


2012 Dodge or Ram Truck Journey AWD V6-3.6L

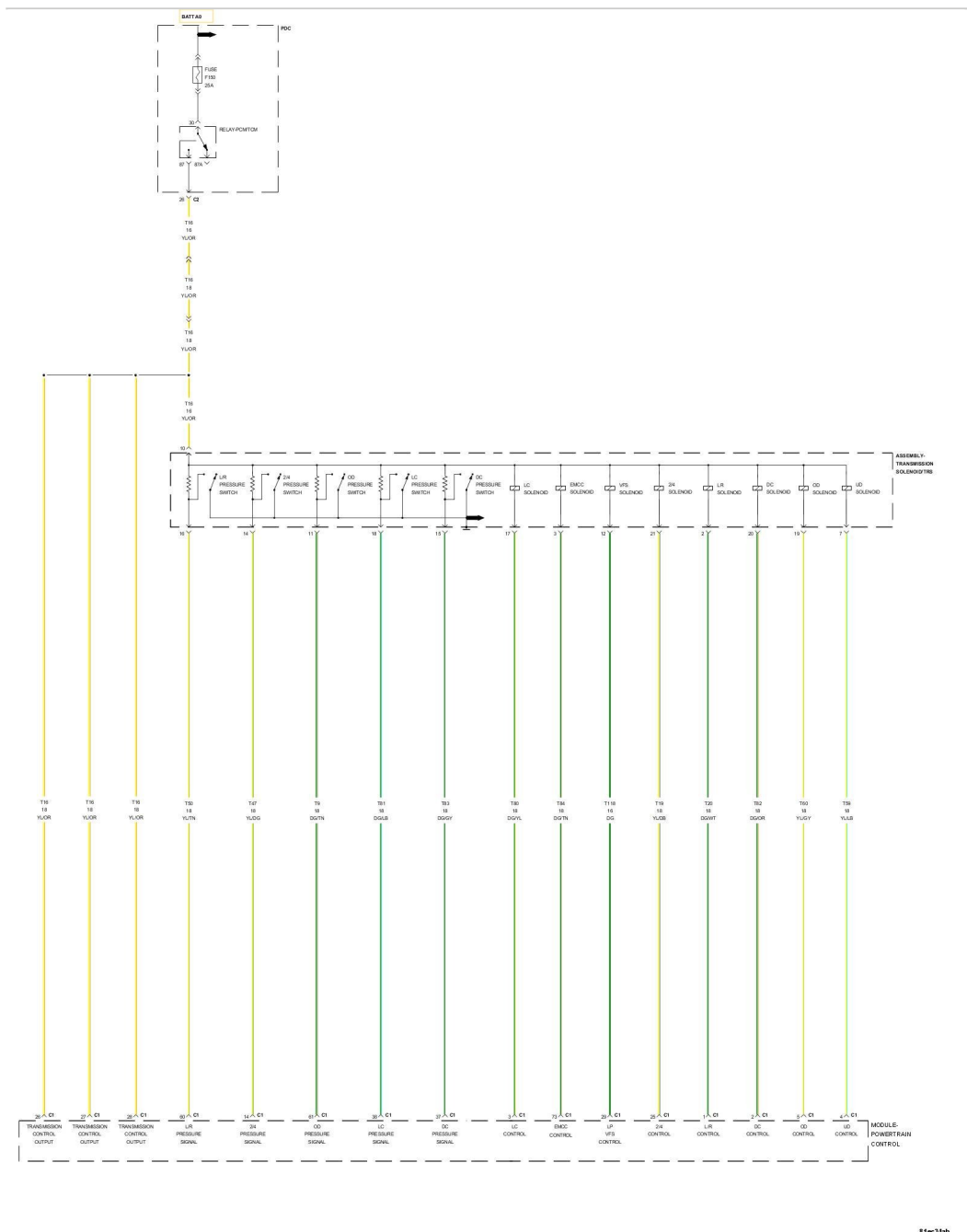
Vehicle > ALL Diagnostic Trouble Codes (DTC) > Testing and Inspection > P Code Charts > P083B

POWERTRAIN CONTROL MODULE (PCM) - 62TE

P083B-LC PRESSURE SWITCH RATIONALITY

Special Tools:

Essential Tools	
	8333A - Simulator, Transmission



81ec3ab

For a complete wiring diagram, refer to the **Wiring Information**.

