



Thank you for purchasing your Watson outboard. We are sure you will be very happy with your purchase. To make sure you get the most out of your purchase please register your outboard as soon as you receive it. This will ensure your warranty is valid for the duration of the warranty period. If you need any advice about the product you have purchased, please do not hesitate to contact us. To validate your warranty please scan the QR code on your warranty card and follow the on-screen instructions.

Watson Outboard 15hp quick start manual

Your Watson outboard has been shipped to you in a laid down position this is because currently your engine has no fluids inside.

The first thing you need to do is take note of the sticker on the outboard telling you which side to lie your engine down when it has been filled with fluids.

Make sure you add all the oil provided to the engine before you run it as this could cause unnecessary damage to the outboard.

What's in the box

The box shipped out by the Xcape Marine team should contain

1x 15hp Watson Outboard

1x 1000ml of SAE 10-30w engine oil

1x Tool kit

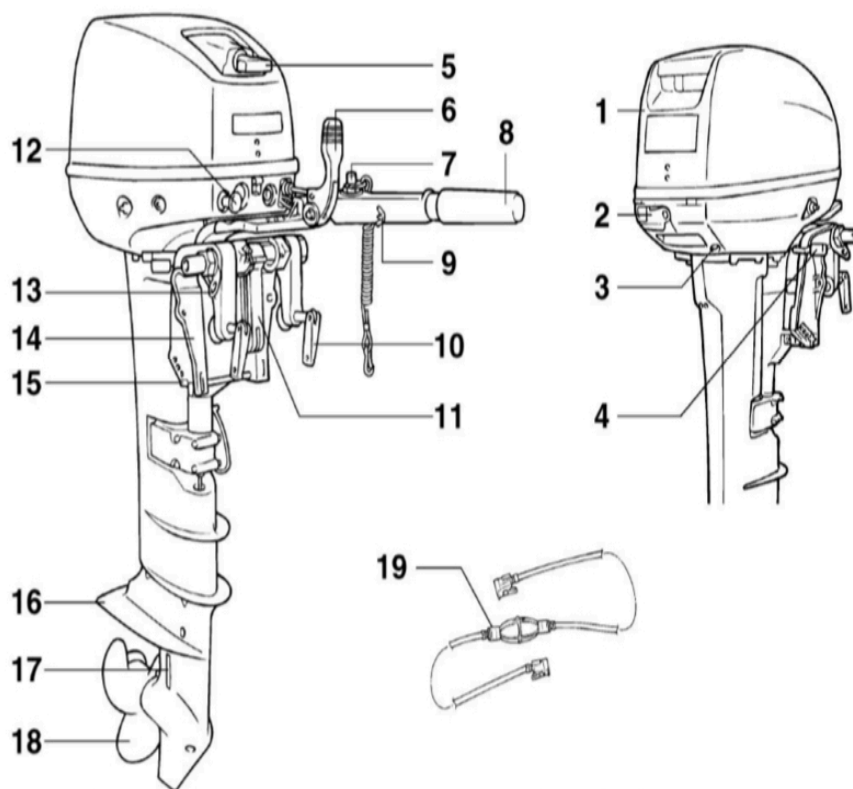
WATSON ENGINE SAFETY

Operator Responsibility.

For the safety of yourself and others take these precautions:

- Do not allow anyone to operate the outboard motor without proper instruction or supervision
- Always attach the emergency cut out lanyard (“deadman”) to the operator when running engine
- Before operation make sure you understand the laws and regulations relating to boating and the use of outboard motors
- Make sure you understand how to stop the engine quickly in case of emergency or man overboard
- Do not attempt to modify the engine
- Always ensure you and your crew are wearing a life jacket while on board
- The engine and exhaust become very hot during operation so avoid touching these parts as contact can cause burns and injury
- Note- these parts remain hot even after engine has been stopped. Let it cool down before doing any maintenance
- Never run the engine with the cover/cowling off. Install the cover immediately after any emergency starting
- Do not exceed boat power rating and make sure the outboard is properly mounted
- Do not run the engine while anyone is nearby in the water
- Do not remove any of the guards, shields, labels, covers and safety devices
- Refuel carefully in well ventilated areas. Avoid spillages. Ensure filler caps are secure and spillages cleaned up before restarting.

