

5. CONNECT STOP VALVES TO SERVICE VALVES

Tighten the nuts by hand.

CAUTION:

- Do not connect the wrong valves to the high pressure and the low pressure sides.
- To prevent loosening the nuts, do not apply compressor oil to seat of the connection.

6. OPEN HAND VALVES OF BOTH STOP VALVES**REMOVAL OF MANIFOLD GAUGE SET****1. CLOSE BOTH HAND VALVES OF MANIFOLD GAUGE SET****2. CLOSE HAND VALVES OF BOTH STOP VALVES****3. DISCONNECT STOP VALVES FROM SERVICE VALVES ON REFRIGERANT LINE****4. INSTALL CAPS TO SERVICE VALVES**

COMPRESSOR

ON-VEHICLE INSPECTION

1. INSTALL MANIFOLD GAUGE SET

(See page [AC-16](#))

2. RUN ENGINE AT APPROX. 1,500 RPM**3. CHECK COMPRESSOR FOR FOLLOWING:**

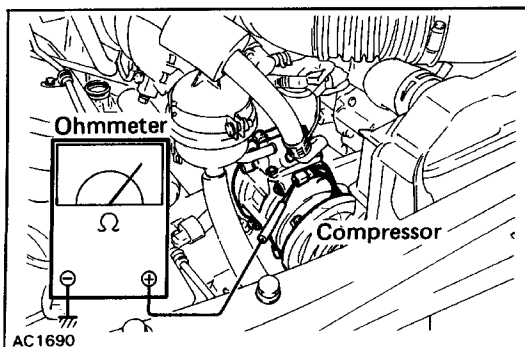
- High pressure gauge reading is not low and low pressure gauge reading is not higher than normal.
 - Metallic sound
 - Leakage from shaft seal
- If defects are found, repair the compressor.

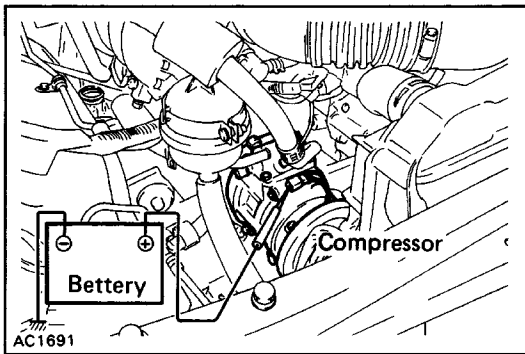
4. CHECK MAGNETIC CLUTCH

- Inspect the pressure plate and the rotor for signs of oil.
- Check the clutch bearings for noise and grease leakage.
- Using an ohmmeter, measure the resistance of the stator coil between the clutch lead wire and ground.

