

SERVICE SPECIFICATIONS

40 – 65 HP E-TEC Models		
ENGINE	Full Throttle Operating Range RPM	40 HP – 5000 to 6000 RPM 50 HP – 5500 to 6000 RPM 60 HP – 5500 to 6000 RPM 650 HP – 5500 to 6000 RPM
	Power	40 HP (30 kw) @ 5500 RPM 50 HP (37 kw) @ 5750 RPM 60 HP (45 kw) @ 5750 RPM 65 HP (45 kw) @ 5750 RPM
	Idle RPM in Gear	800 ± 50 <i>EMM</i> Controlled
	Idle RPM in Neutral	750 ± 50 <i>EMM</i> Controlled
	Test Propeller	P/N 382861
	Weight (may vary depending on model)	(RL) Models: 232 lbs. (105 kg) (PL) Models: 240 lbs. (109 kg)
	Lubrication	<i>Evinrude/Johnson XD100, XD50, XD30</i> ; or NMMA TC-W3 certified
	Engine Type	In-line, 2 Cylinder, Two-Cycle
	Displacement	52.7 cu. in. (864 cc)
	Bore	3.601 in (91.47 mm)
	Stroke	2.588 in. (65.74 mm)
	Standard Bore	3.6005 to 3.6015 in. (91.45 to 91.48 mm) To bore oversize, add piston oversize dimension to standard bore
	Top Crankshaft Journal	2.1870 to 2.1875 in. (55.55 to 55.56 mm)
	Center Crankshaft Journal	2.1870 to 2.1875 in. (55.55 to 55.56 mm)
	FUEL	Bottom Crankshaft Journal
Rod Crankpin		1.3757 to 1.3762 in. (34.94 to 34.96 mm)
Piston Ring End Gap, Both		0.011 to 0.023 in. (0.28 to 0.58 mm)
Fuel/Oil Control		<i>EMM</i> Controlled
Starting Enrichment		<i>EMM</i> Controlled
Minimum (High) Fuel Pressure		24 to 28 psi (165 to 193 kPa)
Minimum Fuel Lift Pump Pressure		3 psi (21 kPa)
Maximum Fuel Inlet Vacuum		4 in. Hg.
Minimum Octane	87 AKI (R+M)/2 or 90 RON	
Additives	2+4 [®] <i>Fuel Conditioner, Fuel System Cleaner</i> Use of other additives may result in engine damage.	
	See Fuel Requirements on p. 53 for additional information	

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ELECTRICAL	Minimum Battery Requirements	640 CCA (800 MCA) or 800 CCA (1000 MCA) below 32° F (0° C)
	Alternator	25-Amp fully regulated
	Tachometer Setting	6 pulse (12 pole)
	Engine Fuse	P/N 967545 – 10 A
COOLING	Thermostat	143°F (62°C)
	Maximum Temperature	212°F (100°C)
	Water pressure	11 psi minimum @ 5000 RPM
IGNITION	Type	Capacitor Discharge
	Firing Order	1-2
	Ignition Timing	<i>EMM</i> Controlled
	RPM Limit in Gear	6250
	RPM Limit in Neutral	1800
	Crankshaft Position Sensor Air Gap	Fixed
	Spark Plug	Refer to Emission Control Information Label <i>Champion</i> [†] QC10WEP @ 0.028 ± .003 in. (0.71 mm)
GEARCASE	Gear Ratio	12:32 (.375)
	Lubricant	<i>HPF XR Gearcase Lube</i> <i>HPF Pro</i> in high performance or commercial applications
	Capacity	22 fl. oz. (650 ml)
	Shift Rod Height	20 in. (L) Models: 21.38 (543 mm) ± one-half turn
	Shift Cable Stroke	1.125 to 1.330 in. (28.6 to 33.8 mm) measured between NEUTRAL and FORWARD
	POWER TRIM/TILT	Lubrication
Fluid Capacity		15.2 fl. oz. (450 ml)
Trim Range		0° to 15°
Tilt Range		16° to 65°