

AUTOMATIC TRANSAXLE ASSY (ATM)

400ST-07

PRECAUTION

1. The automatic transaxle is composed of highly precision-finished parts which need careful inspection before reassembly because even a small nick could cause fluid leakage or affect the performance. The instructions here are organized in order to work on only one component group at a time. This will help avoid confusion which comes from similar-looking parts of different sub-assemblies being on your workbench at the same time. Inspect and repair the component groups from the converter housing side. Complete the inspection, repair and reassembly before proceeding to the next component group. If a defect is found in a certain component group during reassembly, inspect and repair this group immediately. If a component group cannot be assembled because the necessary parts are being ordered, be sure to keep all the parts of the group in a separate container while proceeding with disassembly, inspection, repair and reassembly of the other component groups.

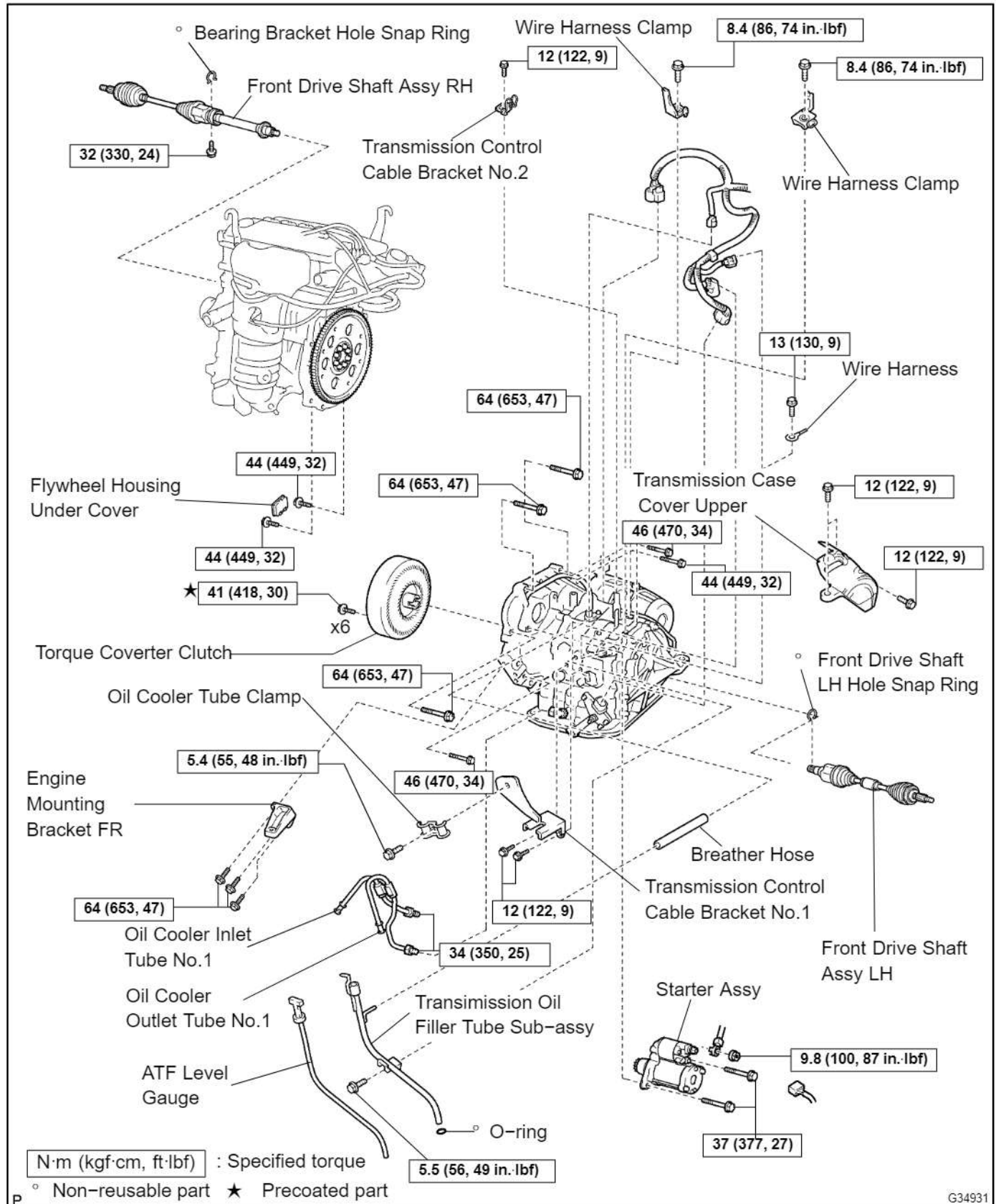
Recommended ATF: T-IV

2. All the disassembled parts should be washed clean and any fluid passages and holes should be blown through with compressed air.
3. Dry all parts with compressed air. Never use shop rags to dry them.
4. Be careful of ATF or kerosene not to be sprayed over your face when using compressed air.
5. The recommended automatic transaxle fluid or kerosene should be used for cleaning.
6. After cleaning, the parts should be arranged in the correct order for efficient inspection, repair, and reassembly.
7. When disassembling the valve body, be sure to match each valve together with the corresponding spring.
8. New discs for the replacement of the brakes and clutches must be soaked in ATF for at least 15 minutes before reassembly.
9. All the oil seal rings, clutch discs, clutch plates, rotating parts, and sliding surfaces should be coated with ATF prior to reassembly.
10. Replace all the gaskets and rubber O-rings.
11. Do not apply adhesive cements to the gaskets and similar parts.
12. Make sure that the ends of the snap ring are not aligned with one of the cutouts and are installed in the groove correctly.
13. If a worn bushing is to be replaced, the sub-assembly containing the bushing must also be replaced.
14. Check the thrust bearings and races for wear or damage. Replace them as necessary.
15. Use petroleum jelly to keep the parts in place.
16. When working with FIPG material, you must follow the procedure below.
 - Remove all the old packing (FIPG) material from the gasket surface using a razor blade and a gasket scraper.
 - Thoroughly clean all the components to remove all the loose material.
 - Clean both the sealing surfaces with non-residue solvent.
 - Parts must be reassembled within 10 minutes of application. Otherwise, the packing (FIPG) material must be removed and reapplied.

AUTOMATIC TRANSAXLE ASSY (U250E)

COMPONENTS

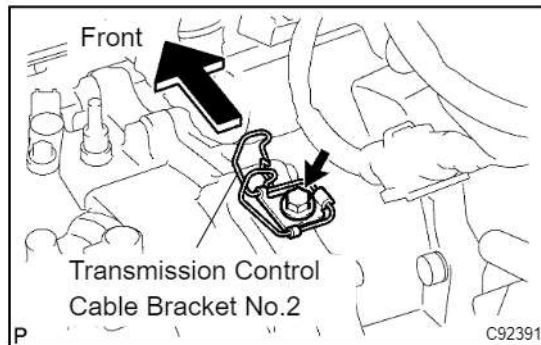
40156-03



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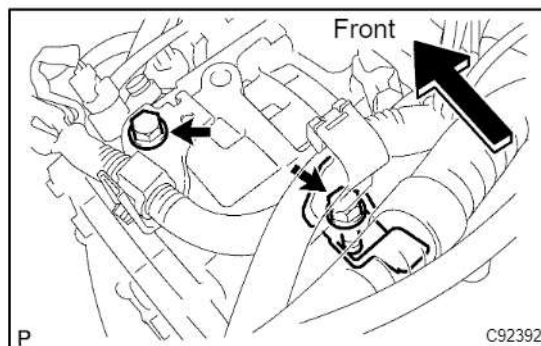
REPLACEMENT

1. REMOVE ENGINE ASSEMBLY WITH TRANSAXLE (SEE PAGE 14-29)
 2. REMOVE FRONT DRIVE SHAFT ASSY RH (SEE PAGE 30-8)
 3. REMOVE FRONT DRIVE SHAFT ASSY LH (SEE PAGE 30-8)
- SST 09520-01010, 09520-24010 (09520-32040)



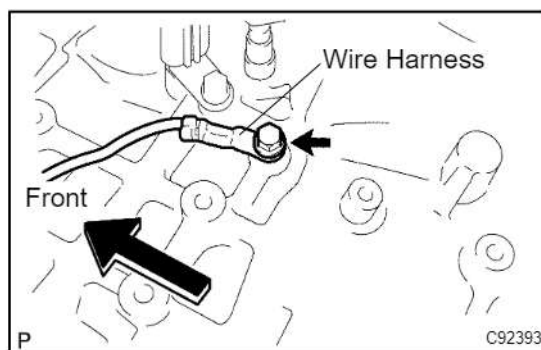
4. REMOVE TRANSMISSION CONTROL CABLE BRACKET NO.2

- (a) Remove the bolt and transmission control cable bracket No.2.



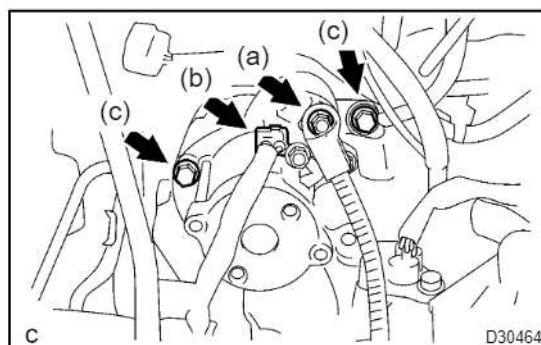
5. REMOVE WIRE HARNESS CLAMP

- (a) Disconnect the wire harnesses from the 2 clamps.
- (b) Remove the 2 bolts and 2 clamps.



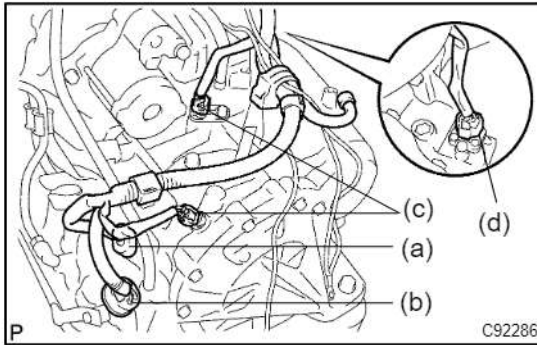
6. DISCONNECT WIRE HARNESS

- (a) Remove the bolt and disconnect the wire harness.

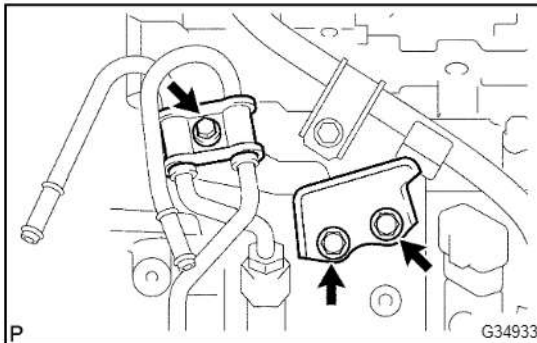


7. REMOVE STARTER ASSY

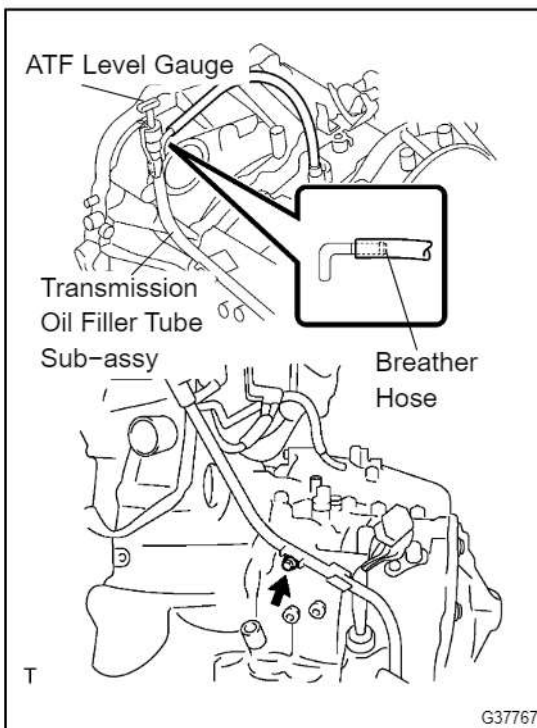
- (a) Remove the nut and disconnect the starter wire.
- (b) Disconnect the connector.
- (c) Remove the 2 bolts and starter assy.

**8. DISCONNECT CONNECTOR**

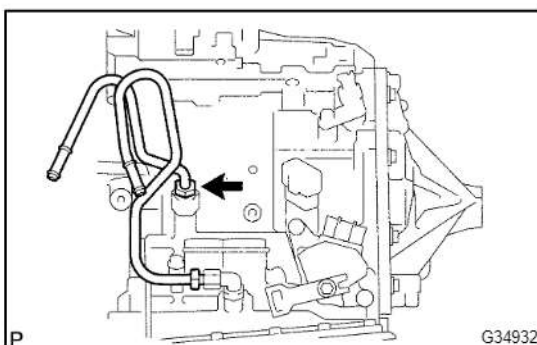
- (a) Disconnect the transmission wire connector.
- (b) Disconnect the park/neutral position switch connector.
- (c) Disconnect the 2 speed sensor connectors.
- (d) Disconnect the speedometer driven gear connector.

**9. REMOVE TRANSMISSION CONTROL CABLE BRACKET NO.1**

- (a) Remove the bolt and oil cooler tube clamp.
- (b) Remove the 2 bolts and transmission control cable bracket No.1.

**10. REMOVE TRANSMISSION OIL FILLER TUBE SUB-ASSY**

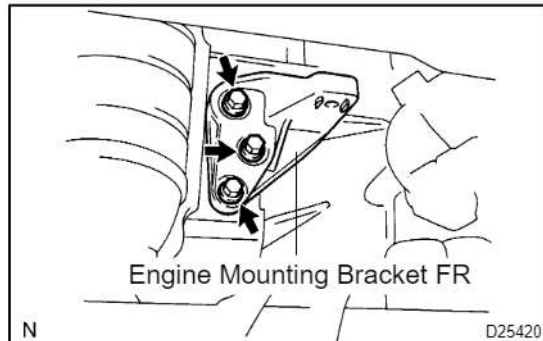
- (a) Remove the ATF level gauge.
- (b) Remove the breather hose from the automatic transaxle.
- (c) Remove the bolt and transmission oil filler tube sub-assy.
- (d) Remove the O-ring from the oil filler tube.

**11. REMOVE OIL COOLER INLET TUBE NO.1**

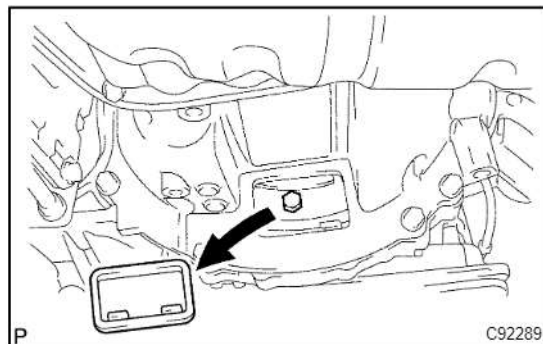
- (a) Remove the oil cooler inlet tube No.1.

12. REMOVE OIL COOLER OUTLET TUBE NO.1

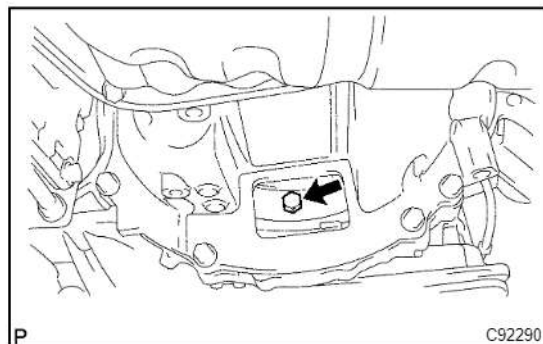
- (a) Remove the oil cooler outlet tube No.1.

**13. REMOVE ENGINE MOUNTING BRACKET FR**

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

**14. REMOVE FLYWHEEL HOUSING UNDER COVER**

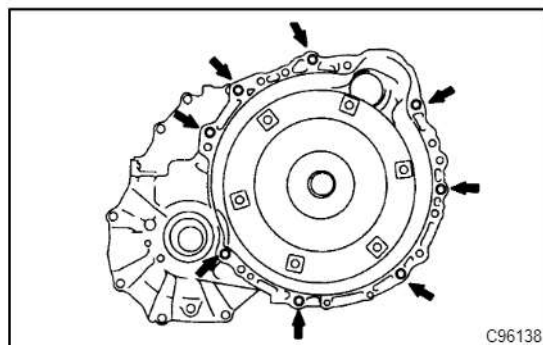
- (a) Remove the flywheel housing under cover.

**15. REMOVE AUTOMATIC TRANSAXLE ASSY**

- (a) Turn the crankshaft to gain access and remove the 6 bolts while holding the crankshaft pulley bolt with a wrench.

HINT:

There will be one green colored bolt.

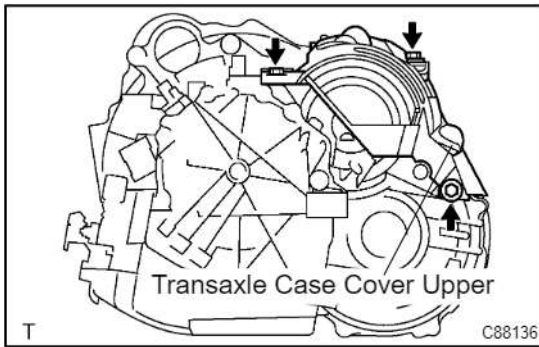


- (b) Remove the 8 bolts.

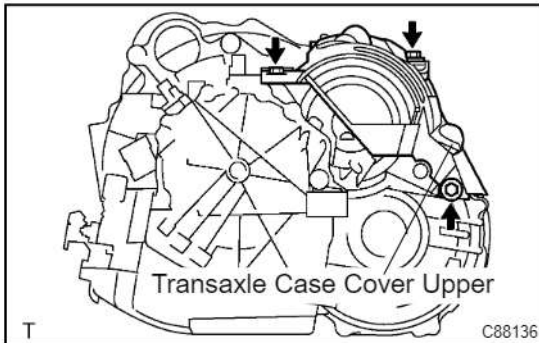
- (c) Separate and remove the automatic transaxle.

16. REMOVE TORQUE CONVERTER CLUTCH ASSY**17. INSPECT TORQUE CONVERTER CLUTCH ASSY (SEE PAGE 40-27)**

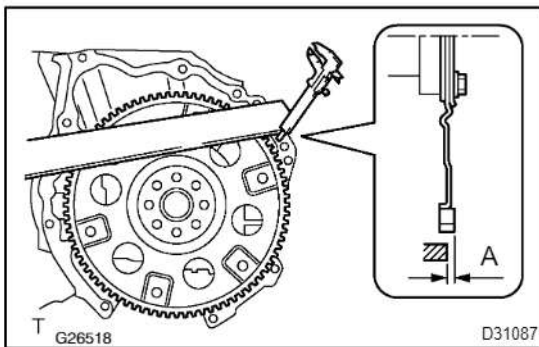
SST 09350-32014 (09351-32010, 09351-32020)

**18. REMOVE TRANSAXLE CASE COVER UPPER**

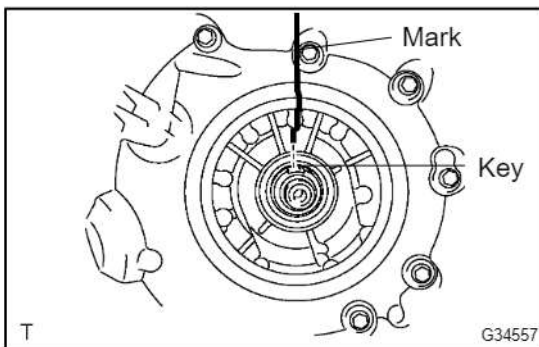
- (a) Remove the 3 bolts and transmission case cover upper.

**19. INSTALL TRANSAXLE CASE COVER UPPER**

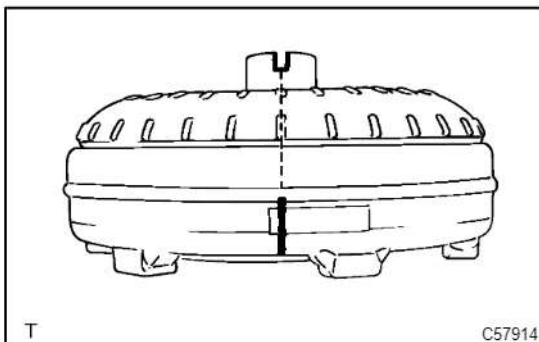
- (a) Install the transmission case cover upper with the 3 bolts.
Torque: 12 N·m (122 kgf·cm, 9 ft·lbf)

**20. INSTALL TORQUE CONVERTER CLUTCH ASSY**

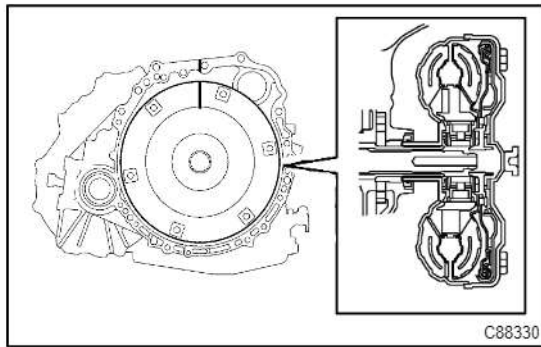
- (a) Using vernier calipers and a straight edge, measure the dimension "A" between the transaxle fitting part of the engine and the converter fitting part of the drive plate.



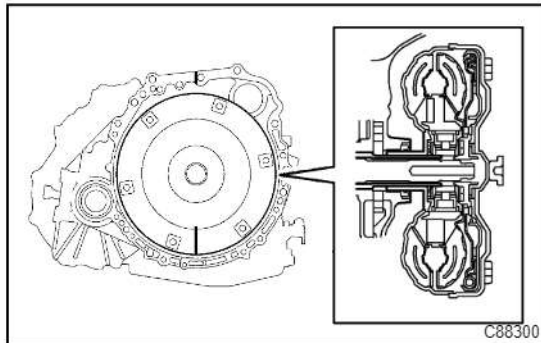
- (b) Set the key of the front oil pump drive gear to the top and put a mark on the housing.



- (c) Put a mark on the torque converter clutch so that its groove can be clearly indicated.



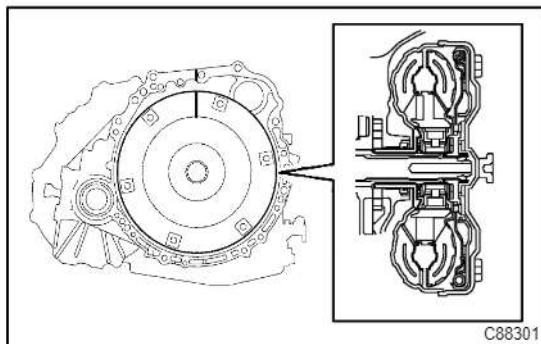
- (d) Match the 2 marks on the transaxle case and the torque converter clutch and fit the splined part of the input shaft to the spline part of the turbine runner.



- (e) Rotating the torque converter clutch, fit the spline part of the stator shaft with the spline part of the stator.

HINT:

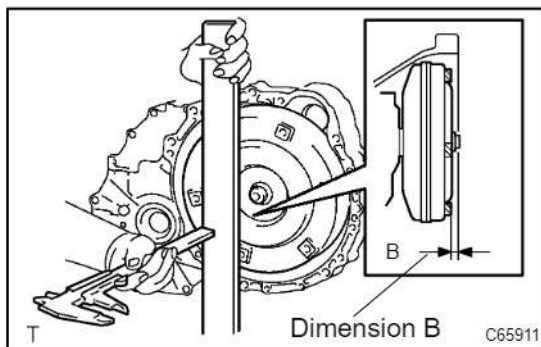
Rotate it about 180 degrees.



- (f) Rotating the torque converter clutch, match the 2 marks on the case and the torque converter clutch again and fit the key of the oil pump drive gear into the key way of the torque converter clutch.

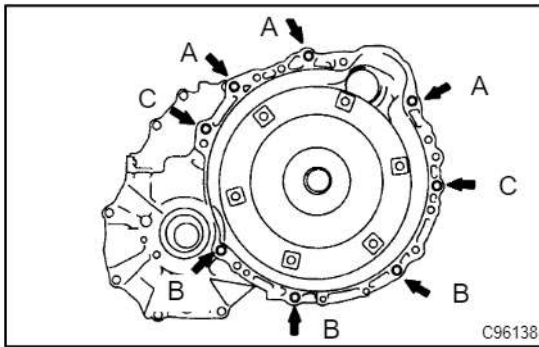
NOTICE:

When rotating the torque converter clutch, do not push it by excessive force.



- (g) Using vernier calipers and a straight edge, measure the dimension B shown in the illustration and check that B is greater than A measured in step (a).

Standard: A + 1 mm (0.04 in.) or more



21. INSTALL AUTOMATIC TRANSAXLE ASSY

- (a) Install the automatic transaxle to the engine with the 8 bolts.

Torque:

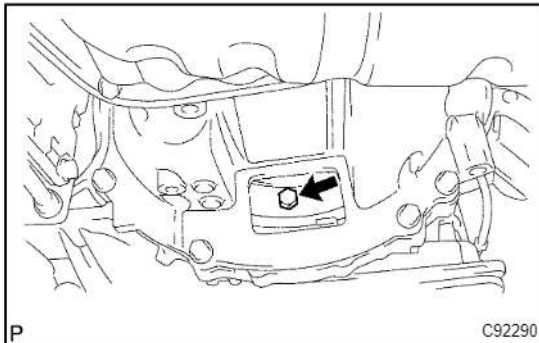
Bolt A: 64 N·m (653 kgf·cm, 47 ft·lbf)

Bolt B: 44 N·m (449 kgf·cm, 32 ft·lbf)

Bolt C: 46 N·m (470 kgf·cm, 34 ft·lbf)

- (b) Apply a few drops of adhesive to 2 threads on the tip of the 6 torque converter clutch mounting bolts.

Adhesive: Part No. 08833-00070, THREE BOND 1324 or equivalent

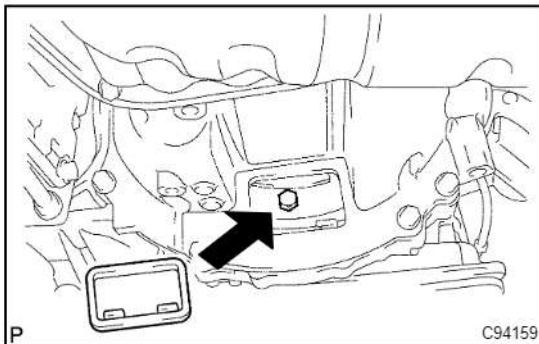


- (c) Install the 6 torque converter clutch mounting bolts.

Torque: 41 N·m (418 kgf·cm, 30 ft·lbf)

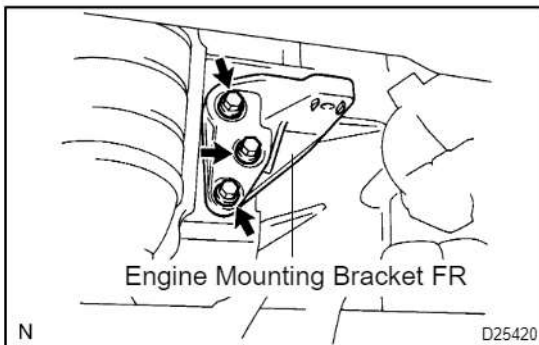
NOTICE:

First install the green colored bolt and then the remaining 5 bolts.



22. INSTALL FLYWHEEL HOUSING UNDER COVER

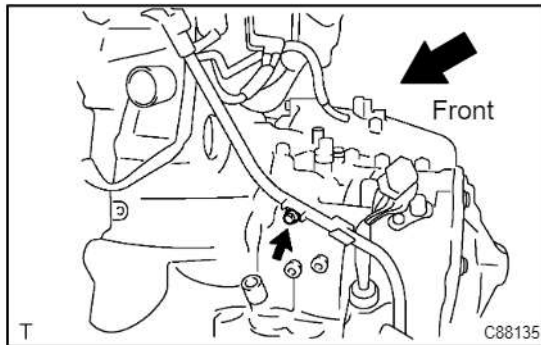
- (a) Install the flywheel housing under cover.



23. INSTALL ENGINE MOUNTING BRACKET FR

- (a) Install the engine mounting bracket FR with the 3 bolts to the automatic transaxle.

