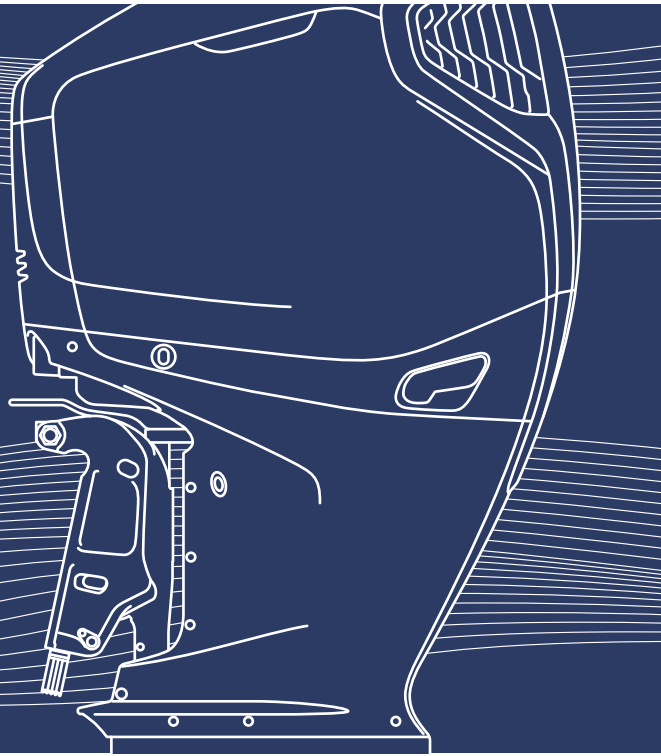
HONDA MARINE

Owner`s Manual

BF350A



Includes US and Canadian Models

⚠ WARNING: ⚠

The engine exhaust from this product contains chemicals known to the State of California to cause cancer, birth defects or other reproductive harm.

Keep this Owner's Manual handy, so you can refer to it at any time. This Owner's Manual is considered a permanent part of the outboard motor and should remain with the outboard motor if resold.

Congratulations on your selection of a Honda outboard motor. We are certain you will be pleased with your purchase of one of the finest outboard motors on the market.

We want to help you get the best results from your new outboard motor and to operate it safely. This manual contains information on how to do that; please read it carefully.

As you read this manual you will find information preceded by a **NOTICE** symbol. That information is intended to help you avoid damage to your outboard motor, other property, or the environment.

We suggest you read the warranty policy to fully understand its coverage and your responsibilities of ownership.

When your outboard motor needs scheduled maintenance, keep in mind that your Honda Marine dealer is specially trained in servicing Honda outboard motors. Your Honda Marine dealer is dedicated to your satisfaction and will be pleased to answer your questions and concerns.

For information regarding the optional equipment, refer to the owner's manual that came with it.

A FEW WORDS ABOUT SAFETY

Your safety and the safety of others are very important. And using this outboard motor safely is an important responsibility.

To help you make informed decisions about safety, we have provided operating procedures and other information on labels and in this manual. This information alerts you to potential hazards that could hurt you or others.

Of course, it is not practical or possible to warn you about all the hazards associated with operating or maintaining an outboard motor. You must use your own good judgment.

You will find important safety information in a variety of forms, including:

- **Safety Labels** – on the outboard motor
- **Safety Messages** – preceded by a safety alert symbol ⚠ and one of three signal words, DANGER, WARNING, or CAUTION.

These signal words mean:

⚠ DANGER You WILL be KILLED or SERIOUSLY HURT if you don't follow instructions.

⚠ WARNING You CAN be KILLED or SERIOUSLY HURT if you don't follow instructions.

⚠ CAUTION You CAN be HURT if you don't follow instructions.

- **Safety Headings** – such as IMPORTANT SAFETY INFORMATION.
- **Safety Section** – such as OUTBOARD MOTOR SAFETY.
- **Instructions** – how to use this outboard motor correctly and safely.

This entire manual is filled with important safety information – please read it carefully.

CONTENTS

CONTENTS

IMPORTANT SAFETY INFORMATION

Honda BF350A outboard motor is designed for use with boats that have a suitable manufacturer's power recommendation. Other uses can result in injury to the operator or damage to the outboard motor and other property.

Most injuries or property damage can be prevented if you follow all instructions in this manual and on the outboard motor. The most common hazards are discussed in this chapter, along with the best way to protect yourself and others.

Operator Responsibility

- It is the operator's responsibility to provide the necessary safeguards to protect people and property. Know how to stop the engine quickly in case of emergency. Understand the use of all controls.
- Stop the engine immediately if anyone falls overboard, and do not run the engine while the boat is near anyone in the water.
- Always stop the engine if you must leave the controls for any reason.
- Attach the emergency stop switch lanyard securely to the operator.
- Always wear a PFD (Personal Flotation Device) while on the boat.
- Familiarize yourself with all laws and regulations relating to boating and the use of outboard motors.
- Be sure that anyone who operates the outboard motor receives proper instruction.
- Be sure the outboard motor is properly mounted on the boat.
- Do not remove the engine cover while the engine is running.

Refuel With Care

- Gasoline is extremely flammable, and gasoline vapor can explode. Refuel outdoors, in a well-ventilated area, with the engine stopped. Never smoke near gasoline, and keep other flames and sparks away.
- Refuel carefully to avoid spilling fuel. Avoid overfilling the fuel tank.
- After refueling, tighten the filler cap securely. If any fuel is spilled, make sure the area is dry before starting the engine.

Carbon Monoxide Hazard

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

If you run the engine in an area that is confined, or even partly enclosed, the air you breathe could contain a dangerous amount of exhaust gas.

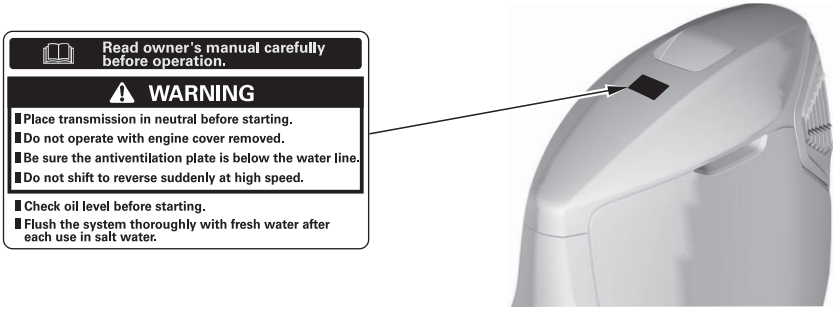
Never run your outboard inside a garage or other enclosure.

⚠ WARNING

Running the engine of your outboard while in an enclosed or partially enclosed area can cause a rapid build-up of toxic carbon monoxide gas.
Breathing this colorless, odorless gas can quickly cause unconsciousness and lead to death.
Only run your outboard engine when it is located in a well-ventilated area outdoors.

SAFETY LABEL LOCATION

US, Puerto Rico, and US Virgin Islands Types



The labels shown here contain important safety information. Please read them carefully. These labels are considered permanent parts of your outboard motor.
If a label comes off or becomes hard to read, contact an authorized Honda Marine dealer for a replacement.

Canadian Types

READ OWNER'S MANUAL

The labels shown here contain important safety information. Please read them carefully. These labels are considered permanent parts of your outboard motor.
If a label comes off or becomes hard to read, contact an authorized Honda Marine dealer for a replacement.

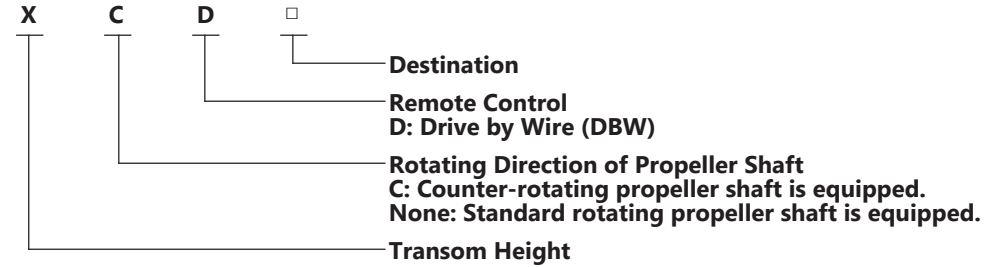
Honda outboard motors are designed to give safe and dependable service if operated according to instructions. Read and understand the Owner's Manual before operating the outboard motor. Failure to do so could result in personal injury or equipment damage.

CONTROL AND FEATURE IDENTIFICATION CODES

Model		BF350A			
Type		XD□	UD□	XCD□	UCD□
Transom Height	25.1 in (638 mm)	●		●	
	30.1 in (765 mm)		●		●
Standard Rotating Propeller Shaft		●	●		
Counter-Rotating Propeller Shaft				●	●

Refer to this chart for an explanation of the Type Codes used in this manual to identify control and feature applications.
For the detailed equipment conditions of optional components, consult your Honda dealer.

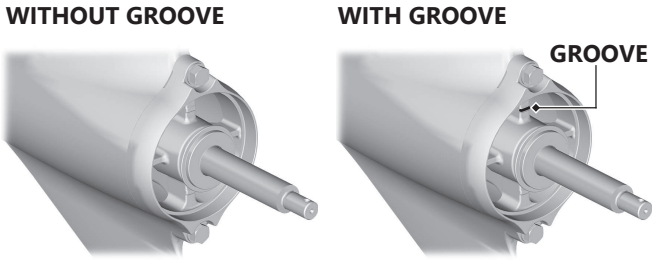
TYPE CODE (example)



HOW TO DETERMINE WHICH DIRECTION THE PROPELLER SHAFT ROTATES

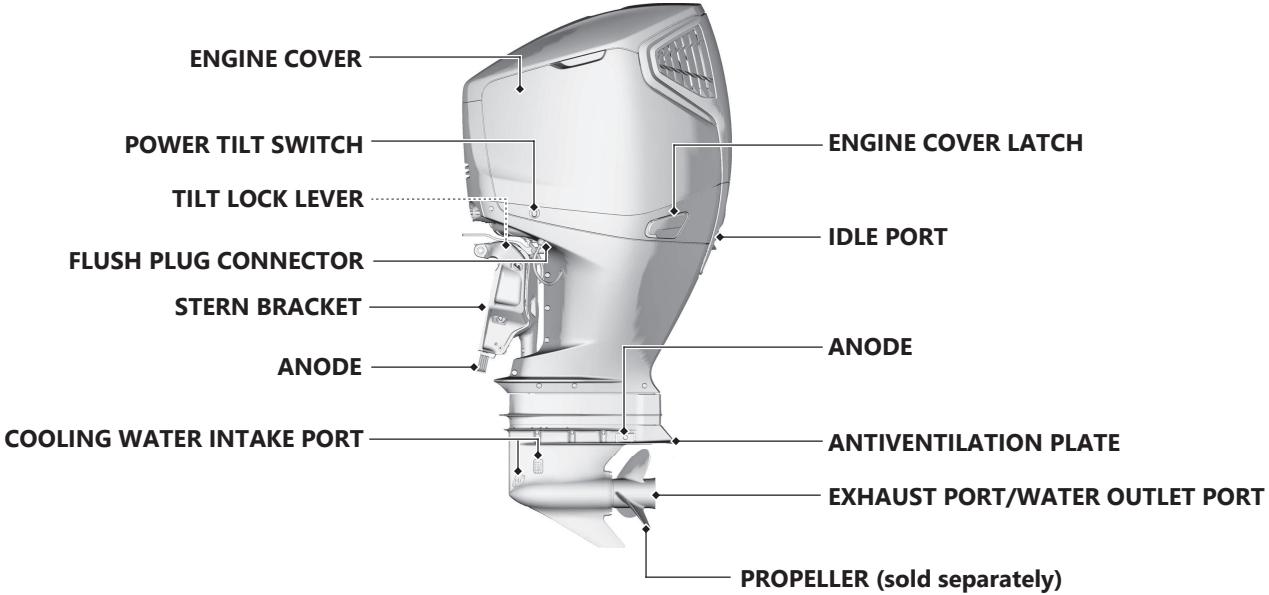
The direction the propeller shaft rotates can be determined based on whether or not the propeller shaft holder has a groove.

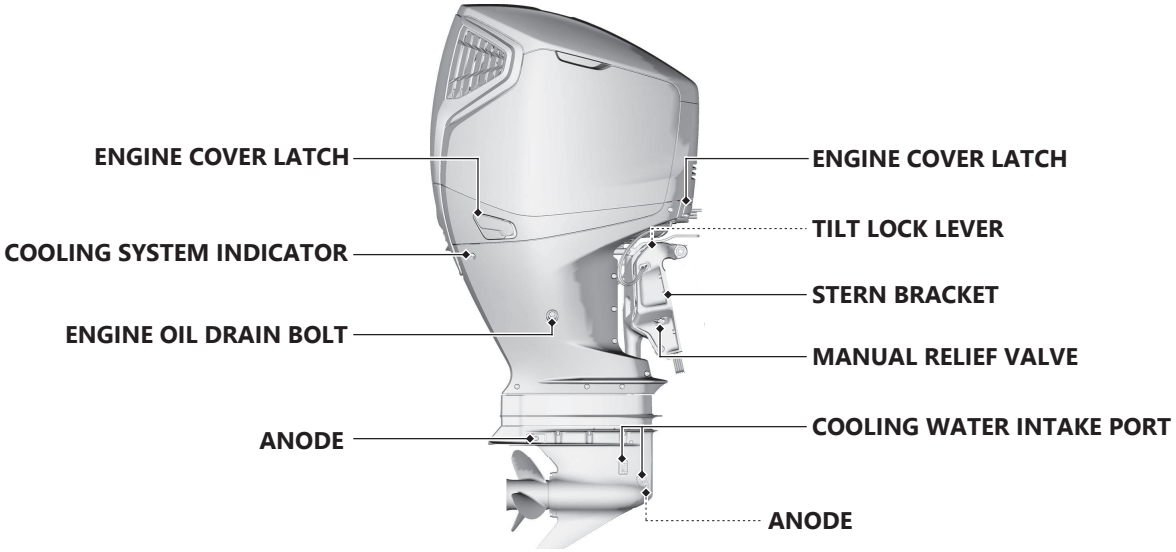
- With groove: Counter-rotating
- Without groove: Standard rotating

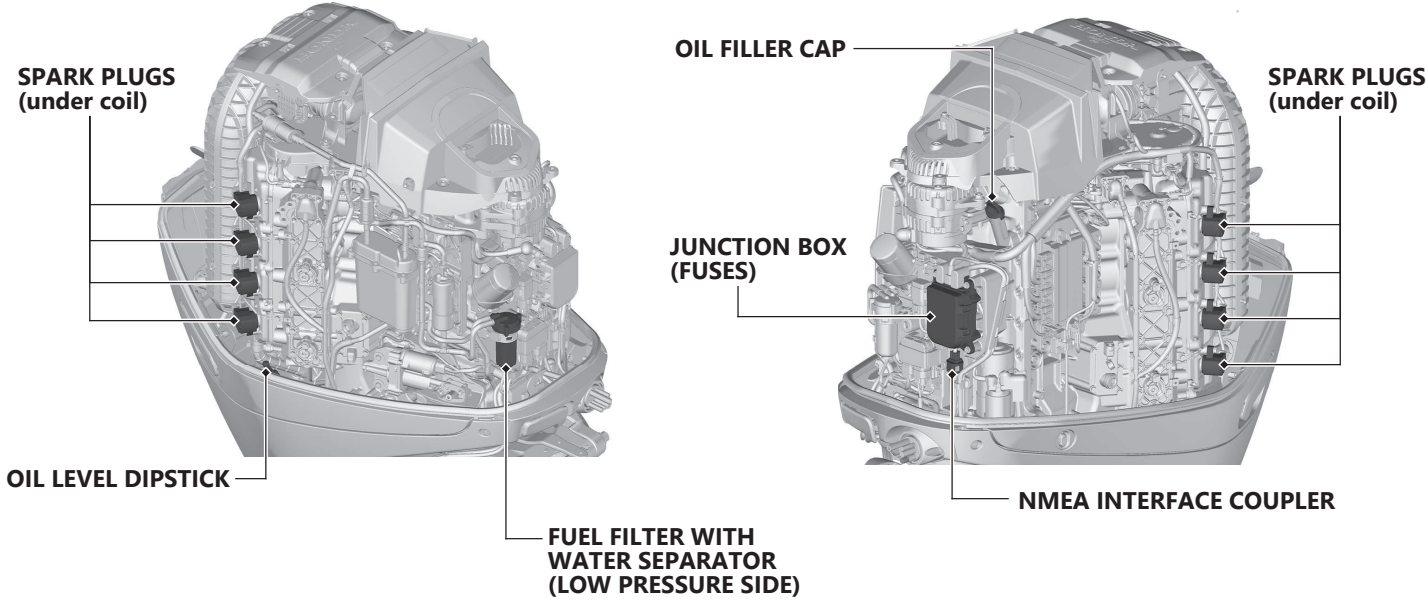


COMPONENT AND CONTROL LOCATIONS

Outboard Motor



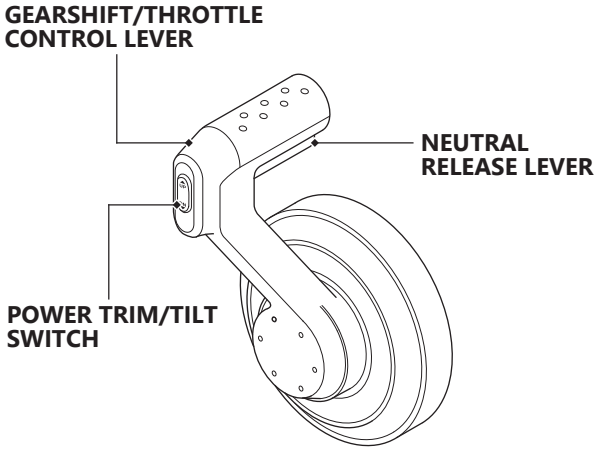

ENGINE COVER LATCH
COOLING SYSTEM INDICATOR
ENGINE OIL DRAIN BOLT
ANODE
ENGINE COVER LATCH
TILT LOCK LEVER
STERN BRACKET
MANUAL RELIEF VALVE
COOLING WATER INTAKE PORT
ANODE



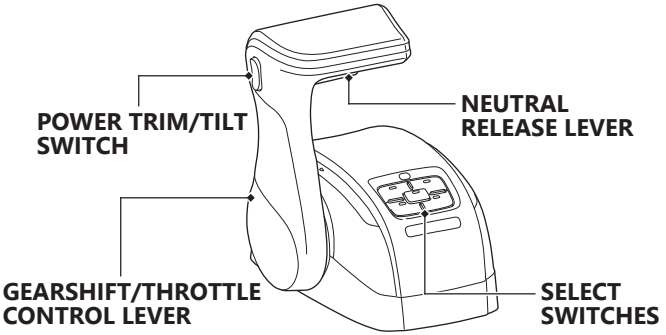
*** The figure above shows the engine with the front striker cover and the rear striker cover removed.**

Remote Control Box (optional equipment)

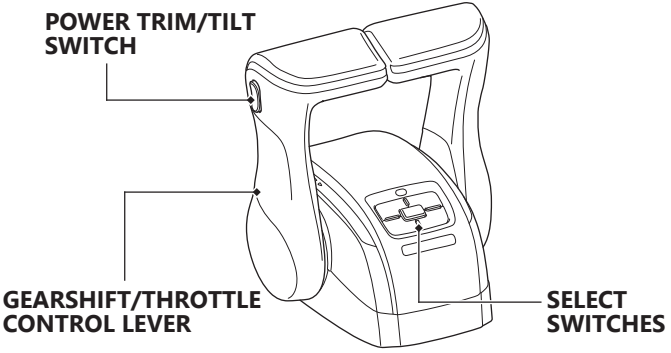
FLUSH-MOUNT REMOTE CONTROL



SINGLE TOP-MOUNT REMOTE CONTROL

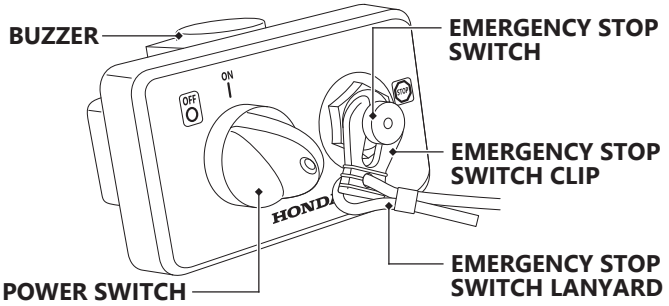


DUAL TOP-MOUNT REMOTE CONTROL



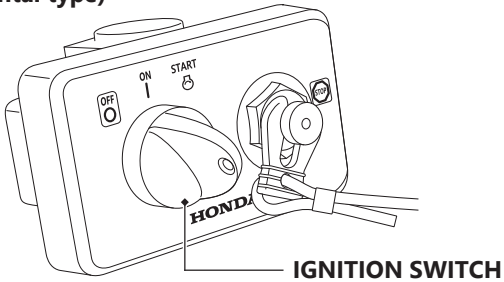
Key Switch Panel (optional equipment)

Normal Key with START/STOP switch type



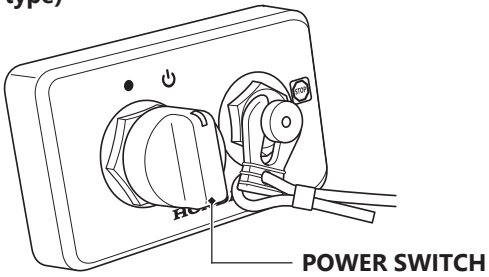
Normal Key without START/STOP switch type

(Horizontal type)



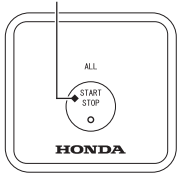
Honda Smart Key type

(Horizontal type)



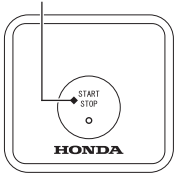
START/STOP Switch Panel (optional equipment)

START/STOP SWITCH



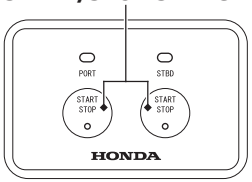
ALL ENGINE START FOR MULTIPLE OUTBOARD MOTORS

START/STOP SWITCH



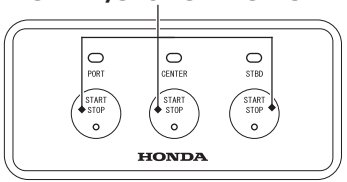
SINGLE TYPE OUTBOARD MOTOR

START/STOP SWITCHES



DUAL TYPE OUTBOARD MOTOR

START/STOP SWITCHES

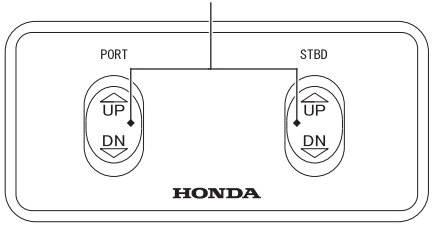


TRIPLE TYPE OUTBOARD MOTOR

PORT: Port side engine
CENTER: Center engine
STBD: Starboard side engine

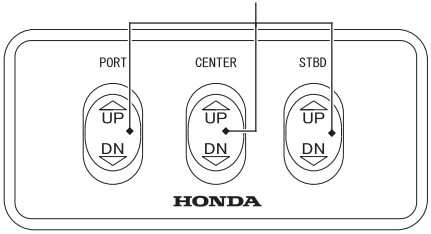
PTT Switch Panel (optional equipment)

POWER TRIM/TILT SWITCHES



DUAL TYPE

POWER TRIM/TILT SWITCHES

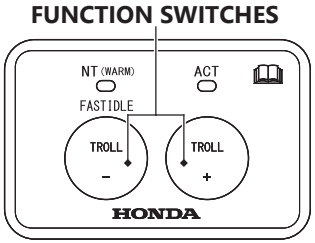


TRIPLE TYPE

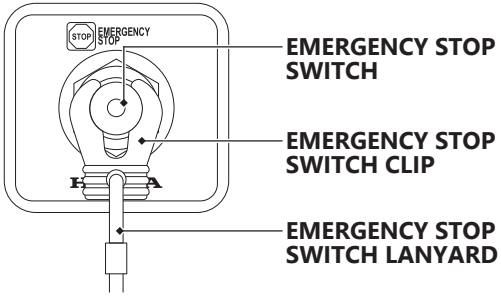
PORT: Port side engine
CENTER: Center engine
STBD: Starboard side engine

Function Switch Panel (optional equipment)

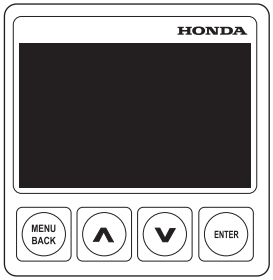
(for FLUSH-MOUNT type)



Emergency Stop Switch Panel (optional equipment)

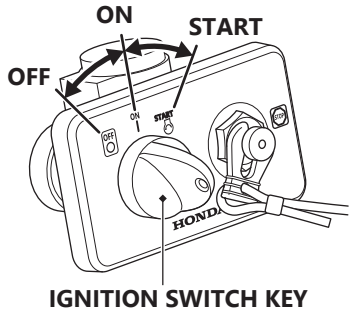


Multi-function Display (optional equipment)



CONTROLS

Ignition Switch (without START/STOP switch)



The ignition switch controls the ignition system and the starter motor.

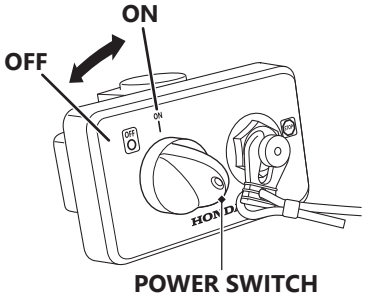
Turning the ignition switch key to the START position starts the engine. The key automatically returns to the ON position when released from the START position.

The engine will not start unless the gearshift/throttle control lever is in the NEUTRAL position (P.58) and the emergency stop switch clip is in the emergency stop switch.

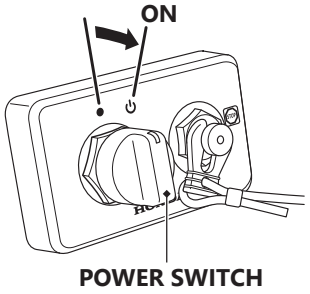
Turning the ignition switch to the OFF position stops the engine.

Power Switch (with START/STOP switch)

(Normal key type)



(Honda Smart Key type)



This remote control is equipped with a start/stop switch.

Normal Key Type

- ON: This position allows the engine to start and run.
- OFF: This position stops the engine (Ignition OFF).

Honda Smart Key Type

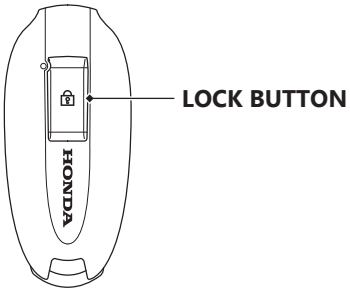
Turn the power switch clockwise and then release to turn the power ON. Turn and release the power switch again to turn the power OFF.

NOTICE

Turn the power off after the engine is stopped. If the power is not turned off after the engine is stopped, the battery will continue to drain until it is depleted.

For the Honda Smart Key type, electric power cannot be supplied to the boat unless the Smart Key and remote control are properly paired (authenticated).

