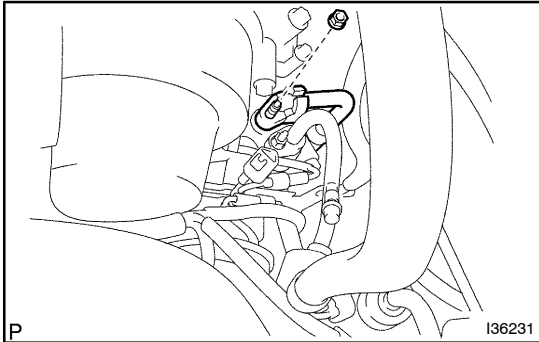


OVERHAUL

HINT:

COMPONENTS: [See page 55-33](#)

1. DISCONNECT NEGATIVE TERMINAL CABLE FROM BATTERY
2. EVACUATE REFRIGERANT (HFC-134A (R134A)) [\(SEE PAGE 55-11\)](#)
3. REMOVE AIR CLEANER INLET NO.1 [\(SEE PAGE 13-6\)](#)
4. REMOVE FAN AND GENERATOR V-BELT [\(SEE PAGE 14-6\)](#)
5. REMOVE ENGINE UNDER COVER NO.1

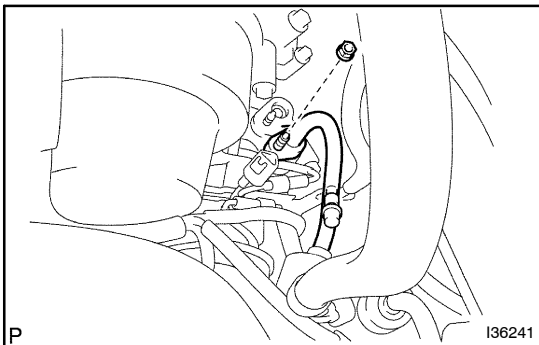


6. DISCONNECT COOLER REFRIGERANT DISCHARGE HOSE NO.1

- (a) Remove the nut and disconnect the cooler refrigerant discharge hose No.1.
- (b) Remove the O-ring from the cooler refrigerant discharge hose No.1.

NOTICE:

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

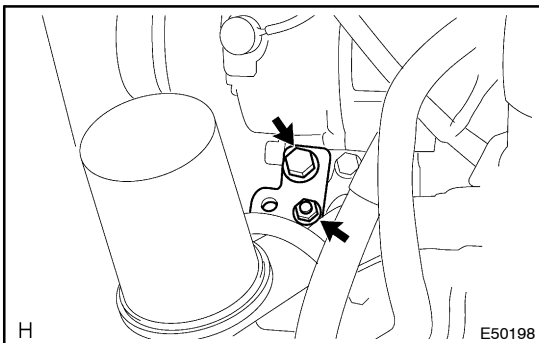


7. DISCONNECT COOLER REFRIGERANT SUCTION HOSE NO.1

- (a) Remove the nut and disconnect the cooler refrigerant suction hose No.1.
- (b) Remove the O-ring from the cooler refrigerant suction hose No.1.

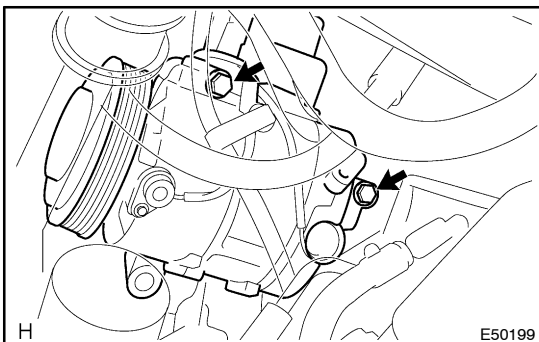
NOTICE:

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



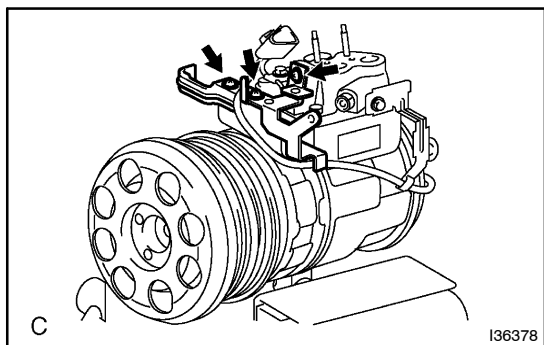
8. REMOVE COMPRESSOR MOUNTING BRACKET NO.1

- (a) Remove the bolt, nut and compressor mounting bracket No.1.