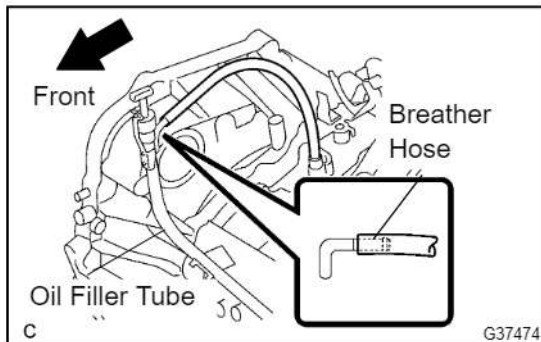
Torque: 64 N·m (653 kgf·cm, 47 ft·lbf)



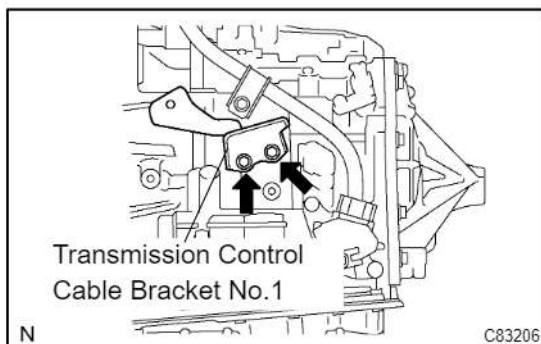
24. INSTALL TRANSMISSION OIL FILLER TUBE SUB-ASSY

- Coat a new O-ring with ATF, and install it to the oil filler tube.
- Install the oil filler tube to the automatic transaxle with the bolt.

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



- Install the breather hose to the automatic transaxle.
- Install the ATF level gauge.

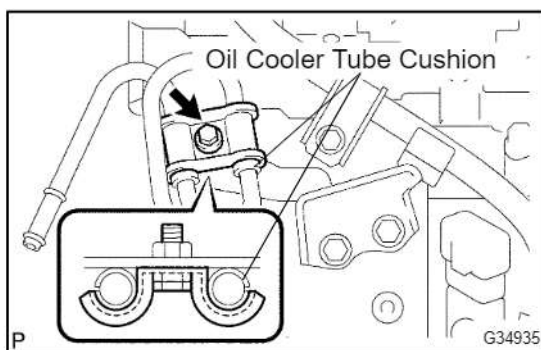


25. INSTALL TRANSMISSION CONTROL CABLE BRACKET NO.1

- Install the control cable bracket No.1 with the 2 bolts.
- Torque: 12 N·m (122 kgf·cm, 9 ft·lbf)**

26. INSTALL OIL COOLER INLET TUBE NO.1

- Temporarily install the oil cooler outlet tube No.1.
- Temporarily install the oil cooler inlet tube No.1.

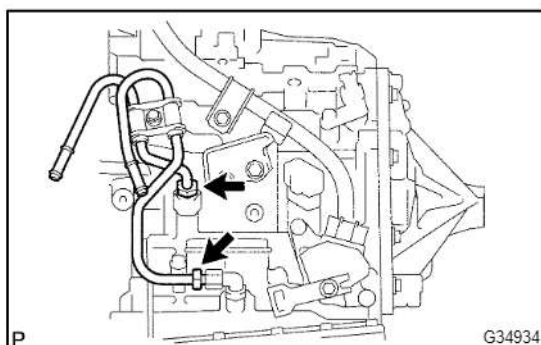


- Install the oil cooler tube clamp with the bolt.

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

HINT:

Install them so that the oil cooler tube cushion is positioned as shown in the illustration.

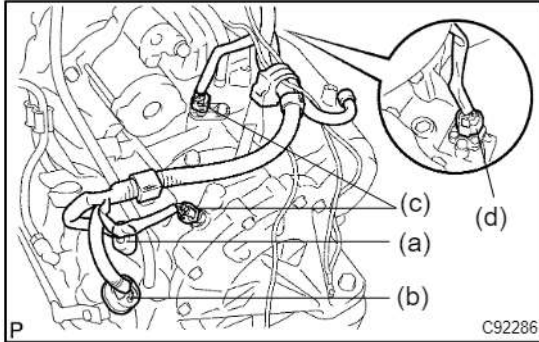


- Torque the oil cooler inlet tube No.1.

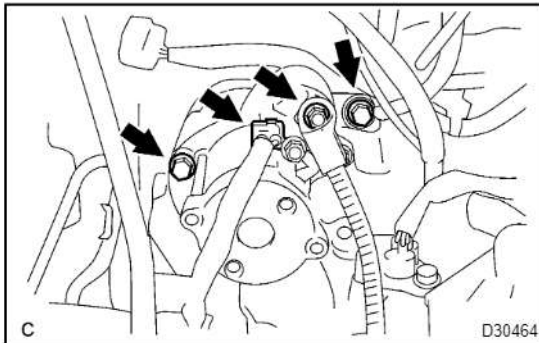
Torque: 34 N·m (350 kgf·cm, 25 ft·lbf)

27. INSTALL OIL COOLER OUTLET TUBE NO.1

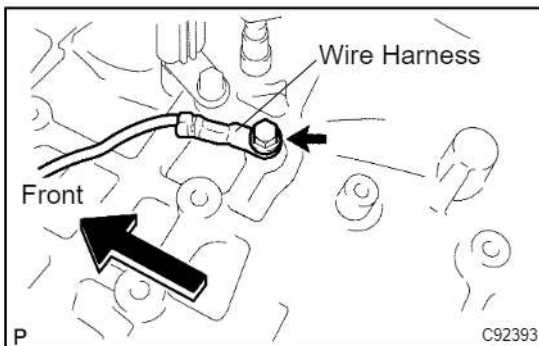
- (a) Torque the oil cooler outlet tube No.1.
Torque: 34 N·m (350 kgf·cm, 25 ft·lbf)

**28. CONNECT CONNECTOR**

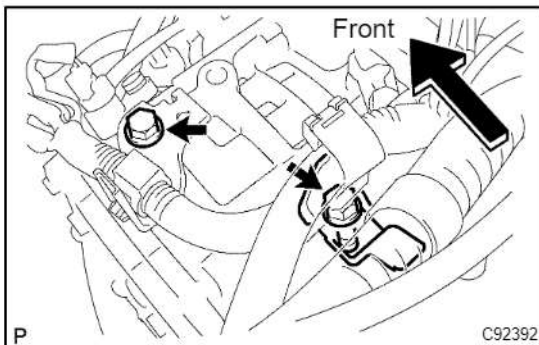
- (a) Connect the transmission wire connector.
 (b) Connect the park/neutral position switch connector.
 (c) Connect the 2 speed sensor connectors.
 (d) Connect the speedometer driven gear connector.

**29. INSTALL STARTER ASSY**

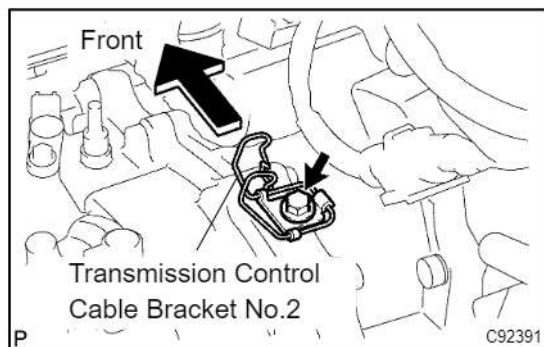
- (a) Install the starter assy with the 2 bolts.
Torque: 37 N·m (377 kgf·cm, 27 ft·lbf)
 (b) Connect the connector.
 (c) Connect the starter wire with the nut.
Torque: 9.8 N·m (100 kgf·cm, 87 in·lbf)

**30. CONNECT WIRE HARNESS**

- (a) Connect the wire harness with the bolt.
Torque: 13 N·m (130 kgf·cm, 9 ft·lbf)

**31. INSTALL WIRE HARNESS CLAMP**

- (a) Install the 2 clamps with the 2 bolts.
Torque: 8.4 N·m (86 kgf·cm, 74 in·lbf)
 (b) Connect the wire harnesses to the clamps.



32. INSTALL TRANSMISSION CONTROL CABLE BRACKET NO.2

- (a) Install the transmission control cable bracket No.2 with the bolt.

Torque: 12 N·m (122 kgf·cm, 9 ft·lbf)

33. INSTALL FRONT DRIVE SHAFT ASSY LH (SEE PAGE 30-8)

34. INSTALL FRONT DRIVE SHAFT ASSY RH (SEE PAGE 30-8)

35. INSTALL ENGINE ASSEMBLY WITH TRANSAXLE (SEE PAGE 14-29)

36. RESET MEMORY

NOTICE:

Perform the RESET MEMORY (AT initialization) when replacing the automatic transmission assy, engine assy or ECM (see page 05-1123).

HINT:

RESET MEMORY can not be completed by only disconnecting the battery terminal.

AUTOMATIC TRANSAXLE FLUID (ATM)

ON-VEHICLE INSPECTION

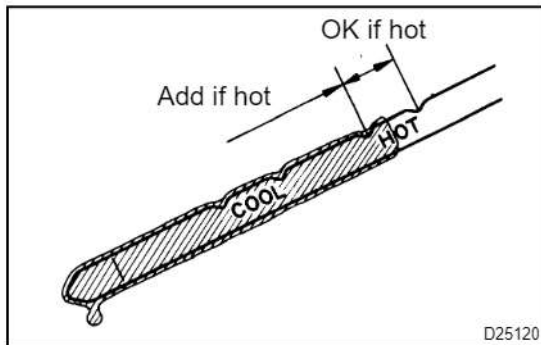
4005R-10

1. CHECK FLUID LEVEL

HINT:

Drive the vehicle so that the engine and transaxle are at the normal operating temperature.

Fluid temperature: 70 to 80 °C (158 to 176 °F)

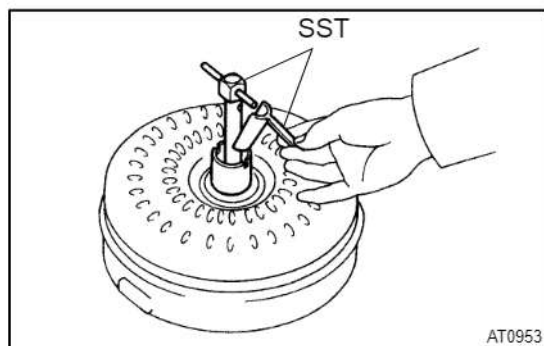


- Park the vehicle on a level surface and set the parking brake.
- With the engine idling and the brake pedal depressed, shift the lever into all positions from the P to the L position, and return to the P position.
- Pull out the dipstick and wipe it clean.
- Push it back fully into the pipe.
- Pull it out and check that the fluid level is within the HOT range.

If there are leaks, it is necessary to repair or replace O-rings, FIPGs, oil seals, plugs or other parts.

TORQUE CONVERTER CLUTCH AND DRIVE PLATE (ATM) INSPECTION

40063-16



1. INSPECT TORQUE CONVERTER CLUTCH ASSY

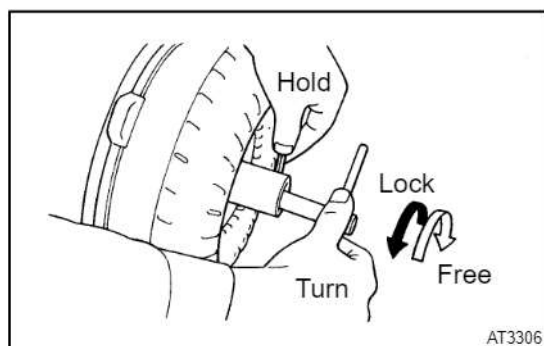
(a) Inspect the one-way clutch.

- (1) Install SST into the inner race of the one-way clutch.

SST 09350-32014 (09351-32010)

- (2) Install SST so that it fits in the notch of the converter hub and outer race of the one-way clutch.

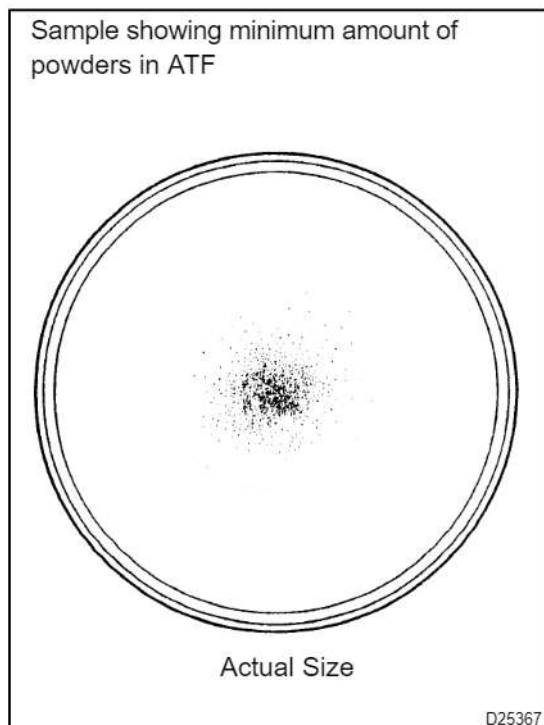
SST 09350-32014 (09351-32020)



- (3) With the torque converter clutch setting up on its side, check that the one-way clutch locks when it is turned counterclockwise, and rotates smoothly clockwise.

If necessary, clean the converter and retest the one-way clutch.

Replace the converter if the one-way clutch still fails the test.



(b) Determine the condition of the torque converter clutch assy.

- (1) If the inspection result of the torque converter clutch assy meets the following item, replace the torque converter clutch.

Malfunction item:

Any metallic sound is heard from the torque converter clutch during stall test or when the shift lever is in neutral position.

One-way clutch is free or locked in both directions.

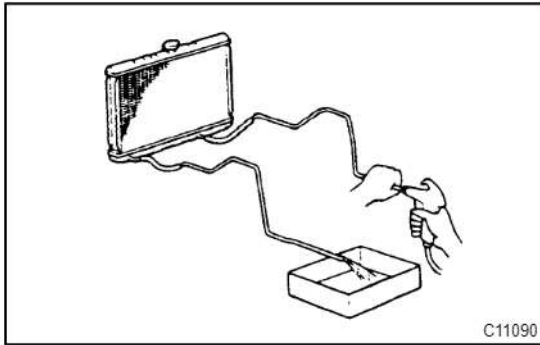
Fine powders exceeding the sample limit is identified in ATF. (See the sample.)

HINT:

The sample shows the auto fluid of approx. 0.25 liters (0.26 US qts, 0.22 Imp. qts) that is taken out from the removed torque converter clutch

(c) Replace the ATF in the torque converter clutch.

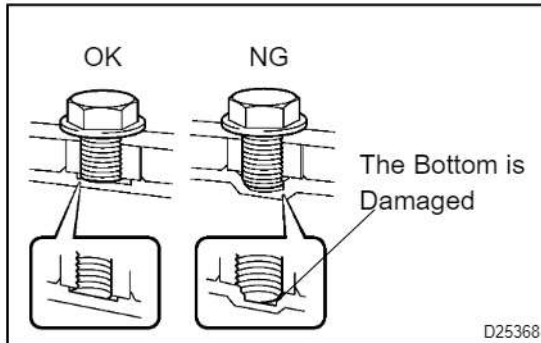
- (1) If the ATF is discolored and/or has a foul odor, completely stir the ATF in the torque converter clutch and drain it with the face for installation facing up.



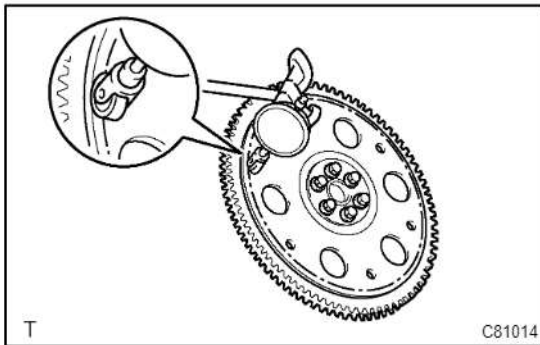
- (d) Clean and check the oil cooler and oil pipe line.
 (1) If the torque converter clutch is inspected or the ATF is exchanged, clean the oil cooler and oil pipe line.

HINT:

- Spray compressed air of 196 kPa (2 kgf/cm², 28 psi) from the inlet hose.
 - If plenty of fine powders are identified in the ATF, add new ATF using a bucket pump and clean it again.
- (2) If the ATF is cloudy, inspect the oil cooler (radiator).



- (e) Prevent deformation of the torque converter clutch and damage to the oil pump gear.
 (1) When any marks due to interference are found on the end of the bolt for the torque converter clutch and on the bottom of the bolt hole, replace the bolt and the torque converter clutch.
 (2) All of the bolts shall have the same length.
 (3) No missing spring washer.

**2. INSPECT DRIVE PLATE & RING GEAR SUB-ASSY**

- (a) Set up a dial indicator and measure the drive plate runout.
 (b) Check the damage of the ring gear.

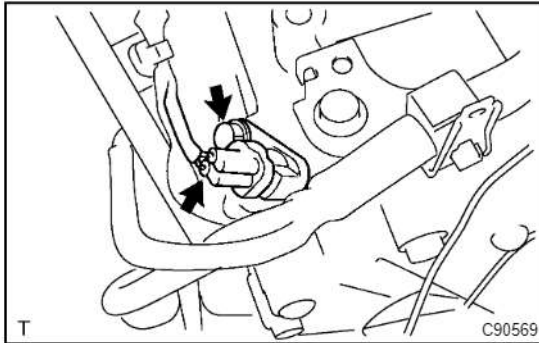
Maximum runout: 0.20 mm (0.0079 in.)

If the runout is not within the specification or ring gear is damaged, replace the drive plate.

TRANSMISSION REVOLUTION SENSOR (ATM)

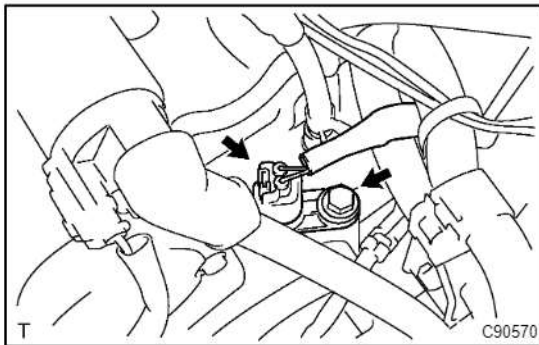
REPLACEMENT

1. REMOVE BATTERY
2. REMOVE AIR CLEANER ASSY (SEE PAGE 14-29) or (SEE PAGE 14-164)
3. REMOVE AIR CLEANER HOSE NO.1 (SEE PAGE 14-29) or (SEE PAGE 14-164)
4. REMOVE AIR CLEANER BRACKET (SEE PAGE 14-29) or (SEE PAGE 14-164)
5. REMOVE AIR CLEANER INLET NO.1 (SEE PAGE 14-29) or (SEE PAGE 14-164)



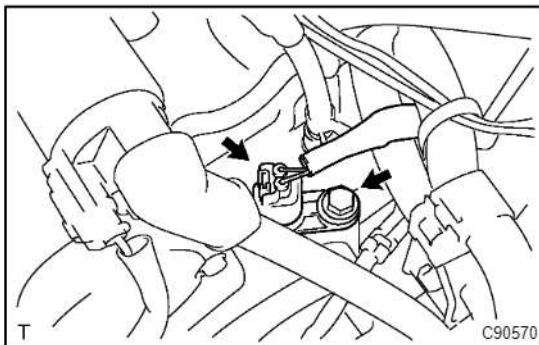
6. REMOVE TRANSMISSION REVOLUTION SENSOR (NT SENSOR)

- (a) Disconnect the speed sensor connector.
- (b) Remove the bolt and transmission revolution sensor.



7. REMOVE TRANSMISSION REVOLUTION SENSOR (NC SENSOR)

- (a) Disconnect the speed sensor connector.
- (b) Remove the bolt and transmission revolution sensor.



8. INSTALL TRANSMISSION REVOLUTION SENSOR (NC SENSOR)

- (a) Coat an O-ring with ATF.
- (b) Install the speed sensor with the bolt.

Torque:

11 N·m (110 kgf·cm, 8 ft·lbf) (U151E)

8.8 N·m (90 kgf·cm, 78 in·lbf) (U250E)

HINT:

Make sure of the manufacturer's name.

- (c) Connect the speed sensor connector.

9. INSTALL TRANSMISSION REVOLUTION SENSOR (NT SENSOR)

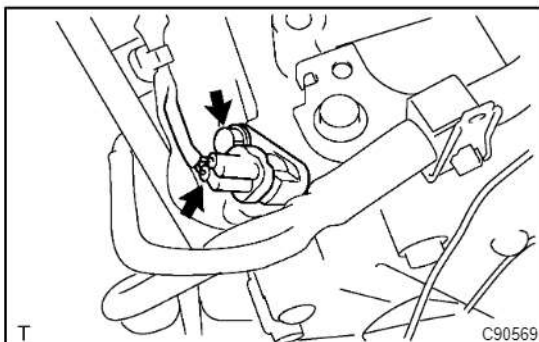
- (a) Coat an O-ring with ATF.
- (b) Install the speed sensor with the bolt.

Torque: 11 N·m (110 kgf·cm, 8 ft·lbf)

HINT:

Make sure of the manufacturer's name.

- (c) Connect the speed sensor connector.



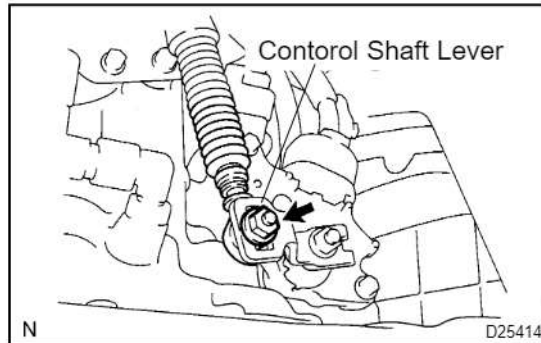
10. INSTALL AIR CLEANER INLET NO.1 (SEE PAGE [14-29](#)) or (SEE PAGE [14-164](#))
11. INSTALL AIR CLEANER BRACKET (SEE PAGE [14-29](#)) or (SEE PAGE [14-164](#))
12. INSTALL AIR CLEANER HOSE NO.1 (SEE PAGE [14-29](#)) or (SEE PAGE [14-164](#))
13. INSTALL AIR CLEANER ASSY (SEE PAGE [14-29](#)) or (SEE PAGE [14-164](#))
14. INSTALL BATTERY

PARK/NEUTRAL POSITION SWITCH ASSY (ATM)

401EH-01

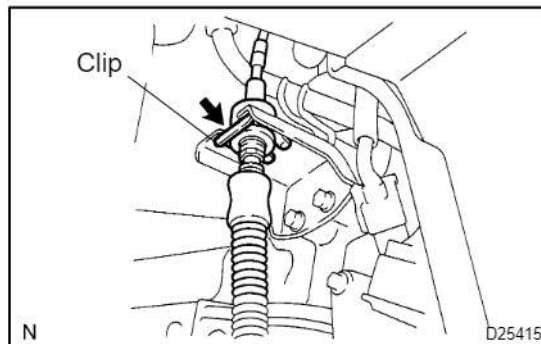
REPLACEMENT

1. REMOVE BATTERY
2. REMOVE ENGINE COVER SUB-ASSY NO.1 (SEE PAGE 14-29) or (SEE PAGE 14-164)
3. REMOVE AIR CLEANER ASSY (SEE PAGE 14-29) or (SEE PAGE 14-164)
4. REMOVE AIR CLEANER HOSE NO.1 (SEE PAGE 14-29) or (SEE PAGE 14-164)
5. REMOVE INTAKE AIR RESONATOR SUB-ASSY (SEE PAGE 14-29) or (SEE PAGE 14-164)
6. REMOVE ENGINE UNDER COVER LH

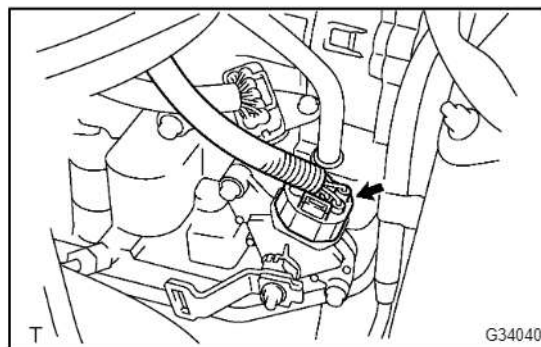


7. DISCONNECT TRANSMISSION CONTROL CABLE ASSY

- (a) Remove the nut from the control shaft lever.
- (b) Disconnect the control cable from the control shaft lever.

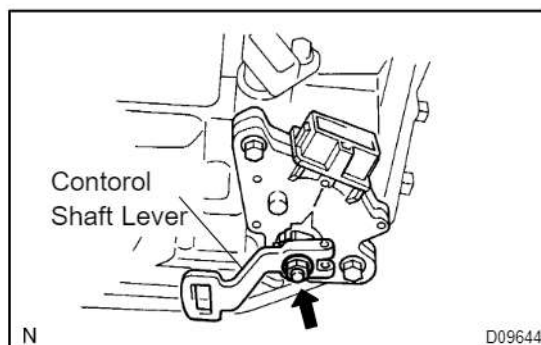


- (c) Remove the clip and disconnect the control cable from the control cable bracket.

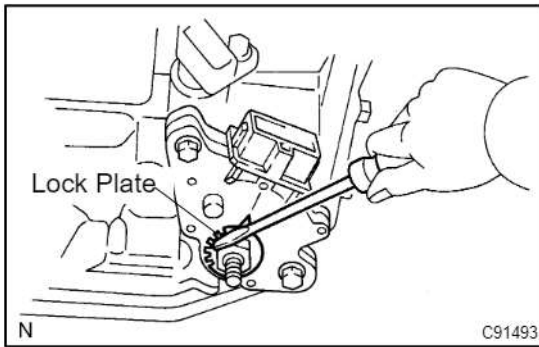


8. REMOVE PARK/NEUTRAL POSITION SWITCH ASSY

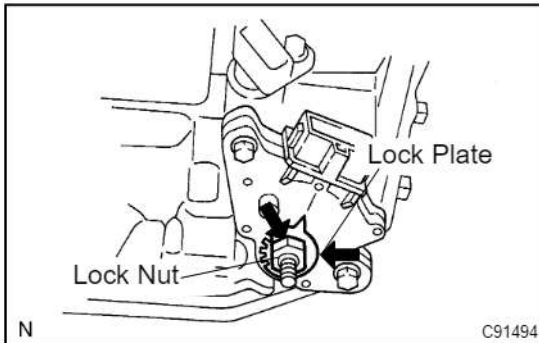
- (a) Disconnect the park/neutral position switch connector.



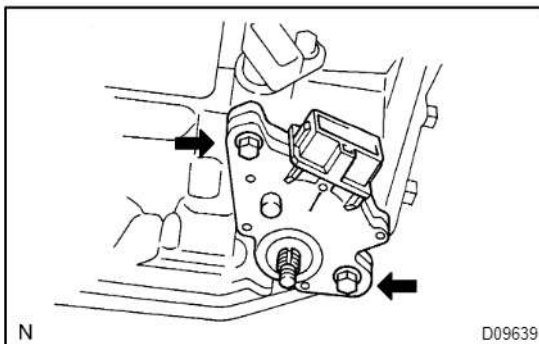
- (b) Remove the nut, washer and control shaft lever.



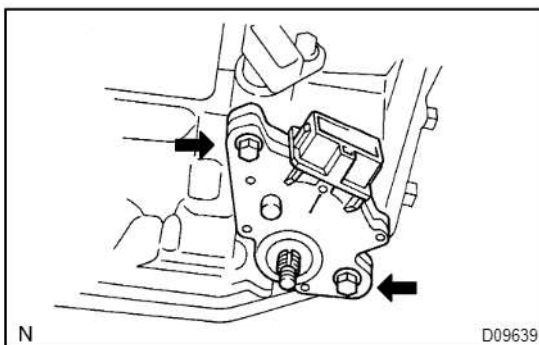
- (c) Pry out the lock plate.



- (d) Remove the lock nut and lock plate.

