

MasterCraft

MasterCraft Frequently Asked Questions (FAQs)

What tips do you have for cleaning the outside and inside of my MasterCraft?

Here are some ideas for keeping your MasterCraft looking like new:

1. Remove stains ASAP on fiberglass and upholstery. The longer you wait to clean up spots the harder it will be later down the line to get them off.
2. For hard water spots, pick up a bottle of Meguiars Hard Water Spot Removal to tackle this problem. Be sure to follow their directions for proper use. Once you are done removing the hard water spots, wash and rinse the boat then follow up with a good quality marine wax such as Meguiars Premium Marine Wax.
3. Be sure to clean your interior thoroughly! There are several products on the market for removing mildew stains, fly specks, ground-in dirt, oil or grease and more. After a good cleaning, finish with a coat of 303 dressing; this will help prolong the life of your interior along with keeping future stains from setting into the vinyl.
4. Do not forget your carpets! Vacuum up all loose sand and dirt then use a good quality carpet cleaner with warm water and a brush. Scrub the cleaner in the carpet then rinse with the warm water. Finish by vacuuming moisture with a shop-vac. No matter, make sure carpet is thoroughly dry before storing your MasterCraft.

Should I leave my tank full of gas?

When it comes to this issue you can find arguments that go both ways. The bottom line? You should always stabilize the fuel to avoid residue buildup that clogs carburetors and fuel injectors.

What should I do before I start my MasterCraft?

Before starting: Familiarize yourself with the controls and indicators used on your MasterCraft boat.

1. Lift the engine cover and inspect the bilge and engine compartment for any fluid leakage. We recommend lifting the engine compartment cover for inspection before each use.
2. Operate the bilge blower for at least (4) minutes. Leave the bilge blower ON throughout the starting process and until the boat has planed.

3. Check the hull drain plugs...make sure they are installed and secure. *To prevent a possible explosion, operate the blower for at least (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 do so may result in serious injury or death! 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 in gear. On EFI engines, if the engine floods, it can be cleared by pushing the button that is in the throttle arm and advancing the throttle to full open 100 percent of its travel and turning the key switch to the start position. The ECM shuts off the fuel supply to the injectors so that no fuel will be delivered during the cranking cycle. When the engine starts, immediately return the throttle to the idle position so that the engine will not over-rev.

Should I change the oil in the winter or spring?

Engine oil and filters must be changed before storage because of the acids that develop in the oil, which can attack bearings. Also, since marine engines run cooler than automotive engines, moisture/condensation stays in the oil instead of evaporating out of the oil. For these two reasons, we recommend changing the oil before sitting for a prolonged period of time.

What is the voltmeter?

The voltmeter registers the electrical activity necessary to operate your boat. If the battery is low or non-functional, or if various electrical items on the boat, such as stereo equipment, is draining the battery and impacting the boat's ability to function properly, the voltmeter will likely be the first gauge to indicate that an issue is occurring.

Do I really need to winterize my MasterCraft even if it is stored in above freezing temperatures?

It is a good idea that all engines be checked and winterized before storage, even when you plan on storing the boat in a heated area. Antifreeze lubricates hoses, impellers and seals, which will help to prevent drying and cracking. Fog oil helps to lubricate pistons, valves and cylinder walls which protect your engine from corrosion and long term wear on the engine.

Do I need a maintenance check up on my MasterCraft?

Many manufacturers, including MasterCraft, recommend an annual service inspection to insure years of trouble-free operation. Simple issues like a worn-out impeller, water in one of the fluids or an out-of-alignment drive coupler can cost thousands in repairs if not attended to in a timely manner. Many of you will be taking your boat into your local dealer to have it winterized, so be sure to ask them to perform the annual maintenance on the boat as well.

How do I change my propeller?

1. Ensure the engine is OFF and the engine safety starting switch is disconnected. Place the throttle/shift control lever in forward gear.
2. Remove and discard the cotter pin.
3. Remove the propeller nut.
4. Tap the center hub with a rubber mallet to release the propeller. Inspect the shaft and propeller splines for damage.
5. Thoroughly clean and apply a light coat of waterproof marine multi-purpose grease to the splined area of the shaft and propeller.
6. Align the splines and carefully install the propeller onto the shaft. **DO NOT FORCE INTO PLACE.**
7. Install the propeller nut and torque to 50-ft-lbs.
8. Install a new cotter pin and bend the ends around the shaft to lock the propeller onto the shaft.

