OWNERS MANUAL
“1993” MARISTAR 225
TABLE OF CONTENTS

1. WELCOME ABOARD

2. STARTING AND BASIC OPERATION

3. STARTING THE BOAT

4. GENERAL OPERATIONAL HINTS

5. OPERATIONAL HINTS

6. BEFORE STARTING

7. STANDING THE ENGINE

8. STANDING UNDERWAY

9. STANDING UNDERWAY ALARM

10. STANDING ALONGSIDE

11. BEFORE EIGHT

12. HIGH SPEED OPERATION

13. FULL THROTTLE OPERATION

14. FIRST TIME OPERATION

15. TEMPERATURE/TEMPERATURE

16. LUBRICATION OF ALL PARTS

17. LUBRICATION OF YOUR ENGINE

18. LUBRICATION OF THE PROPELLER

19. LUBRICATION OF THE SHIELD

20. CLEANING THE SHIELD

21. CLEANING THE BOAT

22. CENTRAL LAY-OUT

23. CENTERLINE LAY-OUT

24. CENTERLINE LAY-OUT

25. CENTERLINE LAY-OUT

26. CENTERLINE LAY-OUT

27. CENTERLINE LAY-OUT

28. CENTERLINE LAY-OUT

29. CENTERLINE LAY-OUT

30. CENTERLINE LAY-OUT

31. CENTERLINE LAY-OUT

32. CENTERLINE LAY-OUT

33. CENTERLINE LAY-OUT

34. CENTERLINE LAY-OUT

35. CENTERLINE LAY-OUT

36. CENTERLINE LAY-OUT

37. CENTERLINE LAY-OUT

38. CENTERLINE LAY-OUT

39. CENTERLINE LAY-OUT

40. CENTERLINE LAY-OUT

41. CENTERLINE LAY-OUT

42. CENTERLINE LAY-OUT

43. CENTERLINE LAY-OUT

44. CENTERLINE LAY-OUT

45. CENTERLINE LAY-OUT

46. CENTERLINE LAY-OUT

47. CENTERLINE LAY-OUT

48. CENTERLINE LAY-OUT

49. CENTERLINE LAY-OUT

50. CENTERLINE LAY-OUT

51. CENTERLINE LAY-OUT

52. CENTERLINE LAY-OUT

53. CENTERLINE LAY-OUT

54. CENTERLINE LAY-OUT

55. CENTERLINE LAY-OUT

56. CENTERLINE LAY-OUT

57. CENTERLINE LAY-OUT

58. CENTERLINE LAY-OUT

59. CENTERLINE LAY-OUT

60. CENTERLINE LAY-OUT
Construction and Standards

All MasterCraft boats are constructed of the highest quality fiberglass materials and resins available. We take pride in producing boats with the highest standards of quality and workmanship. Our commitment to excellence is evident in every part of the production process and continues to the owner with our lifetime limited warranty.

The hull, deck and inner liner are 100% hand-laid with up to 12 layers of fiberglass matting at major stress points. All major hardware is anchored in 3/8" steel inlaid into hull and liner. All fasteners, hardware, handrails, and lifting rings are high-grade stainless steel. All parts running in water are bronze alloy. Every boat is water tested and quality checked at the factory and a permanent record is kept for future reference.

Standard Features

All MasterCraft boats come equipped with many standard features. Skiing features include platforms, mirrors, storage, tow bars, and recreational ski tow. Amenities include drink holders, color coordinated upholstery, and acoustical insulated motor box; safety features such as passenger handrails, tethered engine stop switches, and rear facing observer seats; performance features such as full instrumentation, and the customized MasterCraft Power V-8 engine.

Certification

As a member of the National Marine Manufacturers Association (NMMA), every MasterCraft boat and trailer meets the rigid specifications for certification. This certification exceeds the federally mandated USCG requirements and is backed by the 600 member NMMA. Inspections are performed by a nationally recognized independent testing organization; inspectors visit the plant before the model year begins to check all models for conformance. The inspectors return unannounced during the year to insure continued compliance with certification requirements.

Certification checks are developed by the NMMA engineering staff and the Marine Service Practices Committee to help guard against overheating, overloading, fire, explosion, sinking and collisions.

All parts used in the construction of MasterCraft boats meet or exceed all USCG and American Boat and Yacht Council (ABYC) standards. Never use automotive or parts of unknown quality. Insist on only genuine MasterCraft replacement parts from your dealer.

Serial Number Locations

NOTE
The removal, tampering, alteration, or obliteration of any or all identification numbers will relieve MasterCraft from all obligations to make warranty repairs or replacements.

Hull - The Hull Identification Number (HIN) can be found at the top, outside, starboard corner of the transom. The HIN is molded into the transom and federal law prohibits removal or tampering in any way.

Engine - The engine identification plate can be found at the rear, inside of the starboard valve cover.

Transmission - The transmission identification plate can be found on the top, port side of the housing.

The identification numbers of your boat are important to you. Record the serial and model numbers of your boat in the spaces provided for future reference. Keep a copy of these numbers on a separate sheet of paper and store in a safe place other than your boat. In case of theft, report these numbers in writing to the local authorities, your insurance agent, and MasterCraft, c/o Customer Service, MasterCraft Boat Co., 869 Binfield Road, Maryville, TN 37801.

HULL

Registration Number/State ______________________

HIN ______________________

Date Purchased ______________________

Dealer/Phone ______________________

Ignition Key Number ______________________

ENGINE

Model ______________________

Serial ______________________

TRANSMISSION

Model ______________________

Serial ______________________
Recommended Equipment

For more information:

NOTE

can assist you.

\textbf{FF is vital.} Your responsibility, your Massacarian. Dealer

one through your 1TP 1PP. As the customer, performing

100% of the work you are paid to do. In addition,

it is the customer to prevent any personal

Regulations are to be used at least one Type I or III

1. 900-336-8001

2. 100 Second Street SW

3. Virginia Street, 2204

4. 90 South Broken Street

5. Belt Ocean

6. Virginia Red Cross National HG

7. American Water Show Association (AWSA)

8. Washington, DC 20007

9. Alexandria, VA 22314

10. 240 West Virginia

11. 188 South Street

12. 100 Second Street

13. 90 South Broken Street

14. 80 South Street

15. 7000 NW

16. 3300 NW

17. 240 West Virginia

18. 188 South Street

19. 7000 NW

20. 3300 NW

21. 240 West Virginia

22. 188 South Street

23. 7000 NW

24. 3300 NW

25. 240 West Virginia

26. 188 South Street

27. 7000 NW

28. 3300 NW

29. 240 West Virginia

SAFETY

NOTE

This equipment is for testing and not for operation.

Additional equipment includes:

\textbf{FF is vital.} Your responsibility, your Massacarian. Dealer

one through your 1TP 1PP. As the customer, performing

it is the customer to prevent any personal

Regulations are to be used at least one Type I or III

1. 900-336-8001

2. 100 Second Street SW

3. Virginia Street, 2204

4. 90 South Broken Street

5. Belt Ocean

WARNING

Symbol:

The vulnerable areas are outlined in this section.

The basic safety rules are outlined in this section.

Operation is extremely dangerous.

Before attempting to operate the pool, you must understand all controls and operating instructions.

Start the manual and make sure you understand the safety and the safety of

Understand that your safety and the safety of

General Precautions

Safety Precautions

1. 800-336-8001

2. 100 Second Street SW

3. Virginia Street, 2204

4. 90 South Broken Street

5. Belt Ocean

WARNING

Symbol:

The vulnerable areas are outlined in this section.

The basic safety rules are outlined in this section.

Operation is extremely dangerous.

Before attempting to operate the pool, you must understand all controls and operating instructions.

Start the manual and make sure you understand the safety and the safety of

Understand that your safety and the safety of

General Precautions

Safety Precautions

1. 800-336-8001

2. 100 Second Street SW

3. Virginia Street, 2204

4. 90 South Broken Street

5. Belt Ocean

WARNING

Symbol:

The vulnerable areas are outlined in this section.

The basic safety rules are outlined in this section.

Operation is extremely dangerous.

Before attempting to operate the pool, you must understand all controls and operating instructions.

Start the manual and make sure you understand the safety and the safety of

Understand that your safety and the safety of

General Precautions

Safety Precautions

1. 800-336-8001

2. 100 Second Street SW

3. Virginia Street, 2204

4. 90 South Broken Street

5. Belt Ocean
Combination oar/boat hook
Day/night visual distress signal (check local restrictions)
First aid kit and manual
Airway breathing tube
Waterproof flashlight
Local charts
Mooring lines and fenders
Extra engine oil
Tool kit
Portable AM/FM radio

Safety Afloat

Like most situations, many boating related accidents are caused by the operator's failure to follow basic safety rules or written precautions. Most accidents can be avoided if the operator is completely familiar with the boat, its operation, and can recognize potentially hazardous situations before an accident occurs.

**WARNING**
Improper operation is extremely dangerous. Operators must read and understand all operating manuals supplied with the boat before operation. Improper operation could result in severe personal injury or death.

**WARNING**
On board equipment must always conform to the governing federal, state, and local regulations. Nonconformance may be hazardous to you and others around you.

**WARNING**
Always attach the engine safety shut-off switch lanyard to a part of your clothing such as a belt loop when operating. Failure to do so may cause serious injury or death.

**WARNING**
Never override or modify the engine safety shut-off switch or engine neutral starting safety switch in any way. Doing so may cause serious injury or death.

**WARNING**
Never operate the boat while under the influence of alcohol or other drugs. Doing so may cause serious injury or death.

