

1 06 14-18



Service Information Bulletin

SUBJECT	DATE
DT12 Symptom Diagnostics - Transmission Failed Learn Procedure	June 2018

Additions, Revisions, or Updates

Publication Number / Title	Platform	Section Title	Change
DDC-SVC-MAN-0140	DT12	Transmission Learn Procedure Fails	Replace current content with new information.



13400 Outer Drive, West, Detroit, Michigan 48239-4001
 Telephone: 313-592-5000
www.demanddetroit.com

2 Transmission Learn Procedure Fails

Units may fail transmission learn procedures for various reasons.

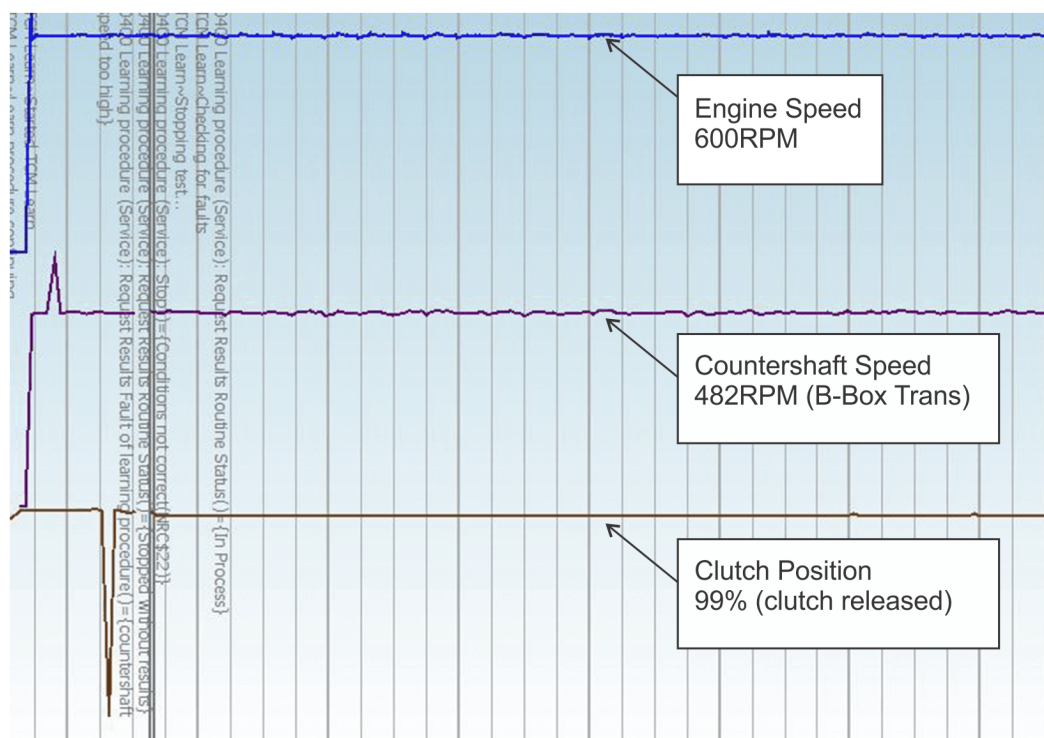
1. **There is a missed Engine Start Request.**



