



Component Failures Disguised as Transmission Problems

The following are common component failures, which we have experienced, with vehicles that were thought to have transmission problems.

1: A damaged catalytic converter can cause excess backpressure in the exhaust. The converter can be damaged by a constant rich fuel mixture, or antifreeze entering the combustion chamber. This will cause the brick or element to melt or break up and eventually plug the converter outlet. As a result the engine cannot expel its exhaust and then restricts the air fuel mixture entering the cylinders causing a lack of power to maintain the desired vehicle speed. The transmission cannot up-shift at the correct times thus causing one to think that the transmission is failing.

2: A dirty air filter can cause the same symptoms as a plugged catalytic converter by restricting the air from entering the cylinders thus reducing the engine power and not allowing the transmission to up-shift.

3: A worn out fuel pump or restricted fuel filter can reduce the amount of fuel needed to maintain the proper vehicle speed for the transmission to up-shift under heavy loads or heavy throttle (acceleration).

4: The Mass Air Flow (MAF) sensor measures the volume of air entering the engine and then the computer calculates the fuel delivery for the engine. If the sensor reading is inaccurate, for the particular throttle opening at the time, the computer may starve the engine of fuel. If this is not enough to maintain the desired speed the transmission will not up-shift. A similar situation can occur with a faulty BARO sensor or MAP sensor.

5: Most late model vehicles utilize a vehicle speed sensor (VSS) signal for the transmission shift sequence. This signal can be generated off the differential on a RWD or the transmission on a FWD vehicle. An open wire in this circuit will cause a no shift condition. As well as a VSS the Ford F and E series trucks have a PSOM module in the instrument cluster (speedometer) that can fail and send wrong signals to the transmission causing shifting errors.

6: Seized or worn universal joints or constant velocity (CV) joints can cause a vibration mimicking a transmission clutch shudder condition. A stripped centre in a CV shaft joint will cause a no drive condition for the vehicle, as well it will not hold in park position.

7: A noisy wheel bearing can transfer up through the drive axle imitating a transmission failure noise.

8: Every vehicle has a throttle position sensor (TPS), which sends a signal relating to the gas pedal position to the engine computer. A faulty reading can cause erratic shifting and in some cases it will disable overdrive and the torque converter lockup clutch operation in the transmission. A symptom will be the engine operating at higher RPMs with delayed shifts.

9: In colder weather a faulty engine thermostat may cause the engine controller to disable overdrive and torque converter clutch operation as the engine must be up to a required operating temperature before the computer will allow the transmission to shift into overdrive.

10: If the thermostatic radiator fan clutch, found on some RWD vehicles, will not free wheel or becomes seized, the roaring sound from the fan blades moving the air can make one think the engine is revving too high sounding like a slipping transmission. In fact the transmission is operating normally but the fan clutch needs replaced.

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