Checking painted surface of outboard motor

Check the outboard for scratches, nicks, or flaking paint. Areas with damaged paint are more likely to corrode. If necessary, clean and paint the areas. Touch-up paint is available from your dealer.

Periodic maintenance

⚠ WARNING

These procedures require mechanical skills, tools, and supplies. If you do not have the proper skills, tools, or supplies to perform a maintenance procedure, have a dealer or other qualified mechanic do the work.

The procedures involve disassembling the motor and exposing dangerous parts. To reduce the risk or injury from moving hot, or electrical parts:

- **Turn off the engine and keep the key(s) and engine shut-off cord (lanyard) with you when perform maintenance unless otherwise specified.**
- **Allow the engine to cool before handling hot parts or fluids.**
- **Always completely reassemble the motor before operation.**

Replacement parts

If replacement parts are necessary, use only genuine our parts or parts of equivalent design and quality. Any part of inferior quality may malfunction, and the resulting loss of control could endanger the operator and passengers. Our genuine parts and accessories are available from your dealer.

Severe operating conditions

Severe operating conditions involve one or more of the following types of operation on a regular basis:

- Operating continuously at or near maximum engine speed (rpm) for many hours.
- Operating continuously at a low engine speed (rpm) for many hours.
- Operating without sufficient time for engine to warm up and cool down.
- Frequent quick acceleration and deceleration.
- Frequent shifting.
- Frequently starting and stopping the engine(s).
- Operation that fluctuates often between light and heavy cargo loads.

Outboard motors operating under any of these above conditions require more frequent maintenance. We recommends that you do this service twice as often as specified in the maintenance chart. For example, if a particular service should be done at 50 hours, do it

instead at 25 hours. This will help prevent more rapid deterioration of engine components.

Maintenance chart 1

TIP:

- Refer to the sections in this chapter for explanations of each owner-specific action.
- The maintenance cycle on these charts assume usage of 100 hours per year and regular flushing of the cooling water passage.Maintenance frequency should be adjusted when operating the engine under adverse conditions such as extended trolling.
- Disassembly or repairs may be necessary depending on the outcome of maintenance checks.
- Expendable or consumable parts and lubricants will lose their effectiveness over time and through normal usage regardless of the warranty period.
- When operating in salt water,muddy,other turbid (cloudy) ,acidic water,the engine should be flushed with clean water after each use.

The"●"symbol indicates the check-ups which you may carry out yourself.

The"○"symbol indicates work to be carried out by your dealer.

Item	Actions	Initial	Every			page
		20 hours (3 months)	100 hours (1 year)	300 hours (3 years)	500 hours (5 years)	
Anode(s) (external)	Inspection or replacement as necessary		●/○			66
Anode(s) (internal)*1	Inspection or replacement as necessary		○			—
Anode(s) (internal)*2	Replacement				○	—
Cooling water leakage	Inspection or replacement as necessary	○	○			—
Cowling lock lever	Inspection		●/○			27,28
Engine starting condition/noise	Inspection	●/○	●/○			31
Engine idle speed/noise	Inspection	●/○	●/○			58
Engine oil	Replacement	●/○	●/○			58
Engine oil fitter(built into oil pan)	Inspection or replacement as necessary		○			27
Fuel filter(disposal type)	Replacement		○			—
Fuel line	Inspection	●	●			-
Fuel line	Inspection or replacement as	○	○			-

	necessary					
Fuel pump	Inspection or replacement as necessary			○		—
Fuel/engine oil leakage	Inspection	○	○			—
Gear oil	Replacement	●/○	●/○			63
Greasing points	Greasing	●/○	●/○			55
Impeller/water pump housing	Inspection or replacement as necessary		○			—
Impeller/water pump housing	Replacement			○		—
Propeller/propeller nut/cotter pin	Inspection or replacement as necessary	●/○	●/○			61
Shift link/shift cable	Inspection, adjustment or replacement as necessary	○	○			—
Spark plug(s)	Inspection or replacement as necessary		●/○			56
Spark plug caps/spark plug wires	Inspection or replacement as necessary	○	○			—
Water from the cooling water pilot hole	Inspection	●/○	●/○			36
Throttle link/throttle cable	Inspection, adjustment or replacement as necessary	○	○			—
Thermostat	Inspection or replacement as necessary		○			—
Timing belt	Inspection or replacement as necessary		●/○			—
Valve clearance	Inspection and adjustment				○	—
Cooling water inter	Inspection	●/○	●/○			13
stop switch	Fill, changing or replacing as necessary	○	○			—
Wire harness connections/wire coupler connections	Inspection or replacement as necessary	○	○			—
Fuel tank (portable tank	Inspection and cleaning as		○			—

	necessary					

*1 cylinder head

*2 cylinder head

Maintenance chart 2

Item	Actions	Every	Page
		1000 hours	
Exhaust guide/exhaust manifold	Inspection or replacement as necessary	○	—
Timing belt	Replacement	○	—