

# 1975-79 EXHAUST EMISSION SYSTEMS

## Chrysler Corp. Throttle Position Solenoid

3-33

### 1975 Models

#### DESCRIPTION

Throttle Position Solenoid (TPS) system is used on vehicles equipped with catalytic converters. This system prevents damage to catalytic converter from an over-rich mixture entering converter. System consists of an electronic speed switch and throttle position solenoid. See Fig. 1.

#### OPERATION

The throttle valve is held open slightly during deceleration to increase air flow to engine. When engine speed is above 2000 RPM, electronic speed switch energizes the throttle position solenoid. When solenoid is energized, throttle is held open slightly until engine speed drops below 2000 RPM.

#### TESTING

##### TPS SYSTEM

- 1) With engine off, disconnect wire from solenoid. Hold throttle open. Using a jumper wire, apply battery voltage to solenoid. Solenoid shaft should extend. If not, replace solenoid.
- 2) Connect a tachometer and start engine. Using a jumper wire, apply battery voltage to solenoid connector. Open throttle enough to ensure solenoid shaft is extended. Allow time for Orifice Spark Advance Control (OSAC) valve to provide vacuum advance. Engine should be at 1450-1550 RPM. If not, adjust solenoid shaft.
- 3) Disconnect jumper wire and reconnect solenoid wire. Slowly accelerate engine from idle. As engine speed passes 2000 RPM, solenoid should extend and remain extended. Slowly decelerate engine. At about 1800 RPM, solenoid should retract. If operation is not as described, check electrical power and engine speed signal to speed switch.

