

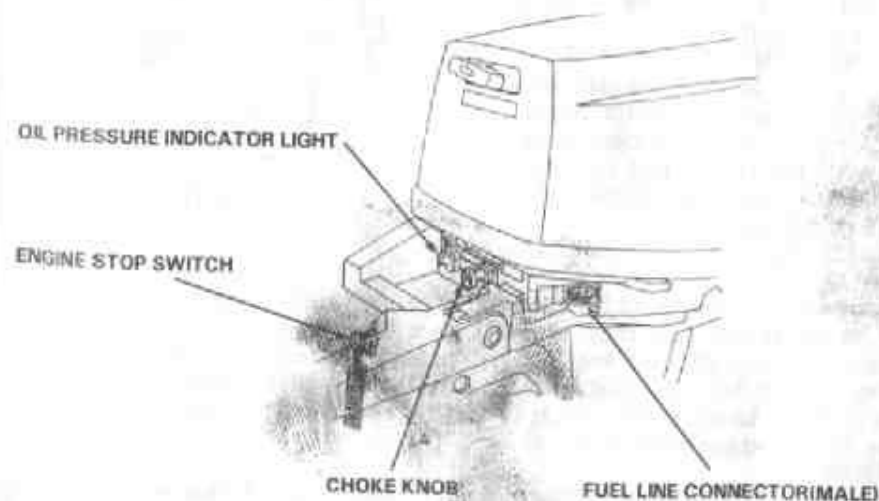
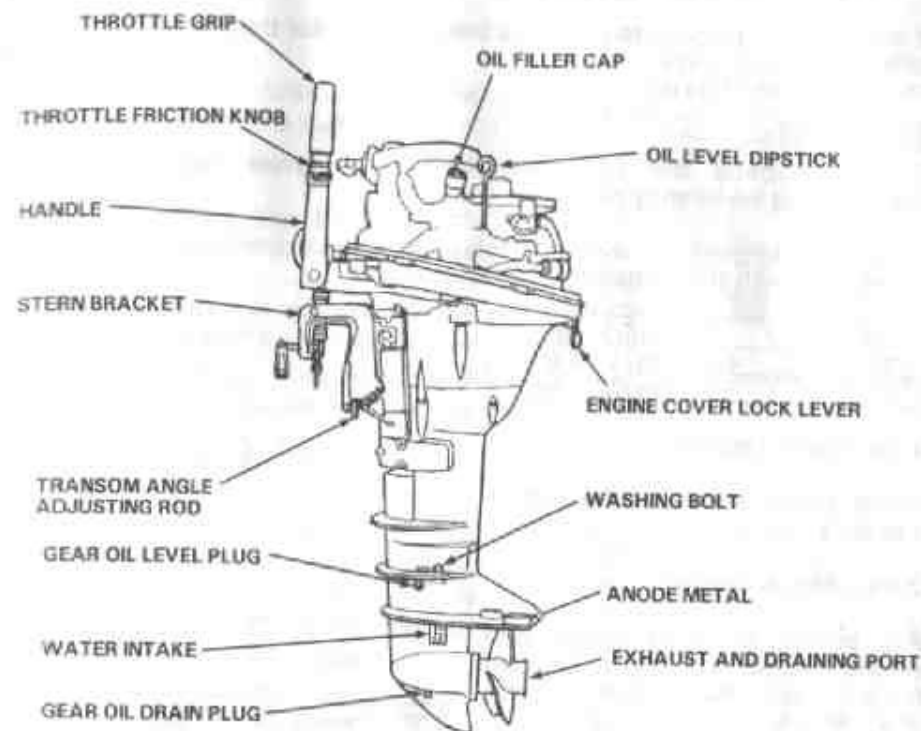
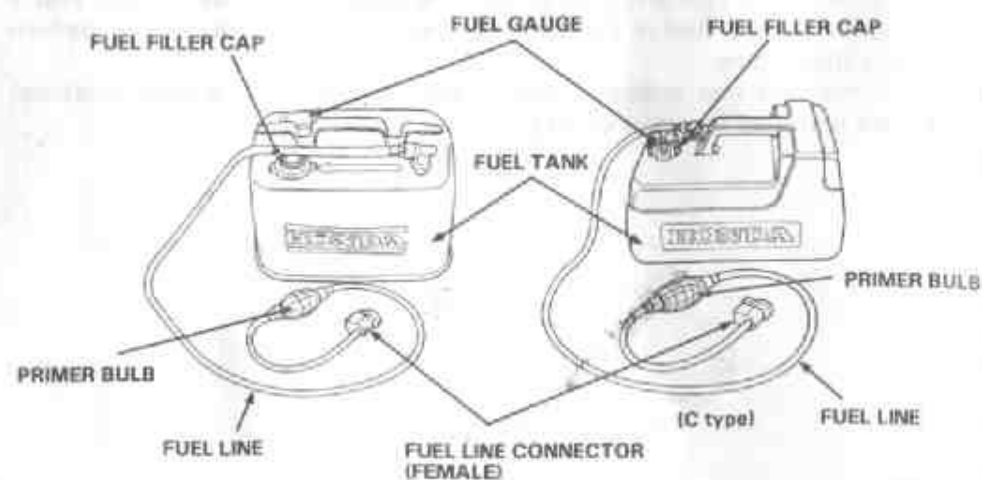
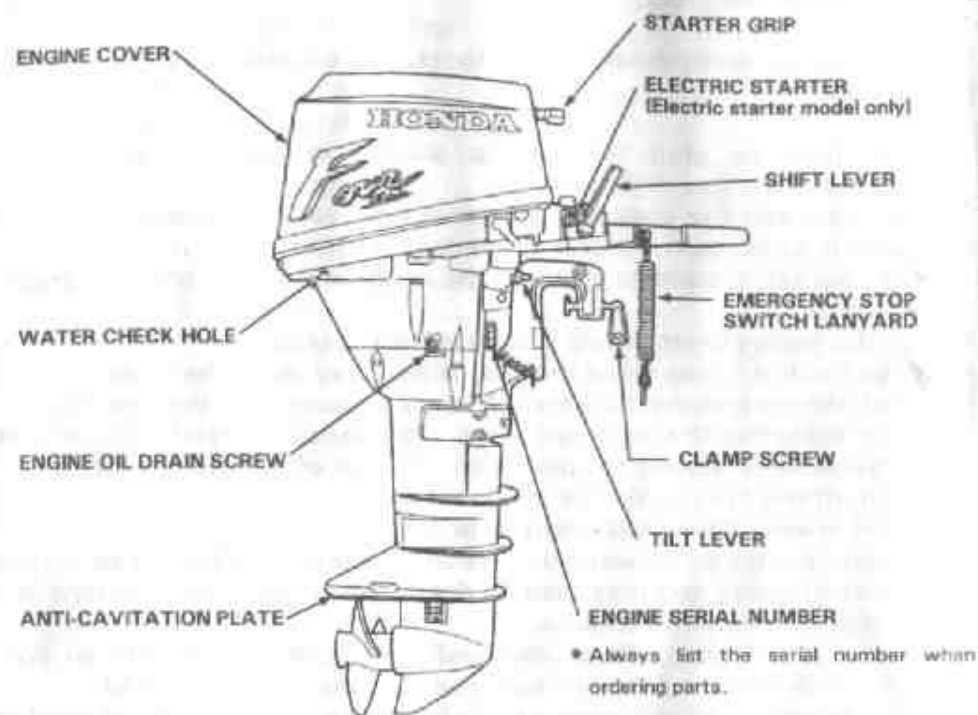
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SAFETY INFORMATION

For your safety and the safety of others, pay special attention to these precautions.

- Know how to stop the engine quickly in case of emergency. Understand the use of all controls.
- Do not exceed the boat manufacturer's power recommendation, and be sure the outboard motor is properly mounted.
- Never permit anyone to operate the outboard motor without proper instruction.
- Stop the engine immediately if anyone falls overboard.
- Do not run the motor while the boat is near anyone in the water.
- Attach the emergency stop switch lanyard securely to the operator.
- Before operating the outboard motor, familiarize yourself with all laws and regulations relating to boating and the use of outboard motors.
- Do not attempt to modify the outboard motor.
- Always wear a life-jacket when on board.
- Exhaust contains poisonous carbon monoxide which can cause unconsciousness and may lead to death. Never run the outboard in a closed garage or confined area.
- Gasoline is extremely flammable and is explosive under certain conditions. Refuel in a well ventilated area with the engine stopped. Do not smoke or allow flames or sparks where the engine is refueled or where gasoline is stored.
- Do not overfill the fuel tank. After refueling make sure that the fuel tank cap is closed properly and securely.
- Be careful not to spill any fuel while refueling. Spilled fuel or fuel vapor may ignite. If any fuel is spilled make sure that the area is dry before starting the engine.
- Do not remove any guards, labels, shields, covers or safety devices; they are installed for your safety.

2. COMPONENT IDENTIFICATION



3. INSTALLATION

It is your responsibility to choose a boat suitable for the engine.
BF9.9A: 9.9 HP (7.4 kW)
BF15A: 15 HP (11.2 kW)

⚠ WARNING

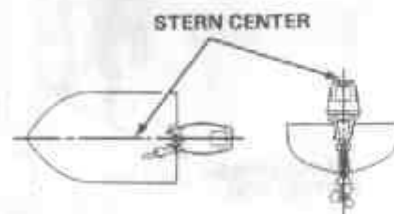
Do not exceed the boat manufacturer's power recommendation. Damage and injury may result.

Two shaft lengths are available for your outboard motor, either long or short, to match the transom height of the boat.

Model	Transom length
S(Short)	440 mm (17.3 in)
L(Long)	570 mm (22.4 in)

1. Installation position

Install at the stern, at the center line of the boat.



2. Installation height

For proper propeller depth and engine cooling, the boat's transom height must match the motor's shaft length.

The short shaft motor requires a transom height of about:

380 mm (15.0 in)

The long shaft motor requires a transom of about:

508 mm (20.0 in)

Once the boat is in the water and loaded, check proper motor depth by looking at the anti-cavitation plate: with the motor not running, the plate should be below the surface of the water.