Components diagram



1. Top cowling
2. Cowl lock lever
3. Cooling water pilot hole
4. Tilt lock lever
5. Manual starter handle
6. Gear shift lever
7. Engine stop button/Engine shut-off switch
8. Tiller handle
9. Throttle friction adjuster
10. Clamp screw
11. Carrying handle
12. Choke knob
13. Restraint cable attachment
14. Clamp bracket
15. Trim rod
16. Anti-cavitation plate

17. Cooling water inlet
18. Propeller
19. Fuel hose

Fuel tank

If your model was equipped with a portable fuel tank, its function is as follows.

⚠ WARNING

The fuel tank supplied with this engine is its dedicated fuel reservoir and must not be used as a fuel storage container. Commercial users should conform to relevant licensing or approval authority regulations.

Operation

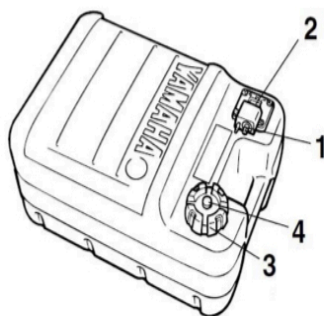
Procedure for 4-stroke models.

Your new engine requires a period of 10 hours “break-in” to allow mating surfaces of moving parts to wear in evenly and protect the longevity of your engine.

Run the engine in water, under load (in gear) as follows. For breaking in the engine avoid extended idling, rough water and crowded areas.

1. For the first hour of operation: Run the engine at varying speeds up to 2000rpm or approximately half throttle.
2. For the second hour of operation: Run the engine at 3000rpm or approximately three-quarter throttle
3. Remaining 8 hours: Run the engine at any speed. However, avoid operating at full throttle for more than 5 minutes at a time.
4. After the first 10 hours you can operate the engine however you see fit.

Important Information



1. Fuel joint
2. Fuel gauge
3. Fuel tank cap
4. Air vent screw

Fuel joint

This joint is used to connect the fuel line.

Fuel gauge

This gauge is located on either the fuel tank cap or on the fuel joint base. It shows the approximate amount of fuel remaining in the tank.

Fuel tank cap

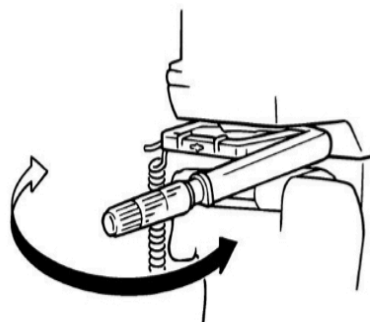
This cap seals the fuel tank. When removed, the tank can be filled with fuel. To remove the cap, turn it counterclockwise.

Air vent screw

This screw is on the fuel tank cap. To loosen the screw, turn it counterclockwise.

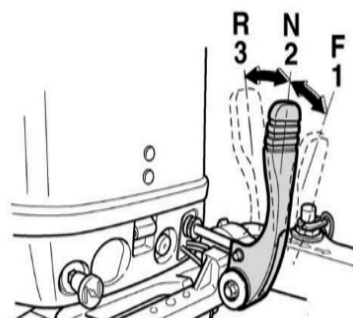
Tiller handle

To change direction, move the tiller handle to the left or right as necessary.



Gear shift lever

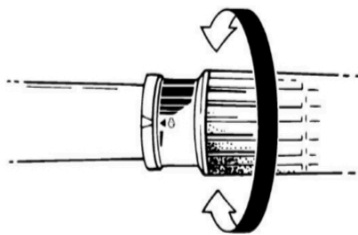
Pulling the gear shift lever towards you puts the engine in forward gear so that the boat moves ahead. Pushing the lever away from you puts the engine in reverse gear so that the boat moves astern.