d500321

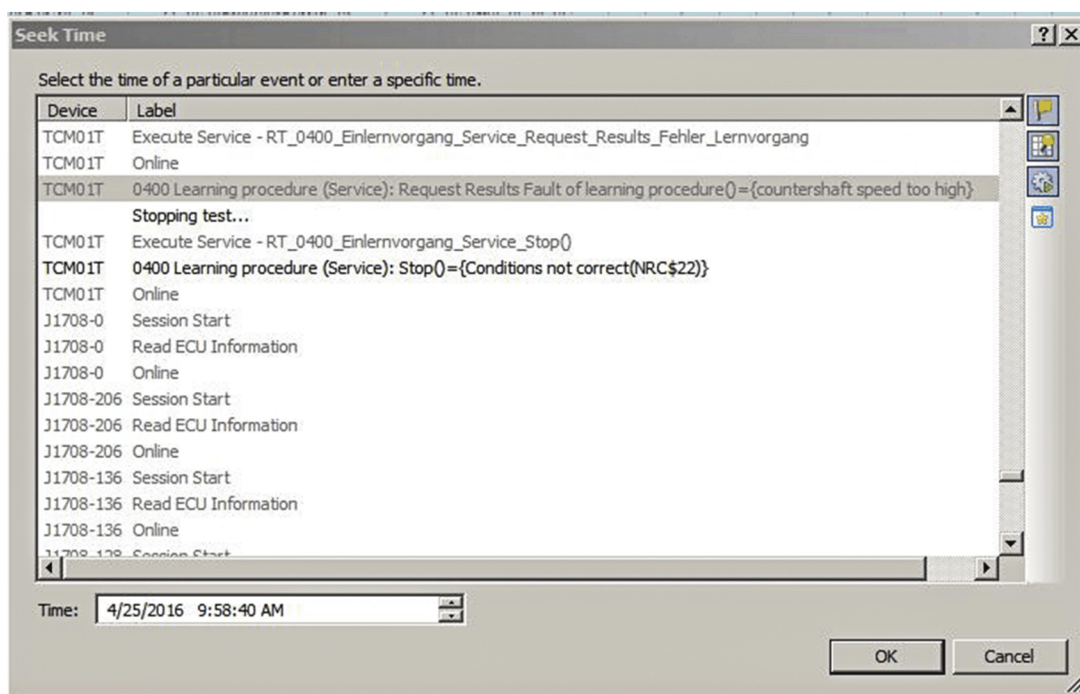
The engine start request lasts ten seconds. The engine was started after the engine start request went inactive. In this case, just attempt another learn procedure and follow the prompt to start the engine from the display in the dash, not from DiagnosticLink[®].

2. **Countershaft speed is too high.**



d500322

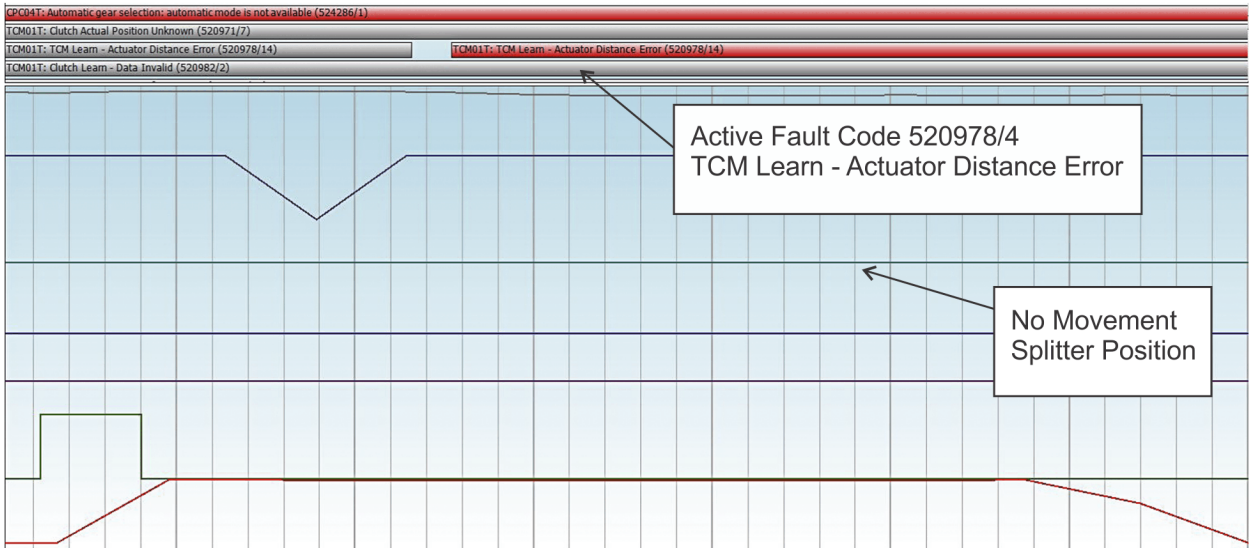
The label above reads "Request Results Fault of learning procedure () = {countershaft speed too high}". The pop-up below shows the label more clearly.