**WARNING**
Never stand or allow passengers to stand in the boat or sit on the motor box while underway. You or others may be thrown from the boat and seriously injured.

**WARNING**
Prior to starting the engine, you must open the engine box and check the engine compartment and bilge for gasoline and oil vapors; you must also operate the blower for at least 4 minutes. Failure to do so may result in fire or explosion and may cause serious injury or death.

**WARNING**
Never remove or modify any components of the fuel or carburetion systems except for maintenance by qualified personnel. Tampering with fuel and carburetion components may cause a hazardous condition which could result in severe personal injury or death.

**WARNING**
Never allow any type of sparks or open flame on board. It may result in fire or explosion and may cause serious injury or death.

Skiing Safety

Skiers, like operators, must be aware of the fundamental safety rules of water skiing. If you are new to the sport, seek certified training before going out for the first time. Join the local ski club and AWSA if possible. Always remember that the majority of water ski 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.

**WARNING**
The skier(s) must always wear a USCG approved personal flotation device. Failure to do so may cause serious injury or death.
Never ski or direct on any part of the body at any time. Do not ski around any part of the body at any time.

Death. Depth of water in which you do not know the depth. Never ski in shallow water close to shore.

Always have an experienced skier and a life jacket on the boat while skiing. Keep at least 100 feet away from all other skiers.

May cause severe injury or death. When the skier is running (on), don't go any speed or get in the water. Never jump from a boat that is moving at}

Death. May cause severe injury or death. Do not ski in front of or directly in front of another boat. Do not ski any closer than 200 feet from another boat. Skier must not ski more than 100 feet from another boat.
RULES OF THE ROAD

Just as there are rules which apply when you are driving on streets and highways, there are waterway rules which apply when you are driving your boat. These rules are used internationally, and are also enforced by the United States Coast Guard and local agencies. You should be aware of these rules, and follow them whenever you encounter another vessel on the water.

Several sets of rules prevail according to geographic location, but are all basically the same as the international Rules of the Road. The rules presented here in your Owner's Manual are condensed, and have been provided for your convenience only. Consult your local U.S. Coast Guard Auxiliary or Department of Motor Vehicles for a complete set of rules governing the waters in which you will be using your boat.

Steering and Sailing Rules and Sound Signals

Whenever two vessels on the water meet one another, one vessel has the right-of-way: it is called the "stand-on" vessel. The vessel which 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 what each vessel should do.

Stand-On Vessel - 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.

Give-Way Vessel - The vessel which 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, you should not cross in front of the vessel with the right-of-way. You should slow down or change directions briefly and pass behind the other vessel. You should always move in such a way that the operator of the other vessel can see what you are doing.

"The 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 main situations which you may encounter with other vessels which could lead to a collision unless the Steering Rules are followed.

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

In the following illustration, your boat is in the center. You should give the right-of-way to any vessels shown in white area (you are the Give-Way vessel). Any vessels in the shaded area must yield to you (they are the Give-Way vessels). Both you and the meeting vessel must alter course to avoid each other.
Other Special Situations

When driving, you should give the right of way if the other vessel is passing you, if you are overtaking, or if you are meeting another vessel.

Overtaking: If you are passing another vessel, you should give the right of way if the other vessel is on your port (left) side and remember the other vessel is on your starboard (right) side.

Collision: When two power-driven vessels are crossing, each vessel must keep out of the way of the other vessel.

Meeting: If you are meeting another power vessel, you should give the right of way if the other vessel is on your port (left) side.

Narrow Channels and Bends: When navigating in narrow channels and bends, you should give the right of way if the other vessel is on your starboard (right) side.

Crossing: When two power-driven vessels are cross, the vessel which has the other on the starboard (right) side should give the right of way to the other vessel.

Lubricants

Spares Parts

Mooring Line

Bucket

Safety Equipment
**Sailing Vessel Right-of-Way** – Sailing vessels should normally be given the right-of-way. The exceptions to this are:

1. When the sailing vessel is overtaking the power-driven vessel, the power-driven vessel has the right-of-way.
2. Sailing vessels should keep clear of any fishing vessel.
3. In a narrow channel, a sailing vessel should not hamper the safe passage of a power-driven vessel which can navigate only in such a channel.

**Reading Buoys and Other Markers** – The waters of the United States are marked for safe navigation by the lateral system of buoyage. Simply put, buoys and markers have an arrangement of shapes, colors, numbers and lights to show which side of the buoy a boater should pass on when navigating in a particular direction. The markings on these buoys are oriented from the perspective of being entered from seaward (the boat is going towards the port). This means that red buoys are passed on the starboard (right) side when proceeding from open water into port, and black buoys are to port (left) side. When navigating out of port, your position with respect to the buoys should be reversed; red buoys should be to port and black buoys to starboard.

Many bodies of water used by boaters are entirely within the boundaries of a particular state. The Uniform State Waterway Marking System has been devised for these waters. This system uses buoys and signs with distinctive shapes and colors to show regulatory or advisory information. These markers are white with black letters and orange borders. They signify speed zones, restricted areas, danger areas, and general information.

Remember, markings may vary by geographic location. Always consult local boating authorities before driving your boat in unfamiliar waters.
CONTROLS AND INDICATORS

Gauges

1. **Engine Hourmeter** - Registers accumulated engine operating time, and is activated when the ignition switch is in the "ON" position. Be aware that time will be logged whenever the ignition switch is "ON", even when the engine is not running. Use the hourmeter to keep accurate logs for scheduled maintenance.

2. **Tachometer** - Indicates engine speed in crankshaft revolutions per minute (RPM). Propeller shaft RPM is the same as the engine except for boats equipped with the Power Slot package in which case propeller shaft RPM is one-half of the engine RPM.

3. **Speedometers** - Indicates forward speed of boat in miles per hour. Dual speedometers are required for tournament use in case of a failure during a run. Knob A is used for precise calibration, see Care and Maintenance, page 31. Knob B is set to the desired speed to be used as a quick reference guide in maintaining that speed.

4. **Voltmeter** - Indicates electrical system operating voltage in volts DC. Normal operating voltage is between 13.4 to 14.8 volts.

5. **Fuel Gauge** - Indicates the approximate amount of fuel in fuel tank in quarters of a tank (approx. 6.25 gal). Readings are only approximate and should be compared to the hours of operation multiplied by the known fuel consumption (GPH). The gauge is activated with the ignition switch.

6. **Engine Temperature Gauge** - Indicates the cooling water/coolant inside the engines in °F. Normal operating temperature is between 170°F and 195°F.

7. **Engine Oil Pressure Gauge** - Indicates the pressure of the lubricating oil inside the engine in PSI. Normal pressure is between 10 to 30 PSI at idle.

Switches

8. **Ignition Switch** - The ignition switch has four positions: accessory, off, run (ignition), and start. Never leave the switch in the RUN position without the engine running; doing this will prevent natural discharge of the battery. It is also used to activate the fuel gauge.

![WARNING]

The safety switch lanyard must be attached to the operator whenever the engine is started. Failure to do so may cause serious injury or death.

9. **Safety Switch** (illustrated on page 16) - The emergency engine safety switch is an ignition cutoff 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 and the opposite end has a cap that fits over the switch. Be sure that the cap is firmly attached to the switch before starting. The switch is located on the gunwale next to the throttle control box. If the cap is left off or loose, the engine will crank but will not start or fire.
Controls

13 Manual Bridge Pump Switch - A two position rocker switch that incorporates the function of the manual bridge pump and serves as an indicator in the cockpit of the switch position.

14 Auto Bridge Pump Switch - A two position rocker switch that incorporates the function of the automatic bridge pump and serves as an indicator in the cockpit of the switch position.

15 Bridge Control - The steering wheel is labeled with forward, neutral, and reverse positions.

16 THRU/THROTTLE Control - This one-hand, pull-cable, mechanically linked to the throttle by a push/pull mechanism.

17 Transmission Temperature Warning Light - Indicates the temperature of the transmission and can be used to ensure the engine is running at an appropriate temperature.

18 Transaxle Temperature Warning Light - Indicates the temperature of the transaxle and can be used to ensure the transaxle is running at an appropriate temperature.

19 All motor boat circuits, except the accessory (heater and stereo options) circuits, are protected from circuit breakers.

10 Horn Switch - Actuates the horn from push to sound.

20 Steering Wheel - The steering wheel is labeled with forward, neutral, and reverse positions.

3 & 5 AMP (Fuse) 10 AMP (Fuse) 6 AMP 7 AMP 5 AMP 7 AMP 10 AMP 35 AMP

21 Ignition Switch - Controls the ignition and safety circuits.

22 Engine Main - Controls the engine and safety circuits.

23挪威

Radio Accessory Circuit

Ventilation Blower

Blower Pump

NVY-ANC

WARNING Horn

IGN

Boat Circuit - A two position rocker switch that incorporates the function of the boat circuit.