1. Forward "F"
2. Neutral "N"
3. Reverse "R"

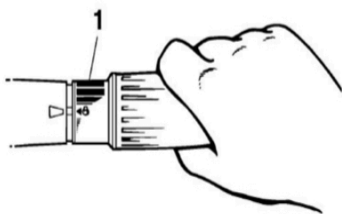
Throttle grip

The throttle grip is on the tiller handle. Turn the grip counterclockwise to increase speed and clockwise to decrease speed.



Throttle indicator

The fuel consumption curve on the throttle indicator shows the relative amount of fuel consumed for each throttle position. Choose the setting that offers the best performance and fuel economy for the desired operation.

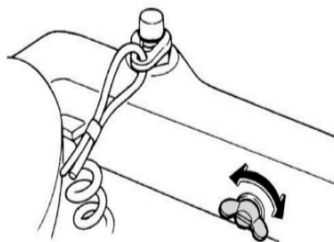


1. Throttle indicator

Throttle friction adjuster

A friction device provides adjustable resistance to movement of the throttle grip or the remote control lever, and can be set according to operator preference.

To increase resistance, turn the adjuster clockwise. To decrease resistance, turn the adjuster counterclockwise. **WARNING! Do not overtighten the friction adjuster.** If there is too much resistance, it could be difficult to move the remote control lever or throttle grip, which could result in an accident.



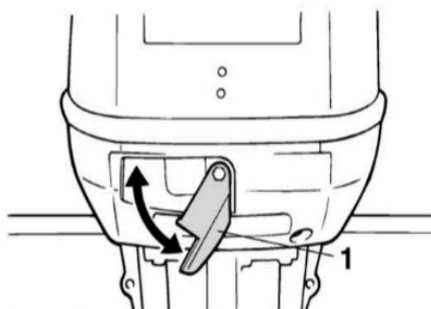
When constant speed is desired, tighten the adjuster to maintain the desired throttle setting.

Engine shut-off cord (lanyard) and clip

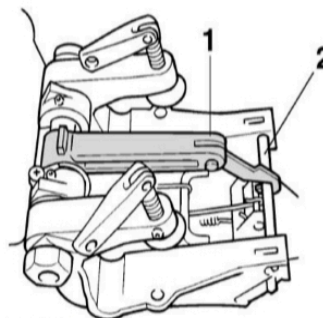
The clip must be attached to the engine shut-off switch for the engine to run. The cord should be attached to a secure place on the operator's clothing, or arm or leg. Should the operator fall overboard or leave the helm, the cord will pull out the clip, stopping ignition to the engine. This will prevent the boat from running away under power. **WARNING! Attach the engine shut-off cord to a secure place on your clothing, or your arm or leg while operating. Do not attach the cord to clothing that could tear loose. Do not route the cord where it could become entangled, preventing it from functioning. Avoid accidentally pulling the cord during normal operation. Loss of engine power means the loss of most steering control. Also, without engine power, the boat could slow rapidly. This could cause people and objects in the boat to be thrown forward.**

Cowling lock lever(s) (turn type)

To remove the engine top cowling, turn the cowling lock lever(s) and lift off the cowling. When installing the cowling, check to be sure it fits properly in the rubber seal. Then lock the cowling again by returning the cowling lock lever(s) to the lock position.



1. Cowling lock lever(s)



1. Carrying handle
2. Clamp bracket bar

Carrying handle

A carrying handle is included on the clamp bracket. After setting the handle up, it enables you to carry the outboard motor easily with one hand.

To set up the carrying handle, proceed as follows:

1. Place the tilt lock lever in the lock position.
2. Securely hook the arm on the carrying handle end to the clamp bracket bar.

