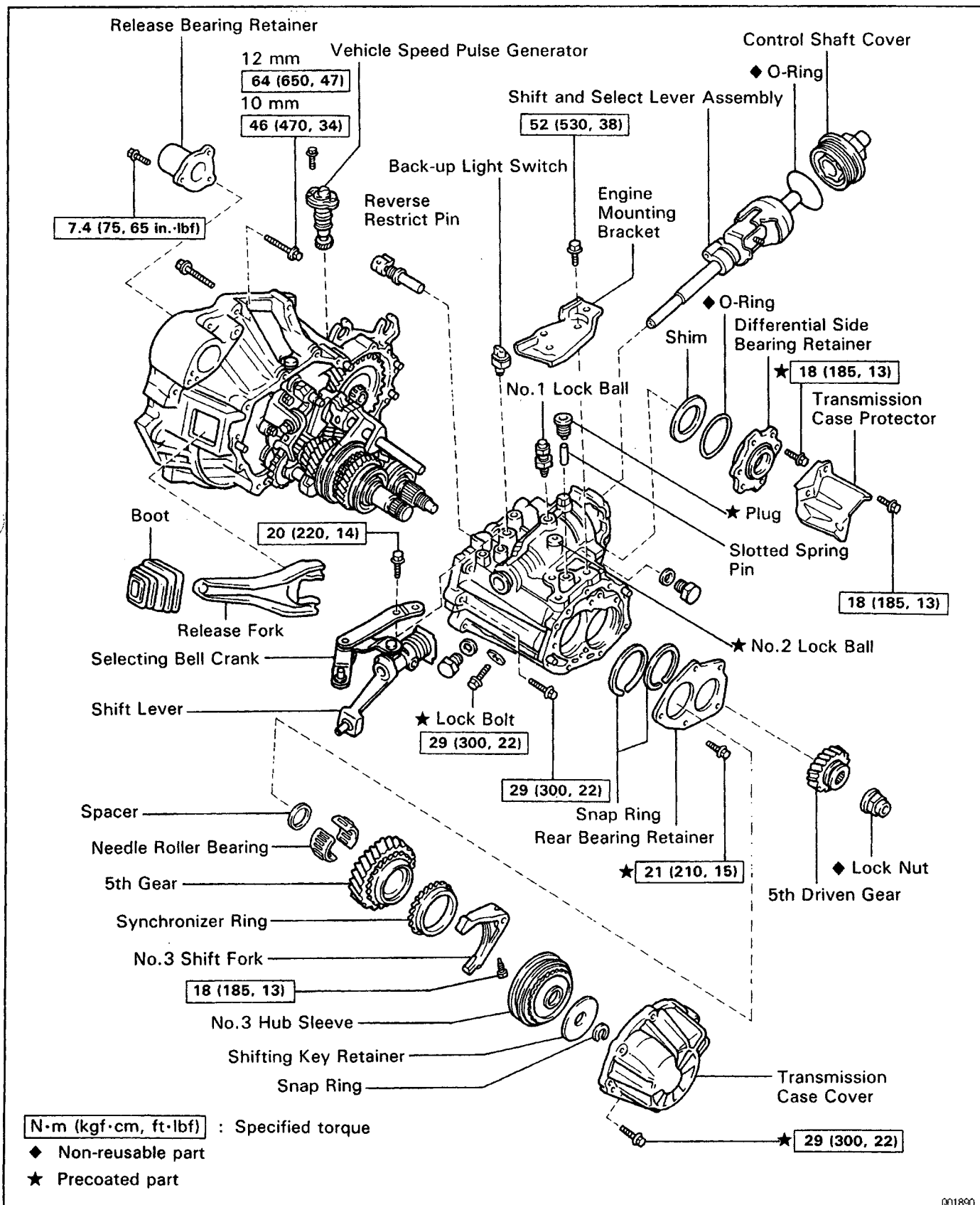
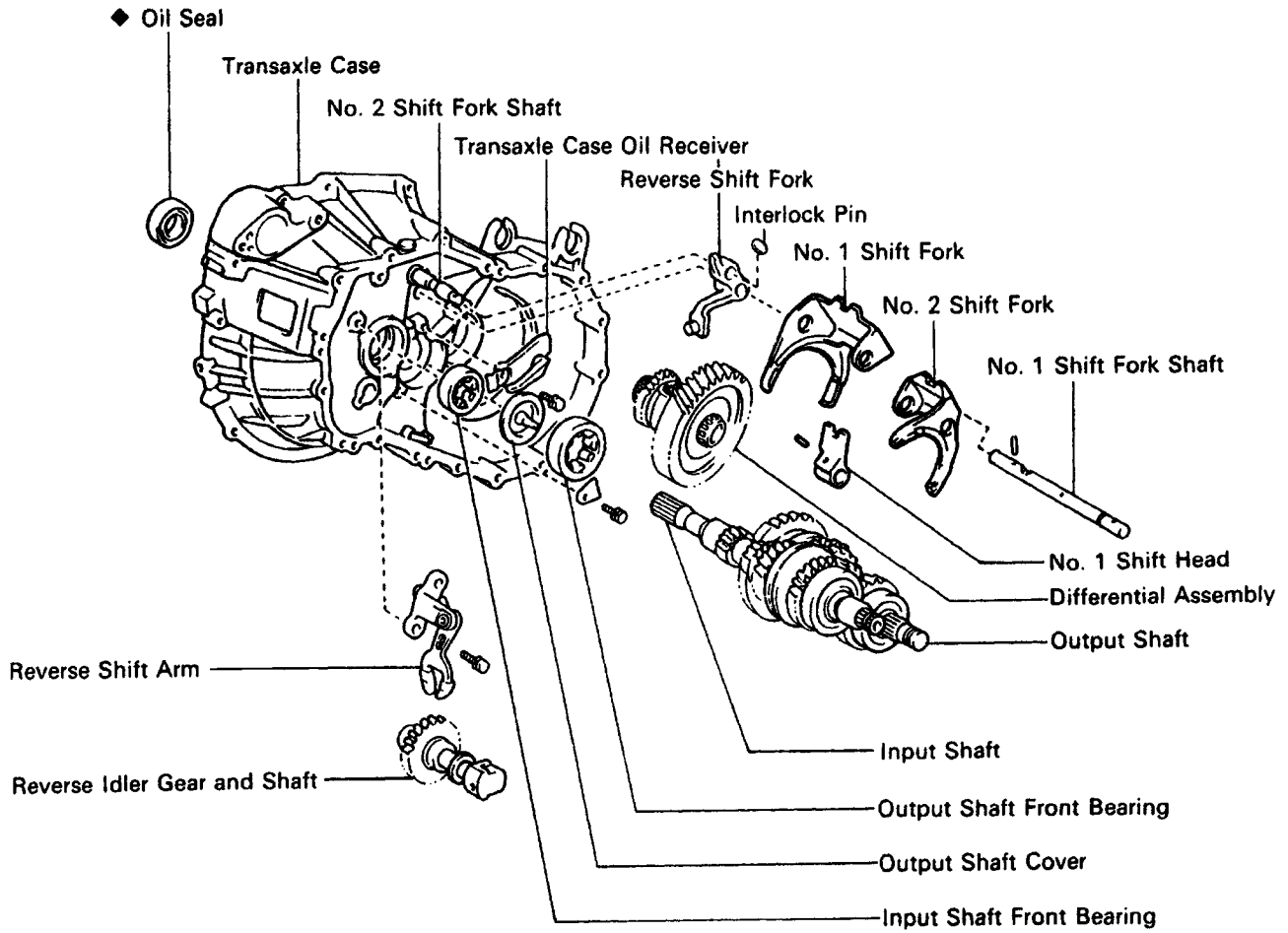
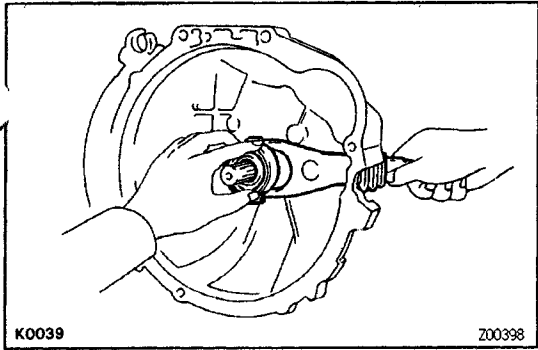


