

1971 Johnson

OUTBOARD MOTOR

SERVICE MANUAL



MODEL 125ESL71

125 HP

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JOHNSON MOTORS, WAUKEGAN, ILLINOIS U.S.A.

SPECIFICATIONS

Model Numbers	125ESL71 (20" transom)
*Horsepower (B.I.A.-certified)	125 hp at 5000 rpm
Full throttle operating range	4500 to 5500 rpm
Tank test with test wheel part number 384933	5400 rpm
Engine type	90° V-type, 4 cylinder, 2 cycle
Bore and stroke	3-1/2" bore x 2-19/32" stroke
Piston displacement	99.6 cubic inches
Piston ring sets (2 per set) standard	Part Number 384539
.020" oversize	Part Number 384982
.030" oversize	Part Number 384980
Diameter of ring	3.500 in. (standard)
Width of ring	Upper .0895 - .0900 in. Lower .0615 - .0625 in.
Piston ring lbs. compression	
recommended when compressed	Upper 3.600 min. lbs. Lower 3.300 - 4.900 lbs.
Piston less rings	
Standard	Part Number 384516
.020" oversize	Part Number 384981
.030" oversize	Part Number 384979
Crankshaft size	
Top journal	1.4980 - 1.4975
Center journals	1.3752 - 1.3748
Bottom journal	1.1815 - 1.1810
Connecting rod crank pin	1.1828 - 1.1823
Carburetion	2 carburetors - Float feed with low-speed adjustment Automatic, manual lever and remote control choke
Float level setting	Remove float bowl, turn carburetor upside down so weight of float closes needle; float should now be parallel to gasket surface.
Carburetor orifice plug	Part Number 314893 Hole size .065
Inlet needle seat	.065 - .062 Use a #52 drill as gage
Cooling system	Thermostatically controlled recirculating system
Propeller gear ratio	13:26
Propeller supplied with motor	Aluminum 3 blade, 12-3/4" dia. 21" pitch
Alternate propellers	Aluminum 3 blade, 13-1/4" dia. x 17" pitch Aluminum 3 blade, 14" dia. x 11" pitch Aluminum 3 blade, 14" dia. x 13" pitch Aluminum 3 blade, 13-3/4" dia. x 15" pitch Aluminum 3 blade, 13" dia. x 19" pitch Aluminum 3 blade, 12-3/4" dia. x 23" pitch Bronze 2 blade, 13-3/4" dia. x 21" pitch Bronze 2 blade cupped, 13-3/4" dia. x 21" pitch Bronze 2 blade cupped, 13-3/4" dia. x 23" pitch Stainless steel 3 blade, 13" dia. x 19" pitch Stainless steel 3 blade, 12-3/4" dia. x 21" pitch Stainless steel 3 blade, 12-3/4" dia. x 23" pitch
Speed control	Remote control - synchronized throttle and spark
Gear shift control	Hydro-Electric - forward, neutral, reverse - remote control
Shift solenoids	5-6 ohms (lo ohms scale)
Weight (without fuel tank)	252 lbs. (Fuel tank weight 11 lbs. net)
Fuel capacity	6 gallons
Starter	Electric and emergency rope
Electrical system	9 amp flywheel alternator
Starter amp draw when cranking	185 amperes maximum
Ignition (CD breakerless)	Battery - Power Pulse
Spark plug	Champion L-77V
Spark plug torque	17-1/2 - 20-1/2 foot-pounds
Sensor air gap	.028 in.

Part No. 580740 Coil Test Specifications - New Stevens Tester Model No. M.A. - 75 **Use Model CD-1 Adapter		
Switch	Coil	Index Adjustment
**A - - - - -	580740 - - - - -	- - - - - 20

*Horsepower established at sea level. Allow 2% reduction per 1000' above sea level.

