

MANUAL TRANSMISSION SYSTEM

MT08U-01

PRECAUTION

When working with FIPG material, you must observe the following items.

- Using a razor blade and gasket scraper, remove all the old FIPG material from the gasket surfaces.
- Thoroughly clean all components to remove all the loose material.
- Clean both sealing surfaces with a non-residue solvent.
- Apply FIPG in an approx. 1 mm (0.04 in.) wide bead along the sealing surface.
- Parts must be assembled within 10 minutes of application. Otherwise, the FIPG material must be removed and reapplied.



TROUBLESHOOTING

MT08V-01

PROBLEM SYMPTOMS TABLE

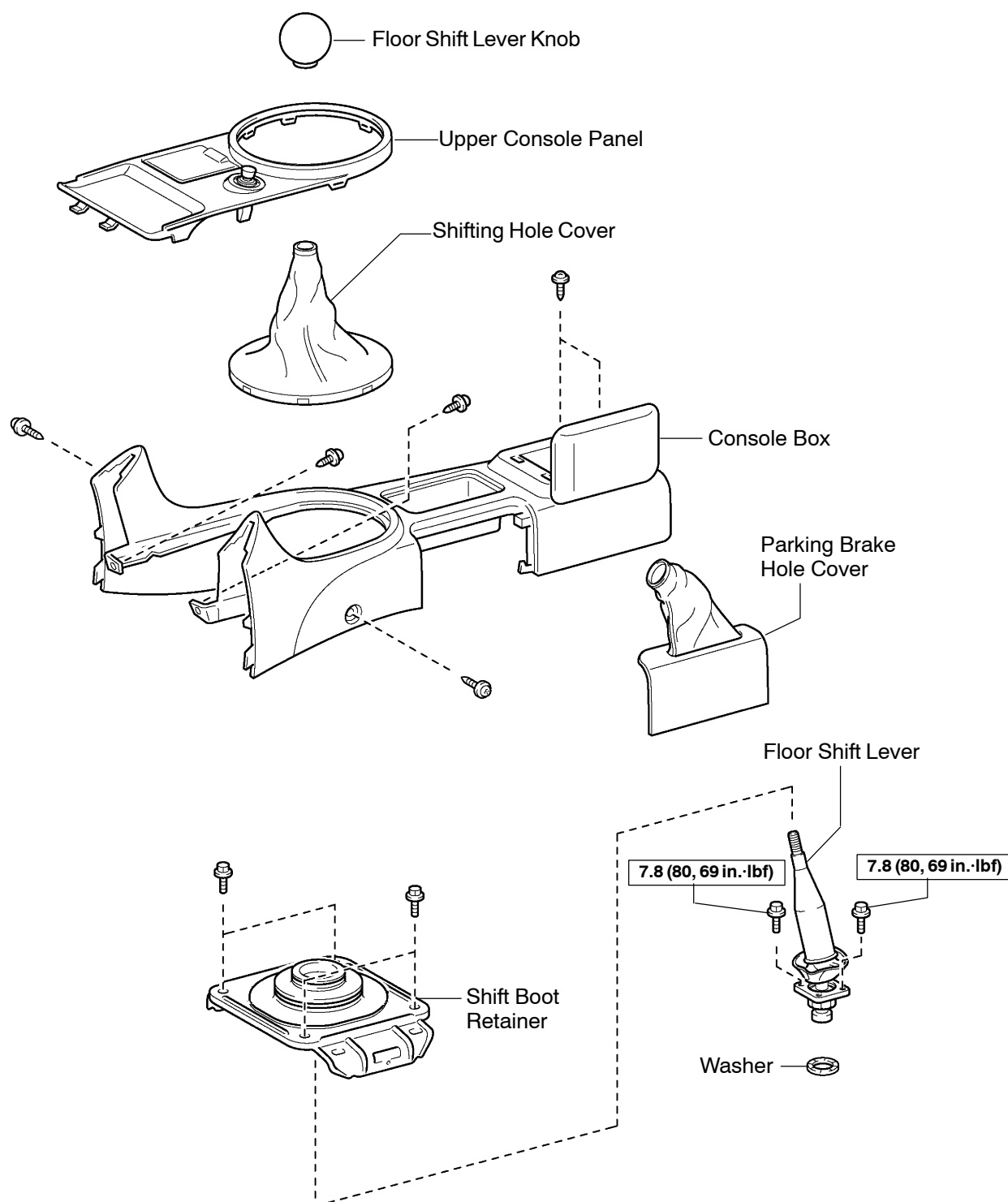
Use the table below to help you find the cause of the problem. The numbers indicate the priority of the likely cause of the problem. Check each part in order. If necessary, replace these parts.

Symptom	Suspect Area	See page
Noise	1. Oil (Level low) 2. Oil (Wrong) 3. Gear (Worn or damaged) 4. Bearing (Worn or damaged)	MT-5 MT-5 MT-11 MT-11
Oil leakage	1. Oil (Level too high) 2. Gasket (Damaged) 3. Oil seal (Worn or damaged) 4. O-Ring (Worn or damaged)	MT-5 MT-11 MT-11 MT-11
Hard to shift or will not shift	1. Synchronizer ring (Worn or damaged) 2. Shift key spring (Damaged)	MT-38 MT-43 MT-54 MT-43 MT-49
Jumps out of gear	1. Locking ball spring (Damaged) 2. Shift fork (Worn) 3. Gear (Worn or damaged) 4. Bearing (Worn or damaged)	MT-11 MT-11 MT-11 MT-11

MANUAL TRANSMISSION UNIT

COMPONENTS

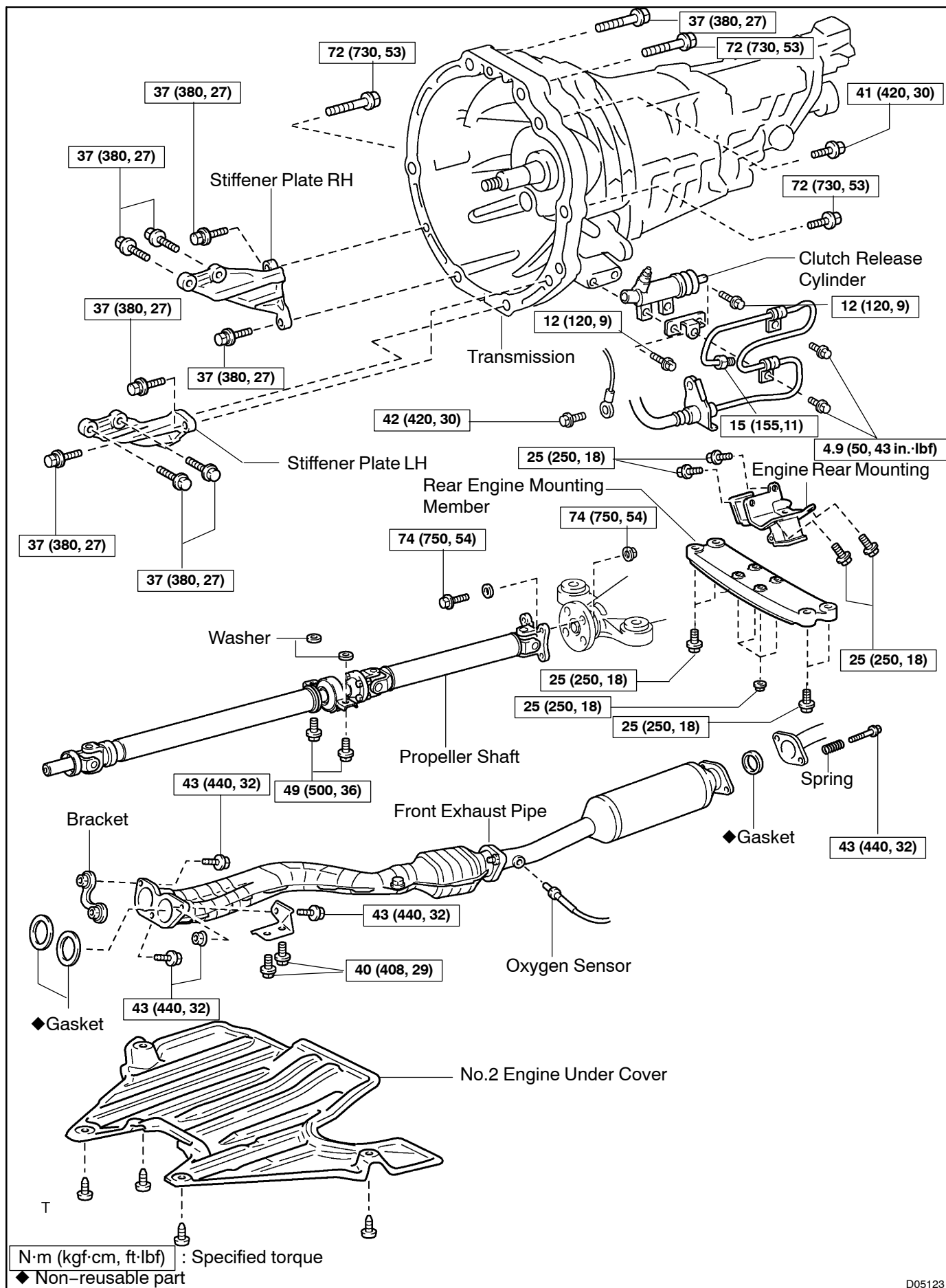
MT08R-01



T

N·m (kgf·cm, ft·lbf) : Specified torque

D05687



D05123

REMOVAL

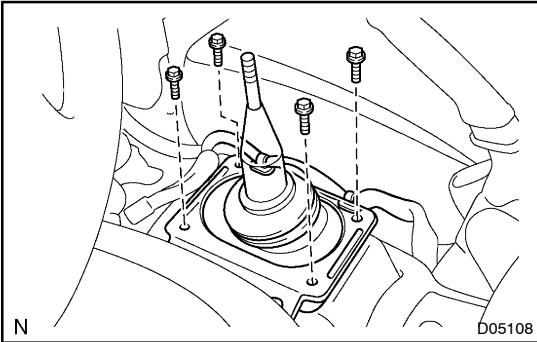
1. REMOVE UPPER CONSOLE PANEL AND CONSOLE BOX

- (a) Remove the shift lever knob.
- (b) Using a screwdriver, pry out upper console panel.
- (c) Using a screwdriver, pry out parking brake hole cover.

HINT:

Tape the screwdriver, tip before use.

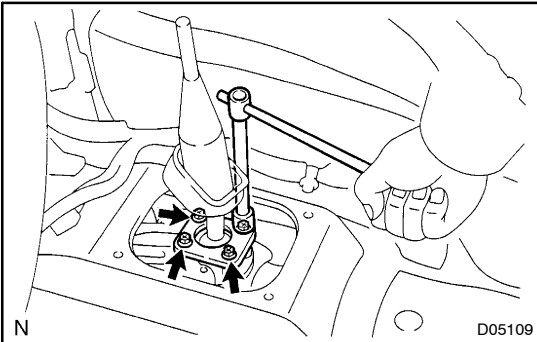
- (d) Remove the 4 screws and console box.



2. REMOVE SHIFT BOOT RETAINER

- (a) Disconnect the 2 wire harness clamps.
- (b) Remove the 4 bolts and shift boot retainer.

3. REMOVE SHIFT BOOT



4. REMOVE TRANSMISSION SHIFT LEVER

Remove the 4 bolts and transmission shift lever.

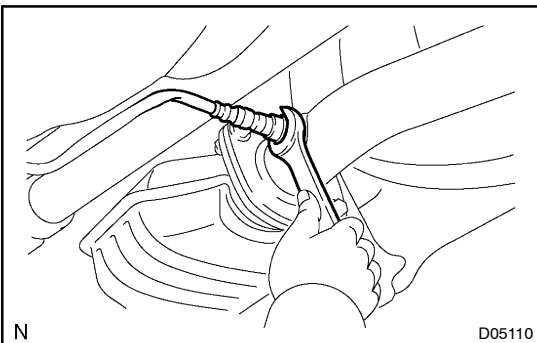
5. RAISE VEHICLE

NOTICE:

Make sure that the vehicle is securely supported.

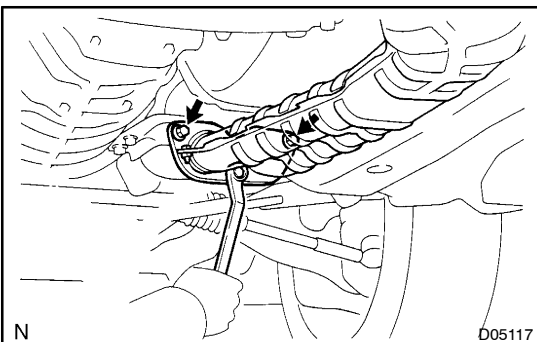
6. DRAIN TRANSMISSION OIL

7. REMOVE NO.2 ENGINE UNDER COVER

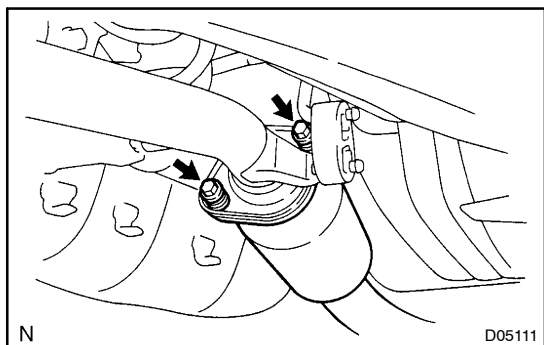


8. REMOVE EXHAUST FRONT PIPE

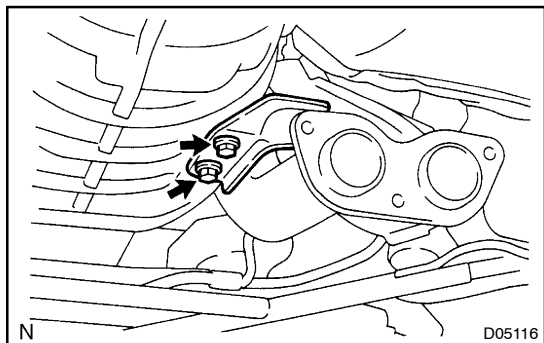
- (a) Disconnect the oxygen sensor.



- (b) Remove the 3 bolts, nuts and bracket.

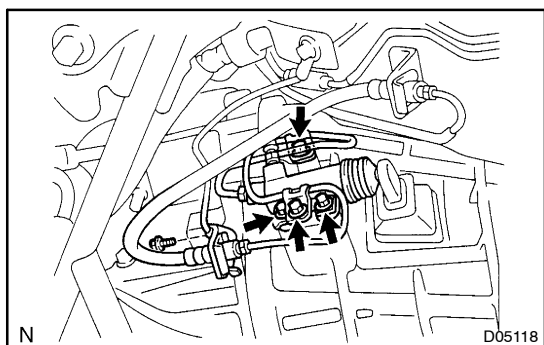


- (c) Remove the 2 bolts and 2 springs.
- (d) Remove the front exhaust pipe.



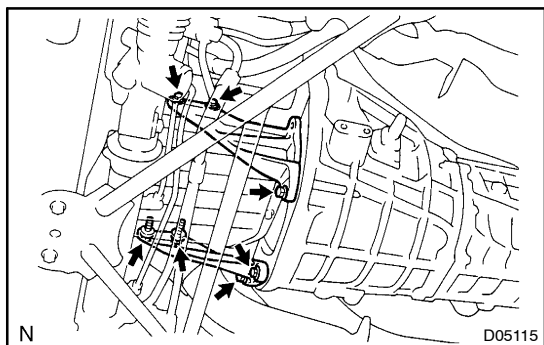
9. REMOVE EXHAUST MANIFOLD STAY

Remove the 2 bolts and exhaust manifold stay.



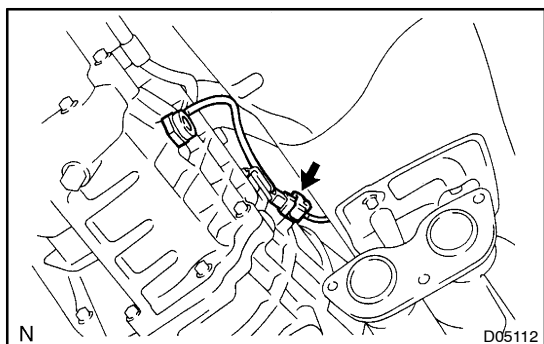
10. DISCONNECT CLUTCH RELEASE CYLINDER AND EARTH WIRE

Remove the 5 bolts and disconnect the clutch release cylinder and earth wire.

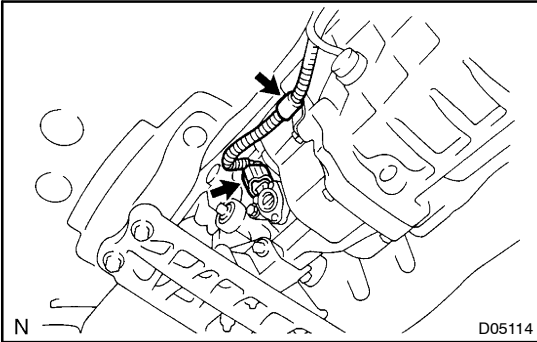


11. REMOVE STIFFENER PLATES

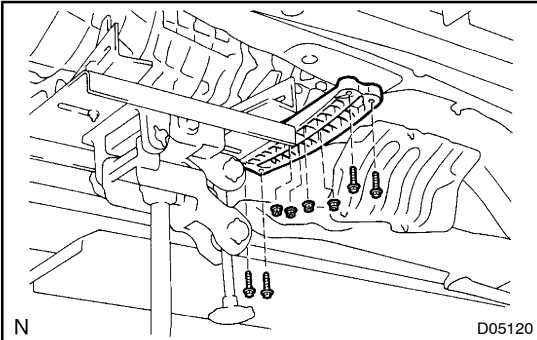
Remove the 7 bolts and stiffener plates LH and RH.



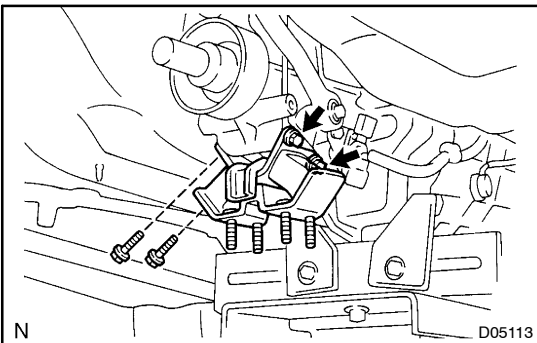
12. DISCONNECT BACK-UP LIGHT SWITCH CONNECTOR

**13. DISCONNECT SPEED SENSOR CONNECTOR****14. JACK UP TRANSMISSION SLIGHTLY**

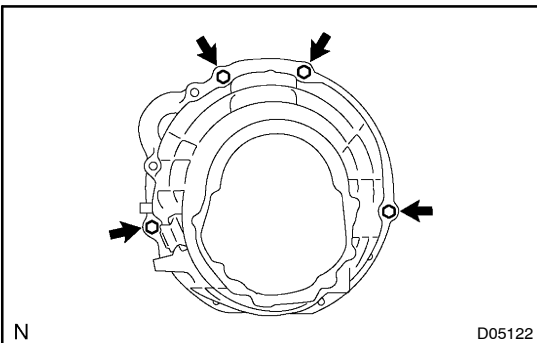
Using a transmission jack, support the transmission.

15. REMOVE STARTER SET BOLT**16. REMOVE REAR ENGINE MOUNTING MEMBER**

Remove the 4 bolts , 4 nuts and rear engine mounting member.

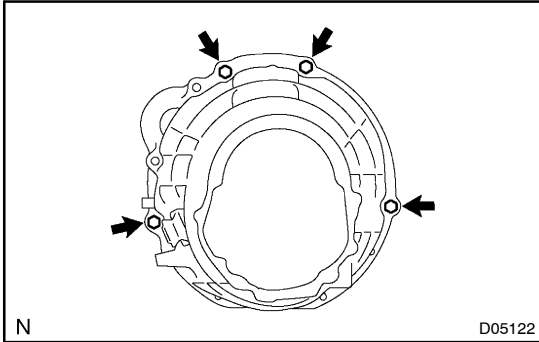
**17. REMOVE ENGINE REAR MOUNTING**

Remove the 4 bolts and engine rear mounting.

**18. REMOVE TRANSMISSION**

(a) Remove the 4 bolts.

(b) Lower the engine rear side and remove the transmission from the engine.

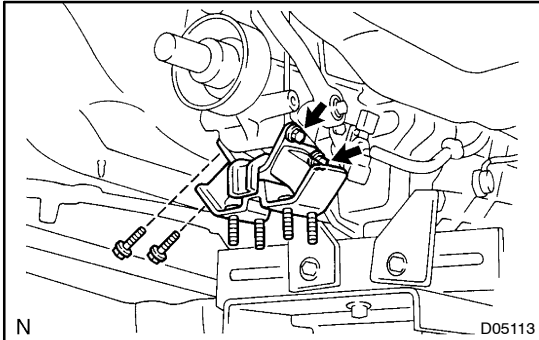


INSTALLATION

1. INSTALL TRANSMISSION

- (a) Raise the engine front side.
- (b) Align the input spline with a clutch disc and install the transmission to the engine
- (c) Install the 4 bolts.

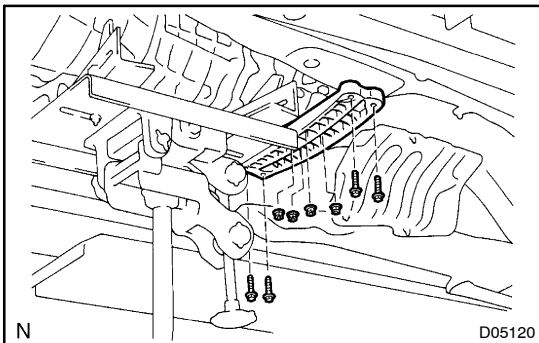
Torque: 72 N·m (730 kgf·cm, 53 ft·lbf)



2. INSTALL ENGINE REAR MOUNTING

Install the engine rear mounting with 4 bolts.

Torque: 25 N·m (250 kgf·cm, 18 ft·lbf)



3. INSTALL REAR ENGINE MOUNTING MEMBER

Install the rear engine mounting member with 4 bolts and 4 nuts.

Torque:

Nut: 13 N·m (135 kgf·cm, 9 ft·lbf)

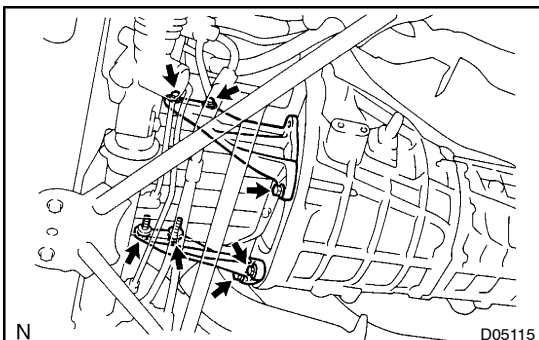
Bolt: 25 N·m (250 kgf·cm, 18 ft·lbf)

4. INSTALL STARTER SET BOLT

Torque: 42 N·m (420 kgf·cm, 30 ft·lbf)

5. CONNECT SPEED SENSOR CONNECTOR

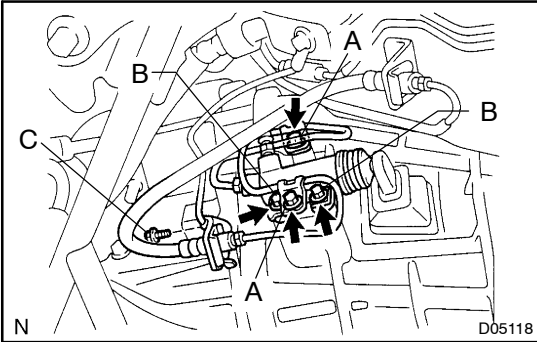
6. CONNECT BACK-UP LIGHT SWITCH CONNECTOR



7. INSTALL STIFFNER PLATES

Install the stiffner plates with 7 bolts.

Torque: 37 N·m (380 kgf·cm, 27 ft·lbf)



8. CONNECT CLUTCH RELEASE CYLINDER AND EARTH WIRE

Connect the clutch release cylinder and earth wire with 5 bolts.

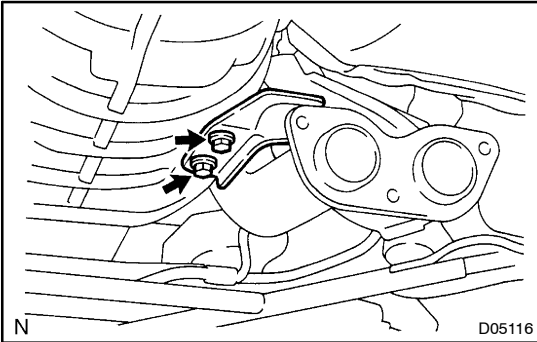
Torque:

Bolt (A): 4.9 N·m (50 kgf·cm, 43 in·lbf)

Bolt (B): 12 N·m (120 kgf·cm, 9 ft·lbf)

Bolt (C): 42 N·m (420 kgf·cm, 30 ft·lbf)

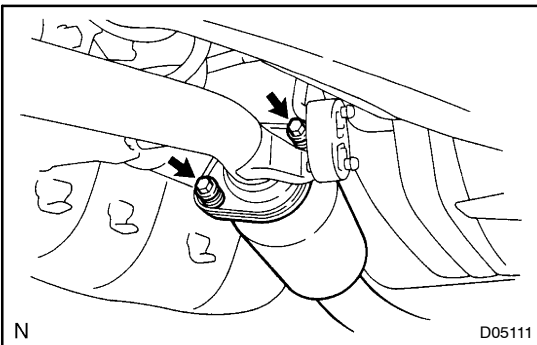
9. INSTALL PROPELLER SHAFT (See page PR-10)



10. INSTALL EXHAUST MANIFOLD STAY

Install the exhaust manifold stay with the 2 bolts.

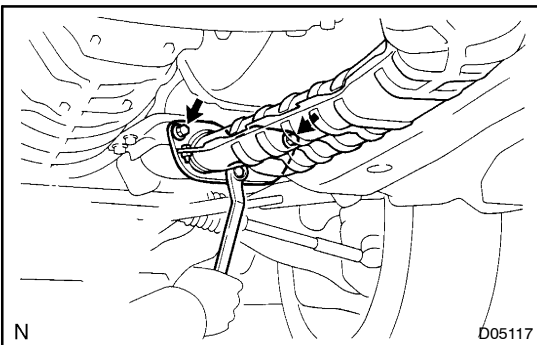
Torque: 40 N·m (408 kgf·cm, 29 ft·lbf)



11. INSTALL EXHAUST FRONT PIPE

- Install 3 new gaskets.
- Install the exhaust front pipe.
- Install the 2 springs and 2 bolts.

Torque: 43 N·m (440 kgf·cm, 32 ft·lbf)



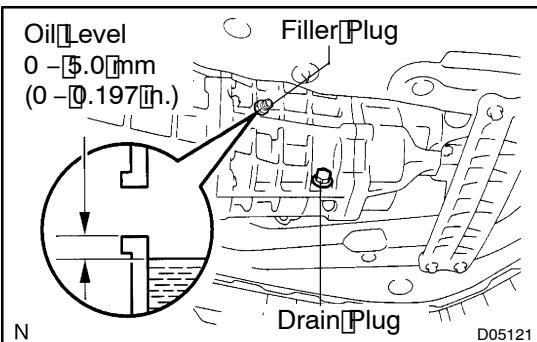
- Install the bracket with the 2 bolts.

