MasterGraft Trailer Manual

The MasterCraft Trailer

Congratulations on your choice of a MasterCraft trailer–the ideal match for MasterCraft boats. The quality, innovation, selection and value are unmatched in the industry.

Please take a few minutes to read this manual completely before the use of your MasterCraft trailer for the first time. It will help you answer most of the remaining questions you may have about your new trailer. If you still have questions after reviewing this manual, be sure to contact your MasterCraft dealer. It is important for you to approach your trailering experience with confidence and as much knowledge as you can.

Every effort has been made to make this manual accurate. All information is based on the latest product information available at the time of printing. Because of our policy of continuous product improvement, we reserve the right to make changes in specifications and models at any time, without notice, and also to discontinue models. The right is also reserved to change specifications, parts or accessories at any time without incurring any obligation to equip the same on models manufactured before the date of the change.

The continuing accuracy of this manual cannot be guaranteed. The illustrations used in this manual are intended only as representative reference views and may not depict actual model component parts. Information about certain components furnished by suppliers other than MasterCraft is provided separately. This information is available from your dealer.

Note: The information given in this manual may not be applicable to international rules of the road. If you have any questions, please contact your local authority.

Visit us on the web at www.mastercraft.com. If you have specific questions about your MasterCraft trailer, feel free to contact your dealer for additional information and guidance.

MasterCraft Boat Company 100 Cherokee Cove Drive, VonoreTN 37885

The maintenance, service and repair procedures described in this Manual should be performed only by trained and authorized factory personnel or dealer technicians. To avoid serious injury or damage to the boat or its components, all steps in each procedure and all safety recommendations should be strictly observed. Failure to follow the procedures described will void any and all warranties and may cause personal injury or damage to components and adversely affect the operation of the boat. CONSUMERS SHOULD NEVER ATTEMPT TO UNDERTAKE THE MAINTENANCE AND REPAIR PROCEDURES DESCRIBED IN THIS MANUAL.



Warnings and Cautions

Throughout this manual the terms "warning" and "caution" appear, alerting the trailer owner or operator to dangerous or potentially dangerous situations that may arise. Those terms have the following respective meanings whenever they appear herein:



This is the safety alert symbol. It is used to alert you to potential personal injury hazards. Obey all safety messages that follow this symbol to avoid possible injury or death.



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



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

Failure to adhere to and comply with the safety warnings and cautions that appear in this manual can lead to serious illness, injury or even death and/or damage to your trailer or the property of others. Beyond these warnings, drivers have a personal responsibility to utilize a common sense approach to the towing experience. MasterCraft offers many proactive approaches to the towing experience, but the consumer is ultimately responsible for a positive and safe involvement in towing and maintaining safety standards for the trailer.

MasterCraft strongly encourages you to cross-reference and read the warnings and cautions within the context in which they are presented by reading and reviewing those sections of this manual. You MUST also be familiar with state and local ordinances regarding driving and towing. MasterCraft also recommends a thorough review of your insurance companies restrictions and coverage for towing, as well as a review and adherence to recommendations presented in the tow vehicle's owners manual.



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

- I. Before towing this trailer, be sure to read and familiarize yourself with this manual. (*Page* 7)
- 2: The total weight of your boat, engine, fuel, water and gear must not exceed the trailer's maximum load-carrying capacity. Overloading can cause serious injury or property damage. Note: Maximum load-carrying capacity is the Gross Vehicle Weight Rate ("GVWR") less the weight of the empty trailer. (Page 8)
- 3: Trying to tow with water-filled bladder(s) may not only cause the total weight limits for the trailer to be exceeded but may also result in the improper distribution of the weight on the trailer thereby making towing difficult and/or causing instability when towing, which can be very dangerous to you and to other motorists. You should NEVER tow with water in the ballast bladders or tanks! (*Page 8*)
- 4: Serious injury or death or property damage can result if the total weight on your loaded trailer exceeds the capacity of the hitch on your tow vehicle. (*Page 11*)
- 5: Failure to properly attach the safety cables and brake actuator breakaway cable between your trailer and the tow vehicle can result in a run-away trailer if the trailer coupler becomes detached from the hitch, which may cause serious injury or death or property damage. (*Page 11*)
- **6:** Failure to properly engage the hitch ball in the coupler ball socket and to securely lock the coupler latch mechanism can cause the trailer to become detached from the tow vehicle while traveling, which may cause serious injury or death or property damage. (*Page 13*)

- 7: To reduce the risk of serious injury, death or property damage, make certain that all the trailer lights are in proper working order. (*Page 14*)
- 8: Maintain the proper torque on the lug nuts attached to the wheel bolts. Failure to do so may result in serious injury or property damage.Your MasterCraft dealer can provide you with the proper torque specifications (measured in foot-pounds). (*Page 15*)
- **9:** Also keep the wheel bearings lubricated. Failure to do so may cause failure and possible wheel loss, which may result in serious injury or death or property damage. (*Page 15*)
- 10: Keep your tires properly inflated. Failure to maintain the correct pressure may result in tire failure and loss of control, which may result in serious injury or death or property damage. (Page 18)
- II: Trailer brakes must be maintained in good working condition. The loss of adequate braking could result in serious injury or death or property damage. (Page 19)
- 12: Do not tow boat with wakeboards or skis left in board and/or ski racks. Doing so may create a hazard for or cause damage to vehicles following behind you as the boards and/or skis may become disengaged while traveling, or may result in damage to your vehicle or boat, which damage would not be covered by your warranty. (Page 9)



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

- I: Some launch ramps may be slippery when wet. Use great care when walking, standing or loading and unloading boats on or around any launch ramps. (*Page 24*)
- 2: Wet brakes may not hold and/or may cause brakes to have diminished performance characteristics. A few braking applications at a slow speed will help to dry them out, but extra care must be used when braking after brakes have become wet. (*Page 24*)

Quick Tips

Here are some quick tips for maintaining your trailer in tip-top condition:

- Chips in the paint, especially on the axles and frame result when these surfaces are subjected to repeated or severe hits by external objects. Usually, this is gravel or asphalt chips thrown up by the rear tires of the tow vehicles. Over time, rust may develop where paint has been chipped away and this is not covered by the trailer's warranty. To avoid this, consider attaching mud flaps behind the tow vehicle's rear tires. Exceptional care should be taken to travel as slowly as practical when traveling on gravel or other loose surfaces.
- To ensure proper operation of the trailer jack, wipe it down and lubricate it on a regular basis.
- If the trailer is backed into salt water, you must completely and thoroughly wash the trailer to retard rusting. Salt water is very corro-

sive, even on galvanized trailers and can corrode the brake system as well. Exposure to salt water can also cause brake pads to stick and malfunction.

