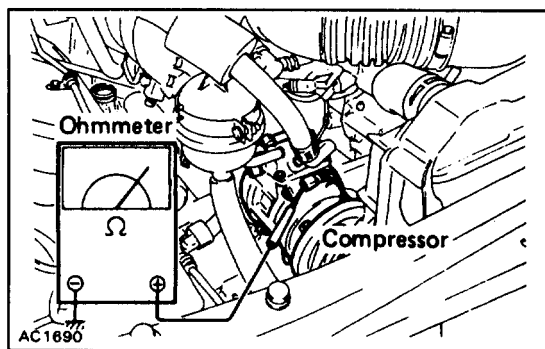


COMPRESSOR

ON-VEHICLE INSPECTION

1. **INSTALL MANIFOLD GAUGE SET**
(See page [AC-14](#))
2. **RUN ENGINE AT APPROX. 1,500 RPM**
3. **CHECK COMPRESSOR FOR FOLLOWING:**
 - (a) High pressure gauge reading is not low and low pressure gauge reading is not higher than normal.
 - (b) Metallic sound.
 - (c) Leakage from shaft seal.

If defects are found, repair the compressor.

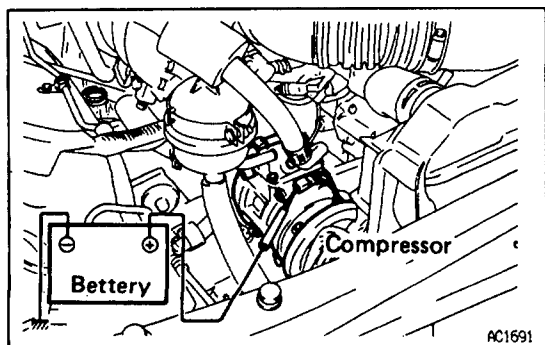


4. **INSPECT MAGNETIC CLUTCH**
 - (a) Inspect the pressure plate and the rotor for signs of oil.
 - (b) Check the clutch bearings for noise and grease leakage.
 - (c) Using an ohmmeter, measure the resistance of the stator coil between the clutch lead wire and ground.

Standard resistance:

$$3.6 \pm 0.2 \, \Omega \text{ at } 20^{\circ}\text{C (68}^{\circ}\text{F)}$$

If resistance value is not as specified, replace the coil.

