GLOBAL SAFETY FIELD INVESTIGATIONS
DCS6639
URGENT - DISTRIBUTE IMMEDIATELY

Date: August 8, 2023

Subject: N232411300 - Service Update
Brake Fluid Leak

Models: 2023 Chevrolet Silverado 4500 HD/5500 HD/6500 HD

To: All General Motors Medium Duty Dealers

General Motors is releasing Service Update N232411300 today. The total number of U.S. vehicles involved is approximately 40. Please see the attached bulletin for details.

Global Warranty Management (GWM)
The Required Field Action section on the Investigate Vehicle History (IVH) screen will be updated August 8, 2023. A list of vehicles in dealer inventory is attached to this message.

END OF MESSAGE

GLOBAL SAFETY FIELD INVESTIGATIONS

Service Update
N232411300 Brake Fluid Leak

Release Date: August 2023 **Revision:** 00

Attention:	This service update includes vehicles in dealer inventory and customer vehicles that return to the dealership for any reason. This bulletin will expire at the end of the involved vehicle's New Vehicle Limited Warranty period. ONLY Chevrolet Medium Duty dealers can complete this field action repair.

Make	Model	Model Year		RPO	Description
		From	To		
Chevrolet	Silverado 4500 HD/5500 HD/6500 HD	2023	2023		

Involved vehicles are marked "Open" on the Investigate Vehicle History screen in GM Global Warranty Management system. This site should always be checked to confirm vehicle involvement prior to beginning any required inspections and/or repairs.

Condition	Certain 2023 model year Chevrolet Silverado 4500 HD/5500 HD/6500 HD vehicles may have a brake fluid leak at the brake pressure switch.
Correction	Dealers are to inspect the brake pressure switch for the suspect lot code 04523, replace the brake pressure switch if it has the suspect lot code or if the code is missing/unreadable. If there is evidence of a fluid leak, then replace both the brake pressure switch and brake jumper harness.

Parts

Quantity	Part Name	Part No.
1	Brake Pressure Wiring Switch	19409480
1	Wire Harness*	19407615
1	Wire Harness*	19408341
1	Battery Terminal Nut*	19405196
As Required	DOT 3 Motor Vehicle Brake Fluid	+NPN
As Required	Blue Dielectric Grease**	+NPN

Important: * The wire harness should only be ordered when inspection determines that it is necessary, and only order the battery terminal nut if inspection determines the wire harness needs to be replaced. DO NOT order the harness unless required. The expected failure rate is very low and new parts will not be necessary for every vehicle.

** NANO2133005 or equivalent locally sourced.

+ Locally sourced non-GM material.

Reminder: Parts may be removed from Retail Inventory Management (RIM). Dealers should review the affected parts to confirm RIM managed status. Parts may have quantity limiters in effect.

Warranty Information

Labor Operation	Description	Labor Time	Trans. Type	Net Item
9106927	Brake Pressure Switch Lot Code Inspection	0.3	ZFAT	N/A
9106923	Inspect and Replace Brake Pressure Switch (includes brake system bleed)	0.8		
9106924	Replace Brake Jumper Harness and Brake Pressure Switch (includes inspection and brake system bleed)	1.2		

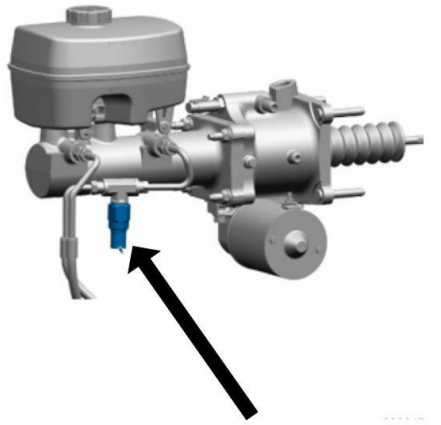
Service Procedure

Warning: Brake fluid may irritate eyes and skin. In case of contact, take the following actions:

- **Eye contact—rinse thoroughly with water.**
- **Skin contact—wash with soap and water.**
- **If ingested—consult a physician immediately.**

