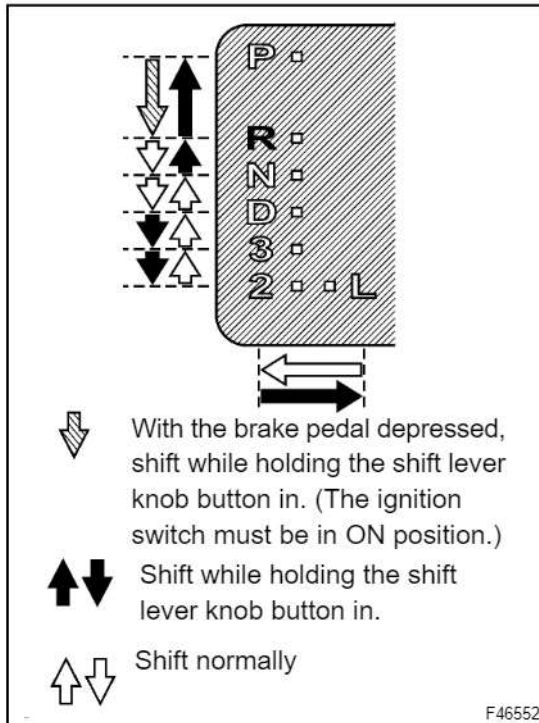


ADJUSTMENT



1. INSPECT SHIFT LEVER POSITION

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

Positions which can be operated without pressing the shift lever knob button

R → N → D, L → 2 → 3 → D → N

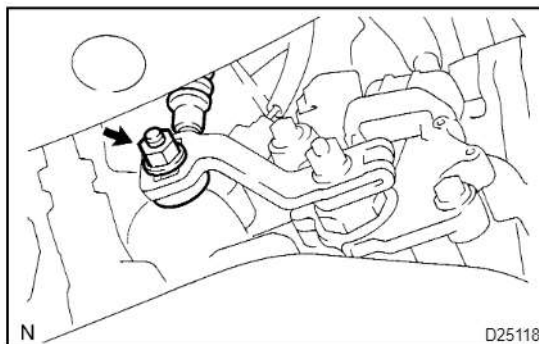
Positions which can be operated only while pressing the shift lever knob button

D → 3 → 2 → L, N → R → P

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

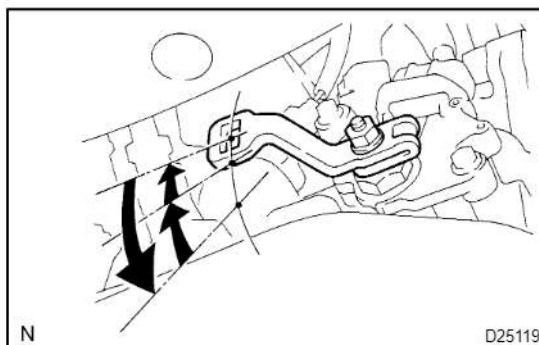
P → R

- (b) When starting the engine, make sure that the vehicle moves forward when shifting from N to D position, and moves backward 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)

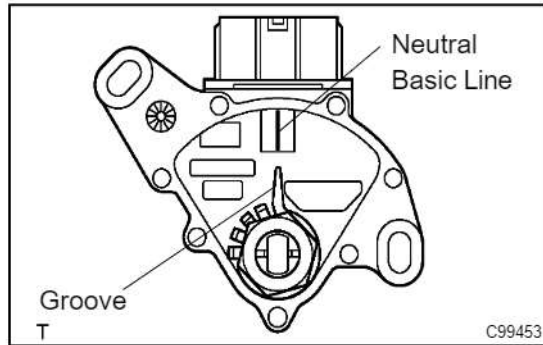
- (f) Start the engine and make sure that the vehicle moves forward when shifting the lever from the N to D position and moves backward when shifting it to the R position.

ADJUSTMENT

1. INSPECT SWITCH ASSY, NEUTRAL START

- Apply the parking brake and turn the ignition switch to the ON position.
- Depress the brake pedal and check that the engine starts only when the shift lever is set in the 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 the R position.

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



2. ADJUST SWITCH ASSY, NEUTRAL START

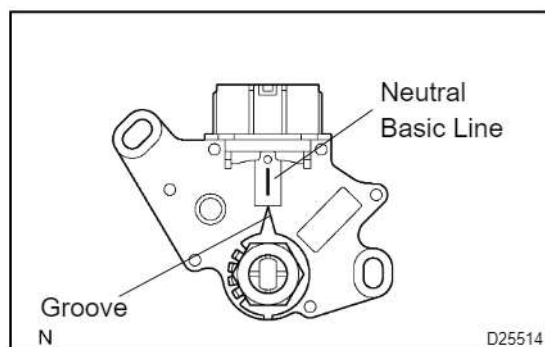
- Loosen the 2 bolts of park/neutral position switch and set the shift lever to the N position.
- Align the groove and neutral basic line.
- Hold the switch in position and tighten the 2 bolts.
Torque: 5.4 N·m (55 kgf·cm, 48 in·lbf)
- After adjustment, perform the inspection described in step 1.

ADJUSTMENT

1. INSPECT PARK/NEUTRAL POSITION SWITCH ASSY

- (a) Apply the parking brake and turn the ignition switch ON.
- (b) Depress the brake pedal and check that the engine starts only when the shift lever is set in N or P position and it does not start in other positions.
- (c) Check that the back-up light is lit and the reverse warning buzzer sounds only when the shift lever is set in R position and these do not function in other positions.

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



2. ADJUST PARK/NEUTRAL POSITION SWITCH ASSY

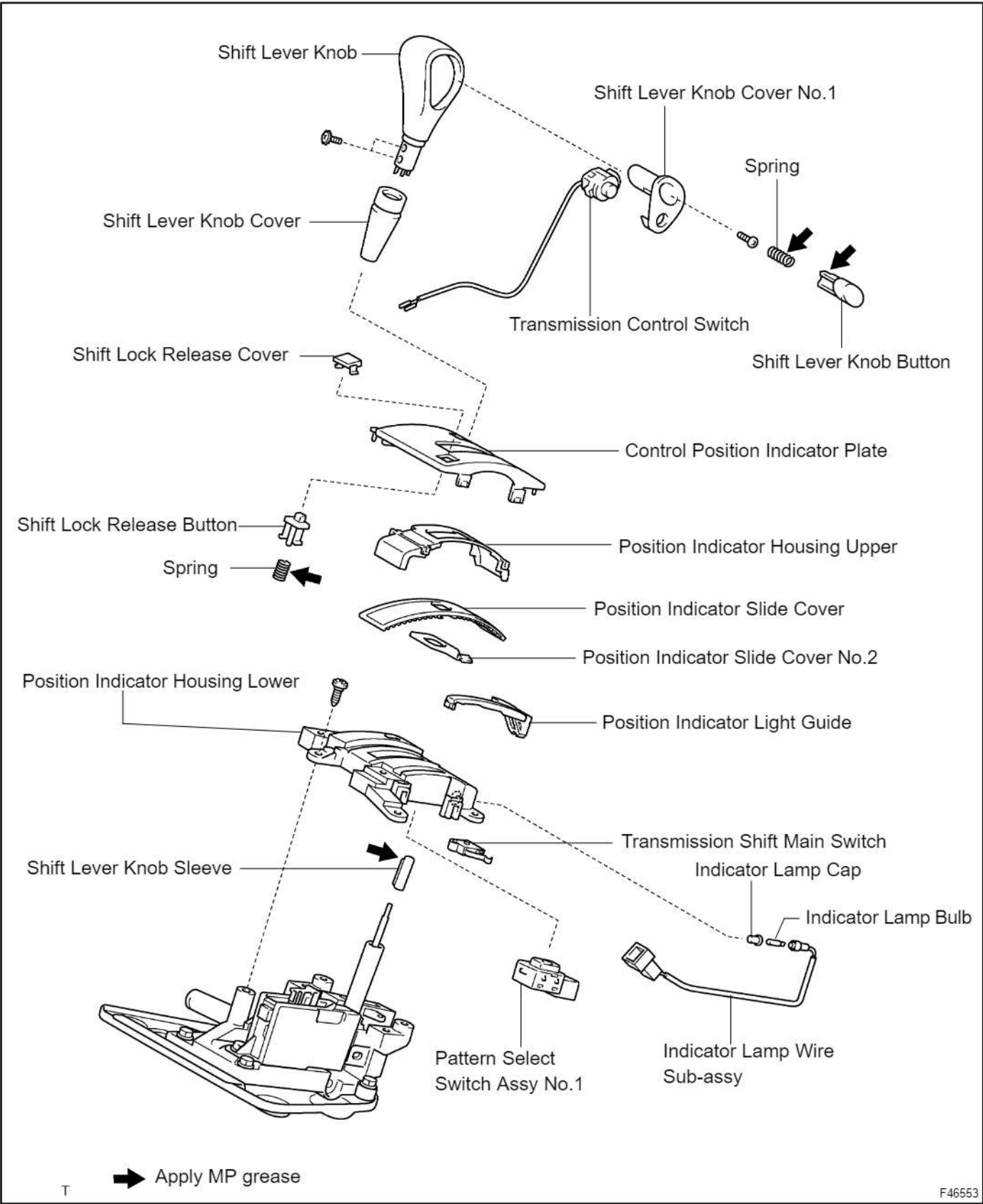
- (a) Loosen the 2 bolts of park/neutral position switch and set the shift lever to the N position.
- (b) Align the groove and neutral basic line.
- (c) Hold the switch in position and tighten the 2 bolts.

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

- (d) After adjustment, perform the inspection described in step 1.

SHIFT LEVER ASSY (ATM) COMPONENTS

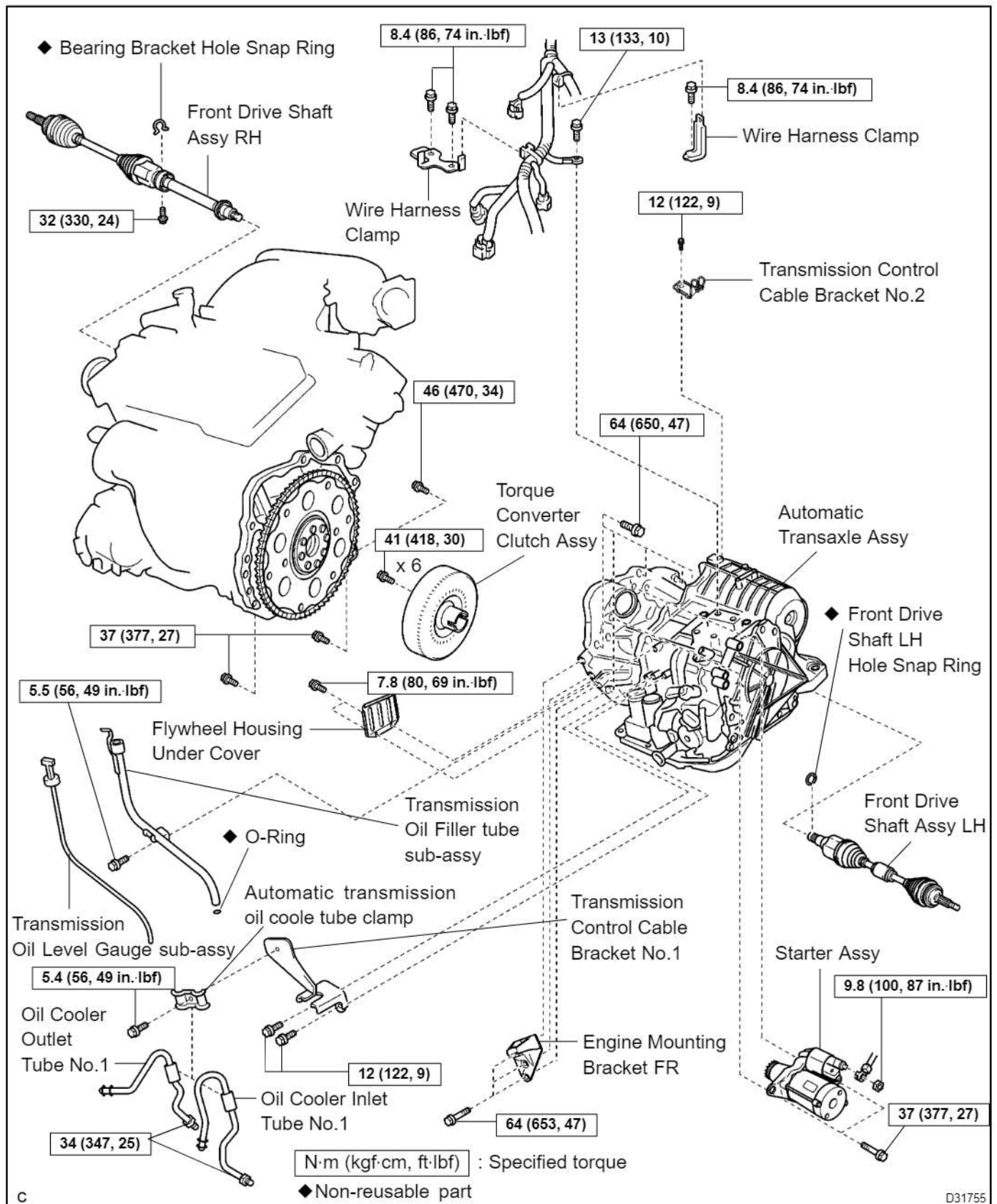
4016Z-01

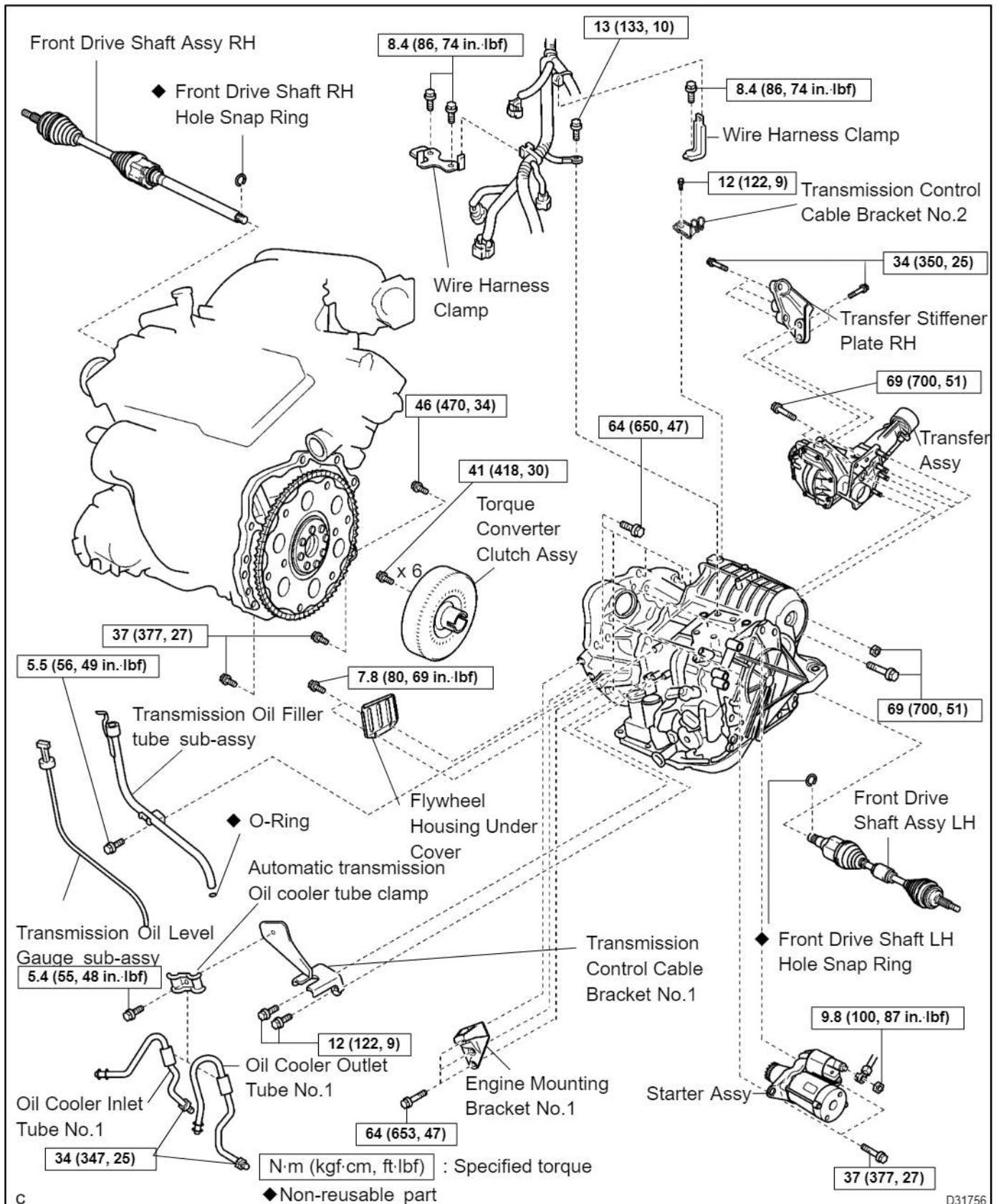


AUTOMATIC TRANSAXLE ASSY (U151E/U151F)

COMPONENTS

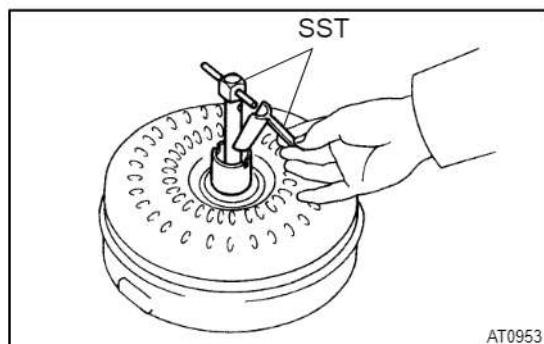
4012C-02





TORQUE CONVERTER CLUTCH AND DRIVE PLATE (ATM) INSPECTION

40063-11



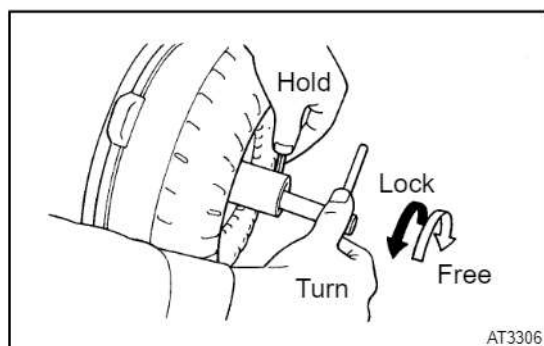
1. INSPECT TORQUE CONVERTER CLUTCH ASSY

- (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.

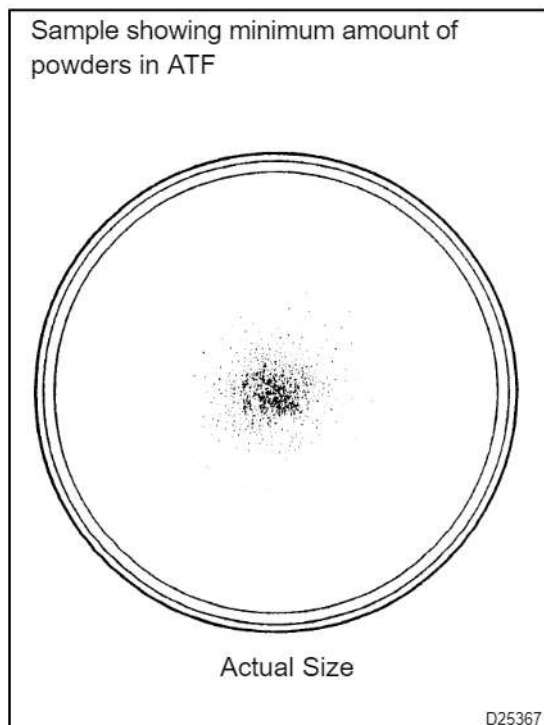
SST 09350-32014 (09351-32020)



- (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.



Sample showing minimum amount of
powders in ATF

Actual Size

- (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.

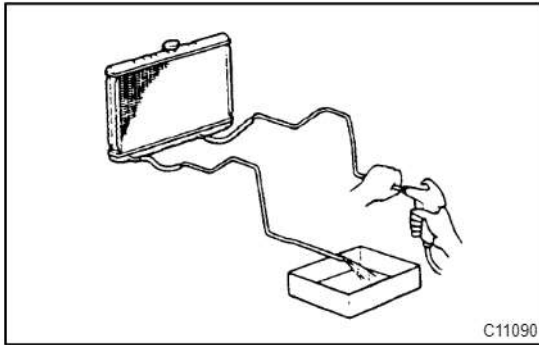
Fine powders exceeding the sample limit is identified in ATF. (See the sample.)

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.

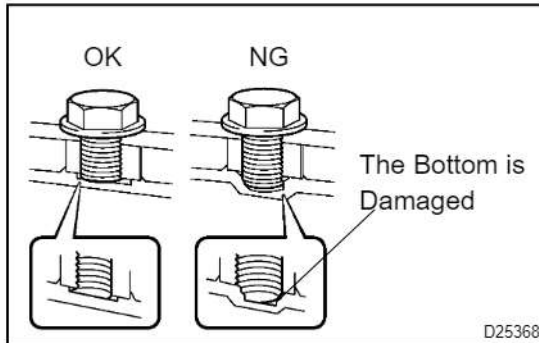
- (1) If the ATF is discolored and/or has a foul odor, completely stir the ATF in the torque converter clutch and drain it with the face for installation facing up.



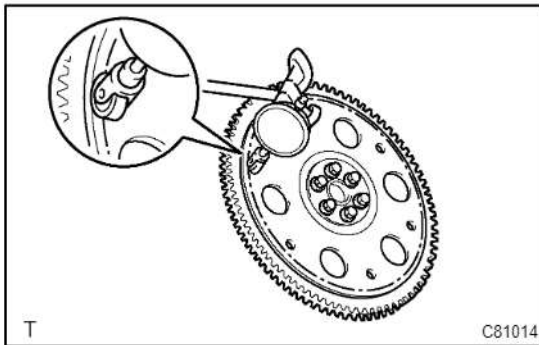
- (d) Clean and check the oil cooler and oil pipe line.
- (1) If the torque converter clutch is inspected or the ATF is exchanged, clean the oil cooler and oil pipe line.

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.

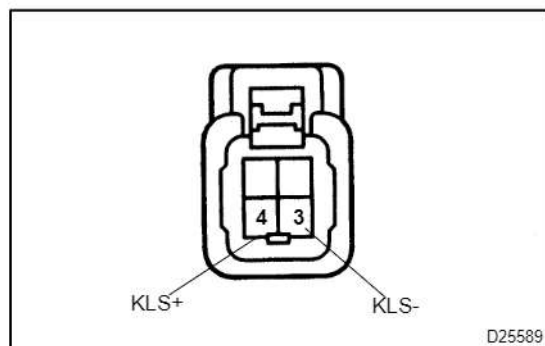
Maximum runout: 0.20 mm (0.0079 in.)

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

KEY INTER LOCK SOLENOID (ATM)

INSPECTION

40055-05



1. INSPECT KEY INTER LOCK SOLENOID

- Disconnect the solenoid connector.
- Connect KLS+ (4) terminal to the batteries' positive (+) terminal, and KLS- (3) terminal to the battery negative (-) terminal, and apply about 12V between KLS+ - KLS- terminals.
- Check that operation noise can be heard from the solenoid.

If the solenoid does not operate, replace the solenoid.

AUTOMATIC TRANSAXLE FLUID (ATM)

ON-VEHICLE INSPECTION

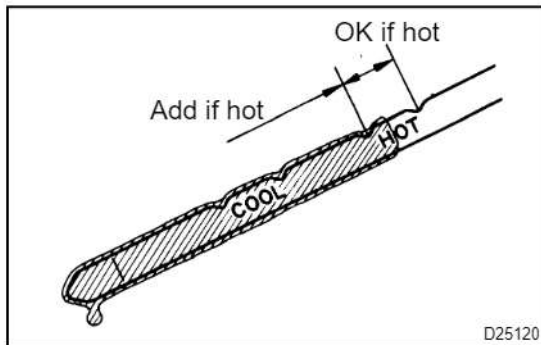
4005R-09

1. CHECK FLUID LEVEL

HINT:

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

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



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

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

SHIFT LOCK SYSTEM (ATM)

40067-10

ON-VEHICLE INSPECTION

1. CHECK SHIFT LOCK OPERATION

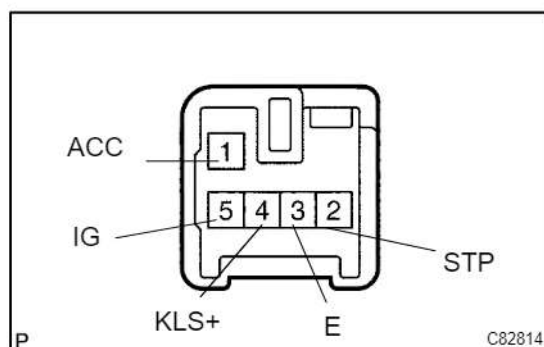
- Shift the shift lever to P position.
- Turn the ignition switch to LOCK.
- Check that the shift lever cannot be shifted to any other positions than P.
- Turn the ignition switch ON, depress the brake pedal and check that the shift lever can be shifted to any other positions.

2. CHECK SHIFT LOCK RELEASE BUTTON OPERATION

- Using a small screwdriver, remove the shift lock release cover.
- When operating the shift lever with the shift lock release button pressed, check that the lever can be shifted to any position other than P.

3. CHECK KEY INTERLOCK OPERATION

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



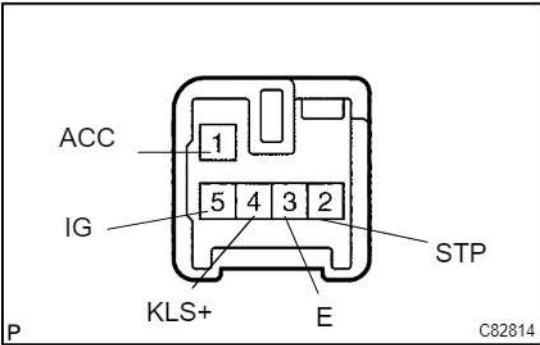
4. INSPECT SHIFT LOCK CONTROL UNIT ASSEMBLY

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

HINT:

Do not disconnect the shift lock control unit assembly connector.

Terminal	Measuring Condition	Voltage (V)
1 (ACC) - 3 (E)	Ignition switch ACC	10 - 14
1 (ACC) - 3 (E)	Ignition switch OFF	0
2 (STP) - 3 (E)	Depress brake pedal	10 - 14
2 (STP) - 3 (E)	Release brake pedal	0
4 (KLS+) - 3 (E)	(1) Ignition switch ACC and P position	0
	(2) Ignition switch ACC and except P position	7.5 - 11
	(3) Ignition switch ACC and except P position (After approx. 1 second)	6 - 9
5 (IG) - 3 (E)	Ignition switch ON	10 - 14
5 (IG) - 3 (E)	Ignition switch OFF	0



(b) Using an ohmmeter, measure the resistance at terminal E (3) and body ground.

