LEXUS

Technical Service Information Bulletin

February 10, 2005

Title:

NOISE FROM REAR A/C UNIT

Models:

'04 GX 470

TSIB

Introduction

Some GX 470 owners may experience a crackling/static type sound from the right rear HVAC assembly. This procedure provides a method to improve this condition.

Applicable Vehicles

- **2004** model year **GX 470** vehicles.

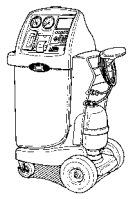
Production Change Information

MODEL	PRODUCTION CHANGE EFFECTIVE VIN
GX 470	JTJBT20X#40055279

Parts Information

PREVIOUS PART NUMBER	CURRENT PART NUMBER	PART NAME	QTY
88515–60130	Same	Valve, Rear Cooling Unit Expansion	1
90069–08012		Suction O–Ring	3
90099–14119		Liquid O–Ring	2
90069–08007		Discharge O–Ring	1

Required Equipment

MANUFACTURER	EQUIPMENT	QTY
Robinair 342000* (or equivalent)	R–134a Refrigerant Recovery/Recycling Machine 	1

* Lexus Approved Dealer Equipment

NOTE:

Additional refrigerant service equipment may be ordered by calling Lexus Approved Dealer Equipment at 1–800–368–6787.

Warranty Information

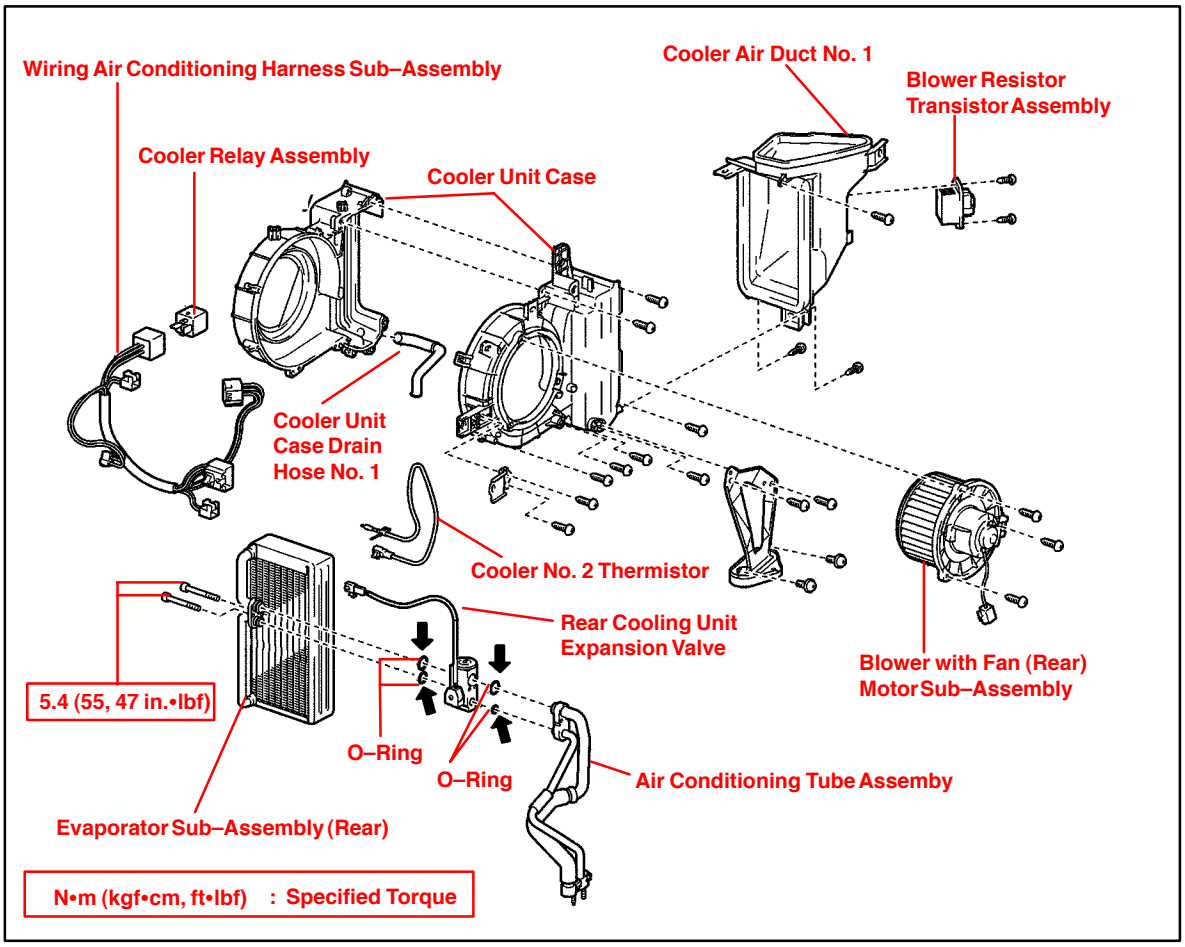
OP CODE	DESCRIPTION	TIME	OFP	T1	T2
AC4011	R & R Rear A/C Expansion Valve	1.7	88515–60130	91	50