COMPONENT PARTS REMOVAL COMPONENTS



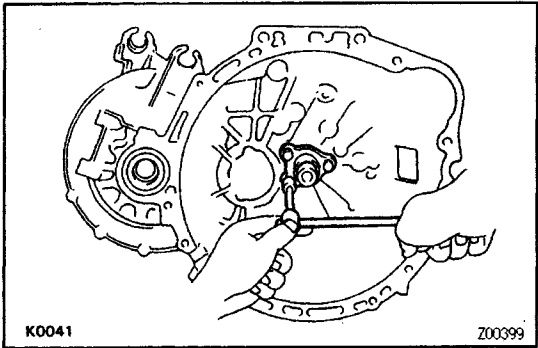


◆ Non-reusable part

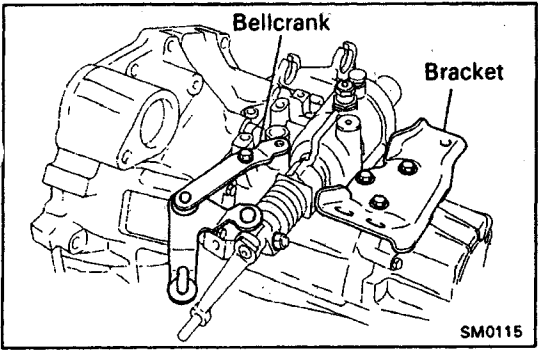


BASIC SUBASSEMBLY SEPARATION
 (See page **MX1-19** and **MX1-20**)

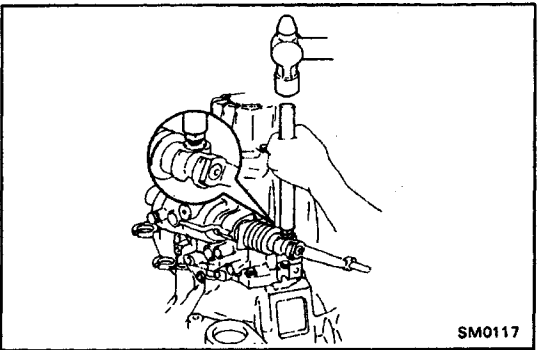
1. REMOVE RELEASE FORK, BEARING BACK – UP LIGHT SWITCH AND VEHICLE SPEED PULSE GENERATOR



2. REMOVE RELEASE BEARING RETAINER

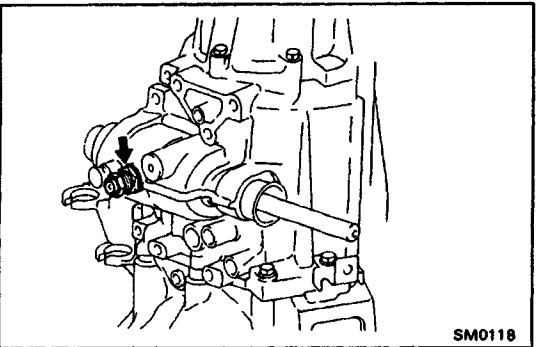


3. REMOVE SELECTING BELLCRANK AND ENGINE MOUNT BRACKET



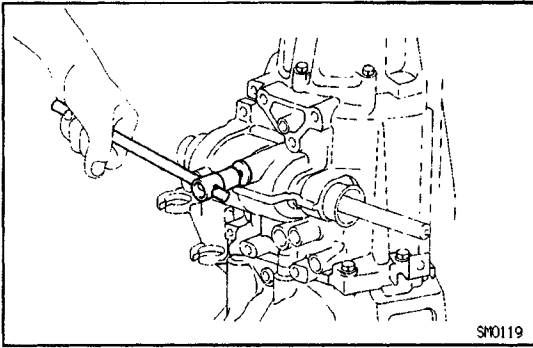
4. REMOVE SHIFT LEVER

- (a) Loosen the lock nut as far as the tip of the lock pin.
- (b) Using a brass bar and hammer, tap out the lock pin.
- (c) Pull out the shift lever with dust boot from shift and select lever shaft.

