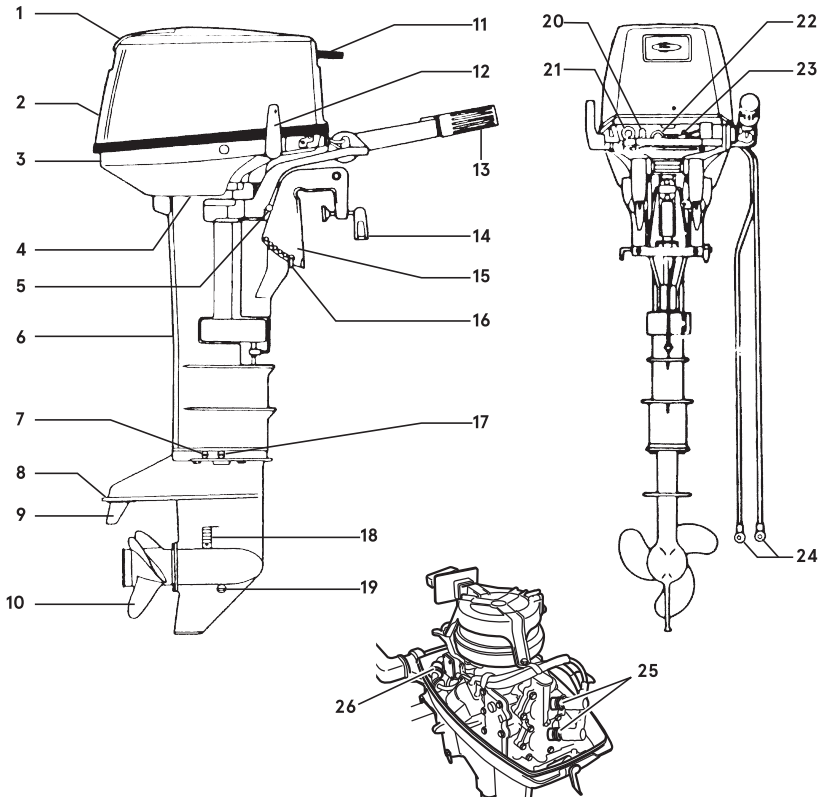
3

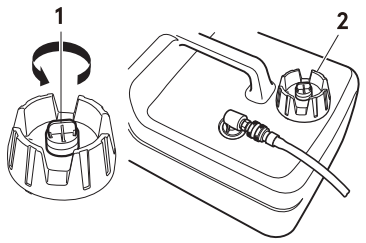
ENOM01502-0

9.8B EF



ENOF02204-0

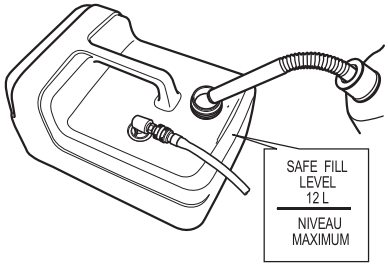
1 Tilt Handle
2 Top Cowl
3 Bottom Cowl
4 Cooling Water Check Port
5 Tilt Stopper
6 Drive Shaft Housing
7 Water Plug
8 Anti-Ventilation Plate
9 Anode / Trim Tab
10 Propeller
11 Starter Handle
12 Shift Lever
13 Throttle Grip
14 Clamp Screw
15 Clamp Bracket
16 Thrust Rod
17 Oil Plug (Upper)
18 Water Inlet
19 Oil Plug (Lower)
20 Choke Knob
21 Stop Switch
22 Main Switch
23 Fuel Connector
24 Battery Cord
25 Spark Plug
26 Fuel Filter



ENOF00417-1

1. Air vent screw
2. Fuel tank cap

2. Open the fuel tank cap slowly.
3. Fill the fuel carefully not to overflow.



ENOF00419-A

4. After filling the tank, close the fuel tank cap.

ENOM01002-0

3. Engine oil recommendation

ENOW0002A-A

⚠ CAUTION

Use of engine oils that do not meet these requirements will result in reduced engine life, and other engine problems.