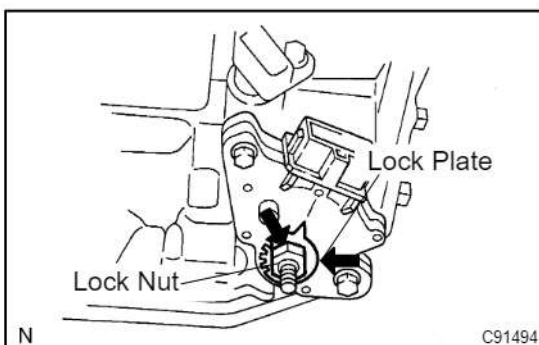


- (e) Remove the 2 bolts and pull out the park/neutral position switch.

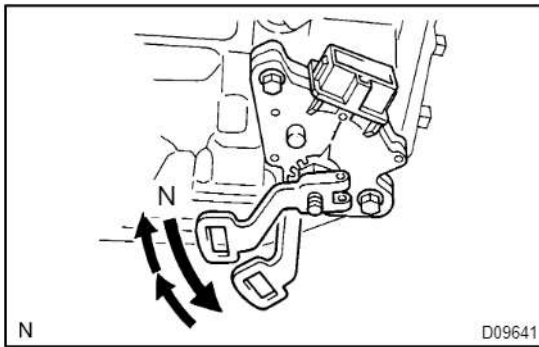


9. INSTALL PARK/NEUTRAL POSITION SWITCH ASSY

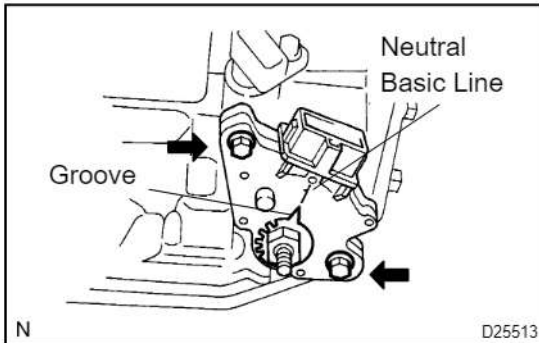
- (a) Install the park/neutral position switch to the manual valve shaft.
(b) Temporarily install the 2 bolts.



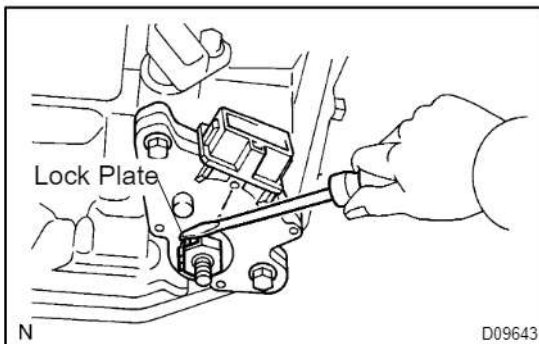
- (c) Place a new lock plate and tighten the nut.
Torque: 6.9 N·m (70 kgf·cm, 61 in.·lbf)
(d) Temporarily install the control shaft lever.



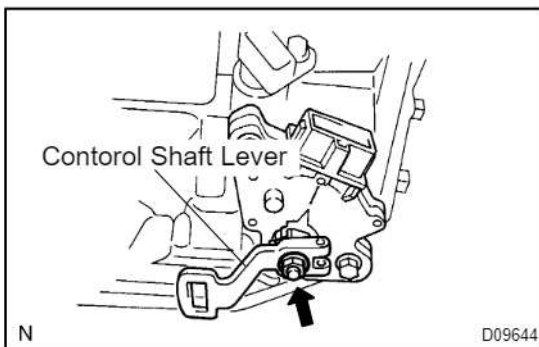
- (e) Turn the lever counterclockwise until it stops, then turn it clockwise 2 notches.
- (f) Remove the control shaft lever.



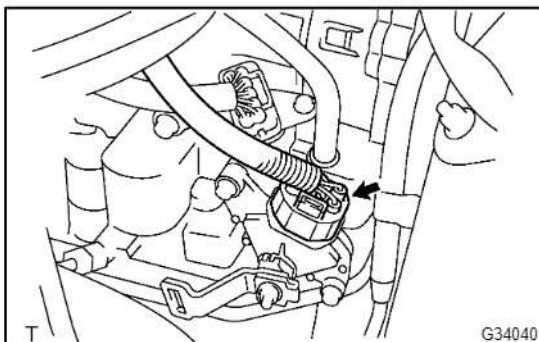
- (g) Align the groove with neutral basic line.
- (h) Hold the switch in position and tighten the 2 bolts.
Torque: 5.4 N·m (55 kgf·cm, 48 in·lbf)



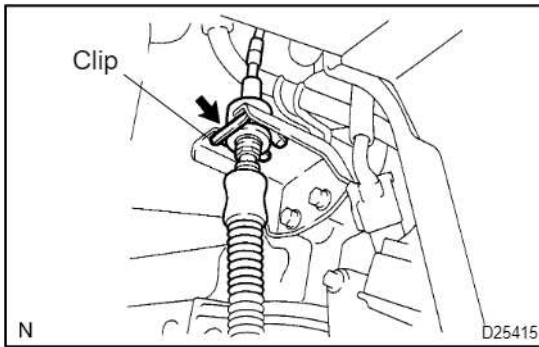
- (i) Using a screwdriver, stake the nut with the lock plate.



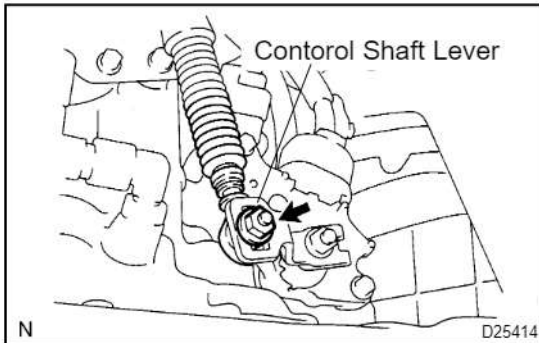
- (j) Install the control shaft lever, washer and nut.
Torque: 12.7 N·m (130 kgf·cm, 9 ft·lbf)



- (k) Connect the park/neutral position switch connector.

**10. INSTALL TRANSMISSION CONTROL CABLE ASSY**

- (a) Install the control cable and a new clip to the bracket.



- (b) Temporarily install the control cable to the control shaft lever with the nut.

11. ADJUST SHIFT LEVER POSITION (SEE PAGE 40-64)
12. INSPECT SHIFT LEVER POSITION (SEE PAGE 40-64)
13. INSPECT PARK/NEUTRAL POSITION SWITCH ASSY (SEE PAGE 40-7)
14. INSTALL ENGINE UNDER COVER LH
15. INSTALL INTAKE AIR RESONATOR SUB-ASSY (SEE PAGE 14-29) or (SEE PAGE 14-164)
16. INSTALL AIR CLEANER HOSE NO.1 (SEE PAGE 14-29) or (SEE PAGE 14-164)
17. INSTALL AIR CLEANER ASSY (SEE PAGE 14-29) or (SEE PAGE 14-164)
18. INSTALL ENGINE COVER SUB-ASSY NO.1 (SEE PAGE 14-29) or (SEE PAGE 14-164)
19. INSTALL BATTERY

TRANSMISSION WIRE (U151E)

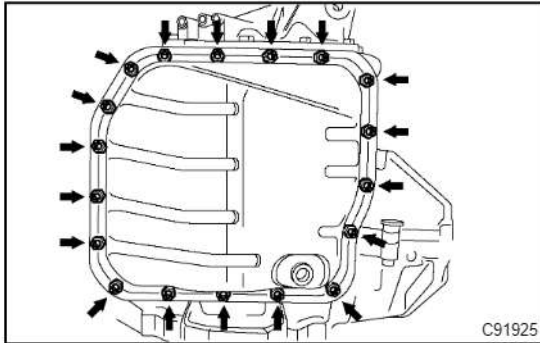
REPLACEMENT

1. REMOVE ENGINE UNDER COVER LH

2. DRAIN AUTOMATIC TRANSAXLE FLUID

- Remove the drain plug and gasket, and drain the ATF.
- Install a new gasket and the drain plug.

Torque: 49 N·m (500 kgf·cm, 36 ft·lbf)

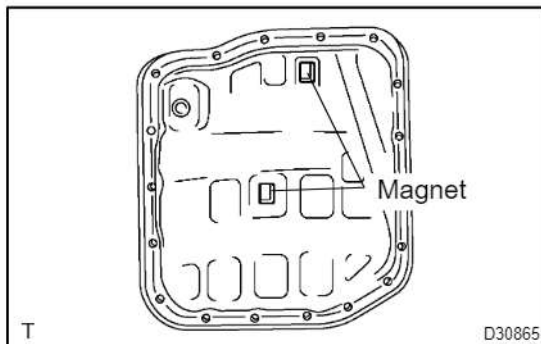


3. REMOVE AUTOMATIC TRANSAXLE OIL PAN SUB-ASSY

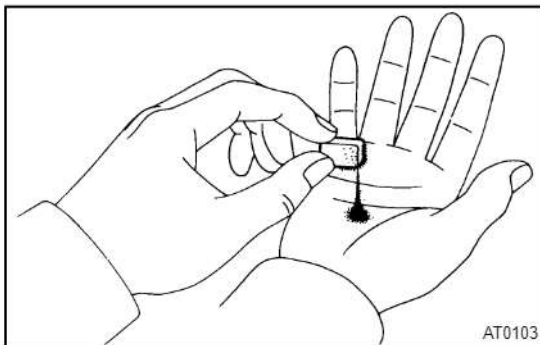
- Remove the 18 bolts, oil pan and gasket.

NOTICE:

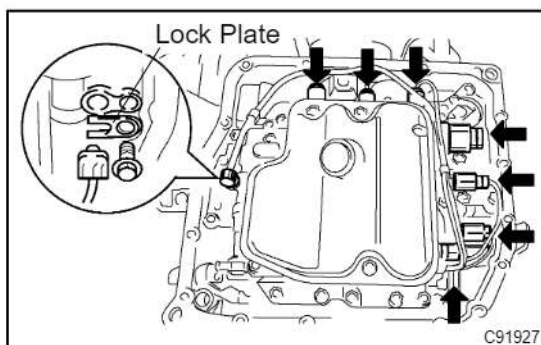
Some fluid will remain in the oil pan. Remove all the pan bolts, and carefully remove the oil pan assembly.



- Remove the 2 magnets from the oil pan.

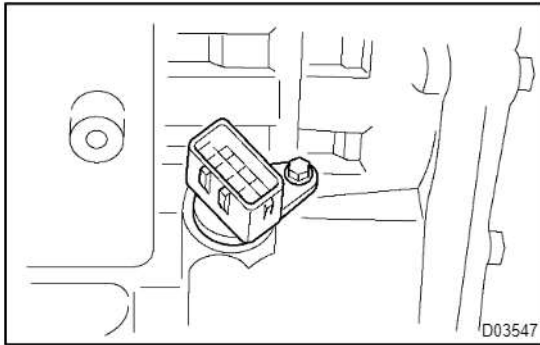


- Examine particles in the pan.
 - Collect any steel chips with the removed magnets. Look carefully at the chips and particles in the pan and on the magnets to see the type of wear which might be found in the transaxle.
Steel (magnetic): bearing, gear and plate wear
Brass (non-magnetic): bearing wear

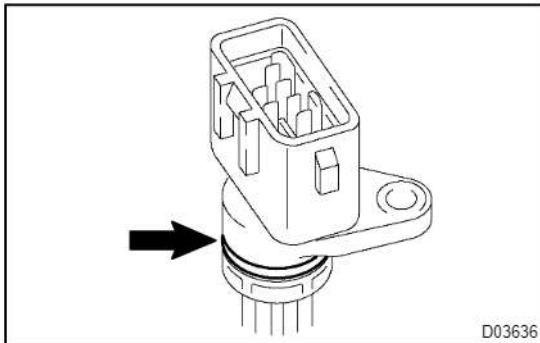


4. DISCONNECT TRANSMISSION WIRE

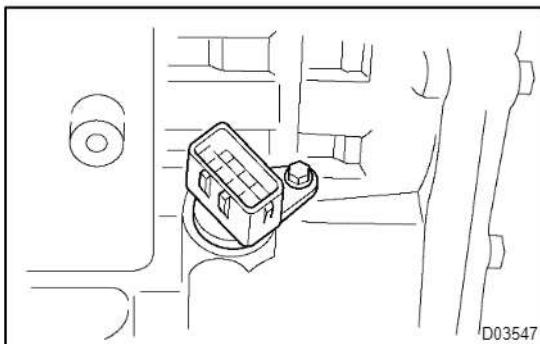
- Disconnect the 7 shift solenoid valve connectors.
- Remove the bolt and lock plate, and disconnect the ATF temperature sensor.

**5. REMOVE TRANSMISSION WIRE**

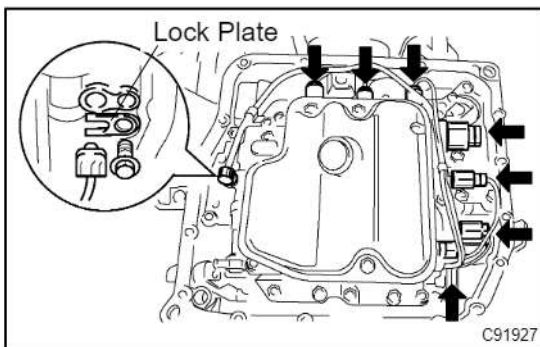
- (a) Disconnect the transmission wire connectors.
- (b) Remove the bolt and transmission wire.

**6. INSTALL TRANSMISSION WIRE**

- (a) Coat an O-ring of the transmission wire connector with ATF.



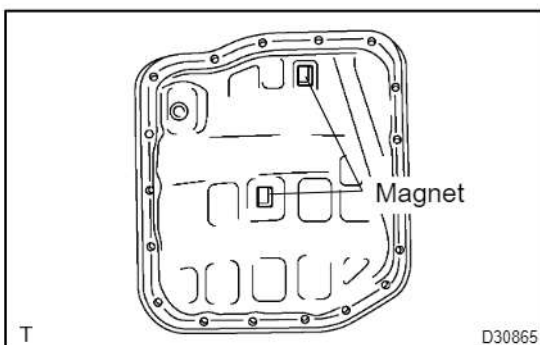
- (b) Install the transmission wire with the bolt.
Torque: 5.4 N·m (55 kgf·cm, 48 in.·lbf)

**7. CONNECT TRANSMISSION WIRE**

- (a) Coat an O-ring of the ATF temperature sensor with ATF.
- (b) Install the ATF temperature sensor with the lock plate and bolt.

Torque: 6.6 N·m (67 kgf·cm, 58 in.·lbf)

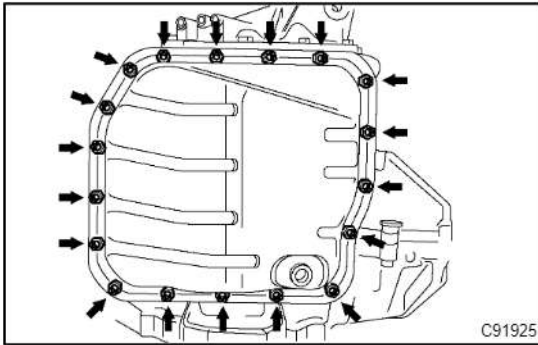
- (c) Connect the 7 shift solenoid valve connectors.

**8. INSTALL AUTOMATIC TRANSAXLE OIL PAN SUB-ASSY**

- (a) Install the 2 magnets in the oil pan.
- (b) Apply seal packing or equivalent to the 18 bolts.

Seal packing:

THREE BOND 2430 or equivalent



- (c) Using a new gasket, install the oil pan with the 18 bolts to the transaxle case.

Torque: 7.8 N·m (80 kgf·cm, 69 in·lbf)

NOTICE:

Apply seal packing to the bolts and tighten them within 10 minutes of application.

9. ADD AUTOMATIC TRANSAXLE FLUID

Fluid type: ATF type T-IV

Capacity: 3.5 liters (3.7 US qts, 3.1 Imp. qts)

10. INSPECT AUTOMATIC TRANSAXLE FLUID (SEE PAGE [40-2](#))

11. INSTALL ENGINE UNDER COVER LH

TRANSMISSION WIRE (U250E)

4015A-03

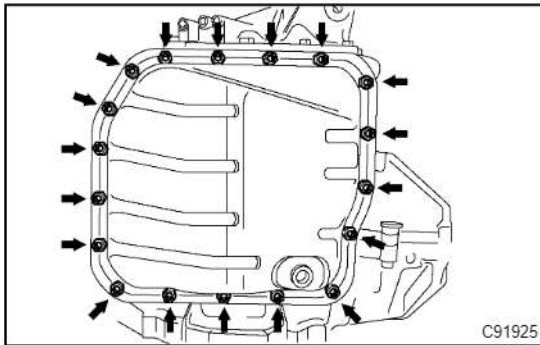
REPLACEMENT

1. REMOVE ENGINE UNDER COVER LH

2. DRAIN AUTOMATIC TRANSAXLE FLUID

- (a) Remove the drain plug and gasket, and drain the ATF.
- (b) Install a new gasket and the drain plug.

Torque: 49 N·m (500 kgf·cm, 36 ft·lbf)

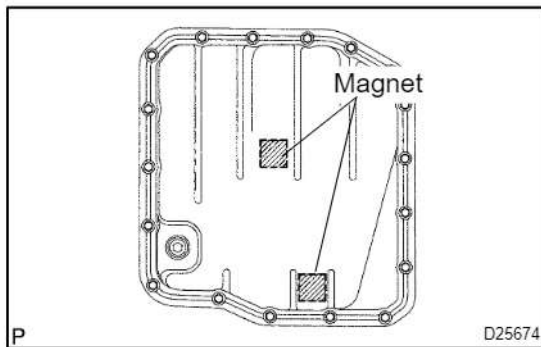


3. REMOVE AUTOMATIC TRANSAXLE OIL PAN SUB-ASSY

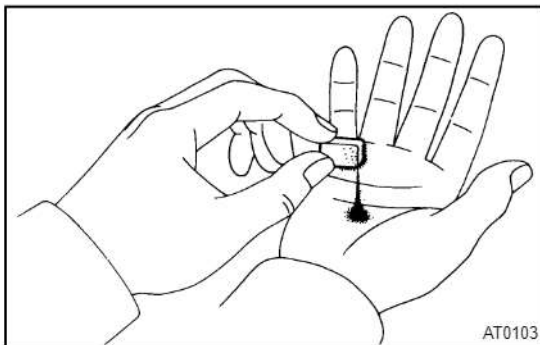
- (a) Remove the 18 bolts, oil pan and gasket.

NOTICE:

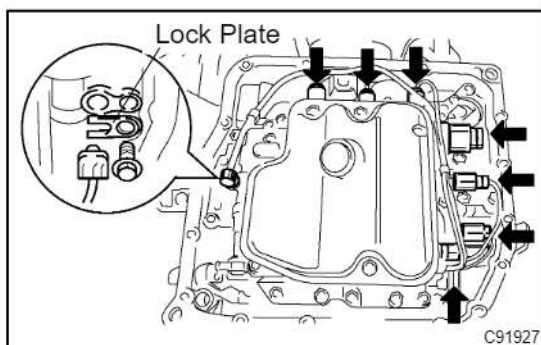
Some fluid will remain in the oil pan. Remove all pan bolts, and carefully remove the oil pan assembly.



- (b) Remove the 2 magnets from the oil pan.

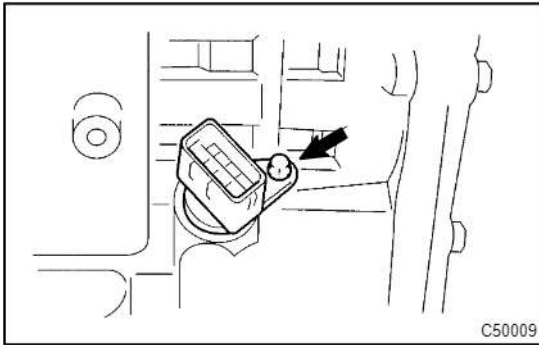


- (c) Examine particles in the pan.
 - (1) Collect any steel chips with the removed magnets. Look carefully at the chips and particles in the pan and on the magnets to see the type of wear which might be found in the transaxle.
 Steel (magnetic): bearing, gear and plate wear
 Brass (non-magnetic): bearing wear



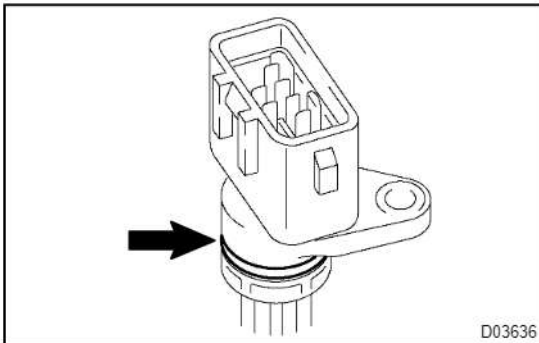
4. DISCONNECT TRANSMISSION WIRE

- (a) Disconnect the 7 shift solenoid valve connectors.
- (b) Remove the bolt and lock plate, and disconnect the ATF temperature sensor.



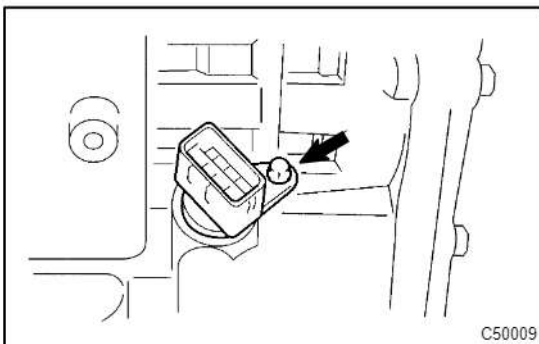
5. REMOVE TRANSMISSION WIRE

- (a) Disconnect the transmission wire connector.
- (b) Remove the bolt and transmission wire.

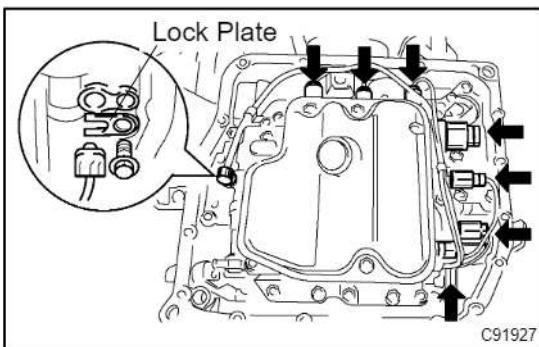


6. INSTALL TRANSMISSION WIRE

- (a) Coat an O-ring of the transmission wire connector with ATF.
- (b) Install the transmission wire.



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

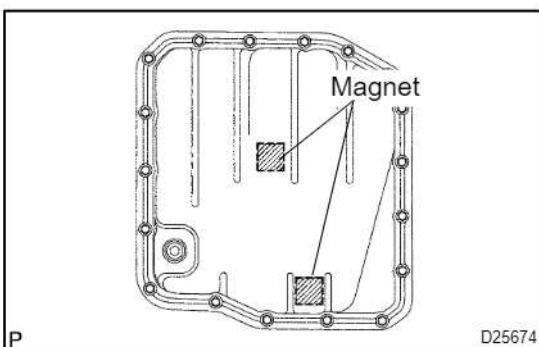


7. CONNECT TRANSMISSION WIRE

- (a) Coat an O-ring of the ATF temperature sensor with ATF.
- (b) Install the ATF temperature sensor with the lock plate and bolt.

Torque: 6.6 N·m (67 kgf·cm, 58 in.·lbf)

- (c) Connect the 7 shift solenoid valve connectors.

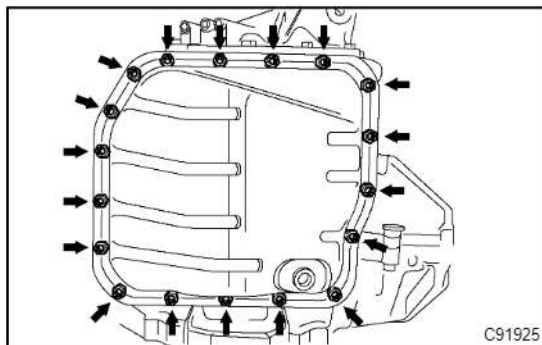


8. INSTALL AUTOMATIC TRANSAXLE OIL PAN SUB-ASSY

- (a) Install the 2 magnets in the oil pan.
- (b) Apply seal packing or equivalent to the 18 bolts.

Seal packing:

THREE BOND 2430 or equivalent



- (c) Install the oil pan and a new gasket with the 18 bolts to the transaxle case.

Torque: 7.8 N·m (80 kgf·cm, 69 in·lbf)

NOTICE:

Apply seal packing to the bolts and tighten them within 10 minutes of application.

9. ADD AUTOMATIC TRANSAXLE FLUID

Fluid type: ATF type T-IV

Capacity: 3.5 liters (3.7 US qts, 3.1 Imp. qts)

10. INSPECT AUTOMATIC TRANSAXLE FLUID (SEE PAGE [40-2](#))

11. INSTALL ENGINE UNDER COVER LH

TRANSMISSION VALVE BODY ASSY (U151E)

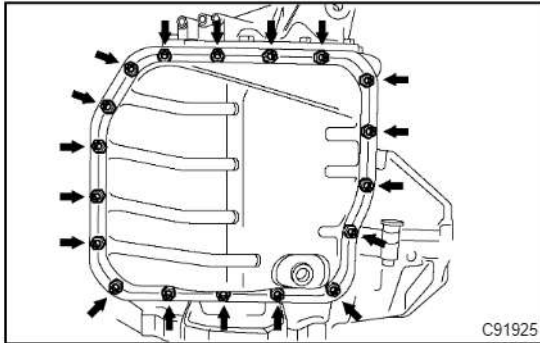
4010W-06

REPLACEMENT

1. REMOVE ENGINE UNDER COVER RH
2. DRAIN AUTOMATIC TRANSAXLE FLUID

- (a) Remove the drain plug and gasket, and drain the ATF.
- (b) Install a new gasket and the drain plug.

Torque: 49 N·m (500 kgf·cm, 36 ft·lbf)

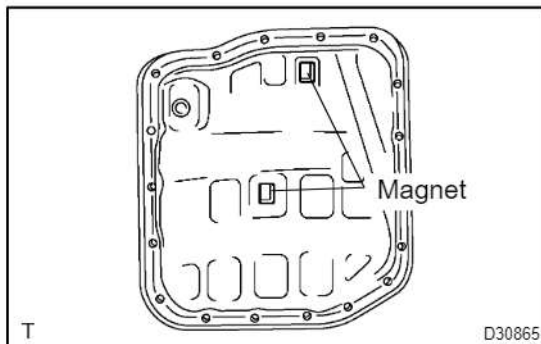


3. REMOVE AUTOMATIC TRANSAXLE OIL PAN SUB-ASSY

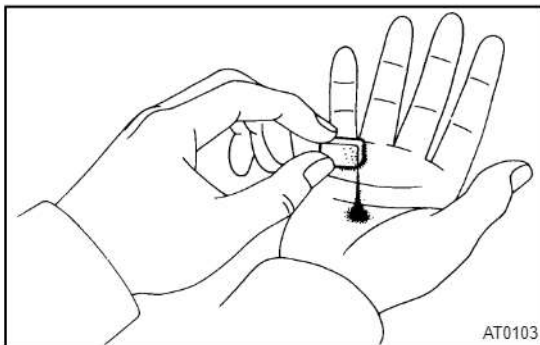
- (a) Remove the 18 bolts, oil pan and gasket.

NOTICE:

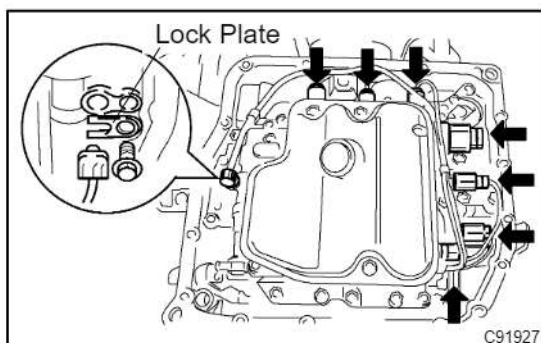
Some fluid will remain in the oil pan. Remove all the pan bolts, and carefully remove the oil pan assembly.



- (b) Remove the 2 magnets from the oil pan.

