Bulletin No.: 14588B

Date: November 2015

## SPECIAL COVERAGE

SUBJECT: Special Coverage Adjustment - Engine Cooling Fan Motor

MODELS: 2011-2015 Chevrolet Caprice

2012-2016 Chevrolet Impala

**Equipped as Police Patrol Vehicles (RPO 9C1 or 9C3)** 

This bulletin has been revised to add the 2016 MY Chevrolet Impala. Please discard all copies of bulletin 14588A.

#### CONDITION

On some 2011-2015 model year Chevrolet Caprice and 2012-2016 model year Chevrolet Impala police patrol vehicles, idling the engine for extended periods of time can prematurely wear the engine-cooling-fan motor. In this condition, the motor may fail to operate or operate noisily. This condition can also damage motor-control relays in the vehicle's underhood bussed electrical center (UBEC).

#### SPECIAL COVERAGE ADJUSTMENT

This special coverage covers the condition described above for a period of 6 years or 100,000 miles (160,000 km), whichever occurs first, from the date the vehicle was originally placed in service, regardless of ownership.

Dealers are to diagnose and replace fan motors per PI1384 regarding the semi-annual preventative maintenance check for police vehicle cooling fans. The repairs will be made at no charge to the customer.

For vehicles covered by Vehicle Service Contracts, all eligible claims with repair orders on or after July 23, 2015, are covered by this special coverage and must be submitted using the labor operation codes provided with this bulletin. Claims with repair orders prior to July 23, 2015, must be submitted to the Service Contract provider.

#### **VEHICLES INVOLVED**

All involved vehicles are identified by Vehicle Identification Number on the Applicable Warranties section in GM Global Warranty Management system. Dealership service personnel should always check this site to confirm vehicle involvement prior to beginning any required inspections and/or repairs. It is important to routinely use this tool to verify eligibility because not all similar vehicles may be involved regardless of description or option content.

#### PART INFORMATION

Parts required to complete this special coverage are to be obtained from General Motors Customer Care and Aftersales (GMCCA).

**Note:** Use the vehicle identification number (VIN) and the GM Electronic Parts Catalog (EPC) to determine which part to order.

Part Number	Description	Quantity/Vehicle
22762591	MOTOR KIT, ENG CLG FAN	2
89018696	MOTOR KIT, ENG CLG FAN (RIGHT)	1
89018695	MOTOR KIT, ENG CLG FAN (LEFT)	1
89018693	BLADE KIT, ENG CLG FAN (RIGHT)	1
89018691	BLADE KIT, ENG CLG FAN (LEFT)	1
92191945	MOTOR KIT, ENG CLG FAN	2
84008379	RELAY JUMPER HARNESS	1
19300089	DURASEAL SPLICE TUBE	2
19300091	DURASEAL SPLICE TUBE	4
12377900	NYOGEL LUBE	As Required
12337820	TIE STRAP	4
11561734	RIVET	2

#### SERVICE PROCEDURE

<u>Note:</u>: There are multiple Technical Service Bulletins related to the coolant fan motors in these vehicles. Please refer to SI for proper diagnostic procedures.

#### **CAPRICE ONLY**

- 1. Using the diagnostic steps in SI and Technical Service Bulletins, determine if the engine coolant fan motors need to be replaced.
- If necessary, replace the coolant fan motors. Refer to Engine Coolant Fan Motor Replacement in SI.

#### **IMPALA ONLY**

Inspect the vehicle and service history to determine if the updated engine cooling fan wiring harness kit has been installed.

- If the revised engine coolant fan wiring harness has been installed, proceed to step #1 below.
- If the revised engine coolant fan wiring harness has NOT been installed, proceed to the Engine Cooling Fan Wiring Harness Installation section below. After completing the wiring harness installation, proceed to step #1 below.
- 1. Using the diagnostic steps in SI, determine if the engine coolant fan motors need to be replaced.
- 2. If necessary, replace the coolant fan motors. Refer to *Engine Coolant Fan Motor Replacement in SI*.

#### ENGINE COOLANT FAN MOTOR WIRING HARNESS INSTALLATION

1. Disconnect the battery. Refer to Battery Negative Cable Disconnection and Connection in SI.

2. Remove the passenger side motor compartment front cross brace.



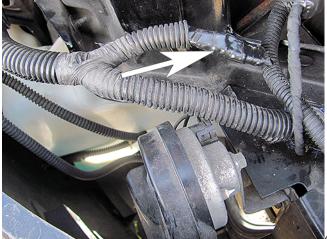
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- 3. Remove the passenger side head lamp and the G101 ground bolt.
- 4. Disconnect the cooling fan wiring harness from the fans. Carefully disengage the retainer clips of the factory harness from the fan shroud. Use care to not damage the attachment features on the shroud, they will be reused.

