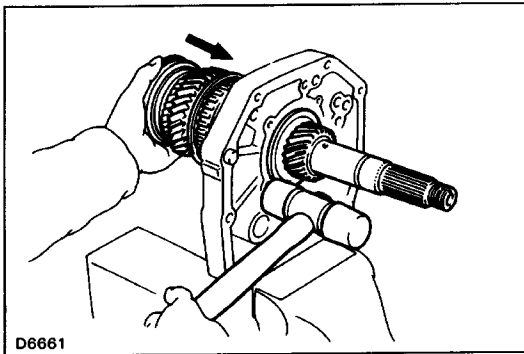


ASSEMBLY OF TRANSMISSION

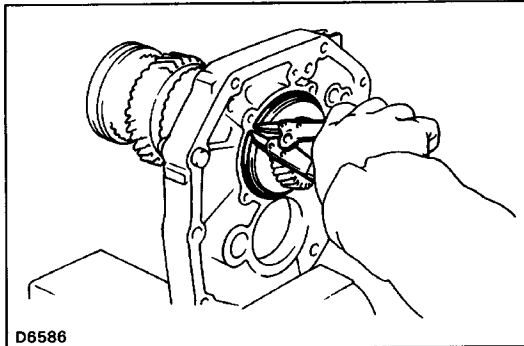
(See pages [MT1-67](#), [68](#))

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.

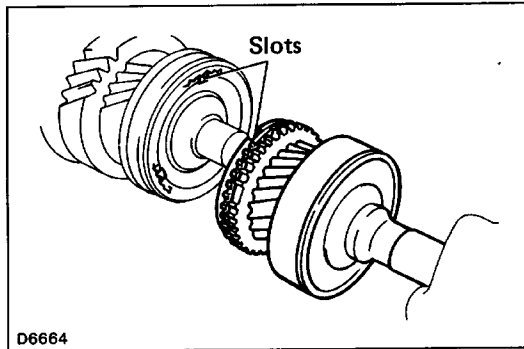


- (b) Using snap ring pliers, install the snap ring.



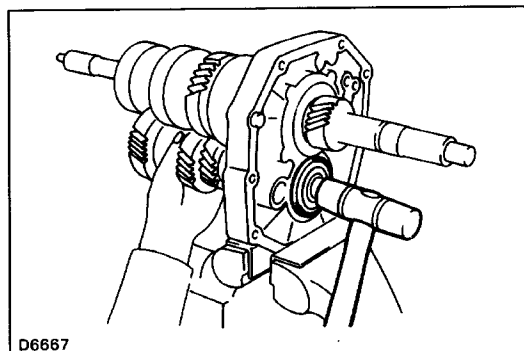
2. INSTALL INPUT SHAFT

- (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

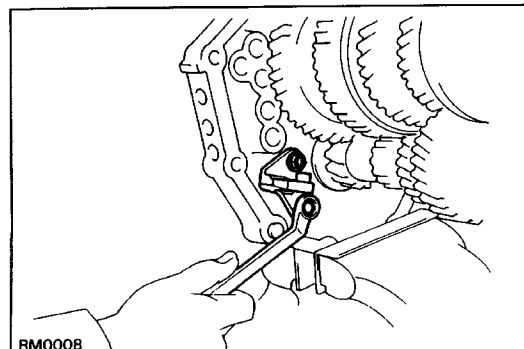
Install the counter gear into the intermediate plate while holding the counter gear, and install the counter rear bearing with a plastic hammer.

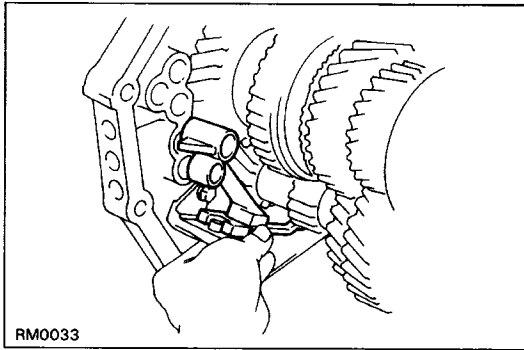


4. INSTALL REVERSE SHIFT ARM BRACKET

Install the reverse shift arm bracket and torque the bolts.

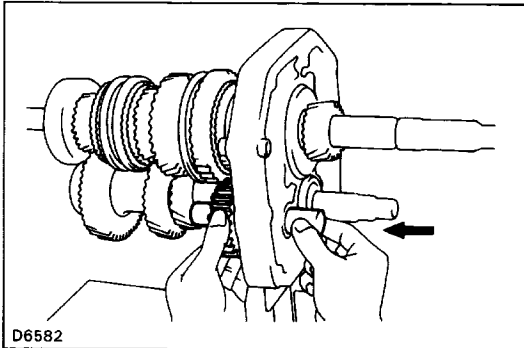
Torque: 18 N-m (185 kgf-cm, 13 ft-lbf)





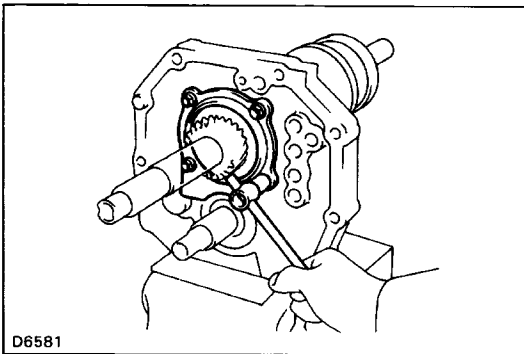
5. INSTALL REVERSE SHIFT ARM TO REVERSE SHIFT ARM BRACKET

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



6. INSTALL REVERSE IDLER GEAR AND SHAFT

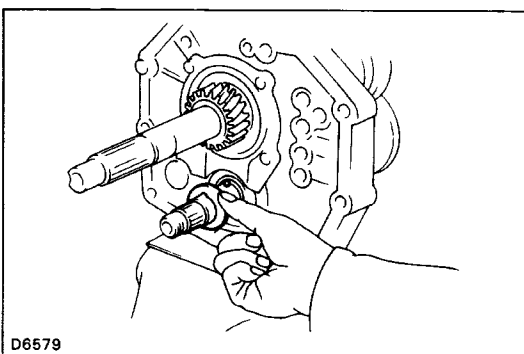
Align the reverse shift arm shoe to the reverse idler gear groove and insert the reverse idler gear shaft to the intermediate plate.