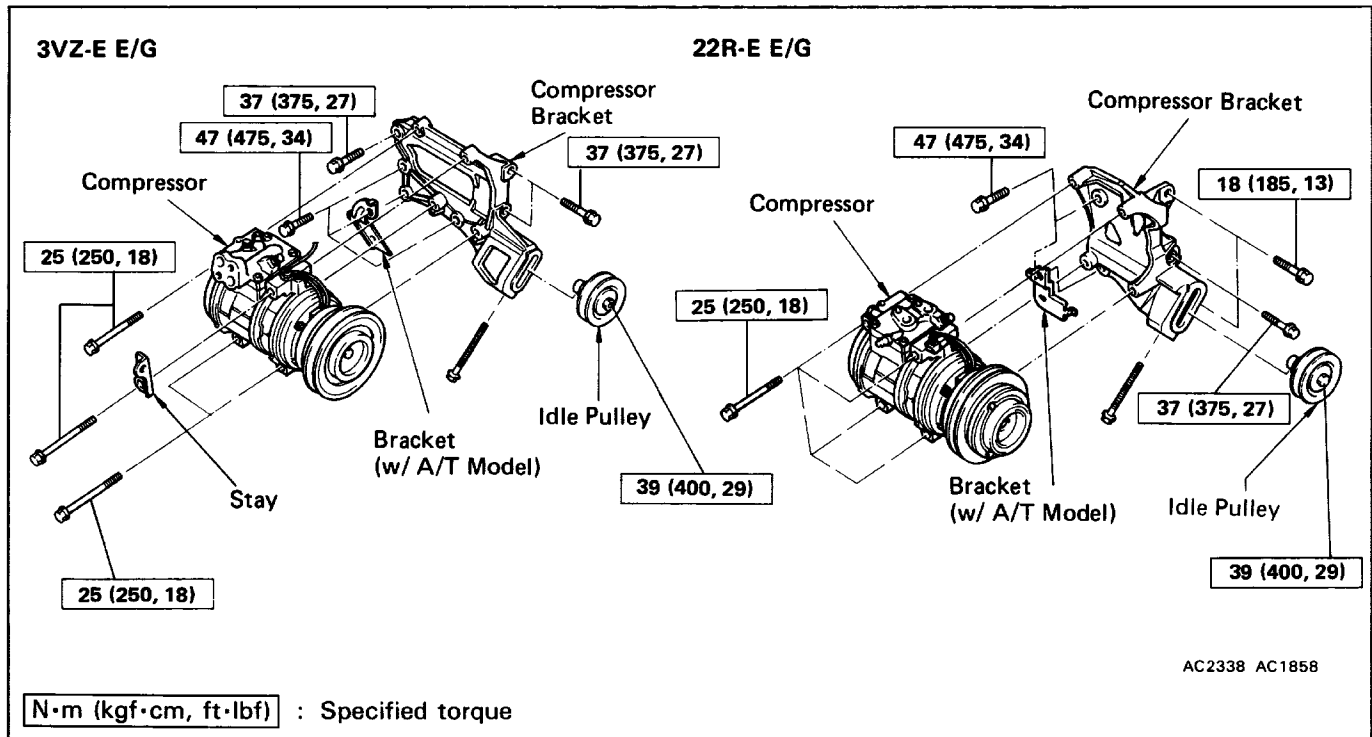
Standard resistance: $3.6 \pm 0.2 \Omega$ at 200C (680F)