• Check the braking system in spring and fall, along with the wheel bearings. If you find anything that appears to be worn, take the trailer to your Master-Craft dealer for a check and possible repair.



- Always approach the trailer slowly as you prepare to load your boat. This will allow you to retain greater control. Hard impact with the trailer or improper alignment on the trailer can result in damage to the boat, the trailer or both, and this is not covered under warranty. Also, if your trailer is equipped with the Boat Buddy System, a hard hit against it could cause damage, which is also not covered by warranty.
- Disc brakes on the trailer require an additional wire hook-up for the trailer lights. This wire is blue and hooks to the back-up light wire circuit on the tow vehicle. It's very important to attach this properly so that the brakes will disengage when you are backing up.

Introduction

With the purchase of your new, custom-built MasterCraft trailer you have added value to your MasterCraft boating enjoyment. You can now enjoy almost any of the thousands of recreational waterways in the country.

As the manufacturer, MasterCraft has provided you with a vehicle designed specifically for many years of attractive, convenient, troublefree service. Now, it is up to you to give it proper care and maintenance to be sure it will continue to perform safely and satisfactorily.

The purpose of this section of the manual is to help you do just that. Please read and follow its warnings and instructions carefully. Also, because all trailers are not exactly alike, be sure to read and comply with any warnings and additional information supplied by MasterCraft in your owners' packet. It's the best way to obtain peak performance.



Before towing this trailer, be sure to read and familiarize yourself with this manual.

A Proper Match



The key to carefree boat trailering is the proper match of boat to trailer. This proper match is only one reason why the Master-Craft engineering department has designed your trailer to carry the full weight of your boat, engine and gear. It also provides the proper support for the boat hull during storage.



The total weight of your boat, engine, fuel, water and gear must not exceed the trailer's maximum load-carrying capacity. Overloading can cause serious injury or property damage. NOTE: Maximum loadcarrying capacity is the Gross Vehicle Weight Rate ("GVWR"), less the weight of the empty trailer.

Load-Carry Capacity

Check the metallic certification label attached to the left, forward side of your trailer. It will show the maximum load-carrying capacity of the trailer. It will also show the Gross Vehicle Weight Rating (GVWR), which is the load-carrying capacity plus the weight of the trailer itself. **Be sure that the total weight of your boat**, **engine**, **gear and trailer do not exceed the GVWR**.

Be especially careful to avoid overloading your trailer by putting heavy baggage, camping gear, etc., inside the boat.

Don't tow the boat with a water-filled bladder for wakeboarding. Empty the contents or the tongue weight will be incorrect.

Don't tow the boat with wakeboards left on the board racks. Doing so may void your warranty and cause damage to your boat or to vehicles following behind you as boards and/or racks may become disengaged.



Trying to tow with water-filled bladder(s) may not only cause the total weight limits for the trailer to be exceeded but may also result in the improper distribution of the weight on the trailer thereby making towing difficult and/or causing instability when towing, which can be very dangerous to you and to other motorists. You should NEVER tow with water in the ballast bladders or tanks!



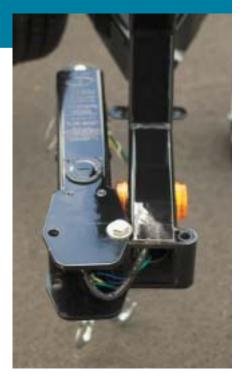
Do not tow boat with wakeboards or skis left in board and/or ski racks. Doing so may create a hazard for or cause damage to vehicles following behind you as the boards and/or skis may become disengaged while traveling, or may result in damage to your vehicle or boat, which damage would not be covered by your warranty.

Weight Distribution

Improper weight distribution can cause a boat trailer to fish-tail (sway from side-to-side) as it moves down the highway, putting excessive strains on both trailer and towing equipment, increasing gas consumption and sometimes causing an accident. The most effective way to guard against fish-tailing is to make sure the weight load on your trailer is properly distributed.

It is extremely important that a minimum of 5-to-10 percent of the total weight of your trailer should be felt at the trailer coupling ball when the tongue is parallel to the ground. A bathroom scale can be used for this determination.

For example, if the gross weight of the trailer, boat and gear is 3,000 pounds, the weight on the tongue



should not be more than 300 pounds, but not less than 150. (Some auto manufacturers say that tongue weight should not exceed 200 pounds when using a weight-carrying, bumper-mounted hitch with full-sized cars.)

The importance of an adequate download on the hitch ball cannot be over-stated.

<u>The Trailer Hitch</u>

There are two basic types of trailer hitches: A weight-carrying hitch and a weight-distributing hitch. A weight-carrying hitch is recommended for your MasterCraft. Before deciding which type of hitch to use, also consult your automobile manufacturer on recommendations for your car or truck.

Be sure that the total weight of your trailer-boat rig does not exceed the hitch's load capacity. The maximum weight it can handle is stamped on the hitch. Also, be sure the hitch ball is the correct size to match the coupler on your trailer. The correct ball diameter is marked on the trailer coupler. The hitch also should provide a place for attaching the trailer's safety cables-two rings or holes on either side of the hitch ball.

A truck or van using a step bumper as the hitch platform will need to have safety cable attachments such as eye-bolts, as well as a hitch ball, installed according to the Society of Automotive Engineers; SAE J684 Standard. Installing a light or heavy-duty hitch can be a major undertaking. The hitch and its installation should meet the SAE J684 Standard. It is recommended that you have the job done by a professional. Your dealer can advise you.