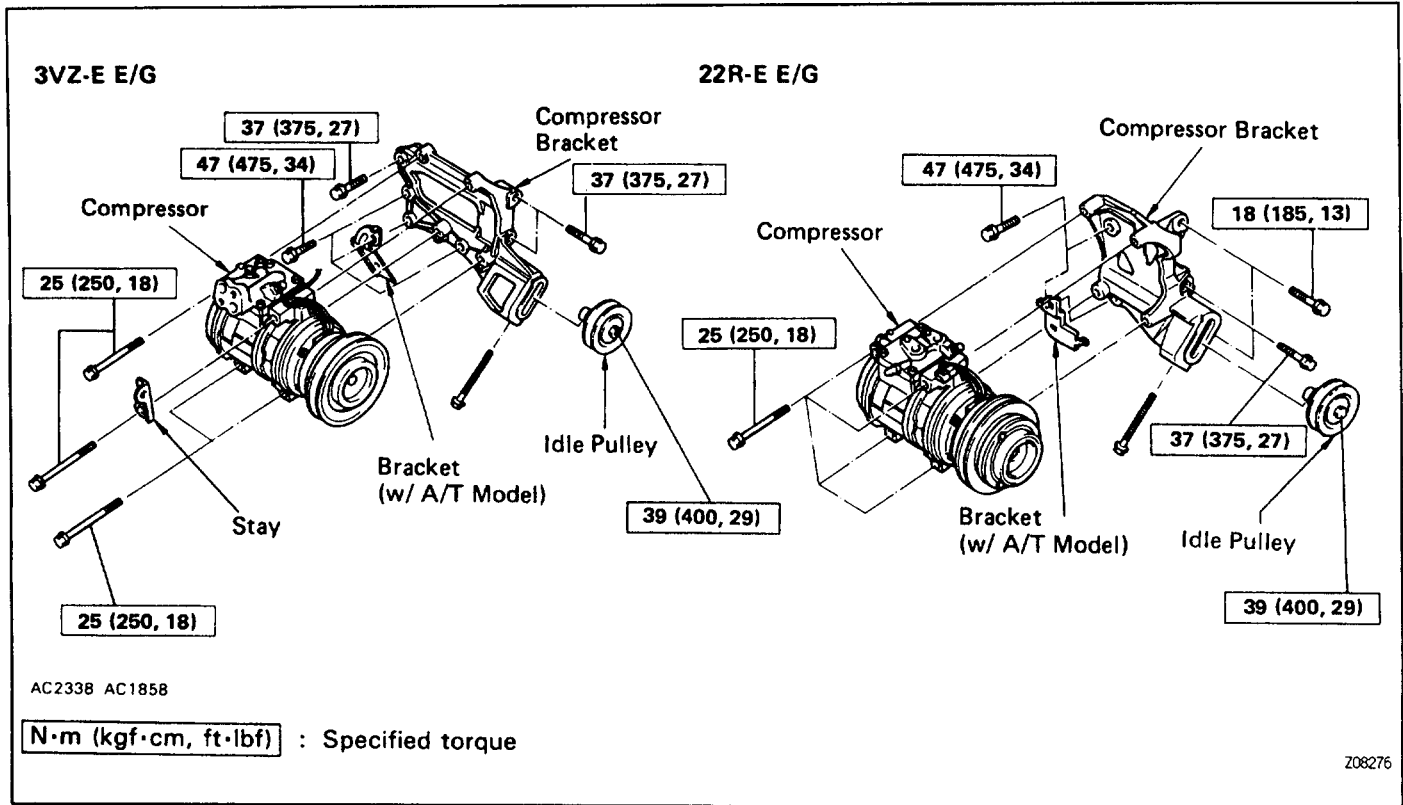


- (d) Connect the positive (+) lead from the battery to terminal and the negative (-) lead to ground, check that the magnetic clutch is energized.

If magnetic clutch is not energized, replace the coil.

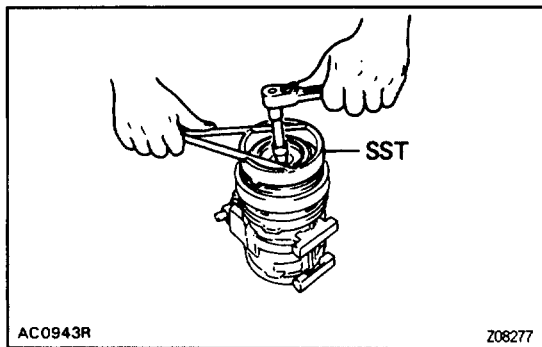
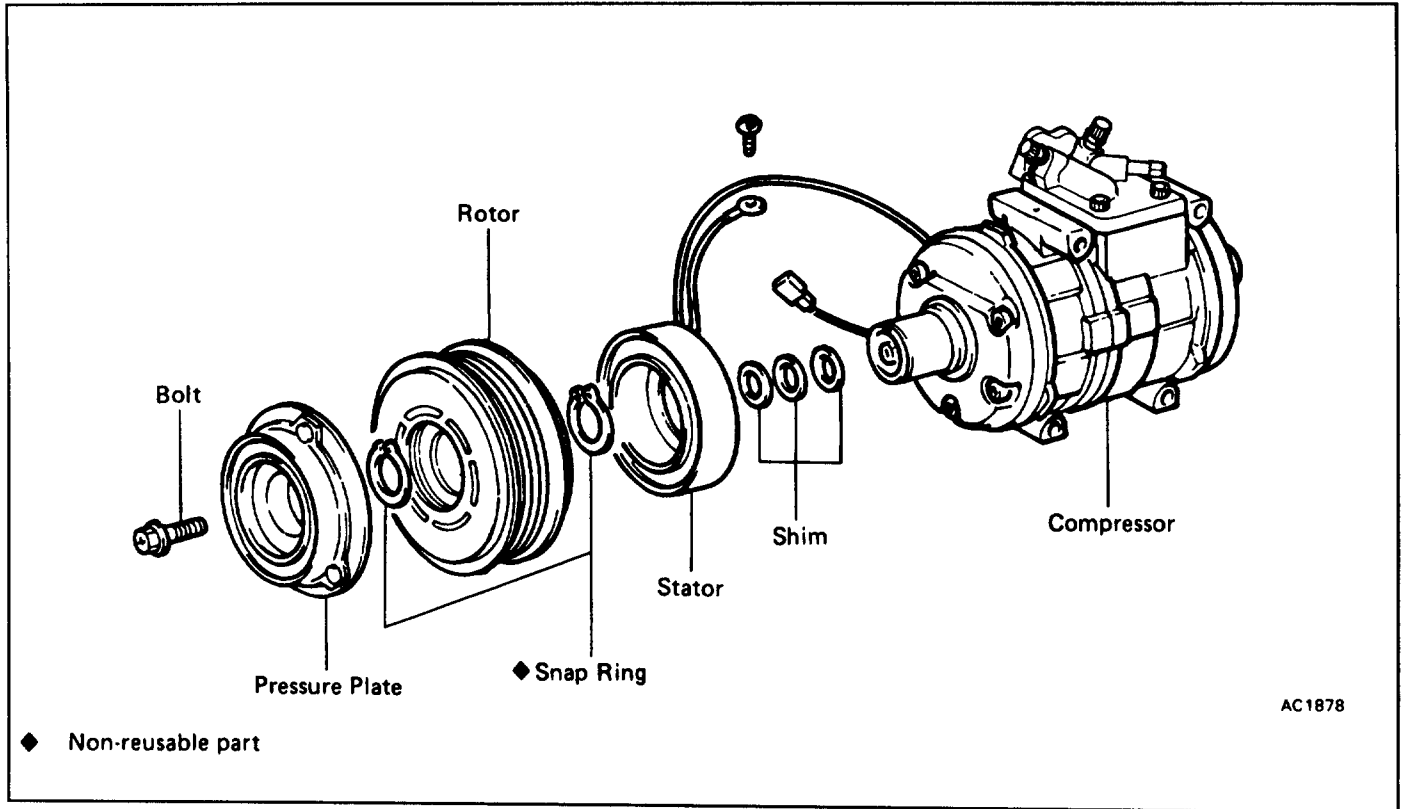
NOTICE: Do not short the positive (+) lead wire on the vehicle by applying battery positive voltage.

