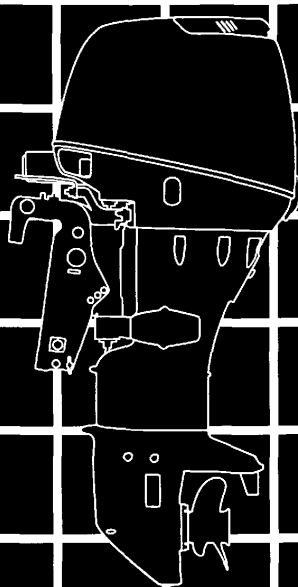


HONDA
MARINE

BF25D·BF30D

OWNER'S MANUAL



Honda Motor Co., Ltd. 2004



ECOLOGY CONSCIOUS TECHNOLOGY

The “e-SPEC” mark symbolizes environmentally responsible technologies applied to Honda power equipment, which contains our wish to “preserve nature for generations to come.”

Thank you for purchasing a Honda Outboard Motor.

This manual covers operation and maintenance of the Honda BF25D/30D Outboard Motor.

All information in this publication is based on the latest product information available at the time of approval for printing.

Honda Motor Co., Ltd. reserves the right to make changes at any time without notice and without incurring any obligation.

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This manual should be considered a permanent part of the Outboard Motor and should remain with it if it is resold.

Throughout this manual, you will see safety messages preceded by the following words and symbols. Here's what they mean:

▲ DANGER

Indicates serious injury or death WILL result if instructions are not followed.

▲ WARNING

Indicates a strong possibility that serious personal injury or death may result if instructions are not followed.

▲ CAUTION

Indicates a possibility that personal injury or equipment damage could result if instructions are not followed.

NOTICE

Indicates that equipment or property damage could result if instructions are not followed.

NOTE: Gives helpful information.

If a problem should arise, or if you have any questions about the Outboard Motor, consult an authorized Honda Outboard Motor dealer.

▲ WARNING

Honda Outboard Motors are designed to give safe and dependable service if operated according to instructions. Read and understand the Owner's Manual before operating the Outboard Motor. Failure to do so could result in personal injury or equipment damage.

- Have your dealer install the long tiller handle.
- The illustration may vary according to the type.

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Model Type	BF25D				
	SHGU	SRTU	LHGU	LHTW	LRTU
	SHGW	SRTW	LHGW	LHTD	LRTW
		SRTK	LHGD		LRTK
					LRTD
Shaft Length	S	S	L	L	L
Tiller Handle	H		H	H	
Remote Control		R			R
Gas-assisted Tilt	G		G		
Power Trim/Tilt		TT		TT	TT
Tachometer	*	●	*	●	●
Trim meter		●		*	●
Electric starter	S	S	S	S	S

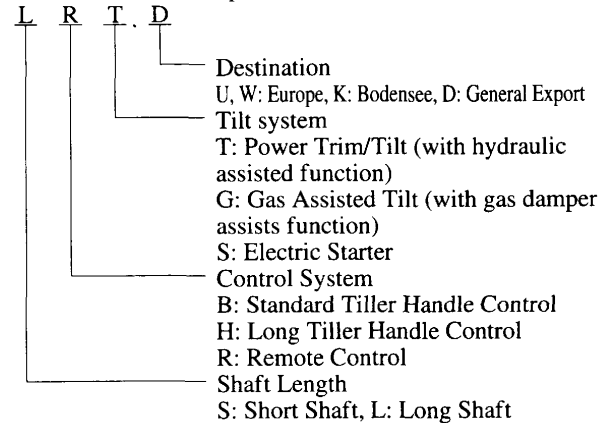
NOTE: Note that the types of the outboard motor differ according to the countries where they are sold.

BF25D/30D is provided with the following types according to the shaft length, control system, and tilt system.

BF25D-SRTK, LRTK (outboard motors which meet all the requirements of the emission control regulations established for Bodensee-Lake Constance).

- According to Shaft Length
S: Short Shaft
L: Long Shaft
- According to Control System
B: Standard Tiller Handle Control
H: Long Tiller Handle Control
R: Remote Control
- According to tilt system
G: Gas-assisted Tilt (with gas damper assist function)
TT: Power Trim & Tilt (with hydraulic assist function)
None : Mechanical Tilt
- : Standard Equipment
- * : Optional Equipment

TYPE CODE	Example
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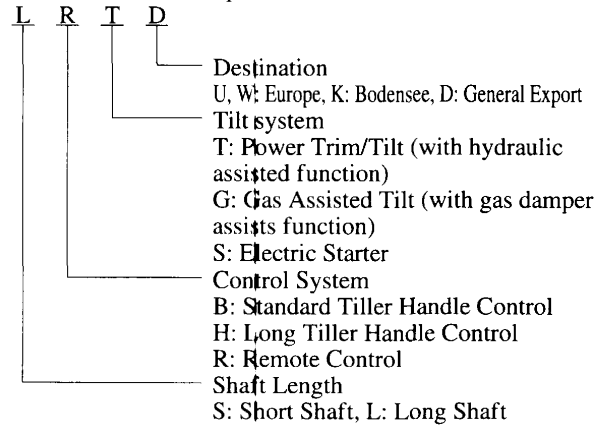
Model	BF30D							
Type	SBSD	SHGU SHGW	SHTD	SRTU SRTW SRTD	LBSD	LHGU LHGW LHGD	LHTW LHTD	LRTU LRTW LRTD
Shaft Length	S	S	S	S	L	L	L	L
Tiller Handle	B	H	H		B	H	H	
Remote Control				R				R
Gas-assisted Tilt	G	G			G	G		
Power Trim/Tilt			TT	TT			TT	TT
Tachometer		*	●	●		*	●	●
Trim meter			*	●			*	●
Electric starter	S	S	S	S	S	S	S	S

NOTE: Note that the types of the outboard motor differ according to the countries where they are sold.

BF25D/30D is provided with the following types according to the shaft length, control system, and tilt system.

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- According to tilt system
G: Gas-assisted Tilt (with gas damper assist function)
TT: Power Trim & Tilt (with hydraulic assist function)
None : Mechanical Tilt
- : Standard Equipment
*: Optional Equipment

TYPE CODE Example

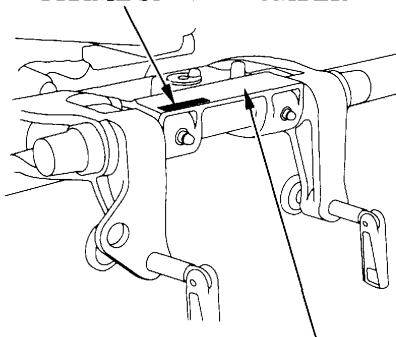


This Owner's Manual is using the following type names when it describes the operations special to a type.

Standard tiller handle type: B type
Long tiller handle type: H type
Remote control type: R type
Gas-assisted tilt type: G type
Power trim/tilt type: T type

Check the type of your outboard motor and read this Owner's Manual thoroughly before operation. Texts with no type indication are the information and/or procedures common to all types.

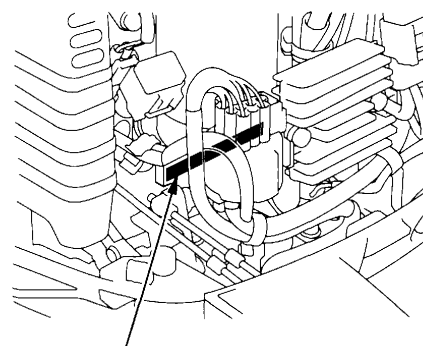
FRAME SERIAL NUMBER



SWIVEL CASE

Record the frame and engine serial numbers for your reference. Refer to the serial numbers when ordering parts, and when making technical or warranty inquiries.

Frame serial number:



ENGINE SERIAL NUMBER

The frame serial number is stamped on a plate attached to the top of the swivel case.

The engine serial number is stamped on the cylinder block under the starter motor which is located in front of the motor.

Engine serial number:

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1. SAFETY

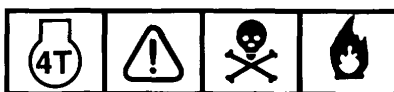
SAFETY INFORMATION

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

Operator Responsibility



- Honda outboard motor is designed to give safe and dependable service if operated according to instructions. Read and understand the Owner's Manual before operating the outboard motor. Failure to do so could result in personal injury or equipment damage.



- Gasoline is harmful or fatal if swallowed. Keep the fuel tank out of reach of children.
- 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.



- The engine can be started even if the gearshift position is in FORWARD or REVERSE when it is cranked by rope in emergency. To prevent start-in-gear, be sure to set the gearshift position to the NEUTRAL before starting the engine. Read and understand the Owner's Manual before starting the engine in emergency.

SAFETY

- 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 that 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.
- Do not operate the outboard motor without the engine cover. Exposed moving parts can cause injury.
- Do not remove any guards, labels, shields, covers or safety devices; they are installed for your safety.

Fire and Burn Hazards

Gasoline is extremely flammable, and gasoline vapor can explode. Use extreme care when handling gasoline. **KEEP OUT OF REACH OF CHILDREN.**

- Remove the fuel tank from the boat for refueling.
- Refuel in a well-ventilated area with the engine stopped. Keep flames and sparks away, and do not smoke in the area.
- Refuel carefully to avoid spilling fuel. Avoid overfilling the fuel tank (there should be no fuel in the filler neck). After refueling, tighten the filler cap securely. If any fuel is spilled, make sure the area is dry before starting the engine.

SAFETY

The engine and exhaust system become very hot during operation and remain hot for a while after stopping. Contact with hot engine components can cause burns and may ignite some materials.

- Avoid touching a hot engine or exhaust system.
- Allow the engine to cool before performing maintenance or transporting.

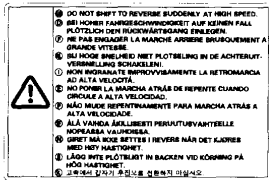
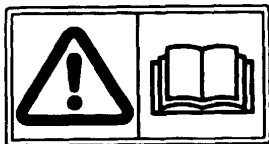
Carbon Monoxide Poisoning Hazard

Exhaust contains poisonous carbon monoxide, a colorless and odorless gas. Breathing exhaust can cause loss of consciousness and may lead to death.

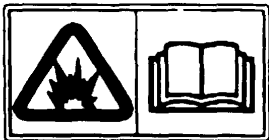
- If you run the engine in an area that is confined, or even partially enclosed, the air can become contaminated with a dangerous amount of exhaust gas. To keep exhaust gas from building up, provide adequate ventilation.

[Equipped type]

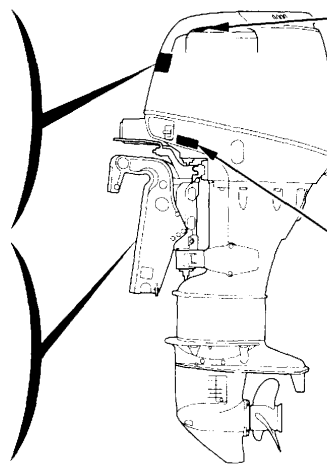
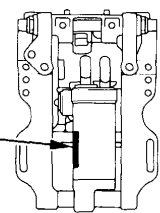
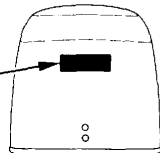
READ OWNER'S MANUAL



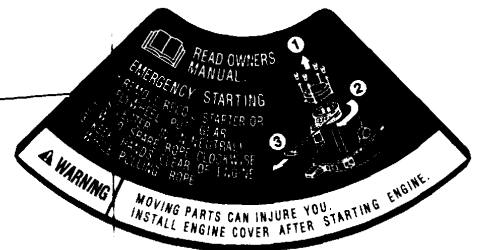
AT CAUTION



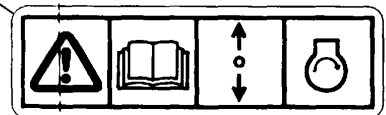
[G type]



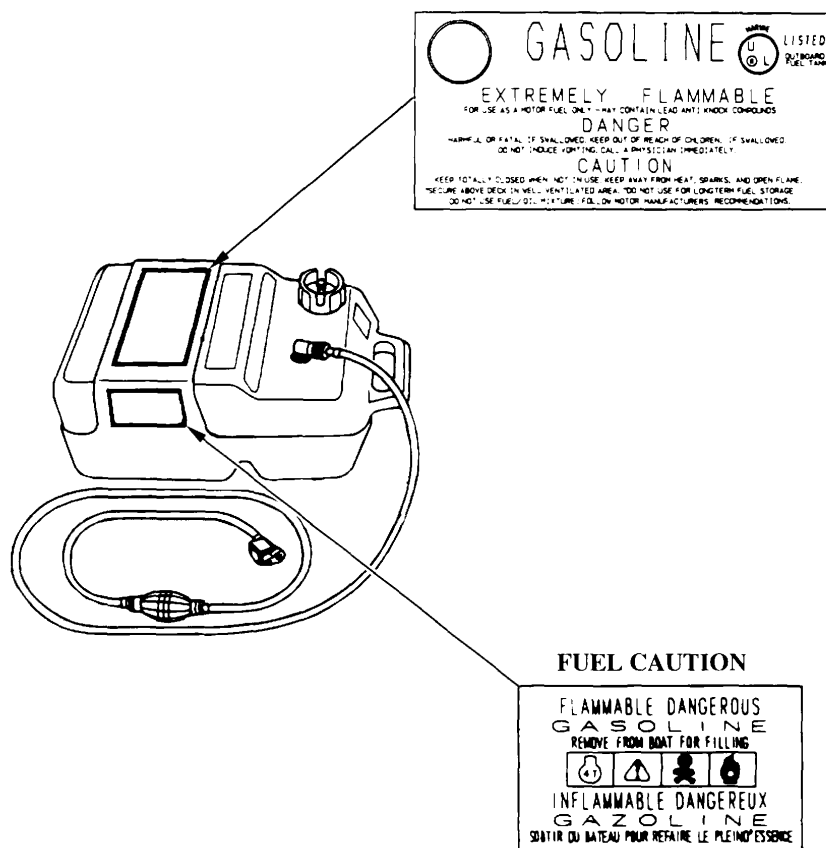
**READ OWNER'S MANUAL
EMERGENCY ENGINE STARTING**



**READ OWNER'S MANUAL
EMERGENCY ENGINE STARTING**

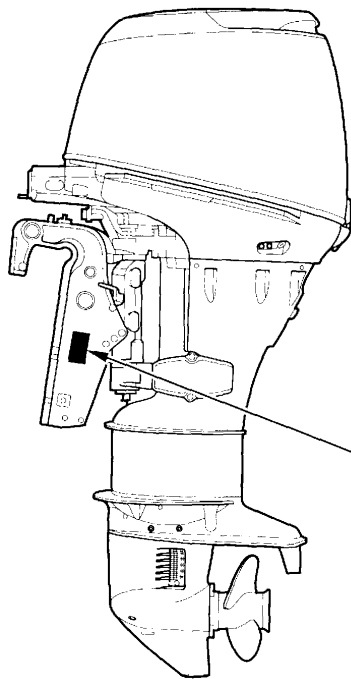


SAFETY LABEL LOCATIONS

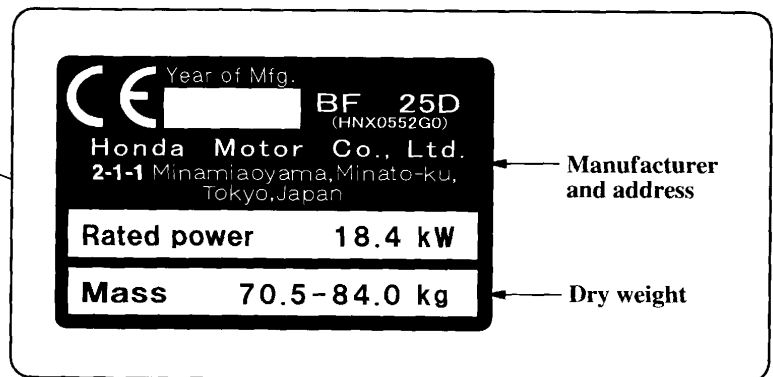


SAFETY LABEL LOCATIONS

CE mark location
[U, W and K types]



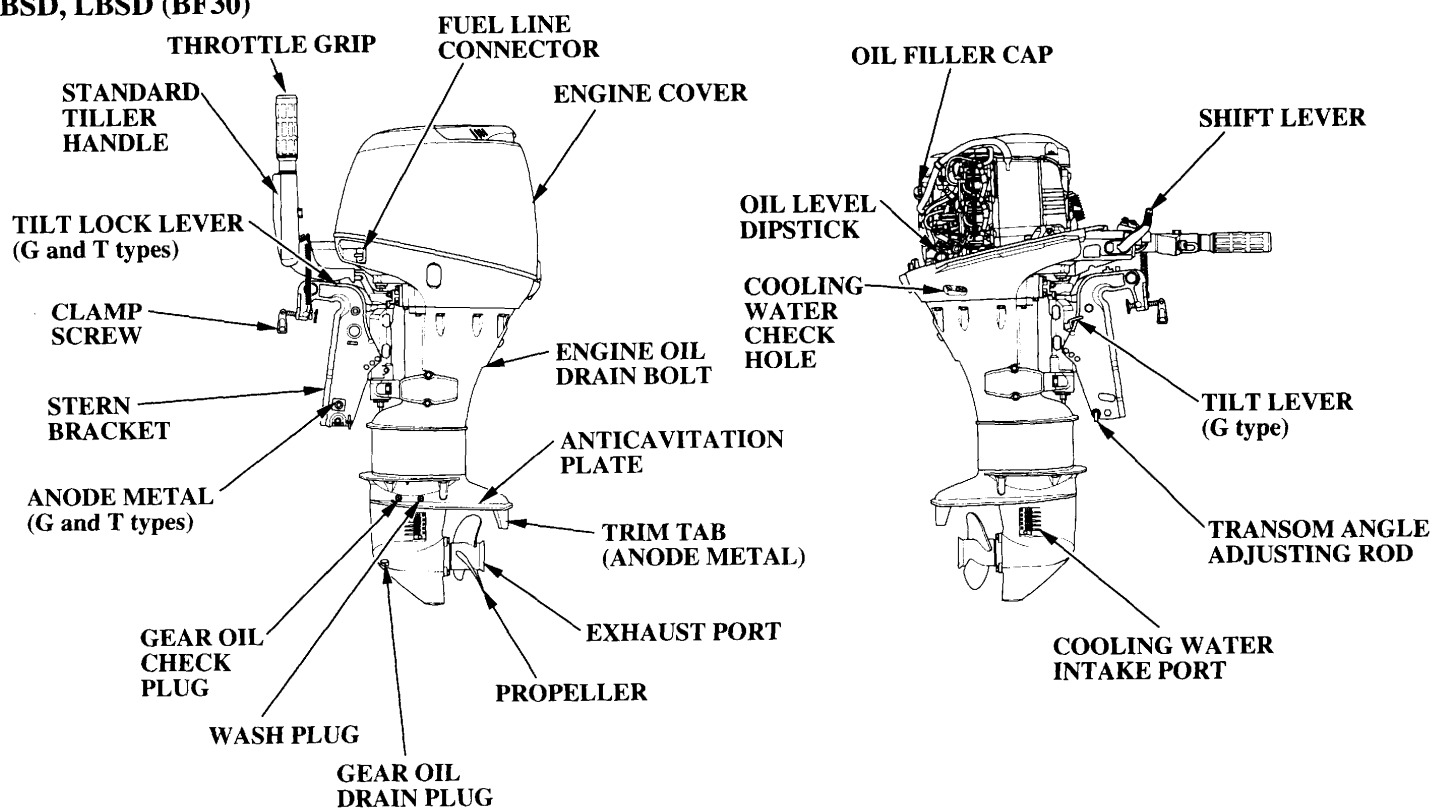
CE MARK



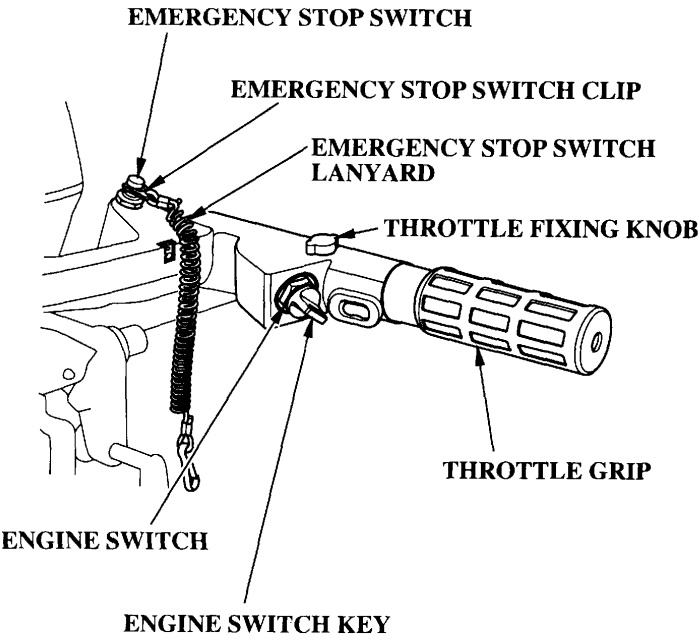
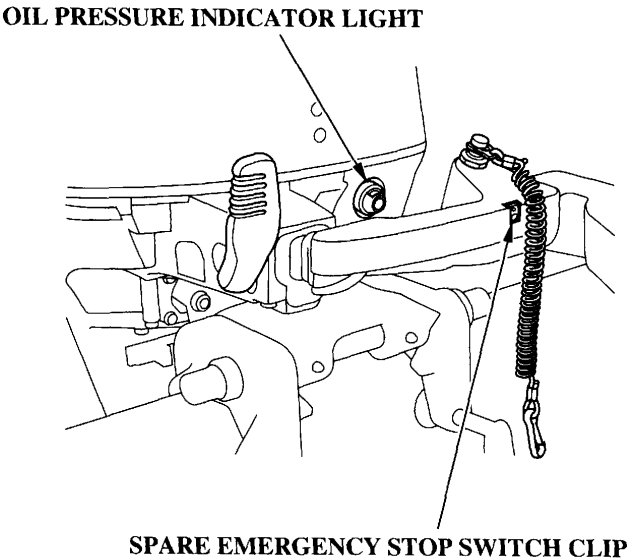
[Example of BF25D]

3. COMPONENT IDENTIFICATION

STANDARD TILLER HANDLE TYPE (B type) SBSD, LBSD (BF30)

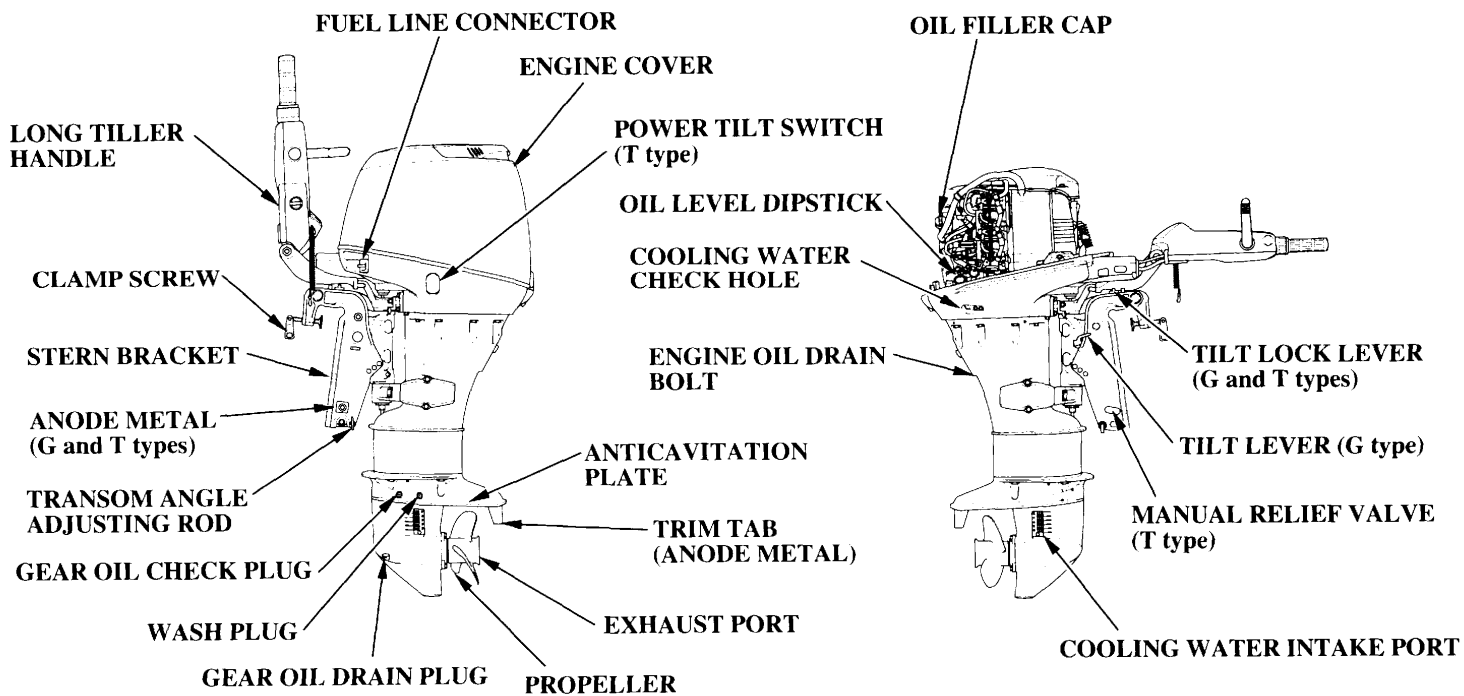


COMPONENT IDENTIFICATION

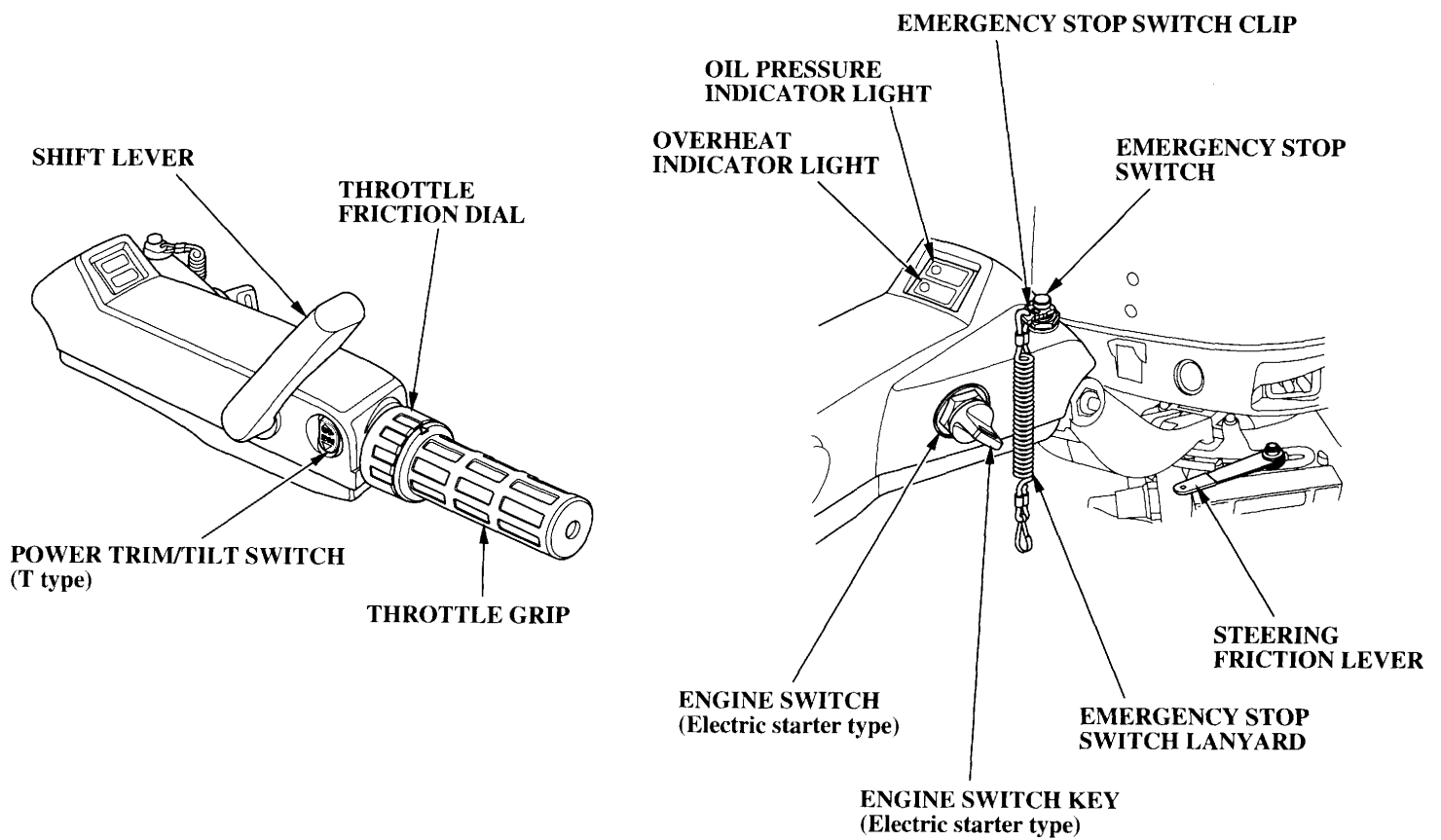


COMPONENT IDENTIFICATION

LONG TILLER HANDLE TYPE (H type)

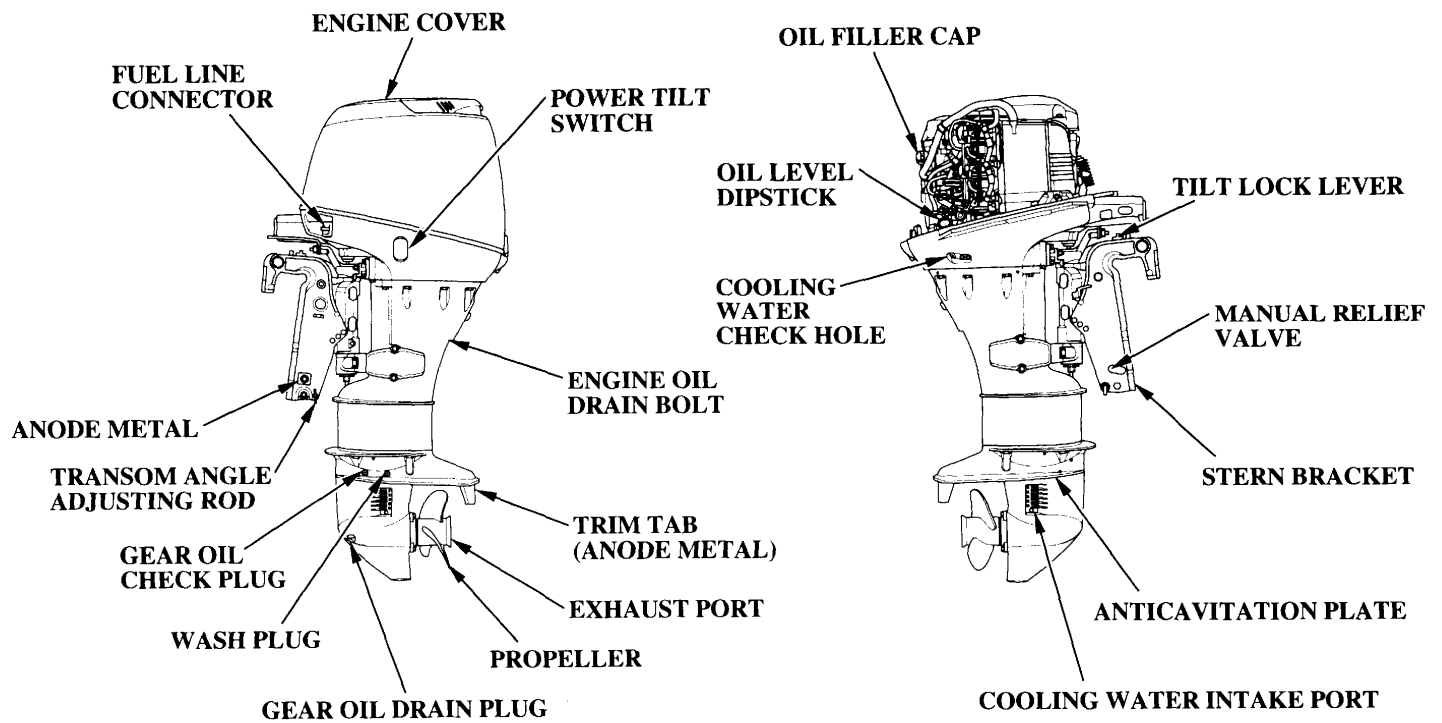


COMPONENT IDENTIFICATION



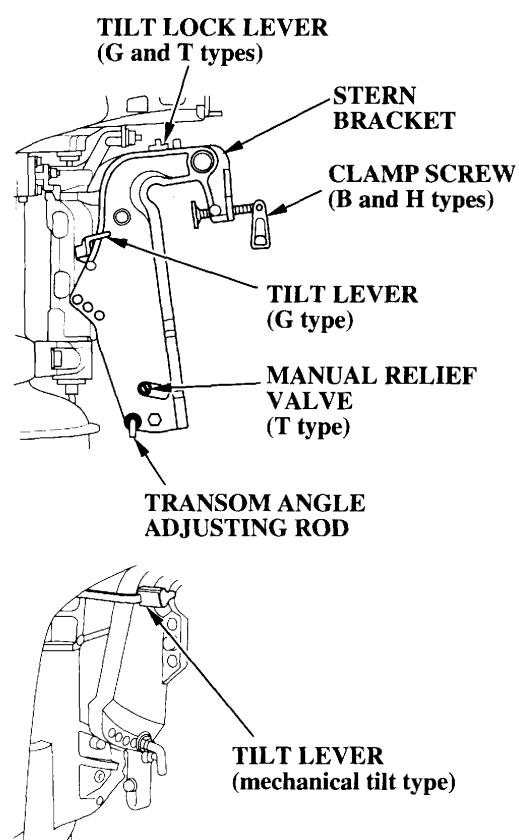
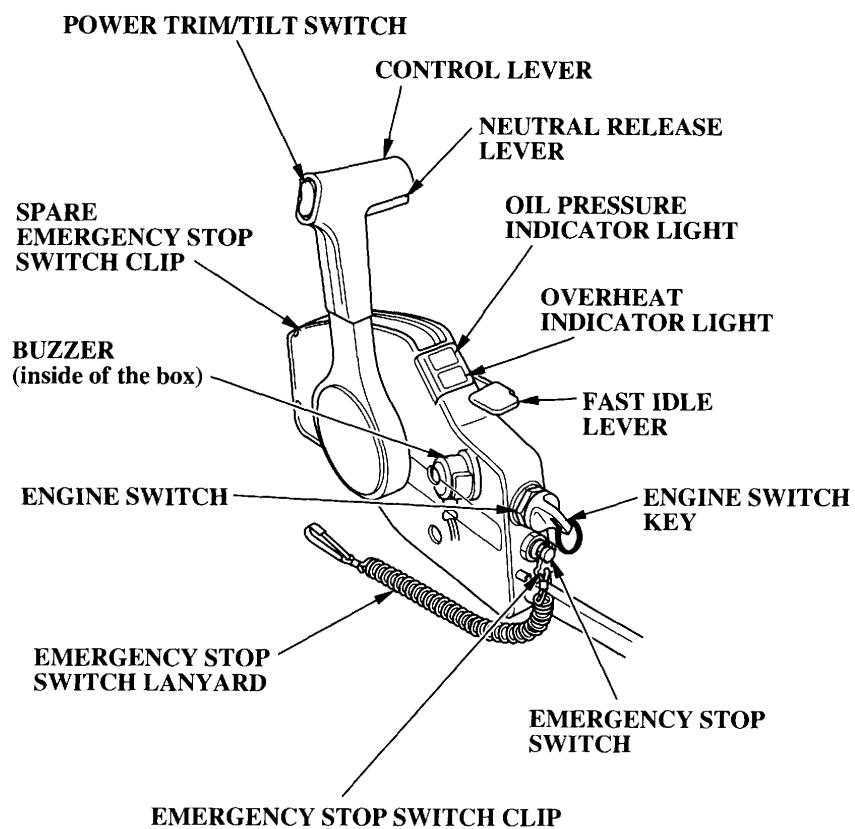
COMPONENT IDENTIFICATION