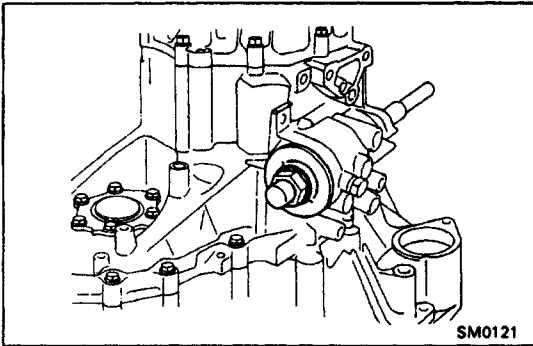


5. REMOVE NO.1 AND NO.2 LOCK BALL ASSEMBLIES

- (a) Loosen the lock nut and remove the No. 1 lock ball.

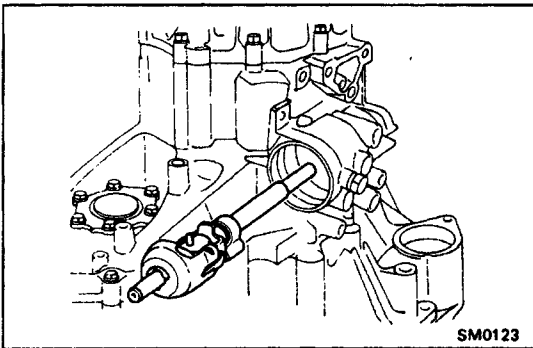


- (b) Using a hexagon wrench (6 mm), remove the No.2 lock ball.

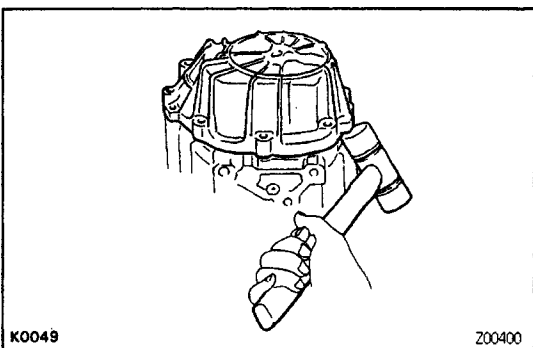


6. REMOVE SHIFT AND SELECT LEVER SHAFT ASSEMBLY

- (a) Remove the control shaft cover.
 (b) Remove the O-ring from control shaft cover.

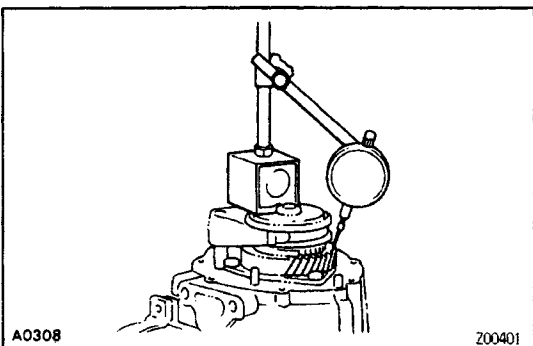


- (c) Pull out the shift and select lever shaft assembly.



7. REMOVE TRANSMISSION CASE COVER

- (a) Remove the eight bolts.
 (b) Using a plastic hammer, tap off the transmission case cover.



8. INSPECT FIFTH GEAR THRUST CLEARANCE

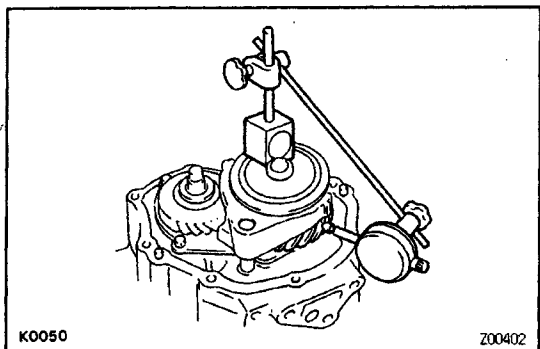
Using a dial indicator, measure the thrust clearance.

Standard clearance:

0.20–0.40 mm (0.0079–0.0157 in.)

Maximum clearance:

0.45 mm (0.0177 in.)



9. INSPECT FIFTH GEAR OIL CLEARANCE

Using a dial indicator, measure the oil clearance.

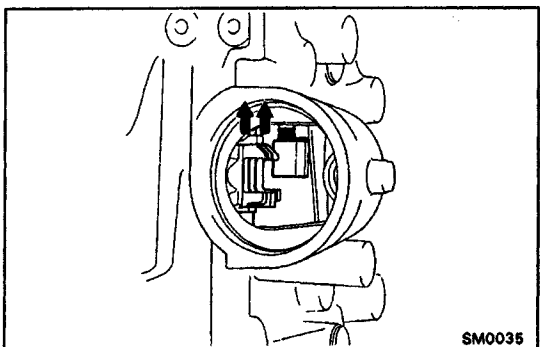
Standard clearance:

0.009–0–050 mm (0.0004–0.0020 in.)

Maximum clearance:

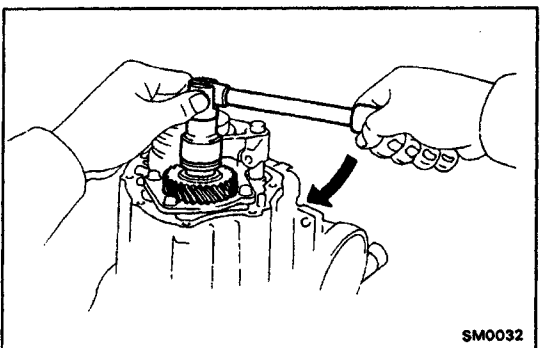
0.07 mm (0.0028 in.)

If the clearance exceeds the maximum, replace the gear, needle roller bearing or input shaft.



