MerCruiser Service bulletin

No. 2000-11

WARRANTY INFORMATION

SERVICE INFORMATION

▲ = Revised October 2000. This bulletin supercedes the previous bulletin 2000-11.

Engine Specifications

Model: 496 MAG Sterndrive

Engine

Propshaft Power Displacement Engine Type / Rotation Bore x Stroke **Compression Ratio Compression Pressure** Oil Pressure @ 2000 RPM Oil Pressure @ Idle RPM Valve Adjustment / Lifter Thermostat Ignition Type of Ignition System Firing Order Spark Plug Type Spark Plug Gap Initial Ignition Timing Electrical Alternator **Battery Required** Fuel Type of Fuel System **Fuel Required Fuel Pressure** RPM Idle RPM Full Throttle RPM **Date Code Location Fluid Capacities** Oil Change with Filter Closed Cooling System Sterndrive Gear Lube **MIE Transmission Torque Specifications** Exhaust Manifold Exhaust Elbow Intake Manifold Cylinder Head Flywheel Flywheel Coupler/Drive Plate 375 hp (280 kW) 496 cid (8.1L) V8 Gen+ / LH 4.25 in. x 4.38 in. (108.0 mm x 111.3 mm) 9.1:1 Minimum 100 psi (690 kPa) Minimum 30 psi (207 kPa) Minimum 15 psi (103 kPa) See Service Manual #30 / Roller 160° F (71° C)

Distributorless Ignition 1-8-7-2-6-5-4-3 Original: Denso TJ14R-P15 .060 in. (1.5 mm) N/A

72 Cold Operating Amps, 65 Hot Operating Amps Minimum 650 cca or 825 mca (150 Ah), 12V Negative (–) Ground

Multi-Port Fuel Injection with Electric Fuel Pump Minimum 87 Octane [R+M/2] / (90 RON) Boost Pump 7 psi (48 kPa), EFI Pump 43 psi (296 kPa)

650 RPM in Neutral Gear 4400-4800 RPM Stamped On Machined Cylinder Block Boss On Rear Starboard Side

Approx. 9 U.S. Quarts (8.5 L) 19 U.S. Quarts (18.0 L) Same as before N/A

26 lb-ft (35 Nm) 15 lb-ft (20 Nm) ▲ 106 lb-in. (12 Nm) See Service Manual #30 for procedure 74 lb-ft (100 Nm) 35 lb-ft (48 Nm)

Engine Specifications

Model: 496 MAG HO Sterndrive

Engine

Propshaft Power Displacement Engine Type / Rotation Bore x Stroke **Compression Ratio Compression Pressure** Oil Pressure @ 2000 RPM Oil Pressure @ Idle RPM Valve Adjustment / Lifter Thermostat Ignition Type of Ignition System Firing Order Spark Plug Type Spark Plug Gap Initial Ignition Timing **Electrical** Alternator **Battery Required** Fuel Type of Fuel System **Fuel Required Fuel Pressure RPM** Idle RPM Full Throttle RPM **Date Code Location Fluid Capacities** Oil Change with Filter Closed Cooling System Sterndrive Gear Lube **MIE Transmission Torque Specifications Exhaust Manifold** Exhaust Elbow Intake Manifold Cylinder Head Flywheel Flywheel Coupler/Drive Plate 425 hp (317 kW) 496 cid (8.1L) V8 Gen+ / LH 4.25 in. x 4.38 in. (108.0 mm x 111.3 mm) 9.1:1 Minimum 100 psi (690 kPa) Minimum 30 psi (207 kPa) Minimum 15 psi (103 kPa) See Service Manual #30 / Roller 160° F (71° C) **Distributorless Ignition** 1-8-7-2-6-5-4-3 Original: Denso TJ14R-P15 .060 in. (1.5 mm) N/A 72 Cold Operating Amps, 65 Hot Operating Amps Minimum 650 cca or 825 mca (150 Ah), 12V Negative (-) Ground Multi-Port Fuel Injection with Electric Fuel Pump Minimum 87 Octane [R+M/2] / (90 RON) Boost Pump 7 psi (48 kPa), EFI Pump 43 psi (296 kPa) 650 RPM in Neutral Gear 4600-5000 RPM Stamped On Machined Cylinder Block Boss On Rear Starboard Side Approx. 9 U.S. Quarts (8.5 L) 19 U.S. Quarts (18.0 L) Same as before N/A 26 lb-ft (35 Nm) 15 lb-ft (20 Nm) ▲ 106 lb-in. (12 Nm) See Service Manual #30 for procedure 74 lb-ft (100 Nm) 35 lb-ft (48 Nm)

