

Customer Satisfaction Program

N212346580 Block Heater Restore



Release Date: March 2022

Revision: 01

Revision Description: This bulletin is being revised to allow all locations to perform the full repair and to add the customer letter. Please discard all previous copies of N212346580.

Attention: This program is in effect until April 30, 2024.

Make	Model	Model Year		RPO	Description
		From	To		
Chevrolet	Silverado 2500/3500	2017	2019	L5P	6.6L, 8-cylinder diesel engine
GMC	Sierra 2500/3500				

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 2017-2019 model year Chevrolet Silverado 2500/3500 and GMC Sierra 2500/3500 vehicles equipped with the Duramax diesel 6.6 liter engine and the optional engine-block heater cord, may have a condition in which the block heater cable function was disabled.
Correction	Dealers will replace the engine block heater and cord.

Parts

Quantity	Part Name	Part No.
1	Engine Coolant Heater	12724955
1	Power Cord – Engine Coolant Heater	85590391
2	Dex-Cool Engine Coolant	12346290 US 10953464 Canada Obtain locally in compliance w/ GM spec GMW3420 and Material Specification 9985809 (all other countries)
4	Locally Sourced Automotive Quality Wire Tie	NPN

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.

Note: The per gallon part number for coolant is listed in the part table. If your facility buys the correct coolant in a bulk quantity, do not order the gallon units.

Warranty Information

Labor Operation	Description	Labor Time	Trans. Type	Net Item
9106097	Install Revised Engine Coolant Heater Element and Cord	1.5	ZFAT	N/A
9106098	Customer Reimbursement Approved - For USA and Canada dealers only - For Export dealers only	N/A 0.2	ZFAT	*
9106099	Customer Reimbursement Denied – For USA dealers only	N/A	ZFAT	**

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

* For USA and Canada: Submit the dollar amount reimbursed to the customer in Net/Reimbursement. Submit \$20.00 USD (\$25.00 CAN) administrative allowance in Net/Admin Allowance.

For Export: Submit the dollar amount reimbursed to the customer in Net/Reimbursement.

** Submit \$10.00 administrative allowance in Net/Admin Allowance.

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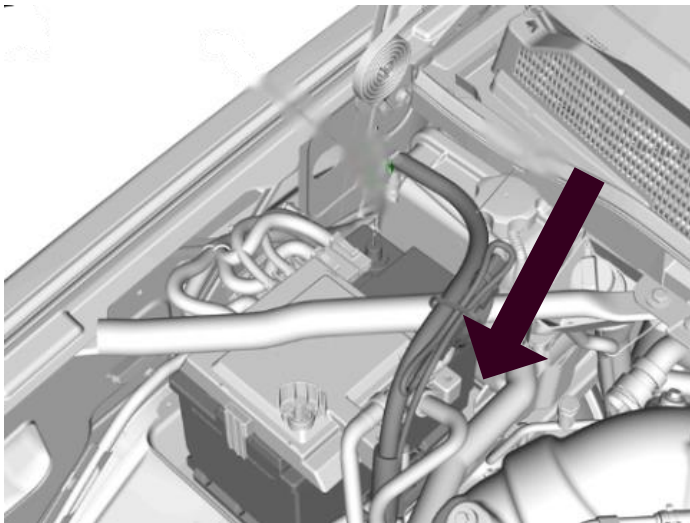
Service Procedure

Note: A training video was created to supplement the written service procedure below. The training video is available on the GM Center of Learning web site (centerlearning.com) to aid technicians with this repair. After logging into the website, U.S. dealers should select the GM Media Tube app. Perform a search for N212329840. The course number is 56521.16V. Canadian dealers should access the "Video On Demand" site within the Resources page of the Centre of Learning. Select Feature Topics followed by "TAC Talk" February 2022 Feature Topic".

