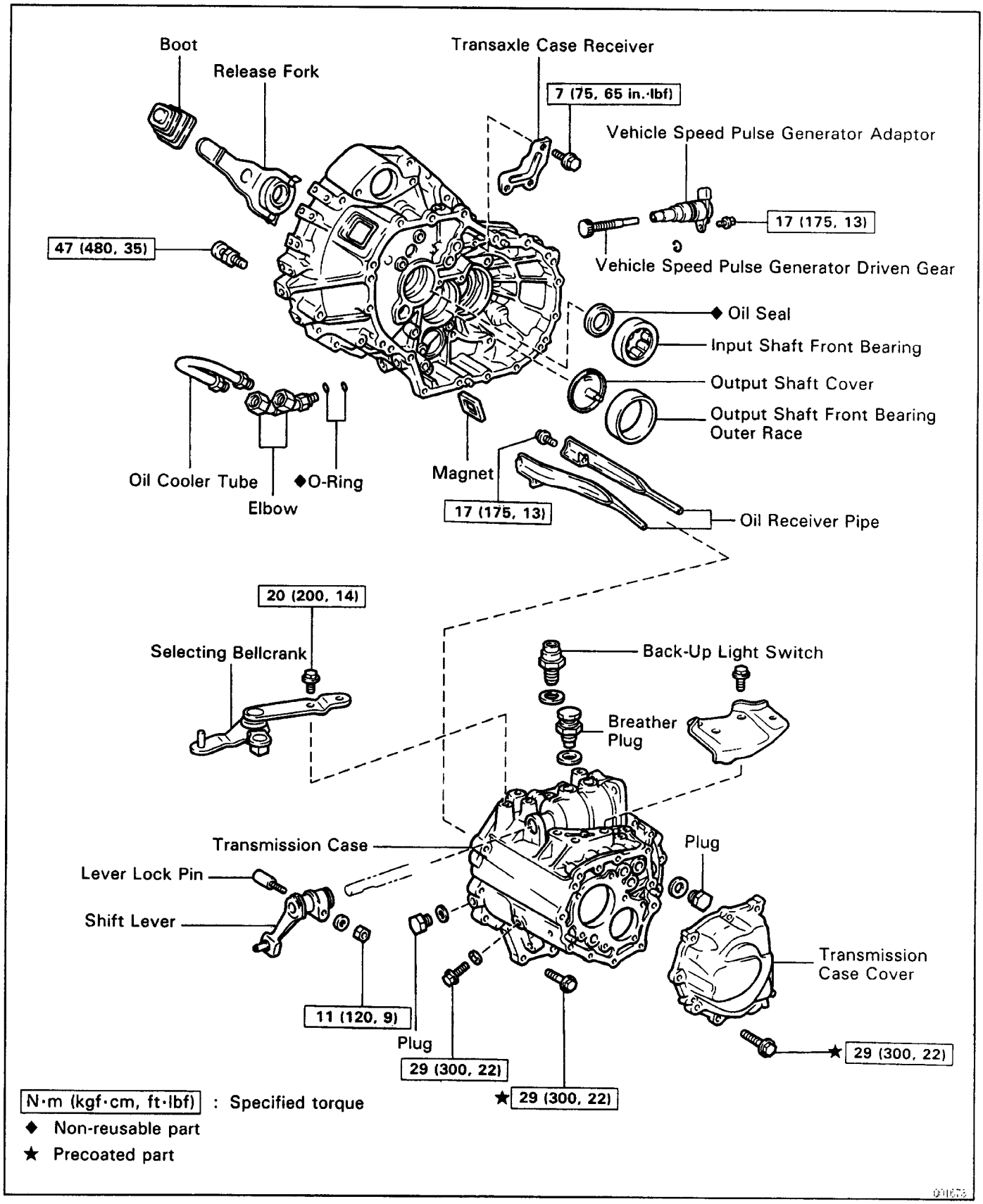
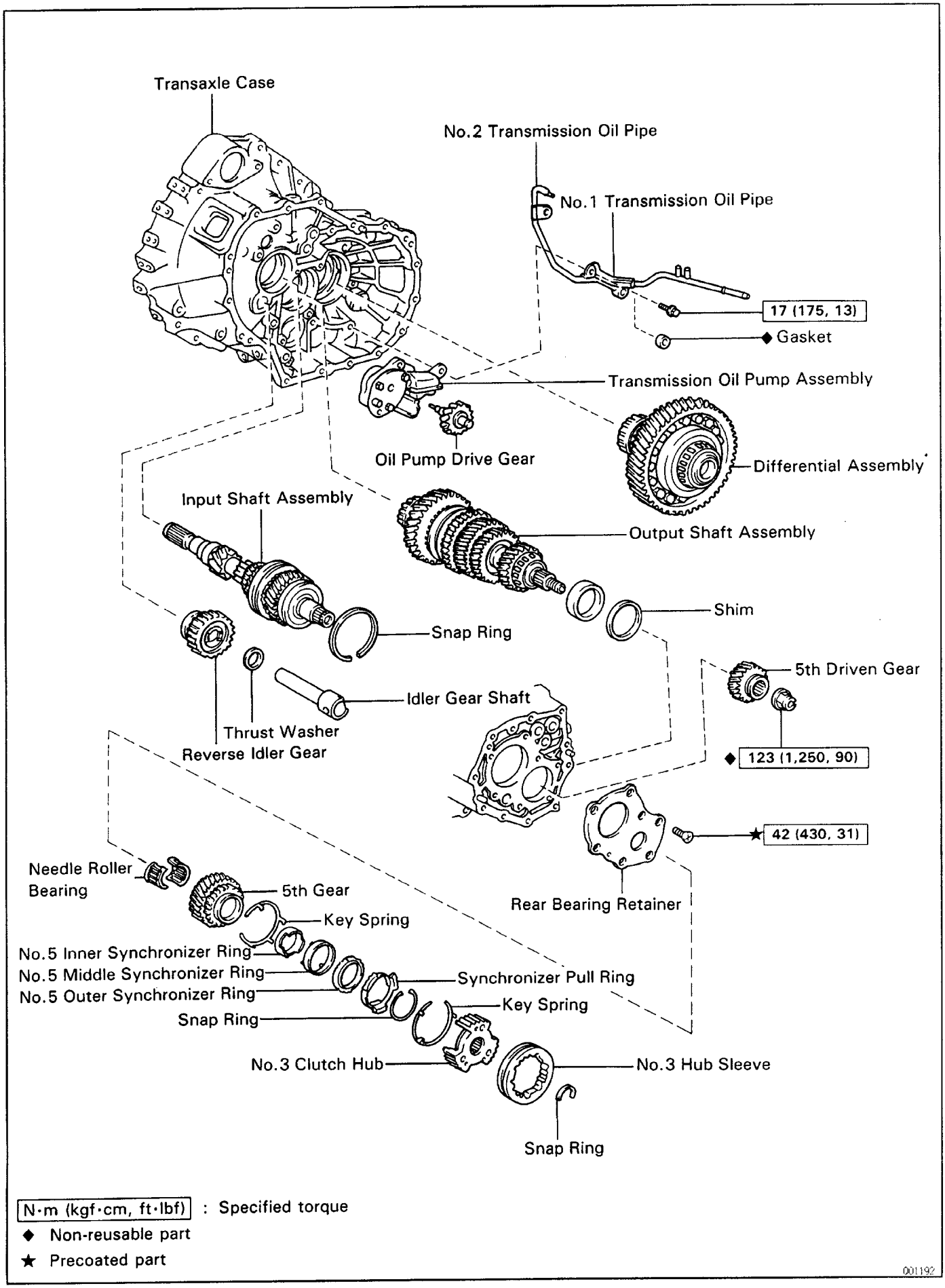
COMPONENT PARTS REMOVAL