COMPRESSOR REMOVAL



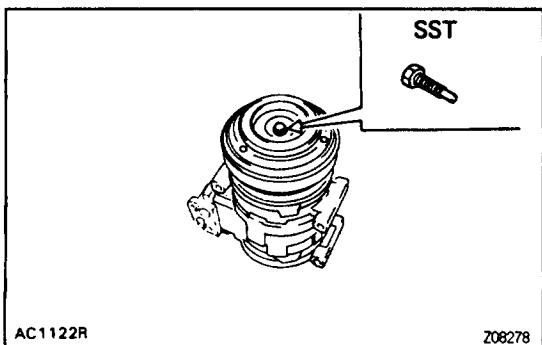
1. RUN ENGINE AT IDLE SPEED WITH A/C ON FOR APPROX. 10 MINUTES WITH AIR CONDITIONING ON
2. STOP ENGINE
3. DISCONNECT NEGATIVE (-) CABLE FROM BATTERY
4. 3VZ-E Engine Only:
REMOVE POWER STEERING PUMP
5. DISCONNECT CLUTCH LEAD WIRE FROM WIRING HARNESS
6. RECOVER REFRIGERANT FROM REFRIGERATION SYSTEM
7. DISCONNECT 2 HOSES FROM COMPRESSOR SERVICE VALVES
Cap the open fitting immediately to keep moisture out of the system.
8. REMOVE COMPRESSOR
 - (a) Remove the fan shroud.
 - (b) Loosen the drive belt.
 - (c) Remove the compressor mounting bolts and the compressor.
9. REMOVE COMPRESSOR BRACKET
Remove the compressor bracket mounting bolts and the compressor bracket.

