

Suzuki DT30 (Prior to 1988)

OUTBOARD MOTOR

THERMOSTAT. A thermostat (7—Fig. SZ11-14) is used to regulate operating temperature. Thermostat should start to open within the temperature

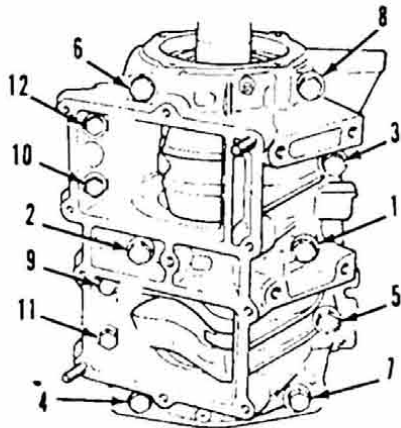


Fig. SZ11-9—Tighten crankcase screws in the sequence shown. Refer to CONDENSED SERVICE DATA for screw torques.

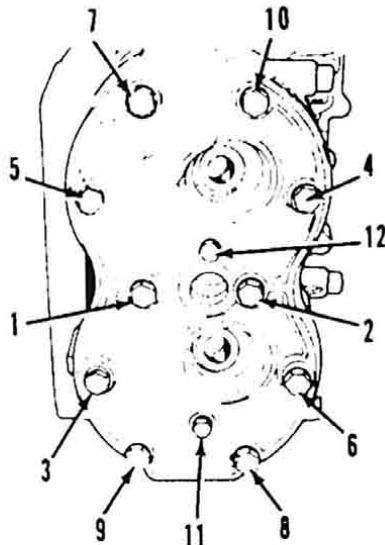


Fig. SZ11-10—Tighten cylinder head screws in sequence shown. Refer to CONDENSED SERVICE DATA for screw torques.

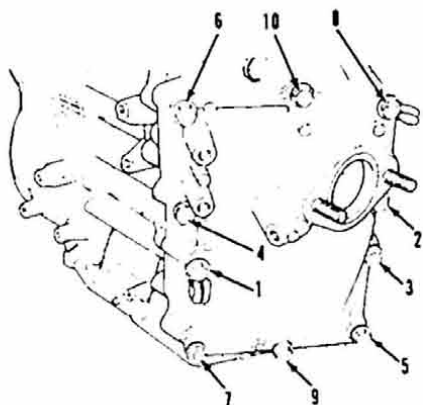


Fig. SZ11-11—Securely tighten intake manifold screws in sequence shown.

range of 48.5°-51.5° C (119°-125° F). Thermostat can be removed for inspection or renewal by removing cylinder head cover (6).

POWER HEAD

REMOVE AND REINSTALL. To remove the power head, first remove engine's top cover. Disconnect throttle cables, throttle limiting rod, fuel inlet hose at lower engine cover connector, choke knob and wires which will interfere with power head removal. Label wires, if needed, for later reference. Remove and carburetor's air intake cover, carburetor, rewind starter, starter motor relay and electric starter motor. Remove eight screws which secure power head assembly to drive shaft housing and lift off power head.

Before reinstalling power head, make certain drive shaft splines are clean then coat them with a light coating of water resistant grease. Install power head on drive shaft housing. Coat threads of retaining cap screws with silicone sealer and tighten screws to 15-20 N·m (11-14 ft.-lbs.). The remainder of installation is the reverse of removal procedure. Refer to SPEED CONTROL LINKAGE for synchronizing throttle opening with ignition advance.

DISASSEMBLY. Disassembly and inspection may be accomplished in the

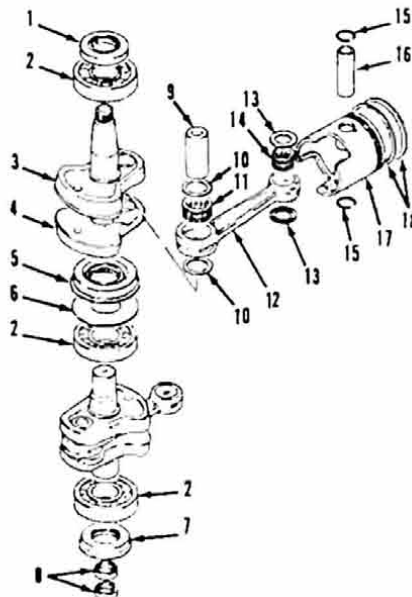


Fig. SZ11-12—Exploded view of piston and crankshaft assembly.

- | | |
|-------------------|--------------------|
| 1. Seal | 10. Thrust washers |
| 2. Ball bearings | 11. Roller bearing |
| 3. Crank half | 12. Connecting rod |
| 4. Crank half | 13. Thrust washers |
| 5. Labyrinth seal | 14. Roller bearing |
| 6. Washer | 15. Circlips |
| 7. Seal | 16. Piston pin |
| 8. Seals | 17. Piston |
| 9. Crank pin | 18. Piston rings |

following manner. Remove electric starter bracket, exhaust tube, fuel filter and fuel pump. Remove flywheel and key, stator plate with pulser, charge and lighting coils. Remove electrical parts holder, speed control linkage, upper oil seal housing and stator retainer ring. Remove intake manifold, reed valve plate, exhaust cover and exhaust plate with gaskets. Remove cylinder head and cover with gaskets. Remove the twelve crankcase cap screws, then separate crankcase from cylinder block. Lift crankshaft assembly with pistons and connecting rod assemblies from cylinder block.

Engine components are now accessible for overhaul as outlined in the appropriate following paragraphs. Clean carbon from cylinder head and combustion chambers and remove any foreign material accumulation in water passages. Inspect components for damage and renew if needed. Refer to the following section for assembly procedure.

ASSEMBLY. Refer to specific service sections when assembling the crankshaft, connecting rods, pistons and reed valves. Make sure all joint and gasket surfaces are clean and free from nicks and burrs. Make sure all carbon, salt, dirt and sand are cleaned from the combustion chambers, exhaust ports and water passages.

Lubricate crankpin bearings and cylinder walls with Suzuki engine oil or a suitable NMMA certified two-stroke engine oil. Install crankshaft assembly in crankcase. Make sure flange of lower oil seal (7—Fig. SZ11-12) and middle labyrinth seal (5) fits properly in crankcase grooves. Make sure bearing pins engage notches in crankcase. Spread a coat of Suzuki Bond No. 1215 or a suitable equivalent on the mating surfaces of the crankcase and the cylinder block. Position crankcase half on cylinder block and tighten the crankcase screws in the sequence shown in Fig. SZ11-9 to torques shown in CONDENSED SERVICE DATA. Tighten the cylinder head screws in the sequence shown in Fig. SZ11-10 to torques shown in CONDENSED SERVICE DATA. Tighten the intake manifold screws in the sequence shown in Fig. SZ11-11.

PISTONS, PINS, RINGS AND CYLINDERS. Each piston is fitted with two piston rings. Piston ring end gap should be 0.2-0.4 mm (0.008-0.016 in.) with a maximum allowable ring end gap of 0.8 (0.031 in.). Piston rings are retained in position by locating pins. Standard piston pin diameter is 17.995-18.000 mm (0.7085-0.7087 in.). Install marked side of piston ring toward top of piston. Piston to cylinder