

**SPECIFICATIONS**

Model Numbers . . . . . 2R71  
 \*Horsepower (B.I.A.-certified) . . . . . 2 hp at 4500 rpm  
 Full throttle operating range . . . . . 4000 to 5000 rpm  
 Test tank with test wheel . . . . . 4100 RPM  
 Test wheel . . . . . Part Number 314206  
 Engine type . . . . . Single cylinder, 2 cycle  
 Bore and stroke . . . . . 1-9/16" bore x 1-3/8" stroke  
 Piston displacement . . . . . 2.64 cubic inches  
 Piston ring sets (2 per set)  
     Standard . . . . . Part Number 383920  
     .030" oversize . . . . . Part Number 384312  
 Diameter of ring . . . . . 1.563 in. (standard)  
 Width of ring . . . . . .0625 - .0615 in.  
 Lbs. compression recommended when compressed . . . . . 1.3 to 2.8 lbs.  
 Piston and rings - standard . . . . . Part Number 384651  
     .030" oversize piston less rings . . . . . Part Number 384666  
 Crankshaft size  
     Top journal . . . . . .7502 - .7497 in.  
     Bottom journal . . . . . .7502 - .7497 in.  
 Connecting rod crank pin . . . . . .6690 - .6685 in.  
 Carburetion . . . . . Single barrel float feed, with high and low-speed adjustments  
 Float level setting . . . . . Flush with casting  
 Inlet needle seat . . . . . .050 - .053 Use a #55 drill as gage  
 Cooling system . . . . . Centri-matic pump  
 Propeller gear ratio . . . . . 12:25  
 Propeller drive pin . . . . . Part Number 203230  
 Propeller . . . . . 7-1/4 x 4-1/2  
 Speed control . . . . . Single lever, synchronized throttle and spark  
 Weight . . . . . 23 lbs.  
 Fuel capacity . . . . . Gravity feed integral tank 1 qt.  
 Starter . . . . . Manual self rewinding  
 Ignition . . . . . Flywheel magneto  
 Spark plug . . . . . AC-M44C, Champion J6J - 14mm  
 Spark plug gap . . . . . .030 inch  
 Spark plug torque . . . . . 17-1/2 - 20-1/2 foot-pounds  
 Breaker point gap . . . . . .020 inch  
 Condenser . . . . . Part Number 580321  
     Capacity . . . . . .18 to .22 Mfd.

Part No. 580416 Coil Test Specifications  
 Old Stevens Tester

Switch	Index Reading
A	2. to 2.5

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

Switch	Index Adjustment
A	22

Merc-O-Tronic

Operating Amperage	Primary Resistance		Secondary Continuity	
	Min.	Max.	Min.	Max.
1.4	.45	.55	35	45

Graham Tester Model 51

Maximum Secondary	Maximum Primary	Coil Index	Minimum Coil Test	Gap Index
5500	1.2	75	33	70

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

**CLEARANCE CHART**

Power head	
Piston ring gap	.015 max. - .005 min.
Piston ring - groove	.0040 max. - .0020 min.
Cylinder and piston	.0055 max. - .0043 min.
Crankshaft	
Upper	Needle bearing
Lower	Needle bearing
Connecting rod	
Piston end	.0011 max. - .0004 min.
Crankshaft end	Needle bearing
Lower unit	
Driveshaft and bushing in gear case	.0028 max. - .0010 min.
Gearcase head and propeller shaft	.0022 max. - .0007 min.
Propeller on shaft	.0057 max. - .0022 min.
Gearcase bushing to propeller shaft	.0022 max. - .0007 min.

**TORQUE CHART**

Power head	
Flywheel nut	22 - 25 foot-pounds
Connecting rod screws	60 - 66 inch-pounds
Cylinder head screws	60 - 80 inch-pounds
Manifold to crankcase screws	60 - 80 inch-pounds
Bearing housing to cylinder screws	60 - 80 inch-pounds
Spark plug	17-1/2 - 20-1/2 foot-pounds
Lower unit	
Pull at propeller shaft to tilt up lower unit	11 - 14 lbs.

**SCREW TORQUE**

Torque should be used on the following sizes unless otherwise specified.

**Standard screws**

	<u>Inch-Pounds</u>	<u>Foot-Pounds</u>
No. 6	7-10	
No. 8	15-22	
No. 10	25-35	2-3
No. 12	35-40	3-4
1/4"	60-80	5-7
5-16"	120-140	10-12
3/8"	220-240	18-20

**CAUTION**

When tightening two or more screws on the same part, DO NOT tighten screws completely, one at a time. To avoid distortion of the part, first tighten all screws together to one-third of specified torque, then to two-thirds of specified torque, then torque down completely.

**NOTE**

Re-torque cylinder head screws and spark plugs after motor has been run and has reached operating temperature, and has cooled comfortable to touch.