

Subject: Engineering Information - Airbag Warning Lamp Illuminated On Driver Information Center (DIC), DTC B0017 Set

Attention: Proceed with this EI ONLY if the customer has commented about this concern AND the PIE number is listed in the Global Warranty Management / Investigate History link (GWM/IVH). If the customer has not commented about this condition or the EI does not show in GWM/IVH, disregard the PIE and proceed with diagnostics found in published service information. THIS IS NOT A RECALL — refer to Service Bulletin 04-00-89-053 for more details on the use of Engineering Information bulletins.

This EI has been revised to update the Warranty Information. Please discard PIE0611.

Brand:	Model:	Model Year:		VIN:		Engine:	Transmission:
		from	to	from	to		
Cadillac	XT4	2021	2021	-	-	-	-
	XT5						
	XT6						
Chevrolet	Blazer						
GMC	Acadia						

Involved Region or Country	North America
Condition	Important: If the customer did not bring their vehicle in for this concern, DO NOT proceed with this EI. Some customers may comment on the Airbag Warning Lamp illuminated on the Driver Information Center (DIC). Technicians may find DTC B0017 set.
Cause	GM Engineering is attempting to determine the root cause of the above condition. Engineering has a need to gather information on vehicles PRIOR to repair that may exhibit this condition. As a result, this information will be used to "root cause" the customer's concern and develop/validate a field fix.

Correction

If you encounter a vehicle with the above concern, perform the following steps below.

1. Verify that the vehicle has DTC B0017. Is the DTC current or in history? What symptom bytes are reported? Record all DTCs in all modules including symptom bytes and active or history status.
2. Contact the Engineer (the engineer may have additional directions other than what is described below).
3. Access the connector for the F114D Driver Knee Airbag. Take a picture of the connection without disturbing the area and visually verify that the connector is properly and fully connected.
 - 3.1. If not properly connected, disconnect, look for debris or corrosion in the connector. If any debris or corrosion is found, collect and bag the connector (at least 4 inches from airbag connector), cut from the harness and return the connector and the knee airbag to the WPC. Replace the knee airbag and send the airbag with connector to the Warranty Parts Center (WPC). Install the new connector pigtail. Reconnect, be careful to ensure the CPA is fully engaged. Clear the DTCs and wiggle the connector to ensure that B0017.01 does not set again.
4. Connect the MDI tool and monitor loop resistance for the F114D driver knee airbag (loop 13 for driver side's side knee airbag DTC B0017). Look for resistance spikes up and down and monitor the resistance through all of the following steps (normal resistance is ~2.5 ohms). Range is 2.1-3.5 is ok.
 - 4.1. If no spikes are present, gently hold and gently twist the airbag connector body to the right and left and monitor for resistance jumps.
 - 4.2. If spikes occur, pause, and twist again. If spikes replicate, move to step 5.2 below. Otherwise move to step 6.
 - 4.3. If no spikes are present, gently wiggle the airbag wire harness to the right and left and monitor for resistance jumps.
 - 4.4. If spikes occur, pause, and tap again. If spikes replicate, move to step 5.2 below. Otherwise move to step 6.
5. Tap on the F114D Driver Knee Airbag connector (while actively monitoring resistance).
 - 5.1. If spikes occur, pause, and tap again. If spikes replicate, move to step 5.2 below.

- 5.2. Remove the airbag WITHOUT disconnecting/disturbing the connector and send the airbag with connector attached to the WPC.
6. If no spikes have occurred, turn on the wipers on the lowest intermittent speed (while actively monitoring resistance).
 - 6.1. If spikes occur, pause, and allow the wipers to cycle again.
 - 6.2. Replace the wiring to the F114D Driver Knee Airbag with twisted pair. See if B0017.01 is set. Try to reproduce the condition at all wiper speeds (intermittent through high).
7. If no spikes have occurred, turn on the heated steering wheel, if equipped (while actively monitoring resistance).
 - 7.1. If spikes occur, pause, turn off the heated steering wheel, and turn it on again.
 - 7.2. Replace the wiring to the Knee Airbag with twisted pair. See if B0017.01 is set. Try to reproduce the condition with the heated steering wheel turned on.
8. If no spikes have occurred, turn on the HVAC blower on high speed (while actively monitoring resistance).
 - 8.1. If spikes occur, pause, and allow the wipers to cycle again.
 - 8.2. Replace the wiring to the F114D Driver Knee Airbag with twisted pair. See if B0017.01 is set. Try to reproduce the condition for all blower speeds.
9. If no spikes have occurred, start the engine, put your foot on the brake, shift the vehicle to drive turn the steering wheel fully to the left (while actively monitoring resistance).
 - 9.1. If spikes occur, pause, and allow the wipers to cycle again.
 - 9.2. Replace the wiring to the F114D Driver Knee Airbag with twisted pair. See if B0017.01 is set. Try to reproduce the condition by turning the wheel fully to the right just after starting the engine.
10. If the DTC is reported in History ONLY and no resistance spikes have occurred, turn the ignition off, open and close the driver's door, close all doors/liftgate, remove the key fob from the area, and wait 15 seconds for the vehicle bus to stop communications. Approach the vehicle with the key fob, open the door, go to Run power mode, wait 8 seconds. Read DTCs and document all DTCs reported by all modules.
11. Tap on the K36 Inflatable Restraint Sensing and Diagnostic Module at the Wiring Harness Connector (while actively monitoring resistance).
 - 11.1. If spikes occur, pause, and tap again. If spikes replicate, move to step 11.2 below.
 - 11.2. Disconnect the negative battery cable.
 - 11.3. Remove the K36 Inflatable Restraint Sensing and Diagnostic Module WITHOUT disconnecting/disturbing the connector and send the module with connector attached to the WPC.
12. Connect a multimeter to the SDM battery input and check for SDM power or ground fluctuations during engine start.
13. If no harness issues were found. Replace the SDM and return to the WPC for analysis.

item

Contact Information

Engineer Name	Phone Number
Antonio Xavier	(586) 404-0613
Patty McCown	(586) 907-2654

Please include the following information if leaving a message:

- Technician name
- Dealer name and phone number
- Complete VIN and repair order (R.O) number

On the repair order, document the date and time the call was placed (even if the engineer was not reached).

If engineering is unable to return the call within one hour, proceed with diagnosis and repair based on information found in SI.

Warranty Information

If engineer was contacted or required information was provided, use:

Labor Operation	Description	Labor Time
6486098*	Engineering Information - Airbag Warning Lamp Illuminated On (DIC), DTC B0017 Set	1.0 hr
* This is a unique labor operation for bulletin use only.		

Version	2
Modified	Released February 02, 2021 Revised February 23, 2021 – Revised to update the Warranty Information.

Below the line - Internal only - Do not fax or email

Administrative Details:

Revision Log:

PIE0611 - Released on 02/02/21

PIE0611A- Revised on 02/23/21 - Revised to update the Warranty Infromation.

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