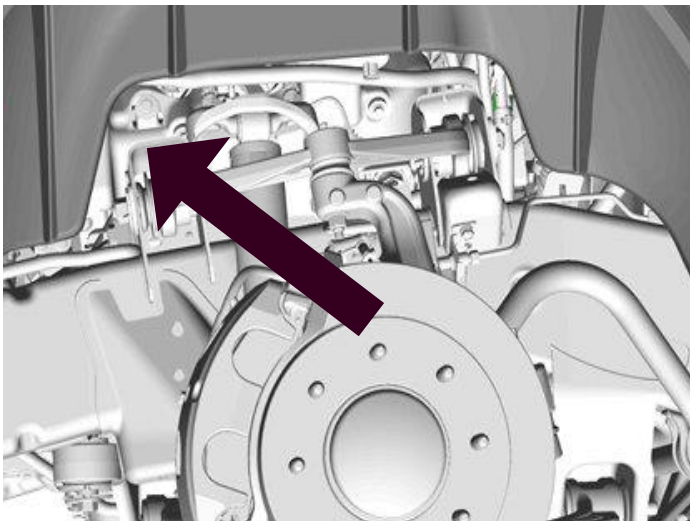
DANGER: When performing the following repairs, ensure the engine and coolant are at room temperature. When removing the engine block heater, the coolant in the engine will drain out. This coolant may injure the technician if the coolant is hot.

Note: It is critical that the radiator surge tank is topped off with an additional **1.6 L (2 qt)** of coolant to fill the upper and lower radiator surge tank chambers. If the coolant tank is not purged and filled properly, there will be air pockets in the coolant tank which will require the customer to return to the dealership to address low coolant warning.

1. Remove the new service engine heater power cord from the box and uncoil the cord.
2. Lower the engine heater element end of the new power cord to the underside of the vehicle.



- Start lowering the cord inboard of the battery toward the front of dash.



- It should come out in the area identified above.

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3. Raise the vehicle and remove the right front wheel. Refer to *Tire and Wheel Removal and Installation (8-Lug Wheel)* in SI.
4. Remove the right front wheelhouse liner. Refer to *Front Wheelhouse Liner Replacement - Right Side* in SI.
5. Looking through the area between the frame and suspension, locate the engine block heater.

Note: It is not necessary to drain the radiator. The engine block coolant will be drained when the engine coolant heater is removed.



Note: The removal of the old coolant heater element requires a 30mm Socket wrench. The installation of the new coolant heater element requires a 26mm socket wrench.

6. Place a large drain pan under the vehicle to capture the coolant. Remove the engine coolant heater. Refer to *Engine Coolant Heater Replacement (L5P)* in SI.
7. After removing the original block heater, take care to remove the old cured thread sealant in the block. Failure to remove the old thread sealant will result in cross threading or binding of the replacement block heater.

Caution: Do not under torque the engine coolant heater. This can result in a coolant leak. A torque wrench, with tactile or audible feedback when torque has been achieved, should be used. Tighten to 90 N.m. (66 lb ft). DO NOT OVERTIGHTEN. Hand start the block heater carefully and secure at least 3 full turns before further tightening with a socket wrench.

Note: The new engine block heater element has the thread sealer applied at the time of manufacture. DO NOT INSTALL ADDITIONAL SEALER to the threads.