REMOTE CONTROL TYPE (R type)

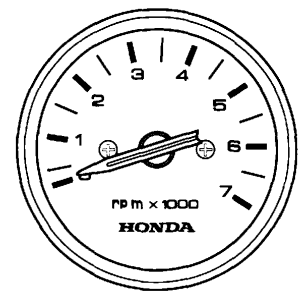
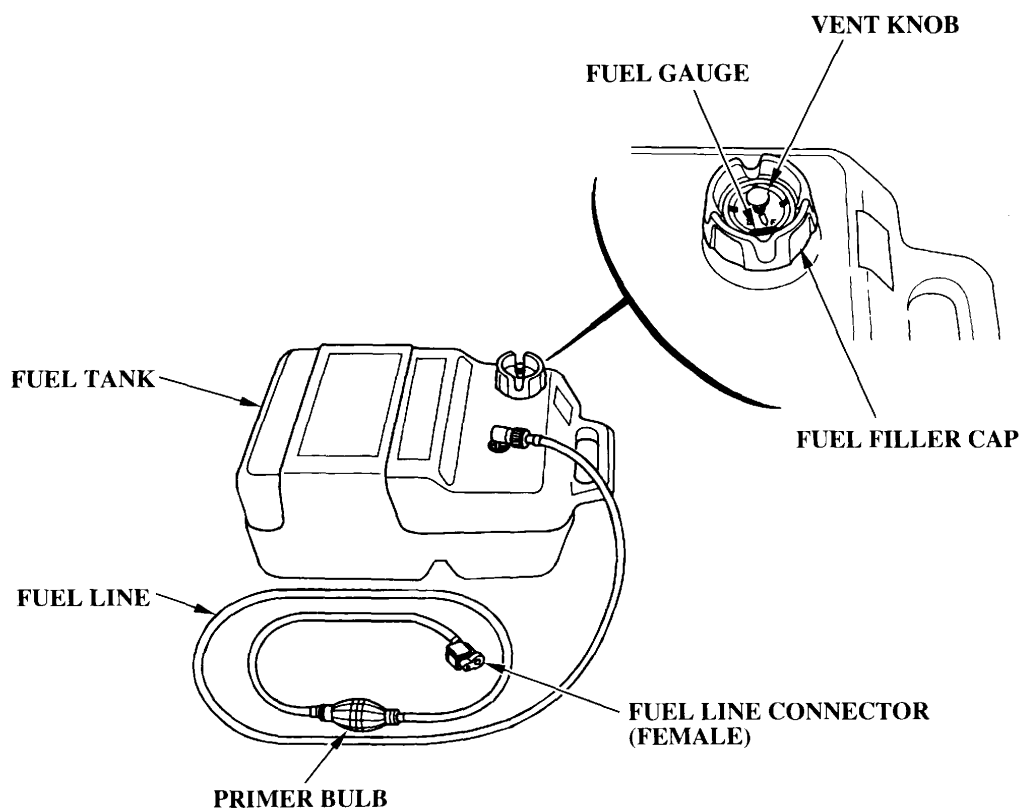


COMPONENT IDENTIFICATION

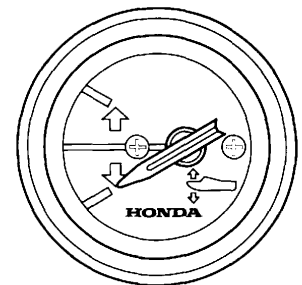
COMMON



COMPONENT IDENTIFICATION



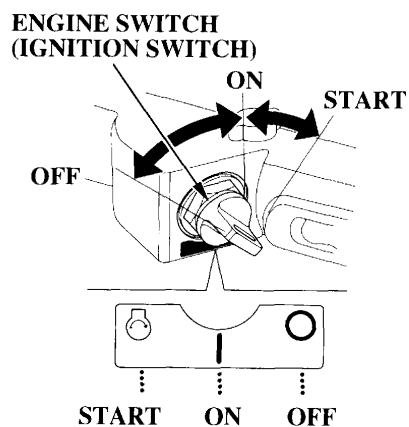
TACHOMETER
[T type (SHG and LHG types optional equipment)]



TRIM METER
[SRT and LRT types (SHT and LHT types optional equipment)]

4. CONTROLS (B type)

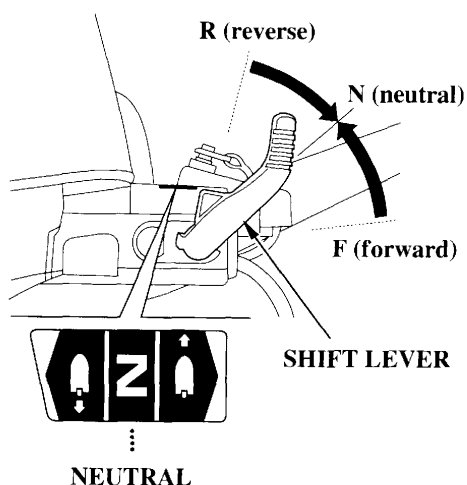
Engine Switch



This tiller handle is equipped with an automotive type ignition switch.

Key positions:

- START: to start the engine.
ON: to run the engine after starting.
OFF: to stop the engine (IGNITION OFF).



NOTICE

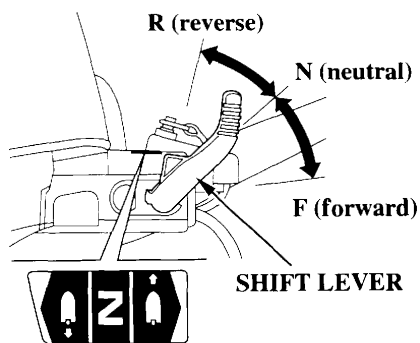
Do not leave the engine switch (ignition switch) ON (key in ON position) when the engine is not running as the battery will discharge.

NOTE:

The starter motor will not work unless the shift lever is in the N (neutral) position.

CONTROLS (B type)

Shift Lever



REVERSE FORWARD
NEUTRAL

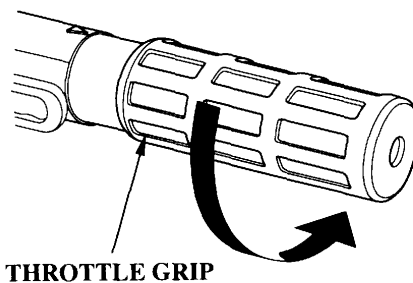
Use the shift lever to run the boat in forward or reverse gear, or to cut off the engine power from the propeller. There are the three positions for the shift lever.

FORWARD: The boat moves ahead.

NEUTRAL: The engine power is cut off from the propeller. The boat does not move.

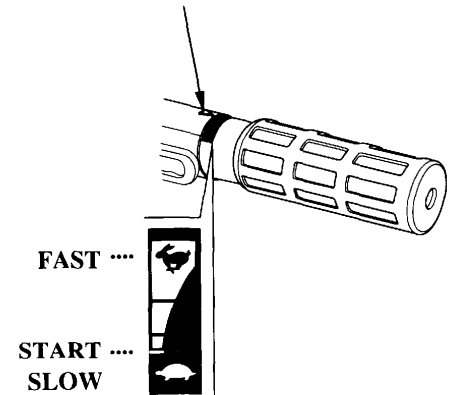
REVERSE: The boat reverses.

Throttle Grip



Turn the grip clockwise or counterclockwise to adjust the engine speed. Turning the grip in the direction shown by arrow increases the engine speed.

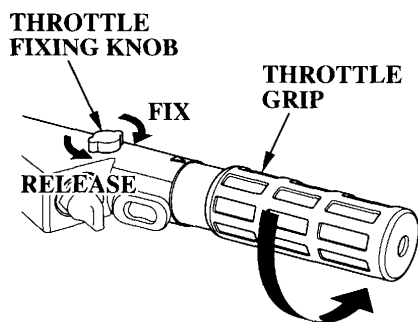
THROTTLE INDICATOR



The curve on the grip indicates the engine speed.

CONTROLS (B type)

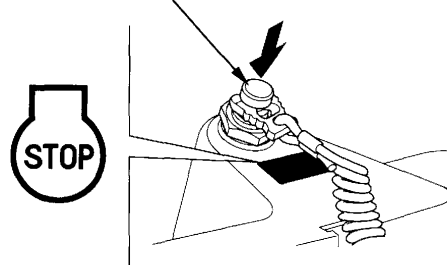
Throttle Fixing Knob



Use the engine throttle fixing knob to cruise at a certain constant speed. Turning the fixing knob clockwise fixes the throttle grip in the place, and it is released by turning the fixing knob counterclockwise.

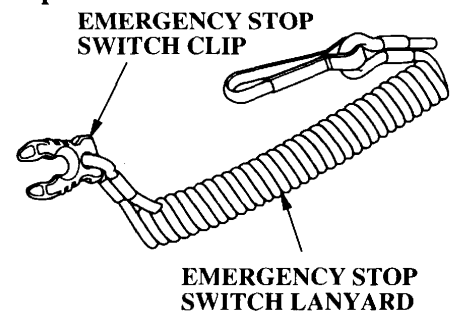
Emergency Stop Switch

EMERGENCY STOP SWITCH



Press the emergency stop switch to stop the engine.

Emergency Stop Switch Lanyard/Clip



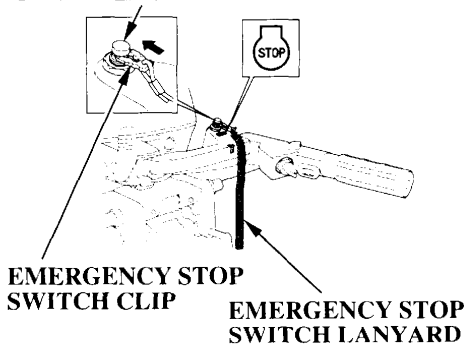
The emergency stop switch lanyard is provided to stop the engine immediately when the operator falls overboard or away from the outboard motor.

The engine stops when the clip at the end of the emergency stop switch lanyard is pulled out of the emergency stop switch.

When operating the outboard motor, be sure to attach one end of the emergency stop switch lanyard securely to the operator.

CONTROLS (B type)

EMERGENCY STOP SWITCH

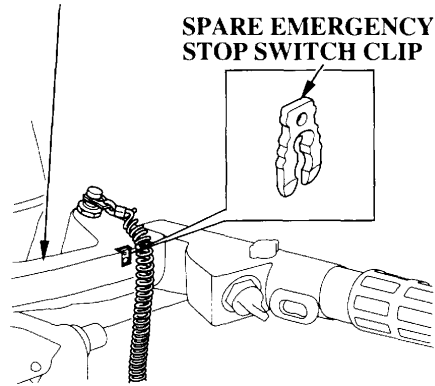


⚠ WARNING

If the emergency stop switch lanyard is not set, the boat might run out of control when the operator, for example, falls overboard and is not able to operate the outboard motor.

For the sake of the operator's and the passengers' safety, be sure to set the emergency stop switch clip located at one end of the emergency stop switch lanyard with the emergency stop switch. Attach the other end of the emergency stop switch lanyard securely to the operator.

CARRYING HANDLE

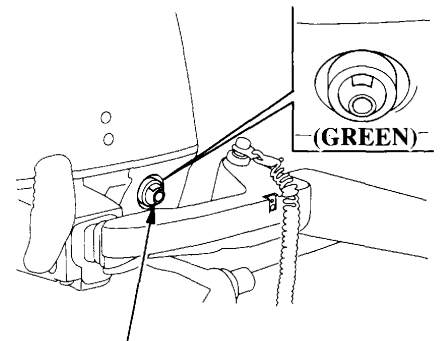


NOTE:

The engine does not start unless the emergency stop switch clip is set on the emergency stop switch.

A spare emergency stop switch clip is provided on the carrying handle. Use the spare emergency stop switch clip to make the emergent engine start when the emergency stop switch lanyard is not available as, for example, the operator falls outboard.

Oil Pressure Indicator Light

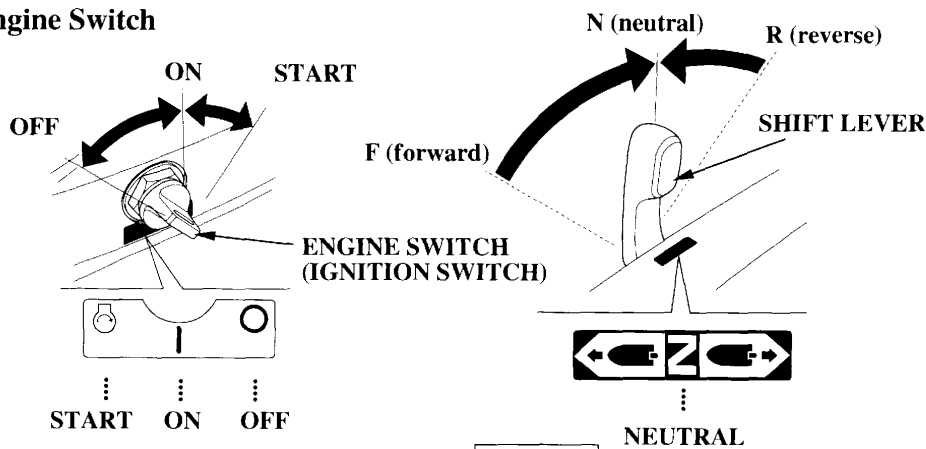


OIL PRESSURE INDICATOR LIGHT

When the engine oil level is low or the engine lubrication system is faulty, the oil pressure indicator light turns off and the engine speed decreases gradually.

CONTROLS (H type)

Engine Switch



This tiller handle is equipped with an automotive type ignition switch.

Key positions:

START: to start the engine.
ON: to run the engine after starting.
OFF: to stop the engine (IGNITION OFF).

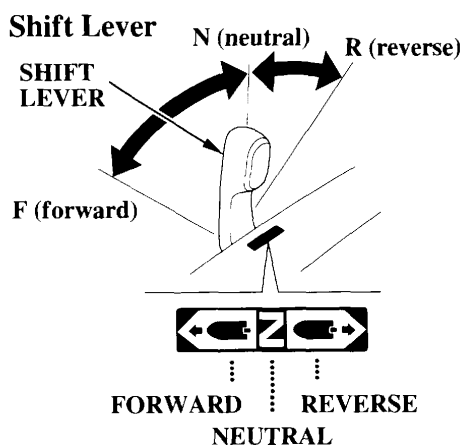
NOTICE

Do not leave the engine switch (ignition switch) ON (key in ON position) when the engine is not running as the battery will discharge.

NOTE:

The starter motor will not work unless the shift lever is in the N (neutral) position.

CONTROLS (H type)



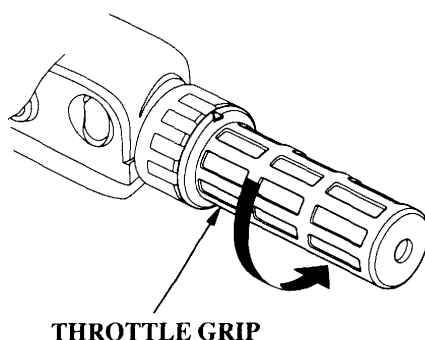
Use the shift lever to run the boat in forward or reverse gear, or to cut off the engine power from the propeller. There are the three positions for the shift lever.

FORWARD: The boat moves ahead.

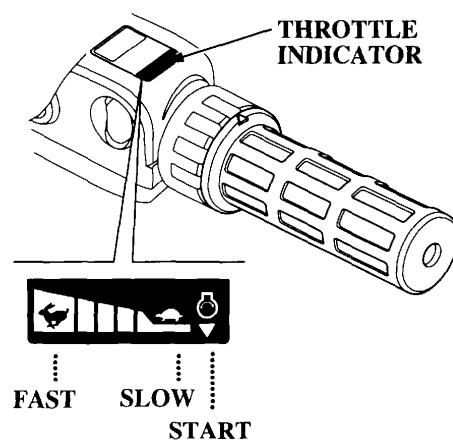
NEUTRAL: The engine power is cut off from the propeller. The boat does not move.

REVERSE: The boat reverses.

Throttle Grip



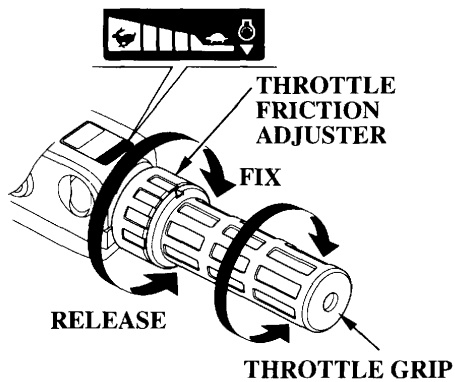
Turn the grip clockwise or counterclockwise to adjust the engine speed. Turning the grip in the direction shown by arrow increases the engine speed.



The curve on the grip indicates the engine speed.

CONTROLS (H type)

Throttle Friction Adjuster

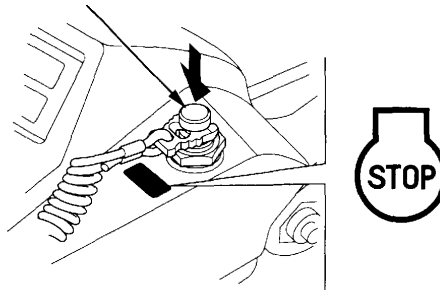


The throttle friction adjuster adjusts resistance to throttle grip rotation.

Turn the adjuster clockwise to increase friction for holding a throttle setting while cruising.

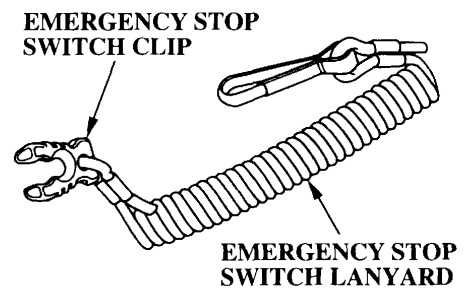
Turn the adjuster counterclockwise to decrease friction for easy throttle grip rotation.

Emergency Stop Switch EMERGENCY STOP SWITCH



Press the emergency stop switch to stop the engine.

Emergency Stop Switch Lanyard/ Clip



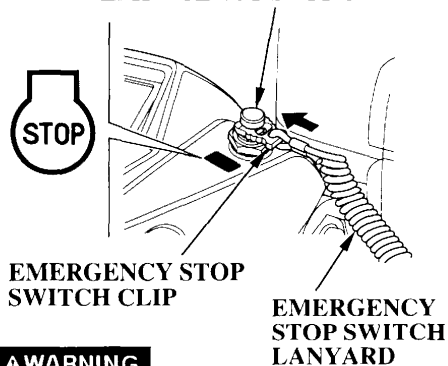
The emergency stop switch lanyard is provided to stop the engine immediately when the operator falls overboard or away from the outboard motor.

The engine stops when the clip at the end of the emergency stop switch lanyard is pulled out of the emergency stop switch.

When operating the outboard motor, be sure to attach one end of the emergency stop switch lanyard securely to the operator.

CONTROLS (H type)

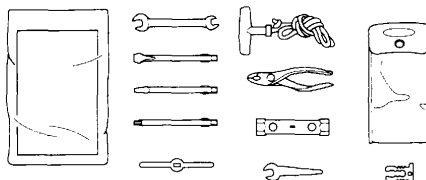
EMERGENCY STOP SWITCH



⚠ WARNING

If the emergency stop switch lanyard is not set, the boat might run out of control when the operator, for example, falls overboard and is not able to operate the outboard motor.

For the sake of the operator's and the passengers' safety, be sure to set the emergency stop switch clip located at one end of the emergency stop switch lanyard with the emergency stop switch. Attach the other end of the emergency stop switch lanyard securely to the operator.



SPARE EMERGENCY STOP SWITCH CLIP

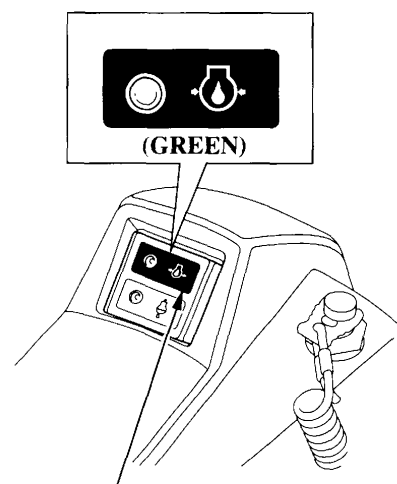
NOTE:

The engine does not start unless the emergency stop switch clip is set on the emergency stop switch.

A spare emergency stop switch clip is provided in the tool bag (see page 123).

Use the spare emergency stop switch clip to make the disabled engine start when the emergency stop switch lanyard is not available as, for example, when the operator falls overboard.

Oil Pressure Indicator Light

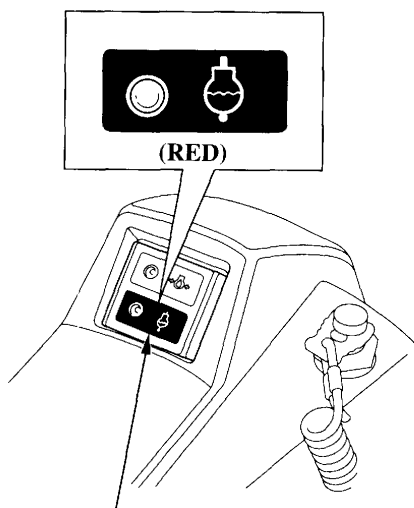


OIL PRESSURE INDICATOR LIGHT

When the engine oil level is low or the engine lubrication system is faulty, the oil pressure indicator light turns off and the engine speed decreases gradually.

CONTROLS (H type)

Overheat Indicator Light



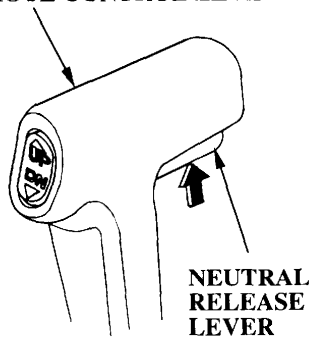
OVERHEAT INDICATOR LIGHT

When the engine cooling system is faulty, the overheat indicator light turns on and the engine speed decreases gradually.

CONTROLS (R type)

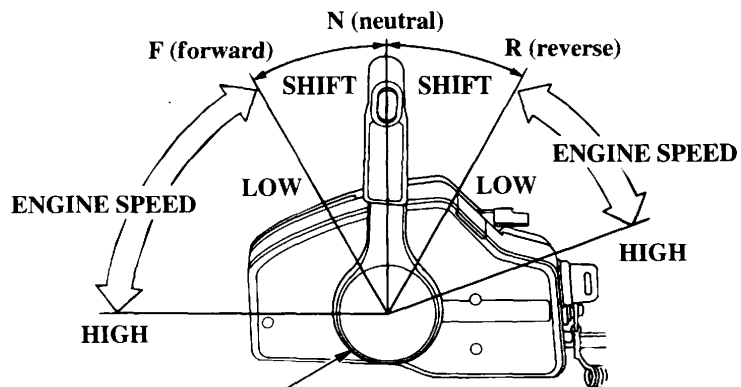
Remote Control Lever

REMOTE CONTROL LEVER



Shifting gear into forward, reverse, or neutral and the engine speed adjustment can be performed with the remote control lever.

It is necessary to pull up the neutral release lever to operate the remote control lever.



REMOTE CONTROL LEVER

FORWARD:

Moving the lever to the FORWARD position (i.e. approximately 30° from the NEUTRAL position) engages the gear into forward. Moving the lever further from the FORWARD position will increase the throttle opening and the boat forward speed.

NEUTRAL:

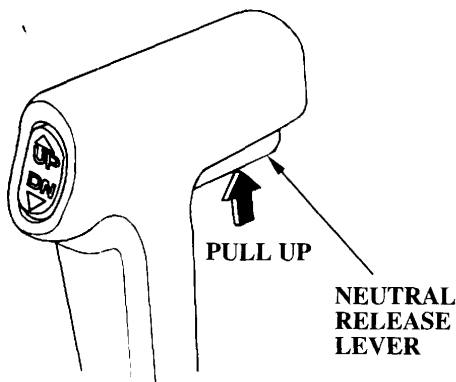
Engine power is cut off from the propeller.

REVERSE:

Moving the lever to the REVERSE position (i.e. approximately 30° from the NEUTRAL position) engages the gear into reverse. Moving the lever further from the REVERSE position will increase the throttle opening and the boat reverse speed.

CONTROLS (R type)

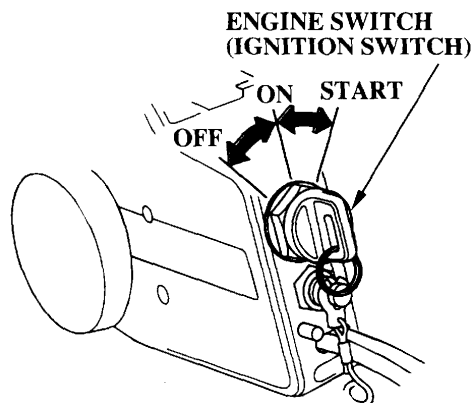
Neutral Release Lever



The neutral release lever is set on the remote control lever to prevent an accidental operation of the remote control lever.

The remote control lever does not operate unless it is moved while pulling the neutral release lever up.

Engine Switch



This remote control is equipped with an automotive type ignition switch.

Key positions:

START: to start the engine.
ON: to run the engine after starting.
OFF: to stop the engine (IGNITION OFF).

NOTICE

Do not leave the engine switch (ignition switch) ON (key in ON position) when the engine is not running as the battery will discharge.

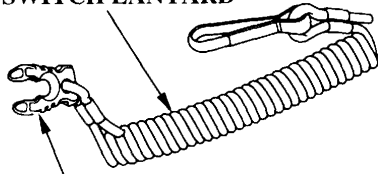
NOTE:

The starter motor will not work unless the remote control lever is in the N (neutral) position.

CONTROLS (R type)

Emergency Stop Switch Lanyard/Clip

EMERGENCY STOP SWITCH LANYARD



EMERGENCY STOP SWITCH CLIP

EMERGENCY STOP SWITCH

EMERGENCY STOP SWITCH CLIP

EMERGENCY STOP SWITCH LANYARD

The emergency stop switch lanyard is provided to stop the engine immediately when the operator falls overboard or away from the outboard motor.

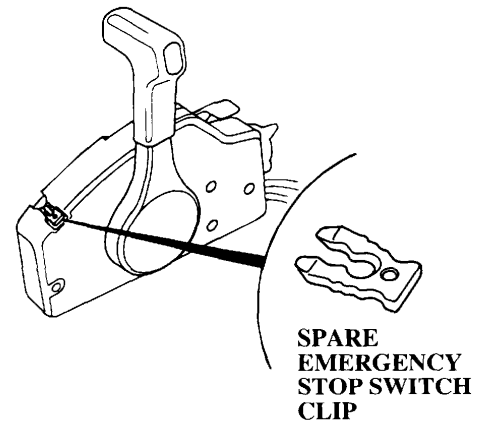
The engine stops when the clip at the end of the emergency stop switch lanyard is pulled out of the emergency stop switch.

When operating the outboard motor, be sure to attach one end of the emergency stop switch lanyard securely to the operator.

⚠ WARNING

If the emergency stop switch lanyard is not set, the boat might run out of control when the operator, for example, falls overboard and is not able to operate the outboard motor.

For the sake of the operator's safety, be sure to set the emergency stop switch clip and attach one end of the emergency stop switch lanyard securely to the operator.



SPARE EMERGENCY STOP SWITCH CLIP

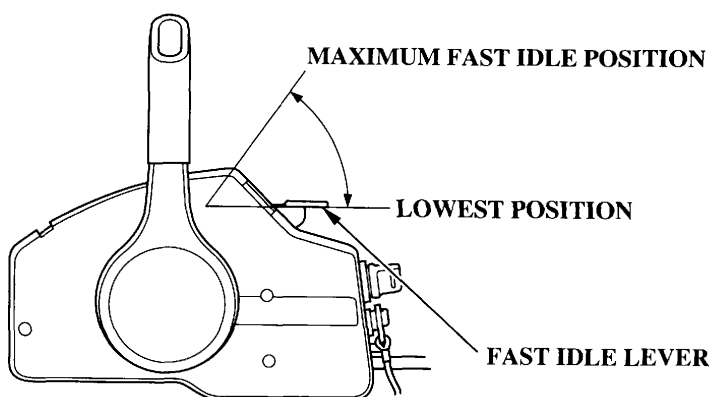
NOTE:

The engine does not start unless the emergency stop switch clip is set on the emergency stop switch.

A spare emergency stop switch clip is provided on the remote control box. Use the spare emergency stop switch clip to make the disabled engine start when the emergency stop switch lanyard is not available as, for example, the operator falls overboard.

CONTROLS (R type)

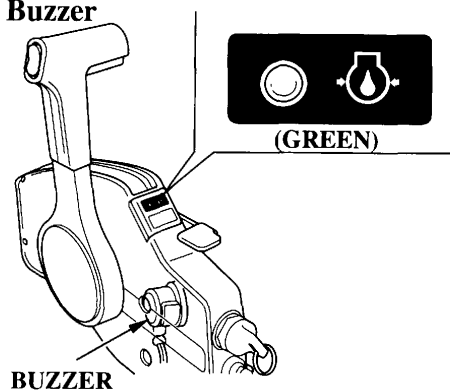
Fast Idle Lever



The fast idle lever is provided with the engine speed adjustment function. The lever does not move unless the remote control lever is in the "N" (neutral) position. Note also that the control lever does not move unless the fast idle lever is in the "full close" position.

Use the fast idle lever for engine warm-up after starting a cold engine and when starting a warm engine.

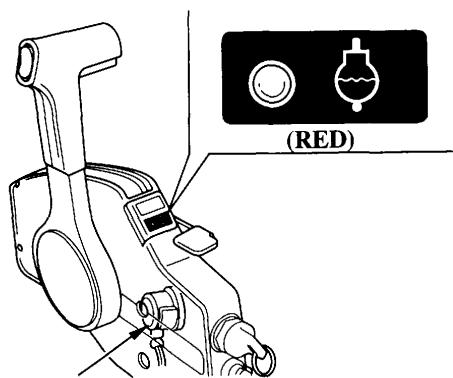
Oil Pressure Indicator Light/ Buzzer



The oil pressure indicator light turns off and the buzzer sounds when the oil level is low and/or the engine lubrication system is faulty. The engine speed slows down gradually this time.

