

MasterCraft

**2027 BOAT
OWNER'S MANUAL**

CONGRATULATIONS



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Congratulations on your purchase of a new high-performance recreational tow boat. Your MasterCraft boat has been constructed to meet and/or exceed all U.S. Coast Guard (USCG) and National Marine Manufacturers Association (NMMA) requirements applicable at the time of its manufacture. However, it is still your responsibility as the boat owner to ensure the boat is operated in a safe manner and is properly maintained.

Before operating this vessel, please take the time to get acquainted with the vessel and its various features and controls. We recommend that you carefully read and familiarize yourself with this Owner's Manual and all on-product safety labels prior to operating your new watercraft. This manual contains important information on Boating Safety, Boating Rules, Proper Operation, and Maintenance of your boat.

This manual provides a guideline for proper operation and maintenance of your boat, and you should consider it a permanent part of your vessel. In the event that this boat is sold, this manual should be included along with the boat to ensure that it will provide the same important information to the next owner.

The recommended practices and warnings in this manual represent sound advice for recreational boating and identify common risks encountered by boaters engaging in towed watersport activities. Read and understand the contents of this manual. Ask questions of a boating professional if anything in this manual does not make sense to you.

The manual does not cover all instances of risk or danger, so please use common sense and good judgment when boating. If you follow the advice provided in this manual you will significantly reduce risk

to yourself, your passengers, towed participants, and other boaters. This manual is not intended to be a substitute for taking a course on boating safety nor is it a substitute for boating experience. It is recommended that if you are unfamiliar with the use and operation of a boat you seek advice and training from a qualified individual or organization. Check with your local marine law enforcement agency or dealer for more information about boating safety classes in your area.

The precautions listed in this manual and on the boat are not all-inclusive. If a procedure or method is not specifically recommended, YOU must be satisfied that it is safe for you and your passengers, and that the boat will not be damaged or made unsafe as a result of your decision. Remember—always use caution and common sense when operating and maintaining your boat.

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SAFETY KNOWLEDGE

Prior to operation, be certain that all passengers are aware of where the safety equipment is stowed, the location of emergency equipment such as fire extinguishers and how this equipment is used. In case of emergency, be sure that at least one other person on-board understands how to operate the boat.

Your safety, as well as the safety of others with and around you, is a direct result of how you operate and maintain your boat. You—and anyone who will be operating this boat—should read and seek to fully comprehend this Owner's Manual, and any additional information provided by component manufacturers and suppliers. Make sure that you understand all of the controls and operating instructions before attempting to operate the boat. Improper operation is extremely dangerous!

NOTE



THIS IS THE SAFETY ALERT SYMBOL. IT IS USED TO ALERT YOU TO POTENTIAL PERSONAL INJURY HAZARDS. OBEY ALL SAFETY MESSAGES THAT FOLLOW THIS SYMBOL TO AVOID POSSIBLE INJURY OR DEATH.

The basic safety rules are outlined in this section of the Owner's Manual. Additional precautions throughout the Owner's Manual are noted by the following symbols. The precautions listed in this Owner's Manual and on the boat are not all-inclusive. If a procedure, method, tool or part is not specifically recommended by MasterCraft, using it may place you and others in an unsafe situation; in addition, you may render your warranty void. Remember: Always use common sense when operating, servicing or repairing the boat! Observing the safety recommendations found in this Owner's Manual is critical to keeping your boating experience as safe as possible during routine operation. Your failure to do so may result in severe personal injury or death to you and/or others. Use caution and common sense when operating your boat.

Do not ever take unnecessary chances!



DANGER

DANGER indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury.



CAUTION

CAUTION indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury.



WARNING

WARNING indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.

CAUTION

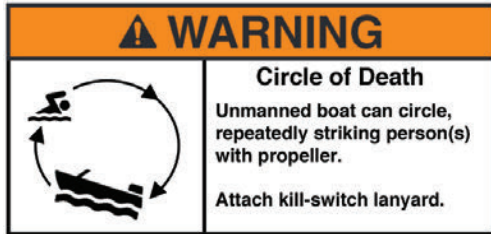
CAUTION used without the safety alert symbol indicates a potentially hazardous situation which, if not avoided, may result in property damage.

GENERAL PRECAUTIONS

Be certain that all operators of your boat are aware of the safety information within this Owner's Manual and that they use it to conform to boat safety principles.

Boating safety starts with a thorough understanding of boat operations. In addition to careful review of this Owner's Manual, you should also be aware that many sources of helpful information are available. MasterCraft urges you to pursue additional training prior to the independent operation of your boat. Training at any time from a recognized boating and/or safety organizations is beneficial.

The following is a listing of a few agencies and organizations that offer safety training and/or information:



On April 1, 2021 a new federal law went into effect that requires the operator of a boat, less than 26 feet in length, with an installed Engine Cut-Off Switch (ECOS) to use the ECOS link. The link is usually a coiled bungee cord lanyard clipped onto the operator's person, Personal Flotation Device (PFD) or clothing and the other end attached to the cut-off switch. The law applies on all "Navigable Waters of the US."

American Red Cross, National HQ

430 17th Street, NW
 Washington, DC 20006
 1-800-733-2767 | redcross.org

U.S.A. Water Ski Association

1251 Holy Cow Road
 Polk City, FL 33868
 (863) 324-4341 | usawaterski.org

Boat Owners Association of The United States

880 South Pickett Street
 Alexandria, VA 22304
 (703) 461-2878 | boatus.com

National Safe Boating Council

9500 Technology Drive, Suite 104
 Manassas, VA 20110
 (730) 361-4294 | safeboatingcouncil.org

U.S. Coast Guard Auxiliary

2703 Martin Luther King Jr. Ave, SE
 Washington, DC 20593-7501
 (202) 267-1001 | uscg.mil | uscgboating.org

SAFETY AFLOAT

The cause of many boating accidents is often the operator's failure to follow basic safety rules or written precautions. Many accidents can be avoided if an operator is completely familiar with the boat, its operation, and can recognize potentially hazardous situations before an accident occurs. Common risks with open power boat operations include:

- Falls over board
- Falls on board
- Fire
- Carbon Monoxide Poisoning
- Propeller Injury

DANGER

Failure to comply with safety-related information and instructions may result in serious injury or death to you and/or others. Always use common sense when operating the boat or participating in any activities associated with the boat, including, but not limited to, periods of time when the boat engine is shut down and the boat is not in operation.

- *Improper operation of a boat is extremely dangerous! Operators must read and understand all operating manuals supplied with the boat, before operation.*

- *On-board equipment must always conform to the governing federal, state and local regulations.*
- *Always attach the emergency kill switch lanyard to your clothing (such as a belt loop) when operating the boat.*

DANGER

Never override or modify the emergency kill switch in any way.

Never operate the boat, water ski, wakeboard, wakesurf or engage in other water activities while under the influence of alcohol or drugs.

- All persons must be seated in a designated occupant seating area while the boat is in motion. (A seating label is affixed in each model.) Never stand or allow passengers to stand in the boat or sit on the motor box or tower (if equipped), gunwale, decks, or any location other than occupant seating while underway. You or others may be thrown within or from the boat, which could result in serious injury or death. Never allow occupants to use sun pads or transom seating while the engine is running. On models equipped with sliding or adjustable seat backs, ensure that the backs are in the locked position prior to operating the boat.

- Prior to starting the engine, open the engine box and check the engine compartment and bilge for gasoline and oil vapors. Always operate the blower for at least four (4) minutes before starting the boat. Failure to do so may result in fire and/or an explosion.

 **DANGER**

Failure to comply with the requirement of operating the blower for at least four (4) minutes before starting the engine may result in serious injury or death to you and/or others.

- *Never remove or modify any components of the fuel system. Removal or modification of any component of the fuel system may cause a hazardous situation and will void the warranty. The modern MasterCraft fuel delivery lines are pressurized and attempting to loosen or remove them may result in the uncontrolled release of fuel, which can be environmentally hazardous, and can cause injury.*
- *Never allow any type of spark or open flame on board. It may result in fire or explosion.*

COMMON SENSE ADVICE

Avoid any activity that may result in damage to the boat, thereby voiding the warranty. Some things, such as avoiding stationary objects, are obvious. However, even less obvious activities can cause damage to a boat, no matter how well-built. For example, while a beach or shoreline may seem soft while walking on it, running a boat up onto shore may result in significant scratches

in the gel coat and fiberglass finish. The causes of many kinds of damage are usually quite obvious to trained service personnel, and if they determine that damage was caused by misuse or activity such as “beaching,” such results can void the warranty.

MasterCraft cannot anticipate every type of activity or neglect that could result in damage to the boat or that may cause illness, injury or even death to boaters. The operator, owner and/ or all persons on board are responsible for using common sense and a careful thought process to ensure that every measure has been taken to keep boating enjoyable for many years to come. A MasterCraft boat can be the source of countless hours of family fun, as well as building friendships, but the boating experience remains safe only if you, and everyone on board, use your head before, during and after your boating activity.

As you anticipate many good times ahead with your MasterCraft boat, be sure that first and foremost, you are well-prepared to be responsible.

 **WARNING**

For most activities the boat operator should be seated at the helm position. Some situations may require standing at the helm to maintain visibility over the bow. When standing is necessary make certain that the safety shut off lanyard is attached to your clothing or PFD. Operating the boat while standing may result in a loss of control which could cause serious injury or death.

HAZARDOUS OPERATIONS

There are a number of situations which can result in peril for boats and persons on board. Among these is boating too close to dam spillways, where turbulence and strong currents can result in loss of control of the vessel. These areas as well as other hazardous areas are usually marked. **DO NOT** ignore such markers.

Additionally, there may be potentially hazardous situations that can adversely affect boating. These include weather conditions (addressed later in this chapter), operating in shallow water where underwater navigational gear may be damaged, or boating in bodies of water that include weeds and other growth that can foul boat operations. These flora can foul your boat engine, restrict water intake to the engine (causing overheating), and restrict the propeller(s) to such an extent that it causes a vibration that can damage the engine and drive train.



OPERATOR RESPONSIBILITIES

THE FOLLOWING ARE THE OPERATOR'S RESPONSIBILITY:

- Ensure the boat is in top operating condition and there are no hazards that impede your moving about the boat.
- File a float plan, as described below, with a relative or friend.
- Ensure the bilge is clean prior to starting.
- Have a complete knowledge of the operation and handling characteristics of your boat.
- Ensure that the boat is not loaded above the maximum capacity and that the load is properly distributed. Reference the seating chart label affixed in the boat for proper distribution of persons aboard.
- Ensure that all occupants are seated in designated safe seating. Refer to the seating chart label.
- Ensure that all children on-board are under the direct supervision of a specific adult occupant.
- Learn to navigate your local waterways. Be familiar with your starting and ending locations as well as any waterways along the way.
- Maintain a safe speed at all times to avoid collisions.
- Keep an eye out for changing weather conditions and respond accordingly.
- Know and practice the navigational rules. Know and obey all federal and state regulations and operate the boat properly around all waterway markers.
- Maintain a clear, unobstructed view at all times, especially forward. Scan the water and avoid tunnel vision. Many boating collisions are caused by inattention.

**CONSISTENT
ATTENTION
REQUIRED**



To access the Water Sports Industry Association (WSIA)
Towed Water Sports Boating Handbook scan the QR code

CARBON MONOXIDE (CO)

When anchoring the boat, you **MUST** turn OFF the engine. In most models, exhaust fumes containing carbon monoxide are emitted from the exhaust flap area of the transom immediately below the platform. No one should ever be on the platform or transom while the engine is operating.

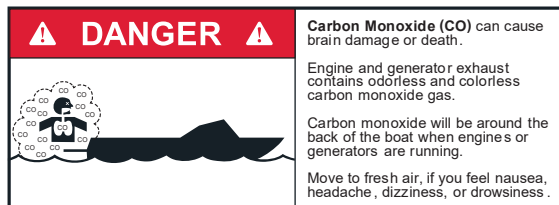
⚠ DANGER

Carbon monoxide is a colorless, tasteless, odorless and poisonous gas that accumulates rapidly and can cause serious injury or death. Exposure to carbon monoxide can be fatal in a matter of minutes.

Exposure to even low concentrations of carbon monoxide must not be ignored because the effects of long term carbon monoxide exposure can build up and be just as lethal as high concentrations. Carbon monoxide from exhaust pipes of inboard or outboard engines may build up inside and outside the boat in areas near exhaust vents, particularly during slow-speed operations.

STAY AWAY from these exhaust vent areas, which are located at the stern of the boat, and DO NOT swim or engage in any water sports or other activities in or near the stern, including, without limitation, the platform, the stern sun deck, and aft facing lounge seats when the engine is in operation.

Under no circumstances should the owner and/or operator allow persons to hold onto the platform while the engine is operating and the boat is in motion. These activities (sometimes known as “teak surfing” or “platform dragging,” where the participant holds onto the platform



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and is pulled through the water, and/or “body surfs” immediately behind the boat) are extremely dangerous, highly likely to result in death or serious bodily injury, and are a misuse of this product.

Carbon monoxide (CO) enters your bloodstream through the lungs, blocking the oxygen your body needs. Prolonged exposure to low concentrations or very quick exposure to high concentrations can be deadly to all on board.

Early symptoms of CO poisoning include irritated eyes, headache, nausea, weakness and dizziness. These can be confused with seasickness or intoxication. Altitude, certain health-related problems, and age will increase the effects of CO. Persons who smoke or are exposed to high concentrations of cigarette smoke, consume alcohol, or have lung disorders or heart problems are particularly susceptible to an increase in the effects of CO. However, anyone can be affected. Another factor to consider is that physical exertion accelerates the rate at which the blood absorbs CO.

EMERGENCY TREATMENT FOR CO POISONING

CO poisoning or toxicity is a life-threatening emergency that requires immediate action. The following is a list of things that should be done if CO poisoning is suspected. Proceed with caution. The victim may be in an area of CO concentration, which means you or others could be in danger from exposure to CO:

- Evaluate the situation and ventilate the area if possible.
- Evacuate the area and move the affected person(s) to a fresh air environment.
- Observe the victim(s).
- Administer oxygen, if available.
- Contact medical help. If the victim is not breathing, perform rescue breathing or approved cardiopulmonary resuscitation (CPR) as appropriate until medical help arrives. Prompt action can mean the difference between life and death.
- Shut off potential sources of CO, if possible. Correct ventilation problems and/or repair exhaust problems as appropriate. Investigate the source of CO and take corrective action, such as evacuating and ventilating the area or shutting off the source of the CO.

WHERE CO MAY ACCUMULATE

Carbon monoxide can accumulate anywhere in or around your boat. This includes, but is not limited to:

- Inadequately ventilated canvas enclosures.
- Exhaust gas trapped in enclosed places.
- Blocked exhaust outlets.
- Another vessel's exhaust. CO from the boat docked next to you can be just as deadly as that emitted from your own boat.
- Back drafting from your own boat's exhaust.
- At slow speeds, while idling or stopped. Be aware that CO can remain in or around your boat at dangerous levels even if your engine or the other boat's engine is no longer running.

⚠
WARNING
⚠

OPERATING, SERVICING AND MAINTAINING A RECREATIONAL MARINE VESSEL CAN EXPOSE YOU TO CHEMICALS INCLUDING ENGINE EXHAUST, CARBON MONOXIDE, PHTHALATES, AND LEAD, WHICH ARE KNOWN TO THE STATE OF CALIFORNIA TO CAUSE CANCER AND BIRTH DEFECTS OR OTHER REPRODUCTIVE HARM. TO MINIMIZE EXPOSURE, AVOID BREATHING EXHAUST, SERVICE YOUR VESSEL IN A WELL-VENTILATED AREA AND WEAR GLOVES OR WASH YOUR HANDS FREQUENTLY WHEN SERVICING THIS VESSEL. FOR MORE INFORMATION VISIT WWW.P65WARNINGS.CS.GOV/MARINE

HOW TO PROTECT YOURSELF AND OTHERS

Follow these simple steps to help keep CO from poisoning you, your passengers and others nearby:

- Know where and how CO may accumulate in and around your boat. This is particularly important when starting or running engines in boathouses, or near a sea wall. Boats that are moored in close proximity are also potential problems as the fumes from your boat or another boat can affect air drafts on all boats. Back drafting sometimes called the “station wagon effect” occurs when the fumes curl up over the platform and transom and into the boat, especially when canvas or other coverings trap the fumes. Even in open air, consider wind direction, the boat’s speed and trim angles.
- Never sit, teak surf, or hang on the back deck or platform while the engine is running. Teak surfing is NEVER a safe activity.
- If your boat is equipped with a generator, know where the exhaust outlet(s) is located and keep everyone away from the area.
- Ensure that appliance, air conditioning, heater, generator, or other on-board function that emits fumes is routinely and regularly provided with maintenance as described by manufacturers. Failure to do so can result in the accumulation of CO fumes.
- Maintain fresh air circulation throughout the boat at all times. CO concentration is greater when the engine is cold. Ensure the boat is situated to take advantage of maximum dissipation of fumes.
- Never allow person in the water to swim under the platform or transom at any times.
- Operation of boats at mile-high (5,250 ft.) or higher altitudes may affect CO production. Check with an authorized MasterCraft dealer before operating at higher altitudes to determine whether the engine may require additional tuning to prevent excessive CO.
- Although CO can be present without the smell of exhaust fumes, if you smell exhaust fumes, CO is also present. Take immediate action to dissipate these fumes.
- Treat symptoms of seasickness as possible CO poisoning. Get the person(s) into fresh air immediately. Seek medical attention!
- Install and maintain CO alarms inside your boat. Do not ignore any alarm. Replace alarms as recommended by the manufacturer.
- Follow Coast Guard safety checklists.
- Get a Vessel Safety Check. They are free! Your local U.S. Coast Guard Auxiliary can provide details or check www.uscgaux.org online to locate assistance.

WEIGHT LIMITS & DISTRIBUTION

Overloading a boat may cause it to become unstable and may potentially result in the boat's flotation system becoming overwhelmed. Too much weight can sink any boat. Within this Owner's Manual and on a label mounted in each boat is the Maximum Capacity for that specific model. Bear in mind that maximum limits include additional water ballast bags and water put in them, gear brought onto the boat, non-factory options and all people. Maximum people is limited to the number of designated occupant seating positions. Equally critical is how weight is distributed throughout the boat. The weight must be distributed evenly throughout the boat. If too much weight is placed in one area it can have serious impact on maintaining control. Items and people can also shift positions during operation, potentially causing a dangerous situation. Adding weight of any type to the boat will affect the handling characteristics of the boat while it is underway. Caution should always be exhibited when putting the boat into motion or attempting to stop it, particularly when the added-weight characteristics have changed.

WARNING

All boats have weight limits. Failure to adhere to the posted limits can cause operation instability and/or the boat to sink. This may result in serious injury or death, as well as significant damage to the boat, which will not be covered by warranty.

LINE OF SIGHT

Care should also be taken to avoid interfering with the boat operator's line of sight when the boat is underway. This applies particularly to individuals riding in the bow. It is possible to quite unintentionally obscure the driver's view. Even momentary interference can result in the driver's inability to respond to a situation that requires avoidance of another vessel or submerged or partially-submerged objects. MasterCraft recommends using the driver seat bolster or standing to maintain a safe lookout and proper visibility when necessary. Everyone on board should always pay attention to other vessels, people and objects located in close proximity to the boat, activities taking place in or near the water, and should always be supportive of the boat operator.

The law requires the boat operator to maintain clear visibility at all times and in all directions when the boat is in motion.



PERSONAL FLOTATION DEVICES & ACCESSIBILITY

Federal law requires at least one wearable Personal Flotation Device (PFD) of the proper size (Type I, II, III, or V) for each person on board or being towed, and at least one throwable PFD (Type IV) in the boat. PFDs must be Coast Guard approved, in good and serviceable condition, and the appropriate size for the user. To meet requirements, each lifesaving device must have a current, legible USCG approval stamp permanently affixed. Your MasterCraft dealer can assist you with finding appropriate PFDs.

NOTE

REQUIREMENTS FOR COASTAL WATERS AND INLAND WATERS DIFFER. CHECK WITH THE LOCAL BOATING AUTHORITIES FOR MORE INFORMATION.

People on-board who cannot swim or who are not strong swimmers, as well as children, should wear PFDs at all times.

- Wearable PFDs must be readily accessible in the boat.
- It should be possible to put on the PFDs within a reasonable amount of time in case of emergency.
- PFDs should never be stowed in plastic bags, in locked or closed compartments or have other gear stowed on top of them.
- The U.S. Coast Guard, as well as MasterCraft, recommends the wearing of PFDs at all times when the vessel is underway, even though it is not a requirement. The best PFD is the one that is worn and that can save your life.
- Inflatable PFDs must have a full cylinder and all status indicators on the inflator must be green, or the device is NOT serviceable, and is NOT considered a usable PFD for anyone on-board the vessel.
- Coast Guard-approved inflatable PFDs are authorized for use on recreational boats by persons at least 16 years of age.
- Some states require children to wear PFDs at all times. Check with your state boating safety officials for details. Be certain to equip children with a PFD that is appropriate for the size of the child. The label will indicate the weight limits for use.

FIVE U.S. COAST GUARD PFD CATEGORIES

Type I PFD

Is designed for extended survival in rough, open water. It usually will turn an unconscious person face up and is the best PFD to keep you afloat in remote regions where rescue may be slow.

Type II PFD

This “classic” PFD comes in several sizes for adults and children and is for calm inland water where there is chance of fast rescue. It usually will turn an unconscious person face up in the water.

Type III PFD

Flotation aid for use in calm water where there is good chance of fast rescue since they will generally not turn an unconscious person face up in the water.

Type IV PFD

This PFD is designed to be thrown to a person in the water. They are not designed to be worn and must be supplemented by wearable PFDs. It's important to keep these devices immediately available for emergencies.

Type V PFD

Special use PFDs include work vests, deck suits, and hybrids for restricted use. Some Type Vs are designed to be inflatable for additional buoyancy. These PFDs may be used instead of a Type I, II, or III with non-towed participants if used in accordance with the approval conditions on the label and if worn when the boat is underway.

EVENTS REQUIRING SAFETY KNOWLEDGE

IN THE EVENT OF A FIRE

Fire on-board is among the most serious of matters that boaters can experience. Due to the close proximity of fuel tanks and a number of electrically operated items that can result in a spark or arc, any and all fires on a boat should be a matter for immediate action.

While your MasterCraft boat is equipped with a fire suppression system and fire extinguishers (except models imported into Japan), it is important to make a quick and calculated decision regarding any fires. If the extinguishing/suppression materials do not quickly extinguish the fire, it may become necessary to abandon ship. Make sure everyone on board has a PFD and swims as quickly and as far as possible, up wind and upstream from the boat. If gasoline is released, it will float on top of the water. It may spread out or move with the body of water's current.

FIRE EXTINGUISHERS

The engine compartment in every MasterCraft boat is equipped with an automatic fire suppression system. The system has a manual deployment handle mounted in the helm area (domestic boats only) which uses a clean agent canister to suppress fires in the engine compartment.

Every boat MasterCraft builds is required by law to have on board one (1) 2.5-pound, dry chemical fire extinguisher rated for Type A, B and C fires. The dry chemical fire extinguisher is standard equipment, and is automatically included in your boat from the factory. Handheld extinguishers are generally located under the observer seat and replacements can be ordered from authorized MasterCraft dealers.

If any of the fire suppression system canisters on board your boat are discharged (whether a canister in an automatic system, or a portable fire extinguisher), they must be replaced. If the automatic fire suppression system has been discharged, the video display at the helm will notify the driver. If the clean agent canister associated with the automatic fire suppression system has been discharged, it must be replaced. Contact your authorized MasterCraft dealer to obtain a replacement for the clean agent type of canister. If the dry chemical fire extinguisher has been discharged, it must be replaced with a fire extinguisher rated for Type A, B and C fires from an authorized MasterCraft dealer or another source.



Handheld Fire Extinguisher



Automatic Engine Fire Suppression

Fire extinguishers require regular maintenance. Monthly, each fire extinguisher on your boat should be examined to be sure that the seals and tamper indicators are not broken or missing. The pressure gauges or indicators, if applicable, should read in the operable range. There should be no obvious physical damage, rust, corrosion, leakage or clogged nozzles. Additionally, if the extinguisher has not been used, it should be weighed annually to assure that the minimum weight as stated on the label still exists. Any fire extinguisher that has been partially emptied must be replaced.

In an automatic/manual system, ensure the pin inserted to protect the system at the helm during transit from the factory (pictured above) has been pulled to activate the system. This is part of dealer preparation, but it is the responsibility of the boat owner to ensure that the system is functional.



Manual Fire Suppression

FIRE SUPPRESSION & EXTINGUISHING

All MasterCraft boats are equipped with an automatic fire suppression system. The automatic system operates from sensors in the engine room and will automatically release a clean-agent, gaseous chemical that does not leave residue behind.

On domestic boats it is also possible to activate the system manually. Pull the pin with the red tag (pictured below), and then pull the red fire handle to set the system in operation. (International boats are automatic only.)

In case of an engine compartment fire, shut down the engine and blowers before manual discharge, or immediately following the automatic discharge. Boats are equipped with a discharge indication light at the instrument panel or on the video display gauge at the helm.

After the suppression system has been used, the fire extinguisher canister will be empty. The boat owner/operator should have the canister replaced.

MasterCraft boats have also been specified to carry a handheld 2.5 lb. mono-ammonium phosphate expellant (dry chemical) unit, which is rated Class A (trash, wood and paper), Class B (flammable liquids, fuel, gas) and Class C (energized electrical

equipment). These units should be used in situations other than engine compartment fires.

Hand-held units should be replaced or recharged as soon as possible after use. Chemical discharge should be cleaned from all surfaces as soon as possible and prior to running the boat again, unless operation is necessary to return to shore.

The boat should never be operated following a fire until after a determination has been made whether operation may result in another fire. If any danger of an additional fire exists, the boat should be towed to shore or dock rather than running the engine(s).

Consumers who choose to purchase fire control equipment from resources other than MasterCraft must follow the instructions and requirements as listed within the engine compartment regarding suitability for the compartment volume. These standards are established by the Coast Guard Code of Federal Regulations (CFR) and the American Boat and Yacht Council (ABYC).



DANGER

Following the activation of the automatic fire suppression system or a hand-held fire extinguisher, a careful determination should be made as to whether the boat can safely be operated. If there is any doubt or concern whatsoever, the boat should be towed to shore and/or dock for service by an authorized MasterCraft dealer prior to operating again. Failure to follow these instructions could result in death or serious injury/illness.

CAPSIZING

In addition to fire, a boater's greatest concern may be with the possibility of capsizing or overturning the boat. A number of factors can occur that will result in a boat overturning (high waves, excessive wakes, bad weather) or sinking as a result of damage such as striking an underwater object or another boat. In the event of such an occurrence, try to turn the engine OFF.

Attempt to locate any other people who were on-board and determine whether they are injured. Unless there is fire or release of gasoline, in most instances it is wise to remain with the boat. Climbing on the hull will make it easier for rescuers to locate you and others.

MEANS OF RE-BOARDING

UNASSISTED

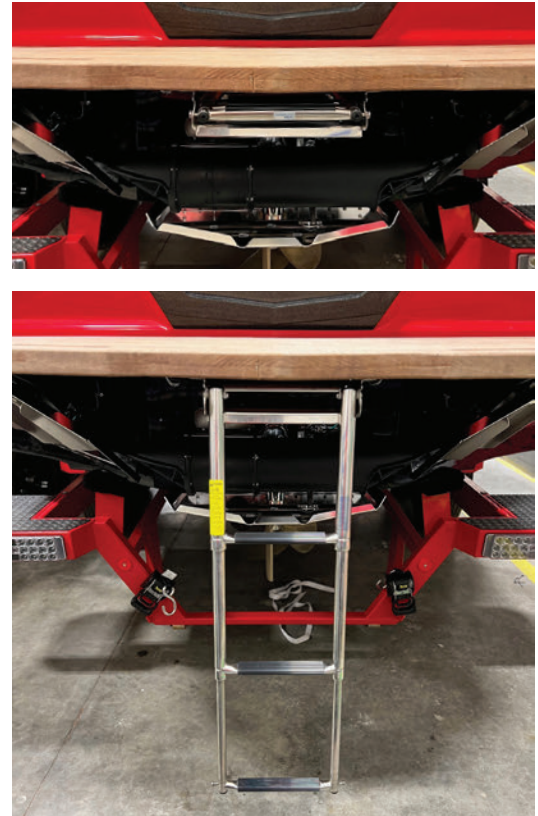
To re-board a boat without a ladder or swim step, place both hands, palms down, onto the top of the platform. Using your legs to kick swiftly upwards, pull your body and legs up over the edge of the platform. Additional leverage may be gained by using the grab handles integrated into the platform. Lean into the platform and swing one leg up onto the platform. Use the grab handles to provide support while pulling the rest of your body onto the platform. Stand up, maintaining three points of contact with the boat, and use the transom step to climb back into the cockpit of the boat.

CAUTION

*Do not allow arms, legs, or body to extend below the platform or transom.
Metal surfaces mounted on the hull may cause minor to moderate injuries.*

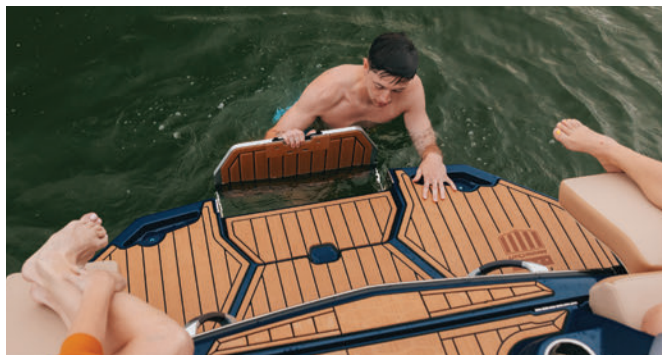
LADDERS

Models equipped with ladders (shown at right) are offered to assist in re-boarding. The re-boarding ladders may be mounted beneath the platform. To re-board, using a ladder, deploy the ladder and use it to climb up and onto the platform. Always maintain three points of contact with the boat when using a ladder to re-board. For instructions on deploying a ladder, refer to the Ladders section of this manual.



SWIM STEP

Some models are equipped with a swim step to assist in re-boarding. To re-board a boat utilizing the swim step, deploy the swim step by releasing the latch, located at the center recess of the platform and unfold the step aft and down. Ensure that everyone is clear of moving parts and lower the Swim Step to the fully extended position. Using a three-point contact, ascend onto the platform. Swim Step is limited to 400 pounds total weight. Deploy the Swim Step by releasing the latch located at the center of the platform recess, situated at the forward most point of the Swim Step. Ensure that everyone is clear of the moving parts and lower the Swim Step to the fully deployed position. Using a three-point contact, ascend onto the platform.



RUNNING AGROUND OR STRIKING OBJECTS

Ascertain whether there is damage to the hull. If water can be stopped from entering the boat, cautiously return to dock. Have the boat checked out by your authorized MasterCraft dealer to be certain that the hull has not been weakened. Even if water does not intrude initially, difficulties may occur later. If water is entering the boat after running aground or striking an underwater object, call or signal for assistance. Abandon ship, if necessary. Do not attempt to out-run a significant leak, as it can be difficult to estimate how long it will take for enough water to intrude and sink the boat.



IN-WATER ACTIVITIES SAFETY

Individuals in the water are obligated to be as aware of the fundamental safety rules as operators. If you are new to water sports, you should seek certified training before starting. You may find it especially helpful to join a local water-sports club, if available, and the U.S.W.S.A. (United States Water Skiing Association). Remember that the majority of in-water injuries are the result of impacts with other objects, so always look where you are going, and be aware of what is going on around you.

DANGER

CONTACT WITH A SPINNING PROPELLER WILL CAUSE SERIOUS INJURY OR DEATH. Shut off the engine(s) when near persons in the water, prior to using sun pads, the platform or the boarding ladder.

- Never put your arm, head or any other part of your body through the handle/bridle of the ski or wakeboarding line. Never wrap the line around any part of the body at any time.
- Never ski, wakeboard, wake surf or engage in tubing at night.
- Never ski, wakeboard, wake surf or engage in tubing directly in front of other boats.
- Never follow another boat pulling a rider or tuber. The person may fall and could make it necessary to take immediate evasive measures. This is an unsafe form of operation that should be avoided.
- When adding accessories to the tower, ensure that the total aggregate weight of the accessories does not exceed 85 lbs. (U.S.).

Exceeding the limit may result in structural failure of the tower. MasterCraft strongly encourages the use of MasterCraft towers and accessories only as they have been tested and determined to meet product requirements, including weight.

WARNING

Towers should never have a total aggregate weight of accessories exceeding 85 lbs. (U.S.). Excessive weight can cause tower failure and the collapse of a tower or the disconnection of the tower from the deck, which could result in serious bodily injury or damage to the boat that is not covered by warranty.

- Never jump from a boat that is moving at any speed, nor enter or exit the water when the engine is running (ON). (See the Common Sense Approach section of this Owner's Manual for additional information regarding carbon monoxide peril.)

DANGER

Maintain a distance of at least six (6) feet from the ski platform when wake surfing or tubing. Any closer risks exposure to CO fumes, which can be deadly. Never launch a surfboard from the ski platform (or any part of the boat) or end a surfing session by surfing onto the ski platform. Such activities can damage the boat, which is not covered under warranty. Being on the ski platform at any time the boat is running can potentially expose individuals to CO poisoning as well.

- Never ride on the ski platform or hold on to the ski platform while in the water during engine operation, including at idle. Carbon monoxide fumes are expelled from the lower transom areas of your boat and

can cause death or serious illness. See the Common Sense Approach section following for more details.

- Never climb, sit or stand on a tower. The tower is intended for towing only as noted.
- Make sure that everyone knows and uses approved skiing/ wakeboarding hand signals and adheres to common skiing, wakeboarding and boating courtesy. Inexperienced skiers might not know that there are waterskiing hand signals, similar to bicycle and motorcycle hand signals, that can be used while skiing. For example, giving a thumbs up or palm facing up signal while motioning upwards means “speed up,” and the opposite, thumbs down or palms facing down, means “slow down.” There are also signals for speed—turn right, turn left, stop—and signals for when you are down in the water. Learning these help the water skier communicate with the boat over the loud roar of the engine. The best way to utilize these signals is by having a spotter. Many states require at least two people be aboard the boat while towing a skier—one driver and one spotter. Having a spotter to watch the water skier allows the driver of the boat to concentrate on the water in front of and around the boat. The spotter watches the water skier and communicates hand signals to the driver and also can alert the driver when the skier falls.
- Give immediate assistance to anyone who falls because they are vulnerable and may not be seen by other boaters. Approach individuals in the water from the leeward side (opposite the wind) and turn OFF the engine prior to reaching them. Propellers and engine exhaust are only part of the potential problem for someone in the water. Be aware that propellers may continue to turn for a period of time after the engine is shut OFF, and the edges are often sharp enough to easily cut skin or break bones.
- Ski and wakeboard only in acceptable areas. Avoid restricted areas.

- The above mandates are not all-inclusive. It is the boater's responsibility to operate the boat in a safe fashion and become familiar with any and all rules and regulations governing boat operation.

DANGER

Do not tow more than two (2) persons at one time on a tow tower. The tow tower approved for use on your boat should be used only for water skis, wakeboards, surfboards or recreational two-person towables, and not for parasailing, kite flying or towing other boats. Do not add any attachments that are not approved for use on your MasterCraft boat. Do not climb on, sit on, stand on, jump off of or dive off of the tower. Never allow loose tow rope ends to dangle. Always be certain that all bolts are in place and tight before and during use. When the tower is up, watch for low obstacles such as tree limbs, bridges or power lines.



EQUIPMENT

SAFETY EQUIPMENT

Federal law requires certain safety equipment to be on-board your boat at all times. Responsible boaters carry additional equipment in case of emergency. It is your responsibility to check with the local boating authorities for any additional requirements and/or equipment over and above the federal requirements.

REQUIRED EQUIPMENT

Your MasterCraft boat was equipped at the factory with most of the federally required safety equipment for inland waters (Class II, 16' to less than 26' watercraft). This equipment includes:

- ABYC-approved (American Boat & Yacht Club) marine mufflers with water injection
- USCG-approved (United States Coast Guard) marine flame arrestor
- USCG-approved engine box ventilation with spark-less blower
- ABYC-approved electric horn sound-warning device
- USCG-approved inland lighting
- Automatic and manual fire extinguishers

RECOMMENDED EQUIPMENT

The responsible boat owner will avoid potential problems on an outing by having additional equipment on board. Normally, the decision regarding the appropriate equipment to take on individual outings is dependent upon the body of water and the length of the trip. We suggest the following equipment as a minimum (your MasterCraft dealer can also assist you with additional recommendations):

- Anchor with at least 75 feet of line (in saltwater operation, particularly)
- Manual bailing device for removing water
- Combination oar/boat hook
- Day-and-night visual distress signal
- First aid kit and manual
- Airway breathing tube
- Waterproof flashlight
- Non-electric horn or whistle
- Set of local navigational charts
- Mooring lines and fenders
- Extra engine oil
- Portable, battery-operated AM/FM radio or weather radio/scanner
- Tool kit

SOUND PRODUCING DEVICES

Navigation rules require sound signals to be made under certain circumstances. Meeting, crossing and overtaking situations, which will be described in some detail shortly, are examples of when sound signals are required. Recreational vessels are also required to use sound signals during periods of reduced visibility. Your MasterCraft boat is equipped with a horn, but you may also purchase after-market devices in case of potential electrical disconnect or failure. The following are standard signals when using a whistle:

- One prolonged blast: WARNING.
- One short blast: PASS ON MY PORT SIDE.
- Two short blasts: PASS ON MY STARBOARD SIDE.
- Three short blasts: MY ENGINES ARE IN REVERSE.
- Five or more blasts: DANGER!

NOTE

**THE REQUIREMENT TO CARRY A BELL ON BOARD
NO LONGER APPLIES TO VESSELS OPERATING ON
INTERNATIONAL WATERS.**

VISUAL DISTRESS SIGNALS

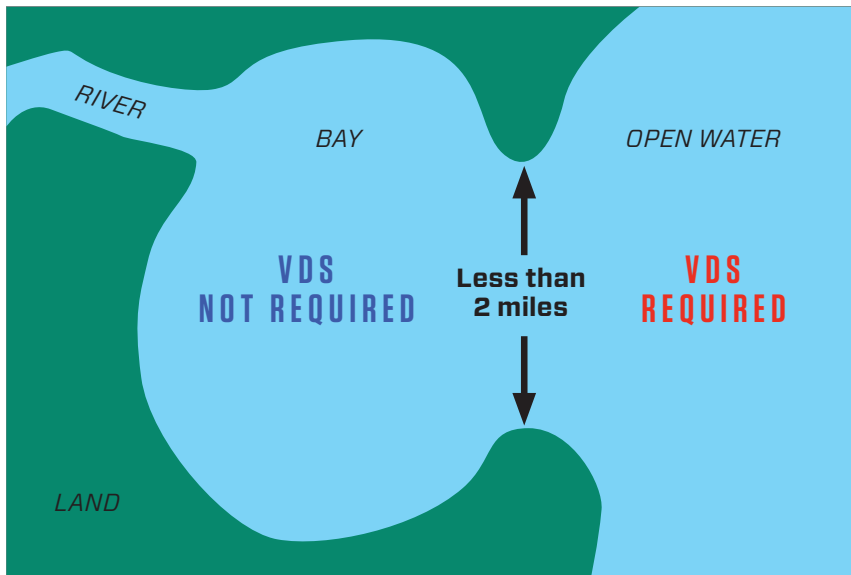
All vessels used on coastal waters, the Great Lakes, territorial seas and those waters connected directly to them up to a point where a body of water is greater than two miles wide, must be equipped with U.S.C.G.-approved visual distress signals. Vessels owned in the United States but operating on the high seas must be equipped with U.S.C.G.-approved visual distress signals. RIVER

Pyrotechnic visual distress signals must be Coast Guard approved, in serviceable condition and readily accessible. This means that:

- They are marked with an expiration date. Expired signals may be carried as extra equipment, but cannot be counted toward meeting the visual distress signal requirement, since they may be unreliable.
- If pyrotechnic devices are selected, a minimum of three are required. That is, three signals for day use and three signals for night. Some pyrotechnic signals meet both day and night use requirements.
- Pyrotechnic devices should be stored in a cool, dry location, if possible. A watertight container painted red or orange and prominently marked "Distress Signals" or "Flares" is recommended.

NOTE

VDS = VISUAL DISTRESS SIGNAL





Flare Gun



U.S.C.G.- approved pyrotechnic visual distress signals and associated devices include pyrotechnic red flares, hand-held or aerial; pyrotechnic orange smoke, hand-held or floating, or launchers for aerial red meteors or parachute flares.

Non-pyrotechnic devices may be allowed. These include an orange distress flag (day signal only) or an electric distress light (which is acceptable for night use). Use of these devices must still meet Coast Guard requirements, information for which is available online and from the Coast Guard.

Under Inland Navigation Rules, a high intensity white light flashing at regular intervals from 50-70 times per minute is considered a distress signal. Such devices do NOT count toward meeting the visual distress signal requirement, however. Regulations prohibit display of visual distress signals on the water under any circumstances except when assistance is required to prevent immediate or potential danger to persons on board a vessel.

All distress signals have distinct advantages. No single device is ideal under all conditions or suitable for all purposes. Pyrotechnics are universally recognized as excellent distress signals. However, there is potential for injury and property damage if not properly handled. Particular care should be used in stowage of pyrotechnics if children will be on board. These devices produce a very hot flame and the residue can cause burns and ignite flammable materials.

Check with local authorities regarding the best visual distress signal for use in the area in which you will be boating.

NAVIGATIONAL LIGHTS

Your MasterCraft boat is equipped with navigational lights. See the 2027 Model Features & Specs section to determine the location of the navigational lights on your boat or verify with your dealer. Anytime you are moving on the water between sunset and sunrise, you are required to have your navigational lights operating.

NOTE

THE PROSTAR NAVIGATION LIGHT SHOULD ONLY BE USED IN INLAND WATERWAYS AND IS NOT CLASSIFIED AS AN OFFSHORE NAVIGATION LIGHT.



MAXIMUM CAPACITIES

18 PERSONS OR 2450 LBS.

2450 POUNDS, PERSONS, GEAR

THIS BOAT COMPLIES WITH U.S. COAST GUARD SAFETY STANDARDS IN EFFECT ON THE DATE OF CERTIFICATION WITH THE EXCEPTION OF CERTAIN FUEL SYSTEM REQUIREMENTS ASSOCIATED WITH ITS FUEL INJECTED ENGINE AS AUTHORIZED BY U.S. COAST GUARD GRANT OF EXEMPTION (CGB 98-002). MAINTENANCE OF THE FUEL SYSTEM IN THIS BOAT SHOULD BE PERFORMED ONLY BY EXPERIENCED TECHNICIANS USING IDENTICAL FUEL SYSTEM COMPONENTS.

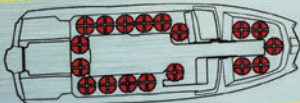
MANUFACTURER: MASTERCRAFT BOAT CO.
MODEL: XSTAR 25 VONORE, TN

DESIGN COMPLIANCE WITH NMMA REQUIREMENTS BELOW IS VERIFIED. MFOR, RESPONSIBLE FOR PRODUCTION CONTROL.

LOAD CAPACITY • COMPARTMENT VENTILATION
STEERING, FUEL AND ELECTRICAL SYSTEMS
NAVIGATION LIGHTS • MANEUVERABILITY

XSTAR 25 UNDER WAY SEATING CHART

BOW SEATING MAX = 5 PERSONS OR 750 LBS



WEIGHT MUST BE EVENLY DISTRIBUTED

MasterCraft

EMISSIONS CONTROL SYSTEM INFORMATION

MEETS 2025 MY CALIFORNIA EVAP EMISSIONS REGULATIONS FOR SPARK-IGNITION MARINE WATERCRAFT

MANUFACTURER: MASTERCRAFT
CALIFORNIA EVAP FAMILY: SMCBPVSSLAA1
EMISSIONS CONTROL SYSTEM:
CARBON CANISTER, PLASTIC TANK
NMC-2024-043

BOATMAN'S CHECK LIST

For maximum enjoyment and safety, check each of these items BEFORE you start your engine.

- ✓ DRAIN PLUG (Securely in place?)
- ✓ LIFE SAIVING DEVICES (One for every person on board?)
- ✓ STEERING SYSTEM (Working smoothly and properly?)
- ✓ FUEL SYSTEM (Adequate fuel? Leaks? Fumes?)
- ✓ BATTERY (Fully charged? Cable terminals clean and tight?)
- ✓ ENGINE (In neutral?)
- ✓ CAPACITY PLATE (Are you overloaded or overpowered?)
- ✓ WEATHER CONDITIONS (Safe to go out?)
- ✓ ELECTRICAL EQUIPMENT (Lights, horn, pump, etc.?)
- ✓ EMERGENCY GEAR (Fire extinguisher, bailer, paddle, anchor & line, signaling device, tool kit, etc.?)

WARNING

THE WEIGHT LIMIT (TOTAL CAPACITY) OF THIS BOAT INCLUDES PERSONS AND GEAR WITH FULL BALLAST TANK(S) AND FUEL. ANY ADDITIONAL BALLAST WEIGHT MUST BE SUBTRACTED FROM THE TOTAL CAPACITY, THUS REDUCING THE NUMBER OF PERSONS AND/OR GEAR THAT MAY BE ON BOARD THE BOAT. SEE THE "COMMON SENSE APPROACH" SECTION OF THE OWNER'S MANUAL FOR ADDITIONAL INFORMATION.

MEETS U.S. EPA EVAP
STANDARDS USING
CERTIFIED COMPONENTS
MASTERCRAFT BOATS, VONORE, TN

NOTICE

Multiple technologies available on this boat may be protected by patents. Please see www.mastercraft.com/patents for a comprehensive list.

WARNING PLATES & LABELS

Read and note ALL warning plates and labels from bow to stern, including those that are installed inside the engine compartment, lockers and also under seating.

YOU MUST READ AND ADHERE TO ALL CAUTIONS AND WARNINGS IN AND ON YOUR BOAT!

LEGAL REQUIREMENTS

LAW ENFORCEMENT

A vessel underway, when hailed by a Coast Guard vessel, is required to heave to, or maneuver in such a manner that permits a boarding officer to come aboard.

Other federal, state and local law enforcement officials may board and examine a vessel. The Coast Guard may impose a civil penalty up to \$1,000 for failure to comply with equipment requirements; failure to report a boating accident; or comply with other federal regulations. Failure to comply with the Inland Navigation Rules Act of 1980 can result in a civil penalty up to \$5,000. Details of the Act are available online or through the U.S. Coast Guard and the Coast Guard Auxiliary.



OPERATOR'S LICENSE

Some states are implementing operator's license requirements. These requirements vary widely. Many states now have restrictions regarding age. If you are operating in a location where minors are allowed to operate the boat, careful supervision by an adult should be the rule of thumb always. Whether operating a boat locally or in a remote location, operators should annually verify with state and local authorities regarding whether a license or training is required.

BOATING UNDER THE INFLUENCE

Boating under the influence of alcohol or drugs can be as deadly as driving a car while under the influence!

Did you know:

- A boat operator is likely to become impaired more quickly than a vehicle driver, drink for drink?
- The penalties for BUI can include large fines, revocation of operator privileges and serious jail time?
- The use of alcohol is involved in about one-third of all recreational boating fatalities?

It is illegal to operate a boat while under the influence of alcohol

or drugs in every state. The Coast Guard also enforces a federal law that prohibits BUI. Alcohol affects judgment, vision, balance and coordination. These impairments increase the likelihood of accidents afloat for both boat operators and passengers. U.S. Coast Guard data shows that in boating deaths involving alcohol use, over half the victims capsized their boats and/or fell overboard.

Alcohol is even more hazardous on the water than on land. The marine environment of motion, vibration, engine noise, sun, wind and spray accelerate a drinker's impairment. These stressors cause fatigue that makes a boat operator's coordination, judgment and reaction time decline fast when using alcohol. As a result of alcohol's effects, a boat operator with a blood alcohol concentration of approximately .10 percent is estimated to be more than 10 times as likely to die in a boating accident than an operator with zero blood alcohol concentration. Passengers are also at greatly increased risk for injury or death, especially if they are also using alcohol.

The Coast Guard and every state has stringent penalties for violating BUI laws. Penalties can include fines, suspension or revocation of boat operator privileges, and jail time. The Coast Guard and individual states cooperate fully in enforcement of BUI laws in order to remove impaired boat operators from the waters.

In waters that are overseen solely by the states, the states have

the authority to enforce their own BUI statutes. In state waters that are also subject to U.S. jurisdiction, there is concurrent jurisdiction. That means if a boater is apprehended under Federal law in these waters, the Coast Guard will (unless precluded by state law) request that state law enforcement officers take the intoxicated boater into custody. Depending on the circumstances, the operator may be arrested. Penalties vary, but in many jurisdictions operators found guilty of BUI can expect a civil penalty of at least \$1,000 or criminal penalty of \$5,000, one year of imprisonment or both. Civil lawsuits in cases of property damage or injury/ death to others can result in significantly more serious penalties. Intoxication from drugs, including legal prescription drugs, is an equally serious matter and is dealt with as seriously as alcohol.



REGISTRATION, NUMBERING & DOCUMENTATION

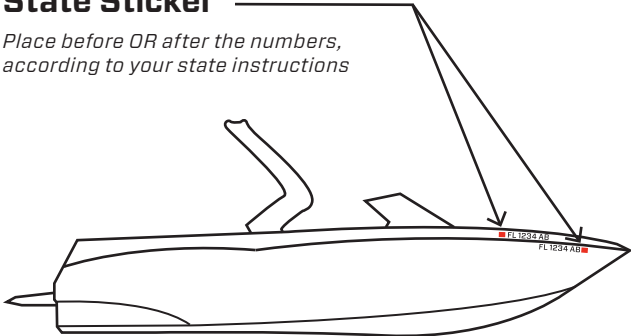
Although it might not be immediately obvious as to how this relates to boating safety, it can in fact be critical in emergencies. All undocumented vessels equipped with propulsion machinery must be registered in the state of principal use. A certificate of number will be issued upon registering the vessel. These numbers must be displayed on your vessel. The owner/operator of the vessel must carry a valid certificate of number whenever the vessel is in use. When moving to a new state of principal use, the certificate is valid for 60 days. Check with your state boating authority for registration requirements.

Numbers must be painted or permanently attached to each side of the forward half of the vessel. The validation stickers must be affixed within six inches of the registration number. With the exception of the vessel fee decal, no other letters or numbers may be displayed nearby. Lettering must be in plain, vertical block characters of no less than three (3) inches in height. Spaces or hyphens between letter and number groupings must be equal to the width of a letter other than "I" or a number other than "1."

The owner of a vessel must notify the agency which issued the

State Sticker

Place before OR after the numbers, according to your state instructions



FL 1234 TN † 3"

certificate of number within fifteen (15) days if the vessel is transferred, destroyed, abandoned, lost, stolen, or recovered; if the certificate of number is lost/destroyed; or if the owner's address has changed. If the certificate of number becomes invalid for any reason, it must be surrendered in the manner prescribed to the issuing authority within 15 days.

SPEEDING & NOISE

Some states and boating areas have imposed speed limits for operation of boats, including but not limited to no-wake zones. Noise regulations may also be imposed. It is the responsibility of the boat operator to be familiar with any and all laws and regulations and to obey them. The U.S. Coast Guard is an excellent source for this information, including penalties for failure to observe the requirements.



ACCIDENT REPORTING

Federal law requires the boat operator to file a boating accident report with the state reporting authority when, as a result of an occurrence that involves a boat or its equipment:

- A person dies
- A person disappears from the vessel under circumstances that indicate death or injury
- A person is injured and requires medical treatment beyond first aid
- Damage to vessels and other property totals \$2,000 or more (the amount may be lower in some states and territories; verify with local boating authorities)
- The boat is destroyed

If the boat operator is deceased or unable to make the report, the boat owner is required to file the report.

Your responsibility does not end with your own craft. You are required by law to respond to any distress signal, visual or auditory. Render immediate assistance, EXCEPT in instances in which you and your passengers will be endangered or those situations that exceed your capabilities or the capabilities of your boat. Good Samaritan protection is provided to boaters who provide good faith assistance and protects them from civil liability for assistance given.

RADIOS—TELEPHONES

Improper use of a radio-telephone is a criminal offense. The use of obscene, indecent or profane language during radio communications is punishable by a \$10,000 fine, imprisonment for two years or both. Other penalties exist for misuse of a radio, such as improper use of Channel 16 VHF-FM, a calling and distress channel. It is not to be used for conversation or radio checks. Such communications should be only conducted on an authorized channel.

REFUSE & POLLUTION

There are stringent requirements regarding pollution, discharge of oil, discharge of garbage and the operation and discharge from sanitation devices. It is the boat owner's and operator's responsibility to determine laws and regulations and to ensure that those laws and regulations are respected and enforced. Details are available through the U.S. Coast Guard. The preceding information provides requirements within the United States territorial waters. Boats operated under other autonomous governmental agencies throughout the world will have their own legal requirements, including the international MARPOL Treaty. Boat owners and operators are responsible for determining what those requirements are and complying with them, regardless of



the owner/operator's citizenship.

This Owner's Manual was developed to help ensure an enjoyable boating experience with a your MasterCraft boat. As stated earlier, this information is not all-inclusive. There are many factors to consider and additional information that you need to research before undertaking any boating activity. In addition to reading this Owner's Manual and other related material, and familiarizing yourself with the proper operation of the MasterCraft boat, always use common sense when boating.

BOAT SAFETY LABELS

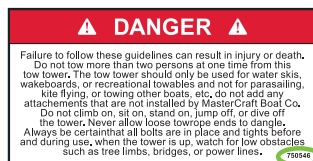
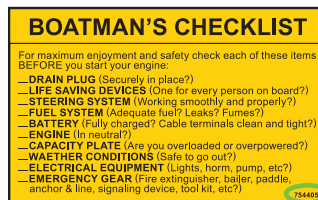
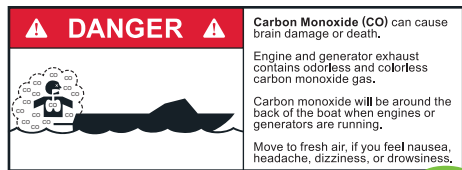
Warning labels are placed on your MasterCraft boat at the time of manufacture to alert operators to potential hazards that may not be obvious. These labels also indicate how to avoid hazards. Warning labels should never be removed and must remain legible.

If you suspect a label is missing, or if a label becomes damaged or becomes unreadable (damaged, faded, or sun bleached), you should have it replaced immediately.

To replace a warning label, contact your MasterCraft dealer with a label part number, which can be found by visiting MasterCraft.com/manuals, and request a new label.

The label's part number is located in the bottom right corner of every label (shown circled in green on the label to the right).

It is the responsibility of the boat owner and occupants of the boat to understand and comply with all warning labels and safety recommendations and requirements. The operator of the boat and the boat owner are responsible for the proper operation of the boat and the safety of the occupants of the boat. Failure to adhere to and comply with the on-product warning labels and safety statements labeled as dangers, warnings, and cautions that appear in this manual can lead to serious injury, or death, as well as property damage.



READ, AND ADHERE TO ALL WARNING PLATES AND LABELS from bow to stern, including those installed in the engine compartment, lockers, and under seating.



OTHER IMPORTANT INFORMATION

COMMUNICATIONS

The following applies to the Great Lakes and salt water boating:

When boating off-shore, carry communications gear such as a marine VHF-FM and/or HF transceiver(s), appropriate to the operating area. Cellular phone coverage is available in many coastal areas. However, cellular phones should NOT be considered a substitute for VHF-FM marine band radios for emergencies.

In distress situations, press the VHF transmit button and clearly say: MAYDAY, MAYDAY, MAYDAY. Follow this with the vessel name and/or description, the location, nature of emergency and number of people on-board. Then release the transmit button and wait for 10 seconds. If there is no response, repeat the MAYDAY call.

Satellite EPIRBs (406 MHz) are designed to quickly and reliably alert rescue forces, indicate an accurate distress position, and guide rescue units to the distress scene, even when all other communications fail.

When activated, the satellite EPIRB transmits a distress signal with a beacon-unique identifying code. The system detects the signal, calculates an accurate distress position, checks the unique identifying code against the EPIRB registration database (vessel and point of contact information supplied by the owner) and routes the distress alert with registration information to



the responsible U.S. Coast Guard (or International) Rescue Coordination Center (RCC).

406MHz EPIRBs with GPS (internal or attached) also provide an immediate GPS position in the information passed to the RCC.

Geostationary satellites make detection almost immediate. If the EPIRB does not have the ability to provide a GPS position, the process to determine a position takes about an hour on average and almost always less than two hours. Satellite EPIRBs also include a homing beacon and strobe to help rescue forces quickly locate the distress scene.

Satellite beacons have significant coverage, alerting timeliness, position accuracy, and signaling advantages over other types of EPIRBs (121.5 MHz). Before purchasing or using something other than the 406 MHz EPIRB, be sure to understand the capabilities and limitations.

Further information and a complete listing of VHF channels and frequencies is available at: www.navcen.uscg.gov

INSURANCE

Even if someone else is operating the boat, the owner is generally held liable for any damages or injuries that occur. It is in the owner's best interest to maintain sufficient personal liability and property damage insurance on the boat in anticipation of potential judgments. Guarding against theft is another consideration.

WEATHER

Never leave the dock without first checking the weather forecast, both locally and to your destination. Weather information is available from television, radio, local newspaper, online or from a weather channel on a VHF radio. At certain times of the year, weather can change rapidly and boaters should always keep an eye out for weather conditions.

While boating, pay attention to the following:

- Watch for cloud build-up, especially rapid, vertically rising clouds. Sudden drop in temperature.
- Sudden change in wind direction and/or speed.
- On-board barometers, where placed on-board by the boat owner, should be checked every two-to-three hours. A rising barometer indicates fair weather and a rise in wind velocity; a falling barometer indicates stormy or rainy weather.

What to do in severe weather:

- Reduce speed, keeping enough power to maintain headway.
- Put on PFDs.
- Turn on running lights.
- Head for the nearest shore or safe harbor that is safe to approach, if possible.
- Head bow of boat into waves at 45-degree angle, if possible.
- Keep bilges free of water.
- Seat passengers on bottom of the boat, near the centerline.
- If the engine fails, tie a sea anchor on a line from the bow of the boat to keep the boat headed into the waves. A bucket will work as a sea anchor in an emergency.
- Anchor the boat, if necessary.
- Seek shelter on-shore whenever possible. Particularly avoid riding out a storm that includes high wind and/or lightning, which is especially dangerous. Avoid contact with metal portions of the boat such as handrails, windshields, tower and cleats.

NAUTICAL CHARTS

Nautical charts are especially important to boaters planning trips, particularly on open waters. These charts show the nature and shape of the coast, depths of water, general configuration and character of the bottom of the body of water. Other markings on the nautical charts include prominent landmarks, port facilities, aids to navigation, and marine hazards. Changes brought about by people and nature require that nautical charts be constantly maintained and updated to aid safe navigation.

National Ocean Service (NOS) charts may be purchased either directly by mail from the NOS Distribution Branch or through an authorized agent. There are more than 1,700 nautical chart agents who sell them.

NOAA Office of Coast Survey

Distribution Division, AVN-530

1315 East West Highway

Silver Spring, MD 20910

Telephone: 1-888-990-6622

Email: outreach@noaa.gov <https://nauticalcharts.noaa.gov/>



To access the NOAA Nautical Charting Office website scan the QR code below

FLOAT PLAN

A “float plan” is a written record indicating the planned destination and approximate length of time for the outing. Sample forms are available at the Coast Guard’s website. One should be completed and left with a relative or friend prior to each trip. In case of an emergency or failure to return within a reasonable period of time, pertinent information will be available to assist local marine police or the Coast Guard in determining whether a search should be performed. Be sure to notify the float plan holder upon return.

NOTE

TO MAKE A FLOAT PLAN VISIT
[FLOATPLANCENTRAL.CGAUX.ORG](https://floatplancentral.cgaux.org)
OR SCAN THE QR CODE BELOW





STAYING AFLOAT

It is commonly believed that someone dressed in heavy clothing or waders will experience more difficulty staying afloat if they fall overboard. This is not true. Air trapped in clothing provides flotation and bending the knees will trap air in waders.

To stay afloat:

- Remain calm. Do not thrash about or try to remove clothing or footwear. This leads to exhaustion and increases the loss of air that may keep you afloat.
- Keep your PFD on.
- Keep your knees bent.
- Float on your back and paddle slowly to safety

COLD WATER SURVIVAL

Sudden immersion in cold water can induce rapid, uncontrolled breathing, cardiac arrest and other physical body conditions, which can lead to drowning. Always wearing a PFD will help survival in rapid immersion situations.

In other situations when entry into cold water is necessary:

- Wear a PFD.
- Button all clothing.
- Cover your head if possible and enter the water slowly.
- Keep your head out of the water if at all possible.
- Assume the Heat Escape Lessening Posture (HELP) position taught within a Coast Guard-taught safety course. Information about HELP is available online.

Immersion in water speeds the loss of body heat and can lead to hypothermia, the abnormal lowering of internal body temperature.

If a boat capsizes, it will likely float on or just below the surface. To reduce the effects of hypothermia, get in or on the boat. Try to get as much of your body out of the water as possible. If you can't get in the boat, a PFD will enable you to keep your head out of the water. This is very important because about 50 percent of body heat loss is from the head. It may be possible to revive a drowning victim who has been under water for some time and shows no



sign of life. Cases document instances where victims have been resuscitated after extended periods. Start CPR immediately and get the victim to a hospital as quickly as possible. Immersion suits will delay the effects of hypothermia in cold water and are available through many retailers who specialize in sales of marine products. The suits should be stored and maintained according to the manufacturer's instructions.

INFLATABLE LIFE RAFTS

An inflatable life raft can provide a survival platform for an extended period of time. Be sure the life raft is large enough for everyone on board when the boat operates off-shore. It should have the appropriate emergency equipment pack and should be professionally serviced periodically, according to the manufacturer's instructions. Coast Guard-approved life rafts must meet a number of stringent material and performance standards.



ANCHORING

Anchoring is done for two principal reasons: first, to stop for fishing, swimming, lunch or an overnight stay, or to keep a boat from running aground in bad weather or as a result of engine failure.

When preparing to anchor, bring the bow of the vessel into the wind or current. Place the engine in neutral. When the boat comes to a stop, slowly lower the anchor. Do not throw the anchor over as it will tend to foul the anchor or tangle line. When the anchor line has been let out, back up away from the anchor with the engine in idle reverse to help set the anchor. After it is firmly set, use reference points (landmarks) in relation to the boat to be sure that the boat is not drifting. Check the points frequently.



RULES OF THE OPEN WATER

STEERING AND SAILING RULES/SOUND SIGNALS

Any time two (2) vessels on the water meet one another, one vessel has the right-of-way. It is called the stand-on vessel. The vessel that does not have the right-of-way is called the give-way or burdened vessel.

These rules determine which vessel has the right of way, and accordingly, what each vessel should do.

The vessel with the right-of-way has the duty to continue its course and speed, except to avoid an immediate collision. When you maintain your direction and speed, the other vessel will be able to determine how best to avoid you.

The vessel that does not have the right of way has the duty to take positive and timely action to stay out of the way of the stand-on vessel. Normally, the give-way vessel should not cross in front of the stand-on vessel, but should slow down or change direction briefly and pass behind the other vessel. You should always move in such a way that the stand-on operator can see what you are doing if you are operating the give-way vessel.

GENERAL PRUDENTIAL RULE

This rule is called Rule 2 in the International Rules and says, "In obeying and construing these rules due regard shall be had to all dangers of navigation and collision, and to any special circumstances, which may render a departure from the above rules necessary in order to avoid immediate danger."

RULES WHEN ENCOUNTERING VESSELS

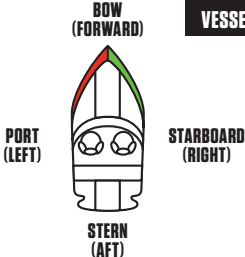
There are three (3) main situations in which you may encounter other vessels, and you must avoid a collision. These are:

- Meeting (you are approaching another vessel head-on).
- Crossing (you are traveling across the other vessel's path).
- Overtaking (you are passing or being passed by another vessel).

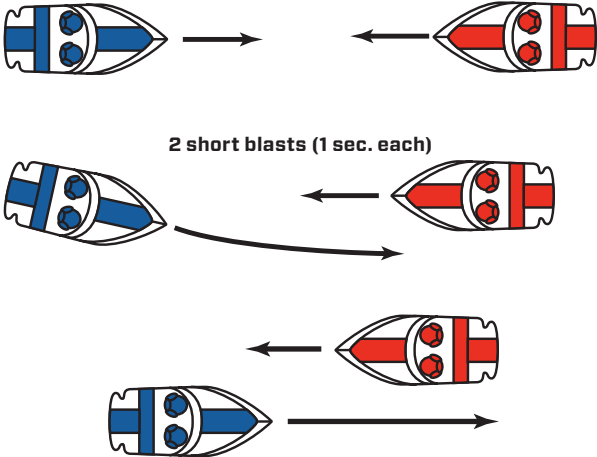
MEETING

If you are meeting another vessel head-on, and you are close enough to run the risk of collision, neither of you has the right-of-way. Both of you should alter course to avoid an accident. You should keep the other vessel on your port (left) side. (This rule doesn't apply if both of you can clear each other by continuing your set course and speed.)

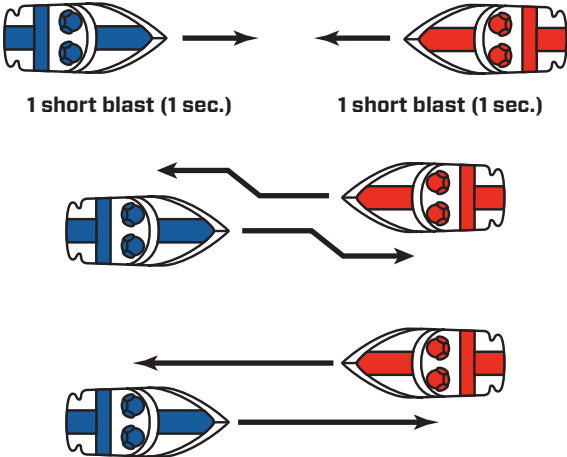
VESSEL TERMS



Scenario 1: No right of way. Steer to keep the other vessel on your PORT side



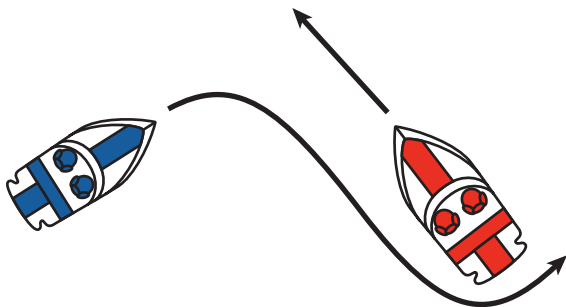
Scenario 2: Head on. Steer to avoid other vessel maintaining course and speed



CROSSING

When two (2) power-driven vessels are crossing each other's path close enough to run the risk of collision, the vessel that views the crossing vessel to the starboard (right) side must give way.

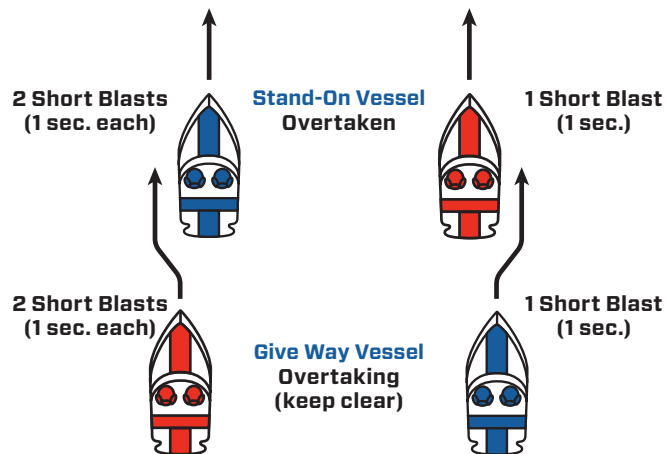
If the other vessel is to the port (left) side, you are the stand-on vessel, and provided the other vessel gives you the right-of-way, maintain your course and direction.



OVERTAKING

If you are passing another vessel, you are the give-way vessel. This means that the other vessel is expected to maintain its course and speed. You must stay out of its way as you clear it, altering course and speed as necessary.

Conversely, if you are being passed by another vessel, you are the stand-on vessel, and you should maintain your speed and direction so that the vessel can be steered around you.



SAILING VESSEL RIGHT-OF-WAY

Sailing vessels should normally be given the right-of-way. The exceptions to this are:

- When the sailing vessel is overtaking the power-driven vessel, the power-driven vessel has the right-of-way.
- Sailing vessels should keep clear of any fishing vessel.
- In a narrow channel, a sailing vessel should not hamper the safe passage of a power-driven vessel that can navigate only in such a channel. A sailing vessel that is underway but not using sails is considered a power vessel and should be treated like any other power vessel when determining right of way.

FISHING VESSEL RIGHT-OF-WAY

Under international rules, all vessels that are fishing with nets, lines or trawls are considered to be fishing vessels; however, boats with trolling lines are not considered fishing vessels.

Fishing vessels have the right of way, regardless of position, but these vessels cannot impede the passage of other vessels in narrow channels.

OTHER SPECIAL SITUATIONS

There are additional rules to remember when operating your boat around other vessels, such as:

- When navigating in narrow channels, you should keep to the right when it is safe and practical to do so.
- When preparing to go around a bend that may obstruct your view of other water vessels, you should sound a prolonged blast on the horn or with a whistle for four (4) to six (6) seconds. Even if no reply is heard, you should still proceed around the bend with caution.

The red horn button on the MasterCraft dash





READING BUOYS AND OTHER MARKERS

The waters of the United States are marked for safe navigation by the lateral system of buoyage. The markers and buoys you encounter will have an arrangement of shapes, colors, numbers and lights to show which side of the buoy a boater should pass when navigating in a particular direction.

The Uniform State Waterway Marker System has been devised for these waters. This system uses buoys and signs with distinctive shapes and colors to show regulatory or advisory information. The markings on these buoys are oriented from the perspective of being entered from a seaward direction while the boater is going toward the port. Red buoys are passed on the starboard (right) side when proceeding from open water into port, and green buoys are passed on the port (left) side. When navigating out of port, your position to the buoys should be reversed: red buoys to port (left) and green buoys to starboard (right).

UNIFORM STATE WATERWAY MARKER SYSTEM

Green or Black Channel Marker Buoy: Traveling upstream, you should pass to the right of the buoy as it marks the left side of the channel.

Red Channel Marker Buoy: Traveling upstream, you should pass to the left of this buoy as it marks the right side of the channel.

Junction Buoy (Green over Red): Means two channels are coming together and you should pass to the right of the buoy as you travel upstream.

Junction Buoy (Red over Green): Means two channels are coming together and you should pass to the left of the buoy as you travel upstream.

Passing Daymark (Green): A sign mounted on poles in the water or on the bank which is used in the same manner as a channel marker buoy. In this case it marks the left side of the channel as you travel upstream.

Passing Daymark (Red): A sign mounted on poles in the water or on the bank which is used in the same manner as a channel marker buoy. In this case it marks the right side of the channel as you travel upstream.

Channel Crossing Daymark (Green): A sign mounted on poles in the water or on the bank which means the channel is crossing from the left bank to the right bank as you travel upstream.

Channel Crossing Daymark (Red): A sign mounted on poles in the water or on the bank which means the channel is crossing from the right bank to the left bank as you travel upstream.

Boats Keep Out Buoy: Marks a swimming area, an area near a dam or any area where boats are not allowed.

Danger Buoy: Marks an obstruction, ferry cable, or any area where boats should not navigate or should use extreme caution. Information Buoy: Used to relay information. Words printed in black (usually inside the border) tell place names, distances, directional arrows, availability of supplies, gasoline, etc.

Control Buoy: Marks a restricted area such as “slow no-wake,” “5 MPH, no skiing or no fishing.”

Mooring Buoy: Means an anchor buoy. This is the only buoy to which a boat may tie or secure to.

Diver's Flag: Must be used any time a diver is in the water. Boats must not come closer than 50 feet of the flag and must operate at a slow, no-wake speed within 200 feet.

Alpha Flag: Means a vessel is engaged in diving operations or is restricted in its ability to navigate. Boaters must use extreme caution and are advised to look for a diver's-down flag.

NOTE: Markings may vary by geographic location. For example, the Western Rivers System markers are slightly different, as well as in different states or jurisdictions. Always consult appropriate boating authorities before boating in unfamiliar waters.

WAKE RESPONSIBLY

1

Stay at least 200 feet away from the shoreline, docks, or other structures.

2

**Keep music at reasonable levels. Sound travels well over water.
Minimize repetitive passes on any one portion of shoreline.
Remember, you are responsible for your own wake.**

3

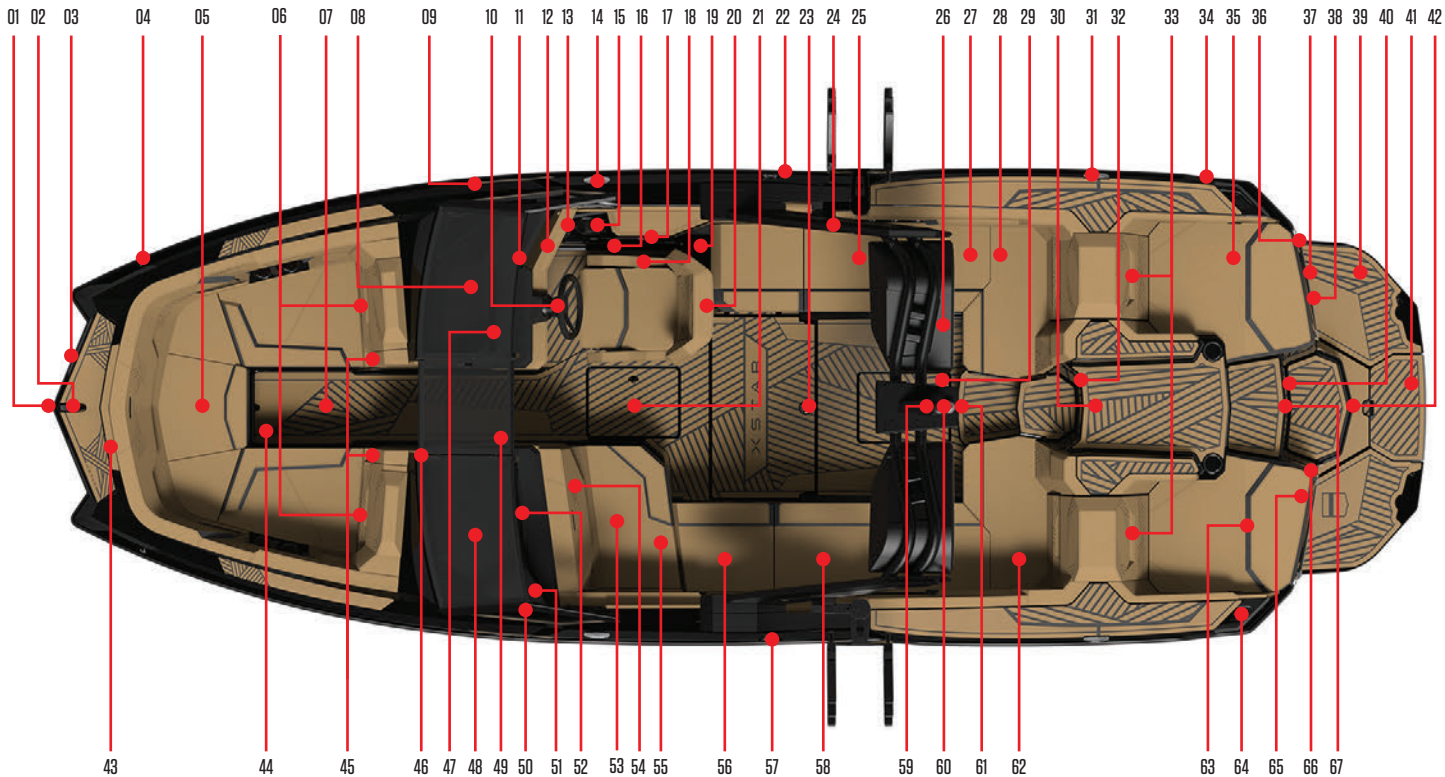
Take The Pledge at: [WakeResponsibly.com](https://www.WakeResponsibly.com)



**Scan this QR Code to access
the Wake Responsibly Card**



2027 MODEL FEATURES & SPECS



XSTAR 23

XSTAR 23

FEATURES

- | | | |
|---|--|--|
| 1. Bow Camera | 22. Starboard Fuel Fill | 46. Billet Wind Dam |
| 2. Bow Cleat | 23. Murphy Seat | 47. Starboard Forward Subwoofer |
| 3. Bow Lights | 24. Z100 Tower | 48. Port Forward Subwoofer |
| 4. Navigation Light | 25. Cooler | 49. Trash Bin |
| 5. Anchor Storage | 26. SoundPods | 50. Amp Board |
| 6. Fender Storage | 27. Starboard Ballast Tank | 51. Observers Display |
| 7. Forward KGB Ballast Tank | 28. Starboard Aft Subwoofer | 52. Glove Box |
| 8. XStar Dash | 29. Fuel Tank Service Hatch | 53. Observer Storage Canvas |
| 9. Forward Ballast Thru-hull Outlet & Bilge Thru-hull Outlet | 30. Engine Access Hatch | 54. Handheld Fire Extinguisher |
| 10. Steering Wheel | 31. Aft Cleat | 55. Batteries (4) |
| 11. Helm Circuit Breaker | 32. Engine Flush Valve | 56. Back Rest |
| 12. Valuables Drawer | 33. MAAX Subwoofers | 57. Port Fuel Fill |
| 13. Battery Switch, Key Switch, Wireless Charger, & Nav Lights | 34. Starboard Ballast Thru-hull Outlet | 58. Port Ballast Tank |
| 14. Midship Cleat | 35. Transom Seating | 59. Anchor Light |
| 15. MasterCraft MyDrive | 36. Surf Tab | 60. Tower Camera |
| 16. Shift/Throttle/Stern Thruster Control | 37. Stern Lights | 61. Tower Tow Point |
| 17. Kill Switch Lanyard | 38. MAAX Transom Audio | 62. Port Aft Subwoofer |
| 18. Power Seat Controls | 39. Platform | 63. Inflator Pump* |
| 19. Fire Suppression Unit Manual Override | 40. Transom Stereo Remote | 64. Transom Grab Handle |
| 20. Heated Helm Seat* | 41. Swim Step | 65. Transom Surf Camera |
| 21. Forward Bilge Access w/ Center Drain Plug | 42. Underwater Exhaust, Center Surf Tab, Stern Thruster, & Transom Drain Plug | 66. Underwater Lights |
| | 43. Horn | 67. Transom Tow Point |
| | 44. Bow Filler Cushion | |
| | 45. Fold Down Arm Rests | |

DIMENSIONS

BOAT LENGTH	23'7" / 7.19 M
BOAT HEIGHT	11" / 3.38 M
BEAM	102" / 2.59 M
INTERIOR WIDTH	85" / 2.16 M
DRAFT	31.5" / 0.80 M

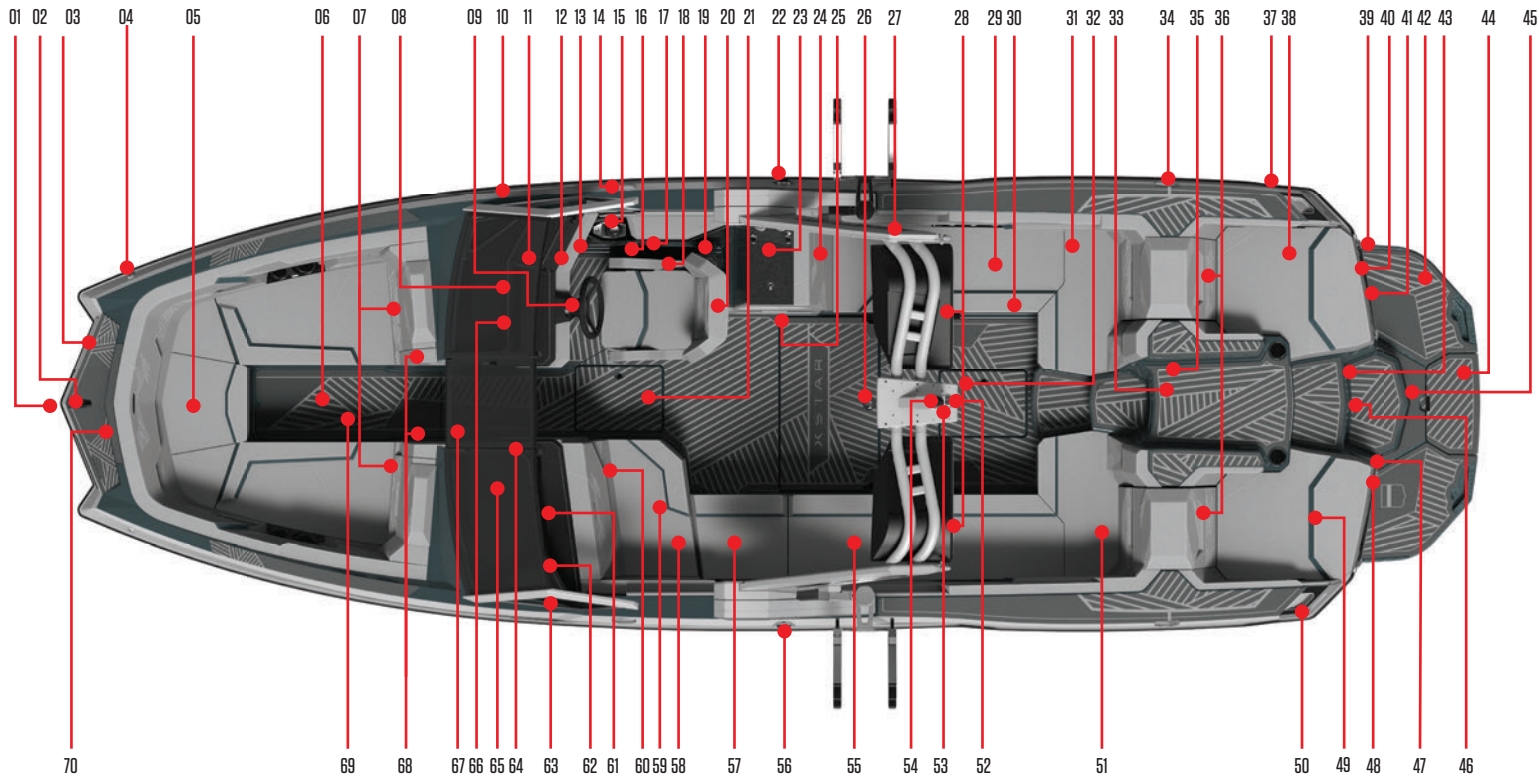
DETAILS

SEATING	16 People
BOAT WEIGHT	7,600 Lbs / 3,447 Kg
BALLAST	3,775 Lbs / 1,712 Kg
WEIGHT CAPACITY	2,200 Lbs / 998 Kg
FUEL CAPACITY	86 Gal / 325.5 L
HULL	Vector Drive
STORAGE	98 Cu. Ft / 2.78 Cu. M

Weight must be evenly distributed on-board

* If equipped

^ One on each side of the boat



XSTAR 25

XSTAR 25

FEATURES

1. Bow Camera
2. Bow Cleat
3. Bow Lights
4. Navigation Light
5. Anchor Storage
6. Forward KGB Ballast tank
7. Fender Storage
8. XStar Dash
9. Steering Wheel
10. Forward Ballast Thru-hull Outlet & Bilge Thru-hull Outlet
11. Helm Circuit Breaker
12. Valuables Drawer
13. Battery Switch, Key Switch, Wireless Charger, & Nav Lights
14. Midship Cleat
15. MasterCraft MyDrive
16. Shift/Throttle/Stern Thruster Control
17. Kill Switch Lanyard
18. Power Seat Controls
19. Fire Suppression Unit Manual Override
20. Heated Helm Seat*
21. Forward Bilge Access w/Center Drain Plug
22. Starboard Fuel Fill
23. Midship Valuables Drawer
24. Fold Out Social Table
25. Refrigerator or Storage Drawer
26. Murphy Seat
27. Z100 Tower
28. SoundPods
29. Cooler
30. Starboard Ballast Tank
31. Starboard Aft Subwoofer
32. Fuel Tank Service Hatch
33. Engine Access Hatch
34. Aft Cleat
35. Engine Flush Valve
36. MAAX Subwoofers
37. Starboard Ballast Thru-hull Outlet
38. Transom Seating
39. Surf Tab
40. Stern Lights
41. MAAX Transom Audio
42. Platform
43. Transom Stereo Remote
44. Swim Step
45. Underwater Exhaust, Center Surf Tab, Stern Thruster, & Transom Drain Plug
46. Transom Tow Point
47. Underwater lights
48. Transom Surf Camera
49. Inflator Pump*
50. Transom Grab Handle
51. Port Aft Subwoofer
52. Tower Tow Point
53. Tower Camera
54. Anchor Light
55. Port Ballast Tank
56. Port Fuel Fill
57. Cockpit Back Rest
58. Batteries (4)
59. Observer Storage Canvas
60. Handheld Fire Extinguisher
61. Glove Box
62. Observers Display
63. Amp Board
64. Trash Bin
65. Port Forward Subwoofer
66. Starboard Forward Subwoofer
67. Billet Wind Dam
68. Fold Down Arm Rests
69. Bow Filler Cushion
70. Horn

DIMENSIONS

BOAT LENGTH	25'7" / 7.80 M
BOAT HEIGHT	11'3" / 3.43 M
BEAM	102" / 2.59 M
INTERIOR WIDTH	85" / 2.16 M
DRAFT	32" / 0.81 M

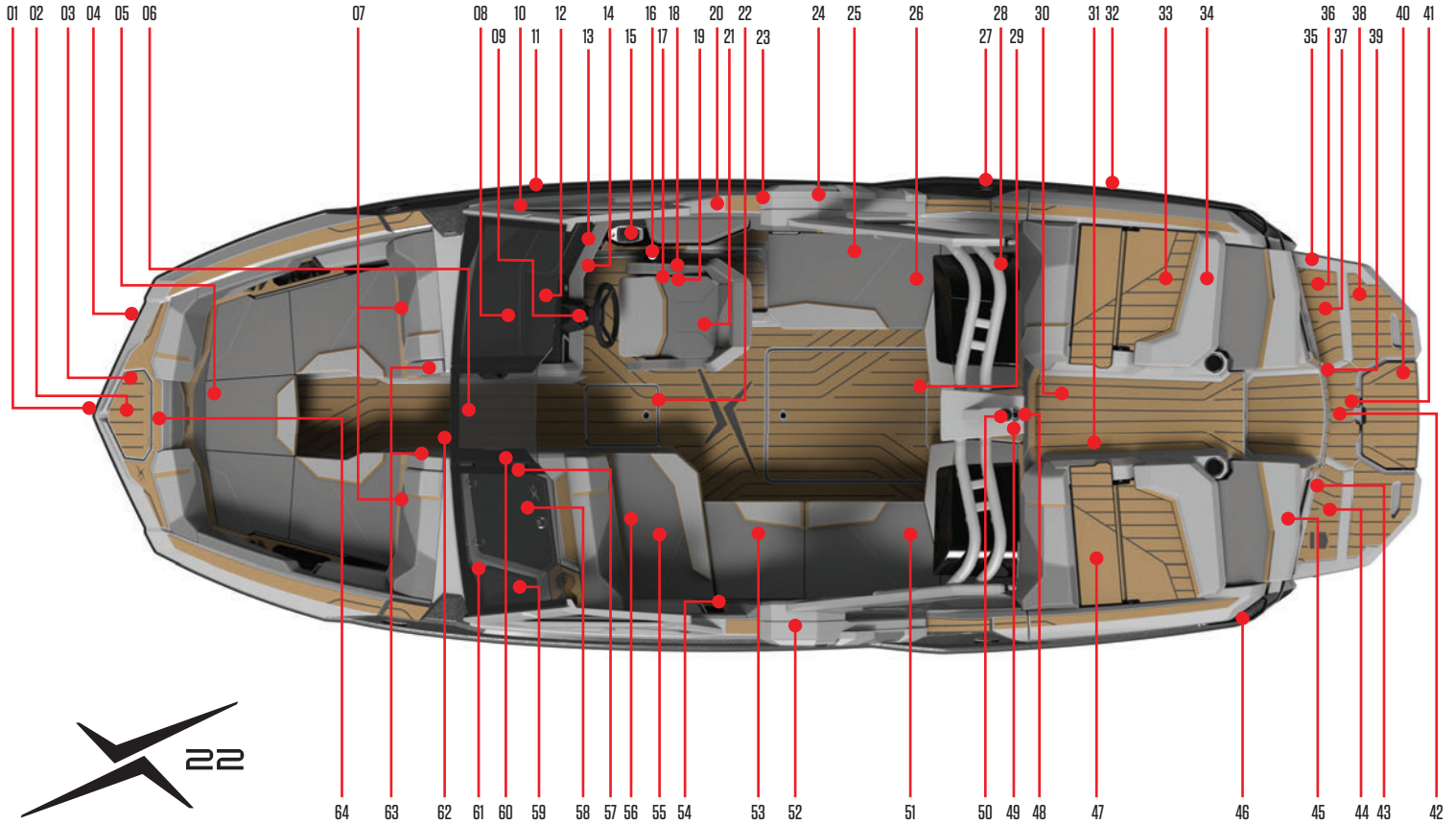
DETAILS

SEATING	18 People
BOAT WEIGHT	8,400 Lbs / 3,810 Kg
BALLAST	3,975 Lbs / 1,803 Kg
WEIGHT CAPACITY	2,450 Lbs / 1,111 Kg
FUEL CAPACITY	86 Gal / 325.5 L
HULL	Vector Drive
STORAGE	112 Cu. Ft / 3.17 Cu. M

Weight must be evenly distributed on-board

* If equipped

^ One on each side of the boat



X22

FEATURES

1. Bow Camera
2. Bow Cleat
3. Anchor Storage
4. Bow Lights*
5. Bow Filler Cushion*
6. Forward KGB Ballast Tank
7. Fender Storage
8. X Series Dash
9. Steering Wheel
10. Navigation Light
11. Forward Ballast Thru-hull Outlet & Bilge Thru-hull Outlet
12. Helm Circuit Breaker
13. Valuables Drawer
14. Battery Switch, Key Switch, Wireless Charger, & Nav Lights
15. MasterCraft MyDrive
16. Shift/Throttle/Stern Thruster Control*
17. Kill Switch Lanyard
18. Power Seat Controls
19. Fire Suppression Unit Manual Override
20. Midship Cleat
21. Heated Helm Seat*
22. Forward Bilge Access w/Center Drain Plug
23. Starboard Fuel Fill
24. Z9 Tower
25. Cooler
26. Starboard Ballast Tank
27. Aft Cleat
28. SoundPods
29. Fuel Tank Service Hatch
30. Engine Access Hatch
31. Engine Flush Valve
32. Starboard Ballast Thru-hull Outlet
33. Inflator Pump*
34. Transom Seating
35. Surf Tab
36. Stern Lights*
37. MAAX Transom Audio*
38. Platform
39. Transom Stereo Remote*
40. Swim Step*
41. Underwater Exhaust, Center Trim Tab, Stern Thruster*, & Transom Drain Plug
42. Transom Tow Point
43. Transom Surf Camera*
44. Underwater Lights*
45. MAAX Subwoofer*
46. Transom Grab Handle
47. Transom Wet Storage Tub
48. Tower Tow Point
49. Tower Camera
50. Anchor Light
51. Port Ballast Tank
52. Port Fuel Fill
53. Cockpit Back Rest
54. Observer Display*
55. Observer Storage Canvas
56. Batteries
57. Handheld Fire Extinguisher
58. Glove Box
59. Amp Board
60. Trash Bin
61. Port Forward Subwoofer
62. Billet Wind Dam
63. Fold Down Arm Rests
64. Horn

DIMENSIONS

BOAT LENGTH	22'3" / 6.78 M
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BOAT HEIGHT	11'2" / 3.40 M
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BEAM	102" / 2.59 M
------	---------------

INTERIOR WIDTH	83" / 2.11 M
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DRAFT	32" / 0.81 M
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DETAILS

SEATING	15 People
---------	-----------

BOAT WEIGHT	6,950 Lbs / 3,152 Kg
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BALLAST	3,800 Lbs / 1,724 Kg
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WEIGHT CAPACITY	2,150 Lbs / 975 Kg
-----------------	--------------------

