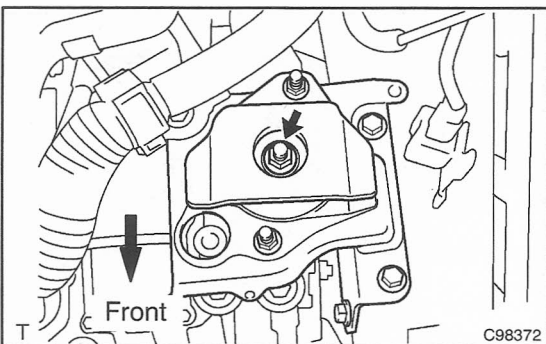


- (b) Install the housing side cover and starter cover with the 2 bolts.

Torque: 32 N·m (326 kgf·cm, 23 ft·lbf)



29. CONNECT ENGINE MOUNTING BRACKET NO.3

- (a) Connect the engine mounting bracket No.3 to the engine mounting insulator using a nut.

Torque: 80 N·m (816 kgf·cm, 59 ft·lbf)

30. REMOVE ENGINE HANGER NO.1

- (a) Remove the bolt and engine hanger.

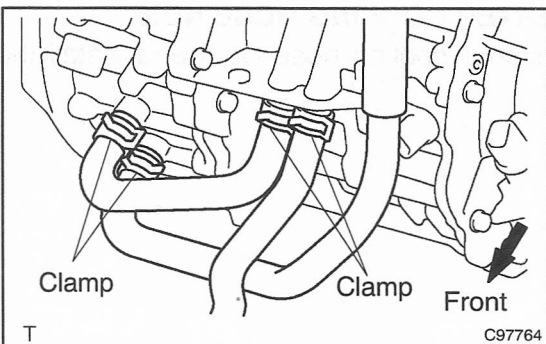
31. INSTALL FRONT SUSPENSION CROSSMEMBER SUB-ASSY (SEE PAGE 14-32)

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32. CONNECT EXHAUST PIPE ASSY (SEE PAGE 15-2)

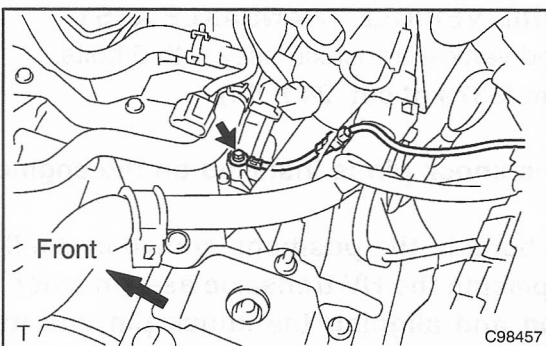
33. INSTALL FRONT DRIVE SHAFT ASSY LH (SEE PAGE 30-7)

34. INSTALL FRONT DRIVE SHAFT ASSY RH (SEE PAGE 30-7)



35. CONNECT INVERTER COOLING HOSE NO.4

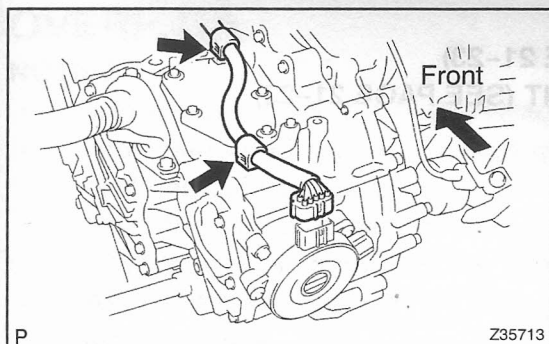
- (a) Connect the 3 hoses with the 4 clamps.