9. REMOVE COMPRESSOR AND MAGNETIC CLUTCH

- (a) Disconnect the connector.
- (b) Remove the 2 bolts, compressor and magnetic clutch.

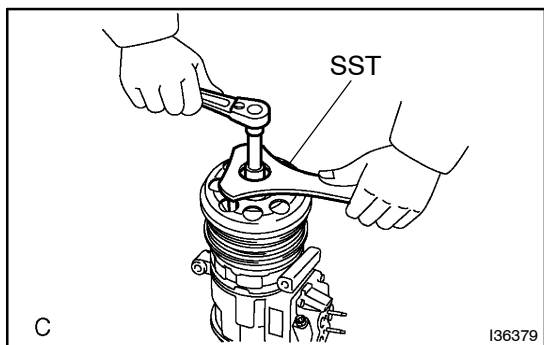
**10. REMOVE COOLER COMPRESSOR BRACKET**

- (a) Place the compressor and magnet clutch in a vice.

NOTICE:

Do not get the bracket and harness caught in the vice.

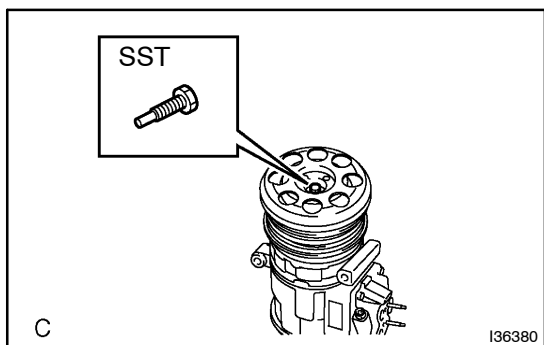
- (b) Remove the screw and cooler compressor bracket.

**11. REMOVE MAGNET CLUTCH ASSY**

- (a) Using SST and a socket wrench, remove the shaft bolt.

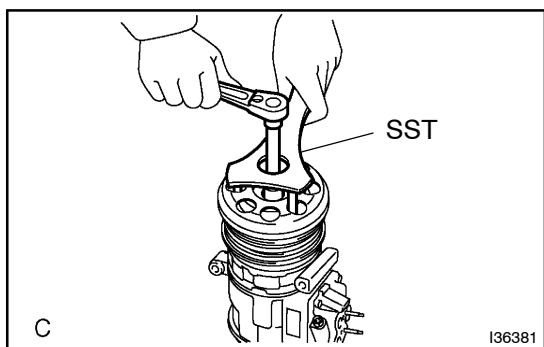
SST 07112-76060

Torque: 13.2 N·m (135 kgf·cm, 9 ft·lbf)



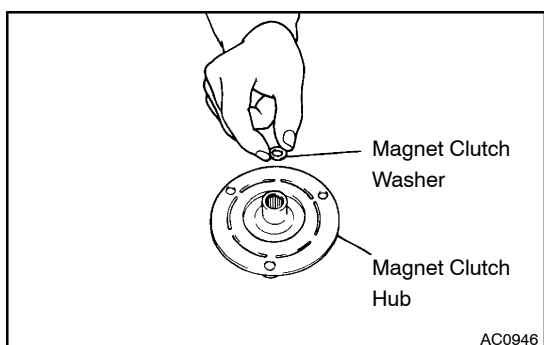
- (b) Install SST on the magnet clutch hub.

SST 07112-66040

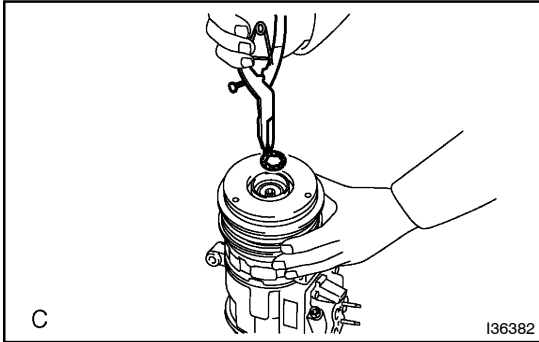


- (c) Using SST and a socket wrench, remove the magnet clutch hub.

