File in Section:

Bulletin No.: PI1121

Date: December, 2013

# PRELIMINARY INFORMATION

Subject: A/C Inoperable, Blows Warm Air

Models: 2013-2014 Chevrolet Spark

Condition/Concern

Some customers may comment that the A/C blows warm air or that the A/C is inoperable.

This may be caused by the evaporator freezing, causing poor circulation and/or compressor failure.

### Recommendation/Instructions

Prior to performing this PI, be sure the most current version of PI1013 has been performed.

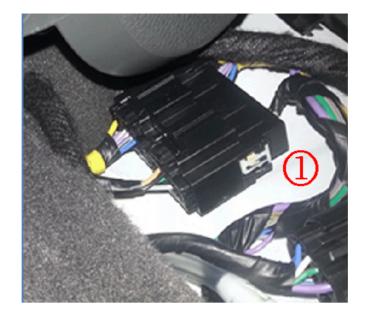
Replace the air conditioning evaporator hose assembly, a new low side pressure switch to the hose and install a new harness lead following the steps below:

- 1. Recover the A/C system. Refer to Refrigerant Recovery and Recharging in SI.
- 2. Remove air conditioning evaporator hose assembly.
  - 2.1. Remove the air inlet snorkel.
  - 2.2. Remove the windshield washer fill tube.
  - 2.3. Remove the radiator surge tank mounting bolts and block heater connecting plug holder (if equipped) and reposition.



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- 2.4. Mark each line as shown and using a pipe cutter or suitable tool, cut the A/C evaporator hose for easy removal.
- 2.5. Remove the air conditioning evaporator hose assembly nut to air conditioning evaporator thermal expansion valve.
- 2.6. Remove the air conditioning evaporator hose assembly nut to air conditioning condenser.
- 2.7. Remove the air conditioning evaporator hose assembly bolt to air conditioning compressor.
- 2.8. Remove the air conditioning evaporator hose assembly mounting bracket nuts.
- 2.9. Remove the air conditioning evaporator hose assembly.
- 3. Remove the glove box assembly.
- 4. Remove the front side door sill trim plate. Refer to Front Side Door Sill Trim Plate Replacement.





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## Legend

- Inline Body Connector IP connector
- (1) (2)
- 5. Under the dash, disconnect the inline body connector and IP connector from the harness and disconnect the washer hose.



6. Remove the harness clip shown above.



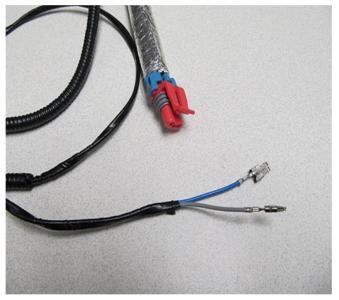
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7. Locate the harness grommet under the hood and remove from the opening. Pull through the harness and connectors from the interior of the vehicle.

Important: DO NOT pull the harness through opening by the grommet.



8. Remove the tape from the harness at the grommet and slide down past the conduit.



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9. With the new supplied harness with the connector shown above, insert the harness with terminal ends through the center of the grommet and pull through up to the conduit.



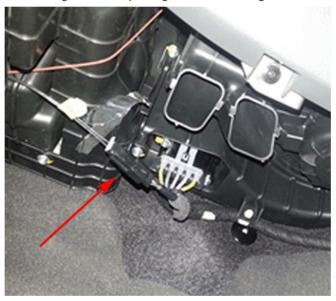




- 10. Insert the terminals into IP in-line connector. Refer to the pictures above.
- 11. Insert the wiring harness back through the I/P opening and install the grommet.



- 12. Position the grommet back to its original position and tape the harness to the grommet.
- 13. Insert the wiring harness back through the I/P opening and install the grommet.



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14. Inside the vehicle, disconnect the EVAP TEMP sensor connector.



15. With the second part of the new harness kit, install the pigtail connector to the EVAP TEMP sensor connector.



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16. Install the terminals into the FWD in-line connector as shown above.



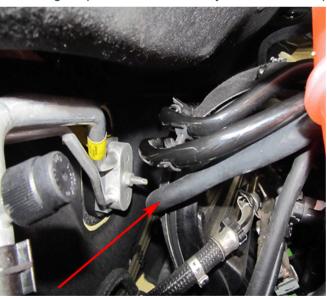
- 17. Wrap sponge tape around the EVAP TEMP connector as shown above.
- 18. Connect the remaining harness connectors and washer hose and install harness clip.
- 19. Install the front side door sill trim plate. Refer to Front Side Door Sill Trim Plate Replacement.



