

MANUAL TRANSMISSION (Turbo)

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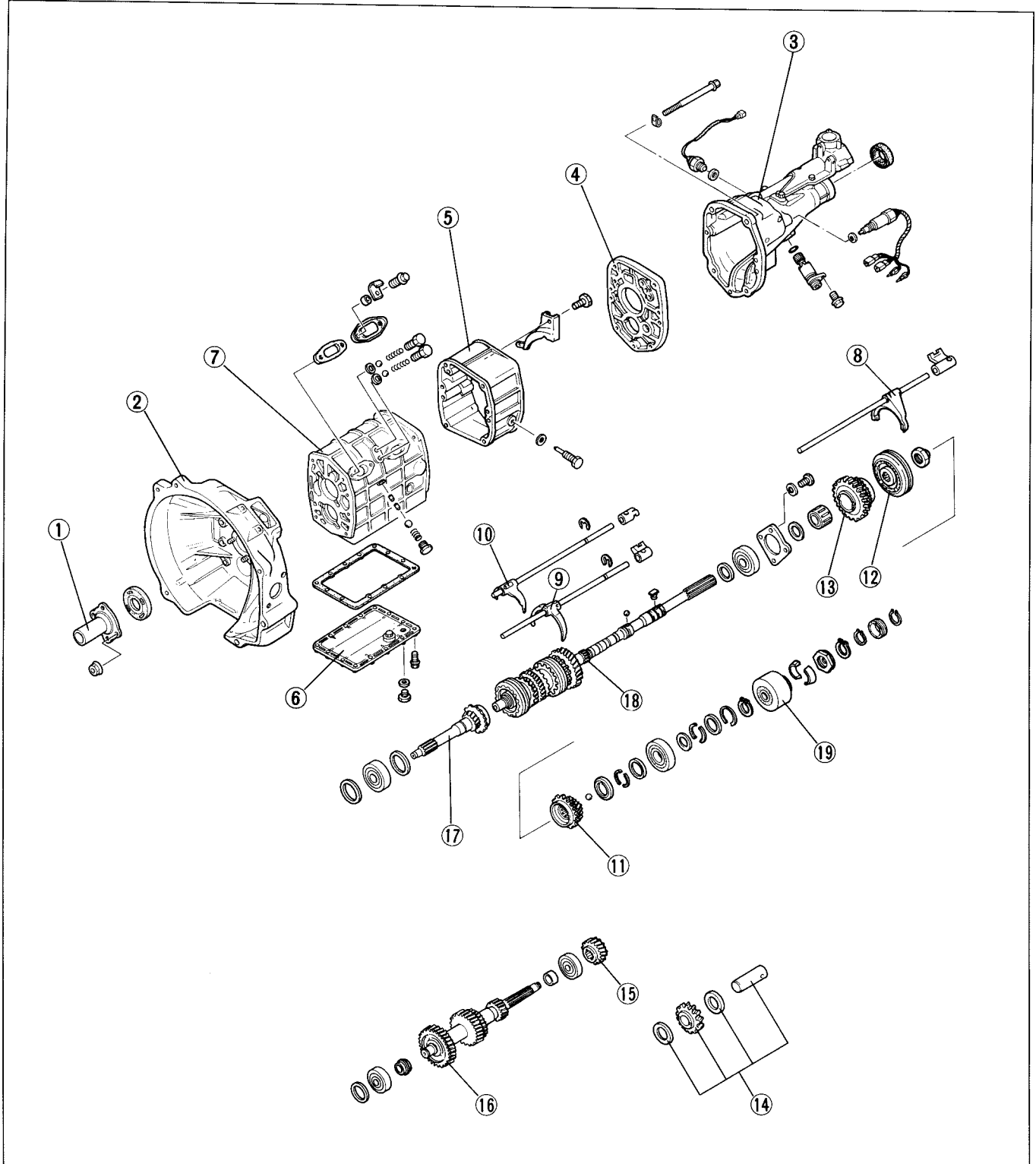
OUTLINE

SPECIFICATIONS

Item		Transmission model	R-type
Synchronization mechanism			Forward: Synchromesh Reverse: Synchromesh
Shift type			5-speed, floor shift
Shift pattern			
Gear ratio	1st		3.483
	2nd		2.015
	3rd		1.391
	4th		1.000
	5th		0.719
	Reverse		3.288
Oil	Grade		API service GL-4 or GL-5
	Viscosity	All-season	SAE 75W-90
		Above 10°C (50°F)	SAE 80W-90
	Capacity	liters (US qts, Imp qts)	2.5 (2.6, 2.2)

