

# Service Bulletin

25-028

March 21, 2025 Version 1

## **Air Conditioner Makes Noise (DTC P0530/P0534)**

#### **APPLIES TO**

Year	Model	Trim Level	VIN Range
2024	Prologue	ALL	ALL

## **SYMPTOM**

A whistle noise may be present within the HVAC system when switching from cabin heat to full cooling (A/C on). While driving, the heat may begin to blow cold air and the blower speed may drop intermittently. Possible DTC codes P0530 (Air Conditioning Refrigerant Pressure Sensor Circuit) and P0534 (Air Conditioning Refrigerant Charge Low) may be set.

#### **POSSIBLE CAUSE**

Possible faulty air conditioner condenser check valve or improperly formed A/C line at the mating surface of the condenser check valve.

#### **CORRECTIVE ACTION**

- Inspect whether the check valve is correctly installed, note if it was not.
- Remove and inspect the check valve for damage and/or rattle sound.
- Inspect the lower A/C line opening; if opening is undersized and/or off centered, repair the A/C line and correctly install the check valve.

#### **WARRANTY CLAIM INFORMATION**

Operation Number	Description	Flat Rate Time	Defect Code	Symptom Code	Template ID	Failed Part Number
6161P1	Remove, inspect and if necessary, replace check valve (includes evac and recharge)	1.3hr	03217	03212	A25028A	13542079
Α	Ream AC line – Add	0.1hr			A25028B	

#### **PARTS INFORMATION**

Part Name	Part Number	Quantity
Seal, A/C Evaporator	13579649	3

**CUSTOMER INFORMATION:** The information in this bulletin is intended for use only by skilled technicians who have the proper tools, equipment, and training to correctly and safely maintain your vehicle. These procedures should not be attempted by "do-it-yourselfers," and you should not assume this bulletin applies to your vehicle, or that your vehicle has the condition described. To determine whether this information applies, contact an authorized Honda automobile dealer.

## **REQUIRED MATERIALS**

Ordering BEV POE Oil requires completion of the release request form: 19435414 BEV POE A/C Oil Release Request

Part Name	Part Number	Quantity
BEV POE Oil, Type PZ	19435414	1 per car

## **TOOL INFORMATION**

Tool Name	Tool Number	Quantity
Mahle R-1234yf Recover, Recycle Recharge Machine	RTIACX2282	
Multiple Diagnostic Interface 2 (MDI2)	07-EL-52100	1
Tech Line Connect (TLC) Software Application Tool With Honda Diagnostic Package	N/A	N/A
Reamer Tool 6 mm x 143 mm	Commercially available	1
R-1234yf Oil Injector Hose	07-GE-50745	1
A/C POE Oil Injector	07-J-45037	1

#### **REPAIR PROCEDURE**

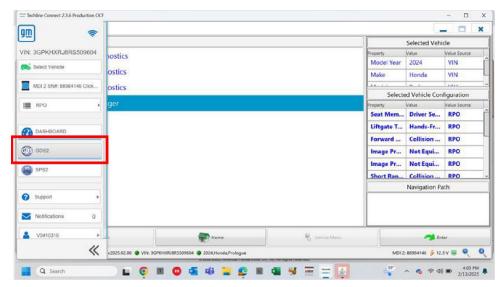
- 1. Start the vehicle, then set the HVAC system to AUTO HIGH (max heat).
- 2. Use Tech Line Connect to monitor the refrigerant temperature sensors 6 and 8.
- 3. If there is less than a **50° F** difference, inspect the check valve to make sure the arrow is pointing up.

  NOTE: If the check valve arrow is pointing down, remove and reinstall the check valve in the correct position.

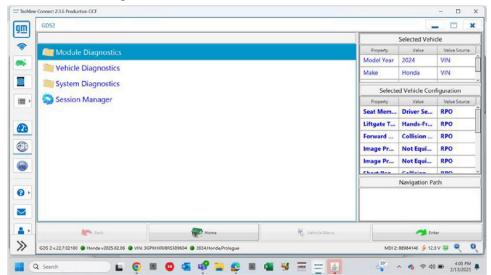




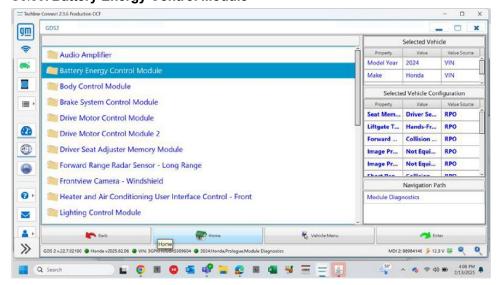
- 4. Launch the Tech Line Connect service diagnostic tool to command the system valves to open. Select the K16 Battery Energy control module scan tool function.
  - 1. Select GDS2.



