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Service Information Bulletin

SUBJECT	DATE
Symptom Diagnostics - Will Not Go Into Gear after Cold Soak	January 2019

Additions, Revisions, or Updates

Publication Number / Title	Platform	Section Title	Change
DDC-SVC-MAN-0140	DT12	Will Not Go Into Gear after Cold Soak	New step added.

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2 Will Not Go Into Gear after Cold Soak

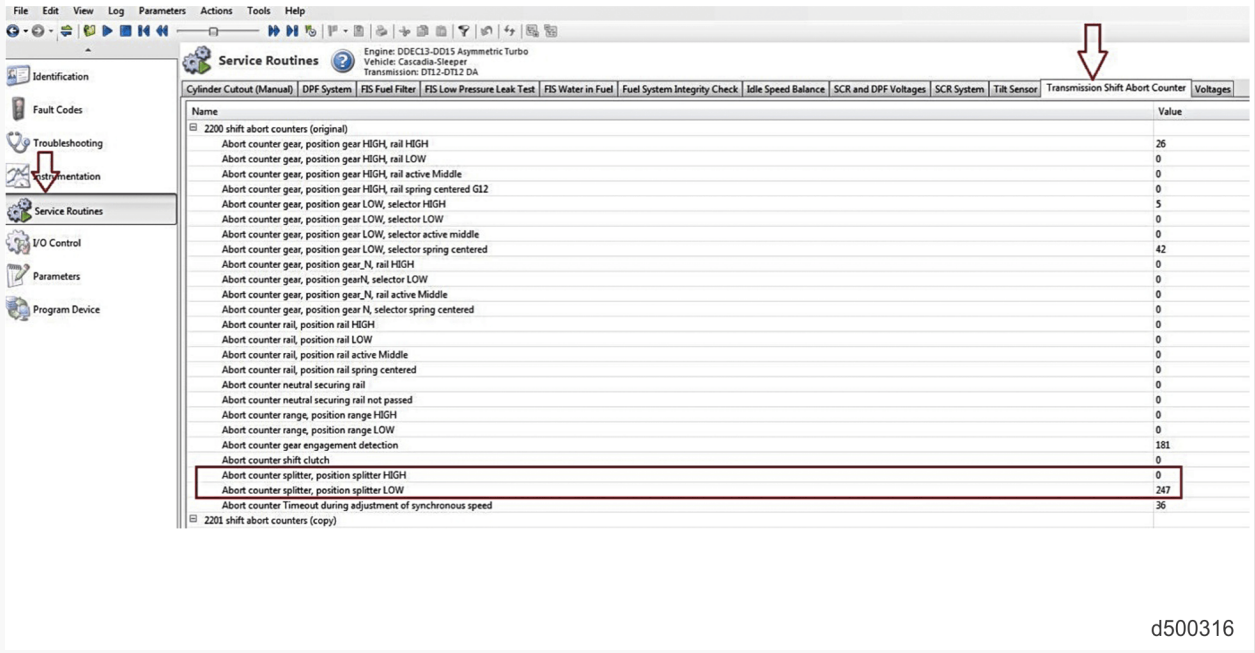
NOTE: This condition is usually only seen on "A" model transmissions (DT12DA or DT12OA).

Check as follows:

1. Is TCM fault code SPN 520960/FMI 7 or 521049/FMI 7 (active or inactive) also present?
   a. Yes; complete troubleshooting for the appropriate code.
   a. No; Go to step 2.
2. Attempt to duplicate complaint while creating a log file. Was complaint duplicated?
   a. Yes; Go to step 3.
   b. No; perform gear/split/range test and Go to step 3.
3. Review log file for high Split shift aborts and gear engagement. (See examples below).

Table 1.