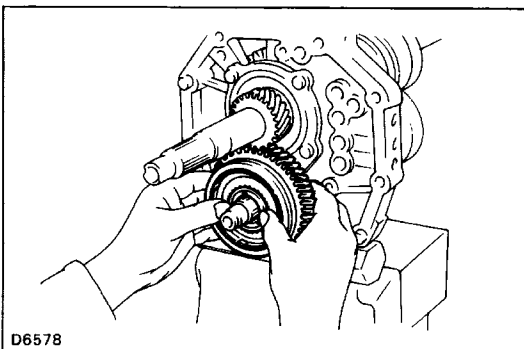
7. INSTALL REAR BEARING RETAINER

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

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

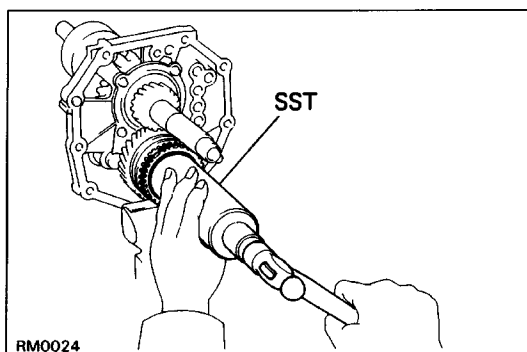


8. INSTALL BALL AND THRUST WASHER



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

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

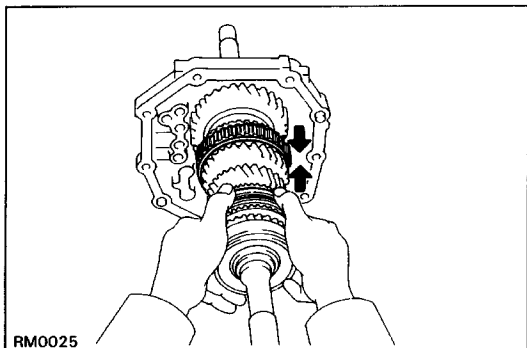


10. INSTALL SYNCHRONIZER RING AND GEAR SPLINE PIECE NO.5

- (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.

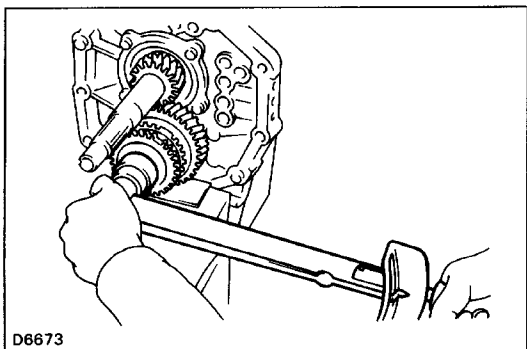
SST 09316-60010 (09316-00010)

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



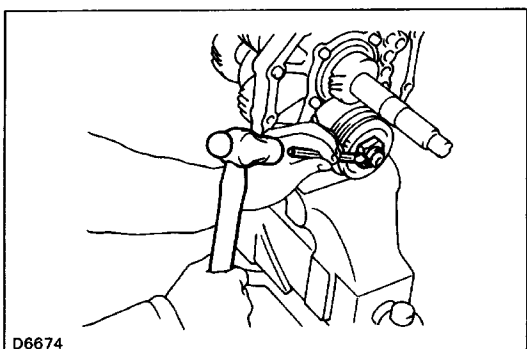
11. INSTALL LOCK NUT

- (a) Engage the gear double meshing.



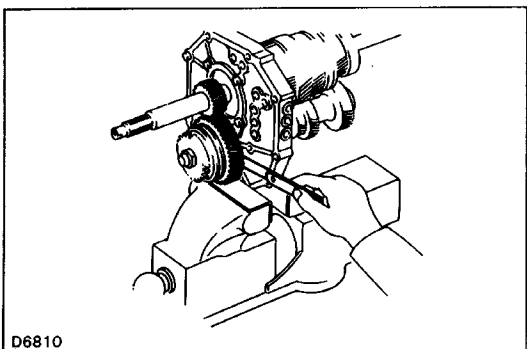
- (b) Install and torque the lock nut.

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



- (c) Stake the lock nut.

- (d) Disengage the gear double meshing.

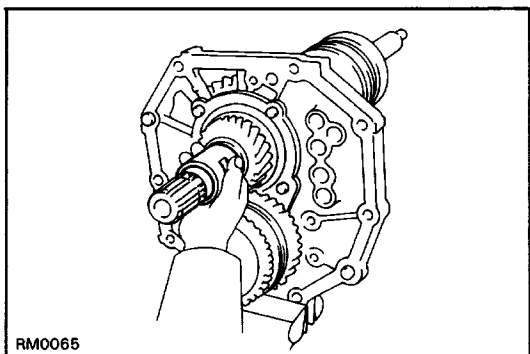


12. INSPECT COUNTER FIFTH GEAR THRUST CLEARANCE

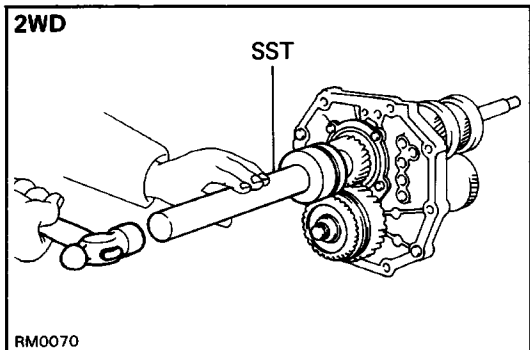
Using a feeler gauge, measure the counter 5th gear thrust clearance.

