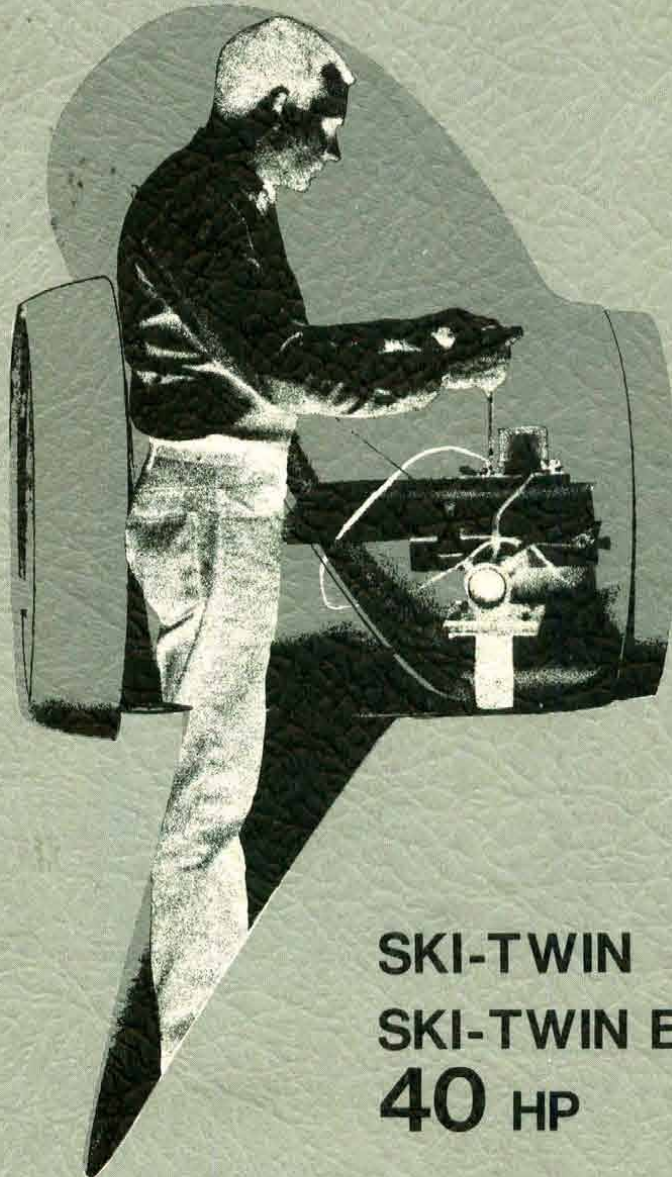


1971 EVINRUDE SERVICE MANUAL



**SKI-TWIN
SKI-TWIN ELECTRIC
40 HP**

INTRODUCTION

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MODELS 40102 • 40103 • 40152 • 40153

