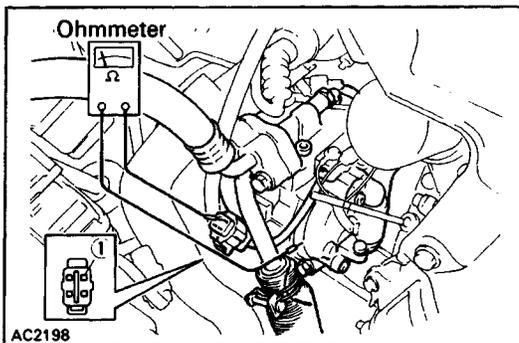


COMPRESSOR

ON-VEHICLE INSPECTION

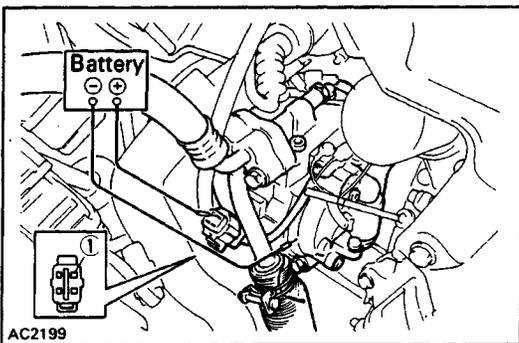
1. **INSTALL MANIFOLD GAUGE SET**
(See page AC-16)
2. **RUN ENGINE AT FAST IDLE**
3. **CHECK COMPRESSOR FOR FOLLOWING:**
 - (a) High pressure gauge reading is not lower and low pressure gauge reading is not higher than normal.
 - (b) Metallic sound
 - (c) Leakage from shaft seal
If defects are found, repair the compressor.
4. **CHECK 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 terminal 1 and ground.

Standard resistance: 3.4 – 3.8Ω at 20°C (68°F)

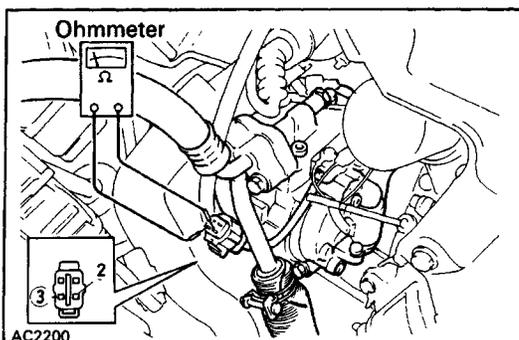
If resistance is not as specified, replace the coil.



- (d) Connect the positive (+) lead from the battery to terminal 1, 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, applying battery voltage.