MX014–02

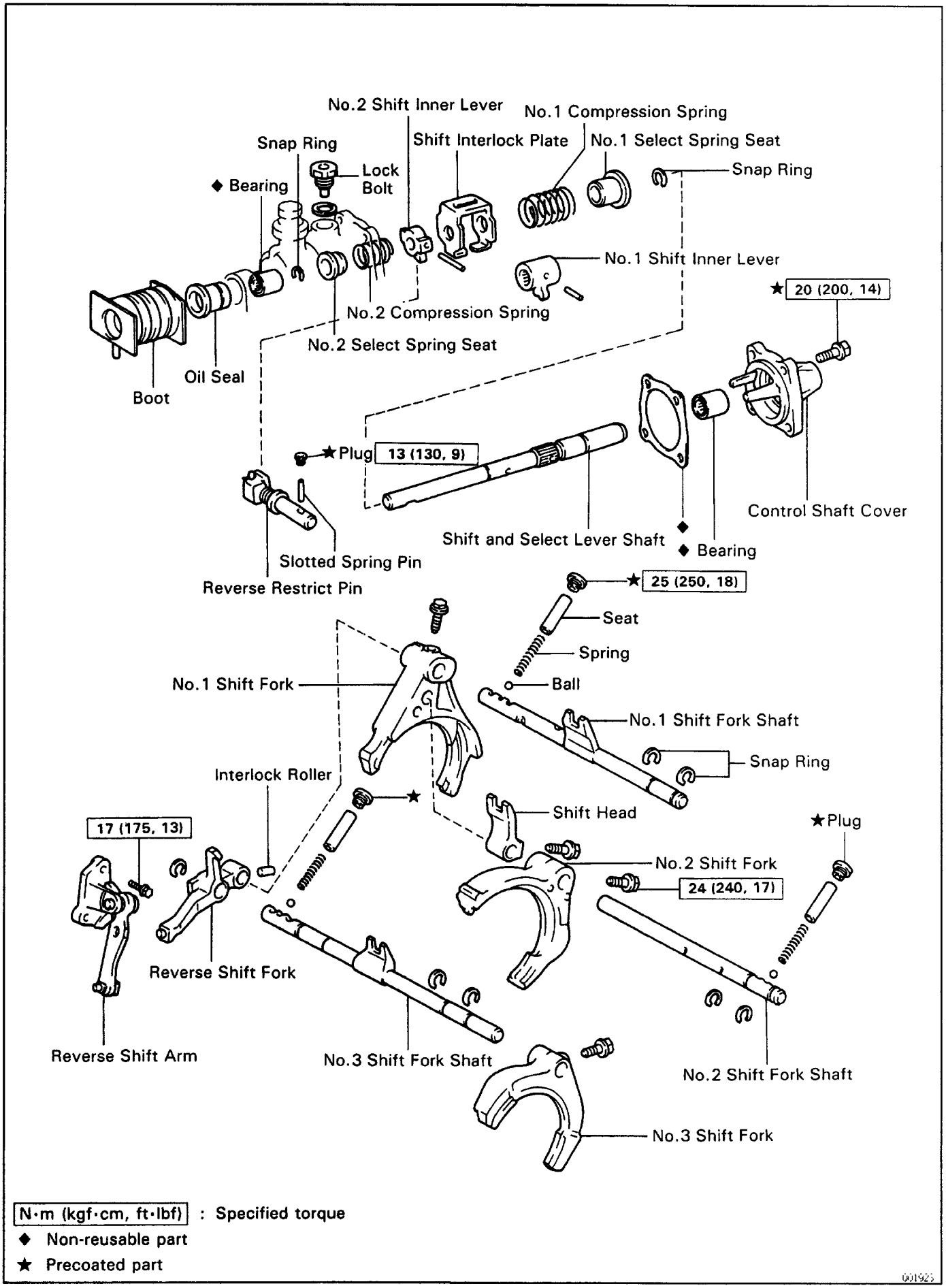
COMPONENTS





N·m (kgf·cm, ft·lbf) : Specified torque
◆ Non-reusable part
★ Precoated part

001192



N·m (kgf·cm, ft·lbf) : Specified torque
◆ Non-reusable part
★ Precoated part

001925

MX04W–01

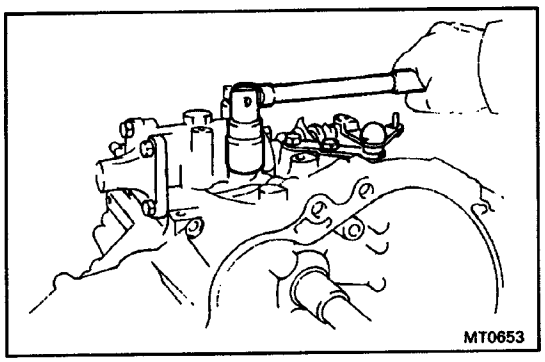
BASIC SUBASSEMBLY SEPARATION

(See pages MX2–20 to MX2–22)

1. REMOVE RELEASE FORK AND BEARING

2. REMOVE BACK–UP LIGHT SWITCH

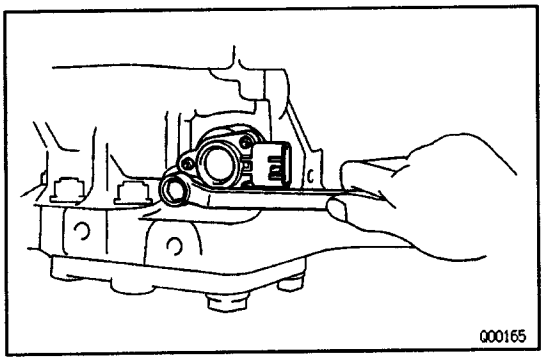
Remove the back–up light switch.



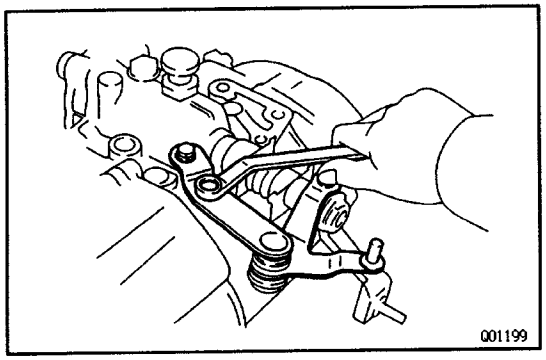
3. REMOVE VEHICLE SPEED PULSE GENERATOR

(a) Remove the set bolt and lock plate.

(b) Remove the vehicle speed pulse generator.

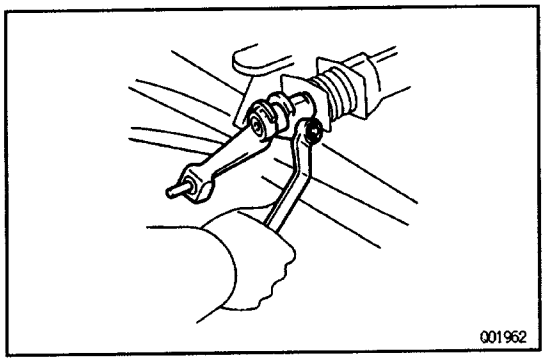


4. REMOVE SELECTING BELLCRANK ASSEMBLY

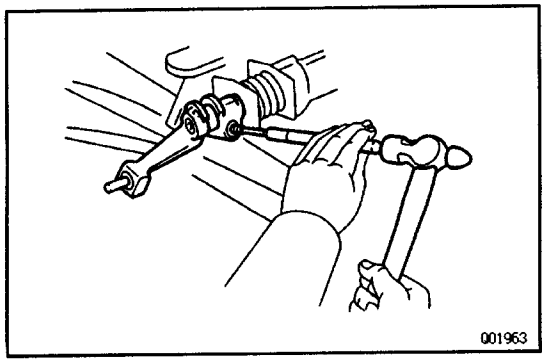


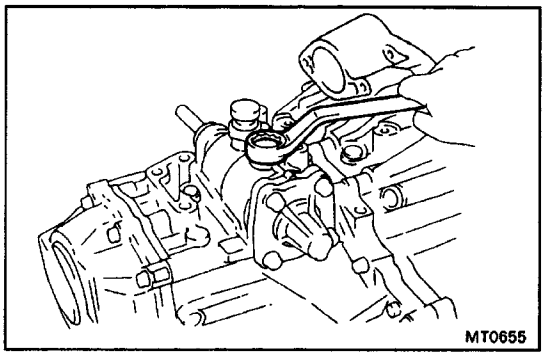
5. REMOVE SHIFT LEVER

(a) Remove the shift lever set nut.

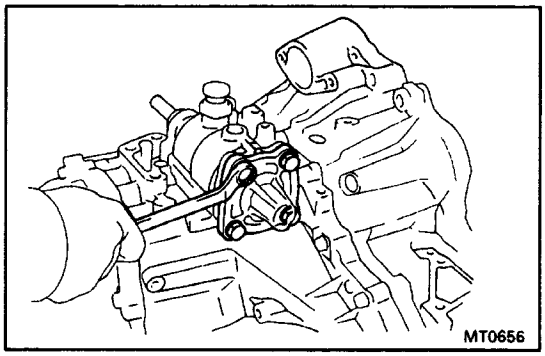


(b) Using a pin punch and hammer, tap out the lock pin.



