## Suzuki DT90 & DT100

1 mm (0.04 in.) is present between throttle lever (4) and stopper (5) on carburetor. Refer to OIL INJECTION section for injection pump control linkage adjustment.



Fig. SZ18-6-Exploded view of intake manifold and reed valve assemblies.





10.5 mm (0.413 ln.)

Fig. SZ18-7-Distance between reed stop (5) and reed plate (3) should be 10.5 mm (0.413 in.) as shown. Clearance between reed petal (4) and reed plate (3) must not exceed 0.2 mm (0.008 in.).



Fig. SZ18-8-Refer to text to synchronize carburetor throttle valves.

To ease engine starting, ignition timing is electronically advanced to 5 degrees BTDC. The starting ignition advance duration is 15 seconds when engine temperature is below 97°-110° C (36°-44° F) and 5 seconds when engine is warmed to 97°-110° C (36°-44° F) or above. After the initial timing advance period, idle speed timing is controlled by the idle speed adjustment switch. The idle speed adjustment switch varies timing from 7 degrees ATDC (slow) to TDC (fast), changing idle speed approximately 50 rpm per position.

Full throttle timing should be 23 degrees BTDC at 5000 rpm and is electronically controlled by the Micro Link processor. The processor uses information from the gear counter coil and the throttle valve sensor to determine the optimum ignition timing for all operating conditions. Refer to IGNITION section for throttle valve sensor adjustment procedure.

## **OIL INJECTION**

BLEEDING PUMP. Air should be purged from injection system any time an injection system component has been removed or renewed, or if outboard motor has been in storage.

While bleeding the system, a 50:1 fuel and oil mixture must be used in the fuel tank to ensure proper engine lubrication during the bleeding procedure. Open the air bleed screw (B--Fig. SZ18-11) two or three turns. Start engine and run at 650-700 rpm until air is no longer noted at screw (B). Stop engine and tighten screw (B) securely.

CHECKING OIL PUMP OUTPUT. Start engine and warm-up for approximately five minutes. Stop engine, remove oil reservoir and disconnect oil pump control rod (2-Fig. SZ18-11) from carburetor. Connect Suzuki oil measuring cylinder 09941-68710 to oil pump inlet hose and fill with a recommended engine oil. Bleed air from system as previously outlined, then refill oil cylinder to an upper reference mark. Rotate oil pump control lever to the fully closed (clockwise) position, start engine and run at 1500 rpm for exactly five

## OUTBOARD MOTOR

minutes. After five minutes, stop engine and note oil measuring cylinder. Oil consumption in five minutes at 1500 rpm should be 2.5-4.5 mL (0.085-0.152 fl. oz.).

Next, refill oil cylinder, rotate oil pump control lever to the full-open (counterclockwise) position, start engine and run at 1500 rpm for exactly two minutes. Stop engine and note oil cylinder. Oil consumption in two minutes at 1500 rpm should be 6.0-9.0 mL (0.203-0.304 fl. oz.). After reconnecting oil pump control rod to carburetor, be sure carburetor throttle valves are properly synchronized (SPEED CONTROL LINK-AGE) and check adjustment of oil pump control rod as outlined in PUMP CON-TROL ROD ADJUSTMENT section.

NOTE: Oil pump output test results may vary depending on testing error and ambient temperature. To ensure accurate results, repeat test three times, or until results are consistent.

Renew oil pump assembly (1) if output is not as specified.

Be sure pump is properly engaged with driven gear (3) before tightening fasteners.

**OIL FLOW SENSOR.** Oil flow sensor (9-Fig. SZ18-11) is connected in-line between oil reservoir and oil pump. The oil flow sensor serves as an oil filter as well as a sensor to detect insufficient oil flow to pump. Should oil flow become restricted, the sensor circuit closes, signaling the microcomputer to decrease engine speed and activate the warning lamp and buzzer.

The sensor filter should be periodically removed and cleaned in a suitable solvent. Renew filter if excessive blockage is noted.

To test sensor, connect an ohmmeter between sensor pink/blue wire and black wire. No continuity should be present. Next, plug sensor inlet and apply a vacuum to the outlet port. Zero ohms should be noted with vacuum applied.

PUMP CONTROL ROD ADJUST-MENT. Make sure carburetor throttle





- Link rod
- Throttle arm Carburetor 2.
- Throttle lever
- Stopper
- 5. N. Nuts