

1 POWERBOAT OPERATION NOTES

1.1 Use of Powerboats

The River Rats Powerboat is restricted to use for Adult and Summer Training and designated club activities. This is required by the club's insurance carrier. Use of Powerboats for other than these activities requires the approval of the Powerboat Chairperson or the First Officer.

Any operator of a powerboat must have a valid NJ Powerboat Certificate and must pass an on the water proficiency test supervised by the Powerboat Committee.

1.2 Powerboat Committee

Joe Malik is the chairperson of the Powerboat Committee which is responsible for Powerboat maintenance. For a successful and pain free season we need to work together to keep the Powerboat fleet operational.

If a problem occurs, I can be reached on 732-693-5434 and my email is joemalik@att.net. Unfortunately some repairs cannot be made quickly and for that reason we have multiple boats available. Carefully applying the rules in these notes will minimize powerboat problems.

Don Barber is a member of the Powerboat Committee and can be reached at Donald.barber@db.com if an emergency occurs and I cannot be reached. Rich Appezzato is also a member of the committee and a powerboat owner and can be reached at rappezzato@hotmail.com.

Please read these notes carefully and if you have questions, don't hesitate to contact me.

Powerboats are your tools; you are responsible for keeping them in good order. Damage to the boats may be your financial responsibility and will not be tolerated.

1.3 Powerboat Fleet Status

As of June 2013 the status of the Powerboat Fleet is

- RIB: On its lift and the lift is operational. The RIB has been used without any problems observed. It will need fuel; currently fuel level was about 1/2 tank. It is a four cycle engine and does not a fuel/oil mix. The engine oil level should be checked every other day. The oil used is the regular "30" oil.
- New whaler: at the dock and no problems have been observed. It uses a tank of unleaded fuel with no oil added; the oil is injected separately. The oil fill is on the top of the engine and should be checked every day. The oil used is the outboard motor "TC3" oil.
- Old whaler: at the dock and has run fine. It uses a fuel/oil mix. 16 ounces of TC3 oil to a full tank.
- Deckboat: on its mooring and has run without problems. It uses unleaded fuel with no oil added; the oil is injected separately. The oil reservoir is in the portside battery compartment and should be checked with every use. The oil used is the outboard motor "TC3" oil.
- Barhopper: this is our "hot spare" boat. It is rigged and ready to go. It currently has an issue with its bow eye which prevents it from being on a mooring. However until that is repaired it is available for use but should be kept at the dock. It is a four cycle

engine and uses pure gas. The engine oil level should be checked every other day. The oil used is the regular "30" oil.

1.4 Instructor Powerboat Manager

Summer training instructors use the powerboats every day. Please designate the most knowledgeable instructor to be in charge of the powerboats and the primary contact to the Powerboat Committee. Although all the instructors are responsible for the care and feeding of the powerboat fleet, we need a primary point of contact to report issues to the Powerboat Chairperson.

If you are having a problem, please contact Joe and give him as much detail as you can about the problem. The symptoms and what you are observing is most important. We will also put a logbook in the dock box so you can note minor problems.

1.5 Powerboat Troubleshooting

Here are some guidelines for keeping the fleet in an operational state.

1.5.1 Fuel Issues

The most common problem with marine engines is fuel issues. Fuel tanks are marked for "Unleaded Fuel Only" for tanks with no oil mix and unmarked tanks are assumed to have an oil mix. To obtain fuel, (unfortunately the nearby Sunoco station for which River Rats has a credit card is closed) you can go to any convenient gas station (e.g. Valero in Fair Haven or Exxon in Rumson) to fill portable tanks. (The Sunoco station on HWY 35 in Middletown is one I have used with our credit card).

The RIB and Deckboat can go to Bahr's fuel dock where River Rats has an account. I will try to keep these boats topped off at Bahrs fuel dock. In a pinch you can fill them with a reserve tank or two.