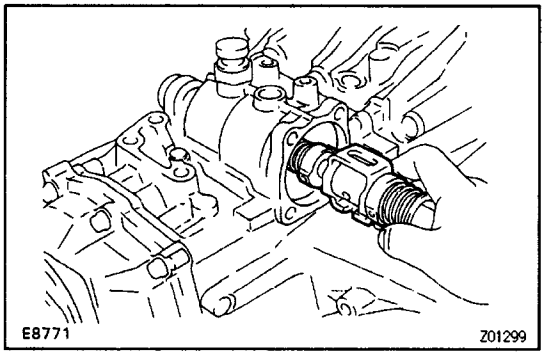


6. REMOVE LOCK BOLT

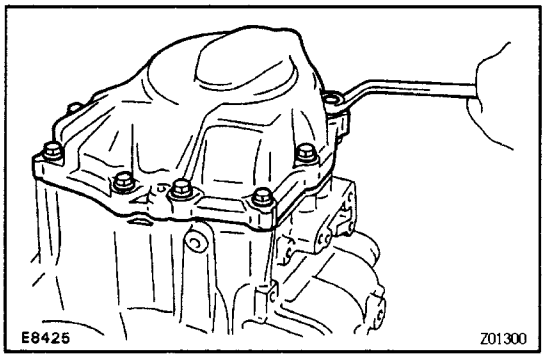


7. REMOVE CONTROL SHAFT COVER

Remove the four bolts holding the control shaft cover.

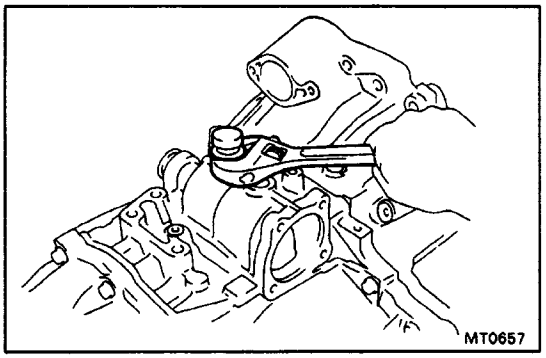


8. REMOVE SHIFT AND SELECT LEVER SHAFT ASSEMBLY

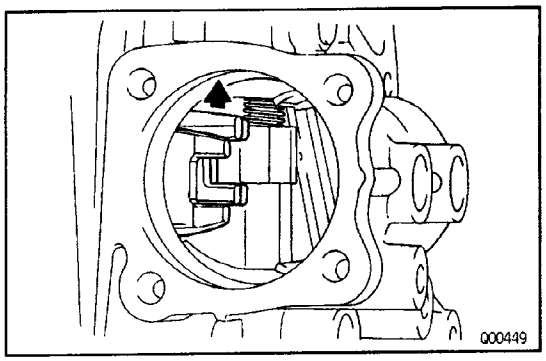


9. REMOVE TRANSMISSION CASE COVER

Remove the ten bolts and case cover.



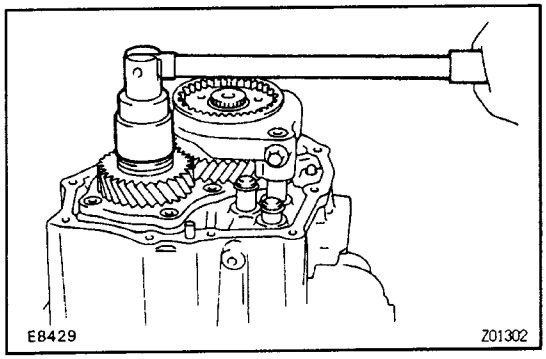
10. REMOVE BREATHER PLUG WITH GASKET



11. REMOVE LOCK NUT

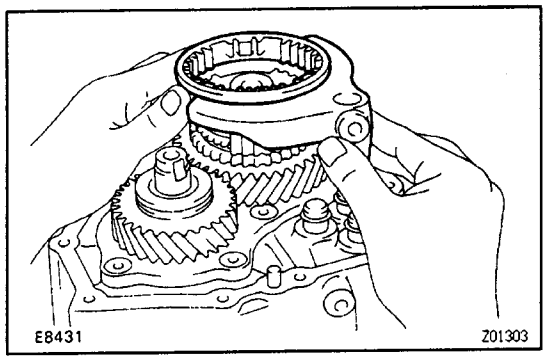
(a) Unstake the lock nut.

(b) Engage the gear double meshing.



(c) Remove the lock nut.

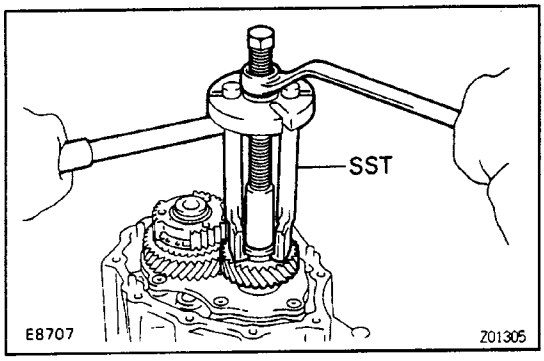
(d) Disengage the gear double meshing.



12. REMOVE NO. 3 HUB SLEEVE AND NO. 3 SHIFT FORK

(a) Remove the No.3 shift fork set bolt.

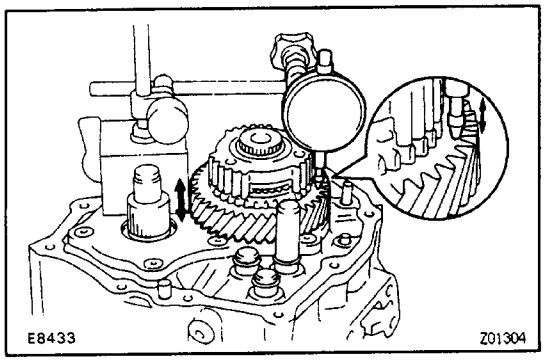
(b) Remove the No.3 hub sleeve and No.3 shift fork.



13. REMOVE FIFTH DRIVEN GEAR

Using SST, remove the 5th driven gear.

SST 09310–17010 (09310–07010, 09310–07020, 09310–07040, 09310–07050)



14. MEASURE FIFTH GEAR THRUST CLEARANCE AND OIL CLEARANCE

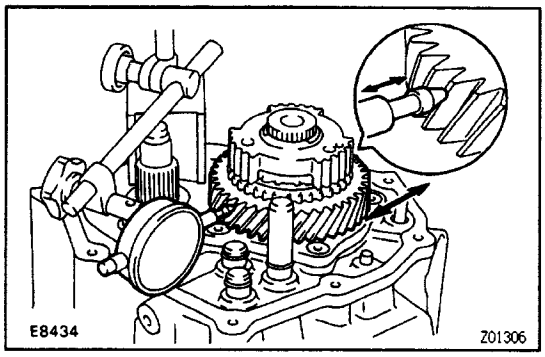
(a) Using a dial indicator, measure the thrust clearance.

Standard clearance:

0.10–0.57 mm (0.0039–0.0224 in.)

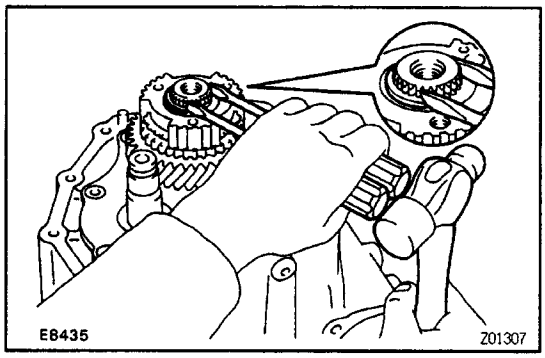
Maximum clearance:

0.65 mm (0.0256 in.)



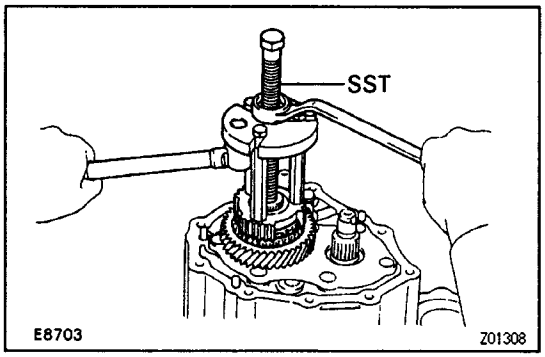
(b) Using a dial indicator, measure the oil clearance.

