550WX–01

REPLACEMENT

HINT:

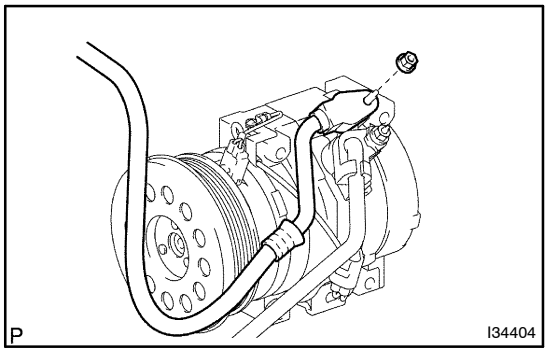
COMPONENTS: See page 55–9

1. DISCHARGE REFRIGERANT FROM REFRIGERATION SYSTEM
(See Pub. No. RM990E on page 55–26)

SST 07110–58060 (07117–58080, 07117–58090, 07117–78050, 07117–88060, 07117–88070, 07117–88080)

2. REMOVE ENGINE UNDER COVER SUB–ASSY NO.1 (See page 14–5)

3. REMOVE FAN AND GENERATOR V BELT (See page 14–5)



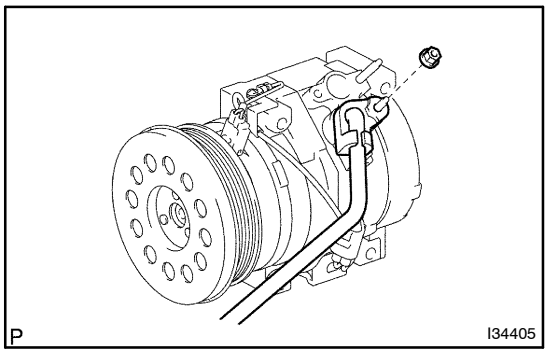
4. DISCONNECT DISCHARGE HOSE SUB–ASSY

(a) Remove the nut and disconnect the discharge hose sub–assy from the compressor and magnetic clutch.

(b) Remove the O–ring from the discharge hose sub–assy.

NOTICE:

Seal the opening of the disconnected parts using vinyl tape to prevent moisture and foreign matters from entering.



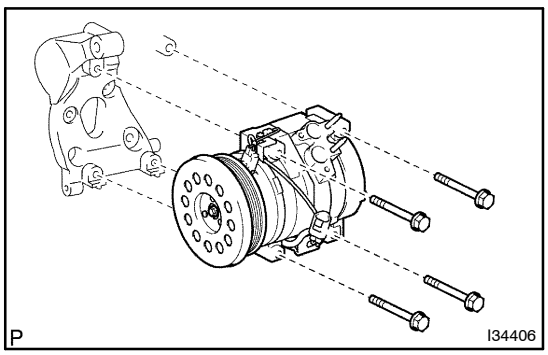
5. DISCONNECT SUCTION HOSE SUB–ASSY

(a) Remove the nut and disconnect the suction hose sub–assy from the compressor and magnetic clutch.

(b) Remove the O–ring from the suction hose sub–assy.

NOTICE:

Seal the opening of the disconnected parts using vinyl tape to prevent moisture and foreign matters from entering.



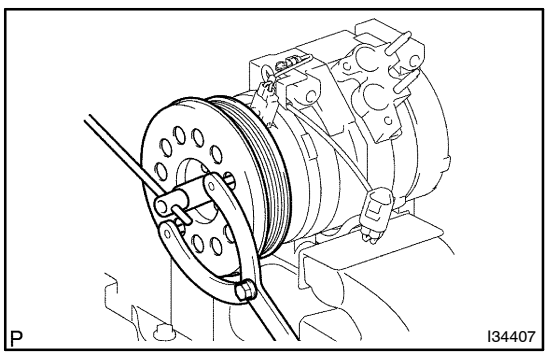
6. REMOVE COMPRESSOR AND MAGNETIC CLUTCH

(a) Disconnect the connector.