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- 20. Route the wires along the A/C system wiring harness under the HVAC module assembly and attach with four evenly spaced zip ties.
- 21. Secure the wiring harness with tie straps to secure in place.
- 22. Route the wire harness on the side of the brake pressure modulator and with five or six evenly spaced zip ties attach to the factory installed harness.
- 23. Disconnect the left rear (LR) and right rear (RR) brake pipes from the brake pressure modulator valve (BPMV) and plug the lines and valve.
- 24. Install the new air conditioning evaporator hose assembly.
  - 24.1. Install the new air conditioning evaporator hose assembly under the brake pipes and place into position.



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24.2. Move the coolant surge tank hose out of the way for clearance to the air conditioning evaporator thermal expansion valve stud.

Note: Do not install the A/C evaporator hose onto the air conditioning evaporator thermal expansion valve stud yet.

24.3. Install front of the A/C hose past the radiator cross bar support into position.



- 24.4. Place the hose into position (with the expansion valve stud in between the lines as shown) and gently pull back and install onto the air conditioning evaporator thermal expansion valve stud.
- 24.5. Make sure the front part of the hose is in proper position for compressor mounting and brackets.
- 24.6. Install the air conditioning evaporator hose assembly nut to air conditioning evaporator thermal expansion valve.

#### **Tighten**

Tighten the nut to 22 Nem (16 lb ft).

24.7. Install the air conditioning evaporator hose assembly nut to air conditioning condenser.

## **Tighten**

Tighten the nut to 22 N•m (16 lb ft).

24.8. Install the air conditioning evaporator hose assembly bolt to air conditioning compressor.

#### **Tighten**

Tighten the bolt to 22 N•m (16 lb ft).

24.9. Install the air conditioning evaporator hose assembly mounting bracket nuts.

#### Tighten

Tighten the nuts to 10 N•m (89 lb in).

24.10. Install the radiator surge tank mounting bolts and block heater connecting plug holder (if equipped).

#### Tighten

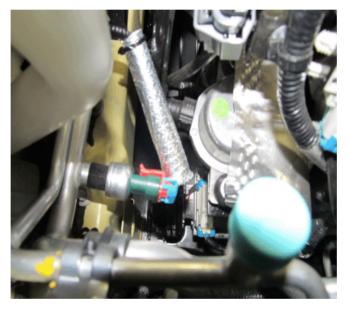
Tighten the bolts to 8N•m (71 lb in).

- 24.11. Install the air inlet snorkel.
- 25. Connect the left rear (LR) and right rear (RR) brake pipes to the brake pressure modulator valve (BPMV).

## **Tighten**

Tighten to 18N•m (13 lb ft).





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26. Install the new low pressure switch to the hose assembly.

## Tighten

Tighten to 3-5 N•m (26-44 lb in).

27. Connect the new harness connector to the low pressure switch.



- 28. Install the C-Clip to the hose assembly.
- 29. Bleed the hydraulic brake system. Refer to Hydraulic Brake System Bleeding.
- 30. Recharge the A/C system. Refer to Refrigerant Recovery and Recharging in SI.

## **Parts Information**

The parts kit can be obtained from the Warranty Parts Center (WPC). Please use the form at the end of this bulletin to order the parts.

Part Number	Description	
WPC# 739	Air Conditioning Evaporator Hose Assembly, Low Pressure Switch and Wiring Harness Kit	

# **Warranty Information**

For vehicles repaired under warranty, use:

Labor Operation	Description	Labor Time
4480108*	Replace Air Conditioning Evaporator Hose Assembly and Install Switch and Harness	1.9 hrs
*This is a unique labor operation for bulletin use only. It will not be published in the Labor Time Guide.		

#### Parts Request Form - Warranty Parts Center

Use this form ONLY for U.S., Canadian and Mexico Dealers. Export markets located outside of North America must contact their regional Technical Assistance Center for assistance.

To: Warranty Parts Center

e-mail: warrantypartscenter USA@gm.com

or WPC Fax: 248-371-0192

Attn: Amina Winfrey

Part Being Requested: WPC# 739 Air Conditioning Evaporator Hose Assembly, Low Pressure Switch and Wiring Harness Kit

Dealer BAC (U.S.) /Dealer Code (Canada)/Dealer Number (Mexico):

Dealer Name:

Dealer Address:

Dealer Contact Person:

Dealer Contact Person:

Repair Order Number:

Kepair Order Number:

**Important:** If you do not receive the part within 2 business days after e-mailing or faxing your part request to the Warranty Parts Center, please call WPC Customer Assistance at 248-371-9901/9902.