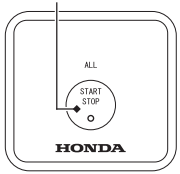
Honda Smart Key (optional equipment)



The Honda Smart Key has an immobilizer system. The immobilizer system helps to protect against boat theft. Refer to the Honda Smart Key Owner's Manual for complete information on the Smart Key system.
The Honda Smart Key is available in certain areas.

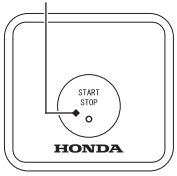
START/STOP Switch

START/STOP SWITCH



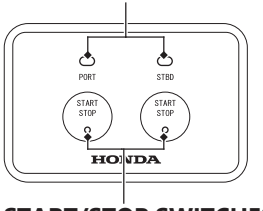
ALL ENGINE START/STOP FOR MULTIPLE OUTBOARD MOTORS

START/STOP SWITCH



SINGLE TYPE OUTBOARD MOTOR

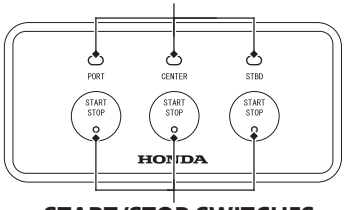
INDICATORS



START/STOP SWITCHES

DUAL TYPE (quad-type) OUTBOARD MOTOR

INDICATORS



START/STOP SWITCHES

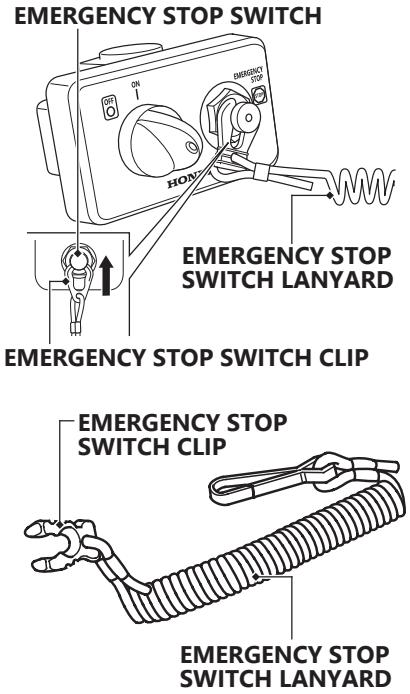
TRIPLE TYPE OUTBOARD MOTOR

To start the engine, be sure the power switch is in the ON position, and then press the start/stop switch button.

For boats with multiple outboard motors and equipped with the ALL ENGINE START/STOP switch, all motors can be started at the same time at the press of one button.
For boats equipped with multiple outboard motors and either the dual type or triple type start/stop switches, each outboard on the boat may be started individually and the corresponding indicator light will turn on after the engine has started.

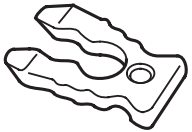
The starter motor will not work unless the gearshift/throttle control lever is in the NEUTRAL position, and the clip is in the emergency stop switch.

Emergency Stop Switch Clip and Emergency Stop Switch



The emergency stop switch clip must be inserted in the emergency stop switch in order for the engine to start and run. The emergency stop switch lanyard must be attached securely to the operator or to the operator's PFD (Personal Flotation Device).

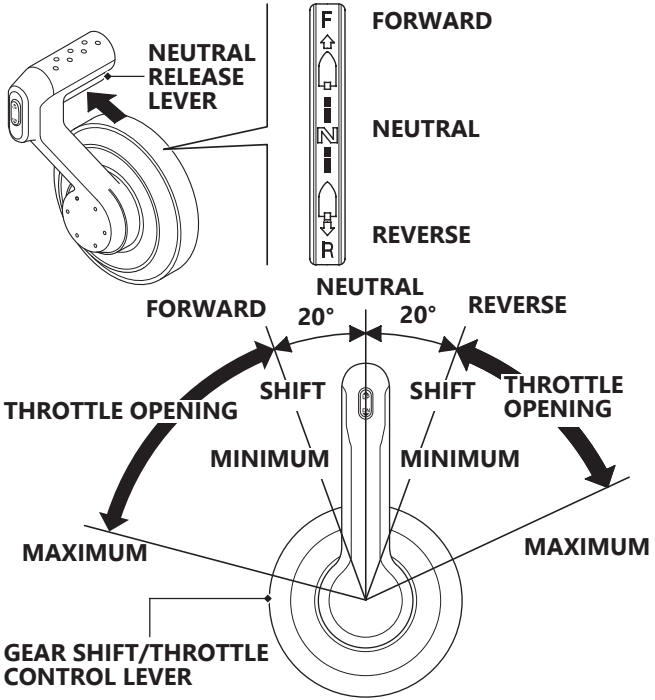
When used as described, the emergency stop switch clip and emergency stop switch lanyard system stops the engine if the operator falls away from the controls.



SPARE SWITCH CLIP (optional equipment)

A spare switch clip should be stored near the controls in case the operator and primary switch clip falls overboard and a passenger needs to pilot the boat during an emergency situation.

Gearshift/Throttle Control Lever (Flush-Mount type)



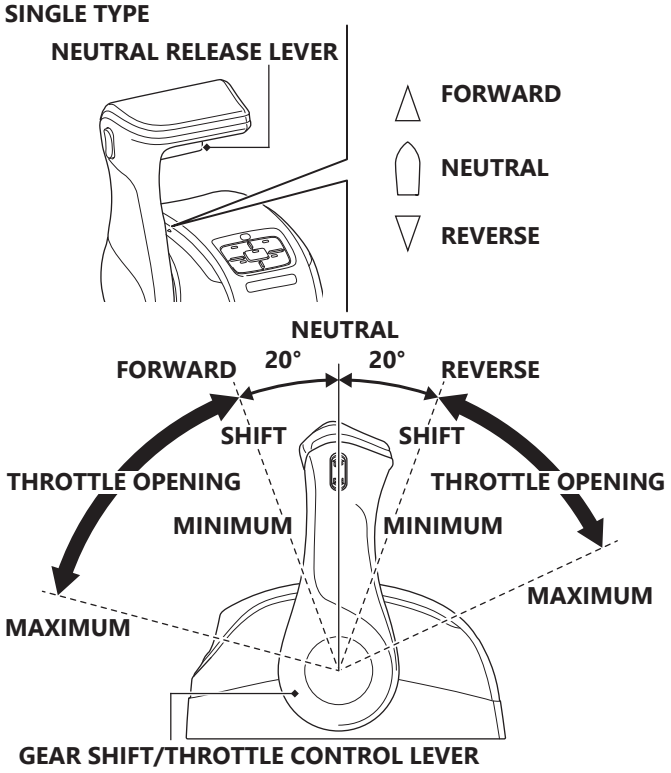
You can use the gearshift/throttle control lever to shift gear into forward, reverse, or neutral, and to adjust the engine speed.
It is necessary to pull up the neutral release lever to operate the gearshift/throttle control lever.

FORWARD:
Moving the lever to the FORWARD position (approximately 20° 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's forward speed.

NEUTRAL:
Engine power is cut off from the propeller.

REVERSE:
Moving the lever to the REVERSE position (approximately 20° 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's reverse speed.

Gearshift/Throttle Control Lever (Top-Mount type)



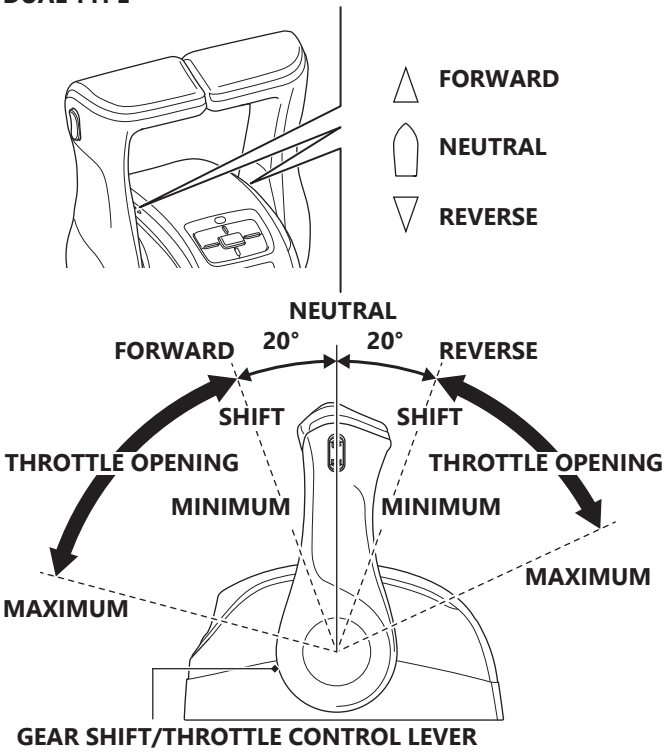
You can use the gearshift/throttle control lever to shift gear into forward, reverse, or neutral, and to adjust the engine speed.

FORWARD:
Moving the lever to the FORWARD position (approximately 20° 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's forward speed.

NEUTRAL:
Engine power is cut off from the propeller.

REVERSE:
Moving the lever to the REVERSE position (approximately 20° 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's reverse speed.

DUAL TYPE



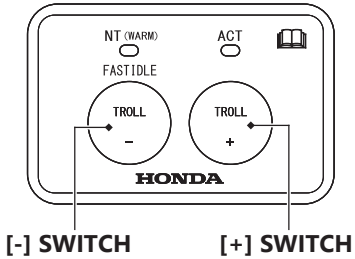
You can use the gearshift/throttle control lever to shift gear into forward, reverse, or neutral, and to adjust the engine speed.

FORWARD:
Moving the lever to the FORWARD position (approximately 20° 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's forward speed.

NEUTRAL:
Engine power is cut off from the propeller.

REVERSE:
Moving the lever to the REVERSE position (approximately 20° 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's reverse speed.

Function Switches (Flush-Mount type)



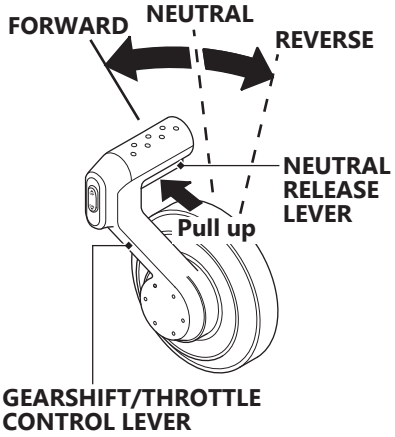
Function switches are used for operations in the fast idle mode and trolling mode.

NT (WARM)
- Lights: The gearshift is in neutral.
- Blinks: It is in the fast idle mode.

ACT
- Lights: The gearshift and throttle operations are possible.
- Off: The gearshift and throttle operations are not possible.

Fast Idle Mode

The BF350A model uses programmed fuel injection, so this mode will not be needed for starting.
After the engine starts and if the outside temperature is below 41°F (5°C), the fast idle mode can be used to accelerate engine warm-up.
See page 60 for engine warm-up instructions.

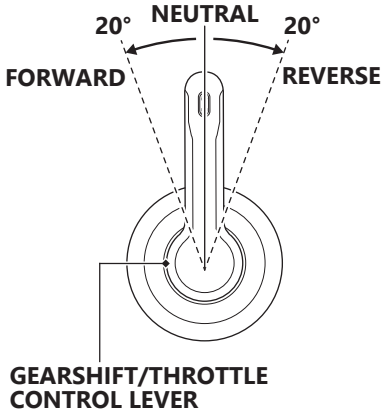


Use the [-] switch and the gearshift/throttle control lever to adjust the engine speed without the gearshift when warming up the engine.

Keeping the [-] switch pressed when the gearshift/throttle control lever is in the NEUTRAL position, turn the lever forward. Keep turning the lever forward. The throttle opens and the engine speed increases after the lever passes the shift point.
Note that the gearshift mechanism does not function when the [-] switch is pushed once and then released after the gearshift/throttle control lever is moved.
The control lever does not operate unless the neutral release lever is pulled.
To release the fast idle mode, press and hold the [-] switch with the gearshift/throttle control lever in the NEUTRAL position.

Trolling Mode

After the engine warms up, when the gearshift/throttle control lever is tilted from the NEUTRAL position to the FORWARD or REVERSE side by about 20° and the [+] switch is pressed and held, the mode changes to trolling mode.



Engine speed adjusting range:
650 rpm – 1,000 rpm (every 50 rpm)

When in trolling mode, trolling mode is not released even if you put the gearshift/throttle control lever in the NEUTRAL position. By shifting from NEUTRAL to FORWARD or REVERSE again, the boat will cruise at the set engine speed.

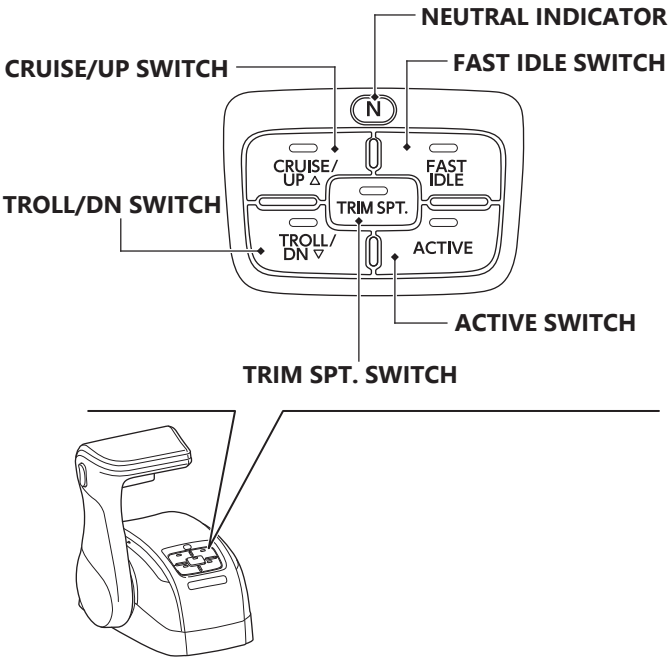
⚠ CAUTION

While in trolling mode, be careful when shifting the gearshift/throttle control lever from the NEUTRAL position to the FORWARD or REVERSE position. Operating the gearshift/throttle control lever while trolling mode is ON creates a risk of collision or injury due to an unexpected sudden start, which is caused by the engine starting to cruise at the speed set for trolling mode, not by how far the throttle is opened.

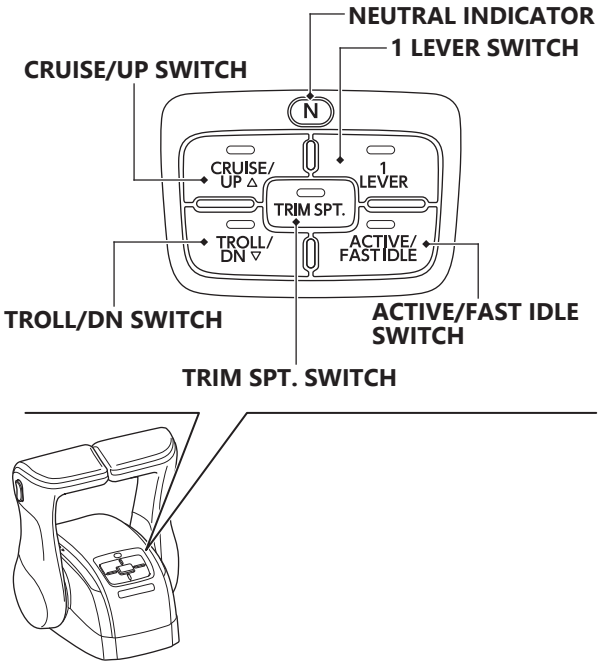
- If the engine is not finished warming up, it cannot go into trolling mode. So, warm up the engine (P. 60).
- You can force the release of trolling mode by using the gearshift/throttle control lever to increase the engine speed to 3,000 rpm or higher.
- To release the trolling mode, press and hold the [+] switch.

Select Switches (Top-Mount type)

SINGLE TYPE



DUAL TYPE



Select switches are used for operations in the fast idle mode, trolling control mode, one-lever mode, active mode, cruise control mode and trim support mode.

Indicators on select switches

Indicator	On	Flashing	Off
NEUTRAL	The gearshift/throttle control lever is in the NEUTRAL position	-	The gearshift/throttle control lever is in the FORWARD or REVERSE position
CRUISE/UP	Cruise control mode is on	Cruise control mode is paused	Cruise control mode is off
TROLL/DN	Trolling control mode is on	Trolling control mode is paused	Trolling control mode is off
TRIM SPT.	Trim support mode is on	Trim support mode is paused	Trim support mode is off
FAST IDLE	-	Fast idle mode is on	Fast idle mode is off
ACTIVE	Active mode is on	-	Active mode is off
1 LEVER	One-lever mode is on	-	One-lever mode is off
ACTIVE/FAST IDLE	Active mode is on And Fast idle mode is off	Active mode is on And Fast idle mode is on	Active mode is off And Fast idle mode is off

ACTIVE Switch, ACTIVE/FAST IDLE Switch

For multiple station type, use the ACTIVE switch or ACTIVE/FAST IDLE switch to change the operating remote control (active mode).

If you press the ACTIVE switch or ACTIVE/FAST IDLE switch on the remote control you want to operate the outboard motors when all gearshift/throttle control levers are in the NEUTRAL position, the mode changes to active mode.

FAST IDLE Switch, ACTIVE/FAST IDLE Switch

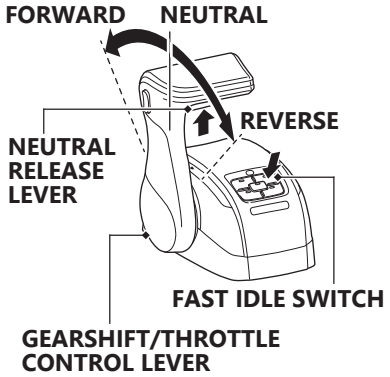
If you press the FAST IDLE switch or ACTIVE/FAST IDLE switch on the remote control in active mode when the gearshift/throttle control levers are in the NEUTRAL position, the mode changes to the fast idle mode. You can adjust the engine speed by lowering the gearshift/throttle control lever to the FORWARD or REVERSE side. In the case of dual top-mount remote control, the mode changes to the fast idle mode only for an engine whose gearshift/throttle control levers are in the NEUTRAL position.

The BF350A model uses programmed fuel injection, so this mode will not be needed for starting. After the engine starts and if the outside temperature is below 41°F (5°C), the fast idle mode can be used to accelerate engine warm-up.

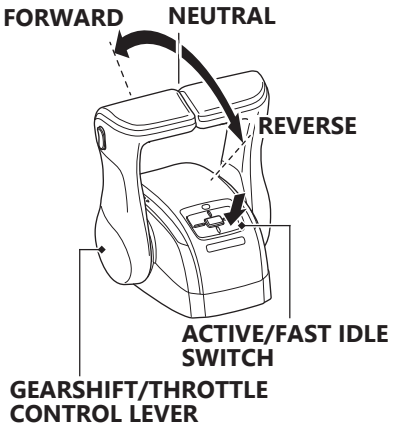
- You cannot turn on the fast idle mode without putting the gearshift/throttle control lever in the NEUTRAL position.
- If remote controls are mounted at two places, changing of fast idle mode can be done only with the remote control that is in active mode (P.32).
- To release the fast idle mode, press the FAST IDLE switch or ACTIVE/FAST IDLE switch with all the gearshift/throttle control levers put in the NEUTRAL position.

- When fast idle mode is released, a short buzz sounds twice.

SINGLE TYPE

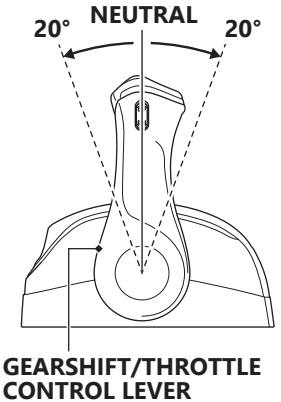


DUAL TYPE



TROLL/DN Switch

After the engine warms up, when the gearshift/throttle control levers are tilted from the NEUTRAL position to the FORWARD or REVERSE side by about 20° and the TROLL/DN switch of the remote control is pressed, the mode changes to trolling control mode.



The engine speed can be adjusted with the CRUISE/UP switch and TROLL/DN switch when in trolling control mode. After the mode changes to the trolling mode, the engine speed is 650 rpm.

Engine speed adjusting range:
650 rpm to 1,000 rpm (in steps of 50 rpm)

When in trolling control mode, trolling control mode is not released even if you put the gearshift/throttle control lever in the NEUTRAL position. By shifting from NEUTRAL to FORWARD or REVERSE again, the boat will cruise at the set engine speed.

⚠ CAUTION

While in trolling control mode, check whether the mode indicator is ON/OFF before shifting the gearshift/throttle control lever from the NEUTRAL position to the FORWARD or REVERSE position. Operating the gearshift/throttle control lever while trolling control mode is ON creates a risk of collision or injury due to an unexpected sudden start, which is caused by the engine starting to cruise at the speed set for trolling control mode, not by how far the throttle is opened.

- If the engine is not finished warming up, it cannot go into trolling mode. So, warm up the engine (P. 60).
- If remote controls are mounted at two places, the changing of trolling control mode can be done only with the remote control that is in active mode (P.61).
- You can force the release of trolling control mode by using the gearshift/throttle control lever to increase the engine speed to 3,000 rpm or higher.
- To release the trolling control mode, press and hold the TROLL/DN switch.
- When the trolling control mode is released, a short buzz sounds twice.

1 LEVER Switch (For multiple outboard motors type)

Shifting gear and the engine speed adjustment of all the outboard motors can be performed with one gearshift/throttle control lever when in one-lever mode.

If you press the 1 LEVER switch on the remote control in active mode when all gearshift/throttle control levers are in the NEUTRAL position, the mode changes to one-lever mode.

- If remote controls are mounted at two places, the changing of one-lever mode can be done only with the remote control that is in active mode (P.32).
- To release one-lever mode, press and hold the 1 LEVER switch with the gearshift/throttle control lever in the NEUTRAL position.
- When one-lever mode is released, a short buzz sounds twice.
- To use one-lever mode the next time you are boating, turn the engine switch or the power switch off while in one-lever mode so that the next time you go boating the one-lever mode will be on.

CRUISE/UP Switch

If you press the CRUISE/UP switch during cruising with all the gearshift/throttle control levers in the FORWARD position, the mode changes to the cruise control mode, which lets the boat cruise at a constant engine speed or velocity.

- Speed can only be adjusted in cruise control mode when equipped with GPS.

NOTICE

- Operations may be inconsistent, depending on the GPS that you are using. Consult your dealer for more information about GPS.

In the cruise control mode, pressing the CRUISE/UP switch increases the engine speed or velocity and pressing the TROLL/DN switch decreases it.

Engine speed adjusting range:
Engine speed at mode change ± 500 rpm (in steps of 50 rpm)

Velocity adjusting range:
- Velocity at mode change ±10 km/h (in steps of 1.0 km/h)
- Velocity at mode change ±5 miles/h (in steps of 0.5 miles/h)
- Velocity at mode change ±5 knots (in steps of 0.5 knots)

- To select whether to adjust the engine speed or velocity in the cruise control mode, use a multi-function display.
- If remote controls are mounted at two places, the changing of cruise control mode can be done only with the remote control that is in active mode (P.32).
- The mode does not change to the cruise control mode in the following cases.
  - GPS has not been started (Velocity adjustment is selected in the multi-function display)
  - The trolling control mode is on
  - In the case of multiple outboard engines, when even one of the outboard engines has stopped
- The cruise control mode is stopped temporarily if you make a turn or turn the boat continuously.
- To release the cruise control mode, press and hold the CRUISE/UP switch.
- When the cruise control mode is released, a short buzz sounds twice.
- The cruise control mode is released forcibly in the following cases.
  - GPS error or disconnection (Velocity adjustment is selected in the multi-function display)
  - Engine stops or engine is abnormal (overheating, low oil pressure, etc.)
  - If the engine RPM or speed is unstable

- Operate the gearshift/throttle control lever a certain amount from the position for changing modes.*

* Operation of a certain amount
- If you put the engine speed at 3,000 rpm, switch to cruise control mode, and use the CRUISE/UP switch to adjust to 3,500 rpm
  - The mode is forcibly released by operating the gearshift/throttle control lever to the FORWARD side to increase the engine speed to 3,500 rpm or more.
  - The mode is forcibly released immediately if the gearshift/throttle control lever is operated to the REVERSE side.
- If you put the engine speed at 3,000 rpm, switch to cruise control mode, and use the TROLL/DN switch to adjust to 2,500 rpm
  - When the gearshift/throttle control lever is operated to the REVERSE side and the engine speed exceeds 2,500 rpm, the mode is forcibly released.
  - The mode is forcibly released immediately if the gearshift/throttle control lever is operated to the FORWARD side.
- The mode is forcibly released immediately by putting the gearshift/throttle control lever in NEUTRAL.

TRIM SPT. Switch

Pressing the TRIM SPT. switch changes the mode to the trim support mode, which automatically does trim operations according to the speed or engine RPM.
The conditions that control the trim operation (engine RPM and speed) and the trim angle pattern are set in the multi-function display.

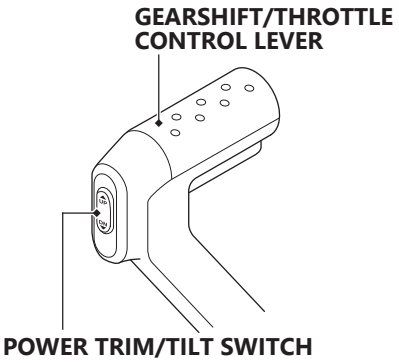
For information about how to use the power trim/tilt switch, see page 38.
- If remote controls are mounted at two places, the changing of trim support mode can be done only with the remote control that is in active mode (P.32).

- To release the trim support mode, press the TRIM SPT. switch.
- When trim support mode is released, a short buzz sounds twice.

COMMON CONTROLS

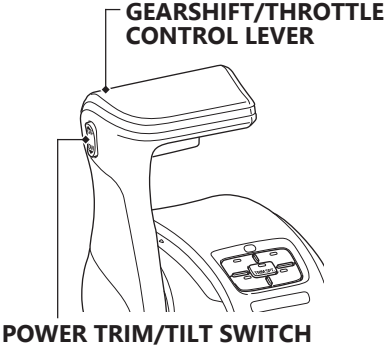
Power Trim/Tilt Switch

(Flush-mount type)

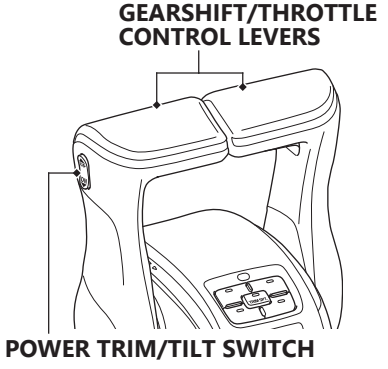


(Top-mount type)

SINGLE TYPE



DUAL TYPE



The power trim/tilt switch is located on the gearshift/throttle control lever. It is a rocker switch with UP and DN (down) positions for changing the angle of the outboard motor.

You can use the power trim/tilt switch anytime whether the boat is underway, stopped, or the ignition switch is in the OFF position.

Trim the outboard motor to obtain the best performance and stability (P.69).

