

1974-79 EXHAUST EMISSION SYSTEMS

BMW Dashpot System

3-45

**1974 Bavaria, 3.0CS & Sedan
1974-75 2002 Models**

DESCRIPTION

To help control exhaust emissions during deceleration, throttle plate is held slightly open by means of a vacuum operated diaphragm (dashpot). At speeds over 1650-1850 RPM (1820-2020 RPM on 3.0L engine), a speed sensor actuates a vacuum solenoid valve to vent diaphragm to atmosphere. A spring in vacuum diaphragm causes carburetor linkage to open slightly. As engine speed drops below 1550-1750 RPM (1700-1800 RPM on 3.0L engine), speed sensor interrupts current to vacuum solenoid valve, allowing intake manifold vacuum to retard plunger of vacuum diaphragm and return throttle to idle position.

ADJUSTMENT

1974 MODELS

With vacuum hose removed from dashpot, idle speed must increase to 1400-1500 RPM (1650-1750 RPM on 3.0L engine). If necessary, adjust by turning dashpot in bracket.

1975 MODELS

With vacuum hose to dashpot disconnected and plugged, operate throttle linkage to bring engine speed to 2500 RPM. Gradually close

throttle until linkage contacts dashpot set screw. At this time engine speed should be 1550-1650 RPM. If adjustment is required, loosen dashpot lock nut and turn dashpot until proper speed is obtained.

TESTING

1974 MODELS

Step on accelerator pedal and release quickly. Engine RPM must return to idle with a certain delay. If not, adjust dashpot.

1975 MODELS

1) With tachometer connected to engine, increase engine speed to 2500 RPM. Release accelerator and observe tachometer and dashpot plunger movement as carburetor returns to idle. Above 1650-1850 RPM, plunger must contact throttle linkage. Below 1550-1750 RPM, plunger must retract and free throttle linkage.

2) If system does not perform as indicated, check dashpot adjustment and for vacuum at dashpot. If vacuum is present and dashpot does not operate, replace dashpot.

3) Also check connector and ground at speed sensor. If okay, unplug connector from vacuum solenoid valve. Probe connector terminal with test light. If test light comes on with engine speed above 1900 RPM, vacuum solenoid valve is defective. If test light does not come on, wiring or speed sensor is defective.