To ensure that the boat is riding properly on the trailer supports, the trailer should be in a level position when hitched to the tow vehicle. The recommended height of the hitch ball, according to the NMMA, is 18to-20 inches to the top of the ball from the ground. More importantly, failure to adjust to this height may prematurely activate the surge brakes.

This can be corrected in a number of different ways. For example, you may install air-pressure adjustable shock absorbers on the tow vehicle, or switch from a weight-carrying hitch to a weight-distributing hitch. Again, consult with your tow vehicle dealer.

In general, for Class 3 rigs (3,500 to 5,000 lbs.), a two-inch (2") ball is the requirement. For Class 4 (5,000 to 10,000 lbs.), a ball of either 2" or 2-5/16" will be required.





Serious injury or death or property damage can result if the total weight on your loaded trailer exceeds the capacity of the hitch on your tow vehicle.

Safety cables

The safety cables on your MasterCraft trailer provide added insurance that it will not become detached from the towing vehicle when underway. Before each trip, you should make sure that the proper cables are correctly attached between the towing vehicle and the trailer.

As noted above, your trailer hitch should provide a place for attaching safety cables, through holes or rings on both sides of the hitch ball. It is strongly recommended—and in fact, most states require it—that you criss-cross the cables under the trailer tongue. The cables on the left side of the trailer tongue should be attached to the hole or ring on the right side of the hitch ball, and the right cable should be attached to the hole or ring on the left side of the hitch ball. This will prevent the trailer tongue from dropping to the road if the trailer coupler separates from the hitch ball.

The cables should be rigged as tight as possible, with just enough slack to permit tight turns. If for any reason you should find it necessary to replace a safety cable, do not substitute with any part other than a genuine MasterCraft cable.

Note also that late-model trailers are equipped with a surge brake break-away cable. This should be attached to the tow vehicle, making sure there is enough slack for tight turns.



Failure to properly attach the safety cables and brake actuator breakaway cable between your trailer and the tow vehicle can result in a run-away trailer if the trailer coupler becomes detached from the hitch, which may cause serious injury or death or property damage.

Trailer Winch Assembly

Upon each use of the winch, check for the proper ratchet operation. Do not use the winch if it is damaged. Seek immediate repairs.

Maintain a firm grip on the winch handle at all times. Never release the handle when the ratchet lever is in the unlocked position



with a load on the winch. The handle will spin violently under these conditions, which could cause personal injury.

Never use the winch handle as a handle for pulling or maneuvering the entire trailer or other equipment. Never pull on the winch handle against a locked ratchet.

Never exceed the rated capacity of the winch. Excessive loads may cause premature failure and result in personal injury.

Never apply a load on the winch with the strap fully extended. Keep at least two full turns on the strap that's on the reel.

Inspect the condition of the winch strap. Using one that is damaged or worn can result in serious personal injury or damage.

It is not recommended to use the winch as the sole method for loading the boat onto the trailer. However, it is a satisfactory assistant in the event of engine power loss.

Check the winch straps frequently. The strength in these can deteriorate from exposure to weather, ozone and ultraviolet light. If a strap becomes frayed or worn, replace it immediately with a new one.

A heavy grease should be applied to the gears to provide a freerunning drive and to minimize the effort you have to expend to crank the boat on the trailer.

The winch is intended solely as an aid to loading the boat on the trailer. It is not intended or adequate to be the sole means of holding the boat in place while trailering. Proper tie-downs fore and aft must be used.

Warnings at Tongue

Attention should be paid to all warning labels. Pay particular attention to the warning labels that appear on the pivot tongue.



MasterCylinder Level

Regularly verify that the brake fluid level comes to the top of the reservoir. MasterCraft specification for brake fluid is type DOT3 Premium.

As part of an annual maintenance program, consumers should check the fluid level both at the beginning and at the conclusion of the boating season. If at any time you suspect a braking issue, check the fluid level.



Trailer Coupling

Your trailer coupling is designed to have the required strength when a hitch ball is in its socket. It is therefore necessary to exercise care when the trailer is disconnected from the hitch that the coupling is not subjected to any impact.



Failure to properly engage the hitch ball in the coupler ball socket and to securely lock the coupler latch mechanism can cause the trailer to become



detached from the tow vehicle while traveling, which may cause serious injury or death or property damage. The coupling should not be allowed to lay on the ground where dirt or sand can enter the socket. This can cause excessive wear when the trailer is towed again, or it can cause the locking mechanism to jam.

If the coupler becomes damaged it must be repaired or replaced before towing. When the coupling is placed on the ball, the latch should close firmly. Keep the latch mechanism lightly oiled and clean. *Always install a lock pin in the coupler to promote safety.*



To reduce the risk of serious injury, death or property damage, make certain that all the trailer lights are in proper working order.

lights

A special wiring harness for connecting the trailer lights to the lighting system of the tow vehicle comes with your trailer. Be sure the white ground wire from the connector is attached to the frame so that the hitch



ball does not have to act as an electrical connection. Always have your light plug hooked up when backing your trailer. Disc brakes will not release without the special connector wired to your back-up lights on your tow vehicle.

Note: Some late-model cars have yellow turn signals and separate (red) stop lights. In this case, a special wiring adapter will have to be installed on the automobile.

Here are a few things you can do to keep your trailer lighting system in good working order:

- Be sure the white ground wire is properly connected to the trailer frame. Replace any parts that are damaged or badly worn.
- A small amount of waterproof grease on the plug contacts and light bulb bases will help prevent rust and corrosion.
- Before every trip, check for burned-out or broken bulbs, cracked or broken light lenses, etc.
- Be sure to unplug the light each time before backing into the water. Extra plugs are available from your MasterCraft dealer.

Wheels and Hubs

Because they are often exposed to water, trailer wheels and tires require more attention than the wheels on your family car. The three major items to check are lug nuts, lubrication and the tire pressure.