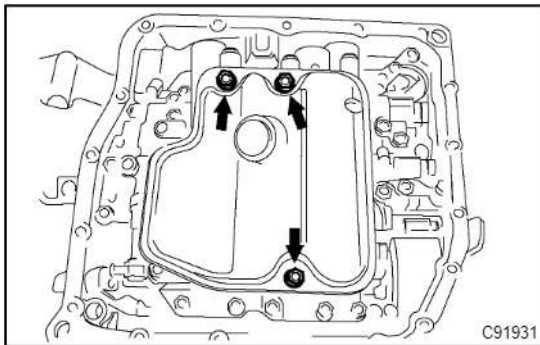


- (c) Examine particles in the pan.
 - (1) Collect any steel chips with the removed magnets. Look carefully at the chips and particles in the pan and on the magnets to see the type of wear which might be found in the transaxle.
 Steel (magnetic): bearing, gear and plate wear
 Brass (non-magnetic): bearing wear



4. DISCONNECT TRANSMISSION WIRE

- (a) Disconnect the 7 shift solenoid valve connectors.
- (b) Remove the bolt and lock plate, and disconnect the ATF temperature sensor.

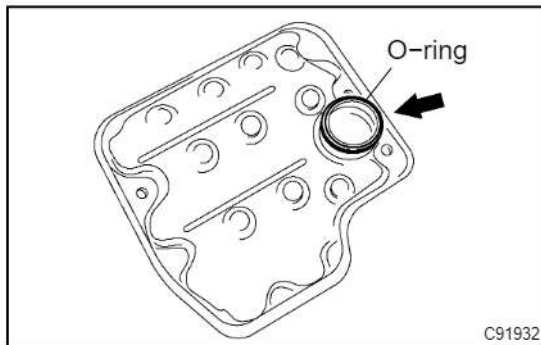


5. REMOVE VALVE BODY OIL STRAINER ASSY

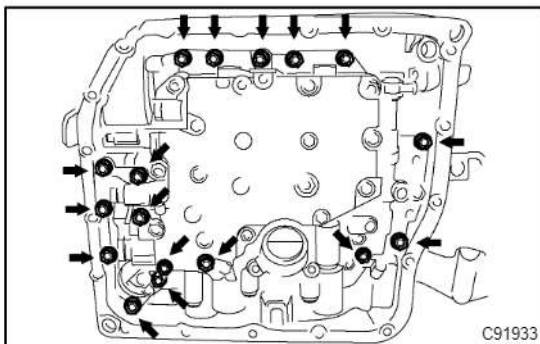
- (a) Remove the 3 bolts and oil strainer.

NOTICE:

Be careful that some fluid will come out of the oil strainer.



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

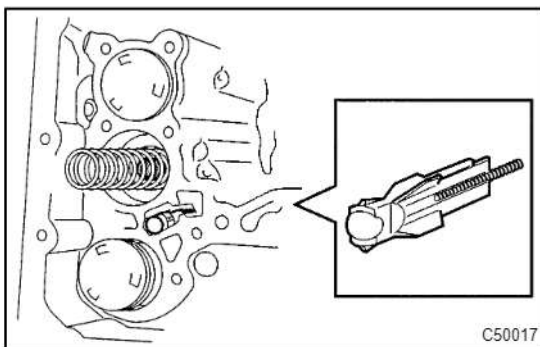


6. REMOVE TRANSMISSION VALVE BODY ASSY

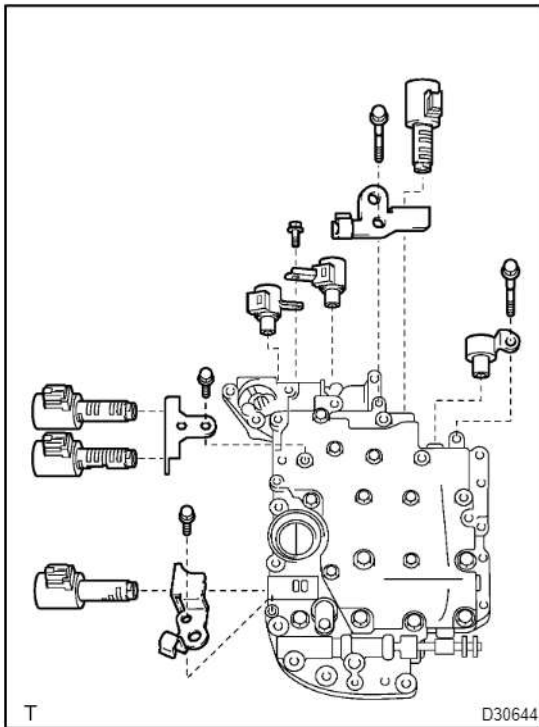
- (a) Support the valve body assy and remove the 17 bolts and the valve body assy.

NOTICE:

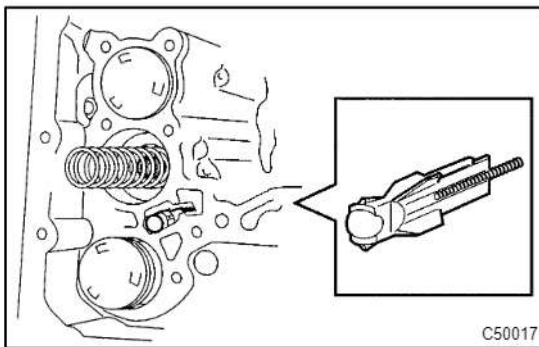
Be careful not to drop the check ball, spring and accumulator piston.



- (b) Remove the check ball body and spring.

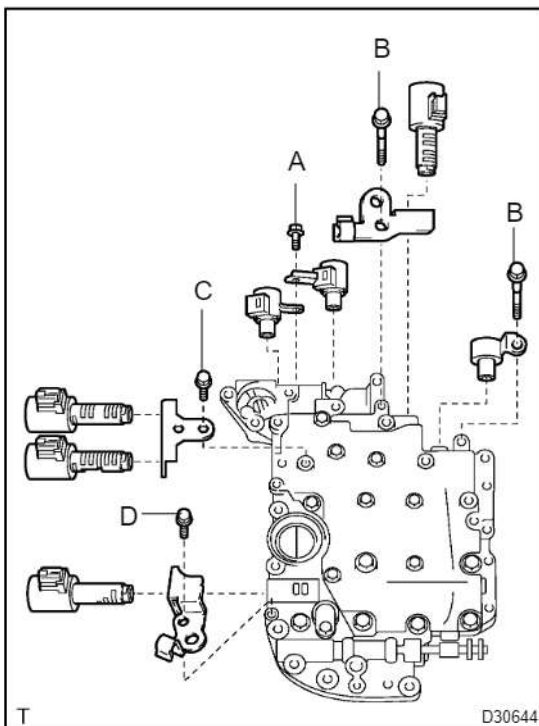


- (c) Remove the 5 bolts and 7 shift solenoid valves.



7. INSTALL TRANSMISSION VALVE BODY ASSY

- (a) Install the spring and check ball body.



- (b) Install the 7 shift solenoid valves with the 5 bolts.

Torque:

Bolts A, B: 11 N·m (110 kgf·cm, 8 ft·lbf)

Bolts C, D: 6.6 N·m (67 kgf·cm, 58 in. lbf)

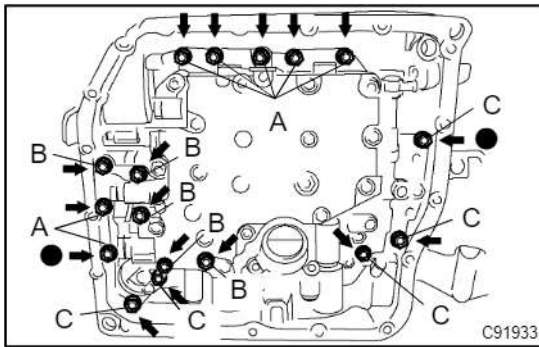
Bolt length:

Bolt A: 16 mm (0.63 in.)

Bolt B: 57 mm (2.2 in.)

Bolt C: 23 mm (0.9 in.)

Bolt D: 12 mm (0.47 in.)



(c) Align the groove of the manual valve with the pin of the lever.

(d) Install the 17 bolts.

Torque: 11 N·m (110 kgf·cm, 8 ft·lbf)

NOTICE:

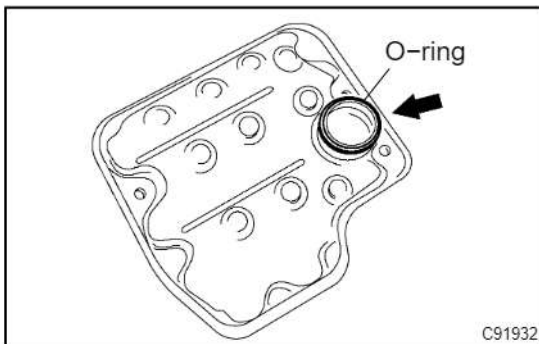
- Push the valve body against the accumulator piston spring and the check ball body to install it.
- First, temporarily tighten the bolts marked by ● in the illustration because they are positioning bolts.

Bolt length:

Bolt A: 25 mm (0.984 in.)

Bolt B: 57 mm (2.244 in.)

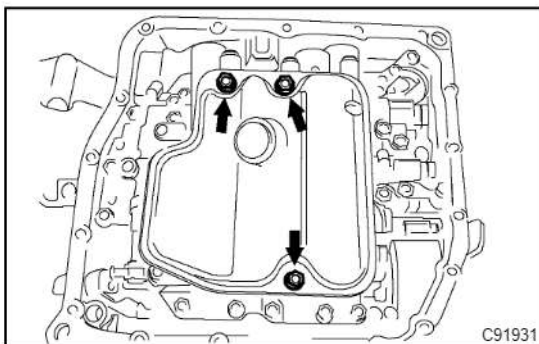
Bolt C: 41 mm (1.614 in.)



8. INSTALL VALVE BODY OIL STRAINER ASSY

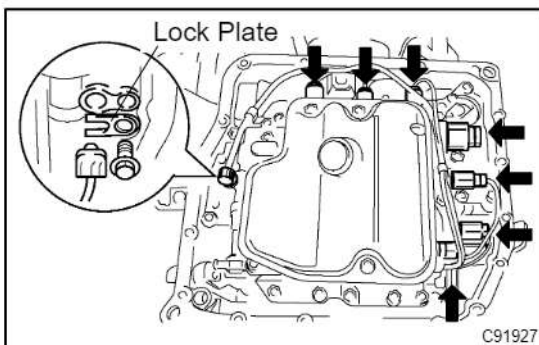
(a) Coat a new O-ring with ATF.

(b) Install the O-ring to the oil strainer.



(c) Install the oil strainer with the 3 bolts.

Torque: 11 N·m (110 kgf·cm, 8 ft·lbf)



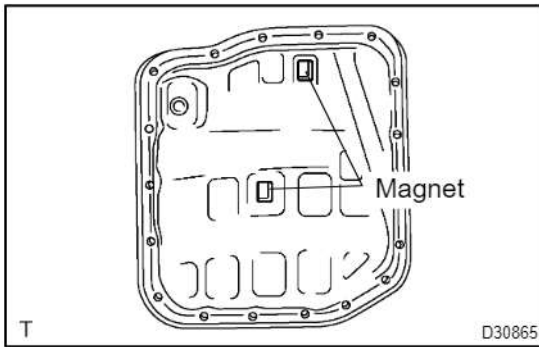
9. INSTALL TRANSMISSION WIRE

(a) Coat an O-ring with ATF.

(b) Install the ATF temperature sensor with the lock plate and bolt.

Torque: 6.6 N·m (67 kgf·cm, 58 in·lbf)

(c) Connect the 7 shift solenoid valve connectors.

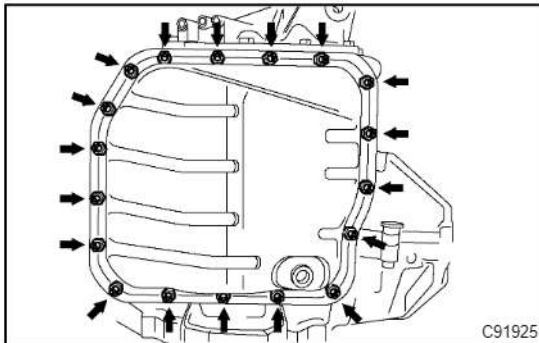


10. INSTALL AUTOMATIC TRANSAXLE OIL PAN SUB-ASSY

- (a) Install the 2 magnets in the oil pan.
- (b) Apply seal packing or equivalent to the 18 bolts.

Seal packing:

THREE BOND 2430 or equivalent



- (c) Using a new gasket, install the oil pan with the 18 bolts to the transaxle case.

Torque: 7.8 N·m (80 kgf·cm, 69 in·lbf)

NOTICE:

Since the bolts should be seal bolts, apply seal packing to the bolts and tighten them within 10 minutes of application.

11. ADD AUTOMATIC TRANSAXLE FLUID

Fluid type: ATF type T-IV

Capacity: 3.5 liters (3.7 US qts, 3.1 Imp. qts)

12. INSPECT AUTOMATIC TRANSAXLE FLUID (SEE PAGE 40-2)

13. INSTALL ENGINE UNDER COVER RH

14. RESET MEMORY (SEE PAGE 05-1251)

TRANSMISSION VALVE BODY ASSY (U250E)

4015B-03

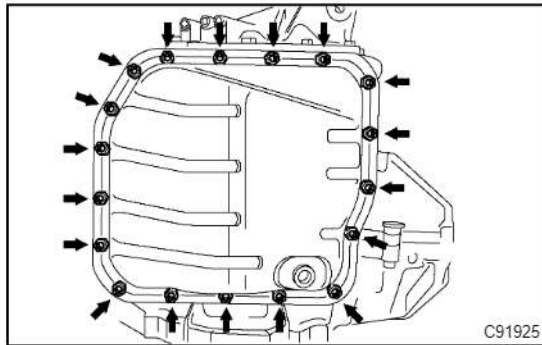
REPLACEMENT

1. REMOVE ENGINE UNDER COVER RH

2. DRAIN AUTOMATIC TRANSAXLE FLUID

- Remove the drain plug and gasket, and drain the ATF.
- Install a new gasket and the drain plug.

Torque: 49 N·m (500 kgf·cm, 36 ft·lbf)

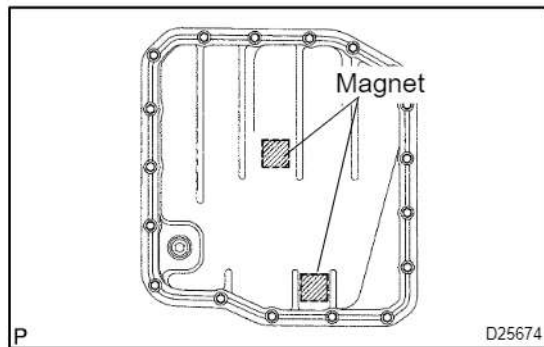


3. REMOVE AUTOMATIC TRANSAXLE OIL PAN SUB-ASSY

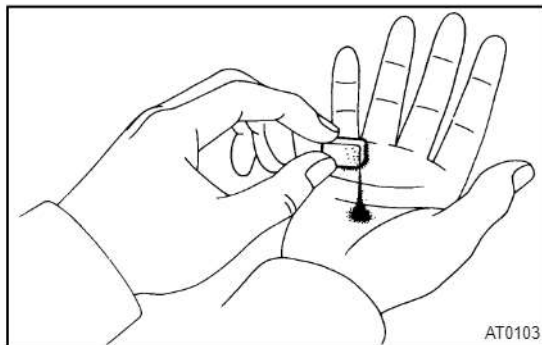
- Remove the 18 bolts, oil pan and gasket.

NOTICE:

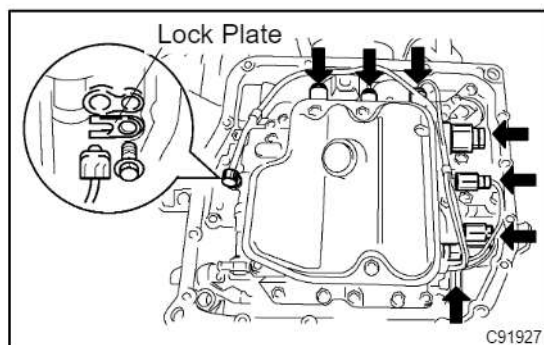
Some fluid will remain in the oil pan. Remove all pan bolts, and carefully remove the oil pan assembly.



- Remove the 2 magnets from the oil pan.

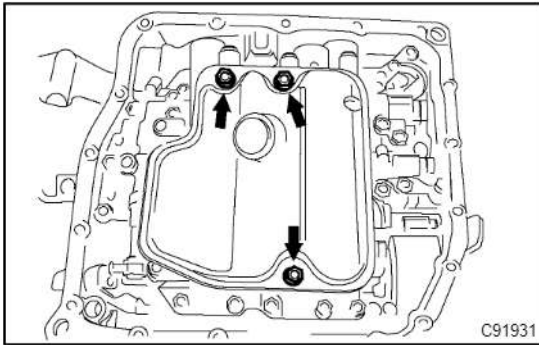


- Examine particles in the pan.
 - Collect any steel chips with the removed magnets. Look carefully at the chips and particles in the pan and on the magnets to see the type of wear which might be found in the transaxle.
 Steel (magnetic): bearing, gear and plate wear
 Brass (non-magnetic): bearing wear



4. DISCONNECT TRANSMISSION WIRE

- Disconnect the 7 shift solenoid valve connectors.
- Remove the bolt and lock plate, and disconnect the ATF temperature sensor.

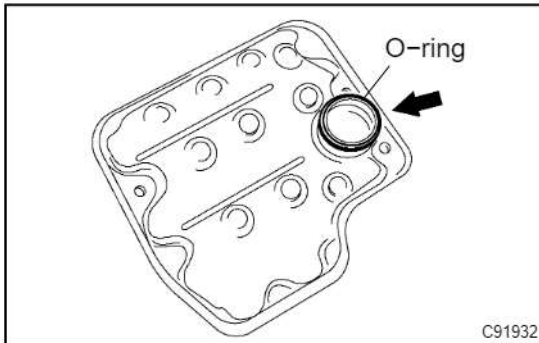


5. REMOVE VALVE BODY OIL STRAINER ASSY

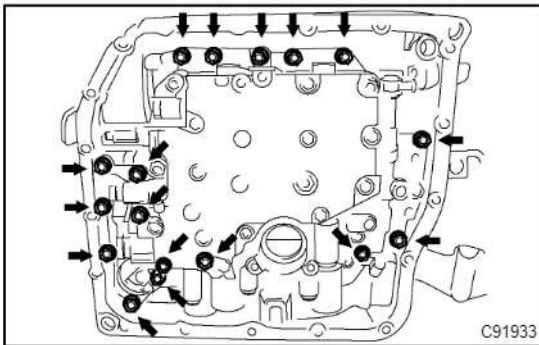
- (a) Remove the 3 bolts and oil strainer.

NOTICE:

Be careful as some fluid will come out of the oil strainer.



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

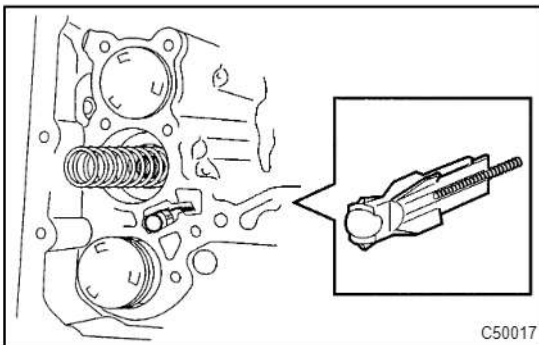


6. REMOVE TRANSMISSION VALVE BODY ASSY

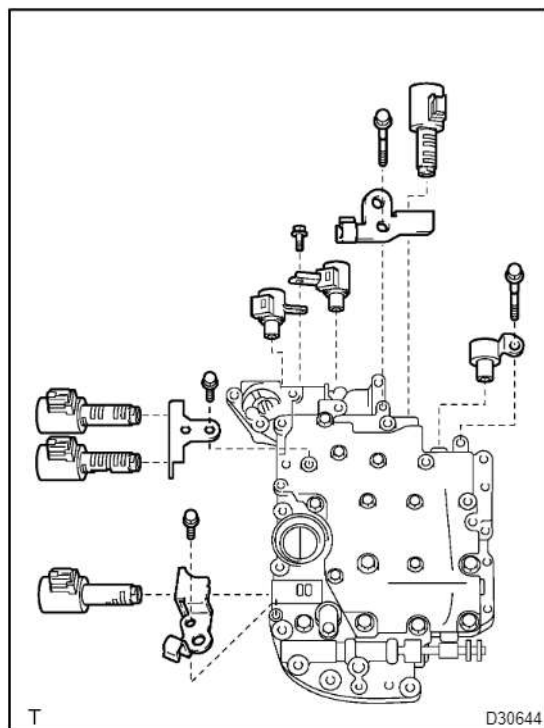
- (a) Support the valve body assy and remove the 17 bolts and the valve body assy.

NOTICE:

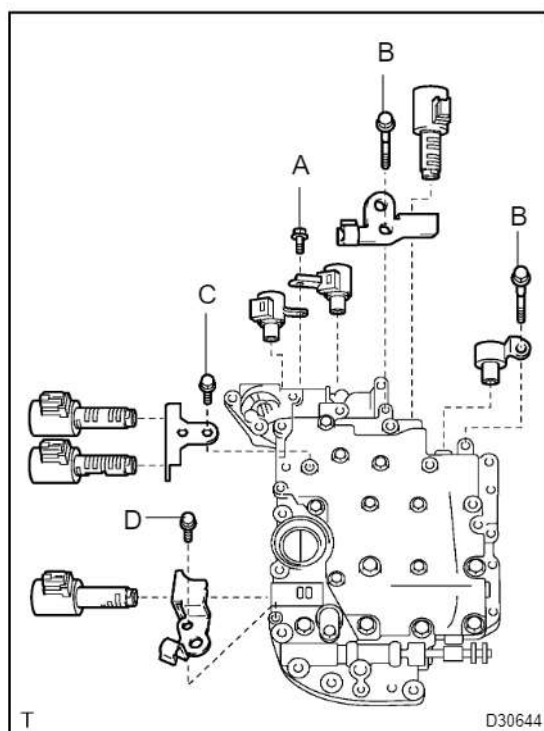
Be careful not to drop the check ball, spring and accumulator piston.



- (b) Remove the check ball body and spring.



- (c) Remove the 5 bolts and 7 shift solenoid valves.



7. INSTALL TRANSMISSION VALVE BODY ASSY

- (a) Install the 7 shift solenoid valves with the 5 bolts.

Torque:

Bolt A, B: 11 N·m (110 kgf·cm, 8 ft·lbf)

Bolt C, D: 6.6 N·m (67 kgf·cm, 58 in·lbf)

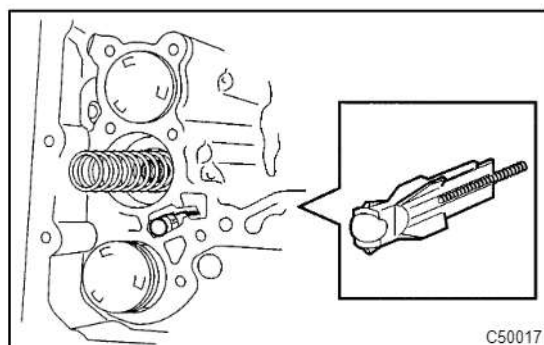
Bolt length:

Bolt A: 16 mm (0.63 in.)

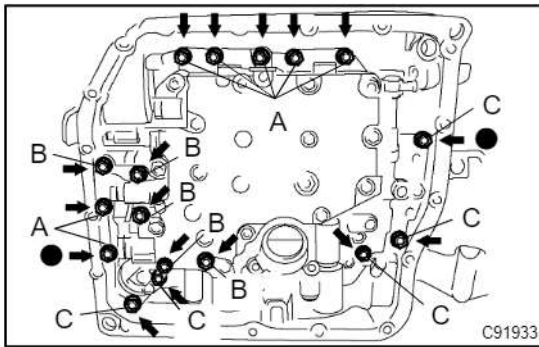
Bolt B: 57 mm (2.2 in.)

Bolt C: 23 mm (0.9 in.)

Bolt D: 12 mm (0.47 in.)



- (b) Install the spring and check ball body.



(c) Align the groove of the manual valve with the pin of the lever.

(d) Install the 17 bolts.

Torque: 11 N·m (110 kgf·cm, 8 ft·lbf)

NOTICE:

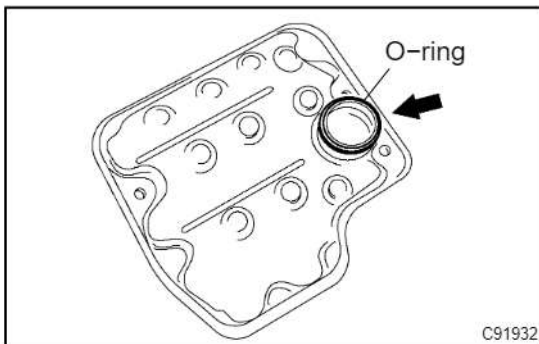
- Push the valve body against the accumulator piston spring and the check ball body to install it.
- First, temporarily tighten the bolts marked by ● in the illustration because they are positioning bolts.

Bolt length:

Bolt A: 25 mm (0.984 in.)

Bolt B: 57 mm (2.244 in.)

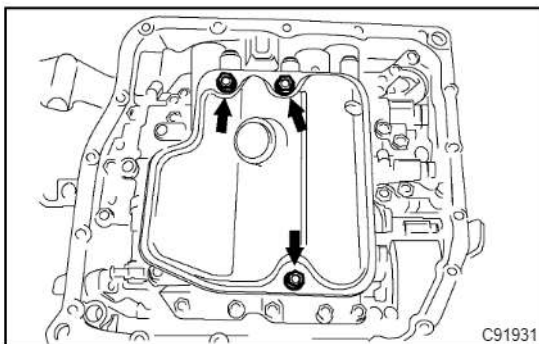
Bolt C: 41 mm (1.614 in.)



8. INSTALL VALVE BODY OIL STRAINER ASSY

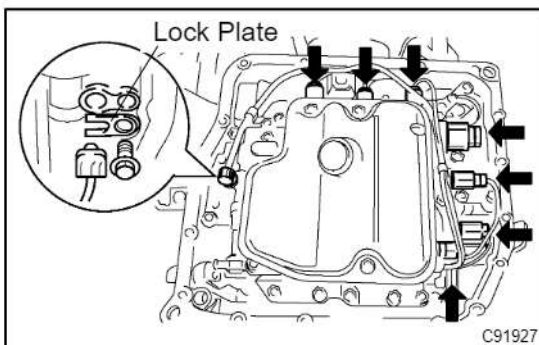
(a) Coat a new O-ring with ATF.

(b) Install the O-ring to the oil strainer.



(c) Install the oil strainer with the 3 bolts.

Torque: 11 N·m (110 kgf·cm, 8 ft·lbf)



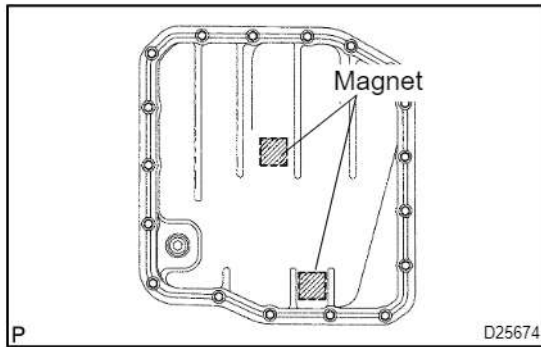
9. INSTALL TRANSMISSION WIRE

(a) Coat an O-ring with ATF.

(b) Install the ATF temperature sensor with the lock plate and bolt.

Torque: 6.6 N·m (67 kgf·cm, 58 in·lbf)

(c) Connect the 7 shift solenoid valve connectors.

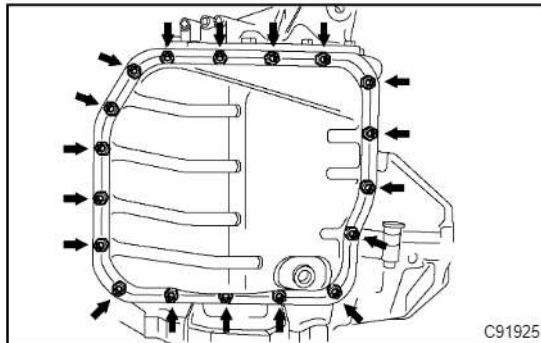


10. INSTALL AUTOMATIC TRANSAXLE OIL PAN SUB-ASSY

- (a) Install the 2 magnets in the oil pan.
- (b) Apply seal packing or equivalent to the 18 bolts.

Seal packing:

THREE BOND 2430 or equivalent



- (c) Install the oil pan and a new gasket with the 18 bolts to the transaxle case.

