

## DISASSEMBLY

1. REMOVE BREATHER HOSE
2. REMOVE DYNAMIC DAMPER

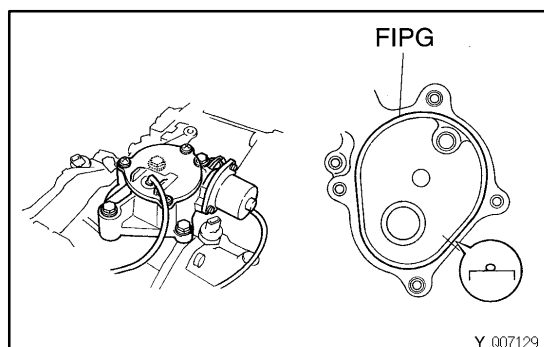
Remove the 2 bolts and dynamic damper.

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)**

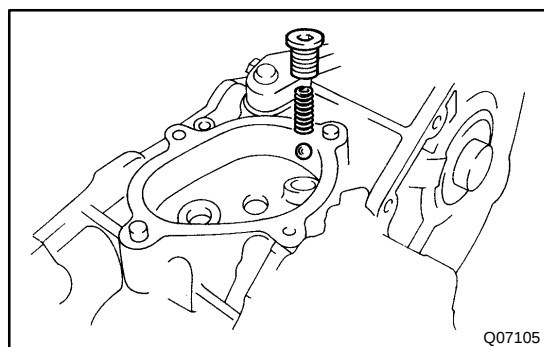
4. REMOVE OUTPUT GEAR FROM FRONT CASE

HINT:

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

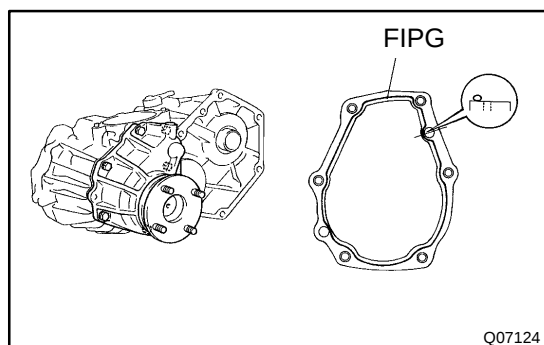
**NOTICE:**

**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.



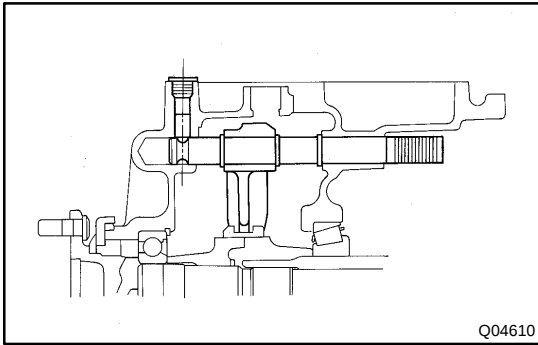
HINT:

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.



#### 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.

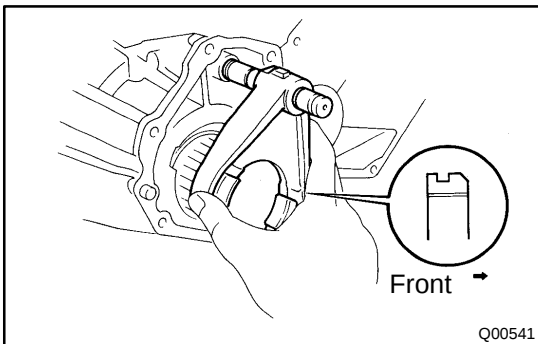
HINT:

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**

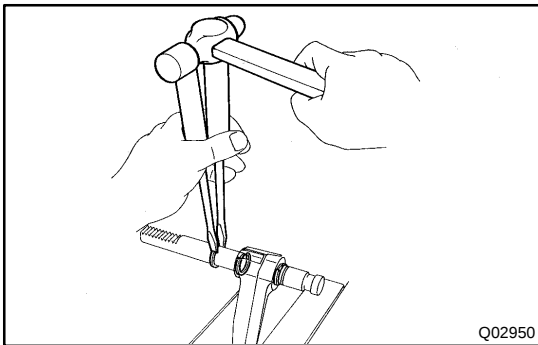
**Torque: 37 N·m (380 kgf·cm, 27 ft·lbf)**



