



## NORTH RIVER OUTBOARD BOAT MODELS MAINTENANCE AND OPERATION

### Maintenance Schedule

**Refer to the engine manufacturers Maintenance Schedule to ensure that all of the maintenance items listed are checked and replaced at the recommended hours.**

### Routine Maintenance

Routine maintenance provides the best solution for making sure that the engine is ready when you are. The following are some routine service points:

- The engine oil level should be checked daily. It is recommended that the oil be checked just before the engine is started for the first time for the day. The oil level should be between the 'ADD' and the 'FULL' marks on the dipstick.
- Keep the fuel tank filled. A full tank of fuel reduces the possibility of condensation forming in the fuel tank and moisture entering the fuel system.
- The water separating fuel filter should be replaced annually or if you have trouble with water in your fuel.
- Check all hoses, clamps, motor mount bolts, etc. on a regular basis for tightness and condition.
- Make frequent checks for engine oil and fuel leaks.
- Repair any oil or fuel leaks.
- Check battery condition and cables frequently clean as necessary.
- Keep the engine air filter and/or spark arrestor clean (if applicable).
- Monitor engine coolant temperature (if applicable).
- Monitor engine oil pressure (if applicable).
- Check voltmeter and charging system.
- Inspect the sacrificial anodes on a regular basis. Do not change or add anodes without consulting an authorized service center.



“WARNING: Operating, servicing and maintaining a recreational marine vessel can expose you to chemicals including engine exhaust, carbon monoxide, phthalates, and lead, which are known to the State of California to cause cancer and birth defects or other reproductive harm. To minimize exposure, avoid breathing exhaust, service your vessel in a well-ventilated area and wear gloves or wash your hands frequently when servicing this vessel. For more information go to [www.P65warnings.ca.gov/marine](http://www.P65warnings.ca.gov/marine).”

**CAUTION: Neglecting proper maintenance can cause premature component failures.**

**Your dealership is a valuable resource of information, support and strives to provide the best service after the sale with one common goal; your complete satisfaction!**

### **Saltwater Care and Maintenance**

- After running your boat in saltwater, it is required to flush the engine with freshwater (see engine owners manual). Wash the entire boat, inside and out, as well as the trailer with freshwater immediately after pulling the boat out of the water. Washing the boat is a critical means of reducing the risk of crevice corrosion and paint related corrosion. Washing should include: complete flushing of the entire boat inside and out using freshwater and boat soap.
- We also recommend that you wax your boat's painted surfaces as often as possible; especially prior to using your boat in saltwater (***do not use wax or polish on the painted surfaces for the first 30 days***). North River Boats also recommends the use of aftermarket products (Salt-X, Salt Away, and Salt Terminator) that can help with saltwater corrosion. Please carefully follow the directions on the container for use of these types of products.
- Inspect the Sacrificial Anode on a regular basis. North River Boats recommends using **Aluminum Sacrificial Anodes ONLY** and **NEVER** mix anode alloy type. Do not change or add anodes without consulting an authorized service center.
- Because saltwater corrosion is not warrantable we don't recommend mooring or excessive use in saltwater. Should you drill any holes through the painted surfaces you must seal these holes with silicon or a rubber gasket. This is not a guarantee that corrosion won't occur, but it will help keep it to a minimum.

### **Finish Care & Maintenance**

- North River Boats only recommends the use of boat soap and freshwater to clean all material surfaces and or finishes.
- Hand wash only and remove water spots with a soft cloth or chamois.
- Do not use wax or polish on the painted surfaces for the first 30 days.
- North River Boats does not recommend polishing the natural aluminum material or the use of any aluminum cleaning products; including but not limited to: Abrasives, Acids, Detergents and Aluminum cleaner or polish.
- Spilled fluids and chemicals should be immediately wiped away
- Protect your boat from extreme high or low temperatures; avoid parking under trees or near facilities with heavy fallout or smoke.

## **Canvas & Upholstery Care**

- **Top Gun Canvas Top:**  
General or light cleaning: brush off loose dirt, hose down and prepare a cleaning solution of water and mild soap (Ivory Snow, Dreft or Woolite – NO DETERGENTS). Use a soft bristle brush to clean, allow solution to soak into fabric, rinse thoroughly until all soap residue is removed and air dry only.
- **NAUGAHYDE® vinyl seat covers:**  
For light soiling: use a solution of 10% household liquid dish soap with warm water applied with a soft bristle brush. Wipe away the residue with a water dampened cloth.

## **Operation Tips**

### **Comfort Level:**

- Never try to run your boat in waters you do not feel comfortable in. Don't let other people talk you into operating your boat in conditions or water you're not ready for.