HINT:
Do not disconnect the shift lock control unit assembly connector.

Terminal	Measuring Condition	Specified Value
1 (E) - Body ground	Always	Continuity

AUTOMATIC TRANSAXLE ASSY (ATM)

400ST-09

PRECAUTION

1. The automatic transaxle is composed of highly precision-finished parts, necessitating careful inspection before reassembly because even a small nick could cause fluid leakage or affect the performance. The instructions here are organized so that you work on only one component group at a time. This will help avoid confusion from similar-looking parts of different sub-assemblies being on your workbench at the same time. The component groups are inspected and repaired from the converter housing side. As much as possible, 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 parts are being ordered, be sure to keep all parts of the group in a separate container while proceeding with disassembly, inspection, repair and reassembly of other component groups.

Recommended ATF: T-IV

2. All 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.
4. When using compressed air, always aim away from yourself to prevent accidentally spraying ATF or kerosene on your face.
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, repairs, and reassembly.
7. When disassembling a valve body, be sure to match each valve together with the corresponding spring.
8. New discs for the brakes and clutches that are to be used for replacement must be soaked in ATF for at least 15 minutes before reassembly.
9. All oil seal rings, clutch discs, clutch plates, rotating parts, and sliding surfaces should be coated with ATF prior to reassembly.
10. All gaskets and rubber O-rings should be replaced.
11. Do not apply adhesive cements to gaskets and similar parts.
12. Make sure that the ends of a 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 thrust bearings and races for wear or damage. Replace if necessary.
15. Use petroleum jelly to keep parts in place.
16. When working with FIPG material, you must observe the following.
Using a razor blade and a gasket scraper, remove all the old packing (FIPG) material from the gasket surface.
Thoroughly clean all components to remove all the loose material.
Clean both sealing surfaces with a non-residue solvent.
Parts must be reassembled within 10 minutes of application. Otherwise, the packing (FIPG) material must be removed and reapplied.

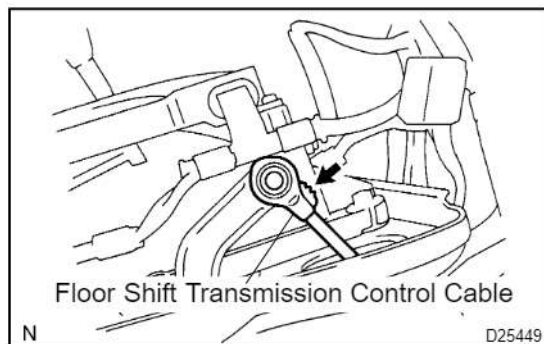
OVERHAUL

HINT:

COMPONENTS:

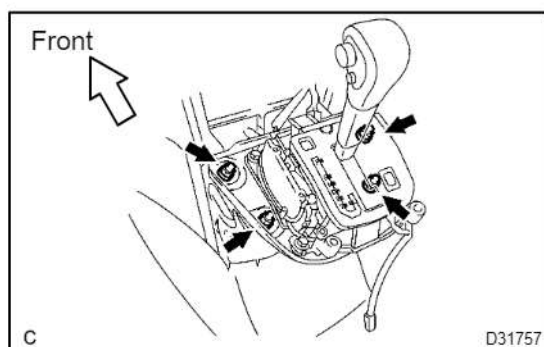
SHIFT LEVER ASSY (See page 40-61)

1. REMOVE INSTRUMENT CLUSTER FINISH PANEL ASSY CENTER (SEE PAGE 71-10)
2. REMOVE FLOOR CARPET COVER CENTER RH (SEE PAGE 71-10)
3. REMOVE FLOOR CARPET COVER CENTER LH (SEE PAGE 71-10)
4. REMOVE CONSOLE BOX ASSY (SEE PAGE 71-10)



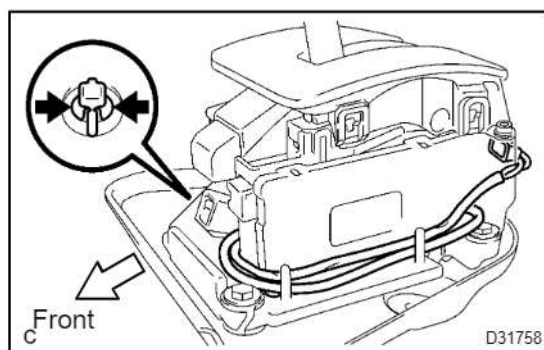
5. DISCONNECT TRANSMISSION CONTROL CABLE ASSY

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



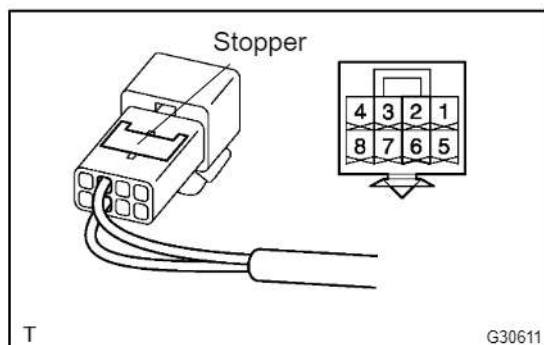
6. REMOVE FLOOR SHIFT ASSY

- (a) Disconnect the 3 connectors.
- (b) Remove the 4 nuts and dismount the floor shift assy from the vehicle.

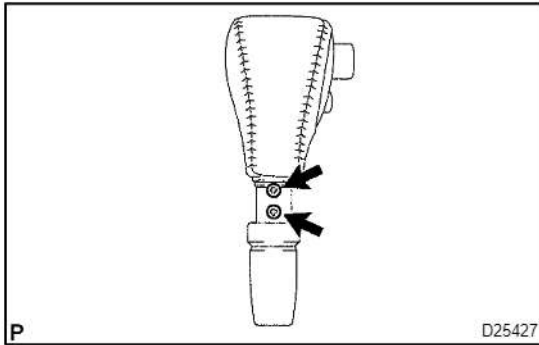


7. REMOVE SHIFT LEVER KNOB SUB-ASSY

- (a) Releasing the lock by pressing the click, disconnect the indicator lamp wire connector from the shift lever plate.



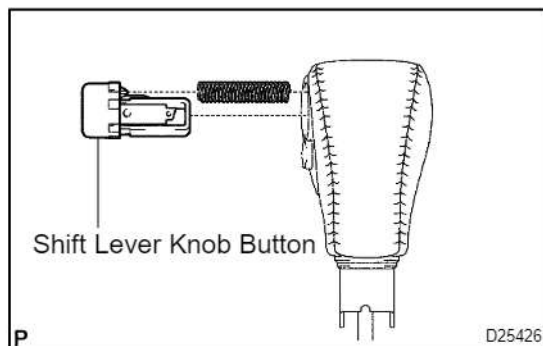
- (b) Using a screwdriver, release the stopper of the connector.
- (c) Using a small screwdriver, disengage the locking lug of the terminals 2 and 6, and pull the terminals out from the rear.
- (d) Disconnect the 2 wire harnesses of the transmission control switch from the clamp.



- (e) Lower the shift lever knob cover.
- (f) Remove the 2 screws and shift lever knob from the shift lever.

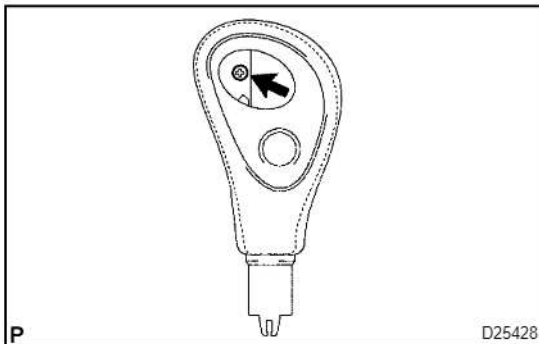
8. REMOVE FLOOR SHIFT SHIFT LEVER KNOB COVER

- (a) Remove the shift lever knob cover from the shift lever.



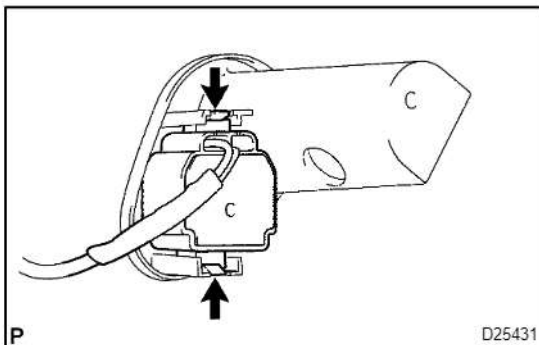
9. REMOVE SHIFT LEVER KNOB BUTTON

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

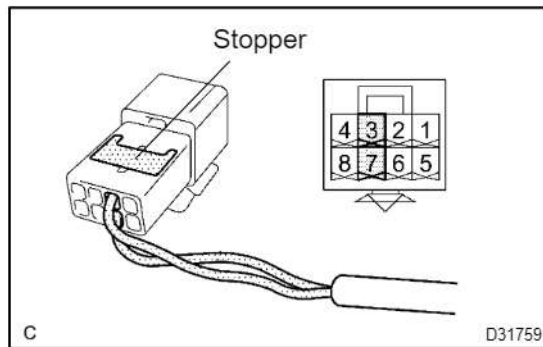


10. REMOVE TRANSMISSION CONTROL SWITCH

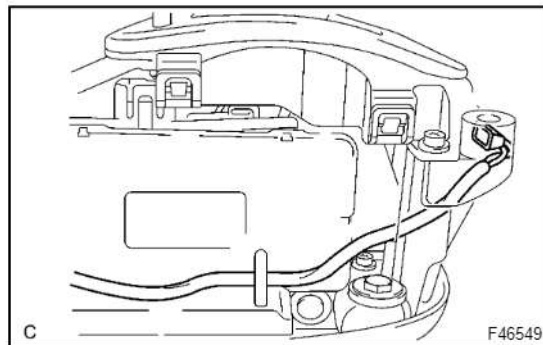
- (a) Remove the screw from the shift lever knob, detach the transmission control switch together with the shift lever knob cover No.1.



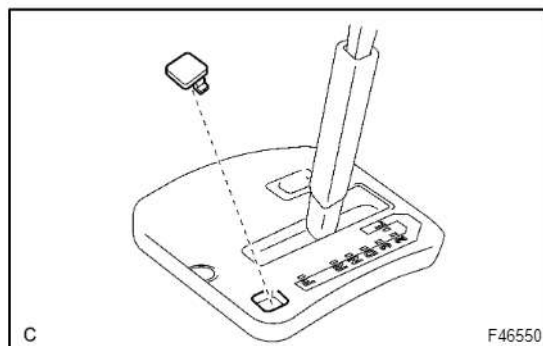
- (b) Using a screwdriver, release the 2 claws and remove the transmission control switch from the shift lever knob cover No.1.

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

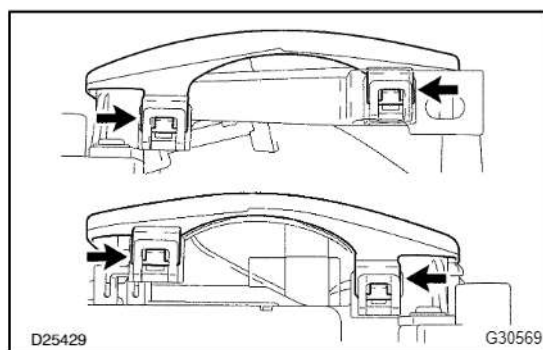
- (a) Using a screwdriver, release the stopper of the connector.
- (b) Using a small screwdriver, disengage the locking lug of the terminals 3 and 7, and pull the terminals out from the rear.



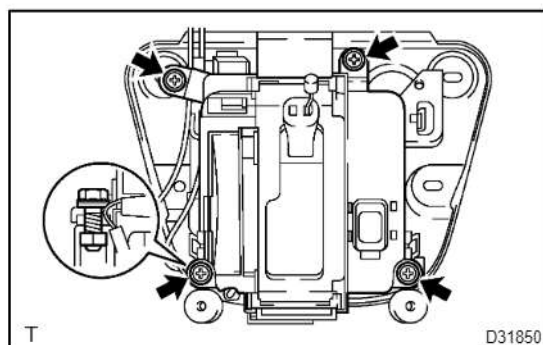
- (c) Remove the indicator lamp wire from the position indicator housing lower.
- (d) Remove the indicator lamp cap and indicator lamp bulb from the indicator lamp wire.

**12. REMOVE SHIFT LOCK RELEASE BUTTON COVER**

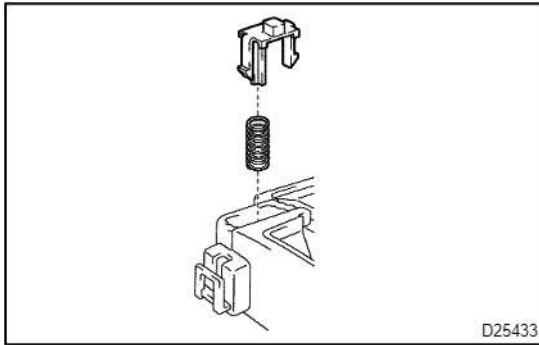
- (a) Using a small screwdriver, remove the shift lock release cover from the control position indicator plate.

**13. REMOVE CONTROL POSITION INDICATOR PLATE**

- (a) Using a screwdriver, release the 4 claws and remove the control position indicator plate from the position indicator housing lower.

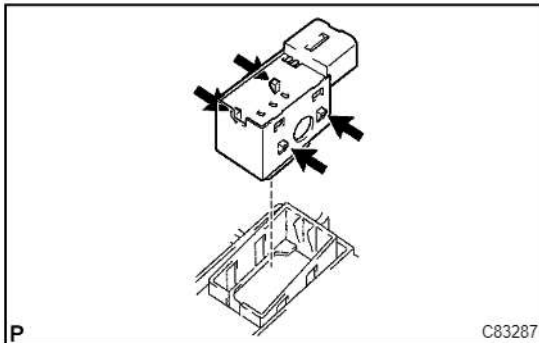
**14. REMOVE POSITION INDICATOR HOUSING LOWER**

- (a) Remove the 4 screws, detach the position indicator housing lower from the shift lever plate.



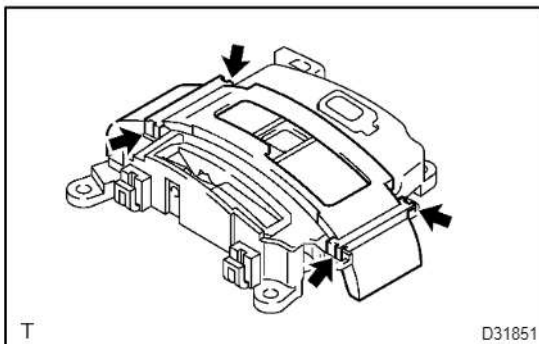
15. REMOVE SHIFT LOCK RELEASE BUTTON

- (a) While pressing the 2 claws, remove the shift lock release button and spring from the position indicator housing lower.



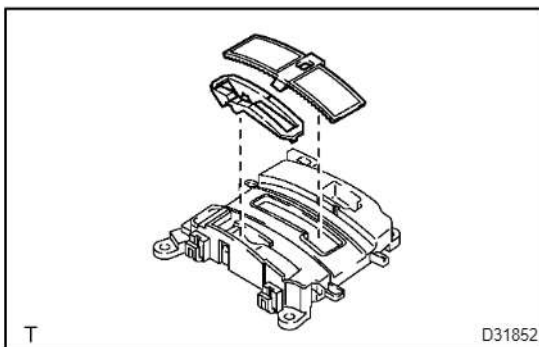
16. REMOVE PATTERN SELECT SWITCH ASSY NO.1

- (a) Using a screwdriver, release the 4 claws and remove the pattern select switch assy No.1 from the position indicator housing lower.



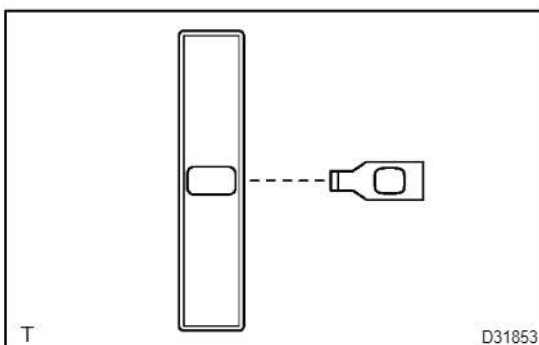
17. REMOVE POSITION INDICATOR HOUSING UPPER

- (a) Using a screwdriver, release the 4 claws and remove the position indicator housing upper from the position indicator housing lower.



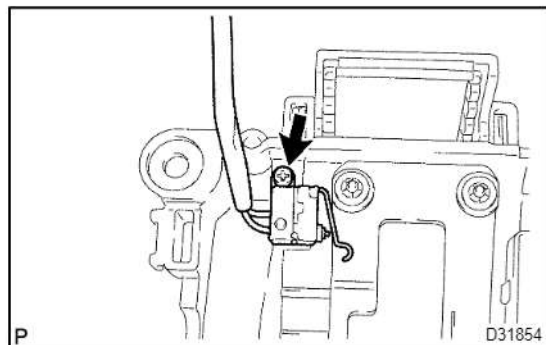
18. REMOVE POSITION INDICATOR SLIDE COVER

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

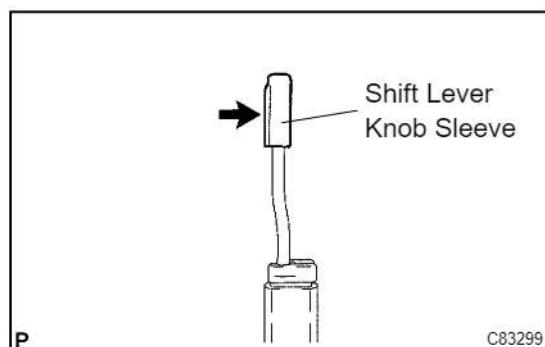


19. REMOVE POSITION INDICATOR SLIDE COVER

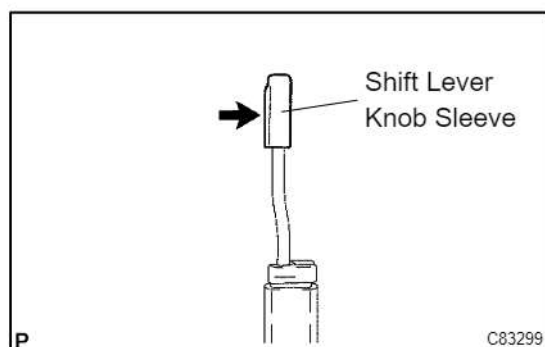
- (a) Remove the position indicator slide cover No.2 from the position indicator slide cover.

**20. REMOVE TRANSMISSION SHIFT MAIN SWITCH**

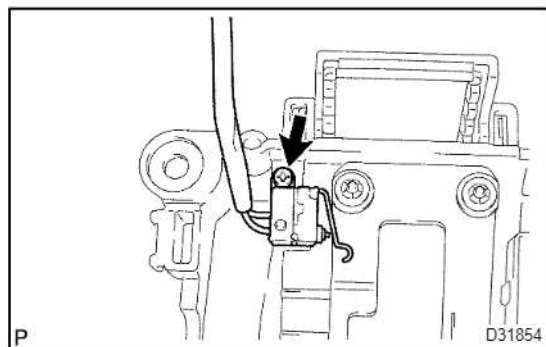
- (a) Remove the screw and transmission shift main switch from the position indicator housing lower.

**21. REMOVE SHIFT LEVER KNOB SLEEVE**

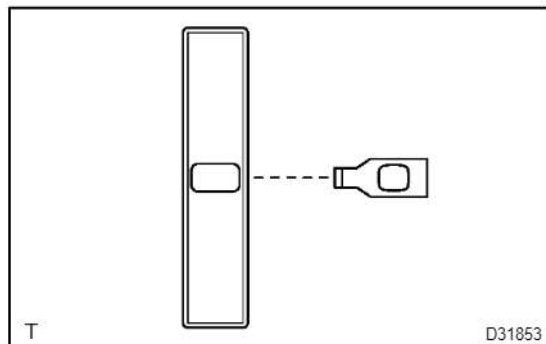
- (a) Remove the shift lever knob sleeve from the shift lever.

**22. INSTALL SHIFT LEVER KNOB SLEEVE**

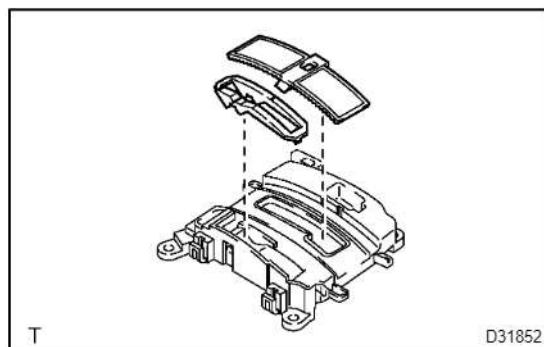
- (a) Apply MP grease to the shown part of the shift lever knob sleeve and install it to the shift lever.

**23. INSTALL TRANSMISSION SHIFT MAIN SWITCH**

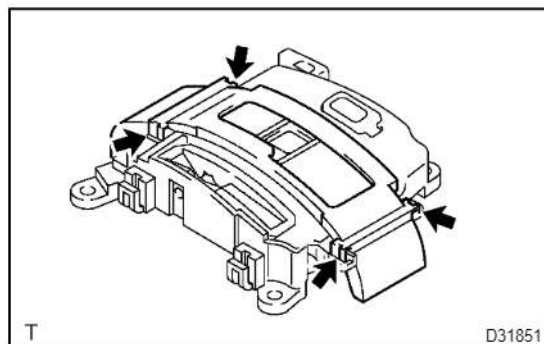
- (a) Install the transmission shift main switch to the position indicator housing lower with the screw.

**24. INSTALL POSITION INDICATOR SLIDE COVER**

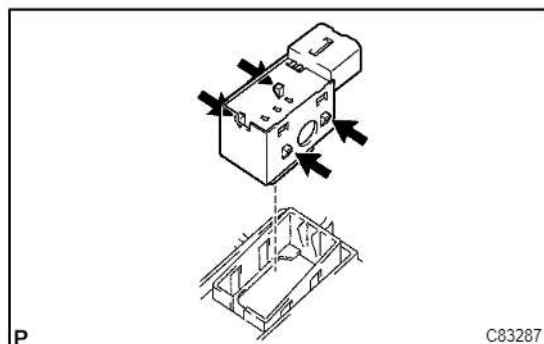
- (a) Install the position indicator slide cover No.2 to the position indicator slide cover.

**25. INSTALL POSITION INDICATOR SLIDE COVER**

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

**26. INSTALL POSITION INDICATOR HOUSING UPPER**

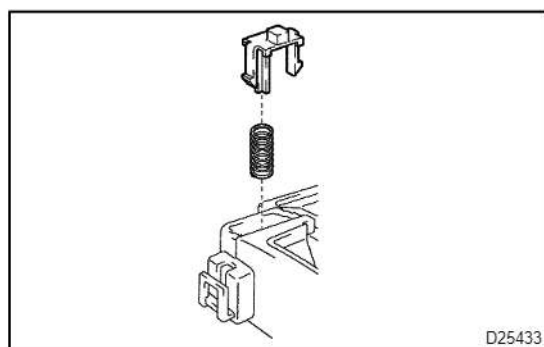
- (a) Install the position indicator housing upper to the position indicator housing lower.

**27. INSTALL PATTERN SELECT SWITCH ASSY NO.1**

- (a) Install the pattern select switch assy No. 1 to the position indicator housing lower.

HINT:

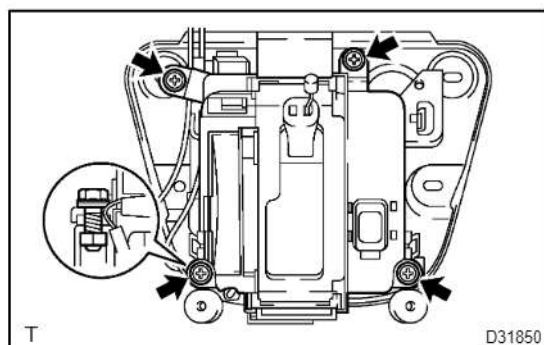
Fit the claws securely.

**28. INSTALL SHIFT LOCK RELEASE BUTTON**

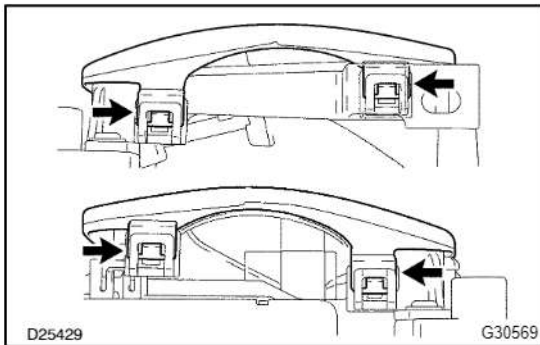
- (a) Install the shift lock release button and greased spring to the position indicator housing lower.

HINT:

Fit the claws securely.

**29. INSTALL POSITION INDICATOR HOUSING LOWER**

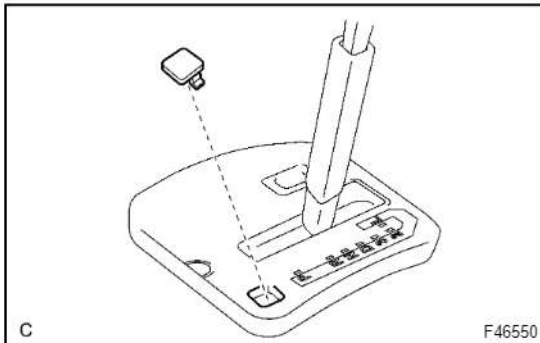
- (a) Install the position indicator housing lower to the shift lever plate with 4 screws.

**30. INSTALL CONTROL POSITION INDICATOR PLATE**

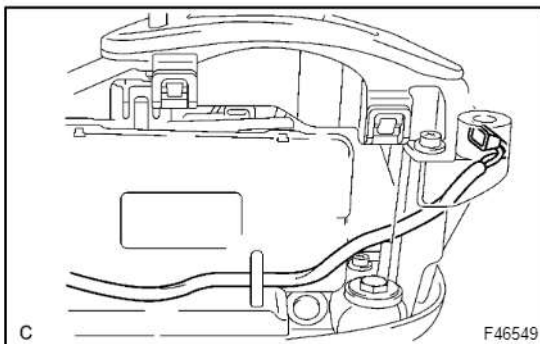
- (a) Install the control position indicator plate to the position indicator housing lower.