SST 07112-76060, 07112-66040



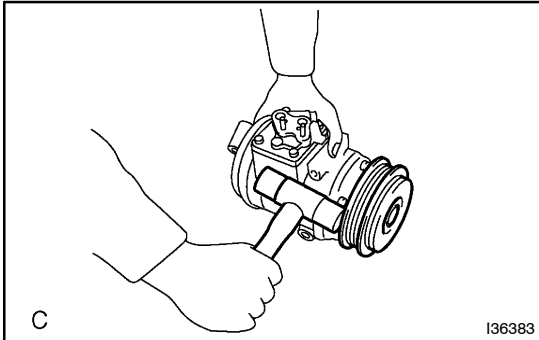
- (d) Remove the magnet clutch washer from the magnet clutch hub.



- (e) Using a snap ring expander, remove the snap ring.

NOTICE:

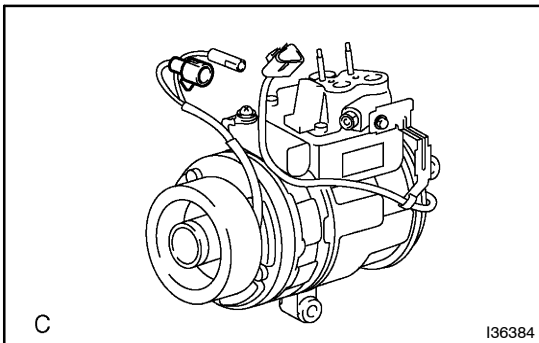
Do not damage the seal cover of the bearing when removing the snap ring.



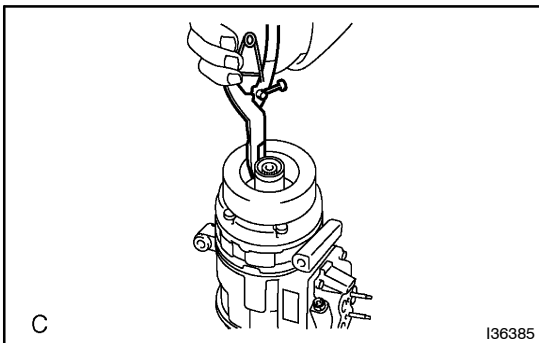
- (f) Using a plastic hammer, tap the magnet clutch rotor off the shaft.

NOTICE:

Be careful not to damage the pulley when tapping on the rotor.



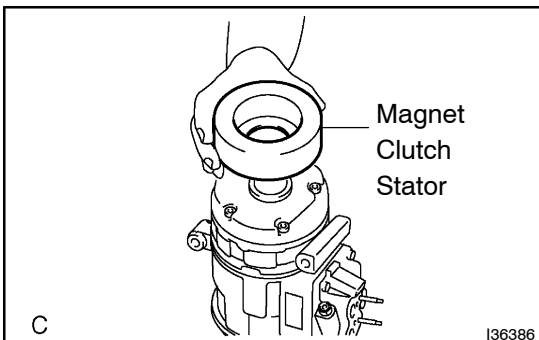
- (g) Disconnect the connector from the magnet clutch stator.



- (h) Using a snap ring expander, remove the snap ring.

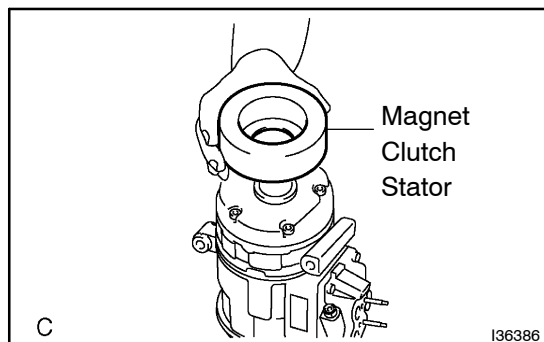
NOTICE:

Do not damage the seal cover of the bearing when removing the snap ring.



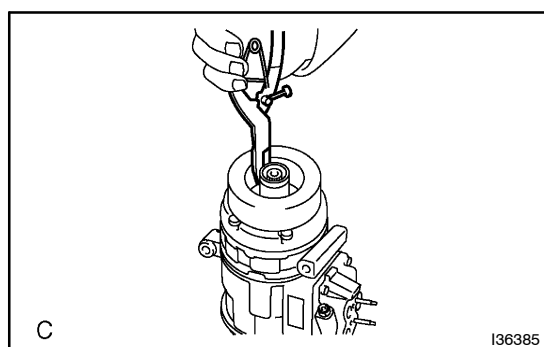
- (i) Remove the magnet clutch stator.