Torque: 43 N·m (440 kgf·cm, 32 ft·lbf)

- Install the bolts and nut.

Torque: 43 N·m (440 kgf·cm, 32 ft·lbf)

- Install the oxygen sensor.



12. FILL WITH TRANSMISSION OIL

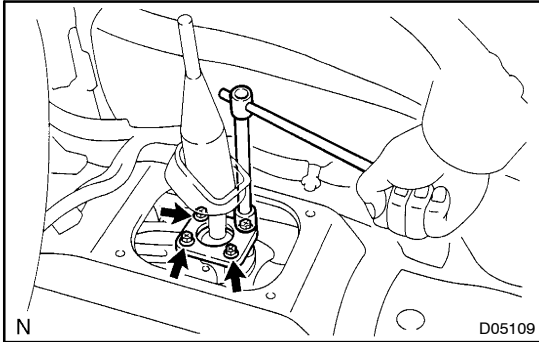
Oil grade: API GL-3

Viscosity: SAE 75W-90

DCapacity: 1.8 liter (1.9 USqts, 1.6 Imp.qts)

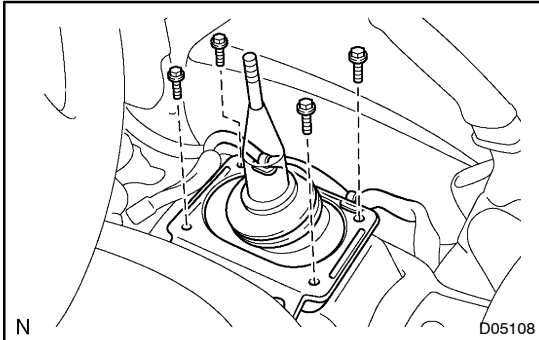
13. INSTALL NO.2 ENGINE UNDER COVER

14. LOWER VEHICLE

**15. INSTALL TRANSMISSION SHIFT LEVER**

- (a) Install the 2 washers.
- (b) Apply MP grease to the tip of shift lever.
- (c) Install the shift lever with 4 bolts.

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

16. INSTALL SHIFT BOOT**17. INSTALL SHIFT BOOT RETAINER**

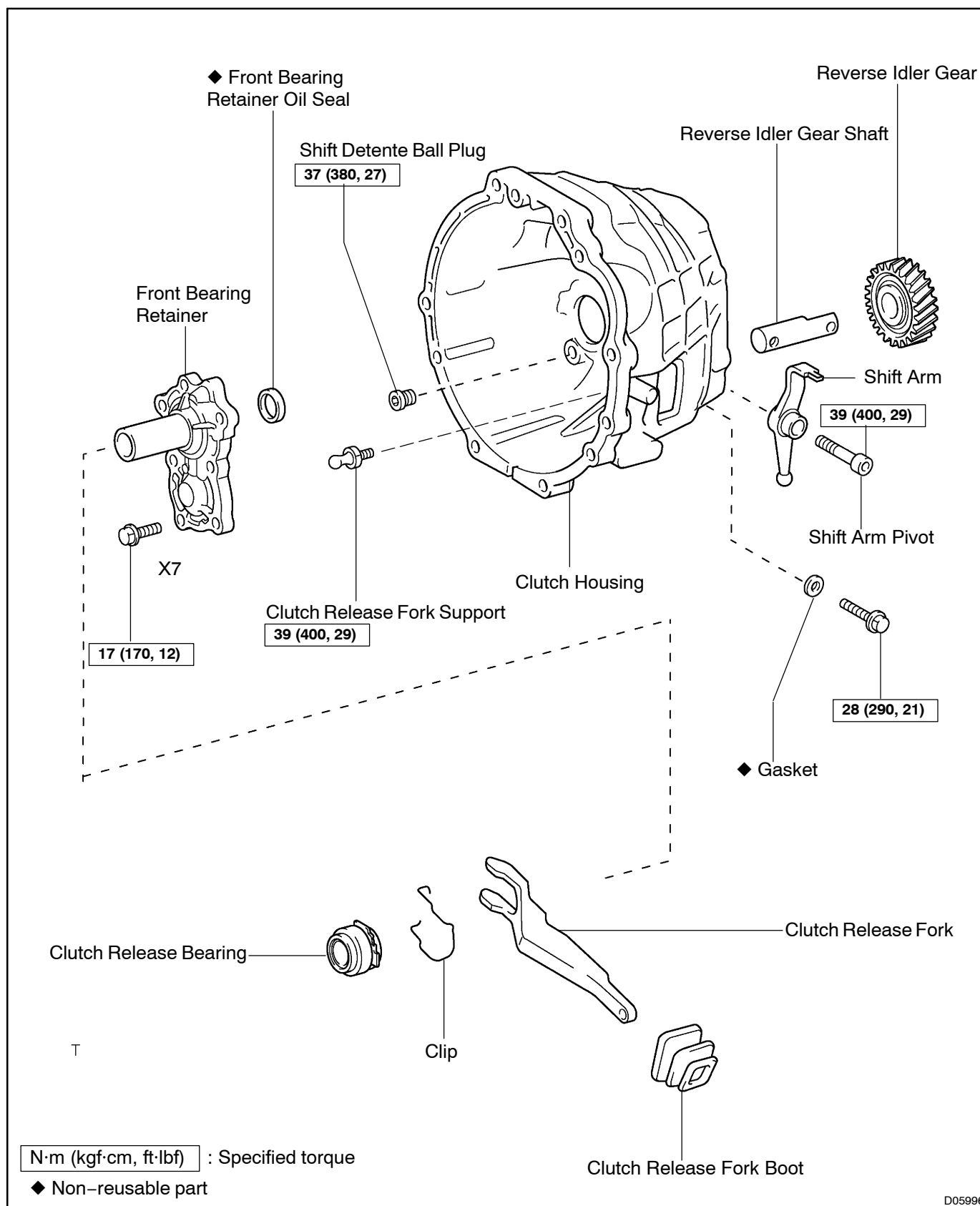
- (a) Install the shift boot retainer with 4 bolts.
- (b) Connect the wire harness clamps.

18. INSTALL UPPER CONSOLE PANEL AND COSOLE BOX (See page BO-104)

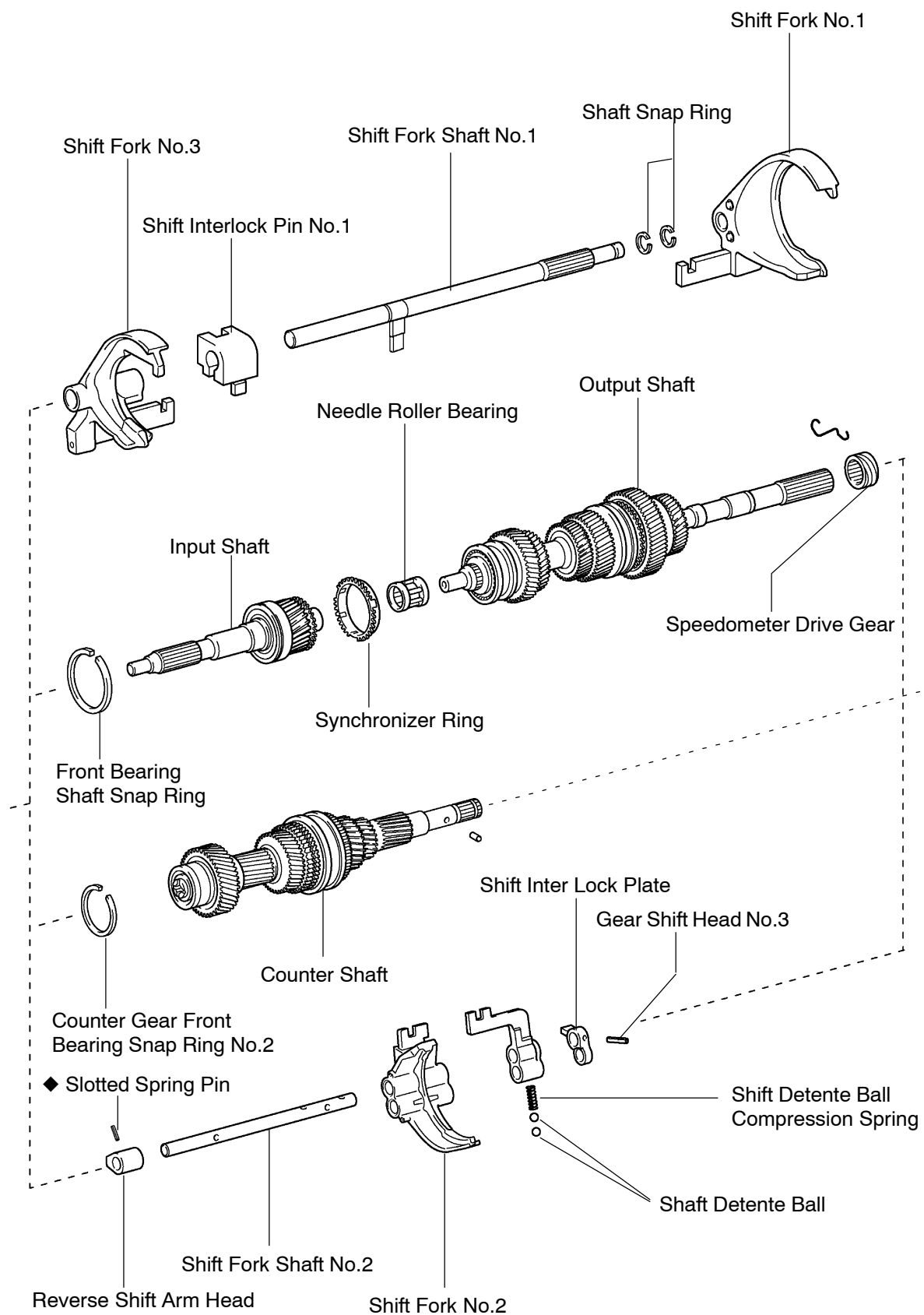
MANUAL TRANSMISSION ASSEMBLY

COMPONENTS

MT08W-01



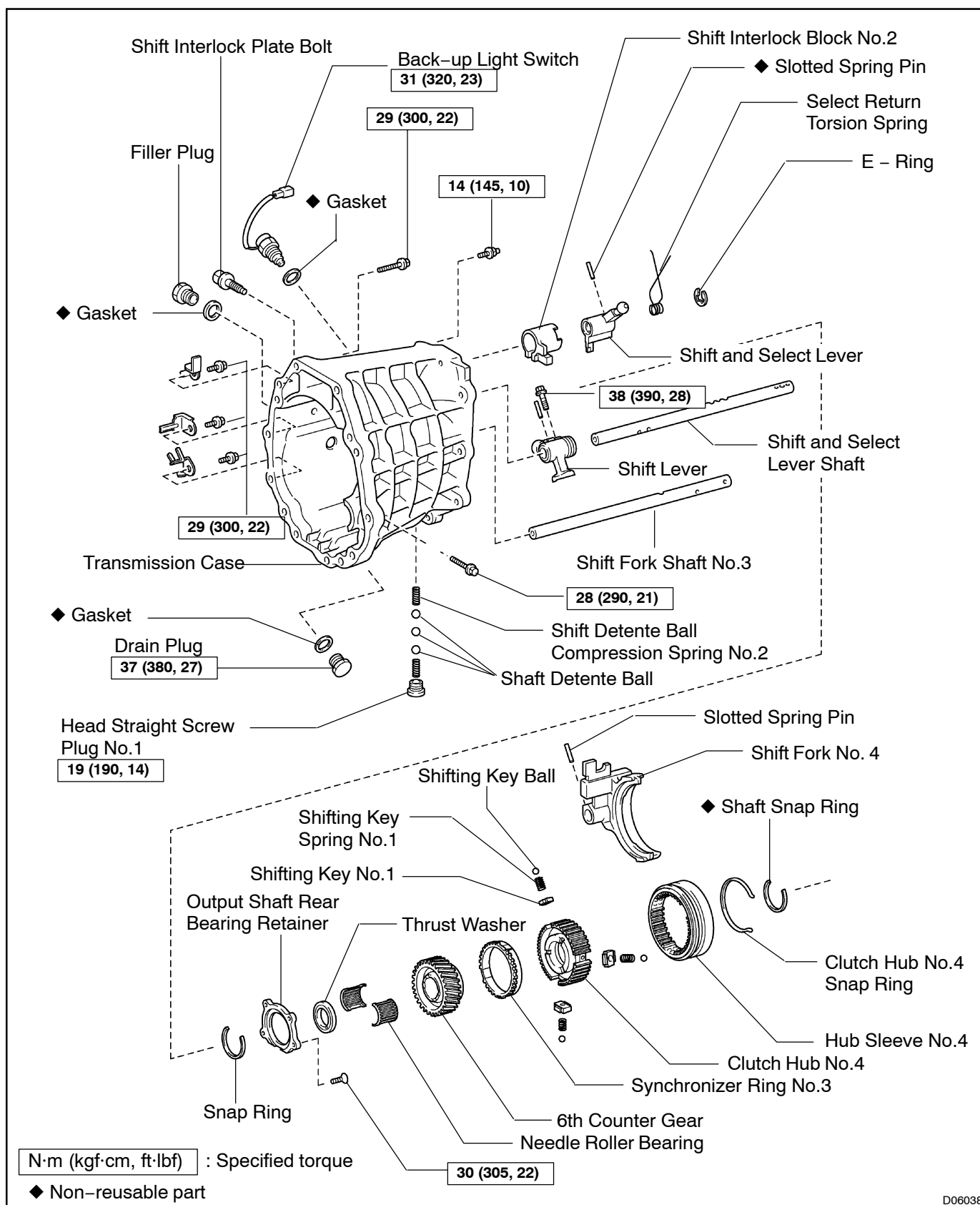
D05996



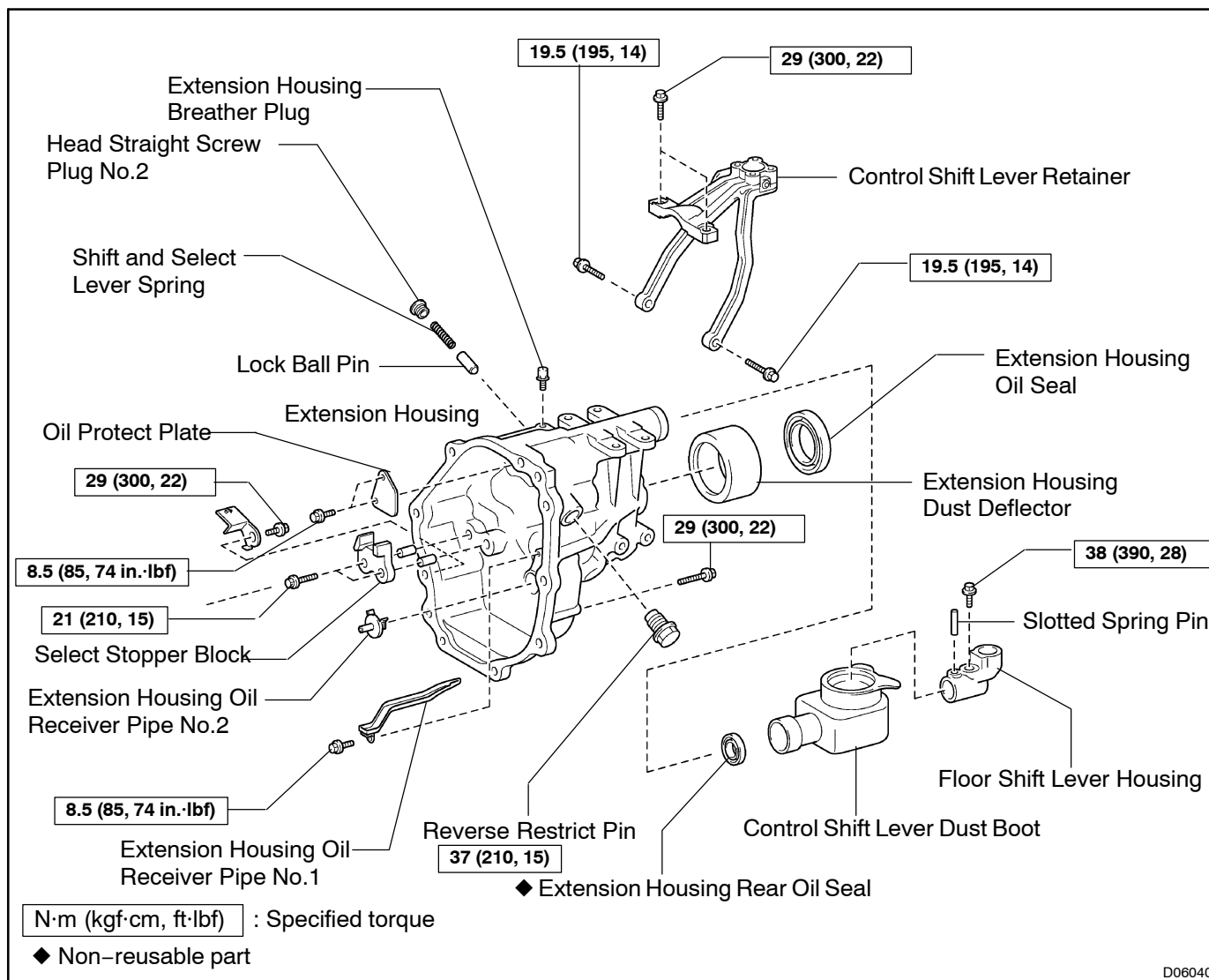
◆ Non-reusable part

T

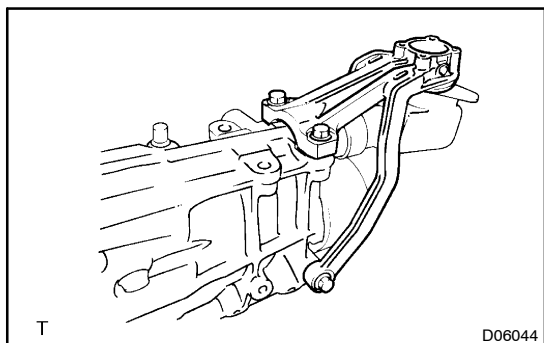
D06039



D06038



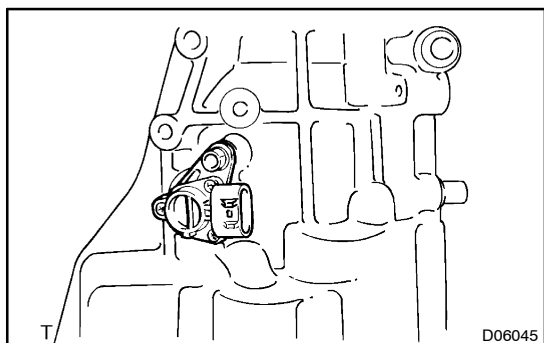
D06040



DISASSEMBLY

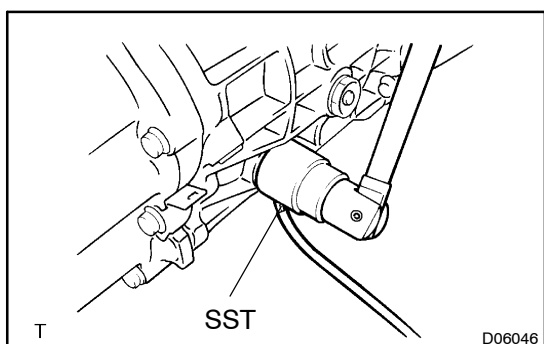
1. REMOVE SHIFT LEVER RETAINER

- (a) Remove the 4 bolts and disconnect the control shift lever dust boot.
- (b) Remove the shift lever retainer.



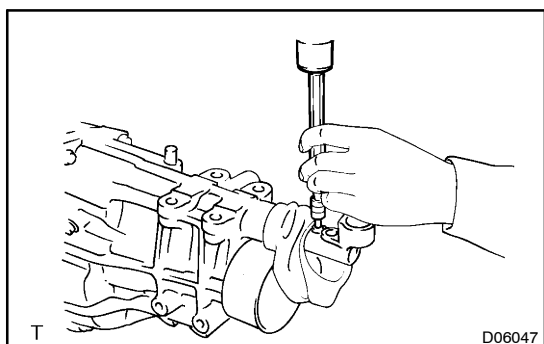
2. REMOVE VEHICLE SPEED SENSOR

Remove the bolt and vehicle speed sensor.



3. REMOVE BACK-UP LIGHT SWITCH

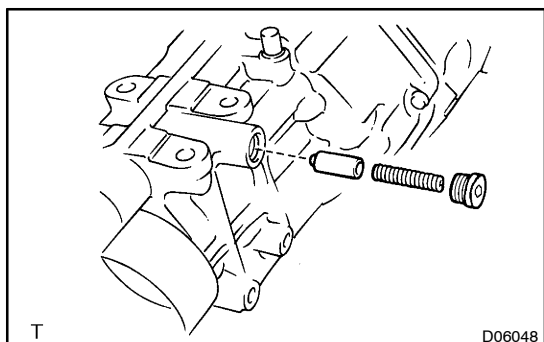
- (a) Disconnect the connector clamp.
- (b) Using SST, remove the back-up light switch and gasket.
SST 09817-16011



4. REMOVE FLOOR SHIFT LEVER HOUSING

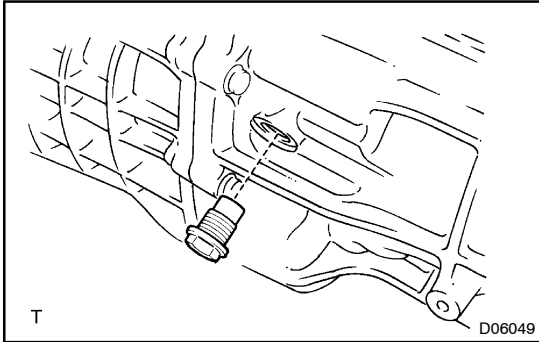
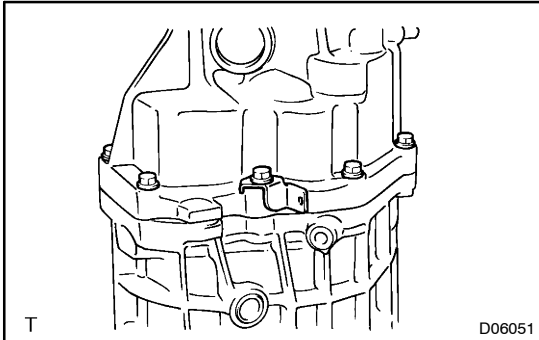
- (a) Turn over the control shift lever dust boot.
- (b) Remove the bolt.
- (c) Using a pin punch and hammer, drive out slotted spring pin and remove the floor shift lever housing.

5. REMOVE CONTROL SHIFT LEVER DUST BOOT

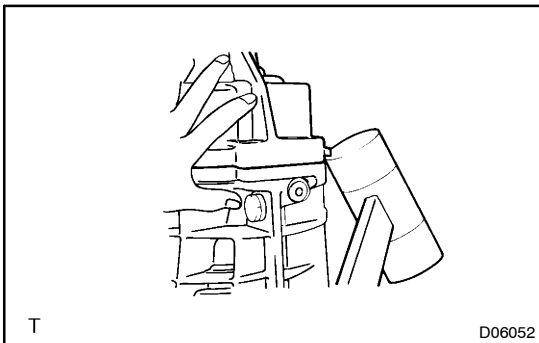


6. REMOVE LOCK BALL PIN

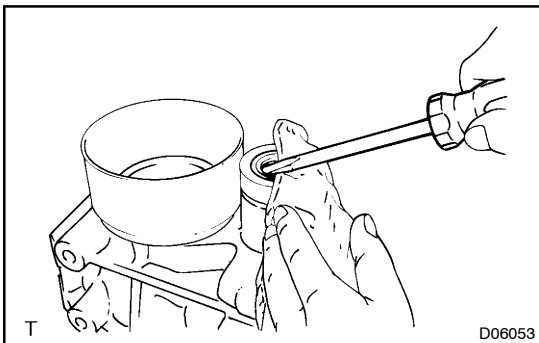
- (a) Using a hexagon wrench (8 mm, 0.31 in.), remove the head straight screw plug No. 2.
- (b) Remove the shift and select lever spring and lock ball pin.

**7. REMOVE REVERSE RESTRICT PIN****8. REMOVE EXTENSION HOUSING**

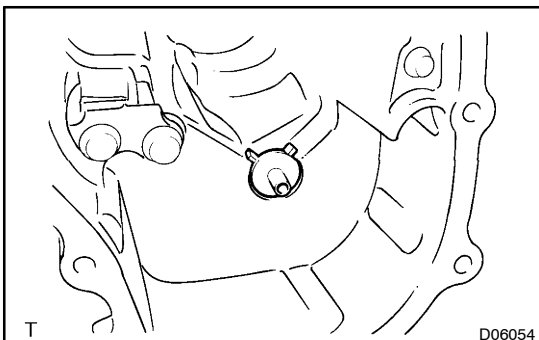
- (a) Remove the 9 bolts and clamp.

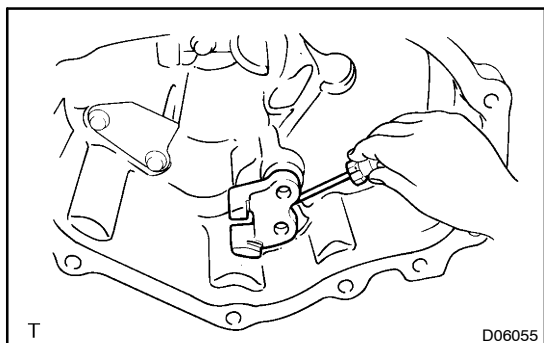


- (b) Using a plastic hammer, carefully tap out the extension housing.

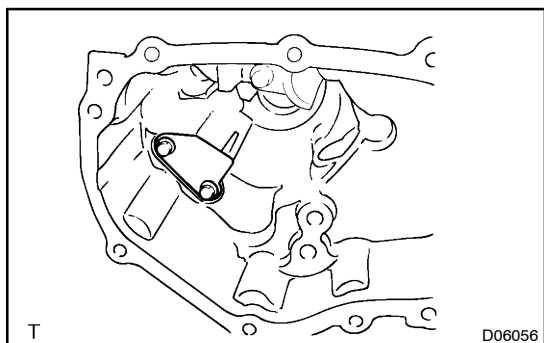
**9. REMOVE EXTENSION HOUSING REAR OIL SEAL**

Using a screwdriver and a cloth, remove the extension housing rear oil seal.

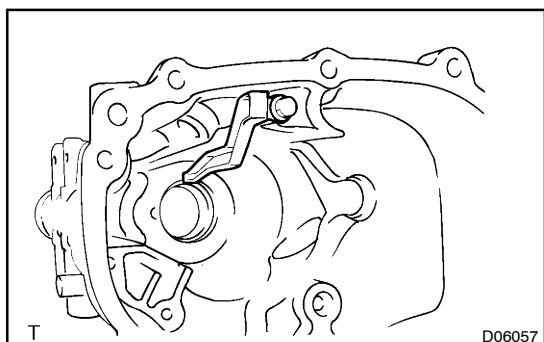
**10. REMOVE EXTENSION HOUSING OIL RECEIVER PIPE NO. 2**

**11. REMOVE SELECT STOPPER BLOCK**

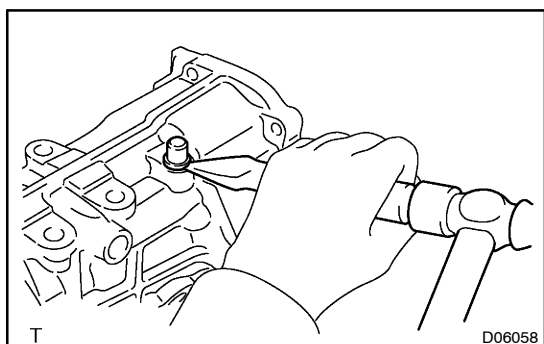
- (a) Remove the 2 bolts.
- (b) Using a screwdriver, remove the select stopper block.