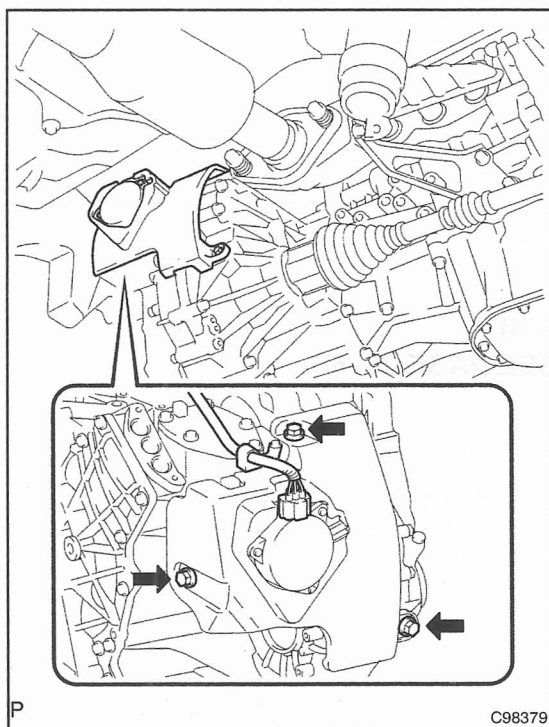
36. CONNECT CONNECTOR

- (a) Connect the earth wire using a bolt.

Torque: 9.0 N·m (92 kgf·cm, 80 in·lbf)



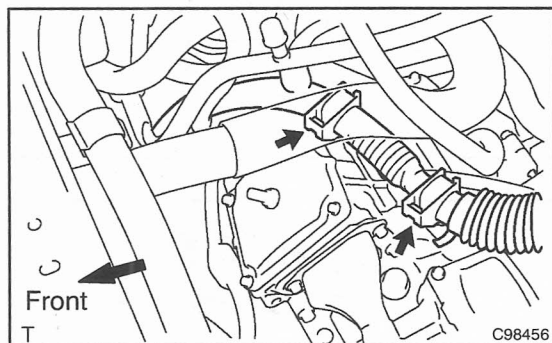
(b) Connect the 2 clamps.



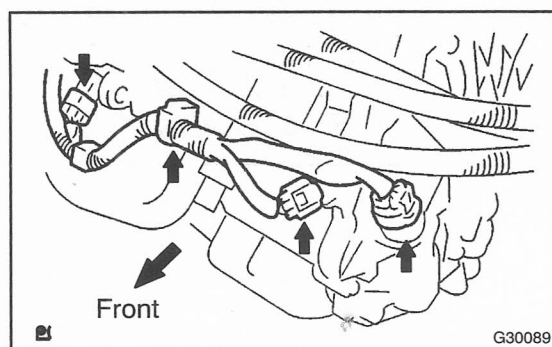
(c) Install the transmission case cover to the hybrid vehicle transaxle using the 3 bolts.

Torque: 7.0 N·m (71 kgf·cm, 62 in·lbf)

(d) Connect the connector.



(e) Connect the clamps in the 2 locations shown in the illustration.



(f) Connect the clamp and the 3 connectors shown in the illustration.

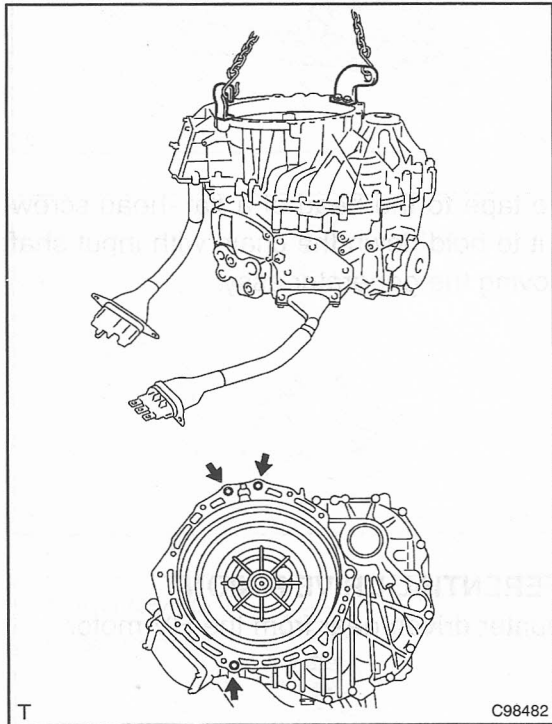
37. INSTALL AIR CLEANER ASSY (SEE PAGE 14-32)
38. INSTALL W/CONVERTER INVERTER ASSY (SEE PAGE 21-23)
39. INSTALL COWL TOP PANEL SUB-ASSY OUTER FRONT (SEE PAGE 21-23)
40. INSTALL FR WIPER ARM LH (SEE PAGE 66-14)
41. INSTALL FR WIPER ARM RH (SEE PAGE 66-14)
42. INSTALL HOOD SUB-ASSY (SEE PAGE 75-4)
43. INSPECT HOOD SUB-ASSY (SEE PAGE 75-2)
44. ADJUST HOOD SUB-ASSY (SEE PAGE 75-2)
45. INSTALL ENGINE UNDER COVER RH
46. INSTALL ENGINE UNDER COVER LH
47. INSTALL FRONT WHEELS
48. INSTALL SERVICE PLUG GRIP (SEE PAGE 01-5)
49. CONNECT BATTERY NEGATIVE TERMINAL
50. ADD TRANSAXLE OIL
Fluid type: AUTO FLUID WS
Capacity: 3.8 liters (4.0 US qts, 3.3 Imp. qts)
51. INSPECT TRANSAXLE OIL (SEE PAGE 22-1)
52. ADD COOLANT (SEE PAGE 22-4)
53. CHECK FOR ENGINE COOLANT LEAKS (SEE PAGE 16-4)
54. INSPECT AND ADJUST FRONT WHEEL ALIGNMENT (SEE PAGE 26-6)
55. DELETE TORQUE ZERO POINT (SEE PAGE 05-1210)
56. PERFORM INITIALIZATION (SEE PAGE 01-28)

