

TS 1033699: DT12 Transmission Driver Interview: Shifting Complaint Questionnaire

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Applicable Vehicles:

Vehicles equipped with Detroit DT12 Transmissions with shifting complaints

Purpose of Solution:

Driver interviews are a key component when troubleshooting a vehicle. This questionnaire is to help supplement and guide this step in the diagnostic process.

Solution:

The questionnaire attached below in word format has some potential questions, and reasons for asking, to help get the diagnostic process started. This shouldn't be considered a comprehensive guide, so please share below what additional questions you might add and why. Thank you [Talbert Simonian](#) and his team for providing this information.

Detroit DT12 Transmission: Shifting Complaint Questionnaire

1) Is this an intermittent problem? **YES NO**

a. If yes, when do you see it occur:

i. What weather conditions?

ii. What type of terrain? (bumpy, rocky, level etc..)

iii. Any other notable driving conditions?

2) Is the ABS warning light on? **YES NO**

Reason: Would default the transmission to manual mode, or no start

3) Is there a check engine or malfunction indicator light on? **YES NO**

Reason: Indicates more than one issue than just the transmission

4) Are the cruise control and Jake brake functions working normally? **YES NO**

Reason: Indicates the issue is not related to the shift stalk controller

5) When does the complaint occur?

a) When first started and cold

b) When operating several hours and at operating temperature

c) When coming to a stop

What would you do/learn depending on each option?

Depending on the issue the operational temp can make a difference, and if performing a countershaft brake test – trans must be up to temp.

6) When the complaint occurs, does the transmission seem to get stuck in odd or even gears?

Odd Even Both Neither

What does this indicate to you? May indicate a split pin, or range selector

7) Does the complaint occur when shifting from *Low* to *High* (5th to 6th) range only?
YES NO

8) Does the complaint occur when? **Loaded Empty Both**

- 9) Does the transmission search for gears? **YES NO**
- 10) Does the transmission shift into 11th and 12th gears? **YES NO**
 Why just 11th and 12th? May specifically indicate clutch slip
- 11) If it does not shift, is it when pulling? **On Hill On Flat Ground**
- 12) Does the transmission ever grind when shifting? **YES NO**
- 13) Can you smell burnt clutch? **YES NO**
- 14) Do you have and problems building air? **YES NO**
- a. Are there any air leaks? **YES NO**
 - b. Air compressor been replaced within the last 90 days? **YES NO**
 - c. Is this a dedicated trailer or drop & hook? **Dedicated Drop & Hook**
- 15) Has the transmission even been serviced? **YES NO**
- a. What mileage? _____
- 16) Was the vehicle towed within the last 6 months? **YES NO**
- a. If so, from the front or the rear? **Front Rear**
 - b. Was the driveline removed? **YES NO**
- 17) Does the Hill Start Aid light ever come on? **YES NO**
 Reason: May assist with what the customer is trying to explain, drivers may not be familiar with vehicle operation and may indicate an issue.
- 18) Have there been any recent transmission repairs? **YES NO**
- a. What repairs were performed?

 - b. Where were they performed?
