

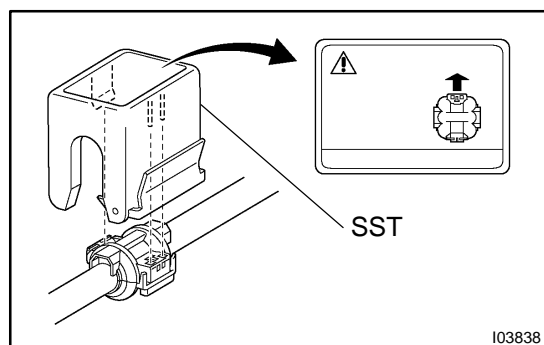
OVERHAUL

HINT:

COMPONENTS: see page 55-27 ,71-6

1. DISCHARGE REFRIGERANT FROM REFRIGERATION SYSTEM (SEE PAGE 55-17)

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



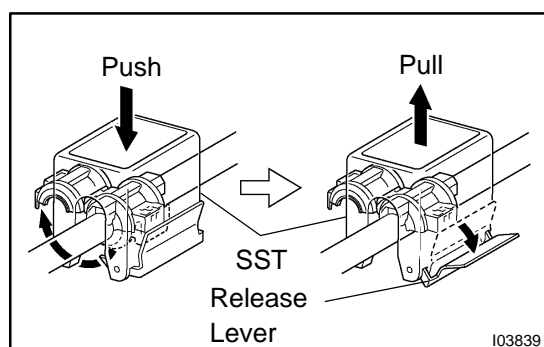
2. DISCONNECT COOLER REFRIGERANT SUCTION PIPE NO.1

(a) Install SST on piping clamp.

SST 09870-00015

HINT:

Make sure the direction of the piping clamp claw and SST by seeing the illustration shown on the caution label.

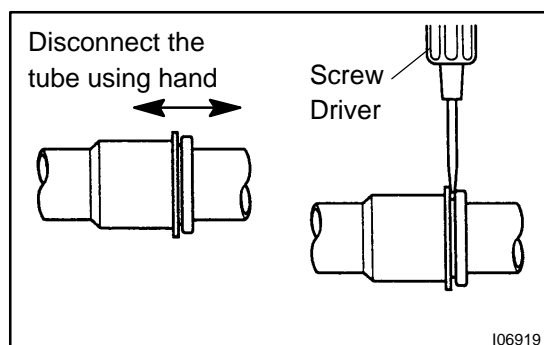


(b) Push down the SST and release the clamp lock.

NOTICE:

Be careful not to deform the tube when pushing SST.

(c) Pull SST slightly and push the release lever, and then remove the piping clamp with SST.



(d) Disconnect the cooler refrigerant suction hose No.1.

NOTICE:

- Do not use tools like screwdriver to remove the tube.
- Cap the open fittings immediately to keep moisture or dirt out of the system.

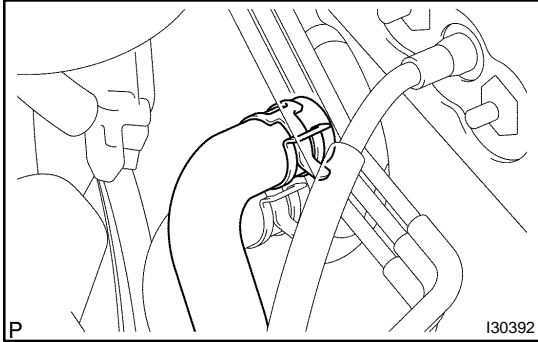
(e) Remove the 2 O-rings from the cooler refrigerant suction hose No.1.

3. DISCONNECT COOLER REFRIGERANT LIQUID PIPE A

SST 09870-00025

HINT:

Disconnect of the cooler refrigerant liquid pipe A is same as the cooler refrigerant suction pipe No.1.



4. DISCONNECT HEATER OUTLET WATER HOSE

- (a) Using pliers, grip the claws of the clip and slide the clip, and then disconnect the heater outlet water hose.

NOTICE:

- Do not apply any excessive force to the heater outlet water hose.
- Prepare a drain pan or cloth for when the cooling water leaks.

5. DISCONNECT HEATER INLET WATER HOSE

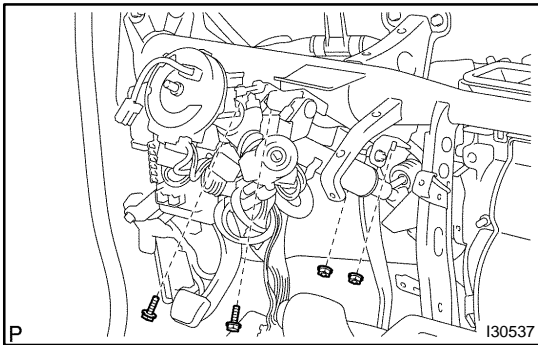
- (a) Disconnection of the heater inlet water hose is same as the heater outlet water hose.