HINT:

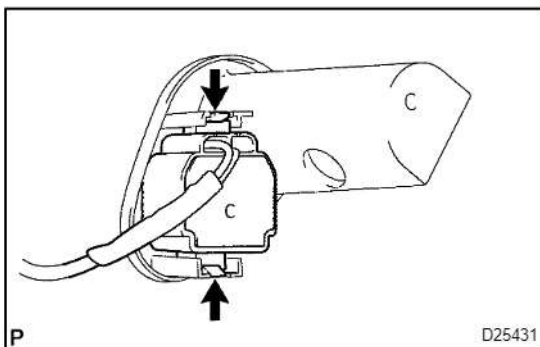
Fit the claws securely.

**31. INSTALL SHIFT LOCK RELEASE BUTTON COVER**

- (a) Install the shift lock release cover to the control position indicator plate.

**32. INSTALL INDICATOR LAMP WIRE SUB-ASSY**

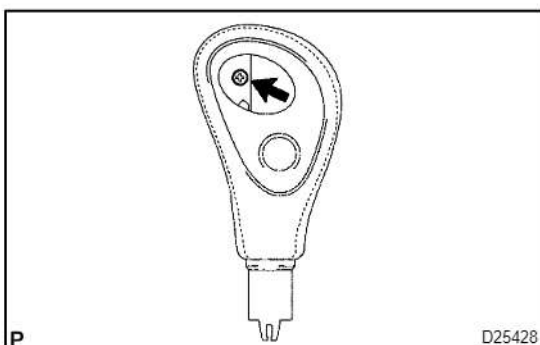
- (a) Install the indicator lamp bulb and indicator lamp cap to the indicator lamp wire.
- (b) Install the indicator lamp wire to the position indicator housing lower.

**33. INSTALL TRANSMISSION CONTROL SWITCH**

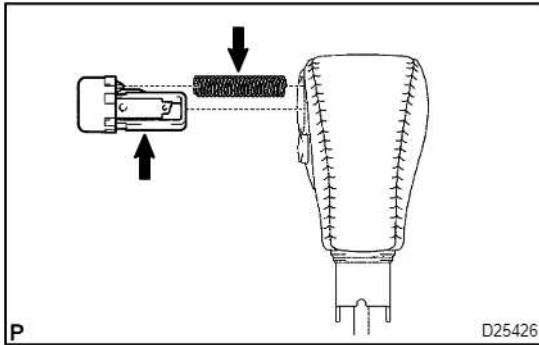
- (a) Install the transmission control switch to the shift lever knob cover No.1.

HINT:

Fit the claws securely.



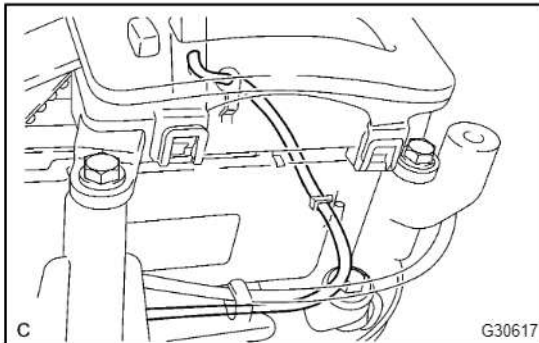
- (b) Install the shift lever knob cover No.1 to the shift lever knob with a screw.

**34. INSTALL SHIFT LEVER KNOB BUTTON**

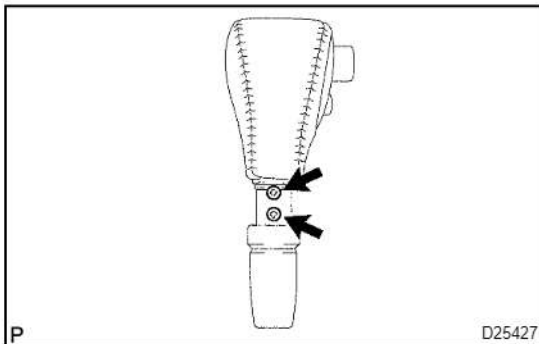
- (a) Apply MP grease to the shift lever knob button and spring and install them to the shift lever knob.

35. INSTALL SHIFT LEVER KNOB COVER NO.1

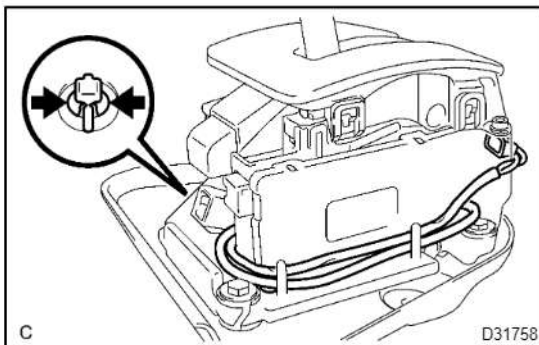
- (a) Install the shift lever knob cover to the shift lever.

**36. INSTALL SHIFT LEVER KNOB SUB-ASSY**

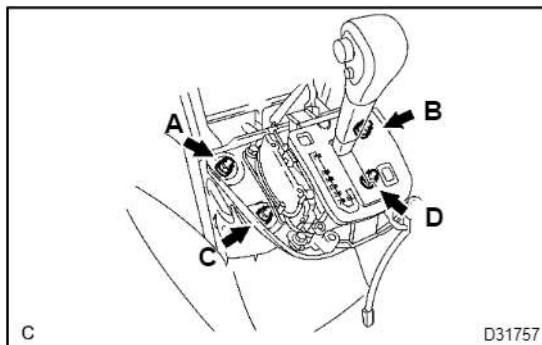
- (a) Install the wire harness of the transmission control switch as shown in the illustration.



- (b) Install the shift lever knob to the shift lever with 2 screws.
 (c) Install the shift lever knob cover to shift lever knob.
 (d) Install the 2 wire harnesses of the transmission control switch.



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

**37. INSTALL FLOOR SHIFT ASSY**

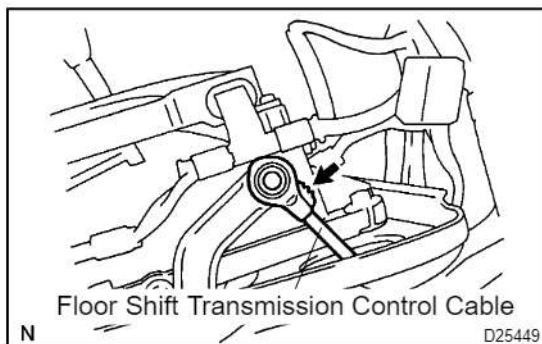
- (a) Install the floor shift assy to the vehicle with the 4 nuts.

Torque: 12 N·m (122 kgf·cm, 9 ft·lbf)

HINT:

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

- (b) Connect the 3 connectors.

**38. INSTALL TRANSMISSION CONTROL CABLE ASSY**

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

HINT:

Install it with the uneven surface facing up.

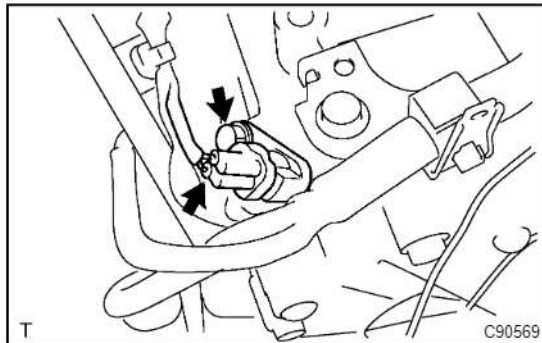
39. INSPECT SHIFT LEVER POSITION (SEE PAGE 40-71)**40. ADJUST SHIFT LEVER POSITION (SEE PAGE 40-71)**

SPEED SENSOR (U151E/U151F)

40060-09

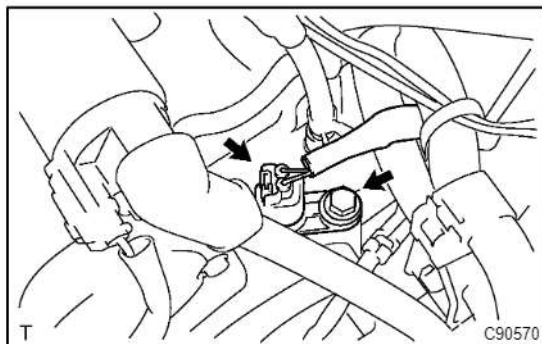
REPLACEMENT

1. REMOVE BATTERY
2. REMOVE AIR CLEANER ASSY
3. REMOVE AIR CLEANER HOSE NO.1



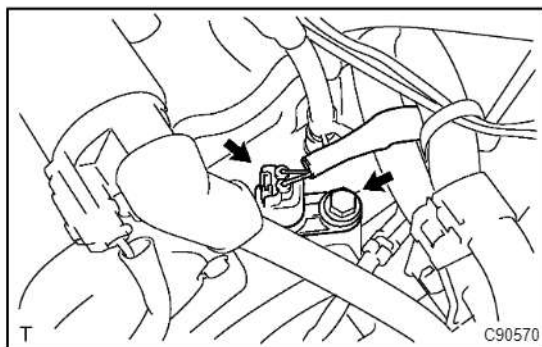
4. REMOVE SPEED SENSOR (NT SENSOR)

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



5. REMOVE SPEED SENSOR (NC SENSOR)

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



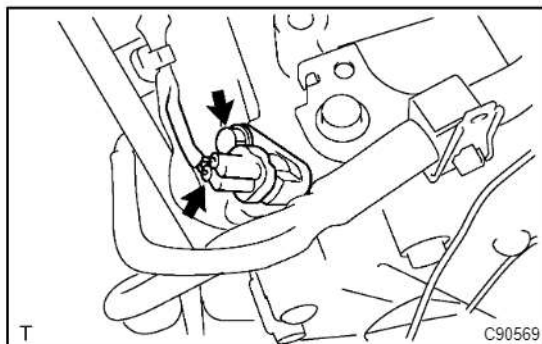
6. INSTALL SPEED SENSOR (NC SENSOR)

- (a) Coat the O-ring with ATF.
- (b) Install the speed sensor with the bolt.
Torque: 11 N·m (115 kgf·cm, 8 ft·lbf)

HINT:

Make sure of the sensor manufacturer's name.

- (c) Connect the speed sensor connector.



7. INSTALL SPEED SENSOR (NT SENSOR)

- (a) Coat the O-ring with ATF.
- (b) Install the speed sensor with the bolt.
Torque: 11 N·m (115 kgf·cm, 8 ft·lbf)

HINT:

Make sure of the sensor manufacturer's name.

- (c) Connect the speed sensor connector.

8. INSTALL AIR CLEANER HOSE NO.1
9. INSTALL AIR CLEANER ASSY
10. INSTALL BATTERY
11. PERFORM INITIALIZATION(SEE PAGE 01-4)

TRANSMISSION WIRE (U151E/U151F)

400FS-04

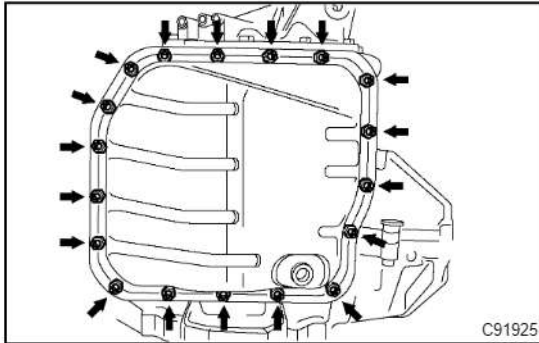
REPLACEMENT

1. REMOVE ENGINE UNDER COVER NO.1

2. DRAIN AUTOMATIC TRANSAXLE FLUID

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

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

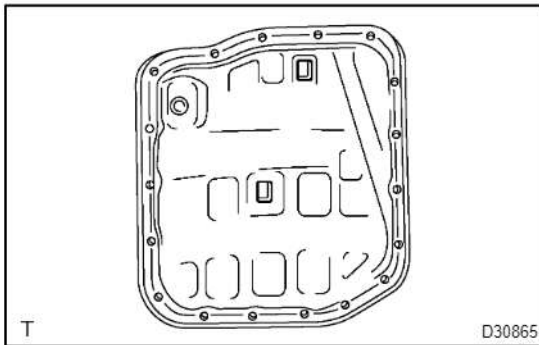


3. REMOVE AUTOMATIC TRANSAXLE OIL PAN SUB-ASSY

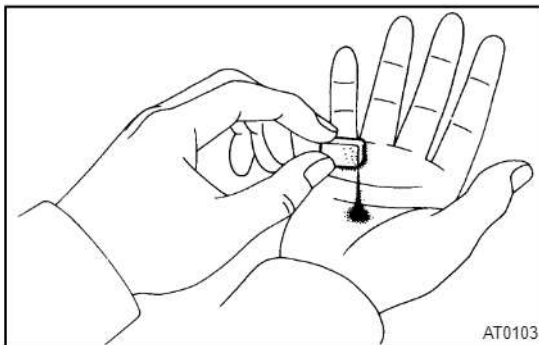
- Remove the 18 bolts, oil pan and gasket.

NOTICE:

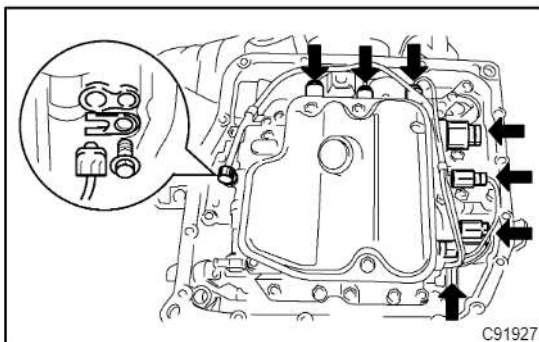
Some fluid will remain in the oil pan. Remove all of the oil pan bolts, and carefully remove the oil pan assembly.



- Remove the 2 magnets from the oil pan.

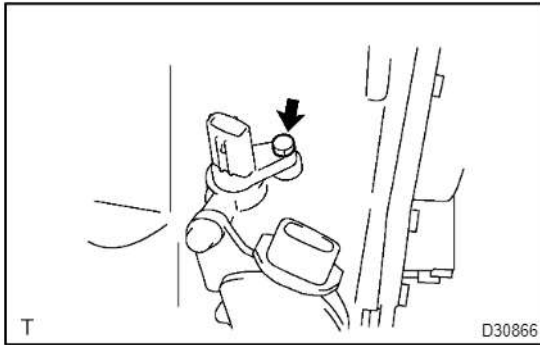


- Examine the particles in the oil pan.
 - Remove the magnets and use them to collect any steel chips. Look at the chips and particles in the pan and on the magnet carefully to see the type of wear which might be found in the transaxle.
 Steel (magnetic): bearing, gear and plate wear
 Brass (non-magnetic):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



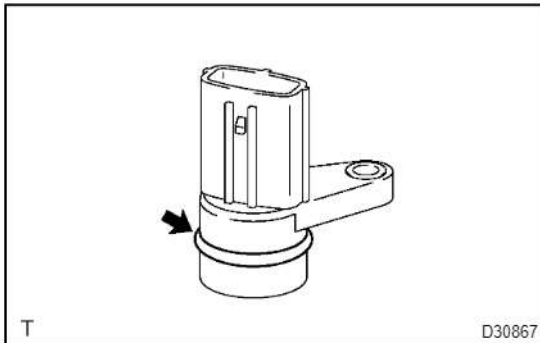
4. DISCONNECT TRANSMISSION WIRE

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



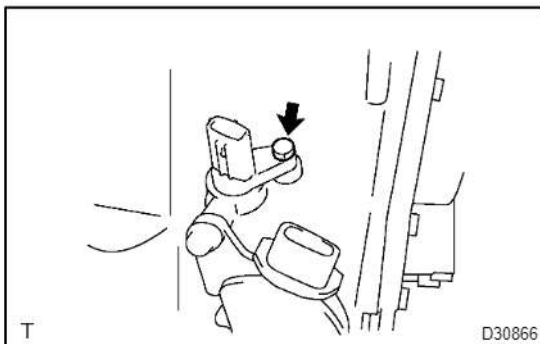
5. REMOVE TRANSMISSION WIRE

- Disconnect the transmission wire connectors.
- Remove the bolt and transmission wire.

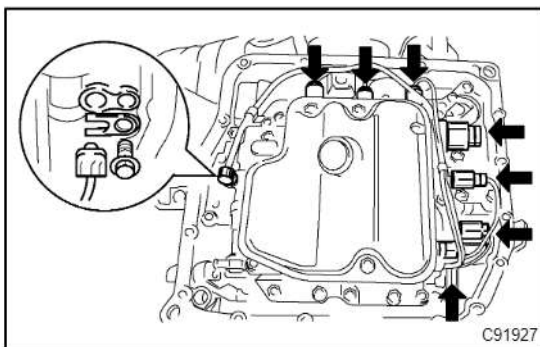


6. INSTALL TRANSMISSION WIRE

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



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

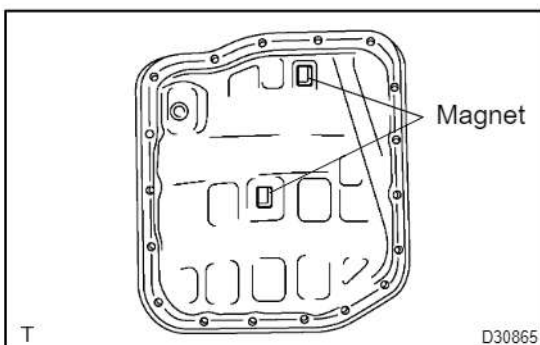


7. CONNECT TRANSMISSION WIRE

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

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

- Connect the 7 shift solenoid valve connectors.

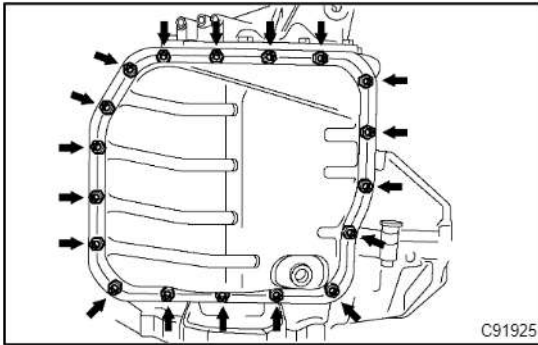


8. INSTALL AUTOMATIC TRANSAXLE OIL PAN SUB-ASSY

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

Seal packing:

THREE BOND 1344 or equivalent



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

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

NOTICE:

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

9. ADD AUTOMATIC TRANSAXLE FLUID
10. INSPECT AUTOMATIC TRANSAXLE FLUID (SEE PAGE [40-2](#))
11. INSTALL ENGINE UNDER COVER NO.1
12. RESET MEMORY (SEE PAGE [05-1005](#))

TRANSMISSION VALVE BODY ASSY (U151E/U151F)

400FT-04

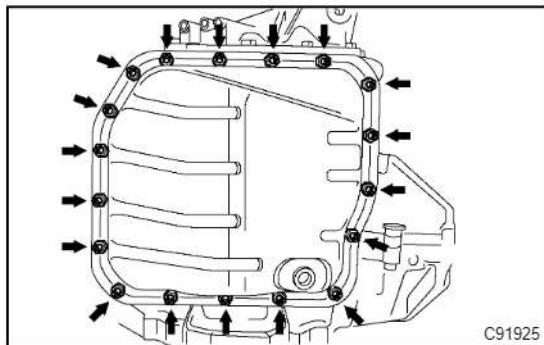
REPLACEMENT

1. REMOVE ENGINE UNDER COVER NO.1

2. DRAIN AUTOMATIC TRANSAXLE FLUID

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

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

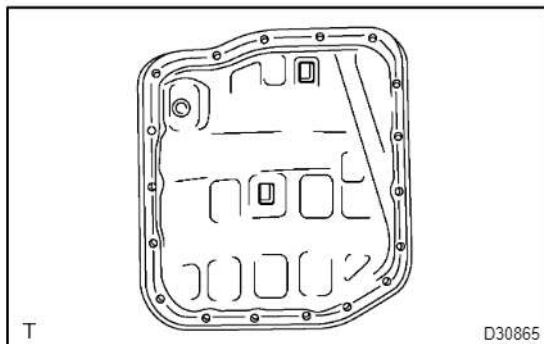


3. REMOVE AUTOMATIC TRANSAXLE OIL PAN SUB-ASSY

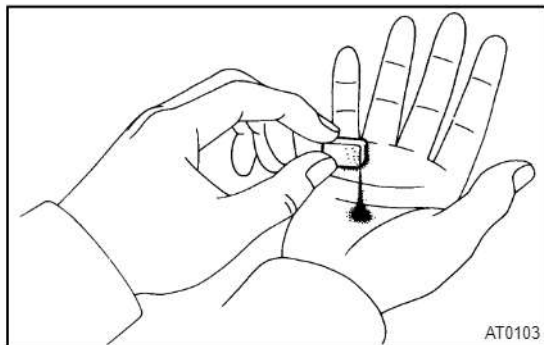
- Remove the 18 bolts, oil pan and gasket.

NOTICE:

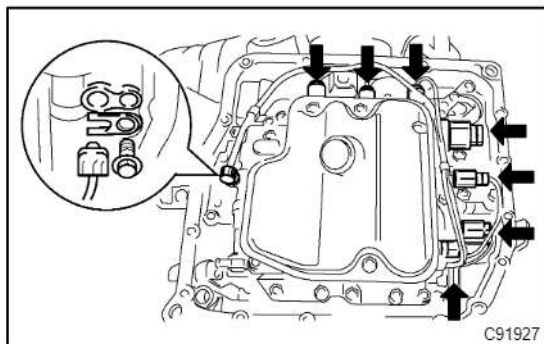
Some fluid will remain in the oil pan. Remove all of the oil pan bolts, and carefully remove the oil pan assembly.



- Remove the 2 magnets from the oil pan.

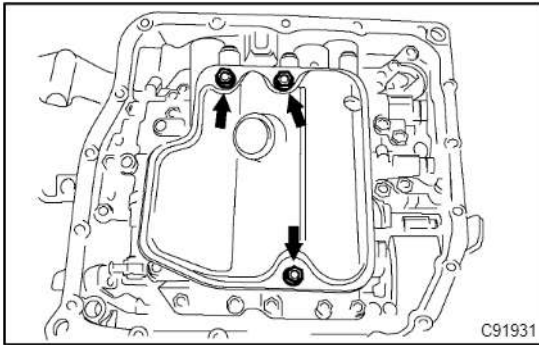


- Examine the particles in the oil pan.
 - Remove the magnets and use them to collect any steel chips. Look at the chips and particles in the pan and on the magnet carefully to see the type of wear which might be found in the transaxle.
 Steel (magnetic): bearing, gear and plate wear
 Brass (non-magnetic):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

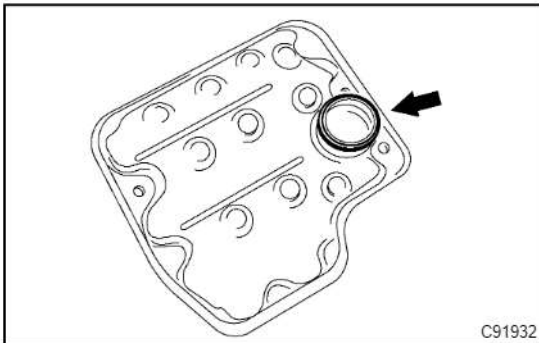


5. REMOVE VALVE BODY OIL STRAINER ASSY

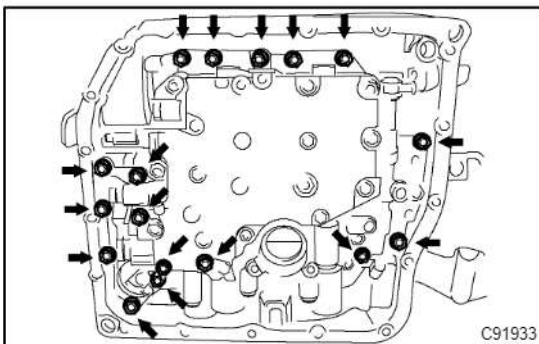
- (a) Remove the 3 bolts and oil strainer.

NOTICE:

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



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

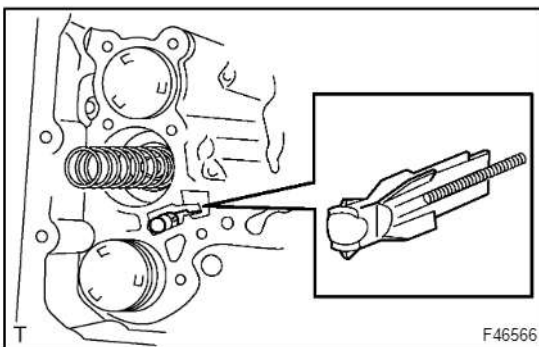


6. REMOVE TRANSMISSION VALVE BODY ASSY

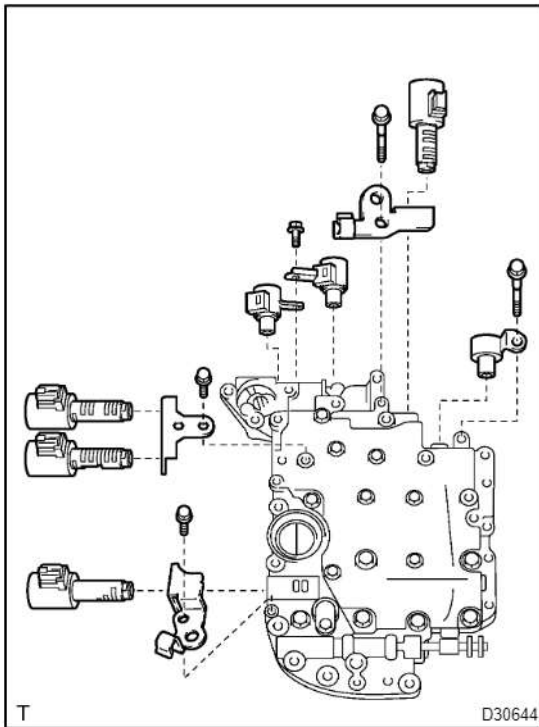
- (a) Support the valve body assy and remove the 17 bolts and the valve body assy.

NOTICE:

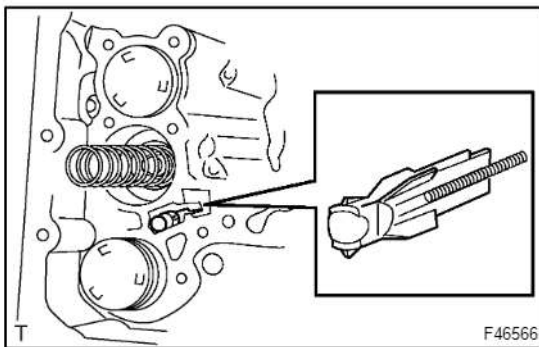
Be careful not to drop the check valve body, spring and accumulator piston.