Here are some guidelines for fueling and fuel related issues:

1. Only put oil into the proper tanks. Put the oil in BEFORE adding the gasoline. Sixteen ounces of TC3 to a full tank.
2. Don't overfill the tanks. Gasoline from the pump is cold and as it warms will expand and overflow. The Deckboat has an overflow on the outboard side of its tank and when fuel comes out, it has gotten enough in the tank.
3. Do not run any tank down to empty. You will suck up any crud that is in the bottom of the tank and regret it later.
4. Don't forget to open the vent slightly on the portable tanks. Also, leave them open when in storage.
5. Gasoline is VERY dangerous. Clean up any spills and if you see any leaking from the tank or an engine, stop using that engine or tank and let me know.

1.5.1.1 Diagnosing Fuel Related Problems

Typically a fuel related problem is observed by the engine going: "cough-sputter-cough" either when running or when attempting to start. Here are some things to check:

1. Is there fuel in the tank and is the fuel line connected.
2. Is the fuel line connection at the tank loose? If it is loose, there will be no suction to draw gas into the engine.
3. Have you pumped the tank bulb to draw gas into the engine?
4. Is the tank vent opened? If it is closed, you create a vacuum which prevents gas from being drawn into the engine.
5. Is the engine choke working. The choke is electrical and you should hear a "clicking" when you engage it.
6. Have you flooded the engine? A sign of flooding is gas in the water. Stop using the choke and you will have to wait until the excess fuel clears out.
7. If none of the above works, it may be a more subtle issue; here are some I have seen:
 - a. Bad fuel line or connectors; try a different line or tank.
 - b. Dirty carburetor: try using some starting ether (in dock box) or carburetor cleaner. Remove cover and squirt some into the carburetor intake.
 - c. Choke failure: the Johnson/Evinrude engines have a manual override inside (a red lever). You can open that and try to start the engine. After it starts, you must close the lever.
 - d. Dirty fuel filter from bad fuel; I will have to replace or clean it.

1.5.2 Ignition Issues

An ignition problem is rare but typically when you attempt to start nothing happens or when running the engine abruptly dies. Here are some things to check.

1. Is the red safety cord attached? This grounds the engine to prevent it operating. For some of our engines it is not needed but to be sure, please use it on all the engines.
2. When trying to start, if nothing happens or if the starter motor barely turns over, it usually means
 - a. Loose or dirty battery connections. Tighten them with pliers after checking if you see corrosion. You can clean them with a screwdriver or a file. Vibration will loosen them up.
 - b. Battery needs to be charged. Running the boat will charge the battery and we also will have a charged spare in the locker.
 - c. Battery is low on water. Please check them once a week. The plates should NOT be exposed. If they are exposed, we are on a slippery slope for reduced capacity.
 - d. Rare problems are the starter motor gets gummed up and does not spin up; some WD40 or other similar spray can address that. A more complex problem is the solenoid or starter motor goes bad; that is a major fix.
3. Keep battery covers on the battery.
4. Do not run the starter motor for more than 20 seconds at a time. It will overheat.
5. On the Old Whaler, do not let the battery get submerged.

6. If the engine is very hard starting and balky, it could be fouled spark plugs. Call me and I will check and change them.
7. If the issues in 1 & 2 are not the cause, it is a more subtle issue and I will need to be contacted.

1.5.3 Cooling Issues

Cooling issues underway result in a gradual loss of power. If they work, there is a temperature alarm that should sound. The engines are also designed to operate in a slow "go home" mode that should get you back to the dock which you should do as soon as possible. If you see steam coming out of the engine, that indicates a cooling system problem. Here are some things to check.

1. Is water coming out of the outflow? It should be a steady stream when underway or at the dock. For some of the engines the thermostat restricts the outflow until the engine warms up. However with our boats I usually see the outflow pumping water from the get-go.
2. If the water is not flowing or barely flowing, check the input at the bottom of the motor; it can get clogged with sand or weed. Clean it out.
3. The water flowing out should not be steaming or overly hot to the touch. If it is then we may have an impeller problem or a stuck thermostat. You should call me.

