

# Service Update

## 33530 Engine Ground Cable In Contact With Half-Shaft



**Reference Number:** N16203353

**Release Date:** November 2016

**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.

Make	Model	Model Year		RPO	Description
		From	To		
Cadillac	ATS	2016	2016	F46 KL9 LTG	AWD Stop/Start System 2.0L Engine
Cadillac	CTS	2016	2016	F46 KL9 LTG	AWD Stop/Start System 2.0L 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.

<b>Condition</b>	Certain 2016 model year Cadillac ATS and CTS vehicles equipped with AWD (RPO F46), Stop/Start System (RPO KL9), and a 2.0L engine (RPO LTG), may have an engine ground cable (EGC) that could come in contact with the passenger side half-shaft assembly, which may cause the EGC to wear through the insulation and the cable diameter may reduce over time. If this occurs, a noise near the front passenger's side may be heard while the vehicle is in motion. If the insulation on the EGC is worn through to the bare cable, arcing may occur between the EGC and half-shaft at engine start. If the EGC is severed while the vehicle is in motion, and the driver brakes to a stop and the vehicle enters stop/start mode, the engine will shut off and various driver information center (DIC) messages will display. The vehicle will not be able to re-start.
<b>Correction</b>	Dealers are to use a tie strap to attach the EGC to the engine harness. If there is extensive damage, the engine ground cable can either be repaired or the engine wire harness can be replaced.

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### Parts

Quantity	Part Name	Part No.
1	200 MM Adjustable Tie Strap	11509086
As Required, (Submit as Net Item)	Woven Polyester Electrical Tape (PET)	*1089482
As Required, (Submit as Net Item)	Auto - Electric Super Sealant-Black	*84079
1, If Required	Harness Asm - Eng Wrg	23323458
1, If Required	Harness Asm - Eng Wrg	23402551
1, If Required	Harness Asm - Eng Wrg	23402552
1, If Required	Harness Asm - Eng Wrg	23402543
1, If Required	Harness Asm - Eng Wrg	23376893
1, If Required	Dexcool Coolant	12378390 (US) 10953456 (Canada)
1, If Required	Dexron Transmission Fluid	88865601 (US) 19264717 (Canada)
1, If Required	Gasket-Ctltc Conv	22759470
2, If Required	Clip-Trans Fl Clr Pipe	24205103
2, If Required	Nut-Whl Drv Shaft	11610571

\* Contact Kent Automotive at 1-888-937-5368 (USA), 1-800-563-1717 (Canada), or [www.kent-automotive.com](http://www.kent-automotive.com). Dealers that do not have a Kent Automotive account or representative must advise the Customer Service Representative that the part(s) is being used for this GM bulletin to obtain special bulletin pricing. **Do not order from GMCCA.**

### Warranty Information

Labor Operation	Description	Labor Time	Trans. Type	Net Item
9102605	Reposition and Secure Engine Ground Cable, Includes Inspection	0.3	ZFAT	N/A
	ADD: Install Cable Seal Patch and PET	0.3		*
	ADD: Install Engine Harness, includes: Remove and Install Powertrain, Service A/C and Coolant	14.4		N/A

\* The amount identified in "Net Item" should represent the actual sum total of the current GMCCA dealer net price for the Auto-Electric Super Sealant-Black and Woven Polyester Electrical Tape (PET) needed to perform the required repairs, not to exceed \$1.65 USD, \$2.05 CAD, plus applicable Mark-Up or Landed Cost (for Export).

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#### Service Procedure

1. Raise the vehicle hood.



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2. Locate the engine ground cable, positioned directly above the right front axle shaft.

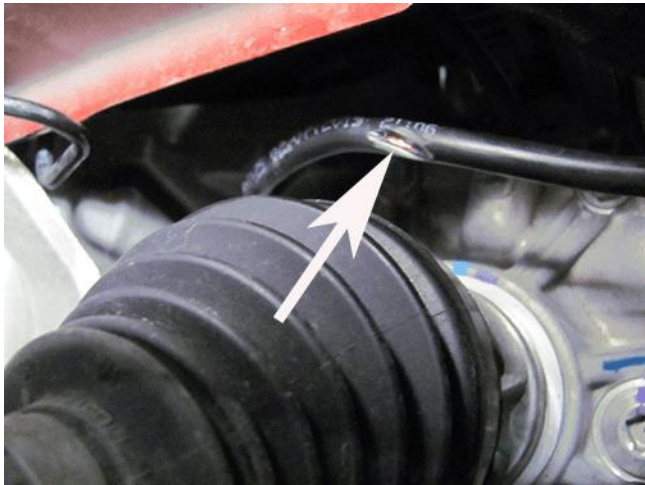


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3. Inspect the cable and determine if it is making contact with the axle shaft or CV boot.

