

# OPERATOR'S MANUAL for Yamaha XL700 2002

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## OPERATION

### Fuel and oil

This engine uses Yamaha's oil injection system, which provides superior lubrication by ensuring the proper oil ratio for all operating conditions. No fuel premixing is necessary except during the engine break-in period. Simply pour gasoline into the fuel tank and oil into the oil tank.

### Gasoline

**WARNING :** GASOLINE AND ITS VAPORS ARE HIGHLY FLAMMABLE AND EXPLOSIVE!

- Do not smoke when refueling, and keep away from sparks, flames, or other sources of ignition.
- Stop engine before refueling.
- Refuel in a well-ventilated area. Do not stand or sit on the watercraft while refueling in case of fire.
- Take care not to spill gasoline. If gasoline spills, wipe it up immediately with dry rags. Always properly dispose of gasoline-soaked rags.
- Avoid overfilling the fuel tank. Stop filling when the fuel level just reaches the bottom of the filler tube. Do not fill up the filler tube because fuel expands as it warms up and could overflow.
- Tighten the filler cap securely after refueling.
- If you should swallow some gasoline, inhale a lot of gasoline vapor, or get gasoline in your eyes, get immediate medical attention.
- If any gasoline spills onto your skin, immediately wash with soap and water. Change clothing if gasoline spills on it.

**CAUTION:** Use only fresh gasoline that has been stored in clean containers.

## Gasohol

There are two types of gasohol: gasohol containing ethanol and that containing methanol. Gasohol containing ethanol can be used if ethanol content does not exceed 10 % and the fuel meets minimum octane ratings. Gasohol containing methanol is not recommended by Yamaha because it can cause fuel system damage or engine performance problems.

## 2-stroke engine oil

If YAMALUBE 2-W is not available, another 2-stroke engine oil with an NMMAcertified TC-W3 rating may be used.

## **Filling the fuel tank**

**CAUTION:** Be careful when refueling. Avoid getting water or other contaminants in the fuel tank. Contaminated fuel can cause poor running or engine damage.

1. Open the hood and remove the front storage compartment. Also, remove all seats, so you can watch the fuel level. (See page 2-6 for hood, and pages 2-4 and 2-5 for seats.)
2. Open the fuel tank filler cap, and slowly add fuel to the fuel tank.
3. Stop filling when the fuel just reaches the bottom of the filler tube on the fuel tank. Do not fill into the filler tube, because fuel could spill out.

*Fuel tank capacity:*

Total: 50 L (13.2 US gal, 11 Imp gal)

Reserve: 12 L (3.17 US gal, 2.64 Imp gal)

## **Filling the oil tank**

### **WARNING**

- Do not add gasoline to the oil tank. Fire or explosion could result.
- Oil in the bilge is a serious fire hazard. Wipe up any spilled oil immediately.

**CAUTION:** Do not allow the oil tank to become completely empty. If the oil tank becomes empty the oil injection pump must be bled to ensure proper oil flow, otherwise engine damage may occur. If bleeding of the oil pump is necessary, have a Yamaha dealer bleed it.

1. Open the hood and remove the front storage compartment. Also, remove all seat, so you can watch the oil level. (See page 2-6 for hood, and pages 2-4 and 2-5 for seats.)
2. Open the oil tank filler cap, and very slowly add engine oil to the oil tank.
3. Stop pouring when the oil just reaches the bottom of the filler tube.

*Oil tank capacity:* 3.8 L (1.0 US gal, 0.84 Imp gal)

## **Operation**

**WARNING** Before operating your watercraft, become familiar with all controls. Consult your Yamaha dealer about any control or function you do not fully understand. Failure to understand how controls work could cause an accident or prevent you from avoiding an accident.

**CAUTION:** Make sure that stern drain plugs are securely tightened before launching the watercraft.

## **Engine break-in**

The engine break-in period is essential to allow the various components of the engine to wear and polish themselves to the correct operating clearances. This ensures proper performance and promotes longer component life.

### **CAUTION:**

- For the first tankful of operation, premix a 50:1 mixture of fuel and oil (in addition to the oil in the oil tank).

- After break-in, use straight gasoline for normal operation.