CONTROLS (R type)

Overheat Indicator Light/Buzzer



BUZZER

The overheat indicator light turns on and the buzzer sounds when the engine cooling circuit is faulty. The engine speed slows down this time.

CONTROLS (T type)

Power Trim/Tilt Switch

Press the power trim/tilt switch on the control lever (R type) or the tiller handle (H type), and the motor installation angle (trim angle) and boat angle can be adjusted while sailing or stopping the boat. Acceleration, maximum high speed, operational stability and fuel consumption are improved by setting the motor at the suitable trim angle.

▲WARNING

Do not trim excessively while cruising through rough waves, or it may cause an accident.

CONTROL LEVER

Press UP to trim or tilt the motor up.

Press DN (down) to trim or tilt the motor down.

POWER TRIM/TILT SWITCH

(R type)

Excessive trim angle can result in cavitation and racing of the propeller, and trimming up the motor excessively can cause damage to the impeller pump.

POWER TRIM/TILT SWITCH

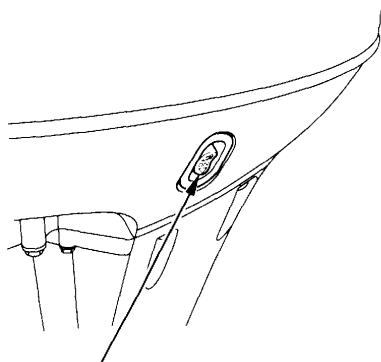
Press UP to trim or tilt the motor up.

Press DN to trim or tilt the motor down.

(H type)

CONTROLS (T type)

Power Tilt Switch (motor pan)

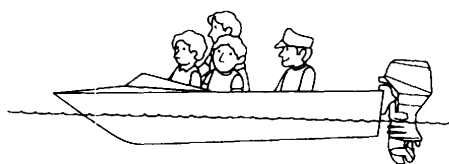


POWER TILT SWITCH

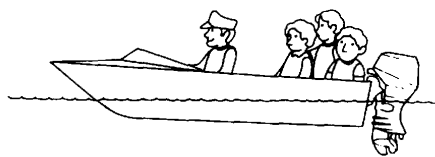
The power tilt switch located on the motor pan is a convenience switch for tilting the motor for trailering, or performing outboard maintenance. This power tilt switch should only be operated with the boat being stopped and motor off.

CONTROLS (T type)

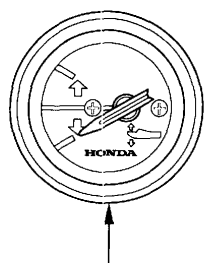
Trim Meter [SRT and LRT types (SHT and LHT types optional equipment)]



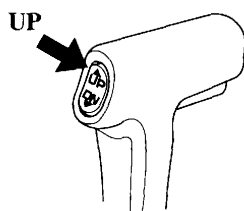
Increase the trim angle by pressing UP of the power trim/tilt switch.



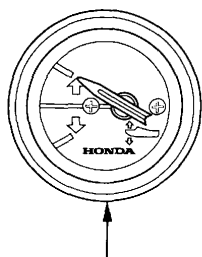
Decrease the trim angle by pressing DN (down) of the power trim/tilt switch.



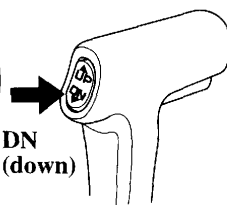
TRIM METER



(R type)



TRIM METER

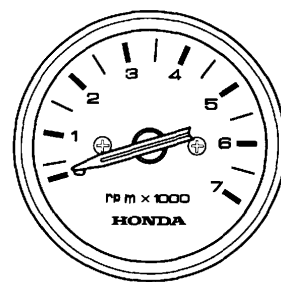


(R type)

The trim meter indicates the trimming condition of the outboard motor. Referring to the trim meter, press the power trim/tilt switch and trim the boat at the best angle for optimum stability and speed.

The illustration represents R type. Perform the same procedure for the other types.

Tachometer (SHG and LHG types optional equipment)



TACHOMETER

The tachometer shows the engine speed in revolutions per minute.

CONTROLS (T type)

Manual Relief Valve

If the power trim/tilt switch does not operate because of, for example, dead battery, the motor can be tilted manually by opening the manual relief valve.

To move the outboard motor by hand, turn the manual relief valve under the stern bracket 2 and a half turns counterclockwise using a screw driver.

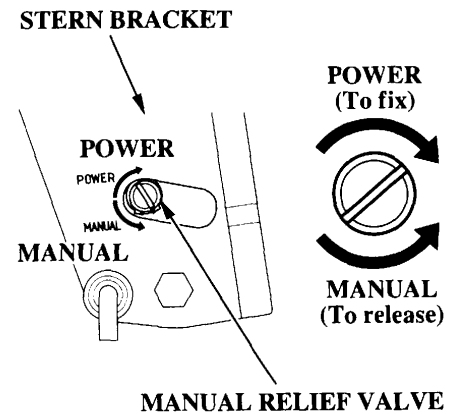
After moving the motor, turn the screw clockwise securely.

⚠ WARNING

Be sure to tighten the manual relief valve securely. The motor could rise when sailing in the reverse gear, resulting in an accidental injury to the passenger(s).

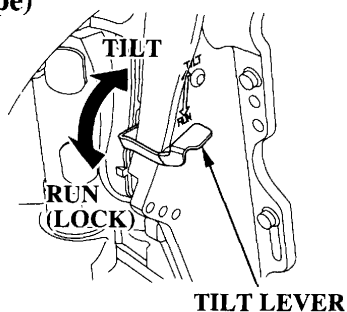
NOTICE

Do not loosen the manual relief valve more than two turns, or the outboard motor cannot be tilted up when the manual relief valve is retightened.



CONTROLS

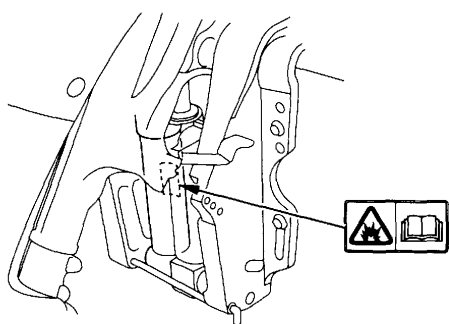
Tilt Lever (G type)



Use the tilt lever to temporarily raise the motor when the boat is sailing in the shallows, or mooring or anchoring in the shallows. Raising the tilt lever unlocks the motor and the motor can be tilted. Lowering the tilt lever locks the motor.

▲WARNING

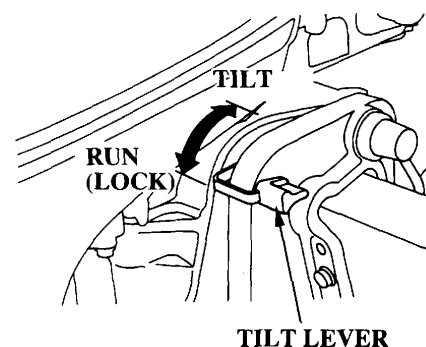
Be sure to lower the tilt lever and lock the motor before sailing. The motor could rise when sailing in the reverse gear, resulting in an accidental injury to the passenger(s).



▲WARNING

Do not disassemble the gas assisted damper assembly as it is filled with the high pressure gas.

(Mechanical Tilt type)



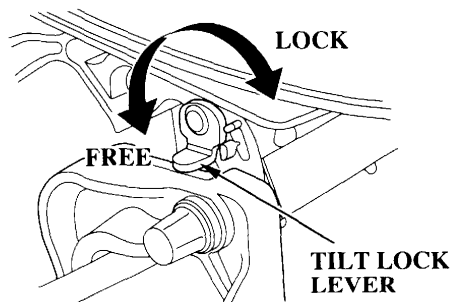
Use the tilt lever to temporarily raise the motor when the boat is sailing in the shallows, or mooring or anchoring in the shallows. Raising the tilt lever unlocks the motor and the motor can be tilted. Lowering the lever locks the motor.

▲WARNING

Be sure to lower the tilt lever and lock the motor before sailing. The motor could rise when sailing in the reverse gear, resulting in an accidental injury to the passenger(s).

CONTROLS (Common)

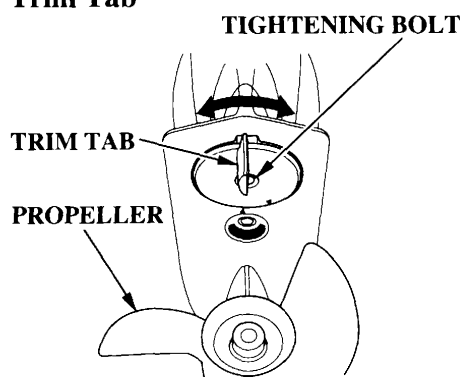
Tilt Lock Lever (G and T types)



Use the tilt lock lever to raise the motor and lock it in the position when the boat is moored or anchored for a long time.

Tilt the motor as far as it goes and move the lock lever in the locking direction.

Trim Tab



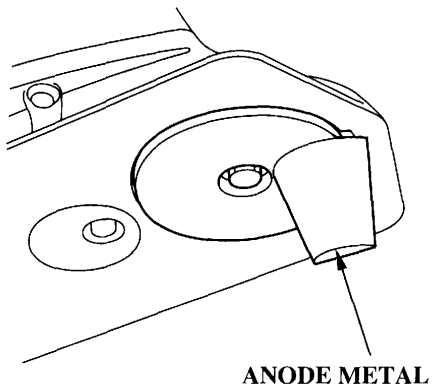
If the steering wheel/handle is pulled to the side while running at full speed, adjust the trim tab so that the boat runs straight ahead.

Loosen the tightening bolt and turn the trim tab right or left to adjust.

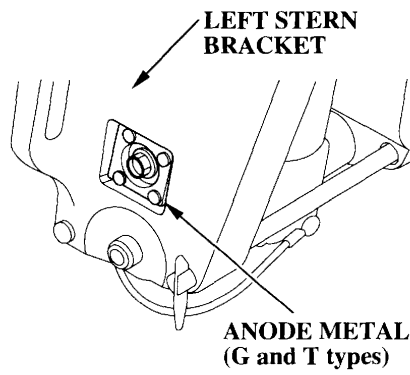
The trim tab also functions as the anode metal.

CONTROLS (Common)

Anode Metal



The anode metal is a sacrificed metal which protects the outboard from corrosion.

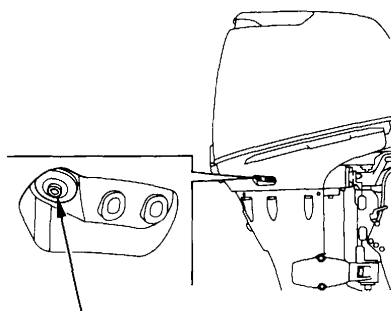


NOTICE

Do not paint the anode metal. It deteriorates the function of the anode metal, which can lead to rust and corrosion damage to the outboard motor.

CONTROLS (Common)

Cooling Water Check Hole

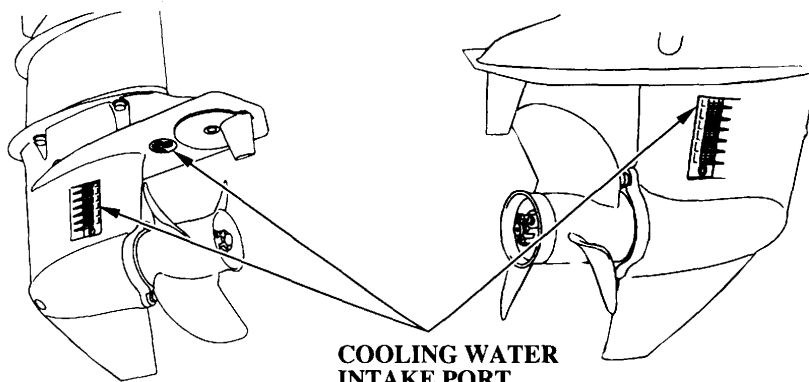


COOLING WATER CHECK HOLE

The cooling water is checked here to see whether it is circulating inside the engine properly.

After starting the engine, check at the cooling water check hole whether the cooling water is circulating through the engine.

Cooling Water Intake Port

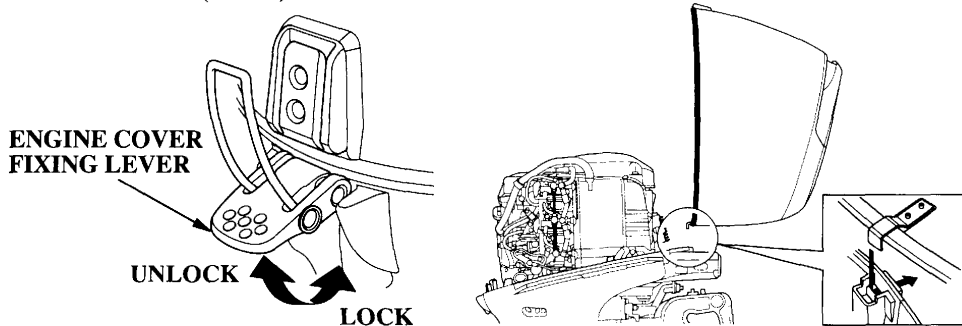


**COOLING WATER
INTAKE PORT**

The engine cooling water is drawn into the engine through this port.

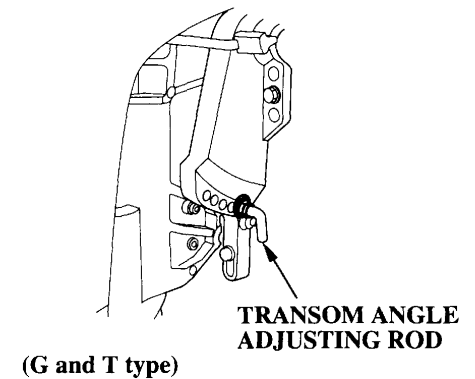
CONTROLS (Common)

Engine Cover Fixing Lever (REAR)

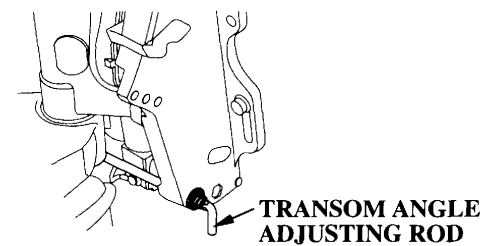


Latch/unlatch the engine cover fixing lever to install or remove the engine cover.

Transom Angle Adjusting Rod (mechanical tilt type)



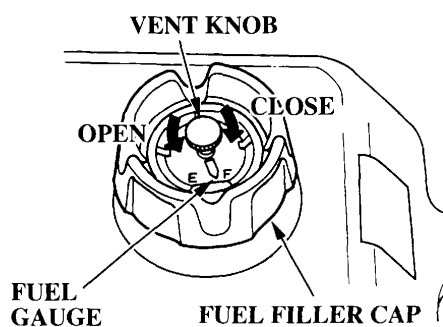
(G and T type)



Use the transom angle adjusting rod to adjust the motor angle properly. The motor angle can be adjusted to the five or four angles by changing the adjusting rod position.

CONTROLS (Common)

Fuel Filler Cap (with vent knob and fuel gauge)



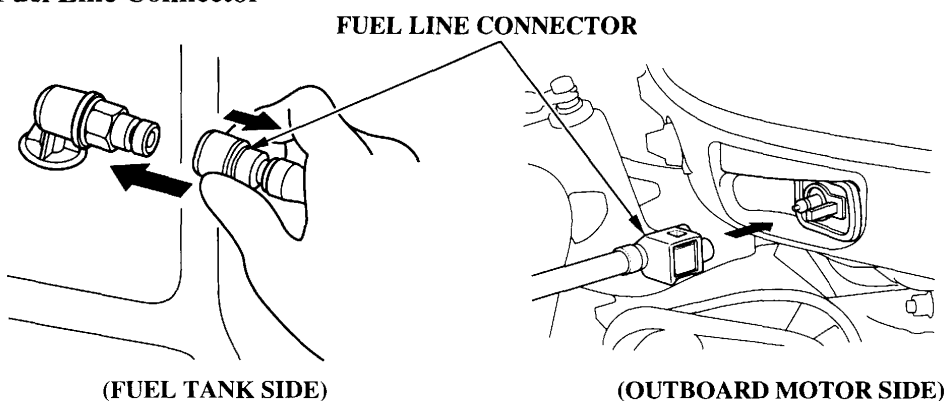
The fuel cap vent knob controls air entering and leaving the fuel tank.

The fuel gauge is part of the fuel cap, and indicates the fuel level in the tank.

When refilling the fuel tank, turn the vent knob counterclockwise to open and remove the fuel filler cap.

Turn the vent knob clockwise and close it securely before transporting or storing the fuel tank.

Fuel Line Connector



The fuel line connector is used to connect the fuel line between the fuel tank and the separate outboard motor.

5. INSTALLATION

NOTICE

Improperly installed outboard motor can result in the motor dropped into the water, boat not able to cruise straight ahead, engine speed not increase, and much fuel consumption.

We recommend that the outboard motor be installed by an authorized Honda outboard motor dealer. Consult the authorized Honda dealer in your area for the Y-OP (User Optional Parts)/equipments installation and operation.

Applicable Boat

Select the boat suitable for the engine power.

Engine power:

BF25D: 18.4 kW (25 PS)

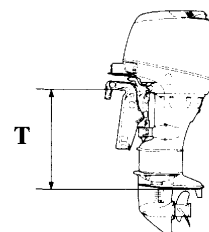
BF30D: 22.1 kW (30 PS)

Power recommendation is indicated on most of the boats.

⚠ WARNING

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

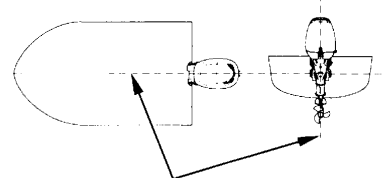
Transom Height



Type:	T (Transom Height) (when transom angle is 12°)
S:	431 mm (17.0 in)
L:	552 mm (21.7 in)

Select the outboard motor which is correct for the boat transom height of your boat.

Location

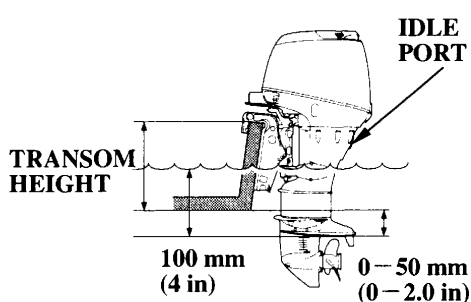


CENTER LINE

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

INSTALLATION

Installation Height



The antiventilation plate of the outboard motor should be 0 – 50 mm (0 – 2 in) below the bottom of the boat.

The correct dimensions differ according to the type of the boats and the configuration of the bottom of the boats. Follow the manufacture's recommended installation height.

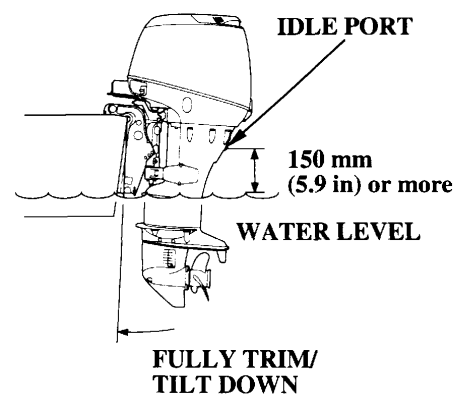
If the outboard motor is installed too low, the boat will squat and be hard to plane, and the motor will spray water that may enter the boat. It will tend to porpoise, and high-speed stability will be reduced.

If the outboard motor is installed too high, that will cause propeller ventilation.

NOTICE

- The water level must be at least 100 mm (4 in) above the anticavitation plate with the motor not running, otherwise the water pump may not receive sufficient cooling water, and the engine will overheat.

Outboard Motor Installation

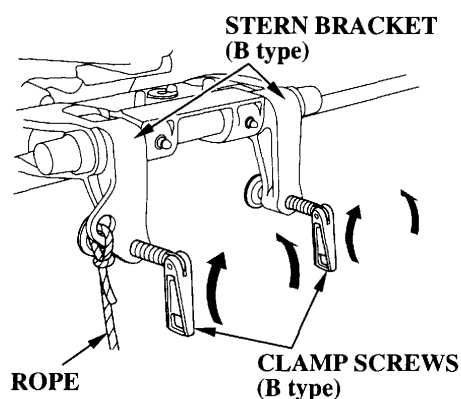


NOTICE

- Adverse effect to the engine can occur if the installation position of the outboard motor is too low. Trim/tilt down the outboard motor with the boat fully loaded and stop the engine. Check that the idle port is at 150 mm (5.9 in) or above from the water level.

INSTALLATION

Outboard Motor Installation

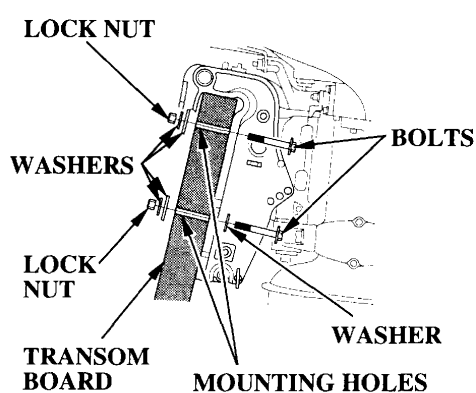


1. Attach the stern bracket to the transom and tighten the clamp screws (B type).

⚠ 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.

(G and T type)



2. Apply the silicone sealant (Three Bond 1216 or equivalent) to the outboard motor mounting holes.
3. Set the outboard motor on the boat and secure with the bolts, washers, and lock nuts.

NOTE:

Standard torque:

29 – 39 N·m

(3.0 – 4.0 kgf·m, 22 – 29 lbf·ft)

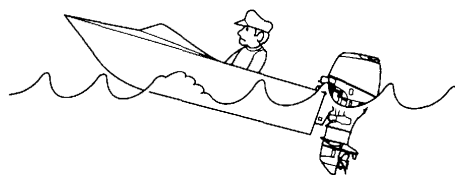
The standard torque is given just as a guideline. Torque of the nut can be different according to the material of the boat. Consult with an authorized Honda outboard motor dealer.

⚠ CAUTION

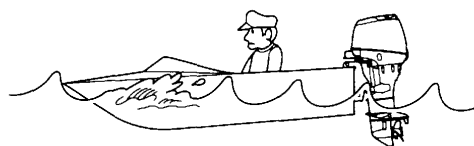
Install the outboard motor securely. Loosely mounted outboard motor can result in accidental loss of the motor and damage and injury to the equipment and personnel.

INSTALLATION

Motor Angle Inspection (Cruising)

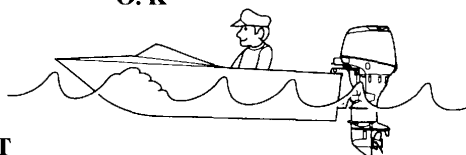


INCORRECT
CAUSES BOAT TO "SQUAT"



INCORRECT
CAUSES BOAT TO "PLOW"

O. K



CORRECT
GIVES MAXIMUM PERFORMANCE

Install the outboard motor at the best trim angle for stable cruising and maximum power.

Trim angle too large: Incorrect causes boat to "squat."

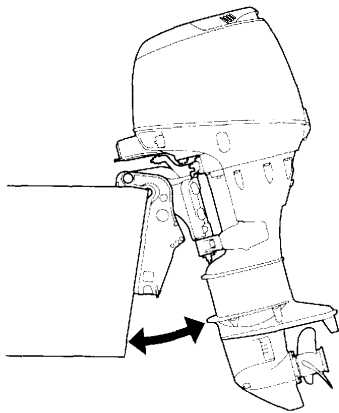
Trim angle too small: Incorrect causes boat to "plow."

The trim angle differs according to the combination of the boat, outboard motor, and propeller, and the operating conditions.

〈 Motor Angle Adjustment 〉

Adjust the outboard motor so that it is perpendicular to the water surface (i.e. axis of the propeller is parallel with the water surface).

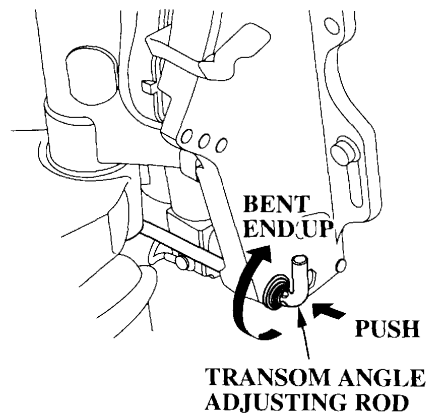
INSTALLATION



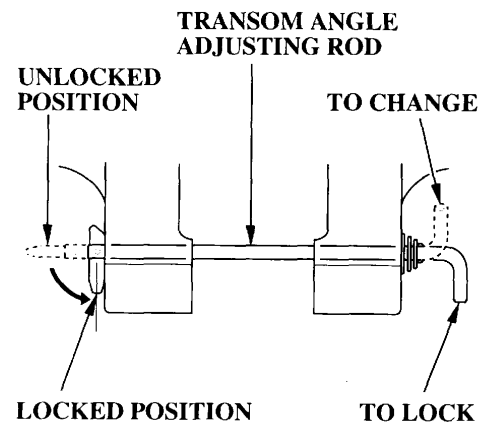
There are five adjusting stages (mechanical tilt type).

There are four adjusting stages (G and T type).

1. Tilt the motor to the designated tilt angle.



2. Push in the adjusting rod, twist upwards to the unlocked position and pull out to remove.



3. Inserting the adjusting rod in the proper hole, twist it down to lock. After locking, pull the adjusting rod and be sure it is not withdrawn.

NOTICE

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

INSTALLATION

Battery Connections

Use a battery which has 12V-65 Ah or more specifications. The battery is an optional part (i.e. part to be purchased separately from the outboard motor).

▲ WARNING

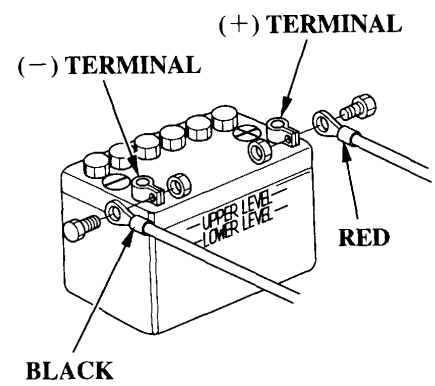
Batteries produce explosive gases: If ignited, an explosion can cause serious injury or blindness. Provide adequate ventilation when charging.

- **CHEMICAL HAZARD:** Battery electrolyte contains sulfuric acid. Contact with eyes or skin, even through clothing, may cause severe burns. Wear a faceshield and protective clothing.
 - **Keep flames and sparks away, and do not smoke in the area.**
- ANTIDOTE:** If electrolyte gets into your eyes, flush thoroughly with warm water for at least 15 minutes and call a physician immediately.

- **POISON:** Electrolyte is poison.
- ANTIDOTE:**
- **External:** Flush thoroughly with water.
 - **Internal:** Drink large quantities of water or milk. Follow with milk of magnesia or vegetable oil, and call a physician immediately.
- **KEEP OUT OF REACH OF CHILDREN.**

To protect the battery from mechanical damage and to prevent the battery from falling or tipping over, the battery must be:

- Installed in the correct size corrosion-resistant battery box.
- Properly secured in the boat.
- Secured in a location free from direct sunlight and water spray.
- Secured away from the fuel tank to avoid potential sparks near the fuel tank.



Connect the battery cables:

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

INSTALLATION

NOTICE

- 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.
 - Be careful to avoid connecting the battery in reverse polarity, as this will damage the battery-charging system in the outboard motor.
 - Do not disconnect the battery cables while the engine is running. Disconnecting the cables while the engine is running, will damage the outboard motor's electrical system.
 - Do not place the fuel tank near the battery.
- **Battery cable extension:**
Extending the original battery cable will cause the battery voltage to drop due to the increased length of the cable and number of connections. The outboard may not start if the battery voltage reaching the engine is too low.

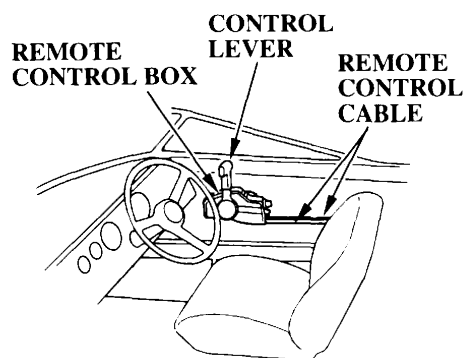
INSTALLATION (R type)

Remote Control Installation

NOTICE

Improperly installed steering system, remote control box, and remote control cable, or installing those of the different types could cause unpredictable accident. Consult an authorized Honda outboard motor dealer for proper installation.

< Remote Control Box Location >



Install the remote control box in the position where is easy to operate the control lever and switches.

Be sure that there are no obstacles on the route of the control cable.

< Remote Control Cable Length >

Measure the distance from the center of the remote control box via the transom corner to the center of the engine.

Recommended cable length is 300 mm (11.8 in) longer than the measured distance.

Set the cable along the pre-determined route and be sure that it is long enough to the route.

Connect the cable to the engine and be sure it is not kinked, bent sharp, pulled taut, or interfered while steering.

NOTICE

Do not bend the remote control cable as sharp as its route diameter is 400 mm (16 in.) or less, or it affects the service life of the cable and the remote control lever operation.

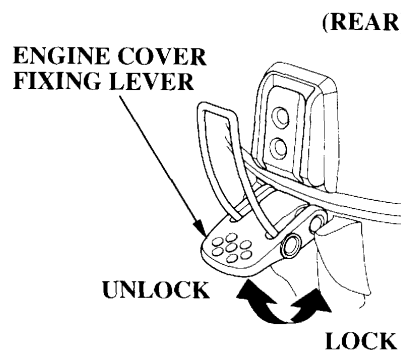
6. PRE-OPERATION CHECKS

BF25D/30D is the 4-stroke, water cooled outboard motor which uses unleaded regular gasoline for fuel. It also requires the engine oil. Check the following before operating the outboard motor.

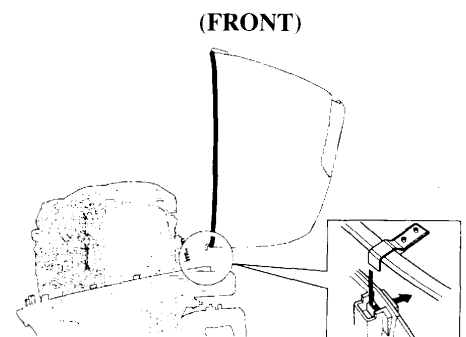
⚠ CAUTION

Perform the following pre-operation checks with the engine stopped.

Engine Cover Removal/Installation



- To remove, raise the rear engine cover fixing lever and remove the engine cover.
- To install, set the engine cover, hook the front and rear latches, and push down rear engine cover fixing lever.



⚠ WARNING

Do not operate the outboard motor without the engine cover. Exposed moving parts can cause injury.

PRE-OPERATION CHECKS

Engine Oil

NOTICE

- 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.

NOTE:

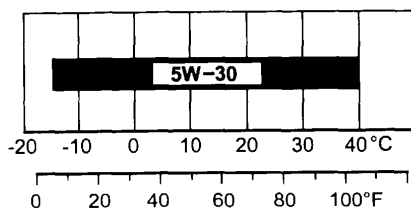
To avoid incorrect gauging of the engine oil level, inspect the oil level when the engine has cooled.

< Recommended oil >

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, SH or SJ. Motor oils classified SG, SH or SJ will show this designation on the

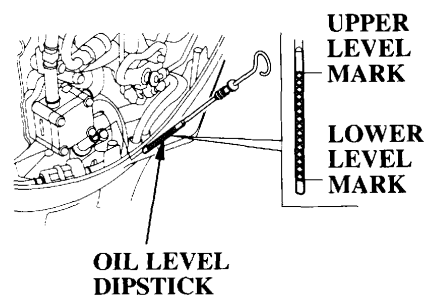
container.

SAE 5W-30 is recommended for general use.



AMBIENT TEMPERATURE

< Inspection and Refilling >



1. Position the outboard motor vertically, and remove the engine cover.
2. Remove the oil level dipstick and wipe with a clean rag.
3. Reinsert the dipstick all the way in, then pull it out and read the level. If near or below the lower level mark, remove the oil filler cap and fill to the upper level mark with the recommended oil. Tighten the oil filler cap securely.

PRE-OPERATION CHECKS

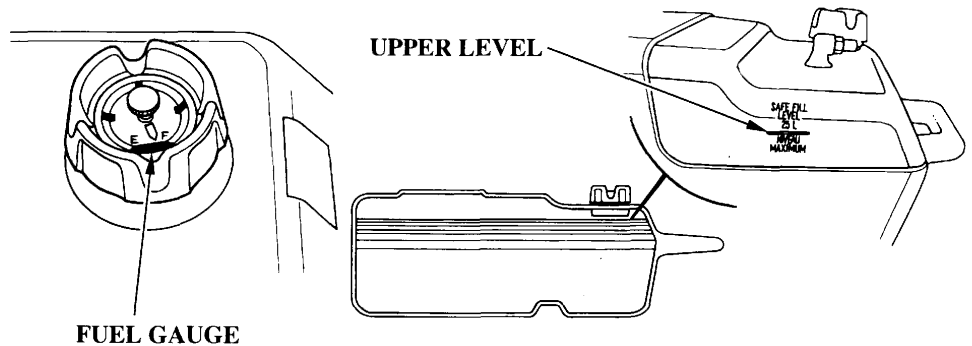
When the engine oil is contaminated or discolored, replace with the fresh engine oil (see page 126 for replacement interval and procedure).

