COMPRESSOR

ACOLT–01

ON–VEHICLE INSPECTION

(Magnetic Clutch)

1. MAKE FOLLOWING VISUAL CHECKS

(a) Leakage of grease from the clutch bearing.

(b) Signs of oil on the pressure plate or rotor.

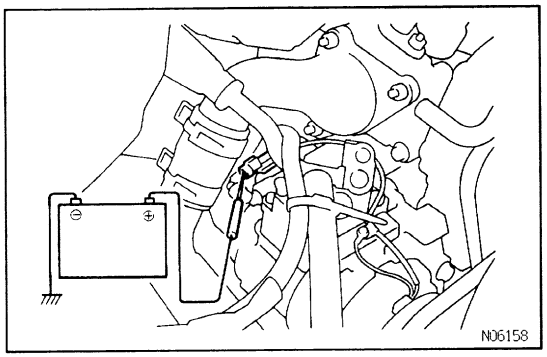
Repair or replace, as necessary.

2. INSPECT MAGNETIC CLUTCH BEARING FOR NOISE

(a) Start engine.

(b) Check for abnormal noise from near the compressor when the A/C switch is OFF.

If abnormal noise is being emitted, replace the magnetic clutch.



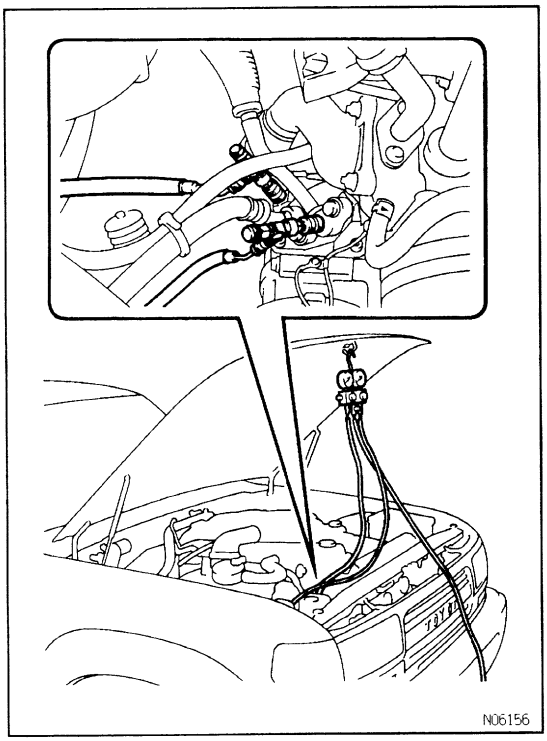
3. INSPECT MAGNETIC CLUTCH

(a) Disconnect the connector from the magnetic clutch.

(b) Connect the positive (+) lead from the battery to the terminal on the magnetic clutch connector and the negative (–) lead to the body ground.

(c) Check that the magnetic clutch is energized.

If operation is not as specified, replace the magnetic clutch.



(Compressor)

1. INSTALL MANIFOLD GAUGE SET

(See page AC –14)

2. START ENGINE AND RUN AT APPROX. 2,000 RPM

3. INSPECT COMPRESSOR FOR METALLIC SOUND

Check that there is a metallic sound from the compressor when the A/C switch is turn on.

If metallic sound is heard, replace the compressor assembly.

4. INSPECT PRESSURE OF REFRIGERATION SYSTEM

See " REFRIGERANT SYSTEM INSPECTION WITH–MANIFOLD GAUGE SET" on page AC–22.

