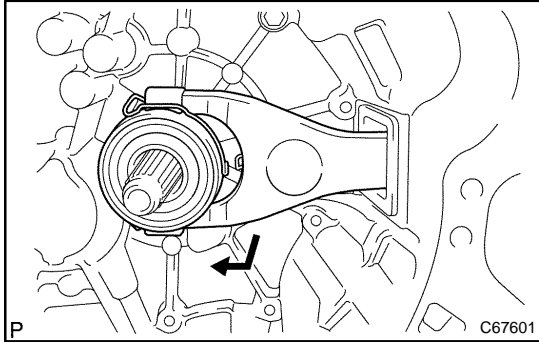


OVERHAUL

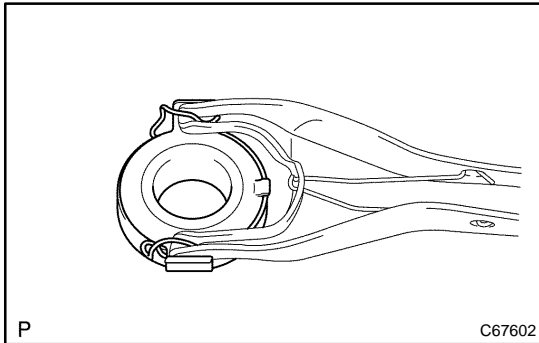
1. REMOVE SPEEDOMETER DRIVEN HOLE COVER SUB-ASSY

- (a) Remove the bolt and speedometer driven hole cover sub-assy.
- (b) Remove the O-ring from the speedometer driven hole cover sub-assy.



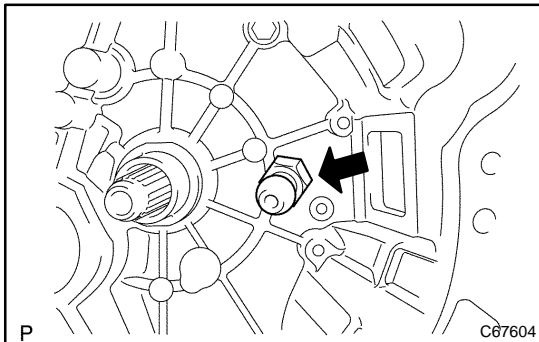
2. REMOVE CLUTCH RELEASE FORK SUB-ASSY

- (a) Remove the clutch release fork sub-assy with clutch release bearing assy from the transaxle case.



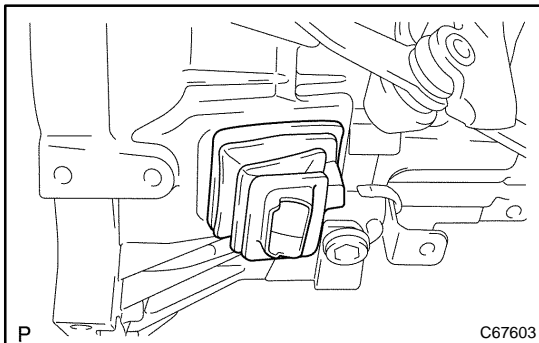
3. REMOVE CLUTCH RELEASE BEARING ASSY

- (a) Remove the clutch release bearing hub clip and clutch release bearing assy from the clutch release fork sub-assy.



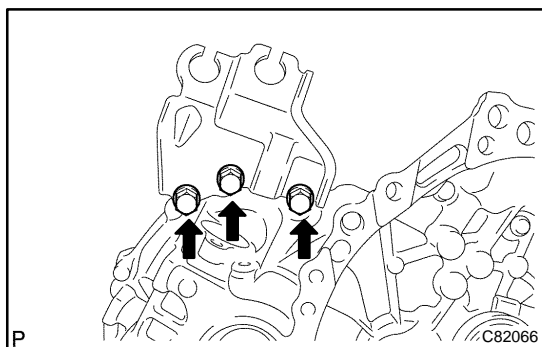
4. REMOVE RELEASE FORK SUPPORT

- (a) Remove release fork support from the transaxle case.



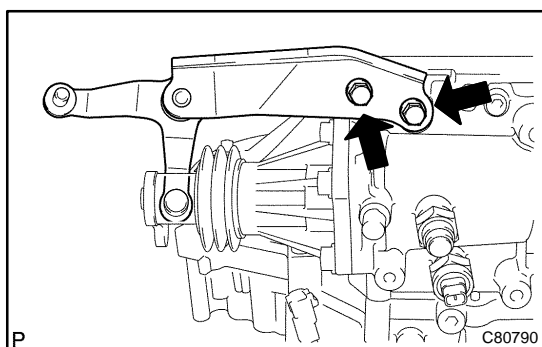
5. REMOVE CLUTCH RELEASE FORK BOOT

- (a) Remove the clutch release fork boot from the transaxle case.



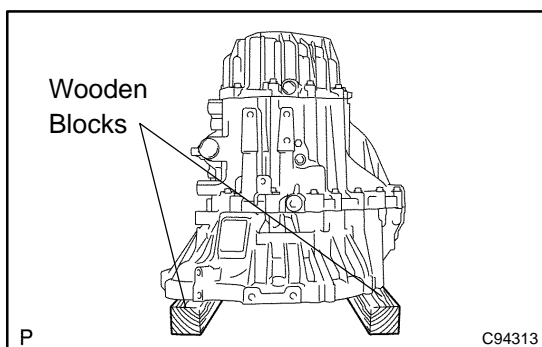
6. REMOVE FLOOR SHIFT CONTROL LEVER HOUSING SUPPORT BRACKET

- (a) Remove the 3 bolts and floor shift control lever housing support bracket from the transaxle case.



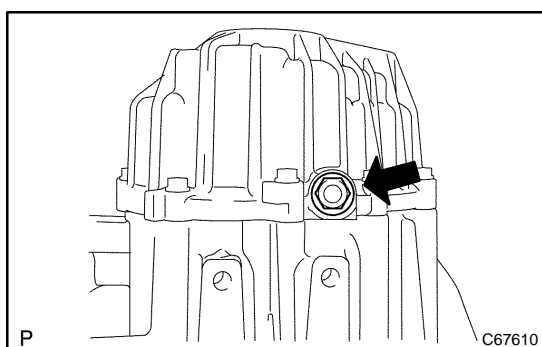
7. REMOVE SELECTING BELL CRANK ASSY

- (a) Remove the 2 bolts and selecting bellcrank assy from the manual transmission case.



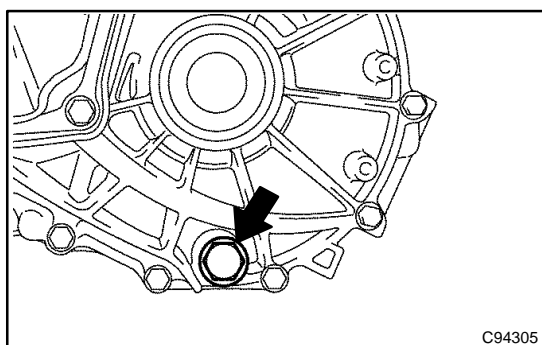
8. FIX MANUAL TRANSAXLE ASSY

- (a) Using wooden blocks, fix the manual transaxle assy.



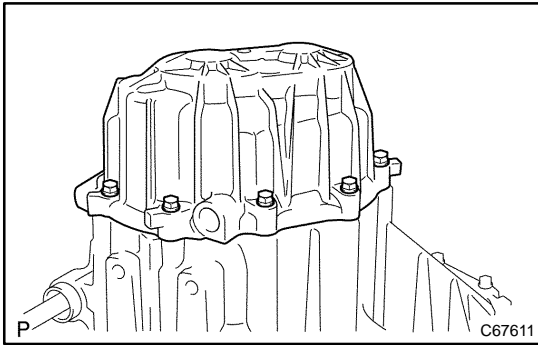
9. REMOVE MANUAL TRANSMISSION FILLER PLUG

- (a) Remove the manual transmission filler plug and gasket from the manual transmission case cover.



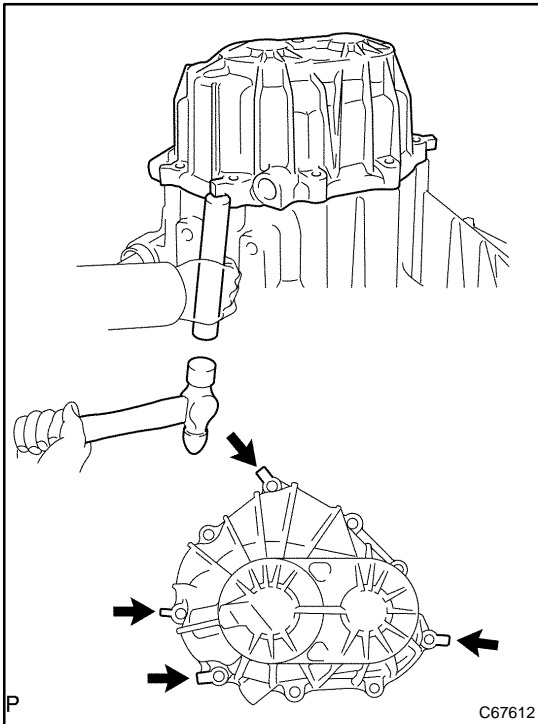
10. REMOVE DRAIN (MTM) PLUG SUB-ASSY

- (a) Remove the drain (MTM) plug sub-assy and gasket from the manual transmission case.



11. REMOVE MANUAL TRANSMISSION CASE COVER SUB-ASSY

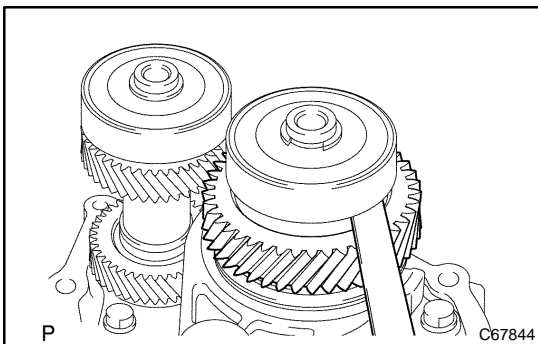
- (a) Remove the 9 bolts.



- (b) Using a brass bar and a hammer, remove the manual transmission case cover sub-assy.

NOTICE:

Do not damage the manual transmission case cover sub-assy.

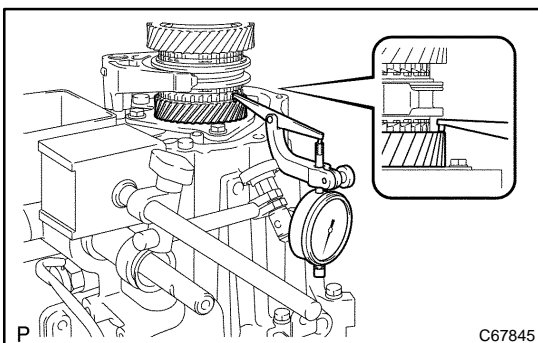


12. INSPECT 6TH GEAR THRUST CLEARANCE

- (a) Using a feeler gauge, measure the 6th gear thrust clearance.

Standard clearance:

0.10 – 0.60 mm (0.0039 – 0.0236 in.)

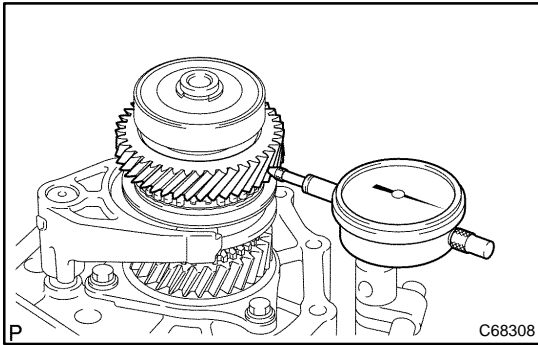


13. INSPECT 5TH GEAR THRUST CLEARANCE

- (a) Using a dial indicator, measure the 5th gear thrust clearance.

Standard clearance:

0.10 – 0.62 mm (0.0039 – 0.0244 in.)



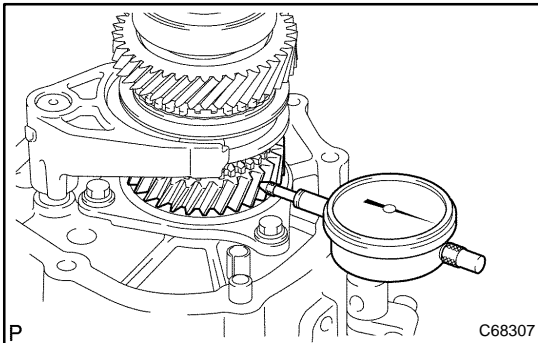
14. INSPECT 6TH GEAR RADIAL CLEARANCE

- (a) Using a dial indicator, measure the 6th gear radial clearance.

Standard clearance:

0.009 – 0.050 mm (0.0004 – 0.0020 in.)

If the clearance is out of the specification, replace the 6th gear needle roller bearing.



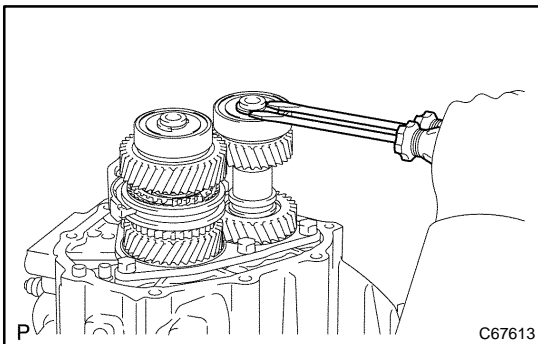
15. INSPECT 5TH GEAR RADIAL CLEARANCE

- (a) Using a dial indicator, measure the 5th gear radial clearance.

Standard clearance:

0.015 – 0.056 mm (0.0006 – 0.0022 in.)

If the clearance is out of specification, replace the 5th gear needle roller bearing.

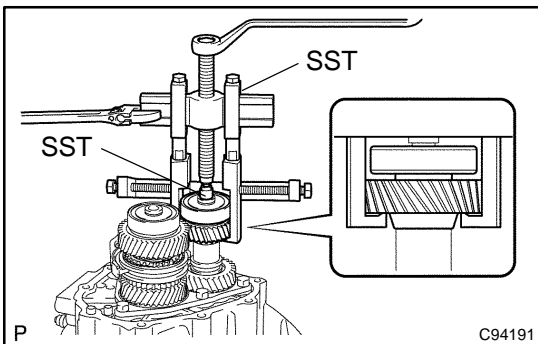


16. REMOVE COUNTER GEAR 6TH

- (a) Using 2 screwdrivers and a hammer, remove the output shaft RR snap ring from the output shaft.

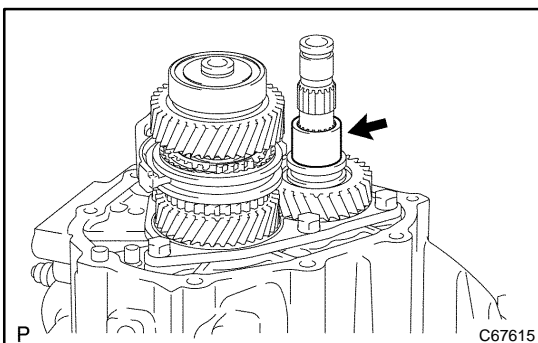
NOTICE:

Using a waste to prevent the snap ring from the being scattered.



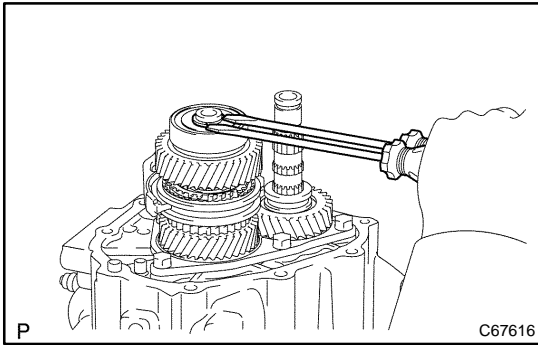
- (b) Using SST, remove output shaft RR bearing with 6th counter gear from the output shaft.

SST 09950-40011 (09951-04010, 09952-04010, 09953-04020, 09954-04010, 09955-04021, 09957-04010, 09958-04011), 09950-60010 (09951-00190)



17. REMOVE OUTPUT GEAR SPACER

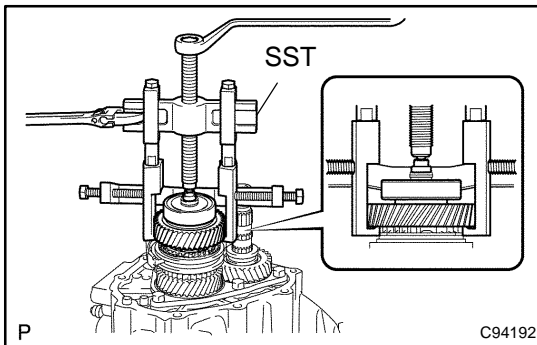
- (a) Remove the output gear spacer from the output shaft.

**18. REMOVE 6TH GEAR SUB-ASSY**

- (a) Using 2 screwdrivers and a hammer, remove the input shaft snap ring from the input shaft.

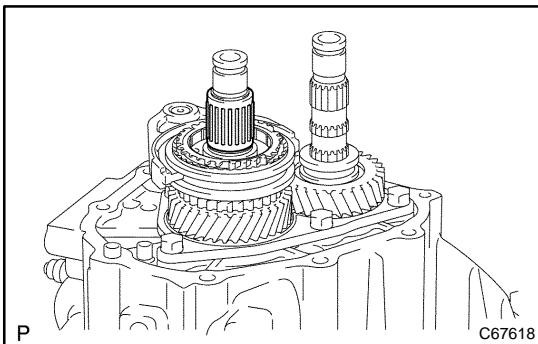
NOTICE:

Using a waste to prevent the snap ring from the being scattered.