1. Park vehicle on a flat surface.
2. Shift transmission to Park or Neutral and set the Parking Brake.

3. Turn vehicle to Key OFF position.
4. Install wheel chocks.
5. Unlatch and open the hood.



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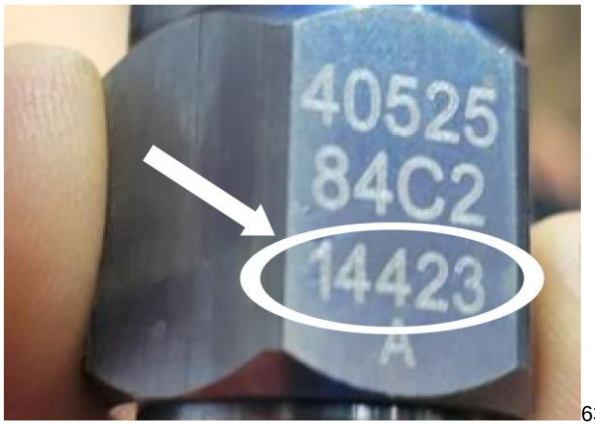
6. Locate Brake Pressure Switch (shown above).



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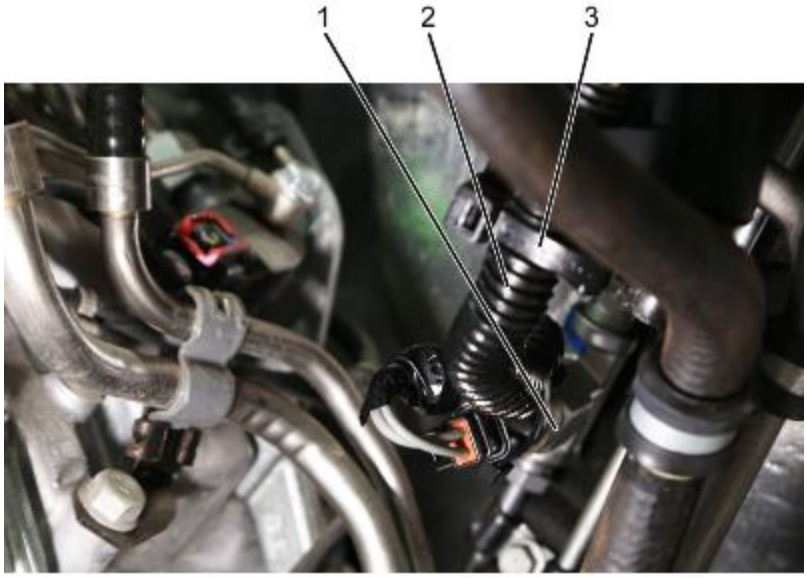
Note: Removal of Brake pressure sensor should NOT be necessary for Lot Code inspection.

7. Using a mirror if necessary, inspect brake master cylinder pressure sensor for Lot Code: **04523** (*Lot Code location shown above*).
    - If Lot Code does not match **04523**, no further action is required.
    - If Lot Code is **04523**, proceed to step 8.



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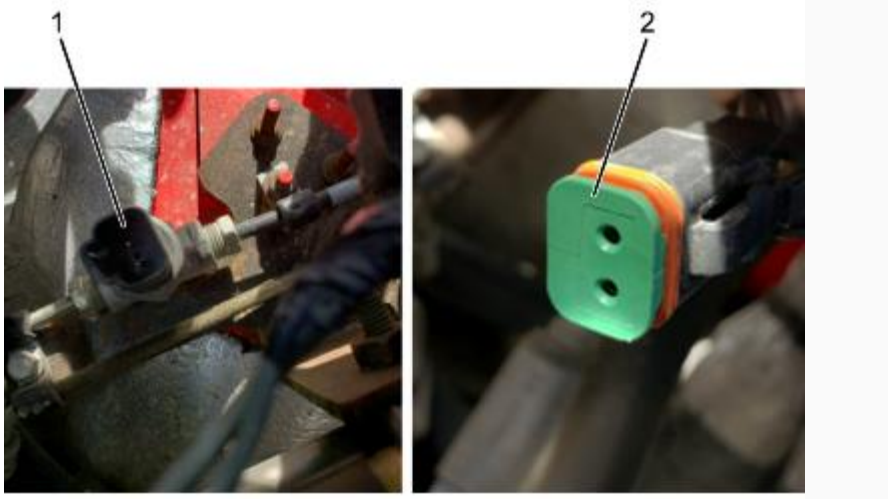
8. Disconnect the Harness Connector (2) from the Brake Pressure Switch (1).
   Note: Some vehicles may have dielectric grease in the switch/connector, this should not be confused with brake fluid.