(b) Remove the 4 bolts and the compressor and magnetic clutch.

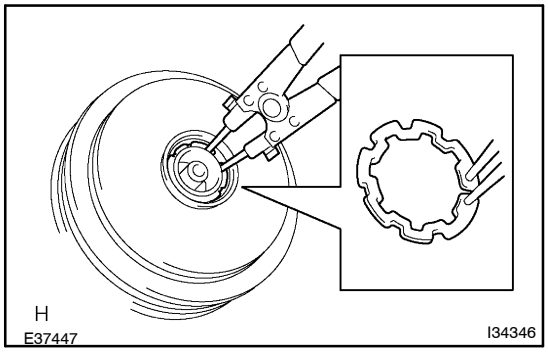
7. REMOVE MAGNET CLUTCH ASSY

(a) Place the compressor and magnetic clutch in a vise.

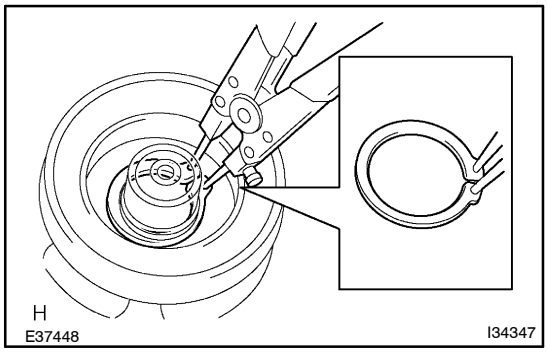


(b) Using SST, remove the bolt, the magnet clutch hub and the magnet clutch washer.

SST 09960–10010 (09962–01000, 09963–00500)

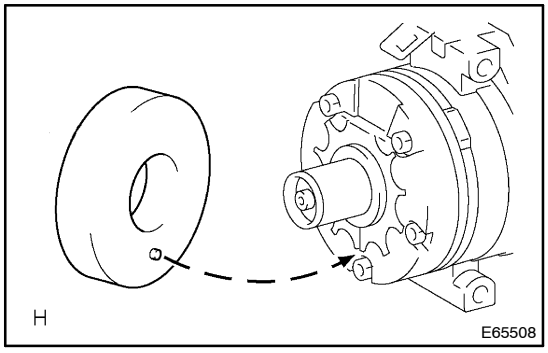


(c) Using a snap ring expander, remove the snap ring and the magnet clutch rotor.
(d) Remove the screw and disconnect the connector.



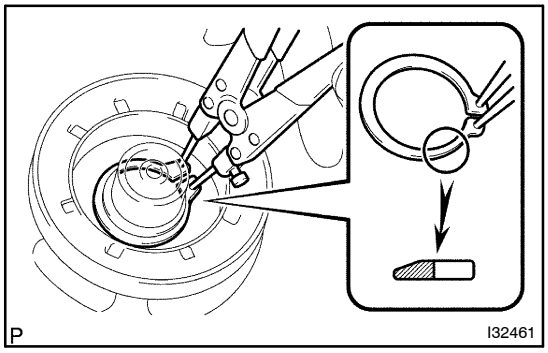
(e) Using a snap ring expander, remove the snap ring and the magnet clutch starter.

8. REMOVE COOLER COMPRESSOR ASSY

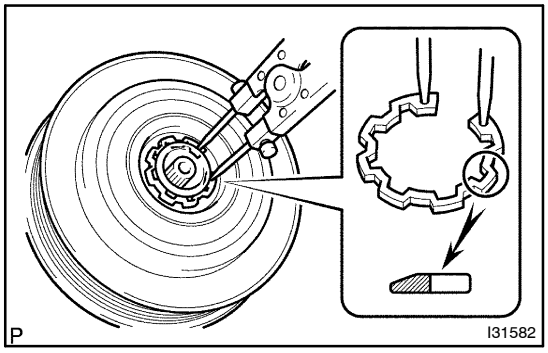


9. INSTALL MAGNET CLUTCH ASSY

(a) Fit the parts shown in the illustration and install the magnet clutch starter.

