



November 2015

Dealer Service Instructions for:

Safety Recall R57 / NHTSA 15V-676 Air Conditioning Hose

Models

2015 (KL) Jeep® Cherokee

NOTE: This recall applies only to the above vehicles equipped with a 2.4L engine (sales code ED6 or ED8) built from October 01, 2014 through June 18, 2015 (MDH100100 through 061814).

IMPORTANT: Many of the vehicles within the above build period have already been inspected or repaired and, therefore, have been excluded from this recall.

IMPORTANT: Some of the involved vehicles may be in dealer new vehicle inventory. Federal law requires you to complete this recall service on these vehicles before retail delivery. Dealers should also consider this requirement to apply to used vehicle inventory and should perform this recall on vehicles in for service. Involved vehicles can be determined by using the VIP inquiry process.

Subject

The Air Conditioning (A/C) hose on about 75,500 of the above vehicles may have been misrouted during the manufacturing process. The A/C hose may come in contact with the engine exhaust manifold. Prolonged A/C hose contact with the engine exhaust manifold may result in a leak of the A/C refrigerant and/or A/C refrigerant oil. A/C refrigerant oil on a hot exhaust manifold could result in underhood smoke and/or an engine compartment fire.

Repair

The A/C hose routing must be inspected. Vehicles found with a misrouted A/C hose will have the hose replaced.

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Alternate Transportation

Dealers should attempt to minimize customer inconvenience by placing the owner in a loaner vehicle if inspection determines that A/C hose replacement is required and the vehicle must be held overnight.

Parts Information

Part Number	Description
68103259AE	Hose, Air Conditioning
68157533AA	Seal, Refrigerant Line (small)

NOTE: It is expected that less than 1000 vehicles globally will require replacement of the A/C hose (part number 68103259AE). Dealers will not receive automatic allocation of this part through Campaign ARO and should <u>NOT</u> order this part unless vehicle is known to have an actual need due to confirmation of misrouting of the A/C hose. As this part will not be required for most vehicles, this part will be <u>non-returnable</u>.

52014775AB Condenser, Air Conditioning

NOTE: It is expected that less than a few hundred vehicles globally will require replacement of the A/C condenser (part number 52014775AB). Dealers will not receive automatic allocation of this part through Campaign ARO and should <u>NOT</u> order this part unless vehicle is known to have an actual need due to confirmation of <u>both</u> misrouting of the A/C hose and loss of refrigerant. As this part will not be required for most vehicles, the part will be <u>non-returnable</u>.

68231471AA	Seal, Refrigerant Line (large)
06510520AA	Rivet, Fascia (MSQ = 12)
68224028AA	Refrigerant, R1234YF

Parts Return

No parts return required for this campaign.

Special Tools

The following special tool is required to perform this repair:

> NPN

Refrigerant Recovery Machine

Service Procedure

A. Inspect Air Conditioning (A/C) Hose Routing

- 1. Open the hood.
- 2. Remove and save the intake air resonator (Figure 1).

3. Inspect the air conditioning hose routing:

Figure 1 – Intake Air Resonator

- If the A/C hose is routed correctly, continue with Step 4 of this procedure (Figure 2).
- If the A/C hose is misrouted, and the <u>refrigerant has been lost</u> due to hose failure at the exhaust manifold, continue with Section B: Replace Air Conditioning Condenser (Figure 3).
- If the A/C hose is misrouted, but there is <u>no loss of refrigerant</u>, continue with Section C: Replace Air Conditioning Hose (Figure 3).
- 4. Install the intake air resonator.
- 5. Close the hood.
- 6. Return the vehicle to the customer.





Figure 2 - Correctly Routed A/C Hose



Figure 3 – Incorrectly Routed A/C Hose

B. Replace Air Conditioning Condenser

NOTE: The following procedure is required if the air conditioning hose requires replacement per the inspection in Section "A." *Very few vehicles are expected to require this repair.*

1. Disconnect and isolate the negative battery cable.

CAUTION: If equipped with an Intelligent Battery Sensor (IBS), disconnect the IBS connector first before disconnecting the negative battery cable.

2. Remove and save the radiator closure plastic panel (Figure 4).



Figure 4 – Radiator Closure Panel

- 3. Use the following procedure to remove the front fascia:
 - a. Raise the vehicle on the hoist.
 - b. Remove and save the right front wheel/tire assembly.
 - c. Remove and save the underbody splash shield.
 - d. Drill out the two outer rivets on the right and left side of the lower fascia (Figure 5).
 - e. Partially lower the vehicle from the hoist.



