### N222375270 Brake Pressure Switch Connector Fire



Release Date: June 2023 Revision: 00

#### Attention:

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. <u>DO NOT order the harness unless required.</u> The expected failure rate is very low and new parts will not be necessary for every vehicle.

It is a violation of Federal law for a dealer to deliver a new motor vehicle or any new or used item of motor vehicle equipment (including a tire) covered by this notification under a sale or lease until the defect or noncompliance is remedied.

Vehicles involved in this recall were placed on stop delivery April 13, 2023. Once the service procedure contained in this bulletin has been performed on the vehicle, the vehicle is released from stop delivery and the vehicle can be delivered to the customer.

All involved vehicles that are in dealer inventory must be held and not delivered to customers, dealer traded, or used for demonstration purposes until the repair contained in this bulletin has been performed on the vehicle.

ONLY Chevrolet Medium Duty dealers can complete this recall repair.

		Model Year			
Make	Model	From	То	RPO	Description
Chevrolet	Silverado 4500HD/5500HD/6500HD	2019	2023	L5D	6.6L Duramax Diesel Engine

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	General Motors has decided that a defect which relates to motor vehicle safety may exist in certain 2019-2023 model year Chevrolet Silverado Medium Duty 4500HD/5500HD/6500HD vehicles. These vehicles may have a brake pressure sensor assembly that allows brake fluid to leak beyond the diaphragm seal into the pressure switch. The brake fluid may seep into the sensor's electrical components and short the brake pressure switch and the associated fuse. If brake fluid shorts the brake pressure switch and the associated fuse, the circuit can generate excessive heat that could result in a fire, increasing the risk of injury. An underhood fire may occur when the vehicle is off and possibly unattended.
Correction	Dealers will replace the master cylinder pressure sensor. Dealers will also inspect the associated wire
	harness and replace if necessary.

#### **Parts**

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. <u>DO NOT order the harness unless required.</u> The expected failure rate is very low and new parts will not be necessary for every vehicle.

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	DOT 3 Motor Vehicle Brake Fluid	+NPN
Required		
As	Blue Dielectric Grease**	+NPN
Required		
As	14-inch cable tie strap	+NPN
Required		

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. <u>DO NOT order the harness unless required.</u> The expected failure rate is very low and new parts will not be necessary for every vehicle.

<sup>\*\*</sup> NANO2133005 or equivalent locally sourced.

<sup>+</sup> Locally sourced non-GM material.

### N222375270 Brake Pressure Switch Connector Fire



**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
	-			
9106844	Inspect and Replace Brake Pressure Switch (includes brake system bleed)	0.8	ZFAT	*
9106845	Replace Brake Jumper Harness and Brake Pressure Switch (includes inspection and brake system bleed)	1.2	ZFAT	**
9106846	Customer Reimbursement Approved		ZFAT	***
	- For USA and Canada dealers only	N/A		
	- For Export dealers only	0.2		
9106847	Customer Reimbursement Denied – For USA dealers only	N/A	ZFAT	****
9106848	Floor Plan Reimbursement – NEW INVENTORY ONLY	N/A	ZFAT	****
9106849	Working Capital Assistance Program Reimbursement – USED INVENTORY ONLY	N/A	ZFAT	*****

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. <u>DO NOT order the harness unless required.</u> The expected failure rate is very low and new parts will not be necessary for every vehicle.

Note: To avoid having to "H" route the customer reimbursement / floor plan / WCAP transaction for approval, it must be submitted prior to the repair transaction.

- \* The amount identified in "Net Item" should represent the actual sum total of the current GMCCA Dealer net price for DOT 3 Motor Vehicle Brake Fluid to perform the required repairs, not to exceed \$7.00 USD.
- \*\* The amount identified in "Net Item" should represent the actual sum total of the current GMCCA Dealer net price for DOT 3 Motor Vehicle Brake Fluid and Blue Dielectric Grease perform the required repairs, not to exceed \$36.30 USD.
- \*\*\* Submit the dollar amount reimbursed to the Customer in Net/Reimbursement. Submit \$20.00 USD administrative allowance in Net/Admin Allowance.

