# DTC P177A: Line Pressure Solenoid Valve A Or Line Pressure Switch Stuck OFF (2013-15)

NOTE: Before you troubleshoot, record all freeze data and any on-board snapshot with the HDS, and review the General Troubleshooting Information -Refer to: How to Troubleshoot the Fuel and Emissions Systems (2013-15), or How to Troubleshoot the A/T System (2013-15).

| DTC Description  | Confirmed<br>DTC | Pending<br>DTC | Freeze<br>Frame |
|--|------------------|----------------|-----------------|
| P177A Line Pressure Solenoid<br>Valve A Or Line Pressure<br>Switch Stuck OFF |                  |                |                 |
| DTC (A/T)  | ,                |                |                 |

- 1. ATF check:
  - 1. Warm up the engine to normal operating temperature (the radiator fan comes on).
  - 2. Make sure that the transmission is filled to the proper level, and check for fluid leaks.- 3. Drain the ATF through a strainer. Inspect the strainer for metal debris or excessive clutch material.

Does the strainer have metal debris or excessive clutch material?

### YES

Replace the transmission .

### NO

Replace the ATF , then go to step 2.

### 2. Problem verification:

- 1. Raise the vehicle on a lift. Make sure it is securely supported, and allow all four wheels to rotatefreely.
- 2. Press the engine start/stop button to select the ON mode.
- 3. Clear the DTC with the HDS.

Clear DTC

- 4. Start the engine.
- 5. Monitoring the APP Sensor (%) with the HDS, press (2 % opened) and release (0 % opened) theaccelerator pedal every 2 seconds. Then check the Line Pressure Sol VLV. A signal and the Line Pressure Switch signal with the HDS.

| Signal | Current conditions |      |  |
|--------|--------------------|------|--|
|        | Values             | Unit |  |
|        |                    |      |  |

| APP Sensor (%)                |  |
|-------------------------------|--|
| Line Pressure Sol VLV. A      |  |
| Line Pressure Pressure Switch |  |

Is the Line Pressure Switch ON when Line Pressure Sol VLV. A is ON, and OFF when Line Pressure Sol VLV. A is OFF?

YES

Intermittent failure, the system is OK at this time. Check for poor connections and loose terminals between the line pressure switch and the PCM.

NO

The failure is duplicated. Go to step 3.

3. Determine possible failure area (IG1(VBSOL) line, others):

Select the Line Pressure Solenoid Test in the Miscellaneous Test Menu, and check that line pressure solenoid valve A operates with the HDS. Line Pressure Solenoid Test Is a clicking sound heard?

YES Go to step 6. NO Go to step 4.

### 4. Fuse check:

- 1. Press the engine start/stop button to select the OFF mode.

| Fuse            | No. B2 (15 A)             |
|-----------------|---------------------------|
| Location        | Under-dash fuse/relay box |
| le the fuee OK2 |                           |

Is the fuse OK?

#### YES

The fuse is OK. Go to step 5.

### NO

Replace the fuse, and recheck. If the fuse blows again, repair a short to ground on the No. B2 (15 A) fuse circuit, and recheck.

- 5. Open wire check (IG1(VBSOL) line):
  - 1. Jump the SCS line with the HDS.

SCS Short

- 2. Disconnect the following connector.

PCM connector B (49P) - Refer to: How to Troubleshoot the Fuel and Emissions Systems(NA) (2013-15), or How to Troubleshoot the A/T System(NA) (2013-15)

- 3. Press the engine start/stop button to select the ON mode.- 4. Measure the voltage between test points 1 and 2.

| Test condition | ON mode                             |
|----------------|-------------------------------------|
|                | PCM connector B (49P): disconnected |
| Test circuit   | IG1(VBSOL)                          |
|                |                                     |



## Is there battery voltage?

### YES

The IG1(VBSOL) wire is OK. Faulty line pressure solenoid valve A. Replace the secondary valve body (line pressure solenoid valve A) - Refer to: Secondary Valve Body Removal and Installation (2013-13), or Secondary Valve Body Removal and Installation (2014-17).

### NO

Repair an open in the IG1(VBSOL) wire between the PCM and the No. B2 (15 A) fuse in the underdash fuse/relay box.

### 6. Line pressure switch check:

- 1. Press the engine start/stop button to select the OFF mode.-
  - 2. Disconnect the following connector.

Line pressure switch 1P connector

- 3. Connect terminals A and B with a jumper wire.



- 4. Press the engine start/stop button to select the ON mode.-

### 5. Check the parameter(s) below with the HDS.

|                               | Threshold |      | Current conditions |      |
|-------------------------------|-----------|------|--------------------|------|
| Signal                        | Values    | Unit | Values             | Unit |
| Line Pressure Pressure Switch | ON        |      |                    |      |

Do the current condition(s) match the threshold?

YES

Replace the line pressure switch .

### NO

The line pressure switch is OK. Go to step 7.

- 7. Open wire check (OPPLSW line):
  - 1. Press the engine start/stop button to select the OFF mode.
  - 2. Remove the jumper wire.
  - 3. Jump the SCS line with the HDS.

SCS Short

- 4. Disconnect the following connector.

PCM connector C (49P) - Refer to: How to Troubleshoot the Fuel and Emissions Systems(NA)

### (2013-15), or How to Troubleshoot the A/T System(NA) (2013-15)

- 5. Check for continuity between test points 1 and 2.

| Test condition | OFF mode  |
|----------------|---|
|                | Line pressure switch 1P connector: disconnected |
|                | PCM connector C (49P): disconnected             |
| Test circuit   | OPPLSW  |
| Test point 1   | Line pressure switch 1P connector No. 1 (BRN)   |
| Test point 2   | PCM connector C (49P) No. 45 (BRN)              |



Is there continuity? YES The OPPLSW wire is OK. Replace the PCM . NO

Repair an open in the OPPLSW wire between the line pressure switch and the PCM.