Standard clearance:
0.009–0.050 m m (0.0004–0.0020 in.)
Maximum clearance:
0.070 mm (0.0028 in.)



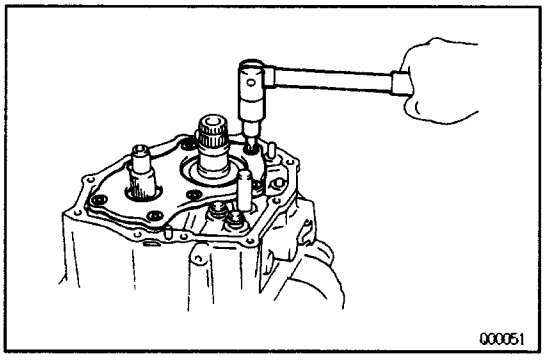
15. REMOVE NO.3 CLUTCH HUB AND FIFTH GEAR

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



(b) Using SST, remove the No.3 clutch hub with synch–ronizer ring and 5th gear.
SST 09310–17010 (09310–07010, 09310–07020, 09310–07030, 09310–07050)

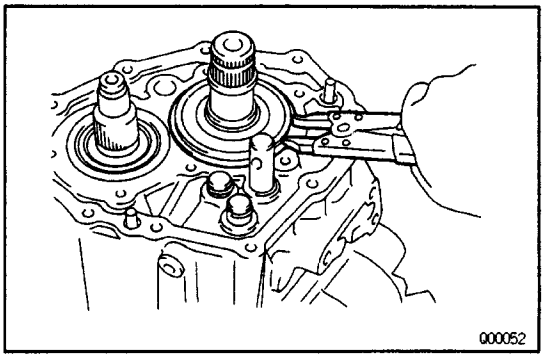
16. REMOVE NEEDLE ROLLER BEARING AND SPACER



17. REMOVE REAR BEARING RETAINER

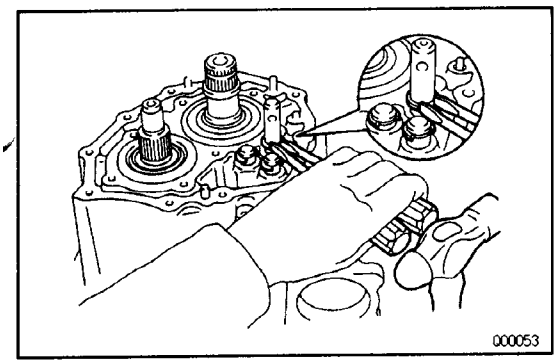
(a) Using a torx socket wrench, remove the seven torx screws and bearing retainer.
Torx wrench T45 09042–00050

(b) Remove the adjust shim.

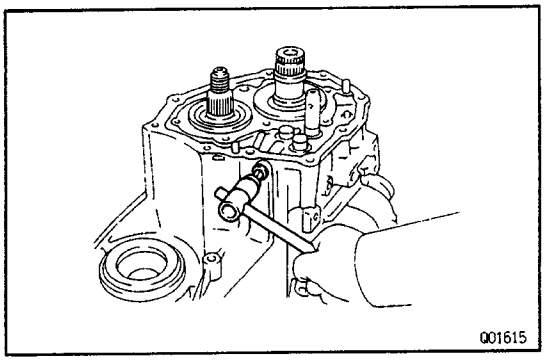


18. REMOVE SNAP RING

(a) Using a snap ring expander, remove the snap ring.

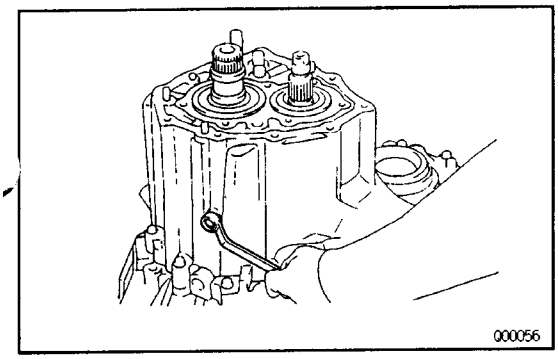


(b) Using two screwdrivers and a hammer, remove the three snap rings.

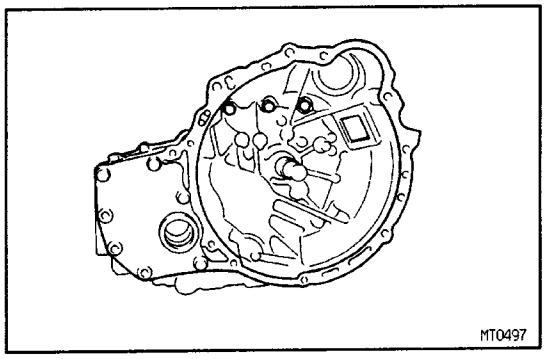


19. REMOVE PLUG, SEAT, SPRING AND LOCKING BALL

(a) Using a hexagon wrench (6 mm), remove the plug.
(b) Using a magnetic finger, remove the seat, spring and locking ball.

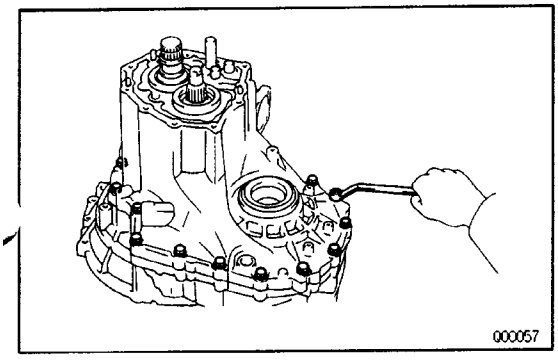


20. REMOVE REVERSE IDLER GEAR SHAFT RETAINING BOLT

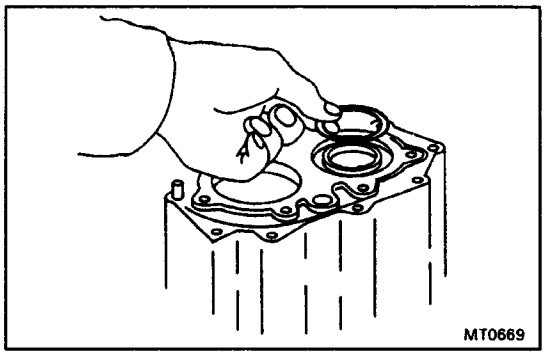


21. REMOVE TRANSMISSION CASE

(a) Remove the three bolts from transaxle case side.

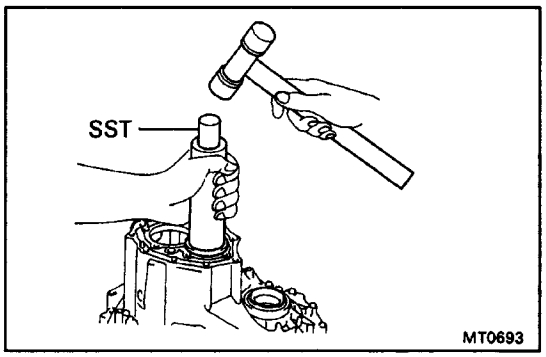


(b) Remove the fourteen bolts from the transmission case side and tap off the case with a plastic hammer.

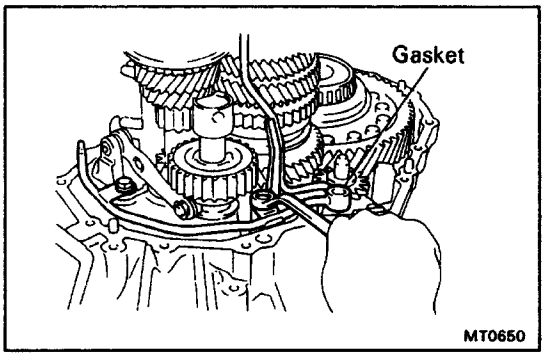


22. REMOVE OUTPUT SHAFT REAR TAPERED ROLLER BEARING OUTER RACE

(a) Remove the shim.