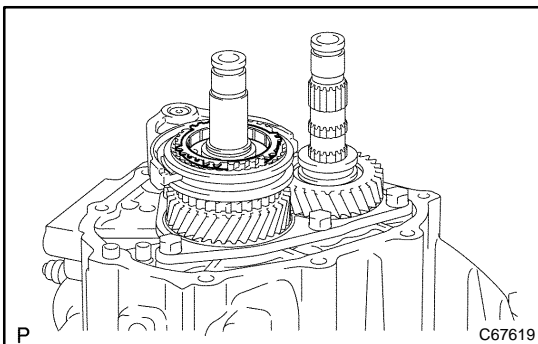


- (b) Using SST, remove the input shaft radial ball bearing RR with 6th gear sub-assy from the input shaft.

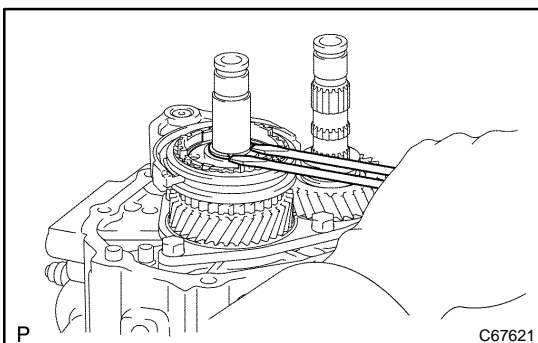
SST 09950-40011 (09951-04010, 09952-04010, 09953-04020, 09954-04010, 09955-04021, 09957-04010, 09958-04011)

**19. REMOVE 6TH GEAR NEEDLE ROLLER BEARING**

- (a) Remove 6th gear needle roller bearing from the input shaft.

**20. REMOVE SYNCHRONIZER RING NO.3 (FOR 6TH GEAR MT)**

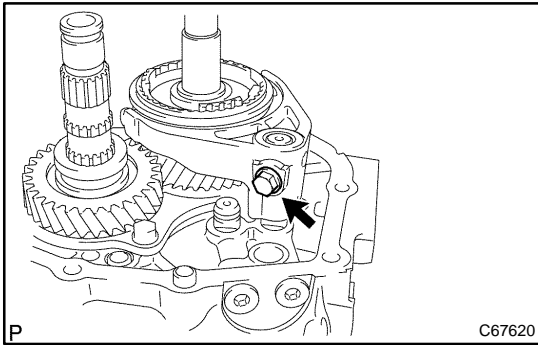
- (a) Remove the synchronizer ring No.3 from the input shaft.

**21. REMOVE TRANSMISSION CLUTCH HUB NO.3**

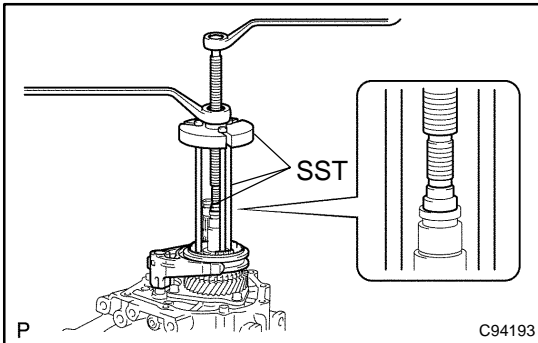
- (a) Remove the 6th gear spacer.
 (b) Using 2 screwdrivers and a hammer, remove the transmission clutch hub No.3 shaft snap ring from the input shaft.

NOTICE:

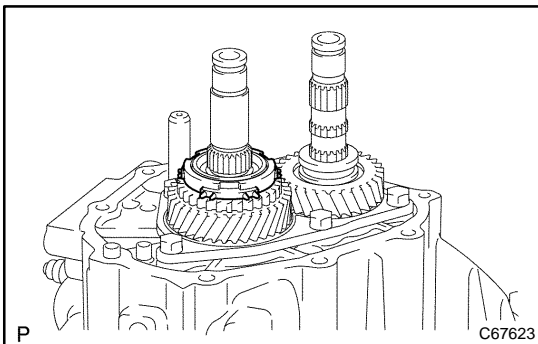
Using a waste to prevent the snap ring from the being scattered.



- (c) Remove the shift fork lock bolt from the shift fork No.3.

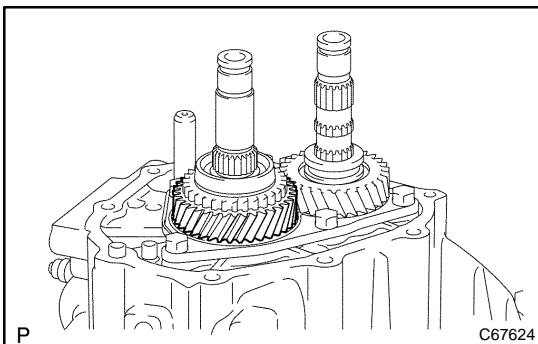


- (d) Using SST, remove the transmission clutch hub No.3 with gear shift fork No.3 from the input shaft.
SST 09950-30012 (09951-03010, 09953-03010, 09957-04010), 09950-50013 (09954-05040)



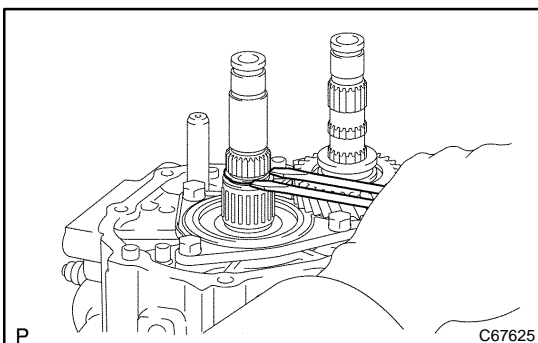
22. REMOVE SYNCHRONIZER RING NO.3 (FOR 5TH GEAR MT)

- (a) Remove the synchronizer ring No.3 from the 5th gear.



23. REMOVE 5TH GEAR

- (a) Remove the 5th gear from the input shaft.

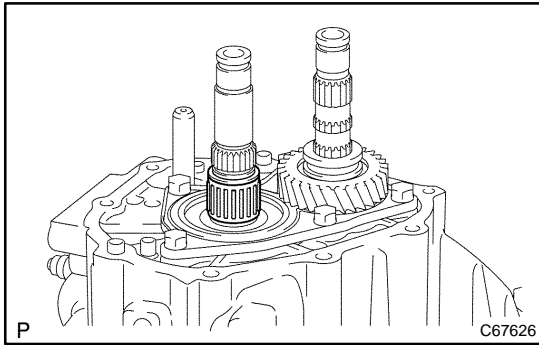


24. REMOVE 5TH GEAR NEEDLE ROLLER BEARING

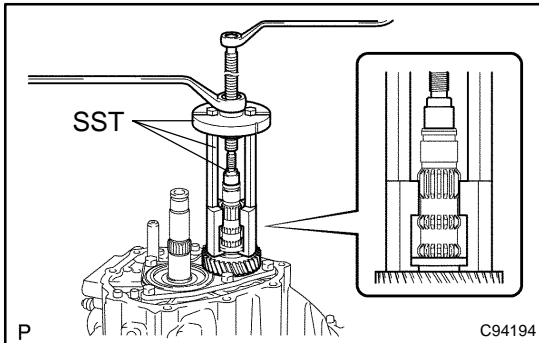
- (a) Using 2 screwdrivers and a hammer, remove the transmission clutch hub No.3 shaft snap ring from the input shaft.

NOTICE:

Using a waste to prevent the snap ring from the being scattered.



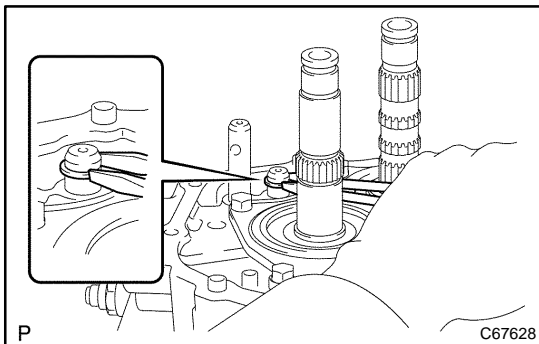
- (b) Remove the 5th gear needle roller bearing and 2 5th gear bearing spacers from the input shaft.



25. REMOVE 5TH DRIVEN GEAR

- (a) Using SST, remove the 5th driven gear from the output shaft.

SST 09950-30012 (09951-03010, 09953-03010, 09954-03010, 09955-03011, 09957-04010), 09950-60010 (09951-00190)

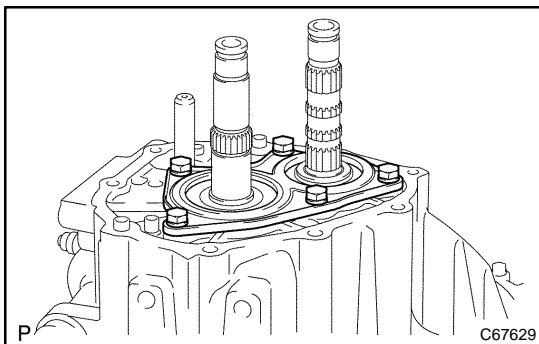


26. REMOVE SHIFT FORK SHAFT SHAFT SNAP RING

- (a) Using 2 screwdrivers and a hammer, remove the shift fork shaft snap ring from the shift fork shaft No.2.

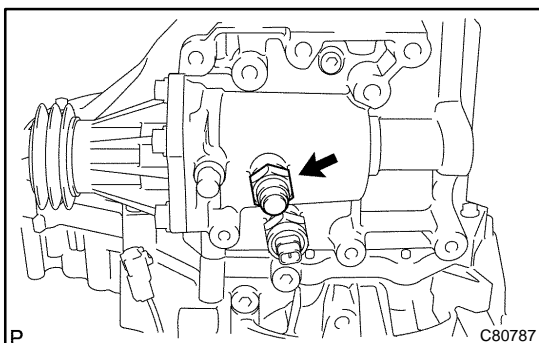
NOTICE:

Using a waste to prevent the snap ring from the being scattered.



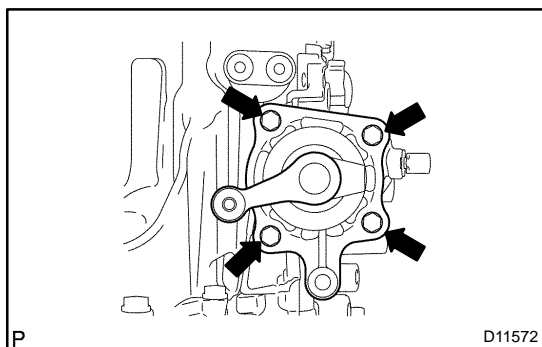
27. REMOVE BEARING RETAINER REAR (MTM)

- (a) Remove the 5 bolts and bearing retainer rear (MTM) from the manual transmission case.

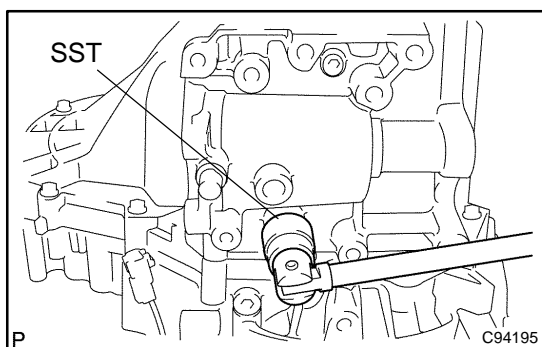


28. REMOVE LOCK BALL ASSY NO.1

- (a) Remove the lock ball assy No.1 from the manual transmission case.

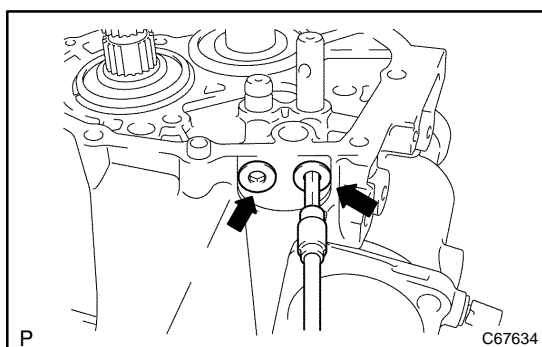
**29. REMOVE SHIFT & SELECT LEVER SHAFT ASSY**

- (a) Remove the 4 bolts and shift & select lever shaft assy and gasket from the manual transmission case.

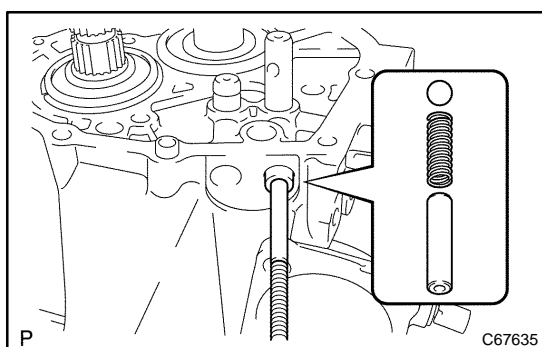
**30. REMOVE BACK UP LAMP SWITCH ASSY**

- (a) Using SST, remove the back up lamp switch assy and gasket from the manual transmission case.

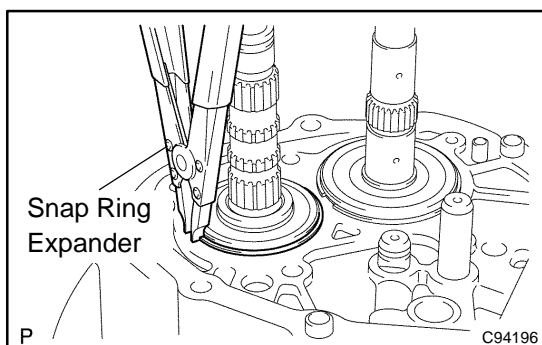
SST 09817-16011

**31. REMOVE SHIFT DETENT BALL**

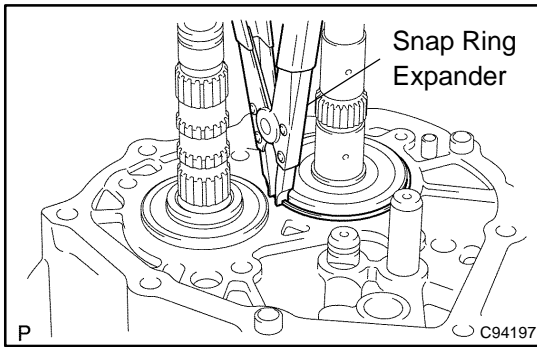
- (a) Using a socket hexagon wrench 6, remove the 2 shift detent ball plugs from the manual transmission case.



- (b) Using a magnetic finger, remove the 2 shift detent ball spring seats, 2 shift detent ball compression springs and 2 shift detent balls from the manual transmission case.

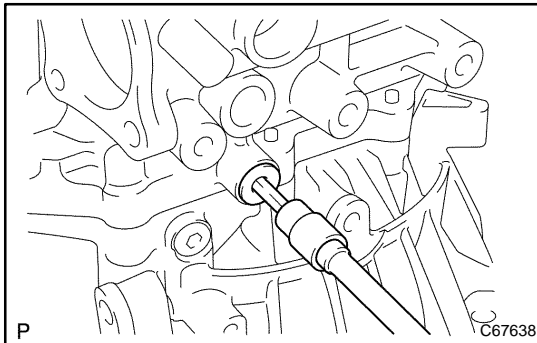
**32. REMOVE OUTPUT SHAFT REAR BEARING HOLE SNAP RING**

- (a) Using a snap ring expander, remove the output shaft rear bearing hole snap ring from the output shaft.



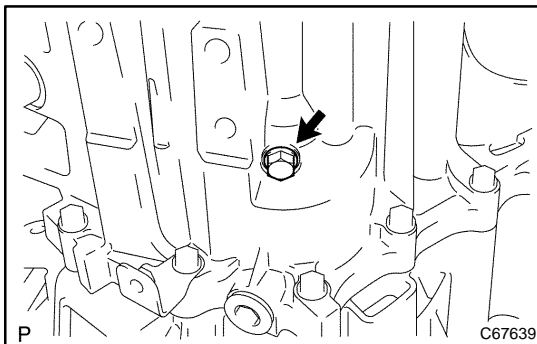
33. REMOVE INPUT SHAFT REAR BEARING HOLE SNAP RING

- (a) Using a snap ring expander, remove the input shaft rear bearing hole snap ring.



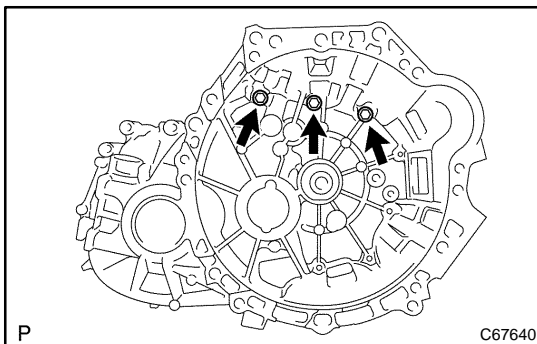
34. REMOVE MANUAL TRANSMISSION CASE PLUG

- (a) Using a socket hexagon wrench 6, remove the manual transmission case plug from the manual transmission case.



