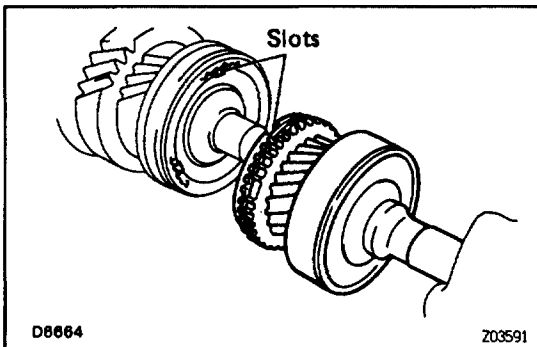
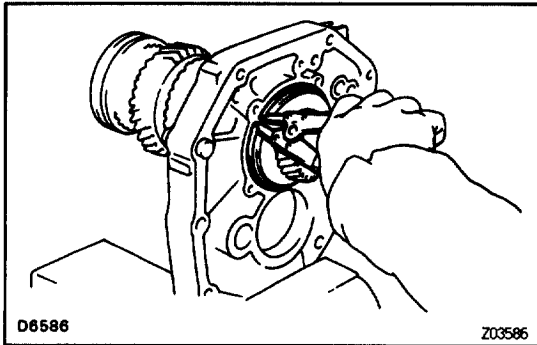


COMPONENT PARTS INSTALLATION

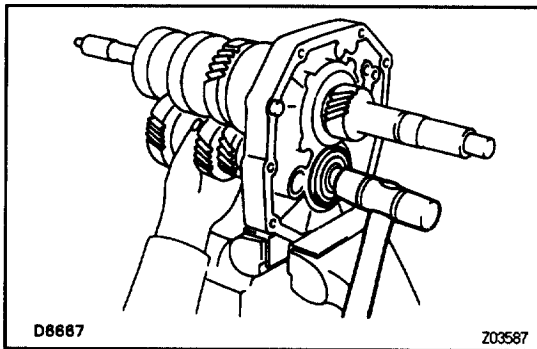
BASIC SUBASSEMBLY REASSEMBLY

(See pages [MT3-23](#) and [MT3-24](#))

1. **INSTALL OUTPUT SHAFT TO INTERMEDIATE PLATE**
 - (a) Install the output shaft into the intermediate plate by pushing on the output shaft and tapping on the intermediate plate.
 - (b) Using a snap ring expander, install the snap ring.

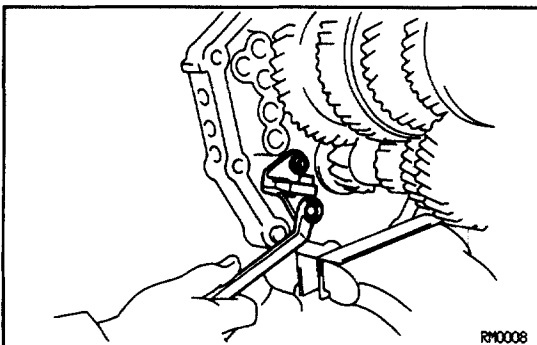


2. **INSTALL INPUT SHAFT**
 - (a) Apply gear oil to the needle roller bearing and install it into the input shaft.
 - (b) Install the input shaft to the output shaft with the synchronizer ring slots aligned with the shifting keys.



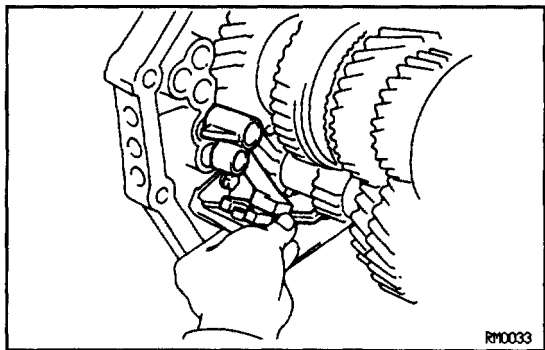
3. **INSTALL COUNTER GEAR**

Install the counter gear into the intermediate plate while holding the counter gear, and install the counter rear bearing with a plastic hammer.



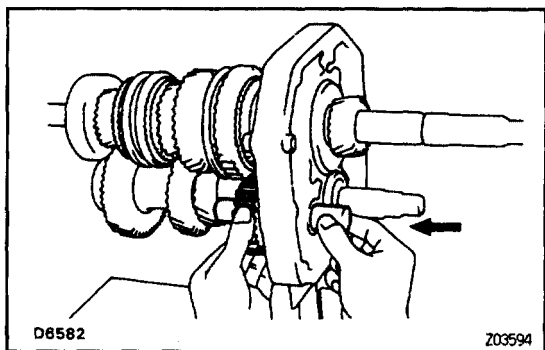
4. **INSTALL REVERSE SHIFT ARM BRACKET**

Install the reverse shift arm bracket and torque the bolts.
Torque: 18 N·m (185 kgf·cm, 13 ft·lbf)



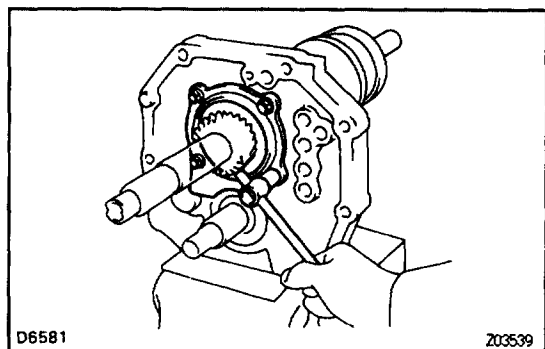
5. INSTALL REVERSE SHIFT ARM TO REVERSE SHIFT ARM BRACKET

Install the reverse shift arm to the pivot of the reverse shift arm bracket.



6. INSTALL REVERSE IDLER GEAR AND SHAFT

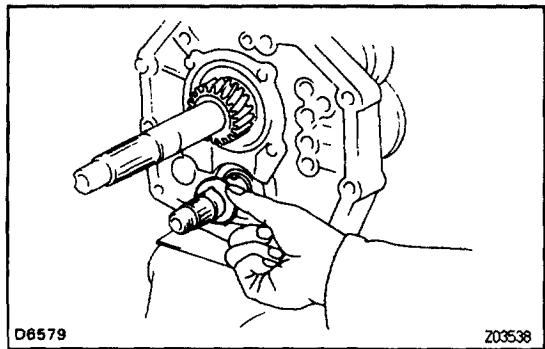
Align the reverse shift arm shoe to the reverse idler gear groove and install the reverse idler gear shaft to the intermediate plate.