**12. REMOVE OIL PROTECT PLATE**

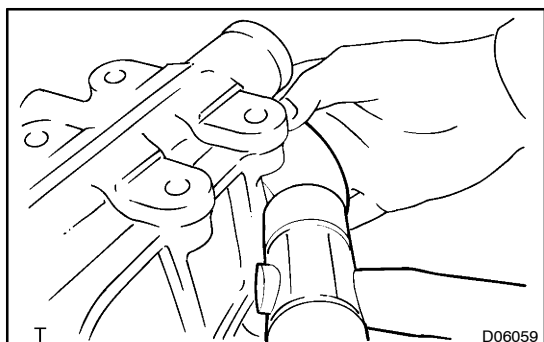
Remove the 2 bolts and oil protect plate.

**13. REMOVE EXTENSION HOUSING OIL RECEIVER PIPE NO.1**

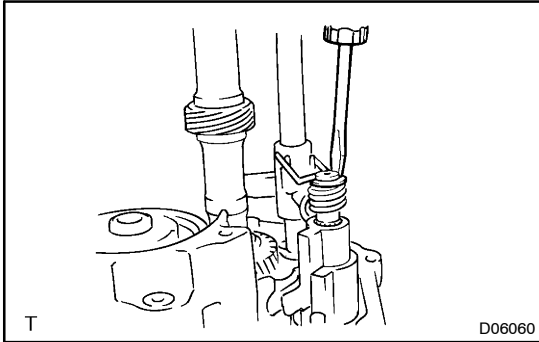
Remove the bolt and extension housing oil receiver pipe No.1.

**14. REMOVE EXTENSION HOUSING BREATHER PLUG**

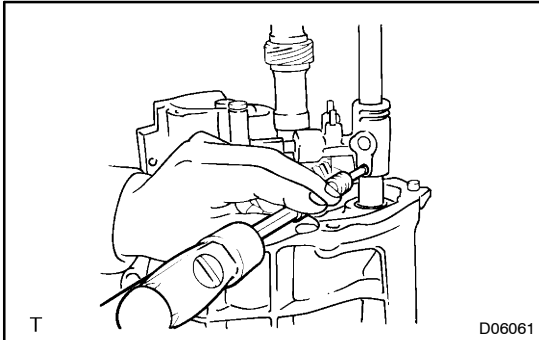
Using a chisel and hammer, remove the extension housing breather plug.

**15. REMOVE EXTENSION HOUSING DUST DEFLECTOR**

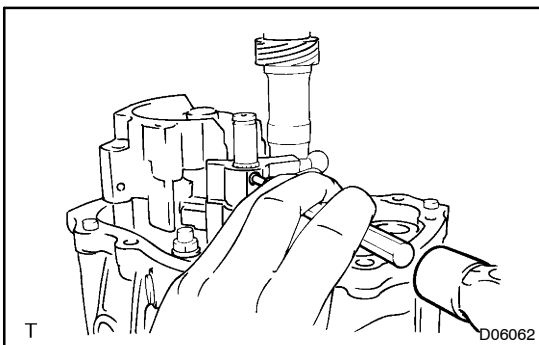
Using a plastic hammer, remove the extension housing dust deflector.

**16. REMOVE SELECT RETURN TORSION SPRING**

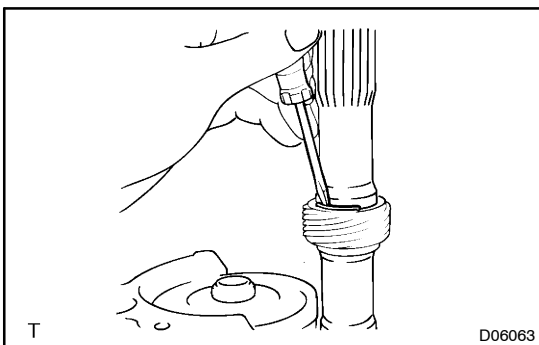
Using a screwdriver, remove the shift fork shaft E-ring and select return torsion spring.

**17. REMOVE SHIFT LEVER HOUSING**

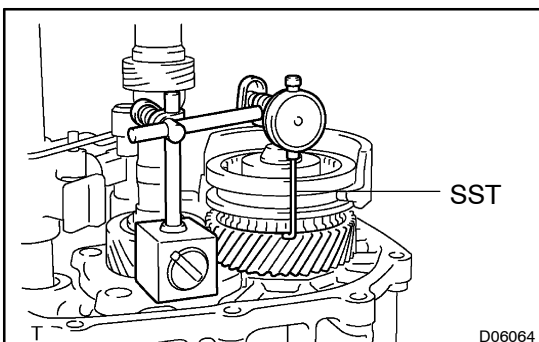
- (a) Remove the bolt.
- (b) Using a pin punch and hammer, drive out the slotted spring pin.
- (c) Remove the gear shift fork shaft No. 1 and shift lever housing.

**18. REMOVE SHIFT INTERLOCK PIN NO. 2**

- (a) Using a pin punch and hammer, drive out the slotted spring pin.
- (b) Remove the shift and select lever.
- (c) Remove the shift interlock block No. 2.

**19. REMOVE SPEEDOMETER DRIVE GEAR**

- (a) Using a screwdriver, remove the clip.
- (b) Remove the speedometer drive gear.

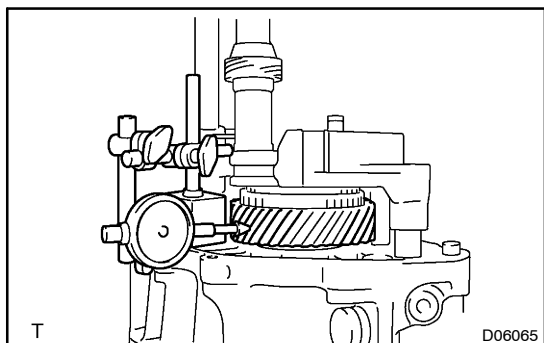
**20. INSPECT COUNTER 6TH GEAR THRUST CLEARANCE**

Using SST and dial indicator, measure the counter 6th gear thrust clearance.

SST 09350-20015 (09530-06120)

Standard clearance:

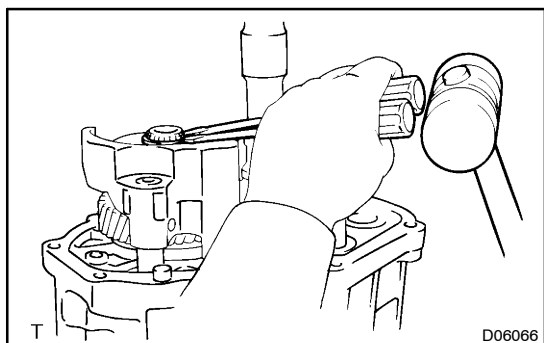
0.10 – 0.40 mm (0.0039 – 0.0157in.)

**21. INSPECT COUNTER 6TH GEAR OIL CLEARANCE**

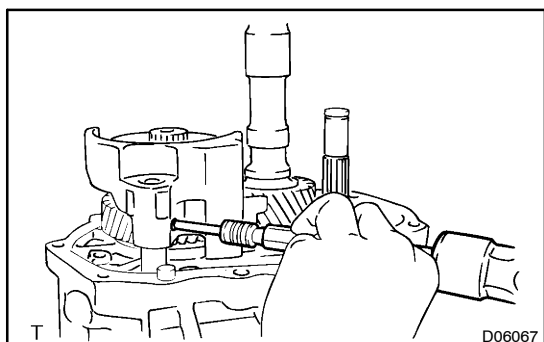
Using a dial indicator, measure the counter 6th gear oil clearance.

Standard clearance:

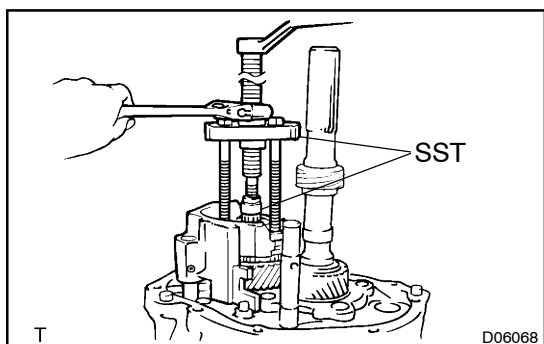
0.015 – 0.068 mm (0.00059 – 0.00268 in.)

**22. REMOVE 6TH GEAR**

(a) Using 2 screwdrivers, remove the shaft snap ring.

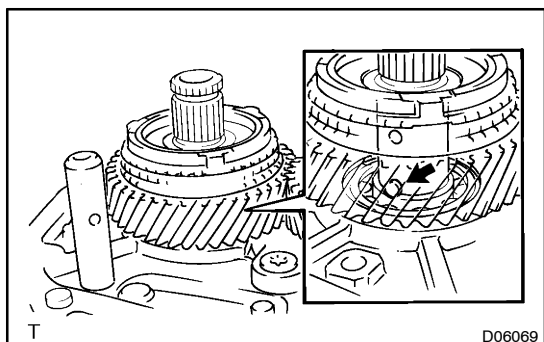


(b) Using a pin punch and hammer, remove the slotted spring pin.

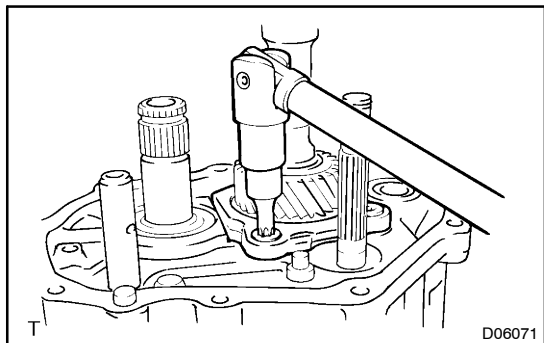


(c) Using SST, remove the clutch hub No. 4 and shift fork No. 4.

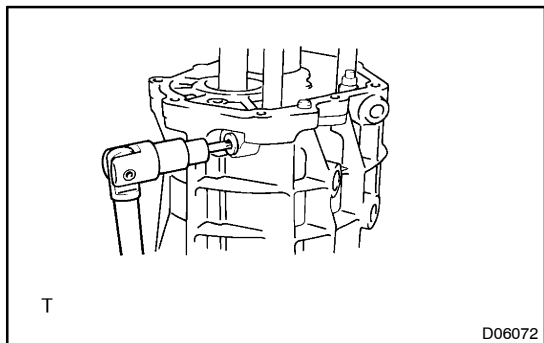
SST 09950-30011 (09951-03010, 09953-03010),
09950-40011 (09957-07010)



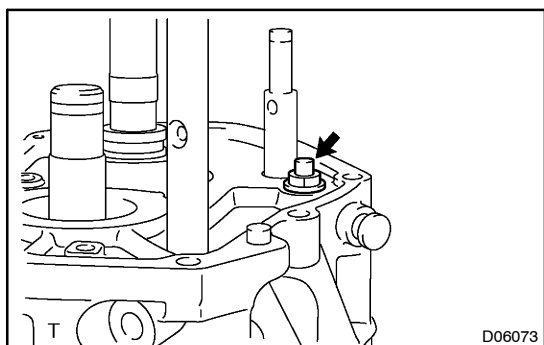
(d) Remove the counter 6th gear needle roller bearing, 6th gear thrust washer and gear thrust washer straight pin.

**23. REMOVE TRANSMISSION CASE**

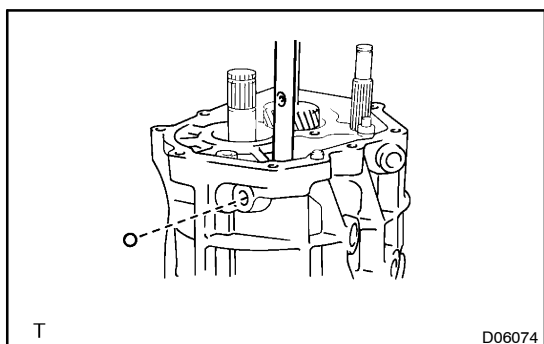
- (a) Using a torx wrench (T45), remove the 4 bolts and transmission output shaft rear bearing retainer.



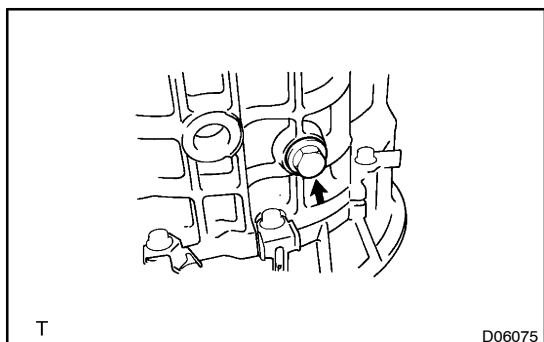
- (b) Using a torx wrench (T30), remove the head straight screw plug No. 1, shift detente ball compression spring No. 2 and shaft detente ball.



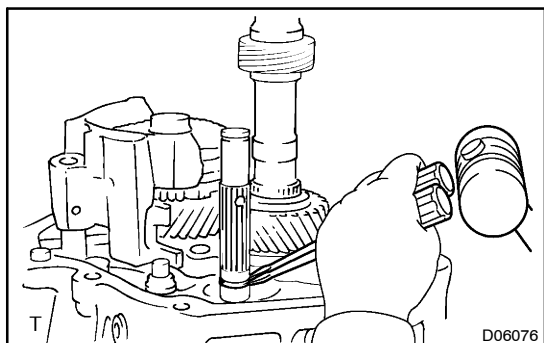
- (c) Remove the shift and select lever stopper bolt.



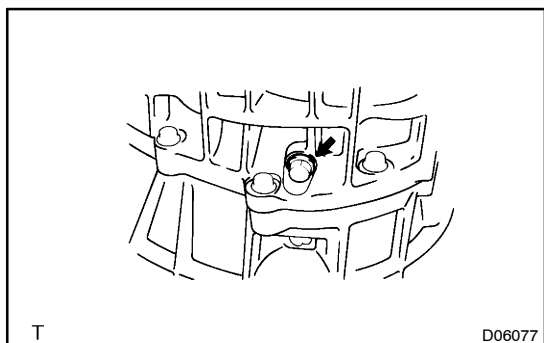
- (d) Pull out the shift fork shaft and remove the shaft detente ball.



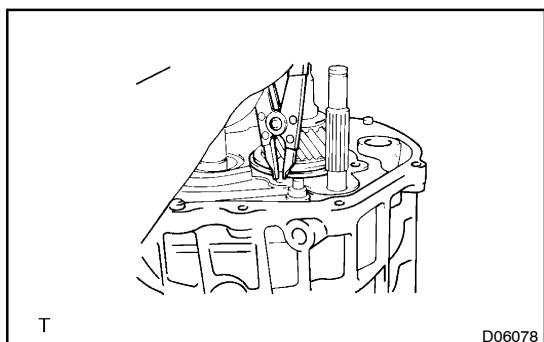
- (e) Remove the shift interlock plate bolt.



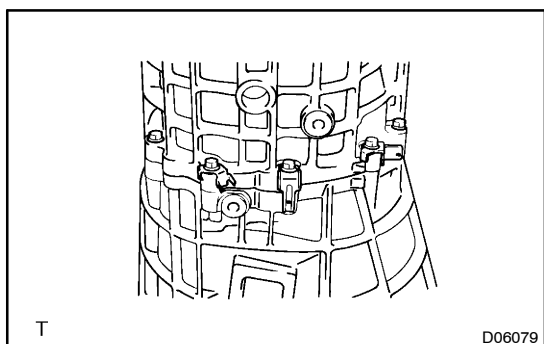
- (f) Using 2 screwdrivers, remove the snap ring.



- (g) Remove the reverse idler gear shaft bolt and reverse idler gear shaft gasket.



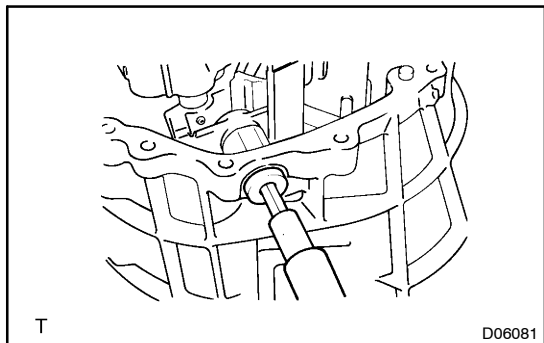
- (h) Using snap ring expander, remove the output shaft bearing snap ring.



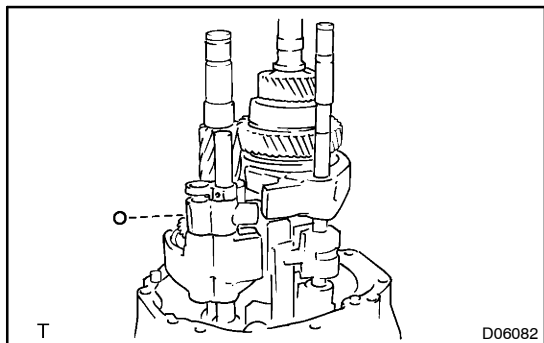
- (i) Remove the 10 bolts.



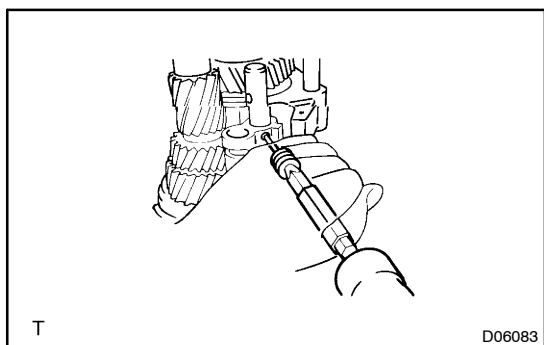
- (j) Using a plastic hammer, carefully tap the transmission case.
- (k) Remove the shift detente ball compression spring No. 2.

**24. REMOVE 5TH SHIFT ARM**

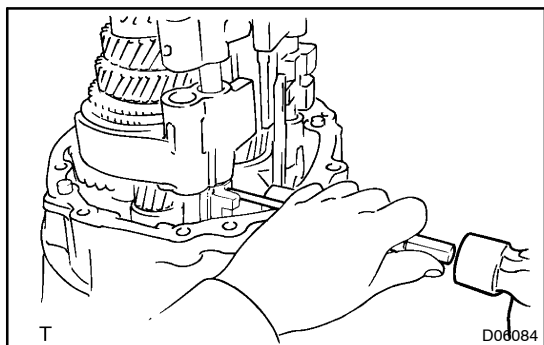
- (a) Using a hexagon wrench (8 mm, 0.31 in.), remove the shift arm pivot.
- (b) Remove the 5th shift arm.

**25. REMOVE GEAR SHIFT FORK SHAFT NO. 2**

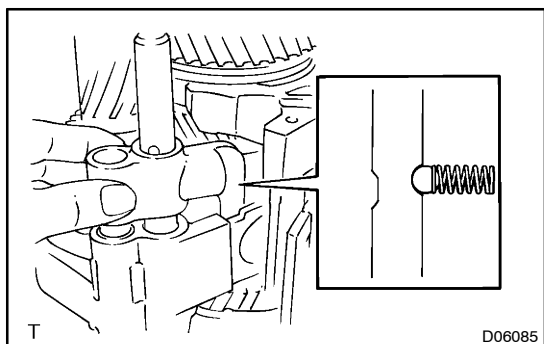
- (a) Remove the shaft detente ball from gear shift head No. 3.



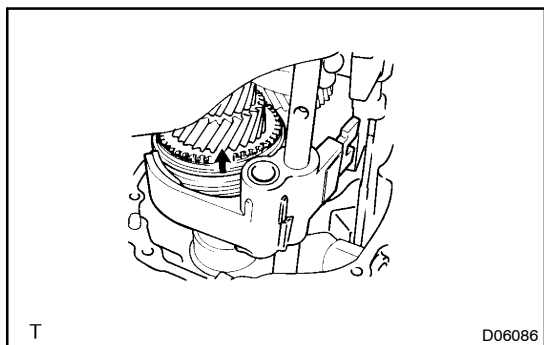
- (b) Using a pin punch and hammer, drive out the slotted spring pin.
- (c) Remove the shift interlock plate.



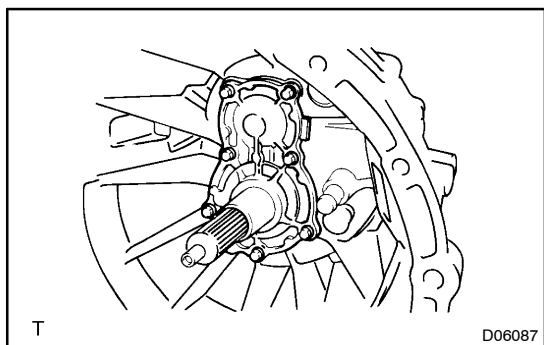
- (d) Hold up the gear shift fork shaft No. 2 lightly.
- (e) Using a pin punch and hammer, remove the slotted spring pin.



- (f) Remove the gear shift head No. 3 shaft detente ball, shift detente ball compression spring.

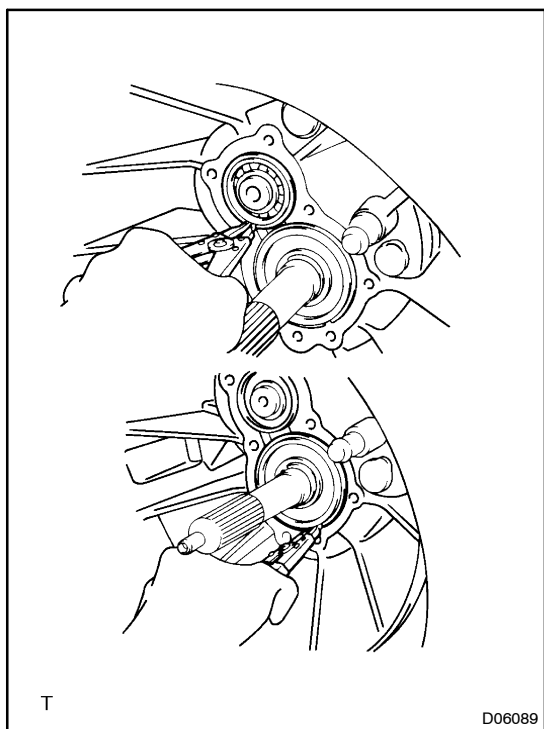


- (g) Pull out the gear shift fork shaft.
- (h) Remove the 3rd, 4th shift fork and reverse shift arm head.



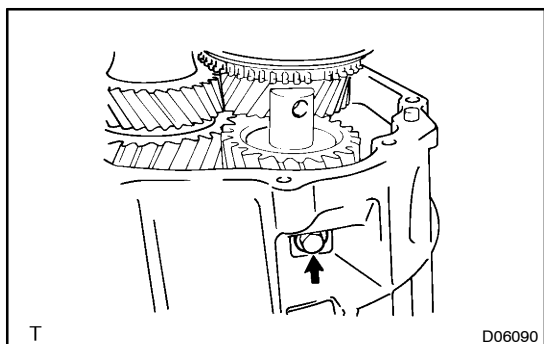
26. REMOVE FRONT BEARING RETAINER

Remove the 7 bolts and front bearing retainer.

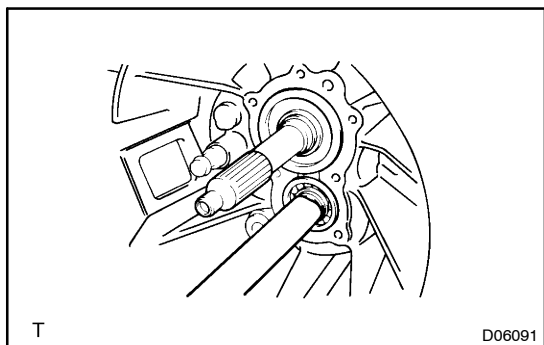


27. REMOVE COUNTER SHAFT

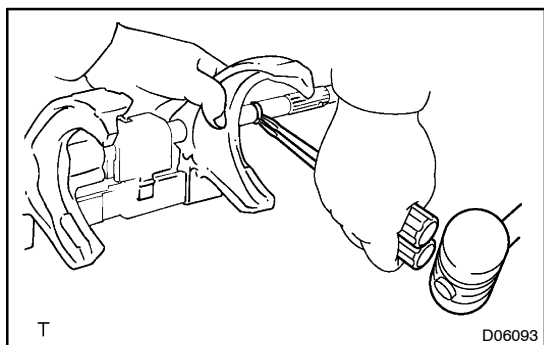
- (a) Using a snap ring expander, remove the 2 snap ring.



- (b) Remove the bolt and reverse idler gear shaft gasket.



- (c) Press out the input shaft, output shaft, counter shaft, reverse idler gear shaft and gear shift fork shaft No. 1 with hammer handle or equivalent.



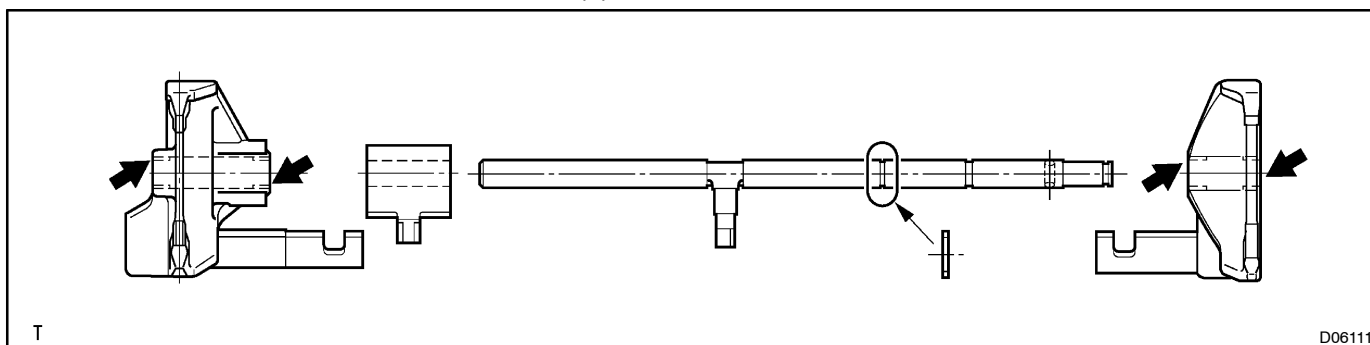
28. REMOVE SHIFT INTERLOCK PIN NO. 1

- (a) Using a screwdriver remove the shaft snap ring.
- (b) Remove the shift fork No.1, shift fork No.3 and shift interlock pin No. 1 from gear shift fork shaft No. 1.

REASSEMBLY

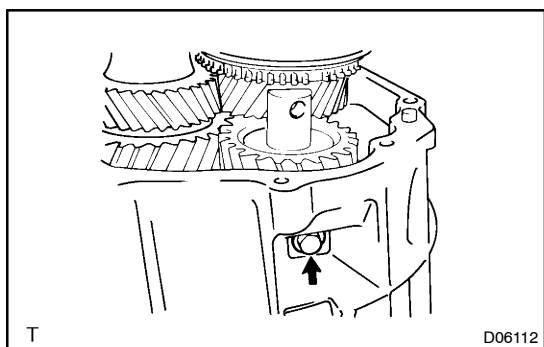
1. INSTALL INTERLOCK PIN NO. 1

- (a) Apply gear oil to bush of each shift forks.
- (b) Install the shift fork No.1 to gear shift fork shaft No. 1
- (c) Using a screwdriver, install the new snap ring.
- (d) Install the shift interlock pin No. 1
- (e) Install the shift fork No.3.