1. Launch the watercraft and start the engine. (See pages 3-15 to 3-17 for engine starting procedures.)
2. Run the engine at the lowest possible speed for 5 minutes. 3-14
3. Gradually open the throttle to 3/4 or less.
4. Continue operation at 3/4 throttle or less until the first tankful of fuel has been used.
5. Fill the tank with straight gasoline, and then proceed with normal operation.

**CAUTION:** Failure to follow the engine break-in procedure properly can result in severe damage to the engine.

## **Starting the engine**

**WARNING** Never start the engine or let it run for any length of time in an enclosed area. Exhaust fumes contain carbon monoxide, a colorless, odorless gas that may cause loss of consciousness and death within a short time. Always operate the watercraft in an open area.

1. Launch the watercraft in water free from weeds and debris and at least 60 cm (2 ft) deep.

**WARNING** Never operate in water that is less than 60 cm (2 ft) deep, otherwise you increase your chance of hitting a submerged object, which could result in injury.

**CAUTION:** Never operate in water that is less than 60 cm (2 ft) deep, otherwise pebbles or sand could be sucked into the jet intake, causing impeller damage or engine overheating.

2. Turn the fuel cock knob to the "ON" position.

**NOTE:** Before starting the watercraft, after it has been sitting, remove the fuel tank filler cap to release any built-up pressure in the tank due to fuel expansion.

3. Attach the clip 1 to the engine shut-off switch 2. Also, attach the engine shutoff cord 3 to your left wrist.

**WARNING** Check that the engine shut-off cord is not frayed or broken, and keep it free from the handlebars so the engine stops if the operator falls off. The engine shut-off cord may not pull free if wrapped around the handlebars when the operator falls off, allowing the watercraft to continue to run and cause an accident.

**NOTE:** It is not possible to start the engine with the clip removed from the engine shut-off switch.

4. Pull and hold the choke knob all the way out to start a cold engine.

**NOTE:** The choke should not be used when the engine is warm.

5. While lightly squeezing the throttle lever, push the start switch (green button).

**WARNING** On this watercraft, the engine is connected directly to the jet pump. Starting the engine immediately generates some thrust. Apply only enough throttle to keep the engine running.

6. Release the start switch as soon as the engine starts to run.

**CAUTION:**

- Never push the start switch while the engine is running.
- Do not operate the start switch for more than 5 seconds, otherwise the battery will be discharged and the engine will not start. Also, the starter motor may be damaged. If the engine does not start in 5 seconds, release the start switch, wait 15 seconds, and try again.

7. After the engine has warmed up, push the choke knob in to its original position.

**NOTE:** If the choke knob is left pulled out, the engine will stall.

## **Stopping the engine**

To stop the engine, release the throttle lever, and then push the engine stop switch (red button).

**WARNING** You need throttle to steer. Shutting off the engine can cause you to hit an obstacle you are attempting to avoid. A collision could result in severe injury or death.

## **Leaving the watercraft**

If leaving the watercraft, remove the engine shut-off cord to reduce the chance of accidental starting or unauthorized use by children or others.

## **Operating your watercraft**

Getting to know your watercraft

Operating your watercraft requires skills acquired through practice over a period of time. Take the time to learn the basic techniques well before attempting more difficult maneuvers.

Operating your new watercraft can be a very enjoyable activity, providing you with hours of pleasure. However, it is essential to familiarize yourself with the operation of the watercraft to achieve the skill level necessary to enjoy riding safely. Before operating this watercraft, read this Owner's/Operator's Manual, the Riding Practice Guide, the Riding Instruction card and all warning and caution labels on the watercraft. Pay particular attention to the safety information on pages 1-8 to 1-15. Also, watch the Basic Orientation Video provided with your watercraft. These materials should give you an understanding of the watercraft and its operation.

**Remember:** This watercraft is designed to carry the operator and up to 2 passengers. Never exceed the maximum load limit or allow more than 3 persons (or 2 persons if a water-skier is being pulled) to ride the watercraft at one time.

*Maximum load:* 240 kg (530 lb) Load is the total weight of cargo, operator and passengers.

### **Learning to operate your watercraft**

Before operating the watercraft, always perform the pre-operation checks listed on page 3-5. The short time spent checking the watercraft will reward you with added safety and reliability.