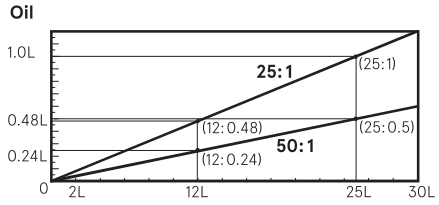
Use a genuine two stroke engine oil or ones recommended (TC-W3). Refer to your Distributor.
Use of other two stroke engine oil is not recommended.

Add engine oil into fuel tank. The mixing ratio of gasoline and oil is 50:1. Make sure that gasoline and oil are mixed well. The mixing ratio during break in is 25:1.

Mixing Ratio

	Gasoline : Engine Oil
During break-in	25 : 1
After break-in	50 : 1

Fuel by Oil Mixing (50:1, 25:1)



ENOF02210-0

ENOM01003-0

Engine oil – gasoline mixing procedure

ENOW00937-1

⚠ CAUTION

- **Do not use other than two stroke engine oil with specified grade, or the engine may be damaged.**
- **Do not use fuel prepared in other than specified mixing ratio.**
  - **Lack of engine oil can cause severe engine problems such as piston seizure.**
  - **Excess of engine oil can shorten spark plug life, and/or cause increase of noxious exhaust.**

6

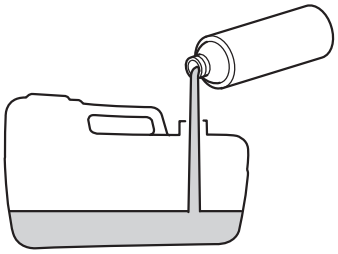
ENOM00042-0

Before starting

ENOW00022-B

⚠ CAUTION

Be sure to fill the engine before starting engine. (To properly fill the engine with oil follow the instructions. See page 27)



ENOF01710-A

ENOM00044-E

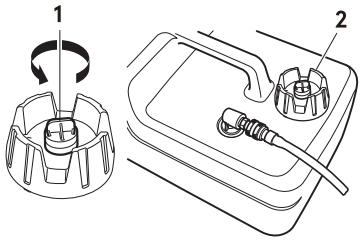
1. Fuel feeding

ENOW00029-1

⚠ WARNING

When opening fuel tank cap, be sure to follow the procedure described below. Fuel could blast out if the fuel tank cap is opened by using another procedure when internal pressure of fuel tank is raised by heat from sources such as sun light.

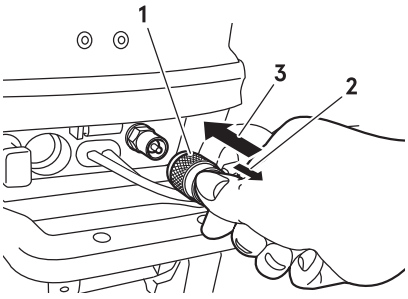
1. Fully open the air vent screw on the fuel tank cap.



ENOF00417-1

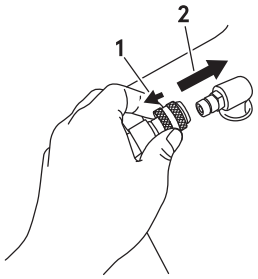
1. Air vent screw
2. Fuel tank cap

2. Open the fuel tank cap slowly and release internal pressure completely. After that, close the fuel tank.
3. Connect the fuel connector to the engine and fuel tank.



ENOF02211-0

1. Fuel connector
2. Pull
3. Insert



ENOF00861-A

1. Pull
2. Insert

4. Squeeze primer bulb until it becomes stiff to feed fuel to carburetor. Point the arrow mark upward when priming.



ENOF00862-0

1. Engine side
2. Fuel tank side

Do not squeeze primer bulb with engine running or when the outboard motor is tilted up to avoid fuel from overflowing.

ENOM00045-A

2. Starting the engine

ENOW00958-1

⚠ WARNING

- **Do not remove or install the top cowl after the engine has started.**
- **The exposed rotating engine parts cause serious injury.**

ENOW00959-0

⚠ CAUTION

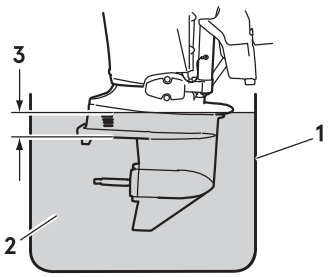
The top cowl must be installed while the engine is running except in an emergency. If the top cowl is not installed correctly, water splash can damage the engine.