11 Auxiliary Lights - A two position rocker switch that incorporates the function of the auxiliary lights.

12 Battery Switch - A two position rocker switch that incorporates the function of the battery switch.

12 Battery Switch - A two position rocker switch that incorporates the function of the battery switch.

12 Battery Switch - A two position rocker switch that incorporates the function of the battery switch.

12 Battery Switch - A two position rocker switch that incorporates the function of the battery switch.

12 Battery Switch - A two position rocker switch that incorporates the function of the battery switch.

12 Battery Switch - A two position rocker switch that incorporates the function of the battery switch.

12 Battery Switch - A two position rocker switch that incorporates the function of the battery switch.

12 Battery Switch - A two position rocker switch that incorporates the function of the battery switch.

12 Battery Switch - A two position rocker switch that incorporates the function of the battery switch.

12 Battery Switch - A two position rocker switch that incorporates the function of the battery switch.

12 Battery Switch - A two position rocker switch that incorporates the function of the battery switch.

12 Battery Switch - A two position rocker switch that incorporates the function of the battery switch.

12 Battery Switch - A two position rocker switch that incorporates the function of the battery switch.

12 Battery Switch - A two position rocker switch that incorporates the function of the battery switch.

12 Battery Switch - A two position rocker switch that incorporates the function of the battery switch.

12 Battery Switch - A two position rocker switch that incorporates the function of the battery switch.

12 Battery Switch - A two position rocker switch that incorporates the function of the battery switch.

12 Battery Switch - A two position rocker switch that incorporates the function of the battery switch.

12 Battery Switch - A two position rocker switch that incorporates the function of the battery switch.
FUELING

The ignition timing as set by the factory requires the use of leaded or unleaded fuel with a minimum Research Octane Number (RON) of 93 or a minimum Anti-Knock Index Number (AKI) / Pump Octane Number of 89 octane. Most any high quality gasoline available for automotive use may be used without difficulty.

⚠️ CAUTION

Damage to the engine by use of low quality gasoline or gasoline with an octane rating below the minimum level listed below will void the warranty.

If fuels with 93 RON (89 AKI/Pump) octane are not available in your area, the ignition timing must be retarded so that low octane fuels, with a minimum of 90 RON (86 AKI/Pump) octane can be used; see your MasterCraft dealer. When the ignition timing is retarded, a decrease in engine power can be expected.

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

- **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.

Fuel additives and treatments, other than conditioners for moisture absorption and winter storage, are not recommended for use in MasterCraft Power engines.

⚠️ WARNING

Gasoline is extremely flammable and highly explosive under certain conditions. Always stop the engine and never smoke or allow open flames or sparks within 50 feet of the fueling area when refueling.

Take care not to spill gasoline. If gasoline is spilled accidentally, wipe up all traces of it with dry rags and dispose of the rags properly onboard immediately.

Always tighten the fuel plate cap completely with the cap key after refueling.

LAUNCHING/LOADING

**NOTE**

Launching and Loading procedures along with general information on trailering and trailer use are covered in the MasterCraft Trailer Owner’s manual which is under a separate cover.
continue for the 24 hour period.
water, elective health, the factory, but break-in must
be performed for a short period of time on the
board so that the finishings of parts. All master-crafts
entire and transmission to wear-in to one another.
The break-in period allows minimum parts within the
maximum performance and longest powertrain life.

The first 24 hours of operation are the most impor-

NOTE

New Boat Break-In

Check that the bilge compartment is watertight.
Check the drain, oil, and water leakage.
Fill and add to prevent moisture due to condensation.
Check for excessive vibration.
Check that controls operate smoothly.
Check engine pressure for signs of abnormal

After Operation

Before Each Operation

Check for air, the bilge compartment.
Check for fuel, oil, and water leakage.
Fill and add to prevent moisture due to condensation.
Check that the exhaustsystem is fully charged.
Check that the required safety equipment is on.
Check that there is an adequate supply of fuel.
Check engine oil level.

During Operation

Check that all required scheduled maintenance
Check the cooling water intake pipe for
Check the propeller and shaft for damage.
Check that the bilge drain pipe is installed properly.
Check all hoses and connections for leakage and

Warning

Never leave the boat if problem is

Maintenance dealer.

Problems associated to immediate, see your
contacting service if needed. Above any
could lead to an accident during the outings.

Found during the safety check a problem

Do Not Launch the boat if problem is

Safety checks and services are essential to

The following checks and services are essential to
CAUTION

To ensure proper break-in and lubrication, do not remove factory break-in oil until after the initial 10 hours of operation.

NOTE
Before operating the boat for the first time you must read this manual completely.

Please follow the break-in procedure carefully; close attention to the following is very important:

- **Maintain proper oil level.** Until the piston rings, cylinders, etc. are thoroughly seated, oil consumption can be high and must be carefully watched.

- **Pay close attention to gauges.** It is important to stop the engine immediately if the gauges indicate a problem. Low oil pressure and overheating are serious and require immediate attention.

- **Abnormal vibration/noises.** A sure sign of impending trouble, vibration and noises can usually be traced to loose mountings, hardware or driveline damage.

- **Fuel, oil or water leaks.** While not as damaging to engine operation, leaks pose a serious safety threat and are most likely to occur after a few hours of operation.

- **Vary the engine speed.** Never run the engine for more than three minutes at any constant RPM during the break-in period. Doing this will assist in the proper break-in of rings and bearings.

- **Plane the boat quickly.** Operating the boat at low (before planing) speeds places an excessive load on the engine. Plane quickly, then back down to a slower planing speed.

---

**The First Hour of Operation**

1. Start the engine and allow to warm-up to normal operating temperature (170° F) at low idle (600 - 800 RPM).

2. Operate the boat in neutral for 5 - 10 minutes at high idle (800 - 1200 RPM). This will ensure proper lubrication.

3. Operate the boat in forward gear, accelerate quickly, but gradually to planing speed and bring the throttle back to maintain a planing attitude. Vary the engine speed, but do not exceed 2000 RPM for the first hour.

---

**The Next Four Hours**

Continue operation at plane, vary the engine speed but do not exceed 3000 RPM. Occasionally reduce throttle to idle speed for a cool-down period.

---

**The Next Five Hours**

1. Continue operation at plane, vary the engine speed but do not exceed 4000 RPM. Occasionally reduce throttle to idle speed for a cool-down period.

2. Return the boat to your MasterCraft dealer for the 10 hour inspection. At this time he will change the engine oil and filter and make other necessary checks, adjustments and services.

---

**The Final Ten Hours**

Operation during the final ten hours of break-in is very much the same as the second five hours except that it is permissible to run at full speed for 2 - 3 minutes at a time. Do not accelerate suddenly from low to full speed; increase speed gradually. Again, an occasional cool-down period is helpful.
Troubleshooting Guide

3. Check the bilge compartment for fuel or water leaks, and for fumes.

**Warning**

To prevent a possible explosion, operate the boat in a well-ventilated area.

**Before Starting**

1. Operate the bilge blower for at least 4 minutes.
2. Perform all scheduled maintenance checks and services as described on page 22.
3. Perform all safety checks and services as described on page 13.
4. Familiarize yourself with the controls and indicators on your Mastercraft.

If operating for the first time, you must follow the "New Break-in" procedures described on page 12. Failure to follow these procedures could result in serious engine damage and will void the warranty.

**Starting and Basic Operation**

After break-in...

...attention to the controls and engine safety warnings.

Always perform a break-in period of 400 hours.

Operate the engine at continuous idle for 25 hours, but not beyond the maximum speed of 4600 RPM.

Once the break-in period is over, the boat may be operated continuously at any speed, but not beyond the maximum speed of 4600 RPM.
Starting the Engine

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 which will not allow the engine to be started in gear.

1. Attach the Emergency Engine Safety Switch tether between an article of your clothing and the switch.

2. Prime the engine as follows (not required when engine is warm):
   a. Pull out the throttle button about 1/4".
   b. Move the throttle lever to the full throttle position once to prime.
   c. Move the throttle back to the idle position.

CAUTION
Do not operate the starter motor continuously for more than 15 seconds without at least a 2 minute "cool-down" period. Failure to do so may cause the starter to overheat and cause damage. Failure to release the ignition key after the engine has started may damage the starter motor and drive.

3. Turn the key switch to the start position and hold until engine starts. Re-prime if necessary. Release key as soon as the engine starts.

NOTE
If the engine should flood, move the lever to the neutral position and then advance the throttle to the full open position, start the engine, and immediately adjust the throttle so that engine speed remains below 1500 RPM.

4. Adjust engine speed to high idle between 800 and 1200 RPM and allow the engine to warm-up for about 2 - 3 minutes. (Not required when engine is warm.)

NOTE
While the engine is warming-up, check to see that all lights and gauges operate properly, that the steering operates properly and that there are no apparent leaks under pressure. Re-engage the control lever after warm-up by returning the lever to neutral and pushing the throttle button back into the engage position.

Shifting Gears

CAUTION
When shifting, always move the control lever smoothly and quickly into gear, do not hesitate. Slow gear engagement could damage the shifting mechanism in the transmission. Always allow the engine speed to fall to low idle (600 - 800 RPM) before making a shift or gear damage may result.

- Forward - Raise the lifter ball under the lever knob and briskly push control lever forward into the first 45° of travel. Throttle movement will begin after 45°.

Reverse - Raise the lifter ball under the lever knob and briskly pull the control lever back into the first 45° of travel. Throttle movement will begin after 45°.
Operational Hints

Before operating the engine:

1. Check the oil level and adjust to the correct level.
2. Check the fuel level and adjust to the correct level.
3. Check the water temperature and adjust to the correct level.
4. Check the pressure gauge and adjust to the correct level.

Stopping

Caution:

If the engine stops, do not attempt to start it. Contact a qualified mechanic for assistance.

Engine Warning Alarm

Before stopping the engine:

1. Check the oil level and adjust to the correct level.
2. Check the fuel level and adjust to the correct level.
3. Check the water temperature and adjust to the correct level.
4. Check the pressure gauge and adjust to the correct level.

Note:

If the engine stops, contact a qualified mechanic for assistance.

