TR0CM–01

DISASSEMBLY

1. REMOVE BREATHER HOSE

2. REMOVE DYNAMIC DAMPER

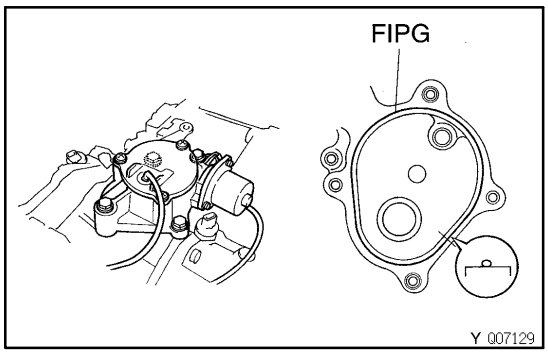
Remove the 2 bolts and dynamic damper.

HINT:

At the time of reassembly, apply adhesive to the bolt threads.

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

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



3. REMOVE MOTOR ACTUATOR

Remove the 4 bolts and motor actuator.

HINT:

At the time of reassembly, please refer to the following items.

- Set the motor actuator in differential lock condition.
- Apply FIPG to the front case.

FIPG: Part No. 08826–00090, THREE BOND 1281 or equivalent

Torque: 18 N·m (185 kgf·cm, 13 ft·lbf)

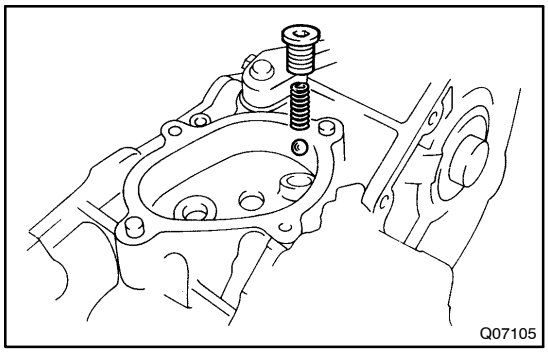
4. REMOVE OUTPUT GEAR FROM FRONT CASE

HINT:

At the timie of reassembly apply gear oil to the output gear.

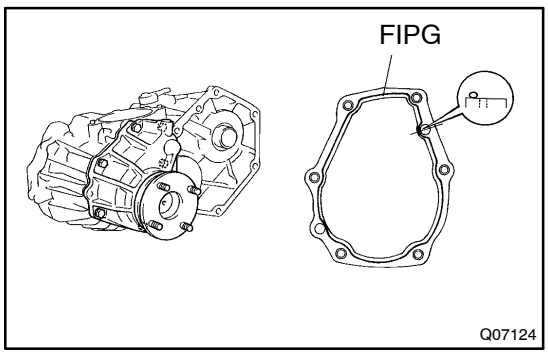
NOTICE:

At the time of reassembly, do not turn the output gear.



5. REMOVE SCREW PLUG, SPRING AND BALL

(a) Using a torx socket wrench (T40), remove the screw plug.



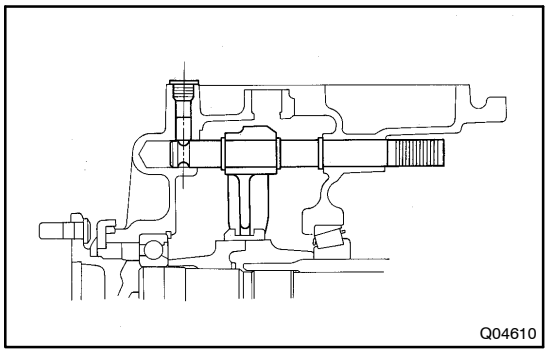
HINT:

At the time of reassembly, apply liquid sealer to the screw plug.

Sealant: Part No.08833–00080, THREE BOND 1344, LOCTITE 242 or equivalent

Torque:19 N·m (190 kgf·cm, 14 ft·lbf)

(b) Using a magnetic finger, remove the spring and ball.


Q04610

6. REMOVE TRANSFER INDICATOR SWITCH

Remove the Center Diff Lock indicator switch, L4 position switch, Neutral position switch and 3 gaskets.

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

7. REMOVE FRONT EXTENSION HOUSING

Remove the 6 bolts and front extension housing.

HINT:

If necessary, tap the front extension housing with a plastic hammer.

