



Mooredale Sailing Club  
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## MSC Motorboat User Guide



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## 1. Introduction

This manual is intended to provide an overview of User and Maintenance procedures for qualified powerboat users at the Mooredale Sailing Club.

Mooredale has a fleet of 3 powerboats that are used exclusively for club activities consisting of sailing instruction, race duties and safety assistance to our sailing fleet in the Outer Harbour area.

The powerboats are for use by Mooredale club members only, unless specific arrangements have been made to lend a boat to another club or organization. Along with a Pleasure Craft Operator's Card and a valid Harbour License, operators are also required to attend a Mooredale Motorboat User's info session, which basically explains the safety and user requirements as outlined in the manual.

### **Safety Note:**

All Mooredale boats are equipped with vented fuel tanks in the passenger areas of the boats. Smoking is not permitted on the boats, or on the motorboat dock at any time.

## 2. The Mooredale Powerboats

### 2.1 White boat (*Boston Whaler SportPro 16'*)

- 4.7m solid hull (foam-filled) fiberglass
- 60 hp 4 cyl 4 stroke Merc Bigfoot
- electronic fuel-injection
- regular gas

### 2.2 Black Inflatable (*Zodiac Bombard 16'*)

- 4.9m inflatable
- 40 hp four-stroke Yamaha
- carbureted, electric choke
- regular gas

### 2.3 Small boat (*Boston Whaler 13'*)

- 4.0 m solid hull (foam-filled) fiberglass
- 25 hp four-stroke Merc
- carbureted, electric choke
- regular gas

*Further details on the boats are provided later in this manual.*

### 3. At the Dock

#### 3.1 Boat parking

The powerboats at Mooredale are docked at the Motorboat Dock, where each boat has its own spot. Mooring lines and dock whips are different for each boat. The powerboats are to be stored in their proper parking spots each night to prevent damage from storms or low water levels.

The White Whaler and the Black inflatable each use dock bumpers as well as dock whips to stop the boat from hitting the dock while parked. Each boat uses a bow and stern line to secure the boat to the dock, two dock whips, and a centering line. All lines must be used when the boat is stored at the dock.

In addition, the White boat uses 3 bumpers which hang over the side of the boat, while the Black inflatable has 4 dock bumpers fastened to the side of the dock.

All boats are stored at the dock with the motors up out of the water to prevent zebra mussels from clogging the cooling inlets.

#### 3.2 Gas Tanks

All boats are normally docked with gas tanks on board. The gas tanks must be secured under the seat (white boat), or with rain-caps installed to prevent water from getting into the tanks. Tanks are not to be refilled on the boats as any spilled gas will become a fire hazard. If spare fuel is to be carried on board, it must be in an approved motorboat fuel tank, not in a gas can. All fuel tanks must be strapped down in the boat.

Any tanks showing any signs of damage or leaking must be reported and immediately removed from the boat.

All gas containers not in use in a boat must be stored in the gas locker located beside the lifejacket shed. All gas containers must have all their appropriate caps and lids in place to prevent dirt and moisture from getting into the tanks.

#### 3.3 Rain and Weather

With the gas tank water caps in place, the boats are designed to operate and be stored outdoors. Each boat is equipped with electric bilge pump to pump excess water out of the boat. Two of the boats are equipped with automatic float switches; the white Whaler is self-bailing at the dock.

Each boat also has a hand -bailer on board in case of an emergency, as listed under Safety Equipment below.

The boat navigation lights should be turned on when there is poor visibility during the day. The small boat is not equipped with lights and should not be used after sunset or under conditions where visibility is a problem.

### **3.4 MSC On-board Safety Equipment**

According to Transport Canada Regulations, the following equipment must be carried aboard the motorboats:

- one lifejacket for each person on boat
- two paddles
- anchor with 15m of line
- hand bailer
- lights if out after sunset
- heaving line 15m
- sound signaling device (horn or whistle)

Included in Safety Box

- light signaling device (flashlight)
- first aid kit
- fire extinguisher
- boat registration

## 4. Boat Use

### 4.1 Sign-Out and Boat prep

Boat keys are stored in the clubhouse, and must be signed out whenever a motorboat is taken out by a member.

