

11. Compressor

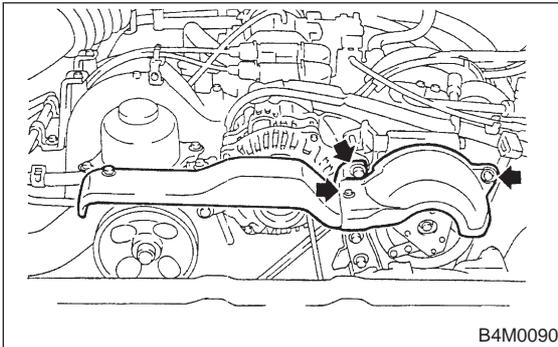
A: INSPECTION

1. COMPRESSOR CLUTCH

NOTE:

- Compressor is a swash plate type. When trouble occurs, replace compressor as a single unit.
- Compressor clutch trouble is often caused by clutch slippage and noise. Check and take corrective measures, as required.

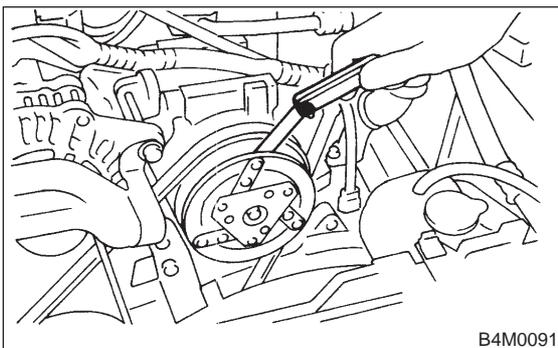
- 1) Remove belt cover.



- 2) Compressor clutch trouble is often caused by clutch slippage and noise. Check and take corrective measures, as required.

Clearance:

0.3 — 0.6 mm (0.012 — 0.024 in)



- 3) Check that voltage applied to magnetic coil is at least 10.5 volts.
- 4) When noise is noted, check that it originates in either compressor or pulley bearing.

B: REMOVAL

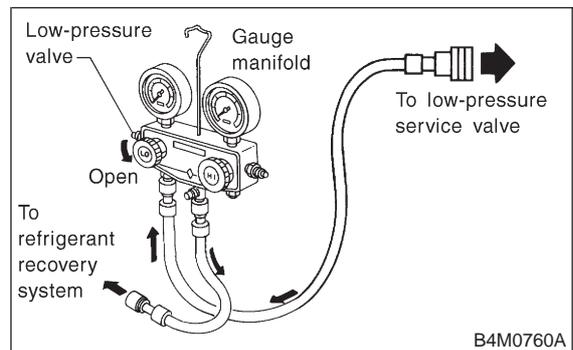
- 1) Disconnect ground cable from battery.

- 2) Discharge refrigerant using refrigerant recovery system. <Ref. to 4-7 [W6A0].>

- (1) Fully close low-pressure valve of manifold gauge.
- (2) Connect low-pressure charging hose of manifold gauge to low-pressure service valve.
- (3) Open low-pressure manifold gauge valve slightly, and slowly discharge refrigerant from system.

CAUTION:

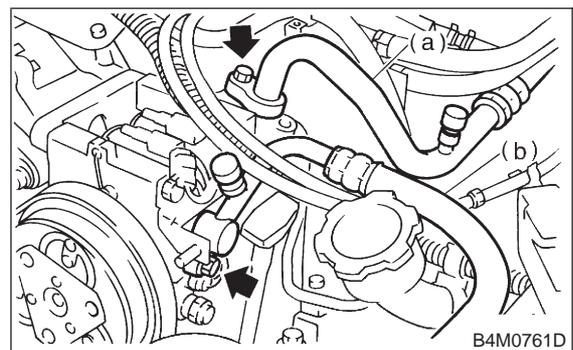
Do not allow refrigerant to rush out. Otherwise, compressor oil will be discharged along with refrigerant.