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

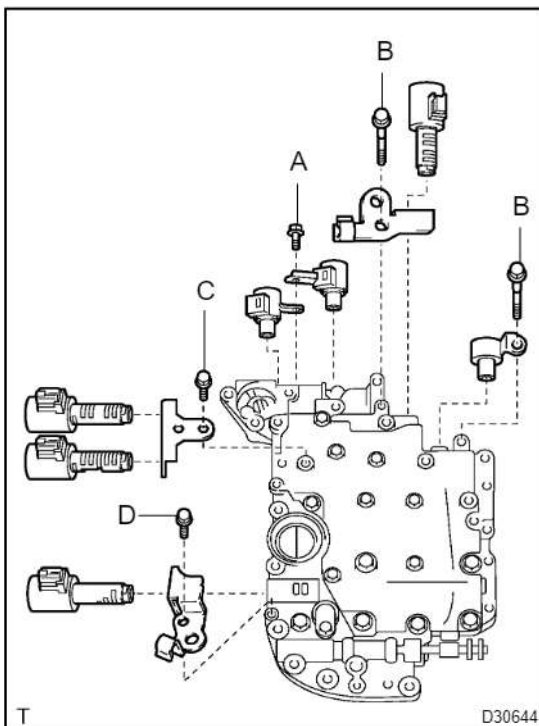


- (c) Remove the 5 bolts, 3 lock plates and 7 shift solenoid valves.



7. INSTALL TRANSMISSION VALVE BODY ASSY

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



- (b) Install the 7 shift solenoid valves and 3 lock plates 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)

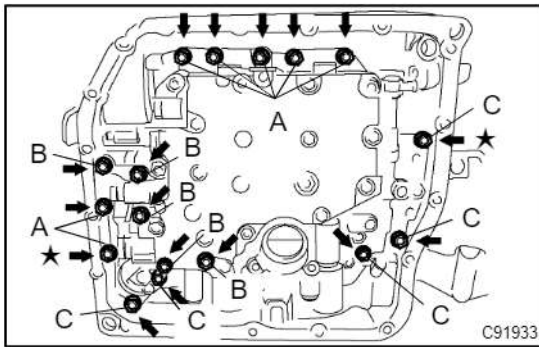
Bolt length:

Bolt A: 16 mm (0.63 in.)

Bolt B: 57 mm (2.2 in.)

Bolt C: 20 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:

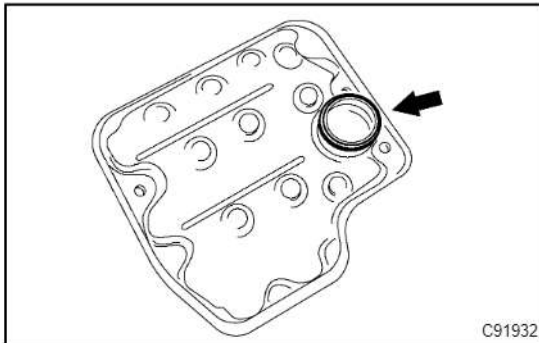
- Push the valve body against the accumulator piston spring and the check ball body to install it.
- First, temporarily tighten those bolts marked by ★ in the illustration because they are positioning bolts.

Bolt length:

Bolts A: 25 mm (0.984 in.)

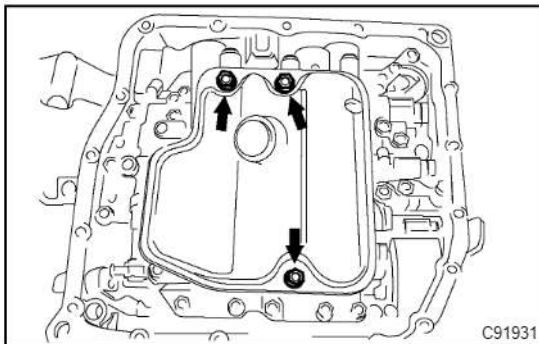
Bolts B: 57 mm (2.244 in.)

Bolts C: 41 mm (1.614 in.)

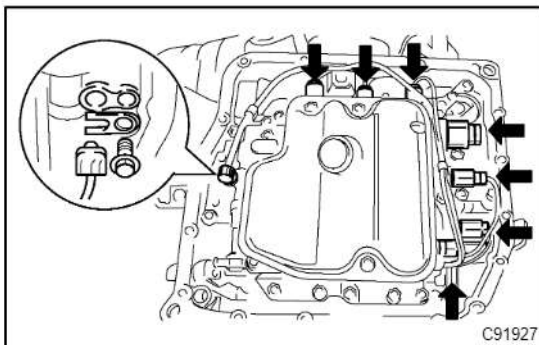


8. INSTALL VALVE BODY OIL STRAINER ASSY

- (a) Coat a new O-ring with ATF.
 (b) Install the O-ring to the oil strainer.

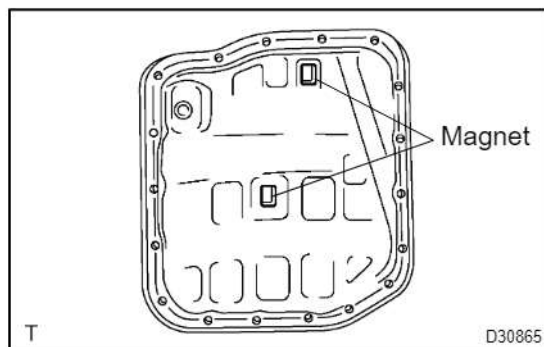


- (c) Install the oil strainer with the 3 bolts.
Torque: 11 N·m (110 kgf·cm, 8 ft·lbf)



9. CONNECT 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.

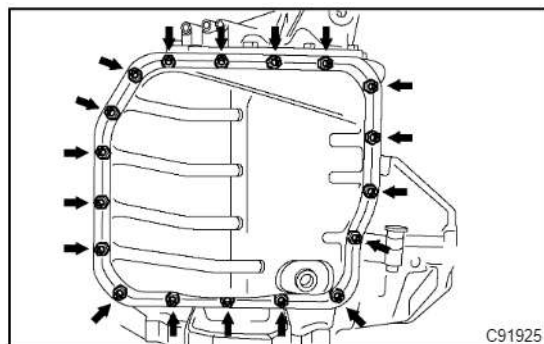


10. INSTALL AUTOMATIC TRANSAXLE OIL PAN SUB-ASSY

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

Seal packing:

THREE BOND 1344 or equivalent



- (c) Install a new gasket, the oil pan and 18 bolts to the trans-axle case.

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

NOTICE:

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

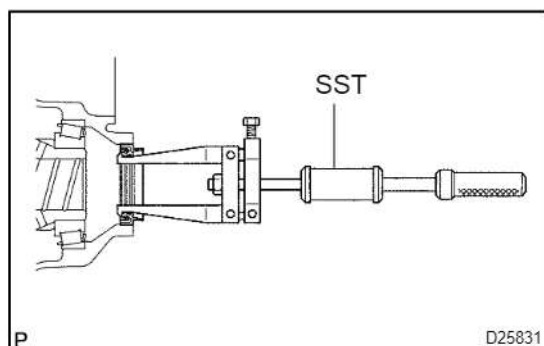
11. ADD AUTOMATIC TRANSAXLE FLUID
12. INSPECT AUTOMATIC TRANSAXLE FLUID (SEE PAGE 40-2)
13. INSTALL ENGINE UNDER COVER NO.1
14. RESET MEMORY (SEE PAGE 05-1005)

FRONT DIFFERENTIAL OIL SEAL (U151E)

40066-10

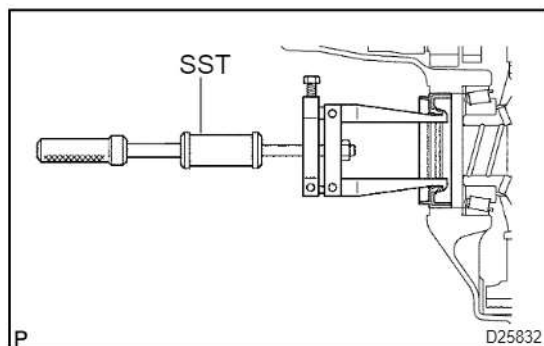
REPLACEMENT

1. REMOVE FRONT WHEELS
2. REMOVE ENGINE UNDER COVER NO.1
3. DRAIN AUTOMATIC TRANSAXLE FLUID
 - (a) Remove the drain plug, gasket and drain ATF.
 - (b) Install a new gasket and the drain plug.
Torque: **49 N·m (500 kgf·cm, 36 ft·lbf)**
4. REMOVE FRONT DRIVE SHAFT ASSY LH (SEE PAGE 30-21)
SST 09520-01010, 09520-24010 (09520-32040)
5. REMOVE FRONT DRIVE SHAFT ASSY RH (2WD DRIVE TYPE) (SEE PAGE 30-21)



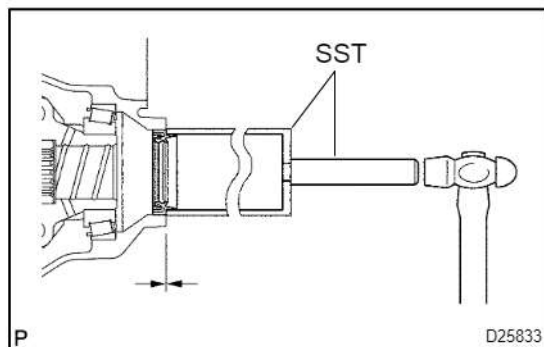
6. REMOVE TRANSAXLE HOUSING OIL SEAL

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



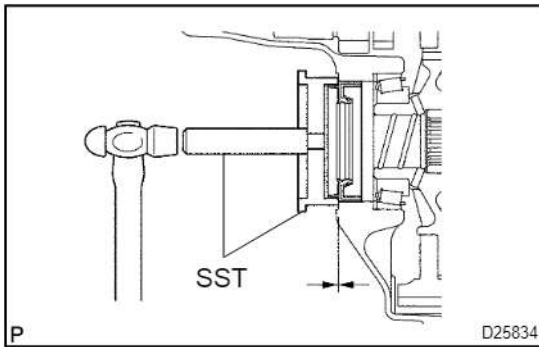
7. REMOVE DIFFERENTIAL SIDE BEARING RETAINER OIL SEAL

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



8. INSTALL TRANSAXLE HOUSING OIL SEAL

- (a) Using SST and a hammer, drive in a new oil seal.
SST 09316-6001 1 (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.



9. INSTALL DIFFERENTIAL SIDE BEARING RETAINER 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:

$0 \pm 0.5 \text{ mm}$ ($0 \pm 0.020 \text{ in.}$)

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

10. INSTALL FRONT DRIVE SHAFT ASSY LH (SEE PAGE 30-21)
11. INSTALL FRONT DRIVE SHAFT ASSY RH (2WD DRIVE TYPE) (SEE PAGE 30-21)
12. INSTALL FRONT WHEELS
Torque: 103 N·m (1,050 kgf·cm, 76 ft·lbf)
13. ADD AUTOMATIC TRANSAXLE FLUID
14. INSPECT AUTOMATIC TRANSAXLE FLUID (SEE PAGE 40-2)
15. INSTALL ENGINE UNDER COVER NO.1
16. CHECK ABS SPEED SENSOR SIGNAL (SEE PAGE 05-765)

FRONT DIFFERENTIAL OIL SEAL (U151F)

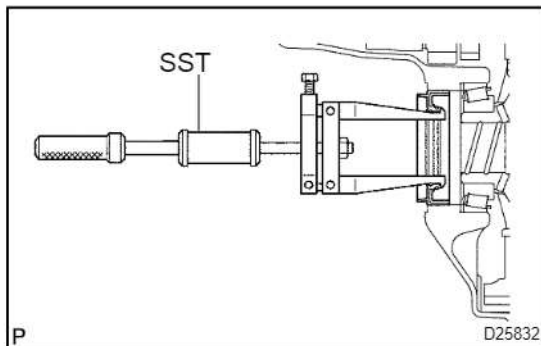
REPLACEMENT

4012E-04

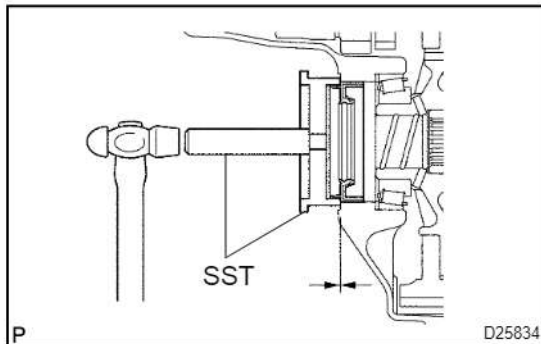
HINT:

When replacing the front differential oil seal (LH) or (RH), perform step 1 to 11 or 12 to 23 respectively.

1. **REMOVE FRONT WHEEL**
2. **REMOVE ENGINE UNDER COVER NO.1**
3. **DRAIN AUTOMATIC TRANSAXLE FLUID**
 - (a) Remove the drain plug, gasket and drain ATF.
 - (b) Install a new gasket and the drain plug.
Torque: 49 N·m (500 kgf·cm, 36 ft·lbf)
4. **REMOVE FRONT DRIVE SHAFT ASSY LH (SEE PAGE 30-21)**
SST 09520-01010, 09520-24010 (09520-32040)

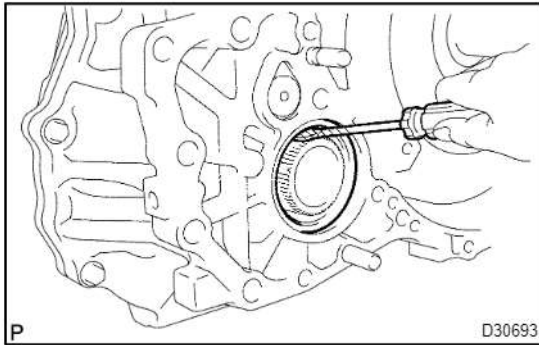


5. **REMOVE DIFFERENTIAL SIDE BEARING RETAINER OIL SEAL**
 - (a) Using SST, pull out the oil seal.
SST 09308-00010



6. **INSTALL DIFFERENTIAL SIDE BEARING RETAINER OIL SEAL**
 - (a) Using SST and a hammer, drive in a new oil seal.
SST 09223-15020, 09950-70010 (09951-07200)
Oil seal drive in depth:
0 ± 0.5 mm (0 ± 0.020 in.)
 - (b) Coat the lip of the oil seal with MP grease.

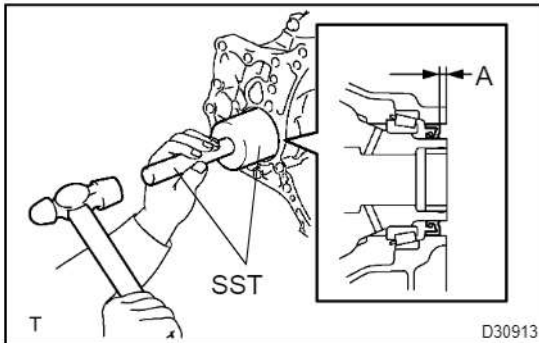
7. **INSTALL FRONT DRIVE SHAFT ASSY LH (SEE PAGE 30-21)**
8. **INSTALL FRONT WHEEL**
9. **ADD AUTOMATIC TRANSAXLE FLUID**
10. **INSPECT AUTOMATIC TRANSAXLE FLUID (SEE PAGE 40-2)**
11. **INSTALL ENGINE UNDER COVER NO.1**
12. **REMOVE ENGINE ASSEMBLY WITH TRANSAXLE (SEE PAGE 14-149)**
13. **REMOVE FRONT DRIVE SHAFT ASSY RH (SEE PAGE 30-21)**
SST 09520-01010, 09520-24010 (09520-32040)
14. **REMOVE TRANSFER STIFFENER PLATE RH (SEE PAGE 40-20)**
15. **REMOVE AUTOMATIC TRANSMISSION W/TRANSFER (SEE PAGE 40-20)**
16. **REMOVE TRANSFER ASSY (SEE PAGE 31-9)**

**17. REMOVE TRANSAXLE HOUSING OIL SEAL**

- (a) Using a screwdriver with vinyl tape wrapped around its tip, remove the oil seal.

NOTICE:

Be careful not to damage the housing.

**18. INSTALL TRANSAXLE HOUSING OIL SEAL**

- (a) Using SST and a hammer, drive in a new oil seal.
SST 09649-17010, 09950-70010 (09951-07200)

Oil seal drive in depth:

6.0 ± 0.5 mm (0.236 ± 0.020 in.)

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

19. **INSTALL TRANSFER ASSY (SEE PAGE 31-9)**
20. **INSTALL AUTOMATIC TRANSMISSION W/TRANSFER (SEE PAGE 40-20)**
21. **INSTALL TRANSFER STIFFENER PLATE RH (SEE PAGE 40-20)**
22. **INSTALL FRONT DRIVE SHAFT ASSY RH (SEE PAGE 30-21)**
23. **INSTALL ENGINE ASSEMBLY WITH TRANSAXLE (SEE PAGE 14-149)**
24. **RESET MEMORY (SEE PAGE 05-1005)**
25. **PERFORM INITIALIZATION (SEE PAGE 01-4)**

OIL W/HOSE COOLER ASSY (U151E/U151F)

4012F-02

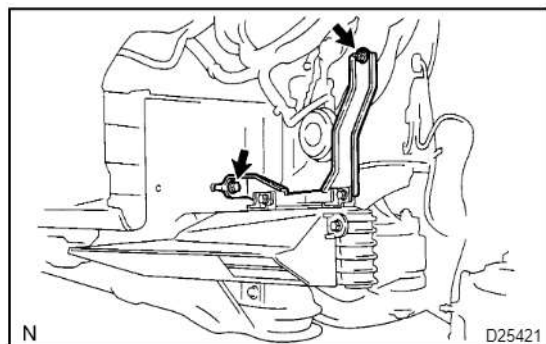
REPLACEMENT

1. REMOVE FRONT BUMPER COVER (SEE PAGE 76-2)

2. DRAIN AUTOMATIC TRANSAXLE FLUID

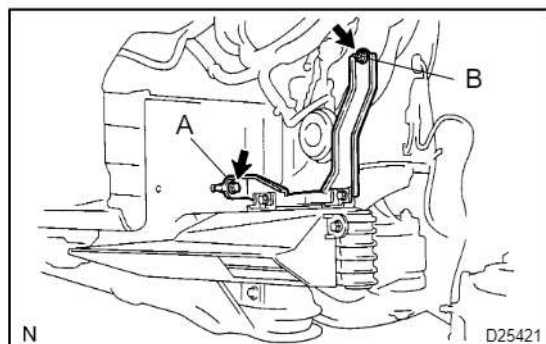
- (a) Remove the drain plug and gasket, and drain ATF.
- (b) Install a new gasket and the drain plug.

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



3. REMOVE OIL COOLER ASSY

- (a) Disconnect the 2 oil cooler hoses.
- (b) Remove the bolt, nut and oil cooler assy.



4. INSTALL OIL COOLER ASSY

- (a) Install the oil cooler assy, bolt A and nut B.

HINT:

After temporarily tightening the bolt A, fully tighten in order of the nut B, bolt A.

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

- (b) Connect the 2 oil cooler hoses.

5. INSTALL FRONT BUMPER COVER (SEE PAGE 76-2)

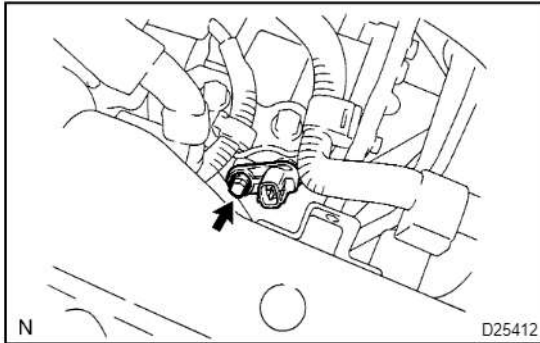
6. ADD AUTOMATIC TRANSAXLE FLUID

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

SPEED SENSOR (U241E/U140F) REPLACEMENT

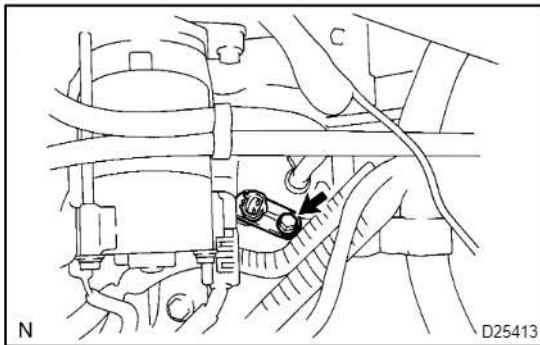
400TX-02

1. REMOVE BATTERY
2. REMOVE AIR CLEANER ASSY
3. REMOVE AIR CLEANER HOSE NO.1



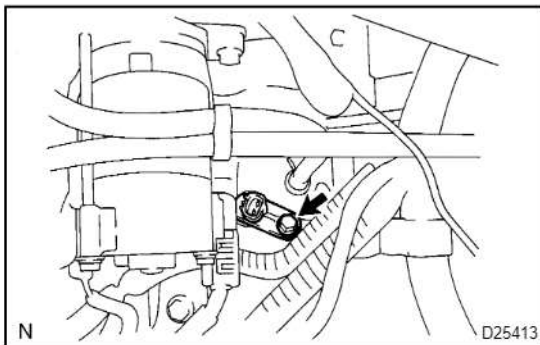
4. REMOVE SPEED SENSOR (NT SENSOR)

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



5. REMOVE SPEED SENSOR (NC SENSOR)

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



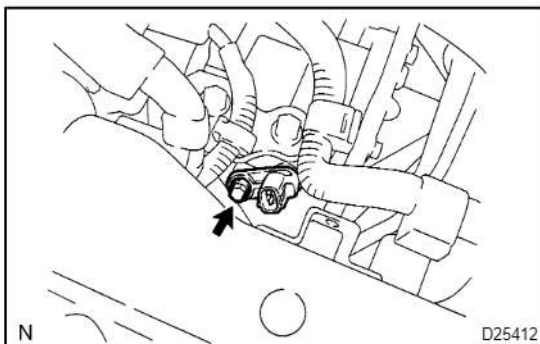
6. INSTALL SPEED SENSOR (NC SENSOR)

- (a) Coat O-ring with ATF.
- (b) Install the speed sensor with the bolt.
Torque: 11.3 N·m (115 kgf·cm, 8 ft·lbf)

HINT:

Make sure of the manufacturer's name.

- (c) Connect the connector.



7. INSTALL SPEED SENSOR (NT SENSOR)

- (a) Coat O-ring with ATF.
- (b) Install the speed sensor with the bolt.
Torque: 11.3 N·m (115 kgf·cm, 8 ft·lbf)

HINT:

Make sure of the manufacturer's name.

- (c) Connect the connector.

8. INSTALL AIR CLEANER ASSY

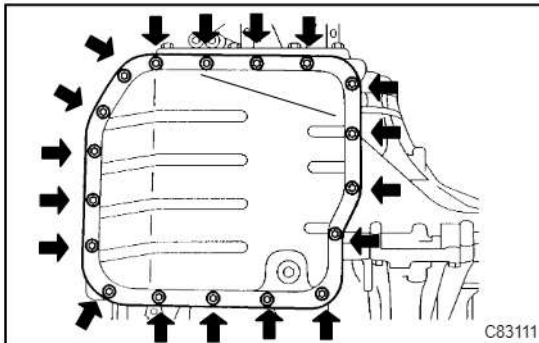
Torque: 5.0 N·m (51 kgf·cm, 44 in·lbf)

TRANSMISSION WIRE (U241E/U140F)

REPLACEMENT

4005V 06

1. **REMOVE ENGINE UNDER COVER NO.1**
2. **DRAIN AUTOMATIC TRANSAXLE FLUID**
 - (a) Remove the drain plug, gasket and drain ATF.
 - (b) Install a new gasket and drain plug.
Torque: 49 N·m (500 kgf·cm, 36 ft·lbf)



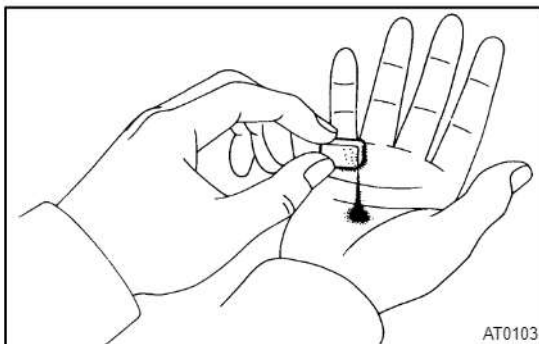
3. REMOVE AUTOMATIC TRANSAXLE OIL PAN SUB-ASSY

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

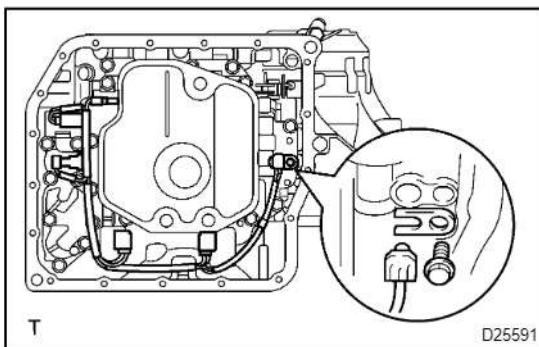
NOTICE:

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

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

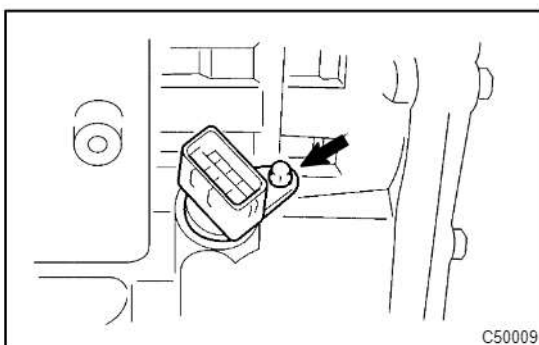


- (c) Examine particles in pan.
 - (1) Remove the magnets and use them to collect any steel chips. Look carefully at the chips and particles in the pan and the magnet to anticipate what type of wear you will find in the transaxle.
Steel (magnetic): bearing, gear and plate wear
Brass (non-magnetic): bearing wear



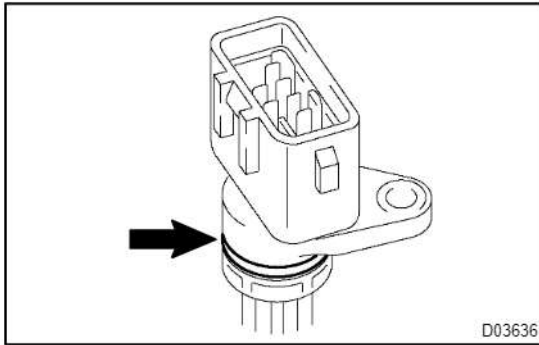
4. SEPARATE TRANSMISSION WIRE

- (a) Disconnect the 5 connectors.
- (b) Remove the bolt and lock plate, and remove the ATF temperature sensor.