While boats should always be in ready-to-go condition, it is good practice to do a walk-around before setting off in one of the motorboats. The following checklist should be followed to identify any problems before you go:

- gas tank is full
- no obvious damage or problems with the boat
- note any damage to dock whips, etc.
- all safety equipment is on board (see list)
- Orange safety box on board (see below)
- gas tank, battery are securely fastened
- boats is signed out
- boat sign-out log does not indicate any previous problems
- boat starts and runs smoothly
- you have your Harbour Licence and PCOC with you

Each boat is assigned a Safety Box containing a flashlight, first aid kit and fire extinguisher, as well as the boat registration. These boxes are stored on a shelf in the Tool Shed, and must be brought on board whenever the boat is being used. The boxes must be returned to the Tool Shed when you return the boat.

Remember, you are responsible for any unreported damage to the boat, so if there is a problem, note the problem beforehand. If the problem is serious, do not take the boat. This includes low air tanks on the Black Inflatable that don't stay pumped up.

### 4.2 Starting the boat

Starting procedures are similar for all three Mooredale powerboats.

Please note: The warn-up lever under the shift lever is not for starting the boat, it is used to set a fast idle during engine warn-up under cold weather conditions. It should be left in the down position during normal starting. (*don't touch*)

## White Boat

1. Check for gas in tank
2. Use button on shift lever to lower engine into the water
3. Insert key in ignition and move safety switch to the up position
4. Squeeze primer bulb till full
5. Turn key to start engine
6. Be sure water is spraying out of cooling port at back of motor. If not, stop engine and advise boat captain.
7. Allow 3 - 4 minutes for warm up before leaving dock

## Black Inflatable

1. Check for gas in tank
2. Use button on shift lever to lower engine into the water
3. Insert key in ignition and attach clip to safety switch
4. Squeeze primer bulb till full
- 5a. Push key in to set choke
- 5b. Turn key to start engine
6. Be sure water is spraying out of cooling port at back of motor. If not, stop engine and advise boat captain.
7. Allow 3 - 4 minutes for warm up before leaving dock

## Small Whaler

1. Check for gas in tank
2. Push release slowly lever to lower engine into the water
3. Insert key in ignition and move safety switch to the up position
4. Squeeze primer bulb till full
- 5a. Push key in to set choke
- 5b. Turn key to start engine
6. Be sure water is spraying out of cooling port at back of motor. If not, stop engine and advise boat captain.
7. Allow 3 - 4 minutes for warm up before leaving dock

### 4.3 Leaving the dock

**Note:** Movement away from the dock should be done slowly and carefully to avoid scraping the back of the boat on the dock, and to be sure all lines and dock-ships are properly detached. If necessary, push the boat away from the dock by hand to avoid hitting the dock with the boat.

#### **4.4 Use of Anchors**

Anchors may be used to moor a boat during classes or during a racing event at Mooredale. Anchors are made of steel and are equipped with a six foot length of chain to ensure proper grip on the lake bottom.

When lowering or retrieving an anchor, do not allow the anchor, the chain or the anchor line to rub or bang on the side of the boats.

When putting anchors on board boats, DO NOT drop the anchor into the bottom of the boat, as this can easily puncture or crack the fiberglass bottom of the boat.

The Black Inflatable is particularly susceptible to damage, from the anchors, and under no circumstances should the lines or chains be dragged across the hull.

#### **4.5 Towing other boats**

Mooredale powerboats may need to tow other boats back to the dock, either sailboats or disabled powerboats. When towing, the tow loops on the transom should be used to attach lines. The steel hoop on the back of the Black Inflatable should not be used for towing. Be careful to keep lines clear of the boat prop while starting or stopping a tow. Whenever possible, a floating tow line should be used to minimize the chance of the line getting caught in the prop.

For safety reasons, towing requires that there is at least one additional person on the tow boat whose job it is to watch the towed vessel at all times.

Any sailboats being towed should have their sails down and their centerboard up. The rudder must be used to steer the boat in the direction of the tow boat. Minimum speed should be used. If towing after sunset, both towing and disabled boats must show navigation lights, or an emergency light of some sort.