Engine Specifications

Model: 8.1S Horizon Inboard

Engine

Propshaft Power Displacement Engine Type / Rotation Bore x Stroke **Compression Ratio Compression Pressure** Oil Pressure @ 2000 RPM Oil Pressure @ Idle RPM Valve Adjustment / Lifter Thermostat Ignition Type of Ignition System Firing Order Spark Plug Type Spark Plug Gap Initial Ignition Timing **Electrical** Alternator **Battery Required** Fuel Type of Fuel System **Fuel Required Fuel Pressure RPM** Idle RPM Full Throttle RPM **Date Code Location Fluid Capacities** Oil Change with Filter Closed Cooling System Sterndrive Gear Lube **MIE Transmission Torque Specifications Exhaust Manifold** Exhaust Elbow Intake Manifold Cylinder Head Flywheel Flywheel Coupler/Drive Plate 370 hp (276 kW) 496 cid (8.1L) V8 Gen+ / LH 4.25 in. x 4.38 in. (108.0 mm x 111.3 mm) 9.1:1 Minimum 100 psi (690 kPa) Minimum 30 psi (207 kPa) using scan tool Minimum 15 psi (103 kPa) using scan tool See Service Manual #30 / Roller 160° F (71° C)

Distributorless Ignition 1-8-7-2-6-5-4-3 Original: Denso TJ14R-P15 .060 in. (1.5 mm) N/A

72 Cold Operating Amps, 65 Hot Operating Amps Minimum 650 cca or 825 mca (150 Ah), 12V Negative (–) Ground

Multi-Port Fuel Injection with Electric Fuel Pump Minimum 87 Octane [R+M/2] / (90 RON) Boost Pump 7 psi (48 kPa), EFI Pump 43 psi (296 kPa)

650 RPM in Neutral Gear 4200-4600 RPM Stamped On Machined Cylinder Block Boss On Rear Starboard Side

Approx. 9 U.S. Quarts (8.5 L) 19 U.S. Quarts (18.0 L) N/A Same as before

26 lb-ft (35 Nm) 15 lb-ft (20 Nm)

▲ 106 lb-in. (12 Nm) See Service Manual #30 for procedure 74 lb-ft (100 Nm) 35 lb-ft (48 Nm)

Engine Specifications

Model: 8.1S HO Inboard

Engine

Propshaft Power Displacement Engine Type / Rotation Bore x Stroke **Compression Ratio Compression Pressure** Oil Pressure @ 2000 RPM Oil Pressure @ Idle RPM Valve Adjustment / Lifter Thermostat Ignition Type of Ignition System Firing Order Spark Plug Type Spark Plug Gap Initial Ignition Timing **Electrical** Alternator **Battery Required** Fuel Type of Fuel System **Fuel Required Fuel Pressure RPM** Idle RPM Full Throttle RPM **Date Code Location Fluid Capacities** Oil Change with Filter Closed Cooling System Sterndrive Gear Lube **MIE Transmission Torque Specifications Exhaust Manifold** Exhaust Elbow Intake Manifold Cylinder Head Flywheel Flywheel Coupler/Drive Plate 420 hp (313 kW) 496 cid (8.1L) V8 Gen+ / LH 4.25 in. x 4.38 in. (108.0 mm x 111.3 mm) 9.1:1 Minimum 100 psi (690 kPa) Minimum 30 psi (207 kPa) using scan tool Minimum 15 psi (103 kPa) using scan tool See Service Manual #30 / Roller 160° F (71° C) **Distributorless Ignition** 1-8-7-2-6-5-4-3 Original: Denso TJ14R-P15 .060 in. (1.5 mm) N/A 72 Cold Operating Amps, 65 Hot Operating Amps Minimum 650 cca or 825 mca (150 Ah), 12V Negative (-) Ground Multi-Port Fuel Injection with Electric Fuel Pump Minimum 87 Octane [R+M/2] / (90 RON) Boost Pump 7 psi (48 kPa), EFI Pump 43 psi (296 kPa) 650 RPM in Neutral Gear 4400-4800 RPM Stamped On Machined Cylinder Block Boss On Rear Starboard Side Approx. 9 U.S. Quarts (8.5 L) 19 U.S. Quarts (18.0 L) N/A Same as before 26 lb-ft (35 Nm) 15 lb-ft (20 Nm) ▲ 106 lb-in. (12 Nm) See Service Manual #30 for procedure 74 lb-ft (100 Nm)

35 lb-ft (48 Nm)