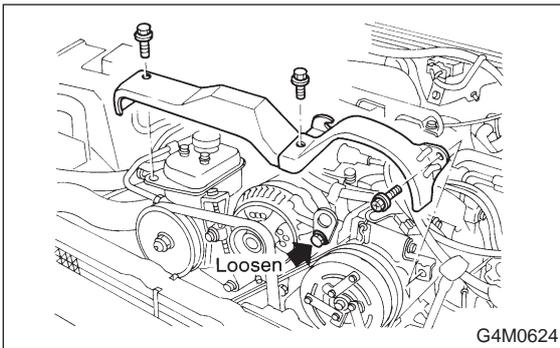
- 3) Remove low-pressure hose (a) and high-pressure hose (b).

CAUTION:

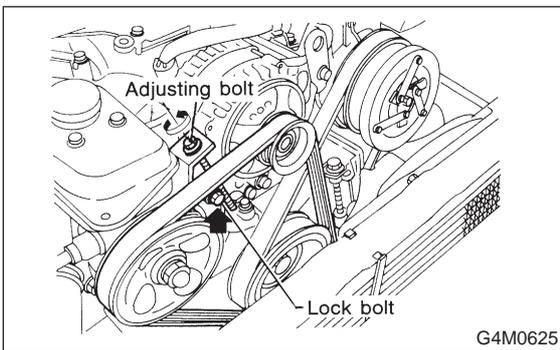
- Be careful not to lose O-ring of low-pressure hose.
- Plug the opening to prevent foreign matter from entering.



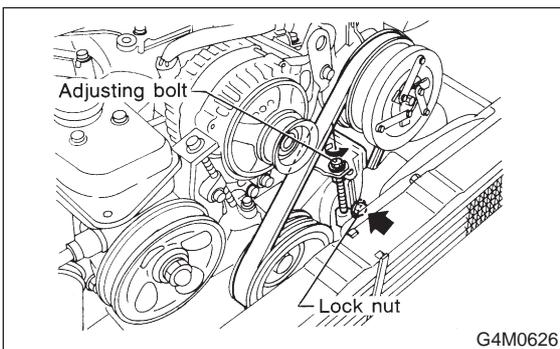
- 4) Remove compressor belt cover and alternator belt cover:
Remove bolts which secure belt covers.



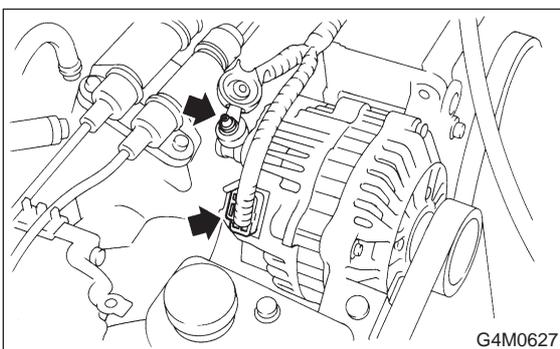
- 5) Remove alternator V-belt:
(1) Loosen lock bolt on alternator bracket.
(2) Turn adjusting bolt and remove V-belt.



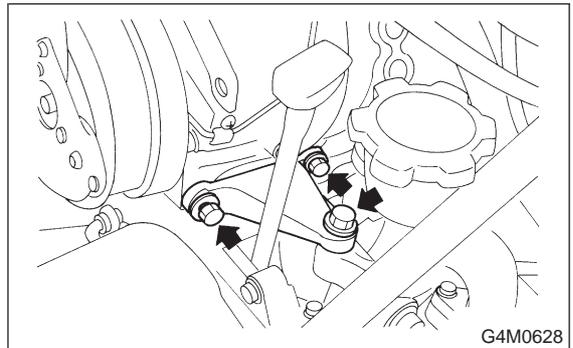
- 6) Remove compressor V-belt:
(1) Loosen lock nut on idler pulley.
(2) Turn adjusting bolt and remove V-belt.