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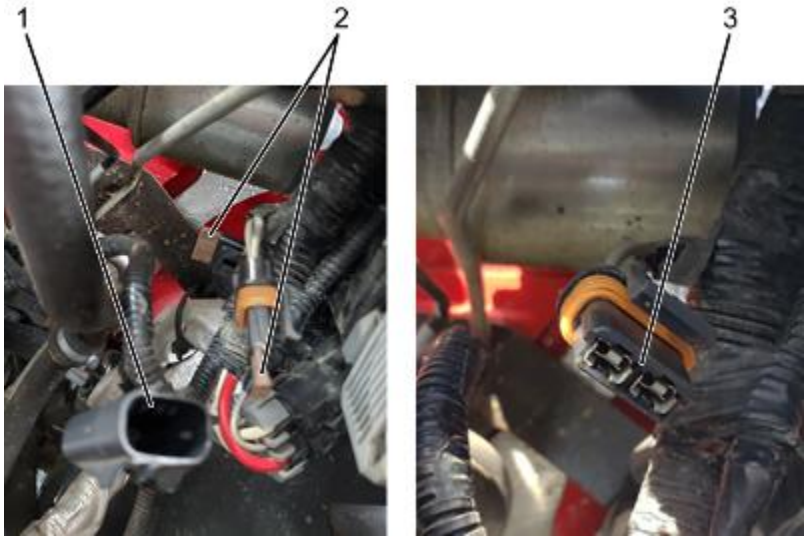
9. Inspect for presence of brake fluid at both the Brake Pressure Switch Terminals (1) and Harness Connector (2).
   - If there is NO brake fluid in the switch terminals or harness connector, proceed to step 10.
   - If there is brake fluid present in the switch terminals or harness connector, proceed to step 13.



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10. Locate both 5-amp fuses (2) and remove the protective cover (1).
11. Remove the fuses (2).
12. Inspect for presence of brake fluid in both fuse connections (3).
    - If brake fluid is NOT present in the fuse connectors, reinstall fuses and protective covers. Proceed to step 13.
    - If brake fluid is present in either fuse connectors, it is NOT necessary to reinstall fuses and protective covers, proceed to step 13.

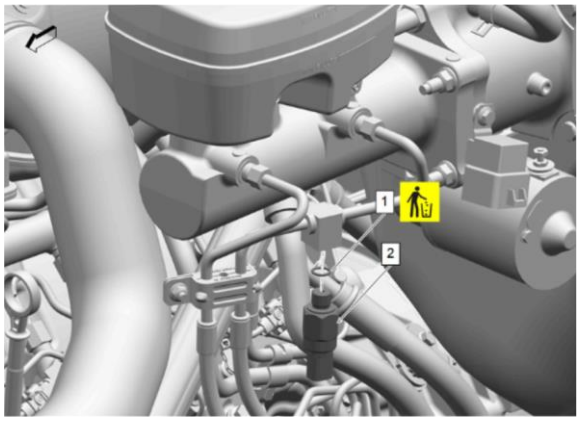
    Caution: Ensure NO brake fluid gets into the connector end of the NEW Brake Pressure Switch. If brake fluid gets into the connector end, the NEW Brake Pressure Switch MUST be replaced.

    Note: Before proceeding to the next step, you MUST have new switch in your hand.

    Note: Verify that the brake fluid level is above the “ADD” line on the master cylinder.
13. Pour a few drops of NEW DOT 3 brake fluid into the NEW Brake Pressure Switch.

    Caution: To prevent damage to property, utilize a back-up style wrench to prevent brake line damage. Failure to do so can result in damage to the brake line.

    Caution: To prevent damage to property, ensure brake pressure switch connector is shielded from fluids, debris, and other contaminants. Failure to do so can result in damage to property.



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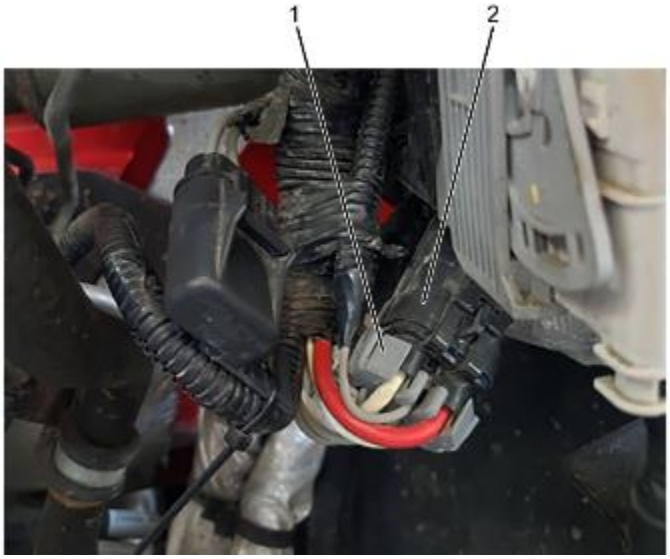
14. Remove and **DISCARD** the brake pressure warning switch seal (1).
15. Remove Brake Pressure Warning Switch (2).
16. Install a **NEW** Brake Pressure warning Switch Seal (1).