We at Mariner take pride in our products and all our operating instructions. This section is designed to present the most basic operational procedures. It is NOT intended to cover all operational procedures.
**Emergencies** - Know how to use and spot distress signals and offer assistance if possible. Remember, you may need assistance some day.

**Courtesy** - Always respect the rights of others on water. Keep wide when passing, slow down in crowded areas, be alert, and be aware of your wake and wash.

**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, maneuver.

- **Recognize Outside Forces!** Check the wind direction and velocity, as well as water currents and waves.

- **Have A Crew on Hand!** Hands ready with fenders, lines and boat hook can assist you when docking and launching/loading.

- **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 on 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 propulsion and steering 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 bow follows a smaller turning circle than the stern. This is especially important to remember when making close quarters maneuvers.

The effects of unequal propeller thrust (torque steering), wind, and current must also be kept in mind. While 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 drift to the starboard when going forward, and to the port when going backwards with the rudder in the straight ahead position. At high speed this effect is compensated for and is nearly nonexistent, but at slow speed, and especially during backing, the effect can be most powerful. This is the main reason 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 thrust 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.
Page 20.

Water Skiing Signals

High Speed Operation

DO NOT attempt maneuvers like those.

Your Mastcrroll was designed to be a high

When practising manoeuvring techniques, always do

Water Skiing Signals

Docking and Tie-up - Approach docks slowly with

Turn Left

Speed O.K.

Turn Right

Brake to dock

Circle
LIFTING THE BOAT

If the boat is to be hoisted from the water, use the lifting eyes if possible. They are designed for easy, damage-free lifting.

⚠️ CAUTION

DO NOT use the ski pylon for lifting. It is NOT designed as a central lifting point. Also, DO NOT use the stern ski tow as a lifting ring, the deck will be damaged.

Never lift a boat with a large amount of water in the bilge. The extra stress will put a load on the hull and lifting equipment.

Using Lifting Eyes

An overhead hoist with at least a 2 ton capacity should be used. Cables should be rated for at least 3500 lbs each. When lifting, keep the bow slightly higher than the stern to prevent any possibility of water running into the engine exhaust manifold.

Using Lifting Slings

⚠️ CAUTION

Lifting slings must never contact shafts, struts or hardware protruding from the hull. Damage caused by slings will void the warranty.

An overhead hoist with at least a 2 ton capacity should be used. Slings must be 6 inches wide by 20 feet long and a minimum capacity of 3500 lbs each. Use a 7' spreader bar on each sling to prevent damaging side pressure to the deck or gunwale molding.

Storage Cradle

⚠️ CAUTION

When your boat is out of the water, it is important to support the hull correctly to avoid any hull damage which will void the warranty.

If a storage cradle is used, the hull must be properly supported to prevent load damage. Load damage 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 from resting on the cradle or the ground. DO NOT apply any load stress to the prop, shaft, rudder, swim platform, etc.
Cleaning

WASHFAIR - Cleaning the Windshield

Wash and dry the windshield before applying the product. Be sure to remove
any dirt or debris from the surface. Use a clean, dry cloth to wipe the product
away from the surface. For best results, use a soft cloth or sponge.

Dry the windshield and apply the product using a smooth, circular motion.

RINSE - Rinsing the Windshield

Rinse the windshield to remove any excess product. Use clean, soft water
and a clean, soft cloth to apply the product to the windshield. Be sure to
remove any excess product from the surface. Use a soft cloth or sponge.

DRY - Drying the Windshield

Dry the windshield with a clean, soft cloth to remove any excess product.

ALL WINDSHIELDS - Comprehensive Cleaning

Use a clean, soft cloth or sponge to apply the product to the windshield.

RINSE - Rinsing the Windshield

Rinse the windshield to remove any excess product. Use clean, soft water
and a clean, soft cloth to apply the product to the windshield. Be sure to
remove any excess product from the surface. Use a soft cloth or sponge.

DRY - Drying the Windshield

Dry the windshield with a clean, soft cloth to remove any excess product.

ALL WINDSHIELDS - Comprehensive Cleaning

Use a clean, soft cloth or sponge to apply the product to the windshield.

RINSE - Rinsing the Windshield

Rinse the windshield to remove any excess product. Use clean, soft water
and a clean, soft cloth to apply the product to the windshield. Be sure to
remove any excess product from the surface. Use a soft cloth or sponge.

DRY - Drying the Windshield

Dry the windshield with a clean, soft cloth to remove any excess product.

ALL WINDSHIELDS - Comprehensive Cleaning

Use a clean, soft cloth or sponge to apply the product to the windshield.

RINSE - Rinsing the Windshield

Rinse the windshield to remove any excess product. Use clean, soft water
and a clean, soft cloth to apply the product to the windshield. Be sure to
remove any excess product from the surface. Use a soft cloth or sponge.

DRY - Drying the Windshield

Dry the windshield with a clean, soft cloth to remove any excess product.

ALL WINDSHIELDS - Comprehensive Cleaning

Use a clean, soft cloth or sponge to apply the product to the windshield.

RINSE - Rinsing the Windshield

Rinse the windshield to remove any excess product. Use clean, soft water
and a clean, soft cloth to apply the product to the windshield. Be sure to
remove any excess product from the surface. Use a soft cloth or sponge.

DRY - Drying the Windshield

Dry the windshield with a clean, soft cloth to remove any excess product.

ALL WINDSHIELDS - Comprehensive Cleaning

Use a clean, soft cloth or sponge to apply the product to the windshield.

RINSE - Rinsing the Windshield

Rinse the windshield to remove any excess product. Use clean, soft water
and a clean, soft cloth to apply the product to the windshield. Be sure to
remove any excess product from the surface. Use a soft cloth or sponge.

DRY - Drying the Windshield

Dry the windshield with a clean, soft cloth to remove any excess product.

ALL WINDSHIELDS - Comprehensive Cleaning

Use a clean, soft cloth or sponge to apply the product to the windshield.

RINSE - Rinsing the Windshield

Rinse the windshield to remove any excess product. Use clean, soft water
and a clean, soft cloth to apply the product to the windshield. Be sure to
remove any excess product from the surface. Use a soft cloth or sponge.

DRY - Drying the Windshield

Dry the windshield with a clean, soft cloth to remove any excess product.

ALL WINDSHIELDS - Comprehensive Cleaning

Use a clean, soft cloth or sponge to apply the product to the windshield.

RINSE - Rinsing the Windshield

Rinse the windshield to remove any excess product. Use clean, soft water
and a clean, soft cloth to apply the product to the windshield. Be sure to
remove any excess product from the surface. Use a soft cloth or sponge.

DRY - Drying the Windshield

Dry the windshield with a clean, soft cloth to remove any excess product.

ALL WINDSHIELDS - Comprehensive Cleaning

Use a clean, soft cloth or sponge to apply the product to the windshield.

RINSE - Rinsing the Windshield

Rinse the windshield to remove any excess product. Use clean, soft water
and a clean, soft cloth to apply the product to the windshield. Be sure to
remove any excess product from the surface. Use a soft cloth or sponge.

DRY - Drying the Windshield

Dry the windshield with a clean, soft cloth to remove any excess product.

ALL WINDSHIELDS - Comprehensive Cleaning

Use a clean, soft cloth or sponge to apply the product to the windshield.
**Stainless Steel and Chrome** - 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 appearance.

**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. Treat with a water repellent as necessary.

For heavy soil or mildew, a solution of 1/2 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 to prevent deterioration of the stitching. Rinse completely and allow to drip dry, then allow it to lay in the sun until completely dry.

---

**SCHEDULED MAINTENANCE CHECKS AND SERVICES**

Proper care, maintenance and adjustment will contribute to the peak performance of the boat and extend the overall service life and resale value.

Use the table to the right to establish your maintenance routine. The instructions are grouped by the required service intervals. The pages that follow contain instructions and how to accomplish each of the required checks, inspections and services as listed in the table. The intervals are New Boat Break-In (first 50 hours), Daily (before each use or every 8 hours of operation), Quarterly (every 3 months or every 50 hours), and Annually (each year or every 100 hours) whichever occurs first. The following definitions apply to maintenance:

**Check** - To verify operational readiness by physical measurement i.e., measuring oil level with dipstick gauge or alignment with a feeler gauge.

**Inspect** - To determine 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., to drain, replenish or service.

---

**Frequency and Scheduled Maintenance Task Table**

**New Boat Break-In**
- Change engine oil and filter after initial 10 and 50 hours of operation. (See Quarterly and Annual Maintenance)
- Lubricate engine starter gear and shaft. (See Quarterly Maintenance)
- Check alignment of propeller shaft coupling. (See Annual Maintenance)

**Before Each Use (Every 8 Hours)**
- Check engine oil level.
- Check transmission fluid level.
- Check cooling system level (fresh water cooling equipped boats only).
- Check engine V-belts for looseness or damage.
- Check/service fuel filter/water separator.
- Inspect drivetrain for loose or missing hardware.*
- Inspect throttle and shift cables for kinks, wear and interference with other components.
- Inspect battery connections and hold-downs.
- Inspect exhaust system for leaks.
- Inspect propeller shaft log for excessive water entry.
- Inspect fuel system lines and connections for leakage.

**Quarterly (Every 50 Hours)**
- Change engine oil.
- Lubricate engine starter gear and shaft.
- Check safety equipment.

**Annually (Every 100 Hours)**
- Change engine oil filter.
- Clean engine flame arrestor.
- Clean carburetor fuel screen.
- Replace fuel filter element.
- Clean fuel tank pick-up.
- Perform engine tune-up.
- Change transmission fluid.
- Clean battery terminals.
- Check propeller shaft coupling alignment.
- Lubricate steering system.
- Lubricate shift and throttle cables.
- Inspect exhaust flaps for damage.*
- Check engine mounts.
- Inspect complete fuel system for leakage.