ENOW00036-A

⚠ CAUTION

When starting the outboard motor in the test tank, make sure that:

1. **Water level is at least 10 cm (4 in.) above the anti-ventilation plate to avoid overheating of the engine.**
2. **Run at idling only**
3. **Remove the propeller (See page 57)**



ENOF00863-0

1. Test tank
2. Water
3. Over 10 cm (4 in.)

ENOW00036-1

⚠ CAUTION

Operating outboard motor without cooling water will lead to overheating and damage on the outboard motor severely. In case the cooling water check port is not discharging water, stop the outboard motor immediately, check for any object, debris which may be blocking the cooling water check port. If you are unable to locate the cause, consult an authorized dealer immediately.

This model is provided with start in gear protection.

ENON00010-1

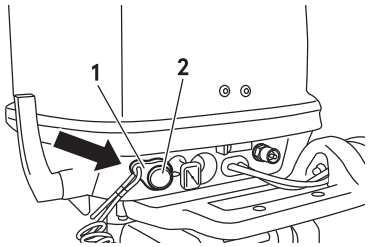
Note

Start-in-gear protection prevents the engine from starting at other than neutral shift. In-gear starting of engine will move the boat immediately, potentially leading to fall down or causing passenger(s) to be thrown overboard.

ENOM01005-B

Tiller handle type

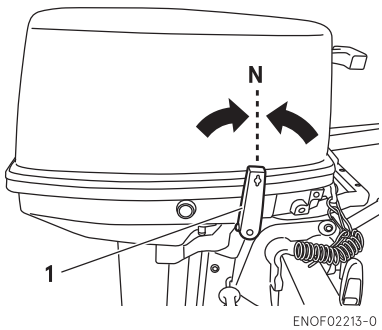
1. Be sure to install the stop switch lock to the stop switch, and attach the stop switch lanyard securely to the operator or to the operator's PFD (Personal Flotation Device.)



ENOF02212-0

1. Stop switch lock
2. Stop switch

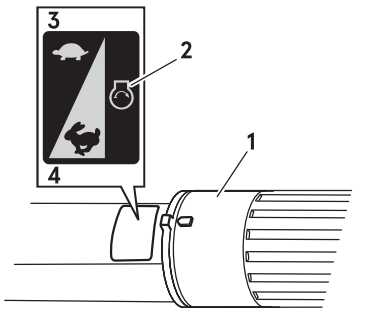
2. Set the shift lever in the Neutral position.



ENOF02213-0

1. Shift lever

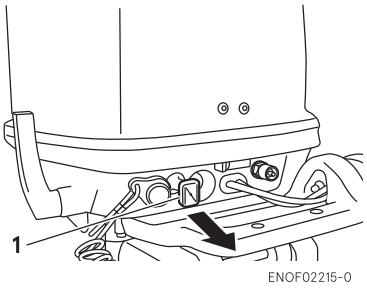
3. Set the throttle grip to START position.



ENOF02214-1

1. Throttle grip
2. START position
3. Fully closed
4. Fully opened

4. Pull the choke knob fully.



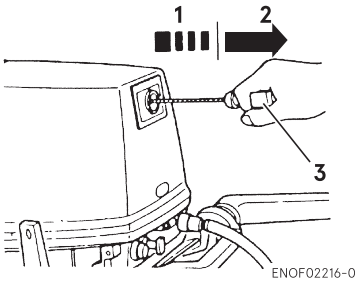
ENOF02215-0

1. Choke knob

7

(For manual starter type)

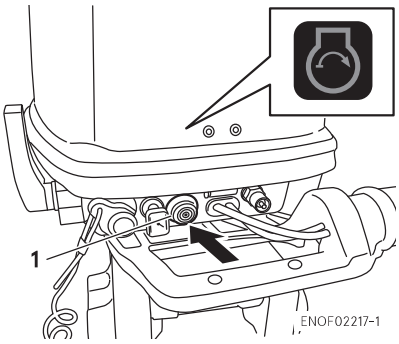
5. Pull the starter handle slowly until you feel resistance. Then pull it quickly. Repeat the procedure until the outboard motor is started.



