TRANSMISSION TV CABLE
ADJUSTMENT AND DIAGNOSIS

WARNING: permanent damage will occur within a few feet of driving if the tv cable is not hooked up or improperly adjusted.

The Throttle Valve (TV) cable is an item that is not present on the current generation of vehicles that use computers, solenoids and sensors to control transmission shift strategies. On older vehicles, the TV cable is an extremely important component of the transmission. It controls line pressure, shift points, shift feel, part throttle downshifts, and full throttle downshifts. If the TV cable is not adjusted properly, it will cause numerous transmission problems.

The TV cable is connected to and operates the throttle lever on the transmission valve body. The throttle lever transfers the movements of the throttle plate to the TV plunger in the transmission valve body. This causes TV pressure and line pressure to increase based on the throttle opening and also controls downshifts. The proper adjustment of the TV cable is vehicle type and vehicle manufacturer specific. Refer to your vehicle manufacturer’s specific instructions for the correct TV cable adjustment procedure.

When the TV cable is properly adjusted, the movement of the TV plunger in the valve body is directly linked to the movement of the fuel delivery system. This means the transmission will always have the correct line pressure and shift feel regardless of engine torque. If a change to the vehicle powertrain is made, such as a different transmission or engine is installed, the change could disrupt this balance between the transmission and fuel system. A TV cable adjustment may be necessary to assure proper function.

Make sure there are no sharp bends or kinks in the cable. Assure that the cable is correct for the vehicle. Check for any binding in the cable housing or at the TV link on the transmission. Check that the cable mount bracket is tight and aligned with the throttle linkage.

Custom tailoring shift points or shift feel by adjusting the TV cable is not recommended. The TV cable controls both shift feel and shift points and they are interlinked, you cannot alter one without altering the other. When the TV cable is not adjusted per the manufacturer’s recommendations:

SHORTENING THE CABLE: If you shorten the cable, this raises both the line pressure and shift point. This in turn gives later, harder shifts. However, when a full throttle downshift is required the TV cable may stretch or possibly break. On some vehicles it may readjust to its correct position.

LENGTHENING THE CABLE: If you lengthen the cable, this lowers both the line pressure and shift points. This type of adjustment allows the engine power to be ahead of transmission line pressure and shift points. Operating the vehicle under this condition will cause premature clutch wear and internal transmission damage.