Applicable Warranty*:

This repair is covered under the Lexus Comprehensive Warranty. This warranty is in effect for 48 months or 50,000 miles, whichever occurs first, from the vehicle's in-service date.

* Warranty application is limited to correction of a problem based upon a customer's specific complaint.

Components



Repair Procedure

1. Verify the customer concern.
   A. Start the engine.
   B. Turn on the front and rear A/C.
      a. Face mode.
      b. Blower on low.
      c. Recirculate mode.
   C. Raise the engine RPM to 1500.
   D. Listen for crackling sound from the right rear (this may take 5–10 minutes).

      If there is a noticeable noise coming from the right rear HVAC system, continue with step 2 of this procedure.
2. Evacuate refrigerant HFC–134a (R134a).

   Refer to the Technical Information System (TIS): 2004 model year GX 470 Repair Manual: *Heater & Air Conditioner: Refrigerant: Replacement (GX470).*

   Equipment: Robinair R–134a Refrigerant Recovery/Recycling Machine (P/N 342000)

Repair Procedure (Continued)

3. Remove interior trim.

   Refer to TIS: 2004 model year GX 470 Repair Manual: *Heater & Air Conditioner: Cooling (Rear) Unit Assy: Overhaul (GX470).*

   A. Remove rear No. 2 seat assembly RH.

   B. Remove rear door scuff plate RH.

   C. Remove rear door opening trim weatherstrip RH.

   D. Remove rear floor mat support plate rear.

   E. Remove package tray trim panel assembly.

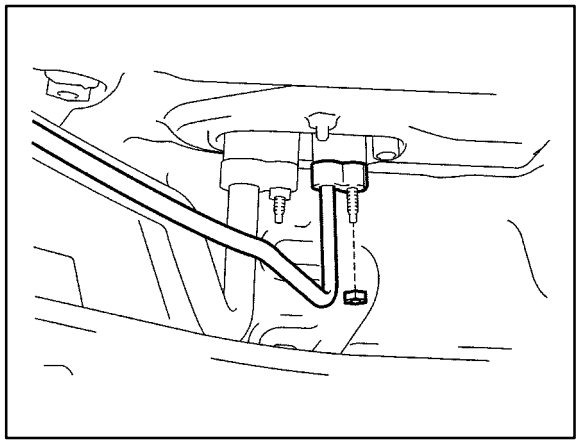
   F. Remove quarter inside trim board RH.

   G. Remove roof side garnish inner RH.

4. Disconnect the refrigerant supply pipe.

   A. Remove the nut and separate the supply pipe from the cooler assembly.

   B. Remove the O–ring from the refrigerant supply pipe.



NOTE:

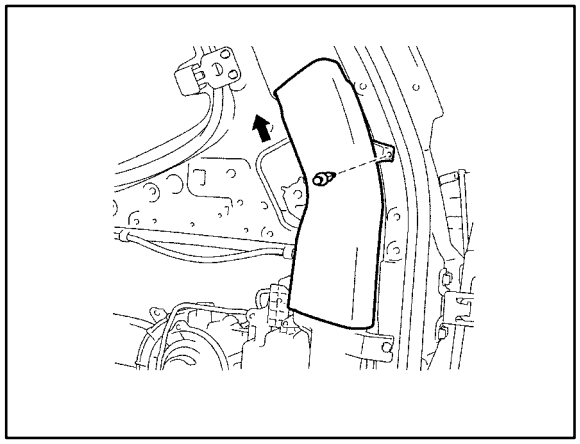
Seal the opening of the disconnected parts using vinyl tape to prevent moisture and foreign material from entering.