Maintain the proper torque on the lug nuts attached to the wheel bolts. Failure to do so may result in serious injury or property damage.Your MasterCraft dealer can provide you with the proper torque specifications (measured in foot-pounds).



Also keep the wheel bearings lubricated. Failure to do so may cause failure and possible wheel loss, which may result in serious injury or death or property damage. As part of the regular maintenance, keep the axle assembly properly lubricated. This procedure is best performed by your MasterCraft dealer. The fill plug in the hub nose must be removed so that 80- to 90-weight motor oil can be added. "Never-seize compound" is applied to the fill plug, which is re-installed and torqued to 7-ft-lbs. If at any time the oil in the hub appears milky, the system must be serviced immediately.

Lug Nuts or Wheel Bolts

Loose lug nuts can cause more than just an annoying wheel wobbleyou could lose a wheel. Before each trip check for loose or missing lug nuts/ wheel bolts.

When tightening the lug nuts, use the correct sized-wrench. The wrong size can round-off the lug nuts and render them useless. If you lose a lug nut, replace it promptly. The correct size varies with different models, so you should verify the information with your MasterCraft dealer.

Take special care to ensure that the replacement lug nut is the correct type. While the threads of the lug nut may match, it may be a



size that does not hold the wheel securely against the hub, even when fully tightened. Be certain a replacement lug nut is an exact match for the original.

Use the following pattern to tighten lug nuts. On first torquing pass: Bring up to 45-ft-lbs. On second pass: Bring up to 70-ftlbs. On third pass: Bring up to 90-ft-lbs.

<u>Lubrication</u>

Currently, trailers feature oil-bath bearings. Earlier models were equipped with easy lubricating hubs. However, water invades and seeps through the smallest opening. When a warm hub is submerged in cold water, any air inside the hub will contact and draw water through the best of seals.

Trailers equipped with the Bearing Buddy II with Auto Check simplify the process of keeping watch for proper lubrication. If the blue ring is fully extended (*about* 1/4-*inch* extruded), you have adequate lubrication. As the grease dissipates, the ring will move back into the shell. When the blue ring is flush with the Bearing Buddy shell, it is time to re-lubricate.

Your best protection against wheel bearing damage from the water is to always keep your wheel assembly properly lubricated. Periodically, view the site window located on the axle hub and determine whether the lubricant appears milky. This would indicate water intrusion and the lubricant should be replaced. Also check the seals for damage. When on a trip, make it a habit to check the wheel hubs every time you stop for gas or refreshments. If the hub feels abnormally hot, the bearings and brakes should be inspected before continuing your trip.

Wheel Bearings and Braking System

Wheel bearings and the braking system on the trailer should be inspected annually. If the bearings or race show signs of scoring, they should be replaced, as well as any worn brake parts. Your MasterCraft dealer should perform this inspection and repair.





Keep your tires properly inflated. Failure to maintain the correct pressure may result in tire failure and loss of control, which may result in serious injury or death or property damage.

Tires

The most common cause of trailer tire trouble is under-inflation. It is important, therefore, that you always maintain correct air pressure as indicated by the tire manufacturer on the



tire's sidewalls. Always check the air pressure when the tires are cold. Tires heat up and the air pressure increases after traveling short distances. Inflate tires to the proper air pressure as noted on the sidewall of the tires.

When your trailer tires become worn or damaged, replace them with new tires. Your MasterCraft dealer can help you.

For safety and convenience, it is recommended that you always carry a spare wheel and tire.

Brakes

In most states, trailers with a Gross Vehicle Weight Rating (GVWR) of 1,500 pounds or more are required by law to have brakes on all wheels. (Auto manufacturers generally recommend brakes even with lighter trailers.)



Trailer brakes must be maintained in good working condition. The loss of adequate braking could result in serious injury or death or property damage.



Your MasterCraft trailer brakes are designed to operate automatically when the tow vehicle's brakes are applied. These are known as surge brakes. When the tow vehicle slows down or stops, the forward momentum (*surge*) of the trailer against the hitch ball applies pressure to a master cylinder in the trailer coupler. This pressure acti-

vates the trailer brakes through a hydraulic system, much like the brakes on your automobile.

Try out your brakes before each trip.On a regular basis, have your brake linings inspected, necessary adjustments made and any damage or worn parts replaced.

Wet brakes usually do not hold especially well. If your wheels have been in water, several brake applications at slow speeds should dry them out.

Trailer Jack

MasterCraft recommends using the jack to lift the coupling of a loaded trailer from the hitch ball and for moving the trailer about when it is disconnected from the towing vehicle. Rotate the trailer jack to the vertical position and engage the locking pin before placing a load on the trailer jack.



Like any mechanical assembly, a jack requires maintenance to function properly over a long period of time. The drive gear and the rack-and-pinion should be greased. The caster and wheel bearing should be oiled frequently. Failure to swing up the jack before towing may result in damage to your trailer.

Tie-Downs

Ensuring that your MasterCraft is held securely in place on the trailer's hull support, especially when underway, is extremely important. If it is not firmly and properly secured, your boat can be damaged as



it bounces against the hull supports.

MasterCraft's Boat Buddy System is located on the winch stand. Ask your MasterCraft dealer to demonstrate the proper use of the Boat Buddy System. A separate winch strap is provided and should then be attached to secure the boat to the bow stop.

As noted previously, it is very important to be sure that the transom of your MasterCraft boat is resting fully and securely on the supports provided at the rear end of the trailer, and that it remains in place when parked or underway.

Tie-downs have been added on both bow and transom of the boat and must be used while trailering.

Hitching Up

- Hitch only to the ball size marked on the coupler.
- Be certain the ball clamp captures the ball and lever or the handwell is fully closed or tightened. Insert safety pin or optional lock pin.

- Cross the safety cables under the coupling.
- Allow only enough slack in the safety cables to handle turns. When hitching your trailer, you should always observe each item of the "Trailer Check List." Hitching your trailer to your tow vehicle can be a one-person job, but it is easier if you have a second person to help you.