FUEL CAPACITY	76 Gal / 288 L
---------------	----------------

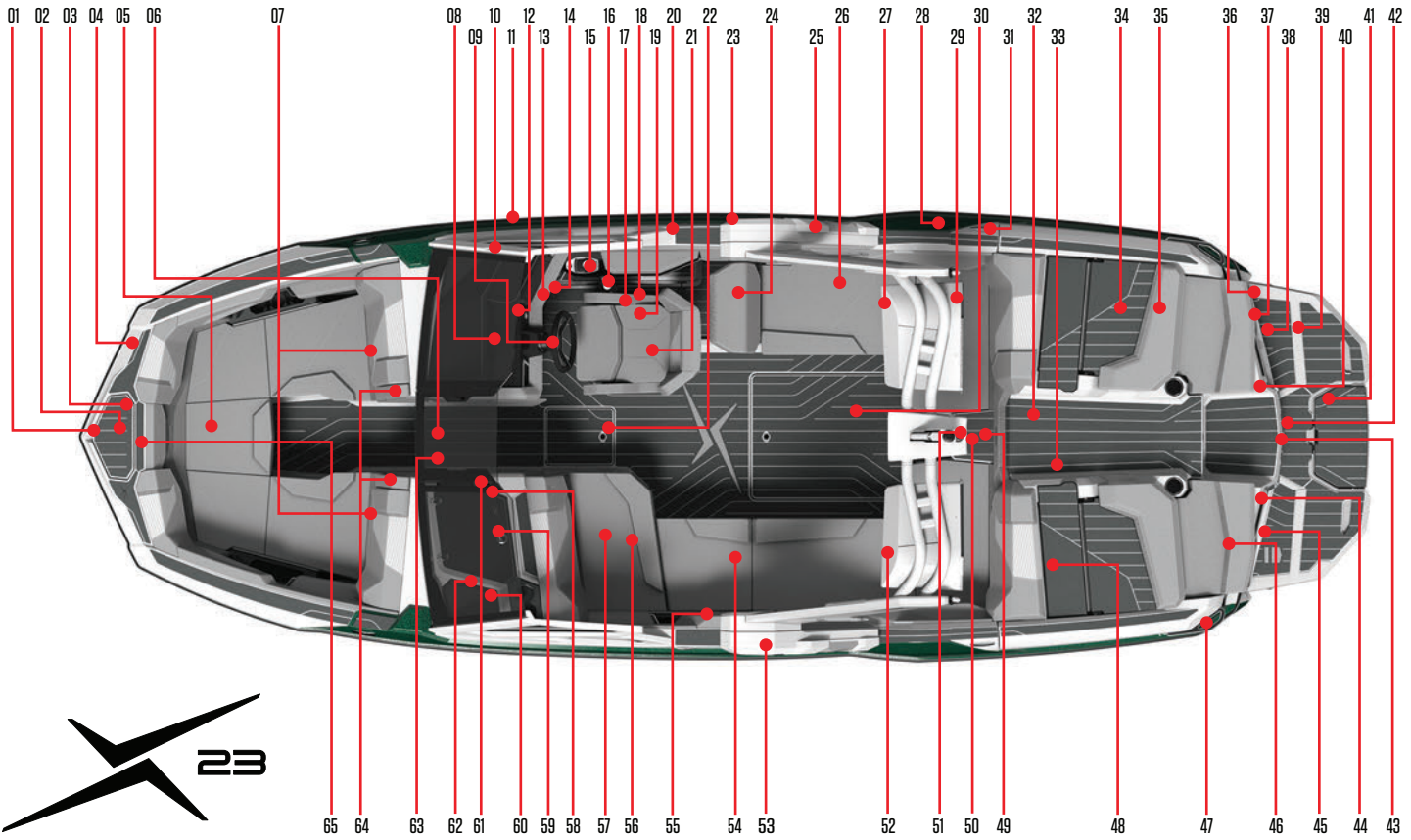
HULL	Vector Drive
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STORAGE	72.5 Cu. Ft / 2.05 Cu. M
---------	--------------------------

Weight must be evenly distributed on-board

* If equipped

^ One on each side of the boat



X23

FEATURES

1. Bow Camera
2. Bow Cleat
3. Anchor Storage
4. Bow Lights
5. Bow Filler Cushion
6. Forward KGB Ballast Tank
7. Fender Storage
8. X Series Dash
9. Steering Wheel
10. Forward Ballast Thru-hull Outlet & Bilge Thru-hull Outlet
11. Navigation Light
12. Helm Circuit Breaker
13. Valuables Drawer
14. Battery Switch, Key Switch, Wireless Charger & Nav Lights
15. MasterCraft MyDrive
16. Shift/Throttle/Stern Thruster Control*
17. Kill Switch Lanyard
18. Power Seat Controls
19. Fire Suppression Unit Manual Override
20. Midship Cleat
21. Heated Helm Seat*
22. Forward Bilge Access w/Center Drain Plug
23. Starboard Fuel Fill
24. Cockpit Back Rest
25. Z9 Tower
26. Cooler
27. Starboard Ballast Tank
28. Starboard Ballast Thru-hull Outlet
29. SoundPods
30. Fuel Tank Service Hatch
31. Aft Cleat
32. Engine Access Hatch
33. Engine Flush Valve
34. Inflator Pump*
35. Transom Seating
36. Surf Tab
37. Stern Lights*
38. MAAX Transom Audio*
39. Platform
40. Transom Stereo Remote*
41. Swim Step*
42. Underwater Exhaust, Center Trim Tab, Stern Thruster* & Transom Drain Plug
43. Transom Tow Point
44. Transom Surf Camera*
45. Underwater Lights*
46. MAAX Subwoofer*
47. Transom Grab Handle
48. Transom Wet Storage Tubs
49. Tower Tow Point
50. Tower Camera
51. Anchor Light
52. Port Ballast Tank
53. Port Fuel Fill
54. Cockpit Back Rest
55. Observers Display*
56. Observer Storage Canvas
57. Batteries*
58. Handheld Fire Extinguisher
59. Glove Box
60. Amp Board
61. Trash Bin
62. Port Forward Subwoofer
63. Billet Wind Dam
64. Fold Down Arm Rests
65. Horn

DIMENSIONS

BOAT LENGTH	22'11" / 6.99 M
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BOAT HEIGHT	10'10" / 3.30 M
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BEAM	102" / 2.59 M
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INTERIOR WIDTH	83" / 2.11 M
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DRAFT	32" / 0.81 M
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DETAILS

SEATING	16 People
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BOAT WEIGHT	7,100 Lbs / 3,221 Kg
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BALLAST	3,800 Lbs / 1,724 Kg
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WEIGHT CAPACITY	2,300 Lbs / 1,043 Kg
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FUEL CAPACITY	76 Gal / 288 L
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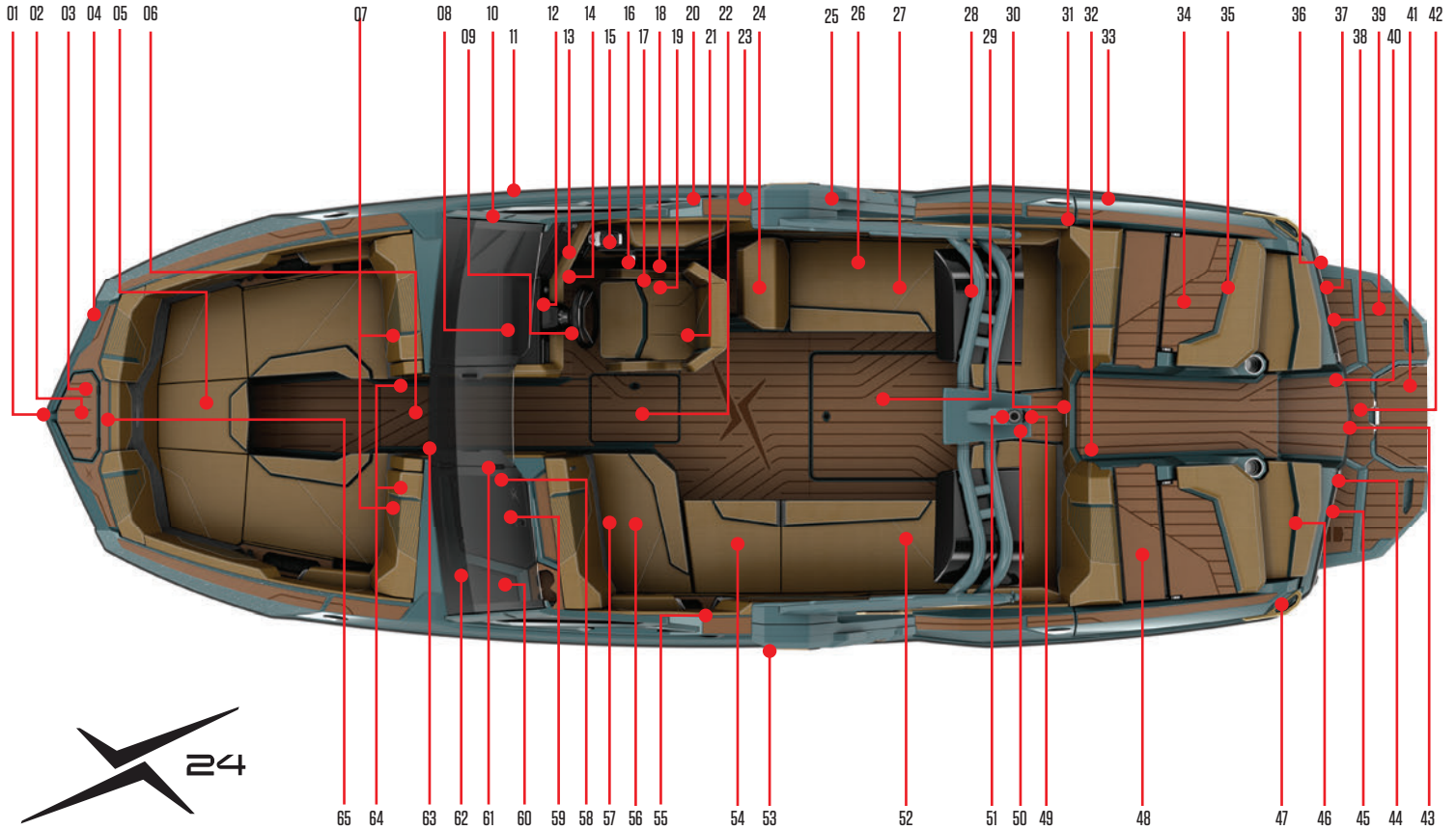
HULL	Vector Drive
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STORAGE	73.85 Cu. Ft / 2.95 Cu. M
---------	---------------------------

Weight must be evenly distributed on-board

* If equipped

^ One on each side of the boat



X24

FEATURES

1. Bow Camera
2. Bow Cleat
3. Anchor Storage
4. Bow Lights*
5. Bow Filler Cushion*
6. Forward KGB Ballast Tank
7. Fender Storage
8. X Series Dash
9. Steering Wheel
10. Forward Ballast Thru-hull Outlet & Bilge Thru-hull Outlet
11. Navigation Light
12. Helm Circuit Breaker
13. Valuables Drawer
14. Battery Switch, Key Switch, Wireless Charger, & Nav Lights
15. MasterCraft MyDrive
16. Shift/Throttle/Stern Thruster Controls*
17. Kill Switch Lanyard
18. Power Seat Controls
19. Fire Suppression Unit Manual Override
20. Midship Cleat
21. Heated Helm Seat*
22. Forward Bilge Access w/Center Drain Plug
23. Starboard Fuel Fill
24. Cockpit Back Rest
25. Z9 Tower
26. Cooler
27. Starboard Ballast Tank
28. Starboard Ballast Thru-hull Outlet
29. SoundPods
30. Fuel Tank Service Hatch
31. Aft Cleat
32. Engine Access Hatch
33. Engine Flush Valve
34. Transom Seating
35. Inflator Pump*
36. Surf Tab
37. Stern Lights*
38. MAAX Transom Audio*
39. Platform
40. Transom Stereo Remote*
41. Swim Step*
42. Underwater Exhaust, Center Trim Tab, Stern Thruster*, & Transom Drain Plug
43. Transom Tow Point
44. Transom Surf Camera*
45. Underwater Lights*
46. MAAX Subwoofer*
47. Transom Grab Handle
48. Transom Wet Storage Tubs
49. Tower Tow Point
50. Tower Camera
51. Anchor Light
52. Port Ballast Tank
53. Port Fuel Fill
54. Cockpit Back Rest
55. Observer Display*
56. Observer Storage Canvas

57. Batteries
58. Handheld Fire Extinguisher
59. Glove Box
60. Amp Board
61. Trash Bin
62. Port Forward Subwoofer
63. Billet Wind Dam
64. Fold Down Arm Rests
65. Horn

DIMENSIONS

BOAT LENGTH 24'3" / 7.39 M

BOAT HEIGHT 11'8.5" / 3.57 M

BEAM 102" / 2.59 M

INTERIOR WIDTH 83" / 2.11 M

DRAFT 32" / 0.81 M

DETAILS

SEATING 17 People

BOAT WEIGHT 7,200 Lbs / 3,266 Kg

BALLAST 4,050 Lbs / 1,837 Kg

WEIGHT CAPACITY 2,400 Lbs / 1,089 Kg

FUEL CAPACITY 86 Gal / 326 L

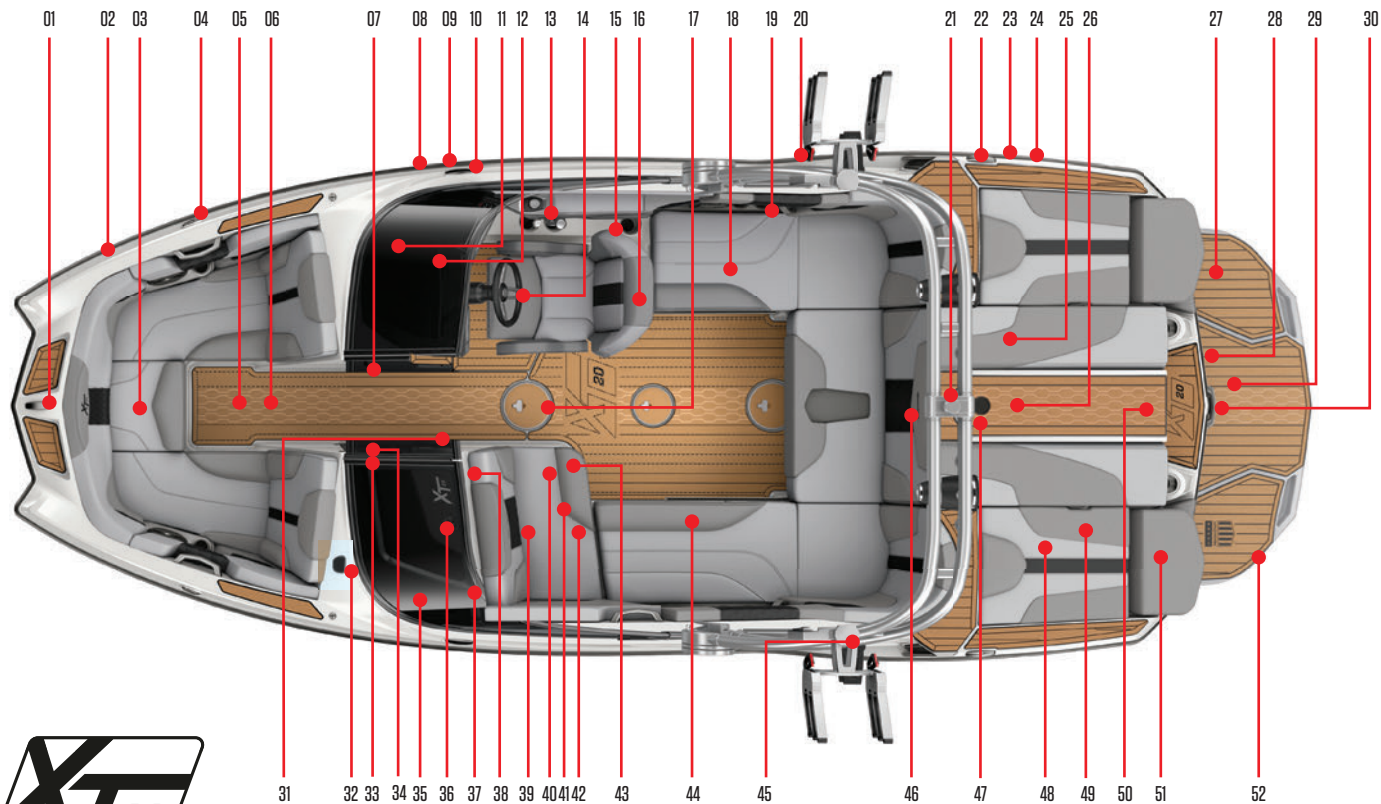
HULL Vector Drive

STORAGE 79 Cu. Ft / 2.24 Cu. M

Weight must be evenly distributed on-board

* If equipped

^ One on each side of the boat



XT20

FEATURES

1. Bow Cleat
2. Horn
3. Anchor Storage
4. Navigation Light[^]
5. Bow Filler Cushion*
6. Ballast Tank
7. Bow Subwoofer*
8. Bilge Thru-hull Outlet
9. Ballast Thru-hull Outlet
10. Midship Cleat[^]
11. Helm Circuit Breaker
12. Instrument Panel
13. Throttle Control and Kill Switch Lanyard/Helm Battery Switch
14. Steering Wheel
15. Fire Suppression Unit Manual Override
16. Heated Helm Seat*
17. Center Drain Plug/ Forward Bilge
18. Cooler
19. Wireless Chargers*[^]
20. Fuel Tank Fill[^]
21. Anchor Light and Tow Point
22. Stern Cleat[^]
23. Ballast Thru-hull Outlet
24. Bilge Thru-hull Outlet
25. Engine Flush Valve
26. Engine Compartment/ Aft Bilge
27. Surf Tab[^]
28. Transom Remote*
29. Stern Thruster*, Center Surf Tab, Underwater Exhaust Tip
30. Transom Drain Plug
31. Trash Can Door
32. GPS Puck
33. Valuables Drawer
34. Dog Bowl*
35. Amp and Amp Board
36. Glove Box
37. Handheld Fire Extinguisher
38. Observer Remote*
39. Batteries
40. Battery Switch
41. Observer Storage Canvas
42. Heated Observer Seat*
43. Main Circuit Breaker
44. Battery Charger*
45. Tower with Standard or XL* Clamping Board Racks
46. Convertible Seat
47. Pop-up Pylon
48. SurfStar Ballast Bag[^]
49. Inflator Pump*
50. Transom Seating
51. Automatic Fire Extinguisher
52. Platform

DIMENSIONS

BOAT LENGTH	20' / 6.10 M
BOAT HEIGHT	120" / 3.05 M
BEAM	100" / 2.54 M
INTERIOR WIDTH	85" / 2.16 M
DRAFT	30" / 0.76 M

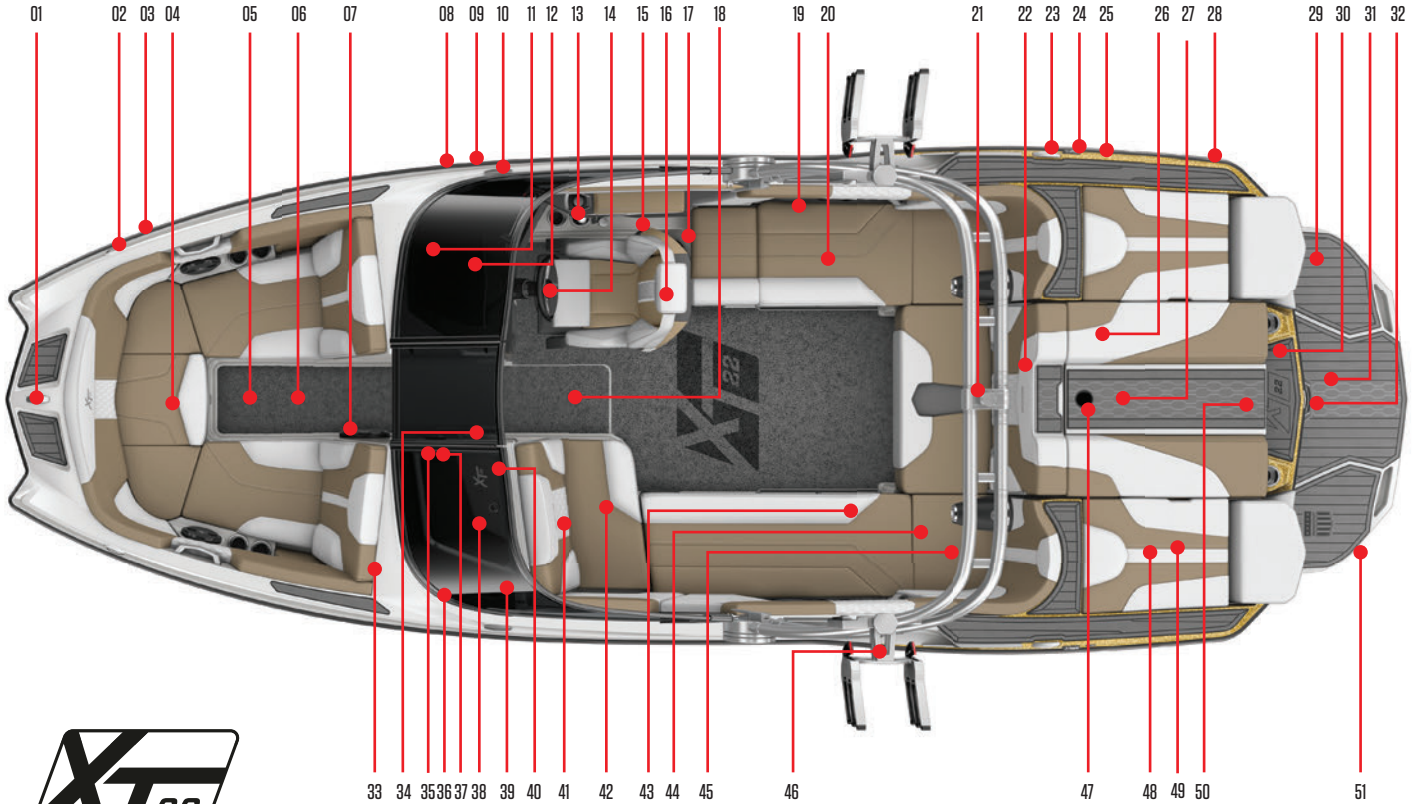
DETAILS

SEATING	12 People
BOAT WEIGHT	5,100 Lbs / 2,313 Kg
BALLAST	2,800 Lbs / 1,270 Kg
WEIGHT CAPACITY	2,000 Lbs / 907 Kg
FUEL CAPACITY	45 Gal / 170 L
HULL	Vector Drive
STORAGE	93 Cu. Ft / 2.63 Cu. M

Weight must be evenly distributed on-board

* If equipped

[^] One on each side of the boat



XT22

FEATURES

- 1. Bow Cleat
- 2. Navigation Light[^]
- 3. Horn
- 4. Anchor Storage
- 5. Bow Filler Cushion*
- 6. Ballast Tank
- 7. Bow Subwoofer*
- 8. Ballast Thru-hull Outlet
- 9. Bilge Thru-hull Outlet
- 10. Midship Cleat[^]
- 11. Helm Circuit Breaker
- 12. Instrument Panel
- 13. Throttle Control and Kill Switch Lanyard/Helm Battery Switch
- 14. Steering Wheel
- 15. Fire Suppression Unit Manual Override
- 16. Heated Helm Seat*
- 17. Subwoofer
- 18. Center Drain Plug (Under Floor)/Forward Bilge
- 19. Wireless Chargers*[^]
- 20. Cooler
- 21. Anchor Light and Tow Point
- 22. Convertible Seat
- 23. Stern Cleat[^]
- 24. Fuel Tank Fill[^]
- 25. Ballast Thru-hull Outlet
- 26. Engine Flush Valve
- 27. Engine Compartment/Aft Bilge
- 28. Bilge Thru-hull Outlet
- 29. Surf Tab[^]
- 30. Transom Remote*
- 31. Stern Thruster*, Center Surf Tab, Underwater Exhaust Tip
- 32. Transom Drain Plug
- 33. GPS Puck
- 34. Trash Can Door
- 35. Valuables Drawer*
- 36. Amp and Amp Board
- 37. Dog Bowl*
- 38. Glove Box
- 39. Handheld Fire Extinguisher
- 40. Observer Remote*
- 41. Heated Observer Seat*
- 42. Observer Storage Canvas
- 43. Battery Charger*
- 44. Circuit Breaker/Battery Switch
- 45. Batteries
- 46. Tower with Standard or XL* Clamping Board Racks
- 47. Pop-up Pylon
- 48. SurfStar Ballast Bag[^]
- 49. Inflator Pump*
- 50. Automatic Fire Extinguisher
- 51. Platform
- 52. Battery Charger Port*
- 53. Ignition Key Location

DIMENSIONS

BOAT LENGTH	22'4" / 6.81 M
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BOAT HEIGHT	123" / 3.12 M
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BEAM	102" / 2.59 M
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INTERIOR WIDTH	86" / 2.18 M
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DRAFT	29" / 0.74 M
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DETAILS

SEATING	16 People
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BOAT WEIGHT	5,485 Lbs / 2,488 Kg
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BALLAST	3,350 Lbs / 1,520 Kg
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WEIGHT CAPACITY	2,400 Lbs / 1,089 Kg
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FUEL CAPACITY	79 Gal / 299 L
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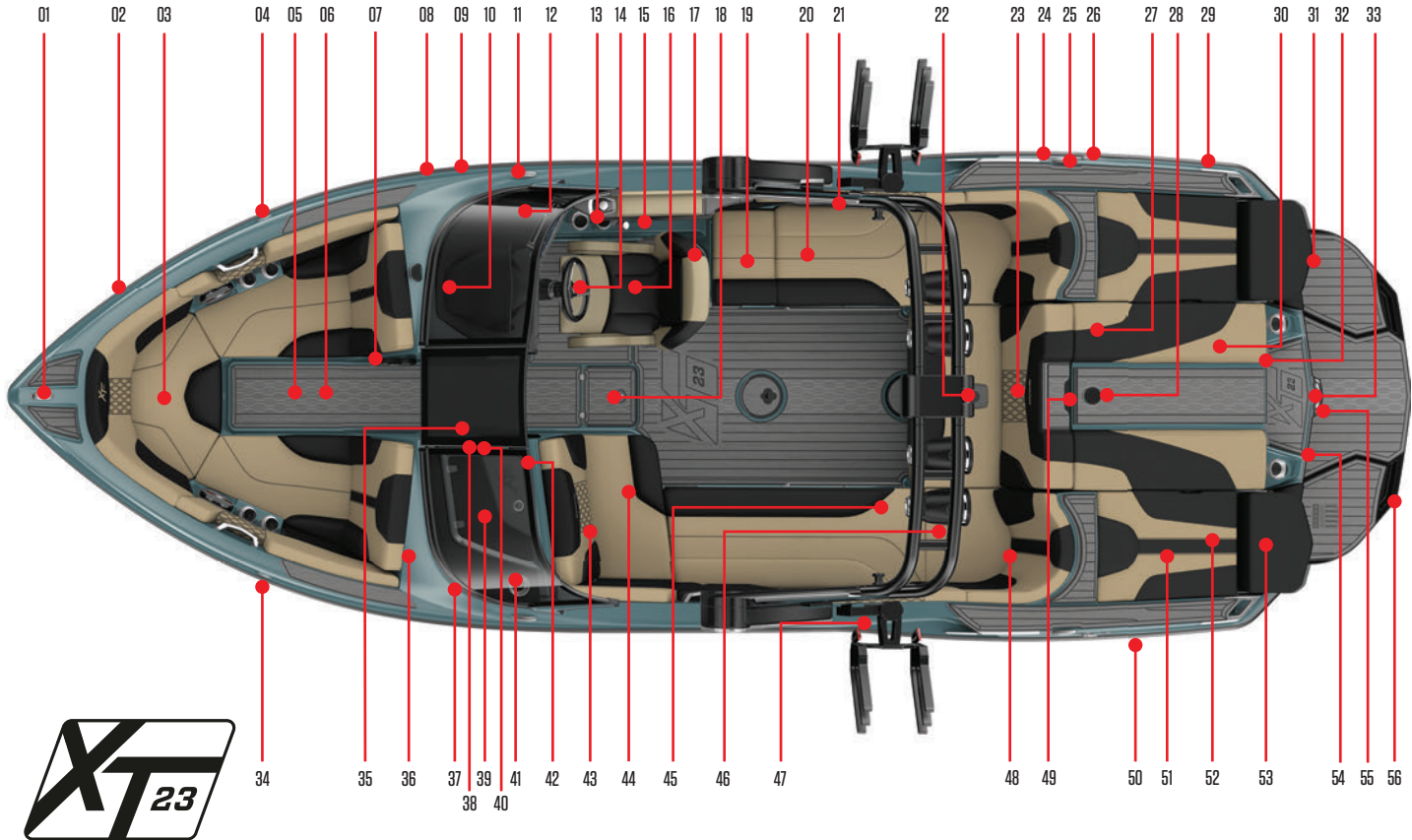
HULL	Vector Drive
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STORAGE	103 Cu. Ft / 2.92 Cu. M
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Weight must be evenly distributed on-board

* If equipped

[^] One on each side of the boat



XT23

FEATURES

1. Bow Cleat
2. Horn
3. Anchor Storage
4. Navigation Light[^]
5. Ballast Tank
6. Bow Filler Cushion*
7. Bow Subwoofer
8. Bilge Thru-hull Outlet
9. Ballast Thru-hull Outlet
10. Circuit Breaker Panel; Battery Switch
11. Midship Cleat[^]
12. Instrument Panel
13. Throttle Control and Kill Switch Lanyard/Helm Battery Switch
14. Steering Wheel
15. Fire Suppression Unit Manual Override
16. Heated Helm Seat*
17. Subwoofer*
18. Center Drain Plug/ Forward Bilge
19. Pop-up Back-facing Back Rest
20. Cooler
21. Wireless Chargers*[^]
22. Anchor Light and Tower Tow Point Attachment
23. Convertible Seat*
24. Ballast Thru-hull Outlet
25. Stern Cleat[^]
26. Fuel Tank Fill
27. Engine Flush Valve
28. Engine Compartment/ Aft Bilge
29. Bilge Outlet
30. Automatic Fire Extinguisher
31. Surf Tab[^]
32. Transom Remote*
33. Transom Drain Plug
34. Navigation Light
35. Trash Can Door
36. GPS Puck
37. Amp and Amp Board
38. Valuables Drawer
39. Glove Box
40. Dog Bowl*
41. Handheld Fire Extinguisher
42. Observer Remote*
43. Heated Observer Seat*
44. Observer Storage Canvas
45. Battery Charger*
46. Battery Switch
47. Tower with Standard or XL* Clamping Board Racks

48. Batteries
49. Pop-up Pylon
50. Ballast Thru-hull Vents
51. SurfStar Ballast Bag[^]
52. Inflator Pump*
53. Transom Seating
54. Underwater Lights*
55. Stern Thruster*, Center Surf Tab, Underwater Exhaust Tip
56. Platform
57. Keyless Ignition/ Hidden Key
58. 120 Volt Battery Charger Plug*

DIMENSIONS

BOAT LENGTH	23'4" / 7.11 M
BOAT HEIGHT	123" / 3.12 M
BEAM	102" / 2.59 M
INTERIOR WIDTH	86.5" / 2.20 M
DRAFT	30" / 0.76 M

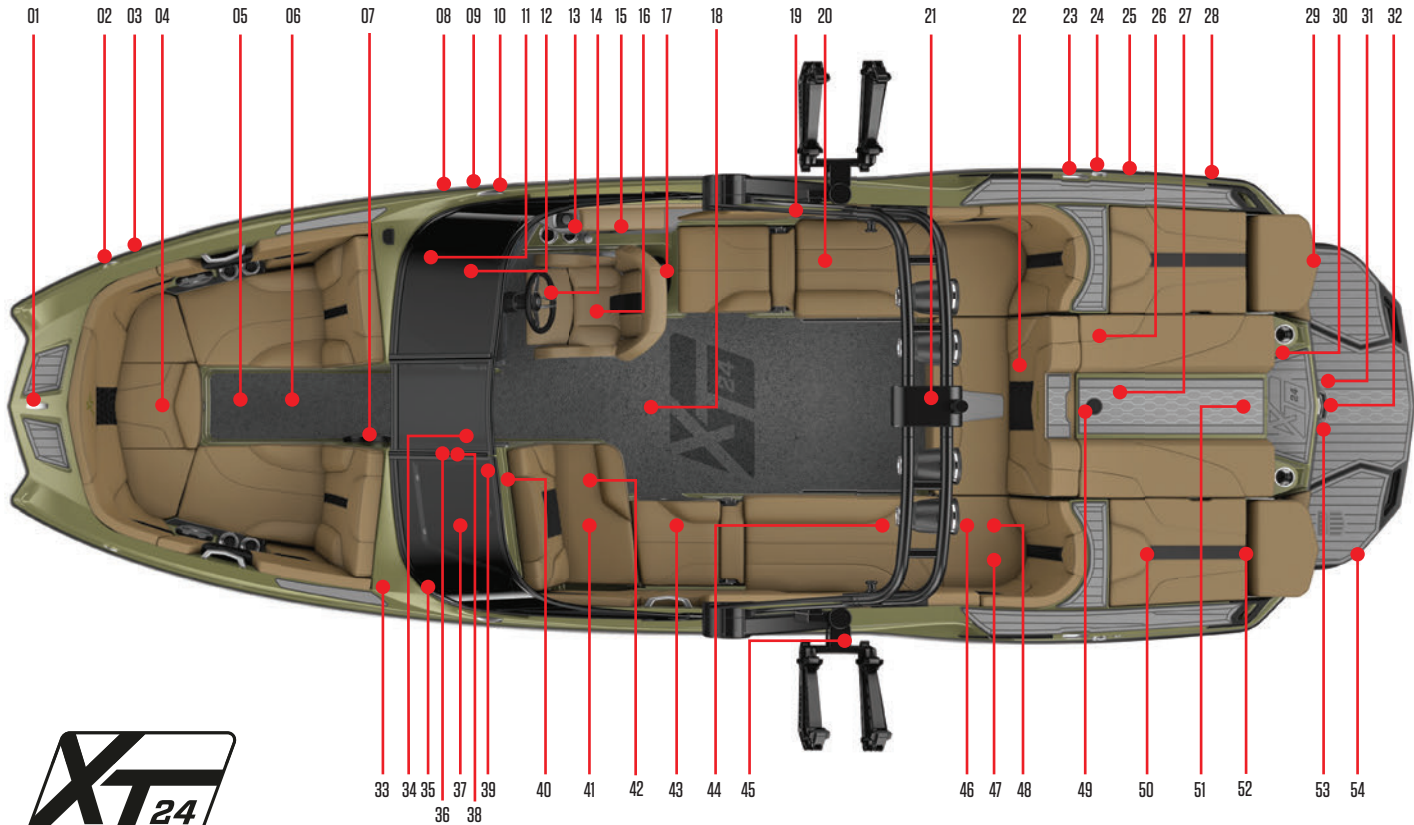
DETAILS

SEATING	16 People
BOAT WEIGHT	5,250 Lbs / 2,381 Kg
BALLAST	3,300 Lbs / 1,497 Kg
WEIGHT CAPACITY	2,500 Lbs / 1,134 Kg
FUEL CAPACITY	79 Gal / 299 L
HULL	Vector Drive
STORAGE	108 Cu. Ft / 3.06 Cu. M

Weight must be evenly distributed on-board

* If equipped

[^] One on each side of the boat



XT24

FEATURES

- | | | |
|--|--|---|
| <ol style="list-style-type: none"> 1. Bow Cleat 2. Navigation Light[^] 3. Horn 4. Anchor Storage 5. Bow Filler Cushion* 6. Ballast Tank 7. Bow Subwoofer* 8. Ballast Thru-hull Outlet 9. Bilge Thru-hull Outlet 10. Midship Cleat[^] 11. Helm Circuit Breaker 12. Instrument Panel 13. Throttle Control and Kill Switch Lanyard/Helm Battery Switch 14. Steering Wheel 15. Fire Suppression Unit Manual Override 16. Heated Helm Seat* 17. Subwoofer 18. Center Drain Plug/Forward Bilge 19. Wireless Chargers*[^] 20. Cooler 21. Anchor Light and Tow Point 22. Convertible Seat* 23. Stern Cleat[^] 24. Fuel Tank Fill[^] 25. Ballast Thru-hull Outlet | <ol style="list-style-type: none"> 26. Engine Flush Valve 27. Engine Compartment/Aft Bilge 28. Bilge Thru-hull Outlet 29. Surf Tab[^] 30. Transom Remote* 31. Center Surf Tab 32. Transom Drain Plug 33. GPS Puck 34. Trash Can Door 35. Amp and Amp Board 36. Valuables Drawer* 37. Glove Box 38. Dog Bowl* 39. Handheld Fire Extinguisher 40. Observer Remote* 41. Heated Observer Seat* 42. Observer Storage Canvas 43. Cockpit Back Rest 44. Battery Charger* 45. Tower with Standard or XL* Clamping Board Racks 46. Battery Switch 47. Batteries 48. Circuit Breaker 49. Pop-up Pylon 50. SurfStar Ballast Bag[^] | <ol style="list-style-type: none"> 51. Automatic Fire Extinguisher 52. Inflator Pump* 53. Stern Thruster*, Center Surf Tab, Underwater Exhaust Tip 54. Platform 55. Battery Charger Port* 56. Ignition Key Location |
|--|--|---|

DIMENSIONS

BOAT LENGTH	24' / 7.3 M
BOAT HEIGHT	126" / 3.2 M
BEAM	102" / 2.59 M
INTERIOR WIDTH	86.5" / 2.20 M
DRAFT	30" / 0.76 M

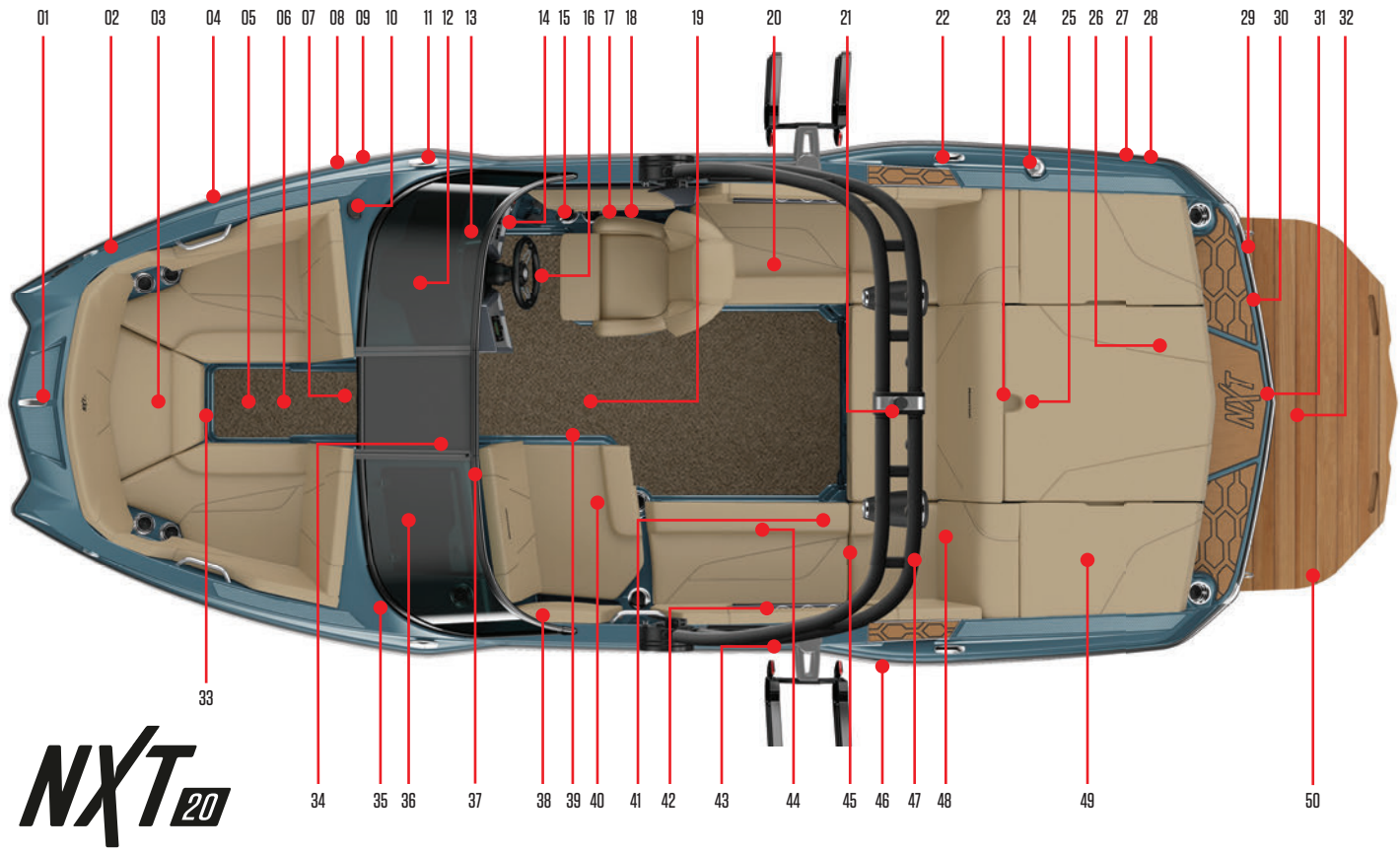
DETAILS

SEATING	17 People
BOAT WEIGHT	5,694 Lbs / 2,583 Kg
BALLAST	3,600 Lbs / 1,633 Kg
WEIGHT CAPACITY	2,500 Lbs / 1,134 Kg
FUEL CAPACITY	92 Gal / 348 L
HULL	Vector Drive
STORAGE	109 Cu. Ft / 3.09 Cu. M

Weight must be evenly distributed on-board

* If equipped

[^] One on each side of the boat



NXT₂₀

NXT20

FEATURES

1. Bow Cleat
2. Navigation Light[^]
3. Anchor Storage Compartment
4. Horn
5. Bow Filler Cushion*
6. Ballast Tank
7. Bow Walk-thru Door*
8. Bilge Thru-hull Outlet
9. Ballast Thru-hull Outlet
10. GPS Puck
11. Midship Cleat
12. Second Subwoofer*
13. Main Circuit Breaker Board
14. Instrument Panel; Helm Wireless Charging Pad
15. Throttle Control/Helm Battery Switch
16. Steering Wheel
17. Kill Switch Lanyard
18. Fire Suppression Unit Manual Override
19. Center Drain Plug; Access to Center Ballast Pumps/FWD Bilge
20. Cooler
21. Anchor Light and Tower Tow Point
22. Stern Cleat
23. Pop-up Pylon
24. Fuel Tank Fill
25. Engine Compartment/ Aft Bilge
26. Automatic Fire Extinguisher
27. Ballast Thru-hull Outlet
28. Bilge Thru-hull Outlet
29. Surf Tab[^]
30. Transom Stereo Remote*
31. Transom Drain Plug
32. Center Surf Tab, Underwater Exhaust Tip
33. Courtesy Light
34. Trash Door
35. Amp and Amp Board
36. Glove Box
37. Handheld Fire Extinguisher
38. Observer Remote*
39. Subwoofer
40. Observer Storage Canvas
41. Battery Charger*
42. Wireless Chargers*[^]
43. Tower with Standard or XL* Clamping Board Racks
44. Inflator Pump*
45. Battery Switch
46. Ballast Thru-hull Outlet
47. Batteries
48. Main Breaker Box
49. Storage Compartment[^]
50. Platform
51. 120 Volt Battery Charger Plug*

DIMENSIONS

BOAT LENGTH	20' / 6.10 M
BOAT HEIGHT	112" / 2.84 M
BEAM	96" / 2.44 M
INTERIOR WIDTH	81" / 2.06 M
DRAFT	27" / 0.69 M

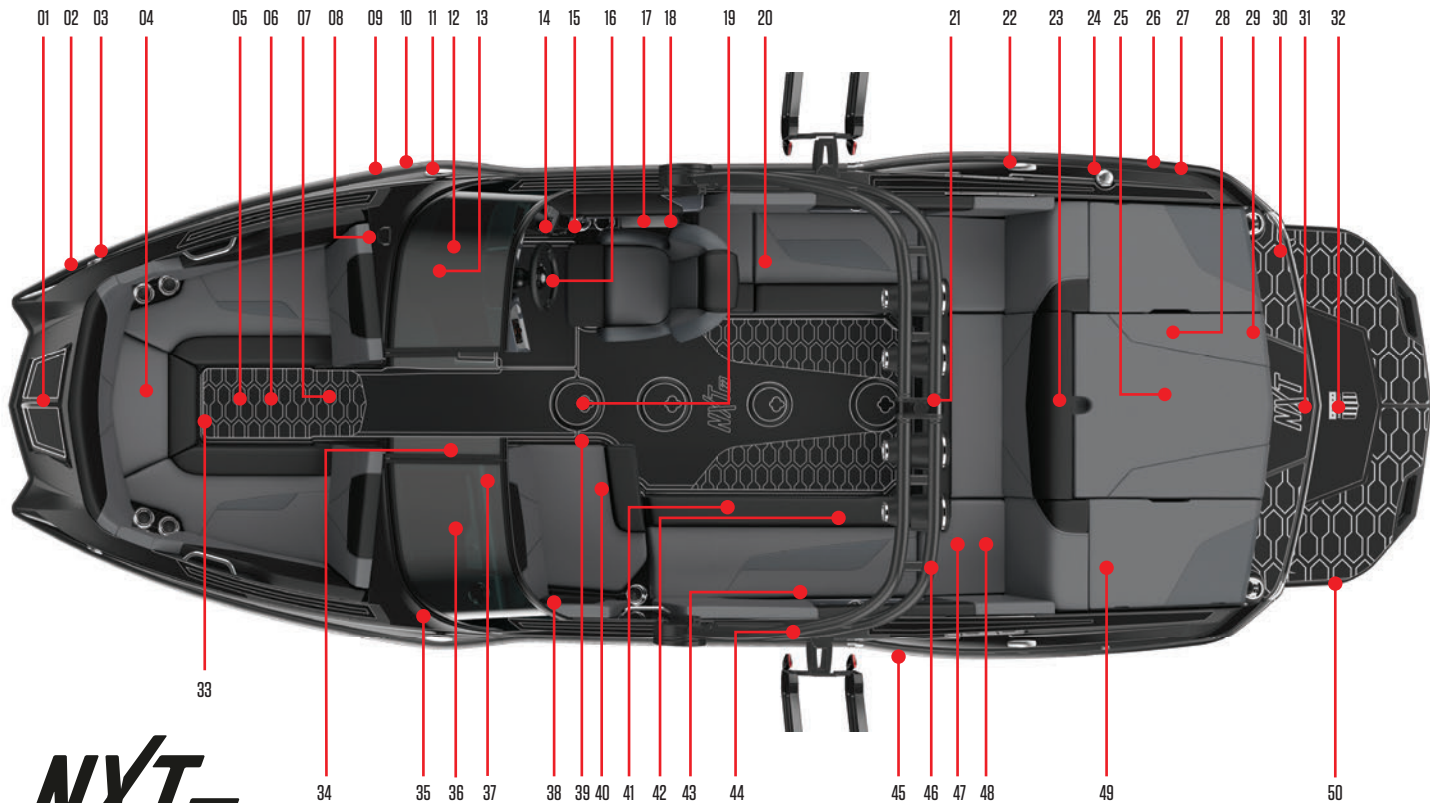
DETAILS

SEATING	11 People
BOAT WEIGHT	3,965 Lbs / 1,798 Kg
BALLAST	1,770 Lbs / 802 Kg
WEIGHT CAPACITY	1,770 Lbs / 802 Kg
FUEL CAPACITY	47 Gal / 178 L
HULL	Vector Drive
STORAGE	82 Cu. Ft / 2.32 Cu. M

Weight must be evenly distributed on-board

* If equipped

[^] One on each side of the boat



NXT₂₂

NXT22

FEATURES

1. Bow Cleat
2. Navigation Light[^]
3. Horn
4. Anchor Storage Compartment
5. Bow Filler Cushion*
6. Ballast Tank
7. Bow Walk-thru Door*
8. GPS Puck
9. Bilge Thru-hull Outlet
10. Ballast Thru-hull Outlet
11. Midship Cleat
12. Main Circuit Breaker Board
13. Second Subwoofer*
14. Instrument Panel; Helm Wireless Charging Pad
15. Throttle Control/Helm Battery Switch
16. Steering Wheel
17. Kill Switch Lanyard
18. Fire Suppression Unit Manual Override
19. Center Drain Plug; Access to Center Ballast Pumps/FWD Bilge
20. Cooler
21. Anchor Light and Tower Tow Point
22. Stern Cleat
23. Pop-up Pylon
24. Fuel Tank Fill
25. Engine Compartment/ Aft Bilge
26. Ballast Thru-hull Outlet
27. Bilge Thru-hull Outlet
28. Automatic Fire Extinguisher
29. Transom Stereo Remote*
30. Surf Tab[^]
31. Transom Drain Plug
32. Center Surf Tab, Underwater Exhaust
33. Courtesy Light
34. Trash Door
35. Amp and Amp Board
36. Glove Box
37. Handheld Fire Extinguisher
38. Observer Remote*
39. Subwoofer
40. Observer Storage Canvas
41. Inflator Pump*
42. Battery Charger*
43. Wireless Chargers**[^]
44. Tower with Standard or XL* Clamping Board Racks
45. Ballast Thru-hull Outlet
46. Battery Switch
47. Batteries
48. Main Breaker Box
49. Storage Compartment[^]
50. Platform
51. 120 Volt Battery Charger Plug*

DIMENSIONS

BOAT LENGTH	22' / 6.7 M
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BOAT HEIGHT	114" / 2.89 M
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BEAM	98" / 2.49 M
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INTERIOR WIDTH	82.5" / 2.09 M
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DRAFT	28" / 0.71 M
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DETAILS

SEATING	14 People
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BOAT WEIGHT	4,760 Lbs / 2,159 Kg
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BALLAST	3,000 Lbs / 1,360 Kg
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WEIGHT CAPACITY	2,312 Lbs / 1,048 Kg
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FUEL CAPACITY	49 Gal / 185.5 L
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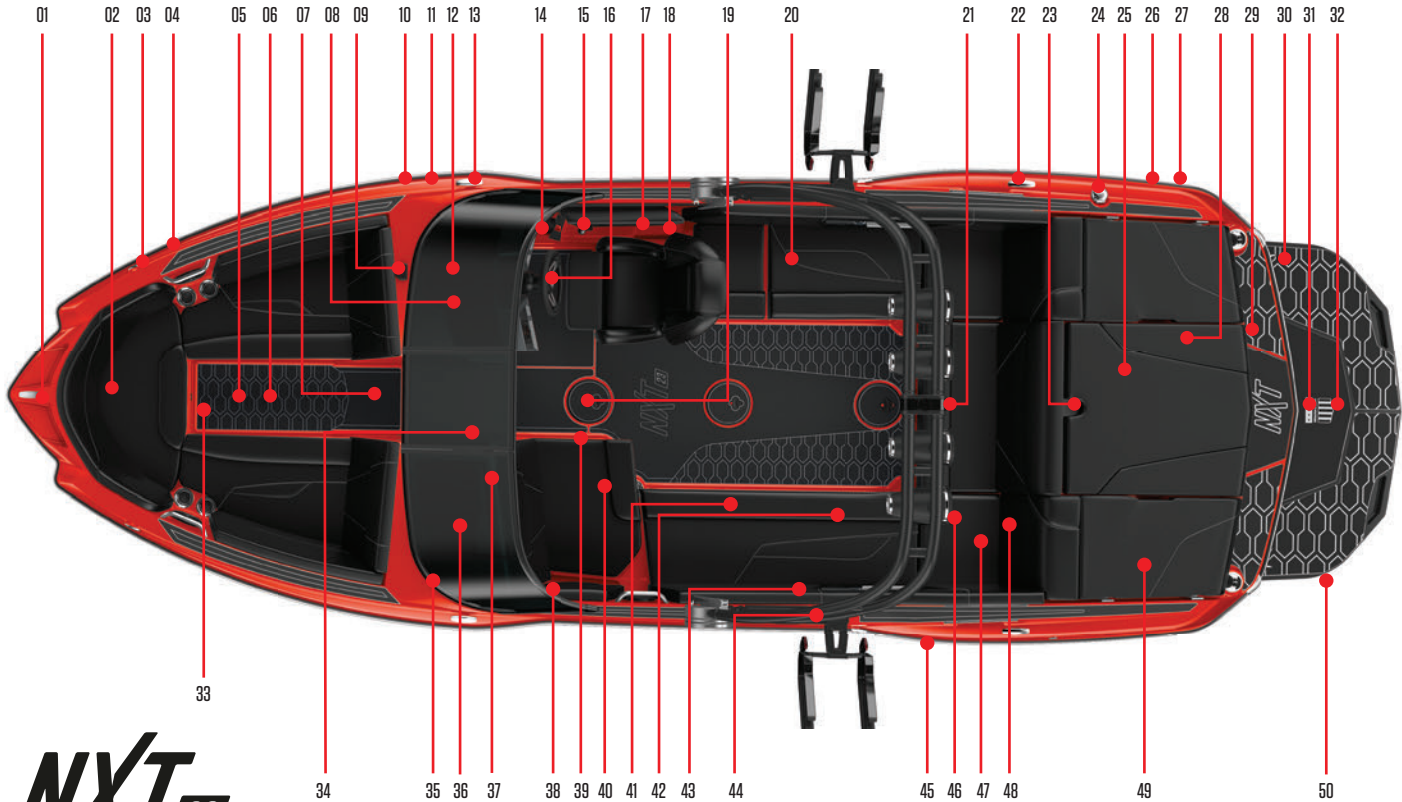
HULL	Vector Drive
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STORAGE	94 Cu. Ft / 2.66 Cu. M
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Weight must be evenly distributed on-board

* If equipped

[^] One on each side of the boat



NXT₂₃

NXT23

FEATURES

1. Bow Cleat
2. Navigation Light[^]
3. Horn
4. Anchor Storage Compartment
5. Bow Filler Cushion*
6. Ballast Tank
7. Bow Walk-thru Door*
8. GPS Puck
9. Bilge Thru-hull Outlet
10. Ballast Thru-hull Outlet
11. Midship Cleat
12. Main Circuit Breaker Board
13. Second Subwoofer*
14. Instrument Panel; Helm Wireless Charging Pad
15. Throttle Control/Helm Battery Switch
16. Steering Wheel
17. Kill Switch Lanyard
18. Fire Suppression Unit Manual Override
19. Center Drain Plug; Access to Center Ballast Pumps/FWD Bilge
20. Cooler
21. Anchor Light and Tower Tow Point
22. Stern Cleat
23. Pop-up Pylon
24. Fuel Tank Fill
25. Engine Compartment/ Aft Bilge
26. Ballast Thru-hull Outlet
27. Bilge Thru-hull Outlet
28. Automatic Fire Extinguisher
29. Transom Stereo Remote*
30. Surf Tab[^]
31. Transom Drain Plug
32. Center Surf Tab, Underwater Exhaust
33. Courtesy Light
34. Trash Door
35. Amp and Amp Board
36. Glove Box
37. Handheld Fire Extinguisher
38. Observer Remote*
39. Subwoofer
40. Observer Storage Canvas
41. Inflator Pump*
42. Battery Charger*
43. Wireless Chargers*[^]
44. Tower with Standard or XL* Clamping Board Racks
45. Ballast Thru-hull Outlet
46. Battery Switch
47. Batteries
48. Main Breaker Box
49. Storage Compartment[^]
50. Platform
51. 120 Volt Battery Charger Plug*

DIMENSIONS

BOAT LENGTH	23' / 7.01 M
BOAT HEIGHT	117" / 2.98 M
BEAM	100" / 2.54 M
INTERIOR WIDTH	84" / 2.12 M
DRAFT	29" / 0.74 M

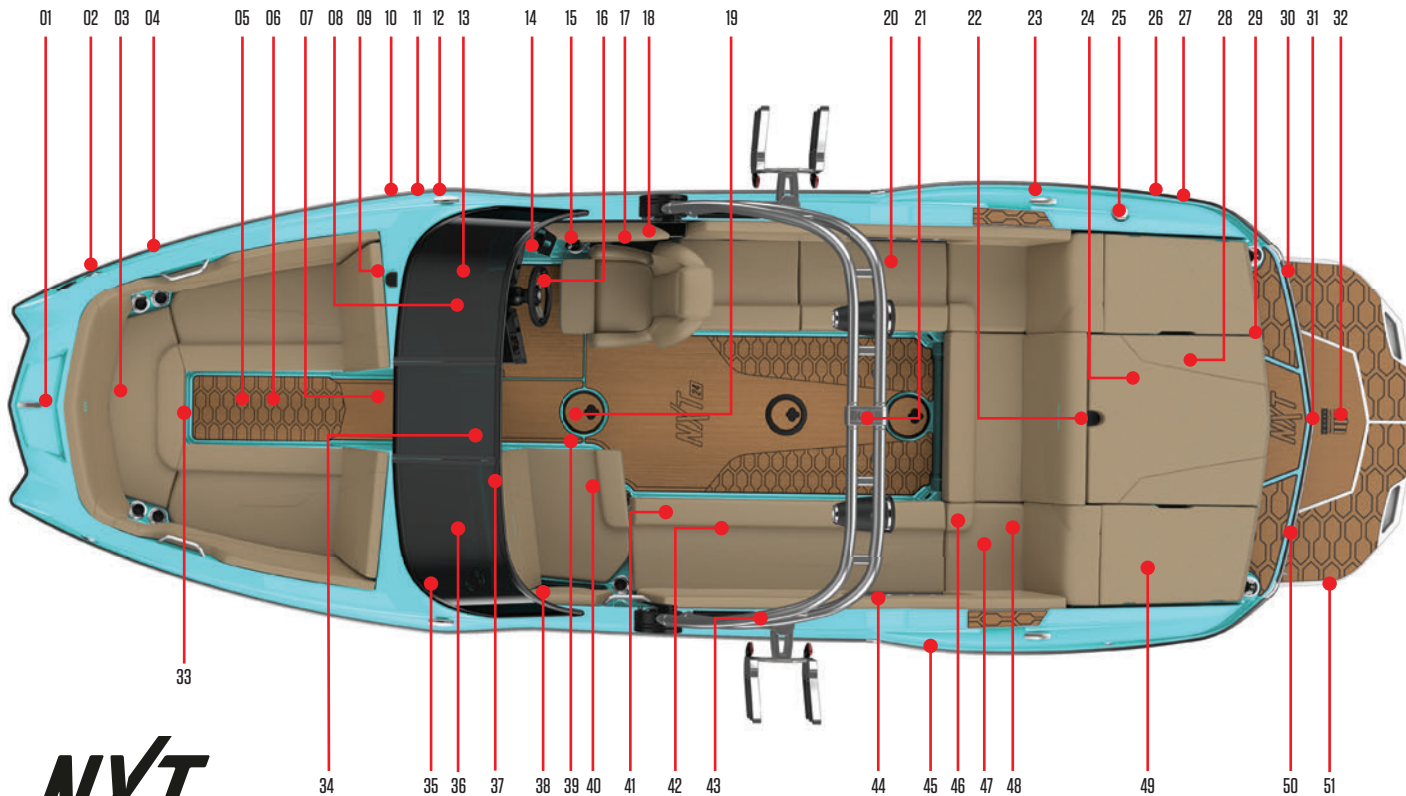
DETAILS

SEATING	16 People
BOAT WEIGHT	5,030 Lbs / 2,282 Kg
BALLAST	3,130 Lbs / 1,420 Kg
WEIGHT CAPACITY	2,160 Lbs / 980 Kg
FUEL CAPACITY	65 Gal / 246 L
HULL	Vector Drive
STORAGE	99 Cu. Ft / 2.80 Cu. M

Weight must be evenly distributed on-board

* If equipped

[^] One on each side of the boat



NXT₂₄

NXT24

FEATURES

1. Bow Cleat
2. Navigation Light[^]
3. Horn
4. Anchor Storage Compartment
5. Bow Filler Cushion*
6. Ballast Tank
7. Bow Walk-thru Door*
8. GPS Puck
9. Bilge Thru-hull Outlet
10. Ballast Thru-hull Outlet
11. Midship Cleat
12. Main Circuit Breaker Board
13. Second Subwoofer*
14. Instrument Panel; Helm Wireless Charging Pad
15. Throttle Control/Helm Battery Switch
16. Steering Wheel
17. Kill Switch Lanyard
18. Fire Suppression Unit Manual Override
19. Center Drain Plug; Access to Center Ballast Pumps/FWD Bilge
20. Cooler
21. Anchor Light and Tower Tow Point
22. Stern Cleat
23. Pop-up Pylon
24. Fuel Tank Fill
25. Engine Compartment/ Aft Bilge
26. Ballast Thru-hull Outlet
27. Bilge Thru-hull Outlet
28. Automatic Fire Extinguisher
29. Transom Stereo Remote*
30. Surf Tab[^]
31. Transom Drain Plug
32. Center Surf Tab, Underwater Exhaust
33. Courtesy Light
34. Trash Door
35. Amp and Amp Board
36. Glove Box
37. Handheld Fire Extinguisher
38. Observer Remote*
39. Subwoofer
40. Observer Storage Canvas
41. Battery Charger*
42. Inflator Pump*
43. Tower with Standard or XL* Clamping Board Racks
44. Wireless Chargers*[^]
45. Ballast Thru-hull Outlet
46. Battery Switch
47. Batteries
48. Main Breaker Box
49. Storage Compartment[^]
50. Platform
51. 120 Volt Battery Charger Plug*

DIMENSIONS

BOAT LENGTH	24' / 7.30 M
BOAT HEIGHT	115.5" / 2.93 M
BEAM	102" / 2.59 M
INTERIOR WIDTH	82.5" / 2.08 M
DRAFT	29" / 0.74 M

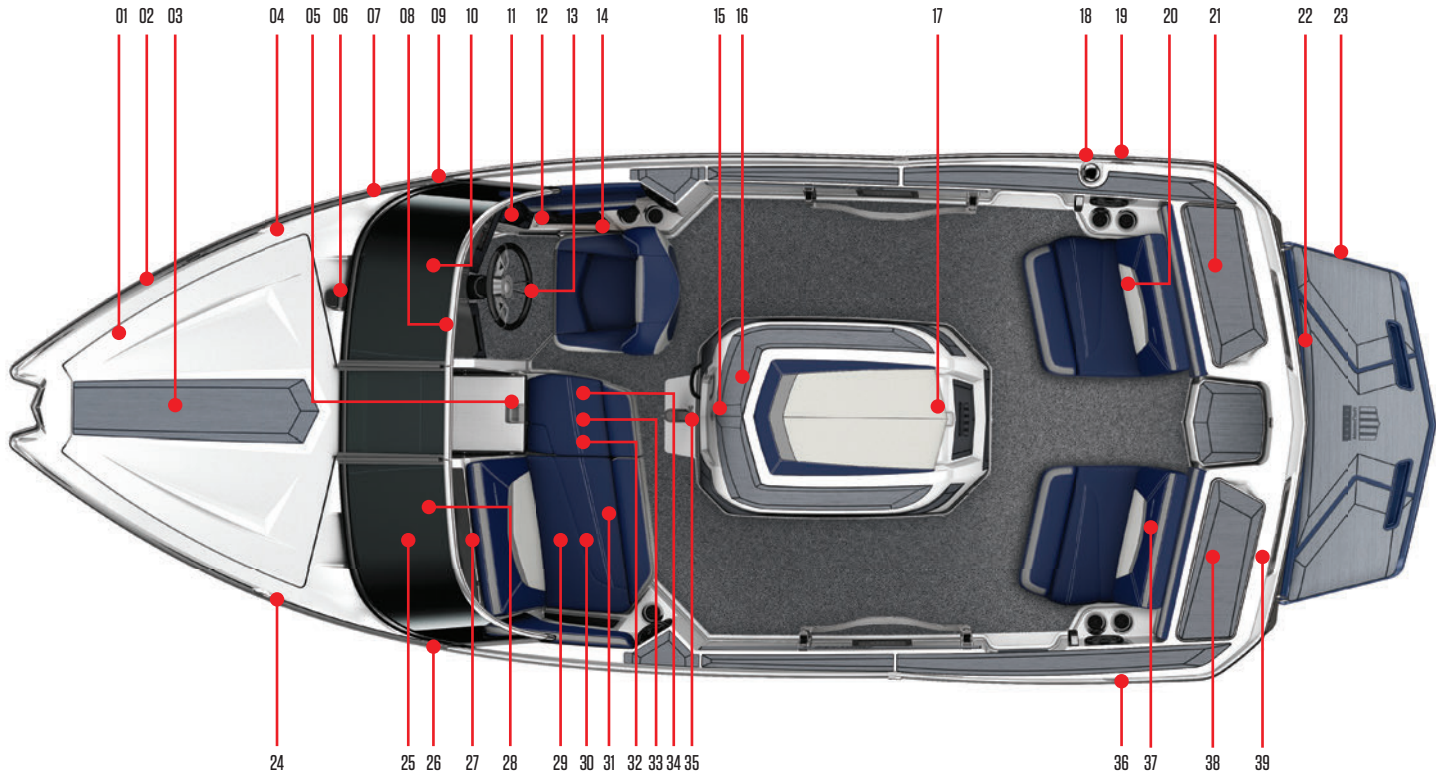
DETAILS

SEATING	16 People
BOAT WEIGHT	5,000 Lbs / 2,268 Kg
BALLAST	3,300 Lbs / 1,496 Kg
WEIGHT CAPACITY	2,250 Lbs / 1,020 Kg
FUEL CAPACITY	65 Gal / 246 L
HULL	Vector Drive
STORAGE	103 Cu. Ft / 2.92 Cu. M

Weight must be evenly distributed on-board

* If equipped

[^] One on each side of the boat



PROSTAR

FEATURES

1. Bow Hatch*
2. Horn
3. Bow Seating*
4. Navigation Light^
5. Drop-in Walk-thru Door
6. GPS Puck
7. Bilge Thru-hull Outlet
8. Adjustable Mirror*
9. Midship Cleat
10. Battery Switch
11. Instrument Panel
12. Shift-throttle Control/
Helm Battery Switch
13. Steering Wheel
14. Fire Suppression Unit
Manual Override
15. Engine Compartment
16. Jump Switch Wire Hole
17. Automatic Fire
Extinguisher
18. Fuel Tank Filler
19. Stern Cleat*
20. Aft Seating*
21. Aft Storage
Compartment
22. Engine Exhaust
23. Platform
24. Navigation Light
25. Battery
26. Midship Cleat
27. Heater*
28. Glove Box
29. MTS Ballast System*
30. Hand-held Fire
Extinguishers/
Bilge Pump
31. Observer Storage
Canvas
32. Drain Plug
33. Folding Walk-thru Seat
34. Battery Switch; Circuit
Breaker Board
35. Ski Pylon
36. Stern Cleat*
37. Aft Seating*^
38. Aft Storage
Compartment
39. Stern Light Receptacle*
(with tower, the light
will be in center aft of
tower)

DIMENSIONS

BOAT LENGTH	20' / 6.09 M
BOAT HEIGHT	66" / 1.67 M
BEAM	96" / 2.43 M
INTERIOR WIDTH	85.25" / 2.17 M
DRAFT	22" / 0.56 M

DETAILS

SEATING	7 People
BOAT WEIGHT	3,300 Lbs / 1,497 Kg
WEIGHT CAPACITY	1,341 Lbs / 608.26 Kg
FUEL CAPACITY	30 Gal / 113 L
HULL	Direct Drive
STORAGE	32 Cu. Ft / 0.89 Cu. M

Weight must be evenly distributed on-board. Storage space is located under: Observer's seat, bow seating.

* If equipped

^ One on each side of the boat

DASHES AND VIDEO SCREENS

Immediately following this introduction are photo images of the different types of instrument panels used on MasterCraft boats. Operators should match up the appropriate image with the actual instrument on your boat model.

The video screen options are broken down into NXT, which comes equipped with a standard 7" touch screen, XT, which uses a standard 12" touch screen, X, which uses a 12" touch screen plus a 15" center screen, and Xstar, which uses a 12.8" touch screen plus a 24" curved center screen. MasterCraft encourages all owners to go over the screen operations with your authorized MasterCraft dealer prior to operating the boat.

VARIATIONS IN GAUGES & SWITCHES

Please note that not every gauge or switch explained in this Owner's Manual is found on every model. Some equipment is optional, and not every option is available on all models of MasterCraft boats.

MC utilizes a variety of switches and screen styles that may vary from pictures shown in this manual. These differences between the various styles of gauges and switches are not in functionality. If a boat is equipped with a gauge or switch that is labeled as described, it will operate in the same fashion as the description, even if its appearance is different, as the appearance changes periodically.

If the owner and/or operators are uncertain about the purpose of a gauge or switch, do not operate the boat until consulting with an authorized MasterCraft dealer. Some gauges monitor information that is critical to safe and long-term use of the boat. Some switches can affect maneuverability, as well as operations that impact long-term use of the boat.



Do not become distracted while utilizing multi-functional screens. Maintain situational awareness and do not change settings in crowded boating/swimming areas.

MANUAL CONTROLS

Regardless of dash option, some controls will remain manual (items such as navigation and anchor lights, ballast switches, tabs) and may vary across models and options selected.



MasterCraft





XSTAR DUAL SCREEN DASH



X DUAL SCREEN DASH



XT SINGLE SCREEN DASH




NXT SERIES INSTRUMENT PANEL



PROSTAR SINGLE SCREEN DASH

XT, X, AND XSTAR DASH/SCREEN OPERATIONS



The XT, X, and XStar Series Helm Screen(s) are designed for instrumentation and control of the electronically controlled engines communicating via SAE J1939. The multimedia displays provide cruise control, rider profiles, and enable boat operators to view many different system parameters and service codes. We continually strive to bring you the highest quality, full-featured products. As a result, you may find that your actual display screens may be slightly different than what is represented in this manual at the time of printing.

The single and dual screen dashes are designed for instrumentation and control on electronically controlled engines communicating via CAN networks. The XT and X Series 12" (P12) touch screens are the command center for all the boat's systems. The XStar 12.8" touch screen is the command center for all the boat's systems.

CARE AND MAINTENANCE

General maintenance is not required; however, a soft cloth can be used for cleaning the units. Window cleaner or alcohol can also be used to clean the glass portion of the display. Do not use harsh or abrasive cleaners on the unit.

⚠ CAUTION

Avoid contact between sharp or hard objects and the video screens, as this can result in scratches or other permanent marks on the screen. Clean only with a soft cloth, using window cleaner or rubbing alcohol only. Never use harsh or abrasive cleaners on the unit, as this may result in damage to the unit that is not covered under warranty.

KEYLESS ENTRY

SLEEP MODE

Enabling sleep mode conserves power and prevents accidental engine starts. Enabling SLEEP MODE will dim screen(s), allow for all active features to remain active (i.e. lights, audio/music), disables engine start/stop, enables pop-up to unlock.

To UNLOCK: tap, swipe, enter boat PIN. Once unlocked, the screen is returned to the last screen and illuminates engine start/stop button allowing the user to start the boat.

AWAY MODE

Away mode is meant for end of the day boating activity and allows time to disembark the boat. Enabling AWAY dims the screens and starts an on-screen 5 minute countdown. AWAY turns off ECU, stops all pumps, music, trim tabs retract, engine start/stop becomes inactive. Lights will remain in current state. The default 5 minute countdown keeps lights active for the 5 minute duration and automatically turns off the battery switch after the 5 minutes.



This timer is adjustable in System Settings.

How to use:

Upon battery switch, screen(s) will turn on requiring the user to acknowledge risk, followed by a requirement to enter a pin unlocking the start/stop switch.

When the “Enter Vehicle Pin for Keyless Start” pop up is present, enter your boat (vehicle) pin and hit “Submit.” By default, the user pin is set to 1234. Entering this pin will unlock screen functionality and the engine start/stop switch.

If you, the boat owner, wish to change your pin or disable the keyless entry feature, go to SYSTEM SETTINGS. Under System Settings you can:

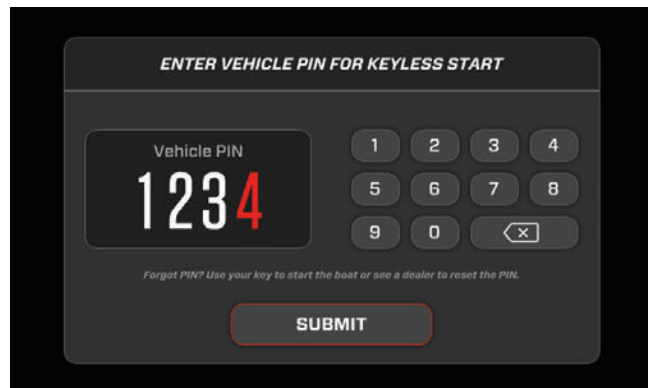
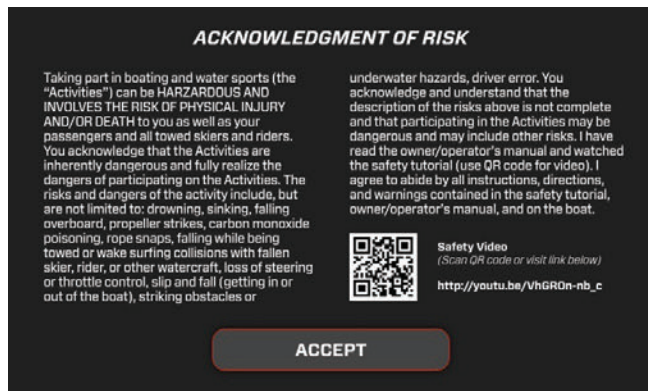
1. Disable the PIN requirement upon battery switch startup
2. Change your boat (vehicle) pin
3. Change SLEEP MODE timeout
4. Change AWAY countdown timer

EMERGENCY BACK-UP

If pin is unknown OR in case of screen failure, a hidden key is available in the glovebox of the boat.

With battery switch on, using key will activate engine start/stop.

NOTE: If telematics is unplugged, some keyless functionality will be disabled.



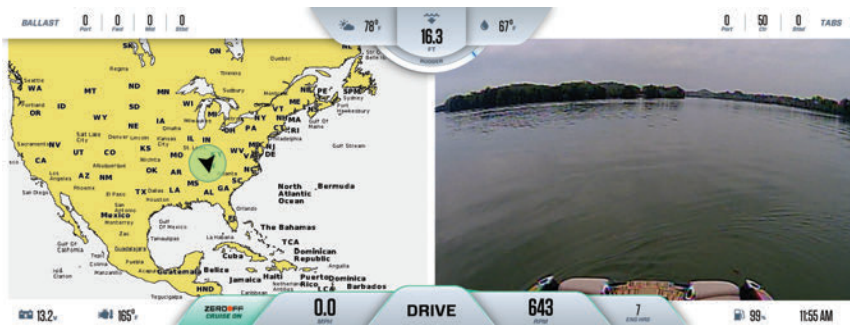
P15 OVERVIEW

The P15 unit displays boat critical information and provide camera and maps layouts.

Located above the steering wheel on X dual screen models, the P15 unit displays ballast settings, air temperature, depth, rudder position, water temperature, tab settings, engine battery voltage, engine temperature, cruise status (on/off), speed (MPH/KPH), mode (drive/surf/tow), RPM, engine hours, fuel level, clock time.

The P15 screen display options are full screen aft view, 1/2 map, and 1/2 camera.

Standard Screen



12" OR 12.8" TOUCHSCREEN NAVIGATION & OVERVIEW

Navigation within the P12 touchscreen is controlled via touch commands.

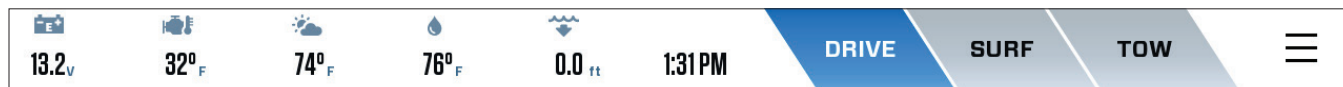
The user preference can be set between “Light Mode” and “Dark Mode.” This is customizable in user settings.



Dark Mode



Light Mode



OPERATING MODES

The MasterCraft Dash is organized around three main on-water activities: driving from place-to-place, surfing, and towing riders. The activities are divided into three operating modes: **Drive**, **Surf**, and **Tow**.

- **Drive Mode** displays basic operating information for cruising. From Drive Mode, you can quickly adjust speed, tabs, and ballast.
- **Surf Mode** is broken into rapid surf, custom surf and foil. Factory loaded profiles for ballast, speed and tabs are easily selectable. You also have the ability to create and save
- **Tow Mode** is broken into wake and ski. Factory loaded profiles for ballast, speed and tabs are easy to select and modify as needed in tow mode. You may also create you own custom profiles in tow mode.

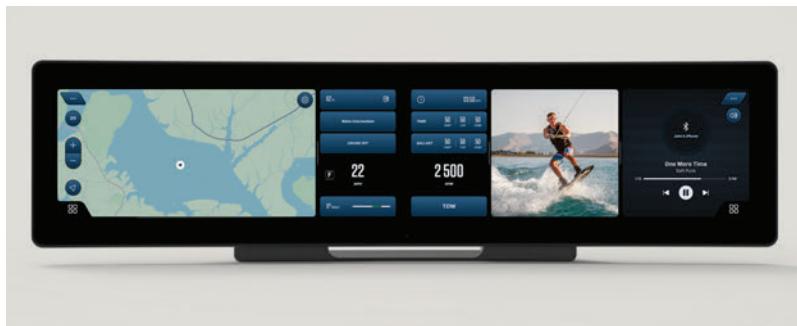
To switch between these modes, tap the buttons at the top of the touch display.

24" CURVE SCREEN OVERVIEW

The 24" Curve display provides critical boat information and supports camera and map layouts. It is standard on all XStar models and is located above the steering wheel. The display features a variety of customizable widgets. To modify a widget, press and hold the desired widget, then drag and drop a new widget into place. These settings can be configured independently for each operating mode.

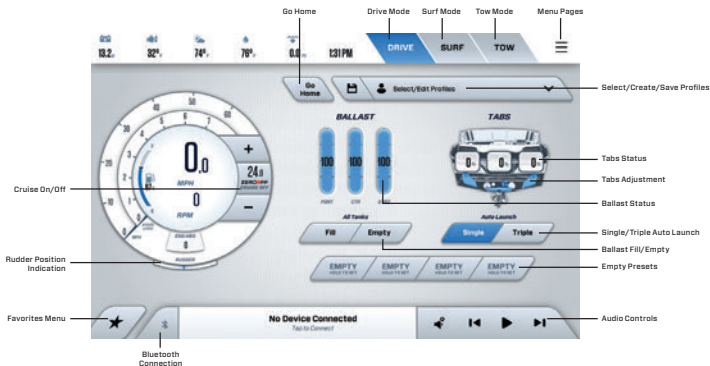
Available widgets include ballast settings, air temperature, depth, rudder position, water temperature, tab settings, engine or house battery voltage, engine temperature, cruise status (on/off), speed (MPH/KPH), mode (drive/surf/tow), RPM, engine hours, fuel level, clock time, fuel burn, range, heading, and audio.

The 24" Curve display also supports multiple layout configurations on the left and right sides, including full screen, split screen, and dual-quarter screen views with combinations of maps, cameras, and widgets.



DRIVE MODE

Drive Mode displays basic operating information useful for cruising around your body of water. In Drive Mode, you may quickly fill or empty ballast, adjust tab positions, and activate speed control. Drive Mode is the default setting when the system first powers on.

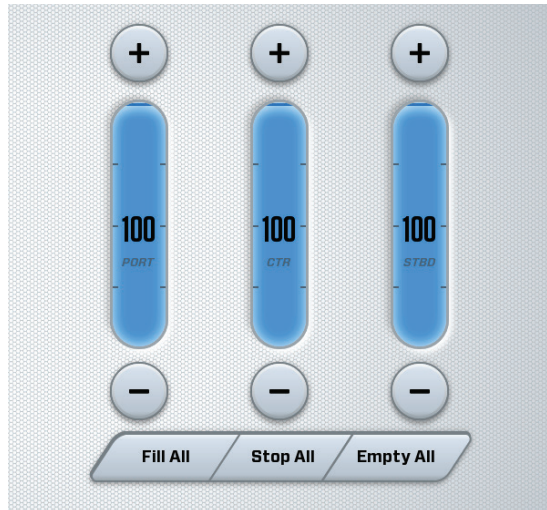
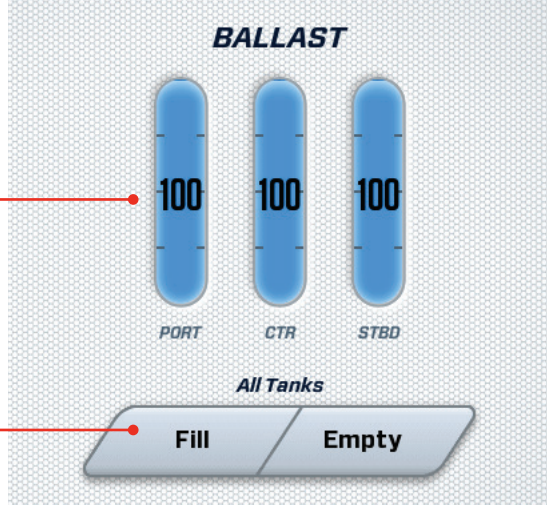


COMPONENT	DESCRIPTION
Drive (Normal Operations)	<i>Drive Mode is optimized for cruising from place-to-place, with controls for AutoLaunch, speed, ballast, tabs, and cruise control</i>
Surf Mode (Rapid and Custom)	<i>Provides 7 preset left and right surf profiles, customizable surf page and foil profiles for left/right, beginner and advanced.</i>
Tow Mode	<i>Provides access to factory and customizable wakeboard and ski profiles.</i>
Ski Mode	<i>Provides access to ski and ski beginner profiles.</i>
Profile Selection and Creation	<i>Available in Drive, Surf and Tow. Allows creation and selection of custom profiles.</i>

COMPONENT	DESCRIPTION
Surf Tabs Adjustment	<i>Provides access to individual surf tab controls</i>
AutoLaunch Control (Triple + Single)	<i>When AutoLaunch is turned ON, the center tab and surf tabs are used to help bring the boat up on plane.</i>
ZeroOff Controls	<i>Activates or deactivates the speed control system. Enables adjustment of cruise control speed.</i>
Fill/Empty All Ballast	<i>Provides a quick method for filling or emptying all ballasts tanks/bags simultaneously</i>
Audio Controls	<i>Provides access to blue tooth connection, play/mute/pause, previous/next song and audio zone pop-up.</i>

Individual tank settings. Tap to open the dedicated ballast adjustment screen.

Fill or empty all tanks completely



BALLAST

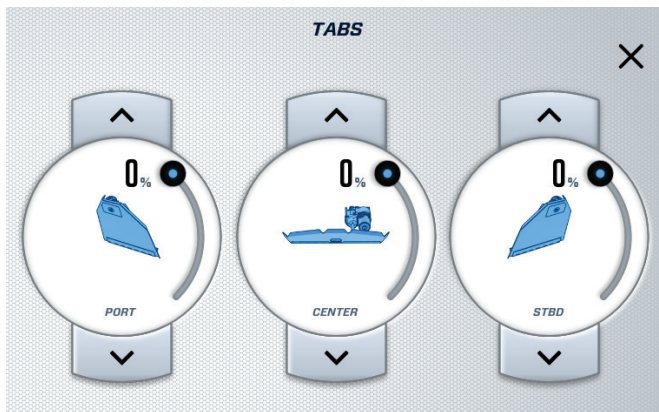
To fill the ballast tanks, touch either FILL (All Tanks) or tap in the ballast area to adjust individual ballast zones: Tapping the ballast zone area will pull up the screen shown at left.

From the ballast screen, users can fill or empty all ballast zones by touching FILL or EMPTY ALL. To pause the fill process, tap STOP ALL. To adjust individual ballast zones, touch the UP or DOWN arrows at the top or bottom of the ballast zone that you wish to fill or empty. Alternatively, slide your finger along the ballast progress bars to adjust ballast zones and set custom fill levels. Tapping the ballast zone area will pull up the following screen:

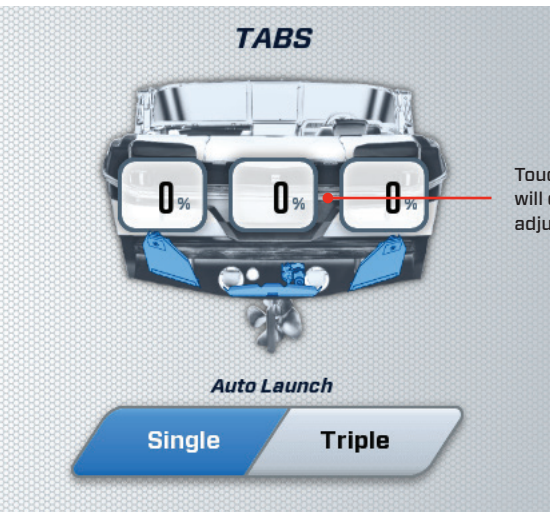
ADJUSTING TABS

Tabs allow you to precisely dial in your wakes and waves by sculpting the water as it leaves the hull bottom.

Touch the surf tab area to adjust individual tabs. Touching the surf tab area will pull up the following screen.



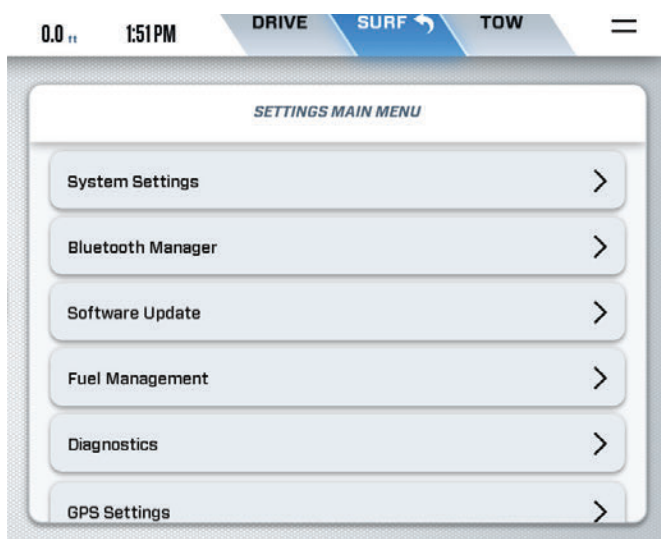
Make adjustments to each tab by touching the up and down arrows or sliding your finger up or down the slider bar.



Touching this area will open the surf tab adjustment screen

BALLAST AND TAB SETTINGS

From Main Menu/System Settings, Ballast/Tabs Settings are accessed. This screen allows you to set fill and drain times for each ballast zone, and times for center and surf tab crossover. MasterCraft does not recommend adjusting fill times, as these timers are factory-set. If you feel the need to change timer settings, contact your authorized MasterCraft dealer.



AUTOLAUNCH SETTINGS

For NXT models, autolaunch uses a crossover speed setting to retract the tab when it is no longer required for assistance getting the boat on plane. When enabled, AutoLaunch will automatically deploy one or all three of the surf tabs, pushing the boat up to plane at a faster rate. Once the boat no longer needs assistance getting on plane, the tabs will automatically retract to normal running position. Autolaunch Heavy setting will be automatically selected when ballast tanks are close to full. If spray is experienced in Heavy mode, change mode setting to Light.

The boat has reached its “crossover speed” when it no longer requires any assistance getting on plane. Crossover speed is pre-configured on all MasterCraft boats. While you can adjust crossover speed from the “Ballast and Tab Settings” menu, you should only do so if the boat’s normal operating weight is either very light or very heavy. In such cases, crossover speed may be decreased for lighter loads and increased for heavier loads.

If you are consistently running the boat without ballast or with just a few people on-board, you may wish to decrease the crossover speed. To decrease the crossover speed for a particular surf tab, access the crossover settings found within the “Ballast and Tab Settings” menu. Then tap the DOWN arrow beside the tab. If you have a very heavy operating load, you can increase the crossover speed by pressing the UP arrow beside the tab.

CRUISING

The dual screen dash simplifies cruising to and from the best riding spot on the lake by allowing operators to easily get the boat's ballast and tabs settings prepared for a set.

Heading Out

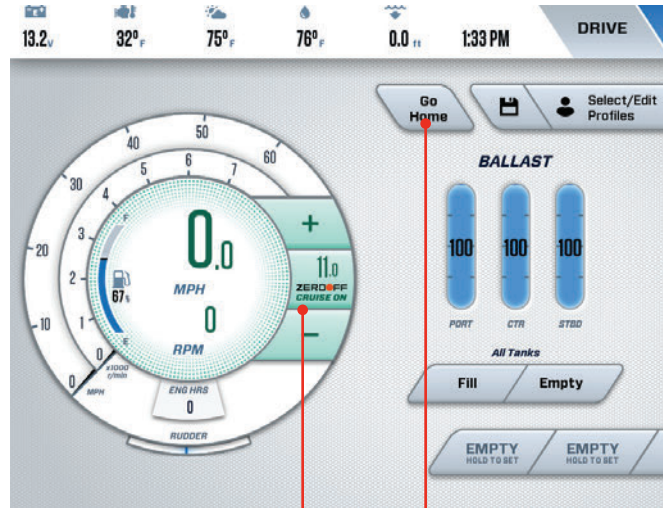
To prepare the boat for a riding session on the way to your favorite spot, navigate to Drive Mode. Depending on the model, the boat will default to 24 MPH and AutoLaunch will default to ON. Tap FILL ALL to start filling the ballast tanks.

Heading Home

At the end of the day when it is time to empty the ballast tanks and head home, navigate to Drive Mode. AutoLaunch will default to ON and speed control will default to 24 MPH. Tap EMPTY ALL to drain the ballast tanks. If necessary turn AutoLaunch ON to assist the boat to plane. Navigating to Drive Mode will always cancel any active Tow Mode profiles, but will not drain the ballast tanks.

Go Home

Go Home is a quick and easy method to switch to drive mode, return tabs to zero and begin the process to empty all ballast.



Cruise
Control
Active

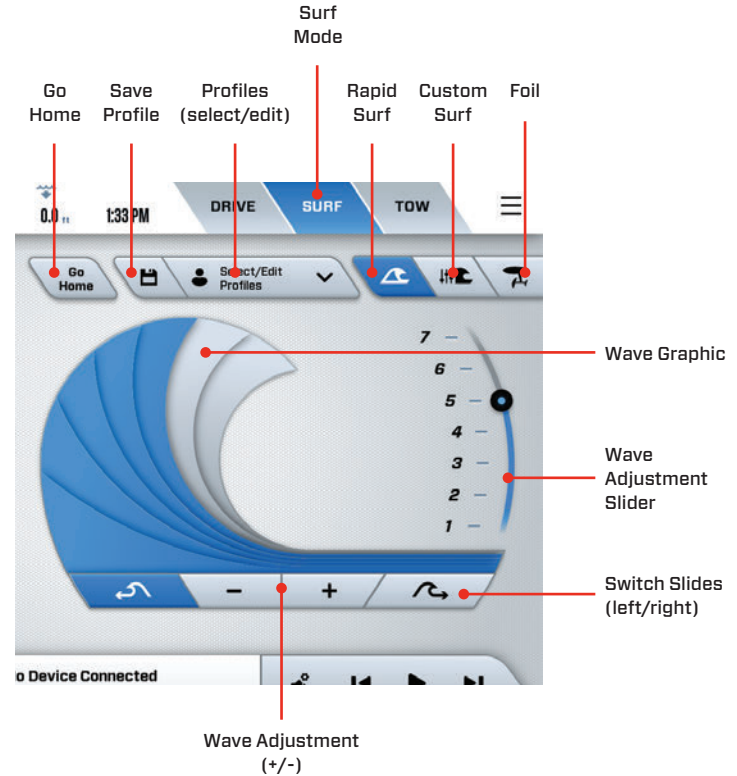
Go
Home

SURF MODE

SURF MODE: OVERVIEW

Surf Mode is divided into **Rapid Surf**, **Custom Surf** and **Foil**. The default Rapid Surf menu provides 7 preset waves for both left and right riders. Increasing number will modify the steepness of your wave. 1 is most mellow, 7 is steepest.

More seasoned athletes can select Custom Surf for additional options in ballast and tabs adjustment.



RAPID SURF


Rapid Surf is one of three menus included within Surf Mode. It allows you to easily select a wave using the slider on the right hand side of the screen. Alternatively, you may use the + / - buttons under the wave. Hitting + will increase the steepness. Hitting - will decrease the steepness resulting in a mellower wave.

Any adjustments made to your surf wave will appear on the wave graphic to the right of the wave adjustment controls. The surf wave includes a readiness calculator and will flash yellow until ready.

In addition to wave adjustment settings, Rapid Surf includes options for storing wave presets and creating custom surf profiles. For more information on wave presets and custom profile creation, refer to the section titled “Creating a New Surf Profile.”

USING RAPID SURF TO SELECT A WAVE

Rapid Surf is intended to make wave customization a quick and easy process. In a few simple steps, you can build an amazing surf wave and hit the water in no time.

