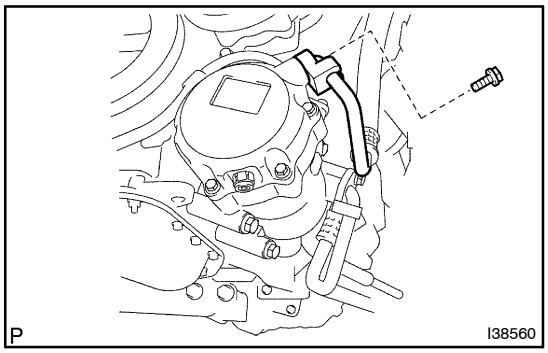
ELECTRIC INVERTER COMPRESSOR ASSY

55193–01

REPLACEMENT

1. REMOVE REAR FLOOR BOARD NO.2 (SEE PAGE 21–120)
2. REMOVE DECK FLOOR BOX REAR (SEE PAGE 21–120)
3. REMOVE REAR FLOOR BOARD NO.3 (SEE PAGE 21–120)
4. DISCONNECT BATTERY NEGATIVE TERMINAL (SEE PAGE 60–1)
5. REMOVE SERVICE PLUG GRIP (SEE PAGE 21–120)
6. **DISCHARGE REFRIGERANT FROM REFRIGERATION SYSTEM**

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



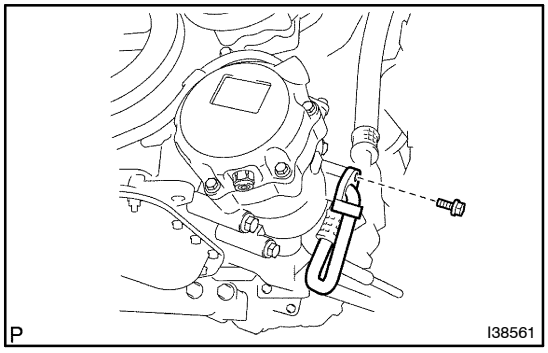
7. **DISCONNECT DISCHARGE HOSE SUB–ASSY**

(a) Remove the bolt and disconnect the discharge hose sub–assy.

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

NOTICE:

Seal the openings of the disconnected parts of the discharge hose and the compressor assy with the electric inverter compressor assy using vinyl tape to prevent moisture and foreign matter from entering.



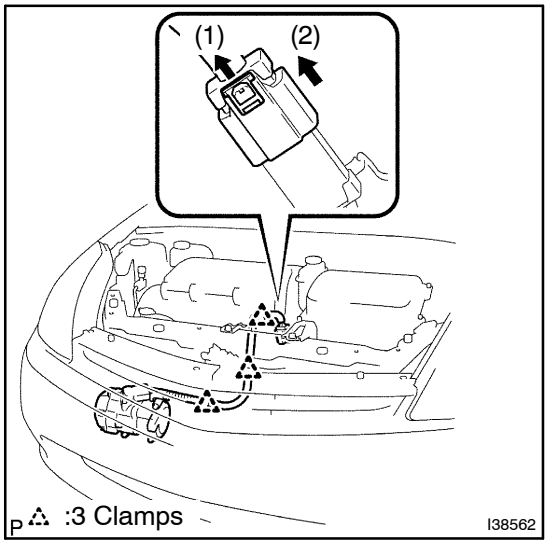
8. **DISCONNECT SUCTION HOSE SUB–ASSY**

(a) Remove the bolt and disconnect the suction hose sub–assy.

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

NOTICE:

Seal the openings of the disconnected parts of the suction hose and the compressor assy with the electric inverter compressor assy using vinyl tape to prevent moisture and foreign matter from entering.



9. **REMOVE ELECTRIC INVERTER COMPRESSOR ASSY**

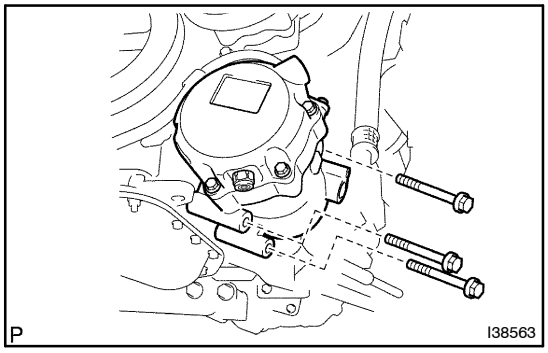
(a) Release the green–colored lock.(1)

(b) Disconnect the connector.(2)

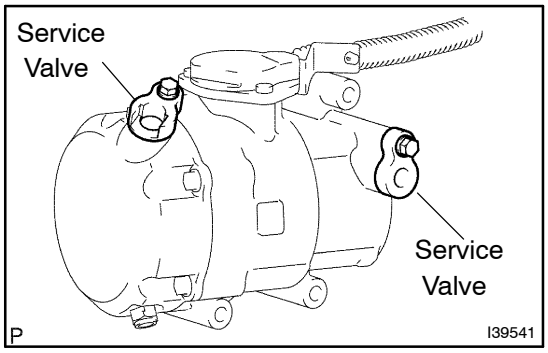
(c) Remove the 3 clamps and disconnect the wire harness.