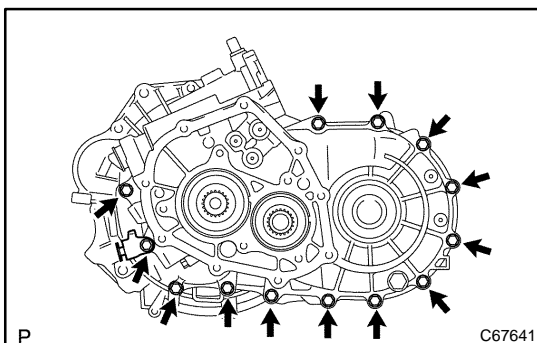
35. REMOVE REVERSE IDLER GEAR SHAFT BOLT

- (a) Remove the reverse idler gear shaft bolt and gasket from the manual transmission case.

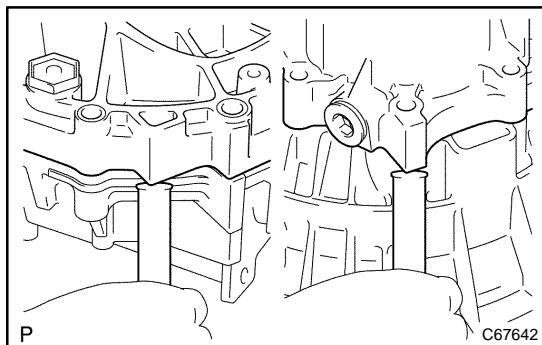


36. REMOVE MANUAL TRANSMISSION CASE

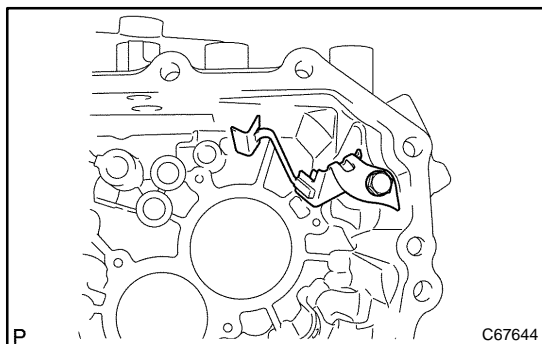
- (a) Remove the 3 bolts from the transaxle case side.



- (b) Remove the 13 bolts from manual transmission case side.



- (c) Using a brass bar and a hammer, remove the manual transmission case from the transaxle case.

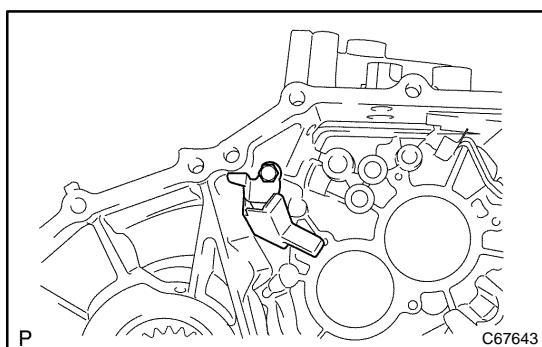


37. REMOVE OIL RECEIVER PIPE NO.1 (MTM)

- (a) Remove the bolt and oil receiver pipe No.1 from the manual transmission case.

NOTICE:

Be careful not to damage the oil receiver pipe No.1.

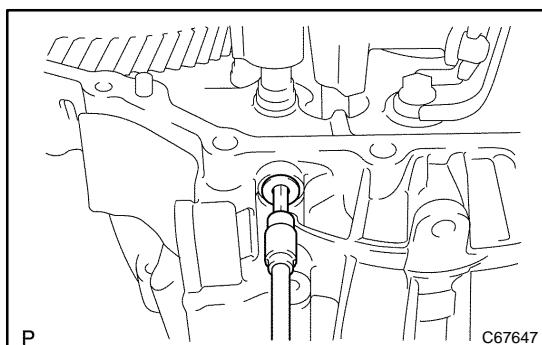


38. REMOVE OIL RECEIVER PIPE NO.2 (MTM)

- (a) Remove the bolt and oil receiver pipe No.2 from the manual transmission case.

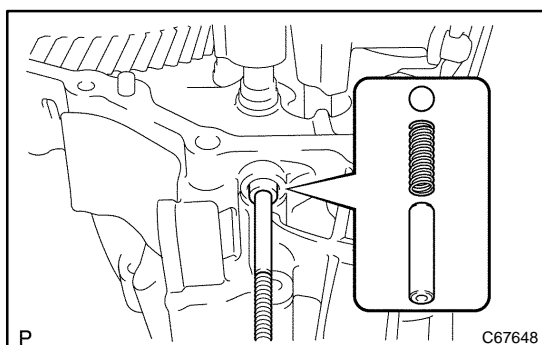
NOTICE:

Be careful not to damage the oil receiver pipe No.2.

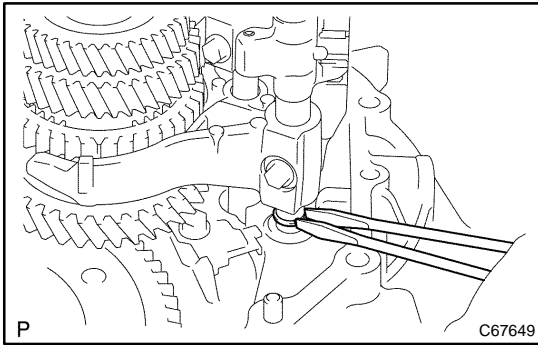


39. REMOVE 1ST GEAR THRUST WASHER PIN OR BALL

- (a) Using a socket hexagon wrench 6, remove the shift detent ball plug from the transaxle case.



- (b) Using a magnetic finger, remove the shift detent ball spring seat, shift detent ball compression spring and shift detent ball from the transaxle case.

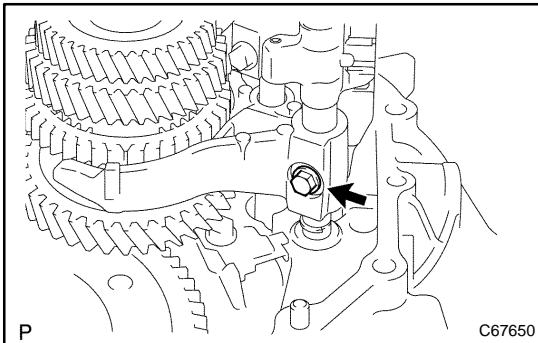


40. REMOVE GEAR SHIFT FORK SHAFT SUB-ASSY NO.1

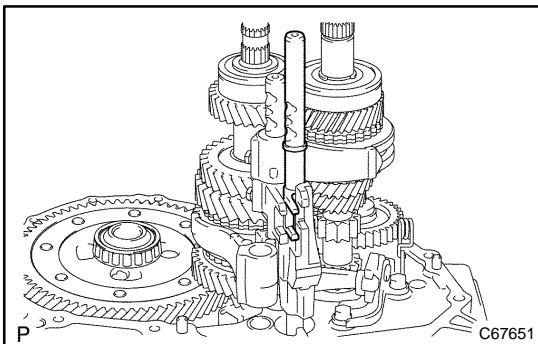
- (a) Using 2 screwdrivers and a hammer, remove shaft snap ring.

NOTICE:

Using a waste to prevent the snap ring from the being scattered.

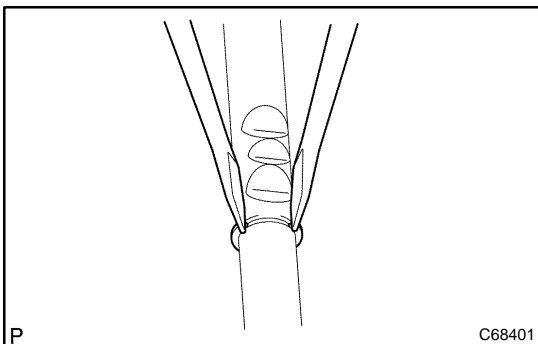


- (b) Remove the gear shift fork lock bolt and gear shift fork shaft sub-assy No.1.



41. REMOVE GEAR SHIFT FORK SHAFT NO.3

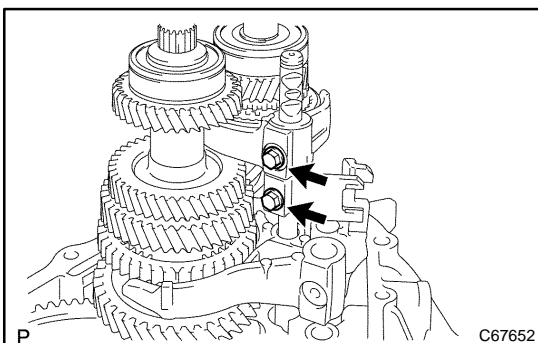
- (a) Remove the shift fork shaft No.3 from the transaxle case.



- (b) Using 2 screwdrivers and a hammer, remove the shaft snap ring from the shift fork shaft No.3.

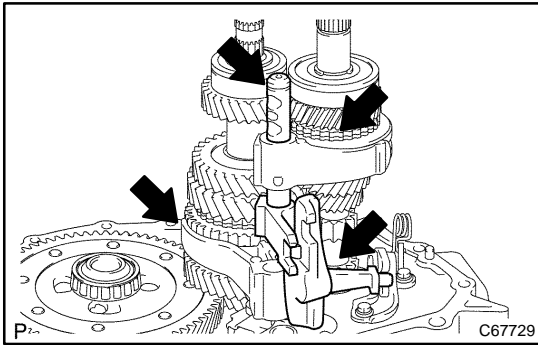
NOTICE:

Using a waste to prevent the snap ring from the being scattered.

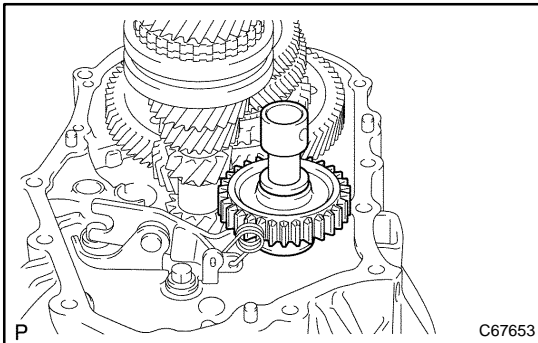


42. REMOVE GEAR SHIFT FORK SHAFT NO.2

- (a) Remove the 2 gear shift fork lock bolts from the gear shift fork No.2 and gear shift head No.1.

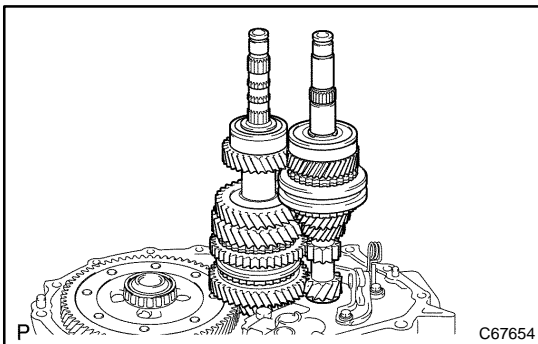


- (b) Remove the gear shift fork shaft No.2, gear shift fork No.2, gear shift head No.1 and reverse shift fork.



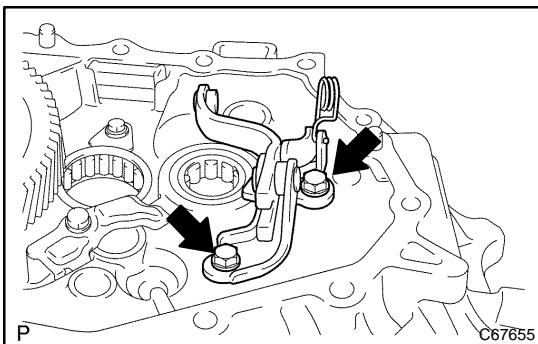
43. REMOVE REVERSE IDLER GEAR SUB-ASSY

- (a) Remove the reverse idler gear shaft, thrust washer and reverse idler gear sub-assy from the transaxle case.



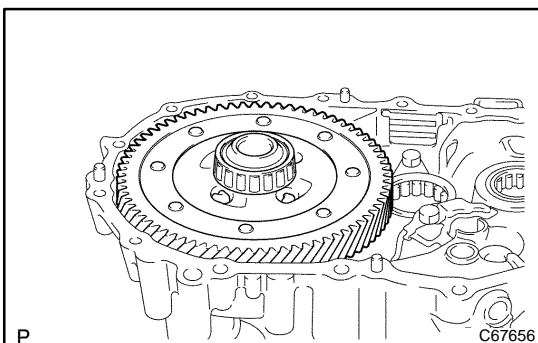
44. REMOVE INPUT SHAFT ASSY

- (a) Remove the input shaft assy with output shaft assy from the transaxle case.



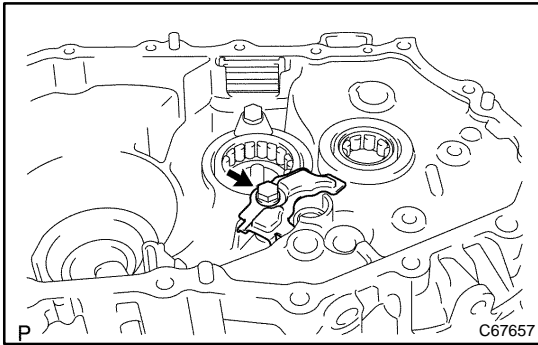
45. REMOVE REVERSE SHIFT ARM BRACKET ASSY

- (a) Remove the 2 bolts and reverse shift arm bracket assy from the transaxle case.

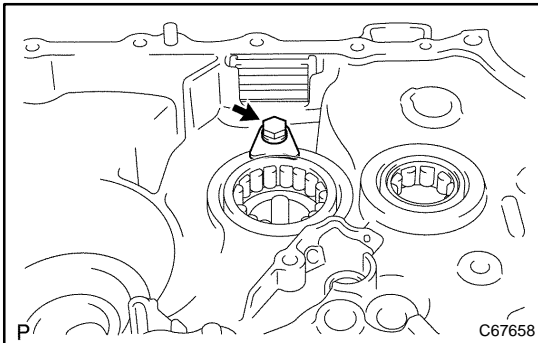


46. REMOVE DIFFERENTIAL CASE ASSY

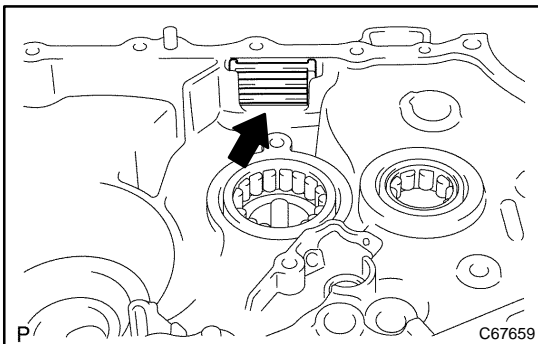
- (a) Remove the differential case assy from the transaxle case.



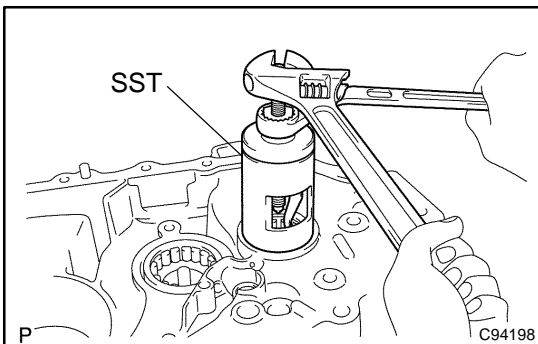
- 47. REMOVE MANUAL TRANSAXLE CASE RECEIVER**
 (a) Remove the bolt and manual transaxle case receiver from the transaxle case.



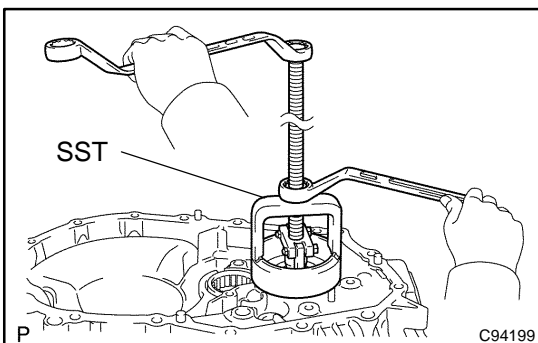
- 48. REMOVE BEARING LOCK PLATE**
 (a) Remove the bolt and bearing lock plate from the transaxle case.



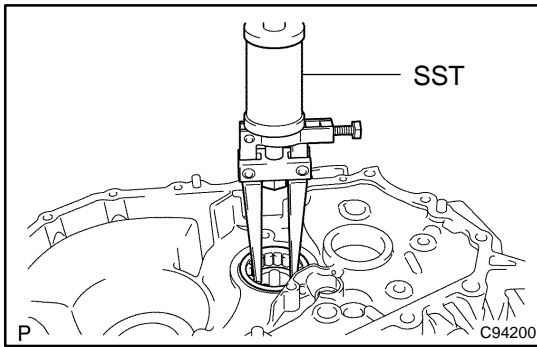
- 49. REMOVE TRANSMISSION MAGNET**
 (a) Remove the transmission magnet from the transaxle case.