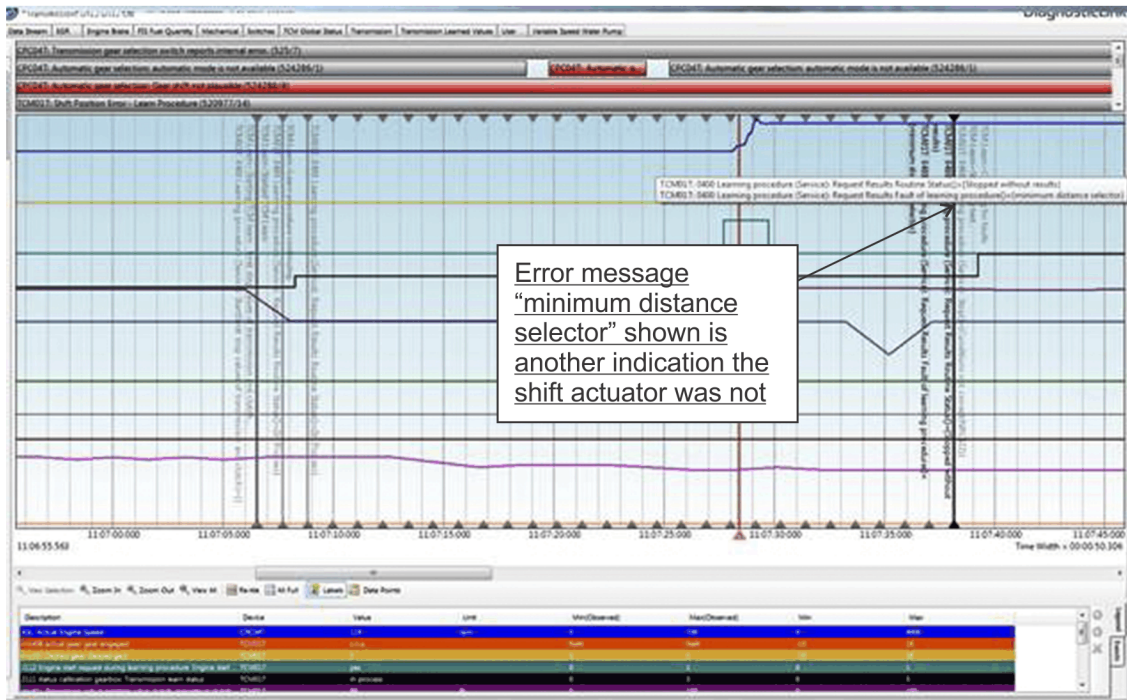
d500323

This indicates a possible issue with the clutch. Please refer to Clutch Inspection Symptom Diagnostics.

