

1970 AMERICAN MOTORS DECELERATION VALVE

DESCRIPTION

In 1970, all 199", 232" and 390" CID engines equipped with manual transmission will incorporate a deceleration valve (decel valve) as an addition to the Emission Control System. The valve is part of the distributor vacuum advance system and provides ignition advance during periods of deceleration.

OPERATION

When intake manifold vacuum rises above a specific value, the decel valve closes off vacuum to the carburetor spark port and applies intake manifold vacuum to the advance side of the distributor vacuum unit, providing full vacuum advance timing. As manifold vacuum falls below the specific value, the decel valve closes off intake manifold vacuum and restores carburetor spark port vacuum to the advance side of the vacuum unit.

TESTING

Prior to adjusting the decel valve, the ignition timing must be checked and adjusted as outlined in the Tune-Up Section. *NOTE - Because of the volume of vacuum required to operate the decel valve, the valve must be adjusted while connected to the engine.* Proceed as follows:

- 1) Adjust engine to specified final idle speed and idle mixture (lean best idle).
- 2) When so equipped, check carburetor dashpot setting and adjust accordingly.
- 3) Install a "T" fitting and vacuum gauge in the distributor vacuum advance hose. With the engine at the specified final idle speed, the vacuum gauge must read less than 4" Hg. (vacuum). If a vacuum reading above 4" is observed, recheck timing, idle speed and mixture adjustments.

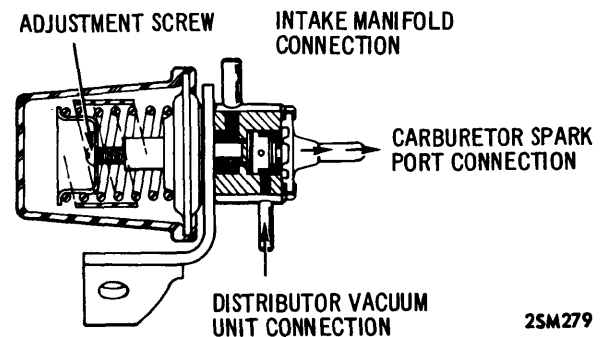
- 4) Operate the engine at 2000 RPM for 10 seconds. Release the throttle and observe the vacuum gauge. Vacuum should increase to at least 20" Hg. for a minimum of 1 second and fall to idle level (less than 4" Hg.) within 5 seconds after releasing the throttle.

ADJUSTMENT

If it takes less than 1 second or more than 5 seconds to obtain the specified vacuum readings (at least 20" Hg. and return to less than 4" Hg.), remove the valve cap and adjust the valve as follows:

- 1) To increase the time vacuum remains above idle level, turn the adjusting screw counterclockwise.
- 2) To decrease the time vacuum remains above idle level (less than 4" Hg.), turn the adjusting screw clockwise.

NOTE - If 20" Hg. is not obtained, decel valve is adjusted too far clockwise.



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