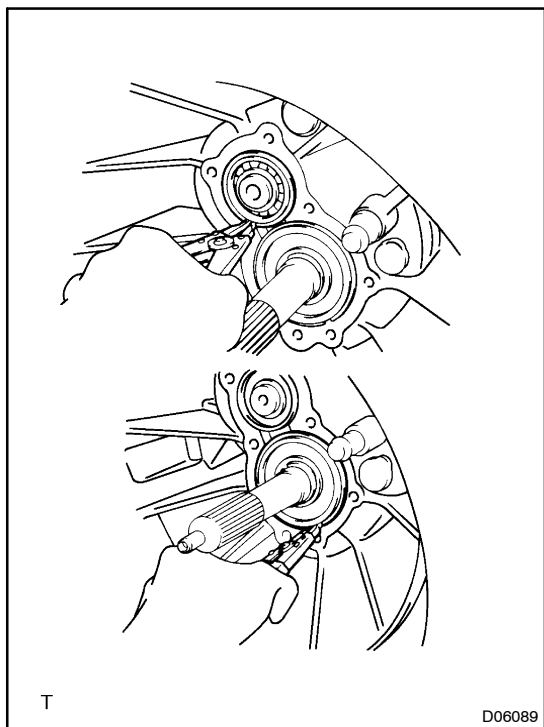


2. INSTALL OUTPUT SHAFT

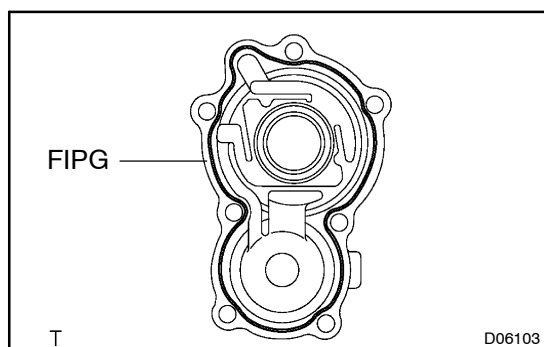
- (a) Apply gear oil to input shaft needle roller bearing and reverse idler gear shaft.
- (b) Install the input shaft to output shaft.
- (c) Install the input shaft, output shaft, counter shaft, reverse idler gear and shift fork shaft No. 1 to clutch housing.



- (d) Install a new gasket to idler gear shaft.
- (e) Install the idler gear shaft set bolt temporarily (clutch housing side).



- (f) Using a snap ring expander, install the 2 snap ring.

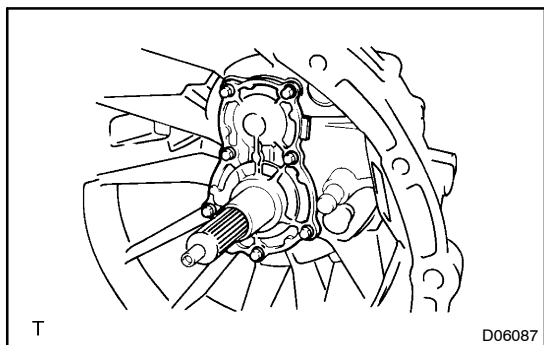


3. INSTALL FRONT BEARING RETAINER

- (a) Apply FIPG to the front bearing retainer, as shown in the illustration.

FIPG:

Part No. 08826-00090, THREE BOND 1281 or equivalent

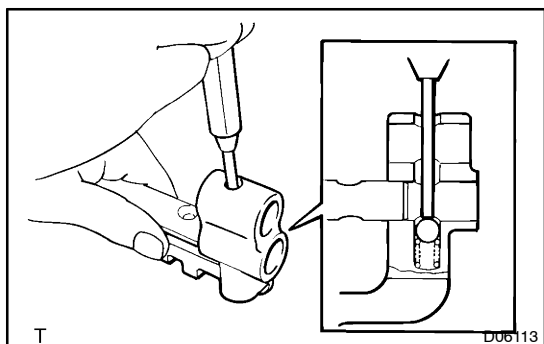


- (b) Coat sealant to 7 bolts and install the front bearing retainer.

Torque: 17 N·m (170 kgf·cm, 12 ft·lbf)

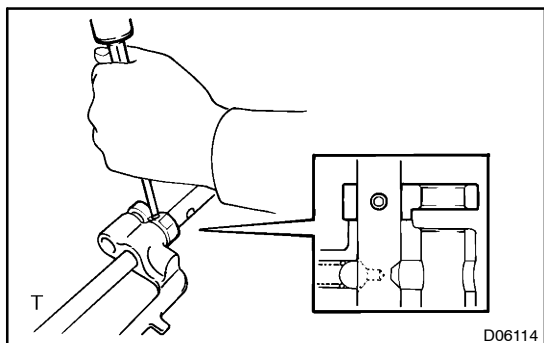
Sealant:

Part No. 08833-00080, THREE BOND 1344, LOCTITE 242 or equivalent



4. INSTALL GEAR SHIFT HEAD NO. 3

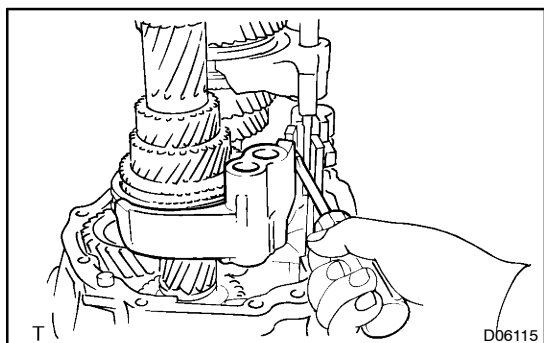
- (a) Install the shift detente ball compression spring.
 (b) Using a pin punch, hold the shaft detente ball and install the gear shift detente ball and install the gear shift head No. 3 to gear shift fork shaft No. 2.



5. INSTALL SHIFT INTERLOCK PLATE

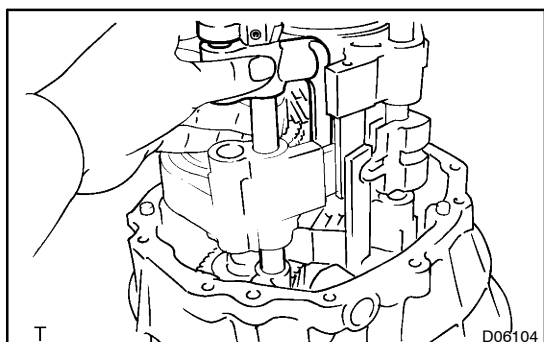
- (a) Install the shift interlock plate to gear shift fork shaft No. 2.
- (b) Using a pin punch and hammer, drive in the slotted spring pin.

Drive in depth: 0 ± 0.5 mm (0 ± 0.0197 in.)



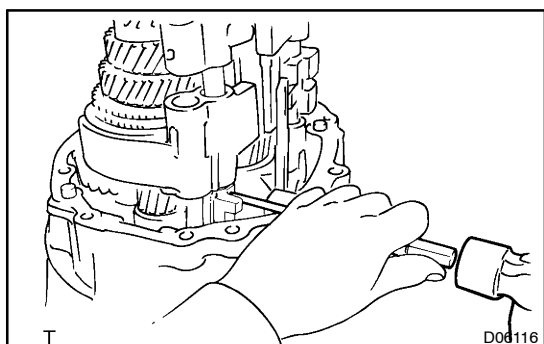
6. INSTALL 3RD AND 4TH SHIFT FORK

Using a screwdriver, install the 3rd and 4th shift fork to counter shaft.

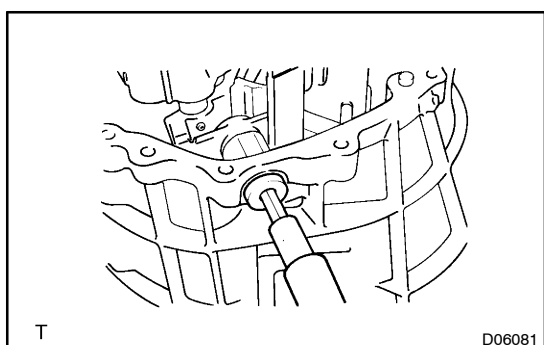


7. INSTALL GEAR SHIFT FORK SHAFT NO. 2

- (a) Install the reverse shift arm head to clutch housing temporarily.
- (b) Install the gear shift fork shaft No. 2.



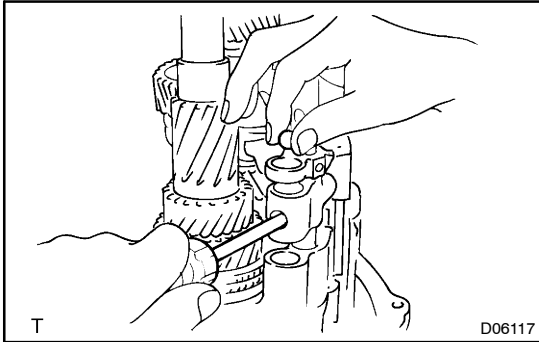
- (c) Using a pin punch and hammer, drive in the slotted spring pin.



8. INSTALL 5TH SHIFT ARM

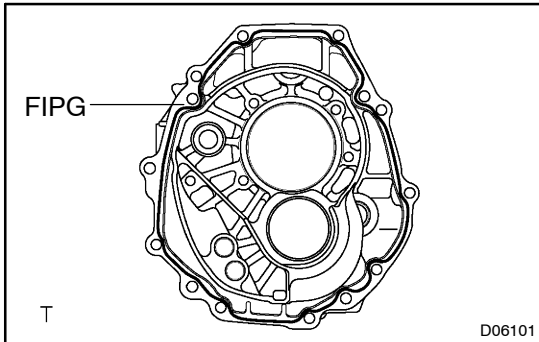
- (a) Install the 5th shift arm.
- (b) Using a hexagon wrench (8.0 mm, 0.31 in.), install the pivot bolt.

Torque: 39 N·m (390 kgf·cm, 29 ft·lbf)



9. INSTALL TRANSMISSION CASE

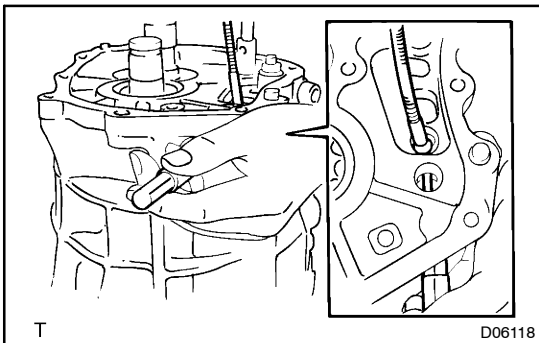
- (a) Apply MP grease to the shaft detente ball.
- (b) Using a screwdriver, install the shaft detente ball to gear shift head No. 3.



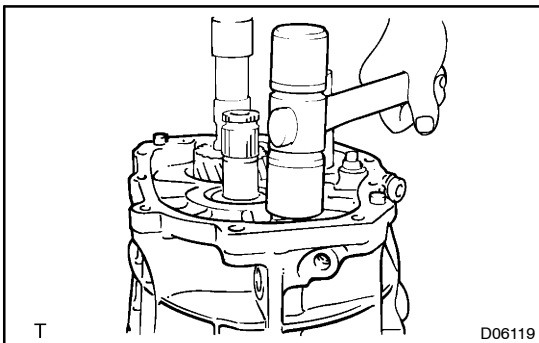
- (c) Apply FIPG to transmission case, as shown in the illustration.

FIPG:

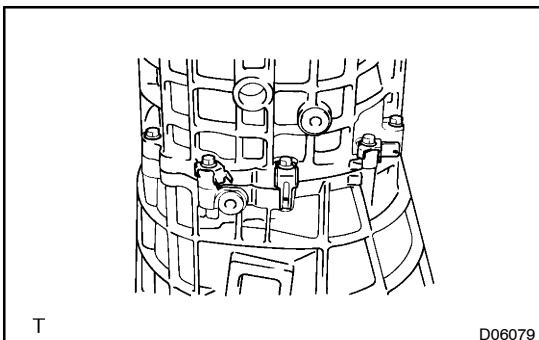
Part No. 08826-00090, THREE BOND 1281 or equivalent



- (d) Install the shaft detente ball compression spring No. 2.
- (e) Using a pin punch and magnetic finger, hold the shaft detente ball and install the transmission case temporarily.



- (f) Using a plastic hammer, tap on the transmission case to install it.



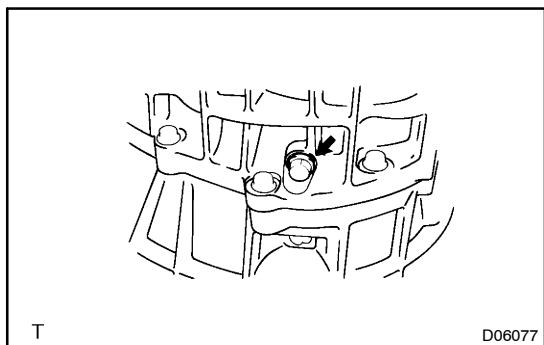
- (g) Coat sealant to 10 bolts.

Sealant:

Part No. 08833-00080, THREE BOND 1344, LOCTITE 242 or equivalent

- (h) Install the 10 bolts.

Torque: 29 N·m (290 kgf·cm, 21 ft·lbf)

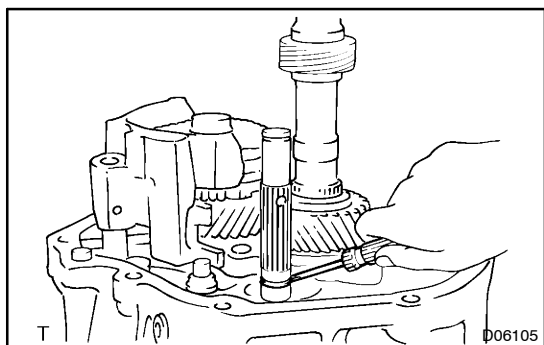


- (i) Install a new reverse idler gear shaft gasket.
- (j) Install the idler gear shaft set bolt (transmission case side).

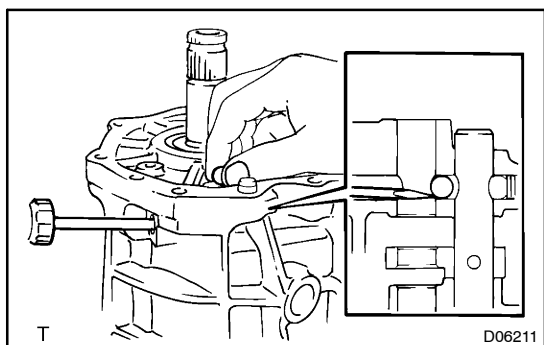
Torque: 28 N·m (290 kgf·cm, 21 ft·lbf)

- (k) Tighten the idler gear shaft set bolt (clutch housing side).

Torque: 28 N·m (290 kgf·cm, 21 ft·lbf)

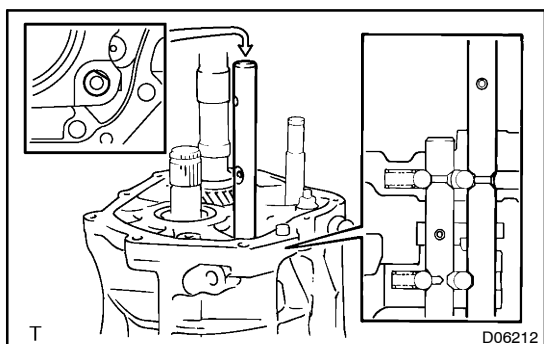


- (l) Using a screwdriver, install a new snap ring.



10. INSTALL SHIFT FORK SHAFT NO. 3

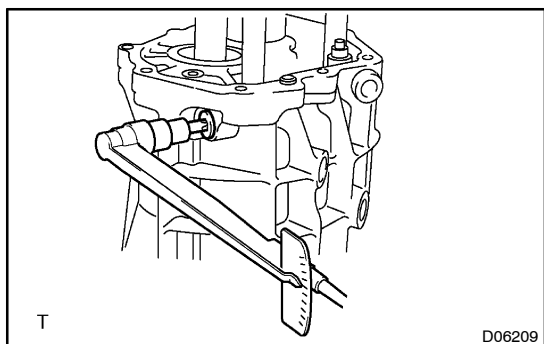
- (a) Apply MP grease to shaft detente ball No. 2.
- (b) Using a screwdriver, install the shaft detente ball to transmission case.



- (c) Install the shift fork shaft No. 3.
- (d) Coat sealant to head straight screw plug No. 1.

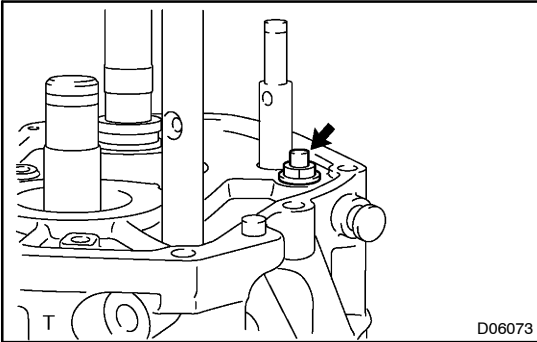
Sealant:

Part No. 08833-00080, THREE BOND 1344, LOCTITE 242 or equivalent

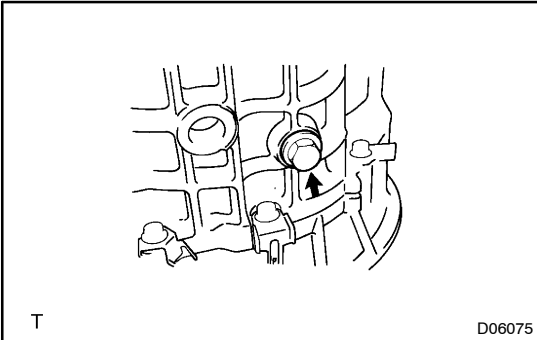


- (e) Install the shaft detente ball and shift detente ball compression spring No. 2.
- (f) Using a torx wrench (T30), install the head straight screw plug No. 1.

Torque: 19 N·m (190 kgf·cm, 14 ft·lbf)

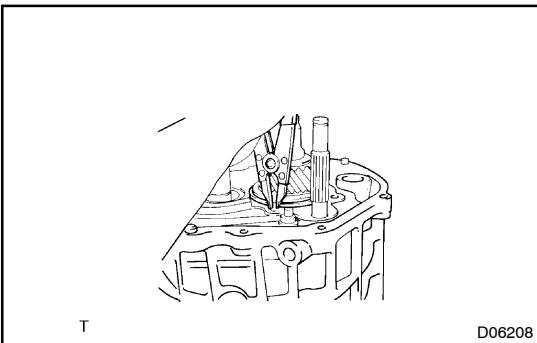


- (g) Install the shift and select lever stopper bolt.
Torque: 14 N·m (145 kgf·cm, 10 ft·lbf)



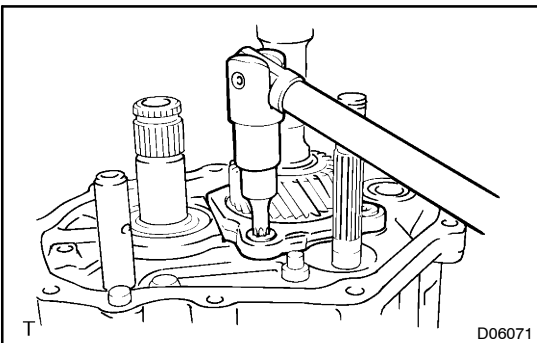
11. INSTALL SHIFT INTERLOCK PLATE BOLT

- (a) Coat sealant to shift interlock plate bolt.
Sealant:
Part No. 08833-00080, THREE BOND 1344, LOCTITE 242 or equivalent
- (b) Install the shift interlock plate bolt.
Torque: 31 N·m (320 kgf·cm, 23 ft·lbf)

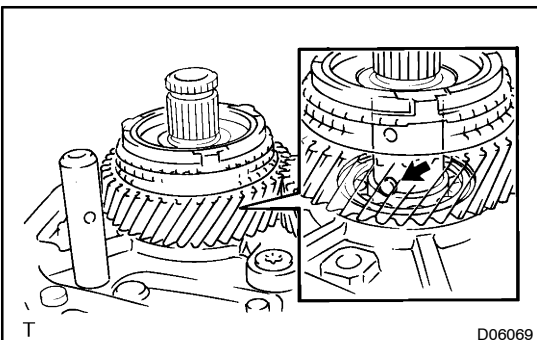


12. INSTALL OUTPUT SHAFT REAR BEARING RETAINER

- (a) Using a snap ring expander, install the output shaft bearing snap ring.

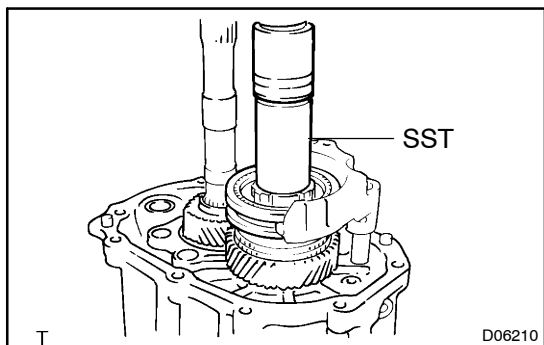


- (b) Coat sealant to 4 bolts.
Sealant:
Part No. 08833-00080, THREE BOND 1344, LOCTITE 242 or equivalent
- (c) Using a torx wrench (T45), install the output shaft rear bearing retainer with 4 bolts.
Torque: 30 N·m (305 kgf·cm, 22 ft·lbf)

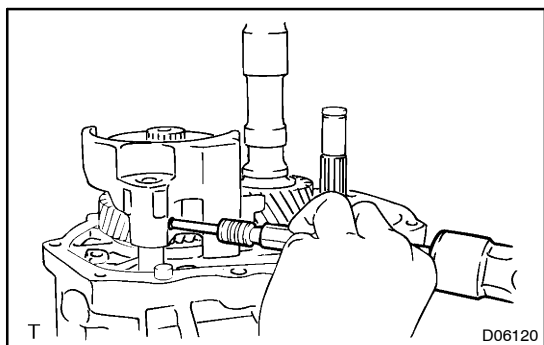


13. INSTALL CLUTCH HUB NO. 4

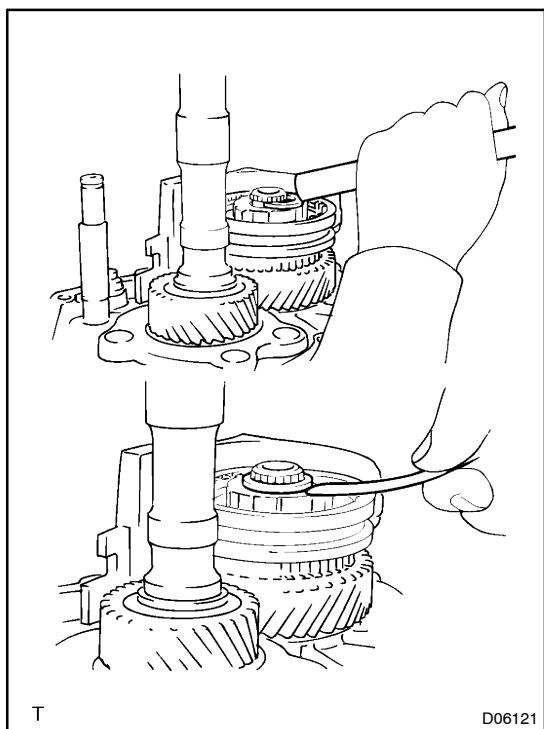
- (a) Install the gear thrust washer pin to counter shaft.
- (b) Apply gear oil to 6th gear thrust washer, 6th gear needle roller bearing, 6th counter gear synchronizer ring No. 3 and install them to counter shaft.



- (c) Using SST and press, install the clutch hub No. 4 with 3rd and 4th shift fork.
SST 09632-36010



- (d) Using a pin punch and hammer, drive in the slotted spring pin.
Drive in depth: 0 ± 0.5 mm (0 ± 0.02 in.)

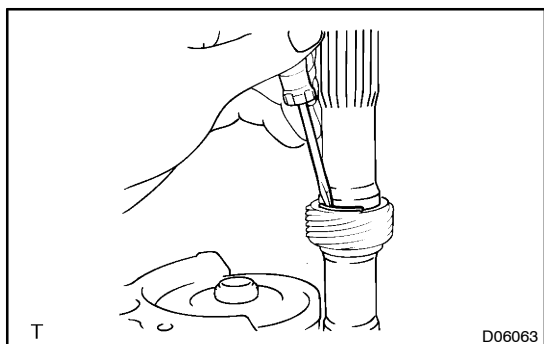


14. INSTALL SHAFT SNAP RING

- (a) Select a snap ring that will allow minimum axial play.

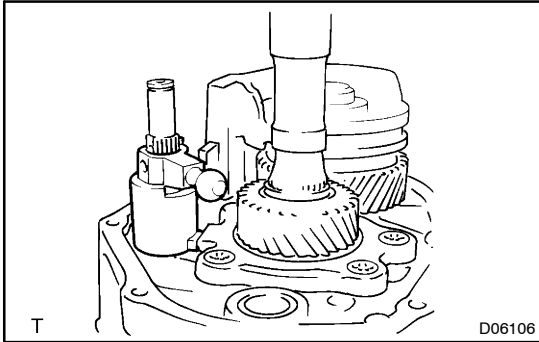
Mark	Thickness mm (in.)
A	2.80 (0.1102)
B	2.85 (0.1122)
C	2.90 (0.1142)
D	2.95 (0.1162)
E	3.00 (0.1181)
F	3.05 (0.1201)

- (b) Using a brass bar and hammer, tap in the snap ring.

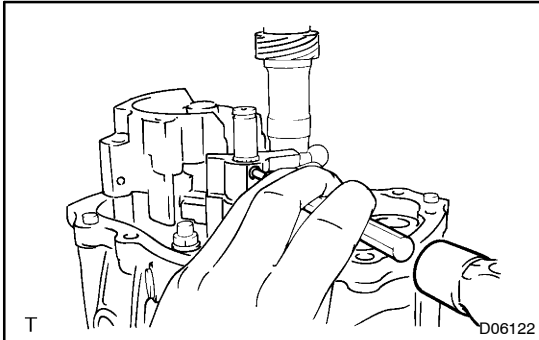


15. INSTALL SPEEDOMETER DRIVE GEAR

- (a) Put a clip on the speedometer drive gear and install the speedometer drive gear on the output shaft.
(b) Using a screwdriver, install the clip.