Standard clearance: 0.10 - 0.35 mm

(0.0039 - 0.0138 in.)



13. INSTALL SPACER



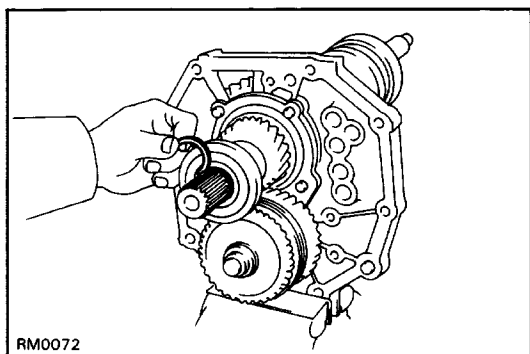
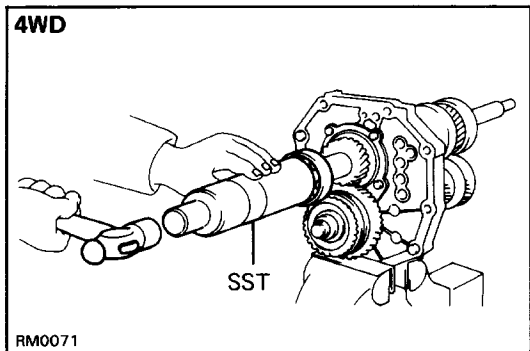
14. INSTALL OUTPUT SHAFT REAR BEARING

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

SST (2WD) 09309-35010

(4WD) 09316-60010

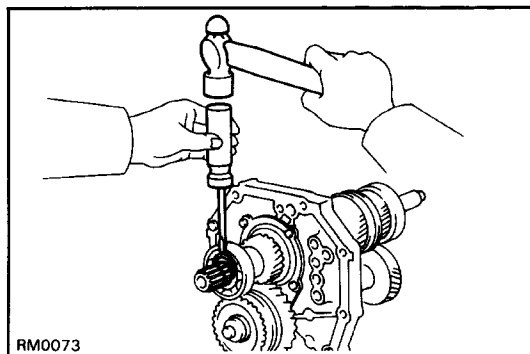
(09316-00010, 09316-00070)



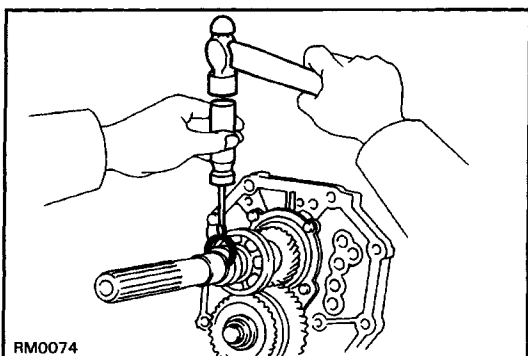
15. INSTALL SNAP RING

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

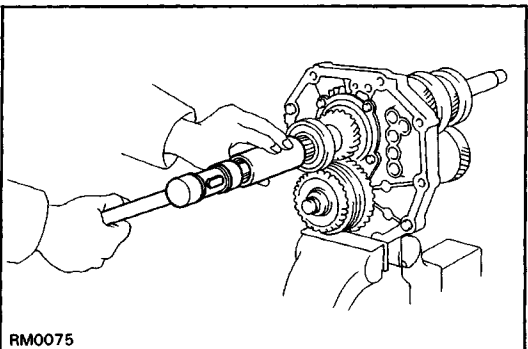
Mark	Thickness mm (in.)	Mark	Thickness mm (in.)
A	2.65 - 2.70 (0.1043 - 0.1063)	K	3.10 - 3.15 (0.1220 - 0.1240)
B	2.70 - 2.75 (0.1063 - 0.1083)	L	3.15 - 3.20 (0.1240 - 0.1260)
C	2.75 - 2.80 (0.1083 - 0.1102)	M	3.20 - 3.25 (0.1260 - 0.1280)
D	2.80 - 2.85 (0.1102 - 0.1122)	N	3.25 - 3.30 (0.1280 - 0.1299)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



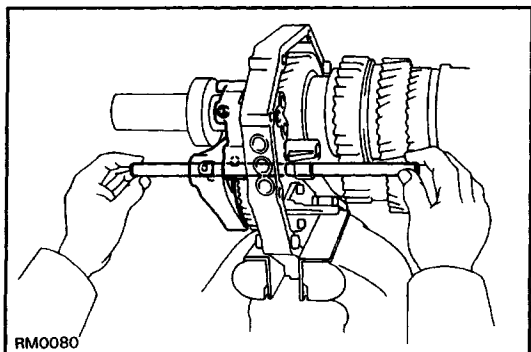
(b) Using a screwdriver and hammer, install the snap ring.