10. REMOVE OUTPUT SHAFT LOCK NUT

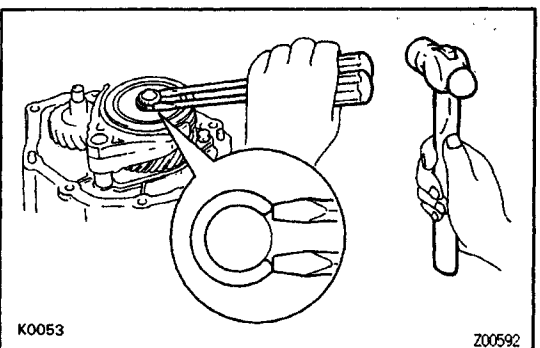
- (a) Unstake the nut.
- (b) Engage the gear double meshing.



- (e) Remove the lock nut clockwise and remove it.

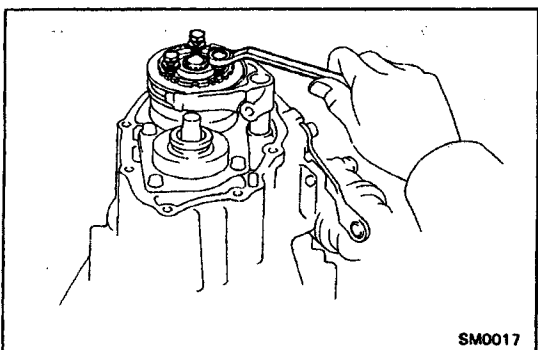
HINT: The lock nut has LH threads.

- (d) Disengage the gear double meshing.



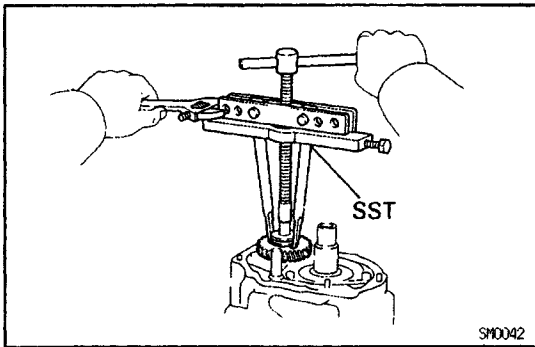
11. REMOVE NO.3 HUB SLEEVE ASSEMBLY AND NO.3 SHIFT FORK

- (a) Using two screwdrivers and a hammer, tap out the snap ring.
- (b) Remove the shifting key retainer.
- (c) Remove the bolt from the No.3 shift fork.

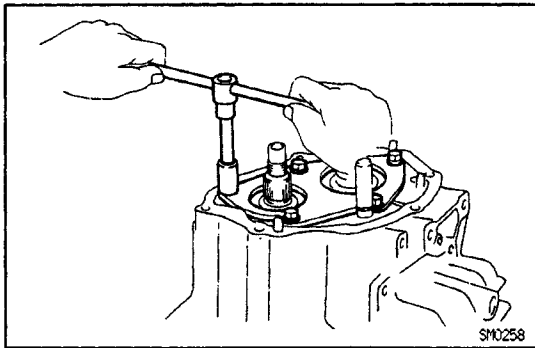
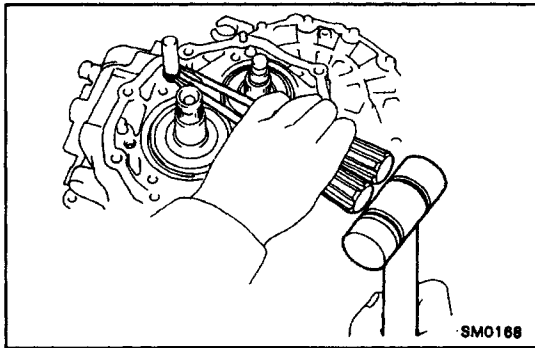


- (d) Using— the three case cover set bolts, tighten the three bolts a little at a time and remove the No.3 hub sleeve assembly and shift fork.

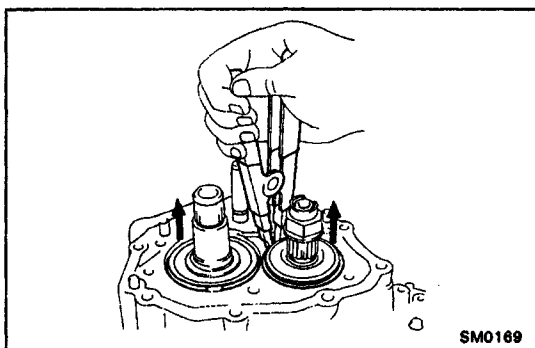
12. REMOVE FIFTH GEAR, SYNCHRONIZER RING, NEEDLE ROLLER BEARINGS AND SPACER

**13. REMOVE FIFTH DRIVEN GEAR**

Using SST, remove the 5th driven gear.
SST 09950-20017

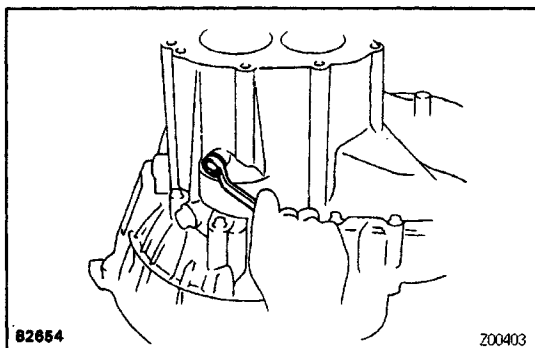
**14. REMOVE REAR BEARING RETAINER****15. REMOVE SNAP RING FROM NO. 1 SHIFT FORK SHAFT**

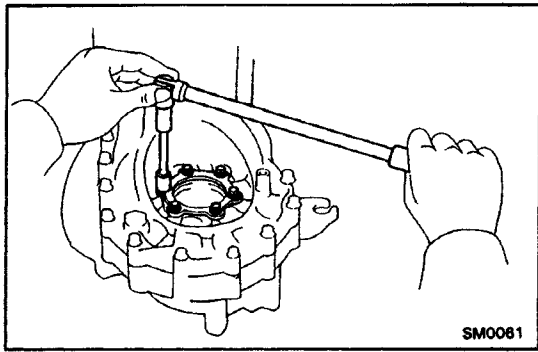
Using two screwdrivers and a hammer, tap out the snap ring.