NOTICE:

- **Wear insulated gloves when performing the procedures.**
- **Insulate the connector by sealing it with tape.**



(d) Remove the 3 bolts and then the electric inverter compressor assy.



10. INSPECT COMPRESSOR OIL

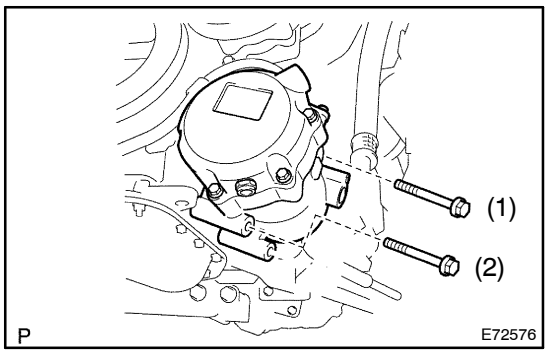
(a) Gradually discharge inert gas (helium) from the service valve when replacing the electric inverter compressor assy with the inverter compressor assy with a new one. Drain the following amount of oil from the new electric inverter compressor assy before installation.

Standard:

(Oil capacity inside new electric inverter compressor 100 (+ 15 mL)) – (Remaining oil amount in the removed compressor assy with the motor (w/ motor compressor assy)) = (Oil amount to be removed before installation)

NOTICE:

- **Observe the precautions on the cooler removal/ installation procedures when checking the amount of compressor oil.**
- **Because compressor oil remains in the pipes of the vehicle, if a new cooler compressor assy is installed without removing the oil inside, the amount of oil becomes too great, preventing heat exchange in the refrigerant cycles and causing refrigerant failure and/or abnormal vibration.**
- **Check for oil leakage if the remaining oil amount in the removed compressor is too low.**
- **If any compressor oil other than ND–OIL11 is used, compressor motor insulation performance may decrease, resulting in a leakage of electric power.**

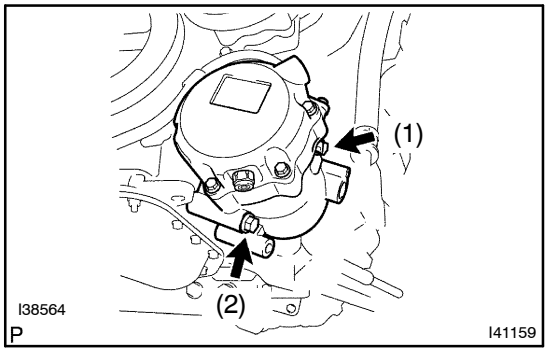


11. TEMPORARILY TIGHTEN ELECTRIC INVERTER COMPRESSOR ASSY

(a) Temporarily tighten the electric inverter compressor assy with the 2 bolts.

NOTICE:

Tighten them in the order indicated in the illustration.



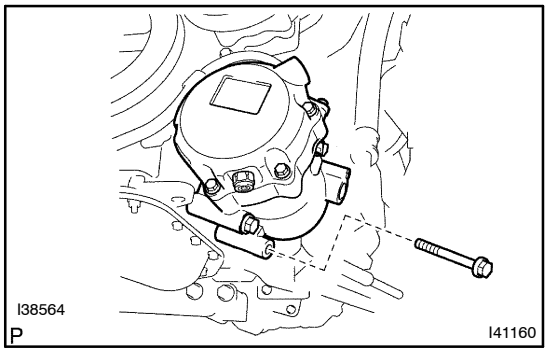
12. FULLY TIGHTEN ELECTRIC INVERTER COMPRESSOR ASSY

(a) Fully tighten the electric inverter compressor assy with the 2 bolts.