OVERHAUL

NOTICE:

- When working on the high voltage systems, always wear insulated gloves.
- After removing the service plug grip, do not operate the power switch as it may damage the hybrid vehicle control ECU.
- Keep the removed service plug in your pocket to prevent other technicians from reconnecting it while you are servicing the vehicle.
- After removing the service plug grip, do not touch the high voltage connectors and terminals for 5 minutes.

1. REMOVE HYBRID VEHICLE TRANSAXLE ASSY (SEE PAGE 22-11)



2. REMOVE HYBRID VEHICLE GENERATOR ASSY

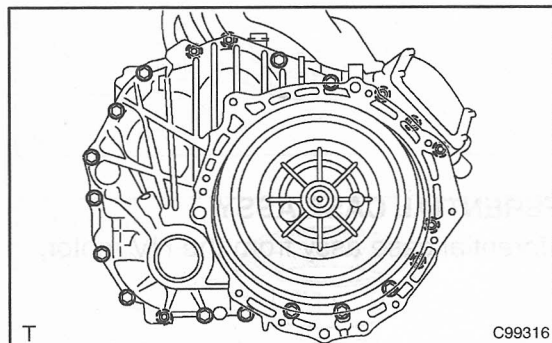
- (a) Install the engine hanger in the position shown in the illustration.

HINT:

- Engine hanger 12281-67070, S1228-11781
 - Bolt 91642-81045, 91642-81265
 - Nut 90178-10001, 90179-12147
- (b) Using an engine sling device and chain block, set the transaxle assy with the generator side facing upward.

NOTICE:

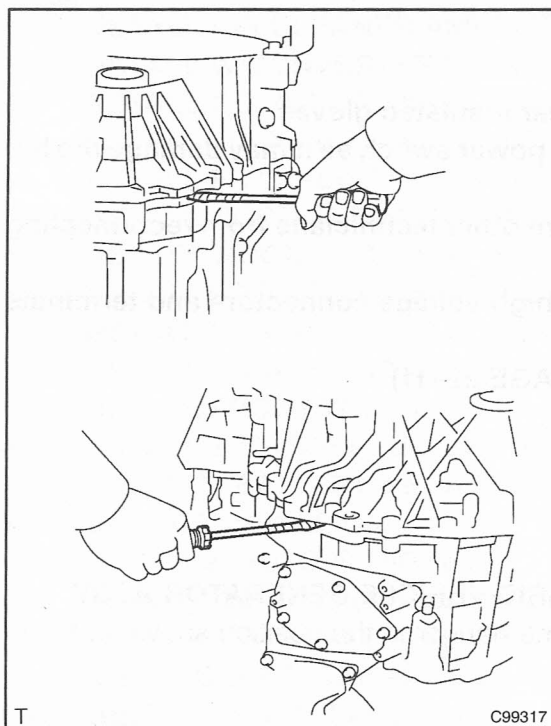
- Fix the transaxle assy on a wooden block, etc.
 - Fix the transaxle assy so that no excessive force is applied to the cable.
- (c) Remove the drain pulg.



- (d) Remove the 21 bolts shown in the illustration.

HINT:

- 13 bolts on the generator assy side.
- 8 bolts on the motor assy side.



- (e) Separate the motor assy and generator assy by inserting a flat-head screwdriver in the position shown and prying the two apart.