Torque: 7.8 N·m (80 kgf·cm, 69 in.·lbf)

NOTICE:

Apply seal packing to the bolts and tighten them within 10 minutes of application.

11. ADD AUTOMATIC TRANSAXLE FLUID

Fluid type: ATF type T-IV

Capacity: 3.5 liters (3.7 US qts, 3.1 Imp. qts)

12. INSPECT AUTOMATIC TRANSAXLE FLUID (SEE PAGE 40-2)

13. INSTALL ENGINE UNDER COVER RH

14. RESET MEMORY

NOTICE:

Perform the **RESET MEMORY** (AT initialization) when replacing the automatic transmission assy, engine assy or ECM (see page 05-1123).

HINT:

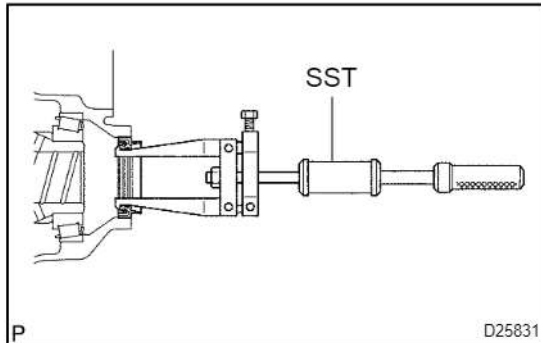
RESET MEMORY can not be completed by only disconnecting the battery terminal.

FRONT DIFFERENTIAL OIL SEAL (U151E)

4010X-06

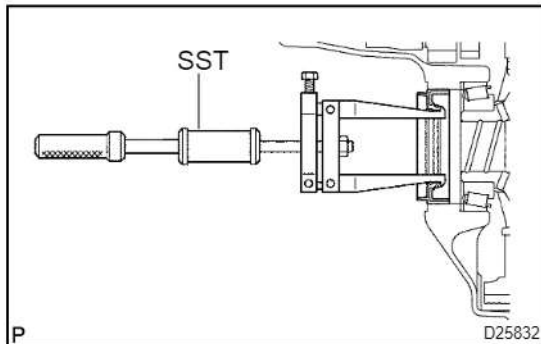
REPLACEMENT

1. REMOVE FRONT WHEELS
2. REMOVE ENGINE UNDER COVER RH
3. REMOVE ENGINE UNDER COVER LH
4. DRAIN AUTOMATIC TRANSAXLE FLUID
 - (a) Remove the drain plug, gasket and drain the ATF.
 - (b) Install a new gasket and the drain plug.
Torque: 49 N·m (500 kgf·cm, 36 ft·lbf)
5. REMOVE FRONT DRIVE SHAFT ASSY RH (SEE PAGE 30-8)
6. REMOVE FRONT DRIVE SHAFT ASSY LH (SEE PAGE 30-8)
SST 09520-01010, 09520-24010 (09520-32040)



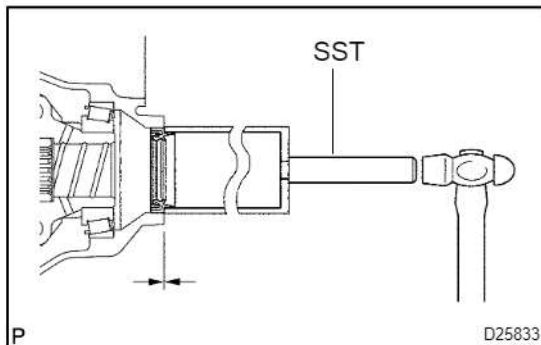
7. REMOVE TRANSAXLE HOUSING OIL SEAL

- (a) Using SST, pull out the oil seal.
SST 09308-00010



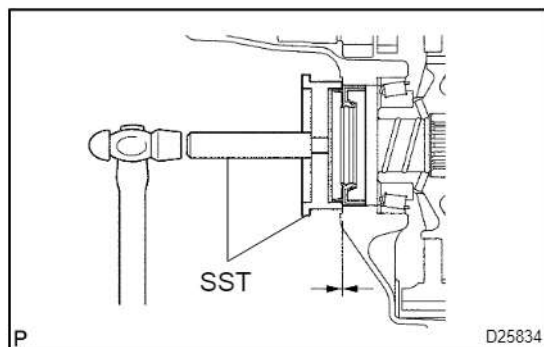
8. REMOVE DIFFERENTIAL SIDE BEARING RETAINER OIL SEAL

- (a) Using SST, pull out the oil seal.
SST 09308-00010



9. INSTALL DIFFERENTIAL SIDE BEARING RETAINER OIL SEAL

- (a) Using SST and a hammer, drive in a new oil seal.
SST 09316-60011 (09316-00011)
Oil seal drive in depth:
0 ± 0.5 mm (0 ± 0.020 in.)
- (b) Coat the lip of the oil seal with MP grease.

**10. INSTALL TRANSAXLE HOUSING OIL SEAL**

- (a) Using SST and a hammer, drive in a new oil seal.
SST 09223-15020, 09950-70010 (09951-07150)

Oil seal drive in depth:

0 ± 0.5 mm (0 ± 0.020 in.)

- (b) Coat the lip of the oil seal with MP grease.

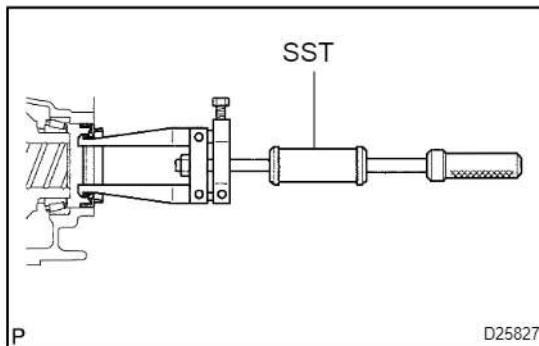
11. INSTALL FRONT DRIVE SHAFT ASSY LH (SEE PAGE 30-8)
12. INSTALL FRONT DRIVE SHAFT ASSY RH (SEE PAGE 30-8)
13. INSTALL ENGINE UNDER COVER LH
14. INSTALL ENGINE UNDER COVER RH
15. INSTALL FRONT WHEELS
16. ADD AUTOMATIC TRANSAXLE FLUID
Fluid type: ATF type T-IV
Capacity: 3.5 liters (3.7 US qts, 3.1 Imp. qts)
17. INSPECT AUTOMATIC TRANSAXLE FLUID (SEE PAGE 40-2)

FRONT DIFFERENTIAL OIL SEAL (U250E)

40065-11

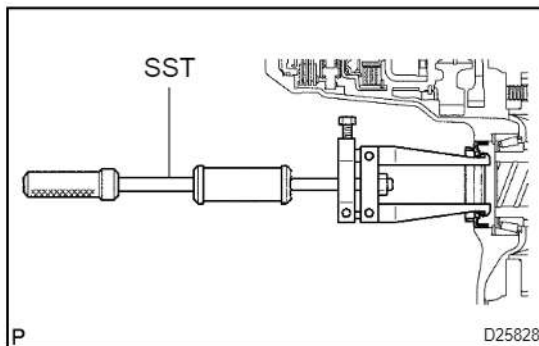
REPLACEMENT

1. REMOVE FRONT WHEELS
2. REMOVE ENGINE UNDER COVER RH
3. REMOVE ENGINE UNDER COVER LH
4. DRAIN AUTOMATIC TRANSAXLE FLUID
 - (a) Remove the drain plug and gasket, and drain the ATF.
 - (b) Install a new gasket and the drain plug.
Torque: **49 N·m (500 kgf·cm, 36 ft·lbf)**
5. REMOVE FRONT DRIVE SHAFT ASSY RH (SEE PAGE 30-8)
6. REMOVE FRONT DRIVE SHAFT ASSY LH (SEE PAGE 30-8)
SST 09520-01010, 09520-24010 (09520-32040)



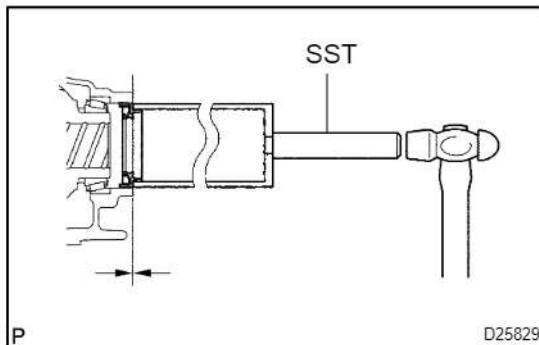
7. REMOVE TRANSAXLE HOUSING OIL SEAL

- (a) Using SST, pull out the oil seal.
SST 09308-00010



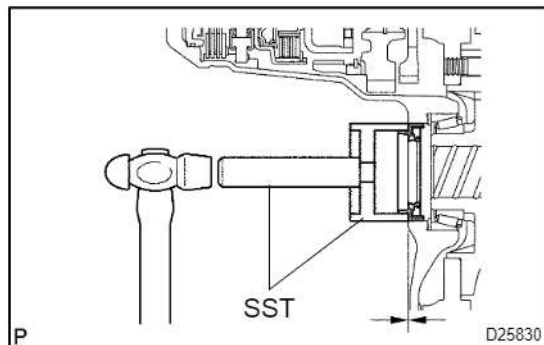
8. REMOVE DIFFERENTIAL SIDE BEARING RETAINER OIL SEAL

- (a) Using SST, pull out the oil seal.
SST 09308-00010



9. INSTALL TRANSAXLE HOUSING OIL SEAL

- (a) Using SST and a hammer, drive in a new oil seal.
SST 09316-60011 (09316-00011)
Oil seal drive in depth:
0 ± 0.5 mm (0 ± 0.020 in.)
- (b) Coat the lip of the oil seal with MP grease.

**10. INSTALL DIFFERENTIAL SIDE BEARING RETAINER OIL SEAL**

- (a) Using SST and a hammer, drive in a new oil seal.
SST 09649-17010, 09950-70010 (09951-07150)

Oil seal drive in depth:

0 ± 0.5 mm (0 ± 0.020 in.)

- (b) Coat the lip of the oil seal with MP grease.

11. INSTALL FRONT DRIVE SHAFT ASSY LH (SEE PAGE 30-8)
12. INSTALL FRONT DRIVE SHAFT ASSY RH (SEE PAGE 30-8)
13. INSTALL ENGINE UNDER COVER LH
14. INSTALL ENGINE UNDER COVER RH
15. INSTALL FRONT WHEELS
Torque: 103 N·m (1,050 kgf·cm, 76 ft·lbf)
16. ADD AUTOMATIC TRANSAXLE FLUID
Fluid type: ATF type T-IV
Capacity: 3.5 liters (3.7 US qts, 3.1 Imp. qts)
17. INSPECT AUTOMATIC TRANSAXLE FLUID (SEE PAGE 40-2)

SHIFT LOCK SYSTEM (ATM)

4010Y-03

ON-VEHICLE INSPECTION

1. CHECK SHIFT LOCK OPERATION

- Shift the shift lever to P position.
- Turn the ignition switch to LOCK position.
- Check that the shift lever cannot be shifted to any other positions other than P.
- Turn the ignition switch ON, depress the brake pedal and check that the shift lever can be shifted to any other positions.

If operation can not be done as specified, inspect the shift lock control unit.

2. CHECK SHIFT LOCK RELEASE BUTTON OPERATION

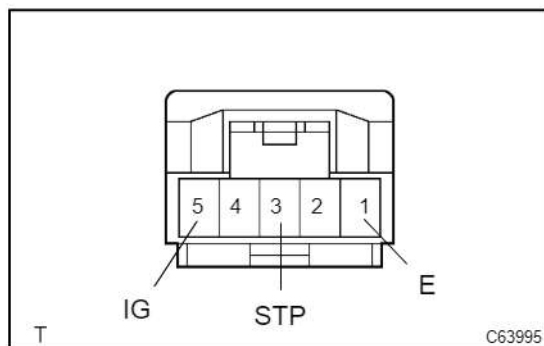
- Using a screwdriver, remove the shift lock release button cover.
- When operating the shift lever with pressing the shift lock release button and being the ignition key in ACC or ON, check that the lever can be shifted to any other position.

If operation can not be done as specified, check the shift lever assy installation condition.

3. CHECK KEY INTERLOCK OPERATION

- Turn the ignition switch ON.
- Depress the brake pedal and shift the shift lever to any other positions other than P.
- Check that the ignition key cannot be turned to LOCK position.
- Shift the shift lever to P position, turn the ignition key to LOCK position and check that the ignition key can be removed.

If operation cannot be done as specified, inspect the shift lock control unit.



4. INSPECT SHIFT LOCK CONTROL COMPUTER

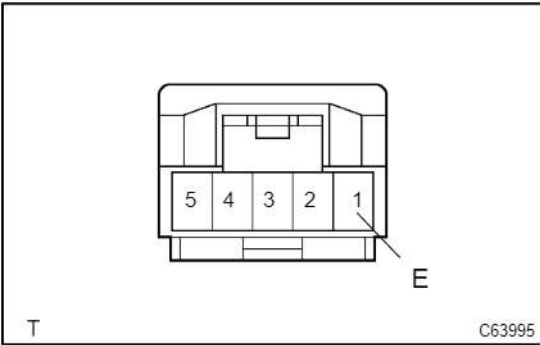
- Using a voltmeter, measure the voltage at each terminal.

HINT:

Do not disconnect the shift lock control unit connector.

Terminal	Measuring Condition	Voltage (V)
5 (IG) - 1 (E)	Ignition switch ON	10 - 14
5 (IG) - 1 (E)	Ignition switch OFF	0
3 (STP) - 1 (E)	Depress brake pedal	10 - 14
3 (STP) - 1 (E)	Release brake pedal	0

If the result is not as specified, replace the shift lock control unit.



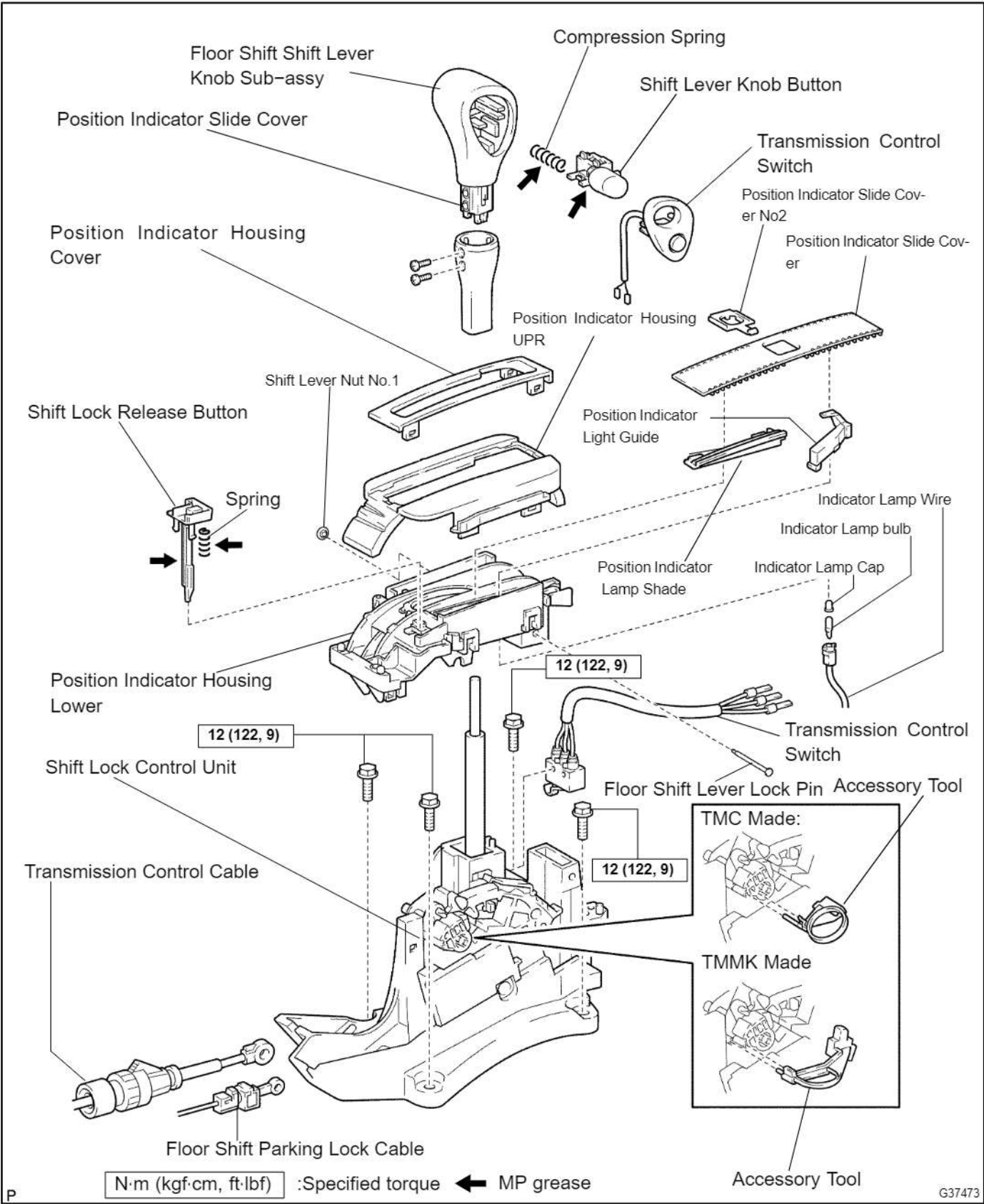
- (b) Using an ohmmeter, measure the resistance between terminal E (1) and body ground.

Terminal	Measuring Condition	Voltage (V)
1 (E) - Body ground	Always	Continuity

If the result is not as specified, replace the shift lock control unit.

FLOOR SHIFT ASSY (ATM) COMPONENTS

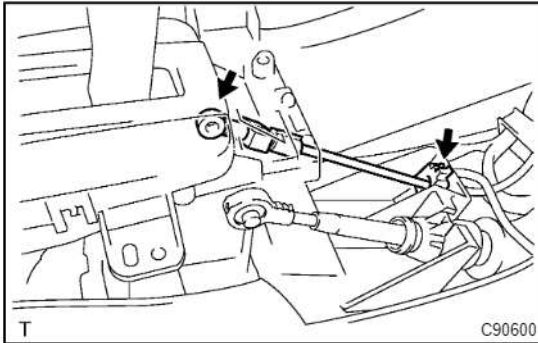
4010Z-03



cardiagn.com

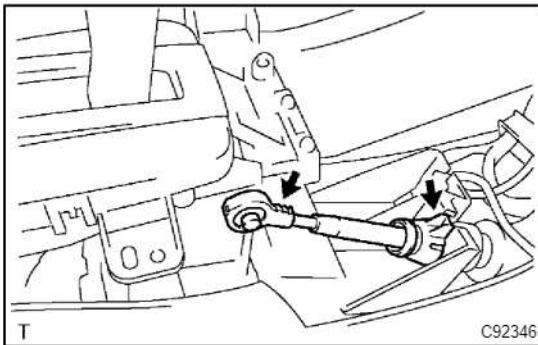
OVERHAUL

1. REMOVE CONSOLE BOX CARPET (SEE PAGE 71-16)
2. REMOVE RR CONSOLE BOX (SEE PAGE 71-16)
3. REMOVE FRONT ASH RECEPTACLE ASSY (W/ ASHTRAY) (SEE PAGE 71-16)
4. REMOVE CONSOLE BOX FRONT (SEE PAGE 71-16)
5. REMOVE AIR DUCT REAR NO.1 (SEE PAGE 71-16)
6. REMOVE AIR DUCT REAR NO.2 (SEE PAGE 71-16)
7. REMOVE CONSOLE BOX DUCT NO.1 (SEE PAGE 71-16)



8. DISCONNECT FLOOR SHIFT PARKING LOCK CABLE ASSY

- (a) Disconnect the floor shift parking lock cable from the floor shift assy.

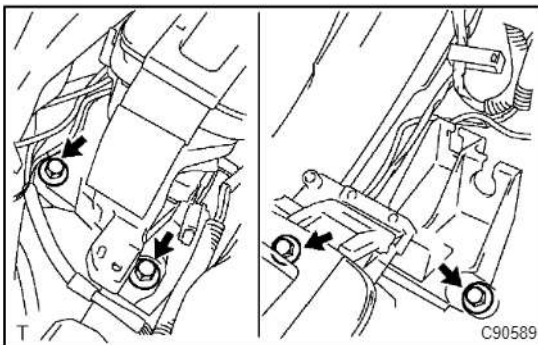


9. DISCONNECT TRANSMISSION CONTROL CABLE ASSY

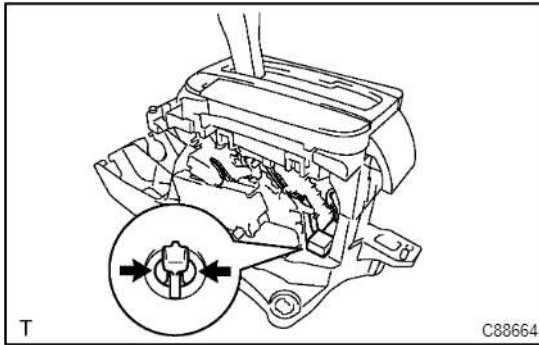
- (a) Disconnect the floor shift cable transmission control shift from the floor shift assy.

10. REMOVE FLOOR SHIFT ASSY

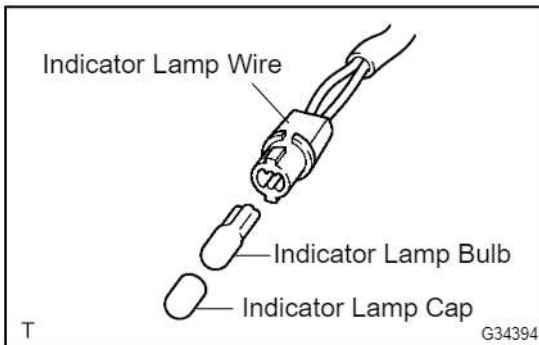
- (a) Disconnect the shift lock control computer connector.
- (b) Disconnect the transmission control switch connector.



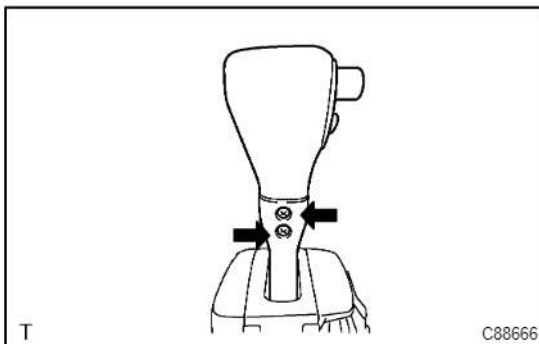
- (c) Remove the 4 bolts and transmission floor shift assy.

**11. REMOVE INDICATOR LAMP WIRE SUB-ASSY**

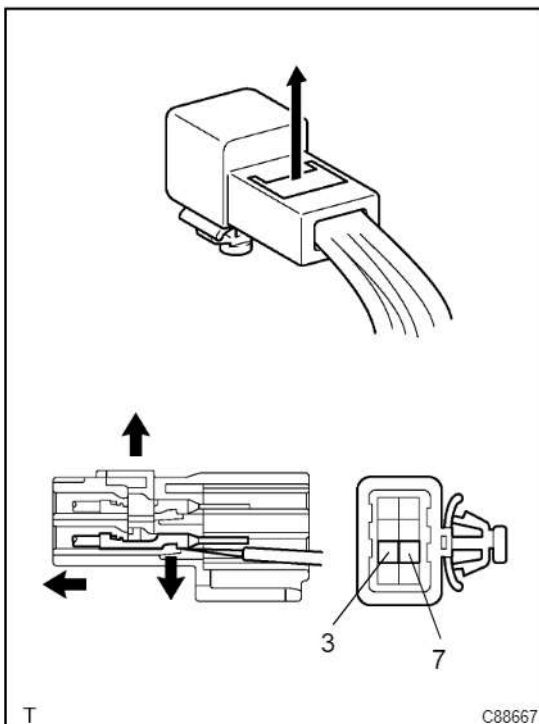
- (a) Releasing the lock by pressing the slick, disconnect the indicator lamp wire connector from the shift lever plate.
- (b) Disconnect the indicator lamp wire sub-assy from the position indicator housing.



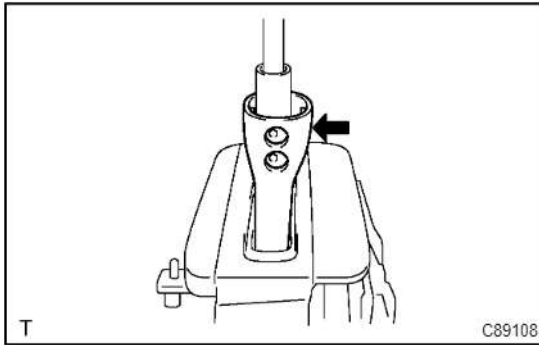
- (c) Remove the indicator lamp cap and indicator lamp bulb from the indicator lamp wire sub-assy.

**12. REMOVE SHIFT LEVER KNOB SUB-ASSY**

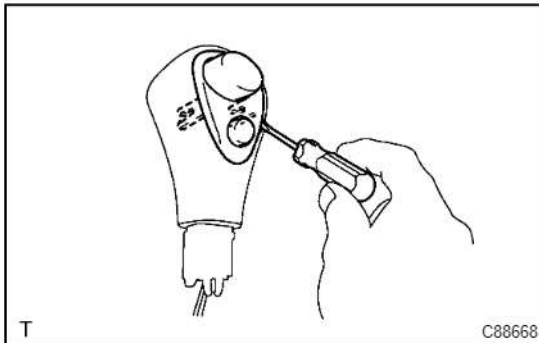
- (a) Remove the 2 screws and shift lever knob from the shift lever.



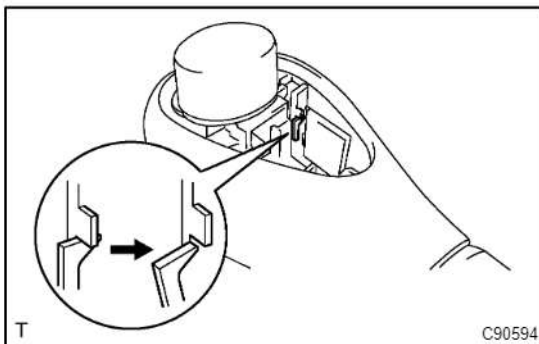
- (b) Using a screwdriver, release the stopper of the connector.
- (c) Using a small screwdriver, disengage the locking lug of the terminals 3 and 7, and pull out the terminals from the rear.

**13. REMOVE POSITION INDICATOR SLIDE COVER**

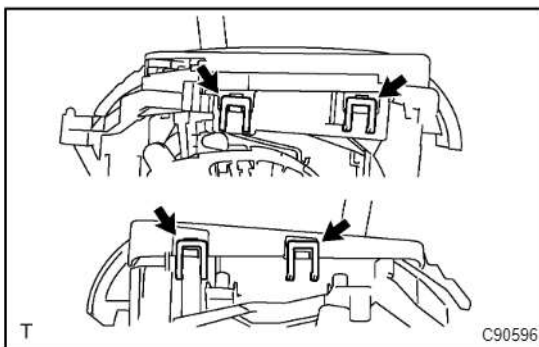
- (a) Remove the position indicator slide cover from the floor shift assy.

**14. REMOVE TRANSMISSION CONTROL SWITCH**

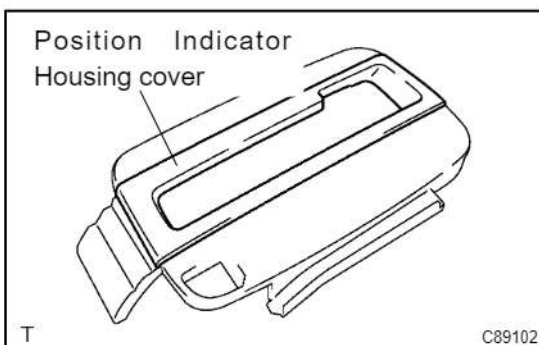
- (a) Using a screwdriver, remove the transmission control switch from the shift lever knob.

**15. REMOVE SHIFT LEVER KNOB BUTTON**

- (a) Using a screwdriver, release the claw and remove the shift lever knob button.
(b) Remove the compression spring.