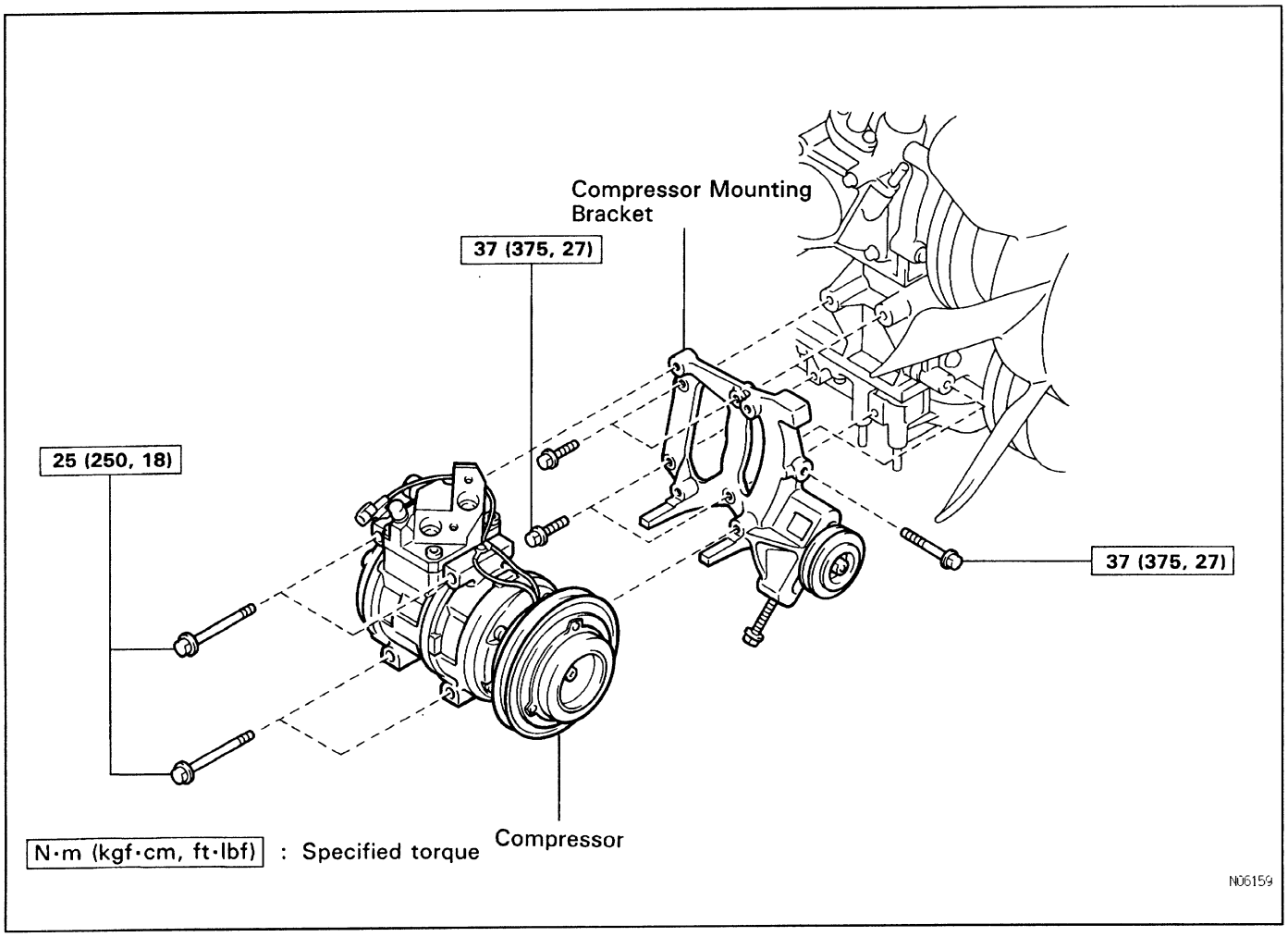
5. STOP ENGINE

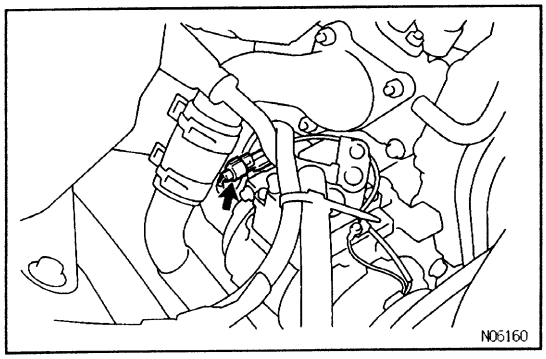
6. INSPECT VISUALLY FOR LEAKAGE OF REFRIGERANT FROM SHAFT SEAL

If there is any leakage, replace the compressor assembly.