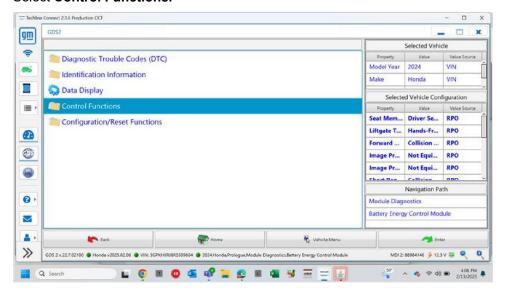
2. Select Module Diagnostics.



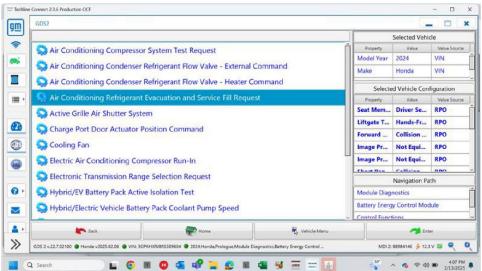
3. Select Battery Energy Control Module



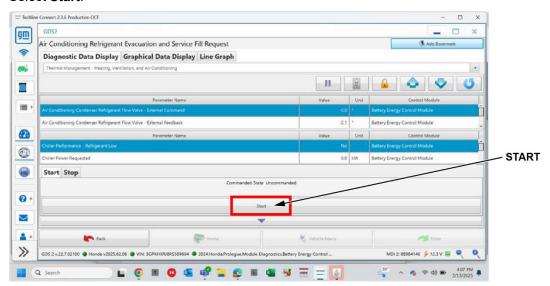
4. Select Control Functions.



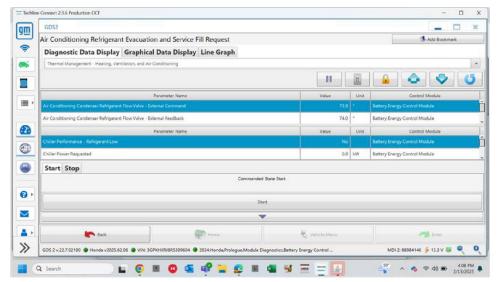
5. Select Air Conditioning Refrigerant Evacuation and Service Fill Request.



6. Select Start.



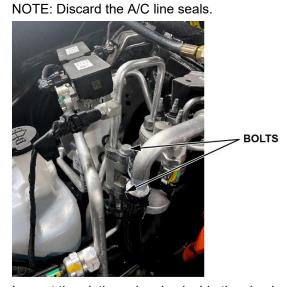
7. Once the valves are open, then start recovering the refrigerant.



5. Recover the refrigerant using the Mahle Machine **only**, (P/N RTIACX2282). For more information refer to <u>Refrigerant</u> Recovery and Recharging.

#### NOTE:

- DO NOT use the Robinair machine, it will not output the correct information for recovered POE oil.
- Record the exact amount of refrigerant oil recovered from the vehicle as the same amount of oil recovered will be needed to recharge the system. Refer to Job Aid December 2024, <u>Prologue A/C Diagnosis and Leak Check.</u>
- 6. Remove the two A/C check valve bolts that secure the A/C lines and then remove the check valve.

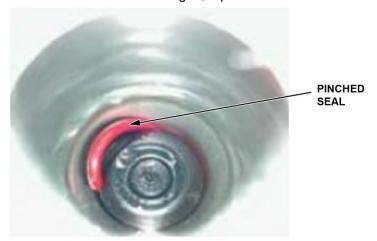


7. Inspect the pintle and spring inside the check valve for loose or missing items.

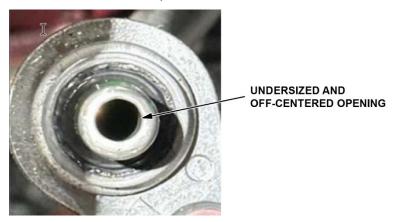
NOTE: Shake the check valve. If it rattles, replace it.

8. Verify that the seals are not pinched or cut.

NOTE: If the seals are damaged, replace the check valve.



9. Inspect and measure the opening of the lower line that connects to the A/C check valve. If the opening is less than **6 mm** and/or off centered, the A/C line will need to be reamed out.

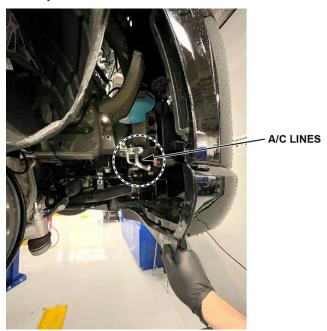


NOTE: This service bulletin **does not** apply if the A/C line is severely damaged that it cannot be repaired. Refer to the service manual for A/C line replacement.

