

4. EVACUATE AIR IN REFRIGERATION SYSTEM AND CHARGE WITH REFRIGERANT

Specified amount: 900 ± 50 g (31.74 ± 1.76 oz)

5. INSPECT FOR LEAKAGE OF REFRIGERANT

Using a gas leak tester, check for leakage of refrigerant.

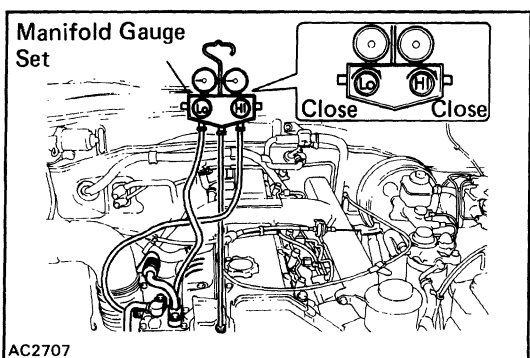
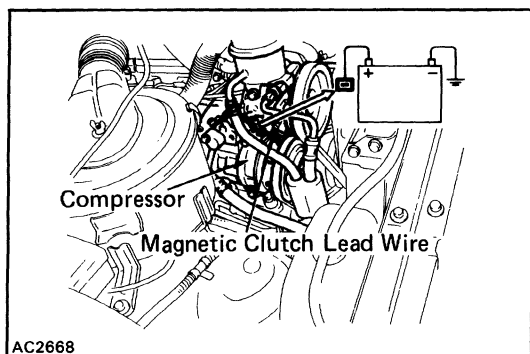
6. INSPECT AIR CONDITIONER OPERATION

COMPRESSOR ON-VEHICLE INSPECTION

(Magnetic Clutch)

INSPECT MAGNETIC CLUTCH FOR FOLLOWING

- (a) Inspect the pressure plate and the rotor for signs of oil.
- (b) Check the clutch bearings for noise and grease leakage.
- (c) Connect the positive (+) lead from the battery to the terminal on the magnetic clutch connector and the negative (-) lead to the body ground.
- (d) Check that the magnetic clutch is energized.
If the magnetic clutch is not energized, replace the magnetic clutch.



(Compressor)