6. REMOVE INSTRUMENT PANEL SAFETY PAD SUB-ASSY (SEE PAGE 71-10)

SST 09950-50013 (09951-05010, 09952-05010, 09953-05020, 09954-05021)

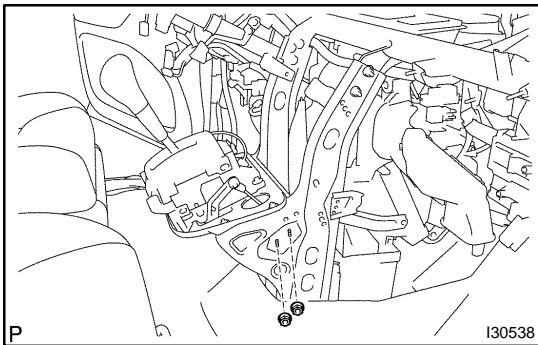
HINT:

Refer to the instructions for removal of the instrument panel safety pad sub-assy.



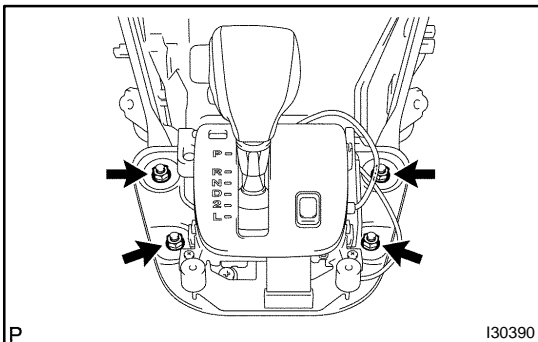
7. SEPARATE STEERING COLUMN ASSY

- (a) Remove the 2 bolts and 2 nuts, disconnect the steering column assy from the instrument panel reinforcement assy.

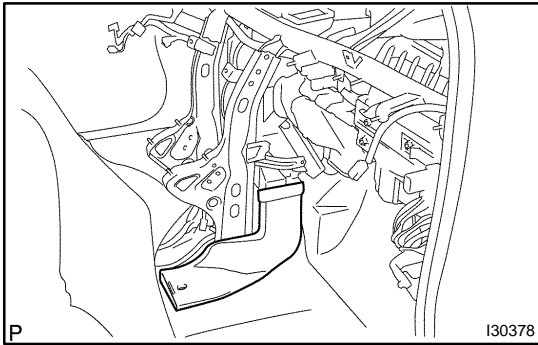


8. SEPARATE FLOOR SHIFT ASSY

- (a) Remove the 2 nuts and disconnect the shift cable.



- (b) Remove the 4 nuts and disconnect transmission floor shift assy.

**9. REMOVE AIR DUCT REAR NO.2**

- (a) Remove the side scuff plate.
- (b) Take up the floor carpet.

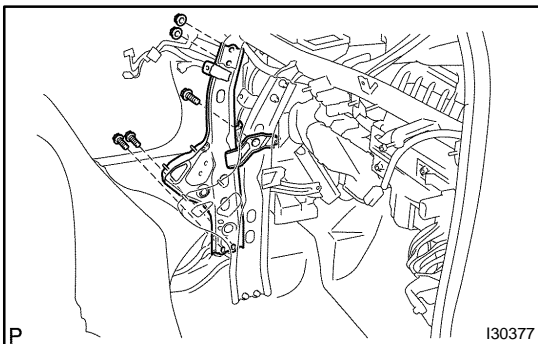
HINT:

Take up the floor carpet so that the air duct rear No.2 can be removed.

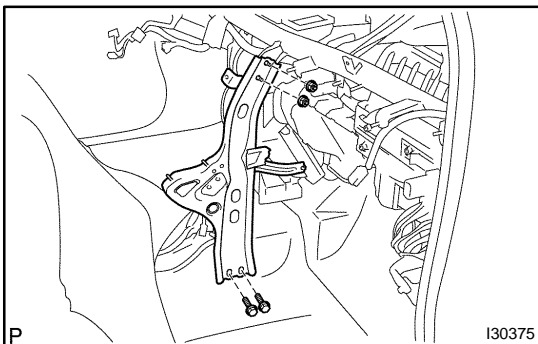
- (c) Remove the air duct rear No.2.

10. REMOVE AIR DUCT REAR NO.1**HINT:**

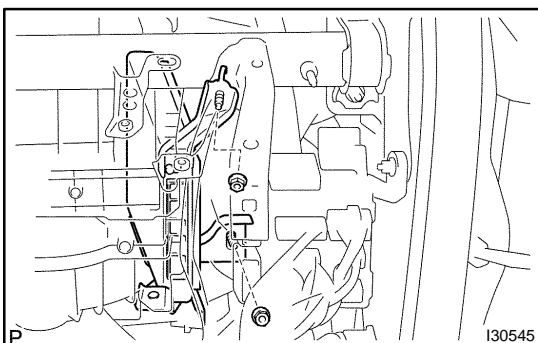
Remove it in the same way with the air duct rear No.2.