## Example.



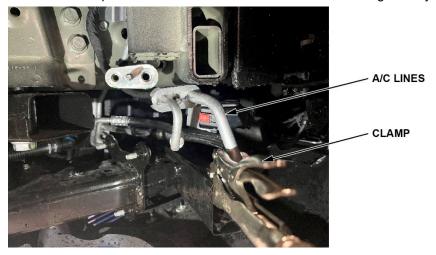
- 10. Remove the passenger side front wheel, 190 N·m (140 lb-ft).
- 11. Partially remove the front fender liner to access the A/C receiver lines located just below the washer reservoir.



12. Disconnect the lower connection A/C lines.

## NOTE:

- Use a clamp on the frame to hold the A/C line out of the way.
- DO NOT clamp the lines as this may damage A/C function.
- Place a shop towel over the end of the A/C line that is being held by the clamp.



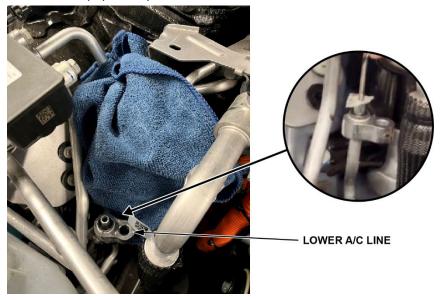
13. Disconnect and remove the upper A/C receiver line from the A/C receiver dehydrator. NOTE: Discard the A/C line seal.



- 14. Cover the opening of the A/C receiver dehydrator with a shop towel to prevent any debris from entering.
- 15. Insert a section of paper shop towel into the lower A/C line to catch debris or shavings.

## NOTE:

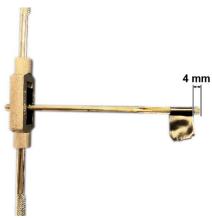
- Use a ~2" x~2" section of paper shop towel.
- Soak the paper shop towel with brake cleaner to ease installation.



16. Use a 6 mm x 143 mm reamer tool, tape off no more than 4 mm depth as a stopper.

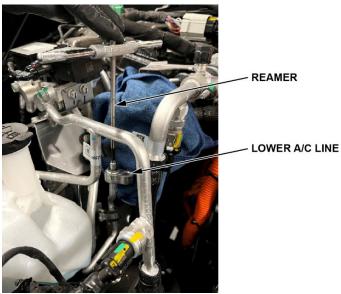
## NOTICE

**DO NOT** use power tools or drill bits with this repair. Failure to follow these instruction will result in damage to the lower A/C line.



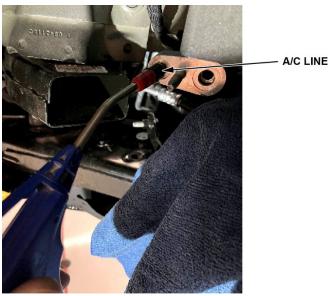
17. Carefully ream the lower A/C line hole to 6 mm wide by 4 mm deep.

NOTE: Make sure the reamer is aligned straight with the hole and not at an angle.



18. Once reaming is complete, use compressed air and blow from the bottom A/C line to clear the paper shop towel and debris out of the line.

NOTE: A/C line is located on the passenger side front wheel area.



19. Clear out any remaining debris from the A/C line using brake cleaner and compressed air.



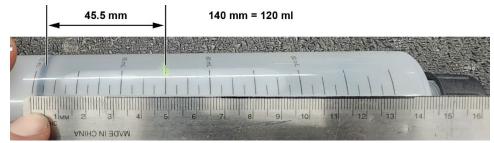
20. Install all removed parts in the reverse order of removal. Make sure to use new A/C receiver line and check valve seals.

## Replace the extracted oil:

- 1. Use the printout from the Mahle machine to determine how much oil to install.
- Current POE bottles do not have level markings to measure fluid. Use an oil injector and calculate how much oil to install.

Example, if the system needs 39 mL, calculate to convert oz. to mL.

- 39 mL x 140 mm = 5460
- 5460 / 120 mL = 45.5 mm
- Measure **45.5 mm** from the plunger.



- 3. Launch the TechLine Connect service diagnostic tool to command the system valves to open.
- 4. Follow the instructions on the Mahle machine screen prompts to add the POE oil and refrigerant back into the system.
- Use the A/C POE Oil Injector (P/N 07-J-45037) with the R-1234yf AC Oil Injector hose (P/N 07-GE-50745).
   NOTE: **DO NOT** use the HONDA R-1234yf POE Oil Injector hose.