1. INSTALL MANIFOLD GAUGE SET

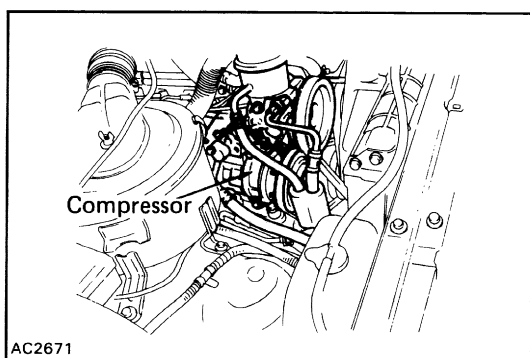
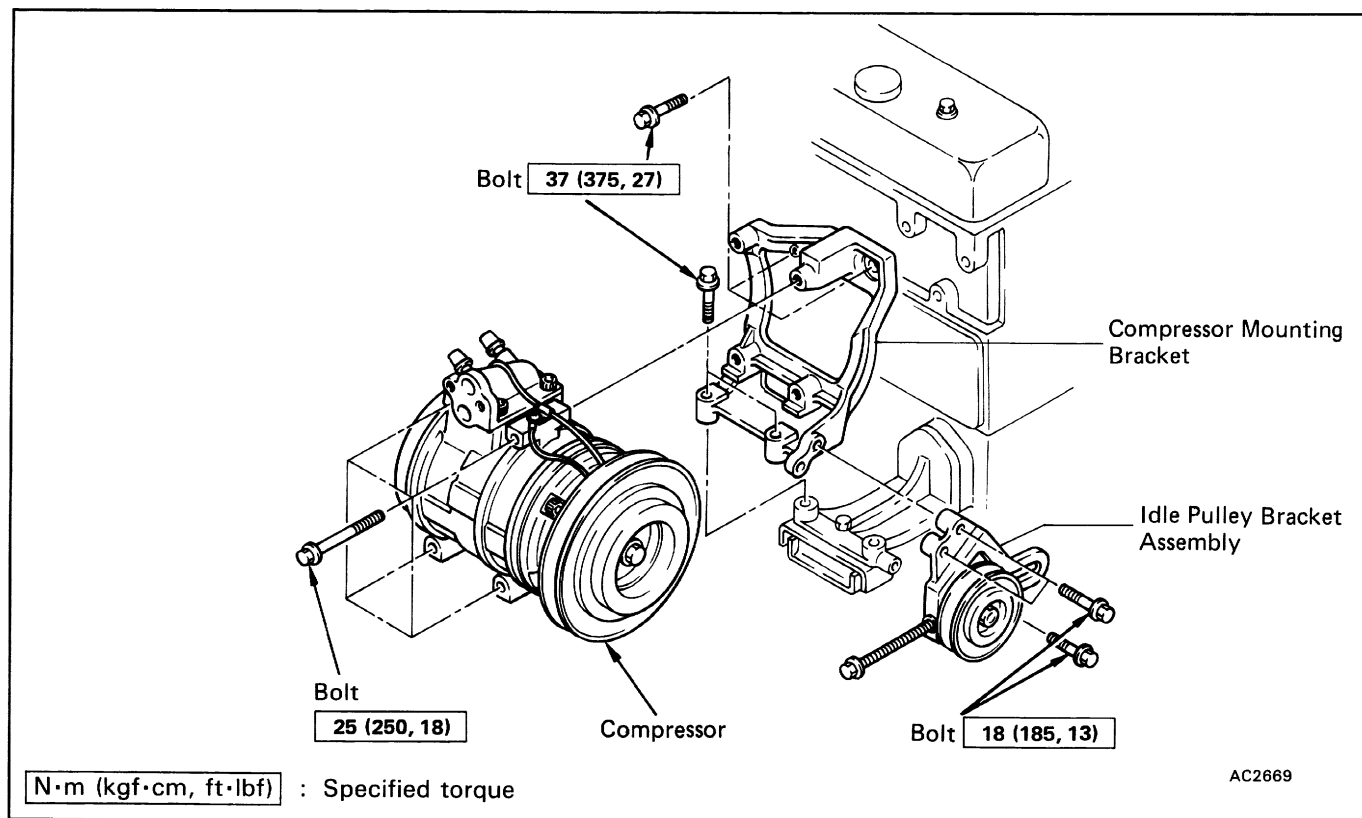
See page [AC-14](#)

2. RUN ENGINE AT APPROX. 2,000 RPM

3. INSPECT COMPRESSOR FOR FOLLOWING

- (a) High pressure gauge reading is not lower and low pressure gauge reading is not higher than normal.
- (b) Check that the metallic sound.
- (c) Check that the leakage from shaft seal.
If defects are found, replace the compressor.