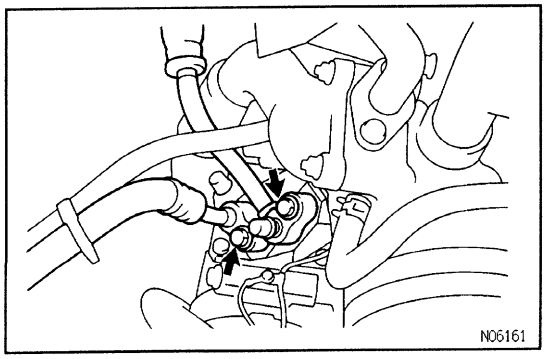
ACOLU–01

COMPRESSOR REMOVAL

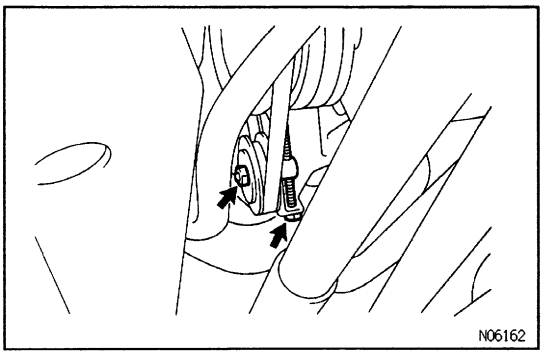




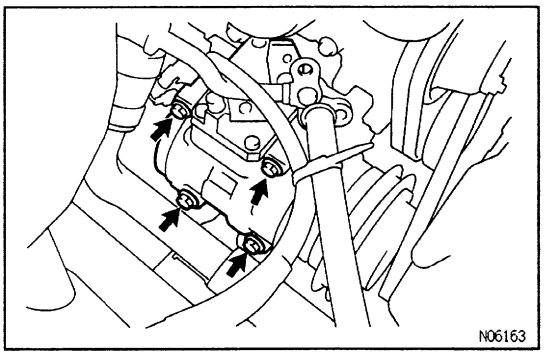
1. RUN ENGINE AT IDLE SPEED WITH A/C ON FOR TEN MINUTES
2. STOP ENGINE
3. DISCONNECT NEGATIVE CABLE FROM BATTERY
4. DISCONNECT CONNECTOR FROM MAGNETIC CLUTCH
5. RECOVER REFRIGERANT FROM REFRIGERATION SYSTEM



6. DISCONNECT TWO HOSES FROM COMPRESSOR SERVICE VALVES
Cap the open fittings immediately to keep the moisture and dust out of the system.
7. REMOVE ENGINE UNDER COVER