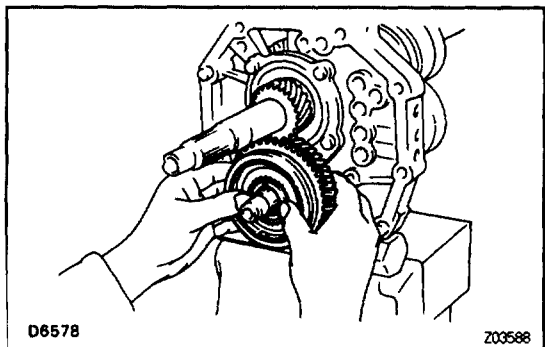
7. INSTALL REAR BEARING RETAINER

- Align the rear bearing retainer to the reverse idler gear shaft groove.
- Install and torque the bolts.

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

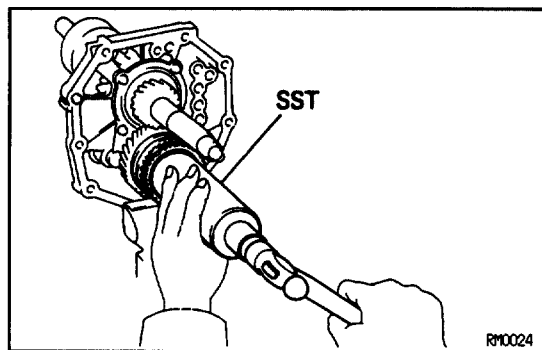


8. INSTALL BALL AND THRUST WASHER



9. INSTALL COUNTER 5TH GEAR WITH NO.3 HUB SLEEVE ASSEMBLY AND NEEDLE ROLLER BEARINGS

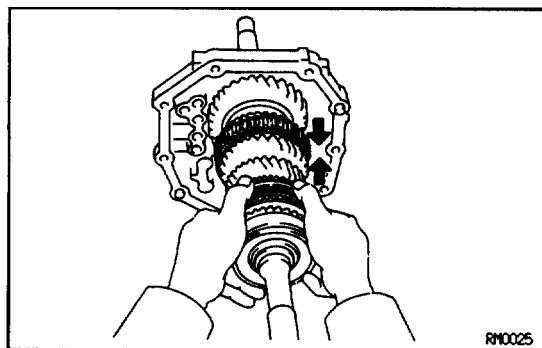
- Apply gear oil to the needle roller bearings.
- Install the counter 5th gear with No.3 hub sleeve and needle roller bearings.



10. INSTALL SYNCHRONIZER RING AND GEAR SPLINE PIECE NO.5

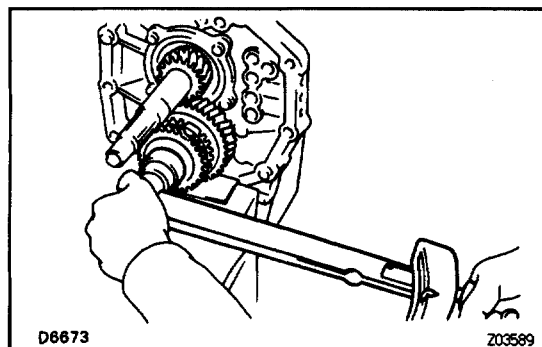
- (a) Install the synchronizer ring on gear spline piece No.5.
- (b) Using SST and a hammer, drive in gear spline piece No.5 with the synchronizer ring slots aligned with the shifting keys.
SST 09316-60010 (09316-00010)

HINT: When installing gear spline piece No.5, support the counter gear in front with a 3–5 lb hammer or equivalent.



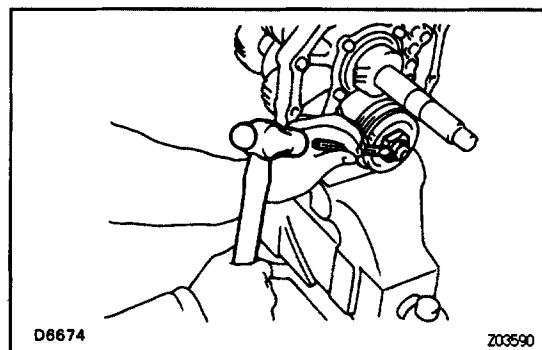
11. INSTALL LOCK NUT

- (a) Engage the gear double meshing.

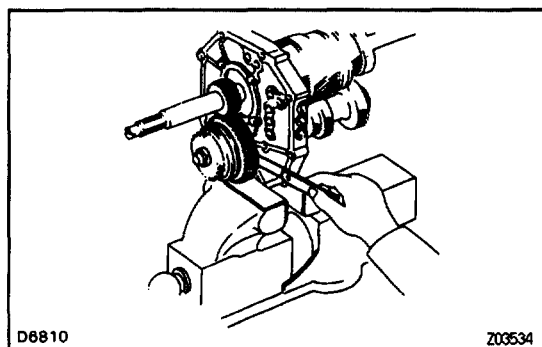


- (b) Install and torque the lock nut.

Torque: 127 N·m (1,300 kgf·cm, 94 ft·lbf)



- (c) Stake the lock nut.
- (d) Disengage the gear double meshing.

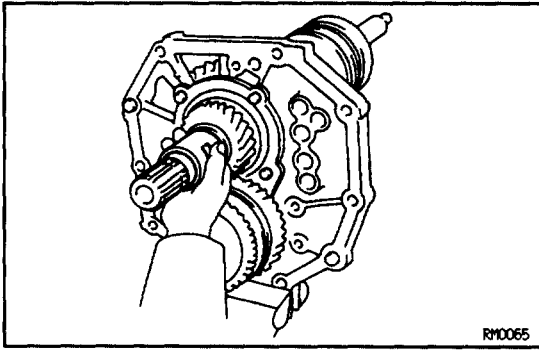


12. INSPECT COUNTER 5TH GEAR THRUST CLEARANCE

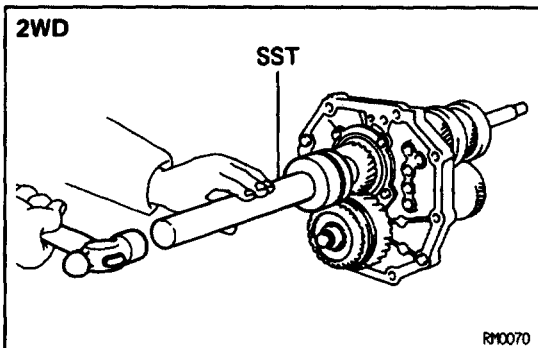
Using a feeler gauge, measure the counter 5th gear thrust clearance.