SPECIFICATIONS

Model Numbers	40102 - Standard length (15" transom) 40103 - 5" longer (20" transom) 40152 - Standard length (15" transom) 40153 - 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 40102 - 128.5 lbs. Model 40103 - 132 lbs. Model 40152 - 140 lbs. Model 40153 - 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	Ski-Twin - Simplex self-winding Ski-Twin Electric - Electric										
Piston displacement	43.9 cubic inches	Starter amperage draw while cranking	120 AMPS Max.										
Piston ring sets (2 per set) standard .030" oversize	Part Number 384699 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 Top journal Center journal Bottom journal	1.2500 - 1.2495 1.000 - .9995 1.000 - .9995	Condenser Capacity	Part Number 580422 .25 - 29 Mfd.										
Connecting rod crank pin	1.1828 - 1.1823 in.	Part No. 580416 Coil Test Specifications											
Carburetion	Single barrel, float feed, high- and low-speed adjustments, manual choke or electric choke	Old Stevens Tester											
Float level setting	Flush with rim of casting	<table><tr><td>Switch</td><td>Index Reading</td></tr><tr><td>A</td><td>2.0 - 2.5</td></tr></table>		Switch	Index Reading	A	2.0 - 2.5						
Switch	Index Reading												
A	2.0 - 2.5												
Inlet needle seat	.065 - .062 Use #52 drill as gage	New Stevens Tester Model No. M.A.-75											
Cooling system	Centri-matic (combination positive displacement and centrifugal pump)	<table><tr><td>Switch</td><td>Index Adjustment</td></tr><tr><td>A</td><td>22</td></tr></table>		Switch	Index Adjustment	A	22						
Switch	Index Adjustment												
A	22												
Propeller gear ratio	12:21	Merc-O-Tronic											
Propeller drive pin	Part Number 304575, 1/4" x 1-15/32" stainless steel	<table><tr><td>Operating Amperage</td><td>Primary Resistance Min. Max.</td><td>Secondary Continuity Min. Ma x.</td></tr><tr><td>1.4</td><td>.45 - .55</td><td>35 - 45</td></tr></table>		Operating Amperage	Primary Resistance Min. Max.	Secondary Continuity Min. Ma x.	1.4	.45 - .55	35 - 45				
Operating Amperage	Primary Resistance Min. Max.	Secondary Continuity Min. Ma x.											
1.4	.45 - .55	35 - 45											
Propeller supplied with motor	3 blade, 10-1/2" dia. x 13" pitch	Graham Tester Model 51											
		<table><tr><td>Maximum Secondary</td><td>Maximum Primary</td><td>Coil Index</td><td>Minimum Coil Test</td><td>Gap Index</td></tr><tr><td>5500</td><td>1.2</td><td>75</td><td>33</td><td>70</td></tr></table>		Maximum Secondary	Maximum Primary	Coil Index	Minimum Coil Test	Gap Index	5500	1.2	75	33	70
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.