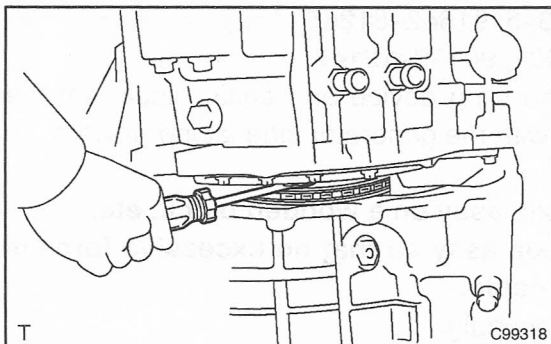
NOTICE:

Be careful not to damage the two faces of each part.

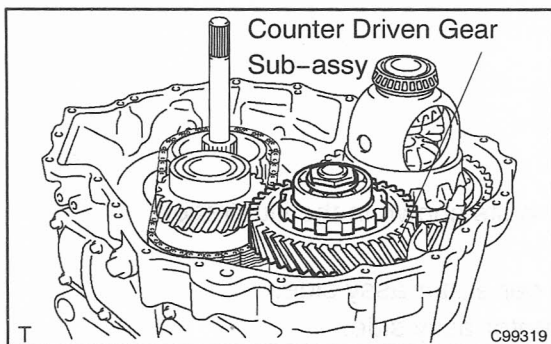
- (f) Using an engine sliding device and a chain block, raise the generator assy.

HINT:

Raise the generator assy approximately 3 to 4 cm.

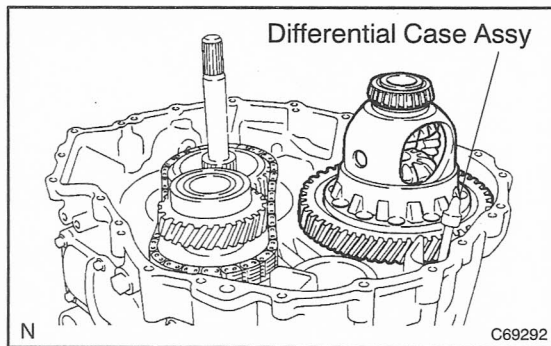


- (g) Apply protective tape to the head of a flat-head screwdriver and use it to hold down the chain with input shaft assy while removing the generator assy.



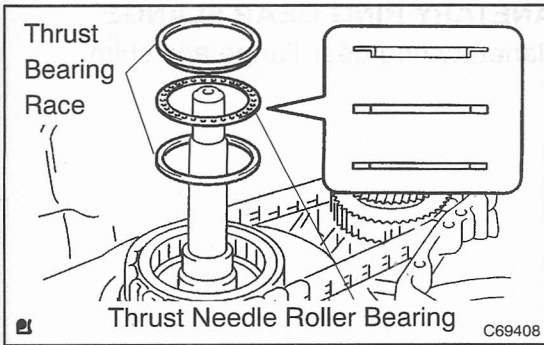
3. REMOVE DIFFERENTIAL DRIVE PINION

- (a) Remove the counter driven gear from the HV motor.



4. REMOVE DIFFERENTIAL CASE ASSY

- (a) Remove the differential case assy from the HV motor.

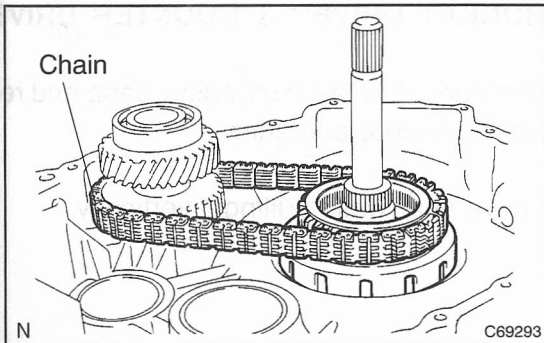


5. REMOVE TRANSMISSION DRIVE SPROCKET SUB-ASSY

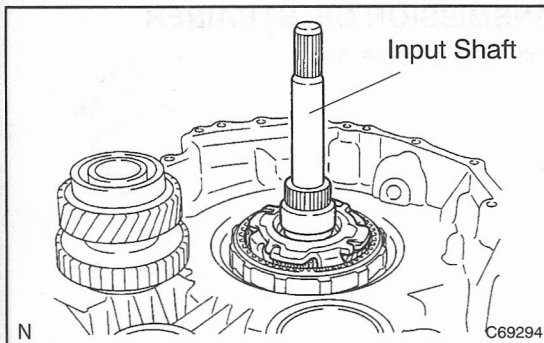
- (a) Remove the thrust bearing race, thrust needle roller bearing and thrust bearing race No.1.