**16. REMOVE BEARING SNAP RINGS**

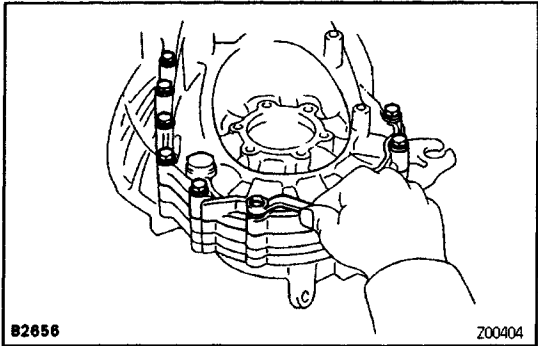
Using a snap ring expander, remove the two snap rings.

HINT: If it is difficult to remove the snap rings, pull up the shafts.

**17. REMOVE REVERSE IDLER GEAR SHAFT LOCK BOLT**

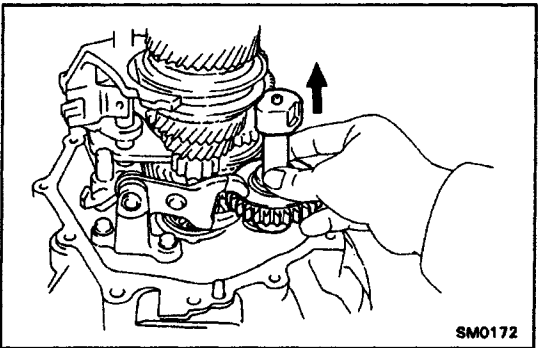


18. REMOVE DIFFERENTIAL SIDE BEARING RETAINER AND SHIM



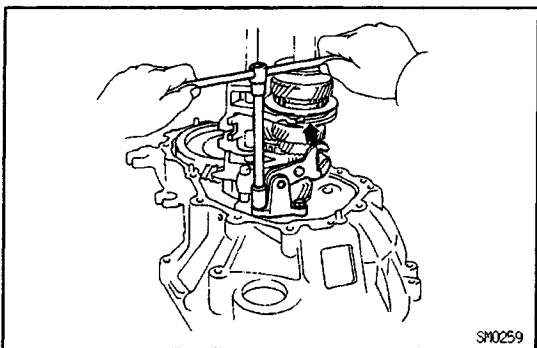
19. REMOVE TRANSMISSION CASE

- (a) Remove the seventeen bolts.
- (b) Using a plastic hammer, tap off the transmission case.



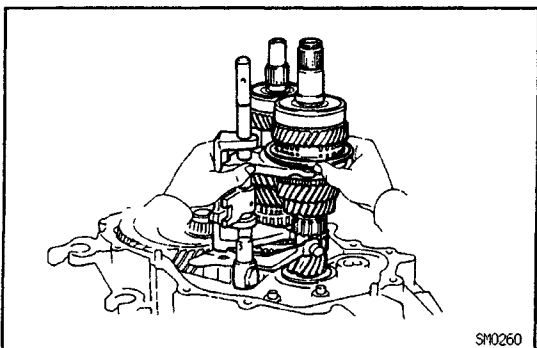
20. REMOVE REVERSE IDLER GEAR AND SHAFT

- (a) Pull out the shaft.
- (b) Remove the idler gear and thrust washer.



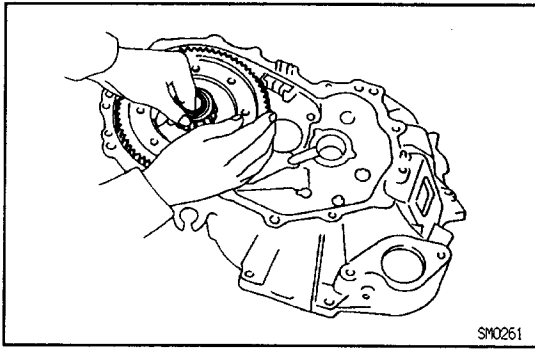
21. REMOVE REVERSE SHIFT ARM

- (a) Shift the fork shaft into reverse.
- (b) Remove the two bolts and pull off the reverse shift arm.

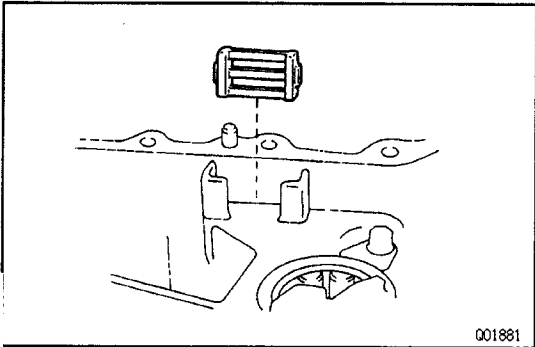


22. REMOVE NO.1 SHIFT FORK SHAFT, NO.1 SHIFT HEAD, NO.1 AND NO.2 SHIFT FORKS, REVERSE SHIFT FORK WITH INTERLOCK PIN, INPUT AND OUTPUT SHAFTS ASSEMBLY

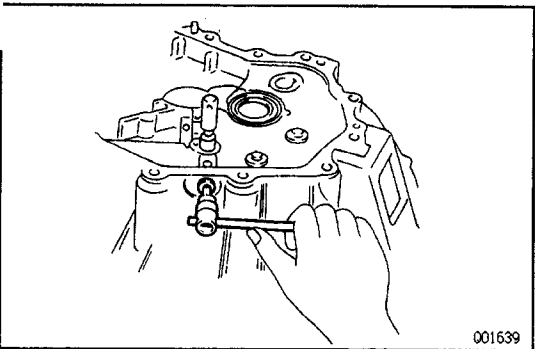
Remove the input shaft assembly and output shaft assembly together with the No. 1 fork shaft, shift head and shift forks with the interlock pin from the trans-axle case.