- Before you begin setting up your wave, make sure that Surf Mode is selected and that it is set to the Rapid Surf menu. When Rapid Surf is active, the following screen will appear:
- 
- Locate the slider to the right of the wave and the +/- found on the bottom of the wave. These controls allow you to choose from 7 Naval Preset Profiles. Each Naval Preset has been designed to suit a particular surf style. 1 is the mellowest, shortest wave and is suited to beginners. 7 is the steepest, tallest wave and is suited to advanced surfers. The average surfer will most likely opt for presets 3-5. Note: For each of the 7 Naval Presets, there is a SURF LEFT and SURF RIGHT variant. As a result, the operator has 14 Naval Presets to choose from in total.
- Using the SURF LEFT/SURF RIGHT buttons, choose the position of your surf wave. Selecting SURF LEFT will direct the surf tabs to create a port-side wave. Selecting SURF RIGHT will direct the surf tabs to create a starboard wave.



Surf Left

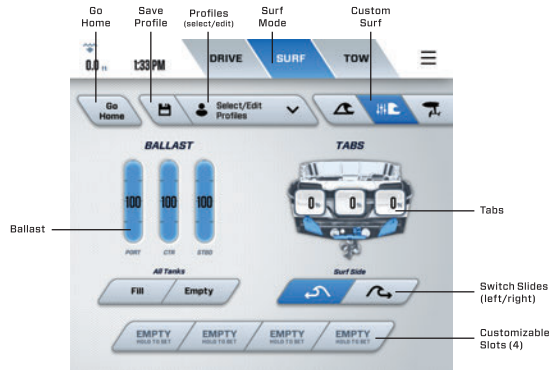
Surf Right

CUSTOM SURF

Custom Surf provides access to additional, in-depth wave settings. From this menu, you may adjust ballast fill levels, tab positions, wave position, and ZeroOff cruise control. You may also store presets, create custom profiles, manage/select profiles, and adjust sound settings. With its deep customization features, this menu is designed for experienced wakesurfing enthusiasts looking to craft a wave that perfectly suits their unique preferences.

To access the Custom Surf menu, select CUSTOM SURF from the toggle in the top right hand corner of the Surf Mode screen.

If you are satisfied with your wave and wish to save it as a preset for later use, you may do so using the slot bar near the bottom of the screen. This bar houses 4 slots in total. To store your wave in one of these slots, press and hold any EMPTY slot.

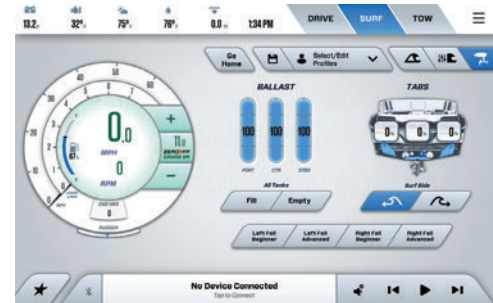


FOIL PROFILES

Foil profiles provide access to left/right beginner/advanced foil profiles.

For XT, Foil Beginner is a slower and more mellow wave and Foil Advanced is faster and a bit steeper for additional push in forward and back waves. Both waves can be used for long line or foiling in the surf wave. Which setting you select depends on rider skill level and foiling setup/equipment.


Refer to MasterCraft's How to Videos for more information: https://youtu.be/Ecn2nTFg_CU



CREATING A NEW SURF PROFILE

Custom Surf allows you to create your own custom surf profile with individualized tab, ballast, and speed settings. The profile may then be stored for later use.

To create a custom surf profile, follow the instructions below.

1. Select  from the panel near the top of the screen.
2. The following menu will appear on screen. From this menu, you may adjust ballast fill levels, tab deployment, speed, and cruise control (on/off). You may also tap SURF LEFT or SURF RIGHT to set the wave position. (Tapping a ballast zone or surf tab will take you to a dedicated ballast or tab adjustment screen.)



3. When you are satisfied with your settings, touch the NEXT button. Doing so will save the adjustments to your profile and take you to the next step in the profile creation process.
4. Using the keyboard provided, give your profile a name.

5. Tap SAVE & ACTIVATE if you want to save and immediately activate your new profile. Tap SAVE & CLOSE if you want to save the profile for later use. Saved profiles can be accessed at any time by using the profile manager.



USING THE PROFILE MANAGER

Using the Profile Manager Once a profile has been created, you can access it using the profile manager. This menu allows you to select, edit, or delete custom profiles. It may hold up to 30 profiles at a time.

1. Select “Select/Edit Profiles” from the panel near the top of the screen.
2. The profile manager will appear on screen. Using the profile manager, you may select any custom profile from the drop-down menu on the right hand side of the screen. You may also edit or delete custom profiles by tapping the pencil or trash bin icons.
3. To activate a profile, first use the drop-down menu to find it, then tap the profile to select it.
4. Once the profile is selected, touch the ACTIVATE button. Doing so will immediately activate the profile. When finished, select it again and touch the DEACTIVATE button.



TOW MODE

Tow Mode is intended for wakeboarding and skiing. Like Surf Mode it enables control of the surf tabs and ballast zones, allowing the user to adjust shape and intensity of the wake. Tow Mode includes Wake Beginner, Wake Intermediate, Wake Advanced, Ski, Ski Beginner. Ski Beginner is selectable under Select/Edit Profiles.

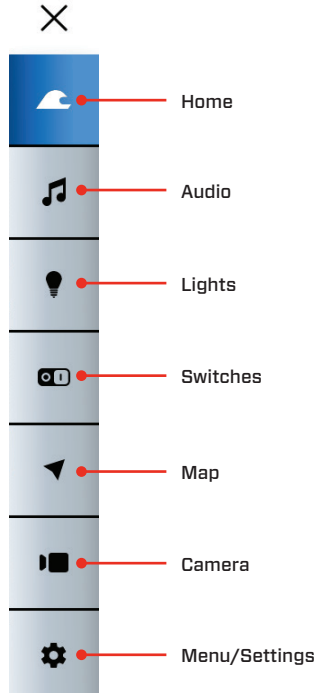


- **Beginner**—Designed for new riders who are still learning to wakeboard. Allows the user to get comfortable wakeboarding at slower speeds. The user may begin learning surface tricks and wake crossings. Recommended line length: 55-60'.
- **Intermediate**—Designed for moderately experienced riders learning their first wake-to-wake jumps, basic inverts, and spins. Recommended line length: 55-65'.
- **Advanced**—Designed for highly experienced riders seeking bigger airs for advanced tricks. Recommended line length: 65-75'. All stock profiles are accessible from the Tow Mode home screen. To activate a stock profile, tap the one you wish to use. The button will turn light gray, indicating that the profile is active.

CUSTOM TOW PROFILE

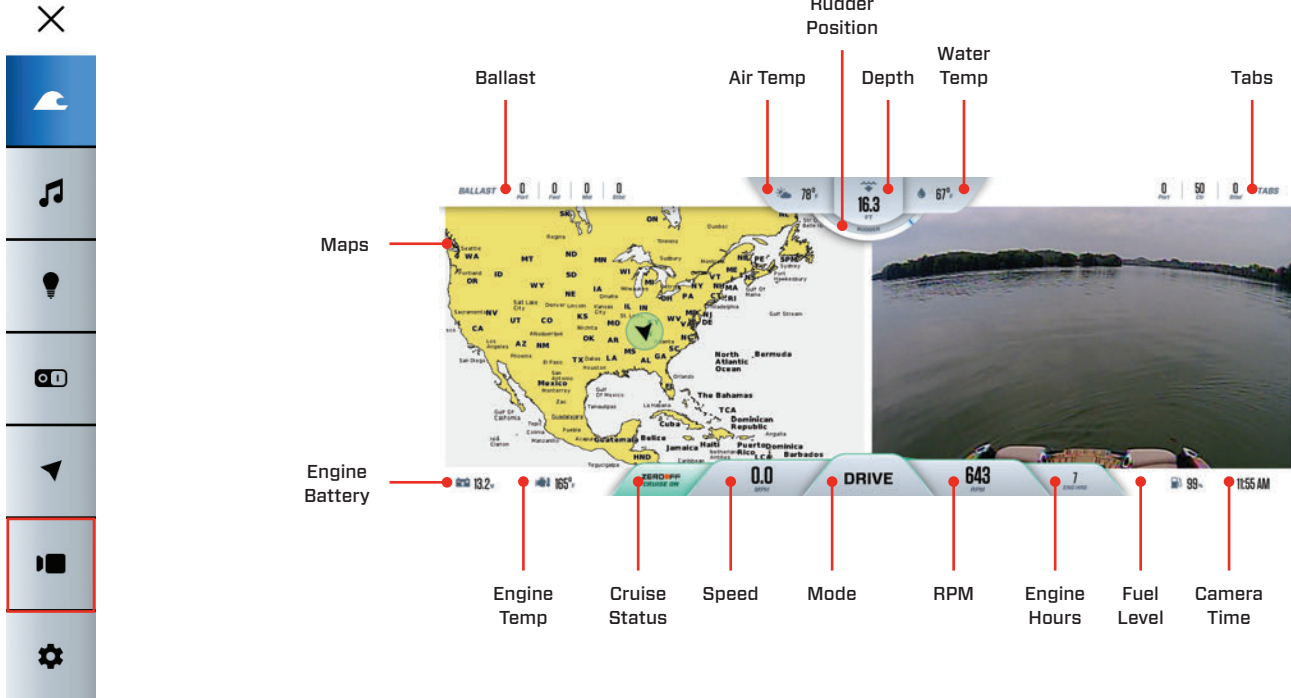
Refer to Surf Mode section and follow the same procedure to create and save custom wakeboard or ski profiles.

PAGES






COMPONENT	DESCRIPTION
Home	<i>Returns to mode in use</i>
Audio	<i>Provides access to blue tooth connection, USB input, FM, AM, WB, audio zones and equalizer</i>
Lights	<i>Turn on/off the standard and optional lighting on the boat</i>
Switches	<i>Controls various accessories including midship bilge, aft bilge, blower, cockpit heater (if optioned) and seat heaters (if optioned)</i>
Map	<i>Provides access to Navigation. Users can display and record tracks and waypoints.</i>
Camera	<i>Provides access to camera position set-up</i>
Menu/Settings	<ul style="list-style-type: none"> • <i>System Settings</i> • <i>Bluetooth Manager</i> • <i>Software Update</i> • <i>Fuel Management</i> • <i>Diagnostics</i> • <i>GPS Settings</i> • <i>Ballast/Tabs Settings</i> • <i>Service Information</i> • <i>Factory Settings</i>



On X and XStar models, the P15 center screen is standard and shows maps and camera. To access this layout page, click on the camera page.







MAPS AND NAVIGATION

From the Maps and Navigation Page, you can view your GPS location, enable tracking, and create/manage waypoints. To access this page, select  from the Pages Menu. A map will appear onscreen with options for tracking and waypoint management.

When the Maps & Navigation Page is selected from the Menu Bar, a map display will appear onscreen: From this page, you can manage waypoints and tracking options. Select  to add a waypoint and  to adjust waypoints. To enable tracking, tap the

 button. The system will begin recording your tracking data for later use. To stop recording a track, tap the button again and the system will stop recording. You can access previously recorded tracks and tracking settings by touching .

Use the  and  buttons to zoom in/out. Select  to center the map. Select  to toggle between north up/course up. The following table breaks down the name and function of each button found on the Maps & Navigation Page.



COMPONENT	DESCRIPTION
	Allows user to zoom in and out of a particular spot on the map.
	Edit existing track names; alter track color; select tracks. Show / hide existing tracks and delete tracks, either one at a time or all at once.
	Touch this button at the start of a track, and touch it again at the end of the track to record it.
	Add a waypoint/saved location on the map with a custom name. Select the type of waypoint (flag; anchor; fish; marina).
	View and/or go to a specific waypoint, edit a waypoint name, assign waypoint icons and delete one or all waypoints.
	Orients the display of the map to be either North at the top, or the course heading at the top.



Allows user to zoom in and out of a particular spot on the map.



Edit existing track names; alter track color; select tracks. Show / hide existing tracks and delete tracks, either one at a time or all at once.



Touch this button at the start of a track, and touch it again at the end of the track to record it.



Add a waypoint/saved location on the map with a custom name. Select the type of waypoint (flag; anchor; fish; marina).



View and/or go to a specific waypoint, edit a waypoint name, assign waypoint icons and delete one or all waypoints.



Orients the display of the map to be either North at the top, or the course heading at the top.

MEDIA

The Media Page allows you to easily adjust audio sources and output volume. Additionally, if FM, AM, or WB audio sources are selected, you may adjust tuning frequency and switch between channels. You may also select and save up to 5 preset radio stations. To access the Media Page, select the music note icon. You may select an audio source by touching the AM audio icon.



FM/AM RADIO

When FM/AM audio sources are selected, you may change stations, scan for stations, adjust output volume, and save presets. To switch between stations, touch or . Touching or will scan for detectable signals. If you have a favorite station and wish to save it as a preset, touch and hold . Mute or unmute volume using. Set volume using the volume slider.



WEATHER BAND

When WB (Weather Band) is selected as the audio source, you may choose 1 of 7 National Weather Service channels in order to obtain regional weather information. To select an NWS channel, use the tuning arrows or pick a station from the channel list.



Volume controls for Weather Band audio sources are identical to those used for FM and AM sources, detailed above. The following table breaks down the name and function of each button found on the Media Page.

COMPONENT	DESCRIPTION
	AM/FM: Scan previous or next signal. WB: Tune to next channel. USB: Next track.
	Fine tune the current station
	Save a favorite station. Tune into the station, then press and hold the slot for approximately 3 seconds.
	Volume adjustment. Touch and drag the slider to adjust volume.
	Mutes and unmutes volume

TO CONNECT VIA BLUETOOTH:

1. Ensure your phone's Bluetooth is on
2. On the P12 touchscreen select the audio/music page and select the Bluetooth icon. If your phone does not show, push the Bluetooth add button and select your phone to pair.
3. Once pairing is successful your phone will show in the Bluetooth Manager menu.

Note : Connection by way of USB will only charge Android devices but will play stored music.

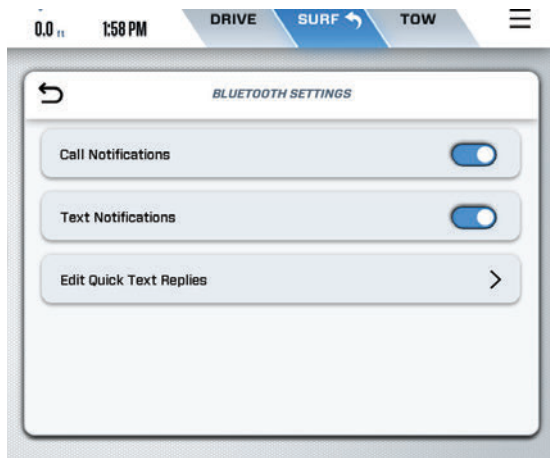


USB can be used to both charge and stream from an iPhone device.



BLUETOOTH SETTINGS

Connecting via Bluetooth allows operators to connect to the boat wirelessly, play audio, receive phone calls and text notifications, send pre-written text message quick responses (Android only), and display album art and song information. To customize Bluetooth settings, navigate to the settings tab and select **BLUETOOTH MANAGER**. From here you can pair other Bluetooth devices and change active devices. Tap into **BLUETOOTH SETTINGS** to customize call and text notifications.



ENABLING PHONE NOTIFICATIONS

1. To receive call or text message notifications on the dual screen dash, navigate to **BLUETOOTH MANAGER** and tap the **BLUETOOTH SETTINGS** button.
2. Tap **ENABLED** next to either Call Notifications or Text Notifications to allow the screen to display phone call and text message notifications.

NOTE: Apple devices are not compatible with Quick Text Replies.

NOTE: Phone notifications must be enabled in your device's settings menu to receive alerts on the dual screen dash.

To reply to a text message that appears on the screen tap the **QUICK TEXT REPLY** button and choose a pre-written text response from the list.

EDITING QUICK-REPLY MESSAGES

Quick Text Replies can be edited by touching Edit Quick Text Replies on the settings menu. Tap the pencil icon to the right of the reply you wish to edit. This will pull up a keyboard where the message can be edited.



VOLUME/EQUALIZER

VOLUME ZONES

From the Volume/Equalizer Page, you may control the volume and frequency ranges of all on-board speakers. You may adjust master volume (combined output of all speakers) as well as 5 individual speaker zones: Bow, Sub, Helm, Cockpit, and Tower. Bass, mid and treble EQs are also available for adjustment but your boat's audio system has been preprogrammed for best performance by default at mid level.

Note: XStar has 7 customizable zones.

Speaker zone volumes reflect a percentage of the master volume. If the master volume is set to 20% and a zone is set to 40%, the zone is playing at 100% of the current master volume. If the master is adjusted to 30%, the zone will become louder while continuing to play at 100% of the master volume. To play the speakers at maximum volume, turn all of the zones up to their maximum volume level, then do the same with the master volume.

You can mute a zone by selecting it and tapping . To mute all zones, deselect them and tap .



To change the volume of a zone:

1. Touch the zone you wish to adjust.
2. Slide your finger along the slider below the zone selection area until you reach the desired volume.

AUTO VOLUME

The Automatic Volume (Auto Vol) Mode allows the operator to add automatic volume adjustment based on the boat RPM. To activate Auto Volume, press “Auto Vol” under the volume page and turn on. Using the slider bar to set the auto volume to a maximum volume level which you want to experience while underway. Returning the boat to low RPM or neutral will lower the volume level to the previous low RPM set point. To deactivate, simply select “off”.

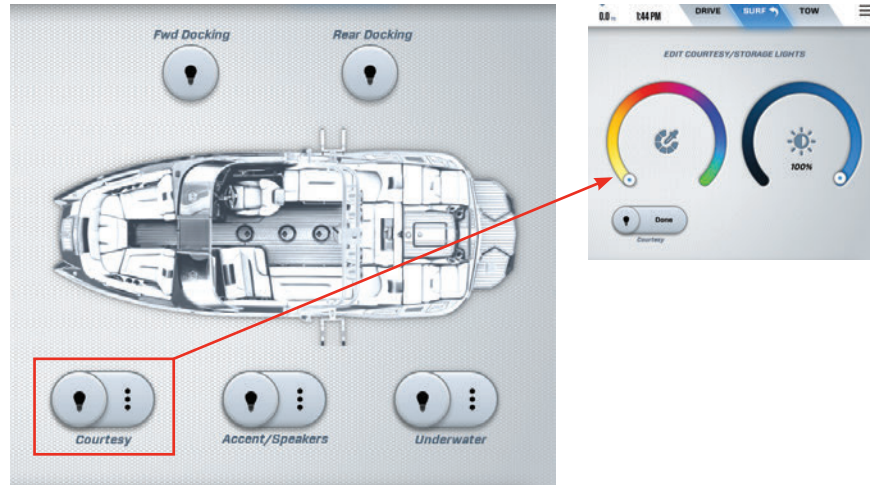


LIGHTING

To turn lights ON or OFF for a specific zone, touch the button corresponding to that zone.

You may adjust the intensity of the speaker lights by using the sliders to adjust color and intensity. Click DONE when satisfied with the color and intensity.

Note: XStar has a tower zone for lighting. This zone illuminates tower legs, windshield exterior lighting and nav/anchor lights.

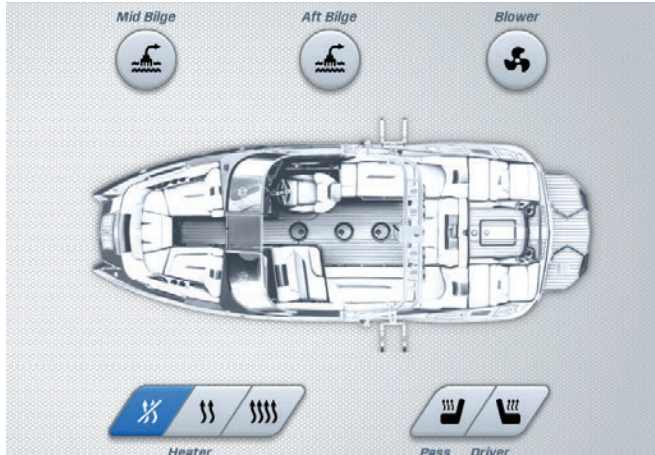


ACCESSORY SWITCHES

The Accessory Switches Page allows you to activate or deactivate the blower, cockpit heater, bilge pumps, and seat heaters.

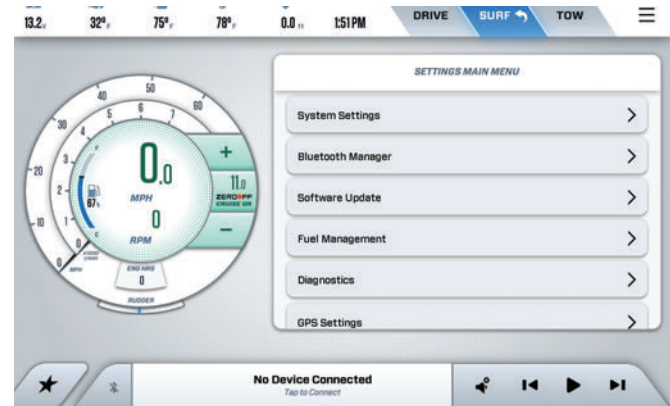
To activate a device, tap the corresponding button. It will be highlighted in gray, and a representative graphic will appear onscreen.

Please note: When the ignition key is turned to the “on” position, the blower will automatically activate and run for exactly four (4) minutes. If you would like to turn the blower on manually, you may do so from the Accessory Switches Page.



SETTINGS MAIN MENU

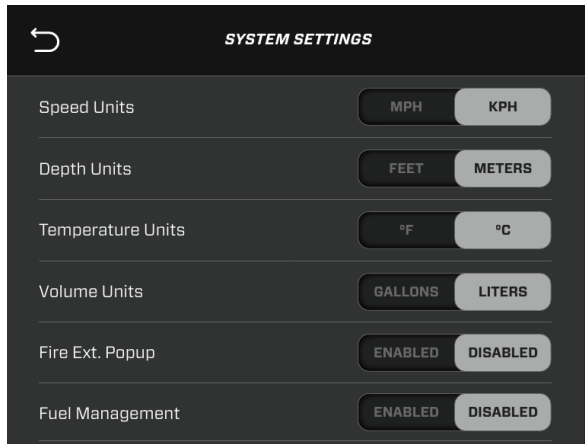
From the Main Menu, you can access and adjust System Settings, PDM Diagnostics, Fuel Management, Bluetooth Management, GPS Settings, Software Updates, Service Information, Factory Settings, and Tab/Ballast Settings. You can also view training videos on boat operations.



SYSTEM SETTINGS

From the System Settings Page, you can adjust major settings, including system of measurement (standard or metric), fuel management, depth alarms, and brightness.

The table at right breaks down the name and function of each button found on the System Settings page:



COMPONENT	DESCRIPTION
Units	<i>Choose a measurement system: Metric or U.S. Standard. This choice will impact depth, fuel volume, and speed measurements.</i>
Fire Extinguisher Pop-up	<i>A pop-up display indicating when the engine compartment's fire extinguisher is active or has been activated.</i>
Fuel Management	<i>When enabled, fuel management calculates fuel levels based on engine activity and RPM.</i>
Fuel Alarm	<i>An alarm indicating when fuel levels have reached the saved percentage amount.</i>
Minimum Depth Alarm	<i>An alarm indicating when the established minimum depth has been detected. This can be adjusted in increments of 6 inches.</i>
Brightness: Day	<i>Adjust screen brightness during daylight hours. Slide to adjust brightness levels.</i>
Brightness: Night	<i>Adjust screen brightness during daylight hours. Slide to adjust brightness levels.</i>
Tuner Region	<i>Select your location so that the AM/FM radio may optimize stations geographically.</i>
Update Software	<i>Allows your authorized MasterCraft dealer to download PV1100 software updates.</i>

BLUETOOTH MANAGER

See the “Bluetooth Settings” section of this chapter.

FUEL MANAGEMENT

In MasterCraft boats, the fuel management system directly connects the boat operator to the management of their fuel. This system collects precision information on fuel flow levels from the engine controller. It then calculates and displays the amount of fuel remaining based on engine activity and the usable size of the fuel tank.

As a safeguard against inaccurate readings, there is a back-up low fuel sensor that signals any discrepancies between the computer and the actual amount of fuel in the tank.



USING FUEL MANAGEMENT SOFTWARE

Upon keying the boat on, the touchscreen display will ask if you have added fuel to the boat.

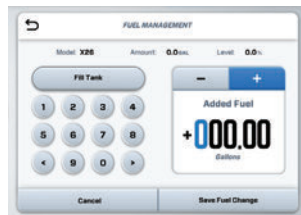
If the answer is no, tap **NO** to exit the fuel management system. If the answer is yes, tap **YES**. This will display the fuel level entry page. Input the amount of fuel added, or tap the **FULL** button if the tank has been filled completely. Fuel levels will be displayed next to "Amount" at the top of the screen. Press **SAVE** to exit to the menu screen.

Should an operator input the wrong amount of fuel, there are several fail-safes in place. To immediately correct an input error, navigate to the Main Menu tab. Select **FUEL MANAGEMENT** from the menu. This will re-open the fuel level entry page.

Using the keypad and the +/- button, adjust to the correct amount of fuel. Use a positive value if more fuel needs to be entered, or a negative value if too much fuel was entered.

If the fuel management system senses that fuel is getting low, it will display a low fuel warning on the screen. The boat will be able to run unballasted for approximately 20 minutes before running out of fuel. When you see the low fuel warning, immediately empty all ballast tanks and proceed to a fueling station before engaging in any further activity. Continuing to operate the boat with low fuel levels could leave users stranded offshore.

If an operator has inaccurately or mistakenly entered the fuel level, there is a sensor in the fuel tank which will override the incorrect entry when low fuel is detected. To avoid false readings, the sensor will only override the fuel management system if and when it detects a low fuel level for more than 30 seconds with the engine operating at less than 900 RPM.



To activate or deactivate the fuel management software:

- Navigate to the Main Menu tab.
- Tap SYSTEM SETTINGS.
- On the System Settings Page, select either ENABLE or DISABLE under Fuel Management.

Disabling the fuel management software will allow the fuel gauge to read fuel levels directly from the sensor on the fuel tank. You must reset this sensor when disabling fuel management. To do so, cycle the battery switch ON then OFF. With the key switch OFF, fill the fuel tank to 100% full at a fueling station. Turn the battery switch ON, then turn the key switch back ON.

GUIDE TO REFUELING WITH INACTIVE FUEL MANAGEMENT

- Always fill up with the key switch off.
- Filling boat completely full from the same location with a consistent ethanol content level, such as a marina, storage tank or gas station, will aid to maintain a more accurate fuel gauge reading.
- If refueling with a different grade and/or ethanol content than the existing fuel content in the boat, fill the tank completely full with the key in an “Off” position in order to initiate the recalibration of the fuel sensor.

*Note** When refueling from various sources with different levels of ethanol in the fuel, always wait until the fuel gauge indicates less than 1/2 fuel tank level before refueling. The key must be in the “OFF” position and the fuel tank must be completely refilled.

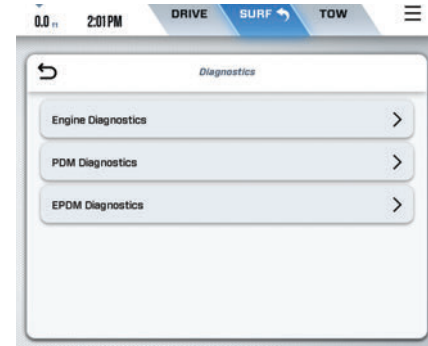
WARNING

When the low fuel warning appears, immediately empty all ballast tanks and proceed to the nearest fueling station or dock.

These critical guidelines signal the software to activate the modem to prepare for recalibration. After the tank is completely refilled and the key switch turned “ON”, the fuel will alert a sensor at the top of the sender, triggering the recalibration procedure and adjusting for the ethanol content in the tank.

DIAGNOSTICS

You may access all PDM, EPDM, and engine diagnostic information under DIAGNOSTICS in the Main Menu. Tapping any of the listed options will load system specific diagnostics:



ENGINE DIAGNOSTICS

This screen shows the number of active and stored faults, as well as the fault number currently displayed. To advance to the next fault, touch NEXT. Touch PREVIOUS to go back to the last fault. Use the following glossary to better understand this screen:

SPN—Suspect Parameter Number—fault code. If not translated into text by the display, see the engine manufacturer's literature for the definition of the SPN number.

FMI—Failure Mode Indicator—fault code. The FMI is defined by SAE J1939. If not translated into text, see the SAE standard or the engine manufacturer's literature.

Description Field—Most common SPNs and FMIs have text descriptions stored in the computer. If no description is visible, refer to the engine manufacturer or the SAE J1939 standard. NOTE: This field is only used with certain engine models.

Corrective Action—Tap GET FAULTS. This queries the engine(s) ECU for feedback on diagnostic codes activated and stored in the ECU for service needs.

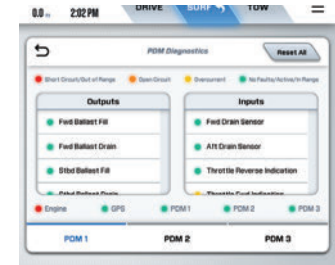


PDM DIAGNOSTICS

In MasterCraft boats, PDMs (Power Distribution Modules) provide electrical power to vehicle systems and act as circuit breakers for those systems. The PDM Diagnostics page displays faults for all PDM outputs, inputs, and CAN communications. To check all PDMs for faults, tap PDM 1, PDM 2, or PDM 3 on the PDM Diagnostics page. Faults for each PDM will be displayed on their respective pages. To reset existing faults, touch RESET FAULTS.

Faults are color coded as follows:

- Red - Short Circuit or Out of Range
- Orange - Open Circuit
- Yellow - Overcurrent
- Green - No Faults / Active / In Range



CAN DIAGNOSTICS

All models use CAN, Controller Area Network, for communications among various digital devices that control various parts of the vessels. Most models have 2 CAN networks divided between critical and secondary systems. CAN diagnostics is designed to make diagnostic checks easier and more convenient for quick, on-the-water fixes. To access the CAN Diagnostics screen, select CAN Diagnostics from the Diagnostics page under System Settings. The screen displays critical and secondary electrical system operating information. For each device, the screen displays the digital status of each device. Status is designated by green, red, and orange indicators.

- A green indicator denotes that the digital device is communicating properly.
- A red indicator denotes that there is a problem with the digital device communication.
- An orange indicator denotes that the digital device is currently communicating, but data is out of expected range, or it is an optional device and is not communicating.

To reset a digital device that is showing red, perform a battery switch cycle. Switch off the battery switch, wait 30 seconds, and turn battery switch on. If the fault does not clear the boat should be taken to an authorized MasterCraft dealer for repair.



erCraft XT 22



EPDM DIAGNOSTICS

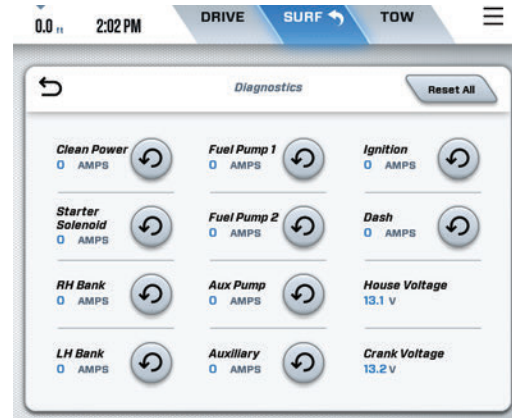
The EPDM is a type of PDM designed to make engine diagnostic checks easier and more convenient for quick, on-the-water fixes. To access the EPDM screen, select EPDM Diagnostics from the Diagnostics page under System Settings.

The EPDM screen displays critical engine and electrical system operating information. For each engine function, the screen displays amperage draw and digital switch status. Digital switch status is designated by green, red, and gray indicators.

- A **green indicator** denotes that the digital switch is functioning properly.
- A **red indicator** denotes that there is a problem with the digital switch and that it has tripped.
- A **gray indicator** denotes that the digital switch is currently unused or is not receiving power.

To reset a digital switch that has tripped, press the RESET button next to the system with a fault. To reset the entire EPDM, press the RESET ALL button in the bottom right corner of the screen.

If a digital switch continues to trip multiple times in one outing, this indicates a serious electrical issue. In such cases, the boat should be taken to an authorized MasterCraft dealer for repair.

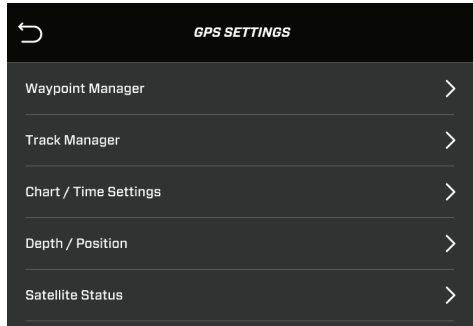


CAUTION

The EPDM and digital switches are designed to protect the engine and electrical system from damage. If a switch has tripped and continues to trip even after resetting the EPDM, it may be a sign of a larger electrical issue. The boat should be taken to an authorized MasterCraft dealer for diagnosis and repair.

GPS SETTINGS

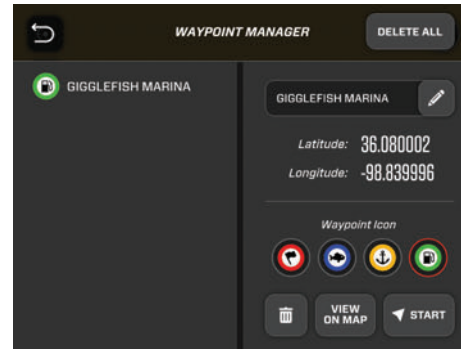
Accessed from the Main Menu/Settings Page, the GPS Settings Page includes options for managing waypoints, tracks, chart/time settings, depth/position settings, and satellite status.



WAYPOINT MANAGER

The Waypoint Manager lists existing waypoints to view, edit or delete.

- To plot a course to a specific waypoint, highlight the waypoint on the list on the left side of the screen, and touch Start.
- To view a specific waypoint on the map, highlight the waypoint on the list on the left side of the screen and touch VIEW ON MAP.
- To edit the name of a waypoint, highlight the waypoint on the list on the left side of the screen and touch EDIT. (the pencil icon).
- To assign an icon to a waypoint, highlight the waypoint and touch the specific icon to be assigned (flag, anchor, fish or fuel).
- To delete a waypoint, highlight the waypoint and touch the trash can icon. To delete all waypoints, touch DELETE ALL.



TRACK MANAGER

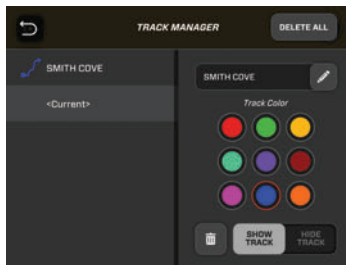
A track is a recording, displayed on the map, of where the boat has traveled. Tracks are only recorded when the RECORD TRACK button is selected. Once recorded, tracks will appear in the Track Manager to be edited, shown or hidden on the map, or deleted.

To edit a track name, navigate to the Track Manager and highlight the track on the list, tap edit. A keyboard will appear where operators can make necessary changes.

To show or hide a track, navigate to the Track Manager and highlight the track on the list. Touch SHOW TRACK or HIDE TRACK. When hidden, the track is saved in the memory, but will not appear on the screen.

To assign track colors, highlight the track and choose a color disk.

To delete one track in the Track Manager, highlight that track and touch the trash can icon. To delete all tracks, touch DELETE ALL.



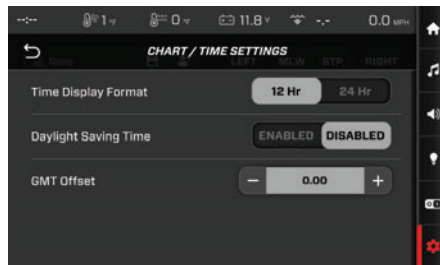
CHART/TIME SETTINGS

Chart/Time Settings allow users to turn ON or OFF the following parameters. Touch the green or red squares to select or deselect:

- Show Grids
- Show Text
- Show Waypoints
- Show Tracks
- Show Navigation Aids
- Show Waypoint Names Adjust the GMT offset hours by touching the left or right arrows.

If Daylight Saving Time is enabled in your location, touch DST Enabled to turn it on.

Choose the clock display in 12 hour format or 24 hour format.



DEPTH/POSITION SETTINGS

The Position Format selection displays positions on the map in the following three GPS formats:

- Degrees, Minutes and Decimal Minutes (i.e., 79°58.93172W)
- Degrees, Minutes, Seconds and Decimal Seconds (i.e., 40°20'50.93172)
- Degrees and Decimal Degrees (i.e., 79.982195)

Depth Contour

The Depth Contour setting allows an alarm to be displayed when the boat is detecting a water depth at or above the depth selected. The map will display depths within the lines as shown below. Choose a Depth Contour to be displayed by touching a preferred depth:

- Off
- 6 feet
- 16 feet
- 33 feet
- 66 feet



Safety Contour

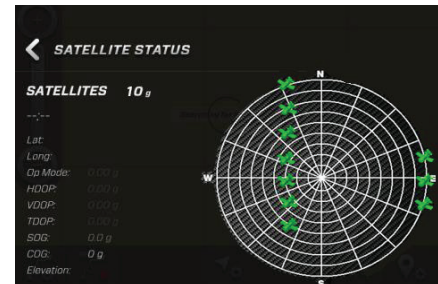
The Safety Contour will change the map's display color in areas of water that are at or deeper than the selected depth. These depths will be blue while depths shallower than the selected depth will be white. Choose a Depth Contour to be displayed by touching a preferred depth:

- Off
- 6 feet
- 16 feet
- 33 feet
- 66 feet



Satellite Status

This screen will display a representation of all the satellites visible to the boat's GPS system.



SERVICE INFORMATION

From here, dealers can reset the system's oil change reminders or dealer service reminders. Dealer contact information can also be found here.

MILESTONE	MESSAGE ON DISPLAY
Oil Change Reset	<i>Displays a question of "Reset Oil Change?" Tap YES or NO.</i>
Dealer Service Reset	<i>Displays a question of "Reset Dealer Service?" Tap YES or NO.</i>
Dealer Information	<i>Provides the Dealer contact information.</i>

FACTORY SETTINGS

This section requires a Dealer code to enter. If changes are needed, contact our Authorized MasterCraft Dealer.





VOLUME KNOB

A rotary volume knob comes standard on all boat models and functions the same. The volume knob provides volume control, play/pause, and track navigation functions. Rotating the knob clockwise increases the volume, while rotating counterclockwise decreases the volume. Pressing on the knob activates play/pause. When connected via Bluetooth, toggling the knob to starboard advances to the next track, and toggling to port restarts or returns to the previous track.



MYDRIVE ROTARY ENCODER

All XT/X/XStar models come standard with a 5-button rotary encoder. The encoder is a quick way to access frequently used commands, or “hot key”. The hot keys allow for:

- Speed adjustment
- Surf tab adjustment
- Rapid Surf adjustment
- Switching surf sides
- Favorites menu which includes:
 - Ballast and tabs
 - Profiles access
 - Maps access
 - Audio adjustment (includes zones, EQ and Autovolume)
 - Switches
 - Lights

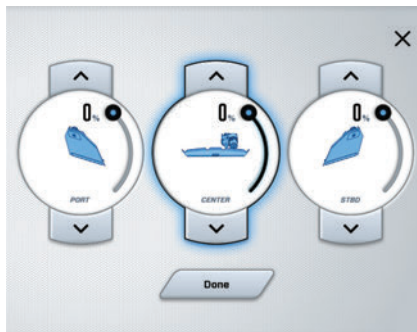
The encoder features can be activated by pressing the hot keys. By default the encoder hot key will timeout after 10 seconds but if desired you can change this to close out upon hitting the hot key a 2nd time. This is customizable in the menu user settings.





Speed Adjustment from the Hot Key:

Press the speed hot key to bring up ability to adjust current set speed. Once the pop-up is on screen, turn the rotary knob to increase or decrease set speed. You can also press down on the encoder knob to turn on or off the ZeroOff cruise control. One incremental click of increase/decrease is 0.1 mph.



Tabs Adjustment from the Hot Key:

Press the tabs hot key to bring up the ability to adjust all 3 surf tabs. By default the center tab is selected. Use the rotary knob to toggle left or right and select the port or starboard tab. Once selected you can use the rotary knob to turn and increase or decrease a surf tab. One incremental click is 5% tab. Turning clockwise will increase the tab percentage.



Rapid Surf Adjustment from the Hot Key:

Press the Rapid Surf hot key to bring up Rapid Surf. Increasing clockwise by one click will increase the Rapid Surf setting which will increase the wave amplitude. Turning counter-clockwise will decrease the wave setting.



Switching Sides from the Hot Key:

Only when in surf mode can you press the hot key to switch from left to right or visa versa while underway. The surf tabs will adjust to the opposite wave.



Favorites Hot Key:

Hitting the favorites hot key allows for quick access to other adjustable features such as:

- Ballast and tabs
- Profiles access
- Maps access
- Audio adjustment (includes zones, EQ and Autovolume)
- Switches
- Lights

For example, to bring maps up to the P12 screen, you could hit the Favorites hot key and toggle to maps and select maps by pressing down the encoder.

OBSERVER DISPLAY

The optional MasterCraft Observer Display is designed for control of various functions and integration with alternate systems on X and XStar models. The multimedia Observer Display provides controls for sounds, heaters, and lights

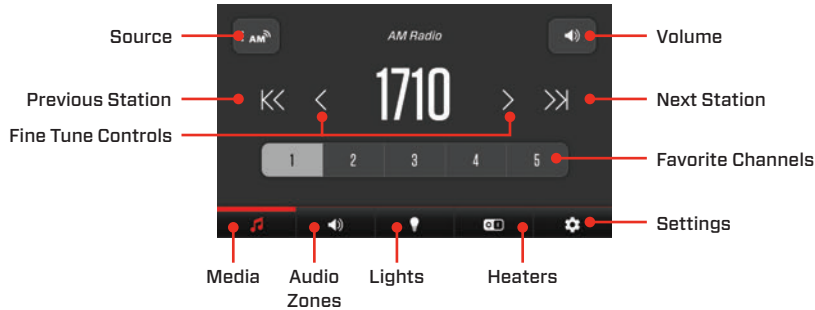


CARE AND MAINTENANCE

General maintenance is not required; however, a soft cloth can be used for cleaning the unit. Window cleaner or alcohol can also be used to clean the glass portion of the display. Do not use harsh or abrasive cleaners on the unit.

BASIC NAVIGATION FEATURES

THE OBSERVER REMOTE CONTAINS THE FOLLOWING TOUCH COMMANDS:



COMPONENT	DESCRIPTION
Media	<i>Provides access to the sources for Bluetooth, USB Media and FM/ AM/ Weather Band radios.</i>
Audio Zones	<i>Provides access to the volume controls for each zone of the craft.</i>
Lights	<i>Provides access to customizable light controls on the craft.</i>
Heaters	<i>Provides access to the heater controls on the craft.</i>
Settings	<i>Provides access to brightness controls, system information and software update abilities.</i>

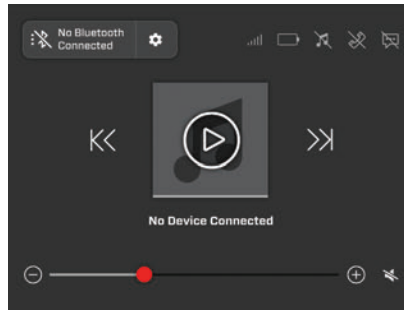
MULTIMEDIA CONTROLS

This area allows access to the sources available through Bluetooth, USB Media and FM/AM/Weather band radio signals. One of the following symbols will be displayed. Touch and choose the desired source.



BLUETOOTH

If the following screen appears when Bluetooth is chosen, follow the Bluetooth procedures prompted in the main entertainment system or refer to the Bluetooth procedures shown in the main entertainment system manual to connect and play Bluetooth sources:



The following controls will be displayed:

COMPONENT	DESCRIPTION
	<i>Repeat. Touching this button once will turn the symbol green and display a 1 (repeat one song). Touching it twice will display All (repeat all songs)</i>
	<i>Reverse to the beginning of the song, then if pressed again reverses to the previous song</i>
	<i>Play</i>
	<i>Fast forwards to the next song</i>
	<i>Shuffles the songs so that they are played randomly</i>

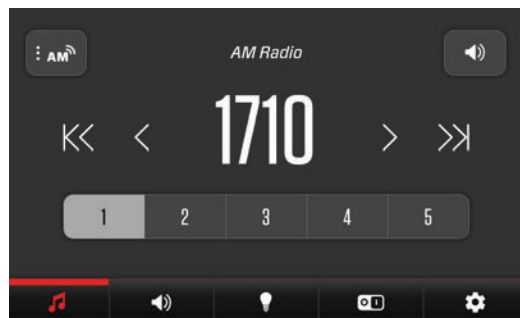
FM/AM RADIO

Choosing one of these options will display the chosen Radio band (AM shown below):

To select a channel, utilize the following controls:

To save a favorite channel, dial in the appropriate channel then press and hold one of the five presets buttons shown for 3 seconds. The channel will be saved to the corresponding number.

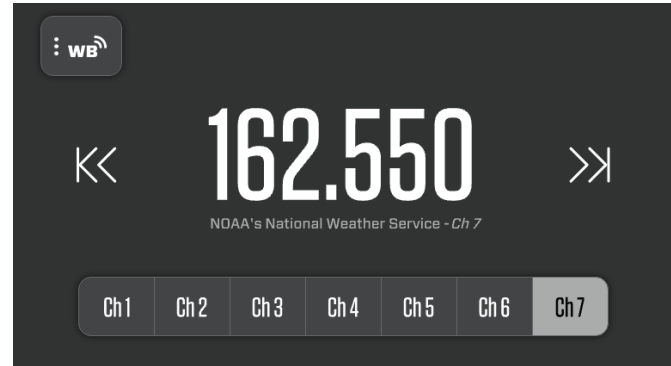
3.5 mm AUX jack at helm



COMPONENT	DESCRIPTION
>	<i>Fine tune to the next highest number on the channel scale</i>
>>	<i>Tune to the next available channel on the scale</i>
<	<i>Fine tune to the last number on the channel scale</i>
<<	<i>Tune to the previous available channel on the scale</i>

WEATHER BAND

The National Weather Service has seven different channels to obtain weather information. Select a channel (1-7) to obtain weather information for your particular area.

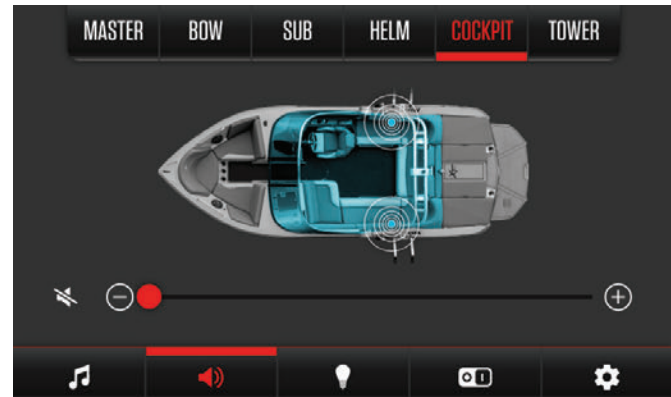


SOUNDS

This section controls the volume in the various zones of the craft.

To control the volume in each zone:

1. Touch the desired zone (the Cockpit is shown highlighted in the above picture).
2. Slide your finger along the volume line below the picture to the desired volume.
3. To mute the sound in all zones except the highlighted zone, touch the mute symbol.

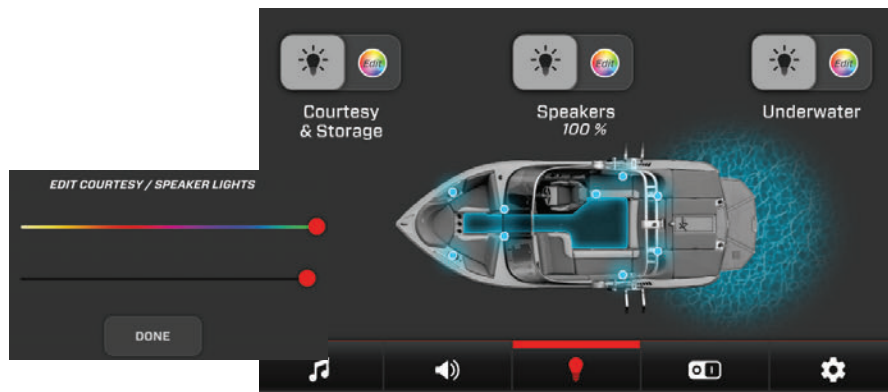


LIGHTS

To turn on/off lights in a specific area, touch the corresponding On/Off bubble for that area.

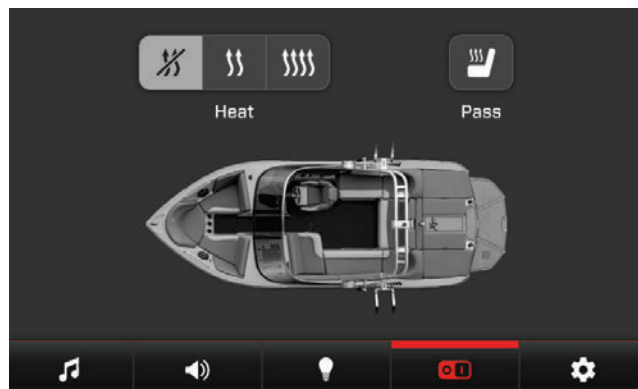
Change the light colors by touching .

Adjust the slider bar to the appropriate color and intensity and touch Done:



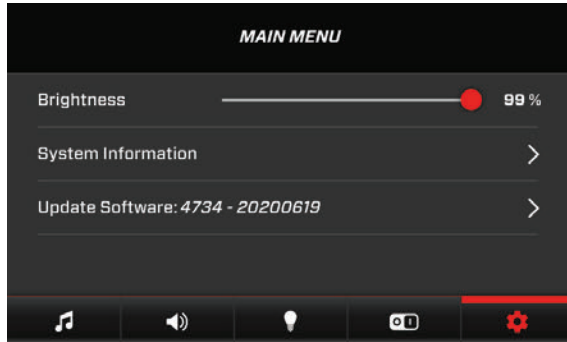
HEATERS

To turn on or off the heaters, touch the On/Off bubble that corresponds to that switch.



SETTINGS

To control the screen brightness, tap a desired area of the line.



GENERAL TROUBLESHOOTING GUIDE

Display appears not to work or doesn't come ON.

1. Display could be in sleep mode. Touch the screen to activate the display.
2. Check for loose connections at battery and display unit.
3. Check for reversed polarity on the power connections.
4. Verify battery has a minimum voltage of six volts.

Display resets or goes OFF when starting engine.

1. Check display supply wires are connected properly to battery.
2. Verify battery is charged properly.
3. Check battery for efficient starter current.

Display has no back light.

Contact an authorized MasterCraft service center.

Display has no keypad back light. (if present).

Contact an authorized MasterCraft service center.





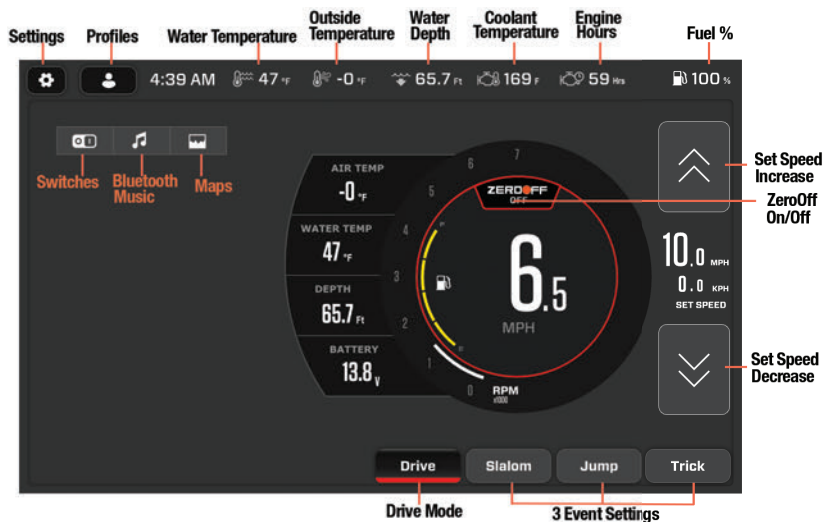
PROSTAR DASH/ SCREEN OPERATIONS



The ProStar 11" touch screen display is a multi-functional tool that provides GPS tracking, multi-media display, cruise control, rider profiles, and enables equipment operators to view a wide range of engine, ballast, transmission parameters and service codes.

CARE AND MAINTENANCE

Only basic cleaning should be required to maintain the 11" touch screen at its best. A soft cloth can be used for cleaning the unit. Typical window cleaner or rubbing alcohol can also be used to clean the glass portion of the video screen display. To avoid damage that is not covered under warranty, do not use harsh or abrasive cleaners on the unit.



⚠ CAUTION

Avoid contact between sharp or hard objects and the video touch screen because this can result in scratches or other permanent marks on the screen.


BASIC NAVIGATION FEATURES

All features are easily accessible through the touch point commands and menus.

TOUCH POINT COMMANDS

After the desired screen is accessed, navigation within the screen is controlled with Touch Point Commands. These are executed by touching the screen in areas that are outlined with a highlighted bezel. In addition, there are areas where sliding a finger up or down can adjust settings. For example, on the Ballast screen, sliding the finger on the inside of the screen tank area adjusts the ballast setting.

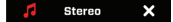
STEREO

The Stereo screen can be accessed by pressing the  button on the 11" display.



TOUCH POINT COMMANDS



Opens the Stereo controls, then becomes *(Touch X to close.)* 



MUTE — Touch this button to mute or unmute the volume.



SOURCE — Touch this to select a MasterCraft supported source like: AM radio; FM radio; Regional Weather Channels (7); Bluetooth-connected devices; USB drives



SCAN — These buttons scan to the left or right and will stop on the next available station/song.



FINE TUNE SCAN — These buttons scan to the left or right to fine-tune the current signal.



Initiates a scan to the next available station where it stops for a few seconds, then scans again and stops for a few seconds, until a complete loop around the stations has occurred.



FAVORITES — One of five buttons to which a favorite station can be saved. Hold your finger on the button until the station address appears as the button label.



VOLUME—Slide the red dot along the line or touch the line to adjust the volume.



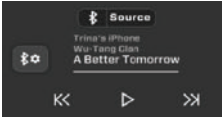


Appears as:



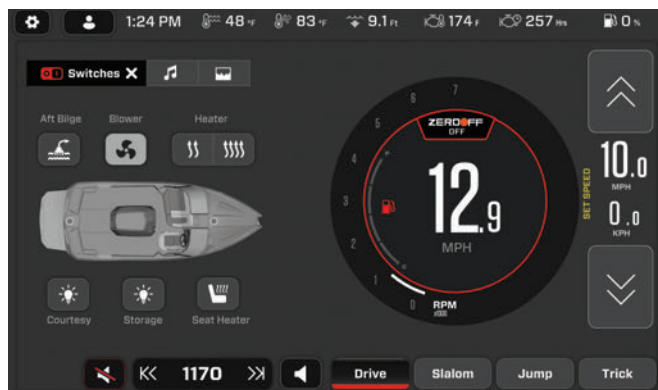
BLUETOOTH PROCEDURES

To attach a Bluetooth-connected device, follow these steps:

STEP	ACTION
1	Touch the Bluetooth icon  . If the desired device is not already connected, touch the Bluetooth Settings button  .
2	Previously paired devices will appear on the Devices list. Touch Add to add a different device.
3	The Add New Device screen will appear, asking to put the mobile device into pairing mode. Touch OK.
4	The display will begin to poll available devices within the physical area. When the desired device appears in the list, touch the + beside the name.
5	A "Pairing Device" message will appear on both the display and device. Touch Pair on the Device and touch OK on the display.
6	The display will show Connected beside the device name. Touch Back, and the song title and artist currently being played will appear: 

SWITCHES

Touch the Switches button and the following screen will appear:
 Touch the appropriate button (Bilge, Blower, Lights and Heaters) to turn them on or off.



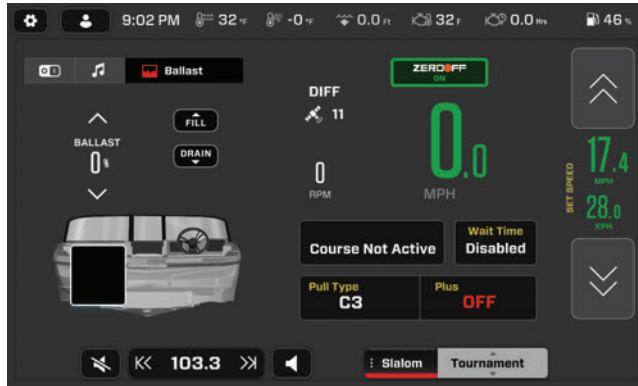
Note: Heater and Seat Heater are options enabled by the Dealer and may not appear on the above screen.

To close the Switches menu, touch the X:



BALLAST

The Ballast controls can be accessed by pressing the Ballast button. The following screen will appear:

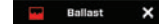


TOUCH POINT COMMANDS

Utilize the up and down arrows to increase or decrease Ballast.



Utilize these buttons to Fill completely or Drain completely the Ballast. The Stop button will appear in mid process to halt at the displayed percentage.



Touch the X to close Ballast controls.



This is a graphical representation of the ballast.

The blue section represents the current water level.

The green section represents the amount of water being added (when increasing the Ballast).

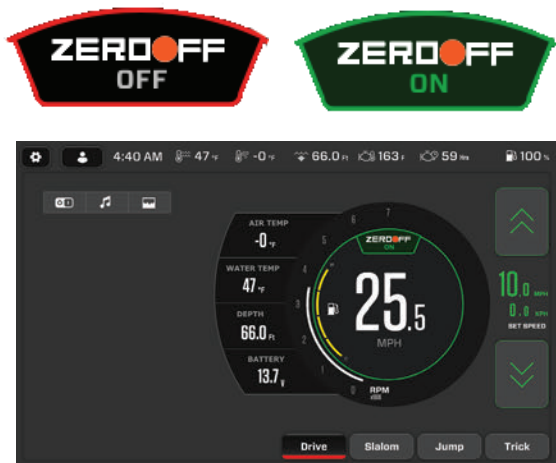
The red section represents the amount of water being drained (when decreasing the Ballast).

You may touch the specific color section and slide up to fill or down to empty the Ballast.



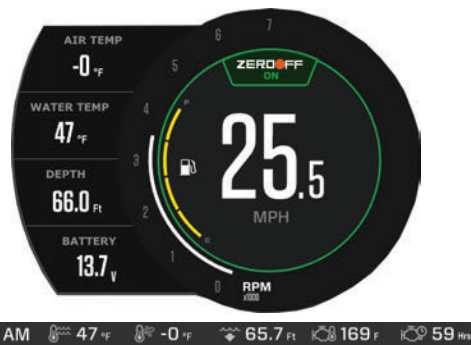
ZERO OFF

Zero Off* GPS Speed Control is based solely on input from satellites, engine management systems and the speed you are traveling across the surface of the water. These eliminate the requirements for skier weight, crew weight, KX, PX or even any kind of wind adjustment. You simply set the desired speed and go. This easy-to-use technology has made Zero Off the industry standard. Simply touch Zero Off to turn it on and adjust your Set Speed with the arrows.



GAUGE SCREEN


- Speedometer (MPH)
- Water Depth (FT)
- Air Temperature (°F)
- Water Temperature (F)
- Battery Voltage (Volts)
- Fuel Level



The top of the screen duplicates some of the gauge information and also displays the:

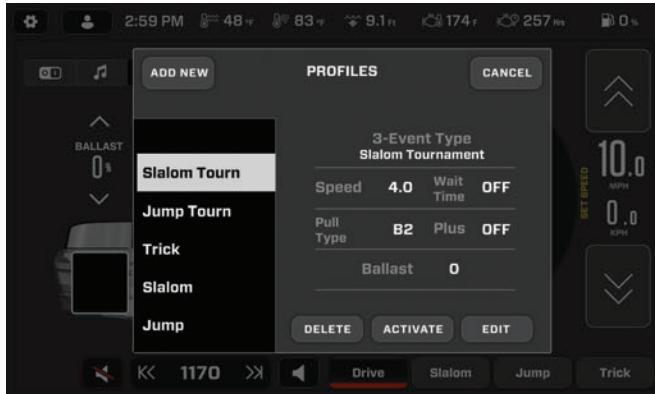
- Clock
- Engine Hours

PROFILES

The Profiles screen can be accessed by pressing . This feature displays rider/user profiles for cruise controls based on user preferences for Set Speed, Ballast, and Tab settings. Up to 20 rider/user profiles can be created and stored.

Touch the available Profiles and slide your finger up to view the complete list.

Touch an existing profile to highlight it, and your choices are Delete, Activate and Edit. The Profile Name, Profile Speed, 3Event Settings and Ballast can be edited for existing profiles. Choose Edit and follow the screen prompts.



ADDING A NEW PROFILE

To add a new profile, follow these steps:

STEP	ACTION
1	Touch Add New.
2	Type the Profile Name and touch Next. Verify the name and touch Next.
3	The Edit Profile Speed screen will appear. Choose the appropriate 3Event Event Type (Trick, Jump Tournament or Training, Slalom Tournament or Training).
4	Utilize the - and + buttons to adjust the speed to the desired setting. Touch Next.
5	Choose whether to turn on or off Plus (for additional throttle when entering the first gate) and choose the desired Pull Type. Touch Next.
6	Slide your finger on the Ballast cell or utilize the arrows to adjust the Ballast water level to the desired amount.
7	Review all the settings on the final screen and touch Save.
8	Highlight the newly added profile and touch Activate.
9	The screen will display the activated profile settings and turn on Zero Off.

TOURNAMENT EVENTS

The 3 Event screen can be accessed by pressing Slalom, Jump or Trick at the bottom of the screen:



This feature provides a way to keep a boat within the strict guidelines of the event it is tracking and provide a visual display of the track and the progress of the skier.

TOURNAMENT AND TRAINING MODES

There are two modes each for Slalom and Jump. Select the Event, then choose Tournament or Training.

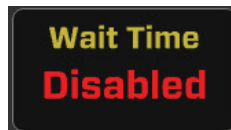


The Training Mode operates like the Tournament Mode without the set speed limitation.

The Tournament Mode is limited to the set speed of the event.

SLALOM—TOURNAMENT MODE

This screen illustrates the display when the event being tracked is the Slalom event in Tournament mode.



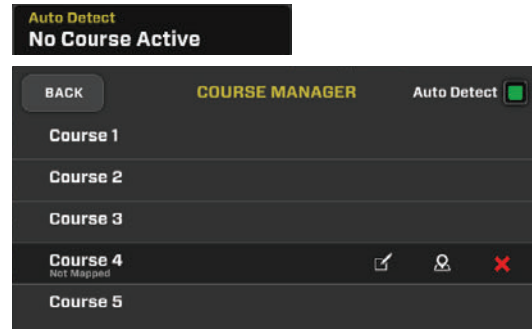
This screen illustrates the display when the event being tracked is the Slalom event in Tournament mode.



Allows you to map a course. See Course Manager.

COURSE MANAGER—ALL SLALOM & JUMPING EVENTS


On the 3 Event screen, touch the Auto Detect/No Course Active button, and the Course Manager screen will appear.



NOTE: Always highlight a course on the list page before mapping a new course. When mapping a course, the program assigns the mapping to whatever name is highlighted on the course list.

When auto detect is active, you do not have to select an active course. The 3-Event head unit automatically starts the course and timers based on your GPS location when you enter a course. If auto detect is not active, you must manually select a course to follow.

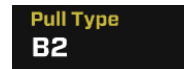
COURSE MAPPING INSTRUCTIONS

STEP	ACTION
1	Highlight a course to be mapped, then touch  . Press Start Gate to begin mapping the course.
2	For Slalom, press the Start Gate button when the GPS puck crosses the start gate. For Jump, press the Start Gate button when the Ski Pylon crosses the start gate.
3	Press End Gate to stop the mapping.
4	If necessary, touch Cancel to cancel the current mapping and return to the course list.



Pull type is the amount of “pull” felt by the skier as the boat adjusts to maintain the set speed.

- | | |
|---|----------------------------------|
| A: Slower engine response out of the buoy | 1: Softer pull behind the boat |
| B: Moderate engine response | 2: Moderate pull behind the boat |
| C: Faster engine response | 3: Harder pull behind the boat |

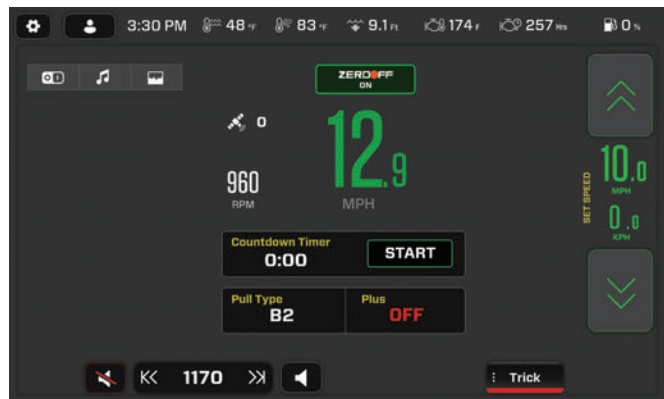


In the On position, the system will react sooner to both increase and decrease in speed deviation.

Used for trick setting or additional throttle when entering the first gate.

TRICK SCREEN

This screen illustrates the display available when the scheduled event is Trick. Use the Touch Commands in setting up, controlling and tracking the Trick event.



TOUCH COMMANDS DESCRIPTION

Countdown Timer

0:00

START

Touching Start begins countdown

Pull type is the amount of “pull” felt by the skier as the boat adjusts to maintain the set speed.

A: Slower engine response out of the buoy

B: Moderate engine response

C: Faster engine response

1: Softer pull behind the boat

2: Moderate pull behind the boat

3: Harder pull behind the boat

Pull Type
B2

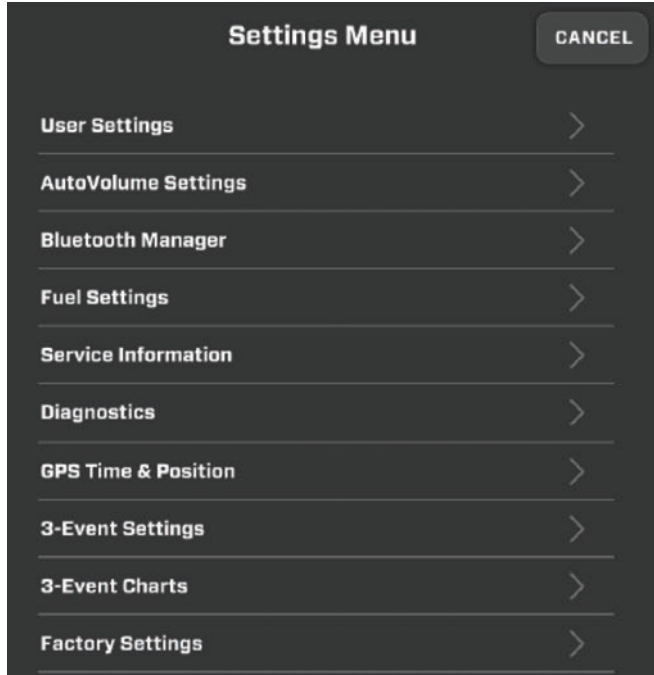
Plus
OFF

In the On position, the system will react sooner to both increase and decrease in speed deviation.

Used for trick setting or additional throttle when entering the first gate.

SETTINGS

Touch the Settings icon  to display the following screen:



USER SETTINGS

Touch this touch command to access the user settings screens. Touch the field following the option to change the setting. Adjust a scale setting by sliding the red dot along the presented line. Touch [Back] to return to the Settings menu.

Units	<i>US Standard (US Std) or Metric</i>
Fire Extinguisher Notification	<i>Enabled (Pop-up) or Disabled (Pop-up)</i>
Depth Alarm	<i>Sets the depth at which an alarm will sound when the boat approaches that depth</i>
Day Brightness	<i>Sets the screen brightness for daylight</i>
Night Brightness	<i>Sets the screen brightness for nighttime</i>
Gauge Brightness-Day	<i>Sets the gauge brightness for daylight</i>
Gauge Brightness-Night	<i>Sets the gauge brightness for nighttime</i>
Ballast Settings	<i>Controls the ballast fill and drain times by utilizing the - and + buttons.</i>

AUTOVOLUME SETTINGS

Utilize the - and + buttons to adjust the intensity of the volume that occurs automatically to compensate for wind and engine noise.

BLUETOOTH MANAGER

See Bluetooth Procedures in this manual.

FUEL SETTINGS

Upon startup, the Fuel Management system will ask, “Did you add fuel?” If you answer “Yes”, the above screen will appear.

BACK
Fuel Settings
CANCEL

Model: PROSTAR Fuel Management: DISABLED ENABLED

Amount: 0.0 Gal

Level: 0.0% Fuel Alarm: - 0% +

Gallons Added?

1

2

3

4

5

6

7

8

9

+/-

0

✕

00.00
 Added Value

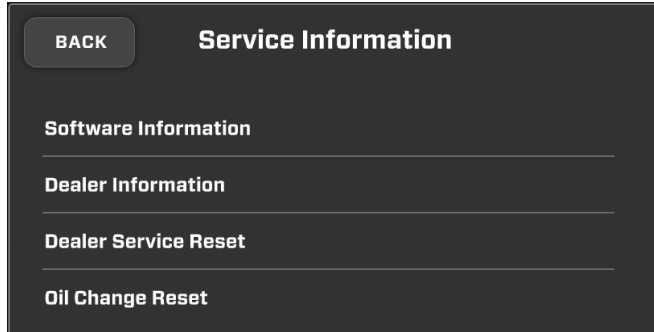
FULL

SAVE

TOUCH COMMANDS	DESCRIPTION
Fuel Management	<i>Turns off (Disabled) or on (Enabled) the management of fuel for the craft.</i>
Fuel Alarm	<i>Utilize the - and + buttons to set the remaining percentage of fuel at which an alarm will sound to warn of a low fuel situation.</i>
Gallons Added	<i>Enter the number of fuel gallons added.</i>
Full	<i>Touch this button if the fuel tank has been filled to Full.</i>
Save	<i>Touch this button to save the settings entered on this screen.</i>

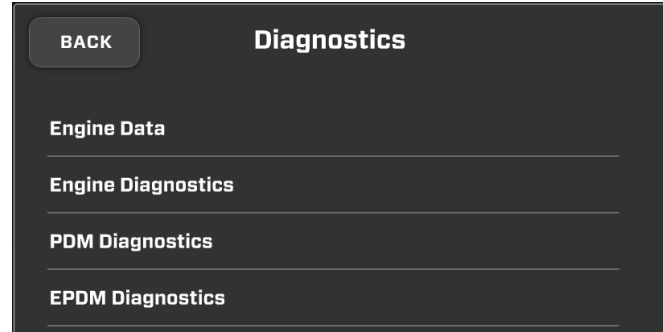
A photograph showing a person water skiing on a lake. The skier is leaning back, creating a large splash of white water. Behind the skier, a dark-colored speedboat is moving across the water, also leaving a white wake. The background consists of a dense line of tall, thin trees under a clear sky. The water in the foreground is slightly blurred, suggesting motion.

SERVICE INFORMATION



TOUCH COMMANDS	DESCRIPTION
Software Information	<i>Provides the Software Version, Application Version and Part Number (PN), OS Version and PN, Bootloader Version and PN, ZeroOff Serial Number and Software Version, Prop Type and Engine Type. Also present is a way to update the software through a USB drive.</i>
Dealer Information	<i>This contains the Dealer contact information (provided by the Dealer).</i>
Dealer Service Reset	<i>Set by the Dealer. If changes are needed, contact your Dealer.</i>
Oil Change Reset	<i>Allows the resetting of the Oil Change timer when the Oil is changed.</i>

DIAGNOSTICS



TOUCH COMMANDS	DESCRIPTION
Engine Data	<i>Displays Engine Hours, Engine Temperature and Oil Pressure</i>
Engine Diagnostics	<i>Displays Active and Stored Faults (if present) and any Corrective Actions necessary. (See next page for additional information)</i>
PDM Diagnostics	<i>Displays any PDM short circuits, analog out of range, open circuits or overcurrents (if present), and a method to reset the faults.</i>
EPDM Diagnostics	<i>Displays any electrical PDM faults and a method to reset them. (See next page for additional information)</i>
3-Event Diagnostics	<i>Displays active and historic diagnostic codes for ZeroOff, and a way to reset them.</i>

EPDM & ENGINE DIAGNOSTICS

MODELS

All ProStar models with standard PV1100 Touch Screen

PURPOSE

Power distribution modules (PDMs) provide electrical power to various vehicle systems. They also have diagnostic functionality and can be used to monitor the fault status of circuits. On ProStar models and other MasterCraft boats, the EPDM (Engine Power Distribution Module) is designed to make engine diagnostic checks more convenient, enabling quick, on-the-water fixes.

LOCATION

To access the EPDM screen, press the Settings button, which will call up the Settings menu. Tap Diagnostics, then tap EPDM Diagnostics.

OPERATION

The EPDM screen displays critical engine and electrical system operating information. Amperage draw and the status of internal digital switches are displayed on the EPDM screen for each engine function. Digital switch status is designated by either a green, red or gray indicator.

- A green indicator denotes that the digital switch is functioning properly.
- A red indicator denotes that there is a problem with the digital switch and it has tripped.
- A gray indicator denotes that the digital switch is unused or not receiving power.

To reset a tripped digital switch, press RESET next to the system with a fault. To reset the entire EPDM, press RESET ALL on the bottom right portion of the screen.

If a digital switch continues to trip multiple times in one outing, it is a sign of a larger electrical issue and the boat should be taken to an authorized MasterCraft dealer for diagnosis and repair.

The EPDM and digital switches are designed to protect the engine and electrical system from damage. If a switch has tripped and continues to trip even after resetting the EPDM, it may be a symptom of a larger electrical issue, and the boat should be taken to an authorized MasterCraft dealer for diagnosis and servicing.

ACTIVE FAULTS/STORED FAULTS

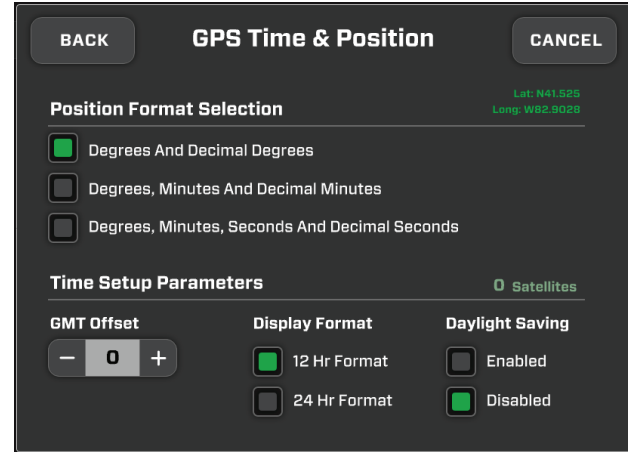
Shows the number of active faults and which fault number is currently being displayed. To advance to the next fault, touch [NEXT] and [PREV] to go back to the previous fault. Touching [BACK] returns to the Settings Menu.

- **SPN**—"Suspect Parameter Number" - fault code. If not translated into text by the display, see the engine manufacturer's literature for the definition of the SPN number.
- **FMI**—"Failure Mode Indicator" - fault code. The FMI is defined by SAE J1939. If not translated into text, see the SAE standard, or the engine manufacturer's literature.
- **Description Field**—Most common SPN's and FMI's have text for the description stored in the display. If there is no text, then this SPN and FMI must be defined by referring to the engine manufacturer, or the SAE J1939 standard. NOTE: This field is only used with certain brands and models of engine

CORRECTIVE ACTION (SUGGESTED ACTION FOR CORRECTION)

Get Faults—Touching [Get Faults] queries the engine(s) ECU for feedback on diagnostic codes that have been activated and stored in the ECU for service needs.

GPS TIME & POSITION



TOUCH COMMANDS	DESCRIPTION
Position Format Selection	<i>Choose the desired display on the map for your location.</i>
Time Setup Parameters	<p><i>Displays the number of detectable satellites, along with:</i></p> <ul style="list-style-type: none"> • <i>GMT Offset: adjust the number of hours your location is from GMT</i> • <i>Display Format: 12- or 24-hour</i> • <i>Daylight Saving: enable or disable</i>

3-EVENT SETTINGS

BACK

3-Event Settings

Buzzer Volume (High Speed): - 40 +

Buzzer Volume (Low Speed): - 30 +

Prop Type: < 4 Blade >

Jump Switch Timeout >

Trick Settings >

TOUCH COMMANDS	DESCRIPTION
----------------	-------------

Buzzer Volume (High Speed)	<i>Adjust the volume of the buzzer that will sound during times of high speed.</i>
-----------------------------------	--

Buzzer Volume (Low Speed)	<i>Adjust the volume of the buzzer that will sound during times of low speed.</i>
----------------------------------	---

Prop Type	<i>Choose 3- or 4-blade.</i>
------------------	------------------------------

Jump Switch Timeout	<i>(ZeroOff does not recommend changing this option except in extreme conditions.)</i>
----------------------------	--

Trick Settings	<i>This page enables or disables River Mode, allows the choosing of the River Direction, and the Offset setting.</i>
-----------------------	--

3-EVENT CHARTS

BACK

3-Event Charts

<
>

Jump RTB Mode (return to baseline)

Speed	1st + 2nd Segment (82mt)			3rd Segment (41mt)		
	fast	actual	slow	fast	actual	slow
57	57	57	57	57	57	57
54	54	54	54	54	54	54
51	51	51	51	51	51	51
48	48	48	48	48	48	48
45	45	45	45	45	45	45
42	42	42	42	42	42	42
39	39	39	39	39	39	39

Jump Three Segment Mode Boat Timing (reference 11.02)

Speed	1st Segment (52m)		1st + 2nd Segment (82m)			1st + 2nd Segment (82m)		
	fast	slow	fast	actual	slow	fast	actual	slow
57	57	57	57	57	57	57	57	57
54	54	54	54	54	54	54	54	54
51	51	51	51	51	51	51	51	51
48	48	48	48	48	48	48	48	48
45	45	45	45	45	45	45	45	45

This section provides reference tables of the Slalom and Jump Timing Tolerances.

IMPORTANT: Use the 3-Event Charts for reference only. The charts will not reflect any changes, should a change occur in the rule book. We suggest periodically verifying the charts with the current rule book. Touch the arrows to view the two additional pages.

FACTORY SETTINGS

This section requires a Dealer Code to enter. If changes are necessary, please contact your Dealer.

TROUBLESHOOTING

Display appears not to work or doesn't come ON.

1. Display could be in sleep mode. Touch a key on the keypad to activate the display.
2. Check for loose connections at battery and display unit.
3. Check for reversed polarity on the power connections.
4. Verify battery has a minimum voltage of 6 volts.

Display has no back light.

Contact your MasterCraft service center.

Display resets or goes OFF when starting engine.

1. Check display supply wires are connected properly to battery.
2. Verify battery is charged properly.
3. Check battery for efficient starter current.

Display has no keypad back light.

Contact your MasterCraft service center.



NXT OPERATIONS





DASH COMPONENTS

PUSH BUTTON SWITCHES

Blower Switch

A push button switch activates the engine box ventilation blower. Push the button IN to turn the blower ON.

NOTE: The blower must operate for a minimum of four (4) minutes before starting the engine at any time.

The blower must also be operated during idle and slow-speed running, but is not necessary during cruising speed.

DANGER

To prevent a possible explosion, operate the blower for at least four (4) minutes before starting the engine and always when at idle or slow-running speed. Explosive gasoline and/or battery fumes may be present in the engine compartment. Failure to operate the blower as instructed may cause improper ventilation of the boat engine and bilge areas, and fuel vapors can accumulate in this area, causing a fire or explosion which may result in serious injury or death!

Forward and Aft Bilge Pump

The bilge pumps will be in the automatic mode when the ignition key is turned ON. The manual and automatic bilge discharge is never completely OFF. When in the automatic (default set-up) position, a sensor alerts the system to discharge water from the bilge area. Boat operators are advised to leave the push-button in the automatic position unless there appears to be excess water in the bilge. In the event of excess water, the bilge can be manually activated by pushing the bilge pump switch to the ON position. Push the bilge pump OFF when finished emptying the bilge. Leaving the switch in manual mode can result in damage to the pump and many not be covered by warranty.

Navigation/Anchor Lights

A push button switch activates the navigation and anchor lights. Push the button IN to turn the lights ON. Push again to turn OFF. MasterCraft boats are designed for activities that should be conducted during daylight with good visibility. When operating at night or in limited visibility, turn on the navigation lights and slow down.

Courtesy Lights

A push button switch activates the courtesy lights. Push the button IN to turn the lights ON. Push again to turn OFF.

CAUTION

Failure to leave the bilge pump switches in AUTOMATIC mode can result in damage to the bilge pumps. The pumps will not shut OFF while in the MANUAL mode until the operator turns them OFF. Such damage is not covered under warranty. Malfunctioning pumps or pumps that do not work at all can result in excess water in the bilge, and eventually into the deck. Over time, this could result in sinking of the boat. Such damage is not covered under warranty.

WARNING

In limited visibility it is difficult to see and interpret the running lights of other boats, particularly with lights on-shore that are in the background. Operating at slower speeds gives you the opportunity to see and be seen by others. Weather conditions during daylight may also result in the need to run or anchor with the lights on. When circumstances require the operation of your MasterCraft boat at night or in limited visibility, activate the navigation lights, ensure that they are functioning and SLOW DOWN. Maintain a close watch for the navigation lights of other vessels and objects in the water. Failure to do so may result in serious injury. See the Visual Assistance section of the Boat Operations chapter.

TOUCHSCREEN DISPLAY AND BALLAST/TAB SWITCHES

Ballast tanks and bags can be filled by using either the 7" touchscreen or by using the manual switches located on the left side of the dash. Press the FILL button to fill any of the 3 ballast systems (port, center, starboard). Press the FILL button to turn OFF the fill action. Press the EMPTY button to empty the ballast. Press the EMPTY button to turn off the emptying action.

Important Note: The manual switch controls (push buttons) and pumps do not operate automatically! It is important for operators to turn off the controls after filling or emptying the tanks.

It is possible for operators to be aware when tanks are full as over-flow will exit the tanks through the overflow vents. When emptying, operators should pay attention to the vents. When the tanks are empty, water will cease to come out the vents.

In the event of ballast pump failure, the inability to empty the tank(s) of all water may result in more serious issues. These include unanticipated effects on boat maneuverability; inability to tow the boat; and/or instability while towing the boat due to the increased weight from the filled tank.



⚠ CAUTION

Maintain ballast switches to OFF position except when filling/emptying tanks. Failure to follow this guideline may result in damage to the ballast pumps. Any inadvertent damages to the ballast pumps will not be covered under warranty



NXT TOUCHSCREEN DISPLAY

See following section for information regarding operation.

Horn

The horn is sounded by means of a button on the instrument panel. Pressing the button emits a loud and recognizable noise.

START/STOP Button

NXT models are equipped with a removable ignition key. Its purpose is for safety and security. The key should be inserted prior to starting an outing, and removed at the conclusion. This is intended to prevent theft or unapproved use of the boat.

The process for starting the boat is:

- Insert the key and turn to the right (starboard). This turns ON the electrical system and prompts the batteries to provide power.
- Turn the blower ON by pushing IN the blower button and allow it to run for at least four (4) minutes before starting the engine.
- Momentarily press the ENGINE START-STOP button.
- Momentarily press the ENGINE START-STOP button to turn OFF the engine.

WARNING

The electrical system will continue to operate as long as the key is turned. Whenever the engine is stopped, the key should be turned to the left and/or removed in order to prevent depletion of the batteries and inability to start the engine.

At the conclusion of the outing, turn the key OFF and remove from the key slot. Also, shut OFF the battery switch. Doing so will ensure that you have turned OFF the electrical system, and prevent others from starting or running the boat. Note that shutting OFF the key but failing to also turn OFF the battery switch will result in the electrical charge to the battery or batteries continuing to drain. Such drain will, in time, render the batteries unable to start the engine or run any electrical components on the boat. As noted elsewhere in this Owner's Manual, a dead battery could cause boaters to become stranded.

Attitude Adjustment Plate and Surf Star System Wake Shaping Devices (when equipped) The Attitude Adjustment Plate has been designed to improve the overall attitude of a boat. If used properly, the plate will improve the ride, reduce drag, increase speed and improve the fuel efficiency of the boat.

The plate is mounted with the actuator on the transom of the boat. When the plate is lowered, the water flow is redirected, creating an upward force at the stern of the boat. When the stern rises, the bow will lower.

Since the actuator that maneuvers the plate is electro-hydraulic, it provides an immediate response at the touch of the switch. The switch adjustments are based on the position of the bow, and are designed in that manner to minimize the guesswork while underway.

Press the switch DOWN to lower the bow. Press the switch UP to raise the bow.

Since models have different weights, lengths, speed and performance, it will take some practice for the operator to understand how the boat reacts with the attitude adjustment plate installed. The plates will allow your boat to get on plane faster and continue planing at lower speeds. This will improve visibility and the overall safety of the boat. When making adjustments with the attitude adjustment plates, use short momentary taps of the switch. Continued practice will help you become familiar with how the plates perform.

SurfStar System Wave Shaping Device Switches

Independent switches are provided for each device. Press DOWN on the switch to deploy the tab, and UP on the switch to retract the tab.

Maneuvering a boat with the wake shaping devices deployed requires practice to master. Initial times running with either deployment should be done at low speed and with plenty of room. This is critical to learning how the devices affect control and maneuverability.



Electro-hydraulic actuators provide an instant response. When making adjustments, use short momentary taps of the switch.

SPECIAL CONDITIONS

Head Sea: Lower the plate by tapping slightly DOWN. This will bring the bow down while maintaining speed. This also allows the hull of the boat to absorb the impact of the waves. This adjustment will result in a more efficient and smoother ride. Changes should be made in small increments to ensure maintaining control of the boat.

Following Sea: Make sure the plate is fully retracted by pressing UP. This will bring the plate up to a fully retracted position, decreasing lift in the stern and allowing the bow to rise. If the plate is deployed, the bow may dig.

Shallow Water/Hole Shot: Lower the plate completely by pressing DOWN. This provides lift in the stern of the boat and will keep the bow down. As you throttle up and speed increases, raise the tab by pressing UP.

Uneven Load: If one side of the boat is higher than the other while running, press DOWN on the switch on that side. This will lower the tab on the listing side (low side) to bring the boat level.

Porpoising: To stop porpoising, press DOWN. The plate needs only to be deployed slightly to correct this adverse situation.

While the boat is underway do not move one plate up or down significantly as this may cause listing. While at higher speeds do not over-trim, as this will cause the bow to lower quickly, resulting in a reduction of speed and may cause the boat to veer. When in following seas or when running an inlet, the plates should be fully retracted. This will allow for optimal performance.


WARNING

Electro-hydraulic actuators provide an instant response. When making adjustments, use short momentary taps of the switch. Excessively powerful adjustments to the actuators may cause loss of control, which could result in serious injury or death.

WARNING

Use caution when operating adjustment plates. Improper adjustments may cause loss of control, which could result in serious injury or death.

NXT DASH/SCREEN OPERATIONS



The 7" Touchscreen Dash is designed for instrumentation and control on electronically controlled engines communicating via SAE J1939 and NMEA 2000. The multimedia display provides cruise control and rider profiles, and enables boat operators to view many different engine, ballast, transmission parameters and service codes. We continually strive to bring you the highest quality, full-featured products. As a result, you may find that your

actual display screens may be slightly different than what is depicted in this Owner's Manual.

The 7" Touchscreen is designed for instrumentation and control on electronically controlled engines communicating via CAN networks. The screen displays information based on the operating mode of the boat and acts as the command center for all of the boat's systems.

PRODUCT INFORMATION

The NXT integrates instrumentation and control. The video display is a multi-functional tool that enables the boat operator to view many different display settings, engine parameters, and service codes.

CARE AND MAINTENANCE

Only basic cleaning should be required to maintain the 7" video touch screen at its best. A soft cloth can be used for cleaning the units. Typical window cleaner or rubbing alcohol can also be used to clean the glass portion of the video screen display. Do not use harsh or abrasive cleaners on the unit.

CAUTION

Avoid contact between sharp or hard objects and the video touch screen because this can result in scratches or other permanent marks on the screen. Clean only with a soft cloth, using window cleaner or rubbing alcohol only. Never use harsh or abrasive cleaners on the unit, as this may result in damage to the unit that is not covered under warranty.

7" TOUCHSCREEN NAVIGATION & OVERVIEW

Navigation within the 7" Touchscreen is controlled via touch commands. The information displayed onscreen varies depending on the operating mode selected (Drive or Tow). Regardless of the mode selected, certain information is displayed at all times. The screen always presents battery charge, water depth, engine hours, water/air temperature, and time at the top of the display.

Note: boats equipped with the PV700 feature a suite of gauges that present operating information onscreen, including speed, RPM, fuel level, oil pressure, and engine temperature.



SCREEN FEATURES

Navigate by touching designated areas on the touch screen display. The **drop down menu** highlight changes according to the mode screen displayed. To navigate to a desired mode, touch the desired screen mode tab at the bottom of the page or touch the **drop down menu** button and select the desired icon.

TOUCH POINT ICONS



Opens the drop down menu (Touch X to close.)



MUTE—Touch this button to mute or unmute the volume.



GAUGES—Optimized for cruising from place-to-place. Includes controls for AutoLaunch, speed, ballast and tabs.



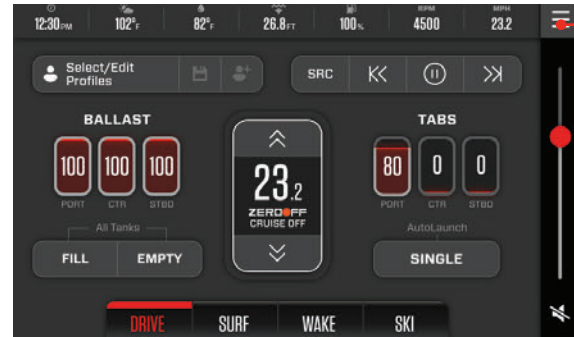
TOW MODES—Provides access to 3 wave profiles per surf side as well as custom profiles. Allows user to customize wave position, ballast levels and tab positions.



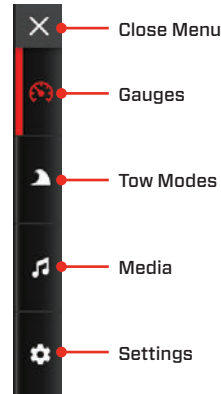
MEDIA—Touch this button to change screen mode to control media and source



SETTINGS—Touch this button to access diagnostics and settings



Drop Down Menu



OPERATING MODES

The PV700 is organized around two main on-water activities: driving from place-to-place and towing riders. To correspond with these activities, the screen features two primary operating modes: Drive and Tow, plus three Tow sub-modes: Surf, Wake and Ski.

- **Drive Mode** displays basic operating information for cruising. From Drive Mode, you can quickly adjust speed, tabs, and ballast.
- **Tow Mode** is broken down into three sub-modes: Surf, Wake, and Ski. Factory-loaded profiles for ballast, speed, and tab configurations are easy to select and modify from each sub-mode. Each sub-mode features custom profile creation.

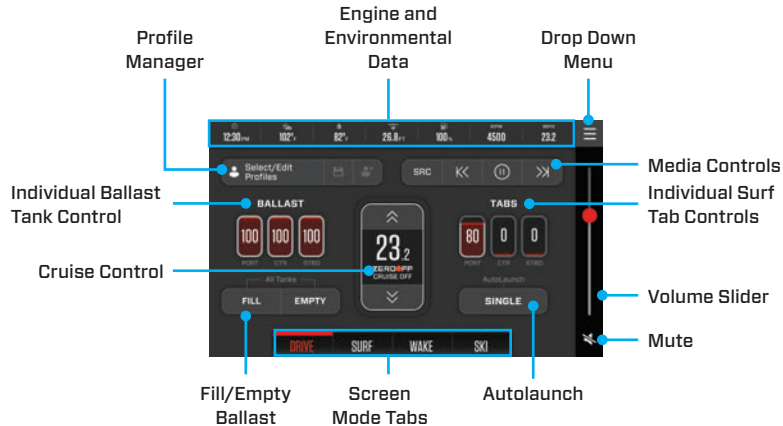
To switch between modes, use the tabs located at the bottom of the touch display. Touch DRIVE to access Drive Mode. Touch SURF, WAKE, or SKI to access one of the Tow Mode variants.

Operators cannot switch between modes while the throttle is in gear.

DRIVE MODE

Drive mode displays basic operating information for cruising around your body of water. In Drive Mode, quickly fill or empty ballast, adjust tab positions, and activate speed control. Drive Mode is the default setting upon powering up the system.

