

Service Bulletin

PRELIMINARY INFORMATION

Subject: Battery Drain and/or Steering Wheel Control Illumination Inoperative

Models: 2013 Cadillac ATS, SRX, XTS Condition/Concern

Some customers may comment the illumination for the steering wheel controls is not functioning.

A battery rundown condition may also be experienced with or without the steering wheel illumination concern. Both of the conditions may be caused by wiring insulation damage within the steering wheel assembly. The illumination concern may also be the result of the wires on the harness connecting to the 10 way connector being too short and creating a poor connection.

Recommendation/Instructions

Use the following steps to inspect and repair the steering wheel wiring concerns related to the steering wheel control illumination. Use the "Steering Wheel Wiring Update Package" listed below.

1. Remove the steering wheel airbag. Refer to Steering Wheel Airbag Replacement in SI.



- 2. Inspect the steering wheel metal base plate.
 - If you see a RED or BLACK line under the airbag retention spring between the left and right branches of the main wire harness, the steering wheel has already been reworked. No further rework is required. Inspect the wiring and ensure there is no damage to wires and reposition the heated steering wheel wire harness as shown in UVD step #5. Reinstall the airbag module into the steering wheel and proceed with SI diagnostic procedures to correct the condition(s).
 - If no black or red indicator in found, proceed to step 3.



3. Disconnect the upper 10 way connector.



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- Measure both the left side and right side harness length from the white retaining clip (wire tie) to the center of the connector (where white wire enters). The wire length should be measured from a straightened wire. The measurement should be between 50 mm and 63 mm in length for both left and right side.
- If either side measures less than **50 mm or more than 63 mm**, proceed to step 4. If both sides are within the target measurement, proceed to step 5.



- 4. Cut the white wire tie that retains the incorrect length wire harness to the horn plate. It is not necessary to remove both clips for this step if one side has an acceptable length. Use care to not damage the harness. Remove the wire tie retainer from the horn plate. Use care to ensure no plastic pieces of the retainer break off and drop into the steering wheel. If plastic debris falls into the steering wheel, it may cause a rattle condition.
- 5. Carefully inspect the wires for damaged (missing) insulation. This damage is caused by the wiring making hard contact with the sharp metal edge of the stamped steel horn plate.
 - 5.1. If only the insulation is damaged, apply two light coats of *Kent Industries Liquid Vinyl Tape, Part # 99491 or the equivalent, to the wire where the insulation is nicked or missing.
 - 5.2. If the insulation and the conductor (wire) are damaged, replace the affected harness.



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6. Install the three supplied (50 mm by 10 mm strip of clear tape) pieces of protective tape to the edges of the metal horn plate in the three locations shown. Roll the tape from the inside edge of the horn plate over the outside edge making sure that the potentially sharp outside edge is covered by the tape. Ensure all of the sharp edges on the horn plate are covered with the protective tape where the harness may come in contact.



- 7. If step 4 was performed, straighten the wire harness along the left/right hand side. Measure 60 mm from the bottom of the 10 way clock spring connector and attach a new white wire tie retaining clip. Clip the retainer into the horn plate. Ensure the wire tie is positioned with the connecting portion parallel to the horn plate above the wire harness to prevent contact with the airbag module. Repeat for the opposite side if necessary. Trim the excess length of the wire ties.
- 8. Secure the red horn power wire as follows:



8.1. On vehicles equipped with a white plastic wire carrier, secure the red horn power wires to the white plastic wire carrier (located on the right side of the horn plate inside of the steering wheel) as shown. Ensure the wire tie is positioned with the connecting portion facing toward the front of the vehicle to prevent contact with the airbag module.



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8.2. On vehicles not equipped with the wire carrier, secure the red horn power wires to the right side wire harness lower main branch as shown.

Note: If the vehicle is equipped with a heated steering wheel (RPO UVD), stop at this point and see the "Additional Steps" listed below.



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 Draw a RED or BLACK line under the DAB retention spring between the left and right branches of the main wire harness to indicate that the updates have been performed. Reconnect all electrical connectors.



10. Inspect the air bag retention spring and ensure the top of the spring is in contact with the flange on the horn plate as shown. If not, reposition the spring using a small screwdriver.



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Inspect the left and right spring ends to ensure they are in the correct position. Reposition if necessary.