**16.–1(2WD)****INSTALL SPEEDOMETER DRIVE GEAR**

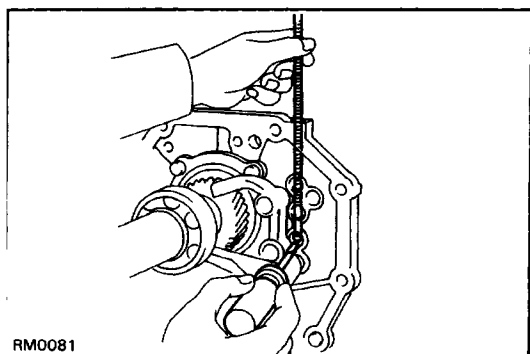
- (a) Using a screwdriver and hammer, install the front snap ring.
- (b) Install the ball and drive gear.
- (c) Using a screwdriver and hammer, install the rear snap ring.

**16.–2(4WD)****INSTALL SLEEVE TO OUTPUT SHAFT**

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

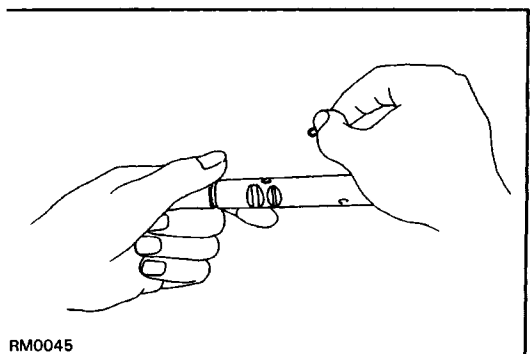
**17. INSTALL SHIFT FORK SHAFT NO.4, REVERSE SHIFT HEAD AND SHIFT FORK NO.3**

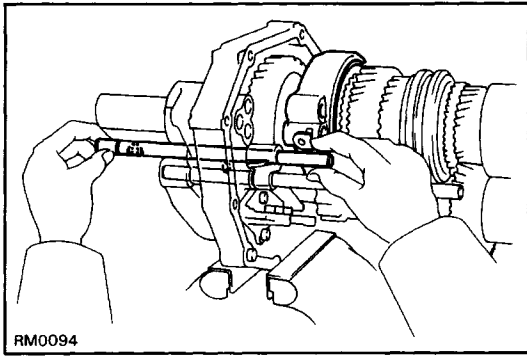
- (a) Place the shift fork No.3 into the groove of hub sleeve No. 3.
- (b) Install the shift fork shaft No.4 to shift fork No.3, reverse shift head and shift fork through the intermediate plate.
- (c) Install the locking ball into the reverse shift head.

**18. 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.

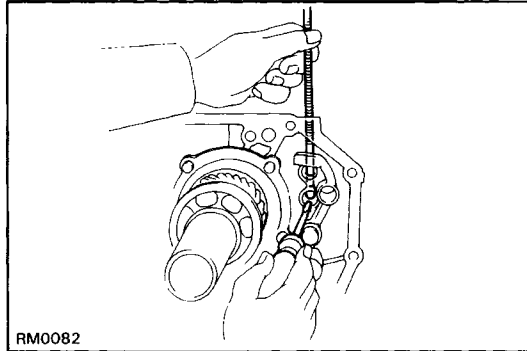
- (b) Install the interlock pin into the shaft hole.





RM0094

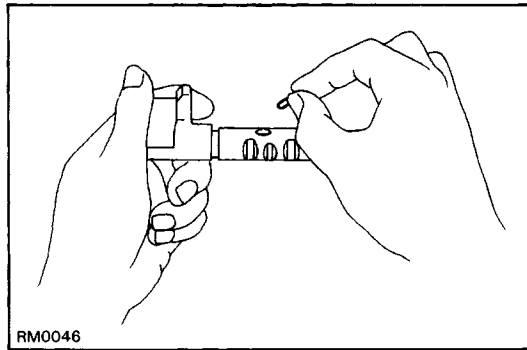
- (c) Place the shift fork No.1 into the groove of hub sleeve No. 1.
- (d) Install the fork shaft No.3 to the reverse shift fork and shift head through the intermediate plate.



RM0082

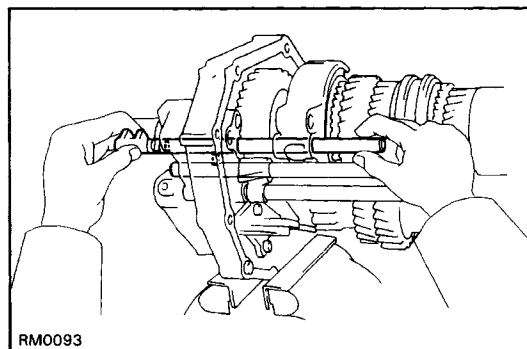
19. INSTALL SHIFT FORK SHAFT NO. 1

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



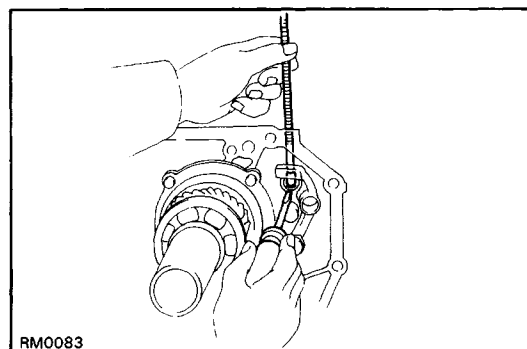
RM0046

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



RM0093

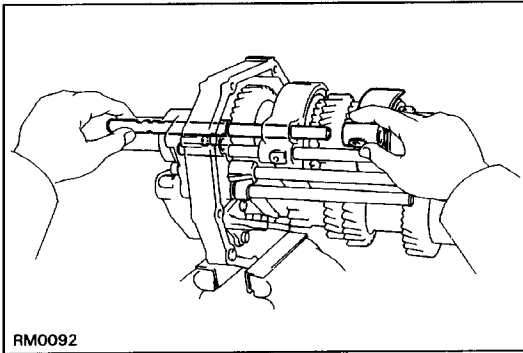
- (c) Install the fork shaft No. 1 to shift fork No. 1 through the intermediate plate.