MAGNETIC CLUTCH DISASSEMBLY

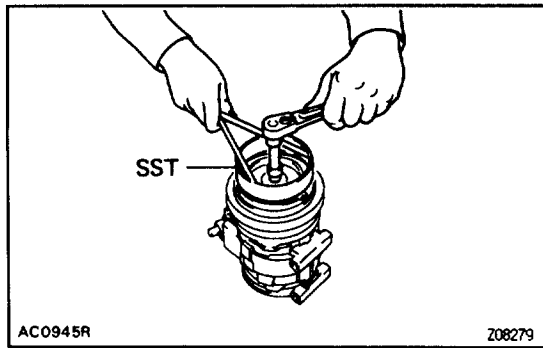


1. REMOVE PRESSURE PLATE

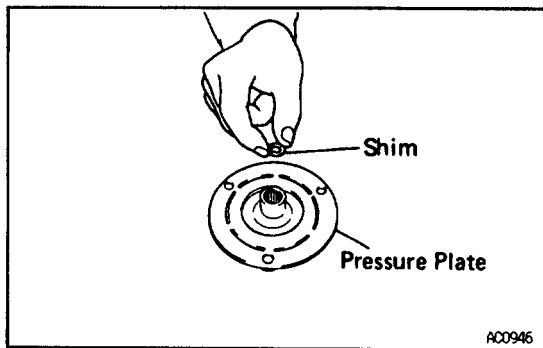
- (a) Using a SST and socket wrench, remove the shaft bolt.
SST 07112-76060



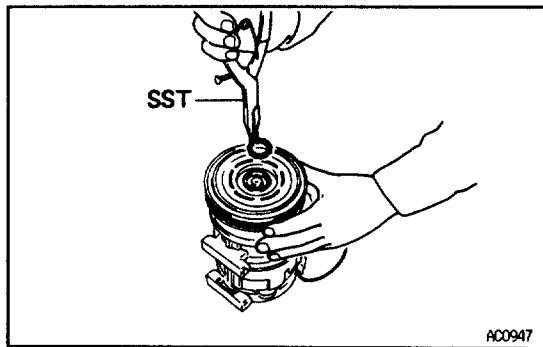
- (b) Install a SST on the pressure plate.
SST 07112-66040



- (c) Using a SST and socket wrench, remove the pressure plate.
SST 07112-76060

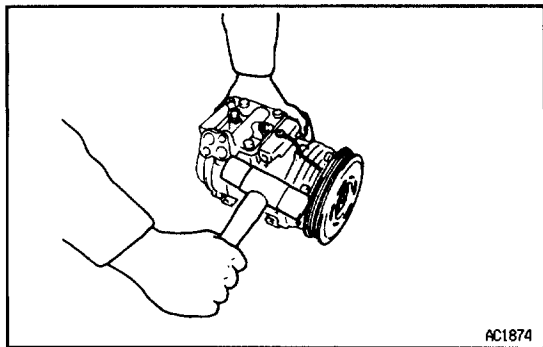


- (d) Remove the shims from the pressure plate.

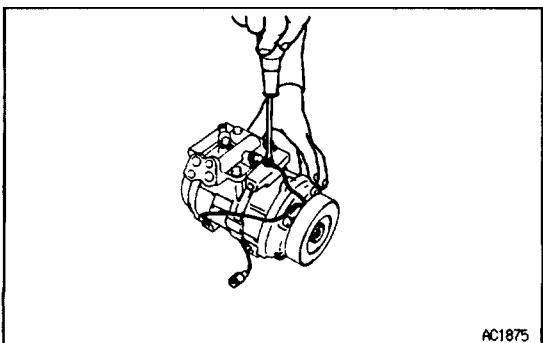


2. REMOVE ROTOR

- (a) Using a SST, remove the snap ring.
SST 07114-84020

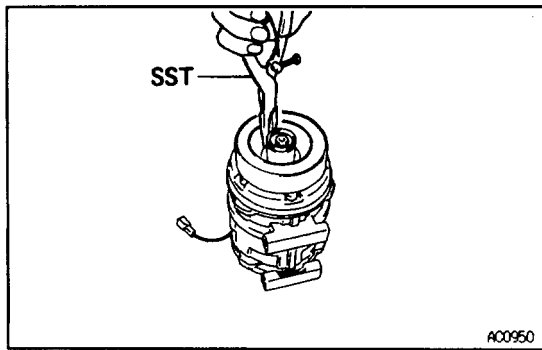


- (b) Using a plastic hammer, tap the rotor off the shaft.
NOTICE: Be careful not to damage the pulley when tapping on the rotor.