* Best accomplished with boat out of water.
1. Operate engine for about 3 minutes or until warm. Turn engine off and disconnect negative battery terminals.

2. Open engine box and locate engine oil level dipstick.

3. Remove dipstick and wipe off with a clean rag.

4. Add oil if necessary through oil filler in valve cover. Use only the recommended oil for your type of oil. See Specifications on page 86.

Never mix different types of engine oils.

Check engine oil level before each use (every 8 hours).
Check Transmission Fluid Level

1. Operate the boat for about 5 minutes to warm transmission fluid. Turn engine OFF and disconnect engine safety starting switch; be sure that throttle/shift control lever is in neutral.

2. Open engine box and locate transmission fluid level dipstick.

NOTE
Transmission fluid level must be checked immediately after engine shut-down to prevent an incorrect reading. Oil drains back into the transmission from the cooler and cooler lines and could give a false reading if not done quickly.

3. Remove dipstick and wipe off with a clean rag. Quickly re-insert dipstick fully and immediately remove. Check that fluid level is at the “FULL WARM” mark on the dipstick.

4. Add or remove fluid as necessary to maintain level at the mark. Use only the recommended automotive transmission fluid, see Specifications on page 38. Never mix different types/brands of fluid.

Check Cooling System Level
(Fresh Water Cooling Equipped Boats Only)

CAUTION
Engine must be cool when checking the coolant level. Hot coolant and steam under pressure may cause personal injury.

1. Open engine box and remove reservoir cap.

2. Maintain coolant level to top of reservoir filler neck.

Check Engine V-Belts for Looseness or Damage

1. Turn engine OFF and disconnect engine safety starting switch; be sure that throttle/shift control lever is in neutral.

![Diagram of alternator and belt]

ALTERNATOR PULLEY
CIRCULATION PUMP PULLEY
CRANKSHAFT DRIVE PULLEY

2. Open engine box and locate engine V-belts.

3. Check alternator belt tension on top midway between the circulating pump pulley and the alternator pulley. The belt should be tight enough so that it will deflect 1/4" - 1/2" when pressed with the thumb.

IMPORTANT
If the belt is too tight, excessive belt and bearing wear can occur. If the belt is too loose, slippage can occur resulting in low alternator output and rapid belt wear.

4. If the belt needs adjustment, loosen the alternator mounting hardware, pivot the alternator as needed, and tighten the hardware. Recheck belt tension.

Check/Service Fuel Filter/Water Separator

WARNING
Gasoline is highly flammable, and its vapors may result in fire or explosion. Be particularly cautious when working on any part of the fuel system. Be sure that the engine has cooled completely and keep all sparks and flames well away from the area. Never smoke when working on the fuel system. Take care not to spill any gasoline; if gasoline is spilled accidentally, wipe up all traces of it immediately with dry rags and dispose of the rags properly on shore. If you are not completely confident that you have the skills and knowledge to perform fuel system maintenance and repairs, have these items performed by your MasterCraft dealer.

1. Turn engine OFF and disconnect engine safety starting switch; be sure that throttle/shift control lever is in neutral. Engine must be cool.

2. Open the engine box and locate the fuel filter/water separator.

3. Place a clean catch container beneath the fuel filter assembly.
Inspect Exhaust System for Leaks

- Visually check the exhaust system for obvious damage.
- Check for leaks using soap and water.

Inspect Battery

- Check the battery terminals for corrosion.
- Use a phosphoric acid cleaner to remove corrosion.
- Clean the terminals with a clean, dry cloth.
- Ensure the battery is fully charged.

Inspect Carburetor and Fuel System

- Check for leaks and proper fuel flow.

Inspect Spark Plugs

- Remove and inspect spark plugs.
- Ensure they are clean and properly gapped.

Inspect Ignition System

- Check the ignition coil and spark plugs.
- Ensure the wiring is secure.

Inspect Ignition Switch

- Check for proper function.

Ice & Snow Precautions

- Use a scraper to remove ice and snow from the engine.
- Ensure the engine is warm before starting.

Inspect Coolant

- Check the coolant level and condition.
- Add coolant as needed.

Inspect Radiator

- Check for leaks and proper fill level.

Inspect Engine Oil

- Check the oil level and condition.
- Change the oil as needed.

Inspect Fuel Filter

- Check for clogs and replace as needed.

Inspect Air Filter

- Check for dirt and debris.
- Clean or replace as needed.

Inspect Drive Chain

- Check for proper tension and lubrication.
- Adjust or replace as needed.

Inspect Brake System

- Check for leaks and proper function.
- Inspect brake pads and rotors.

Inspect Clutch

- Check for proper engagement and release.
- Inspect the clutch plates and springs.

Inspect Transmission

- Check for leaks and proper gear engagement.
- Inspect the fluid level and condition.

Inspect Shock Absorbers

- Check for leaks and proper damping.
- Adjust or replace as needed.

Inspect Suspension

- Check for proper alignment and wear.
- Adjust or replace as needed.

Inspect Tires

- Check for proper inflation and wear.
- Rotate the tires as needed.

Inspect Wheel Bearings

- Check for proper function and condition.
- Adjust or replace as needed.

Inspect Brakes

- Check for proper function and condition.
- Adjust or replace as needed.

Inspect Clutch

- Check for proper function and condition.
- Adjust or replace as needed.

Inspect Oil Cooler

- Check for leaks and proper fluid flow.
- Change the fluid as needed.

Inspect Coolant Pump

- Check for proper function and condition.
- Adjust or replace as needed.

Inspect Ignition System

- Check for proper function and condition.
- Adjust or replace as needed.

Inspect Fuel System

- Check for leaks and proper fuel flow.
- Adjust or replace as needed.

Inspect Exhaust System

- Check for leaks and proper flow.
- Adjust or replace as needed.

Inspect Engine Oil

- Check the oil level and condition.
- Change the oil as needed.

Inspect Fuel Filter

- Check for clogs and replace as needed.

Inspect Air Filter

- Check for dirt and debris.
- Clean or replace as needed.

Inspect Drive Chain

- Check for proper tension and lubrication.
- Adjust or replace as needed.

Inspect Brake System

- Check for leaks and proper function.
- Inspect brake pads and rotors.

Inspect Clutch

- Check for proper engagement and release.
- Inspect the clutch plates and springs.

Inspect Transmission

- Check for leaks and proper gear engagement.
- Inspect the fluid level and condition.

Inspect Shock Absorbers

- Check for leaks and proper damping.
- Adjust or replace as needed.

Inspect Suspension

- Check for proper alignment and wear.
- Adjust or replace as needed.

Inspect Tires

- Check for proper inflation and wear.
- Rotate the tires as needed.

Inspect Wheel Bearings

- Check for proper function and condition.
- Adjust or replace as needed.

Inspect Brakes

- Check for proper function and condition.
- Adjust or replace as needed.

Inspect Clutch

- Check for proper function and condition.
- Adjust or replace as needed.

Inspect Oil Cooler

- Check for leaks and proper fluid flow.
- Change the fluid as needed.

Inspect Coolant Pump

- Check for proper function and condition.
- Adjust or replace as needed.

Inspect Ignition System

- Check for proper function and condition.
- Adjust or replace as needed.

Inspect Fuel System

- Check for leaks and proper fuel flow.
- Adjust or replace as needed.
4. Check the rubber coupling for leakage; no leakage is permissible. If leakage is apparent, see your MasterCraft dealer.

**Inspect Fuel System for Leakage**

**WARNING**

Gasoline is highly flammable, and its vapors may result in fire or explosion. Be particularly cautious when working on any part of the fuel system. Be sure that the engine has cooled completely and keep all sparks and flames well away from the area. Never smoke when working on the fuel system. Take care not to spill any gasoline; if gasoline is spilled accidentally, wipe up all traces of it immediately with dry rags and dispose of the rags properly on shore.

1. Turn engine OFF and disconnect engine safety starting switch; be sure that throttle/shift control lever is in neutral.

2. Open engine box and visually check the fuel system from the filter to the carburetor for obvious leakage.

3. Start the engine and look for leakage: stop engine immediately if leakage is seen. Leak must be repaired before the engine is re-started. See your MasterCraft dealer.

**QUARTERLY (Every 50 Hours)**

**Change Engine Oil**

1. Start and run engine until warm. Turn engine OFF and disconnect engine safety starting switch; be sure that throttle/shift control lever is in neutral.

2. Open engine box and locate the oil drain hose.

3. Remove the engine oil filler cap. This will speed up the oil draining process.

**IMPORTANT**

Never drain oil into the bilge or into the water. Wipe up spilled oil immediately and dispose of rags and drain oil properly on shore.

4. Attach a suction pump to the drain hose and remove oil completely.

5. Change oil filter if necessary.

6. Cap oil drain hose and refill crankcase through filler opening. See Specifications, page 38, for recommended oil type. Check oil level with the dipstick.
1. Open engine box and locate the flame arrester.