**16. REMOVE POSITION INDICATOR HOUSING UPPER**

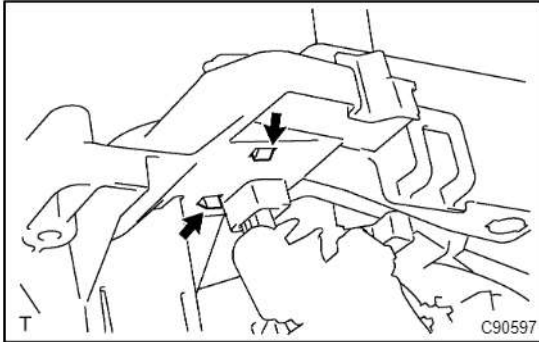
- (a) Using a screwdriver, disengage the 4 claws and remove the position indicator housing upper from the floor shift assy.

**17. REMOVE POSITION INDICATOR HOUSING COVER**

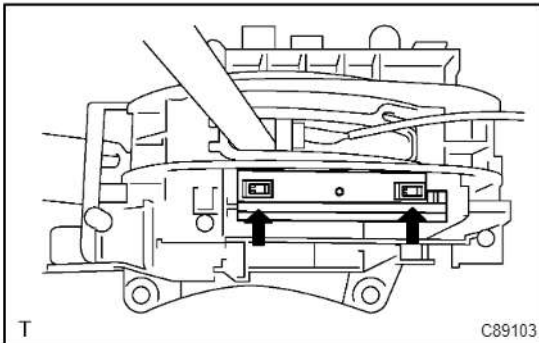
- (a) Using a screwdriver, remove the position indicator housing cover from the position indicator housing upper.

18. REMOVE POSITION INDICATOR SLIDE COVER

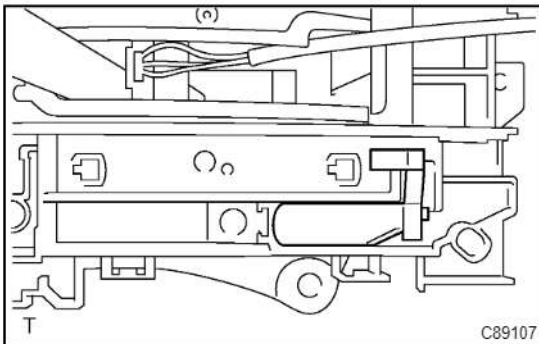
- (a) Remove the position indicator slide cover from the floor shift assy.
- (b) Remove the position indicator slide cover No.2 from the floor shift assy.

**19. REMOVE SHIFT LOCK RELEASE BUTTON**

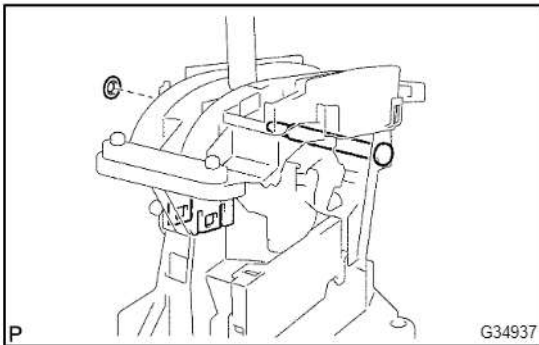
- (a) While pressing the 2 claws, remove the shift lock release button and shift lock release spring.

**20. REMOVE POSITION INDICATOR LIGHT GUIDE**

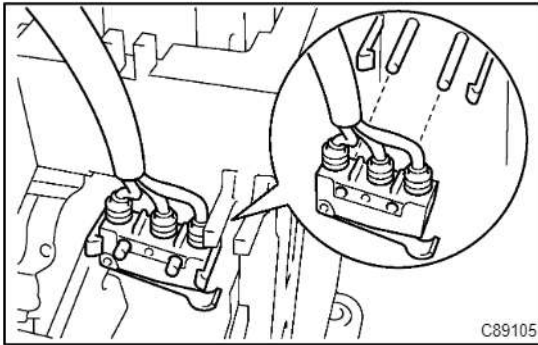
- (a) Disengage the 2 claws and remove the position indicator lamp shade from the position indicator housing lower.



- (b) Remove the position indicator light guide from the position indicator housing lower.

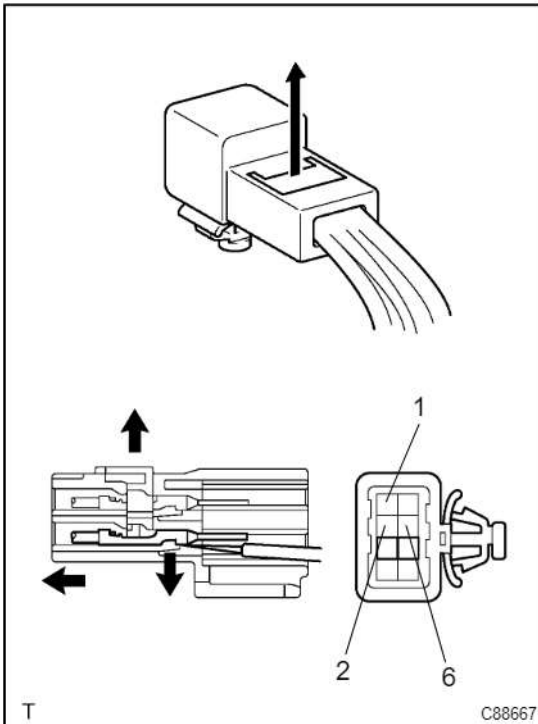
**21. REMOVE POSITION INDICATOR HOUSING LOWER**

- (a) Using a screwdriver, pry up the shift lever nut No.1.
- (b) Using a screwdriver, pry up the floor shift lever lock pin.
- (c) Using a screwdriver release the 2 claws and remove the position indicator housing lower from the floor shift assy.

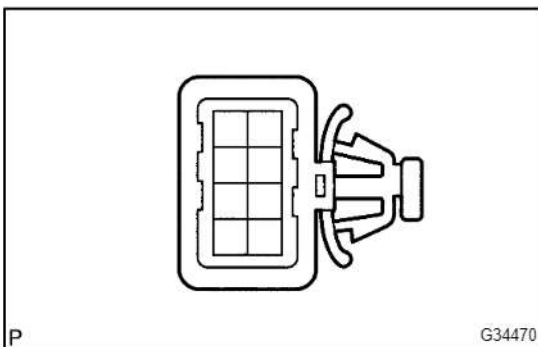


22. REMOVE TRANSMISSION CONTROL SWITCH

- (a) Using a screwdriver, remove the transmission control switch from the floor shift assy.

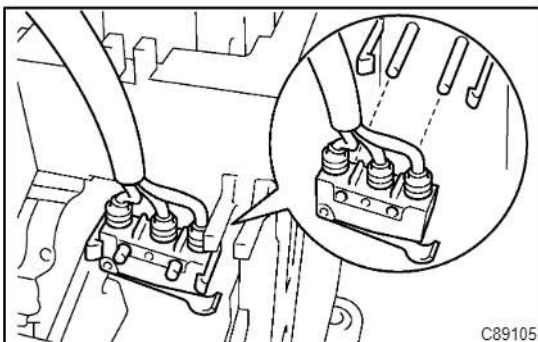


- (b) Using a screwdriver, release the stopper of the connector.
 (c) Using a small screwdriver, disengage the locking lug of the terminals 1, 2 and 6 and pull the terminals out from the rear.

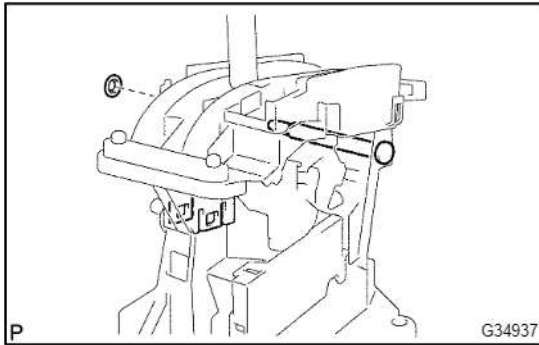


23. INSTALL TRANSMISSION CONTROL SWITCH

- (a) Install the 3 terminals into the indicator lamp wire connector.



- (b) Install the transmission control switch to the floor shift assy.

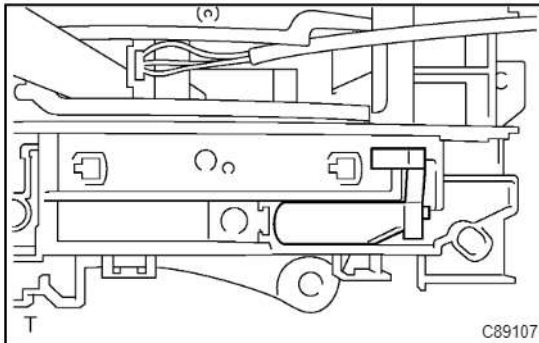


24. INSTALL POSITION INDICATOR HOUSING LOWER

- (a) Install the position indicator housing lower with the shift lever lock pin and a new shift lever nut No.1.

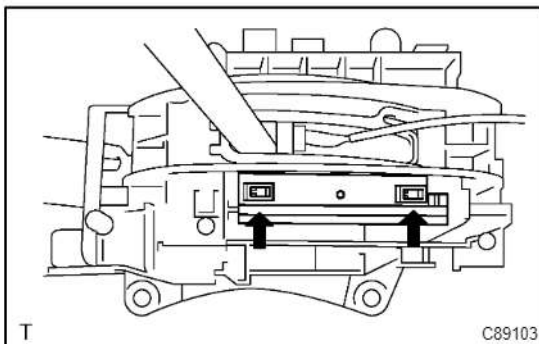
HINT:

Ensure that the claws fit tightly.

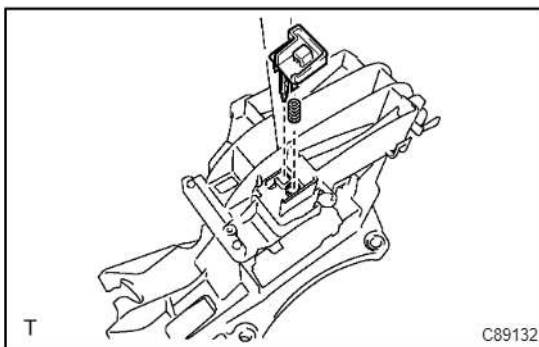


25. INSTALL POSITION INDICATOR LIGHT GUIDE

- (a) Install the position indicator light guide to the position indicator housing lower.



- (b) Install the position indicator lamp shade to the position indicator housing lower.



26. INSTALL SHIFT LOCK RELEASE BUTTON

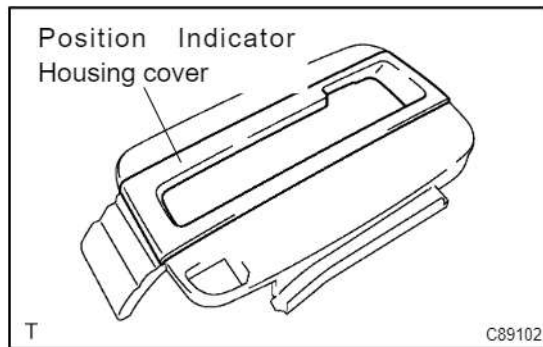
- (a) Apply MP grease to the shift lock release spring and shift lock release button.
- (b) Install the shift lock release button and shift lock release spring to the position indicator housing lower.

HINT:

Ensure that the claws fit tightly.

27. INSTALL POSITION INDICATOR SLIDE COVER

- (a) Install the position indicator slide cover No.2 to the position indicator.
- (b) Install the position indicator slide cover to the floor shift assy.

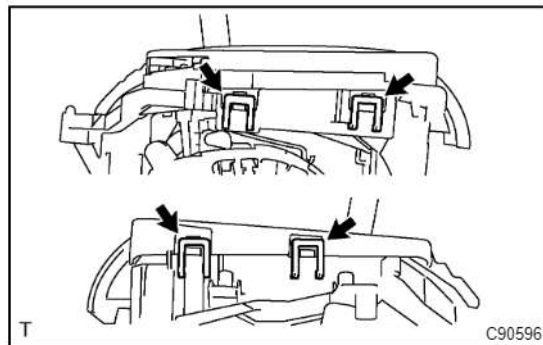


28. INSTALL POSITION INDICATOR HOUSING COVER

- (a) Install the position indicator housing cover to the position indicator housing upper.

HINT:

Ensure that the claws fit tightly.

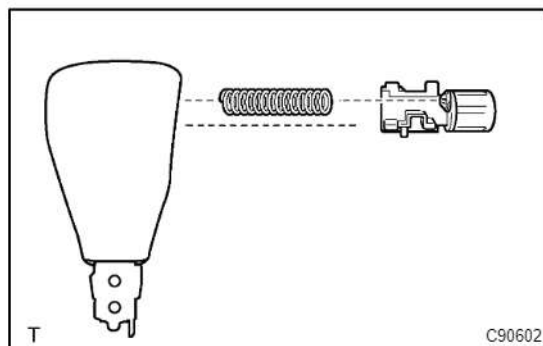


29. INSTALL POSITION INDICATOR HOUSING UPPER

- (a) Install the control position indicator housing upper.

HINT:

Ensure that the claws fit tightly.



30. INSTALL SHIFT LEVER KNOB BUTTON

- (a) Apply MP grease to the shift lever knob button and compression spring and install them to the shift lever knob.

HINT:

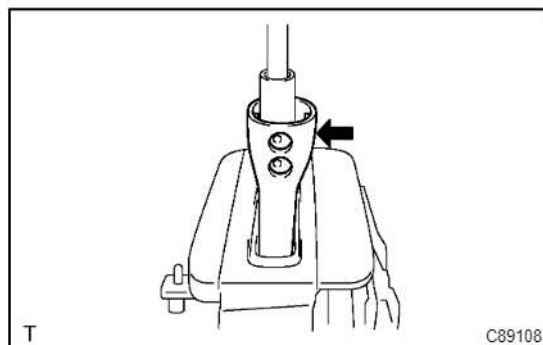
Ensure that the claws fit tightly.

31. INSTALL TRANSMISSION CONTROL SWITCH

- (a) Install the transmission control switch to the shift lever knob.

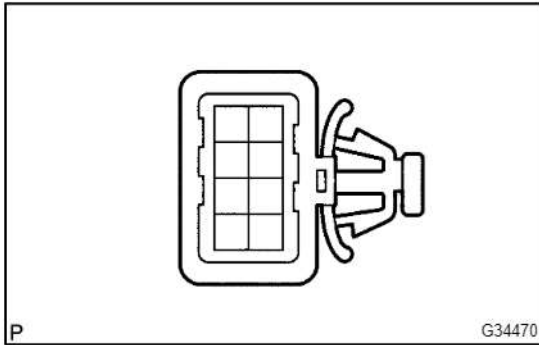
HINT:

Ensure that the claws fit tightly.



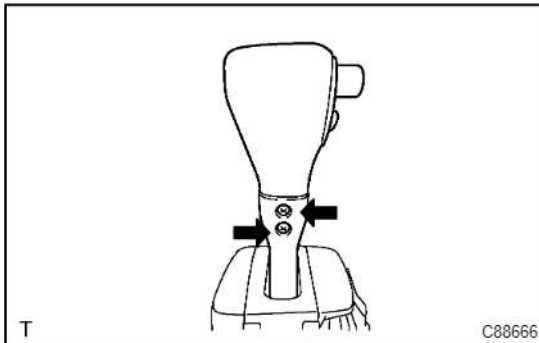
32. INSTALL POSITION INDICATOR SLIDE COVER

- (a) Install the position indicator slide cover to the floor shift assy.

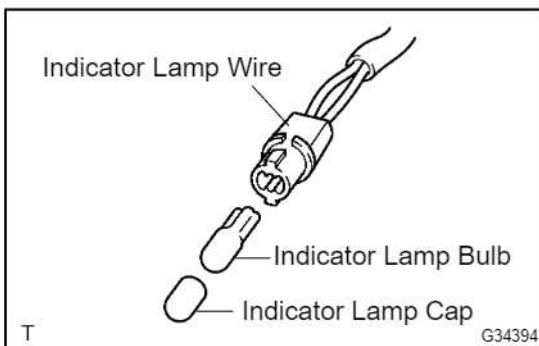


33. INSTALL SHIFT LEVER KNOB SUB-ASSY

- (a) Install the 2 terminals into the indicator lamp wire connector.

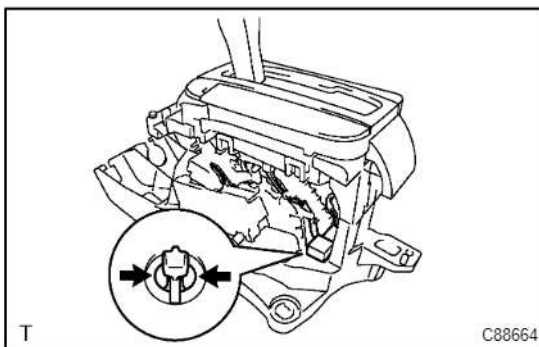


- (b) Install the shift lever knob to the shift lever with 2 screws.

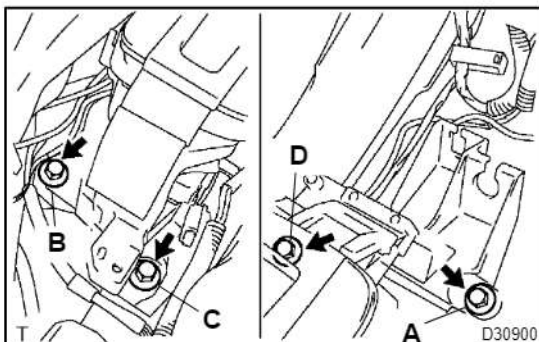


34. INSTALL INDICATOR LAMP WIRE SUB-ASSY

- (a) Install the indicator lamp bulb and indicator lamp cap to the indicator lamp wire.
- (b) Install the indicator lamp wire to the position indicator housing lower.



- (c) Install the indicator lamp wire harness and connector as shown in the illustration.



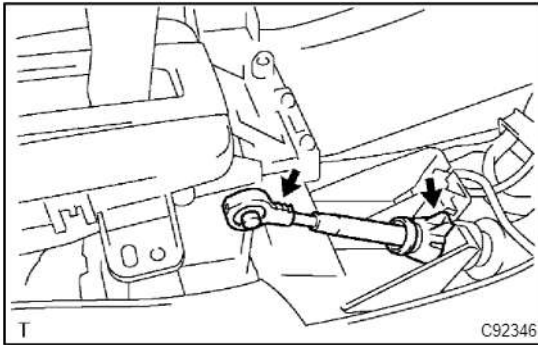
35. INSTALL FLOOR SHIFT ASSY

- (a) Install the floor shift assy to the vehicle with the 4 bolts.
Torque: 12 N·m (122 kgf·cm, 9 ft·lbf)

HINT:

Tighten them in the order, A, B, C and D.

- (b) Connect the transmission control switch connector.
- (c) Connect the shift lock control computer connector.

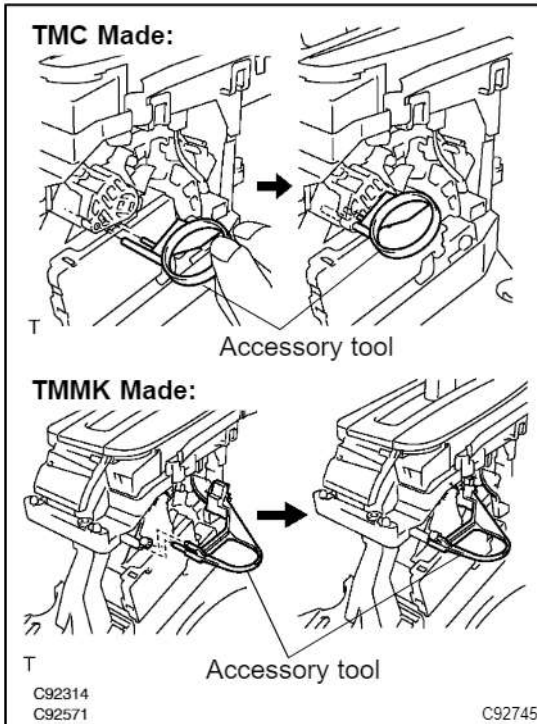


36. CONNECT TRANSMISSION CONTROL CABLE ASSY

- (a) Connect the floor shift cable to the floor shift assy.

HINT:

- Install it with the uneven surface facing to up.
- Ensure that the claws fit tightly.



37. CONNECT FLOOR SHIFT PARKING LOCK CABLE ASSY

- (a) Set the accessory tool.

- (1) Shift the shift lever to P position and turn the ignition switch to the LOCK position. (TMC made)
- (2) Shift the shift lever to N position and turn the ignition switch to the ACC. position (TMMK made)
- (3) Set the accessory tool to the shift lock control unit assy as shown in the illustration.

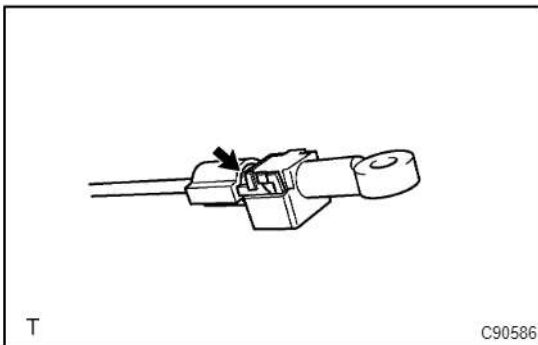
Accessory tool parts No.:

TMC Made: 33693-33010

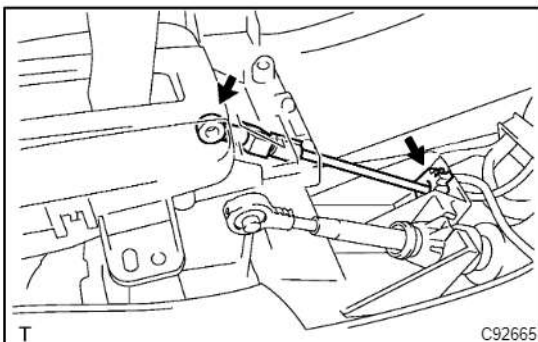
TMMK Made: 33693-06010

HINT:

Only in the case of reusing the shift lock control unit assy.



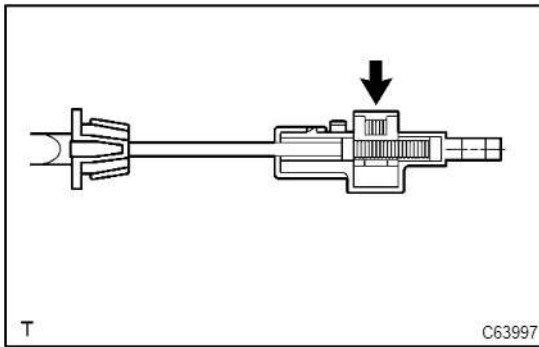
- (b) Using a screwdriver, unlock the claw of the lock key of automatic adjustment part.



- (c) Insert the lever pin into the hole in the floor shift parking lock cable.

HINT:

Ensure that the claws fit tightly.



(d) Lock the lock key.

HINT:

- At this time, the shift lever should be in P position and the ignition key should be set to LOCK position. (TMC Made)
- At this time, the shift lever should be in N position and the ignition key should be set to ACC position. (TMMK Made)

(e) Remove the accessory tool.

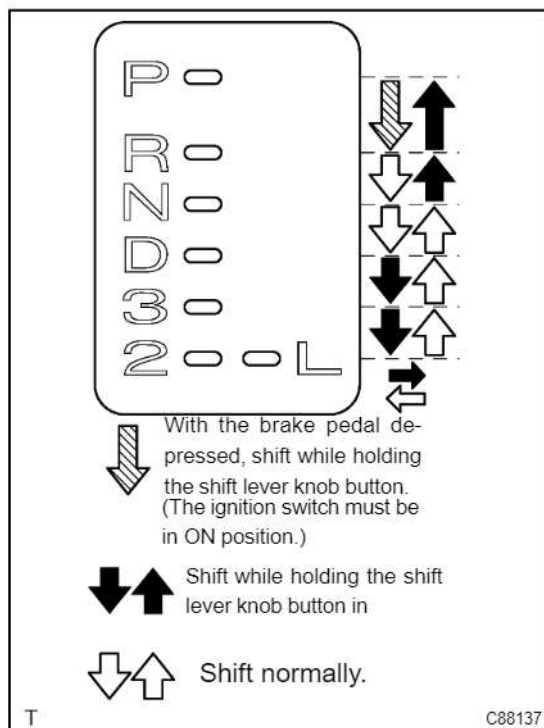
Accessory tool parts NO.:

TMC Made: 33693-33010

TMMK Made: 33693-06010

38. CHECK KEY INTERLOCK OPERATION (SEE PAGE 40-51)
39. CHECK SHIFT LOCK OPERATION (SEE PAGE 40-51)
40. CHECK SHIFT LOCK RELEASE BUTTON OPERATION (SEE PAGE 40-51)
41. INSTALL CONSOLE BOX DUCT NO.1 (SEE PAGE 71-16)
42. INSTALL AIR DUCT REAR NO.2 (SEE PAGE 71-16)
43. INSTALL AIR DUCT REAR NO.1 (SEE PAGE 71-16)
44. INSTALL CONSOLE BOX FRONT (SEE PAGE 71-16)
45. INSTALL FRONT ASH RECEPTACLE ASSY (W/ ASHTRAY) (SEE PAGE 71-16)
46. INSTALL RR CONSOLE BOX (SEE PAGE 71-16)
47. INSTALL CONSOLE BOX CARPET (SEE PAGE 71-16)

ADJUSTMENT



1. INSPECT SHIFT LEVER POSITION

- (a) When shifting the shift lever to each position, make sure that it moves smoothly, and the position indicator displays correctly.

The positions which can be shifted without pressing the shift lever knob button

R → N → D, L → 2 → 3 → D → N

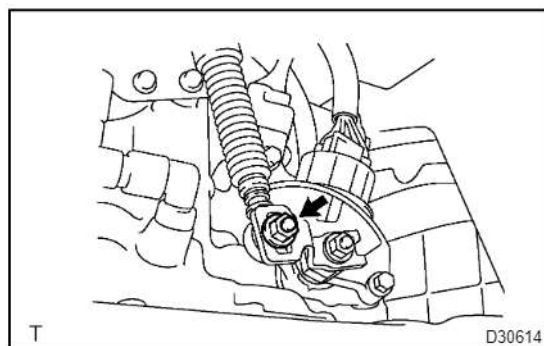
The positions which can be operated only while pressing the shift lever knob button

D → 3 → 2 → L, N → R → P

The positions which can be operated only while pressing the shift lever knob button, ignition switch ON and brake pedal depressed

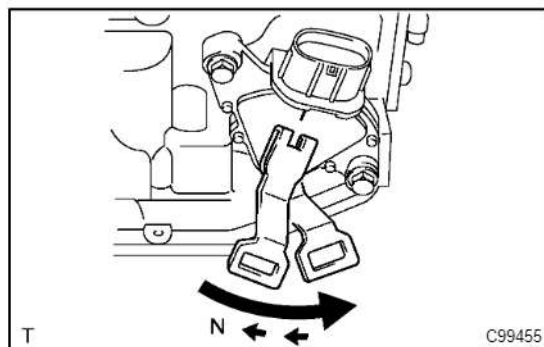
P → R

- (b) Start the engine and make sure that the vehicle moves forward when shifting the lever from N to D position, and moves rearward when shifting to R position.



2. ADJUST SHIFT LEVER POSITION

- (a) Loosen the nut on the control shaft lever.



- (b) Push the control shaft fully downward.
 (c) Return the control shaft lever 2 notches to N position.
 (d) Set the shift lever to N position.
 (e) While holding the shift lever lightly toward the R position side, tighten the shift lever nut.

Torque: 14.7 N·m (150 kgf·cm, 10 ft·lbf)

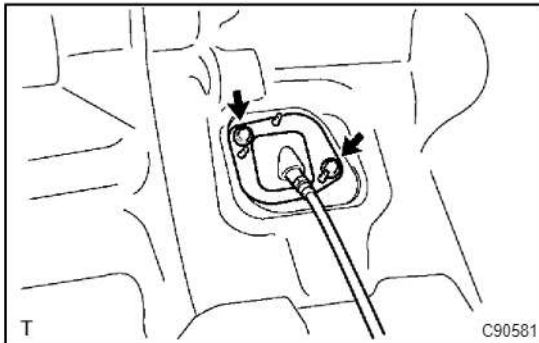
- (f) Start the engine and make sure that the vehicle moves forward when shifting the lever from N to D position and moves rearward when shifting it to R position.