HINT:

The thrust bearing race may be attached to the generator assy side.

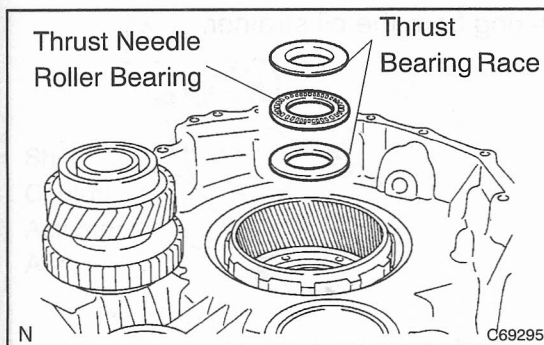


- (b) Remove the drive sprocket and chain.



6. REMOVE INPUT SHAFT ASSY

- (a) Remove the input shaft assy.

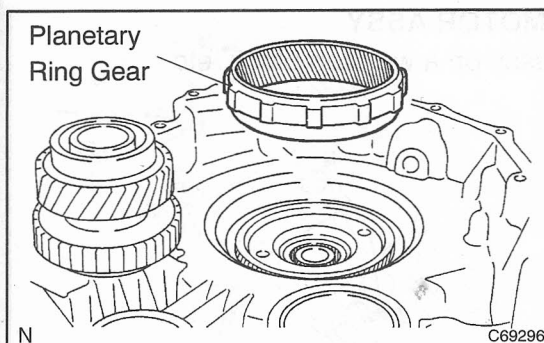


7. REMOVE PLANETARY RING GEAR

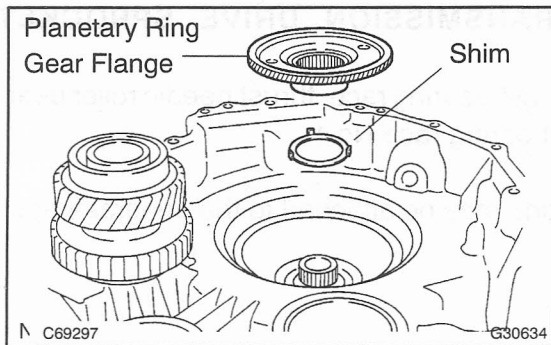
- (a) Remove the thrust bearing race, thrust needle roller bearing and thrust bearing race No.1.

HINT:

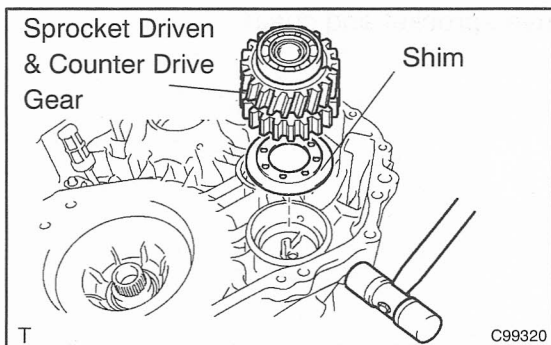
The thrust bearing race may be attached to the input shaft side.



- (b) Remove the planetary ring rear.



- 8. REMOVE PLANETARY RING GEAR FLANGE**
- (a) Remove the planetary ring gear flange and shim.

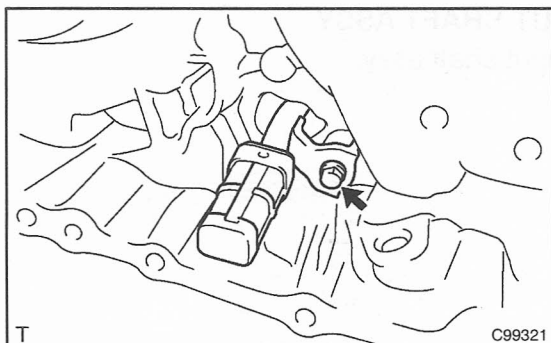


- 9. REMOVE SPROCKET DRIVEN & COUNTER DRIVE GEAR**

- (a) Use a plastic hammer to tap the motor assy case and remove the counter drive gear and shim.