5. Disconnect the refrigerant suction pipe.

   Remove the nut and separate the refrigerant suction pipe from the cooler assembly.

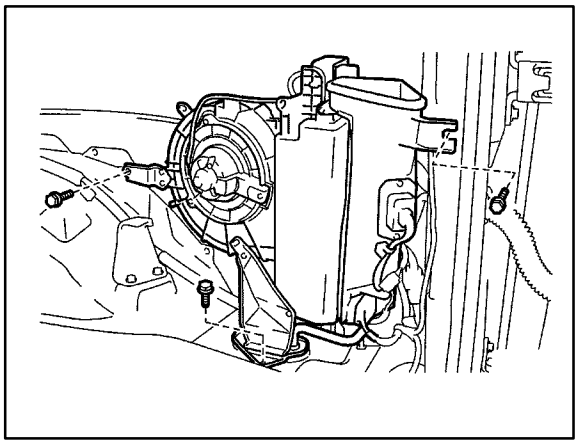
6. Remove cooler air duct No. 1, upper.

   Remove the clip and the cooler air duct No. 1.

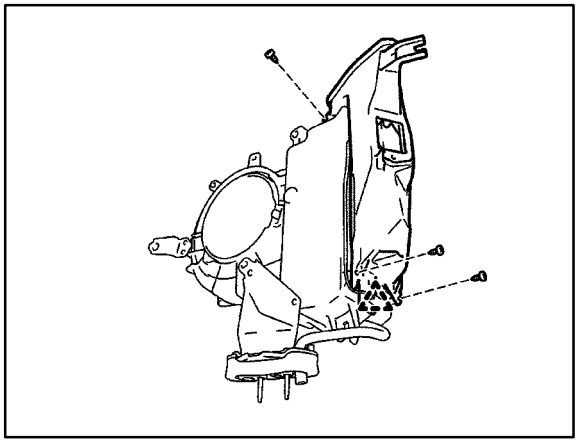


Repair Procedure (Continued)

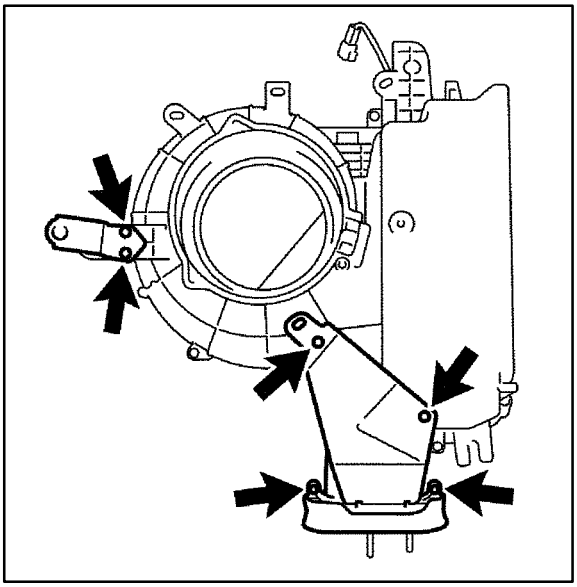
7. Remove cooling (rear) unit assembly.
   A. Disconnect the connectors.
   B. Remove the 3 bolts and the cooling (rear) unit assembly.