5. **REVOLUTION DETECTING SENSOR**

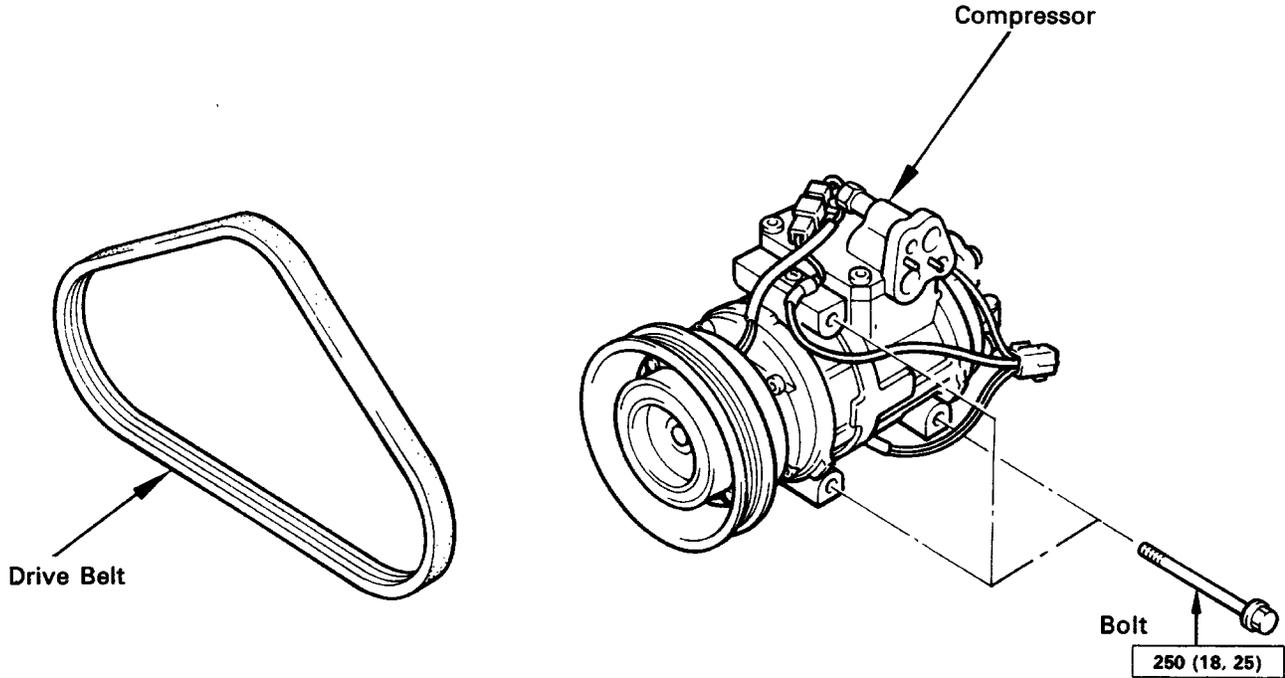
Using an ohmmeter, measure the resistance between two terminals 2 and 3 of the sensor.

Standard resistance: 100 –130Ω at 20°C (68°F)

If resistance is not as specified, replace the revolution detecting sensor.

