



Service Bulletin

File in Section: -

Bulletin No.: PI1069A

Date: June, 2014

PRELIMINARY INFORMATION

Subject: Cooling Fans Do Not Run or Run with Key Off

Models: 2012-2013 Chevrolet Impala
2014 Chevrolet Impala Limited (VIN W)
Equipped with RPOs 9C1 or 9C3

This PI has been revised to update the Recommendation/Instructions, Parts Information and Warranty Information. Please discard PI1069.

Condition/Concern

Some customers may comment that the cooling fans do not run or that the fans run with the key off. This may be caused by one or more of the following:

- Cooling fan relays sticking.
- Cooling fan motors drawing too much amperage, sticking and causing damage to the relays and accessory wiring block.

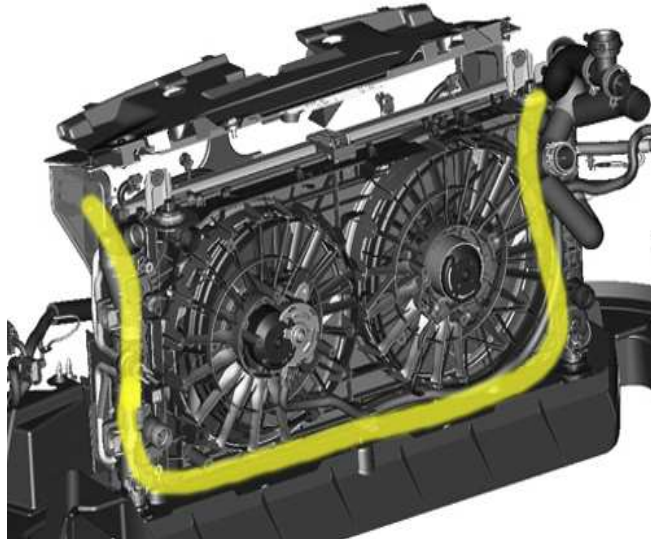
Recommendation/Instructions

Technicians should install the engine cooling fan wiring harness kit following the procedure below:

1. Disconnect the battery.
2. Remove both engine cross braces.



3. Remove the driver side head lamp and remove the ground bolt.



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4. Route the new harness with the factory harness (where the fan connectors are) along the lower radiator support below the fans and towards the passenger side along the cables near main battery and outboard of the UBEC.
5. Route the fan control wires (dk. green and dk. blue) above the UBEC to the engine harness, in the area where it enters the UBEC.



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6. Feed the ground wire of the new harness through the driver side head lamp opening and install the ground bolt.

Tighten

Tighten the bolt to 16 N•m (12 lb ft).

7. Adjust the new harness in place with the wiring for the fan connectors and relays.
8. Disconnect the fan connectors from the factory harness and connect the new harness fan connectors.

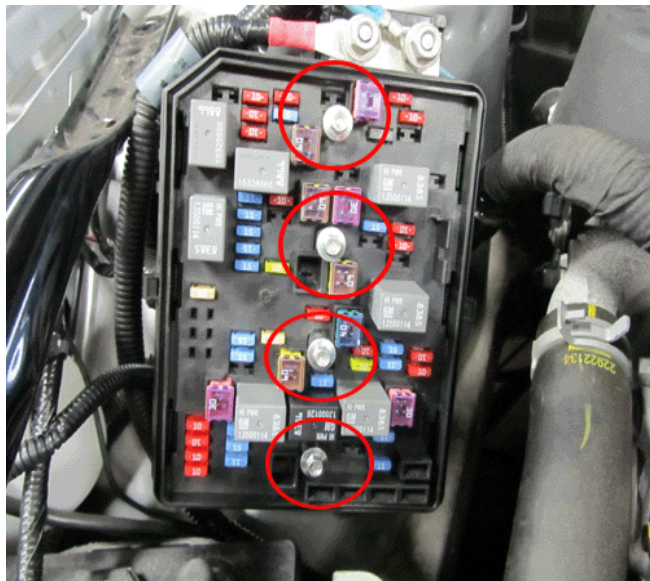


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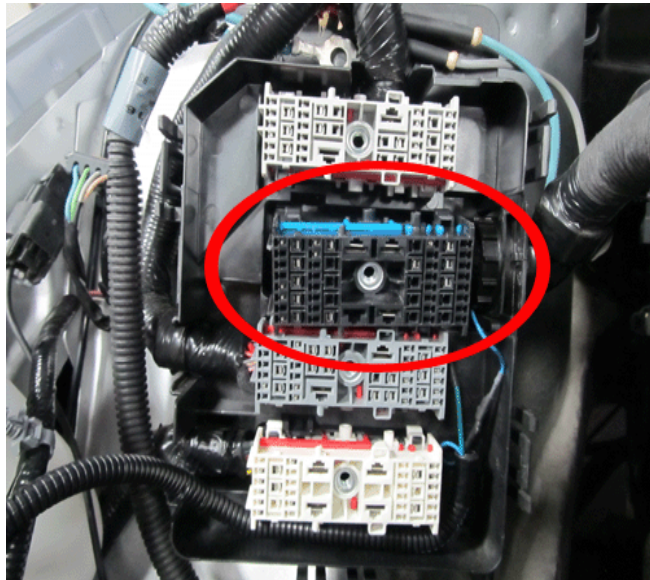
9. Remove the UBEC cover, remove the nuts from UBEC battery studs and install fan harness 2 ring terminals (RED) to studs as follows: route the shortest ring terminal lead to the RH UBEC stud and the longest lead to the LH battery stud. Orient the ring terminals with the crimp up and displaced angularly to permit the rings to lie flat. Reinstall the nuts.

