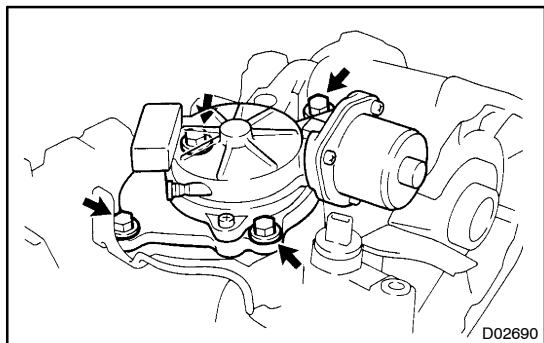


DISASSEMBLY

1. REMOVE BREATHER HOSE
2. REMOVE SPEED SENSOR DRIVEN GEAR

Remove the bolt and driven gear.

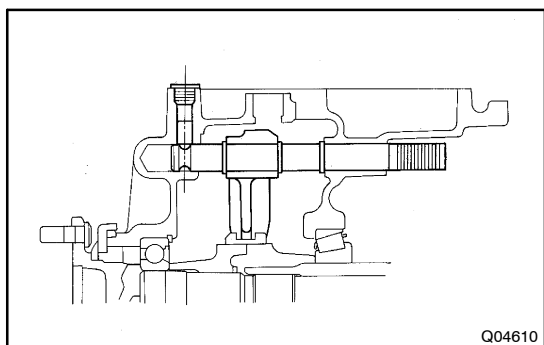
Torque: 11 N·m (115 kgf·cm, 8 ft·lbf)



3. REMOVE MOTOR ACTUATOR

Remove the 4 bolts and motor actuator.

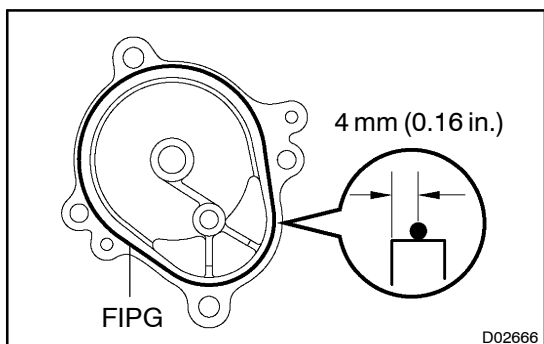
Torque: 18 N·m (185 kgf·cm, 13 ft·lbf)



HINT:

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

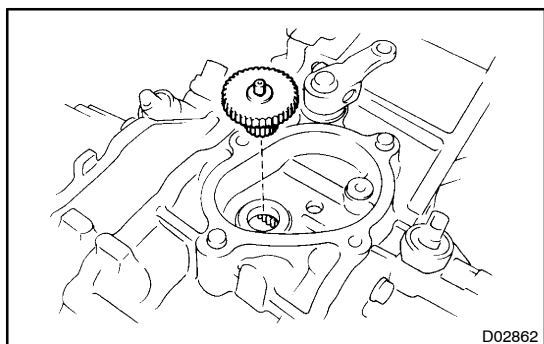
- Set the motor actuator in differential lock condition.



- Apply FIPG to the motor actuator.

FIPG:

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



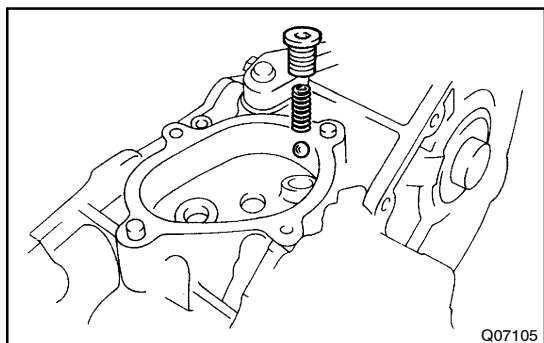
4. REMOVE OUTPUT GEAR FROM FRONT CASE

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 threads.