11. Reinstall the steering wheel airbag. Refer to Steering Wheel Airbag Replacement in SI.

Additional Steps To Be Performed On Vehicles With RPO UVD- Heated Steering Wheel

Perform the following additional steps on vehicles equipped with RPO UVD to correct the battery rundown concern.

1. Perform above steps 1-8.



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2. Most steering wheels will have the heated steering wheel wiring harness attached to the horn plate with a clip. If the vehicle does not have this clip, proceed to step 3. Using side cutters, snip off and remove the white retaining clip that currently holds the heater connector to the horn plate. Leave the lower portion of the white retaining clip connected to the horn plate. This prevents any loose pieces of the white retaining clip from falling into the wheel and causing rattles while driving.



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3. Inspect the heated steering wheel wiring harness for damaged insulation. Repair any damaged wire insulation using the procedure outlined in step 5.1 above.

4. Wrap the heated steering wheel wiring harness with protective tape Such as *Kent Industries Part # 1089482 or the equivalent, as follows:



4.1. On the clock spring side, wrap the brown and black wires as shown.



4.2. On the steering wheel side, wrap the red and black wires as shown.

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5. Position the harness as shown.

Do not re-fasten the harness to the horn plate. Ensure the harness is clear of the airbag mounting attachment points (red pinch points).

6. Proceed with steps 9-11 above.

* We believe this source and their products to be reliable. There may be additional manufacturers of such products/ materials. General Motors does not endorse, indicate any preference for, or assume any responsibility for the products or material from this firm or for any such items that may be available from other sources.

Parts Information

*This product is currently available from Kent Industries (1-888-YES-KENT).

Important: When ordering the replacement steering wheel wiring harness from the Warranty Part Center (WPC), use the tag on the existing harness (was #) to identify the correct replacement harness.

Part Number	Description	
WPC 680	23121936 Heated module with harness (2-way)	
WPC 681	23125982 (was 22973112) - Wire harness- Heat W/O-TUTD	
WPC 682	23125981 (was 22973111) - Wire harness- No Heat W/O TUTD	
WPC 683	23121939 (was 22984939) - Wire harness- No Heat W/TUTD	
WPC 684	23121938 (was 22984938) - Wire harness- Heat W/TUTD	
WPC 685	Steering Wheel Wiring Update Package (Protective tape and Wire Ties)	
*99491	Kent Industries Liquid Vinyl Tape	
*1089482	Kent Industries Protective Tape	

Warranty Information

For vehicles repaired under warranty, use:

Labor Operation	Description	Labor Time
E9573*	Inspect Steering Wheel Wiring, Install Update Kit And Protective Tape	0.4 hr
Add #1	Repair Wiring Insulation As Required	0.1 hr
Add #2	Replace Steering Wheel Wiring Harness	0.4 hr
*This is a unique labor operation for bulletin use only. It will not be published in the Labor Time Guide.		

IMPORTANT NOTE WHEN PRINTING THIS FORM: If the form prints out on two pages, make certain you fax BOTH pages so that the WPC receives all the needed information. Missing information will delay or prevent the part from being shipped.

Parts Request Form – Warranty Parts Center		
Use this form ONLY for U.S., Canadian and Mexico Dealers. Export markets located outside of North America must contact their regional Technical Assistance Center for assistance.		
To: Warranty Parts Center		
e-mail: warrantypartscenterUSA@gm.com		
or WPC Fax: 248-371-0192		
Attn: Jeanette Dunn		
Part Being Requested: (Circle the applicable WPC part number (s) below)		
WPC 680		
WPC 681 WPC 682		
WPC 683		
WPC 684		
WPC 685		
Dealer BAC (U.S.) /Dealer Code (Canada)/Dealer Number (Mexico):		
Dealer Name:		
Dealer Address:		
Dealer Contact Person:		
Dealer Phone Number:		
Repair Order Number:		
Vehicle VIN:		
Important: If you do not receive the part within 2 business days after e-mailing or faxing your part request to the Warranty Parts Center, please call Customer Assistance at 248-371-9901/9902.		
IMPORTANT NOTE WHEN PRINTING THIS FORM: If the form prints out on two pages, make certain you fax BOTH pages so that the WPC receives all the needed information. Missing information will delay or prevent the part from being shipped.		