

# 1979 **EVINRUDE** **SERVICE MANUAL**

**6 HP  
models  
6904, 6905**

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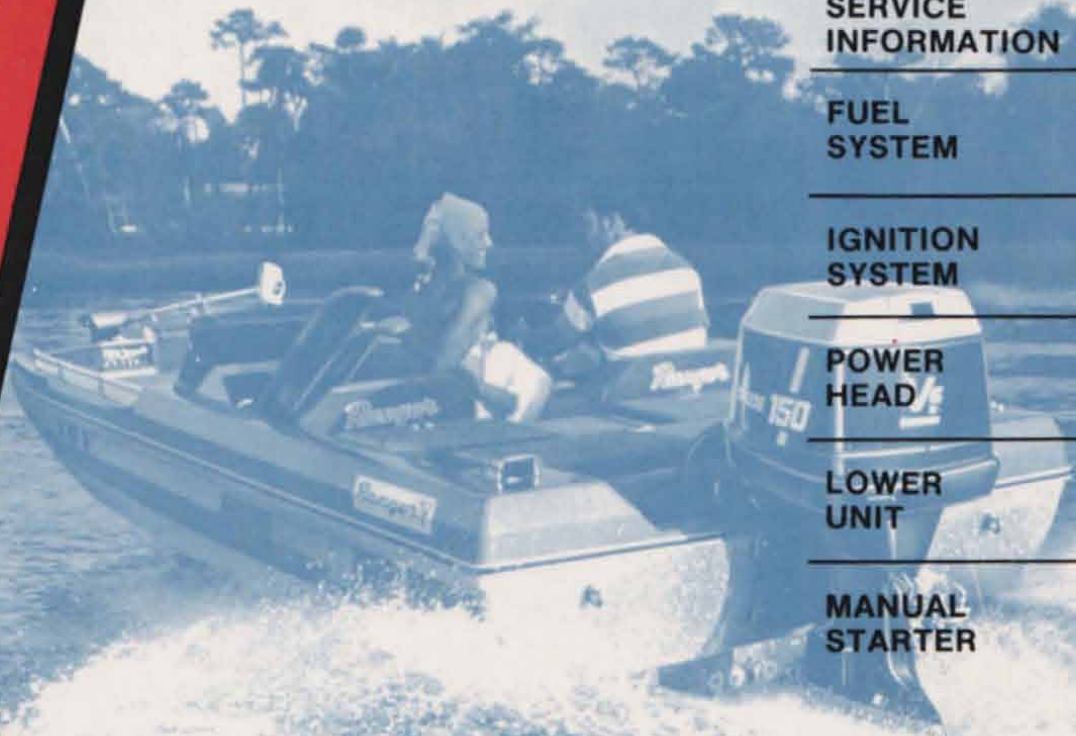
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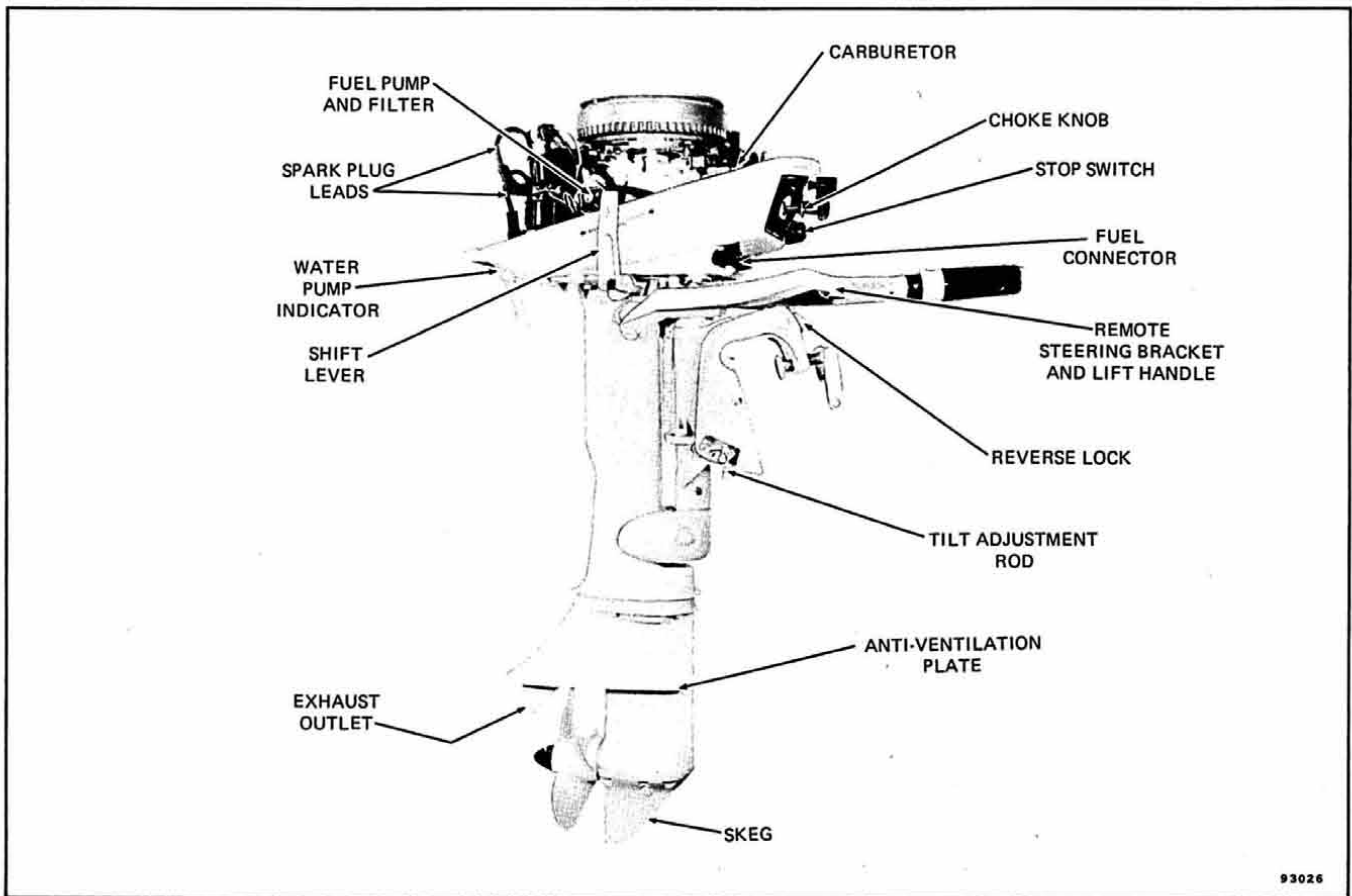