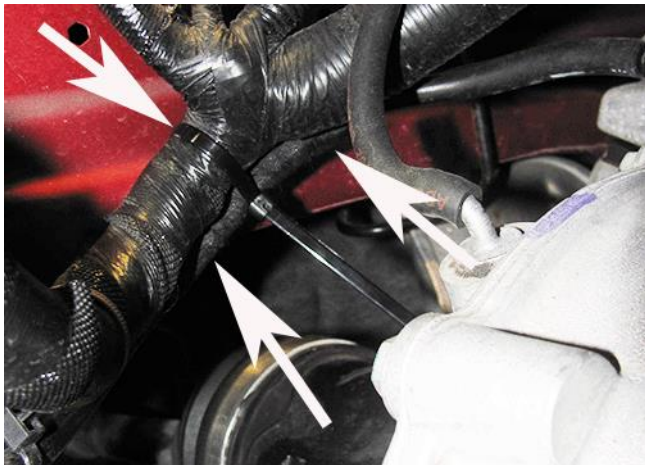
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- If the cable is making contact and the **cable insulation is damaged**, proceed to the Battery Cable Inspection and Repair section below.
  - If the cable is not making contact and the **insulation is not damaged**, proceed to step #4.
4. Raise the engine ground cable up to the main harness.
  5. Loosely install the wire tie strap midway between the existing two cable locators.



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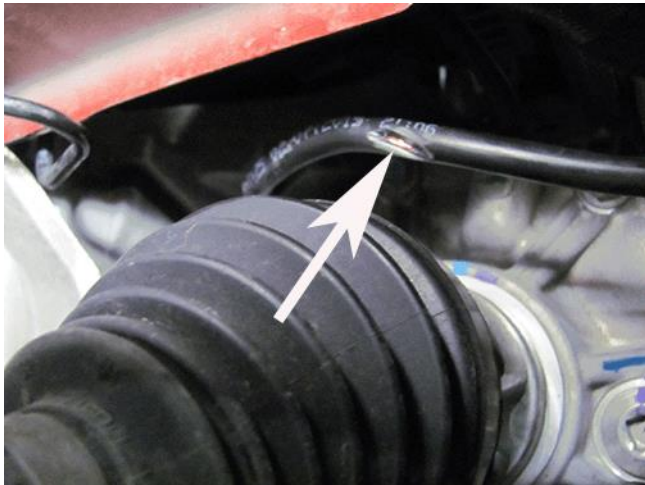
6. Position the ground cable under the main harness toward the center of the vehicle. Ensure that the cable is not outboard of the harness, it may contact the frame rail.
7. Tighten and trim the wire tie strap.

#### **Battery Cable Inspection and Repair**

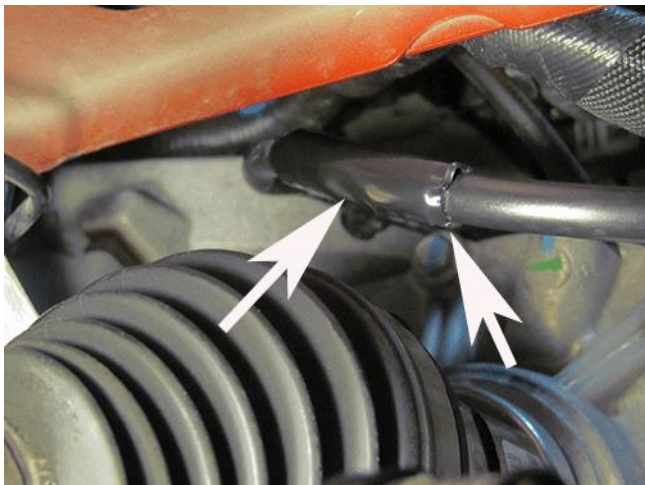
1. Raise the vehicle on a hoist. Refer to *Lifting and Jacking the Vehicle (Base)* in SI.
2. Remove the right front wheel. Refer to *Tire and Wheel Removal and Installation* in SI.
3. Remove the right engine lower front splash shield. Refer to *Engine Lower Front Splash Shield Replacement (Non V-Series)* in SI.

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4. Inspect the engine ground cable and determine the extent of the damage.
  - If **only the cable insulation is damaged** and no copper conductors are worn through, proceed to step #5 below.
  - If the **insulation is damaged and any copper conductors are worn through**, proceed to the Engine Wiring Harness Replacement section below.
5. Clean the repair area on the ground cable with a general purpose adhesive cleaner.
6. Peel the paper backing off of the super sealant patch.