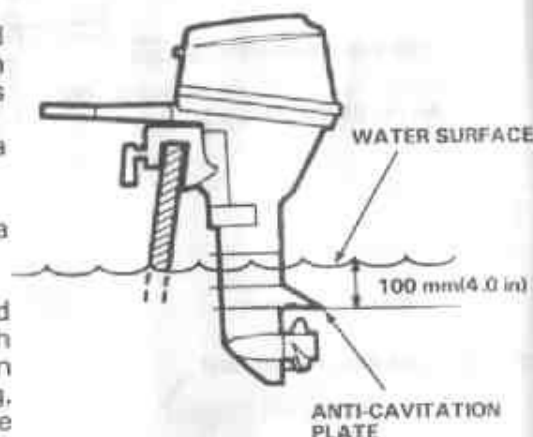
It should be about:

100 mm (3.9 in)

During operation, check to be sure the anti-cavitation plate remains under water at all times and that water flows from the water check hole. Excessive or imbalanced loading will affect the motor's water depth. Loading too far forward will raise the motor out of the water, reducing engine cooling. Loading too much or too far rearward will push the motor deeper, reducing performance.

CAUTION:

Insufficient water supply (anti-cavitation plate out of the water) may cause overheating that will damage the outboard motor.

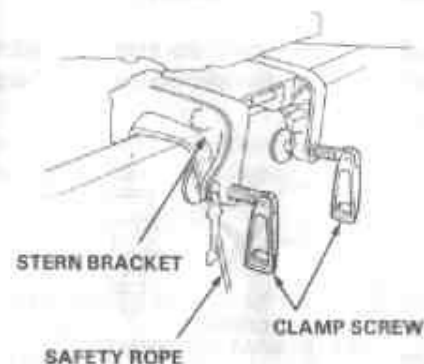


3. Motor attachment

Attach the stern bracket to the transom and tighten the clamp screws.

CAUTION:

- While operating the boat, check the tightness of the clamp screws occasionally.
- Tie a rope through the hole in the stern bracket and secure the other end of the rope to the boat. This will prevent accidental loss of the motor.

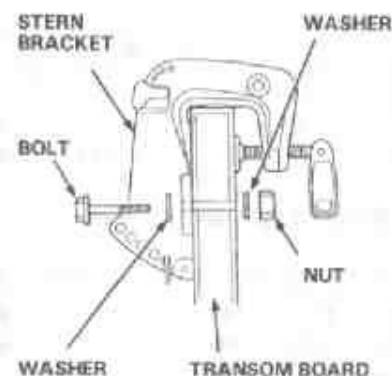


NOTE:

To prevent the outboard motor from falling accidentally, you may further secure the stern bracket to the transom board with commercially available bolts, nuts and washers.

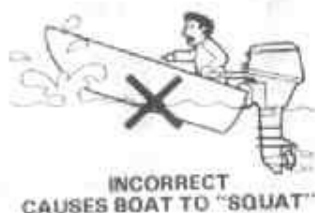
After attaching the stern bracket to the transom board, be sure to apply sealant (THREEBOND 1216 or equivalent) to the bolt holes.

This modification should be made by your authorized Honda Outboard Motor dealer.



4. Motor angle (cruising)

Adjust the motor so the axis of the propeller is parallel with the water surface.



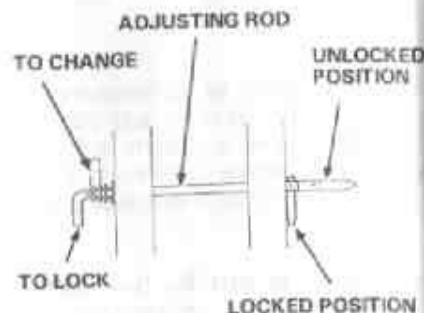
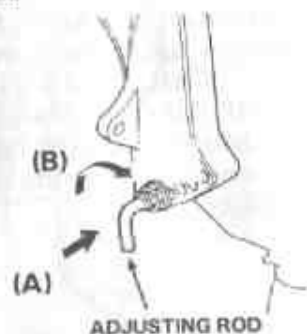
5. Motor angle adjustment

If the propeller axis is not parallel with the water surface, adjust by changing the adjusting rod position. There are four adjusting stages.

1. Push in (A) the adjusting rod, twist upwards (B) and pull out to remove.
2. Inserting the rod in the proper hole, twist it down to lock.

CAUTION:

To prevent damage to the motor or boat, make sure the adjusting rod is locked.



6. Battery connections (for electric starter)

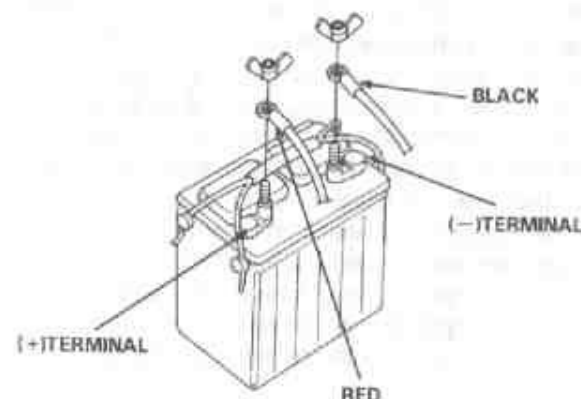
Use a battery which has 12 V 40 AH specifications.

Place the battery in a corrosion-resistant battery box and fix the battery box securely to the hull.

Install the battery box in a location such that it does not topple over while the boat is cruising or is not exposed to spray or direct sunlight.

Connecting the battery cord

1. Connect the cable with the red terminal cover to the (+) side of the battery.
2. Connect the cable with the black terminal cover to the (-) side of the battery.



CAUTION:

- Be sure to connect the (+) side battery cable first. When disconnecting the cables, disconnect the (-) side first then the (+) side.
- Unless the cables are properly connected to the terminals, the starter motor may fail to operate normally.
- Do not place the fuel tank near the battery.

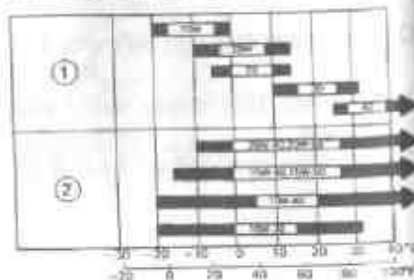
4. PRE-OPERATION CHECK

1. Engine oil level

CAUTION:

- Engine oil is a major factor affecting engine performance and service life. Nondetergent and low quality oils are not recommended, because they have inadequate lubricating properties.
- Running the engine with insufficient oil can cause serious engine damage.

Use Honda 4-stroke oil, or an equivalent high detergent, premium quality motor oil certified to meet or exceed U.S. automobile manufacturer's requirements for Service Classification SG, SF/CC, CD. Motor oils classified SG, SF/CC, CD will show this designation on the container.



GASOLINES CONTAINING ALCOHOL

If you decide to use a gasoline containing alcohol (gasohol), be sure it's octane rating is at least as high as that recommended by Honda. There are two types of "gasohol": one containing ethanol, and the other containing methanol. Do not use gasohol that contains more than 10% ethanol. Do not use gasoline containing methanol (methyl or wood alcohol) that does not also contain cosolvents and corrosion inhibitors for methanol. Never use gasoline containing more than 5% methanol, even if it has cosolvents and corrosion inhibitors.

NOTE:

- Fuel system damage or engine performance problems resulting from the use of fuels that contain alcohol is not covered under the warranty. Honda cannot endorse the use of fuels containing methanol since evidence of their suitability is as yet incomplete.
- Before buying fuel from an unfamiliar station, try to find out the fuel contains alcohol, if it does, confirm the type and percentage of alcohol used. If you notice any undesirable operating symptoms while using a gasoline that contains alcohol, or one that you think contains alcohol, switch to a gasoline that you know does not contain alcohol.

3. Other checks

Check the following items.

- ① The propeller and cotter pin for damage or looseness.
- ② The fuel hose for kinking, collapsing or a loose connection.
- ③ The steering handle for impaired operation.
- ④ The stern bracket for damage.
- ⑤ The tool kit for missing spare parts and tools.
- ⑥ The anode metal for damage, looseness or excessive corrosion.

The anode metal helps to protect the outboard motor from corrosion damage; it must be exposed directly to the water whenever the motor is in use. Replace the anode metal when it has been reduced to approximately one half of its original size.

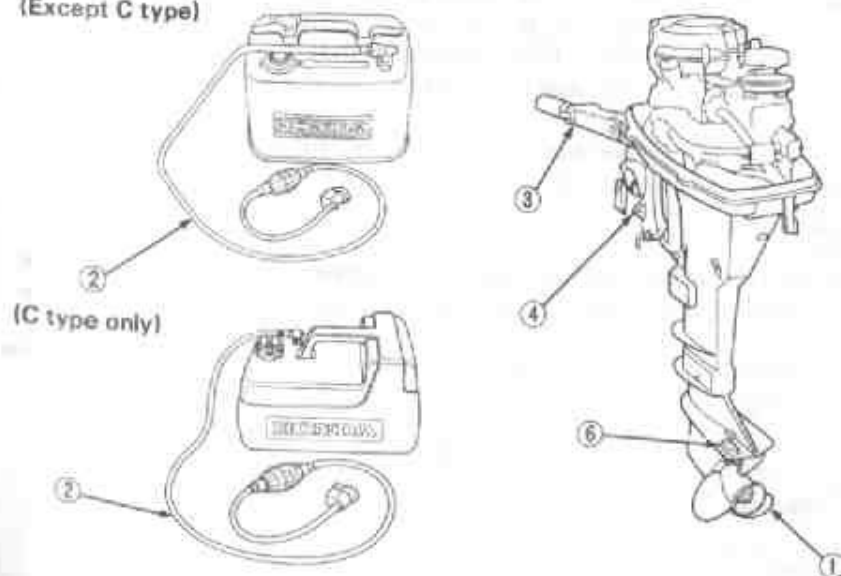
CAUTION:

If you paint the surface of the anode metal it will fail to function as a sacrificial metal, causing the outboard motor to rust and corrode.

The following materials should be kept with the boat:

1. Owner's Manual's.
2. Tool Kit.
3. Spare engine oil, spark plugs, propeller and propeller cotter pins.
4. Required information regarding boating laws and regulations.

(Except C type)



5. STARTING THE ENGINE

Fuel line connection

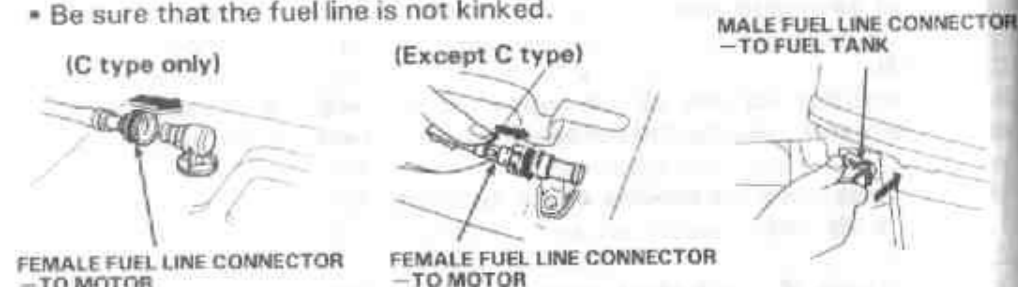
CAUTION:

To prevent damage to the outboard from overheating, never run the engine with the propeller out of the water.