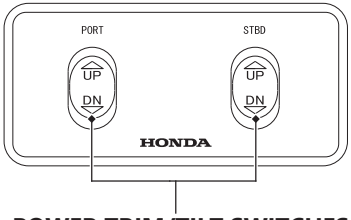
Tilt the outboard motor for shallow water operation, beaching, launching, or mooring.

For multiple outboard motors, tilt them up at the same time.

PTT Switch Panel

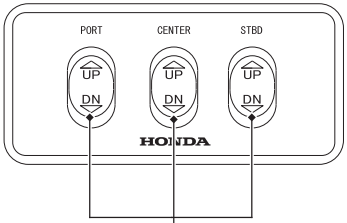
POWER TRIM/TILT SWITCH PANEL

DUAL TYPE



POWER TRIM/TILT SWITCHES

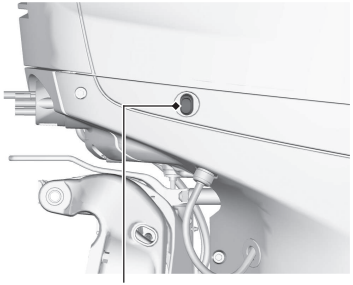
TRIPLE TYPE



POWER TRIM/TILT SWITCHES

For multiple outboard motors, the trim/tilt angle of all outboard motors is adjusted at the same time by using the power trim/tilt switch on the gearshift/throttle control lever and the trim/tilt angle of each outboard motor is adjusted by using each power trim/tilt switch on the panel.

Power Tilt Switch



POWER TILT SWITCH

The power tilt switch is located on the engine pan. It is a rocker switch with UP and DN (down) positions for changing the angle of the outboard motor.

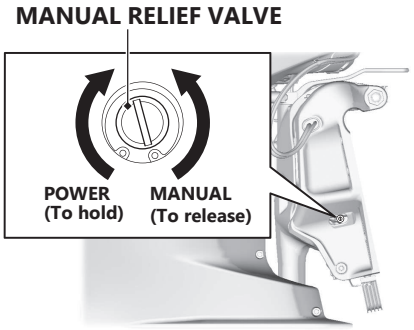
The power tilt switch operates without turning the ignition switch ON.

This switch is used, while the engine is stopped, to raise the outboard motor for mooring, trailering, or maintenance.

⚠ CAUTION

Do not operate the power tilt switch on the outboard motor while cruising. You can lose control of your balance, fall, and be injured by the moving outboard, propeller, or boat. Always use the power trim/tilt switch while under way.

Manual Relief Valve



The outboard motor can be tilted manually after opening the manual relief valve. This allows the outboard motor to be tilted up or down when no battery is connected.

⚠ DANGER

Check that nobody is under the outboard motor before opening the manual relief valve. If the manual relief valve is loosened (turned counterclockwise) when the outboard motor is tilted up, the outboard motor will suddenly tilt down.

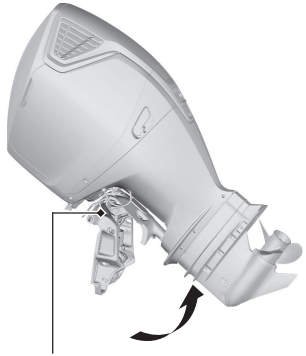
⚠ CAUTION

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

NOTICE

- If there is not enough clearance between the bottom of the outboard and the ground, the outboard may strike the ground and be damaged if the manual relief valve is opened.

Tilt Lock Lever



TILT LOCK LEVER (each side)

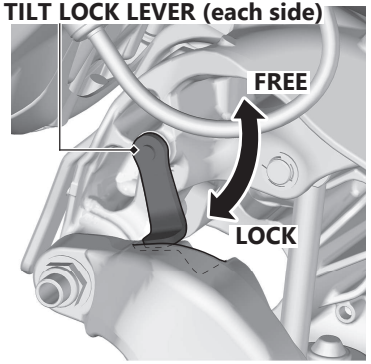
The tilt lock levers are used to support the outboard motor in the fully-raised position (P.78).

When the boat is to be moored for a long time, tilt the outboard motor up as far as it will go. Then move the tilt lock levers to the LOCK position, and gently lower the outboard motor until the lever contacts the stern bracket.

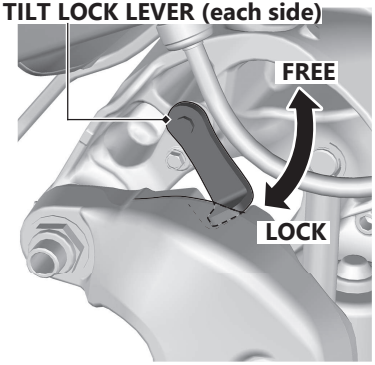
NOTICE

- Before tilting it up, leave the outboard motor in the running position for one minute after stopping the engine to drain the water from inside the engine.
- Be careful that while the outboard motor is tilted up that it does not collide with the pier or other boats.

When tilted up to 65°



When tilted up to 55°



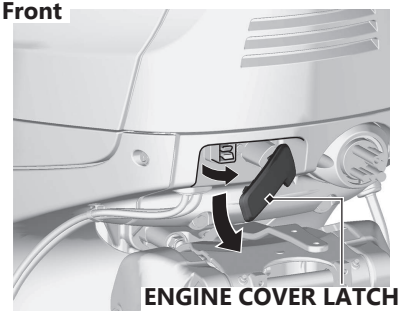
The tilt lock levers of the BF350A can lock the outboard motor at two tilt angles of 65° or 55°.
If it is not possible to tilt up to 65°, due to the hull, lock the outboard motor at 55°.

⚠ CAUTION

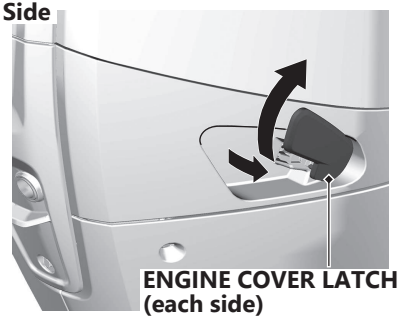
If you do not secure the outboard motor with the tilt lock levers after you tilt up the outboard motor by 55° or 65° or more, then the hydraulic pressure of the power trim/tilt may drop and cause the outboard motor to tilt down.

Engine Cover Latches

Front



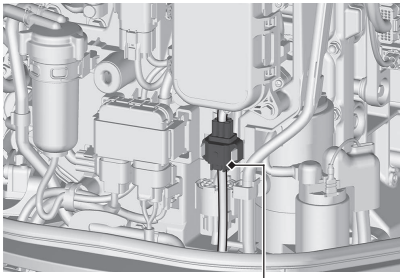
Side



The engine cover latches fasten the engine cover to the outboard motor.

NMEA Interface Coupler

The NMEA2000® interface coupler connects the outboard motor to the boat's NMEA2000® network through an interface cable and transmits information such as engine information and warnings to the control panel and gauges. Contact your dealer for more information.



Operating Hour Notification System

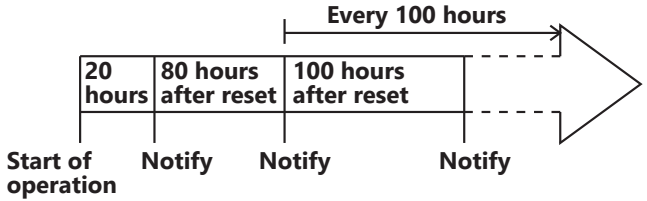
This outboard motor engine counts the number of operating hours since the last periodic maintenance. When the next periodic maintenance is due, the engine notifies the NMEA2000 network, and a maintenance indication is displayed on an NMEA2000-compatible device.

After periodic maintenance is performed, reset the hour counter by:

1. Turn ON the power switch or ignition switch. (The buzzer will sound twice.)
2. Wait at least 1 second and then shift to the FORWARD or REVERSE gear with the gearshift/throttle control lever of the outboard motor.
3. Turn OFF the power switch or ignition switch.
4. Turn ON the power switch or ignition switch. (The buzzer will sound twice.)
5. Insert and remove the emergency stop switch clip five times within 20 seconds.
   - When reset, the buzzer will sound once.
6. Set the gearshift/throttle control lever in the NEUTRAL position.
7. Turn OFF the power switch or ignition switch.

Periodic maintenance is required when either the operating hours or the time since last maintenance reaches the prescribed limit. Therefore, periodic maintenance may be required based on the number of months since the last maintenance before the alert based on engine operating hours appeared (see MAINTENANCE SCHEDULE on page 88). Reset the hour counter whenever maintenance is performed, whether based on the time interval or the number of operating hours.

Operating hour notification timing



Periodic maintenance display

- Notification about periodic maintenance is displayed on the multi-function display when the power switch or the engine switch is turned on.
- The notification for periodic maintenance remains displayed after the engine is started.
- The display disappears when the gearshift/throttle control lever is put in the FORWARD or REVERSE position.

NMEA2000-compatible display:

- Follow the instructions on the display.
- If the display allows selection of notification to be preset, select "Notify" (or equivalent).
- Turn on the power supply to the display before turning on the ignition switch of the outboard motor.
- The indication may differ, depending on the type of display.

When "Periodic Maintenance" is indicated:

1. Have the periodic maintenance performed without delay after returning to port.
2. Reset the hour counter. If not reset, the maintenance indication will remain in the display, and the hour count until the next maintenance will be in error.

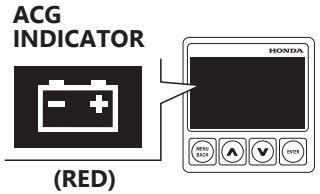
When the periodic maintenance is conducted before "Periodic Maintenance" is indicated, reset the hour counter. If not reset, the hour count until the next maintenance will be in error.

INDICATORS

Check the indicators displayed on the multi-function display. For information about NMEA2000-compatible device displays, refer to the display device's manual.

Alternator (ACG) Indicator

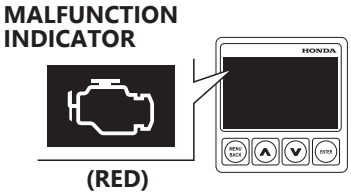
Multi-function Display



The ACG indicator turns on and the buzzer sounds in one-second intervals when the charging system is faulty.

Malfunction Indicator

Multi-function Display



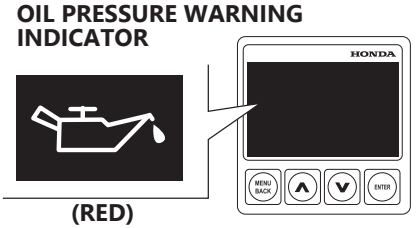
When the engine control system detects an engine control system malfunction, the malfunction indicator turns on.

When the malfunction indicator turns on, the buzzer sounds continuously with an intermittent long sound.

- If the malfunction indicator lights and the buzzer does not stop sounding: Return to port immediately without continuing your voyage. There is a risk of shift operation failure (see page 138), alert detection failure, or engine start failure.
- If the malfunction indicator lights and the buzzer sounds for only 10 seconds: Return to port as soon as possible because engine speed control and other functions will be limited.

Oil Pressure Warning Indicator

Multi-function Display



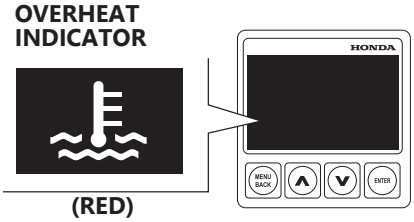
If oil pressure becomes low, the indicator comes on, and the engine protection system limit engine speed. Refer to TAKING CARE OF UNEXPECTED PROBLEMS, on P.133.

All models are equipped with a buzzer that sounds continuously when the oil pressure warning indicator comes on.

Low oil pressure indicates that the engine oil level is low or that there is a problem with the engine lubrication system.

Overheat Indicator

Multi-function Display

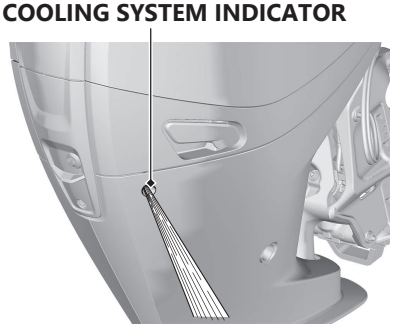


When the alert triggers, the overheat indicator comes on and the buzzer sounds a steady tone as the engine speed is reduced to 1,800 rpm. If the condition persists for another 20 seconds, the engine shuts off. Refer to TAKING CARE OF UNEXPECTED PROBLEMS, on P.124.

All models are equipped with a buzzer that sounds continuously when the red overheat indicator light comes on.

Engine overheating may be the result of clogged water intakes.

Cooling System Indicator



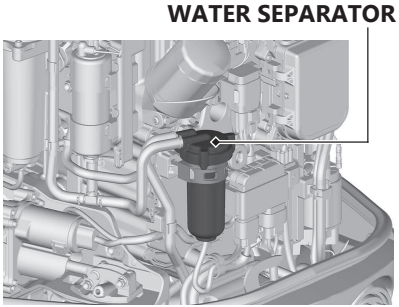
Water should flow from the cooling system indicator while the engine is running. This shows that water is circulating through the cooling system.

If water stops flowing while the engine is running, it indicates a cooling system problem, such as clogged water intakes, which will cause engine overheating.

The cooling system indicator discharge port can also become plugged.
If this happens, shut off the engine immediately and inspect the intake screens.

OTHER FEATURES

Water Separator Buzzer



The water separator buzzer sounds a rapid, repeating signal when water has accumulated in the water separator.

To check the water separator, you need to remove the front striker guide cover. (P.107)

Rev Limiter

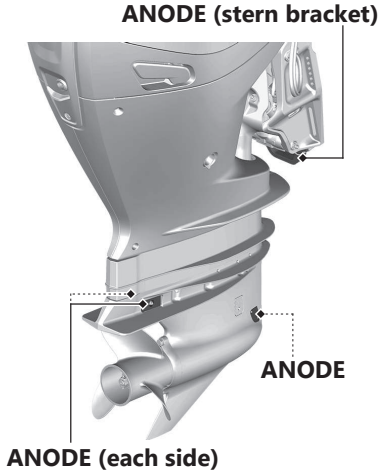
The engine is equipped with a rev limiter to prevent the possibility of mechanical damage from excessive engine speed.

The rev limiter may be activated during operation, limiting engine speed, if the outboard motor is trimmed or tilted up excessively, or when propeller ventilation occurs during a sharp turn.

If the rev limiter is activated, check the trim angle of the outboard motor.

Check to see if the correct propeller is installed.

Anodes



The anodes are made of a sacrificial material that helps to protect the outboard motor from corrosion.

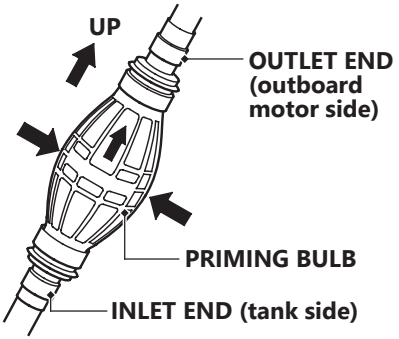
There are three anodes on the gear case, one on the stern bracket (P.111).

Additional anodes are located inside the engine and should be serviced by an authorized Honda Marine servicing dealer according to the MAINTENANCE SCHEDULE (P.88).

NOTICE

- Painting or coating the anodes will defeat their purpose and will lead to rust and corrosion damage to the outboard motor. The anodes must be exposed to the water in order to protect the outboard motor.

Fuel Priming Bulb



A priming bulb is built into the fuel hose that connects the fuel tank to the outboard motor.

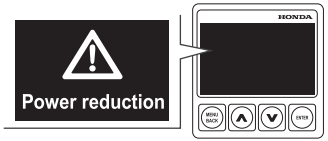
Before starting the engine, hold the priming bulb up in the direction of the arrow; then squeeze the priming bulb until it feels firm. This will ensure that fuel is supplied to the engine (P. 56).

Battery Switch OFF Notification

This function alerts the operator that the battery switch is OFF and must be turned to the ON position. If the battery switch is OFF, a buzzer will sound three times during the following situations.

- When starting the engine
- When using the power trim/ tilt switch
- When turning the battery switch OFF while the ignition switch or power switch is ON

Power Reduction



This outboard motor is equipped with the power reduction system which activates when the outboard motor has a serious problem.
The power reduction system decreases the engine speed to protect the engine until the malfunction is corrected.
When one of the two systems of the remote control sensor is faulty, the power reduction system does not decrease the engine speed.

ARE YOU READY TO GET UNDERWAY?

Your safety is your responsibility. A little time spent in preparation will significantly reduce your risk of injury.

Knowledge

Read and understand this manual. Know what the controls do and how to operate them.

Familiarize yourself with the outboard motor and its operation before you get underway. Know what to do in case of an emergency.

Familiarize yourself with all laws and regulations relating to boating and the use of outboard motors.

Safety

Always wear a PFD (Personal Flotation Device) while on the boat.

Attach the emergency stop switch lanyard securely to the operator or to the PFD worn by the operator.

IS YOUR OUTBOARD MOTOR READY TO GO?

For your safety, and to maximize the service life of your equipment, it is very important to take a few moments before you operate the outboard motor to check its condition. Be sure to take care of any problem you find, or have your authorized Marine dealer correct it, before you operate the outboard motor.

⚠ WARNING

Failure to properly maintain this outboard motor, or failing to correct a problem before operation, could result in a significant malfunction.

Some malfunctions can cause serious injuries or death.

Always perform a pre-operation inspection before each operation and correct any problems.

Normal Key without START/ STOP Switch Type

Before beginning your pre-operation checks, be sure the IGNITION switch key is in the OFF position.

Normal Key with START/STOP Switch Type

Before beginning your pre-operation checks, be sure the power switch is in the OFF position.

Honda Smart Key type

Before beginning your pre-operation checks, be sure the power switch is in the power OFF position.

Safety Inspection

- Before each use, look around and underneath the engine for signs of oil or gasoline leaks.
- Check that the fuel hose is undamaged and properly connected.
- Wipe up any spills before starting the engine.
- Check the stern bracket to be sure the outboard motor is securely installed.
- Check that all controls are operating properly.
- Replace any damaged parts.
- Check that all fasteners are in place and securely tightened.

- Check the emergency stop switch for proper operation. Start the engine (P.57). Make sure the engine stops by pulling the emergency stop switch clip from the emergency stop switch.

Maintenance Inspection

- Check the engine oil level (P. 93). Running the engine with a low oil level can cause engine damage. Overfilling the engine can cause the engine to smoke or have oil leaks which can cause engine damage.
- Check to be sure the propeller is undamaged and the castle nut is secured with the cotter pin (P.112).
- Check that the anodes are securely attached to the stern bracket and the gear case (P. 111) and are not excessively worn. The anodes help protect the outboard motor from corrosion.
- Make sure the tool kit is onboard (P.87). Replace any missing items.
- Check the fuel level in the fuel tank (P.104).
- Check that the battery fluid is between the upper and lower levels, and the battery leads are connected securely.
- Check the fuel filter for water or sediment accumulation (P. 107).

SAFE OPERATING PRECAUTIONS

To safely realize the full potential of this outboard motor, you need a complete understanding of its operation and a certain amount of practice with its controls.

Before operating the outboard motor for the first time, please review the IMPORTANT SAFETY INFORMATION on page 7 and the chapter titled BEFORE OPERATION.

For your safety, do not start or run the engine in a confined or partly enclosed area. Your engine's exhaust contains poisonous carbon monoxide, a colorless, odorless gas that can collect rapidly. Breathing carbon monoxide can cause loss of consciousness and may lead to death.

⚠ WARNING

Exhaust contains poisonous carbon monoxide gas that can build up to dangerous levels in closed areas.

Breathing carbon monoxide can cause unconsciousness or death.

Never run this product's engine in a closed, or even partly closed area.

BREAK-IN PROCEDURE

Break-in period: 10 hours

Proper break-in operation allows the moving parts to wear in smoothly for best performance and long service life. Avoid continuous operation at a steady speed.

First 15 minutes:
Run the engine at trolling speed. Use the minimum throttle opening necessary to operate the boat at a safe trolling speed.

Next 45 minutes:
Run the engine up to a maximum of 2,000 - 3,000 rpm, which is about 10% to 30% of maximum throttle opening. Operating at a maximum of 2,000 - 3,000 rpm should be limited to 50% of the 45 minutes.

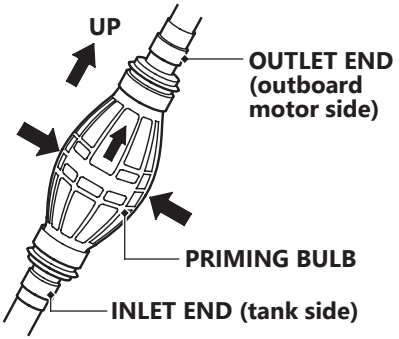
Next 60 minutes:
Run the engine up to a maximum of 4,000 - 5,000 rpm, which is about 50% to 80% of maximum throttle opening. Operating at a maximum of 4,000 - 5,000 rpm should be limited to 50% of the 60 minutes.

30-second full-throttle bursts are OK, but do not operate the engine continuously at full throttle.

For boats that plane easily, bring the boat up on plane, and then reduce the throttle opening to the recommended rpm range.

Next 8 hours:
Do not run the engine at full throttle for more than 5 minutes at a time.

FUEL PRIMING



Hold the priming bulb up in the direction of the arrow; then squeeze the priming bulb several times until it feels firm, indicating that fuel has reached the engine.

Check to be sure there are no fuel leaks before starting the engine.

Do not touch the priming bulb while the engine is running or when tilting up the outboard motor. The vapor separator could overflow.

⚠ WARNING

Gasoline is highly flammable and explosive.

You can be burned or seriously injured when handling fuel.

- Stop the engine and let it cool before handling fuel.
- Keep heat, sparks, and flame away.
- Handle fuel only outdoors.
- Keep away from your vehicle.
- Wipe up spills immediately.

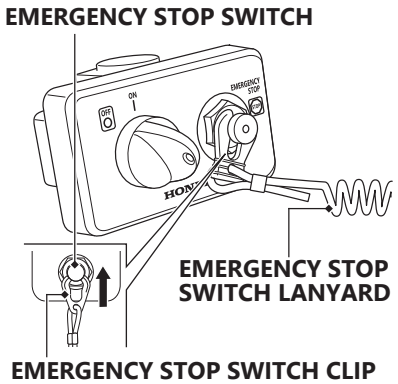
INFREQUENT OR OCCASIONAL USE

If your outboard motor will be used on an infrequent or intermittent basis, please refer to the fuel section of the STORAGE chapter (P.117) for additional information regarding fuel deterioration.

STARTING THE ENGINE

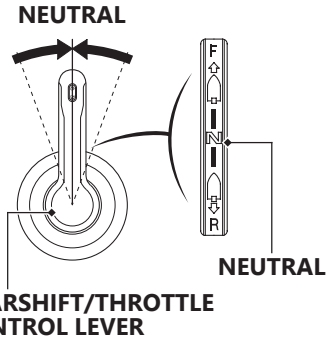
NOTICE

- Make sure the battery switch is ON before turning ON the ignition switch or power switch. If the battery switch is OFF while attempting to start the engine, the buzzer will sound three times.

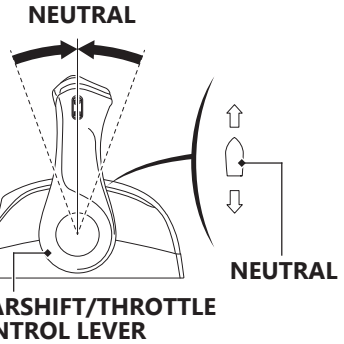


1. Put the emergency stop switch clip in the emergency stop switch, and attach the emergency stop switch lanyard securely to the operator or to the operator's PFD (Personal Flotation Device).
   The engine will not start or run unless the emergency stop switch clip is in the emergency stop switch.
   The emergency stop switch clip and emergency stop switch lanyard system is a safety device that will stop the engine if you fall away from the controls while operating the boat.
   Always attach the emergency stop switch lanyard securely to the operator or to the operator's PFD before starting the engine.
2. Set the control lever in the NEUTRAL position.
   The engine will not start if the FORWARD or REVERSE gears are engaged.

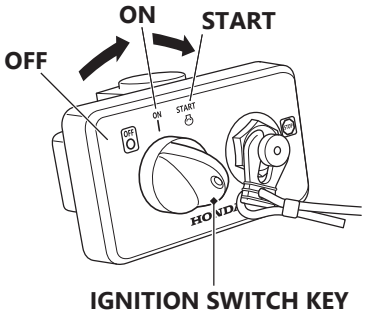
Flush-Mount Type



Top-Mount Type



(Normal Key without START/ STOP Switch Type)



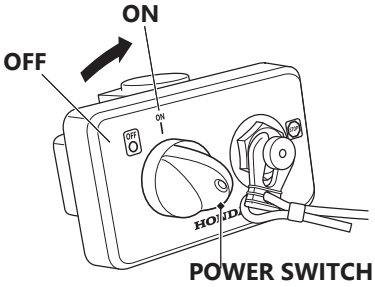
3. Turn the ignition switch key to the START position until the engine starts.
   When the engine starts, release the key, allowing it to return to the ON position.
   Go to step 5.

NOTICE

- Do not turn the IGNITION switch key to the START position while the engine is running.

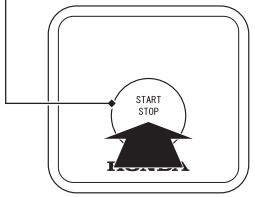
(Normal Key with START/STOP Switch Type)

Normal Key Type



3. Insert the key into the power switch and turn it to the ON position.

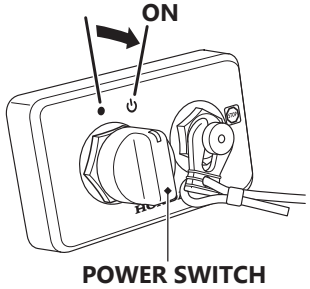
START/STOP SWITCH



4. Push the start/stop switch.

(Honda Smart Key Type)

Honda Smart Key Type



3. Turn the power switch to the right. The power will not be turned ON unless the Honda Smart Key is authenticated.
4. Push the start/stop switch. When the boat is equipped with two outboard motors, push the all engine start switch.
5. Before getting underway, allow the engine to warm-up sufficiently to ensure good performance.
   Above 41°F (5°C), warm-up the engine for 2 or 3 minutes. Below 41°F (5°C), warm-up the engine for at least 10 minutes at 2,000 rpm. Press the fast idle button to activate it, and then use the throttle lever to achieve approximately 2,000 rpm.

NOTICE

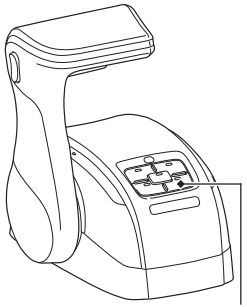
- If the engine is not properly warmed up before raising the engine speed, the buzzer and overheat indicator may activate and the engine speed will be automatically reduced.
- The cooling system may freeze in areas where the temperature reaches 32°F (0°C) or below. Cruising at high speed without warming the engine up may cause engine damage.

During the warm-up period, check the oil pressure warning indicator (P.47), overheat indicator (P.48), and cooling system indicator (P.48).

If the indicators show any abnormal condition, immediately stop the engine and determine the cause of the problem. Refer to TAKING CARE OF UNEXPECTED PROBLEMS on P.124.