Here are the basic steps:

- Back your tow vehicle as close as possible to the trailer. It's easierand safer- than pulling the trailer to your car or truck.
- Check to be sure the coupler-locking device is released.
- Raise the front end of the trailer with your jack, position the coupler directly over the hitch ball and lower until it is all the way down onto the ball.
- Check under the coupling to be certain that the ball clamp is below the ball and not riding on top of the ball.
- Lock the coupler to the hitch ball. To be sure it is in the locked position and securely in place, lift up on the trailer jack. If it comes loose from the ball, unlock and go back to the third step above.
- Be certain the jack is in the fully raised and locked position.
- Your MasterCraft trailer has a surge brake-away cable. Attach it to the tow vehicle, making sure there is enough slack for tight turns.
- Attach the safety cables.
- Connect the trailer wiring harness to the lighting system of the tow vehicle and check the operation.



Trailer Techniques

With a boat trailer in tow, you are operating a ve-

hicle combination that is longer, heavier and sometimes wider and taller than your car or truck. This means you will have to make a few adjustments in your normal driving practices to compensate for the difference. Here are a few tips to help you enjoy trailering:

• Take a shakedown cruise. Before you make your first major trip or



first trip to the lake with your trailer, make at least one short trial run to familiarize yourself with its handling characteristics. Be sure everything is working properly.

• Slow down. There is less strain on your car, trailer and boat at moderate to slow speeds. Also, many states have lower speed limits for vehicles towing trailers.

• Allow extra time and space. You'll need more of both when passing and stopping.

• Check the rear view mirrors. Install outside rear view mirrors on both sides of the tow vehicle. Make it a habit to check the mirrors at frequent intervals to be sure your trailer and boat are riding properly.

• Swing wider. Trailer wheels are closer to the inside of turns than the wheels on

your car or truck. This means you should swing wider at curves and corners.

- Pass with extra care. With a trailer in tow, you'll need more time and distance to accelerate, get around a slower vehicle and return to the right lane.
- Watch the wind. Be prepared for sudden changes in air pressure and/or wind buffeting when larger vehicles pass you from either direction. Slow down a little and keep a firm hand on the steering wheel.
- Conserve fuel. Wind resistance against the boat and trailer can reduce your gas mileage significantly, especially at higher speeds.
- Avoid sudden stops and starts. Even though your trailer has brakes, a sudden stop can cause it to skid, slide or even jack-knife. (*Be especially careful to avoid the necessity for quick stops while turning*.) Smooth, gradual starts and stops will improve your gas mileage and put less strain on your tie-downs, etc.
- Signal your intentions. Well before you stop, turn, change lanes or pass, use your light signals to let other vehicles know what you intend to do.
- Shift to a lower gear. If your tow vehicle has a manual transmission, traveling in lower gears when going up steep hills or over sand, gravel or dirt roads will ease the load on your engine and transmission. If your tow vehicle has an overdrive gear (manual or automatic) you may get better gas mileage in a lower gear. Check the automobile's owners manual for their recommended towing specifications.

- Always be courteous. Make it as easy as possible for faster-moving vehicles to pass you. Remain in the slower lane and be prepared to slow down if they need extra time to return to their proper lane.
- Don't tailgate. Allow at least one combined car-and-trailer length between you and the car ahead for every 10 MPH you are traveling.

If a problem occurs, the general rule is to stay calm. Don't panic and don't do anything any more suddenly or violently than you have to.

A sudden bumping or fan-tailing may be a flat tire. Don't jam on the brakes or mash the accelerator to try to drive out of it. Stop slowly and in as straight a line as possible. If conditions permit, allow your rig to coast at a very slow speed and try to avoid braking, except when your wheels are straight ahead and the trailer and tow vehicle are in line.

If your trailer begins to fish-tail as you accelerate to highway speed, back off a little and it should cease. If it begins again as you accelerate, stop and check your load. If it is not evenly distributed side-to-side, or it is too far back so that the hitch load becomes too low, the result can be this condition. Re-distribute the load forward and correct the improper loading before continuing.

Launching

Every MasterCraft owner develops their own favorite launching technique. Until you do, here are a few helpful tips:

• Check the ramp first. Whether you're launching from an unimproved or surfaced ramp, check it out before starting your launching procedure. How steep is it? Is the surface firm enough to support the



weight of the trailer rig and tow vehicle? Is it wide enough? How deep is the water at the end of the ramp?



Some launch ramps may be slippery when wet. Use great care when walking, standing or loading and unloading boats on or around any launch ramps.

- **Prepare for launching.** Install your drain plugs and detach the trailer tie-downs.
- Back your trailer down to the ramp. If possible have someone stand to one side of the ramp to direct you. Backing up a trailer can be tricky. A good way to simplify the procedure is to grasp the steering wheel with one hand at its lowest point (6:00). When you want the trailer to go right, move your hand on the wheel to the right; to make the trailer go left, move your hand to the left.
- Back your trailer into the water until the trailer tire wheel well is about two inches from the top of the water surface. (This may vary with the angle of the ramp.) Set the parking brake and shift into park (*automatic transmission*) or first gear (*manual transmission*). Shut off the engine. Unlock the Boat Buddy latch and winch hook; then back the boat off the trailer.

To re-load the boat on the trailer, simply reverse the above procedures, including setting your Boat Buddy latch to the proper position, and drive your boat on the trailer at a slow pace. Before loading, we recommend you clean any dirt or sand off the rollers and bunks. Sand on these can abrade the boat's bottom while trailering. Be sure to back in and completely wet the trailer bunks, then pull forward to the loading position.

Be certain all the boat tie-downs are properly fastened before departing from the launching ramp area.



Wet brakes may not hold and/or may cause brakes to have diminished performance characteristics. A few braking applications at a slow speed will help to dry them out, but extra care must be used when braking after brakes have become wet.

Storage

When your MasterCraft trailer will not be in use for several months, you can help it continue to give you good performance by taking the following steps:



• If at all possible, park your boat-trailer rig in a protected area such as a garage, carport or similar shelter.

• Service or re-pack the wheel bearings.