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



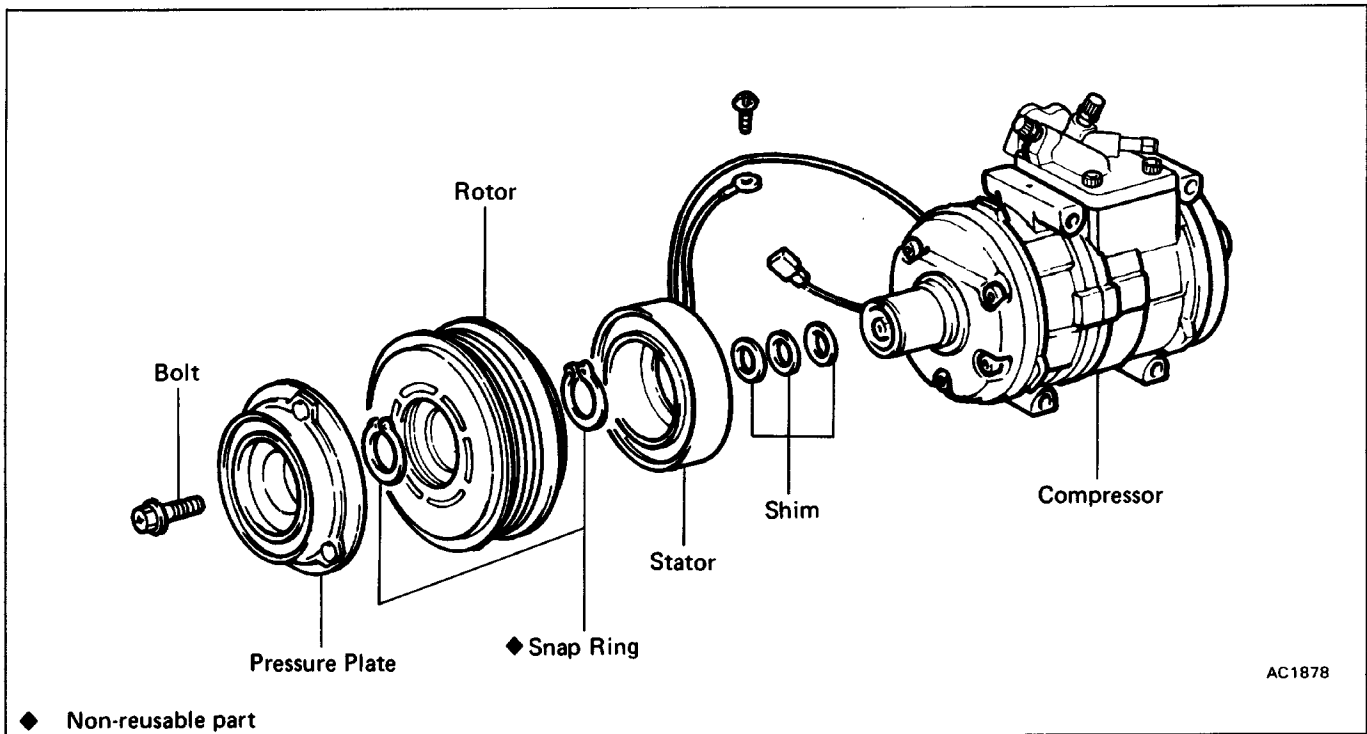


- (d) Connect the positive (+) lead from the battery to terminal and the negative (-) lead to ground, check that the magnetic clutch is energized. If magnetic clutch is not energized, replace the coil.
NOTICE: Do not short the positive (+) lead wire on the vehicle by applying battery positive voltage.



REMOVAL OF COMPRESSOR

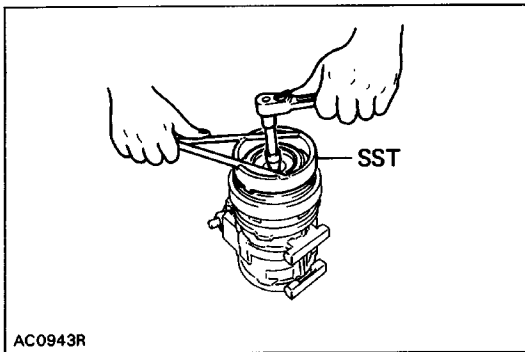
1. RUN ENGINE AT IDLE SPEED FOR 10 MINUTES WITH AIR CONDITIONING ON
2. STOP ENGINE
3. DISCONNECT NEGATIVE CABLE FROM BATTERY
4. REMOVE POWER STEERING PUMP (3VZ EG ONLY)
5. DISCONNECT CLUTCH LEAD WIRE FROM WIRING HARNESS
6. RECOVER REFRIGERANT FROM REFRIGERATION SYSTEM
7. DISCONNECT TWO HOSES FROM COMPRESSOR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



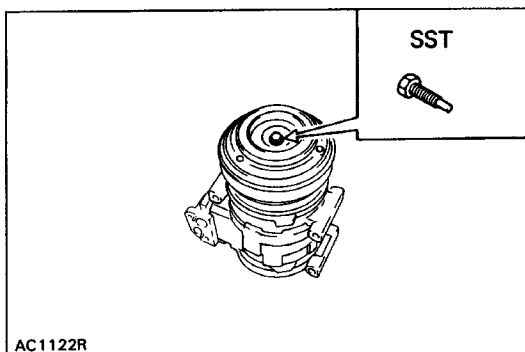
DISASSEMBLY OF MAGNETIC CLUTCH

1. REMOVE PRESSURE PLATE

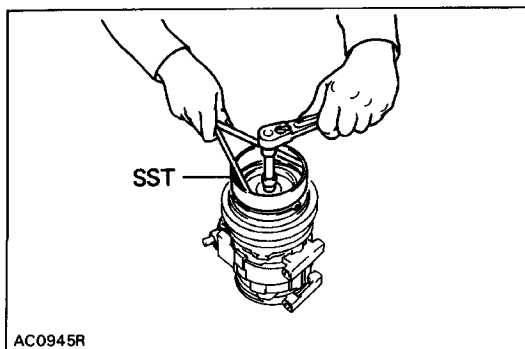
(a) Using SST and a socket, remove the shaft bolt.
SST 07112-76060