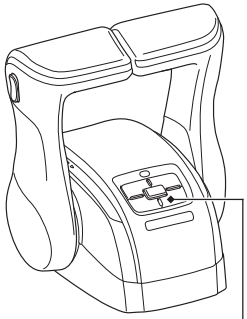
Active Mode

SINGLE TYPE



ACTIVE SWITCH

DUAL TYPE



ACTIVE/FAST IDLE SWITCH

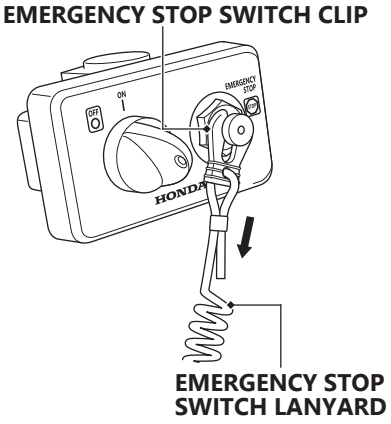
For multiple station type, use the ACTIVE switch or ACTIVE/FAST IDLE switch to change the operating remote control (active mode).
If you press the ACTIVE switch or ACTIVE/FAST IDLE switch on the remote control you want to operate the outboard motors when all gearshift/throttle control levers are in the NEUTRAL position, the mode changes to active mode.

STOPPING THE ENGINE

NOTICE

- After stopping the engine, be sure to turn OFF the ignition switch or power switch before turning OFF the battery switch. If the battery switch is turned OFF while the ignition switch or power switch is ON, the buzzer will sound three times briefly.

Emergency Engine Stopping



To stop the engine in an emergency, pull the emergency stop switch clip out of the emergency stop switch by pulling the emergency stop switch lanyard.

If the emergency stop switch is activated while the engine is running, the engine will shut down abruptly and the boat will quickly decelerate, potentially causing occupants and objects to be thrown forward and/or overboard.

If the emergency stop switch is activated, the emergency stop switch clip must be reinserted before the engine can be restarted.

We suggest that you stop the engine this way occasionally to verify that the emergency stop switch is operating properly.

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

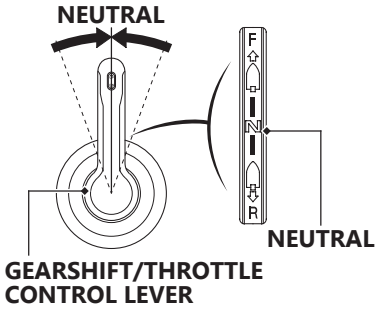
Turn the ignition switch key to the OFF position after verifying the emergency stop switch operation.

NOTICE

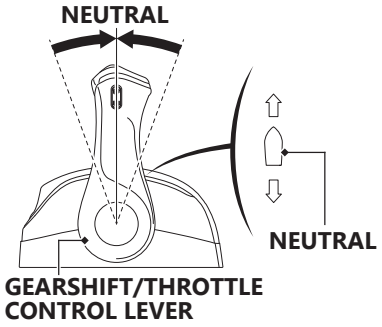
- When you have stopped the engine with the emergency stop switch, be sure to turn off the ignition switch key or the power switch. Leaving the ignition switch key or power switch ON will drain the battery.

Normal Engine Stopping

Flush-Mount Type



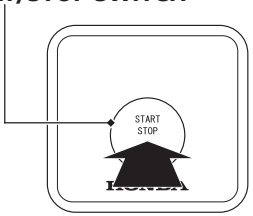
Top-Mount Type



1. Move the control lever(s) to the NEUTRAL position. After cruising at full throttle, cool down the engine by idling for a few minutes before stopping the engine.

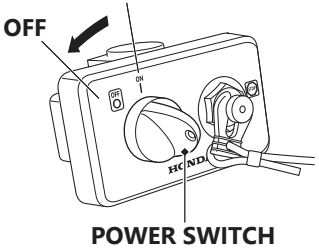
(with START/STOP switch)

START/STOP SWITCH



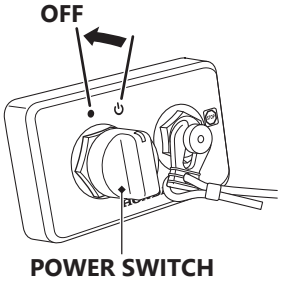
2. Push the start/stop switch to stop the engine.

Normal Key Type



3. Turn the power switch to the OFF position, and then remove and store it.

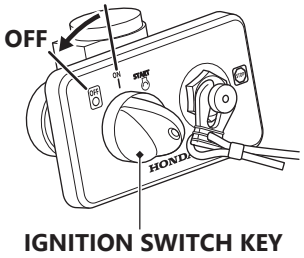
Honda Smart Key Type



3. Turn the power switch to the right or press the lock button on the Honda Smart Key to turn the power OFF.
   In the event that the engine does not stop when the power switch is turned to the OFF position, pull the emergency stop switch clip out of the emergency stop switch by pulling the emergency stop switch lanyard (P.62).

4. When the boat is not in use, remove and store the emergency stop switch clip and lanyard.

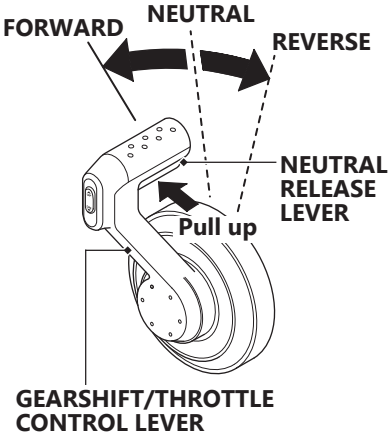
(without START/STOP switch)



2. Turn the ignition switch key to the OFF position to stop the engine.
   In the event that the engine does not stop when the ignition switch key is turned to the OFF position, pull the emergency stop switch clip out of the emergency stop switch by pulling the emergency stop switch lanyard (P.62).
3. When the boat is not in use, remove and store the ignition switch key and the emergency stop switch clip and lanyard.

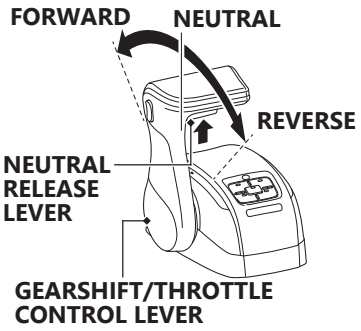
GEARSHIFT AND THROTTLE OPERATION

Flush-Mount Type

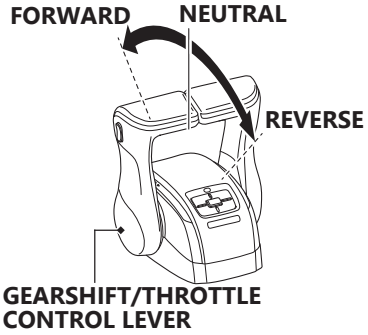


Top-Mount Type

Single



Dual



To shift gears, move the control lever to select the FORWARD, NEUTRAL, or REVERSE gear.

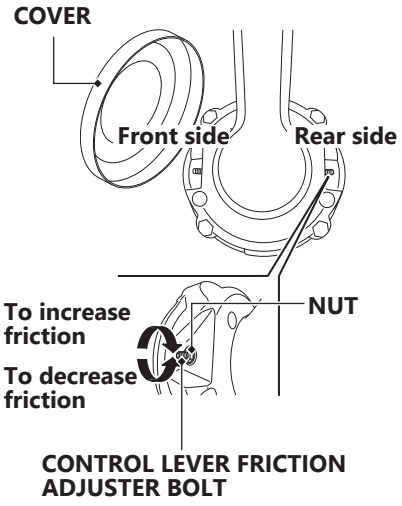
The control lever cannot be moved from the NEUTRAL position unless the neutral release lever is squeezed (flush-mount/single top-mount types).

Moving the control lever beyond the gear selection range increases engine speed.

Gearshift/Throttle Control Lever Friction

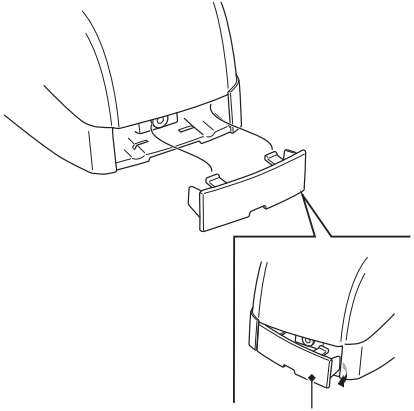
Adjust the control lever friction adjuster so the gearshift/throttle control lever will hold a constant throttle setting while cruising.

Flush-Mount Type

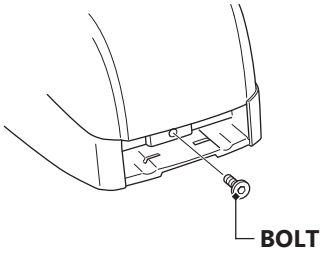


1. Remove the cover of the control lever.
2. Loosen the nut.
3. Adjust the lever friction when increasing throttle opening and boat speed by turning the control lever friction adjuster bolt right or left.
4. Tighten the nut to lock the lever friction.
5. Reinstall the cover of the control lever.

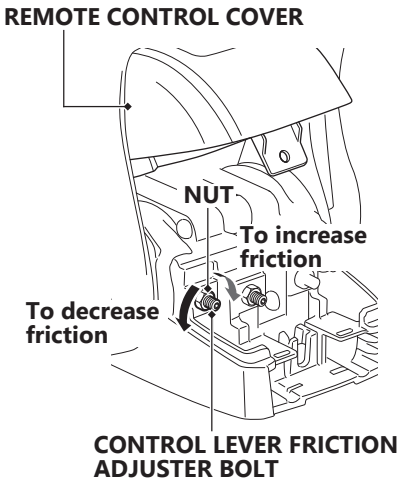
Top-Mount Type



1. Remove the maintenance cover.



2. Remove the bolt.



3. Open the remote control cover.
4. Loosen the nut.
5. Adjust the lever friction when increasing throttle opening and boat speed by turning the control lever friction adjuster bolt right or left.
6. Tighten the nut to lock the lever friction.
7. Reinstall the remote control cover.
8. Install and tighten the bolt.
9. Reinstall the maintenance cover.

STEERING

Steer the boat in the same manner as an automobile.

Under normal conditions, turning the steering wheel counterclockwise will make the boat turn left and turning the steering wheel clockwise will make the boat turn right.

CRUISING

Engine Speed

For best fuel economy, limit the throttle opening to 80%. Use the throttle friction control (P.66) to help you hold a steady speed.

For rough water conditions or large waves, slow down to prevent the propeller from rising out of the water.

The engine is equipped with a rev limiter to prevent the possibility of mechanical damage from excessive engine speed.

If, for example, the outboard motor is tilted excessively or propeller ventilation occurs during a sharp turn, the engine may overrev, activating the rev limiter.

If engine speed becomes unstable at high speed due to activation of the rev limiter, reduce speed and check the trim angle of the outboard motor.

⚠ WARNING

Traveling at high speeds may cause the boat to loss of control in some water conditions, which could result in damage to the outboard motor and injury to the occupants.
Always travel at safe speeds for the water conditions.

Trim

Use the power trim/tilt switch to trim the outboard motor for the best performance and stability.

You can use the power trim/tilt switch at any time, whether the boat is underway or stopped.

Press the UP or DN (down) side of the switch to adjust the angle of the outboard motor.

Refer to the multi-function display or NMEA2000-compatible display for an indication of whether the outboard motor is trimmed high or low.

It is necessary to trim the angle of the outboard motor to compensate for changes in boat load, weight distribution, water conditions, and propeller selection.

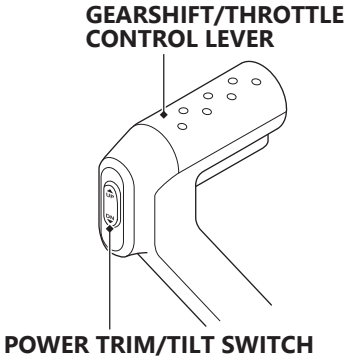
Under normal conditions, the boat will perform best when the antiventilation plate is level with the water surface.

When cruising into a high wind, trim the outboard motor down slightly to level the boat and improve stability. With a tail wind, trim the outboard motor up slightly.

NOTICE

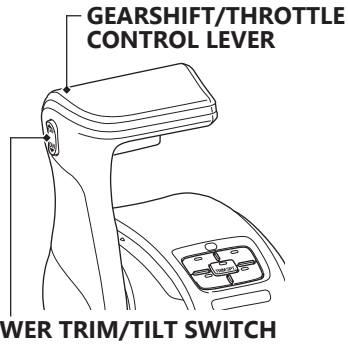
- Excessive trim/tilt angle during operation can cause propeller ventilation, overheating, and water pump damage.

Flush-Mount Type

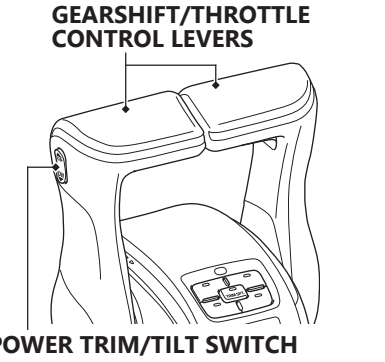


Top-Mount Type

SINGLE TYPE



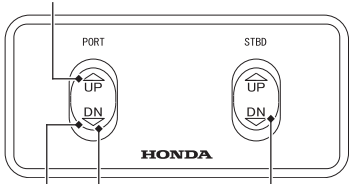
DUAL TYPE



PTT Switch Panel

DUAL TYPE

Press UP to raise bow.

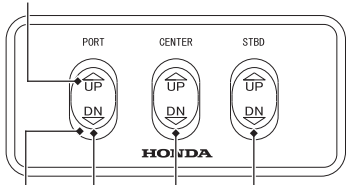


Press DN to lower bow.

POWER TRIM/TILT SWITCHES

TRIPLE TYPE

Press UP to raise bow.

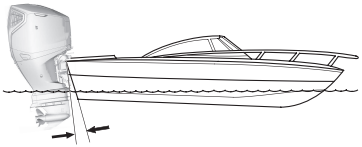


POWER TRIM/TILT SWITCHES

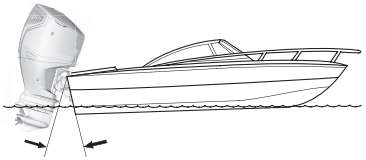
Press DN to lower bow.

For multiple outboard motors, the trim/tilt angle of all outboard motors is adjusted at the same time by using the power trim/tilt switch on the gearshift/throttle control lever and the trim/tilt angle of each outboard motor is adjusted by using each power trim/tilt switch on the panel.

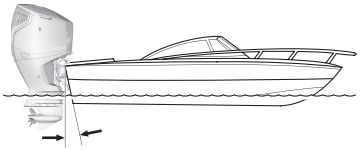
OUTBOARD MOTOR TRIMMED TOO LOW



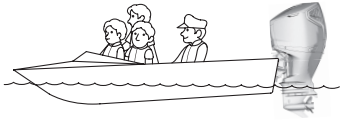
OUTBOARD MOTOR TRIMMED TOO HIGH



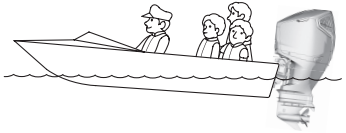
OUTBOARD MOTOR TRIMMED CORRECTLY



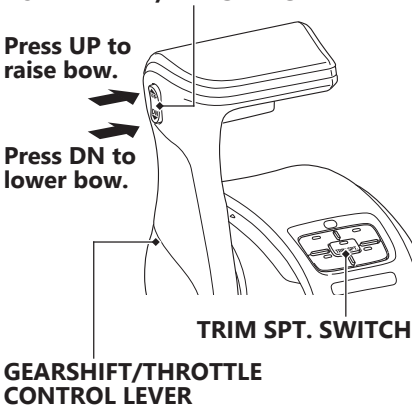
BOW TOO LOW DUE TO
1. LOAD IN THE FRONT
2. OUTBOARD MOTOR TRIMMED TOO LOW



BOW TOO HIGH DUE TO
1. LOAD IN THE REAR
2. OUTBOARD MOTOR TRIMMED TOO HIGH



Trim Support Mode



Pressing the TRIM SPT. switch changes the mode to the trim support mode, which automatically does trim operations according to the speed or engine RPM.

Adjusting the trim angle to an optimum position automatically during acceleration or cruising improves acceleration performance, top speed, steering stability, fuel efficiency, etc.

The conditions that control the trim angle pattern is set in the multi-function display.

The trim support switch (TRIM SPT. switch) can be used regardless of whether the boat is stopped or cruising.

You can finely adjust the trim angle manually while in trim support mode.
In the case of a single outboard motor, if you press the power trim/tilt switch of the remote control while in trim support mode, you can fine-tune the trim angle.
In the case of multiple outboard motors, if you press the power trim/tilt switch of the remote control in the trim support mode, you can fine-tune the trim angles of all the outboard motors simultaneously.

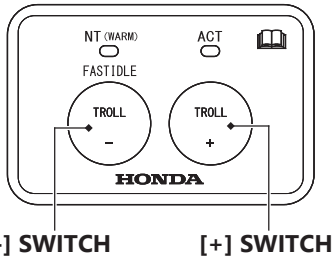
The finely adjusted angle is temporarily overwritten with the preset pattern, and returns to the pattern before overwriting when the engine switch or power switch is turned off.

If you use the cruise control mode while in the trim support mode, the trim support mode is temporarily stopped.

The trim support mode is forcibly canceled in the following cases.

- Trim angle is adjusted beyond the trim area by the power trim/tilt switch
- GPS error or disconnection
- Engine malfunction (overheating, low oil pressure, etc.)
- Trim operation abnormality
- Accelerating or decelerating so quickly as to put a load on trim

TROLLING MODE



(ELECTRICAL REMOTE CONTROL BOX and FLUSH-MOUNT type)

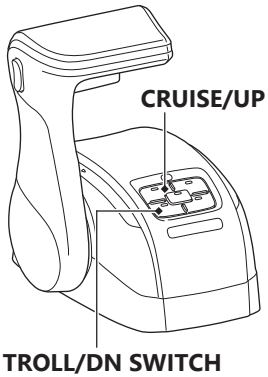
[-] Switch: Reduce engine speed
[+] Switch: Increase engine speed

After the engine warms up, when the gearshift/throttle control lever is tilted from the NEUTRAL position to the FORWARD or REVERSE side by about 20° and the [+] switch is pressed and held, the mode changes to trolling mode.

A long buzz sounds once.
When the mode is changed to trolling mode, the engine speed is 650 rpm.

You can adjust the engine speed by 50 rpm every time you press the switch once. You will hear a short buzz.
The engine speed can be adjusted within the range of 650 – 900 rpm.
Continuing to press the switch will not decrease or increase the engine speed beyond the lower (650 rpm) or higher (900 rpm) limit.
If you try to do this, a short buzz sounds twice.
The throttle may be operated while in trolling mode.

TROLLING CONTROL MODE



TROLL/DN Switch: Reduce engine speed
CRUISE/UP Switch: Increase engine speed

After the engine warms up, when the gearshift/throttle control levers are tilted from the NEUTRAL position to the FORWARD or REVERSE side by about 20° and the TROLL/DN switch of the remote control is pressed, the mode changes to trolling control mode.

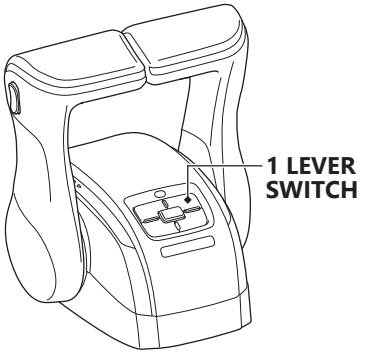
A long buzz sounds once.
When the mode is changed to trolling control mode, the engine speed is 650 rpm.

You can adjust the engine speed by 50 rpm every time you press the switch once. You will hear a short buzz.
The engine speed can be adjusted within the range of 650 – 1,000 rpm.

Continuing to press the switch will not decrease or increase the engine speed beyond the lower (650 rpm) or higher (1,000 rpm) limit.
If you try to do this, a short buzz sounds twice.

The throttle may be operated while in trolling control mode.

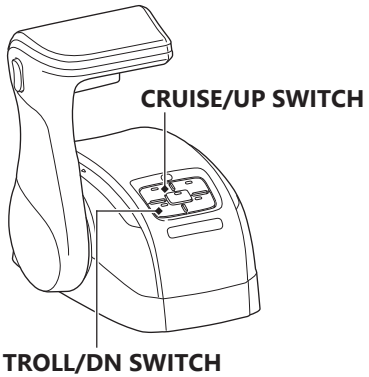
ONE-LEVER MODE (For multiple outboard motors type)



Shifting gear and the engine speed adjustment of all the outboard motors can be performed with one gearshift/throttle control lever when in one-lever mode.

If you press the 1 LEVER switch when all gearshift/throttle control levers are in the NEUTRAL position, the mode changes to one-lever mode.
A long buzz sounds once.

CRUISE CONTROL MODE



TROLL/DN Switch: Reduce engine speed or velocity
CRUISE/UP Switch: Increase engine speed or velocity

If you press the CRUISE/UP switch during cruising with all the gearshift/throttle control levers in the FORWARD position, the mode changes to the cruise control mode, which lets the boat cruise at a constant engine speed or velocity.
A long buzz sounds once.

- Speed can only be adjusted in cruise control mode when equipped with GPS.

You can adjust the engine speed or velocity by every time you press the switch once. You will hear a short buzz.
Continuing to press the switch will not decrease or increase the engine speed beyond the lower or higher limit.
If you try to do this, a short buzz sounds twice.

Engine speed adjusting range:
Engine speed at mode change ±500 rpm (in steps of 50 rpm)

Velocity adjusting range:

- Velocity at mode change ±10 km/h (in steps of 1.0 km/h)
- Velocity at mode change ±5 miles/h (in steps of 0.5 miles/h)
- Velocity at mode change ±5 knots (in steps of 0.5 knots)

The cruise control mode is released forcibly in the following cases.

- GPS error or disconnection (Velocity adjustment is selected in the multifunction display)
- Operate the gearshift/throttle control lever a certain amount from the position for changing modes

- Engine stops or engine is abnormal (overheating, low oil pressure, etc.)
- If the engine RPM or speed is unstable

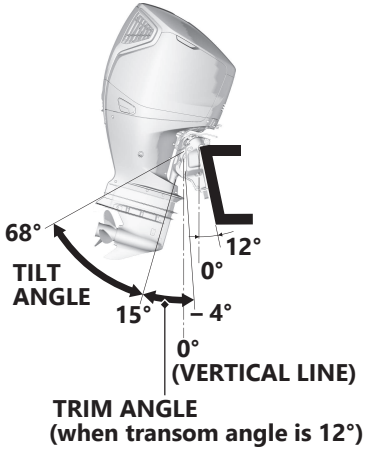
SHALLOW WATER OPERATION

When operating in shallow water, use the power trim/tilt switch (P. 70) to tilt the outboard motor so that the propeller and gear case won't hit the bottom.

Proceed at low speed, and monitor water flow from the cooling system indicator (P.48) to be sure the outboard motor is not tilted so high that the water intakes are out of the water.

NOTICE

- An excessive trim/tilt angle during operation can cause propeller ventilation, overheating, and water pump damage. This type of damage is not covered by the Distributor's Limited Warranty (U.S.) (P.151) / Distributor's Warranty (CA.) (P.164).



MOORING, BEACHING, LAUNCHING

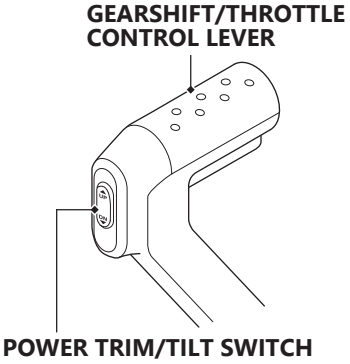
Stop the engine before tilting the outboard motor.

Before tilting an outboard motor up, leave it in the running position for one minute after stopping the engine to drain the water from inside the engine.

1. Move the gearshift/throttle control lever to the NEUTRAL position and stop the engine.
2. Press UP on the power trim/tilt switch and tilt the outboard motor to the best position according to cruising conditions.

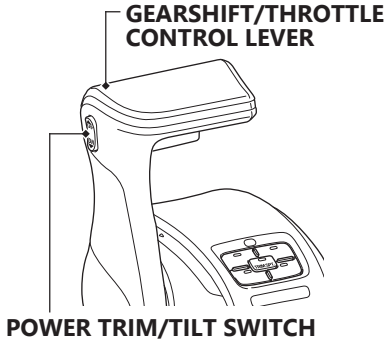
Pressing UP on the power trim/tilt switch on the gearshift/throttle control lever or PTT switch panel twice in succession tilts up the outboard motor to the set tilt angle automatically.

Flush-Mount Type

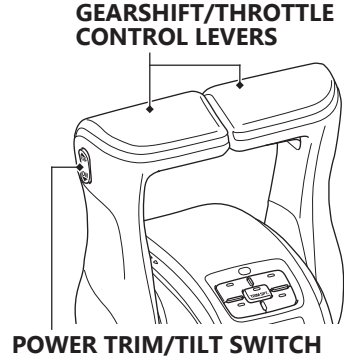


Top-Mount Type

SINGLE TYPE

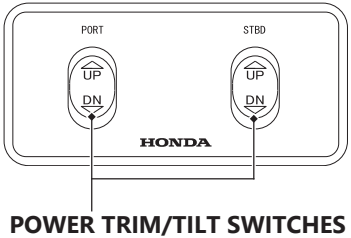


DUAL TYPE

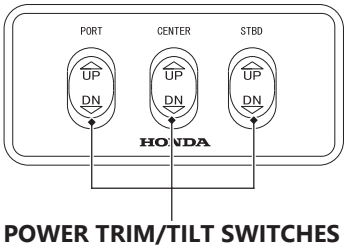


PTT Switch Panel

DUAL TYPE



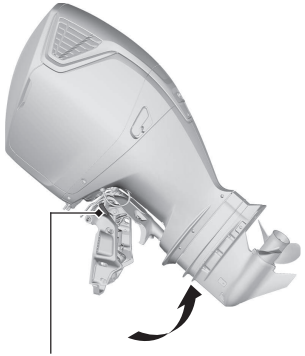
TRIPLE TYPE



NOTICE

- For multiple outboard motors, the trim/tilt angle of all outboard motors is adjusted at the same time by using the power trim/tilt switch on the gearshift/ throttle control lever and the trim/tilt angle of each outboard motor is adjusted by using each power trim/tilt switch on the panel.

Moorage



Tilt up the outboard motor using the tilt lock levers when mooring the boat. Shift the gearshift/throttle control lever into the NEUTRAL position and stop the engine before tilting up the outboard motor.

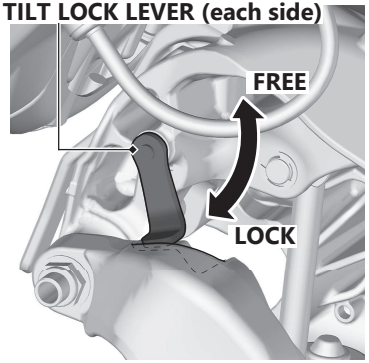
NOTICE

- Before tilting it up, leave the outboard motor in the running position for one minute after stopping the engine to drain the water from inside the engine.