23. REMOVE DIFFERENTIAL CASE ASSEMBLY

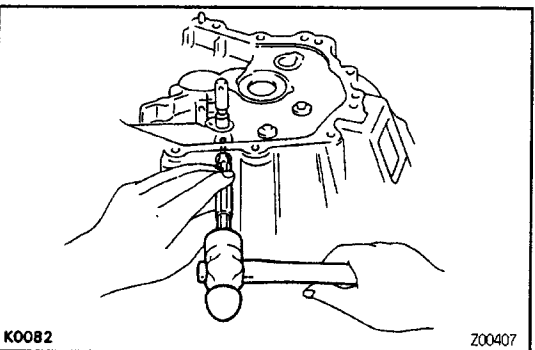


24. REMOVE MAGNET FROM TRANSAXLE CASE



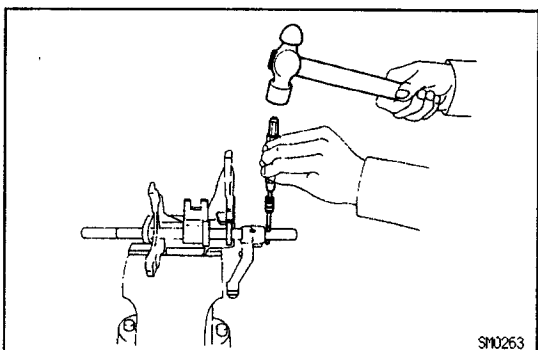
25. REMOVE NO.2 FORK SHAFT

- (a) Using a hexagon wrench (6 mm), remove the straight screw plug.



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

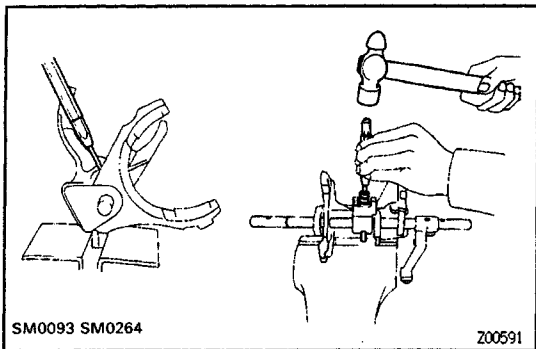
- (c) Pull out the shaft.



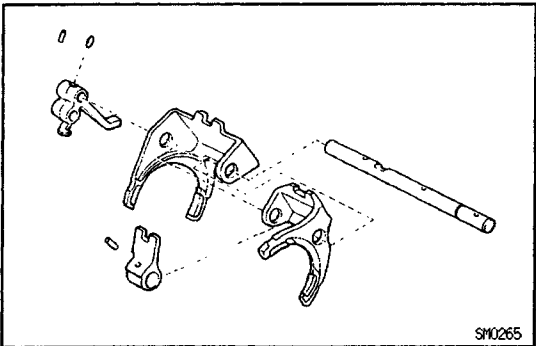
26. SEPARATE NO.1 FORK SHAFT, NO.1 SHIFT HEAD, NO.1, NO.2 SHIFT FORKS AND REVERSE SHIFT FORK

- (a) Mount the shift forks to the vise.

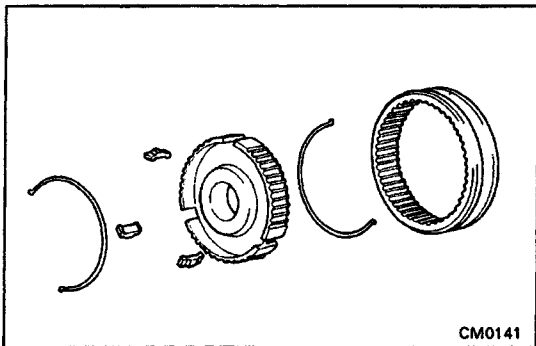
- (b) Using a pin punch and hammer, drive out the slotted spring pin from the No.1 fork shaft.



- (c) Using a pin punch and hammer, drive out the slotted spring pin from the No.1 fork shaft as shown in the figure.

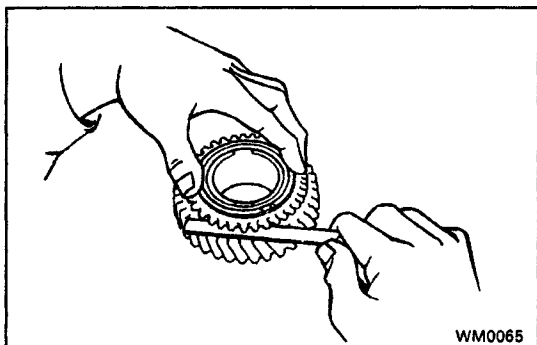
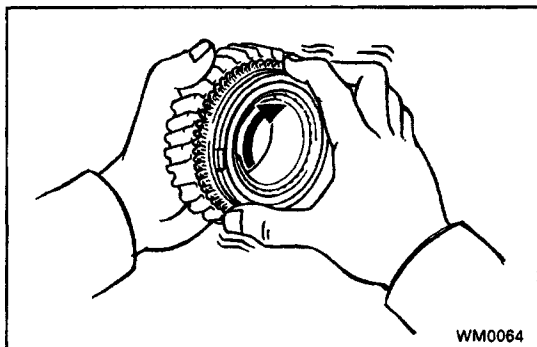


- (d) Separate the No.1 shift fork shaft, No.1 shift head, No.1, No.2 shift forks and reverse shift fork.



27. REMOVE NO.3 HUB SLEEVE, SHIFTING KEYS AND SPRINGS FROM NO-3 CLUTCH HUB

Using a screwdriver, remove the three shifting keys and two springs from the No.3 clutch hub.



COMPONENT PARTS INSPECTION

1. INSPECT SYNCHRONIZER RING OF FIFTH GEAR

- (a) Check for wear or damage.
- (b) Check the braking effect of the synchronizer ring.
Turn the synchronizer ring in one direction while pushing it to the gear cone and check that the ring is locked.
If the braking effect is insufficient, lightly rub the synchronizer ring and gear cone by applying a small amount of fine lapping compound.

NOTICE:

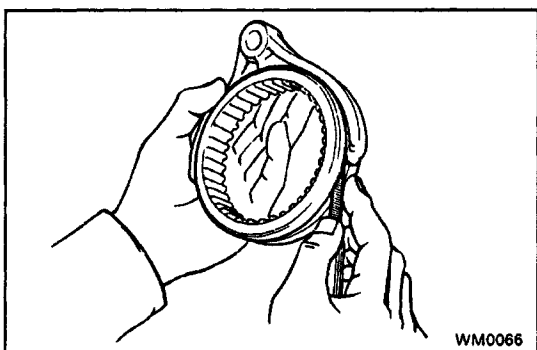
- Wash off completely the fine lapping compound after rubbing.
 - Check again the braking effect of the synchronizer ring.
- (c) Using a feeler gauge, measure the clearance between the synchronizer ring back and the gear spline end.