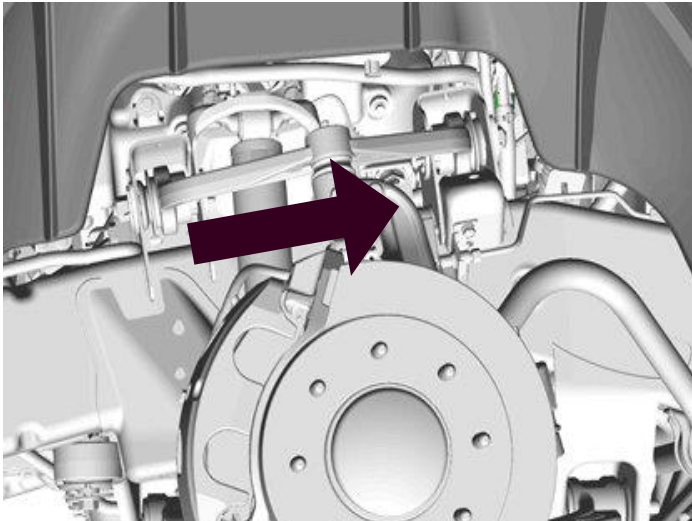


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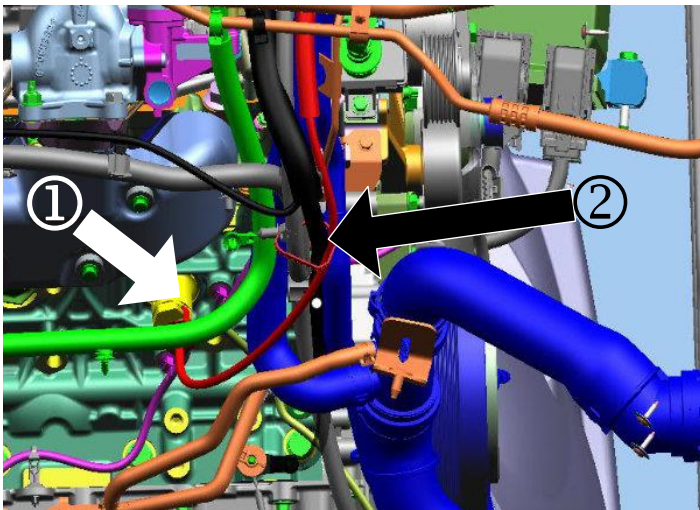


8. Hand start the block heater carefully and secure at least 3 full turns before further tightening with a socket wrench.
9. Tighten to 90 N.m. (66 lb ft). DO NOT OVERTIGHTEN. A torque wrench, with tactile or audible feedback when torque has been achieved, should be used.



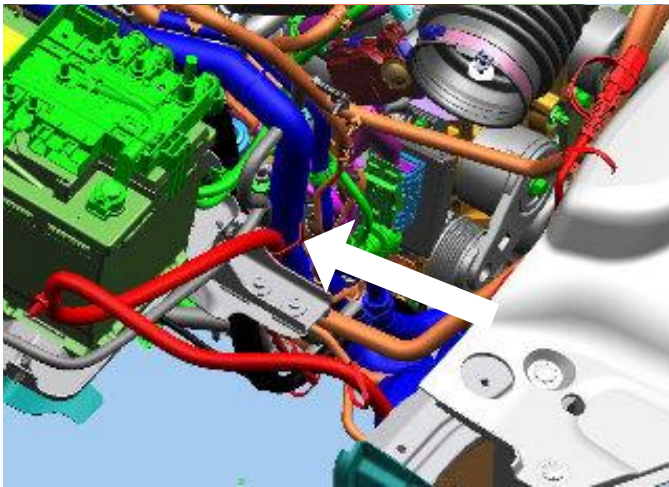
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10. Slide the new power cord forward in the vehicle, toward the coolant heater element. Place the power cord connector near the coolant heater element. DO NOT CONNECT the power cord to the heater element at this time, it will be connected after the cooling system pressure test.



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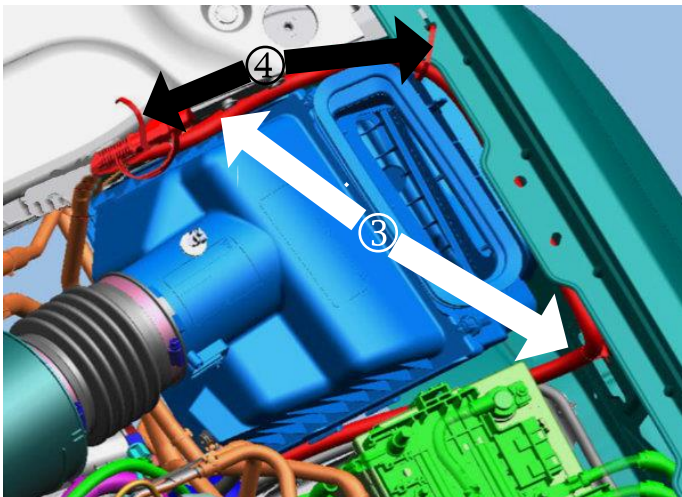
11. Route the new engine coolant heater power cord (shown in red) to the upper motor compartment. Begin at the Element (1) and secure the wire tie (2) around the negative battery cable (black) and the engine chassis harness (grey).
12. Lower the vehicle.