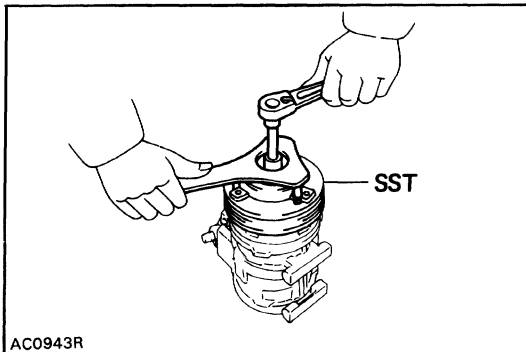
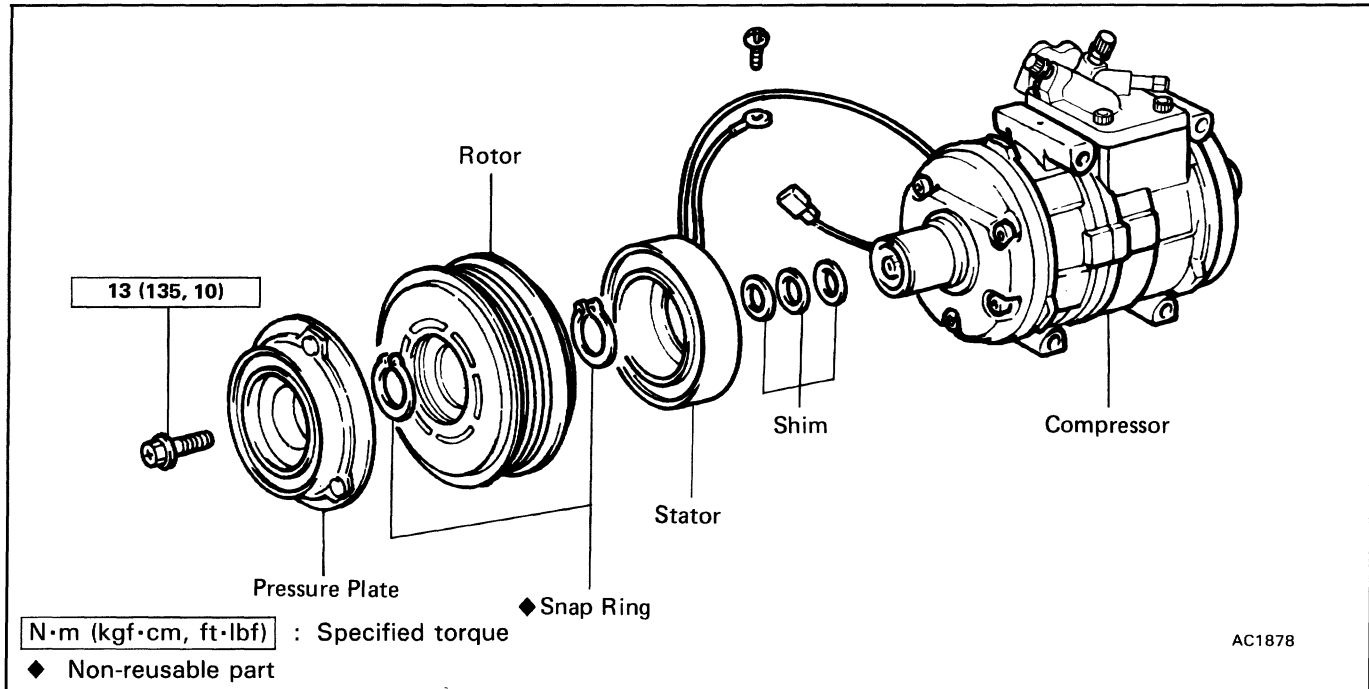
REMOVAL OF COMPRESSOR



1. RUN ENGINE AT IDLE SPEED WITH A/C ON FOR TEN MINUTES
2. STOP ENGINE
3. DISCONNECT NEGATIVE CABLE FROM BATTERY
4. REMOVE UNDER COVER
5. DISCONNECT CONNECTOR FROM MAGNETIC CLUTCH
6. DISCHARGE REFRIGERANT FROM REFRIGERATION SYSTEM
7. DISCONNECT TWO HOSES FROM COMPRESSOR SERVICE VALVES

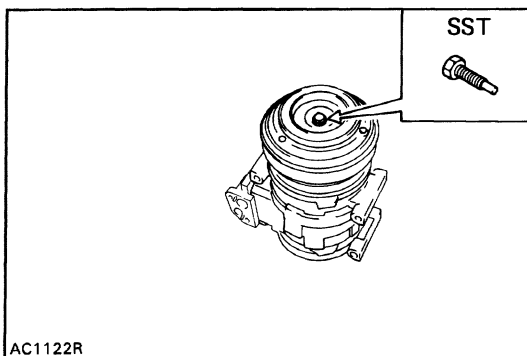
Cap the open fitting immediately to keep moisture and dust out of the system.

DISASSEMBLY OF MAGNETIC CLUTCH

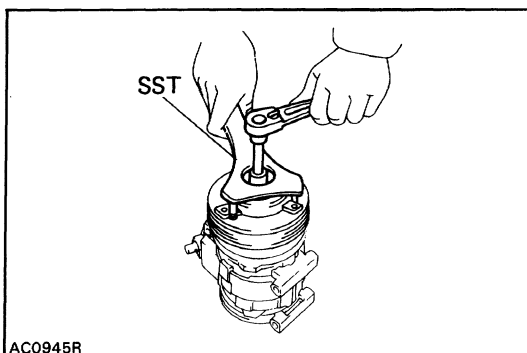


1. REMOVE PRESSURE PLATE

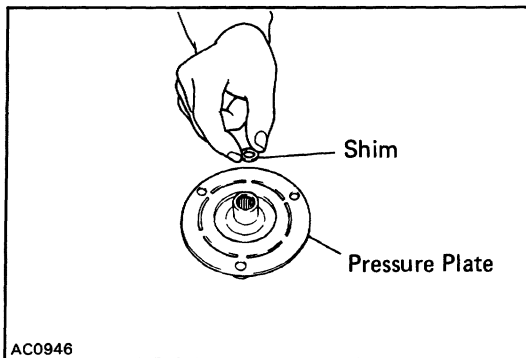
- (a) Using SST and a socket, remove the shaft bolt.
SST 07112-76060