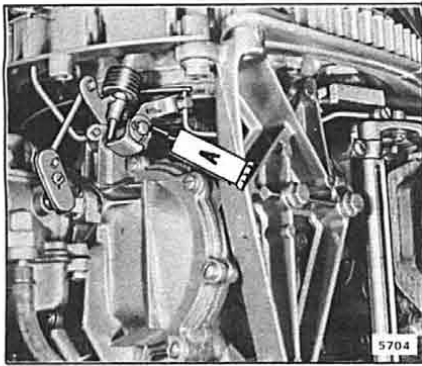


Figure 2-3. Cam Follower Linkage and Locking Lever

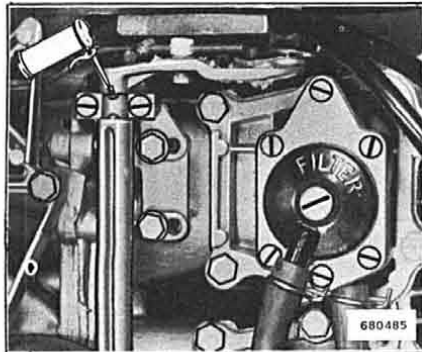


Figure 2-4. Throttle Shaft Bearing and Magneto Linkage

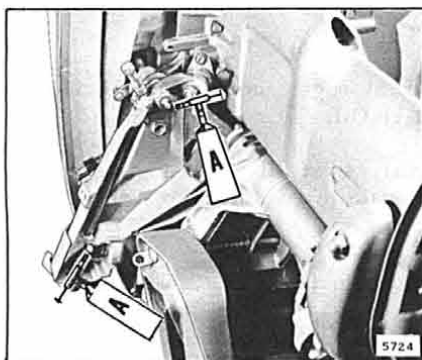


Figure 2-5. Throttle Shaft Bushings and Gears

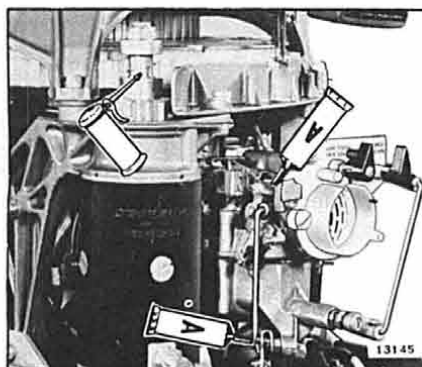


Figure 2-6. Choke Linkage and Starter Pinion Gear Shaft

LUBRICATION POINTS

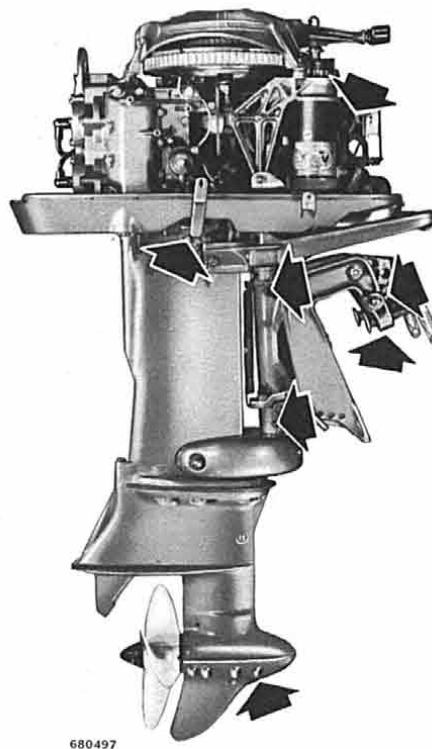


Figure 2-1. Starboard Side, 40 H.P. Electric

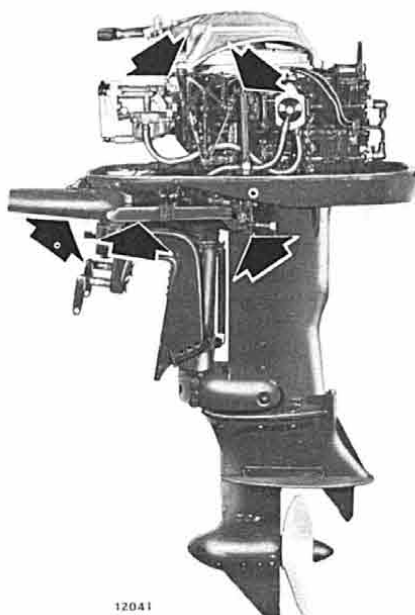


Figure 2-2. Port Side, 40 H.P. Manual Start

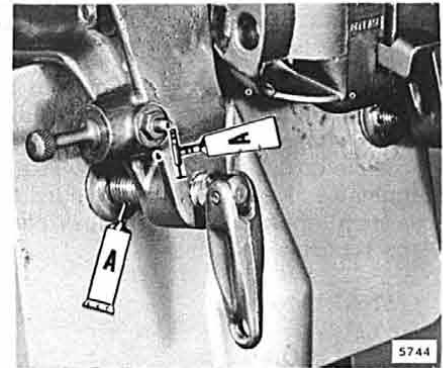


Figure 2-7. Tilt Lock Pin and Clamp Screws



Figure 2-8. Gearcase

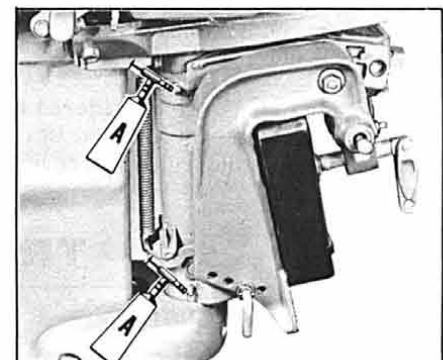


Figure 2-9. Swivel Bracket Fittings and Reverse Lock

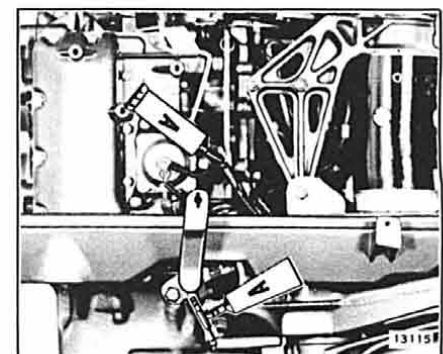


Figure 2-10. Gear Shift Lever Shaft and Lockout