17. Install Brake Pressure Warning Switch (2) and tighten to **48 N·m (35 lb ft).**
    - If brake fluid was present in steps 9 and/or 12, proceed to step 18.
    - If brake fluid was NOT present in steps 9 and/or 12, proceed to step 43.

    Note: The Battery Terminal Nut is not listed as a single use component in SI, however for this procedure it is to be DISCARDED.

18. Disconnect the Negative Battery Cable and DISCARD the Battery Terminal Nut. Refer to *Battery Negative Cable Disconnection and Connection* in SI.



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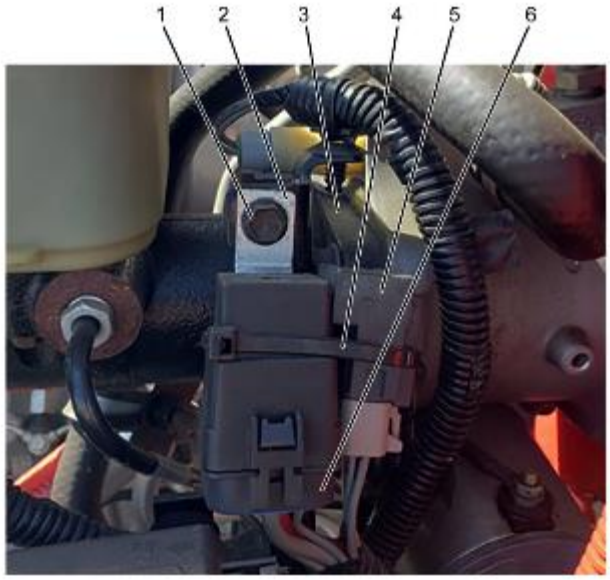
19. Disconnect the Back-up Booster Pump Motor Jumper Wire Harness Connector (1) from the Center Chassis Harness Connector (2).



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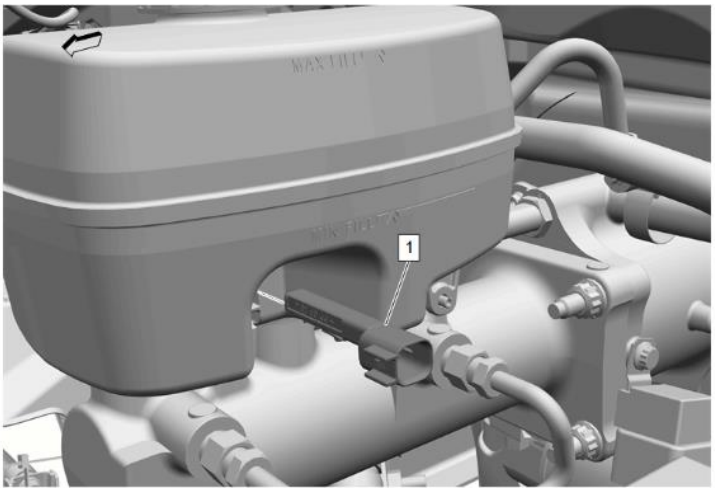
20. Cut and discard the Cable Tie Strap (4) connecting the Diode (5) to the Relay Mounting Bracket (2).
21. Disconnect the Relay Connector (6).



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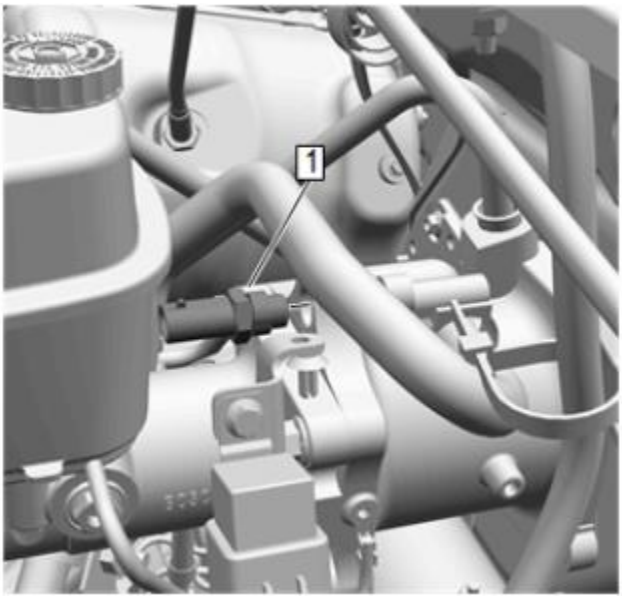
22. Disconnect the Master Cylinder Fluid Level Sensor Connector mounted on the Brake Fluid Reservoir (Shown Above).



