550S1–01

# REPLACEMENT

HINT:

COMPONENTS: See page 55–82

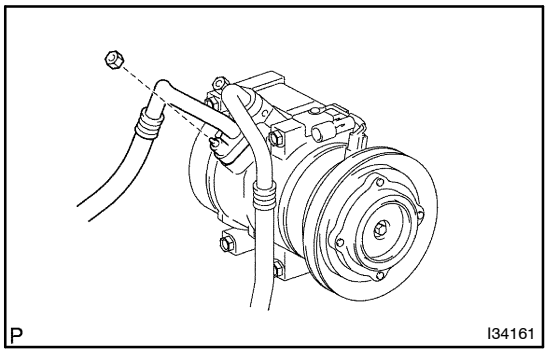
**1. DISCHARGE REFRIGERANT FROM REFRIGERATION SYSTEM (See page 55–26)**

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

**2. REMOVE ENGINE UNDER COVER SUB–ASSY NO.1**

**3. REMOVE VANE PUMP V BELT (See page 14–77)**

**4. REMOVE V (COOLER COMPRESSOR TO CRANKSHAFT PULLEY) BELT NO.1 (See page 55–42)**




**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.

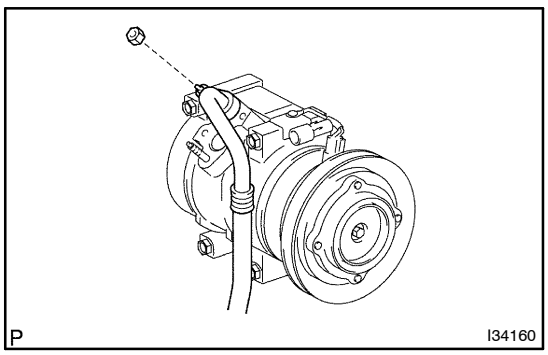
**NOTICE:**

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

**6. DISCONNECT SUCTION HOSE SUB–ASSY (W/ REAR COOLER)**

HINT:

Disconnect of the suction hose sub–assy is same the suction hose sub–assy.



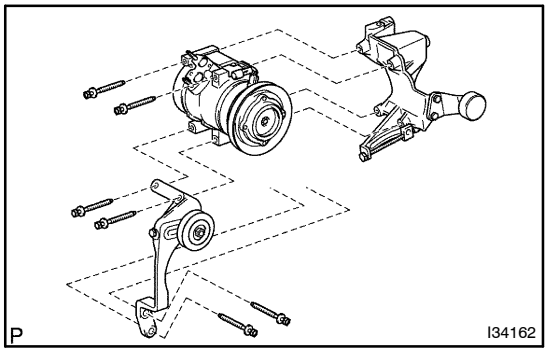

**7. DISCONNECT DISCHARGE HOSE SUB–ASSY**

(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 matter from entering.**




**8. REMOVE COMPRESSOR AND MAGNETIC CLUTCH**

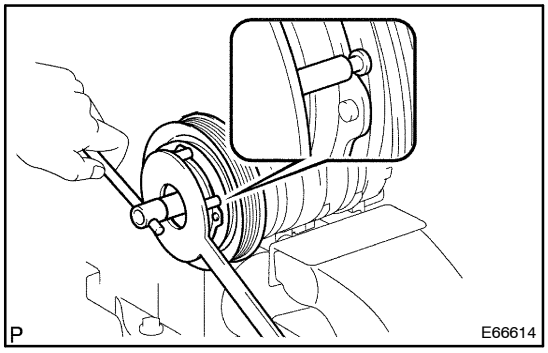
(a) Disconnect the connector.

(b) Remove the 4 bolts and idle pulley assy w/ bracket.

(c) Remove the 2 bolts and compressor and magnetic clutch.

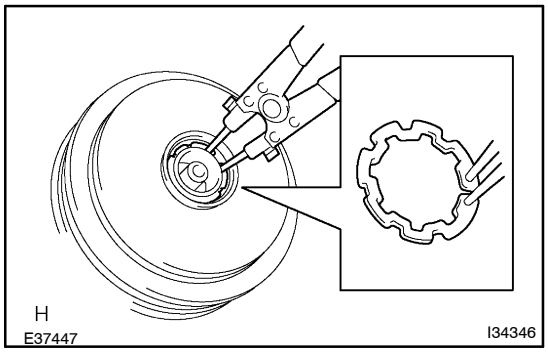
**9. REMOVE MAGNET CLUTCH ASSY**

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



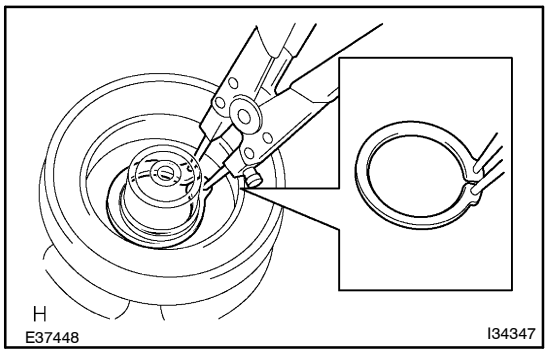

(b) Using SST, hold the magnet clutch hub.
SST 95047–10400

(c) Remove the bolt, magnet clutch hub and magnet clutch washer.