What can you tell me about tower safety?

Do not tow more than two persons at one time on a tow tower. The tow tower should be used only for water skis, wakeboards, or recreational towables and not for parasailing, kite flying or towing other boats. Do not add any attachments that are not installed by MasterCraft. Do not climb on, sit on, stand on, jump off or dive off the tower. Never allow passengers to sit behind the tow rope attachment point. 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.

I am looking for replacement upholstery for my older model MasterCraft boat?

Mastercraft has older upholstery available and we offer:

Upholstery Skins Available 2002 - 2008
Complete Upholstery Available 2004 - 2008

Please contact your local Dealer to learn more.

Can I still get parts for my 1980's model MasterCraft boat?

After checking with your dealer, if you are unable to locate parts, you could check with www.overtone.com as a possible resource for parts. Another source would be "Marine Supermart" in Jacksonville, FL. Their telephone number is: (888)464-7678

Any tips for wakeboarding or skiing safely?

The below recommendations 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 laws governing boat operation:

1. Never put your arm, head or any other part of your body through the handle/bridle of the ski line, nor wrap the line around any part of the body at any time.
2. Never ski at night, or directly in front of other boats.
3. Never jump from a boat that is moving at any speed, nor enter or exit the water when the engine is running or "ON".
4. Make sure that everyone knows and uses approved skiing hand signals and common skiing courtesies.
5. Never ride on the ski platform or hold on to the platform while in the water during engine operation, including at idle. Carbon monoxide fumes are expelled from the lower transom area of a boat and can cause serious illness or even death.

How do I check my MasterCraft boat's speedometer calibration?

For tournament use and practice, accurate speedometer readings are a must. To calibrate the speedometer you need an accurately measured course of 850 feet and a certified stopwatch accurate to a thousandth of a second. To calibrate to AWSA official-tournament rules:

1. Approach the course at an indicated 36 miles perhour (MPH). Hold the speed steady and have an observer check the course time with a stopwatch.
2. If the course time is between 15.88 and 16.28 seconds, no adjustment is necessary. If the course time is not within tolerance, the adjustment switch is on the lower right panel of the dash.

What should I do when I meet another boat on the water?

Any time two 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. The following 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. Slow down or change directions 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.

How do I dock and tie-up my MasterCraft boat?

Approach docks slowly, with the starboard side of the boat if possible. The natural tendency to torque steer with the rotation of the propeller at slow speeds makes docking easier on that side. Also, use wind and current to your advantage when docking. Before tying-up the boat, be sure to use enough dock bumpers 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 lifting 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.


I had a bunch of friends on the boat over the weekend and the carpet is dirty. How do I clean my 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 usually the best time to clean the bilge also). Allow the boat to remain uncovered in the sun for several days to prevent any mildew or odor caused by moisture.

What are the recommended upholstery cleaners for my MasterCraft boat?

MasterCraft recommends the following cleaners for your upholstery: - MasterCraft Premium Shine & Protectant - Vinyl Finish Vinyl Cleaner - Dish Soap, such as Dawn or Ivory - Fantastik - 303 Protectant

Can you tell me more about the LY6, multi-port EFI 6.0 Liter V8 engine?