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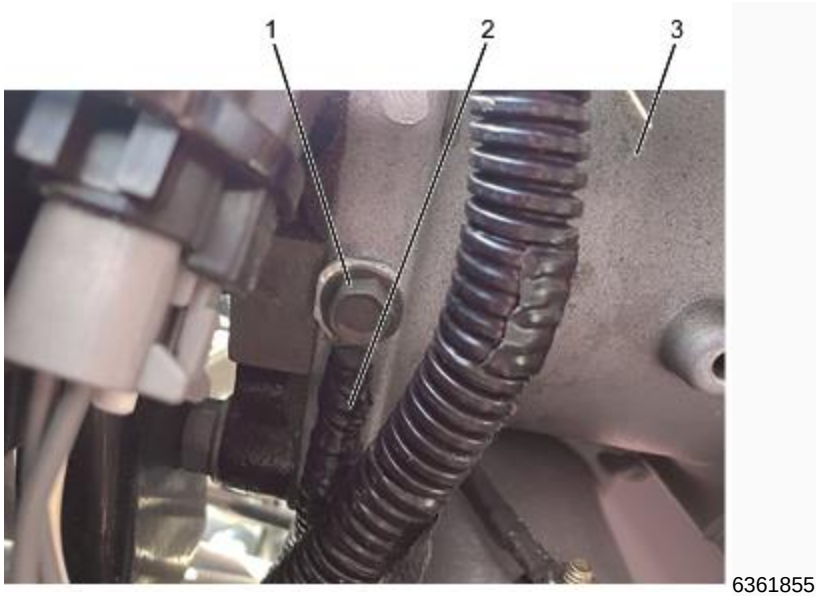
23. Disconnect the Brake Booster Flow Switch Connector mounted on the Hydromax Booster. (Shown Above)



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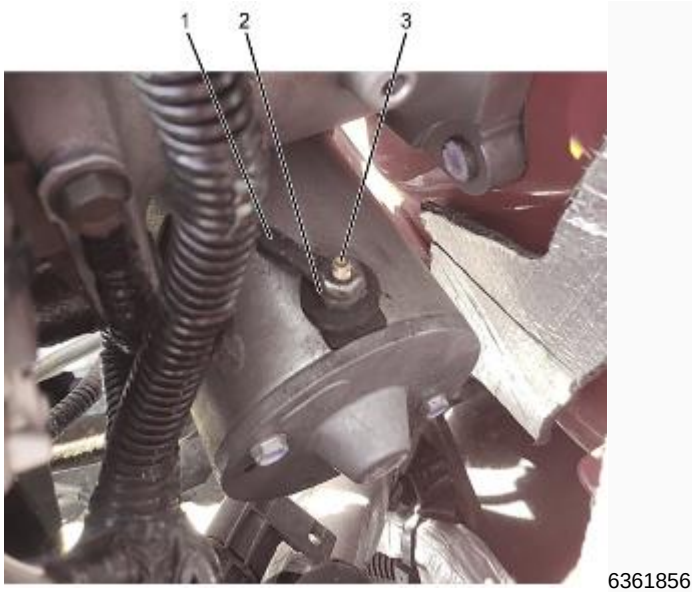
24. Remove the Bolt (1) securing the Ground Wire (2) to the Hydromax Brake Booster (3).
25. Reposition the Ground Wire (2).