4. Install the engine cover and lock it securely.

NOTICE

Do not overfill the engine oil. Check the engine oil after refilling. Excessive engine oil as well as the insufficient oil could cause damage to the engine.

Fuel Level



Check the fuel gauge and refill the tank to the upper level mark if necessary. Do not fill the fuel tank above the UPPER level mark.

NOTE:

Open the vent knob before removing the fuel filler cap. When the vent knob is firmly closed, the cap will be difficult to remove.

Use unleaded gasoline with a Research Octane Number of 91 or higher (a Pump Octane Number of 86 or higher). Use of leaded gasoline may cause damage to the engine.

Never use an oil/gasoline mixture or dirty gasoline. Avoid getting dirt, dust or water in the fuel tank.

Fuel tank capacity (separate tank):
25 l (6.6 US gal , 5.5 Imp gal)

PRE-OPERATION CHECKS

▲ WARNING

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 in the area where the engine is refueled or where gasoline is stored.**
- **Do not overfill the fuel tank (there should be no fuel in the filler neck). After refueling, make sure the tank cap is closed properly and securely.**
- **Be careful not to spill fuel when refueling. Spilled fuel or fuel vapor may ignite. If any fuel is spilled, make sure the area is dry before starting the engine.**
- **Avoid repeated or prolonged contact with skin or breathing of vapor.**
- **KEEP OUT OF REACH OF CHILDREN.**

Gasoline Containing Alcohol

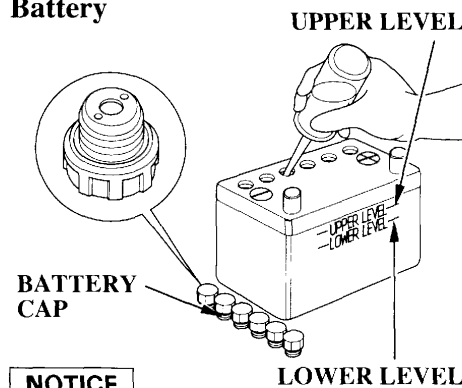
If you decide to use a gasoline containing alcohol (gasohol), be sure its octane rating is at least as high as that recommended by Honda. There are two types of "gasohol": one containing ethanol, and the other containing methanol. Do not use gasohol that contains more than 10% ethanol. Do not use gasoline 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.

PRE-OPERATION CHECKS

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

Battery



NOTICE

Battery handling differs according to the type of the battery and the instructions described below might not be applicable to the battery of your outboard. Refer to the battery manufacturer's instructions.

Check whether the battery fluid is between the upper and lower levels, and check the vent hole in the battery caps for clogging. If the battery fluid is near or below the lower level, add the distilled water to the upper level.

Check that the battery cables are connected securely.

If the battery terminals are contaminated or corroded, remove the battery and clean the terminals (see page 130).

▲WARNING

Batteries produce explosive gases: If ignited, an explosion can cause serious injury or blindness. Provide adequate ventilation when charging.

- **CHEMICAL HAZARD:** Battery electrolyte contains sulfuric acid. Contact with eyes or skin, even through clothing, may cause severe burns. Wear a faceshield and protective clothing.
- **Keep flames and sparks away, and do not smoke in the area.** **ANTIDOTE:** If electrolyte gets into your eyes, flush thoroughly with warm water for at least 15 minutes and call a physician immediately.

PRE-OPERATION CHECKS

- **POISON:** Electrolyte is poison.

ANTIDOTE:

- **External:** Flush thoroughly with water.
- **Internal:** Drink large quantities of water or milk. Follow with milk of magnesia or vegetable oil, and call a physician immediately.
- **KEEP OUT OF REACH OF CHILDREN.**

Propeller and Split Pin Inspection

⚠ WARNING

The propeller blades are thin and sharp. Careless handling of the propeller can result in injury.

When checking the propeller:

- **Remove the emergency stop switch clip to prevent an accidental start of the engine.**
- **Wear heavy gloves.**

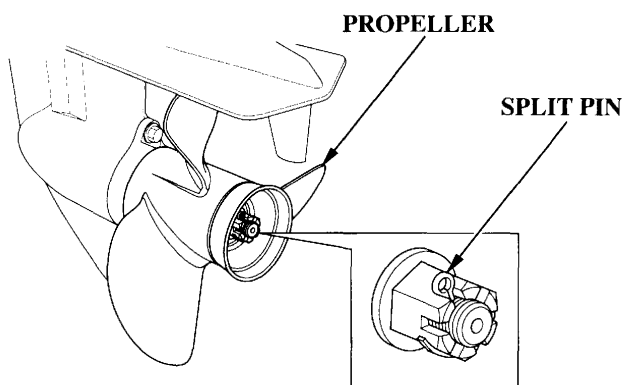
Propeller rotates rapidly while cruising. Before starting the engine, check the propeller blades for damage and deformation and replace if necessary.

Obtain a spare propeller for the event of an unpredictable accident while cruising. If no spare propeller is available, return to the pier at low speed and replace.

Consult an authorized Honda outboard motor dealer for propeller selection.

Keep the spare plain washer, castle nut and split pin with you on your boat.

PRE-OPERATION CHECKS



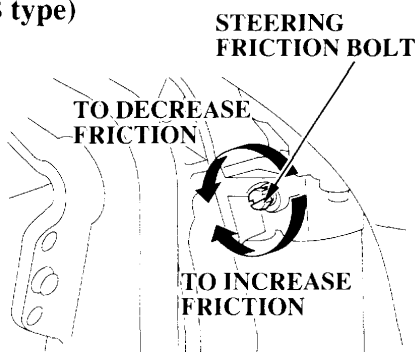
Engine speed varies according to the propeller size and the boat condition. Use of the outboard motor outside the full throttle speed range will adversely affect the engine and cause a serious problem. Use of the correct propeller assures powerful acceleration, top speed, excellency in terms of economy and cruising comfort, and it assures longer engine life as well.

Consult with your authorized Honda outboard motor dealer for proper propeller selection.

1. Check the propeller for damage, wear, or deformation.
2. Check whether the propeller is installed properly.
3. Check the split pin for damage. Replace whenever the propeller is faulty.

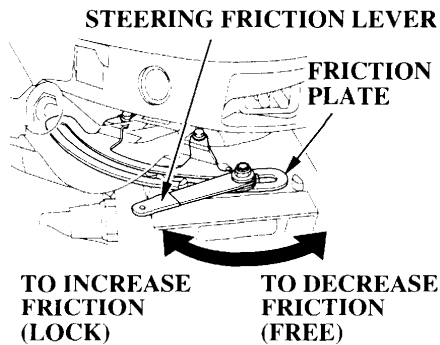
PRE-OPERATION CHECKS

Steering Handle Friction (B type)



Check whether the handle moves smoothly.
For smooth steering, adjust the steering friction bolt so that a slight drag is felt when turning.

(H type)

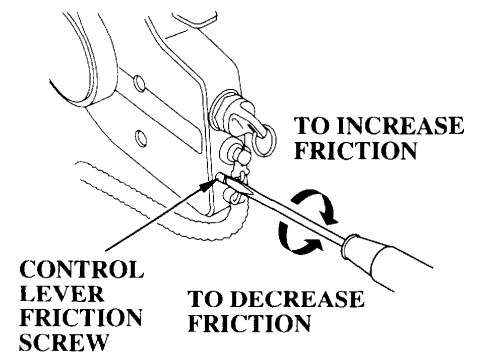


Check whether the handle moves smoothly.
For smooth steering, adjust the steering friction lever so that a slight drag is felt when turning.

NOTE:

Do not apply grease or oil on the friction plate. Grease or oil will reduce the friction of the lever.

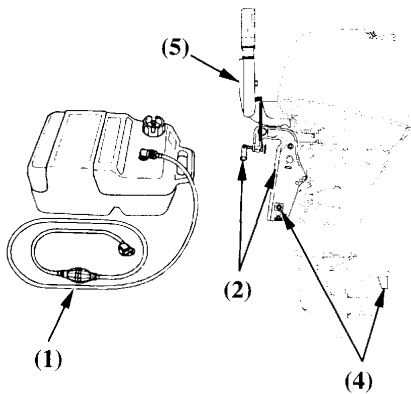
Remote Control Lever Friction (R type)



Check whether the remote control lever moves smoothly.
Friction of the lever can be adjusted by turning the control lever friction screw right or left.

PRE-OPERATION CHECKS

Other Checks



Check the following items:

- (1) The fuel hose for kinking, collapsing or a loose connection.
- (2) The stern bracket for damage and clamp screw tightened.
- (3) The tool kit for missing spare parts and tools.
- (4) 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

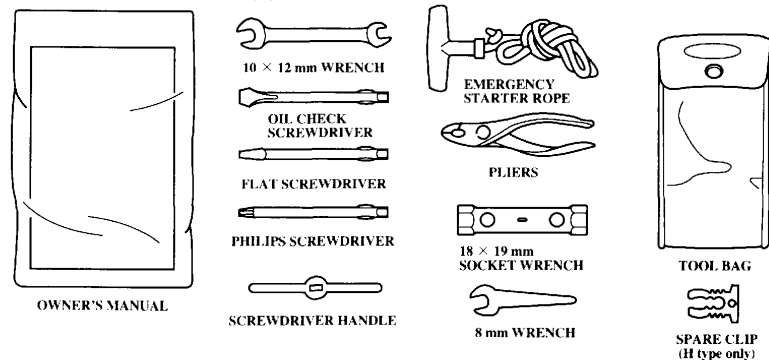
use. Replace the anode metal when it has been reduced to approximately one half of its original size.

NOTICE

The possibility of corrosion damage is increased if the anode metal is painted over or allowed to deteriorate.

- (5) The tiller handle for loose installation, wobble, or operation (B and H types).
- (6) The remote control lever and switch for operation (R type).

(3) TOOL KIT



Parts/materials which should be installed on board:

- (1) Owner's Manual
- (2) Tool kit
- (3) Spare parts: spark plugs, engine oil, spare propeller, plain washer, castle nut, and split pin.
- (4) Spare emergency stop switch clip.
- (5) Other parts/materials required by laws/regulations.

7. STARTING THE ENGINE

Fuel Line Connection

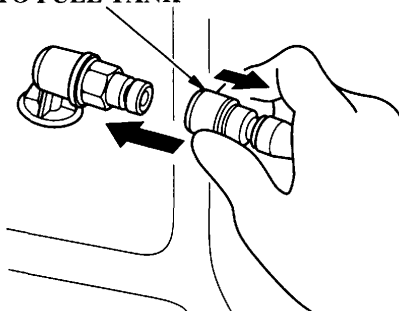
NOTE:

- Set the fuel tank securely so that it does not move or fall down while cruising.
- Position the fuel tank so the tank fuel line connector is no more than 1 m (3.3 feet) below the motor fuel line connector.
- Do not place the fuel tank more than 2 m (6.6 feet) away from the motor.
- Be sure that the fuel line is not kinked.
- Be sure to insert the outboard motor side connector in the direction as shown (the clip should be at the right side).

⚠ CAUTION

The sealing material will be damaged if the outboard end fuel line connector is inserted with force in the opposite direction, resulting in fuel leaks.

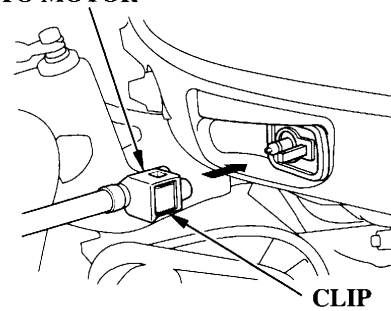
MALE FUEL LINE CONNECTOR — TO FUEL TANK



(FUEL TANK SIDE)

1. Connect the fuel line to the tank. Be sure the connector is securely latched.

FEMALE FUEL LINE CONNECTOR — TO MOTOR



CLIP

(OUTBOARD MOTOR SIDE)

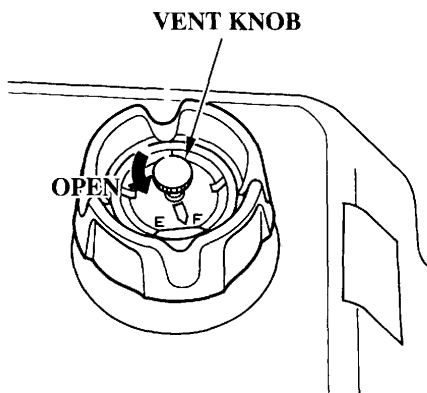
2. Connect the fuel line connector to the outboard motor. Install the outboard end fuel line connector with the clip toward the outside as shown.

Be sure the fuel line connector is securely snapped in place.

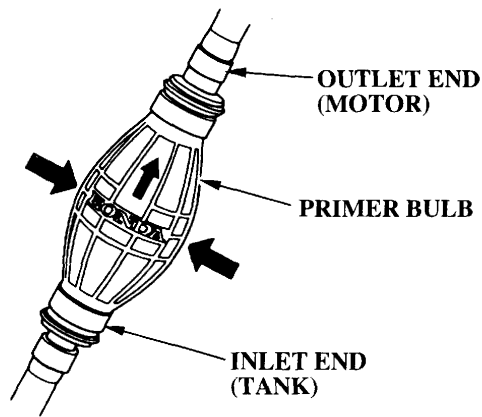
NOTICE

If the outboard end fuel line connector is forcibly installed in the reversed direction, the fuel line connector O-ring seal can be damaged. A damaged O-ring seal can cause a fuel leak.

STARTING THE ENGINE



3. Open the fuel cap vent knob 2 to 3 turns.



4. Hold the primer bulb so that the outlet end is higher than the inlet (so that the arrow on the primer bulb points up), and squeeze it until it feels firm, indicating that fuel has reached the motor. Check for leaks.

⚠ WARNING

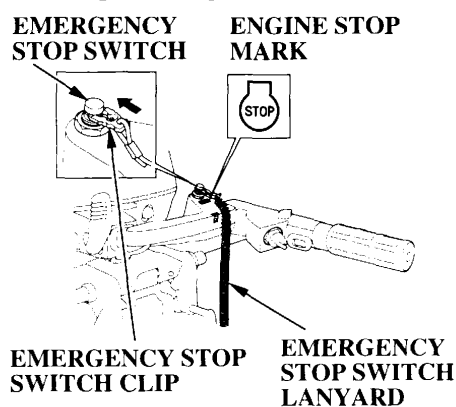
Be careful not to spill any fuel. Spilled fuel vapor may ignite. If any fuel is spilled, make sure the area is dry before starting the engine.

NOTICE

Do not squeeze the primer bulb when the motor is running because this could cause the carburetor to overflow.

STARTING THE ENGINE (B type)

Starting the Engine



⚠ WARNING

The exhaust contains poisonous carbon monoxide. Do not start the engine in a poor ventilation area such as in a boat house.

NOTICE

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. Insert the emergency stop switch clip at one end of the emergency stop switch lanyard into the emergency stop switch. Attach the other end of the lanyard securely to the operator.

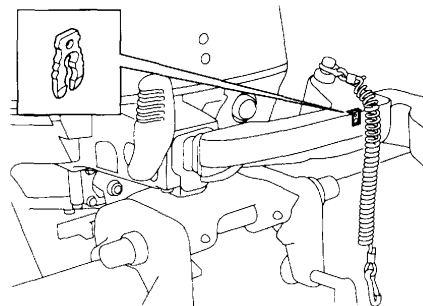
⚠ WARNING

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:

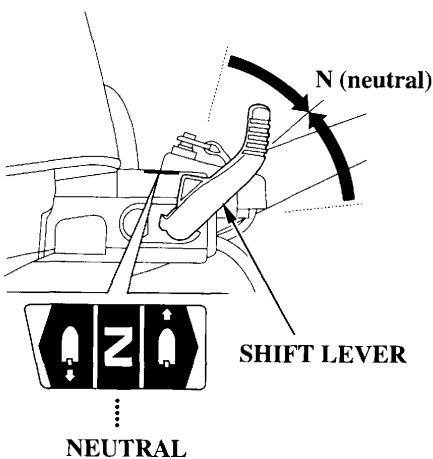
The engine will not start unless the emergency stop switch clip is engaged with the emergency stop switch.

SPARE EMERGENCY STOP SWITCH CLIP

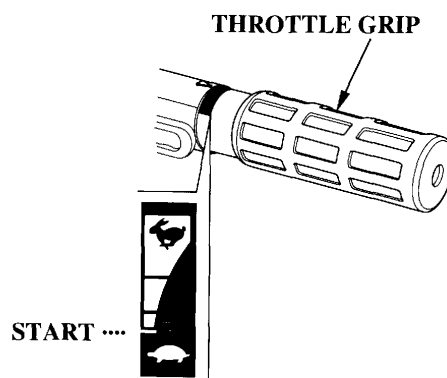


A spare emergency stop switch clip is provided on the carrying handle. Use the spare emergency stop switch clip to make the emergency engine start when the emergency stop switch lanyard is not available as, for example, the operator falls outboard.

STARTING THE ENGINE (B type)



2. Move the shift lever to the N (neutral) position. The engine does not start unless the shift lever is set in the N (neutral) position.

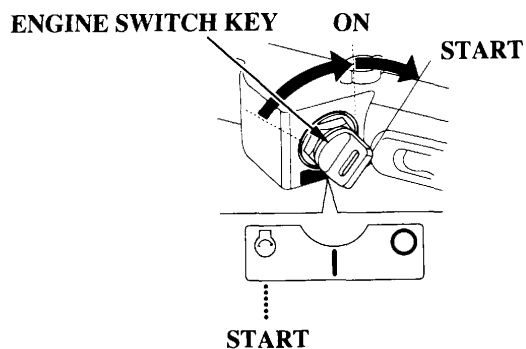


3. Align the "⌚" mark on the throttle grip with the projected end of the "▶" mark on the handle.

NOTE:

This engine is equipped with an accelerator pump. Do not turn the throttle grip frequently before starting. Hard starting may result. If the throttle grip has been turned frequently before starting, open the throttle grip $1/8 - 1/4$ turns and start.

STARTING THE ENGINE (B type)



4. Turn the engine switch key to the **START** position and hold it there until the engine starts.
When the engine starts, release the key, allowing it to return to the **ON** position.

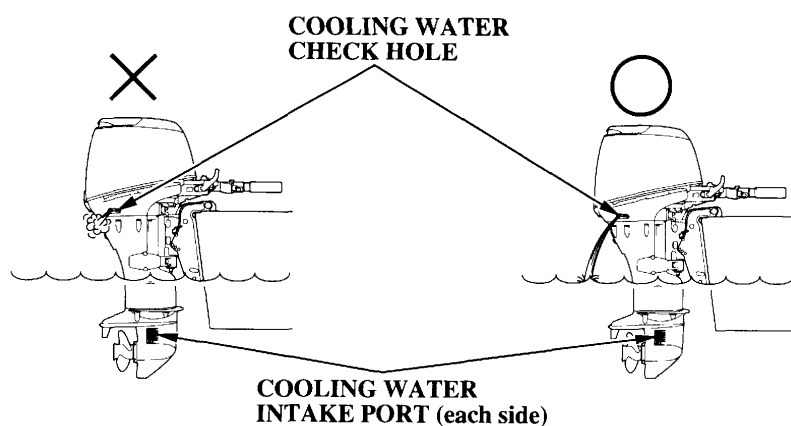
NOTICE

- 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 at least 10 seconds before running the starter motor again.
- Do not turn the engine switch key to the **START** position while the engine is running.

NOTE:

The “Neutral Starting System” prevents the engine from being started unless the control lever is set in the N (neutral) position even though the engine is cranked by the starting motor.

STARTING THE ENGINE (B type)



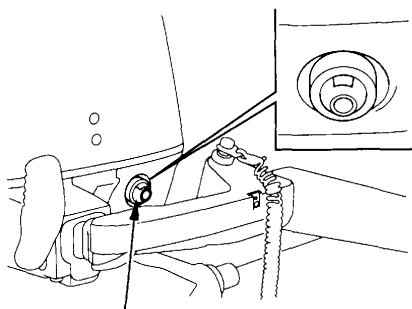
5. After starting, check whether the cooling water is flowing out of the cooling water check hole. Amount of water flowing out of the check hole might vary due to the thermostat operation, but this is normal.

NOTICE

If water does not flow out, or if steam comes out, stop the engine. Check to see if the screen in the cooling water intake port is obstructed and remove foreign materials if necessary. Check the cooling water check hole for clogging. If water still does not flow out, have your outboard motor checked by an authorized Honda outboard motor dealer. Do not operate the engine until the problem has been corrected.

STARTING THE ENGINE (B type)

NORMAL: ON
ABNORMAL: OFF



ENGINE OIL PRESSURE INDICATOR LIGHT

6. Check to see if the oil pressure indicator light turns ON. If it does not turn on, stop the engine and perform the following inspections.

- 1) Check the oil level (see page 54).
- 2) If the oil level is normal and the oil pressure indicator light does not turn ON, consult with an authorized Honda outboard motor dealer.

7. Warm up the engine as follows:
Above 5°C (41°F)—run the engine for 2 or 3 minutes.
Below 5°C (41°F)—run the engine for at least 5 minutes at 2,000 min⁻¹ (rpm)—3,000 min⁻¹ (rpm).
Failure to completely warm up the engine will result in poor engine performance.

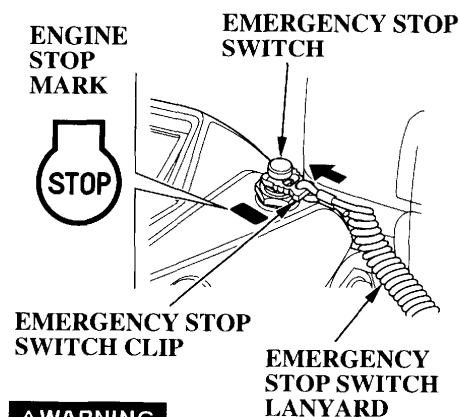
In an area where the temperature goes down below 0°C (32°F), the engine cooling system may freeze. High speed operation without proper engine warm up may damage the motor.

NOTE:

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

STARTING THE ENGINE (H type)

Starting the Engine



WARNING

The exhaust contains poisonous carbon monoxide. Do not start the engine in a poor ventilation area such as in a boat house.

NOTICE

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.

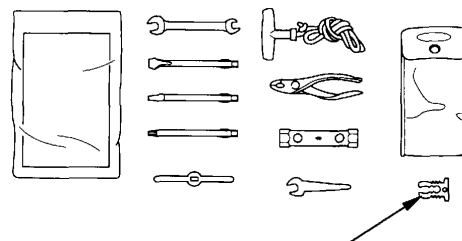
1. Insert the emergency stop switch clip at one end of the emergency stop switch lanyard into the emergency stop switch. Attach the other end of the lanyard securely to the operator.

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 emergency stop switch.

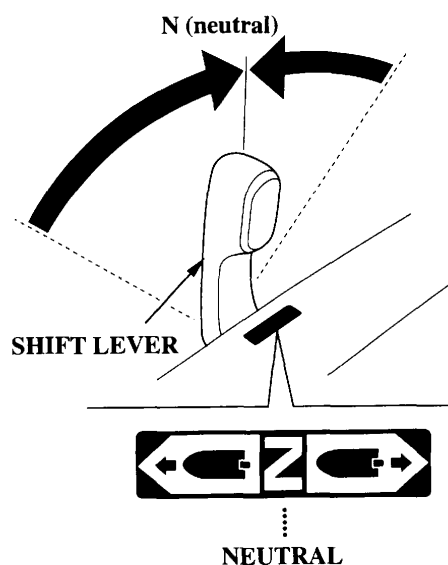


SPARE EMERGENCY STOP SWITCH CLIP

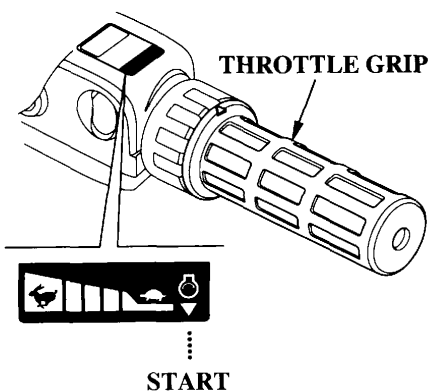
A spare emergency stop switch clip is provided in the tool bag (see page 123).

Use the spare emergency stop switch clip to make the disabled engine start when the emergency stop switch lanyard is not available as, for example, when the operator falls overboard.

STARTING THE ENGINE (H type)



2. Move the shift lever to the N (neutral) position. The engine does not start unless the shift lever is set in the N (neutral) position.

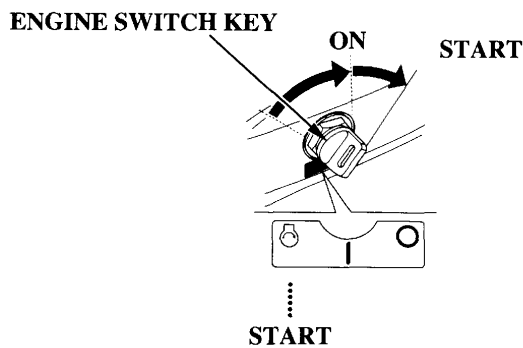


3. Align the "O" mark on the throttle grip with the projected end of the "▶" mark on the handle.

NOTE:

This engine is equipped with an accelerator pump. Do not turn the throttle grip frequently before starting. Hard starting may result. If the throttle grip has been turned frequently before starting, open the throttle grip 1/8 – 1/4 turns and start.

STARTING THE ENGINE (H type)



4. Turn the engine switch key to the START position and hold it there until the engine starts. When the engine starts, release the key, allowing it to return to the ON position.

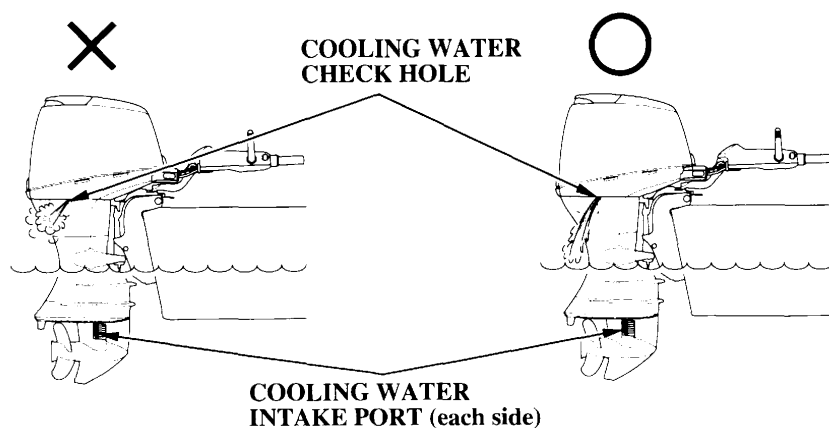
NOTICE

- 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 at least 10 seconds before running the starter motor again.
- Do not turn the engine switch key to the START position while the engine is running.

NOTE:

The “Neutral Starting System” prevents the engine from being started unless the control lever is set in the N (neutral) position even though the engine is cranked by the starting motor.

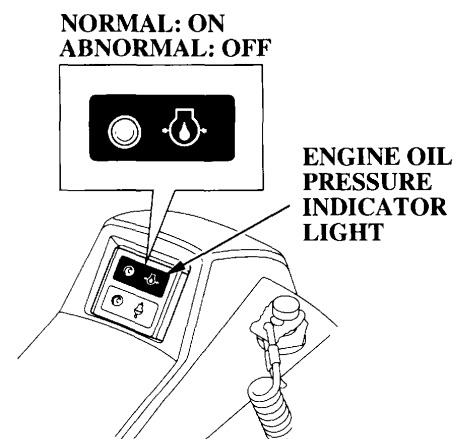
STARTING THE ENGINE (H type)



5. After starting, check whether the cooling water is flowing out of the cooling water check hole. Amount of water flowing out of the check hole might vary due to the thermostat operation, but this is normal.

NOTICE

If water does not flow out, or if steam comes out, stop the engine. Check to see if the screen in the cooling water intake port is obstructed and remove foreign materials if necessary. Check the cooling water check hole for clogging. If water still does not flow out, have your outboard motor checked by an authorized Honda outboard motor dealer. Do not operate the engine until the problem has been corrected.



6. Check to see if the oil pressure indicator light turns ON. If it does not turn on, stop the engine and perform the following inspections.
- 1) Check the oil level (see page 54).
 - 2) If the oil level is normal and the oil pressure indicator light does not turn ON, consult with an authorized Honda outboard motor dealer.

STARTING THE ENGINE (H type)

7. Warm up the engine as follows:
Above 5°C (41°F) — run the engine for 2 or 3 minutes.
Below 5°C (41°F) — run the engine for at least 5 minutes at 2,000 min⁻¹ (rpm) — 3,000 min⁻¹ (rpm).
Failure to completely warm up the engine will result in poor engine performance.

In an area where the temperature goes down below 0°C (32°F), the engine cooling system may freeze.
High speed operation without proper engine warm up may damage the motor.

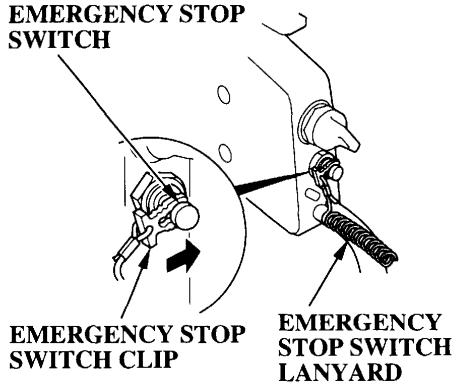
NOTE:

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

STARTING THE ENGINE (R type)

Starting the Engine

EMERGENCY STOP SWITCH



⚠ WARNING

The exhaust contains poisonous carbon monoxide. Do not start the engine in a poor ventilation area such as in a boat house.

NOTICE

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.

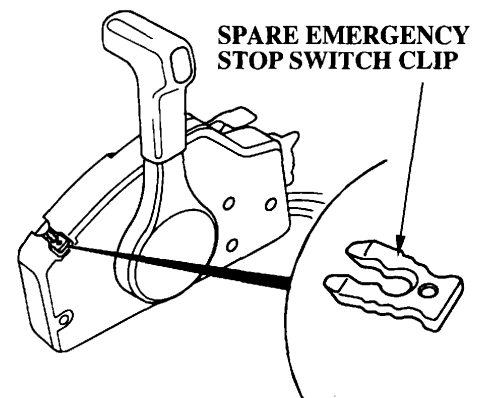
1. Insert the emergency stop switch clip at one end of the emergency stop switch lanyard into the emergency stop switch. Attach the other end of the lanyard securely to the operator.

⚠ 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.

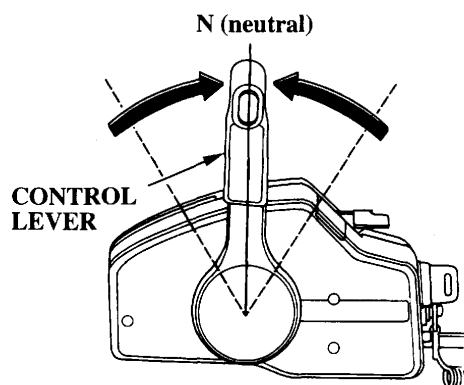
NOTE:

The engine will not start unless the emergency stop switch clip is engaged with the emergency stop switch.

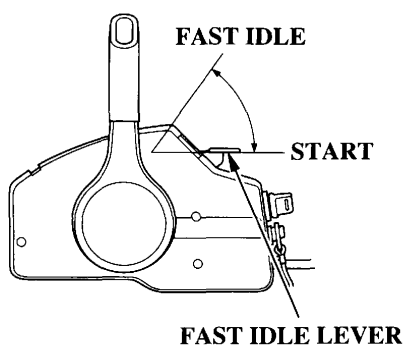


A spare emergency stop switch clip is provided on the remote control box. Use the spare emergency stop switch clip to make the emergency engine start when the emergency stop switch lanyard is not available as, for example, if the operator falls overboard.

STARTING THE ENGINE (R type)



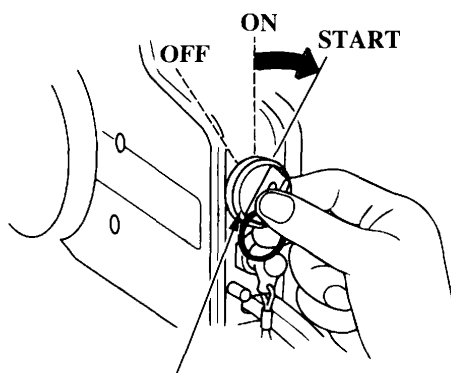
2. Set the control lever in the N (neutral) position.
The engine does not start unless the control lever is set in the N (neutral) position.