### **Preparing your boat prior to backing the trailer in at the boat ramp:**

- Make sure that you have adequate fuel for the time you are planning on spending on the water. Check the fuel level gauge with the boat "level" on the trailer. The sending unit for the fuel gauge is located in the rear of the tank, so if the bow is up, the gauge will read "fuller" and if the bow is down, the gauge will read "emptier."
- Remove any tie down straps or "my wedge" transom saver that you may have added to the boat.
- Make sure the drain plug(s) are in. Drain plugs are located on the transom and usually centered in the vee of the hull at the keel intersection.
- Threaded drain plugs should be treated with a thread sealant prior to installation.
- Compression type drain plugs should not be used on hulls that will be moored for extended periods of time.
- Secure any loose items on the inside of the boat; make sure that the floor is clear of any tripping hazards for people on board.
- Check the boat's battery switch and make sure the switch is in the on position.

### **Unloading your boat from the trailer:**

- Back the trailer in so that water is about half way up on the rear upright leg of the load guide. If you have an outboard jet drive motor, you will need to back the trailer in until the boat will be able to back off the trailer. With a prop drive motor, check your water depth at the transom to make sure there is enough water depth to clear the lower unit.

### **Getting underway:**

- Remember all your safety equipment, especially your life jackets. Check your fuel gauge while you are at the idle speed with the boat sitting level in the water, as this is the only time you will get a good reading. When underway, the fuel gauge will indicate a higher than actual fuel level due to the sending unit being located at the rear of the tank. Make sure you have plenty of fuel for your planned trip.
- Always try to load your boat so that the majority of the load is located mid ship. This will make your boat plane quickly and handle properly. Remember that with a heavy load it will take longer to plane and the boat will handle differently than with a light load. Give thought as to how much room you will need to turn and the distance and speed you will need to get onto and maintain a solid plane. Give your boat full throttle to quickly get on plane and then bring your boat at the slowest speed that will maintain a solid plane and adequate handling. This will conserve fuel, give you more time to respond and leave you with plenty of throttle should you need it to emphasize turns or stops.
- Once you are ready to get on plane, check your passengers and make sure everyone is seated and understands you are about to accelerate. Make sure you are heading in a straight line and the wheel is centered. Begin to increase your forward speed by moving the throttle lever forward. You should increase your speed smoothly by steadily adding more throttle. Initially the bow will raise, you will feel the boat “come on plane” as the bow lowers and the attitude of the boat is now more parallel with the water surface. Once on plane you can use your trim switch located on the throttle lever to increase speed and reduce the amount of water friction on the hull.

### **Trimming the hull:**

- Using your trim can make your boat do many different things. Understanding how your trim works may take you some time on the water experimenting with the trim at differing speeds, and loads within the boat.
- Basically your outboard motor should be in the fully trimmed down position when at low speeds as this will give you the best low speed maneuverability, reverse thrust and keep your bow down for best visibility. As you increase your forward speed and approach plane, adding trim will increase speed, engine rpm and free the boat up making it feel lighter and more responsive. This will also increase your fuel economy. On relatively smooth wave free water using more and more trim will give you more speed. Too much trim may cause the engine to cavitate or create a porpoising effect. Having unusually heavy loads located near the transom will mean you may not be able to use as much trim as you could with a normally loaded boat. In rough water conditions trimming the bow down will give you smoother ride and trimming up will cause the ride to be rougher and porpoising may occur. When entering a turn, it is best to reduce your trim as

you are entering the turn and add trim as you are exiting the turn. Reducing your trim as you begin to slow down prior to stopping will also help keep your bow down and your trim angle will be in the proper position for low speed maneuvering. This will also mean the trim is in the down position for the next time you are increasing your speed to plane.

### **Steering your boat (jet):**

- With a jet powered boat, remember that throttle is just as important as the steering wheel. When in precarious water, always keep one hand on the throttle! Short bursts of throttle, coordinated with turns of the wheel, will greatly emphasize turning quickness and precision. Get to know how your boat reacts by spending several hours in deep water where a mistake won't be costly. Always look and think ahead when you are running in white water or shallow water. You should always have a safe place to stop and restart in sight or you are out of your comfort zone. Always stay in your comfort zone! Expanding your personal comfort zone will take some practice and patience. The basic rule is: if you aren't sure, don't try it.

### **Steering you boat (propeller):**

- Your propeller driven outboard boat will steer much like your automobile. Turn the wheel to the left and the boat will turn left, turn the wheel to the right and boat will turn right. At low speeds the boat will respond slowly to the wheel turn and at higher speeds the boat will respond much quicker. Practice steering your boat in a location on the water where there is little or no other boat traffic or obstacles that you will need to avoid. Spending some time on the water when all you need to do is learn how to operate your boat will increase your ability to operate the vessel properly.
- Practice making wide sweeping turns at slow planning speeds and then increase your speed with similar turns. The tighter the turn, the more speed and thrust you will lose which may cause the boat actually drop off of a plane. Increase your throttle as you feel the hull slowing down will help keep you on plane and as you come out of the turn you will need to reduce your throttle to slow back down to your original speed. Remember to trim your motor down as you enter the turn and trim up as you exit the turn. Offshore bracket boats are more prone to cavitation in a turn so reducing your trim angle in tight turns is a must with this type of transom.