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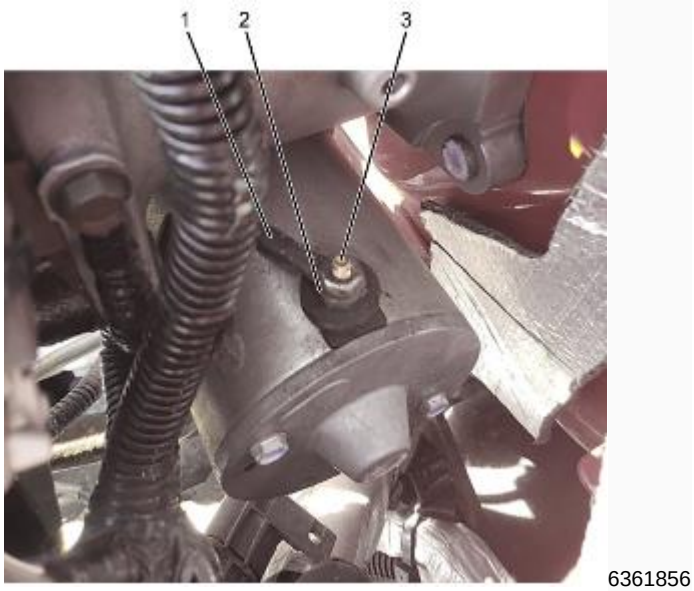
26. Remove the Nut and Lock Washer (2) securing the Power Wire (1) to the Booster Pump Motor Terminal (3).
27. Reposition the Wire (1).
28. Record the Wire Harness routing and the location of Cable Tie Straps and Clipping Saddles.
29. Cut and discard Cable Tie Straps securing the Wire Harness.
30. Remove and DISCARD the Wire Harness.

    Caution: To prevent damage to property, use caution while routing harness. Failure to do so can lead to damage to harness.
31. Using previously recorded routing and slipping locations, route new harness as noted in step 28, installing cable tie straps where previously located.



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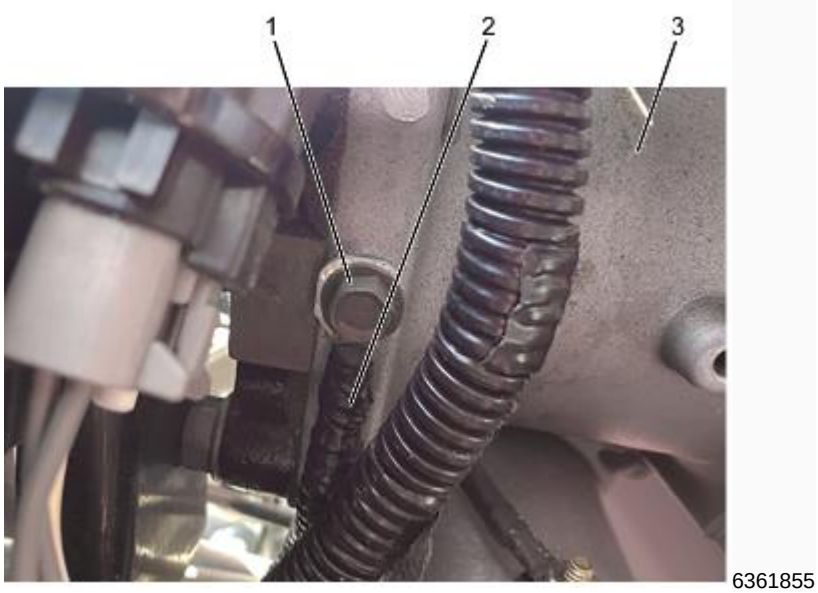
32. Position the Ring Terminal of the Power Wire (1) over the Booster Pump Motor Terminal (3).
33. Install and tighten the lock washer and nut (2) to 2 Nm (17 lb in).

    Caution: To prevent damage to property, ensure even application of dielectric grease to backup pump power terminal nut and booster pump ground bolt. Failure to do so can result in damage to property.

34. Evenly apply dielectric grease to the top of the Backup Pump Power Terminal Nut (2).



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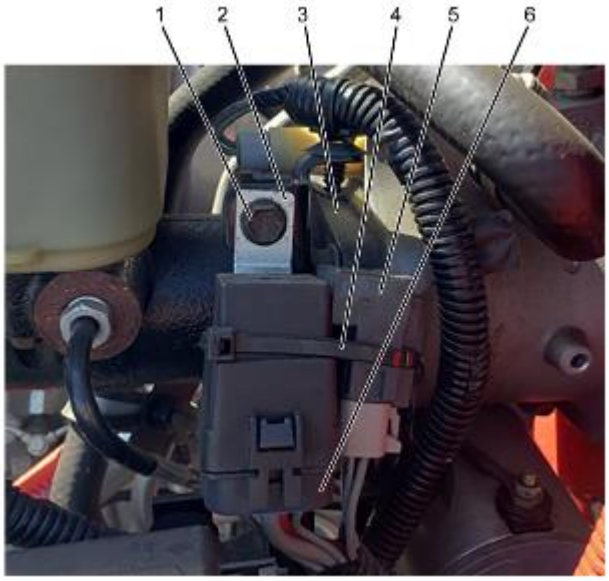
35. Evenly apply dielectric grease to both sides of the Ground Ring Terminal Eyelet on the Ground Wire (2).
36. Position the Ground Bolt (1) through the Ring Terminal Eyelet of the Ground Wire (2) and into the Hydromax Brake Booster (3).
37. Tighten to Ground Bolt (1) to 11.5 Nm (102 lb in).
38. Connect the Master Cylinder Fluid Level Sensor mounted on the Brake Fluid Reservoir and the Brake Booster Flow Switch mounted on the Hydromax Booster.



