

COMPRESSOR

ON-VEHICLE INSPECTION

Magnetic Clutch:

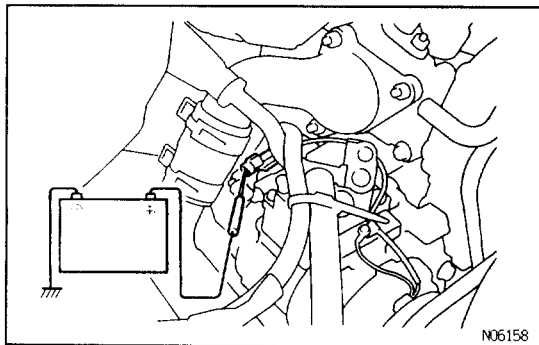
1. MAKE THESE VISUAL CHECKS:

- (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-11](#))

2. START ENGINE AND RUN AT APPROX. 1,500 RPM

3. INSPECT COMPRESSOR FOR METALLIC SOUND

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

If metallic sound is heard, replace the compressor assembly.

4. INSPECT PRESSURE OF REFRIGERATION SYSTEM

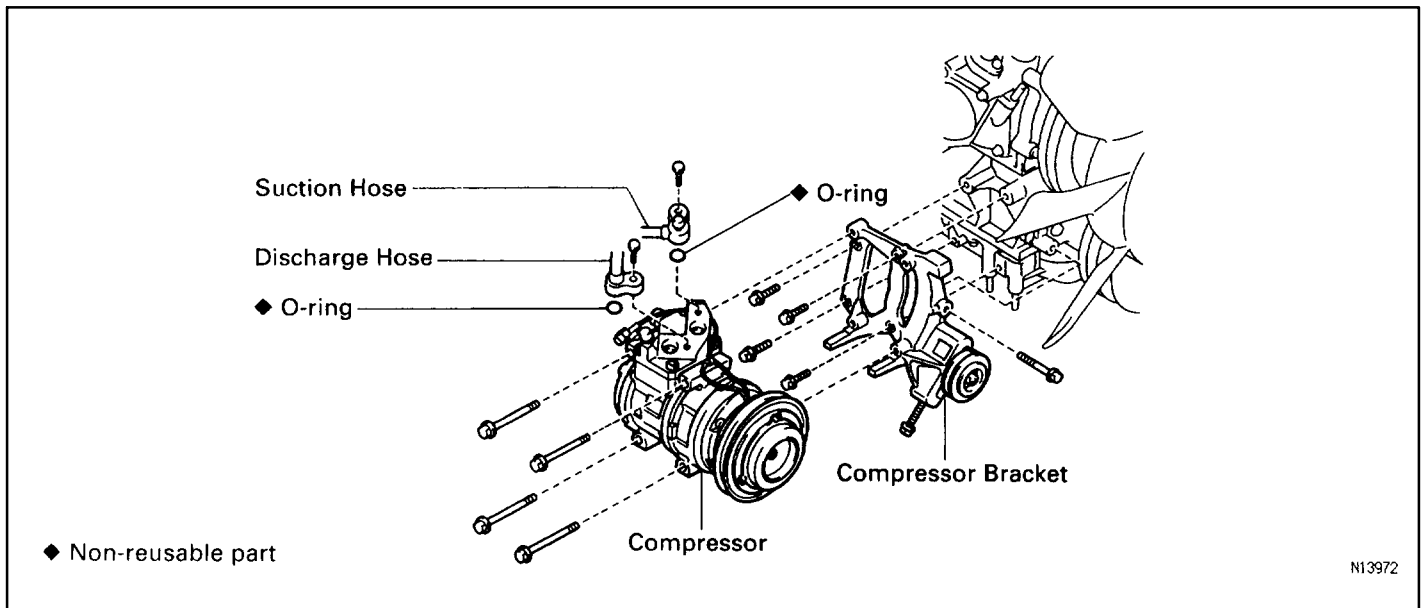
See "REFRIGERANT SYSTEM INSPECTION WITH MANIFOLD GAUGE SET" on page [AC-17](#).

5. STOP ENGINE

6. INSPECT VISUALLY FOR LEAKAGE OF REFRIGERANT FROM SHAFT SEAL

If there is any leakage, replace the compressor assembly.