Figure 5 – Drill Out Rivets on Right and Left Side (right side shown)

f. Remove and save the three right and left side wheel opening splash shield-to-fascia bolts (Figure 6).

g. Remove and save the right and left side fascia bolts located behind the wheel opening splash shield (Figure 7).



Figure 6 – Wheel Opening Splash Shield-to-Fascia Bolts



Figure 7 – Hidden Fascia Bolt (right side shown)

- h. Disconnect the electrical connector located behind the left wheel opening splash shield (Figure 8).
- i. Lower the vehicle from the hoist.
- j. Partially unsnap the right and left side wheel opening molding (Figure 9).



Figure 8 – Electrical Connector Behind Left Wheel Opening Splash Shield



Figure 9 – Partially Disengage Front Wheel Opening Molding

- k. Remove and save the three right and left side upper fascia retaining bolts (Figure 10).
- 1. Carefully unsnap the front fascia and remove the fascia from the vehicle (Figure 11).



Figure 10 – Three Right and Left Side Upper Fascia Retaining Bolts



Figure 11 - Remove Front Fascia Assembly



Figure 12 – Transmission Oil Cooler and Bumper Beam

3. Remove and save the transmission oil cooler and oil cooler tube bracket. Then carefully set the cooler aside (Figure 12).

NOTE: Do not disconnect any of the transmission oil cooler tubes.

- 4. Remove and save the aluminum bumper beam (Figure 12).
- 5. Disconnect the electrical connector at the left side radiator air deflector (Figure 12).
- 6. Remove and save the left and right radiator air deflector (Figure 12).
- 7. Remove and save remove the nut and the A/C discharge/liquid line manifold from the A/C condenser.
- 8. Remove and save the four A/C condenser mounting bolts.

- 9. Carefully remove the original A/C condenser (Figure 13).
- 10. Transfer the refrigerant jumper tubes from the original A/C condenser to the new A/C condenser (Figure 14). Tighten the jumper tube retaining bolts to 15 ft. lbs. (20 N⋅m).

CAUTION: Be sure to install new refrigerant seals on both jumper tube fittings.

11. Transfer the condenser mounting brackets from the original A/C condenser onto the new A/C condenser (Figure 14).



Figure 13 – Remove Condenser



Figure 14 – Transfer Refrigerant Jumper Tubes and Mounting Brackets

- 12. Place the new condenser into position on the vehicle and install the four mounting bolts. Tighten the bolts to 70 in. lbs. (8 N⋅m).
- 13. Install the transmission oil cooler and tube bracket retaining bolts. Tighten the bolts to 80 in. lbs. (9 N·m).
- 14. Install the left and right side radiator air deflectors.
- 15. Connect the electrical connector at the left side radiator air deflector.
- Install the aluminum bumper beam. Tighten the retaining bolts to 35 ft. lbs. (45 N·m).
- 17. Install the front fascia using the following procedure:
 - a. Install the front fascia into position on the vehicle and snap into place.
 - b. Install the three right and left side upper fascia retaining bolts.
 - c. Install the radiator closure plastic panel.
 - d. Snap the right and left side wheel opening molding into position.
 - e. Raise the vehicle on the hoist.
 - f. Connect the electrical connector located behind the left wheel opening splash shield.
 - g. Connect the right and left side hidden fascia bolts located behind the wheel opening splash shield.
 - h. Install the underbody splash shield.
 - i. Lower the vehicle from the hoist.
- 18. Continue with Section C. Replace Air Conditioning Hose

C. Replace Air Conditioning Hose

NOTE: The following procedure is required if the air conditioning hose requires replacement per the inspection in Section "A." Very few vehicles are expected to require this repair.

1. <u>For vehicles that did not have the condenser replaced</u>, disconnect and isolate the negative battery cable.

CAUTION: If the vehicle is equipped with an Intelligent Battery Sensor (IBS), disconnect the IBS connector before disconnecting the negative battery cable.

- 2. For vehicles that did not have the condenser replaced, use an appropriate air conditioning refrigerant recovery machine to recover the refrigerant from the air conditioning system.
- 3. <u>For vehicles that did not have the condenser replaced</u>, disconnect the A/C liquid line bracket (Figure 15).
- 4. <u>For vehicles that did not have the condenser replaced</u>, remove the nut and the A/C discharge/liquid line manifold from the A/C condenser (Figure 15).
- 5. Separate the discharge line from liquid line manifold (Figure 15).



