## Service Update 18085 Crankshaft Position Sensor Connector Terminal Seal Issue



#### Reference Number: N172124340

# Release Date:March 2018Revision: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.

		Model Year			
Make	Model	From	То	RPO	Description
Chevrolet	Volt	2018	2018		

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	Terminal seal was not fully seated into the cavity of the crankshaft position sensor connector.
Correction	Inspect and replace crankshaft position sensor and connector as needed.

#### Parts

Quantity	Part Name	Part No.	
1	Exhaust System Front Gasket	23238284	
1	Connector Kit – Wiring Harness *Brown	19329387	
1	Crankshaft Position Sensor	12662533	

**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.

It is estimated that only 136 involved vehicles will require parts replaced.

Due to the small number of vehicles anticipated that will need this fix, and the limited initial parts availability, dealers are encouraged <u>not</u> to order recall parts for use as shelf stock.

Note: Use the VIN and the GM Electronic Parts Catalog (EPC) to determine which parts to order.

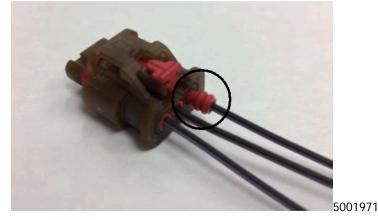
#### Warranty Information

Labor Operation	Description	Labor Time	Trans. Type	Net Item
9103720	Replace crankshaft position sensor and crankshaft position sensor	1.7	ZFAT	N/A
	connector (includes inspection)			
9103727	Inspect Only – No Further Action Required	0.3	ZFAT	N/A

#### **Service Procedure**

2.

1. Lift the vehicle. Refer to Lifting and Jacking the Vehicle in SI.

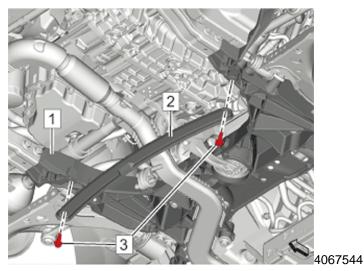


- Inspect the crankshaft position sensor connector.
- If the crankshaft position sensor does NOT have a terminal seal protruding as shown, no further action is required. Proceed to step 17.

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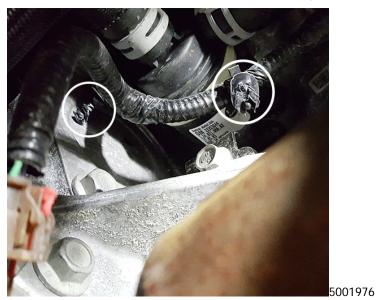
- If the crankshaft position sensor connector has a terminal seal protruding as shown, proceed to step three.
- 3. Remove the Front Compartment Splash Shield. Refer to Front Compartment Splash Shield Replacement in SI.
- 4. Remove the Front Underbody Air Deflector. Refer to Front Underbody Air Deflector Replacement in SI.



- 5. Remove the drivetrain and front suspension brace (2) from the drivetrain and front suspension cradle (1) by removing the bolts (3).
- 6. Remove the exhaust front pipe and exhaust muffler section from the vehicle **as one piece**.
  - 6.1 Remove the exhaust front pipe nuts.

**NOTE:** In the following step, you can disregard steps 1 and 2 in the linked procedure as we are dropping the exhaust as one piece. It is not necessary to loosen the exhaust pipe clamp to drop the exhaust with the drivetrain and front suspension brace removed.

6.2 Remove the exhaust. Refer to Exhaust Muffler Replacement in SI.



- 7. Remove the two indicated harness clips from the engine block (already removed from block in picture, use picture for location reference).
- 8. Cut the crankshaft position sensor wires as close to the connector as possible.

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- 9. Measuring from the connector, cut the new connector kit so you have 3 inches (76.2mm) of wire to work with as shown.
- 10. Using the provided butt connectors, crimp the new connector kit to the crankshaft position sensor harness. Refer to *Wire to Wire Repair* in SI.
- 11. Replace the Crankshaft Position Sensor. Refer to *Crankshaft Position Sensor Replacement* in SI. Be sure to perform the Crankshaft Position Variation Learn afterwards.



- 12. Reinstall the harness clips to the block and connect the crankshaft position sensor connector to the crankshaft position sensor. Repair should look as shown above after completion.
- 13. Reinstall the exhaust, making sure to replace the front gasket. Refer to Exhaust Front Pipe Replacement and Exhaust Muffler Replacement in SI.
- 14. Install the drivetrain and front suspension brace. Torque the bolts to 58 N-m (43 lb-ft).
- 15. Install the Front Compartment Splash Shield. Refer to Front Compartment Splash Shield Replacement in SI.
- 16. Install the Front Underbody Air Deflector. Refer to Front Underbody Air Deflector Replacement in SI.
- 17. Lower the vehicle.

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### **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 <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.

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, <u>DO NOT</u> 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.



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### GLOBAL SAFETY FIELD INVESTIGATIONS DCS4689 URGENT - DISTRIBUTE IMMEDIATELY

Date: March 13, 2018

Subject: 18085 - Service Update Crankshaft Position Sensor Connector Terminal Seal Issue

Models: 2018 Chevrolet Volt

To: All General Motors Dealers

General Motors is releasing Service Update 18085 today. The total number of U.S. vehicles involved is approximately 116. Please see the attached bulletin for details.

### Global Warranty Management (GWM)

The Investigate Vehicle History (IVH) screen in the GWM system will be updated March 14, 2018. A list of involved vehicles in dealer new inventory is attached to this message. Please hold all warranty transactions until IVH has been updated.

END OF MESSAGE GLOBAL SAFETY FIELD INVESTIGATIONS