(d) Using a snap ring expander, remove the snap ring and magnet clutch rotor.

(e) Remove the screw and disconnect the connector.

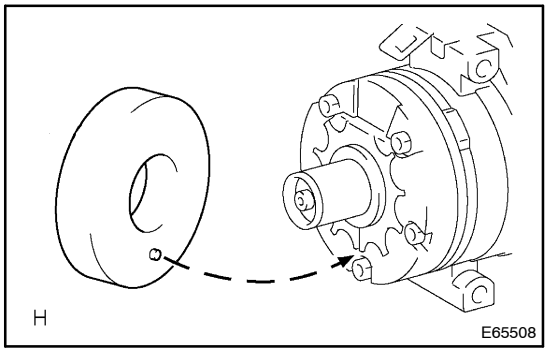



(f) Using a snap ring expander, remove the snap ring and magnet clutch starter.

**10. REMOVE AIR CONDITIONING WIRING HARNESS SUB–ASSY**

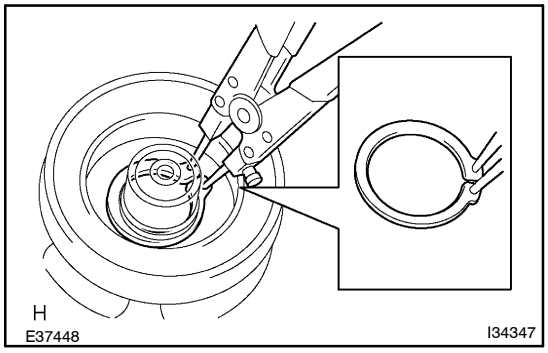
**11. REMOVE COOLER COMPRESSOR BRACKET**

**12. REMOVE COOLER COMPRESSOR ASSY**

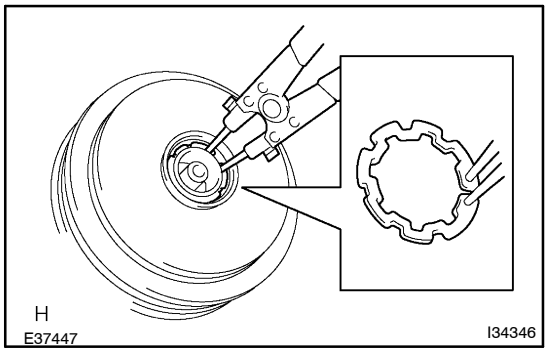



**13. INSTALL MAGNET CLUTCH ASSY**

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

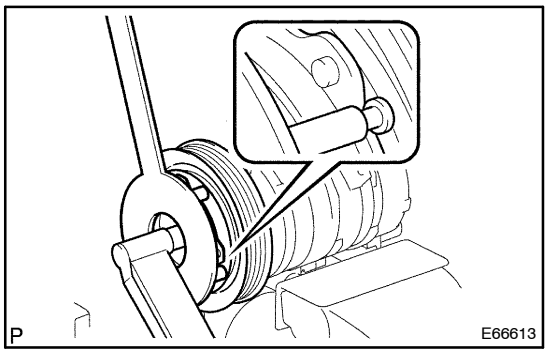



(b) Using a snap ring expander, install a new snap ring with the chamfered side facing up.
(c) Install the screw and connect the connector.

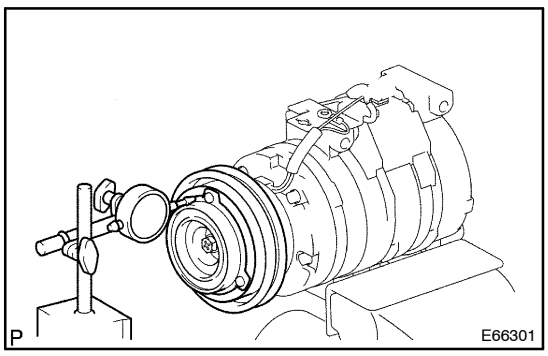



(d) Using a snap ring expander, install the magnet clutch rotor and a new snap ring with the chamfered side facing up.
(e) Install the magnet clutch washer and magnet clutch hub.

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




(f) Using SST, hold the magnet clutch hub and install the bolt.
SST 95047–10400
**Torque: 18 N·m (183 kgf·cm, 13 ft·lbf)**




**14. 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 out of the standard range, remove the magnet clutch hub and adjust it with magnet clutch washers.