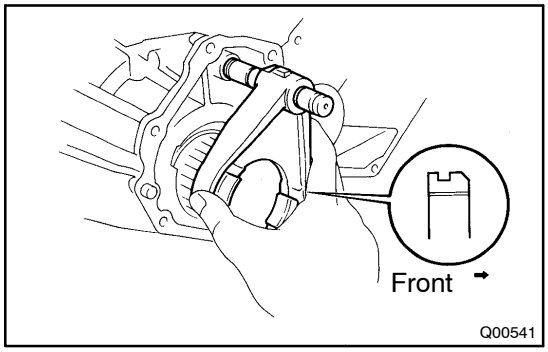
HINT:

At the time of reassembly, please refer to the following items.

- Set the clutch sleeve in differential lock condition.
- Apply FIPG to the front case.

  FIPG: Part No. 08826–00090, THREE BOND 1281 or equivalent

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

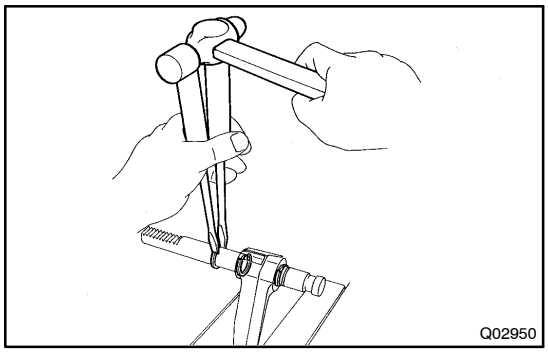


Q00541

8. REMOVE CLUTCH SLEEVE, SHIFT FORK NO.2 SHAFT AND SHIFT FORK NO.2

HINT:

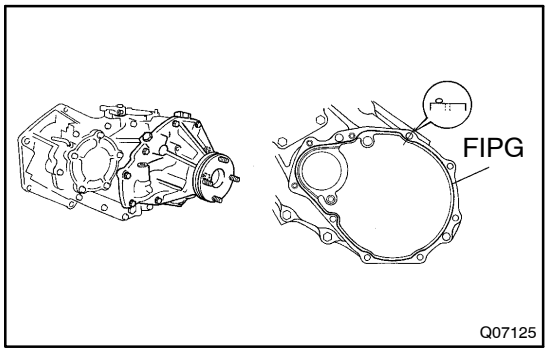
At the time of reassebly, make sure to install the clutch sleeve in the correct direction.


Q02950

9. SEPARATE SHIFT FORK NO.2 SHAFT AND SHIFT FORK NO.2

(a) Using 2 screwdrivers and a hammer, tap out the 3 snap rings from the shift fork No.2 shaft.

(b) Separate the shift fork No.2 shaft and shift fork No.2.



Q07125

10. REMOVE REAR EXTENSION HOUSING

Remove the 9 bolts and rear extension housing.

HINT:

If necessary, tap the rear extension housing with a plastic hammer.

HINT:

At the time of reassembly, apply FIPG to the rear case.

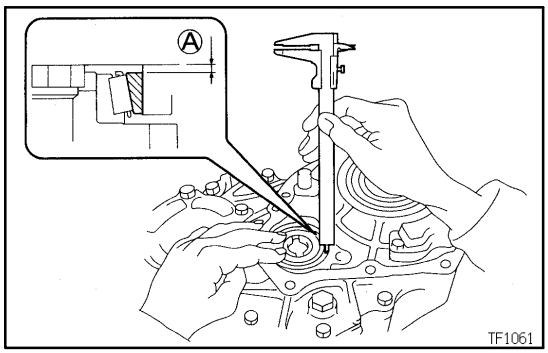
FIPG: Part No. 08826–00090, THREE BOND 1281 or equivalent

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

11. REMOVE RETAINER FROM REAR CASE

Remove the 5 bolts and retainer.

Torque: 39 N·m (400 kgf·cm, 28 ft·lbf)



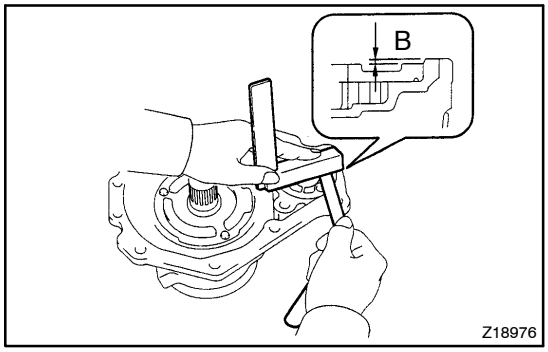
12. REMOVE ADJUSTING SHIM

HINT:

At the time of assembly, select adjusting shims for the idler gear rear taper roller bearing.