LUBRICATION POINTS

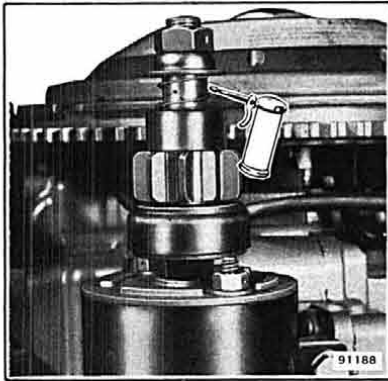


Figure 2-6. Starter Pinion Gear Shaft

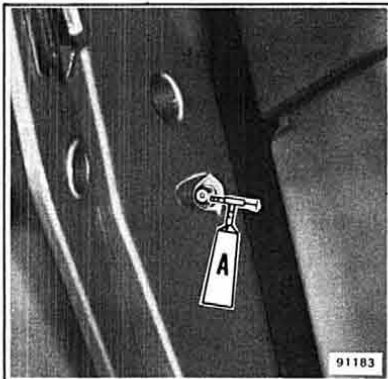


Figure 2-5. Swivel Bracket Fitting

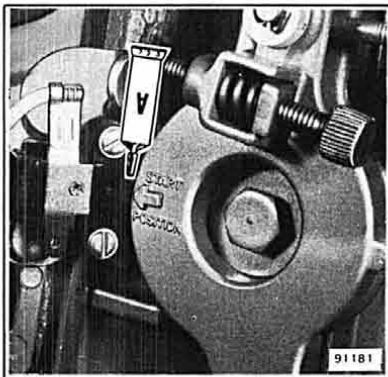


Figure 2-4. Safety Switch Cam

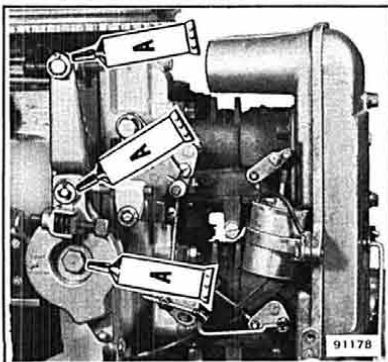


Figure 2-3. Control Shaft Bushings and Control Lever Bearings

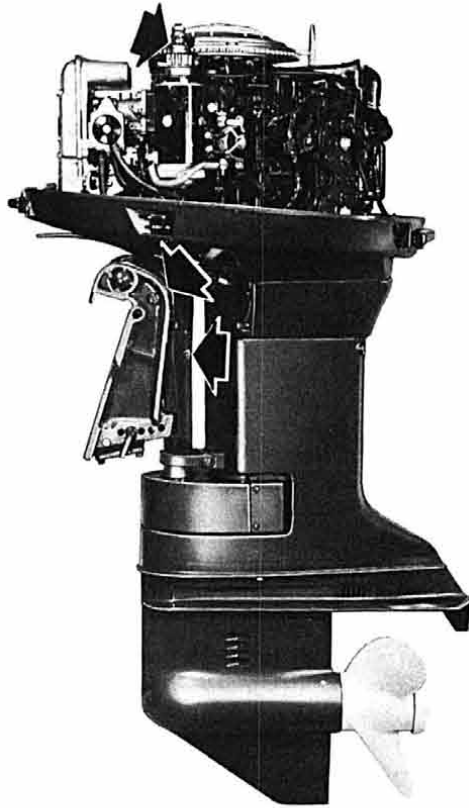


Figure 2-2. Port Side

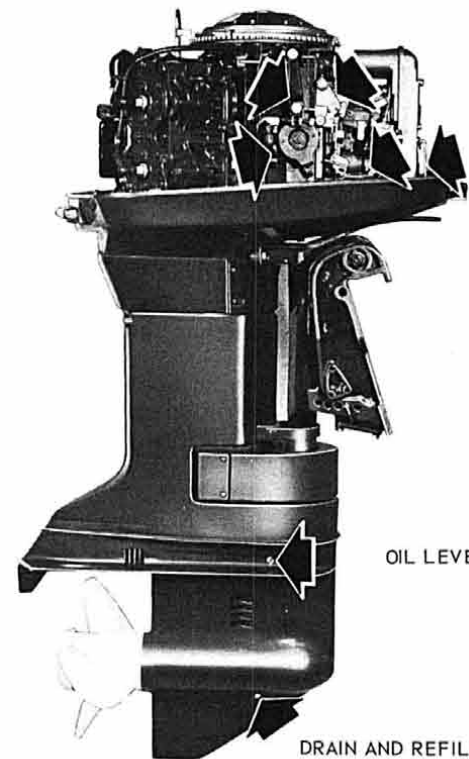


Figure 2-1. Starboard Side

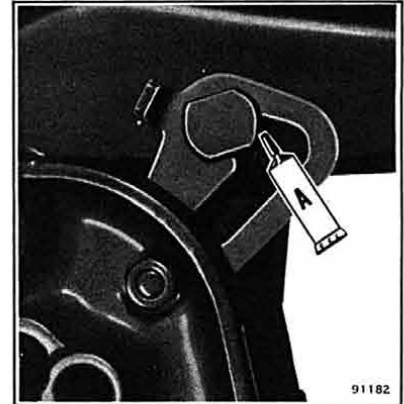


Figure 2-7. Stern Bracket Tilt Lock

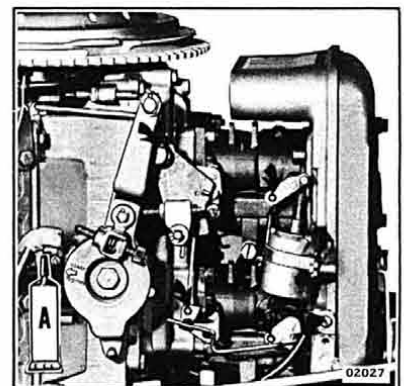


Figure 2-8. Carburetor Linkage

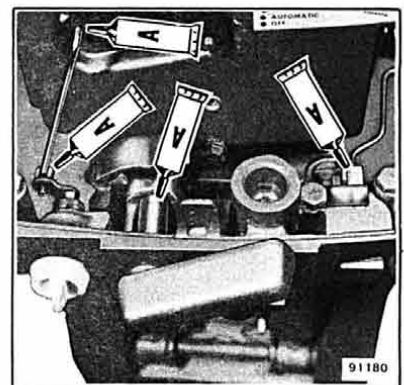


Figure 2-9. Cover Latches, Choke and Low Speed Adjustments

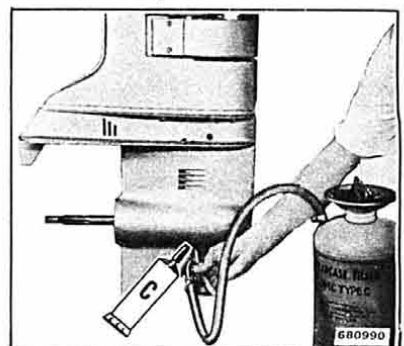


Figure 2-10. Gearcase