

1971 Johnson

OUTBOARD MOTOR

SERVICE MANUAL



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MODELS 60ES71 60ESL71

60 HP

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

SPECIFICATIONS

Model Numbers	60ES71 (standard length) 60ESL71 (5" longer)
*Horsepower (B.I.A.-certified)	60 hp at 5000 rpm
Full throttle operating range	4500 to 5500 rpm
Tank test with test wheel Part Number 382861	4800 rpm
Engine type	2 cycle, 3 cylinders in line
Bore and stroke	3" bore x 2-11/32" stroke
Piston displacement	49.7 cubic inches
Piston ring sets (2 per set) standard	Part Number 384250
.020" oversize	Part Number 384247
.030" oversize	Part Number 384300
Diameter of ring	3.000 in. (standard)
Width of ring	Upper, .0900 - .0895 in. Lower, .0625 - .0615 in.
Piston ring lbs. compression recommended when compressed.	Upper, 2.5 lbs. Lower, 4 to 8 lbs.
Piston with rings	
Standard	Part Number 384683
.020" oversize	Part Number 384685
.030" oversize, without rings	Part Number 384686
Crankshaft size	
Top journal	1.4979 - 1.4974 in.
Center journals	1.3752 - 1.3748 in.
Bottom journal	1.1815 - 1.1810 in.
Connecting rod crank pin	1.1828 - 1.1823 in.
Carburetion	3 carburetors - Float feed with low-speed adjustment. Automatic, thermo electric manual lever and remote control choke
Float level setting	Remove float bowl, turn it upside down so weight of float closes needle; float should now be parallel to and 1/16" above surface of gasket
Carburetor orifice plug	Part Number 205880 - Hole size .057"
Inlet needle seat065 - .062 Use a #52 drill as gage.
Cooling system	Thermostatically controlled recirculating system
Propeller gear ratio	12:29
Propeller supplied with motor	(Aluminum) 3 blade, 13-1/4" dia. x 17" pitch
Alternate propellers	(Aluminum) 3 blade, 14" dia. x 9" 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 21" 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	Electric - Hydraulic - forward, neutral, reverse - remote control
Weight (without fuel tank).	Model 60ES71 - 207 lbs. Model 60ESL71 - 212 lbs. (Fuel tank weight 11 lbs. net)
Fuel capacity	6 gallons
Starter	Electric and emergency rope
Electrical system	9 amp alternating current generator
Starter amp draw when cranking.	Prestolite, 135 amperes maximum
Ignition (CD with breaker points)	Battery
Spark plug	Champion L77V
Spark plug torque	17-1/2 - 20-1/2 foot-pounds
Breaker point gap010 in.
Breaker point spring tension	28 - 32 oz.
Shift solenoid resistance - lo ohms scale	5-6 ohms
Part No. 580847 Coil Test Specifications	

New Stevens Tester Model No. M.A.-75

Switch	Coil	Index Adjustment
**A - - - - -	580847 - - - - -	20

Merc-O-Tronic with Capacitor Discharge Adapter Model 55-980

Operating Amperage	Primary Resistance	Secondary Continuity
Min. - Max.	Min. - Max.	Min. - Max.
1.4		22 - 26