Torque: 25 N·m (255 kgf·cm, 18 ft·lbf)

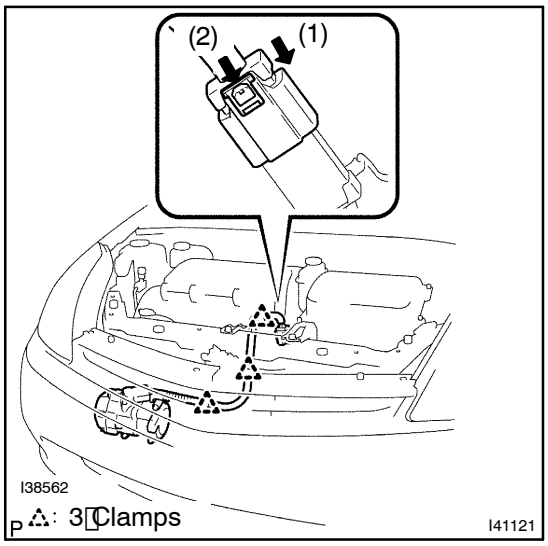
NOTICE:

Tighten them in the order indicated in the illustration.



(b) Fully tighten the electric inverter compressor assy with the bolt.

Torque: 25 N·m (255 kgf·cm, 18 ft·lbf)



(c) Connect the wire harness.

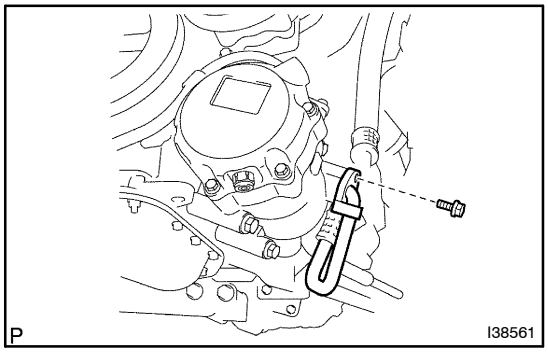
NOTICE:

Wear insulated gloves when performing the procedures.

(1) Connect the wire harness 3 clamps.

(2) Connect the connector. (1)

(3) Lock the green–colored lock. (2)



13. INSTALL SUCTION HOSE SUB–ASSY

(a) Sufficiently apply compressor oil to a new O–ring and fitting surface of the electric inverter compressor assy.

Compressor oil: ND–OIL 11 or equivalent

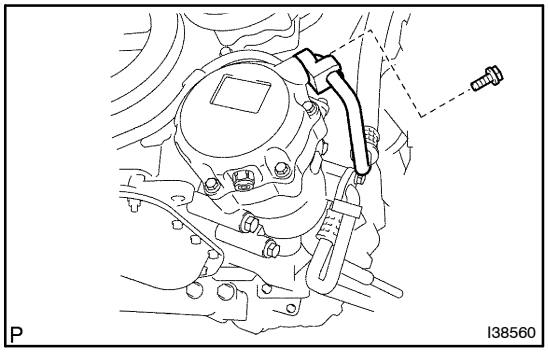
NOTICE:

- **Do not use any compressor oil other than ND–OIL11 (see page 55–1).**
- **If any compressor oil other than ND–OIL11 is used, compressor motor insulation performance may decrease, resulting in a leakage of electric power.**

(b) Install the O–ring to the suction hose sub–assy.

(c) Install the suction hose sub–assy with the bolt.

Torque: 9.8 N·m (100 kgf·cm, 87 in.·lbf)



14. INSTALL DISCHARGE HOSE SUB–ASSY

(a) Sufficiently apply compressor oil to a new O–ring and fitting surface of the electric inverter compressor assy.
Compressor oil: ND–OIL 11 or equivalent

NOTICE:

- **Do not use any compressor oil other than ND–OIL11 (see page 55–1).**
- **If any compressor oil other than ND–OIL11 is used, compressor motor insulation performance may decrease, resulting in a leakage of electric power.**

(b) Install the O–ring to the discharge hose.

(c) Install the discharge hose with the bolt.
Torque: 9.8 N·m (100 kgf·cm, 87 in.·lbf)

15. INSTALL SERVICE PLUG GRIP (SEE PAGE 21–120)

16. CONNECT BATTERY NEGATIVE TERMINAL

17. INSTALL REAR FLOOR BOARD NO.3

18. INSTALL DECK FLOOR BOX REAR

19. INSTALL REAR FLOOR BOARD NO.2

20. CHARGE REFRIGERANT (SEE PAGE 55–12)

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

Specified amount: 450 ± 30 g (15.87 ± 1.05 oz.)

21. WARM UP COMPRESSOR (SEE PAGE 55–12)

22. INSPECT LEAKAGE OF REFRIGERANT (SEE PAGE 55–12)