



Transmission Diagnostic

Preliminary

The following items should be checked at the beginning the diagnostic procedures:

Communication

First understand the customer concern of about their transmission.

Basic question to ask your customer: Does this problem occur during...?

Does this problem occur during Hot or cold vehicle temperature.

Does this problem occur during Hot or cold ambient temperature.

Does this problem occur during Adverse weather conditions snow,rain etc.

Does this problem occur during Vehicle loaded/unloaded.

Does this problem occur during City/highway driving.

Does this problem occur during on rough or harsh terrain.

After understanding when and how the concern occurs, proceed to Verify the problem.

NOTE: Some transmission conditions can cause engine concerns. An electronic pressure control short circuit can cause engine misfiring. The torque converter clutch not disengaging will stall the engine.

The following procedures on the next pages will be covered more in depth in order to help determine the problem(s) with your customers transmission.

Up-shift
Downshift
Coasting
Engagement

Noise/vibration:
RPM
vehicle speed
shift
gear
range
temperature dependent

If we can Assist you in anyway please fell free to contact us.

www.dynotecindustries.com

875 Corporate Drive - Jordan, MN 55352 952-641-9005



Check Fluid Level and Condition

CAUTION: The vehicle should not be driven if the fluid level indicator shows the fluid below the DO NOT DRIVE mark or internal failure could result. Under normal circumstances, the fluid level should be checked during normal maintenance. If the transmission starts to slip, shifts slowly, or has signs of fluid leaking, the fluid level should be checked.

1. Place the range selector lever in the PARK position.
2. Wipe the fluid level indicator cap and remove the indicator.
3. Wipe the indicator with a clean cloth.
4. Install the indicator back in the filler tube until it is fully seated, then remove the indicator. The fluid level should be within the normal operating temperature range.

High Fluid Level

A fluid level that is too high may cause the fluid to become aerated, causing erratic control pressure, foaming, loss of fluid from the vent tube and possible transmission malfunction and/or damage.

Low Fluid Level

A low fluid level could result in poor transmission engagement, slipping, malfunction and/or damage. This could also indicate a leak in one of the transmission seals or gaskets.

Diagnostic Strategy

Troubleshooting an electronically controlled automatic transmission is simplified by using the proven method of diagnosis. One of the most important things to remember is that there is a definite procedure to follow.

NOTE: Do not take any short cuts or assume that critical checks or adjustments have already been made.

To properly diagnose a concern, have the following information available:

1. Clutch and Band and/or Clutch Application Chart
2. Code Definitions
3. Pressure Locations and Specifications
4. Solenoid Firing Order

Diagnostics

Carry out on-board diagnostic procedures key on engine off (KOEO) and key on engine running (KOER).

1. Record all diagnostic trouble codes (DTCs).
2. Repair all non-transmission codes first.
3. Repair all transmission codes second.
4. Erase all continuous codes and attempt to repeat them.
5. Repair all continuous codes.

Automatic Transmission Diagnostic Worksheet

Initial Diagnostic Information

Technicians Name _____ Shop Name _____

Vehicle Make and Model _____

Vehicle Year, Engine Size and Transmission Type _____

Customers Concern _____

What modifications, if any, are done to the vehicle? _____

On Board Diagnostic Codes _____

Transmission Fluid _____

Electrical concerns? (i.e Battery, extra cables for auxiliary components) _____

Battery Voltage _____

Engine Concerns _____

Unusual Vibrations/Noises/Concerns _____

Test Drive Diagnostics

Selector Position: P___ R___ N___ OD___ D___ 3___ 2___ 1___

(Depending on the vehicle the selector may be different)

What is the verified concern? _____

When did the problem occur? _____

What Gear does the concern happen? _____

Vehicle's temperature ? _____

Outside temp was? _____

Driving conditions:

Accelerating _____ Decelerating _____ Braking _____

Road Surface: _____ Up Hill _____ Dow Hill _____

Pressure Test: P _____ R _____ OD _____

Stall Test: R _____ OD _____ D _____



Shop Diagnostics

Linkages/Cables_____ Exhaust System_____ Oil Leaks_____ Yoke_____

Cooler Lines_____ Mounts_____ Drive-line_____ U-Joints_____

Carrier Bearing_____ Electrical Connections_____

Over all Vehicle Performance_____

Transmission Case_____ CV Boots_____

Results of the Diagnostic Routine

What did your tests results Indicate?_____

Disassembled Tansmission Findings

What components were damaged in the Transmission?_____

Road Test After the Repair

Engagement Test_____ Driving/Oper ating System_____

Speedometer_____ Cruise Control_____

Kick Down_____ Manual Linkage_____

Tail/Head Lights_____ Engine RPM_____

U-Joints_____ Clean Vehicle_____

Is the Vehicle ready for delivery?

Technicians Signature_____

Managers Signature_____

NOTES:_____