**11. REMOVE INSTRUMENT PANEL BRACE SUB-ASSY NO.1**

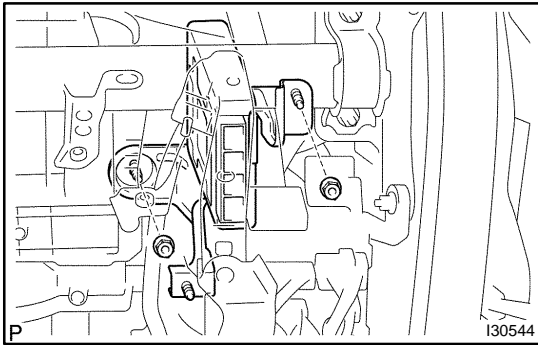
- (a) Disconnect the connector clamp.
- (b) Remove the 3 bolts, 2 nuts and instrument panel brace sub-assy No.1.

**12. REMOVE INSTRUMENT PANEL BRACE SUB-ASSY NO.2**

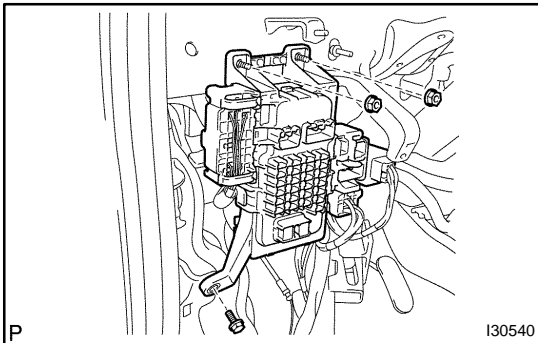
- (a) Remove the 2 bolts, 2 nuts and instrument panel brace sub-assy No.2.

**13. REMOVE AIRCONDITIONER AMPLIFIER ASSY (W/ LEXUS NAVIGATION SYSTEM)
(SEE PAGE 55-68)****14. REMOVE ECM**

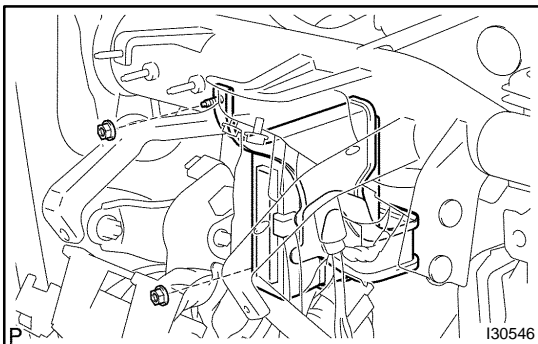
- (a) Disconnect the connector.
- (b) Remove the 2 nuts, and ECU.

**15. REMOVE MULTIPLEX NETWORK BODY ECU**

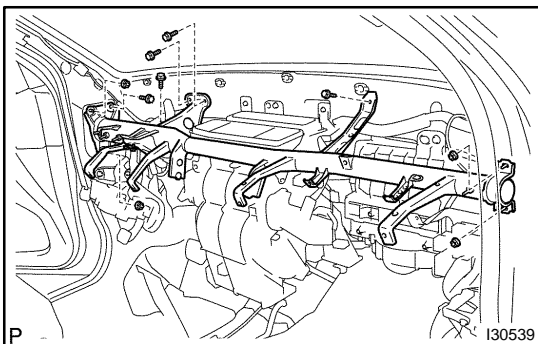
- (a) Disconnect the connector.
- (b) Remove the 2 nuts and multiplex network body ECU.

**16. DISCONNECT INSTRUMENT PANEL JUNCTION BLOCK ASSY**

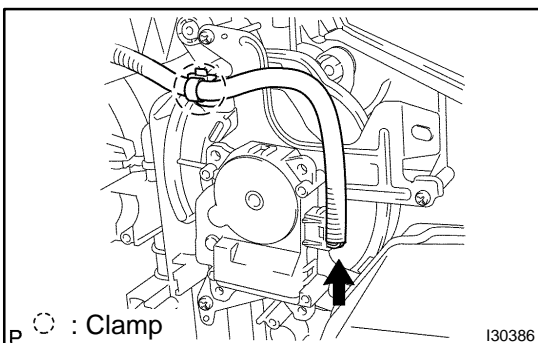
- (a) Remove the bolt and 2 nuts, disconnect the instrument panel junction block assy.

**17. REMOVE SKID CONTROL ECU ASSY**

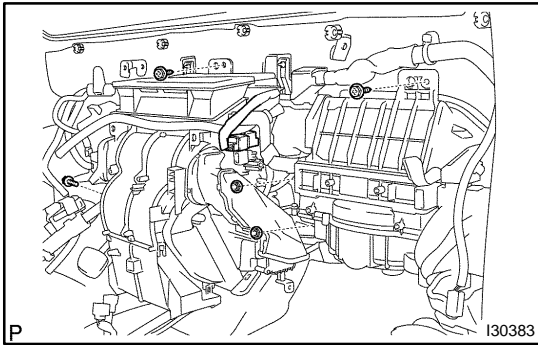
- (a) Disconnect the connector.
- (b) Remove the 2 nuts and skid control ECU assy.