• Loosen the tie-downs and winch strap, but be sure the boat is still resting properly on the hull supports.

• Remove the drain plug and elevate the trailer tongue slightly (*just an inch or two*) to allow water to drain out so the boat will be dry. Tie the plugs to something obvious-like the steering wheel-so you will remember to replace the drain plugs before your next trip.

• A good time to touch up rust spots, nicks and chips is when the trailer is in storage.

- Replace damaged tie-downs, winch straps, wiring, etc.
- Lubricate moving parts such as the rollers and winch, as well as the ball coupler.
- Tighten any loose nuts and bolts.

Trailering Tips

- The jack and lug wrench that came with your tow vehicle may also work on your trailer, but don't count on it! Check to make sure.
- Your trailer will look better and last longer if you rinse it off with fresh water several times a year. If your boat is in brackish or salt water, the trailer should be rinsed thoroughly after every trip. An annual washing with a mild detergent and waxing with an auto wax also will help to keep your trailer bright and clean.
- Make up a special Boating Kit and carry it with you on all trips.
- The kit should include a spare wheel and tire, lug wrench, wheel chocks, bearing grease, spare strap for tie-downs and winch, extra lights, wheel bearings and road flares.
- Some insurance policies do not provide coverage when towing a trailer. Check your policy, or call your insurance agent to be sure you are fully covered.

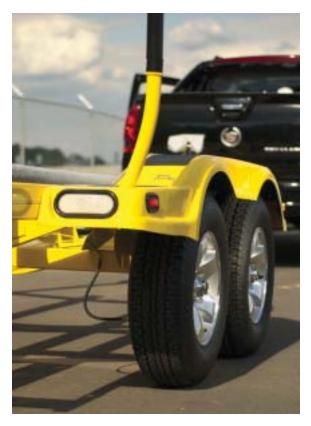


Trailering Check List

Never tow this trailer before you check to be sure:

- Coupler, hitch and hitch ball are of the same size.
- Coupler and safety cables are safely secured to the hitch.
- Check all fasteners for proper tightness.
- The boat is securely anchored to the trailer. *(The winch strap by itself is not a satisfactory tie-down!)*
- The wheel lug nuts are properly tightened.
- The wheel bearings are properly adjusted and maintained.
- The load is within the maximum load-carrying capacity of both the trailer and the tow vehicle.
- The tires are properly inflated.
- All trailer lights are working properly.
- Trailer brakes are properly adjusted and working.

Before towing ensure that the tower on the boat (if so equipped) is secure, whether it is upright and locked in place or has been lowered. Also be certain that there is sufficient overhead clearance before removing the boat/trailer from cover, or when towing that the unit will clear any overhead items such as trees, bridges, overhead power lines, overpasses, etc.



This trailer is manufactured to meet the applicable federal safety standards at the time of manufacture. Check the local and state requirements regarding any additional equipment that may be required.

Note: Trailer laws covering such things as brakes, lights, safety cables, licenses, etc., will vary from state to state. Be sure that your trailer is in full compliance with applicable state laws. Your MasterCraft dealer can help you in this regard. Otherwise, contact your nearest state motor vehicle department.

Limited Warranty Statement

(NOTE: The MasterCraft Limited Warranty Statement was written to cover boats and/or trailers.)

I. <u>Limited Warranty and Term</u>. MasterCraft Boat Company, Inc. ("MasterCraft") warrants to the original retail purchaser that the following components of each new boat shall be free from material defects in materials and workmanship to the extent set forth below, under normal use and when operated and maintained in accordance with MasterCraft's instructions, for the period indicated:

1.1 Deck, Hull, Liner and Stringers. From the date of the original retail purchase, the deck, hull, liner and stringer system (collectively, "Structural Components") is warranted for as long as the original purchaser owns the boat.

1.2 Gel Coat. Because environmental operating conditions and customer maintenance/care considerations are factors which have a significant effect on the condition and the durability of the gel coat which is applied to all MasterCraft boats at the factory, MasterCraft does not provide, and hereby expressly disclaims, any warranty on the gel coat covering the exterior surfaces of the boat. Therefore, cosmetic issues relating to the appearance of the gel coat such as blisters, scratches, discoloration or fading are not covered by this Limited Warranty. However, in the event that the gel coat is materially damaged due to a covered defect to the boat's Structural Components, the damage to the gel coat will be covered under this Limited Warranty in connection with the warranty repair under Section 1.1 hereof. Any material defects in the gel coat which are determined by MasterCraft, in its sole discretion, to have been caused by the application/installation of the gel coat at the factory, will be covered under this Limited Warranty. Stress crazing/cracking of the gel coat is considered a cosmetic issue, and therefore, is not covered under this Limited Warranty, but will be reviewed on a case-by-case basis as a matter of customer good will. All communications regarding any issues relating to gel coat should be addressed first to the Customer Services Representative at the MasterCraft authorized Dealership prior to communication with MasterCraft. Review of any gel coat issues by MasterCraft will require digital or 35 mm photos or video images which clearly show the alleged conditions.

1.3 <u>Other Component Parts (Excluding Engine and Transmission).</u> One (1) year from the date of the original retail purchase of the boat or the initial use of the boat, whichever first occurs.

1.4 <u>Trailer and Trailer Component Parts.</u> One (1) year from the date of the original retail purchase of the boat or the initial use of the boat, whichever first occurs.

2 Engine and Transmission. The engines used in MasterCraft boats are supplied by Indmar Products Company, Inc., in Millington, Tennessee ("Indmar"). Indmar provides a separate warranty of three (3) years from the date of the original retail purchase of the boat or the initial use of the boat, whichever first occurs for the engine and transmission (the "Indmar Power Train Warranty"). A statement of the Indmar Power Train Warranty is provided separately to the original retail purchaser. MasterCraft provides no independent warranty with regard to the engine and transmission; however, the owner may contact MasterCraft at the address or telephone number listed in <u>Section</u> Z below to obtain contact information for making claims or inquiries under the Indmar Power Train Warranty.