- 50. REMOVE INPUT SHAFT FRONT BEARING**
 (a) Using SST, remove the input shaft front bearing (outer race) from the transaxle case.
 SST 09612-24014 (09613-22011)



- 51. REMOVE FRONT TRANSAXLE CASE OIL SEAL**
 (a) Using SST, remove the front transaxle case oil seal from the transaxle case.
 SST 09612-65014 (09612-01040, 09612-01050)

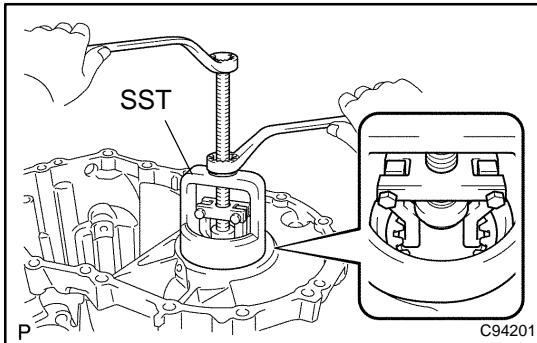
**52. REMOVE OUTPUT SHAFT FRONT BEARING**

- (a) Using SST, remove the output shaft front bearing from the transaxle case.

SST 09308-00010

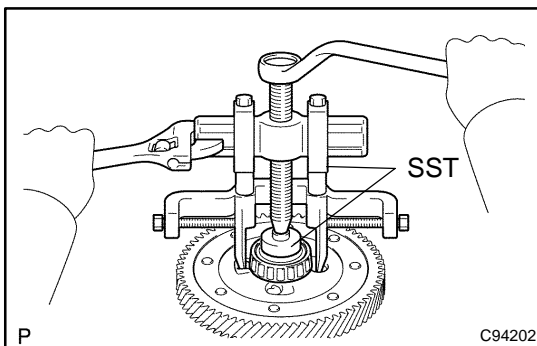
NOTICE:

Do not apply unreasonable force to the transaxle case when installing it.

**53. REMOVE FR DIFFERENTIAL CASE REAR TAPERED ROLLER BEARING**

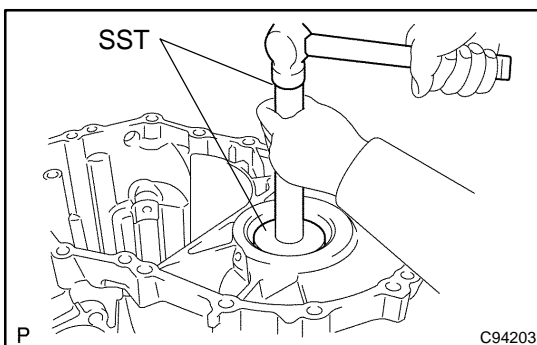
- (a) Using SST, remove the front differential case rear tapered roller bearing (outer race) and shim from manual transmission case.

SST 09612-65014 (09612-01040, 09612-01050)



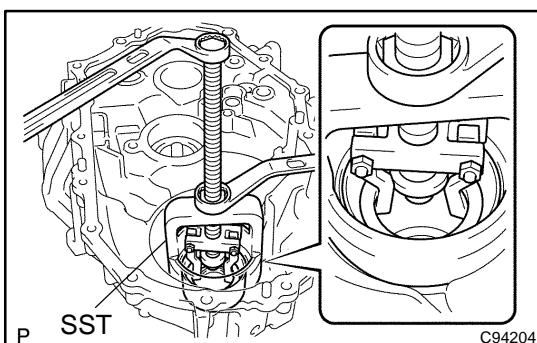
- (b) Using SST, remove the FR differential case rear tapered roller bearing (inner race) from the front differential case.

SST 09612-65014 (09612-01040, 09612-01050),
09950-40011 (09951-00390, 09951-04010,
09952-04010, 09953-04020, 09954-04010,
09955-04061, 09957-04010, 09958-04011),
09950-60010

**54. REMOVE TRANSMISSION CASE OIL SEAL**

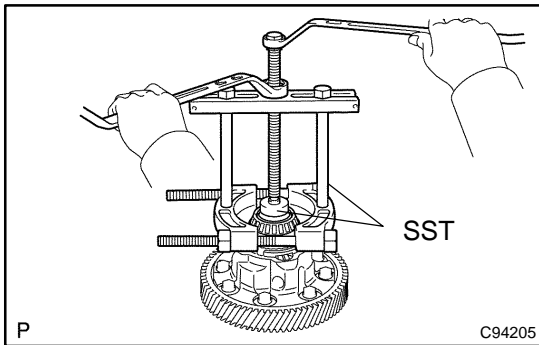
- (a) Using SST and a hammer, remove transmission case oil seal from the manual transmission case.

SST 09950-60010 (09951-00530), 09950-70010
(09951-07150)

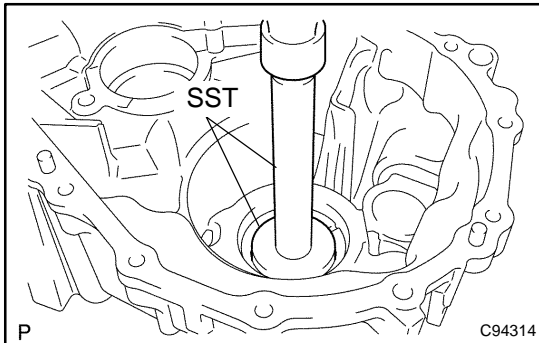
**55. REMOVE FR DIFFERENTIAL CASE FRONT TAPERED ROLLER BEARING**

- (a) Using SST, remove the front differential case front tapered roller bearing (outer race) and front differential case washer FR from the transaxle case.

SST 09612-65014 (09612-01040, 09612-01050)

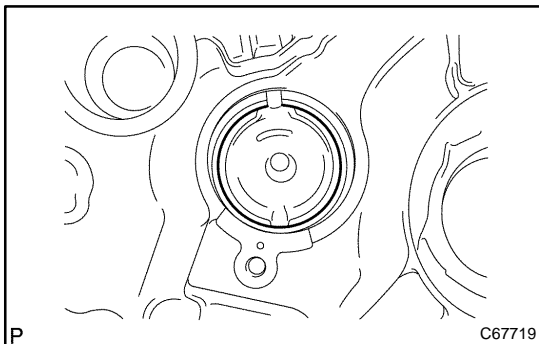


- (b) Using SST, remove the FR differential case front tapered roller bearing (inner race) from the front differential case.
SST 09950-00020, 09950-00030, 09950-40011
(09957-04010), 09950-60010 (09951-00390)



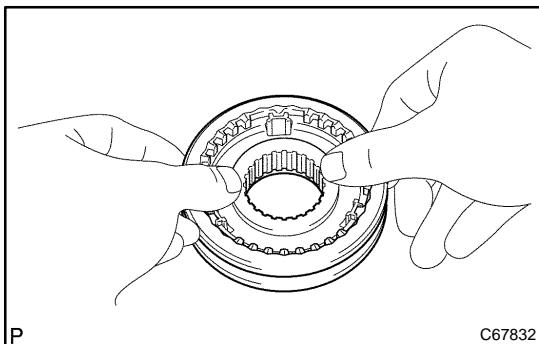
56. REMOVE TRANSAXLE CASE OIL SEAL

- (a) Using SST and a hammer, remove transaxle case oil seal from the transaxle case.
SST 09950-60010 (09951-00600), 09950-70010
(09951-07100)



57. REMOVE OUTPUT SHAFT (MTM) COVER

- (a) Remove the output (MTM) shaft cover from the transaxle case.

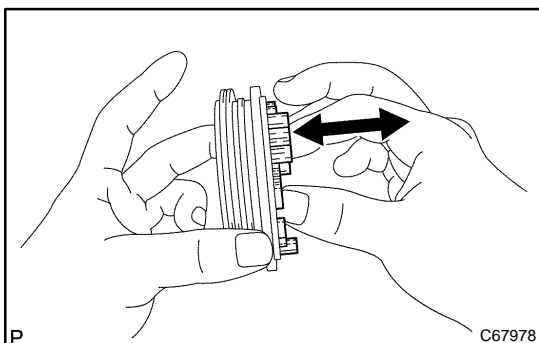


58. REMOVE TRANSMISSION HUB SLEEVE NO.3

- (a) Remove the transmission hub sleeve No.3, 3 synchromesh shifting key No.3 and 2 synchromesh shifting key spring No.3.

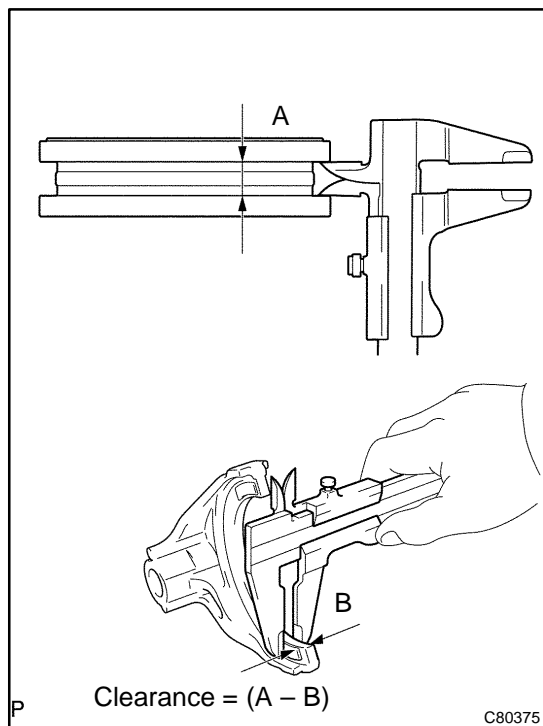
NOTICE:

Using a waste to prevent the synchromesh shifting key and spring from the being scattered.



59. INSPECT TRANSMISSION HUB SLEEVE NO.3

- (a) Check the sliding condition between the transmission hub sleeve No.3 and transmission clutch hub No.3.
(b) Check that spline gears of the transmission hub sleeve No.3 is not worn down.

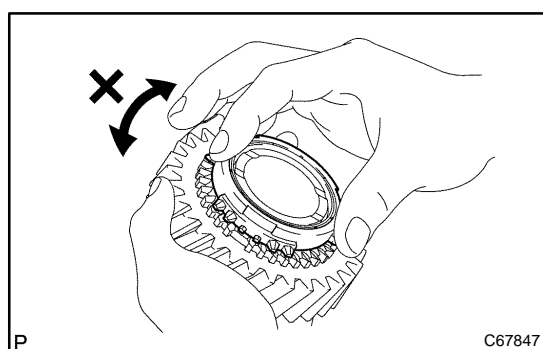


- (c) Using a vernier calipers, inspect the transmission hub sleeve No.3 and gear shift fork No.3 as shown in the illustration.

Standard clearance:

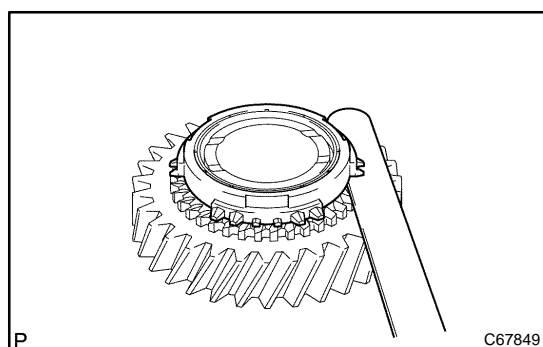
0.31 - 0.89 mm (0.0122 - 0.035 in.)

If the clearance out of specification, replace the transmission hub sleeve No.3 and gear shift fork No.3.



60. INSPECT SYNCHRONIZER RING NO.3 (FOR 6TH GEAR MT)

- (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, check that the ring locks.

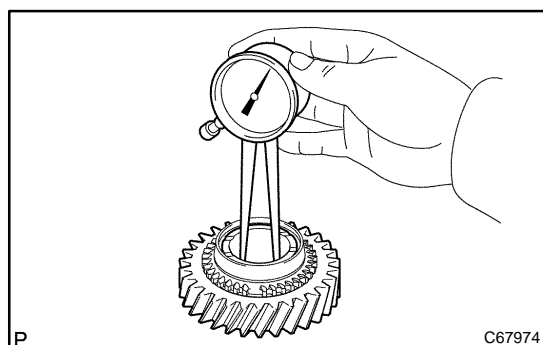


- (c) Using a feeler gauge, measure the clearance between the synchronizer ring back and gear spline end.

Standard clearance:

0.75 - 1.65 mm (0.0295 - 0.065 in.)

If the clearance is out of specification, replace the synchronizer ring No.3.



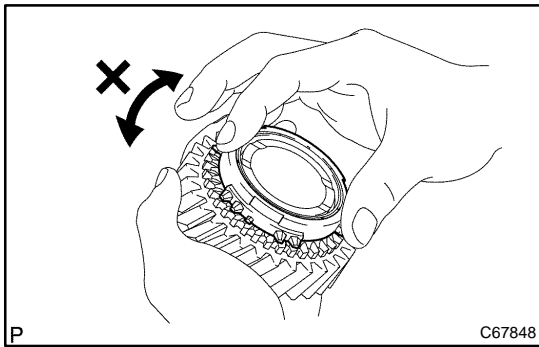
61. INSPECT 6TH GEAR SUB-ASSY

- (a) Using a caliper gauge, inspect the 6th gear inner diameter.

Inner diameter:

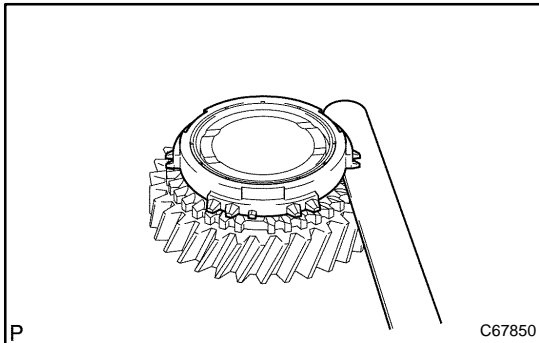
New gear: mm (in.)	Maximum inner diameter: mm (in.)
28.015 - 28.031 (1.1030 - 1.1036)	28.031 (1.1036)

If the clearance is exceeds the maximum, replace the 6 th gear sub-assy.



62. INSPECT SYNCHRONIZER RING NO.3 (FOR 5TH GEAR MT)

- (a) Check the braking effect of the synchronizer ring. Turn the synchronizer ring in one direction while pushing it to the gear cone, check that the ring locks.

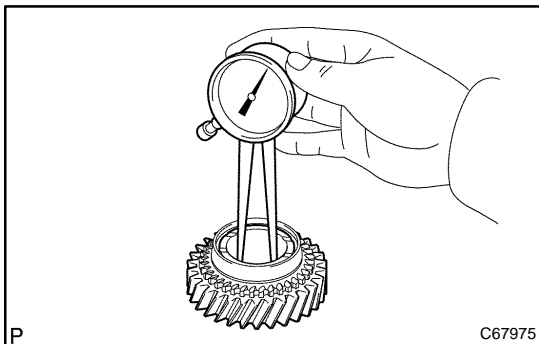


- (b) Using a feeler gauge, measure the clearance between the synchronizer ring back and 5th gear spline end.

Standard clearance:

0.75 – 1.65 mm (0.0295 – 0.0650 in.)

If the clearance is out of specification, replace the synchronizer ring No.3.



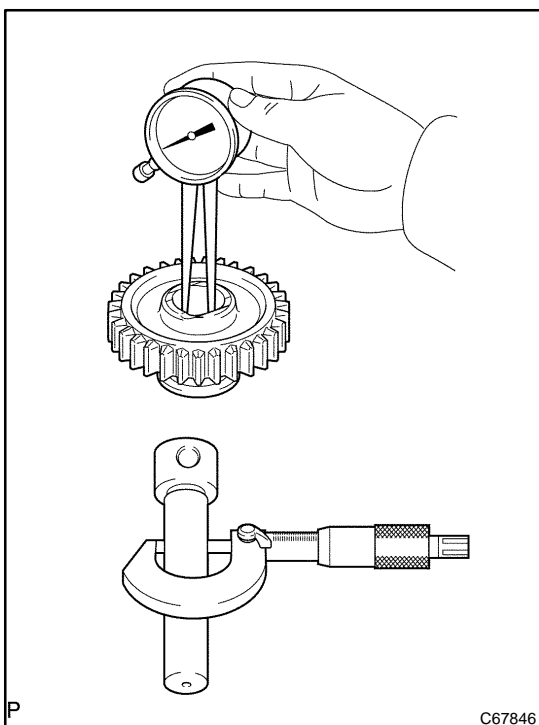
63. INSPECT 5TH GEAR

- (a) Using a caliper gauge, inspect the 5th gear inner diameter.

Inner diameter:

New gear: mm (in.)	Maximum inner diameter: mm (in.)
29.915 – 29.931 (1.1778 – 1.1784)	29.931 (1.1784)

If the inner diameter is exceeds the maximum, replace the 5th gear.



64. INSPECT REVERSE IDLER GEAR SUB-ASSY

- (a) Using a caliper gauge, inspect the reverse idler gear sub-assy as shown in the illustration.

Inner diameter:

New gear: mm (in.)	Maximum inner diameter: mm (in.)
18.040 – 18.058 (0.7102 – 0.7109)	18.058 (0.7109)

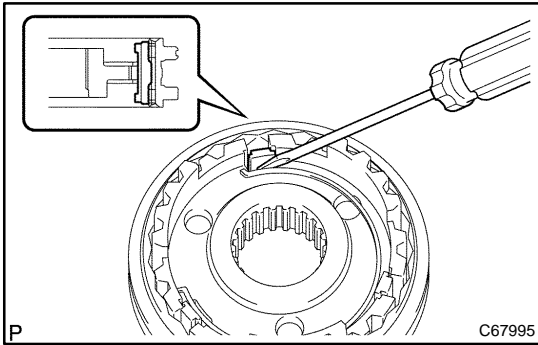
If the inner diameter is exceeds the maximum, replace the reverse idler gear sub-assy.

- (b) Using a micrometer, inspect the reverse idler gear shaft as shown in the illustration.