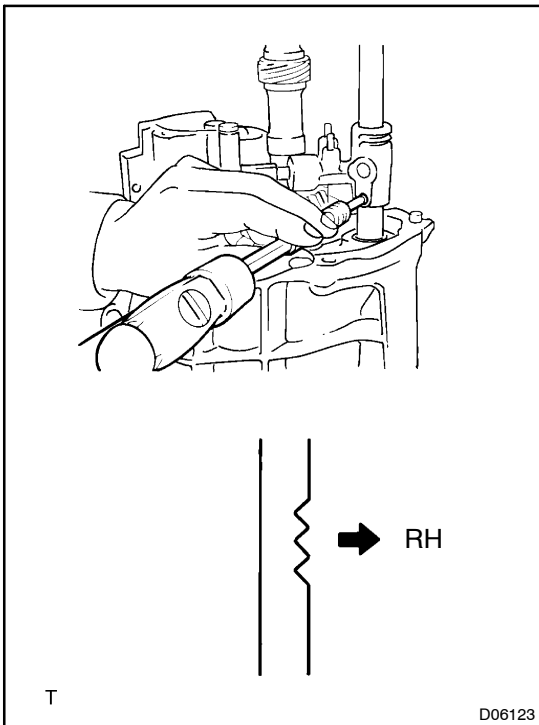
**16. INSTALL SHIFT AND SELECT LEVER**

- (a) Install the shift interlock block No. 2 and shift and select lever.



- (b) Using a pin punch and hammer, drive in the slotted spring pin.

Drive in depth: 0 + 0.5 mm (0 + 0.02 in.)

**17. INSTALL SHIFT LEVER HOUSING**

- (a) Install the shift lever housing to gear shift fork shaft No. 1.
- (b) Install the gear shift fork shaft No. 1 to transmission case.
- (c) Using a pin punch and hammer, drive in the slotted spring pin.

Drive in depth: 0 + 0.5 mm (0 + 0.02 in.)

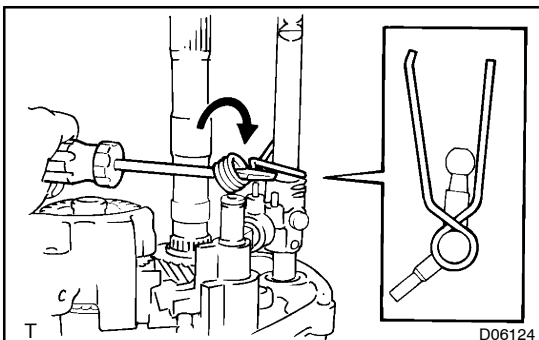
- (d) Apply sealant to the bolt.

Sealant:

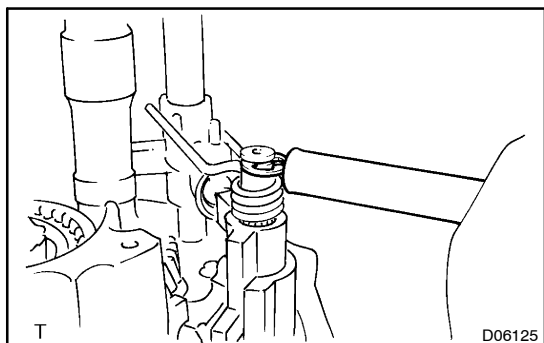
Part No. 08833-00080, THREE BOND 1344, LOCTITE 242 or equivalent

- (e) Install the bolt.

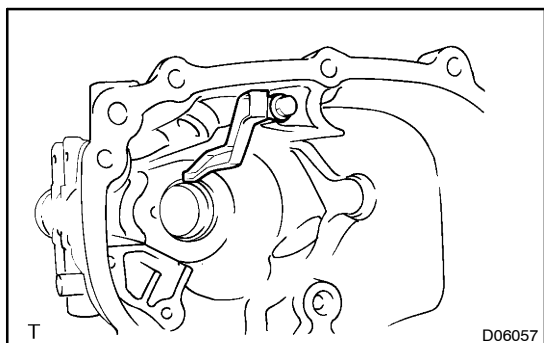
Torque: 30 N·m (305 kgf·cm, 22 ft·lbf)

**18. INSTALL SELECT RETURN TORSION SPRING**

- (a) Using a screwdriver, install the select return torsion spring.



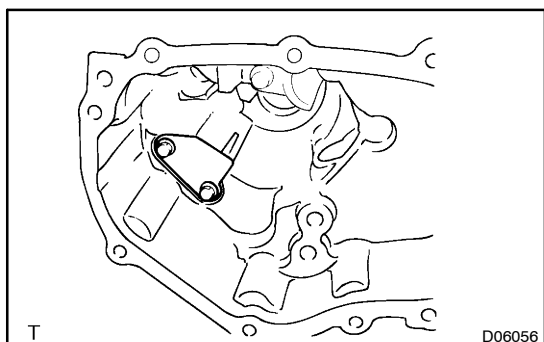
- (b) Using a brass bar and hammer, install the shift fork shaft E-ring.



19. INSTALL EXTENSION HOUSING OIL RECEIVER PIPE NO. 1

Install the extension housing oil seal receiver pipe No. 1 with bolt.

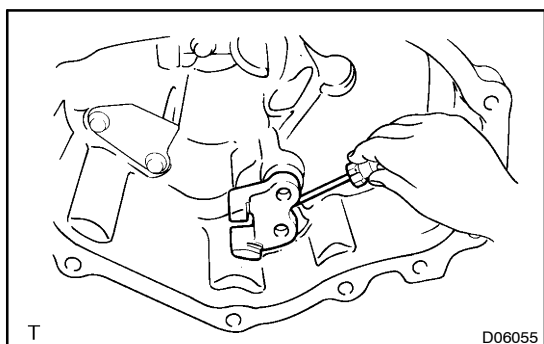
Torque: 8.5 N·m (85 kgf·cm, 74 in·lbf)



20. INSTALL OIL FILTER PLATE

Install the oil filter plate with 2 bolts.

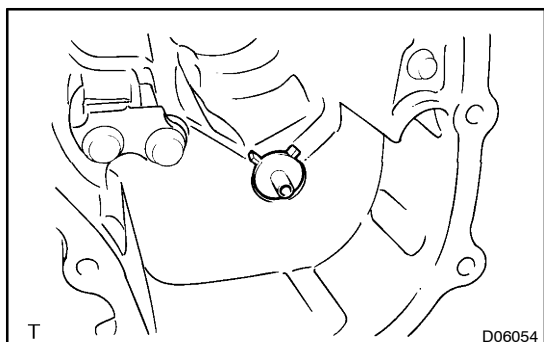
Torque: 8.5 N·m (85 kgf·cm, 74 in·lbf)



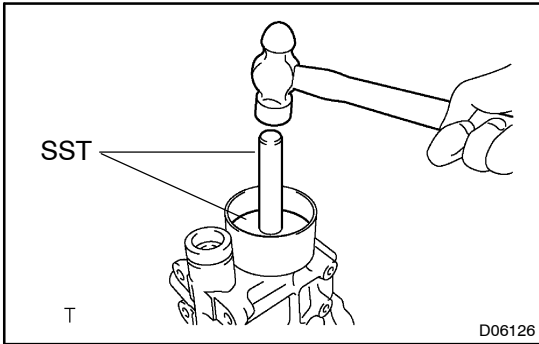
21. INSTALL SELECT STOPPER BLOCK

Install the select stopper block with the 2 bolts.

Torque: 21 N·m (210 kgf·cm, 15 ft·lbf)



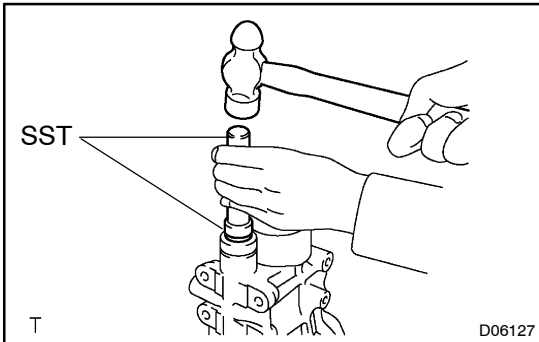
22. INSTALL EXTENSION HOUSING OIL RECEIVER NO. 2

**23. INSTALL EXTENSION HOUSING DUST DEFLECTOR**

Using SST and a hammer, drive in the extension housing dust deflector.

SST 09950-60020 (09951-00750),
09950-70010 (09951-07100)

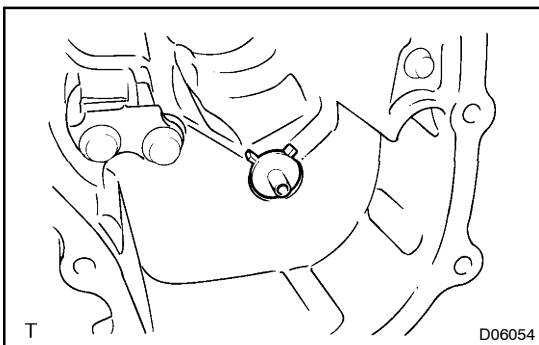
Drive in depth: 1.5 ± 0.5 mm (0.059 ± 0.02 in.)

**24. INSTALL EXTENSION HOUSING REAR OIL SEAL**

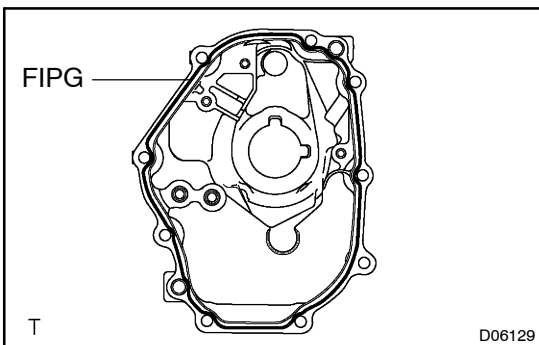
(a) Using SST and hammer, install a new extension housing rear oil seal.

SST 09325-20010

(b) Apply MP grease to lip of extension housing oil seal.

**25. INSTALL EXTENSION HOUSING BLEEDER PLUG**

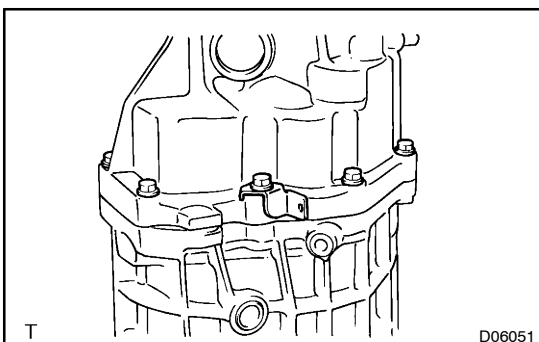
Using a screwdriver, and hammer, install the extension housing bleeder plug.

**26. INSTALL EXTENSION HOUSING**

(a) Apply FIPG to extension housing, as shown in the illustration.

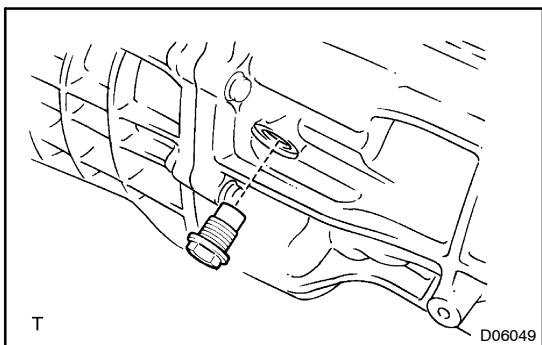
FIPG:

Part No. 08826-00090, THREE BOND 1281 or equivalent

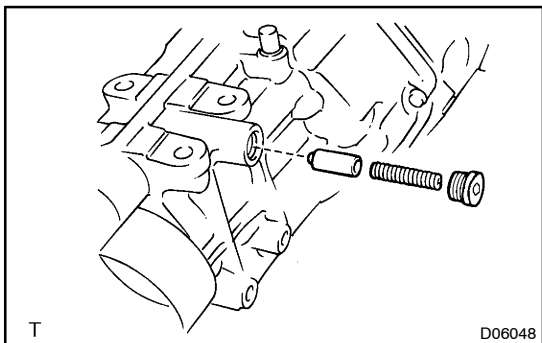


(b) Install the extension housing with 9 bolts and clamp.

Torque: 29 N·m (300 kgf·cm, 22 ft·lbf)

**27. INSTALL REVERSE RESTRICT PIN**

Torque: 37 N·m (380 kgf·cm, 27 ft·lbf)

**28. INSTALL LOCK BALL PIN**

- (a) Apply sealant to head straight screw plug No. 2.

Sealant:

Part No. 08833-00080, THREE BOND 1344, LOCTITE 242 or equivalent

- (b) Install the lock ball pin and shift and select spring.
 (c) Using a hexagon wrench (8.0 mm, 0.31 in.), install the head straight screw plug No. 2.

Torque: 25 N·m (250 kgf·cm, 18 ft·lbf)

29. INSTALL CONTROL SHIFT LEVER DUST BOOT**30. INSTALL FLOOR SHIFT LEVER HOUSING**

- (a) Install the floor shift lever spring.
 (b) Using a pin punch and hammer, drive in the slotted spring pin until it is flush with floor shift lever housing.
 (c) Apply sealant to the bolt.

Sealant:

Part No. 08833-00080, THREE BOND 1344, LOCTITE 242 or equivalent

- (d) Install the bolt.

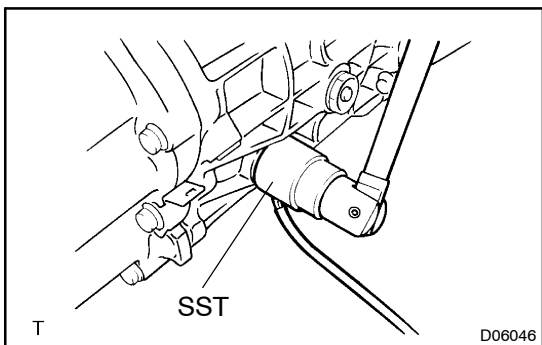
Torque: 38 N·m (390 kgf·cm, 28 ft·lbf)

31. INSTALL BACK-UP SWITCH

Install the back-up switch together with new gasket.

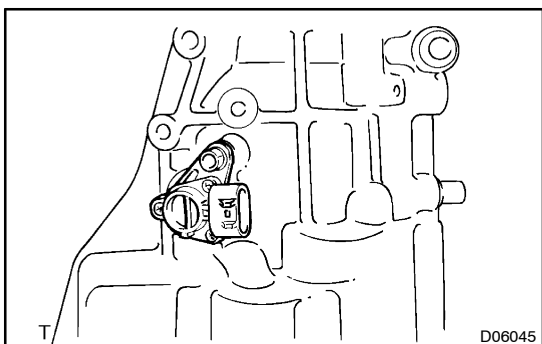
SST 09817-16011

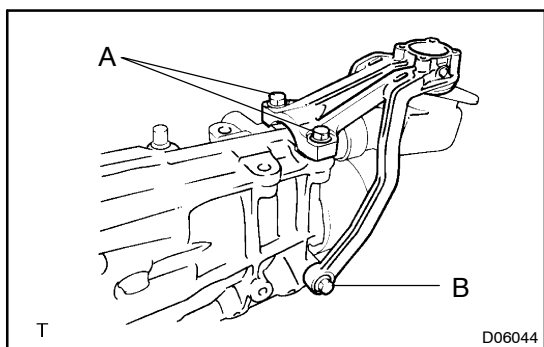
Torque: 44 N·m (450 kgf·cm, 33 ft·lbf)

**32. INSTALL VEHICLE SPEED SENSOR**

Install the vehicle speed sensor with the bolt.

Torque: 14 N·m (140 kgf·cm, 10 ft·lbf)



**33. INSTALL CONTROL SHIFT LEVER RETAINER**

Install the control shift lever retainer with the 4 bolts.

Torque:

Bolt (A): 29 N·m (300 kgf·cm, 27 ft·lbf)

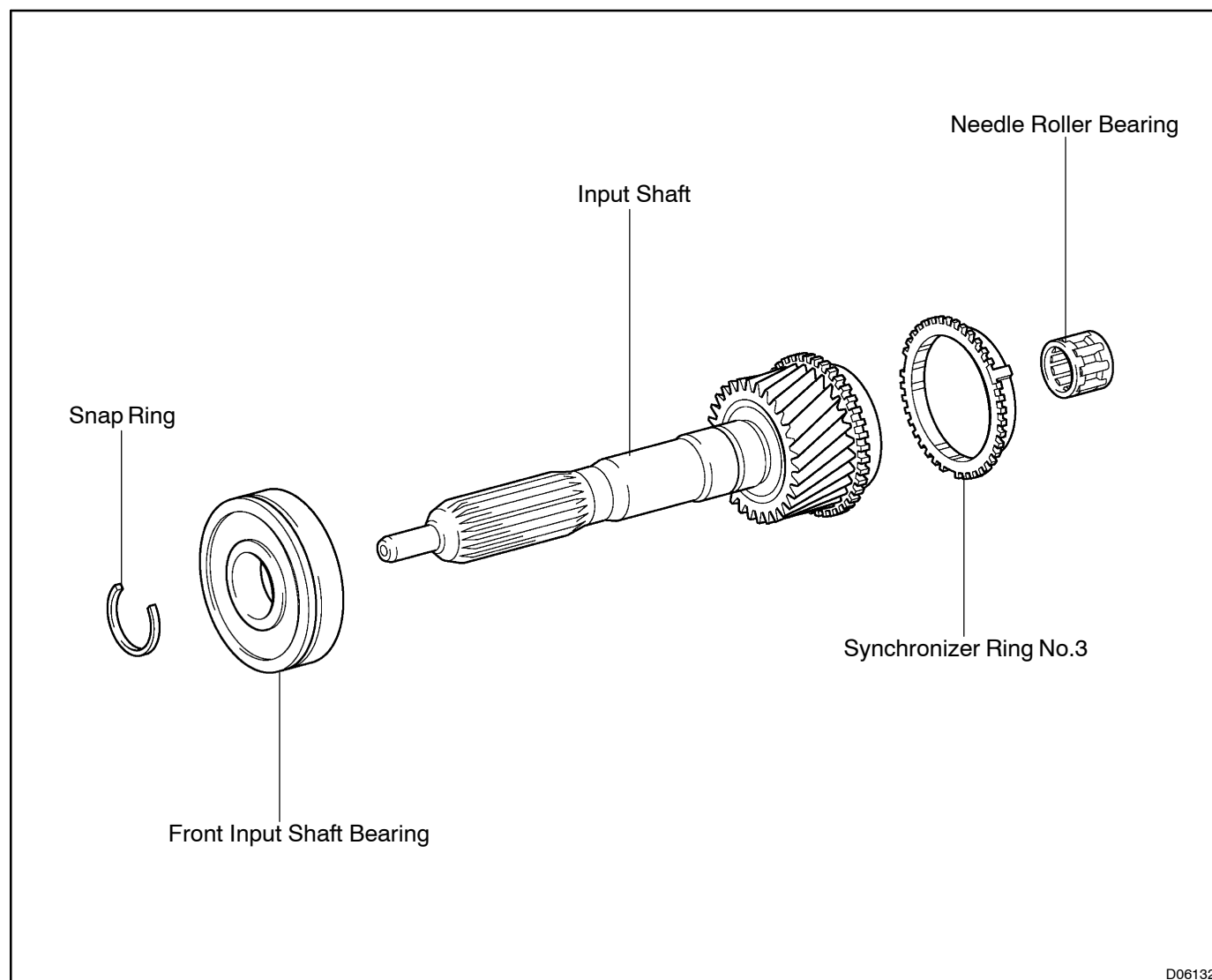
Bolt (B): 19.5 N·m (195 kgf·cm, 14 ft·lbf)

34. INSTALL CLUTCH RELEASE FORK SUPPORT

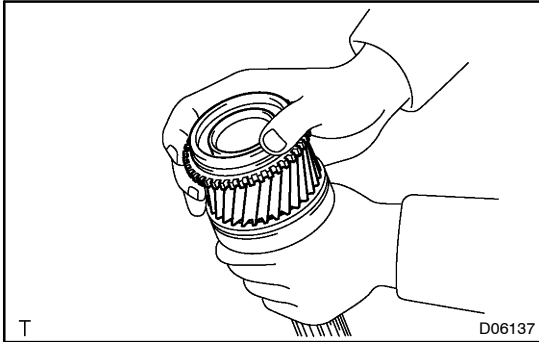
Torque: 39 N·m (400 kgf·cm, 29 ft·lbf)

INPUT SHAFT COMPONENTS

MT08Z-01



D06132



INSPECTION

INSPECT SYNCHRONIZER RING

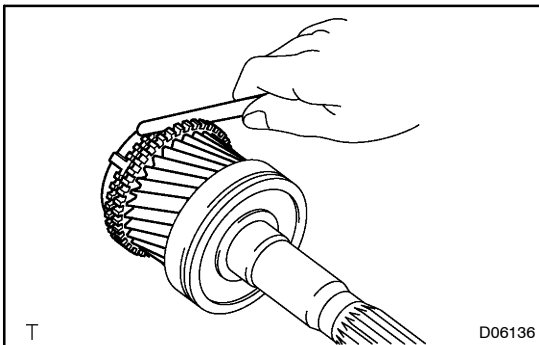
- (a) Check for wear or damage.
- (b) Check for the braking effect of the synchronizer ring.
Turn the synchronizer ring in one direction while pushing it to the gear cone. Check that the ring locks.

If the braking effect is insufficient, apply a small amount of fine lapping compound between the synchronizer ring and gear cone. Lightly rub the synchronizer ring and gear cone together.

NOTICE:

Ensure the fine lapping compound is completely washed off after rubbing.

- (c) Check again the braking effect of the synchronizer ring.



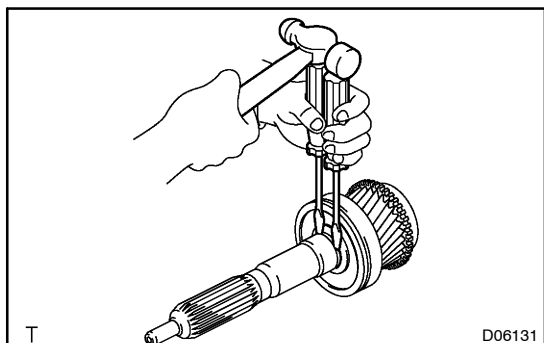
- (d) Using a feeler gauge, measure the clearance between the synchronizer ring back and gear spline end.

Minimum clearance: 0.8 mm (0.031 in.)

If the clearance is less than the minimum, replace the synchronizer ring, and apply a small amount of the fine lapping compound on gear cone.

NOTICE:

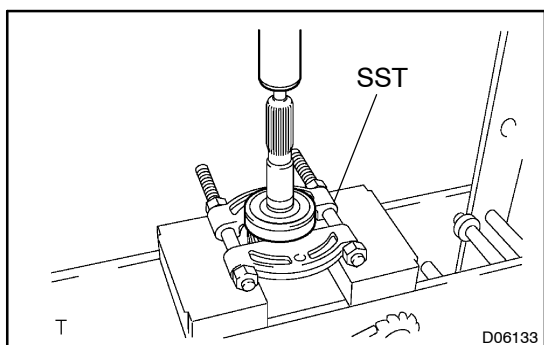
Ensure the fine lapping compound is completely washed off after rubbing.



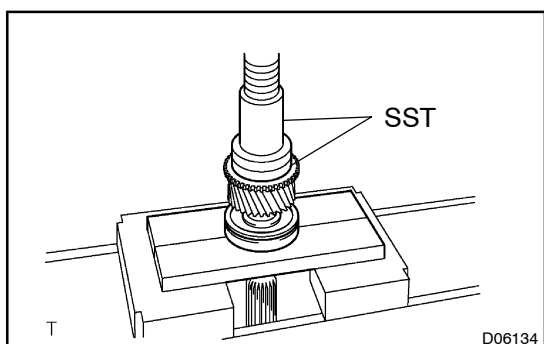
REPLACEMENT

IF NECESSARY, REPLACE INPUT SHAFT BEARING

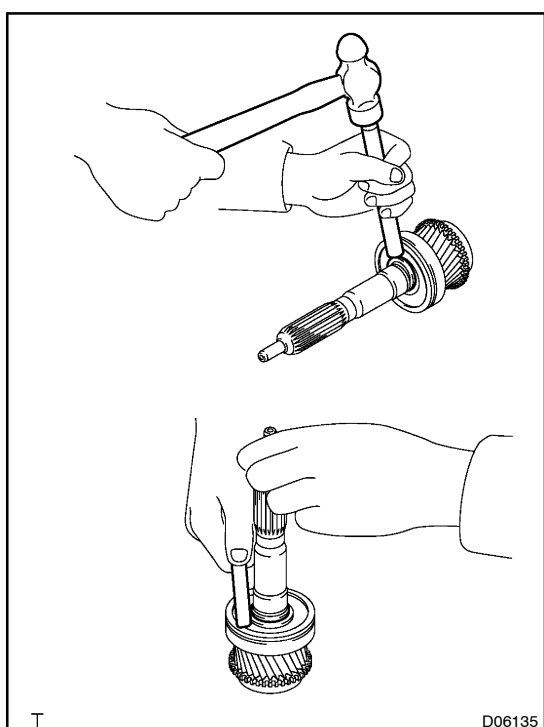
- (a) Using 2 screwdrivers and hammer, remove the snap ring.



- (b) Using SST and press, remove the input shaft bearing.
SST 09950-00020



- (c) Using SST and press, install a new bearing.
SST 09527-20011, 09950-60010 (09951-00560)



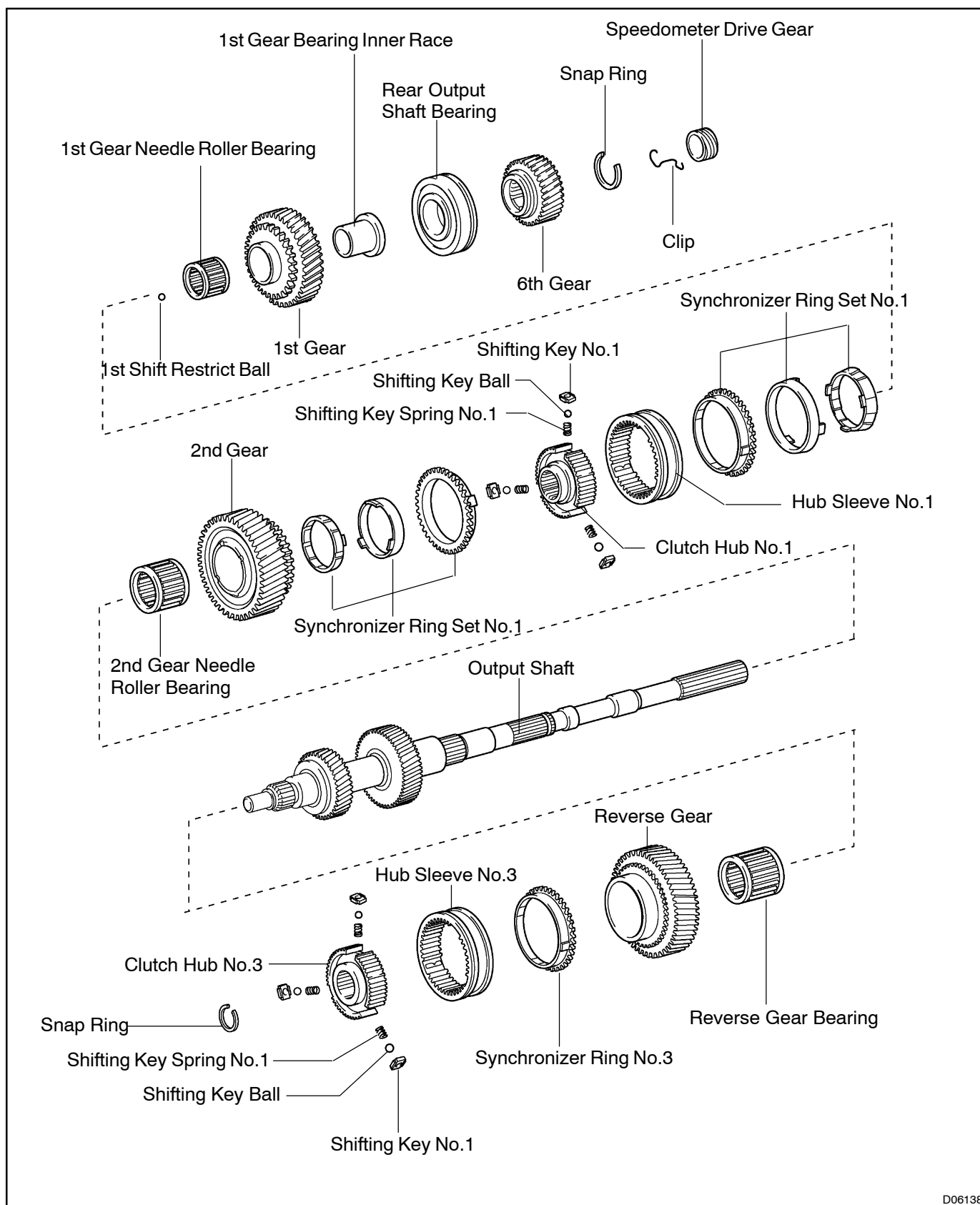
- (d) Select a snap ring that allows minimum axial play.