Minimum clearance:

0.6 mm (0.024 in.)

If the clearance is less than the minimum, replace the synchronizer ring and gear cone by applying a small amount of fine lapping compound.

NOTICE: Wash off completely the fine lapping compound after rubbing.



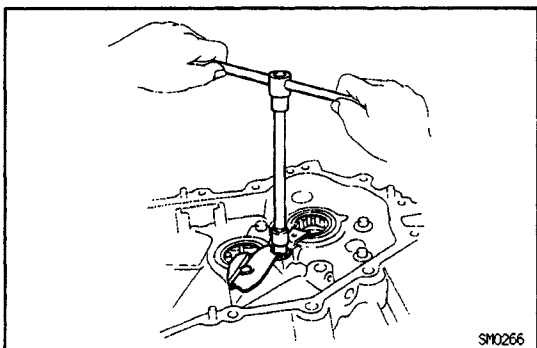
2. INSPECT CLEARANCE OF N4.3 SHIFT FORK AND NO.3 HUB SLEEVE

Using a feeler gauge, measure the clearance between the hub sleeve and shift fork.

Maximum clearance:

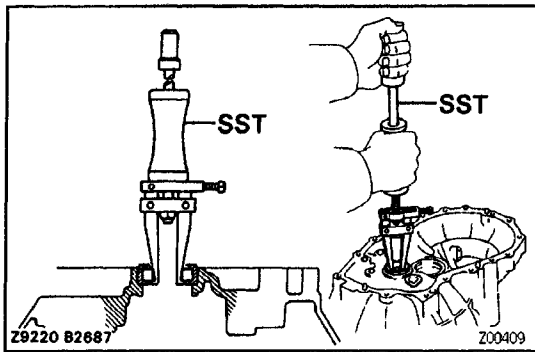
1.0 mm (0.039 in.)

If the clearance exceeds the maximum, replace the shift fork or hub sleeve.

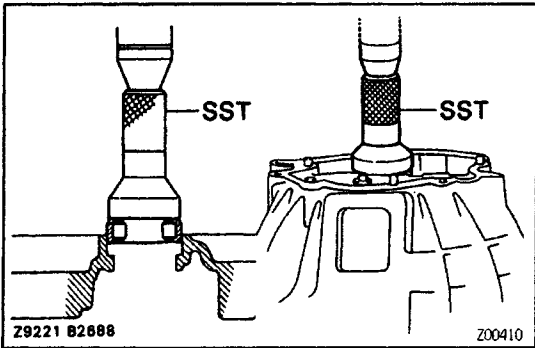


3. IF NECESSARY, REPLACE INPUT SHAFT FRONT BEARING

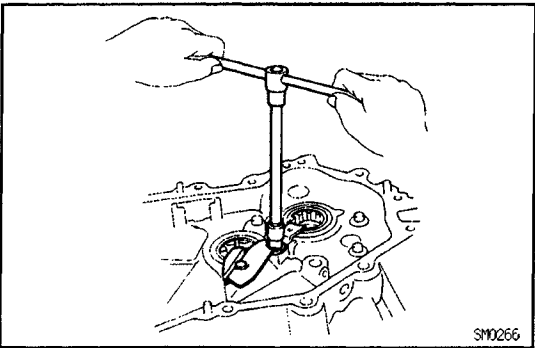
- (a) Remove the bolt and transaxle case receiver.



- (b) Using SST; pull out the bearing.
SST 09308-00010

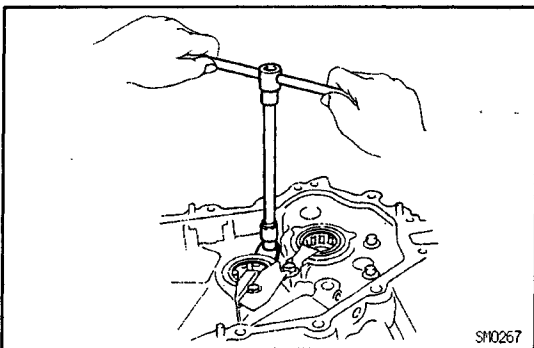


- (c) Using SST, press in a new bearing.
SST 09310-35010



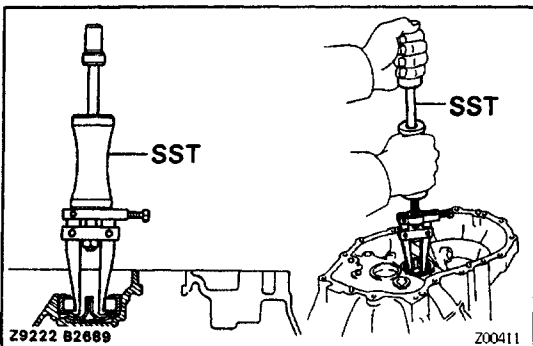
- (d) Install the transaxle case receiver and torque the bolt.

Torque: 7.4 N-m (75 kgf-cm, 65 in.lbf)

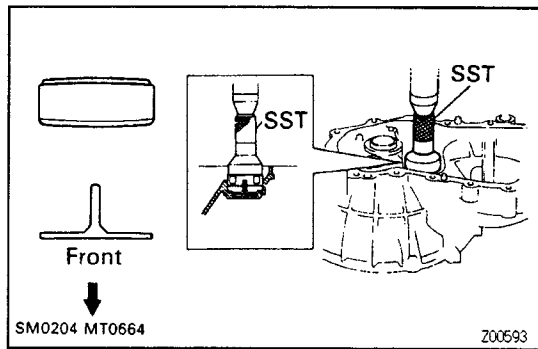


4. IF NECESSARY. REPLACE OUTPUT SHAFT FRONT BEARING

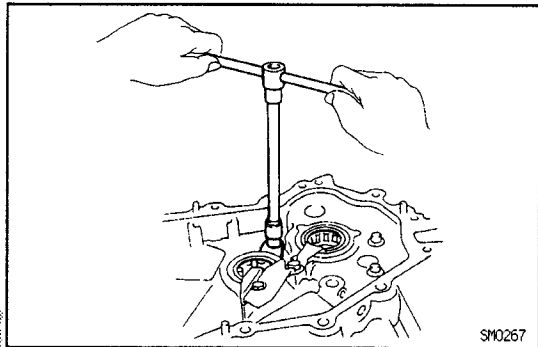
- (a) Remove the bolt and bearing lock plate.