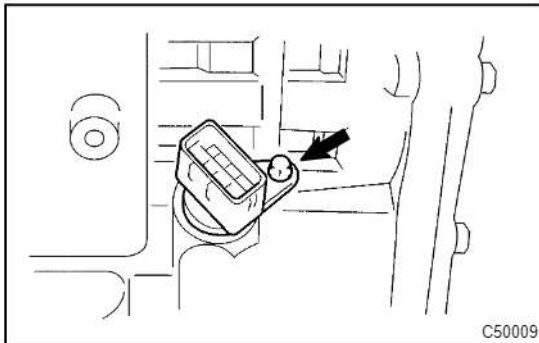
5. REMOVE TRANSMISSION WIRE

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

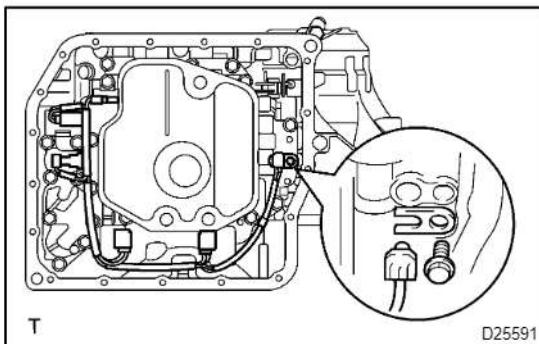


6. INSTALL TRANSMISSION WIRE

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

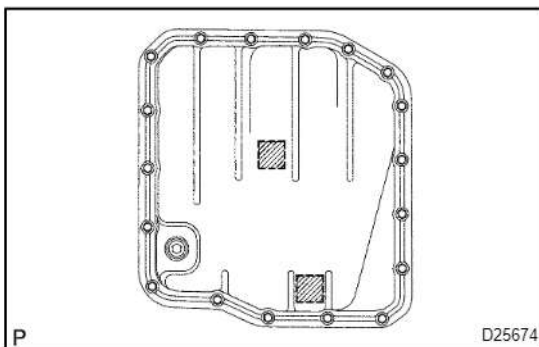


- (c) Install the bolt.
Torque: 5.4 N·m (55 kgf·cm, 48 in·lbf)



7. CONNECT TRANSMISSION WIRE

- (a) Coat a 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 5 shift solenoid valve connectors.

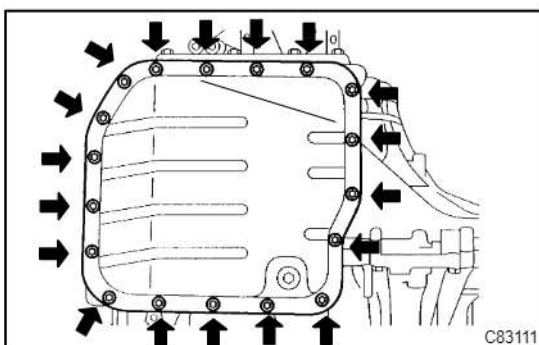


8. INSTALL AUTOMATIC TRANSAXLE OIL PAN SUB-ASSY

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

Seal packing:

THREE BOND 2430 or equivalent



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

Torque: 7.6 N·m (77 kgf·cm, 67 in·lbf)

NOTICE:

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

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

TRANSMISSION VALVE BODY ASSY (U241E/U140F)

40064-08

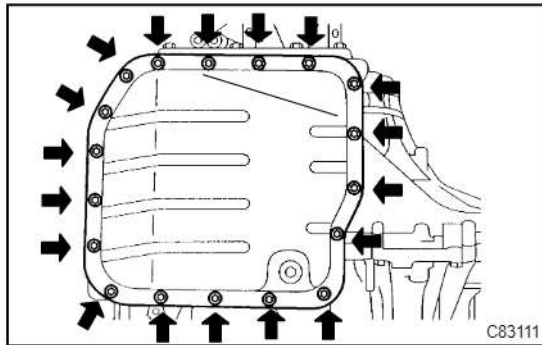
REPLACEMENT

1. REMOVE ENGINE UNDER COVER NO.1

2. DRAIN AUTOMATIC TRANSAXLE FLUID

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

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



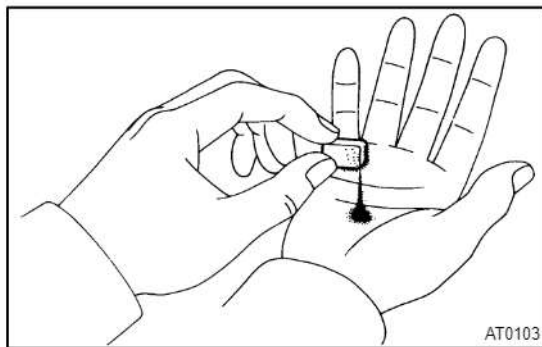
3. REMOVE AUTOMATIC TRANSAXLE OIL PAN SUB-ASSY

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

NOTICE:

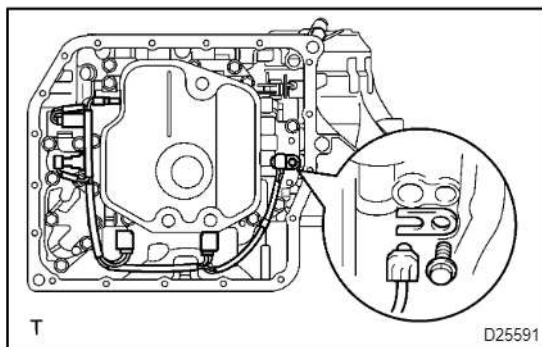
Some fluid will remain in the oil pan. Remove all pan bolts, and carefully remove the oil pan assembly. Discard the gasket.

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



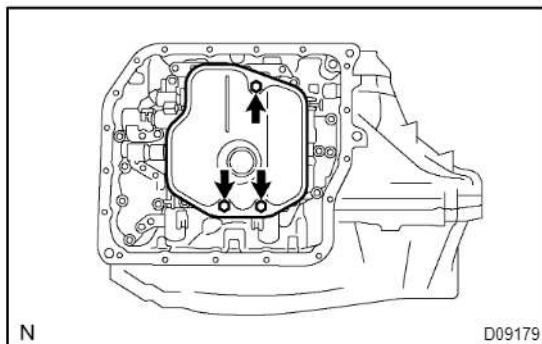
- (c) Examine particles in pan.

- (1) Remove the magnets and use them to collect any steel chips. Look carefully at the chips and particles in the pan and the magnet to anticipate what type of wear you will find in the transaxle.
Steel (magnetic): bearing, gear and plate wear
Brass (non-magnetic): bearing wear



4. SEPARATE TRANSMISSION WIRE

- (a) Disconnect the 5 connectors.
- (b) Remove the bolt and lock plate, and remove the ATF temperature sensor.

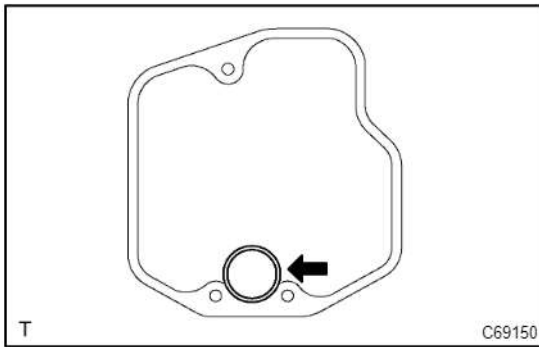


5. REMOVE VALVE BODY OIL STRAINER ASSY

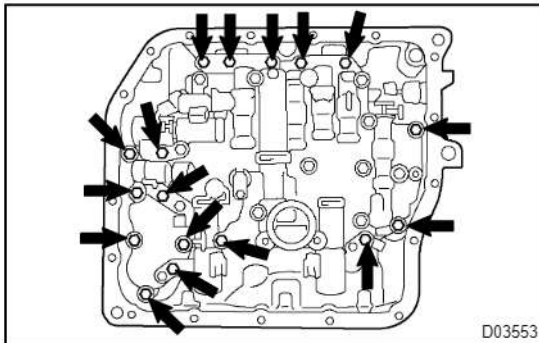
- (a) Remove the 3 bolts and oil strainer.

NOTICE:

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



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

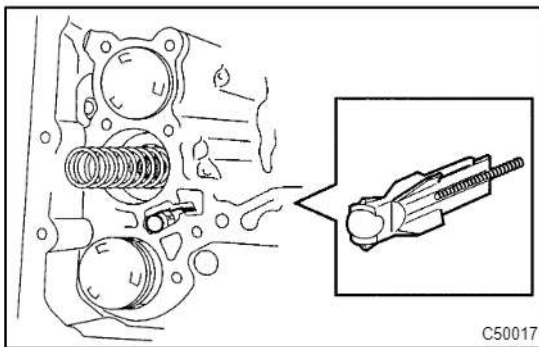


6. REMOVE TRANSMISSION VALVE BODY ASSY

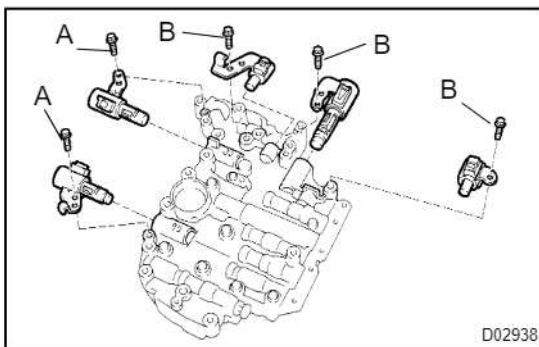
- (a) Support the valve body assy and remove the 17 bolts and the valve body assy.

NOTICE:

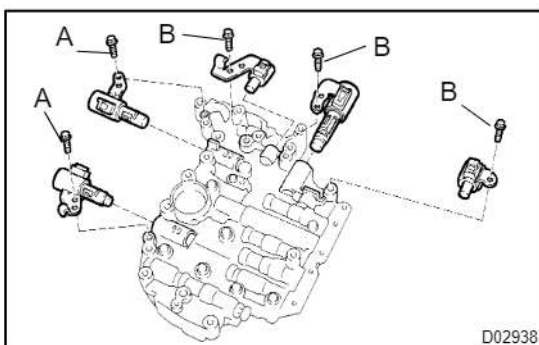
Be careful not to drop the check valve body, spring and accumulator piston.



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



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



7. INSTALL TRANSMISSION VALVE BODY ASSY

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

Torque:

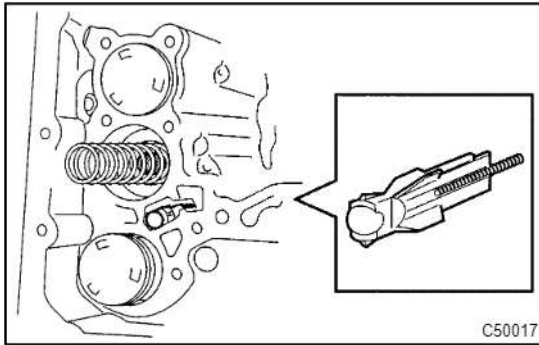
6.6 N·m (67 kgf·cm, 58 in.·lbf) for Bolt A

11 N·m (112 kgf·cm, 8 ft·lbf) for Bolt B

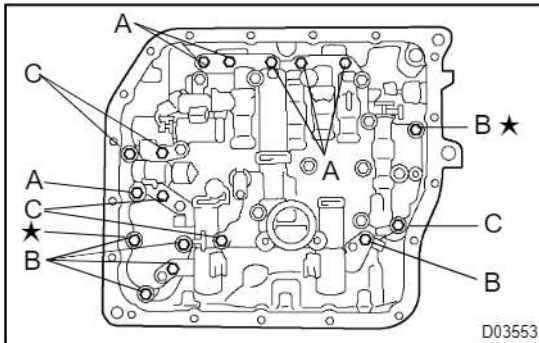
Bolt length:

12 mm (0.47 in.) for Bolt A

45 mm (1.77 in.) for Bolt B



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



- (c) Align the groove of the manual valve with the pin of lever.
(d) Install the 17 bolts.

Torque: 11 N·m (110 kgf·cm, 8 ft·lbf)

NOTICE:

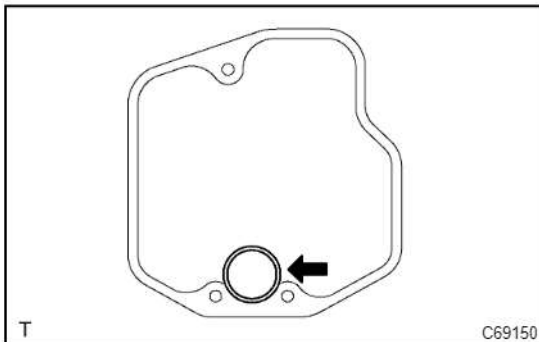
- Push the valve body against the accumulator piston spring and the check ball body to install it.
- Tighten those bolts marked by ★ in the illustration first temporarily because they are positioning bolts.

Bolt length:

25 mm (0.984 in.) for Bolt A

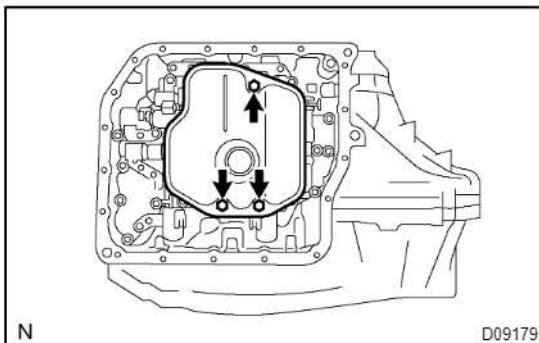
41 mm (1.614 in.) for Bolt B

45 mm (1.771 in.) for Bolt C

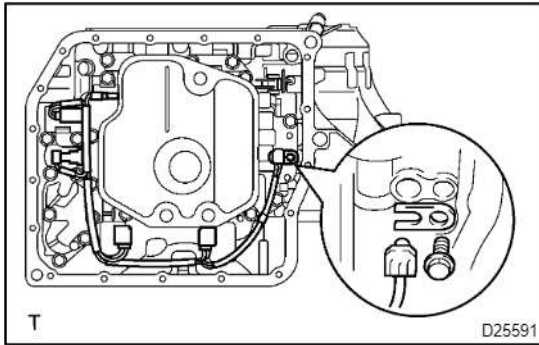


8. INSTALL VALVE BODY OIL STRAINER ASSY

- (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)

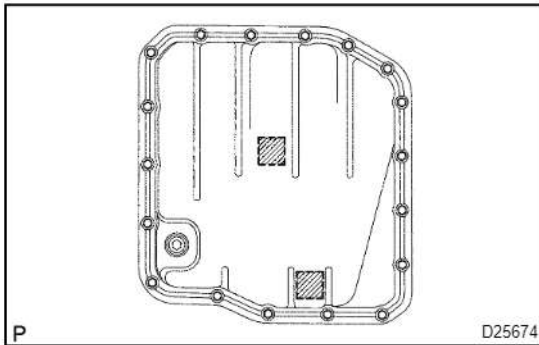


9. INSTALL TRANSMISSION WIRE

- (a) Coat a 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 5 shift solenoid valve connectors.

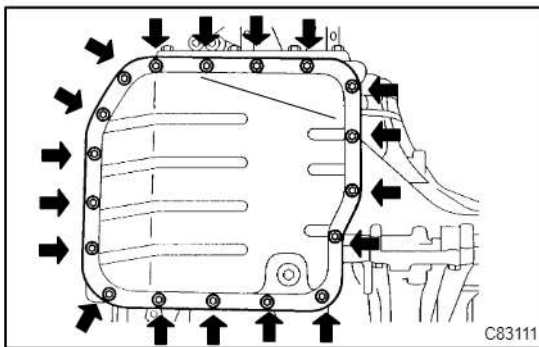


10. INSTALL AUTOMATIC TRANSAXLE OIL PAN SUB-ASSY

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

Seal packing:

THREE BOND 2430 or equivalent



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

Torque: 7.6 N·m (77 kgf·cm, 67 in·lbf)

NOTICE:

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

11. ADD AUTOMATIC TRANSAXLE FLUID

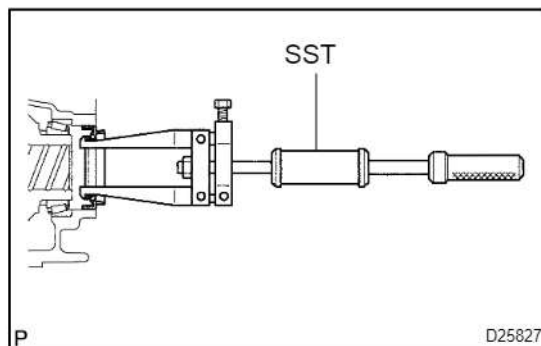
12. INSPECT AUTOMATIC TRANSAXLE FLUID (SEE PAGE 40-2)

FRONT DIFFERENTIAL OIL SEAL (U241E)

40065-09

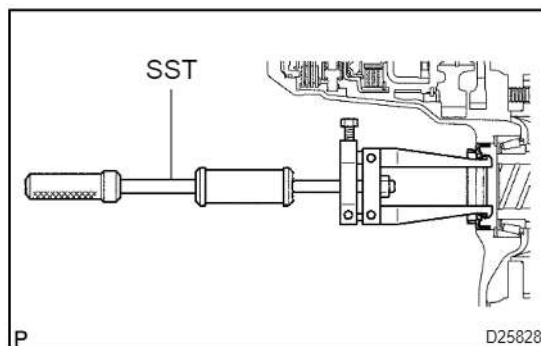
REPLACEMENT

1. REMOVE FRONT WHEELS
2. REMOVE ENGINE UNDER COVER NO.1
3. DRAIN AUTOMATIC TRANSAXLE FLUID
 - (a) Remove the drain plug, gasket and drain ATF.
 - (b) Install a new gasket and drain plug.
Torque: 49 N·m (500 kgf·cm, 36 ft·lbf)
4. REMOVE FRONT DRIVE SHAFT ASSY RH (SEE PAGE 30-21)
5. REMOVE FRONT DRIVE SHAFT ASSY LH (SEE PAGE 30-21)



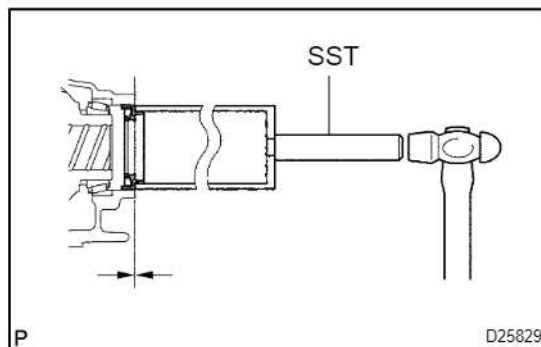
6. REMOVE TRANSAXLE HOUSING OIL SEAL

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



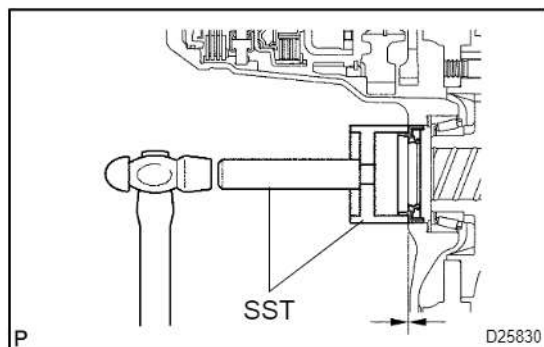
7. REMOVE DIFFERENTIAL SIDE BEARING RETAINER OIL SEAL

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



8. INSTALL TRANSAXLE HOUSING OIL SEAL

- (a) Using SST and a hammer, drive in a new oil seal.
SST 09316-6001 1 (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.



9. 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.

10. INSTALL FRONT DRIVE SHAFT ASSY LH (SEE PAGE 30-21)

11. INSTALL FRONT DRIVE SHAFT ASSY RH (SEE PAGE 30-21)

12. INSTALL FRONT WHEELS

Torque: 103 N·m (1,050 kgf·cm, 76 ft·lbf)

13. ADD AUTOMATIC TRANSAXLE FLUID

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

15. CHECK ABS SPEED SENSOR SIGNAL

FRONT DIFFERENTIAL OIL SEAL (U140F)

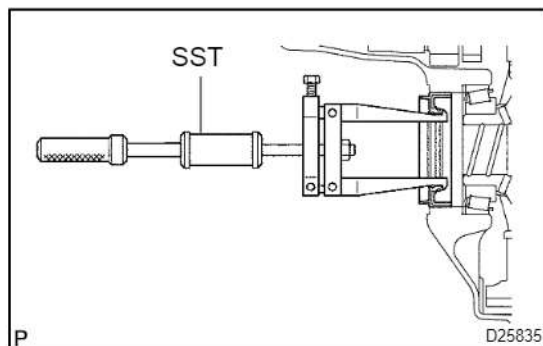
REPLACEMENT

4009W-06

HINT:

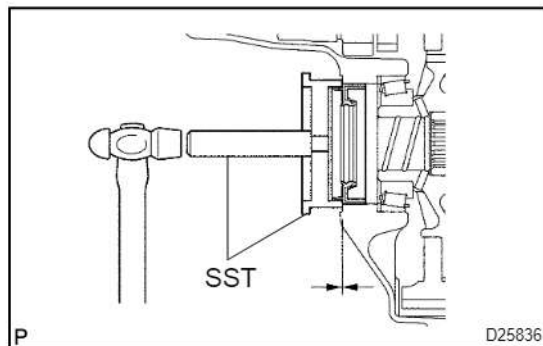
When replacing the front differential oil seal (LH) or (RH), perform step 1 to 11 or 12 to 21 respectively.

1. **REMOVE FRONT WHEELS**
2. **REMOVE ENGINE UNDER COVER NO.1**
3. **DRAIN AUTOMATIC TRANSAXLE FLUID**
 - (a) Remove the drain plug, gasket and drain ATF.
 - (b) Install a new gasket and drain plug.
Torque: 49 N·m (500 kgf·cm, 36 ft·lbf)
4. **REMOVE FRONT DRIVE SHAFT ASSY LH (SEE PAGE 30-21)**



5. **REMOVE DIFFERENTIAL SIDE BEARING RETAINER OIL SEAL**

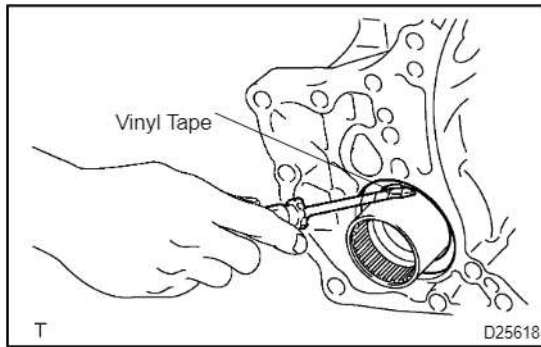
- (a) Using SST, pull out the oil seal.
SST 09308-00010



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

- (a) Using SST and a hammer, drive in a new oil seal.
SST 09726-27012 (09726-02041), 09950-70010 (09951-07200)
Oil seal drive in depth: 0 ± 0.5 mm (0 ± 0.020 in.)
- (b) Coat the lip of the oil seal with MP grease.

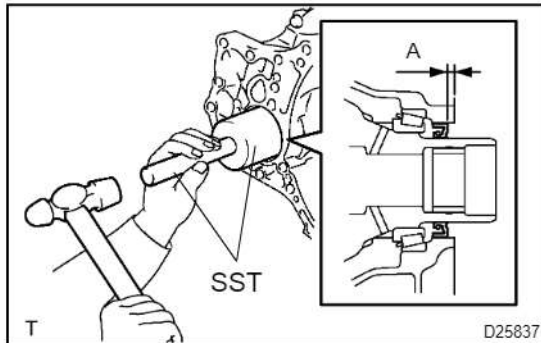
7. **INSTALL FRONT DRIVE SHAFT ASSY LH (SEE PAGE 30-21)**
8. **INSTALL FRONT WHEELS**
Torque: 103 N·m (1,050 kgf·cm, 76 ft·lbf)
9. **ADD AUTOMATIC TRANSAXLE FLUID**
10. **INSPECT AUTOMATIC TRANSAXLE FLUID (SEE PAGE 40-2)**
11. **REMOVE ENGINE ASSEMBLY WITH TRANSAXLE (SEE PAGE 14-24)**
12. **REMOVE FRONT DRIVE SHAFT ASSY RH (SEE PAGE 30-21)**
13. **REMOVE TRANSVERSE ENGINE ENGINE MOUNTING BRACKET (SEE PAGE 31-9)**
14. **REMOVE TRANSFER ASSY (SEE PAGE 31-9)**

**15. REMOVE TRANSAXLE HOUSING OIL SEAL**

- (a) Using a screw driver with vinyl tape wound around its tip, remove the oil seal.

NOTICE:

Be careful not to damage the housing.

**16. INSTALL TRANSAXLE HOUSING OIL SEAL**

- (a) Using SST and a hammer, drive in a new oil seal.

SST 09309-37010

Oil seal drive in depth:

6.0 ± 0.5 mm (0.236 ± 0.020 in.)