Theory of Operation

The Transmission system uses three pressure switches to monitor the fluid pressure in the L/R, LC, and OD elements. The pressure switches are continuously monitored for the correct states in each gear. The LC pressure switch monitors the fluid pressure to the LC clutch to confirm proper operation of the LC solenoid. If the LC pressure switch is identified as closed in P or N, the code will immediately be set and normal operation will be allowed for the given key start. If the problem is identified for three successive ignition cycles, the transmission will go into Limp-in mode.

- When Monitored:

Whenever the engine is running.

- Set Condition:

The DTC is set if one of the pressure switches are open or closed at the wrong time in a given gear. If the problem is identified for three successive key starts, the transmission will go into Limp-in mode and the MIL will turn on after 10 seconds of vehicle operation.

Possible Causes

RELATED TCM POWER INPUT DTCS PRESENT
LOSS OF PRIME DTC PRESENT
(T81) LC PRESSURE SIGNAL CIRCUIT OPEN
(T81) LC PRESSURE SIGNAL CIRCUIT SHORTED TO GROUND
(T81) LC PRESSURE SIGNAL CIRCUIT SHORTED TO VOLTAGE
TRANSMISSION SOLENOID/TRS ASSEMBLY
POWERTRAIN CONTROL MODULE (PCM)

Always perform the 62TE Pre-Diagnostic Troubleshooting procedure before proceeding. See: Computers and Control Systems > Initial Inspection and Diagnostic Overview > Pre-Diagnostic Troubleshooting Procedure.

PRESSURE SWITCH STATES

GEAR	L/R	2/4	OD	LC	DC
R	OPEN	OPEN	OPEN	OPEN	OPEN
P/N	CLOSED	OPEN	OPEN	OPEN	OPEN
1st	CLOSED	OPEN	OPEN	OPEN	OPEN
2nd	CLOSED	OPEN	OPEN	OPEN	CLOSED
3rd	OPEN	CLOSED	OPEN	CLOSED	OPEN
4th Prime	OPEN	CLOSED	OPEN	OPEN	CLOSED
4th	OPEN	OPEN	CLOSED	CLOSED	OPEN
D	OPEN	OPEN	CLOSED	OPEN	CLOSED
OD	OPEN	CLOSED	CLOSED	OPEN	CLOSED

1. CHECK IF RELATED TCM DTCS ARE PRESENT

1. With the scan tool, read DTCs

Are there any TCM Power Input DTCs present also?

Yes

- See: A L L Diagnostic Trouble Codes (DTC) > Testing and Inspection Perform the appropriate transmission diagnostic procedure.

No

- Go To 2

2. CHECK FOR LOSS OF PRIME DTC

1. With the scan tool, check for other DTCs.

Is the DTC P0944 present also?

Yes

- See: A L L Diagnostic Trouble Codes (DTC) > Testing and Inspection Perform the appropriate transmission diagnostic procedure.

No

- Go To 3

3. CHECK TO SEE IF P083B IS CURRENT

1. With the scan tool, view DTCs.

Is the status Active or is the Starts Since Set counter 2 or less for this DTC?

Yes

- Go To 4

No

- Go To 8

4. PCM AND WIRING

1. Turn the ignition off to the lock position.
2. Remove the Starter Relay.

CAUTION: Removal of the Starter Relay will prevent the vehicle from being started in gear.

WARNING: The Starter Relay must be removed from the PDC. Failure to do so may result in possible serious or fatal injury.

NOTE: Failure to remove the Starter Relay can cause a Transmission - No Response condition.

3. Install the Transmission Simulator and the Electronic Transmission Adapter kit.
4. Ignition on, engine not running.
5. With the Transmission Simulator, turn the Pressure Switch selector to LC.
6. With the scan tool, monitor the LC Pressure Switch state while pressing the Pressure Switch Test button on the Transmission Simulator.

Did the LC Pressure Switch state change?