Figure 1-1. Starboard Side

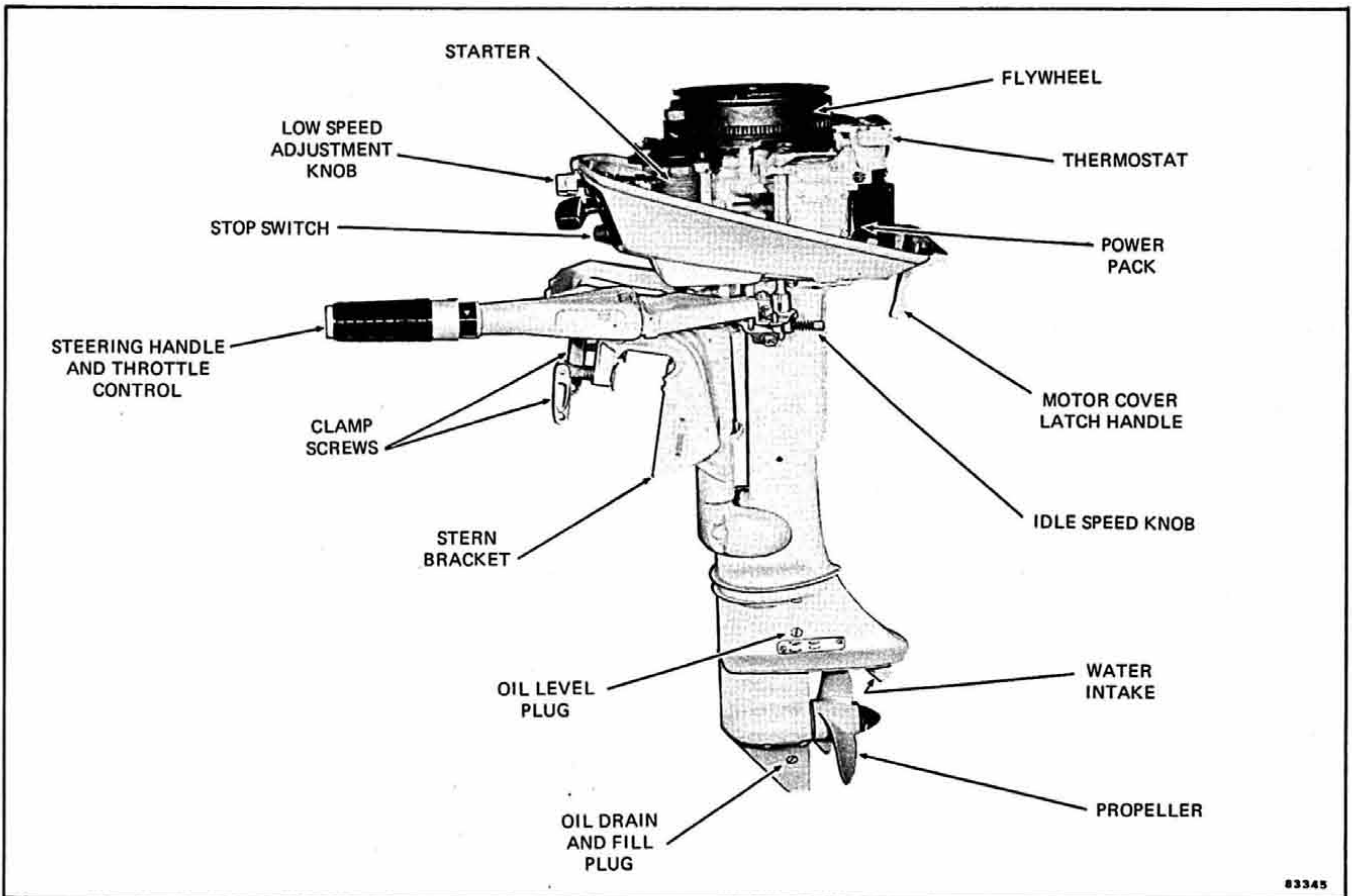


Figure 1-2. Port Side

# SPECIFICATIONS

Model Numbers	6904 - Standard 15" (381 mm) transom 6905 - Long 20" (508 mm) transom	Speed control	Twist-grip, synchronized throttle and spark	
*Horsepower (B.I.A. - certified)	6 hp (4.2 kW) at 4500 rpm	Gear shift control	Forward, neutral, and reverse	
Full throttle operating range	4000 - 5000 rpm	Weight (without fuel tank)	Standard - 54 pounds (24.5 kg) Long - 55 pounds (24.9 kg) (Fuel tank weight 8.2 pounds (3.7 kg) net)	
Tank test with test wheel	4500 rpm Part Number 379673	Fuel capacity	3 gallons (11.4 litres)	
Idle speed	550 rpm in gear	Starter	Manual, self-rewinding	
Engine type	2 cylinder, 2 stroke cycle, alternate firing	Ignition	Flywheel magneto breakerless CD	
Bore and stroke	1-15/16" bore x 1-1/2" stroke (49.21 x 38.10 mm)	Spark plug	Champion L78V or AC M40FFK	
Piston displacement	8.84 cubic inches (145 cm <sup>3</sup> )	Alternate spark plug	Champion L77J4 or AC M40FFX gapped at 0.040" (1.0 mm)	
Piston ring sets (2 per set) standard	Part Number 378432	Spark plug torque	17-1/2 - 20-1/2 Foot-pounds (24 - 27 N·m)	
0.030 oversize	Part Number 384336	Charge coil resistance	575 ± 75 ohms	
Width of ring	0.0935 - 0.0925 in. (2.375 - 2.350 mm)	Ignition coil	Part No. 581997	
Piston less rings standard	Part Number 386692	<b>IGNITION COIL TEST SPECIFICATIONS</b>		
0.030 oversize	Part Number 386691	Stevens Model ST-75		
Crankshaft size top journal	0.8080 - 0.8075 in. (20.523 - 20.510 mm)	Reverse Polarity (Switch Setting CD)		1.2