Figure 15 – Refrigerant Lines at Condenser

- 6. Replace the seal on the A/C liquid line (Figure 16).
- 7. Remove and save the nut on the A/C suction/discharge manifold to the A/C compressor (Figure 17).
- 8. Install masking tape over the open refrigerant line fittings and the condenser and discharge tube ports.
- 9. Lift the vehicle on an appropriate hoist.
- 10. For vehicles that did not have the condenser replaced, remove and save the right front tire.



Figure 16 – Condenser Liquid Line Seal



Figure 17 – A/C Suction/Discharge Manifold and Lines



Figure 18 – Disconnect the Lower Suction Line from Upper Suction Line

- 11. **For vehicles that did not have the condenser replaced**, partially remove the right front wheel opening plastic liner to gain access to lower A/C suction line fitting (Figure 18).
- 12. Disconnect the lower A/C suction line from the upper A/C suction line (Figure 18).
- 13. Remove and discard the original A/C line.
- 14. Place the new A/C line into position.
- 15. Connect the lower A/C line to the new upper A/C suction line. Tighten the retaining nut to 15 ft. lbs. (20 N·m) (Figure 18).
- 16. Install the right plastic wheel liner.

- 17. **For vehicles that had the condenser replaced**, install the two outer rivets on the right and left side of the lower fascia.
- 18. **For vehicles that had the condenser replaced**, connect the three right and left side wheel opening splash shield-to-fascia bolts.
- 19. Install the right front tire/wheel assembly. Tighten the lug bolts to 96 ft. lbs. $(130 \text{ N} \cdot \text{m})$.
- 20. Lower the vehicle from the hoist.
- 21. Remove the tape from the suction/discharge line fitting and the compressor port.
- 22. Install the lower A/C suction/discharge manifold to the A/C compressor and tighten the retaining nut to 15 ft. lbs. (20 N·m).
- 23. Remove the tape from the discharge line fitting.
- 24. Attach the discharge line to the liquid line manifold.
- 25. Install the A/C discharge/liquid line manifold to the A/C condenser and tighten the nut to 15 ft. lbs. (20 N \cdot m).
- 26. Connect the negative battery cable. If equipped with an Intelligent Battery Sensor (IBS), connect the IBS connector to the negative battery cable.

CAUTION: Do NOT run the engine with a vacuum pump in operation or with a vacuum present within the A/C system. Failure to follow this caution will result in serious A/C compressor damage

27. Using an appropriate air conditioning refrigerant recovery machine, evacuate the refrigerant system (Figure 19).

NOTE: Follow the refrigerant recovery machine instructions that apply to the machine being used.

28. Using an appropriate air conditioning refrigerant recovery machine, charge the A/C system with the proper refrigerant (Figure 19).

NOTE: Add 1.5 ounces of ND12 refrigerant oil if the condenser has been replaced. No refrigerant oil needs to be added if the only the A/C line was replaced.

- 29. Verify proper A/C function.
- 30. Remove the air conditioning refrigerant recovery machine from the vehicle.
- 31. Return the vehicle to the customer.



Figure 19 – Typical A/C Recovery and Charge Machine

Complete Proof of Correction Form for California Residents

This recall is subject to the <u>State of California Registration Renewal/Emissions</u> <u>Recall Enforcement Program</u>. Complete a Vehicle Emission Recall Proof of Correction Form (<u>Form No. 81-016-1053</u>) and supply it to vehicle owners residing in the state of California for proof that this recall has been performed when they renew the vehicle registration.

Completion Reporting and Reimbursement

Claims for vehicles that have been serviced must be submitted on the DealerCONNECT Claim Entry Screen located on the Service tab. Claims submitted will be used by FCA to record recall service completions and provide dealer payments.

Use <u>one</u> of the following labor operation numbers and time allowances:

	Labor Operation <u>Number</u>	Time <u>Allowance</u>
Inspect A/C hose routing	24-R5-71-81	0.2 hours
Inspect A/C hose routing and replace A/C hose	24-R5-71-82	1.4 hours
Inspect A/C hose routing, replace A/C hose and condenser	24-R5-71-83	2.0 hours

Add the cost of the recall parts package plus applicable dealer allowance to your claim.

NOTE: See the Warranty Administration Manual, Recall Claim Processing Section, for complete recall claim processing instructions.

Dealer Notification

To view this notification on DealerCONNECT, select "Global Recall System" on the Service tab, then click on the description of this notification.