Displacement: 364 C.I.D. (6.01 litres) — 400 horsepower, at 5200 RPM Bore: 3.898" Stroke: 3.623" Compression Ratio: 10:1 Cylinder Head Material: Cast Iron Block Material: Cast Iron Compression Pressure: 100 PSI minimum Maximum Allowable Compression Variation: Highest to lowest within 70% RPM Range at WOT: 5200-5600 RPM Oil Pressure (Hot): 20 PSI at 2000 RPM Propshaft Rotation: Left-hand Fuel Requirement: 93 Octant (R+M)/2 (RFG acceptable) Fuel Pressure: Operating Pressure: 53-58 PSI Fuel Pump Volume: 1 pint in 20 seconds Type of Fuel Induction: Marine Electronic Fuel Injection Phased Port Type Electronic Control Module: Delco Electronics Waterproof Marine Controller (MEFI 5A) Ignition System: Coil near plug Alternator Output Rating: 90 amps at 2000 RPM Thermostat: 160 degrees Spark Plug Type: AC41-985 Recommended Plug Gap: 0.050" Firing Order: 1-8-7-2-6-5-4-3 Minimum Battery Rating: 750 cold cranking amps for 30 seconds at 0 degrees Fahrenheit or better Oil Capacity: 5.5 quarters with filter change—verify with dipstick Oil Type: SAE 15W40, SJ, CG4, CH4 Oil Filter Type: AC PF 25 or PZ3 Transmission Fluid Capacity: 2  to 3 quarts 15W40 motor oil with 1.5:1 Transmission: 4-5 quarts. SAE 15W40 Motor oil with V-drive transmission Initial Timing: Factory set and computer controlled—not field adjustable Total Ignition Advance: Varies as a function of input information Cooling System—Engine: Raw Water Cooled Cooling System—Engine Oil/Transmission: Raw Water—Full Flow Tandem

Can you tell me how to read the new multi-function gauge?

This gauge provides several functions of interest and support to the boater: As a tachometer, it indicates the engine speed in crankshaft revolutions per minute (RPM). Propeller shaft RPM is the same as the engine rotation except for boats equipped with the Power Slot 1.5:1 ratio package or a V-drive gear, in which case propeller shaft RPM is less than that of the engine RPM. Toggle to the hourmeter and it registers the accumulated engine operating time. Use the hourmeter to keep accurate logs for scheduled maintenance.

Replacing the computer (known as the MMDC) will erase the hours. It counts hours only when the engine is above 300 RPM. When equipped with a revision C MMDC, the option exists to change the display to metric from the hours screen. This is done by holding down the gauge selection display button for three seconds. When prompted, select English or metric display. Wait an additional three (3) seconds and the display will return to normal operation. Toggle to the air temperature gauge (optional) to get an approximate reading of the ambient air temperature above the water's surface. Toggle to the clock for the convenience of determining the time.

Please tell me about Carbon Monoxide safety.

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 are cumulative and can be just as lethal as at 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. 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 swim platform and the rear sun deck, when the engine is in operation. Under no circumstances should teak surfing or similar activities be performed during the operation of your MasterCraft boat - such activities are a misuse of this product.

What can you tell me about reading my fuel gauge?

The readings are only approximate. The gauge is activated with the ignition switch. Rocking motion of the boat during normal operation will cause fluctuation of the fuel gauge. For a more accurate reading, make sure that the boat is level and at rest. When the boat is placed into initial operation, do not run the boat below a quarter of a tank until you have refueled several times and have a sense of how long you can operate the boat on the fuel available. Extending usage beyond the known capability may cause the boat to run out of fuel and strand you away from the shore. Although it may be possible to see fuel in the bottom of the fuel tank, you still may not be able to operate the boat. The fuel pick-up system was designed to avoid introducing the water and debris that inevitably accumulate in the bottom of the tank. Rather than relying on visual inspection, you should pay attention to the fuel gauge. Further, it is not recommended to allow the fuel to fall below one-quarter of a tank full at any time as it may result in damage to the fueling system.

What is the normal operating temperature for my MasterCraft boat?

The temperature gauge indicates the cooling water temperature inside the engine as measured in degrees Fahrenheit. The normal operating temperature will range from 140 degrees to 190 degrees. Engines with electronic fuel injection also have a control circuit inside the engine control module that will cause the engine to run at reduced speeds if the module senses that the engine is running too hot. If you notice that your speed has reduced during normal operation without reducing the throttle, monitor your temperature gauge. If

the gauge indicates excessive temperatures during operation, slow down immediately and turn off the ignition. This indicates an engine problem that needs to be checked by your dealer. Continuing to operate the boat while the temperature is above normal operating parameters may cause serious damage to your engine. Damage to your engine resulting from operating the engine in an overheated condition can be costly to repair. Such damage is not covered by your MasterCraft warranty!

What can you tell me about my MasterCraft engine oil pressure gauge?

