## Service Information Bulletin

### SUBJECT
SPN 520970 FMI 7 (TCM)

### DATE
August 2015

### Additions, Revisions, or Updates

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### 2 SPN 520970/FMI 7

Clutch - Unable to Open Fully

Check as follows:

1. Connect DiagnosticLink® 8.01 or higher; SPN 520999/FMI 7 (AMT Clutch Control - Mechanical Error) may also be present when this fault occurs.

#### WARNING: PERSONAL INJURY

To avoid injury before starting and running the engine, ensure the vehicle is parked on a level surface, parking brake is set, and the wheels are blocked.

#### WARNING: ENGINE EXHAUST

To avoid injury from inhaling engine exhaust, always operate the engine in a well-ventilated area. Engine exhaust is toxic.

2. Start the engine and idle for two minutes.

3. Is the transmission air supply pressure greater than 689 kPa (100 psi)?
   a. Yes; Go to step 6.
   b. No; Go to step 4.

4. Shut the engine OFF.

5. Inspect transmission air supply lines and fittings for leaks; repair as necessary. Repeat all steps in this procedure.

6. Under the Actions menu, select transmission heading and then choose Clutch Apply Leak Test; execute routine. Does the result indicate a successful completion, test pass? Note that test may have to be performed three times in order to get a "pass" result.
   a. Yes; if fault is inactive, release vehicle. If fault is active, Go to step 7.
   b. No; Go to step 7.

7. Under Instrumentation tab, select Transmission Learned Values. Is Instrument Learn Value Clutch Minimum greater than 33 mm or Clutch Maximum greater than 51 mm?
a. Yes; Go to step 8.
b. No; obtain a driving log file and contact the Detroit™ Customer Support Center at 855-253-0428 for further assistance.

8. Remove transmission. Refer to section "Removal of the Transmission".
9. Keep the pressure plate and clutch disk installed on the engine.
   a. Lay a straightedge (1) on the raised portions on the pressure plate (2).
b. Use a ruler to measure the distance (A) from the straightedge to the contact apex of each release finger.

10. Is the measurement greater than one inch or pressure plate fingers warped?
   a. Yes; replace pressure plate, pressure plate mounting bolts and clutch disc. Refer to section "Removal of the Clutch".
   b. No; replace the Concentric Pneumatic Clutch Actuator (CPCA). Refer to section "Removal of the Clutch Actuator Assembly".