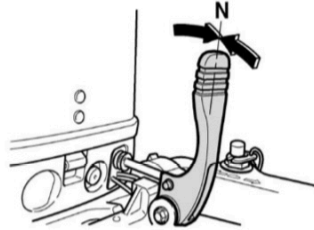
NOTICE

Place the tilt lock lever in the lock position while using the carrying handle. Otherwise, the lower unit could fall to the ground while carrying the motor.

Starting your Watson Outboard

- Avoid accidentally pulling the cord during normal operation. Loss of engine power means the loss of most steering control. Also, without engine power, the boat could slow rapidly. This could cause people and objects in the boat to be thrown forward.

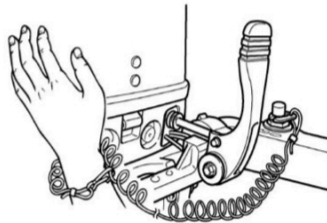
1. Place the gear shift lever in neutral.



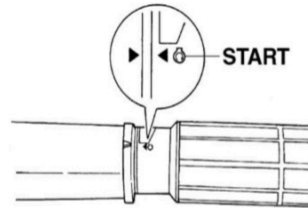
TIP:

The start-in-gear protection device prevents the engine from starting except when in neutral.

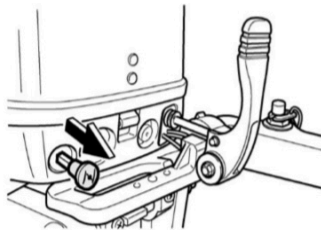
2. Attach the engine shut-off cord to a secure place on your clothing, or your arm or leg. Then install the clip on the other end of the cord into the engine shut-off switch.



3. Place the throttle grip in the "START" (start) position.

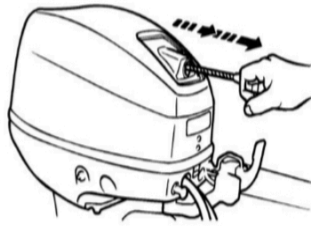


4. Pull out / turn the choke knob fully. Place the choke knob back in to the second or third position to warm up the engine after starting. When the engine has fully warmed up, replace the choke knob back in to its home position.



TIP:

- It is not necessary to use the choke when starting a warm engine.
 - If the choke knob is left in the pulled out position while the engine is running, the engine will run poorly or stall.
5. Pull the manual starter handle slowly until you feel resistance. Then give a strong pull straight out to crank and start the engine. Repeat if necessary.



NOTICE

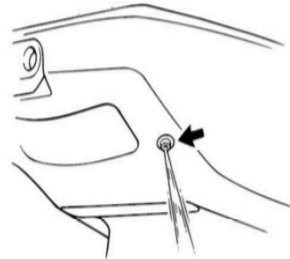
If water is not flowing out of the pilot hole at all times while the engine is running, overheating and serious damage could occur. Stop the engine and check whether the cooling water inlet on the lower case or the cooling water pilot hole is blocked.

6. After the engine starts, slowly return the manual starter handle to its original position before releasing it.
7. Slowly return the throttle grip to the fully closed position.

Checks after starting engine

Cooling water

Check for a steady flow of water from the cooling water pilot hole. A continuous flow of water from the pilot hole shows that the water pump is pumping water through the cooling passages. If the cooling passages are frozen, it may take a while for water to start flowing out of the pilot hole.



Check that no water leaks from the joints between the exhaust cover, cylinder head, and body cylinder.

Warming up engine

Choke start models

After starting the engine, allow it to idle for 3 minutes to warm up. Failure to do so will shorten engine life. Gradually return the choke knob to its home position as the engine warms up.

Checks after engine warm-up

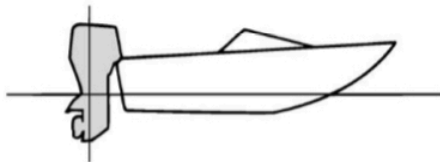
Shifting

While tightly moored, and without applying throttle, confirm that the engine shifts smoothly into forward and reverse, and back to neutral.