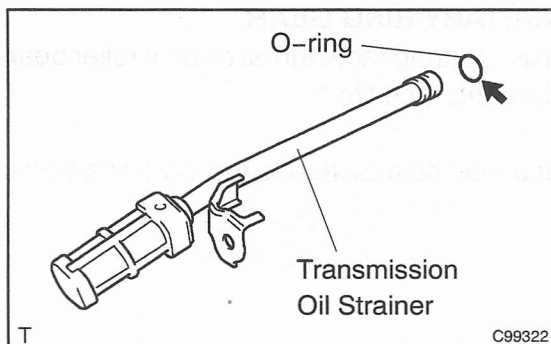
HINT:

Remove the counter drive gear while pulling it vertically.

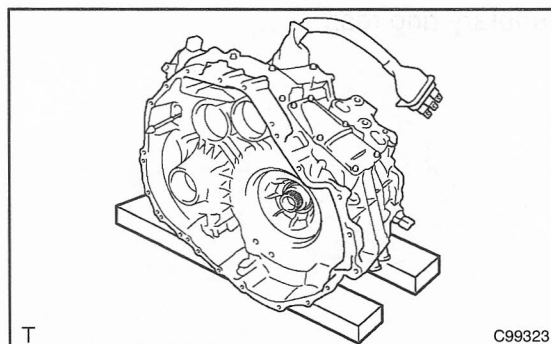


- 10. REMOVE TRANSMISSION OIL STRAINER**

- (a) Remove the bolt and oil strainer.

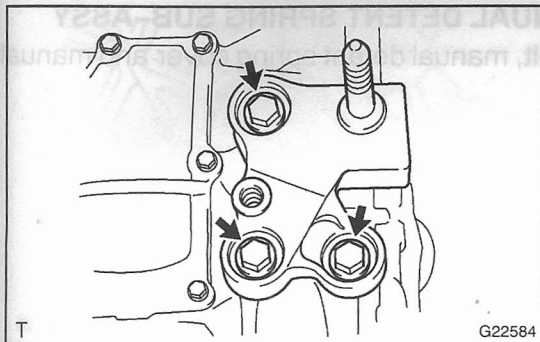


- (b) Remove the O-ring from the oil strainer.

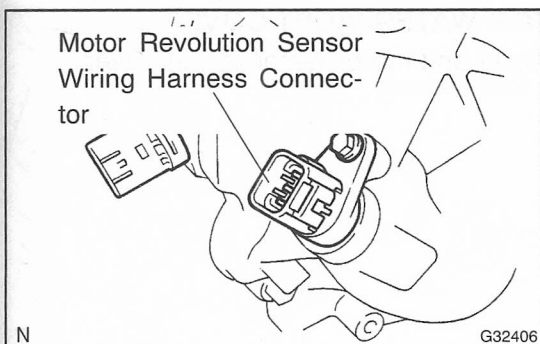


- 11. REMOVE HV MOTOR ASSY**

- (a) Fix the motor assy on a wooden block, etc.

**12. REMOVE ENGINE MOUNTING BRACKET NO.3**

- (a) Remove the 3 bolts and mounting bracket.

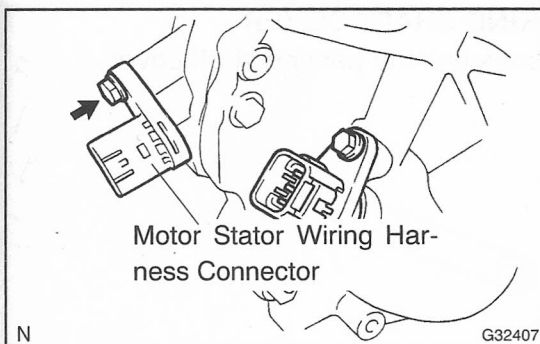
**13. REMOVE MOTOR REVOLUTION SENSOR WIRING HARNESS CONNECTOR**

- (a) Remove the bolt and pull out the HV motor side motor revolution sensor wire harness connector (gray).

NOTICE:

Do not pull on the connector any more than necessary.

- (b) Remove the connector and motor revolution sensor wire harness connector (gray).