Outer diameter:

New idler gear shaft: mm (in.)	Minimum outer diameter: mm (in.)
17.966 – 17.984 (0.7073 – 0.7080)	17.966 (0.7073)

If the outer diameter is exceeds the minimum, replace the reverse idler gear shaft.

**65. INSTALL TRANSMISSION HUB SLEEVE NO.3**

- (a) Coat the transmission hub sleeve No.3 with gear oil, install it to the transmission clutch hub No.3.

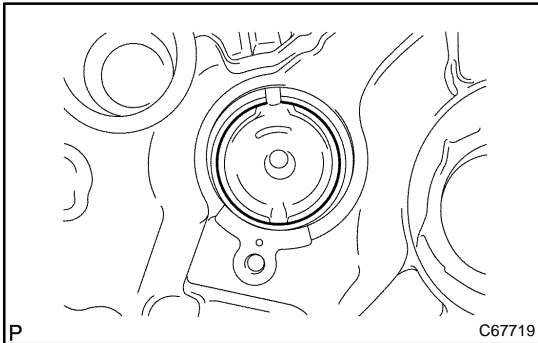
NOTICE:

Do not set the transmission clutch hub No.3 in incorrect orientation.

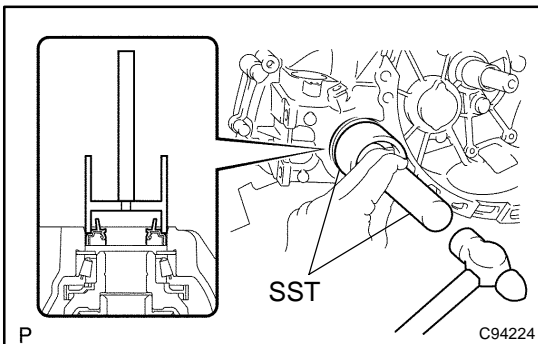
- (b) Using a screwdriver, install the 2 synchromesh shifting key spring No.3 and 3 synchromesh shifting key No.3.

NOTICE:

Do not set both openings of the shifting key spring in the same position.

**66. INSTALL OUTPUT SHAFT (MTM) COVER**

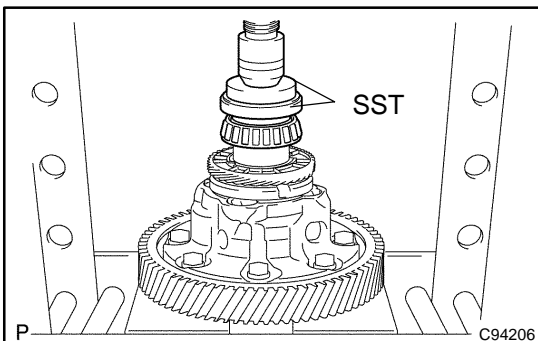
- (a) Coat the output shaft (MTM) cover with MP grease, install it to the transaxle case.

**67. INSTALL TRANSAXLE CASE OIL SEAL**

- (a) Using SST and a hammer, install the transaxle case oil seal No.2 to the transaxle case.

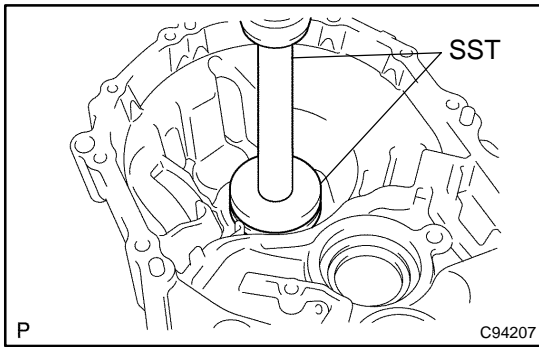
SST 09726-27012 (09726-02041), 09950-70010 (09951-07100)

Driven in depth: 1.9 ± 0.3 mm (0.075 ± 0.012 in.)

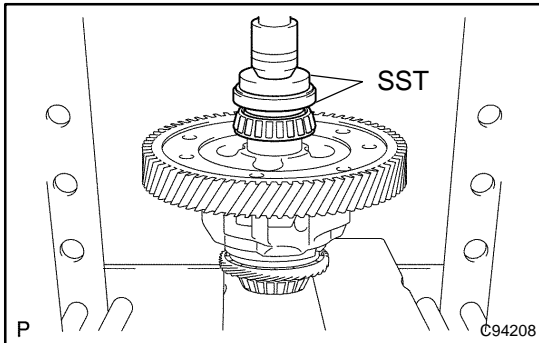
**68. INSTALL FR DIFFERENTIAL CASE FRONT TAPERED ROLLER BEARING**

- (a) Using SST and a press, install FR differential case front tapered roller bearing (inner race) to the front differential case.

SST 09350-32014 (09351-32120), 09950-60010 (09951-00530)

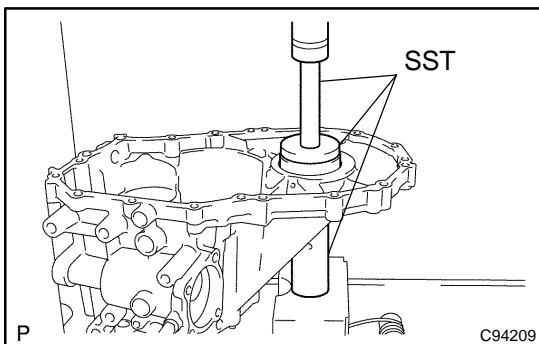


- (b) Using SST and a press, install the FR differential case front bearing spacer and FR differential case front tapered roller bearing (outer race) to the transaxle case.
SST 09950-60020 (09951-00680), 09950-70010 (09951-07150)



69. INSTALL FR DIFFERENTIAL CASE REAR TAPERED ROLLER BEARING

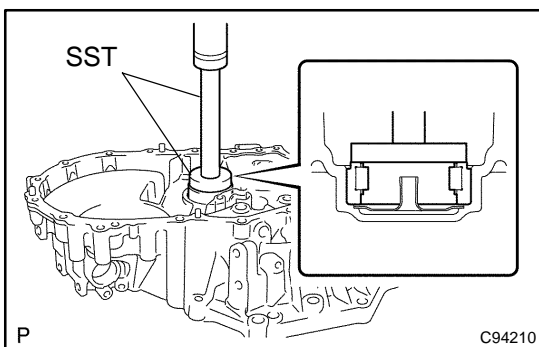
- (a) Using SST and a press, install the FR differential case rear tapered roller bearing (inner race) to the front differential case.
SST 09350-32014 (09351-32120), 09950-60010 (09951-00530)



- (b) Using SST and a press, install the front differential case shim RR and FR differential case rear tapered roller bearing (outer race) to the manual transmission case.
SST 09309-36010, 09950-60020 (09951-00710), 09950-70010 (09951-07150)

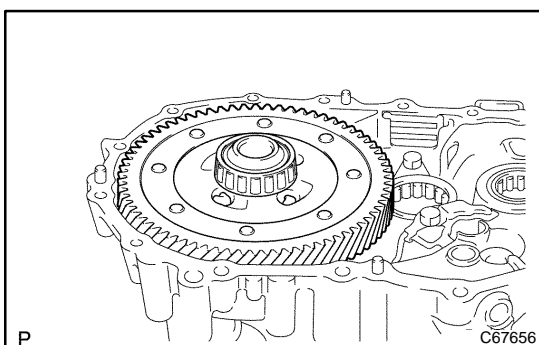
HINT:

Use a front differential case shim RR of the same thickness with the remove one.



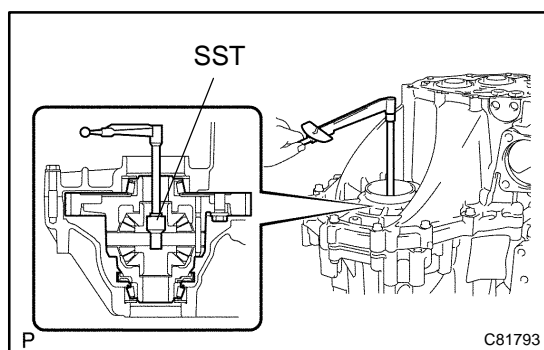
70. INSTALL OUTPUT SHAFT FRONT BEARING

- (a) Coat the new output shaft front bearing with gear oil, using SST and a press, install it to the transaxle case.
SST 09950-60010 (09951-00550), 09950-70010 (09951-07150)



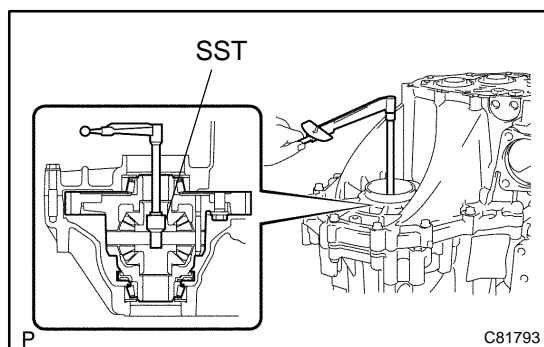
71. ADJUST DIFFERENTIAL SIDE BEARING RRELOAD

- (a) Coat the differential case assy with gear oil, install it to the transaxle case.
(b) Install the manual transmission case with 16 bolts.
Torque: 29.4 N·m (300 kgf·cm, 22 ft·lbf)



- (c) Using SST and a torque wrench, turn the differential case assy right and left 2 or 3 times to allow the bearings to settle.

SST 09564-32011



- (d) Using SST and a torque wrench, measure the preload.
SST 09564-32011

Preload:

Bearing	Torque
New	0.78 - 1.57 N·m (8 - 16 kgf·cm, 7 - 14 in.-lbf)
Used	0.49 - 0.98 N·m (5 - 10 kgf·cm, 4 - 9 in.-lbf)

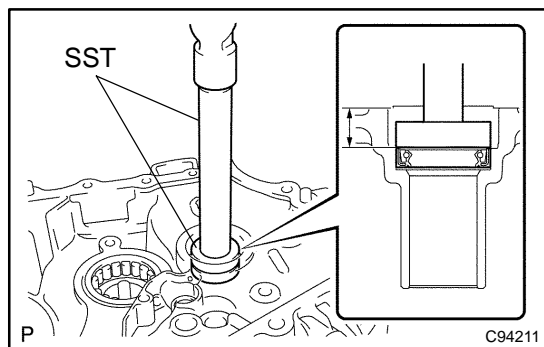
If the preload is out of the specification, select the front differential case shim RR adjust it.

HINT:

Shim thickness:

Part No.	Thickness: mm (in.)	Make
90564-41014	2.10 (0.0827)	AA
90564-41015	2.15 (0.0846)	BB
90564-41016	2.20 (0.0866)	CC
90564-41017	2.25 (0.0886)	DD
90564-41018	2.30 (0.0906)	EE
90564-41019	2.35 (0.0925)	FF
90564-41020	2.40 (0.0945)	GG
90564-41021	2.45 (0.0965)	HH
90564-41022	2.50 (0.0984)	JJ
90564-41023	2.55 (0.1004)	KK
90564-41024	2.60 (0.1024)	LL
90564-41025	2.65 (0.1043)	MM
90564-41026	2.70 (0.1063)	NN
90564-41027	2.75 (0.1083)	PP
90564-41028	2.80 (0.1102)	QQ
90564-41029	2.85 (0.1122)	RR
90564-41030	2.90 (0.1142)	SS
90564-41031	2.95 (0.1161)	TT
90564-41032	3.00 (0.1181)	UU

- (e) Remove the 16 bolts and manual transmission case.
(f) Remove the differential case assy from the transaxle case.

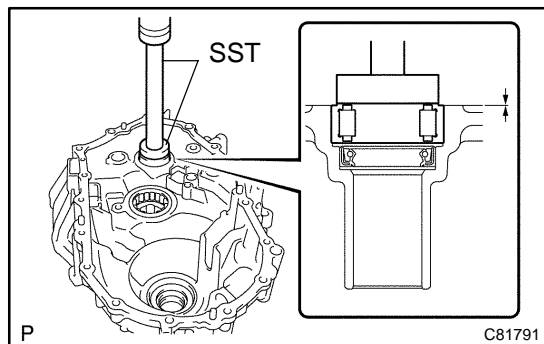
**72. INSTALL FRONT TRANSAXLE CASE OIL SEAL**

- (a) Using SST and a hammer, install a new front transaxle case oil seal to the transaxle case.

SST 09950-60010 (09951-00370), 09950-70010 (09951-07150)

Driven in depth: 15.6 – 16.0 mm (0.6142 – 0.6299 in.)

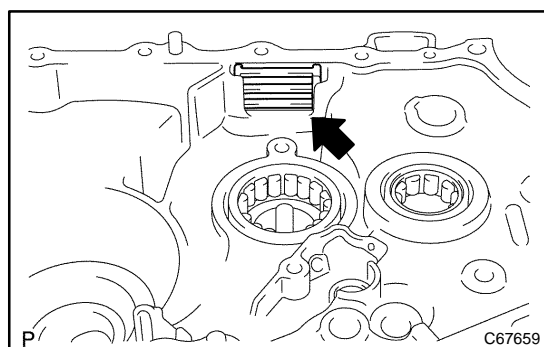
- (b) Coat the lip of the front transaxle case oil seal with MP grease.

**73. INSTALL INPUT SHAFT FRONT BEARING**

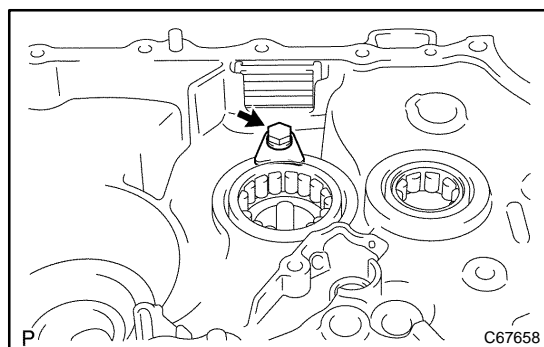
- (a) Coat new input shaft front bearing with MP grease, using SST and a press, install it to the transaxle case.

SST 09950-60010 (09951-00420), 09950-70010 (09951-07150)

Driven in depth: 0 – 0.30 mm (0 – 0.0118 in.)

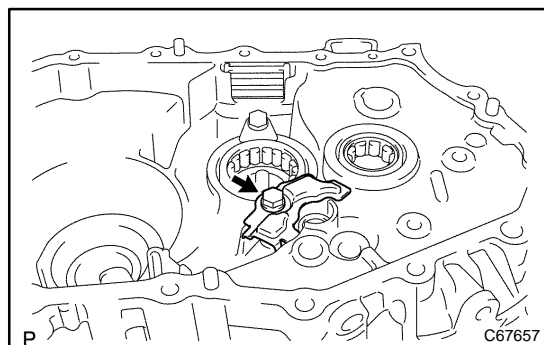
**74. INSTALL TRANSMISSION MAGNET**

- (a) Clean the transmission magnet, install it to the transaxle case.

**75. INSTALL BEARING LOCK PLATE**

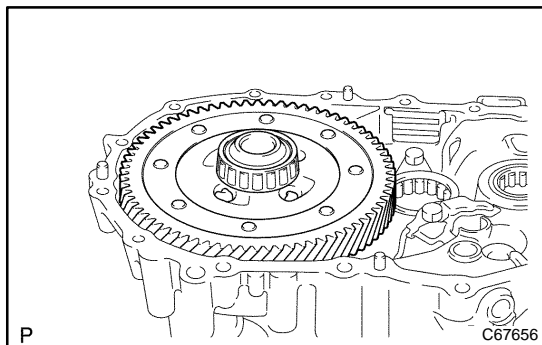
- (a) Install the bearing lock plate with bolt to the transaxle case.

Torque: 11.3 N·m (115 kgf·cm, 8 ft·lbf)

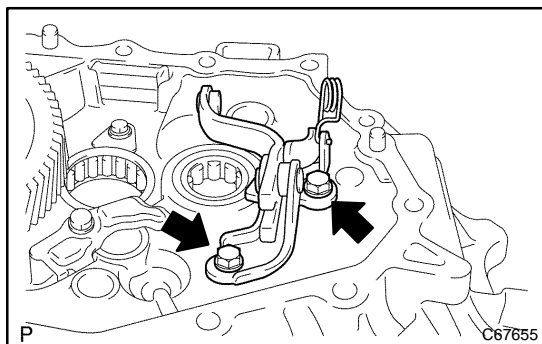
**76. INSTALL MANUAL TRANSAXLE CASE RECEIVER**

- (a) Install the manual transaxle case receiver with bolt to the transaxle case.

Torque: 11.3 N·m (115 kgf·cm, 8 ft·lbf)

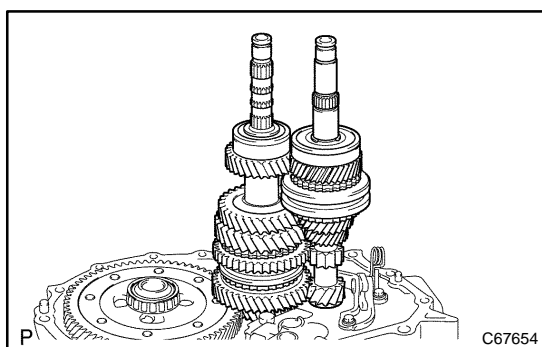
**77. INSTALL DIFFERENTIAL CASE ASSY**

- (a) Coat the differential case tapered roller bearing with gear oil, install the differential case assy to the transaxle case.