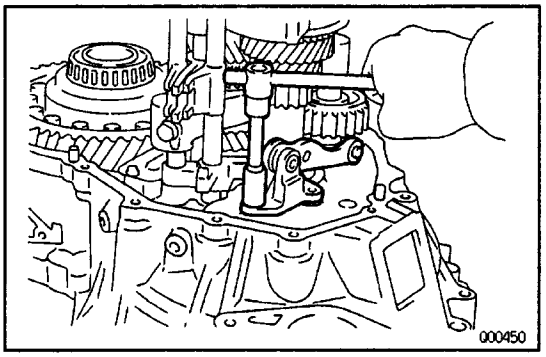


(b) Using SST and a hammer, remove the output shaft rear tapered roller bearing outer race.
SST 09316–60010 (09316–00010)



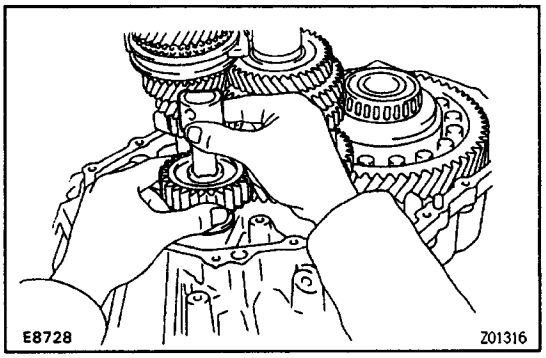
23. REMOVE NO.2 OIL PIPE

(a) Remove the gasket.
(b) Remove the two bolts and oil pipe.



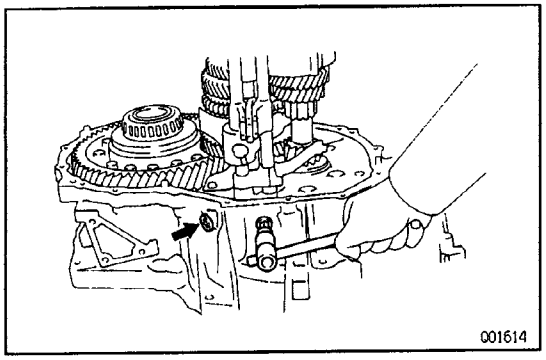
24. REMOVE REVERSE SHIFT ARM BRACKET

Remove the bolt and pull off the bracket.



25. REMOVE REVERSE IDLER GEAR AND SHAFT

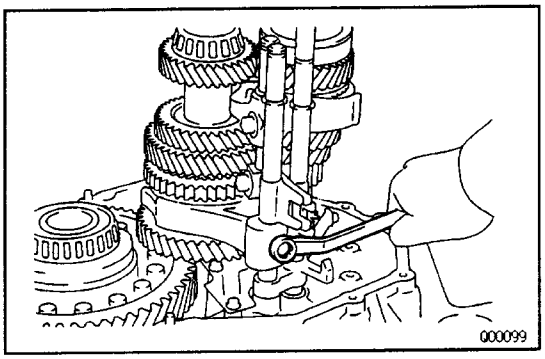
Pull out the shaft, remove the reverse idler gear.



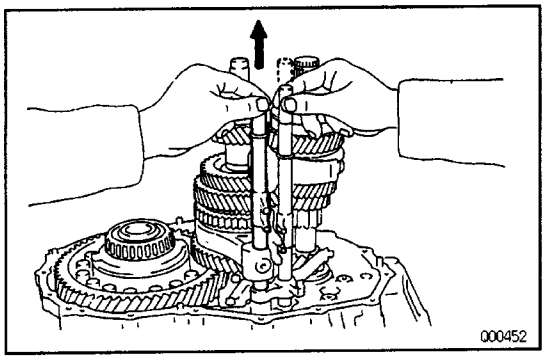
26. REMOVE STRAIGHT SCREW PLUGS, LOCKING BALLS AND SPRINGS

(a) Using a hexagon wrench (6 mm), remove the two plugs.

(b) Using a magnetic finger, remove the two spring seats, springs and balls.

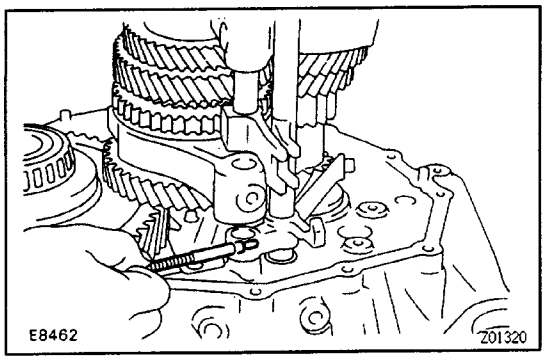


27. REMOVE THREE SET BOLTS



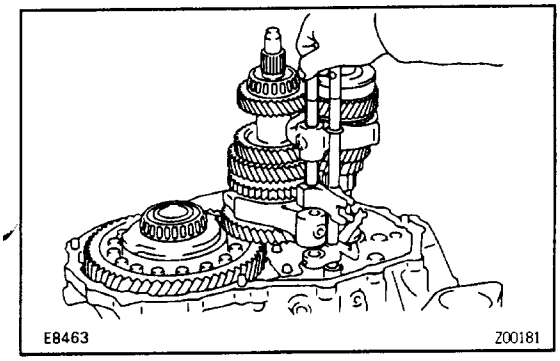
28. REMOVE No.1 SHIFT FORK SHAFT

Pull up No.3 shift fork shaft, remove the No.1 shift fork shaft.



29. REMOVE INTERLOCK ROLLER

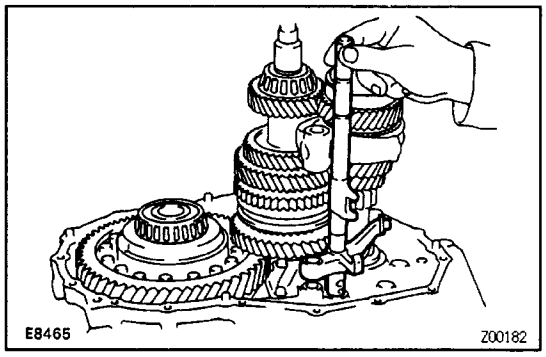
Using a magnetic finger, remove the interlock roller from the reverse shift fork.



30. REMOVE NO.2 SHIFT FORK SHAFT, SHIFT HEAD AND NO.1 SHIFT FORK

(a) Pull out the No.2 shift fork shaft.

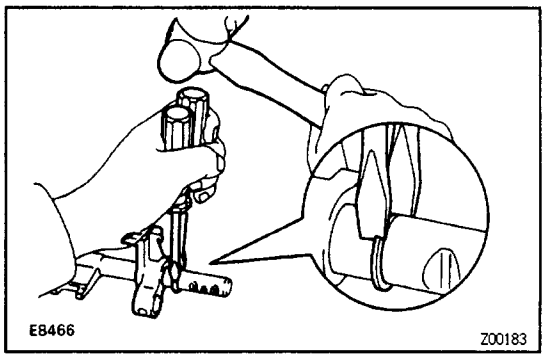
(b) Remove the shift head and No.1 shift fork.



31. REMOVE NO.3 SHIFT FORK SHAFT WITH REVERSE SHIFT FORK AND NO.2 SHIFT FORK

(a) Pull out the No.3 shift fork shaft with reverse shift fork.

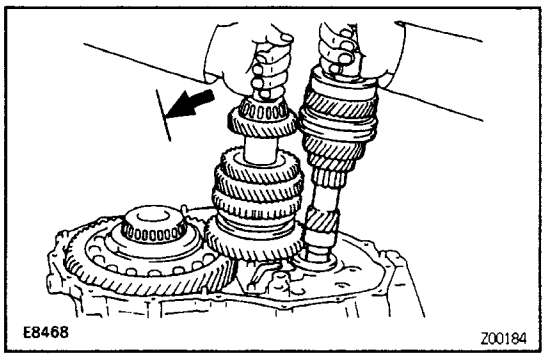
(b) Remove the No.2 shift fork.



32. REMOVE SNAP RINGS

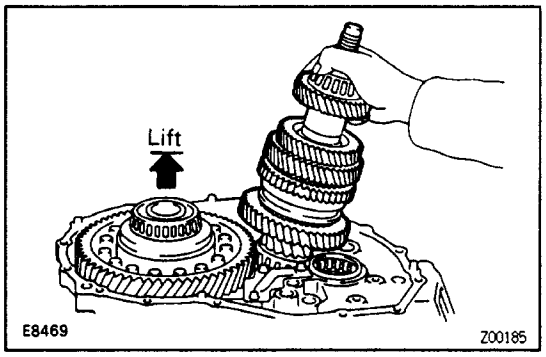
(a) Using two screwdrivers and a hammer, remove the snap ring and reverse shift fork from the No.3 shift fork shaft.