center journal		Stevens Tester Model M.A.-75 or M.A.-80		
bottom journal		Switch	Index Adjustment	
Connecting rod	0.6700 - 0.6695	**A	20	
Crank pin size	(17.018 - 17.005 mm)	Merc-O-Tronic with Capacitor Discharge Adapter Model 55-980		
Carburetion	Single barrel, float feed, low-speed adjustment. Fixed high speed jet	Operating Amperage	Primary Resistance	*Secondary Continuity
Float level setting	Flush with rim of casting	Min. - Max.	Min. - Max.	Min. - Max.
Carburetor orifice plug	Hole size 0.042 (1.07 mm) Part Number 322249	1.4	0.1 Ohm or Less	275 ± 10
Inlet needle seat	0.053" to 0.050" (1.35 - 1.27 mm) Use a #55 drill as gage	**Use Model CD-1 Adapter Red test clip to orange/black Black test clip to orange		
Cooling system	Combination positive displacement and centrifugal pump Thermostatically controlled	Graham Tester Model 51		
Propeller gear ratio	12:25	Maximum Secondary . . . . . 1,000 ohms		
Propeller drive pin	Part Number 307949,	Maximum Primary . . . . . 0.5 ohm		
Propeller	8" diameter x 7" pitch, 3 blade	Coil Index . . . . . 50		
		Coil Test Minimum AMPLIFIED . . . . . 17 (With secondary circuit "open.")		
		Hi tension lead disconnected		
		Gap Index . . . . . 50 (Coil must fire spark gap on tester at this setting.)		
		<b>IGNITION COIL OHMMETER TEST</b>		
		Primary Low Ohms	Secondary High Ohms	
		0.1 ± 0.05	275 ± 50	
		6 HP 1976 THRU 1979 (4500 RPM)		

\*Horsepower established at sea level. Allow 2% reduction per 1000' (300 m) above sea level.