Tilt Angle

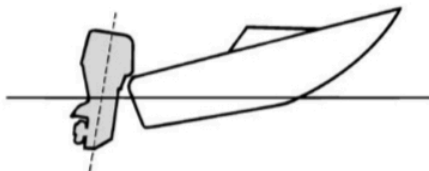
Adjusting boat trim

When the boat is on plane, a bow-up attitude results in less drag, greater stability and efficiency. This is generally when the keel line of the boat is up about 3 to 5 degrees. With the bow up, the boat may have a greater tendency to steer to one side or the other. Compensate for this as you steer. When the bow of the boat is down, it is easier to accelerate from a standing start onto plane.



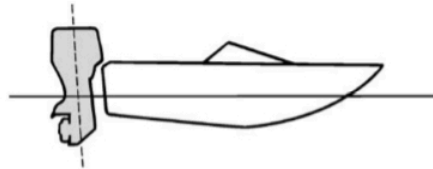
Bow Up

Too much trim-out puts the bow of the boat too high in the water. Performance and economy are decreased because the hull of the boat is pushing the water and there is more air drag. Excessive trim-out can also cause the propeller to ventilate, which reduces performance further, and the boat may “porpoise” (hop in the water), which could throw the operator and passengers overboard.



Bow Down

Too much trim-in causes the boat to “plow” through the water, decreasing fuel economy and making it hard to increase speed. Operating with excessive trim-in at higher speeds also makes the boat unstable. Resistance at the bow is greatly increased, heightening the danger of “bow steering” and making operation difficult and dangerous.



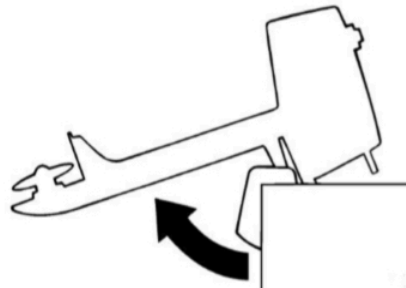
TIP:

Depending on the type of boat, the outboard motor trim angle may have little effect on the trim of the boat when operating.

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Tilting up and down

If the engine will be stopped for some time or if the boat is moored in shallows, the outboard motor should be tilted up to protect the propeller and lower casing from damage by collision with obstructions, and also to reduce salt corrosion.



Changing the gearbox oil

TIP:

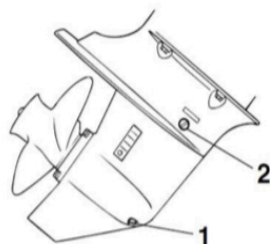
If the propeller nut does not align with the propeller shaft hole after tightening to the specified torque, tighten the nut further to align it with the hole.

Changing gear oil

WARNING

- Be sure the outboard motor is securely fastened to the transom or a stable stand. You could be severely injured if the outboard motor falls on you.
- Never get under the lower unit while it is tilted, even when the tilt support lever or knob is locked. Severe injury could occur if the outboard motor accidentally falls.

1. Tilt the outboard motor so that the gear oil drain screw is at the lowest point possible.
2. Place a suitable container under the gear case.
3. Remove the gear oil drain screw and gasket. **NOTICE:** If there is an excessive quantity of metal particles on the magnetic gear oil drain screw, this can indicate lower unit problem.



1. Gear oil drain screw
2. Oil level plug

TIP:

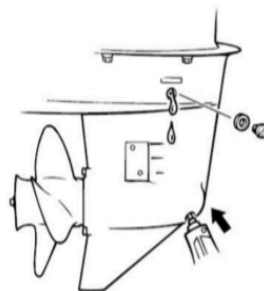
- If a magnetic gear oil drain screw is equipped, remove all metal particles from the screw before installing it.
- Always use new gaskets. Do not reuse the removed gaskets.