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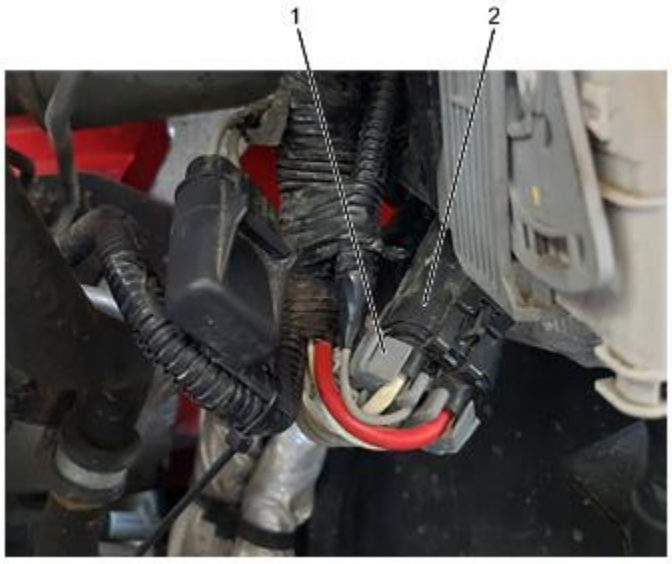
39. Connect the relay connector (6).



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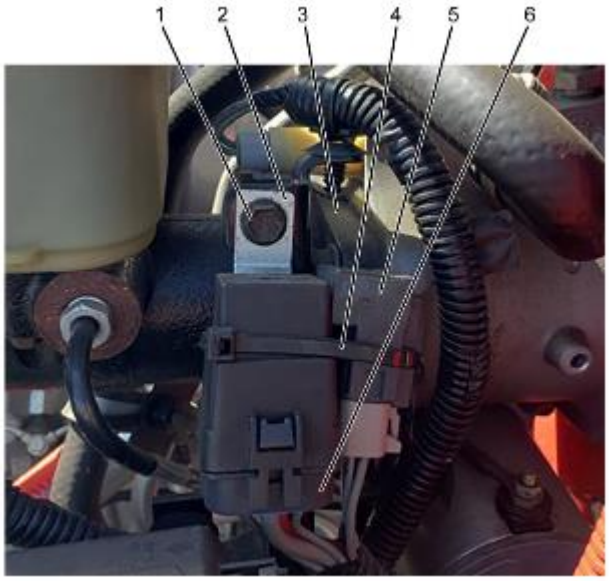
40. Connect the Booster Pumper Motor Jumper Harness Connector (1) to the Center Chassis Harness Connector (2).



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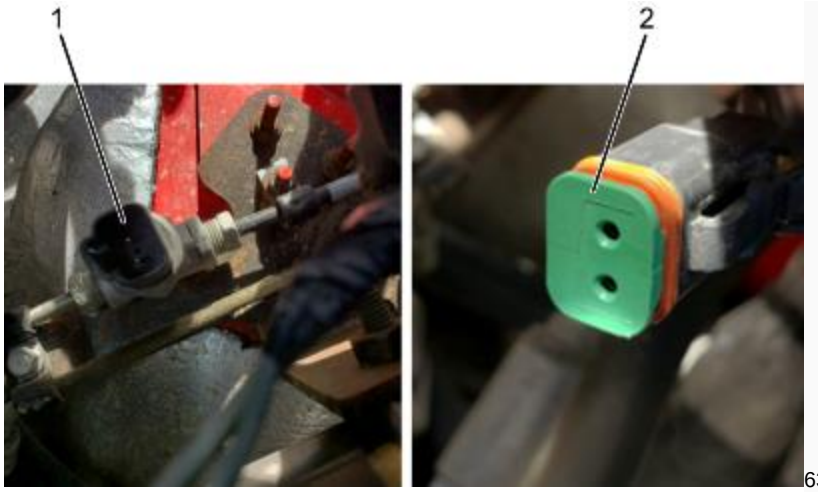
41. Use a cable tie strap to secure the Diode (5) to the Relay Mounting Bracket (2).
42. Using a cable tie strap, secure both fuse holders to the Brake Jumper Harness.