2. Open oil filter and locate the fuel supply.

3. After filling the engine, start the engine.

4. Turn the filter by hand until the gasket just touches the filter.

5. Use a clean rags to clean the filter.


8. Install flame arrester, connect hoses and install.


10. Clean the flame arrester and attachment hoses.

11. Replace if necessary.

12. Remove the flame arrester and inspect for damage. Replace.

13. Disconnect the crankcase and fuel pump vent.

14. Remove the cover.

15. Install flame arrester, connect hoses and install.


17. Clean the flame arrester and attachment hoses.

18. Replace if necessary.

19. Remove the flame arrester and inspect for damage. Replace.

20. Disconnect the crankcase and fuel pump vent.

21. Remove the cover.

22. Install flame arrester, connect hoses and install.

23. Pressurize air in sevort and blow dry with low pressure compressed air.

24. Clean the flame arrester and attachment hoses.

25. Replace if necessary.

26. Remove the flame arrester and inspect for damage. Replace.

27. Disconnect the crankcase and fuel pump vent.

28. Remove the cover.

29. Install flame arrester, connect hoses and install.

30. Pressurize air in sevort and blow dry with low pressure compressed air.

31. Clean the flame arrester and attachment hoses.

32. Replace if necessary.

33. Remove the flame arrester and inspect for damage. Replace.
keep all sparks and flames well away from the area. Never smoke when working on the fuel system. Take care not to spill any gasoline; if gasoline is spilled accidentally, wipe up all traces of it immediately with dry rags and dispose of the rags properly on shore.

3. Remove fuel supply tube between the fuel pump and carburetor. Inspect tube for damage; replace if necessary.

⚠️ WARNING
Safety glasses should always be worn when using compressed air to avoid eye injury.

4. Remove filter nut, washers and screen. Clean screen with solvent and blow dry with low pressure compressed air.

5. Install screen, washers, filter nut and tube. Torque filter nut to 18 lb ft.

6. Install fuel supply tube between fuel pump and carburetor. While holding filter nut with wrench, torque tube nuts to 18 lb ft.

7. Start the engine and check the area around the screen and tube for leaks. If leakage occurs, stop the engine immediately and reset the connections; if leakage continues to occur, stop engine and consult your MasterCraft dealer immediately.

Replace Fuel Filter Element

1. Turn engine OFF and disconnect engine safety starting switch; be sure that throttle/shift control lever is in neutral. Engine must be cool.

2. Open engine box and locate the fuel filter.

⚠️ WARNING
Gasoline is highly flammable, and its vapors may result in fire or explosion. Be particularly cautious when working on any part of the fuel system. Be sure that the engine has cooled completely and keep all sparks and flames well away from the area. Never smoke when working on the fuel system. Take care not to spill any gasoline; if gasoline is spilled accidentally, wipe up all traces of it immediately with dry rags and dispose of the rags properly on shore.

3. Drain fuel bowl, see Check/Service Fuel Filter/Water Separator, page 24.

4. Remove head bolt and bowl housing.

5. Remove and discard filter element properly on shore.

6. Clean housing, gasket gland and gasket with solvent and blow dry with low pressure compressed air.

7. Install new element into housing.

8. Install bowl housing and head bolt. Torque head bolt to 65 lb in.

Clean Fuel Tank Pick-Up

1. Turn engine OFF and disconnect engine safety starting switch; be sure that throttle/shift control lever is in neutral. Engine must be cool.

⚠️ WARNING
Gasoline is highly flammable, and its vapors may result in fire or explosion. Be particularly cautious when working on any part of the fuel system. Be sure that the engine has cooled completely and keep all sparks and flames well away from the area. Never smoke when working on the fuel system. Take care not to spill any gasoline; if gasoline is spilled accidentally, wipe up all traces of it immediately with dry rags and dispose of the rags properly on shore.

2. Remove rear seat to access fuel tank.

3. Loosen hose clamp and remove fuel pick-up hose from tank.
Propeller Shaft Coupling

1. If lever is in neutral, change must be cool.
2. Ensure that the transmission is disengaged.
3. Turn the shaft coupling, and disengage the safety handle.
4. Turn thePropeller shaft to ensure disconnection of the safety handle.
5. Turn the shaft coupling, and remove the safety handle.
6. Turn the shaft coupling, and remove any debris that may be caught.
7. Turn the shaft coupling to ensure the propeller shaft is disengaged.
8. Turn the shaft coupling, and remove any debris that may be caught.
9. Turn the shaft coupling, and remove any debris that may be caught.
10. Connect and close the safety handle.
6. Spread a generous amount of waterproof marine multipurpose grease over cable end. Work steering wheel several times back and forth and re-apply grease if necessary.

7. Using a flexible end on a grease gun, give two full shots of waterproof marine multipurpose grease to three fittings: one on the rudder shaft, one on the tube and one on the pivot. Clean up any old grease purged from the areas.


4. Lubricate the cable ends and connections with a coat of waterproof marine multipurpose grease.

5. Lubricate pivots and linkages with a light grease.

6. Work the control lever from full-throttle-forward to full-throttle-reverse several times to work lubricant in.

Inspect Exhaust Flaps for Damage

1. Turn engine OFF and disconnect engine safety starting switch; be sure that throttle/shift control lever is in neutral.

2. Inspect exhaust flap hinge for signs of deterioration. Replace flaps if necessary.

3. Check that hose clamps securing the flaps are tight. Tighten hose clamps if necessary.

Check Engine Mounts

1. Turn engine OFF and disconnect engine safety starting switch; be sure that throttle/shift control lever is in neutral. Engine must be cool.

2. Open the engine box and locate the four motor mounts.

3. Check the tightness of the mounting hardware and adjustment locknuts. Tighten any loose hardware securely.

Inspect Complete Fuel System for Leakage

1. Turn engine OFF and disconnect engine safety starting switch; be sure that throttle/shift control lever is in neutral. Engine must be cool.

2. Remove rear seat.

3. Remove screws securing floorboard behind engine. Remove floorboard.

4. Check fuel tank mounting points for cracks or other damage.

5. Check all hose connections for tightness.

6. Check fuel hoses for wear, kinks, cracking, deterioration or other damage.

WARNING

Gasoline is highly flammable; and its vapors may result in fire or explosion. Be particularly cautious when working on any part of the fuel system. Be sure that the engine has cooled completely and keep all sparks and flames well away from the area. Never smoke when working on the fuel system. Take care not to spill any gasoline; if gasoline is spilled accidently, wipe up all traces of it immediately with dry rags and dispose of the rags properly on shore.

8. Install the floorboard and rear seat.

New car 205
**Propellers**

**Checking/Repainting**

1. Inspect the propeller. Look for cracks in the blade.
2. Inspect the propeller. Look for damage caused by impact or impact.
3. Inspect the propeller. Look for damage caused by water or water.
4. Inspect the propeller. Look for damage caused by heat or heat.
5. Inspect the propeller. Look for damage caused by wear or wear.

**Changing Propellers**

1. Use a propeller puller to remove the propeller from the shaft.
2. Remove the propeller nut and replace it with a new one.
3. Remove the propeller and replace it with a new one.
4. Tighten the propeller nut to the correct torque.
5. Inspect the new propeller. Look for damage caused by impact or impact.
6. Inspect the new propeller. Look for damage caused by water or water.
7. Inspect the new propeller. Look for damage caused by heat or heat.
8. Inspect the new propeller. Look for damage caused by wear or wear.

**Maintenance**

- Clean the propeller after each use.
- Check the propeller for damage before each use.
- Replace the propeller if necessary.
- Use a propeller puller to remove the propeller from the shaft.
- Use a new propeller nut and torque to the correct torque.
- Inspect the new propeller. Look for damage caused by impact or impact.
- Inspect the new propeller. Look for damage caused by water or water.
- Inspect the new propeller. Look for damage caused by heat or heat.
- Inspect the new propeller. Look for damage caused by wear or wear.

- Note: All propellers should be cleaned and inspected before each use.
To repair minor nicks and dings in a propeller:

1. Remove propeller from the boat.

2. Use a small ball peen hammer and anvil to carefully pound out the ding to the original contour of the blade.

3. File the area to remove rough edges.

### Replacing Lights

**BOW LIGHT** - Remove screws securing light assembly to deck, pull light out a couple of inches, turn over and remove screws holding lens cover to base, remove lens cover and lenses. Grasp light and push into base, then slide up while twisting out. During installation be sure that the red lens is to the port side of the boat and the green lens to starboard. Snug-up screws only, do not overtorque.

**STERN LIGHT** - Unscrew lens cover. Grasp bulb, push down and turn counterclockwise. Align lugs, push down and turn clockwise to install bulb.

<table>
<thead>
<tr>
<th>LOCATION</th>
<th>TRADE NUMBER</th>
<th>VOLTS/ WATTS</th>
<th>BASE TYPE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bow</td>
<td>12354 (PERKO FIG.71)</td>
<td>12/10</td>
<td>SV 8,5</td>
</tr>
<tr>
<td>Stern</td>
<td>1004</td>
<td>12.8/12</td>
<td>D.C. Bay.</td>
</tr>
<tr>
<td>Speedometer</td>
<td>53</td>
<td>14.4/1.7</td>
<td>Min. Bay.</td>
</tr>
<tr>
<td>Other</td>
<td>12329</td>
<td>12/2</td>
<td>BA 7a</td>
</tr>
</tbody>
</table>

### Replacing Fuses

The optional radio has two inline fuses; one on the power (positive) wire and one on the memory wire. To access the fuse holders, open the observer's seat. The accessory switch also has an inline fuse. To access the accessory fuse, remove the screws securing the dash panel and pull the panel out a couple of inches. To open an inline fuse holder, grasp each end of the holder, push together and twist in opposite directions.

