1974-79 EXHAUST EMISSION SYSTEMS
Opel Coasting Richer System

1976-79 Models

DESCRIPTION

Coasting richer system is used to prevent excessive emissions which could be created by coasting. A lean mixture, resulting from closed throttle valve for extended period of time, will create inefficient combustion. This system richens air/fuel mixture through an auxiliary fuel supply system. Coasting richer system consists of transmission switch, clutch switch, accelerator switch, engine speed sensor (if equipped), and coasting solenoid valve.

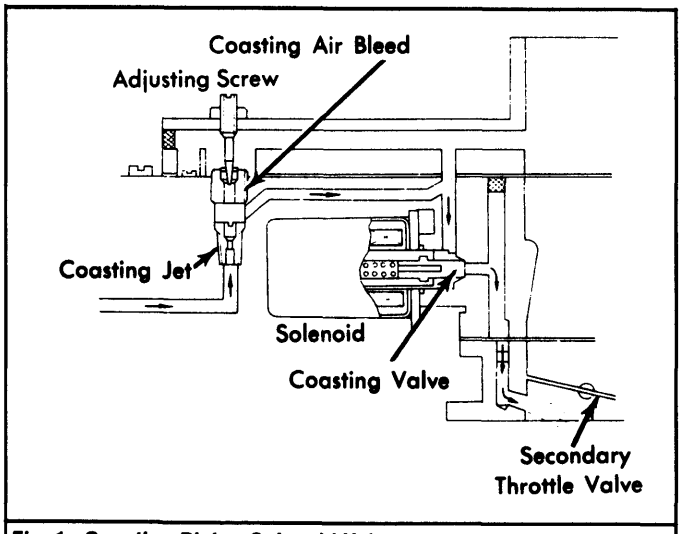

Fig. 1: Coasting Richer Solenoid Valve

OPERATION

When engine speed sensor, accelerator switch, clutch switch and transmission switch are on, coasting solenoid valve on secondary side of carburetor is energized. This opens fuel passage from coasting jet and air bleed which supplies additional fuel into lower part of secondary throttle. Fuel mixture is now enriched temporarily for efficient combustion during coasting.

ACCELERATOR SWITCH

Switch is connected to accelerator linkage and is on, completing circuit to solenoid, when accelerator pedal is NOT depressed. When depressed, accelerator switch opens electrical circuit to coasting richer solenoid valve.

CLUTCH SWITCH

Located near clutch pedal, switch is turned off when clutch is depressed. Coasting richer system is not activated.

INHIBITOR/TRANSMISSION SWITCH

Switch is installed on transmission shift quadrant or on shift lever. On automatic transmission, switch is turned on when shift lever is placed in any forward gear (3rd or 4th gear on manual transmission).

ENGINE SPEED SENSOR

1976-78 California Models - Engine speed sensor detects engine RPM by sensing pulses from ignition coil. When engine speed exceeds 1600 RPM, engine speed sensor turns on and coasting richer solenoid valve may be energized.