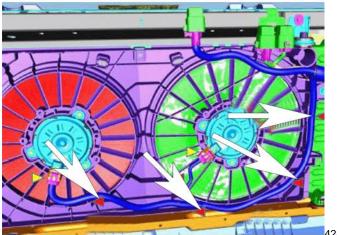


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5. Cut the cooling fan wiring branch at the headlamp opening area. Measure approximately 100mm from the main wire bundle. This branch contains the White, Black, Grey and Light Blue wires. Remove and discard the cut off fan harness.



6. Seal the four cut leads of the harness with four Duraseal Splice Tubes. Wrap the cut harness section with electrical tape to prevent moisture damage.



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- 7. Route the new harness along the bottom of the fan shroud and engage the retainer clips into the mounting holes in the fan shroud.
- 8. Add Nyogel Lube to the terminals of both fan connectors on the new harness. Connect the fan connectors to the fan motors.
- 9. Route the new fan harness into the passenger side headlamp pocket area.



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10. Route the harness through the headlamp area, inboard of the windshield washer fluid bottle, then outboard of the UBEC. Loosely install three tie straps, do not tighten the straps at this time.

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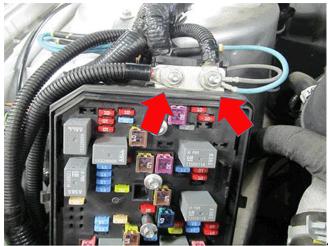
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11. Route the fan control wires (D-GN and D-BU) outboard of the UBEC to the engine harness, in the area where it enters the UBEC. Place the two harness fuses outboard of the UBEC.

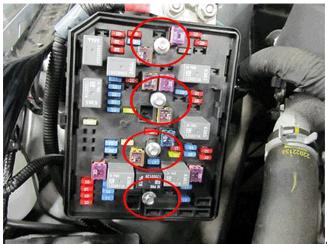


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- 12. Route the ground wire of the new harness through the passenger side head lamp opening and install over the G101 ring terminal (see below). Reinstall the ground bolt. **Tighten:** Tighten the bolt to 10 +/- 2 N-m.
- 13. Remove the UBEC cover.

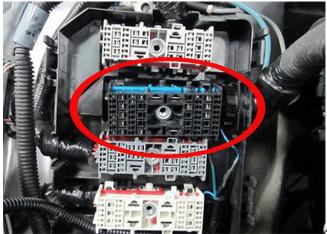


14. Remove the nuts from both UBEC battery studs, and remove all ring terminals. The convoluted conduit on the left ring terminal may not be present in some vehicles. It may appear as double-crimped fusible links to a single ring terminal.



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15. Unscrew the four UBEC connector bolts and remove the UBEC.

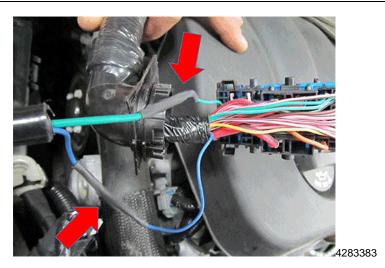


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- 16. Remove the engine harness connector and turn over to access the wiring.
- 17. Find the fan control wires in the engine harness: D-GN wire, 22 AWG, circuit 335 (Cavity H7), and D-BU wire, 22 AWG, circuit 473 (Cavity C7).

**Note:** There is 1 additional D-GN/WH stripe wire (22 AWG) and 1 DK-GN wire (20 AWG). The required D-GN wire is a 22 AWG wire.

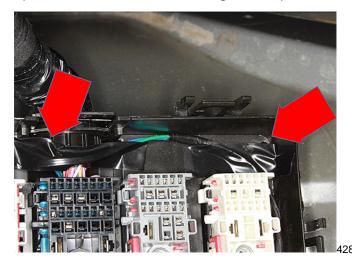
18. Extract the D-GN and D-BU control wires and cut the wires. Stagger wire cut points to permit splices to lay end-to-end. Apply electrical tape to the wire ends going into the UBEC connector.



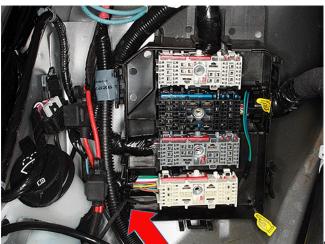
19. Splice the new fan relay control wires from new harness (D-GN and D-BU) to the matching cut wire ends leading to PCM. Apply heat to the heat shrink tubes to seal the splices.



20. Return the spliced wires into the UBEC splash shield between the connectors, routing them so they will not be crushed during the UBEC re-installation. Using a tie strap, secure the spliced wires near the existing tie strap on the engine harness connector.