Example 1 - Shift Abort Counts



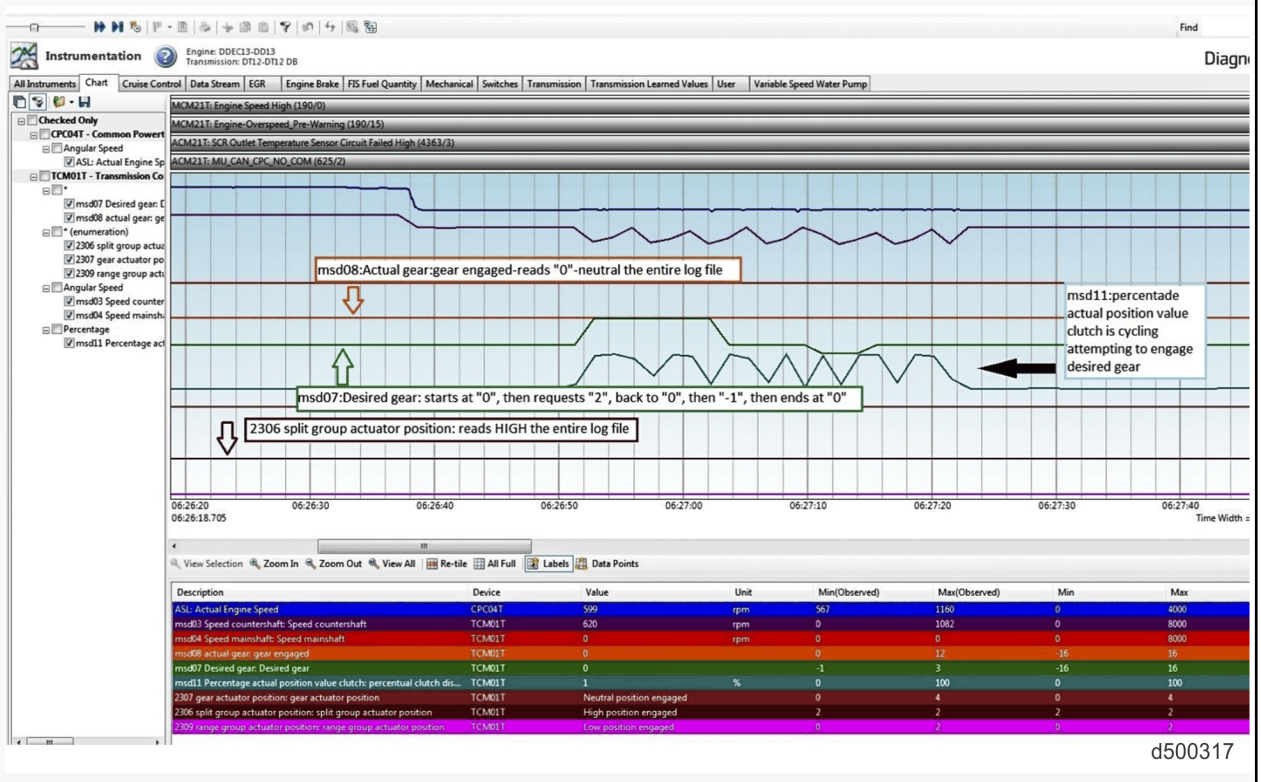
Shows: "Abort counter splitter, **Position splitter LOW"** is a high count (over 100 is considered high) The abort number is high, which indicates that the split pin is sticking

NOTE: The abort counts will change from "Position splitter LOW" or "Position splitter HIGH" pending the transmission model (Overdrive or Direct Drive).

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Table 2.

Example 2 - Gear/Split/Range Test Results - Gear Engagement



Shows: msd07: Desired gear: starts at "0", then requests "2", back to "0", then "-1", ending at "0".
Instrument: msd08: Actual gear: stays in neutral the entire log file.
Instrument: msd11: Percentage actual position value clutch: cycles from a high % to a low %, attempting to get the actual gear to engage to the desired gear.
Instrument: 2306: Split group actuator position: reads **HIGH** the entire log file, which indicates that the split pin is not moving.

4. Does the log indicate either of the above examples?
   a. Yes; due to the high number of shift aborts, unit needs the split pin bushing repair.
      Refer to section "Split Rod Bushing Repair".
      Refer to document 18TS2 (https://ddcsn-ddc.freightliner.com/cps/rde/xbcr/ddcsn/18TS2.pdf)
      Refer to video on ddcsn.com, Support, Multimedia, DT12 Transmission Split-Pin Bushing Repair. After the repair, reset the Shift Abort Counters. DT12 Transmission Split-Pin Bushing Repair (https://ddcsn-ddc.freightliner.com/media/NewSplitPinBushingRepair.mp4)
   b. No; review original complaint with the customer for more information.

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