The engine oil pressure gauge indicates the pressure of the lubricating oil inside the engine. The average pressure ranges are between 6 pounds-per-square-inch (PSI) at 1000 RPM to 40 PSI or more at cruise-range speeds. A reading of pressure below 5 PSI at 1000 RPM may be caused by a low oil level or other potentially serious problems that result in low oil pressure. If you experience low oil pressure, stop your engine immediately and check your oil level before operating again.

What if my "Check Engine" light comes on?

The red malfunction indicator Check Engine light is operated from an on-board computer that monitors the operation of your fuel, ignition and engine control systems. On some models, the Check Engine light should come on when the key is in the ON position and the engine is not running. This is a check to show you that it is working. If it does not come on at all, have it repaired by your MasterCraft dealer right away. If it stays on or comes on while you are operating your boat - the computer is indicating that you have a problem. You should take your boat to your MasterCraft dealer for immediate service. Notice: If you continue to operate your boat with this light on, you could adversely affect the emission control systems on the engine. You could also experience poor fuel economy, and your engine may not run as smoothly. This could lead to costly repairs not covered by your warranty.

Should I leave the ignition switch "ON"?

Never leave the ignition switch in the RUN position without the engine running; this will prevent the natural discharge of the battery and result in damage to the starter solenoid.

What would happen if my kids left the stereo playing for a long period time without the boat running?

In the event that the stereo has been functioning when the boat is not ON and running, the voltage drain on the battery can result in difficulties in restarting the boat. It can also cause intermittent erroneous or fluctuating gauge readings. To avoid this situation, when the voltage level reaches 11.5 volts, the system will shut off the stereo system and sound the alarm for a period of two minutes to give boaters ample time to adjust.

What should I do with the safety lanyard?

The emergency engine safety switch, called the "lanyard", is an ignition cut-off switch designed to stop the engine in the event of an operator being thrown from position or

moving too far from the helm. The lanyard is equipped with a hook on one end for attachment to your clothing or PFD, and the opposite end has a slide that fits over the switch. Be sure that the slide is firmly attached to the switch before starting. The switch is located near the throttle control box. If the slide is left off or loose, the engine will crank but will not start. The safety switch lanyard must be attached to the operator whenever the engine is started. Failure to do so may result in serious injury or death.

Can you please explain the bilge pump switches?

A three-position rocker switch activates the bilge pump. Push the top half of the switch to turn the bilge pump to the manual ON position. Press the switch down to activate the bilge pump for automatic mode while the boat is underway. When the switch is centered, the bilge pump is OFF. The bilge pumps on all V-drive models will be in the automatic mode when the ignition key is turned ON. On boat models equipped with a ballast system, a three-position switch will allow for the filling or emptying of the ballast tanks and/or bags. It is important to be aware that the engine must operate at 1500 RPM during the fill and empty processes. Failure to do so can result in malfunction or permanent damage to the ballast pumps that force the water through the system. This is not covered under warranty.

How do I operate the throttle? And can I shift the throttle when the boat is not running?

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 lifter under the ball knob. Shifting is accomplished by moving the lever into the first 45 degrees of travel. Moving the lever forward engages the running gear; moving it back from center puts the drive train into reverse. By advancing the lever beyond 45 degrees you move from the shifting range to the throttle range. Never attempt to shift without the engine running! The shift mechanism of this control can be temporarily disengaged by engaging in the black button in the side of the throttle handle. This allows the engine to increase RPM in neutral during warm-up.

How do I operate the MasterCraft cruise control system?

On boats equipped with a Cruise Control System, it is possible to review various functions by toggling to the cruise control read-outs on the multi-function gauge. Note also that the throttle position must always be greater than the speed set on the cruise control. For example, if the cruise was set at 35 mph but the throttle position is equivalent to 25 mph, the boat will not reach 35. This is also true of the RPMs. Also, the cruise control cannot be engaged when the boat is at idle speed. System Start-Up: When the ignition is turned on the cruise control system starts in the OFF mode. While it is in OFF mode, the LCD display will show the current time. RPM Set-Point Adjustment: In order to adjust the RPM Set Point in OFF Mode, first move the RPM/SPEED mode selection switch to the RPM position. Using the +/- switch, select the desired Set Point. The RPM icon will illuminate and the LCD will display the current Set Point. Briefly pressing the +/- switch will increase or decrease the Set Point by 20 RPM. Holding the switch will increase or decrease by 100 RPM. The RPM Set Point is limited to a minimum of 1200 RPM and a maximum of 5000 RPM. Speed Set

Point Adjustment: In order to adjust the Speed Set Point in OFF Mode, first move the RPM/SPEED Mode selection switch to the SPEED position. Use the +/- switch to select the desired Set Point. The SPEED icon will illuminate and the LCD will display the current Set Point. Brief presses of the +/- switch will increase or decrease the Set Point by 0.2 mph. Holding the switch increases or decreases the Set Point by 1.0 mph. The Speed Set Point is limited to a minimum of 5.0 mph and a maximum of 50 mph.