### Floor Plan Reimbursement - NEW INVENTORY ONLY

\*\*\*\*\* For vehicles eligible for floor plan reimbursement, the amount should be submitted in Net Item/Miscellaneous. This amount should represent the product of the vehicle's average daily interest rate (see table below) multiplied by the actual number of days the vehicle was in dealer inventory and not available for sale. This reimbursement is limited to the number of days from the date of the stop delivery message (April 13, 2023) to the date the repair is completed, and the vehicle is ready for sale.

	Floor Plan Reimbursement Amount
Vehicle	USA
2019 Chevrolet Silverado 4500HD/5500HD/6500HD	\$14.00
2020 Chevrolet Silverado 4500HD/5500HD/6500HD	\$14.83
2021 Chevrolet Silverado 4500HD/5500HD/6500HD	\$15.20
2022 Chevrolet Silverado 4500HD/5500HD/6500HD	\$16.00
2023 Chevrolet Silverado 4500HD/5500HD/6500HD	\$18.19

### Working Capital Assistance Program (WCAP) Reimbursement – USED INVENTORY ONLY

Note: To avoid having to "H" route the WCAP transaction for approval, it must be submitted prior to the repair transaction.

Important: The WCAP ZSET transaction labor code, 9800106, provided in the dealer message sent on April 27, 2023, must have been submitted prior to the submittal of the ZFAT transaction labor code or the claim will reject.

For vehicles eligible under the Working Capital Assistance Program, the amount should be submitted in Net Item/Miscellaneous. This amount has been calculated to a daily value for the days that the vehicle was in used dealer inventory and not available for sale. This reimbursement is limited to the number of days from the date of the stop sale/stop delivery order (April 13, 2023) to the date the inspection or repair closed the recall bulletin.

<sup>\*\*\*\*</sup> Submit \$10.00 USD administrative allowance in Net/Admin Allowance.

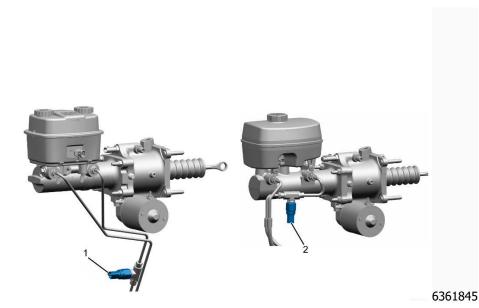
# N222375270 Brake Pressure Switch Connector Fire



Vehicle	Working Capital Assistance Program Reimbursement Amount		
venicie	USA		
2019 Chevrolet Silverado 4500HD/5500HD/6500HD	\$23.33		
2020 Chevrolet Silverado 4500HD/5500HD/6500HD	\$24.72		
2021 Chevrolet Silverado 4500HD/5500HD/6500HD	\$25.34		
2022 Chevrolet Silverado 4500HD/5500HD/6500HD	\$26.66		
2023 Chevrolet Silverado 4500HD/5500HD/6500HD	\$30.31		

### **Service Procedure**

- 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.

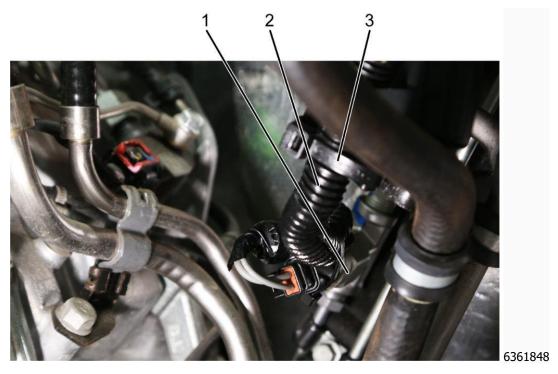


**Note**: Vehicles built on or before 11/30/2020 will have the Brake Pressure Switch located in position (1). Vehicles built on or after 12/01/2020 will have the Brake Pressure Switch located in position (2).