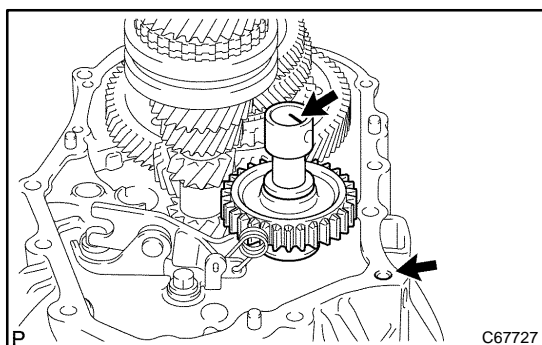
**78. INSTALL REVERSE SHIFT ARM BRACKET ASSY**

- (a) Install the reverse shift arm bracket assy with 2 bolts to the transaxle case.

Torque: 17.2 N·m (175 kgf·cm, 13 ft·lbf)

**79. INSTALL INPUT SHAFT ASSY**

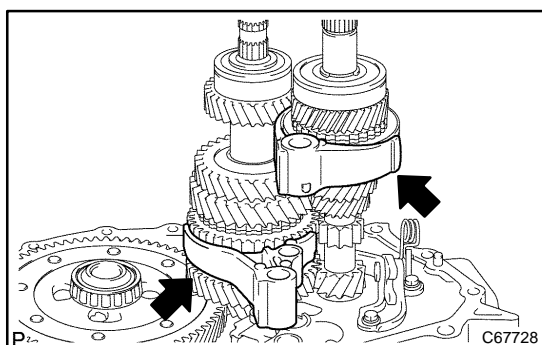
- (a) Coat the sliding and rotating surface of the input and output shafts with gear oil, install them to the transaxle case.

**80. INSTALL REVERSE IDLER GEAR SUB-ASSY**

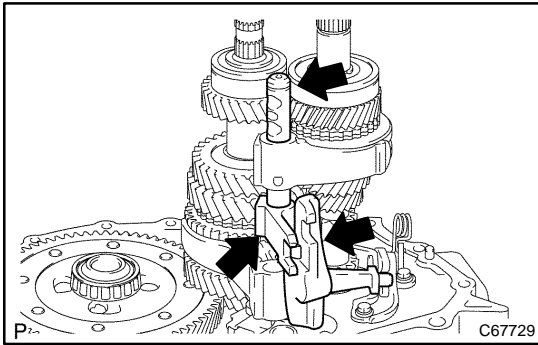
- (a) Coat the reverse idler gear sub-assy, thrust washer and reverse idler gear shaft with gear oil, install them to the transaxle case.

HINT:

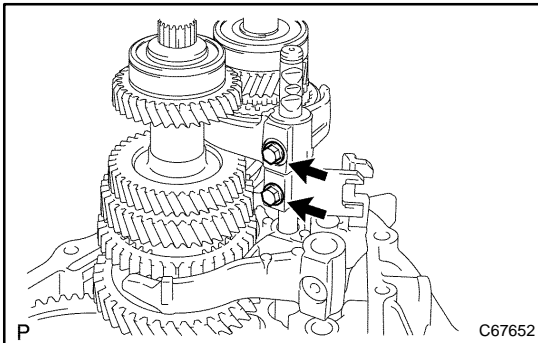
Align the mark on the reverse idler gear shaft with the bolt hole shown in the illustration.

**81. INSTALL GEAR SHIFT FORK SHAFT NO.2**

- (a) Coat the gear shift fork No.2 and gear shift fork No.1 with gear oil, install them to the input and output shafts.



- (b) Coat the gear shift fork shaft No.2 with gear oil, install the gear shift head No.1, reverse shift fork and gear shift fork shaft No.2.

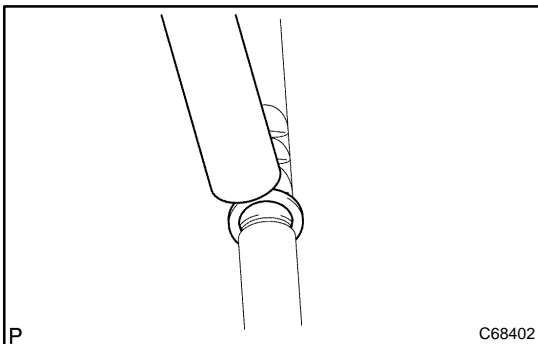


- (c) Coat the 2 shift lock bolts with sealant, install them to the gear shift fork No.2 and gear shift head No.1.

Sealant:

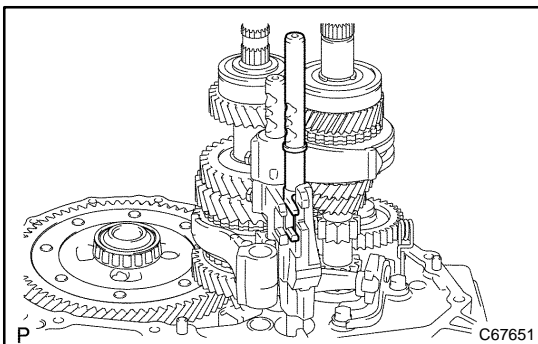
Part No.08833-00080, THREE BOND 1344, LOCTITE 242 or equivalent

Torque: 15.7 N·m (160 kgf·cm, 12 ft·lbf)

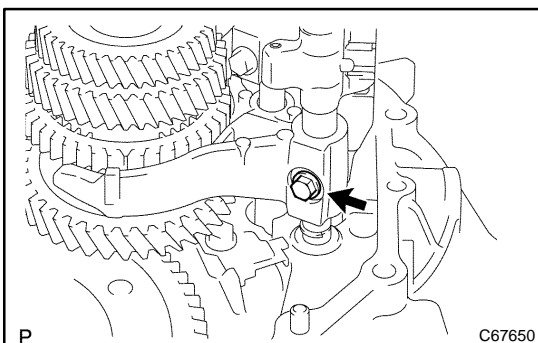


82. INSTALL GEAR SHIFT FORK SHAFT NO.3

- (a) Using a brass bar and a hammer, install the shaft snap ring to the gear shift fork shaft No.3.



- (b) Coat the gear shift fork shaft No.3 with gear oil, install it to the transaxle case.



83. INSTALL GEAR SHIFT FORK SHAFT SUB-ASSY NO.1

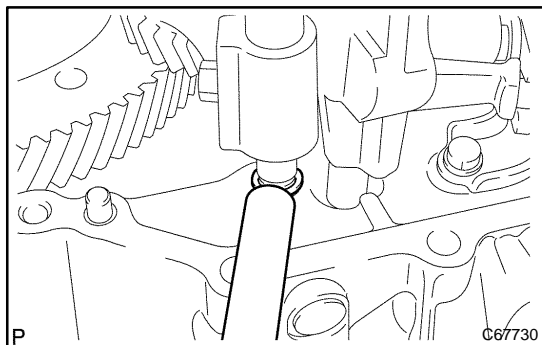
- (a) Coat the gear shift fork shaft sub-assy No.1 with gear oil, install it to the transaxle case.

- (b) Coat the shift fork lock bolt with sealant, install it to the gear shift fork No.1.

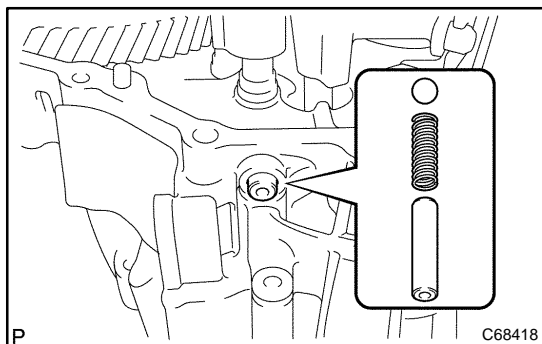
Sealant:

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

Torque: 15.7 N·m (160 kgf·cm, 12 ft·lbf)

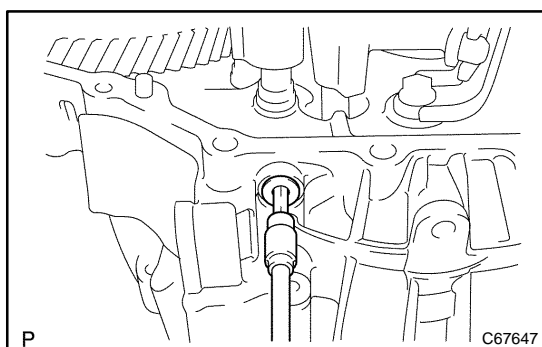


- (c) Using a brass bar and a hammer, install shaft snap ring.



84. INSTALL 1ST GEAR THRUST WASHER PIN OR BALL

- (a) Install the shift detent ball, shift detent ball compression spring and shift detent ball spring seat to the transaxle case.

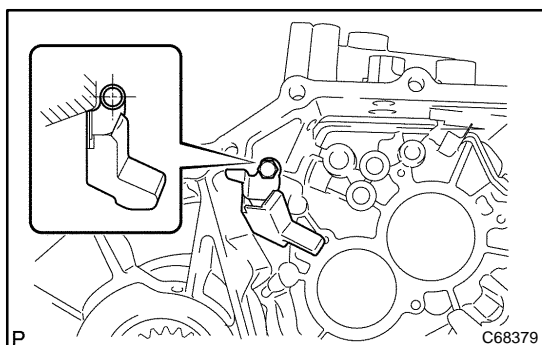


- (b) Coat the shift detent ball plug with sealant, using SST, install it to the transaxle case.

Sealant:

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

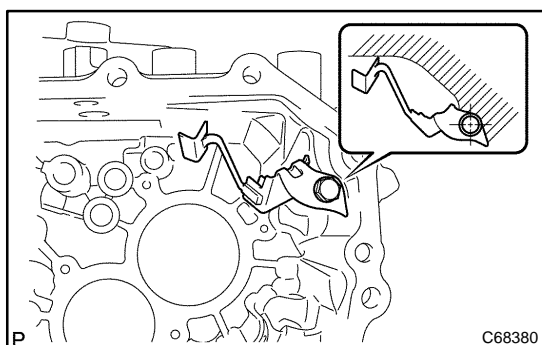
Torque: 24.5 N·m (250 kgf·cm, 18 ft·lbf)



85. INSTALL OIL RECEIVER PIPE NO.2 (MTM)

- (a) Install the oil receiver pipe No.2 (MTM) with bolt to the manual transmission case.

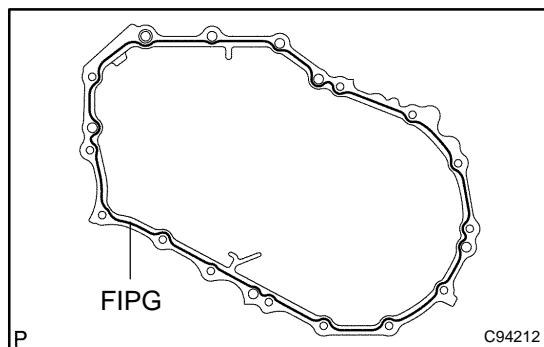
Torque: 17.2 N·m (175 kgf·cm, 13 ft·lbf)



86. INSTALL OIL RECEIVER PIPE NO.1 (MTM)

- (a) Install the oil receiver pipe No.1 (MTM) with bolt to the manual transmission case.

Torque: 17.2 N·m (175 kgf·cm, 13 ft·lbf)

**87. INSTALL MANUAL TRANSMISSION CASE**

- (a) Apply FIPG to the manual transmission case, as shown to the illustration.

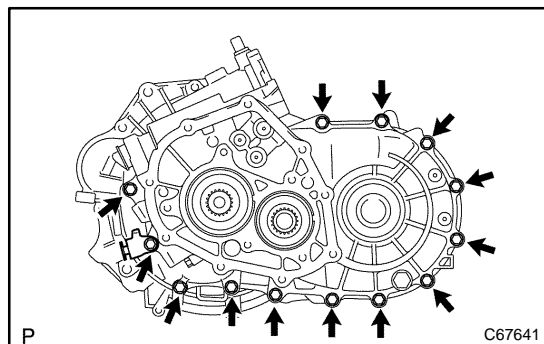
FIPG:

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

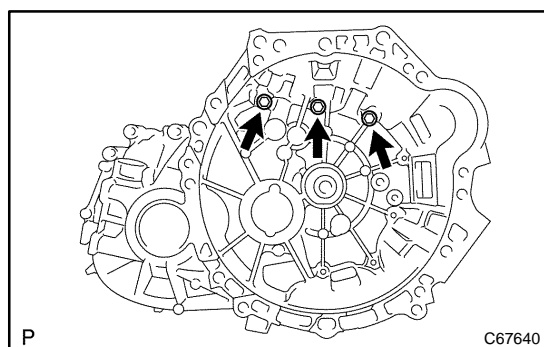
NOTICE:

Parts must be assembled within 10 minutes of application. Otherwise, the packing (FIPG) material must be removed and reapplied.

- (b) Install the 13 bolts to the manual transmission side.
Torque: 29.4 N·m (300 kgf·cm, 22 ft·lbf)



- (c) Install the 3 bolts to the transaxle case side.
Torque: 29.4 N·m (300 kgf·cm, 22 ft·lbf)

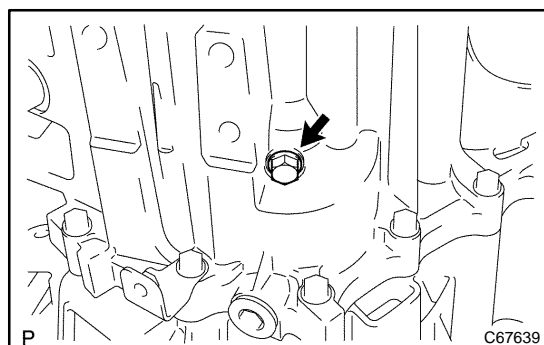
**88. INSTALL REVERSE IDLER GEAR SHAFT BOLT**

- (a) Coat the reverse idler gear shaft bolt with sealant, install it with new gasket to the manual transmission case.

Sealant:

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

Torque: 29.4 N·m (300 kgf·cm, 22 ft·lbf)

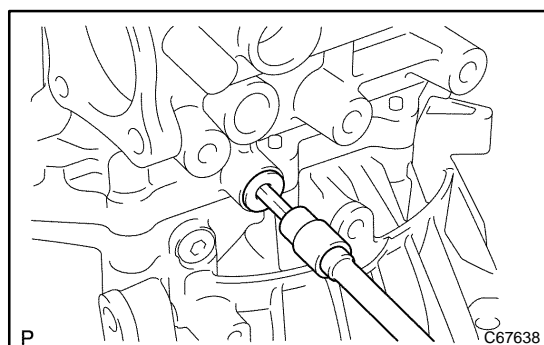
**89. INSTALL MANUAL TRANSMISSION CASE PLUG**

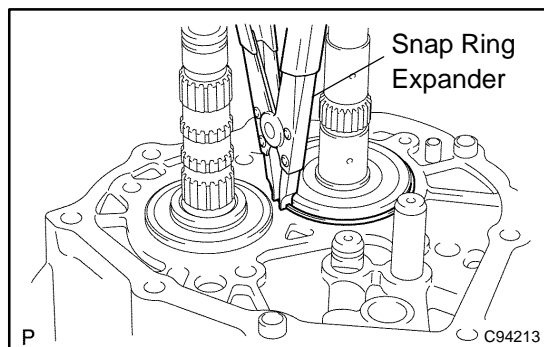
- (a) Coat the transmission case plug with sealant, using socket hexagon wrench 6, install it to the manual transmission case.

Sealant:

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

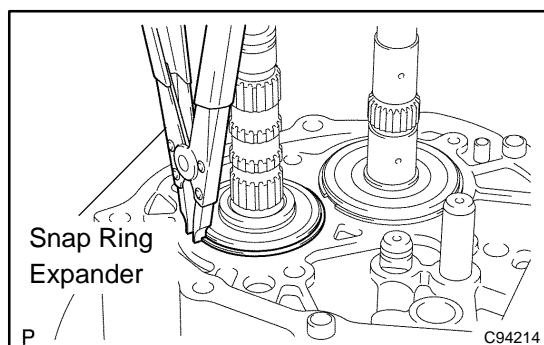
Torque: 39.2 N·m (400 kgf·cm, 29 ft·lbf)





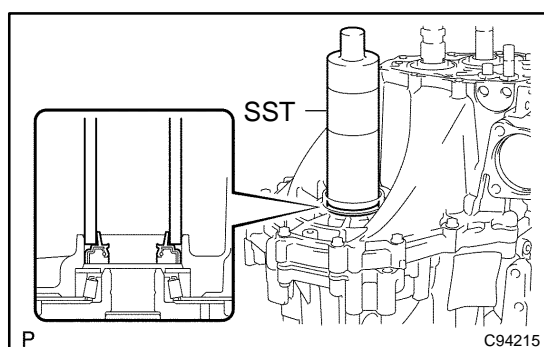
90. INSTALL INPUT SHAFT REAR BEARING HOLE SNAP RING

- (a) Using a snap ring expander, install the input shaft rear bearing hole snap ring to the input shaft.



91. INSTALL OUTPUT SHAFT REAR BEARING HOLE SNAP RING

- (a) Using a snap ring expander, install the output shaft rear bearing hole snap ring to the output shaft.



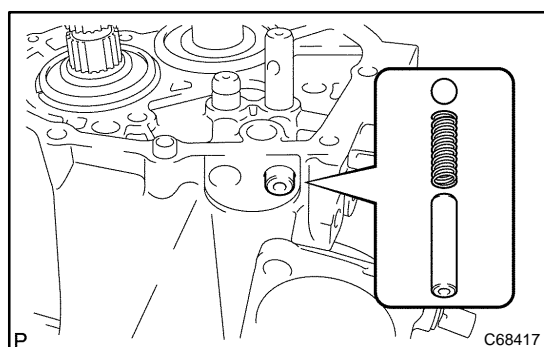
92. INSTALL TRANSMISSION CASE OIL SEAL

- (a) Using SST and a hammer, install the transmission case oil seal to the manual transmission case.