8. LOOSEN IDLE PULLEY LOCK NUT AND COMPRESSOR DRIVE BELT

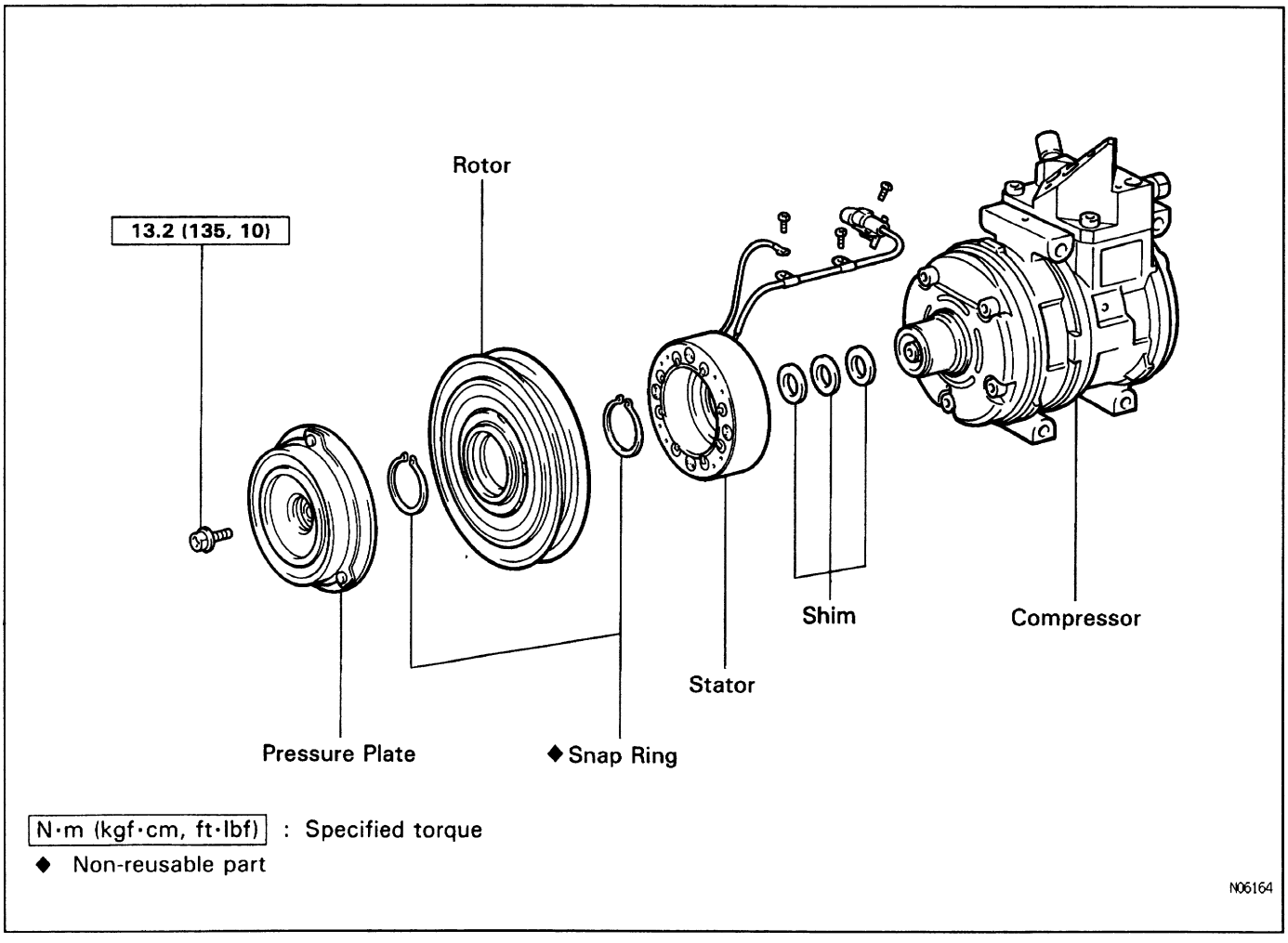


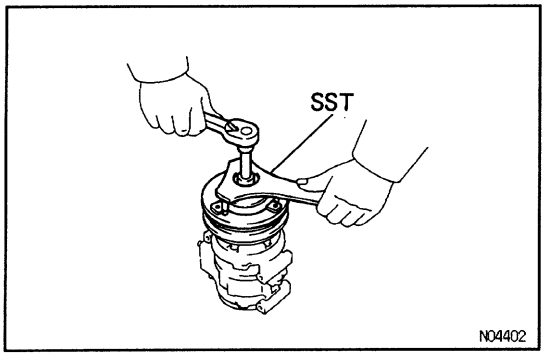
9. REMOVE COMPRESSOR

Remove the four bolts and pull the compressor upward.