NOTE: The display in this document is set to US Standard Units. You may change it to Metric on the User Settings screen.



DRIVE MODE SCREEN FEATURES

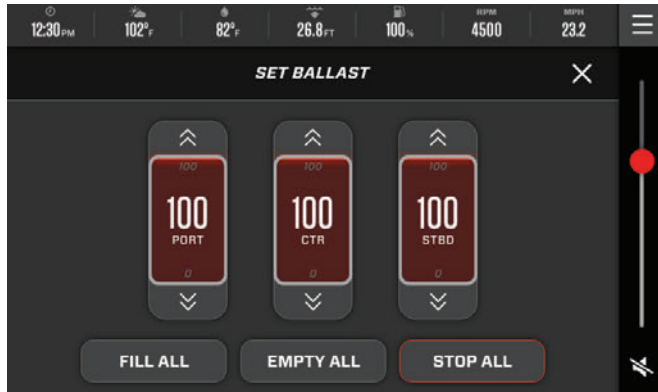
COMPONENT	DESCRIPTION
Mode Selection	<p>Allows the user to select an operating mode:</p> <p><i>Drive Mode: Optimized for cruising from place-to-place. Includes controls for AutoLaunch, speed, ballast and tabs.</i></p> <p><i>Surf Mode (Rapid/Custom): Provides access to 3 wave profiles per surf side as well as custom profiles. Allows user to customize wave position, ballast levels and tab positions.</i></p> <p><i>Wake Mode: Provides access to factory pre-set wake profiles as well as customization to ballast and tab settings</i></p> <p><i>Ski Mode: Provides access to factory pre-set ski profiles as well as customization to ballast levels.</i></p>
AutoLaunch Control	<i>When Autolaunch is turned on, the tab(s) are used to help the boat get up onto plane.</i>
Tab Controls	<i>Allows the user to individually adjust tabs</i>
Fill/Empty All Ballast	<i>Provides a quick way to fill or empty all of the ballast tanks and bags at one time</i>

COMPONENT	DESCRIPTION
Adjust Cruise Set Speed	<i>Allows the user to adjust cruising speed</i>
Cruise ON/OFF	<i>Turns the speed control system on or off</i>
Media	<i>Allows the user to adjust AM/FM/ Weather Bands, and Bluetooth devices. Allows the user to access volume and equalizer controls for the entire boat.</i>
Lighting	<i>Activate or deactivate the standard and optional lighting devices found on the boat</i>
Heaters	<p><i>Allows the user to control various accessories including the blower, heater, seat heaters, and bilges</i></p> <p><i>Allows the user to access:</i></p> <ul style="list-style-type: none"> • System Settings • Bluetooth Manager • Fuel Management
Settings	<ul style="list-style-type: none"> • Diagnostics • GPS Settings • Ballast / Tab Settings • Service Information • Factory Settings

BALLAST

To fill the ballast tanks, touch FILL ALL. Alternatively, tap the ballast area to adjust individual ballast zones.

From the ballast screen, users can fill or empty all ballast zones by touching FILL or EMPTY ALL. To pause the fill process, tap STOP ALL. To adjust individual ballast zones, touch the UP or DOWN arrows at the top or bottom of the ballast zone that you wish to fill or empty. Alternatively, slide your finger along the ballast progress bars to adjust ballast zones and set custom fill levels.



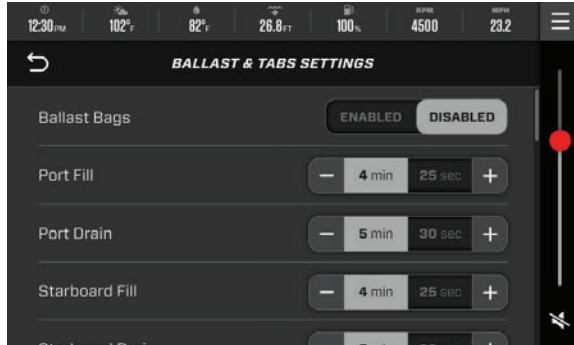
ADJUSTING TABS

Tabs allow you to precisely dial in your wakes and waves by sculpting the water as it leaves the hull bottom. Touch the surf tab area to adjust individual tabs. Make adjustments to each tab by touching the up and down arrows. Alternatively, slide your finger up or down the slider bar. The Autolaunch default setting while in Drive mode is ON.



BALLAST AND TAB SETTINGS

Located under Main Menu/System Settings, the Ballast/Tab Settings page allows you to establish fill and drain times for each ballast zone, along with the timing of center and surf tab crossovers. MasterCraft does not recommend adjusting fill times, as these have been factory-set for specific reasons. If you desire to modify the timer settings on your boat, contact your authorized MasterCraft dealer.



NXT AUTOLAUNCH CROSSOVER SETTINGS

AutoLaunch is the logic software which automatically deploys and retracts the surf tabs. For NXTs, AutoLaunch will automatically deploy the center tab allowing the boat to quickly get on plane. As the boat accelerates and reaches its approximate planing speed—also known as crossover speed—the tabs will automatically retract to their normal running positions.

Crossover speeds are pre-set, but may be adjusted from the Ballast/Tab Settings page. The crossover speed is the speed at which the boat no longer needs assistance reaching a fully-planed position. There is only reason the user should ever adjust crossover speed: if the boat's normal operating weight is consistently very light or very heavy. In such cases, the speed can be decreased for light weight boats and increased for heavier boats.

Adjusting the crossover speed will take some experimentation. The goal is to get the boat on plane quickly and without causing any spray. If your boat will be heavily weighted with persons/ ballast for any consistent period, increase the crossover speed to keep the tabs in the down (deployed) position longer. You can raise crossover speed by tapping the + next to the tab(s) you wish to increase.

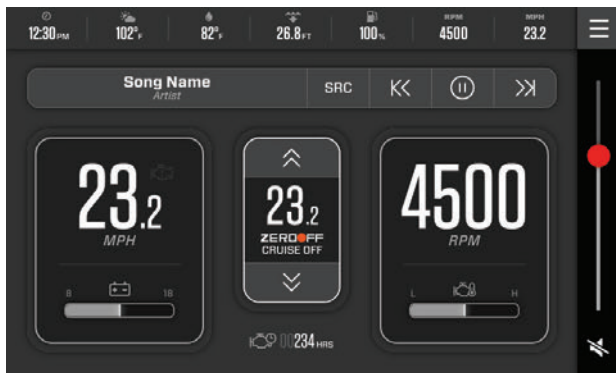
If you plan to consistently run the boat without ballast or with only a few people, decrease the crossover speed to pull the tabs up earlier. Crossover speed for the center tab, tap the – next to that tab.

CRUISING

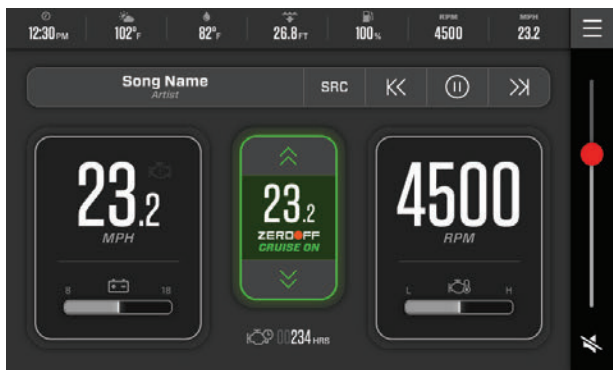
The 7" Touchscreen simplifies cruising to and from the best riding spot on the lake by allowing operators to easily get the boat's ballast and tabs settings prepared for a set.

Heading Out: To prepare the boat for a riding session on the way to your favorite spot, navigate to Drive. The boat will default to 24 MPH and **AutoLaunch** will default to the ON position. Tap FILL ALL to start filling the ballast tanks.

Heading Home: At the end of the day when it's time to head home and empty the ballast tanks, navigate to Drive Mode. AutoLaunch will default to the ON position and speed control will default to 24 MPH. Tap EMPTY ALL to drain the ballast tanks. Navigating to Drive Mode will always cancel any active Tow Mode profiles but will not drain the ballast tanks. To activate and deactivate cruise, simply tap the center Cruise button. When On, the button's outline will be green as shown to top right.



Cruise Control Off



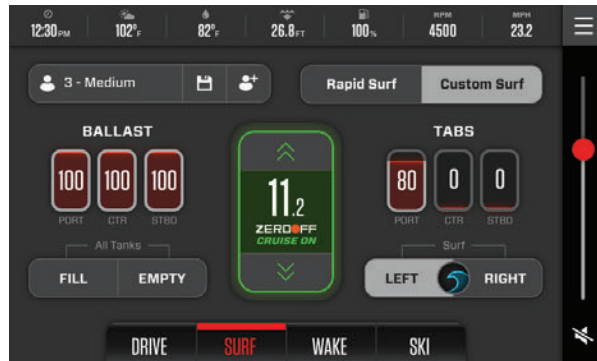
Cruise Control On

TOW MODE

When Surf Mode is first selected, Rapid Surf is the default menu setting. To toggle between Rapid Surf and Custom Surf, use the button located near the top right hand corner of the screen.

SURF MODE: OVERVIEW

Surf Mode is divided into 2 distinct menus: Rapid Surf and Custom Surf. From the Rapid Surf menu, you may choose the shape of your wave by selecting 1 of 3 different wave presets. Use the controls provided on the left hand side of the screen to easily select a preset. Doing so will modify the steepness of your wave. Surf provides additional options for seasoned athletes, such as tab and ballast control. For more information on Rapid Surf and Custom Surf operation, refer to the following sections.



Custom Surf Mode

RAPID SURF

Rapid Surf allows you to easily select a wave by adjusting the slider on the left hand side of the screen. Alternatively, use the arrows located immediately to the right of the slider. Hitting the “Up” arrow or raising the slider will create a steeper wave. Hitting the “Down” arrow or lowering the slider will create a mellower wave.


From the Rapid Surf menu, you may also choose the position of your surf wave. Selecting SURF RIGHT will create a starboard wave. Selecting SURF LEFT will create a port-side wave.

Any adjustments made to your surf wave will appear on the graphic to the right of the adjustment controls. Whenever new adjustments are made, a readiness timer will indicate the load time.

In addition to preset profiles, Rapid Surf also supports custom profiles. For more information on the profile creator, see the section of this chapter titled “Creating a New Surf Profile.”

USING RAPID SURF TO SELECT A WAVE

Rapid Surf is intended to make wave customization a quick and easy process. In a few simple steps, you can build an amazing surf wave and hit the water in no time.

1. Before you begin setting up your wave, make sure that Surf Mode is selected and set to the Rapid Surf menu. When Rapid Surf is active, you will see a screen resembling the one at right:
2. Locate the slider and arrows found on the left-hand side of the screen. These controls allow you to choose between 3 wave types. Each wave has been designed to suit a particular surf style. 1 is the mellowest, shortest in height and is typically suited for beginners. 3 is the steepest, tallest in height and is suited for more advanced surfers. Note: For each of the 3 wave types, there is a SURF LEFT and SURF RIGHT variant. As a result, there are 6 presets in total.
3. Use your finger to drag the slider to the desired wave preset. Alternatively, use the arrows to the right of the slider.
4. Using the SURF LEFT/SURF RIGHT buttons, choose the position of your surf wave. Selecting SURF LEFT will direct the surf tabs to create a port-side wave. Selecting SURF RIGHT will direct the surf tabs to create a starboard wave.
5. The readiness timer will display the amount of time required for the wave to be sculpted. Wait for it to finish. If you already have a surf profile selected, you may save your adjustments to said profile by clicking . Doing so will save any active values to the profile currently selected.



Cruise Control Off




Cruise Control On

CUSTOM SURF

Custom Surf provides access to additional, in-depth wave settings. From this menu, you may adjust ballast fill levels, tab positions, wave position, and ZeroOff cruise control. You may also create and manage custom surf profiles. With its deep customization features, this menu is designed for experienced wakesurfing enthusiasts looking to craft a wave that perfectly suits their style. To access the Custom Surf menu, select CUSTOM SURF from the toggle pane near the top right hand corner of the screen.

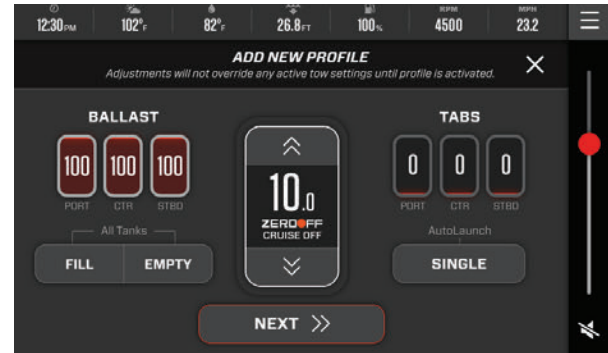
CREATING A NEW SURF PROFILE

Both Rapid Surf and Custom Surf allow you to create your own custom surf profile with individualized tab, ballast, and speed settings. The profile may then be stored for later use. To create a custom surf profile, follow the instructions below.

1. Select  from the panel near the top of the screen.
2. The following menu will appear onscreen. From this menu, you may adjust ballast fill levels, tab deployment, speed, and cruise control (on/off). You may also tap SURF LEFT or SURF RIGHT to set the wave position. (Tapping a ballast zone or surf tab will take you to a dedicated ballast or tab adjustment screen.)
3. When you are satisfied with your settings, touch the NEXT button. Doing so will save the adjustments to your profile and take you to the next step in this process.



Custom Profile Icon




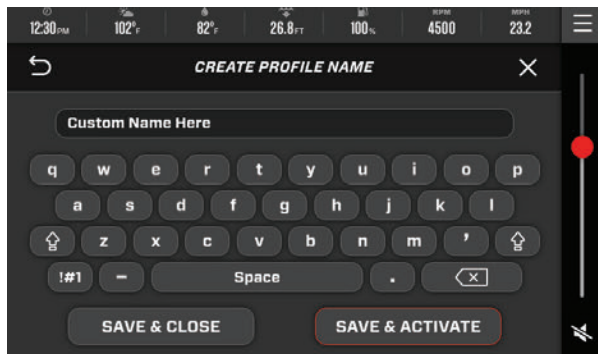
Add New Profile

- Using the keyboard provided, give your profile a name.
- Tap SAVE & ACTIVATE if you want to save and immediately activate your new profile. Tap SAVE & CLOSE if you want to save the profile for later use. Saved profiles can be accessed at any time by using the profile manager.

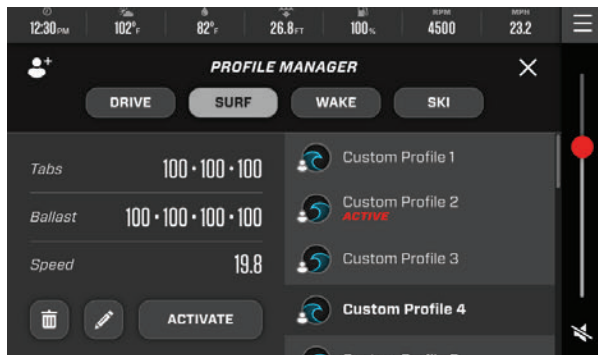
USING THE PROFILE MANAGER

Once a profile has been created, you can access it using the profile manager. This menu allows you to select, edit, or delete custom profiles. It may hold up to 30 profiles at a time.

- Select  from the panel near the top of the screen.
- The profile manager will appear onscreen. Using the profile manager, you may select a custom profile from the catalog on the right hand side of the screen. You may also edit or delete custom profiles by selecting the pencil icon or trash bin icon.
- Use the catalog to find the desired profile.
- Tap the profile to select it.
- Once the profile is selected, touch the ACTIVATE button. Doing so will immediately activate the profile.
- When you no longer wish to use the profile, select it again and touch the DEACTIVATE button.



Naming Profile Screen



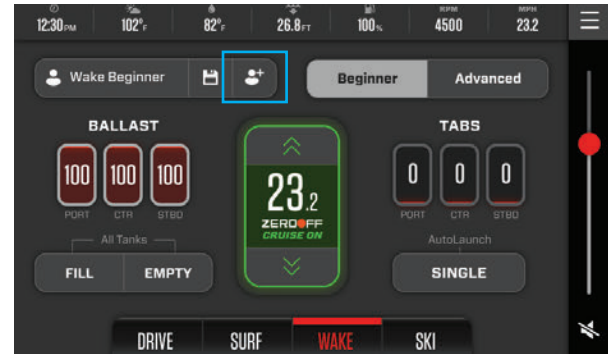
Surf Profile Manager

WAKE MODE

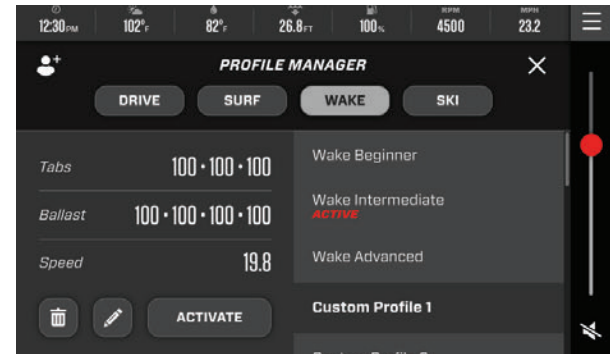
Wake Mode is intended solely for wakeboarding. Like Surf Mode, it enables control of surf tabs and ballast zones, allowing the user to influence the shape and intensity of the wake generated by the boat's WSDs. Wake Mode includes 3 stock wake profiles: **Beginner**, **Intermediate**, and **Advanced**. MasterCraft recommends that you select the profile best corresponding to your level of ability.

- **Beginner**—Designed for new riders who are still learning to wakeboard. Allows the user to get comfortable wakeboarding at slower speeds. The user may begin learning surface tricks and wake crossings. Recommended line length: 55-60'.
- **Intermediate**—Designed for moderately experienced riders learning their first wake-to-wake jumps, basic inverts, and spins. Recommended line length: 55-65'.
- **Advanced**—Designed for highly experienced riders seeking bigger airs for advanced tricks. Recommended line length: 65-75'.

All 3 stock profiles are accessible from the Wake Mode home screen. To activate a stock profile, tap the one you wish to use. The button will turn light gray, indicating that the profile is active.




Wake Mode



Stock Wake Profile Manager

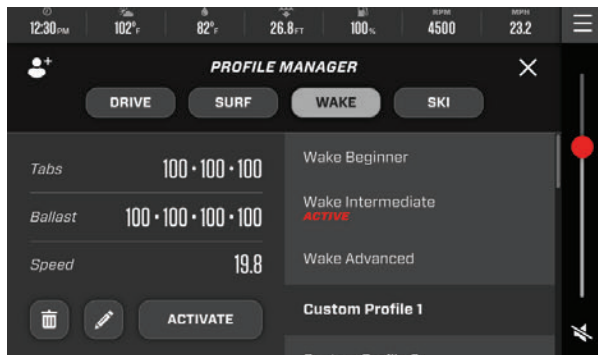
CUSTOM WAKE PROFILES

In addition to letting the user select a stock profile, Wake Mode also allows for the creation of custom wakeboard profiles. Once created, these profiles can be saved and stored for use at any time. To build a profile, complete the following series of steps.

1. Select  from the panel near the top of the menu. You will see a page resembling the home screen. From this screen, you may adjust tab, ballast, and cruise control. Selecting an individual tab or ballast zone will take you to a dedicated tab/ballast page.
2. When you are satisfied with your settings, touch the NEXT button. Doing so will save any adjustments made to your profile and take you to the next step in the profile creation process.
3. Using the keyboard provided, give your profile a name.
4. Tap SAVE & ACTIVATE if you want to save and immediately activate your new profile. Tap SAVE & CLOSE to save the profile for later use. Saved profiles can be accessed at any time using the profile manager, pictured below.



Wake Mode




Surf Profile Manager

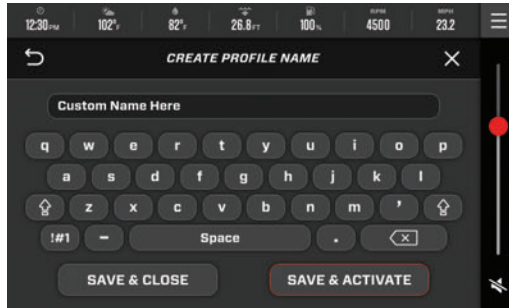
SKI MODE

Ski Mode is intended solely for skiing. Like the other tow mode variants, it includes options for adjusting tabs, ballast, and cruise control. MasterCraft has one predefined ski profile: Ski. To activate this profile, tap the SKI button at the bottom of the screen.

CUSTOM SKI PROFILES

To create a custom ski profile, follow these steps:

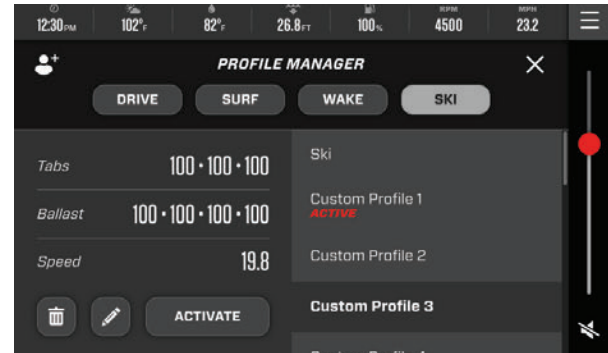
1. Select . Adjust and set tabs, ballast, and cruise control.
2. When you are done, touch the NEXT button.
3. Using the keyboard provided, give your profile a name.
4. Tap SAVE & ACTIVATE to save and activate your new profile.
Tap SAVE & CLOSE to save the profile for later use.



Custom Profile Activation



Ski Mode



Ski Profile Manager

MEDIA

Select the Media icon  on the drop down menu and the following screen will appear:

COMPONENT	DESCRIPTION
-----------	-------------



*Audio Source Tab
Provides access to AM/
FM/Weather bands, and
Bluetooth media selections.*



*Volume Control
Sliding a finger across the
volume slider will increase
and decrease volume.*



*Volume Mute
Touch to mute or un-mute
the stereo.*

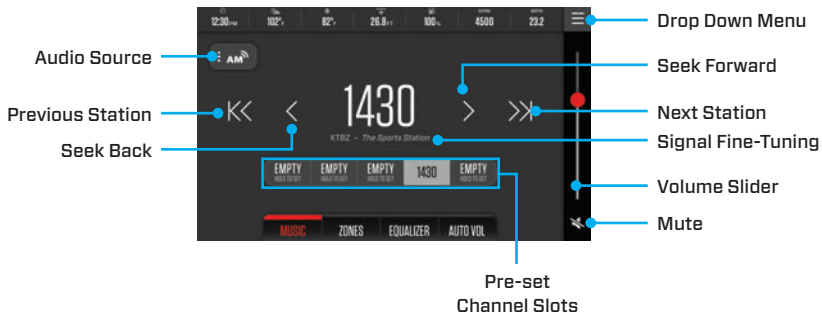


*Bluetooth and Music Icons
The Bluetooth icon will
illuminate when a mobile
device is connected via
Bluetooth. The music note
icon will illuminate when the
boat plays music from the
Bluetooth connected device.*

3.5 mm AUX Input



Media



Audio Source

Previous Station

Seek Back

Drop Down Menu

Seek Forward

Next Station

Signal Fine-Tuning

Volume Slider

Mute

Pre-set
Channel Slots

FM/AM RADIO

All radio controls are integrated into the 7" Touchscreen display. Change stations, fine tune stations or adjust the volume, all on the display.

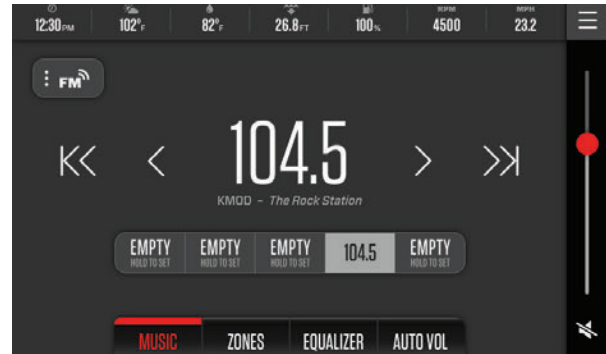
To increase the master volume, slide your finger along the volume control line at the bottom of the screen. To mute the sound, touch the Mute button to the right of the volume control line.

To search for the next available station signal, touch Next Station. To search for a station in reverse order, touch Previous Station. To fine-tune the signal, touch the single finetune arrows.

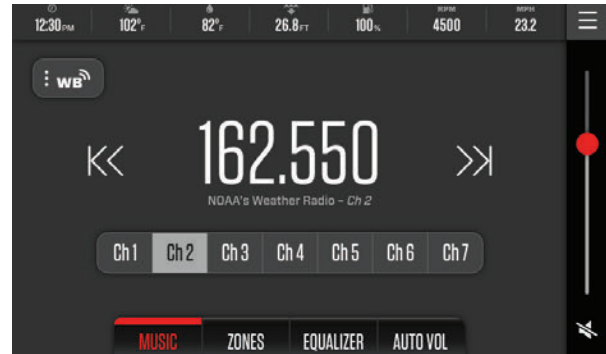
To save a favorite station, tune to that station and press/hold one of the available slots for approximately 3 seconds.

WEATHER BAND

The National Weather Service has seven different channels to obtain weather information. Select one of the channels (1-7) to receive weather information for your particular region.



Surf Profile Manager



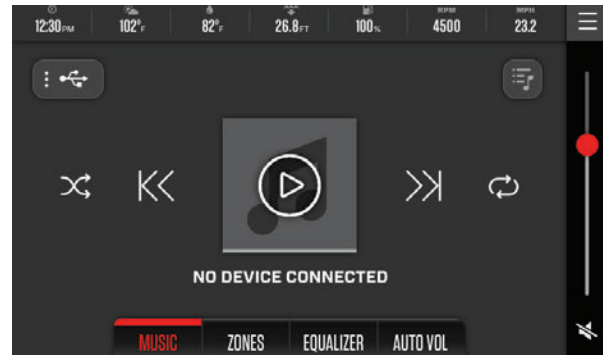
Surf Profile Manager

BLUETOOTH AUDIO CONNECTIONS

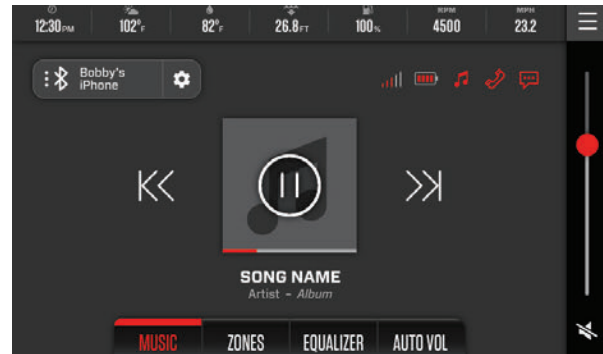
Connecting a device Bluetooth allows your personal music collection or an online music streaming service to be played through the boat's audio system.

Connecting via Bluetooth gives operators wireless audio, and displayed song information.

Connecting via USB cable offers charging of devices only.




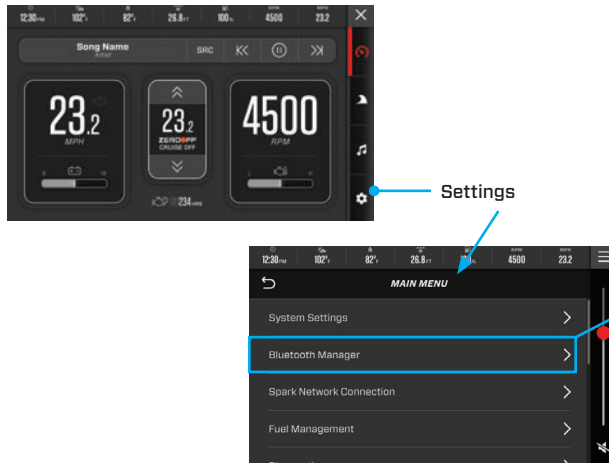
Source: USB Not Connected



Source: Bluetooth

BLUETOOTH SETTINGS

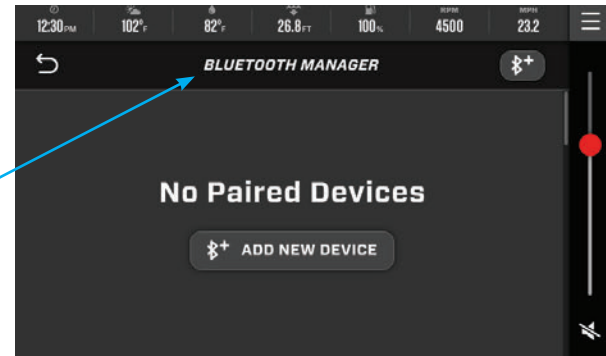
Connecting via Bluetooth allows operators to connect to the boat wirelessly, play audio and display song information. To customize Bluetooth settings, navigate to the settings tab and select BLUETOOTH MANAGER. From here you can pair new devices or re-connect paired devices using the on screen buttons. To pair a new device, select  ADD NEW DEVICE and follow the on-screen prompts.



Settings Menu

To Connect via Bluetooth:

1. Ensure that your device's Bluetooth is turned on.
2. On the 7" Touchscreen navigate to the Bluetooth Manager in the Settings Menu. All discoverable Bluetooth devices will appear. If you have not connected the new device with the boat before, touch "+Add New Device" to connect the device.
3. The screen will display ADD NEW DEVICE. Tap OK, then ensure that your device's Bluetooth setting is ON and that your device is Discoverable to new connections.



Surf Profile Manager

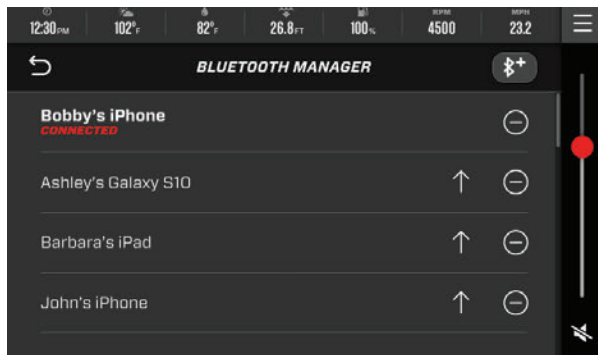
- The MasterCraft unit will begin to search for your device. Once the boat has discovered your device, tap your device's name and a message will display stating "Confirm Pairing on Your Phone."
- On your device, a Bluetooth Pairing Request will appear. Touch OK. The device and the boat's screen will now be connected.



Located Devices to Add

To Connect via USB Cable:

- Plug your device's charging cord into the USB port, mounted under the throttle at the helm.
- Your device will begin charging and will be connected to the boat's system.
- Navigate to, and select USB MEDIA from the stereo source list to get access to your phone's music collection. Launch a music application on your device and it will display on the screen (Apple devices only, Android devices can only play music that has been downloaded to the device drive).




Connected Devices

VOLUME/EQUALIZER

AUDIO ZONES

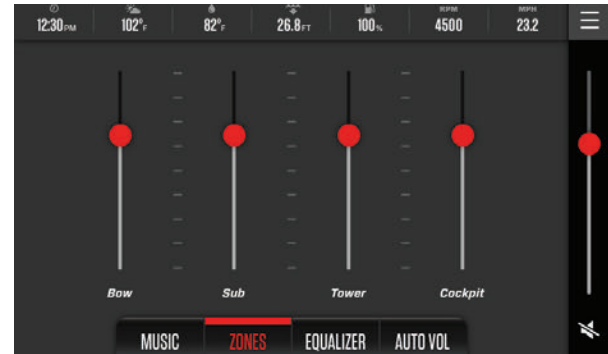
This tab allows full control over the sound zones in the boat. The software features both a master volume and four individual zone volumes: Bow, Sub, Cockpit and Tower. The zone volume levels reflect a percentage of the overall master volume. If the master volume is at 20 and a zone is at 40, then the zone is playing at 100 percent of the current master volume level. If a zone volume level is set at 20, then the volume in that zone is playing at 50% of the overall master volume. To play the speakers at maximum volume, turn all zones up to 40, then turn the master up to 40.

Mute a zone by selecting a zone and tapping the mute button . Mute all zones by deselecting all zones then tap the mute button.

XStar audio has a user setting to enable or disable zone control based on mode. This is found under system settings.

EQUALIZER

The equalizer allows operators to adjust bass, mid and treble ranges. Slide a finger on each selection to tune the boat.



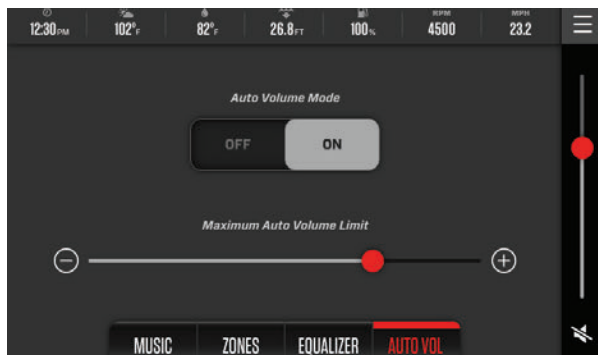
Audio Zone Controls



Audio Equalizer Controls

AUTO VOLUME

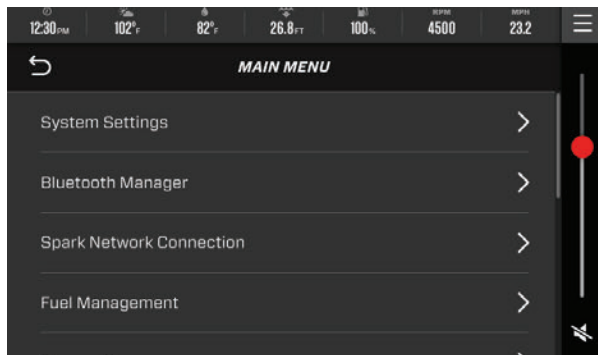
The Automatic Volume (Auto Vol) Mode allows the operator to add automatic volume adjustment based on the boat RPM. To activate Auto Volume, press Auto Vol under the volume page and turn on. Using the slider bar to set the auto volume to a maximum volume level which you want to experience while underway. Returning the boat to low RPM or neutral will lower the volume level to the previous low RPM set point. To deactivate Auto Volume, simply select “off”.



Auto Volume Control

MAIN MENU/SETTINGS

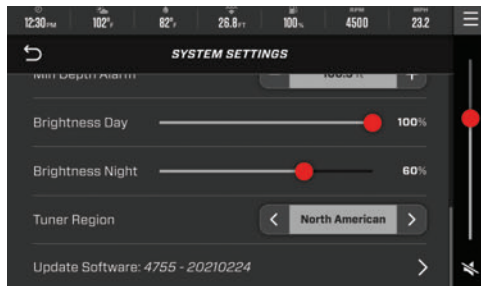
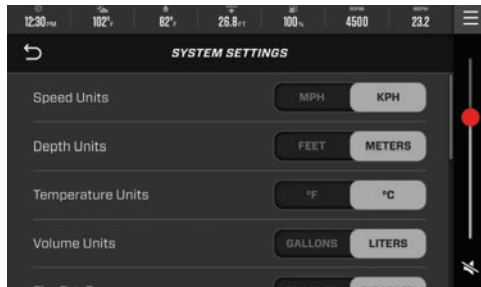
The Main Menu/Settings page contains all of the settings and customization options for the 7” dash. From the Main Menu operators can adjust Bluetooth Settings, Fuel Management, Diagnostics, Tab and Ballast settings and GPS settings.



Settings Main Menu

SYSTEMS SETTINGS

Easily adjust the system's major settings, including standard or metric units, fuel management, depth alarms and brightness.



System Settings Menu

COMPONENT	DESCRIPTION
Units	Choose which numbering format is being used, US Standard or Metric. This will change depth numbers, fuel volume numbers, temperature and speed.
Pop-up Fire Extinguisher	Displays a pop-up that shows when the engine compartment fire extinguished is active, or when it has been activated.
Fuel Management	When enabled fuel management calculates fuel levels based on engine activity and RPM.
Fuel Alarm	Will display an alarm when the fuel level reaches the saved percentage amount.
Minimum Depth Alarm	Will display an alarm when the established minimum depth can be detected. This can be adjusted in increments of six (6) inches.
Brightness Day	Allows adjustment of the screen brightness during the daylight hours. Slide your finger or touch along the line to adjust brightness levels.
Brightness Night	Allows adjustment of the screen brightness during the nighttime hours. Slide your finger or touch along the line to adjust brightness levels.
Tuner Region	Select your location so the AM/FM radio can optimize stations best for your location.
Update Software	Your authorized MasterCraft dealer can update the software version on your Dual Screen Dash via the Spark Network or USB.

BLUETOOTH MANAGER

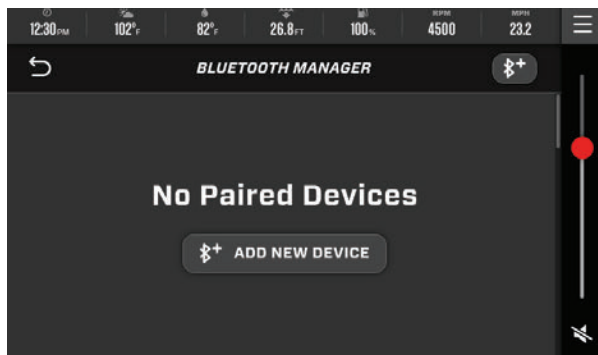
See BLUETOOTH AUDIO in this section of the MasterCraft Owner's Manual.

FUEL MANAGEMENT

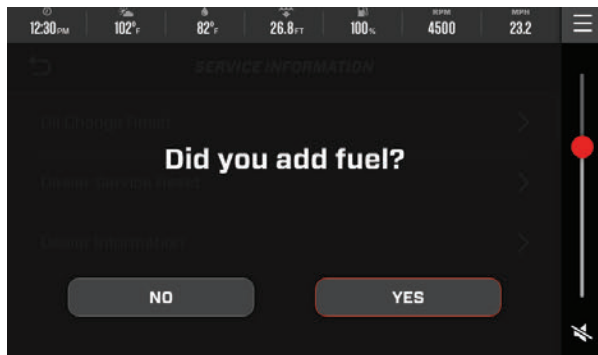
The fuel management software in MasterCraft boats directly connects the boat operator to the management of their fuel. This system collects precision information on fuel flow levels from the engine controller. It then calculates and displays the amount of fuel remaining based on engine activity and the usable size of the fuel tank. As a safeguard, there is a back-up low fuel sensor that signals any discrepancies between the computer and the actual amount of fuel in the tank.

USING FUEL MANAGEMENT SOFTWARE

When keying the boat on, the touchscreen display will ask the operator if fuel has been added to the boat.



Bluetooth Devices



Popup prompt when keying the boat

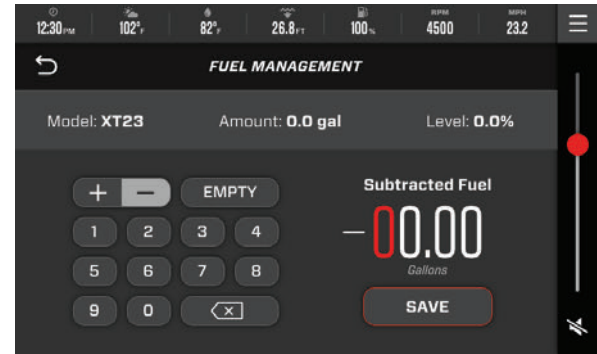
Tap NO on the screen to close the fuel management system, or tap YES to display the fuel level entry page. The operator can input the amount of fuel added, or tap the FULL button to indicate that the tank has been filled completely. Fuel levels will be displayed next to “Amount” at the top of the screen.

Press SAVE to exit to the menu screen.

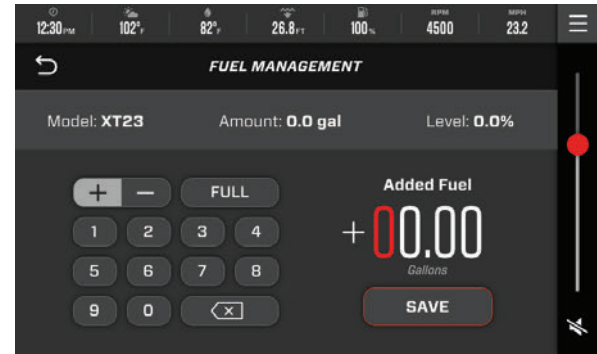
Should an operator input the wrong amount of fuel on the fuel entry page, there are several fail-safes in place. To immediately correct an input error, navigate to the Main Menu tab and scroll to and tap FUEL MANAGEMENT. This will re-open the fuel level entry page. Use the keypad and the +/- button to adjust to the correct amount of fuel. Use a positive value if more fuel needs to be entered, or use a negative value if too much fuel was entered.

When the fuel management system senses that fuel is getting low it will display a low fuel warning on the screen. When this warning is displayed, the boat will be able to run unballasted for approximately twenty (20) minutes (without any ballast) before running out of fuel. Empty all ballast tanks and immediately proceed to a fueling station before any further activity. Continuing to operate the boat with low fuel levels could leave users stranded offshore.

If an operator has inaccurately or mistakenly entered the fuel level, there is a sensor in the fuel tank that will override the entered fuel level when it senses low fuel. To avoid false readings, the sensor will only override the fuel management system when it detects a low fuel level for more than 30 seconds with the engine operating at less than 900 RPM.



Subtract Fuel



Add Fuel

To ENABLE or DISABLE the fuel management software:

- Navigate to the Main Menu tab and tap SYSTEM SETTINGS.
- On the system settings page, select either ENABLE or DISABLE under Fuel Management.

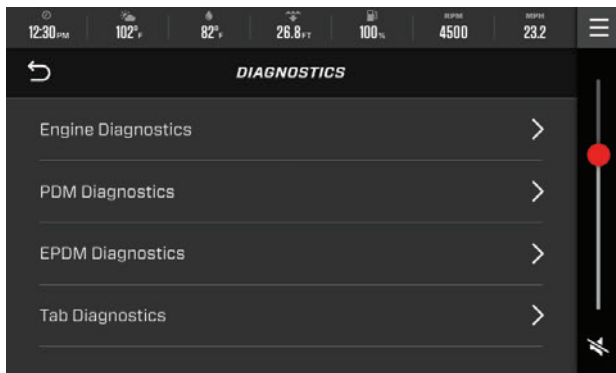
Disabling the fuel management software will allow the fuel gauge to read fuel levels directly from the sensor on the fuel tank. You must reset the sensor when disabling fuel management. To do this, cycle the battery switch ON then OFF. With the key switch OFF, fill the fuel tank to 100 percent full at a fueling station. Turn the battery switch ON, then turn the key switch back ON.

WARNING

When low fuel warning is displayed immediately empty all ballast tanks and proceed to the nearest fueling station or dock.

DIAGNOSTICS

All engine, PDM, EPDM and Tab diagnostic information can be found under DIAGNOSTICS on the main menu. Tap one of the four diagnostic options to pull up system diagnostics.



Engine Diagnostics Menu

ENGINE DIAGNOSTICS

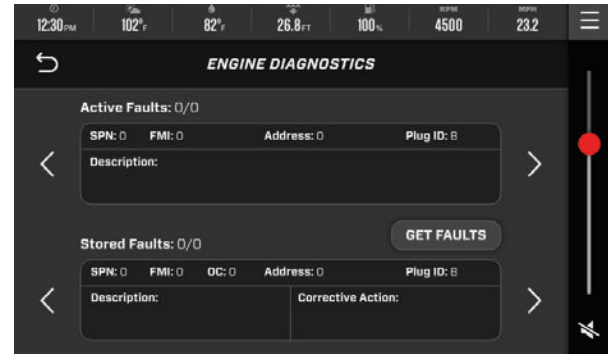
Shows the number of both Active and Stored faults and which fault number is currently being displayed. To advance to the next fault, touch NEXT. Touch PREVIOUS to go back to the previous fault.

SPN—Suspect Parameter Number—fault code. If not translated into text by the display, see the engine manufacturer's literature for the definition of the SPN number.

FMI—Failure Mode Indicator—fault code. The FMI is defined by SAE J1939. If not translated into text, see the SAE standard, or the engine manufacturer's literature.

Description Field—Most common SPNs and FMIs have text for the description stored in the display. If there is no text, refer to the engine manufacturer or the SAE J1939 standard. NOTE: This field is only used with certain engine models.

Corrective Action—Tap GET FAULTS. This queries the engine(s) ECU for feedback on diagnostic codes activated and stored in the ECU for service needs.



Engine Diagnostics

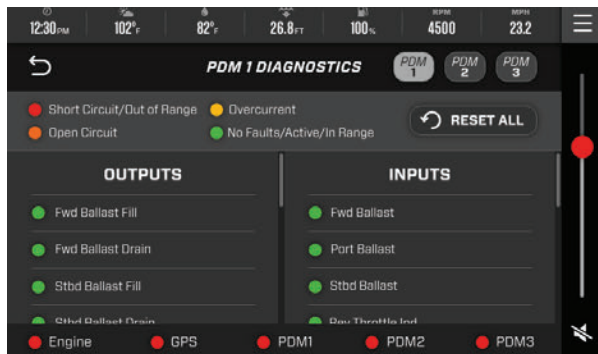
PDM DIAGNOSTICS

PDM Diagnostics displays faults for outputs, inputs and CAN communications for PDM modules. XT Series models have two PDMs. To check all PDMs for faults, tap PDM 1, PDM 2 or PDM 3 on the PDM Diagnostics page. Faults on each PDM will be displayed on their respective pages.

To reset existing faults, touch RESET FAULTS.

Faults are color coded as follows:

- **Red**—Short Circuit or Out of Range
- **Orange**—Open Circuit
- **Yellow**—Over-Current
- **Green**—No Faults / Active / In Range



PDM Diagnostics and Resets

EPDM DIAGNOSTICS

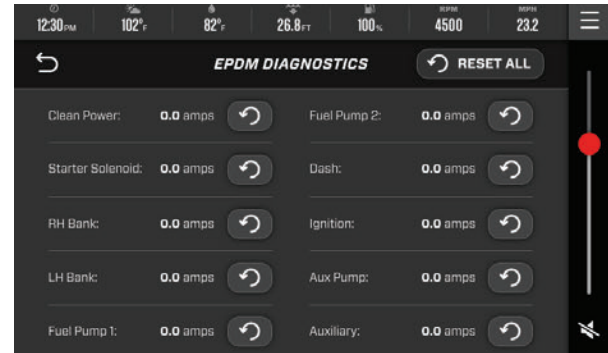
The EPDM is a solid state engine fuse block designed for all MasterCraft boats to make engine diagnostic checks easier and more convenient for quick, on the water fixes. To access the EPDM screen tap EPDM Diagnostics from the Settings Menu.

The EPDM screen displays critical engine and electrical system operating information. Amperage draw and the status of internal digital switches are displayed for each engine function. Digital switch status is designated by either a green, red or gray indicator.

- A green indicator denotes that the digital switch is functioning properly.
- A red indicator denotes that there is a problem with the digital switch and it has tripped.
- A gray indicator denotes that the digital switch is currently unused or not receiving power.

To reset a tripped digital switch, press RESET next to the system with a fault. To reset the entire EPDM, press RESET ALL on the bottom right portion of the screen.

If a digital switch continues to trip multiple times in one outing, it is a sign of a larger electrical issue and the boat should be taken to an authorized MasterCraft dealer.



EPDM Diagnostics and Resets

! WARNING

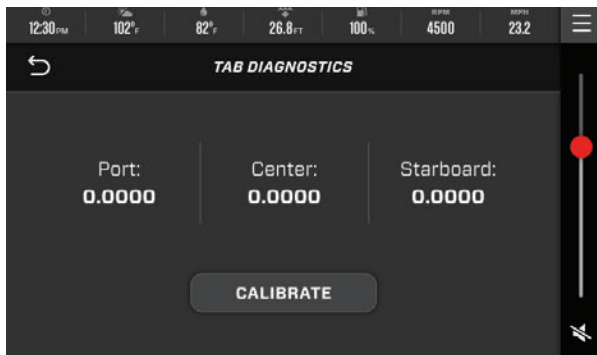
The EPDM and digital switches are designed to protect the engine and electrical system from damage. If a switch has tripped and continues to trip even after resetting the EPDM, it may be a symptom of a larger electrical issue, and the boat should be taken to an authorized MasterCraft dealer for diagnosis and servicing.

TAB DIAGNOSTICS

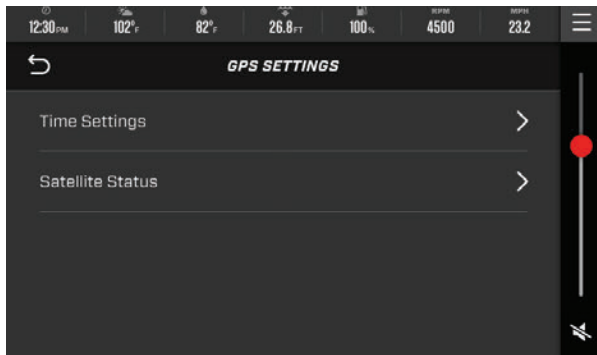
Under main menu, select ballast/tab settings, then scroll to “calibrate tab sensors” to recalibrate the actuators.

GPS SETTINGS

Accessible by tapping the Main Menu/Settings button, GPS Settings has options for Time Settings and Satellite Status.



Tab Diagnostics and Calibration

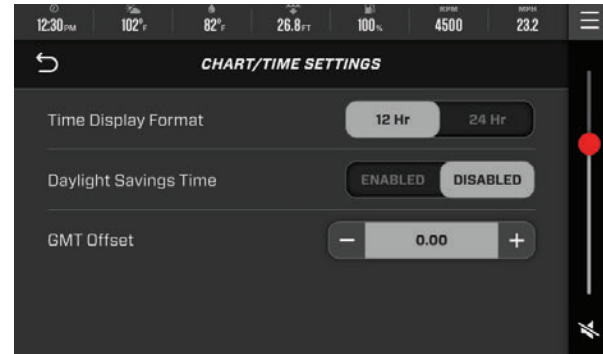


GPS Settings Menu

CHART/TIME SETTINGS

Chart/Time Settings allow users to adjust the following:

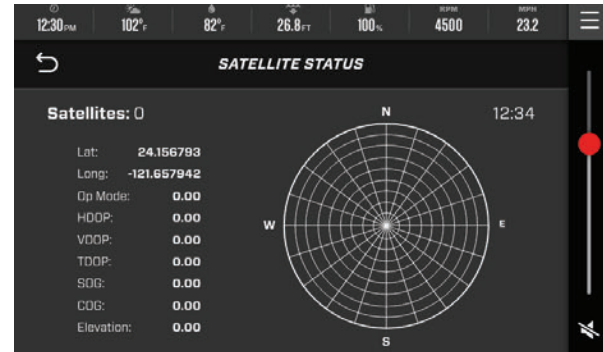
- Time display format (24 hr. or 12 hr.)
- Enable or disable Daylight Saving Time (Enable DST to turn on)
- GMT Offset - adjust the clock to your local time using the +/-.



GPS Chart and Time Settings

SATELLITE STATUS

This screen will display a representation of all of the satellites visible to the boat's GPS system.



GPS Satellite Status

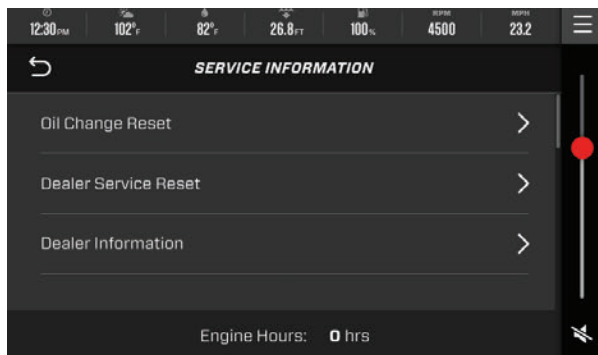
BALLAST AND TAB SETTINGS

See BALLAST AND TAB SETTINGS in this section of the Owner's Manual.

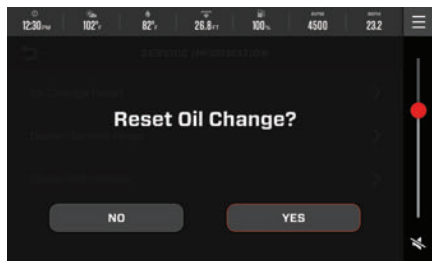
SERVICE INFORMATION

From here, dealers can reset the system's oil change reminders or dealer service reminders. Dealer contact information can also be found here.

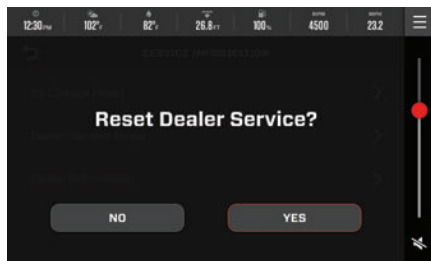
COMPONENT	DESCRIPTION
Oil Change Reset	<i>Displays a question of "Reset Oil Change?" Tap YES or NO.</i>
Dealer Service Reset	<i>Displays a question of "Reset Dealer Service?" Tap YES or NO.</i>
Dealer Information	<i>Provides the Dealer contact information.</i>



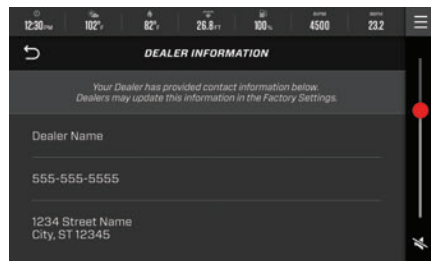
Service Information Menu



Oil Change Reset



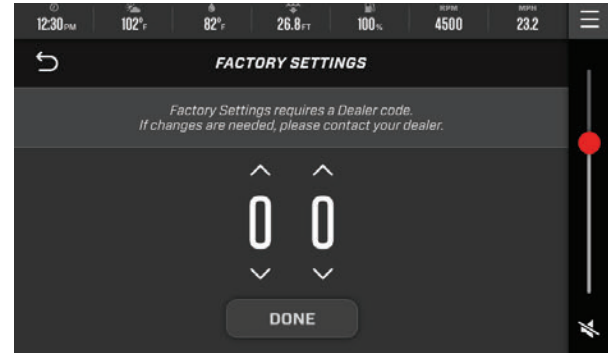
Dealer Service Reset



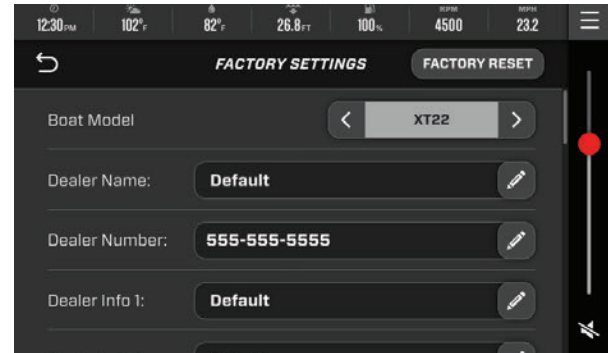
Dealer Information

FACTORY SETTINGS

This section requires a Dealer code to enter.
If changes are needed, contact your Dealer.



Dealer Code for Factory Settings Access



Dealer Info Factory Settings

TROUBLESHOOTING GUIDE

Display appears not to work or doesn't come ON:

- Check for loose connections at battery and display unit.
- Verify battery has a minimum voltage of 10 volts.

Display resets or goes OFF when starting engine:

- Check to ensure that display supply wires are connected properly to battery.
- Verify that the battery is charged properly. If the battery is not charged, use a battery charger to charge the batteries, or run the engine until battery power has been restored.
- Check battery for efficient starter current.

Display has no back light:

- Contact your authorized MasterCraft dealer.

Keypad has no back light:

- Contact your authorized MasterCraft dealer.



BOAT OPERATIONS

BASIC ELECTRICAL COMPONENTS

LOCATION

The location of the main circuit breaker board varies depending on the model in question. See the Models Features + Specs section for locations of circuit breaker panels. On the ProStar, the main breaker board is found beneath the jump seat.

On all models, there are some breakers (PDM breakers) which are reset using a digital switching system. The operator may reset them from the “PDM Diagnostics” menu on the dash screen, where the status of each PDM circuit is displayed. PDM-powered circuits may also be reset by restarting the battery switch cycle or by pressing the main PDM switches on the main breaker board.

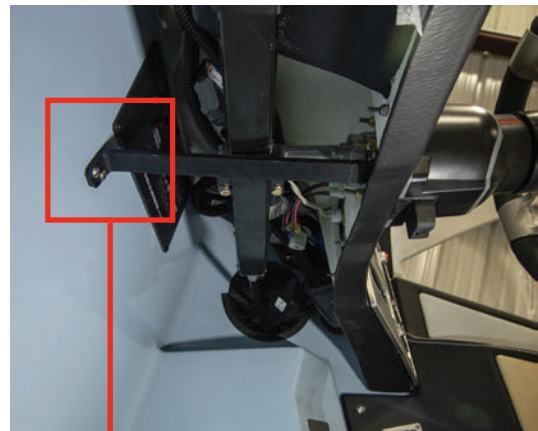
For safety purposes, it is important to make sure that all electrical wiring retains its proper position and routing. If during maintenance or inspection it becomes necessary to remove or reposition any of the engine's wiring or wire harnesses, verify that the wiring has been returned to its original position and that all harnesses are routed correctly before you attempt to use the boat again. If a wiring clip or retainer breaks, replace it immediately.

OPERATION

Two types of circuit breaker—thermal and PDM—are found on MasterCraft boats. Operation method varies depending on the type of breaker that has tripped. Circuits controlled from the dash screen use PDM breakers, and should be reset from the “Diagnostics” screen menu. All other components (except auto bilge) use thermal breakers, and should be reset from the main board.

If a problem develops with one of the non-PDM circuits (i.e. any circuit not controlled from the dashboard touchscreen), access the main breaker board and shut off the circuit. Wait one (1) minute. Push the appropriate breaker button and switch the circuit on. If the circuit continues to trip, there is a problem requiring urgent attention from an authorized MasterCraft dealer.

Location under helm dash



CIRCUIT BREAKERS

MODELS

Circuit breakers are a standard feature on all models.

PURPOSE

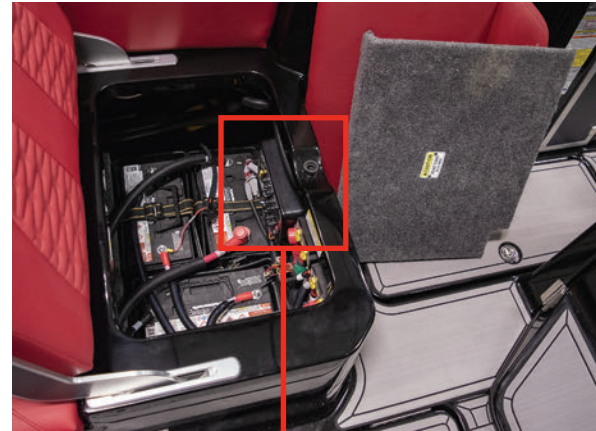
Circuit breakers protect major circuits from damage. Whenever an electrical issue is detected in a circuit, the breaker will automatically “trip,” interrupting the flow of electricity. By preventing short circuits and other electrical hazards, circuit breakers protect on-board electrical systems from taking damage.

On MasterCraft boats, circuit breakers may be adjusted from the main breaker board or from the digital “Diagnostics” menu on the dash touchscreen. Both allow the operator to access various switches which are used to reset tripped circuits.

When it comes to preventing electrical faults, circuit breakers are generally preferable to fuses. Unlike fuses, they don't have to be replaced after an electrical overcharge occurs. MasterCraft therefore uses thermal circuit breakers and PDM smart breakers for all circuits except those powering the auto bilge pumps. For auto bilge pumps, an MDL fuse (also known as a “slow blow fuse”) is used to prevent locked rotor short circuits.

Only some circuits may be reset from the main breaker board. For circuits controlled by the dashboard touchscreen display, the “Diagnostics” menu operates as a digital switchboard. All other circuits are reset using the main breaker board. (See the “Operation” section for more information.)

Locations Vary Across Boat Models



To reset PDM circuits, access the “Diagnostics” menu on the dash screen. Find the toggle for the circuit and reset it. (If the circuit has tripped, the menu will display an orange, red, or yellow icon beside the problematic circuit, depending on the issue encountered.) Allow a few seconds to pass while the digital switching resets. Turn the circuit back on. If the circuit continues to trip, there is a problem requiring urgent attention from an authorized dealer.

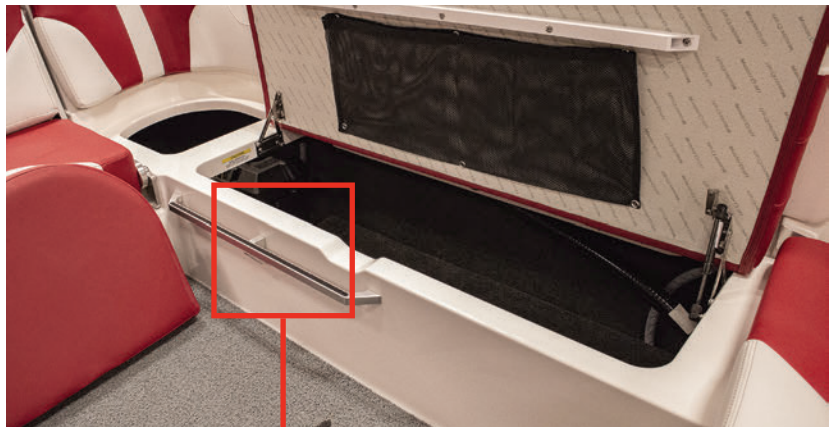
Note: There are several red PDM switches on the main breaker board. These are the main PDM switches; they control all systems on a given PDM. Use these switches to reset an entire PDM if that PDM displays a fault reading on the screen.



TROUBLESHOOTING

Whenever a breaker trips repeatedly, this indicates a situation requiring prompt attention. You should take the boat to an authorized MasterCraft dealer for service. If you attempt self-repair, MasterCraft is not liable for any resultant damages.

Location under port cockpit seating



SINGLE BATTERY

MODELS

Only ProStar and select NXT models rely on a single battery.

PURPOSE

When properly operated, the battery allows the boat's engine to crank over with immediacy, efficiently supporting the various electrical loads on-board.

LOCATION

The location of the battery switch is at the helm. The main battery control switch location varies depending on model.

OPERATION

For normal operation, toggle the helm's remote battery switch to the "ON" position, sending power to the engine and all accessories. In this configuration, the alternator works to recharge the battery. When trailering, storing the vessel, or at the end of operation, toggle the switch to the "OFF" position, isolating the battery from all circuits. The bilge pumps are wired to a separate circuit and therefore will operate when the remote battery switch is "OFF".

TROUBLESHOOTING

Because battery needs can vary substantially depending on a number of factors (such as usage, location, and the number of connected electrical components), MasterCraft does not place a specific battery—or batteries—in the boat. The company strongly encourages that you discuss battery options with your authorized MasterCraft dealer prior to purchase. If purchasing a new battery, note that all batteries must have 800 CCA (cold cranking amps). Any less may result in excessively fast battery discharge; this can leave boaters stranded on the water. To attain proper CCA and avoid potential battery malfunction, MasterCraft recommends AGM spiral cell batteries.

CAUTION

To avoid damaging the engine's electrical system, do not switch off the battery switch while the engine is running.

DUAL BATTERY BANKS

MODELS

Dual batteries come standard on all models except ProStar and NXT. Depending on certain audio options chosen, some models may require a third battery.

PURPOSE

An additional battery helps the boat process heavier electrical loads. This is important for late MasterCraft boats, which—due to their high number of powerful features—can be electrically demanding. The dual battery system allows the engine to crank over with immediacy and support all on-board electrical loads.

LOCATION

The location of the battery switch is at the helm. The main battery control switch location varies depending on model.

NXT Helm Battery Switch



NXT Battery Location



OPERATION

For normal operation, toggle the helm's remote battery switch to the "ON" position, sending power to the engine and all accessories. In this configuration, the alternator works to recharge the battery. When trailering, storing the vessel, or at the end of operation, toggle the switch to the "OFF" position, isolating the battery from all circuits. The bilge pumps are wired on a separate circuit and therefore will continue to operate when the remote battery switch is "OFF".

If the batteries have no charge, bilge pumps will not operate in manual or automatic mode. This may allow excessive amounts of water into the hull, which can damage or sink the boat. When boats are moored and exposed to the elements, frequently check the battery charge and bilge function to make sure they work.

Figure A is a diagram of the main switch that will be used on most models. The ProStar will have only a single module since it is a single battery only module.

Main switch layout: left most switch is for the engine battery, the center is the VSR/ACR as well as manual parallel between the 2 battery banks, and right switch is for the house battery.

Normal operation and as the boat leaves the MasterCraft factory is as pictured in Figure A with the 3 switches pointed to the top of the switch. This is fully automatic mode. The helm remote switch

(and telematics app) will activate the 2 outer switches and the center VSR/ACR will activate as it does today. The center VSR/ACR will automatically close once the motor is running and providing a charge.

⚠ CAUTION

To avoid damaging the engine's electrical system, do not switch off the battery switch while the engine is running.

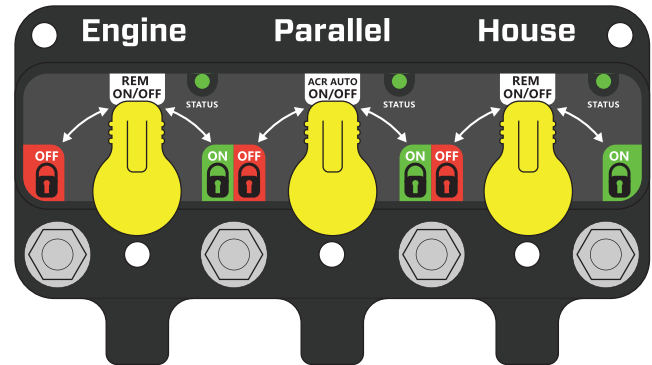


Figure A

Note: the knobs do not rotate except for through manual rotation. The status indicators on the switch will let you know if the switch is on or off or in manual override. Green light on means the switch is ON or in automatic state. Green light is off, the switch is OFF or in an automatic state. Flashing on/off indicates the switch is in a manual override state either off or on.

Rotating a yellow knob counterclockwise will switch that cell to an OFF state. This will deactivate the helm switch and telematics, meaning neither one can turn the switch on. The indicator light will be blinking. If the center is switched to off, the center VSR/ ACR will not charge the house battery from the engine.

Rotating the yellow knob clockwise will switch that cell to an on state. The helm switch and telematics cannot turn the switch off. The indicator light will be blinking. If the center is switched to on, the center VSR/ACR will charge the house battery from the engine and this is the emergency parallel feature if the engine battery is low and the motor would not normally start.

The switching feature internal to the switches will draw from the battery studs and does not draw the current from the helm switch/telematics. That signal is a low level power signal that will operate the switch as low as 8V

TROUBLESHOOTING

Because battery needs can differ substantially depending on a number of factors (such as usage, location, and the number of connected electrical components), MasterCraft does not place a

specific battery—or batteries—in the boat. The company strongly recommends that you discuss your options with an authorized MasterCraft dealer prior to purchasing a new battery.

If purchasing a new battery, ensure that the battery's Cold Cranking Amps (CCA), reserve capacity, and BCI group size match the currently installed battery to achieve proper performance and avoid potential malfunction. Only lithium batteries purchased from your MasterCraft dealer are approved replacements, as they are specifically designed for your boat; do not use lithium batteries from other manufacturers. AGM batteries are also acceptable replacements. Do not mix battery types or chemistries.

CAUTION

Prior to operating the boat for the first time, review the electrical information contained in this manual. Failure to follow basic procedures may result in property damage or personal injury.

DANGER

The engine exhaust system emits carbon monoxide, a toxic substance which may cause serious harm if inhaled. For this reason, never run the engine in a confined space or any location that may entrap fumes. You should also avoid running the engine whenever the boat is stationary in calm wind conditions.

LOW VOLTAGE BATTERY ALARM

MODELS

A low voltage battery alarm is a standard feature on all models.

PURPOSE

The low voltage battery alarm protects the engine battery in the event that the stereo is used without the engine and alternator running. By automatically shutting off the stereo and sounding an alarm when the engine battery voltage reaches 11.5 volts or less, the battery alarm prevents total battery drainage.

LOCATION

The low voltage battery alarm is internal and unseen.

OPERATION

If the battery alarm sounds, immediately deactivate the stereo and any other battery-powered systems that may be active at the time. Activate the engine and let it run for several minutes, allowing the alternator to recharge the battery or batteries. This will not work if the battery or batteries have zero charge.

OTHER ALARMS

MODELS

All models feature various alarm systems monitoring oil pressure, engine, and transmission.

PURPOSE

The alarms take readings from sensors that monitor oil pressure and engine/ transmission temperatures. If an issue is detected, an alarm will sound as a warning to the operator.

LOCATION

All alarms are internal and unseen.

OPERATION

If the system detects readings outside the acceptable range, the system shuts off the stereo and sounds the alarm for a period of one (1) minute. In this event, return to shore as soon as possible and seek assistance from an authorized MasterCraft dealer.

BATTERY CHARGER

MODELS

The battery charger is optional for all models except ProStar.

PURPOSE

The optional battery charger re-powers the battery and extends battery life while the boat is in storage. It belongs to the triple-stage class of electronic chargers. These chargers are lightweight, silent, and completely automatic. Unlike most automotive chargers, they do not boil off electrolytes from batteries that have undergone proper maintenance and installation.

LOCATION

The location of the battery charger varies by model. For more information regarding the location of your boat's battery charger, see the "Individual Models" section of this manual.

WARNING

When charging, batteries generate small amounts of dangerous hydrogen gas. This gas is highly explosive. Keep all sparks, flames, and smoking well away from the area. Failure to follow instructions when charging a battery may cause an electrical charge or even an explosion of the battery, which could result in death or serious injury.

OPERATION

Before charging the battery, ensure that all accessories are off. Also ensure that the cables and mounted LED lights are in good condition. If either of these components are damaged, you should not operate the battery charger until they have been repaired or replaced by an authorized MasterCraft dealer. To use, hook the charger up to the battery. The battery charger will automatically shut off when the charge is complete. If necessary, the user can monitor the charge status by observing a set of red and green LED lights on the charger. These indicate when the charger is re-powering and maintaining the battery. If you find that you must remove the battery from the product, always remove the grounded terminal from the battery first. Be sure that the area around the battery is well ventilated while the battery is being charged. Also ensure that the battery terminals are free of corrosion. (See the Scheduled Maintenance section of this Owner's Manual for additional battery information.)

TROUBLESHOOTING

If the battery charger ever appears to malfunction, see your authorized MasterCraft dealer for assistance. The dealer should handle all repair and replacement of battery chargers.



12-VOLT RECEPTACLE

MODELS

All models include a 12-volt receptacle. Some may include multiple.

PURPOSE

The 12-volt receptacle draws on the boat's electrical system to recharge external electronic devices.

LOCATION

MasterCraft boats have one (1) or more receptacles. Examine your boat to determine whether there are additional outlets.

OPERATION

Before plugging any accessory into the 12-volt receptacle, make sure the device is compatible with the receptacle. If it seems to experience resistance plugging into the receptacle, do not attempt to force the connection; the device is likely incompatible. Use of incompatible chargers may harm the boat's electrical system. MasterCraft is not liable for any subsequent damages to the boat's electrical system, the charger, or the external device. The warranty does not cover such damages.

TROUBLESHOOTING

If a connected electronic device does not recharge after the expected period of time has elapsed, verify that the charger is compatible. Also make sure that it is fully seated in the receptacle. If the charger is both compatible and fully seated, yet will not charge, take the boat to an authorized MasterCraft dealer for inspection. This kind of problem is extremely rare.



KEYLESS IGNITION SYSTEM & BACKUP KEY SWITCH

MODELS

All models feature a keyless ignition system and a backup key switch.

PURPOSE

The keyless ignition system activates the boat's electrical system and requires entry of a 4-digit PIN during startup. Once the correct PIN is entered, the electrical system becomes operational. To prevent use of the start/stop switch, the display can be set to "AWAY" or "LOCK" mode, which disables ignition in the event the screen is non-functional.

A backup key switch is provided for emergency starting if the screen fails. To use the key switch, ensure the battery switch is ON, then turn the key to the ON position to activate the start button. Once the engine is running, the touchscreen will unlock if it is partially operational.

It is recommended to store the key onboard in a concealed location for emergency use only. The key switch is not intended for routine operation, as "AWAY" or "LOCK" modes may not function properly with the key in the ON position."

LOCATION

The backup key switch is located in the glovebox on all MasterCraft models.

OPERATION

Insert the ignition key into the ignition switch. The key has two positions: OFF and ON. Turn the key to the ON position. Before starting the engine, operate the blower for a minimum

of four (4) minutes. Do not leave the ignition in the ON position for extended periods with the engine off, as this will discharge the battery.

TROUBLESHOOTING

If the key does not turn in the ignition, verify that the correct key has been inserted. If the key turns but no electrical power is present, the battery may be insufficiently charged. Check the voltmeter for a reading; if the voltage is below 11.5 volts or does not register, the battery requires charging. Use the charger supplied with the boat.

CAUTION

Do not attempt to jump start the battery or batteries from a vehicle or another boat. Doing so may overload the boat's electrical system, resulting in significant damage to the boat. This holds true regardless of battery brand. The warranty will not cover damages resulting from an attempted jump.

IGNITION START-STOP

MODELS

All boats feature an ignition start-stop button.

PURPOSE

The start-stop button is used to activate the engine after the ignition key has powered up the electrical system. The ignition start-stop button is also used to turn the engine off.

LOCATION

The ignition start-stop is found on the dash or driver's armrest.

SPECIAL ATTENTION

This button affects only the engine. The electrical system will continue to operate as long as the key is turned ON. If the key is left turned in the ON position after the outing, it will eventually run down the battery(ies) and the engine and all systems will not start as a result. At the conclusion of the outing, turn the key to the OFF position and remove from the key slot. Doing so will ensure that you have shut down the electrical system, and it will prevent others from starting or running the boat.

OPERATION

The process for starting the boat is:

1. Turn the battery switch on and enter passcode. If passcode is disabled simply turn battery switch on.
2. Turn the blower ON and allow it to run for at least four (4) minutes before starting the engine.
3. Momentarily press the engine START-STOP button.
4. When it is time to turn the engine OFF, press and hold for three (3) seconds the START-STOP button. If the button is held for less than three (3) seconds, the engine will not turn OFF. This is a system design to avoid shutting off the engine if the button is inadvertently pressed or hit during operation.

TROUBLESHOOTING

If the key switch is in the ON position and the engine will not start by pressing the START-STOP BUTTON, check the voltmeter for a reading. If it is lower than 10.5 volts or does not register, the battery(ies) require recharging. Use only a MasterCraft battery charger. DO NOT attempt to jump start the battery from a vehicle or another boat because this can cause an overload of the electrical system.

EMERGENCY KILL SWITCH LANYARD

PURPOSE

The emergency kill switch, which is attached to a lanyard, is an ignition cut-off switch designed to stop the engine in the event the operator is thrown or moves away from the helm. The lanyard is equipped with a hook on one end that should be attached to your clothing or PFD, and the opposite end has a slide that fits over the ignition switch. Be sure that the slide is firmly attached to the ignition switch before starting the engine.

LOCATION

The emergency kill switch connection is located near the throttle control box on the armrest. If the slide is left off or is loose, the engine will crank but will not start. Operators should NEVER attempt to override this safety system!



On April 1, 2021 a new federal law went into effect that requires the operator of a boat, less than 26 feet in length, with an installed Engine Cut-Off Switch (ECOS) to use the ECOS link. The link is usually a coiled bungee cord lanyard clipped onto the operator's person, Personal Flotation Device (PFD) or clothing and the other end attached to the cut-off switch. The law applies on all "Navigable Waters of the US".

DANGER

The safety switch lanyard must be attached to the operator whenever the engine is running. Attempting to override this system may result in death or serious injury!

TROUBLESHOOTING

If the lanyard between the emergency kill switch becomes unattached from the connection point, the engine will shut down. Reattach the lanyard to to the emergency kill switch connection point and restart the engine.

OPERATIONAL CONTROL

SHIFT/THROTTLE CONTROL

MODELS

The shift/throttle control is found on all models.

PURPOSE

The one-hand, single-lever control doubles as both a gear shifter and a throttle stick. The operator may also use the shift/throttle control to direct the stern thruster and rotate the boat. (For more information on stern thruster operation, refer to the section on the stern thruster in the chapter “Below Deck.”)

LOCATION

The shift/throttle control lever is located on the starboard side panel, adjacent to the driver's compartment (helm).



OPERATION

The lever can be moved from neutral only by raising the lifter under the ball knob. Shifting is accomplished by moving the lever forward or backward. Center (straight up) is neutral. Moving the lever forward engages the running gear; moving it back from center puts the drive train into reverse.

Never attempt to shift without the engine running! The neutral safety prevents the boat from starting the engine while in gear, but shifting while the engine is OFF will cause accelerated wear of the shifting gears.

SPECIAL NOTE: During regular warm-up of the engine, it is possible to temporarily increase the engine RPMs without moving the boat. To accomplish this, push in the button located at the bottom of the shift/throttle lever with one hand and pull up the “umbrella” (aluminum surround below the top of the knob). Move the lever to the desired position and then simultaneously release the button and umbrella. The engine will run with increased RPMs and can be increased or decreased by moving the lever. Returning the handle to the neutral position will bring the system back to neutral and reduce the engine RPMs to preset levels.

This function should be done sparingly. Over-revving the engine for any extended period can cause undue wear and tear on the engine. Avoid advancing to wide-open throttle and holding the RPMs at that level.

TROUBLESHOOTING

If the shift/throttle lever will not move, be certain that the lifter under the ball knob is lifted up before attempting to move the lever forward or aft. If the lever still will not move, contact your authorized MasterCraft dealer. Never attempt to shove or force the lever. If it does not move smoothly when operated as indicated, there may be an issue involving the system that requires correction in an area under the deck, which is inaccessible to the consumer.





ADDITIONAL SAFETY SUPPORT

FIRE SUPPRESSION AND EXTINGUISHING

See also the Safety section of this Owner's Manual.

MODELS

All

PURPOSE

MasterCraft has developed an extensive fire suppression and extinguishing system for its boats. All MasterCraft boats are equipped with an automatic fire suppression system. The automatic system operates from sensors in the engine room and will automatically release a clean-agent, gaseous chemical that does not leave residue behind. All boats have also been specified to carry a hand-held 2.5 lb. mono-ammonium phosphate expellant (dry chemical) unit, which is rated Class A (trash, wood and paper), Class B (UL Approved) and Class C (energized electrical equipment). These units should be used in situations other than engine compartment fires.

DANGER

Opening an engine compartment when there is indication of a fire inside can cause the fire to flare up and/or spread, which may result in serious injury or death to people on-board. Never attempt to fight a fire with your hands, feet, clothing, or other material on-board the boat, other than approved fire suppression or fire extinguishing products as specified by MasterCraft. Failure to follow directions as outlined in this section can result in serious injury or death.

Hand-held units should be replaced or recharged as soon as possible after use, or 12 years after the date of manufacture. In the event of any evidence of a fire within the engine compartment, DO NOT OPEN THE ENGINE COMPARTMENT (BOX). Opening an engine compartment when there is indication of a fire inside can cause the fire to flare up and/or spread, which may result in extensive damage or even sinking of the boat and/or serious injury or death to people on board. Shut down the engine and blowers. Continuously discharge the entire contents of the fire suppression unit immediately.



Handheld Fire Extinguisher

LOCATION

Manual Fire Extinguishers:

Manual fire extinguishers have various locations within the boat, but are generally located under the observer seat and are easily accessible. Be certain to determine the location of all fire suppression and extinguishing units on the boat. Your authorized MasterCraft dealer can assist you.

All automatic fire extinguishers are located in the engine compartments on all boats. The locations of automatic fire suppression override units' manual override varies by model, but generally is in the vicinity of the helm.



Engine Cover on XStar



Supercharged 6.2L ILMOR Engine



Location of Engine Fire Extinguisher

OPERATION

Manual Fire Extinguishers: Pull the pin and squeeze the trigger.

Automatic Fire Extinguisher Manual Override: It is possible to manually override the HFC-227 fire extinguishing system on all non-CE packaged boats. Pull the pin from the red handle labeled FIRE near the helm seat. Pull up on the FIRE handle to deploy the system.

SPECIAL ATTENTION

In case of an engine compartment fire, shut down the engine and blowers before manual discharge, or immediately following the automatic discharge. Boats are equipped with a discharge indication light at the instrument panel or on the video display gauge at the helm.

TROUBLESHOOTING

- If there is evidence of fire in the engine compartment of a V-drive boat and the automatic fire suppression system does not activate, pull the manual override (on domestic boats only). The override location is illustrated in the Guide to Individual Models of this Owner's Manual. Boat owners should also confirm this location with the assistance of an authorized MasterCraft dealer.
- If the manual override does not deploy, ensure all persons on-board are equipped with PFDs (personal flotation devices). If there is time, send visual and sound signals of the emergency. All persons should abandon ship and move to a safer location. Boats can be consumed by fire and even explode if there are fuel fumes. If a fire begins in another location other than the engine compartment, remove the fire extinguishers from their storage location,
- Activate as indicated above and attempt to put out the fire. Remain alert to the fact that a fire near or in the fuel tank or fuel lines is especially dangerous. Follow the instructions in the preceding paragraph, if a fuel fire begins or if the fire extinguisher(s) has not been effective in putting out the fire.



DANGER

Following the activation of the automatic fire suppression system or a hand-held fire extinguisher, a careful determination should be made as to whether the boat can safely be operated. If there is any doubt or concern whatsoever, the boat should be towed to shore and/or dock for service by an authorized MasterCraft dealer prior to operating again. Failure to follow these instructions could result in death or serious injury/illness.

CLEATS

MODELS

All

PURPOSE

Cleats are an important feature of MasterCraft boats, allowing boaters to tie-up to docks and raft with ease and confidence.

LOCATION

Cleat locations vary by model. (See Guide to Individual Models in this Owner's Manual to determine the locations for your model). Cleats will be on top deck sides of the bow, aft near the transom, and some larger models also have mid-ship cleats.

OPERATION

Use marine-grade lines to loop over the cleat and tie up to the dock, allowing some slack in the rope. If there is any motion in the body of water, MasterCraft recommends also purchasing “fenders” from an aftermarket supplier to provide a cushion between the boat and the dock. Without a cushion, the boat’s finished gel coat and graphics can be damaged. Such damage is not covered under warranty.

⚠ CAUTION

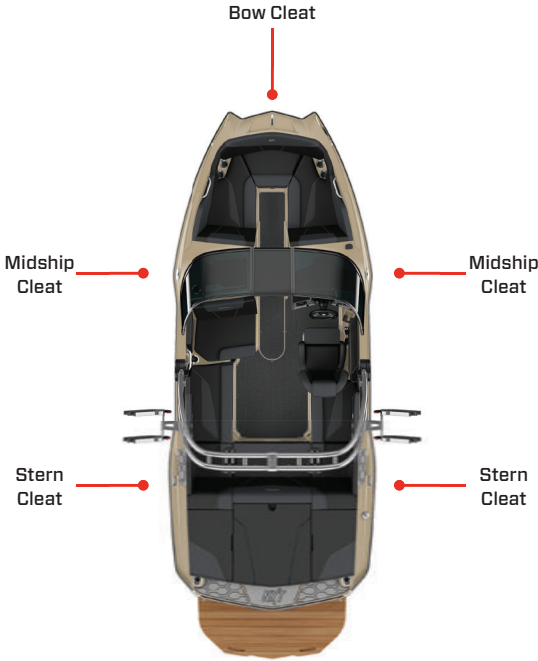
The boat should be tied to docks with marine-grade lines ONLY to the cleats, allowing some slack. Never tie-up the boat to the tower, mirror, seats or any other part of the boat. If the ability exists to tie up to all cleats on the side nearest to the dock, operators should do so. MasterCraft also recommends using fenders to cushion the side of the boat in the event of water motion. Otherwise, the boat gel coat and graphics may be damaged. Such damage is not covered under the warranty.



Stowed Stern Cleat



Bow Cleat in Use



HORN

MODELS

All

PURPOSE

The horn allows the boat operator to alert other boaters by way of a well-known and loud sound

LOCATION

The horn is sounded by pressing a button mounted on the instrument panel or driver's armrest. It is a red button.

OPERATION

Press the red horn button (shown at left) to emit a loud sound as a warning.

TROUBLESHOOTING

If the horn does not sound, check the main circuit breaker panel to see whether the circuit has tripped and needs to be reset. If the circuit does not require resetting, there may be an issue elsewhere in the system. Take the boat to an authorized MasterCraft dealer for repair.



Horn Button



Horn Speaker

MIRRORS

MODELS

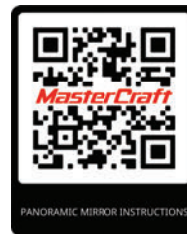
All models feature a standard aft-view mirror. In addition to the standard mirror, two additional optional aft-view mirrors are available, each designed in a different style.

PURPOSE

The mirror allows the boat operator to see behind the boat. While mirrors are helpful to assist in the observation of persons being towed behind the boat, a mirror is not a substitute for an observer. Whenever there is a rider behind the boat, the operator must also have an observer facing aft and alerting the operator when the rider is no longer riding on the water or the tow has been lost. There are specific hand signals for activities, and this information is available via U.S. Coast Guard pamphlets and website.

LOCATION

Mirrors are mounted on the windshield frame or directly onto the glass on XStar-models.



OPERATION

Most mirrors require no special instructions. They are removable and adjustable up and down and side to side like a standard automobile rear-view mirror. The billet panoramic mirror functions differently than other mirror options. It uses two locking mechanisms to lock the position of the mirror. To lock in place, turn the lock knob to the marked lock position, the release button will pop out. To unlock, push the black release button and the lock knob will spring open. Raise or lower the mirror, and re-lock it in place. Each operator should adjust the mirror to a comfortable viewing angle based on his or her height for maximum visibility.

SPECIAL ATTENTION

MasterCraft recommends boat owners and operators use only MasterCraft installed mirrors. While there are a number of third-party mirrors available through marine retailers, the mirror provided by MasterCraft was selected and developed to maximize the range of vision for the driver of MasterCraft boats. If it becomes necessary to replace a mirror, use only MasterCraft approved mirrors.

TROUBLESHOOTING

If a mirror does not stay in place after it has been adjusted to the driver's comfort, verify that the hardware holding the mirror in place is secure. If the driver's vision is obscured, be certain that the mirror is clean. Fingerprints, sun tan oil and a host of other products often used in boats can cause the mirror's surface to become dirty, which can negatively affect the driver's vision when using the mirror. Clean mirrors properly, as described in the Care and Maintenance section of this Owner's Manual.

CAUTION

Prior to operation of the boat, verify that the mirror hardware is secure. Failure to do so may result in the mirror detaching from the windshield extrusion. The mirror could hit the operator or a passenger, resulting in injury.

SKI/WAKEBOARD/SURF ROPE

MODELS

May be purchased from an authorized MasterCraft dealer or aftermarket retailer.

PURPOSE

MasterCraft boats are equipped with watersports towing points as standard equipment, and may also offer other optional pylons and towers intended to be used to attach rope for skiing, wakeboarding, and/or surfing. Note that tow ropes should never be attached to anything but the approved transom tow hook, pylon, or tower. Care should also be taken by all on board to pay attention to the tow rope as it can snap back and hit passengers when a skier or wakeboarders lets go of it. Usually, the rope simply skips along the water surface behind the boat, but it can become airborne, especially if it was taut prior to release.

LOCATION

Attachment locations vary by model. See the Guide to Individual Models section in this Owner's Manual to determine pylon and tower attachments for each model. MasterCraft recommends

stowing rope when not in use. Feet, arms, and bodies can become entangled with rope left on the deck or seating; rope left loose behind the boat can become airborne and swing around to strike people on board.

OPERATION

Failure to properly and securely attach to the tower, pylon, or other MasterCraft designated attachment locations for each model could result in the rope coming loose. As noted in the above warning, individuals could be injured if the rope is not secure.

WARNING

Attach ski/wakeboard ropes to approved pylons and towers. Failure to do so may result in structural failures which could cause death or serious injury.

WARNING

Ski/wakeboard tow ropes may snap back into occupied portions of the boat, causing serious injury. Occupants must be vigilant when towing skiers or wakeboarders.



BELOW DECK

BILGE SYSTEM, CENTER DRAIN, TRANSOM DRAIN PLUGS, & SEA STRAINERS

MODELS

All

PURPOSE

Water inevitably intrudes into any boat. MasterCraft boats are designed to expel the water via the bilge system. When on the water, bilge pumps act to expel water. Bilge pump sensors allow the system to pump water overboard by either automatic or manual activation. Because the bilge is located in the lowest portion of the boat's hull, it is not always readily apparent to individuals on-board whether there is water in the bilge or not. To allow operators the opportunity to manually verify water levels in the bilge, a center access plate or access door is built into every boat.

All boats (except ProStar) have two drain plugs, which allow water to be drained from the boat when the boat is OUT of the water. There is a center T-handle drain (the only one for a ProStar) and a

CAUTION

Bilge pumps will not operate in either the manual or automatic mode if the batteries are fully discharged. This condition may allow excessive water into the hull, which can damage or sink the boat. Make frequent checks of battery charge and bilge pump function when boats are moored and exposed to the elements.

triangular shaped transom drain plug. The transom drain plug is equipped with a quick socket hole for ease of removal if necessary. The tool cannot be used to tighten the drain plug as it is designed to be hand tightened only. When out of the water, on a trailer or lift, water can normally be drained into the bilge system by opening the center drain. Boats have sea strainers installed to assist in keeping debris out of the engine and water intake systems such as the ballast system.

LOCATION

The bilge lines and pumps are beneath the decks. The center drain location will vary slightly by model, but generally is found close to or adjacent to the driver's seat. It will be accessed through a hatch or access plate, which may be under deckadece. A transom drain plug is on the centerline of the transom. Sea strainers are located in front of the engine and can be accessed by removing the transmission cover on all engine models. There are deck drain points on the deck in all of the lowest points or where water may get trapped. If water is pooling above the drain points they are likely clogged. Bilge pump-out locations are on the side of the boat. Depending on the model, the pumpout may be on the bow or the gunnel. See Guide to Individual Models in this Owner's Manual to determine the location of bilge pump-out. (They are often adjacent to ballast overflow/vents.) Pump-outs should never be obstructed.



Transom Drain Plug



Open deck hatch at helm to access drain plug



View beneath deck of properly installed center drain plug

The bilge system operates automatically, but can be manually controlled by a digital switch in the accessory page of the Dash. The bilge pumps on all V-drive models will be in the automatic mode when the ignition key is turned ON. Some models may have two (2) switches, one for the forward bilge and one for the aft. In these instances, the switches will be marked on the screen. The manual and automatic bilge discharge system is never completely

OFF. When in the automatic (default) position, a sensor alerts the system to discharge water from the bilge area. Boat operators are advised to leave the switch in the automatic position, unless there appears to be excess water in the bilge as viewed through the center plate. In that event, the bilge pump can be manually activated by turning the bilge pump switch to the manual ON position. Return the switch to the automatic position when finished emptying the bilge. Leaving the switch in manual mode can result in damage to the pump and may not be covered by warranty!

Drain plugs should be loosened and removed when the boat is out of the water to allow additional drainage of the bilge system. Always ensure that the transom drain plugs have been tightened in place prior to launching the boat into the water. Failure to do so can result in water intruding and overwhelming the system, sinking the boat.

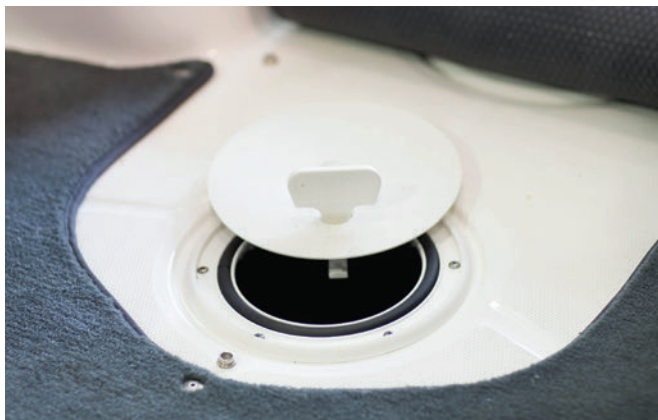
⚠ CAUTION

Return the bilge switch to automatic any time it has been turned to manual to remove water from the bilge. Operators should monitor the water level through the center drain and ensure that the bilge pump(s) does not continue to operate after the bilge is emptied. Note that a small amount of water in the bilge is acceptable, except when winterizing the bilge system. Failure to follow instructions may result in damage to the bilge system, which may not be covered under warranty!