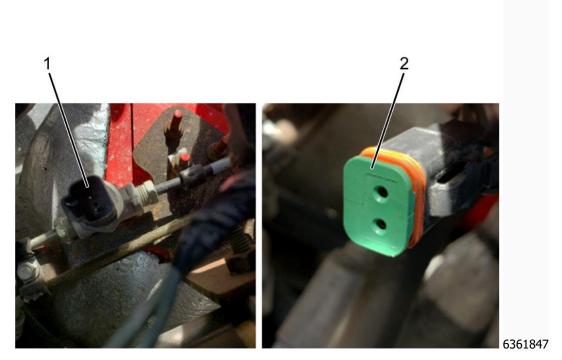
6. Locate the Brake Pressure Switch (1) or (2) depending on build date.

# N222375270 Brake Pressure Switch Connector Fire





- 7. Locate the Brake Booster Pressure Switch Connector (1), shown above.
- 8. Disconnect the Harness Connector (2) from the Brake Pressure Switch (1).

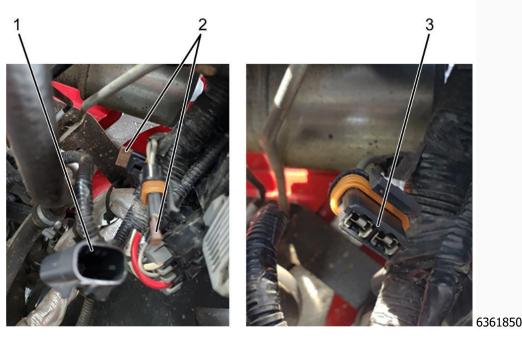


Note: Some vehicles may have dielectric grease in the switch/connector, this should not be confused with brake fluid.

- 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.

### N222375270 Brake Pressure Switch Connector Fire





- 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.

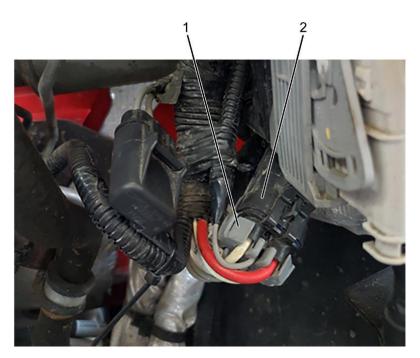
- 14. Remove the existing Brake Pressure Switch and quickly install the NEW Brake Pressure Switch, tighten to 48 Nm (35 lb ft).
  - If brake fluid was present in steps 9 and/or 12, proceed to step 15.
  - If brake fluid was NOT present in steps 9 and/or 12, proceed to step 39.

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

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

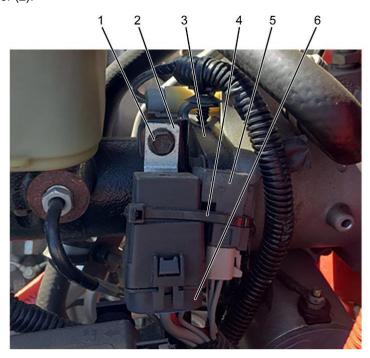
# N222375270 Brake Pressure Switch Connector Fire