Standard clearance:

0.10–0.35 mm (0.0039–0.0138 in.)



13. INSTALL SPACER



14. INSTALL OUTPUT SHAFT REAR BEARING

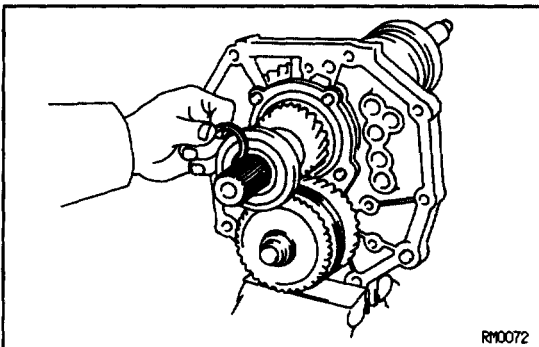
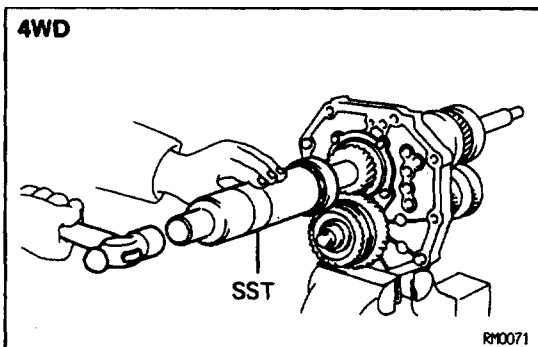
Using SST and a hammer, drive in the rear bearing.

2WD:

SST 09309-35010

4WD:

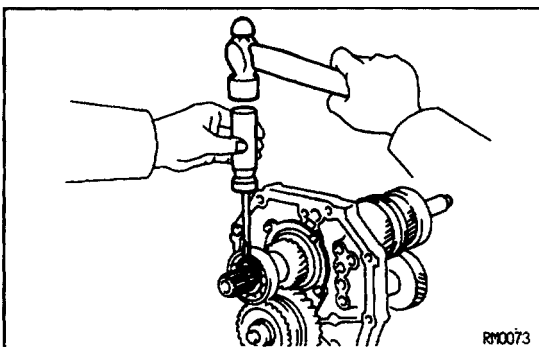
SST 09316-60010 (09316-00010, 09316-00070)



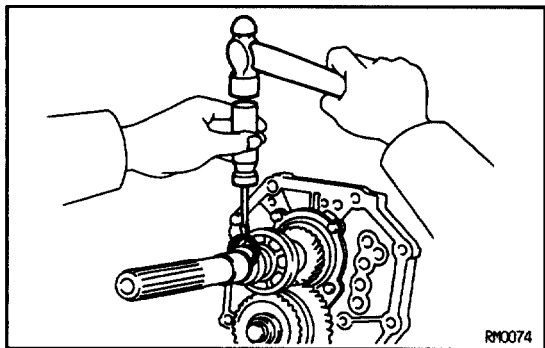
15. INSTALL SNAP RING

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

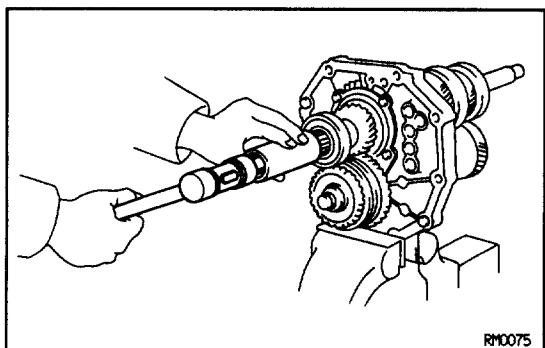
| Mark | Thickness mm (in.) |
|------|-------------------------------|
| A | 2.65 – 2.70 (0.1043 – 0.1063) |
| B | 2.70 – 2.75 (0.1063 – 0.1083) |
| C | 2.75 – 2.80 (0.1083 – 0.1102) |
| D | 2.80 – 2.85 (0.1102 – 0.1122) |
| E | 2.85 – 2.90 (0.1122 – 0.1142) |
| F | 2.90 – 2.95 (0.1142 – 0.1161) |
| G | 2.95 – 3.00 (0.1161 – 0.1181) |
| H | 3.00 – 3.05 (0.1181 – 0.1201) |
| J | 3.05 – 3.10 (0.1201 – 0.1220) |
| K | 3.10 – 3.15 (0.1220 – 0.1240) |
| L | 3.15 – 3.20 (0.1240 – 0.1260) |
| M | 3.20 – 3.25 (0.1260 – 0.1280) |
| N | 3.25 – 3.30 (0.1280 – 0.1299) |
| P | 3.30 – 3.35 (0.1299 – 0.1319) |
| Q | 3.35 – 3.40 (0.1319 – 0.1339) |
| R | 3.40 – 3.45 (0.1339 – 0.1358) |
| S | 3.45 – 3.50 (0.1358 – 0.1378) |



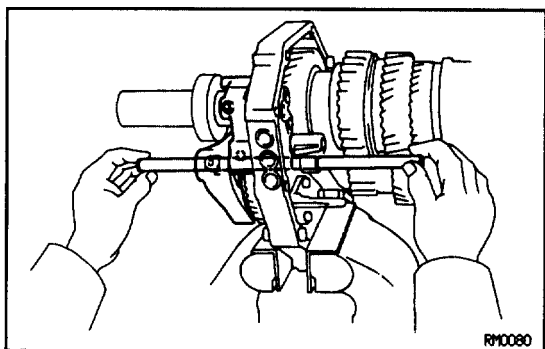
(b) Using a screwdriver and hammer, install the snap ring.