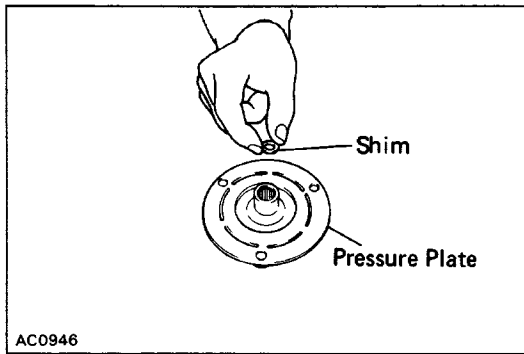


(b) Install SST to the pressure plate.
SST 07112-66040

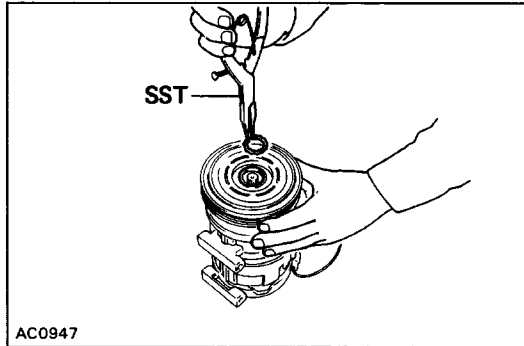


(c) Using SST and a socket, remove the pressure plate. SST 07112-76060



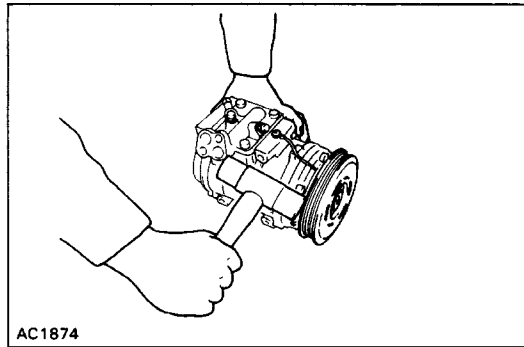


- (d) Remove the shims from the pressure plate.



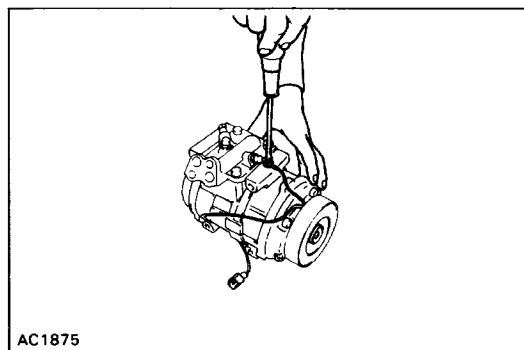
2. REMOVE ROTOR

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



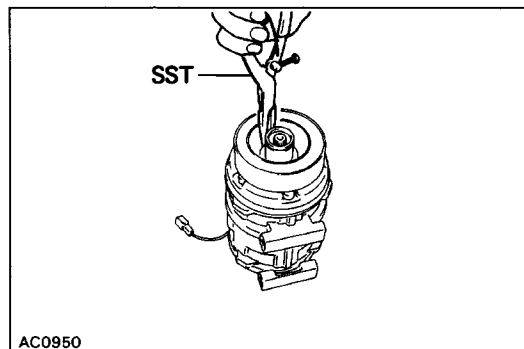
- (b) Using a plastic hammer, tap the rotor off the shaft.

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

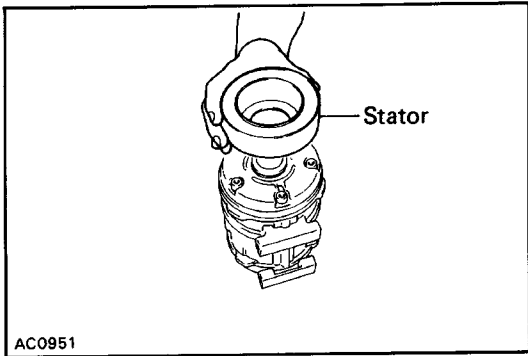


3. REMOVE STATOR

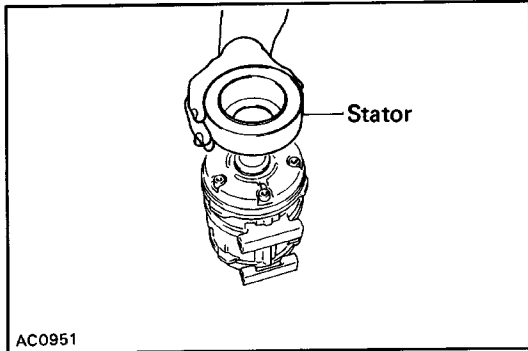
- (a) Disconnect the stator lead wire from the compressor housing.



