

SERVICE BULLETIN

Classification: HA02-005b Reference:

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ITB02-056b

2003 G35 SEDAN; NOISE FROM ENGINE AREA WITH A/C ON

This bulletin contains amended Applied VIN. Please discard all previous copies of ITB02-056.

APPLIED VEHICLE: APPLIED VIN: APPLIED DATE:

2003 G35 (V35) - Sedan Vehicles built before JNKCV51E*3M312415 Vehicles built before November 11, 2002

SERVICE INFORMATION

If a 2003 G35 Sedan has:

 a buzz or growl type noise from the engine area with the Air Conditioner "ON," which goes away when the Air Conditioner is turned "OFF,"

Refer to the Service Procedure below to help identify if the noise is coming from the A/C system. If it is, install the Air Conditioner Kit parts to complete the Service Procedure and reduce the noise, if it should occur.

Service Procedure Overview:

- Isolate the Noise to determine if the noise is coming from A/C System
- Install Air Conditioner Kit, if the noise is coming from the A/C System.

SERVICE PROCEDURE

Isolate the Noise:

- 1. Check to see if the Applied Vehicle's noise is the same as described in the Service Information, above.
- 2. Check to see if noise is coming from the A/C System. Do this by turning the A/C system OFF **when** the noise is heard.
 - If you hear the noise with the A/C OFF, this bulletin <u>does not</u> apply. Use the 2003 G35 Electronic Service Manual (ESM) to further diagnose the incident.
 - If the noise stops when the A/C is shut OFF, go to Install Air Conditioner Kit (below).

Install Air Conditioner Kit:

WARNING: In this section the cooling system must be "opened." Allow the engine to cool fully before proceeding.

1. Evacuate the A/C system. Refer to the appropriate page of the 2003 G35 Electronic Service Manual (ESM) / ATC (Automatic Air Conditioner) Section for detailed information.

- 2. Remove the A/C compressor, as follows:
 - A. Remove the engine upper cover, air duct, air cleaner assembly and air hose. Refer to the appropriate page of the 2003 ESM / EM (Engine Mechanical) Section for detail.
 - B. Remove the mounting nuts from the low-pressure flexible hose.

CAUTION: To avoid entry of air and debris into the system: "cap off" or wrap the joint of the pipe with suitable material such as vinyl tape.

C. Remove the high-pressure flexible hose. Refer to the appropriate page of the 2003 ESM / ATC (Automatic Air Conditioner) Section for detail.

CAUTION: To avoid entry of air and debris into the system: "cap off" or wrap the joint of the pipe with suitable material such as vinyl tape.

- D. Put vehicle up on a hoist.
- E. Remove the engine under-cover.
- F. Remove the drive belt for the alternator, power steering pump, and fan. Refer to the appropriate page of the 2003 ESM / EM (Engine Mechanical) Section for detail.
- G. Remove the A/C compressor drive belt. Refer to the appropriate page of the 2003 ESM / EM (Engine Mechanical) Section for detail.
- H. Remove the idler pulley bracket.
- I. Disconnect the compressor (magnet clutch) and Electronic Control Valve (ECV) connectors.
- J. Remove the mounting bolts from the compressor, using power tools.

NOTE: The bolts removed during this step will be re-used in Step 11 (page 4).

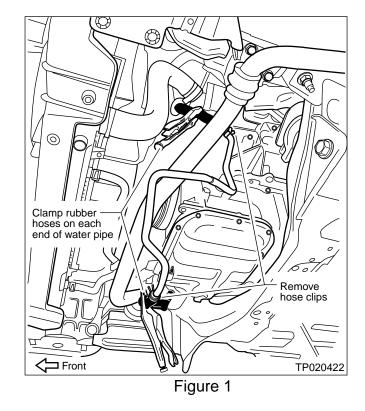
- K. Remove the compressor from the lower side of the vehicle.
- 3. Remove the compressor bracket from the engine.

NOTE: This bracket will not be re-used, however, the bolts removed during this step will be re-used in Step 9 (page 4).

4. With the engine cooled down, remove, then replace the radiator cap. This is to release any residual (remaining) system pressure.

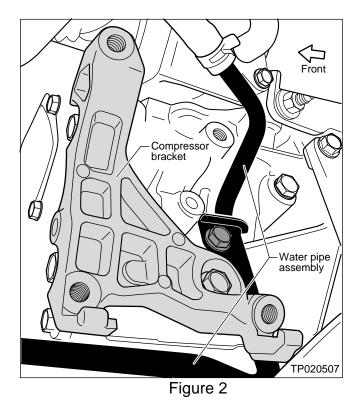
 Clamp the rubber water hoses on each end of the water pipe with pinch-off pliers or other suitable tools (see Figure 1).

Remove the hose clips (see Figure 1).