**16. 2WD:****INSTALL SPEEDOMETER DRIVE GEAR**

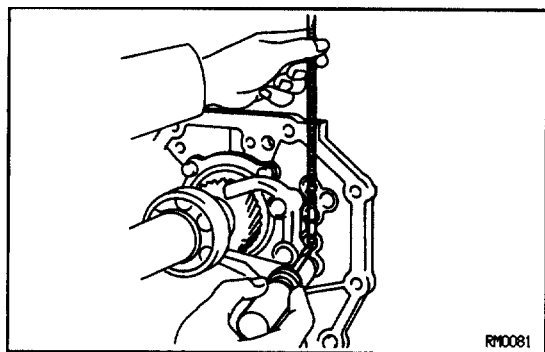
- (a) Using a screwdriver and hammer, install the front snap ring.
- (b) Install the ball and drive gear.
- (c) Using a screwdriver and hammer, install the rear snap ring.

**17. 4WD:****INSTALL SLEEVE TO OUTPUT SHAFT**

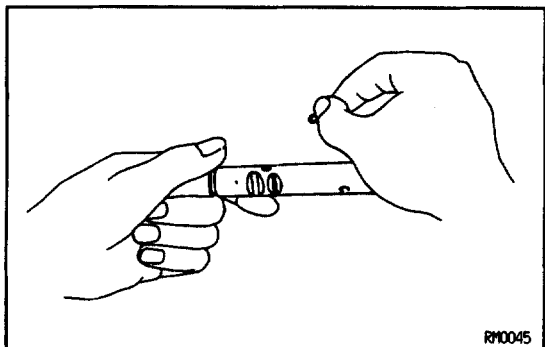
Using a plastic hammer, drive in the sleeve onto the output shaft.

**18. INSTALL SHIFT FORK SHAFT NO. 4, REVERSE SHIFT HEAD AND SHIFT FORK NO. 3**

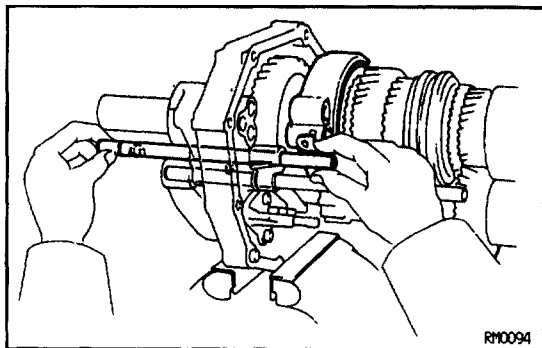
- (a) Place the shift fork No. 3 into the groove of hub sleeve No. 3.
- (b) Install the shift fork shaft No. 4 to shift fork No. 3, reverse shift head and shift fork through the intermediate plate.
- (c) Install the locking ball into the reverse shift head.

**19. INSTALL SHIFT FORK SHAFT NO. 3 AND SHIFT FORK NO. 1**

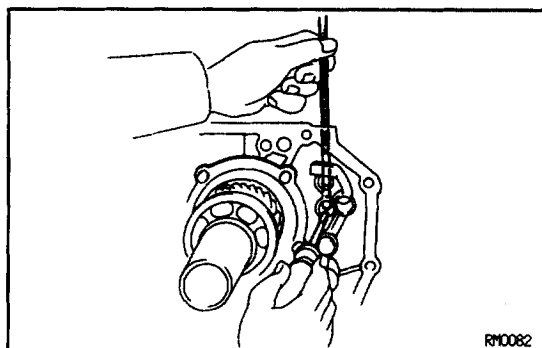
- (a) Using a magnetic finger and screwdriver, install the locking ball into the intermediate plate.



- (b) Install the interlock pin into the shaft hole.

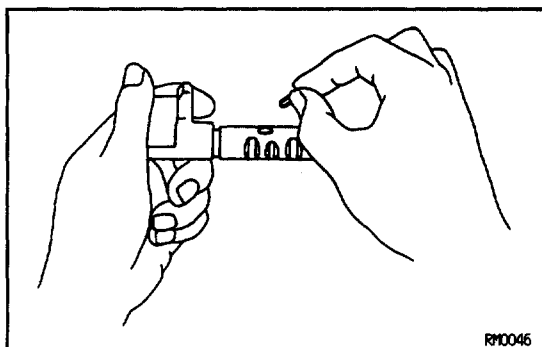


- (c) Place the shift fork No.1 into the groove of hub sleeve No. 1.
- (d) Install the fork shaft No. 3 to the reverse shift fork and shift head through the intermediate plate.

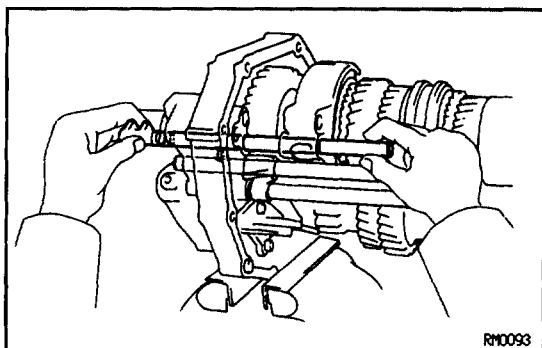


20. INSTALL SHIFT FORK SHAFT NO. 1

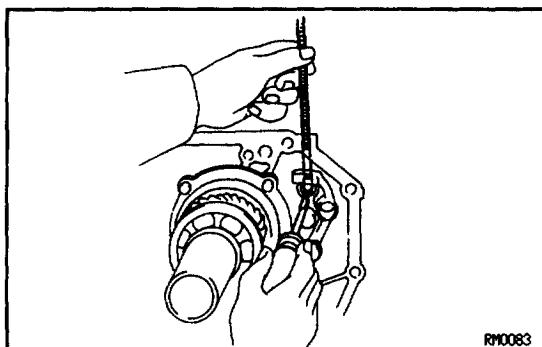
- (a) Using a magnetic finger and screwdriver, install the interlock pin into the intermediate plate.



- (b) Install the interlock pin into the shaft hole.

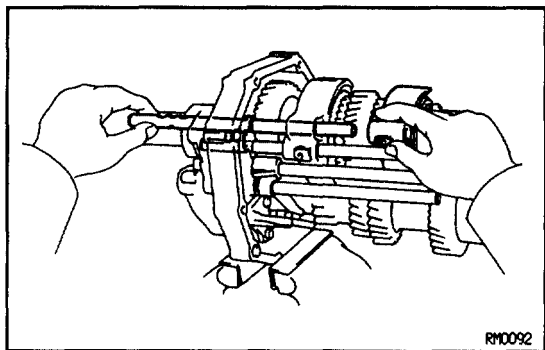


- (c) Install the fork shaft No. 1 to shift fork No. 1 through the intermediate plate.