REMOVAL OF COMPRESSOR

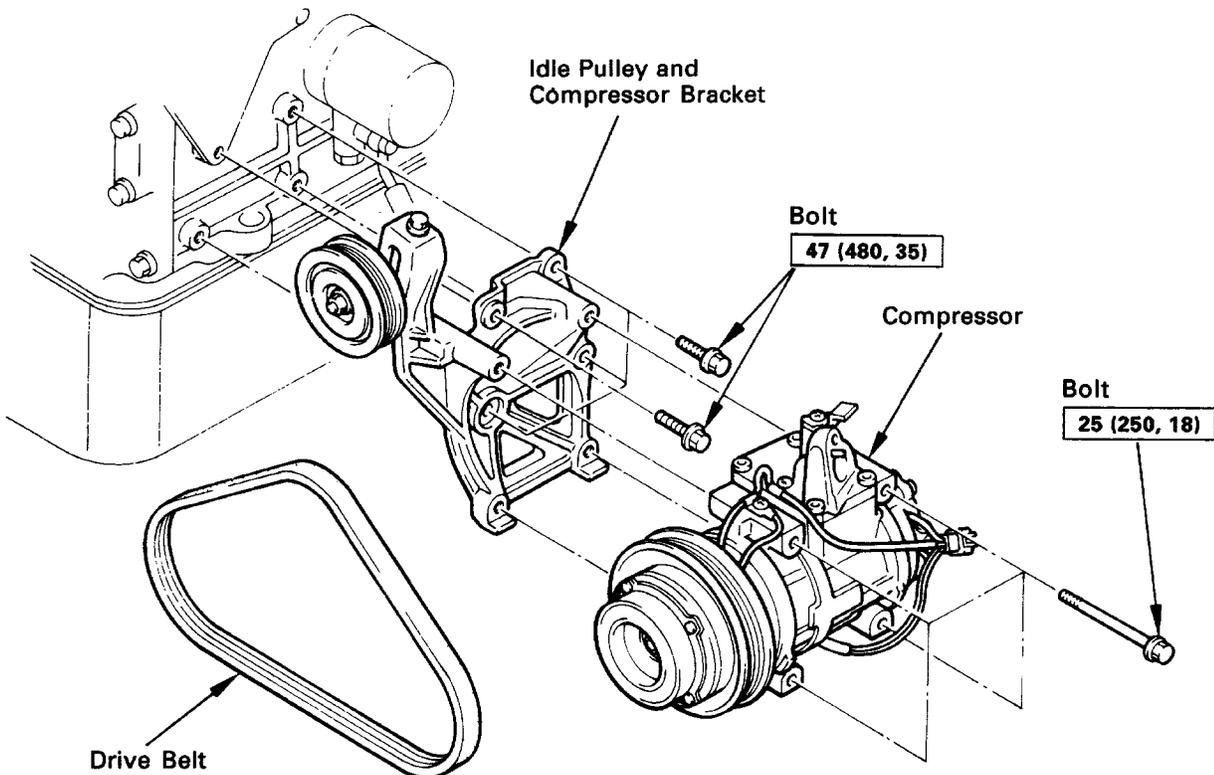
S Series Engine



N·m (kgf·cm, ft·lbf)

AC2201

A Series Engine

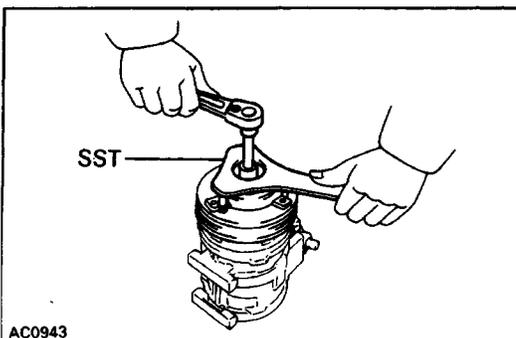
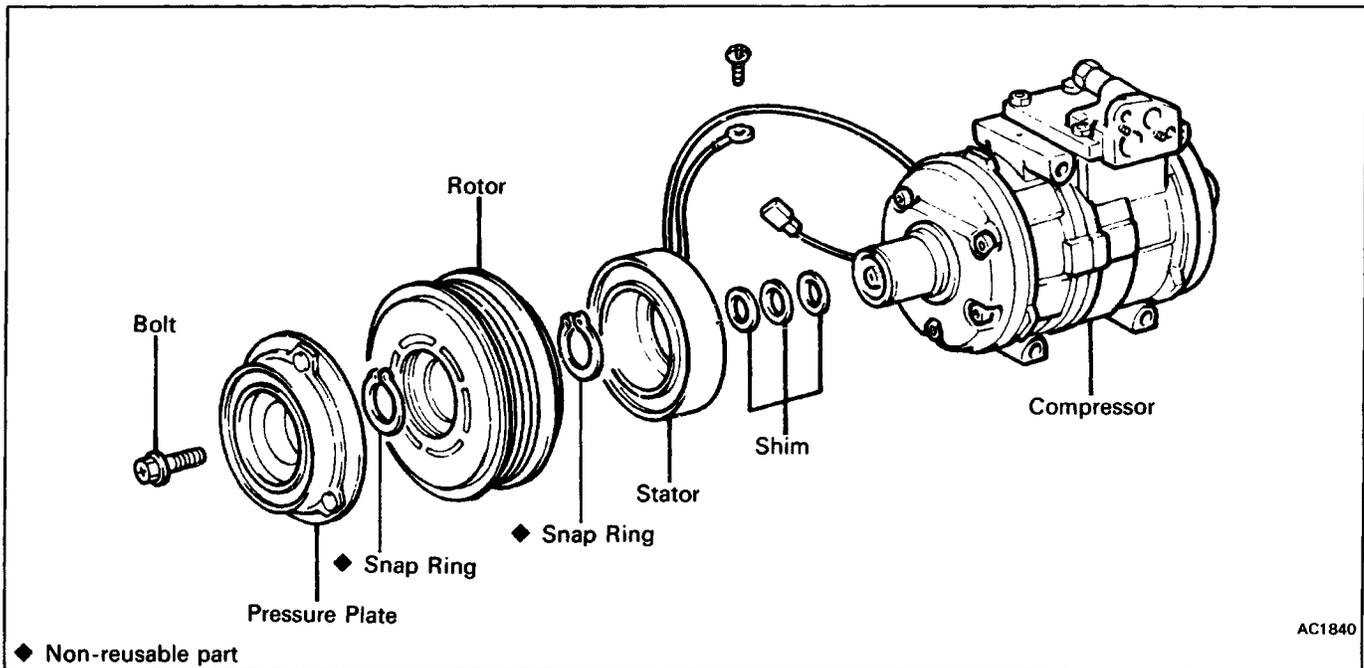