6361852

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



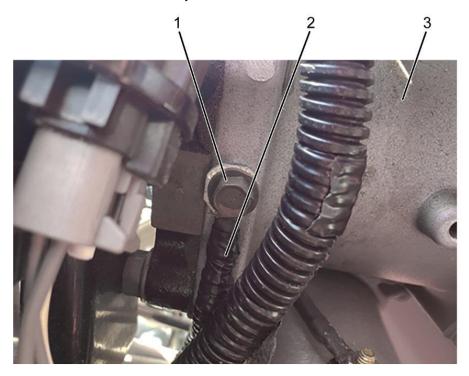
6361853

- 17. Cut and discard the Cable Tie Strap (4) connecting the Diode (5) to the Relay Mounting Bracket (2).
- 18. Disconnect the Relay Connector (6).
- 19. If the vehicle being worked on was built on or before 11/30/2020, perform step 19A. If the vehicle being worked on was built on or after 12/01/2020, perform step 19B.
  - A. Disconnect the Master Cylinder Fluid Level Sensor mounted on the Brake Fluid Reservoir, Low-Pressure Brake Switch Connector mounted on the Master Cylinder, and the Brake Booster Flow Switch mounted on the Hydromax Booster.

# N222375270 Brake Pressure Switch Connector Fire

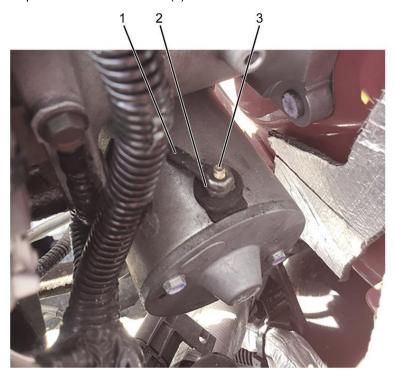


B. Disconnect the Master Cylinder Fluid Level Sensor mounted on the Brake Fluid Reservoir and Brake Booster Flow Switch mounted on the Hydromax Booster.



6361855

- 20. Remove the Bolt (1) securing the Ground Wire (2) to the Hydromax Brake Booster (3).
- 21. Reposition the Ground Wire (2).

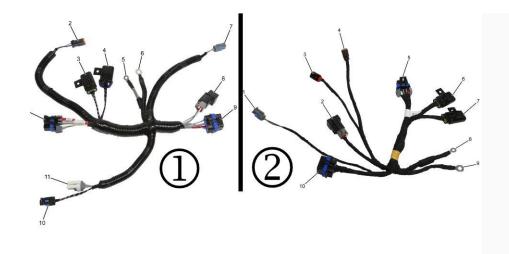


6361856

- 22. Remove the Nut and Lock Washer (2) securing the Power Wire (1) to the Booster Pump Motor Terminal (3).
- 23. Reposition the Wire (1).

# N222375270 Brake Pressure Switch Connector Fire





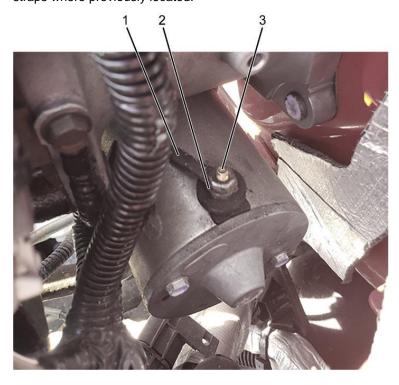
6366283

**Note**: The wire harness routing varies based upon build date. Vehicles built on or before 11/30/2020 are shown on the left (1). Vehicles built on or after 12/01/2020 are shown on the right (2).

- 24. Record the Wire Harness routing and the location of Cable Tie Straps and Clipping Saddles.
- 25. Cut and discard Cable Tie Straps securing the Wire Harness.
- 26. 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.

27. Using previously recorded routing and slipping locations, route new harness as noted in step 24, installing cable tie straps where previously located.



6361856

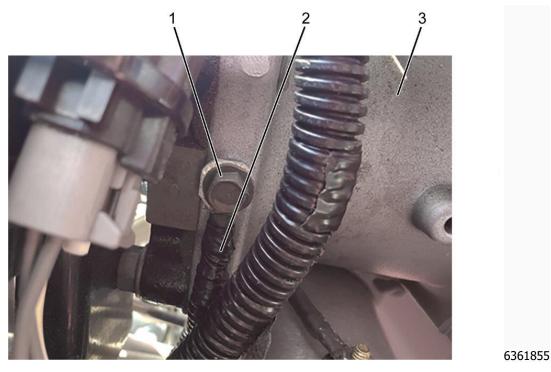
### N222375270 Brake Pressure Switch Connector Fire



- 28. Position the Ring Terminal of the Power Wire (1) over the Booster Pump Motor Terminal (3).
- 29. 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.