(a) Using vernier calipers, measure dimension A.

(b) Lightly hold down the bearing outer race in the thrust direction to eliminate any looseness before making the measurement.



(c) Using a steel straight edge and feeler gauge, measure the clearance of dimension B.

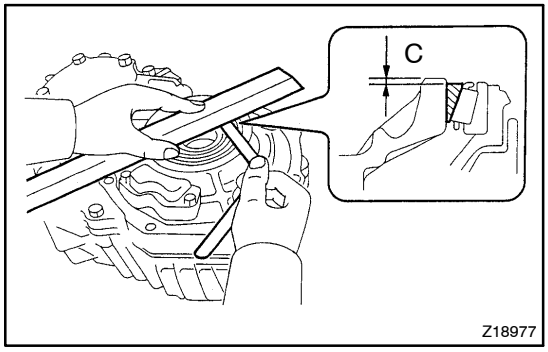
(d) Calculate the required thickness of the adjusting shim.

Thickness:

Dimension A + Dimension B + (0.022 – 0.049 mm, 0.0009 – 0.0019 in.)

(e) From the following table, select a shim so that its thickness is within the range of the calculation.

Mark	Thickness mm (in.)	Mark	Thickness mm (in.)
2	0.30 (0.0118)	8	3.20 (0.1260)
3	0.45 (0.0177)	9	3.40 (0.1339)
4	2.40 (0.0945)	10	3.60 (0.1417)
5	2.60 (0.1024)	11	3.80 (0.1496)
6	2.80 (0.1102)	12	4.00 (0.1575)
7	3.00 (0.1181)	13	0.55 (0.0216)



HINT:

At the time of reassembly, select adjusting shims for the output shaft taper roller bearing.

(f) Using a steel straight edge and feeler gauge, measure the clearance of dimension C.

(g) Lightly hold down the bearing outer race in the thrust direction to eliminate any looseness before making the measurement.

(h) Calculate the required thickness of the adjusting shim.

Thickness:

Dimension C + (0.014 – 0.039 mm, 0.0006 – 0.0015 in.)

(i) From the following table, select a shim so that its thickness is within the range of the calculation.

Mark	Thickness mm (in.)	Mark	Thickness mm (in.)
B	0.30 (0.0118)	H	1.80 (0.0709)
C	0.45 (0.0177)	J	2.00 (0.0787)
D	1.00 (0.0394)	K	2.20 (0.0866)
E	1.20 (0.0472)	L	2.40 (0.0945)
F	1.40 (0.0551)	M	2.60 (0.1024)
G	1.60 (0.0630)	N	0.55 (0.0216)

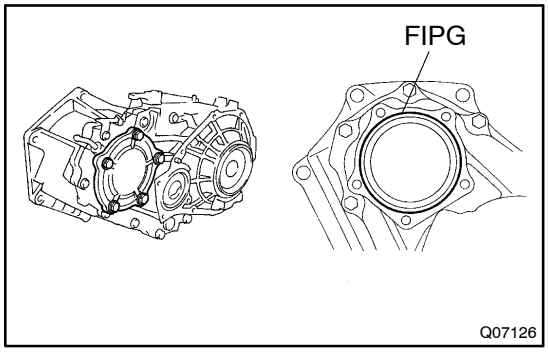
13. REMOVE OIL STRAINER FROM REAR CASE

Remove the 2 set bolts and oil strainer.

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

14. REMOVE CASE COVER

(a) Remove the 5 bolts.



HINT:

At the time of reassembly, apply liquid sealer to the bolt threads.

Sealant: Part No.08833–00080, THREE BOND 1344, LOCTITE 242 or equivalent

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

(b) Using a brass bar and hammer, tap the case cover and remove it.

HINT:

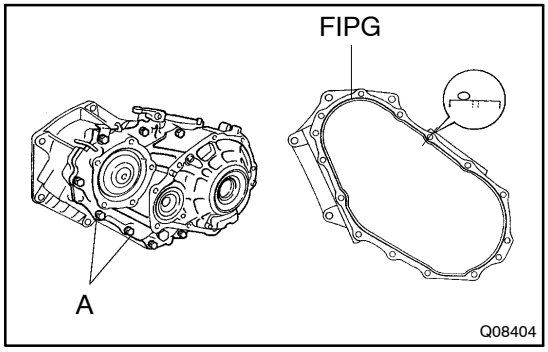
At the time of reassembly, apply FIPG to the rear case.