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



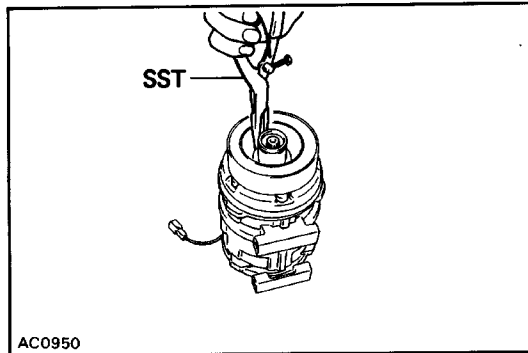
(c) Remove the stator.



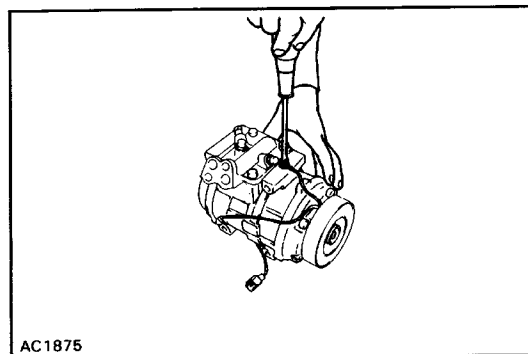
ASSEMBLY OF MAGNETIC CLUTCH

1. INSTALL STATOR

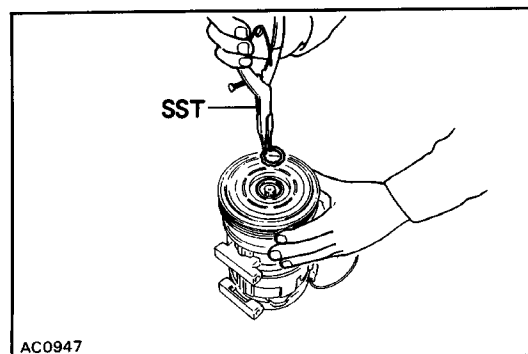
(a) Install the stator on the compressor.



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



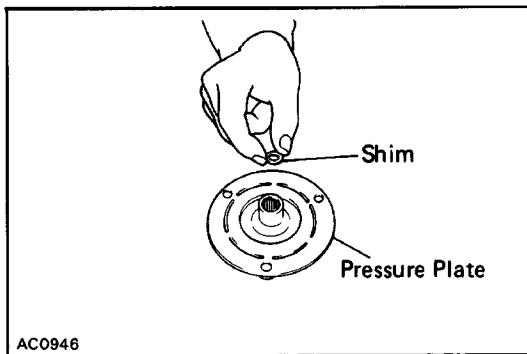
(c) Connect the stator lead wires to the compressor housing.



2. INSTALL ROTOR

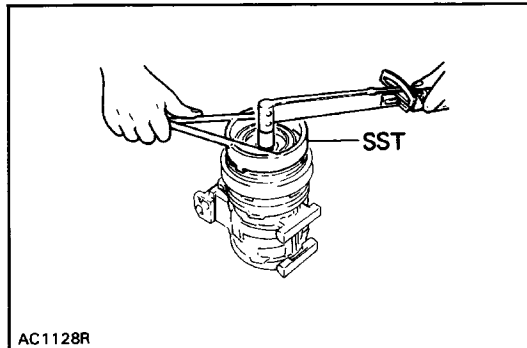
(a) Install the rotor on the compressor shaft.

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



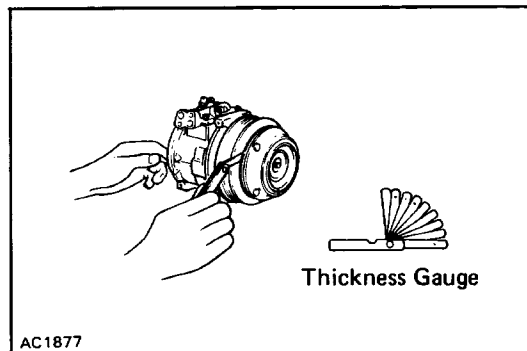
3. INSTALL PRESSURE PLATE

- (a) Put 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 (0.020 i 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-17](#))

1. INSTALL COMPRESSOR WITH THREE MOUNTING BOLTS

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

2. INSTALL DRIVE BELT

(See step 2 and 3 and on page [AC-14](#))

3. CONNECT TWO HOSES 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)

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: 700 – 800 g (1.5 – 1.8 lb)