Idle Speed: Adjustments

CURB IDLE SPEED ADJUSTMENT

Explanation

Curb idle speed (RPM) is controlled by the Electronic Engine Controls (EEC IV) processor and the idle speed control device. If the control system is operating properly, these speeds are self-compensating and cannot be changed by traditional adjustment techniques.

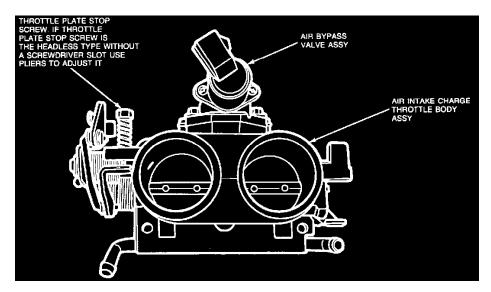
Adjustments are sometimes required to establish the correct operating limits within which the Idle Speed Control (ISC) system can properly function. Misadjustment of the operating limits could restrict the operating range of the ISC system, so adjustments to the system should never be made unless a specific causal factor has been identified.

Vehicle Prechecks

- Verify the following:
 - Cooling system is filled.
 - Throttle plate and throttle bore are clean.
 - Throttle is not sticking or binding.
 - Throttle lever is resting on the throttle stop screw.
 - There are no vacuum leaks.
 - Heater and accessories are off.
 - Engine at operating temperature.
- Place transmission in PARK or NEUTRAL, apply parking brake, and block the wheels.
- Check curb idle rpm, automatic transmission in DRIVE, manual transmission in NEUTRAL. See: Specifications
- If a rough idle speed problem exists perform Electronic Engine Controls (EEC IV) Quick Test. Resolve any deficiencies indicated. See: Computers and Control Systems/Testing and Inspection
- If curb idle speed is not within specification perform the following:
 - Shut off engine.
 - Disconnect negative (-) battery terminal for three minutes minimum then reconnect.
 - Let engine idle for five minutes with automatic transmission in DRIVE.
- Recheck curb idle speed, if still not within specification continue with Adjustment procedure.

Adjustment Procedure

- Place transmission in NEUTRAL or PARK, run engine at 1800 rpm for 30 seconds.
- Let engine idle, place automatic transmission in DRIVE, manual transmission in NEUTRAL.



- Check/adjust idle rpm. Back out the throttle plate stop screw until 610 +/- 40 rpm (automatics) or 710 +/- 40 rpm (manuals) is reached, then back out an additional 1/2 turn.

NOTE: Adjustment must be completed within 40 seconds. After 40 seconds idle speed may change due to strategy parameter.

- Shut engine of and disconnect battery for 3 minutes minimum.
- With engine off, reconnect idle speed control-air bypass solenoid. Verify the throttle is not stuck in the bore and linkage is not preventing the throttle from closing.
- On Automatic Overdrive Transmissions (AOD), check TV pressure adjustment.