

#09-09-40-003A: SIR/Airbag Light Illuminated, DTC B0081 and Passenger Presence System (PPS) Code 23 Stored (Replace Passenger Seat Belt Retractor and Re-Route Wire Harness) - (Jul 26, 2010)

Subject: SIR/Airbag Light Illuminated, DTC B0081 and Passenger Presence System (PPS) Code 23 Stored (Replace Passenger Seat Belt Retractor and Re-Route Wire Harness)

Models: 2006-2008 Chevrolet Cobalt Coupe
2008-2010 Chevrolet Cobalt SS Coupe
2006 Pontiac Pursuit Coupe (Canada Only)
2007-2010 Pontiac G5 Coupe



This bulletin is being revised to update the model years. Please discard Corporate Bulletin Number 09-09-40-003 (Section 09 – Restraints).

Condition

Some customers may comment that the SIR light is illuminated. Upon investigation, the technician may find the following SDM code stored:

DTC B0081 71: Passenger Presence System Invalid Serial Data Received With Passenger Presence System (PPS) Flash Code of DTC 023

Cause

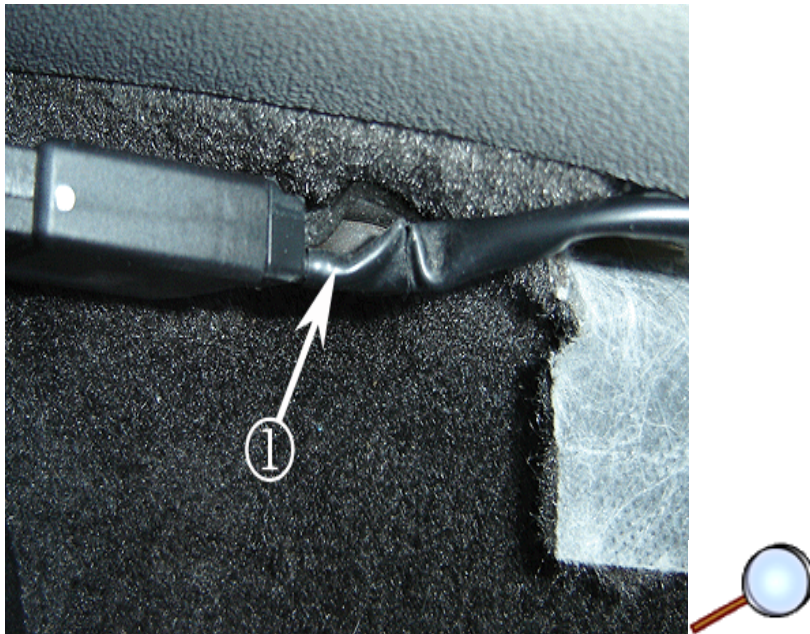
The wire on the Belt Tension Sensor (BTS), that is part of the retractor assembly, may become open or acquire a ground near the sensor. If the BTS is rotated toward the rear of the vehicle, added stress is applied to the wire bundle that may cause an open or a ground path. The two photos below illustrate the possible effects on the wiring. Each photo indicates the area to investigate at the arrow labeled (1).

Figure 1 – Stress Point on Wiring Bundle

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Figure 2 - Outer Wiring Wrap Insulation Breached