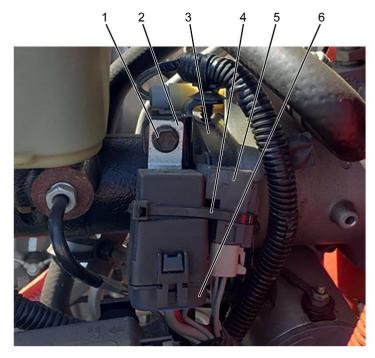
30. Evenly apply dielectric grease to the top of the Backup Pump Power Terminal Nut (2).



- 31. Evenly apply dielectric grease to both sides of the Ground Ring Terminal Eyelet on the Ground Wire (2).
- 32. Position the Ground Bolt (1) through the Ring Terminal Eyelet of the Ground Wire (2) and into the Hydromax Brake Booster (3).
- 33. Tighten to Ground Bolt (1) to 11.5 Nm (102 lb in).
- 34. If the vehicle being worked on was built on or before 11/30/2020, perform step 34A. If the vehicle being worked on was built on or after 12/01/2020, perform step 34B.
  - A. Connect the Master Cylinder Fluid Level Sensor mounted on the Brake Fluid Reservoir, Low-Pressure Brake Switch Connector mounted on the Master Cylinder, and the Brake Booster Flow Switch mounted on the Hydromax Booster.
  - B. Connect the Master Cylinder Fluid Level Sensor mounted on the Brake Fluid Reservoir and the Brake Booster Flow Switch mounted on the Hydromax Booster.

# N222375270 Brake Pressure Switch Connector Fire





6361853

35. Connect the relay connector (6).

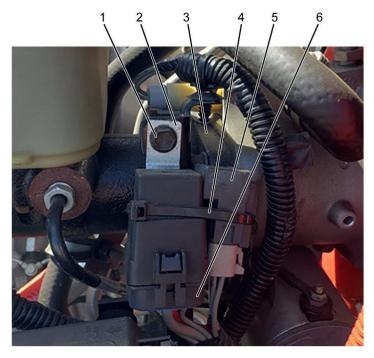


6361852

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

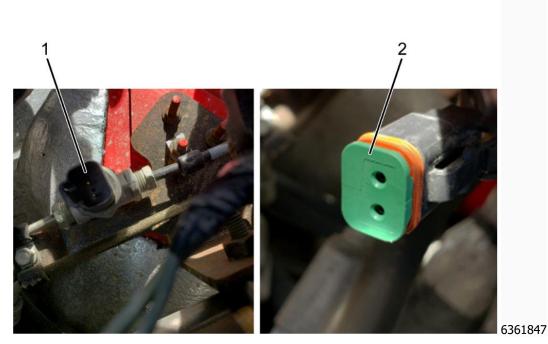
# N222375270 Brake Pressure Switch Connector Fire





6361853

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



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

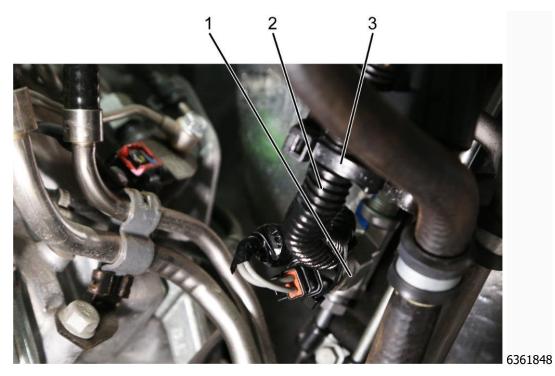
**Caution**: To prevent damage to property, ensure brake fluid does not contact painted surfaces. Failure to do so can result in damage to property.