3. When the engine is cold or the ambient temperature is low, leave the fast idle lever in the initial position. (This will provide rich fuel mixture to the engine by the automatic choke.)
When the engine is warm, raise the fast idle lever to the FAST IDLE position and hold it in the position.

NOTE:
The fast idle lever does not move unless the control lever is set in the N (neutral) position.

STARTING THE ENGINE (R type)



ENGINE SWITCH KEY

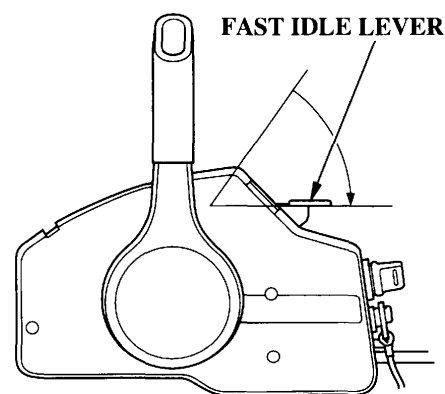
4. Holding the fast idle lever in position, turn the engine switch key to the START position and release the key when the engine starts.

NOTICE

- 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 at least 10 seconds before running the starter motor again.
- Do not turn the engine switch key to the START position while the engine is running.

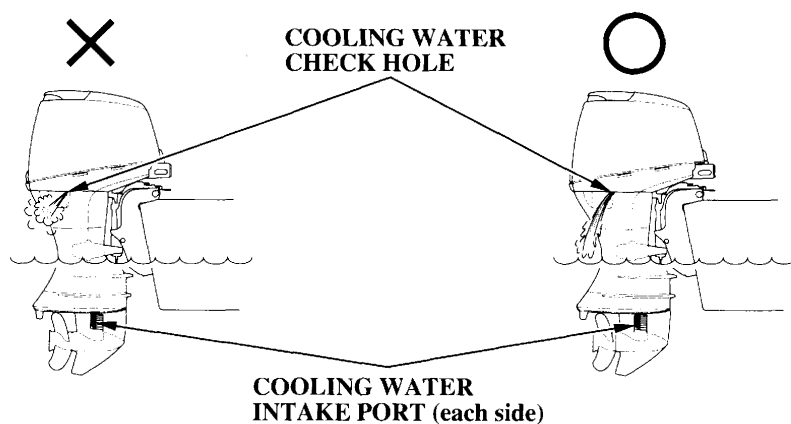
NOTE:

The "Neutral Starting System" prevents the engine from being started unless the control lever is set in the N (neutral) position even though the engine is cranked by the starting motor.



5. If the fast idle lever is raised, return the fast idle lever slowly to the position where the engine does not stall and hold the lever in the position.

STARTING THE ENGINE (R type)

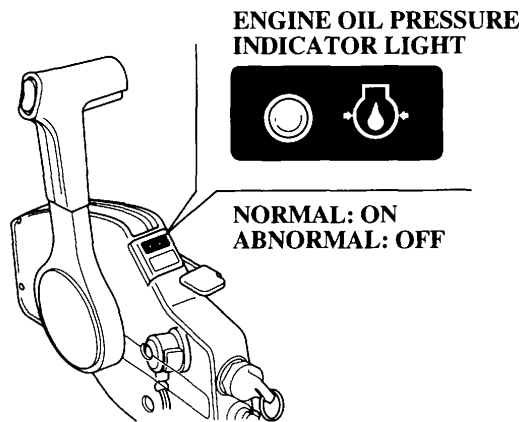


6. After starting, check whether the cooling water is flowing out of the cooling water check hole. Amount of water flowing out of the check hole might vary due to the thermostat operation, but this is normal.

NOTICE

If water does not flow out, or if steam comes out, stop the engine. Check to see if the screen in the cooling water intake port is obstructed and remove foreign materials if necessary. Check the cooling water check hole for clogging. If water still does not flow out, have your outboard motor checked by an authorized Honda outboard motor dealer. Do not operate the engine until the problem has been corrected.

STARTING THE ENGINE (R type)



High speed operation without proper engine warm up may damage the motor.

NOTE:

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

7. Check to see if the oil pressure indicator light turns ON.

If it does not turn on, stop the engine and perform the following inspections.

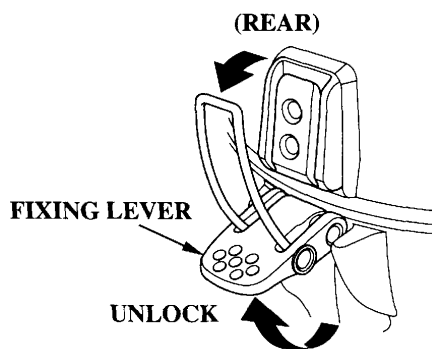
- 1) Check the oil level (see page 54).
- 2) If the oil level is normal and the oil pressure indicator light does not turn ON, consult with an authorized Honda outboard motor dealer.

8. Warm up the engine as follows:
- Above 5°C (41°F) — run the engine for 2 or 3 minutes.
- Below 5°C (41°F) — run the engine for at least 5 minutes at 2,000 min⁻¹ (rpm) — 3,000 min⁻¹ (rpm).
- Failure to completely warm up the engine will result in poor engine performance.

In an area where the temperature goes down below 0°C (32°F), the engine cooling system may freeze.

STARTING THE ENGINE (Common)

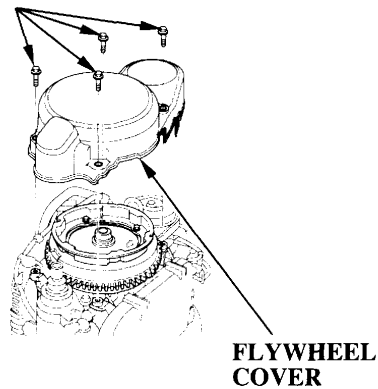
Emergency Starting



If the electric starting system does not operate properly for some reasons, the engine can be started using the spare starter rope in the tool kit.

1. Raise the rear fixing lever and remove the engine cover.

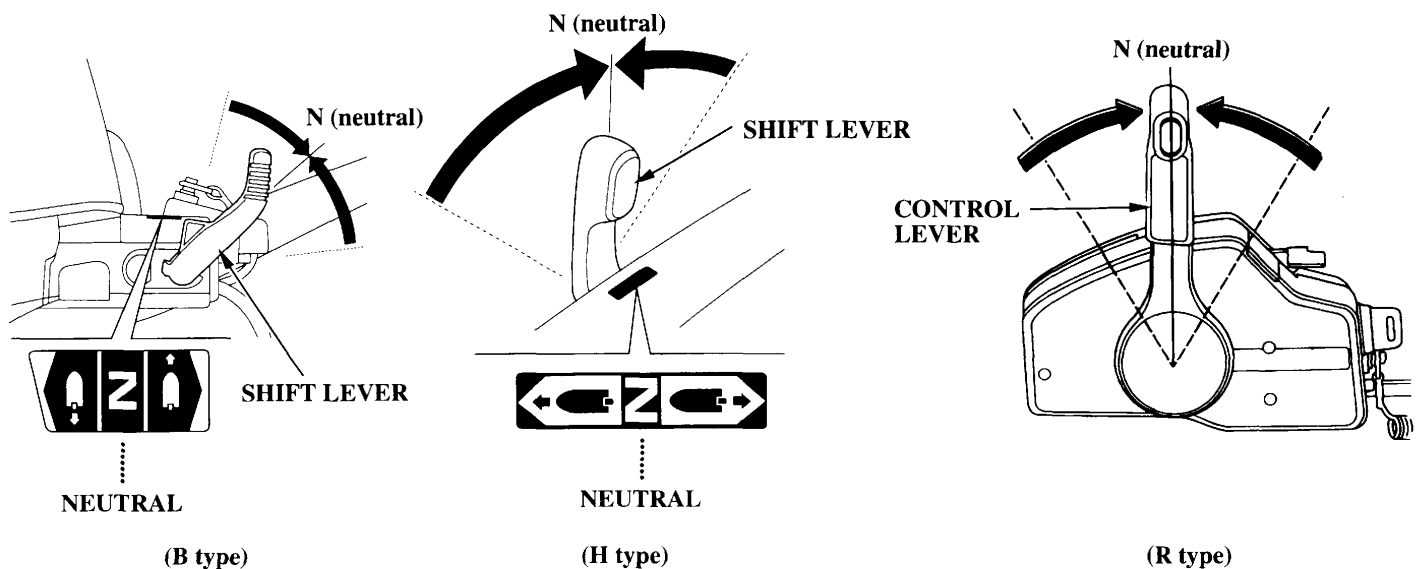
6 × 22 mm BOLT



Remove the four 6 × 22 mm bolts and flywheel cover.

NOTE:
Take care not to lose the washers.

STARTING THE ENGINE (Common)

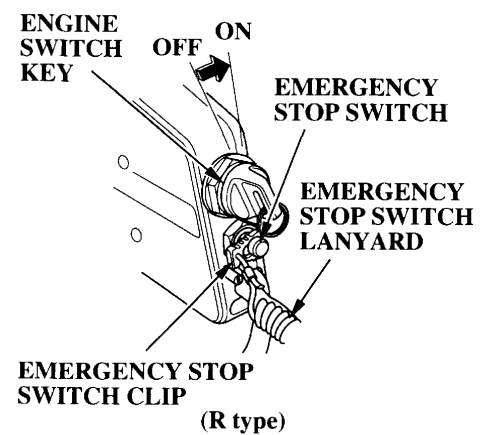
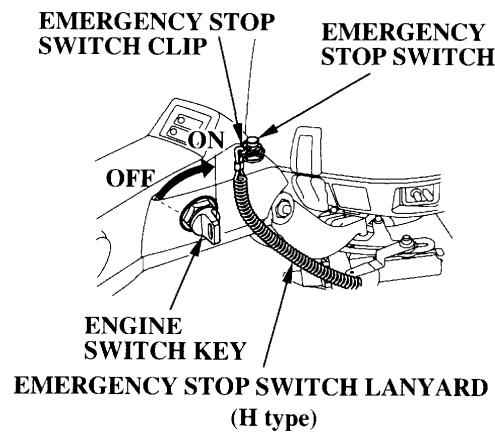
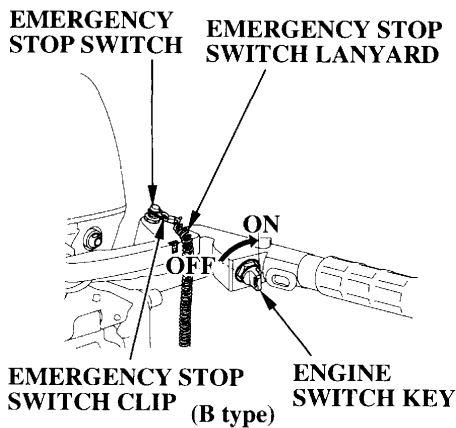


3. Set the shift lever/control lever in the N (neutral) position.

▲WARNING

The “Neutral Starting System” will not work in emergency starting. Be sure to set the shift lever/control lever into the **NEUTRAL** position to prevent start-in-gear when starting the engine in emergency. Sudden unexpected acceleration could result in serious injury or death.

STARTING THE ENGINE (Common)



NOTICE

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.

4. Turn the engine switch key to the ON position.
Engage the emergency stop switch clip at one end of the emergency stop switch lanyard with the emergency stop switch.

Attach the other end of the emergency stop switch lanyard securely to the operator.

B type:

A spare emergency stop switch clip is provided on the carrying handle (see page 24).

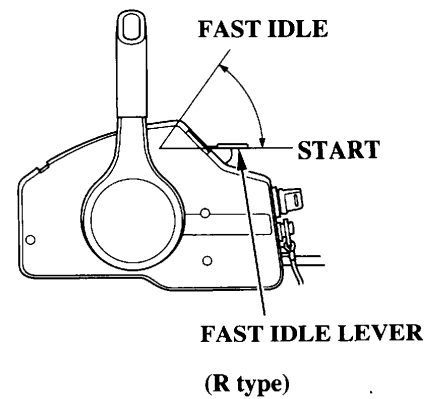
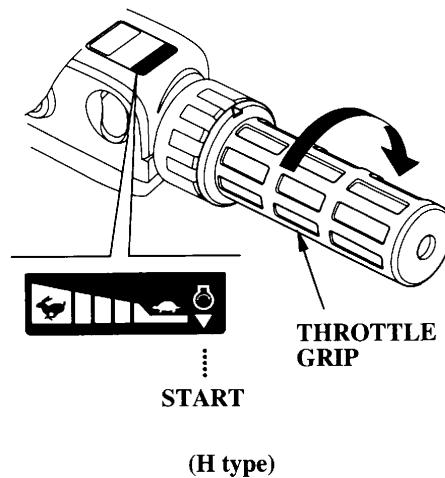
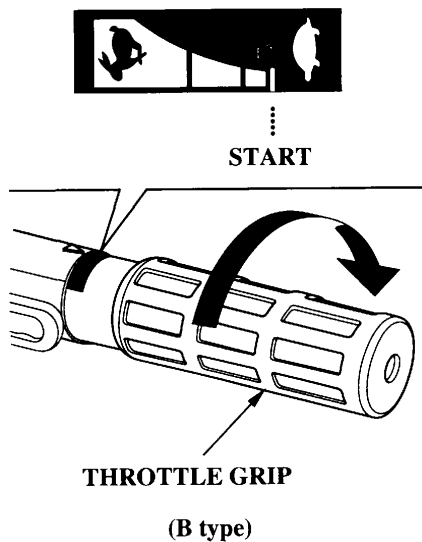
H type:

A spare emergency stop switch clip is provided in the tool bag (see page 123).

R type:

A spare emergency stop switch clip is provided on the remote control box (see page 32).

STARTING THE ENGINE (Common)



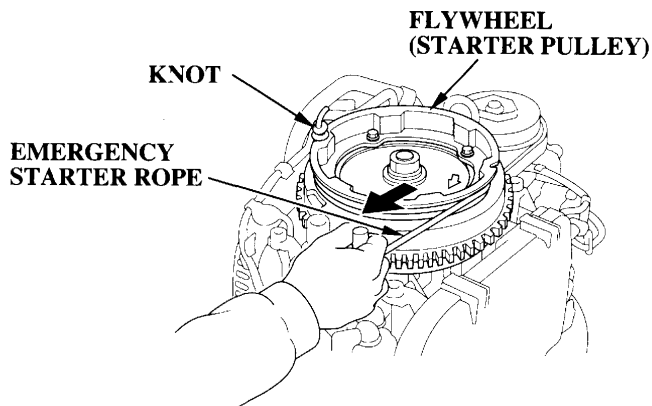
5. B type and H type:
Align the “” mark on the throttle grip with the projected end of the “” mark on the handle.

NOTE:
This engine is equipped with an accelerator pump. Do not turn the throttle grip frequently before starting. Hard starting may result. If the throttle grip has been turned frequently before starting, open the throttle grip 1/8 – 1/4 turns and start.

R type:
When the engine is cold or the ambient temperature is low, leave the fast idle lever in the initial position. (This will provide rich fuel mixture to the engine by the automatic choke.) When the engine is warm, raise the fast idle lever to the FAST IDLE position and hold it in the position.

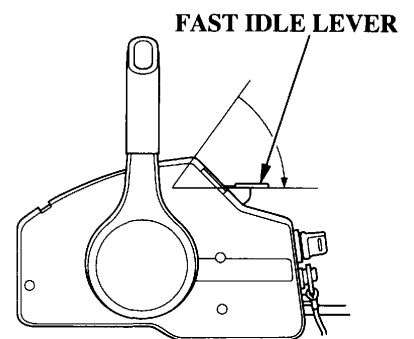
NOTE:
The fast idle lever does not move unless the control lever is set in the N (neutral) position.

STARTING THE ENGINE (Common)



6. Set the knot at the end of the emergency starter rope in the notch in the flywheel, and while pulling the emergency starter rope clockwise around the flywheel.

7. Pull the emergency starter rope lightly until resistance is felt, then pull briskly.



(R type)

8. R type:
If the fast idle lever is raised, return the fast idle lever slowly to the position where the engine does not stall and hold the lever in the position.

STARTING THE ENGINE (Common)

9. Reinstall the engine cover.

⚠WARNING

Take extreme care when installing the engine cover. The flywheel is rotating. Do not operate without the engine cover. Exposed moving parts could cause injury and starter may damage the engine.

STARTING THE ENGINE (Common)

Troubleshooting Starting Problems

SYMPTOM	POSSIBLE CAUSE	REMEDY
Starter motor doesn't turn over.	1. Engine switch OFF. 2. Emergency stop switch clip is not set. 3. Shift lever not in NEUTRAL position. 4. Blown fuse. 5. Loose battery connector.	1. Turn engine switch key START. (page 66, 71, 76) 2. Set emergency stop switch clip. (page 64, 69, 74) 3. Set shift lever in NEUTRAL position. (page 65, 70, 75) 4. Replace fuse. (page 137) 5. Connect battery cable securely. (page 50)
Starter motor turns but the engine doesn't start.	1. Out of fuel. 2. Vent knob not open. 3. Primer bulb not squeezed. 4. Engine flooded. 5. Weak battery. 6. Plug caps are not installed properly.	1. Supply fuel. (page 55) 2. Open vent knob. (page 63) 3. Squeeze primer bulb to supply fuel. (page 63) 4. Clean and dry spark plugs. (page 128) 5. Start using emergency starter rope. (page 79) 6. Install plug caps securely. (page 128) Have your authorized Honda outboard motor dealer charge battery.

8. OPERATION (B type)

Break-in Procedure

Break-in operation allows the mating surfaces of the moving parts to wear evenly and thus ensures proper performance and longer outboard motor life.

Break-in your new outboard motor as follows.

For the initial 15 minutes:

Run the outboard motor at idling or trolling speeds (i.e. the lowest possible speed).

For the next 45 minutes:

Run the outboard motor at 2,000 — 3,000 min⁻¹ (rpm) (with 10% — 30 % of throttle).

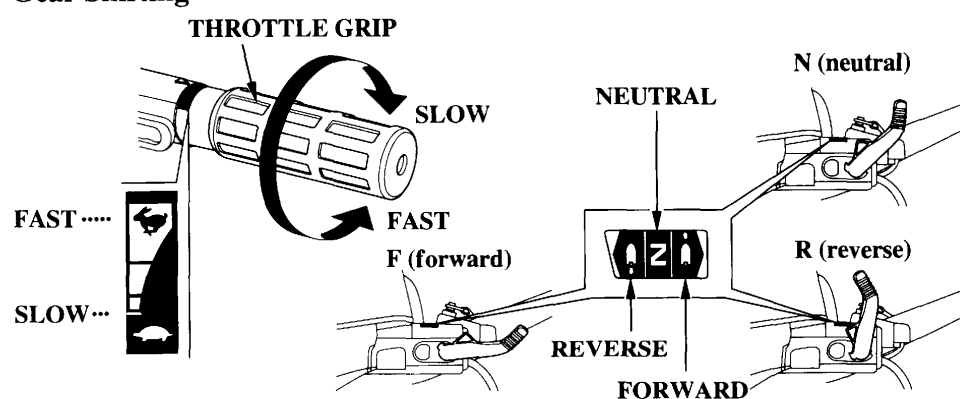
For the next to the second 60 minutes:

Run the outboard motor at 4,000 — 5,000 min⁻¹ (rpm) (with 50% — 80 % of throttle).

For the initial 10 hours:

Avoid continuous full throttle (100 % throttle) operation for more than 5 minutes.

Gear Shifting



The gearshift lever has 3 positions: FORWARD, NEUTRAL, and REVERSE.

An indicator at the base of the gearshift lever aligns with the icon attached at the base of the gearshift lever.

Turn the throttle grip to SLOW to decrease engine speed before moving the gearshift lever.

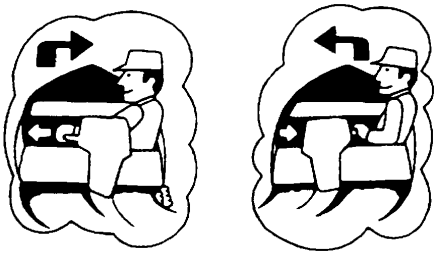
NOTE:

The throttle mechanism is designed to limit throttle opening in REVERSE and NEUTRAL. Do not turn the throttle grip with force in the FAST direction. The throttle can be opened to FAST only in FORWARD gear.

Be sure that the tilt lever is in the LOCK position.

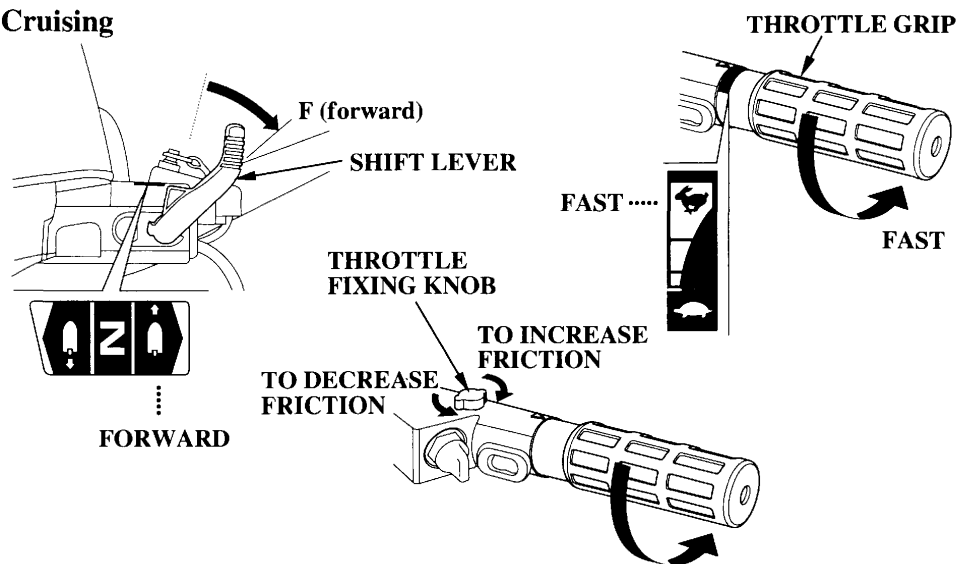
OPERATION (B type)

Steering



The boat swings its stern in the opposite direction in which it is to turn. To turn to the right, swing the steering handle to the left. To turn to the left, swing the steering handle to the right.

Cruising



1. With the shift lever in the **FORWARD** position, turn the throttle grip in the **FAST** direction to increase the speed.
2. For the sake of fuel economy, open the throttle about 80%.

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

OPERATION (B type)

NOTE:

This outboard motor is equipped 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 full open position, return the grip to the SLOW side until the speed becomes stable.

▲CAUTION

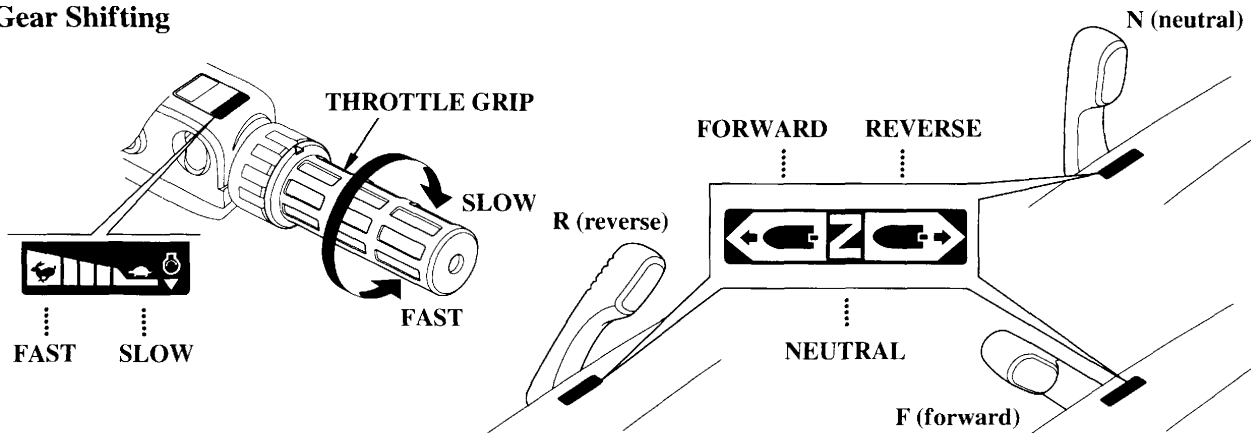
Do not operate without the engine cover. Exposed moving parts could cause injury; water may damage the engine.

NOTE:

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

OPERATION (H type)

Gear Shifting



The gearshift lever has 3 positions: FORWARD, NEUTRAL, and REVERSE.

An indicator at the base of the gearshift lever aligns with the icon attached at the base of the gearshift lever.

Turn the throttle grip to SLOW to decrease engine speed before moving the gearshift lever.

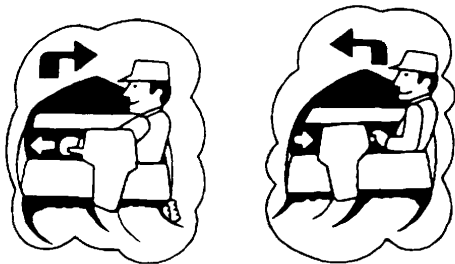
NOTE:

The throttle mechanism is designed to limit throttle opening in REVERSE and NEUTRAL. Do not turn the throttle grip with force in the FAST direction. The throttle can be opened to FAST only in FORWARD gear.

Be sure that the tilt lever is in the LOCK position.

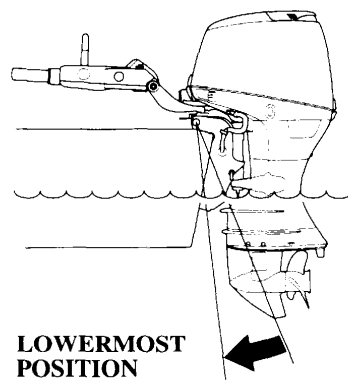
OPERATION (H type)

Steering



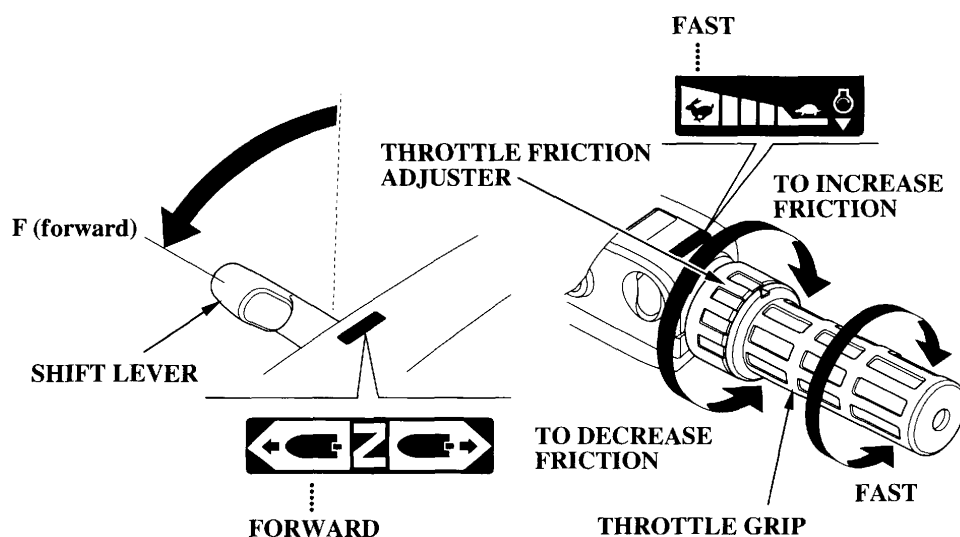
The boat swings its stern in the opposite direction in which it is to turn. To turn to the right, swing the steering handle to the left. To turn to the left, swing the steering handle to the right.

Cruising



1. T type:
Press the DN (down) of the power trim/tilt switch and tilt the motor to the lowermost position.

OPERATION (H type)



2. With the shift lever in the FORWARD position, turn the throttle grip in the FAST direction to increase the speed.
3. For the sake of fuel economy, open the throttle about 80%.

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

NOTE:

This outboard motor is equipped 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 full open position, return the grip to the SLOW side until the speed becomes stable.

CAUTION

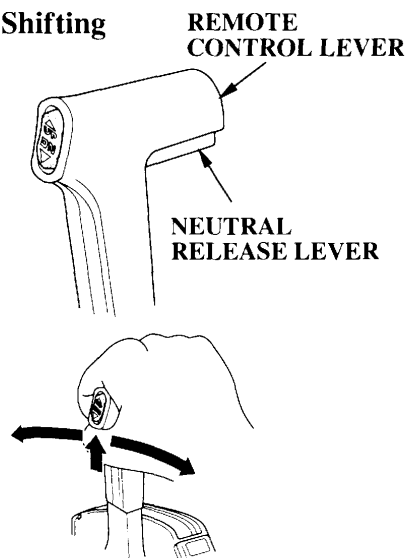
Do not operate without the engine cover. Exposed moving parts could cause injury; water may damage the engine.

NOTE:

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

OPERATION (R type)

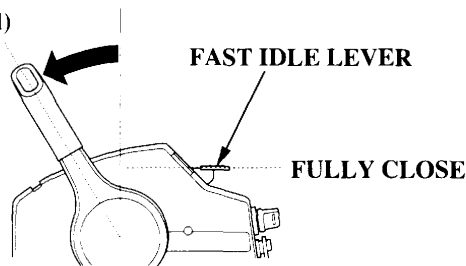
Gear Shifting



While pulling the neutral release lever, move the control lever 30° toward the FORWARD or REVERSE position to engage the clutch.

Moving the control lever further opens the throttle and the engine speed increases.

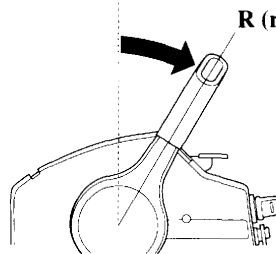
F (forward)



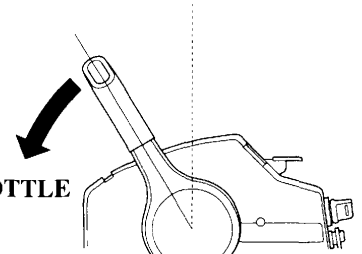
FAST IDLE LEVER

FULLY CLOSE

R (reverse)



THROTTLE OPEN



⚠ CAUTION

Avoid jerky operation of the control lever. An accident or unpredictable injury could result.

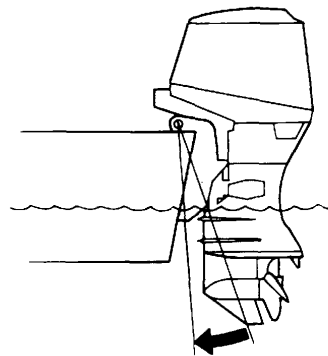
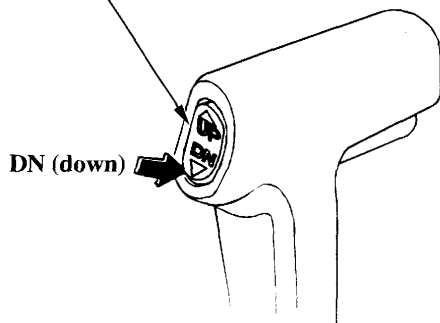
NOTE:

- The control lever might not move unless the neutral release lever is lifted fully.
- Set the fast idle lever in the fully closed throttle position, or the control lever does not operate.

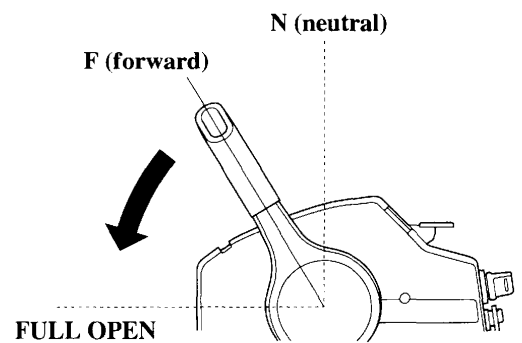
OPERATION (R type)

Cruising

POWER TRIM/TILT SWITCH



LOWERMOST POSITION



1. T type:

Press the DN (down) of the power trim/tilt switch and tilt the motor to the lowermost position.

2. Move the control lever from NEUTRAL toward FORWARD position.
Moving about 30° engages the gear. Moving the control lever further opens the throttle and increases the engine speed.
3. For the sake of fuel economy, open the throttle about 80%.

OPERATION (R type)

(Common)

NOTE:

This outboard motor is equipped 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 control lever near the full open position, return the control lever to the LOW 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.

NOTE:

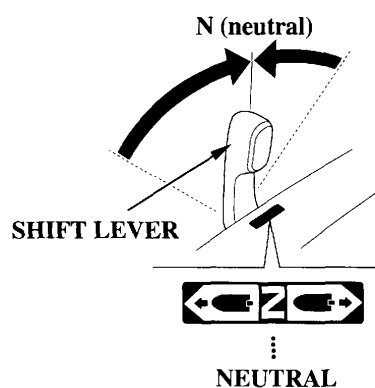
For best performance, passengers and equipment should be distributed evenly to balance the boat.

