

SPECIFICATIONS

Model Numbers	40R71 - Standard length (15" transom) 40RL71 - 5" longer (20" transom) 40E71 - Standard length (15" transom) 40EL71 - 5" longer (20" transom)	Propeller options	3 blade, 10-3/8" dia. x 11-1/2" pitch 3 blade, 10-1/2" dia. x 12" pitch 3 blade, 10-3/8" dia. x 14" pitch 3 blade, 11" dia. x 9" pitch
Horsepower (B.I.A. certified)	40 hp at 4500 rpm	Speed control	Knob on steering bracket or remote control. Synchronized throttle and spark
Full throttle operating range	4000 to 5000 rpm	Gear shift control	Forward, neutral, and reverse
Tank test with test wheel	4300 rpm Part Number 378566	Weight (without fuel tank)	Model 40R71 - 128.5 lbs. Model 40RL71 - 132 lbs. Model 40E71 - 140 lbs. Model 40EL71 - 144 lbs. (Fuel tank weight 11 pounds net)
Engine type	2 cyl., 2 cycle, alternate firing	Fuel capacity	6 gallons
Bore and stroke	3-3/16" bore x 2-3/4" stroke	Starter	40R71-40RL71 - Ready pull self-winding 40E71-40EL71 - Electric
Piston displacement	43.9 cubic inches	Starter amperage draw while cranking	120 AMP.
Piston ring sets (2 per set)	standard Part Number 384699 .030" oversize Part Number 384718	Ignition	Flywheel magneto
Diameter of ring	3.1875 in. (standard)	Spark plug	AC-M42K, Champion J4J, 14mm
Width of ring	Upper - .0900 - .0895 in. Lower - .0615 - .0625 in.	Spark plug gap	.030 inch
Lbs. compression recommended when compressed	Upper - .5 to 2.5 lbs. Lower - 4 to 8 lbs.	Spark plug torque	17-1/2 - 20-1/2 foot-pounds
Piston less rings standard .030" oversize	Part Number 384692 Part Number 384715	Breaker point	Gap .020 inch
Crankshaft size		Condenser Capacity	Part Number 580422 .25 - 29 Mfd.
Top journal	1.2500 - 1.2495	Part No. 580416 Coil Test Specifications	
Center journal	1.000 - .9995	Old Stevens Tester	
Bottom journal	1.000 - .9995	Switch	Index Reading
Connecting rod crank pin	1.1828 - 1.1823 in.	A	2.0 - 2.5
Carburetion	Single barrel, float feed, high- and low-speed adjustments, manual choke or electric choke	New Stevens Tester Model No. M.A.-75	
Float level setting	Flush with rim of casting	Switch	Index Adjustment
Inlet needle seat	.065 - .062 Use #52 drill as gage	A	22
Cooling system	Vari-Volume (combination positive displacement and centrifugal pump)	Merc-O-Tronic	
Propeller gear ratio	12:21	Operating Amperage	Primary Resistance Min. Max. Secondary Continuity Min. Max.
Propeller drive pin	Part Number 304575, 1/4" x 1-15/32" stainless steel	1.4	.45 - .55 35 - 45
Propeller supplied with motor	3 blade, 10-1/2" dia. x 13" pitch	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	.017 Max. - .007 Min.	Propeller shaft in front gear bushing	.0020 Max. - .0010 Min.
Piston ring groove clearance, lower	.0040 Max. - .0015 Min.	Rear reverse gear to rear bushing	.0020 Max. - .0005 Min.
Piston pin to piston - loose end	.0006 Max. - .0001 Min.	Reverse gear bushing to propeller shaft	.0015 Max. - .0005 Min.
Cylinder and piston	.0045 Max. - .0030 Min.	Propeller on shaft at drive pin hole	.007 Max. - .003 Min.
Crankshaft end play	.011 Max. - .003 Min.	Propeller on shaft - above the shoulder	.0069 Max. - .0034 Min.
LOWER UNIT			
Driveshaft - upper	Roller		

TORQUE CHART

POWER HEAD		LOWER UNIT	
Flywheel nut	100 - 105 Foot-pounds	Side mounts - upper and lower nuts	150 - 170 Inch-pounds (12 - 14 Foot-pounds)
Connecting rod screw	348 - 372 Inch-pounds (29 - 31 Foot-pounds)	Front mount - upper nut	240 - 320 Inch-pounds (20 - 26 Foot-pounds)
Cylinder head screws	168 - 192 Inch-pounds	Pilot shaft to steering bracket screws	120 - 140 Inch-pounds (10 - 12 Foot-pounds)
Crankcase to cylinder screws - upper and lower	150 - 170 Inch-pounds	Slip Clutch Propeller	185 - 255 Foot-pounds
center	162 - 168 Inch-pounds	*Pull at propeller shaft for tilt up lower units	30 - 40 lbs.
Electric starter through bolts	50 Inch-pounds	*Pull at propeller shaft to overcome reverse lock	260 - 310 lbs.
Spark plug	17-1/2 - 20-1/2 Foot-pounds	STANDARD SCREWS	
Starter housing screws	96 - 120 Inch-pounds (8 - 10 Foot-pounds)		
<div style="border: 1px dashed black; padding: 5px; width: fit-content; margin: 0 auto;"> CAUTION </div> <p>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.</p> <p>NOTE: Re-check torque on cylinder head screws and spark plugs after motor has been run, has reached operating temperature, and motor has cooled comfortable to touch.</p>		Inch-Pounds	Foot-Pounds
		No. 6	7-10
		No. 8	15-22
		No. 10	25-35
		No. 12	35-40
		1/4"	60-80
		5-16"	120-140
		3/8"	220-240
			2-3
			3-4
			5-7
			10-12
			18-20

*Standard length lower unit.