Periodic maintenance



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 guick 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"O"symbol indicates work to be carried out by your dealer.

		Initial	al Every			
Item	Actions	20 hours	100 hours	300 hours	500 hours	page
		(3 months)	(1 year)	(3 years)	(5 years)	
Anode(s)	Inspection or					
(external)	replacement as		•/0			85
	necessary					
Anode(s)	Inspection or					
(internal)*1	replacement as		0			_
	necessary					
Anode(s)	Replacement				0	
(internal)*2					O	
Battery (electrolyte	Inspection	•/0	•/0			85
level, terminal		•/ 0	•/ 0			00
Battery (electrolyte	Fill, changing or					
level, terminal	replacing as		0			_
	necessary					
Cooling water	Inspection or					
leakage	replacement as	0	0			_
	necessary					
Cowling lock lever	Inspection		●/○			34,38
Engine starting	Inspection	•/0	•/0			41
condition/noise		•/ 0	•/ 0			71
Engine starting	Inspection	•/0	•/0			76
speed/noise		•/ 0	•/ 0			70
Engine oil	Replacement	●/○	●/○			76
Engine oil	Replacement		•/0			
fitter(cartridge)			•/0			_
Fuel filter (can be	Inspection or					
disassembled)	replacement as	•/0	•/0			34
	necessary					

Remark			Initial	Every			
Fuel line Inspection or replacement as necessary Inspection or replacement or replacement as necessary Inspection or replacement as nec	Item	Actions		100 hours		500 hours	page
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	Cooling water inter	-	•/0	•/0			14
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switch	replacing as				
	necessary				
Wire harness	Inspection or				
connections/wire	replacement as	0	\cap		
coupler	necessary				
connections					
Fuel tank (portable	Inspection and				
tank	cleaning as		0		
	necessary				

^{*1} cylinder head, thermostat cover

Maintenance chart 2

Itom	Actions	Every	Page
Item		1000 hours	
Exhaust guide/exhaust	Inspection or		_
manifold	replacement as	0	
	necessary		
Timing belt	Replacement	0	_

^{*2} exhaust cover, cooling water passage cover. Rectifier Regulator cover