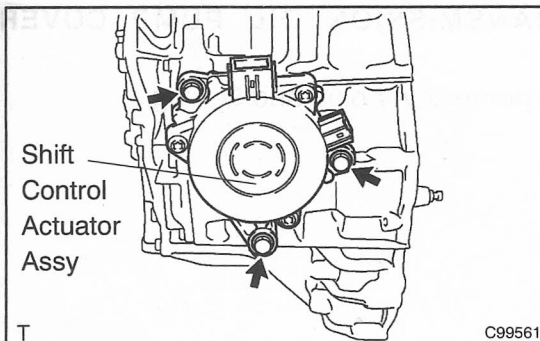
**14. REMOVE MOTOR STATOR WIRING HARNESS CONNECTOR**

- (a) Remove the bolt and pull out the motor stator wire harness connector (black).

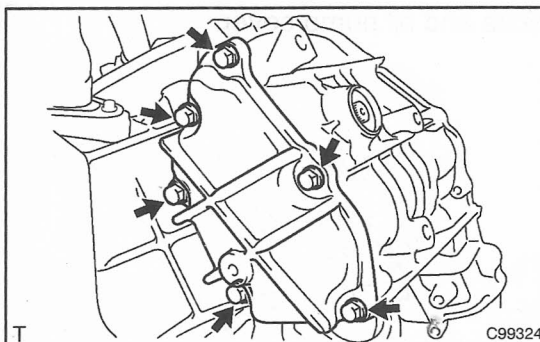
NOTICE:

Do not pull on the sensor connector any more than necessary.

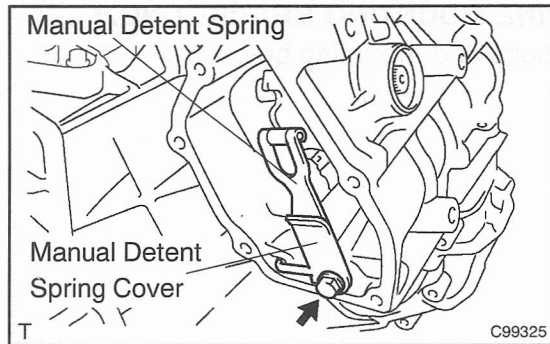
- (b) Remove the connector and the motor stator wire harness connector (black).

**15. REMOVE SHIFT CONTROL ACTUATOR ASSY**

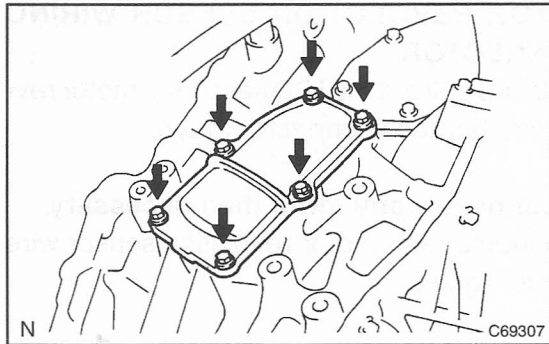
- (a) Remove the 3 bolts and shift control actuator assy.

**16. REMOVE PARKING COVER**

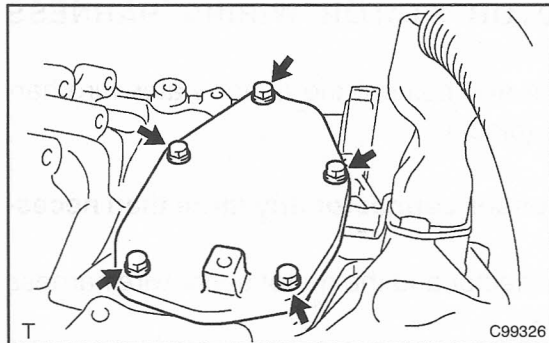
- (a) Remove the 6 bolts and the parking cover.

**17. REMOVE MANUAL DETENT SPRING SUB-ASSY**

- (a) Remove the bolt, manual detent spring cover and manual detent spring.

**18. REMOVE MOTOR WATERJACKET COVER**

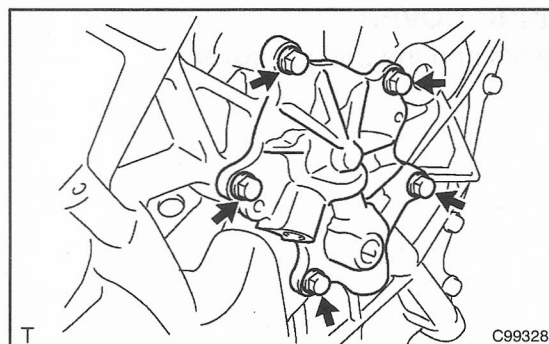
- (a) Remove the 6 bolts and motor water jacket cover.