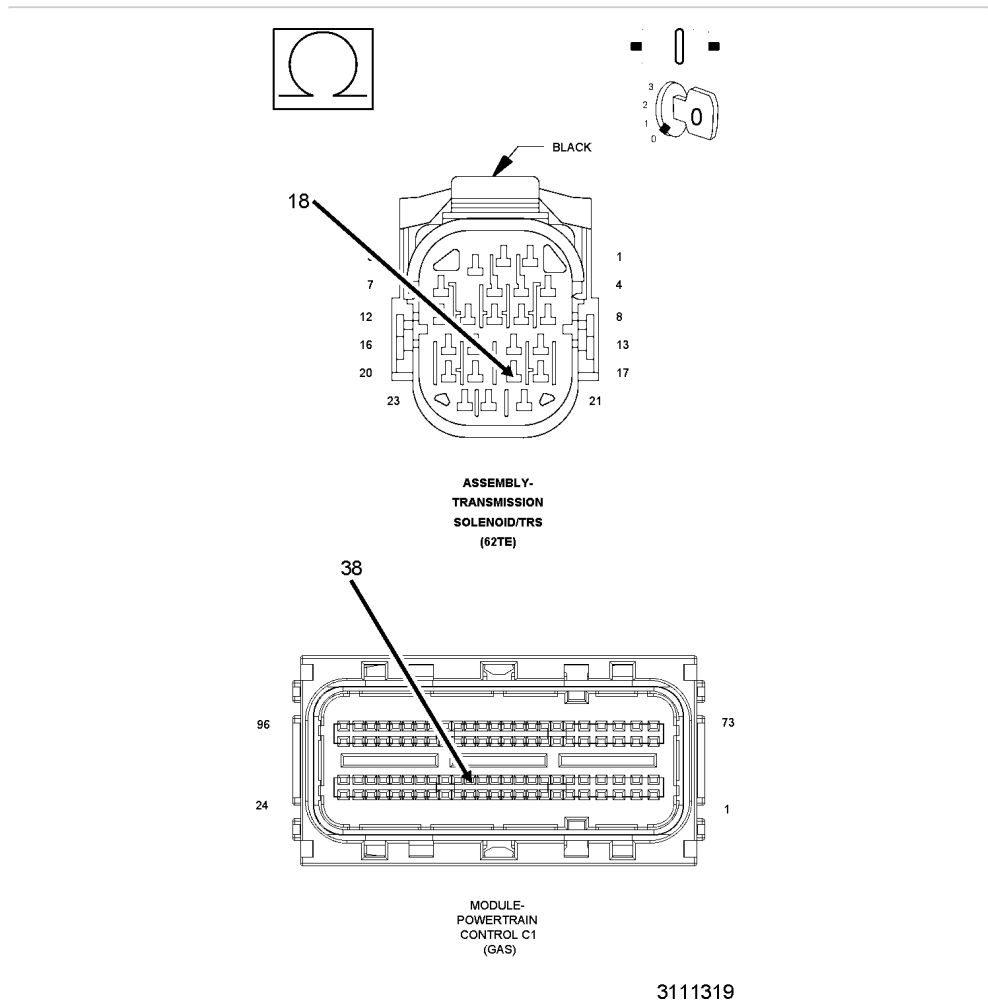
Yes

- Replace the Transmission Solenoid/TRS Assembly. See: Fluid Pressure Sensor/Switch, A/T > Removal and Replacement > Transmission Solenoid And Pressure Switch Assembly - Removal.
- Perform the 62TE TRANSMISSION VERIFICATION TEST. See: A L L Diagnostic Trouble Codes (DTC) > Verification Tests > 62TE Transmission Verification Test.

No

- Go To 5

5. (T81) LC PRESSURE SIGNAL CIRCUIT OPEN



1. Turn the ignition off to the lock position.
2. Disconnect the PCM C1 harness connector.
3. Disconnect the Transmission Solenoid/TRS Assembly harness connector.
4. Measure the resistance of the (T81) LC Pressure Signal circuit between the appropriate terminal of the PCM C1 harness connector and the Transmission Solenoid/TRS Assembly harness connector.

Is the resistance above 5.0 Ohms?