TRANSMISSION CONTROL CABLE ASSY (ATM)

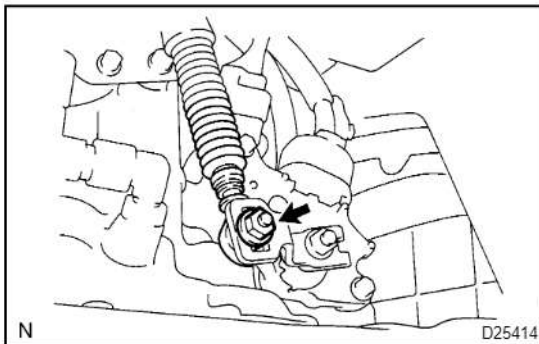
401EL-01

REPLACEMENT

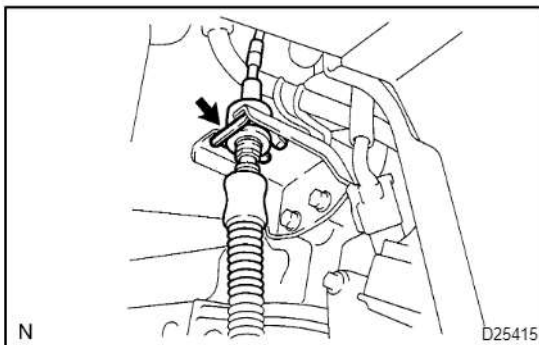
1. DISCONNECT BATTERY NEGATIVE TERMINAL
2. REMOVE INSTRUMENT PANEL SAFETY PAD SUB-ASSY (SEE PAGE 71-16)
3. REMOVE AIR CONDITIONING RADIATOR ASSY (SEE PAGE 55-34)
4. REMOVE AIR BAG ECU ASSY (SEE PAGE 60-59)
5. REMOVE AIR CLEANER ASSY (SEE PAGE 14-29) or (SEE PAGE 14-164)
6. REMOVE INTAKE AIR CONNECTOR SUB-ASSY (SEE PAGE 14-29) or (SEE PAGE 14-164)
7. REMOVE EXHAUST PIPE ASSY (SEE PAGE 15-3)



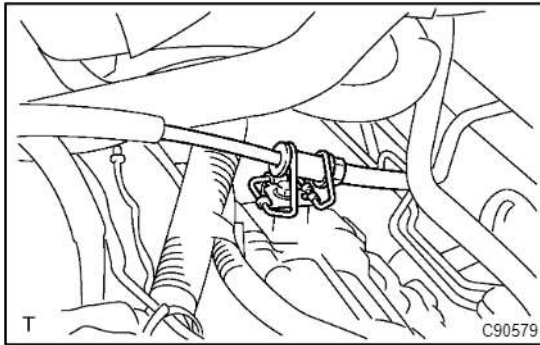
8. REMOVE TRANSMISSION CONTROL CABLE ASSY
 - (a) Remove the 2 bolts and disconnect shift cable grommet retainer No.2.



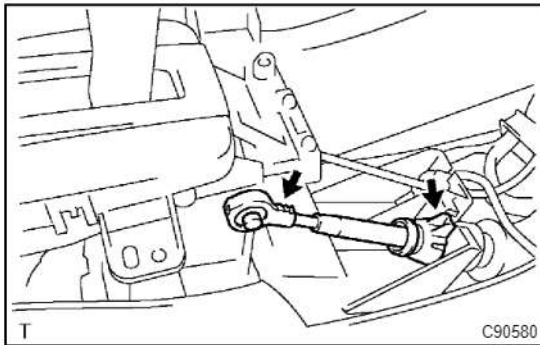
- (b) Remove the nut from the control shaft lever.
 - (c) Disconnect the control cable from the control shaft lever.



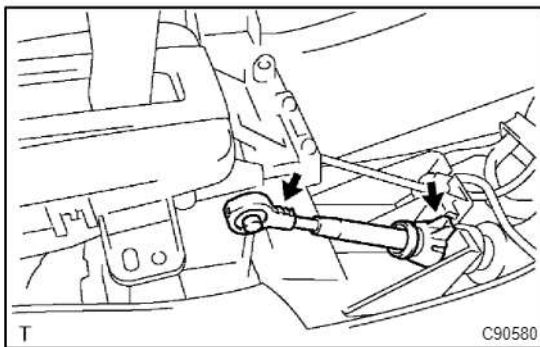
- (d) Remove the clip and disconnect the control cable from the control cable bracket.



- (e) Disconnect the control cable from the control cable clamp.



- (f) Disconnect the floor shift cable from the transmission floor shift assy.
 (g) Pull out the control cable from the body.
 (h) Remove the shift cable grommet retainer No. 2.

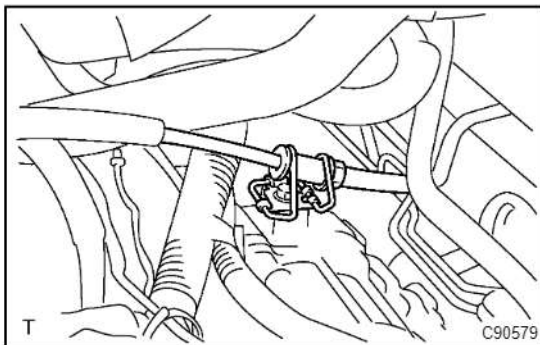


9. INSTALL TRANSMISSION CONTROL CABLE ASSY

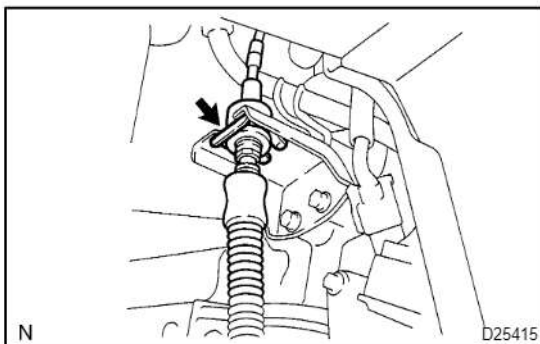
- (a) Put in the control cable to the body.
 (b) Install the shift cable grommet retainer No.2 to the floor shift cable.
 (c) Install the floor shift cable as shown in the illustration.

HINT:

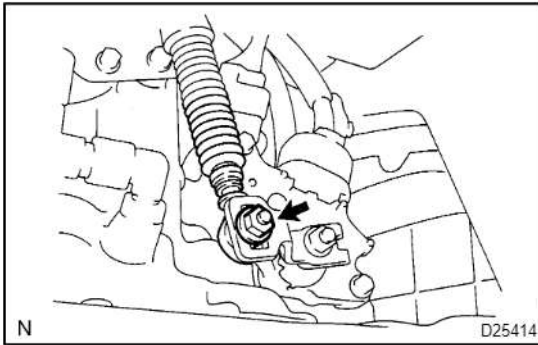
- Install it with the uneven surface facing to up.
- Fit the claws securely.



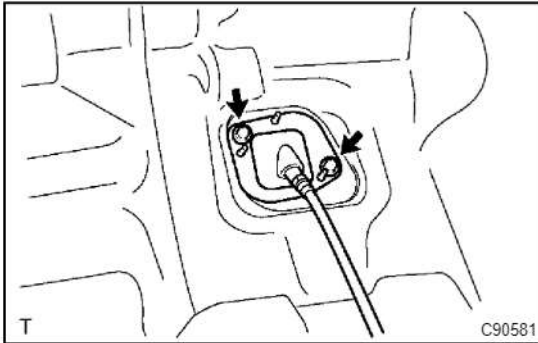
- (d) Connect the control cable to the control cable clamp.



- (e) Install the control cable and a new clip to the bracket.



- (f) Temporarily install the control cable to the control shaft lever with nuts.



- (g) Install the shift cable grommet retainer No.2 with the 2 bolts.

Torque: 4.9 N·m (50 kgf·cm, 43 in.·lbf)

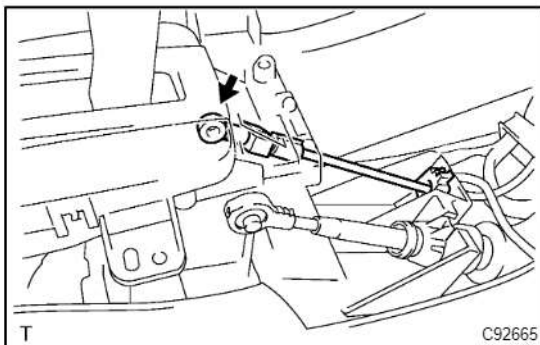
10. INSTALL EXHAUST PIPE ASSY (SEE PAGE 15-3)
11. INSTALL AIR BAG ECU ASSY (SEE PAGE 60-59)
12. INSTALL AIR CONDITIONING RADIATOR ASSY (SEE PAGE 14-29) or (SEE PAGE 14-164)
13. ADJUST SHIFT LEVER POSITION (SEE PAGE 40-64)
14. INSPECT SHIFT LEVER POSITION (SEE PAGE 40-64)
15. INSTALL INTAKE AIR CONNECTOR SUB-ASSY (SEE PAGE 14-29) or (SEE PAGE 14-164)
16. INSTALL AIR CLEANER ASSY (SEE PAGE 14-29) or (SEE PAGE 14-164)
17. INSTALL BATTERY NEGATIVE TERMINAL

FLOOR SHIFT PARKING LOCK CABLE ASSY (ATM)

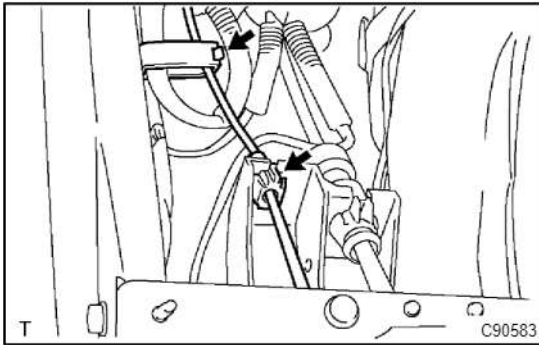
40113-03

REPLACEMENT

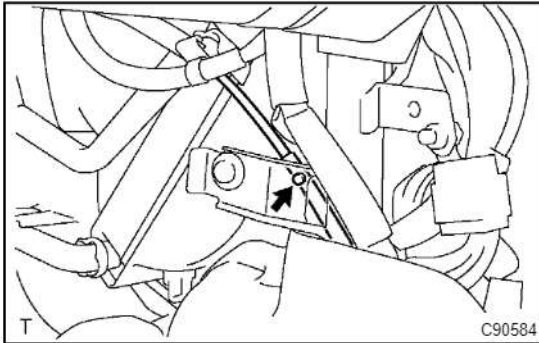
1. PRECAUTION (SEE PAGE 60-1)
2. DISCONNECT BATTERY NEGATIVE TERMINAL
3. REMOVE STEERING WHEEL COVER LOWER NO.2 (SEE PAGE 50-9) or (SEE PAGE 50-21)
4. REMOVE STEERING WHEEL COVER LOWER NO.3 (W/O STEERING PAD SWITCH 4 SPOKE STEERING WHEEL) (SEE PAGE 50-9) or (SEE PAGE 50-21)
5. REMOVE CONNECTOR COVER (W/ STEERING PAD SWITCH 4 SPOKE STEERING WHEEL) (SEE PAGE 50-9) or (SEE PAGE 50-21)
6. REMOVE STEERING WHEEL COVER LOWER NO.3 (3 SPOKE STEERING WHEEL ASSY) (SEE PAGE 50-9) or (SEE PAGE 50-21)
7. PLACE FRONT WHEELS FACING STRAIGHT AHEAD (SEE PAGE 50-9) or (SEE PAGE 50-21)
8. REMOVE HORN BUTTON ASSY (SEE PAGE 60-25)
9. REMOVE STEERING WHEEL ASSY (SEE PAGE 50-9) or (SEE PAGE 50-21)
SST 09950-50013 (09951-05010, 09952-05010, 09953-05020, 09954-05021)
10. REMOVE INSTRUMENT CLUSTER FINISH PANEL (SEE PAGE 71-16)
11. REMOVE STEERING COLUMN COVER UPR (SEE PAGE 50-9) or (SEE PAGE 50-21)
12. REMOVE FRONT DOOR SCUFF PLATE LH (SEE PAGE 71-16)
13. REMOVE COWL SIDE TRIM SUB-ASSY LH (SEE PAGE 71-16)
14. REMOVE INSTRUMENT PANEL COIN BOX SUB-ASSY (SEE PAGE 71-16)
15. REMOVE INSTRUMENT PANEL FINISH LOWER PANEL LH (SEE PAGE 71-16)
16. REMOVE INSTRUMENT PNL INSERT SUB-ASSY LWR LH (SEE PAGE 71-16)
17. REMOVE CONSOLE BOX CARPET (SEE PAGE 71-16)
18. REMOVE RR CONSOLE BOX (SEE PAGE 71-16)
19. REMOVE FRONT ASH RECEPTACLE ASSY (W/ ASHTRAY) (SEE PAGE 71-16)
20. REMOVE CONSOLE BOX FRONT (SEE PAGE 71-16)
21. REMOVE AIR DUCT REAR NO.2 (SEE PAGE 71-16)
22. REMOVE AIR DUCT REAR NO.1 (SEE PAGE 71-16)
23. REMOVE CONSOLE BOX DUCT NO.1 (SEE PAGE 71-16)



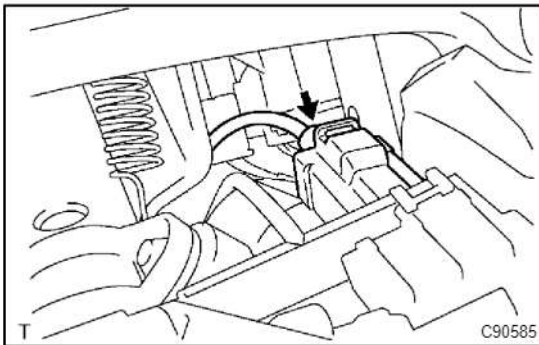
24. REMOVE FLOOR SHIFT PARKING LOCK CABLE ASSY
 - (a) Disconnect the parking lock cable end from the lever pin of the floor shift assembly.



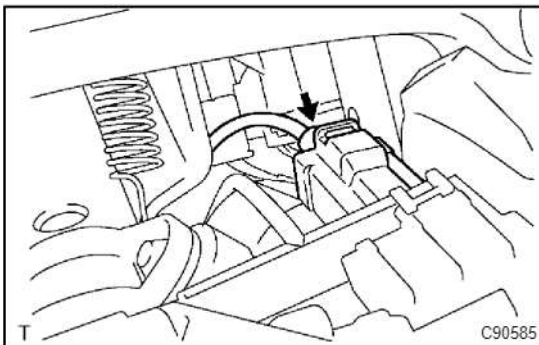
- (b) Using a screwdriver, disconnect the parking lock cable from the floor shift assembly and clamp.



- (c) Disconnect the cable clamp.
(d) Turn the ignition switch to ACC or ON position.

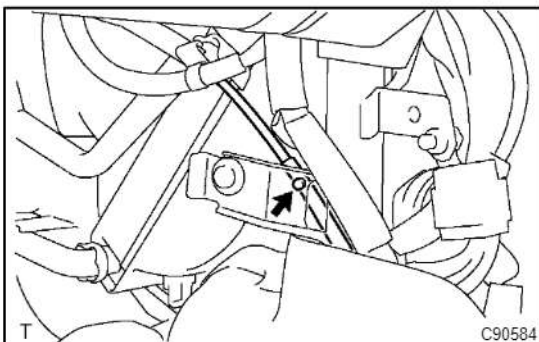


- (e) Using a screwdriver, remove the cable from the upper bracket.

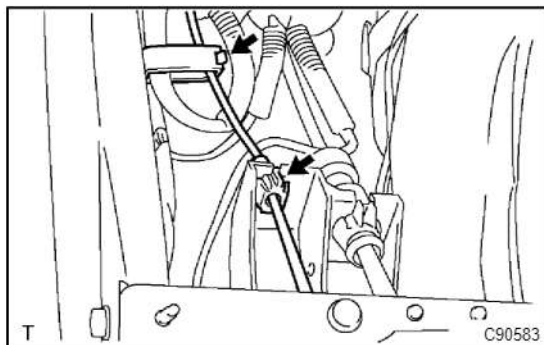


25. INSTALL FLOOR SHIFT PARKING LOCK CABLE ASSY

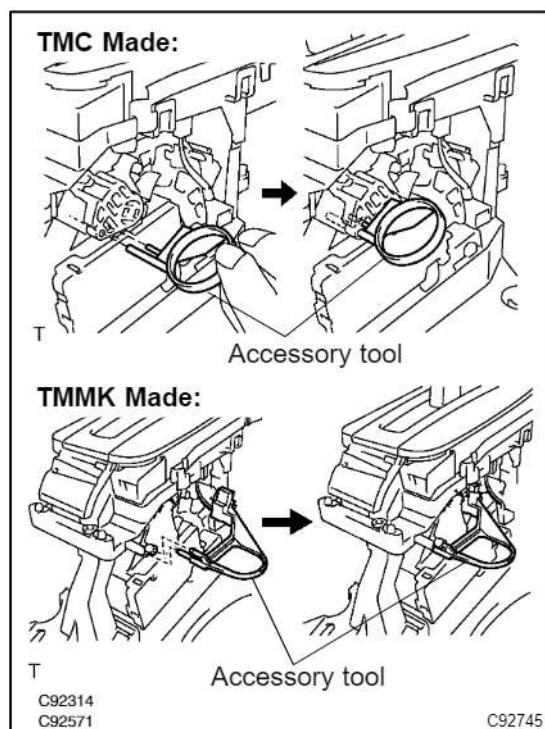
- (a) Turn the ignition switch to ACC or ON.
(b) Connect the cable to the upper bracket.



- (c) Connect the cable clamp.



- (d) Insert the slide cap into the through hole and install.

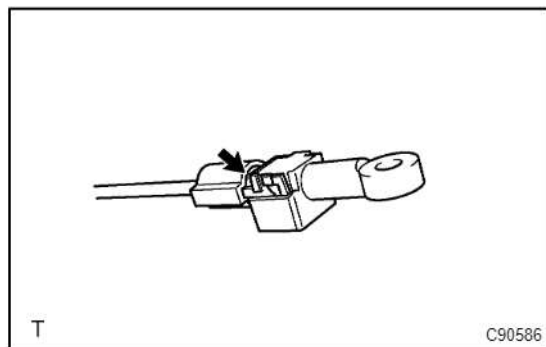


- (e) Set the accessory tool.
- (1) Shift the shift lever to P position and turn the ignition switch to LOCK position. (TMC made)
 - (2) Shift the shift lever to N position and turn the ignition switch to ACC position. (TMMK made)
 - (3) Set the accessory tool to the shift lock control unit Assy.

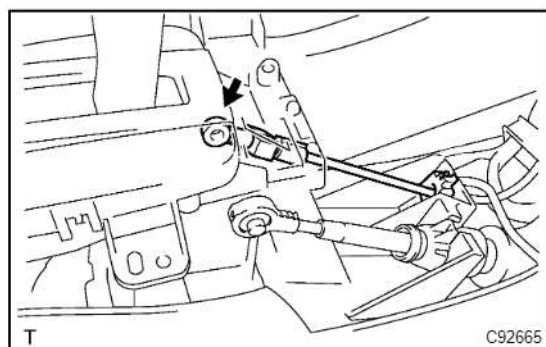
Accessory tool parts No.:

TMC Made: 33693-33010

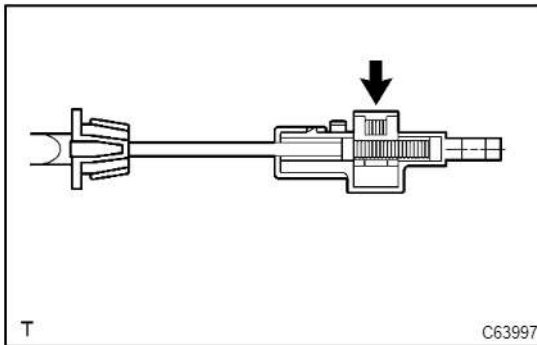
TMMK Made: 33693-06010



- (f) Using a screwdriver, unlock the claw of the lock key of automatic adjustment part.



- (g) Insert the lever pin into the hole in the floor shift parking lock cable.



(h) Lock the lock key.

HINT:

- At this time, the shift lever should be in P position and the ignition key should be set to LOCK position. (TMC Made)
- At this time, the shift lever should be in N position and the ignition key should be set to ACC position. (TMMK Made)

(i) Remove the accessory tool.

Accessory tool parts No.:

TMC Made: 33693-33010

TMMK Made: 33693-06010

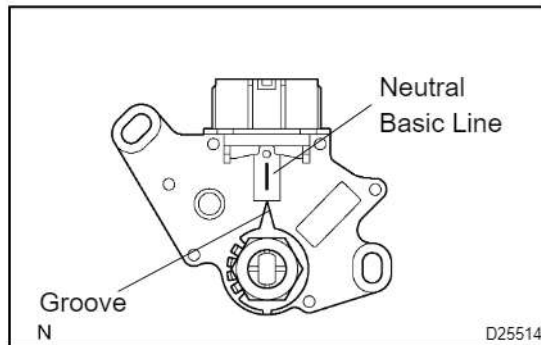
26. CHECK KEY INTERLOCK OPERATION (SEE PAGE 71-16)
27. INSTALL CONSOLE BOX DUCT NO.1 (SEE PAGE 71-16)
28. INSTALL AIR DUCT REAR NO.1 (SEE PAGE 71-16)
29. INSTALL AIR DUCT REAR NO.2 (SEE PAGE 71-16)
30. INSTALL CONSOLE BOX FRONT (SEE PAGE 71-16)
31. INSTALL FRONT ASH RECEPTACLE ASSY (W/ ASHTRAY) (SEE PAGE 71-16)
32. INSTALL RR CONSOLE BOX (SEE PAGE 71-16)
33. INSTALL CONSOLE BOX CARPET (SEE PAGE 71-16)
34. INSTALL INSTRUMENT PNL INSERT SUB-ASSY LWR LH (SEE PAGE 71-16)
35. INSTALL INSTRUMENT PANEL FINISH LOWER PANEL LH (SEE PAGE 71-16)
36. INSTALL INSTRUMENT PANEL COIN BOX SUB-ASSY (SEE PAGE 71-16)
37. INSTALL COWL SIDE TRIM SUB-ASSY LH (SEE PAGE 71-16)
38. INSTALL FRONT DOOR SCUFF PLATE LH (SEE PAGE 71-16)
39. INSTALL STEERING COLUMN COVER UPR (SEE PAGE 50-9) or (SEE PAGE 50-21)
40. INSTALL INSTRUMENT CLUSTER FINISH PANEL
41. INSTALL STEERING WHEEL ASSY (SEE PAGE 50-9) or (SEE PAGE 50-21)
42. INSPECT STEERING WHEEL CENTER POINT (SEE PAGE 50-9) or (SEE PAGE 50-21)
43. INSTALL HORN BUTTON ASSY (SEE PAGE 60-25)
44. INSTALL STEERING WHEEL COVER LOWER NO.2 (SEE PAGE 50-9) or (SEE PAGE 50-21)
45. INSTALL STEERING WHEEL COVER LOWER NO.3 (W/O STEERING PAD SWITCH 4 SPOKE STEERING WHEEL) (SEE PAGE 50-9) or (SEE PAGE 50-21)
46. INSTALL CONNECTOR COVER (W/ STEERING PAD SWITCH 4 SPOKE STEERING WHEEL) (SEE PAGE 50-9) or (SEE PAGE 50-21)
47. INSTALL STEERING WHEEL COVER LOWER NO.3 (3 SPOKE STEERING WHEEL ASSY) (SEE PAGE 50-9) or (SEE PAGE 50-21)
48. CONNECT BATTERY NEGATIVE TERMINAL
49. INSPECT SRS WARNING LIGHT (SEE PAGE 05-1467)

ADJUSTMENT

1. INSPECT PARK/NEUTRAL POSITION SWITCH ASSY

- Apply the parking brake and turn the ignition switch to ON.
- Depress the brake pedal and check that the engine starts only when the shift lever is set in N or P position.
- Check that the back-up light is lit and the reverse warning buzzer sounds only when the shift lever is set in R position.

If a failure is found, check the park/neutral position switch for continuity.

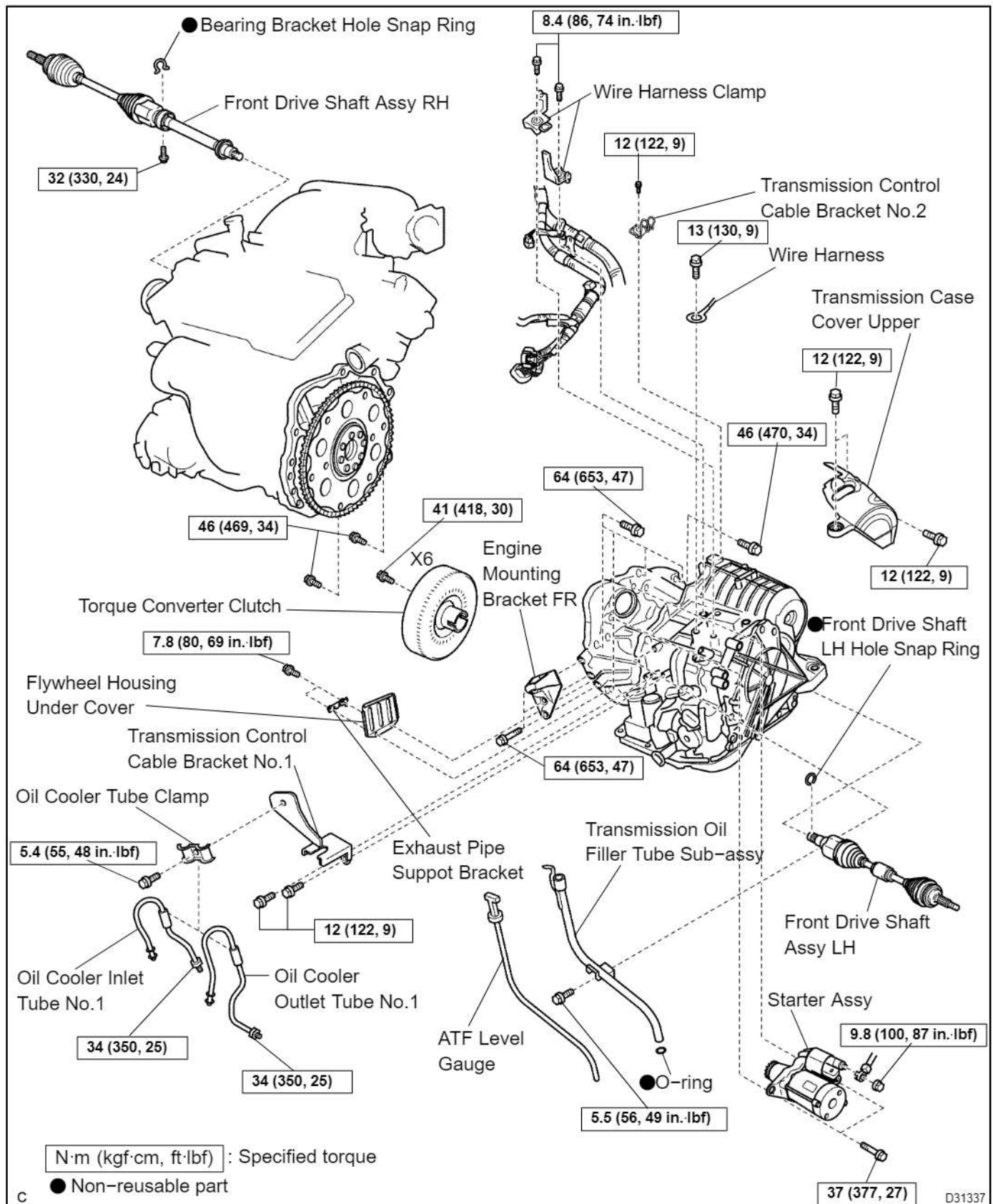


2. ADJUST PARK/NEUTRAL POSITION SWITCH ASSY

- Loosen the 2 bolts of park/neutral position switch and set the shift lever to the N position.
- Align the groove with neutral basic line.
- Hold the switch in position and tighten the 2 bolts.
Torque: 5.4 N·m (55 kgf·cm, 48 in·lbf)
- After adjustment, perform the inspection described in step 1.