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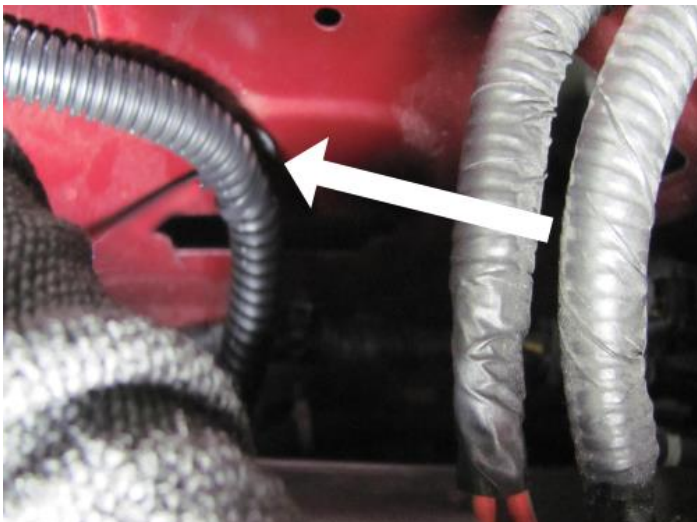
13. Route the power cord (shown in red) as shown and secure to the surge tank hose (blue) with a wire tie.

Engine Compartment Routing Overview



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Push pin attachments (3), wire tie attachments (4).

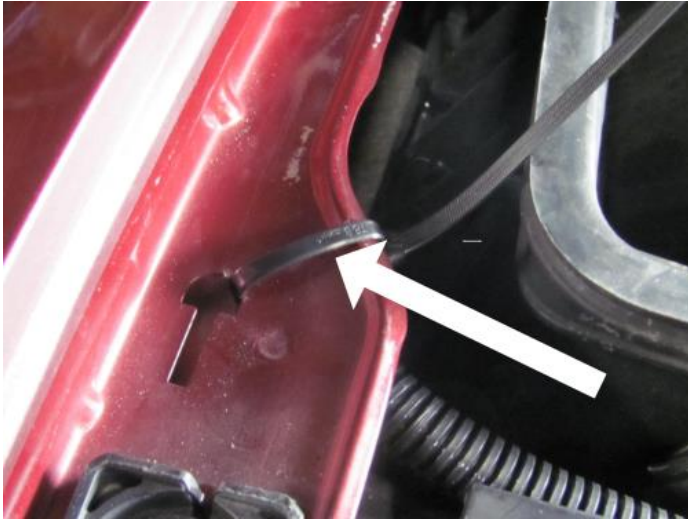


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14. Position the power cord along the inner fender and secure to the existing hole using the first (closest to the heater element) push pin wire tie attached to the harness.



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15. Secure the power cord to the fender flange with a wire tie as shown. Some vehicles may have a hood seal or headlamp attachment at this location. Position the wire tie under the seal/bracket.



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16. Locate the drill location on the front compartment front sight shield. Mark the location.

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17. Drill a 5mm (13/64 in.) hole in the marked area. Use care to not damage components below the drill location.
18. Route the power cord from the fender flange area under the front compartment front sight shield.



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19. Create a gentle bend in the power cord and place the power cord plug over the hole in the site shield. Ensure the prongs on the power cord plug are facing toward the right fender.