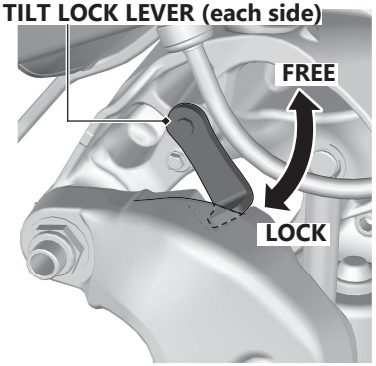
Stop the engine before tilting the outboard motor.

1. Tilt the outboard motor up to its highest position using the power trim/tilt switch (P.38).
2. Move the tilt lock levers to the LOCK position and lower the outboard motor until the lock levers contact the stern bracket.

When tilted up to 65°



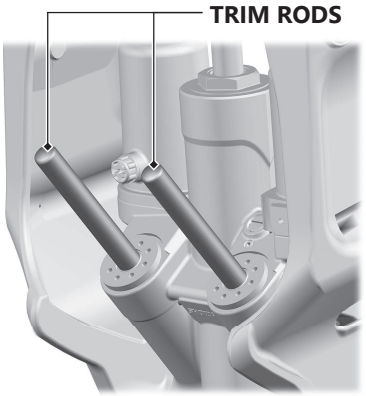
When tilted up to 55°



If it is not possible to tilt up to 65°, due to the hull, lock the outboard motor at 55°.

⚠ CAUTION

If you do not secure the outboard motor with the tilt lock levers after you tilt up the outboard motor by 55° or 65° or more, then the hydraulic pressure of the power trim/tilt may drop and cause the outboard motor to tilt down.



3. Press DN (down) on the power trim/tilt switch to fully shorten the trim rods.
4. To tilt down, raise the outboard motor as far as it goes using the power trim/tilt switch, move the tilt lock levers to the FREE position, and lower the outboard motor to the designated position.

NOTICE

- Do not start the engine while the tilt lock lever is locked. There is a risk of damaging the engine.

Pressing DN on the power trim/tilt switch on the gearshift/throttle control lever or PTT switch panel twice in succession tilts the outboard motor down to the set tilt angle automatically (P. 82).

Automatic Tilt Mode

If you press the power trim/tilt switch twice in succession while the boat is stopped, the automatic tilt mode is turned on, automatically tilting the outboard motor up or down.

When the "UP" side of the power trim/tilt switch is pressed twice in succession, the buzzer sounds once at a long interval, and the tilt is automatically raised to the preset tilt limit position. The buzzer continues to sound at short intervals while the outboard motor is tilted up.

When you press "DN" on the power trim/tilt switch twice in succession, the buzzer sounds once at a long interval, and the outboard motor is automatically tilted down to the preset tilt limit position. The buzzer continues to sound at short intervals while the outboard motor is tilted down.

Even during automatic tilting, automatic tilt will be forcibly canceled and the outboard motor will stop being tilted in the following cases.

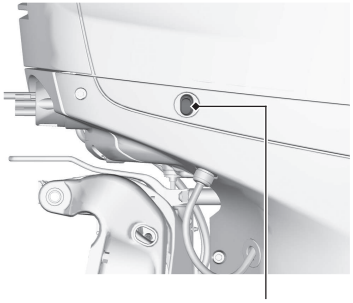
- The power trim/tilt switch is pressed during automatic tilt operations
- The power tilt switch (outboard motor pan) is pressed and held in the opposite direction of the tilt direction during automatic tilt operations
- Any of the engines are started
- Any of the engines are abnormal (overheating, low oil pressure, etc.)

Before you can use the automatic tilt function, you need to set it in the multi-function display.

For multiple outboard motors, the power trim/tilt switch on the gearshift/throttle control lever side can turn on the automatic tilt mode for all the outboard motors and the power trim/tilt switch on the PTT switch panel can turn on the automatic tilt mode for each individual outboard motor.

The power trim/tilt switch on the gearshift/throttle control lever side turns on the automatic tilt mode even if the power switch or engine switch is off.

Power Tilt Switch (Outboard Motor Pan)



When you are away from the power trim/tilt switch on the gearshift/throttle control lever, you can operate the power tilt switch on the outboard motor. The switch operation is the same as that of the power trim/tilt switch on the gearshift/throttle control lever.

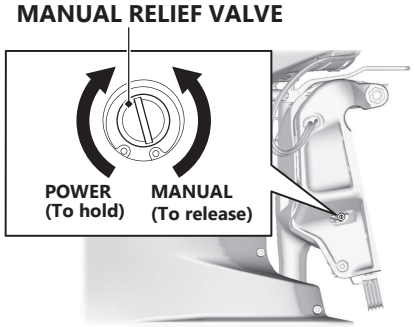
⚠ CAUTION

Do not operate the power tilt switch on the outboard motor while cruising. You can lose control of your balance, fall, and be injured by the moving outboard, propeller, or boat. Always use the power trim/tilt switch while under way.

NOTICE

- Do not attempt to use the power tilt switch to tilt the outboard motor down while the tilt lock levers are in the LOCK position. Damage to the power tilt system may occur.

Manual Relief Valve



The outboard motor can also be tilted manually after opening the manual relief valve. This feature enables the outboard motor to be tilted up or down when no battery is connected.

For manual tilting, use a screwdriver to turn the valve counterclockwise 1 or 2 turns. Close the valve firmly after positioning the engine.

Be sure the valve is closed before operating the outboard motor. If the valve is not closed, the outboard motor will tilt up when operated in reverse.

⚠ DANGER

Check that nobody is under the outboard motor before opening the manual relief valve. If the manual relief valve is loosened (turned counterclockwise) when the outboard motor is tilted up, the outboard motor will suddenly tilt down.

MULTIPLE OUTBOARD MOTORS

On boats equipped with more than one outboard motor, all motors normally operate at the same time.

If one or more motor(s) is stopped while the other(s) is running, put the stopped motor in NEUTRAL and tilt it up so its propeller is above the water's surface.

If the propeller of the stopped motor is left in the water, it may turn as the boat moves through the water, causing a reverse flow of water from the exhaust side. Reverse flow can cause an engine malfunction.

NOTICE

- If one outboard is down and another outboard is tilted all the way up, it may cause extreme steering angles that can cause the outboard cowlings to touch and damage each other.
- Never use the tilt lock lever if a stopped motor is tilted up. There is a risk of damaging the motor if you use the tilt lock lever while cruising.

THE IMPORTANCE OF MAINTENANCE

Proper maintenance is essential for safe, economical, and trouble-free operation. It will also help reduce air pollution.

⚠ WARNING

Failure to properly maintain this outboard motor, or failing to correct a problem before operation, could result in a significant malfunction.

Some malfunctions can cause serious injuries or death.

Always follow the inspection and maintenance recommendations and schedules in this owner's manual.

To help you properly care for your outboard motor, the following pages include a maintenance schedule, routine inspection procedures, and simple maintenance procedures using basic hand tools. Other service tasks that are more difficult or require special tools are best handled by professionals and are normally performed by a Honda technician or other qualified mechanic.

The maintenance schedule applies to normal operating conditions. If you operate your outboard motor under unusual conditions, consult an authorized Honda Marine dealer for recommendations applicable to your individual needs and use.

Remember that your authorized Honda Marine dealer knows your outboard motor best and is fully equipped to maintain and repair it.

To ensure the best quality and reliability, use only new, Honda Genuine parts or their equivalents for repair and replacement.

Maintenance, replacement, or repair of the emission control devices and systems may be performed by any marine engine repair establishment or individual, using parts that are "certified" to EPA standards.

MAINTENANCE SAFETY

Some of the most important safety precautions follow. However, we cannot warn you of every conceivable hazard that can arise in performing maintenance. Only you can decide whether or not you should perform a given task.

⚠ WARNING

Improper maintenance can cause an unsafe condition.

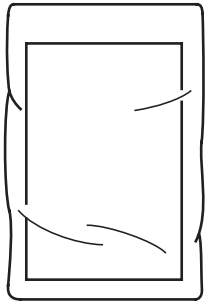
Failure to properly follow maintenance instructions and precautions can cause serious injuries or death.

Always follow the procedures and precautions in this owner's manual.

Safety Precautions

- Make sure the engine is off before you begin any maintenance or repairs. This will eliminate several potential hazards:
  - **Carbon monoxide poisoning from engine exhaust.**
    Do not start or run the engine in a confined or partly enclosed area.
  - **Burns from hot parts.**
    Let the engine and exhaust system cool before touching them.
  - **Injury from moving parts.**
    Do not run the engine unless instructed to do so.
- Read the instructions before you begin, and make sure you have the tools and skills required.
- To reduce the possibility of fire or explosion, be careful when working around gasoline. Use only a nonflammable solvent, not gasoline, to clean parts. Keep cigarettes, sparks, and flames away from all fuel-related parts.
- Wear gloves when handling the propeller to protect your hands from sharp edges.

TOOL KIT and OWNER'S MANUAL



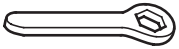
OWNER'S MANUAL

TOOL BAG

10 mm BOX WRENCH

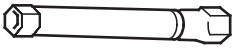
6 mm HEX. WRENCH

PHILLIPS SCREWDRIVER



EYE WRENCH

GRIP

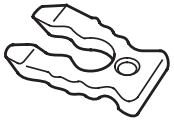


SPARK PLUG WRENCH

The tool kit can be used for simple maintenance procedures and emergency repairs. Keep these items on the boat so that they will always be available if you need them.

If your tool kit needs replacement, it is not available as a kit and each item must be ordered individually.

SPARE EMERGENCY STOP SWITCH CLIP (optional equipment)



Always carry a spare emergency stop switch clip onboard. The spare clip may either be stored in the tool bag or near the controls in case the operator and primary switch clip falls overboard and a passenger needs to pilot the boat during an emergency situation.

MAINTENANCE SCHEDULE

Follow the MAINTENANCE SCHEDULE table and service your outboard motor accordingly. Please note, a claim for warranty coverage will not be denied simply because the maintenance schedule for your outboard motor was not followed. However, any part(s) that fails specifically due to lack of maintenance, or improperly performed maintenance, would not be covered under the Distributor's Limited Warranty (U.S.) / Distributor's Warranty (CA.).

ITEM / 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.	Every 6 years or 1,200 hrs.	Refer to page
Engine oil	Check level	o							93
	Change			o	o				96
Engine oil filter	Replace					o (2)			—
Gear case oil	Change			o (2)	o (2)				—
Timing belt	Check-adjust					o (2)			—
ACG belt	Check-adjust					o (2)			—
Valve clearance	Check-adjust						o (2)		—
Spark plug (iridium)	Check					o (9)			100 - 103
Spark plug (nickel) (Optional part)	Check-adjust/ Replace				o				103
Propeller and cotter pin	Check	o				o			112
Anode metal (Outside engine) (6)									
Stern bracket, Gear case	Check	o				o			111
Water front screen	Check						o		
Anode metal (Inside engine) (6)									
	Check						o (2)		—
	Replace							o (2)	—
Idle speed	Check-adjust			o (2)	o (2)				—
Lubrication	Grease			o (1)	o (1)				97
Fuel filter with water separator (Low pressure side)	Check	o			o				107
	Replace						o		109

(1) Lubricate more frequently when used in salt water.
(2) These items should be serviced by your servicing dealer, unless you have the proper tools and are mechanically proficient. Refer to the Honda Shop Manual for service procedures. See “Honda Publications” on P.147 for ordering information.
(3) For professional commercial use, log hours of operation to determine proper maintenance intervals.
(6) Replace the anodes when they have been reduced to about two-thirds of their original size,or if they are crumling.
(9) Do not clean the spark plugs. If an electrode is contaminated with accumulated objects or dirt, replace the spark plug with a new one. Do not adjust the spark plug gap. If the gap is out of specification, replace the spark plug with a new one.

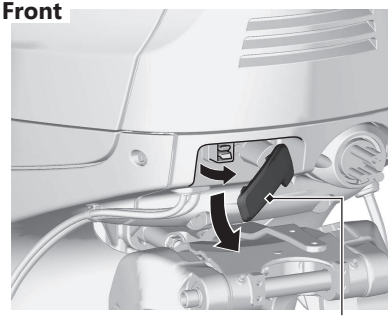
ITEM / REGULAR SERVICE PERIOD (3) Perform at every indicated month or operating hour interval, whichever comes first.		Each use	After use	First month or 20 hrs.	Every 6 months or 100 hrs.	Every year or 200 hrs.	Every 2 years or 400 hrs.	Every 6 years or 1,200 hrs.	Refer to page
Fuel filter (High pressure side)	Replace						o (2)		—
Thermostat and thermostat cover	Check/Replace					o (2)			—
Fuel line	Check	o (7)							54
	Replace	Every 2 years (if necessary) (2) (8)							—
Battery and cable connection	Check level-tightness	o							54
Bolts and nuts	Check-tightness			o (2)	o (2)				—
Crankcase breather tube	Check					o (2)			—
Cooling water passages	Clean		o (4)		o (4)				114
Coolant leak	Check	o							—
Water pump, Woodruff key	Check					o (2)			—
Impeller housing	Check					o (2)			—
Emergency stop switch	Check	o							54
Engine oil leak	Check	o							—
Each operating part	Check	o							—
Engine condition (5)	Check	o							—
Power Trim/Tilt	Check				o (2)				—

(2) These items should be serviced by your servicing dealer, unless you have the proper tools and are mechanically proficient. Refer to the Honda Shop Manual for service procedures. See “Honda Publications” on P.147 for ordering information.
(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.
(5) Upon starting, check for unusual engine sounds and cooling water flowing freely from the check hole.
(7) Check the fuel line for leaks, cracks, or damage. If it is leaking, cracked, or damaged, take it to your servicing dealer for replacement before using your outboard motor.
(8) Replace the fuel line if there are signs of leaks, cracks, or damage.

ENGINE COVER REMOVAL AND INSTALLATION

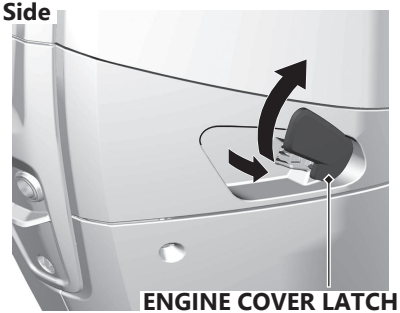
Removal

Front



ENGINE COVER LATCH

Side

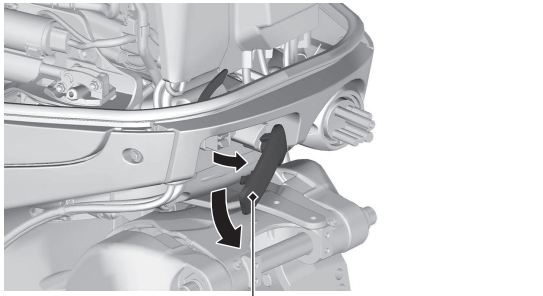


ENGINE COVER LATCH (each side)

1. Pull the latches and rotate them as shown.
2. Remove the engine cover by lifting it straight up from the outboard motor.

Installation

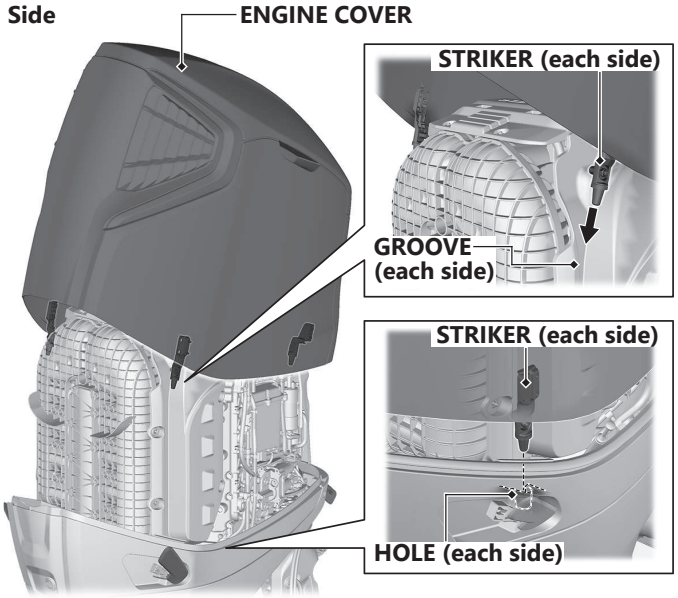
Front



Side

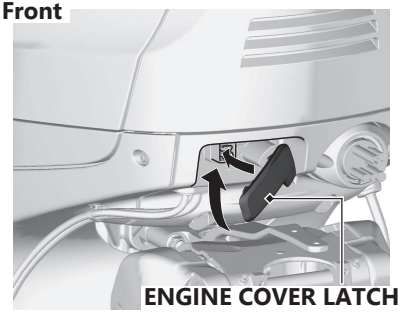
1. Rotate and hold the latches as shown.

Side

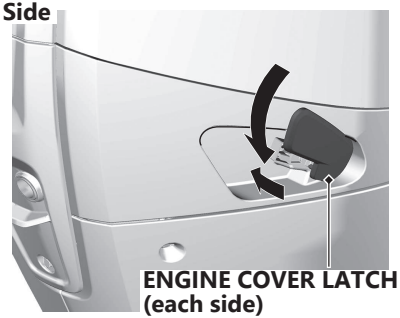


2. Slide the strikers on the engine cover into the grooves on the rear striker cover.
   Align the strikers on the engine cover with the holes on the main body to install the engine cover.

Front



Side



3. Push the engine cover until it is fully seated.
4. Rotate the latches as shown. Push in on all the latches to lock them.

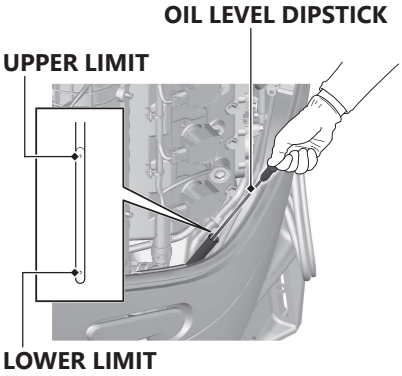
Lubricate the tip of the striker with silicone spray to make installation easier.

The cover should be tight when fully seated position. If the cover is loose or difficult to secure, an adjustment may be necessary. Please see the shop manual or your Marine dealer for adjustment.

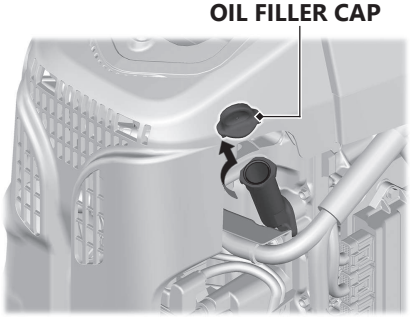
ENGINE OIL LEVEL CHECK

Check the engine oil level with the engine stopped and the outboard motor in the vertical position.

1. Unlock and remove the engine cover (P.91).
2. Remove the oil level dipstick by pulling it. Wipe the oil level dipstick clean.



3. Insert the dipstick all the way in, then remove it and check the oil level shown on the dipstick.



4. If the oil level is near or below the lower limit mark on the dipstick, remove the oil filler cap, and add oil to reach the upper limit mark shown on the dipstick. Use the oil recommended on P.97.

NOTICE

- Running the engine with a low oil level can cause engine damage.
- Do not overfill. Overfilling the engine will cause it to smoke or have oil leaks.

5. Insert the dipstick all the way in. Install the oil filler cap and tighten it securely. Do not overtighten.
6. Install the front striker guide cover in the reverse order of removal.
7. Install and lock the engine cover.

When you check the oil level with the dipstick, you might notice the engine oil appears milky or the oil level has increased. If you notice either condition, change the engine oil. See the following table for an explanation of these conditions.

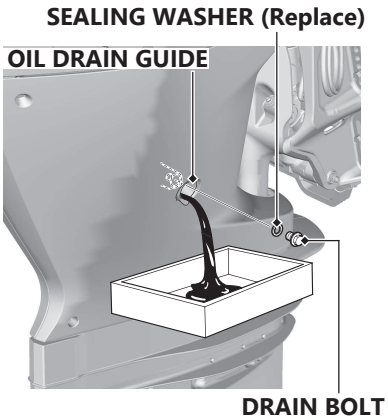
Operating Method	Result	Effect
Running the engine below 3,000 rpm for more than 30% of the time so the engine does not warm-up.	● Water condenses in the engine and mixes with the oil, resulting in a milky appearance. ● Unburned fuel mixes with the oil, increasing the volume of oil.	The engine oil deteriorates, becomes less efficient as a lubricant, and causes an engine malfunction.
Frequent starting and stopping without allowing the engine to warm-up.		

ENGINE OIL CHANGE

An engine oil evacuation/filling device may be used to remove/add the engine oil.

Drain the used oil while the engine is warm. Warm oil drains quickly and completely.

1. Unlock and remove the engine cover (P.91).



2. Place a suitable container below the oil drain guide to catch the used oil, and then remove the oil filler cap, drain bolt, and sealing washer.
3. Allow the used oil to drain completely. Use a new sealing washer, and then reinstall the engine oil drain bolt using a new washer.
   Tighten the drain bolt securely.

TIGHTENING TORQUE:
17 lbf·ft (23 N·m, 2.3 kgf·m)

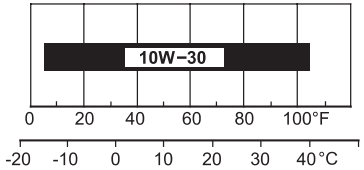
NOTICE

- Improper disposal of engine oil can be harmful to the environment. If you change your own oil, please dispose of the used oil properly. Put it in a sealed container, and take it to a recycling center. Do not throw it in the trash, pour it on the ground or down a drain.

4. With the outboard motor in a vertical position, fill to the upper limit mark on the dipstick (P.93) with the recommended oil.
   Engine oil refill capacity:
   - Without oil filter change: 10.8 US qt (10.2 L)
   - With oil filter change: 11.0 US qt (10.4 L)
5. Install the oil filler cap and tighten it securely.
6. Install and lock the engine cover (P.92).

ENGINE OIL RECOMMENDATIONS

Oil is a major factor affecting performance and service life. Use 4-stroke detergent oil.



AMBIENT TEMPERATURE

Honda 10W-30 FC-W® outboard motor oil is recommended for general use.

FC-W® is a registered trademark of the National Marine Manufacturers Association.

If Honda 10W-30 FC-W oil is not available, Honda recommends that you use API service category SG, SH, SJ or SL oil. The SAE oil viscosity and service category are in the API label on the oil container.

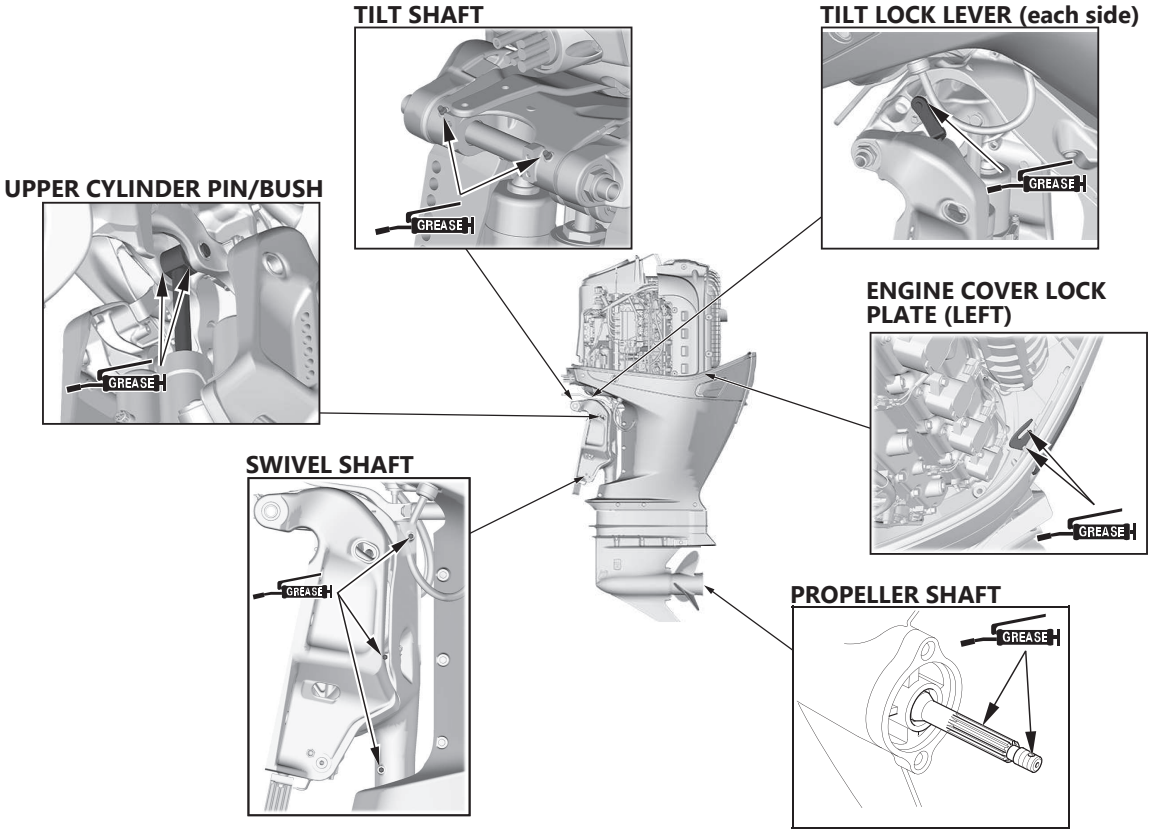
LUBRICATION POINTS

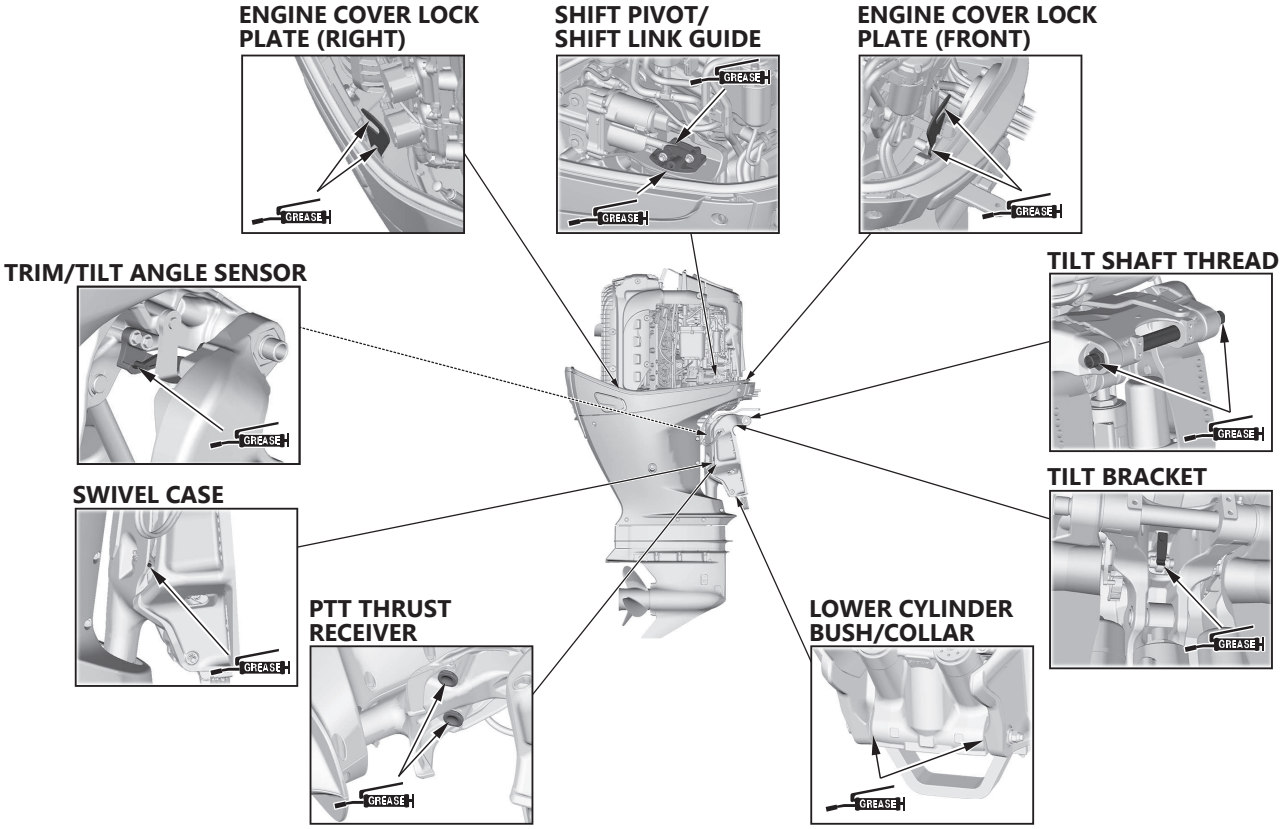
Apply Honda Marine waterproof grease to the parts shown below:

NOTICE

- Apply anticorrosion oil to pivot surfaces where grease cannot penetrate.

