## 1968 EVINAUDE SERVICE MANUAL

SPEEDIFOUR STARFLITE

85 HP

MODELS

85852 85853

85892 85893

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## **SPECIFICATIONS**

Madal Nambana	AIIONS	W-1-1-1	M-1-1 05050 90	0	
Model Numbers 85852 85853 85892 85893	Manual Shift, Standard length Manual Shift, 5" longer Electric Shift, Standard length Electric Shift, 5" longer	Weight (without fuel tank)	Model 85852 - 232 pounds Model 85853 - 236 pounds Model 85892 - 240-1/2 pounds Model 85893 - 246 pounds (Fuel tank weight - 11 pounds net)		
*Horsepower (O.B.C	85 hp at 5000 rpm	Fuel capacity	6 gallons, suction type tank		
certified)		Electrical system	Alternating current generator		
Full throttle operating range	4000 to 5000 rpm (5500 under Limited Conditions)	Starter	Electric and emergency rope  Maximum 140 amp  CD Electronic Ignition System with Breaker Points		
Tank test with	4700 R.P.M.	Starter amp draw when cranking			
with test wheel Engine type	90° V-type, 4 cylinder, 2 cycle	Ignition			
Bore and stroke	3-3/8" bore x 2-1/2" stroke	Spark plug	Champion L19V		
Piston displace-	89.5 cubic inches	Spark plug torque	17-1/2 - 20-1/2 foot-pounds		
ment	Ň	Breaker point gap .010 inch			
Piston ring sets (3 standard .020" oversize .040" oversize	per set) Part Number 380110 Part Number 380111 Part Number 380112	Carburetion	Twin barrel, down draft, float feed, low-speed adjust- ment, automatic thermo electric choke		
Diameter of ring	3.375 in. (standard)	Float level	Remove carburetor cover and turn upside down, so that weight of float closes float needle. With float arms straight, float should be parallel with face of casting (approximately 1/4" from casting).  Hole size .064"		
Width of ring	.09350925 in.	setting			
Lbs. compression recommended when compressed Piston less rings	9.7 to 13.7 lbs.				
standard .020'' oversize .040'' oversize	Part Number 380569 Part Number 378814 Part Number 378815	Carburetor orifice plug			
Crankshaft size top journal center journal bottom journal	1.2658 - 1.2653 in. 1.3752 - 1.3748 in. 1.1815 - 1.1810 in.	Inlet needle seat .081" to .084". Use a #45 drill as gage  Part No. 580688 Coil Test Specifications -			
Connecting rod crank pin	1.1828 - 1.1823	New Stevens Tester Model No. M.A 75			
Cooling system	Thermostatically controlled recirculating system				
Propeller gear ratio	20:23	Merc-O-Tronic with Capacitor Discharge Adapter Model 55-980 Primary   Secondary			
Propeller drive pin - standard	Part #307217, 9/32" x 2-5/32", stainless steel				
Propeller standard	10-1/4" diameter x 10" pitch	Operating Amperage Min Max.		Continuity Min Max.	
Propeller options	9-1/2" diameter x 10" pitch 10" diameter x 9-1/4" pitch 10" diameter x 11" pitch	.8 - 1.2   22.5 - 25.0			
		Graham Tester Model 51			
Speed control	10" diameter x 12" pitch Remote control only	Suggested test specifications for Coil #580688			
Gear shift control	Forward, neutral, and reverse - Speedifour - Manual or remote control Starflite - Selectric pushbutton remote control	Secondary Continuity Primary Continuity Coil Index Coil Test (Normal) Coil Test (Amplified) Gap Index  3,000 ohms max. 1.2 ohms max. 60 9 minimum 80 minimum 50 maximum			

<sup>\*</sup>Horsepower established at sea level. Allow 2% reduction per 1000' above sea level.

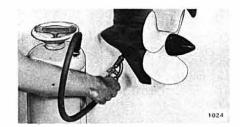


Figure 2-3. Gearcase

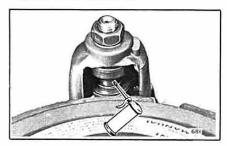


Figure 2-4. Starter Pinion Gear Shaft

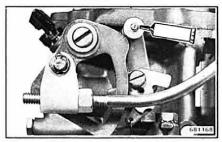


Figure 2-5. Carburetor Linkage



Figure 2-6. Tilt and Trailing Lever

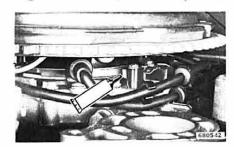


Figure 2-7. Safety Switch Cam



Figure 2-8. Throttle Shaft Gears

## LUBRICATION POINTS

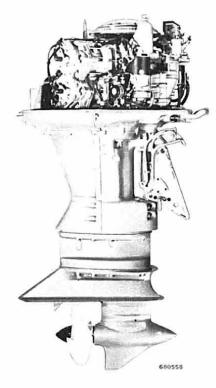


Figure 2-1. Starboard Side

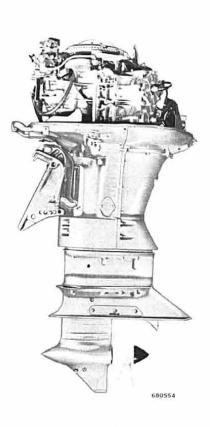


Figure 2-2. Port Side

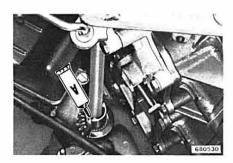


Figure 2-9. Throttle Shaft Lower Bushing

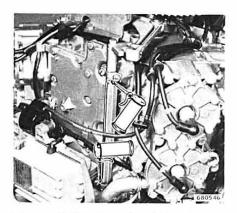


Figure 2-10. Lock Shaft Bearing Clamps

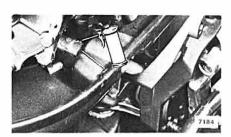


Figure 2-11. Throttle & Shift Shaft Bearings

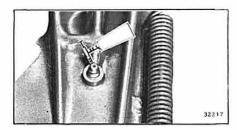


Figure 2-12. Swivel Bracket Fitting

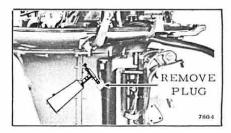


Figure 2-13. Gear Shift Linkage