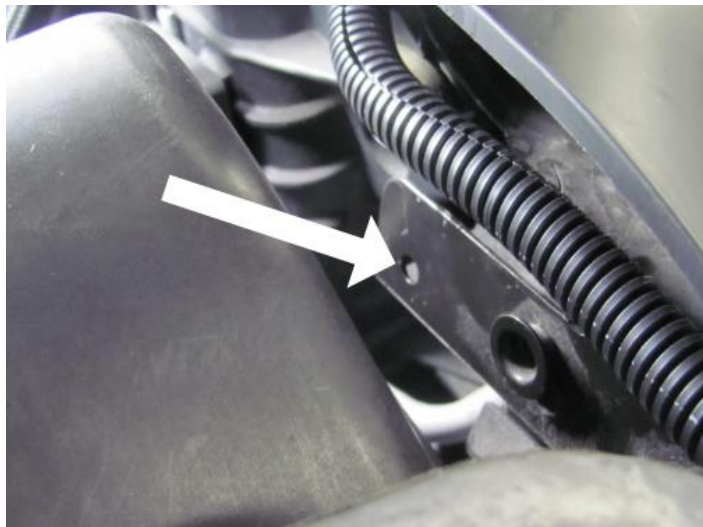


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20. Secure the power cord plug to the to the front compartment front sight shield with a wire tie as shown. Ensure the prongs are facing toward the right front fender.



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21. Locate the hole on the passenger side upper tie bar bracket.



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22. Position the harness up under the front compartment front sight shield and secure it using the second (closest to the electrical plug) push pin wire tie on the harness.

23. Trim all wire ties as necessary.

Important: The Vac-N-Fill Procedure must be used when refilling the cooling system. If the Vac-N-Fill Procedure is not used, the customer will return to the dealership with a low coolant condition.

24. Fill the cooling system. Refer to *Cooling System Draining and Filling (Vac N Fill)* in SI.

25. Pressurize the cooling system. Refer to *Cooling System Leak Testing (L5P)* in SI.

26. Partially raise the vehicle and inspect the new engine block heater for coolant leaks.

- Inspect the interface between the engine block heater and the engine block (threaded area) for leaks.
- Check the cavity where the electrical connector fits for leaks.

27. Plug the new engine coolant heater cord assembly into the heater and secure it with the metal clip.

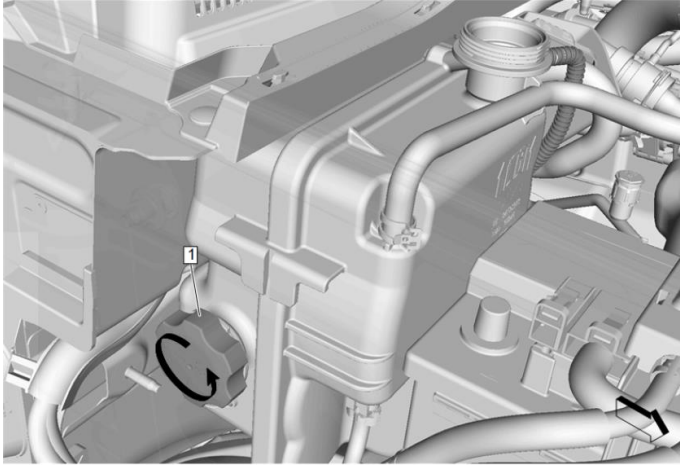
28. Reinstall the right front wheelhouse liner. Refer to *Front Wheelhouse Liner Replacement - Right Side* in SI.

29. Reinstall the right front wheel and tire. Refer to *Tire and Wheel Removal and Installation (8-Lug Wheel)* in SI.

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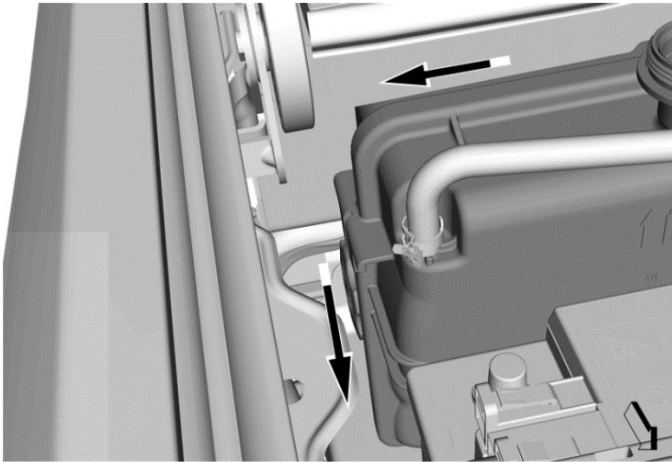