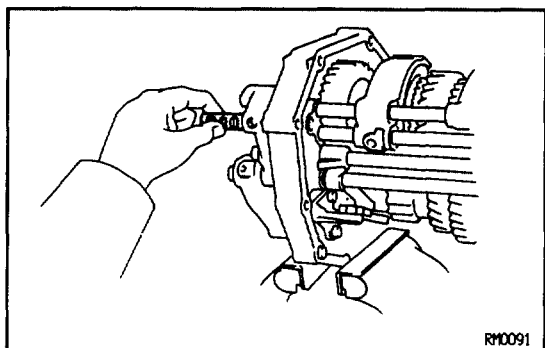


21. INSTALL SHIFT FORK SHAFT NO. 2 AND SHIFT FORK

- (a) Using a magnetic finger and screwdriver, install the interlock pin into the intermediate plate.

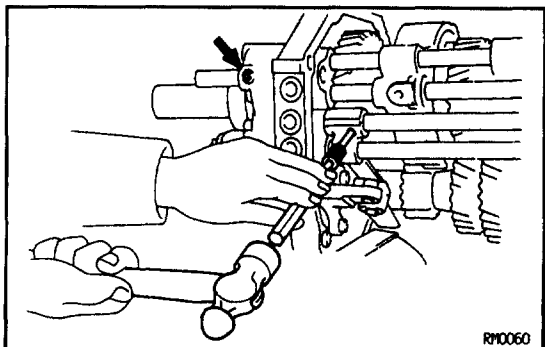


- (b) Place the shift fork No. 2 into the groove of hub sleeve No. 2.
- (c) Install the fork shaft No.2 to shift fork No.1 and No.2 through the intermediate plate.



22. INSTALL SHIFT FORK SHAFT NO.5

Install the shift fork shaft No. 5 to reverse shift head through the intermediate plate.



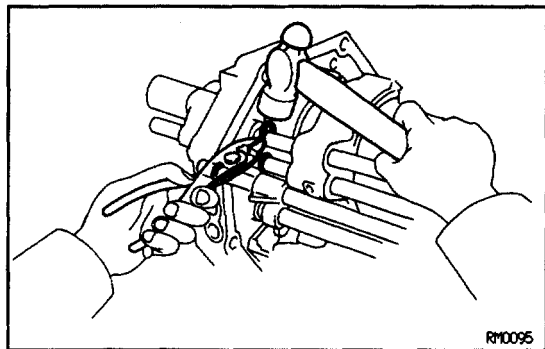
23. INSTALL SLOTTED SPRING PINS

Using a pin punch and hammer, drive in the 2 slotted spring pins to the reverse shift head and shift fork.

24. CHECK INTERLOCK

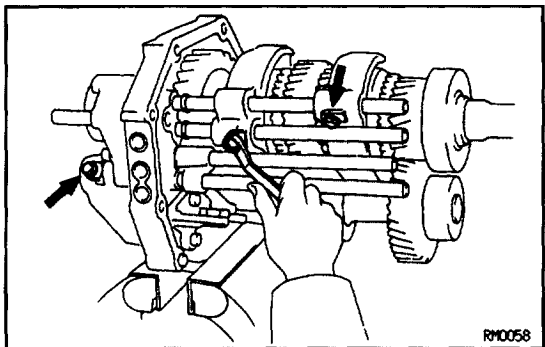
Shift fork shaft No. 1 to the 1st speed position.

HINT: No.2, No.3, No.4 and No.5 fork shafts should not move.



25. INSTALL SNAP RINGS

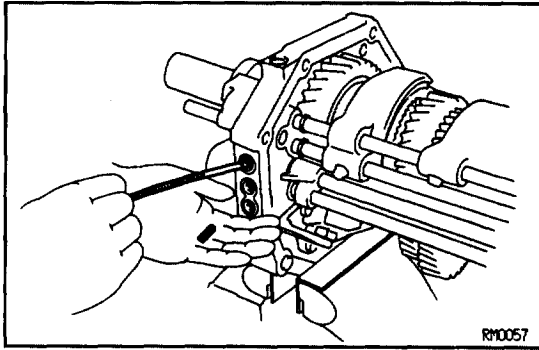
Using pliers and a hammer, install the 3 snap rings.



26. INSTALL SET BOLTS

Install and torque the 3 bolts.

Torque: 20 N·m (200 kgf·cm, 14 ft·lbf)



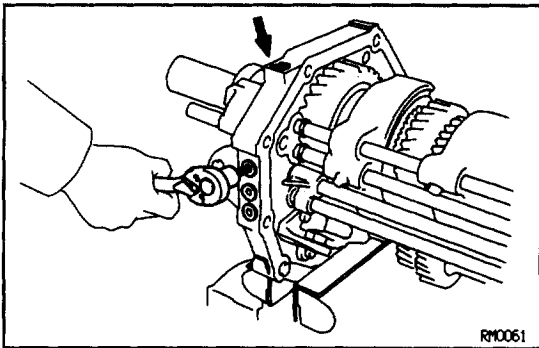
27. INSTALL LOCKING BALLS, SPRINGS AND SCREW PLUGS

- (a) Apply liquid sealer to the plug threads.

Sealant:

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

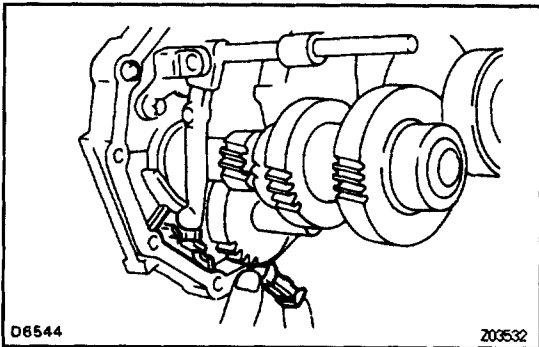
- (b) Install the 4 locking balls, springs and screw plugs.



- (c) Using a torx socket wrench, torque the screw plugs.