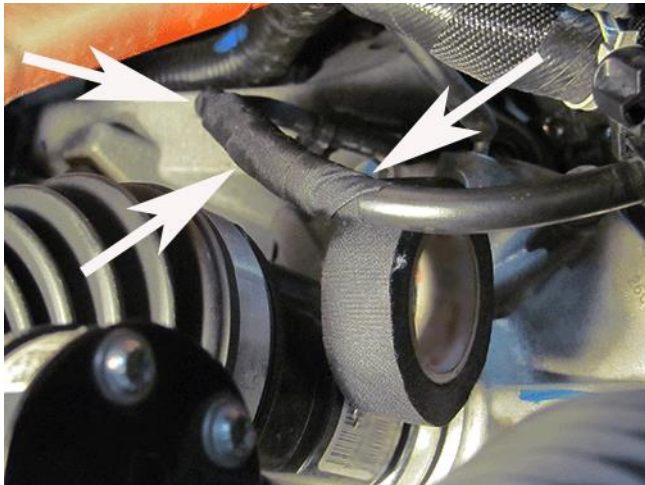


7. Center the patch over the damaged area of the ground cable. Firmly press the patch into place around the cable ensuring the seal is weather tight.



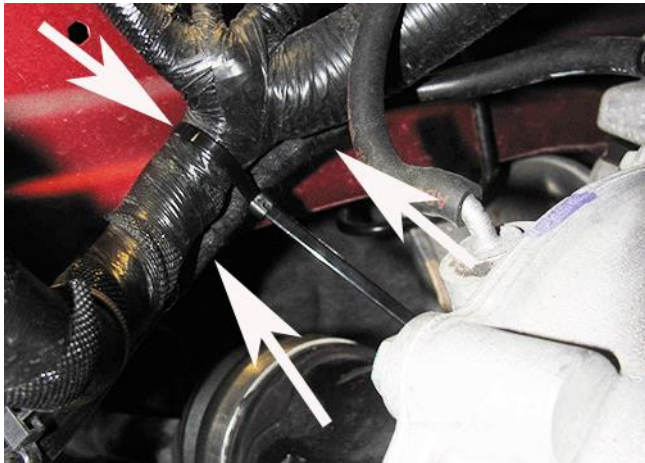
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8. Wrap the repair area with polyester electrical tape (PET). Begin the wrap 13mm (1/2 in.) outboard of the sealant patch and continue 13mm (1/2 in.) past the patch. Rewrap the repair area with a second layer of PET.
9. Raise the engine ground cable up to the main harness.
10. Loosely install the wire tie strap midway between the existing two cable locators.



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11. Position the ground cable under the main harness toward the center of the vehicle. Ensure that the cable is not outboard of the harness, it may contact the frame rail.
12. Tighten and trim the wire tie strap.
13. Reinstall the right engine lower front splash shield. Refer to *Engine Lower Front Splash Shield Replacement (Non V-Series)* in SI.
14. Reinstall the right front wheel. Refer to *Tire and Wheel Removal and Installation* in SI.
15. Lower the vehicle. Refer to *Lifting and Jacking the Vehicle (Base)* in SI.

#### Engine Wiring Harness Replacement

**Note:** When removing the drivetrain and front suspension from the vehicle, it is not necessary to separate the engine from the transmission or suspension frame. This drivetrain and suspension frame removal is being performed to provide access to the engine wiring harness replacement.

1. Remove the drivetrain and front suspension. Refer to *Engine Replacement (LTG with All Wheel Drive)* in SI.
2. Document all of the engine wiring harness locators, fasteners, routing and connections.
3. Remove the damaged engine wiring harness.
4. Using the documentation from step # 2, install the new engine wiring harness.

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5. Reinstall the drivetrain and front suspension. Refer to *Engine Replacement (LTG with All Wheel Drive)* in SI.
6. Inspect the engine wiring harness to axle shaft to ensure there is proper clearance.

#### 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.



GLOBAL SAFETY FIELD INVESTIGATIONS  
DCS4267  
URGENT - DISTRIBUTE IMMEDIATELY

Date: November 28, 2016

Subject: 33530 - Service Update  
Engine Ground Cable In Contact With Half-Shaft

Models: 2016 Cadillac ATS  
2016 Cadillac CTS  
Equipped with 2.0L Engine (RPO LTG), AWD (RPO F46), and  
Stop/Start System (RPO KL9)

To: All General Motors Dealers

General Motors is releasing Service Update 33530 today. The total number of U.S. vehicles involved is 8,121. Please see the attached bulletin for details.

**Global Warranty Management (GWM)**

The Investigate Vehicle History (IVH) screen in the GWM system will be updated November 28, 2016. A list of involved vehicles in dealer new inventory is attached to this message. Please hold all warranty transactions until the VIN appears in IVH.

END OF MESSAGE  
GLOBAL SAFETY FIELD INVESTIGATIONS