30. Remove the leak testing equipment from the surge tank.



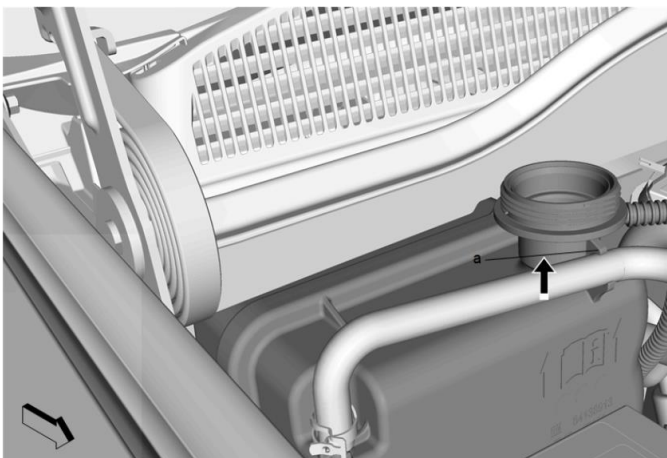
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31. Open the lower radiator surge tank cap (1) a ¼ of a turn counterclockwise.



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32. Using a funnel, slowly fill the radiator surge tank with **1.6 L (2 qt)** of coolant to fill the lower radiator surge tank chamber. The overflow tube will flow to the left and down as shown above, and slowly move to the lower radiator surge tank chamber.



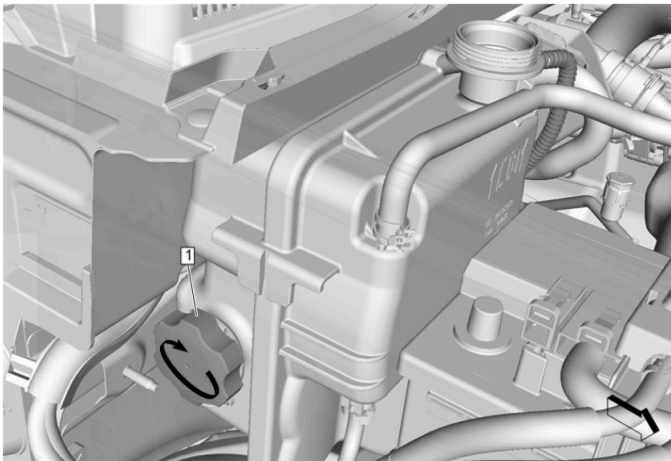
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33. When completed, the radiator surge tank should be filled as shown above (a).

Note: Be sure the lower radiator surge tank cap is completely closed and locked in place to avoid getting air into the cooling system after filling. There will be a snap sound when the cap is completely closed and locked in place.

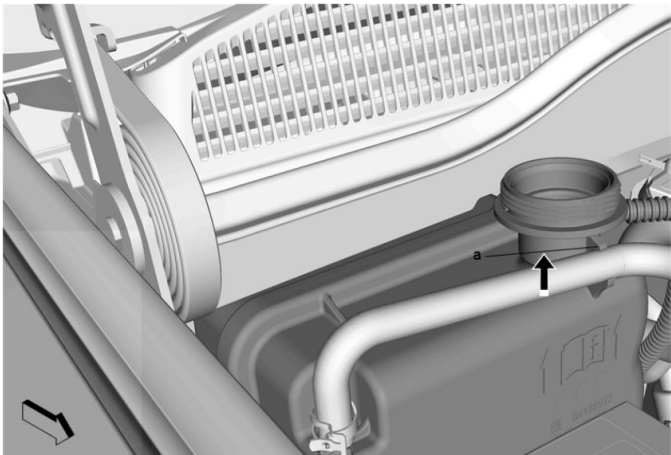
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34. Close the lower radiator surge tank cap (1) clockwise.



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35. If the coolant level is below the fill neck level shown (a) add coolant to the fill neck level shown.

36. Install radiator surge tank cap by turning counterclockwise.

37. Rinse away any excess coolant from the engine and the engine compartment.

38. Perform the following check list before delivering the vehicle to the customer:

- Drain/fill/burp coolant system with vac/fill equipment.
- Cord attached with 4 tie straps.
- Cord attached with 2 push pin wire ties.
- Engine block heater torqued to 90 N.m. (66 lb ft).
- Cord properly connected to heater with metal clip engaged.