(Torx socket wrench T40 09042-00020)

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

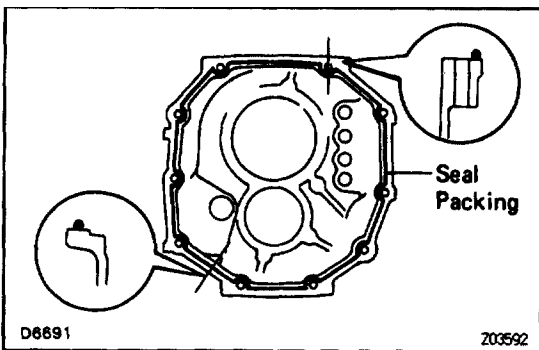


28. INSTALL MAGNET TO INTERMEDIATE PLATE

29. DISMOUNT INTERMEDIATE PLATE FROM VISE

- (a) Dismount the intermediate plate from the vise.

- (b) Remove the bolts, nuts and plate washers.



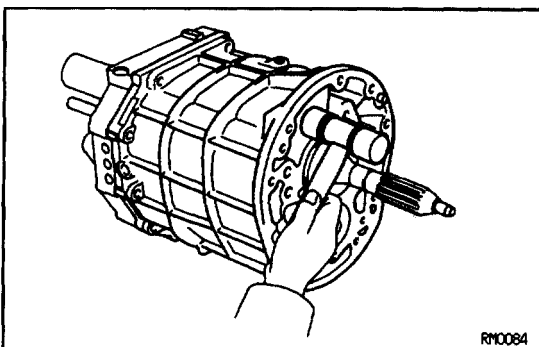
30. INSTALL TRANSMISSION CASE

- (a) Remove any FIPG material and be careful not to drop oil on the contacting surfaces of the intermediate plate or transmission case.

- (b) Apply FIPG to the transmission case, as shown.

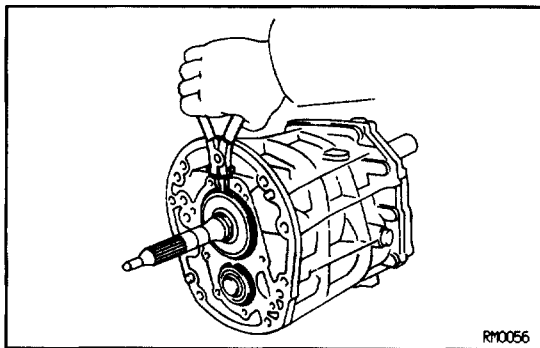
FIPG:

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



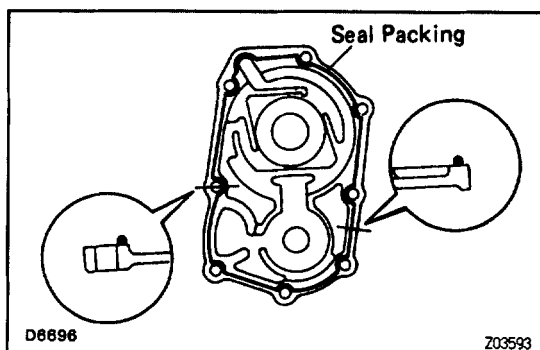
- (c) Align the 2 bearing outer races, the 4 fork shaft ends and reverse idler gear shaft end with the case installation holes, and install the case.

If necessary, tap on the case with a plastic hammer.



31. INSTALL BEARING SNAP RINGS

Using a snap ring expander, install the 2 snap rings to the input shaft bearing and counter gear front bearing.



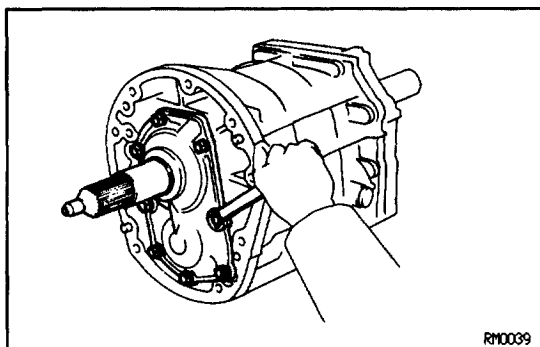
32. INSTALL FRONT BEARING RETAINER

- (a) Remove any FIPG material and be careful not to drop oil on the contacting surfaces of the front bearing retainer or transmission case.

- (b) Apply FIPG to the retainer, as shown.

FIPG:

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



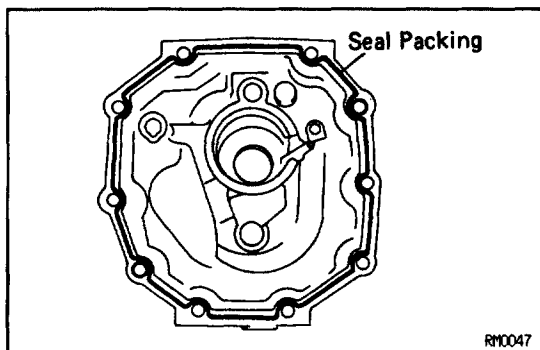
- (c) Apply liquid sealer to the bolt threads.

Sealant:

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

- (d) Install and torque the bolts.

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



33. 2WD:

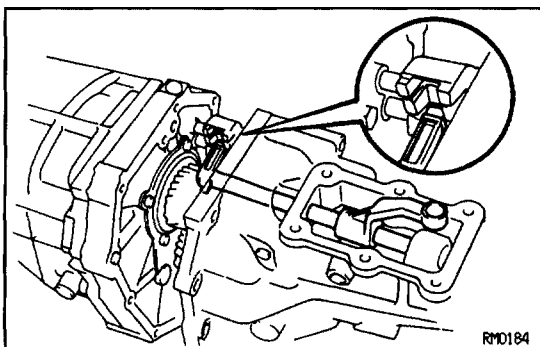
INSTALL EXTENSION HOUSING, SHIFT AND SELECT LEVER AND SHIFT LEVER HOUSING

- (a) Remove any FIPG material and be careful not to drop oil on the contacting surfaces of the extension housing or transmission case.