N·m (kgf·cm, ft·lbf)

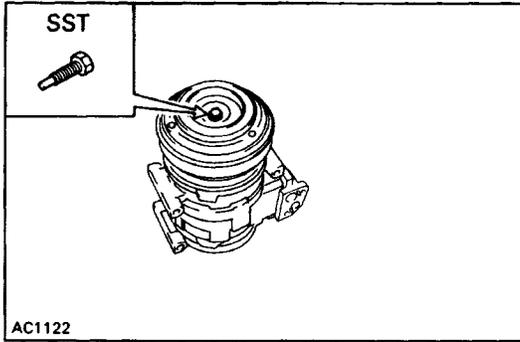
AC2202

1. RUN ENGINE AT IDLE SPEED WITH AIR CONDITIONING ON FOR 10 MINUTES
2. STOP ENGINE
3. DISCONNECT NEGATIVE CABLE FROM BATTERY
4. REMOVE BATTERY
5. DISCONNECT CLUTCH LEAD WIRE FROM WIRING HARNESS
6. RECOVER REFRIGERANT FROM REFRIGERATION SYSTEM
7. DISCONNECT TWO HOSES FROM COMPRESSOR SERVICE VALVES
Cap the open fitting immediately to keep moisture out of the system.
8. REMOVE COMPRESSOR
 - (a) Loosen the drive belt.
 - (b) Remove the compressor mounting bolts and the compressor.

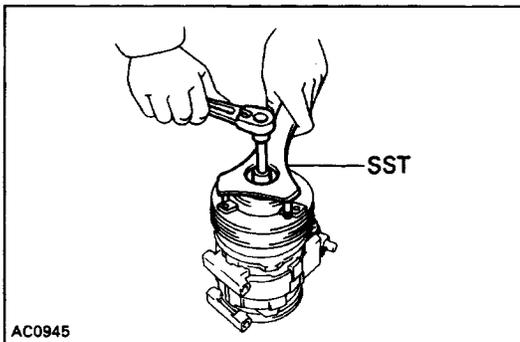
DISASSEMBLY OF MAGNETIC CLUTCH



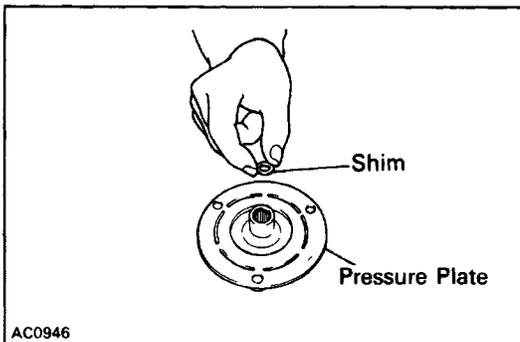
1. REMOVE PRESSURE PLATE
 - (a) Using SST and a socket, remove the shaft bolt.
SST 07112-76060



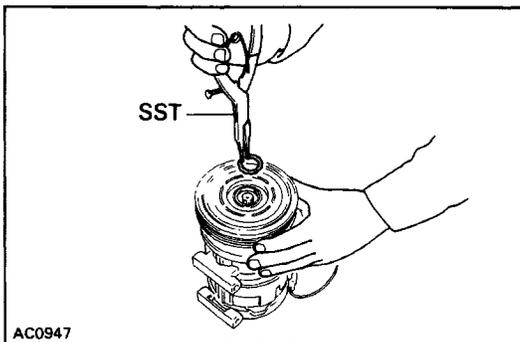
- (b) Install SST to the pressure plate.
SST 07112-66040



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

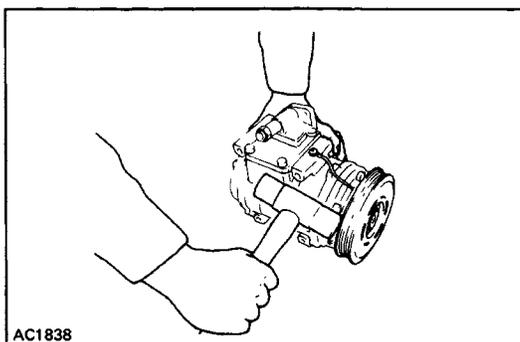


- (d) Remove the shims from the pressure plate.