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

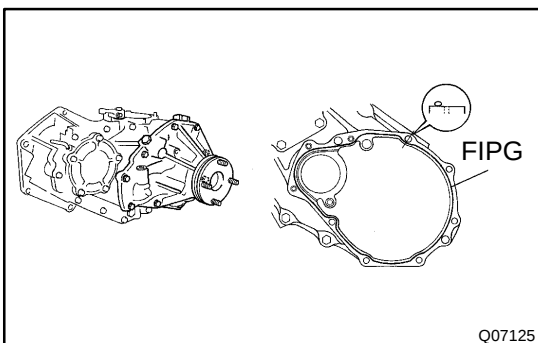
HINT:

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



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

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



#### 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.

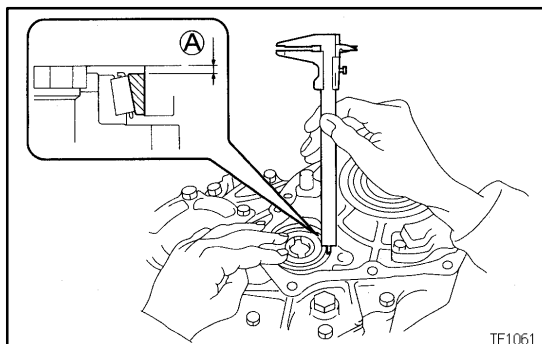
**FIPG: Part No. 08826-00090, THREE BOND 1281 or equivalent**

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

**11. REMOVE RETAINER FROM REAR CASE**

Remove the 5 bolts and retainer.

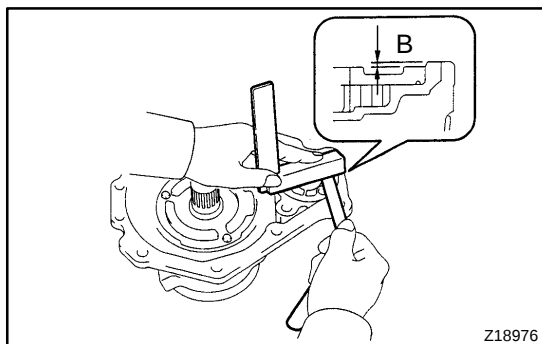
**Torque: 39 N·m (400 kgf·cm, 28 ft·lbf)**

**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.

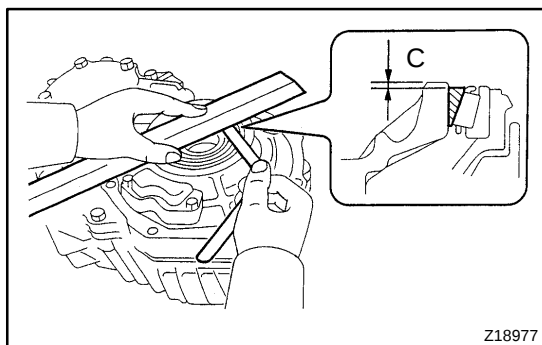
- (d) Calculate the required thickness of the adjusting shim.

**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.

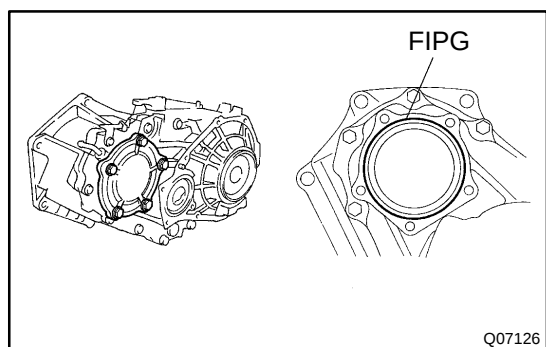
| Mark | Thickness mm (in.) | Mark | Thickness mm (in.) |
|------|--------------------|------|--------------------|
| B    | 0.30 (0.0118)      | H    | 1.80 (0.0709)      |
| C    | 0.45 (0.0177)      | J    | 2.00 (0.0787)      |
| D    | 1.00 (0.0394)      | K    | 2.20 (0.0866)      |
| E    | 1.20 (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)**