**19. REMOVE PARKING SHAFT COVER**

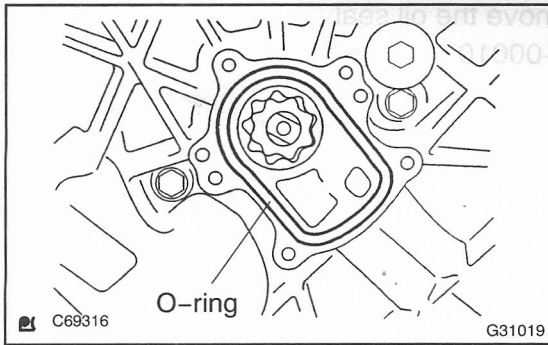
- (a) Remove the 5 bolts and the parking shaft cover.

**20. REMOVE TRANSMISSION OIL PUMP COVER SUB-ASSY**

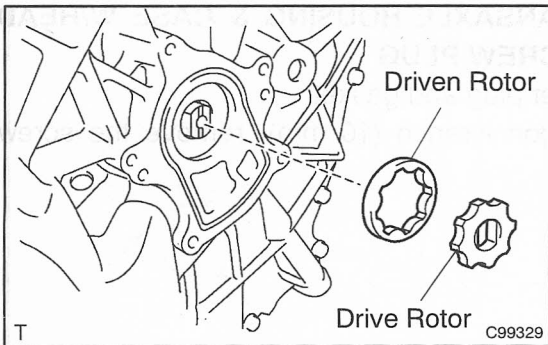
- (a) Remove the oil pump cover plug and O-ring.



- (b) Remove the 5 bolts and oil pump cover.

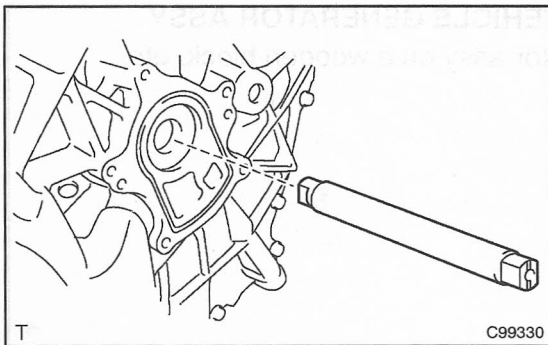


(c) Remove the O-ring.

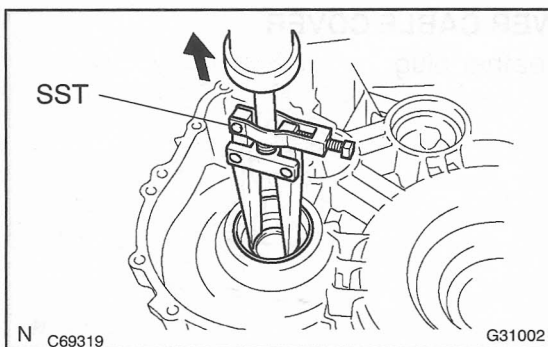


21. REMOVE OIL PUMP DRIVE SHAFT

(a) Remove the oil pump drive rotor and oil pump driven rotor.



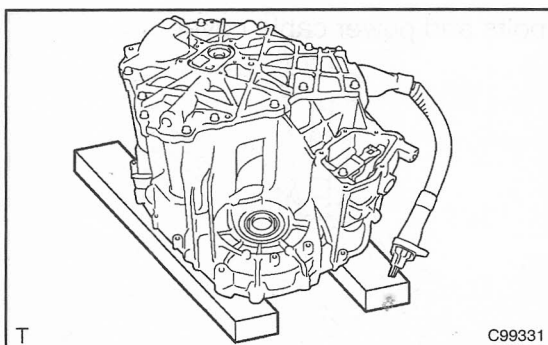
(b) Remove the oil pump drive shaft.



22. REMOVE DIFFERENTIAL CASE LH TAPERED ROLLER BEARING

(a) Using SST, remove the differential case tapered roller bearing LH outer race and shim.

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23. REMOVE HYBRID VEHICLE TRANSAXLE ASSY TYPE T OIL SEAL

(a) Fix the motor assy on a wooden block, etc.

NOTICE:

Do not use a wooden block with the parking lock rod.