AC00T–05

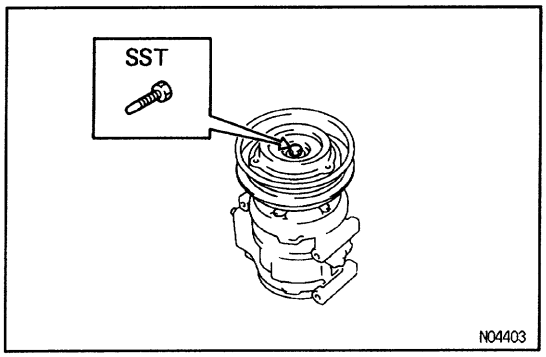
MAGNETIC CLUTCH DISASSEMBLY



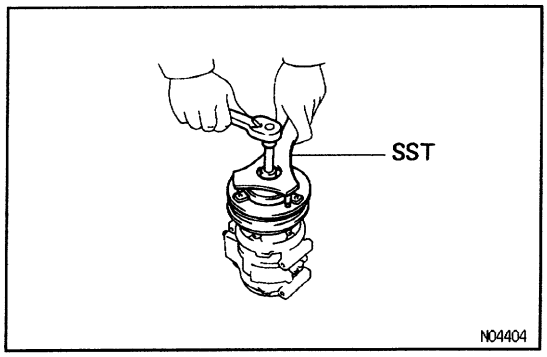


1. REMOVE PRESSURE PLATE

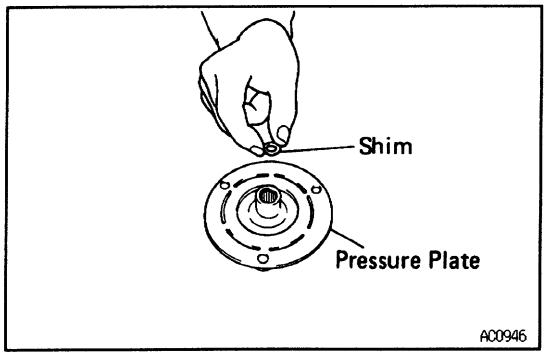
(a) Using SST and socket wrench, remove the shaft bolt.
SST 07112–76060



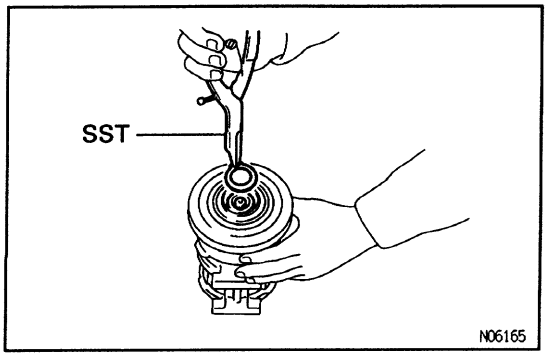
(b) Install SST on the pressure plate.
SST 07112–66040



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



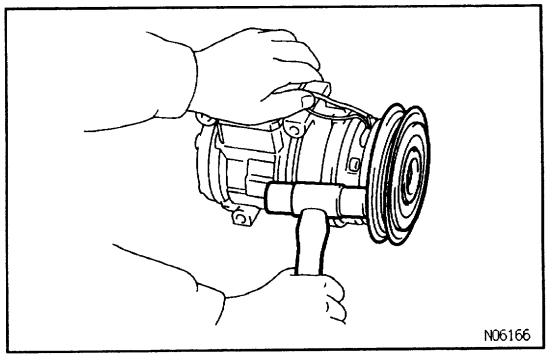
(d) Remove the shims from the pressure plate.



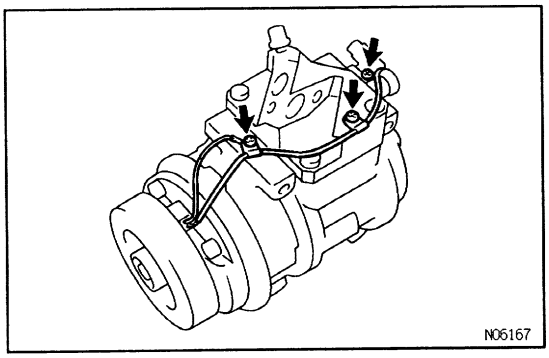
2. REMOVE ROTOR

(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.)

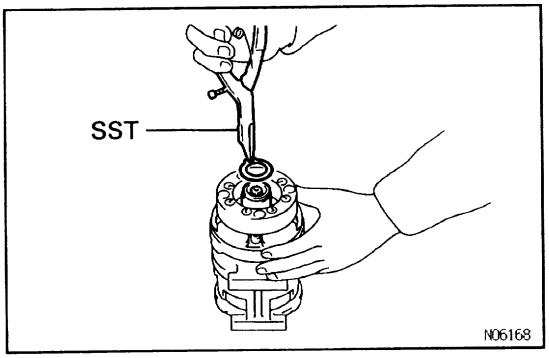


(b) Using a plastic hammer, tap the rotor off the shaft.
NOTICE: Be careful not to damage the pulley when tapping on the rotor.