3. Shift Controller is installed incorrectly.

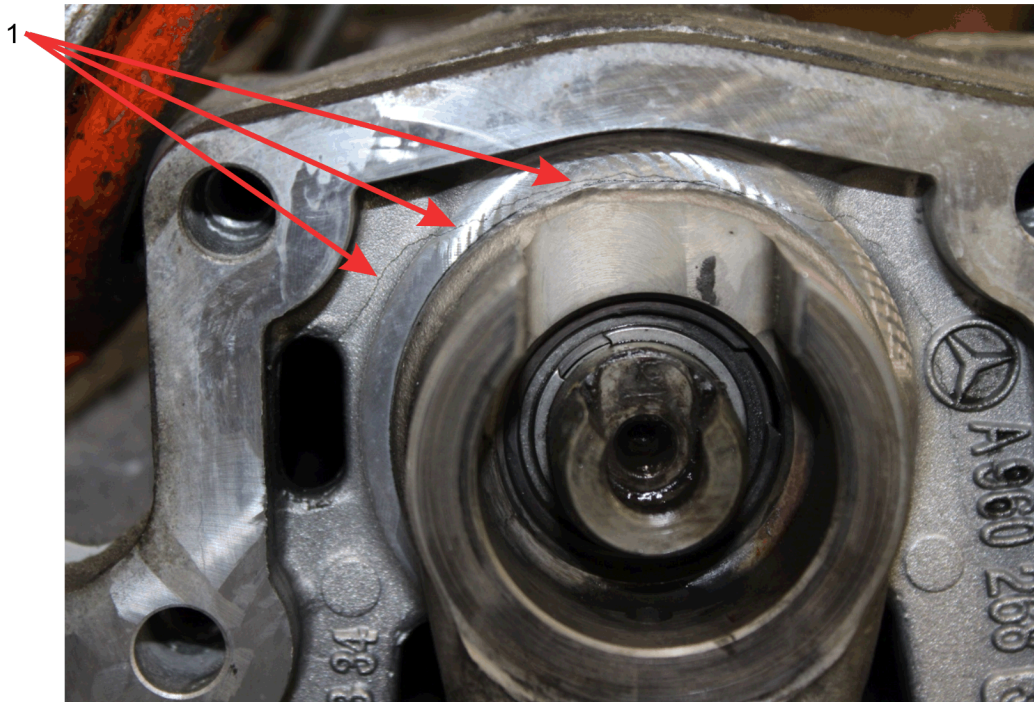


d500324

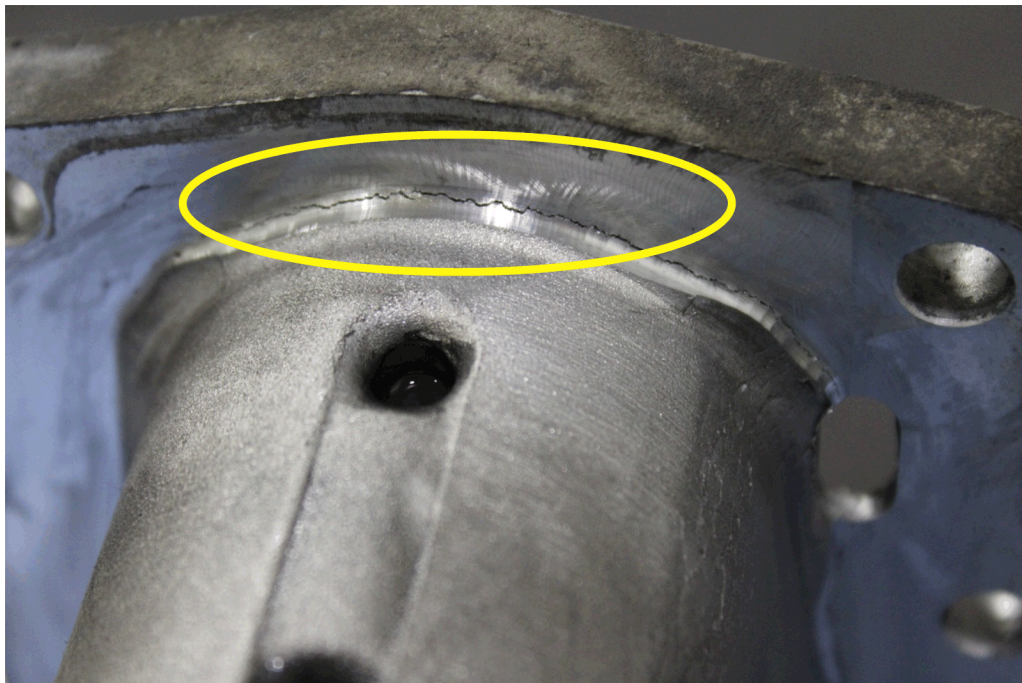


d500325

This condition will occur when the shift controller is removed for replacement or when completing the split pin bushing repair. When the shift controller is not hung correctly on the shift actuator or BOTH gaskets are not installed on the shift controller, the shift actuator will become damaged. See images below. The transmission will need to be removed again; Refer to section "Installation of the Shift Controller" in the Detroit Transmissions Manual.



d260176



d260177

4. The transmission type set is incorrect.

If the incorrect transmission type set (when setting an overdrive transmission as a direct drive or vice versa) during programming after replacing a TCM, shift controller with TCM or transmission, the following faults could become active after attempting a learn procedure:

- 191/13 Transmission Output Shaft Speed Signal is missing or not available.
- 520995/14 TCM Transmission Type Error.
- Learn procedure will fail due to Vehicle Speed Too High.