21. Use electrical tape to keep the two wire leads in place during UBEC re-installation.



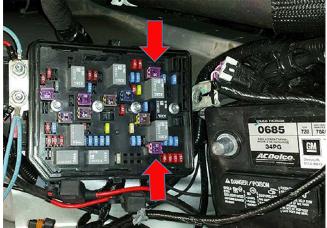
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- 22. Route the two wires out of the UBEC.
- 23. Install the UBEC back in place and tighten the 4 connector bolts. **Tighten:** Tighten the bolt to 6 +/- 2 N-m.

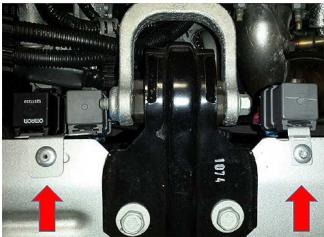


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24. Re-install all original ring terminals to the UBEC battery studs. Install the 2 ring terminals (RED) of the new harness to the studs as follows: route the shortest ring terminal lead to the RH UBEC stud and the longest lead to the LH battery stud. Orient the ring terminals with the crimp up and displaced angularly to permit all the ring terminals to lie flat. Reinstall the nuts. **Tighten:** Tighten the nuts to 15 +/- 3 N-m.



- 25. Remove, and discard, both Cooling Fan Fuses in UBEC. They are on each side of the Cooling Fan Relays.
- Reinstall the UBEC cover.



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27. Position the relay and bracket assemblies on the upper radiator support as shown, Mark the drill location with a paint pen. Note that the double relay bracket is located on the passenger side of the upper engine mount.

**Note:** Avoid drilling spot welds in the radiator support.

- 28. Using a 5mm drill bit, drill the 2 relay bracket mounting holes in the upper radiator support. Treat all exposed metal with GM Super Lube®, or equivalent.
- 29. Install the relay brackets to the radiator support using two (2) rivets.
- 30. Re-install the passenger side cross brace. Tighten: Tighten the nuts to 10 N-m.
- 31. Check all routing, especially the position of the J-Case fuse holders and the leads to the UBEC near the cross brace.



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- 32. Tighten the 3 tie straps after checking all routing of the new harness.
- 33. Install the passenger side head lamp.
- 34. Reconnect the negative battery cable. **Tighten:** Tighten the nut to 6 +/- 2 N-m.

35. Perform a test of the fan harness by turning the engine ON, and activating the A/C. Both fans should start operating instantly.

#### CUSTOMER REIMBURSEMENT - For U.S.

Customer requests for reimbursement of previously paid repairs to correct the condition described in this bulletin are to be submitted to the dealer by November 30, 2016, unless otherwise specified by state law. If this is not convenient for the customer, the customer may mail the completed Customer Reimbursement Request Form and all required documents to the GM Customer Assistance Center. Repairs must have occurred within the 6 years of the date the vehicle was originally placed in service, or 100,000 miles, whichever occurs first.

All reasonable and customary costs to correct the condition described in this bulletin should be considered for reimbursement. Any questions or concerns should be reviewed with your GM representative prior to processing the request.

When a customer requests reimbursement, they must provide the following:

- A completed Customer Reimbursement Request Form. This form is mailed to the customer or can be obtained through GM GlobalConnect.
- The name and address of the person who paid for the repair.
- Paid receipt confirming the amount of the repair expense, a description of the repair, and the person or entity performing the repair.

**IMPORTANT:** GM requires dealers to approve or deny a reimbursement request within 30 days of receipt. If a reimbursement request is approved, the dealer should immediately issue a check to the customer and submit an appropriate warranty transaction for the incurred expense. If a reimbursement request is denied, the dealer <u>MUST</u> provide the customer with a clear and concise explanation, in writing, as to why the request was denied. The bottom portion of the Customer Reimbursement Request Form may be used for this purpose. If the denial was due to missing documents, the customer can resubmit the request when the missing documents are obtained, as long as it is still within the allowed reimbursement period.

Warranty transactions for customer reimbursement of previously paid repairs are to be submitted as required by GM Global Warranty Management. Additional information can also be found in Warranty Administration Bulletin 11-00-89-004.

## **CUSTOMER REIMBURSEMENT** - For Canada and Export

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 November 30, 2016. Repairs must have occurred within the 6 years of the date the vehicle was originally placed in service, or 160,000 kilometers, whichever occurs first.

When a customer requests reimbursement, they must provide the following:

- Proof of ownership at time of repair.
- Original paid receipt confirming the amount of unreimbursed repair expense(s) (including Service Contract deductibles), a description of the repair, and the person or entity performing the repair.

All reasonable and customary costs to correct the condition described in this bulletin should be considered for reimbursement. Any questions or concerns should be reviewed with your GM representative prior to processing the request.