Correction

If PPS DTC 23 is Current, Perform the Following Steps

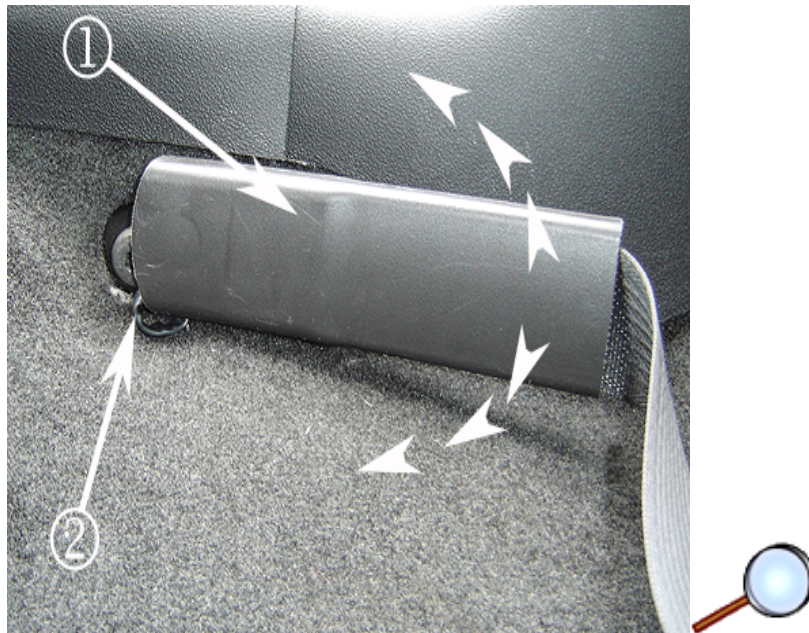
Important: Technicians are to inspect the electrical connections to all the PPS components.

1. Check for shorts, opens and continuity between the PPS module and belt tension sensor (BTS) mating connector that is part of the vehicle harness (Located under the passenger rear trim panel near the rear seat cushion).
2. If there are no wiring issues, replace the Passenger Seat Belt Retractor using the repair instruction "Seat Belt Installation and Seatbelt Sleeve Modification" located below. Do not replace the PPS.
3. Connect the Diagnostic Scan Tool and clear the codes.
4. Verify that the DTC does not reset.

If PPS DTC 23 is in History, Perform the Following Steps

1. Connect the Diagnostic Scan Tool.
2. Locate the Passenger Side Belt Tension Sensor (BTS) and rotate the seat belt sleeve fully as shown in Figure 3.

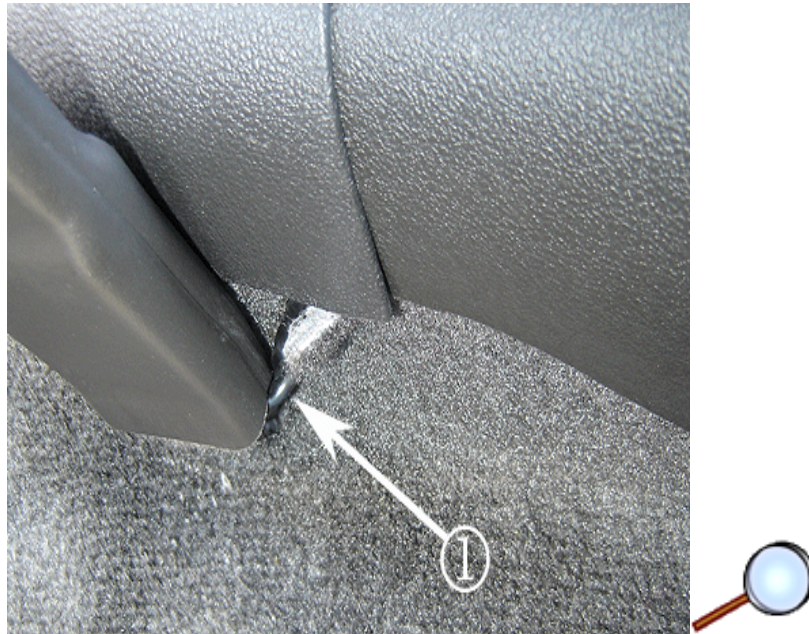
Figure 3 – Rotating the Seat Belt Sleeve



- (1) Passenger Seat Belt Sleeve
- (2) BTS Sensor Wire Sheath

3. Slowly rotate the BTS w/sleeve forward and rearward. Did PPS and SDM faults change to current and cause the Air Bag light to illuminate? If the DTC changed to current, replace Seat Belt retractor using "Seat Belt Installation and Seatbelt Sleeve Modification" instructions located below.

