

F60 '02~'04 (EPA Carb.)

Tune-Up Specifications:

Spark Plug - NGK	DPR5EA-9
Plug Gap	0.9mm (0.035")
*Ignition Timing @ Idle	0 (TDC) $\pm 1^\circ$
*Full Advance Timing	25° $\pm 3^\circ$
Carb Pilot Screw	EPA
Idle Speed in Neutral	850 rpm ± 50
Idle Speed in Gear (trolling)	N/A
L/U Gear Oil Capacity	430 cc (14.5 oz.)
Engine Oil Capacity (with filter)	2.2L (2.3 qt.)
Engine Oil Type	SAE 10W-30, 10W-40 API SE, SF, SG, SH, SJ
Intake Valve Clearance	0.20 $\pm$ 0.05mm (0.008 $\pm$ 0.002")
Exhaust Valve Clearance	0.30 $\pm$ 0.05mm (0.012 $\pm$ 0.002")
Tachometer Pole Setting	12 pole
Charging Output	12V, 10 amp
Minimum Battery Specification	380 CCA, 502 MCA, 124 RC
*Minimum Compression	125 psi

Basic Troubleshooting Specifications

General Tests

Full Throttle RPM Range	5000~6000 rpm
Test Propeller	
Kent-Moore P/N	YB1611
New Engine RPM	5700~5900
Service Dyno (Model 2000/2003)	
Rated RPM/New Engine PSI	N/A
Thermostat Opening Temperature	60°C (140°F)
Overheat Sensor "ON" Temperature	80°C (176°F)
Overheat Sensor "OFF" Temperature	70°C (158°F)
Low Oil Pressure Warning "ON"	4.1 ~ 8.3 psi
Over-revolution Control	6200 rpm

Starting Procedures

PrimeStart™ Model — DO NOT use warm-up lever when starting.

Microcomputer Ignition - Not adjustable.

NOTE: It is recommended for optimum performance and engine life to adjust the WOT engine speed to the top end of the recommended range.

Electrical Tests	
Pulser Coils	
Wire leads	W/R — W/B
Resistance open	396 ~ 594Ω
Peak voltage cranking unloaded	6.3
Peak voltage cranking loaded	3.5
Peak voltage @ 1500 rpm loaded	7.4
Peak voltage @ 3500 rpm	11.2
Charge Coil	
Wire leads	L — Br
Resistance open	272~408Ω
Peak voltage cranking unloaded	144
Peak voltage cranking loaded	137
Peak voltage @ 1500 rpm loaded	169
Peak voltage @ 3500 rpm	129
CDI Output	
Wire leads	B/O — B, B/W — B
Peak voltage cranking unloaded	126
Peak voltage cranking loaded	150
Peak voltage @ 1500 rpm loaded	151
Peak voltage @ 3500 rpm loaded	116
Ignition Coil	
Wire leads	O — B
Primary resistance	0.078~0.106Ω @ 20° C (68° F)
Wire leads	High tension cord to high tension cord
Secondary resistance	3.5~4.7KΩ @ 20° C (68° F)
Lighting Coil	
Wire leads	G — G
Resistance	1.2~1.8Ω
Peak voltage cranking unloaded	15.4
Peak voltage cranking loaded	10.5
Peak voltage @ 1500 loaded	13
Peak voltage @ 3500 loaded	13
Rectifier / Regulator	
Wire leads	R — B
Peak voltage @ 1500 loaded	13.2
Peak voltage @ 3500 loaded	13.4

All resistance specifications are $\pm 20\%$ unless otherwise indicated. See page 10 for color code description.

All peak voltage specs are minimum at 77°F.