(b) Using two screwdrivers and a hammer, remove the snap rings from the No.1, No.2 and No.3 shift fork shafts.

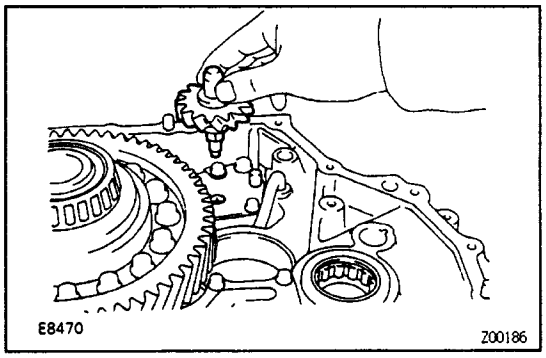


33. REMOVE INPUT AND OUTPUT SHAFT ASSEMBLY

(a) Leaning the output shaft to the differential side, remove the input shaft assembly.

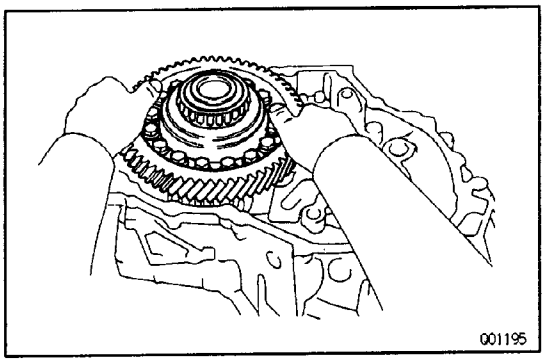


(b) Lift up the differential case assembly, remove the output shaft.

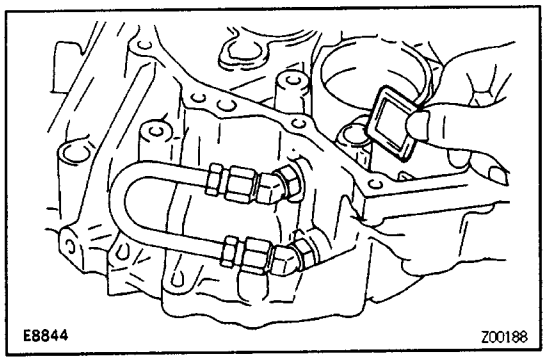


34. REMOVE DIFFERENTIAL ASSEMBLY

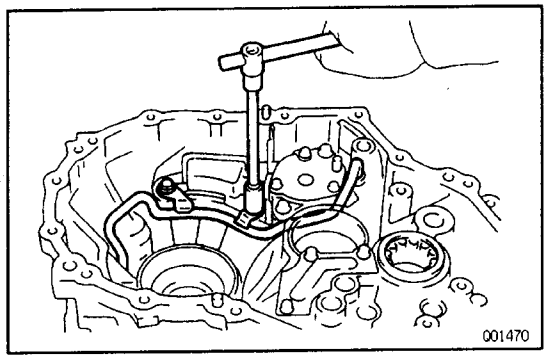
(a) Remove the oil pump drive gear.



(b) Remove the differential case assembly.

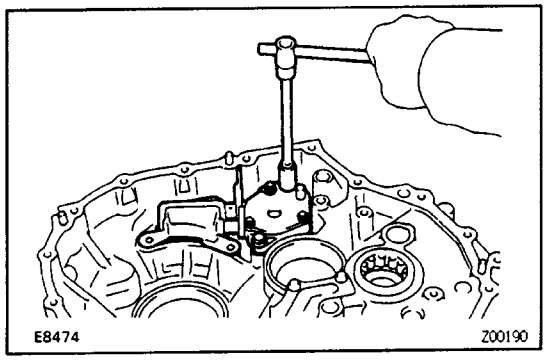


35. REMOVE MAGNET FROM TRANSAXLE CASE

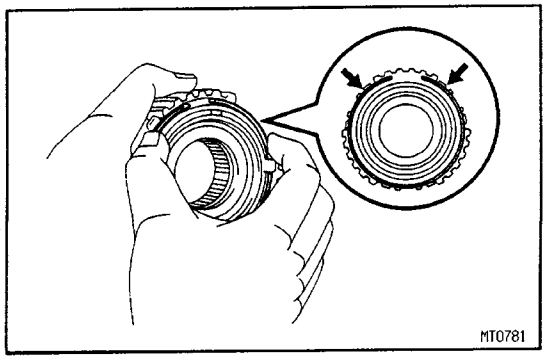


36. REMOVE OIL PUMP ASSEMBLY

(a) Remove the two bolts and oil pipe.

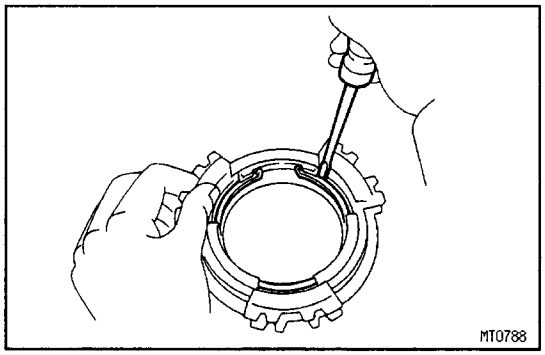


(b) Remove the two bolts and oil pump.

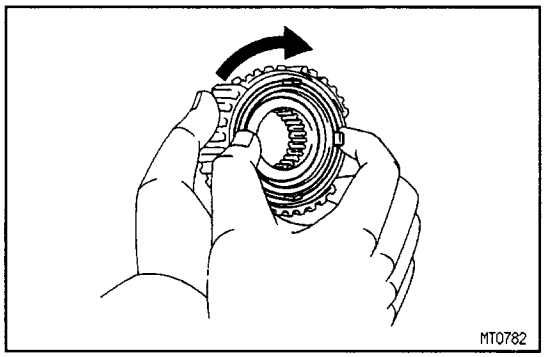


37. REMOVE NO.5 SYNCHRONIZER RING WITH KEY SPRING FROM NO.3 CLUTCH HUB

(a) Remove the No.5 synchronizer ring with key spring from No.3 clutch hub.



(b) Using a screwdriver, remove the snap ring.
HINT: Wrap vinyl tape on the screwdriver to prevent damaging the synchronizer ring.
(c) Remove the synchronizer rings.

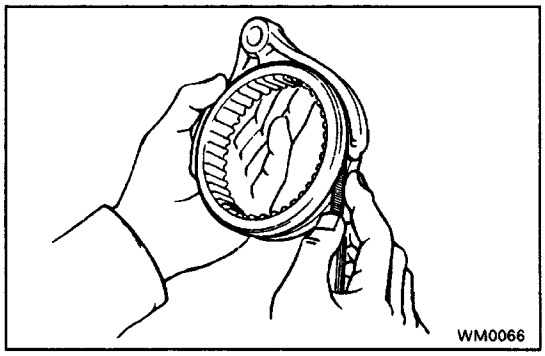


COMPONENT PARTS INSPECTION

MX04X–01

1. INSPECT NO.5 SYNCHRONIZER RINGS

(a) Check for wear or damage.
(b) Check the braking effect of the synchronizer ring.
Turn the middle No.5 synchronizer ring in one direction while pushing it to the outer No.5 synchronizer ring and check that the ring is locked.
If the braking effect is insufficient, replace the synchronizer ring.

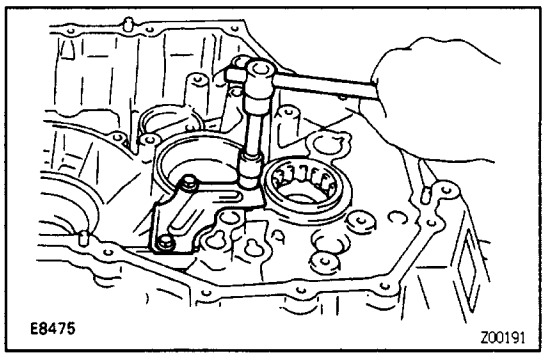


2. MEASURE CLEARANCE OF SHIFT FORKS AND HUB SLEEVE

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

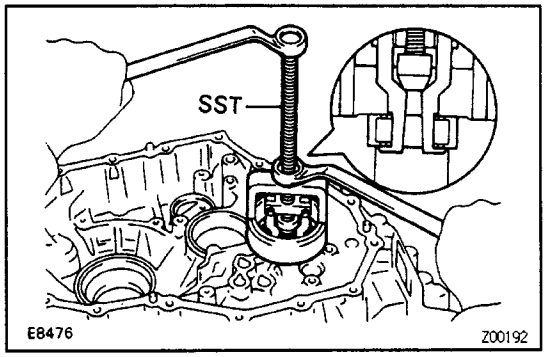
Maximum clearance:
1.0 mm (0.039 in.)