Figure 4 – BTS Wires

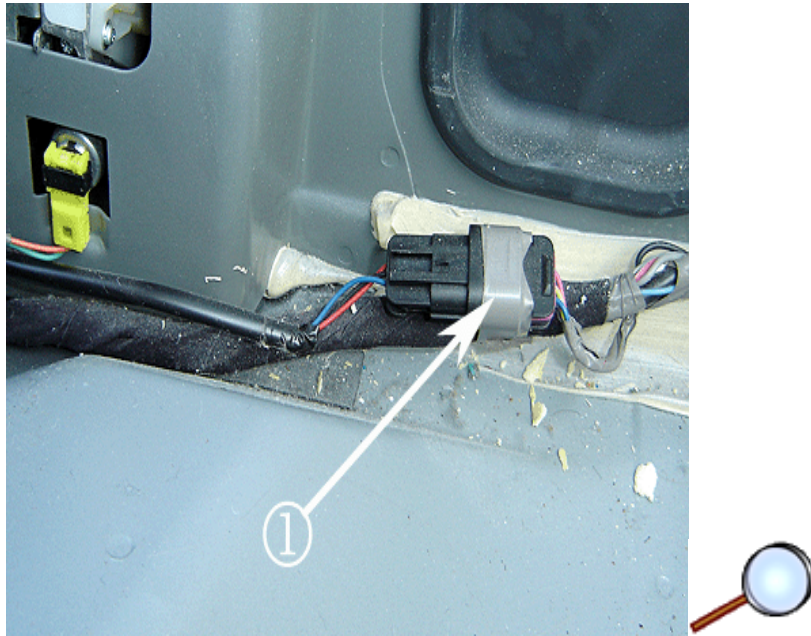


4. Move wires (1) near the BTS paying close attention near the area that is around the bottom of sleeve. Did PPS and SDM faults change to current and cause the Air Bag light to illuminate? If DTC changed to current, replace Seat Belt Retractor using "Seat Belt Installation and Seatbelt Sleeve Modification" as shown in the next section.
5. Check for shorts, opens and continuity between the PPS module and belt tension sensor (BTS) mating connector that is part of the vehicle harness (Located under the passenger rear trim panel near the rear seat cushion).
6. Clear the codes.
7. Verify that the DTC does not reset.

Seat Belt Retractor Pretensioner Installation and Sleeve Modification

1. Remove the rear passenger quarter trim panel and rear seat cushion. Refer to Rear Quarter Panel Trim Removal in SI.

Figure 5 – BTS Connector



2. Locate the BTS connector (1) located under the trim panel.
3. Remove the tape from the connector securing the connector to the wire loom.
4. Refer to Seat Belt Retractor Pretensioner Replacement - Front (Coupe) in SI for removal and discarding instructions.

Important: DO NOT retape the BTS connector (retainer is located 200 mm (8 in) rearward of the connector) to the harness.
DO NOT re-install the BTS to body retainer (refer to Figure 6).

[Figure 6 – BTS Harness Retainer](#)