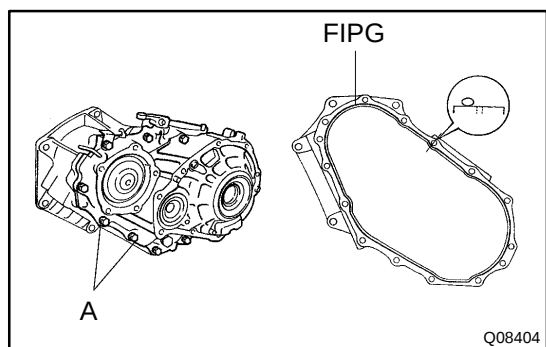
- (b) Using a brass bar and hammer, tap the case cover and remove it.

**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.

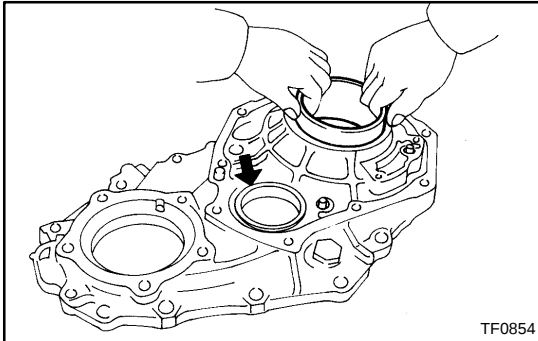
**Sealant: Part No.08833-00080, THREE BOND 1344, LOCTITE 242 or equivalent****Torque: 37 N·m (380 kgf·cm, 27 ft·lbf)**

- (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.

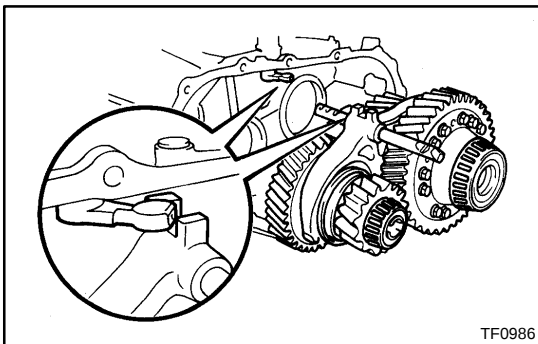
**FIPG: Part No. 08826-00090, THREE BOND 1281 or equivalent**



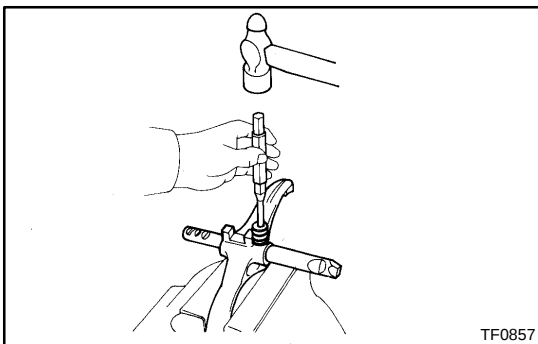
**16. REMOVE 2 BEARING RACES FROM REAR CASE**

**17. REMOVE INPUT SHAFT ASSEMBLY**

Using a plastic hammer, remove the input shaft assembly.

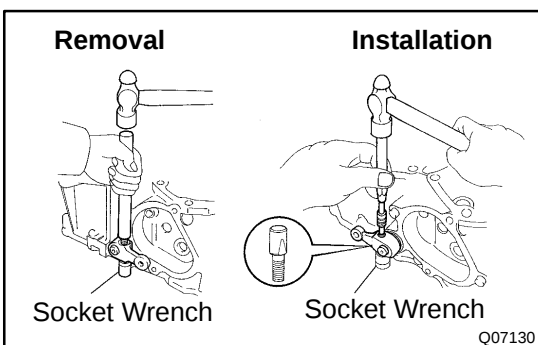


**18. REMOVE IDLER GEAR ASSEMBLY, CENTER DIFFERENTIAL ASSEMBLY, SHIFT FORK NO.1 AND SHIFT FORK NO.1 SHAFT FROM FRONT CASE**



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

- Using a pin punch and hammer, drive out the slotted spring pin.
- Separate the shift fork No.1 and shift fork No.1 shaft.