1. Connect the fuel line to the tank and outboard motor, as shown. Be sure the connectors are securely latched.

NOTE:

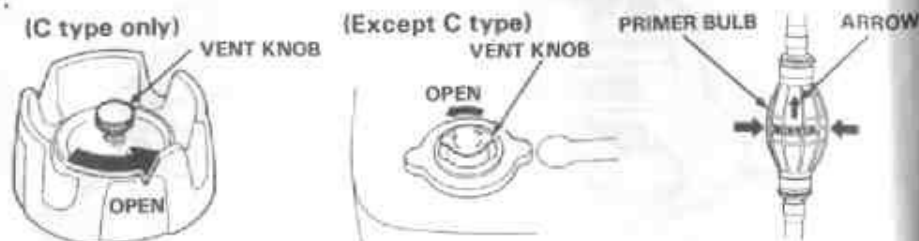
- Position the fuel tank so the tank fuel line connector is no more than 1 meter (3.3 ft) below the motor fuel line connector.
- Do not place the fuel tank more than 2 meters (6.6 ft) away from the motor.
- Be sure that the fuel line is not kinked.



2. Open the fuel cap vent knob 2 to 3 turns.
3. Hold the primer bulb so that the outlet end is higher than the inlet end. The arrow on the primer bulb points upward. Squeeze the primer bulb several times until it feels firm, indicating that fuel has reached the carburetors. Check for fuel leaks and repair any leaks before starting the motor. Do not squeeze the primer bulb when the motor is running because this could cause the carburetors to overflow.

▲WARNING

Be careful not to spill fuel. Spilled fuel or fuel vapor may ignite. If any fuel is spilled, make sure the area is dry before storing or transporting the motor.



Starting

▲WARNING

Exhaust contains poisonous carbon monoxide which can cause unconsciousness and may lead to death. Never run the outboard in a closed garage or confined area.

CAUTION:

The propeller must be lowered into the water, running the outboard motor out of the water will damage the water pump and overheat the engine.

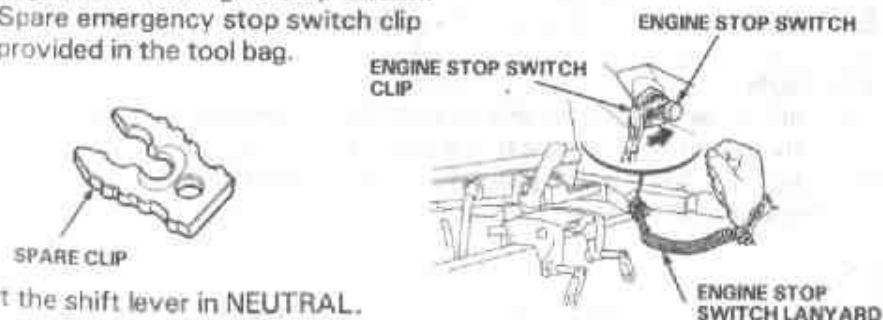
1. Engage the emergency stop switch clip located at one end of the emergency stop switch lanyard with the engine stop switch. Attach the other end of the emergency stop switch lanyard securely to the operator.

▲WARNING

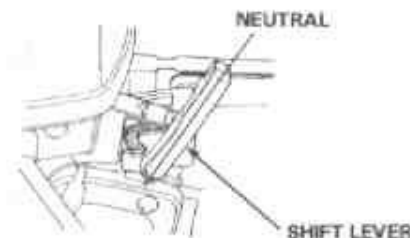
If the operator does not attach the emergency stop switch lanyard, and is thrown from his seat or out of the boat, the out-of-control boat can seriously injure the operator, passengers, or bystanders. Always properly attach the lanyard before starting the motor.

NOTE:

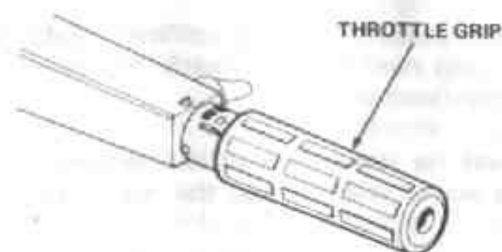
- The engine will not start unless the emergency stop switch clip is engaged with the engine stop switch.
- A Spare emergency stop switch clip is provided in the tool bag.



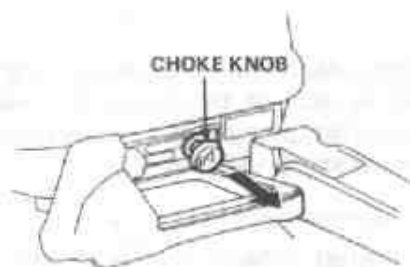
2. Put the shift lever in NEUTRAL.



3. Align the throttle grip START position with the mark on the steering handle.



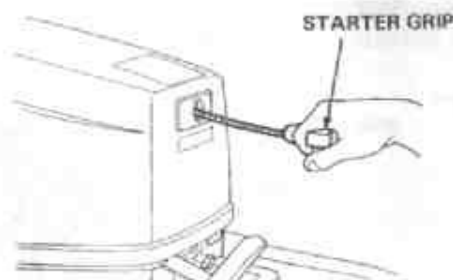
4. If the engine is "cold", pull out the choke knob for starting and then push it in gradually as the engine warm up.



5. Pull the starter rope slowly until a resistance is felt, then pull briskly.

CAUTION:

- Do not allow the starter grip to snap back against the engine. Return it gently to prevent damage to the starter.
- Do not pull the starter grip while the engine is running, as that may damage the starter.



6. Electric starter (Electric starter model only)

Put the outboard motor in NEUTRAL, then press the electric starter button and start the engine.

ELECTRIC STARTER BUTTON



CAUTION:

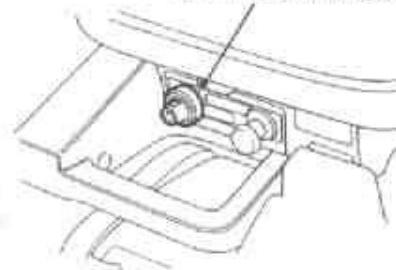
- The starter motor consumes a large amount of current. Do not therefore run it continuously for more than 5 seconds at a time. If the engine does not start within 5 seconds, wait for at least 10 seconds before running the starter motor again.
- Do not press the electric starter button while the engine is running. This may damage the starting unit.

NOTE:

If the engine fails to start, check the emergency stop switch clip.

7. After the engine starts, confirm that the engine oil circulation indicator lamp is lit. In the event that the indicator is not lit, stop the engine and perform the following checks.
- 1) Is the oil quantity normal?
 - 2) If the oil quantity is correct but the indicator lamp is not lit, have the outboard motor checked by the shop where you purchased it.

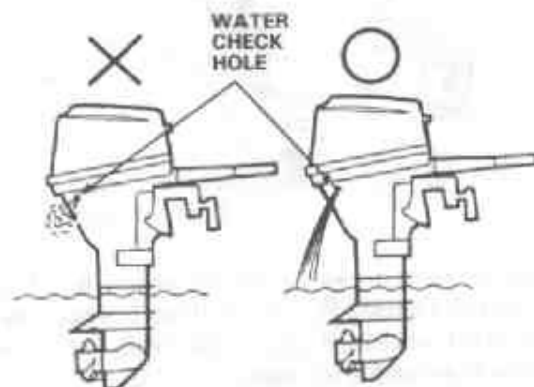
OIL PRESSURE INDICATOR LAMP



8. After starting, be sure water is flowing out of the water check hole.

WARNING

If water does not flow out, or if steam comes out, stop the engine. Check to see if the screen in the cooling water inlet is obstructed. Do not operate the engine until the problem has been corrected.



9. If the choke was used, push it in gradually as the engine warms up.

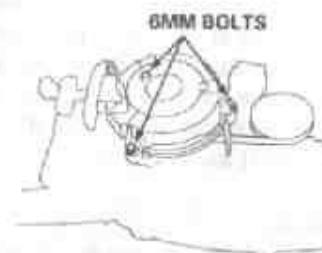
NOTE:

Before leaving the dock, check the operation of the emergency stop switch.

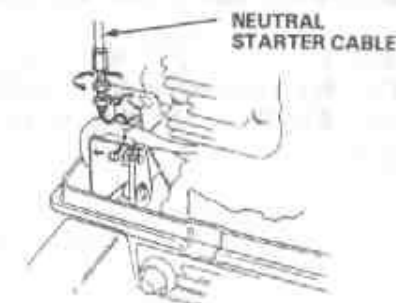
Emergency starting

If the recoil starter is not working properly, the engine can be started with the spare starter rope in the tool kit.

1. Remove the engine cover.
2. Remove the recoil starter by removing the three 6 mm bolts.



3. Disconnect the neutral starter cable.

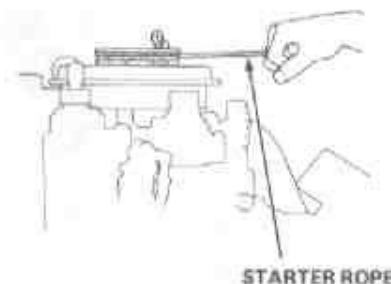


4. Wind the spare rope clockwise around the pulley, and then pull it straight out to start the engine.

CAUTION:

Keep clear of moving parts.

5. Leave the recoil starter off and reinstall engine cover.



WARNING

Exposed moving parts can cause injury. Use extreme care when installing the engine cover. Do not operate the outboard motor without the engine cover.

6. OPERATION

For the first 10 hours of operation, run the outboard motor at low speed, and avoid abrupt operation of the throttle.