#### **4.6 Boat Return**

##### Boat Damage or Problems

The Motorboats are critical to club activities on the water and are required on most days during the season. Any problems or damage to the boats must be reported immediately. So they can be dealt with. The phone numbers for the contact people are listed in the motorboats sign-out binder.

Boats must be returned in clean condition (free of dirt, debris, empty pop cans, etc.) The person driving the boat will be held responsible for cleanliness of the boats after use.



## 5. Details on the Boats

### 5.1 White boat

The White Whaler has the gas tank secured under the seat. After filling the tank, it must be re-secured in its proper place. A loose tank can damaged the fuel lines and cause a gas leak or hard starting.

The battery on this boat is located under the console. The battery must be covered and fastened down at all times to prevent injury and short circuits.

The Bimini top can be opened for protection from rain or from the sun. It should be returned to the stored position when the boat is brought back to the dock.

The boat is equipped with an electric bilge pump with the switch located on the console. When parked at the dock, the drain plug at the transom must be removed, allowing any water to drain from the boat. This plug should be re-installed when the boat is in use to stop water from coming in.

The boat is equipped with running lights with the switch also on the console. Off is the middle straight-up position on the switch.

Please be sure switches in middle position before leaving the boat at the dock, the lights will drain the battery and make the boat difficult to start the next day.

### 5.2 Black Inflatable

The gas tank on this boat is located behind the seats. Because the tank is not protected from the weather, the plastic rain cap must be used on the tank at all times to prevent water in the gas

The 12v battery is also located in the back of the boat, and should be covered and fastened at all times.

This boat is equipped with an eclectic bilge pump with a switch on the console. The pump also has a float switch for self-bailing while docked.

The pontoons on the boat are susceptible to damage from sharp objects, and caution should be used when docking this boat. The back of the pontoons are low and can slide under regular-height dock bumpers, causing scratches or holes in the rubber.

A foot pump is stored under the seats to add air to the pontoons. The boat captain will instruct you how to properly fill the tanks. Air may need to be added on particularly cool days. The boat must not be operated with low air in the pontoons, as the flexing can damage the tanks.

Any low-air condition on the boat should be reported to the boat captain immediately.

This boat is equipped with a water-separator in the fuel line to prevent the engine from drawing any moisture from the fuel tank. This unit should only be serviced by qualified personnel.

### 5.3 Small boat

This boat has the battery and the gas tank mounted behind the seat. Both must be secured at all times.

At present, this boat does not have running lights and should not be used after sunset.

This boat does not have power trim, so the engine must be lifted out of the water by hand when the boat is docked for the night.

When the motor is tilted out of the water, the motor is held up on the tilt lever only. The motor lock does not need to be used unless the boat is being towed on a trailer.

To lower the motor into the water, simply push down on the lever slowly, allowing the motor to lower into the water. Once in the water, the lock should be engaged to stop the motor from lifting out of the water in reverse.

## 6. On-water Diagnostics

### Please note:

If motor will not start and problem persists, please notify the boat captain and wait for service or have the boat towed back to the dock. Prolonged cranking of the motor will drain the battery and damage the starter motor.

#### 6.1 Motor starts to run poorly

- check for gas in tank
- check fuel line connections to tank and to motor
- be sure vent valve on tank is open
- If there is enough gas and there has been a lot of rain recently, there may be water in the gas. Add a small amount of gas treatment to the tank. Run motor slowly and see if it improves. Do not add gas treatment more than once. Notify boat captain.