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

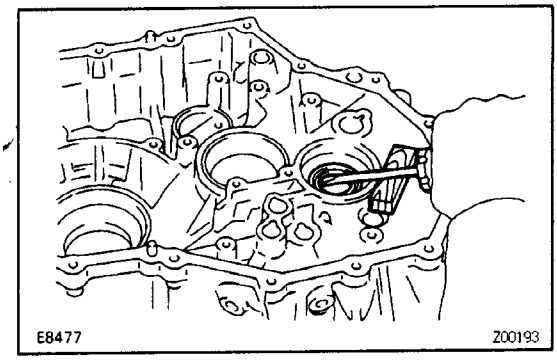


3. IF NECESSARY, REPLACE INPUT SHAFT BEARING AND OIL SEAL

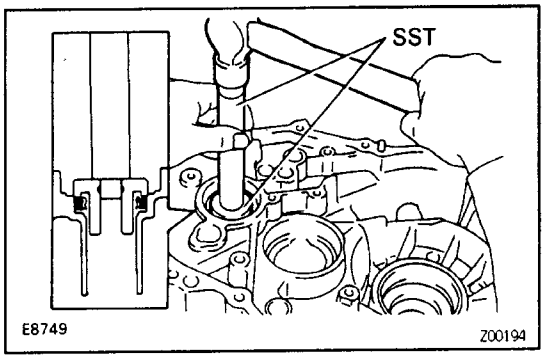
(a) Remove the three bolts and transaxle case receiver.



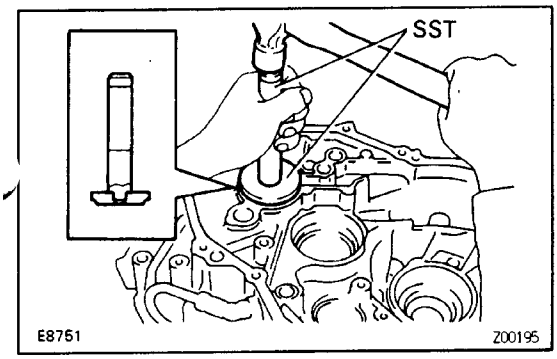
(b) Using SST, pull out the bearing.
SST 09612–65014



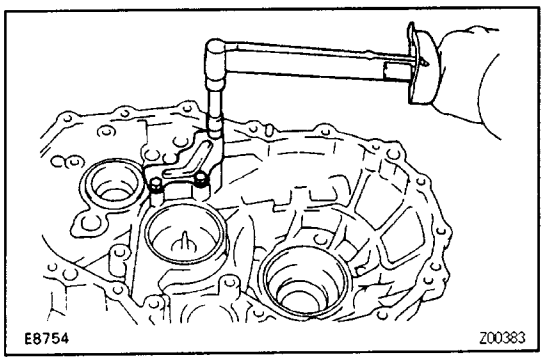
(c) Using a screwdriver, remove the oil seal.



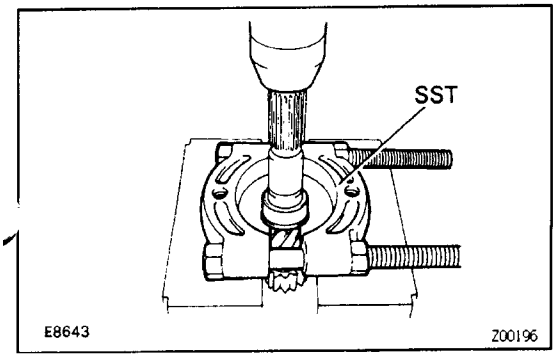
(d) Using SST, drive in a new oil seal.
SST 09608–12010 (09608–00020, 09608–00080)
(e) Coat the lip of seal with MP grease.



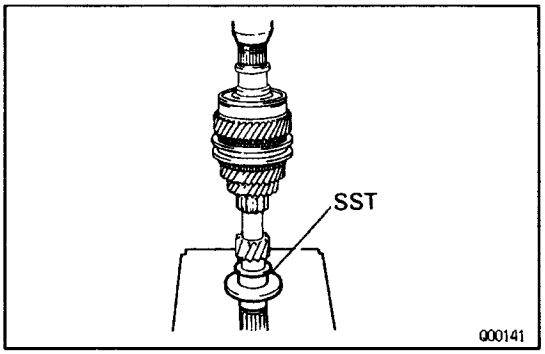
(f) Using SST, drive in a new bearing.
SST 09608–12010 (09608–00020, 09608–00060)



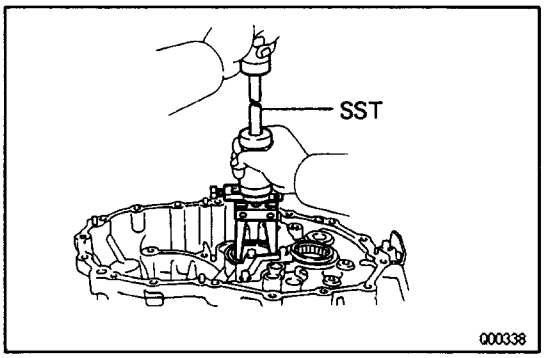
(g) Install the transaxle case receiver.
(h) Install and torque the three bolts.
Torque: 7.4 N–m (75 kgf–cm, 65 in.–lbf)



(i) Using SST and a press, remove the inner race.
SST 09950–00020



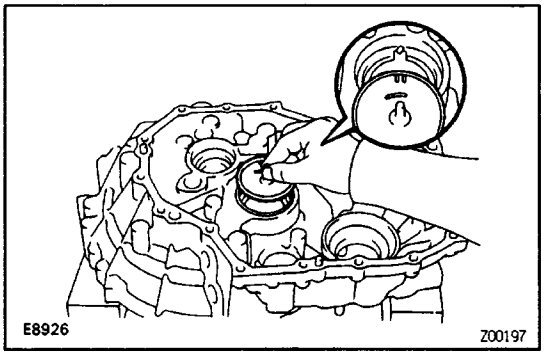
(j) Using SST and a press, install a new input shaft front bearing inner race.
SST 09316–60010 (09316–00020)



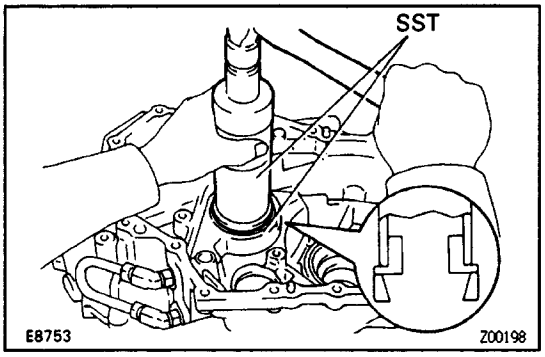
4. IF NECESSARY, REPLACE OUTPUT SHAFT FRONT BEARING AND OUTPUT SHAFT FRONT COVER

(a) Using SST, pull out the output shaft front bearing outer race.
SST 09308–00010

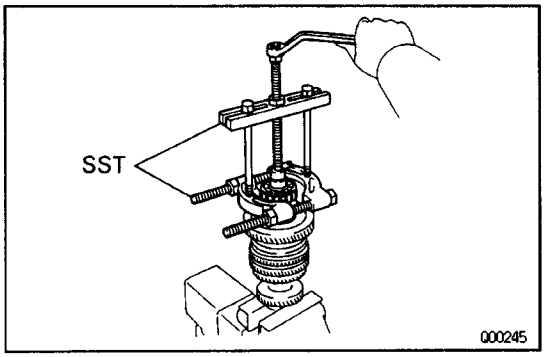
(b) Remove the output shaft front cover.



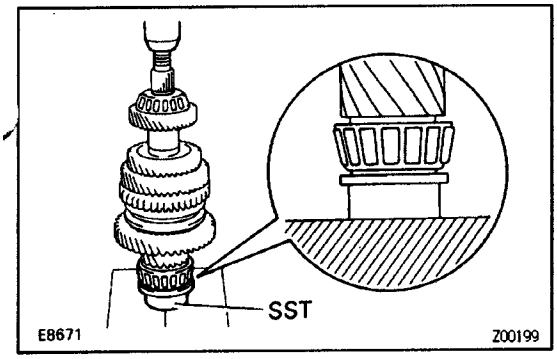
(c) Install a new output shaft front cover.
HINT: install the output shaft front cover projection into the case side groove.