Tilting the Motor

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

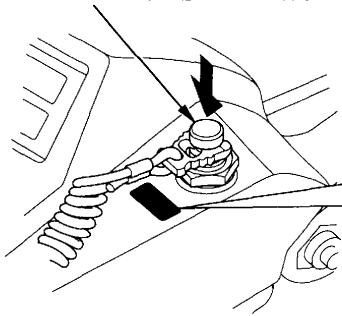
OPERATION (Mechanical Tilt type)

Tilting the Motor

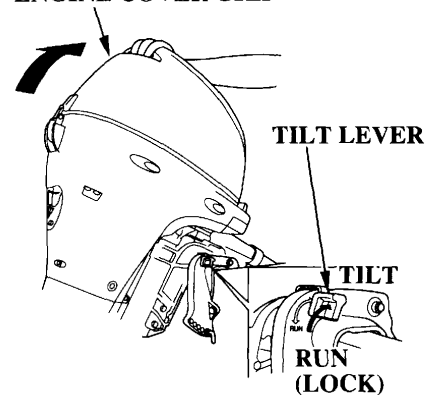


1. Move the shift lever to the N (neutral) position and stop the engine.

EMERGENCY STOP SWITCH



ENGINE COVER GRIP



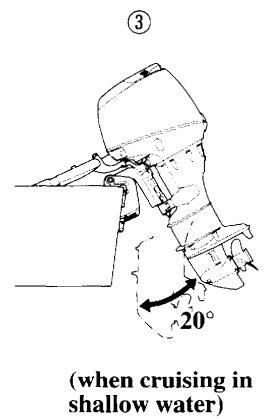
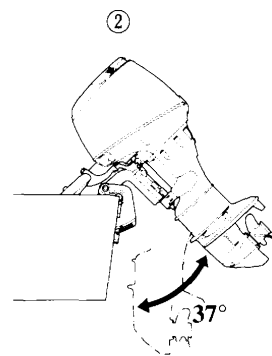
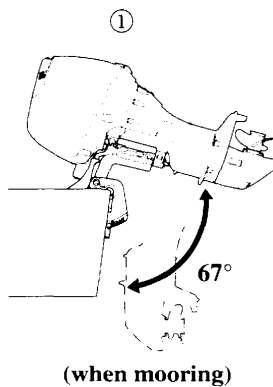
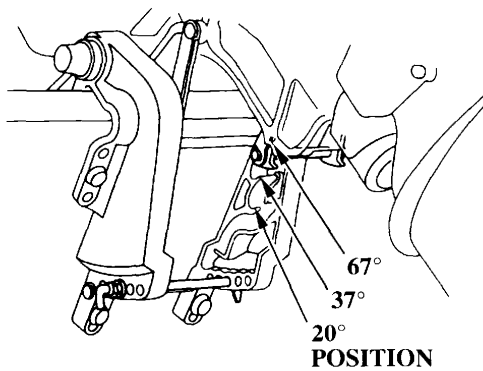
2. Move the tilt lever to the "TILT" position. Hold the engine cover grip and raise the motor.

CAUTION

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

OPERATION (Mechanical Tilt type)

(transom angle at 12°)



3. Set the tilt lever in the "TILT" position, and raise the outboard motor to either the 20°, 37° and 67° tilt position.

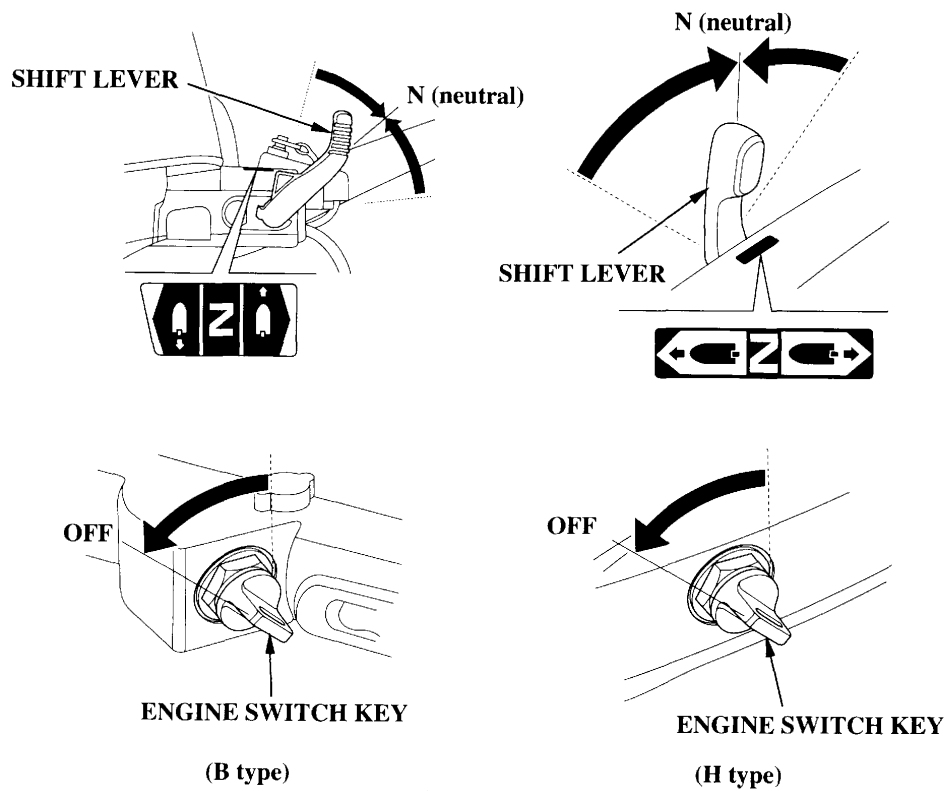
4. To return the motor to the normal "RUN" position, move the tilt lever away from you until it stops, tilt the motor slightly, then lower the motor slowly.

▲ 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.

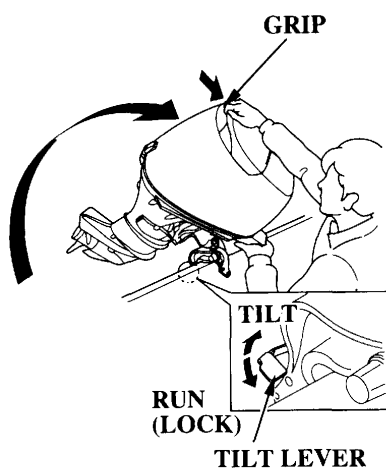
OPERATION (G type)

Tilting the Motor

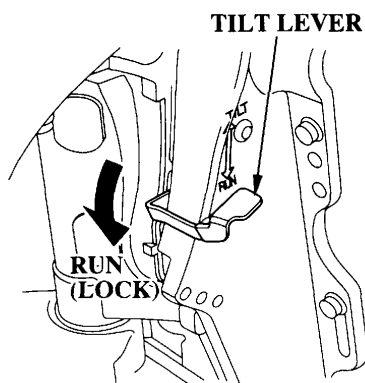


1. Move the shift lever to the N (neutral) position and stop the engine.

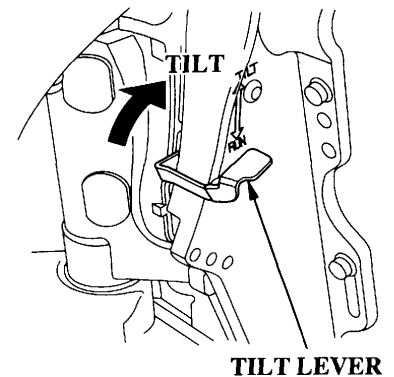
OPERATION (G type)



2. Move the tilt lever to the TILT position. Hold the engine cover grip and raise the motor. (The outboard motor can be tilted stagelessly.)



3. With the outboard motor tilted up at the designated position, move the tilt lever to the RUN (LOCK) position to lock the motor in the position.



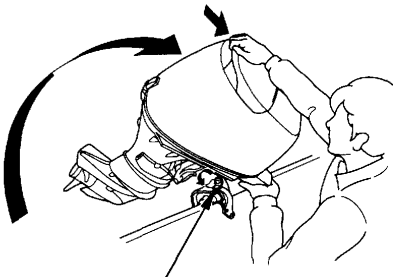
4. To return the motor, move the tilt lever to the TILT position, tilt up the motor slightly by holding the engine cover grip, and lower the engine gently to the designated position.

CAUTION

Set the tilt lever in the TILT/RUN positions securely.

OPERATION (G type)

Moorage

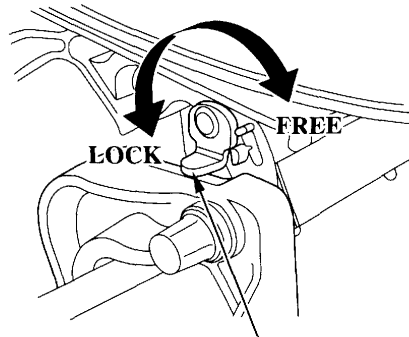


TILT LOCK LEVER

Tilt-up using the tilt lock lever.
Use this mechanism when mooring
the outboard motor.

NOTE:

Before tilting up, hold the outboard
motor in the position for one minute
after stopping the engine to drain the
water inside the engine.



TILT LOCK LEVER

1. Move the tilt lever the TILT position and raise the outboard motor as full as it goes by holding it by the grip of the engine cover.
2. Move the tilt lock lever to the LOCK position and lower the outboard motor slowly.
3. Move the tilt lever to the RUN (lock) position.

4. To tilt down, move the tilt lever to the TILT position, and move the tilt lock lever to the FREE position while lifting the outboard motor to the designated position and move the tilt lever to the RUN (lock) position.

OPERATION (T type)

Tilting the Motor

POWER TRIM/TILT SWITCH

Press UP to tilt the motor up.

Press DN to tilt the motor down.

(H type)

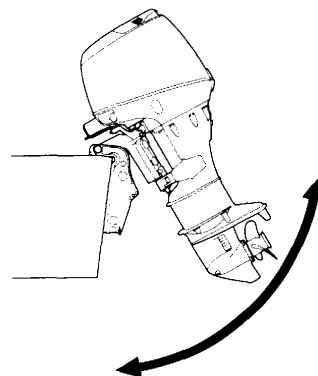
POWER TRIM/TILT SWITCH

Press UP to tilt the motor up.

Press DN to tilt the motor down.

CONTROL LEVER

(R type)



The outboard motor equipped with the power trim/tilt system can adjust the motor angle (trim angle) while cruising and mooring. The motor angle can also be adjusted while cruising and accelerating to obtain the maximum speed and optimum driveability and fuel economy. Press either UP or DN (down) of the power trim/tilt switch and tilt the motor to the best position in compliance with the cruising conditions.

The power trim/tilt system operates when the switch is pressed, and it stops when the switch is released. To tilt up slightly, press on UP momentarily but securely. To tilt down slightly, press on DN (down) in the same manner.

OPERATION (T type)

CAUTION

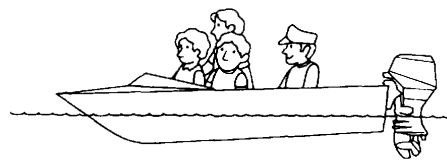
- Improper trim angle results in unstable steering condition.
- Do not trim excessively while cruising through rough waves, or it may cause an accident.
- Excessive trim angle can result in cavitation and racing of the propeller, and trimming up the motor excessively can cause damage to the impeller pump.

NOTE:

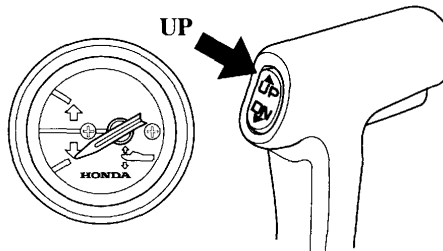
- When cruising against strong wind, trim down slightly to improve the stability of the boat.
- When cruising with the wind, trim up slightly to improve the stability of the boat.

Trim Meter

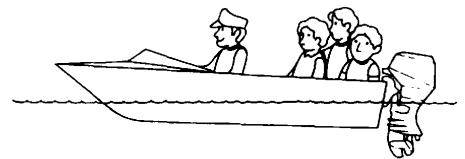
[SRT and LRT types (SHT and LHT types optional equipment)]



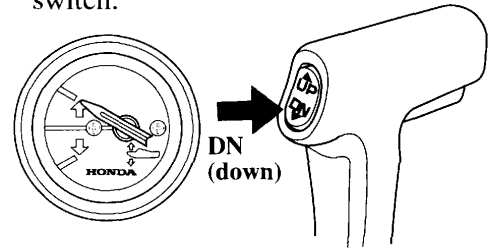
Increase the trim angle by pressing UP of the power trim/tilt switch.



(R type)



Decrease the trim angle by pressing DN (down) of the power trim/tilt switch.



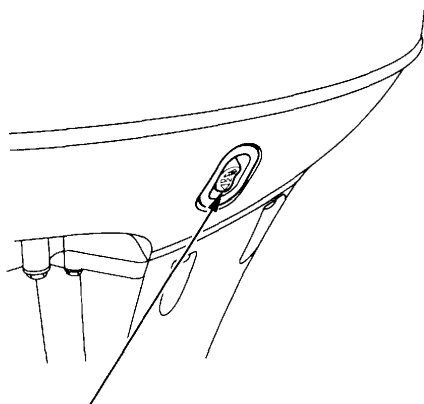
(R type)

The trim meter indicates the trimming condition of the outboard motor. Referring to the trim meter, press the power trim/tilt switch and trim the boat at the best angle for optimum stability and speed.

The illustration represents R type. Perform the same procedure for the other types.

OPERATION (T type)

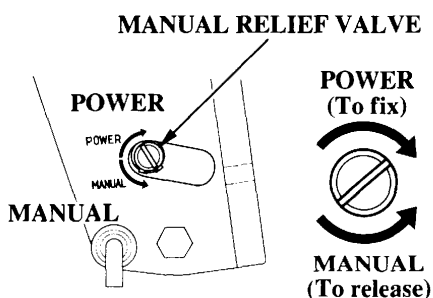
Power Tilt Switch



POWER TILT SWITCH

The power tilt switch located on the motor pan is a convenience switch for tilting the motor for training, or performing outboard maintenance. This power tilt switch should only be operated with the boat being stopped and motor off.

Manual Relief Valve



When power trim/tilt system does not operate because of dead battery or faulty power trim/tilt motor, the outboard motor can be manually tilted up or down by operating the manual relief valve.

To tilt the outboard motor manually, turn the manual relief valve under the stern bracket 2 and a half turns counterclockwise using a screwdriver.

NOTICE

Do not loosen the manual relief valve more than two turns, or the outboard motor cannot be tilted up when the manual relief valve is retightened.

Check that no person is under the outboard motor before carrying out this operation because if the manual relief valve is loosened (turned counterclockwise) when the outboard motor is tilted up, the outboard motor will suddenly tilt down.

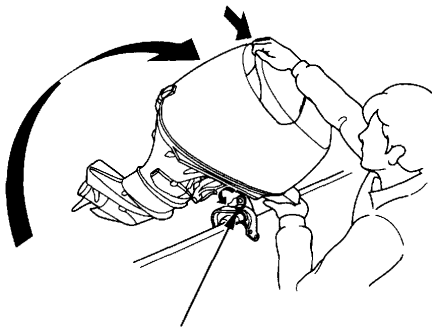
After tilting up/down manually, close the manual relief valve to lock the motor in the position.

CAUTION

The manual relief valve must be tightened securely before operating the motor or the motor could tilt when operating in reverse.

OPERATION (T type)

Moorage



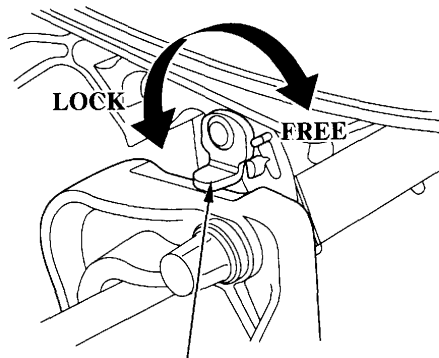
TILT LOCK LEVER

Tilt-up using the tilt lock lever.
Use this mechanism when mooring
the outboard motor.

NOTE:

Before tilting up, hold the outboard motor in the position for one minute after stopping the engine to drain the water inside the engine.

1. Raise the motor as full as it goes using the power trim/tilt switch.
2. Move the tilt lock lever to the LOCK position and lower the outboard motor until the lock lever



TILT LOCK LEVER

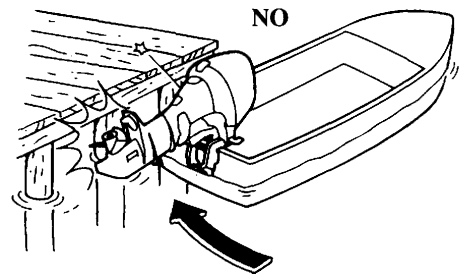
contacts the stern bracket.

NOTE:

If more clearance is needed to swing the tilt lock lever into the LOCK position, rock the outboard motor back slightly by pulling on the engine cover grip.

3. To tilt down, raise the outboard motor slightly, move the tilt lock lever to the FREE position, and lower the outboard motor to the designated position.

〈 Mooring 〉

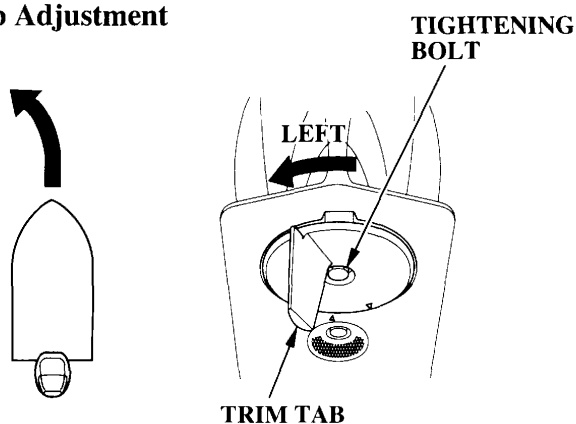


▲ CAUTION

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.

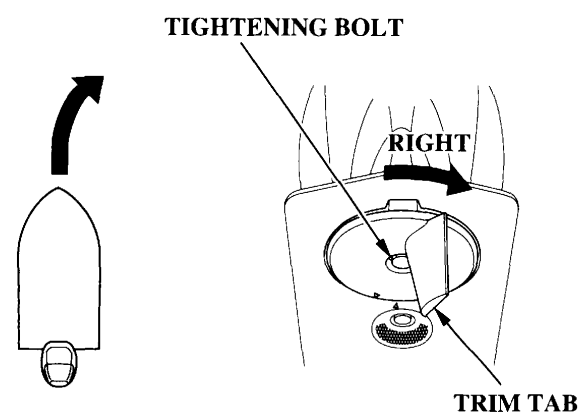
OPERATION

Trim Tab Adjustment



If the steering wheel/handle is pulled to one side while running at full speed, adjust the trim tab so that the boat runs straight ahead.

If less effort is required to make left turns:
Loosen the trim tab tightening bolt and turn the rear end of the trim tab toward the left. Tighten the bolt securely.

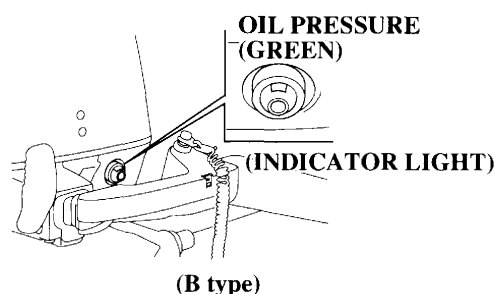


If less effort is required to make right turns:
Loosen the trim tab tightening bolt and turn the rear end of the trim tab toward the right. Tighten the bolt securely.

NOTE:

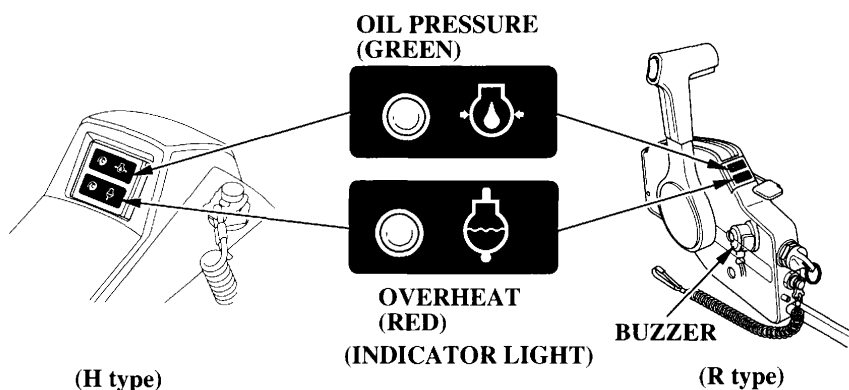
- Stable steering cannot be obtained unless the trim tab is adjusted properly.
- After adjustment, test run the boat several times to find the best adjustment position.
- Do not paint the trim tab as it also functions as an anode metal.

Motor Protection System 〈 Engine Oil Pressure and Overheat Warning Systems 〉



Oil Pressure Indicator

- When the green light is lit, oil pressure is OK.
- If oil pressure becomes low, the green light will go off, and the engine protection system will limit engine speed.
- Remote control types are also equipped with a buzzer that sounds when the green light goes off. The buzzing sound stops below an engine speed of 1,400 rpm.
- The engine speed does not increase if the throttle is opened widely.
- The engine speed increases gradually as soon as the cause of the warning is removed.



Overheat Warning Indicator

- If the engine overheats, the engine protection system will limit engine speed. If the condition persists for another 20 seconds, the engine will shut off (All types).
- Remote control types are also equipped with a warning light and a buzzer. Red light will come on and a buzzer sounds if the engine overheats.
- The engine speed does not increase if the throttle is opened widely.
- The engine speed increases gradually as soon as the cause of the warning is removed.

OPERATION

System Type	Low oil pressure			Overheat		
	Warning light	Buzzer sounds	Engine speed control	Warning light	Buzzer sounds	Engine speed control
B type	○	×	○	×	×	○
H type	○	×	○	○	×	○
R type	○	○	○	○	○	○

System Symptom		Warning light		Buzzer
		Oil pressure	Overheat (H type and R type)	R type
Normal		ON	OFF	—
Abnormal	Low oil pressure	OFF	OFF	Continuous beep* ¹
	Overheat	ON	ON	Continuous beep* ¹
	Low oil pressure & overheat	OFF	ON	Continuous beep* ¹

* 1: The buzzing sound stops below an engine speed of 1,400 rpm.

When the oil pressure warning system operated (green indicator light turned off):

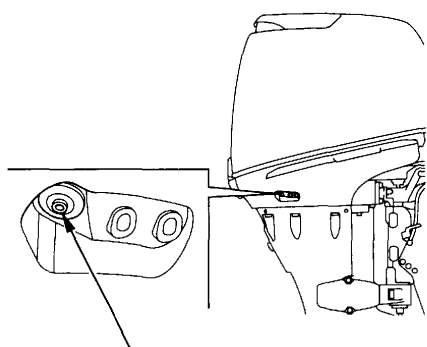
- 1) Stop the engine immediately and check the engine oil level (see page 54).
- 2) If the oil is up to the recommended level, operate the outboard motor at low speed (within 30 seconds). The warning system is normal if it stops.

NOTE:

If the throttle is closed suddenly while sailing with the throttle fully open, the engine speed temporarily drops below the specified idle speed. The oil pressure indicator light can turn off this time.

- 3) If the warning system is still operating, return to the pier at low speed and service the system.

OPERATION



COOLING WATER CHECK HOLE

When the overheat warning system operated (red indicator light turned on):

- 1) Return the shift lever to the N (neutral) position (idle speed) immediately, and check whether water is flowing out of the cooling water check hole.

NOTICE

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

- 2) If water is flowing, continue idling (within 30 seconds).
The warning system is normal if it stops.

NOTE:

The overheat warning system might work when the engine is started while it is excessively hot after, for example, along sailing with the full open throttle.

- 3) If the warning system is still operating, return to the pier at low speed and service the system.

< Over-rev Limiter >

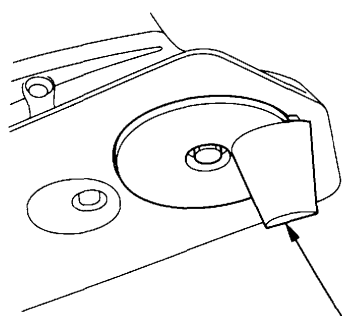
The BF25D/30D outboard motor is equipped with the over-rev limiter which operates when the engine speed increases excessively for some reasons while cruising or when the propeller races while tilting up the outboard motor or changing the cruising course.

When the over-rev limiter operated:

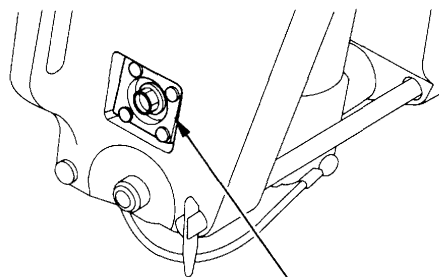
- 1) Slow down the engine speed immediately and check the tilt angle.
- 2) If the tilt angle is proper but the engine speed is too high, stop the engine and check the outboard motor and propeller for installation condition and damage. Correct or service if necessary.

OPERATION

〈Anode〉



ANODE METAL



ANODE METAL
(G and T types)

The anode is a sacrificial material which helps to protect the outboard motor from corrosion.

NOTICE

Painting or coating the anode will lead to rust and corrosion damage to the outboard motor.

Shallow Water Operation

NOTICE

Excessive trim/tilt angle during operation can cause the propeller to raise out of the water and cause propeller ventilation and engine over-revving. Excessive trim/tilt angle can also damage the water pump and overheat the engine.

When operating in shallow water, tilt the motor up to prevent the propeller and gear case from hitting the bottom (refer to pages 94, 96, 98 and 100). With the motor tilted up, operate the motor at low speed.

Monitor the cooling system indicator for water discharge. Be sure that the motor is not tilted so high that the water intakes are out of the water.

If an excessive amount of throttle is used when operating in forward gear, the motor will return to the transom angle adjusting rod. (G type)

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 specific modifications to the carburetor. If you always operate the outboard motor at altitudes higher than 1,500 m (5,000 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 300 m (1,000 foot) increase in altitude. The effect of altitude on the horsepower will be greater than this if no carburetor modification is made.

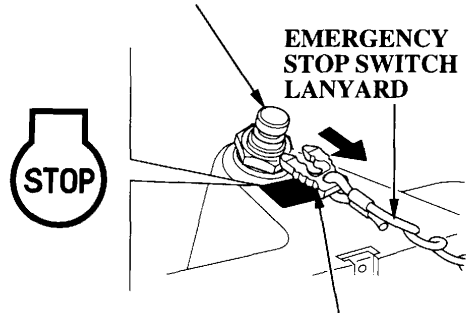
NOTICE

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.

9. STOPPING THE ENGINE (B type)

Stopping the Engine

EMERGENCY STOP SWITCH

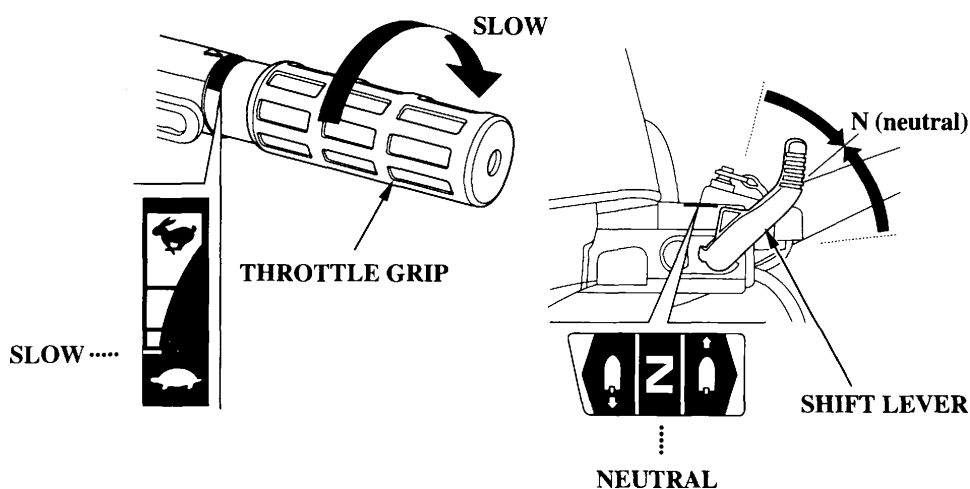


EMERGENCY STOP SWITCH CLIP

• **In an emergency;**
Pull the emergency stop switch lanyard and remove the emergency stop switch clip from the switch; this will stop the engine.

NOTE:

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



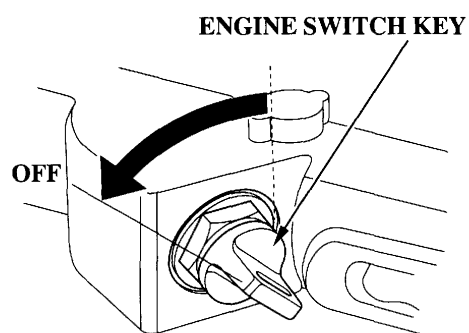
• In normal use;

1. Turn the throttle grip to SLOW position and move the shift lever to N (neutral).

NOTE:

After sailing with the throttle fully open, cool down the engine by running it at the idle speed for a few minutes.

STOPPING THE ENGINE (B type)



2. Turn the engine switch key to the OFF position to stop the engine.

NOTE:

In the event that the engine does not stop when the engine switch is turned OFF, disconnect the fuel line connector.

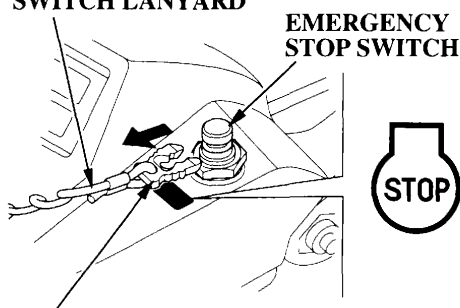
3. Remove the engine switch key and store it.

STOPPING THE ENGINE (H type)

Stopping the Engine

EMERGENCY STOP SWITCH LANYARD

EMERGENCY STOP SWITCH



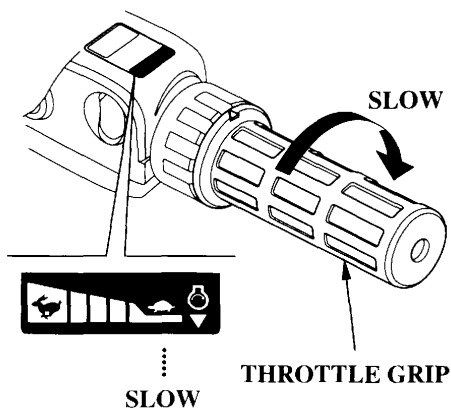
EMERGENCY STOP SWITCH CLIP

• In an emergency;

Pull the emergency stop switch lanyard and remove the emergency stop switch clip from the switch; this will stop the engine.

NOTE:

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



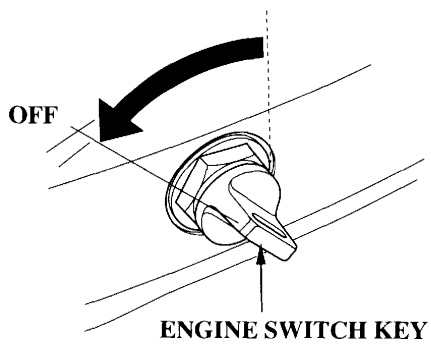
• In normal use;

1. Turn the throttle grip to SLOW position and move the shift lever to N (neutral).

NOTE:

After sailing with the throttle fully open, cool down the engine by running it at the idle speed for a few minutes.

STOPPING THE ENGINE (H type)



2. Turn the engine switch key to the OFF position to stop the engine.

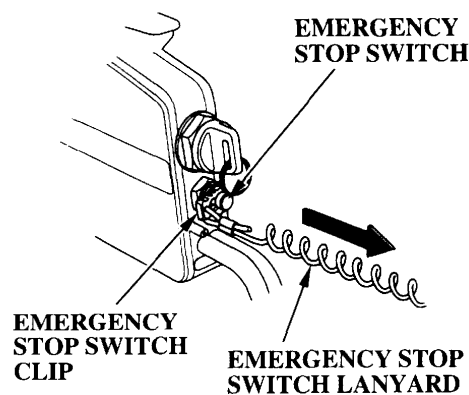
NOTE:

In the event that the engine does not stop when the engine switch is turned OFF, disconnect the fuel line connector.

3. Remove the engine switch key and store it.

STOPPING THE ENGINE (R type)

Stopping the Engine

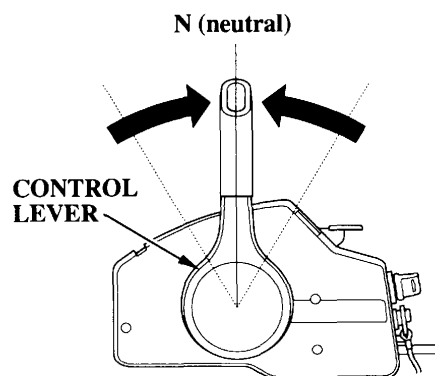


- **In an emergency;**

Pull the emergency stop switch lanyard and remove the emergency stop switch clip from the switch; this will stop the engine.