97U0J2-003

COMPONENTS



97U0J2-004

- | | | |
|--|--|---|
| 1. Front cover | 9. Shift fork and rod (1st/2nd) | 16. Countershaft |
| 2. Clutch housing | 10. Shift fork and rod (3rd/4th) | 17. Main drive gear |
| 3. Extension housing | 11. 5th gear | 18. Mainshaft assembly
(1st gear, clutch hub
assembly [1st/2nd], 2nd gear,
3rd gear, clutch hub
assembly [3rd/4th]) |
| 4. Bearing housing | 12. Clutch hub assembly
(5th/Reverse) | 19. Dynamic damper |
| 5. Center housing | 13. Reverse gear | |
| 6. Undercover | 14. Reverse idler gear assembly | |
| 7. Transmission case | 15. Counter reverse gear | |
| 8. Shift fork and rod
(5th/Reverse) | | |

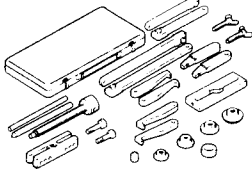

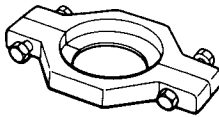

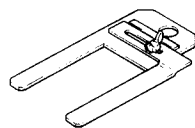
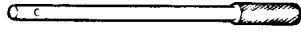
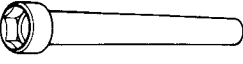
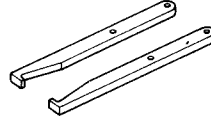
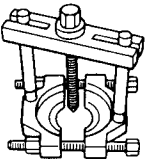
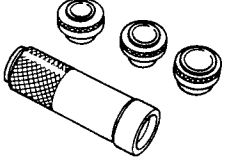
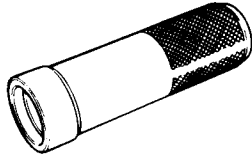


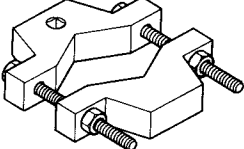
TROUBLESHOOTING GUIDE

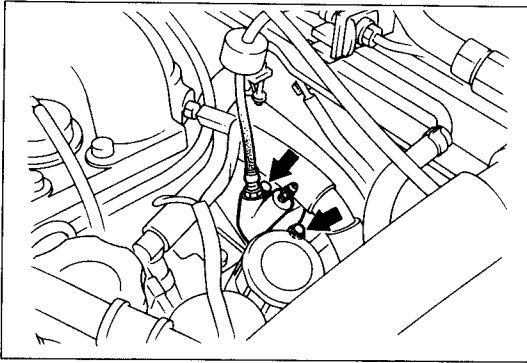
Problem	Possible Cause	Action	Page
Abnormal noise	Insufficient oil	Add oil	J2- 8
	Deterioration of oil quality	Replace with specified oil	J2- 8
	Worn bearing	Replace	J2-24
	Worn contact surface of countershaft gear	Replace	J2-23
	Worn contact surface of gears	Replace	J2-23
	Excessive gear backlash	Replace	—
Difficult to shift	Damaged gear teeth	Replace	J2-23
	Insufficient oil	Add oil	J2- 8
	Deterioration of oil quality	Replace with specified oil	J2- 8
	Wear or play of control lever end or shift rod	Replace	J2-23
	Worn synchronizer ring	Replace	J2-24
	Worn synchronizer cone of gear	Replace	J2-24
	Poor contact of synchronizer ring and gear cone	Replace	J2-24
	Excessive longitudinal play of gears	Replace	J2-23
Worn bearing	Replace	J2-24	
Improper disengagement of clutch	Refer to Section H	—	
Jumps out of gear	Weak detent ball spring	Replace	J2-25
	Worn shift fork	Replace	J2-23
	Worn clutch hub	Replace	J2-24
	Worn clutch hub sleeve	Replace	J2-24
	Worn gears	Replace	J2-23
	Excessive gear backlash	Replace	—
	Worn bearing	Replace	J2-24
	Incorrect installation or loose engine mounts or transmission mounts	Tighten	J2-43