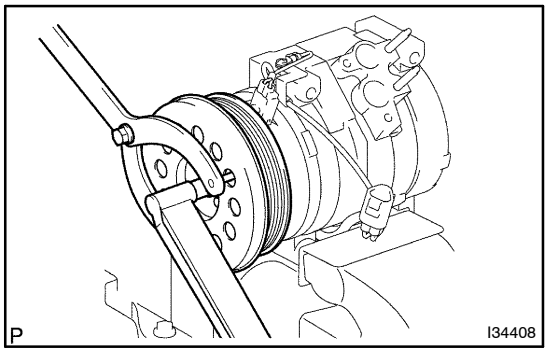


(b) Using a snap ring expander, install a new snap ring with the chamfered side facing up.
(c) Install the screw and connect the connector.

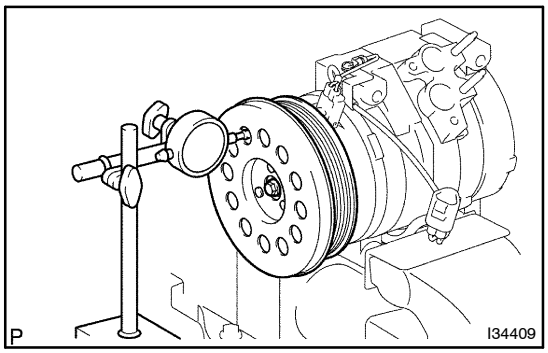


(d) Using a snap ring expander, install the magnet clutch rotor and a new snap ring with the chamfered side facing up.
(e) Install the magnet clutch washer and the magnet clutch hub.

NOTICE:
Do not change the combination of the magnet clutch washers used before disassembly.



(f) Using SST, install the magnet clutch hub and magnet clutch washer with the bolt.
SST 09960–10010 (09962–01000, 09963–00500)
Torque: 18 N·m (183 kgf·cm, 13 ft·lbf)



10. INSPECT MAGNETIC CLUTCH CLEARANCE
(a) Set the dial indicator to the magnet clutch hub.
(b) Connect the battery positive lead to the terminal 1 of magnet clutch connector and the negative lead to the earth wire. Turn on and off the magnet clutch and measure the clearance.
Standard clearance:
0.35 – 0.60 mm (0.013 – 0.023 in.)

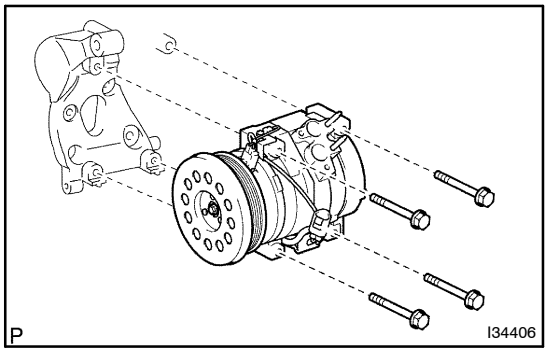
If the measured value is outside the standard range, remove the magnet clutch hub and adjust it with the magnet clutch washers.

NOTICE:
Adjustment shall be performed with 3 or less magnet clutch washers.

11. INSPECT COMPRESSOR OIL
(a) When replacing the compressor and magnetic clutch with a new one, after gradually removing the refrigerant gas from the service valve, drain the following amount of oil from the new compressor and magnetic clutch before installation.
Standard:
(Oil capacity inside new compressor and magnetic clutch: 120 + 15 cc (4.0 + 0.5 fl. oz.)) – (Remaining oil amount in the removed compressor and magnetic clutch) = (Oil amount to be removed when replacing)