#### 6.2 Motor stops, will crank but won't re-start

- check for gas in tank
- check fuel line connections to tank and to motor
- check that safety switch is still in correct position or clip attached
- if won't start, let engine cool for about 10 minutes and try again
- if still won't start, have boat towed back to the dock and notify boat captain

#### 6.3 Motor will not crank at dock

- be sure shift lever is in neutral
- check battery by turning on bilge pump. If bilge pump doesn't work, charge battery.
- if still won't start, notify boat captain

#### 6.4 Motor cranks but will not start

- check safety switch position
- check fuel connections at tank and motor
- if engine tries to start but stumbles and dies, and weather has been very wet, add small amount of gas treatment to tank, or change tanks. Be sure to mark which tank was on the boat originally.
- if engine still will not start, but may need to be drained from engine. Do not crank engine for more than 30 seconds. Stop cranking after 10 tries or starter will overheat.
- if still won't start, notify boat captain

#### 6.5 Motor suddenly slows and stops when leaving dock

Motor re-starts but stalls when put in gear

- check for mooring line around prop
- if line is around prop, turn off motor, remove key from ignition, tilt motor up and remove line from prop

**Note:** fishing line around the prop can damage the shaft seal and cause oil to leak out of the lower unit. Please notify the boat captain if this occurs.

#### 6.6 Shift lever will not go into gear

- make sure warm-up lever is all the way in
- be sure lock button is squeezed all the way in
- straighten steering wheel and try again
- if problem persists, notify boat captain.

## 7. Boat Maintenance

### 7.1 Engine service

Engine service is performed by qualified members and is not required by motorboat users. Please call the boat captain if service is required.

### 7.2 Fuel

Clean water-free fuel is essential to the outboard engines. Bad gas can cause stalling, corrosion and damage to carburetors and fuel injectors. Never use fuel from an open container, and avoid using fuel that had been sitting for more than 2 weeks. Regular gas contains 10% ethanol, which can cause problems by absorbing moisture if allowed to sit for extended periods of time. Vent cap on fuel tanks should be closed when the boat is not in use.

### 7.3 Regular check-ups

Boats should be checked for damage and any problem every time it is put into use. All required safety equipment, including the orange safety box must be on board. Any problem should be reported to the boat captains.

### 7.4 Dock and mooring lines

Proper tie-up and mooring methods will be explained during motorboat training. The condition of the mooring lines, dock whips and dock bumpers should be noted during boat prep and when the boat is returned. Any problem should be fixed immediately, or if this is not possible, reported to the boat captain.

### 7.5 Boat cleaning

Keeping the boats clean and garbage -free is everyone's responsibility. All motorboat users will have an opportunity to take part in a boat cleaning day, when the boats will be scrubbed and power-washed.

Boats must be returned in clean condition after use. If the boat is dirty before you use it, please report this condition to the boat captain before you leave the dock, or you will be responsible for cleaning it when you return.

## 8. On-water Emergencies

### 8.1 Boat Damage

8.1.1 Motor disabled (*also see Engine diagnostics in section 3*)

8.1.2 Boat damage

hull or engine/prop, buoyancy compromised?

8.1.3 Shallow water

- raise motor sufficiently to clear the bottom
- slowly return to deeper water
- if too shallow for motor, use paddles

8.1.4 Collision

- remain in area and assess damage and boat buoyancy
- assist any injured persons
- call Harbour Police (911) for assistance

### 8.2 Person

8.2.1 **Man overboard**

- alert others by shouting "Man Overboard"
- maintain visual contact with person
- circle boat around and approach person from downwind
- if you lose sight of person, reduce speed immediately
- use heaving line or pole, etc. to retrieve person if possible
- if assistance is required call Harbour Police (911)

8.2.2 **Person injured**

- any serious injuries should be reported to the Harbour Police immediately by calling 911. If possible, the injured person should be brought to the nearest dock where there are people and there is access to EMS as quickly as possible.

### 8.3 Weather

- in the event of a sudden storm, the boat must be taken to the closest safe harbour or dock, or if not possible, anchored in a protected area with enough room to swing on the anchor.

## 9. Contact Numbers

Emergencies	911
Toronto Harbour Police <i>(non emergencies)</i>	416 808-5800
<b>Medical treatment</b>	
St. Michael's Hospital 30 Bond St Toronto ON M5B 1W8	416 360-4000
Toronto Port Authority	416 863-2001
Mooredale clubhouse	416 461-3660

### **Additional Info:**

Transport Canada Office of Boating Safety	<a href="http://www.tc.gc.ca/boatingsafety/">www.tc.gc.ca/boatingsafety/</a>
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