8. Remove cooler air duct No. 1, lower.
   Release the clamp and remove the 3 screws and the cooler air duct No. 1.

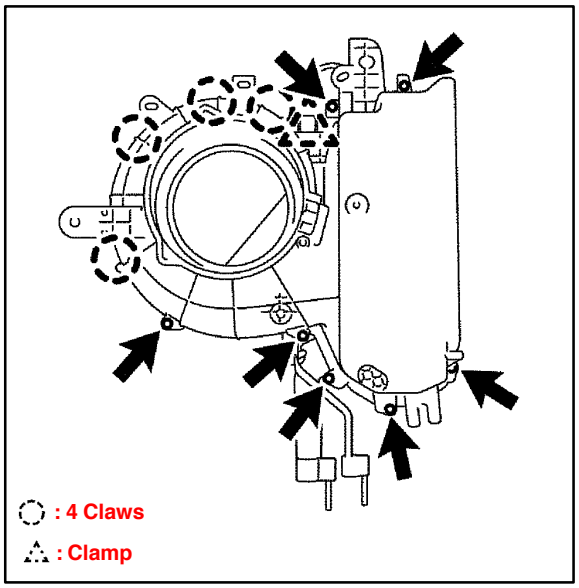


9. Remove cooler unit case.
   Remove the 6 screws and the 2 brackets.

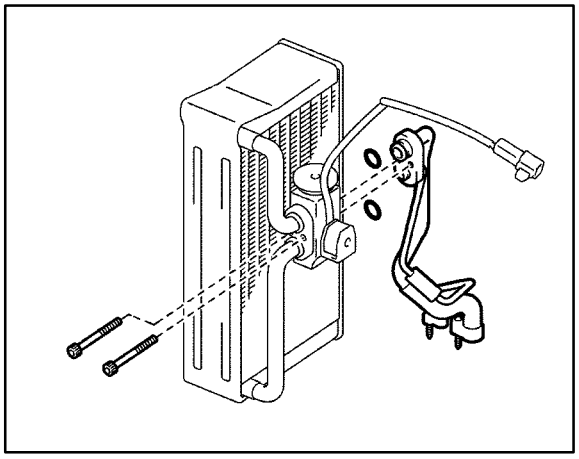


Repair Procedure (Continued)

C. Release the 4 claw fittings and the clamp, and remove the 7 screws and the 2 cooler unit cases.

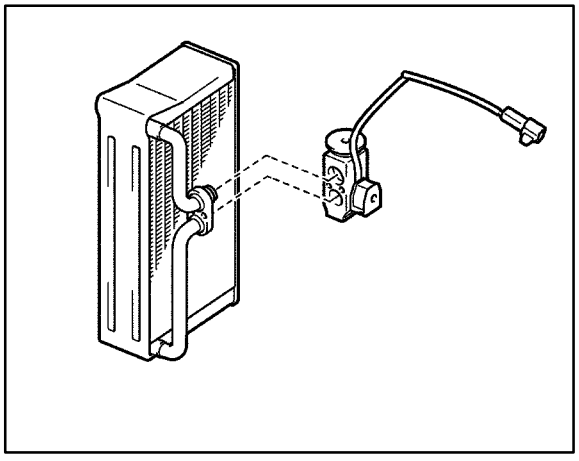


10. Remove air conditioning tube assembly.
    A. Using a hexagon wrench 4.0 mm (0.15 in.), remove the 2 hexagon bolts and the air conditioning tube assembly.
    B. Remove the 2 O–rings from the air conditioning tube assembly.



11. Remove the rear cooling unit expansion valve.

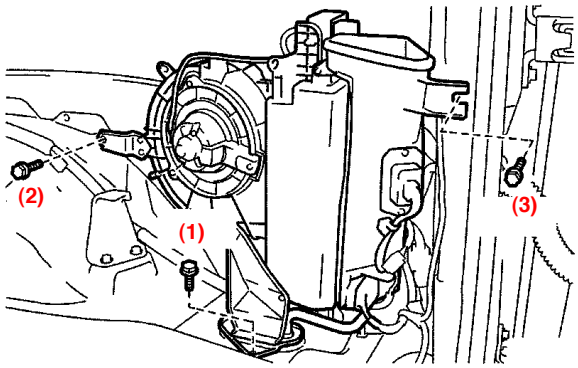
NOTE:
Please reconfirm that the expansion valve production date on the part is after 6F11, where 6 = month, F = year, and 11 = day (June 11, 2004).



Repair Procedure (Continued)

12. Replace the expansion valve.
    A. Sufficiently apply compressor oil to 2 new O–rings and the surface of the expansion valve.
       Compressor oil: ND–OIL 8 (or equivalent)
    B. Install the 2 O–rings to the evaporator sub–assembly.
13. Replace the air conditioner tube assembly.
    A. Sufficiently apply compressor oil to 2 new O–rings and the surface of the tube assembly.
       Compressor oil: ND–OIL 8 (or equivalent)
    B. Install the 2 O–rings to the tube assembly.
14. Reassemble and install the cooler unit case.
15. Install the cooling (rear) unit assembly with the 3 bolts.