**18. REMOVE INSTRUMENT PANEL REINFORCEMENT ASSY**

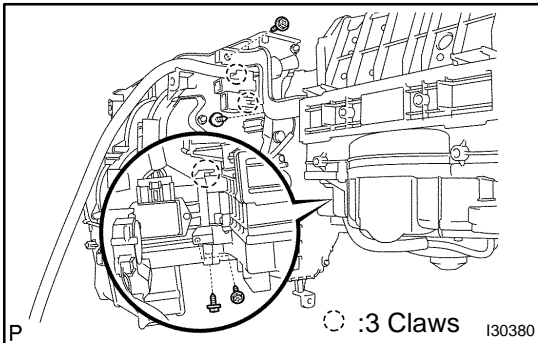
- (a) Remove the 5 bolts, 4 nuts and instrument panel reinforcement assy.

**19. REMOVE AIR CONDITIONER UNIT ASSY**

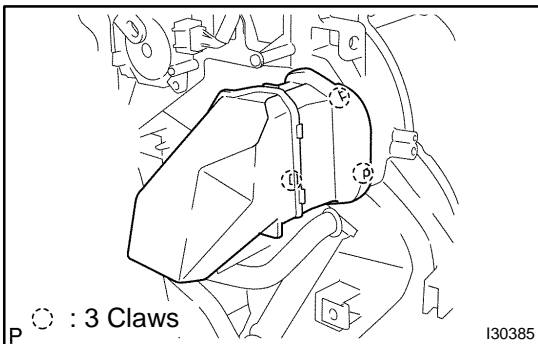
- (a) Disconnect the connector and clamp.



- (b) Disconnect the connectors connecting the wiring air indicator harness sub-assy and vehicle harness.
 - (c) Remove the 2 bolts, 2 nuts and air conditioner unit assy.
- 20. REMOVE AIR CONDITIONING RADIATOR ASSY**
- (a) Remove the screw, disconnect the connected part of the duct and take off the air duct No.2.

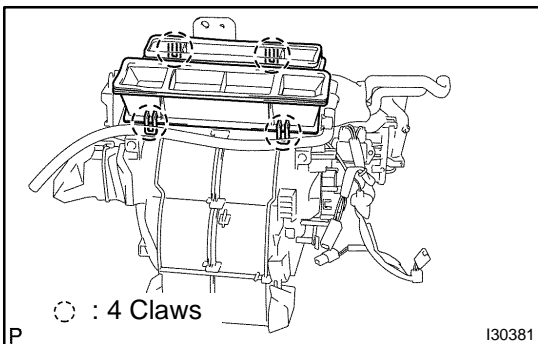


- (b) Remove the 4 screws and bracket.
- (c) Disconnect the connection between the blower assy and the air conditioner radiator assy and remove the air conditioning radiator assy.



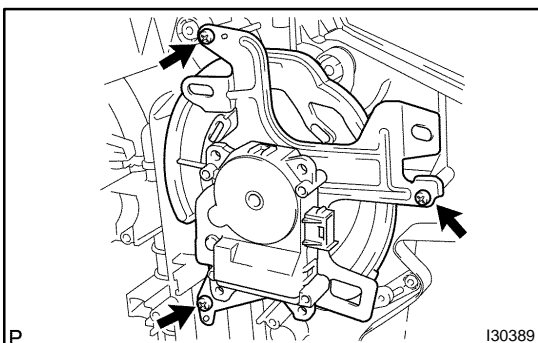
21. REMOVE AIR DUCT NO.1

- (a) Release the 3 claw fittings, remove the air duct No.1.



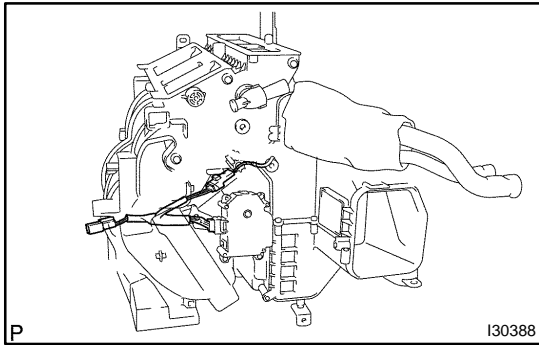
22. REMOVE HEATER TO REGISTER DUCT CENTER

- (a) Release the 4 claw fittings, remove the heater to register duct center.



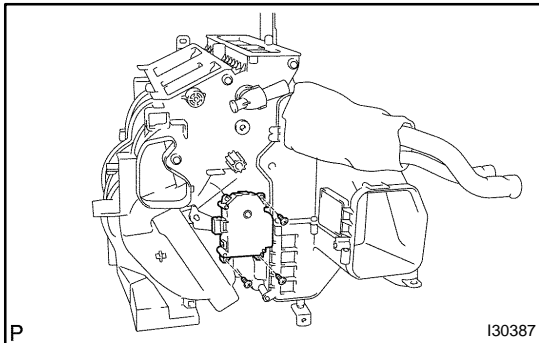
23. REMOVE MODE DAMPER SERVO SUB-ASSY

- (a) Remove the 3 screws and mode damper servo sub-assy.