NOTE:

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

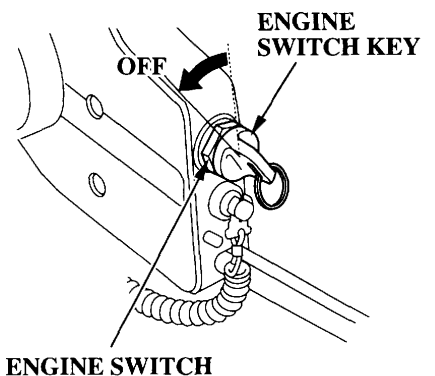


- **In normal use;**

1. Move the control lever to the N (neutral) position.

NOTE:

After sailing with the throttle fully open, cool down the engine by running it at the idle speed for a few minutes.



2. Turn the engine switch key to the OFF position to stop the engine.

NOTE:

In the event that the engine does not stop when the engine switch is turned OFF, disconnect the fuel line connector and move the fast idle lever to the upmost position.

3. Remove the engine switch key and store it.

10. TRANSPORTING

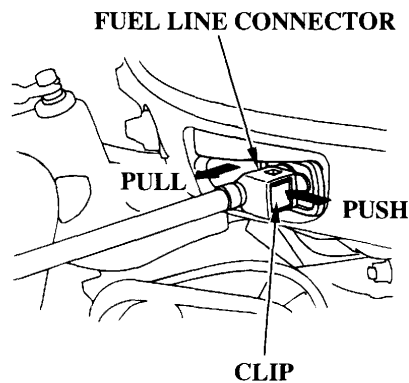
Fuel Line Disconnection

Before transporting the motor, disconnect and remove the fuel line in the following procedure.

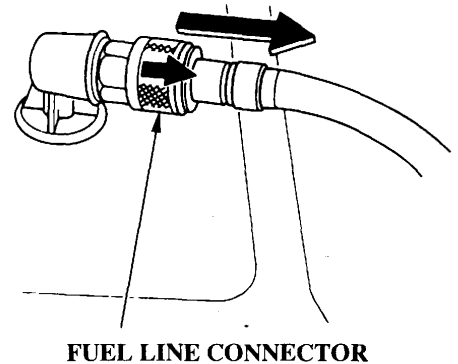
⚠ WARNING

Gasoline is extremely flammable, and gasoline vapor can explode, causing serious injury or death.

- **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.**



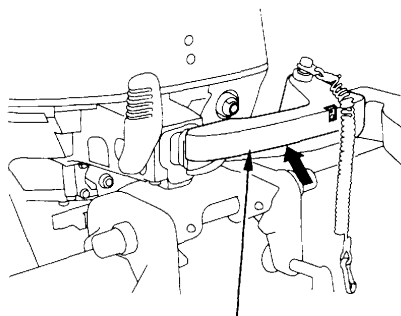
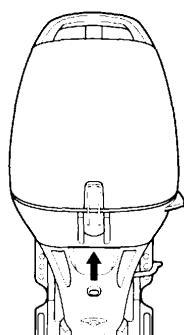
1. While pressing the fuel line connector clip, pull the fuel line connector and disconnect it from the outboard side joint.



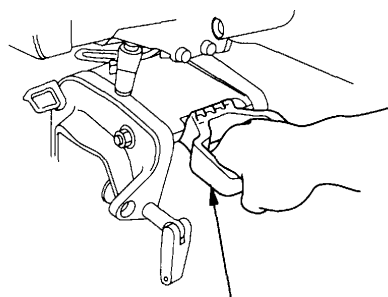
2. While pulling the fuel line connector cover, pull the fuel line connector to disconnect the fuel line connector from the fuel tank.

TRANSPORTING

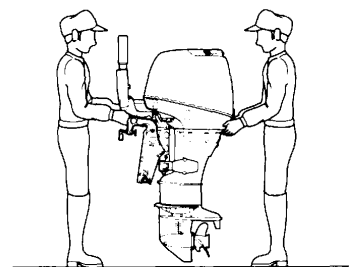
Transporting



CARRYING HANDLE
(B type)



CARRYING HANDLE
(H type)



Carry the outboard motor with more than two people. To carry, hold the motor by the carrying handle, or hold by the carrying handle and the lug beneath the engine cover lock lever as shown here. Do not carry by the engine cover.

⚠ CAUTION

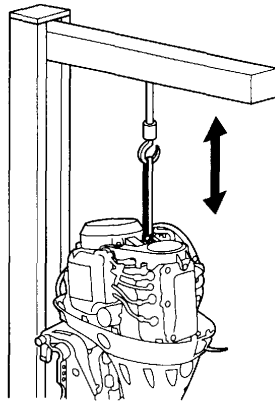
Do not carry the outboard motor by the engine cover. The engine cover can be unlatched and outboard motor can drop, resulting in an accidental injury and damage.

NOTICE

Do not carry the outboard motor by the carrying handle more than five minutes. Prolonged carrying of the motor by the handle can cause the engine oil leak in the cylinders, make the engine hard starting or smoke when started.

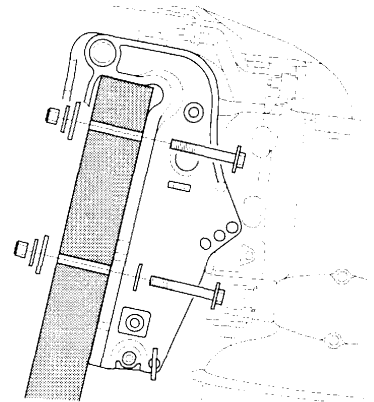
TRANSPORTING

Transport the motor either vertically or horizontally as follows with the steering handle raised.



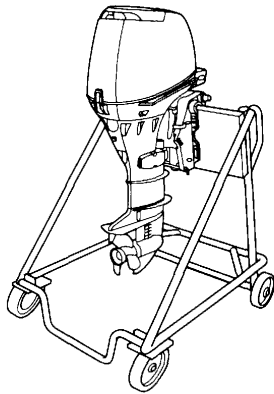
When transporting the outboard motor on a vehicle, perform the following.

1. Remove the engine cover, lift the outboard motor using the engine hanger hook, and place on the outboard motor stand.



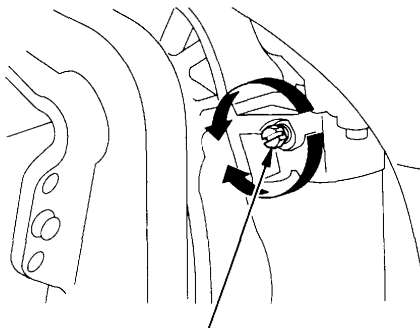
2. Secure the outboard motor with the bolts and nuts.

TRANSPORTING



3. Reinstall the engine cover.

Trailing



STEERING FRICTION BOLT

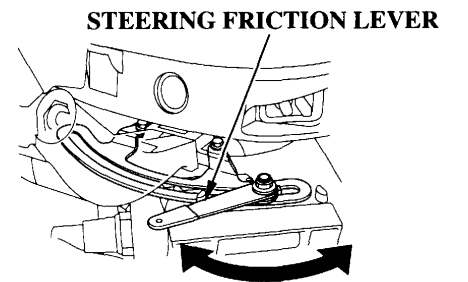
(B type)

B type:

When trailing 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.

H type:

When trailing or transporting the boat with the motor attached, it is recommended that the motor remain in normal running position with the steering friction lever locked position.



TO INCREASE
FRICTION
(LOCK)

TO DECREASE
FRICTION
(FREE)

(H type)

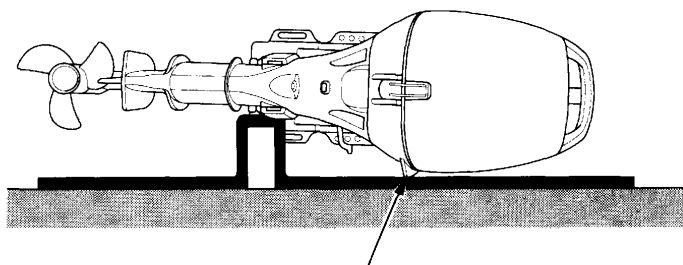
NOTICE

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.

TRANSPORTING

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.

Horizontal transport or storage:
Rest the motor on the case protector.



CASE PROTECTOR

⚠ CAUTION

Before transporting the outboard motor horizontally, be sure to drain the gasoline and oil from the outboard motor as instructed on pages 126 and 143.

When you place the outboard motor horizontally to transport, be sure to place sponge or clothes under the outboard motor to protect it from impact and damage.

11. CLEANING AND FLUSHING

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

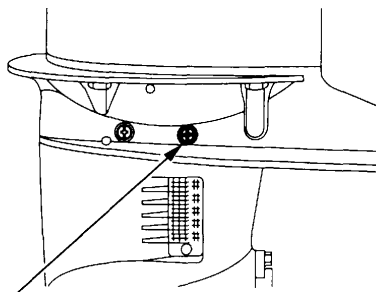
▲WARNING

- 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.

NOTICE

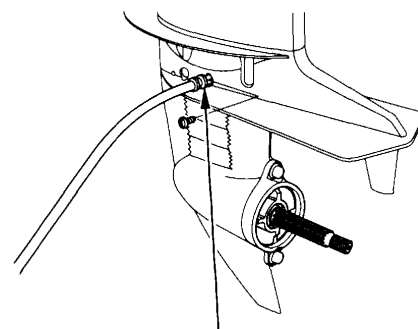
Running the engine without water can cause serious engine damage due to overheating. Be sure that water flows from the cooling water check hole while the engine is running. If not, stop the engine and determine the cause of the problem.

With Water Hose Joint (Optional part)



WASH PLUG

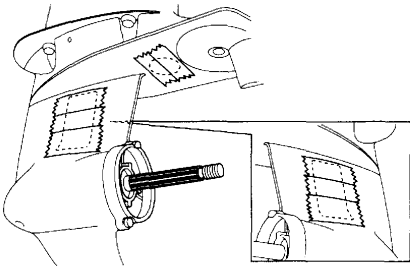
1. Wash the outside of the outboard motor with clean, fresh water.
2. Remove the wash plug.



WATER HOSE JOINT
(optional)

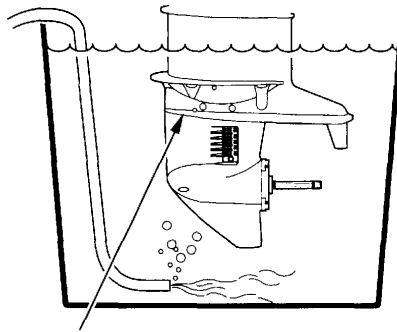
3. Insert the water hose joint into the plug hole and connect the hose from a fresh water faucet to the hose joint.

CLEANING AND FLUSHING



4. Plug the three water cooling water intake ports with tape.
5. Remove the propeller (see page 138).
6. Move the shift lever or control lever to the N (neutral) position.
7. Turn on the fresh water supply to the hose.
8. Start the engine and run in neutral position for at least 10 minutes to clean inside of the motor.

Without Water Hose Joint



ANTICAVITATION PLATE

When the water hose joint is not used, stand the outboard in a suitable container of fresh water.

1. Wash the outside of the outboard motor with clean, fresh water.
2. Remove the propeller (see page 138).
3. Stand the motor in a suitable container of water. The water level must be at least 4 inches above the anticavitation plate.
4. Move the shift lever or control lever to the N (neutral) position.

5. Turn on the fresh water supply to the hose.
6. Start the engine and run in neutral for at least 5 minutes to clean inside of the motor.

12. MAINTENANCE

Periodic maintenance and adjustment are important to keep the motor in the best operating condition. Service and inspect according to the MAINTENANCE SCHEDULE.

▲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.

Be sure to reinstall the engine cover, if it was removed, before starting the engine. Lock it securely by lowering the fixing levers.

NOTICE

- **If the engine must be run, make sure there is water at least 100 mm (4 in) above the anticavitation plate, otherwise the water pump may not receive sufficient cooling water, and the engine will overheat.**
- **Use only genuine Honda parts or their equivalents for maintenance or repair. The use of replacement parts which are not of equivalent quality may damage the motor.**

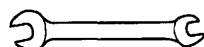
MAINTENANCE

Tool Kit and Spare Parts

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



OWNER'S MANUAL



10 × 12 mm WRENCH



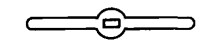
OIL CHECK
SCREWDRIVER



FLAT SCREWDRIVER



PHILLIPS
SCREWDRIVER



SCREWDRIVER
HANDLE



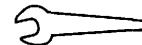
EMERGENCY
STARTER ROPE



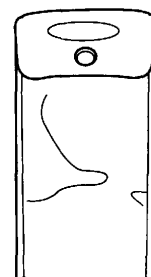
PLIERS



18 × 19 mm
SOCKET WRENCH



8 mm WRENCH



TOOL BAG



SPARE CLIP
(H type)

MAINTENANCE

Maintenance Schedule

REGULAR SERVICE PERIOD (3) Perform at every indicated month or operating hour interval, whichever comes first.		Each use	After use	First month or 20 hrs.	Every 6 months or 100 hrs.	Every year or 200 hrs.	Every 2 years or 400 hrs.
Item							
Engine oil	Check level	○					
	Change			○	○		
Gear case oil	Change			○ (2)	○ (2)		
Engine oil filter	Replace					○ (2)	
Timing belt	Check-adjust					○ (2)	
Carburetor linkage	Check-adjust			○ (2)	○ (2)		
Idling speed	Check-adjust			○ (2)	○ (2)		
Valve clearance	Check-adjust					○ (2)	
Spark plug	Check-adjust				○		
	Replace					○	
Propeller and split pin	Check	○					
Anode	Check	○					
Lubrication	Grease			○ (1)	○ (1)		
Fuel tank and tank filter	Clean					○	
Water pump	Check					○ (2)	

NOTE: (1) Lubricate more frequently when used in salt water.
 (2) These items should be serviced by an authorized Honda marine dealer, unless you have the proper tools and are mechanically proficient. Refer to the Honda Shop Manual for service procedures.
 (3) For professional commercial use, log hours of operation to determine proper maintenance intervals.

MAINTENANCE

REGULAR SERVICE PERIOD (3) Perform at every indicated month or operating hour interval, whichever comes first.		Each use	After use	First month or 20 hrs.	Every 6 months or 100 hrs.	Every year or 200 hrs.	Every 2 years or 400 hrs.
Item							
Thermostat	Check					○ (2)	
Fuel filter	Check				○		
	Replace						○
Fuel line	Check	○					
	Replace			Every 2 years (If necessary) (2)			
Battery and cable connection	Check level-tightness	○					
Bolts and Nuts	Check-tightness			○ (2)	○ (2)		
Crankcase breather tube	Check					○ (2)	
Cooling water passages	Clean		○ (4)				
Emergency stop switch	Check	○					

NOTE: (1) Lubricate more frequently when used in salt water.
 (2) These items should be serviced by an authorized Honda marine dealer, unless you have the proper tools and are mechanically proficient. Refer to the Honda Shop Manual for service procedures.
 (3) For professional commercial use, log hours of operation to determine proper maintenance intervals.
 (4) When operating in salt water, turbid or muddy water, the engine should be flushed with clean water after each use.

MAINTENANCE

Engine Oil

Insufficient or contaminated engine oil adversely affects the service life of the sliding and moving parts.

Wash your hands with soap and water after handling used oil.

Oil change interval:

20 operating hours after the date of purchase or first month for initial replacement, then every 100 operating hours or 6 months.

Oil capacity:

1.6 l (1.7 US qt , 1.4 Imp qt)

...when oil filter is not replaced.

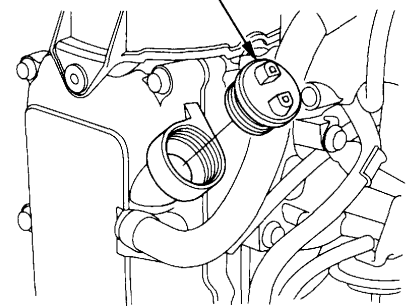
1.7 l (1.8 US qt , 1.5 Imp qt)

...when oil filter is replacement.

Recommended oil: SAE 5W-30 engine oil or equivalent, API Service classification SG, SH or SJ.

< Engine Oil Replacement >

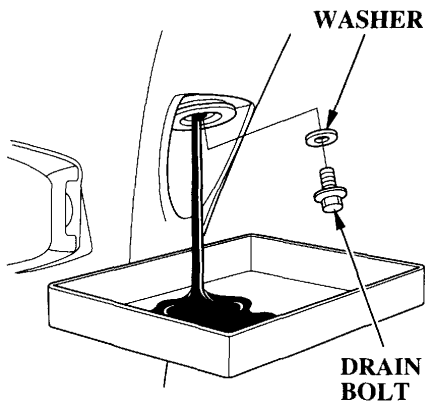
OIL FILLER CAP



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

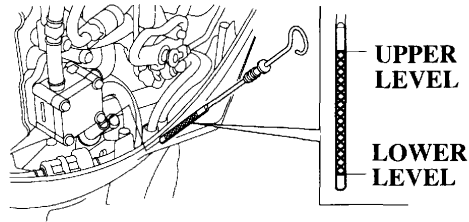
1. Position the outboard motor vertically, and remove the engine cover. Remove the oil filler cap.

MAINTENANCE



2. Remove the engine oil drain bolt and washer using the 12 mm wrench and drain the engine oil.

Install the new washer and drain bolt and tighten bolt securely.



3. Refill to the upper level mark on the oil level dipstick with the recommended oil.

4. Reinstall the oil filler cap securely.

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.

MAINTENANCE

Spark Plugs

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

⚠ CAUTION

The spark plug becomes very hot during operation and will remain hot for a while after stopping the engine. Allow the engine to cool before servicing the spark plug.

Check-Adjust interval:

Every 100 operating hours or 6 months.

Replacement interval:

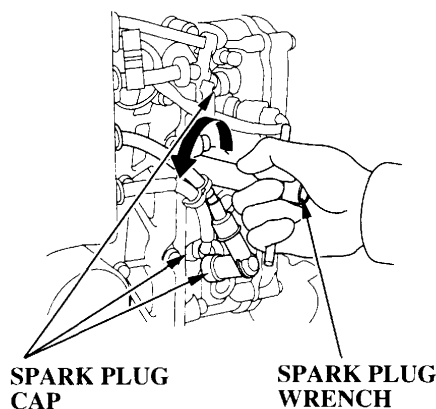
Every 200 operating hours or every year.

Recommended spark plug:

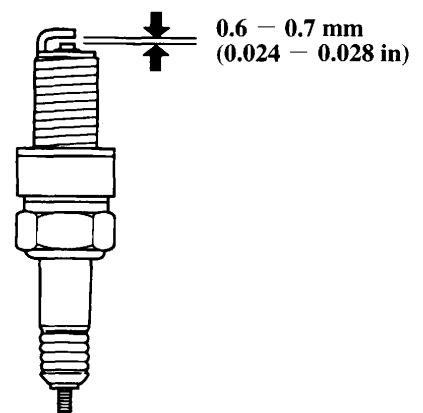
DR7EA (NGK)
X22ESR-U (DENSO)

NOTICE

Use only the recommended spark plugs or equivalent. Spark plugs which have an improper heat range may cause engine damage.

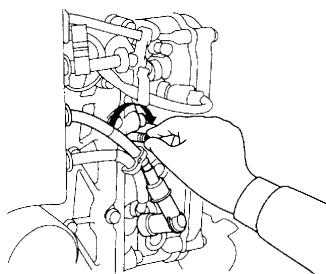


1. Remove the engine cover.
2. Remove the spark plug caps.
3. Use the wrench and screwdriver supplied in the tool kit to remove the spark plugs.
4. Visually inspect the spark plugs. Discard the spark plugs if there is apparent wear, or if the insulators are cracked or chipped. Clean the spark plugs with a wire brush if they are to be reused.



5. Measure the plug gaps with a feeler gauge. The gaps should be 0.6–0.7 mm (0.024–0.028 in). Correct as necessary by carefully bending the side electrode.

MAINTENANCE



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.

NOTICE

The spark plugs must be securely tightened. An improperly tightened plug can become very hot and may cause engine damage.

Battery

NOTICE

Battery handling differs according to the type of the battery and the instructions described below might not be applicable to the battery of your outboard. Refer to the battery manufacturer's instructions.

Check that the battery cables are connected securely.
If the battery terminals are contaminated or corroded, remove the battery and clean the terminals.

Battery check interval:

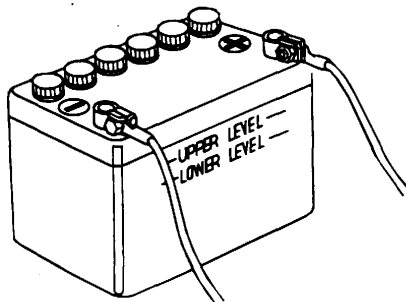
Before each use.

⚠ WARNING

Batteries produce explosive gases: If ignited, an explosion can cause serious injury or blindness. Provide adequate ventilation when charging.

- **CHEMICAL HAZARD:** Battery electrolyte contains sulfuric acid. Contact with eyes or skin, even through clothing, may cause severe burns. Wear a faceshield and protective clothing.
- Keep flames and sparks away, and do not smoke in the area. **ANTIDOTE:** If electrolyte gets into your eyes, flush thoroughly with warm water for at least 15 minutes and call a physician immediately.
- **POISON:** Electrolyte is poison. **ANTIDOTE**
 - External: Flush thoroughly with water.
 - Internal: Drink large quantities of water or milk. Follow with milk of magnesia or vegetable oil, and call a physician immediately.
- **KEEP OUT OF REACH OF CHILDREN.**

MAINTENANCE



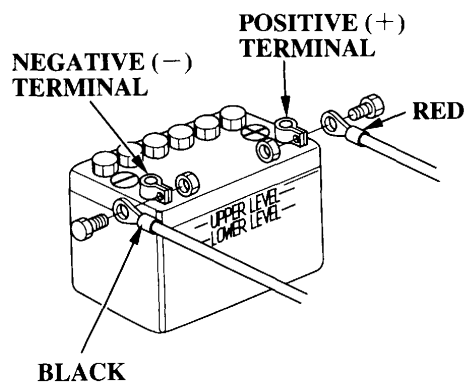
Installation check:

Check that the cables are connected to the battery terminals securely. Tighten the terminals if they are loose.

〈 Battery Fluid Level 〉

Check whether the battery fluid is between the upper and lower levels, and check the vent hole in the battery caps for clogging. If the battery fluid is near or below the lower level, add the distilled water to the upper level.

〈 Battery Cleaning 〉



1. Disconnect the battery cable at the battery negative (−) terminal, then at the battery positive (+) terminal.
2. Remove the battery and clean the battery terminals and battery cable terminals with a wire brush or sand paper.
Clean the battery with a solution of baking soda and warm water, taking care not to get the solution or water in the battery cells. Dry the battery thoroughly.

3. Connect the battery positive (+) cable to the battery positive (+) terminal, then the battery negative (−) cable to the battery negative (−) terminal. Tighten the bolts and nuts securely. Coat the battery terminals with grease.

▲ CAUTION

When disconnecting the battery cable, be sure to disconnect at the battery negative (−) terminal first. To connect, connect at the positive (+) terminal first, then at the negative (−) terminal. Never dis/connect the battery cable in the reverse order, or it causes a short circuit when a tool contacts the terminals.

MAINTENANCE

Lubrication

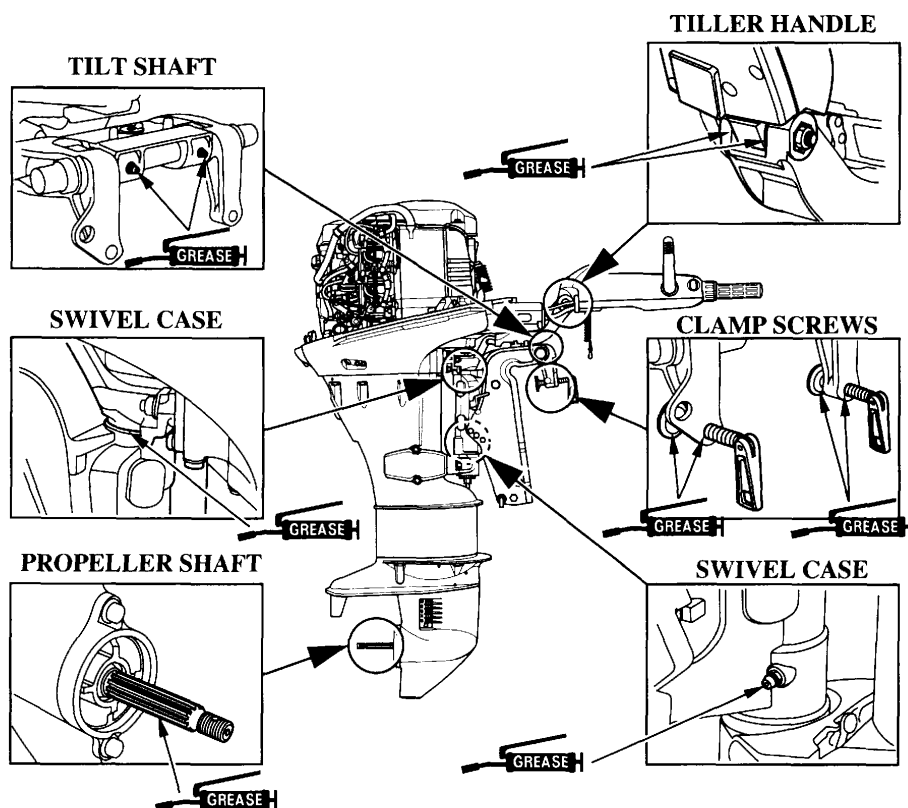
Wipe the outside of the engine with a cloth dipped in clean oil. Apply marine anticorrosion grease to the following parts:

Lubrication interval:

20 hours or a month after the date of purchase for initial lubrication, then every 100 hours or 6 months.

NOTE:

Apply anticorrosion oil to pivot surfaces where grease cannot penetrate.



MAINTENANCE

Fuel Filter

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. Check and replace the fuel strainer periodically.

Inspection interval:

Every 100 operating hours or 6 months

Replacement interval:

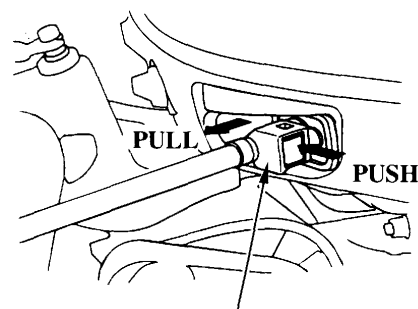
Every 400 operating hours or 2 years

⚠ WARNING

Gasoline is extremely flammable, and gasoline vapor can explode, causing serious injury or death. Do not smoke or allow flames or sparks in your working area. KEEP OUT OF REACH OF CHILDREN.

- 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 filter. Spilled fuel or fuel vapor may ignite. If any fuel is spilled, make sure the area is dry before starting the engine.

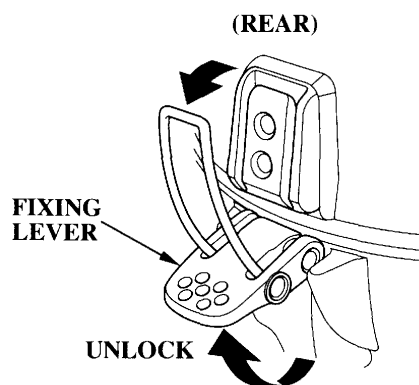
〈 Inspection 〉



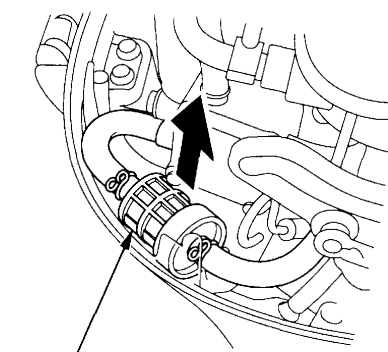
FUEL LINE CONNECTOR

1. Disconnect the fuel line connector from the outboard motor.

MAINTENANCE



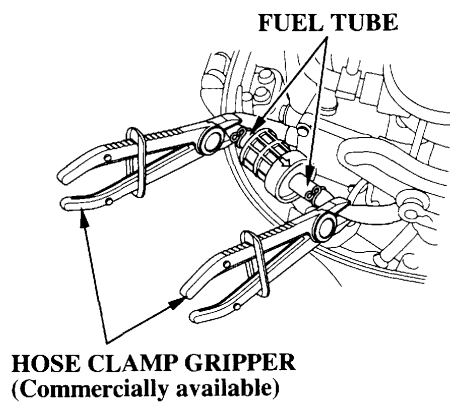
2. Raise the rear fixing lever and remove the engine cover.



3. Raise the fuel filter, and remove it from the engine under case.
4. Check the fuel filter for water accumulation and clogging. After inspection, reinstall the fuel filter properly.

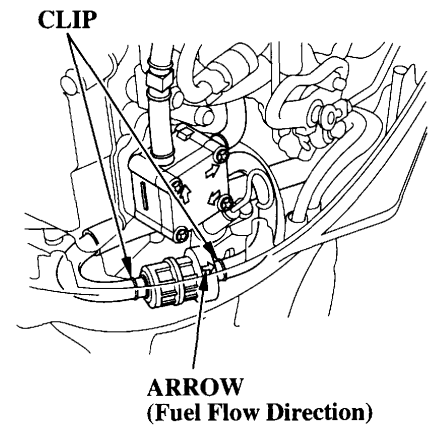
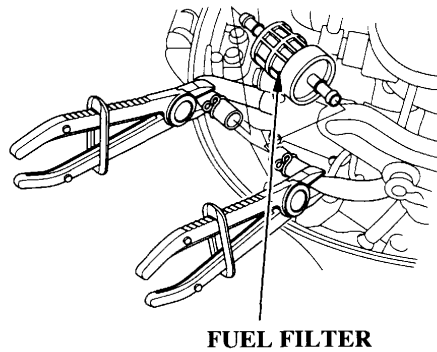
MAINTENANCE

< Replacement >



1. Remove the fuel filter, disconnect the right and left fuel tubes, and replace with a new fuel filter.

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



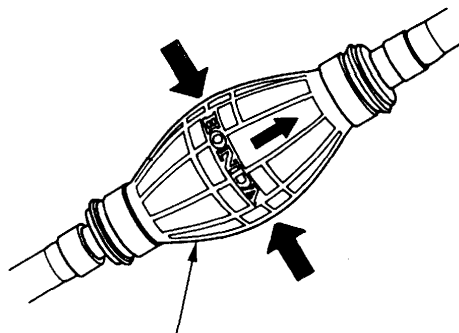
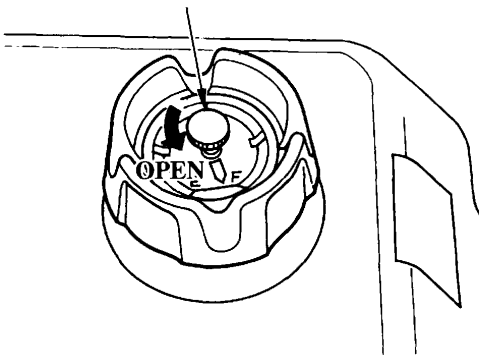
2. Install the new fuel filter so that the arrow mark on the fuel filter is toward the fuel pump side.

NOTE:
Fuel flow will be impeded if the filter is installed backward.

3. Connect the fuel tubes to the fuel filter securely with the tube clips.
4. Remove the hose clamp grippers.

MAINTENANCE

VENT KNOB

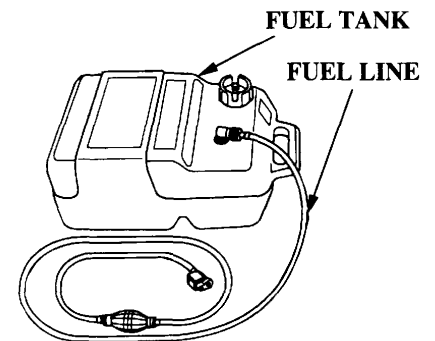


PRIMER BULB

5. Connect the fuel line connector securely.
Turn the vent knob to OPEN side, squeeze and release the primer bulb to feed the fuel, and check for leaks.

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

Fuel Tank and Tank Filter



Cleaning interval:
Every year or after every 200 hours of outboard motor operation.

⚠ WARNING
Gasoline is extremely flammable, and gasoline vapor can explode, causing serious injury or death. Do not smoke or allow flames or sparks in your working area. KEEP OUT OF REACH OF CHILDREN.

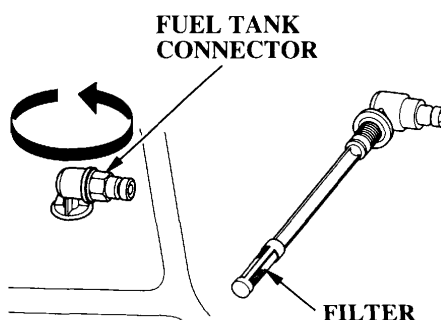
MAINTENANCE

- Always work in a well-ventilated area.
- Be sure that any fuel drained from the fuel tank is stored in a safe container.
- Be careful not to spill fuel when cleaning the tank and filter. Spilled fuel or fuel vapor may ignite. If any fuel is spilled, make sure the area is dry before starting the engine.

〈 Fuel Tank Cleaning 〉

1. Disconnect the fuel line from fuel tank.
2. Empty the tank, pour in a small quantity of gasoline, and clean the tank thoroughly by shaking it. Drain and dispose of the gasoline properly.

〈 Tank Filter Cleaning 〉



1. Turn the fuel tank connector counterclockwise and remove the tank filter.
2. Clean the filter with non-flammable solvent. Replace the fuel filter if necessary.
3. After cleaning, reinstall the tank filter securely.