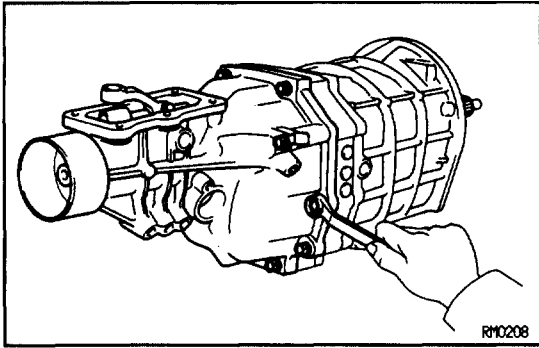
- (b) Apply FIPG to the extension housing, as shown.

FIPG:

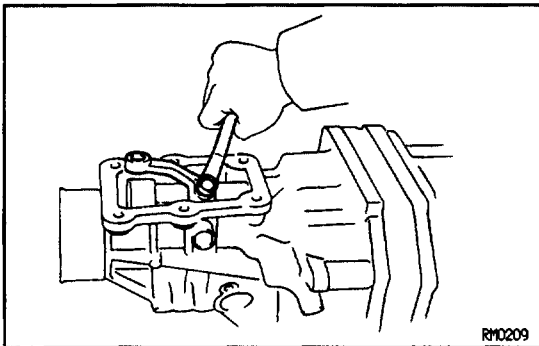
Part No. 08826-00090, THREE BOND 1281 or equivalent



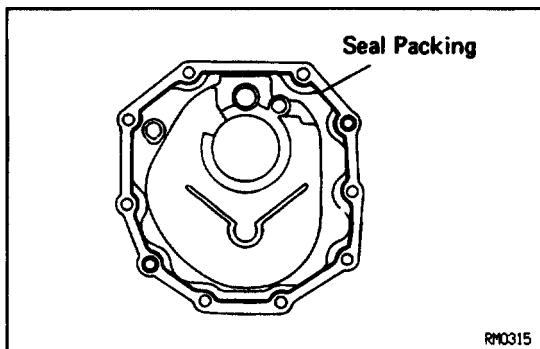
- (c) Install the shift and select lever into the extension housing.
- (d) Connect the shift and select lever to the fork shaft and put in the shift lever housing.
- (e) Align the fork shaft No. 5 to the extension housing installation hole and push in the extension housing.



- (f) Install and torque the extension housing bolts.
Torque: 37 N·m (380 kgf·cm, 27 ft·lbf)



- (g) Install and torque the shift lever housing bolt.
Torque: 38 N·m (390 kgf·cm, 28 ft·lbf)

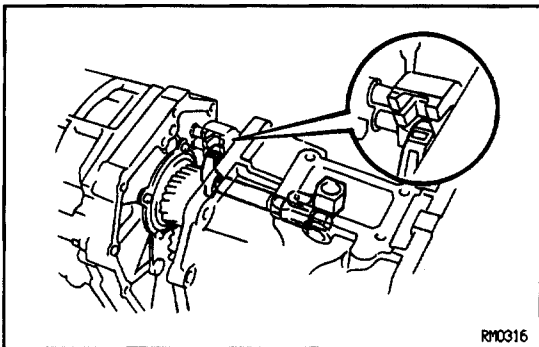


**34. 4WD:
INSTALL TRANSFER ADAPTOR, SHIFT LEVER SHAFT
AND SHIFT LEVER HOUSING**

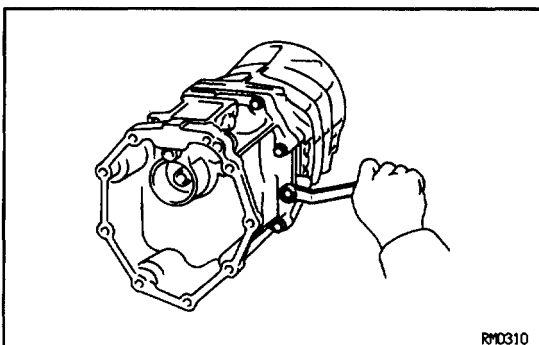
- (a) Remove any FIPG material and be careful not to drop oil on the contacting surfaces of the transfer adaptor or transmission case.
(b) Apply FIPG to the transfer adaptor, as shown.

FIPG:

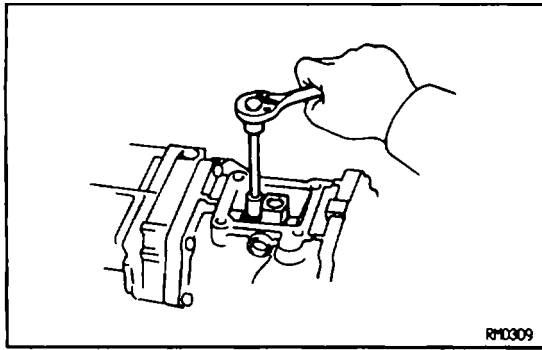
Part No. 08826-00090, THREE BOND 1281 or equivalent



- (c) Install the shift and select lever into the transfer adaptor.
(d) Connect the shift and select lever to the fork shaft and put on the shift lever housing.
(e) Align the fork shaft No.5 to the transfer adaptor installation hole and push in the transfer adaptor.



- (f) Install and torque the bolts.
Torque: 37 N·m (380 kgf·cm, 27 ft·lbf)



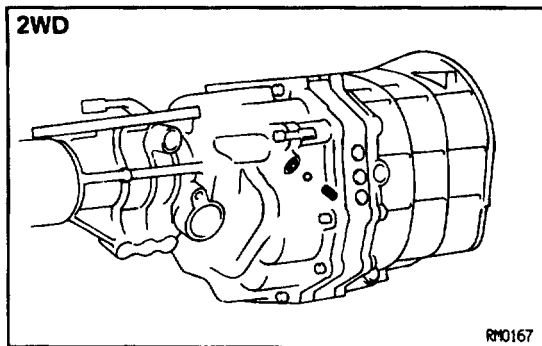
- (g) Install and torque the shift lever housing bolt.

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

- (h) Apply liquid sealer to the plug threads.

