

# TECHNICAL DATA

|               | HP   | 3.5   | 6/8   |
|---------------|--|---|---|
| <b>ENGINE</b> | Full Throttle Operating Range RPM  | 4500-5500   | <b>6 HP:</b> 4500-5500<br><b>8 HP:</b> 5000-6000                                |
|               | Power  | 3.5 HP (2.6 kw) @ 5000 RPM  | 6 HP (4.5 kw) @ 5000<br>8 HP (6 kw) @ 500                                       |
|               | Idle RPM in Gear   | 1100 ± 100  | 700 ± 25  |
|               | Weight   | <b>(R) Models:</b> 29.7 lbs. (13.5 kg)  | <b>(R) Models:</b> 56 lbs. (25.4 kg)<br><b>(RL) Models:</b> 58.5 lbs. (26.5 kg) |
|               | Lubrication  | <i>Evinrude/Johnson</i> XD25 formula outboard oil<br>Refer to <b>Engine Lubricant</b> , this section. |   |
|               | Engine Type  | Single cylinder   | In-line 2 cylinder  |
|               | Displacement   | 4.75 cu. in. (77.8 cm <sup>3</sup> )  | 10 cu. in. (164 cm <sup>3</sup> )   |
|               | Bore   | 1.8898 in. (48 mm)  | 1.9375 in. (49.21 mm)   |
|               | Stroke   | 1.6929 in. (43 mm)  | 1.700 in. (43.18 mm)  |
|               | Standard Bore  | 1.8890 to 1.8906 in. (48.00 to 48.02 mm)  | 1.9373 to 1.9380 in. (49.21 to 49.23 mm)  |
|               |  | To bore oversize, add piston oversize dimension to standard bore                                      |   |
|               | Top Crankshaft Journal   | 0.7875 to 0.7878 in. (20.002 to 20.010 mm)  | 0.8762 to 0.8767 in. (22.26 to 22.27 mm)  |
|               | Center Crankshaft Journals   | –   | 0.8120 to 0.8125 in. (20.62 to 20.64 mm)  |
|               | Bottom Crankshaft Journal  | 0.5906 to 0.5910 in. (15.001 to 15.011 mm)  | 0.6691 to 0.6695 in. (17.00 to 17.01 mm)  |
|               | Rod Crankpin   | 0.6299 to 0.6301 in. (16.00 to 16.005 mm)   | 0.6695 to 0.6700 in. (17.01 to 17.02 mm)  |
|               | Piston Diameter, Standard  | 1.8868 to 1.8873 (47.9247 to 47.9374)   | 1.9345 to 1.9355 (49.14 to 49.16 mm)  |
|               | Piston Ring End Gap, Both  | 0.0059 to 0.0138 in. (0.15 to 0.35 mm)  | 0.005 to 0.015 in. (0.13 to 0.38 mm)  |
|               | Piston Ring Groove Side Clearance, Both  | 0.0026 in (0.066 mm) maximum  | 0.004 in. (0.10 mm) maximum   |
|               | Test Propeller   | 115306  | 390239  |
|               | Minimum Test RPM   | 3.5 HP: 5000  | 6 HP: 4800<br>8 HP: 5300  |
| <b>FUEL</b>   | Fuel/Oil Ratio   | 50:1 (25:1 break-in)  |   |
|               | Carburetion  | One single-throat carburetor, float feed  |   |
|               | Calibration  | Adjustable low speed  | Adjustable low speed;<br>Fixed high speed                                       |
|               | Low-Speed Setting  | Refer to <b>FUEL SYSTEM</b> Section   |   |
|               | Starting Enrichment  | Manual Choke  |   |
|               | Carburetor Float Level Setting   | See <b>FUEL SYSTEM</b> Section  | Float gauge P/N 324891  |
|               | Carburetor Float Drop Setting  |   | 1 to 1 3/8 in. (25 to 35 mm)  |
|               | Preferred Fuel   | Regular unleaded, plus grade unleaded, premium unleaded gasolines                                     |   |
|               | Acceptable Fuel  | Any of the above gasolines with 10% Ethanol or 5% Methanol with 5% co-solvents                        |   |
|               | Minimum Octane   | 87 AKI (R+M)/2 or 90 RON  |   |
| Additives     | 2+4 Fuel Conditioner, Fuel System Cleaner, Carbon Guard<br>Use only Bombardier recommended fuel additives.<br>The use of other additives may result in engine damage.<br>See <b>FUEL REQUIREMENTS</b> , this section, for additional information |   |   |

**SPECIAL TOOLS AND SERVICE SPECIFICATIONS**  
**TECHNICAL DATA**

|                   | <b>HP</b>   | <b>3.5</b>                                     | <b>6/8</b>  |
|-------------------|---|--|---|
| <b>ELECTRICAL</b> | Alternator (optional)   | -  | 4 Amp, Non-Regulated  |
|                   | Battery<br>Minimum Recommendation<br>with Optional Battery Charging |  | 12 Volt, 360 CCA (465 MCA) with<br>90 Minutes Reserve Capacity or<br>50 Ampere-Hour |
|                   | Tachometer Setting<br>(Requires Battery Charging)                   |  | 5 Pulse/10 Pole   |
|                   | AC Lighting (optional)  |  | 60 Watts  |
| <b>COOLING</b>    | Thermostat opens  | None   | 143°F (62°C)  |
| <b>IGNITION</b>   | Type  | Magneto Powered Capacitor Discharge            |   |
|                   | RPM Limit   | None   | None  |
|                   | Spark Plugs   | <i>Champion L78YC @<br/>0.030 in. (0,8 mm)</i> | <i>Champion L86C or QL86C @<br/>0.030 in. (0,8 mm)</i>                              |
|                   | Ignition Coil   | P/N 582508                                     | P/N 583740  |
| <b>GEARCASE</b>   | Gear Ratio  | 12:25 (.48)                                    | 13:29 (.448)  |
|                   | Lubricant   | <i>Ultra-HPF Gearcase Lube</i>                 |   |
|                   | Capacity  | 2.7 fl. oz. (80 ml)                            | 11 fl. oz. (330 ml)   |
|                   | Shift Rod Height  | None   |   |

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