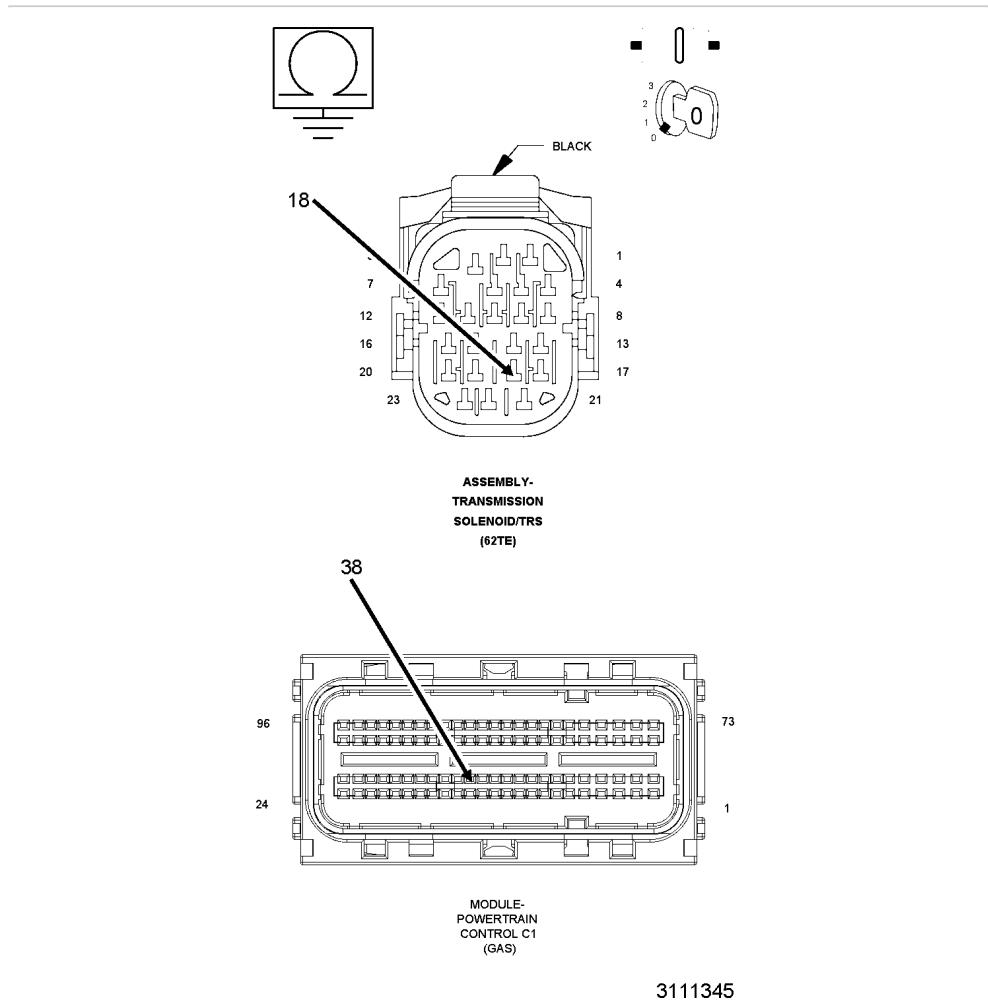
Yes

- Repair the (T81) LC Pressure Signal circuit for an open.
- Perform the 62TE TRANSMISSION VERIFICATION TEST. See: A L L Diagnostic Trouble Codes (DTC) > Verification Tests > 62TE Transmission Verification Test.

No

- Go To 6

6. (T81) LC PRESSURE SIGNAL CIRCUIT SHORTED TO GROUND



1. Measure the resistance between ground and the (T81) LC Pressure Signal circuit.

Is the resistance below 5.0 Ohms?