Mark	Thickness mm (in.)
0	1.95 (0.077)
1	2.00 (0.079)
2	2.05 (0.081)
3	2.10 (0.083)
4	2.15 (0.085)
5	2.20 (0.087)

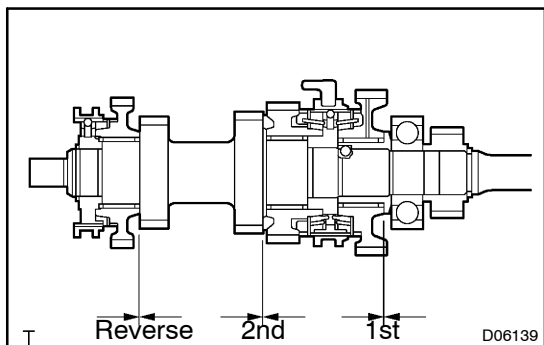
- (e) Using brass bar and hammer, install the snap ring.

OUTPUT SHAFT COMPONENTS

MT092-01



D06138



DISASSEMBLY

1. INSPECT EACH GEAR THRUST CLEARANCE

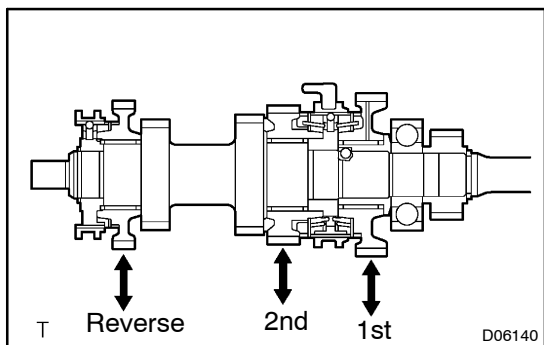
Using a feeler gauge, measure the thrust clearance of each gear.

Standard clearance:

1st gear: 0.15 – 0.40 mm (0.0059 – 0.0157 in.)

2nd and reverse gear:

0.10 – 0.45 mm (0.0039 – 0.0177 in.)



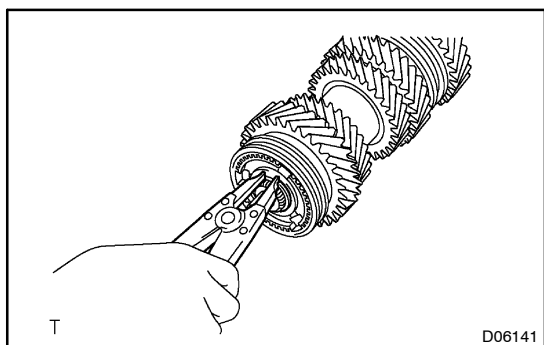
2. INSPECT EACH GEAR RADIAL CLEARANCE

Using a dial indicator, measure the radial clearance of each gear.

Standard clearance:

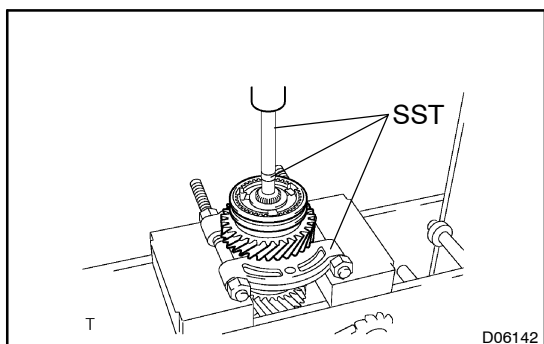
0.015 – 0.066 mm (0.00059 – 0.00260 in.)

If the clearance exceeds the standard, replace the gear, shaft or needle roller bearing.



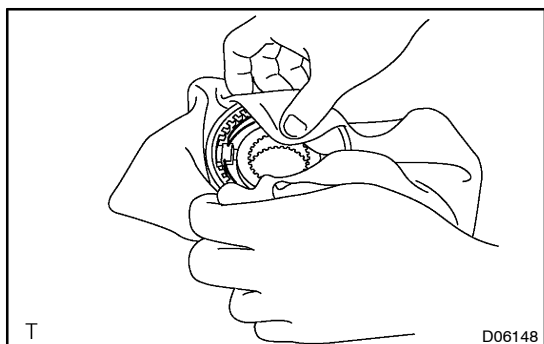
3. REMOVE REVERSE GEAR

- (a) Using a snap ring expander, remove the snap ring.



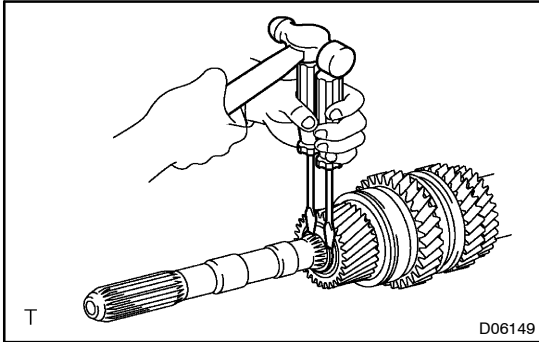
- (b) Using SST and a press, remove the transmission clutch hub No. 3 and reverse gear, synchronizer ring No. 3 and reverse gear bearing.

SST 09950-00020, 09950-60010 (09951-00230),
09950-70010 (09951-07100)



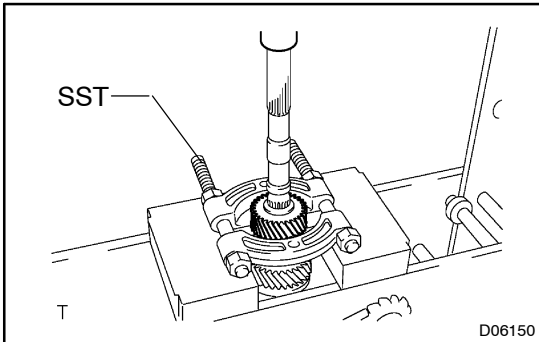
4. REMOVE HUB SLEEVE NO.3

- (a) Cover the hub sleeve No.3 with a cloth, remove the hub sleeve No.3.
- (b) Remove the 3 shifting keys, 3 shifting springs and 3 shifting key balls.

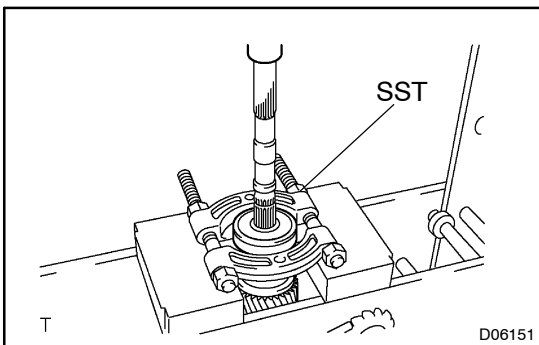


5. REMOVE 6TH GEAR

- (a) Using 2 screwdrivers and hammer, remove the 6th gear shaft snap ring.

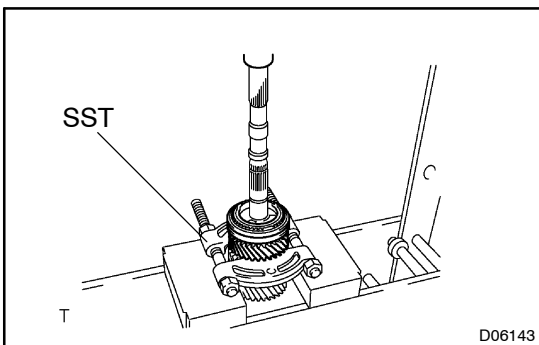


- (b) Using SST and press, remove the 6th gear.
SST 09950-00020



6. REMOVE 1ST GEAR

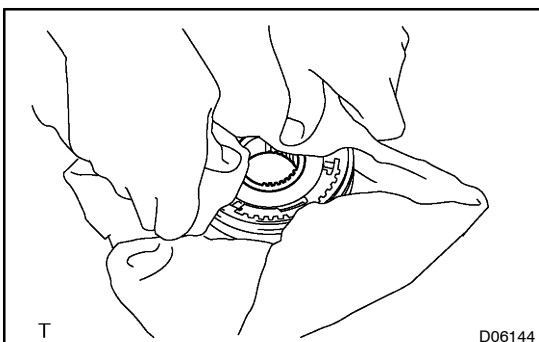
- (a) Using SST and press, remove the output shaft bearing RR.
SST 09950-00020
- (b) Remove the 1st gear bearing inner race 1st gear needle roller bearing and 1st shift restrict ball.



7. REMOVE 2ND GEAR

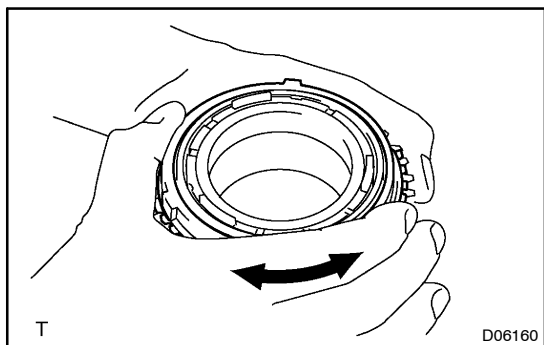
- Using SST and press, remove the 2nd gear, transmission clutch hub No. 1 and 2nd gear needle roller bearing.
SST 09950-00020

8. REMOVE SYNCHRONIZER RING SET NO. 1



9. REMOVE HUB SLEEVE NO. 1

- (a) Cover the hub sleeve No. 1 with a cloth, remove the hub sleeve No.1.
- (b) Remove the 3 shifting keys, 3 shifting springs and 3 shifting key balls.



INSPECTION

1. INSPECT 1ST AND 2ND GEAR SYNCHRONIZER RING

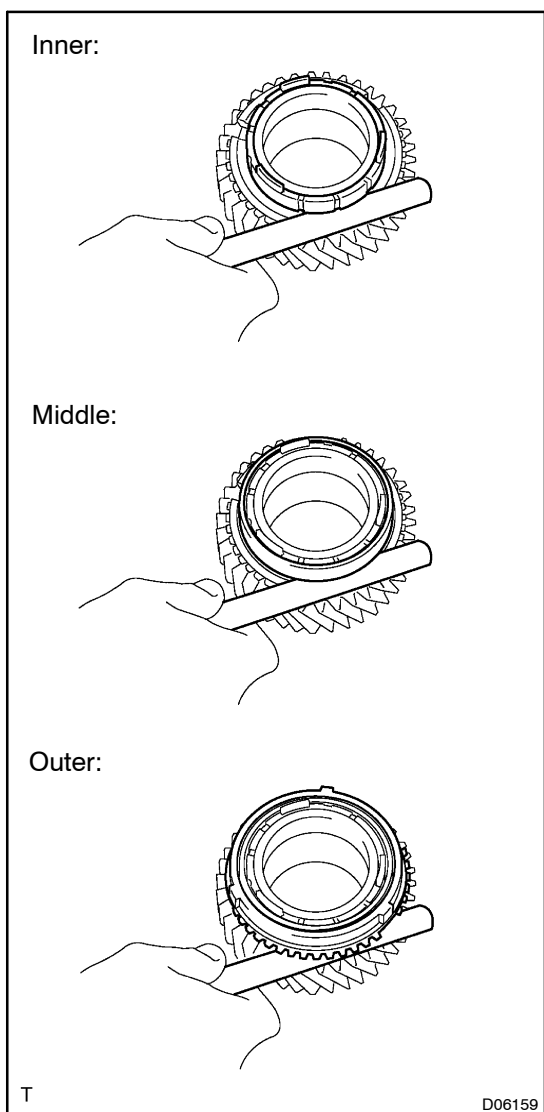
- (a) Check for wear or damage.
- (b) Check for the braking effect of the synchronizer ring.
Turn the synchronizer ring in one direction while pushing it to the gear cone. Check that the ring locks.

If the braking effect is insufficient, apply a small amount of fine lapping compound between the synchronizer ring and gear cone. Lightly rub the synchronizer ring and gear cone together.

NOTICE:

Ensure the fine lapping compound is completely washed off after rubbing.

- (c) Check again the braking effect of the synchronizer ring.



- (d) Using a feeler gauge, measure the clearance between the synchronizer ring back and gear spline end.

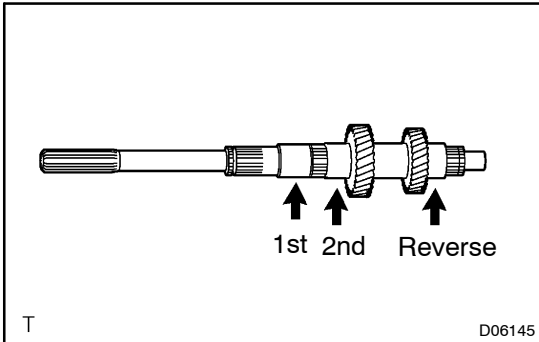
Standard clearance:

Inner: 0.98 – 1.62 mm (0.039 – 0.064 in.)

Middle: 0.68 – 1.92 mm (0.027 – 0.076 in.)

Outer: 0.88 – 1.72 mm (0.035 – 0.068 in.)

If the clearance is not as standard, replace the synchronizer ring.



2. INSPECT OUTPUT SHAFT

- (a) Using a micrometer, measure the outer diameter of the output shaft journal.

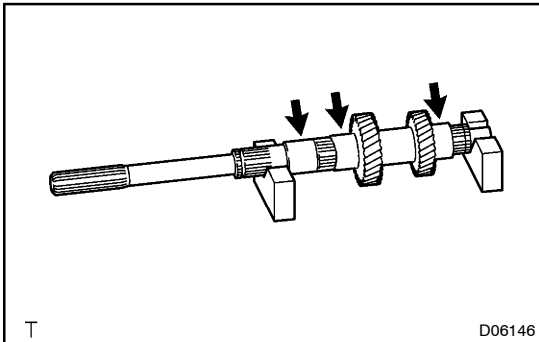
Minimum diameter:

1st gear: 31.984 – 32.000 mm (1.259 – 1.260 in.)

2nd gear: 42.984 – 43.000 mm (1.692 – 1.693 in.)

Reverse gear: 40.984 – 41.000mm (1.6135 – 1.6141 in.)

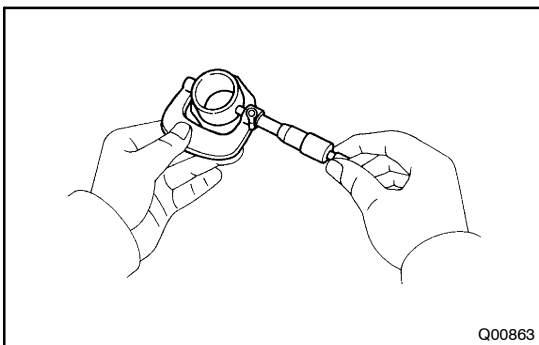
If the outer diameter is less than the minimum, replace the output shaft.



- (b) Using a dial indicator, check for the shaft runout.

Maximum runout: 0.03 mm (0.0012 in.)

If the runout exceeds the maximum replace the output shaft.

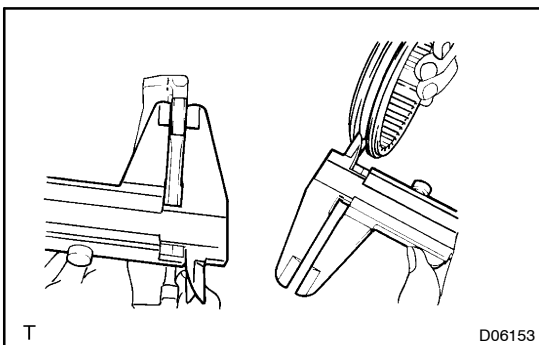


3. INSPECT 1ST GEAR BEARING INNER RACE

Using a micrometer, measure the outer diameter of the inner race.

Minimum diameter: 4.0284 – 40.300 (1.586 – 1.587 in.)

If the outer diameter is less than the minimum, replace the inner race.



4. INSPECT HUB SLEEVE NO. 1 AND NO. 3 CLEARANCE

- (a) Using vernier calipers, measure thickness claw of shift fork.

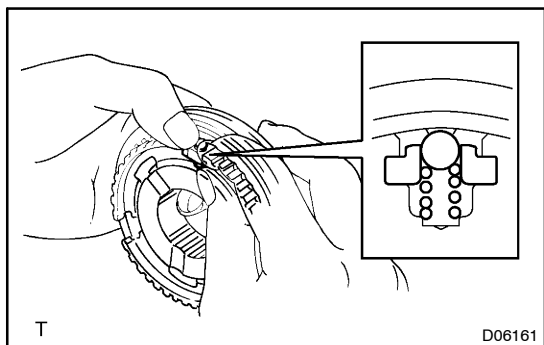
Standard thickness: 7.9 – 8.0 mm (0.311 – 0.315 in.)

- (b) Using vernier calipers, measure the groove of hub sleeve and subtract the shift fork claw thickness from hub sleeve groove.

Maximum clearance:

0.15 – 0.35 mm (0.0059 – 0.0138 in.)

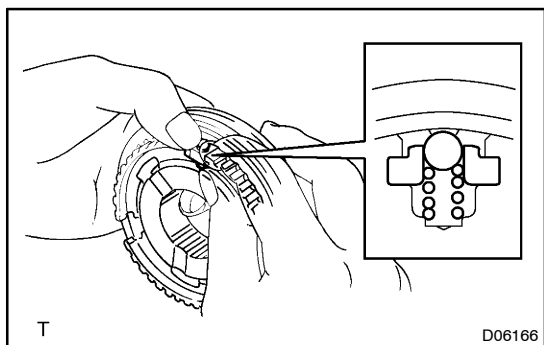
If the clearance exceeds the maximum, replace the shift fork or hub sleeve.



REASSEMBLY

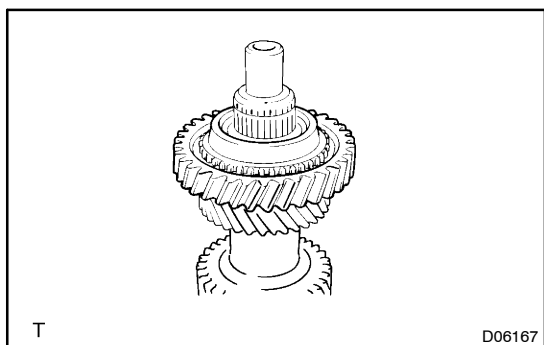
1. INSTALL HUB SLEEVE NO. 1

- (a) Install the hub sleeve No. 1 to clutch hub No. 1.
- (b) Install the shifting key and spring to clutch hub.
- (c) While pushing the spring, install the shifting key ball.



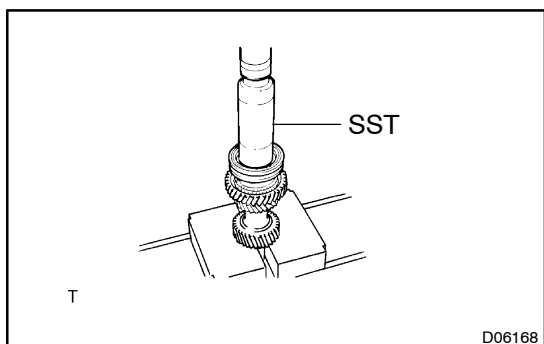
2. INSTALL HUB SLEEVE NO. 3

- (a) Install the hub sleeve No. 3 to clutch hub No. 3.
- (b) Install the shifting key and spring to clutch hub.
- (c) While pushing the spring, install the shifting key ball.



3. INSTALL REVERSE GEAR

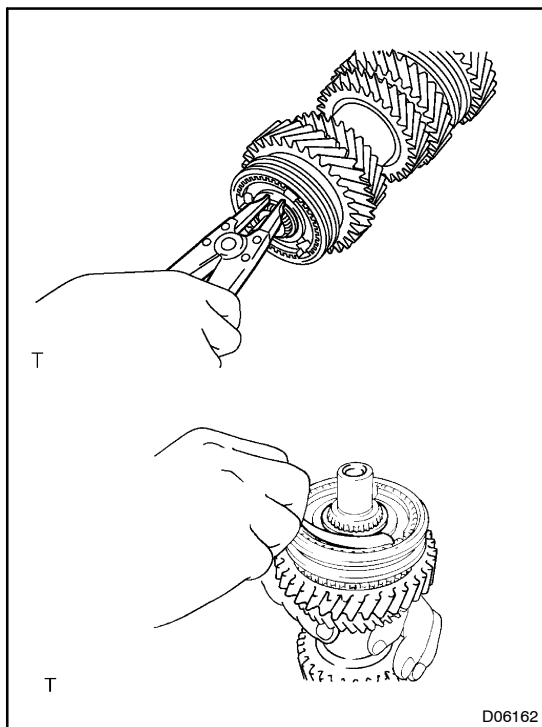
- (a) Apply gear oil to the shaft, inner of reverse gear bearing, inner of reverse gear and cone of reverse gear.
- (b) Install the reverse gear bearing and reverse gear.



4. INSTALL TRANSMISSION CLUTCH HUB NO. 3

- (a) Install the synchronizer ring No. 3 to reverse gear.
- (b) Using SST and press, install the transmission clutch hub No. 3.

SST 09309-37010



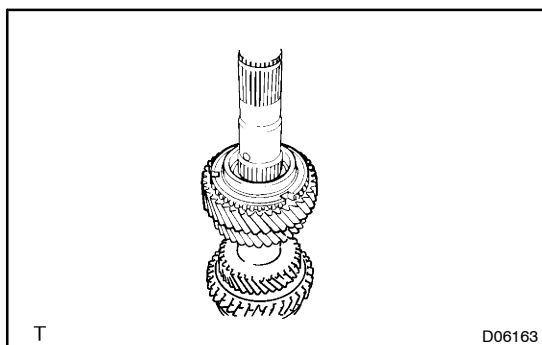
D06162

5. INSTALL TRANSMISSION CLUTCH HUB NO. 3 SHAFT SNAP RING

- (a) Select a snap ring that allows the minimum axial play.

Mark	Thickness mm (in.)
A	1.80 (0.0709)
B	1.85 (0.0728)
C	1.90 (0.0748)
D	1.95 (0.0768)
E	2.00 (0.0787)
F	2.05 (0.0807)

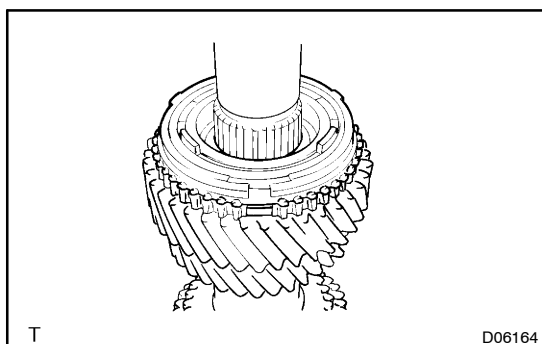
- (b) Using a snap ring expander, install the snap ring.



D06163

6. INSTALL 2ND GEAR

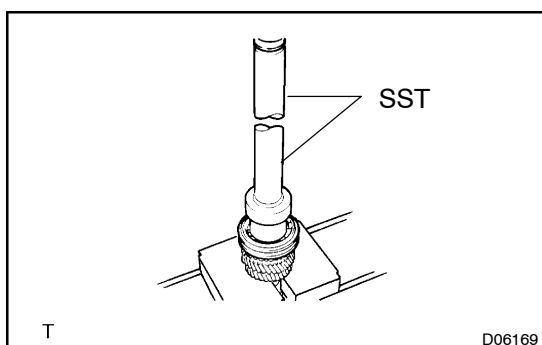
- (a) Apply gear oil to the shaft, inner of reverse gear bearing, inner of the 2nd gear needle roller bearing, inner of 2nd gear and cone of 2nd gear.
- (b) Install the 2nd gear needle roller bearing and 2nd gear to output shaft.



D06164

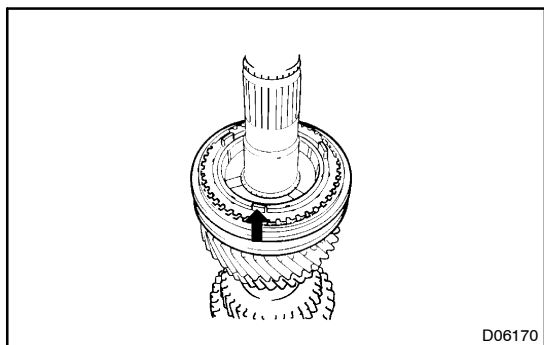
7. INSTALL TRANSMISSION CLUTCH HUB NO. 1

- (a) Place the synchronizer ring set (for 2nd gear) on the gear and align the ring slots with the shifting keys.

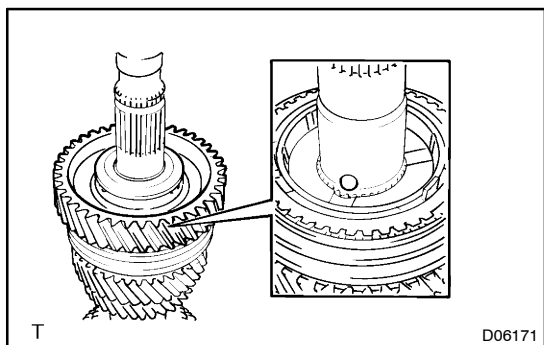


D06169

- (b) Using SST and press, install the clutch hub No. 1.
SST 09309-35010, 09631-12090

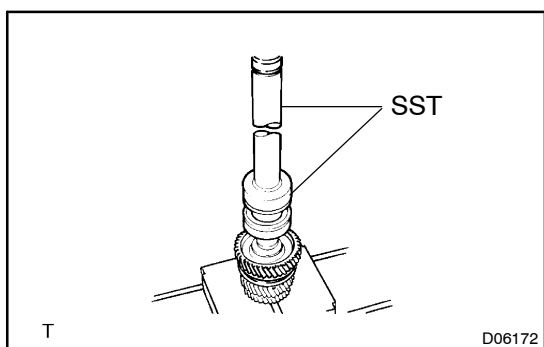


- (c) Place the synchronizer ring set (for 1st gear) on the gear and align the ring slots with the shifting keys.