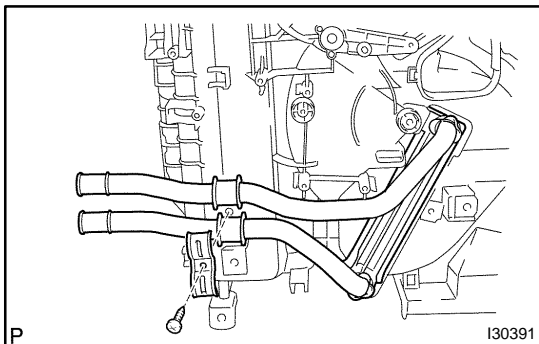
24. REMOVE WIRING AIR CONDITIONING HARNESS SUB-ASSY

- (a) Remove the wiring air conditioning harness sub-assy from the air conditioner radiator assy.



25. REMOVE AIRMIX DAMPER SERVO SUB-ASSY

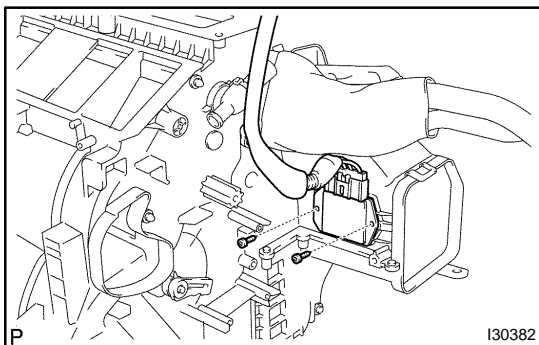
- (a) Remove the 3 screws and airmix damper servo sub-assy.



26. REMOVE HEATER RADIATOR UNIT SUB-ASSY

- (a) Remove the screw and clamp.
(b) Remove the heater radiator unit sub-assy from the air conditioner radiator assy.

27. REMOVE COOLER THERMISTOR NO.1



28. REMOVE BLOWER MOTOR CONTROL (AUTO AIR CONDITIONING)

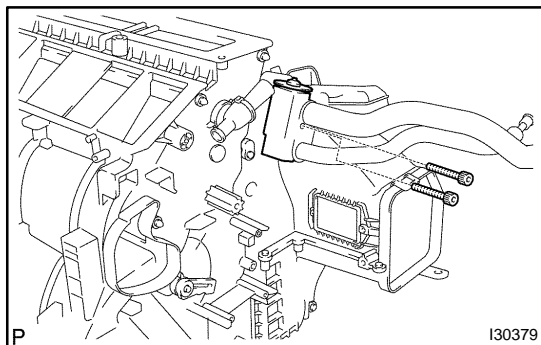
- (a) Remove the 2 screws and blower motor control.

29. REMOVE BLOWER RESISTOR (MANUAL AIR CONDITIONING)

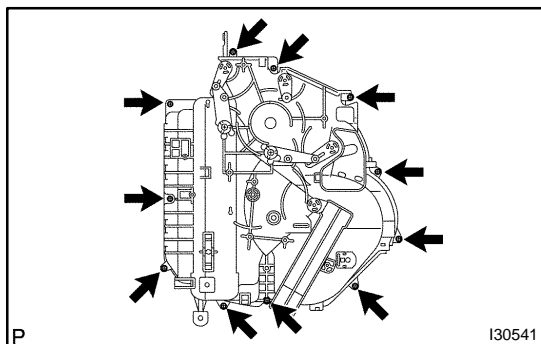
- (a) Remove the 2 screws and blower resistor.

30. REMOVE WIRING AIR INDICATOR HARNESS SUB-ASSY NO.2

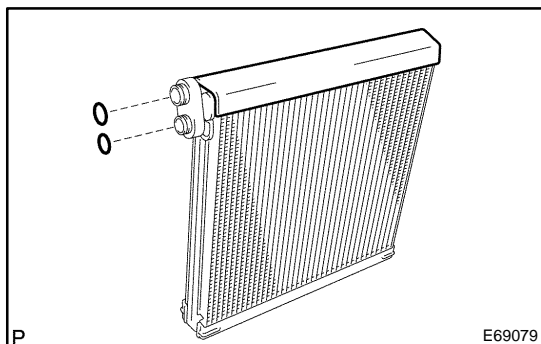
- (a) Remove the wiring air indicator harness sub-assy No.2 from the blower motor control.

