

# SPECIFICATIONS

|   |  |
|---|--|
| Models 25802 and 35802,<br>Manual Start   | Standard Length (15" transom) (381 mm) |
| Models 25852 and 35852,<br>Electric Start | Standard Length                        |
| Models 25803 and 35803,<br>Manual Start   | Long Shaft (20" transom) (508 mm)      |
| Models 25853 and 35853,<br>Electric Start | Long Shaft                             |

## POWER HEAD

|                               |  |
|-------------------------------|--|
| Horsepower (B.I.A. certified) |  |
| 25 HP Model                   | 25 HP at 5000 rpm                              |
| 35 HP Model                   | 35 HP at 5500 rpm                              |
| Full throttle operating range | 25 HP - 4500-5500 rpm<br>35 HP - 5000-6000 rpm |

|                                   |  |
|-----------------------------------|--|
| Tank test                         |  |
| 25 HP - Wheel part number 388880, | 5200 rpm   |
| 35 HP - Wheel part number 386891, | 5300 rpm   |
| Engine type                       | 2 cyl., 2 cycle, alternate firing  |
| Bore and stroke                   | 3.000" bore x 2.250" (76.20 x 57.15 mm)  |
| Piston displacement               | 31.8 cubic inches (521 cm <sup>3</sup> )   |
| Piston and rings available        | standard and 0.030" oversize   |
| Thickness of ring                 | Upper - 0.0900 - 0.0895 in. (2.286 - 2.273 mm)<br>Lower - 0.0625 - 0.0615 in. (1.588 - 1.562 mm) |
| Crankshaft size                   |  |
| Top journal                       | 1.2510 - 1.2515 in. (31.775 - 31.788 mm)   |
| Center journal                    | 1.1805 - 1.1810 in. (29.985 - 29.997 mm)   |
| Bottom journal                    | 0.9842 - 0.9846 in. (24.999 - 25.009 mm)   |
| Connecting rod crank pin          | 1.1828 - 1.1823 in. (30.043 - 30.030 mm)   |

## CARBURETOR

|                                  |  |
|----------------------------------|--|
| Carburetion                      | Single barrel, float feed, fixed high speed, adjustable low-speed (under motor cover), manual choke  |
| High speed orifice plug          | 25 HP - Part Number 324020<br>Identification Number 49-D<br>35 HP - Part Number 319831<br>Identification Number 59-D   |
| Float level setting              | Flush with rim of casting  |
| Inlet needle seat                | 0.065 - 0.062 (1.65 - 1.57 mm)<br>Use #53 drill as gage  |
| Initial low speed needle setting | 1-1/4 turns open   |
| Idle speed                       | 650 rpm maximum  |
| Maximum neutral rpm              | 2000 - 3500 rpm  |
| Cooling system                   | Combination positive displacement and centrifugal pump   |
| Propeller gear ratio             | Pressure relief and thermostatically controlled  |
| Propeller supplied with motor    | 12:21 (25 HP) - 14:27 (35 HP)  |
| Propeller options                | 25 HP - 3 blade 9-1/4" dia. x 11" pitch<br>35 HP - 3 blade 10-1/2" dia. x 11" pitch<br>25 HP - 3 blade 9-1/4" dia. x 9" pitch SST<br>3 blade 9" dia. x 9" pitch<br>3 blade 9" dia. x 10" pitch<br>3 blade 9-1/4" dia. x 7" pitch<br>3 blade 9-1/4" dia. x 9" pitch SST |

|                            |   |
|----------------------------|---|
|                            | 3 blade 9-1/4" dia. x 12" pitch SST   |
|                            | 35 HP - 3 blade 11-1/4" dia. x 7" pitch alum.   |
|                            | 3 blade 11" dia. x 9" pitch alum.   |
|                            | 3 blade 10" dia. x 13" pitch alum.  |
|                            | 3 blade 10-1/4" dia. x 13" pitch SST  |
|                            | 3 blade 10-1/2" dia. x 11" pitch SST  |
|                            | 3 blade 11" dia. x 9" pitch SST   |
| Speed control              | On steering handle (Manual start)<br>Remote control available (Electric start)  |
| Gear shift control         | Forward, neutral and reverse  |
| Weight (without fuel tank) | Model 25802, 101 lbs. (45.8 kg)<br>Model 25803, 104 lbs. (47.2 kg)<br>Model 25852, 103 lbs. (46.7 kg)<br>Model 25853, 106 lbs. (48.1 kg)<br>Model 35802, 114 lbs. (51.7 kg)<br>Model 35803, 118 lbs. (53.5 kg)<br>Model 35852, 117 lbs. (53.1 kg)<br>Model 35853, 121 lbs. (54.9 kg)<br>(Fuel tank weight 11 pounds - net 5 kg) |
| Fuel capacity              | 6 gallons (22.7 litres)   |

## ELECTRICAL SYSTEM

|                                      |  |
|--------------------------------------|--|
| Charging system                      | 5 amp flywheel alternator (Electric start models only) |
| Starter                              | Manual - Self-winding<br>Electric - 12 volt            |
| Starter amperage draw while cranking | 100 amps Max.  |

## IGNITION SYSTEM

|                      |   |
|----------------------|---|
| Ignition             | Magneto breakerless C. D.                             |
| Spark plug           | Champion L78V   |
| Alternate Spark plug | Champion L77J4 or AC M40FFX gapped at 0.040" (1.0 mm) |
| Spark plug torque    | 17-1/2 - 20-1/2 foot-pounds (24 - 27 N·m)             |
| Ignition coil        | Part No. 581862                                       |

## IGNITION COIL TEST SPECIFICATIONS

|  |  |                      |
|--|--|----------------------|
| Stevens Model ST-75  |  |                      |
| Reverse Polarity (Switch Setting CD)   |  | 1.6                  |
| Stevens Tester Model M.A.-75 or M.A.-80  |  |                      |
| Switch<br>**A  | Index Adjustment<br>20   |                      |
| **Use Model CD-1 Adapter - Red test clip to orange/black - Black test clip to orange |  |                      |
| Merc-O-Tronic with Capacitor Discharge Adapter Model 55-980                          |  |                      |
| Operating Amperage   | Primary Resistance   | Secondary Continuity |
| 1.7  | 0.1 Ohm or less  | 5 (approx.)          |
| Graham Tester Model 51   |  |                      |
| Maximum Secondary  | 1,000 ohms   |                      |
| Maximum Primary  | 0.6 ohm  |                      |
| Maximum Primary DC Ohms (Point Test)   | 1.0 ohms   |                      |
| Coil Index   | 60   |                      |
| Coil Test Minimum AMPLIFIED  | 29 (With secondary circuit open") Hi tension lead disconnected |                      |
| Gap Index  | 60 (Coil must fire spark gap on tester at this setting.)       |                      |

\*Horsepower established at sea level. Allow 2% reduction per 1000' (300 m) above sea level.

READMANUAL.COM