1. Gear shifting

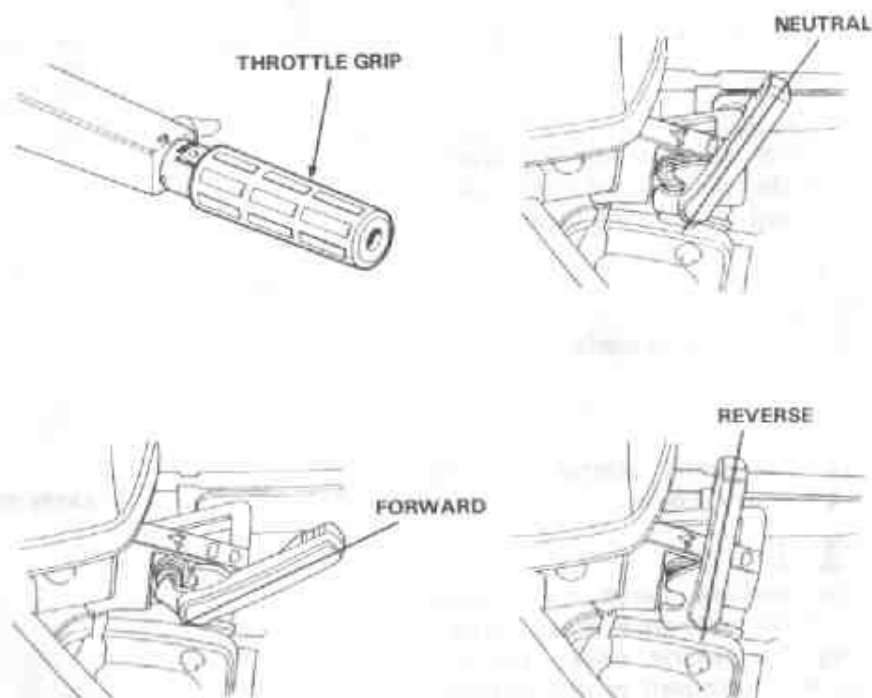
The gearshift lever has 3 positions : FORWARD, NEUTRAL, and REVERSE. An indicator at the base of the gear shift lever aligns with letters F, N, or R on the engine case to show the gear that has been selected. Turn the throttle grip to SHIFT to decrease engine speed before moving the gear shift lever.

CAUTION:

When operating in reverse, proceed with caution to avoid hitting any underwater obstruction with the propeller.

NOTE:

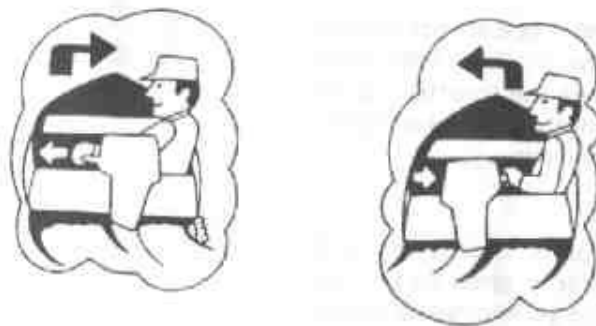
The throttle mechanism is designed to limit throttle opening in REVERSE and NEUTRAL. The throttle can be opened to FAST only in FORWARD gear.



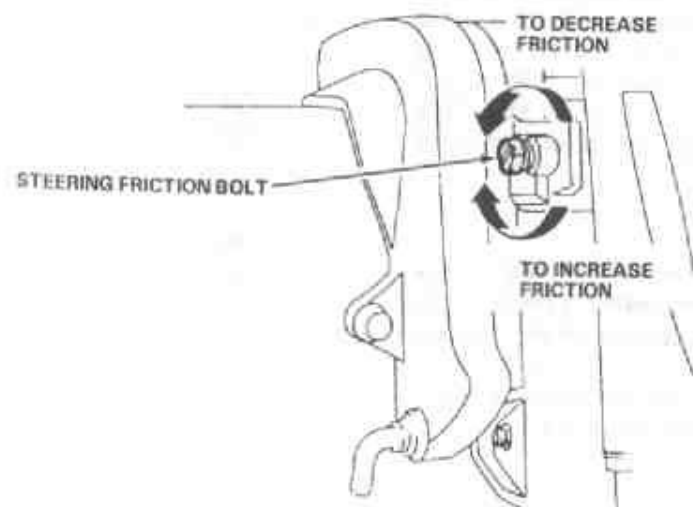
2. Steering

To turn to the right, swing the steering handle to the left. To turn to the left, swing the handle to the right.

Boats equipped with a remote control steering wheel are controlled in the same way as a car.



For smooth steering, adjust the steering friction bolt so that a slight drag is felt when turning.



3. Cruising

With the shift lever in the forward position F, turn the throttle grip toward FAST to increase speed. For normal cruising, open the throttle about 3/4.

To hold the throttle at a steady setting, turn the throttle friction knob clockwise. To free the throttle grip for manual speed control, turn the friction knob counterclockwise.

NOTE:

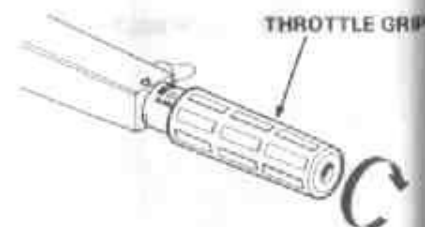
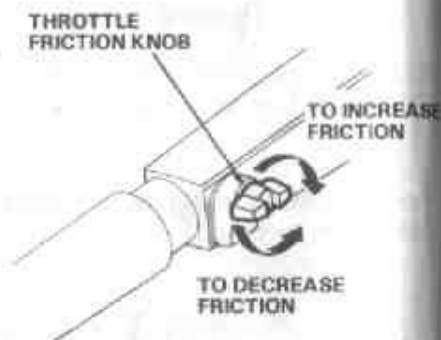
This outboard motor is provided with an over-rev limiter in order to prevent a breakdown due to excessive engine speed. Depending upon the running condition of the outboard motor (if the force applied to the propeller is light, for example), the limiter may operate, causing the engine speed to become unstable, thus preventing stable running. If the engine speed becomes unstable when the outboard motor is run with the grip near the "fully open" position, return the grip to the "low speed" side until the speed becomes stable.

CAUTION:

- Do not operate without the engine cover. Exposed moving parts could cause injury; water may damage the engine.
- Confirm that the tilt lever is in the "RUN" position (page 23).

NOTE:

For best performance, passengers and equipment should be distributed evenly to balance the boat.



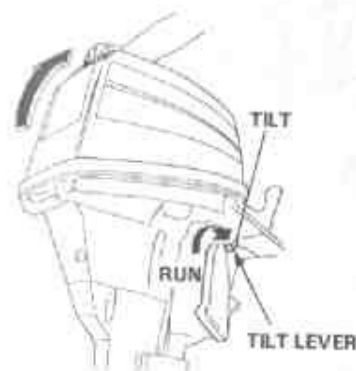
4. Tilting the motor

Tilt the motor to prevent the propeller and gear case from hitting bottom when the boat is beached or stopped in shallow water.

1. Stop the engine and put the shift lever into NEUTRAL.
2. Pull the tilt lever toward you, set the lever in the TILT position, and raise the engine to either the 30°, 45° and 70° tilt position.

CAUTION:

Do not use the throttle grip to tilt the outboard motor.



70°(when mooring)



45°



30°(when cruising in shallow water)

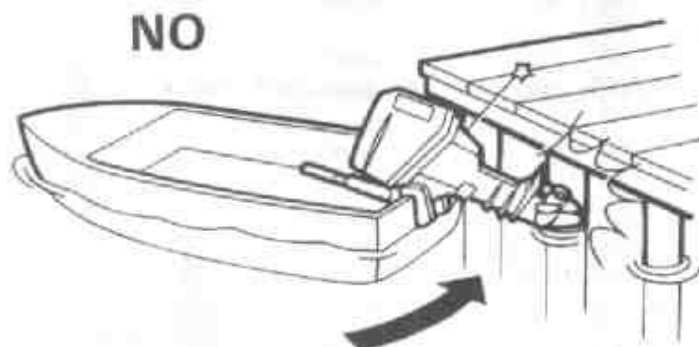
3. To return the engine to the normal RUN position, move the tilt lever away from you until it stops, tilt the engine slightly, then lower the engine slowly.

CAUTION:

- Make sure water comes out from the cooling water check hole.
- When the outboard motor is tilted up, cruise at low speed.
- Never operate in reverse when the outboard motor is tilted up. The outboard motor will rise up, causing an accident.

CAUTION:

To avoid damaging the motor, use the utmost care when mooring a boat, especially when its motor is tilted up. Don't allow the motor to strike against the pier or other boats.

**Trailer**

When trailering or transporting the boat with the motor attached, it is recommended that the motor remain in normal running position with the steering friction bolt tightened securely.

CAUTION:

Do not trailer or transport the boat with the motor in the tilted position. The boat or motor could be severely damaged if the motor drops.

The motor should be trailered in the normal running position. If there is insufficient road clearance in this position, then trailer the motor in the tilted position using a motor support device such as a transom saver bar, or remove the motor from the boat. Tilt lever should be in the tilt position.

5. Battery charging (SB and LB types only)**▲ WARNING**

Batteries produce explosive gases. Keep sparks, flames, and cigarettes away. To prevent the possibility of creating a spark near the battery, connect the charging cord first to the battery and then to the outboard motor; when disconnecting the charging cord remove it from the outboard first.

NOTE:

Refer to page 9 for battery specifications, and mounting instructions.

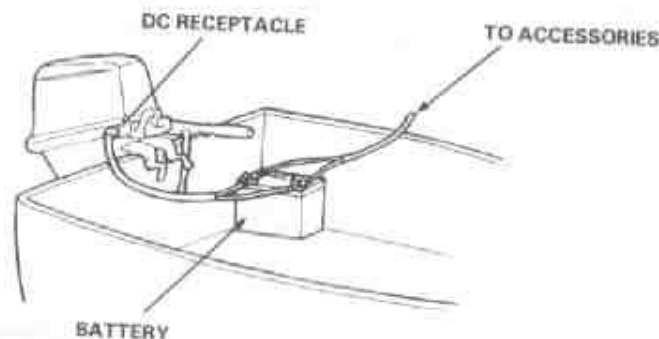
The DC receptacle provides a 12 volt, 6 amp output for battery charging. The charging circuit is protected by a 15 Amp fuse that is mounted inside the engine cover.

A male plug for the DC receptacle is provided with the outboard motor; connect your battery charging wires to that plug (Refer to the wiring diagram on page 51). Be sure that the positive (Red) battery lead is connected to the (+) plug terminal.

CAUTION:

- Reversing the battery leads will damage the charging system and/or the battery.
- When it is not in use, keep the DC receptacle dry and clean by covering it with the rubber cap provided.

The outboard motor's 12 volt output is intended for battery charging only. Electrical accessories should be connected to the battery as shown.



● High altitude operation

At high altitude, the standard carburetor air-fuel mixture will be excessively rich. Performance will decrease, and fuel consumption will increase. High altitude performance can be improved by installing a smaller diameter main fuel jet in the carburetor and readjusting the pilot screw. If you always operate the outboard motor at altitudes higher than 1,830 m (6,000 feet) above sea level, have your authorized Honda dealer perform these carburetor modifications.

