CHRYSLER CORP. IMPORTS DECELERATION FUEL CUT-OFF SYSTEM

Arrow
Arrow Pickup
Challenger
Champ
Colt
D50
Sapporo

DESCRIPTION

Deceleration fuel cut-off system reduces HC emissions through use of a coasting air valve, air switching valve, engine speed sensor and solenoid valve. The coasting air valve supplies additional air to intake manifold and air switching valve cuts off fuel to by-pass holes and pilot outlet by supplying additional air to slow idle passage.

OPERATION

Coasting Air Valve – When engine speed sensor detects 1600-2000 RPM (1400-1800 RPM on 2600 cc engines), it deactivates the coasting air valve by opening the solenoid valve. This maintains smooth vehicle operation during engine mode transient stage and prevents engine stalling.

Air Switching Valve – When engine speed sensor detects 1600-2000 RPM (1400-1800 RPM on 2600 cc engines), it deactivates the air switching valve by opening the solenoid valve. This maintains smooth vehicle operation during engine mode transient stage and prevents engine stalling.

TESTING

1) Run engine at idle. Disconnect solenoid valve connector to disable solenoid valve (manifold vacuum will act on air switching valve, causing valve to open). If idle drops excessively or engine stalls, air switching valve and solenoid valve are okay.

2) If idle speed does not change, check vacuum passage for clogging and check condition of air switching valve or solenoid valve.

3) With engine idling, battery voltage should be measured at solenoid connector. If voltage is not present, electrical wiring or engine speed sensor is defective.

4) Increase speed to 1500 RPM. Check to ensure voltage is present at solenoid valve connector. If not, engine speed sensor is defective.

5) Increase speed to 2500 RPM. Check to be sure no voltage is present at solenoid valve connector. If it is, engine speed sensor is defective.

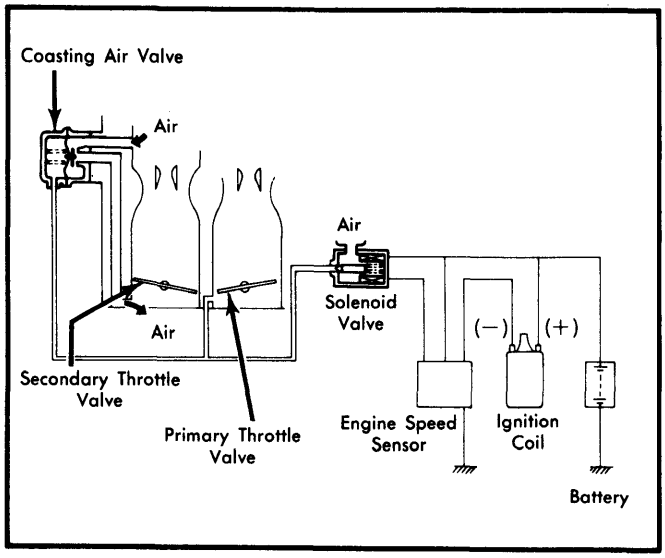

Fig. 1 Air Switching Valve Schematic

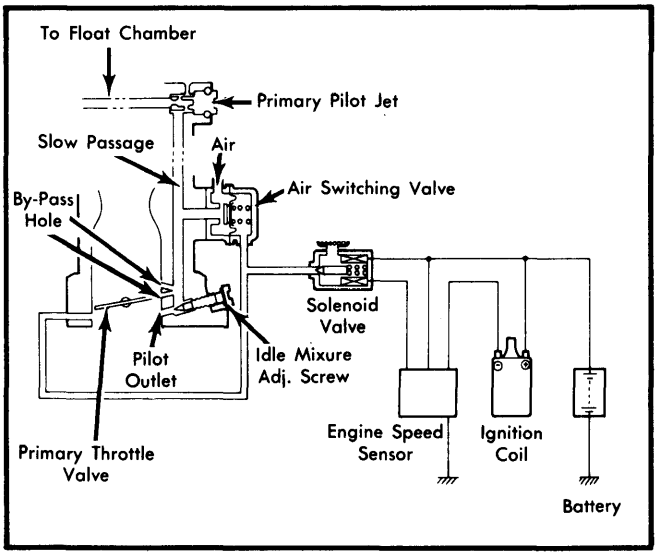

Fig. 2 Coasting Air Valve Schematic