Sealant:

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

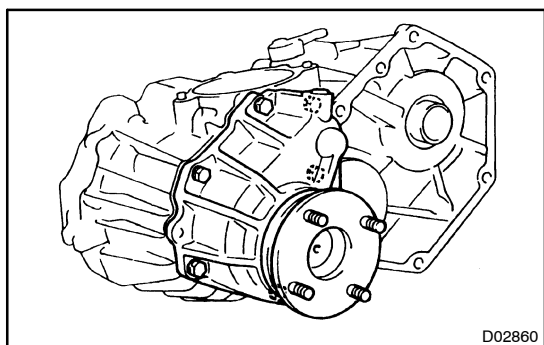
Torque: 19 N·m (190 kgf·cm, 14 ft·lbf)

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

6. REMOVE TRANSFER INDICATOR SWITCH

Remove the center diff. lock indicator switch, L 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.

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

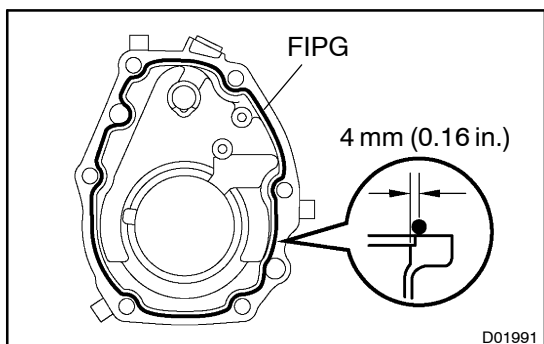
HINT:

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

HINT:

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

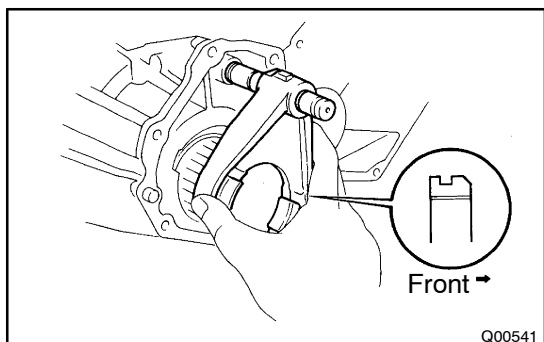
- Set the clutch sleeve in differential lock condition.



- Apply FIPG to the front extension housing.

FIPG:

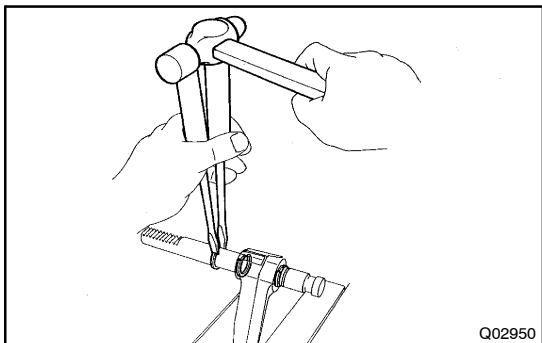
Part No. 08826-00090, THREE BOND 1281 or equivalent



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

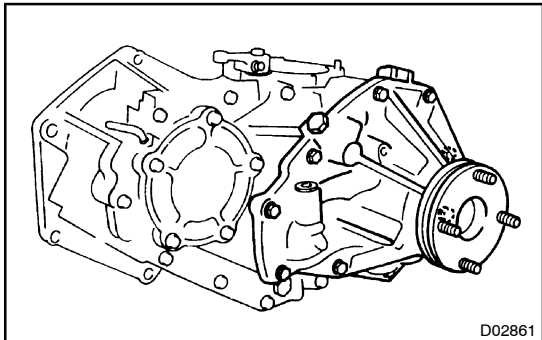
HINT:

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

- (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.