4. Remove the oil level plug and gasket to allow the oil to drain completely.

NOTICE: Inspect the used oil after it has been drained. If the oil is milky, water is getting into the gear case which can cause gear damage. Consult a Yamaha dealer for repair of the lower unit seals.

5. Put the outboard motor in a vertical position. Using a flexible or pressurized filling device, inject the gear oil into the gear oil drain screw hole.

Recommended gear oil: Hypoid gear oil SAE#90 Gear oil quantity: 0.250 L (0.264 US qt, 0.220 Imp.qt)
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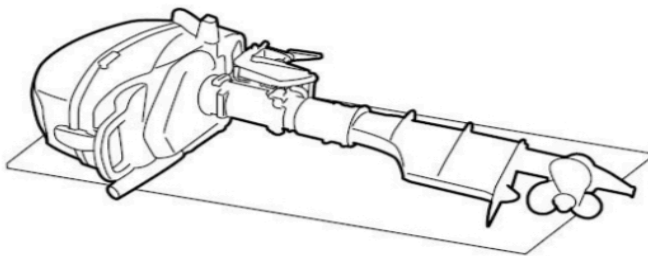
6. Put a new gasket on the oil level plug. When the oil begins to flow out of the oil level plug hole, insert and tighten the oil level plug.

Storing your Outboard

When transporting or storing the outboard motor while removed from a boat, use an outboard motor stand.



If transporting or storing the outboard motor horizontally cannot be avoided, tighten the clamp screws completely, place a towel or something similar under the outboard motor to protect it from damage, and then place the outboard motor in the attitude shown. If the front side of the outboard motor is facing down, turn the clamp bracket 90° so that it does not contact the ground, and then turn the steering friction adjuster clockwise to secure the bracket.



When storing your Watson Outboard motor with the fluids in (oil & petrol) make sure you pay attention to the sticker on the engine. If the engine is laid on the wrong side, you will have issues with fluids leaking into the engine and causing damage.

When storing your outboard for a prolonged time (2 Months or over) it is recommended you have your engine prepared by a Watson (Outboard Professional) to make sure no damage occurs while your outboard is in storage.

This goes as far as but is not limited to,

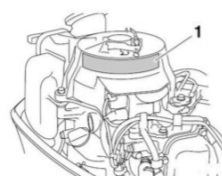
- Draining the fuel
- Draining the oil
- Oiling and re-greasing components
- Flushing the cooling system

Emergency Starting Procedure

Emergency Starting Procedure

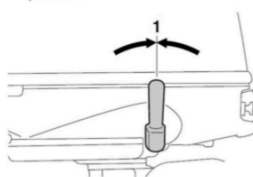
- Do not attach the cord to clothing that could tear loose. Do not route the cord where it could become entangled, preventing it from functioning.
- Avoid accidentally pulling the cord during normal operation. Loss of engine power means the loss of most steering control. Also, without engine power, the boat could slow rapidly. This could cause people and objects in the boat to be thrown forward.
- Make sure that no one is standing behind you when pulling the starter rope. It could whip behind you and injure someone.
- An unguarded, rotating flywheel is very dangerous. Keep loose clothing and other objects away when starting the engine. Use the emergency starter rope only as instructed. Do not touch the flywheel or other moving parts when the engine is running. Do not install the starter mechanism or top cowling after the engine is running.
- Do not touch the ignition coil, spark plug wire, spark plug cap, or other electrical components when starting or operating the outboard motor. You could get an electrical shock.

Before performing the following procedure, make sure to read the emergency starting label on the manual starter/flywheel magnet cover.