Center drain pie-hole lids should be secured prior to boat operation. It is possible to misdirect and cross-thread the pie-hole when reinstalling. Retry until the lid is secure, level with the deck. Additional water from the deck may intrude if the lid is not secured,

⚠ WARNING

Transom plugs should be opened only when the boat is ashore. Removing the plugs allows additional drainage of the bilge system. The transom plugs must always be secured tightly in place prior to launching the boat into the water. Failure to do so will allow water to intrude into the bilge system and may result in serious injury or death as a result of the boat sinking.



and individuals on-board could injure themselves if they misstep in the area of the center drain.

The sea strainer (shown circled at right) should be checked before each outing. See the Care and Maintenance section of this Owner's Manual for details on how to properly inspect it. As equipped, the strainer operates automatically and does not require a switch or gauge to monitor. Regular maintenance however is important.

***SPECIAL NOTE:** Because the bilge pump operates even when the boat is shut OFF to prevent excessive water on board, if the pump runs fairly frequently, which causes the battery(ies) to fully discharge. This is a signal that the boat is either taking on too much water from a leak or that the boat is being left in the water for periods that are too long. Anytime the battery is low or discharged, recharge it prior to operation.*

Bilge pumps will not operate in either the manual or automatic mode if the batteries are fully discharged. This condition may allow excessive water in the hull, which can damage or sink the boat. Make frequent checks of the battery charge and bilge pump function when the boats are moored and exposed to the elements.

TROUBLESHOOTING

Proper attention should always be paid to bilge operations as it's one of the most critical systems on the boat.

- If the boat does not automatically pump water out of the system when the ignition key is ON, verify that the bilge switch is set to automatic.



Bilge Pump



Sea Strainer

- If it is set to automatic but still is not pumping when there is evidence of water in the bilge, turn the pumps on manually using the on-screen button. Follow the instructions above and do not leave the switch turned to manual after water is evacuated.
- If the bilge pump(s) still does not work when turned to manual, check the circuit breaker panel to ensure that electricity is moving between the switch and the pump. If the circuit breaker, which is marked, has tripped, reset it to ON.
- If the bilge pump(s) still does not work, it may be evidence of debris in the system or failure of the pump's impeller, which must be replaced on a regular basis as detailed in the Care and Maintenance section of this Owner's Manual. This is a serious concern. The bilge system keeps the boat from filling with excess water that may cause imbalance in the boat's trim. Under the worst possible conditions, the boat can sink. If the system fails while on a body of water, return to shore IMMEDIATELY! Have all people on-board put on PFDs (personal flotation devices). Signal for emergency help. If persons on-board have working cell phones, contact help. After returning to shore, take the boat to an authorized MasterCraft dealer as soon as possible for repairs and do not use the boat again until it has been properly repaired.

⚠ DANGER

An inoperable bilge system can result in the boat taking on excessive amounts of water, resulting in significant damage to the boat, even sinking. Persons on board should wear PFDs and be prepared to abandon ship if the boat is on an outing. Operators should signal for emergency help and return to shore IMMEDIATELY and have the boat repaired. Failure to follow instructions can result in serious injury or death.



UNDERWATER EXHAUST

MODELS

The underwater exhaust system is standard on all NXT, XT, X, and XStar models.

PURPOSE

By sending exhaust directly into the water, this feature significantly reduces both exhaust gases and noise behind the boat. As a result, passengers will enjoy a quieter in-boat experience and wake surfers will enjoy no exhaust fumes and a quieter experience. The feature also reduces engine backflow, heightening engine reliability and performance.

LOCATION

The exhaust tip is found on the stern of the boat.

TROUBLESHOOTING

The underwater exhaust system should be routinely inspected for leaks. Any serious damages to the underwater exhaust or adjacent components should be repaired by an authorized MasterCraft dealer. For more information on exhaust maintenance, please see the “Care and Maintenance” section of this manual.



Underwater Exhaust Pipe

⚠ DANGER

Exhaust system leaks may allow excessive amounts of water into the boat. This can damage or sink the vessel. Have any leaks promptly repaired by an authorized MasterCraft dealer.

BLOWER SYSTEM

MODELS

All models have a blower system.

PURPOSE

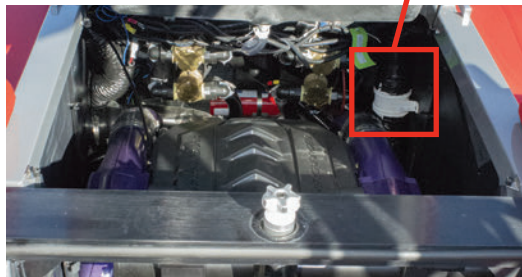
The blower system is one of the most critical systems on the boat. A natural by-product of operating the engine is the creation of unseen fumes. Carbon monoxide is discussed in the Safety section of this Owner's Manual. The engine will also create flammable, ignitable gasoline and/or battery fumes. Dispensed into the open air, they are quickly diffused and pose little to no threat to well-being. However, if the fumes are not released by opening the engine compartment and operating the blower for a minimum of four (4) minutes before starting the engine (even if the engine has not been operated for some time), the fumes may explode when the engine is started.

DANGER

To prevent a possible explosion, the blower will automatically run for four (4) minutes when the key switch is turned to the ON position. You should always operate the blower for at least four (4) minutes before starting the engine and always when at idle or slow running speed. Explosive gasoline and/or battery fumes may be present in the engine compartment. Failure to operate the blower as instructed may cause improper ventilation of the boat engine and bilge areas, and fuel vapors can accumulate in this area, causing a fire or explosion which may result in serious injury or death!



Blower



LOCATION

The blower system is mostly unseen by those on-board. The system operates automatically when the key switch is turned to the ON position, however the blower can be turned on through the Dual Screen Dash. Navigate to the accessory page and toggle the blower ON an OFF. The engine compartment blower exhausts fumes through vents located on the transom of the boat

OPERATION

ProStar, XT, X, and XStar: The blower automatically activates and runs for four (4) minutes when the battery switch is turned to the ON position. To turn the blower on manually, navigate to the accessories page on the Touch Screen at the dash. Tap the button to toggle the blower ON and OFF. As an additional safety feature, the blower system will automatically turn on if there is a communication fault with the power distribution system onboard while the battery switch is in the ON position.

NXT: Push the blower switch to turn the blower ON. Push the switch a second time to turn the blower OFF.

NOTE: Blower operation drains energy from the battery.

TROUBLESHOOTING

NEVER OPERATE THE BOAT IF THE BLOWER SYSTEM IS INOPERABLE OR NOT WORKING PROPERLY. SEE THE DANGER WARNING ON THE PREVIOUS PAGE.

The blower hums audibly when it is operating. If it is not functioning, turn the ignition key to ON and verify on the voltmeter that the electrical system is charging at least 11.5 volts or higher. If it is not, it will be necessary to recharge the battery(ies). See the electrical information in this section of the Owner's Manual for proper procedure. If there is sufficient charge indicated, but the blower still is not operating properly, DO NOT LAUNCH THE BOAT. Take the boat to an authorized MasterCraft dealer for repair.



NOTE

THE BLOWER MUST OPERATE FOR A MINIMUM OF FOUR (4) MINUTES BEFORE STARTING THE ENGINE AT ANY TIME. THE BLOWER MUST ALSO BE OPERATED DURING IDLE AND SLOW-SPEED RUNNING, BUT IS NOT NECESSARY DURING CRUISING SPEED.

STEERING SYSTEM

MODELS

All

PURPOSE

The steering system controls the direction in which the boat moves.

LOCATION

Except for the steering wheel and shift/throttle control at the helm, the steering system is not visible under normal circumstances. In a V-drive boat, the steering mechanism is typically located on the starboard side of the engine compartment for models equipped with a cable system, and on the port side for hydraulic steering systems.

To lubricate the control mechanism on the standard system as part of the annual maintenance (as described in the Care and Maintenance section of this Owner's Manual), locate the specific connection for your boat.

Steering wheels are mounted on a tilt mechanism that allows adjustment of the steering wheel angle to meet the needs and comfort of the operator. The system was designed to be used by operators who are sitting down in the driver's seat. Standing or manipulating the steering wheel in any other manner could cause loss of control.



Hydraulic Steering System

OPERATION

The steering of a boat is very similar to that of a car or truck, but it will generally respond less quickly due to operation in the water, which is more dense than air. Read the Starting and Basic Operations Information and Operational Hints that appear in the Preparation section of this Owner's Manual for more detail and assistance.

TROUBLESHOOTING

If the steering is sluggish, difficult, or shows any signs of not working smoothly and properly, the boat should immediately be taken to an authorized MasterCraft dealer for attention.

Optional hydraulic steering components are not accessible to consumers for repair or maintenance, all of which should be done by an authorized MasterCraft dealer. Most standard steering system repairs are only accessible by the dealer.

WARNING

For most activities the boat operator should be seated at the helm position. Some situations may require standing at the helm to maintain visibility over the bow. When standing is necessary make certain that the safety shut off lanyard is attached to your clothing or PFD. Operating the boat while standing may result in a loss of control which could cause serious injury or death.

RUDDER POSITION SENSOR

MODELS

Available on XT, X, and XStar models.

PURPOSE

Your MasterCraft is equipped with a built-in rudder position sensor, seamlessly integrated into the helm display screens. This sensor provides real-time feedback on the position of your rudder—helping you better understand and control your boat's direction, especially during docking, low-speed maneuvering, and tow sports setup.

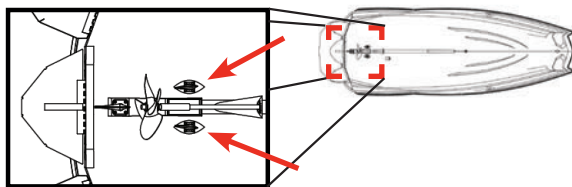
Note: Rudder position feedback is based on helm input and mechanical alignment. Always visually confirm surroundings before operating.



DOCKSTAR HANDLING SYSTEM

MODELS

Optional on all XT Series and NXT Series models.



⚠ DANGER

PROPELLER(S) MAY CAUSE SERIOUS INJURY OR DEATH. Shut off the engine(s) when near persons in the water, or on sun pads, platforms or the boarding ladders.

PURPOSE

The DockStar Handling System controls the direction in which the boat moves. The triple rudder system gives more control over the boat than a traditional single rudder system alone. The Dock-Star rudder allows a boat to reverse to either direction dependent on the orientation of the steering wheel. A DockStar equipped boat is also more agile and responsive at speed in forward.

LOCATION

The DockStar Handling System is a triple rudder system mounted to the bottom of the hull. Additional steering components are mounted under the helm and under the engine in the engine compartment. See the area indicated below.

OPERATION

Steering a boat with the DockStar Handling System is very similar to steering a car or truck, but the boat will generally respond slower due to operation in the water, which is more dense than air. A DockStar equipped boat will respond with more precision in forward, at both low and high speeds, than a traditional inboard single rudder system. In reverse, the DockStar system will allow the boat to reverse in either direction similar to a car. As in a car, turn the wheel to the left to back up to port, and turn the wheel to the right to back to starboard.

TROUBLESHOOTING

At any time, if steering is sluggish, difficult, or shows any signs of not working properly and smoothly, the boat should immediately be taken to an authorized MasterCraft dealer for attention. The DockStar Handling System is not accessible to the consumer for repair or maintenance. All maintenance should be done by an authorized MasterCraft dealer. Always check your surroundings when using the DockStar Rudder System in reverse, and never approach a person in the water in reverse. Always clear the area of downed riders or swimmers before using the DockStar Rudder System in reverse.



STERN THRUSTER

MODELS

This is an optional feature on X and XT models and a standard feature on XStar models.

PURPOSE

The stern thruster propels the stern of the boat clockwise or counterclockwise, allowing the operator to easily and expediently rotate the vessel. This is useful for circumstances which require close maneuvering, such as docking the boat under heavy wind resistance or navigating tight, narrow lanes.

LOCATION

The stern thruster is mounted to the center tab of the boat, beneath the platform. A grated tunnel encloses the propeller. The thruster knob—used to activate and direct the propeller—is found at the top of the throttle control lever in the helm.



Stern Thruster



OPERATION

The stern thruster may be operated in forward, neutral, or reverse. To use the thruster, twist the knob located at the top of the throttle control lever more or less depending on how much thrust is desired from the proportional thruster. The stern thruster will automatically activate as soon as the knob is twisted, causing the propeller to rotate the boat in the direction chosen.

TROUBLESHOOTING

If stern thruster is unresponsive, ensure engine is running. If engine is running, use the touchscreen diagnostics menu to reset the circuit. The thruster is connected to PDM1 and should be reset from the corresponding page within the diagnostics menu. If none of the procedures fix the problem, consult an authorized MasterCraft dealer.



SALT WATER ANODE

MODELS

All except ProStar, as part of the Salt Water Package option.

PURPOSE

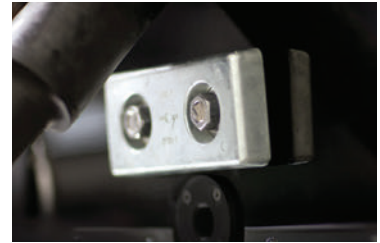
If the boat is operated in salt, polluted, or brackish waters, even temporarily, it should be equipped with a transom-mounted aluminum anode to protect submerged metal parts. The aluminum is, by design, self-sacrificing. It is slowly eroded away by electrolytic action and requires periodic inspection for deterioration. When the aluminum has eroded to approximately one-half (1/2) of its original size, it must be replaced to continue protection, or damage to other metal parts may result.

LOCATION

The anode is mounted on the transom.

OPERATION

There is no operation required. Boat owners should periodically examine the anode to determine how much erosion has occurred and consult an authorized MasterCraft dealer to determine the appropriate time to replace it.



Salt Water Anode

VISUAL ASSISTANCE

NAVIGATION/ANCHOR LIGHTS

MODELS

All

PURPOSE

Although MasterCraft boats are designed to be operated during daylight, there are instances in which operators may find themselves on the water at dawn, dusk or even at night. Weather conditions during daylight may also result in the need to run or anchor with the lights on. Note: The ProStar Navigation Light should only be used in inland waterways and is not classified as an offshore navigation light.

LOCATION

Vary by model. See the Guide to Individual Models in this Owner's Manual to determine the location of these lights for your model. Lights may be on the stern (port light will be red and starboard light will be green).

DANGER

MasterCraft boats should not be operated at night or in limited visibility even with navigation lights illuminated. The lights have limited visual range. Other boat operators may not see or understand the movements of your boat. When necessary to operate at night REDUCE SPEED, use visual and sound signals to slowly return to shore. Night operations may result in collisions or striking fixed objects that could result in death or serious injury.



Starboard Navigation Light

OPERATION

A push button switch operates the navigation lights. The first push of the button will illuminate the navigation & anchor lights, required while moving at night, the second press of the button will illuminate only the anchor light, required when stationary on the water at night, a third button press will turn all lights off.

SPECIAL NOTE: The navigation lights are not designed for operation in full darkness with the boat underway at higher speeds. Do not operate the boat after dark, even with navigation lights on. The lights have limited range and brightness. The boat may not be seen by other boat operators. When required to return to shore after dark, use visual and sound signals to slowly return to shore at slow speed. Serious injury or death may result.

ADDITIONAL SPECIAL NOTE: In the ProStar model, if the boat is not equipped with tower lighting, the navigational lighting is valid for INLAND RULES ONLY.

TROUBLESHOOTING

If lights do not operate, check the main circuit breaker panel to determine if a circuit may have tripped. Reset the circuit; if it continues to trip, take the boat to an authorized dealer.

If the circuit breaker has not tripped, the bulb may have burned out. Although the lights are LEDs, which rarely burn out, it is possible. Take the boat to an authorized MasterCraft dealer to have the bulb replaced.



Anchor Light

BOW LIGHTS

MODELS

Optional on XT and X series models.
Standard on XStar23/XStar25.

PURPOSE

Optional bow lights provide a significant aid to navigation in dark conditions. Bow lights are especially useful when pulling up to a dock or into a boat slip after dark.

LOCATION

Two sets of bright LED lights mounted to the bow or bow rubrail.

OPERATION

A digital switch on the lighting page of the Dash turns the lights on and off. Tap the switch to toggle the lights ON and OFF. Consult local laws and regulations about using while underway.



Bow Lights

TROUBLESHOOTING

If the lights do not operate, check the main circuit breaker panel to determine if a circuit may have tripped. Although the bow lights are LED lights which rarely burn out, it is possible. Take the boat to an authorized MasterCraft dealer to have the bulb(s) replaced when necessary.

STERN LIGHTS

MODELS

Optional on XT and X models.
Standard on XStar23/XStar25.

PURPOSE

Optional stern lights provide additional lighting to the aft portion of the boat. They may be especially useful when combined with the bow lights while pulling up to a dock or into a boat slip after dark.

LOCATION

Two sets of bright LED lights mounted to the transom rub rail.

OPERATION

A digital switch on the lighting page of the dash mounted touchscreen turns the lights on and off. Tap the switch to toggle the lights ON and OFF. Consult local laws and regulations about using while underway.



Stern Lights

TROUBLESHOOTING

If the lights do not operate, check the main circuit breaker panel to determine if a circuit may have tripped. Although the stern lights use LED bulbs which last for an extended period of time, even LED bulbs will eventually burn out and need to be replaced.

TOWER DOME LIGHT

MODELS

Standard on Z8 towers.

PURPOSE

The tower dome light illuminates the cockpit of the boat for use in low light situations or at night.

LOCATION

The tower dome light is mounted to the underside of the header box on the tower (directly below the tow point).

OPERATION

To turn the tower dome light on, press up on the light until it makes a soft click, then release the light. It will turn on. To turn off the light press up on the light and release (there will be no click).

TROUBLESHOOTING

If the light does not operate, check the main circuit breaker panel to determine if a circuit may have tripped. Although the tower dome light is made up of LED lights, which rarely burn out, it is possible that they have burned out. Take the boat to an authorized MasterCraft dealer to have the bulb(s) replaced when necessary.



COURTESY/STORAGE COMPARTMENT LIGHTS

MODELS

All

PURPOSE

The courtesy lights and storage compartment lights provide illumination for the interior deck and compartments.

LOCATION

Mounted to various locations around the deck and in storage compartments.

OPERATION

The digital switch that operates the courtesy and storage light can be found on the touchscreen dash on the lighting tab. Toggle it ON and OFF by tapping the Courtesy/Storage Light button on screen.



Courtesy Lights

TROUBLESHOOTING

If lights do not operate, check the main circuit breaker panel to determine if a circuit may have tripped. Reset the circuit; if it continues to trip, take the boat to an authorized dealer. If the circuit breaker has not tripped, the bulb may have burned out.

UNDERWATER LIGHTS

MODELS

All NXT, XT, X, and XStar models as an option

PURPOSE

Underwater lights provide a significant improvement in visual illumination of the water beneath platforms and in the area surrounding the boat stern. In shallow water, this can be especially useful in determining safer operations.

LOCATION

Located on the transom below the waterline under the platform.

Underwater Lights



OPERATION

The digital switch that operates the underwater lights can be found on the touchscreen dash on the lighting tab. Toggle the lights ON and OFF by taping the Underwater button. The lights will come ON and the screen will highlight the lights on the screen. Note that the underwater lights should never be operated unless the boat is in the water. Even though these are LED lights, they generate some heat and require the cooling effect of the water to avoid prematurely burning out the bulbs. Underwater lights may have thermal protection circuitry that will turn the light off when reaching high temperatures. Allow lights to cool in water in order to turn back on. Underwater lights are intended to be used while docked, moored, or anchored. Using while underway may result in fines or other penalties. Follow local regulations.

TROUBLESHOOTING

If lights do not operate, check the main circuit breaker panel to determine if a circuit may have tripped. Reset the circuit; if it continues to trip, take the boat to an authorized MasterCraft dealer. If the circuit breaker has not tripped, take the boat to an authorized MC dealer to have the boat inspected.

SPORT ENHANCEMENTS

ATTITUDE ADJUSTMENT PLATE

MODELS

Standard on all NXT, XT, X, and XStar models.

PURPOSE

When used properly, the plate improves the ride, reduces drag, increases speed, and improves the fuel efficiency of the boat.

LOCATION

The attitude adjustment plate is permanently attached to the boats stern, below the waterline. The operator may control the plate using either the dash screen on NXT, ST, X, XStar, MyDrive on applicable models or by manual switches located on the driver's armrest (only on NXT).

OPERATION

The operation of the attitude adjustment plate is basic. The plate is mounted with an actuator on the transom of the boat. When the plate is lowered, the water flow is redirected, creating an upward force at the boat's stern. When the stern rises, the bow will lower. Since these actuators are electrohydraulic, they provide



Attitude adjustment plate is referred to as the center tab

an immediate response at the touch of the helm mounted switch. (The attitude adjustment plate can be controlled through both the 12" and 7" touchscreen dash displays.)

- Press and hold **UP** on the switch raise the center tab.
- Press and hold **DOWN** on the switch to lower the center tab into the water.

Because our models have different weights, lengths, speed and performance, it will take some practice for the operator to understand how the boat reacts with the attitude adjustment plate installed. The plate will allow your boat to get on plane faster and continue planing at lower speeds. It improves visibility and the overall safety of your boat.

When making adjustments with the attitude adjustment plate, use short momentary taps of the switch. Continued practice will help you become familiar with how the plate performs.

SPECIAL ATTENTION

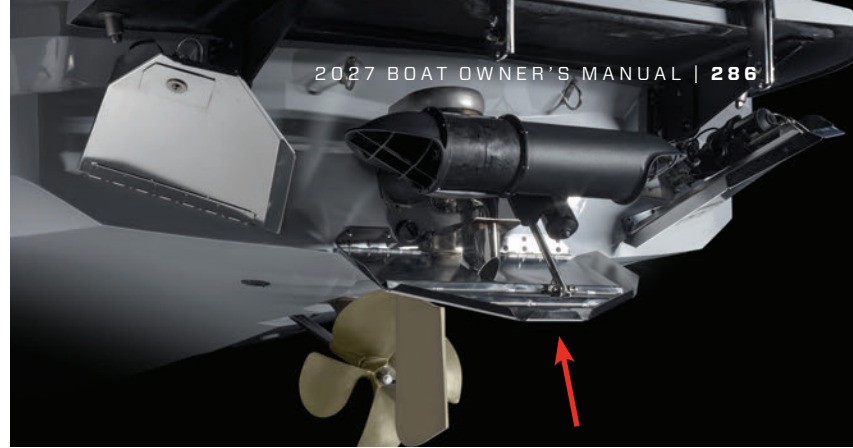
Because these plates can adversely affect boat handling if not utilized properly, the following information is provided to assist operators in determining the correct usage of the attitude adjustment plate(s).

SPECIAL CONDITIONS

Head Sea: Lower the plate by tapping slightly on **BOW DOWN** on a single system. This will bring the bow down while maintaining speed. This also allows the boat hull to absorb wave impact. This adjustment will result in a more efficient and smoother ride. Changes should be made in small increments to ensure maintaining control of the boat.

Following Sea: Make sure the plates are fully retracted by pressing **BOW UP** on both sides of a dual system, and **BOW UP** on a single system. This will bring the plate(s) up to a fully retracted position, decreasing lift in the stern and allowing the bow to rise. If the plate(s) is/are deployed, the bow may dig.

Shallow Water/Hole Shot: Lower the plate by pressing **BOW DOWN**. This provides lift in the stern of the boat and will keep the bow down. As you throttle up and speed increases, raise the tab by pressing UP.



Attitude adjustment plate, also referred to as the center tab

WARNING

Improper use of the attitude adjustment plate may result in loss of control, which could result in serious injury or death.

- *While at higher speeds, do not over-trim, as this will cause the bow to lower quickly, resulting in a reduction of speed and may cause the boat to veer.*
- *When in following seas or when running an inlet, the plates should be fully retracted. This will allow for optimal performance.*
- *Electro-hydraulic actuators provide an instant response. When making adjustments, use short momentary taps of the switch to prevent over correction.*

Porpoising: To stop porpoising, press **BOW DOWN** on the attitude adjustment plate control. The plate(s) needs only to be deployed slightly to correct this adverse situation.

SPECIAL ATTENTION

On all XT, X, and XStar models, the attitude adjustment plate's range is limited at speed to prevent adverse handling conditions. The limit of the plate varies between models based on hull shape and running attitudes. Maneuvering a boat with the attitude adjustment plate extended requires practice to master. Initial times running with the attitude adjustment plate extended should be done at low speed with plenty of room. This is a critical practice to learning how the attitude adjustment plate affects control and maneuverability, especially when teaming the attitude adjustment plate with surf tabs.

ADDITIONAL SPECIAL ATTENTION

DO NOT use the attitude adjustment plate(s) to board the boat. The edges are sharp and can easily slice through skin. The plate(s) is also not sturdy enough to withstand many people's body weight. Damage to the plate(s) in this manner is not covered under warranty. Use only boarding ladders and platforms to board from the transom side when boats are equipped with an attitude adjustment plate(s).

CAUTION

Never use the attitude adjustment plate(s) to board or assist in boarding the boat. Sharp edges can cut individuals, causing potentially serious bleeding. Damage to the plate(s) from people using it to board the boat is not covered under warranty.



ADDITIONAL SPECIAL ATTENTION

Care should also be taken when backing up the boat in shallow water, removing boats from the water on steeply pitched access areas, or backing up with the boat on a trailer. The attitude adjustment plate(s) does not fold or retract, and it may require additional clearance to avoid damage to the plate(s).

Resulting damage from failure to follow instructions is not covered under warranty.

TROUBLESHOOTING

- If the switch(es) is/are unresponsive, check the main circuit breaker panel to determine if the circuit has tripped. Reset the circuit and try the switch again.
- If the circuit continues to trip, bring the boat to an authorized MasterCraft dealer for repair.

If the boat does not respond as noted in the above instructions, turn OFF the switch and do not use the attitude adjustment function until the system has been checked by authorized MasterCraft dealer. Malfunction can result in loss of control of the boat.



Main circuit breaker panel under the dash on the XT23

CAUTION

Care must be taken to ensure that there is always sufficient clearance around the attitude adjustment plate, whether it is in the water or out, particularly on a trailer. The attitude adjustment plate(s) extends beyond the boat transom and is not foldable or retractable. Damage to the plate(s) from failure to allow sufficient clearance is not covered under warranty.

AUTOLAUNCH

MODELS

All NXT, XT, and XStar Models.

PURPOSE

AutoLaunch uses the attitude adjustment tabs and surf tabs mounted to the transom of the boat to help push the boat onto plane more quickly and more efficiently, while reducing bow rise. AutoLaunch speeds are optimized by MasterCraft engineers at the factory and come preset for optimal performance in normally weighted operating conditions. There are two AutoLaunch settings, Light and Heavy (NXT models only has the Light setting). The Light setting uses the center tab to produce bow rise while getting on plane, this the best for most use cases. The Heavy setting uses the center tab and surf tabs together to drive the bow down when getting on plane. Your boat will automatically switch between Light and Heavy settings depending on the amount of ballast in the tanks. In Tow mode, you may manually switch between Light and Heavy settings.



LOCATION

The AutoLaunch can be turned on in main page in the drive and tow modes on XT, X, and XStar models. The button is located under the tab control and will be highlighted in a lighter blue when activated. In NXT the autolaunch button is on the main page in drive, wake, and ski modes. The button is located under the tab control and will be highlighted in a light grey when activated.

SURF STAR SYSTEM

MODELS

The Surf Star system is a standard feature for NXT, XT, X, and XStar models.

PURPOSE

The Surf Star System gives the operator precise control over the dimensions of the boat's surf wave. Using the dashboard screen or the helm-mounted switch pack, the operator may set and modify the amplitude of the surf wave created by the boat's wake shaping devices. This allows the operator to program a surf wave matching the style, skill-level, and/or preferences of the rider.

The Surf Star System uses stainless steel surf tabs to create powerful waves. This is made possible by the electrical feedback configuration of the Surf Star System. In response to user commands, the dash screen signals the PDMs (Power Distribution Modules), electronic devices which distribute electrical power to connected systems. With the power supplied by the PDMs, the transom-mounted electro-hydraulic actuators drive the surf tabs into deployment. The resulting displacement influences and modifies the amplitude of the boat's surf wave.





SurfStar Ballast Location on Equipped Models

SurfStar System



Using the Surf Star System, the operator may deploy tabs at different angles to create waves of varying type. This gives the operator a wide range of control over wave amplitude. Mellow waves are created by deploying the tab further into the water on one side of the boat, and steeper waves by retracting the tab.

LOCATION

The surf tabs and actuators—also known as wake shaping devices—are installed on the port and starboard sides of the transom, beneath the platform. An additional center tab is also present. Tabs may be controlled using the helm-mounted switch pack or the dash screen video display.

The Surf Star System is powered by PDMs (Power Distribution Modules). On NXT, XT, and ProStar models, PDMs are found underneath the dash.

OPERATION

On all models, users may control tabs and ballast from the screen controls. Ballast and tab settings are available in all modes. When the boat is in surf mode, rapid surf settings are the default. All Rapid Surf settings fill ballast to 100% and automatically select speed and tab deployment. IF changes are desired from the engineered rapid surf settings, enter the “custom surf” page to adjust tabs and ballast, speed can be adjusted from the rapid surf page. Each MasterCraft model equipped with SurfStar has pre engineered

waves ranging from steep and powerful to mellow and playful, and everywhere inbetween. These waves are created by MasterCraft's team of Professional Athletes and Naval Architects. NXT models have 3 wave settings per side, XT, X & XStar have 7 per side.

As an alternative to operating the SurfStar from the dash screen, NXT's can be operated by switches beneath the dash and XT, X, & XStar models can be operated with MyDrive. MyDrive has integrated Rapid Surf commands as well as speed and tab deployment hot keys.

TROUBLESHOOTING

If one of the Surf Star System's components does not seem to be responding to the switch, first recalibrate your tabs. You can do this by entering the settings menu, then entering the "Ballast & Tab

settings" submenu. Next select the tab calibration key, this will recalibrate the tabs on the transom. The boat must be running and in neutral through this process. If that does not solve the issue check the appropriate circuit on the main breaker board or the PDM screen diagnostics menu. If the circuit continues to trip after you have reset the breaker, take the boat to an authorized MasterCraft dealer for inspection. Recurrent tripping of a circuit may be a sign of a deeper electrical issue.

For additional information on circuit breakers and diagnostics, refer to the "Basic Electrical Components" chapter. For additional information on digital screen diagnostics, refer to the chapter on operating your particular model. Serious, recurring electrical issues should be addressed by an authorized dealer.

ADDITIONAL INFORMATION

Because MasterCraft aims to bring you the best wakesurfing experience possible, it may occasionally be necessary to download software updates for the Surf Star System's screen UI (User Interface). On XT, X, and XStar models, you can update the screen software by accessing the Spark Network Connections page in the System Settings menu, joining a wi-fi network, and scanning for connections. Alternatively, an authorized dealer can install updates via USB drive.

In some instances, the Surf Star System may require tab position sensor recalibration. To recalibrate the position sensor on XT, X, and XStar boat models, access the Tab Diagnostics page in the System Settings page of the dash touchscreen display and use the controls provided. For more information on sensor recalibration, discuss the topic with your authorized MasterCraft dealer.

WARNING

Electro-hydraulic actuators provide an instant response. When making adjustments, use short momentary taps of the switch. Large adjustments to surf tabs may result in loss of control, which could, in turn, cause serious injury or death.

BALLAST SYSTEMS

MODELS

Ballast systems are found on all models. The NXT, XT, X, and XStar models utilize triple or quad hard tank ballast systems. Some models have two additional ballast bags included in the aft sundeck compartments.

NXT20 has additional optional cockpit ballast bags. These are plug-and-play bags that store beneath the port and starboard cockpit seats and enhance the NXT20 wave potential.

The ProStar uses a single hard tank ballast designed for competition training. For the most part, the MTS tank functions similarly to the multi-tank systems found on the NXT, XT, X, and XStar.



Underway with Full Ballast

PURPOSE

Ballast systems are specially designed for each model to enhance the boating experience. By creating deeper, more dynamic waves, beginners and professionals alike can have experiences that are more enjoyable—even record-setting. For simple outings and improved, faster handling, ballast systems may be left empty.

LOCATION

Ballast tanks are located under the deck, in the hull, hidden from sight. Additional plug-in bags are located in the aft sundeck storage areas, on either side of the engine compartment. The ballast outflow vents are located on the upper perimeter of the hull. Depending on the model, the overflow may be on the bow or the gunwale. Fill, empty, and overflow locations should never be obstructed.

On all XT, X, and XStar models, ballast fill/empty locations are located underwater and should be kept clear of debris. (See the “Care and Maintenance” section of this Owner’s Manual for more details.) NXT Series models pump ballast water in from the hull bottom, but pump water out of thru-hull vents located on the hull’s sides. Ballast overflow vents are located on the side of the hull.

Ballast switching is found in the screen on all models and NXT has manual dash switches too. Ballast levels are always controlled by the display screen.

OPERATION: XT, X, AND XSTAR SERIES

- To fill a ballast tank, press the **FILL** button on the main screen in any mode and the desired tank will begin to fill. It is important to note that all activity presets will automatically set the ballast at the proper level.

- To stop filling, press the **FILL** button again. The pumps will pause and the button will change color. To resume filling the tank press the **FILL** button again.
- When the tanks are full, operators will see water being vented out of the ballast overflow vents on the hull side. When a ballast tank is at 100 percent full, pressing the **FILL** button again will begin a 30 second override. The pumps will overfill the tanks, excess water is pumped out of the ballast overflow vents on the hull side.
- To empty a tank press the **EMPTY** button. The button will light up and the ballast pumps will begin to empty the desired ballast tank.
- To stop emptying, press the **EMPTY** button again. The button color will change and the ballast pumps will stop running. To resume emptying the tank, press the **EMPTY** button again.
- When a ballast tank is at zero (0) percent full, pressing the **EMPTY** button again will begin a 30 second override. The pumps will over-drain the tanks, excess water is pumped out of the hull bottom.
- To set the ballast tank at a desired percent level click on the desired tank and using the up or down arrows select the desired % full. The tank will start automatically filling to the selected level.

The software ballast top-off feature is only usable for surf mode, when enabled, this feature will top off the stern ballast tanks every 10 minutes for a 30 second override to ensure maximum ballast potential.



OPERATION: NXT SERIES

The buttons are clearly marked: **FILL**, and **EMPTY**.

- Push the fill button either on the dash or in the screen interface. When the tank(s) is/are full, operators will see water being evacuated out of the ballast overflow vents on either the gunnel or hull side (see Guide to Individual Models in this Owner's Manual to determine the location of the ballast overflow).
- To evacuate a tank, push the empty button on the dash or in the screen interface. The ballast system in NXT models operates on an automated system that shuts down automatically when the emptying process has been completed.
- To set the ballast tank at a desired percent level click on the desired tank and using the up or down arrows select the desired % full. The tank will start automatically filling to the selected level.

All ballast systems operate on timers. Note that the timer operation varies by model. Timers may also be impacted by the addition of optional bags. See your authorized MasterCraft dealer for assistance in determining proper timer settings.



CAUTION

Failure to return the manual operation switch on an NXT ballast system to OFF after emptying the tanks can cause the ballast pumps to fail. Such failure is not covered under warranty.

WARNING

*On models equipped with plug-in bags, if the bags are emptied and disconnected from the system, the original bridge connector **MUST** be reinstalled. Failure to do so will allow any water pumped into the rest of the ballast system to evacuate through the quick connect, which can result in flooded storage compartments which could sink the boat.*

The bridge connector in the ballast system must be reinstalled if the plug-in bags are removed from the system. Failure to do so will result in any water in the ballast system evacuating into the storage compartment, potentially flooding the storage compartments. This could sink the boat, resulting in serious injury or death.

SPECIAL ATTENTION

In standard ballast systems, the engine must be operated **at 1500 RPM or more** during the fill and empty processes for optimal performance. On models equipped with the FastFill Ballast System (see the FASTFILL BALLAST PUMP section of this Owner's Manual) the engine must be operated **under 1500 RPM** for optimal performance. Operating the FastFill system at higher RPM can cause the low voltage alarm to sound. Check engine specifications for related engine idle speed, which, in some instances, may be too low for the empty/fill operation to be properly accomplished. Failure to increase or decrease engine RPM to the required level may result in malfunction or permanent damage to the ballast pumps that force water through the system or to the engine's electrical system. Such damage is not covered under your warranty.

SPECIAL ATTENTION

NEVER tow a trailer with water in the boat's ballast tank(s)! Even small amounts of water can cause serious problems with the required balance of the boat on the trailer (see the Trailers section of this Owner's Manual if you own a MasterCraft trailer).

Note that this information is also applicable when towing with trailers built and sold by other manufacturers.

Correct balance is critical to safe trailering.

DANGER

Never tow a boat with water in the ballast tank(s). Doing so may damage the boat and trailer, resulting in loss of control that could cause serious injury or death.

ADDITIONAL SPECIAL ATTENTION

Ballast pump impellers MUST be replaced on a regular basis (at least annually, but more often as necessary). Its purpose is to move water from the intake on the hull bottom and into the ballast tank, and vice versa when emptying the ballast tank. Through usage, the impeller, by design, will wear and eventually need replacement (see Care and Maintenance section of this Owner's Manual). Authorized MasterCraft dealers can help to locate any and all pumps and impellers. Failure to follow directions may result in damage to the ballast pump that is not covered under warranty.

 **CAUTION**

Failure to follow instructions regarding the care and maintenance of ballast pumps as outlined in this Owner's Manual can result in damage to the ballast pump that is not covered under warranty.

TROUBLESHOOTING

If the ballast pumps do not turn ON when the switch is activated or the touch screen is used, check that the circuit has not tripped on the main circuit breaker panel, or use PDM diagnostics to reset the fault. Continual tripping after reset is indicative of an issue that requires the attention of an authorized MasterCraft dealer.

If the ballast pumps do not work and the circuit breaker has not been tripped, it is likely that the pump has malfunctioned. This can be the result of running the impellers while the tanks are empty. Regardless of cause, it is necessary to take the boat to an authorized MasterCraft dealer to determine whether the impeller and/or pump must be replaced.

Your authorized MasterCraft dealer has an extensive troubleshooting tree for ballast systems that includes parts of the system that are not accessible to the consumer. Because a malfunctioning ballast system can cause problems with the control of the boat, no potential issue that arises with the system should ever be ignored.



FASTFILL BALLAST PUMPS

PURPOSE

FastFill ballast pumps are designed to move water through the ballast system and into or out of ballast tanks nearly three (3) times faster than standard pumps.

LOCATION

Ballast pumps are mounted throughout the boat.

OPERATION

Fast fill pumps operate using either the helm mounted touch display or the manual ballast switches on the dash. For detailed operating instructions, see the “XT and XStar Dash/Screen Operations” section of the MasterCraft Owner’s Manual.

ANNUAL MAINTENANCE

MasterCraft recommends scheduling an appointment with an authorized dealer’s service department to have a certified technician perform all impeller changes. Ballast pump impellers should be changed every 100 hours as part of annual maintenance.

TO CHANGE BALLAST PUMP IMPELLERS:

1. Remove three (3) of the four (4) cover screws. Loosen the fourth screw. Retain the screws for the re-installation process. Swing the cover out of the way to allow access to the impeller.
2. Using needle-nose pliers, pull the old impeller out of the casing.
3. Lubricate the new impeller before installation using lubricant included in the package with the impeller kit.
4. Install the new impeller. It is intentionally larger than the casing in the pump. Gently squeeze it in, making sure the pump’s shaft aligns with the hub on the impeller.
5. Carefully slide the cover plate back into place. No silicone is necessary due to the built-in gasket on the plate. Tightening the screws should prevent leakage.
6. Run water through the ballast pumps. Ensure there are no leaks.



PYLONS

MODELS

All XT and NXT.

PURPOSE

When properly utilized, ski pylons allow skiers the opportunity to be towed behind the boat with a sensible and unobstructed view by individuals in observer seats.

LOCATION

Varies by model, but pylons are generally adjacent to or integrated within aft seating. (See the model features and specs section for specific model locations.)

OPERATION

See the Ski/Wakeboard Rope information under Additional Safety Support in this section of the Owner's Manual. Avoid tangling rope around the pylons or any other portion of the boat.



CAUTION

Ensure that removable ski pylons have securely snapped into place prior to use. Pylons that are not secure can become detached during operation. In these circumstances, the pylon could hit persons on board or skiers behind the boat, causing injury.

SPECIAL ATTENTION

Pop-up pylons are now standard on XT and NXT models. Push down and turn to elevate the pylon. Push down and turn to lock it back into place.

TROUBLESHOOTING

If the pylon will not lock into place, check for debris or other obstructions in the pylon housing. If the housing is clear and the pylon still will not snap securely, take the boat to an authorized MasterCraft dealer for service.

PLATFORM

MODELS

All models. Materials vary. Most models offer optional styles.

PURPOSE

The platforms provide easy access between the interior of the boat and the body of water. Care should always be taken by persons moving between the boat and the water. While the platforms have been designed to be slip-resistant, they may still become slick, and footing can become difficult. All movement should be done with that in mind. Failure to exercise caution can lead to injury. Also, boisterous play is inappropriate on the platform because injury can occur.

LOCATION

The platforms are attached to the boat transom.

CAUTION

Never allow boisterous behavior on the platform. A fall from the platform could result in contact with transom-mounted metal edges, which could cause minor to moderate injury.

DANGER

The platform has a maximum rated weight capacity of 1000 lbs. Exceeding this limit may result in serious property damage and personal injury. Your warranty most likely will not cover damages ensuing from a failure to follow our recommendations.

DANGER

PROPELLERS MAY CAUSE SERIOUS INJURY OR DEATH. Shut off the engine(s) when near persons in the water prior to using sun pads, platforms or boarding ladders.



OPERATION

Platforms may be permanently attached to the transom. However, some platforms feature a bracket that allows them to fold down, reducing the amount of room required for storage. To determine whether the boat is so equipped, look beneath the platform and see if there is a bracket with a pin. If so, the platform can be folded. To do so properly, follow these instructions:

NOTE: Platforms themselves are fairly heavy, and releasing the bracket may result in the platform falling down, and thereby striking the transom with excessive force. Please provide some kind of manual support to the platform at the time of releasing the bracket, and then slowly lower the platform into place for towing or storage.

NOTE: The surf tabs may also need to be lowered prior to lowering the platform.

FOLDING DOWN THE PLATFORM

Complete the following steps on the next page to lower the underwater gear and stow the platform.

NOTE: Ensure there is no tightness while the platform is being folded. There should be no binding during this action.

CAUTION

The platform must be raised and locked into position for transportation of the boat, as well as use of the platform while boating.



Fully Deployed Teak Platform

STEPS TO STOW A PLATFORM

Lowering or stowing the platform should be done with the boat out of water on either the trailer or a lift.

1. Ensure the engine is off and nothing is stored on the platform, and all surf tabs are lowered enough to access by hand.
2. Remove the surf tab pins by first pulling the D-Lock off the end of each barrel pin.
3. Manually lift each tab slightly and remove the barrel pin from the slot. Be sure to collect and save all pins. Slowly allow the tab to lower to a resting position before performing on the next tab.
4. With all tabs lowered, remove the platform bracket pins and store with the tab pins.
5. To lower the platform, begin by lifting the platform about four (4) inches upward while easing the platform away from the boat transom. This will allow the platform to move freely on the hinge so you can lower it into a stowed position.

WARNING

Leaving the platform down may result in damage to the boat transom during transport that will not be covered by the warranty.

2. Remove D-Lock from pin



3A. Lift tab and pull pin barrel



3B. Slowly lower tab





4A. Lowered Tabs



4B. Remove platform bracket pins



5A. Slowly lower platform



5B. Stowed platform

SECURING THE PLATFORM

Lift the platform to an angle of approximately 20 degrees from the boat. Lightly push the platform (do not shove nor jam) toward the transom to allow the platform to set in place.

Verify that the platform is in the locked position and will not fall down. Failure to verify that the platform is locked may result in the platform falling while someone is on it and could result in injury.

Insert one (1) safety hinge pin into each platform bracket.



The platform must be raised and locked into position. No one should be allowed on the platform until the platform is securely locked in place and the engine is OFF. Failure to do so may result in serious injury or death!

SPECIAL ATTENTION

MasterCraft reminds consumers to review the Common Sense Approach section of this Owner's Manual, and pay particular attention to avoiding "teak surfing" or "platform dragging," which expose the participant to excess carbon monoxide.

Carbon monoxide is a colorless, tasteless, odorless and poisonous gas that accumulates rapidly and can cause serious injury or death. Exposure to carbon monoxide can be fatal in a matter of minutes. Exposure to even low concentrations of carbon monoxide must not be ignored because the effects of exposure to carbon monoxide can build up and be just as lethal as high

concentrations. Carbon monoxide from exhaust pipes of inboard or outboard engines may build up inside and outside the boat in areas near exhaust vents, particularly during slow-speed operations. STAY AWAY from these exhaust vent areas, which are located at the stern of the boat, and DO NOT swim or engage in any watersports or other activities in or near the stern area of the boat, including, without limitation, the platform and the aft sun deck, when the engine is in operation.

Under no circumstances should the owner and/or operator allow persons to hold onto the platform while the engine is operating and the boat is in motion. These activities (sometimes known as "teak surfing" or "platform dragging," where the participant holds onto the platform and is pulled through the water, and/or "body surfs" immediately behind the boat) are extremely dangerous, highly likely to result in death or serious bodily injury, and are a misuse of this product.

ADDITIONAL SPECIAL ATTENTION

Platforms, especially those that feature teak wood, require consistent maintenance to retain luster and finish (see the Care and Maintenance section of this Owner's Manual for important care requirements). Failure to follow instructions can result in damage to the platform that is not covered under warranty.

If at any time the platform does not feel secure (there should be no noticeable movement or "play" in relation to the rest of the boat), immediately leave the platform. Verify that, whether permanently attached or held in place with brackets, the platform is fastened as designed. If it is not, stop using the platform and take the boat to an authorized MasterCraft dealer for repair.

SWIM STEP USAGE

Deploy the Swim Step by releasing the latch located at the center of the platform recess, situated at the forward most point of the Swim Step. Ensure that everyone is clear of moving parts and lower the Swim Step to the fully deployed position. Using a three-point contact, ascend onto the platform. To return the Swim Step to storage, hold firmly to the aft and Swim Step, lift the Swim Step up and rotate it back to a stowed position, while also avoiding contact with the metal components. To secure the Swim Step in a stowed position, the latch can be retracted, thereby, enabling an effortless locking or it can be forcibly closed by slamming it closed (for example “shutting a door”).

Note: Only offered on fiberglass platforms options, however, it is not available on all models.



TEAK PLATFORM CARE

ALL WOOD PLATFORMS

If shoes are worn when walking on teak wood platforms, they should be proper boating shoes. Black-soled shoes are likely to scuff the surface, resulting in marks that may be difficult or impossible to remove. These marks or stains are not covered under warranty. To maintain its original appearance and finish, teak wood will need regular cleaning and oiling. Unprotected wood will turn gray and could split or separate. If this happens, it may void the warranty.

New wood platforms have been sealed and finished with an oil-based, wood preservative by the manufacturer. Platforms will keep a new look and last for many years if properly maintained. For best results oil the platform and allow it to dry before the first use. If the boat spends a lot of long weekends on the lake with the platform in the water, or if the platform sits uncovered in the sun, it will need to be oiled more often. The platform should be covered when not in use or when stored for the winter.

TO OIL THE PLATFORM:

Before oiling the platform, you will need teak, tung or linseed oil.

1. Before applying teak, tung or linseed oil to seal and protect the platform, the wood should be cleaned and with a mild soap and water mixture. Harsher cleaners can damage and strip the wood's finish.
2. Use a stiff bristled brush or rag to clean away dirt and stains. After cleaning, pat the platform as dry as possible with a clean towel, then let the platform air dry.
3. Use a cloth or brush to saturate the platform with teak, tung or linseed oil (front, back and edges). Push the oil into all cracks, crevices and end grain.
4. Let the platform dry in the shade for 30-45 minutes. After the platform has had time to soak in fresh oil, use a soft cloth to gently buff off all excess oil that does not soak into the platform.

OILING THE TEAK PLATFORM

The teak platform will require additional frequent maintenance if it is regularly exposed to direct sun or water. In most cases, the platform will require maintenance when it gets a dry frosted look, or when it quits easily shedding water. A platform that gets a lot of sun and water may need oil 1-2 times a month for the first year. If the platform starts to get a tacky or gummy feel, oiling may be too frequent and the platform should be oiled less often.

SKI RACKS

MODELS

ProStar, as an option.

PURPOSE

The ski racks provide a sleek and attractive method to store skis in the gunwales on both sides of the boat interior. These ski racks are constructed with anodized aluminum and particular attention must be paid to prevent corrosion. See Corrosion in the Care and Maintenance section of this Owner's Manual.

LOCATION

The ski racks are mounted to the inboard of gunnel.

OPERATION

The ski racks operate easily by tapping the lower bar of the assembly. Holding down on the bar keeps the ski rack holder open for easy access or storage of the skis. Releasing the lower bar closes the rack and holds the skis in place. Prior to operating the boat, always check that the skis are secure in the rack. Failure to do so could result in a ski or skis becoming dislodged during boat operation. This could result in the skis striking individuals seated in the aft portion of the boat or the skis going overboard.



CAUTION

Always verify that skis stowed in the ski racks are secure prior to operation of the boat. Otherwise, skis may become dislodged and strike passengers in the aft section of the boat or the skis going overboard.

TOWERS

MODELS

The Z tower is featured on all NXT, XT, X, and XStar models. There are multiple tower varieties depending on model. ProStar has its own unique tower.

PURPOSE

Towers provide many benefits. Their high tow points make them a great resource for watersport enthusiasts, while their supplemental lighting, storage space, camera, and stereo output contribute ambiance and comfort. For these reasons, many boat owners consider towers to be an invaluable feature.

LOCATION

Towers are located amidships. For the locations of specific tower components, see the section of this chapter focusing on the model in question. For the locations of accessories and addons, see the "Tower Accessory Options" section of this chapter.



OPERATION

The Z6 is operated using a lock-pin mechanism, while the Z8, Z9, and Z100 utilize hydraulic support. For detailed instructions on how to use a specific model, refer to its respective section in this manual.

CAUTION

Because Z towers are specifically designed and tested for our boats, MasterCraft discourages installation of after-market towers. After-market towers may lead to damages and will void the warranty. We urge owners to buy towers and related accessories from an authorized MasterCraft dealer.



Z6 Tower Bimini Stowed

RAISING AND LOWERING THE PROSTAR TOWER

Lowering (Leaving the Tower Attached):

- While applying some upward/forward pressure on the tower header (top red arrow), disengage one of the hand knobs on the tower leg (black arrow).
- Repeat for the other side (or a second person can do this simultaneously). Note: Typically, it is easier to disengage both sides first compared to completely removing one knob and then disengaging and removing the second. The angled thread on the knobs can put the tower/threads in a bind.
- Completely unscrew the hand knobs until they are disengaged (a spring pushes them out).
- Fold tower back and rest it on the motor box (or the tower stands included with the boat to protect upholstery). Some padding is advised to protect adjacent surfaces.

If Removing, Follow These Additional Steps:

- Pull excess wires out from under the deck.
- Disconnect the light wires. Note: On the tower side, fold the wires and push them up into the tube. On the deck side, fold/loop the wires up and stuff them back into the access hole.
- Looping the wires up so they create pressure against the deck/hole will provide additional resistance to help prevent them from falling down.



CAUTION

Do not plug the wires together. This will act as a direct short if the light switch is turned on, resulting in a tripped circuit breaker.

- If this happens, the side access panel will have to be removed to re-route them through the access hole.
- Ensuring the wires are clear, stand the tower all the way back up to its normal operating position.
- From the back side of the tower, push the base of the tower leg forward.
- It should easily slide about 1/2" before catching on a small, raised feature intended to keep the tower from sliding out too easily and the operator losing control of it.
- A small push or bump with the palm of your hand should be enough to fully disengage the locking clip

- Be careful not to push/strike the tower hard enough that it falls on you. Very light pressure with your other hand on the upright should prevent this from happening. Too much pressure will possibly prevent the clip/foot from sliding and disengaging.
- Repeat on the other side.
- Remove tower from the boat.

If desired, the locking hook can be stowed in the tower mounting base:

- Push the hook forward in its groove, until it will fold sideways towards its stowed position.
- Collapse the locking clip in order to completely stow.

Installation is essentially the reversal of the removal, assuming the hook is stowed:

- Collapse locking clip and rotate out of the stowed position.
- Spring load will push the hook to the back of its groove. Note: Take care that you don't pinch your fingers!
- Place tower in front of the hooks in the upright position.
- Pull each tower foot back into the hook.
- Rotate tower back to hook up navigation light.
- Connect the light wires.

- Feed all of the excess wires and connectors below the deck through the access hole.
- The remaining wire should be straight.
- Slowly stand the tower back up, keeping an eye on the wires and ensuring they don't get pinched.
- Make sure that both tower feet/hooks are all the way to the back of the groove. If they are not, the hand knob threads won't be aligned.
- Get one hand knob started and threaded most of the way in. Note: If the threads don't start easily, it could be that the tower is in a slight bind. Back off the hand knob or lightly bump the tower/foot to free the bind before continuing to tighten.
- If you have two (2) people, starting and tightening together is easiest.
- Start the second hand knob and tighten until it is snug.
- On the other (original side), put a moderate amount of forward pressure on the tower header while torquing the hand knob tight.
- Repeat the previous step on the second side. Note: These last two steps are important to ensure that the tower does not come loose during operation.

THE Z6 TOWER

The Z6 tower uses a mechanical locking mechanism which requires full manual operation when raising or lowering.

The Z6 locks into place using a quick release handle. After disengaging the locking handle on both sides of the tower, the user applies upward force to bring the tower into standing position. Once the tower is upright, the user reengages the locking handle to secure the tower.

To raise the Z6 tower:

1. Disengage both locking handles in order to unlock the tower.
2. With the locking handles disengaged, apply upward pressure to the tower header until the tower stands upright.
3. Close the locking handles once the tower reaches standing position.

To lower the Z6 tower:

1. Remove all boards from the board racks. Fold the racks to the inward position.
2. Disengage the locking handles from either side of the tower.
3. With the handles unlatched, put gentle downward pressure on the top of the tower until it reaches the down position.
Note: The level of difficulty raising and lowering the Z6 tower depends on how many accessories are affixed to it. If it has only board racks it will be easier to raise and more difficult to

lower, if it has four tower speakers it will be more difficult to raise and easier to lower for example. If the tower starts to fall when the latches are released or the assistance from the gas spring is less than normal visit an authorized MasterCraft dealer to have the gas springs inspected.

4. Close the latches to secure the tower.

WARNING

Always reengage the locking mechanism on both sides of the Z6 immediately after raising or lowering the tower. Failure to do so could result in the collapse of the tower, causing serious injury or death. The tower could also be damaged if left upright or down without the locking latches locked and secured.

CAUTION

When setting up the Z6 tower, it is sometimes advisable to receive assistance from another individual. Depending on the weight of the tower, assistance may reduce the chances of damaging the tower or the boat itself. In general, you should exercise caution when lifting any MasterCraft tower.

⚠ WARNING

The tower may fall if gas springs are defective or tower is overloaded.. Be prepared to support the tower's weight for the entirety of the set-up procedure, from standing to resting position. Damage inflicted by mishandling of the tower may not be covered under warranty. Follow the instructions as stated in this manual.



THE Z8 TOWER

Unlike the Z6, the Z8 is augmented with hydraulic fluid support. The unique assembly of the tower leg decreases the amount of effort needed to raise or lower the tower. When the operator pushes the release on the header box, solenoids are electrically powered, allowing it to rotate. The operator may then raise or lower the tower while keeping their finger on the release.

Note: MasterCraft discourages the addition of after-market speakers to the Z8. After-market speakers may increase the amount of force needed to lift the tower, impacting the amount of gas assist needed for the Z8 to easily raise/lower. If you choose to install after-market speakers, consult an authorized dealer beforehand. It may be necessary for MasterCraft to alter the gas assist and keep the raising/lowering effort within reason. A trained professional should perform this service for you.

To raise the Z8 tower:

1. Identify the release button on the tower header box. Pressing this button will activate the hydraulic fluid system in the tower leg, freeing the tower and allowing it to rotate.
2. Press and hold the release button.
3. While pressing down on the release button, exert upward force on the tower to bring it into full standing position. Note: The tower will lock in place if you lift your finger from the button.
4. Once the tower is fully upright, let go of the button. The tower will lock in place, no additional steps needed.

To lower the Z8 tower:

1. Ensure the board racks have been swiveled safely inboard.
2. Identify the release button on the tower header.
3. Press and hold the release button.
4. With one hand supporting the header and the other pressing the button, begin to pull aft and downward on the tower. It will begin to decline into the resting position.
5. Fold the tower while keeping your finger on the release button. When you are done, lift your finger from the switch.

Rotating Board Racks Inward



THE Z9 AND Z100 TOWER

The Z100 and Z9 (only available on XStar and X series respectively) feature a hydraulic pump that allows the operator to raise and lower the tower at the press of a button. The towers are controlled using a rocker switch located at helm or near the transom of the boat. XStar and X series offer both locations.

To raise the tower:

- Press and hold the **TOWER UP** switch, letting the internal hydraulic pump raise the tower into the deployed position.

To lower the tower:

- Press **TOWER DOWN** and let the tower decline. Always ensure the racks have been swiveled fully inboard prior to operation.

⚠ WARNING

If the Z6, Z8, Z9, or Z100 towers are not positioned fully upright, you should not tow individuals. Doing so may result in injury or death.

⚠ CAUTION

When operating Z6, Z8, Z9, and Z100 towers, individuals should keep all body parts, especially fingers, away from hinge areas.

⚠ DANGER

Always ensure that there are no people, power lines, or objects in the way when raising or lowering the tower. Individuals and their limbs may be subject to injury if caught in the tower's path. Please note with special consideration that MasterCraft has carefully determined the maximum amount of weight and total accessories that the tower can safely hold. Ignoring this information could result in injury to the operator and/or passengers.

⚠ WARNING

85 pounds is the maximum aggregate weight allowed for accessories mounted on the tower. Exceeding this restriction can result in tower failure, which could cause serious injury or death to the operator and/or passengers.



Raise/Lower Button for Z100 Tower

Rotating Board Racks Inward



TROUBLESHOOTING

In rare cases, the Z6 pull-pin locking mechanism may have trouble engaging. This is a result of misalignment and may lead to scarring. If the locking mechanism on your Z6 does not engage properly, take it to an authorized MasterCraft dealer for inspection.

If the Z8 and Z100 towers do not respond to the switch, verify that the circuit has not tripped at the cylinder/pump. If it has not tripped at the cylinder/pump, examine the breaker board. (See the chapter “Basic Electrical Components” for information on breakers.) If the tower is still unresponsive after toggling the breaker, you should take the boat to an MasterCraft dealer.

Although Z towers are sturdy, well-designed equipment, you should know what to do in the unlikely event that a tower causes damage or exhibits signs of insecurity. If there is evidence of tower-induced damage to the deck (such as gel coat cracking) or insecurity (such as unsteadiness), stop using the tower and take it to an authorized dealer for closer inspection. The dealer will be able to diagnose repairs. If the damages appear to have been inflicted by the owner's actions, warranty may not cover the repairs.

If you have any questions regarding the hydraulics used in the Z8, Z9, and Z100 towers, contact an authorized MasterCraft dealer. The dealer can provide information from the OEM manufacturer regarding installation instructions, system diagrams, part

numbers for hoses or fittings, thread sealant, hydraulic fluid, pump filling processes, test procedures, operating pressure, alternate means of operation, maintenance, and/or troubleshooting.

WARNING

Occupants of the boat should never stand on, sit on, or jump from the tower. MasterCraft towers should only be used for approved sport towing. See the “Safety” chapter of this Owner's Manual for a list of approved activities.

WARNING

Immediately stop using the tower if it appears to be unsteady, insecure, or shows signs of gel coat cracking or other stress near the tower legs. Continuing to use the tower under these conditions could result in serious injury or even death. An authorized MasterCraft dealer must determine if the damage can be repaired. If the damage is the result of misuse of the product, such damage will not be covered under the warranty policy.

TOWER ACCESSORIES

MODELS

Aside from the ProStar tower, all tower models feature lights, speakers, and board racks as optional accessories.

Board racks are available in two types: essential and supreme.

Standard board racks accommodate up to 4 wakeboards (or 4 thinner surfboards) at a time.

XL board racks accommodate up to 4 wakeboards or 4 surfboards at a time. XL board racks are available as an optional upgrade for all models.

The tower hook comes standard on the Z9 tower. It is NOT a tow point. It can be removed and the Standard or XL board racks can be easily installed.

Four speaker options are available to the consumer: the M80, S85. The M80 is the default speaker for NXT and XT towers. The S85 is an optional upgrade for Z8 towers (XT).

Various lighting accessories are also available to the consumer. Dome lights are small, circular lamps in the header box. Speaker light rings available on M80's.

PURPOSE

Tower accessories increase general comfort and convenience. Lights improve visibility during low-light situations, illuminating the aft deck, platform, and nearby waters. Speakers enhance the quality of music and other audio entertainment. Board racks keep the deck clear of surfboards and wakeboards, increasing the amount of available space in the cabin.

LOCATION

All options are mounted to the tower. Board racks are found on the tower arm. The dome light is attached to the header box. Speaker can lights run along the bottoms of the tower cans.

OPERATION

Lights: To activate speaker lights, use the lighting tab on the touchscreen. To adjust speaker lights, use the illumination brightness dial to adjust brightness and the RBG controller to adjust color if equipped. To activate the dome light, push up on the light until it activates. (For more information on lighting accessories, see the chapter on "Visual Assistance".

Speakers: Tower speakers are controlled using the audio settings found on the dash touchscreen. For more information, consult the "Screen Operations" chapter of this manual.

Board Racks: Operate the racks using the black-and-red lever on the back. To open the clamps, press the red release button; the clamps will open. To close, push the lever upward until it seats fully and the red lock button clicks into place, then release the button.

Ensure the board is securely clamped before operation to prevent movement. Use only properly fitting boards, as an improper fit may result in a loose hold. The manufacturer is not responsible for any resulting loss, damage, or injury.

Tower Hook: If board racks are not installed, MasterCraft provides a tower hook for hanging gear to dry and keep it out of the cockpit. The tower hook and board rack options share the same mounting interface and are interchangeable. The tower hook is NOT designed or rated for use as a tow point under any circumstances.



COMFORT & CONVENIENCE

STEREO COMPONENTS

MODELS

Standard on all models.

PURPOSE

The stereo system provides enhanced enjoyment of the boating experience. The system includes a stereo AM/FM radio, remote controls, USB, Auxiliary and Bluetooth connections, and may include a sub-woofer.

LOCATION

The stereo system operates through the touch screen displays on dash.

Optional remote controls are available for mounting to the transom of all models. The USB plug-in is located on the throttle panel for all stereo configurations. Sub-woofer and amp locations vary by model. (See the 2027 Model Features & Specs of this Owner's Manual to determine the location for your model.)

SPECIAL ATTENTION

Tampering with the factory audio setup on any stereo-related equipment will void the manufacturer's warranty, and will cause the system to malfunction. The system is set up such that aftermarket stereo equipment cannot be added to the system. DO NOT attempt to add after-market stereo equipment to the boat. Stereo upgrades can be performed by your dealer in certain circumstances. Contact your authorized MasterCraft dealer for more information.

OPERATION

The stereo and components come with a separate manual explaining operation of the devices. Please review and become familiar with these manuals and the stereo equipment.

The USB interface option allows the unit to simply be plugged in and run off the boat's electrical system. USB plug-ins are mounted below the throttle on the throttle panel.

Be aware that all such devices are a drain on the boat's battery and electrical system. Care should be taken to avoid excessive usage of such devices and by responding to any alarms that sound so that the boat's battery(ies) do not become fully discharged.



Bow Speaker



Tower Speaker



Cockpit Speaker

TELEMATICS SYSTEM

MODELS

All

PURPOSE

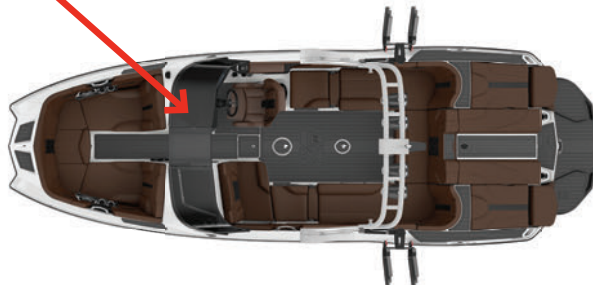
The revolutionary system that encompasses the use of signals from boat sub-systems related to safety, functionality, mobility and convenience of the vessel and operator, which provides means of vessel tracking, dealership connection and remote system monitoring, via an in-built cellular network to help maximize owner's time on water.

LOCATION

The telematics unit (box) is located under the Bow Seat in the electrical department (ProStar is an exception where the device is located under the instrument cluster). The device is secured to the deck wall utilizing approved fasteners.



Telematic Box Location

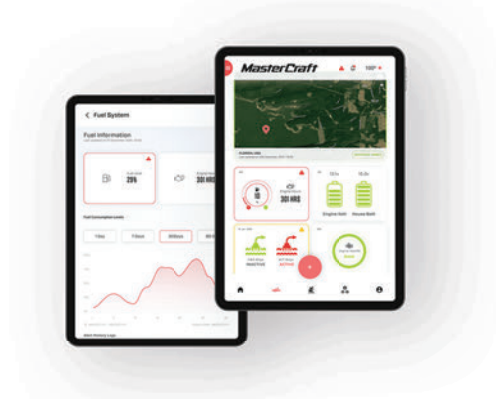


OPERATION

The vessel signals will be transmitted using the cellular modem on the telematics device. The MasterCraft cloud processes the data to provide meaningful insights to the vessel operator and dealer.

For all models, the app insights from telematics includes:

- GPS Vessel tracking and geofencing alerts
- DTCs (Diagnostic Troubleshooting Codes)
- Engine DTCs
- Battery monitoring (house and engine)
Note: ProStar is single battery
- Battery switch notification
- Bilge activity (forward and aft bilges)
- Bilge+ Fuse status/alarms
- Fuel level and engine hour information
- Fire extinguisher monitoring



Download the MasterCraft CONNECT app by scanning the QR code below that is compatible with your device operating system.

Telematics display on MasterCraft CONNECT



Apple



Android

WIRELESS CHARGING

MODELS

Two types of wireless charging devices are found on MasterCraft boats: wireless helm chargers and wireless cockpit chargers. The wireless helm charging system is a standard feature on all models. The wireless cockpit charging system is optional for NXT and XT models, and it comes standard on X and XStar models.

PURPOSE

The wireless charging system provides convenient charging for compatible smartphones while on the water.

LOCATION

The wireless helm charger is located at the helm of the boat, inside the helm phone holder. Wireless cockpit chargers are located inside a pair of plastic phone holders directly above the drink holders in the port and starboard side compartments.



Wireless Cockpit Chargers



Wireless Helm Chargers

OPERATION

To use one of the wireless chargers, simply place your phone in the phone holder. The phone should immediately begin to charge. If it does not charge, remove the case and try again.

GLOVE BOX

MODELS

The glove box is a standard feature on all models.

PURPOSE

The glove box provides easily accessible storage space for small items. MasterCraft recommends that you keep this Owner's Manual in a water-resistant plastic bag inside the glove box so that it is quick to find in the event that troubleshooting for any part of the boat is required.

LOCATION

The glove box is located on the port side of the dash, forward of the observer seat.

OPERATION

The design of the glove box varies depending on the model. All have a closable lid. To open the glove box lids that feature a recessed button, simply push in on the button. A twist knob will pop up. Twist the knob to disengage the lid from the box.



NXT Glovebox

SPECIAL ATTENTION

Glove box lids should always be closed and latched any time the boat is in operation. While the boxes are water resistant, if the lid is not latched securely water can intrude and cause damage to anything inside the glove box. MasterCraft is not responsible for such damage. Any items placed in the glove box that cannot or should not become wet should be placed in water tight containers before placing them inside the glove box.

TROUBLESHOOTING

Any time the lid will not close and latch properly, see an authorized MasterCraft dealer. If it is not properly closed, damage could occur to the lid.

HEATER

MODELS

All models, as an option.

PURPOSE

Warmed air from an electrically powered heater box will be blown from vents within the boat deck, to keep occupants warm.

LOCATION

Heater vent locations vary by model, but all are located within the cockpit. They typically reside in the driver's floor, either side of the cockpit in the cup holder inserts, and/or on the observer dash near the glove box. A heater tube and vent is typically installed near the floor.

OPERATION

The heater is controlled through the dash. It has two settings HIGH and LOW. Tap the heater button to turn the heater ON LOW. Tap the button again to turn the heater ON HIGH. Tapping the heater button again turns it OFF. The heater can only be operated with the engine ON. This prevents battery drain.



Starboard Cockpit Heater Vent



Port Cockpit Heater Vent

SPECIAL ATTENTION

In regular use, the heater should not require any routine maintenance. However, it is advisable to avoid placing items in front of the vents, particularly when the heater is in use. The heated air coming out could cause damage. Never run the heater in a confined space, such as a garage or shop. Running the heater requires also running the engine; fumes from the engine can be deadly. See also the Common Sense Approach in the Safety section of this Owner's Manual regarding carbon monoxide danger. See the Storage and Winterization section of this manual for winterization instructions.

TROUBLESHOOTING

If the heater fails to respond when the switch is turned to either of its ON positions, check on the main circuit breaker panel to ensure that the circuit has not tripped. If resetting does not correct the problem or if it continues to trip, take the boat to an authorized MasterCraft dealer for repair.

WARNING

Carbon monoxide is emitted from the engine's exhaust system. Never run the engine without proper ventilation. Do not run the engine in a confined space or where fumes may be trapped.

SEAT HEATERS

MODELS

Optional on all models for driver's seat; certain models for observer's seat.

PURPOSE

The seat heat option allows equipped seats to be warmed to temperatures above those of the ambient air.

LOCATION

The electrical seat-heat mechanisms are located inside equipped seats. The seat heat switch can be found in the helm mounted touchscreen on the Dual Screen Dash. In some models, an optional observer seat heat switch will also be found in the helm mounted touchscreen.

CAUTION

Do not leave unattended, open food or other materials that could melt, on a seat equipped with a seat heater that is or will be turned ON. The additional heat could cause melting, resulting in a stain or other damage that is not covered under warranty.

OPERATION

To turn the seat heater(s) on in XStar, X, XT, & ProStar, navigate to the accessories page on the dash mounted touchscreen. Tap seat heat button to turn the seat ON. The button will change colors to show that the seat heater is ON. Note that the seat heater will only operate with the engine is running. In NXT, the heated seat switch is a physical rocker switch at the helm. The heated observers seat on the ProStar is also a physical switch mounted on the port side of the boat in reach of the observer.

SPECIAL ATTENTION

Do not leave open food, sun tan oil, or other materials on the seats if the seat heat function is ON. Although the heat does not exceed a temperature at which skin can touch without burning, the additional heat could cause some types of food or other materials to melt, causing a stain or damage that is not covered under warranty.

TROUBLESHOOTING

If the seat heat system does not work when the switch is ON, check at the main circuit breaker panel to ensure the circuit has not tripped. If so, reset. If the seat heater(s) still does not work or if the circuit continues to trip, take the boat to an authorized MasterCraft dealer.

ANCHOR

MODELS

Anchors are optional on all models, except NXTs and ProStar.

PURPOSE

The anchor allows the boat to be temporarily moored in relatively shallow water. Note that standard equipment does not include the line for the anchor. This is because needs will vary considerably by location of the body of water. The general rule of thumb is that the boat owner should purchase anchor line from a marine aftermarket company at a length about three-to-four (3-4) times the depth of the body of water in which the boat will be moored.

LOCATION

Some models are equipped with anchors, and there will be a designated storage area or stowage location on the boat, normally in the forward area of the bow. Check with your dealer if you are uncertain about this area because it is important to keep the anchor stowed when it is not in use. In some instances, ladders may also be stowed in this location.

**Always tie off at the bow.
Never solely tie off to any aft position.**



Bow Anchor Locker

OPERATION

MasterCraft anchors are manually operated. The anchor has a storage compartment at the front of the bow. After purchasing and securely attaching a line manufactured to be used in a marine environment as an anchor line, open the anchor storage compartment and remove the anchor. Drop the anchor over the side, ensuring that the anchor does not make contact with the boat deck or hull, as such contact could cause damage to the gel coat, which is not covered under warranty. Also, use care in retracting the line and anchor to avoid damaging the deck or hull. Swimmers or

anyone in the water in the area of the bow should remain aware of the anchor line anytime it is deployed. Even if it appears taut, an individual could become entangled in the line underwater, which could result in injury or death. It is also possible that people could cause the anchor to lose anchorage, causing the boat to move. If there is a current, the boat could become inaccessible to people in the water.

CAUTION

The anchor has been provided to assist boaters in remaining in a chosen location. Boats should always be tied off to the bow and never solely to the aft. Note that use of the anchor system will not guarantee a properly anchored boat or that the boat will remain in a stationary position. Environmental, bottom conditions, current and tidal conditions must be taken into consideration when anchoring the boat. Only properly trained operators should set the anchor for this system. Establishing a secure anchorage requires practice. Damage to your boat may result due to improper anchoring techniques.

WARNING

Whenever the anchor line is deployed, individuals in the water nearby should avoid the line. Disrupting the line could cause the boat to move away from the chosen anchorage location. It is also possible that individuals could become entangled in the anchor line. If underwater, this could result in serious injury or even death.

SPECIAL ATTENTION

MasterCraft suggests that operators monitor and verify the rewinding process to ensure that the line retracted in a smooth and even fashion. Anchors should never be pulled aboard and left on-deck because this can lead to a variety of potentially dangerous situations.

TROUBLESHOOTING

If the anchor line has been improperly rewound, have an authorized MasterCraft dealer assist in deploying and rewinding the line to its appropriate berth.

WARNING

Improperly stored anchors and/or anchor lines that have been improperly rewound may create a hazardous situation. People on-board can trip on improperly stored materials, which can result in injury. Improperly stored materials can also move too freely during boat operation and make contact with individuals, again causing injury. Properly store all anchors and lines whether the boat is in operation or not, any time the anchor and line are not in use. Never operate the boat with the anchor line deployed.

CANVAS COVERS

MODELS

MasterCraft offers several different styles of canvas covers for varying uses on all models. Bimini tops are designed to provide protection from the sun while operators and passengers are out on the water. Mooring or towing covers protect MasterCraft boats from the elements while towing, docked, or in storage. Your MasterCraft boat comes standard with a cover and a bimini.

OPERATION

Most covers are intended for use when the boat is moored or stored. These canvas covers will snap or ratchet into place. For information regarding bimini covers see the bimini section immediately following.

SPECIAL ATTENTION

MasterCraft strongly recommends that only authorized MasterCraft dealers perform the installation of snap-on canvas such as cockpit and tonneau covers. Improper installation of these covers can cause “crazing,” unwanted spider web-like cracks in the gel coat. Such damage is not covered under warranty.

ADDITIONAL SPECIAL ATTENTION

On-going care is required to keep canvas material in good condition for the life of the boat. See Cleaning the Boat section of this Owner's Manual for more information. Note that towing with unapproved covers on the boat may result in damage to the gel coat. MasterCraft recommends using only approved towable mooring covers when towing. Other canvas covers are available only through authorized MasterCraft dealers for a variety of uses.

CAUTION

The use of canvas covers, especially dark colored ones, in hot, sunny conditions, can result in temperatures inside the boat in excess of 140°F/60°C. Prolonged high temperatures can heat interior metal and other surfaces to the point that brief contact with the skin may cause serious burns. Carefully remove the cover and allow the interior to ventilate and cool before allowing anyone on board.

NOTE

MASTERCRAFT MOORING COVERS HAVE TAGS DIRECTLY SEWN INTO THE BOW HULL TO EASE INSTALLING THE COVER ONTO YOUR BOAT.



Tension Pole Deck Mount Access



Pass-through Design, Buckles Through the Stern Eyes

Padded Transom Zippered Ratchet Case



Fuel Fill Access



Fuel Fill Access



Speaker Can Covers



Platform Cover Installation



Platform Cover



Platform Cover Installation

STANDARD BIMINI CANVAS

MODELS

All MasterCraft models come standard with a bimini and certain models offer a premium upgrade option. Each tower style has a bimini designed specifically for that tower (ProStar windshield mounted).

PURPOSE

MasterCraft's bimini is designed to enhance comfort and protect boaters from the sun's rays while on the water. Store up to 6 boards on select models.

LOCATION

Bimini tops are designed and built to match each of MasterCraft's tower options. The bimini is integrated into its respective tower and will usually cover the helm and/or midsection of the boat. Bimini legs and canvas fold to allow minimal wind resistance when towing, during storage or when riding across a body of water at high speeds. When folding the bimini up or down, be careful to avoid pinching fingers between the support legs.



Z6 Tower Bimini Deployed

OPERATION

See each tower's respective bimini section immediately following this section.

WARNING

When trailering a boat or when operating the boat at high speeds, fold the bimini down to reduce wind resistance. High speeds put large amounts of air pressure on the bimini legs and can cause them to collapse causing serious injury and damage to the boat.

Z6, Z8, Z9 (X SERIES), Z100 BIMINI

MODELS

All boats equipped with a Z6, Z8, Z9, or Z100 (XStar) Tower. Though the biminis look slightly different, they function identically.

PURPOSE

The Z6, Z8, Z9, and Z100 biminis cast shade on the cockpit of the boat to keep occupants cool and protected from the sun's rays.

LOCATION

Integrated into the Z6, Z8, Z9, and Z100 (XStar) towers.

OPERATION

Biminis come pre-installed from dealers on all models.



Z6 Tower Bimini Stowed



Z8 Tower Bimini Stowed

TO DEPLOY THE Z6, Z8, Z9 (X SERIES) OR Z100 (XSTAR) BIMINI

For balance, it is suggested that operators have an additional person assist when raising or lowering a bimini top.

1. Unzip and remove the bimini boot cover
2. Unclip all clips securing the bimini legs to one another
3. Unfold to deploy the bimini. It folds forward, away from the tower
4. Zip all of the zippers on the aft portion of the canvas around the forward most tower tube
5. Buckle all straps around the tower loosely
6. Fully extend the bimini legs and ensure that they are locked into place
7. Tighten all straps and buckles around the tower so that the canvas is stretched tightly around the tower.

Collapsing the bimini is the opposite of deploying it:

1. Unlock the bimini legs and let them fold forward loosely
2. Loosen and unclip all buckles around the tower tubes and supports
3. Unzip all zippers around the tower tubes
4. Fold the bimini and canvas up to the tower
5. Use the gray leg clips to keep the bimini legs locked together
6. Cover bimini with the protective boot, then zip the boot around the canvas



BIMINI FEATURES

BOARD STORAGE

Above storage with elastic straps (can easily store up to four boards on top). Protective nose pocket and adjustable velcro straps for under Built in rope storage - zipper accessible from top and bottom

Do not store boards above bimini at night to ensure anchor light visibility.

TROUBLESHOOTING

Should the bimini ever bind or become locked in either the stowed or deployed position, MasterCraft recommends that the bimini be taken to an authorized MasterCraft dealer for repair. Improper use may bend or deform the bimini frames, or may rip the bimini canvas. Misuse is not covered under the warranty.



PROSTAR BIMINI

MODELS

ProStar

PURPOSE

The ProStar bimini casts shade on the cockpit of the boat to keep occupants cool and protected from the sun's rays.

LOCATION

Mounted to the ProStar's windshield.

OPERATION

For balance, it is suggested that operators have an additional person assist when raising or lowering a bimini top.

To install the ProStar bimini:

1. Let the bimini canvas rest on top of the motor box with the legs facing towards the bow of the boat.
2. With another person, line up the main bimini legs (the longest leg on both sides of the bimini) with the mounting brackets on the port and starboard sides of the windshield frame. Ensure that the ball joint is facing upwards (see photo).
3. Insert the ball joint into the bracket and insert the pin to lock the bimini legs to the mounting bracket. To ensure proper orientation see the photo below.
4. The bimini should rest on the support poles supplied at delivery.



TROUBLESHOOTING

Should the bimini ever bind or become locked in either the stowed or deployed position, MasterCraft recommends the bimini be taken to an authorized dealer for repair.



To deploy the ProStar bimini:

1. With the main bimini legs mounted to the windshield, lift the topmost portion of bimini frame forward (the rest of the bimini and frame will follow) until the main bimini leg touches the top corners of the windshield.
2. With some upward pressure on the main bimini leg, slide the secondary mounting ball joints down into the top of the windshield's corners.
3. Fully extend the bimini supports on either side until they lock into place. Ensure that the bimini supports lock into place before operating the boat.

To stow the bimini:

1. Unlock the bimini support legs.
2. With upward pressure on the main bimini leg, slide the secondary mounting ball joint upwards on the bimini leg until it is clear of the windshield.
3. Fold the bimini down to rest on the support poles.
4. Wrap the bimini boot cover around the bimini and zip closed.

PREMIUM CAGE BIMINI

MODELS

The cage bimini is available on X and XStar models only.

PURPOSE

MasterCraft's cage bimini is designed for comfort and convenience. Store up to 6 boards with BUBS installed.

LOCATION

The cage bimini is specifically designed to fit the Z9 and Z100 towers and is integrated into the electronic actuation.

OPERATION

The cage bimini operates simultaneously with the tower using the up/down button. Raising or lowering the tower initiates automatic deployment or retraction of the bimini on its own cycle. Refer to the next page for additional operating details.



WARNING

Remove canvas for trailering above 45 mph unless an over-tower cover is used.

TO DEPLOY THE Z9 OR Z100 CAGE BIMINI

1. Press and hold the tower UP button.
2. A single continuous press is required to maintain synchronization between the tower and cage.
3. Do not release or repeatedly press the button during travel.
4. The cage has a slight intentional delay relative to tower movement.
5. Continue holding until the tower reaches full UP position.
6. Keep holding the UP button for an additional 3-4 seconds after full tower extension to ensure full cage deployment.

TO RETRACT THE Z9 OR Z100 CAGE BIMINI

1. Press and hold the tower DOWN button.
2. A single continuous press is required to maintain synchronization between the tower and cage.
3. Do not release or repeatedly press the button during travel.
4. The cage has a slight intentional delay relative to tower movement.
5. Continue holding until the tower reaches full DOWN position.
6. The tower is expected to contact the landing pads before full cage retraction is complete.
7. Continue holding the DOWN button until the cage fully retracts and reaches its final position.
8. The system will pull the cage down to the required level of interference, depending on operator application.
9. Ensure contact/interference with landing pads is appropriate for the intended use condition (minimal for trailering).

NOTE

DO NOT LEAVE CANVAS INSTALLED FOR LONG-WINTER STORAGE IN WET ENVIRONMENTS DUE TO MOLD AND MILDEW RISK. REMOVE THE CANVAS FOR TRAILERING ABOVE 45 MPH UNLESS AN OVER-TOWER COVER IS USED.

TO INSTALL THE Z9 OR Z100 CAGE BIMINI CANVAS

1. Deploy the tower/cage to approximately 25% UP position for topside installation access.
2. Position canvas with the front buckles facing forward and the aft “V” section aligned aft.
3. Secure the port and starboard aft straps/buckles to the aft longitudinal tubes.
4. Pull canvas around the aft corners and forward over the forward longitudinal tubes.
5. Gradually tighten each ratchet strap. Do not fully tighten one and then the other.
6. Adjust side curtains as needed during tightening.
7. Complete final tension once fully seated and aligned.
8. Confirm uniform tension, correct alignment, and secure attachment.

TO REMOVE THE Z9 OR Z100 CAGE BIMINI CANVAS

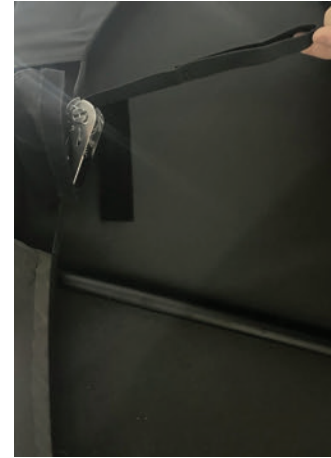
1. Deploy the tower/cage to approximately 25% UP position for topside installation access.
2. Loosen the ratchet straps until canvas tension is removed.
3. Ensure the side curtains and fabric are free of load.
4. Pull canvas off the front longitudinal tubes, working evenly from side to side.
5. Disconnect the port and starboard aft straps/buckles from the longitudinal tubes.
6. Carefully pull the canvas aft off the cage structure.
7. Avoid snagging on corners or fittings during removal.
8. Fold and store in a clean, dry location.



Aft Buckle



Wrap



Ratchet

NOTE

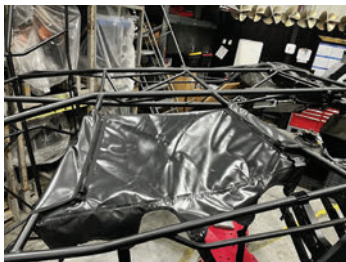
DO NOT LEAVE CANVAS INSTALLED FOR LONG-WINTER STORAGE IN WET ENVIRONMENTS DUE TO MOLD AND MILDEW RISK. REMOVE THE CANVAS FOR TRAILERING ABOVE 45 MPH UNLESS AN OVER-TOWER COVER IS USED.

TO INSTALL THE Z9 OR Z100 BUBS

1. The bimini canvas does not need to be fully removed. Loosen the ratchet straps and fold back the port and starboard side curtains.
2. Identify the PORT and STBD tags on each BUBS assembly.
3. Starting with either the forward or aft zipper, wrap the BUBS material around the second and third crossbars of the bimini frame and fully zip closed. Crossbars are counted from the forward edge of the bimini frame moving aft.
4. Wrap the four Velcro straps around the inboard and outboard longitudinal tubes of the bimini frame. Pull each strap tight and press firmly together to secure.
5. Re-secure the bimini canvas and verify proper alignment, uniform tension, and secure attachment.

TO REMOVE THE Z9 OR Z100 BUBS

1. Remove all boards from the BUBS.
2. Loosen the bimini canvas to access the Velcro straps and zippers.
3. Separate the Velcro straps and unwrap them from the longitudinal tubes of the bimini frame.
4. Unzip the forward and aft zippers.
5. Fold the BUBS and store in a clean, dry location.



BUBS Zippers to Bimini Frame



BUBS Straps



BUBS with Board

NOTE

BUBS MAY REMAIN INSTALLED FOR TRAILERING BUT SHOULD BE REMOVED FOR EXTENDED UNCOVERED HIGHWAY TRAVEL.

PLATFORM COVER

MODELS

Available as an option on all models.

PURPOSE

Cover and protect the platform from the elements.

LOCATION

Canvas cover for the platform

OPERATION

Position the cover on the platform, aligning it to the platform contours. Begin by wrapping the port and starboard ends of the cover around the forward edges of the platform, then continue securing the remaining perimeter. The cover is form-fitted to match the platform geometry.



Platform Cover

CAUTION

The platform cover must be removed before trailering, as it may damage the gel coat and/or come off the platform, becoming a road hazard.

NOTE: The platform canvas is purposely loose in order for the operator to be able to step on the canvas for installation/removal.

SPEAKER COVER

MODELS

Speaker covers are an optional feature for NXT, XT, X, and XStar models. They are compatible with Z6, Z8, Z9, and Z100 towers.

PURPOSE

Covering the tower speaker housings, speaker covers offer additional protection from weather and insects. The covers are constructed from Phifertex, an anti-microbial fabric with UV-resistant properties.

LOCATION

The speaker covers install over the exterior housing of the tower speakers.



Installed Speaker Can Covers

INSTALLATION

To install your speaker cover unzip the cover. While standing facing the speaker grill, slip the cover over the rear of the speaker can housing, then pull it toward to yourself to fit it in place. Once the seams appear to fit the speaker can, and open zipper is oriented vertically you can draw the zipper up to close the cover and secure the velcro tab.

MOORING COVER WITH ANTI-POOLING SYSTEM

MODELS

All MasterCraft boats come standard with your choice of an under tower mooring cover or an over tower mooring cover.

PURPOSE

Anti-pooling boat covers are designed to prevent water and debris intrusion while the boat is docked or stored. Mooring covers mount around the boat and cover everything above the stainless steel rubrail.

Under tower mooring covers feature an integrated anti-pooling system that lifts the cover up so that snow or water drains off the side rather than pooling on top of the cover. Anti-pooling covers use a drawstring system to lift the canvas mooring cover up towards the tower. The anti-pooling cover is designed to be used in conjunction with anti-pooling poles during long-term storage, or on long road trips. Poles are required when trailering the boat for trips lasting more than one (1) hour, at speeds over 70 MPH. Poles are also required for use with the mooring cover for long term and seasonal storage.



LOCATION

Mooring covers mount over the boat and use ratcheting straps to secure them snugly around the boat. The anti-pooling system on under tower covers loops over the tower tow point and is secured in place by pulling on the drawstring mounted to the aft portion of the canvas.

OPERATION

To install a boat cover with the anti-pooling drawstring:

1. Cover the bow and the forward portion of the cockpit with the canvas designed to fit the bow.
2. Continue covering the boat from bow to stern until you reach the windshield. Ensure that the windshield door is closed. Continue covering the boat.
3. When you reach the tower base, mount the neoprene anti-pooling loop over the tow point on the tower. Buckle the buckles on both sides of the tower and ensure that the velcro is secured around the tower legs.
4. Cover the rest of the boat to the transom. Pull the canvas down below the rubrail on XT and NXT models and use the ratcheting straps to secure the cover onto the boat. Ratchet the straps until they cannot be tightened further. The cover is designed to ratchet very tight.



CAUTION

Failure to use anti-pooling poles to support the mooring cover during storage, or while trailering the boat could cause damage to the mooring cover, the boat, or the trailer.

BOW AND AFT SHADES

MODELS

Available on all NXT and XT models.

PURPOSE

The bow and aft shades provide additional shade when the boat is at rest to keep occupants cool and protected from the sun's rays.

LOCATION

The bow shade attaches to the forward edges of the bimini frame, while the aft shade attaches to the aft edges. Both shades and their support poles can be removed, placed in the provided storage bags, and stowed to keep them secured and out of the way when not in use.



NOTE

DO NOT USE THE BOW AND AFT SHADES WHILE THE BOAT IS UNDERWAY OR IN INCLEMENT WEATHER.



OPERATION

The shades mount to the bimini using a series of buckles and tension poles. To install the poles into the deck:

To install the bow shade:

1. Remove the shades and poles from the storage bags.
2. Unfold and lay out the shades with the buckles facing the tower. Ensure that the material is facing the correct side up.
3. Insert the tension poles into the mounting points on the gunnel. Be sure they are properly seated in the mount.
4. Lay the wide part (with the buckles) of the shade over the forward edge of the bimini.
5. Buckle the straps around the middle support arm of the bimini on each side, ensuring that the shade remains on the top of the bimini.
6. Move to the forward end of the shade. Stretch the canvas forward so that the metal rings can be mounted on the tension poles.
7. Mount the metal rings around the tension poles. Pull the tension pole slightly toward you to make mounting the metal ring is easier.
8. After mounting the metal ring on the tension pole, release the tension on the pole slowly so that it returns to a vertical position.

To install the aft shade:

1. Remove the shade and poles from the storage bags.
2. Un-fold and lay out the shade with the buckles facing the tower. Ensure that the material is facing the correct side up.
3. Insert the tension poles into the gunnel mounting points. Ensure that they are properly seated in the mount.
4. Attach the shade to the tower using the buckles that are provided on one end of the shade. Use the images as a guide, and note that the two widest buckles wrap around the surf tow point. With the outside straps in place, the rest will line up where they mount.
5. Move to the aft end of the shade. Stretch the canvas aft so that the metal rings can be mounted on the tension poles.
6. Mount the metal rings around the tension poles. Pull the tension pole slightly towards you to make mounting the metal ring easier. After mounting the metal ring on the tension pole, release the tension on the pole slowly so that it returns to a vertical position.
7. Adjust the buckles as necessary to ensure that the shade is taught, but not putting undue stress on the tension poles.



AFT SHADE

MODELS

Aft shade is an optional feature available on all NXT and XT models.

PURPOSE

Aft shades offer additional protection from heat and sunlight at the aft of the boat to include the transom seating. The shades are constructed from Phifertex, an anti-microbial fabric with UV-resistant properties.

LOCATION

Once installed, the aft shade attached to the extends over the aft of the boat to provide shade all the way to the platform.



INSTALLATION

1. Insert the tension poles into the mounting points on the platform. Be sure they are properly seated in the mounting holes.
2. Lay the wide part (with the buckles) of the shade over the aft edge of the tower, then buckle the straps around the tower arch.
3. Move to the aft with the shade. Stretching the canvas so that the metal rings can be mounted on the tension poles. Pull the tension pole slightly towards you to make mounting the metal ring easier. After mounting the metal ring on the tension pole, release the tension on the pole slowly so that it returns to a vertical position.
4. Adjust the buckles as necessary to ensure that the shade is taut, but not putting undue stress on the poles.

PREMIUM AFT SHADE

MODELS

The aft shade is an optional feature available on all X and XStar models.

PURPOSE

Aft shades offer additional protection from heat and sunlight at the aft of the boat, including transom seating. The shades are constructed from Phifertex, an anti-microbial fabric with UV-resistant properties.