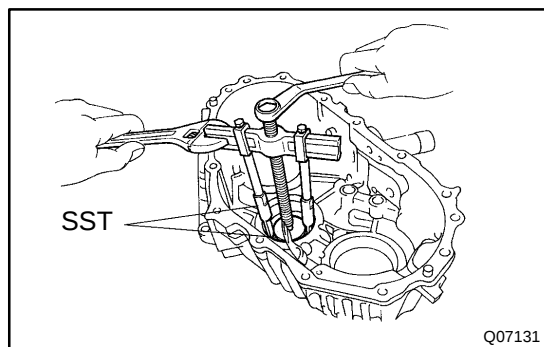
**20. REMOVE SHIFT OUTER LEVER AND INNER LEVER**

- Remove the nut and washer from the shift outer lever.  
**Torque: 12 N·m (120 kgf·cm, 9 ft·lbf)**
- Using a brass bar, hammer and socket wrench, tap out the lever lock pin.
- Remove the shift outer lever, washer and inner lever from the front case.

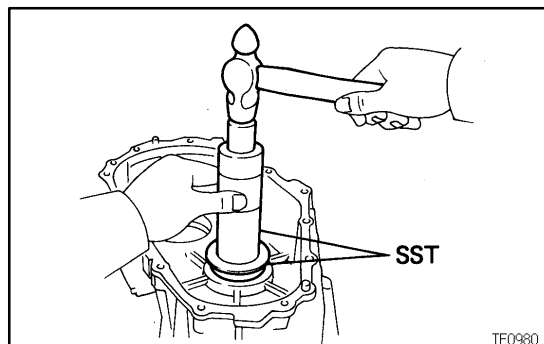
**21. REMOVE OIL RECEIVER FROM FRONT CASE**

Remove the bolt and oil receiver.

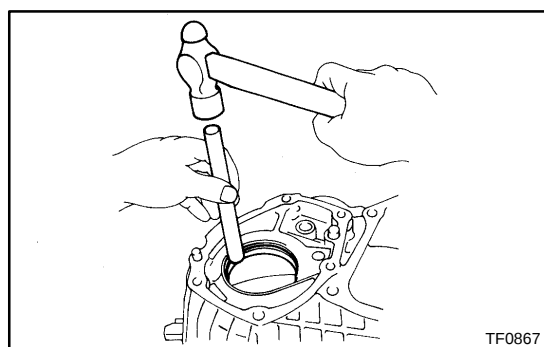
**Torque: 12 N·m (120 kgf·cm, 9 ft·lbf)**

**22. REMOVE 2 BEARING RACES FROM FRONT CASE**

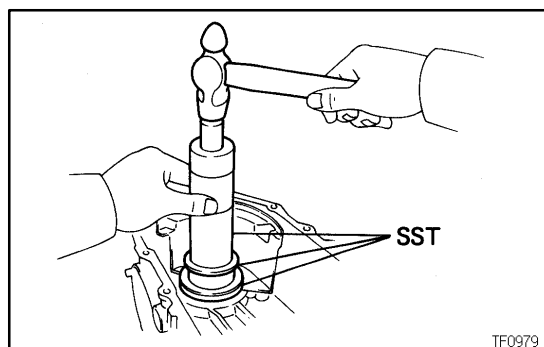
- (a) Using SST, remove the bearing race (for idler gear).  
SST 09950-40010, 09950-60010 (09951-00320)

**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 09316-6001 1 (09316-00011, 09316-00041)

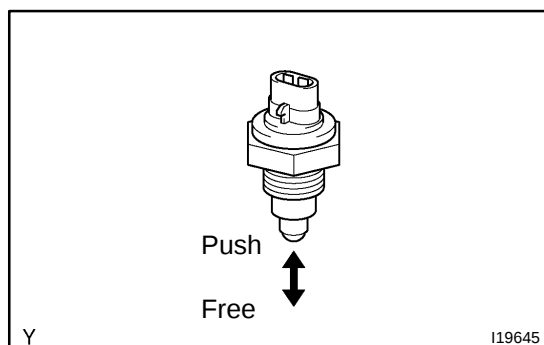


- (b) Using a brass bar and hammer, remove the bearing race (for output shaft).

**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.