SST 09316-60011 (09316-00011)

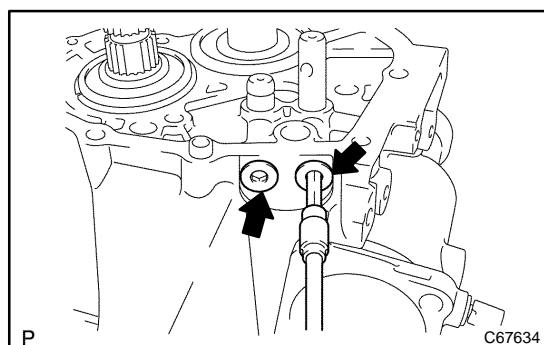
Driven in depth: 9.9 ± 0.3 mm (0.390 – 0.012 in.)

- (b) Coat the lip of the transmission case oil seal with MP grease.



93. INSTALL SHIFT DETENT BALL

- (a) Install the 2 shift detent balls, 2 shift detent ball springs and 2 shift detent ball spring seats to the manual transmission case.

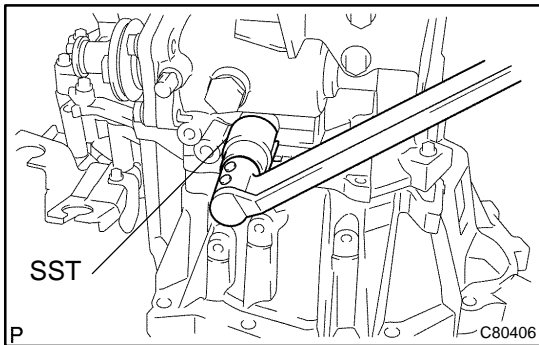


- (b) Coat the 2 shift detent ball plugs with sealant, install it to the manual transmission case.

Sealant:

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

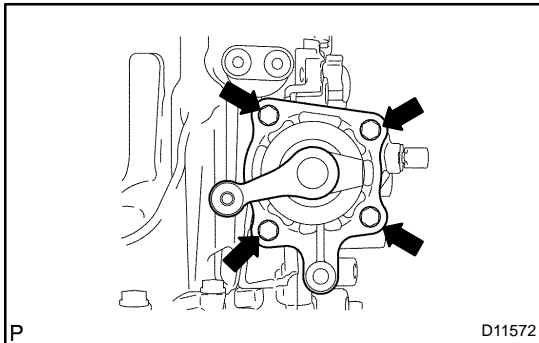
Torque: 24.5 N·m (250 kgf·cm, 18 ft·lbf)

**94. INSTALL BACK UP LAMP SWITCH ASSY**

- (a) Using SST, install the back up lamp switch assy with a new gasket to the manual transmission case.

SST 09817-16011

Torque: 40.2 N·m (411 kgf·cm, 30 ft·lbf)

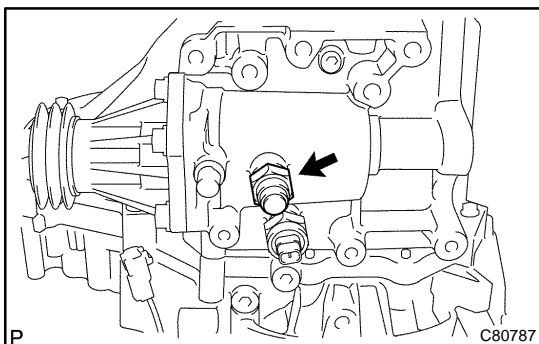
**95. INSTALL SHIFT & SELECT LEVER SHAFT ASSY**

- (a) Coat the shift & select lever shaft assy with gear oil.
 (b) Coat the 4 bolts with sealant, install them with new gasket and shift & select lever shaft assy.

Sealant:

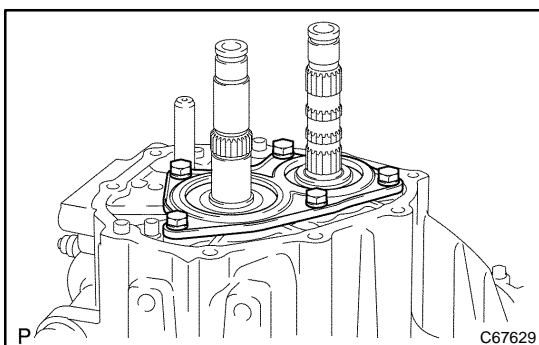
Part No.08833-00080, THREE BOND 1344, LOCTITE 242 or equivalent

Torque: 19.6 N·m (200 kgf·cm, 14 ft·lbf)

**96. INSTALL LOCK BALL ASSY NO.1**

- (a) Coat the lock ball assy No.1 with sealant, install it to the manual transmission case.

Torque: 29.4 N·m (300 kgf·cm, 22 ft·lbf)

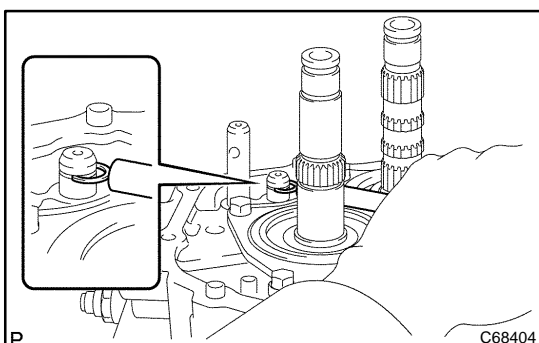
**97. INSTALL BEARING RETAINER REAR (MTM)**

- (a) Coat the 5 bolts with sealant, install it with bearing retainer rear to the manual transmission case.

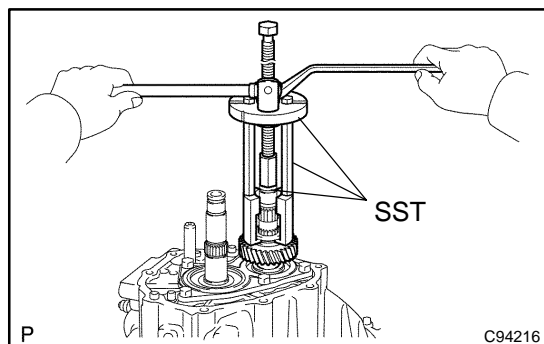
Sealant:

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

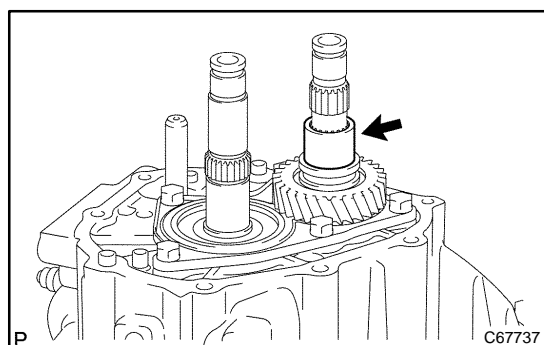
Torque: 27.4 N·m (279 kgf·cm, 20 ft·lbf)

**98. INSTALL SHIFT FORK SHAFT SHAFT SNAP RING**

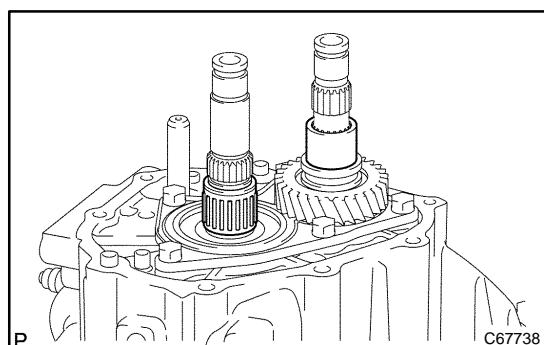
- (a) Using a brass bar and a hammer, install the shift fork shaft snap ring to the shift fork shaft No.2.

**99. INSTALL 5TH DRIVEN GEAR**

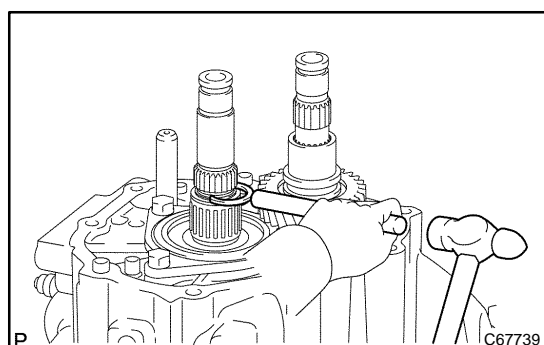
- (a) Using SST, install the 5th driven gear to the output shaft.
 SST 09950-30012 (09951-03010, 09953-03010,
 09954-03010, 09955-03011, 09956-03080)

**100. INSTALL OUTPUT GEAR SPACER**

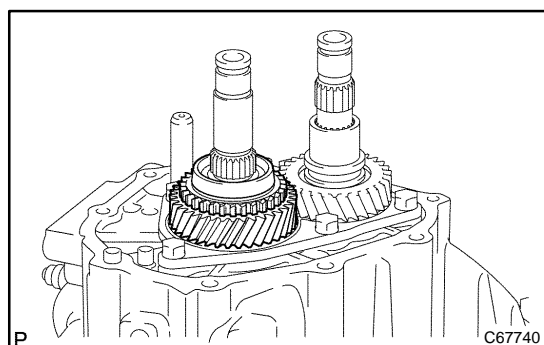
- (a) Install the output gear spacer to the output shaft.

**101. INSTALL 5TH GEAR NEEDLE ROLLER BEARING**

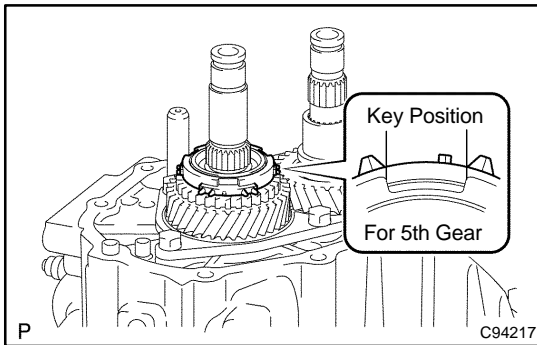
- (a) Coat the 2 5th gear bearing spacers, and 5th gear needle roller bearing with gear oil, install them to the input shaft.



- (b) Using a brass bar and a hammer, install the transmission clutch hub No.3 shaft snap ring to the input shaft.

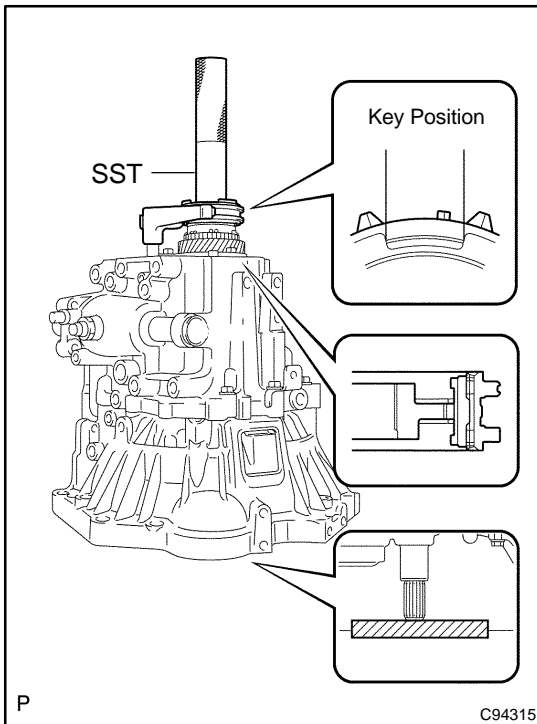
**102. INSTALL 5TH GEAR**

- (a) Coat the 5th gear with gear oil, install it to the input shaft.



103. INSTALL SYNCHRONIZER RING NO.3 (FOR 5TH GEAR MT)

- (a) Coat the synchronizer ring No.3 with gear oil, install it to the 5th gear.

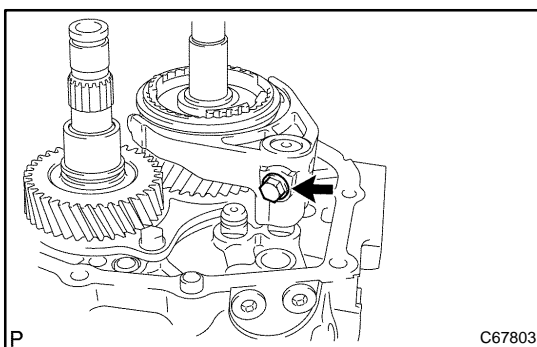


104. INSTALL TRANSMISSION CLUTCH HUB NO.3

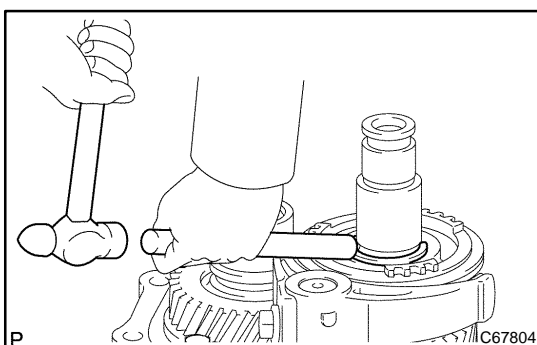
- (a) Using SST and a hammer, install the transmission clutch hub No.3 with gear shift fork No.3 to the input shaft.
SST 09608-04031

NOTICE:

- Before driving in the transmission clutch hub No.3, place the suitable sized wooden block on the rear side of the input shaft, as shown in the illustration.
- When driving it in, fix the input shaft rear bearing is over loaded, it might be damaged.



- (b) Coat the shift fork lock bolt with sealant, install it to the gear shift fork No.3.
Torque: 15.7 N·m (160 kgf·cm, 12 ft·lbf)



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

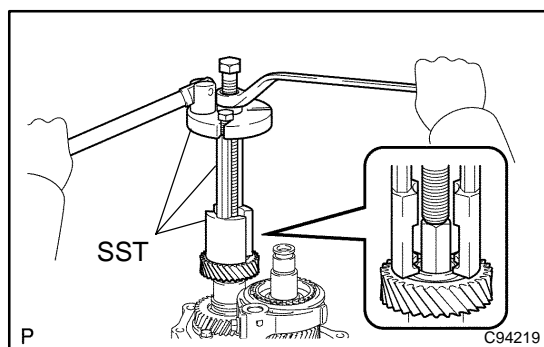
Clearance: 0.1 mm (0.004 in.) or less

Snap ring thickness:

Part No.	Thickness: mm (in.)	Mark
90520-20074	1.75 (0.0689)	A
90520-20075	1.80 (0.0709)	B
90520-20076	1.85 (0.0728)	C
90520-20077	1.90 (0.0748)	D
90520-20078	1.95 (0.0768)	E
90520-20079	2.00 (0.0787)	F

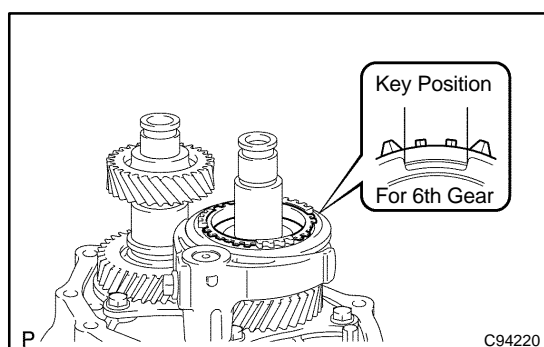
Part No.	Thickness: mm (in.)	Mark
90520-20080	2.05 (0.0807)	G
90520-20081	2.10 (0.0827)	H
90520-20082	2.15 (0.0846)	J

- (d) Using a brass bar and a hammer, install the snap ring to the input shaft.



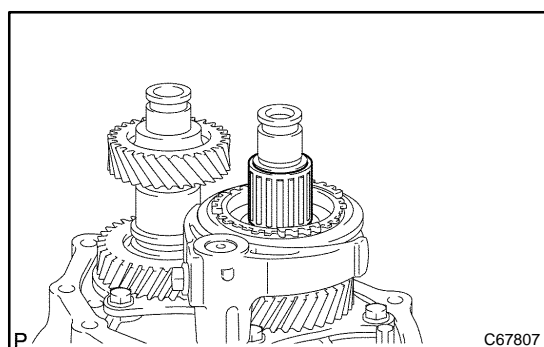
105. INSTALL COUNTER GEAR 6TH

- (a) Using SST, install the counter gear to the output shaft.
SST 09950-30012 (09951-03010, 09953-03010, 09954-03010, 09955-03011, 09956-03080)



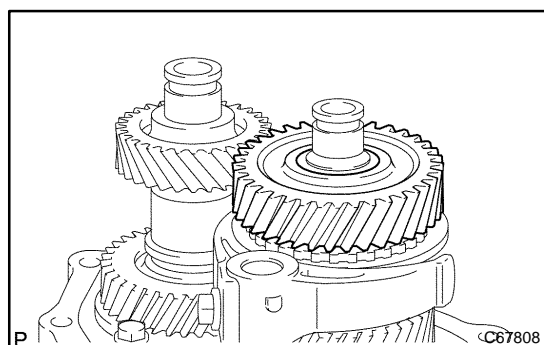
106. INSTALL SYNCHRONIZER RING NO.3 (FOR 6TH GEAR MT)

- (a) Coat the synchronizer ring No.3 with gear oil, install it to the transmission clutch hub No.3.