<table>
<thead>
<tr>
<th>CIRCUIT</th>
<th>FUSE TYPE</th>
<th>RATING</th>
</tr>
</thead>
<tbody>
<tr>
<td>Radio Power</td>
<td>ATC</td>
<td>3 Amp</td>
</tr>
<tr>
<td>Radio Memory</td>
<td>ATC</td>
<td>5 Amp</td>
</tr>
<tr>
<td>Accessory</td>
<td>311</td>
<td>10 Amp/32 Volt</td>
</tr>
</tbody>
</table>

---

**STORAGE/WINTERIZATION**

Storage or winter lay-up requires special preparation to prevent damage to the boat. Since winter lay-up is an annual event, it is wise to perform all annual maintenance at this time. The natural excitement of getting the boat in the water as soon as possible the next season will make any maintenance unbearable at that time.

Without proper preparation, storage for long periods of time may cause internal parts of the engine and transmission to rust because of lack of lubrication. Or, if the boat is stored in below freezing temperatures, water inside the bilge or cooling system may freeze causing damage. Damage to the boat due to improper storage will void the warranty. The following procedures will help keep your boat from damage for a period of 5 months.
Check hoses. Inspect all 1990 and later model master cylinder drain plugs. Evergreen drain plugs (inlet master cylinder). Drain cylinder. Remove drain plug(s) in each master cylinder. Leave all holes disconnected during transporting. 

NOTE

1. Remove both hoses from the raw water pump. 
2. Remove both hoses from the raw water pump. 
3. Remove both hoses from the raw water pump. 
4. Remove both hoses from the raw water pump. 

**WARNING**
1. Remove negative battery cable from battery. Charge battery to full charge or remove completely. Never store batteries close to heat, spark or flame producing devices.

m. Clean all traces of dirt, oil grime and grease from the engine, transmission and bilge. Touch up areas of engine and transmission where paint has been removed.

n. If the boat is to be stored for more than two months at high moisture environment, in temperature extremes or outdoors. "Fog" the engine with a rust preventative fogging oil.

o. Coat entire length of propeller shaft (inside and outside boat) with corrosion resistant metal protectant.

p. Use duct tape to cover the carburetor air intake and seal the exhaust flaps to prevent dirt and nesting rodents from entering.

q. Cover the boat with a boat cover or tarp.

NOTE
If your boat is equipped with an optional heater, or shower, remove both hoses and blow through one hose to remove all water.

NOTE
If speedometer pickups in rear of boat are clogged, damage can occur to speedometer ballast tubes.

h. Check all hose clamps for tightness.

i. Install bilge drain plug.

j. Grease propeller shaft taper and install propeller.

k. Perform daily maintenance. If not performed during lay-up, perform annual maintenance.

l. If the boat is equipped with the optional fresh water cooling system and was drained for storage, fill the system with fresh coolant solution.

m. Take the boat to the water and start it. It may take a minute of cranking to allow the fuel pump to fill the carburetor bowl. Allow a two minute cool down period for every 30 seconds of cranking. When the engine fires, keep a close watch over the gauge readings and check for leakage and abnormal noises. Keep speeds low for the first 15 minutes until the engine has reached normal operating temperature.

3. REACTIVATING THE BOAT AFTER STORAGE

   a. Remove duct tape from exhaust flaps and carburetor air intake.

   b. Charge and install battery in boat.

   c. Wrap two drain plugs with teflon sealing tape and install in exhaust manifold.

   d. Close two engine drain petcocks on each side of block.

   e. Check propeller shaft coupling alignment. Install and tighten coupling hardware.

   f. Check engine compartment and bilge for signs of nesting animals; clean as necessary.

   g. Check entire engine for cracks and leaks caused by freeze damage.
## Troubleshooting

### Weather Signals

- **Wind Warning**
  - Small Craft Advisory
  - Winds up to 35 MPH

### Possible Causes

<table>
<thead>
<tr>
<th>Solution</th>
<th>Problem</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Connect safety switch lead.</td>
<td>Engine will not start.</td>
</tr>
<tr>
<td>2. Shift to neutral.</td>
<td>Safety switch lead not connected.</td>
</tr>
<tr>
<td>4. Clean battery terminals.</td>
<td>Battery week or worn out.</td>
</tr>
<tr>
<td>5. Charge or replace battery.</td>
<td>Loose or corroded battery wires.</td>
</tr>
<tr>
<td>8. Replace neutral safety switch.</td>
<td>Decelerate ignition switch or wiring.</td>
</tr>
<tr>
<td>10. Replace ignition switch or repair.</td>
<td>Watcr in engine (hydrostatic).</td>
</tr>
<tr>
<td>11. Remove spark plugs and look for water or gas in cylinders. See your dealer.</td>
<td>Water in engine (hydrostatic).</td>
</tr>
</tbody>
</table>

### Possible Causes

- Distributor problems.
- Weak or shorted ignition coil.
- Contaminated fuel.
- Fuel filter clogged.
- Fuel filter leak.
- No fuel in tank.
- Full fuel tank.
- Fuel pump does not start.
- Engine cranks but will not start.

### Warning

- MasterCraft dealer.
- Not included in this manual. See your MasterCraft dealer for service.
- Not included in this manual. See your MasterCraft dealer for service.
- Not included in this manual. See your MasterCraft dealer for service.
- Not included in this manual. See your MasterCraft dealer for service.

To correct a problem, first determine what the problem is. Start with the first cause and eliminate the most likely to the least likely.
<table>
<thead>
<tr>
<th>PROBLEM</th>
<th>POSSIBLE CAUSE</th>
<th>SOLUTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Engine hard to start.</td>
<td>1. Flooded engine.</td>
<td>1. Start engine at full throttle and back off immediately.</td>
</tr>
<tr>
<td></td>
<td>2. Plugged flame arrestor.</td>
<td>2. Clean flame arrestor.</td>
</tr>
<tr>
<td></td>
<td>3. Fouled spark plugs.</td>
<td>3. Replace spark plugs.</td>
</tr>
<tr>
<td></td>
<td>4. Loose coil or ignition wires.</td>
<td>4. Tighten coil or ignition wires.</td>
</tr>
<tr>
<td></td>
<td>5. Battery cables loose or corroded.</td>
<td>5. Clean and tighten battery cables.</td>
</tr>
<tr>
<td></td>
<td>6. Weak battery.</td>
<td>6. Charge or replace battery.</td>
</tr>
<tr>
<td></td>
<td>7. Distributor problems.</td>
<td>7. See your dealer.</td>
</tr>
<tr>
<td>Engine misses or idles rough.</td>
<td>1. Fouled spark plugs.</td>
<td>1. Replace spark plugs.</td>
</tr>
<tr>
<td></td>
<td>2. Loose or defective high tension leads.</td>
<td>2. Tighten or replace high tension leads.</td>
</tr>
<tr>
<td></td>
<td>3. Plugged PCV valve.</td>
<td>3. Replace PCV valve.</td>
</tr>
<tr>
<td></td>
<td>4. Weak ignition coil.</td>
<td>4. Replace ignition coil.</td>
</tr>
<tr>
<td></td>
<td>5. Vacuum leak.</td>
<td>5. See your dealer.</td>
</tr>
<tr>
<td>Poor boat performance.</td>
<td>1. Fouled spark plugs.</td>
<td>1. Replace spark plugs.</td>
</tr>
<tr>
<td></td>
<td>2. Contaminated fuel.</td>
<td>2. Replace fuel and fuel filter.</td>
</tr>
<tr>
<td></td>
<td>3. Plugged flame arrestor.</td>
<td>3. Clean flame arrestor.</td>
</tr>
<tr>
<td></td>
<td>4. Weak ignition coil.</td>
<td>4. Replace ignition coil.</td>
</tr>
<tr>
<td></td>
<td>5. Distributor problems.</td>
<td>5. See your dealer.</td>
</tr>
<tr>
<td>Poor gas mileage.</td>
<td>1. Fouled spark plugs.</td>
<td>1. Replace spark plugs.</td>
</tr>
<tr>
<td></td>
<td>2. Plugged flame arrestor.</td>
<td>2. Clean flame arrestor.</td>
</tr>
<tr>
<td></td>
<td>3. Inefficient driving habits.</td>
<td>3. Plane boat quickly, then slow down to desired speed.</td>
</tr>
<tr>
<td></td>
<td>4. Plugged PCV valve.</td>
<td>4. Replace PVC valve.</td>
</tr>
<tr>
<td></td>
<td>5. Distributor problems.</td>
<td>5. See your dealer.</td>
</tr>
<tr>
<td></td>
<td>2. Defective throttle return spring.</td>
<td>2. Replace throttle return spring.</td>
</tr>
<tr>
<td></td>
<td>3. Low transmission oil level.</td>
<td>3. Replenish transmission oil.</td>
</tr>
<tr>
<td></td>
<td>5. Kink in cable(s).</td>
<td>5. Replace cable(s). See your dealer.</td>
</tr>
</tbody>
</table>
# SPECIFICATIONS

## Boat
- **Length:** 22' 6"
- **Width (Amidship):** 96"
- **Weight:** 3000 lbs.
- **Tow Bar Height to Water Line:** 34"
- **Draft:** 22"
- **Fuel Capacity:** 38 gal.
- **Top Speed With Standard 351 Engine:** 44 mph
- **Top Speed With Optional 454 Engine:** 48 mph