COMPRESSOR REMOVAL



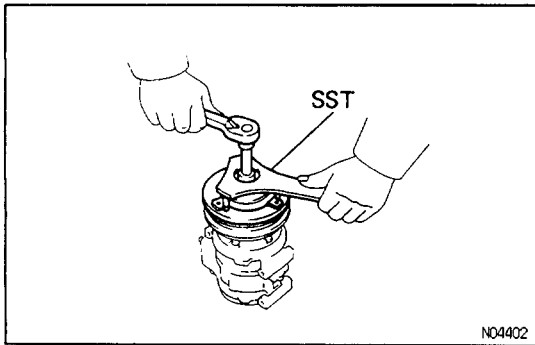
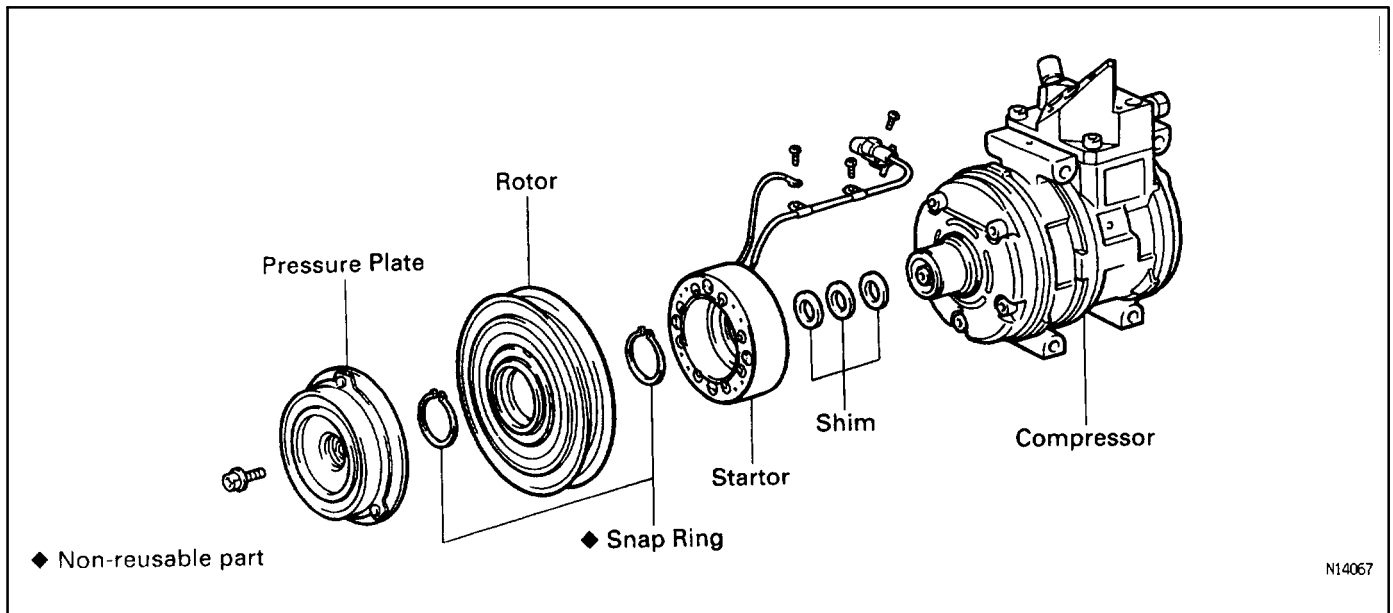
1. RUN ENGINE AT IDLE SPEED WITH A/C SWITCH ON FOR 10 MINUTES
2. STOP ENGINE
3. DISCONNECT NEGATIVE (–) TERMINAL CABLE FROM BATTERY
4. DISCONNECT CONNECTOR FROM MAGNETIC CLUTCH
5. DISCHARGE REFRIGERANT FROM REFRIGERATION SYSTEM
6. DISCONNECT 2 HOSES FROM COMPRESSOR SERVICE VALVES

NOTICE: 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 4 bolts and pull the compressor upward.