Turning On RPM Cruise Control Mode: To turn on the Cruise Control System in RPM Control mode, make sure that the RPM/SPEED mode selection switch is in the RPM position and that the current engine speed is at least 400 RPM less than the Set Point. Press and hold the ON/OFF switch in the ON position for approximately one second. The LCD should now display the current engine speed, the RPM icon should be illuminated and the LOCK icon should be blinking.

Turning On Speed Cruise Control Mode: To turn on the Cruise Control in Speed Control mode, make sure that the RPM/SPEED mode selection switch is in the MANUAL (center) position and that current engine speed is at least 1200 RPM. Then press and hold the ON/OFF switch in the ON position for approximately one second. The LCD should display the current engine speed and the LOCK icon should be blinking.

Manual Set Point Adjustment: The Manual Set Point can be adjusted using the +/- switch. The LOCK icon will disappear and the LCD will display the current Set Point. Short presses of the +/- switch will increase or decrease the Set Point by 20 RPM. Holding the switch increases or decreases the Set Point by 100 RPM. The Manual Set Point is limited to a minimum of 1200 RPM and a maximum of 5000 RPM.

Using Speed Control Mode: Manual Control works basically in the same way that RPM Control Mode does. The difference is that when the system is turned ON in manual mode the Set Point is set to the current engine speed. For example, if the Cruise Control is OFF and the engine speed is 2500 RPM, and the system is turned on, the engine will hold the engine speed at 2500 RPM.

Disengaging the Cruise Control System: There are two ways to disengage the system. Pulling back the throttle will disengage the system at any time. The system remains ON and can be engaged by accelerating the boat until the LOCK icon stays illuminated, or by moving the ON/OFF switch to OFF. It is recommended that the throttle be pulled back before turning off the system.

With fuel prices the way they are, can I substitute an alcohol-modified fuel in my 2010 MasterCraft boat?

We do not recommend that you use alcohol-modified fuels in your MasterCraft boat because of the following side effects:

Moisture: Alcohol-blended fuels absorb and keep moisture. Moisture inside the fuel tank causes many engine problems.

Performance: Alcohol-blended fuels cause the engine to operate on a leaner fuel/air ratio and may cause hard starting, stalling and vapor lock. Engine damage may result.

Deterioration: Alcohol quickly deteriorates rubber and plastic components in the fuel system, causing more frequent inspection and replacement of parts. This increases the potential for fire and explosion due to fuel leakage. The new 2008 fuel system, however, is designed to withstand alcohol and MTBE fuel additives commonly found in the new "oxygenated" fuels. We still recommend fuels with as

little alcohol as possible due to the moisture absorption problems. NOTE: Fuel additives and treatments, other than conditioners for moisture absorption and winter storage, are not recommended for use in MasterCraft Power engines.

Tell me about unleaded fuels...Can I use leaded fuel in my MasterCraft?

Unleaded gasoline should meet the specifications ASTM D4814 in the United States and CGSB 3.5-92 in Canada. If you operate your engine in a country other than the United States or Canada, unleaded fuels may be difficult to locate. Using leaded fuels in your engine is not recommended as engine components will last longer using unleaded fuel. Leaded fuel is not compatible with today's engines.

I just purchased a sweet 2010 XStar from my dealer, what should I do to break in my boat?