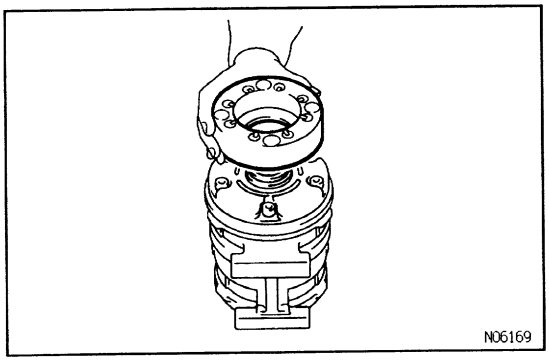


3. REMOVE STATOR

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



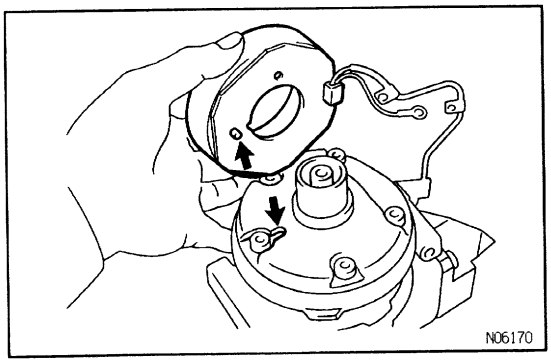
(6) Using SST, remove the snap ring.
SST 07114–84020



(c) Remove the stator.

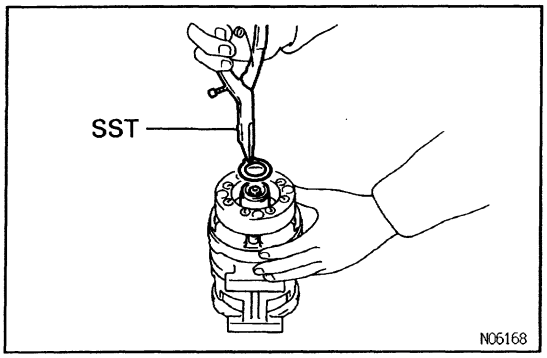
AC0LV–01

MAGNETIC CLUTCH ASSEMBLY

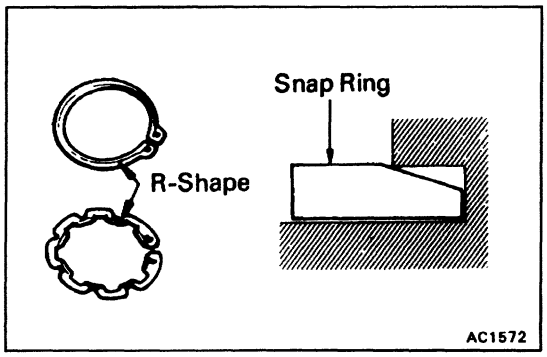


1. INSTALL STATOR

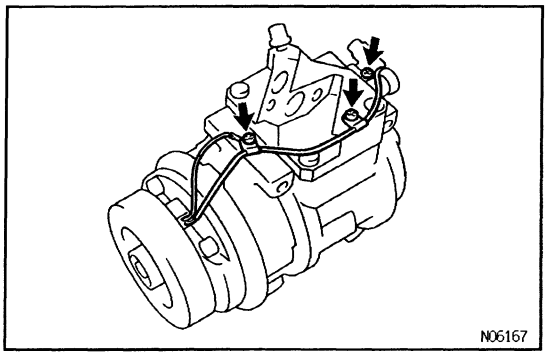
(a) Install the stator on the compressor.