Even with suitable carburetor jetting, engine horsepower will decrease approximately 3.5% for each 305 m (1,000 foot) increase in altitude. The effect of altitude on horsepower will be greater than this if no carburetor modification is made.

CAUTION:

Operation of the outboard motor at an altitude lower than the carburetor is jetted for may result in reduced performance, overheating, and serious engine damage caused by an excessively lean air/fuel mixture.

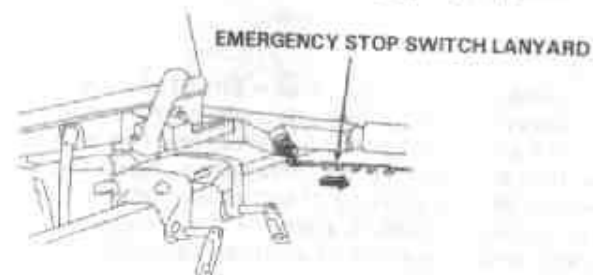
7. STOPPING THE ENGINE

• In an emergency

Disengage the emergency stop switch clip from the engine stop switch by pulling the emergency stop switch lanyard.

NOTE:

It is a good idea to stop the engine with the emergency stop switch from time to time to be sure that the switch is operating properly.



• In normal use

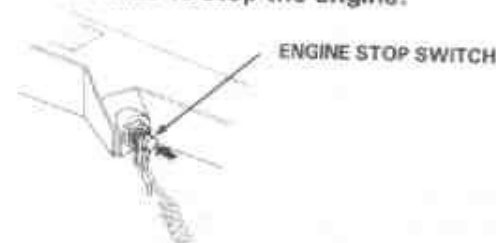
1. Turn the throttle grip to "SLOW" position and move the shift lever to NEUTRAL.



2. Push the engine stop switch until the engine stops.

CAUTION:

In the event that the engine does not stop when you depressed the engine stop switch, pull the emergency stop switch lanyard. If the engine continues to run, pull the choke knob to stop the engine.



3. Remove the emergency stop switch lanyard and store it.

8. MAINTENANCE

Periodic maintenance and adjustment are important to keep the motor in the best operating condition. Inspect or service as scheduled below.

▲WARNING

Shut off the engine before performing any maintenance. If the engine must be run, make sure the area is well ventilated. Never run the engine in an enclosed or confined area. Exhaust contains poisonous carbon monoxide gas; exposure can cause loss of consciousness and may lead to death.

CAUTION:

- If the engine must be run, make sure there is water at least 100 mm (3.9 in) above the anti-cavitation plate, otherwise the water pump may not receive sufficient cooling water, and the engine will overheat.
- To maintain cooling system efficiency, flush the outboard motor with fresh water after each use in salt water or dirty water.
- Use only genuine HONDA parts or their equivalent. The use of replacement parts which are not of equivalent quality may damage the motor.

REGULAR SERVICE PERIOD		EACH USE	FIRST MONTH OR 20 HRS (3)	EVERY 6 MONTHS OR 100 HRS (3)	EVERY YEAR OR 200 HRS (3)
ITEM	Performed at every indicated month or operating hour intervals, whichever comes first.				
Engine oil	Check level				
	Change	○	○	○	
Gear case oil	Check level			○	
	Change		○		○
	Check for water contamination			○	
Starter rope	Check			○	
Carburetor linkage	Check		○ (2)	○ (2)	
Valve clearance	Check/Readjust		○ (2)		○ (2)
Spark plug	Check/clean			○	
Propeller/cotter pin	Check			○	
Lubrication	Grease			○ (1)	
Fuel tank	Clean				○
Fuel filter	Replace				○ (2)
Thermostat	Check				○ (2)
Fuel line	Check (Replace if necessary)	○	Every 2 years (2)		

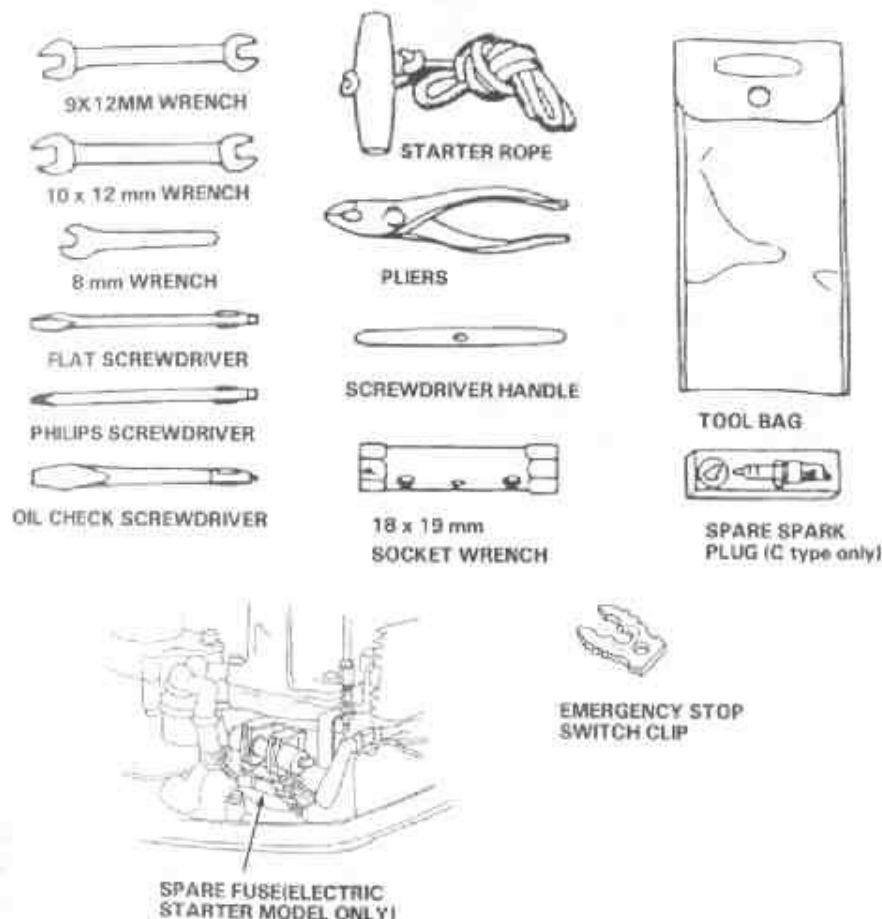
NOTE:

- (1) Lubricate more frequently when used in salt water.
- (2) These items should be serviced by an authorized Honda outboard dealer, unless the owner has the proper tools and is mechanically proficient. See the Honda Shop Manual.
- (3) For professional commercial use, long hours of operation to determine proper maintenance intervals.

Tool kit and spare parts

The following tools and spare parts are supplied with the outboard motor for maintenance, adjustment, and emergency repairs.

Tool kit



Engine oil change

Drain the oil while the engine is still warm to assure rapid and complete draining.

1. Remove the engine cover. Remove the drain screw and filler cap, and drain the oil. Reinstall the drain screw.

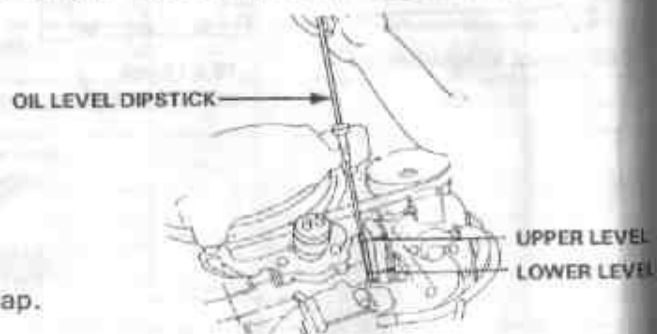


2. Fill the crankcase with the recommended oil (see page 12) and check the oil level. Fill to the upper level mark.

Oil capacity:

Total oil capacity: 1.1 ℓ (1.2 US qt , 1.0 Imp qt)

Oil capacity during oil change: 1.0 ℓ (1.1 US qt , 0.9 Imp qt)



3. Reinstall the oil filler cap.

CAUTION:

Used motor oil may cause skin cancer if repeatedly left in contact with the skin for prolonged periods. Although this is unlikely unless you handle used oil on a daily basis, it is still advisable to thoroughly wash your hands with soap and water as soon as possible after handling used oil.

NOTE:

Please dispose of used motor oil in a manner that is compatible with the environment. We suggest you take it in a sealed container to your local service station for reclamation. Do not throw it in the trash or pour it on the ground.

Gear oil check/change

Oil level check

Check the oil level when the engine is in the vertical position. Remove the level plug and see if oil flows out.

If no oil comes out, fill through the drain plug hole until the oil starts to flow out through the level plug hole.

If there is water in the oil, the water will flow out first when the drain plug is removed, or the oil will be a milky color.

Oil change

Remove the level plug and drain plug to drain the oil.

Inject oil through the drain plug hole until it starts flowing out through the level plug hole.

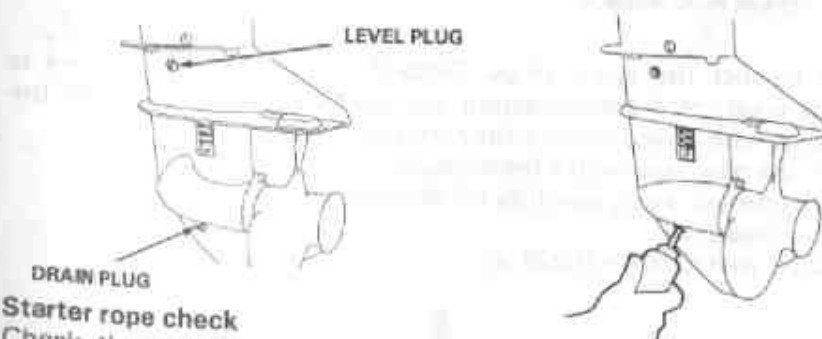
Reinstall and tighten the level plug first and then the drain plug securely.

CAUTION:

If water is detected in the oil, the unit should be inspected by an authorized Honda dealer.

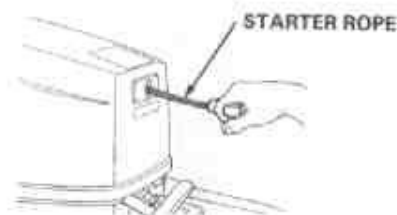
Recommended oil: API standard (GL-4 or GL-5)
SAE 90 outboard motor gear oil

Oil Capacity: 0.24 ℓ (0.25 US qt , 0.21 Imp qt)



Starter rope check

Check the starter rope every 6 months or after every 100 hours of outboard motor operation. Replace the rope if it is frayed.