The first 50 hours of operation are the most important to your boat. Proper break in will ensure maximum performance and the longest possible power-train life. The break-in period allows moving parts within the engine and transmission to wear in properly. All MasterCraft boats are lake tested on the water before leaving the factory, but the break-in must continue for the first 50 hours of your ownership. NOTE: 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 manual completely! 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. At that time, an oil change should be performed by an authorized MasterCraft service technician at your local MasterCraft dealer. Please follow the break-in procedure carefully. Close attention to the following is very important:

1. 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. The oil requirement is for SAW 15W40, API SJ/CH4.
2. Pay close attention to the gauges: It is important to stop the engine immediately if the gauges indicate a problem. Low oil pressure and overheating are serious issues and require immediate attention.
3. Abnormal vibration or noises: These symptoms can precede trouble and should not be ignored. Occasionally, hardware may work loose, mountings may need tightening or the driveline may require attention.
4. Fuel, oil or water leaks: Leaks can pose a serious safety threat. If one occurs, it is most likely to do so after a few hours of operation.
5. Vary the engine speed: Never run the engine for more than three (3) minutes at any constant RPM during the break-in period. Doing this will assist in the proper break-in of rings and bearings.
6. 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 Hour of Operation: Start the engine and allow the warm-up to normal operating

temperature (140 degrees F to 190 degrees F) at low idle (600 to 800 RPM). Operate the boat in forward gear, accelerate quickly, but gradually, to planing speed. Then return the throttle back to maintain a planing attitude. Vary the engine speed, but do not exceed 2000 RPM for the first hour. Carry only a light load. First Five Hours of Operation: Continue operation at plane and vary the engine speed, but do not exceed 4000 RPM. Occasionally reduce the throttle to idle speed for a cool-down period. Carry only a light load.

What can you tell me about loading my MasterCraft boat?

Never overload your boat. The maximum weight capacity as listed on the certification plate includes all items added to the boat (persons and gear). Also, proper distribution of weight is critical to boat performance. Allocate the load as evenly as possible. These capacities include filled ballast bags, whether they are factory-installed, dealer-installed or added by the customer. Note that adding ballast bags reduces the number of people and the amount of gear that can be added. Failure to adhere to the total maximum capacity may result in too much strain on the drive train or can sink the boat.

What can you tell me about basic maneuvering of my MasterCraft boat?

Steering response is dependent upon three factors: rudder position, motion and throttle. While high speed maneuvering is relatively easy and takes little practice, slow speed maneuvering is far more difficult and requires much time and practice to master. With both steering and propulsion at the rear 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 close quarters maneuvers. 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 advantage. Unequal thrust is a phenomenon shared by all single-engine, propeller-driven boats. A counterclockwise rotation propeller tends to cause the boat to drive to port when going forward, and to starboard when going backward, with the rudder in the straight ahead position. At high speed, there is compensation for this effect, and it is virtually nonexistent. But, at slow speed and especially during backing the effect can be very pronounced. This is the main reason most experienced drivers approach with the dock to the starboard 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 experience or a damaging at the least, embarrassing one.

What tips can you give me for high speed operation of my MasterCraft boat?

Your MasterCraft boat was designed to be a high-performance ski boat. You may have seen professional drivers with advanced operating skills perform high-speed maneuvers and on-a-dime turns. 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 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, you must select a propeller with the proper diameter and pitch. The propeller supplied with your boat was chosen for best all-around performance under average operating conditions. Load, weather, altitude and boat condition all affect WOT engine operation. If you use your boat for several different applications such as wakeboarding, bare footing and cruising, it may be necessary to have two or more propellers of different size and pitch to allow the engine to operate in the WOT range for each application. Propping the boat should be done after the engine break-in and the initial 10-hour dealer check. The boat should be loaded the way it would normally be for each application. For example, if you are propping the boat for wakeboarding, fill the ballast tanks and add the people and gear you would normally expect to carry 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. The engine operating ranges for engines in MasterCraft boats are: RPT-1 engine: 4600-5000 RPM MCX engine: 4800-5200 RPM LY6 engine: 5200-5600 RPM 8.1 Liter engine: 5000-5400 RPM Crusader engine: See Crusader manual for information. Installing a higher-pitched propeller will reduce the WOT RPMs. An engine that is over-revving may quickly experience catastrophic damage. 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. 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 out on a cool, dry day in spring and later, 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 manufacturers suggest that consumers consult with the dealer from whom you purchased your boat regarding the best propeller for the application in which you expect to run your boat. However, you should be aware that changing your propeller may void your warranty. Again, working with your dealer is your best bet to ensure excellent performance.