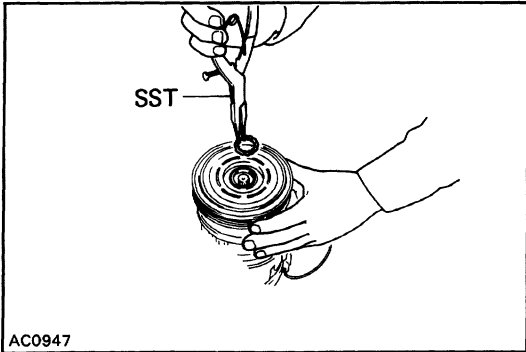
- (b) Install SST to the pressure plate.
SST 07112-66040



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



(d) Remove the shims from the pressure plate.



2. REMOVE ROTOR

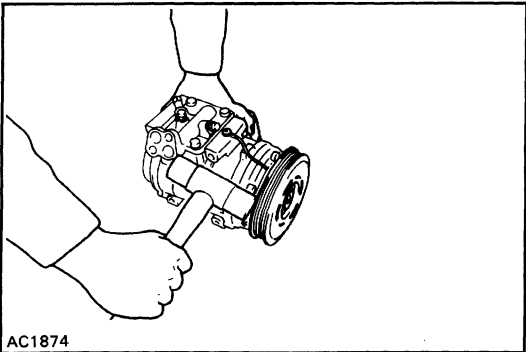
(a) Using SST, remove the snap ring.

SST 07114 - 84020

CAUTION: Do not spread the point of SST widely.

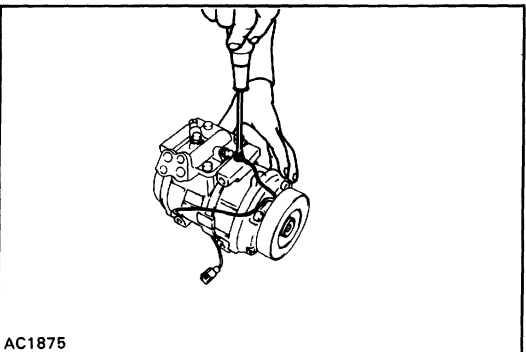
Maximum Width:

23.1 mm (0.909 in.)



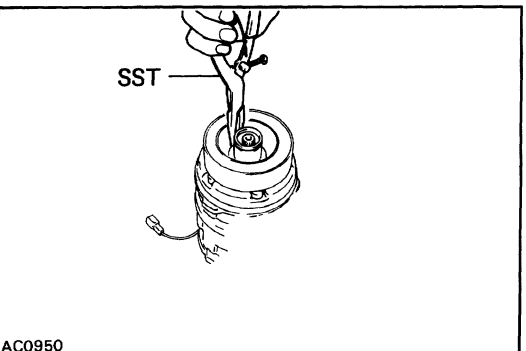
(b) Using a plastic hammer, tap the rotor off the shaft.

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



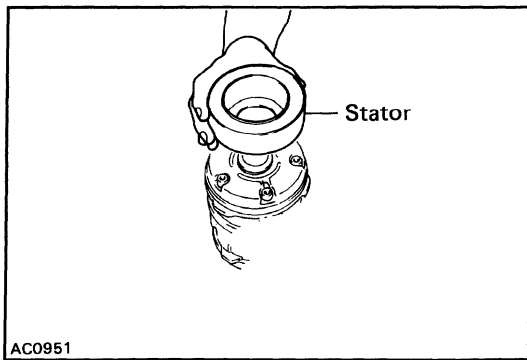
3. REMOVE STATOR

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

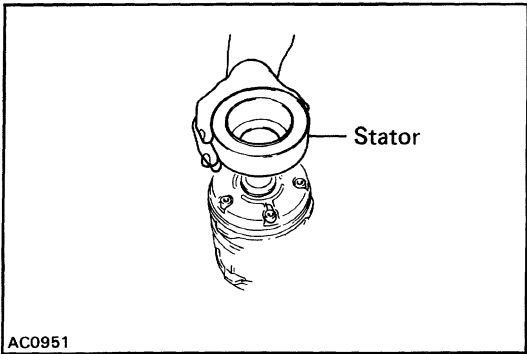


(b) Using SST, remove the snap ring.