NOTICE:
- **When checking the compressor oil level, observe the precautions on the cooler removal/installation.**
- **Because compressor oil remains in the pipes of the vehicle, if a new compressor and magnetic clutch is installed without removing some oil inside, the oil amount becomes excessive, preventing heat exchange in the refrigerant cycle and causing refrigerant failure.**

- **If the remaining oil in the removed compressor and magnetic clutch is too small in volume, check for oil leakage.**
- **Be sure to use ND–OIL8 for compressor oil.**



12. INSTALL COMPRESSOR AND MAGNETIC CLUTCH

(a) Install the compressor and magnetic clutch with the 4 bolts.
Torque: 24 N·m (245 kgf·cm, 18 ft·lbf)

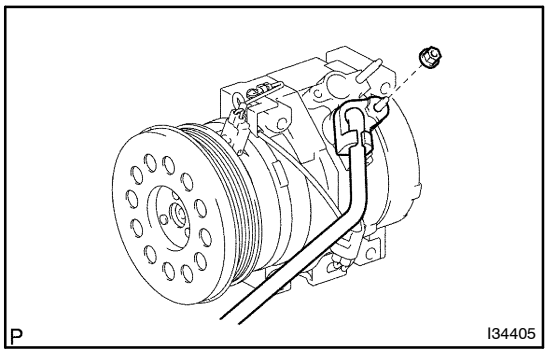
(b) Connect the connector.

13. INSTALL SUCTION HOSE SUB–ASSY

(a) Remove the attached vinyl tape from the hose.

(b) Sufficiently apply compressor oil to a new O–ring and the fitting surface of the compressor and magnetic clutch.
Compressor oil: ND–OIL8 or equivalent

(c) Install the O–ring on the suction hose sub–assy.



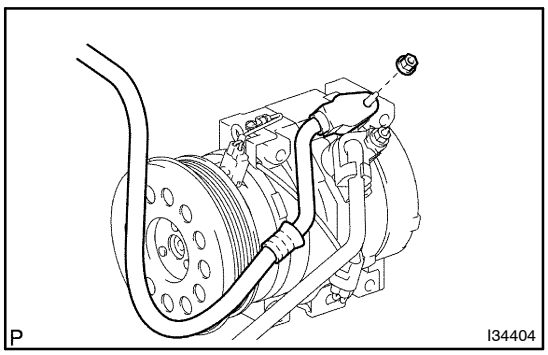
(d) Install the suction hose sub–assy on the compressor and the magnetic clutch with the nut.
Torque: 9.8 N·m (100 kgf·cm, 87 in.·lbf)

14. INSTALL DISCHARGE HOSE SUB–ASSY

(a) Remove the attached vinyl tape from the hose.

(b) Sufficiently apply compressor oil to a new O–ring and the fitting surface of the compressor and magnetic clutch.
Compressor oil: ND–OIL8 or equivalent

(c) Install the O–ring on the discharge hose sub–assy.



(d) Install the discharge hose sub–assy on the compressor and magnetic clutch with the nut.
Torque: 9.8 N·m (100 kgf·cm, 87 in.·lbf)

15. INSTALL FAN AND GENERATOR V BELT (See page 14–5)

16. INSTALL ENGINE UNDER COVER SUB–ASSY NO.1 (See page 14–5)

17. CHARGE REFRIGERANT (See Pub. No. RM990E on page 55–26)

SST 07110–58060 (07117–58060, 07117–58070, 07117–58080, 07117–58090, 07117–78050, 07117–88060, 07117–88070, 07117–88080)

Specified amount:
Single A/C: 600 ± 30 g (21.16 ± 1.06 oz.)
Single A/C + Cool box: 700 ± 30 g (24.69 ± 1.06 oz.)
Dual A/c: 800 ± 30 g (28.21 ± 1.06 oz.)
Dual A/c + Cool box: 900 ± 30 g (31.74 ± 1.06 oz.)

18. WARM UP ENGINE (See Pub. No. RM990E on page 55–26)

19. INSPECT LEAKAGE OF REFRIGERANT (See Pub. No. RM990E on page 55–26)