1. Emergency starting label

1. Move the gear shift lever to the neutral position.



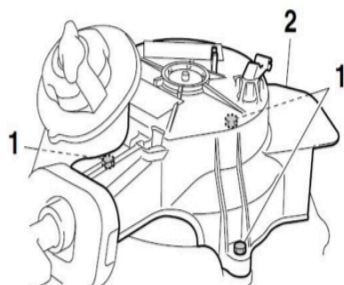
1. Neutral position

2. Remove the top cowling.
3. Loosen the nut, and then disconnect the start-in-gear protection cable.

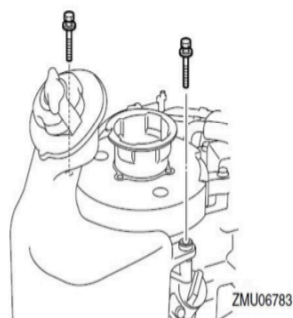


1. Start-in-gear protection cable
2. Nut

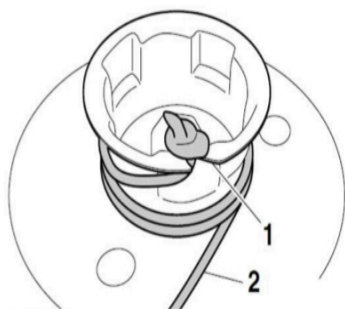
4. Remove the manual starter/flywheel magnet cover by removing the bolts.



- 1. Bolts
- 2. Manual starter/flywheel magnet cover
- 5. Reinstall 2 bolts to secure the fuel tank.

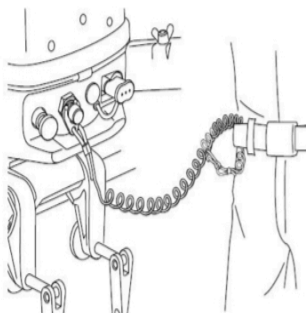


- 6. Insert the knotted end of the emergency starter rope into the notch in the flywheel magnet and wind the rope several turns around the flywheel magnet clockwise.

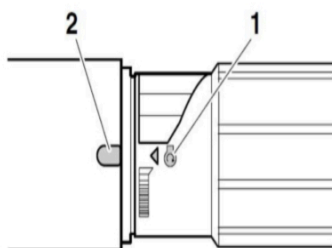


- 1. Notch
- 2. Emergency starter rope

- 7. Attach the engine shut-off cord to a secure place on your clothing, or your arm or leg. Then, install the clip on the other end of the cord to the engine shut-off switch.



- 8. Align the engine start mark "S" on the throttle grip with the notch in the tiller handle.



- 1. Start mark "S"
- 2. Notch
- 9. Give a strong pull straight out to crank and start the engine.

Troubleshooting

Troubleshooting

Troubleshooting

This section describes the likely causes and remedies for problems, such as those in the fuel, compression, and ignition systems, poor starting, and loss of power. Please note that all of the items in this section may not apply to your model.

Engine will not start.

Q. Is fuel tank empty?

A. Fill tank with clean, fresh fuel.

Q. Is fuel contaminated or stale?

A. Fill tank with clean, fresh fuel.

Q. Is fuel filter clogged?

A. Clean or replace filter.

Q. Is fuel pump malfunctioning?

A. Have serviced

Q. Is spark plug fouled or of incorrect type?

A. Inspect spark plug. Clean or replace with recommended type.

Q. Is spark plug cap fitted incorrectly?

A. Check and re-fit cap.

Q. Is spark plug wiring damaged or poorly connected?

A. Check wires for wear or breaks. Tighten all loose connections. Replace worn or broken wires.

Q. Are electrical parts malfunctioning?

A. Have serviced.

A. Install clip to engine shut-off switch.

Q. Are engine inner parts damaged?

A. Have serviced

Engine idles irregularly or stalls.