## Engine

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>RPM</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Idle (In Gear)</td>
<td>600-800</td>
<td>600-800</td>
<td>600-800</td>
<td>600-800</td>
<td>600</td>
</tr>
<tr>
<td>Max (In Gear)</td>
<td>4600</td>
<td>4600</td>
<td>4600</td>
<td>4600</td>
<td>5000</td>
</tr>
<tr>
<td>Bore</td>
<td>4.00</td>
<td>4.00</td>
<td>4.00</td>
<td>4.00</td>
<td>4.25</td>
</tr>
<tr>
<td>Stroke</td>
<td>3.50</td>
<td>3.50</td>
<td>3.48</td>
<td>3.48</td>
<td>4.00</td>
</tr>
<tr>
<td>Cubic Inches</td>
<td>351</td>
<td>351</td>
<td>350</td>
<td>350</td>
<td>454</td>
</tr>
<tr>
<td>Compression Ratio</td>
<td>8.8:1</td>
<td>8.8:1</td>
<td>9.0:1</td>
<td>9.0:1</td>
<td>8.8:1</td>
</tr>
<tr>
<td><strong>Timing</strong></td>
<td>10° BTDC</td>
<td>10° BTDC</td>
<td>10° BTDC</td>
<td>10° BTDC</td>
<td>10° BTDC</td>
</tr>
</tbody>
</table>

*(89 Octane Fuel Minimum)*

- **Firing Order:** 13726548 13726548 18436572 18436572 18436572
- **Spark Plug Type & Gap:** ASF32M/.035 ASF32M/.035 MR43T/.035 MR43T/.035 MR43T/.035
- **Oil Filter Type:** FLIA FLIA PF-25 PF-25 PF-25
- **Oil Type:** SAE30/AP1SF SAE30/AP1SF SAE30/AP1SF SAE30/AP1SF SAE30/AP1SF
- **Alternator Output:** .51 AMP .51 AMP .51 AMP .51 AMP .51 AMP

## Transmission

<table>
<thead>
<tr>
<th></th>
<th>1:1 Ratio</th>
<th>1.5:1 Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Oil Type</strong></td>
<td>Dexron II</td>
<td>Dexron II</td>
</tr>
<tr>
<td><strong>Oil Capacity</strong></td>
<td>2 qts.</td>
<td>3 qts.</td>
</tr>
<tr>
<td><strong>Propeller (L.H. Rotation)</strong></td>
<td>13&quot; x 13&quot; Cupped</td>
<td>14&quot; x 18&quot; Cupped</td>
</tr>
</tbody>
</table>
**Maristar 225**

**Storage**
- Need to be emptied of coolant during winter
- Freeze protection is used. The heater does not freeze under conditions and is adequate for:
  - If the boat is equipped with both a heater and a forced air blower/plenum box

**NOTE**
- If the heater is equipped with a hot water base heater, the heater must be run for at least five minutes before turning off the engine.
- When removing the heater, ensure that the system is primed and filled with coolant.

**Additional Options**
- Winter storage:
  - Move of any water from the core and hoses during winter.
  - The heater is maintenance free except for the re-heat close heater valve fully when not using.

**Trick Release**
- Use a key to remove the top of the heater core, allowing easy access to the re-heat close heater valve fully when not using.

**Trick Release**
- Underwater heater location:
  - The heater is maintenance free except for the re-heat close heater valve fully when not using.

**Trick Release**
- Thrust release:
  - Use a key to remove the top of the heater core, allowing easy access to the re-heat close heater valve fully when not using.

**Trick Release**
- Fresh water cooling system:
  - The fresh water cooling system is self-contained and consists of a water to water heat exchanger.
  - The power sol package consists of a 1.5-l pumps.

**Optional Equipment**
- **Battery**
- **Outlet box**
- **Blower plenum box**

**Installation**
- Install the heater according to manufacturer's instructions.
- After installation, the system is primed and filled with coolant.
- After filling, the system is run for at least five minutes before turning off the engine.
- When removing the heater, ensure that the system is primed and filled with coolant.
DEALER SERVICE AND WARRANTY

Dealer Service

Your MasterCraft Dealer has been carefully chosen to provide you with expert service when needed. He is equipped with the latest service information and techniques for competent and courteous routine maintenance and service. He will also be glad to assist you with “do-it-yourself” replacement parts and advice.

For your safety, when replacing any parts on your MasterCraft, be sure to use genuine MasterCraft replacement parts or parts approved by USCG and ABYC. Never use automotive replacement parts for marine applications. In many cases, automotive parts are not designed to offer you the safety and durability needed for marine use.

Warranty Service

Although MasterCraft boats are highly reliable, a problem may develop on occasion. If the boat is still under warranty, you may bring it to any one of the over 120 dealers in our network. If you have questions regarding warranty coverage, ask your dealer or contact the factory directly by writing to: Warranty Department, MasterCraft Boat Co. (MCB), 869 Binfield Road, Maryville, TN 37801.

Warranty Registration

At the time of purchase of your MasterCraft, you and your dealer must fill out all portions of the warranty registration card. It is extremely important that the registration information card be filled-in at the time of sale and be mailed to the address shown on the card within 14 days of purchase. The information on this card is not only used to validate the warranty, enabling you to receive service, but also allows MCB to comply with the Federal Boating Safety Act, which will ensure your notification should a recall campaign be started. We will also be able to keep you informed of new accessories and service items that may become available to you; and this information will aid law enforcement officials and insurance companies in recovery of stolen boats. Original purchasers should inform MCB of any change of address for the same reasons.

Warranty Claims

To make a claim under warranty, contact the MasterCraft dealer from whom your boat was originally purchased, or the nearest dealer. It is recommended that warranty service on your MasterCraft be performed by the original dealer because of his personal interest in you. Remember, your MasterCraft must be delivered to a dealer within 10 days of discovery of the defect for it to be covered. Proof of purchase may be required by the dealer to substantiate any warranty claim.

During the period of warranty, any authorized MasterCraft dealer will (free of charge), repair or replace, at MCB’s option, any item manufactured by MCB, that proves to be defective, upon examination by MCB, due to faulty workmanship or material from the factory. All replaced parts will become the property of MasterCraft Boat Co.

Owner’s Warranty Responsibilities

Under the terms of this warranty, the owner is responsible for ensuring that the boat is registered for warranty; properly operated, maintained, and stored in accordance with the owner’s manual.

The owner of the boat shall give notice of any and all apparent defects within ten (10) days of discovery and deliver the boat for inspection and repairs at the MasterCraft dealer. The owner is also responsible for returning the boat from the MasterCraft dealer.

NOTE
Owner must read warranty and owner assistance manual.

Owner’s Boating Responsibilities

As the owner of a boat, you have certain responsibilities that must be acknowledged before taking to the water for the first time. In many cases your MasterCraft dealer will be able to help you meet these responsibilities.

Registration - All power boats operated on (federally controlled) navigable waters of the United States must be numbered (registered) in the state of principal use. Contact your state boating authorities for an application for a Certificate of Number.

Insurance - Insurance for your MasterCraft should be obtained as soon as practical for protection against loss by fire, theft, etc. In addition, additional liability protection is recommended. Consult your insurance agent.

Periodic Maintenance - Maintaining your boat in good working condition is a condition of warranty as well as an important safety habit and will add to the resale value. Implement a routine for periodic maintenance, including daily checks. Consult your MasterCraft dealer.

Briefing Passengers - Whenever you are going for an outing, make sure that at least one passenger is familiar with the operation and safety aspects of the boat in case of emergency. Show all passengers the location of emergency equipment and how to use it.

Courtesy - By and large, boaters are a friendly group. Know the rules of the road and learn the peculiar patterns of any body of water. Give fishermen and sailors plenty of room and look for personal water vehicles. Keep speeds down in congested and restricted areas. You are responsible for spotting and avoiding swimmers and slow moving vessels. You are also responsible for any damage caused by your wake. Don’t throw refuse overboard or discharge liquids such as oil. Help to keep boating fun for everyone! Ask your local Coast Guard Auxiliary or state boating authorities for more information on boating courses and the like.

Storage - Proper storage of your boat and trailer during the “off season” will make reactivating a lot easier. A few hours of preparation can save both time and money come spring. Consult your MasterCraft dealer for storage supplies or services.
MASTERCRAFT BOAT COMPANY, INC.

990 Phoenix Rd.
Tuscaloosa, AL 35404

888-877-1701

The Mastercraft Warranty is the original retail limited lifetime warranty on the deck, hull, and structural components of the boat in accordance with the requirements set forth in this warranty. The warranty is limited to the original retail purchaser of the boat and is not transferable. The warranty covers materials and workmanship for as long as the original retail purchaser owns the boat. The warranty does not cover normal wear and tear or damage caused by misuse or abuse. The warranty is subject to the terms and conditions set forth in this warranty. For more information, please contact Mastercraft Boats at 888-877-1701.
## SERVICE LOG

<table>
<thead>
<tr>
<th>Every 50 Hours</th>
<th>Date</th>
<th>Date</th>
<th>Date</th>
<th>Date</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Engine oil change</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Engine starter gear and shaft lubrication</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Safety equipment check</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Every 100 Hours</strong></td>
<td>Date</td>
<td>Date</td>
<td>Date</td>
<td>Date</td>
<td>Date</td>
</tr>
<tr>
<td>Engine oil filter change</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Clean engine flame arrestor</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Clean carburetor fuel screen</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Replace fuel filter element</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Clean fuel tank pick-up</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Engine tune-up</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Change transmission fluid</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Clean battery terminals</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Check propeller shaft coupling alignment</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lubricate steering system</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lubricate shift and throttle cables</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Inspect exhaust flaps for damage*</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Check engine mounts</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Inspect complete fuel system for leakage</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Best accomplished with boat out of water.*