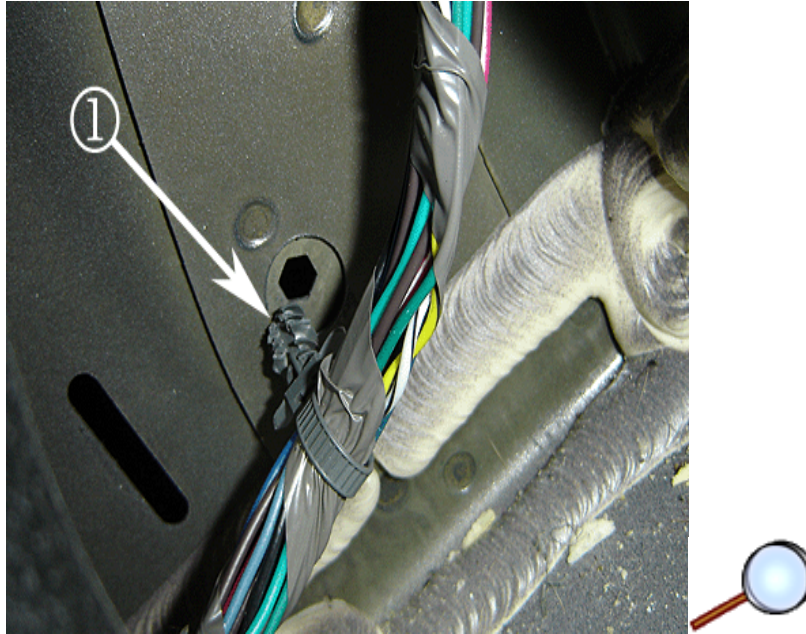
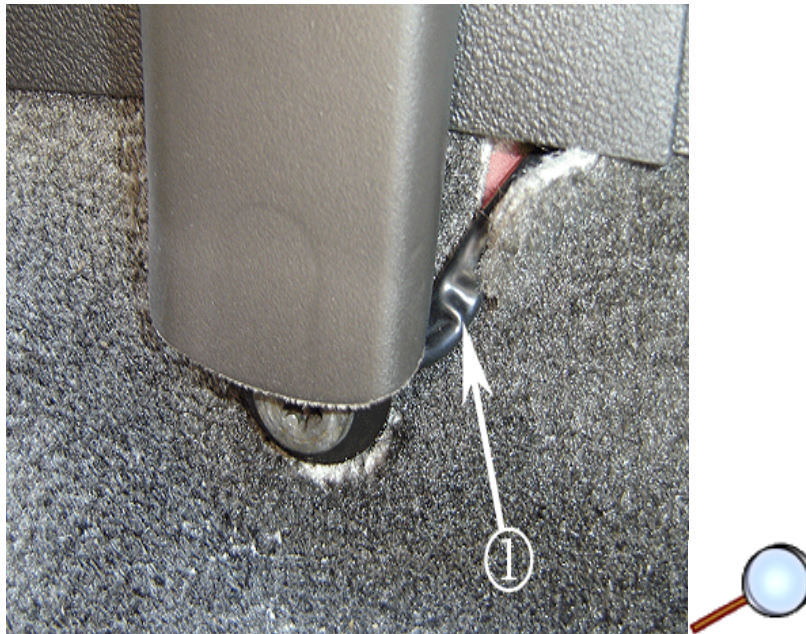


Figure 7 – Wire Stress Area



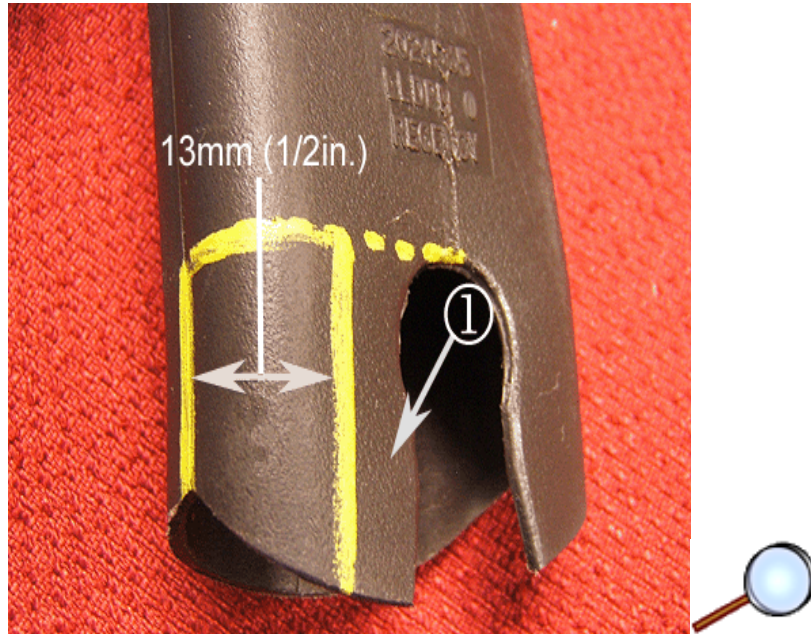
5. Route the new wire pigtail from the BTS to allow extra slack at the previous wire stress area (refer to Figure 7).