1. Slowly
2. Quickly
3. Starter handle

(For electrical starter type)

5. Push the starter switch button and release the button when the engine has started.



1. Starter switch button

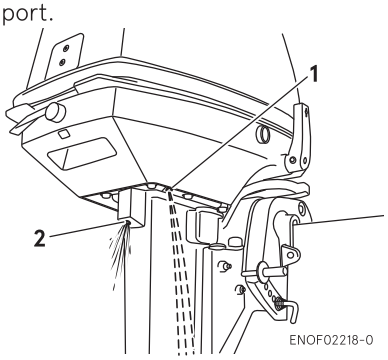
ENOW00032-0

⚠ CAUTION

Do not keep turning starter motor for over 5 seconds, or the battery may be consumed, potentially making the engine starting impossible and/or damaging the starter.

If cranking over 5 seconds fails to start engine, return main switch to "ON", and crank engine again after 10 seconds or more.

6. Return the choke knob fully after engine has started.
7. Make sure that water is being discharged from the cooling water check port.



1. Cooling water check port
2. Idle port

ENOM00042-F

Emergency starting

ENOW00099-1

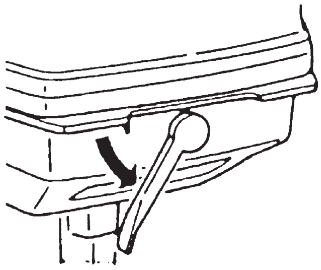
⚠ WARNING

When the emergency starter rope is used for starting engine;

- **Start in gear protection does not work. Make sure that shift is in neutral position. If the gear is in Forward or Reverse, the boat can start moving immediately and may lead to accident and personal injury.**
- **Be careful that of your clothes or other items do not to get caught in the rotating parts.**
- **To prevent accident and injury by rotating parts, do not re-attach flywheel cover and the top cowl after the engine has been started.**
- **Do not pull starter rope if any bystander is around.**

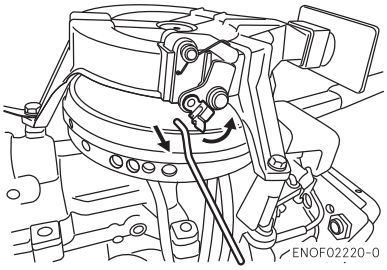
- **Attach engine stop switch lanyard to clothing or any part of body such as wrist, arm before starting engine the outboard motor.**

1. Remove the top cowl.



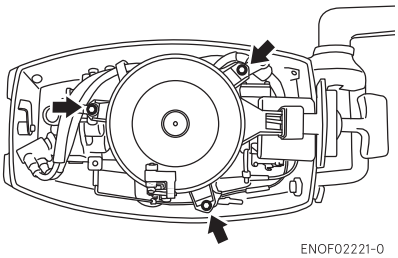
ENOF02219-0

2. Disconnect the linkage of the starter lock rod.



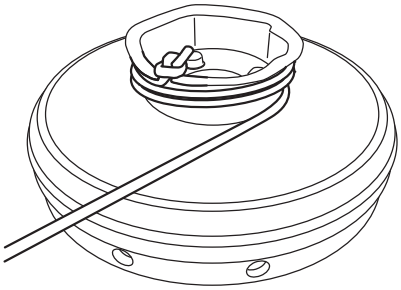
ENOF02220-0

3. Remove the bolts (3pcs) and remove the recoil starter.



ENOF02221-0

4. Insert the knotted end of the starter rope into the notch in the flywheel and wind the rope around the flywheel clockwise several times.



ENOF02222-0

5. Tie a loop to other end of the emergency starter rope and attach socket wrench that is included in the tool kit.

ENOW00860-0

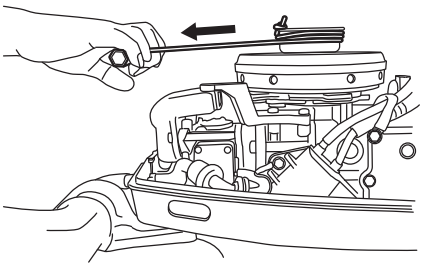
⚠ CAUTION

Be sure to keep the harness away from the rotation parts.

6. Be sure to install the stop switch lock to the stop switch, and attach the stop switch lanyard securely to the operator or to the operator's PFD (Personal Flotation Device.)
7. Set the shift lever in the Neutral position.