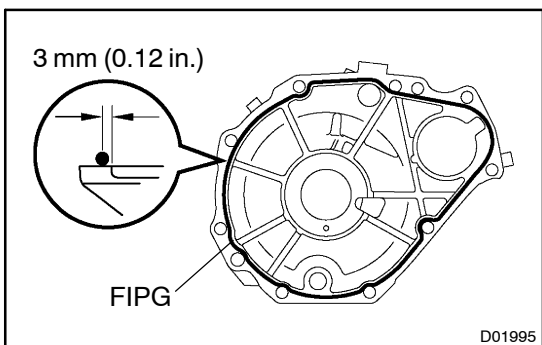
10. REMOVE REAR EXTENSION HOUSING

Remove the 9 bolts and rear extension housing.

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

HINT:

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

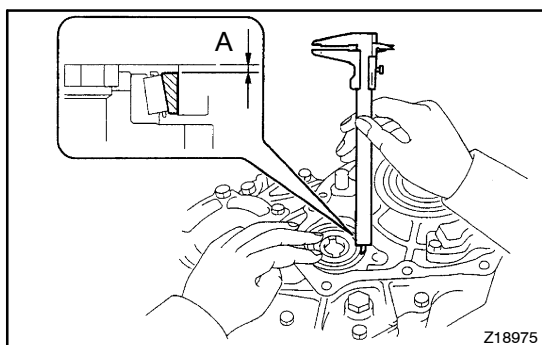


HINT:

At the time of reassembly, apply FIPG to the rear extension housing.

FIPG:

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

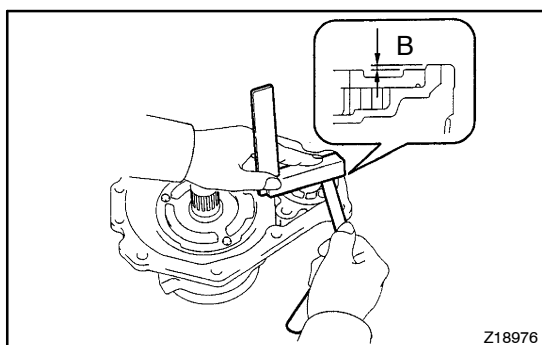


11. REMOVE ADJUSTING SHIM

HINT:

At the time of reassembly, select a adjusting shim 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.



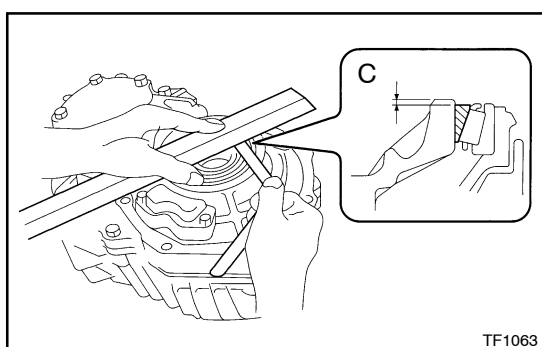
- (c) Using a steel straight edge and feeler gauge, measure the clearance of dimension "B".

- (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.

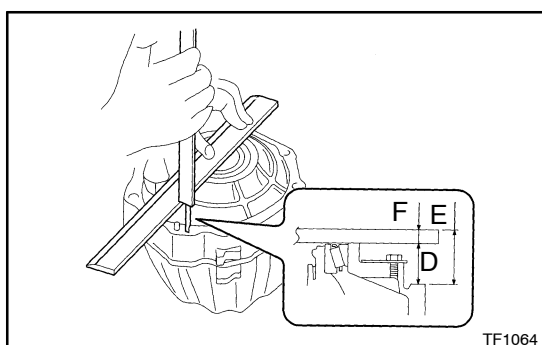
Mark	Thickness mm (in.)	Mark	Thickness mm (in.)
2	0.30 (0.0118)	8	3.20 (0.1260)
3	0.45 (0.0177)	9	3.40 (0.1339)
4	2.40 (0.0945)	10	3.60 (0.1417)
5	2.60 (0.1024)	11	3.80 (0.1496)
6	2.80 (0.1102)	12	4.00 (0.1575)
7	3.00 (0.1181)	13	0.55 (0.0216)



HINT:

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

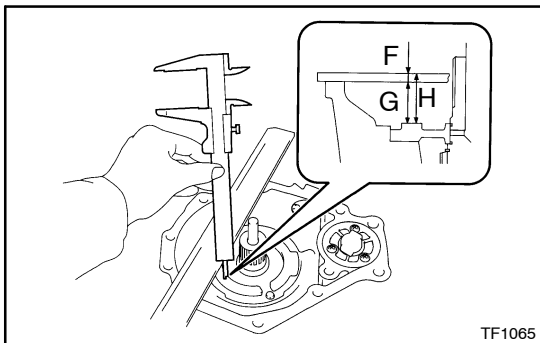
- (f) Using a steel straight edge and feeler gauge, measure the clearance of dimension "C".
- (g) Lightly hold down the bearing outer race in the thrust direction to eliminate any looseness before making the measurement.



- (h) Using a steel straight edge and vernier calipers with a depth gauge, measure dimension "D".

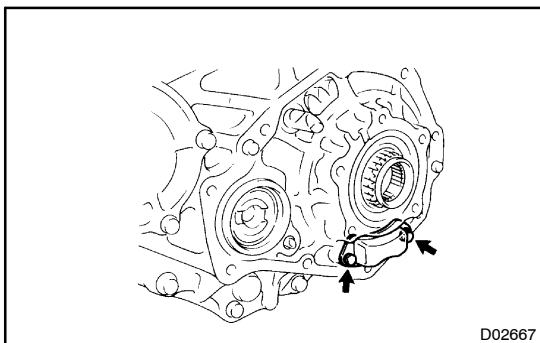
- (i) Dimension "D" is the straight edge thickness (Dimension "F") subtracted from dimension "E" in the illustration to the left.

Dimension "D": Dimension "E" – Dimension "F"



- (j) Using a steel straight edge and vernier calipers with a depth gauge, measure dimension "G".
- (k) Dimension "G" is the straight edge thickness (Dimension "F") subtracted from dimension "H".
Dimension "G": Dimension "H" – Dimension "F"
- (l) Calculate the required thickness of the adjusting shim.
Thickness: Dimension "G" – (Dimension "D" – Dimension "C") + [0.014 – 0.039 mm, (0.0006 – 0.0015 in.)]
- (m) From the following table, select a shim so that its thickness is within the range of the calculation.

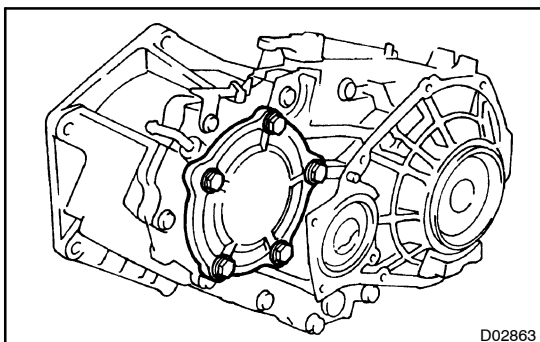
Mark	Thickness mm (in.)	Mark	Thickness mm (in.)
B	0.30 (0.0118)	H	1.80 (0.0709)
C	0.45 (0.0177)	J	2.00 (0.0787)
D	1.00 (0.0394)	K	2.20 (0.0866)
E	1.20 (0.0472)	L	2.40 (0.0945)
F	1.40 (0.0551)	M	2.60 (0.1024)
G	1.60 (0.0630)	N	0.55 (0.0216)



12. REMOVE OIL STRAINER FROM REAR CASE

Remove the 2 bolts and oil strainer.

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



13. REMOVE CASE COVER

- (a) Remove the 5 bolts.