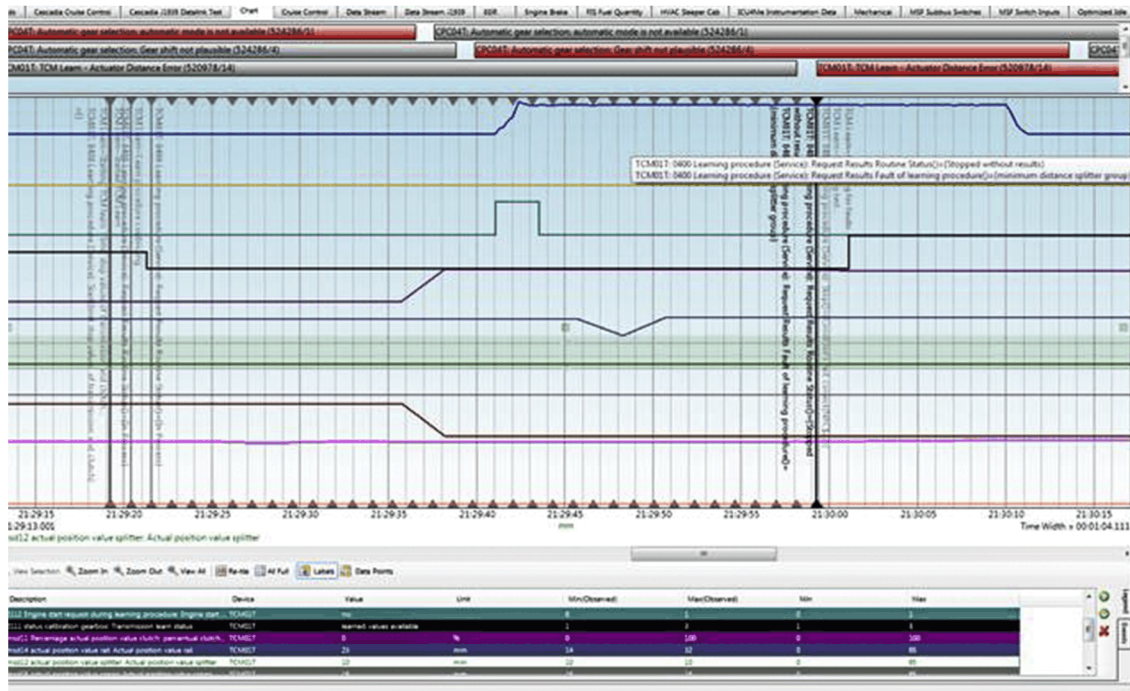
To correct the above, go to DL8 Actions -> Transmission -> TCM Replacement and set the correct transmission type.

Table 1.

Transmission for setting the correct model type when reprogramming				
Trans S/N First 6 - Germany	Trans S/N First 6 - Detroit	Torque Rating	Trans Type - US	Trans Type - Germany
715354	716300	1450	DT12-DB	G211
715364	716310	1650	DT12-OB	G230
715374	716320	1750	DT12-DA	G281
715384	716330	2050	DT12-OA	G330

D=DIRECT DRIVE
 O=OVER DRIVE
 A=LARGE BODY TRANSMISSION
 B=SMALL BODY TRANSMISSION
 715=Germany built transmission
 716=Detroit built transmission

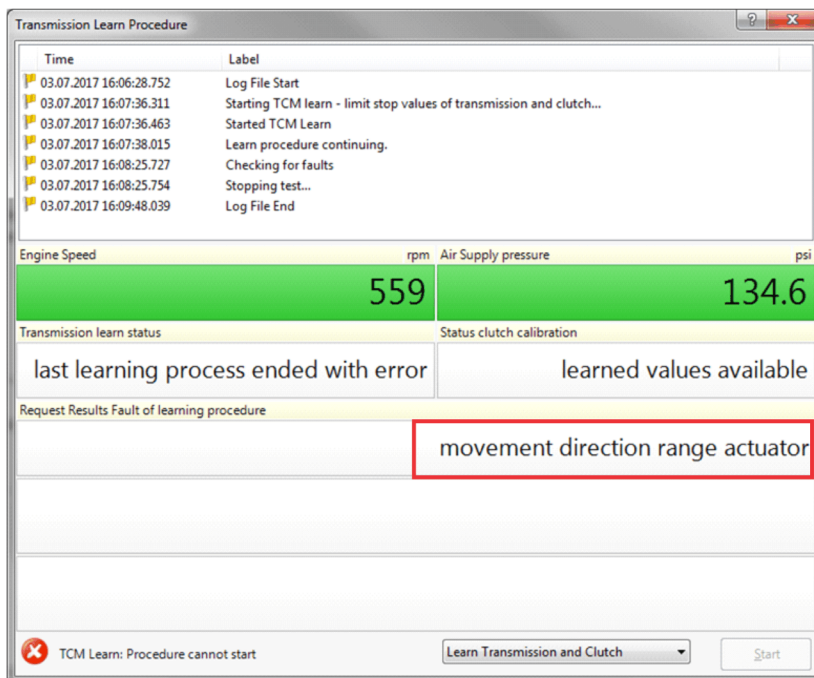
5. Broken split pin sensor



d500326

Failure error: "minimum distance splitter group".
 MSD12: Split will stay at 10mm the entire log file.

6. AMT shift controller air lines reversed



d500336

The message above; "movement direction range actuator"; indicates that either the air line connections at the AMT shift controller or on the range housing are reversed. Lines are numbered which indicates the port they should connect to.