SPECIFICATIONS

Model	4W74 (weedless gearcase) 4R74 (standard gearcase)
*Horsepower (B.I.A. - certified)	4 hp at 4500 rpm
Full throttle op.-range	4000 to 5000 rpm
Test tank rpm with test wheel	4100 rpm Part Number 316021 for 4W74 4550 rpm Part Number 317738 for 4R74
Engine type	2 cylinder, 2 cycle alternate firing
Bore and stroke	1-9/16" bore x 1-3/8" stroke
Piston displacement	5.28 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 ring assembly	
standard	Part Number 384651
.030" oversize	Part Number 384666
Crankshaft size	
top journal	.7520 - .7515 in.
center journal	.6854 - .6849 in.
bottom journal	.6854 - .6849 in.
Connecting rod crank pin	.6255 - .6250 in.
Carburetion	Single barrel float feed, with high and low-speed adjustments manual choke
Float level setting	Parallel with casting
Inlet needle seat	.053 - .050 Use a #55 drill as gage.
Cooling system	Vari-volume (combination positive displacement and centrifugal pump).

Propeller gear ratio	17:28 4W74 Model 12:25 4R74 Model
Propeller drive	Part Number 316558 1/8" x 1.234" stainless steel
Propeller	4R74 Models - Standard - 7-1/2" dia x 6" pitch, 3 blade LEXAN 4W74 Models - 6-1/4" diameter x 6" pitch, 2 blades LEXAN
Speed control	Single lever, synchronized throttle and spark
Weight	4W74 Model - 34.0 lbs. 4R74 Model - 32.3 lbs.
Hi Lift vacuum fuel system	3 gal. tank and plug in hose
Fuel capacity	3 gallons
Starter	Swing-Arm, 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 Capacity	Part Number 580321 .18 to .22 Mfd.
Coil	Part No. 580971

COIL TEST SPECIFICATIONS

Old Stevens Tester

Switch	Index Reading
A	2.0 - 2.5

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

Switch	Index Adjustment
A	22

Merc-O-Tronic

Operating Amperage	Primary Resistance Min. Max.	Secondary Continuity Min. Max.
1.7	.45 - .65	35 - 45

Graham Tester Model 51

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

*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	.0020 Max. - .0008 Min.
Crankshaft - Upper	Needle Bearings
- Center	.0023 Max. - .0013 Min.
- Lower	.0023 Max. - .0013 Min.
Connecting rod - Piston end	.0011 Max. - .0004 Min.
- Crankshaft end	.0017 Max. - .0007 Min.

LOWER UNIT

		Weedless	Standard
Standard	Pinion & Bushing In Gear Case		.0018 Max. - .0005 Min.
Weedless	Drive Shaft & Bushing In Gear Case	.003 Max. - .001 Min.	
	Gearcase Head & Bushing Assembly	.0015 Max. - .0005 Min.	.0022 Max. - .0007 Min.
	Propeller On Shaft	.0053 Max. - .0020 Min.	.0067 Max. - .0022 Min.
	Gear Case Bushing To Propeller Shaft		.0022 Max. - .0007 Min.

TORQUE CHART

POWER HEAD	
Flywheel nut	30 - 40 Foot-pounds
Connecting rod screws	60 - 66 Inch-pounds
Cylinder head screws	60 - 80 Inch-pounds
Crankcase to cylinder screws - upper, center, lower	60 - 80 Inch-pounds
Spark plugs	17-1/2 - 20-1/2 Foot-pounds
Pull at propeller shaft to tilt up lower unit	12 - 15 lbs.

STANDARD SCREWS

	Inch-Pounds	Foot-Pounds
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

NOTE

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