MAGNETIC CLUTCH DISASSEMBLY

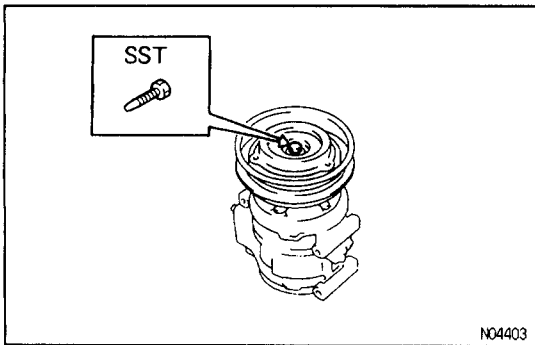


1. REMOVE PRESSURE PLATE

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

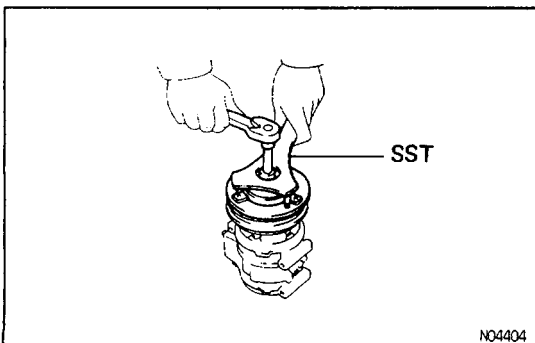
Torque: 14 N·m (140 kgf·cm, 10 ft·lbf)

SST 07112-76060



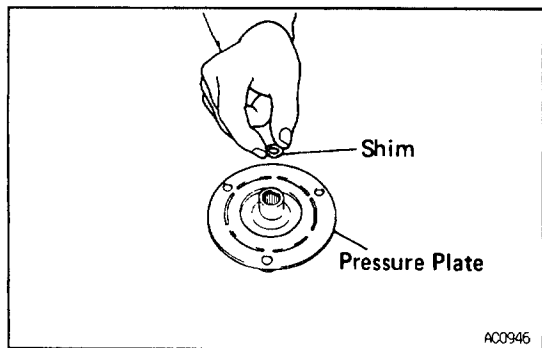
- (b) Install SST on the pressure plate.

SST 07112-66040

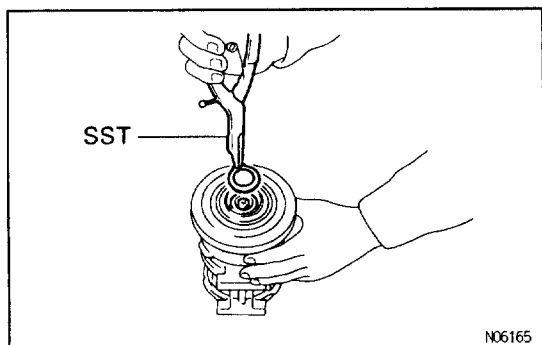


- (c) Using SST and socket wrench, remove the pressure plate.

SST 07112-76060



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



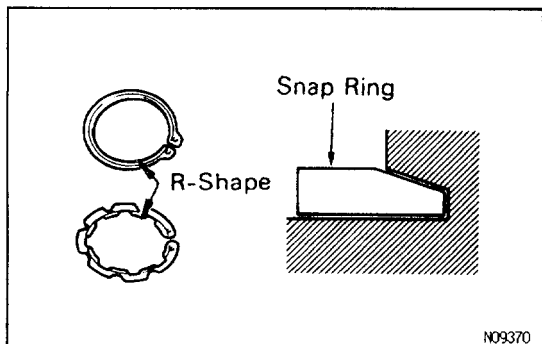
2. REMOVE ROTOR

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

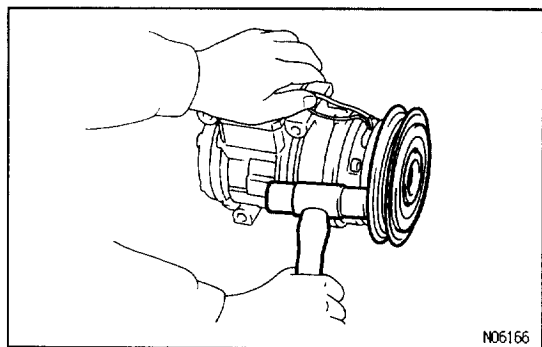
SST 07114-84020

DISASSEMBLY CAUTION: Do not spread the point of SST widely.

Maximum width: 23.1 mm (0.909 in.)

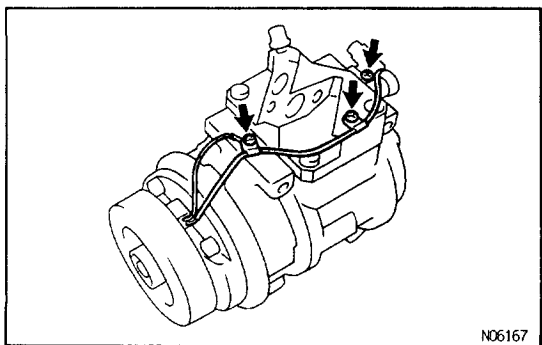


ASSEMBLY NOTICE: The snap ring should be installed so that its beveled side faces up.