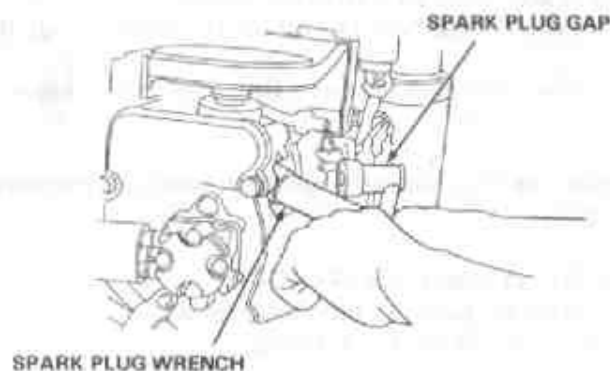


Spark plug service

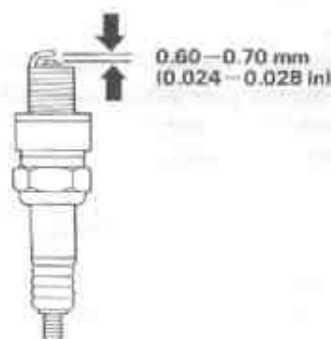
Recommended spark plug: BF9.9A: DR-5HS(NGK), X16FSR-U(ND)
BF15A: DR-6HS(NGK), X20FSR-U(ND)

To ensure proper engine operation, the spark plug must be properly gapped and free of deposits.

1. Remove the engine cover.
2. Remove the spark plug caps.
3. Use the wrench supplied in the tool kit to remove the spark plugs.



4. Visually inspect the spark plugs. Discard the spark plugs if there is apparent wear, or if the insulators are cracked or chipped. Clean the spark plugs with a wire brush if they are to be reused.
5. Measure the plug gaps with a feeler gauge. Correct as necessary by carefully bending the side electrode. The gaps should be:
0.60–0.70 mm (0.024–0.028 in)



6. Thread the plugs in by hand to prevent cross threading.
7. After the spark plugs are seated, tighten with a spark plug wrench to compress the washers.

NOTE:

If installing new spark plugs, tighten 1/2 turn after the spark plugs seat to compress the washers. If reinstalling used spark plugs, tighten 1/8–1/4 turn after the spark plugs seat to compress the washers.

8. Reinstall the engine cover.

CAUTION:

- The spark plugs must be securely tightened. Improperly tightened plug can become very hot and may cause engine damage.
- Use only the recommended spark plugs or equivalent. Spark plugs which have an improper heat range may cause engine damage.

Replacing the fuse

If the fuse blows, you cannot charge the battery. Before replacing the fuse, check the current ratings of the electrical accessories and ensure that there are no abnormalities.

<How to replace the fuse>

1. Stop the engine.
2. Remove the engine cover.
3. Withdraw the fuse holder from the fuse bracket.
4. Remove the fuse from the fuse holder.

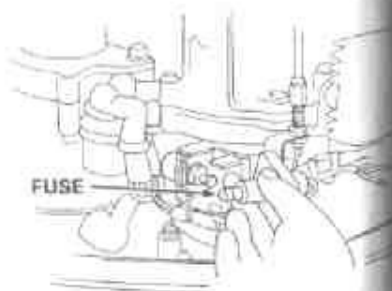
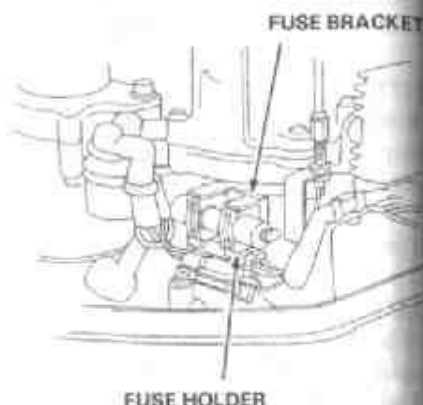
<Designated fuse> 15 A

▲WARNING

Never use a fuse with a different rating from that specified. Serious damage to the electrical system or a fire may result.

CAUTION:

If the fuse is blown, check the cause, then replace the fuse with a spare fuse of the same rated capacity. Unless the cause is found, the fuse may blow again.



Cleaning and flushing

After each use in salt water or dirty water, thoroughly clean and flush the outboard motor.

▲WARNING

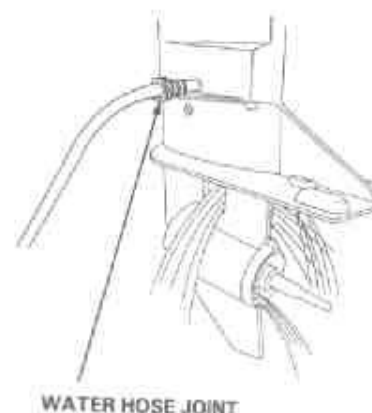
- For safety, the propeller must be removed.
- Be sure the outboard motor is securely mounted, and do not leave it unattended while running.
- Keep children and pets away from the area, and stay clear of moving parts during this procedure.

CAUTION:

Running the engine without water can cause serious engine damage due to overheating. Be sure that water flows from the water check hole while the engine is running. If not, stop the engine and determine the cause of the problem.

(With hose joint—optional part)

1. Wash the outside of the outboard motor with clean, fresh water.
2. Remove the flush bolt.
3. Flush the cooling system, using the water hose joint.
 - a. Attach a hose from a fresh water faucet to the water hose joint.
 - b. Remove the propeller.
 - c. Turn on the fresh water supply to the hose.
 - d. Start the engine and run in neutral at idle for at least 5 minutes.



(Without water hose joint)

1. Wash the outside of the outboard motor with clean, fresh water.
2. Remove the propeller.
3. Stand the motor in a suitable container of water. The water level must be at least 100 mm (3.9 in) above the anti-cavitation plate.
4. Start the engine and run slowly for at least 5 minutes.



ANTI-CAVITATION PLATE

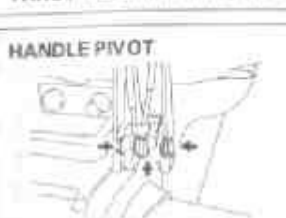
Lubrication

Wipe the outside of the engine with a cloth dipped in clean oil. Apply marine anti-corrosion grease to the following parts:

SHIFT SHAFT AND PIVOT



THROTTLE CABLE AND PIVOT



CLAMP SCREWS



ADJUSTING ROD



GEAR SHIFT ARM



COVER LOCK LEVER



TILT LINKAGE



SWIVEL CASE



PROPELLER SHAFT



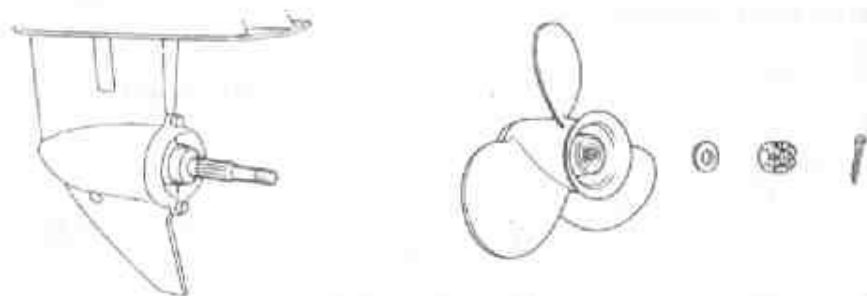
NOTE:

Apply anti-corrosion oil to pivot surfaces where grease cannot penetrate.

Propeller change

If the propeller strikes a rock, stake, or other obstacle, necessitating replacement, replace the propeller as follows.

1. Remove the cotter pin, then remove the 14 mm castle nut, plain washer and the propeller.
2. Install the new propeller in the reverse sequence to removal. Be sure to replace the cotter pin with a new one.



Fuel filter replacement

The fuel filter is located between the fuel coupling and the fuel pump. Water or sediment accumulated in the fuel filter can cause loss of power or hard starting. To prevent engine malfunction, replace the fuel filter regularly.

(SERVICE PERIOD) Every 200 operating hours or every one year.

▲WARNING

- Gasoline is extremely flammable and explosive under certain conditions. Do not smoke or allow flames or sparks near the outboard motor while draining fuel.
- Always work in a well-ventilated area.
- Be sure that any fuel drained from the outboard motor is stored in a safe container.
- Be careful not to spill fuel when replacing the strainer. Spilled fuel or fuel vapor may ignite. If any fuel is spilled, make sure the area is dry before starting the engine.

1. Disconnect the fuel tank line from the motor.
2. Remove the engine cover, and remove the fuel filter.

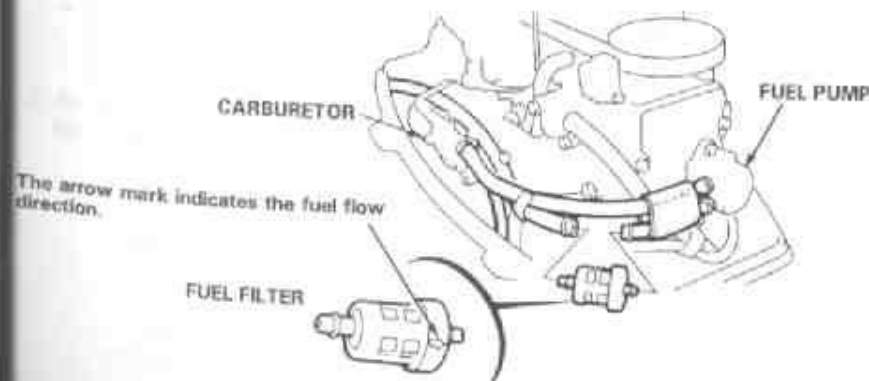
NOTE:

Before removing the filter, place clamps on the fuel tubes on each side of the filter to prevent fuel leakage.

3. Install the new fuel filter, so that the arrow on the fuel filter is on the fuel pump side.

NOTE:

Fuel flow will be impeded if the strainer is installed backward.



4. Remove the clamps used to close the fuel tubes. Connect the fuel tank line to the motor. Turn the fuel tank vent knob to the ON position, pump the primer bulb, and check for leaks.

NOTE:

If loss of power or hard starting is found to be caused by excessive water or sediment accumulated in the fuel filter, inspect the fuel tank. Clean the fuel tank if necessary.

Servicing a submerged motor

A submerged motor must be serviced immediately after it is recovered from the water in order to minimize corrosion.

If there is a Honda outboard motor dealership nearby, take the motor immediately to the dealer. If you are far from a dealership, proceed as follows:

1. Remove the engine cover, and rinse the motor with fresh water to remove salt water, sand, mud, etc.
2. Loosen the carburetor drain screw (p. 42), drain the contents of the carburetor into a suitable container, then retighten the drain screw.
3. Change the engine oil (p. 30). If there was water in the engine crankcase, or the used engine oil showed signs of water contamination, then a second engine oil change should be performed after running the engine for 1/2 hour.
4. Remove the spark plugs. Disengage the emergency stop switch clip from the engine stop switch and pull the recoil starter several times to completely expel water from the cylinders.