SST 07114-84020



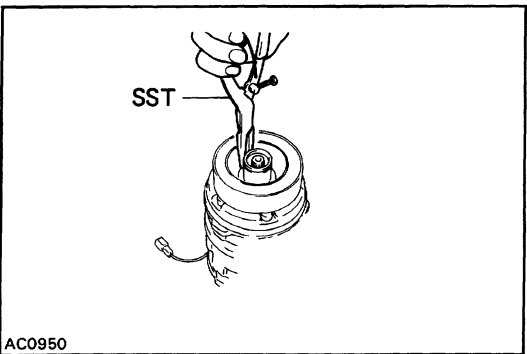
(c) Remove the stator.



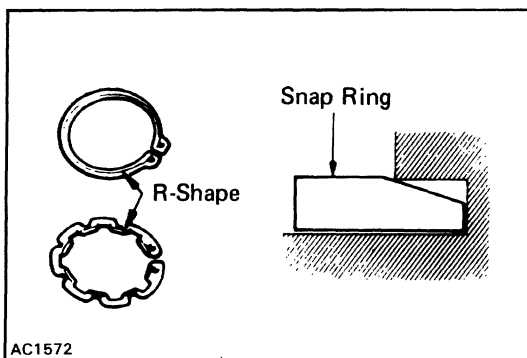
ASSEMBLY OF MAGNETIC CLUTCH

1. INSTALL STATOR

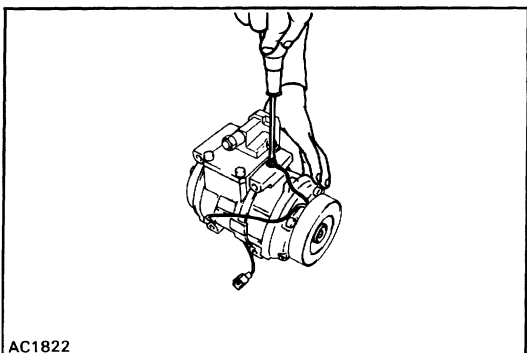
(a) Install the stator on the compressor.



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



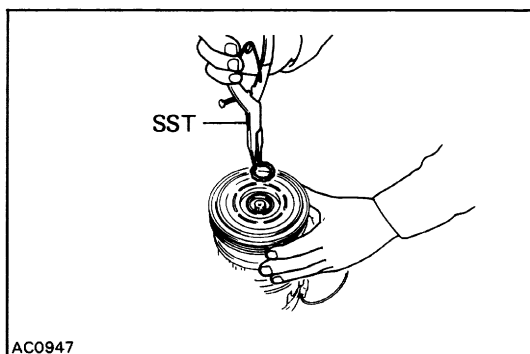
NOTICE: The snap ring should be installed so that its beveled side faces up.



(c) Using a SST and torque wrench, fasten the magnetic clutch lead wire to the cylinder block.

Torque: 3.4 N-m (35 kgf-cm, 30 in.-lbf)

SST 07110-61050



2. INSTALL ROTOR

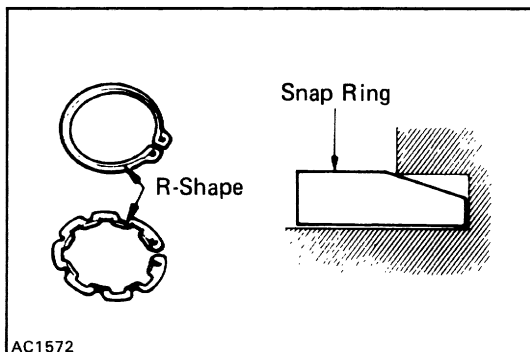
- (a) Install the rotor on the compressor shaft.
- (b) Using a SST, install the new snap ring.

SST 07114-84020

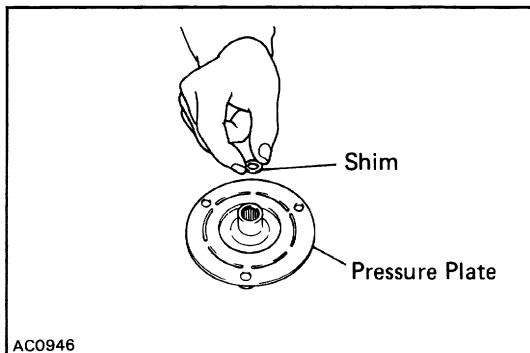
CAUTION: Do not spread the point of SST widely.

