

Constellation
Heritage
4700 Models
4800 Models

4900 Models
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5900 Models
6900 Models

Western Star
Service Bulletin

General Information

On some vehicles, the antilock braking system (ABS) indicator light illuminates as expected during the self check operation, but the ABS solenoids do not self check.

The Hill Start Aid (HSA) telltale is driven by ABS ECU connector 3, pin 1, which is wired to a 120 ohm resistor, circuit 376N. This circuit seeks a grounding path through a splice to circuit 378RS-, which keeps the indicator from flickering during normal operation. Circuit 378RS- terminates at ABS ECU connector 3, pin 8. This input to ABS connector X3, pin 8 through the 120 ohm resistor causes the pin to degrade prematurely, causing the ABS light to self check when the key is turned to the ON position while the ABS solenoids do not self check. When this condition occurs, the ABS and enhanced stability control (ESC) systems continue to operate normally.

Correction of this failure involves installing a relay jumper assembly part number A66-12083-000 in place of the resistor. Use the instructions in this bulletin to install the relay jumper.

HSA Light Relay Installation

See [Fig. 1](#) for a basic schematic of the retrofit with a relay.

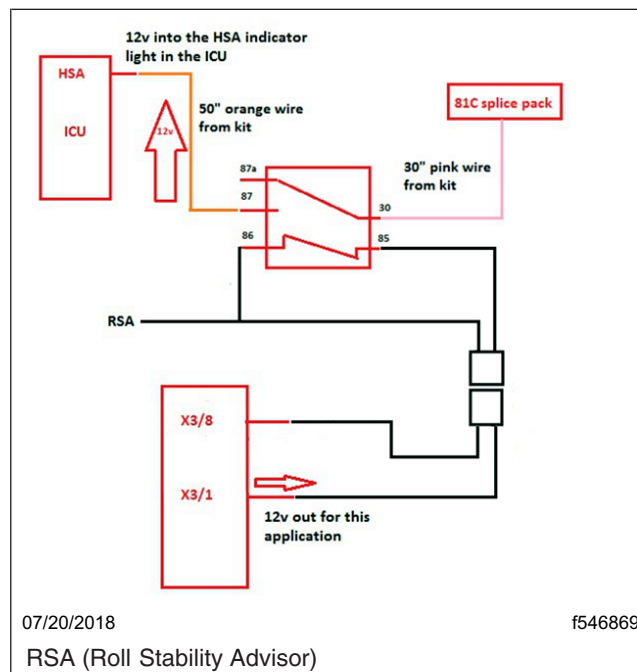


Fig. 1, Correct Wiring After the Procedure

1. Park the vehicle on a level surface, shut down the engine and set the parking brakes. Chock the tires.
2. Access the ABS ECU by removing the ICU housing.
 - 2.1 Remove the two fasteners that secure the ICU housing to the dash.
 - 2.2 Tilt the housing assembly forward to gain access to the ICU connectors. See [Fig. 2](#) and [Fig. 3](#).

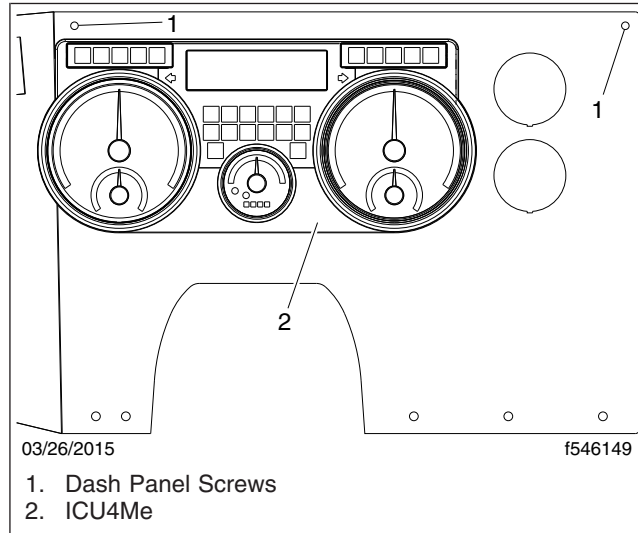


Fig. 2, ICU4Me and Main Dash Panel



Fig. 3, Connectors Located Behind the ICU

3. Locate the resistor, remove it from the connector . See [Fig. 4](#).

ABS Light Illuminating in the ICU, ABS Solenoids Not Self Checking

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Fig. 4, Resistor Location

NOTE: The resistor will be located near the ABS ECU and is connected to the ABS harness circuit numbers 376N and 378RS.

4. Connect the 2-pin connector of the harness supplied in the kit to the ABS harness where the resistor was just removed.
5. Secure the relay to existing harnesses using tie straps.