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

**Use Model CD-1 Adapter

LUBRICATION POINTS

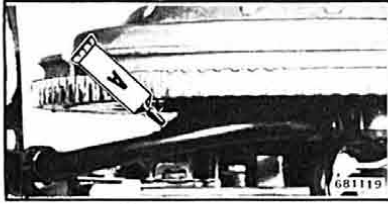


Figure 2-6. Safety Switch Cam on Distributor Base

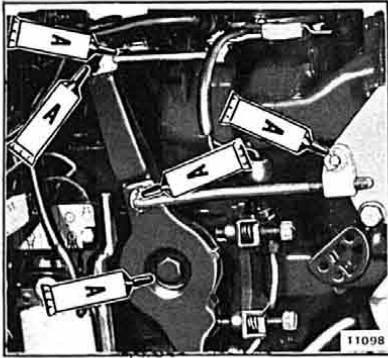


Figure 2-5. Throttle Arm and Distributor Linkage

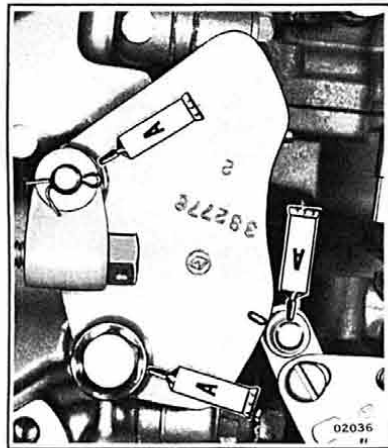


Figure 2-4. Cam Follower and Roller Shaft

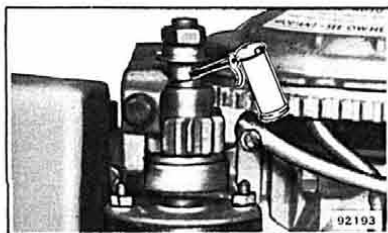
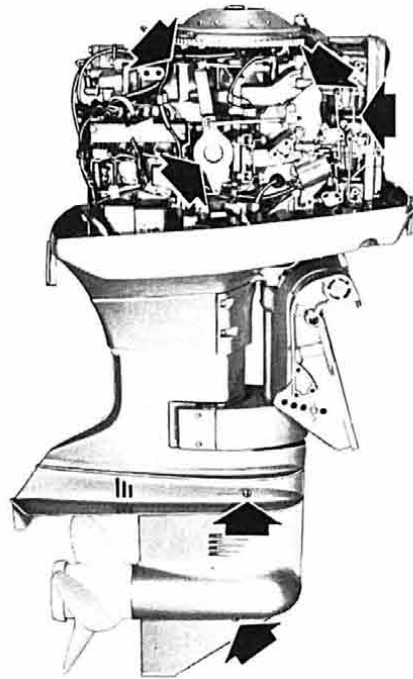


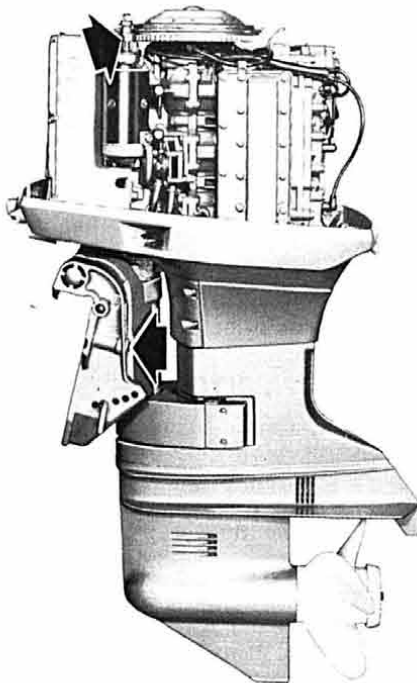
Figure 2-3. Starter Pinion Gear Shaft



DRAIN AND REFILL

11615

Figure 2-1. Starboard Side



01264

Figure 2-2. Port Side

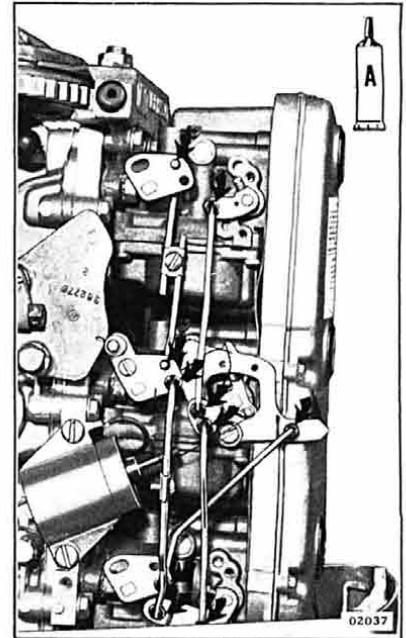
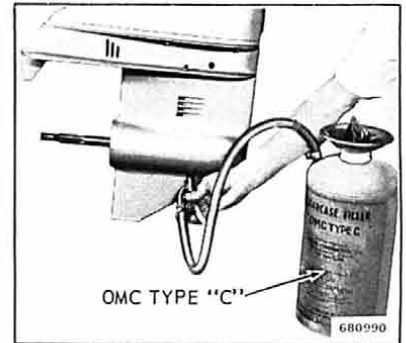


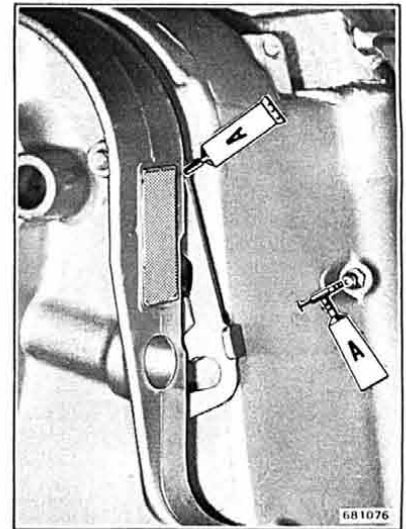
Figure 2-7. Throttle and Choke Shaft Springs and Linkage



OMC TYPE "C"

680990

Figure 2-8. Gearcase



681076

Figure 2-9. Swivel Bracket and Tilt Lock Lever