#### COURTESY TRANSPORTATION - For U.S. and Canada

The General Motors Courtesy Transportation program is intended to minimize customer inconvenience when a vehicle requires a repair that is covered by the New Vehicle Limited Warranties. The availability of courtesy transportation to customers whose vehicles are within the warranty coverage period and involved in a product program is very important in maintaining customer satisfaction. Dealers are to ensure that these customers understand that shuttle service or some other form of courtesy transportation is available and will be provided at no charge. Dealers should refer to the General Motors Service Policies and Procedures Manual for Courtesy Transportation guidelines.

#### WARRANTY TRANSACTION INFORMATION

Submit a transaction using the table below. All transactions should be submitted as a ZREG transaction type, unless noted otherwise.

Vehicles Still Covered Under Applicable New Vehicle Limited Warranties			
Labor Code	Description	Labor Time	Net Item
4039949	Engine Cooling - Customer Concern Not Duplicated	0.1-0.3	N/A
4032280	Engine Coolant Fan Motor Replacement		N/A
	- Caprice	0.7	
	- Impala	1.1	
	ADD: Install Relay Jumper Harness (Impala Only)	1.4	

**Note:** For reimbursements on vehicles covered under warranty, refer to the Policies and Procedures Manual.

Vehicles No Longer Covered Under Applicable New Vehicle Limited Warranties			
Labor Code	Description	Labor Time	Net Item
9900215	Engine Cooling - Customer Concern Not Duplicated	0.1-0.3	N/A
9900216	Engine Coolant Fan Motor Replacement		N/A
	- Caprice	0.7	
	- Impala	1.1	
	ADD: Install Relay Jumper Harness (Impala Only)	1.4	
9900217	Customer Reimbursement Approved	0.2	*
9900218	Customer Reimbursement Denied - For U.S. Dealers Only	0.1	N/A

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

\* The amount identified in "Net Item" should represent the dollar amount reimbursed to the customer.

### **CUSTOMER NOTIFICATION**

General Motors will notify customers of this special coverage on their vehicles (see copy of typical customer letter included with this bulletin - actual divisional letter may vary slightly).

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Dear General Motors Customer:

As the owner of a 2011-2015 model year Chevrolet Caprice or 2012-2016 model year Chevrolet Impala police patrol vehicle, your satisfaction with our product is very important to us.

On some of these vehicles, idling the engine for extended periods of time can prematurely wear the engine-cooling-fan motor. In this condition, the motor may fail to operate or operate noisily. This condition can also damage motor-control relays in the vehicle's underhood bussed electrical center (UBEC).

# <u>Do not take your vehicle to your GM dealer as a result of this letter unless you believe that your vehicle has the condition as described above.</u>

**What We Have Done:** General Motors is providing owners with additional protection for the condition described above. If this condition occurs on your vehicle within 6 years of the date your vehicle was originally placed in service or 100,000 miles (160,000 km), whichever occurs first, the condition will be repaired for you at **no charge**. Diagnosis or repair for conditions other than the condition described above is not covered under this special coverage program.

What You Should Do: If you believe that your vehicle has the condition described above, repairs and adjustments qualifying under this special coverage must be performed by a General Motors dealer. You may want to contact your GM dealer to find out how long they will need to have your vehicle so that you may schedule the appointment at a time that is convenient for you. This will also allow your dealer to order parts if they are not already in stock. Keep this letter with your other important glove box literature for future reference.

**Reimbursement:** If you have 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 November 30, 2016, unless state law specifies a longer reimbursement period.

If you have any questions or need any assistance, just contact your dealer or the appropriate Customer Assistance Center at the number listed below. You may also contact the Fleet Action Center at 1-800-353-3867.

Division	Number	Text Telephones (TTY)
Chevrolet	1-800-222-1020	1-800-833-2438
Guam	65-6267-1752	
Puerto Rico – English	1-800-496-9992	
Puerto Rico – Español	1-800-496-9993	
Virgin Islands	1-800-496-9994	

We are sorry for any inconvenience you may experience; however, we have taken this action in the interest of your continued satisfaction with our products. Terry M. Inch Executive President Global Connected Customer Experience

Enclosure 14588

# GM CUSTOMER CARE AND AFTERSALES DCS3832 URGENT - DISTRIBUTE IMMEDIATELY

Date: November 2, 2015

Subject: 14588B – Special Coverage Adjustment Revised

Engine Cooling Fan Motor

Models: 2011-2015 Chevrolet Caprice

2012-2016 Chevrolet Impala

Equipped as Police Patrol Vehicles (RPO 9C1 or 9C3)

To: All Chevrolet Dealers

Attention: General Manager, Service Advisor, Service Manager, Parts and

Service Director, Parts Manager, New or Used Vehicle Sales

Manager, and Warranty Administrator

General Motors is releasing Special Coverage Adjustment 14588B today. The 2016 Chevrolet Impala MY has been added. Please discard all copies of bulletin 14588A.

END OF MESSAGE GM CUSTOMER CARE AND AFTERSALES