12. REMOVE COOLER COMPRESSOR ASSY

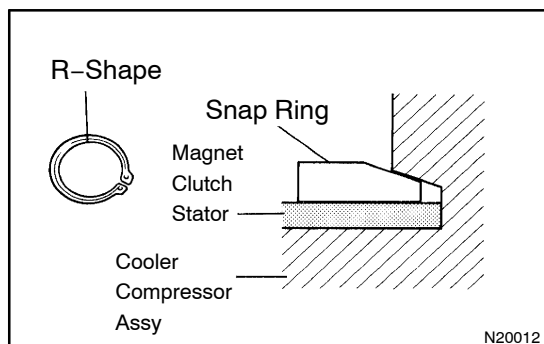


13. INSTALL MAGNET CLUTCH ASSY

- (a) Install the magnet clutch stator.

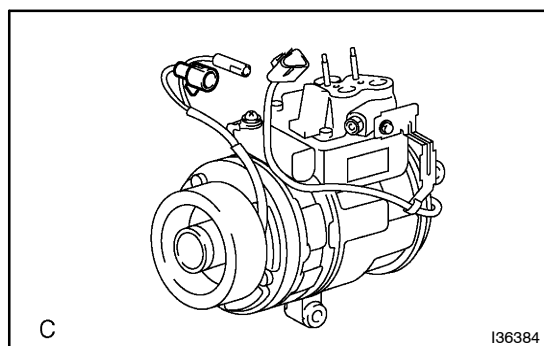


- (b) Using a snap ring expander, install a new snap ring with the beveled side facing up.

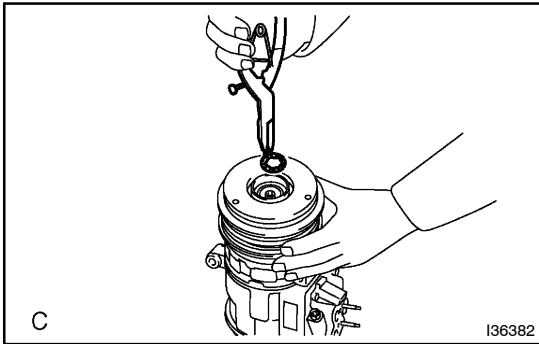


NOTICE:

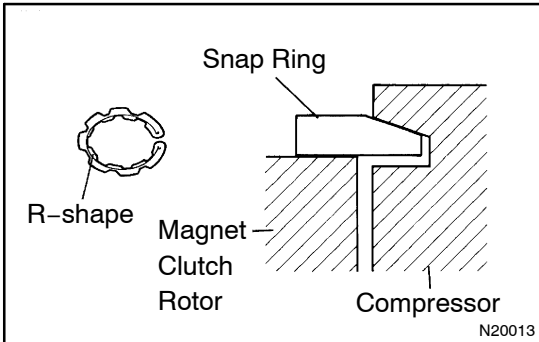
- The snap ring should be installed so that its beveled side faces up.
- Do not damage the seal cover of the bearing when installing the snap ring.



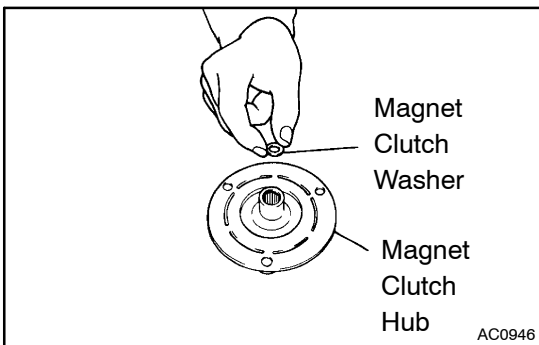
- (c) Connect the connector to the magnet clutch stator.



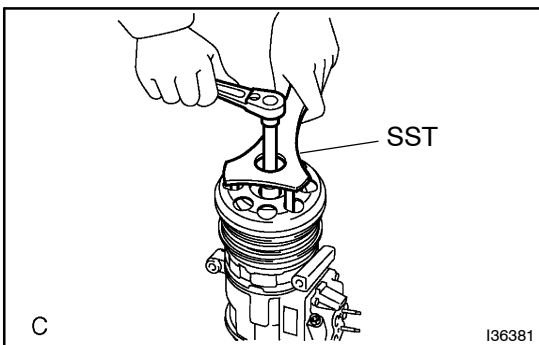
- (d) Install the magnet clutch rotor.
- (e) Using a snap ring expander, install a new snap ring with the beveled side facing up.