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

17. INSTALL TRANSVERSE ENGINE ENGINE MOUNTING BRACKET (SEE PAGE 31-9)

18. INSTALL TRANSFER ASSY (SEE PAGE 31-9)

19. INSTALL FRONT DRIVE SHAFT ASSY RH (SEE PAGE 30-21)

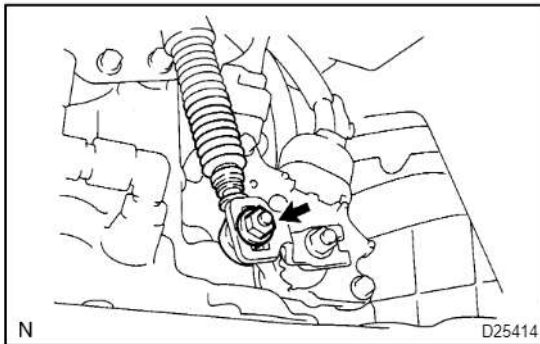
20. INSTALL ENGINE ASSEMBLY WITH TRANSAXLE (SEE PAGE 14-24)

TRANSMISSION CONTROL CABLE ASSY (ATM)

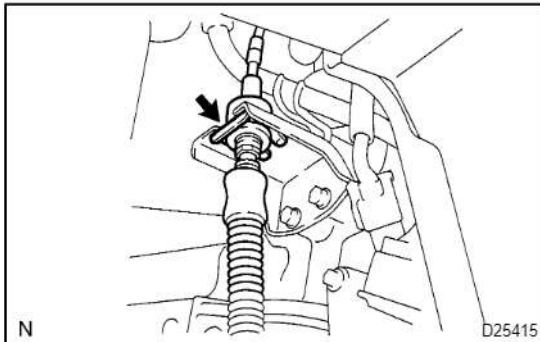
4005X-06

REPLACEMENT

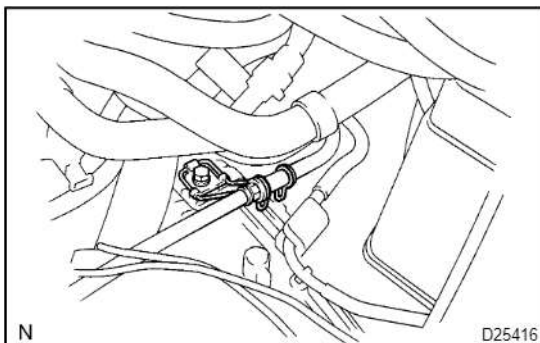
1. REMOVE INSTRUMENT CLUSTER FINISH PANEL ASSY CENTER (SEE PAGE 71-10)
2. REMOVE FLOOR CARPET COVER CENTER RH (SEE PAGE 71-10)
3. REMOVE FLOOR CARPET COVER CENTER LH (SEE PAGE 71-10)
4. REMOVE BATTERY
5. REMOVE AIR CLEANER ASSY
6. REMOVE AIR CLEANER HOSE NO.1



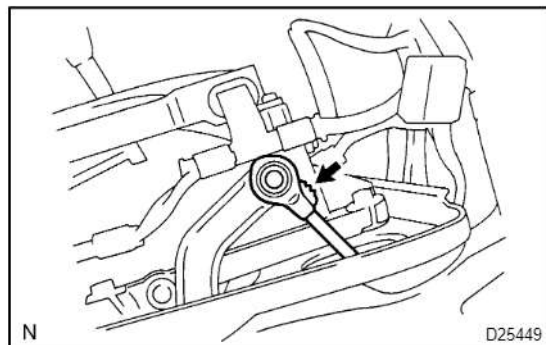
7. REMOVE TRANSMISSION CONTROL CABLE ASSY
 - (a) Remove the nut from the control shaft lever.
 - (b) Disconnect the control cable from the control shaft lever.



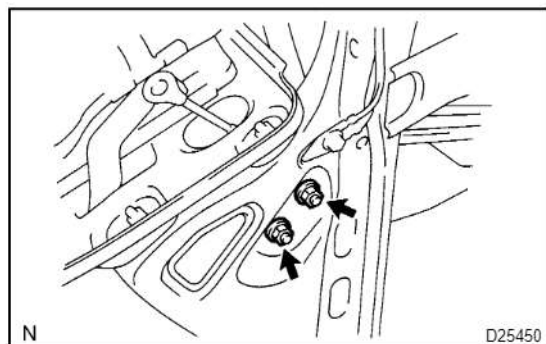
- (c) Remove the clip and disconnect the control cable from the control cable bracket.



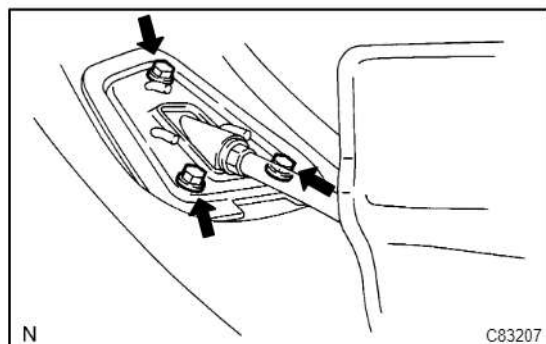
- (d) Disconnect the control cable from the control cable clamp.



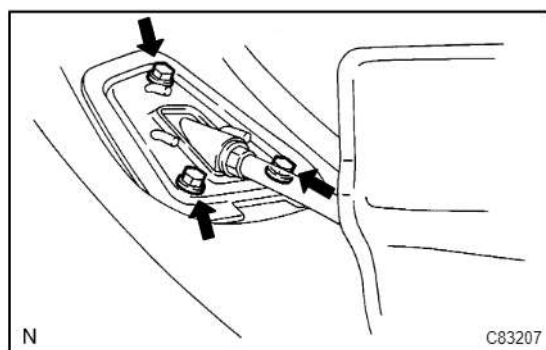
- (e) Disconnect the cable end from the rod of the floor shift assembly.



- (f) Remove the 2 nuts.

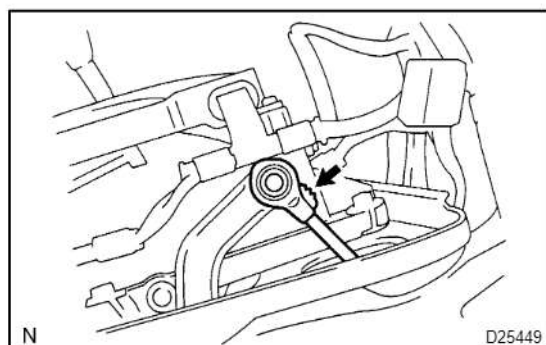


- (g) Remove the 3 bolts.
(h) Pull out the control cable from the body.

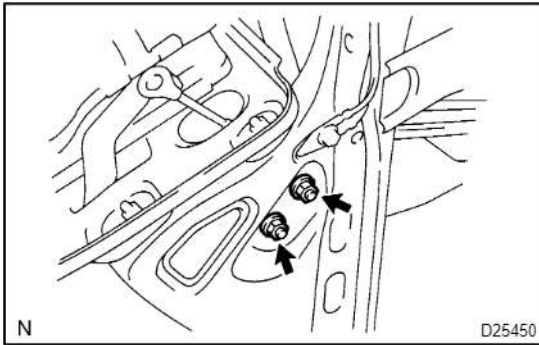


8. INSTALL TRANSMISSION CONTROL CABLE ASSY

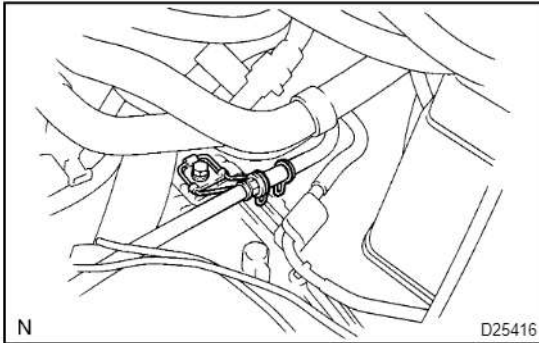
- (a) Pull in the control cable to the body.
(b) Install the 3 bolts.
Torque: 4.9 N·m (50 kgf·cm, 43 in.·lbf)



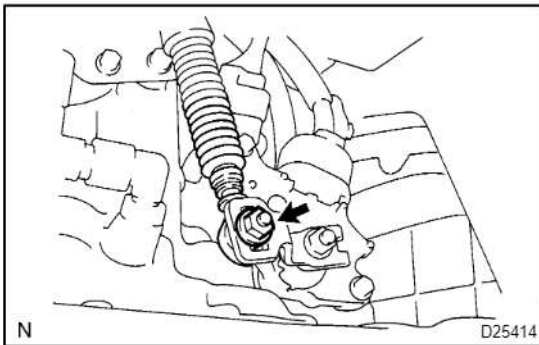
- (c) Install the cable end, as shown in the illustration.
HINT:
Install it with the uneven surface facing up.



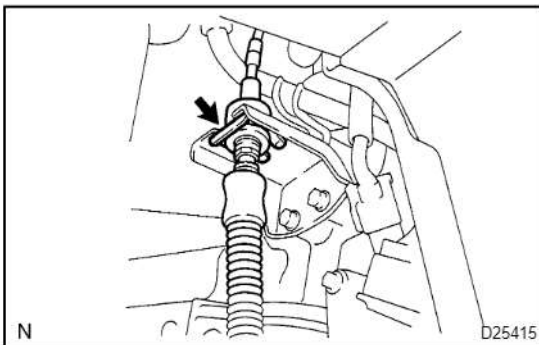
- (d) Install the control cable and 2 nuts.
Torque: 11.8 N·m (122 kgf·cm, 9 ft·lbf)



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



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



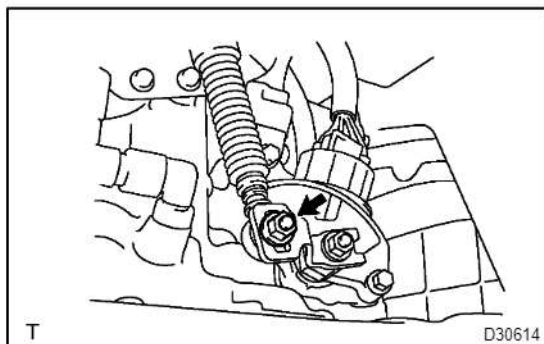
- (g) Install the control cable and clip to the bracket.

9. INSTALL AIR CLEANER ASSY
10. ADJUST SHIFT LEVER POSITION (SEE PAGE 40-71)
11. INSPECT SHIFT LEVER POSITION (SEE PAGE 40-71)

PARK/NEUTRAL POSITION SWITCH ASSY (U151E/U151F) REPLACEMENT

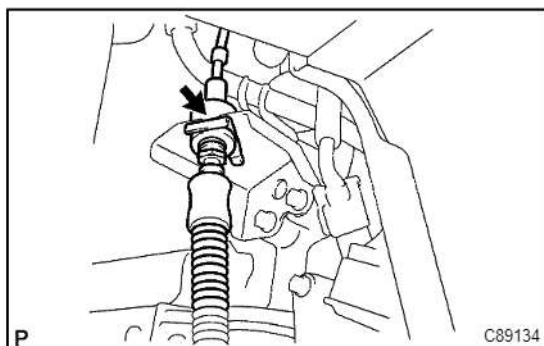
4016W-01

1. REMOVE ENGINE UNDER COVER NO.1



2. SEPARATE TRANSMISSION CONTROL CABLE ASSY

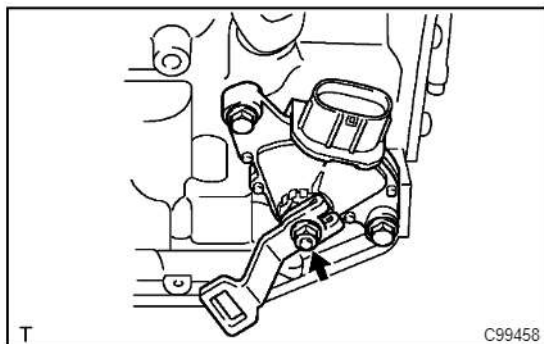
- (a) Remove the nut from the control shaft lever.
- (b) Disconnect the control cable from the control shaft lever.



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

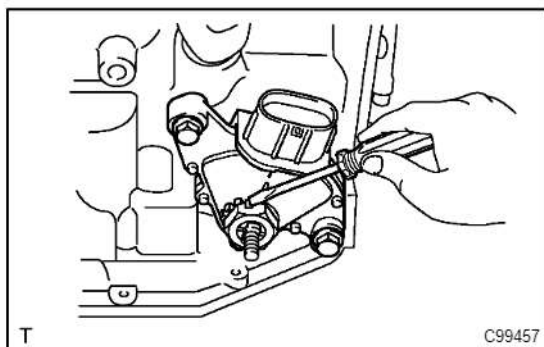
NOTICE:

Do not hold the resin guide pipe.

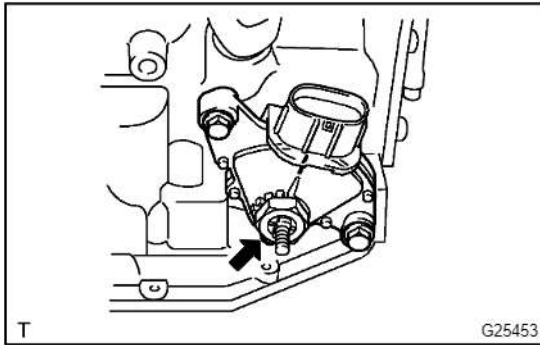


3. REMOVE PARK/NEUTRAL POSITION SWITCH ASSY

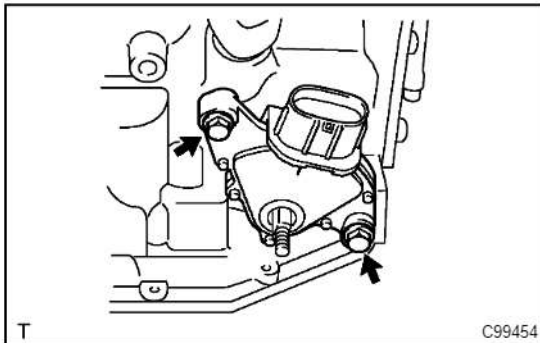
- (a) Disconnect the park/neutral position switch connector.
- (b) Remove the nut, washer and control shaft lever.



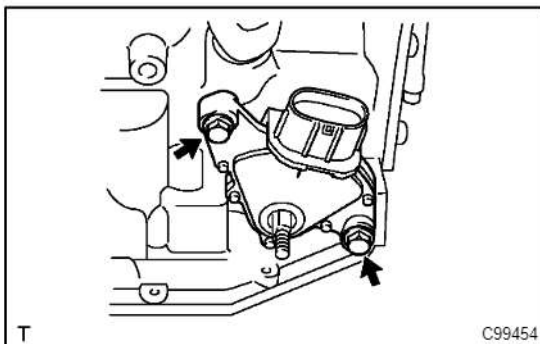
- (c) Pry out the lock plate.



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

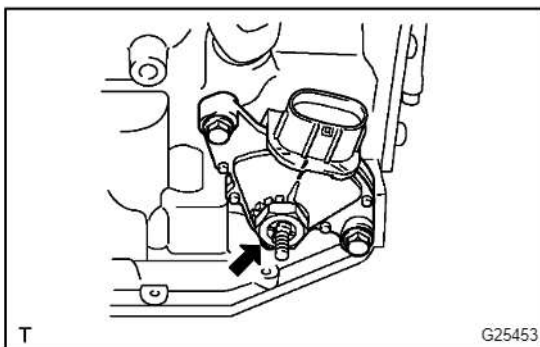


- (e) Remove the 2 bolts and pull out the park/neutral position switch.

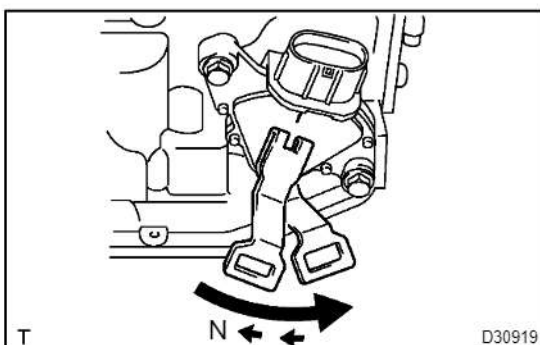


4. INSTALL PARK/NEUTRAL POSITION SWITCH ASSY

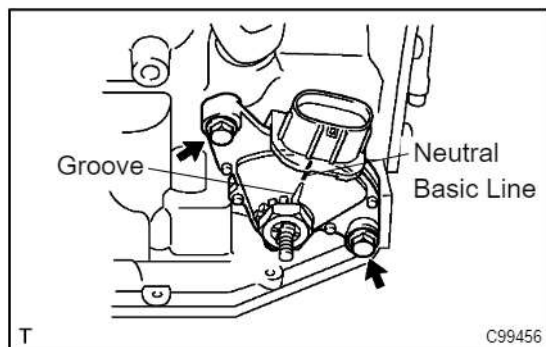
- (a) Install the park/neutral position switch to the manual valve shaft.
(b) Temporarily install the 2 bolts.



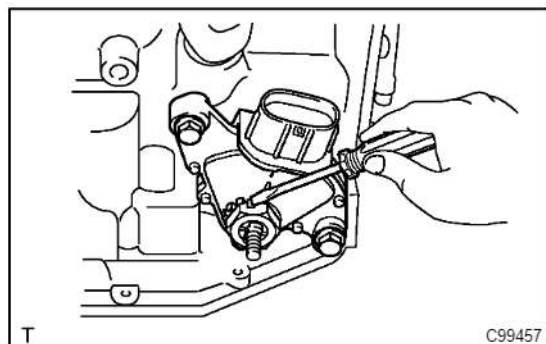
- (c) Place the lock plate and tighten the nut.
Torque: 6.9 N·m (70 kgf·cm, 61 in.·lbf)
(d) Temporarily install the control shaft lever.



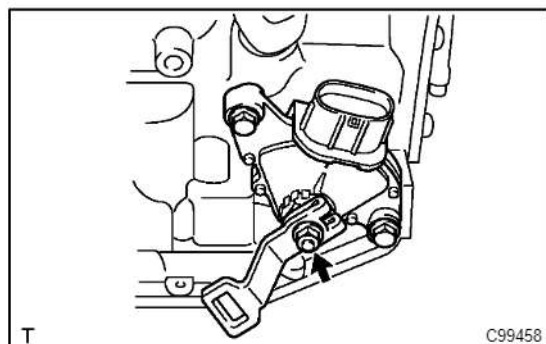
- (e) Turn the lever counterclockwise until it stops, then turn it clockwise 2 notches.
(f) Remove the control shaft lever.



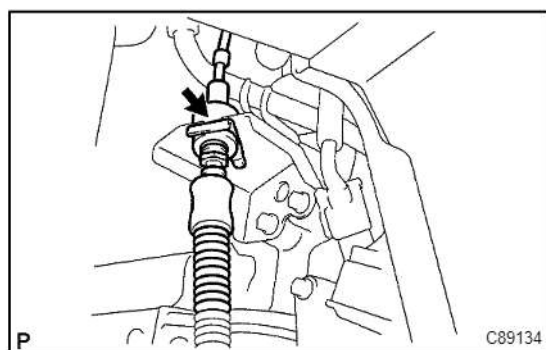
- (g) Align the groove with the neutral basic line.
- (h) Hold the switch in position and tighten the 2 bolts.
Torque: 5.4 N·m (55 kgf·cm, 48 in·lbf)



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

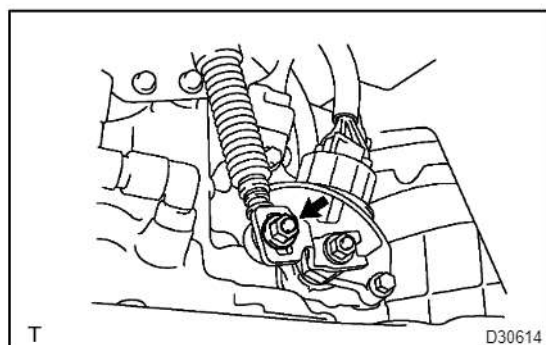


- (j) Install the control shaft lever, washer and nut.
Torque: 13 N·m (130 kgf·cm, 9 ft·lbf)
- (k) Connect the park/neutral position switch connector.



5. INSTALL TRANSMISSION CONTROL CABLE ASSY

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



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

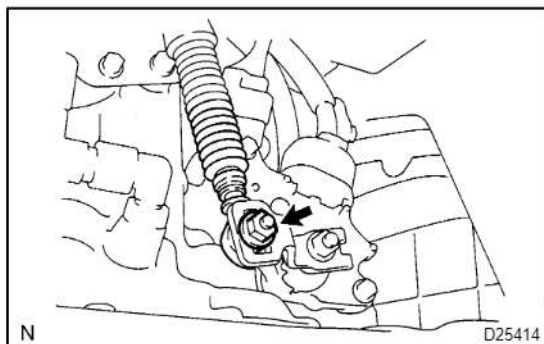
6. ADJUST SHIFT LEVER POSITION (SEE PAGE [40-71](#))
7. INSPECT SHIFT LEVER POSITION (SEE PAGE [40-71](#))
8. INSPECT PARK/NEUTRAL POSITION SWITCH ASSY (SEE PAGE [40-11](#))

PARK/NEUTRAL POSITION SWITCH ASSY (U241E/U140F)

REPLACEMENT

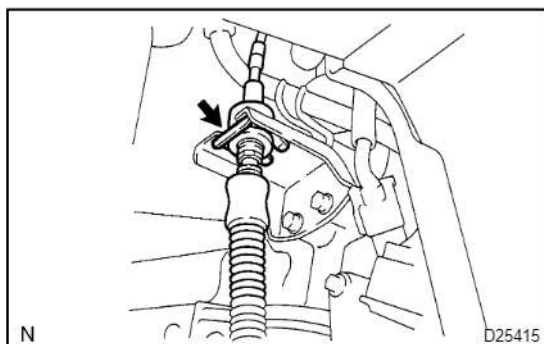
4017K-01

1. REMOVE ENGINE UNDER COVER NO.1

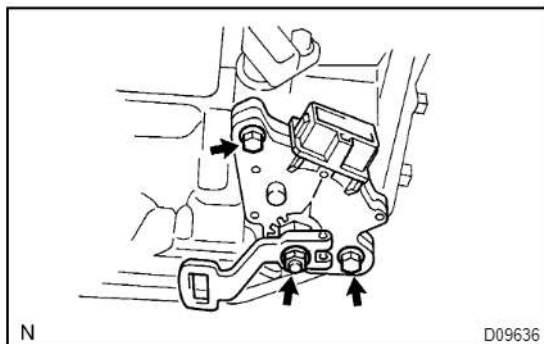


2. SEPARATE TRANSMISSION CONTROL CABLE ASSY

- Remove the nut from the control shaft lever.
- Disconnect the control cable from the control shaft lever.

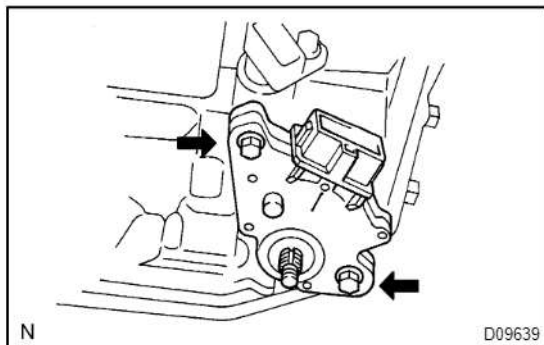


- Remove the clip and disconnect the control cable from the control cable bracket.



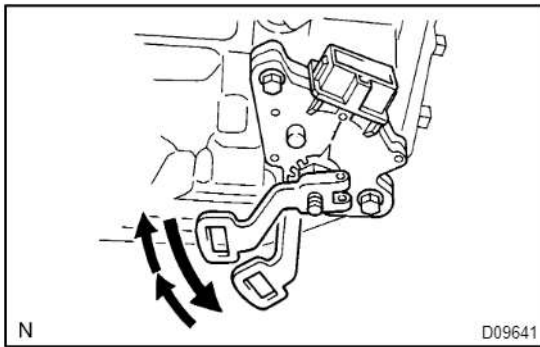
3. REMOVE PARK/NEUTRAL POSITION SWITCH ASSY

- Remove the nut, washer and control shaft lever.
- Pry out the lock plate and remove the manual valve shaft nut.
- Remove the 2 bolts and pull out the park/neutral position switch.

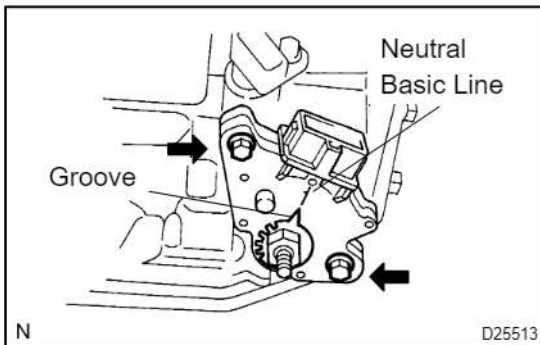


4. INSTALL PARK/NEUTRAL POSITION SWITCH ASSY

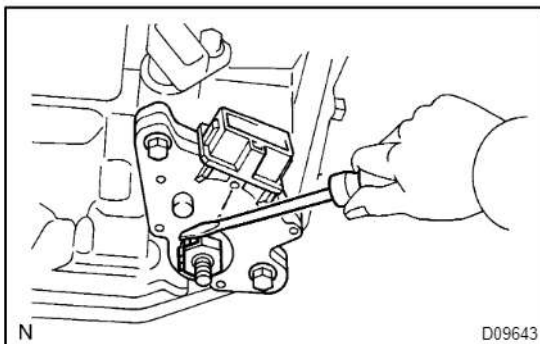
- Install the park/neutral position switch to the manual valve shaft.
- Place a new lock plate and tighten the nut.
Torque: 6.9 N·m (70 kgf·cm, 61 in·lbf)
- Temporarily install the 2 bolts.
- Temporarily install the control shaft lever.



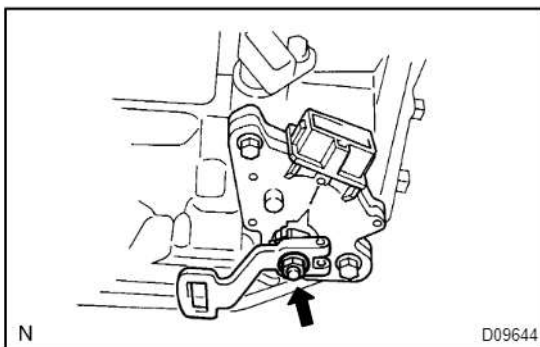
- (e) Turn the lever counterclockwise until it stops, then turn it clockwise 2 notches.
- (f) Remove the control shaft lever.



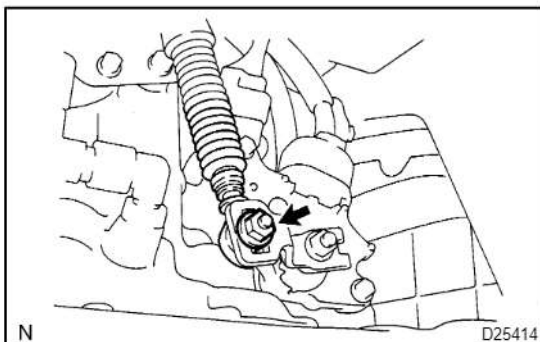
- (g) Align the groove with neutral basic line.
- (h) Hold the switch in position and tighten the 2 bolts.
Torque: 5.4 N·m (55 kgf·cm, 48 in·lbf)



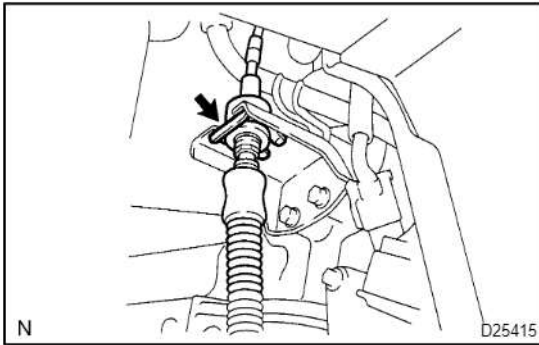
- (i) Using a screwdriver, stake the nut with the lock plate.



