

# 1974-79 EXHAUST EMISSION SYSTEMS

## Jaguar Supplemental Controls

3-251

### 1977-79 XJ12, XJS

#### DESCRIPTION

The XJ12 and XJS models are equipped with additional "supplemental" control devices which assist the exhaust emission systems in maintaining more exacting control of emissions output. The following paragraphs describe the functions of these supplemental controls.

#### OVERRUN VALVES

Two overrun valves are located in the front end of each intake manifold. See Fig. 1. These valves supply additional fresh air to the air/fuel mixture through the injection system during deceleration (closed throttle) to prevent an overly rich fuel mixture. This valve maintains a proper combustible mixture under all engine operating conditions.

#### THERMOSTATIC VACUUM SWITCH

This switch is installed on right rear of engine, next to thermal override switch, and aids in preventing engine overheating. It cuts out retard to the distributor at 220°F (104°C) and allows ignition to advance. This increases engine RPM and cools down the engine during periods of prolonged idle or other modes that may produce high engine temperatures.

#### GEARBOX PRESSURE SWITCH

This switch opens in response to rising automatic transmission governor pressure and operates the solenoid valve, depending upon coolant temperature, when vehicle speed rises to approximately 35 MPH.

#### SOLENOID VALVE

The solenoid valve serves to transfer manifold pressure reference point to a throttle housing reference when switched by either gearbox pressure switch or coolant temperature sensor. The solenoid valve is located on the rear of the right-hand intake manifold.

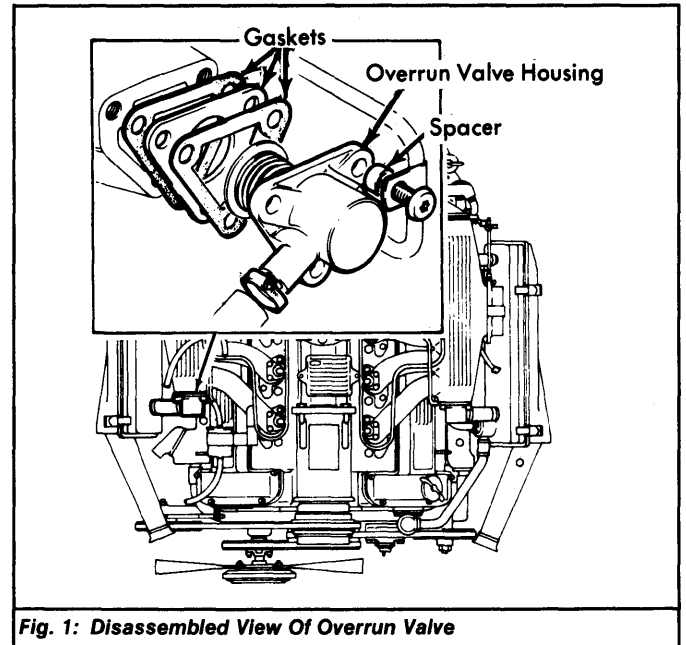


Fig. 1: Disassembled View Of Overrun Valve