# DTC B0081

## Diagnostic Instructions

- Perform the Diagnostic System Check - Vehicle prior to using this diagnostic procedure.
- Review Strategy Based Diagnosis for an overview of the diagnostic approach.
- Diagnostic Procedure Instructions provides an overview of each diagnostic category.

## DTC Descriptors

**DTC B0081 0F:** Passenger Presence System 1 Erratic

**DTC B0081 39:** Passenger Presence System 1 Internal Electronic Failure

**DTC B0081 3A:** Passenger Presence System 1 Incorrect Component Installed

**DTC B0081 71:** Passenger Presence System 1 Invalid Serial Data Received

## Diagnostic Fault Information

| Circuit | Short to Ground | Open / High Resistance | Short to Voltage | Signal Performance |
|---|---|---|---|---|
| B+ Voltage Reference | B0081 0F | B0081 0F | -- | B0081 0F |
| Ground | -- | B0081 0F | -- | -- |

## Circuit / System Description

When the ignition is turned ON, the passenger presence system (PPS) and the inflatable restraint sensing and diagnostic module (SDM) perform tests to diagnose critical malfunctions within the modules. When the SDM has completed the power-up mode, the SDM will establish communication with the module. The SDM will also request the instrument panel cluster (IPC) to illuminate both of the PASSENGER AIR BAG ON/OFF indicators, located in the inside rear view mirror (ISRVM), for 5 seconds. If the SDM detects that the PPS has set a current DTC the SDM will then disable the IP module deployment loop, set DTC B0081 and illuminate the AIR BAG indicator.

## Conditions for Running the DTC

Ignition voltage is between 9-16 volts.

## Conditions for Setting the DTC

Any of the following conditions must exist for 5 seconds:

### B0081 0F

- The SDM has received a fault present message from the PPS.
- The PPS is in assembly plant mode and the SDM is in production mode.

### B0081 39

The SDM has received a fault message from the PPS.

### B0081 3A

The SDM has received a message from the PPS indicating a vehicle and PPS mismatch.

### B0081 71

The SDM has received invalid or no serial data from the PPS.

## Action Taken When the DTC Sets

- The SDM requests the instrument panel cluster (IPC) to illuminate the AIR BAG indicator.
- The I/P module deployment loop will be disabled.

## Conditions for Clearing the DTC

- The condition for setting the DTC no longer exists.
- A history DTC will clear once 100 malfunction-free ignition cycles have occurred.

## Reference Information

### Schematic Reference

SIR Schematics

### Connector End View Reference

Component Connector End Views

### Description and Operation

SIR System Description and Operation

### Electrical Information Reference

- Circuit Testing
- Testing for Intermittent Conditions and Poor Connections
- Connector Repairs
- Wiring Repairs

### Scan Tool Reference

Control Module References for scan tool information

## Circuit / System Testing

**Important:** When removing connectors, inspect for damage or corrosion. Damage or corrosion in the following requires repair or replacement of the affected component/connector:

- PPS module
- SDM module
- PPS module harness connector
- SDM wiring harness connector

1. Ignition ON, Verify the passenger air bag ON/OFF indicators illuminate.
   If the indicators do not illuminate, refer to Passenger Presence System Indicator Circuit Malfunction.
2. Ignition ON, use the scan tool and access the passenger presence system (PPS) menu. Retrieve the PPS DTC codes. Verify no PPS DTCs are set.
   If any PPS DTCs are set, refer to Diagnostic Trouble Code (DTC) List - Vehicle.
3. Verify the correct PPS part number is installed in the vehicle.
   If the wrong PPS was installed, replace with the correct PPS.
4. Ignition OFF, disconnect the harness connector at the PPS module.
5. Ignition OFF, test for less then 5 ohms between the ground circuit terminal 2 X1 and ground.
   If greater then the specified range, test the ground circuit for an open/high resistance.
6. Ignition ON, verify a test lamp illuminates between the B+ circuit terminal 1 X1 and ground.
   If the test lamp does not illuminate, test the B+ circuit for a short to ground or an open/high resistance.
7. If all circuits test normal, replace the PPS module.

## Repair Instructions

Perform the Diagnostic Repair Verification after completing the diagnostic procedure.

Control Module References for PPS and SDM replacement, setup, and programming