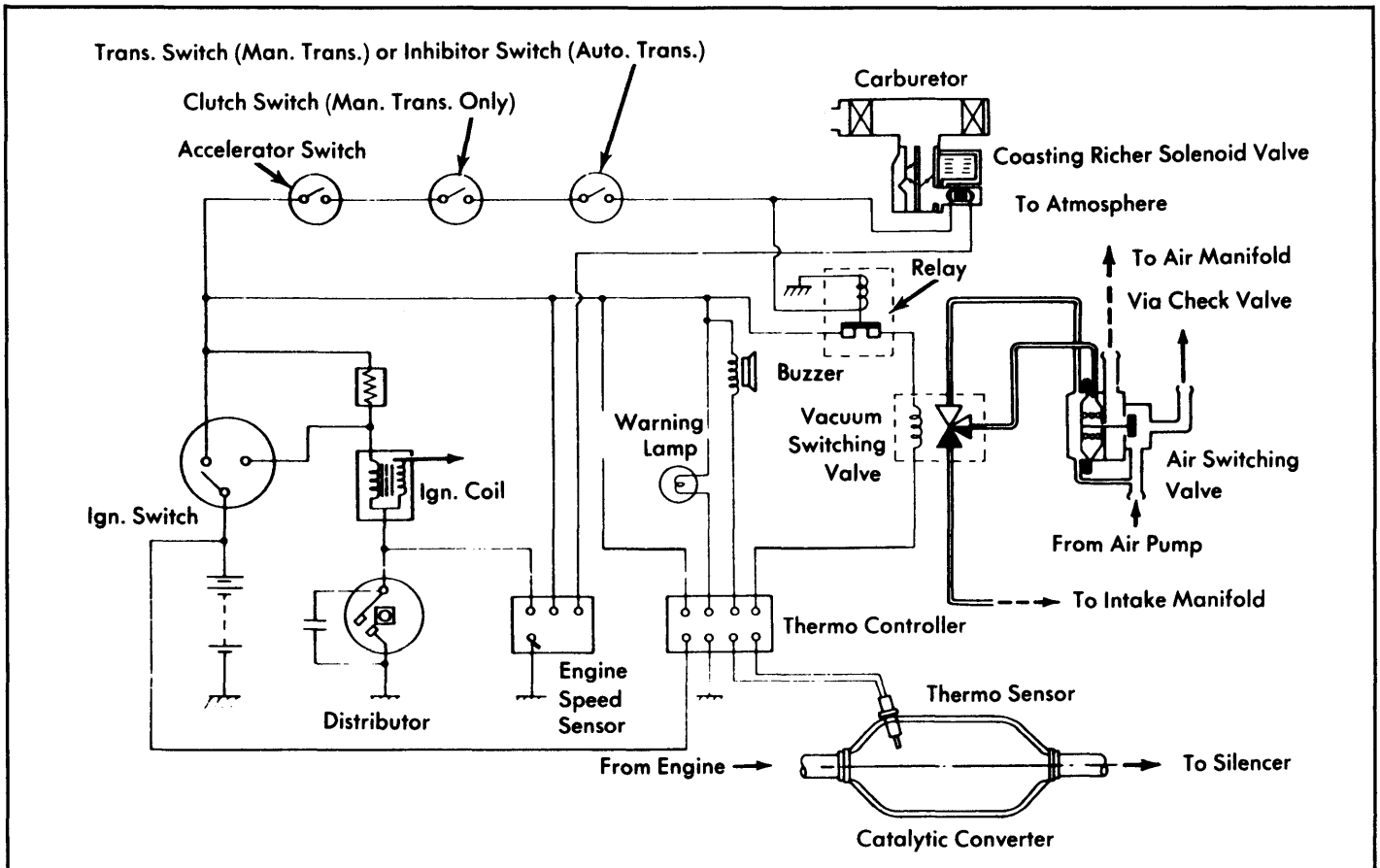

Fig. 2: 1976-78 Coasting Richer System (California Models)

1974-79 EXHAUST EMISSION SYSTEMS
Opel Coasting Richer System (Cont.)

TESTING

ACCELERATOR SWITCH

Check that clearance between accelerator switch and accelerator pedal linkage is .04-.05" (1.0-1.3 mm). Detach electrical connector and install continuity tester. Switch should show on when pedal is released and off when depressed.

CLUTCH SWITCH

Using clutch switch, set height of clutch pedal so it is flush with height of brake pedal. Attach continuity tester to clutch switch and note that it should be on when pedal is released and off when pedal is depressed.

TRANSMISSION SWITCH

Detach wiring connector and install continuity tester. When transmission is placed in 3rd or 4th gear, switch should show continuity. No continuity should be present when in any other gear. On 1978 California models, switch will show continuity in all gear positions except Neutral.

ENGINE SPEED SENSOR

1976-78 California Models – Disconnect engine speed sensor. Connect jumper wire between Black, Black/Red, and Black/Yellow terminals. With engine above 1500 RPM, check for continuity between Black/White color coded terminals. Engine speed sensor is okay if continuity exists.

MAINTENANCE

Inspect components of coasting richer system for proper operation every 15,000 miles.

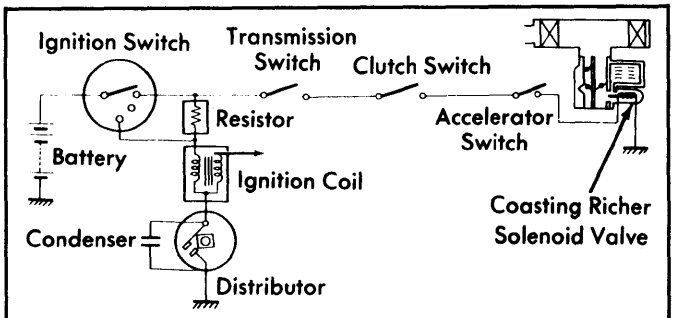

Fig. 3: 1976-78 Coasting Richer System (Federal Models)