

# Exhaust Emission Systems

## 1971-74 FORD MOTOR CO. DECEL VALVE

### DESCRIPTION

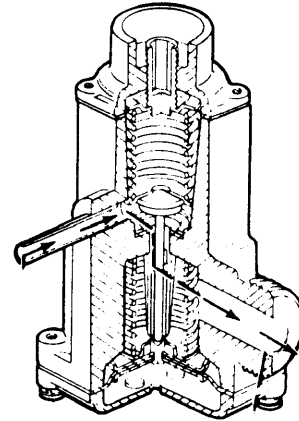
Two types of decel valves are used, which are located on intake manifold. Decel valve supplies an additional air/fuel mixture to engine during periods of deceleration (high intake manifold vacuum when throttle valve is closed). Adjustable decel valve is comprised of a valve controlled by two springs (tension is preset in production). Non-adjustable decel valve is preset and requires no adjustment. Valves are operated by a diaphragm subjected to atmospheric pressure on one side (through small hole in bottom of valve) and manifold vacuum on other side. A small diameter pipe connects valve to a system of fuel and air bleed jets in carburetor.

### OPERATION

When valve is opened (caused by high manifold vacuum) air/fuel mixture is drawn from carburetor (by the same vacuum) and enters intake manifold. This additional volume of combustible mixture, when compressed, results in a more rapid and complete burning of the fuel mixture and, thereby, considerably reduces emissions of hydrocarbons and carbon monoxide.

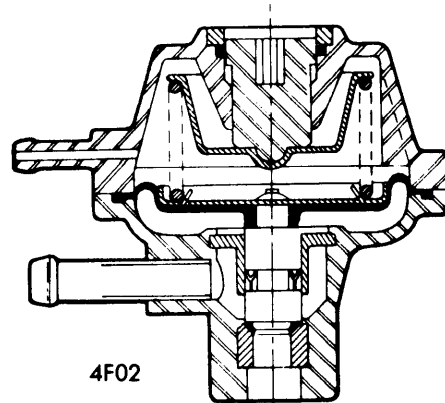
### ADJUSTMENT

Run engine at 1200 RPM for 20 minutes. Connect tachometer. Remove air/fuel mixture hose from decel valve and connect a vacuum gauge, using a "T" fitting so valve remains operational. With transmission in "P" (auto. trans.) or NEUTRAL (man. trans.) raise engine speed to 3,000 RPM and hold steady for five seconds, then release throttle and note time required until vacuum reads zero. Correct decel valve timing is two to five seconds. Turn nylon adjuster clockwise to decrease time and counterclockwise to increase time. *NOTE* — Nylon adjuster can be damaged by use of a screwdriver and it is recommended that Tool T73P-9K809-A be used. After adjustment of decel valve, check that fast idle speed is to specification. If valve timing cannot be adjusted, replace valve.



4F01

**ADJUSTABLE DECEL VALVE**  
(1600, 2000 & 2800 cc)



4F02

**NON-ADJUSTABLE DECEL VALVE**  
(2300 cc)