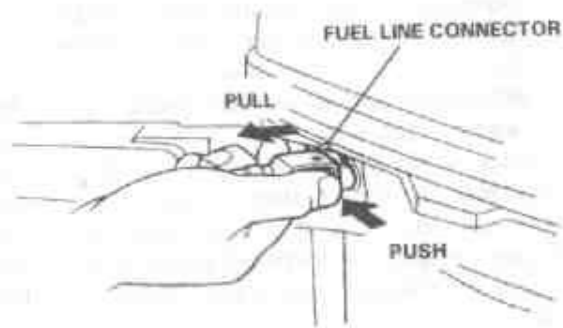
CAUTION:

- When cranking the engine with an open ignition circuit (spark plugs removed from the ignition circuit), disengage the emergency stop switch clip to prevent electrical damage to the ignition system.
 - If the motor was running when it submerged, there may be mechanical damage, such as bent connecting rods. If the engine binds when cranked, do not attempt to run the motor until it has been repaired.
5. Pour a teaspoon of engine oil into each spark plug hole, then pull the recoil starter several times to lubricate the inside of the cylinders.
 6. Reinstall the spark plugs.
 6. Attempt to start the engine.
 - If the engine fails to start, remove the spark plugs, clean and dry the electrodes, then reinstall the spark plugs and attempt to start the engine again.
 - If the engine starts, and no mechanical damage is evident, continue to run the engine for 1/2 hour or longer (be sure the water level is at least 4 inches above the anti-cavitation plate).
 7. As soon as possible, take the motor to a Honda outboard motor dealer for inspection and service.



9. TRANSPORTING/STORAGE

1. Disconnect the fuel line and install the cap on the engine fuel inlet. Firmly close the fuel cap vent knob.



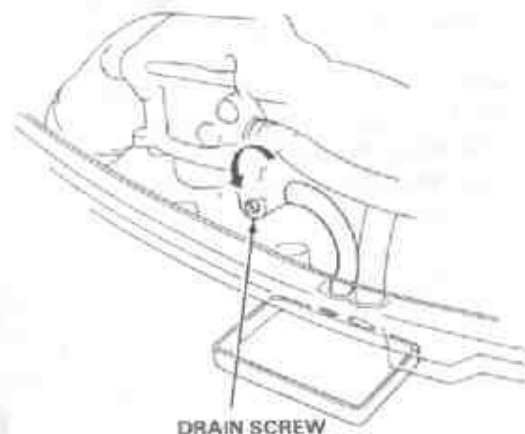
2. Loosen the carburetor drain screw, and drain the gasoline into a suitable container. After draining, retighten the drain screw.

⚠ WARNING

- Be careful not to spill fuel. Spilled fuel or fuel vapor may ignite. If any fuel is spilled, make sure the area is dry before storing or transporting the motor.
- Do not smoke or allow flames or sparks where fuel is drained or stored.

CAUTION:

In cold weather, to prevent ice from forming inside the water pump, raise the motor out of the water, and pull the recoil starter several times to flush the water out.

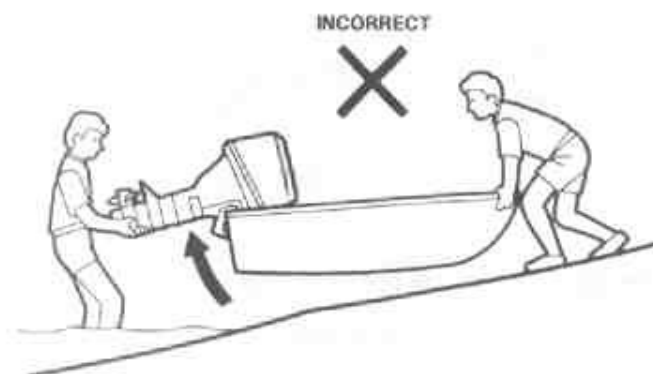


3. To carry, hold the motor by the carrying handle, or hold by the carrying handle and engine cover lock lever as shown here. Do not carry by the engine cover.



CAUTION:

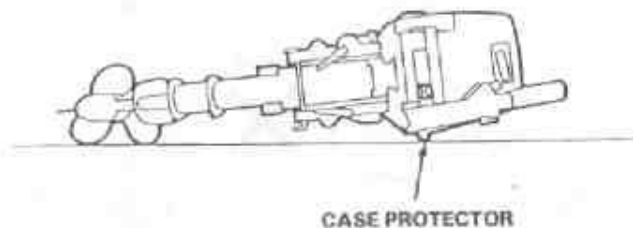
To avoid damaging the motor, never use it as a handle for lifting or moving the boat.



4. Transport and store the motor either vertically or horizontally, as shown below, with the steering handle raised.
Vertical transport or storage: Attach the stern bracket to a stand.



Horizontal transport or storage: Rest the motor on the case protector (steering handle side of the motor).

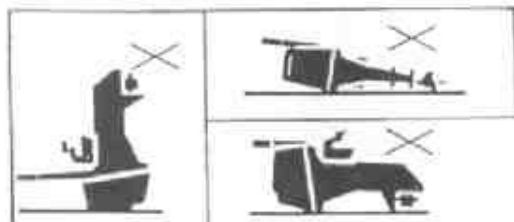


CASE PROTECTOR

CAUTION:

Any other transport or storage position may cause damage or oil leakage.

INCORRECT



5. Tilt the outboard motor, remove the plug cap, pull the recoil starter several times and completely drain off the cooling water.

CAUTION:

If the outboard motor is put on its side without completely draining off the cooling water immediately after stopping it, water may enter the engine from the exhaust port. Be sure, therefore, to drain off the cooling water before putting the outboard motor on its side.

When pulling the starting grip, be careful not to touch the spark plug wire.

6. Pull the starting grip until resistance is felt (i.e. until the engine valve closes, preventing dust from entering the combustion chamber).
7. Store the outboard motor in a clean, dry area.

NOTE:

Before storing, clean, flush, and lubricate the outboard motor as described on pages 35 and 37.

10. TROUBLESHOOTING

Engine will not start:

1. Is the emergency stop switch clip in place?
 2. Is the shift lever in neutral?
 3. Is there fuel in the fuel tank?
 4. Is the fuel cap vent knob turned to ON?
 5. Is the fuel system primed by squeezing the primer bulb?
 6. Is fuel reaching the carburetor?
- Loosen the carburetor drain screw to see if there is fuel in the carburetor float bowl.

▲WARNING

If there is gasoline on the engine, there is a danger of it igniting. Before performing this check, therefore, wipe away all traces of gasoline.

7. Are the spark plugs firing?

Method of detecting spark

- (1) Remove the spark plugs from the engine, then install each plug in the plug cap and hold the threaded portion against the engine to ground.
- (2) Recoil starter type
Put the gear lever in the "NEUTRAL" position, pull the starter grip hard and check to see whether or not a spark appears across the gap of the spark plug.

Starter motor type

Put the gear lever in the "NEUTRAL" position, rotate the starter motor and check to see whether or not a spark appears across the gap of the spark plug.

If the spark plugs are OK, reinstall them, and try to start the engine.

If a spark does not appear, either replace the spark plug or contact your authorized Honda outboard motor dealer.

Engine overheats:

1. Is the water intake screen clogged?
2. Is the thermostat faulty?
3. Is the water level correct?

THE ASBESTOS PRODUCTS (SAFETY) REGULATION 1985

SOME OR ALL of The Following Components May Contain ASBESTOS.

The Following Precautions Must Be Taken When Replacing These Components.

● Brake Pads	Use vacuum cleaner to prevent spread of dust.
● Brake Shoes	Use vacuum cleaner to prevent spread of dust.
● Gaskets, Packing or Insulator	Do not bend or break into small pieces.
● Clutch Discs	Do not break into small pieces.
● High Tension Plug Caps	Do not break into small pieces.
● Muffler Assy	Do not separate or sever.
● Noise Suppressor Assy	Do not separate or sever.

NOTE:

Obey local laws and regulations.

11. SPECIFICATIONS

Model	BF9.9A	
	S Model BABS	L Model BABL
Description Code	9.9 HP(7.4 kW)	
Rated power	4,500—5,500 rpm	
Full throttle range	4-stroke OHC in-line twin cylinder	
Engine type	280 cm ³ (17.1 cu-in)	
Displacement	0.60—0.70 mm (0.024—0.028 in)	
Spark plug gap	With recoil starter(without electric starter)	
Starter system	Recoil starter & electric starter(with electric starter)	
Ignition system	C.D.I.	
Lubrication system	Trochoid pump pressure lubrication	
Specified oil	Engine: API standard(SG SF/CC CD)SAE 10W-30 Gear case: API standard (GL-4 or GL-5) SAE 90 outboard motor gear oil	
Oil capacity	Engine: 1.1 ℓ (1.2 US qt, 1.0 Imp qt) Gear case: 0.24 ℓ (0.25 US qt, 0.21 Imp qt)	
D.C.output	12V—6A/6,000min ⁻¹ (rpm)	
Cooling system	Water cooling with thermostat (volumetric pump)	
Exhaust system	Underwater exhaust	
Spark plug	DR-5HS(NGK), X16FSR-U(ND)	
Fuel Pump	Diaphragm type fuel pump	
Fuel	Automotive gasoline (91 research octane, 86 pump octane)	
Tank capacity	C type: 12 ℓ (3.0 US gal, 2.6 Imp gal) Except C type: 13 ℓ (3.4 US gal, 2.9 Imp gal)	
Steering equipment	Bar handle	
Tilt angle	3-stage adjustment (30°, 45° and 70°)	
Angle of rotation	40°(both sides)	
Dimensions	S Model	
	Length	550 mm (21.7 in)
	Height	1,050 mm (41.3 in)
	Width	320 mm (12.6 in)
Height from stern bracket to anti-cavitation plate	L Model	
	Length	550 mm (21.7 in)
	Height	1,180 mm (46.5 in)
	Width	320 mm (12.6 in)
Standard Propeller	S Model 3-240 x 240 mm (9-1/2 x 9-1/2 in)	
(No. of blades-diameter x pitch)	L Model 3-240 x 220 mm (9-1/2 x 8-5/8 in)	
Gear change	Forward-Neutral-Reverse(dog type)	
Dry weight	without electric starter	
	42.0 kg (92.6 lbs)	43.0 kg (94.8 lbs)
	with charge coil and	43.5 kg (95.9 lbs)
	without electric starter	
with electric starter	46.0 kg (101.4 lbs)	47.0 kg (103.6 lbs)