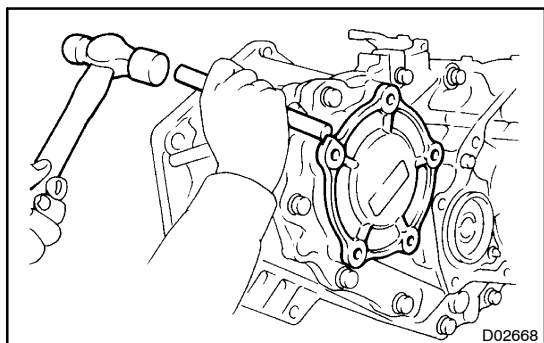
HINT:

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

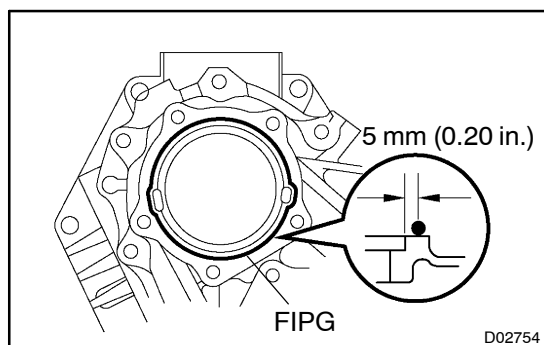
Sealant:

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.

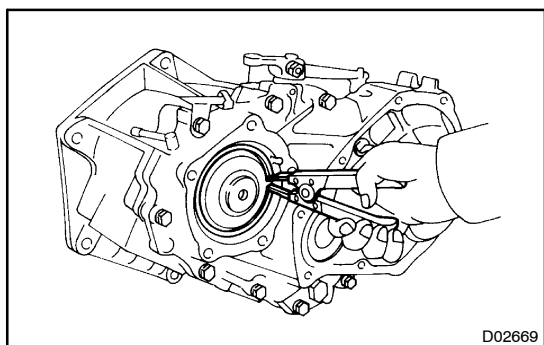


HINT:

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

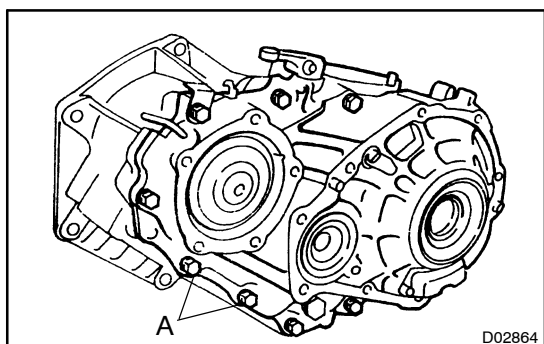
FIPG:

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



14. 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)

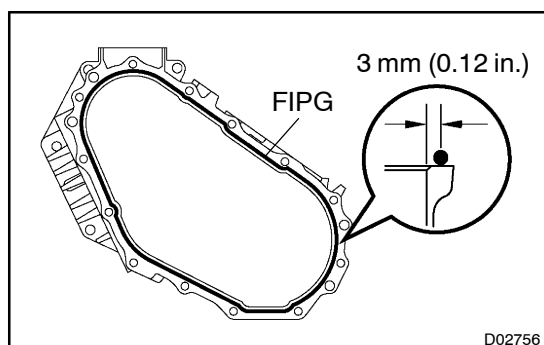
- (c) Using a brass bar and hammer, tap the rear case and separate it.

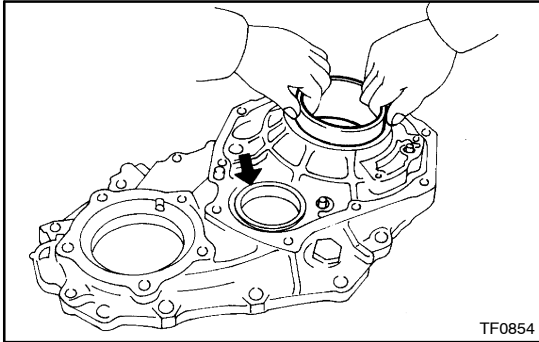
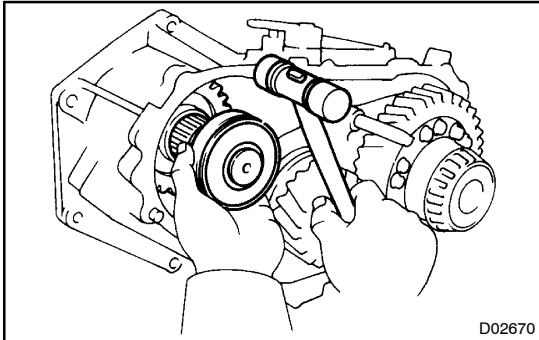
HINT:

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

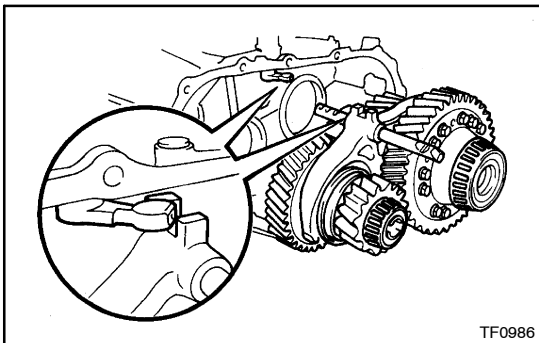
FIPG:

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

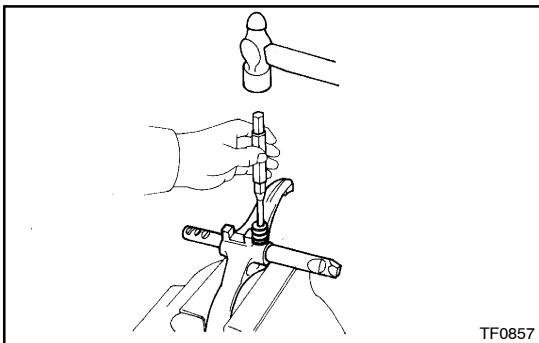


**15. REMOVE 2 BEARING RACES FROM REAR CASE****16. REMOVE INPUT SHAFT ASSEMBLY**

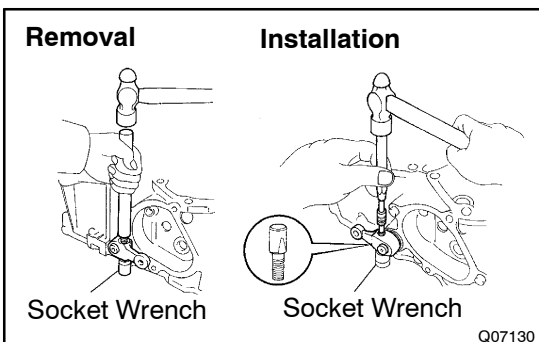
Using a plastic hammer, remove the input shaft assembly from the front case.

**17. REMOVE IDLER GEAR ASSEMBLY WITH CENTER DIFFERENTIAL ASSEMBLY, SHIFT FORK NO.1 AND SHIFT FORK NO.1 SHAFT FROM FRONT CASE****NOTICE:**

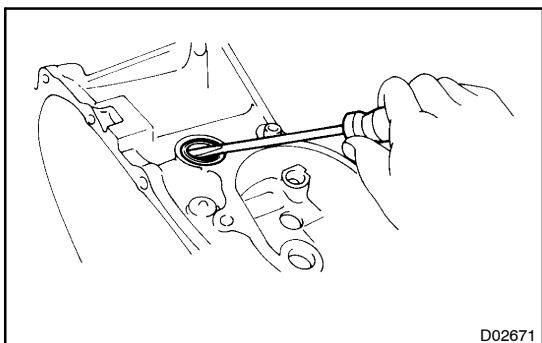
At the time of reassembly, set the shift inner lever into the fork head part of the shift fork No.1 securely.