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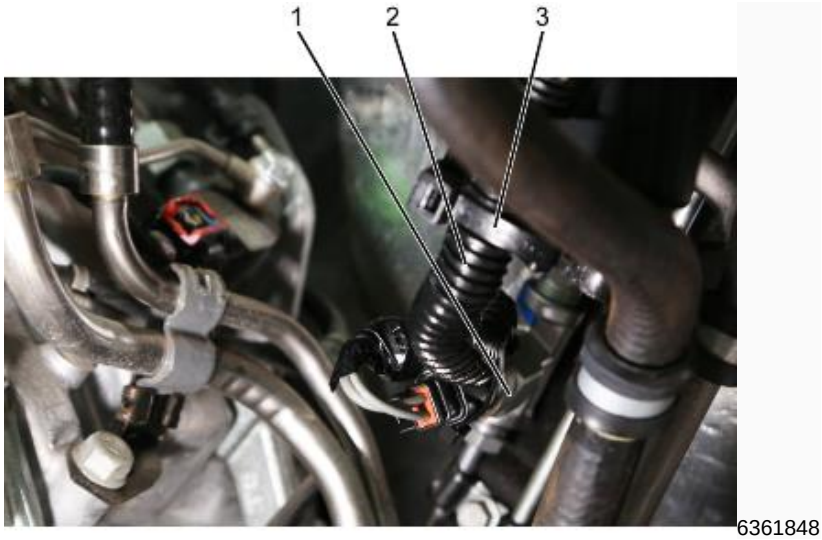
43. Route and connect the Hydraulic Brake Pressure Switch (2) to the Hydraulic Brake Pressure Switch Harness Connector (1).

    Caution: To prevent damage to property, ensure brake fluid does not contact painted surfaces. Failure to do so can result in damage to property.

    Note: Verify brake fluid level is filled to the “MAX” level with NEW DOT 3 brake fluid before performing brake bleeding procedure.

44. Bleed the FRONT brakes. Refer to *Hydraulic Brake System Bleeding* in SI.



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45. Using a cable tie strap (3) secure the Brake Booster Flow Switch Harness (2).
    - If the battery was disconnected, proceed to step 46.
    - If the battery was NOT disconnected, proceed to step 49.
46. Using a wire brush, electronic contact cleaner, and compressed shop air, clean the negative battery terminal components.
47. Apply BLUE dielectric grease to the Battery Terminal Stud, Negative Battery Cable Ring Terminal, and threads of the NEW Battery Stud Nut.
48. Connect the Battery Negative Cable. Refer to *Battery Negative Cable Disconnection and Connection* in SI.
49. Turn the ignition switch to key ON, engine OFF position.
50. Depress the brake pedal to verify Backup Booster Pump Motor Operation.
51. Turn the ignition switch to key OFF position.
52. Close and latch the hood.
53. Remove the wheel chocks.

Dealer Responsibility

Whenever a vehicle subject to this service update enters your vehicle inventory or is in your facility for service in the future, and the vehicle is still covered under the New Vehicle Limited Warranty, you must take the steps necessary to be sure the service update correction has been made before selling or releasing the vehicle.

All new, used, GM Certified Used, courtesy transportation vehicles, dealer shuttle vehicles, etc. in dealers' possession and subject to this bulletin must be held and inspected/repaired per the service procedure of this bulletin before customers take possession of these vehicles. Involved vehicles must be held and not delivered to customers, dealer-traded, released to auction, used for demonstration, or any other purpose.

All GM Certified Used vehicles currently in the dealers' inventory within the Certified Pre-Owned Inventory System (CPOIS) will be de-certified and must be held and remedied per the service procedure in this bulletin. Upon submitting an accepted/paid warranty transaction in the Global Warranty Management (GWM) system, the vehicle can be re-certified for sale within the CPOIS system, or once again be used in the CTP program.

Dealer Reports – For USA

The Inventory tab of the Open Vehicle Report will contain Service Update Bulletin VINs that apply to this field action. This information is intended to assist dealers with the **PROMPT COMPLETION** of these vehicles. The Customer In-Service tab will not contain Service Update Bulletin VIN data because the intent of a Service Update Bulletin is to not inconvenience a customer with a special trip for service. Service Update Bulletins are to be completed when the customer is in for a regularly scheduled visit.