- 6. Remove the water pipe. Refer to the appropriate page of the 2003 ESM / LU (Engine Lubricant System) Section for detail.
- Install the new water pipe assembly from the Air Conditioner Kit (see PARTS INFORMATION section). See Figure 2 for view of water pipe assembly <u>installed</u>.

NOTE: Attach the water pipe assembly using the original bolt removed in step 6 (above). You will also use a new Flange Bolt, Hex PP Type 2 7TM8 bolt from the Air Conditioner Kit. Torque all the bolts to 30 - 40 N-m (3.1 - 4.1 kg-m, 22.1 - 29.5 ft/lb).



8. Re-attach the rubber water hoses to the new water pipe assembly. Unclamp the hoses you clamped in Step 5 (above). Re-attach hose clips you removed in Step 5 (above).

9. Install the new compressor bracket (from the Air Conditioner Kit) onto the engine. See Figure 2 (page 3) for a view of the compressor bracket <u>installed</u>.

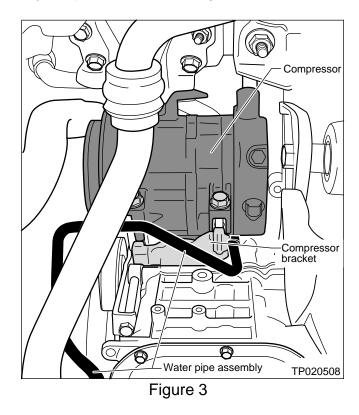
NOTE: Attach the new bracket using the original bolts removed in Step 3 (page 2). You will also use a new Bracket Fixing Bolt from the Air Conditioner Kit. Torque all the bolts to 47 - 63 N-m (4.8 - 6.4 kg-m, 34.6 - 46.4 ft/lb).

10. Complete the Lubricant Adjusting Procedure For Compressor Replacement in the 2003 G35 ESM. Refer to the appropriate page of the 2003 ESM / ATC (Automatic Air Conditioner) Section for detail.

CAUTION: Be sure to perform this step, or A/C system performance will be degraded.

11. Install the new compressor from the Air Conditioner Kit. See Figure 3 for a view of the compressor <u>installed</u>.

Attach the compressor using the original mounting bolts removed in Step 2J (page 2). You will also use a new Bracket Fixing Bolt from the Air Conditioner Kit. Torque all the bolts to 56.9 - 65.7 N-m (5.8 - 6.7 kg-m, 42 - 48.4 ft/lb).



- 12. Re-install the idler pulley bracket removed in Step 2H (page 2).
- 13. Install the replacement Compressor Belt from the A/C Kit. Re-install the drive belt for the alternator, power steering pump, and fan removed in Step 2F (page 2). Adjust the tension of all belts to specifications. Refer to the appropriate page of the 2003 ESM / EM (Engine Mechanical) Section for detail.
- 14. Re-connect the compressor (magnet clutch) and Electronic Control Valve (EVC) connectors disconnected in Step 2I (page 2).
- 15. Re-install the engine under-cover.
- 16. Bring the vehicle down from the hoist.

CAUTION: Before completing steps 17 and 18 (below) remove the caps installed or unwrap the joints of the pipes which were capped off in Steps 2B and 2C (page 2).

17. Re-install the high-pressure flexible hose. Torque the mounting nuts to 7.8 - 19.6 N-m (0.8 - 1.9 kg-m, 69 - 173 in/lb).

- 18. Re-attach and torque the mounting nuts for the low-pressure flexible hose to 7.8 19.6 N-m (0.8 1.9 kg-m, 69 173 in/lb).
- 19. Bleed the cooling system. Refer to the appropriate page of the 2003 ESM / CO (Engine Cooling System) Section for detail.
- 20. Recharge the A/C system to 0.55 kg/1.21 lbs.
- 21. Re-install the engine upper cover, air duct, air cleaner assembly and air hose removed in Step 2A (page 2).

PARTS INFORMATION

DESCRIPTION	PART #	QUANTITY
Air Conditioner Kit (includes the following):	27030-AM800*	1
Complete Compressor Compressor Bracket Compressor Belt Compressor Fixing Bolt (1 each) Bracket Fixing Bolt (1 each) Water Pipe Assembly Flange Bolt, Hex PP Type 2 7TM8 (1 each)		

*This number supersedes the original Air Conditioner Kit (27030-AM600). It contained a different A/C compressor mounting system. In the unlikely event a dealer still has that kit in inventory, it can still be used. In that rare case, the original Service Procedure of this bulletin (ITB02-056, dated October 1, 2002) would apply.

NOTE: Do not swap parts between old and new Kits.

CLAIMS INFORMATION

Submit a Primary Failed Part (PP) line claim using the following claims coding:

DESCRIPTION	PFP	OP CODE	SYM	DIA	FRT
	27030-AM800	TX03AA	ZL	32	2.0 hrs.
(includes evacuate/recharge)					