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



- 5. INSTALL TRANSMISSION CONTROL CABLE ASSY**
- (a) Temporarily install the control cable to the control shaft lever with nuts.



(b) Install the control cable and clip to the bracket.

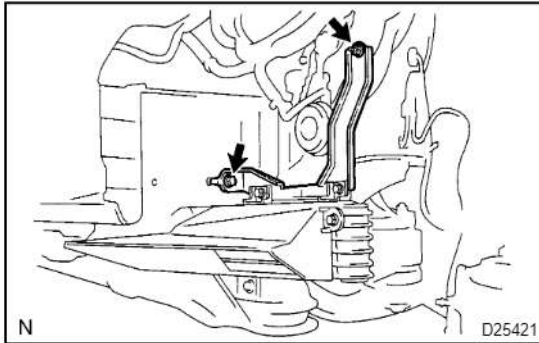
6. ADJUST SHIFT LEVER POSITION (See page [40-71](#))
7. INSPECT SHIFT LEVER POSITION
8. INSPECT PARK/NEUTRAL POSITION SWITCH ASSY (See page [40-6](#))

OIL W/HOSE COOLER ASSY (U241E/U140F)

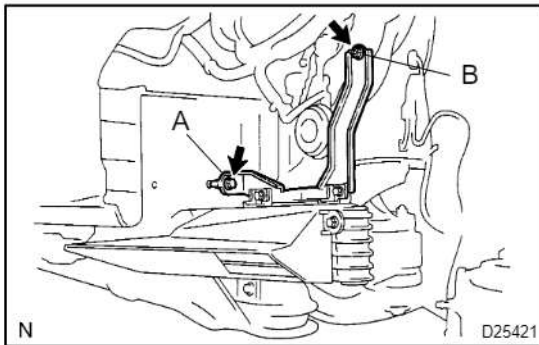
4017J-01

REPLACEMENT

1. **REMOVE RADIATOR GRILLE** (See page 76-2)
2. **REMOVE FRONT BUMPER COVER** (See page 76-2)
3. **SEPARATE OIL COOLER OUTLET TUBE NO.1**
 - (a) Loosen the clip and separate the oil cooler hose.
4. **SEPARATE TRANSMISSION OIL COOLER HOSE NO.1**
 - (a) Loosen the clip and separate the transmission oil cooler hose No. 1.



5. **REMOVE OIL W/HOSE COOLER ASSY**
 - (a) Remove the bolt, nut and oil cooler assy.



6. **INSTALL OIL W/HOSE COOLER ASSY**
 - (a) Install the oil cooler assy, bolt A and nut B.

HINT:
After temporally tightening bolt A, tighten in order of nut B, bolt A.

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

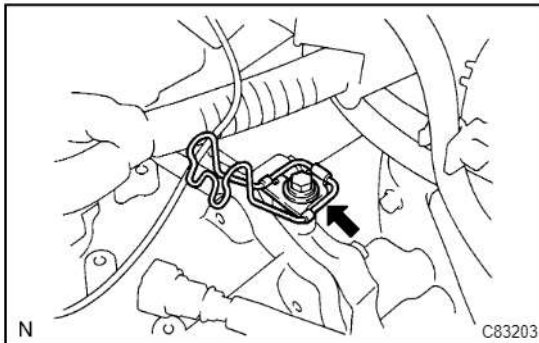
7. **INSTALL TRANSMISSION OIL COOLER HOSE NO.1**
 - (a) Install the transmission oil cooler hose No. 1 and clip.
8. **INSTALL OIL COOLER OUTLET TUBE NO.1**
 - (a) Install the oil cooler hose and clip.
9. **ADD AUTOMATIC TRANSAXLE FLUID**
10. **INSPECT AUTOMATIC TRANSAXLE FLUID** (See page 40-2)

AUTOMATIC TRANSAXLE ASSY (U241E/U140F)

40062-07

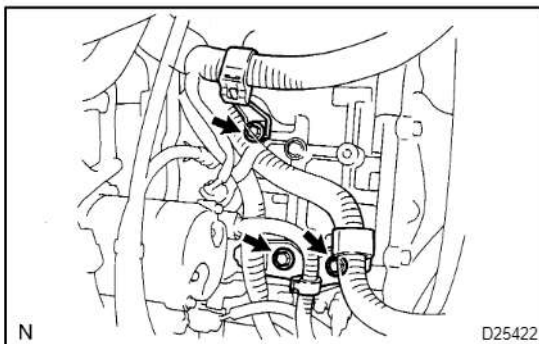
REPLACEMENT

1. REMOVE ENGINE ASSY W/ TRANSAXLE (SEE PAGE 14-24)
2. REMOVE FRONT DRIVE SHAFT ASSY RH (SEE PAGE 30-21)
3. REMOVE FRONT DRIVE SHAFT ASSY LH (SEE PAGE 30-21)
4. REMOVE TRANSVERSE ENGINE ENGINE MOUNTING BRACKET (4WD DRIVE TYPE) (SEE PAGE 31-9)
5. REMOVE TRANSFER ASSY (4WD DRIVE TYPE) (SEE PAGE 31-9)



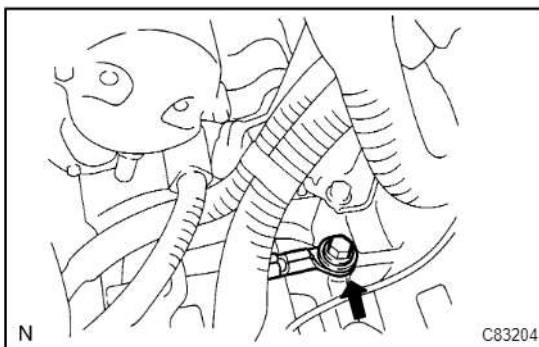
6. REMOVE TRANSMISSION CONTROL CABLE BRACKET NO.2

- (a) Remove the bolt and control cable clamp.



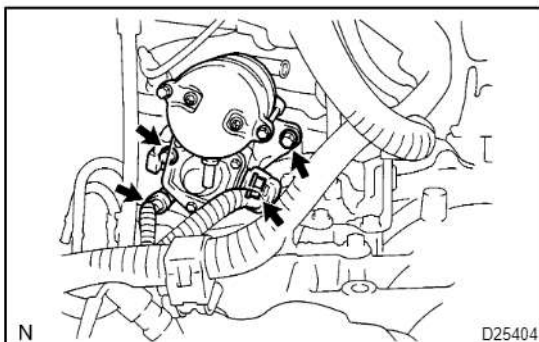
7. REMOVE WIRE HARNESS CLAMP

- (a) Disconnect the wire harness from the clamp.
- (b) Remove the 3 bolts and 2 clamps.



8. SEPARATE WIRE HARNESS

- (a) Remove the wire harness.

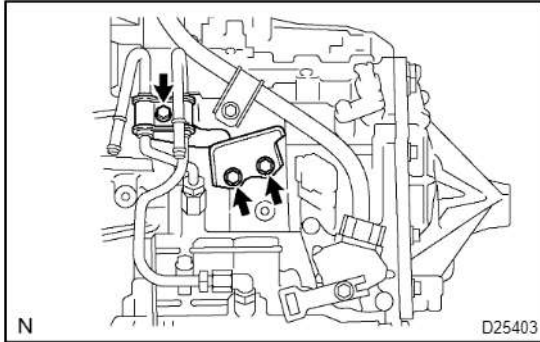


9. REMOVE STARTER ASSY

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

10. SEPARATE CONNECTOR

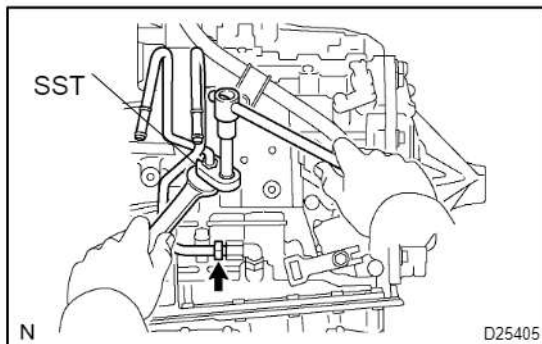
- (a) Disconnect the transmission wire connector.
- (b) Disconnect the park/neutral position switch connector.
- (c) Disconnect the speed sensor connector.

**11. 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.

12. REMOVE TRANSMISSION OIL FILLER TUBE SUB-ASSY

- (a) Remove the ATF level gauge.
- (b) Remove the bolt and oil filler tube.
- (c) Remove the O-ring from the oil filler tube.

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

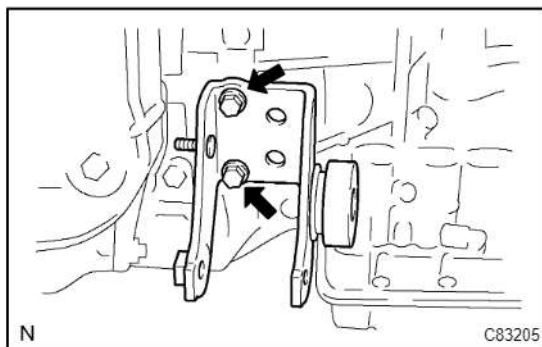
- (a) Using SST and spanner, disconnect the oil cooler inlet tube.

SST 09023-12701

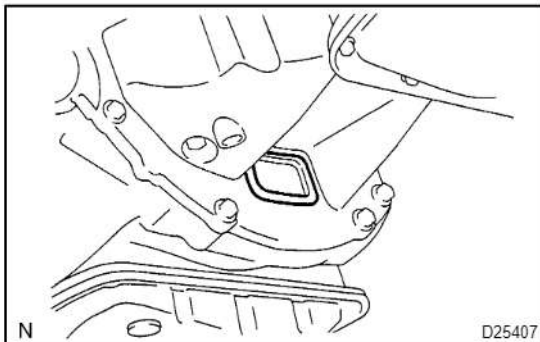
14. REMOVE OIL COOLER OUTLET TUBE NO.1

- (a) Using SST and spanner, disconnect the oil cooler outlet tube.

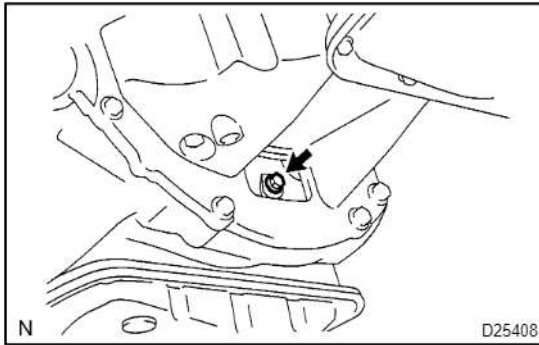
SST 09023-12701

**15. REMOVE TRANSVERSE ENGINE ENGINE MOUNTING BRACKET**

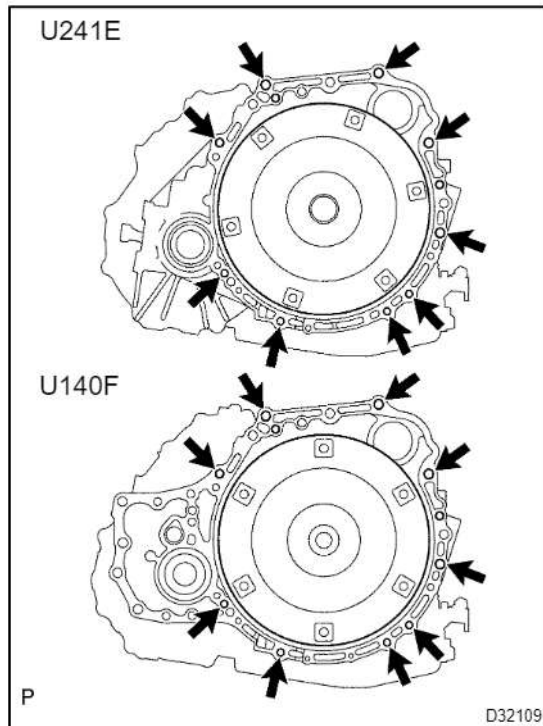
- (a) Remove the 2 bolts and engine mounting bracket FR.

**16. REMOVE FLYWHEEL HOUSING UNDER COVER**

- (a) Remove the flywheel housing under cover.

**17. 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.



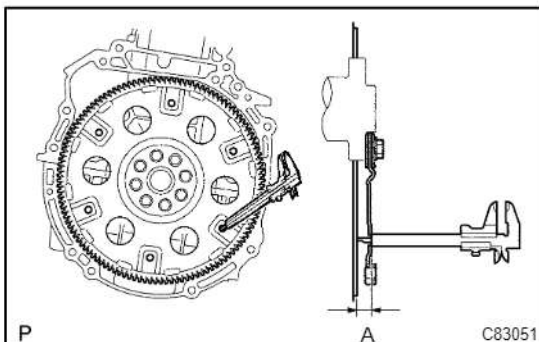
- (b) Remove the 9 bolts.
(c) Separate and remove the automatic transaxle.

18. REMOVE TORQUE CONVERTER CLUTCH ASSY**19. INSPECT TORQUE CONVERTER CLUTCH ASSY (SEE PAGE 40-29)**

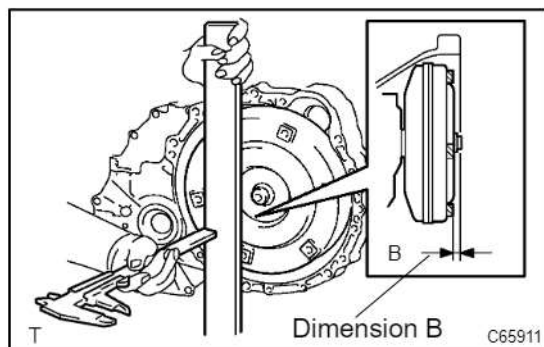
SST 09350-32014 (09351-32010, 09351-32020)

20. INSTALL TORQUE CONVERTER CLUTCH ASSY

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

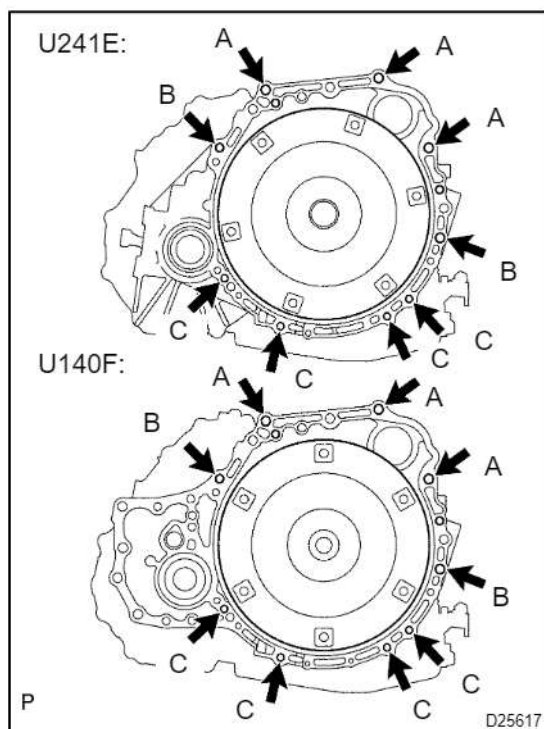


- (b) Using calipers, measure dimension A between the trans-axle and the end surface of the drive plate.



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

Standard: A + 1 mm or more



21. INSTALL AUTOMATIC TRANSAXLE ASSY

- (a) Install the automatic transaxle and 9 bolts to the engine.

Torque:

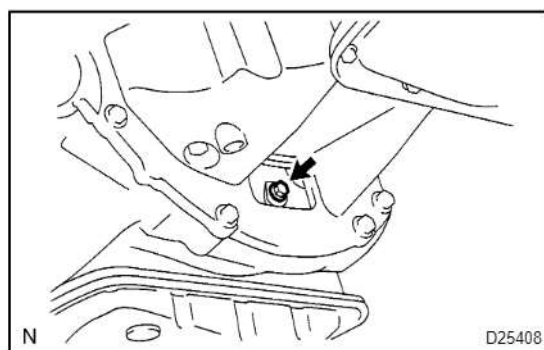
Bolt A: 64 N·m (650 kgf·cm, 47 ft·lbf)

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

Bolt C: 37.2 N·m (379 kgf·cm, 27 ft·lbf)

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

Adhesive: Part No. 08833-00070 or equivalent

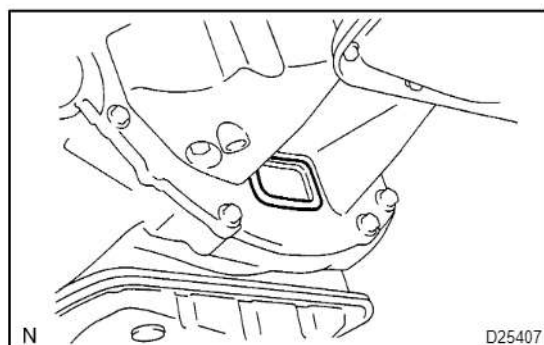


- (c) Install the 6 torque converter clutch mounting bolts.

Torque: 41 N·m (420 kgf·cm, 30 ft·lbf)

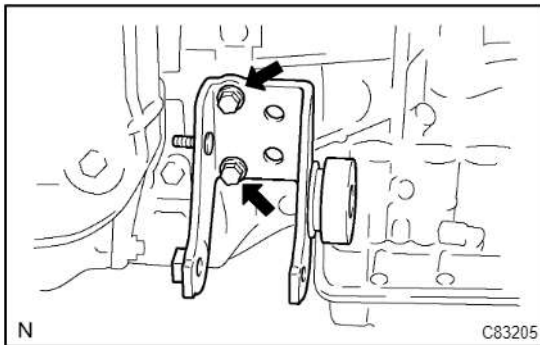
HINT:

First install green colored bolt and then the 5 bolts.



22. INSTALL FLYWHEEL HOUSING UNDER COVER

- (a) Install the flywheel housing under cover.



23. INSTALL TRANSVERSE ENGINE ENGINE MOUNTING BRACKET

- (a) Install the engine mounting bracket FR and 2 bolts to the automatic transaxle.

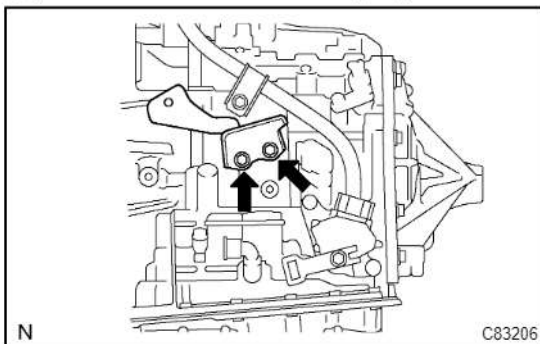
Torque: 64 N·m (653 kgf·cm, 47 ft·lbf)

24. 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 and bolt to the automatic transaxle.

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

- (c) Install the ATF level gauge.



25. INSTALL TRANSMISSION CONTROL CABLE BRACKET NO.1

- (a) Install the control cable bracket and 2 bolts.

Torque: 11.8 N·m (122 kgf·cm, 9 ft·lbf)

26. INSTALL OIL COOLER INLET TUBE NO.1

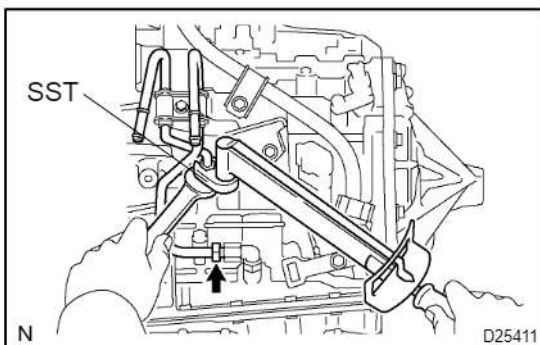
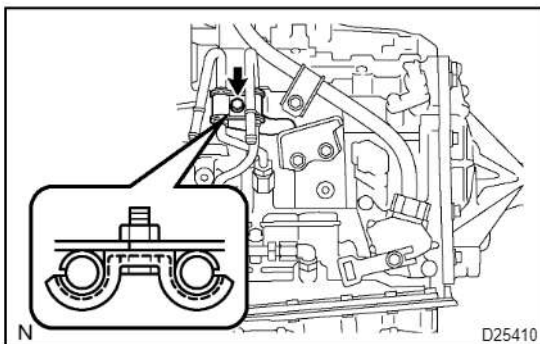
- (a) Temporarily install the oil cooler outlet tube.
(b) Temporarily install the oil cooler inlet tube.

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

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

HINT:

Install them so that the oil cooler tube cushion is positioned as illustrated.



- (d) Using SST and spanner, tighten the oil cooler inlet tube.
SST 09023-12701

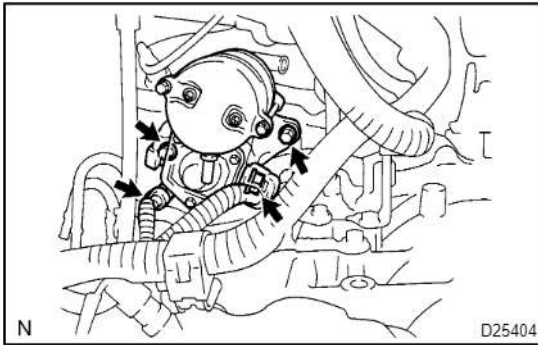
Torque: 34.3 N·m (350 kgf·cm, 25 ft·lbf)

27. INSTALL OIL COOLER OUTLET TUBE NO.1

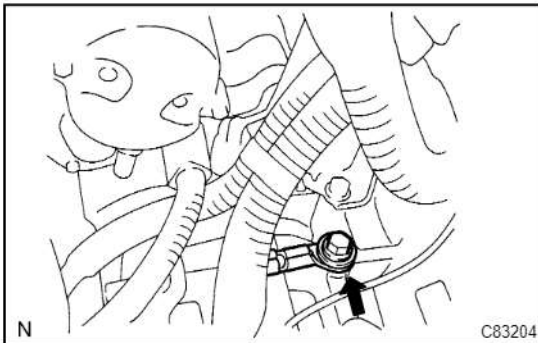
- (a) Using SST and spanner, tighten the oil cooler outlet tube.

SST 09023-12701

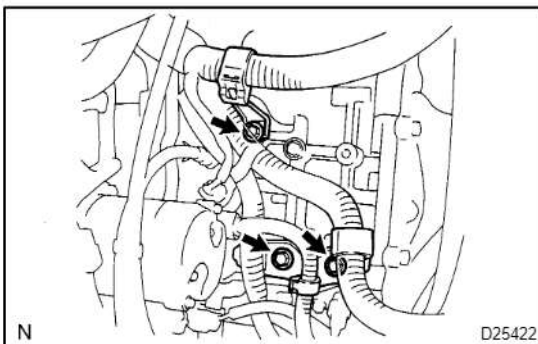
Torque: 34.3 N·m (350 kgf·cm, 25 ft·lbf)

**28. INSTALL STARTER ASSY**

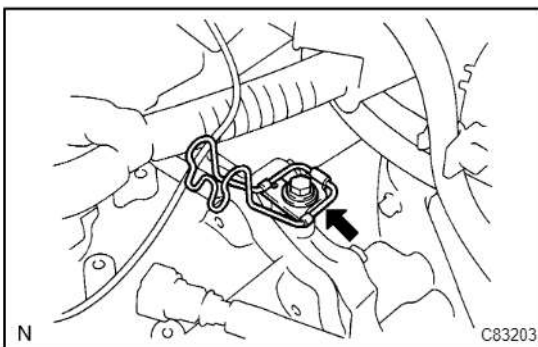
- (a) Install the starter and 2 bolts.
Torque: 39 N·m (398 kgf·cm, 29 ft·lbf)
- (b) Connect the connector.
- (c) Install the starter wire and nut.
Torque: 9.8 N·m (100 kgf·cm, 87 in·lbf)

**29. INSTALL WIRE HARNESS**

- (a) Install the wire harness and bolt.
Torque: 25.5 N·m (260 kgf·cm, 19 ft·lbf)

**30. INSTALL WIRE HARNESS CLAMP**

- (a) Install the 2 clamps and 3 bolts.
Torque: 8.4 N·m (86 kgf·cm, 74 in·lbf)
- (b) Connect the wire harness to the clamp.

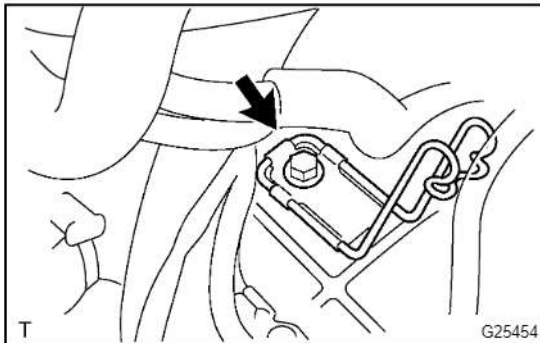
**31. INSTALL TRANSMISSION CONTROL CABLE BRACKET NO.2**

- (a) Install the control cable clamp and bolt.
Torque: 11.8 N·m (122 kgf·cm, 9 ft·lbf)

- 32. **INSTALL TRANSFER ASSY (4WD DRIVE TYPE) (SEE PAGE 31-9)**
- 33. **INSTALL TRANSVERSE ENGINE ENGINE MOUNTING BRACKET (4WD DRIVE TYPE) (SEE PAGE 31-9)**
- 34. **INSTALL FRONT DRIVE SHAFT ASSY LH (SEE PAGE 30-21)**
- 35. **INSTALL FRONT DRIVE SHAFT ASSY RH (SEE PAGE 30-21)**
- 36. **INSTALL ENGINE ASSY W/ TRANSAXLE (SEE PAGE 14-24)**

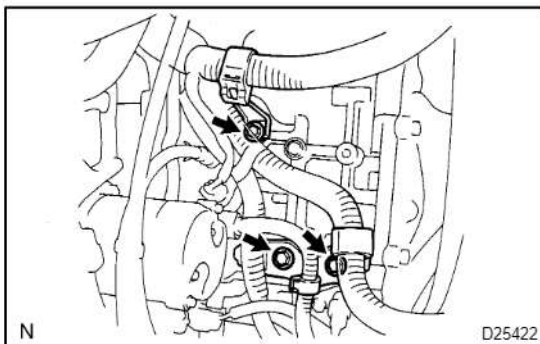
REPLACEMENT

1. REMOVE ENGINE ASSEMBLY WITH TRANSAXLE (SEE PAGE 14-149)
2. REMOVE FRONT DRIVE SHAFT ASSY LH (SEE PAGE 30-21)
SST 09520-01010, 09520-24010 (09520-32040)
3. REMOVE FRONT DRIVE SHAFT ASSY RH (2WD DRIVE TYPE) (SEE PAGE 30-21)
4. REMOVE FRONT DRIVE SHAFT ASSY RH (4WD DRIVE TYPE) (SEE PAGE 30-21)
SST 09520-01010, 09520-24010 (09520-32040)



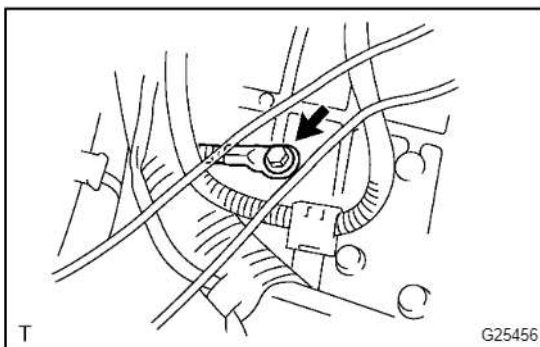
5. REMOVE TRANSMISSION CONTROL CABLE BRACKET NO.2

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



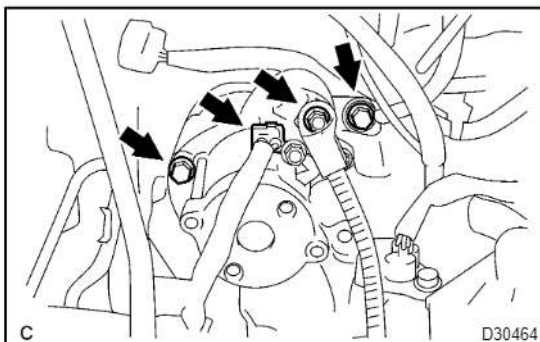
6. REMOVE WIRE HARNESS CLAMP

- (a) Disconnect the wire harnesses from the clamps.
- (b) Remove the 3 bolts and 2 clamps.