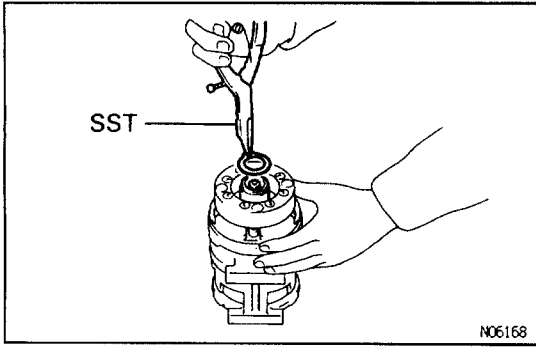
- (b) Using a plastic hammer, tap the rotor off the shaft.

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

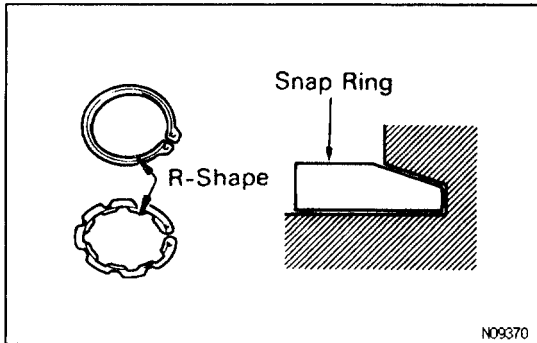


3. REMOVE STATOR

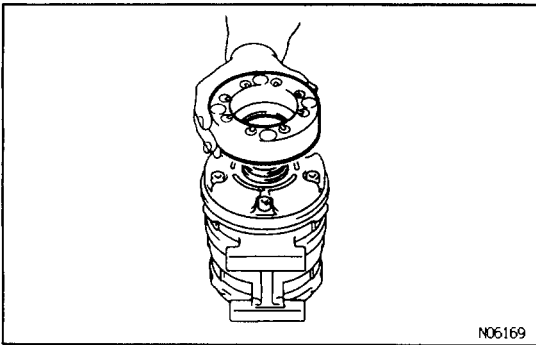
- (a) Disconnect the stator lead wire from the compressor housing.



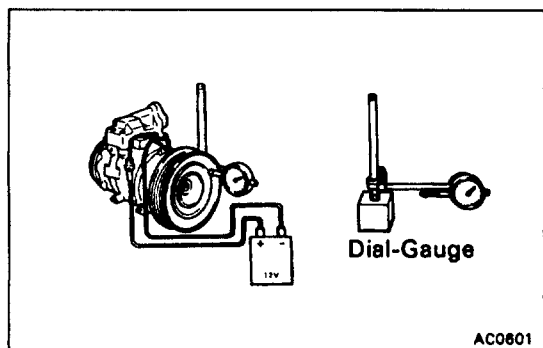
- (b) Using SST, remove the snap ring.
SST 07114-84020



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



- (c) Remove the stator.



MAGNETIC CLUTCH ASSEMBLY

Assembly is in the reverse order of disassembly.

CHECK CLEARANCE OF MAGNETIC CLUTCH

- (a) Set the dial gauge to the pressure plate of the magnetic clutch.
- (b) Connect the magnetic clutch lead wire to the positive (+) terminal of the battery.
- (c) Check the clearance between the pressure plate and rotor, then connect the negative (-) terminal of the battery.

Standard clearance:

$$0.5 \pm 0.15 \text{ mm } (0.020 \pm 0.0059 \text{ in.})$$

If the clearance is not within standard clearance, adjust it using shims to obtain the standard clearance.

Shim thickness:

$$0.1 \text{ mm } (0.004 \text{ in.})$$

$$0.3 \text{ mm } (0.012 \text{ in.})$$

$$0.5 \text{ mm } (0.020 \text{ in.})$$

COMPRESSOR INSTALLATION

1. INSTALL COMPRESSOR WITH MOUNTING BOLTS

Install the compressor with the 4 bolts.

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

2. INSTALL DRIVE BELT

3. ADJUST DRIVE BELT TENSION

(See page [AC-23](#))

4. CONNECT 2 HOSES TO COMPRESSOR SERVICE VALVES

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

5. CONNECT CLUTCH LEAD WIRE TO WIRING HARNESS

6. CONNECT NEGATIVE (-) TERMINAL CABLE TO BATTERY

7. EVACUATE AIR FROM REFRIGERATION SYSTEM

8. CHARGE SYSTEM WITH REFRIGERANT AND INSPECT FOR LEAKAGE OF REFRIGERANT

Specified amount:

$$850 \pm 50 \text{ g } (29.98 \pm 1.76 \text{ oz.})$$