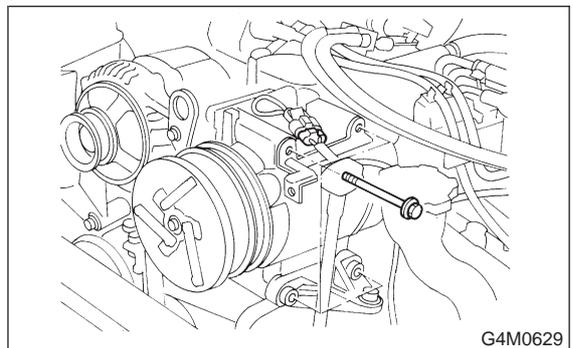
- 7) Disconnect alternator harness.



- 8) Disconnect compressor harness:
Disconnect compressor harness from body harness.
9) Lower bracket:
Remove bolts which secure lower compressor bracket.

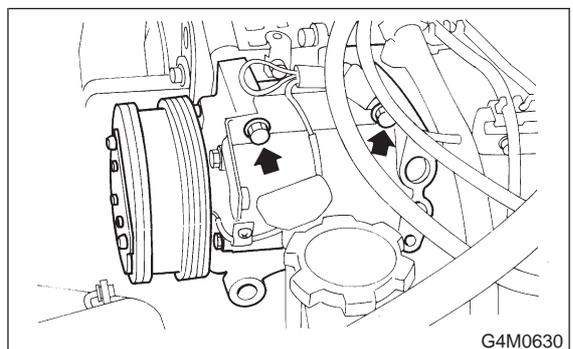


- 10) Remove compressor:
(1) Remove bolt which secure compressor.
(2) Remove compressor from bracket.



C: INSTALLATION

- 1) Install compressor:
Install compressor on bracket.



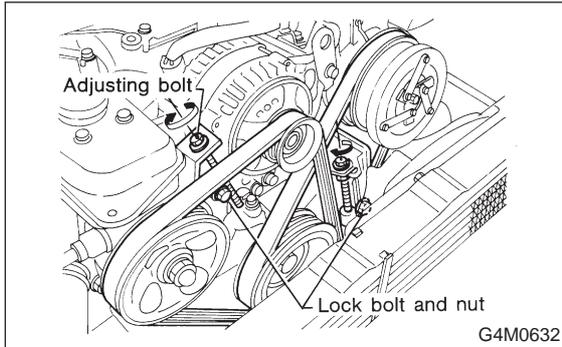
- 2) Connect compressor harness.
3) Connect alternator harness.
4) Install compressor V-belt (Rear):
After adjusting belt tension, tighten tension pulley lock nut securely.

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SERVICE PROCEDURE

5) Install alternator V-belt:
After adjusting V-belt tension, tighten alternator bracket lock bolt securely.



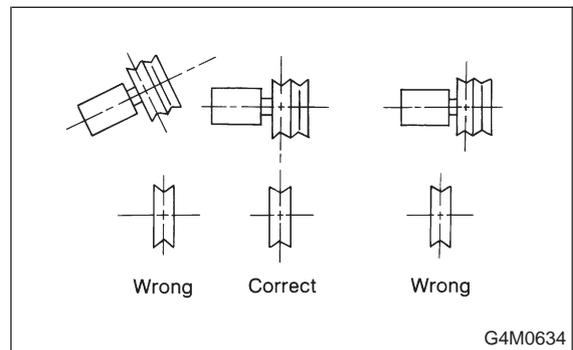
6) Check drive belt tension and adjust it if necessary by changing alternator position and/or idler pulley position.

CAUTION:

- Ensure that the V-belt is aligned correctly. If it is not, check for loose bolts.
- The V-belt should not be too tight or too loose.

A belt which is too tight may break bearing or cause gas to leak from the shaft seal. A belt which is too loose slips, thereby causing the belt cut.

- After completing the compressor installation and testing the system operation, check and adjust the tension of both V-belts again.