**NOTICE:**

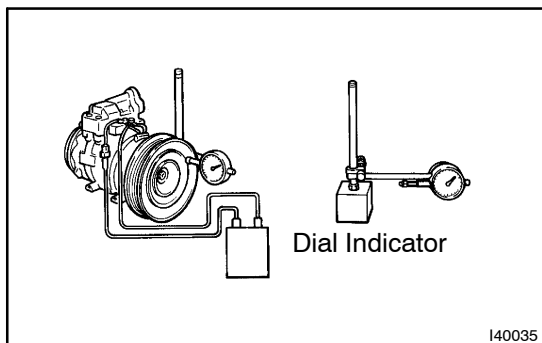
- The snap ring should be installed so that its beveled side faces up.
- Do not damage the seal cover of the bearing when installing the snap ring.



- (f) Install the magnet clutch washer to the magnet clutch hub. Install the magnet clutch hub on the magnet clutch rotor.



- (g) Using SST and a torque wrench, install the shaft bolt.
SST 07112-66040, 07112-76060
Torque: 13.2 N·m (135 kgf·cm, 9 ft·lbf)



14. INSPECT MAGNET CLUTCH CLEARANCE

- Set the dial indicator to the pressure plate of the magnetic clutch.
- Connect the magnetic clutch lead wire to the positive (+) terminal of the battery.
- Check the clearance between the pressure plate and rotor when connecting the negative (–) terminal to the battery.

Standard clearance:

0.30 to 0.55 mm (0.012 to 0.022 in.)

If clearance is not within the specified range, adjust the clearance using a magnet clutch washer until standard clearance is obtained.

Magnet clutch washer thickness:

0.1 mm (0.004 in.)

0.3 mm (0.012 in.)

0.5 mm (0.020 in.)

15. ADJUST COMPRESSOR OIL

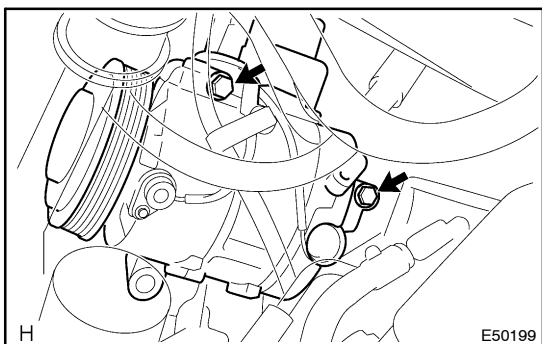
- When replacing the compressor and magnetic clutch with a new one, after gradually removing the refrigerant gas from the service valve, drain the following amount of oil from the new compressor and magnetic clutch before installation.

Standard:

(Oil capacity inside the new compressor: 180 +15 cc (6.1 +0.51 fl.oz.)) – (Remaining oil amount in the removed compressor) = (Oil amount to be removed from the new compressor when replacing)

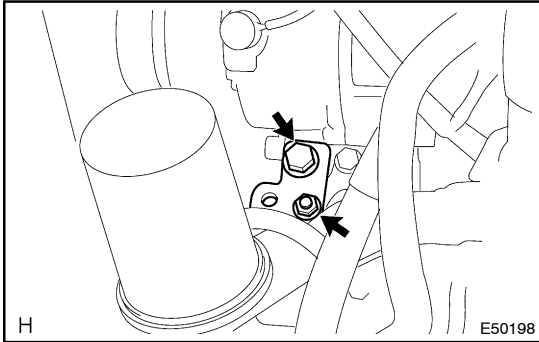
NOTICE:

- When checking the compressor oil level, observe the precautions for air conditioning radiator assy removal/installation.
- Since compressor oil remains in the pipes of the vehicle, if a new compressor and magnetic clutch is installed without removing some oil inside, the oil amount becomes excessive, preventing heat exchange in the refrigerant cycle and causing refrigerant failure.
- If the remaining oil in the removed compressor and magnetic clutch is too small in volume, check for oil leakage.
- Be sure to use ND-OIL 8 or equivalent for compressor oil.