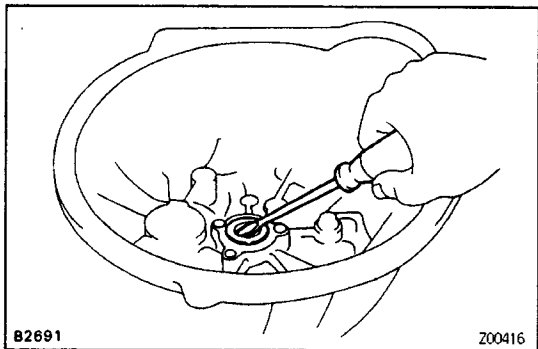
- (b) Using SST, pull out the bearing.
SST 09308-00010



- (c) Using SST, press in a new bearing.
SST 09310-35010

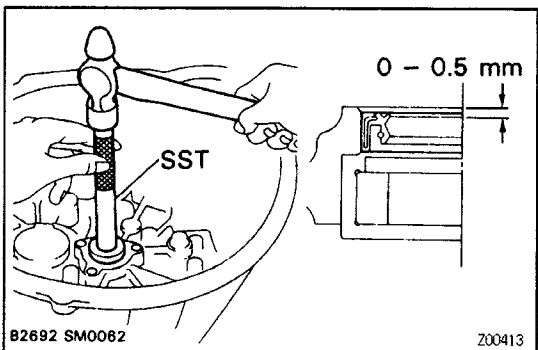


- (d) Install the bearing lock plate and torque the bolt.
Torque: 18 N·m (185 kgf·cm, 13 ft·lbf)



5. IF NECESSARY, REPLACE INPUT SHAFT FRONT OIL SEAL

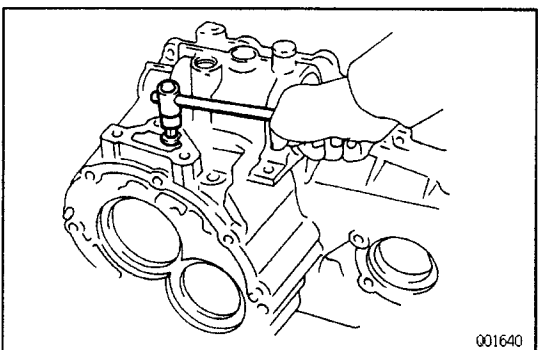
- (a) Using a screwdriver, pry out the oil seal.



- (b) Using SST, drive in a new oil seal.
SST 09608-20012 (09608-00080, 09608-03020)

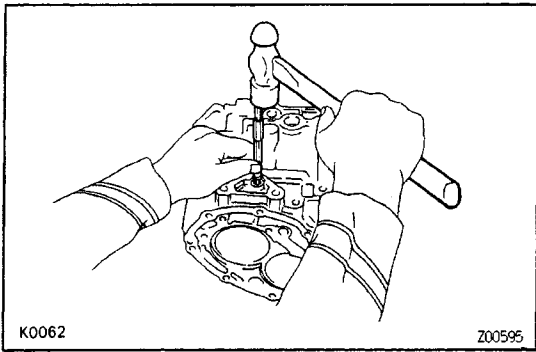
Drive in depth:
0-0.5 mm (0-0.012 in.)

- (c) Coat the lip of the oil seal with MP grease.

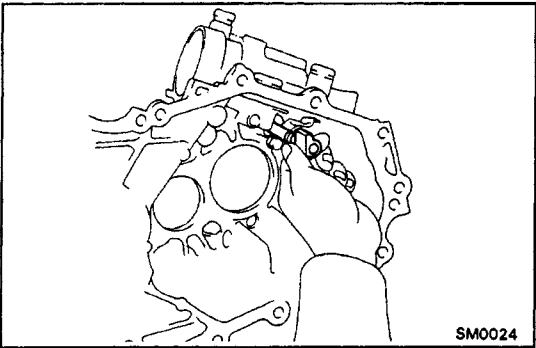


6. IF NECESSARY, REPLACE REVERSE RESTRICT PIN

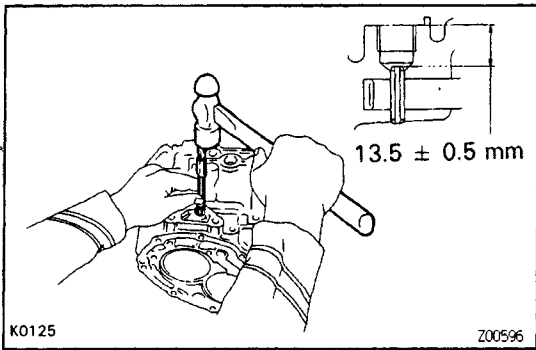
- (a) Using a hexagon wrench (6 mm), remove the straight screw plug.



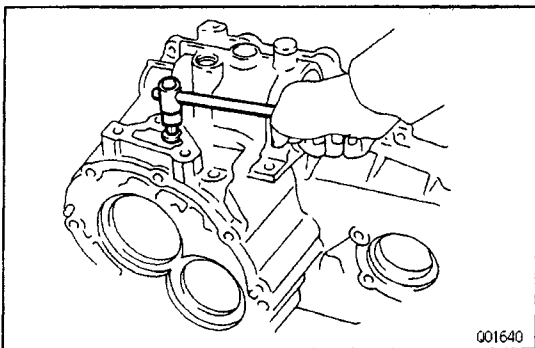
(b) Using a pin punch and hammer, drive out the slotted spring pin.



(c) Replace the reverse restrict pin.



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



(e) Apply sealant to the plug threads.

Sealant:

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

(f) Using a hexagon wrench (6 mm), install and torque the straight screw plug.

Torque: 13 N-m (130 kgf-cm, 9 ft-lbf)