

Technical Service Bulletin



87 Climate system is not cooling as desired

87 12 36 2012886/6 November 16, 2012. Supersedes Technical Service Bulletin Group 87 number 10-07 dated September 2, 2010 for reasons listed below.

| Model(s) | Year | VIN Range | Vehicle-Specific Equipment |
|----------|-------------|-----------|----------------------------|
| Audi Q7 | 2007 - 2014 | All | Not Applicable |

Condition

| REVISION HISTORY | | |
|------------------|-----------|---|
| Revision | Date | Purpose |
| 6 | - | Revised warranty table (damage code) and additional “ <i>Note</i> ” Revised header data (additional model years) |
| 5 | 9/2/2010 | Revised header data (Controlling TSB display in ElsaWeb) |
| 4 | 8/6/2010 | Revised header data (Added MYs) Revised <i>Warranty</i> |
| 3 | 12/5/2008 | Revised Title to include Repair Group |

The A/C system is not cooling as desired in hot weather areas.

Technical Background

The following are suggestions to achieve maximum cooling efficiency in hot weather areas.

Production Solution

Not applicable.

Service

1. Ensure that the scale on your R-134 A/C service tool is properly calibrated.
2. Discharge the A/C system as described in the ElsaWeb Repair Manual and measure the amount of refrigerant removed from the vehicle.
3. Refill the A/C system with the specified amount of refrigerant. Include dye for leak testing. (Ensure proper amount of refrigerant oil.)

Refrigerant capacity in grams

- 2 Zone 700 ± 50 grams.
 - 4 Zone 1050 ± 50 grams.
4. If the incorrect amount of refrigerant is measured then take the appropriate steps to identify the leak in the system. Check service connections, A/C line joints, TXV connection, etc to ensure any small leaks are identified and repaired.
 5. If the correct amount of refrigerant is measured, perform the *A/C system cooling performance, checking* test outlined in the ElsaWeb Repair Manual for the Audi Q7 front and rear A/C system.
 6. Verify that the front and rear climate systems are operating within the specified operating range.
 7. If the A/C system does not achieve the desired values, follow the diagnostic instructions outlined in ElsaWeb *Determine malfunction if specified values are not obtained.*



Tip: Ensure proper operation of the recirculating flap.

8. If the climate system is operating within the specified range, parts replacement is not necessary and will not improve the operation of the climate system.

If the climate system is operating within the specified operating range, explain that it is not uncommon in some areas with hotter climates (i.e. the southwestern area of the United States) for the climate system to take longer to bring the cabin to a comfortable temperature level. Parking the vehicle for a long period of time in direct sunlight will heat the cabin above normal levels. Therefore it will take a longer than expected to cool the cabin.

Here are a few pointers that will help to accelerate cabin cooling:

- To prevent the cabin from heating up, we recommend to keep all sunshades closed (roof, tailgate and doors).
- Allow hot air to escape by leaving a side window slightly open.

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- Open the rear sunroof to tilt position for the first 3 to 4 minutes after startup. This will allow hot air to escape faster.
- An aftermarket sunscreen for front windshield can help keep the cabin cooler.
- An aftermarket window tint foil applied to the glass roof can reduce the cabin heat.
- Using only the front A/C system, if no passengers are in the rear cabin, will cool the front area of the cabin faster.
- Avoid parking in direct sunlight if possible.

Warranty

| | | | |
|--------------------------|--|---------------------------------|--|
| Claim Type: | Use applicable claim type. If vehicle is outside any warranty, this Technical Service Bulletin is informational only. | | |
| Service Number: | 8734 | | |
| Damage Code: | 0016 | | |
| Labor Operations: | Air conditioner check | 87 01 01 50 | 30 TU |
| | Refrigerant drain and refill | 87 03 17 00 | 50 TU |
| | Use the appropriate labor operation for removing and installing any A/C related components that are found to be leaking. | Use appropriate labor operation | XX TU |
| Diagnostic Time: | GFF | 0150 0000 | Time stated on diagnostic protocol (Max 50 TU) |
| | Road test prior to service procedure | 0121 0002 | 10 TU |
| | Road test after service procedure | 0121 0004 | 10 TU |

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|-----------------------|---|
| | Technical diagnosis at dealer' s discretion (Refer to Section 2.2.1.2 and Audi Warranty Online for DADP allowance details) |
| Claim Comment: | As per TSB #2012886/6 |

All warranty claims submitted for payment must be in accordance with the *Audi Warranty Policies and Procedures Manual*. Claims are subject to review or audit by Audi Warranty.



Note: If system evacuate and recharge procedure is performed and additional refrigerant is added due to low volume, the root cause of the refrigerant loss must be diagnosed and repaired. Evacuation and recharge of the circuit with the addition of refrigerant in a system with low refrigerant volume that is not accompanied by a diagnosis and repair of the system leak that caused the low refrigerant level is only covered within 12 months or 12,000 miles (whichever occurs first).

Required Parts and Tools

| Part Number | Part Description | Quantity |
|---------------------------------|-------------------------|----------|
| VAS 5051, VAS 5051B or VAS 5052 | Diagnostic tester | 1 |
| A/C service unit | A/C system service unit | 1 |

Additional Information

All parts and service references provided in this TSB are subject to change and/or removal. Always check with your Parts Department and service manuals for the latest information.