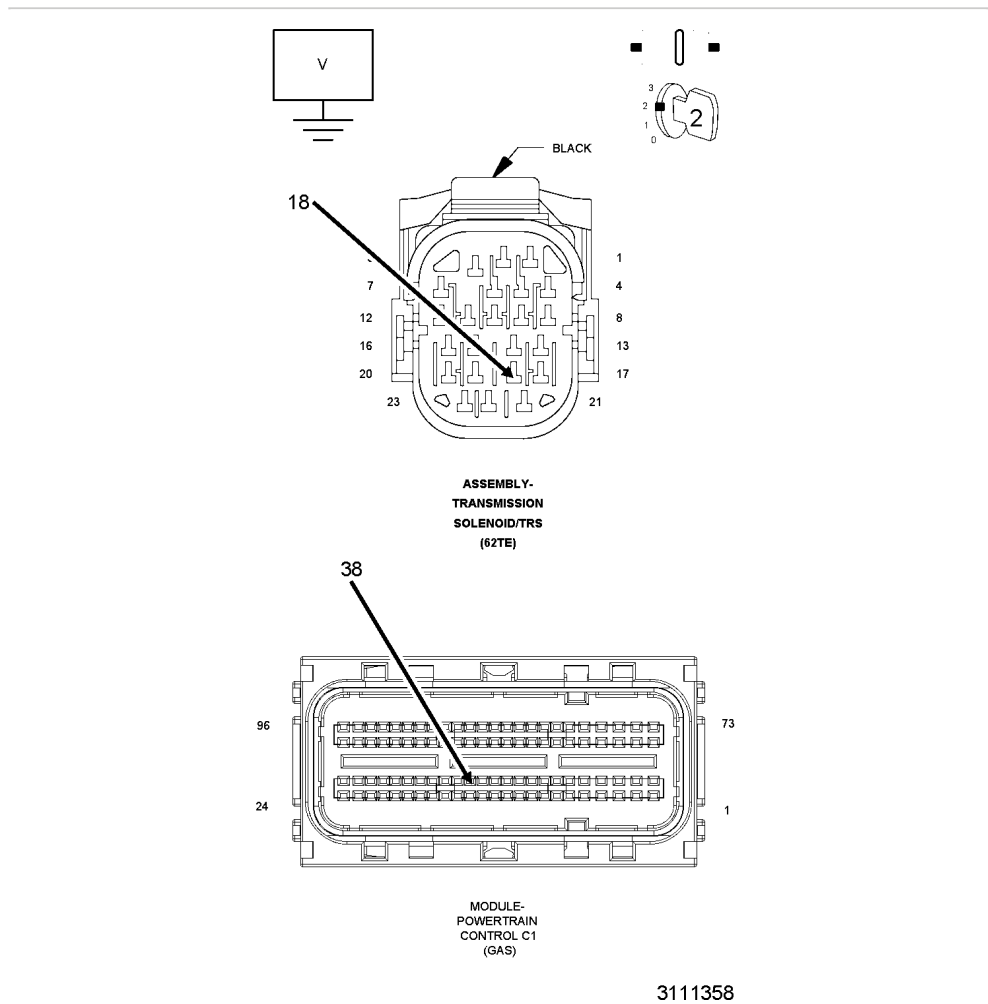
Yes

- Repair the (T81) LC Pressure Signal circuit for a short to ground.
- Perform the 62TE TRANSMISSION VERIFICATION TEST. See: A L L Diagnostic Trouble Codes (DTC) > Verification Tests > 62TE Transmission Verification Test.

No

- Go To 7

7. (T81) LC PRESSURE SWITCH SENSE CIRCUIT SHORTED TO VOLTAGE



1. Remove the PCM/TCM relay and with a fused jumper wire, jumper the Transmission Control Output to B(+).
2. Ignition on, engine not running.
3. Measure the voltage of the (T81) LC Pressure Signal circuit.

Is the voltage above 0.5 of a volt?

Yes

- Repair the (T81) LC Pressure Signal circuit for a short to voltage.
- Perform the 62TE TRANSMISSION VERIFICATION TEST. See: A L L Diagnostic Trouble Codes (DTC) > Verification Tests > 62TE Transmission Verification Test.

No

- Replace and program the Powertrain Control Module (PCM). . See: Engine Control Module > Removal and

Replacement With the scan tool perform the Quick Learn.

- Perform the 62TE TRANSMISSION VERIFICATION TEST. See: A L L Diagnostic Trouble Codes (DTC) > Verification Tests > 62TE Transmission Verification Test.

8. CHECK THE WIRING AND CONNECTORS

1. The conditions necessary to set the DTC are not present at this time.
2. Using the schematics as a guide, inspect the wiring and connectors specific to this circuit.
3. Wiggle the wires while checking for shorted and open circuits.
4. With the scan tool, check the Event Data to help identify the conditions in which the DTC was set.

Were there any problems found?

Yes

- Repair as necessary.
- Perform the 62TE TRANSMISSION VERIFICATION TEST. See: A L L Diagnostic Trouble Codes (DTC) > Verification Tests > 62TE Transmission Verification Test.

No

- Test Complete.