LOCATION

Once installed, the shade extends aft of the tower to provide shade all the way to the platform.



INSTALLATION

1. If properly equipped, the pole receivers will be secured to the top of the tower near centerline. Insert the stainless-steel end of the tension poles into the receivers. Be sure they are fully seated prior to fabric installation.
2. Attach the fabric to the outboard, aft surf tows and ensure the fabric is captured by the forward/lower portion of the receivers.
3. Starting with collapsed poles, find the corners of the canvas and slide the pole ends into the pockets. Extend the poles aft to increase tension on the canvas.
4. Fully extend the poles to create the necessary tension on the canvas to keep the poles in the pockets of the canvas.

PREMIUM AFT SHADE WARNING LABELS

WARNING

- *Anchor light visibility may be restricted to other vessels when sunshade is in use.*
- *This could result in a collision which could lead to serious injury or death.*
- *Sunshade **MUST** be removed in conditions that require the use of the navigation/anchor light. This includes low light visibility conditions such as but not limited to darkness, fog, rain, etc.*

ENGINE FLUSH

MODELS

Standard on all models.

PURPOSE

Boats that will be operated in salt water (or brackish fresh water) need to be rinsed after every use, including internal engine parts.

LOCATION

The engine flush connection is mounted on the pylon brace crossbar inside the engine hatch.

OPERATION

The engine flush connection allows for quick and easy connection to a shoreside garden hose or similar hose to quickly and easily flush the engine. See the ILMOR Engine Owner's Manual for additional details regarding this important function. The flush connection is located on the transom.

TROUBLESHOOTING

If a hose will not connect to the flush connection, locate a different hose. Garden hoses work fine as long as the hose end is not bent or misshapen. If water will not enter through the flush connection, disconnect the hose and check that there is no obstruction in the connection area. If there is no obvious reason for the system malfunction, take the boat to an authorized MasterCraft dealer for assistance.

REMOVABLE COOLERS

MODELS

Standard on all MasterCraft boats is the premium Cordova cooler (excluding ProStar).

PURPOSE

The cooler allows boaters to bring food and beverage on-board for outings and keep such items at a lower temperature than ambient air to prevent spoilage.

OPERATION

In using the cooler, ensure that the lid is securely closed prior to operation of the boat. If the lid is not secure, water, ice and food/beverage items may become dislodged and spill into the void where the cooler is stored. Be sure to keep the cooler in the designated location as shown in the Guide to Individual Models in this Owner's Manual. Coolers that are placed in other locations, including on the deck, are not secure. While the coolers themselves have minimal weight, if they contain ice, food and beverage, the combined weight can cause injury if the cooler moves around during operation.

⚠ CAUTION

Coolers should always be stowed in the appropriate designated location of the boat as noted in the Guide to Individual Models section of this Owner's Manual. Stacked coolers can have enough weight to cause imbalance in the boat and/or cause injury upon contact.

NOTE: 2015 and newer XT, X, and XStar models have shock assisted cooler cushions to eliminate the need to hold the cushion up while removing and installing the cooler, as well as accessing the cooler for beverages/food. The shock could have reduced performance if the cooler cushion is saturated with water. Also, if the seat hinges become misaligned, and the shock interferes with the clearance hole, the hinge may be damaged or the substrate or seat base may be deformed.





Removable Under-seat Cooler

SPECIAL ATTENTION

As with any similar coolers, routine cleaning with warm soapy water is advised after each use. Check whether anything from inside the cooler has been spilled or in some manner ended up in the storage area in which the cooler is kept. This should be cleaned up immediately to avoid mold, mildew, stains or other damage that is not covered under warranty.

Food items or anything that can create an odor or leak should not be left in the cooler, as they could damage the cooler. This type of damage is not covered under warranty.

ADDITIONAL SPECIAL ATTENTION

Do not drink water from melted ice or water that is not in containers. The cooler may contain contaminants.



⚠ CAUTION

Clean the cooler (and the storage compartment in which the cooler is stored) after each outing in which the cooler is used. Failure to do so can cause damage that is not covered under warranty.

REFRIGERATION

MODEL

XStar25

PURPOSE

The refrigerator is suitable for cooling food and beverages for a day on the water. Location The refrigerator unit is located immediately aft of the driver's seat, replacing some storage space.

OPERATION

The refrigerator operates by opening the cool box drawer and turning the thermostat knob clockwise. Shutting it off requires turning the thermostat knob counterclockwise. A booklet from the manufacturer is also supplied in your owner's packet. Please review it prior to operating the refrigerator for the first time.

SPECIAL ATTENTION

Note that the refrigerator functions off the boat's electrical system. Attention should be paid to the voltmeter(s) to be certain that these systems do not over-drain the electrical system.



ADDITIONAL SPECIAL ATTENTION

Food items or anything that can create an odor or leak should not be left in the refrigerator or cold plate areas, as they could damage the units. This type of damage is not covered under warranty. The condenser on the refrigerator should be kept free of dust, dirt and anything that inhibits its proper operation. The manufacturer also recommends leaving the door slightly open if it will not be used for an indeterminate period of time. This helps prevent unpleasant odors from forming. Refrigerator cleaning instructions have been provided by the manufacturer. Note that it should always be OFF, and should never be cleaned under flowing water or submerged in any kind of body of water. Do not use abrasive cleaning agents. If it is necessary to defrost the interior, never remove layers of ice with hard or sharp tools because they can damage the plastic of the vaporizer. Allow the unit to air defrost.

TROUBLESHOOTING

If the refrigerator will not turn ON and cool, check the main circuit breaker box to ensure that the electrical circuit powering the refrigerator has not tripped. Re-set as necessary. If the system still does not work or continues to trip, see an authorized MasterCraft dealer.

If the refrigerator stops working during an outing, move any items inside to a cooler. The cooling inside the fridge will last for a short time, but items that require cooling to keep from spoilage may not be kept at a proper temperature for long enough. Foods or medicines that require cooling but have been in the refrigerator without it operating for a period of time should be discarded without use. MasterCraft assumes no responsibility for spoilage resulting from an inoperable refrigerator or failure to follow directions in use of the refrigerator.

SPECIAL ATTENTION

As noted in the Storage and Winterization section of this Owner's Manual, it is extremely important to ensure that there is no water in the freshwater system, which includes the wet bar, during extended storage (at least two weeks without use). Failure to drain the water can result in foul odors, mildew and mold, or other damage that is not covered under warranty.

ADDITIONAL SPECIAL ATTENTION

If other liquid beverages beyond water are poured down the sink, flush with water to avoid the potential development of unpleasant odors which can develop after the system has not be used for an indeterminate amount of time.

TROUBLESHOOTING

If no water is forthcoming when the faucet is turned ON at the wet bar, verify that there is still water in the freshwater tank. Also, verify that the circuit has not tripped on the main circuit breaker board. If there is water available and the electrical circuit is functional but the system still does not work, have an authorized MasterCraft dealer check the system (the pump is inaccessible to consumers). If the sink does not drain, verify that there is no visible obstruction. If none is evident, take the boat to an authorized MasterCraft dealer for service. NEVER pour drain opener or any caustic substance down the drain or otherwise try to open a clog. This can cause significant damage to the system, which is not covered under warranty.

CAUTION

DO NOT pour any drain opener or caustic substance down the wet bar drain. Do not use a plumber's snake or other device to try to open a malfunctioning drain. Any obstruction that is not clearly visible must be removed by an authorized MasterCraft dealer only. Any other attempt to open the drain will likely result in damage to the system that is not covered under warranty.

STORAGE SPACE

MODELS

All

PURPOSE

Storage space is integrated into all models to allow on-board gear to be stored safely while the boat is underway.

LOCATION

Storage areas vary by model. See the Guide to Individual Models section of this Owner's Manual and also check with your authorized MasterCraft dealer to verify the exact locations on your model. Use only designated storage compartments for storage. Using any other space could result in damage to boat equipment and could cause a malfunction of boat systems. Items should always be stowed when the boat is underway to avoid the potential for injury from items dislodged or moving around as a result. Use only designated storage areas to stow items. Use of any other space could result in damage to boat systems that is not covered under warranty. Malfunctions of boat systems could also affect

⚠ CAUTION

Food items or anything that can create an odor should not be left in storage compartments. Do not leave items that can leak inside the storage compartments, these items could damage the compartment. This type of damage is not covered under warranty. Storage compartments require periodic cleaning. See Care and Maintenance in this Owner's Manual for additional information.



Observer Seat Storage



Bench Seat Storage Compartment



ProStar Transom Storage Hatch



Sundeck Storage Compartments

control of the boat, which could result in injury or death. Do not overfill storage areas. Do not try to force doors, cushions or other closures because it can result in damage that is not covered by warranty. Pay attention to the total weight allowance for your boat model and do not include items in storage that will exceed that limit, even if such items will fit in the storage compartment(s). Also note that balance is extremely important and the combination of on-board gear and materials plus the combined weight of persons on-board affects balance. Items and people should be spread out in the boat to ensure safe maneuvering.

LADDERS

MODELS

Ladders are an optional feature across all models.

PURPOSE

Ladders allow for easier boarding of the boat from the water. A ladder mounted to a platform should only be used for on-boarding when the boat engine is OFF. See the Safety section of this Owner's Manual for additional details regarding carbon monoxide poisoning.

LOCATION

Ladders are mounted under the platform.



Stowed Ladder



Deployed Ladder

OPERATION

Ladders have a stowable position and an operational position. The platform ladder stows under the platform. Slide it out and extend the sections. Stow it by sliding back under the platform and engaging the slide lock. Be sure to stow ladders securely prior to operation of the boat. Pressure from the water while underway could damage the ladder.

SPECIAL ATTENTION

When opening or closing the ladder, be careful not to pinch fingers or other skin between the ladder joints or the ladder and the platform. All ladders feature a catch system to hold the ladder in position and provide protection for people as they board.

TROUBLESHOOTING

If the ladder will not extend or fold back into stowed position, take the boat to an authorized MasterCraft dealer for repair.

SEATING/BOW LID

MODELS

ProStar, as an option

PURPOSE

Bow seating is standard. The ProStar boat may come with an optional bow lid. This lid provides aesthetic appeal to the boat and pays homage to the great tournament towing boats of yesteryear. Boats equipped with the bow lid have storage space beneath it, accessible from the walkway between the helm and observer dashes. No more than 300 total pounds of gear should ever be placed in this storage compartment. Failure to maintain proper weight balance in the boat can lead to a loss of control that can result in serious injury or death.



ProStar Bow Location



ProStar Bow Lid Installed

LOCATION

Bow of the ProStar

All occupants must be seated in designated safe seating as illustrated on the seating chart decal.

No other areas should be used during operation, including, but not limited to, the gunwales, towers, sun pads, engine boxes, or any area that is not clearly intended for seating while the boat is underway. People can become dislodged from locations that are not actual seating, which could result in falls in the boat or overboard, resulting in serious injury or death.

OPERATION

Carefully read the Seating information which follows immediately in this Owner's Manual. Important safety information is included in that section. Care must always be taken to avoid blocking the view of the boat operator when the boat is underway. All individuals in the boat must be seated and weight properly distributed to avoid complications that can result in serious injury or death. The lid is not intended to be used as additional seating. Allowing individuals to move about or sit on the lid could result in damage to the lid that is not covered under warranty.

SPECIAL ATTENTION

In the center of the bow is an anti-skid walkway to the bow tip. The bow lid is designed to add storage to the bow of the boat and to allow swimmers access to the body of water. Individuals should use this walkway only when the boat is stopped and the engine is OFF. Walking on the walkway or exiting the boat from the bow nose at any time when the boat is running could result in an individual falling from the boat, or being run over by the boat. This could result in serious injury or death!

⚠ WARNING

All boats have weight limits. Failure to adhere to the posted limits can cause operation instability and/or the boat to sink. This may result in serious injury or death, as well as significant damage to the boat, which will not be covered by warranty.

⚠ DANGER

Never allow individuals to walk on the bow walkway or anyone to exit the boat from the bow tip unless the boat is stopped and the engine is OFF. Failure to adhere to this instruction could result in serious injury or death.



ProStar Without Bow Lid Installed



ProStar Bow Lid Installed

SEATING

MODELS

All

PURPOSE

Comfortable seating is a hallmark of all MasterCraft models. Not only does the seating enhance the overall boating experience, but it also is the designated area for operators and passengers to occupy while the boat is underway.

No other areas should be used during operation, including, but not limited to, the gunwales, towers, sun pads, engine boxes, or any area that is not clearly intended for seating while the boat is underway. People can become dislodged from locations that are not actual seating, which could result in falls in the boat or overboard, resulting in serious injury or death.

LOCATION

All models have seating inside the deck area and bow area. Some boats also have seating on the sun deck, convertible seating, and optional walk-thru area jump seats. Verify with your authorized MasterCraft dealer the extent to which the seating is considered acceptable for use while the boat is underway.



⚠ DANGER

All occupants must be seated in designated safe seating as illustrated on the seating chart decal.

OPERATION

Some specialized, optional seating adds more comfort. Convertible seats allow the seat back to be moved forward or back, changing the orientation. (Be sure that the seat back locking mechanism is securely engaged before using the seat back in these types of seating. Failure to engage the locking mechanism may allow unintended movement that could result in a person losing balance or even falling.)

The convertible seat backs at the transom and the molded transom lounge seats are intended to be used only when the boat is stationary and the engine is OFF. The seat backs must be in the stowed position when the engine is running or the boat is underway. Positioned aft facing, the seat back offers no security to persons seated at the back of the boat and they could slide off and into the water, with the possibility of making contact with the transom or platform, which could result in injury. The engine should be off when individuals occupy transom seating, individuals may be exposed to carbon monoxide if the engine is running.

**Cockpit Seating****Removable Transom Seats****Transom Seating**

⚠ DANGER

Carbon monoxide is a colorless, tasteless, odorless and poisonous gas that accumulates rapidly and can cause serious injury or death. Exposure to carbon monoxide can be fatal in a matter of minutes. Exposure to even low concentrations of carbon monoxide must not be ignored because the effects of exposure to carbon monoxide can build up and be just as lethal as high concentrations. Carbon Monoxide from exhaust pipes of inboard or outboard engines may build up inside and outside the boat in areas near exhaust vents, particularly during slowspeed operations. **STAY AWAY** from these exhaust vent areas, which are located at the stern of the boat when the boat engine is running.



Flip Up Backrest

⚠ CAUTION

Aft-facing seat backs at the transom or sun pad should always be in the stowed position when the boat is underway. Anyone seated aft could become dislodged when the boat is underway, which could result in sliding off the seating and making contact with the transom or platform. Jump seats should be secured against the deck with a lock pin accessible under the observer seat to avoid dislodging passengers while the boat is underway. Removable seat backing should always be secured prior to use. Care should be taken to avoid pinching fingers or other skin when sliding the backing or securing/ removing the removable seats.



Flip Up Backrest



Open Observer Seat



Convertible Seat

SPECIAL ATTENTION

In models equipped with a convertible seat, the seat must be closed prior to any adjustments to the back rest, including installing or removing the seat. Failure to close the observer seat can result in damage to the observer seat upholstery. Such damage may not be covered by the warranty.

SPECIAL ATTENTION

In some models, removable cushions are available as an option. In those instances, regardless of where the cushions are custom-built to be placed, they will be constructed of the same materials as the rest of the upholstery material. That means that they will require the same cleaning and care. (See Care and Maintenance upholstery information in this Owner's Manual.) Removable cushions should also be stowed in storage when the boat is underway unless they are snapped into position. Failure to stow or snap removable cushions could result in the cushion being lost overboard.

Another attractive feature on some boat models is the folding arm rest, normally found in the bow section. These arm rests are padded with durable upholstery, which requires the same type of care as all of the boat's upholstery. (See Care and Maintenance upholstery information in this Owner's Manual.)



Transom Flip Seat

GAS ASSISTED SEAT LIFT

MODELS

XT models as an option

PURPOSE

Allow the helm seat to raise and lower about 3" to accommodate different operator seat height preferences.

LOCATION

Helm Seat

OPERATION

Lift the handle on the seat pedestal located on the outboard side of the pedestal (circled in red). To raise, lift handle and remove body weight and the seat will extend up. To lower, lift handle while applying weight to the seat to compress the gas assisted mechanism inside. Release handle between the topmost and lowest position to set and hold the seat height.



Gas Seat Assist Lever Under Helm Seat



Non-gas Assisted Levers for Pivot (Bottom) and Slide (Top) Only

TROUBLESHOOTING

If the gas assisted seat lift will not operate properly, take the boat to an authorized MasterCraft dealer for repair.

ELECTRICAL POWERED SEAT LIFT

MODELS

Standard on XStar. Optional on new X models.

PURPOSE

Allows the helm seat to raise and lower to accommodate different operator seat height preferences.

LOCATION

The button location varies between models. Locations are on the helm seat or next to the helm phone charger.

OPERATION

Push the button (up or down) as indicated, on right side of the seat pedestal located on the deck wall (circled in red). To raise, press the top of the button, the seat will extend up. To lower press the lower button, and the seat will lower to adjust to the comfort of the operator.

TROUBLESHOOTING

If the electrical powered seat lift will not operate properly, take the boat to an authorized MasterCraft dealer for repair.



Power Seat Lift Button

CONVERTIBLE SEAT

MODELS

Optional on NXT and XT models.

PURPOSE

Provides three configurations: forward-facing, aft-facing, and center cockpit sun pad.

LOCATION

Aft cockpit

OPERATION

The seat assembly incorporates a sliding, locking pivot that links the seat back to the seat cushion.



Forward-Facing to Aft-Facing

To convert between the forward-facing and aft-facing positions, lift the handle at the base of the seat to disengage the lock. While holding the handle, rotate the seat assembly until the seat base engages and locks into position. Press down on the seat back to verify the lock is fully engaged.

Aft-Facing to Forward-Facing

To convert from the aft-facing to the forward-facing position, lift the handle at the base of the seat to disengage the lock. While holding the handle, rotate the seat assembly forward until the seat base engages and locks into the forward-facing position. Release the handle, then pull on it to verify the lock is fully engaged.

XSTAR MURPHY SEAT

MODELS

Optional on XStar models.

PURPOSE

The Murphy Seat adds functional flexibility and comfort to the cockpit layout when optioned on your XStar. When stored away into the floor, it maintains a spacious walk-through. When deployed, it provides an elevated aft-facing seat—perfect for watching the action behind the boat. Fold down one, or both backrests, to use the Murphy Seat as a cockpit table or a convenient step-over.



OPERATION

Open the storage door, lift from the bow edge of the handle, and pull up towards yourself. Once fully extended, push down on the aft end, to engage it into the soft-locking pockets. Kneel over the seat, close, and lock the hatch, then fold the backrest(s). To return to the storage space, fold down the backrest(s), and reach over to open the hatch. Lift or “pop” the aft end of the seat out of the soft-locking pockets, and then push the seat forward until it starts to slide down the track. Holding ONLY on to the handle, slowly lower into the storage compartment.

REMOVABLE AFT SEATS

MODELS

ProStar, as an option

PURPOSE

Two removable aft seats allow additional passengers to be transported in the boat. The seats can be removed when not needed.

LOCATION

Aft section of the cockpit, port and starboard.

OPERATION

Removal: Lift the forward edge of the seat bottom. Rotate up and pull forward at the same time. Two hooks on the seat back will release from eyelets connected to the aft deck wall. When released, lift seats out of the boat and store.



Removable Transom Seat

CAUTION

Never operate the boat without the aft seats installed properly. Seat back hooks firmly captured by the eyelets and all four foot pads sitting on the cockpit floor.

Installation: Set the seat on the cockpit floor near the aft cockpit wall. Lift the forward edge of the seat bottom. Slide the seat rearward until the seat back hooks touch the aft cockpit wall just below the eyelets. Set the seat bottom down slowly, ensuring that both seat back hooks pass through an eyelet. Never operate the boat without the aft seats installed properly. Seat back hooks firmly captured by the eyelets and all four foot pads sitting on the cockpit floor.



PREPARATION

USING CARE WHEN FUELING

MasterCraft boats are equipped with a highly innovative fuel system. This system is designed to provide years of trouble-free service. The MasterCraft fuel delivery system is based on the latest innovations in fuel handling and safety.

The fuel pump system in MasterCraft boats is specifically designed for the marine environment and contains a number of added safety components. Because of the special nature of the design, there are no user-serviceable parts. Any parts in need of service or maintenance will need to be addressed by an authorized MasterCraft dealer. An authorized MasterCraft dealer is equipped with the special tools necessary to disassemble and service the fuel capsule and associated parts. Replacement parts must meet OEM requirements as specified by MasterCraft.

The fuel line in the bilge area that goes from the tank to the engine is a special multi-layer armored line covered with a special material known as a fire sleeve. The fire sleeve protects the fuel line in the unlikely event of a boat fire. The sleeve is orange colored so that the fuel line can be easily identified.

Filling the fuel tank for the first time will take much longer than subsequent fillings as air is being displaced in the system. For all subsequent fuel-fillings, the process will take about the same amount of time as it does to fill a land-based vehicle.

DANGER

Gasoline is extremely flammable and highly explosive. Always stop the engine and never smoke or allow open flames or sparks within fifty (50) feet of the fueling area when fueling.

DANGER

Take care not to spill gasoline. If gasoline is spilled accidentally, wipe up all traces of it with dry rags immediately and dispose properly on shore.

During refueling you should reasonably expect to avoid having any fuel spit-back or well-back when using an automatic shut-off fuel pump nozzle. All land-based gas stations in North America are required to use these; some marinas may not. Therefore, we recommend that you never leave the fuel fill unattended when fueling. MasterCraft recommends daily inspection of the bilge for foreign materials including possible gas or oil leakage. As part of your daily inspection, include a visual check of the orange fire-sleeved fuel line. If you see damage to the sleeve or line or in any way suspect damage or fuel leakage, **DO NOT START THE BOAT!** Immediately call an authorized MasterCraft servicing dealer and let him or her assess the situation. Leaking fuel can cause serious damage to the environment and may be a potentially hazardous situation for people and property in the area. Therefore, it is critical to attend to any indication that there is fuel line damage or fuel leakage as soon as possible.

FUEL LEVELS

Starting the engine with fuel levels below the acceptable standard will likely cause damage to the fuel pump. MasterCraft, working in conjunction with the fuel pump's manufacturer, has determined that on initial (first-time) use, the boat should have a minimum of fifteen (15) gallons of gas. This will prevent fuel starvation in instances of extreme running angles or when fuel sloshes away from the fuel pick-up.

Note that continuous wake surfing port or starboard with low fuel in the tank will starve the pump of fuel and cause it to either seize or overheat and blow fuses. The boat should never be used for wake surfing at less than one-quarter (1/4) tank full of fuel.

CAUTION

Allowing the fuel level in the fuel tank to fall below one-quarter of a tank full may affect the reliability of the fuel pump or result in damage to the fuel pump, which is not covered under warranty.

DANGER

Gasoline is explosive. If a gasoline odor is present or gasoline is visually observed in the bilge area during inspection, DO NOT START YOUR ENGINE! If the engine is already running, press the START-STOP button to stop the engine. Remove the ignition key from the ignition switch and call an authorized MasterCraft dealer for service.

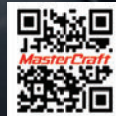


ILMOR MARINE ENGINES

MasterCraft boats are equipped with ILMOR Marine Engines, the finest quality power plant in the industry. Scan the QR code below to download ILMOR's Owner's Manual. For inquiries regarding ILMOR specific components contact:

ILMOR MARINE, LLC (U.S.A.)

55285 Lyon Industrial Drive,
New Hudson, MI 48165
844-60-ILMOR (844-464-5667)
(704) 360-1901 FAX
service@ilmormarine.com
www.ilmor.com



ILMOR OWNER'S MANUAL

MasterCraft Boats have had the indulgence of having a long-standing relationship with Ilmor Marine Engines. Therefore, in an effort to be more productive and sustaining quality products for the Consumer, we have developed a plan of action to better serve our customers. Beginning with the 2023 boats, the engine service agreement for the first oil change adjusts to:

- Up to 50 hours first oil change
- 10–50 hours or annually thereafter
- No change to heavy-duty usage maintenance schedule

The transmission fluid follows the first engine oil change interval. This change will extend the period for the first oil change and provides the customer with more flexibility (most likely past July 4th). This is far greater intervals than the competition. Ilmor Marine Engines does remind all consumers that early and regular oil changes coupled with a certified dealer overview is the best way to ensure we keep customers on the water for the long term. Ilmor Marine Engines have been a major part of the success of the MasterCraft for the past decade. However, due to customer demand and an ever present need to be the ultimate tow boat in the industry, MasterCraft has elected to pursue the Ilmor Supercharged 6.2L. This will prove to be a far more superior product, as well as meet the demand for to boats with current and future requirements.

5.3L GDI CLOSED COOLED



SPECIFICATIONS

- 400 lb-ft Torque
- 365 HP @ 5400 RPM
- Fully Closed - Cooled
- 7 Year, 1,000 Hour Limited Warranty
- 50 Hour Service Interval
- Minimum 87 Octane Fuel
- Recommended 93 Octane Fuel

5.3L GDI HO



SPECIFICATIONS

- 407 lb-ft Torque
- 380 HP @ 5400 RPM
- Raw Water Cooled
- 7 Year, 1,000 Hour Limited Warranty
- 50 Hour Service Interval
- Minimum 87 Octane Fuel
- Recommended 93 Octane Fuel

6.0L MPI



SPECIFICATIONS

- 407 lb-ft Torque
- 373 HP @ 5200 RPM
- Fully Closed-Cooled
- 7 Year, 1,000 Hour Limited Warranty
- 50 Hour Service Interval
- Minimum 87 Octane Fuel
- Recommended 93 Octane Fuel

6.2L GDI



SPECIFICATIONS

- 479 lb-ft Torque
- 430 HP @ 5400 RPM
- Fully Closed-Cooled
- 7 Year, 1,000 Hour Limited Warranty
- 50 Hour Service Interval
- Minimum 90 Octane Fuel
- Recommended 93 Octane Fuel

SUPERCHARGED 6.2L



SPECIFICATIONS

- 665 lb-ft Torque
- 630 HP @ 5500 RPM
- Fully Closed - Cooled
- 5 Year, 500 Hour Limited Warranty
- 50 Hour Service Interval
- Advanced Cooling System
- Minimum 89 Octane Fuel
- Recommended 93 Octane Fuel

GASOLINE

Additional, critical information regarding the proper use of gasoline in relation to the ILMOR Marine Engine is contained in the engine Owner's Manual, such as:

- Avoiding oxygenated fuels or fuels with alcohol.
- What to do when the boat is not used for long periods of time.
- Fueling outside the United States and Canada.

Engine	Required Fuel Octane
5.3L	87
6.0L	87
6.2L	90
6.2L Super Charged	89

CAUTION

Damage to the engine by use of low-quality gasoline or gasoline with an octane rating below the minimum level listed for ILMOR engines will void the warranty on the engine. Extended storage with fuel in the system can affect fuel stability and may require system inspection and fuel filter replacement when the boat returns to service.

6.2L SC DETAILS

The Minimum octane requirement for the SC 6.2L engine is 89 (R+M)/2.

Ilmor recommends 93 (R+M)/2 to ensure the best performance and reliability from the engine.

Rated performance and emissions is achieved on 93 (R+M)/2 ONLY.

Heavy duty usage, extreme ambient conditions, and boats operated with ballast beyond the maximum published specification necessitate the use of 93 (R+M)/2 for warranty coverage.

The use of fuels lower than 89 (R+M)/2 fuel and the use of octane boosters will cause engine damage and such damage is not covered under warranty.

TROUBLESHOOTING THE FUEL SYSTEM

Fuel Pump Does Not Run When The Engine Start-Stop Button Is Pressed

Cause 1: Pump may not be receiving sufficient voltage to the pump, or there may be corrosion interfering with the electrical impulse.

Remedy 1: Take the boat to an authorized MasterCraft dealer. Only the dealer has the specialized, required tools to correct the problem.

Cause 2: The fuel pump relay may have tripped.

Remedy 2: Reset the relay on the EPDM screen on the dash.

The Sound Of The Fuel Pump Running Is Audible But The Engine Does Not Start

Cause: The system may have inadequate fuel pressure or clogged fuel filter and/or lines.

Remedy: Take the boat to an authorized MasterCraft dealer. There are a variety of potential causes that can negatively impact fuel pressure. All repairs require specialized tools available only to dealers.



SAFETY CHECKS AND SERVICES

BEFORE EACH OPERATION

Follow all engine and drive train pre-operation maintenance and safety checks as outlined in the provided engine owner's manual. These tasks are best accomplished before launching the boat.

- Check the weather report, as well as wind and water conditions.
- Are recommended on-board tools and parts located?
- Are the mid-ship and transom (if equipped) drain plugs installed?
- Check the propeller and shaft for damage.
- Is there an adequate supply of fuel.
- Is the fire extinguisher is fully charged and up to date?
- Has any fuel, oil or water is leaking or has leaked into the bilge compartment?
- Check all hoses and connections for leakage or damage. Under normal operations, there will be some vibration, and this may loosen hardware over time.
- Check that the steering system is operating properly.
- Check that the windshield and extrusions do not show any damage.



- Is required safety equipment is on board?
- Check that everything is secure, tower and mirror knobs are tightened, all latches and brackets are secure, and anything that might move around in the cockpit during operation has been stowed. Even soft objects can cause injury when underway.
- Check that all required Scheduled Maintenance Checks and Services (see following sections) were performed.

⚠ WARNING

DO NOT launch or operate the boat if any problem is found during the Safety Check. A problem could lead to an accident during the outing, resulting in death or serious injury. Any and all problems should receive prompt and immediate attention. See your authorized MasterCraft dealer's service department for assistance.

DURING OPERATION

- When boating, avoid using the windshield as an aid for balance or getting out of a seat. This causes undue stress to the window frame and could damage it, which may not be covered under warranty.
- Check gauges frequently for operating conditions.
- Pay attention that controls operate smoothly.
- Note any excessive vibration.
- Check that everything is secure, tower and mirror knobs are tightened, all latches and brackets are secure, and anything that might move around in the cockpit during operation has been stowed. Even soft objects can cause injury when underway. Check that all required Scheduled Maintenance Checks and Services (see following sections) were performed.

AFTER OPERATION

- In boats equipped with a ballast system, drain water from the ballast system before placing the boat on the trailer. Note that the engine must be running at least 1500 RPM during the pumping process (for both fill and empty operations). Drain water prior to ceasing operation of the boat and loading on the trailer. More information regarding ballast systems appears in various sections of this manual, but pay particular attention to the information in the Boat Operation section of this Owner's Manual.
- Check for fluid leaks.
- Check the fins (where equipped), propeller, rudder and shaft for damage after removing the boat from the water.
- Are the mid-ship and transom (if equipped) drain plugs removed and stored in a convenient location?



NEW BOAT BREAK-IN



NEW BOAT BREAK-IN

⚠ CAUTION

To ensure proper break-in and lubrication, boat owners should not remove the factory break-in oil until after the initial ten (10) hours of operation and before twenty-five (25) hours. At that time, an oil change should be performed by an authorized Ilmor/MasterCraft dealer. Failure to follow the break-in procedure exactly as stated will void the engine warranty! NOTE: Before operating the boat for the first time, you must read the engine manufacturer's manual completely in addition to this Owner's Manual!

PLEASE FOLLOW THE BREAK-IN PROCEDURE CAREFULLY. CLOSE ATTENTION TO THE FOLLOWING INFORMATION IS VERY IMPORTANT:

Maintain the Proper Oil Level

Until the piston rings, cylinder and other working internal parts are thoroughly seated, oil consumption can be high and must be carefully watched. (This is important after break-in, as well).

Pay Close Attention to the Gauges and Video Screen(s)

It is important to stop the engine immediately if the gauges and/or video screen(s) indicate a problem. Low oil pressure and overheating are serious issues and require immediate attention.

Abnormal Vibration or Noises

These symptoms can be the first signs of trouble and should not be ignored. Occasionally, hardware may work loose, mountings may need to be tightened or the drive line may require attention.

Fuel, Oil or Water Leaks

Leaks can pose a serious safety threat. While all new MasterCraft boats are lake tested at the factory to check for leaks, it is still possible that one may occur. If a leak does occur, it is quite likely that it will happen during the first few hours of operation.

Vary the Engine Speed

Never run the engine for more than three (3) minutes at any constant RPM during the break-in period. Following this specific instruction will assist in the proper break-in of rings and bearings.

Plane the Boat Quickly

Operating the boat at low speeds places an excessive load on the engine. Plane quickly, then back down to a slower speed.

FIRST HOURS OF OPERATION

The first hours of operation affect the engine and drive train more than any other component on the boat. Therefore, it is very important to follow the break-in procedure EXACTLY as outlined in the engine owner's manual.

Engine manufacturers have detailed and specific requirements for proper engine break-in. That information is found in the engine manual supplied, and must be followed exactly as indicated. Failure to do so could cause engine damage and/or failure that is not covered under warranty.

AFTER BREAK-IN

Once the break-in period is over, the boat may be operated continuously at any speed, but not beyond the maximum indicated in the engine owner's manual.

The engines are equipped with rev-limiters which will cause a fluttering when reached. If the boat has the correct propeller set-up, operators should never reach the limiter, but if that happens, it is a signal that you should reduce the throttle and check with an authorized MasterCraft dealer to determine the cause. Always remember that during normal operation you should allow the engine to warm up gradually. Be sure the engine is warm before accelerating. Pay careful attention to the gauges and video screen(s). Also, check the oil level frequently during the first fifty (50) hours of operation since the piston rings and cylinders require that much time to seat properly.

See the Scheduled Maintenance Checks and Services section for more details.

CAUTION

Failure to follow the engine oil recommendations listed in the engine owner's manual can cause additional engine wear and increase the possibility of engine component failure. Damage to the engine due to incorrect oil usage can be costly to repair, and it is not covered by the warranty!

NOTE

For additional information, please refer to the Ilmor's Owners Manual on pages 26-27 for "Pre-25 Hours," "Post-25 Hours," "After Each Use," and "Long Term Storage."

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www.ilmor.com



STARTING AND BASIC OPERATIONS

STARTING

BEFORE STARTING

Familiarize yourself with the controls and indicators used on this MasterCraft boat. Perform all Safety Checks and Services as described in that part of this section of the Owner's Manual. Also perform all Scheduled Maintenance Checks and Services as described in this Owner's Manual.

DANGER

To prevent a possible explosion, operate the blower for at least four (4) minutes before starting the engine and always when at idle or slow-running speed. Explosive gasoline and/or battery fumes maybe present in the engine compartment. Failure to do so may result in serious injury or death!

DANGER

Before starting the engine, open the engine compartment and check for gasoline fumes, fuel and oil leaks or the presence of fuel or oil in the bilge.

NOTE: Always start the engine with the control lever in the neutral position or with the shift disengaged. Your boat is equipped with a neutral-start safety switch that will not allow the engine to be started when in gear.

1. Lift the engine cover and inspect the bilge and engine compartment for any fluid/vapor leakage. MasterCraft recommends lifting the engine compartment cover for inspection before each use.
2. Check the hull drain plugs. Make sure they are installed and secure.
3. Operate the bilge blower for at least four (4) min. Leave the bilge blower ON through the starting process and until the boat is on plane.



Steps 1-3

STARTING THE ENGINE

Attach the emergency kill switch tether (lanyard) to an article of your clothing and to the switch.

All MasterCraft models will come with software enabling keyless entry. The new software feature also includes **SLEEP MODE** and **AWAY MODE**.

SLEEP MODE

Enabling sleep mode conserves power and prevents accidental engine starts. Enabling SLEEP MODE will dim screen(s), allow for all active features to remain active (i.e. lights, audio/music), disables engine start/stop, enables pop-up to unlock.

To UNLOCK: tap, swipe, enter boat PIN. Once unlocked, the screen is returned to the last screen and illuminates engine start/stop button allowing the user to start the boat.

AWAY MODE

Away mode is meant for end of the day boating activity and allows time to disembark the boat. Enabling AWAY dims the screens and starts an on-screen 5 minute countdown. AWAY turns off ECU, stops all pumps, music, trim tabs retract, engine start/stop becomes inactive. Lights will remain in current state. The default 5 minute countdown keeps lights active for the 5 minute duration and automatically turns off the battery switch after the 5 minutes.

This timer is adjustable in System Settings.

How to use:

Upon battery switch, screen(s) will turn on requiring the user to acknowledge risk, followed by a requirement to enter a pin unlocking the start/stop switch.

When the “Enter Vehicle Pin for Keyless Start” pop up is present, enter your boat (vehicle) pin and hit “Submit.” By default, the user pin is set to 1234. Entering this pin will unlock screen functionality and the engine start/stop switch.

If you, the boat owner, wish to change your pin or disable the keyless entry feature, go to SYSTEM SETTINGS. Under System Settings you can:

1. Disable the PIN requirement upon battery switch startup
2. Change your boat (vehicle) pin
3. Change SLEEP MODE timeout
4. Change AWAY countdown timer

NOTE: While the engine is warming up, check to see that all lights, video screens and gauges operate properly. Check that the steering system operates freely. There should be no apparent leaks under pressure.

BASIC OPERATION

SHIFTING GEARS

When shifting gears, always move the control lever smoothly into gear. Do not hesitate. Slow gear engagement could damage the shifting mechanism in the transmission.

NOTE: When shifting from forward to reverse or reverse to forward, be sure to stop the control lever in the neutral position and allow the engine to fall between 600-800 RPM before completing the shift.

A one-hand, single-lever control operates as both a gear shifter and a throttle. The lever automatically locks in the neutral position (straight up and down) for safety. The lever can be moved from neutral only by raising the umbrella lifter under the ball knob. Shifting is accomplished by moving the lever forward or backward. Center (straight up) is neutral. Moving the lever forward engages the running gear; moving it back from center puts the drive train into reverse.

Never attempt to shift without the engine running!

This causes excessive wear to the shifting mechanism and may negatively affect control of the boat.

During regular warm-up of the engine, it is possible to temporarily increase the engine RPMs without moving the boat. To accomplish this, push in the button located at the bottom of the shift/throttle lever with one hand and pull up the “umbrella” (umbrella lifter



under the ball knob). Move the lever to desired position and then simultaneously release the button and umbrella. The engine will run with increased RPMs and can be increased or decreased by moving the lever. Returning the handle to the neutral position will bring the system back to neutral and reduce the engine RPMs to preset levels. This function should be done sparingly. Over-revving the engine for any extended period can cause undue wear and tear on the engine. Avoid advancing to wide-open-throttle and holding the RPMs at that level.

UNDER WAY

If the oil pressure gauge indicates low or no oil pressure, immediately stop the boat as outlined below and check the oil level. If the temperature gauge indicates overheating, stop the boat when it is safe to do so as outlined below and check the raw water system for blockage. (See the Boat Operations and Care and Maintenance sections of this Owner's Manual for directions on how to properly check for the blockage.) DO NOT operate the boat until the cause for the warning has been found and corrected.

CAUTION

Continued operation after the warning light has illuminated may cause severe engine damage. This will void your warranty.

STOPPING

1. Slowly bring the control lever to the neutral position. If the boat has been driven for a long period of time or at high speed, allow the engine a two-to-three (2-3) minute cool-down period at low idle (600-800 RPM).
2. Press the ENGINE START-STOP button.
3. At the conclusion of the outing, turn the key off and remove from the key slot. Turn the battery switch to "Off". Doing so will ensure that you have turned OFF the electrical system, and prevent others from starting or running the boat.
4. If any problems were encountered during operation, have the boat inspected by an authorized MasterCraft dealer. Request any necessary repairs before resuming operation of the boat.



Engine START/STOP Button

OPERATIONAL HINTS

LOADING THE BOAT

Never overload the boat. The maximum weight capacity as listed on the certification plate includes all items added to the boat (including persons and gear). Proper distribution of weight is critical to boat performance. Allocate the load as evenly as possible. The maximum weight capacity includes filled, factory installed ballast tanks and/or ballast bags. It does not include any bags added by the customer.

The maximum weight capacity is calculated with full factory-installed fuel and ballast tanks. The weight of occupants, gear and water in any ballast bags added by the customer reduces the Maximum Capacity of the boat. Failure to adhere to the total Maximum Capacity may result in too much strain on the drive train or may sink the boat. This is not covered under warranty. See the Common Sense Approach information in the Safety section of this Owner's Manual regarding weight.

WARNING

Adding supplementary aftermarket ballast to a MasterCraft boat is not recommended, and can result in impaired visibility, diminished handling characteristics and instability when operating your boat. Such condition may result in potential structural and/or engine damage to the boat. Such damage is not covered under warranty.

DANGER

Information regarding the Maximum Capacity for each boat is included in the Guide to Individual Models section of this Owner's Manual and on a placard located near the operator's position. It is the boat operator's responsibility to ensure that the boat is never overloaded. Too much additional weight may cause the boat to overturn or sink, which can result in serious bodily injury or death.

EMERGENCIES

Know how to use and spot distress signals, and to offer assistance if possible. Remember, you may need assistance someday. Review the Safety section of this Owner's Manual.

COURTESY

Always respect the rights of others on the water. Keep wide when passing, slow down in crowded areas, be alert and be aware of your wake and wash. See the Rules of the Open Water information in the Safety section of this Manual.

FIRST TIME OPERATION

When taking to the water for the first time, you must keep in mind a few general guidelines: Practice makes perfect! Start in calm water with no wind or current and plenty of room until you get the feel for the boat and its controls.

Proceed slowly! Give yourself time to think, react and maneuver.

Recognize outside forces! Check the wind direction and velocity, as well as water currents and waves.

Have a crew on hand! Have friends or family ready with fenders, lines and a boat hook to assist you when docking, as well as launching and loading.

Remember that a boat is not an automobile! Boats cannot be maneuvered and stopped like a car. Boats steer from the stern and have no brakes.



BASIC MANEUVERING

Steering response is dependent upon three (3) factors: rudder position, motion and throttle. While cruising speed maneuvering is relatively easy and takes little practice, slow-speed maneuvering is far more difficult and requires time and practice to master.

With both steering and propulsion at the stern of the boat, the initiation of a turn pushes the stern of the boat away from the direction of the turn. The stern follows a larger turning circle than the bow. This is especially important to remember when making maneuvers within close quarters.

While the effects of unequal propeller thrust (torque steering), wind, and current may not always be present, a practiced driver will use them to his/her advantage. Unequal thrust is a phenomenon shared by all single-engine, propeller-driven boats. With the rudder in the straight-ahead position, a counterclockwise rotation propeller tends to cause the boat to drive to port when going forward, and to starboard when going backward.

At high speed, there is compensation for this effect, so that unequal thrust is virtually non-existent. But, at slow speed—and especially during backing—the effect can be very pronounced. This is the main reason that most experienced drivers approach with the dock to the starboard side of the boat.



Stopping—or checking headway—is a technique that must be mastered. With no brakes, reverse must be used to stop the boat. The momentum of the boat will vary according to the load. Make it a practice to slow to no-wake speed before shifting into reverse.

When practicing maneuvering techniques, always do so in open water that is free of traffic. Adequate practice may make the difference between a pleasurable boating experience or a potentially damaging (at the very least, embarrassing) one.

HIGH SPEED OPERATION

MasterCraft boats are designed to accommodate professional drivers with advanced operating skills who can perform high-speed maneuvers and turns on-a-dime. DO NOT attempt to duplicate or simulate these feats. Paid, professional drivers log thousands of hours on the water and carefully choreograph every move. Plans are made in advance in the event the routine must be aborted. Maneuvers of this nature could cause serious injury or death, as well as damage to your MasterCraft boat that will not be covered under warranty.

For the best engine performance and longevity, the wide-open-throttle (WOT) engine operation must be near the top of, but within, the specified WOT operating range. To adjust the WOT operating range, select a propeller with the proper diameter and pitch. The propeller supplied on the boat was chosen for best all-around performance under average operating conditions.

Load, weather, altitude and boat condition all affect WOT engine operation. If the boat is used for several different applications such as wakeboarding, bare footing and cruising, it may be necessary to have two (2) or more propellers of differing size and pitch to allow the engine to operate in the WOT range for each application. Propping the boat should be done after the boat is loaded in the manner in which it would normally be loaded for each application.

DANGER

Boat operators should never attempt to duplicate operational skills of professional drivers. When such maneuvers fail, it can result in serious injury or death.

For example, in propping the boat for wakeboarding, fill the ballast tanks and add the people and gear that normally would be expected in the boat. Take the boat out and after warm-up, run it at wide-open-throttle and note the maximum RPM. EFI engines are equipped with RPM limiters to prevent over-revving. Take note if the RPM limiter is activated. If the WOT RPM is higher than the maximum RPM in your engine's WOT operating range, the boat is under-propped. Installing a higher-pitched propeller will reduce the WOT RPMs. An engine that is over-revving may quickly experience catastrophic damage, which will not be covered under warranty. If the WOT RPM is lower than the minimum RPM in your engine's WOT operating range, the boat is over-propped. Installing a lower-pitched propeller will increase WOT RPMs. An engine that is under-revving is "lugging." This places a tremendous load on the pistons, crankshaft and bearings and can cause detonation, piston seizure and other engine damage, which will not be covered under warranty.

 **CAUTION**

Engines should always be operated within engine manufacturer guide lines. Failure to do so may cause significant damage to the engine and drive train and is not covered under warranty!

Elevation and weather also have a very noticeable effect on the wide open throttle power of an engine. Since oxygen gets thinner as elevation increases, the engine begins to starve for air. Humidity, barometric pressure and temperature have a noticeable effect on the density of air since heat and humidity thin the air.

This phenomenon can become particularly apparent when an engine is propped for use on a cool, dry day in spring and then is operated on a hot, humid day in summer, and does not have the same performance. Although some performance can be regained by dropping to a lower-pitch propeller, the basic condition still exists. The propeller is too large in diameter for the reduced power output. An experienced marine dealer can determine how much diameter to remove from a lower-pitch propeller for specific high-elevation locations.

MasterCraft's engine manufacturer suggests that consumers consult with the dealer from whom the boat was purchased regarding the best propeller for the application in which the boat will primarily be run. However, be aware that changing the propeller may void the warranty. Again, working with an authorized MasterCraft dealer is your best bet to ensure excellent performance.

UNUSUAL OPERATING CONDITIONS

If the body of water is unknown, talk to local boaters about the type of obstacles that may be encountered beneath the water's surface. Rocks, tree stumps and sandbars are all dangerous and damaging. Be especially wary of rivers and man-made lakes. Rapidly changing conditions can cause daily changes in underwater hazards.

Stay well clear of floating debris. What looks to be a small branch in the water may well turn out to be an entire tree. When traveling through weedy areas, keep an eye on the engine temperature gauge. Weeds caught up and blocking the water flow through the raw water intake or transmission cooler will cause trouble. Also, after leaving the weedy area, shift to neutral for a few seconds and then to reverse for a few seconds to unwind any weeds that may have wrapped around the propeller.

DOCKING AND MOORING

Approach the dock slowly, with the starboard side of the boat if possible. The natural tendency of traditional inboards is to torque steer with the rotation of the propeller at slow speeds to make docking easier on the starboard side. On MasterCraft models equipped with the DockStar rudder system the boat will dock well to either the port or starboard side.

Before tying up the boat, be sure to use enough dock fenders to protect the boat from damage. If possible, tie up with the bow toward the waves. Use good quality double-braided nylon line. Tie up only to the cleats or tie-down eyes. Never use the handrails or ski pylon.

If the boat is to be moored for a long period of time, use chafing protectors to protect the gel coat finish. Leave a little slack in the lines, allowing for some wave movement or tidal action where applicable. If the boat is to be kept in or near water for the season, consider the purchase of a boat lift and bottom paint for the hull. These lifts prevent the build-up of marine growth on the hull as well as protecting the boat from damage typical of on-water storage, such as blistering. Make sure the boat lift supports the hull correctly. See the next section, Lifting the Boat information in the Care and Maintenance section of the Owner's Manual.

CAUTION

Boats left at docks or at anchor must be monitored on a regular basis to avoid sinking. Maintain adequate battery charge to keep the bilge pumps operational to avoid excess water intrusion. If leaking is detected, immediately remove the boat from the water and determine the cause.



CARE AND MAINTENANCE

LIFTING THE BOAT

NOTE

⚠ CAUTION

DO NOT use the ski pylon or any portion of any tower for lifting. They are **NOT** designed to be used as a central lifting point.

Also, **DO NOT** use the stern ski tow as a lifting ring. The deck may be damaged. Never use the cleats as lifting points. See the Storage Cradle sub-section of this section.

Also never lift a boat with water in the bilge or containing a water-filled device such as a ballast system or sack. The extra stress will put an excessive load on the hull and lifting equipment that may seriously damage the boat. Such damage may not be covered by the warranty.



USING LIFTING SLINGS

An overhead hoist with an appropriate rating capacity should be used. Slings must be six (6) inches wide by twenty (20) feet long and each sling should have a minimum capacity rating more than the weight of the model that is to be lifted. Use an eight-foot spreader bar on each sling to prevent damaging side pressure to the deck or gunwale molding.

CAUTION

Lifting slings must never contact shafts, struts or hardware protruding from the hull. Damage may result that will void the warranty.

CAUTION

When the boat is out of the water, it is important to support the hull correctly to avoid any hull damage. Such damage may void the warranty.

STORAGE CRADLE

If a storage cradle is used, the hull must be properly supported to prevent load damage. This can occur with as little as fifteen (15) pounds per square inch of pressure. **DO NOT** support the boat by resting the hull on the keel (the central fore-and-aft structural member in the bottom of the boat's hull, extending from the bow to the stern). Vertical supports must extend from the chine (the angular intersection of the bottom and sides of the boat) to the keel with no gaps between the hull and cradle supports. A total support area of at least 500 square inches is required for proper support of boats under 25' and 600 square inches for boats over 25'. Protect all items extending from the hull (i.e., the rudder, propeller, fins, etc.) to prevent them from resting on the cradle or the ground. **DO NOT** apply any load stress to the propeller, shaft, rudder, platform, water intake grate or other protruding items.



CORROSION PREVENTION

GALVANIC CORROSION

Galvanic corrosion (electrolysis) is the decomposition of metal due to the effects of electrolytic action. When two (2) dissimilar metals are immersed in a conductive fluid (e.g., salt water), an electric current is produced, much like the action of a battery. As the current flows, it takes with it tiny bits of the softer metal. If left unchecked, severe damage may occur over time. If the boat is operated in salt, polluted or brackish waters, even temporarily, the boat should be equipped with a transom-mounted aluminum anodes to prevent damage to those metal parts coming in contact with salt water.

The aluminum is, by design, self-sacrificing. It is slowly eroded away by electrolytic action and requires periodic inspection for deterioration.

When the aluminum has eroded to approximately one-half (1/2) of its original size, it must be replaced to continue protection, or damage to other metal parts may result.

MasterCraft boats optioned with a saltwater package come equipped with aluminum anodes. For fresh water boats that may be temporarily operated in polluted or brackish water, an authorized MasterCraft dealer can assist in installing proper corrosion protection systems including sacrificial anodes and fresh water flush kits.

NOTE

DAMAGE DUE TO CORROSION IS NOT COVERED UNDER WARRANTY!

SALT WATER CORROSION

MasterCraft boats have been designed for operation in fresh water unless equipped with the Salt Water Package. If operating a fresh-water model temporarily in salt, polluted or brackish water, thoroughly flush the boat with fresh water as soon as possible afterward. The entire engine cooling system should be flushed with fresh water for at least ten (10) minutes after each use in such waters. Do not operate boats continuously in saltwater unless equipped with a closed cooling system to preserve engine life.



SALTWATER CARE & MAINTENANCE

Saltwater or brackish water can deteriorate the condition of a boat much faster than freshwater. To maintain the condition, appearance and functionality of boats used in salt water:

Flush the engine with fresh water in accordance with the Ilmor Engine Owner's Manual (10 minutes minimum).

1. Rinse the boat with fresh water after each use in salt water:

- Bilge
- Hull and deck including all underwater gear
- Upholstery
- Carpet
- If a boat has removable floor covering it should be removed for drying

2. Rinse metal components with fresh water and wipe down with WD40

- Aluminum dash plates
- Steering wheel
- Tower components
- Engine
- Hand rails
- Cleats
- Glovebox
- Walk-thru door
- Exposed Seat frames
- Windshield frame and stanchions

3. Spray motor mounts with a corrosion inhibitor at least once a month.

4. Inspect anodes and replace when they reduce to 50 percent of their original size.



STAINLESS STEEL AND CHROME/ANODIZED ALUMINUM

Stainless steel, chrome-plated and anodized aluminum parts are not totally resistant to corrosion. Occasional cleaning and polishing with a marine chrome-and-stainless polish will maintain and extend the life of these parts. In salt water areas, it is imperative that you thoroughly rinse all hardware with fresh water and apply a light coating of protective oil to enhance the appearance after each use.

Exposure to salt water will cause corrosion leading to significant damage to stainless steel, chrome and anodized aluminum parts. Failure to thoroughly rinse salt water from all hardware, and to apply protective oil after each exposure to salt water, will accelerate the corrosion of hardware and will void your warranty.



MARINE GROWTH

If accelerated marine growth is a problem in the area in which the boat will generally be operated, an anti-fouling bottom paint may be necessary to slow growth while protecting the gel coat. Before selecting a bottom paint, talk with other boaters and an authorized MasterCraft dealer's service department to determine the product that works best in the area. Many local variables may also affect the selection of paint. Be sure to follow the paint manufacturer's directions exactly.

CAUTION

Be sure all fasteners used are approved and rated for marine use. Most fasteners used on MasterCraft boats are stainless steel or specially coated to resist corrosion.

WARNING

Use of improper parts may cause component or engine failure. Such failure may result in death or serious injury!

CAUTION

Exposure to salt water will cause corrosion leading to significant damage to stainless steel, chrome and anodized aluminum parts. Failure to thoroughly rinse salt water from all hardware, and to apply protective oil after each exposure to salt water, will accelerate the corrosion of hardware and will void your warranty.



BOAT CLEANING

Periodic cleaning is the best way to keep your boat looking like new. Regular washing and waxing keep dirt and build-up from deteriorating the finish. If you keep your boat in showroom-new condition, then your personal satisfaction will be higher and the resale value of your boat will be greater.

The boat is made of fiberglass-reinforced plastic resin material that is easy to clean and care for. Several layers of resin material are chemically bonded together to form the hull. The smooth outside surface of the hull is a layer of gel coat resin. The gel coat is a solid color that is only a few millimeters thick.

Beneath the gel coat surface is a series of layers of chemical resin, fiberglass mat and woven roving. It is these layers that give the boat its strength and maintain the hull shape. The boat bottom also uses special coremat material for its strength-to-weight and superior marine performance.

Even though MasterCraft has carefully crafted boats from resilient materials, it is still the responsibility of the boat owner to perform regular and routine cleaning maintenance to ensure that the boat exterior, interior and components retain both their appearance and strength.



HULL

When washing the boat, use a mild detergent, such as Dawn or Ivory dish soap, or similar commercially-produced detergent, and warm water solution. **DO NOT** use abrasive cleaners, solvents, ammonia or chlorine, as these will damage the gel coat surface. Under extreme conditions, special cleaners may be used to remove marine growth from the hull. (See an authorized MasterCraft service department for further instructions.)



CARPET

Occasionally washing with mild detergent and warm water or household carpet cleaners will help keep the carpet clean. Thoroughly hose the detergent out of the carpet and into the bilge. (This is a good time to clean the bilge also.) Allow the boat to remain uncovered to air dry for several days to prevent any mildew or odor caused by moisture.



PLATFORMS

WOOD PLATFORMS

If shoes are worn when walking on the wood, they should be proper boating shoes. Black-soled shoes are likely to scuff the surface, resulting in marks that may be difficult to remove or even leave permanent marks that are not covered under warranty. Regular cleaning and oiling of wood will maintain its original appearance. Unprotected wood will turn gray and could split or separate. If this happens it may void the warranty.

New wood platforms have been sealed and finished with an oil-based, wood preservative by the manufacturer.

Platforms will keep the new look and last for many, many years if properly maintained. For best results re-oil the platform and allow it to dry before the first use. If the boat spends a lot of long weekends on the lake with the platform in the water or if the platform sits uncovered in the sun, it should be oiled one or two times a month during the first season; then as needed after that. The platform should be covered when not in use or when stored for the winter.

Many products such as boiled linseed oil, tongue oil, wood oil and other outdoor wood preservatives can be found at marinas, paint stores or home improvement stores. Some oils such as linseed oil should be thinned with a thinner like mineral spirits before use. (70 percent oil-30 percent thinner.)



Teak Platform



Fiberglass Platform

When oiling a platform, apply a coat of oil with a wet cloth, work into the seams, end grain and edges. Allow the oil to set approximately 15 minutes and then wipe off the excess oil with a dry cloth. Do not let the oil dry on the platform in the sun. Excess oil should be removed with a dry cloth.

FIBERGLASS PLATFORM

The SeaDek on a fiberglass platform requires the same kind of regular—and gentle—cleaning that the rest of the SeaDek throughout the boat needs. After cleaning and once dry, the platform should be covered. Refer to the SeaDek section in this chapter for instructions on how best to care for the SeaDek on your fiberglass platform.

WINDSHIELD

In cleaning tempered glass windshields, the normal glass cleaners (from spray bottles or aerosol cans) work best. While the glass is very strong, it can be scratched if anything abrasive is used. Harsh chemicals or solvents should be avoided because they may affect the vinyl gaskets, anodized or powder-coated finish on the extrusions.



CANVAS COVERS

The material used in constructing bimini tops and boat covers is made from 100 percent solution-dyed polyester fiber with a urethane coating to provide excellent water repellent and mildew resistance. This design allows the material to be easily maintained. By following a few simple care and cleaning steps, the fabric will continue to look good and maintain its fine qualities for seasons to come.

IMPORTANT BACKGROUND INFORMATION

Because the fabrics are woven, they are breathable. It's also important to know that these fabrics are treated with a fluorocarbon finish, which enhances water repellent. This finish requires replenishment after vigorous cleaning. Polyester fabric will not support the growth of mildew. Mold and mildew need something on which to grow and polyester fabric is not a desirable substance for such growth. Dirt or dust on the fabric, however, is a perfect source for mildew growth, which makes regular cleaning of the fabric important.

The material has an applied finish that deters mold and mildew growth, but it does not make it mold-proof. Keeping the fabric free of dirt and foreign substances is important in deterring mold growth.

There is no set time for when the fabric should be cleaned, and



the local environment has a great deal to do with determining cleaning frequency. Cleaning is required less frequently in a dry environment than in a humid one where heavy foliage exists.

CLEANING

One of the best ways to keep the material looking fresh and new, and to delay the need for deep or vigorous cleaning, is to hose off fabrics with clear water on at least a monthly basis. This practice will help prevent dirt from becoming deeply embedded in the fabric, and it will eliminate the need for more frequent and more vigorous cleanings. In most environments, a thorough cleaning will be needed approximately every two (2) years.

The fabric can be cleaned while still in the boat. When cleaning, it is important to observe the following:

- Always use a natural soap—never detergent.
- Water should be cold to lukewarm, but never more than 100 degrees.
- Air dry only. Never apply heat to the fabric.
- Begin by brushing off loose dirt, and then hose down the material.

Prepare a cleaning mixture of water and a mild, natural soap that is free of detergents. Use a soft-bristle brush to clean, allowing the soap to soak in. Rinse thoroughly and allow the fabric to thoroughly air dry. If stubborn stains persist, you can use a diluted chlorine bleach/soap mixture for spot cleaning of mildew, roof run-off and other similar stains. Please keep in mind that chlorine bleach will not change the color of the fabric, but chlorine bleach will eventually break down the fiber of any fabric. Therefore, this cleaning method should be used as infrequently as possible.

The cleaning mixture should be mixed as follows:

1. Four ounces (one-half cup) of chlorine bleach.
2. One gallon of water.
3. Clean with a soft-bristle brush and allow the mixture to soak no longer than twenty (20) minutes. Rinse thoroughly and allow to completely air dry. Repeat if necessary.

MACHINE WASHING CANVAS COVERS

Machine washing is not recommended, however if the canvas fits in the washing machine MasterCraft recommends:

Use only natural soaps—no detergent.

Wash and rinse in cold water. Air dry. (Never put the fabric in a dryer.)

As part of the finishing process, the material has been treated with a fluorocarbon finish, which enhances water repellent.

This finish is designed to last for several years, but it must be replenished after a thorough cleaning. Based on test results, the manufacturer recommends 303 High Tech Fabric Guard™ as the preferred re-treatment product.

After cleaning and air drying, apply 303 in a thin, even coat. When it has dried, apply a second thin, even coat. These two (2) light coatings are more effective in restoring fabric water resistance than a single heavy coating. Keep in mind that 303 High Tech Fabric Guard™ will work only as well as it is applied. This means that the fabric must be free of dirt and detergents or the Fabric Guard will wash away with the dirt particles.

Fabrics should be retreated after thorough cleaning or after five (5) years of use.

UPHOLSTERY

While the vinyl is made to withstand the elements, it is important to care for vinyl by keeping it clean at all times. Many substances may stain the vinyl if left untreated over a period of time. Remember to remove any contaminant and clean vinyl immediately.

Regular washing with mild detergent and warm water or vinyl cleaners is sufficient to keep the cushion and vinyl coverings in good condition.

Do not soak the cushion, and dry thoroughly after washing to prevent mildew accumulations when the boat is covered. Spray the cushions with a mildew repellent and prop them up in the boat when it is covered to take advantage of air circulation. MasterCraft vinyl is made to withstand the effects of sun, heat, acid rain and soiling, under normal conditions, but this does not preclude the cleaning requirements. Please consult the following cleaning recommendations before cleaning your upholstery. In some instances, consumers have reported the appearance of a pink stain on vinyl that is resistant to various cleaning methods. Although there can be other causes for pink staining in vinyls, most pink stains are caused by dyes produced by micro-organisms.

These dyes are metabolic products of the micro-organisms, otherwise known as a form of fungi. It is virtually impossible for



consumers to avoid these micro-organisms as they exist in the atmosphere, and are more prevalent in high-humidity areas. Rain cleanses the air, with the result being that the micro-organisms are deposited on items such as marine vinyl.

While the vinyl is treated to resist the growth of micro-organisms (meaning the vinyl is not a food source), the stain results from failure to properly clean and maintain the vinyl. This means that after use, the upholstery must be cleaned with a soft brush and warm soapy water, followed by a thorough rinse with clean water.

This situation is worsened if the boat is stored without proper ventilation or if the boat cover is put on while the vinyl is still wet, creating a situation in which all forms of fungi (mold and mildew) thrive. Failure to follow these instructions in the proper care of upholstery may cause your warranty to be voided!

The cleaning table presented in this section is offered only as a suggestion and as an aid in attempting to deal with stains. We do not guarantee that the cleaning methods will work. Stains from any external source are unlikely to be covered by warranty.

ADDITIONAL UPHOLSTERY CLEANING INFORMATION

The following information refers to the performance of the upholstery product in specific tests conducted under laboratory conditions. Results may vary under actual conditions. This information is not a guarantee and does not relieve the user from the responsibility of the proper and safe use of the product and all cleaning agents. The use of certain agents can be harmful to the surface appearance and lifespan of the vinyl. The vinyl manufacturer and MasterCraft assume no responsibility resulting from the use of such cleaning agents to the vinyl. Please check compatibility when using this product in combination with painted or varnished surfaces.

**Always remove stains immediately. Upholstery must be kept CLEAN AND DRY!*

A = Medium soft brush, with warm soapy water. Rinse and dry.

B = 303 Fabric and Vinyl Cleaner. Rinse and dry.

C = Wipe or scrape off excess (chill gum with ice before starting).



COMMON STAINS	STEP 1	STEP 2	STEP 3
General Care		A	B
Dirt Build-up	A	B	
Ballpoint Ink*	B	A	
Chewing Gum	B	A	
Coffee, Tea, Chocolate	B	A	
Grease	C	B	A
Household Soil	A	B	
Ketchup	A	B	
Latex Paint	A	B	
Lipstick	C	A	B
Mildew or Wet Leaves*	B	A	
Motor Oil	C	B	A
Oil-based Paint	C	B	A
Permanent Marker*	B	A	
Spray Paint	B	A	
Suntan Lotion*	A	B	
Tar/Asphalt	C	B	A
Yellow Mustard	A	B	

All cleaning methods must be followed by a thorough rinse with clean, warm water. Failure to care for your vinyl properly, or the use of improper cleaners, may void your warranty, as well as damage your vinyl.

Certain household cleaners, powdered abrasives, steel wool, and solvent cleaners can cause damage and discoloration and are not recommended. Dry cleaning fluids and lacquer solvents should not be used because they will remove printed pattern and gloss. Waxes should be used with caution because many contain dyes or solvents that can permanently damage the protective coating.

Do not clean with power washers as they can generate 3,500 P.S.I. and could damage the surface of your interior. Do not use kerosene, gasoline or acetone, because they will remove the protective marine top coat. Do not use any silicone based protectants. They will extract the plasticizer, leaving vinyl hard and brittle, and eventually cracking will occur.

Vinyl upholstery should be covered when not in use to protect from further sun exposure, tree debris, air pollutants and acid rain.

For storage, vinyl should be cleaned, protected, covered and stored in a dry, well ventilated area.



RECOMMENDED PRODUCTS

- MasterCraft Vinyl Dressing
- Vinyl Finish
- Vinyl Cleaner
- Mild Dish Soap
- 303 High Tech Fabric Guard™
- 303 Fabric and Vinyl Cleaner™
- Babe's Seat Soap

NON-RECOMMENDED PRODUCTS

- ArmorAll
- Bleach
- Baking Soda
- Fantastik
- Formula 409
- Murphy's Oil Soap
- Son-of-a-Gun
- Simple Green
- Anything not listed on the Recommended Products list

SEADEK PADS

MODELS

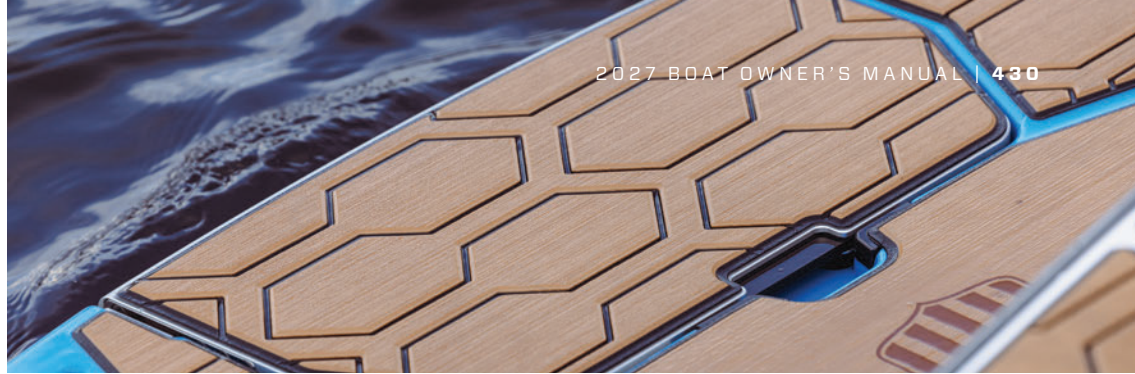
Available on all models.

PURPOSE

SeaDek provides an EVA foam-based alternative to carpet. SeaDek is installed using a stick-on adhesive and is not intended to be removable.

LOCATION

SeaDek pads adhere directly to the flooring, gunnels and other locations around the boat.



CARE

SeaDek Marine Products recommends using **Dek Magic™** cleaner, which has been specifically developed for easy cleaning of PE/EVA nonskid materials and is effective on a variety of stains. Dek Magic is available for purchase on seadek.com. For best results, wet with water then spray Dek Magic liberally over the entire area. With a medium bristled brush, lightly work the product in. Let the cleaner sit for 3-5 minutes then use water to dampen the area and lightly scrub again. Rinse the cleaner off thoroughly and dry with a clean towel. For stubborn stain, repeat these steps as needed.

If Dek Magic is not available, see the below steps for other cleaning options.

Dirt and Footprints

Use an all-purpose cleaner, degreaser, or dish soap along with warm water and a medium bristled brush. Thoroughly work the soapy mixture into the SeaDek until stain comes up. Rinse with clean water and repeat if necessary.

Suntan Lotion, Grease, and Oils

Use an all-purpose cleaner or degreaser alone with a medium bristled brush. Put small amount of the cleaner on the oil stain and use a medium bristled brush and warm water to scrub until the oil is out. Rinse with clean water and repeat if needed.

Rust Stains

Wet the affected area and apply a dry, powdered Oxalic acid (such as Barkeeper's Friend) to the rust stain. Use a medium bristled brush to work the powder into the stain and allow to soak for 3-5 minutes. Rinse with water and repeat if necessary. When applying oxalic acid, use care to avoid getting acid on the edges of the pad, as it could damage the lamination or PSA.

Please follow your state and/or country regulations for proper chemical handling.

Wear vinyl or nitrile gloves and eye protection when necessary.

NOTE

For best cleaning results, tend to all stains, spills, and leaks as soon as possible.



PRODUCTS AND METHODS TO USE WITH CARE:

- Although highly effective, using a pressure washer to clean SeaDek pads can cause damage if not done properly. **DO NOT exceed 1200 PSI.** Spray from the middle to the outside of the pads. Do not point the pressurized spray under the edge of the pad.
- **Acetone** (if it must be used, avoid the edges of the pad to protect the adhesive)
- **Oxalic Acid** (if it must be used, avoid the edges of the pad to protect the adhesive)
- **Bleach** (if used, dilute 1 cup with 1 gallon of water)

DO NOT USE:

- Citrus Cleaners
- Mineral Spirits



MAINTENANCE SERVICE

FREQUENCY AND SCHEDULED MAINTENANCE

Proper care, maintenance and adjustment will contribute to the peak performance of the MasterCraft boat, while also extending the overall service life and the resale value.

The pages that follow provide instructions on how to accomplish the required checks, inspections and services listed. An authorized MasterCraft service department is the best source for proper maintenance.

NOTE: The engine and drive train require scheduled maintenance checks and services in addition to the boat's other maintenance requirements. Read and understand the engine owner's manual that has been provided, and follow the maintenance schedule to ensure proper operation and quality service over the life of the boat and drive train. Failure to follow the maintenance requirements and instructions listed in this and all other manuals may result in damage to the components, systems and equipment of the boat. Resulting damage will not be covered by warranty. Safety issues are also directly impacted by proper maintenance!

MAINTENANCE DEFINITIONS

Check: Verify the operational readiness by physical measurement, i.e., measuring the oil level with the dipstick or aligning with a feeler gauge.

Inspect: Determine the operational readiness by examination, i.e., by sight, sound or feel.

Change: Tasks required periodically to keep the boat in proper operating condition, i.e., drain, replenish or service.

NEW BOAT BREAK-IN

Check the alignment of the propeller shaft. (See Annual Maintenance also.)

Have an authorized MasterCraft service department change the fuel filter after the first fifty (50) hours of operation, and then again at one hundred (100) hours. The fuel filter should be changed annually, even if less than one hundred (100) hours are run during the previous season.

NOTE

MasterCraft recommends the following functions be performed by authorized MasterCraft technicians at an authorized MasterCraft dealer.

MAINTENANCE AT EACH USE

BEFORE STARTING THE ENGINE

Review the engine manual before each outing to determine the drive train requirements that need to be followed prior to each use.

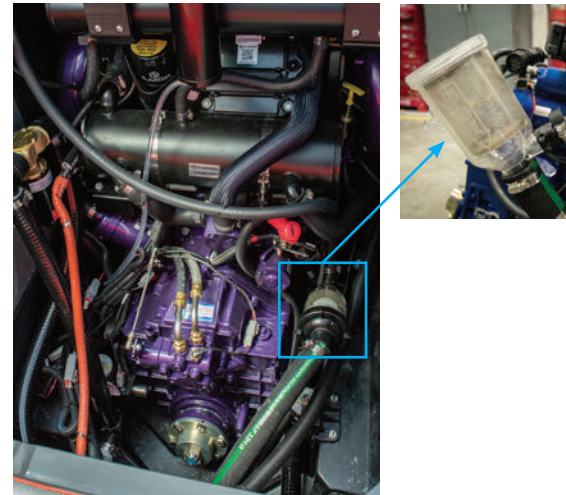
Review the Safety Checks and Services section of this Owner's Manual. There are important functions that must be followed before, during and after every outing:

- Inspect the raw water intake strainer for blockage. If there is blockage, also check the transmission cooler (where equipped).
- Check and clean the seacock strainer as necessary.
- Check the cooling system level. See the engine owner's manual for details.
- Inspect the battery connections and hold-downs.
- Inspect the drive train for loose or missing hardware.
- Inspect the throttle and shift cables for kinks, wear and interference with other components.
- Inspect the propeller shaft log for excessive water entry.
- Inspect the fuel system lines and connections for leaks.
- Check for water leaks or excessive exhaust odor.
- As you start the engine, check that the voltage reading registers a fully charged battery.

AFTER EACH USE

Refer to the Cleaning the Boat and Corrosion Prevention sections of this Owner's Manual for guidance on a thorough approach to maintenance. Also pay attention to the information provided regarding the maintenance of teak platforms and accessories, because the wood requires periodic maintenance as well.

Boats equipped with an optional flushing system for use in salt water or brackish water should operate the flushing system.



QUARTERLY MAINTENANCE (EVERY 50 HOURS)

Before Starting the Engine Or After It Has Cooled:

- Check the safety equipment.
- Change the oil.

Oil Filter Location



ANNUAL MAINTENANCE (EVERY 100 HOURS)

NOTE: MasterCraft recommends that the following be performed by authorized MasterCraft technicians at an authorized dealer.

Before Starting the Engine Or After It Has Cooled:

- Replace the fuel filter (to be performed by an authorized MasterCraft technician only).
- Check the propeller shaft coupler alignment.
- Lubricate the steering system.
- Lubricate the throttle and shift cables.
- Check the engine mounts.
- Inspect the complete fuel system for leakage.
- Check the fire extinguisher and suppression units on-board.
- Change impellers.

MasterCraft recommends using an authorized MasterCraft technicians at an authorized MasterCraft dealer for many of these tasks!

SCHEDULED MAINTENANCE BEFORE EACH USE

BEFORE STARTING THE ENGINE

Review the Safety Checks and Services section of this manual. There are important functions that must be followed before, during and after every outing. The Safety Checks and Services section notes that all drain plugs must be reinstalled prior to operating the boat. This is critical to prevent taking on water.

INSPECT THE SEA STRAINER

Because a clogged sea strainer puts undue strain on the engine(s), the strainer should be checked prior to starting the boat. The strainer is standard on all boats.

1. Open the strainer housing mounted to the engine (see photo).
2. Remove the filter and inspect for debris. Manually clean the strainer.
3. Remove anything found inside the strainer.
4. Return the strainer to the housing and replace the lid. Tighten the lid in place



INSPECT THE BATTERY CONNECTIONS AND HOLD-DOWNS

Because poor connections or hold-downs may result in erroneous voltmeter readings, MasterCraft recommends doing this before starting the boat.

1. Ensure the engine is OFF and the engine safety starting switch disconnected. Be certain that the throttle/shift control lever is in neutral. Locate the battery. Batteries are placed in a variety of locations, depending on the model. Check under the observer seat or behind the aft seat.
2. Check that the battery post connections are clean and tight. If not, loosen and remove the negative terminal connection first. Be careful not to touch the positive terminal with the wrench.

Loosen and remove the positive terminal connection. Remove battery hold-downs and remove the battery from the boat. Clean corrosion from the battery posts with a battery terminal cleaner. Clean the battery with a water-and-baking-soda solution. Use care to avoid allowing the solution to enter the battery vents. Rinse the battery with fresh water.

Use a battery terminal cleaning brush to remove corrosion from the inside of the battery terminals. Clean the terminals with a water-and-baking-soda solution and rinse with fresh water.

Check the battery box that normally holds the battery in place to determine whether there is evidence of battery fluid inside it.



WARNING

Battery electrolyte fluid is dangerous. It contains sulfuric acid, which is poisonous, corrosive and caustic. If electrolyte fluid is spilled or placed on any part of the human body, immediately flush the area with large amounts of clean water and immediately seek medical attention.

Battery fluids are corrosive and can cause permanent damage to the battery box. If fluid is evident, wash out the box with the water-and-baking-soda solution that is used to clean the terminals. Rinse with fresh water and dry with a cloth.

Reconnect the positive terminal first, then the negative. Tighten the terminals. Coat both terminals completely with a thin covering of marine dielectric grease. Be sure that the rubber boot covers the positive terminal completely.

NOTE: The boat's engine is designed to work with the standard electronics installed in the boat. Adding other electrical components or accessories can change the way the fuel injection controls the engine or the overall electrical system functions. Before adding electrical equipment, consult an authorized MasterCraft dealer's service department. Otherwise, the engine may not perform properly.

⚠ CAUTION

Add-on equipment may adversely affect the alternator output or overload the electrical system. Such damage may not be covered by the warranty. If a replacement battery is required, be certain to select a marine battery with at least eight-hundred (800) cold-cranking-amps at zero degrees (0o) Fahrenheit. Before disconnecting the battery, make sure the ignition key and all accessories are in the OFF position. Also remember to re-attach the cables in the proper order, with the positive cable connected to the positive [+] post and the negative cable connected to the negative [-] post.

⚠ WARNING

When charging, batteries generate small amounts of dangerous hydrogen gas. This gas is highly explosive. Keep all sparks, flames and smoking well away from the area. Failure to follow instructions when charging a battery may cause an electrical charge or even an explosion of the battery, which could result in death or serious injury. MasterCraft recommends the use of an AMP spiral-cell battery, such as the Optima brand. These batteries exceed other batteries in holding and extending a charge.

⚠ CAUTION

Some engine parts become very hot during operation. This inspection must be completed while the engine is cool to prevent burns to your skin. Perform this task before starting the boat.

THROTTLE AND SHIFT CABLES

INSPECT FOR KINKS, WEAR AND INTERFERENCE

1. Ensure the engine is OFF, the engine safety starting switch is disconnected and the throttle/shift control lever is in neutral.
2. Open the engine compartment and locate the throttle and shift cables. Follow each cable back under the floorboards and feel for any kinks and wear on the outer jacket. Any sign of cable damage is cause for replacement. See your authorized MasterCraft dealer's service department if you notice any cable damage.



INSPECT THE FUEL SYSTEM FOR LEAKS

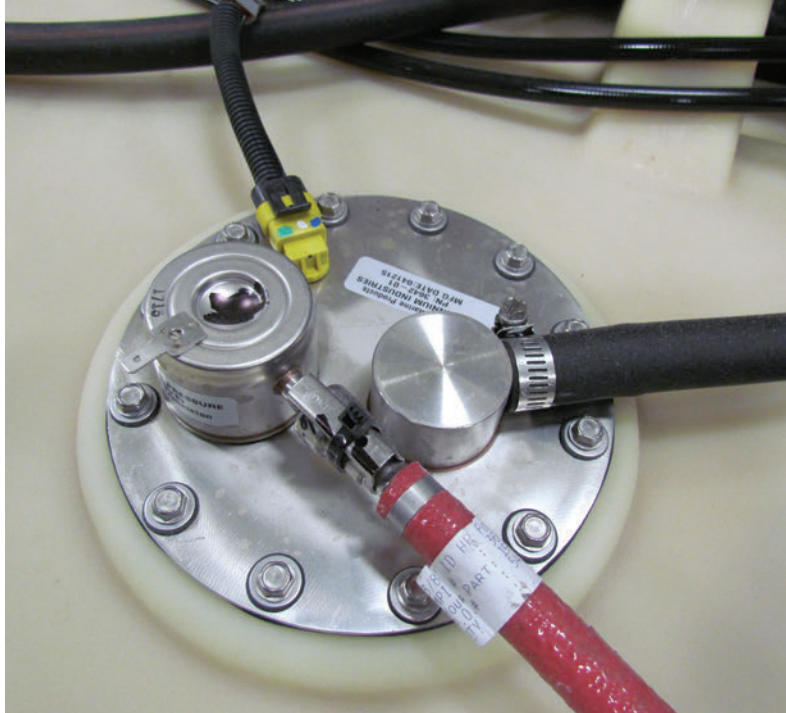
This function should be performed prior to starting the engine; and then again after about three (3)-to-five (5) minutes to determine whether any leaks are apparent.

1. Ensure the engine is OFF, the engine safety starting switch is disconnected and the throttle/shift control lever is in neutral.
2. Open the engine compartment and visually check as much of the fuel system from the tank to the engine as you can see. On some models this will be a limited area. If the odor of gasoline is strong or if you see visual evidence of fuel outside the system, cease all operations and take the boat immediately to an authorized MasterCraft dealer's service department to determine the source of the leak. The leak must be repaired before the engine is restarted. Because the lines on late model MasterCraft boats are pressurized, they can be disconnected and/or removed ONLY by using specialized tools.

DANGER

Gasoline is highly flammable and its vapors may ignite, resulting in fire or explosion. Be sure to keep all sparks and flames away from the area while inspecting the boat's fuel system.

The engine box serves as a machinery guard. The engine must be OFF whenever the box is open. Clothing or body parts can get caught in moving parts, causing death or serious injury. Keep away from moving parts!



WARNING

Fuel leakage can lead to a build-up of potentially explosive fumes within the engine compartment.

DO NOT IGNORE OR OVERLOOK THIS INSPECTION AND REPAIR AS NECESSARY!

NOTE ANY EXHAUST ODORS

This function should be performed **prior to starting the engine;** and then again after about 3-to-5 minutes to determine whether any leaks are apparent.

1. First ensure that the engine is OFF and that the engine safety starting switch is disconnected. Be certain that the throttle/ shift control lever is in neutral. The engine must be cool.
2. Open the engine compartment and note whether there is any unusual odor. In many instances, exhaust will have little or no odor, but in the event of a potentially significant exhaust leakage, it may be possible to smell a “rotten-egg” odor that signifies a probable issue that must be addressed.
3. If leakage is apparent, tighten the hose clamps, being careful to avoid crimping the hose. If the leakage is significant, or is occurring at a location other than the joints (such as a split in a hose), see your authorized MasterCraft dealer's service department for parts and service.

Exhaust fumes can cause illness or impairment, including carbon monoxide poisoning. Equally important to consider, leakage can lead to a build-up of potentially explosive fumes within the engine compartment. DO NOT IGNORE OR OVERLOOK THIS INSPECTION! REPAIR AS NECESSARY!

⚠ DANGER ⚠	<p>Carbon Monoxide (CO) can cause brain damage or death.</p> <p>Engine and generator exhaust contains odorless and colorless carbon monoxide gas.</p> <p>Carbon monoxide will be around the back of the boat when engines or generators are running.</p> <p>Move to fresh air, if you feel nausea, headache, dizziness, or drowsiness.</p>
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BEFORE EACH USE

AFTER STARTING THE ENGINE

Check That The Battery Is Fully Charged

As the boat is started, review the screen information at the helm and pay particular attention to the voltage.

While starting the engine, check that the voltmeter reads between 12.4 and 14.5 volts. An erratic reading may be a sign of low voltage. The voltage reading is the best indication of the status of your battery, however it is not fool-proof. While the reading may indicate that the battery is producing current, if during a previous operation you had reason to suspect a problem with your battery, check with an authorized MasterCraft dealer's service department.

Current models are equipped with a low-voltage battery alarm. In the event that the stereo has been functioning when the boat engine is OFF, the voltage drain on the battery may result in difficulties restarting the boat. To avoid this situation, when the voltage level falls to 10.5 volts, the system will shut off the stereo system and sound an alarm for a period of two (2) minutes to allow the operator time to turn the ignition key ON and start the engine. Doing so will allow the engine's alternator to recharge the battery.

Charge dead batteries with a battery charger before attempting to start the engine. (Some MasterCraft models offer an optional battery charger; but never jump-start the battery.)

WARNING

When charging, batteries generate small amounts of dangerous hydrogen gas. This gas is highly explosive. Keep all sparks, flames and smoking well away from the area. Failure to follow instructions when charging a battery may cause an electrical charge or even an explosion of the battery, which could cause death or injury.

CAUTION

Crossing cables or jumper cables may result in damage to the electrical components due to incorrect battery connections. Such damages may not be covered by your warranty.

Jump-starting From Another Boat Or Battery Is Dangerous!

Charging a dead battery from a third party engine will put undue stress on the alternator, which may cause it to fail.

REPEAT CHECK FOR FUEL AND/OR EXHAUST LEAKS

This function should be performed after about three (3)-to-five (5) minutes of running the engine to determine whether any leaks are apparent.

After three (3)-to-five (5) minutes of operation, shut down the engine and ensure that the engine safety starting switch is disconnected. Be certain that the throttle/shift control lever is in neutral. Again, inspect the fuel system as well as possible. Inspect the fuel pump gasket, fastener gaskets, regulator seal and sender gasket for leaks. If the odor of gasoline is strong or if you see visual evidence of fuel outside the system, cease all operations and take the boat immediately to an authorized MasterCraft dealer's service department to determine the source of the leak. The leak must be repaired before the engine is restarted. Because the lines on late model MasterCraft boats are pressurized, they can be disconnected and/or removed **ONLY** by using specialized tools that are not available to the public.

Reinspect after the fuel tank has been filled full for the first time of the season.

Note that fuel systems vary by model. The pump-in-tank location on top of the fuel tank will resemble one of the two photos.

This is important! Fuel leakage can lead to a build-up of potentially explosive fumes within the engine compartment. DO NOT IGNORE OR OVERLOOK THIS INSPECTION AND REPAIR AS NECESSARY!

Also, recheck that there is no unusual exhaust odors as described prior to starting the engine.

AFTER EACH USE

GENERAL CLEANING AND STORAGE

Refer to the Corrosion Prevention and Cleaning the Boat sections of this Owner's Manual. After each outing, the boat should receive a general cleaning and drying prior to being stored. Even if the boat is kept in a slip, owners/operators should wipe down the interior and should periodically remove the boat from the water for a general cleaning.

In instances of boats being left moored in water, it may be necessary to periodically run the bilge pump to clear out water that has intruded into the bilge compartment. Keep the battery fully charged in order to be able to provide this function.

INSPECTIONS

As noted in the Before Each Use section, some functions need to be performed following use of the boat, such as checking the intake strainer or seacock strainer if evidence has shown that debris collects during the outing. Wet debris is often easier to remove.



SCHEDULED MAINTENANCE

MasterCraft recommends that your annual, or one hundred hour, maintenance requirements be performed by an authorized MasterCraft dealer. Authorized MasterCraft dealerships have the proper equipment and technical training to best meet your service needs.



**Scan this QR Code to access
your transmission manufacturer
Owner's Manual (Multilingual)**

QUARTERLY MAINTENANCE (EVERY 50 HOURS)

CHECK SAFETY EQUIPMENT AND CHANGE OIL

Throughout this Owner's Manual, boat owners, operators and users have been reminded to pay particular attention to any and all safety requirements.

At the fifty (50) hour mark, it is appropriate to check that all required and recommended safety equipment be reviewed for condition and repaired or replaced as necessary. This includes all personal flotation devices. It is also advisable to check that all equipment and personal items on-board have been properly stowed and the routine maintenance performed.



ANNUAL MAINTENANCE (EVERY 100 HOURS)

ANNUAL MAINTENANCE

Some boat owners choose to personally execute some maintenance procedures on their boats. MasterCraft has provided information on several procedures. For safety reasons, a few must be performed by authorized MasterCraft service technicians only, such as anything involving checks and repairs on the fuel line, which is under pressure, and replacement of impellers.

These matters must be addressed on a regular basis, at one hundred (100) hours or annually, whichever comes first. These procedures are in addition to seasonal preparation and winterization (see Storage and Winterization section for additional details). All of these issues are extremely important to continued boating pleasure, as well as long life for the boat, and the critical matter of safety.

Even if the annual maintenance work is completed by an authorized MasterCraft service technician, boat owners and operators should still review this section and ensure that they have some understanding of what is necessary to keep the boat in top condition.

CHECK THE ENGINE MOUNTS

1. Ensure the engine is OFF and disconnect the engine safety starting switch. Be sure that the throttle/shift control lever is in neutral. The engine must be cool.
2. Open the engine box and locate the four (4) motor mounts. See the port forward mount circled below.
3. Check the tightness of the mounting hardware and adjustment lock-nuts. Securely tighten any loose hardware.

CAUTION

Some engine parts become very hot during operation. This inspection must be completed while the engine is cool to prevent burns to your skin. Perform this task before starting the boat.



Engine Mount
Location



CHECK THE PROPELLER SHAFT COUPLING ALIGNMENT

This function is critical to avoiding unnecessary wear and potential damage to the engine as well as the propeller and propeller shaft. Because it is a complex and exacting part of maintenance, this should be performed only by your authorized MasterCraft dealer as part of your annual maintenance.

INSPECT PROSTAR UNDERWATER EXHAUST OR EXHAUST TURNDOWNS FOR DAMAGE

1. Ensure the engine is OFF and disconnect the engine safety starting switch. Be sure that the throttle/shift control lever is in neutral.
2. Inspect for damage. If damaged, water back flow can occur and system efficacy will be compromised.

LUBRICATE STEERING SYSTEM

For cable systems only (both standard steering and DockStar Handling System); hydraulic steering maintenance must be completed by an authorized MasterCraft dealer only.

Because this process should be completed while all movable components of the drive train are NOT in motion, MasterCraft recommends lubrication be done while the boat is out of the water. The process below is for all MasterCraft boat models. Additional steps listed after are required for ProStar rudders.



1. Ensure the engine is OFF and disconnect the emergency kill switch. Be sure that the throttle/shift control lever is in neutral. The engine must be cool.
2. Remove the close-outs to the engine compartment.
3. Turn the steering wheel so that the maximum amount of steering cable is seen (seen in top photo).
4. Use solvent to clean old lubricant from the cable end, pivot and rudder shaft.
5. Spread a generous amount of white lithium grease over the cable end. Work the steering wheel back and forth and reapply grease.
6. Using the flexible end of a grease gun, give two (2) full shots of white lithium grease to the zerk fitting on the steering tube pivot (circled above). Clean up any old grease purged from the areas. NOTE: The ProStar has one additional rudder port zerk fitting. DO NOT use white lithium grease on this rudder port. Use two (2) full shots of Alpha FG2-100, available only from an authorized MasterCraft dealer,
7. Rotate the steering wheel back and forth several times to work the lubricant in.
8. Reinstall the access panel.

LUBRICATE THE THROTTLE SYSTEM

Because this process should be completed while all movable components of the drive train are NOT in motion, MasterCraft recommends this be done while the boat is out of the water.

1. Ensure the engine is OFF and disconnect the engine safety starting switch. Be sure that the throttle/shift control lever is in neutral. The engine must be cool.
2. Open the engine box and locate the shift cable end.
3. Shift to full-throttle-forward.
4. Lubricate the cable ends and connections with a coating of waterproof marine multi-purpose grease.
5. Lubricate the pivots and linkages with a light grease.
6. Shift the control lever from full-throttle-forward to full-throttle-reverse several times to work the lubricant in.

CHECK THE BALLAST PUMP IMPELLER

The number of ballast pumps varies from system to system. Authorized MasterCraft dealers can provide guidance to locate any and all pumps.

1. Remove two (2) of the cover screws and loosen the third screw. Retain the screws for the re-installation process. Swing the cover out of the way to allow access to the impeller location.
2. Using needle-nose pliers, pull the old impeller out of the casing
3. Install a new impeller. (It is intentionally larger than the case. While gently squeezing it in, ensure that the paddle wheels angle in the same direction—counterclockwise—all the way around.)
4. Carefully slide the plate back into place. No silicone is necessary. Due to the built-in gasket, tightening the screws should prevent leakage.



Although the boat engine is similar to an automobile engine, the engine compartment differs substantially. The underside of an automobile engine compartment is totally open to the atmosphere. This allows complete air circulation and ventilation. A boat engine is housed in a closed compartment, the underside of which is the bottom (hull) of the boat.

The enclosed engine compartment limits the ventilation of gasoline and oil fumes. Because confined gasoline vapors mixed with a little air can form an explosive atmosphere, it is important to be especially vigilant in performing the following operations:

1. Inspect the boat bilge area under the engine for the evidence of oil and gasoline—or any gasoline odor. This inspection should take place the first time the boat is started each day. Raise the engine cover and visually look at the bilge area under the engine.
2. Run the bilge blower for at least four (4) minutes to ventilate the bilge area each time before starting the engine.

All MasterCraft models are equipped with a fuel fill cap. These caps are hinged, and they snap open or closed to seal with an audible click. This is important for the system on these boats to operate correctly. Be sure to fully snap the cap shut after each fill.

As part of the Annual Maintenance, the fuel filter must be changed.

Due to the pressurized fuel lines, this maintenance can be done only by authorized MasterCraft dealers.

CAUTION

All replaced fuel components must meet United States Coast Guard (“USCG”) and American Boat & Yacht Council, Inc. (“ABYC”) standards, and must be Underwriter’s Laboratory (“UL”)-approved. Inferior quality components pose a serious safety threat to you and others, and the use of inferior components may result in serious injury or death. Resulting damage may void the warranty.