Apply Honda Marine Corrosion Inhibitor (or equivalent) to all areas under the engine cover and any exposed metal surfaces except the belts.


TILT SHAFT
GREASE
TILT LOCK LEVER (each side)
GREASE
UPPER CYLINDER PIN/BUSH
GREASE
ENGINE COVER LOCK PLATE (LEFT)
GREASE
SWIVEL SHAFT
GREASE
PROPELLER SHAFT
GREASE


ENGINE COVER LOCK PLATE (RIGHT)
SHIFT PIVOT/ SHIFT LINK GUIDE
ENGINE COVER LOCK PLATE (FRONT)
TRIM/TILT ANGLE SENSOR
TILT SHAFT THREAD
SWIVEL CASE
TILT BRACKET
PTT THRUST RECEIVER
LOWER CYLINDER BUSH/COLLAR
GREASE

SPARK PLUG SERVICE

Standard Spark Plug (Iridium)

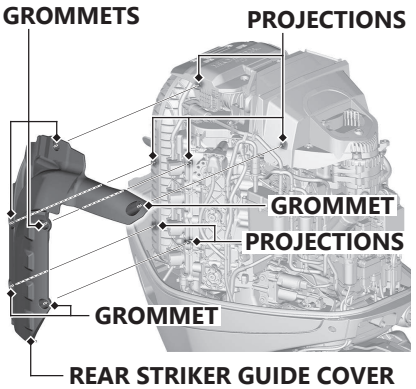
RECOMMENDED SPARK PLUGS:
ILZKAR7S11E (NGK)

NOTICE

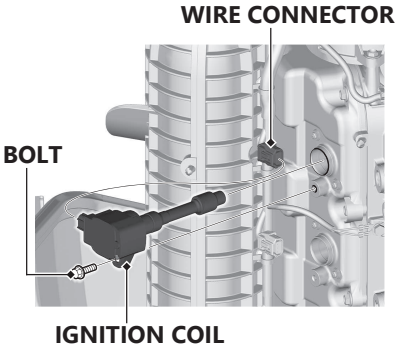
- Incorrect spark plugs can cause engine damage.

Inspection

1. Disconnect the battery negative (–) terminal.
2. Unlock and remove the engine cover (P.91).



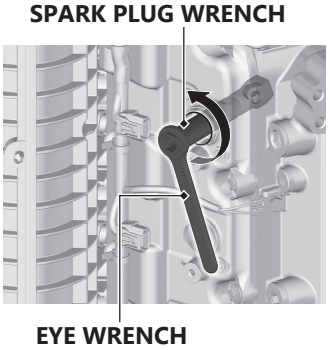
3. Release the grommets on the rear striker guide cover from the projections and remove the rear striker guide cover.



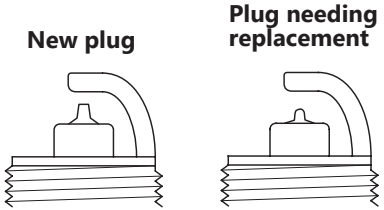
4. Remove the bolt from the ignition coil. Move the ignition coil to a position that allows removal of the wire connector easily.
5. Disconnect the wire connector from the ignition coil by pushing on the lock tab and pulling on the connector. Pull on the plastic connector, not the wires.
6. Remove the ignition coil by pulling it up slightly.

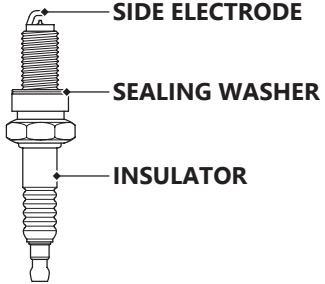
NOTICE

- Do not strike or drop the ignition coil, or it may be damaged and require replacement.

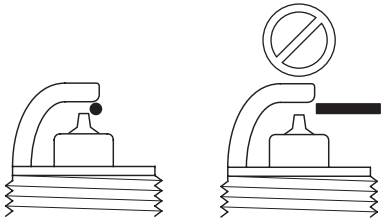


7. Remove the spark plugs with a spark plug wrench and eye wrench.





8. Inspect the spark plugs.
   1. If the electrodes are heavily corroded or carbon-soiled, replace the spark plug with a new one.
   2. Replace a spark plug if the center electrode is worn. The spark plug can wear out in different ways. If the sealing washer shows signs of wear, or if the insulators are cracked or chipped, replace the spark plug.



Use a wire type plug gauge to measure the gap (spark gap) between the center electrode and the side electrode.

- Use a wire-type plug gauge to prevent damage to the iridium center electrode.

Check that the Φ0.051 in (1.3 mm) plug gauge does not fit into the gap.
The gap should be 0.039 – 0.051 inches (1.0 – 1.3 mm).

9. These spark plugs have an iridium coated center electrode.
   Be sure to observe the following when servicing iridium spark plugs.
   - Do not clean the spark plugs. If an electrode is contaminated with accumulated material or dirt, replace the spark plug with a new one.
   - Use only a "wire-type feeler gauge" to check the spark plug gap if necessary. To prevent damaging the iridium coating of the center electrode, never use a "leaf-type feeler gauge."
   - Do not adjust the spark plug gap. If the gap is out of specification, replace the spark plug with a new one.
10. Install the spark plugs carefully, by hand, to avoid cross-threading.

11. After each spark plug is seated, tighten it with the spark plug wrench supplied in the tool kit to compress the sealing washer.
    If reinstalling used spark plugs, tighten 1/8 – 1/4 turn after the spark plugs are seated.
    If installing new spark plugs, tighten 1/2 turn after the spark plugs are seated.

    TIGHTENING TORQUE:
    16 lbf·ft (22 N·m , 2.2 kgf·m)

NOTICE

- Loose spark plugs can overheat and damage the engine.
  Overtightening the spark plugs can damage the threads in the cylinder head.

12. Push the wire connector onto the ignition coil. Make sure it locks in place.
13. Install the ignition coil. Reinstall the bolt.
14. Repeat this procedure for the other seven spark plugs.
15. Reinstall the covers. When reinstalling the covers, make sure not to pinch the wire harnesses between the covers and engine case.

Optional Spark Plug (Nickel)

RECOMMENDED SPARK PLUGS:
LZKAR7F11E (NGK)

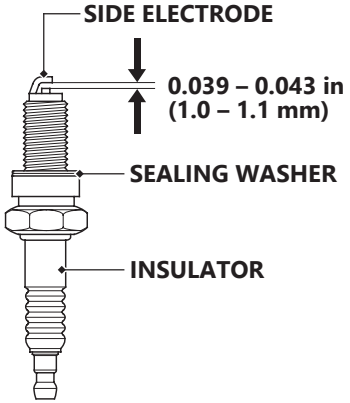
NOTICE

- Incorrect spark plugs can cause engine damage.

Replacement

Installation and removal procedure of the optional spark plugs are the same as the standard spark plugs.

Inspection and Cleaning



Measure the spark plug electrode gap with a wire-type feeler gauge.
Correct the gap, if necessary, by carefully bending the side electrode.
The gap should be:
0.039 – 0.043 in (1.0 – 1.1 mm)

REFUELING

If you do not anticipate cycling through at least one complete tank of fuel within a 30 day period, we recommend adding Honda Marine Fuel Stabilizer each time you refuel.

Check the fuel level and refill it if necessary. Do not fill the fuel tank above the UPPER LIMIT. Refer to the boat manufacturer's instructions.

⚠ WARNING

Gasoline is highly flammable and explosive.

You can be burned or seriously injured when handling fuel.

- Stop the engine and let it cool before handling fuel.
- Keep heat, sparks, and flame away.
- Handle fuel only outdoors.
- Keep away from your vehicle.
- Wipe up spills immediately.

Never refill the fuel tank inside a building where gasoline fumes may reach flames or sparks. Keep gasoline away from appliance pilot lights, barbecues, electric appliances, power tools, etc.

Spilled fuel is not only a fire hazard, it also causes environmental damage. Wipe up spills immediately.

NOTICE

- Fuel can damage paint and plastic. Be careful not to spill fuel when filling your fuel tank. Damage caused by spilled fuel is not covered under the Distributor's Limited Warranty (U.S.) / Distributor's Warranty (CA.).

FUEL RECOMMENDATIONS

Use unleaded gasoline with a pump octane rating of 86 or higher.

Your outboard motor is certified to operate on unleaded gasoline. Unleaded gasoline produces fewer engine and spark plug deposits and extends exhaust system life.

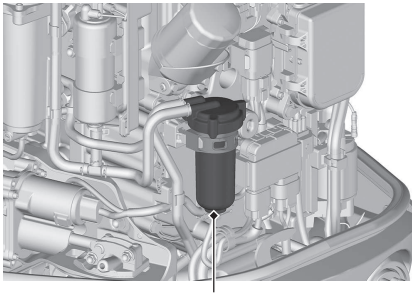
Never use gasoline that is stale, contaminated, or mixed with oil. Avoid getting dirt or water in the fuel tank.

You may use unleaded gasoline containing no more than 10% ethanol (E10) or 5% methanol by volume. In addition, methanol must contain cosolvents and corrosion inhibitors.
Use of fuels with content of ethanol or methanol greater than shown above may cause starting and/or performance problems. It may also damage metal, rubber, and plastic parts of the fuel system.

Engine damage or performance problems that result from using a fuel with percentages of ethanol or methanol greater than shown above are not covered under warranty.

If your outboard motor will be used on an infrequent or intermittent basis, please refer to the fuel section of the STORAGE chapter (P.117) for additional information regarding fuel deterioration.

FUEL FILTER WITH WATER SEPARATOR (LOW PRESSURE SIDE) INSPECTION AND REPLACEMENT



FUEL FILTER with WATER SEPARATOR (LOW PRESSURE SIDE)

The fuel filter with water separator is located below the intake manifold.

Water or sediment accumulation in the fuel filter with water separator can cause loss of power or hard starting.
To prevent engine malfunction, inspect the fuel filter with water separator and replace it when necessary.
Clean it or consult with an authorized Honda Marine dealer for cleaning.

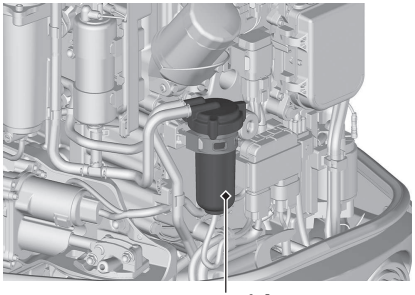
⚠ WARNING

Gasoline is highly flammable and explosive.

You can be burned or seriously injured when handling fuel.

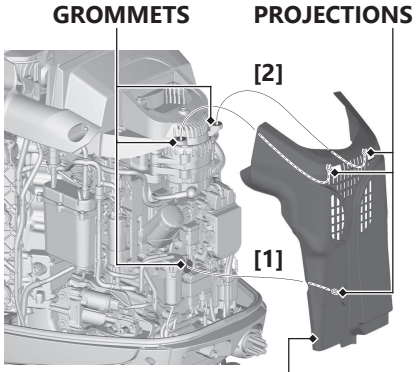
- Stop the engine and let it cool before handling fuel.
- Keep heat, sparks, and flame away.
- Handle fuel only outdoors.
- Keep away from your vehicle.
- Wipe up spills immediately.

Inspection



FUEL FILTER with WATER SEPARATOR (LOW PRESSURE SIDE)

1. Remove the engine cover (P. 91).



FRONT STRIKER GUIDE COVER

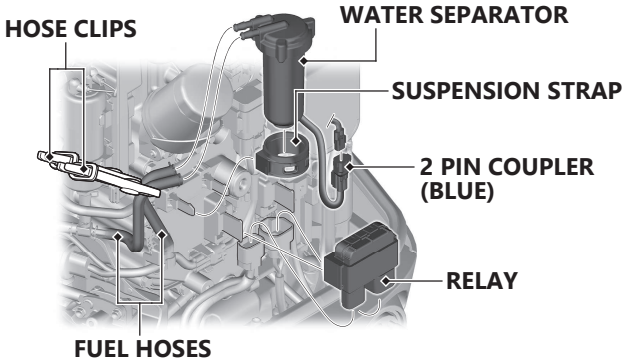
2. Release the projection of the front striker guide cover lower side from the grommet, and then release the projections of the front striker guide cover upper side from the grommets.
   Remove the front striker guide cover.

3. Looking through the translucent strainer cup, check the fuel filter with water separator for accumulation of water or sediment.

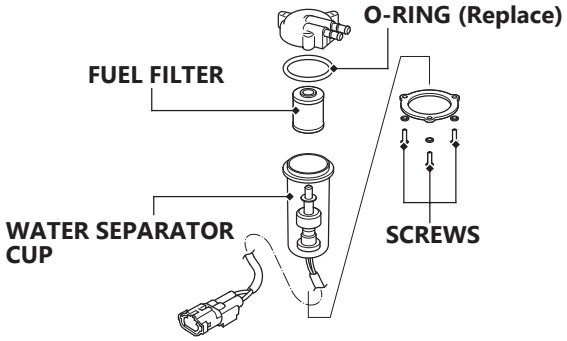
If the fuel filter with water separator is clogged, refer to fuel filter with water separator replacement procedure (P.109) to remove the filter and clean it.

If water is present in the fuel filter with water separator, refer to fuel filter with water separator replacement procedure to remove the strainer cup and empty the water from the inside of the cup.

Replacement

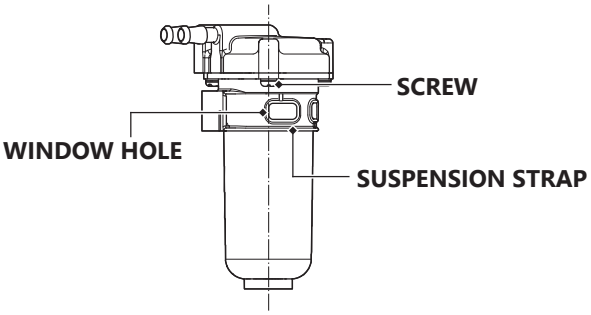


1. Remove the engine cover (P.91).
2. Remove the front striker guide cover (P.107).
3. Remove the relay.
4. Disconnect the 2-pin coupler (blue).
5. Remove the suspension strap from the fuel filter with water separator bracket, then remove the suspension strap from the fuel filter with water separator.
6. Bind the two fuel tubes with the tube clips to prevent fuel leakage, disconnect the fuel tubes.



7. Remove the three screws holding the fuel filter with water separator, empty the water or deposits from the inside of the cup.
8. Thoroughly clean the cup. If the fuel filter is clogged, or has reached the end of its replacement period, replace it with a new one.
9. Reassemble the fuel filter with water separator in the reverse order of removal. Use a new O-ring.

   TIGHTENING TORQUE:
   2.5 lbf·ft (3.4 N·m, 0.35 kgf·m)

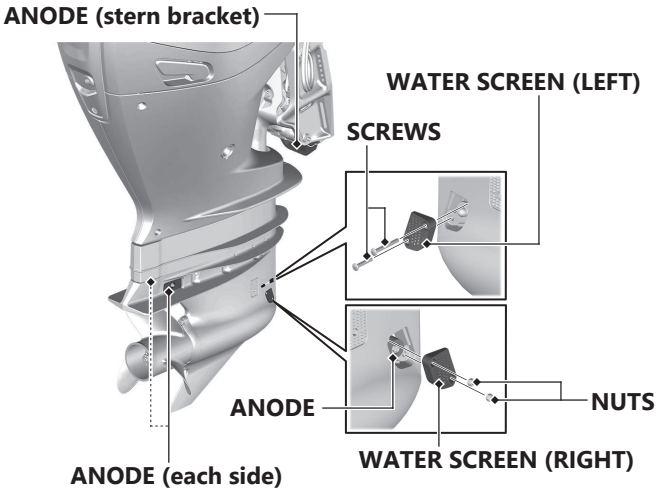


10. When installing the suspension strap to the fuel filter with water separator, align the left end of the suspension strap window hole with the screw as shown in the figure.
11. Prime the engine using the priming bulb (P.56). Check for fuel leaks. Repair any fuel leaks if necessary.

If the buzzer sounds or water or sediment accumulation is found in the fuel filter with water separator, inspect the fuel tank.

Clean the fuel tank and tank filter if necessary. The fuel tank may need to be drained completely and refilled with fresh gasoline.

ANODE INSPECTTION



The anodes are located on each side of the gear case, on the right cooling water intake port and on the stern bracket. They are made of a sacrificial material that helps to protect the outboard motor from corrosion.

Replace the anodes when they have been reduced to about one third their original size, or if they are crumbling.

Water Screen Removal/Installation

1. Loosen the screws and remove the nuts.
2. Remove the water screen (right).
3. Remove the water screen (left).
   If the water inlet is clogged with waterweed or mud, remove it.
4. Install the nuts and water screen (right) to the gear case by holding the nuts.
5. Install the screws and water screen (left).
6. Be careful not to drop the nuts as you tighten the screws.

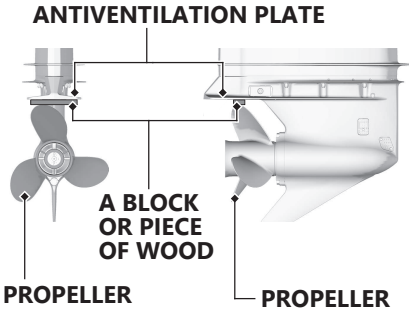
   TIGHTENING TORQUE:
   0.7 lbf·ft (1.0 N·m, 0.1 kgf·m)

PROPELLER REPLACEMENT

Before replacing the propeller, remove the emergency stop switch clip from the emergency stop switch to prevent any possibility of the engine being started while you are working with the propeller.

The propeller blades may have sharp edges, so wear heavy gloves to protect your hands.

Operating the outboard motor at higher altitudes will reduce available power. This may require decreasing the propeller pitch to maintain correct engine RPM.



When replacing the propeller, put a suitable block or piece of wood between the propeller and the antiventilation plate to prevent the propeller from rotating.

Removal

1. Remove the cotter pin, unscrew the castle nut, remove the washer, and then remove the propeller and thrust washer.
2. Inspect the propeller shaft for any fishing line or debris.

Installation

Some propeller brands require specific mounting hardware. Refer to your specific propeller manufacturer's instructions for proper installation.

1. Apply marine grade grease to the propeller shaft.

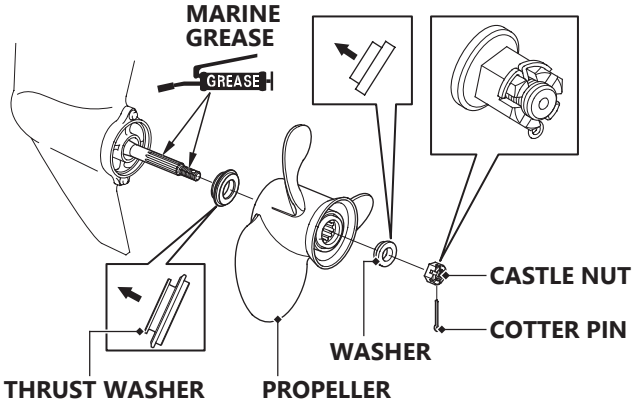
2. Install the thrust washer with the grooved side toward the gear case.
3. Install the propeller.
4. Install the washer as shown below.
5. Lightly tighten the castle nut by hand or wrench until the propeller has no free play.
6. Tighten the castle nut using a torque wrench.
   TIGHTENING TORQUE:
   41 lbf·ft (56 N·m, 5.7 kgf·m)
7. Then, using a torque wrench, tighten the castle nut until the first available groove in the castle nut aligns with the cotter pin hole. Do not tighten past the first alignment of the castle nut groove and the cotter pin hole.

NOTICE

- TIGHTENING TORQUE LIMIT:
  94 lbf·ft (128 N·m, 13 kgf·m)
  Do not tighten the castle nut above the TIGHTENING TORQUE LIMIT, or the propeller and shaft may be damaged.

8. Be sure to replace the cotter pin with a new one.
   - Use a Honda Genuine stainless steel cotter pin or equivalent cotter pin and bend the pin ends.

Note that the castle nut wrench is not included with the tool set that comes with the outboard motor. Contact your authorized Honda Marine dealer for additional tool information.



CLEANING AND FLUSHING

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

Touch up any damaged paint, and coat areas that may rust with Honda Corrosion Inhibitor, or equivalent.
Lubricate controls with a silicone spray lubricant.

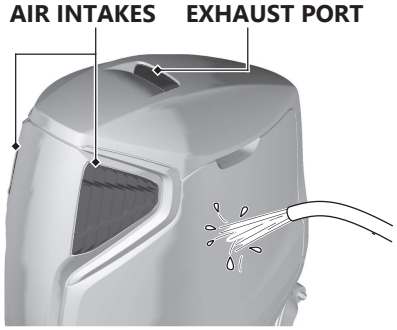
NOTICE

- Do not apply water or corrosion inhibitor directly to the electrical components under the engine cover, such as the AC generator, O_2 sensor, or the AC generator belt. If water or corrosion inhibitor penetrates these components, they may be damaged. Before applying a corrosion inhibitor, cover the AC generator, belt and O_2 sensor with a protective material to prevent damage.

Cleaning

Wash the outside of the outboard motor with clean, fresh water, and flush the cooling system as follows.

Cleaning of the outside of the outboard motor should be performed with the engine cover installed.



NOTICE

- Be careful not to spray water into the air intakes and the exhaust port. If water penetrates inside the engine cover from the air intakes and the exhaust port, it may cause malfunction.

Flushing With a Garden Hose (commercially available)

NOTICE

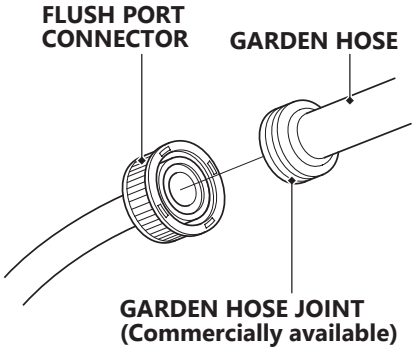
- Do not run the engine when flushing the outboard motor with a garden hose or the outboard motor may be damaged.

For safety, remove the emergency stop switch clip so the engine cannot be started while you are standing near the propeller.

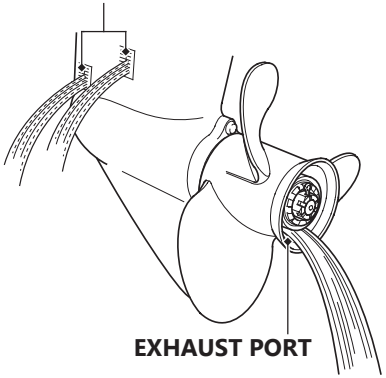
1. Tilt down the outboard motor.
2. Clean and wash the outside of the outboard motor with fresh water.

FLUSH PORT CONNECTOR

3. Disconnect the flush port connector.



4. Screw the flush port connector onto the garden hose.



5. Turn on the fresh water supply and flush the outboard motor for at least 10 minutes. Check that water is draining from the cooling system indicator, the cooling water intake port and the exhaust port.

NOTICE

- Do not start the engine while flushing.

6. After flushing, disconnect the garden hose and reconnect the flush port connector.
7. Tilt up the outboard motor and move the tilt lock levers to the LOCK position (P.41).

FUEL

NOTICE

- Depending on the region where you operate your outboard, fuel formulations may deteriorate and oxidize rapidly. Fuel deterioration and oxidation can occur in as little as 15 days and may cause damage to the fuel system. Please check with your servicing dealer for local storage recommendations.

Gasoline will oxidize and deteriorate in storage. Old gasoline will cause hard starting, and it leaves gum deposits that clog the fuel system. If the gasoline in your fuel tank and vapor separator deteriorates during storage, you may need to have the vapor separator and other fuel system components serviced or replaced.

The length of time that gasoline can be left in your fuel tank and vapor separator without causing functional problems will vary with such factors as gasoline blend, your storage temperatures, and whether the fuel tank is partially or completely filled.

The air in a partially filled fuel tank promotes fuel deterioration. Very warm storage temperatures accelerate fuel deterioration. Fuel deterioration problems may occur in less than 15 days, if the gasoline was not fresh when you filled the fuel tank.

You can extend fuel storage life by adding a gasoline stabilizer that is formulated for that purpose, or you can avoid fuel deterioration problems by draining all the fuel from the fuel tank and vapor separator.

The Distributor's Limited Warranty (U.S.) (P.151) / Distributor's Warranty (CA.) (P. 164) does not cover fuel system damage or engine performance problems resulting from neglected storage preparation. See page 105 for additional information on fuel recommendations.

Storage Procedure

⚠ WARNING

Gasoline is highly flammable and explosive.

You can be burned or seriously injured when handling fuel.

- Stop the engine and let it cool before handling fuel.
- Keep heat, sparks, and flame away.
- Handle fuel only outdoors.
- Keep away from your vehicle.
- Wipe up spills immediately.

1. Remove the engine cover (P. 91).
2. Inspect the fuel filter with water separator (low-pressure side).
   If water has collected inside it or there is a clog, such as sediment in the cup, then remove the water or replace the filter. (P.109)
3. Drain the gasoline from the drain screw of the vapor separator. (P.120)
4. Confirm that there is no water or dirt mixed in with the gasoline that you remove.
5. Do the following operation if you find water or dirt mixed in with the gasoline that you remove.
   ① Confirm that the drain screw has been tightened.
   ② Keep the motor level as you connect a gas tank that has fresh gasoline.

③ Use the primer bulb to supply fresh gasoline to the vapor separator.

⚠ CAUTION

Always operate the primer bulb while the drain screw is tight. If the drain screw is loose, then gas will leak.