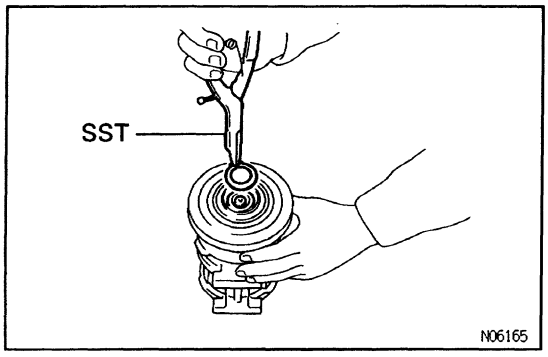
(b) Using SST, install the new snap ring.
SST 07114–84020



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



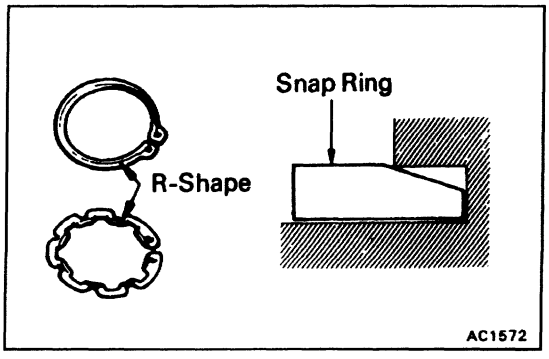
(c) Install the stator lead wire to the compressor housing.



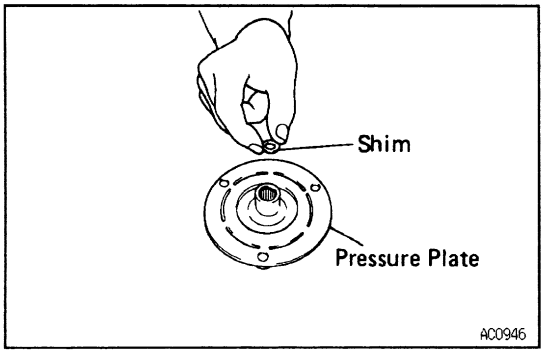
2. INSTALL ROTOR

(a) Install the rotor on the compressor shaft.
(b) Using SST, install the new snap ring.
SST 07114–84020

NOTICE: Do not spread the point of SST widely. Maximum width: 23.1 mm (0.909 in.)

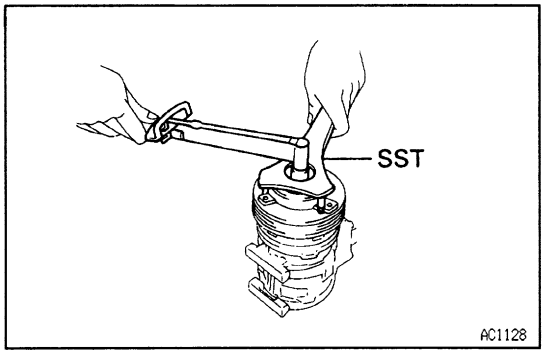


NOTICE: The snap ring should be installed so that its beveled side faces up.

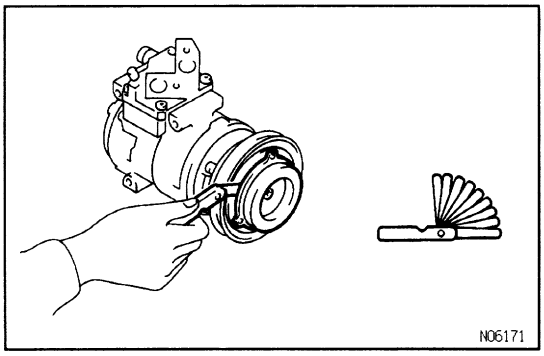


3. INSTALL PRESSURE PLATE

(a) 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: 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 standard clearance, adjust the clearance using shims to obtain the standard clearance.

AC0LW–01

COMPRESSOR INSTALLATION

1. INSTALL COMPRESSOR WITH MOUNTING BOLTS
Torque: 25 N–m (250 kgf–cm, 18 ft–lbf)

2. INSTALL AND ADJUST COMPRESSOR DRIVE BELT
(See page AC–26)

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. CONNECT NEGATIVE CABLE TO BATTERY

6. EVACUATE AIR FROM REFRIGERATION SYSTEM

7. CHARGE SYSTEM WITH REFRIGERANT AND INSPECT FOR LEAKAGE OF REFRIGERANT
Specified amount: 900 ± 50 g (31.74 ± 1.76 oz.)