3. Warranty Conditions, Limitations and Exclusions. MasterCraft boats are manufactured by trained craftsmen from high-quality materials and components. However, conditions outside MasterCraft's control require specific limitations on, and exclusions from, coverage under this warranty. The Limited Warranty on the Structural Components set forth in Section 1(a) above does not cover or include any other components fastened or applied to the hull or deck. This Limited Warranty constitutes the final, complete and exclusive statement of warranty terms, and no other person or entity is authorized to make any other warranties or representations on behalf of MasterCraft. Furthermore, the Limited Warranty set forth in Section 1 (including all subsections) hereof does not cover the following:

(a) damage caused by misuse, negligence, accident, collision or impact with any object;

(b) damage caused by any improper alteration or modification to the boat or any of its component parts or accessories, including damage resulting from alteration, modification, repair or replacement in such a way as to increase the cubic-inch capacity or horsepower output of the engine and boat as originally manufactured;

(c) damage caused by the use of improper or contaminated fuel or fluids;

(d) damage caused by the use of customer-applied chemicals or accidental spills;

(e) damage caused by failure to maintain the boat in accordance with the maintenance provisions in the *Owners Manual* or improper maintenance of the boat;

 $(f) \quad damage resulting from the use of the boat for any racing, speed, commercial competition or performance demonstration;$

(g) damage resulting from use of the boat for rental, commercial or industrial purposes;

(h) damage to hardware and other components fastened or adhered to the hull, deck or liner;

(i) damage caused by fire, theft, freezing, vandalism, explosion, lightning, wind, hail, storms, flooding, or other natural disaster;

(j) damage to any component parts and accessories not manufactured by MasterCraft, including but not limited to the engine, drivetrain, transmission, propeller, shift and throttle control levers and cables, pumps, blowers, windshields, canvas, upholstery, towers and accessories, instrumentation and steering systems; however, such items may be warranted by the individual manufacturer, and if possible, MasterCraft will provide the owner with a copy of the manufacturer's warranty;

- (k) damage caused by use of any non-MasterCraft trailer;
- (1) damage caused by improper support of boat on davits, hoist system or boat lift of any kind;

(m) damage to paints, varnishes, gel coat surfaces and colors, chrome-plated or anodized finishes, floor and floor covers and any other surface coatings, as well as damage due to in-water storage without proper barrier coat and bottom paint (NOTE: Although MasterCraft uses the highestgrade gel coat materials, a condition may develop where the bottom of the boat may show signs of discoloration and/or blisters if the boat is left in the water for long periods of time, and therefore, a proper barrier coat and bottom paint should be used whenever it is anticipated that the boat will be left in the water for an extended period of time);

(n) damage to the trailer and its parts or components due to abrasions, rock chips, rust, improper care or maintenance, or use in salt or brackish water; however, the finishes of galvanized trailers, which are designed for use in salt or brackish water, are warranted to be free from damage resulting from use in salt or brackish water for one (1) year from the date of the original retail purchase or the initial use of the trailer, whichever first occurs;

(o) damage caused by dealer-installed options or accessories;

(p) damage caused by consumer-installed options or accessories;

and/or

(q) all warranted coverage will expire after ninety (90) days on boats used for commercial purposes.

4. <u>Disclaimer and Limitation of Implied Warranties</u>. THE EXPRESS LIMITED WARRANTY SET FORTH HEREIN IS IN LIEU OF ALL OTHER WARRANTIES AND REPRESENTATIONS, EXPRESSOR IMPLIED,

AND TO THE MAXIMUM EXTENT PERMITTED BY APPLICABLE LAW, MASTERCRAFT DISCLAIMS, AND THE OWNER HEREBY EXPRESSLY WAIVES, ANY AND ALL OTHER WARRANTIES OR REPRESENTATIONS OR ANY KIND OR NATURE, INCLUDING, BUT NOT LIMITED TO, IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, OTHER THAN THOSE WARRANTIES WHICH ARE IMPLIED BY, AND ARE INCAPABLE OF EXCLUSION, RESTRICTION OR MODIFICATION UNDER, APPLICABLE LAW. THE TERM OF ANY IMPLIED WARRANTIES THAT CANNOT BE DISCLAIMED UNDER APPLICABLE LAW, INCLUDING, BUT NOT LIMITED TO, IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, SHALL BE LIMITED TO THE DURATION OF THE FOREGOING EXPRESS WARRANTY PERIODS APPLICABLE TO THE RESPECTIVE COMPONENTS. SOME STATES DO NOT ALLOW THE EXCLUSION OF IMPLIED WARRANTIES AND/OR DO NOT ALLOW LIMITATIONS ON HOW LONG AN IMPLIED WARRANTY LASTS, SO THE ABOVE LIMITATIONS MAY NOT APPLY TO YOU. THIS LIMITED WARRANTY GIVES YOU SPECIFIC LEGAL RIGHTS. YOU MAY HAVE OTHER RIGHTS WHICH VARY FROM STATE TO STATE.

5. Limitation of Liability.

5.1 Liability Limitation; Exclusion of Consequential Damages. This warranty is for the benefit of the owner and MasterCraft, and shall not create or evidence any right in any third party. THE REPAIR OR REPLACEMENT OF DEFECTIVE COMPONENT PARTS AS PROVIDED UNDER THIS LIMITED WARRANTY IS THE EXCLUSIVE REMEDY OF THE CONSUMER. TO THE MAXIMUM EXTENT PERMITTED BY APPLICABLE LAW, IN NO EVENTSHALL MASTERCRAFT BE LIABLE FOR ANY INCIDENTAL, CONSEQUENTIAL, SPECIAL, INDIRECT, PUNITIVE OR EXEMPLARY DAMAGES OR LOST PROFITS WHATSOEVER ARISINGOUT OF THE USE OR INABILITY TO USE THE BOAT OR ANY COMPONENT PART THEREOF, OR FOR ANY BREACH OF THIS WARRANTY OR OTHERWISE, EVEN IF MASTERCRAFT HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES ORS COULD REASONABLY HAVE BEEN FORESEEN BY MASTERCRAFT. However, some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you.