**31. REMOVE COOLER EXPANSION VALVE**

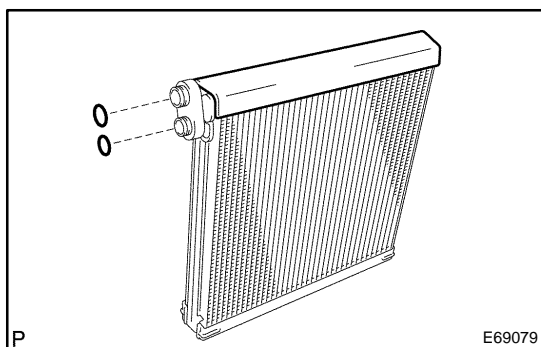
- (a) Using a hexagon wrench 4 mm (0.16 in.), remove the 2 hexagon bolts and cooler expansion valve.
- (b) Remove the 2 O-rings from the air conditioner tube assy.

**32. REMOVE COOLER EVAPORATOR SUB-ASSY NO.1**

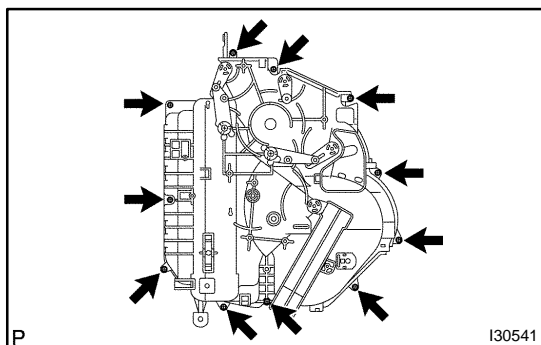
- (a) Remove the 11 screws and radiator case.
- (b) Remove the cooler evaporator sub-assy No.1 from the air conditioner radiator assy.



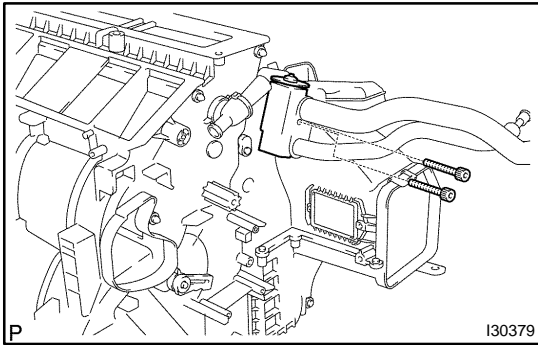
- (c) Remove the 2 O-rings from the cooler evaporator sub-assy No.1.

**33. INSTALL COOLER EVAPORATOR SUB-ASSY NO.1**

- (a) Sufficiently apply compressor oil to the 2 new O-rings and fitting surface of the cooler evaporator sub-assy No.1.
Compressor oil: ND-OIL 8 or equivalent
- (b) Install the 2 O-rings on the cooler evaporator sub-assy No.1.



- (c) Install the cooler evaporator No.1 to the air conditioner radiator assy.
- (d) Install the evaporator cover with the 11 screws.

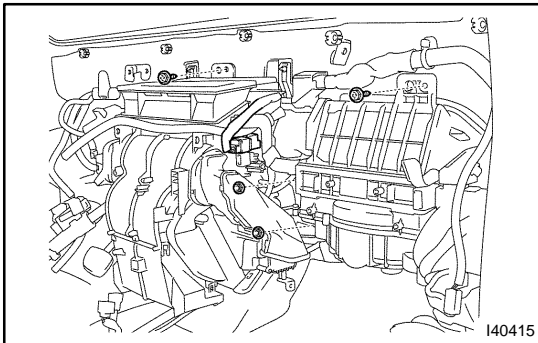
**34. INSTALL COOLER EXPANSION VALVE**

- (a) Sufficiently apply compressor oil to the 2 new O-rings and fitting surface of the air conditioning tube assy.

Compressor oil: ND-OIL 8 or equivalent

- (b) Install the 2 O-rings on the air conditioning tube assy.
 (c) Using a hexagon wrench 4mm (0.15 in.), install the cooler expansion valve and 2 hexagon bolts to the cooler evaporator No.1.

Torque: 5.4 N·m (55 kgf·cm, 48 in.-lbf)

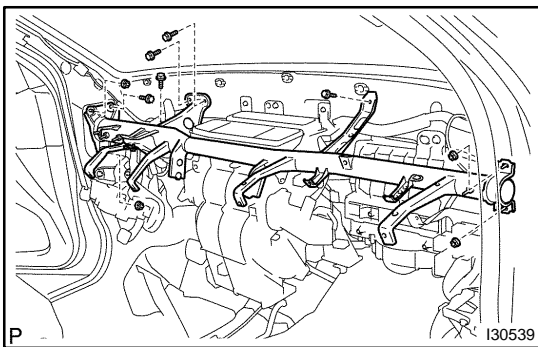
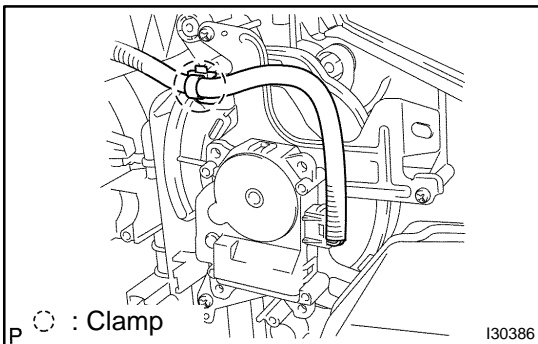
**35. INSTALL AIR CONDITIONER UNIT ASSY**

- (a) Install the air conditioner unit assy with the 2 bolts and 2 nuts.