**18. 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.

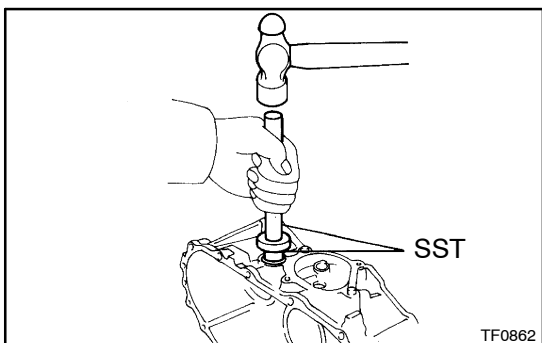
**19. REMOVE SHIFT OUTER LEVER AND INNER LEVER**

- (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.

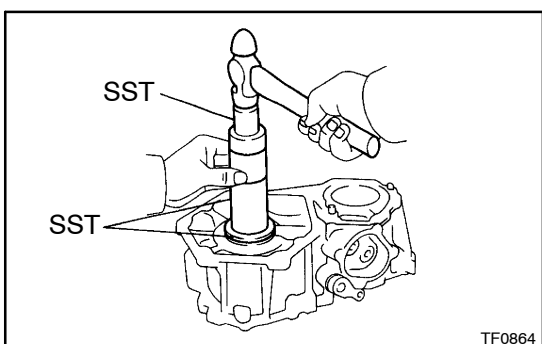


20. IF NECESSARY, REPLACE INNER SHIFT LEVER OIL SEAL

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

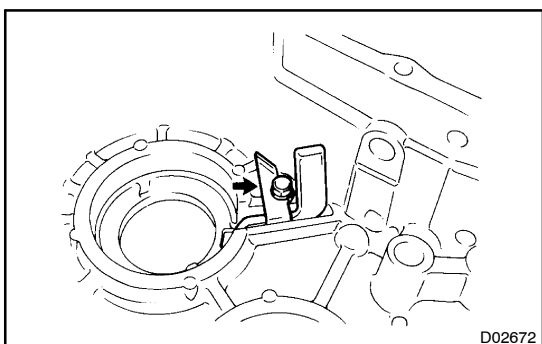


- (b) Apply MP grease to the lip of a new oil seal.
 (c) Using SST and a hammer, drive in a new oil seal.
 SST 09950-60010 (09951-00270), 09950-70010 (09951-07150)



21. IF NECESSARY, REPLACE INPUT SHAFT OIL SEAL

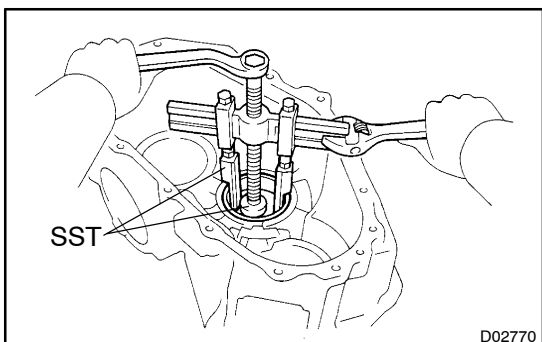
- (a) Using SST and a hammer, drive out the oil seal.
 SST 09316-60011 (09316-00011)
 (b) Apply MP grease to the lip of a new oil seal.
 (c) Using SST and a hammer, drive in a new oil seal.
 SST 09316-60011 (09316-00011, 09316-00031)



22. REMOVE OIL RECEIVER FROM FRONT CASE

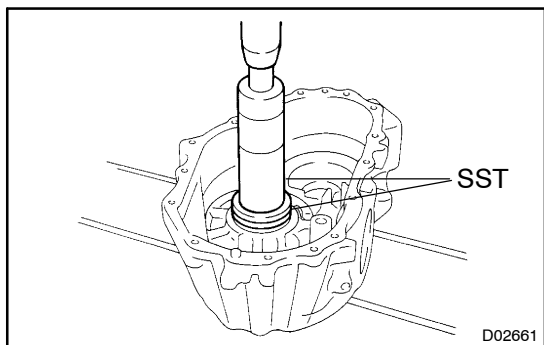
Remove the bolt and oil receiver.