Dealer Responsibility

All new, used, GM Certified Used, courtesy transportation vehicles, dealer shuttle vehicles, etc. in dealers' possession and subject to this program must be held and inspected/repared 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.

Dealers are to service all vehicles subject to this program at no charge to customers, regardless of mileage, age of vehicle, or ownership, through April 30, 2024. Customers who have recently purchased vehicles sold from your vehicle inventory,

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and for which there is no customer information indicated on the involved vehicle 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. Program 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 program enters your vehicle inventory or is in your facility for service through April 30, 2024, you must take the steps necessary to be sure the program correction has been made before selling or 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 field action. 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 field action may be a violation of law in several states.

Courtesy Transportation – For USA & Canada

Courtesy transportation is available for customers whose vehicles are involved in a product program and still within the warranty coverage period. See General Motors Service Policies and Procedures Manual for courtesy transportation program details.

Customer Reimbursement

Customer requests for reimbursement of previously paid repairs to correct the condition described in this bulletin are to be submitted to the dealer prior to or by April 30, 2023. See General Motors Service Policies and Procedures Manual, Section 6.1.11 – Product Field Action Customer Reimbursement Procedure (USA & Canada) or local Policies and Procedures, for details.

GM bulletins are intended for use by professional technicians, NOT a "do-it-yourselfer". They are written to inform these technicians of conditions that may occur on some vehicles, or to provide information that could assist in the proper service of a vehicle. Properly trained technicians have the tools, equipment, safety instructions, and know-how to do a job properly and safely. If a condition is described, **DO NOT** assume that the bulletin applies to your vehicle, or that your vehicle will have that condition. See your dealer for information on whether your vehicle may benefit from the information.



**We Support
Voluntary Technician
Certification**

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April 2022

This notice applies to your vehicle, **VIN:** _____

Dear General Motors Customer:

Our records indicate that the engine-block heater in your 2017 – 2019 model year Chevrolet Silverado 2500/3500 or GMC Sierra 2500/3500 is currently deactivated. The engine-block heater in your vehicle was deactivated in order to prevent a short-circuit condition from developing in the engine-block heater cable or in the terminals that connect the heater cable to the block heater.

We are now ready to activate your vehicle's engine-block heater by replacing the heater and the related cord.

What We Will Do: Your GM dealer will replace the engine-block heater and cord. This service will be performed for you at **no charge until April 30, 2024**. After that, any applicable warranty will apply.

What You Should Do: To limit any possible inconvenience, we recommend that you contact your dealer as soon as possible to schedule an appointment for this repair. By scheduling an appointment, your dealer can ensure that the necessary parts will be available on your scheduled appointment date.

Reimbursement: 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 condition described in this letter, 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. The completed form and required documents must be presented to your dealer or received by the Reimbursement Department by April 30, 2023, unless state law specifies a longer reimbursement period.

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)
Chevrolet	1-800-222-1020	711 / 1-800-833-2438
GMC	1-800-462-8782	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	

We truly appreciate you taking the time to remedy your vehicle as we know your time is valuable. We want you to know that we will do our best, throughout your ownership experience, to ensure that your GM vehicle provides you many miles of enjoyable driving.

Neelie O'Connor
Global Executive Director
Customer Experience Operations

Enclosure
N212346580

GLOBAL SAFETY FIELD INVESTIGATIONS
DCS6082
URGENT - DISTRIBUTE IMMEDIATELY

Date: March 16, 2022

Subject: REVISION: N212346580-01 – Customer Satisfaction Program
Block Heater Restore

Models: 2017 – 2019 Chevrolet Silverado 2500/3500
2017 – 2019 GMC Sierra 2500/3500
Equipped with 6.6L, 8-cylinder diesel engine (RPO L5P)

To: All General Motors Dealers

This bulletin is being revised to allow all locations to perform the full repair and to add the customer letter. Please discard all previous copies of N212346580.

The customer mailing will begin in late April 2022.

END OF MESSAGE
GLOBAL SAFETY FIELD INVESTIGATIONS