

1982 Exhaust Emission Systems

ISUZU & LUV COASTING FUEL CUT-OFF SYSTEM

Isuzu P'UP, LUV Pickup

DESCRIPTION

Coasting fuel cut-off system is used on Federal vehicles only. It is used to prevent excessive emissions which could be created by coasting. This system is an auxiliary fuel system operated by a slow cut solenoid.

System consists of a slow cut solenoid valve integral with carburetor, an engine speed sensor, a transmission switch, an accelerator switch, a clutch switch on Man. Trans. models and an inhibitor switch on Auto. Trans. models.

OPERATION

SPEED SENSOR

The speed sensor detects engine revolutions by sensing ignition pulses from the ignition coil. When engine speed exceeds 2,000 RPM, the speed sensor turns off and coasting fuel cut solenoid becomes de-energized.

TRANSMISSION NEUTRAL SWITCH

Installed on transmission shift quadrant, this switch turns on when gear shifter is moved into any gear position. The switch turns off when shifter is placed in Neutral.

With switch on, the coasting richer circuit is energized. With switch off, coasting richer circuit is de-energized.

ACCELERATOR SWITCH

The accelerator switch is connected to the accelerator linkage. It is turned on when the accelerator pedal is not depressed. With the accelerator pedal depressed, the circuit is open, and the switch is turned off.

CLUTCH SWITCH

Clutch switch is installed near clutch pedal. With clutch pedal depressed, switch is turned off. With switch off, coasting richer circuit is de-energized.

TESTING

SPEED SENSOR

1) Connect a jumper wire between terminals "BY" and "LgW" at speed sensor wiring connector. Start engine and check for voltage between "Lg" and "B" terminals

2) The speed sensor is normal if the voltage is zero when the engine runs at 2100-2300 RPM.

CLUTCH SWITCH

Connect test lamp to switch terminals with switch disconnected. Lamp should light with pedal released and go out with pedal depressed. If not, replace switch

ACCELERATOR SWITCH

Connect test lamp to switch terminals with switch disconnected. Lamp should light with pedal released, and go out with pedal depressed. If not, replace switch.

TRANSMISSION NEUTRAL SWITCH

Disconnect switch and connect test lamp to switch wiring. With gear selector in any position except Neutral, lamp should light. With gear selector in Neutral, lamp should not light. If switch does not respond as described, replace switch.

ADJUSTMENTS

CLUTCH SWITCH

Set height of clutch pedal so it is $\frac{3}{8}$ " (10 mm) higher than height of brake pedal. Height can be adjusted using clutch switch lock nut.

MAINTENANCE

Inspect components of coasting fuel cut-off system every 15,000 miles. In addition, carburetor adjustment and ignition timing should be checked at same time.

Fig. 1: Isuzu & LUV Pickup Coasting Fuel Cut-Off System