7

8. Pull the starter handle slowly until you feel engagement, keep pulling till you feel less resistance, then pull it quickly.



ENOF02223-0

9. Once the outboard motor is started, do not reinstall recoil starter and top cowl.

ENOM00043-A

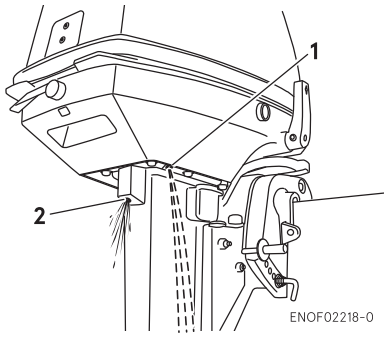
3. Warming up the engine

ENOW00932-1

⚠ CAUTION

Be sure to check that cooling water is discharged from the cooling water check port during warm up.

Warm the engine at low engine speeds for about
3 minutes : above 5°C (41°F)
5 minutes at 2000 min^{-1} (rpm) :
above 5°C (41°F)
This allows the lubricating oil to circulate to all parts of the engine. Operating the engine without warm up shortens the engine's life.



ENOF02218-0

1. Cooling water check port
2. Idle port

ENOM00044-A

Engine speeds

Idling speed after warming up.

Trolling speed (in Forward)	Idling speed (in Neutral)
750 min^{-1} (rpm)	950 min^{-1} (rpm)

ENOM00046-A

4. Forward, reverse, and acceleration

ENOW00037-1

⚠ WARNING

Before shifting into forward or reverse, make sure that boat is properly moored and outboard motor can be steered fully to the right and left. Make sure that no swimmer(s) is around of the boat.

ENOW00038-1

⚠ WARNING

- **Attach the other end of emergency stop switch lanyard to the operator's PFD (Personal Flotation device) or arm and keep it attached during cruising.**
- **Do not attach the tether to a part of clothing that can be torn easily when pulled.**

- **Arrange the tether so that will not be caught by any object when pulled.**
- **Be careful not to pull the tether accidentally during cruising. Unintentional stop of engine can cause loss of control of outboard motor. Rapid loss of engine power can lead to fall down or causing passenger(s) to be thrown overboard.**

ENOW00042-1

⚠ WARNING

- **Do not shift into Reverse during planing, or control will be lost leading to serious personal injury, boat may swamp, and/or hull may be damaged.**
- **Do not shift into Reverse during cruising, or control may be lost, fall down or causing passenger(s) to be thrown overboard. Leading to serious personal injury, and steering system and/or shifting mechanism may be damaged.**

ENOW00861-1

⚠ WARNING

Do not shift at high boat speed, or control may be lost, fall down or causing passenger(s) to be thrown overboard. Leading to serious personal injury.

ENOW00867-1

⚠ WARNING

Sudden acceleration and deceleration may cause passenger(s) to be thrown overboard or fall down.

ENOW00862-1

⚠ CAUTION

Gear and clutch damage may occur if shifting at high engine speed.
Engine must be in the slow idle position before shifting.

ENOW00863-0

⚠ CAUTION

Idle speed may be higher during warming up of engine. If shifted to Forward or Reverse during warming up, it may be difficult to shift back to neutral. In such case, stop engine, shift to neutral, and restart engine to warm up.

ENON00014-0

Note

Frequent shifting to forward or reverse can accelerate wear or degradation of parts. In such case, replace gear oil earlier than the period specified.

ENOW00864-0

⚠ CAUTION

Do not increase engine speed unnecessarily when the shift is in neutral and reverse, or engine damage may occur.

ENOM00890-A

Tiller handle type

ENOW00865-A

⚠ CAUTION

Do not force to shift when the throttle grip is not in the fully closed position, otherwise, steering system and/or shifting mechanism may be damaged.

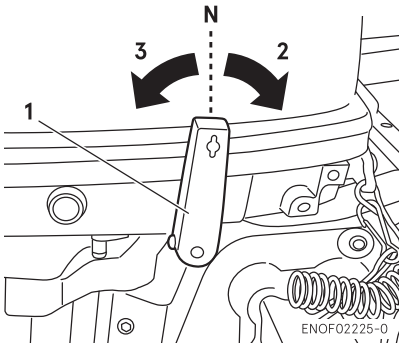
Forward

1. Turn the throttle grip to reduce engine speed.
2. When the engine reaches trolling (or idling) speed, quickly pull the shift lever to the Forward position.