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

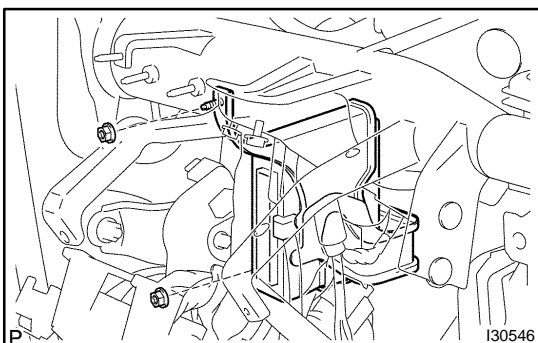
- (b) Connect the connectors connecting the wiring air indicator No.2 harness and vehicle harness.

- (c) Install the connector and clamp.

**36. INSTALL INSTRUMENT PANEL REINFORCEMENT ASSY**

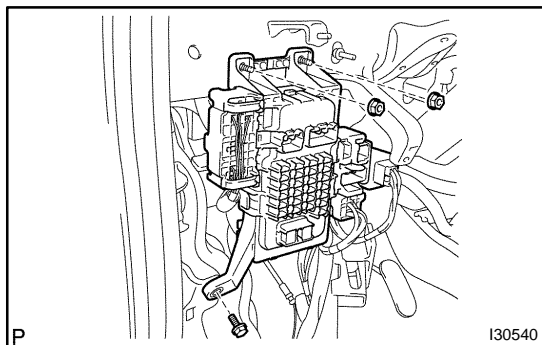
- (a) Install the instrument panel reinforcement assy with the 5 bolts and 4 nuts.

Torque: 29 N·m (300 kgf·cm, 21 ft.-lbf)

**37. INSTALL SKID CONTROL ECU ASSY**

- (a) Install the skid control ECU assy with the 2 nuts.

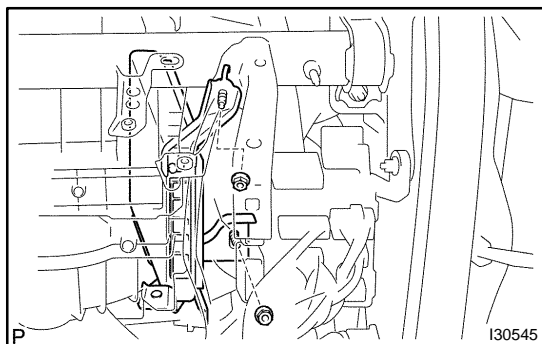
Torque: 5.0 N·m (50 kgf·cm, 43 in.-lbf)



38. INSTALL INSTRUMENT PANEL JUNCTION BLOCK ASSY

- (a) Install the instrument panel junction block assy with the bolt and 2 nuts.

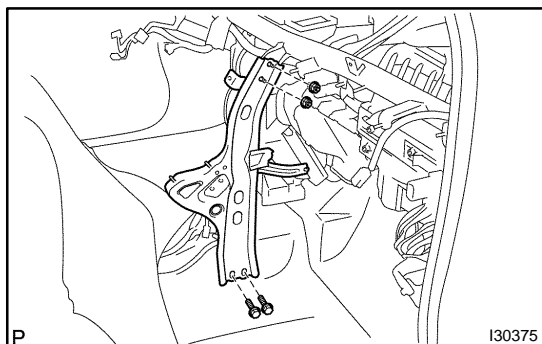
Torque: 8.4 N·m (86 kgf·cm, 74 in.-lbf)



39. INSTALL ECM

- (a) Install the ECM with the 2 nuts.

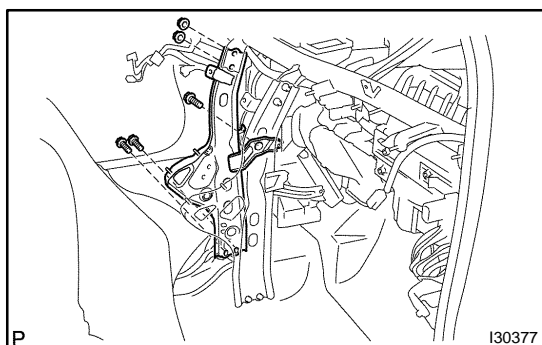
Torque: 5.5 N·m (56 kgf·cm, 49 in.-lbf)



40. INSTALL INSTRUMENT PANEL BRACE SUB-ASSY NO.2

- (a) Install the instrument panel brace sub-assy No.2 with the 2 bolts and 2 nuts.