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

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

### N222375270 Brake Pressure Switch Connector Fire





- 41. Using a cable tie strap (3) secure the Brake Booster Flow Switch Harness (2).
  - If the battery was disconnected, proceed to step 42.
  - If the battery was NOT disconnected, proceed to step 45.
- 42. Using a wire brush, electronic contact cleaner, and compressed shop air, clean the negative battery terminal components.
- 43. Apply BLUE dielectric grease to the Battery Terminal Stud, Negative Battery Cable Ring Terminal, and threads of the NEW Battery Stud Nut.
- 44. Connect the Battery Negative Cable. Refer to Battery Negative Cable Disconnection and Connection in SI.
- 45. Turn the ignition switch to key ON, engine OFF position.
- 46. Depress the brake pedal to verify Backup Booster Pump Motor Operation.
- 47. Turn the ignition switch to key OFF position.
- 48. Close and latch the hood.
- 49. Remove the wheel chocks.

### Dealer Responsibility - For USA

It is a violation of Federal law for a dealer to deliver a new motor vehicle or any new or used item of motor vehicle equipment (including a tire) covered by this notification under a sale or lease until the defect or noncompliance is remedied.

The US National Traffic and Motor Vehicle Safety Act provides that each vehicle that is subject to a recall of this type must be adequately repaired within a reasonable time after the customer has tendered it for repair. A failure to repair within sixty days after tender of a vehicle is prima facie evidence of failure to repair within a reasonable time. If the condition is not adequately repaired within a reasonable time, the customer may be entitled to an identical or reasonably equivalent vehicle at no charge or to a refund of the purchase price less a reasonable allowance for depreciation. To avoid having to provide these burdensome remedies, every effort must be made to promptly schedule an appointment with each customer and to repair their vehicle as soon as possible. In the recall notification letters, customers are told how to contact the US National Highway Traffic Safety Administration if the recall is not completed within a reasonable time.

### N222375270 Brake Pressure Switch Connector Fire



### **Dealer Responsibility** – All

All new, used, GM Certified Used, courtesy transportation vehicles, dealer shuttle vehicles, etc. in dealers' possession and subject to this recall <u>must</u> be held and inspected/repaired per the service procedure of this bulletin <u>before</u> 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.

Dealers are to service all vehicles subject to this recall at no charge to customers, regardless of mileage, age of vehicle, or ownership, from this time forward.

Customers who have recently purchased vehicles sold from your vehicle inventory, and for which there is no customer information indicated on the dealer listing, are to be contacted by the dealer. Arrangements are to be made to make the required correction according to the instructions contained in this bulletin. A copy of the customer letter is provided in this bulletin for your use in contacting customers. Recall follow-up cards should not be used for this purpose, since the customer may not as yet have received the notification letter.

In summary, whenever a vehicle subject to this field action enters your vehicle inventory you must take the steps necessary to ensure the program correction has been made before selling the vehicle. In addition, for vehicles entering your facility for service, you are required to ensure the customer is aware of the open field action and make every reasonable effort to implement the program correction as set forth in this bulletin prior to releasing the vehicle.

### **Dealer Reports**

For dealers with involved vehicles, a listing has been prepared and will be available through GM GlobalConnect Maxis Field Action Reports or sent directly to export dealers. The Inventory tab of the dealer reports will contain VINs that apply to this recall. This information is intended to assist dealers with the **PROMPT COMPLETION** of these vehicles. The Customer In-Service tab will contain customer names and addresses from Motor Vehicle Registration Records. The use of such motor vehicle registration data for any purpose other than follow-up necessary to complete this recall may be a violation of law in several states.

### **Customer Notification**

General Motors will notify customers of this recall on their vehicle (see copy of customer letter included with this bulletin).