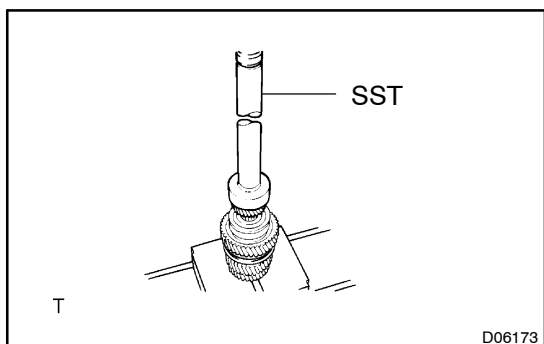
8. INSTALL 1ST GEAR

- (a) Apply gear oil to the shaft needle roller bearing inner race, inner of 1st gear and cone of 1st gear.
- (b) Install the 1st gear shift restrict ball, 1st gear, bearing inner race, 1st gear needle roller bearing and 1st gear.



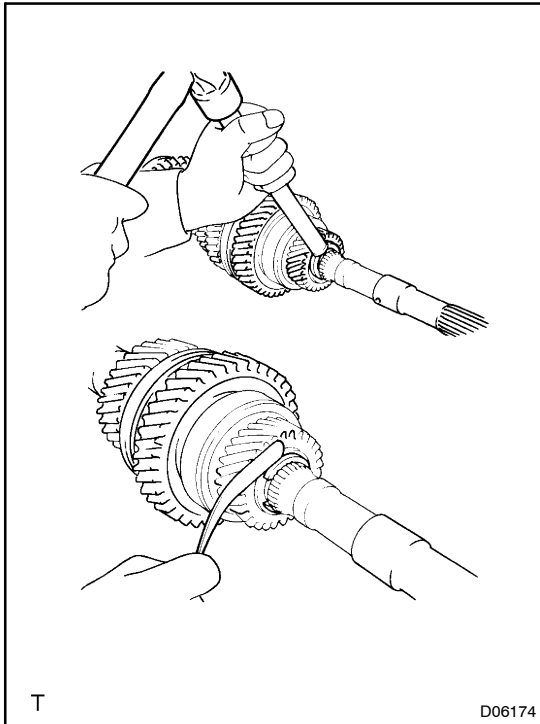
9. INSTALL REAR OUTPUT SHAFT BEARING

Using SST and press, install the rear output shaft bearing.
SST 09309-35010, 09316-60011 (09316-00021)



10. INSTALL 6TH GEAR

Using SST and press, install the 6th gear.
SST 09309-35010



11. INSTALL 6TH GEAR SHAFT SNAP RING

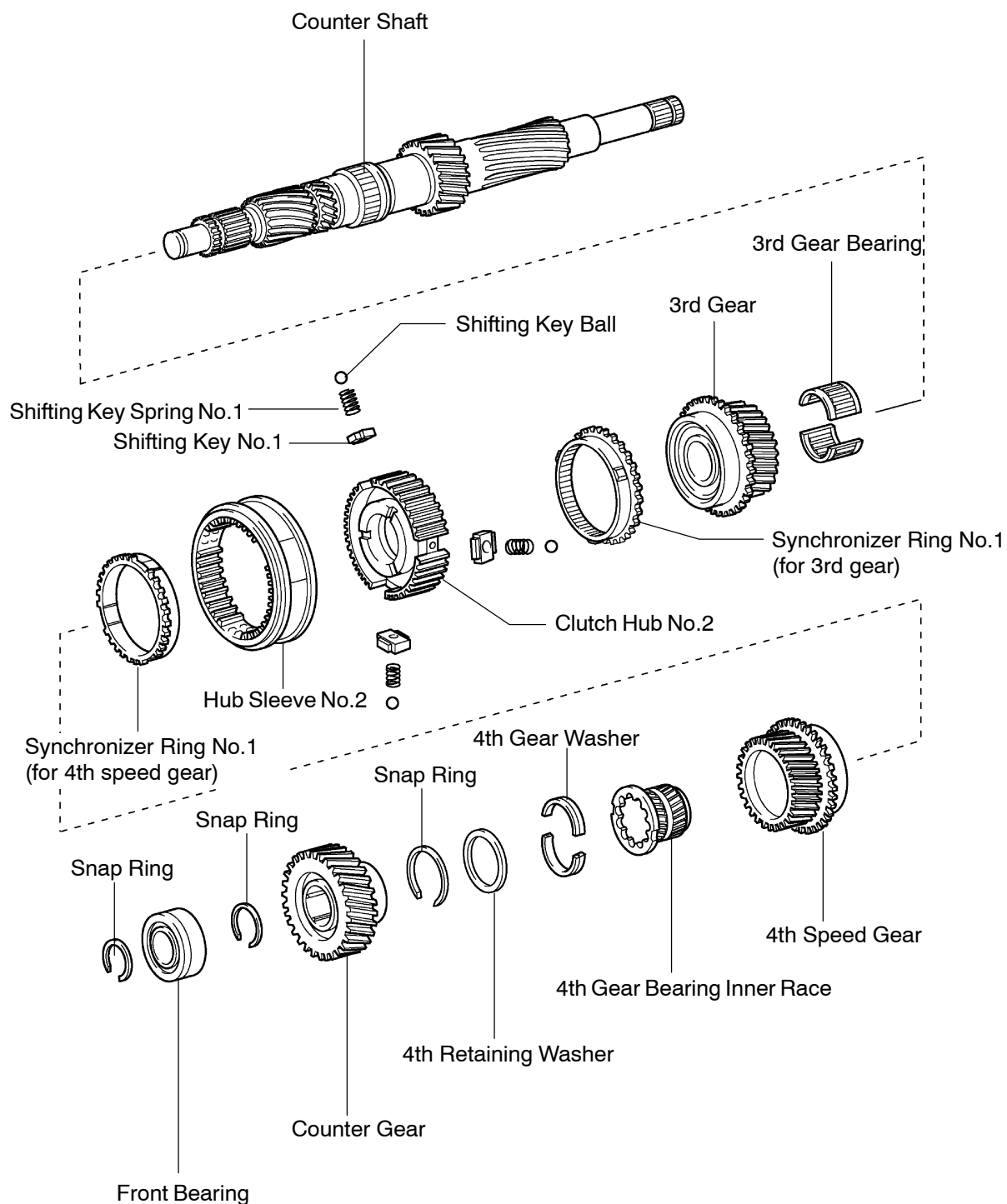
(a) Select a snap ring that allows the minimum axial play.

Mark	Thickness mm (in.)
A	2.67 (0.1051)
B	2.73 (0.1075)
C	2.79 (0.1098)
D	2.85 (0.1122)
E	2.91 (0.1146)
F	2.97 (0.1169)
G	3.03 (0.1192)
H	3.09 (0.1217)
J	3.15 (0.1240)
K	3.21 (0.1263)
L	3.27 (0.1287)

(b) Using a brass bar and hammer, install the snap ring.

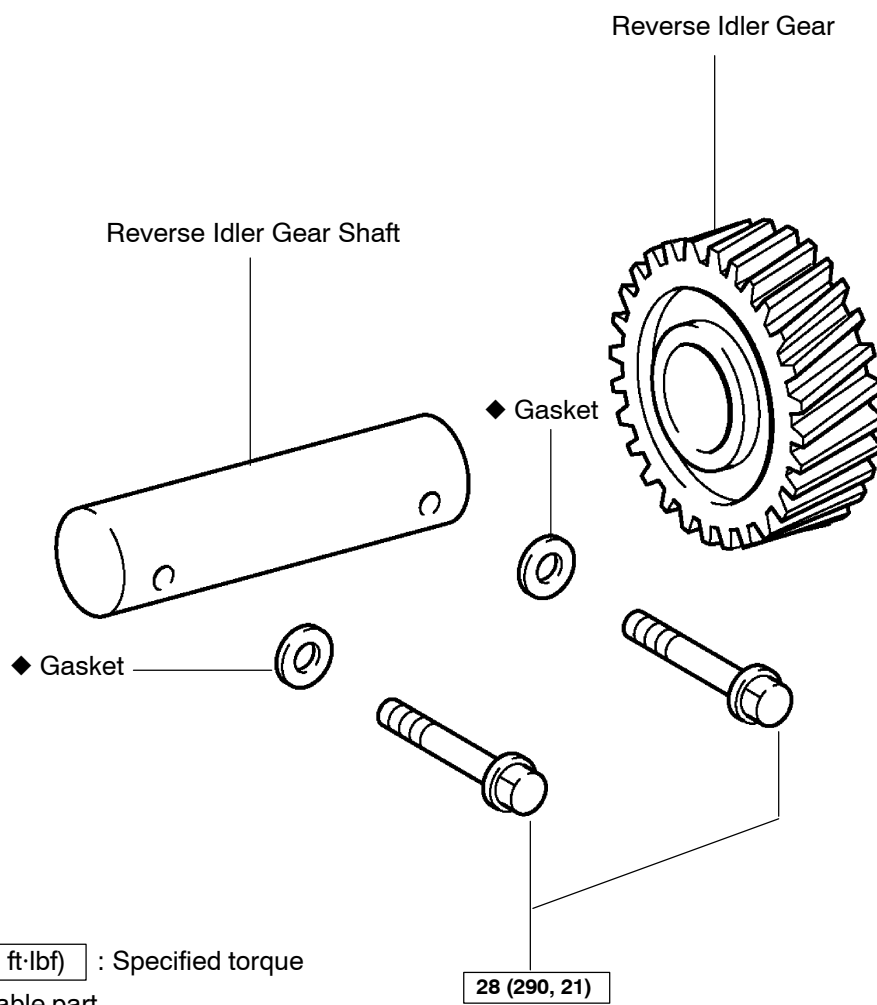
COUNTER GEAR AND REVERSE IDLER GEAR COMPONENTS

MT096-01

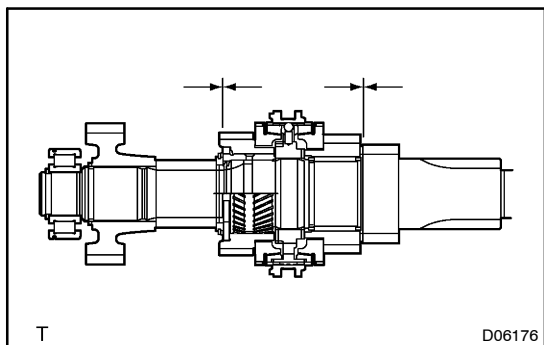


T

D06175



D06156



DISASSEMBLY

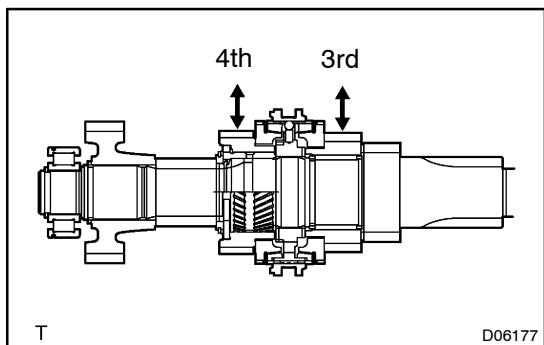
1. INSPECT THRUST CLEARANCE

Using a feeler gauge, measure the thrust clearance of each gear.

Standard clearance:

0.10 – 0.35 mm (0.0039 – 0.0138 in.)

If the clearance is not as standard, adjust the clearance by using 4th gear washer.



2. INSPECT RADIAL CLEARANCE

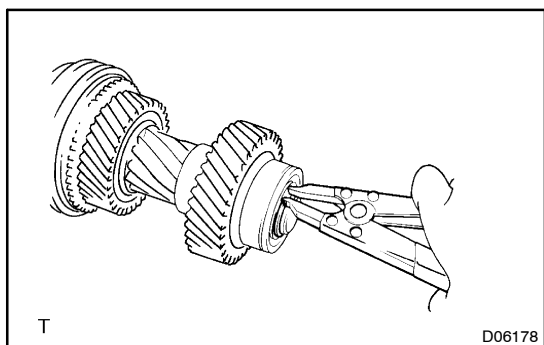
Using a dial indicator, measure the radial clearance of each gear.

Standard clearance:

3rd gear: 0.015 – 0.068 mm (0.00059 – 0.00268 in.)

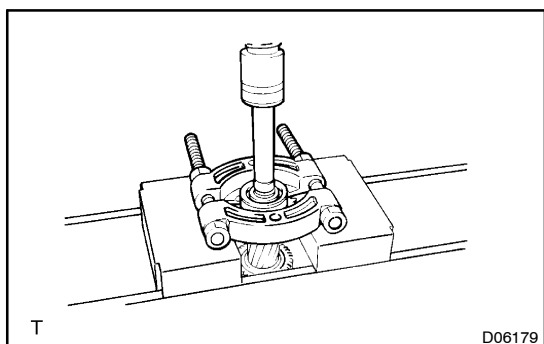
4th gear: 0.065 – 0.115 mm (0.00256 – 0.0453 in.)

If the clearance exceeds the standard, replace the needle roller bearing and gear.



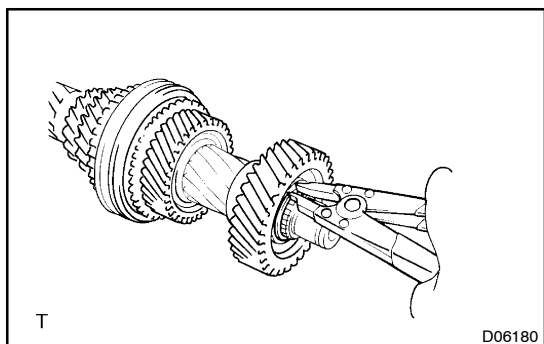
3. REMOVE COUNTER GEAR FRONT BEARING

- (a) Using a snap ring expander, remove the counter gear front bearing snap ring No. 2.



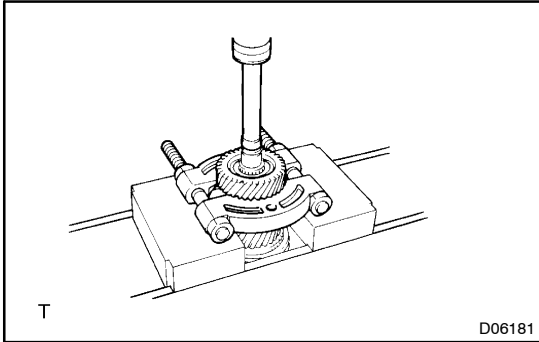
- (b) Using SST and press, remove the counter gear front bearing.

SST 09950-00020, 09950-60010 (09950-00230),
09950-70010 (09951-07100)

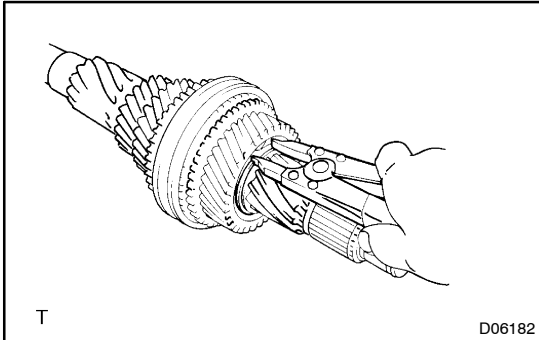


4. REMOVE COUNTER GEAR

- (a) Using a snap ring expander, remove the transmission clutch hub No. 3 shaft snap ring.

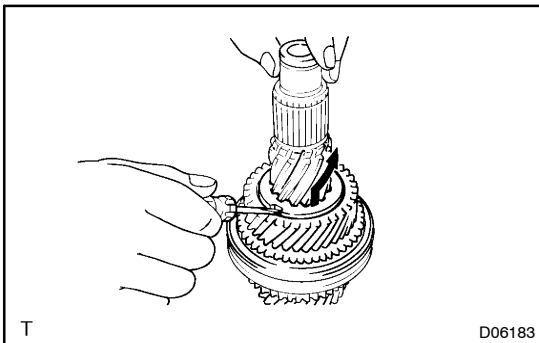


- (b) Using SST and press, remove the counter gear.
 SST 09950-00020, 09950-60010 (09951-00230),
 09950-70010 (09951-07010)

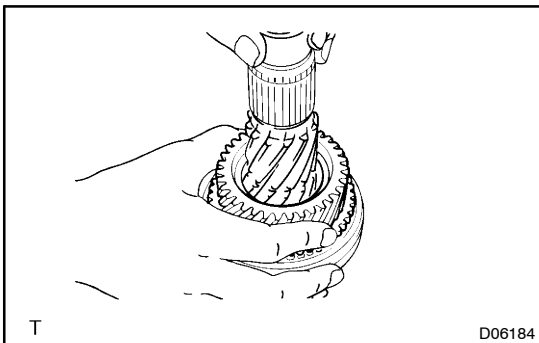


5. REMOVE 4TH SPEED GEAR

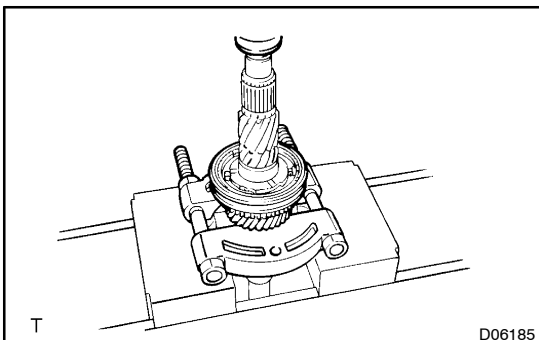
- (a) Using a snap ring expander, remove the snap ring.
 (b) Remove the 4th retaining washer and 4th gear washer.



- (c) Using a screwdriver, remove the 4th gear bearing inner race.

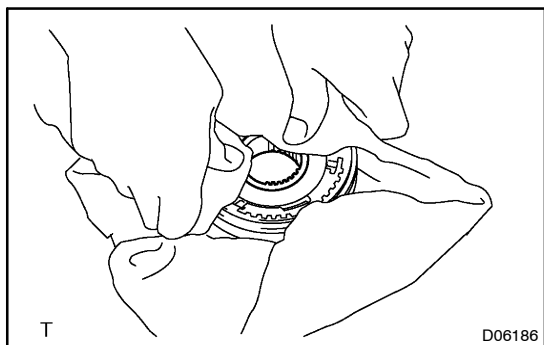


- (d) Remove the counter shaft 4th speed gear and synchronizer ring No. 1.

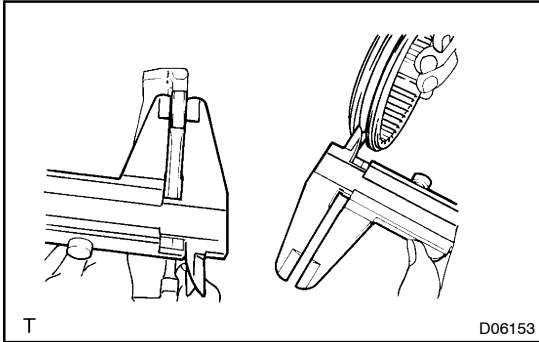


6. REMOVE 3RD GEAR

- Using SST and press, remove the transmission clutch hub No. 2, 3rd gear, synchronizer ring No. 1 and needle roller bearing.
 SST 09950-00020

**7. REMOVE HUB SLEEVE NO.2**

- (a) Cover the hub sleeve No.2 with a cloth.
- (b) Remove the hub sleeve No. 2, 3 No. 1 shifting keys, 3 No. 1 shifting key springs and 3 shifting key balls.



INSPECTION

1. INSPECT TRANSMISSION HUB SLEEVE NO. 2 CLEARANCE

- (a) Using vernier calipers, measure thickness claw of 3rd and 4th shift fork.

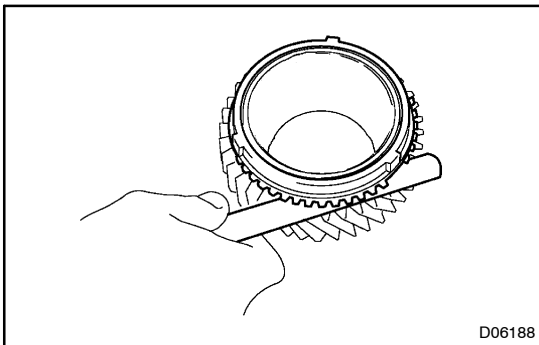
Standard thickness: 7.8 – 8.0 mm (0.307 – 0.315 in.)

- (b) Using vernier calipers, measure the groove of hub sleeve No. 2 and subtract the shift fork claw thickness from hub sleeve groove.

Maximum clearance:

0.15 – 0.35 mm (0.0059 – 0.138 in.)

If the clearance exceeds the maximum, replace the shift fork or hub sleeve.



2. INSPECT SYNCHRONIZER RING NO. 1

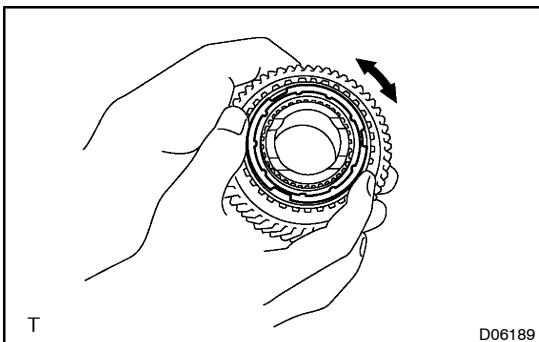
- (a) Apply the gear oil to cone of 3rd gear and synchronizer ring No. 1.
- (b) Install the synchronizer ring to 3rd gear.
- (c) Using a feeler gauge, measure the clearance between the synchronizer ring back and gear spline end.

Standard clearance:

3rd gear: 0.9 – 1.7 mm (0.0354 – 0.0669 in.)

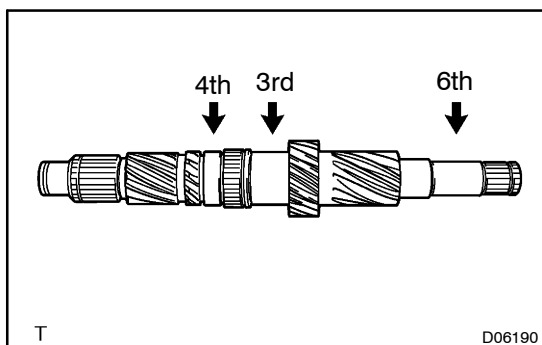
4th gear: 0.8 – 1.6 mm (0.031 – 0.062 in.)

If the clearance is not as standard, replace the synchronizer ring.



- (d) Check the braking effect of the synchronizer ring. Turn the synchronizer ring in one direction while pushing it to the gear cone. Check that the ring locks.

If it does not lock, replace the synchronizer ring.



3. INSPECT COUNTER SHAFT

- (a) Using a micrometer, measure outer diameter of counter gear journal.

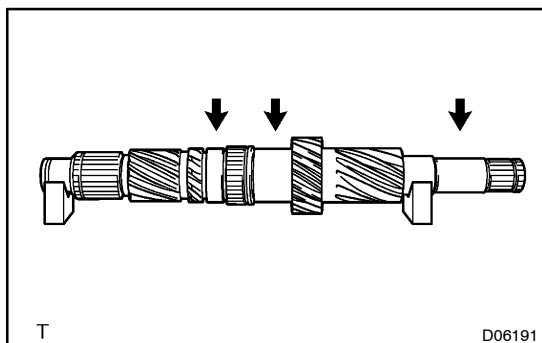
Standard diameter:

3rd gear: 39.284 – 39.300 mm (1.5466 – 1.5472 in.)

4th gear: 37.984 – 38.000 mm (1.495 – 1.496 in.)

6th gear: 24.987 – 25.000 mm (0.9837 – 0.9842 in.)

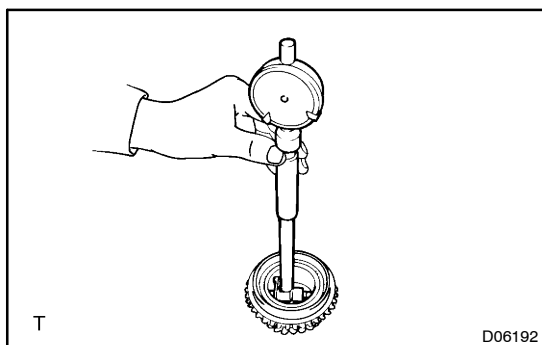
If the outer diameter is not as standard, replace the counter shaft.



- (b) Using a dial indicator, check the counter shaft runout.

Maximum runout: 0.3 mm (0.00012in.)

If the runout exceeds the maximum, replace the counter shaft.



4. INSPECT 3RD AND COUNTER SHAFT 4TH SPEED GEAR

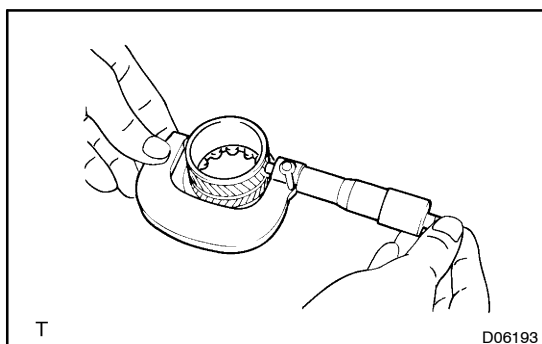
Using a cylinder gauge, measure the inner diameter of each gear.

Standard diameter:

3rd gear: 43.015 – 43.040 mm (1.6935 – 1.6945 in.)

4th gear: 46.315 – 46.340 mm (1.8234 – 1.8244 in.)

If the inner diameter is not as standard, replace the gear.



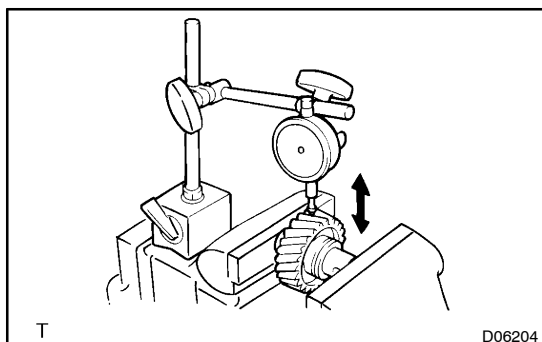
5. INSPECT 4TH GEAR BEARING INNER RACE

Using a micrometer, measure the outer diameter of 4th gear inner race.

Standard diameter:

46.225 – 46.250 mm (1.8199 – 1.8207 in.)

If the outer diameter is not as standard, replace the 4th gear bearing inner race.



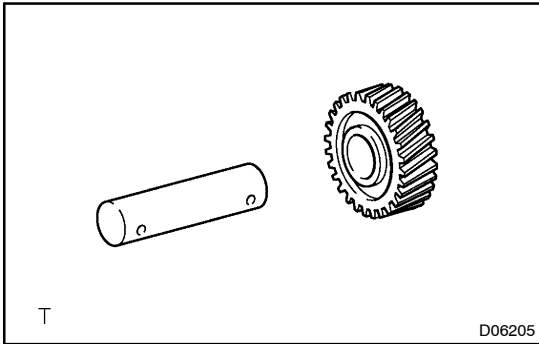
6. INSPECT REVERSE IDLER GEAR RADIAL CLEARANCE

Using a dial indicator, measure the radial clearance.

Standard clearance:

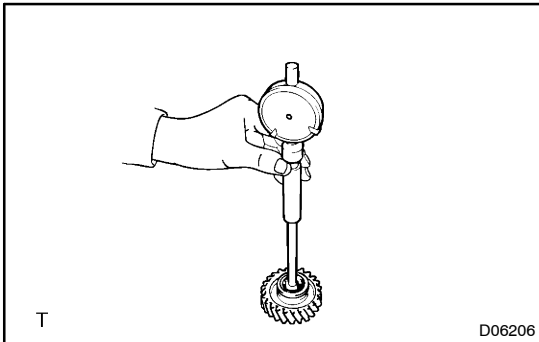
0.040 – 0.082 mm (0.00157 – 0.00323 in.)

