

SPECIFICATIONS

Model Numbers 40R74 - Standard length (15" transom)
 40RL74 - 5" longer (20" transom)
 40E74 - Standard length (15" transom)
 40EL74 - 5" longer (20" transom)

NOTE: The recommended full power operating range for your outboard motor is from 4000 - 5000 R.P.M. In order to get the best performance from your outboard the upper end of this range, from 4500 - 5000 R.P.M., is the engine speed to use in selecting the proper propeller. The R.P.M. should be measured with your expected average load in the boat.

Horsepower (B.I.A. certified) 40 hp at 4500 rpm
 Full throttle operating range 4000 to 5000 rpm
 Tank test with test wheel 4500 rpm Part Number 378566

Engine type 2 cyl., 2 cycle, alternate firing
 Bore and stroke 3-3/16" bore x 2-3/4" stroke
 Piston displacement 43.9 cubic inches

Piston ring sets (2 per set)
 standard Part Number 384699
 .030" oversize Part Number 384718

Diameter of ring 3.1875 in. (standard)

Width of ring Upper - .0900 - .0895 in.
 Lower - .0615 - .0625 in.

Lbs. compression recommended when compressed
 Upper - 1.0 to 3.0 lbs.
 Lower - 4 to 8 lbs.

Piston less rings
 standard Part Number 384692
 .030" oversize Part Number 384715

Crankshaft size
 Top journal 1.4979 - 1.4974
 Center journal 1.3752 - 1.3748
 Bottom journal 1.1815 - 1.1810

Connecting rod crank pin 1.1828 - 1.1823 in.

Carburetion Single barrel, float feed, fixed high speed adjustable low-speed, manual or electric choke

High speed orifice plug Part Number 317183
 Identification Number 67C
 Check with #51 drill

Float level setting Flush with rim of casting

Inlet needle seat .065 - .062
 Use #52 drill as gage

Cooling system Centri-matic (combination positive displacement and centrifugal pump)

Propeller gear ratio 12:21

Propeller drive pin Part Number 304757, 1/4" x 1-15/32" stainless steel

Propeller supplied with motor 3 blade, 10-1/2" dia. x 13" pitch

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

Speed control On steering handle - Manual Start.
 Knob on steering bracket or remote control - Electric Start.
 Synchronized throttle and spark

Gear shift control Forward, neutral, and reverse

Weight (without fuel tank) Model 40R74 - 128 lbs.
 Model 40RL74 - 131 lbs.
 Model 40E74 - 137 lbs.
 Model 40EL74 - 140 lbs.
 (Fuel tank weight 11 pounds net)

Fuel capacity 6 gallons

Electrical system 5 amp flywheel alternator
 (Electric start models only)

Starter Manual - Self-winding
 Electric - 12 volt, Key start and emergency rope

Starter amperage draw while cranking 120 AMPS Max.

Ignition Low tension magneto

Spark plug Champion UL4J, 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 580422
 Capacity .25 - 29 Mfd.
 Coil Part No. 581407

COIL TEST SPECIFICATIONS

New Stevens Tester Model No. M.A.-75 or M.A.-80 with M.A.-14 Adapter in Series with High Tension Lead

Switch	Index Adjustment
B	25

Merc-O-Tronic

Operating Amperage	Primary Resistance		Secondary Continuity
	Min.	Max.	
1.7	0.8	1.2	60 - 70

Graham Tester Model

Maximum Secondary	Maximum Primary	Coil Index	Minimum Coil Test	Gap Index
20,000 ohms	14.0 ohms	50	24	45

COIL OHMMETER TEST

Primary (Low Ohms)	Secondary (High Ohms)
1.35 ± .3	13500 ± 1500

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

CLEARANCE CHART

POWER HEAD	LOWER UNIT
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 .0010 Max. - .0001 Min.	Reverse gear bushing to propeller shaft .0015 Max. - .0005 Min.
Cylinder and piston .0050 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.

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 center 162 - 168 Inch-pounds	Slip Clutch Propeller 180 Foot-pounds Min.																							
Electric starter through bolts 50 Inch-pounds	*Pull at propeller shaft for tilt up lower units 30 - 40 lbs.																							
Spark plug 17-1/2 - 20-1/2 Foot-pounds	*Pull at propeller shaft to overcome reverse lock 260 - 310 lbs.																							
Starter housing screws 96 - 120 Inch-pounds (8 - 10 Foot-pounds)																								
<input type="checkbox"/> 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. 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.	STANDARD SCREWS																							
	<table border="1"> <thead> <tr> <th></th> <th>Inch-Pounds</th> <th>Foot-Pounds</th> </tr> </thead> <tbody> <tr> <td>No. 6</td> <td>7-10</td> <td></td> </tr> <tr> <td>No. 8</td> <td>15-22</td> <td></td> </tr> <tr> <td>No. 10</td> <td>25-35</td> <td>2-3</td> </tr> <tr> <td>No. 12</td> <td>35-40</td> <td>3-4</td> </tr> <tr> <td>1/4"</td> <td>60-80</td> <td>5-7</td> </tr> <tr> <td>5-16"</td> <td>120-140</td> <td>10-12</td> </tr> <tr> <td>3/8"</td> <td>220-240</td> <td>18-20</td> </tr> </tbody> </table>		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
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*Standard length lower unit.