FIPG: Part No. 08826–00090, THREE BOND 1281 or equivalent

15. SEPARATE FRONT CASE AND REAR CASE

(a) Using a snap ring expander, remove the snap ring from the rear case.

(b) Remove the 8 bolts.



HINT:

At the time of reassembly, apply liquid sealer to the ”A” bolt threads.

Sealant: Part No.08833–00080, THREE BOND 1344, LOCTITE 242 or equivalent

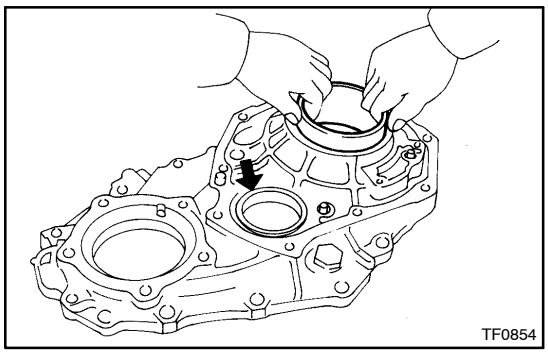
Torque:37 N·m (380 kgf·cm, 27 ft·lbf)

(c) Using a brass bar and hammer, tap the rear case and separate it.

HINT:

At the time of reassembly, apply FIPG to the front case.

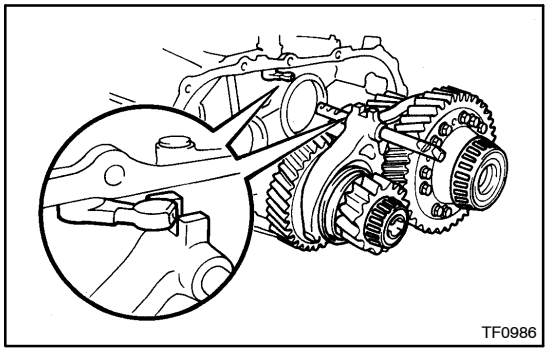
FIPG: Part No. 08826–00090, THREE BOND 1281 or equivalent



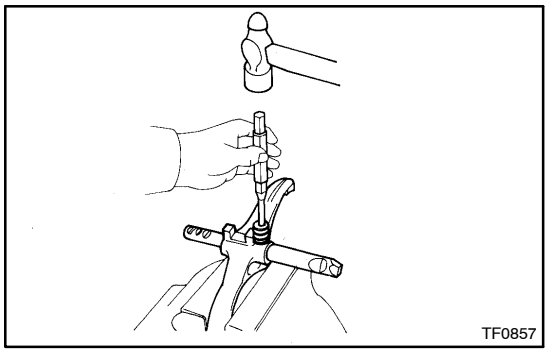
16. REMOVE 2 BEARING RACES FROM REAR CASE

17. REMOVE INPUT SHAFT ASSEMBLY

Using a plastic hammer, remove the input shaft assembly.



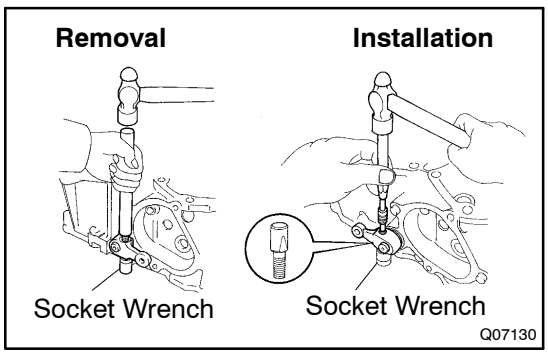
18. REMOVE IDLER GEAR ASSEMBLY, CENTER DIFFERENTIAL ASSEMBLY, SHIFT FORK NO.1 AND SHIFT FORK NO.1 SHAFT FROM FRONT CASE



19. SEPARATE SHIFT FORK NO.1 AND SHIFT FORK NO.1 SHAFT

(a) Using a pin punch and hammer, drive out the slotted spring pin.

(b) Separate the shift fork No.1 and shift fork No.1 shaft.