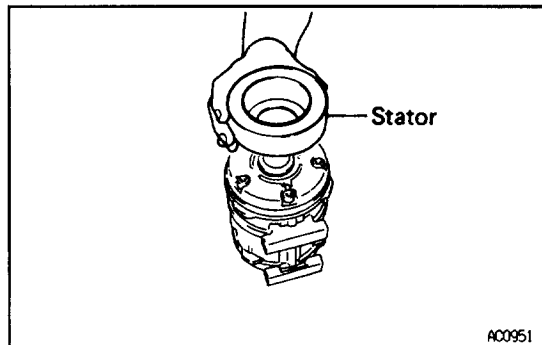


3. REMOVE STATOR

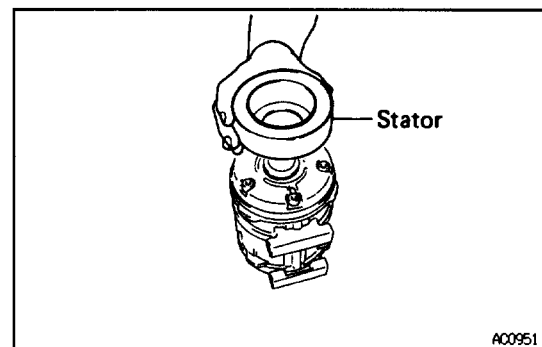
- (a) Disconnect the stator lead wire from the compressor housing.



- (b) Using a SST, remove the snap ring.
SST 07114-84020



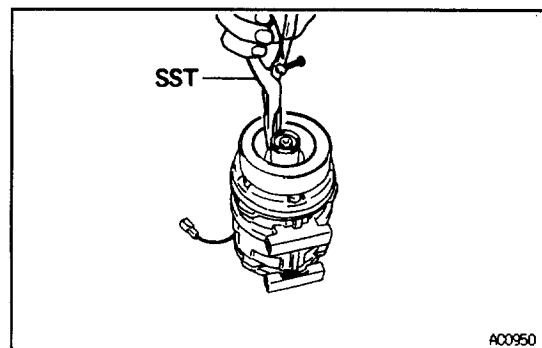
- (c) Remove the stator.



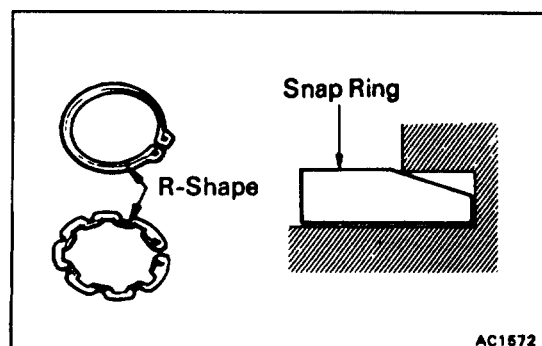
MAGNETIC CLUTCH ASSEMBLY

1. INSTALL STATOR

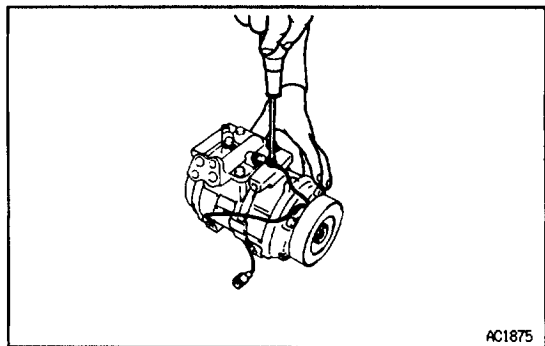
- (a) Install the stator on the compressor.



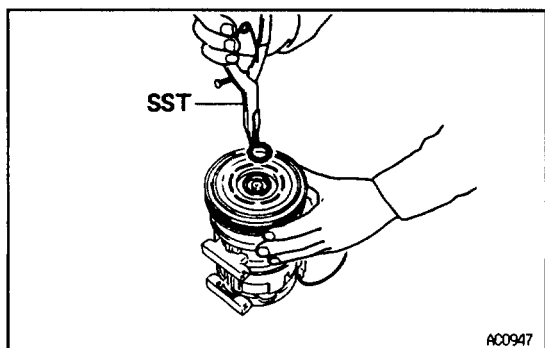
- (b) Using SST, install a new snap ring.
SST 07114-84020



NOTICE: The snap ring should be installed so that its beveled side faces up.



- (c) Connect the stator lead wire to the compressor housing.



2. INSTALL ROTOR

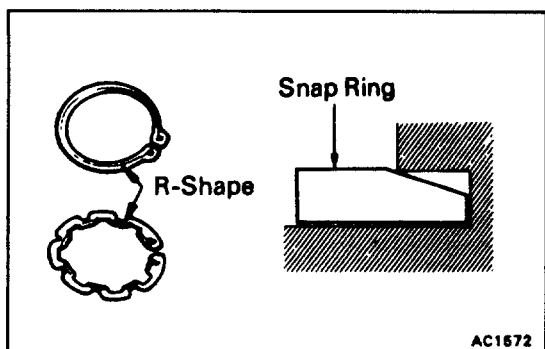
- (a) Install the rotor on the compressor shaft.
 (b) Using SST, install a new snap ring.