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

**15. INSPECT COMPRESSOR OIL**

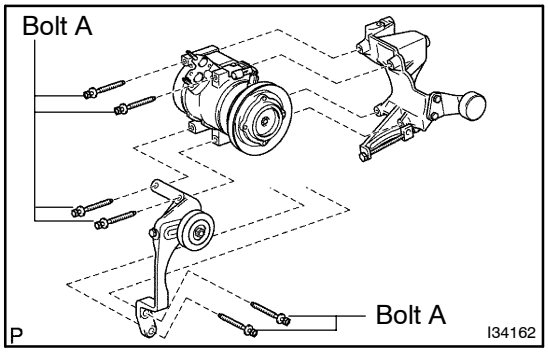
(a) When replacing the compressor and magnetic clutch with a new one, after gradually removing the refrigerant gas from the service valve, drain the following amount of oil from the new compressor and magnetic clutch before installation.

**Standard:**

**(Oil capacity inside new compressor and magnetic clutch: 180 + 15 cc (6.0 + 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.**




**16. INSTALL COMPRESSOR AND MAGNETIC CLUTCH**

(a) Temporary tighten the compressor and magnetic clutch with the 2 bolts.

(b) Temporary tighten the idle pulley assy w/ bracket with the 4 bolts.

(c) Fully tighten the compressor and magnetic clutch with the 6 bolts.

**Torque: 46 N·m (469 kgf·cm, 34 ft·lbf) (BOLT A)**

**Torque: 24 N·m (245 kgf·cm, 18 ft·lbf) (BOLT B)**

**NOTICE:**

**Tighten the bolts in following order shown in the illustration to install the compressor and magnetic clutch.**

(d) Connect the connector.

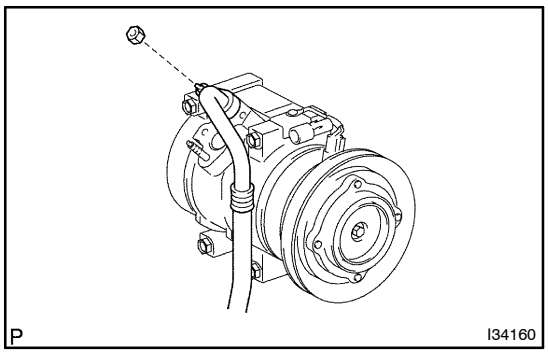
**17. INSTALL DISCHARGE HOSE SUB–ASSY**

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

(b) Sufficiently apply compressor oil to the new O–ring and fitting surface of the compressor and magnetic clutch.

**Compressor oil: ND–OIL8 or equivalent**

(c) Install a 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)**

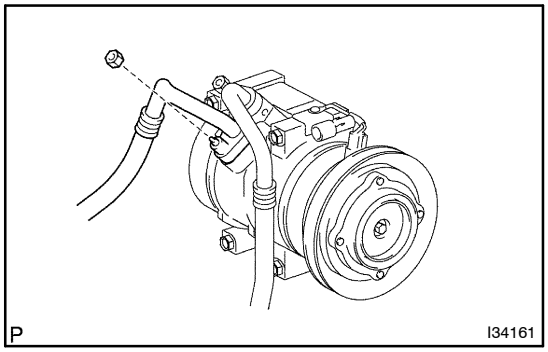
**18. INSTALL SUCTION HOSE SUB–ASSY**

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

(b) Sufficiently apply compressor oil to the new O–ring and fitting surface of the compressor and magnetic clutch.

**Compressor oil: ND–OIL8 or equivalent**

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




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

**19. INSTALL SUCTION HOSE SUB–ASSY (W/ REAR COOLER)**
HINT:
Connect of the suction hose sub–assy is same the suction hose sub–assy.
**20. INSTALL V (COOLER COMPRESSOR TO CRANKSHAFT PULLEY) BELT NO.1**
**(See page 55–42)**
**21. ADJUST V (COOLER COMPRESSOR TO CRANKSHAFT PULLEY) BELT NO.1**
**(See page 55–42)**
**22. FULLY TIGHTEN V (COOLER COMPRESSOR TO CRANKSHAFT PULLEY) BELT NO.1**
**(See page 55–42)**
**23. INSTALL VANE PUMP V BELT (See page 14–77)**
**24. INSTALL ENGINE UNDER COVER SUB–ASSY NO.1**
**25. CHARGE REFRIGERANT (See 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: 650 ± 30 g (22.92 ± 1.06 oz.)**
**Dual A/C: 800 ± 30 g (28.21 ± 1.06 oz.)**
**26. WARM UP ENGINE (See page 55–26)**
**27. INSPECT LEAKAGE OF REFRIGERANT (See page 55–26)**