20. REMOVE SHIFT OUTER LEVER AND INNER LEVER

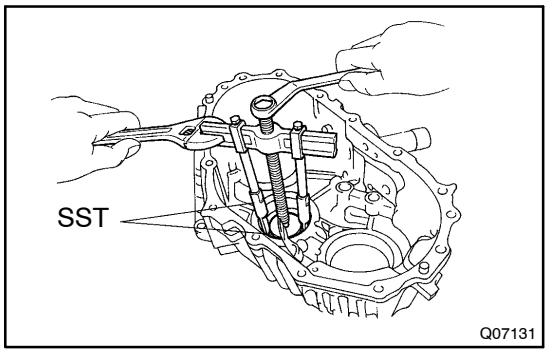
(a) Remove the nut and washer from the shift outer lever.
Torque: 12 N·m (120 kgf·cm, 9 ft·lbf)

(b) Using a brass bar, hammer and socket wrench, tap out the lever lock pin.

(c) Remove the shift outer lever, washer and inner lever from the front case.

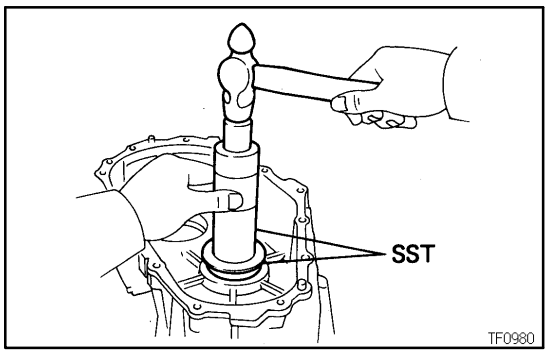
21. REMOVE OIL RECEIVER FROM FRONT CASE

Remove the bolt and oil receiver.
Torque: 12 N·m (120 kgf·cm, 9 ft·lbf)

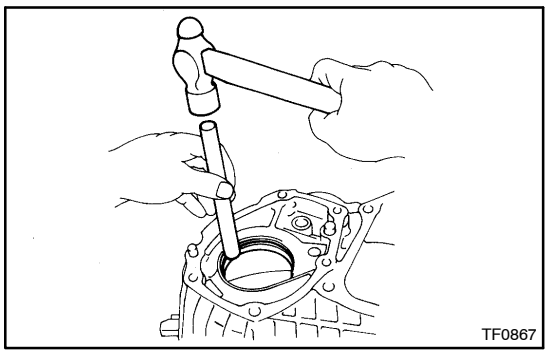


22. REMOVE 2 BEARING RACES FROM FRONT CASE

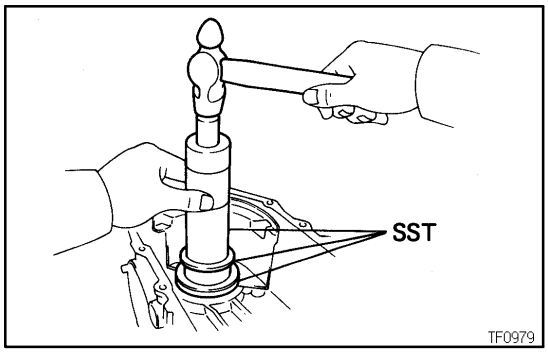
(a) Using SST, remove the bearing race (for idler gear).
SST 09950–40010, 09950–60010 (09951–00320)



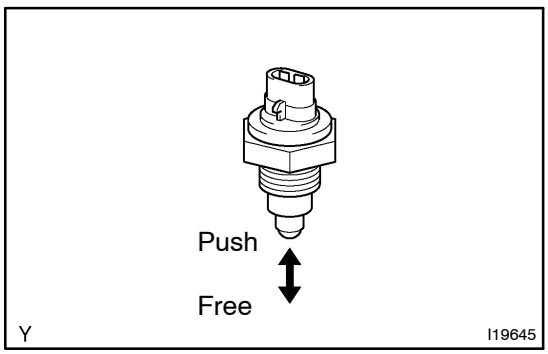
HINT:
At the time of reassembly, please refer to the following item.
Using SST and a press, install the bearing race (for idler gear).
SST 09316–60011 (09316–00011, 09316–00041)



(b) Using a brass bar and hammer, remove the bearing race (for output shaft).



HINT:
At the time of reassembly, please refer to the following item.
Using SST and a press, install the bearing race (for the out put shaft).
SST 09316–20011, 09316–60011 (09316–00011, 09316–00031)



23. INSPECT TRANSFER INDICATOR SWITCH

Check that there is continuity between the terminals, as shown.

Switch Position	Specified
Push	Continuity
Free	No continuity

If continuity is not as specified, replace the switch.