5.2 Purchase Price Limitation. In any event, MasterCraft's entire liability under any provision of this Limited Warranty shall be limited to the repair or replacement of the boat, trailer or component part, or the refund of the purchase price paid by the customer for the boat, trailer or component part found to be defective within the applicable warranty period. This shall constitute MasterCraft's sole liability and obligation in the event of any rolain arising out of its performance or non-performance of fany provision of this Limited Warranty. Because some states and jurisdictions do not allow the exclusion or limitation of liability, the above limitations may not apply to you.

Transfer of Limited Warranty. Upon the first sale, conveyance or other transfer of the boat or 6. trailer by the original retail purchaser, any remaining unexpired Limited Warranty coverage shall be transferred to the second owner and shall remain in effect for the remainder of the applicable warranty period(s) set forth in Sections 1.1, 1.2, 1.3 and 1.4 above (which warranty periods begin to run from the date of the original retail purchase of the boat or trailer, or the first use of the boat or trailer, whichever first occurs, as applicable), upon delivery of the warranty transfer card and payment of the applicable warranty transfer fee to MasterCraft. With respect to the Lifetime Limited Warranty (granted only to the original retail purchaser) on the Structural Components set forth in Section 1.1 above, if the sale, conveyance or other transfer of the boat by the original retail purchaser to another person or entity occurs within three (3) years of the date of the original retail purchase of the boat by the original retail purchaser, then the warranty on the Structural Components shall be transferred to the second owner and shall continue in effect for a period of ten (10) years from the date of the original retail purchase of the boat by the original retail purchaser. If the sale, transfer or conveyance of the boat by the original retail purchaser occurs more than three (3) years after the date of the original retail purchase of the boat, then the Limited Warranty on Structural Components (as well as all other warranties) shall be void as of the date of transfer and shall not be transferable to the second owner.

Only one (1) transfer under the provisions of this <u>Section 6</u> (from the original retail purchaser to the second owner), within the applicable time period, may be made. In the event of a sale or transfer of the boat or trailer by a second owner to a subsequent purchaser, all coverage under this Limited Warranty shall immediately be terminated and the Limited Warranty shall become null and void. No transfer of this Limited Warranty will operate to extend the warranty periods set forth in <u>Section 1</u> above. In order to effectuate the transfer of the Limited Warranty, the original retail purchaser and the new owner must properly fill out the warranty transfer card found in the back of the Owner's Manual and deliver the completed card, together with a check made payable to "MasterCraft Boat Company, Inc." in the amount of the warranty transfer fee, via U.S. mail, postage prepaid, to MasterCraft at the address shown on the warranty transfer card. The card and check for the warranty transfer fee must be post-marked within the time period specified above in this <u>Section 6</u> in order for the warranty transfer from the original retail purchaser to the second owner to be effective.

7. <u>Warranty Claims</u>. In order to maintain warranty service under this Limited Warranty, the owner must return the defective boat or component part to an authorized MasterCraft repair facility, or to MasterCraft's factory at the below address, within the applicable warranty period. for questions regarding warranty service or to obtain information regarding the nearest authorized MasterCraft repair facility, please contact MasterCraft at the following address or telephone number:

MasterCraft Boat Company, Inc. Attention: Warranty/Customer Service Dept. 100 Cherokee Cove Drive Vonore, Tennessee 37885 1-800-443-8774

Subject to the terms of this Limited Warranty, any covered boat or component part with a material defect in materials or workmanship which is returned to an authorized MasterCraft repair facility or MasterCraft's factory during the appropriate warranty period will be repaired or replaced, at MasterCraft's sole option, without charge to the owner for parts and labor. This provision is subject to the following terms and conditions:

(a) MasterCraft shall be obligated only to repair or replace those items that prove defective, in MasterCraft's sole discretion, upon examination by MasterCraft's authorized repair facility or MasterCraft's own personnel, as applicable.

(b) MasterCraft warrants its repairs or replacements only for the remainder of the applicable warranty period.

(c) MasterCraft shall, in its sole discretion, fulfill its obligation to repair or replace any defective item at its factory or authorized repair facility.

(d) The owner shall be responsible for all costs associated with the transportation of the boat, towing bills, trailer or component part(s) to the authorized MasterCraft facility and for any return transportation.

8. <u>No Modification of Warranty</u>. No oral or written information, advice or communication of any nature by or from MasterCraft or its representatives, employees, dealers, agents, distributors or suppliers shall create a warranty or in any manner increase or modify the scope of this Limited Warranty.

Maintenance

Before Initial Use:

• Read the Owners Manual completely.

Before Every Trip:

- Verify that the tongue weight and load is within proper specification.
- Check the brake fluid reservoir to ensure it is at least threequarters full.
- Examine the actuator for wear, bent parts, corroded/seized parts or other damage.
- Test the actuator to verify the brakes are working prior to use.
- Verify all lights are working properly.
- Verify the coupler latch is locked to the ball properly.
- Verify the safety cables are properly attached to the tow vehicle.
- Verify the emergency brake cable is attached properly to the tow vehicle.
- Verify the boat is properly loaded on the trailer and tied-down to the trailer.
- Check tire pressure.
- Ensure the lug nuts are properly torqued. (This must also been done after the first 25 miles of towing and every 100 miles thereafter.)
- Verify the wheel jack is retracted and swung up prior to towing.
- Verify the tow vehicle has **not** exceeded the load capacity prior to towing.
- Verify the oil level is proper for the wheel bearings equipped with the oil bath system.
- Check the guide pole bars to ensure they are tight.

Every three to six months or 250 miles (in addition to above):

- Grease the trailer jack.
- Oil the trailer jack handle in accordance with the manufacturers' recommendations.
- Examine the entire trailer for any abnormalities or damage.
- Examine the trailer bunks for any signs of abnormal wear.
- Lubricate all the rollers on the trailer with a *light* coat of oil.

Annually (in addition to the above):

• Have the braking and suspension system inspected by a certified technician.