1.5.4 Control Issues

These are rare but a control cable or starter switch can fail. Here are some things to watch.

1. Do not force the keys in the ignition. Pushing very hard won't start the motor, it will break the key!
2. Do not force the gear and throttle controls. It will break the controls.

1.6 Powerboat Operation

Each boat has its unique characteristics and here are some general and some specific items for each boat.

1.6.1 General

Here are some general points for all boats.

- Keep the boat clean. Remove water bottles and trash daily. If needed hose sand and dirt out.
- Tilt motors up after use.
- For boats with fenders on the side; they can come loose. Re-tie them so they are not lost.
- I use the boats each week at races so I will be checking them for being shipshape
- Lifejackets for student and instructors are mandatory both in the boat and on the dock.
- Keep dock lines on each boat. If you need more, please let me know.
- Be gentle with ignition keys and controls. Do not force them; they will break. Pushing harder does not encourage the motor to start better.

- Do not rapidly shift the motor from forward to reverse. Just like your car you would not go from forward to reverse in one rapid motion.
- Approach a dock or another boat slowly. If you are new to driving one of the boats, practice how to learn how fast it decelerates. In that way you are not crashing into docks or boats.

1.6.2 Old Whaler

This is our old “reliable” but it is the oldest boat and motor. Here are some tips for it.

- It is not self bailing; water must be bailed out especially after rain.
- Drain plugs must be kept it.
- You can bail the boat underway by pulling the plugs and the water will get sucked out.
- When starting this motor, use the auxiliary throttle on top of the controls in the up position.
- It uses a fuel/oil mix

1.6.3 New Whaler

This is our newest whaler. Here are some tips for it.

- It is self bailing; you should remove the plugs at the dock. Don’t forget to put them in before you leave the dock.
- It uses pure gas in the tank and oil injection from a tank on the motor. Check the oil EVERY day.

1.6.4 RIB

The RIB is kept on the lift. Here are some tips for it.

- The inflatable sides can get soft. If this occurs, there is a pump on the boat to pump them up. Remember they will expand as it gets hot so don’t get carried away but pumping too hard.
- The boat has a bilge pump. Check the bilge periodically to make sure it is working.
- After putting the boat on the lift, turn the lift circuit breaker off in the circuit box.
- The boat has gauges; watch them to see if anything is amiss.

1.6.5 Deckboat

This is our largest boat and just be handled carefully. Here are some tips.

1. The cover should be always put back on after use. Remove it and stow it when underway.
2. The Bimini sunshade should be stowed and covered after use.
3. The bilge pump should be run when you first get on board to see if water is pumping out on the port side. There are bilge pumps on both sides but I only seem to see water on the port side. Don’t forget to turn it off.
4. The power switch should always be left in the OFF position after use.

5. You can start and run the boat on ALL but try to alternate on odd and even days from 1 to 2. In this way we can check each battery. If it won't start on one of the batteries, let me know.
6. Don't forget to turn the radio off after use. It will drain the battery.
7. Use one of the dock lines as a safety mooring line as an extra line to the mooring buoy. The main mooring line (with a clip) should always take up the strain NOT the safety line.
8. Make sure the mooring pennant is secured on the boat rail and not dragging in the water.
9. Use fenders at the dock or when boats are along side.
10. When starting the motor
 - a. Pump the tank bulb.
 - b. Use the choke sparingly
 - c. The throttle can be advanced while starting by pushing the center button in and advancing the throttle. Once it starts, put it in neutral (straight up).
11. Watch the low oil or temp warning lights, if they stay on, stop using the boat. The "ckg-engine" light tends to go on and beep right after starting the engine; if it stops after 10 seconds, it is of no consequence.

1.6.6 Barhopper

This boat is slow and forgiving. Here are some tips for it.

- It is self-bailing. Remove its drain plugs at the dock or on a mooring.
- The engine is a four cycle engine. Use only pure gas.
- Check the oil once a week if the boat is used heavily.