④ Start the engine and run it at idle for 1 minute.

NOTICE

- Always start the engine under normal operating conditions (while the propeller is in the water). Never start it while the propeller is out of the water. Doing so will damage the engine.

⑤ Drain the gasoline from the drain screw of the vapor separator. (P.120)
⑥ Confirm that there is no water or dirt mixed in with the gasoline that you remove.
⑦ If you find water or dirt in the gasoline that you remove, then repeat steps ① to ⑥ until you can confirm there is no water or dirt.

Adding a Fuel Stabilizer

When adding a fuel stabilizer, fill the fuel tank with fresh gasoline. If only partially filled, air in the tank will promote fuel deterioration during storage. If you keep an additional container of gasoline for refueling, be sure that it contains only fresh gasoline.

1. Drain the vapor separator before adding fuel stabilizer.
2. Add Honda Marine fuel stabilizer or equivalent following the instructions on the label.
3. After adding a fuel stabilizer, run the engine in water for 10 minutes to be sure that the treated gasoline has replaced the untreated gasoline in the vapor separator.
4. Turn the engine OFF.

Draining the Fuel System

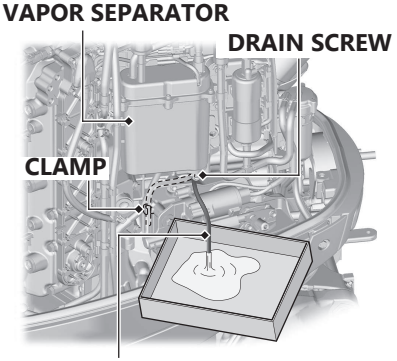
⚠ WARNING

Gasoline is highly flammable and explosive.

You can be burned or seriously injured when handling fuel.

- Stop the engine and let it cool before handling fuel.
- Keep heat, sparks, and flame away.
- Handle fuel only outdoors.
- Keep away from your vehicle.
- Wipe up spills immediately.

You can avoid fuel deterioration problems by draining the fuel tank and vapor separator.



(Draining the fuel becomes easier when the front end of the drain hose is as low as possible)

1. Remove the engine cover (P. 91)
2. Disconnect the drain hose of the vapor separator, which is anchored by the clamp on the lower right, and put its end out of the undercase.
3. Place an approved gasoline container below the fuel drain outlet.
4. Loosen the drain screw on the vapor separator.
5. After draining thoroughly, tighten the drain screw securely.

   TIGHTENING TORQUE:
   1.7 lbf·ft (2.3 N·m, 0.23 kgf·m)

6. Clamp the drain hose on the clamp.

7. Drain the fuel tank into an approved gasoline container, or if you need to store fuel in the fuel tank, you can extend fuel storage life by filling the fuel tank with fresh gasoline and adding Honda Marine fuel stabilizer or equivalent following the directions on the container.

ENGINE OIL

1. Change the engine oil (P.96).
2. Remove the emergency stop switch clip from the emergency stop switch, and remove the spark plugs (P. 100).
3. Pour 1 – 2 teaspoons (5 – 10 cm^3) of clean engine oil into each cylinder.
4. Rotate the engine a few revolutions to distribute the oil in the cylinders.
5. Reinstall the spark plugs (P. 100).

HOISTING THE OUTBOARD MOTOR

Consult an authorized Honda Marine dealer when removing the outboard motor from the hull.

STORAGE PRECAUTIONS

Select a well-ventilated storage area. If possible, avoid storage areas with high humidity.

If storing a container of gasoline, store it away from any appliance that operates with a flame, such as a furnace, water heater, or clothes dryer. Also avoid any area with a spark producing electric motor, or where power tools are operated.

OUTBOARD MOTOR STAND

If the outboard motor will be removed from the boat for storage, store it vertically by mounting it on a commercially available stand.

Cover the outboard motor to keep out dust. Do not use a plastic sheet as a dust cover. A nonporous cover will trap moisture, promoting rust and corrosion.

REMOVAL FROM STORAGE

Check your outboard motor as described in the *BEFORE OPERATION* chapter of this manual.

If the cylinders were coated with oil during storage preparation, the engine may smoke briefly at startup. This is normal.

WITH OUTBOARD MOTOR INSTALLED ON BOAT

Use an outboard motor support bar to prevent the outboard motor from moving while trailering the boat.
Refer to the manufacturer's instructions for using an outboard motor support bar.

The preferred method is to leave the engine in the normal running position, but if there is insufficient road clearance, you can tilt the outboard motor using a commercially available outboard motor support bar available through your dealer.
Refer to the manufacturer's instructions for using an outboard motor support bar.

OUTBOARD MOTOR SUPPORT BAR (commercially available)

WITH OUTBOARD MOTOR REMOVED FROM BOAT

Secure the outboard motor in the vertical position shown on P.122.

ELECTRIC STARTER WILL NOT OPERATE

Possible Cause	Correction
Battery connections loose or corroded.	Clean and tighten battery connections.
Battery discharged.	Recharge battery.
Fuse(s) blown.	Replace fuse(s) (P.128).
Fuel system malfunction, fuel pump failure, ignition malfunction, stuck valves, starter malfunction, switch malfunction, or electrical problem in the starting circuit, etc.	Use starting procedure (P.57); if engine still will not start, then take outboard motor to an authorized Marine dealer, or refer to the shop manual.

ENGINE WILL NOT START

Possible Cause	Correction
Clip not inserted in emergency stop switch.	Insert clip in emergency stop switch.
Control lever not in neutral position.	Shift to neutral.
Out of fuel.	Refuel (P.104).
Fuel hose not primed.	Squeeze priming bulb (P.56).
Fuel filter with water separator or fuel tank filter clogged.	Replace fuel filters (P.109).
Bad fuel; outboard motor stored without treating or draining gasoline, or refueled with bad gasoline.	Drain fuel tank and vapor separator (P.120). Refill with fresh gasoline (P.104).
Water separator full of accumulated water.	Clean water separator (P.107).
Spark plugs faulty, fouled, or improperly gapped.	Gap (non-iridium type) or replace spark plugs (P. 100).
Spark plugs wet with fuel (flooded engine).	Dry and reinstall spark plugs. Start engine with the throttle open.
Fuel system malfunction, fuel pump failure, ignition malfunction, etc.	Take outboard motor to an authorized Marine dealer, or refer to the shop manual.

HARD STARTING OR STALLS AFTER STARTING

Possible Cause	Correction
Fuel hose not primed.	Squeeze priming bulb (P.56).
Fuel filter or fuel tank filter clogged.	Replace fuel filters (P.109).
Bad fuel; outboard motor stored without treating or draining gasoline, or refueled with bad fuel.	Drain fuel tank and vapor separator (P.120). Refill with fresh gasoline (P.104).
Water separator full of accumulated water.	Clean water separator (P.106).

ENGINE OVERHEATS

Possible Cause	Correction
Water intake screens clogged.	Clean water intake screens (P.111).
Faulty thermostat or water pump.	Take outboard motor to an authorized Marine dealer, or refer to the shop manual.

FUSES

Electric Starter Will Not Operate

The 7.5 A, 15 A, and 30 A main fuses protect the electric starter relay and related circuits.

The main fuse protects the ignition switch and related circuits. If this fuse blows, the engine will not start or run, and the power trim/tilt switch will not activate the trim/tilt mechanism.

The 40 A fuse is in the power harness connected to the battery. If this fuse blows, the engine will not start or run.

Battery Will Not Charge

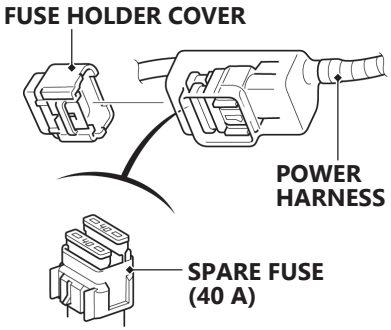
A 200 A ACG fuse protects the alternator circuit. If the ACG fuse blows, the engine will not charge the battery. Refer to P.133.

Fuse Replacement

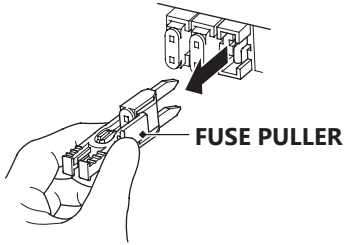
NOTICE

- Disconnect the battery cable at the battery negative (–) terminal before replacing the fuse.
  Failure to do so may cause a short circuit.

Power Harness



1. Stop the engine.
2. Disconnect the battery cable and the power harness.
3. Open the fuse holder cover.

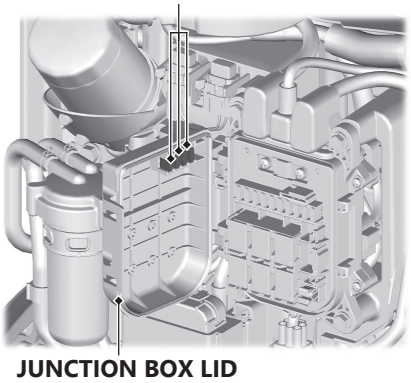


4. Pull the old fuse out of the clip with the fuse puller supplied in the junction box (P.131).
5. Push a new fuse (40A) into the clip.
6. Close the fuse holder cover.

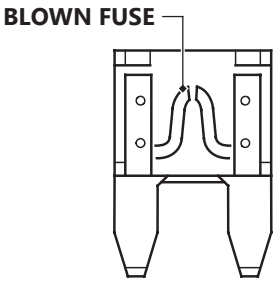
Main Fuse

A spare fuse is located on the reverse side of the junction box lid.

1. Stop the engine and disconnect the battery cable.
2. Remove the engine cover. (P. 91)
3. Remove the front striker guide cover (P.107).



4. Open the junction box lid.



5. Use the fuse puller from the fuse holder to remove the fuses (P.131). If a fuse is blown, install a replacement fuse of the same specified rating.
   The outboard motor is supplied with spare fuses in the junction box lid.

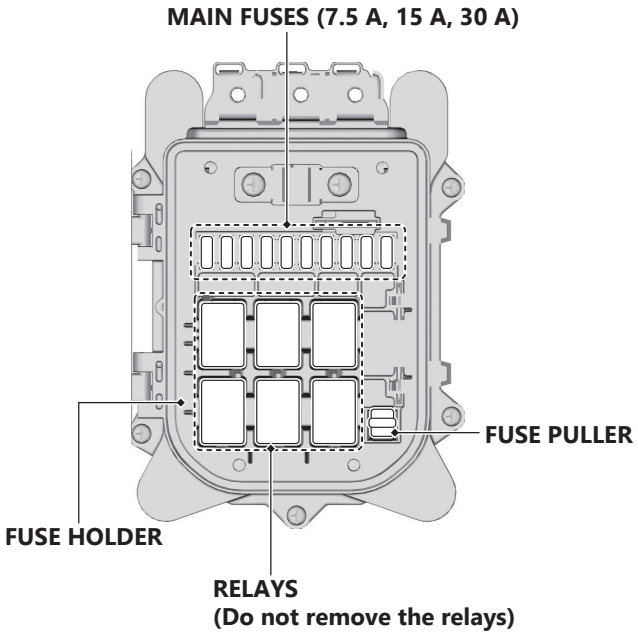
   MAIN FUSE RATINGS:
   7.5 A, 15 A, 30 A
6. Close the junction box lid, and install the front striker guide cover and engine cover.
7. Reconnect the battery.

NOTICE

- Never use a fuse with a rating greater than specified. Serious damage to the electrical system could result.

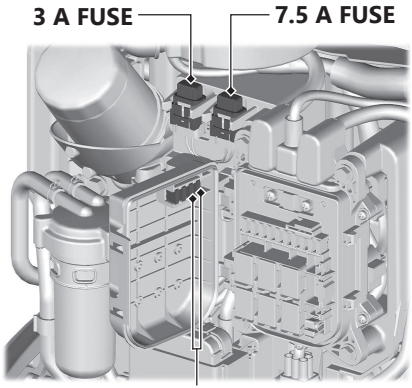
If a blown fuse is found, try to determine and correct the electrical problem that caused the blown fuse. An uncorrected electrical problem may cause the fuse to blow again.

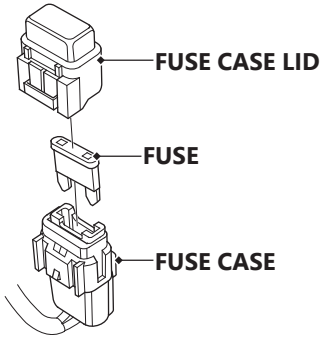
If fuses continue to blow, take the outboard motor to an authorized Marine dealer for inspection and service, or refer to the shop manual.



Fuse No.	Rating	Component(s) or Circuit(s) Protected
1	200 A	ACG, Battery
2	15 A	GROUND
3	15 A	Right throttle body
4	30 A	Main relay, Starter relay
5	7.5 A	Remote control box
6	30 A	Shift actuator
7	15 A	Left throttle body
8	15 A	Fuel pump (High pressure side)
9	15 A	Fuel pump (Low pressure side), sensors, ECU
10	15 A	Left side Injectors, Left side Ignition coils
11	15 A	Right side Injectors, Right side Ignition coils
	3 A	Battery switch OFF notification
	7.5 A	Accessory relay

3 A Fuse, 7.5 A Fuse

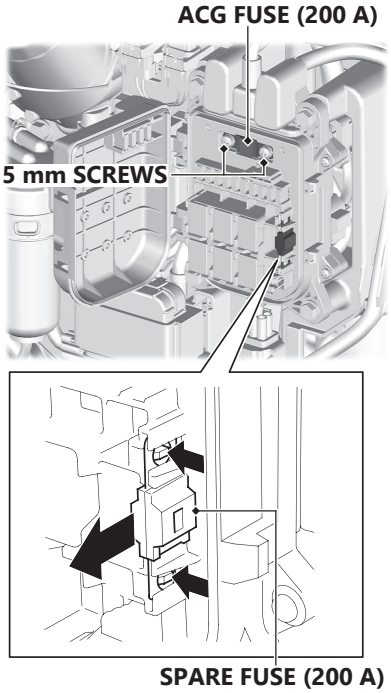




A spare fuse is located on the reverse side of the junction box lid.

1. Stop the engine and disconnect the battery cable.
2. Remove the engine cover. (P. 91)
3. Remove the front striker guide cover (P.107).
4. Remove the fuse case lid.
5. Remove the old fuse out of the fuse case with the fuse puller supplied in the fuse holder (P.131).
6. Install a new fuse. The outboard motor is supplied with spare fuse in the junction box lid.
   FUSE RATING:
   3 A, 7.5 A
7. Be sure the fuse case lid is securely locked.
8. Close the junction box lid, and install the front striker guide cover and engine cover.
9. Reconnect the battery.

ACG Fuse

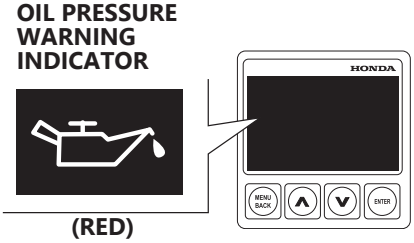


A spare fuse is located in the fuse holder.

1. Stop the engine and disconnect the battery cable.
2. Remove the engine cover. (P. 91)
3. Remove the front striker guide cover (P.107).
4. Open the junction box lid.
5. Remove the old fuse by removing two 5 mm screws.
6. Install a new fuse by tightening two 5 mm screws. ACG FUSE: 200 A
7. Close the junction box lid, and install the front striker guide cover and engine cover.
8. Reconnect the battery.

OIL PRESSURE WARNING INDICATOR COMES ON AND ENGINE SPEED IS LIMITED

Multi-function Display



For information about NMEA2000-compatible device displays, refer to the display device's manual.

If oil pressure becomes low, the oil pressure warning indicator comes on, and the engine protection system limit engine speed. If you are at cruising speed, engine speed will decrease automatically.

The oil pressure warning indicator is also equipped with a buzzer that sounds when the oil pressure warning indicator comes on.

Low oil pressure may be the result of a low engine oil level, or there may be a problem with the engine lubrication system.

If the throttle is closed suddenly after full throttle operation, engine speed may drop below the specified idle rpm, and that could activate the engine protection system momentarily.

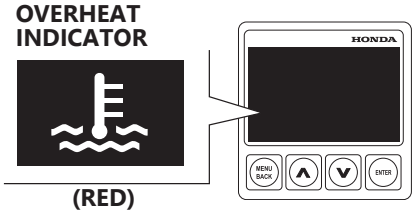
If low oil pressure activates the engine protection system, stop the engine, check the engine oil level (P.93), and add oil if needed.

With the engine oil at the recommended level, restart the engine. If the lubrication system is OK, the oil pressure warning indicator does not come on, and the engine will respond normally to throttle control lever operation.

If the engine protection system remains activated after 30 seconds, return to the nearest boat landing, and have the outboard motor inspected by an authorized Marine dealer.

OVERHEAT INDICATOR COMES ON AND ENGINE SPEED IS LIMITED

Multi-function Display



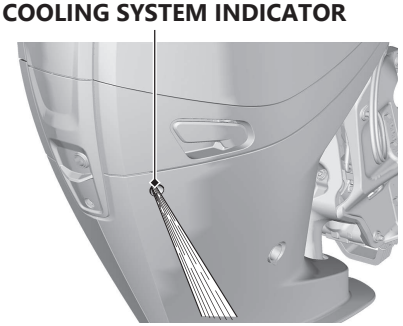
For information about NMEA2000-compatible device displays, refer to the display device's manual.

If the engine overheats, the overheat indicator will come on, and the engine will stop in 20 seconds after the engine protection system limits engine speed. If you are at cruising speed, engine speed will decrease automatically.

All types are equipped with a buzzer that sounds when the overheat indicator comes on.

Engine overheating may be the result of restricted water intake screens, or there may be a problem with the cooling system thermostat or water pump.

If the engine is stopped after running at full throttle, and then restarted soon afterward, that could activate the engine protection system momentarily.



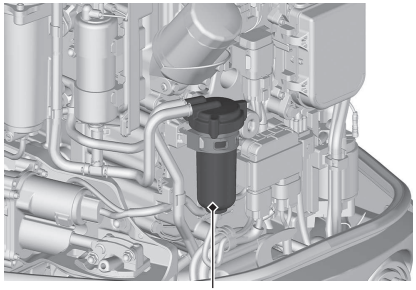
If overheating activates the engine protection system, idle the engine in neutral, and check the cooling system indicator.

If water is flowing from the cooling system indicator, continue idling for 30 seconds. If the cooling system is OK, the overheat indicator should go off within 30 seconds, and the engine will respond normally to throttle control lever operation.

If there is no water flowing from the cooling system indicator, stop the engine, and tilt the outboard motor to inspect the water intake screens. If restricted, clean the water intake screens, return the outboard motor to the running position, restart the engine, and check the cooling system indicator again.

If there is still no water flowing from the cooling system indicator, or if the engine protection system remains activated after 30 seconds, return to the nearest boat landing, and have the outboard motor inspected by an authorized Marine dealer.

WATER SEPARATOR BUZZER SOUNDS



WATER SEPARATOR

When the water separator buzzer sounds (a rapid, repeating signal):

Check the water separator for water contamination. If water is present, stop the engine, and clean the water separator following the instructions on P. 106, or consult with an authorized Honda Marine dealer.

SUBMERGED OUTBOARD MOTOR

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

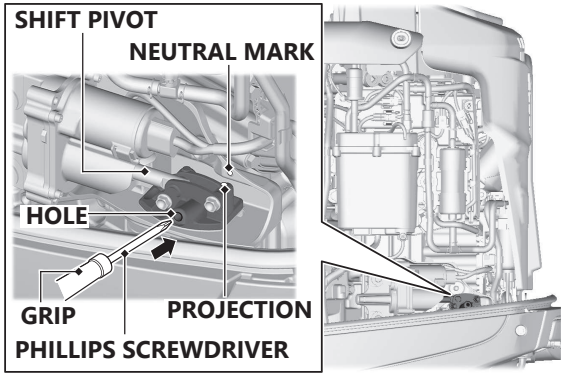
As soon as possible, take the outboard motor to an authorized Marine dealer for inspection and service.

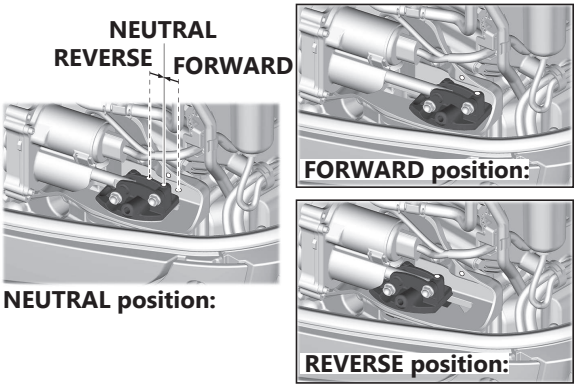
EMERGENCY GEAR SHIFTING

If the gear cannot be shifted, perform shift operation manually according to the following procedure and return to port at possible engine speed.

1. Set the gearshift/throttle control lever in the NEUTRAL position (P.24-26).
2. Stop the engine (P.62).
3. Remove the engine cover (P.91).
4. Insert the Phillips screwdriver with the grip from the tool kit (P.87) into the hole of the shift pivot to move the shaft. Shift gear into neutral by aligning the neutral mark and projection of the shift pivot.
   Grasp the shaft of the inserted Phillips screwdriver close to the shift pivot.
   Operate in a stable posture that makes it easy to apply force.
5. Start the engine (P.57).
6. Shift gear into FORWARD or REVERSE by moving the shift pivot with the Phillips screwdriver with the grip from the tool kit.

After returning to port, stop the engine and anchor the boat.

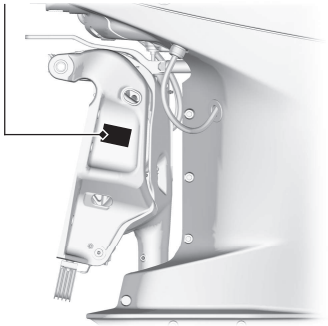




SERIAL NUMBER LOCATIONS

Record the frame serial number, the engine serial number, and the date of purchase in the space provided on this page.
You will need these numbers when ordering parts, and when making technical or warranty inquiries (P.147).

FRAME SERIAL NUMBER

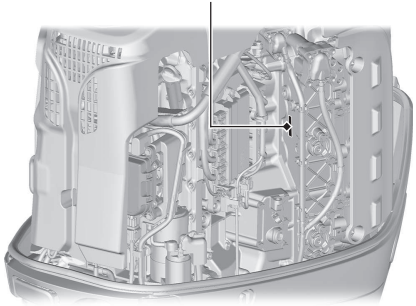


The frame serial number is stamped on a plate attached to the left side of the stern bracket.

Frame Serial Number:

Date of purchase:

ENGINE SERIAL NUMBER



The engine serial number is stamped on the upper left side of the engine.

Engine serial number:

BATTERY

⚠ WARNING

The battery contains sulfuric acid (electrolyte), which is highly corrosive and poisonous.

Getting electrolyte in your eyes or on your skin can cause serious burns.

Wear protective clothing and eye protection when working near the battery.

KEEP CHILDREN AWAY FROM THE BATTERY.

For complete information, refer to the battery manufacturer's instructions.

Minimum Requirements

12 V – 92 Ah/5 HR (110 Ah/20 HR) (CCA800)

NOTICE

- 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.

NOTICE

- 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. This voltage drop may cause the buzzer to sound momentarily when engaging the starter motor and may prevent the engine from starting. If the engine starts and the buzzer sounds momentarily, there may be barely sufficient voltage reaching the engine.

⚠ WARNING

Battery posts, terminals, and related accessories contain lead and lead compounds.
Wash hands after handling.

EMISSION CONTROL SYSTEM INFORMATION

Source of Emissions

The combustion process produces carbon monoxide, oxides of nitrogen, and hydrocarbons. Control of hydrocarbons and oxides of nitrogen 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 utilizes appropriate air/fuel ratios and other emissions control systems to reduce the emissions of carbon monoxide, oxides of nitrogen, and hydrocarbons.

PGM-FI System

The PGM-FI system uses sequential multiport fuel injection. It has three subsystems: Air Intake, Engine Control, and Fuel Control. The Engine Control Module (ECM) uses various sensors to determine how much air is going into the engine. It then controls how much fuel to inject under all operating conditions.

Ignition Timing Control System

The system constantly adjusts the ignition timing, reducing the amount of HC, CO, and NOx produced.

The U.S., California Clean Air Acts, and Canadian Environmental Protection Act

EPA, California, and Canadian regulations require all manufacturers to furnish written instructions describing the operation and maintenance of emission control systems.

The following instructions and procedures must be followed in order to keep the emissions from your Honda engine within the emission standards.

Tampering and Altering

NOTICE

- Tampering is a violation of federal and California law.

Tampering with or altering the emission control system may increase emissions beyond the legal limit. Among those acts that constitute tampering are:

- Alterations that would cause the engine to operate outside its design parameters.
- Removal or alteration of any part of the intake, fuel, or exhaust systems.

Problems That May Affect Emissions

If you are aware of any of the following symptoms, have your engine inspected and repaired by your servicing dealer.

- Hard starting or stalling after starting
- Rough idle
- Misfiring or backfiring under load
- Afterburning (backfiring)
- Black exhaust smoke or high fuel consumption

Replacement Parts

The emission control systems on your Honda engine were designed, built, and certified to conform with EPA, California, and Canadian emission regulations. We recommend the use of Honda Genuine parts whenever you have maintenance done. These original-design replacement parts are manufactured to the same standards as the original parts, so you can be confident of their performance.

Honda cannot deny coverage under the emission warranty solely for the use of non-Honda replacement parts or service performed at a location other than an authorized Honda dealership; you may use comparable EPA certified parts, and have service performed at non-Honda locations. However, the use of replacement parts that are not of the original design and quality may impair the effectiveness of your emissions control system.

A manufacturer of an aftermarket part assumes the responsibility that the part will not adversely affect emission performance. The manufacturer or rebuilder of the part must certify that use of the part will not result in a failure of the engine to comply with emission regulations.

Maintenance

As the outboard engine owner, you are responsible for completing all required maintenance listed in your owner's manual. Honda recommends that you retain all receipts covering maintenance on your outboard engine, but Honda cannot deny warranty coverage solely for the lack of receipts or for your failure to ensure that all scheduled maintenance has been completed.

Follow the MAINTENANCE SCHEDULE on page 88. Remember that this schedule is based on the assumption that your machine will be used for its designed purpose. Sustained high-load operation, or use in unusual conditions, will require more frequent service.

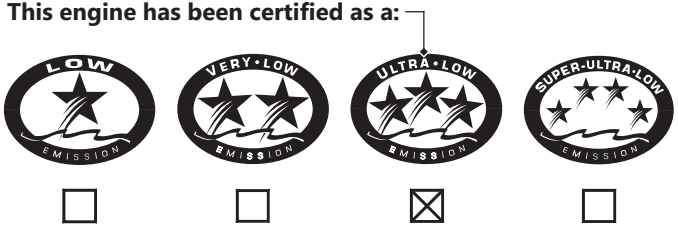
STAR LABEL

US, Puerto Rico, and US Virgin Islands

A Star label was applied to this outboard motor in accordance with the requirements of the California Air Resources Board.

The Star Label means Cleaner Marine Engine

This engine has been certified as a:



☐ ☐ ☒ ☐

The Symbol for Cleaner Marine Engines:

Cleaner Air and Water - for healthier lifestyle and environment.