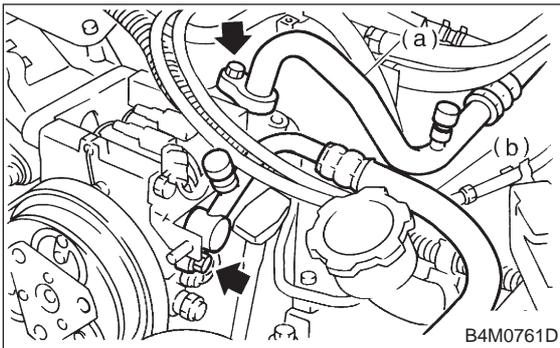
Pulley arrangement	Tension mm (in)/98N (10 kg, 22 lb)	
	(A)	(B)
<p>Figures in table refer to the number of grooves in pulleys. C/P: Crankshaft pulley ALT: Alternator pulley P/S: Power steering oil pump pulley A/C: Air conditioner compressor pulley I/P: Idler pulley</p>	<p>*New belt: 7.0 – 9.0 (0.276 – 0.354) Existing belt: 9.0 – 11.0 (0.354 – 0.433)</p>	<p>*New belt: 7.5 – 8.5 (0.295 – 0.335) Existing belt: 9.0 – 10.0 (0.354 – 0.394)</p>
<p>*When replacing belts with new ones, adjust tensions to specification and then readjust to the same specification after running engine for 5 minutes.</p>		

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7) Install high-pressure hose (b).
Connect high-pressure hose with compressor.

CAUTION:

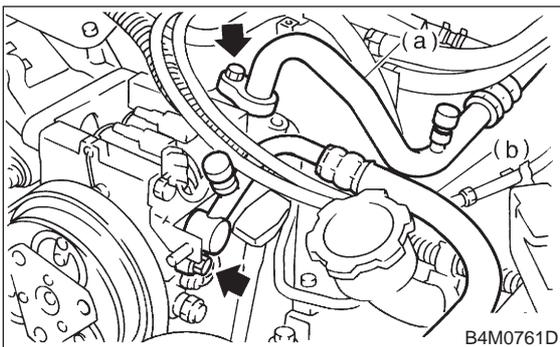
Be sure to apply compressor oil to the periphery of O-ring.



8) Install low-pressure hose (a).
Connect low-pressure hose with compressor.

CAUTION:

Be sure to apply compressor oil to the periphery of O-ring.



9) Install belt cover.

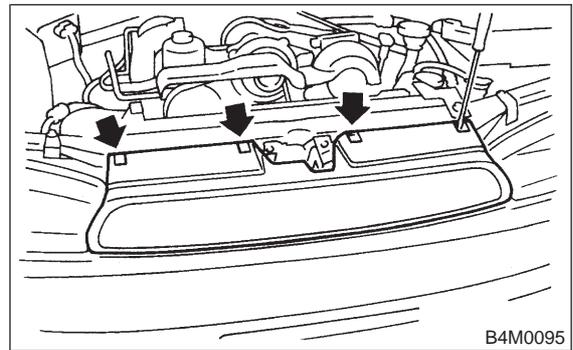
10) Connect ground cable to negative terminal of battery.

11) Charge refrigerant. <Ref. to 4-7 [W7H0].>

12. Condenser

A: REMOVAL AND INSTALLATION

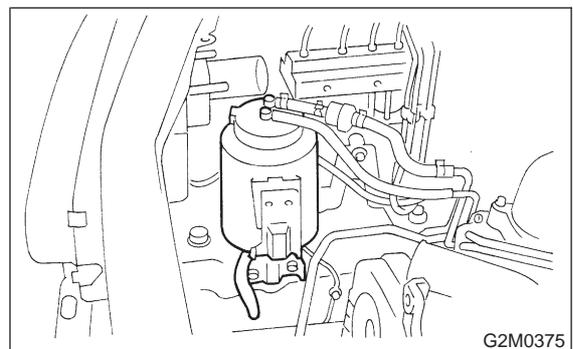
- 1) Disconnect battery negative terminal.
- 2) Discharge refrigerant using refrigerant recovery system. <Ref. to 4-7 [W6A0].>
- 3) Remove front grille.



- 4) Remove canister from bracket.

CAUTION:

- Do not disconnect hose from canister.
- Insert air vent hose of canister into the hole on body.



- 5) Remove the radiator upper bracket of both side.

- 6) Disconnect high-pressure hose (a) and high-pressure pipe (b) from condenser.