Owner Notification and Service Scheduling

All involved vehicle owners known to FCA are being notified of the service requirement by first class mail. They are requested to schedule appointments for this service with their dealers. A generic copy of the owner letter is attached.

Enclosed with each owner letter is an Owner Notification postcard to allow owners to update our records if applicable.

Vehicle Lists, Global Recall System, VIP and Dealer Follow Up

All involved vehicles have been entered into the DealerCONNECT Global Recall System (GRS) and Vehicle Information Plus (VIP) for dealer inquiry as needed.

GRS provides involved dealers with an <u>updated</u> VIN list of <u>their incomplete</u> vehicles. The owner's name, address and phone number are listed if known. Completed vehicles are removed from GRS within several days of repair claim submission.

To use this system, click on the "Service" tab and then click on "Global Recall System." Your dealer's VIN list for each recall displayed can be sorted by: those vehicles that were unsold at recall launch, those with a phone number, city, zip code, or VIN sequence.

Dealers <u>must</u> perform this repair on all unsold vehicles <u>before</u> retail delivery. Dealers should also use the VIN list to follow up with all owners to schedule appointments for this repair.

Recall VIN lists may contain confidential, restricted owner name and address information that was obtained from the Department of Motor Vehicles of various states. Use of this information is permitted for this recall only and is strictly prohibited from all other use.

Additional Information

If you have any questions or need assistance in completing this action, please contact your Service and Parts District Manager.



IMPORTANT SAFETY RECALL

R57 / NHTSA 15V-676

This notice applies to your vehicle (VIN: xxxxxxxxxxxxxx).

This notice is sent to you in accordance with the National Traffic and Motor Vehicle Safety Act.

Dear: (Name)

FCA has decided that a defect, which relates to motor vehicle safety, exists in certain 2015 model year $Jeep_{\otimes}$ Cherokee vehicles equipped with a 2.4L engine.

The problem is	The Air Conditioning (A/C) hose on your vehicle may have been misrouted during the manufacturing process. The A/C hose may come in contact with the engine exhaust manifold. Prolonged A/C hose contact with the engine exhaust manifold may result in a leak of the A/C refrigerant and/or A/C refrigerant oil. A/C refrigerant oil on a hot exhaust manifold could result in underhood smoke and/or an engine compartment fire.
What your dealer will do	FCA will repair your vehicle free of charge. To do this, your dealer will inspect the A/C hose routing and replace the A/C hose if required. The A/C hose inspection will take less than ¹ / ₂ hour. If the hose requires replacement an additional two hours will be needed. However, additional time may be necessary depending on service schedules.
What you must do to ensure your safety	Simply contact your Chrysler, Jeep, Dodge or RAM dealer right away to schedule a service appointment. Please bring this letter with you to your dealer.
If you need help	If you have questions or concerns which your dealer is unable to resolve, please contact the FCA Group Recall Assistance Center at either fcarecalls.com or 1-800-853-1403.
California residents	The State of California requires the completion of emission recall repairs prior to vehicle registration renewal. Your dealer will provide you with a Vehicle Emission Recall Proof of Correction Form after the recall service is performed. Be sure to save this form since the California Department of Motor Vehicles may require that you supply it as proof that the recall has been performed.

Please help us update our records by filling out the attached prepaid postcard if any of the conditions listed on the card apply to you or your vehicle. If you have further questions go to **fcarecalls.com**.

If you have already experienced this specific condition and have paid to have it repaired, you may visit **www.fcarecallreimbursement.com** to submit your reimbursement request online or you can mail your original receipts and proof of payment to the following address for reimbursement consideration: FCA Customer Assistance, P.O. Box 21-8004, Auburn Hills, MI 48321-8007, Attention: Recall Reimbursement. Once we receive and verify the required documents, reimbursement will be sent to you within 60 days. If you've had previous repairs and/or reimbursement you may still need to have the recall repair performed on your vehicle.

If your dealer fails or is unable to remedy this defect without charge and within a reasonable time, you may submit a written complaint to the Administrator, National Highway Traffic Safety Administration, 1200 New Jersey Ave., S.E., Washington, DC 20590, or you can call the toll-free Vehicle Safety Hotline at 1-888-327-4236 (TTY 1-800-424-9153), or go to **safercar.gov**.

We're sorry for any inconvenience, but we are sincerely concerned about your safety. Thank you for your attention to this important matter.

Customer Services / Field Operations FCA US LLC

<u>Note to lessors receiving this recall:</u> Federal regulation requires that you forward this recall notice to the lessee within 10 days.