### **Loading your boat onto the trailer:**

- It is best to have a passenger on your boat safely dropped off at the boat ramp or dock to retrieve your tow vehicle and trailer, or tie your boat up to the bank or dock securely. There are many variables with the angle of the boat ramp, but the basic idea is to have just enough water over the trailer bunks to allow the boat to load under power. The shallower your trailer, the better the boat will self

center onto the trailer. Having the water level approximately 6-8" up on the side load guide should be about right for loading. If the water is near the top of the side load guide or over, the distance between the load guides will be too great and cause the keel / bow eye to miss the bow stop on the trailer as you ease onto the trailer. If there is a choice of sides of a dock, check the direction of the wind or the flow of water current. It is best to have the wind or current pushing you away from the dock if possible. You may also want to kick the trailer slightly into the wind or current at about 10 – 15 degrees. This will help when driving the boat onto the trailer and keep you away from the dock.

- Once you have the trailer backed in at the right depth, set your emergency brake and turn the tow vehicle engine off. Board your boat and untie from the dock or bank.
- Check the wind and or current direction. It is best to set your boat up slightly up wind or up current and allow the wind or current to push you towards the trailer instead of pushing you into the dock or bank. In some situations, you will have to actually approach the trailer at a severe angle so that the bow will be headed for the load guide and not the center of the trailer. If there is little or no wind or current, approach the trailer straight on, keeping the point of the bow headed directly at the bow roller on the trailer. It is best to maintain as slow of speed as possible and use the throttle as little as necessary. You must check the depth of water and may need to trim the motor up enough so that the lower unit / skag does not make contact with the bottom or ramp. If the water is not deep enough to power load, you will need to manually float the boat on to the trailer and use the winch to pull the boat on the entire way.
- As the boat makes contact with the trailer bunks, allow the boat to "settle" into the bunks and center up on the trailer. At this point, the boat should be approximately 2/3 of the way onto the trailer and the boat will not be moving forward. Now you want to make sure you are headed straight for the bow roller and the outboard motor is going to push you straight towards the bow roller on the trailer. Slowly increase your throttle until the boat starts to move forward, as the boat progresses onto the trailer you may need to increase the throttle and the boat will no longer be floating as it is resting on the trailer bunks. If you reduce throttle speed before the bow touches the roller on the trailer, it will be difficult to regain momentum and you may have to winch the boat the rest of the way to the roller. Be careful not to use too much speed as you approach the roller as slamming into it at speed will cause damage to trailer and boat hull. Turn engine off.
- Practice loading and unloading your boat at a time when there is no traffic at a boat ramp so you are comfortable with the process and not creating delays for other boaters.

- Once you are on the trailer, you will need to attach the winch strap or cable to the bow eye along with the safety chain prior to pulling the trailer away from the water. Never pull your trailer up the ramp without attaching the winch strap and safety chain, making sure the winch is engaged and the strap is tightened. Failure to do this may cause your boat to slide off the trailer causing damage to outboard motors and the hull.
- Once the boat is secured to the trailer, pull your tow vehicle up the ramp and find a place to park out of the way of other boaters, there is usually a marked area at boat ramps for tying down and preparing to travel. Once you have parked, attach your trailer tie downs from the transom eye to the trailer, install the “my wedge” transom saver onto the trim cylinder and trim the outboard motor(s) down against the wedge. Turn off all electronics and turn off the main battery switch. Remove the hull drain plug and secure any canvas items, or gear in the boat for travel. It is a good idea to check over the trailer and make sure the coupler is properly attached to the tow vehicle ball before departing. Make sure trailer lights are plugged in and working.

**Courtesy:**

- When out on the river or lake, remember that everyone has a right to use the same water. When others are near, give a wide berth and/or slow down to an idle especially for swimmers or fisherman if at all possible. Always help out if you see someone in danger or broken down. When you come to a blind corner on a river, make sure that no other boat or floater is coming down. Always give way to the down river vessel as it is easier for you to hold in the current than for them to try to stop or turn around. Our sport will stay healthy and safe only if we drive defensively and courteously at all times.

**Common Sense:**

- When preparing to run water you are not familiar with, it is highly recommended you educate yourself in advance. Enrolling in a boating training course, hiring a guide and or riding with an experienced boater are a few methods to accomplish this. Again, if you are not certain of any stretch of water or your ability to handle it, don’t run it! You will naturally improve and expand your ability comfort level with practice in safe waters. The enjoyment you received from your new North River will be greatly enhanced by knowing you are always operating safely and courteously and well within the limits of your own personal abilities.

**HAPPY BOATING!**