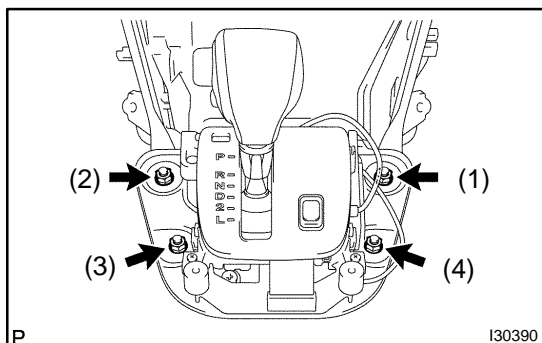
Torque: 29 N·m (300 kgf·cm, 21 ft.-lbf)



41. INSTALL INSTRUMENT PANEL BRACE SUB-ASSY NO.1

- (a) Install the instrument panel brace sub-assy No.1 with the 3 bolts and 2 nuts.

Torque: 29 N·m (300 kgf·cm, 21 ft.-lbf)



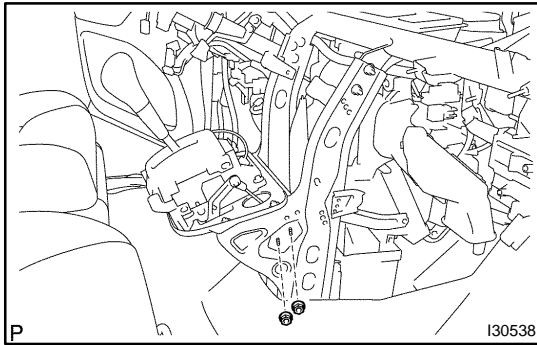
42. INSTALL FLOOR SHIFT ASSY

- (a) Install the floor shift assy with the 4 nuts.

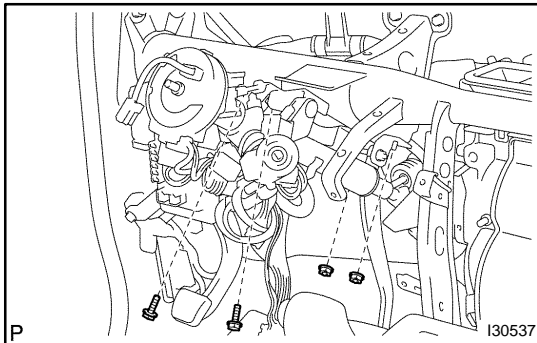
Torque: 12 N·m (122 kgf·cm, 9 ft.-lbf)

NOTICE:

Tighten the nuts in numerical order shown in the illustration to install the floor shift assy.



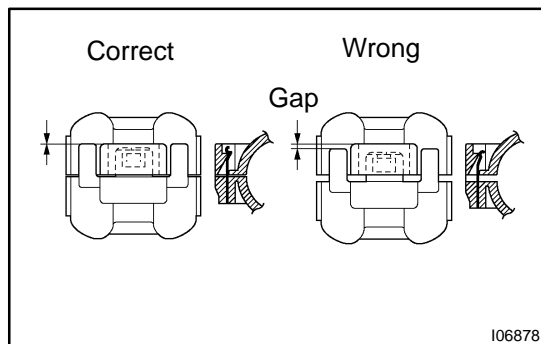
- (b) Install the shift cable with the 2 nuts.
Torque: 20 N·m (200 kgf·cm, 14 ft·lbf)



43. INSTALL STEERING COLUMN ASSY

- (a) Install the steering column assy with the 2 bolts and 2 nuts.
Torque: 21 N·m (210 kgf·cm, 15 ft·lbf)

44. INSTALL INSTRUMENT PANEL SAFETY PAD SUB-ASSY (SEE PAGE 71-10)



45. INSTALL COOLER REFRIGERANT SUCTION PIPE NO.1

- (a) Remove the attached vinyl tape from the pipe.
 (b) Coat a new O-ring with compressor oil and install them to the hose.
Compressor oil: ND-OIL 8 or equivalent
 (c) Install the cooler refrigerant suction pipe No.1 and piping clamp.

HINT:

- Be sure to connect the pipe securely.
- After connection, check the fitting for claw of the piping clamp.

46. INSTALL COOLER REFRIGERANT LIQUID PIPE A

- (a) Remove the attached vinyl tape from the pipe.
 (b) Coat a new O-ring with compressor oil and install it to the pipe.
Compressor oil: ND-OIL 8 or equivalent
 (c) Install the cooler refrigerant liquid pipe A and piping clamp.

47. ADD COOLANT

2AZ-FE: (SEE PAGE 16-6)
3MZ-FE: (SEE PAGE 16-26)

48. CHECK FOR ENGINE COOLANT LEAKS

2AZ-FE: (SEE PAGE 16-1)
3MZ-FE: (SEE PAGE 16-20)

49. CHARGE REFRIGERANT (SEE PAGE 55-17)

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

Specified amount: 650 ± 50 g (22.93 ± 1.76 oz.)

50. WARM UP ENGINE**51. INSPECT LEAKAGE OF REFRIGERANT (SEE PAGE 55-17)**