Q. Is fuel system obstructed?

A. Check for pinched or kinked fuel line or other obstructions in fuel system.

Q. Is fuel contaminated or stale?

A. Fill tank with clean, fresh fuel.

Q. Is fuel filter clogged?

A. Clean or replace filter.

Q. Are electrical parts malfunctioning?

A. Have serviced

Q. Is spark plug gap incorrect?

A. Replace spark plug.

Q. Is spark plug wiring damaged or poorly connected?

A. Check wires for wear or breaks. Tighten all loose connections. Replace worn or broken wires.

Q. Is specified engine oil not being used?

A. Check and replace oil with specified type.

Q. Is thermostat malfunctioning or clogged?

A. Have serviced .

Q. Are carburetor adjustments incorrect?

A. Have serviced .

Q. Is fuel pump malfunctioning?

A. Have serviced .

Q. Is choke knob pulled out?

A. Return to home position.

Q. Is carburetor clogged?

A. Have serviced.

Q. Is fuel joint connection incorrect?

A. Connect correctly.

Q. Is throttle cable adjustment incorrect?

A. Have serviced.

Engine power loss.

Q. Is propeller damaged?

A. Have propeller repaired or replaced.

Q. Is propeller pitch or diameter incorrect?

A. Install correct propeller to operate outboard at its recommended speed (r/min) range.

Q. Is trim angle incorrect?

A. Adjust trim angle to achieve most efficient operation.

Q. Is outboard motor mounted at incorrect height on transom?

A. Have outboard motor adjusted to proper transom height.

Q. Is boat bottom fouled with marine growth?

A. Clean boat bottom.

Q. Is spark plug fouled or of incorrect type?

A. Inspect spark plug. Clean or replace with recommended type.

Q. Are weeds or other foreign material tangled on gear housing?

Q. Is fuel system obstructed?

A. Check for pinched or kinked fuel line or other obstructions in fuel system.

Q. Is fuel filter clogged?

A. Clean or replace filter.

Q. Is fuel contaminated or stale?

A. Fill tank with clean, fresh fuel.

Q. Is spark plug gap incorrect?

A. Replace spark plug.

Q. Is spark plug wiring damaged or poorly connected?

A. Check wires for wear or breaks. Tighten all loose connections. Replace worn or broken wires.

Q. Are electrical parts malfunctioning?

A. Have serviced.

Q. Is specified fuel not being used?

A. Replace fuel with specified type.

Q. Is specified engine oil not being used?

A. Check and replace oil with specified type.

Q. Is thermostat malfunctioning or clogged?

A. Have serviced.

Q. Is air vent screw tightened?

A. Loosen air vent screw.

Q. Is fuel pump malfunctioning?

A. Have serviced.

The best way to flush your Outboard

It is very important to flush your outboard out regularly especially if you use your outboard on the sea. If your outboard is mainly used on the sea you should flush it out after every use to prevent corrosion of the internal workings of the engine. We would always suggest you use a salt inhibitor to make sure to keep your engine in the best shape possible. Flushing an engine is an easy task and once you know how to do it, it will take less than 15 mins.

What you need;

1x Flush Muffs

1X Blu-Thru Dispenser

2x Blu-Thru tablets A hose pipe and tap.

Safety Information

The kill cord, or 'engine safety cut-out switch' to give it its proper name, is a device used to stop the engine in the event of the helms person being thrown out of their seat.

It consists of a length of cord or plastic wire connected to a kill switch on the engine or dashboard of the boat.

One end of the kill cord has a plastic collar to hold the switch open, the other has a clip on it, which can be attached directly to the helmsperson's life jacket, or made into a loop which is then passed around their wrist or thigh.

If the helms person is thrown from their seat by a sudden manoeuvre, such as hitting the back of a wave or a sudden loss of grip at the stern, the kill cord is pulled from the dash, cutting the engine and preventing further injury from the spinning propeller.

Always use a Lanyard when operating an outboard engine

2-year Engine Warranty

To maintain your engine in the right condition and within our warranty terms please ensure it is serviced regularly by authorised service centres in line with the service book. Please note terms and conditions under which your engine should be treated for warranty to apply.

As your engine is water cooled, we advise flushing out your engine with a salt inhibitor, after each time it is used in salt-water (in fresh water use only required once before winterising). At Xcape Marine we manufacture and supply Blu-Thru for this purpose. We recommend using the Blu Thru flush kit along with a set of flush muffs