EMISSION CONTROL SYSTEM (For Bodensee-Lake type)

The combustion process produces carbon monoxide and hydrocarbons. Control of hydrocarbons is very important because under certain conditions, they react to form photochemical smog when subjected to sunlight. Carbon monoxide does not react in the same way, but it is toxic. Honda Motor Co., Ltd. utilizes lean carburetor settings and other system to reduce carbon monoxide and hydrocarbons.

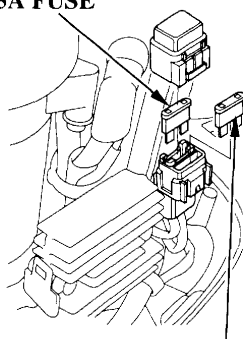
Problems that May Affect Outboard Motor Emissions

If you are aware of any of the following symptoms, have the outboard motor inspected and repaired by your authorized Honda Dealer:

1. Hard starting or stalling after starting
2. Rough idle
3. Misfiring or backfiring during acceleration
4. Poor performance (driveability) and poor fuel economy

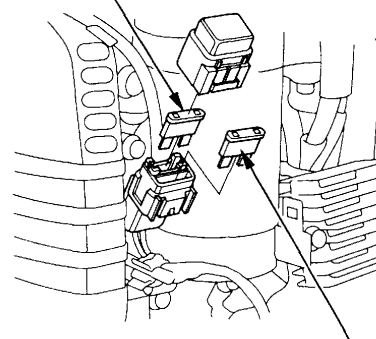
Fuse

15A FUSE



SPARE 15A FUSE

10A FUSE



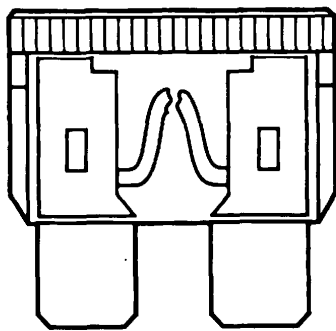
SPARE 10A FUSE

If the fuse blows, running the engine will not 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. Remove the fuse case lid and pull the old fuse out of the clip with your finger.
4. Push a new fuse into the clips.

MAINTENANCE



BLOWN FUSE

〈Designated fuse〉 15A, 10A

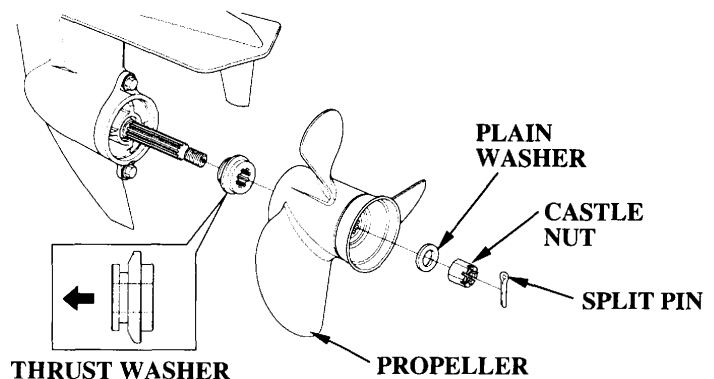
⚠ WARNING

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

NOTICE

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.

Propeller



If the propeller is damaged by striking a rock, or other obstacle, replace the propeller as follows.

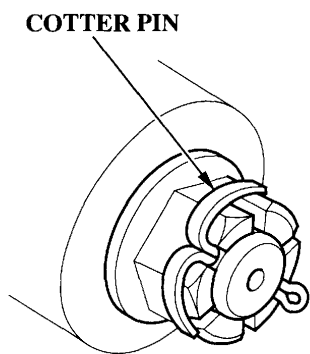
⚠ WARNING

- When replacing, remove the emergency stop switch clip to prevent an accidental startup of the engine.
- The propeller is thin and sharp. To protect your hands, wear the heavy gloves during replacement.

〈Replacement〉

1. Remove the split pin then remove the 14 mm castle nut, 15 mm plain washer, propeller and thrust washer.

MAINTENANCE



2. Install the new propeller in the reverse sequence to removal.
3. Tighten the castle nut with your hand first until the propeller has no play. Then, tighten the castle nut again with a tool until the groove in the castle nut aligns with the cotter pin hole. (Note that this tool is not included in the tools that come together with the outboard motor.)

CASTLE NUT

TIGHTENING TORQUE:

1 N·m (0.1 kgf·m, 0.7 lbf·ft)

UPPER LIMIT OF TORQUE:

35 N·m (3.5 kgf·m , 25 lbf·ft)

4. Be sure to replace the cotter pin with a new one.

NOTE:

- Install the thrust washer with the grooved side toward the gear case.
- Use a genuine Honda split pin and bend the pin ends as shown.

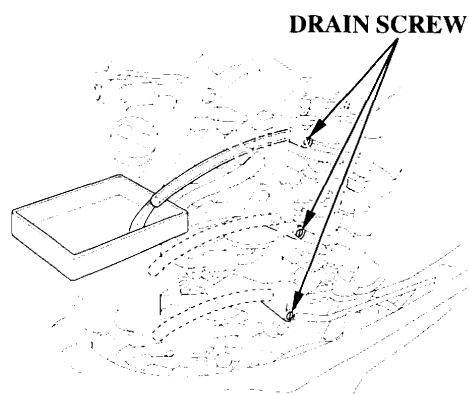
MAINTENANCE

Submerged Motor

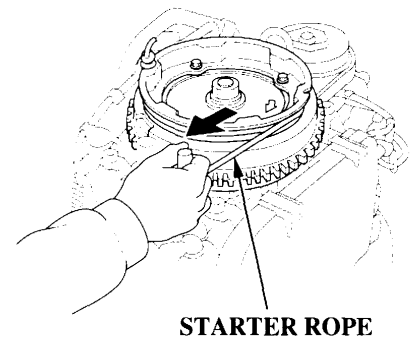
A submerged motor must be serviced immediately after it is recovered from the water in order to minimize corrosion.

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, drain the contents of the carburetor into a suitable container, then retighten the drain screw (see page 143).

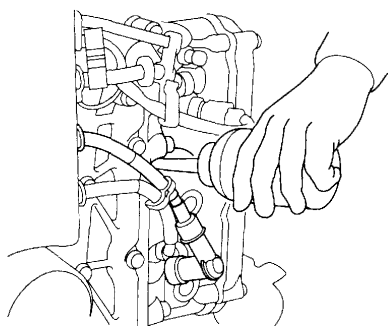


3. Remove the spark plugs. Remove the flywheel cover and wind the emergency starter rope following the emergency starting procedure (pages 79 through 84) and drain the water from the cylinder by pulling the emergency starter rope several times.

NOTICE

- 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.

MAINTENANCE



- 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.
4. Change the engine oil (see page 126). If there was water in the engine crankcase, or if 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.
 5. Pour a teaspoon of engine oil into

each spark plug hole, then pull the emergency starter rope several times to lubricate the inside of the cylinders.

Reinstall the spark plugs.

6. Attempt to start the engine.

▲ 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.

- 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 anticavitation plate).
7. As soon as possible, take the motor to a Honda outboard motor dealer for inspection and service.

13. STORAGE

For longer service life of the outboard motor, have your outboard motor serviced by an authorized Honda outboard motor dealer before storage. However, the following procedures can be performed by you, the owner, with a minimum of tools.

NOTE:

Gasoline spoils very quickly depending on factors such as light exposure, temperature and time. In worst cases, gasoline can be contaminated within 30 days. Using contaminated gasoline can seriously damage the engine (carburetor clogged, valve stuck). Such damage due to spoiled fuel is disallowed from coverage by the warranty.

To avoid this please strictly follow these recommendations:

- Only use specified gasoline (see page 55).
- Use fresh and clean gasoline.
- To slow deterioration, keep gasoline in a certified fuel container.
- If long storage (more than 30 days) is foreseen, drain fuel tank and carburetor.

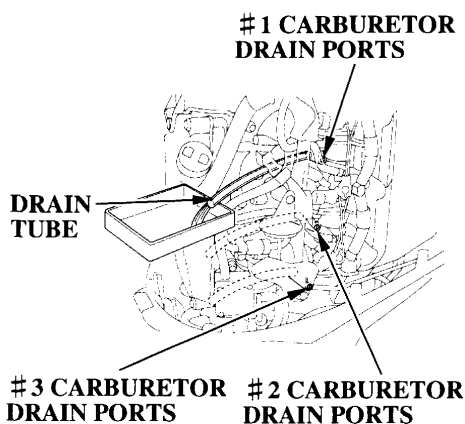
STORAGE

Carburetor Draining

⚠ WARNING

Gasoline is extremely flammable, and gasoline vapor can explode, causing serious injury or death. Do not smoke or allow flames or sparks in your working area. **KEEP OUT OF REACH OF CHILDREN.**

- 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.



1. Disconnect the fuel line connector (see page 115).
2. Remove the engine cover.
3. Pull the # 1 carburetor drain tube outside of the under case.
4. Loosen the drain screw of the # 1 carburetor and drain the carburetor. Catch the draining gasoline in a suitable container.
5. Drain the # 2 and # 3 carburetors in the same manner using the # 1 carburetor drain tube.

6. After draining thoroughly, tighten the drain screws securely. Be sure to drain thoroughly as the gasoline deteriorates as time goes by.
7. Connect the drain tube to the original position of the # 1 carburetor securely.

NOTE:

Before storing the outboard motor for a prolonged period, we recommend that you remove the fuel line connector and operate the engine at 2,000 to 3,000 min⁻¹ (rpm) until it stops.

STORAGE

Battery Storage

NOTICE

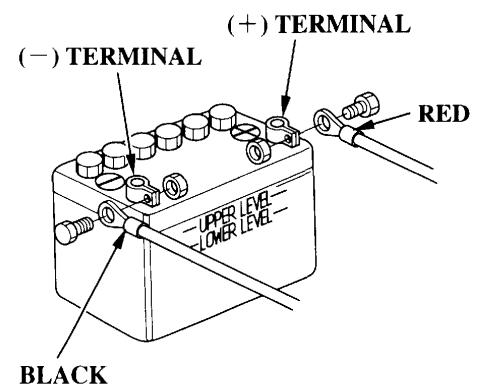
Battery handling differs according to the type of the battery. Refer to the battery manufacturer's instructions.

▲ WARNING

Batteries produce explosive gases: If ignited, an explosion can cause serious injury or blindness. Provide adequate ventilation when charging.

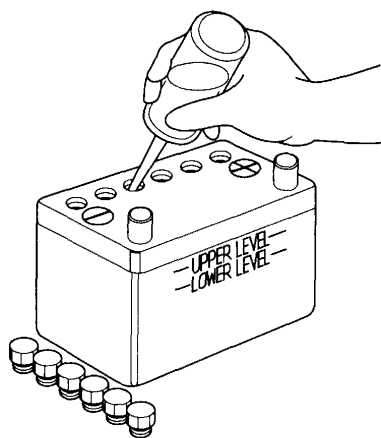
- **CHEMICAL HAZARD:** Battery electrolyte contains sulfuric acid. Contact with eyes or skin, even through clothing, may cause severe burns. Wear a faceshield and protective clothing.

- Keep flames and sparks away, and do not smoke in the area. **ANTIDOTE:** If electrolyte gets into your eyes, flush thoroughly with warm water for at least 15 minutes and call a physician immediately.
- **POISON:** Electrolyte is poison. **ANTIDOTE**
External: Flush thoroughly with water.
Internal: Drink large quantities of water or milk. Follow with milk of magnesia or vegetable oil, and call a physician immediately.
- **KEEP OUT OF REACH OF CHILDREN.**



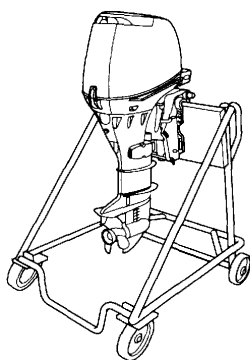
1. Disconnect the battery cable at the battery negative (-) terminal, then at the battery positive (+) terminal.
2. Remove the battery and clean the battery terminals and battery cable terminals with a wire brush or sand paper.
Clean the battery with a solution of baking soda and warm water, taking care not to get the solution of water in the battery cells. Dry the battery thoroughly.

STORAGE



3. Fill the battery with distilled water to the upper level line. Never overfill the battery.
4. Store the battery on a level surface in a cool, dry, well ventilated place out of direct sunlight.
5. Once a month, check the specific gravity of the electrolyte and recharge as required to prolong battery life.

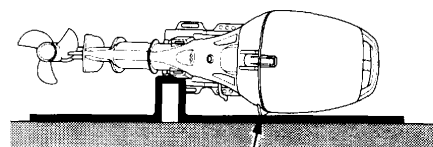
Outboard Motor Position



Transport and store the motor either vertically or horizontally, as shown here. Store the outboard motor in a well-ventilated area free from direct sunlight and humidity.

Vertical transport or storage:

Attach the stern bracket to a stand.



CASE PROTECTOR

Horizontal transport or storage:

Rest the motor on the case protector.

⚠ CAUTION

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

14. TROUBLESHOOTING

〈 Engine fails to start 〉

- | | | |
|--|---|--|
| 1. No fuel in tank. | → | Fill tank with fuel. |
| 2. Fuel line is flattened or kinked. | → | Check for excessively bent or pinched fuel line. |
| 3. Fuel connector is not connected properly. | → | Connect properly. |
| 4. Fuel is contaminated or stale. | → | Replace with new fuel. |
| 5. Battery is discharged. | → | Charge battery. |
| 6. Battery terminal is loose. | → | Tighten battery terminal. |
| 7. Spark plug cap is loose or disconnected. | → | Install and tighten spark plug cap securely. |
| 8. Fuse is blown out. | → | Replace with new fuse. |
| 9. Engine is started in wrong procedure. | → | Start in correct procedure. |

〈 Engine speed fluctuates or engine stalls 〉

- | | | |
|--------------------------------------|---|--|
| 1. Fuel level is low. | → | Add fuel. |
| 2. Fuel line is flattened or kinked. | → | Check for excessively bent or pinched fuel line. |

- | | | |
|--|---|---|
| 3. Fuel filter is clogged. | → | Replace fuel filter. |
| 4. Spark plug is fouled. | → | Remove spark plug and dry and clean it. |
| 5. Spark plug heat range is incorrect. | → | Replace with spark plug of proper heat range. |
| 6. Spark plug gap is incorrect. | → | Adjust to proper gap. |

〈 Engine speed does not increase 〉

- | | | |
|--|---|---|
| 1. Fuel line is flattened or kinked. | → | Check for excessively bent or pinched fuel line. |
| 2. Fuel filter is clogged. | → | Replace fuel filter. |
| 3. Engine oil level is low. | → | Check engine oil and add to specified level. |
| 4. Unmatched propeller is selected. | → | Consult with an authorized Honda outboard motor dealer. |
| 5. Passengers are not distributed equally. | → | Distribute the passengers equally. |
| 6. Outboard motor is not installed properly. | → | Install the outboard motor in proper position. |

TROUBLESHOOTING

〈 Engine overheats 〉

- | | | |
|--|---|---|
| 1. Water intake port and/or water check hole are/is clogged. | → | Clean water intake port and/or water check hole. |
| 2. Engine is overloaded because of unequally distributed passengers or excessive load on the boat. | → | Distribute the passengers equally. Do not load on the boat excessively. |

〈 Engine overrevs 〉

- | | | |
|-------------------------------------|---|---|
| 1. Cavitation. | → | Install outboard motor in the proper position. |
| 2. Propeller is damaged. | → | Replace propeller. |
| 3. Unmatched propeller is selected. | → | Consult with an authorized Honda outboard motor dealer. |
| 4. Trim angle is not correct. | → | Trim to correct angle. |

〈 Power trim/tilt does not operate 〉 (T type)

- | | | |
|---|---|--|
| 1. Battery is undercharged. | → | Charge battery. |
| 2. Manual relief valve is loose. | → | Tighten manual relief valve. |
| 3. Power trim/tilt oil level is low or air is in the oil. | → | Have your outboard motor checked by an authorized Honda outboard motor dealer. |

15. SPECIFICATIONS

MODEL	BF25D	
Description Code	BATJ	
Type	HG	
Overall length	720 mm (28.3 in)	
Overall width	375 mm (14.8 in)	
Overall height	S	1,195 mm (47.0 in)
	L	1,320 mm (52.0 in)
Transom height	S	431 mm (17.0 in)
	L	552 mm (21.7 in)
Weight	S	80 kg (176 lbs)
	L	82 kg (181 lbs)
Rated power	18.4 kW (25 PS)	
Full throttle range	5,000–6,000 min ⁻¹ (rpm)	
Engine type	4 stroke OHC in-line 3 cylinder	
Displacement	552 cm ³ (33.7 cu-in)	
Spark plug gap	0.6–0.7 mm (0.024–0.028 in)	
Starter system	Electric starter	
Ignition system	Digital C.D.I.	
Lubrication system	Trochoid pump pressure lubrication	

Reference to: ICOMIA Standard: as it specifies the engine operating conditions and measurement conditions.

Specified oil	Engine: API standard (SG, SH, SJ) SAE 5W-30 Gear case: API standard (GL-4) SAE 90 outboard motor gear oil
Oil capacity	Engine: Without oil filter replacement: 1.6 ℓ (1.7 US qt , 1.4 Imp qt) With oil filter replacement: 1.7 ℓ (1.8 US qt , 1.5 Imp qt) Gear case: 0.27 ℓ (0.29 US qt , 0.24 Imp qt)
D.C. output	12V – 10A
Cooling system	Water cooling with thermostat
Exhaust system	Water exhaust
Spark plugs	DR7EA (NGK) , X22ESR-U (DENSO)
Fuel pump	Diaphragm type fuel pump
Fuel	Automotive unleaded gasoline (91 research octane, 86 pump octane, or higher)
Tank capacity	25 ℓ (6.6 US gal , 5.5 Imp gal)
Gear change	Forward – Neutral – Reverse (dog type)
Steering angle	40° right and left
Transom angle	G and T types: 4 stages (8°, 12°, 16°, 20°)
Tilt angle (transom angle at 12°)	Stageless adjustment (64°)
Remote control steering system	_____

Noise and Vibration

MODEL	BF25D
CONTROL SYSTEM	H
Sound Pressure Level At Operator's Ear (98/37/EC, ICOMIA 39-94)	82 dB
Vibration (98/37/EC, ICOMIA 38-94)	3.1 (m/s ²) rms

Honda outboards are power rated in accordance with ISO8665 (propeller shaft output).

SPECIFICATIONS

MODEL		BF25D	
Description Code		BATJ	
Type		HT	RT
Overall length		720 mm (28.3 in)	640 mm (25.2 in)
Overall width		375 mm (14.8 in)	375 mm (14.8 in)
Overall height	S	—————	1,195 mm (47.0 in)
	L	1,320 mm (52.0 in)	1,320 mm (52.0 in)
Transom height	S	—————	431 mm (17.0 in)
	L	552 mm (21.7 in)	552 mm (21.7 in)
Weight	S	—————	77.5 kg (170.9 lbs)
	L	84 kg (185 lbs)	79.5 kg (175.3 lbs)
Rated power		18.4 kW (25 PS)	
Full throttle range		5,000 – 6,000 min ⁻¹ (rpm)	
Engine type		4 stroke OHC in-line 3 cylinder	
Displacement		552 cm ³ (33.7 cu-in)	
Spark plug gap		0.6 – 0.7 mm (0.024 – 0.028 in)	
Starter system		Electric starter	
Ignition system		Digital C.D.I.	
Lubrication system		Trochoid pump pressure lubrication	
Specified oil		Engine: API standard (SG, SH, SJ) SAE 5W-30 Gear case: API standard (GL-4) SAE 90 outboard motor gear oil	

Reference to: ICOMIA Standard: as it specifies the engine operating conditions and measurement conditions.

Oil capacity	Engine: Without oil filter replacement: 1.6 ℓ (1.7 US qt , 1.4 Imp qt) With oil filter replacement: 1.7 ℓ (1.8 US qt , 1.5 Imp qt) Gear case: 0.27 ℓ (0.29 US qt , 0.24 Imp qt)	
D.C. output	12V – 10A	
Cooling system	Water cooling with thermostat	
Exhaust system	Water exhaust	
Spark plugs	DR7EA (NGK) , X22ESR-U (DENSO)	
Fuel pump	Diaphragm type fuel pump	
Fuel	Automotive unleaded gasoline (91 research octane, 86 pump octane, or higher)	
Tank capacity	25 ℓ (6.6 US gal , 5.5 Imp gal)	
Gear change	Forward – Neutral – Reverse (dog type)	
Steering angle	40° right and left	
Transom angle	4 stages (8°, 12°, 16°, 20°)	
Tilt angle (transom angle at 12°)	Stageless adjustment (64°)	
Remote control steering system	—————	Motor-mounted

Noise and Vibration

MODEL	BF25D	
CONTROL SYSTEM	H	R
Sound Pressure Level At Operator's Ear (98/37/EC, ICOMIA 39-94)	82 dB	77 dB
Vibration (98/37/EC, ICOMIA 38-94)	3.1 (m/s ²) rms	Not exceed 2.5 (m/s ²) rms

Honda outboards are power rated in accordance with ISO8665 (propeller shaft output).

SPECIFICATIONS

MODEL	BF30D	
Description Code	BAUJ	
Type	BS	HG
Overall length	675 mm (26.6 in)	720 mm (28.3 in)
Overall width	380 mm (15.0 in)	375 mm (14.8 in)
Overall height	S	1,195 mm (47.0 in)
	L	1,320 mm (52.0 in)
Transom height	S	431 mm (17.0 in)
	L	552 mm (21.7 in)
Weight	S	76.5 kg (168.7 lbs)
	L	82 kg (181 lbs)
Rated power	22.1 kW (30 PS)	
Full throttle range	5,000 – 6,000 min ⁻¹ (rpm)	
Engine type	4 stroke OHC in-line 3 cylinder	
Displacement	552 cm ³ (33.7 cu-in)	
Spark plug gap	0.6 – 0.7 mm (0.024 – 0.028 in)	
Starter system	Electric starter	
Ignition system	Digital C.D.I.	
Lubrication system	Trochoid pump pressure lubrication	
Specified oil	Engine: API standard (SG, SH, SJ) SAE 5W-30 Gear case: API standard (GL-4) SAE 90 outboard motor gear oil	

Reference to: ICOMIA Standard: as it specifies the engine operating conditions and measurement conditions.

Oil capacity	Engine: Without oil filter replacement: 1.6 l (1.7 US qt , 1.4 Imp qt) With oil filter replacement: 1.7 l (1.8 US qt , 1.5 Imp qt) Gear case: 0.27 l (0.29 US qt , 0.24 Imp qt)
D.C. output	12V – 10A
Cooling system	Water cooling with thermostat
Exhaust system	Water exhaust
Spark plugs	DR7EA (NGK) , X22ESR-U (DENSO)
Fuel pump	Diaphragm type fuel pump
Fuel	Automotive unleaded gasoline (91 research octane, 86 pump octane, or higher)
Tank capacity	25 l (6.6 US gal , 5.5 Imp gal)
Gear change	Forward – Neutral – Reverse (dog type)
Steering angle	40° right and left
Transom angle	Mechanical tilt type: 5 stages (4°, 8°, 12°, 16°, 20°) G and T types: 4 stages (8°, 12°, 16°, 20°)
Tilt angle (transom angle at 12°)	Mechanical tilt type: 3-stage adjustment (20°, 37° and 67°) G Type: Stageless adjustment (64°)
Remote control steering system	_____

Noise and Vibration

MODEL	BF30D
CONTROL SYSTEM	H
Sound Pressure Level At Operator's Ear (98/37/EC, ICOMIA 39-94)	82 dB
Vibration (98/37/EC, ICOMIA 38-94)	3.2 (m/s ²) rms

Honda outboards are power rated in accordance with ISO8665 (propeller shaft output).

SPECIFICATIONS

MODEL		BF30D	
Description Code		BAUJ	
Type		HT	RT
Overall length		720 mm (28.3 in)	640 mm (25.2 in)
Overall width		375 mm (14.8 in)	375 mm (14.8 in)
Overall height	S	1,195 mm (47.0 in)	1,195 mm (47.0 in)
	L	1,320 mm (52.0 in)	1,320 mm (52.0 in)
Transom height	S	431 mm (17.0 in)	431 mm (17.0 in)
	L	552 mm (21.7 in)	552 mm (21.7 in)
Weight	S	82 kg (181 lbs)	77.5 kg (170.9 lbs)
	L	84 kg (185 lbs)	79.5 kg (175.3 lbs)
Rated power		22.1 kW (30 PS)	
Full throttle range		5,000–6,000 min ⁻¹ (rpm)	
Engine type		4 stroke OHC in-line 3 cylinder	
Displacement		552 cm ³ (33.7 cu-in)	
Spark plug gap		0.6–0.7 mm (0.024–0.028 in)	
Starter system		Electric starter	
Ignition system		Digital C.D.I.	
Lubrication system		Trochoid pump pressure lubrication	
Specified oil		Engine: API standard (SG, SH, SJ) SAE 5W-30 Gear case: API standard (GL-4) SAE 90 outboard motor gear oil	
Oil capacity		Engine: Without oil filter replacement: 1.6 l (1.7 US qt, 1.4 Imp qt) With oil filter replacement: 1.7 l (1.8 US qt, 1.5 Imp qt) Gear case: 0.27 l (0.29 US qt, 0.24 Imp qt)	

D.C. output	12V – 10A	
Cooling system	Water cooling with thermostat	
Exhaust system	Water exhaust	
Spark plugs	DR7EA (NGK) , X22ESR-U (DENSO)	
Fuel pump	Diaphragm type fuel pump	
Fuel	Automotive unleaded gasoline (91 research octane, 86 pump octane, or higher)	
Tank capacity	25 l (6.6 US gal, 5.5 Imp gal)	
Gear change	Forward – Neutral – Reverse (dog type)	
Steering angle	40° right and left	
Transom angle	4 stages (8°, 12°, 16°, 20°)	
Tilt angle (transom angle at 12°)	Stageless adjustment (64°)	
Remote control steering system	_____	Motor-mounted

Noise and Vibration

MODEL	BF30D	
CONTROL SYSTEM	H	R
Sound Pressure Level At Operator's Ear (98/37/EC, ICOMIA 39-94)	82 dB	78 dB
Vibration (98/37/EC, ICOMIA 38-94)	3.2 (m/s ²) rms	Not exceed 2.5 (m/s ²) rms

Reference to: ICOMIA Standard: as it specifies the engine operating conditions and measurement conditions.

Honda outboards are power rated in accordance with ISO8665 (propeller shaft output).

16. MAJOR Honda DISTRIBUTOR ADDRESSES IN EUROPE

For further information, please contact Honda Customer Information Centre at the following address or telephone number:

AUSTRIA

**Honda Austria Gesellschaft
Mbh.**

Hondastraße 1
2351 Wiener Neudorf
Tel. : +43 (0)2236 690 0
Fax : +43 (0)2236 690 480
<http://www.honda.at>

BELGIUM

Honda Belgium NV

Wijngaardveld 1
9300 Aalst
Tel. : +32 053/72 51 11
Fax : +32 053/72 53 23
<http://www.honda.be>

BULGARIA

Kirov Ltd.

49 Tsaritsa Yoana Blvd
1324 Sofia
Tel. : +359 2 93 30 892
Fax : +359 2 93 30 814
<http://www.kirov.net>
✉ honda@kirov.net

CANARY ISLANDS

Automocion Canarias, S.A.

Carretera General del Sur, KM. 8,8
38107 Santa Cruz de Tenerife
Tel. : +34 (922) 620 617
Fax : +34 (922) 618 042
<http://www.aucasa.com>
✉ ventas@aucasa.com
✉ taller@aucasa.com

CROATIA

Fred Bobek d.o.o.

Honda-Marine Croatia - Trg. - Ind.
zona bb
22211 Vodice
Tel. : +385 22 44 33 00/33 10
Fax : +385 22 44 05 00
<http://www.honda-marine.hr>

CYPRUS

Alexander Dimitriou & Sons Ltd.

162, Yiannos Kranidiotis
Avenue
2235 Latsia, Nicosia
Tel. : +357 22 715 300
Fax : +357 22 715 400
<http://www.dimitriou.com>

CZECH REPUBLIC

BG Technik cs, a.s

Budenské nábreží 306 - PO Box 93
17004 Praha 7
Tel. : +420 2 838 70 850
Fax : +420 2 667 111 45
<http://www.hondamarine.cz>

DENMARK

Tima Products A/S

Tårnfalkevej 16 - Postboks 511
2650 Hvidovre
Tel. : +45 36 34 25 50
Fax : +45 36 77 16 30
<http://www.tima.dk>

FINLAND

OY Brandt AB.

Tuupakantie 7B
01740 Vantaa
Tel. : +358 207757200
Fax : +358 (0)9 878 5276
<http://www.brandt.fi>

FRANCE

SAFIG/Honda

B.P. 1813
77018 MELUN Cedex - France
Tel. : +33 (0)1 60 56 61 56
Fax : +33 (0)1 60 56 75 31
<http://www.honda.fr>

GERMANY

**Honda Motor Europe (North)
GmbH**

Sprendlinger Landstraße 166
63069 Offenbach am Main
Tel. : +49 (0)69 8300 60
Fax : +49 (0)69 8300 65100
<http://www.honda.de>
✉ info@post.honda.de

GREECE

General Automotive Co S.A.

71, Leoforos Athinon
10173 Athens
Tel. : +30 210 3483582
Fax : +30 210 3418092
<http://www.honda.gr>
✉ info@saracakis.gr

MAJOR Honda DISTRIBUTOR ADDRESSES IN EUROPE

For further information, please contact Honda Customer Information Centre at the following address or telephone number:

HUNGARY

Mo.Tor.Pedo Co., Ltd.
Kamaraerdei út 3
2040 Budaörs
Tel. : +36 23 444 971
Fax : +36 23 444 972
<http://www.hondamarine.hu>
✉ info@hondamarine.hu

IRELAND

Two Wheels Ltd.
Crosslands Business Park -
Ballymount Rd
Dublin 12
Tel. : +353 (0)1 460 2111
Fax : +353 (0)1 456 6539
<http://www.hondaireland.ie>

ITALY

Honda Italia Industriale S.p.A.
Via della Cecchignola, 5/7
00143 Roma
Tel. : +848 846 632
Fax : +39 065 4928 400
<http://www.hondaitalia.com>
✉ info.marine@honda-eu.com

LITHUANIA

JP Motors Ltd
Kubiliaus str. 6
08234 Vilnius
Tel. : +370 5 2765259
Fax : +370 5 2765250
<http://www.hondamarine.lt>

MALTA

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WIRING DIAGRAM

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ABBREVIATIONS

Symbol Part name

Bat	BATTERY
Bz	BUZZER
ChC	CHARGE COIL
ChR	CHARGE RECEPTACLE
CDI U	CDI UNIT
CmP	CAM PULLEY
CNBT	CONNECTOR BRACKET
EmSw	EMERGENCY STOP SWITCH
Fu	FUSE (10 A)
FLW	FLYWHEEL

GND	GROUND
IgC	IGNITION COIL
IgSw	IGNITION SWITCH
LtSw	LIGHTING SWITCH
LTH	LONG TILLER HANDLE
MeHrn	METER HARNESS (OPTIONAL)
MFu	MAIN FUSE (15 A)
MgSw	STARTER MAGNETIC SWITCH
NSw	NEUTRAL SWITCH
OP Sw	OIL PRESSURE SWITCH
PwC	POWER COIL
PIC	PULSER COIL
PL	INDICATOR LIGHT
PTC H	PTC HEATER
PT M	POWER TRIM MOTOR
PT RL	POWER TRIM RELAY
PT Sw	POWER TRIM SWITCH
PT/T Sw	POWER TRIM/TILT SWITCH
RCB	REMOTE CONTROL BOX
Re/Re	REGULATOR/ RECTIFIER
SP	SPARK PLUG
St	STARTER MOTOR

STH	STANDARD TILLER HANDLE
Th Se	THERMOMETER (OVERHEAT)
Tme	TACHOMETER
TRme	TRIM METER
TrA Se	TRIM ANGLE SENSOR

WIRING DIAGRAM

WIRE COLOR CODE

Bl	BLACK
Y	YELLOW
Bu	BLUE
G	GREEN
R	RED
W	WHITE
Br	BROWN
Lb	LIGHT BLUE
Lg	LIGHT GREEN
Gr	GRAY

SWITCH CONNECTIONS

IGNITION SWITCH

	E	IG	BAT	LOAD	ST
COLOR	Bl	Bl/R	W/Bl	Bl/Y	Bl/W
OFF	○	○			
ON			○	○	
START			○	○	○

POWER TRIM/TILT SWITCH

	Lg	W/Bl	Lb
UP	○	○	
NORMAL			
DOWN		○	○

EMERGENCY STOP SWITCH

	Bl/R	Bl
PUSH or LOCK PLATE OFF	○	○
LOCK PLATE SET		

NEUTRAL SWITCH

	Bl/W	Bl/W
NEUTRAL	○	○
GEAR IN		

POWER TILT SWITCH

	Lg	W	Lb
UP	○	○	
NORMAL			
DOWN		○	○