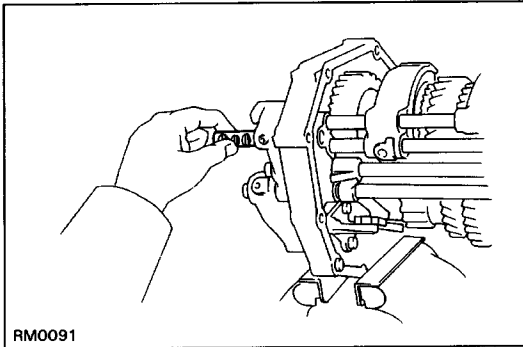
RM0083

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

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

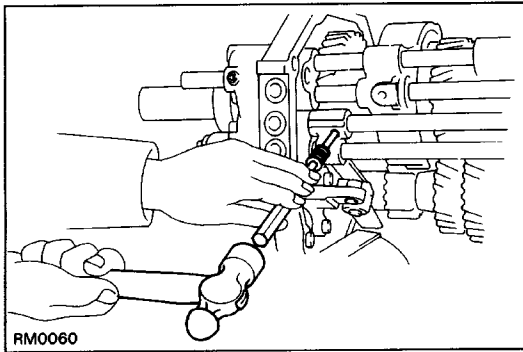


- (b) Place the shift fork No.2 into the groove of hub sleeve No.2.
- (c) Install fork shaft No.2 to shift fork No.1 and No.2 through the intermediate plate.



21. INSTALL SHIFT FORK SHAFT NO.5

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

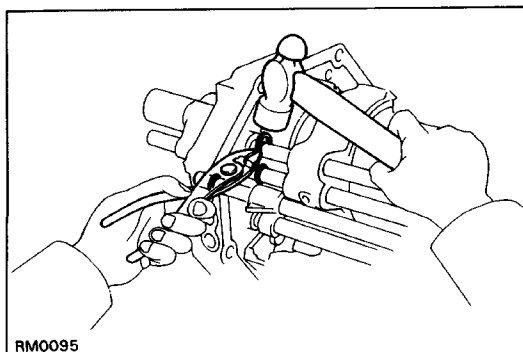


22. INSTALL SLOTTED SPRING PINS

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

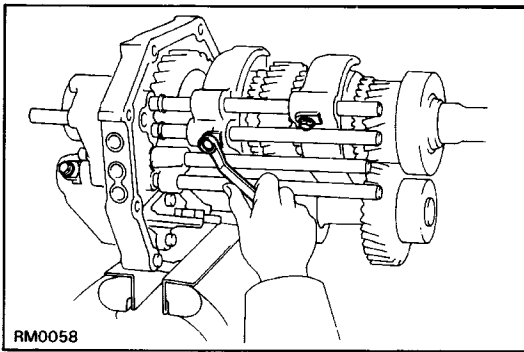
23. CHECK INTERLOCK

- (a) Shift fork shaft No. 1 to the 1 st speed position.
- (b) No.2, No.3, No.4 and No.5 fork shafts should not move.



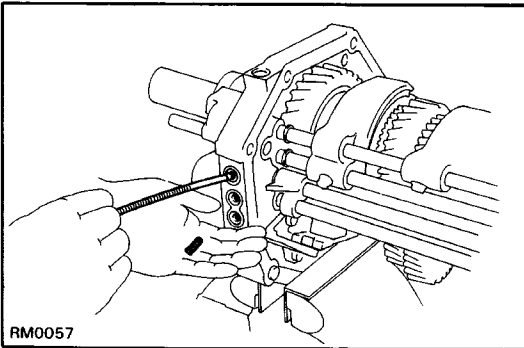
24. INSTALL SNAP RINGS

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

**25. INSTALL SET BOLTS**

Install and torque the three bolts.

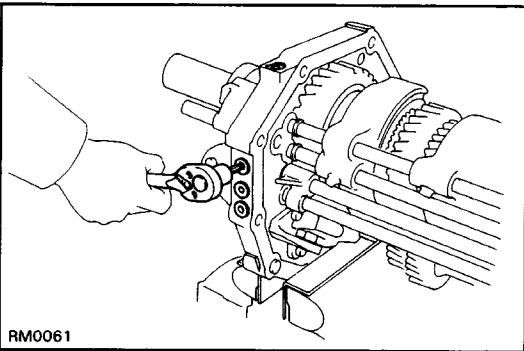
Torque: 20 N-m (200 kgf-cm, 14 ft-lbf)

**26. 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

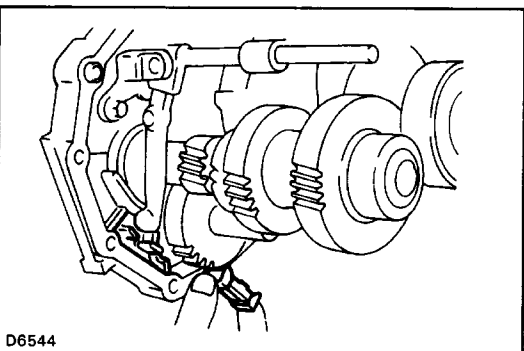
(b) Install the four locking balls, springs and screw plugs.



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

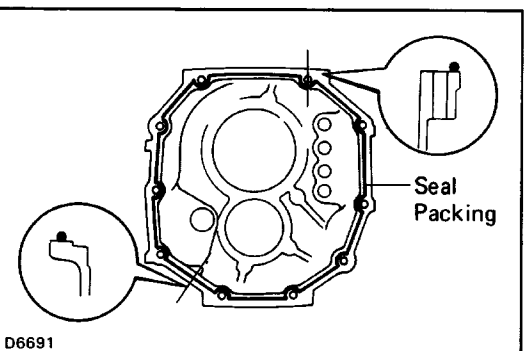
(Torx socket wrench T40 09042-00020)

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

**27. INSTALL MAGNET TO INTERMEDIATE PLATE****28. DISMOUNT INTERMEDIATE PLATE FROM VISE**

(a) Dismount the intermediate plate from the vise.