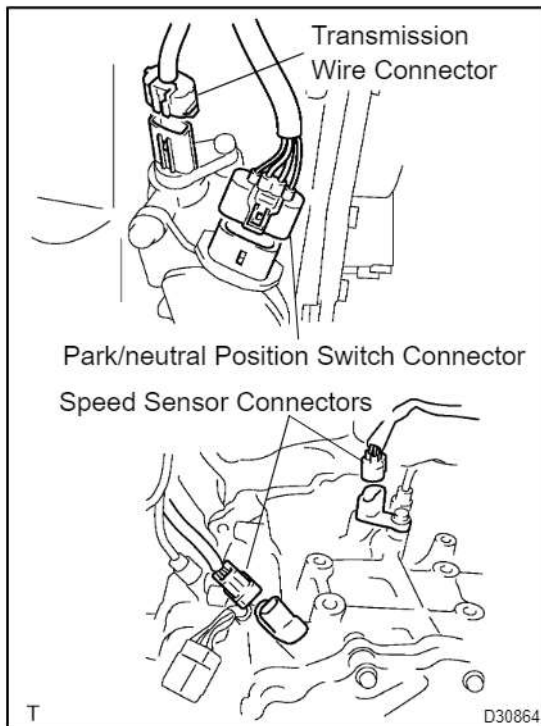
7. DISCONNECT WIRE HARNESS

- (a) Remove the bolt and wire harness.



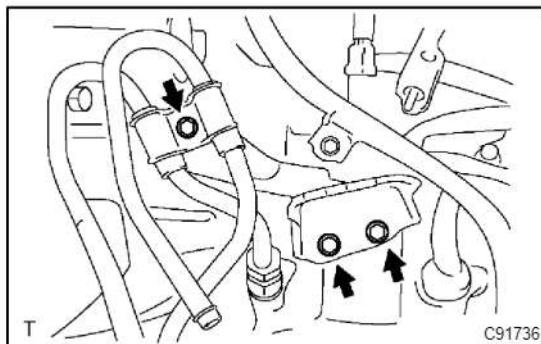
8. REMOVE STARTER ASSY

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



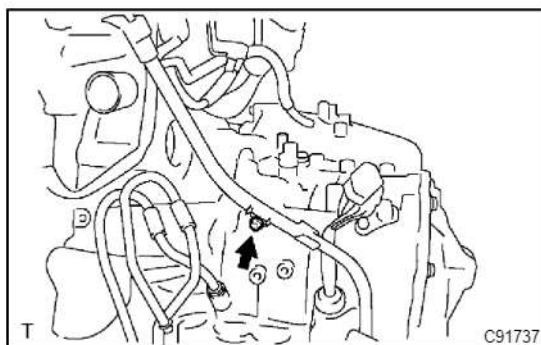
9. DISCONNECT CONNECTOR

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



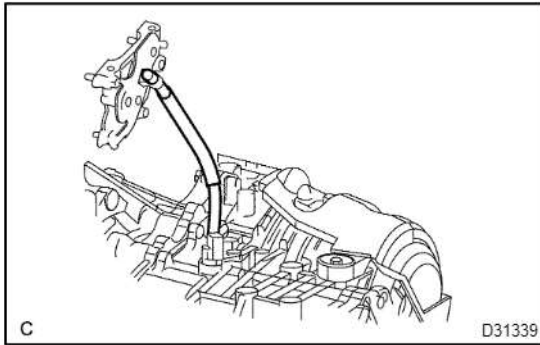
10. REMOVE TRANSMISSION CONTROL CABLE BRACKET NO.1

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

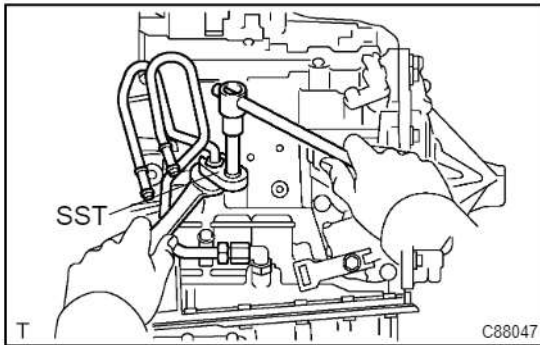


11. REMOVE TRANSMISSION OIL FILLER TUBE SUB-ASSY

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



- (d) Disconnect the breather hose from the wire harness bracket.

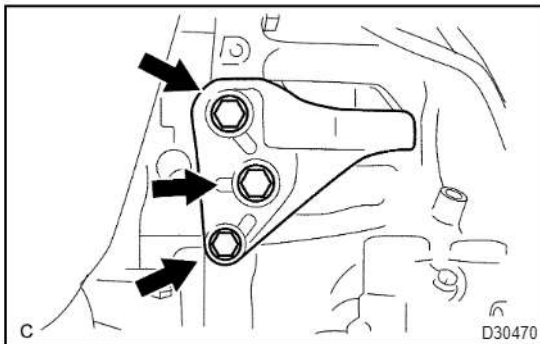


12. REMOVE OIL COOLER INLET TUBE NO.1

- (a) Using SST and a spanner, disconnect the oil cooler inlet tube No.1.
SST 09023-12701

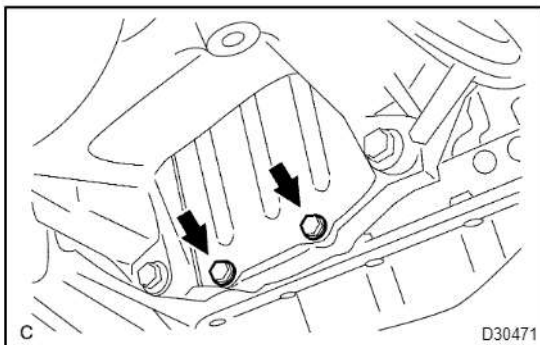
13. REMOVE OIL COOLER OUTLET TUBE NO.1

- (a) Using SST and a spanner, disconnect the oil cooler outlet tube No.1.
SST 09023-12701



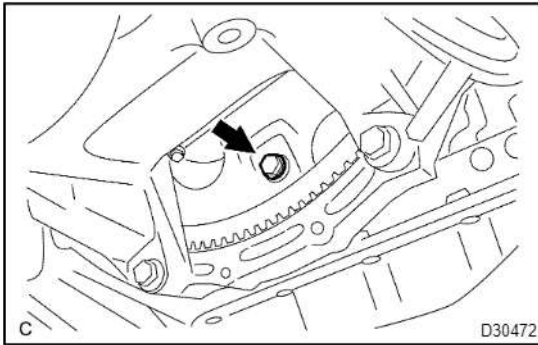
14. REMOVE ENGINE MOUNTING BRACKET FR

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



15. REMOVE AUTOMATIC TRANSAXLE ASSY

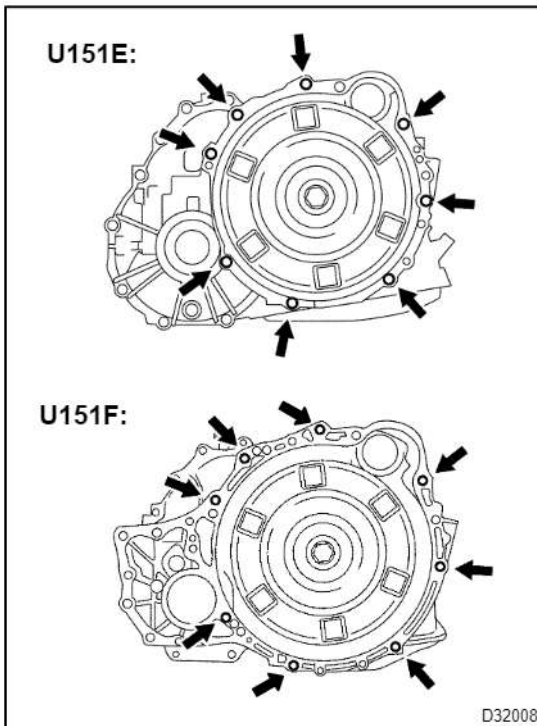
- (a) Remove the 2 bolts and flywheel housing under cover.



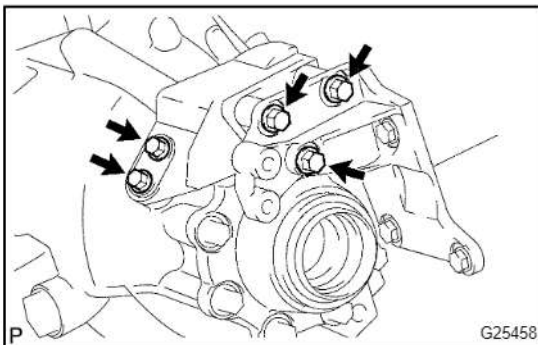
- (b) Turn the crankshaft to gain access and remove the 6 bolts while holding the crankshaft pulley bolt with a wrench.

HINT:

There will be one green colored bolt.



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



16. REMOVE TRANSFER STIFFENER PLATE RH (4WD DRIVE TYPE)

- (a) Remove the 5 bolts and transfer stiffener plate RH.

17. REMOVE TRANSFER ASSY (4WD DRIVE TYPE) (SEE PAGE 31-9)

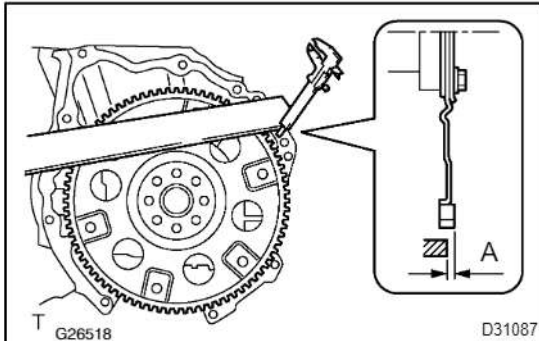
18. REMOVE TORQUE CONVERTER CLUTCH ASSY

19. INSPECT TORQUE CONVERTER CLUTCH ASSY (SEE PAGE 40-2)

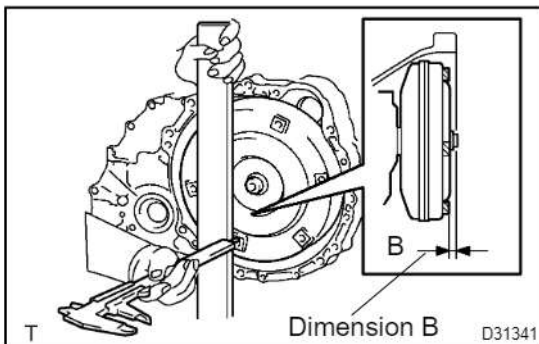
SST 09350-32014 (09351-32010, 09351-32020)

20. INSTALL TORQUE CONVERTER CLUTCH ASSY

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



- (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.

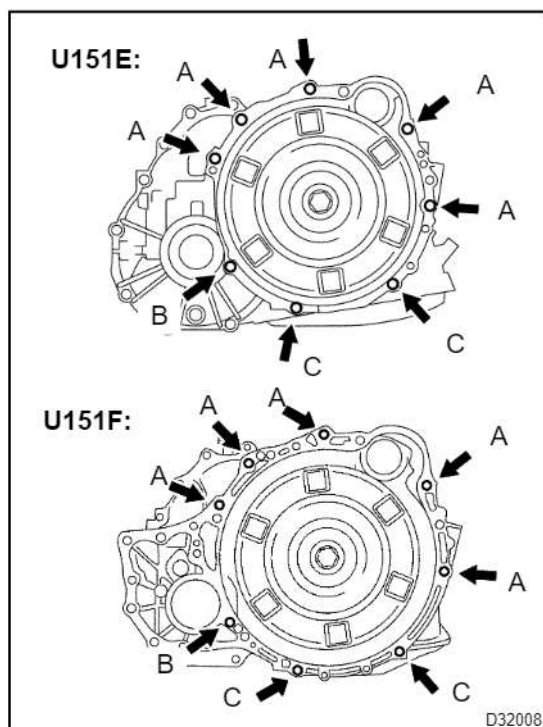


- (c) Using vernier calipers and a straight edge, measure the dimension "B" shown in the illustration and check that "B" is greater than "A", previously measured. See step 20 (b).

Standard: A + 1 mm or more

NOTICE:

Remember to minus the thickness of the straight edge.

21. INSTALL TRANSFER ASSY (4WD DRIVE TYPE) (SEE PAGE 31-9)**22. INSTALL AUTOMATIC TRANSMISSION W/TRANSFER**

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

Torque:

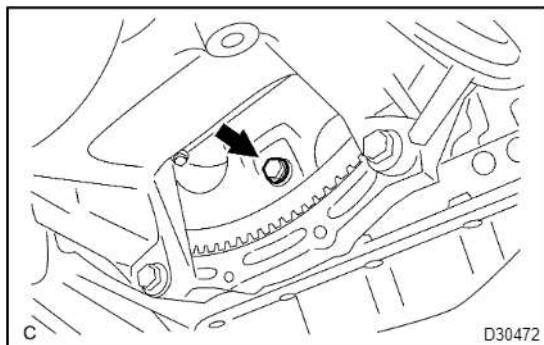
Bolts A: 64 N·m (650 kgf·cm, 47 ft·lbf)

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

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

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

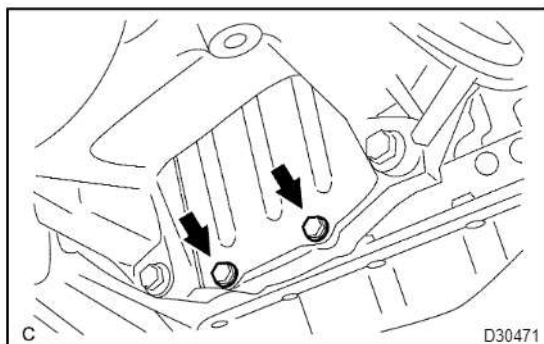
Adhesive: Part No. 08833-00070, THREE BOND 1324 or equivalent



- (c) Install the 6 torque converter clutch mounting bolts.
Torque: 41 N·m (418 kgf·cm, 30 ft·lbf)

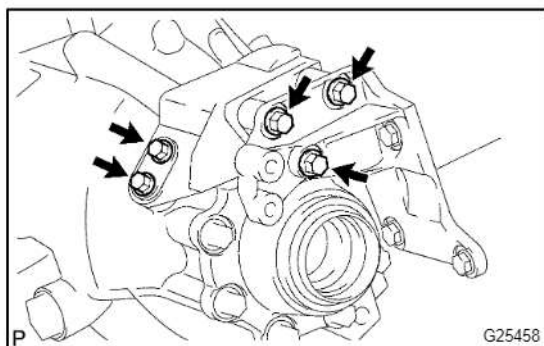
HINT:

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



- (d) Install the flywheel housing under cover to the automatic transaxle with the 2 bolts.

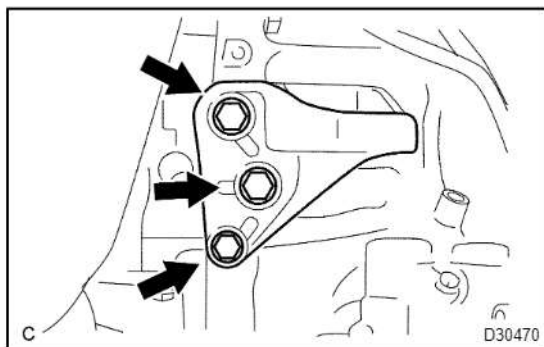
Torque: 7.8 N·m (80 kgf·cm, 69 in·lbf)



23. INSTALL TRANSFER STIFFENER PLATE RH (4WD DRIVE TYPE)

- (a) Install the transfer stiffener plate RH with 5 bolts to the transfer and engine mounting bracket RR.

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



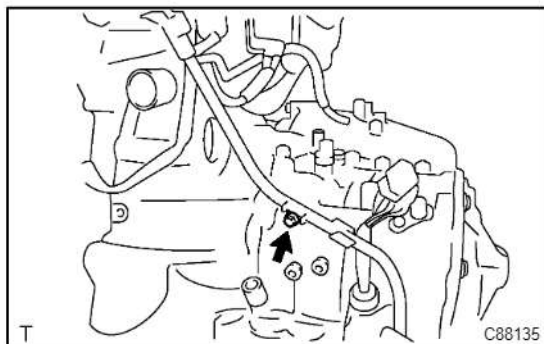
24. INSTALL ENGINE MOUNTING BRACKET FR

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

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

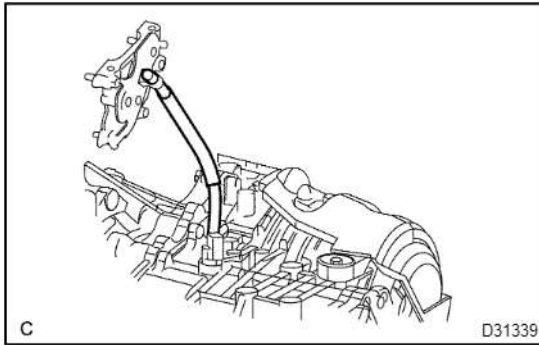
25. INSTALL TRANSMISSION OIL FILLER TUBE SUB-ASSY

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



- (b) Install the transmission oil filler tube sub-assy and bolt to the automatic transaxle.

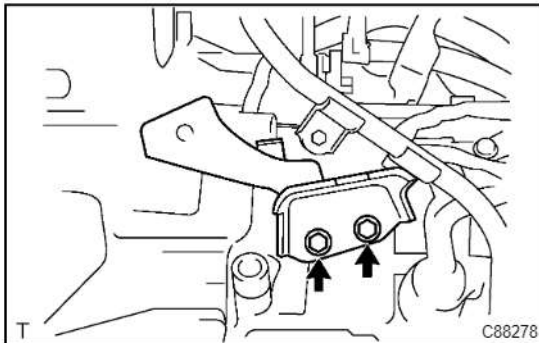
Torque: 5.5 N·m (56 kgf·cm, 49 in·lbf)



- (c) Install the transmission oil level gauge sub-assy.

NOTICE:

- The breather hose should be on the left side of the vehicle.
- (d) Connect the breather hose to the wire harness bracket.



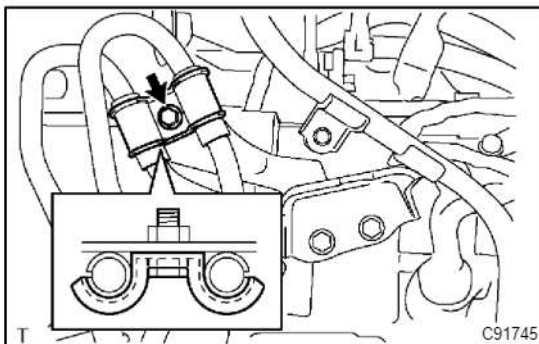
26. INSTALL TRANSMISSION CONTROL CABLE BRACKET NO.1

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

Torque: 12 N·m (122 kgf·cm, 9 ft·lbf)

27. 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.

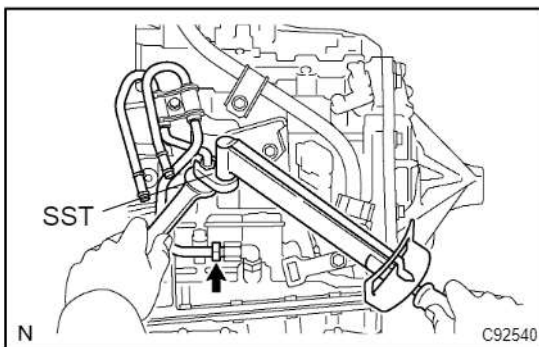


- (c) Install the automatic transmission oil cooler tube clamp and bolt.

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

HINT:

Install the automatic transmission oil cooler tube clamp and bolt so that the oil cooler tube cushion is positioned as illustrated.



- (d) Using SST and a spanner, tighten the oil cooler inlet tube No.1.

SST 09023-12701

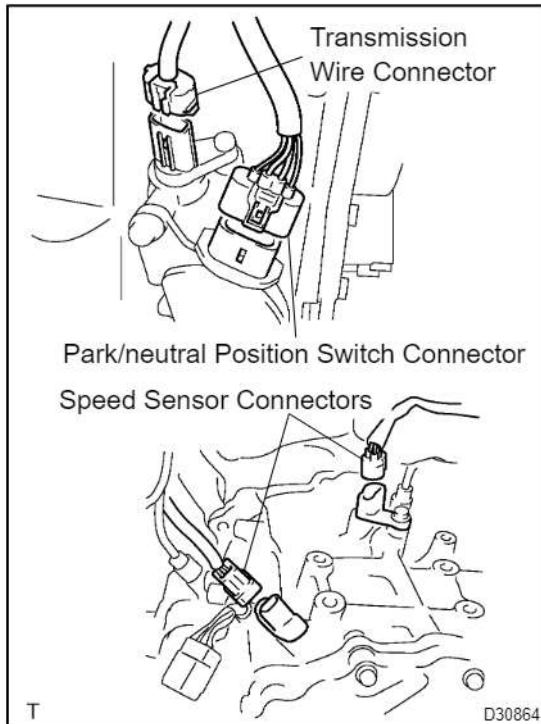
Torque: 34 N·m (347 kgf·cm, 25 ft·lbf)

28. INSTALL OIL COOLER OUTLET TUBE NO.1

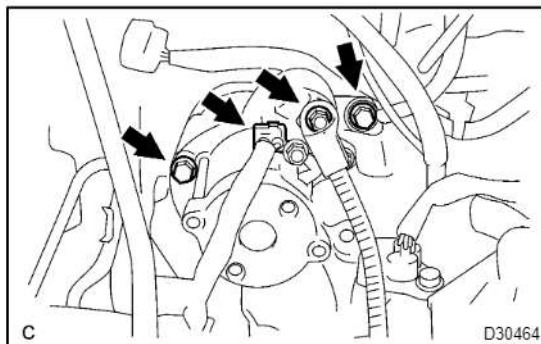
- (a) Using SST and a spanner, tighten the oil cooler outlet tube No.1.

Torque: 34 N·m (347 kgf·cm, 25 ft·lbf)

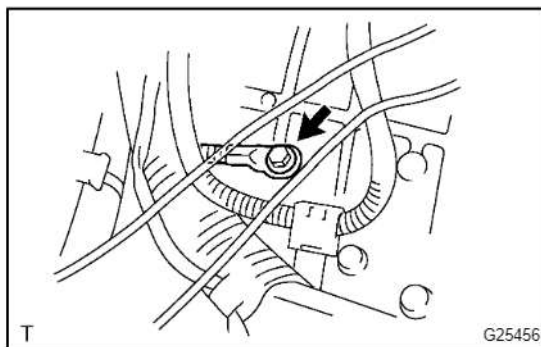
SST 09023-12701

**29. CONNECT CONNECTOR**

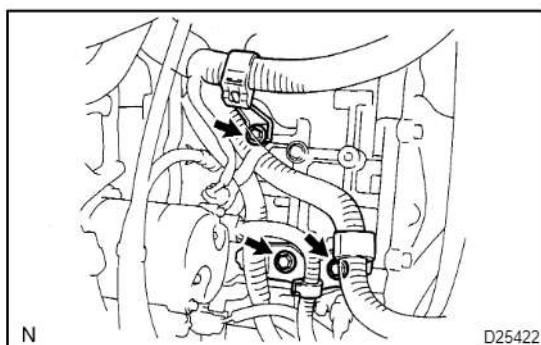
- Connect the transmission wire connector.
- Connect the park/neutral position switch connector.
- Connect the 2 speed sensor connectors.

**30. INSTALL STARTER ASSY**

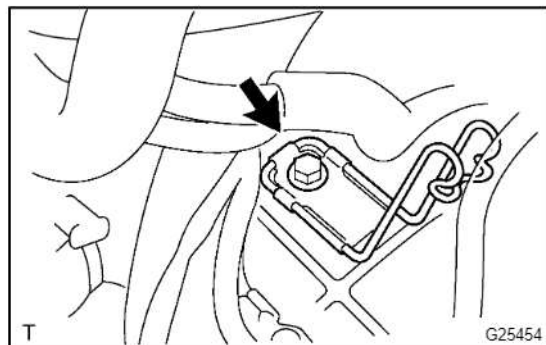
- Install the starter assy and 2 bolts.
Torque: 37 N·m (377 kgf·cm, 27 ft·lbf)
- Connect the connector.
- Install the starter wire and nut.
Torque: 9.8 N·m (100 kgf·cm, 87 in·lbf)

**31. INSTALL WIRE HARNESS**

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

**32. INSTALL WIRE HARNESS CLAMP**

- Install the 2 clamps and 3 bolts.
Torque: 8.4 N·m (86 kgf·cm, 74 in·lbf)
- Connect the wire harnesses to the clamps.

**33. 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)

- 34. INSTALL FRONT DRIVE SHAFT ASSY LH (SEE PAGE 30-21)
- 35. INSTALL FRONT DRIVE SHAFT ASSY RH (2WD DRIVE TYPE) (SEE PAGE 30-21)
- 36. INSTALL FRONT DRIVE SHAFT ASSY RH (4WD DRIVE TYPE) (SEE PAGE 30-21)
- 37. INSTALL ENGINE ASSEMBLY WITH TRANSAXLE (SEE PAGE 14-149)
- 38. RESET MEMORY (SEE PAGE 05-1005)
- 39. PERFORM INITIALIZATION (SEE PAGE 01-4)