DANGER

Gasoline is explosive. If a gasoline odor is present or gasoline is visually observed in the bilge area during inspection, DO NOT START YOUR ENGINE! Remove the ignition key from the ignition switch and call an authorized MasterCraft dealer for service.

NOTE: If there is evidence of loose fuel fittings, deteriorated lines or other problems associated with the fuel system, call an authorized MasterCraft dealer. Fuel system service on later-model MasterCraft boats requires special service tools and special training. Due to the potential for serious consequences when errors occur in servicing the fuel system, MasterCraft strongly encourages all boat owners and operators to seek professional assistance from an authorized MasterCraft dealer’s service department whenever any service or perceived problems occur within the fuel system.

FIRE EXTINGUISHER AND SUPPRESSION UNITS

MasterCraft recommends that boat owners include a check of the fire suppression and extinguisher units during the annual maintenance to be sure that they are always ready for use. Some units may not require annual checks; refer to the signage and labeling on the individual units for further guidance.



STORAGE & WINTERIZATION

AQUATIC INVASIVE SPECIES

As responsible boaters and citizens, each boat owner should do their part to prevent the spread of these aquatic hitchhikers. In many cases, it is also required by law. Check local regulations for any waterway where you will boat.

For more information visit the USDA National Invasive Species Information Center website:

www.invasivespeciesinfo.gov

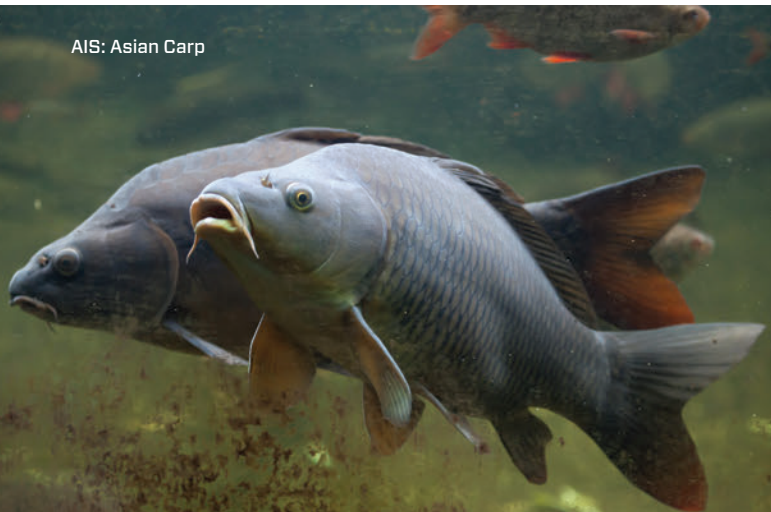


**Scan this QR Code to access the
USDA's National Invasive Species
Information Center**

AQUATIC INVASIVE SPECIES (AIS)

AIS have a negative impact on the waterway, its native species, and recreational and commercial uses of the waterway.

AIS: Asian Carp



AIS: Zebra Mussels



AIS: Giant Salvinia



HOW DO AQUATIC NUISANCE SPECIES SPREAD?

There are many pathways for invasion by aquatic nuisance species. Globalization has vastly increased long-distance travel and commerce, and highly altered waterways. These and other factors have increased the frequency by which non-indigenous plants, animals and pathogens are introduced to new areas, sometimes with costly results. Some of the more common pathways are listed below.

- Boat hulls, fishing gear and other recreational pathways
- Aquaculture escapes
- Intentional introductions
- Aquaria releases
- Live food industry
- Escaped ornamental plants, nursery sales or disposals
- Fishing bait releases
- Illegal stockings

After each boating trip, follow these three simple steps before you leave the water access to stop the spread of AIS: Clean, Drain, and Dry. This is the boater's way to help protect the environment from the damage that AIS can cause.

Clean

Inspect and remove all aquatic plants, animals, mud, and debris from the boat, engine, trailer, anchor, and any watersports equipment before and after launching. Rinse, scrub and or wash, away from storm drains, ditches, or waterways. Rinse watercraft, trailer, and equipment with hot water, when possible. Flush motor according to the maintenance section of this manual.

DANGER

Do not use outlets as fill ports. Extremely hot water may surge out and hit the person decontaminating the boat causing burns.

NOTE: Some localities may require inspection or decontamination before and/or after launching. Check state and local laws and regulations for requirements prior to traveling to go boating.

Drain

Completely drain all water from the boat and its compartments, including but not limited to the bilge, wells, lockers, ballast tanks or bags, bait containers, engines, and out-drives.

Dry

Allow the boat to completely dry before visiting any other bodies of water.

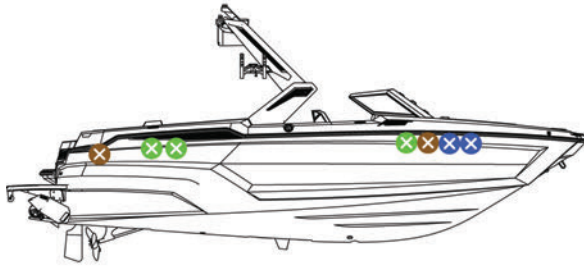
AIS: Kudzu



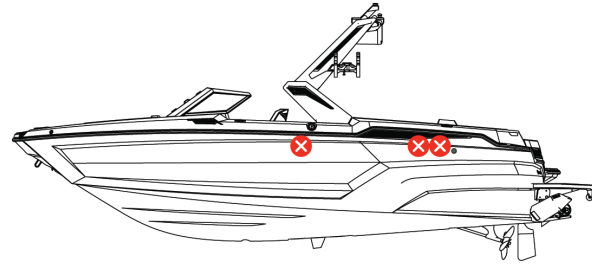
XSTAR 23

BALLAST THROUGH HULL LOCATIONS

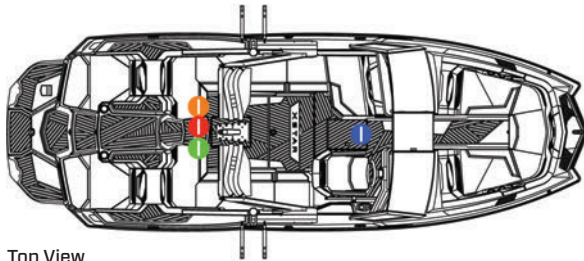
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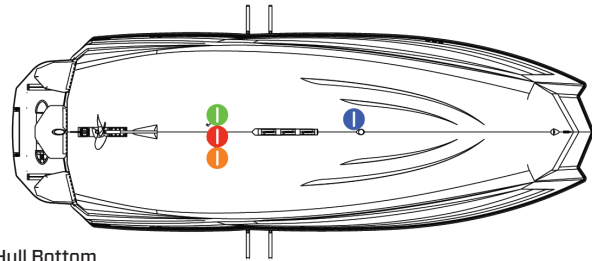
Starboard Hullside



Port Hullside



Top View



Hull Bottom

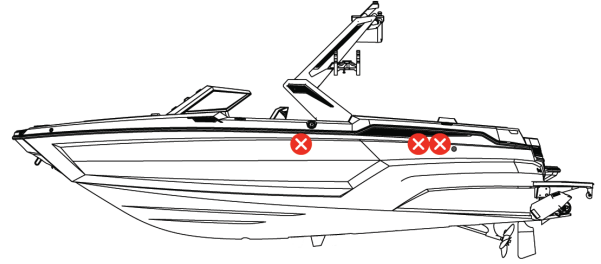
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BALLAST THROUGH HULL LOCATIONS

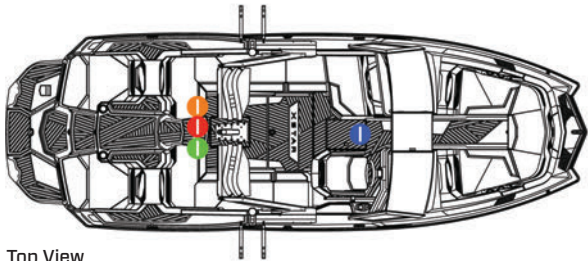
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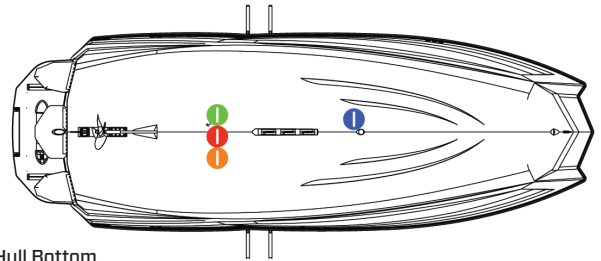
Starboard Hullside



Port Hullside



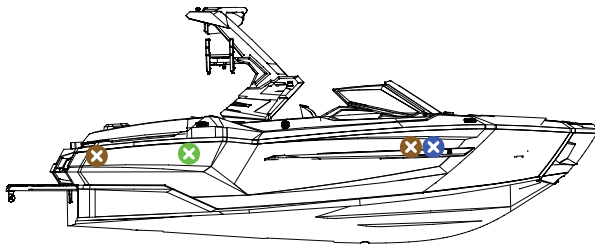
Top View



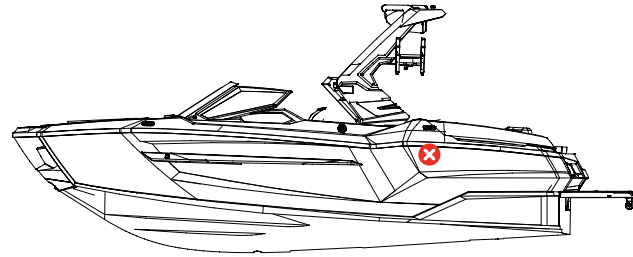
Hull Bottom

22 BALLAST THROUGH HULL LOCATIONS

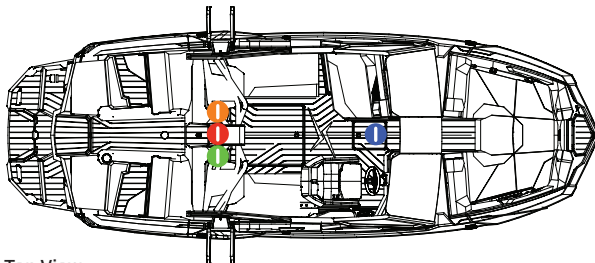
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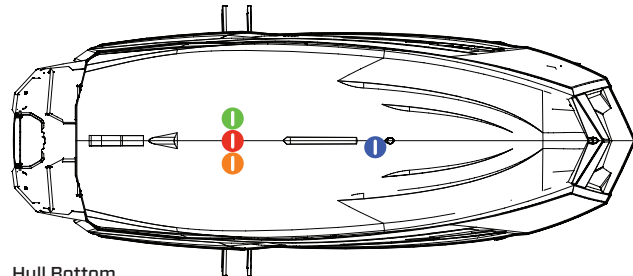
Starboard Hullside



Port Hullside














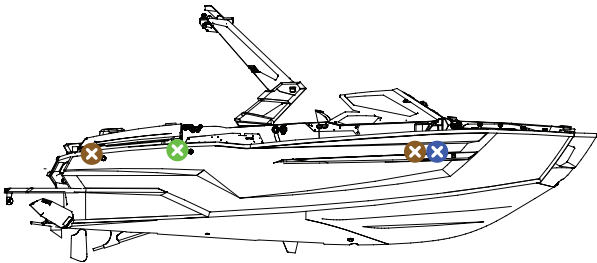
Top View



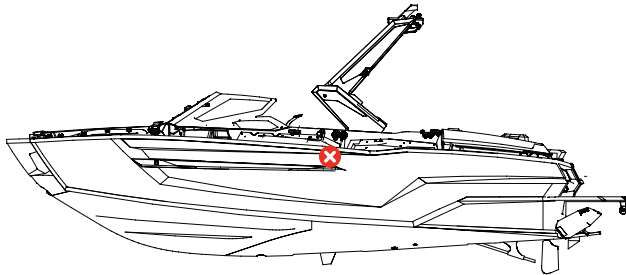
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BALLAST THROUGH HULL LOCATIONS

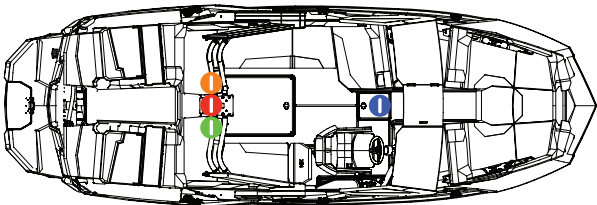
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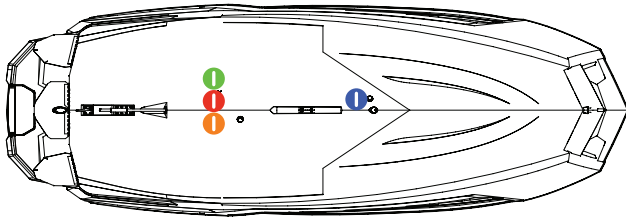
Starboard Hullside



Port Hullside



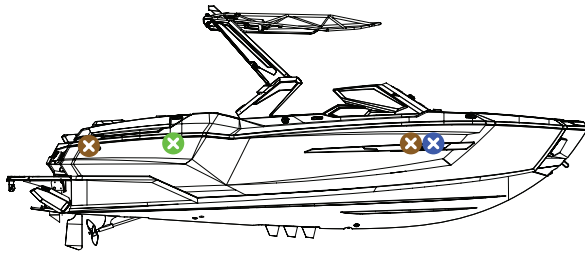
Top View



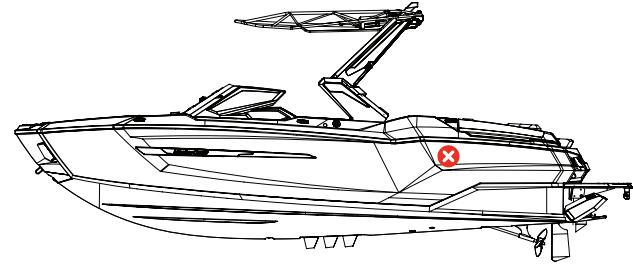
Hull Bottom

24 BALLAST THROUGH HULL LOCATIONS

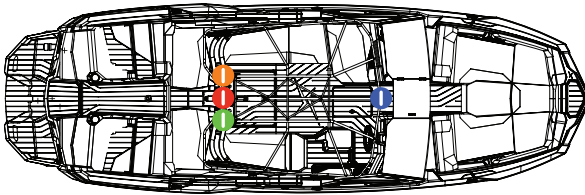
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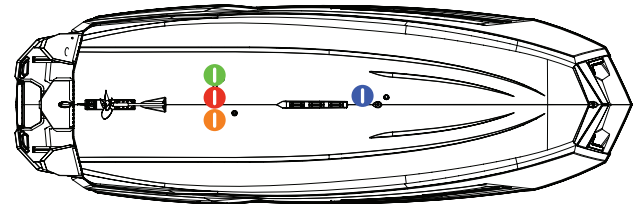
Starboard Hullside



Port Hullside



Top View

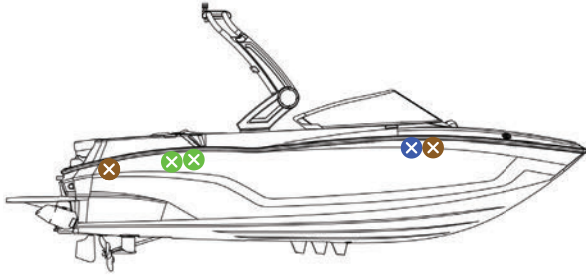


Hull Bottom

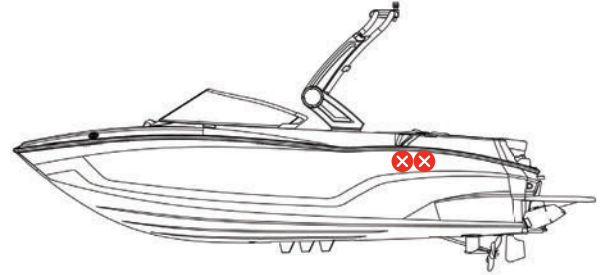


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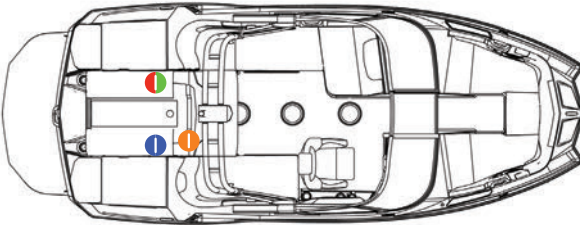
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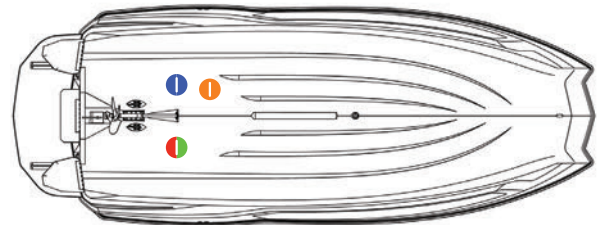
Starboard Hullside



Port Hullside



Top View

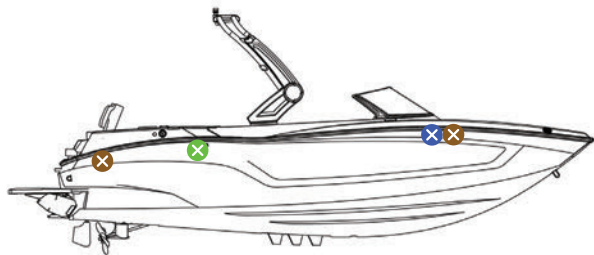


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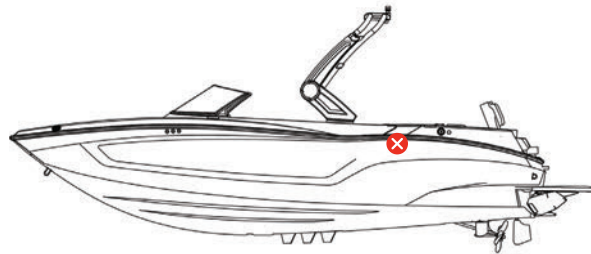


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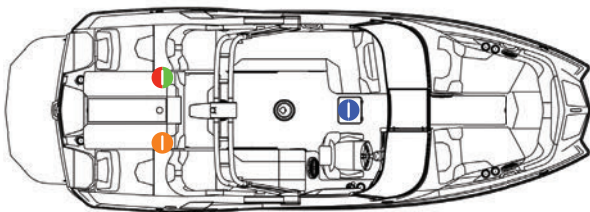
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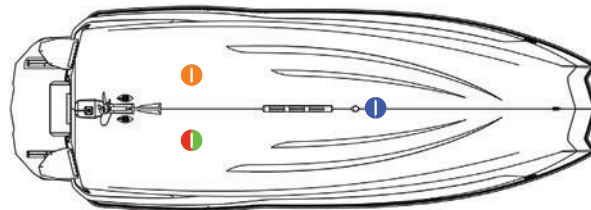
Starboard Hullside



Port Hullside



Top View

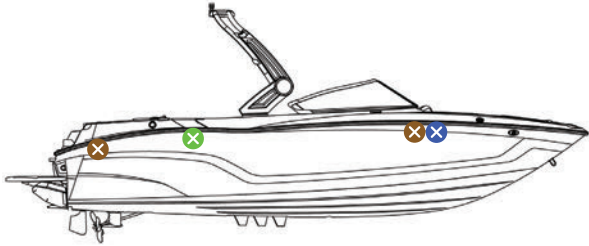


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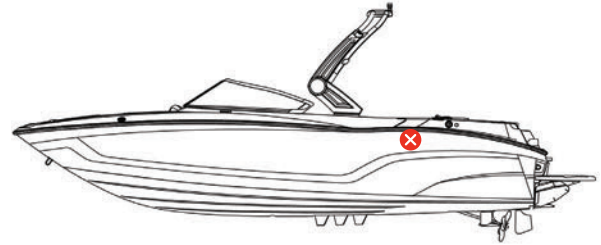


BALLAST THROUGH HULL LOCATIONS

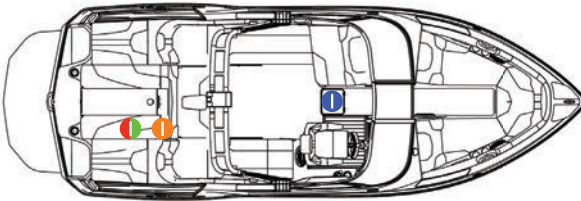
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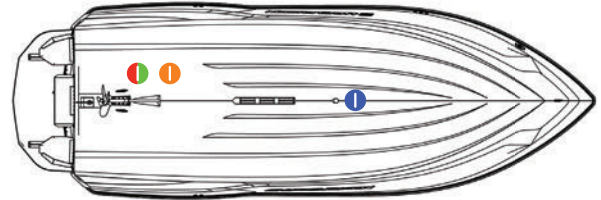
Starboard Hullside



Port Hullside



Top View

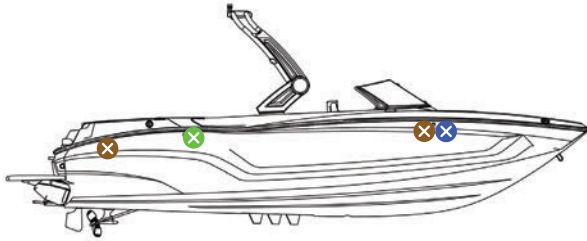


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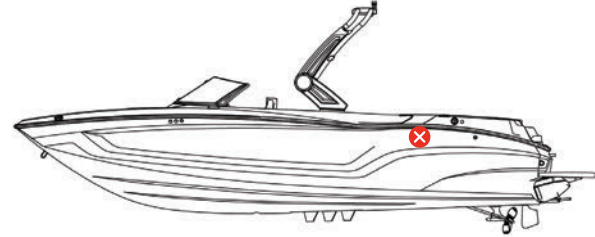


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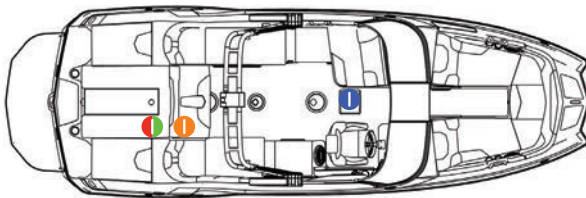
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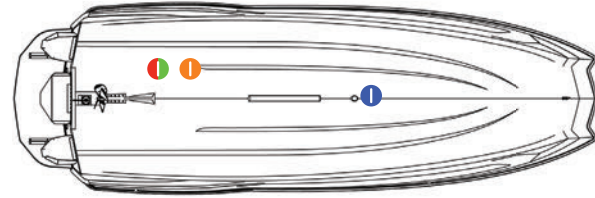
Starboard Hullside



Port Hullside



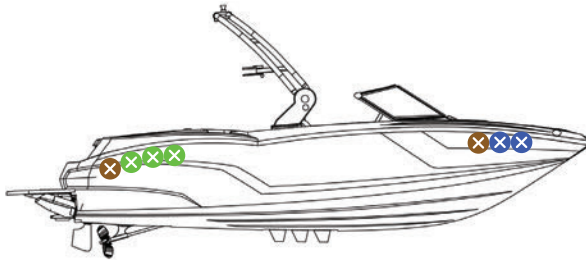
Top View



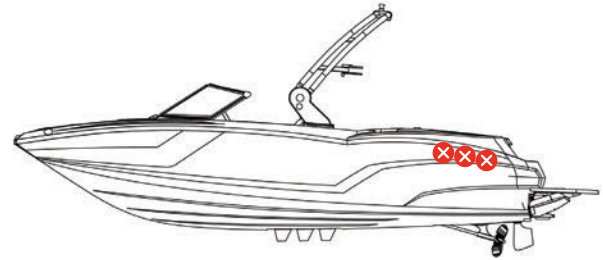
Hull Bottom

NXT₂₀ BALLAST THROUGH HULL LOCATIONS

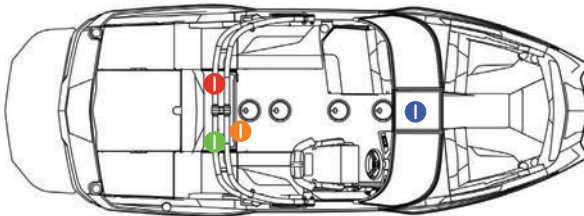
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- ⓘ Front Ballast Intake
- ⊗ Starboard Stern Ballast Outlet
- ⓘ Starboard Stern Ballast Intake
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- ⊗ Dual Ballast Outlet (example)
- ⓘ Dual Ballast Intake (example)



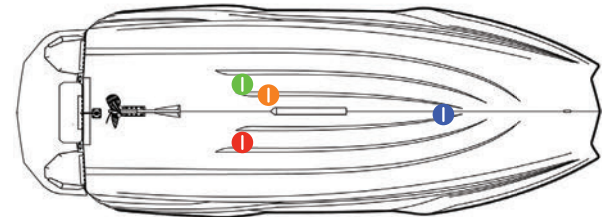
Starboard Hullside



Port Hullside



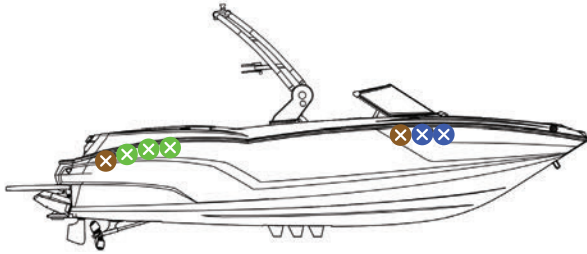
Top View



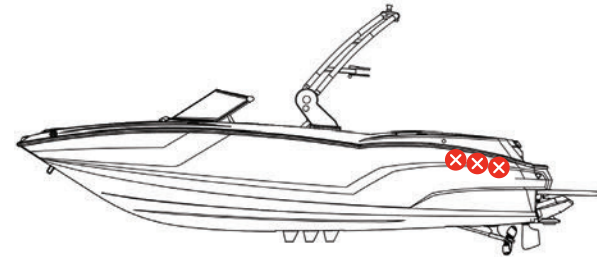
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NXT₂₂ BALLAST THROUGH HULL LOCATIONS

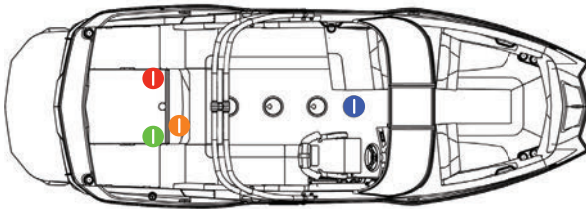
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- 🟡 Triple Ballast Intake (example)
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- ⊗ Port Stern Ballast Outlet
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- 🟩 Starboard Stern Ballast Intake
- ⊗ Dual Ballast Outlet (example)
- 🟩 Dual Ballast Intake (example)



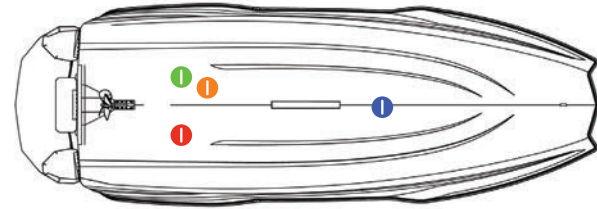
Starboard Hullside



Port Hullside



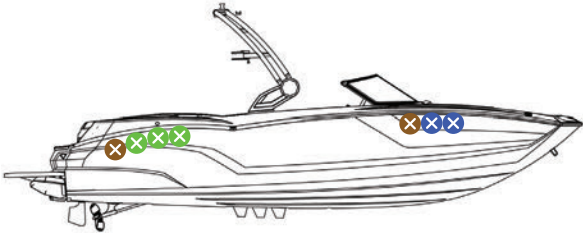
Top View



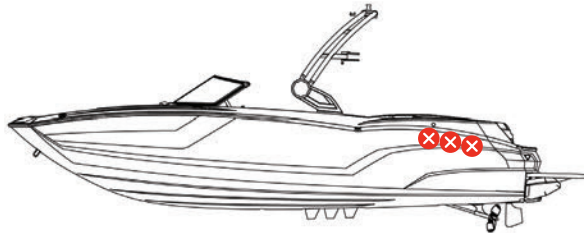
Hull Bottom

NXT₂₃ BALLAST THROUGH HULL LOCATIONS

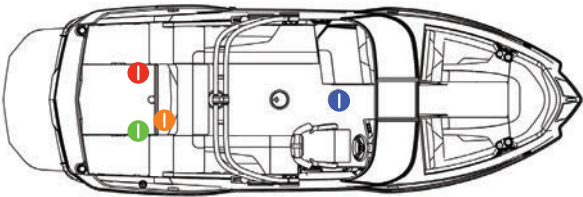
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- ⊗ Port Stern Ballast Outlet
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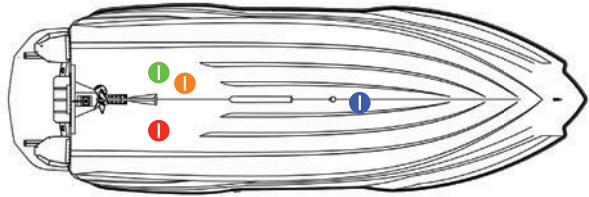
Starboard Hullside



Port Hullside



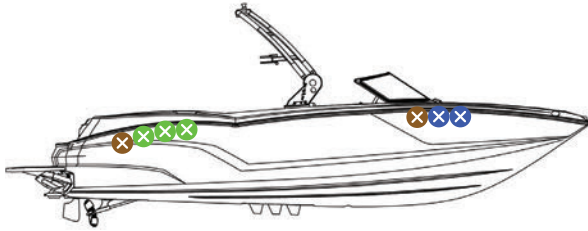
Top View



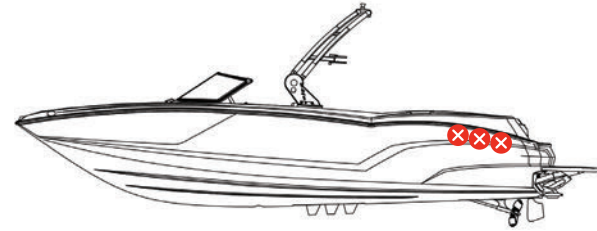
Hull Bottom

NXT₂₄ BALLAST THROUGH HULL LOCATIONS

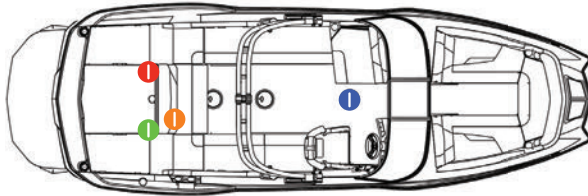
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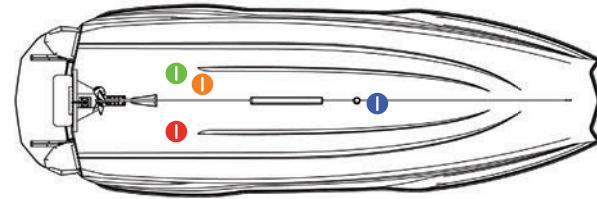
Starboard Hullside



Port Hullside



Top View

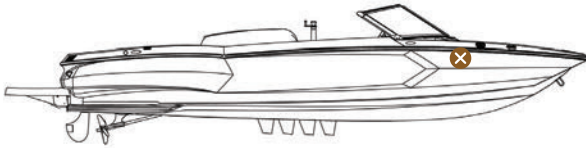


Hull Bottom

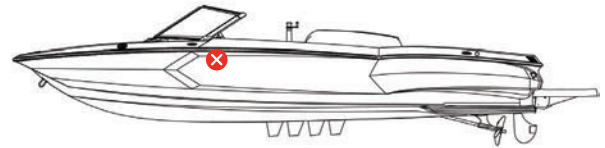


BALLAST THROUGH HULL LOCATIONS

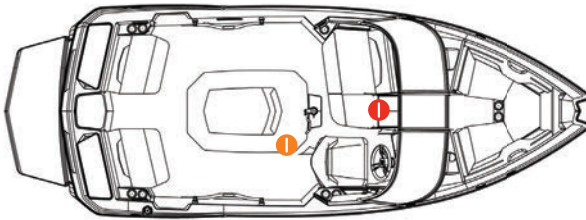
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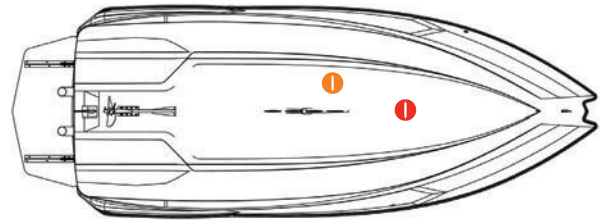
Starboard Hullside



Port Hullside



Top View



Hull Bottom

THE MASTERCRAFT TRAILER

TRAILERS

Congratulations on the purchase of your new custom-built MasterCraft trailer. You and your new MasterCraft boat now have access to thousands of lakes, rivers and other waterways.

MasterCraft custom designs and builds trailers to perfectly match every boat that comes off our assembly floor. MasterCraft trailers have been engineered and constructed for years of trouble-free use. To maintain proper function and to keep your trailer in top condition, some routine care and maintenance is necessary.

The purpose of this section of the Owner's Manual is to provide the information that owners and operators need to keep their trailers in exceptional running condition for years to come. Please read and follow the warnings and instructions carefully. Also, because not all trailers are exactly alike, be sure to read and comply with any warnings and additional information supplied by MasterCraft and its parts suppliers within the owner packet.



**Scan this QR Code to access
your trailer part manufacturer
warranties, service, and owner's
manuals.**

NATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION (NHTSA)

If you believe that your trailer has a defect that could cause a crash or could cause injury or death, DO NOT USE THE TRAILER.

You should immediately inform the National Highway Traffic Safety Administration (NHTSA) in addition to notifying MasterCraft Boat Company. If NHTSA receives similar complaints it may open an investigation, and if it finds that a safety defect does exist in a group of trailers, it may order a recall and remedy campaign. However NHTSA cannot become involved in individual problems between you, your dealer, or MasterCraft Boat Company.

NHTSA Contact Information:

Vehicle Safety Hot-line

Toll-free at 1-888-327-4236, (TTY: 1-800-424-9153)

nhtsa.safercar.gov

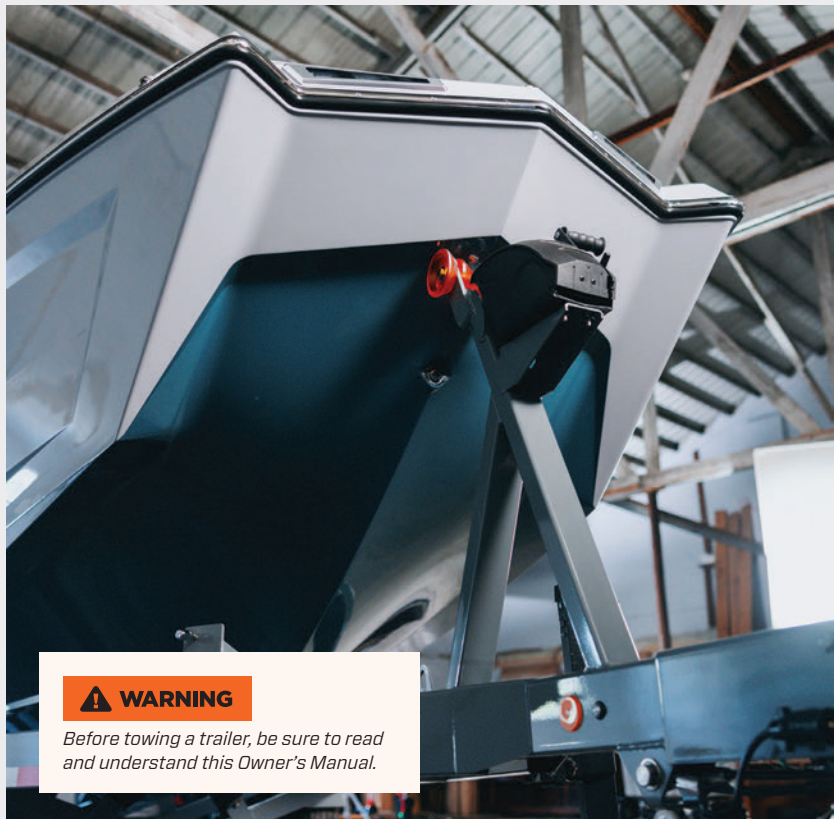
Administrator, NHTSA

1200 New Jersey Avenue SE

Washington DC 20590.



You can also obtain other information about motor vehicle safety from www.safercar.gov or scanning the QR Code.



WARNING

Before towing a trailer, be sure to read and understand this Owner's Manual.

INTRODUCTION

Please take a few minutes to read this section of the Owner's Manual completely before using your MasterCraft trailer for the first time. It provides substantial information about the trailer.

If you still have questions after reviewing this information, be sure to contact an authorized MasterCraft dealer. It is important that any and all trailer operators possess as much knowledge as possible.

NOTE: The information given in this Owner's Manual may not be applicable to international laws or rules of the road. If you have any questions, please contact your local authorities.

A PROPER MATCH

The key to trouble-free boat trailering is properly matching a trailer to a boat. At MasterCraft we design our trailers to be a perfect match for our boats. We build all of our trailers in house to ensure quality and the best trailering experience possible. Each trailer that comes off our assembly line was designed specifically to support the hull and full weight of its matching boat. It is also important that the tow vehicle matches the requirements of the trailer. Check to make sure your tow vehicle can safely tow the boat trailer's Gross Vehicle Weight Rating (GVWR). This trailer information is labeled on the port side of the trailer tongue and further information is available through your dealer.

TRAILER MAINTENANCE AND QUICK TIPS

CHIPS IN THE PAINT

Especially on the axles and frame of the trailer, paint chipping generally results when these surfaces are subjected to repeated or significant impacts by various objects while in transit. Usually, these are gravel, stones, asphalt chips or other debris on roadways, which are thrown up by the rear tires of the tow vehicle. Over time, rust may develop where paint has been chipped away. Such damage is not covered by the Limited Warranty for the trailer. To avoid chipping the paint on the trailer and to preserve its condition, consider attaching mud flaps behind the tow vehicle's rear tires. Exceptional care should be taken to travel as slowly as practical when traveling on gravel or other loose surfaces.

LUBRICATION

To ensure proper operation of the trailer jack, wipe it down and lubricate it on a regular basis.

SALT WATER EFFECTS

If the trailer is backed into salt water, you must completely and thoroughly wash the trailer in fresh water to prevent rusting. Salt water is very corrosive, even on galvanized trailers, and can corrode the braking system. Exposure to salt water can also cause brake pads to stick and malfunction.

REGULAR CLEANING

The trailer will age better if it is rinsed off with fresh water several times a year. If the boat is run in brackish or salt water, the trailer should be rinsed thoroughly after every trip because of residual effects of the brackish or salt water. An annual washing with a mild detergent and waxing with an auto wax will also help to keep the trailer bright and clean.

BRAKING SYSTEM

Check the braking system at the beginning of boating season and again at the conclusion, along with the wheel bearings. If there is anything that appears to be worn or leaking, take the trailer to an authorized MasterCraft dealer for a check and possible repair.

TOW VEHICLE APPROACH

Tow vehicles must always approach the trailer slowly prior to being hitched to the trailer. This allows the operator to retain greater control. Hard impact with the trailer or improper alignment on the trailer can result in damage to the tow vehicle, boat and/or the trailer, and any such damage is not covered under warranty.

SEVEN-WIRE CONNECTOR

The tow vehicle must have a seven-wire connector. It is important to properly connect the seven-wire connector on the trailer to the seven-wire connector on the tow vehicle at all times while towing. MasterCraft recommends applying dielectric grease to the terminals inside the 7-pin trailer connector at least once per year. This helps protect the terminals from corrosion.



TOW VEHICLE AND TOWING EQUIPMENT

Weight Carrying Capacity and Load Ratings: It is imperative to know the Weight Carrying Capacity of any and all equipment being used to tow your MasterCraft Trailer. This includes the tow vehicle itself, hitch, receiver, ball mount, ball, and all components thereof. All equipment used to tow your MasterCraft trailer MUST meet or exceed the Gross Vehicle Weight Rating (GVWR) and Tongue Weight of your trailer. MasterCraft trailers vary in GVWR depending on the boat and trailer model; current model GVWR's are listed in the Trailer Specifications charts at the end of this section. The specific GVWR of any MasterCraft trailer is also labeled on the trailer, see the Trailer Information section below.



HITCH

As stated above, be certain your hitch is rated to at least the GVWR of your MasterCraft trailer. Weight carrying hitches are recommended for use with your MasterCraft trailer, however, a weight distribution hitch may also be used as long as it is designed and installed properly to be used with surge brakes. Use the wrong type of weight distribution hitch or improper set-up will not allow the surge brakes to activate, thus causing loss of braking.

Trailers equipped with optional Electric Over Hydraulic brakes may use additional load distributing hitches since the brakes are electronically activated by the tow vehicle's brake controller.

Fender Towing is NOT recommended as these are typically rated too low for any MasterCraft trailer.

The MasterCraft trailer was designed and built to be attached directly to the tow vehicle, and the trailer should only be attached in that manner. Trailer sway control devices that restrict the operation of the actuator MUST NOT be used. These devices can limit the effectiveness of the trailer brakes.

BALL AND BALL MOUNT

All standard MasterCraft trailers will use either a 2" or 2-5/16" ball*. Be sure to know which size ball your trailer requires and be certain it, and the ball mount, are rated to at least the GVWR of your trailer. BE CAREFUL, there are many adjustable and non-adjustable ball mounts and balls available that are not rated high enough for some MasterCraft trailers. Just because the ball is the correct size does not mean it is properly rated for your trailer!

MasterCraft trailers are designed to be towed level. A hitch or adapter that raises or lowers the ball may also be necessary for your vehicle and trailer. Be sure this equipment is also rated appropriately.

**Australian trailers may come with alternate equipment.*



JACK AND LUG WRENCH

The jack and lug wrench that came with the tow vehicle may also work on the trailer, but don't count on it, check it to be sure before you need it. Most MasterCraft trailers will require a higher capacity jack.

ROAD TRIP KIT

Make up a special road trip kit and carry it with you on all trips. The kit should include a spare wheel and tire, lug wrench, wheel chocks, bearing grease, spare strap for tie-downs and winch, extra lights, wheel bearings, and road flares.

INSURANCE

Some insurance policies do not provide coverage when towing a trailer. Check the policy or call the insurance agent to be certain that you have appropriate insurance coverage in place.



TOWING LEVEL

MasterCraft trailers are designed to be towed as level as possible. All components that go into the trailer are also designed for level operation. Ensure that the tow vehicle, hitch, and ball mount allow the trailer to be towed level. A level trailer has many benefits:

TONGUE WEIGHT

Tongue weight is greatly affected by ball height on multi-axle trailers. This could overload the tow vehicle causing equipment damage or underload the ball causing dangerous swaying, among other issues. Either situation can become extremely dangerous.

AXELS AND TIRES

The trailer will ride more smoothly as the axles and tires will be properly loaded. A trailer that is not level has a higher chance of overloading the axles and/or tires causing accelerated wear and potential for catastrophic failure.

BRAKE ACTUATORS

Surge actuators are designed to be level. A low tongue will cause the brakes to drag and activate more readily which will cause overheating that can lead to brake system failure. A high tongue will reduce braking force and may not allow the brakes to engage at all. Either case could result in loss of braking.

BOAT SUPPORT

The boat will be supported properly by the trailer bunks.

CHECKING FOR LEVEL

1. Set up your tow vehicle with the proper equipment and find a flat level area to perform these measurements.
2. Attach the loaded trailer.
3. Make sure the entire tongue weight is being supported by the tow vehicle and the coupler is attached and locked with safety pin in place.
4. Stow the trailer jack.
5. Measure and compare the height at the bottom of the trailer frame approximately between the axles and at the bottom of the tongue tube approximately below the bow roller. These numbers should ideally be the same. Within 1" is acceptable, but adjust if possible. If the difference is over 2", adjustment or a new towing configuration is required.
6. Always take things slowly on the first test drive or when starting a trip to make sure all equipment is working properly.

⚠ WARNING

Make a point to pay particular attention to the right (starboard) side of the trailer (or whichever side is the 'curb' side in other countries), as this is typically where most road hazard damage occurs.



WALK AROUND INSPECTION

The majority of potential roadside issues can be eliminated by a walk-around visual inspection of the trailer. This should be done after hitching the trailer to the tow vehicle, and again at each fuel or rest stop.

VISUALLY CHECK:

- Coupler - Properly locked on ball with safety pin in place.
- Safety Cables - Attached to tow vehicle and undamaged.
- Emergency Brake Cable - Attached to tow vehicle, not pulled, and undamaged.
- Wiring Connector - Attached, undamaged, and functioning.
- Tie-Downs - Secured and tight.
- Tires - Properly inflated without signs of damage or wear.
- Brakes - Not overheating, worn, or damaged.
- Wheel Hubs - No obvious signs of hubs leaking, visible excessive grease on the front or back of the wheels, unusual heat.
- Any obvious fluid leaks.

PRE-TRAILERING CHECKLIST

Before towing with your tow vehicle, be sure to read and familiarize yourself with the instructions and warnings supplied with it.

In addition to the simple walk around inspection above, these important items should be checked before every tow:

- Coupler, hitch, and hitch ball are of the same size, and are not worn or damaged.
- Breakaway cable is properly attached to the tow vehicle.
- Coupler and safety chains are safely secured to the hitch of the tow vehicle.
- All fasteners are properly tightened.
- Boat is securely tied down to trailer fore and aft (winch line is not a tie down).
- Wheel lug nuts are properly tightened.
- Wheel bearings are properly adjusted and maintained.
- Load is within the maximum load carrying capacity.
- Weight inside the boat is properly distributed.
- Tires are properly inflated to the proper pressure.
- All trailer lighting is working properly.
- Trailer brakes are properly adjusted and working.
- Tower on the boat is secured and locked in place.
- Review boat information to determine if your tower can be locked in the up or down position.
- Know your boat's overall height on the trailer and be aware of the height when towing so that the unit will clear any overhead items such as trees, bridges, overhead power lines, overpasses, etc.
- Ensure sufficient overhead clearance before removing the boat/trailer from cover.

NOTE: Trailer laws covering such things as brakes, lights, safety cables, licenses, etc., will vary from state to state. Be sure that the trailer is in full compliance with applicable state laws. An authorized MasterCraft dealer can help in this regard. Otherwise, contact the nearest state motor vehicle department.

This trailer is manufactured to meet the applicable federal safety standards at the time of manufacture. Check the local and state requirements regarding any additional equipment that may be required.

TRAILER MANEUVERING TIPS

BACKING UP

When backing up, place your hand at the bottom of the steering wheel. To turn left, move your hand left (rotate the wheel clockwise). To turn right, move your hand right (rotate the wheel counterclockwise). Back up slowly. Because mirrors cannot provide all of the visibility you may need when backing up, whenever possible have someone outside at the rear of the trailer to guide you while backing up. Use slight movements of the steering wheel to adjust direction. Exaggerated movements will cause greater movement of the trailer. If you have difficulty, pull forward and realign the tow vehicle and trailer and start over.

PARKING

When parking, try to avoid parking on steep grades. If possible, have someone outside to guide you as you park. Once stopped, but before shifting into park, have someone place blocks on the downhill side of the trailer wheels. Apply the parking brake, shift into park, and then remove your foot from the brake pedal. Following this parking sequence is important to be sure your vehicle does not become locked in park because of extra load on the transmission. For manual transmissions, apply the parking brake and then turn the vehicle off in either first gear when parked uphill, or reverse gear, when parked downhill.



UNCOUPLING

When uncoupling the trailer, place blocks at the front and rear of the trailer tires to ensure that the trailer does not roll away when the coupling is released.

UNBALANCED LOAD

An unbalanced load may cause the tongue to suddenly rotate upward; therefore, before uncoupling, place jack stands under the rear of the trailer.

DIFFICULT TOWING

If a trailer seems hard to tow or sways to one side, a brake rotor may not be rotating freely. If this appears to be the problem, immediately contact your authorized MasterCraft dealer for assistance. Ignoring this symptom could result in brake failure.

WARNING

The total weight of the boat, engine, fuel, water and gear must not exceed the trailer's maximum load-carrying capacity. Overloading can cause instability and loss of control while towing, which may result in death, serious injury or property damage.



LOAD CARRYING CAPACITY

Check the certification label attached to the front left side of the trailer. This is very important as it shows the maximum load-carrying capacity of the trailer. It will also show the Gross Vehicle Weight Rating (GVWR). Be sure that the total weight of the boat, engine, gear and trailer does not exceed the GVWR.

NOTE: The gross Vehicle Weight Rating (“GVWR”) is the estimated total weight of a road vehicle that is loaded to capacity, including the weight of the vehicle itself. Therefore, the maximum load-carrying capacity of the trailer is the GVWR less the weight of the empty trailer.

Be especially careful to avoid overloading the trailer by putting heavy baggage, camping gear, etc. inside the boat.

Do not tow the boat with a water-filled bladder or with water in the ballast tanks. Failure to empty the contents of bladders or ballast tanks will cause the tongue weight percentage to be incorrect. Towing with water-filled bladder(s)/ ballast tank(s) may not only exceed the total weight limits for the trailer, but may also result in the improper distribution of the weight on the trailer, thereby making towing difficult and/or causing instability when towing. This can be very dangerous to the driver, any passengers and to other motorists.

⚠ WARNING

NEVER tow with water in ballast tanks or bags. Failure to empty ballast tanks, bladders or bags on the boat prior to towing can result in improper weight distribution, which can cause towing instability. This could cause the driver to lose control of the tow rig, resulting in death or serious injury to the driver, any passengers and/or to other motorists, or property damage.



Do not tow the boat with wakeboards, skis or other gear left on the board tower racks. Doing so may void the warranty and cause damage to the boat or to vehicles following behind as boards and/or racks may become disengaged.

 **WARNING**

Do not tow with any gear in the tower racks, even if the gear appears to be secure. The racks are not designed to withstand air pressure from highway speeds. Gear may become dislodged, potentially causing damage to the boat or following vehicles.

 **CAUTION**

Loose objects may damage the boat and/or trailer. Such damage is not covered by the warranty.

WEIGHT DISTRIBUTION

Improper weight distribution within the boat can cause instability and loss of control while towing, which may result in death, serious injury or property damage.

Improper weight distribution can cause a boat trailer to fishtail (sway from side to side) as it moves down the highway, putting excessive strains on both the trailer and the tow vehicle, which increases gas consumption and may cause an accident. The most effective way to guard against fishtailing is to make sure the weight load on the trailer is properly distributed.

It is extremely important that a minimum of five percent (5%) and a maximum of ten percent (10%) of the total weight on the trailer is on the trailer coupling ball when the tongue is parallel to the ground. A quick way to measure parallelism is to measure the distance from the ground to the bottom of the frame at or between the tires, and measure from the ground to the bottom of the frame at the swing tongue. Ensure that the measurements are even.

Check the tow vehicle owner's manual prior to first time use.

 **WARNING**

The importance of sufficient weight load on the trailer tongue (creating downward force on the hitch ball) cannot be over-stated.

THE TRAILER HITCH

There are two basic types of trailer hitches: a weight-carrying hitch and a weight-distribution hitch. A weight-carrying hitch is recommended for use with a MasterCraft boat and trailer. However, weight-distributing (equalizing) hitches may be used.

If using a weight-distributing hitch, the chain must be vertical (straight up and down) under the pulling load where the actuator is extended. Excessive tongue weight beyond the actuator rating must be avoided as it will reduce the brake performance and could damage the actuator. Always follow the hitch manufacturer's instructions. Before deciding which type of hitch to use, consult the tow vehicle manufacturer for recommendations.

Be sure that the total weight of the trailer-boat rig does not exceed the hitch load capacity. The maximum permissible weight for the hitch should be stamped on the hitch. The hitch should also provide a place for attaching the trailer's safety cables—two rings or holes on either side of the hitch ball. Be sure the hitch ball is the correct size to match the coupler on the trailer. The correct ball diameter is marked on the trailer coupler.

WARNING

Failure to use the appropriate/required hitch ball and mount rated to your trailer's GVWR may result in failure of the hitch on the tow vehicle and a loss of control of the trailer while towing, which may cause serious injury or death.



A truck or van using a step bumper as the hitch platform will need to have safety cable attachments such as eye-bolts, as well as a hitch ball, which has been installed according to the Society of Automotive Engineers (SAE) J684 Standard. Installing a light or heavy-duty hitch can be quite an heavy undertaking. The hitch and its installation must meet the SAE J684 Standard. It is recommended that the job be done by a professional. An authorized MasterCraft dealer can offer advice. Ensure that the hitch and ball mount allows the trailer to be towed level.

To ensure that the boat is riding properly on the trailer supports, the trailer should be in a level position when hitched to the tow vehicle. With the trailer hooked up to the tow vehicle and the jack stowed, a quick way to measure parallelism is to measure the distance from the ground to the bottom of the frame at or between the tires, and measure from the ground to the bottom of the frame at the swing tongue. Ensure that the measurements are even. Failure to run the trailer parallel to the ground may prematurely activate the surge brakes. This can be corrected in a number of different ways. For example, air pressure adjustable shock absorbers may be installed on the tow vehicle, or you can switch from a weight-carrying to a weight distributing hitch. Consult with the tow vehicle's dealer or manufacturer.

WARNING

If the total weight on the loaded trailer exceeds the load capacity of the hitch on the tow vehicle, the trailer may break free, which may result in serious injury or death and/or property damage. Never Attach The Trailer To Any Device Between The Trailer And The Tow Vehicle.

The photo shows an example of an improper device attached between a trailer and tow vehicle that may create a dangerous condition for towing a boat. Devices like the one shown in the photo may be built or marketed with the idea of improving stability in towing, but instead, devices of this nature may create a very unstable condition in which control of the trailer may be lost during towing.



The MasterCraft trailer was designed and built to be attached directly to the tow vehicle, and the trailer should only be attached in that manner. This is especially critical in maintaining the proper weight balance, which is described in more detail in this section of the Owner's Manual.

This photo shows an example of an improper device attached between the trailer and towing vehicle.

WARNING

Trailer sway control devices that restrict the operation of the actuator MUST NOT be used. These devices can limit the effectiveness of the trailer brakes.

SAFETY CABLES

The safety cables on a MasterCraft trailer provide added security that the trailer will not become detached from the tow vehicle in an emergency situation. These cables conform to the Society of Automotive Engineers (SAE) J684 standard for trailer coupling and automotive-type hitches. If it ever becomes necessary to replace these cables, ensure that the replacement cables meet the SAE J684 standard. The strength rating of EACH safety cable must be equal to or exceed the trailer's GVWR (Gross Vehicle Weight Rating).

Ensure that the safety cables are correctly attached between the tow vehicle and the trailer before each trip. The trailer hitch should provide a place for attaching safety cables, through holes or rings on both sides of the hitch ball. It is strongly recommended, and most states require, that the cables be crossed under the trailer tongue (e.g., the cable on the left side of the trailer tongue should be attached to the hole or ring on the right side of the hitch ball, and the right side cable should be attached to the hole or ring on the left side of the hitch ball). The cables should be rigged as tightly as possible, with just enough slack to permit tight turns. If the trailer separates from the hitch ball, the crossed cables will have a better chance of 'catching' the trailer tongue so that it does not fall all the way to the road. If for any reason it becomes necessary to replace a safety cable, contact your dealer for a genuine replacement part.

Failure to properly attach the safety cables and brake actuator break-away cable between the trailer and the tow vehicle may result in a runaway trailer if the trailer coupler becomes detached from the hitch. This may cause serious injury, death, and/or property damage.

WARNING

The strength rating of EACH safety cable must be equal to or exceed the trailer's GVWR (Gross Vehicle Weight Rating).

Before each trip, ensure that the safety cables are correctly attached between the tow vehicle and the trailer. Secure the breakaway cable to the bumper or frame of the tow vehicle as close to center as possible but do not attach to the safety cables.

As noted above, the trailer hitch should provide a place for attaching safety cables, through holes or rings on both sides of the hitch ball. It is strongly recommended, and most states require, that the cables be crossed under the trailer tongue (e.g., the cables on the left side of the trailer tongue should be attached to the hole or ring on the right side of the hitch ball, and the right side cable should be attached to the hole or ring on the left side of the hitch ball). If the trailer separates from the hitch ball doing so will slow the process of the dropping of the trailer tongue. The cables should be rigged as tightly as possible, with just enough slack to permit tight turns. If for any reason it becomes necessary to replace a safety cable, do not substitute with any part other than a genuine MasterCraft cable.

WARNING

Never tow a trailer without the breakaway cable secured to the tow vehicle.

**BREAKAWAY CABLE**

Secure the breakaway cable to the bumper or frame of the tow vehicle as close to the center as possible, but do not attach it to the safety chains. The cable MUST hang clear of the trailer tongue and be long enough to permit sharp turns without pulling the cable to prevent the brakes from being engaged. The intent of the breakaway cable is to apply the brakes if the safety chains fail. Do not loop an S-hook over the breakaway cable to attach it.

If the breakaway cable is accidentally pulled and the brakes are applied, determine why it happened and fix the problem. Inadvertent setting of the brakes by pulling the breakaway cable is a common mistake. To prevent light pulls from accidentally setting trailer brakes, a small metal clip is installed on breakaway cables in front of the indicator bead. The clip will not inhibit the action of the breakaway mechanism during actual breakaway conditions. However, if breakaway should occur, the clip will be destroyed and should be replaced. Spare clips are available through authorized MasterCraft dealers.

To retract and reset the breakaway cable, slide the coupler fully forward and push up on the push rod release bracket located on the underside and behind the hitch ball socket. The actuator push rod may need to be depressed slightly to release the bracket. A flat head screwdriver, or similar, can be used. This will allow the bead to retract into the actuator and releases the trailer brakes. Install a new clip on the breakaway cable in front of the bead.

The breakaway system must be reset anytime the cable has been pulled.

⚠ CAUTION

The breakaway system is not to be used as a parking brake!

CHECKING AND RESETTNG THE BREAKAWAY CABLE

If pushing up on the bracket does not release the brakes or it is hard to push, insert a pry bar into the 5/16" hole behind the bracket. Use the pry bar to (gently) stroke the push rod backwards and relieve the load on the bracket. Push up on the bracket and hold it up while releasing the pry bar. The push rod release bracket should now move freely and brakes should be released. Check to be certain the actuator is reset. Extend the actuator fully. Remove the cap from the top of the actuator and pull the plug from the top of the reservoir cover. While looking at the fluid in the reservoir, manually compress the actuator. In the first 1/8" of coupler movement the fluid in the reservoir should splash or ripple slightly. If it does, the actuator is working properly.

Stroking the push rod to release the brakes: If the brakes cannot be released using the method described above, or if the push rod release bracket will not move, it is damaged beyond serviceability. Contact an authorized MasterCraft dealer for assistance and replacement parts.



How to install the breakaway cable clip: The breakaway cable clip is installed on the breakaway cable to prevent inadvertent pressurization of the trailer brakes if the cable is lightly pulled by accident. If the breakaway cable is pulled during an emergency situation, the clip will be destroyed. The breakaway system must be reset by pushing up on the tab located under the coupler and the clip must be replaced. Contact your Authorized MasterCraft dealer for a replacement clip.

REVERSING WITH A SURGE ACTUATOR

When backing up a trailer with surge brakes, the coupler will be pushed back and would typically apply the trailer brakes. This can be especially true when backing up an incline. All MasterCraft trailer surge actuators have an bypass solenoid to allow the trailer to back up. This solenoid is controlled by and wired to the back-up lights on the tow vehicle. When the tow vehicle is put into reverse, this solenoid does not allow brake fluid pressure to build, and thus allowing the trailer to be backed up without the brakes being applied.

MANUAL BRAKE LOCKOUT FOR THE ACTUATOR

If the trailer needs to be moved in reverse without electrical power to the reverse solenoid (tow vehicle fault, blown fuse, corrosion, etc.), a lockout key is provided in the user packet which physically locks the coupler in the forward position. This will not allow the brakes to apply at all, in any direction. Place the key in the slot at the front of the actuator housing and reverse the trailer as needed. Remove the pin IMMEDIATELY after backing up. Failure to do so will cause complete loss of braking when the trailer is towed and is NOT to be used while towing.



TRAILER WINCH ASSEMBLY

MasterCraft uses high quality marine grade trailer winches matched to your trailer. Heavy duty gearing and base plates are utilized to withstand years of use with your MasterCraft boat. While the winch can be used to help load the boat, it is not meant to support or pull the entire weight of the boat.

When using the winch, maintain a firm grip on the handle at all times. Never release the handle with a load on the winch, the handle will spin forcefully. This may cause serious injury. If the winch is released and begins to spin, do NOT attempt to halt the spin. Prior to each use of the winch, check for the proper ratchet operation. Do not use the winch if it is damaged. Seek immediate repairs. Never use the winch handle as a handle for pulling or maneuvering the entire trailer or other equipment.

Never pull on the winch handle against a locked ratchet. Never exceed the rated capacity of the winch. Excessive loads may cause premature failure. Never apply a load on the winch with the strap fully extended. Keep at least two full turns of the strap that is on the reel. Inspect the condition of the winch strap. Using a damaged or worn winch strap may result in serious injury or damage. Check the winch straps frequently. The strength in these can deteriorate from exposure to weather, ozone and ultraviolet light (direct

sunlight). If a strap becomes frayed or worn, replace it immediately with a new one. A heavy grease should be applied to the winch's gears to provide a free-running drive and to minimize the effort you have to expend to crank the boat onto the trailer. The winch is intended solely as an aid to loading the boat on the trailer. It is not recommended to use the winch as the sole method for loading the boat onto the trailer. However, it is a satisfactory assistant in the event of engine power loss. It is not intended or adequate to be the sole means of holding the boat in place while loading the boat onto the trailer. Proper tie-downs fore and aft must be used.

TIE DOWN POINTS

MasterCraft provides three main tie-down points on the trailer. One on the tongue and two on the prop guard. It is important to secure the boat to the trailer prior to towing so that the boat does not bounce or slide off in extreme or unexpected conditions. Two tie down eyes for the optional mooring cover are located on the front trailer steps.



⚠ WARNING

Failure to swing up the trailer jack and snap into towing position before towing may result in damage to the trailer.

To ensure the jack is locked in the up or down positions, there will be an audible “click” when the locking pin is fully engaged. Check that the jack is locked by trying to move the jack out of place. Failure to engage the locking pin may result in the collapse of the jack stand, which could cause serious injury or death.

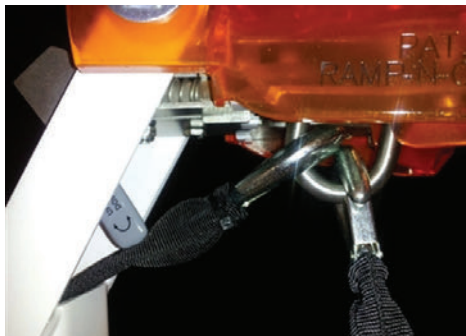
Always be certain that the feet of individuals operating the trailer jack or in the vicinity of the trailer jack are clear when the jack is lowered into position. A considerable amount of the trailer's weight, and that of the boat when it is aboard the trailer, can be transferred through the trailer jack. This could cause very painful injuries if feet are not clear of the jack when it is lowered. Be certain that fingers and hands are clear when moving the trailer jack because they can be pinched in the mechanism, again resulting in injury.

TIE DOWNS

Ensuring that a MasterCraft boat will be held securely in place on the trailer's hull support (bunks), especially when towing, is extremely important. If the boat is not firmly and properly secured, the boat can be damaged as it bounces against the hull supports.

MasterCraft offers the Ramp-N-Clamp system to simplify loading and launching the boat from the trailer. To operate:

- 1.** Set the Ramp-N-Clamp handle to the down position so it can catch the boat when loading onto the trailer.
- 2.** Lift the Ramp-N-Clamp handle to the up position to release boat from the trailer.
- 3.** Do not lift the Ramp-N-Clamp handle until you are ready to release boat from the trailer.



HELPFUL TIPS

For easier release on the ramp, put the boat in forward gear or keep the winch strap tight while lifting the Ramp-N-Clamp handle.

Keeping the Ramp-N-Clamp cover and front of the boat waxed is part of the proper, regular maintenance.

If the boat rocks back and forth on the trailer while towing, raise the winch post uprights or add tie down straps to the trailer to prevent rocking. An ill-fitting trailer will cause wear that is not covered under the warranty.

A winch strap must be used and firmly tight while towing. This prevents wear to the bow eye that is not covered under warranty. Also, it is very important to be sure that the transom of the MasterCraft boat is resting fully and securely on the supports provided at the rear end of the trailer, and that it remains in place when the trailer is parked or underway.

Tie-down eyes have been added on both the bow and transom of the boat and must be used while trailering. Buckles at the back of the trailer must also be secured to the boat prior to towing.



SWING TONGUE

Most MasterCraft trailers are factory equipped with a swing tongue which allows for a shorter parked trailer length. This may help save enough space to store your boat in a garage, behind a fence, or just to keep the tongue out of the way wherever your trailer is parked. This feature is limited by GVWR and tongue weight, therefore it is not currently available on our larger boats. Contact your dealer for more information.

To fold the swing tongue:

- Pull the cotter pin from the clevis pin.
- Pull the clevis pin from the tongue. This is a tight fitting pin and the tongue may need to be wiggled up and down to remove it.
- Push or pull the nose of the tongue toward the pivot bolt side of the trailer. These bolts are torqued tightly so it may require substantial force to fold the tongue.
- Be aware of the internals of the tongue such as the wiring and brake hose. They may shift in the frame with time and use, so be careful not to pull them too tight when folding the tongue.

CAUTION

Use caution as these parts create pinch points for hands and fingers. It may also pinch wires and the brake hose if they are loose and not kept out of the way.



To set the swing tongue for towing:

- Straighten the tongue fully to align the clevis pin holes on the front and back side of the trailer tongue.
- Kinking of the brake hose is another possible issue when straightening the tongue. Verify it bends smoothly and not sharply into the tongue tube.
- Insert the clevis pin into and through the pivot box so the pin's shoulder is sitting on the tongue. This is a tight fit. Wiggling the tongue or tapping with a block may be necessary.
- Install the cotter pin into the clevis pin beneath the tongue.
- Verify the tongue is locked into the straightened position and all fasteners are secure.

NOTE: Swing tongue pins, fasteners, and components are specially designed, high-strength components. Any component replacement or adjustment of the swing tongue should be performed by your authorized MasterCraft dealer with genuine parts.

TRAILERING BASICS, TIPS, AND TECHNIQUES

TOWING REQUIREMENTS

States and municipalities may require special permits and licenses based on the size and weight of your trailer. Some states require additional equipment for the tow vehicle, such as side and rear view mirrors. Inquire at your local motor vehicle administration office to find out what requirements affect you. If you plan to travel in another state or country, don't forget to check requirements there also. In addition to licenses and permits, there may be weight, height and width limits for using certain roads, bridges, and tunnels. Also, be aware of restrictions regarding the transport of gasses or fuels, especially in tunnels. Don't forget to contact your insurance company to make sure you have proper coverage for all types of towing situations. Some jurisdictions may require liability insurance. If you have a loan for the boat and/or trailer purchase, your lender may also require insurance.

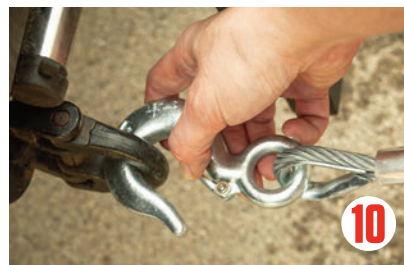
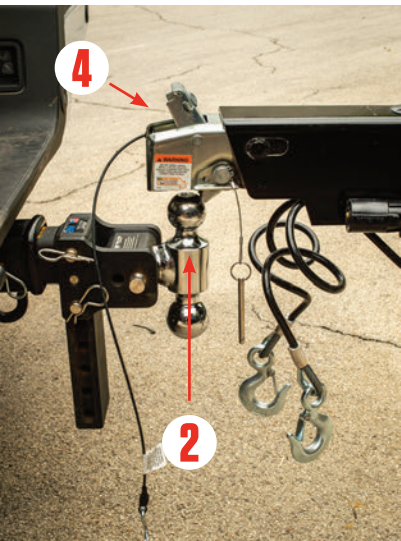
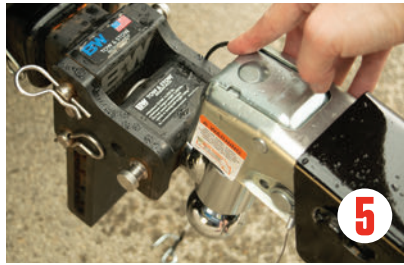
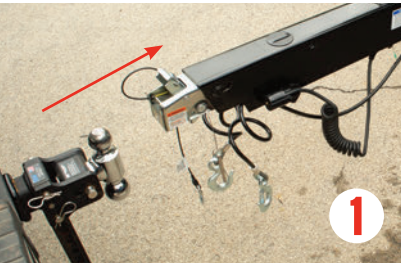
TOW VEHICLE APPROACH

Tow vehicles must always approach the trailer slowly prior to being hitched to the trailer. This allows the operator to retain greater control. Hard impact with the trailer or improper alignment on the trailer can result in damage to the tow vehicle, boat, and/or the trailer, and any such damage is not covered under warranty.

HOW TO ATTACH THE TRAILER

1. Slowly back the tow vehicle as close as possible to the trailer. It's easier—and safer—than pulling the trailer to the tow vehicle.
2. Raise the front of the trailer using the trailer jack so that the coupler is higher than the tow ball.
 - *Move the tow vehicle back and align the tow ball directly below the coupler.*
 - *Always make sure the coupler and tow ball size match.*
3. MasterCraft trailers utilize 2" and 2-5/16" balls. Know which size your trailer has.
4. Check to be sure the coupler is in the unlocked, open position.
 - *These are typically intuitive to use. If necessary, refer to individual actuator or coupler manuals to determine how to operate the coupler.*

5. Lower the trailer with the trailer jack until it is all the way down onto the hitch ball and tongue weight has been transferred to the tow vehicle.
6. Latch the coupler onto the ball and insert the safety pin fully.
 - *If the coupler does not latch easily, do not force it. The coupler may not be aligned properly or fully seated on the ball. It may also be the wrong size ball, or there is damage to one of the components. Check all of this prior to continuing.*
 - *If the safety pin does not go in easily, it is an indicator that the latch is not completely closed.*
 - *DO NOT tow the trailer with the handle open or if the latch handle will not remain closed. If the coupler or latch is damaged, contact an authorized MasterCraft dealer for assistance*
7. Check under the coupling to be certain that the ball clamp is below the ball and not riding on top of the ball.
8. To confirm that the coupler is locked onto the hitch ball, lift up on the trailer using the jack. If the trailer coupler comes loose from the hitch ball, check for issues or damage and repeat the applicable steps above.
9. Attach the surge break-away cable to the tow vehicle, making sure there is enough slack for tight turns.
10. Attach the safety cables, cross them under the trailer tongue.
11. Connect the trailer's seven-wire connector to the seven-wire connector of the tow vehicle and check the operation of the trailer lights (break lights, turn signals, running lights).
12. After the coupler is properly locked on to the hitch ball and safety cables are installed, swing the jack and lock it into the up position.
13. As discussed earlier, be sure the trailer is level when all of its tongue weight is being supported by the tow vehicle.
 - *If not, follow these steps in reverse and remove the trailer from the tow vehicle. Pull the vehicle forward, clear of the trailer and adjust the hitch.*
 - *This will be easier with a tape measure to know how much the hitch needs to be adjusted*



TOWING

When the MasterCraft trailer is loaded and in-tow, the combined dimensions of the trailer and boat are greater than those of the tow vehicle itself. Bearing this in mind, the operator will need to make adjustments to their usual driving practices.

Use Common Sense

MasterCraft cannot anticipate every type of situation in which drivers may find themselves. The following recommendations apply to general situations, but it is up to the individual driver to properly and safely act or react as a given situation requires.

Take a Shakedown Cruise

Before making the first major trip or lake cruise with a MasterCraft trailer, make at least one short trial run to become familiar with its handling characteristics. Be sure everything is working properly.

Gearing and Breaking

Most modern tow vehicles have a tow mode. Place your vehicle in tow mode if available. If the tow vehicle has a manual transmission, traveling in lower gears when going up steep hills or over sand, gravel, or dirt roads will ease the load on the engine and transmission. When driving on long downhill grades, try to avoid down-shifting. Running in a low gear going downhill, which uses the engine as a brake, can actuate the trailer's surge brakes continuously for the duration of the grade, causing them to over-heat. A better procedure is to slow down before the start of the down grade and maintain a controlled downhill speed with repeated application and release of tow vehicle (and thus, the trailer) brakes. This technique permits the brakes to cool down between applications and provides for reserve braking capacity in an emergency. On moderate and steep sections, down-shifting into lower gears may be unavoidable. Slowing down is important to allow the brakes to avoid overheating. Don't hesitate to pull over, when possible, during or after severe braking situations and allow the system to cool down. Running a stretch of highway where braking is not necessary is the quickest way to cool down the brake system because it allows a significant volume of air to flow through the vented rotors and over the brake pads.

Slow Down

There is less strain on the tow vehicle, trailer and boat at moderate to slow speeds. Also, many states have lower speed limits for vehicles towing trailers. Driving at moderate speeds will place less strain on the tow vehicle and the trailer. Trailer instability (sway) is more likely to occur as speed increases. Particular attention needs to be given to all aspects of towing when traveling over bumpy roads and railroad crossings.

Allow Extra Time and Space

You'll need more of both when starting, stopping, and passing.

Allow Considerably More Distance

There is considerably more weight to be maneuvered. A MasterCraft boat on its trailer can easily weigh the same or double what the average tow vehicle weighs. Even though your trailer is equipped with a braking system, additional room will be needed in order to execute slowing or full stops.

Do Not Tailgate

Allow at least one combined car and trailer length between you and the car ahead for every 10 mph you are traveling.

Signal Your Intentions

Well before stopping, turning, changing lanes, or passing, use turn signals to let other vehicles know what you intend to do.

Pass With Extra Care

Signal well in advance and make sure you allow extra distance to clear the vehicle you are passing before you pull back into the lane. Pass on level terrain with plenty of clearance. Avoid passing on steep up or down grades. Down shift as necessary to improve acceleration or speed maintenance. When passing on narrow roads, be careful to avoid soft shoulders. Running on soft shoulders could cause the trailer to jack-knife or go out of control.

Always be Courteous

Make it as easy as possible for faster-moving vehicles to pass you. Remain in the slower lane and be prepared to reduce speed if they need extra time to return to the lane.

Avoid Sudden Steering Maneuvers

These may create sway or undue side force on the trailer. To control swaying caused by air pressure changes and wind buffeting when larger vehicles pass from either direction, release the accelerator pedal to slow down. Keep a firm grip on the steering wheel.

Avoid Sudden Stops and Starts

Even though the trailer has brakes, a sudden stop can cause it to skid, slide, or even jack-knife. Be especially careful to avoid the necessity for quick stops while turning. Smooth, gradual starts and stops will improve gas mileage and put less strain on the tow vehicle, boat, and trailer.

Check the Rear View Mirrors

If not already equipped with them, install outside rear view mirrors on both sides of the tow vehicle. Make it a habit to check the mirrors at frequent intervals to be sure the trailer and boat are riding properly and to know what other vehicles are in your vicinity.

Swing Wider

Trailer wheels are closer to the inside of turns than the wheels on the tow vehicle. This means swinging wider at curves and corners, will be required to prevent impacts between the trailer and other objects.

Do Not Control Trailer Sway with Brakes

Especially avoid jamming on the brakes hard. Generally, this type of action makes the sway worsen.

Pay Attention to Wind

Be prepared for sudden changes in air pressure and/or wind buffeting when larger vehicles pass from either direction. Slow down a little and keep a firm hand on the steering wheel.

Towers and Biminis

DO NOT TOW with ProStar Towers in the DOWN Position. Ensure it is locked in the UP position.

- Ensure your tower is locked in the appropriate UP or DOWN position prior to towing.
- If the boat is equipped with a Bimini top, the top should be closed.
- If the tower has board racks, be sure that the board racks are folded to the inside without any boards or other gear hanging from them.

Gear and Loose Objects

Do not tow the boat with wakeboards, skis, or other gear left on the tower racks. Doing so may void the warranty and cause damage to the boat or to vehicles following behind, as boards and/or racks may become disengaged. Even if the gear appears to be secure, the racks are not designed to withstand air pressure from highway speeds. Gear may become dislodged, potentially causing damage to the boat or following vehicles. Loose objects may damage the boat and/or trailer. Such damage is not covered by the warranty.

Bumping and Fish-Tailing Signals a Flat

Do not jam on the brakes or mash the accelerator to try to drive out of it. Stop slowly and in as straight a line as possible. If conditions permit, allow the trailer and tow vehicle to coast at a very slow speed and try to avoid braking, except when the wheels

are straight ahead and the trailer and tow vehicle are in line. If the trailer begins to fish-tail under acceleration to highway speed, back off the accelerator a little, and it should cease. If it begins again upon acceleration, stop and check the load. If the load is not evenly distributed, or if it is too far back so that the hitch load becomes too light, the result can be fish-tailing. Redistribute the load before continuing.

Backing Up with a Trailer

Backing up with a trailer takes considerable practice to master. Always move slowly when backing a trailer to gain confidence and understand how to control the trailer. When backing up, place your hand at the bottom of the steering wheel. To turn left, move your hand left (rotate the wheel clockwise). To turn right, move your hand right (rotate the wheel counterclockwise). Back up slowly. Because mirrors cannot provide all of the visibility you may need when backing up, whenever possible, have someone outside near the rear of the trailer to guide you while backing up. Make sure this person is visible and can provide clear hand or audible signals. Use slight movements of the steering wheel to adjust direction. Exaggerated movements will cause greater movement of the trailer. If you have difficulty, pull forward to realign the tow vehicle and trailer and start over.

Parking

When parking, try to avoid parking on steep grades. If possible, have someone outside to guide you as you park. Once stopped, but before shifting into park, have someone place blocks on the downhill side of the trailer wheels. Apply the vehicle parking brake, shift into park, and then remove your foot from the brake pedal. Following this parking sequence is important to be sure your vehicle does not become locked in park because of extra load on the transmission. For manual transmissions, apply the parking brake and then turn the vehicle off in first gear.

Uncoupling

When uncoupling the trailer, place blocks at the front and rear of the trailer tires to ensure that the trailer does not roll away when the coupling is released. Try to pull as straight into a parking space as possible. If the trailer tires are in any sort of a twist when parked, this can cause the tongue to swing dangerously when uncoupled from the tow vehicle. Ensure the boat is as far forward as possible. If the boat is too far back, the tongue will be too light and may even jump off of the ball when uncoupled. Follow the attachment steps in reverse to safely uncouple your trailer.

Difficult Towing

If a trailer seems hard to tow or sways to one side, a brake rotor may not be rotating freely. If this appears to be the problem, immediately contact your authorized MasterCraft dealer for assistance. Ignoring this symptom could result in brake failure

Weight Distribution and Unbalanced Load

Improper weight distribution within the boat can cause instability, fishtailing, and loss of control while towing, which may result in death, serious injury, or property damage. Always make sure the boat is fully loaded and that the bow eye is up against the bow roller.

Improper weight distribution can put excessive strain on both the trailer and the tow vehicle. The most effective way to guard against fishtailing is to make sure the weight load on the trailer is properly distributed.

It is extremely important to have a tongue weight that is an absolute minimum of five percent (5%) (Mastercraft recommends a minimum of 7%) and a maximum of ten percent (10%) of the total weight, when the trailer is loaded and level. Typically, lighter boats should have a slightly higher percentage tongue weight than heavier boats, for added stability. MasterCraft designs trailers to these specifications so that your rig, when properly loaded and level, will fall within this range.

The specific tongue weight and overall weight is dependent on your specific boat and trailer. Options, fuel, gear, and placement of gear in the boat can alter these numbers significantly.

Gear

MasterCraft accounts for 200-400lbs of gear to be transported in the boat when towing, model dependent. This gear should be stored above, or just forward of, the trailer axles to maintain the most consistent weight distribution. All items in the boat must be properly secured prior to towing. Additional weight in front of the axles will increase tongue weight, and additional weight rear of the axles will decrease it. Typically it is safer to store gear forward of the axles to increase tongue weight rather than decrease it.

Fuel

Tongue weight is also affected by fuel load. Fuel is heavy, and a full tank will result in more tongue weight than an empty tank.

Ballast and Bilge

Never tow with water in the ballast tanks or ballast bags, lead, or other additional weights. The trailer is not designed to support this excessive weight. In addition, be sure to drain the bilge as much as possible.

Tow Level

As stated before, it is important that the trailer is towed level. A quick way to check is to measure the distance from the ground to the bottom of the frame at or between the tires, and measure from the ground to the bottom of the frame below the bow roller. Ensure that the measurements are even. A low tongue can quickly reduce the tongue weight to dangerous levels, the opposite is true for a tongue that is too high.



LIGHTS

Your MasterCraft trailer is equipped with a full LED lighting package including running, marker, stop, tail, turn, and backup lights*. This means you will never need to check or replace individual bulbs. However, LED's can eventually fail due to time or damage, and corrosion can inhibit lighting performance and operation. Before each use make certain that all trailer lights are in proper working order for your visibility on the road and to reduce the risk of serious injury, death, and/or property damage. If any lights are damaged or non-operational, genuine replacements can be sourced from your dealer.

*Trailers built with the Australian market package do not include back-up lights.



**Scan this QR Code to access
your trailer part manufacturer
warranties, service, and owner's
manuals.**





WARNING

Before each use make certain that all trailer lights are in proper working order to reduce the risk of serious injury, death and/or property damage.

LIGHTS

The MasterCraft trailer harness was specifically designed to mate with the tow vehicle's equipment. This harness is designed to disengage the trailer brakes using the tow vehicle's harness.

NOTE: See an authorized MasterCraft dealer if the tow vehicle does not have the correct trailer harness.

TO KEEP TRAILER LIGHTING SYSTEM IN GOOD WORKING ORDER:

Be sure the white ground wire is properly connected to the master cylinder. Replace any parts that are damaged or worn.

A small amount of waterproof grease on the plug contacts will help prevent rust and corrosion.

Before every trip, check for burned out or broken bulbs, cracked or broken light lenses, etc.

TRAILER RUNWAY LIGHTS BY XKGLOW

XKGlow trailer runway lights are available on all MasterCraft Trailer Models. The lights are used for a number of different purposes, but generally they are designed to beautifully light a boat resting on its trailer. For instructions on operating and troubleshooting the XKGlow runway lights, see the XKGlow Operating Manual included in your boat's Information Packet.

HUBS, WHEEL BEARINGS, AXLES AND LUBRICATION

The Vault hub is designed to be maintenance free for the first five years. Although this is the case, they still need to be inspected visually for signs of grease leakage before each outing and annually by a certified MasterCraft Dealer. Grease loss will lead to wheel bearing and hub failure creating a dangerous situation while towing that could lead to wheel loss and loss of control.

The wheel bearings have been precisely torque-set at the factory but also need to be inspected, at minimum, once per season. High mileage towers should inspect more frequently.

To assure the bearings are in good working order, check the bearing adjustment at least once a year by following this procedure:

1. Jack up one side of the trailer. (Be certain to use jack stands and use chocks on each of the trailer wheels to keep the trailer from moving during the inspection.)
2. Grip the edge of the tire and see if it can be rocked or moved. If the outer edge of the tire moves more than a small amount, the bearings may need to be adjusted.

Trailers are equipped with a Trailer Buddy Axle utilizing the Vault bearing protector with specially formulated Hybrid Oil™ lubricant.

The lubricant combines the benefits of oil and grease, lubricating and protecting the wheel bearings in a sealed pressurized chamber impenetrable by outside elements. The system has a number of unique features not found on conventional trailer axles. Every possible leak point on the front and rear of the hub is sealed. The slight (3-6 psi) pressure within the VAULT system generated inside the hub chamber will not damage the inner oil seals. The pressure inside the hub is needed to keep water out of the hub chamber when the hub is submerged underwater during launch and retrieval.

Internal inspection of the hub or replenishment of the lubricant is not required as part of the routine maintenance. At ambient temperatures the oil is thick, with a viscosity approaching grease. As the bearing temperature rises during towing, the oil thins out, replenishing the bearings with lubricant and dissipating heat. For optimal performance, only UFP's Hybrid Oil Lubricant should be used in this system. Adding or changing the lubricant in the Vault system is neither necessary nor recommended during the first five years of service. After that time, the maintenance requirements should be undertaken only by an authorized MasterCraft dealer and only the lubricant specified above should be used.



Inspection or replenishment of the lubricant is not required as part of the routine maintenance. At ambient temperatures the oil is thick, with a viscosity approaching grease. As the bearing temperature rises during towing, the oil thins out, replenishing the bearings with lubricant and dissipating heat. For optimal performance, only UFP's Hybrid Oil Lubricant should be used in this system. Adding or changing the lubricant in the VAULT system is neither necessary nor recommended during the first five years of service.

WHEELS AND TIRES

MasterCraft uses various 14" and 15" wheels and tires as standard trailer equipment depending on model. All wheels and tires are rated to meet or exceed the required trailer capacity.

Low Profile wheels, 18" wheels with low profile tire side walls, are also available as optional equipment for a custom look and a better ride.

Tire pressure is a critical safety check before and at stops while towing. Low pressure is the leading cause of tire failure.

WHEEL AND TIRE WARRANTY

MasterCraft utilizes multiple wheels and tires for its trailers. If tire and/or wheel warranty is needed, locate the tire warranty sticker located on the rear side of the trailer 'bulkhead', the tube at the rear of the tongue that runs across the trailer. This sticker will be specific to the wheels and tires installed on your trailer and will have a QR code to take you to the manufacturer's warranty and service page where you can request help.



WHEELS

Trailer wheels and tires require more attention than the wheels on a family vehicle because they are regularly exposed to water. The three major items to check are: lug nuts, tire pressure, and lubrication.

Aluminum wheels require attention and routine maintenance, particularly in keeping them clean. Failure to do so may result in damage that is not covered by warranty. The trailer and wheels should be washed weekly during boating season, and after every use if the trailer has been submerged in salt or brackish water. Any exposure to a hard winter climate, particularly road salt and/or chemicals, requires immediate cleaning the same as submersion in salt water.



WARNING

Maintain the proper torque on the lug nuts attached to the wheel bolts. Failure to do so may result in serious injury or death and/or property damage. An authorized MasterCraft dealer can provide the proper torque specifications (measured in foot-pounds).

Check tire pressures regularly. Before each outing and at every rest or fuel stop when towing. If equipped, keep the spare properly topped up as well. Keep the wheel bearings lubricated. As discussed above, inspect the wheel bearings for proper lubrication before each use. Failure to do so may cause wheel failure and possible wheel loss, which may result in serious injury or death and/or property damage.

Keep the wheel bearings lubricated. Inspect the wheel bearings for proper lubrication before each use. Failure to do so may cause wheel failure and possible wheel loss, which may result in serious injury or death and/or property damage.

Use a soft brush, mild detergent and/or mild degreaser. A quality spray-on wheel cleaner may also be used. Ensure that any product used is specifically indicated for use on aluminum. Many cleaners are too harsh and will result in pitting or other damage to the wheel surface. Many car washes use strong chemicals and should be avoided if that is the case.

Removing road film, contaminants, and brake dust (all of which retain moisture) is critical to ensuring that the wheels will retain their luster and quality finish for a long period of time. Any exposure to a harsh winter climate, particularly road salt and/or chemicals, or submersion in salt water at any time, requires immediate cleaning

NEVER CLEAN WHEELS THAT ARE HOT. Allow wheels to cool or cool them with running water. If the wheels are too hot, significant damage can occur to the wheels.

It is also important to seal the wheels with a sealant that reduces static and resists brake dust. Check at an automotive supply store for an appropriate sealant.

CAUTION

Wheels must always be cool or cold to the touch prior to cleaning. Failure to allow wheels to cool sufficiently can result in damage that is not covered under warranty.

WARNING

Ensure that all lug nuts are secure prior towing a MasterCraft trailer. Failure to do so can cause a wheel to disengage from the hub. This can cause damage to the trailer that may not be covered under warranty. Serious injury or death to the driver, any passengers, and/or other motorists can occur.

LUG NUTS OR WHEEL BOLTS

Loose wheel mounting nuts (lug nuts) can cause more than just an annoying wheel wobble—it's possible to lose a wheel. Before each trip check for loose or missing lug nuts/wheel bolts.

When tightening the lug nuts, use a correctly sized socket. The wrong size can round off or strip the lug nuts and render them useless. If you lose a lug nut, replace it promptly with an OEM nut from your authorized MasterCraft dealer. Take special care to ensure that the replacement lug nut is the correct type and size. While the threads may match, the lug nut may be a size that does not hold the wheel securely against the hub, even when fully tightened. Be certain a replacement lug nut is an exact match for the original. Ensuring that lug nuts on trailer wheels are tight and properly torqued is an important responsibility for maintaining your trailer in a safe operating condition. Inadequate and/or inappropriate lug nut torque (tightness) is a major reason that lug nuts can loosen during use. Loose lug nuts can rapidly lead to

a wheel separation from the hub, with potentially serious safety consequences.

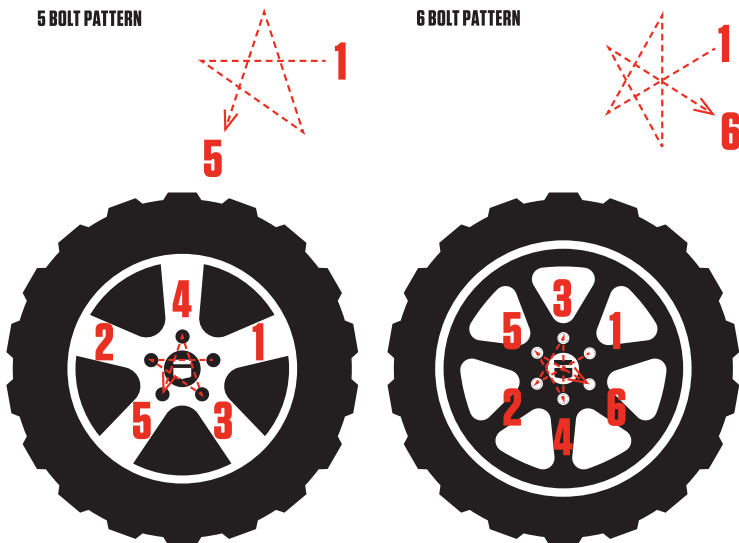
Check the lug nut tightness often, especially during the first few hundred miles of the trailer's use. You should always check the torque prior to beginning any long trip and every time a wheel is removed and reset.

You must use a torque wrench to accurately indicate the amount of torque that you are applying to the lug nut. Four-way wrenches, ratchets, and similar tools can be useful for short-term emergency repairs but are not appropriate tools for accurately checking lug nut torque. Keep a record of the date and approximate mileage when the lug nut torque is checked. Note any lug nut(s) that lost torque. Investigate the reason(s) if the lug nut torque is not maintained over more than one retightening because this can be indicative of a possible problem with the lug nuts, nut studs, wheels and/or hubs and that should be corrected. Contact an authorized MasterCraft dealer immediately if any persistent lug nut loosening (or any other lug, wheel or axle problem) occurs. In the event of a wheel separating from the trailer during use, notify an authorized MasterCraft dealer. Seek prompt professional assistance in assessing the trailer and its gear, and retain but do not reuse involved lug nuts, wheels and studs.

Do not repair or service the trailer yourself. Instead, call a trained, authorized MasterCraft service technician.

Use the following patterns at right to tighten lug nuts.

1. On first torquing pass tighten to 45 lb.-ft.
2. On second pass tighten to 70 lb.-ft.
3. On third pass tighten to 90 lb.-ft.
4. On fourth pass tighten to a reading between 110 lb.-ft. and 120 lb.-ft.



TIRES

The most common cause of trailer tire trouble is under-inflation. It is important to always maintain correct air pressure as indicated by the tire manufacturer on the tire's sidewalls. Tire pressure information may be listed on stickers elsewhere as a convenience, but because tires may be replaced, the air pressure should always be verified on the tire's sidewall. If there is a difference between air pressure listings on labels, warning stickers and tire sidewalls, always defer to the tire sidewall air pressure listing.

Always check the air pressure when the tires are cold. Tires heat up and the air pressure increases after traveling short distances. For safety and convenience, inflate tires to the air pressure indicated on the sidewall of the tire, but always carry a spare wheel and tire in case of unexpected or sudden issues with a tire.

When trailer tires become worn or damaged, replace them with new tires. An authorized MasterCraft dealer can help you. During times of storage, maintain the proper tire inflation, shield tires from UV rays (direct sunlight), and relieve the load on the tires by supporting the trailer frame with concrete blocks or jack stands.

Tires should always be replaced with equivalent tires. This information, along with tire pressure, can be found on the "Tire and Loading Information" sticker placed inside the trailer frame, roughly below the bow roller. Verify these specifications meet the information on the tire's sidewall

WARNING

Keep tires properly inflated. Inspect each tire's pressure before each use. Refer to the tire sidewall for proper inflation. Failure to maintain the correct tire pressure may result in tire failure and loss of control. This may result in serious injury or death and/or property damage.