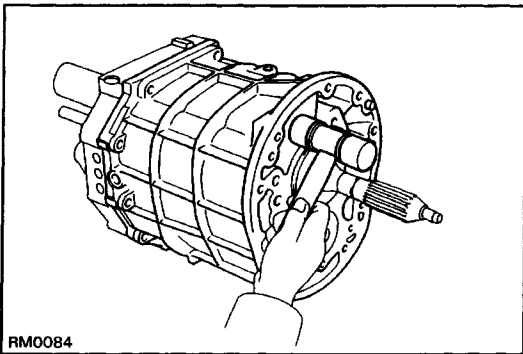
(b) Remove the bolts, nuts and plate washers.

**29. INSTALL TRANSMISSION CASE**

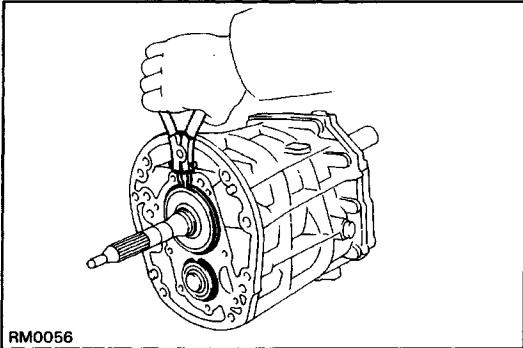
(a) Remove the any packing material and be careful not to drop oil on the contacting surfaces of the intermediate plate or transmission case.

(b) Apply seal packing to the transmission case as shown.

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

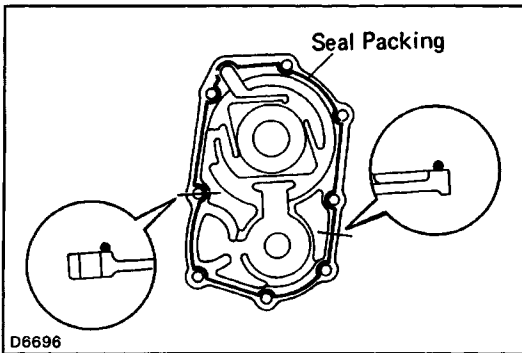


- (c) Align the each bearing outer race, each fork shaft end and reverse idler gear shaft end with the case installation holes, and install the case.
If necessary, tap on the case with a plastic hammer.



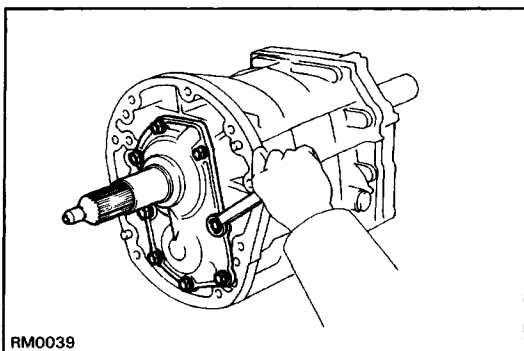
30. INSTALL BEARING SNAP RINGS

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

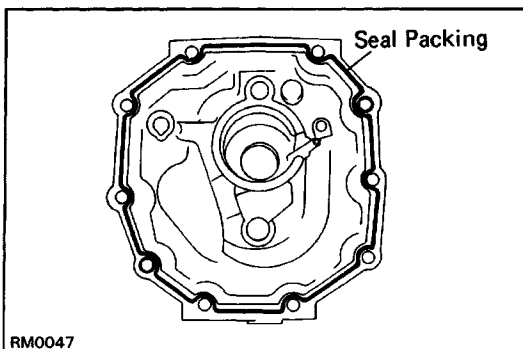


31. INSTALL FRONT BEARING RETAINER

- (a) Remove the any packing material and be careful not to drop oil on the contacting surfaces of the front bearing retainer or transmission case.
(b) Apply seal packing to the retainer as shown.
Seal packing: Part No. 08826-00090, THREE BOND 1281 or equivalent



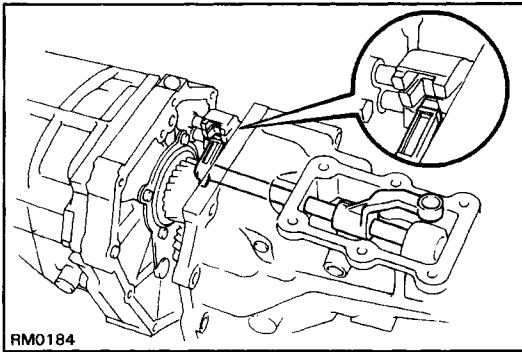
- (c) Apply liquid sealer to the bolt threads.
Sealant: Part No. 08833-00080, THREE BOND 1344, LOCTITE 242 or equivalent
(d) Install and torque the bolts.
Torque: 17 N – m (170 kgf – cm, 12 ft – lbf)



32.-1 (2WD)

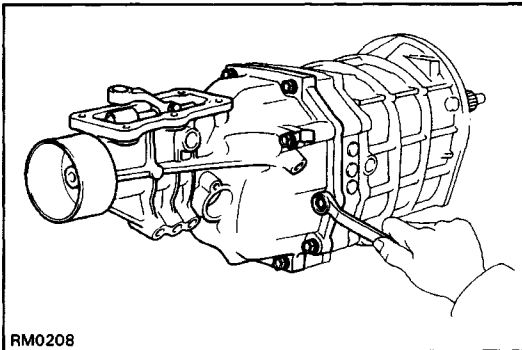
INSTALL EXTENSION HOUSING, SHIFT AND SELECT LEVER AND SHIFT LEVER HOUSING

- (a) Remove the any packing material and be careful not to drop oil on the contacting surfaces of the extension housing or transmission case.
(b) Apply seal packing to the extension housing as shown.
Seal packing: Part No. 08826-00090, THREE BOND 1281 or equivalent