Figure 8 – Proper Stress Relief Loop



6. Slide the BTS pigtail wire forward to gain additional wire near the sensor as shown allowing the pigtail loop to contact the floor (refer to Figure 8).

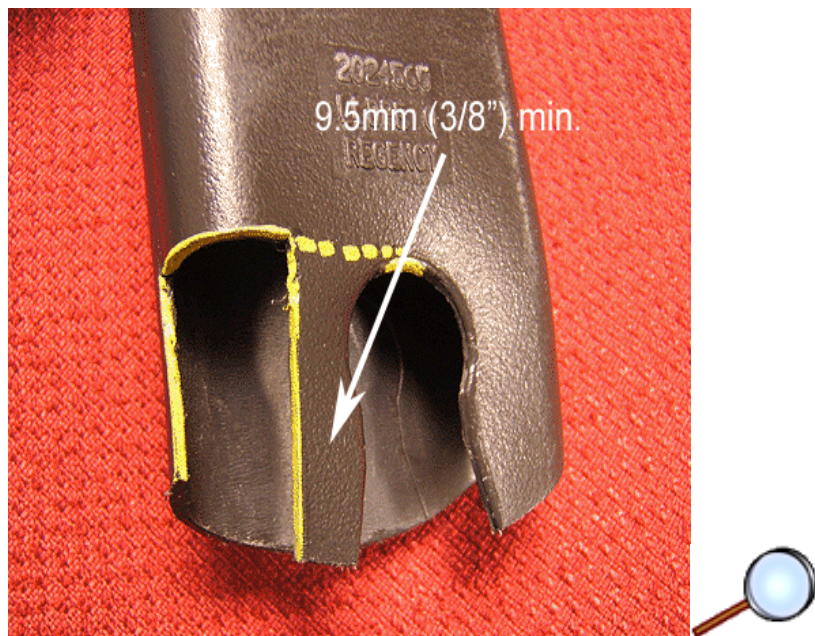
Fig. 9 Sleeve Modification



7. Mark the BTS plastic sleeve as shown in Figure 9. The reference points for marking are the molding line on the side of the sleeve and the top of the pre-existing bolt anchor hole. Proper marking will result in a 13 mm (1/2 in) wide notch. To make the modification, sharp scissors are all that is needed as the material is very soft.

Important: Use a temporary marking pen so that excess can be washed off after the modification is made.

Figure 10 – Modified Sleeve



8. Once the cuts have been made, verify that a 9.5 mm (3/8 in) section of plastic remains (refer to Figure 10).
9. Install the sleeve and anchor bolt. Refer to Seat Belt Retractor Pretensioner Replacement - Front (Coupe) in SI.
10. Rotate the sensor and sleeve forward and rearward to verify if wire stress caused by the BTS has been corrected. If not, move the harness again until the wire stress is corrected.
11. Install the rear passenger quarter trim panel and rear seat cushion. Refer to Rear Quarter Panel Trim Installation in SI.

Parts Information

Part Number	Description
19169207	Retractor, Seat Belt

Warranty Information

For vehicles repaired under warranty, use:

Labor Operation	Description	Labor Time
N9624*	Seatbelt Retractor Replacement and Belt Sleeve Modification	0.7 hr

*This is a unique labor operation for bulletin use only. It will not be published in the Labor Time Guide.

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