LUV COASTING RICHER SYSTEM

Pickup

DESCRIPTION

Coasting richer system is used on Federal Man. Trans. models 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, and coasting solenoid valve.

NOTE – *On California models, a coasting fuel cut device is used to accomplish same purpose as coasting richer system. Fuel cut device is part of Over-Temperature Control System. See "LUV Catalytic Converter and Over-Temperature Control System" article.*

OPERATION

When 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.

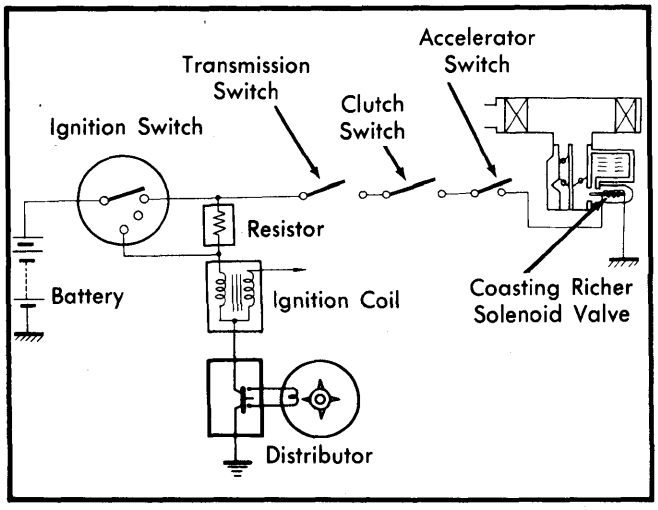

Fig. 1 LUV Coasting Richer System Schematic (Federal Man. Trans. Vehicles)

ACCELERATOR SWITCH

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

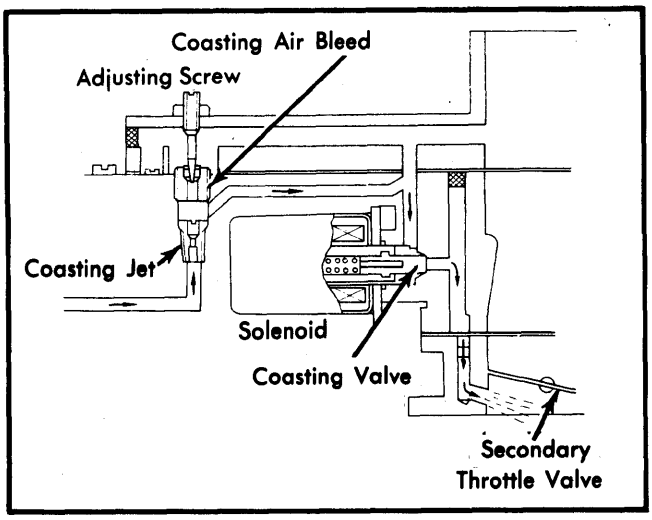

Fig. 2 Coasting Richer Solenoid Valve

CLUTCH SWITCH

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

TRANSMISSION SWITCH

Switch is installed on upper part of transmission gear box and is on when transmission is in 3rd or 4th gear.

TESTING & ADJUSTMENT

ACCELERATOR SWITCH

Check that clearance between accelerator switch lock nut and accelerator pedal bracket is ½" (12.7 mm). Detach electrical connector and install continuity tester. Switch should show "on" when pedal is released and "off" when pedal is depressed.

CLUTCH SWITCH

Using clutch switch, set height of clutch pedal so it is ⅜" (10 mm) higher than the height of the 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.

MAINTENANCE

Inspect components of coasting richer system for proper operation every 15,000 miles. In addition, carburetor adjustment and ignition timing should be checked at the same interval.