16. TEMPORARILY TIGHTEN COMPRESSOR AND MAGNETIC CLUTCH

- Temporarily tighten the cooler compressor w/ magnet clutch assy with the 2 bolts.
- Connect the connector.

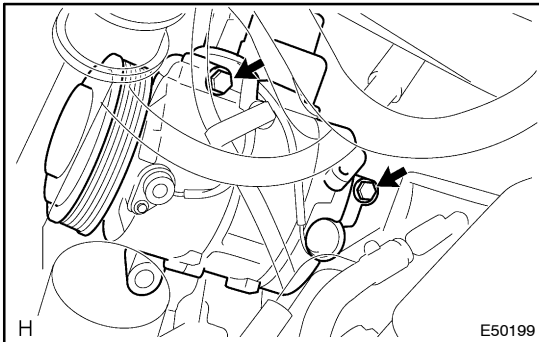
**17. INSTALL COMPRESSOR MOUNTING BRACKET NO. 1**

- (a) Install the compressor mounting bracket with the bolt and nut.

Torque:

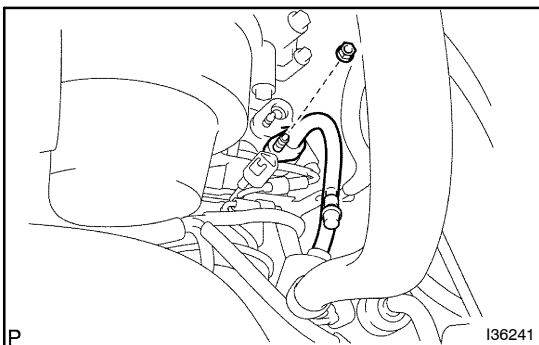
Bolt: 49 N·m (500 kgf·cm, 36 ft·lbf)

Nut: 30 N·m (306 kgf·cm, 22 ft·lbf)

**18. FULLY TIGHTEN COMPRESSOR AND MAGNETIC CLUTCH**

- (a) Fully tighten the cooler compressor w/ magnetic clutch assy with the 2 bolts.

Torque: 49 N·m (500 kgf·cm, 36 ft·lbf)

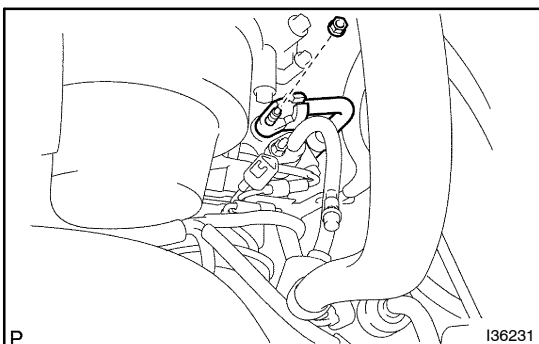
**19. INSTALL COOLER REFRIGERANT SUCTION HOSE NO. 1**

- (a) Remove the attached vinyl tape from the hose.
(b) Sufficiently apply compressor oil to the new O-ring and fitting surface of the compressor and magnetic clutch.

Compressor oil: ND-OIL 8 or equivalent

- (c) Install an O-ring to the cooler refrigerant suction hose No. 1.
(d) Install the cooler refrigerant suction hose No. 1 to the compressor and magnetic clutch with the nut.

Torque: 9.8 N·m (100 kgf·cm, 7 ft·lbf)

**20. INSTALL COOLER REFRIGERANT DISCHARGE HOSE NO. 1**

- (a) Remove the attached vinyl tape from the hose.
(b) Sufficiently apply compressor oil to the new O-ring and fitting surface of the compressor and magnetic clutch.

Compressor oil: ND-OIL 8 or equivalent

- (c) Install an O-ring to the cooler refrigerant discharge hose No. 1.
(d) Install the cooler refrigerant discharge hose No. 1 to the compressor and magnetic clutch with the nut.

Torque: 9.8 N·m (100 kgf·cm, 7 ft·lbf)

21. INSTALL FAN AND GENERATOR V-BELT (SEE PAGE 14-6)

22. INSTALL AIR CLEANER INLET NO. 1 (SEE PAGE 13-6)

23. CONNECT NEGATIVE TERMINAL CABLE TO BATTERY

24. CHARGE REFRIGERANT (SEE PAGE 55-11)

25. WARM UP ENGINE

26. INSPECT FOR REFRIGERANT LEAKAGE (SEE PAGE 55-11)