Check state and local laws before operating your watercraft.

Operate defensively at safe speeds and keep a safe distance away from people, objects, and other watercraft. Select a wide area to learn in, where you have good visibility and light boat traffic.

Use the buddy system—operate with someone nearby. Scan constantly for people, objects, and other watercraft. Be alert for conditions that limit your visibility or block your vision of others.

Attach the engine shut-off cord (lanyard) to your wrist and keep it free from the handlebars so that the engine stops if the operator falls off.

Wear a personal flotation device (PFD). All riders must wear a Coast Guard approved PFD that is suitable for personal watercraft use.

Wear protective clothing. Severe internal injuries can occur if water is forced into body cavities as result of falling into the water or being near the jet thrust nozzle. Normal swimwear does not adequately protect against forceful water entry into rectum and vagina. All riders must wear a wetsuit bottom or clothing that provides equivalent protection.

Such clothing includes thick, tightly woven, sturdy and snug-fitting apparel such as denim, but does not include spandex or similar fabrics like those used in bicycle shorts. A full wetsuit can also protect against hypothermia (subnormal body temperature) and abrasions.

Footwear and gloves are recommended. Eye protection is recommended to keep wind, water, and glare from the sun out of your eyes while you operate your watercraft. Restraining straps for eyewear are made which are designed to float should your eyewear fall in the water.

You should grip the handlebars firmly and keep both feet on the floor of the footwell. Do not attempt to ride with passengers until your operating skills are fully developed.

### **Riding watercraft with passengers**

When 2 or 3 persons (including the operator) are on board, the watercraft handles differently, and is not as easy to maneuver, so operating it requires a higher degree of skill. Before attempting to operate the watercraft with passengers on board, the operator must practice operating the watercraft alone enough to be able to acquire the necessary skills.

The passengers must always wear USCG approved PFD and wetsuit bottom or equivalent.

#### **WARNING**

Do not apply throttle when anyone is at rear of watercraft. Turn engine off or keep engine at idle. Water and/or debris exiting the jet thrust nozzle can cause severe injury. Passengers should not attempt to board the watercraft if the operator is applying throttle.

Do not give a ride to children whose feet cannot reach the floor of the footwell. Passengers should hold on firmly to the person in front of them and keep both feet in the footwell.

#### **WARNING**

When passengers are on board, make sure that they are holding on firmly and have feet in the footwell before you start to accelerate.

When pulling a skier, the spotter should face to the rear while holding the handgrip with both hands. The spotter should always sit astride the seat with his or her feet placed firmly on the footrest for proper balance. Follow state laws regarding skiing such as skier-down flags, rearward-facing spotter, and other requirements.

### **Starting the watercraft**

#### **WARNING**

- Scan constantly for people, objects and other watercraft. Be alert for conditions that limit your visibility or block your vision of others.
- Operate defensively at safe speeds and keep a safe distance away from people, objects, and other watercraft.
- Do not follow directly behind watercraft or other boats. Do not go near others to spray or splash them with water. Avoid sharp turns or other maneuvers that make it hard for others to avoid you or understand where you are going. Avoid areas with submerged objects or shallow water.
- Take early action to avoid collisions. Remember watercraft and other boats do not have brakes. Do not release the throttle when trying to steer away from objects—you need throttle to steer.
- Practice reboarding in shallow water before riding in deep water.

#### **Starting and boarding in shallow water**

1. Do not start the engine in less than 60 cm (2 ft) of water. Put the watercraft in water that is deep enough, and then board the watercraft from the side or the rear.
2. Attach the engine shut-off cord to your left wrist, and then install the clip to the engine shut-off switch.
3. Grip the handlebars with both hands, place both feet on the floor of the footwell, start the engine, and start off.

#### Starting from a dock

1. Board the watercraft from the side.
2. Attach the engine shut-off cord to your left wrist, and then install the clip to the engine shut-off switch.
3. Push the watercraft away from the dock, grip the handlebars with both hands, place both feet on the floor of the footwell, start the engine, and start off.

#### **Warning**

This content is compiled from multiple sources and is provided for reference purposes only. It may not be complete or fully applicable to all situations. If you are unable to resolve your issue, please contact the product manufacturer or an authorized service provider for official support.