NOTE: IGN splice pack wires are usually colored pink.

6. Locate the ignition (IGN) splice pack behind the center dash panel. The wires in this splice pack are marked 81C. See [Fig. 5](#).

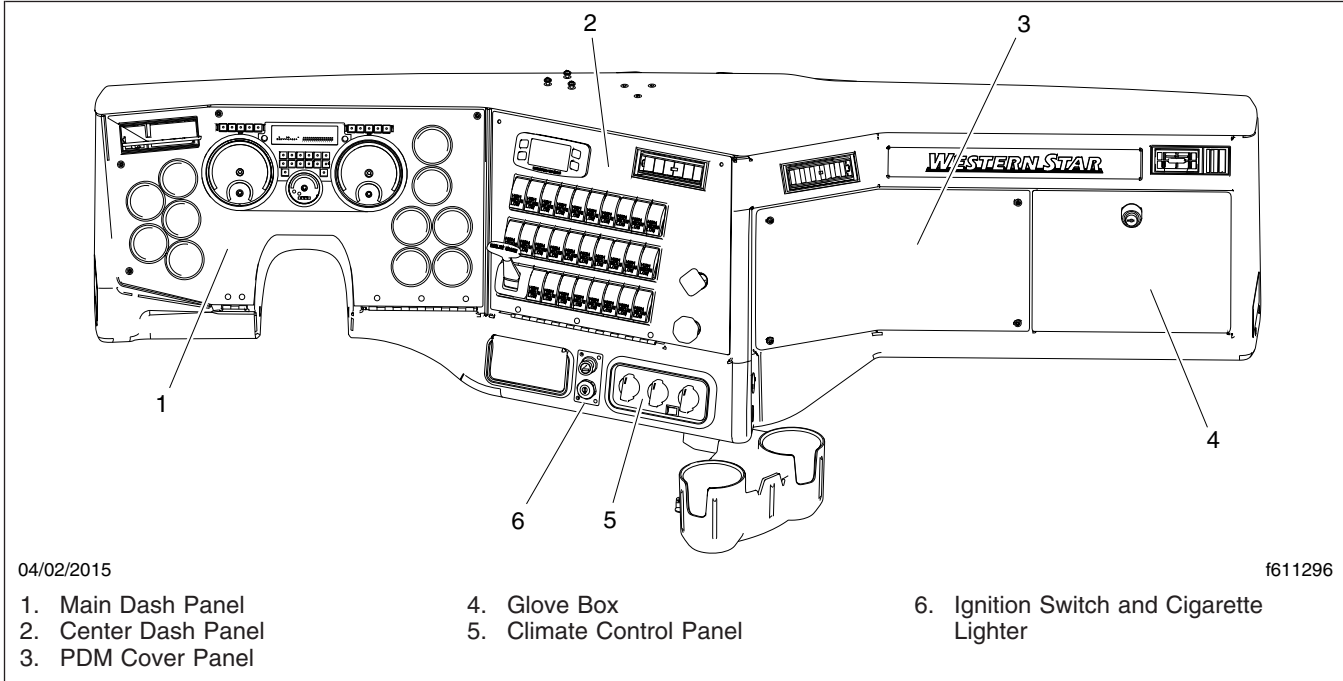


Fig. 5, Dash

7. Remove the lock by first pushing in the retainer, and then removing the lock.
8. Route the pink wire from the harness supplied in the kit up through the doghouse, and insert it into any open cavity of splice pack.
9. Install the splice pack lock.

NOTE: The location of wire 376N may vary depending on the assigned location of the circuit to the pin.

10. Locate orange wire 376N. See [Fig. 6](#). The wire is located in one of the two ICU connectors. The wire is usually located in the smaller B connector.



Fig. 6, Locating Wire 376N

11. Remove the lock from the connector.

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IMPORTANT: Do not insert the wire removal tool into the inside of the connector, as it could damage the terminal.

12. Insert the removal tool (p/n DKIOCHA17002-2) into the access hole opposite the terminal to unlock and release the terminal. See [Fig. 7](#). Remove wire 376N from the connector.