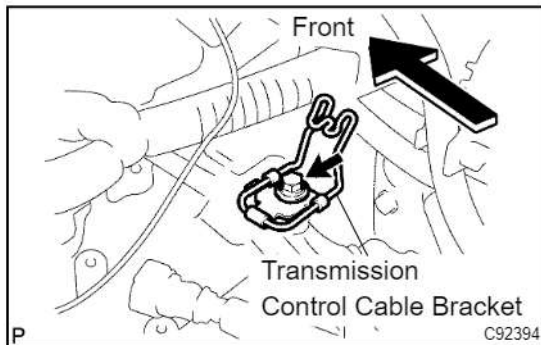
AUTOMATIC TRANSAXLE ASSY (U151E) COMPONENTS

40157-03



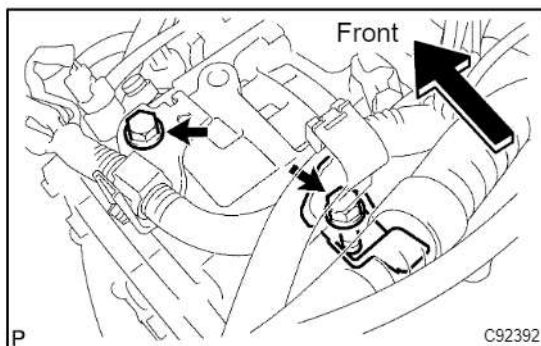
REPLACEMENT

1. REMOVE ENGINE ASSEMBLY WITH TRANSAXLE (SEE PAGE 14-164)
 2. REMOVE FRONT DRIVE SHAFT ASSY RH (SEE PAGE 30-8)
 3. REMOVE FRONT DRIVE SHAFT ASSY LH (SEE PAGE 30-8)
- SST 09520-01010, 09520-24010 (09520-32040)



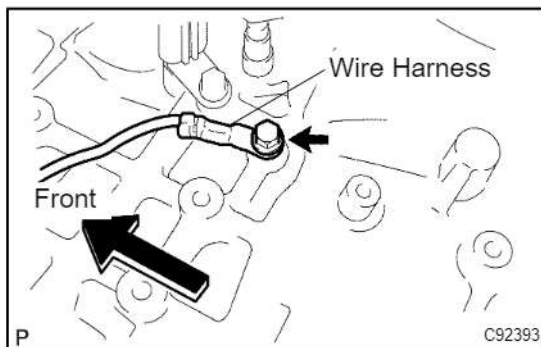
4. REMOVE TRANSMISSION CONTROL CABLE BRACKET NO.2

- (a) Remove the bolt and transmission control cable bracket No.2.



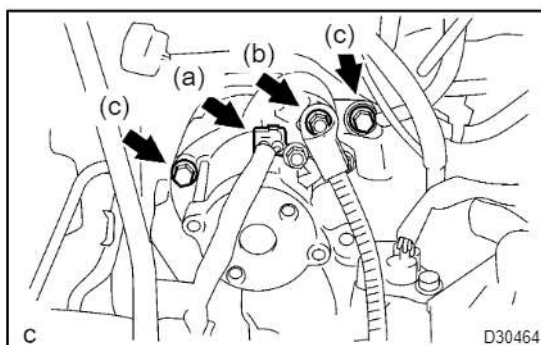
5. REMOVE WIRE HARNESS CLAMP

- (a) Disconnect the wire harnesses from the 2 clamps.
- (b) Remove the 2 bolts and 2 clamps.



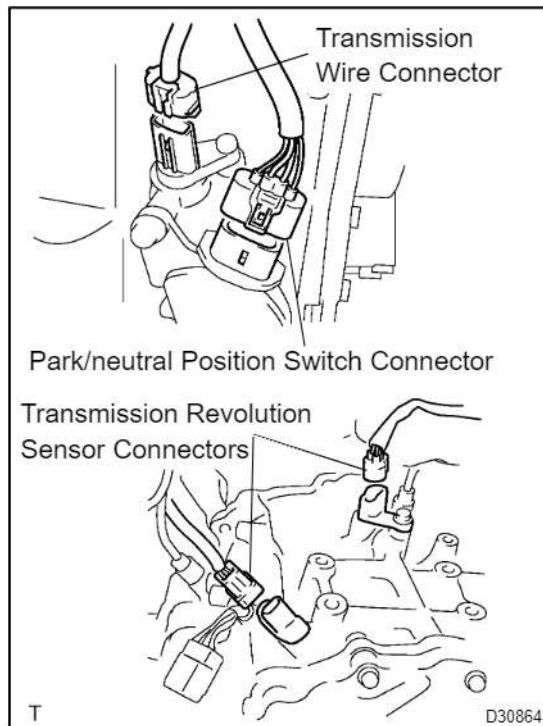
6. DISCONNECT WIRE HARNESS

- (a) Remove the bolt and disconnect the wire harness.



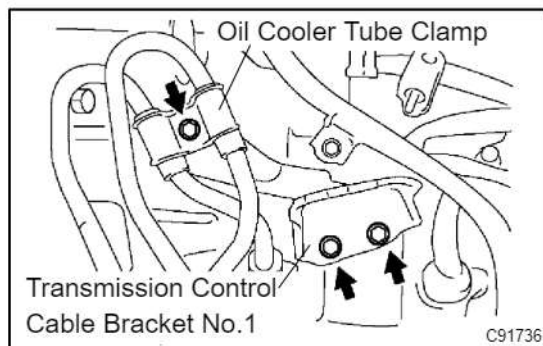
7. REMOVE STARTER ASSY

- (a) Disconnect the connector.
- (b) Remove the nut and disconnect the starter wire.
- (c) Remove the 2 bolts and starter assy.



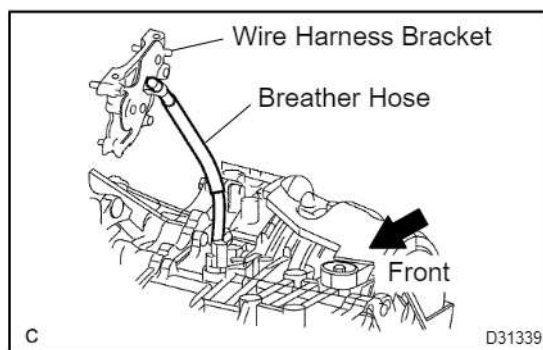
8. DISCONNECT CONNECTOR

- Disconnect the transmission wire connector.
- Disconnect the park/neutral position switch connector.
- Disconnect the 2 transmission revolution sensor connectors.



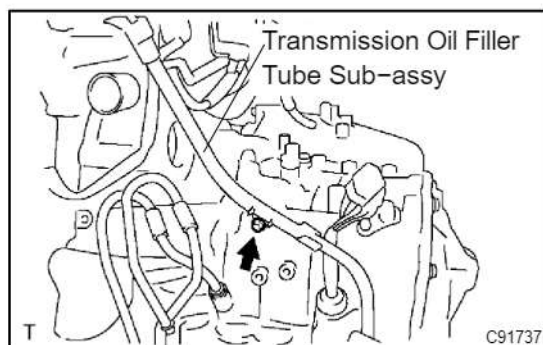
9. REMOVE TRANSMISSION CONTROL CABLE BRACKET NO.1

- Remove the bolt and oil cooler tube clamp.
- Remove the 2 bolts and transmission control cable bracket No.1.

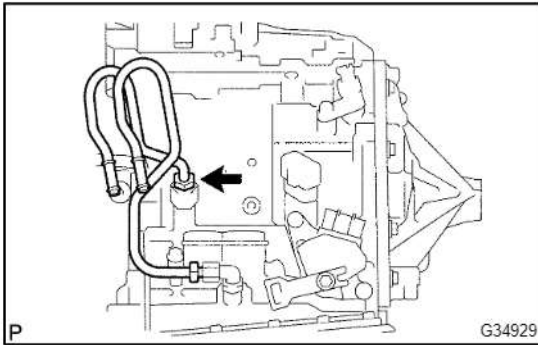


10. REMOVE TRANSMISSION OIL FILLER TUBE SUB-ASSY

- Remove the ATF level gauge.
- Disconnect the breather hose from the wire harness bracket.



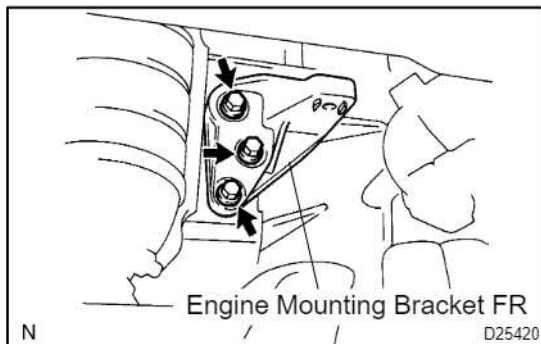
- Remove the bolt and transmission oil filler tube sub-assy.
- Remove the O-ring from the oil filler tube sub-assy.

**11. DISCONNECT OIL COOLER INLET TUBE NO.1**

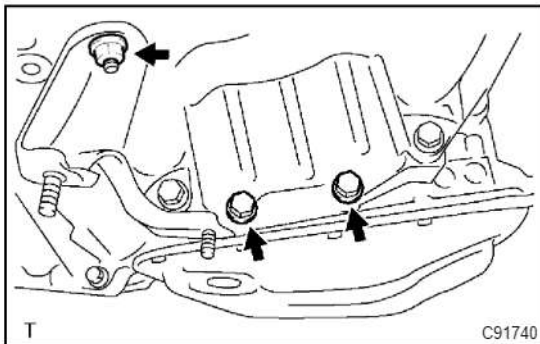
- (a) Disconnect the oil cooler inlet tube No.1.

12. DISCONNECT OIL COOLER OUTLET TUBE NO.1

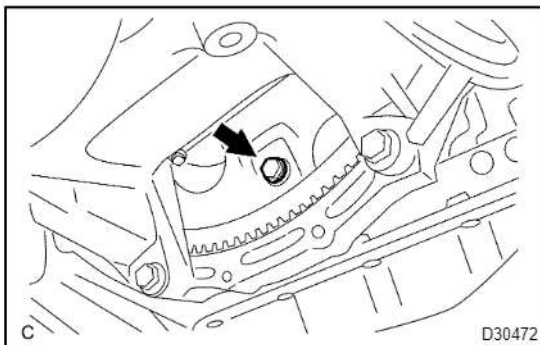
- (a) Disconnect the oil cooler outlet tube No.1.

**13. REMOVE ENGINE MOUNTING BRACKET FR**

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

**14. REMOVE AUTOMATIC TRANSAXLE ASSY**

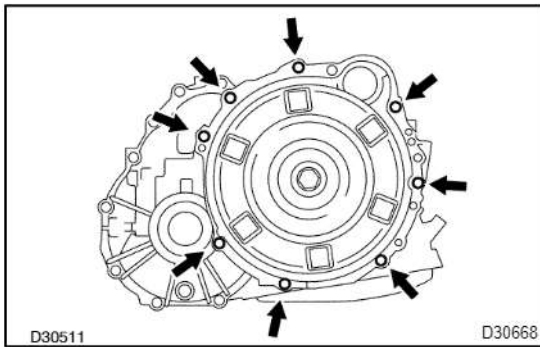
- (a) Remove the 2 bolts and nut.
 (b) Remove the exhaust pipe support bracket and exhaust pipe support bracket No.1 from the automatic transaxle.



- (c) Turn the crankshaft to gain access and remove the 6 bolts while holding the crankshaft pulley bolt with a wrench.

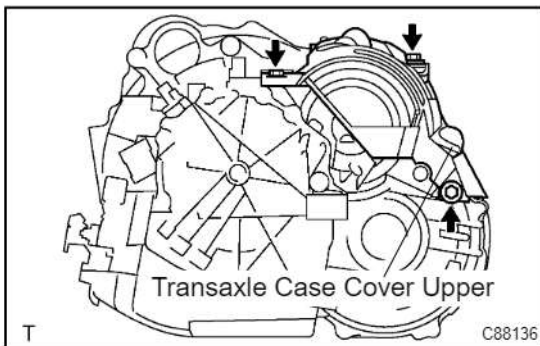
HINT:

There will be one green colored bolt.



- (d) Remove the 8 bolts.
- (e) Separate and remove the automatic transaxle.

15. REMOVE TORQUE CONVERTER CLUTCH ASSY

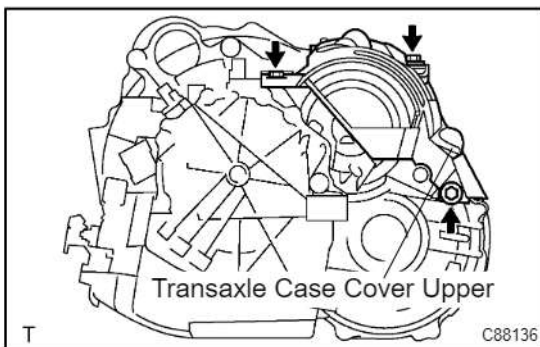


16. REMOVE TRANSAXLE CASE COVER UPPER

- (a) Remove the 3 bolts and transmission case cover upper.

17. INSPECT TORQUE CONVERTER CLUTCH ASSY (SEE PAGE 40-27)

SST 09350-32014 (09351-32010, 09351-32020)

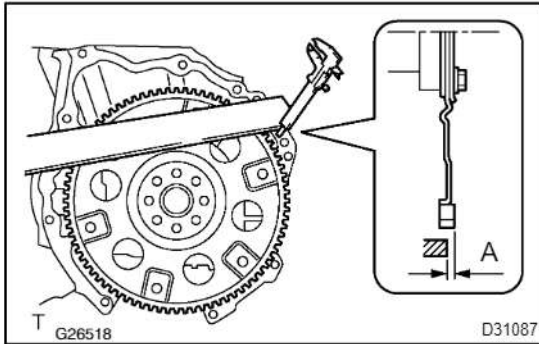


18. INSTALL TRANSAXLE CASE COVER UPPER

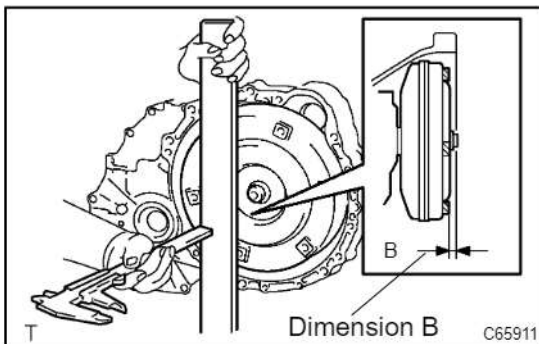
- (a) Install the transmission case cover upper with the 3 bolts.
Torque: 12 N·m (122 kgf·cm, 9 ft·lbf)

19. INSTALL TORQUE CONVERTER CLUTCH ASSY

- (a) Install the torque converter clutch to the automatic transaxle.



- (b) Using vernier calipers and a straight edge, measure the dimension "A" between the transaxle fitting part of the engine and the converter fitting part of the drive plate.

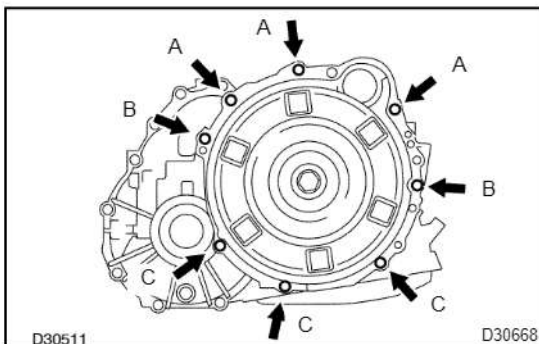


- (c) Using vernier calipers and a straight edge, measure the dimension "B" shown in the illustration and check that "B" is greater than "A" (measured in step (b)).

Standard: A + 1 (0.03937 in.) mm or more

NOTICE:

Remember to minus the thickness of the straight edge.

**20. INSTALL AUTOMATIC TRANSAXLE ASSY**

- (a) Install the automatic transaxle to the engine with the 8 bolts.

Torque:

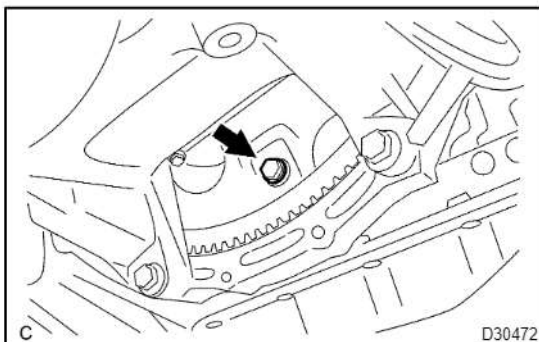
Bolt A: 64 N·m (653 kgf·cm, 47 ft·lbf)

Bolt B: 46 N·m (470 kgf·cm, 34 ft·lbf)

Bolt C: 37 N·m (377 kgf·cm, 27 ft·lbf)

- (b) Apply a few drops of adhesive to 2 threads on the tip of the 6 torque converter clutch mounting bolts.

Adhesive: Part No. 08833-00070, THREE BOND 1324 or equivalent

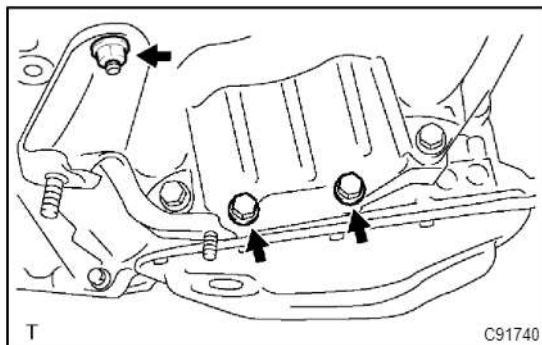


- (c) Install the 6 torque converter clutch mounting bolts.

Torque: 41 N·m (418 kgf·cm, 30 ft·lbf)

NOTICE:

First install the green colored bolt, and then the remaining 5 bolts.

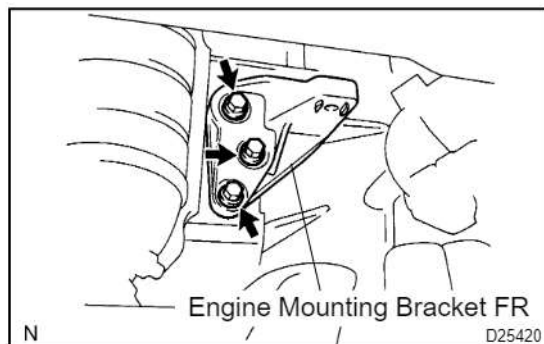


- (d) Install the exhaust pipe support bracket and exhaust pipe support bracket No.1 to the automatic transaxle with the 2 bolts and nut.

Torque:

Bolt : 7.8 N·m (80 kgf·cm, 69 in·lbf)

Nut : 21 N·m (214 kgf·cm, 16 ft·lbf)



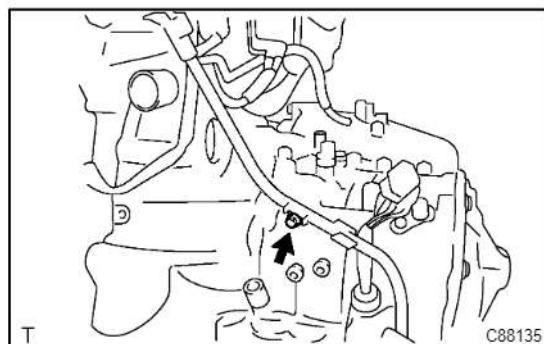
21. INSTALL ENGINE MOUNTING BRACKET FR

- (a) Install the engine mounting bracket FR with the 3 bolts to the automatic transaxle.

Torque: 64 N·m (653 kgf·cm, 47 ft·lbf)

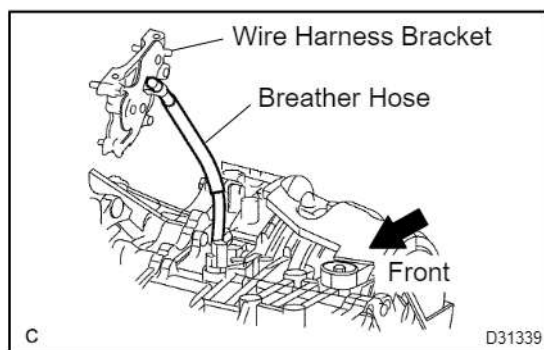
22. INSTALL TRANSMISSION OIL FILLER TUBE SUB-ASSY

- (a) Coat a new O-ring with ATF, and install it to the oil filler tube.



- (b) Install the oil filler tube to the automatic transaxle with the bolt.

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

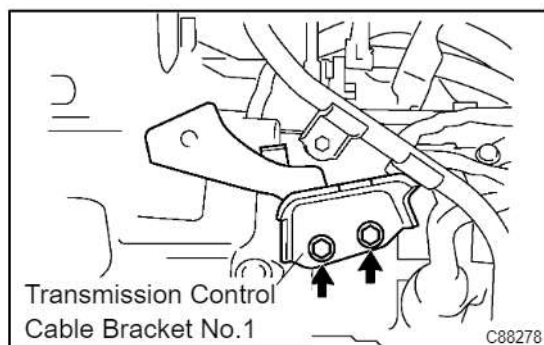


- (c) Connect the breather hose to the wire harness bracket.

NOTICE:

The breather hose should be on the left side of the vehicle.

- (d) Install the ATF level gauge.



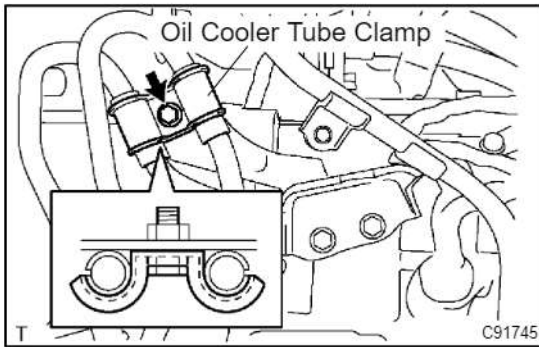
23. INSTALL TRANSMISSION CONTROL CABLE BRACKET NO.1

- (a) Install the control cable bracket No.1 with the 2 bolts.

Torque: 12 N·m (122 kgf·cm, 9 ft·lbf)

24. INSTALL OIL COOLER INLET TUBE NO.1

- (a) Temporarily install the oil cooler outlet tube No.1.
(b) Temporarily install the oil cooler inlet tube No.1.

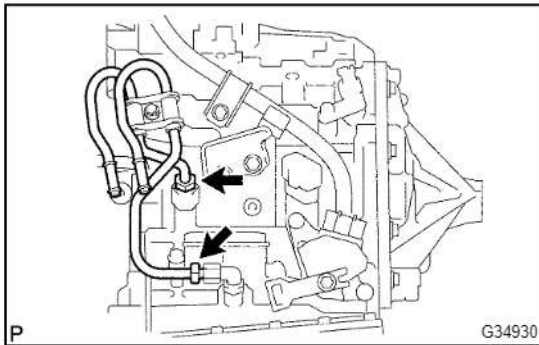


- (c) Install the oil cooler tube clamp and bolt.

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

HINT:

Install them so that the oil cooler tube cushion is positioned as shown in the illustration.

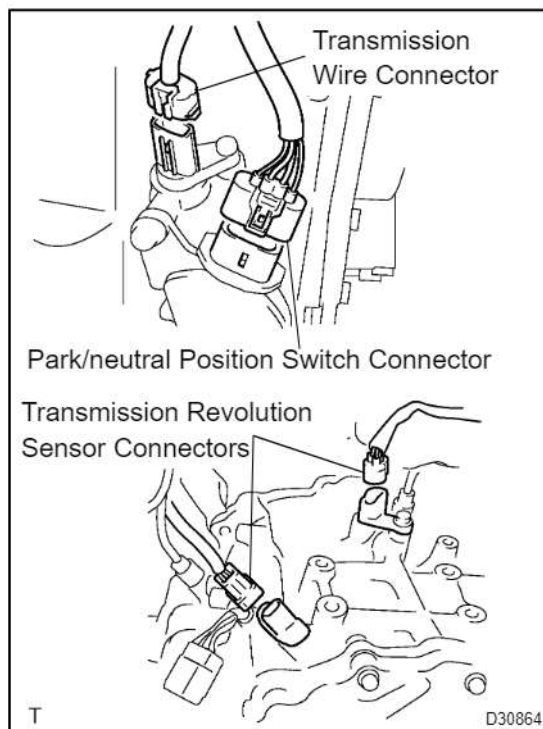


- (d) Install the oil cooler inlet tube No.1.

Torque: 34 N·m (350 kgf·cm, 25 ft·lbf)

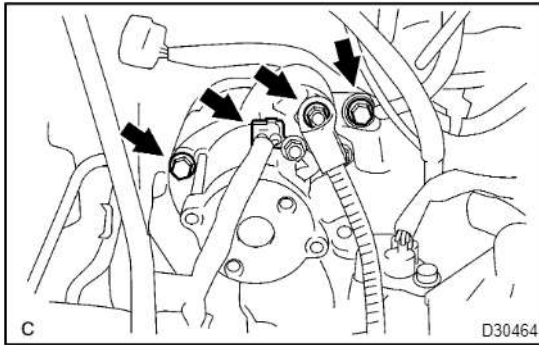
25. INSTALL OIL COOLER OUTLET TUBE NO.1

- (a) Install the oil cooler outlet tube No.1.

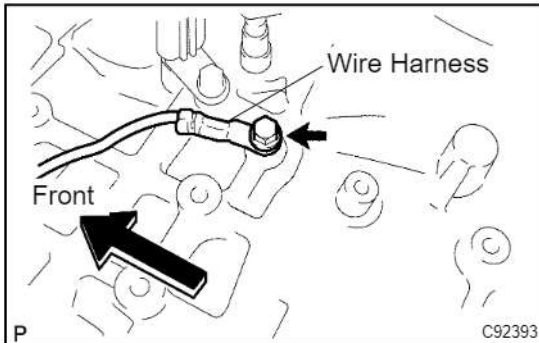


26. CONNECT CONNECTOR

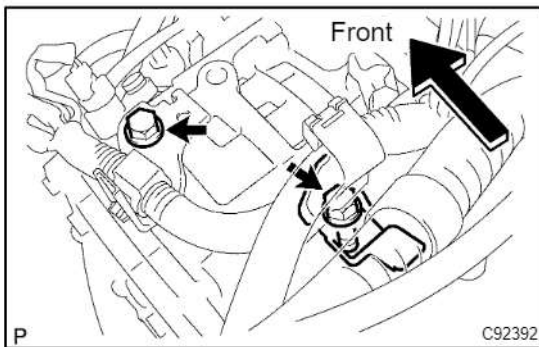
- Connect the transmission wire connector.
- Connect the park/neutral position switch connector.
- Connect the 2 transmission revolution sensor connectors.

**27. INSTALL STARTER ASSY**

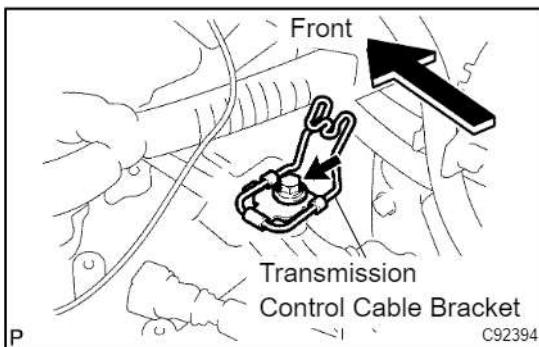
- (a) Install the starter assy with the 2 bolts.
Torque: 37 N·m (377 kgf·cm, 27 ft·lbf)
- (b) Connect the connector.
- (c) Connect the starter wire with the nut.
Torque: 9.8 N·m (100 kgf·cm, 87 in·lbf)

**28. CONNECT WIRE HARNESS**

- (a) Connect the wire harness with the bolt.
Torque: 13 N·m (139 kgf·cm, 9 ft·lbf)

**29. INSTALL WIRE HARNESS CLAMP**

- (a) Install the 2 clamps and 2 bolts.
Torque: 8.4 N·m (86 kgf·cm, 74 in·lbf)
- (b) Connect the wire harnesses to the clamps.

**30. INSTALL TRANSMISSION CONTROL CABLE BRACKET NO.2**

- (a) Install the transmission control cable bracket No.2 with the bolt.
Torque: 12 N·m (122 kgf·cm, 9 ft·lbf)

31. INSTALL FRONT DRIVE SHAFT ASSY LH (SEE PAGE 30-8)

32. INSTALL FRONT DRIVE SHAFT ASSY RH (SEE PAGE 30-8)

33. INSTALL ENGINE ASSEMBLY WITH TRANSAXLE (SEE PAGE 14-164)

34. RESET MEMORY (SEE PAGE 05-1251)