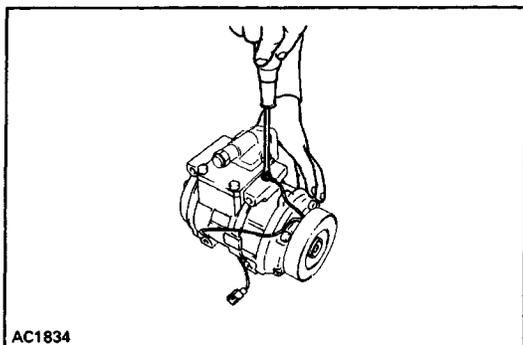


2. REMOVE ROTOR

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

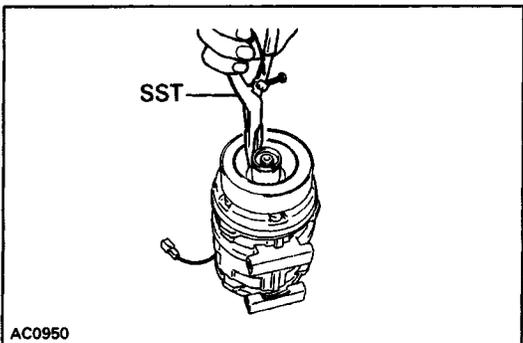


- (b) Using a plastic hammer, tap the rotor off the shaft,
NOTICE: Be careful not to damage the pulley when tapping on the rotor.

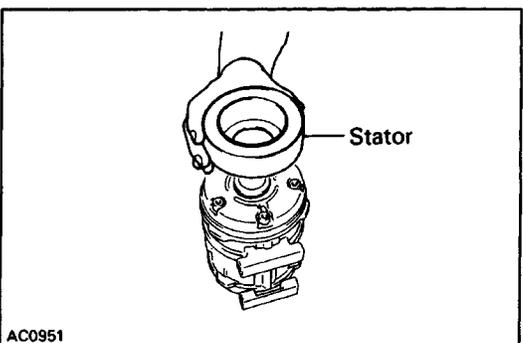


3. REMOVE STATOR

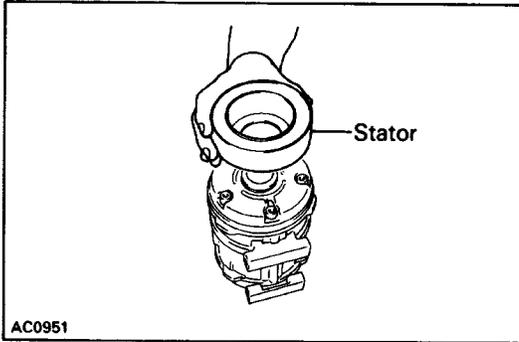
(a) Disconnect the stator lead wire from the compressor housing.



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



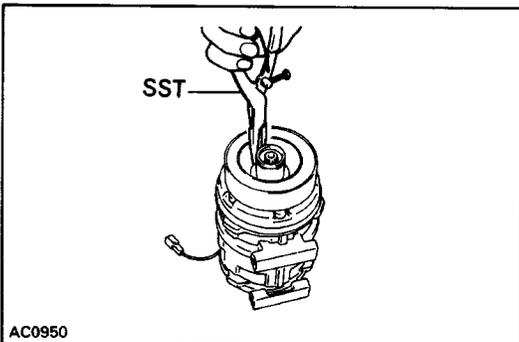
(c) Remove the stator.