What about using lifting eyes and slings on my MasterCraft boat?

Lifting Eyes: An overhead hoist with two-ton capacity (minimum) should be used to lift your boat. Cables should be rated for at least 3500 pounds each. When lifting, keep the bow slightly higher than the stern to prevent any possibility of water running into the engine exhaust manifold. **Lifting Slings:** An overhead hoist with a two-ton capacity (minimum)

should be used. Slings must be 6 inches wide by 20 feet long and a minimum of 3500 pounds capacity each. Use an eight-foot spreader bar on each sling to prevent damaging side pressure to the deck or gunwale molding. Lifting slings must never contact shafts, struts or hardware protruding from the hull.

What about maintaining my MasterCraft boat in a 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 15 pounds per square inch of pressure. DO NOT support the boat by resting the hull on the keel. Vertical supports must extend from the chine to the keel with no gaps between the hull and cradle supports. A total support area of at least 250 square inches is required for proper support. Protect all items extending from the hull to avoid resting on the cradle or the ground. DO NOT apply any load stress to the prop, shaft, rudder, swim platform, water intake grate or other protruding items.

What can your engineers tell me about "Galvanic Corrosion"?

Galvanic corrosion (electrolysis) to the boat is the decomposition of metal due to the effects of electrolytic action. When two dissimilar metals are immersed in a conductive fluid (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, a great deal of damage could occur. If you operate in salt, polluted or brackish waters, your boat should be equipped with a transom-mounted zinc anode to prevent damage to those metal parts coming in contact with the water. The zinc is, by design, self-sacrificing. It is slowly eroded away by electrolytic action and requires periodic inspection for deterioration. If the zinc shows extreme erosion, it must be replaced to continue protection, or damage to other metal parts may result.

How should I clean my MasterCraft boat hull?

When washing the boat, be sure to use a mild 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 your MasterCraft dealer for further instructions. Waxing the entire gel coat surface at least twice a season is recommended for all climates. Use of a specially formulated marine gel coat wax, such as MasterCraft Premium Marine Wax, will reduce color fade, soil and scum adhesion. If the gel coat has chalked or faded from lack of proper maintenance, buffing may be necessary to bring back the shiny appearance. Hand buffing with a #7 rubbing compound or power buffing with glazing compound #1 will quickly restore the surface.

Tell me more about cleaning my upholstery?

To prevent replacing your upholstery, we recommend the following: Regular washing with mild detergent and warm water or vinyl cleaners is sufficient to keep the cushion and vinyl coverings in good condition. Keep the cushion from becoming soaked, and dry thoroughly after washing to prevent mildew accumulations when the boat is covered. Prop up the

cushions in the boat when it is covered to take advantage of air circulation. Spray with a mildew repellent. While your vinyl is made to withstand the elements, it is important to care for it by keeping it clean at all times. Many substances may stain your vinyl if left untouched over a period of time. Remember to remove any contaminant and clean vinyl immediately. Our vinyls are made to withstand the effects of sun, heat, acid rain and soiling, under normal conditions. Please consult the following cleaning recommendations before cleaning your upholstery: Certain household cleaners, powdered abrasives, steel wool, and industrial cleaners can cause damage and discoloration. These are not recommended for use. Dry cleaning fluids and lacquer solvents should not be used as they will remove the printed pattern and gloss. Waxes are not recommended because many contain dyes and solvents that can permanently damage the protective coating. In some instances, consumers have reported the appearance of a pink stain on vinyl that is resistant to various cleaning methods. Our lab tests indicate that the pink stain has been present in the past, but it becomes more visible to the naked eye whenever the whitest-white vinyls are used. This is true regardless of manufacturer or vendor. MasterCraft has chosen a white that reduces the appearance of the pink stain but retains as much of the lightest white we can use. 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. It is also more prevalent in high-humidity areas. Rain can cleanse the air with the result 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. If this procedure is not followed, the micro-organisms can find the marine vinyl to be a suitable host site. 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. The organism causing the pink stain has been identified by the Burlington Scientific Corporation as *Streptovercillium reticulum*, although there are other strains of organisms that can cause stains. Failure to follow these instructions in the proper care of upholstery can cause your warranty to be voided! The cleaning table presented in this frequently asked question section is offered only as a suggestion and as an aid in attempting to deal with stains. We cannot guarantee that the cleaning methods will work. Stains from any external source are unlikely to be covered by warranty.