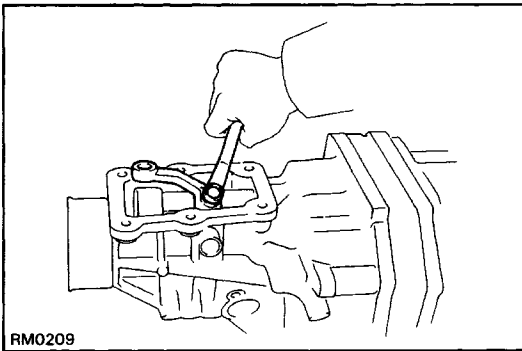
RM0184

- (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.



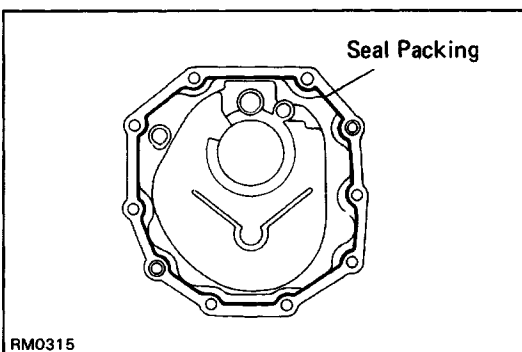
RM0208

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



RM0209

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

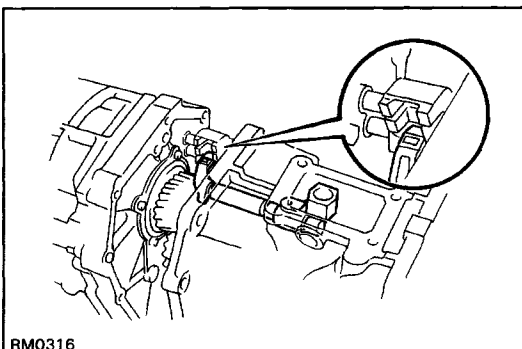


RM0315

32.-2(4WD)

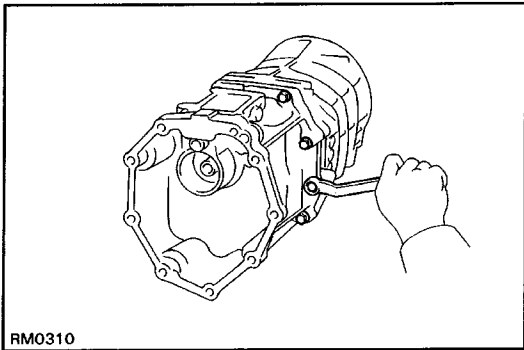
INSTALL TRANSFER ADAPTOR, SHIFT LEVER SHAFT AND SHIFT LEVER HOUSING

- (a) Remove the any packing material and be careful not to drop oil on the contacting surfaces of the transfer adaptor or transmission case.
- (b) Apply seal packing to the transfer adaptor as shown.
Seal packing: Part No. 08826-00090, THREE BOND 1281 or equivalent

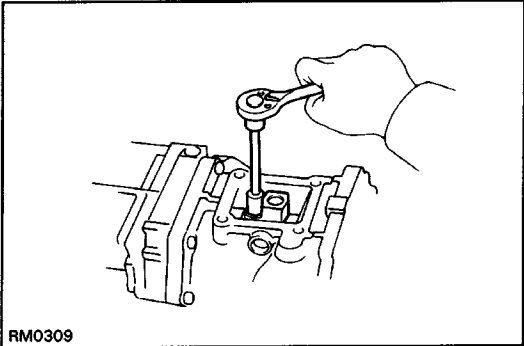


RM0316

- (c) Install the shift and select lever into the transfer adaptor.
- (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 transfer adaptor installation hole and push in the transfer adaptor.

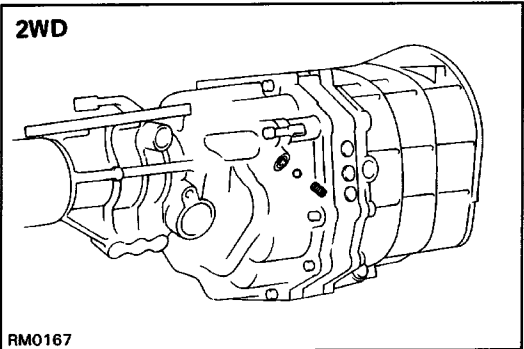


(f) Install and torque the bolts.
Torque: 37 N-m (380 kgf-cm, 27 ft-lbf)



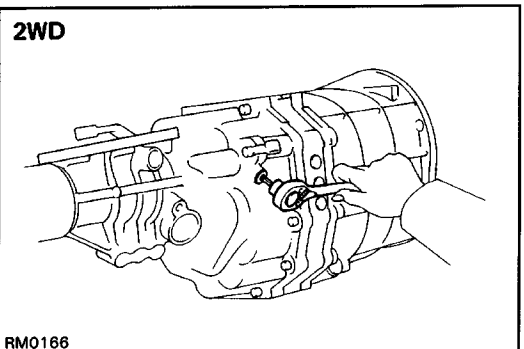
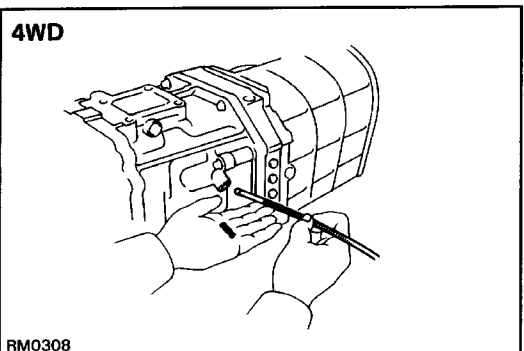
(g) Install and torque the shift lever housing bolt.
Torque: 38 N-m (390 kgf-cm, 28 ft-lbf)