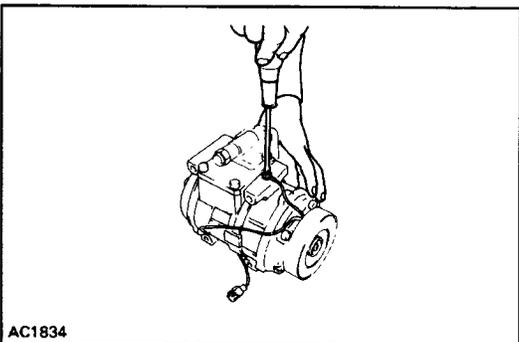
ASSEMBLY OF MAGNETIC CLUTCH

1. INSTALL STATOR

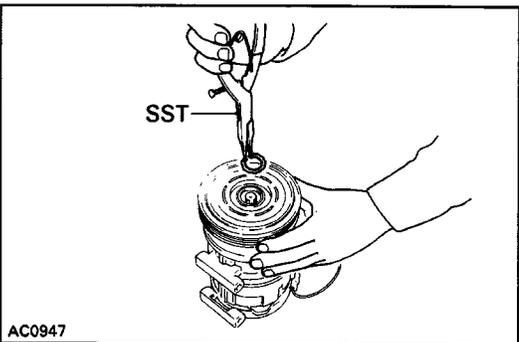
(a) Install the stator on the compressor.



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



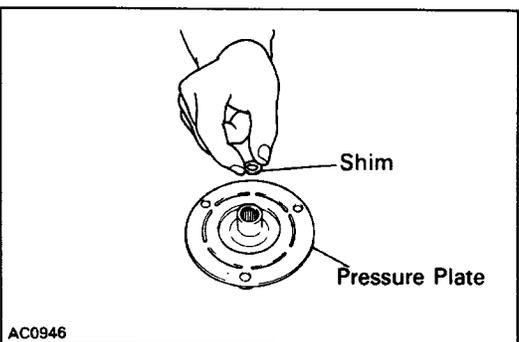
(c) Connect the stator lead wires to the compressor housing.



2. INSTALL ROTOR

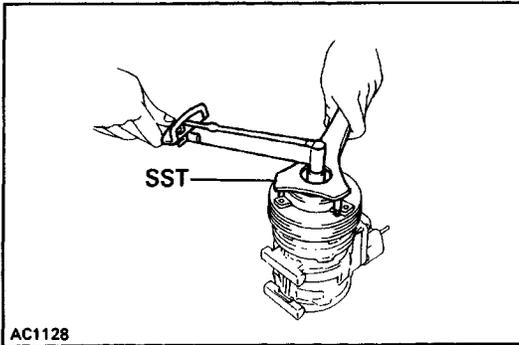
(a) Install the rotor on the compressor shaft.

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

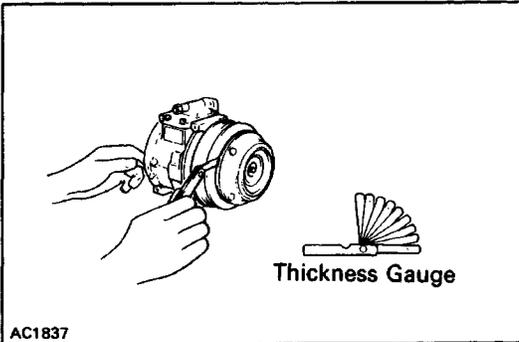


3. INSTALL PRESSURE PLATE

(a) Install the shims to the pressure plate.



- (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
 (0.0020 ± 0.0059 in.)**

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

INSTALLATION OF COMPRESSOR

(See page [AC-26](#))

1. **INSTALL COMPRESSOR WITH THREE MOUNTING BOLTS**
 Torque: 27 N-m (280 kgf-cm, 20 ft-lbf)
2. **INSTALL DRIVE BELT**
 (See steps 2 and 3 on page [AC-21](#))
3. **CONNECT TWO HOSES TO COMPRESSOR SERVICE VALVES**
 Torque: 25 N-m (250 kgf-cm, 18 ft-lbf)
4. **CONNECT CLUTCH LEAD WIRE TO WIRING HARNESS**
5. **PLACE BATTERY**
6. **CONNECT NEGATIVE CABLE TO BATTERY**
7. **EVACUATE AIR FROM AIR CONDITIONING SYSTEM**
8. **CHARGE AIR CONDITIONING SYSTEM WITH REFRIGERANT AND CHECK GAS LEAKAGE**
 Specified amount: 720 ± 50 g (25.4 ± 1.8 oz)