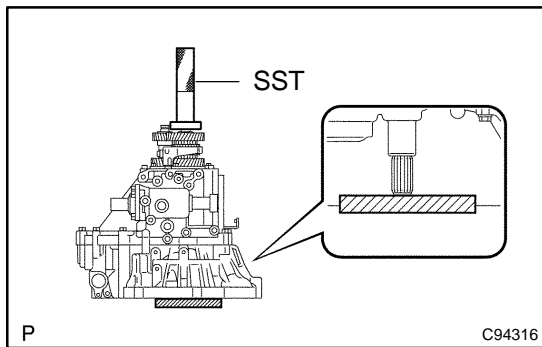
107. INSTALL 6TH GEAR NEEDLE ROLLER BEARING

- (a) Coat the 6th gear needle roller bearing with gear oil, install it to the input shaft.



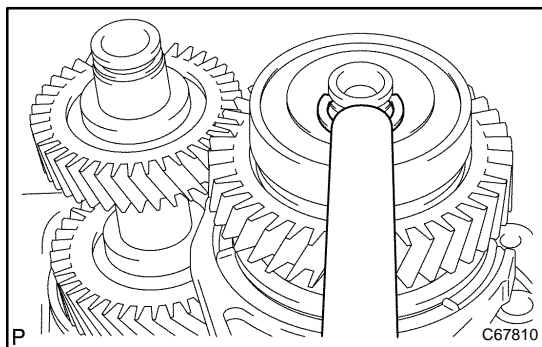
108. INSTALL 6TH GEAR SUB-ASSY

- (a) Coat the 6th gear sub-assy with gear oil, install it to the input shaft.



109. INSTALL INPUT SHAFT REAR RADIAL BALL BEARING

- (a) Using SST, steel block and a hammer, install the input shaft rear radial ball bearing to the input shaft.
SST 09608-04031

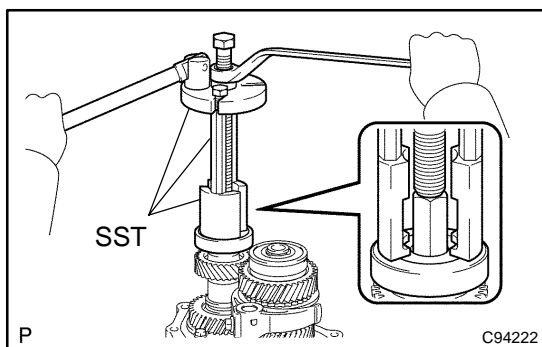


- (b) Select a snap ring that will minimum axial play.
Clearance: 0.1 mm (0.004 in.) or less

Snap ring thickness:

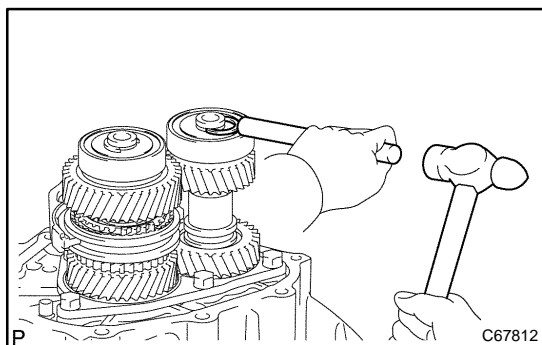
Part No.	Thickness: mm (in.)	Mark
90520-17006	1.70 (0.0669)	A
90520-17007	1.75 (0.0689)	B
90520-17008	1.80 (0.0709)	C
90520-17009	1.85 (0.0728)	D
90520-17010	1.90 (0.0748)	E
90520-17011	1.95 (0.0768)	F
90520-17012	2.00 (0.0787)	G
90520-17013	2.05 (0.0807)	H
90520-17014	2.10 (0.0827)	J
90520-17015	2.15 (0.0846)	K
90520-17016	2.20 (0.0866)	L
90520-17017	2.25 (0.0886)	M

- (c) Using a brass bar and hammer, install the snap ring to the input shaft.



110. INSTALL OUTPUT SHAFT REAR BEARING

- (a) Using SST, install output shaft rear bearing to the output shaft.
SST 09950-30012 (09951-03010, 09953-03010, 09954-03010, 09955-03011, 09956-03080)



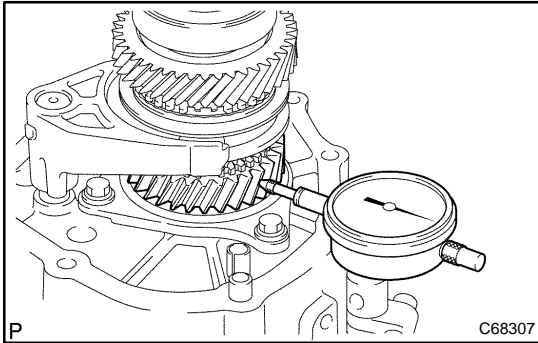
- (b) Select a snap ring that will minimum axial play.
Clearance: 0.1 mm (0.004 in.) or less

Snap ring thickness:

Part No.	Thickness: mm (in.)	Mark
90520-18003	2.31 (0.0909)	B
90520-18004	2.37 (0.0933)	C
90520-18006	2.43 (0.0957)	D
90520-18007	2.49 (0.0980)	E
90520-18008	2.55 (0.1004)	F
90520-18009	2.61 (0.1028)	G

Part No.	Thickness: mm (in.)	Mark
90520-18013	2.67 (0.1051)	H
90520-18011	2.73 (0.1075)	J
90520-18014	2.79 (0.1098)	K
90520-18015	2.85 (0.1122)	L
90520-18016	2.91 (0.1146)	M

- (c) Using a brass bar and hammer, install the snap ring to the output shaft.



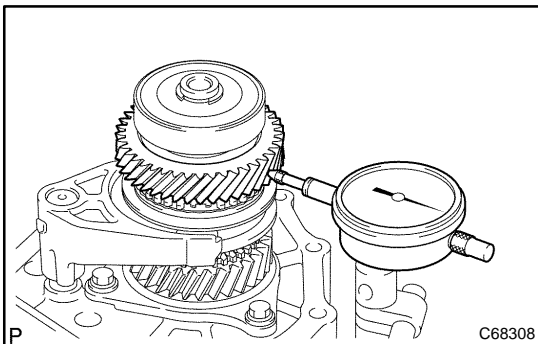
111. INSPECT 5TH GEAR RADIAL CLEARANCE

- (a) Using a dial indicator, measure the 5th gear radial clearance.

Standard clearance:

0.015 – 0.056 mm (0.0006 – 0.0022 in.)

If the clearance is out of specification, replace the 5th gear needle roller bearing.



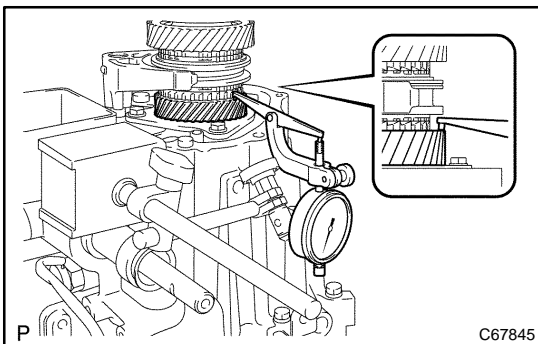
112. INSPECT 6TH GEAR RADIAL CLEARANCE

- (a) Using a dial indicator, measure the 6th gear radial clearance.

Standard clearance:

0.009 – 0.050 mm (0.0004 – 0.0020 in.)

If the clearance is out of specification, replace the 6th gear needle roller bearing.

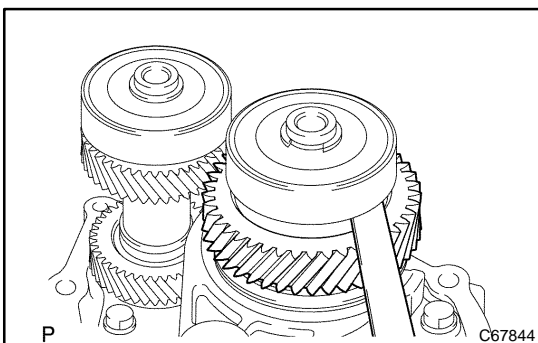


113. INSPECT 5TH GEAR THRUST CLEARANCE

- (a) Using a dial indicator, measure the 5th gear thrust clearance.

Standard clearance:

0.10 – 0.62 mm (0.0039 – 0.0244 in.)

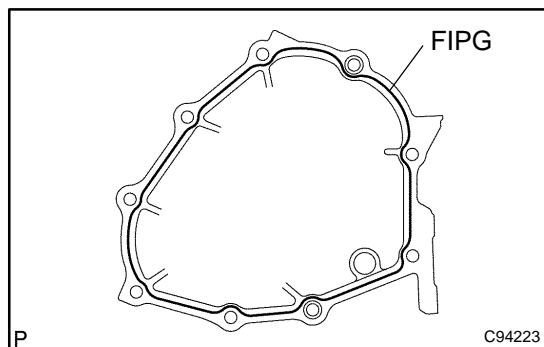


114. INSPECT 6TH GEAR THRUST CLEARANCE

- (a) Using a feeler gauge, measure the 6th gear thrust clearance.

Standard clearance:

0.10 – 0.60 mm (0.0039 – 0.0236 in.)



115. INSTALL MANUAL TRANSMISSION CASE COVER SUB-ASSY

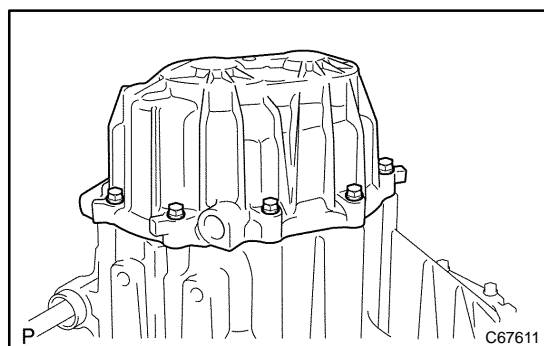
- (a) Apply FIPG to the manual transmission case cover sub-assy.

FIPG:

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

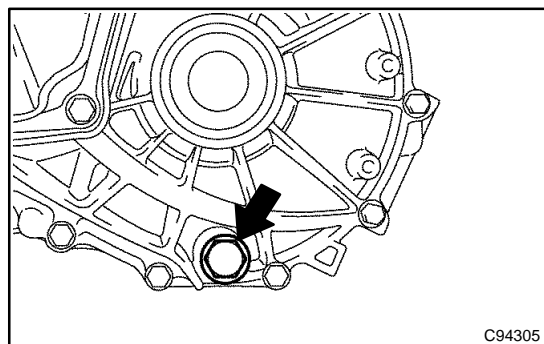
NOTICE:

Parts must be assembled within 10 minutes of application. Other wise, the pack the packing (FIPG) material must be remove and reapplied.



- (b) Install the manual transmission case cover sub-assy with 9 bolts to the manual transmission case.

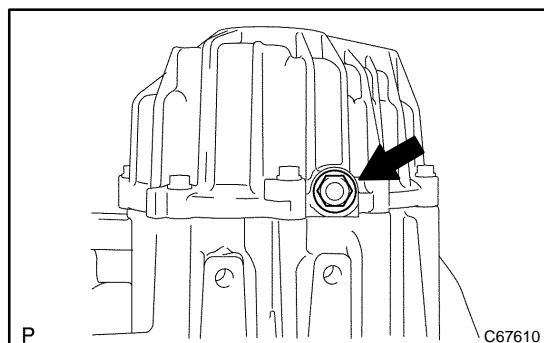
Torque: 18.1 N·m (185 kgf·cm, 13 ft·lbf)



116. INSTALL DRAIN (MTM) PLUG SUB-ASSY

- (a) Install the drain (MTM) plug sub-assy with a new gasket to the manual transmission case.

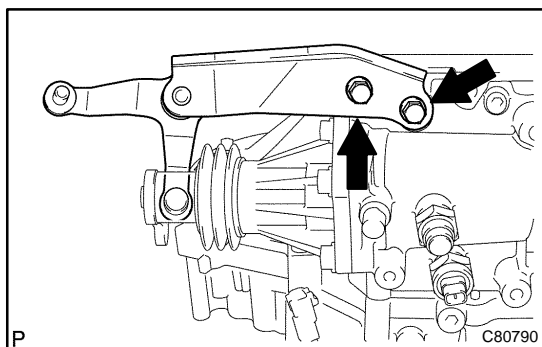
Torque: 39.2 N·m (400 kgf·cm, 29 ft·lbf)



117. INSTALL MANUAL TRANSMISSION FILLER PLUG

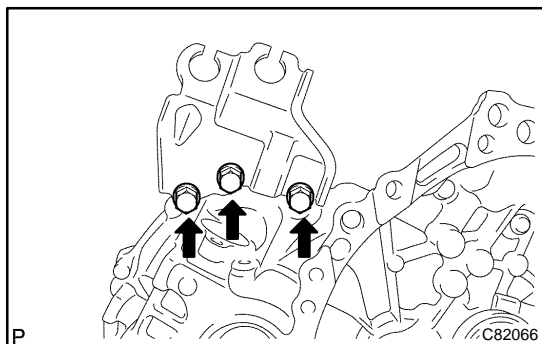
- (a) Install the manual transmission filler plug with a new gasket to the manual transmission case cover.

Torque: 39.2 N·m (400 kgf·cm, 29 ft·lbf)

**118. INSTALL SELECTING BELL CRANK ASSY**

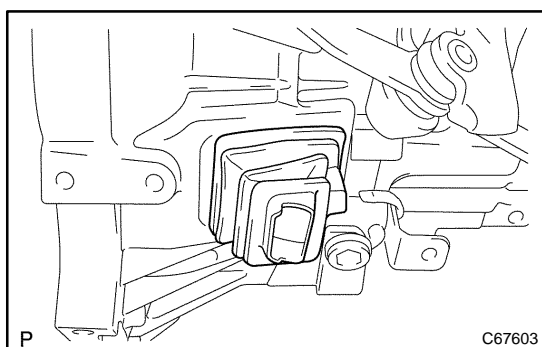
- (a) Install the selecting bellcrank assy with 2 bolts to the manual transmission case.

Torque: 24.5 N·m (250 kgf·cm, 18 ft·lbf)

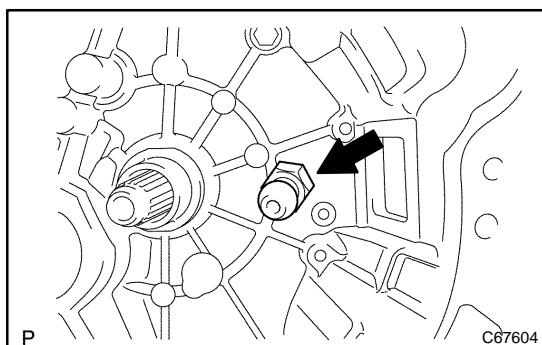
**119. INSTALL FLOOR SHIFT CONTROL LEVER HOUSING SUPPORT BRACKET**

- (a) Install the floor shift control lever housing support bracket with 3 bolts to the transaxle case.

Torque: 11.3 N·m (115 kgf·cm, 8 ft·lbf)

**120. INSTALL CLUTCH RELEASE FORK BOOT**

- (a) Install clutch release fork boot to the transaxle case.

**121. INSTALL RELEASE FORK SUPPORT**

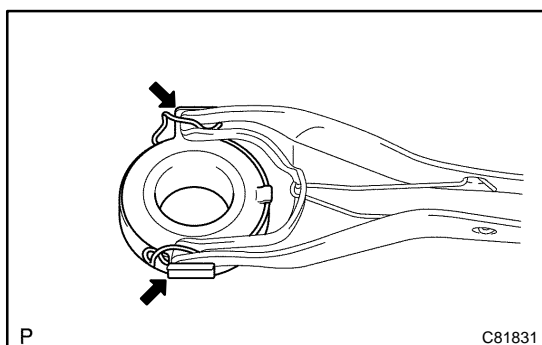
- (a) Install the release fork support to the transaxle case.

Torque: 36.8 N·m (375 kgf·cm, 27 ft·lbf)

- (b) Coat the release fork support with release hub grease.

Release hub grease:

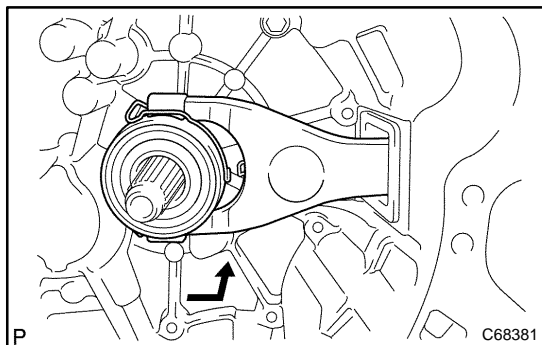
Part No.08887-01806, RELEASE HUB GREASE or equivalent

**122. INSTALL CLUTCH RELEASE BEARING ASSY**

- (a) Coat the clutch release bearing assy with release hub grease, install it to the clutch release fork sub-assy.

Release hub grease:

Part No.08887-01806, RELEASE HUB GREASE or equivalent

**123. INSTALL CLUTCH RELEASE FORK SUB-ASSY**

- (a) Apply clutch spline grease to the input shaft spline.

Clutch spline grease:

Part No.08887-01806, CLUTCH SPLINE GREASE or equivalent

- (b) Install the clutch release fork sub-assy to the input shaft.

124. INSTALL SPEEDOMETER DRIVEN HOLE COVER SUB-ASSY

- (a) Install a new O-ring to the speedometer driven hole cover sub-assy.

- (b) Install the speedometer driven hole cover sub-assy with bolt to the transaxle case.

Torque: 11.3 N·m (115 kgf·cm, 8 ft·lbf)