How should I clean my teak?

Regular cleaning and oiling of teak wood will maintain its original appearance. Use a teak cleaner that can penetrate the pores of the wood and cleanse them of dirt and stains. Avoid caustic teak cleaners since they can damage the wood. Immediately after cleaning, an oil sealer should be applied with a soft cloth. Allow a couple of hours for the oil to soak into the wood and apply a second coat. Wipe off excess oil to prevent a varnish look.

What about cleaning my boat's windshield?

Cleaning the windshield when needed is an important safety precaution. Your MasterCraft windshield is made of tempered safety glass and requires special cleaning to prevent scratches to the surface. Use a mild soap solution and damp cloth only. Harsh detergents, solvents, chemicals or dry cloths could damage the windshield. Also, when your boat is in service, avoid using the windshield as an aid for balance or getting out of a seat. This causes undo stress on the window frame and could damage it.

Should I clean my stainless steel and chrome-plated parts?

Stainless steel and chrome-plated parts are not totally resistant to corrosion. Occasional cleaning and polishing with a marine chrome-and-stainless polish will maintain and extend the useful life. In salt water areas, rinse all hardware with fresh water and apply a light coating of protective oil to enhance the appearance after each use.

Tell me more about cleaning my sun top and boat cover.

Occasional cleaning of the top and cover should be done with mild soap and warm water. Thoroughly wet the entire surface and use a soft-bristled brush. Rinse completely and allow to drip dry. Then allow it to lay in the sun until completely dry. After cleaning, treat with a water repellent as necessary. For heavy soil, a mild solution of 1/3-cup bleach, 1/4-cup household soap and one gallon of water may be used for soaking. DO NOT allow to soak for more than 20 minutes. Longer can cause deterioration of the stitching. Rinse completely and allow to drip dry. Then follow up with time in the sun until it is completely dry.

What can you tell me about 2010 Genuine MasterCraft Parts?

Recognizing the pride that MasterCraft owners take in their boats, MasterCraft has been diligently working to develop our own line of products designed specifically to ensure a better-looking, longer-lasting product. Your 2010 model ProStar, MariStar, X-Series, CSX or 300 boat is just the fourth full model year to be able to utilize these products. As you maintain your boat over the coming years, use Genuine MasterCraft parts (GMP) to keep the pride!

What is the best all-purpose cleaner for my MasterCraft boat?

Most MasterCraft boat owners pay attention to the details, especially when it comes to the maintenance and life of the boat interior. We give you information here online and in your owner's manual on how to extend the life of the boat interiors. We especially caution to avoid certain household cleaners, powdered abrasives, steel wool and industrial cleaners that can cause damage and discoloration. Dry cleaning fluids and lacquer solvents should not be used because they will remove the printed pattern and gloss. No cleaner can remove every mark or stain, but we provide information online and in the owner's manual that tell our owners what to use and how to treat many stains. Now, with this new product, MasterCraft Premium All-Purpose Cleaner, you can do it right! MasterCraft Premium All-Purpose Cleaner is a powerful foam cleaner that cuts through grease, dirt and grime, the foam clings to vertical surfaces and penetrates through dirt that accumulates. MasterCraft

Premium All-Purposes Cleaner is an exclusive product available only through genuine MasterCraft dealerships!

What kind of wax should I use for my MasterCraft boat?

If you take great pride in the appearance of your boat, by using MasterCraft Premium Marine Wax you help ensure a long-lasting and attractive shine for the deck and hull. This pre-softened formula combines carnauba wax with efficient cleaning agents that remove oxidation, engine exhaust spill-off and other contaminants. MasterCraft Premium Marine Wax provides a deep gloss with long-lasting protection from UV rays, salt air and harsh weather conditions. It's great for fiberglass, gel coat, aluminum, chrome and painted surfaces. This product protects and inhibits color fading and cleans effectively without harmful abrasives, leaving a beautiful glossy shine. It protects against harsh weather conditions, too. MasterCraft Premium Marine Wax is an exclusive product available only through genuine MasterCraft dealerships!