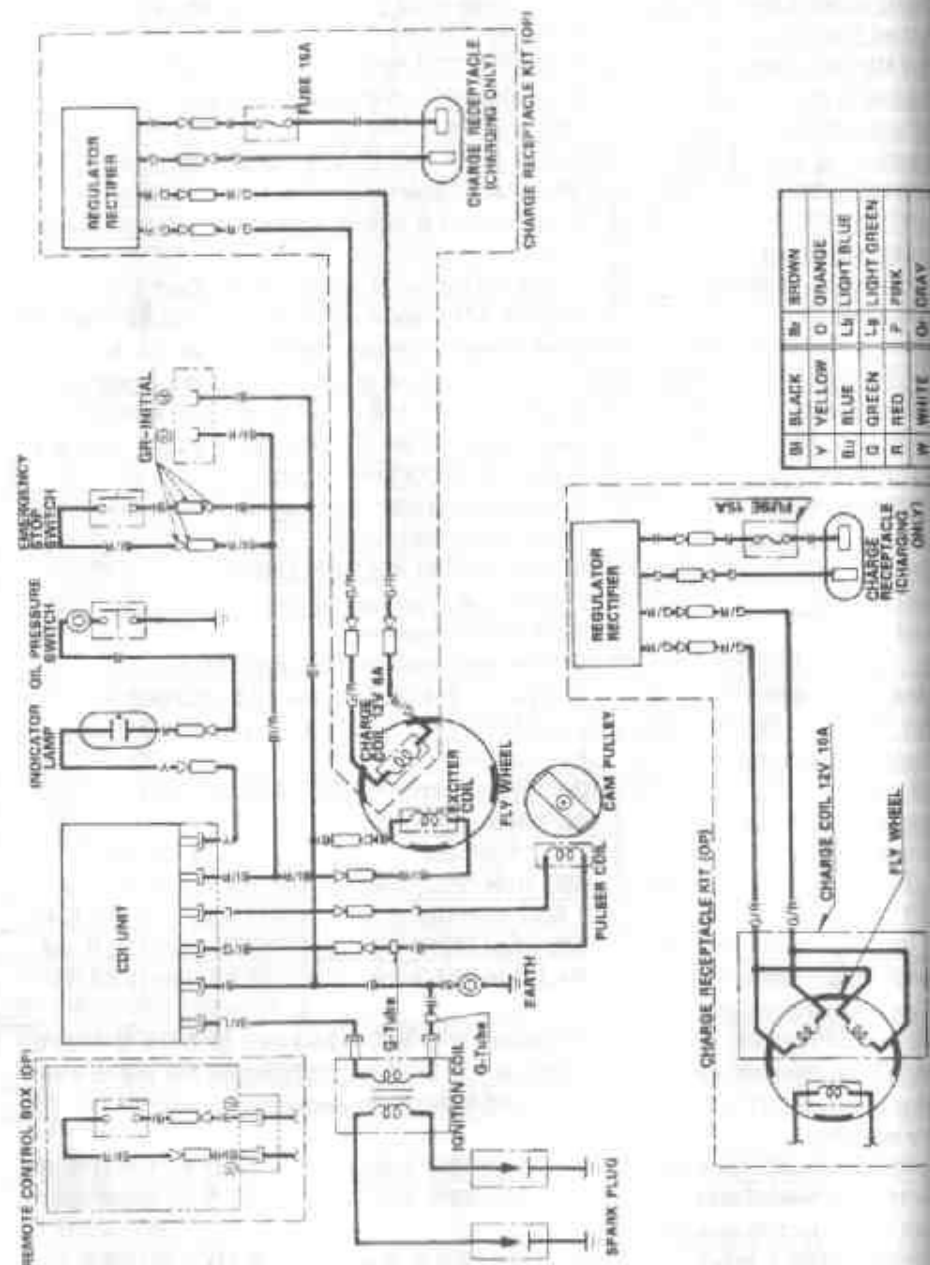
Honda outboards are power rated in accordance with NMMA procedures and using the ICOMIA standard 28-23.

Model	BF15A -	
	S Model BAAS	L Model BAAL
Description Code	15 HP(11.2 kW)	
Rated power	5,000—6,200 rpm	
Full throttle range	4-stroke OHC in-line twin cylinder	
Engine type	280 cm ³ (17.1 cu-in)	
Displacement	0.60—0.70 mm (0.024—0.028 in)	
Spark plug gap	With recoil starter(without electric starter)	
Starter system	Recoil starter & electric starter(with electric starter)	
Ignition system	C.D.I.	
Lubrication system	Trochoid pump pressure lubrication	
Specified oil	Engine: API standard(SG SF/CC CD)SAE 10W-30 Gear case: API standard (GL-4 or GL-5) SAE 90 outboard motor gear oil	
Oil capacity	Engine: 1.1 ℓ (1.2 US qt, 1.0 Imp qt) Gear case: 0.24 ℓ (0.25 US qt, 0.21 Imp qt)	
D.C.output	12V—6A/6,000min ⁻¹ (rpm)	
Cooling system	Water cooling with thermostat (volumetric pump)	
Exhaust system	Underwater exhaust	
Spark plug	DR-6HS(NGK), X20FSR-U(ND)	
Fuel Pump	Diaphragm type fuel pump	
Fuel	Automotive gasoline (91 research octane, 86 pump octane)	
Tank capacity	C type: 12 ℓ (3.0 US gal, 2.6 Imp gal) Except C type: 13 ℓ (3.4 US gal, 2.9 Imp gal)	
Steering equipment	Bar handle	
Tilt angle	3-stage adjustment (30°, 45° and 70°)	
Angle of rotation	40°(both sides)	
Dimensions	S Model	
	Length	550 mm (21.7 in)
	Height	1,050 mm (41.3 in)
	Width	320 mm (12.6 in)
Height from stern bracket to anti-cavitation plate	L Model	
	Length	550 mm (21.7 in)
	Height	1,180 mm (46.5 in)
	Width	320 mm (12.6 in)
Standard Propeller	S Model 3-240 x 240 mm (9-1/2 x 9-1/2 in)	
(No. of blades-diameter x pitch)	L Model 3-240 x 220 mm (9-1/2 x 8-5/8 in)	
Gear change	Forward-Neutral-Reverse(dog type)	
Dry weight	without electric starter	
	42.0 kg (92.6 lbs)	43.0 kg (94.8 lbs)
	with charge coil and	43.5 kg (95.9 lbs)
	without electric starter	
with electric starter	46.0 kg (101.4 lbs)	47.0 kg (103.6 lbs)

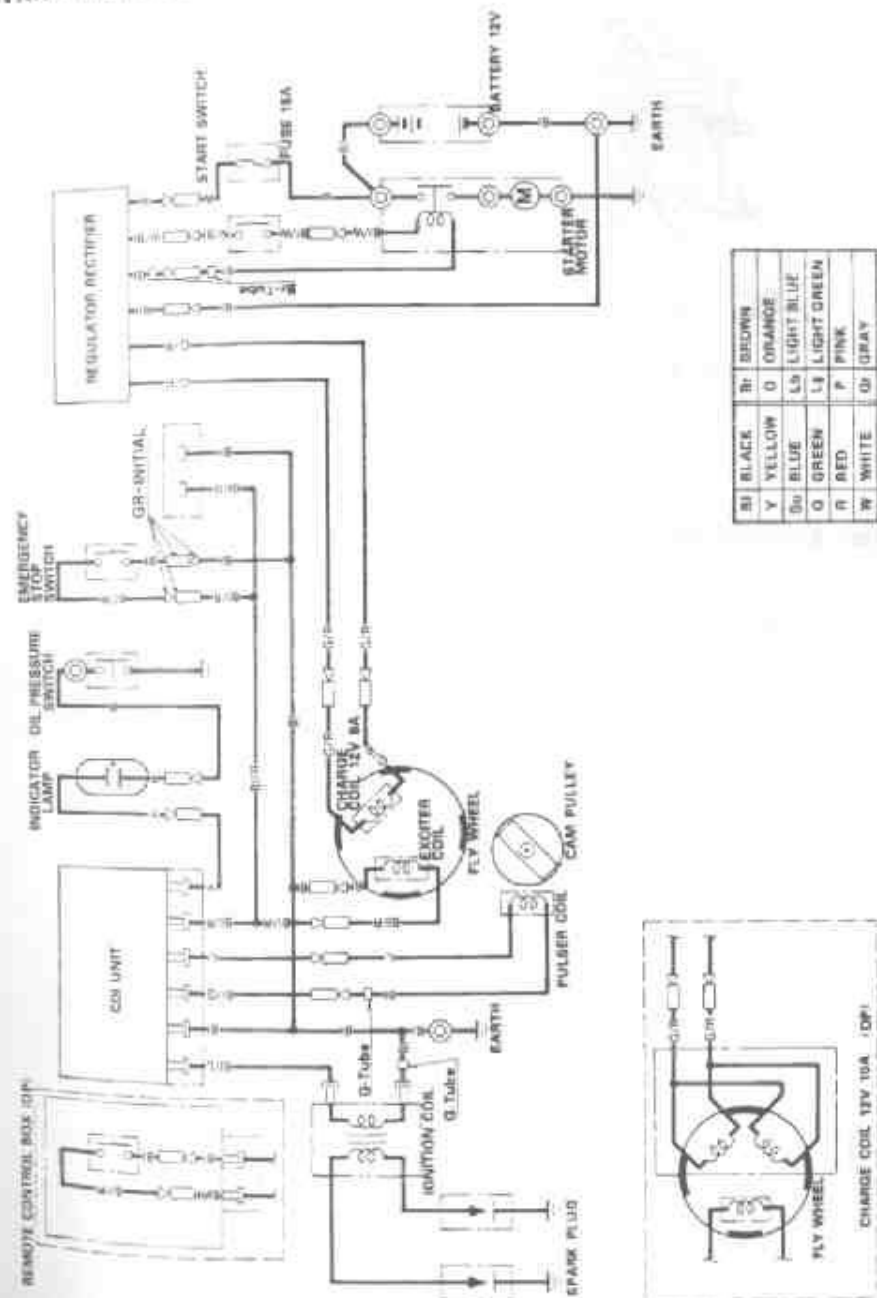
Honda outboards are power rated in accordance with NMMA procedures and using the ICOMIA standard 28-23.

12. WIRING DIAGRAM

(Without electric starter)



(With electric starter)



13. OPTIONAL PARTS



REMOTE CONTROL KIT



10A CHARGING COIL KIT

MEMO