Torque: 12 N·m (120 kgf·cm, 9 ft·lbf)



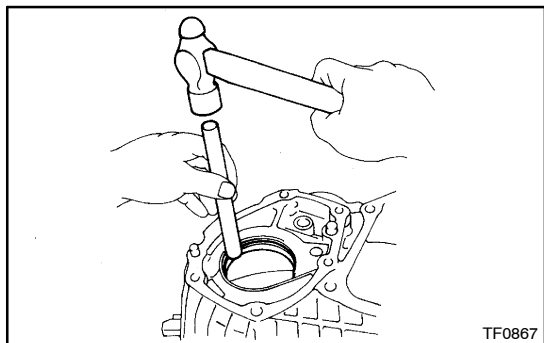
23. REMOVE 2 BEARING RACES FROM FRONT CASE

- (a) Using SST, remove the bearing race (for the idler gear).
 SST 09950-40011 (09951-04020, 09952-04010, 09953-04030, 09954-04010, 09955-04060, 09957-04010), 09950-60010 (09951-00320)

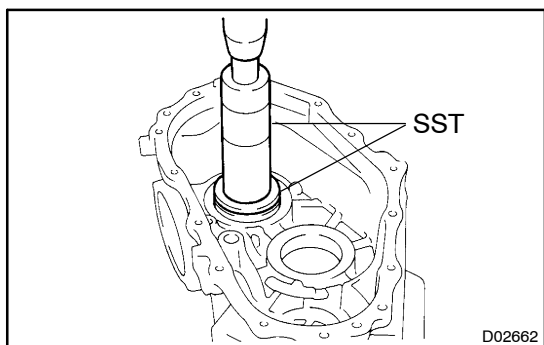
**HINT:**

At the time of reassembly, please refer to the following item.
Using SST and a press, install the bearing race (for the idler gear).

SST 09316-60011 (09316-00011, 09316-00031),
09950-60020 (09951-00790)

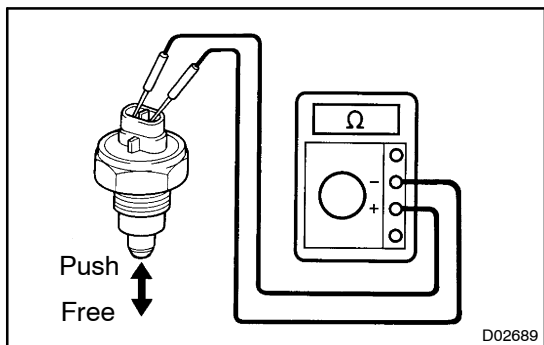


- (b) Using a brass bar and hammer, remove the bearing race (for the output shaft).

**HINT:**

At the time of reassembly, please refer to the following item.
Using SST and a press, install the bearing race (for the output shaft).

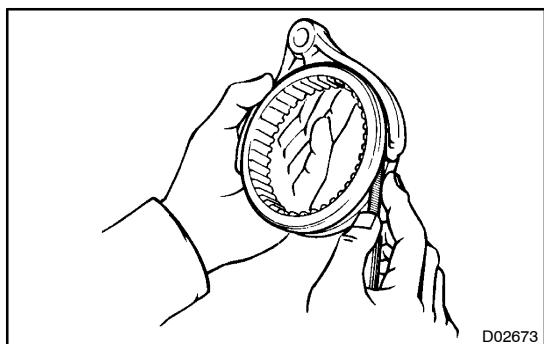
SST 09316-60011 (09316-00011, 09316-00031),
09950-60020 (09951-00890)

**24. INSPECT TRANSFER INDICATOR SWITCH**

Check that continuity exists between the terminals, as shown.

Switch Position	Specified Condition
Push	Continuity
Free	No continuity

If continuity is not as specified, replace the switch.

**25. INSPECT SHIFT FORK NO.2 AND CLUTCH SLEEVE CLEARANCE**

Using a feeler gauge, measure the clearance between the shift fork No.2 and clutch sleeve.

Standard clearance: 0.1 – 0.4 mm (0.0039 – 0.0157 in.)

Maximum clearance: 0.4 mm (0.0157 in.)