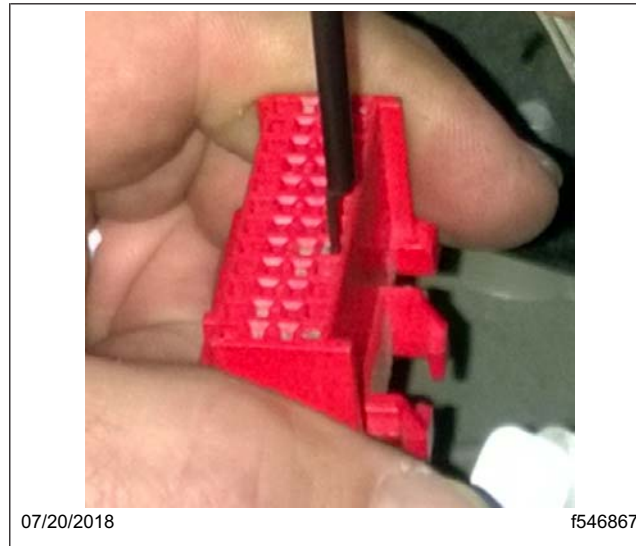


Fig. 7, Removing the Terminal from the Connector

13. Cap terminal 376N, then tape back the wire.
14. Route the 50 inch (127 cm) orange wire through dash, and attach it to the pin where wire 376N was removed, then connect the lock. Coil & secure any excess wiring. See [Fig. 8](#).

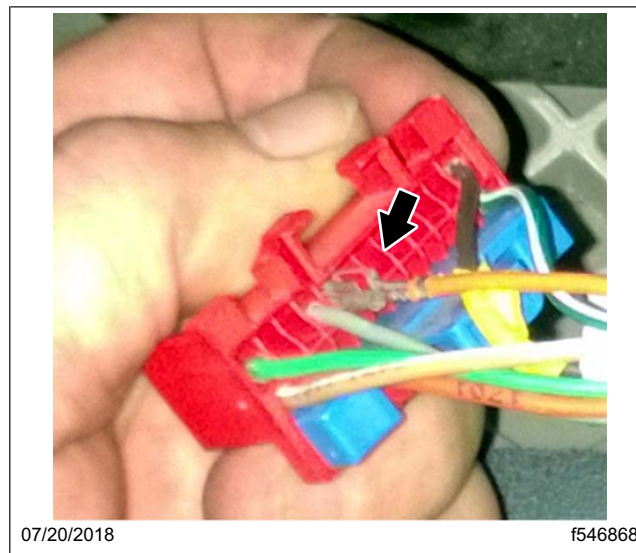


Fig. 8, Inserting the NewWire

15. Turn the key to ON position.
16. Press the HSA override switch, and verify that the HSA indicator light illuminates. See [Fig. 9](#) and [Fig. 10](#).

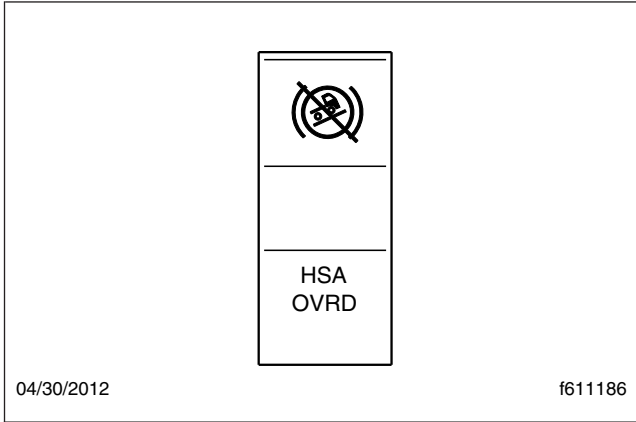


Fig. 9, HSA Switch

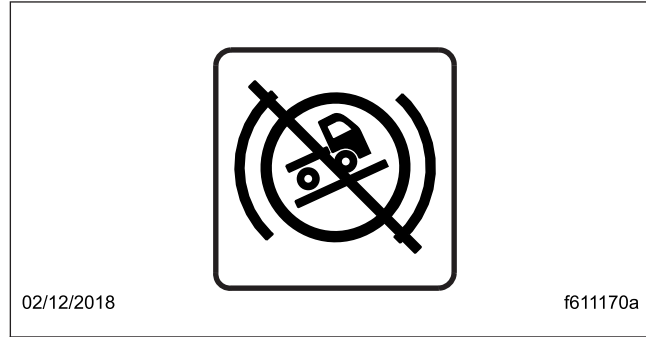


Fig. 10, HSA Telltale

17. Secure all harnesses with tie straps.
18. Tilt the ICU housing in to the dash, and install the two fasteners. Tighten the fasteners securely.

Warranty

This procedure is warrantable only if the described condition exists and the repair is performed within the applicable base or extended coverage warranty period. If a failure is not found, this procedure is considered preventive and warranty does not apply.

Normal warranty applies. See [Table 1](#) for OWL VMRS codes and labor allowance information. Enter this service bulletin number in the *Service Bulletin #* field.

OWL VMRS Codes and Labor Allowance					
Primary Failed Part	Component Code	Cause Code	SRT Code	Description	Time: Hours
HSA Lamp Relay	013-011-096	14	330-5021A	ABS Harness, HSA lamp relay, Install	1.0

Table 1, OWL VMRS Codes and Labor Allowance