SST 07114-84020

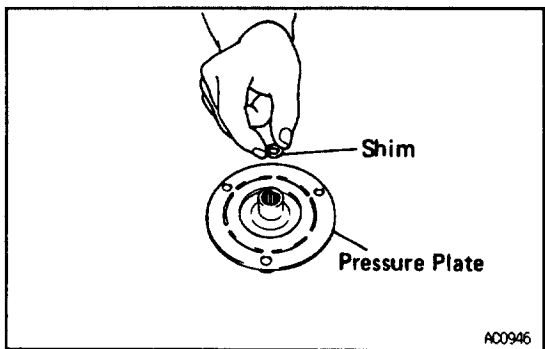
NOTICE: Do not spread the point of SST widely.

Max width:

23.1 mm (0.909 in.)

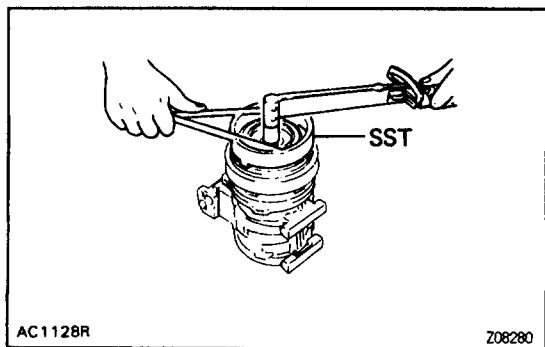


NOTICE: The snap ring should be installed so that its beveled side faces up.

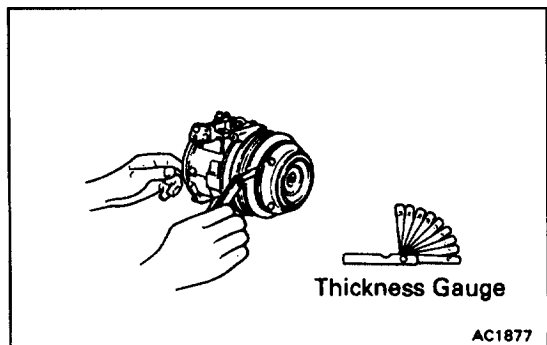


3. INSTALL PRESSURE PLATE

- (a) Adjust the clearance between the pressure plate and rotor by putting shims on the compressor shaft.



- (b) Using SST and torque wrench, install the shaft bolt.
 SST 07112-76060
 Torque: 14 N·m (140 kgf·cm, 10 ft·lbf)



4. CHECK CLEARANCE OF MAGNETIC CLUTCH

Check the clearance between the pressure plate and rotor using thickness gauge.

Standard clearance:

0.5 ± 0.15 mm (0.020 ± 0.0059 in.)

If the clearance is not within tolerance, change the number of shims to obtain the standard clearance.

COMPRESSOR INSTALLATION

1. INSTALL COMPRESSOR BRACKET

(See page [AC-30](#))

Install the compressor bracket with the mounting bolts.

Torque:

47 N·m (475 kgf·cm, 34 ft·lbf)

37 N·m (375 kgf·cm, 27 ft·lbf)

18 N·m (185 kgf·cm, 13 ft·lbf)

2. INSTALL COMPRESSOR WITH 3 MOUNTING BOLTS

Torque: 27 N·m (280 kgf·cm, 20 ft·lbf)

3. INSTALL DRIVE BELT

(See page [AC-21](#))

4. CONNECT DISCHARGE HOSE AND SUCTION HOSE TO COMPRESSOR SERVICE VALVES

Torque:

Discharge line 25 N·m (250 kgf·cm, 18 ft·lbf)

Suction line 25 N·m (250 kgf·cm, 18 ft·lbf)

5. CONNECT CLUTCH LEAD WIRE TO WIRING HARNESS

6. CONNECT NEGATIVE (–) CABLE TO BATTERY

7. EVACUATE AIR FROM REFRIGERATION SYSTEM

8. CHARGE AIR CONDITIONING SYSTEM WITH REFRIGERANT AND CHECK FOR GAS LEAKAGE

Specified amount:

750 ± 50 g (26.45 ± 1.76 oz.)