1974-79 EXHAUST EMISSION SYSTEMS
Renault Fast Idle (Deceleration) Control

1977-79 All Models

DESCRIPTION

The fast idle (deceleration) control system is designed to reduce hydrocarbon (HC) emission which build up during deceleration. The closing of the throttle starves the carburetor of air, which results in an overly rich fuel mixture, causing high HC emissions. The fast idle system consists of an electronic tachometer switch (Calif.), vacuum-actuated valve, idle delay valve, throttle plate opener, and a dashpot.

OPERATION

On Federal models, the vacuum valve opens and vacuum is applied to the throttle plate opener when deceleration starts. The opener holds the throttle plate partially open. In this position, the throttle plate is in the fast idle position.

On California models, a magnetic pick-up in the speedometer transmits impulses to the electronic tachometer switch at road speeds between 17-20 MPH, which activates the solenoid valve. Once the throttle is released, the throttle plates close. Then vacuum in the intake manifold acts on throttle plate opener and partially opens the No. 1 throttle plate to give an accelerated idle.

When road speed drops below 17 MPH, the solenoid valve is closed and vacuum to the throttle plate opener is cut off and throttle plate returns to normal position.

The dashpot, mounted on the carburetor, holds the No. 1 throttle plate partially open for a predetermined time of 2 to 4 seconds. The idle delay valve ensures an automatic, slow return to idle, by venting the vacuum through a small orifice.

TESTING

VACUUM VALVE

Disconnect pipe between vacuum valve and throttle plate opener. Connect a vacuum gauge to outlet of vacuum valve. Start engine and bring to normal operating temperature. Open throttle, then release it. Vacuum gauge should read 21.5 in. Hg.

ADJUSTMENTS

FAST IDLE

NOTE: Ignition advance and curb idle must be adjusted correctly before fast idle position can be set.

Federal Models - **1)** Disconnect vacuum hose at deceleration valve and reconnect it to throttle plate opener on intake manifold.
2) Warm engine to normal operating temperature. Increase engine speed to 2500 RPM, then let it decrease gradually.
3) Check fast idle speed being held by throttle plate opener. It should be 1800-2000 RPM. If not, adjust by turning screw in end of throttle plate opener.
California Models - Disconnect and plug vacuum hose from intake manifold. Loosen lock nut on throttle plate opener, and adjust screw to obtain a no-load speed of 2000 RPM.

MAINTENANCE

Periodically clean and inspect system components for proper operation. Every 25,000 miles, replace idle delay valve. Be sure distributor side of valve faces carburetor.

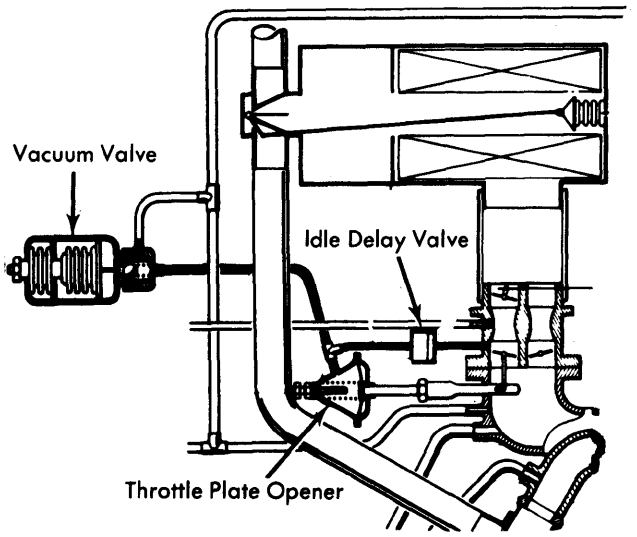

Fig. 1: Federal Fast Idle (Deceleration) Control System