Better Fuel Economy - burns up to 30 - 40 percent less gas and oil than conventional carbureted two-stroke engines, saving money and resources.

Longer Emission Warranty - protects consumer for worry-free operation.

One Star Low Emission

The one-star label identifies engines that meet the Air Resources Board's Personal Watercraft and Outboard marine engine 2001 exhaust emission standards. Engines meeting these standards have 75% lower emissions than conventional carbureted two-stroke engines. These engines are equivalent to the U.S. EPA's 2006 standards for marine engines.

Two Stars Very Low Emission

The two-star label identifies engines that meet the Air Resources Board's Personal Watercraft and Outboard marine engine 2004 exhaust emission standards. Engines meeting these standards have 20% lower emissions than One Star-Low Emission engines.

Three Stars Ultra Low Emission

The three-star label identifies engines that meet the Air Resources Board's Personal Watercraft and Outboard marine engine 2008 exhaust emission standards or the Sterndrive and Inboard marine engine 2003-2008 exhaust emission standards. Engines meeting these standards have 65% lower emissions than One Star-Low Emission engines.

Four Stars Super Ultra Low Emission

The four-star label identifies engines that meet the Air Resources Board's Sterndrive and Inboard marine engine 2009 exhaust emission standards. Personal Watercraft and Outboard marine engines may also comply with these standards. Engines meeting these standards have 90% lower emissions than One Star-Low Emission engines.

Cleaner Watercraft - Get the Facts
1-800-END-SMOG
www.arb.ca.gov

SPECIFICATIONS

MODEL	BF350A			
Description Code	BBYJ			
Type	XD	XCD	UD	UCD
Overall length	44.1 in (1,120 mm)			
Overall width	25.6 in (650 mm)			
Overall height	84.4 in (2,145 mm)		89.4 in (2,272 mm)	
Transom height (when transom angle at 12°)	25.1 in (638 mm)		30.1 in (765 mm)	
Dry mass (weight)*	783 lbs (355 kg)		794 lbs (360 kg)	
Rated power	260.9 kW (350 HP)			
Full throttle range	5,000 – 6,000 rpm			
Engine type	4 stroke OHC VTEC 8-cylinder (V8)			
Displacement	302.1 cu-in (4,952 cm^3)			
Spark plug gap	0.039 – 0.043 in (1.0 – 1.1 mm)			
Starter system	Electric starter			
Ignition system	Fully transistorized, battery ignition			
Lubrication system	Trochoid pump pressure lubrication			
Specified oil	Engine: API standard (SG, SH, SJ, SL) SAE/FC-W 10W-30 Gear case: API standard (GL-4) SAE 90 Hypoid gear oil			

MODEL	BF350A
Oil capacity	Engine: 10.8 US qt (10.2 L) without oil filter change 11.0 US qt (10.4 L) with oil filter change Gear case: 1.82 US qt (1.72 L)
CARB star label	ULTRA · LOW EMISSION
D.C. output	12V – 70A
Cooling system	Water cooling with thermostat
Exhaust system	Water exhaust
Spark plugs	ILZKAR7S11E (NGK)
Fuel pump	Electromagnetic type
Fuel	Unleaded gasoline (86 pump octane or higher)
Gear change	Forward-Neutral-Reverse (dog type)
Steering angle	30° right and left
Tilt angle (transom angle at 12°)	Stageless (68°)
Trim angle (transom angle at 12°)	– 4° to 15°

* Without battery cable, with propeller
Honda outboard motors are power rated in accordance with NMMA procedures and using the ICOMIA standard 28/23.

Dealer Locator Information

To find an authorized Honda Servicing Dealer

For USA:
Visit our website:
http://marine.honda.com and click on Find a Dealer

For Canada:
Call 1-888-946-6329 or visit our website:
English
http://marine.honda.ca/dealerlocator
French
http://marine.honda.ca/trouver-concessionaire

Honda Publications

These publications will give you additional information for maintaining and repairing your outboard motor.

Shop Manual

This manual covers complete maintenance and overhaul procedures. It is intended to be used by a skilled technician.

For USA:
Shop manuals are available through your Honda Marine dealer or visit http://marine.honda.com /Service & Support and click on Shop Manuals

For Canada:
Contact your dealer for information on the Shop Manual.

Parts Catalog

For USA:
This manual provides complete, illustrated parts lists. The catalog is available through your Honda Marine dealer or visit http://marine.honda.com/Parts & Accessories and click on Look Up Parts

For Canada:
Contact your dealer for information on Parts.

Accessory Catalog

Your authorized Honda Marine dealer offers a wide selection of accessories (optional equipment, oils, and lubricants) to enhance your boating experience.

For USA:
Visit http://marine.honda.com and click on PARTS & ACCESSORIES to see the entire catalog of accessories.

For Canada:
Check with your dealer or visit www.honda.ca and select the Parts and Accessories tab under the Honda Marine segment to view the range of accessories available.

Customer Service Information

Contacting Honda

Your Owner's Manual was written to cover most of the questions you might ask about your Honda. Any questions not answered in the Owner's Manual can be answered by your Honda dealer. If your dealer doesn't have an immediate answer, they should be able to get it for you.

If you have a difference of opinion with your dealer, please remember that each dealership is independently owned and operated. That's why it's important to work to resolve any differences at the dealership level. If the service personnel are unable to assist you, please discuss your concerns with the dealer management such as the Service Manager or the dealership's owner.

If you need to contact Honda regarding your experiences with your Honda product or with your dealer, please contact the Honda office in your region:

American Honda Motor Co., Inc.
Marine Division
Customer Relations Office
4900 Marconi Drive Alpharetta, GA 30005-8847
Telephone (770) 497 – 6400
M-F 9:00 am-7:30 pm (Eastern Time Zone)

In Canada:
Honda Canada Inc.
Customer Relations Department
180 Honda Boulevard
Markham, Ontario L6C 0H9
Tel: 1-888-946-6329 (Toll free)
Fax: 1-877-939-0909 (Toll free)

Please include the following information in your communication:

- Your name, address and telephone number (complete with area code)
- Model and complete serial number
- Date of purchase
- Name and location of selling dealer
- Name and location of servicing dealer (if different)
- A detailed description of your concerns

We will likely ask your Honda dealer to respond, or possibly acknowledge your comments directly.

Warranty Coverage

Your new Honda is covered by the following warranties:

- Distributor's Limited Warranty
- Emission Control System Warranty

Please read the warranty statements contained in this manual. There are responsibilities, restrictions, and exclusions that apply to these warranties.

To obtain warranty service you must take your Honda outboard motor, together with proof of original retail purchase date, at your expense, to a Honda engine dealer or distributor authorized to sell that product in the United States, Puerto Rico, the U.S. Virgin Islands or Canada.

It is important to realize that your warranty applies to defects in material or workmanship of your Honda. Your warranty coverage does not apply to normal wear or deterioration associated with using your Honda outboard motor.

Your warranty coverage will not be voided if you choose to perform your own maintenance. However, you should have the proper tools and service information and be mechanically qualified. Failures that occur due to modifications, improper maintenance, or service are not covered.

Warranty Service

Please remember that recommended maintenance interval servicing is not included in your warranty coverage. Additionally, your warranty does not apply to the normal wear of items (such as spark plug(s), water pump, etc.).

As the owner of a Honda product, your servicing dealer may ask you to authorize an inspection. If the problem is covered under warranty, your dealer will perform any warranty repairs for you at no cost. However, you may be responsible for additional non-warranty charges.

If you have questions about warranty coverage or the nature of the repair, it is best to talk to the service manager of your Honda dealer.

Sometimes, in spite of the best intentions of all concerned, a misunderstanding may occur. If you aren't satisfied with your dealer's handling of the situation, we suggest you discuss your problem with the appropriate member of the dealership's management team. If the problem has already been reviewed with the appropriate manager of the Service, Parts, or Sales department, contact the owner of the dealership or their designated representative.

Warranty Statements

The American Honda Distributor's Limited Warranty applies to outboards purchased in the United States, Puerto Rico, or the U.S. Virgin Islands. The Honda Canada Distributor's Warranty applies to outboards purchased in Canada. The product warranty is only valid in the country where the product was purchased.

United States, Puerto Rico and U.S. Virgin Islands

Distributor's Limited Warranty

This warranty is limited to Honda Outboard Motors and related original equipment distributed by American Honda Motor Co., Inc., Power Sports and Products Division, 4900 Marconi Drive, Alpharetta, Georgia 30005-8847.

Products Covered by Warranty:	Length of Warranty: (from date of original retail purchase)		
	NON-COMMERCIAL/NON-RENTAL	COMMERCIAL/RENTAL	STATE/LOCAL/FEDERAL GOVERNMENT
All models purchased on or after Jan. 1, 2016 (2)	60 months	24 months	36 months
All models purchased between July 1, 2008 and December 31, 2015 (2)	60 months	12 months	24 months
All models purchased on or before June 30, 2008 (1)(2)	36 months	12 months	24 months
Related original equipment items: BF5 through BF20 models: Portable fuel tank and original propeller. All models: Primer bulb/fuel line assembly and tiller handle.	The same duration as the outboard with which they were purchased.(3)		

(1) Models purchased prior to July 1, 2008 (unless previously purchased with True-5 warranty from a participating dealer).
(2) 40, 65, & 105 Jet models: Jet pump assembly is a dealer installed option. Jet pump warranty is provided by Specialty Manufacturing Co. (Outboard Jets).
(3) Portable fuel tanks: 24 months or the same duration as the outboard they were purchased with, whichever is longer.

To Qualify for This Warranty:
The Honda Outboard Motor must be purchased from American Honda or a dealer authorized by American Honda to sell Honda Outboard Motors in the United States, Puerto Rico, or the U.S. Virgin Islands. This limited warranty applies to the first retail purchaser and each subsequent owner during the applicable warranty time period.

What American Honda Will Repair or Replace Under Warranty:
American Honda will repair or replace, at its option, any part that is proven to be defective in material or workmanship under normal use during the applicable warranty time period. Warranty repairs and replacements will be made without charge for parts or labor. Anything replaced under warranty becomes the property of American Honda Motor Co., Inc. All parts replaced under warranty will be considered as part of the original product and any warranty on those parts will expire coincidentally with the original product warranty.

To Obtain Warranty Service:
You must, at your expense, take your Honda Outboard Motor and proof of the original purchase date to any dealer who is authorized to service Honda Outboard Motors in the United States, Puerto Rico, or the U.S. Virgin Islands, during the dealer's normal business hours. If you are unable to obtain warranty service, or are dissatisfied with the warranty service you receive, take the following steps: First, contact the owner of the dealership involved; normally this should resolve the problem. However, if you should require further assistance, write or call the Honda Marine Customer Relations Department of American Honda Motor Co., Inc.
Please see Contacting Honda on page 148.

Exclusions:
This warranty does not extend to the following:

- Conditions caused by lack of routine maintenance or improper storage (as outlined in the Owner's Manual)
- Conditions caused by the use of propeller (s) that do not allow the outboard motor to run in its recommended full throttle rpm range
- Operation inconsistent with the recommended operation/duty cycle (as outlined in the Owner's Manual)
- Parts affected or damaged by an abuse, submersion and/or collision
- Fuel contamination and water entering the engine through the fuel intake, air intake, or exhaust system
- Operation with fuels, oils, additives and lubricants which are not suitable for use in the product
- Use in an application for which the outboard motor was not designed, such as racing or competitive use or any other misuse or neglect
- Normal wear and tear
- Incorporation of unsuitable attachments or parts
- The unauthorized alteration, improper installation and/ or rigging, or any causes other than defects in material or workmanship
- Corrosion to steering system or electrical components, corrosion due to electrolysis, water born foreign chemicals, improper service or corrosion caused by damage or abuse
- Reimbursement for towing charges, in and out of water charges, or technician travel time
- Growth of marine organisms on motor surfaces, external or internal
- Any product that has ever been declared a total loss or sold for salvage by a financial institution or insurer, or that has been issued a "salvage" or similar title under any state's law.

Disclaimer of consequential damage and limitation of implied warranties:
American Honda disclaims any responsibility for loss of time or use of the outboard, revenue, or the equipment in which the outboard is installed, transportation, commercial loss, or any other incidental or consequential damage. Any implied warranties are limited to the duration of this written limited warranty.
Some states do not allow limitations on how long an implied warranty lasts and/or do not allow the exclusion or limitation of incidental or consequential damages, so the above exclusions and limitations may not apply to you.
This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

Accessories and Replacement Parts

This warranty is limited to Honda Marine parts, accessories and apparel when distributed by American Honda Motor Co., Inc., 4900 Marconi Drive, Alpharetta, Georgia 30005-8847.

Products Covered by Warranty:	Length of Warranty: (from date of original retail purchase)		
	NON-COMMERCIAL	COMMERCIAL/RENTAL	STATE/LOCAL/FEDERAL GOVERNMENT
Accessories other than noted below	12 months	3 months	3 months
Emission related accessories: Portable fuel tanks, fuel line assemblies, and water/fuel separators	24 months	24 months	24 months
Replacement Parts	6 months	3 months	3 months

To Qualify for This Warranty:

1. The accessories or replacement parts must be purchased from American Honda or a dealer, distributor, or distributor's dealer authorized by American Honda to sell those products in the United States, Puerto Rico, and the U.S. Virgin Islands. Parts and Accessories must be purchased for installation on original Honda equipment or engines to be eligible for warranty coverage. Installing Parts and Accessories on non-Honda products or engines voids this warranty.
2. You must be the first retail purchaser. This warranty is not transferable to subsequent owners.

What American Honda Will Repair or Replace Under Warranty:

American Honda will repair or replace, at its option, any marine product accessories or replacement parts that are proven to be defective in material or workmanship under normal use during the applicable warranty time period.

Anything replaced under warranty becomes the property of American Honda Motor Co., Inc. All parts replaced under warranty will be considered as part of the original product and any warranty on those parts will expire coincidentally with the original product warranty.

Accessories and replacement parts, installed by a dealer who is authorized by American Honda to sell them, will be repaired or replaced under warranty without charge for parts or labor. If installed by anyone else, accessories and replacement parts will be repaired or replaced under warranty without charge for parts, but any labor charges will be the responsibility of the purchaser.

To Obtain Warranty Service:
You must, at your expense, take the Honda Outboard Motor product accessory or replacement part or the outboard motor or boat on which the accessory or replacement part is installed, and proof of purchase to any Honda Marine authorized service facility or dealer in the United States, Puerto Rico, or the U.S. Virgin Islands, during normal business hours.

Exclusions:
This warranty does not extend to accessories or parts affected or damaged by collision, normal wear, use in an application for which the product was not designed or any other misuse, neglect, incorporation or use of unsuitable attachments or parts, unauthorized alteration, improper installation, or any causes other than defects in material or workmanship of the product.
Installing parts and accessories on non-Honda products or engines voids this warranty.

Disclaimer of consequential damage and limitation of implied warranties:
American Honda disclaims any responsibility for loss of time or use of the outboard motor, or the boat on which the product is installed, transportation, commercial loss, or any other incidental or consequential damage. Any implied warranties are limited to the duration of this written warranty. Some states do not allow limitations on how long an implied warranty lasts and/or do not allow the exclusion or limitation of incidental or consequential damages, so the above exclusions and limitations may not apply to you. This warranty gives you specific legal rights, and you may also have other rights, which vary from state to state.

Emission Control System Warranty

Your new Honda outboard engine complies with both the U.S. EPA and State of California emission regulations.
American Honda provides the same emission warranty coverage for outboard engines sold in all 50 states. In all areas of the United States your outboard engine must be designed, built, and equipped to meet the U.S. EPA and California Air Resources Board emission standard for spark ignited marine engines.

CALIFORNIA EMISSIONS CONTROL SYSTEM WARRANTY STATEMENT YOUR WARRANTY RIGHTS AND OBLIGATIONS

The California Air Resources Board (CARB) and American Honda Motor Co., Inc. are pleased to explain the emission control system warranty on your 2024 Honda outboard engine. In California, new outboard engines must be designed, built, and equipped to meet the state's stringent anti-smog standards.

American Honda Motor Co., Inc. must warrant the emission control system on your outboard engine for the periods of time listed below provided there has been no abuse, neglect, or improper maintenance of your outboard engine.
Your emission control system may include parts such as the carburetor or fuel injection system, the ignition system, catalytic converter, canisters, clamps, filters, fuel caps, fuel lines, fuel tanks, valves, and vapor hoses. Also included may be hoses, belts, connectors, and other emission-related assemblies.
Where a warrantable condition exists, American Honda Motor Co., Inc. will repair your outboard engine at no cost to you including diagnosis, parts, and labor.

MANUFACTURER'S WARRANTY COVERAGE:
Select emission control parts from model year 2010 and later outboard engines are warranted for five years or 250 hours of use, whichever first occurs; or the length of the Honda Marine Distributor's Limited Warranty, whichever is longer. The evaporative emission control system from model year 2010 and later outboard engines are warranted for two years with no limit on hours of use, or the length of the Honda Marine Distributor's Limited Warranty, whichever is longer, from the date of delivery to the retail purchaser. However, warranty coverage based on the hourly period is only permitted for engines equipped with hour meters as defined in § 2441(a)(13)* or their equivalent. If any emission-related part on your engine is defective under warranty, the part will be repaired or replaced by American Honda Motor Co., Inc. See the Emission Control System Warranty Parts table on P.163 for parts description.

* California Code of Regulations.

OWNER'S WARRANTY RESPONSIBILITIES:
As the outboard engine owner, you are responsible for the performance of the required maintenance listed in your owner's manual. American Honda Motor Co., Inc. recommends that you retain all receipts covering maintenance on your outboard engine, but American Honda Motor Co., Inc. cannot deny warranty solely for the lack of receipts or your failure to ensure the performance of all scheduled maintenance.
As the outboard engine owner, you should, however, be aware that American Honda Motor Co., Inc. may deny you warranty coverage if your outboard engine or a part has failed due to abuse, neglect, improper maintenance, or unapproved modifications.
You are responsible for presenting your outboard engine to a Honda Marine dealer as soon as a problem exists. The warranty repairs will be completed in a reasonable amount of time, not to exceed 30 days.

If you have any questions regarding your warranty rights and responsibilities, you should contact

American Honda Motor Co., Inc.
Marine Division Customer Relations Office
4900 Marconi Drive
Alpharetta, Georgia 30005-8847
Telephone: (770) 497-6400

WARRANTY COVERAGE:

See Manufacturer's Warranty Coverage above for warranty coverage terms. This warranty is transferred to each subsequent purchaser for the duration of the warranty period.

Warranty repairs will be made without charge for diagnosis, parts, and labor. All defective parts replaced under this warranty become the property of American Honda Motor Co., Inc. A list of warranty parts is on page 161. Normal maintenance items, such as spark plugs and filters, that are on the warranted parts list are warranted up to their required replacement interval only.

American Honda Motor Co., Inc. is also liable for damages to other engine components caused by a failure of any warranted part during the warranty period.

Only Honda approved replacement parts will be used in the performance of any warranty repairs, and they will be provided without charge to the owner. You may use any replacement part as defined in § 1900(b)(20)* in the performance of any maintenance or repairs. Honda cannot deny coverage under the emission warranty solely for use of non-Honda replacement parts or service performed at a location other than an authorized Honda dealership; however, use of a part that is not functionally identical to the original equipment part in any respect that may in any way affect emissions (including durability) could result in denial of coverage. If a non-Honda replacement part is used in the repair or maintenance of your engine, and an authorized Honda Marine dealer determines it causes the failure of a warranted part, your warranty claim may be denied. If the part in question is not related to the reason that your engine requires repair, your claim will not be denied.

* California Code of Regulations

TO OBTAIN WARRANTY SERVICE:

You must take your Honda outboard engine, along with your sales registration card or other proof of original purchase date, at your expense, to any Honda Marine dealer that is authorized by American Honda Motor Co., Inc. to sell and service that Honda marine product during its normal business hours. Claims for repair or adjustment found to be caused solely by defects in material or workmanship will not be denied because the engine was not properly maintained and used.

If you are unable to obtain warranty service, or are dissatisfied with the warranty service you received, contact the owner of the dealership involved. Normally this should resolve your problem. However, if you require further assistance, write or call the Honda Marine Customer Relations Office of American Honda Motor Co., Inc.

EXCLUSIONS:
Failures other than those resulting from defects in material or workmanship are not covered by this warranty. This warranty does not extend to emission control systems or parts which are affected or damaged by owner abuse, neglect, improper maintenance, misuse, misfueling, improper storage, and/or collision, the incorporation of, or use of, unsuitable attachments, or the unauthorized alteration of any part.
This warranty does not cover replacement of expendable maintenance items made in connection with required maintenance service after the items first scheduled replacement as listed in the maintenance section of the product owner's manual, such as: spark plugs and filters.

DISCLAIMER OF CONSEQUENTIAL DAMAGE AND LIMITATION OF IMPLIED WARRANTIES:
American Honda Motor Co., Inc. disclaims any responsibility for incidental or consequential damages such as loss of time or the use of outboard engine, or any commercial loss due to the failure of the equipment; and any implied warranties are limited to the duration of this written warranty. This warranty is applicable only where the California or U.S. EPA emission control system warranty regulation is in effect.

EMISSION CONTROL SYSTEM WARRANTY PARTS:

SYSTEMS COVERED BY THIS WARRANTY:	PARTS DESCRIPTION:	LENGTH OF WARRANTY:
Evaporative	Portable fuel tank, Outboard internal fuel tank, Fuel cap, Fuel hoses, Primer bulb, Fuel hose joint, Vapor separator, and Carbon canister, All other parts not listed that may affect the evaporative emissions control system	Two years, no limit on hours of use; or the length of the Honda Distributor's Limited Warranty, whichever is longer.
Fuel Metering	Carburetor assembly, Throttle body, Fuel injector, Fuel pump, Fuel pressure regulator, Throttle position sensor, Intake air temperature sensor, Engine temperature sensor, Manifold absolute pressure sensor, Idle air control valve, Barometric pressure sensor, Fuel line solenoid valve, Intake manifold, Intake valves, and Oxygen sensor or Air fuel ratio sensor	Five years or 250 hours of use, whichever first occurs; or the length of the Honda Distributor's Limited Warranty, whichever is longer.
Air Induction	Air intake duct, Intake manifold tuning valve (Intake air bypass control valve)	
Ignition	Flywheel magneto, Ignition pulse generator, Ignition coil assembly, Ignition control module, Engine control module, Crankshaft position sensor, Spark plug cap, Spark plug*, Knock sensor, and Camshaft position sensor	
Lubrication System	Oil pump and internal parts	
Crankcase Emission Control	Crankcase breather tube, Positive crankcase ventilation valve, Oil filler cap	
Exhaust	Exhaust manifold and Exhaust valves	
Valve Control System	Rocker arm oil control valve	
Miscellaneous Parts	Tubing, fittings, seals, gaskets, and clamps associated with these listed systems.	
* Covered up to the first required replacement only. See the Maintenance Schedule on page 88.		

Canada

Distributor's Warranty

HONDA CANADA INC., for and on behalf of Honda Motor Co. Ltd., Tokyo, Japan, gives the following written warranty on each new marine product manufactured by Honda Motor Co. Ltd., Japan, distributed in Canada by Honda Canada Inc. and sold by authorized Honda Marine dealers.

Whenever used herein, the word ''Honda'' refers to Honda Canada Inc. and/or Honda Motor Co. Ltd., as appropriate from the context.

HONDA WARRANTS THAT each new Honda Marine product will be free, under normal use and maintenance, from any defects in material or workmanship for the relevant warranty period set forth below. If any defects should be found in a Honda Marine product within the relevant warranty period, necessary repairs and replacements with a new part or the Honda equivalent shall be made at no cost to the consumer for parts and labour, when Honda acknowledges that such defects are attributable to faulty material or workmanship at the time of manufacture.

WARRANTY PERIOD RETAILED ON OR AFTER APRIL 1, 2005:

	Non-commercial use	Commercial use
All Honda Outboard Models	36 Months	12 Months

THIS WARRANTY COVERS

a) Any Honda Marine product purchased in Canada from an authorized Honda dealer which has been registered at the time of purchase on a form provided by Honda, which has had set-up and pre-delivery service performed by an authorized Honda dealer and which is normally operated in Canada;
b) Any factory installed part (except normal maintenance parts referred to in ''THIS WARRANTY DOES NOT COVER''); and
c) Any marine product on which required maintenance services have been performed as prescribed in the Owner's Manual.

THIS WARRANTY DOES NOT COVER

a) Any repairs required as a result of collision, accident, striking any object, misuse or lack of required maintenance;
b) Any repairs required as a result of any attachments, parts or devices installed by or repairs done by a party other than an authorized Honda dealer;
c) Any outboard that has been operated out of water, (Run Dry) damaging the water pump and or engine components due to insufficient cooling water.
d) Any marine products modified, altered, disassembled or remodelled;
e) Normal maintenance services, including tightening of nuts, bolts and fittings and engine tune-up and the replacement of parts made in connection with normal maintenance services including filters, spark plugs and wires, fuses, belts, lubricants and other expendables susceptible to natural wear;
f) Outboard propeller or shear pin; and
g) All accessories or attachments.

THE OWNER'S OBLIGATION

In order to maintain the validity of this DISTRIBUTORS WARRANTY, the required maintenance services as set forth in the Owner's Manual must be performed at the proper intervals and detailed receipts and records retained as proof.

TO OBTAIN WARRANTY SERVICE

You must take your Honda Marine product, at your expense, during normal service hours, to any authorized Honda Marine dealership. If you are unable to obtain or are dissatisfied with the warranty service you receive, first contact the owner of the dealership involved; this should resolve the problem. If you require further assistance, contact Honda Canada's Customer Relations Department at:

HONDA CANADA INC.
Customer Relations Office
180 Honda Boulevard
Markham, Ontario L6C 0H9

TELEPHONE: 1-888-946-6329 TOLL FREE
FAX : 1-877-939-0909 TOLL FREE

REPLACEMENT PARTS AND ACCESSORY WARRANTY

New genuine Honda replacement parts or accessories sold to a consumer or installed by an authorized Honda Marine dealer which are not covered by the DISTRIBUTORS WARRANTY are warranted for a period of one year from date of purchase, provided, however, that this Replacement Parts and Accessory Warranty does not apply to any replacement parts modified, used with, or installed on a marine product for which the replacement parts were not intended. Electrical components that are not installed by the dealer (sold over the counter) are not covered by warranty.

ENTIRE WRITTEN WARRANTY

This DISTRIBUTORS WARRANTY and the REPLACEMENT PARTS AND ACCESSORY WARRANTY are the only and the entire written warranties given by Honda for Marine engines. No dealer or his agent or employee is authorized to extend or enlarge on these warranties on behalf of Honda by any written or verbal statement or advertisement.

DISCLAIMER

To the extent the law permits, Honda disclaims any responsibility for loss of time or use of the product, transportation or towing costs or any other indirect, incidental or consequential damage, inconvenience or commercial loss.

NOTICE TO CONSUMER

The provisions contained in these written warranties are not intended to limit, modify, take away from, disclaim or exclude any warranties set forth in or the operation of The Consumer Products Warranties Act, 1977 (Saskatchewan), The Consumer Product Warranty and Liability Act (New Brunswick), The Consumer Protection Act (Quebec), or any other similar provincial or federal legislation.

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