#### **Customer Reimbursement**

Customer requests for reimbursement of previously paid repairs to correct the condition described in the bulletin can be submitted at anytime to the dealer. See General Motors Service Policies and Procedures Manual, Product Field Action Customer Reimbursement Procedure or local Policies and Procedures, for details.

### N222375270 Brake Pressure Switch Connector Fire





# IMPORTANT SAFETY RECALL

July 2023

This notice applies to your vehicle,	VIN:	
--------------------------------------	------	--

Dear General Motors Customer:

This notice is sent to you in accordance with the National Traffic and Motor Vehicle Safety Act.

General Motors has decided that a defect, which relates to motor vehicle safety, exists in certain 2019-2023 model year Chevrolet Silverado Medium Duty 4500HD/5500HD/6500HD vehicles equipped with a 6.6L Duramax Diesel engine. As a result, GM is conducting a safety recall. We apologize for this inconvenience. However, we are concerned about your safety and continued satisfaction with our products.

### IMPORTANT

- Your vehicle is involved in GM recall N222375270.
- Schedule an appointment with your GM dealer.
- This service will be performed for you at **no charge**.
- Until the recall remedy is performed, owners are advised to park their vehicles outdoors. This condition may declare with a "service brake system" malfunction indicator lamp.

# Why is your vehicle being recalled?

These vehicles may have a brake pressure sensor assembly that allows brake fluid to leak beyond the diaphragm seal into the pressure switch. The brake fluid may seep into the sensor's electrical components and short the brake pressure switch and the associated fuse. If brake fluid shorts the brake pressure switch and the associated fuse, the circuit can generate excessive heat that could result in a fire, increasing the risk of injury. An underhood fire may occur when the vehicle is off and possibly unattended.

#### What will we do?

Your Chevrolet dealer will replace the master cylinder pressure sensor. Dealers will also inspect the associated wire harness and replace if necessary. This service will be performed for you at **no charge**. Because of service scheduling requirements, it is likely that your dealer will need your vehicle longer than the actual inspection and service correction time of approximately 1-2 hours.

# What should you do?

You should contact your GM dealer to arrange a service appointment as soon as possible.

When scheduling your appointment, confirm with the dealer that they service Medium Duty Trucks.

# Did you already pay for this repair?

Even though you may have previously had repairs for this condition, you will still need to take your vehicle to your dealer for additional repairs. If you have already paid for repairs for the recall condition, please complete the enclosed reimbursement form and present it to your dealer with all required documents. Working with your dealer will expedite your request, however, if this is not convenient, you may mail the completed reimbursement form and all required documents to Reimbursement Department, PO Box 33170, Detroit, MI 48232-5170.

# Do you have questions?

If you have any questions or concerns that your dealer is unable to resolve, please contact the appropriate Customer Assistance Center at the number listed below.

For the hearing or speech impaired, please contact our Customer Assistance Center using the Telecommunication Relay Service by dialing 711 then providing the appropriate Customer Assistance Center number for your vehicle.

Division	Number	Text Telephones (TTY)

# N222375270 Brake Pressure Switch Connector Fire



Chevrolet	1-800-222-1020	711 / 1-800-833-2438
Puerto Rico – English	1-866-467-9700	
Puerto Rico – Español	1-866-467-9700	
Virgin Islands	1-866-467-9700	

If after contacting your dealer and the Customer Assistance Center, you are still not satisfied we have done our best to remedy this condition without charge and within a reasonable time, you may wish to write the Administrator, National Highway Traffic Safety Administration, 1200 New Jersey Avenue, SE, Washington, DC 20590, or call the toll-free Vehicle Safety Hotline at 1.888.327.4236 (TTY 1.800.424.9153), or go to http://www.nhtsa.gov. The National Highway Traffic Safety Administration Campaign ID Number for this recall is 23V266.

Federal regulation requires that any vehicle lessor receiving this recall notice must forward a copy of this notice to the lessee within ten days.

Regina A. Carto Vice President Global Product Safety and Systems

Enclosure

GM Recall: N222375270