Maximum Width:

23.1 mm (0.909 in.)

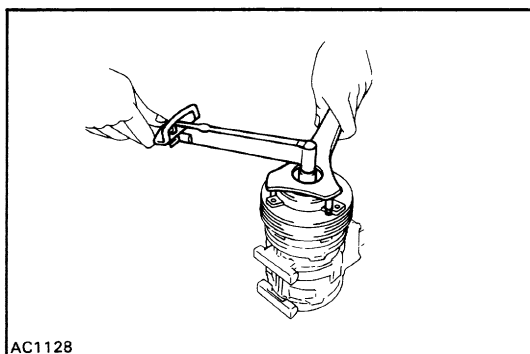


NOTICE: The snap ring should be installed so that its beveled side faces up.



3. INSTALL PRESSURE PLATE

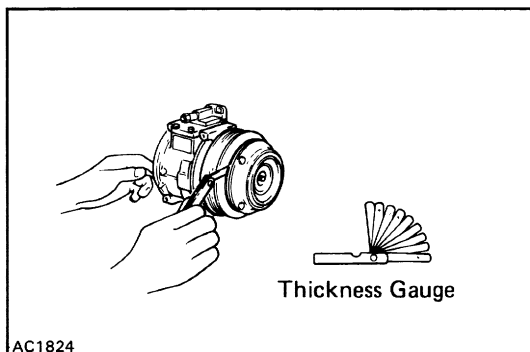
- (a) Put the shims on the pressure plate.



- (b) Using a SST and torque wrench, install the shaft bolt.

SST 07112-76060

Torque: 13 N-m (135 kgf-cm, 10 ft-lbf)



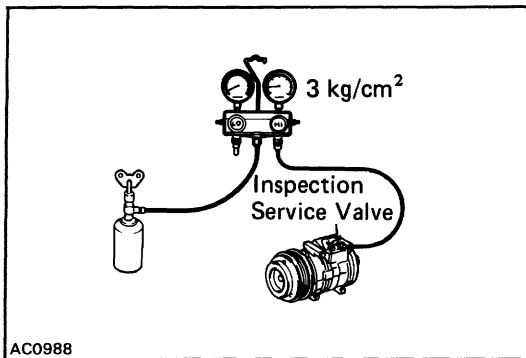
4. CHECK CLEARANCE OF MAGNETIC CLUTCH

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.



PERFORMANCE TEST OF COMPRESSOR

1. PERFORM GAS LEAKAGE TEST

- (a) Install the inspection service valve on the service valve.

HINT: Use only a TOYOTA supplied inspection service valve to perform the gas leakage test.

Part No. Suction side 88376-17020

Discharge side 88376-22020

- (b) Charge the compressor with refrigerant through the charge valve until the pressure is 294 kPa (3 kgf/cm², 43 psi)
- (c) Using a gas leak tester, check the compressor for leaks.

If leaks are found, check and replace the compressor.

2. EVACUATE COMPRESSOR AND CHARGE WITH REFRIG- ERANT

Make sure the caps are tight and the compressor is free from moisture and contamination.

HINT: When storing a compressor for an extended period, charge the compressor with refrigerant or dry nitrogen gas to prevent corrosion.

INSTALLATION OF COMPRESSOR

(See page [AC-18](#))

1. INSTALL COMPRESSOR WITH FOUR MOUNTING BOLTS

Torque: 23 N-m (250 kgf-cm, 18 ft-lbf)

2. INSTALL DRIVE BELT

(See page [AC-15](#))

3. CONNECT TWO HOSES TO COMPRESSOR SERVICE VALVES

Discharge line

Torque: 25 N-m (250 kgf-cm, 18 ft-lbf)

Suction line

Torque: 25 N-m (250 kgf-cm, 18 ft-lbf)

4. CONNECT CLUTCH LEAD WIRE TO WIRING HARNESS

5. CONNECT NEGATIVE CABLE TO BATTERY

6. EVACUATE AIR FROM AIR CONDITIONING SYSTEM

7. CHARGE AIR CONDITIONING SYSTEM WITH

REFRIGERANT AND CHECK FOR GAS LEAKAGE

Specified amount: 900 ± 50 g (31.74 ± 1.76 oz)