Tighten

Tighten the nuts to 6 N•m (53 lb in).



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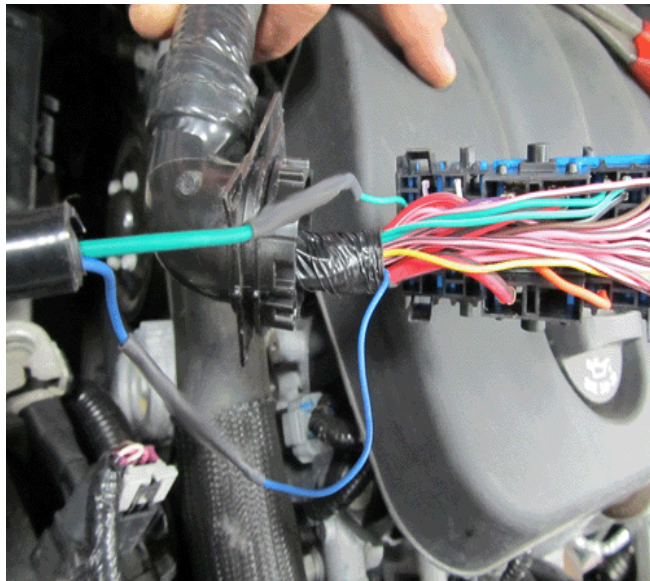


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- 9.1. Remove the UBEC mounting bolts. Refer to the pictures above.
- 9.2. Remove the engine harness connector and turn over to access the wiring.
- 9.3. Find the fan control wires in the engine harness: Dk. Green wire, 22 AWG, circuit 335, and Dk. Blue wire, 22 AWG, circuit 473.

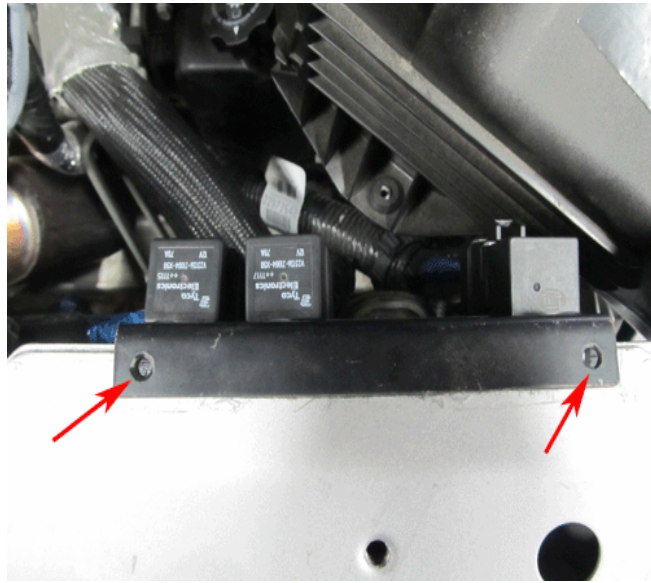
Note: There are 2 additional green w/white wires and 1 green wire, which are larger in wire gauge (20 AWG). The required dark green wire is a 22 AWG wire.

- 9.4. 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 tape to the wires ends going to the UBEC connector.



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- 9.5. Splice the new fan relay control wires from new harness (D-GN and D-BU) to cut wire ends leading to PCM. Return wires into conduit and tape engine harness/new harness. Install a tie strap to the new harness to the engine harness.



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10. Place the relay and bracket assembly in place on the upper radiator support and mark where the two holes should be drilled. Refer to the picture above.

Note: Avoid drilling spot welds in the radiator support.

11. Using a 7/32" drill, drill 2 mounting holes in the upper radiator support. Treat all exposed metal with GM Super Lube® or equivalent and allow to dry before installing the bracket.
12. Install the relay bracket to the radiator support in the driver side area (with the single relay towards the LH side of the vehicle) and attach to vehicle with (2) 3/16" rivets.
13. Install the UBEC back in place and install the 4 mounting bolts.
14. Install the UBEC cover.
15. Using tie straps, tie strap the harness in place.
16. Install both engine cross braces.
17. Install the driver side head lamp.
18. Check all routing, especially the position of the maxi-fuse holders and the leads to the UBEC.
19. Perform a test of the fan harness by turning the engine ON and turn on A/C. The front fans should start operation instantly.

Parts Information

To order the Engine Cooling Fan Wiring Harness Kit, contact Kerr Industries at 800-585-1774.

Part Number	Description
WRH-HD	Engine Cooling Fan Wiring Harness Kit (Includes wire crimps and rivets)

Warranty Information

For vehicles repaired under warranty, use:

Labor Operation	Description	Labor Time
2680028*	Install Engine Cooling Fan Wiring Harness Kit	1.5 hrs

*This is a unique Labor Operation for Bulletin use only. It will not be published in the Labor Time Guide.