If the clearance is not as standard, replace the idler gear or shaft.



7. INSPECT REVERSE IDLER GEAR

- (a) Remove the reverse idler gear from the idler gear shaft.

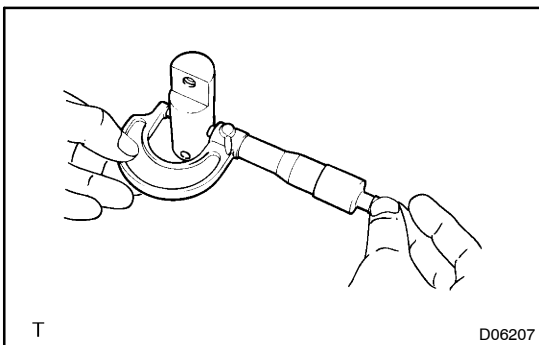


- (b) Using a cylinder gauge, measure the inner diameter of reverse idler gear.

Standard diameter:

22.04 – 22.06 mm (0.868 – 0.869 in.)

If the inner diameter is not as standard, replace the gear.



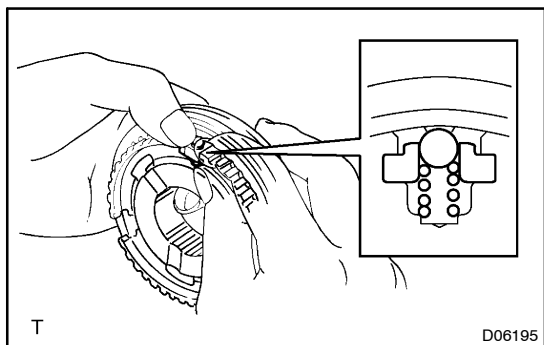
8. INSPECT REVERSE IDLER SHAFT

Using a micrometer, measure the outer diameter of the shaft.

Standard diameter:

21.979 – 22.000 mm (0.865 – 0.866 in.)

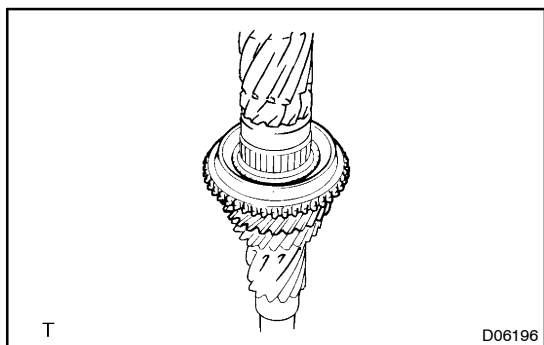
If the outer diameter is not as standard, replace the shaft.



REASSEMBLY

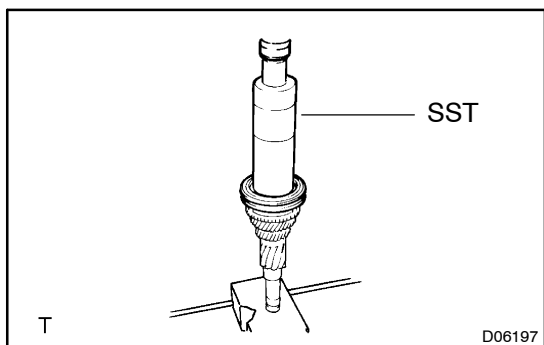
1. INSTALL HUB SLEEVE NO. 2

- (a) Install the hub sleeve No. 1 to clutch hub No. 1.
- (b) Install the shifting key and spring to clutch hub.
- (c) While pushing the spring, install the shifting key ball.



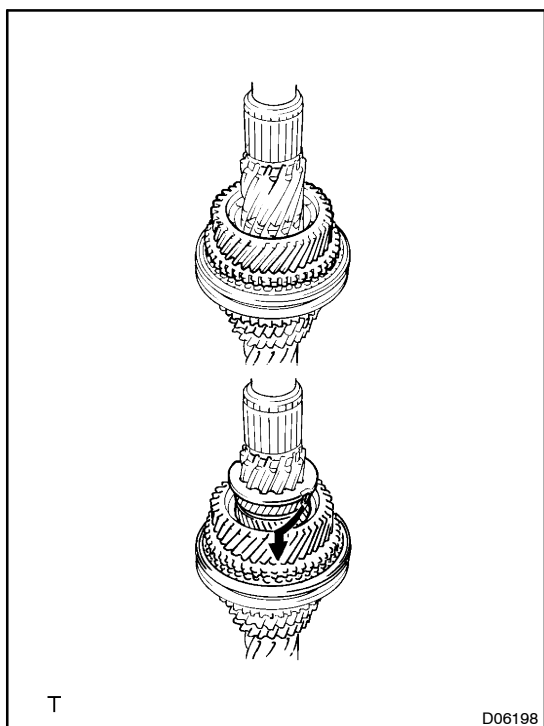
2. INSTALL 3RD GEAR

- (a) Apply the gear oil to the shaft, 3rd gear bearing, inner of gear and cone of gear.
- (b) Install the 3rd gear bearing and 3rd gear to the counter shaft.



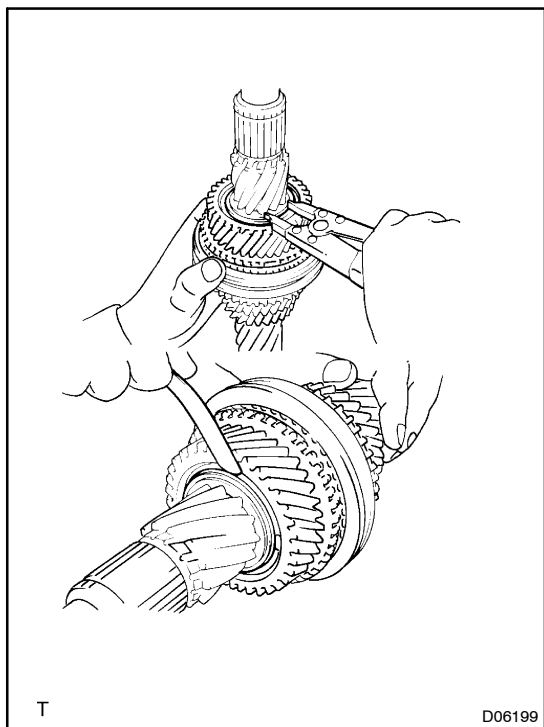
3. INSTALL CLUTCH HUB NO. 2

- (a) Install the synchronizer ring No. 1 (for 3rd gear) to the 3rd gear.
- (b) Using SST and press, install the clutch hub No. 3.
SST 09316-60011 (09316-00011)



4. INSTALL 4TH SPEED GEAR

- (a) Install the synchronizer ring No. 1 (for 4th gear) to the clutch hub No. 2.
- (b) Apply the gear oil to 4th gear bearing gear and cone of counter shaft 4th gear.
- (c) Install the counter shaft 4th speed gear and 4th gear bearing inner race to the counter shaft.
- (d) Install the 4th gear washer and 4th washer retaining ring.

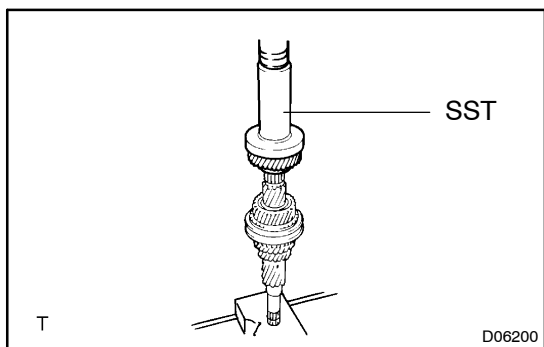


5. INSTALL 4TH WASHER RETAINING SNAP RING

(a) Select a snap ring that allows the minimum axial play.

Mark	Thickness mm (in.)
A	3.75 (0.1476)
B	3.80 (0.1496)
C	3.85 (0.1516)
D	3.90 (0.1535)
E	3.95 (0.1555)
F	4.00 (0.1575)
G	4.05 (0.1594)
H	4.10 (0.1614)

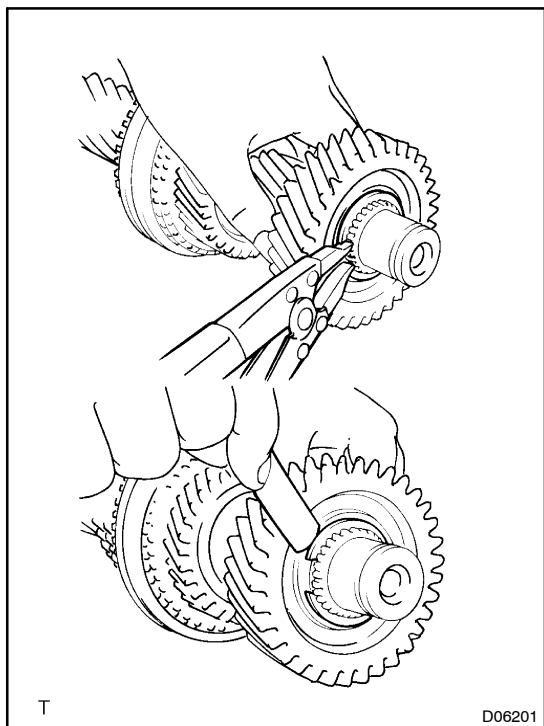
(b) Using a snap ring expander, install the snap ring.



6. INSTALL COUNTER GEAR

Using SST and press, install the counter gear.

SST 09309-36010

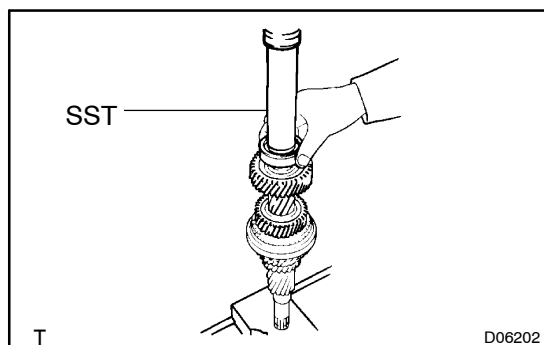


7. INSTALL CLUTCH HUB NO. 3 SHAFT SNAP RING

(a) Select a snap ring that allows the minimum axial play.

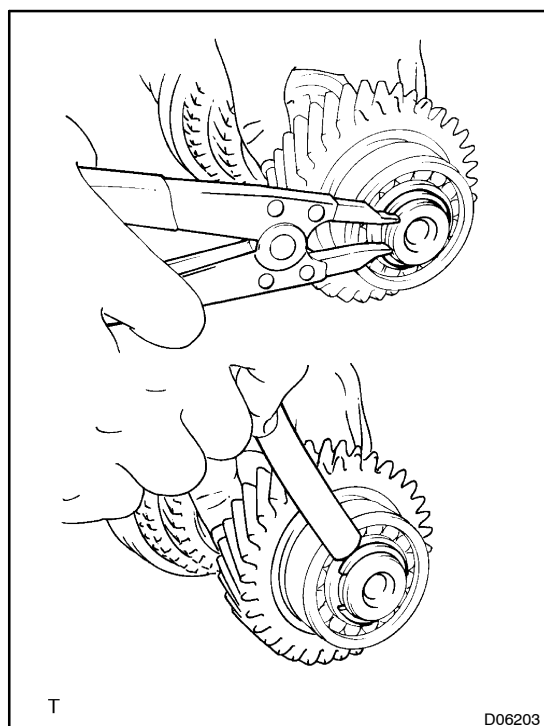
Mark	Thickness mm (in.)
A	1.80 (0.0709)
B	1.85 (0.0728)
C	1.90 (0.0748)
D	1.95 (0.0768)
E	2.00 (0.0787)
F	2.05 (0.0807)

(b) Using a snap ring expander, install the snap ring.



8. INSTALL FRONT BEARING

Using SST and press, install the counter gear front bearing.
SST 09330-50010



9. INSTALL FRONT BEARING SNAP RING NO. 2

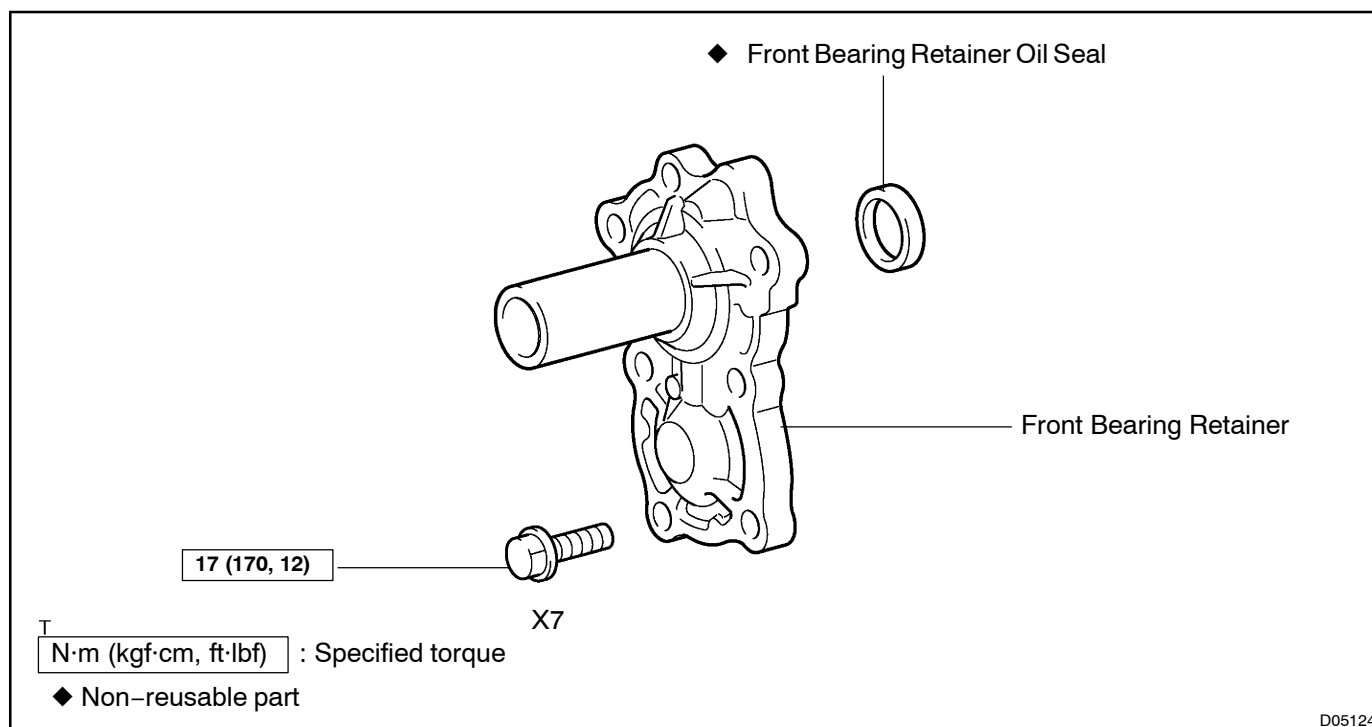
(a) Select a snap ring that allows the minimum axial play.

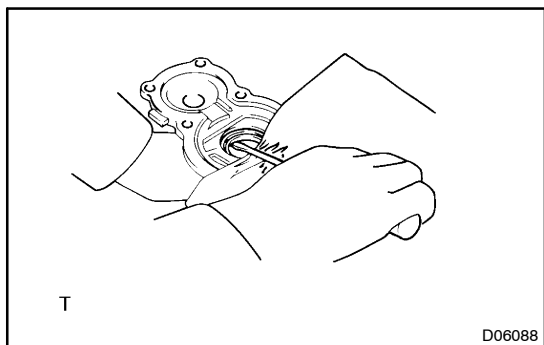
Mark	Thickness mm (in.)
1	2.05 (0.0807)
2	2.10 (0.0827)
3	2.15 (0.0846)
4	2.20 (0.0866)
5	2.25 (0.0886)
6	2.30 (0.0906)

(b) Using a snap ring expander, install the snap ring.

FRONT BEARING RETAINER OIL SEAL COMPONENTS

MT09A-01

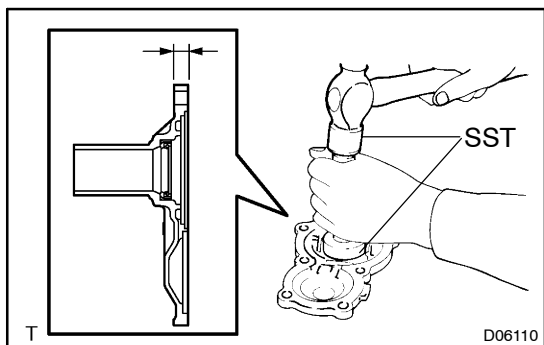




REPLACEMENT

IF NECESSARY, REPLACE FRONT BEARING RETAINER OIL SEAL

- (a) Using a screwdriver, pry out the oil seal.

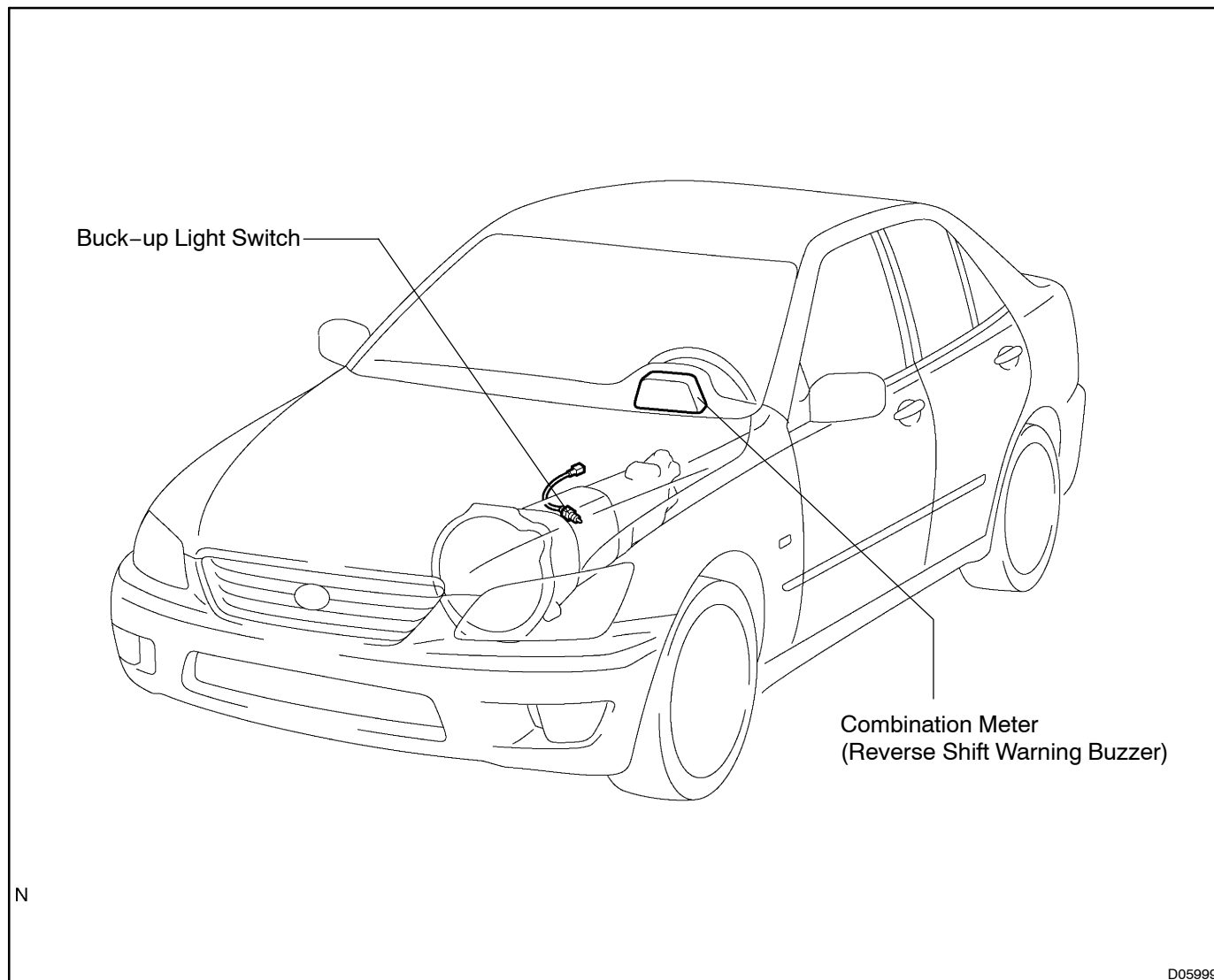


- (b) Using SST and a press, install the new oil seal.
SST 09950-60010 (09951-00420), 09950-70010
(09951-07100)

Drive in depth: 11.5 ± 0.4 mm (0.453 ± 0.016 in.)

REVERSE SHIFT WARNING BUZZER SYSTEM LOCATION

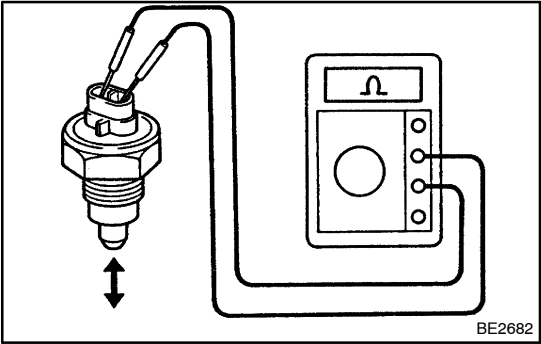
MT09E-01



D05999

INSPECTION

1. INSPECT REVERSE SHIFT WARNING BUZZER SYSTEM (See page BE-83)



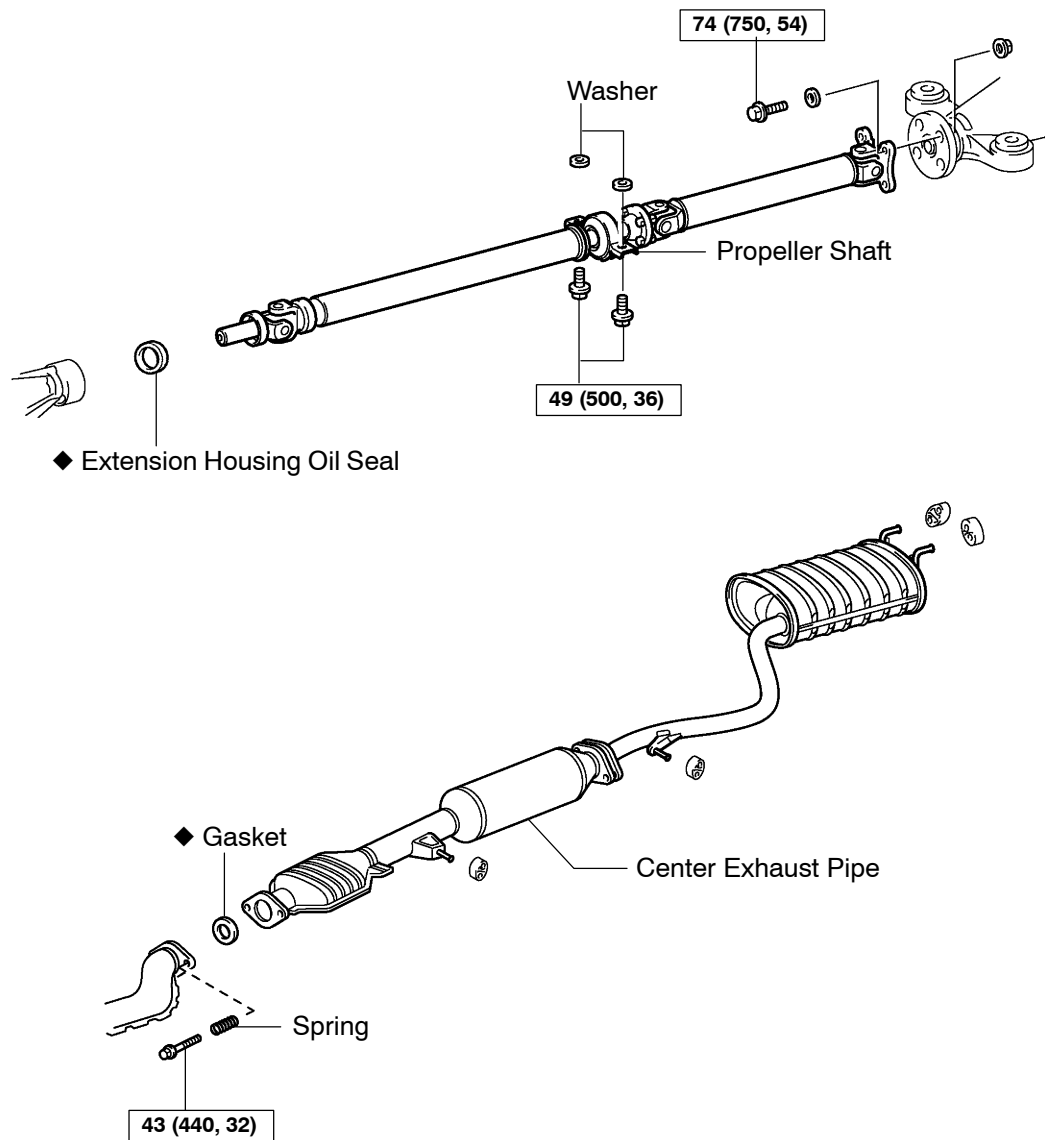
2. INSPECT BACK-UP LIGHT SWITCH CONTINUITY

Switch position	Tester connection	Specified condition
Free	1-2	No continuity
Push	1-2	Continuity

If continuity is not as specified, replace the switch.

OIL SEAL COMPONENTS

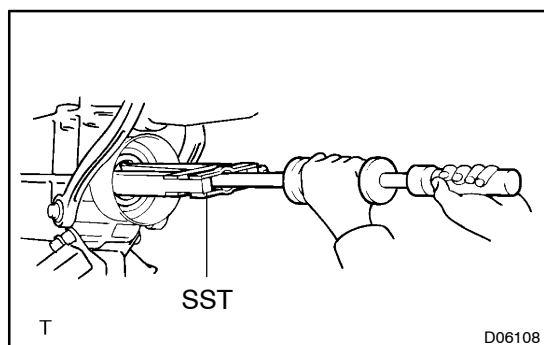
MT09C-01



D05134

REPLACEMENT

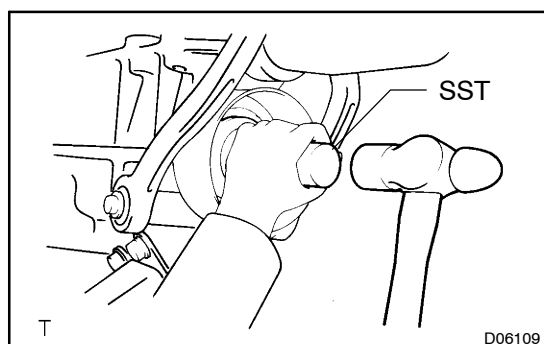
1. DRAIN TRANSMISSION OIL
2. REMOVE PROPELLER SHAFT (See page PR-4)



3. REMOVE EXTENSION HOUSING OIL SEAL

Using SST, pull out the extension housing oil seal.

SST 09308-00010



4. INSTALL NEW EXTENSION HOUSING OIL SEAL

- (a) Coat MP grease to lip of new oil seal.
 - (b) Using SST and a hammer, install the new oil seal.
- SST 09325-20010

5. INSTALL PROPELLER SHAFT (See page PR-10)

6. FILL WITH TRANSMISSION OIL