Reverse

1. Turn the throttle grip to reduce engine speed.

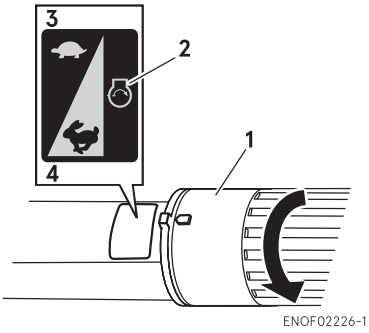
2. When the engine reaches trolling (or idling) speed, quickly pull the shift lever to the Reverse position.



1. Shift lever
2. Forward
3. Reverse

Acceleration

Open throttle grip gradually.



1. Throttle grip
2. START position
3. Fully closed
4. Fully opened

ENOM00049-A

5. Stopping the engine

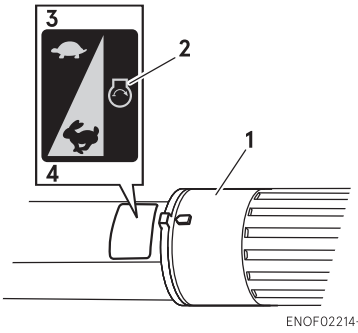
ENOW00868-1

⚠ WARNING

Be careful not to remove engine stop switch lanyard from engine accidentally while boat is running. Sudden stop of engine can cause loss of steering control, speed, possibly leading the crew(s) and or objects on the boat to be thrown forward due to inertial force.

Tiller handle type

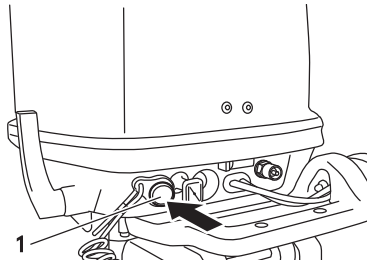
1. Turn the throttle grip to the fully closed position.



1. Throttle grip
2. START position
3. Fully closed
4. Fully opened

2. Put the shift lever in the Neutral position.
   Run the engine for 2-3 minutes at idling speed for cooling down if it has been running at full speed.

3. Push the stop switch for a few seconds to stop the engine.



ENOF02227-A

1. Stop switch

ENOW00869-1

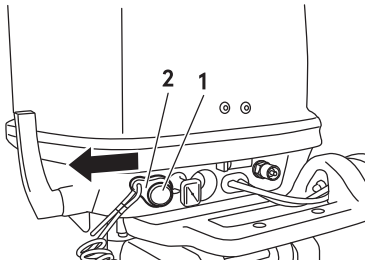
⚠ WARNING

After stopping the engine:

- **Close the air vent screw on the fuel tank cap.**
- **Disconnect the fuel connector from the engine and the fuel tank.**
- **Disconnect the battery cable, after each use.**

Emergency engine stopping

Remove stop switch lock to stop the engine.



ENOF02228-0

1. Stop switch
2. Stop switch lock

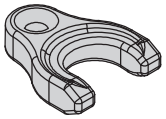
ENOM00910-1

Spare emergency stop switch lock (For CE marking model)

A spare emergency stop switch lock is provided in the accessories bag.

Make sure that spare stop switch lock is available before operating outboard motor.

When used as described, the emergency stop switch clip and emergency stop switch lanyard system stops the engine if the operator is thrown overboard. When an operator falls into water, be sure to use spare emergency stop switch lock.


ENOF00891-0

ENOM00920-0

6. Steering

ENOW00870-1

⚠ WARNING

Sudden steering may cause passenger(s) to be thrown overboard or fall.

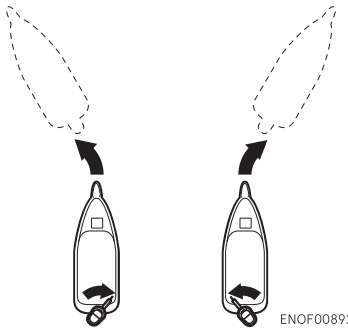
Tiller handle type

Right turn

Move the tiller handle to the left

Left turn

Move the tiller handle to the right.


ENOF00892-0

7