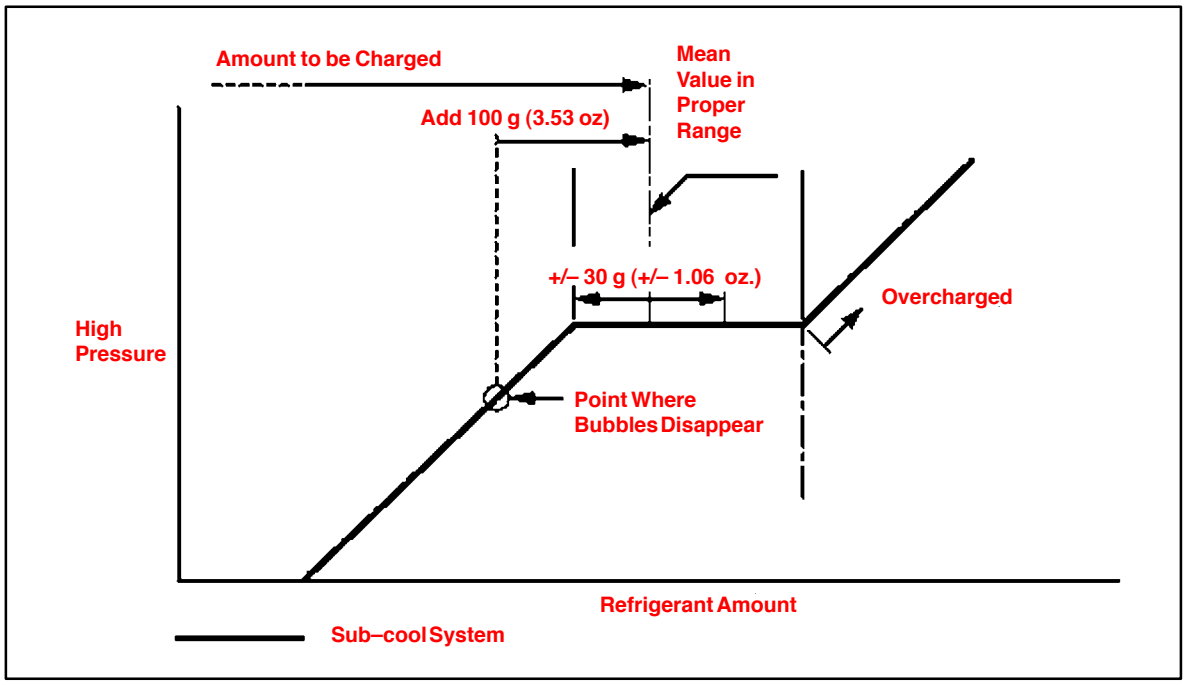
NOTE:
Tighten the bolts in the order shown in the illustration to install the cooling (rear) unit assembly.



16. Install the refrigerant supply pipe.
    A. Remove the attached vinyl tape.
    B. Sufficiently apply compressor oil to a new O–ring and the fitting surface of the rear cooler and accessory assembly.
       Compressor oil: ND–OIL 8 (or equivalent)
    C. Install a new O–ring on the refrigerant supply pipe.
    D. Connect the refrigerant supply pipe to the cooler refrigerant.
    E. Install the retaining nut.
       Torque: 9.8 N•m (100 kgf•cm, 87 in.•lbf)
17. Install the refrigerant suction pipe.
    A. Remove vinyl tape.
    B. Install a new O–ring on the suction pipe.
    C. Connect the refirgerant suction pipe to the cooler assembly.
    D. Install the retaining nut.
       Torque: 9.8 N•m (100 kgf•cm, 87 in.•lbf)

Repair Procedure (Continued)

18. Charge refrigerant HFC–134a (R134a).
    Standard: Dual A/C: 700 +/– 30 g (24.68 +/– 1.06 oz.)



19. Warm up engine.
20. Inspect for refrigerant leakage.
21. Reinstall the removed side panels, seat, and scuff plate.