(h) Apply liquid sealer to the plug threads.
Sealant: Part No. 08833-00080, THREE BOND 1344, LOCTITE 242 or equivalent

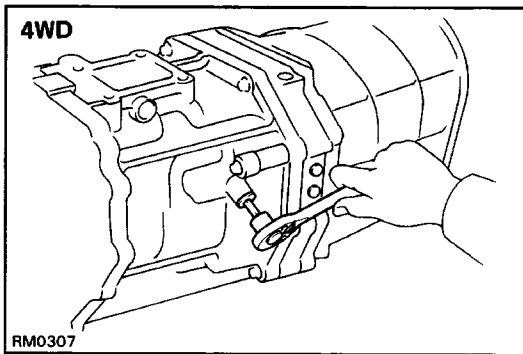


33. INSTALL LOCKING BALL, SPRING AND SCREW PLUG

(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.

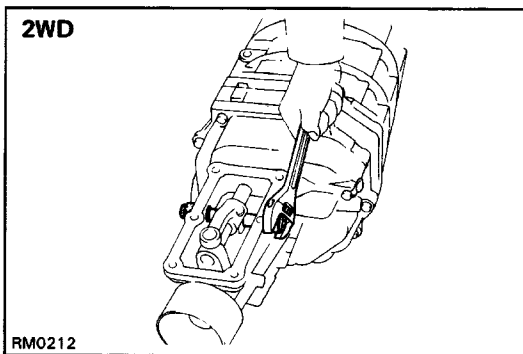


(c) Torque the plug.
 (Torx socket wrench T40 09042-00020)
Torque: 19 N - m (190 kgf - cm, 14 f t - lbf)



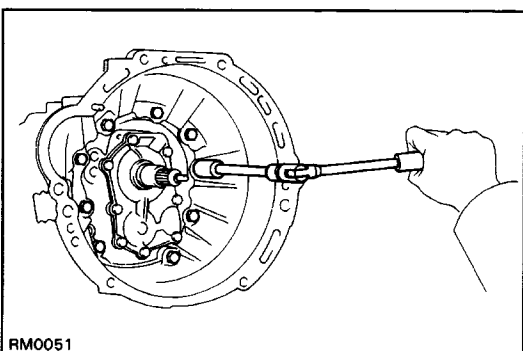
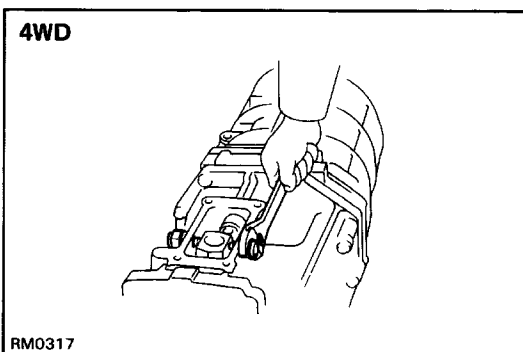
34. AFTER INSTALLING EXTENSION HOUSING OR TRANSFER ADAPTOR CHECK FOLLOWING ITEMS

- (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.



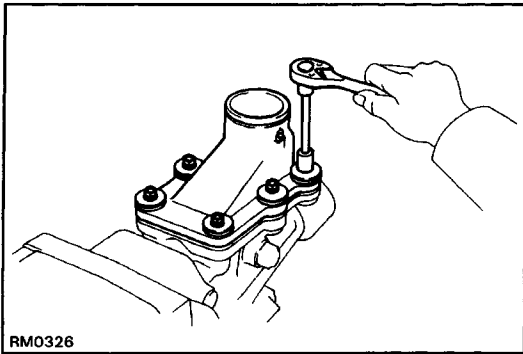
35. INSTALL RESTRICT PINS

- (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)

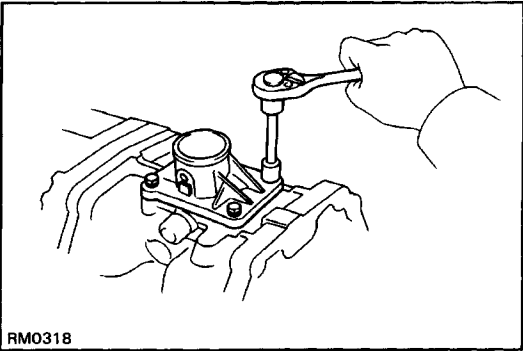


36. INSTALL CLUTCH HOUSING

- (a) Install the clutch housing.
- (b) Install and torque the nine bolts.
Torque: 36 N-m (370 kgf-cm, 27 ft-lbf)

**37.-1 (2WD)****INSTALL SHIFT LEVER RETAINER**

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

**37.-2(4WD)****INSTALL SHIFT LEVER RETAINERS WITH NEW GASKETS**

(a) Apply liquid sealer to the bolt threads.

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

(b) Install the torque the four bolts.

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

38. INSTALL BACK-UP LIGHT SWITCH

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

39. (2WD)**INSTALL SPEEDOMETER DRIVEN GEAR**

(a) Install speedometer driven gear and lock plate.

(b) Install and torque the bolt.

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

40. INSTALL RELEASE FORK AND BEARING

(See page [CL-14](#))