Sealant:

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



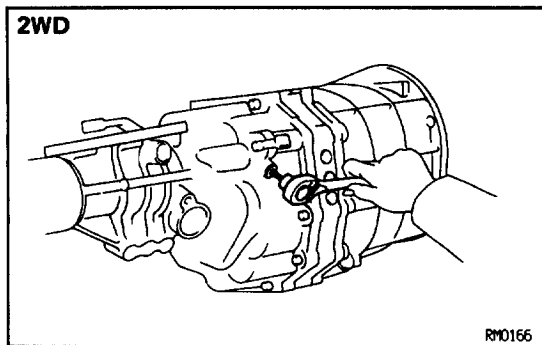
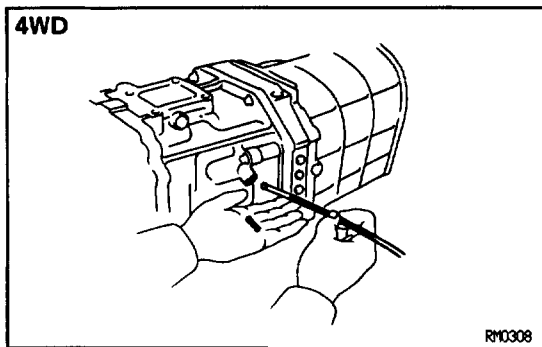
35. INSTALL LOCKING BALL, SPRING AND SCREW PLUG

- (a) Apply liquid sealer to the plug threads.

Sealant:

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

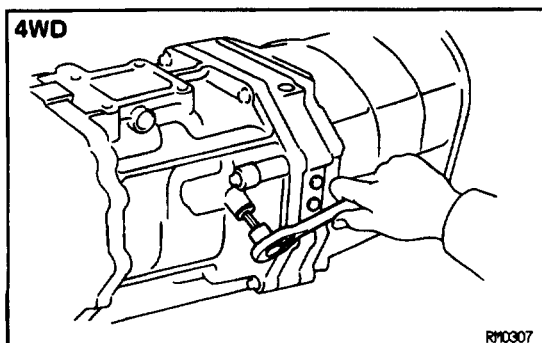
- (b) Install the locking ball, spring and plug.



- (c) Torque the plug.

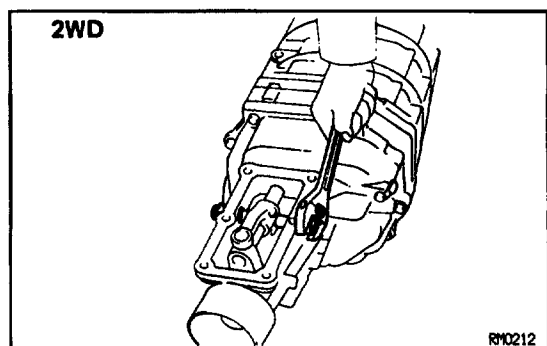
(Torx socket wrench T40 09042-00020)

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



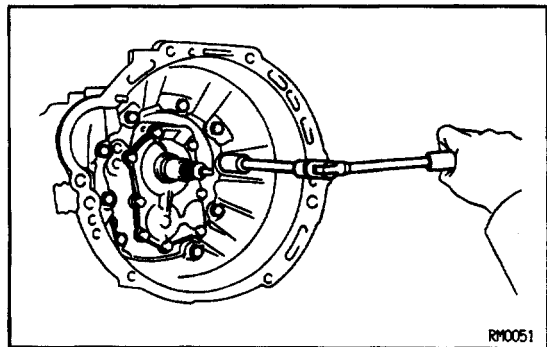
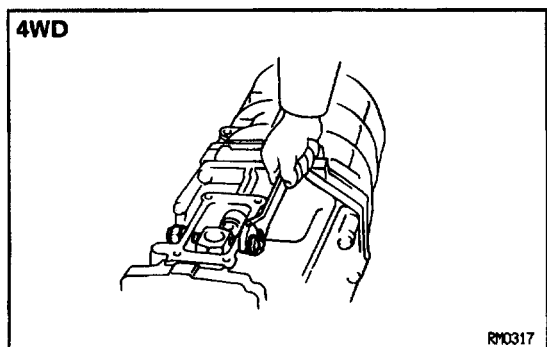
36. AFTER INSTALLING EXTENSION HOUSING OR TRANSFER ADAPTOR CHECK FOLLOWING ITEMS

- (a) Check to see that the input and output shafts rotate smoothly.
- (b) Check to see that shifting can be made smoothly to all positions.

**37. INSTALL RESTRICT PINS**

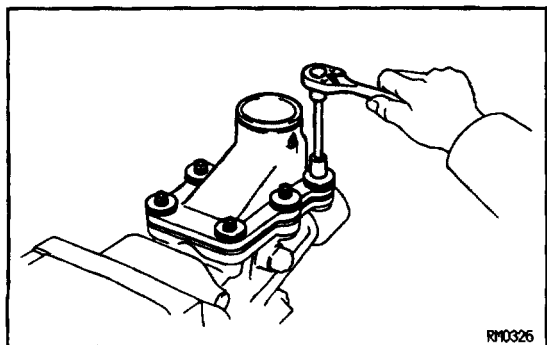
- (a) Install the black pin on the reverse gear/5th gear side.
- (b) Install another pin and torque the pins.

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

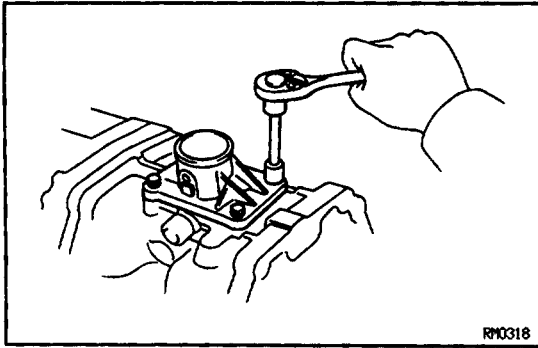
**38. INSTALL CLUTCH HOUSING**

- (a) Install the clutch housing.
- (b) Install and torque the 9 bolts.

Torque: 36 N·m (370 kgf·cm, 27 ft·lbf)

**39. 2WD:****INSTALL SHIFT LEVER RETAINER**

Torque: 16 N·m (160 kgf·cm, 12 ft·lbf)



40. 4WD:
INSTALL SHIFT LEVER RETAINERS WITH NEW GAS-KETS

- (a) Apply liquid sealer to the bolt threads.

Sealant:

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

- (b) Install and torque the 4 bolts.

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

41. INSTALL BACK-UP LIGHT SWITCH

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

42. 2WD:

INSTALL SPEEDOMETER DRIVE GEAR

- (a) Install speedometer drive gear and lock plate.

- (b) Install and torque the bolt.

Torque: 11 N·m (115 kgf·cm, 8 ft·lbf)

43. INSTALL RELEASE FORK AND BEARING