Tires should be replaced at a maximum of 8 years from manufacture date. The manufacture date of the tire is embossed in an oval on the side wall and is indicated by week and year as WWYY, i.e. 2124 indicates the 21st week of 2024. Storage and use can vary greatly from boater to boater, so tires could wear or dry out much more quickly than 8 years. Inspect the tires before each trip. Cracks, damage, or wear should be addressed before towing.

The tires that come equipped on the MasterCraft trailer were selected for durability as well as comfort and are matched to the trailer's specifications. Over time, as with all tires, there will be wear and eventually replacement will be necessary. At that time, do not mix radial and bias tires because it may affect the trailer/tow vehicle handling and safety. MasterCraft dealers offer replacement tires; if the owner chooses to purchase tires elsewhere, be certain that the replacement tires meet the manufacturer's requirements and that they properly integrate with any tires remaining on the trailer

READING TIRE WEAR

The way your tires wear is a good indicator of how your trailer's various systems are integrating. Abnormal wear patterns are often caused by the need for simple tire maintenance or alignment. Tires should be inspected at every opportunity. Learning to read the early warning signs of trouble can prevent wear that shortens tire life or indicates the need for having other parts of the trailer serviced.

Tire Inspection Elements

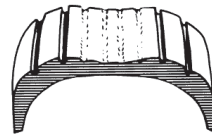
- Visually inspect the tires
- Feel the tread by hand to detect tire wear such as feathering
- Check all tires with a tire pressure gauge



SAMPLES OF ABNORMAL WEAR

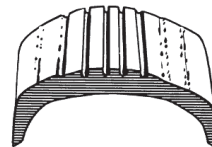
Over-inflation

Excessive wear at the center of the tread indicates that the air pressure in the tire is consistently too high. The tire is riding on the center of the tread and wearing it prematurely. Many times, the “eyeball” method of inflation (pumping the tires up until there is no bulge at the bottom) is at fault. Tire inflation pressure should always be checked with a reliable tire gauge. Occasionally, this wear pattern can result from extremely wide tires on narrow rims. In such situations, tires or wheels will have to be replaced.



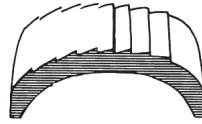
Under-inflation

This is the most common problem in trailer tires. This type of wear usually results from consistent under-inflation. When a tire is under inflated, there is too much contact with the road by the outer treads, which wear prematurely. Tire pressure should be checked with a reliable pressure gauge.



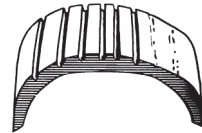
Feathering

Feathering is a condition when the edge of each tread rib develops a slightly rounded edge on one side and a sharp edge on the other. By running your hand over the tire, you can usually feel the sharper edges before you'll be able to see them. The most common cause of feathering is incorrect toe-in setting. If this is occurring, have the toe-in adjusted to a proper setting.



One Side Wear

In instances where an inner or outer rib wears faster than the rest of the tire, there may be a need for a realignment of the tires. This occurs when there is excessive camber in the axle, causing the wheel to lean too much to the inside or outside and putting too much load on one side of the tire. The trailer may simply need the wheels aligned, but misalignment could be due to sagging springs, overloaded trailer or an unbalanced load on multi-axle trailers. Because load has a great effect on alignment, be sure the trailer is loaded to balance the weight on the axle or axles. Trailers should be towed with the trailer level, this is particularly important with independent suspension trailers using torsion axles.



Cupping

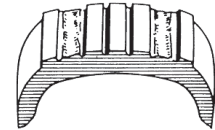
Cups or scalloped dips appearing around the edge of the tread on one side or the other almost always indicate worn (sometimes bent) suspension parts. Adjustment of wheel alignment alone will seldom cure the problem.

Any worn component that connects the wheel to the trailer (wheel bearings, springs, bushings, etc.) can cause this condition. Worn components should be adjusted or replaced with new ones. The worn tire should be balanced and possibly moved to a different location on the trailer. Occasionally, wheels that are out of balance will wear like this, but wheel imbalance usually shows up as bald spots between the outside edges and center of the tread.



Second-Rib Wear

Second-rib wear is normally found only in radial tires, and appears where the steel belts end in relation to the tread. Normally, it can be kept to a minimum by paying careful attention to tire pressure and frequently rotating the tires. Some tire manufactures consider a slight amount of wear at the second rib of a radial tire to be normal, but excessive amounts of wear indicate that the tires are too wide for the wheels. Be careful when having oversized tires installed on narrow wheels.



BRAKING SYSTEM

All MasterCraft trailers are supplied with disc brakes on all wheels. Disc brakes offer several advantages over drum brakes. Disc brakes have improved resistance to fade on downhill grades. They are self-adjusting, so as the pads wear, braking efficiency is not reduced. This type of brake recovers quickly after being submerged. They also require less maintenance, are easier to flush out, and are less susceptible to water-induced corrosion.

Recommended Brake Fluid

MasterCraft uses and recommends DOT 3 brake fluid. DOT 4 may also be used to flush and refill the system as it is compatible with DOT 3, however, it may need to be flushed more often due to higher water absorption rates. **DO NOT USE DOT 5 in a MasterCraft trailer. It is not compatible with DOT 3 or DOT 4 and will harm the braking system.**

DOT 3 and DOT 4 brake fluid naturally absorb water. As the percentage of water in the brake fluid increases, the fluid boiling point decreases, which can lead to spongy, weak brakes, up to complete loss of trailer braking. In addition, the water in the lines accelerates corrosion of brake system components internally. Loss of trailer braking can cause loss of control of the tow vehicle. MasterCraft recommends checking the brake fluid level before every trip and flushing the brake system with new fluid every season. The best time to perform this maintenance is just before



WARNING

After backing a trailer into the water or in rain, wet brakes will be less effective than dry brakes. Use caution while towing until the brakes have had time to dry. Typically in dry conditions, braking surfaces will dry after just a few brake applications. Trailer brakes must be maintained in good working condition at all times. Have the brake system inspected by an authorized MasterCraft dealer or service facility on a regular basis and verify proper fluid level in the actuator. The loss of adequate braking could result in serious injury or death and/or property damage.

the boating season begins to keep the fluid as fresh as possible. Use/storage in humid climates or heavy use during the season may require more frequent maintenance. If any degradation in braking performance is suspected, a full brake system check and maintenance should be performed.

ELECTRIC-OVER-HYDRAULIC BRAKES

Electric-over-Hydraulic (EOH) brakes utilize an electrical signal from a vehicles OEM or aftermarket brake controller to activate a hydraulic brake pump that will apply the trailer brakes. MasterCraft utilizes the HydraStar™ Hydraulic Brake Actuator in this application. The HydraStar™ Actuator is installed inside the tongue assembly of your MasterCraft Trailer.

EOH brakes offer a smoother and stronger brake application when compared to surge brakes, however, the tow vehicle being used MUST be fitted with an electronic brake controller and the appropriate 7-pin trailer connector.

Because the HydraStar™ Actuator is a hydraulic pump, it may overheat in certain situations when the brakes applied for extended periods of time, such as railroad crossings or traffic jams. It is important to apply the parking brake on the tow vehicle and release the brake pedal so that the pump does not run continuously.

The emergency breakaway system on the MasterCraft EOH system utilizes a battery installed in the trailer tongue to activate the pump in the case that the trailer becomes separated from the tow vehicle. It is critical to ensure the battery is maintained and properly charged before towing the trailer. In typical use, the battery is charged when connected to the tow vehicle. After periods of storage, the battery may have lost charge and must be recharged or replaced before towing.

The breakaway system is NOT to be used as a parking brake. The HydraStar™ unit may overheat and/or discharge the battery resulting in loss of braking pressure.

Before use, perform the following steps:

1. Attach the trailer to the tow vehicle
2. Pull the breakaway switch on the trailer.
 - Listen for a hum from the tongue, the sound will change as the unit builds pressure.
 - This shows that the battery has charge and the pump is working.
3. Reset the breakaway switch to turn the actuator pump off.
4. Turn the vehicle ignition and brake controller on.
 - Depress the brake in the tow vehicle.
 - The hydraulic pump should activate when the brake pedal is pressed.
 - This shows that the wiring is correct.
5. The above steps show that the pump is working but the disc brakes still need to be tested.
6. Go for a short, low speed test drive to ensure the brakes are functioning and that the controller is set properly.
 - Apply the brakes while traveling to test the trailer brakes.
 - If the braking force on the trailer needs to be increased or decreased, stop and adjust the gain setting on the brake controller, then repeat the test.

If any problems are encountered, consult the user manuals for the trailer and its components, troubleshoot the system, and/or contact your dealer for further assistance.

The breakaway cable is an additional line of defense in the event the trailer becomes separated from the tow vehicle. Before the breakaway cable is pulled, the coupler must become detached from the hitch ball and the safety chains must fail. At this time the breakaway cable is pulled and applies a braking force to the trailer.

Note that the breakaway system is not intended to lock up the trailer brakes after separating from the tow vehicle but rather to apply just enough braking force to keep the trailer from free-wheeling. The breakaway system must be reset manually after it has been activated.

DO NOT USE THE BREAKAWAY SYSTEM AS A PARKING

BRAKE! Surface rust may build up on the rotor brake surface if the trailer isn't used for a week or more. If this occurs, then generally the brake pads will wipe off the rust in the first few miles of travel. However, if the trailer has been idle for several months, or it has been frequently submerged in salt water and the brakes have not been flushed out (as described earlier in this section of Owner's Manual), severe corrosion can occur.

Try the brakes before each trip. On a regular basis, have the brake lines inspected, necessary adjustments made and any damaged or worn parts replaced by an authorized MasterCraft dealer.

Wet brakes have diminished braking capacity which necessarily means that wet brakes will not slow the trailer as quickly as under normal dry conditions. If the wheels have been in water, several brake applications at slow speeds should dry them out. If the wheel assemblies have been submerged in salt water, it is important to flush the rotors and calipers thoroughly with fresh water to minimize subsequent corrosion.

If the stopping capacity does not meet expectations, have the tow vehicle and the trailer brakes checked for proper operation. The trailer brakes should be inspected by an authorized dealer.

Review the tow vehicle manufacturer's recommendations and instructions for towing.

If the brakes are hot before launching your boat, it is a good idea to allow the brakes to cool before submerging them. The sudden change in temperature when submerging very hot calipers and rotors stresses all the related parts and could cause damage.



If you are unable to back up, check the electronically operated back-up valve on the actuator, which is connected to the tow vehicle back up lights. When energized, the valve opens and prevents pressure build up in the system. When it is energized by shifting the tow vehicle into reverse, you should hear a noticeable “click” sound. If you don’t, check that the electrical connection between the tow vehicle and the trailer is secure.

When parking the trailer, be sure the actuator is fully extended. This position relieves pressure on the brakes. Corrosion sometimes causes actuators to freeze in the compressed position. This causes the brakes to drag and overheat during subsequent outings.

RECOMMENDED BRAKE FLUID

After only a year of use, used brake fluid in the typical marine trailer may contain as much as two percent (2%) water. Over time, the percentage will continue to grow and may reach as much as eight percent (8%). As the concentration of moisture increases, a sharp drop in the fluid’s boiling point temperature results. As little as one percent (1%) moisture can lower the boiling point to 369oF/187oC.

According to DOT and OEM requirements, brand new DOT 3 brake fluid must have a dry (no moisture) boiling point of at least 401oF/205oC, and a wet (moisture saturated) boiling point of no

WARNING

Consumers must use only DOT 3—preferred—or DOT 4 brake fluid. DO NOT USE DOT 5 BRAKE FLUID. DOT 5 FLUID WILL DAMAGE THE SEALS IN THE ACTUATOR AND CALIPERS, CAUSING FAILURE OF BRAKES THAT COULD LEAD TO INJURY OR DEATH. Any other type may not provide sufficient chemistry to protect against overheating. Brake fluid should be completely replaced during annual maintenance (at least once every 12 months or more often if the system has shown evidence of brake fluid loss). Brake fluid types should never be mixed. Failure to provide required maintenance can cause brake failure, leading to incidents that result in serious injury or even death.

less than 284oF/140oC. (Most far exceed these requirements, fresh out of the bottle.) Older brake fluid (about 18 months) with even three percent (3%) moisture content lowers the boiling point to 293oF/145oC, which is dangerously close to the minimum standard requirements.

Water contamination increases the danger of brake failure because vapor pockets can form if the fluid gets too hot. Vapor displaces fluid and is compressible, so when the brakes are applied, the actuator may completely compress without applying the brakes.

In addition, water laden brake fluid promotes corrosion and pitting in caliper pistons and bores, wheel cylinders, master cylinders, steel brake lines and reverse solenoids.

DOT 5 brake fluid is a silicone-based fluid and requires specific materials for the boots, seals and wipers in the actuator master cylinder and caliper. Those materials are NOT used in MasterCraft trailers. Regardless of marketing claims made regarding a supposed superiority of DOT 5 brake fluid, the fact is, they will cause significant failures in the trailer's brakes because they are not designed to use DOT 5 brake fluid.

"Unexplained" brake failures are often traced to dragging brakes caused by the E-stop cable being tripped or the use of DOT 5 brake fluid. The underlying cause most often is because the brakes got over-heated and caused the fluid to boil. This can occur when the fluid level is appropriate, the linings are within specifications, and the hydraulics appear to work properly.

The silicone in DOT 5 brake fluid also causes foaming bubbles when forced through small orifices under high pressure, such as the solenoid valves in a disc brake system. Bubbles in brake fluid result in spongy brakes. Silicone also tends to become slightly compressible at temperatures near its boiling point, which makes it generally inappropriate for trailers used in mountain conditions.

WARNING

DO NOT USE DOT 5 brake fluid in any component of MasterCraft trailers. The silicone causes seals to swell and can bind up caliper pistons. Do not use this in individual actuators, disc brakes or solenoids.

BRAKE LOCKOUT

When backing up, the coupler will move back and apply the trailer brakes. The brakes will apply at different levels depending on how fast you back up, the type of brakes, the road or surface, and the position/angle of the trailer. All MasterCraft trailers have an electrical solenoid control to allow the trailer to back up. This control is wired to the back-up lights on the tow vehicle, and when the tow vehicle is put into reverse, this control does not allow the trailer brakes to apply.

Manual Brake Lockout for the Actuator

If the trailer needs to be moved while in reverse and without electrical connections to operate the reverse lock-out solenoid, the lock-out pin can be used to manually keep the coupler from applying pressure to the master cylinder. Place the lock-out in the slot at the front of the actuator housing. Remove the pin IMMEDIATELY after backing up. Failure to do so will cause the loss of brake power when the trailer is towed.



WARNING

The reverse lockout option must only be used when moving in reverse. Immediately remove the lock-out prior to towing and fully insert it into the coupler latch.

⚠ WARNING

The following procedure should be performed only by skilled and certified mechanics. MasterCraft recommends that it be completed only by an authorized MasterCraft dealer.

MANUAL BLEEDING OF BRAKES

Check that all hydraulic fittings are secure. Read and understand all instructions before starting.

Two people are required for manual bleeding air bubbles.

IMPORTANT: Before bleeding the brake lines, bleed the actuator master cylinder. This is mainly required if a new master cylinder has been installed, or if the master cylinder was run dry or is low on fluid. To do so, remove the plastic access cover on the top of the actuator housing and insert a flat blade screwdriver between the rear bracket/tab and the fixed tab. The fixed tab is between the rear bracket/tab and the front (E-brake release) tab. While holding down the front tab, and using a slow/controlled motion, cycle the screwdriver fore-aft to pump the master cylinder push rod.

- 1.** Remove the master cylinder reservoir cap and fill the reservoir with brake fluid. Use either DOT 3 (preferred) or DOT 4 automotive brake fluid. **DO NOT USE DOT 5 BRAKE FLUID. DOT 5 FLUID WILL DAMAGE THE SEALS IN THE ACTUATOR AND CALIPERS CAUSING FAILURE OF BRAKES THAT COULD LEAD TO INJURY OR DEATH.** (See recommended brake fluid information in this section of the Owner's Manual.)
- 2.** Follow the instructions on the brake fluid container. Avoid shaking the brake fluid container, and pour fluid slowly to minimize air entrapment. Let the fluid in the reservoir stand until it is completely free of
- 3.** Start the bleeding procedure on the brake farthest from the master cylinder.
- 4.** At the brake assembly, connect a transparent bleeder hose to the bleed screw fitting on the caliper and submerge the free end into a container partially filled with brake fluid. Do not reuse this fluid.
- 5.** The first person should stroke the push rod slowly while holding the safety release bracket down. The second person opens the bleed screw fitting. Then close the bleed screw fitting **BEFORE** the first person **SLOWLY** releases the push rod. Repeat this procedure until the fluid expelled from the bleeder hose is free of air bubbles. Remember to always tighten the bleeder screw before releasing the push rod. During this procedure, the master cylinder reservoir fluid level must be maintained at no less than half full.

6. Repeat Steps 4 and 5 for the other brake, as well as the brakes on the front axle of tandem axle trailers, or the center then finally the front on triple axle trailers. If installation is on a tandem-axle or triple-axle trailer, repeat the bleeding procedure on the rear axle(s) brakes for a second time to assure purging of all air in the system.
7. Push down on the safety release bracket to ensure that the push rod is in the released position.
8. After the bleeding is completed, recheck the fluid level in the master cylinder. Fill the master cylinder reservoir to 1/8" from the bottom of the threads on the reservoir cap. Do not overfill.
9. As a final check after bleeding is completed, stroke the push rod and check to be sure the brake system is pressurized. This is done by attempting to rotate a tire around. It is highly recommended to check the function of the brakes prior to driving down the road. Attempt to back-up the trailer (preferably up and incline) without the wiring harness connected. This should activate the brakes to verify they are working as expected. If an incline is not available, and with the wiring harness disconnected, attempt to back-up the trailer against a wheel chock hard enough to slide the actuator rearward into the frame and engage the brakes. Remove the wheel chock and continue to back up to verify the brakes are engaging.



Important: Do not use brake fluid drained from the brake system to refill the master cylinder reservoir as such fluids contain contaminants from the system that may result in brake failure or costly repairs.

ADDITIONAL TRAILER OPTIONS

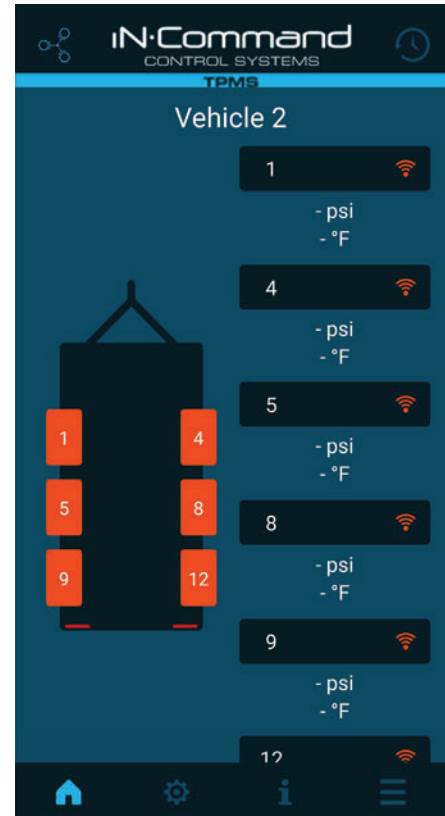
The MasterCraft Trailer supports a variety of optional features. The owner may customize their trailer by selecting any of these options during the initial phase of ordering. If you are curious about buying and installing one of these optional features after purchase, contact your authorized MasterCraft dealer in order to find out whether the desired option is retrofittable.

TIRE PRESSURE MONITORING SYSTEM (TPMS)

The routine inspection of tire pressure status is essential to maintaining a safe, road-ready trailer. If your trailer has been outfitted with the Tire Pressure Monitoring System (TPMS), you can easily and conveniently monitor tire pressure status from the palm of your hand. The TPMS works by taking data from a sensor on the valve stem and transmitting that information via Bluetooth. This allows the user to read pressure levels from their smartphone, eliminating the hassles involved with manual inspection. Installing the TPMS is a straightforward process. The complete TPMS installation package resides in the boat's glovebox upon arrival.

Retrieve the tire pressure sensors, attach them to the valve stems, and use the accompanying wrench to tighten as needed. Once you have installed the sensors, use your smartphone to download the In-Command TPMS app. Link your phone to the Bluetooth module and scan the QR-code on the back of each sensor. More information can be found on the App or Play store under ASA Electronics, LLC, the app's developer.

NOTE: The TPMS system will only provide data once they detect that the trailer is moving. When the trailer stops, the sensors will continue to provide data for a short time before turning off, to conserve battery.



TRANSOM TIE-DOWN STRAPS

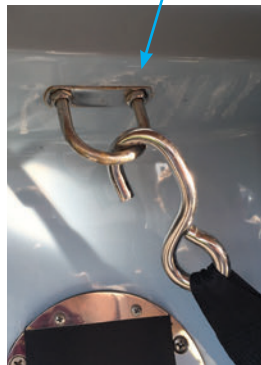
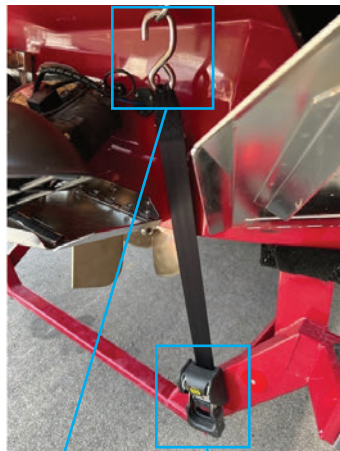
For simplicity, a pair of ratcheting, marine-rated, self-retracting transom tie-down straps can be optioned to the trailer. These straps come pre-installed bolted to the trailer's prop guard, sparing the hassle and mess of loose tie down straps. These pre-installed straps hook to a pair of attachment points on the transom of the boat. A built-in ratchet is used to tighten the connection as needed.

GATORBAK BUNK COATING

Gatorbak is a slick-when-wet, high-traction-when-dry, heavy duty, yet soft, rubber bunk covering. The characteristics of Gatorbak will allow the boat to load and unload more easily when the bunks are wet and also help keep the boat securely on the trailer after being removed from the water. The soft compound is less likely to damage the boat's hull than traditional bunk carpet both in extreme loading conditions and over time. The rubber will not collect particulate matter, such as sand, that could further damage the hull. At this time, Gatorbak is only factory available to replace the center bunk carpet, where most of the load and wear occurs during typical loading and unloading.

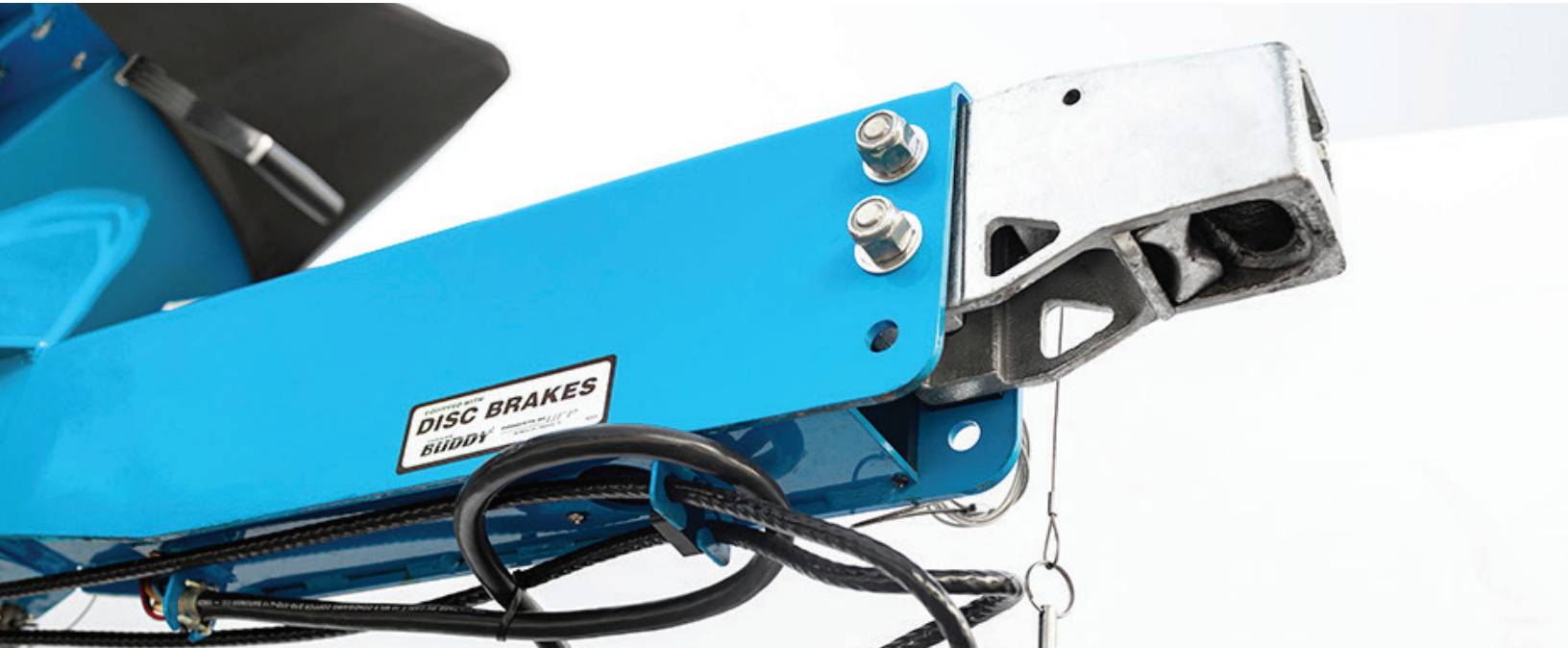
GALVANIZED COAT

The practice of coating metal with a protective zinc layer is known as galvanization. The zinc acts as a barrier between the metal and various corrosive elements in the atmosphere, continuing to protect the metal even after corrosion has started to wear away the zinc layer. As an optional feature, the MasterCraft Trailer can be strengthened with galvanic zinc to promote longevity and durability. The galvanized coat is available on all trailer models.



ELECTRIC OVER HYDRAULIC (EOH) BRAKES

Electric-over-Hydraulic (EOH) brakes utilize an electrical signal from a vehicles OEM or aftermarket brake controller to activate a hydraulic brake pump that will apply the trailer brakes. MasterCraft utilizes the HydraStar Hydraulic Brake Actuator in this application. The HydraStar Actuator, among other braking components, is installed inside the tongue assembly of your MasterCraft Trailer.



EOH brakes offer a smoother and stronger brake application when compared to surge brakes, however, the tow vehicle being used **MUST** be fitted with an electronic brake controller and the appropriate 7-pin trailer connector. Because the HydraStar Actuator is a hydraulic pump, it may overheat in certain situations when the brakes applied for extended periods of time, such as long traffic lights, railroad crossings, or traffic jams. While sitting, it is important to shift to neutral, apply the parking brake on the tow vehicle, and release the brake pedal so that the pump does not run continuously.

The emergency breakaway system on the MasterCraft EOH system utilizes a battery installed in the trailer tongue to activate the pump in the case that the trailer becomes separated from the tow vehicle. It is critical to ensure the battery is maintained and properly charged before towing the trailer. In typical use, the battery is charged when connected to the tow vehicle. After periods of storage, the battery may have lost charge and must be recharged or replaced before towing. The breakaway system is **NOT** to be used as a parking brake. This may cause the HydraStar unit to overheat and/or discharge the battery resulting in loss of braking.

EOH PRE-CHECK

Before use, perform the following steps to verify the battery is charged and the system is working properly:

- Before connecting the trailer to the tow vehicle, pull the breakaway switch on the trailer.

Listen for a hum from the tongue, the sound will change as the unit builds pressure. This shows that the battery has charge and the pump is working.

- Reset the breakaway switch to turn the actuator pump off.
- Attach the trailer to the tow vehicle.
- Turn the vehicle ignition and brake controller on.

Press the brake in the tow vehicle. The hydraulic pump should activate when the brake pedal is pressed. This shows that the wiring is correct.

- The above steps show that the pump is working but the disc brakes still need to be tested.
- Go for a short, low speed test drive to ensure the brakes are functioning and that the controller is set properly.

Apply the brakes while traveling to test the trailer brakes.

If the braking force on the trailer needs to be increased or decreased, stop and adjust the gain setting on the brake controller, then repeat the test.

If any problems are encountered, refer to the HydraStar manual to troubleshoot the system, and/or contact your dealer for further assistance.

EOH EMERGENCY BREAKAWAY CABLE

DO NOT USE THE BREAKAWAY SYSTEM AS A PARKING BRAKE!

The breakaway cable is an additional line of defense in the event the trailer becomes separated from the tow vehicle. If this happens, the breakaway cable is pulled and applies a braking force to the trailer. The breakaway system is not intended to lock up the trailer brakes after separating from the tow vehicle, but rather to apply enough braking force to slow the trailer. The breakaway system must be reset manually after it has been activated.

NOTE: For additional information regarding optional electric over hydraulic brakes, consult the HydraStar Trailer Braking Systems manual included in your owner's packet.





RUNWAY LIGHTS

XKGlow RGB trailer runway lights are available on all MasterCraft Trailer Models. Runway lights are typically used to assist in night-time loading by lighting up underwater and indicating where the trailer frame is located. The runway lights are mounted facing upward in the trailer frame, they can shine through the water and show where the trailer frame is so that the driver can line up properly to load the boat.

The runway lights can be tuned to near infinite custom colors or turned into programmable light shows using the XKGlow app, illuminating the boat on the trailer in exciting ways to show off your rig while parked. While the runway lights can be turned on while trailering, driving with additional lights, flashing lights, or lights of certain colors is illegal in many areas. Know your local regulations wherever you are trailering!

For instructions on operating and troubleshooting the XKGlow runway lights, see the XKGlow Operating Manual included in your boat's Information Packet.

SPARE TIRE

All models support an optional spare tire. Mounted to the front of the trailer, this feature serves as a convenient and reliable back-up tire in the event that one needs to be replaced. Make sure you keep the spare tire inflated and check it periodically. The trailer's VIN label should provide information on optimal pressure levels.

GALVANIZED COAT

The practice of coating metal with a protective zinc layer is known as galvanization. The zinc acts as a barrier between the metal and various corrosive elements, most notably salt water, continuing to protect the metal even after corrosion has started to wear away the zinc layer. As an optional feature, the MasterCraft Trailer can be coated with galvanic zinc to promote longevity. The galvanized coat is available on all trailer models.



RAMP-N-CLAMP

The Ramp-N-Clamp replaces the traditional bow roller and can be added to many trailer models. This device acts as an automatic latching system for the boat. When properly set for loading, the latch in the Ramp-N-Clamp will automatically hook and latch to the bow eye on the boat, securing the boat to the trailer. Once the boat has been loaded up into the Ramp-N-Clamp, the winch can be secured to the bow eye without needing to keep the boat under power or even on. When trailering, the Ramp-N-Clamp can act as an additional forward tie down.

To use the Ramp-N-Clamp for unloading the boat from the trailer, set the lever to the up position to unlock the hook before backing down the ramp but make sure the winch is still connected and tight so that the boat does not unload unintentionally. Once backed down the ramp, unload the boat as normal.

To use the Ramp-N-Clamp for loading the boat onto the trailer, set the lever to the down position and ensure the hook is open. Load the boat fully into the Ramp-N-Clamp so that it latches onto the bow eye. Do not lift the lever again until you are ready to release the boat.



HELPFUL TIPS

For easier release on the ramp, put the boat in forward gear or keep the winch strap tight while lifting the Ramp-N-Clamp handle.

Keeping the Ramp-N-Clamp cover and front of the boat waxed is part of the proper, regular maintenance. If the boat rocks back and forth on the trailer while towing, add tie down straps to the trailer to prevent rocking. An ill-fitting trailer will cause wear that is not covered under the warranty. A winch strap must be used and firmly tight while towing. This prevents wear to the bow eye that is not covered under warranty. Also, it is very important to be sure that the transom of the MasterCraft boat is resting fully and securely on the supports provided at the rear end of the trailer, and that it remains in place when the trailer is parked or underway. Tie-down eyes have been added on both the bow and transom of the boat and must be used while trailering. Buckles at the back of the trailer must also be secured to the boat prior to towing.

LAUNCHING TIPS AND TECHNIQUES

Every MasterCraft boat owner develops his or her own favorite launching technique.

CHECK THE RAMP FIRST

Whether launching from an unimproved or surfaced ramp, check it out before starting the launch procedure.

- How steep is it?
- Is the surface firm enough to support the weight of the trailer and tow vehicle?
- Is it wide enough?
- Is it long enough?
- How deep is the water at the end of the ramp?
- Are there any obstacles above or below the water line?

Use great care when walking, standing or loading and unloading boats on or around any launch ramps because some launch ramps may be slippery when wet.

⚠ CAUTION

Be sure to install the drain plugs and detach the trailer tie-downs.



BACKING DOWN THE RAMP

If possible, have someone stand to one side of the ramp to provide directions. Backing up a trailer can be tricky. A good way to simplify the procedure is to grasp the steering wheel with one hand at its lowest point (6 o'clock). To make the trailer go right, move your hand on the wheel to the right (move the wheel counter-clockwise); to make the trailer go left, move your hand to the left (move the wheel clockwise). Slowly back the trailer into the water until the transom floats four (4) plus inches off of the trailer. The depth of the trailer to achieve this will vary depending on ramp angle. Set the parking brake and shift into park (automatic transmission) or first gear (manual transmission). Shut off the engine. Unlock the Ramp-N-Clamp (where equipped) latch and winch hook; then back the boat off the trailer.

RELOADING THE TRAILER

To reload the boat on the trailer, simply reverse the above procedures, including setting your Ramp-N-Clamp to the proper position, and drive the boat onto the trailer at an extremely slow pace. Before loading, clean any dirt or sand off the rollers and bunks. Sand on these can be abrasive on the boat's bottom while underway. Be sure to back in and completely wet the trailer bunks, then pull forward to the loading position. Be certain all the boat tie-downs are properly fastened down before departing from the launching ramp area.



TRAILER DEPTH INDICATOR STICKERS

These stickers, applied to the driver's side (in North America) guide pole, provide a visual indicator when loading and unloading a boat at various boat ramp angles. These depths are tested and verified at MasterCraft during trailer development – each boat model has a different recommended load depth for different ramp angles.

Some boat ramps have very flat launch angles, and some ramps have very steep launch angles. Under different ramp conditions the trailer will need to be backed into the water to different depths to minimize the collision between trailer bunks and a boat's hull bottom. Hard collisions will damage trailer bunks, trailer bunk carpet, and the boat's hull bottom.

Keep in mind that these stickers are to be used as a guide when loading and unloading. Individual boat weight from options, gear, fuel, etc. can and will affect the boat's draft and specific ramp angles can vary within a given range. Some adjustments will be necessary, but the depth stickers provided are a great starting point.

Trailer depth stickers are labeled for three different boat ramp angles, **NORMAL**, **STEEP**, and **FLAT**.

On a **NORMAL** ramp (7-11 degree ramp angle) the trailer should be backed in until the NORMAL sticker is just below the water line.

On a **STEEP** ramp (12-15 degree ramp angle) the trailer should be backed in until the STEEP sticker is just below the water line.

On a **FLAT** ramp (2-6 degree ramp angle) the trailer should be backed in until the FLAT sticker is just below the water line.

Approaching the trailer very slowly (typically in neutral) is recommended to test load depth. Unloading depth can (and should be) somewhat deeper than these recommended loading depths, as the bunks are not needed to guide the boat off the trailer. Power unloading can burn the carpet in the same manner as power loading.



GUIDE POLES

The guide poles are used to visually indicate the sides of the trailer when under water to aid in a successful load. They are also able to support some side loading to keep the boat centered above the trailer during the loading process in the case of current or wind. They are not intended to support major impacts such as off center or improper load attempts. Significant impacts can damage the guide poles or trailer.

The guide poles are a loading accessory and must be removed before towing.

PROP GUARD

MasterCraft trailers are provided with a rear prop guard to help protect the prop and rudder from damage while backing up. It can not protect these items in all situations. Extreme care should always be taken when backing up and a spotter should be used whenever possible. Mounted to the prop guard are eyes to be used with tie straps to secure the aft end of the boat to the trailer. Standard tie straps are not supplied, but factory installed self-retracting marine tie-downs are available as an option.

The prop guard is also equipped with rollers to further protect the running gear in situations when the trailer could "bottom out" such as a deep curb leaving a parking lot. The prop guard and rollers will briefly support the rear of the trailer until clear of the dip.

OPTIONAL TRAILER FEATURES

There are many options available for MasterCraft trailers. Due to specific requirements, not all options are available on all trailers. See your dealer for details.

SPARE WHEEL/TIRE

All models support an optional spare wheel and tire assembly. Mounted to the front of the trailer, this feature serves as a convenient and reliable back-up wheel assembly in the event of a flat tire. Make sure you keep the spare tire inflated and check it every time you check the trailer's other tires.

NOTE: Due to design related DOT requirements, ProStar, NXT20, and XT20 trailers with a Low Profile package and spare tire option will ALWAYS have a standard sized spare fitted.

LOW PROFILE WHEELS AND TIRES

Eighteen inch wheel and tire packages can be factory fit to most trailer models. Many wheel style options are available. This is an upgrade from the standard wheels and tires both looks and performance. The automotive 'Extra Load' XL SUV tires included in this package have a longer tread life and higher durability than the standard tires.

MasterCraft **strongly** recommends this package for customers that plan on towing frequently and/or towing for longer distances.

In most cases, when selecting a Low Profile package and spare wheel/tire, the spare will match the Low Profile package.

NOTE: Due to design related DOT requirements, ProStar, NXT20, and XT20 trailers with a Low Profile package and spare tire option will ALWAYS have a standard sized spare fitted.

NOTE: Reference the Design a Boat MasterCraft website for wheel/ tire images.

TRAILER CHECKLIST

Before towing the vehicle, be sure to read and familiarize yourself with the instructions and warnings supplied with it.



NEVER TOW THIS VEHICLE BEFORE SAFETY CHECKING

- Coupler, hitch and hitch ball are of the same size
- Breakaway cable is properly attached to the tow vehicle
- Coupler and safety chains are safely secured to the hitch of the tow vehicle
- All fasteners are properly tightened
- Boat is securely tied down to trailer (winch line is not a tie down)
- Wheel lug nuts are properly tightened
- Wheel bearings are properly adjusted and maintained
- Load is within the maximum load carrying capacity
- Weight inside the boat is properly distributed
- Tires are properly inflated
- All trailer lighting is working properly
- Trailer brakes are properly adjusted and working (if trailer is equipped).
- Tower on the boat (if equipped) is secured upright and locked in place, unless the tower can be locked in the down position.
- Sufficient overhead clearance before removing the boat/trailer from cover, or when towing so that the unit will clear any overhead items such as trees, bridges, overhead power lines, overpasses, etc.

NOTE: Trailer laws covering such things as brakes, lights, safety cables, licenses, etc., will vary from state to state. Be sure that the trailer is in full compliance with applicable state laws. An authorized MasterCraft dealer can help in this regard. Otherwise, contact the nearest state motor vehicle department.

This trailer is manufactured to meet the applicable federal safety standards at the time of manufacture. Check the local and state requirements regarding any additional equipment that may be required.

⚠ WARNING

Failure to follow maintenance procedures as outlined in this Owner's Manual may result in component failure. Such failure is not covered under warranty. Failure may also result in loss of control or other malfunction that could potentially lead to serious injury or death!

MAINTENANCE

NOTE: Failure to follow these routine procedures may result in failures that are not covered under warranty. An annual trailer inspection should be performed by a certified MasterCraft dealer.

Hose off the brake rotors and calipers, along with all other parts of the trailer that have come in contact with salt water or brackish water, as this will minimize corrosion. A fresh water flush of the system is the most critical aspect of trailer maintenance.

Extremely thick, heavy rust on rotor surfaces will not allow the wheel assembly to rotate freely, resulting in heat build-up and premature wear on components. Clean or replace components as necessary.

⚠ WARNING

Brake pad replacement should be performed by an authorized MasterCraft dealer. Improper pad replacement may decrease braking effectiveness, potentially resulting in a collision as a result of failure to stop the tow vehicle within an acceptable distance.

⚠ WARNING

Worn rotors must be replaced. Failure to do so may result in brake failure, which may cause serious injury or death.

Brake pads must be replaced when $3/32"$ (.094") or less of the pad friction material is left.

Rotors should be resurfaced by a qualified brake specialist if extreme galling or wear marks are present.

Be certain that hydraulic fluid is clean and the fluid level is within $1/8"$ from the bottom of the threads on the reservoir plug. (See the Actuator and Axle information contained in this section of the Owner's Manual.) Do not fill beyond that level. Brake systems use DOT 3 (preferred) or DOT 4 hydraulic fluid.

DO NOT USE DOT 5 BRAKE FLUID. DOT 5 FLUID WILL DAMAGE THE SEALS IN THE ACTUATOR AND CALIPERS, CAUSING FAILURE OF THE BRAKES THAT COULD LEAD TO INJURY OR DEATH.

NOTE: Care must be taken to avoid brake fluid coming in contact with the trailer paint. Brake fluid will damage paint! Such damage is not covered under warranty!

Check for leaks in the brake lines and fittings. Leaks will lead to loss of trailer braking ability. If lines or fittings appear to be leaking, take the trailer to an authorized MasterCraft dealer.

Aluminum wheels also require attention to routine maintenance, particularly in keeping them clean. Failure to do so may result in damage that is not covered by warranty.

The trailer and wheels should be washed weekly during boating season, and after every use if the trailer has been submerged in salt or brackish water. Use a soft brush, mild detergent and/or mild degreaser. A quality spray-on wheel cleaner may also be used. **Ensure that any product used is specifically indicated for use on aluminum** (many cleaners are too harsh and will result in pitting or other damage to the wheel surface). Many car washes use strong chemicals and should be avoided when that is the case. Removing road film, contaminants and brake dust (all of which retain moisture) is critical to ensuring that the wheels will retain their luster and quality finish for a long period of time. Any exposure to a hard winter climate, particularly road salt and/or chemicals, requires immediate cleaning the same as submersion in salt water.

NEVER CLEAN HOT WHEELS.

Allow wheels to cool or cool them with running water. If the wheels are too hot, significant damage can occur to the wheels. It is also important to seal the wheels with a sealant that reduces static and resists brake dust. Check at an automotive supply store for an appropriate sealant.



BEFORE INITIAL USE

READ AND UNDERSTAND THIS
OWNER'S MANUAL COMPLETELY.

Before Every Trip

- Ensure that all vehicle and trailer maintenance has been performed as set out in this Owner's Manual and the various other manuals, including the tow vehicle's owner's manual.
- Visually inspect the entire trailer.
- Make sure that the tow vehicle has been set up properly.
- Verify that the tongue weight and load are within proper specification. Further, be sure that the load distribution is correct so that the tow vehicle and trailer are properly balanced front-to-back and side-to-side.
- Verify the trailer is being towed level.
- Check the brake fluid reservoir to ensure it has the proper fluid level.
- Examine the brake rotor surfaces and remove excessive rust, flushing the brakes if the trailer has been idle for an extended period of time or submerged in salt water and not flushed afterwards.
- Examine the actuator for wear, bent parts, corroded/seized parts, or other damage.
- Test the actuator to verify the brakes are working prior to in motion use.
- Check the guide pole bars to ensure they are tight.
- Verify all running lights and brake lights, turn signals and hazard lights, are working properly and that all

wiring is properly connected. The wire harness must not be touching the road, but loose enough to make turns without disconnecting or damaging the wires.

- Verify the coupler latch and all equipment that connect the trailer and tow vehicle are properly secured and adjusted.
- Verify that there are no leaks in the brake system.
- Verify the safety cables are properly attached to the tow vehicle.
- Verify the emergency brake cable is attached properly to the tow vehicle.
- Verify the boat is properly loaded on the trailer and properly tied down to the trailer.
- Verify and/or correct tire pressure on both the tow vehicle and trailer.
- Inspect the tires for wear or damage.
- Check that all items are securely fastened on and in the trailer.
- Verify the wheel jack is retracted and in the locked position prior to towing.
- Ensure the lug nuts are properly torqued. (This must also be done after

the first 25 miles of towing and every 100 miles thereafter, at a minimum. MasterCraft recommends checking this more often. At each fuel or rest stop is not excessive.)

- Verify the tow vehicle has not exceeded the load capacity prior to towing.

Every Three To Six Months Or 250 Miles, Whichever Occurs First

(Additional To Above)

- Grease the trailer jack.
- Oil the trailer jack handle in accordance with the manufacturer's recommendations.
- Examine the entire trailer for any abnormalities or visible damage.
- Examine the trailer bunks for any signs of abnormal wear and tear.
- Lubricate all the rollers on the trailer with a light coat of oil.
- Inspect the brakes.

At The Beginning and End Of Each Season, Or Every 2,000 Miles, Whichever Occurs First

(Additional To Above)

- Check wheel bearing endplay. If the outer edge of the tire moves more than 1/8", the bearings may need to be readjusted.
- Inspect the tow hitch for corrosion or damage. Repair or replace components as necessary.
- Check for wear on the hitch ball. If the ball is worn, it is UNSAFE and must be replaced.
- Check the coupler mechanism for smooth operation. If the latch handle does not spring open after being disengaged, lubricate the points on the coupler latch mechanism.
- Check the actuator for excessive wear. If the outer member is rubbing against the inner, wear marks will show on top of the coupler just forward of the outer member. Contact an authorized MasterCraft dealer for replacement parts.
- Check the actuator travel. Excessive

actuator travel (over one inch) when the brakes are applied indicates air in the brake lines. Check the brake fluid in the master cylinder reservoir. On the actuator, remove the cap to the master cylinder reservoir by unscrewing the cap in a counterclockwise direction. The brake fluid level should be 1/8" below the threads.

- Check for foam or bubbles in the brake fluid. If either is present, drain the fluid from the master cylinder and replace with ONLY new brake fluid of the same type (DOT 3 is preferred—or DOT 4). DO NOT USE DOT 5 FLUID.
- In order for brakes to function properly, all air must be expelled from the brake system. If bleeding is necessary, have an authorized MasterCraft dealer perform this function. It is imperative that the system be filled with only ONE type of brake fluid. Different types do not mix. Follow the instructions on the brake fluid container.
- Check the safety chains and

attachment points for damage or wear. Repair or replace as necessary.

- Check the breakaway cable for worn or frayed cable strands. End fittings should be checked for damage. Promptly replace as necessary.
- Check for any hydraulic leaks in the brake system. Be sure all tube fittings are tight. Periodic checks must be made on all hoses, brake line tubing and fittings to guard against cuts, worn hoses and loose fittings that may cause leaks in the trailer brake hydraulic system. Replace deteriorated and damaged parts as necessary.
- Check for chips and nicks in the paint. Touch up as necessary. Ignoring this will lead to accelerated wear and deterioration of the trailer.
- Check the condition of the bunks. If the coverings show wear, discuss with an authorized MasterCraft dealer. If the coverings are not in good condition or if the bunk sub-frame shows any damage, this will adversely affect the fit of trailer to boat. This can

result in damage to the boat hull, which is not covered under warranty.

- Inspect the braking system for wear and tear including the rotors, pads, and calipers.
- Inspect the wheels and tires for wear and tear.
- Inspect for any loose, damaged, or missing components and replace or repair as necessary.

Storage (For Several Months)

Storage is a great time to perform routine maintenance and

- If possible, park the boat trailer in a protected, covered area such as a garage, carport, or similar shelter. Keep all canvas covers on the boat while stored, but in higher humidity areas or periods of weather, it may be necessary to open a corner of the covered area to allow air circulation. See the Care and Maintenance section of this Manual for additional information and suggestions regarding boat storage procedures.
- Be certain the breakaway system has not been set and that the actuator is fully extended so that the brake pads do not seize to the rotor.

- Have the wheel bearings checked by an authorized MasterCraft dealer prior to reuse.
- Loosen the tie-downs and winch strap, but be sure the boat is still resting properly on the trailer bunks.
- Remove the drain plug and elevate the trailer tongue slightly (just an inch or two) to allow water to drain out so the boat will be dry. Tie the drain plugs from the boat's bilge system to something obvious such as the steering wheel so that they will be easy to remember to re-install before the next outing.
- A good time to touch up rust spots, nicks and chips is when the trailer is in storage.
- Replace damaged tie-downs, winch straps, wiring, etc.
- Maintain proper tire inflation and if possible, raise the trailer off the ground so that the tires do not flat spot.
- Shield tires from UV rays (direct sun).
- Tighten any loose nuts and bolts.
- Lubricate moving parts like the rollers, winch, and the ball coupler.
- Check the brake system for fluid level in the master cylinder. If the fluid level is low, air may be trapped in the brake lines. Bleed all lines if necessary and fill the reservoir to the proper level.
- Lubricate all links and pivots to prevent rusting.
- Fill the frame (to avoid damage from vermin).
- When possible, store away from excessive moisture.

Extended Storage (In Excess of One Year)

Follow the recommendations listed above for storage of several months duration. Additionally:

- Check the brake system for fluid level in the master cylinder. If the fluid level is low, air may be trapped in the brake lines. Bleed all lines if necessary and fill the reservoir to the proper level.
- Lubricate all links and pivots to prevent rusting.
- Fill the frame (to avoid damage from vermin).
- Be certain the breakaway system has

not been set and that the actuator is fully extended.

Storage in Dry Stack

Stacks generally have 2 configuration:

- With trailer (better supports the boat bottom but not as common). TRIPLE axle (or leaf spring) trailers should NEVER be put in a dry stack!!! The axles are not structural, and will fail/bend when picked up by the forks, or if used as resting surfaces while stored sitting on forks.
- Without trailer When storing in dry stack, ensure ballast is empty. Ensure drain plug is removed. The bunks should NOT interfere with the supporting bunks. Nor should they interfere with any thru-hulls. Use extreme caution when using fork lift to remove or replace boat. Do not allow forks to interfere with any boat underwater gear or boat bottom components.



TROUBLESHOOTING

⚠ WARNING

If any of the following problems develop, the trailer must be stopped and repaired immediately.

The coupler latch handle is not opening or closing easily

POSSIBLE CAUSE	REMEDY
Ball not fully inserted in ball socket	<i>Check for the ball size and positive tongue load. Check to see if the tongue jack is fully retracted; make sure there are no foreign objects or excessive points inside the coupler cavity</i>
Trailer and tow vehicle not level with each other or facing downhill	<i>Reposition the tow vehicle and trailer or block a trailer tire and extend the actuator</i>
Oversize hitch ball	<i>Check ball size at several positions. The ball should be within 1.970"-2.000" in diameter. Replace if necessary</i>
Excessive corrosion	<i>Lubricate or replace parts as needed</i>
Ball clamp interference	<i>Replace as needed, or lift the coupler slightly to enable the clamp to slide past the blockage, then lower the coupler</i>

Squeaking, Clunking, and Clattering at the Actuator

POSSIBLE CAUSE	REMEDY
The hitch ball requires lubrication	<i>Lubricate with conventional multi-purpose lubricant or commercial lubricant made for hitch balls</i>
Loose hitch ball	<i>Inspect the hitch ball and tighten</i>
Loose hitch	<i>Inspect the hitch and repair</i>
A worn or too small hitch ball	<i>Replace the hitch ball with a quality unit that meets SAE specifications</i>
Air in the brake lines, allowing the actuator to travel too far	<i>Check for leaks and re-bleed the brakes</i>
Trailer equipped with “free backing” brakes	<i>Clunking noise is typical for these types of brakes as long as braking performance is normal</i>

WARNING

If the latch handle does not close freely, DO NOT tow the trailer until locating and correcting the cause of the problem. Forcing the latch handle closed will make opening the latch handle extremely difficult.

When Braking, Brakes Repeatedly Come on and Release. Braking Is Not Smooth, also known as “Chucking”

POSSIBLE CAUSE	REMEDY
Loose hitch or ball	<i>Correct as necessary</i>
Not enough tongue weight or shocks on tow vehicle too soft	<i>Correct as necessary</i>
Air in the brake lines.	<i>Bleed the brake lines</i>
Contaminated brake linings.	<i>Fix the cause of the contamination, which will likely be a leaky wheel cylinder or hub grease seal; replace the linings and clean the braking surface on the rotor.</i>
Corroded master cylinder bore or rust from the brake line	<i>Replace the actuator master cylinder</i>
Breakaway cable has been pulled	<i>Reset the push rod release bracket</i>
Brake line kinked	<i>Eliminate the kink. If found on a steel brake line, the line must be replaced</i>

Brakes Not Operating or Performing Poorly

POSSIBLE CAUSE	REMEDY
Worn out brake shoes or disc brake pads	<i>Replace the brake shoes/pads on both sides of the axles and check the drums/rotors for wear or damage</i>
Foreign material in the brake unit assembly	<i>Clean thoroughly. Replace the shoes and linings if contaminated</i>
Insufficient amount of hydraulic fluid.	<i>Fill the reservoir and bleed the brakes; Check for leaks</i>
Broken lines or pinched line	<i>Replace faulty lines and bleed the brakes</i>
Seized actuator master cylinder prevents piston from stroking	<i>Replace actuator master cylinder</i>
Corrosion/rust keeps brake from operating	<i>Replace damaged components or entire brake assembly as required</i>

One Brake Is Overheating

POSSIBLE CAUSE	REMEDY
Disc brake caliper does not permit the brake pads to release.	<i>Check the caliper. Sections must be free to move apart. If frozen in place, remove and free it up. Caliper piston may freeze up and prevent pads from retracting. Clean contaminants out of the piston cavity. Replace the piston, seal and protective dust cover boot. Bleed the brake system.</i>
Damaged or frozen brake mechanism	<i>Rebuild or replace the brake unit</i>

MORE THAN ONE BRAKE IS OVERHEATING

Isolate the problem to the actuator or the brakes by:

- Fully extend the actuator.
- Remove the master cylinder reservoir cap.
- Check that the reservoir is properly filled.
- Manually push the actuator inner member in or use a screwdriver to stroke the push rod.
- In the first 1/8" of stroke, the reservoir fluid will either remain completely calm or will swirl around. If the fluid swirls, then this indicates that fluid is being allowed to return to the reservoir when the actuator is extended. This means that the actuator is functioning properly and it is necessary to further troubleshoot the brakes to determine the cause of overheating.
- If the fluid is not disturbed, as described above, it means the brake system is remaining pressurized and there is a problem with the actuator. Troubleshoot the actuator to determine the cause of the problem.

POTENTIAL ISSUES WITH THE ACTUATOR INCLUDE

- The fluid return hole in the master cylinder is clogged or is not correctly positioned
- Corrosion in the master cylinder is freezing the piston or not allowing it to fully retract, which is usually caused by a trailer being stored with the actuator compressed
- Some other malfunction or damage that is keeping the master cylinder from retracting.

POSSIBLE CAUSE	REMEDY
Trailer has been stored with the actuator compressed and rust has caused the brakes to freeze up.	<i>Pulled breakaway cable and the push rod has not been reset.</i>
Pinched or kinked brake lines.	<i>Check the brake lines and replace as necessary</i>
Pulled breakaway cable and the push rod has not been reset.	<i>Check the brake lines and replace as necessary</i>

BOAT TRAILER SPECIFICATIONS

LP=Low Profile Wheels and Tires
All weight values are listed in Lbs.

SINGLE AXLE TRAILER

Trailer (Model Years)	GVWR (Gross Vehicle Weight Rating)	Capacity	Frame Size	Trailer Weight	Tire Size	Gross Combined Weight (Boat on Trailer)
PROSTAR (2025+)	5,660	4,591	4"	1,069	225/75R15 LRE	5,034
NXT20 (2014+)	5,660	4,565	4"	1,095	225/75R15 LRE	5,060

TANDEM AXLE TRAILER

Trailer (Model Years)	GVWR (Gross Vehicle Weight Rating)	Capacity	Frame Size	Trailer Weight	Tire Size	Gross Combined Weight (Boat on Trailer)
PROSTAR (2025.5+)	7,014	5,699	4"	1,315	205/75R15 LRD	4,615
PROSTAR LP (2013+)	7,014	5,589	4"	1,425	255/45R18 XL	4,725
XStar23 (2025+)	11,500	9,521	6"	1,979	225/75R16C 121	9,579
X22 (2026+)	10,000	8,064	6"	1,936	225/75R15 LRE	8,886
X23 (2027+)	10,000	8,167	6"	1,833	225/75R15 LRE	8,933
X24 (2026+)	10,000	8,040	6"	1,960	225/75R15 LRE	9,160
XT20 (2025.5+)	7,498	6,078	5"	1,420	205/75R15 LRD	5,920

TANDEM AXLE TRAILER (CONTINUED)

Trailer (Model Years)	GVWR (Gross Vehicle Weight Rating)	Capacity	Frame Size	Trailer Weight	Tire Size	Gross Combined Weight (Boat on Trailer)
XT20 LP (2023+)	7,498	5,963	5"	1,535	255/55R18 XL	6,035
XT22 (2025+)	8,258	6,824	5"	1,434	225/75R15 LRD	6,919
XT22 LP (2025+)	8,258	6,678	5"	1,580	255/55R18 XL	7,065
XT23 (2025.5+)	7,498	6,037	5"	1,461	205/75R15 LRD	6,711
XT23 LP (2016+)	7,498	5,891	5"	1,607	255/55R18 XL	6,857
XT24 (2023.5+)	8,258	6,595	5"	1,663	225/75R15 LRD	7,213
XT24 LP (2022+)	8,258	6,643	5"	1,615	255/55R18 XL	7,165
NXT20 (2025.5+)	7,014	5,739	4"	1,275	205/75R15 LRD	5,240
NXT20 LP (2014+)	7,014	5,629	4"	1,385	255/45R18 XL	5,350
NXT22 (2025.5+)	7,498	6,048	5"	1,450	205/75R15 LRD	5,750
NXT22 LP (2023+)	7,498	5,948	5"	1,550	255/55R18 XL	5,850
NXT23 (2025.5+)	7,498	6,137	5"	1,361	205/75R15 LRD	6,391

TANDEM AXLE TRAILER (CONTINUED)

Trailer (Model Years)	GVWR (Gross Vehicle Weight Rating)	Capacity	Frame Size	Trailer Weight	Tire Size	Gross Combined Weight (Boat on Trailer)
NXT23 LP (2023+)	7,498	5,987	5"	1,511	255/55R18 XL	6,541
NXT24 (2025.5+)	7,498	6,128	5"	1,370	205/75R15 LRD	6,370
NXT24 LP (2021+)	7,498	5,928	5"	1,570	255/55R18 XL	6,570

TRIPLE AXLE TRAILER

Trailer (Model Years)	GVWR (Gross Vehicle Weight Rating)	Capacity	Frame Size	Trailer Weight	Tire Size	Gross Combined Weight (Boat on Trailer)
XStar23 (2025+)	12,000	10,011	6"	1,989	225/75R15 LRD	9,589
XStar23 LP (2025+)	12,000	9,798	6"	2,202	255/55R18 XL	9,802
XStar25 (2025+)	12,000	9,947	6"	2,053	225/75R15 LRD	10,453
XStar25 LP (2025+)	12,000	9,733	6"	2,267	255/55R18 XL	10,667
X24 (2026+)	9,920	7,886	6"	2,034	225/75R15 LRD	9,234
X24 LP (2026+)	9,920	7,672	6"	2,248	255/55R18 XL	9,448
X22 (2026+)	9,920	7,710	6"	2,210	225/75R15 LRD	9,160
X22 LP (2026+)	9,920	7,696	6"	2,224	255/55R18 XL	9,174

TRIPLE AXLE TRAILER (CONTINUED)

Trailer (Model Years)	GVWR (Gross Vehicle Weight Rating)	Capacity	Frame Size	Trailer Weight	Tire Size	Gross Combined Weight (Boat on Trailer)
X23 (2027+)	9,920	8,013	6"	1,907	225/75R15 LRD	9,007
X23 LP (2027+)	9,920	7,799	6"	2,121	255/55R18 XL	9,221
XT24 (2025+)	9,920	8,178	5"	1,742	225/75R15 LRD	7,292
XT24 LP (2025+)	9,920	7,927	5"	1,993	255/55R18 XL	7,543
NXT24 (2025+)	9,920	8,180	5"	1,740	225/75R15 LRD	6,740
NXT24 LP (2025+)	9,920	7,980	5"	1,940	255/55R18 XL	6,940

WARRANTY REGISTRATION AND TRANSFER

1. **Disclaimer and Limitation of Implied Warranties.**

The express limited warranty set forth herein (this “Warranty”, “Limited Warranty” or the “Limited Warranty Statement”) is in lieu of all other warranties and representations, express or implied, and to the maximum extent permitted by applicable law, MasterCraft disclaims, and the Purchaser (as defined in Section 2) hereby expressly waives, any and all other warranties or representations of any kind or nature, including, but not limited to, implied warranties of merchantability and fitness for a particular purpose, other than those warranties which are implied by, and are incapable of exclusion, restriction or modification under applicable law. The term of any implied warranties that cannot be disclaimed under applicable law, including, but not limited to, implied warranties of merchantability and fitness for a particular purpose, shall be limited to the duration of the express warranty periods applicable to the

respective components.

Some states do not allow the exclusion of implied warranties and/or do not allow limitations on the amount of time an implied warranty lasts, so the above limitations may not apply to you. This Limited Warranty gives you specific legal rights. You may have other rights which vary from state to state.

2. **Limited Warranty and Term. MasterCraft Boat Company, LLC. New Boats, Demo Boats and Executive Boats.**

(“MasterCraft”) warrants to the original retail purchaser (the “Purchaser” or “You” that the following components of each new and unused boat manufactured by MasterCraft shall be free from material defects in materials and workmanship to the extent set forth in this warranty, under normal use and when operated and maintained in accordance with MasterCraft’s instructions, beginning on the In-Service Date defined in section 2.6 of this Limited Warranty Statement,

for the period(s) indicated in this Section 2:

2.1 Deck, Hull, Liner and Stringers.

The deck, hull, liner and stringer system (collectively, the “Structural Components”) are warranted for as long as the original purchaser owns the boat.

2.2 Gel Coat.

Provided that you have provided proper maintenance and care as described in the Corrosion and Cleaning the Boat sections of the MasterCraft Owner’s Manual, the gel coat, which is applied to all MasterCraft boats at the factory, will be warranted for a period of one (1) year from the In-Service Date for stress crazing of the gel coat. However, no warranty is provided and MasterCraft expressly disclaims any warranty for scratching, discoloration or fading of the gel coat. The reason for this limitation and exclusion is because environmental operating conditions and customer maintenance/care are factors that have a significant effect on the condition and durability of the gel coat and are factors that are outside of MasterCraft’s reasonable control.

2.3 Engine.

The standard IImor engine in your MasterCraft boat has a seven (7) year warranty period from the In-Service Date or the attainment of 1,000 hours of engine operation, whichever occurs first. The exception to this is the 6.2L Super Charged engine which has five (5) year or 500 hour warranty period.

2.4 Screens.

All electrical display screens on the instrument panel of the boat have a warranty period of three (3) years from the In-Service Date or the attainment of 500 hours of engine operation, whichever occurs first.

2.5 SeaDek Flooring & Pads.

All decking and platform components manufactured by Hyperform, INC. d/b/a SeaDek Marine Products ("SeaDek") and installed by MasterCraft at its factory are warranted for a period of two (2) years from the In-Service Date or the attainment of 500 hours of engine operation, whichever

occurs first. This limited warranty does not apply to decking and platform components manufactured by SeaDek that are not installed by MasterCraft at its factory (i.e., it does not apply to aftermarket components installed by a dealer or by Purchaser after MasterCraft's production of the boat)(collectively, "Aftermarket SeaDek Products"). Any warranty for Aftermarket SeaDek Products shall be governed by the applicable warranty issued by SeaDek, if any.

2.6 Other Component Parts.

All other components of the boat not specifically referenced in Sections 2.1 through 2.5 hereof are warranted for a period of five (5) years from the In-Service Date or 500 engine hours.

2.7 Trailer and Trailer Component Parts.

All components are warranted for a period of five (5) years, with the exception of the trailer's paint, which is

warranted for a period of one (1) year, from the In-Service Date.

2.8 Warranty Period.

All express warranties are for the applicable time periods set forth in this Section 2, unless a longer warranty period is required by applicable law, in which case such longer warranty period will apply. MasterCraft's boats and trailers are manufactured by MasterCraft in model years which run from July 1 of a given year through June 30 of the immediately following year (a "Model Year"). The start date for the warranty periods shall be deemed to be the earlier of the date of the original retail purchase of the new and unused boat or trailer from an authorized MasterCraft dealer, as applicable, or the date that the boat or trailer was first used by Purchaser, whichever first occurs (the "In-Service Date").

3. Warranty Conditions, Limitations and Exclusions.

MasterCraft boats are manufactured by trained crafts-persons from high-quality materials and components. However, conditions outside of MasterCraft's control require specific limitations on, and exclusions from, coverage under this Warranty. The Warranty on the Structural Components set forth in Section 2 of this Warranty does not cover or include any other components fastened or applied to the hull or deck. This Limited Warranty constitutes the final, complete and exclusive statement of warranty terms, and no other person or entity is authorized to make any other warranties or representations on behalf of MasterCraft. Furthermore, the warranty set forth in Section 2 (including all subsections) of this Limited Warranty Statement does NOT cover any of the following, each

- of which are expressly excluded from warranty coverage:
 - *Damage caused by misuse, negligence, accident, collision or impact with any object;*
 - *Damage caused by any improper alteration or modification to the boat or trailer or any of its component parts or accessories, including damage resulting from alteration, modification, repair or replacement in such a way as to increase the cubic inch capacity or horsepower output of the engine and boat as originally manufactured;*
 - *Damage caused by the use of improper or contaminated fuel or fluids;*
 - *Damage caused by the use of customer-applied chemicals or accidental spills;*
 - *Damage caused by failure to maintain the boat in accordance with the maintenance provisions in the Owner's Manual or improper maintenance or repairs to the boat, by a service facility, Purchaser or any other person or entity;*
 - *Damage caused by the failure to comply with any recall or request for repair as directed by MasterCraft;*
 - *Damage resulting from the use of the boat for any racing, speed, commercial competition or performance demonstration;*
 - *Damage resulting from use of the boat for rental, commercial or industrial purposes;*
- *Damage to hardware and other components fastened or adhered to the hull, deck or liner;*
- *Damage caused by fire, theft, freezing, vandalism, explosion, lightning, wind, hail storms, flooding or any other type of natural disaster or weather;*
- *Damage caused by use of any non-MasterCraft trailer to transport, move or store the boat;*
- *Damage caused by improper support of the boat on davits, a hoist system or boat lift of any kind;*
- *Damage to paints, varnishes, gel coat surfaces and colors, chrome-plated or anodized finishes, floor and floor covers and any other surface coatings, as well as damage due to in-water storage without proper barrier coat and bottom paints.*
 (Note: although MasterCraft uses the highest grade gel coat materials, a condition may develop where the bottom of the boat may show signs of discoloration and/or blisters if the boat is left in the water for long periods of time, i.e., in excess of thirty (30) days. Therefore, a proper barrier coat and bottom paint should be used whenever it is anticipated that the boat will be left in the water for an extended period of time, i.e., in excess of thirty (30) days);
- *Damage to the trailer and its parts or components due to abrasions, rock chips, rust, improper care or maintenance, or use in salt or brackish water;*

- *Damage caused by dealer-installed options or accessories;*
- *Standard maintenance items that wear with use and must be periodically replaced or replenished, including but not limited to:*
 1. *Battery(ies);*
 2. *Light bulbs;*
 3. *Fuses;*
 4. *Spark plugs;*
 5. *Spark plug wires;*
 6. *Fuel filter;*
 7. *Air filter;*
 8. *Oil filter;*
 9. *Engine oil;*
 10. *Transmission fluid;*
 11. *Engine belts;*
 12. *Antifreeze;*
 13. *Raw water impeller;*
 14. *Ballast impellers;*
 15. *Trailer brake pads and rotors;*
 16. *Trailer tires and wheels;*
 17. *Trailer brake fluid;*
 18. *Trailer bunk carpet;*
 19. *Anodes (on transom, shaft, attitude adjustment plate and WSD's);*
 20. *Gaskets, foam and padding*
 21. *Trailer bow rollers*

4. Special Use and Demo Boat Warranty Limitations and Exclusions

4.1 Special Use Boats

4.1.1 Definition

For purposes of this warranty type, a Special Use Boat is defined as “a boat that is used to generate income of any kind, whether direct or indirect.”

Examples of Special Use boats include those used as: Commercial use, Engineering validation boats, ski schools, ski clubs, ski camps, rental boats, boat clubs, Experience Center, or resort-use boats.

4.1.2 Warranty Conditions, Limitations and Exclusions

In addition to the warranty conditions, limitations and exclusions, set forth in Section 3 of this Limited Warranty, all of which apply to Special Use Boats, the following additional warranty limitations apply to Special Use Boats:

a. For a period of ninety (90) days from the invoice date, or date usage begins, whichever is later, MasterCraft will provide full warranty coverage

in accordance with the terms and conditions of the Limited Warranty Statement Section.

b. Between ninety-one (91) days from start of usage, and up to 3 years or 480 hours of engine operation , whichever occurs first, there is no warranty coverage for gel coat, Seadek, upholstery, or any cosmetic defects.

There is only coverage for electrical and mechanical components, and the powertrain (engine & transmission)

c. Upon sale to a second owner, the warranty coverage may be transferred to the second owner provided the boat has less than 480 hours and less than 3 years since start of usage. For Special Use boats, there is no fee to transfer the warranty. Failure to transfer the warranty into the second owners name will result in any and all warranty coverage under this Limited Warranty Statement to expire and be of no further force or effect.

d. After a period of 3 years or 480 engine hours, whichever occurs first,

any and all warranty coverage under this Limited Warranty Statement shall expire and be of no further force or effect.

5. Limitation of Liability

5.1 Liability Limitation - Exclusion of Consequential Damages.

This Limited Warranty is for the benefit of the Purchaser and MasterCraft, and shall not create or evidence any right in any third party. The repair or replacement of any component parts as provided under this Warranty is the exclusive remedy of the Purchaser. The decision regarding whether a part or component should be repaired or replaced will be made by the applicable MasterCraft authorized servicing dealer and/or MasterCraft. To the maximum extent permitted by applicable law, in no event shall MasterCraft be liable for any incidental, consequential, special, indirect, punitive or exemplary damages or lost profits whatsoever arising out of the use or inability to use the boat or any component part thereof, or for

any breach of this limited warranty or otherwise, even if MasterCraft has been advised of the possibility of such damages or such damages could reasonably have been foreseen by MasterCraft. However, some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you.

5.2 Purchase Price Limitation.

In any event, MasterCraft's entire liability under any provision of this Limited Warranty shall be limited to the repair or replacement of the boat, trailer or component part, or the refund of the purchase price paid by the consumer for the boat, trailer or component part found to be defective within the applicable warranty period. This shall constitute MasterCraft's sole liability and obligation in the event of any claim arising out of its performance or nonperformance of any provision of this Limited Warranty. Because some states and jurisdictions do not allow the exclusion or limitation of liability, the

above limitations may not apply to you.

6. Transfer of Limited Warranty.

Subject to the provisions of Section 4 and this Section 6 of this Warranty, upon the first sale, conveyance or other transfer of the boat or trailer by the original retail Purchaser, any remaining unexpired Warranty coverage shall be transferred to the second owner and shall remain in effect for the remainder of the applicable warranty period(s) set forth in Sections 2.1 through 2.7 hereof (which warranty periods begin to run in accordance with Section 2.8 or Section 4 hereof, as applicable), upon completion of the warranty transfer form and payment of the applicable warranty transfer fee to the dealer. With respect to the Lifetime Limited Warranty (granted only to the original retail Purchaser) on the Structural Components set forth in Section 2.1 hereof, if: (a) the sale, conveyance or other transfer of the boat by the original retail purchaser to another person or entity occurs within five (5) years of the date of the original retail

purchase of the boat by the original retail purchaser; AND (b) the original retail purchaser and the second owner comply with the provisions of this Section 5, then the limited warranty on the Structural Components shall be transferred to the second owner and shall continue in effect for a period of ten (10) years from the date of the original retail purchase of the boat by the original retail Purchaser. If the sale, transfer or conveyance of the boat by the original retail purchaser occurs more than five (5) years after the date of the original retail purchase of the boat, then the Limited Warranty on Structural Components (as well as all other warranties) shall be void as of the date of transfer and shall not be transferable to the second owner. Only one (1) transfer of the Limited Warranty under the provisions of this Section 6 (from the original retail Purchaser to the second owner), within the applicable time period, may be made. In the event of a sale

or transfer of the boat and/or trailer by a second owner to a subsequent purchaser, all coverage under this Limited Warranty shall immediately be terminated and the Limited Warranty shall immediately become null and void. No transfer of this Warranty will operate to extend any of the warranty periods set forth in Sections 2 or 4 hereof. **In order to transfer, the second owner must transport the boat and trailer (if equipped) to an authorized MasterCraft Dealer for the completion of an inspection to be documented and submitted to MasterCraft by the authorized dealer.** The inspection is to be completed at the cost dictated by the MasterCraft Dealer. This cost is the responsibility of the new owner.

Note: The new purchaser must also pay a separate fee for engine transfer. See Ilmor Marine's Owner's Manual for details or transfers on engine warranty.

7. Warranty Claims.

In order to maintain warranty service under this Warranty, the Purchaser

must return the defective boat or component part to an authorized MasterCraft dealer's service department, or to MasterCraft's factory at the below address, within the applicable warranty period. For questions regarding warranty service or to obtain information regarding warranty service or to obtain information regarding the nearest authorized MasterCraft Dealer, please contact MasterCraft at the following address or telephone number:

**MasterCraft Boat Company, LLC
Attention: Warranty/ Customer
Service**

**100 Cherokee Cove Drive
Vonore, Tennessee 37885
1-423-884-2221**

Subject to the terms of this Limited Warranty, any covered boat or component part with a material defect in materials or workmanship that is returned to an authorized MasterCraft Dealer's service department or MasterCraft's factory during the

appropriate warranty period will be repaired or replaced, in MasterCraft's sole discretion, without charge to the owner for parts and labor. This provision is subject to the following terms and conditions:

- *MasterCraft shall be obligated only to repair or replace those items that prove defective, in MasterCraft's sole discretion, upon examination by a MasterCraft authorized Dealer's service department or MasterCraft's own personnel, as applicable;*
- *MasterCraft warrants its repairs or replacements only for the remainder of the applicable warranty period under the terms of this Warranty;*
- *MasterCraft shall, in its sole discretion, fulfill its obligation to repair or replace any defective item at its factory or its authorized Dealer's service department; and*
- *The Purchaser shall be responsible for all costs associated with the transportation of the boat, towing bills, trailer or component part(s) to the authorized MasterCraft service department and for any return transportation.*

8. No Modification of Warranty.

No oral or written information, advice or communication of any nature to or from MasterCraft or its representatives, employees, authorized dealers, agents, distributors or suppliers shall create a warranty or in any manner increase or modify the scope of this Limited Warranty in any manner whatsoever.



WARRANTY REGISTRATION AND TRANSFER

WARRANTY REGISTRATION

At the time of delivery to the first retail Purchaser of a MasterCraft boat, the boat must be registered for product warranty purposes under applicable federal and state law, and the following steps must be performed in order to complete the warranty registration process for all MasterCraft boats:

- At the time, and on the date, of delivery to the retail Purchaser, the dealer must complete the warranty registration for the boat Purchaser using MasterCraft's online warranty registration system found on the DealerLink system.
- Dealer must notify MasterCraft of a boat sale via DealerLink and shall submit for the Purchaser all required information in connection with the warranty registration for the boat and trailer.
- Warranty registration is essential because it provides a method for distributing information to MasterCraft boat owners and allows MasterCraft to notify the Purchaser of any mandatory recalls or other issues requiring attention.

WARRANTY TRANSFER

In accordance with the provisions of Section 6 of the MasterCraft Limited Warranty Statement (the "Warranty"), if the MasterCraft boat is subsequently sold by the original retail Purchaser, MasterCraft offers a transferable warranty to the second owner of any remaining unexpired warranty coverage under the Limited Warranty (see also the provisions regarding certain boats described in Section 4 of the Warranty). In accordance with the Limited Warranty, with respect to the Lifetime Limited Warranty (which is granted only to the original retail purchaser) on the Structural Components (deck, hull, liner and stringer system) set forth in Section 2.1 of the Limited Warranty, if:

- a. The sale of the boat by the original retail Purchaser occurs within five (5) years of the date of the original retail purchase of the boat by Purchaser; AND
- b. The original retail Purchaser and the second owner comply with the provisions outlined in Section 6 of the Warranty; then the warranty on the Structural Components of the boat shall be transferred to the second owner and shall continue in effect for a period of ten (10) years from the date of the original retail purchase of the boat by the original retail purchaser. In order to complete the transfer of any remaining warranty under the Warranty by the original retail Purchaser to the second owner, the second owner must deliver each of the following to an authorized MasterCraft dealer within fourteen (14) days of the date of the sale by the original retail Purchaser to the second owner (and within five (5) years of the date of the original retail purchase of the boat with respect to the transfer of the warranty on the Structural Components):
- Copy of Sales Agreement/Invoice
 - Payment of \$500
 - MasterCraft dealer to provide copy of inspection report to MasterCraft Boat Company as part of transfer

Upon MasterCraft's receipt of the dealer's inspection report, any remaining warranty coverage under the Warranty will be transferred to the second owner, with all warranty coverage periods running from the applicable date for the beginning of the warranty period as described in Section 2.6 or Section 4 (as applicable) of the Warranty.

Note: The second purchaser must also pay a separate fee for engine transfer. See Ilmor Marine's Engine Owner's Manual for more information on engine warranty transfer procedure.

ADDITIONAL WARRANTY STATEMENTS

The following warranty statement is provided by MasterCraft Boat Company, LLC ("MasterCraft") only to owners of MasterCraft spark engine marine watercraft who reside, or operate their MasterCraft boat, in California, and is being provided pursuant to applicable regulations adopted by the California Air Resources Board.

Ilmor requires a separate inspection report to be filled out by a certified Ilmor dealer, and a separate transfer fee of \$650. Please contact Ilmor for further information at 844-GO-ILMOR (844-464-5667).

CALIFORNIA EVAPORATIVE EMISSIONS CONTROL SYSTEM WARRANTY STATEMENT

Your Warranty Rights and Obligations

The California Air Resources Board and MasterCraft Boat Company are pleased to explain the evaporative emission control system's warranty on your MY 2027 spark-ignition marine watercraft. In California, new spark-ignition marine watercraft must be designed, built, and equipped to meet the State's stringent anti-smog standards. MasterCraft Boat Company must warrant the evaporative emission control system on your spark ignition marine watercraft for the period listed below provided there has been no abuse, neglect or improper maintenance of your spark-ignition marine watercraft.

Your evaporative emission control system may include parts such as: carburetors, fuel tanks, fuel lines, fuel caps, valves, canisters, filters, vapor hoses, clamps, connectors, and other associated evaporative emissions control system components.

Manufacturer's Warranty Coverage

This evaporative emission control system is warranted for five years. If any evaporative emission-related part on your spark-ignition marine watercraft is defective, the part will be repaired or replaced by MasterCraft Boat Company.

Owner's Warranty Responsibilities

- *As the spark ignition marine watercraft owner, you are responsible for performance of the required maintenance listed in your owner's manual. MasterCraft Boat Company recommends that you retain all receipts covering maintenance on your boat, but MasterCraft Boat Company cannot deny warranty solely for the lack of receipts.*
- *As the boat owner, you should however be aware that MasterCraft Boat Company may deny you warranty coverage if your spark-ignition marine watercraft or a part has failed due to abuse, neglect, or improper maintenance or unapproved modifications.*
- *You are responsible for presenting your spark-ignition marine watercraft to a MasterCraft Boat Company dealership sales or service center as soon as the problem exists. The warranty repairs should be completed in a reasonable amount of time, not to exceed 30 days. If you have a question regarding your warranty coverage, you should contact your local MasterCraft dealer or MasterCraft Boat Company at 1-423-884-2221.*

Applicable SIMW evaporative emissions warranty parts list pursuant to 13 CCR §2861(e):

- | | |
|-------------------------------|-----------------------|
| 1. Canister Mounting Brackets | 5. Fuel Lines |
| 2. Carbon Canister | 6. Fuel Line Fittings |
| 3. Clamps* | 7. Fuel Tank |
| 4. Fuel Cap | 8. Vapor Hoses |

*All other parts not listed that may affect the evaporative emissions control system *Note: As they relate to the evaporative emissions control system. NMC-2026-029*

SERVICE LOG

SERVICE LOG—BOAT

AS NEEDED	DATE	DATE	DATE	DATE	DATE
Replace raw water impeller					
Replace ballast impeller(s)					
Add/change oil filter					
Tighten prop nut each time boat is in for service. <i>Tighten to 75 lb/ft torque for all engine configurations except the 6.2L supercharged, tighten to 100 lb/ft torque.</i>					
EVERY 50 HOURS					
Lubricate starter gear and shaft					
Change engine oil and filter					
Check all safety equipment					
EVERY 100 HOURS					
Replace impeller					
Engine tune-up					

EVERY 100 HOURS	DATE	DATE	DATE	DATE	DATE
Change transmission fluid					
Check engine mounts					
Check prop shaft coupling alignments					
Inspect exhaust flaps					
Lubricate steering system					
Lubricate shift and throttle system					
Check/replace ballast pump impeller					
Inspect complete fuel system					
Change fuel filter					
Perform engine/drive train service					

SERVICE LOG—TRAILER

3-6 MONTHS/250 MILES	DATE	DATE	DATE	DATE	DATE
Grease trailer jack					
Oil trailer jack handle					
Examine entire trailer for damage or wear					
Lubricate Rollers					
ANNUALLY/EVERY 2,000 MILES					
Check bearing adjustment					
Inspect tow hitch					
Check for hitch ball wear					
Check coupler mechanism					
Check actuator for wear and travel					

ANNUALLY/EVERY 2,000 MILES**DATE****DATE****DATE****DATE****DATE**

Check brake fluid and for leaks

Check breakaway cable

Check paint for chips and nicks

Check trailer bunks for abnormal wear

See information in the Trailer Section regarding post-Storage maintenance

GLOSSARY OF TERMS

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ABYC

American Boat and Yacht Council, Inc.

ABOARD

On or within the boat.

ABOVE DECK

On the deck (not over it)

AFLOAT

On the water.

ADRIFT

Loose, not on moorings or towline.

AFT

Toward the stern of the boat. The stern is the aft-most part of the vessel.

AHEAD

In a forward direction.

AGROUND

Touching bottom of a body of water.

AMIDSHIP

Center or middle of the boat.

ANCHOR

(1) A heavily weighted object designed to grip the bottom of the body of water to hold the boat.

(2) The act of setting the anchor.

AQUATIC INVASIVE SPECIES (AIS)

Aquatic invasive species (AIS) are freshwater or marine organisms, such as plants and animals, that have spread or been introduced beyond its native range and whose introduction causes or is likely to cause damage or harm to humans.

ASHORE

On the shore.

AWEIGH

The position of anchor as it is raised clear of the bottom.

BAIL

To remove water from the bottom of the boat with a pump, bucket, sponge, bilge, etc.

BALLAST

Any solid or liquid weight placed in a boat to increase the draft, and change a boat's position in the water.

BEAM

The width of the boat.

BEARING

The direction of an object from current location.

BELOW

Beneath the deck.

BILGE

The lowest interior section of the boat hull. Generally water is designed to drain to this point on the boat so it can be pumped overboard.

BOARD

To enter the boat.

BOUNDARY WATERS

A body of water between two areas of jurisdiction; i.e., a river between two states.

BOW

The forward portion of the boat.

BULKHEAD

Vertical partition (wall) in a boat separating compartments.

BUNKS

Carpeted trailer hull supports. MasterCraft boats rest directly on carpeted trailer bunks when loaded onto their trailers.

BURDENED BOAT

Term for the boat that must “give way” to boats with the right-of-way. **BUOY** An anchored float used for marking a position on the water or a hazard or a shoal and for mooring.

CAPACITY PLATE

An informational decal visible from the helm station that provides maximum weight and passengers capacity information.

CAPSIZING

To turn over.

CAST-OFF

To unfasten mooring lines in preparation for departure.

CATHODE

An electrode carrying a negative charge.

CENTER LINE

A lengthwise imaginary line which runs fore and aft with the boat's keel.

CHART

A map for use by navigators

CHINE

The point on a boat where the hull side intersects (meets) the hull bottom.

CHOCK

A fitting through which anchor or mooring lines are led. Usually U-shaped to reduce chafe.

CLEAT

A deck fitting to which mooring lines are fastened.

COCKPIT

An opening in the deck from which the boat is handled.

COURSE

The direction in which a boat is steered.

CURRENT

The flow of water in a body of water. Current can vary in strength and direction.

DEADRISE

The vertical distance between a line horizontal to the keel of a vessel and its chine.

DECK

The open surface on the boat where the passengers walk.

DISPLACEMENT

The weight of water displaced by a floating vessel, thus, a boat's weight.

DOCK

A protected water area in which vessels are moored. The term is often used to denote a pier or a wharf.

DRAFT

The depth of the boat below the water line, measured vertically to the lowest part of the hull.

FATHOM

Six feet

FENDER

A cushioning device used on the side of a vessel or dock to absorb impact or friction.

FORE

Toward the front or bow of the boat.
Opposite of aft.

FORWARD

Toward the bow of the boat.

FREEBOARD

The distance from the waterline to the upper surface of the side of the deck.

FUEL SENDING UNIT

The electrical device mounted on the fuel tank which communicates fuel levels to the dashboard fuel gauge.

FUEL MANAGEMENT SYSTEM

An internal computer system in MasterCraft boats that calculates fuel burn and fuel tank volume to give operators precise fuel tank fill levels.

GEAR

A general term for ropes, blocks, tackle and other equipment.

GIVE-WAY BOAT

(1) Term for the boat that must take whatever action necessary to keep well clear of the boat with the right-of-way in meeting or crossing situations.
(2) The burdened boat.

GRAB RAILS

Hand-hold fittings mounted on cabin tops and sides for personal safety when moving around the boat.

GUNWALE (GUNNEL)

The rail or upper edge of a boat's hull side.

HATCH

An opening in a boat's deck fitted with a watertight cover.

HEAD

(1) A marine toilet. (2) Used to describe the compartment or location of a marine toilet.
HEADWAY The forward motion of a boat.
Opposite of sternway.

HELM

The steering wheel or command area.

HULL

The exterior structural body of a boat below deck.

HYPOTHERMIA

A physical condition in which the body loses heat faster than it can produce it.

KEEL

The lowest portion of the boat; extending fore and aft along the boat's hull bottom.

KNOT

A measure of speed equal to one nautical mile (6076 feet) per hour.

LATITUDE

The distance north or south of the equator measured and expressed in degrees.

LEEWAY

The sideways movement of the boat caused by either wind or current.

LINE

Rope. In a marine environment rope is referred to as a "line."

LIST

Leaning or tilt of a boat toward a side.

LONGITUDE

The distance in degrees east or west of the meridian at Greenwich, England.

MAKING WAY

Making progress through the water.

MARINE CHART

Seagoing maps showing depths, buoys, navigation aids.

MID SHIP

In the vicinity of the mid-length of a boat, technically the exact half way between the bow and the stern.

MOORING

An anchor, chain, or similar device that holds a boat in one location.

NAUTICAL

It's easy to define nautical: it is an all encompassing word for anything concerning sailors or maritime travel. All of the boat terminology here can be defined as nautical words.

NAUTICAL MILE

One minute of latitude; approximately 6076 feet – about 1/8 longer than the statute mile of 5280 feet.

NAVIGATION AID

Recognizable objects on land or sea such as buoys, towers or lights, used to identify safe and unsafe waters.

NAVIGATION LIGHTS

See RUNNING LIGHTS.

NAVIGATION RULES

The regulations governing the movement of vessels in relation to each other, generally called steering and sailing rules.

NMMA

National Marine Manufacturer's Association.

NO-WAKE SPEED

The speed at which a boat travels to produce no visible wake.

OUTBOARD

(1) Toward or beyond the hull sides of the boat. (2) A detachable engine mounted to the transom of the boat.

OVERBOARD

Over the side or out of the boat.

PFD

Personal flotation device.

PIER

A loading platform extending at an angle from the shore.

PILE

A wood, metal or concrete pole driven into the bottom. Craft may be made fast to a pile; it may be used to support a pier (see PILING) or a float.

PILOTING

Navigation by use of visible references, the depth of the water, etc.

PLANING

A boat is said to be planing when it is essentially moving over the top of the water rather than through the water.

PLANING HULL

A hull designed to lift, thereby reducing friction and increasing efficiency.

PORPOISE

A condition in which the bow bounces up and down. This is particularly apparent in boats running at high speeds with full ballast tanks.

PORT

(1) The left side of a boat when facing the bow. (2) A destination or harbor.

PRIVILEGED BOAT

Term used for the boat with the right-of-way.

PROPELLER

A mechanical device for propelling a boat, consisting of a revolving shaft with two or more broad, angled blades.

RIGHT-OF-WAY

Term for the boat that has priority in meeting or crossing situations. The stand on or privileged boat.

RUB RAIL

The rubber extrusion that is fastened over the hull and deck joint. The rub rail wraps all the way around the deck and hull.

RUDDER

A vertical plate or board used for steering the boat.

RUNNING LIGHTS

Also called navigation lights. Lights required for operating a boat between sun-down and sun-up. These include two navigational lights: red (port) and green (starboard), and one white all-around or mast light.

SATELLITE NAVIGATION

A form of position finding using radio transmissions from satellites with sophisticated on-board automatic equipment.

SCUPPERS

Drain holes on deck, in the toe rail, or in bulwarks or (with drain pipes) in the deck itself.

SEA COCK

A through hull valve, a shut off on a plumbing or drain pipe between the vessel's interior and the sea.

SEAWORTHY

A boat or a boat's gear able to meet the usual sea conditions.

SET

Direction toward which the current is flowing.

SLACK

Not fastened; loose. Also, to loosen.

SLIP

The linear distance between the pitch (or advance) of the propeller and the actual distance it moves through the water.

STAND ON BOAT/VESSEL

The boat that must maintain course and speed in meeting or crossing situations. The privileged boat.

STARBOARD

The right side of a boat when looking toward the bow.

STARTER BATTERY

The main battery used for engine starting and electrical circuits.

STERN

The aft-most end of a boat is the stern.

STOW

To store cargo off of the deck usually in designated storage compartments.

STRINGER

Fiberglass reinforcement structure under the floor that stiffen the hull bottom of the vessel.

SURGE BRAKES

A type of trailer braking system designed to automatically actuate when the tow vehicle's brakes are applied.

SWAMP

To fill with water, but not settle to the bottom.

TELEMATICS SYSTEM

An interdisciplinary system that encompasses the use of wireless voice and data communication systems which provide vessel tracking, emergency aid, system monitoring, internet access and other features. Systems typically consist of a user interface, satellite antenna and communication link with the vessel's electronic system.

TIDE

The periodic rise and fall of water level in the oceans.

TRANSDUCER

The unit that sends/receives signals from the depth sounder.

TRANSOM

The transom is the structural surface forming the aft-most face of a vessel at the stern. It spans the width of the hull and serves as a primary mounting interface for components such as outboard motors, sterndrives, trim tabs, platforms, and through-hull fittings.

TRIM

Fore and aft balance of a boat.

UNDERWAY

A boat in motion; i.e., not moored or anchored.

USCG

United States Coast Guard.

VISUAL DISTRESS SIGNAL (VDS)

A device used to signal the need for assistance such as flags, lights or flares.

WAKE

The waves that a boat leaves behind when moving through the water.

WAKE SHAPING DEVICE

Devices that alter the flow of water to change a wake's size and shape.

WATERLINE

The line of the water's edge when the boat is afloat.

WATERWAY

A navigable body of water.

WAY

Movement of a vessel through the water such as headway, sternway or leeway.

WETTED SURFACE

The area of the hull under the water line and any underwater or running gear mounted to the hull or transom.

WSIA

Water Sports Industry Association

YACHT

A pleasure vessel, a pleasure boat; in American usage the idea of size and luxury is conveyed, either sail or power.



WARNING



OPERATING, SERVICING AND MAINTAINING A RECREATIONAL MARINE VESSEL CAN EXPOSE YOU TO CHEMICALS INCLUDING ENGINE EXHAUST, CARBON MONOXIDE, PHTHALATES, AND LEAD, WHICH ARE KNOWN TO THE STATE OF CALIFORNIA TO CAUSE CANCER AND BIRTH DEFECTS OR OTHER REPRODUCTIVE HARM. TO MINIMIZE EXPOSURE, AVOID BREATHING EXHAUST, SERVICE YOUR VESSEL IN A WELL-VENTILATED AREA AND WEAR GLOVES OR WASH YOUR HANDS FREQUENTLY WHEN SERVICING THIS VESSEL. FOR MORE INFORMATION VISIT WWW.P65WARNINGS.CA.GOV/MARINE



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