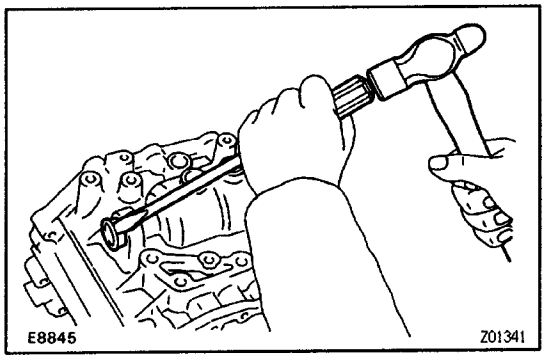
(d) Using SST and a hammer, drive in a new output shaft front bearing outer race.
SST 09316–60010 (09316–00010, 09316–00020)



(e) Using SST and a socket wrench, remove the output shaft front bearing.
SST 09950–00020, 09950–00030

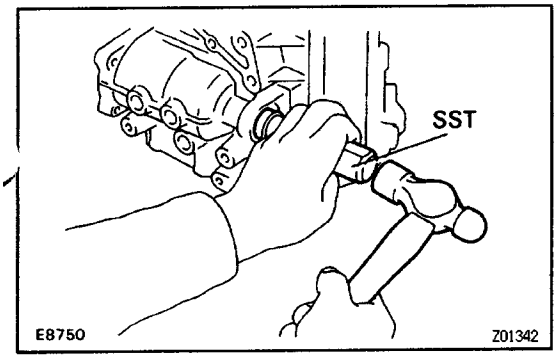


(f) Using SST and a press, install a new output shaft front bearing.
SST 09316–60010 (09316–00070)



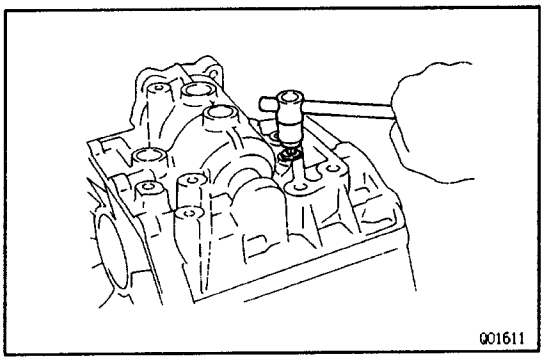
5. IF NECESSARY, REPLACE SHIFT CONTROL SHAFT OIL SEAL

(a) Using a screwdriver and hammer, remove the oil seal.



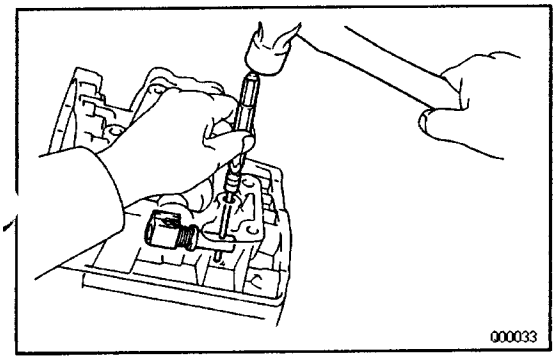
(b) Using SST, drive in the new oil seal until it touches the bottom.
SST 09517–36010

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

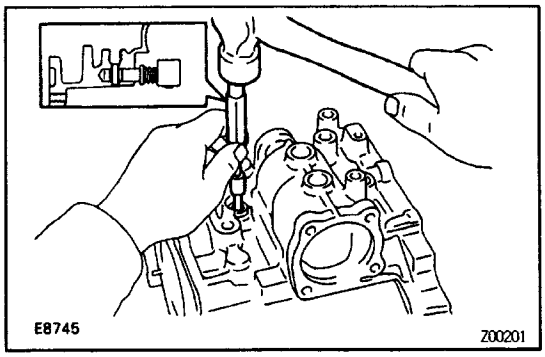


6. IF NECESSARY, REPLACE REVERSE RESTRICT PIN

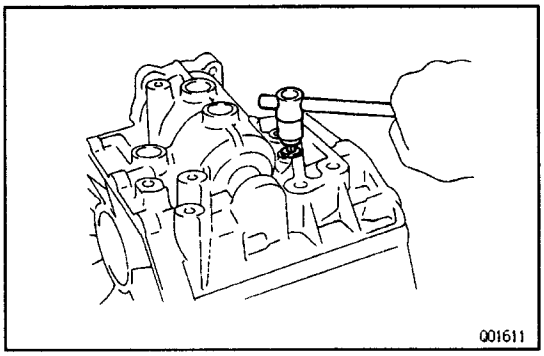
(a) Using a hexagon wrench (6 mm), remove the screw plug.



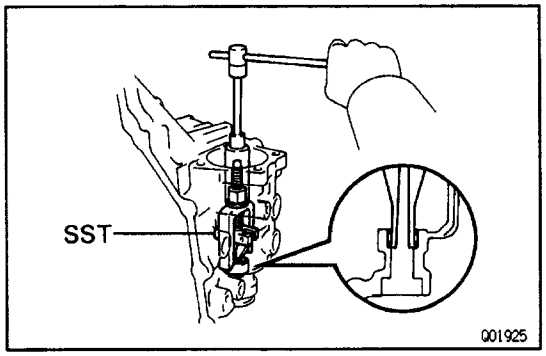
(b) Using a pin punch and hammer, drive out the slotted spring pin.



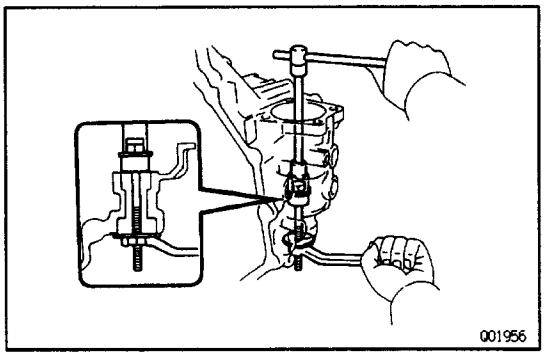
(c) Replace the reverse restrict pin.
(d) Using a pin punch, drive in the slotted spring pin.



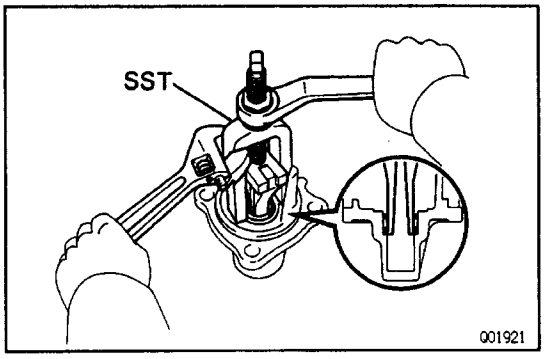
(e) Apply sealant to the screw plug threads.
Sealant:
Part No. 08833–00080, THREE BOND 1344, LOC–TITE 242 or equivalent
(f) Using a hexagon wrench (6 mm), install the screw plug.



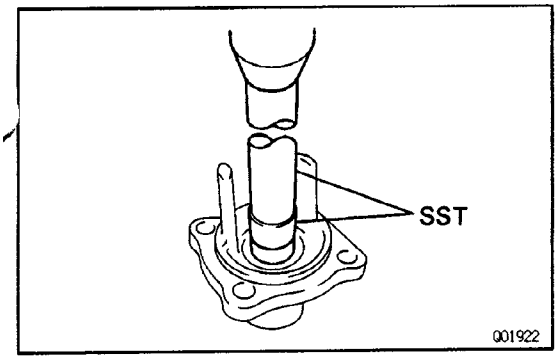
7. IF NECESSARY, REPLACE CONTROL SHAFT FRONT BEARING
(a) Using SST, remove the needle roller bearing from the transmission case.
SST 09319–60020



(b) Using a suitable bolt, nut and two washers, install a new needle roller bearing to the transmission case.



8. IF NECESSARY, REPLACE CONTROL SHAFT REAR BEARING
(a) Using SST, remove the needle roller bearing from the control shaft cover.
SST 09319–60020



(b) Using SST and a press, press in a new needle roller bearing to the control shaft cover.
SST 09620–30010 (09631–00020),
09630–24013 (09620–24010)