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TRANSMISSION

PREPARATION SST

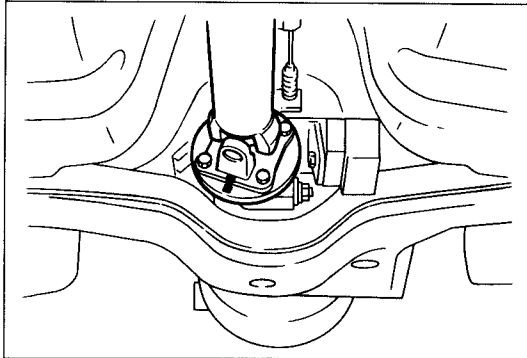
<p>49 0839 425C Puller set, bearing</p> 	<p>49 0500 330 Installer, transmission bearing</p> 	<p>49 0636 145 Puller, fan pulley boss</p> 
<p>49 S120 440 Holder, main-shaft</p> 	<p>49 F017 101 Holder, synchronizer ring</p> 	<p>49 0862 350 Guide, shift fork ass'y</p> 
<p>49 1243 465A Wrench, main-shaft locknut</p> 	<p>49 H017 101 Hook</p> 	<p>49 0710 520 Puller, bearing</p> 
<p>49 F401 330B Installer set, bearing</p> 	<p>49 F401 331 Body (Part of 49 F401 330B)</p> 	<p>49 F401 335A Attachment A (Part of 49 F401 330B)</p> 
<p>49 F401 337A Attachment C (Part of 49 F401 330B)</p> 	<p>49 F017 1A0 Wrench</p> 	<p style="text-align: right;">97U0J2-006</p>



97U0J2-008

Removal Note Clutch release cylinder

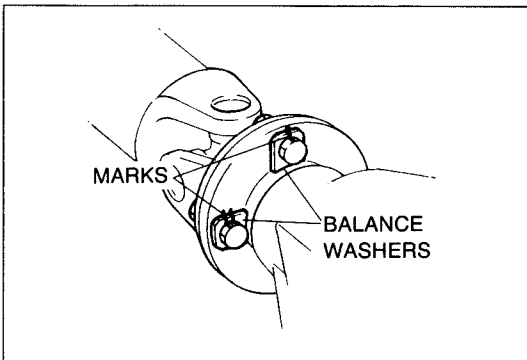
Remove the clutch release cylinder with the flexible hose still connected.



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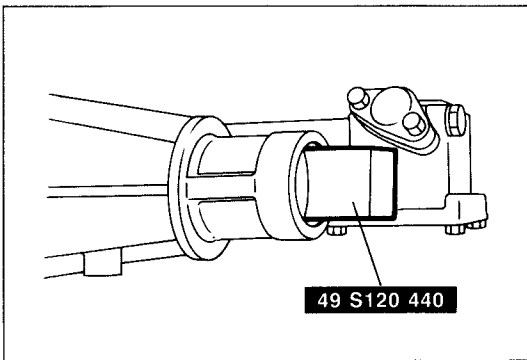
Propeller shaft

1. Before removing the propeller shaft, mark the flanges for correct reassembly.



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2. Mark the balance washers for correct reassembly.

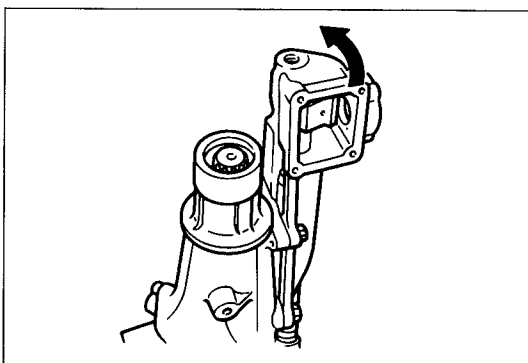


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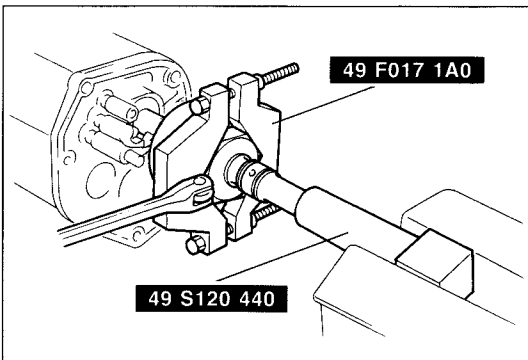
3. When the propeller shaft is removed from the extension housing, install the **SST** into the extension housing.

- | | | |
|---|--|---|
| 1. Front cover
Installation..... page J2-39 | 11. Speedometer driven gear
and key | 20. Rod cover |
| 2. Speedometer drive gear | 12. Clutch housing
Inspect the oil seal (front)
for damage | 21. Oil passage assembly
Installation..... page J2-40 |
| 3. O-ring | Installation..... page J2-39 | 22. Snap rings
Installation..... page J2-40 |
| 4. Neutral switch | 13. Undercover
Installation..... page J2-42 | 23. Locknut
Removal page J2-13
Installation..... page J2-40 |
| 5. Back-up light and 5th switch | 14. Magnet | 24. Taper cotter
Installation..... page J2-40 |
| 6. Steel ball, spring, and
spring cap
Installation..... page J2-41 | 15. Change bush and wave
washer | 25. Steel ball
Installation..... page J2-40 |
| 7. Select-lock spindle, spring,
and spring cap
Installation..... page J2-41 | 16. Control lever
Installation..... page J2-41 | 26. Dynamic damper
Installation..... page J2-40 |
| 8. Blind cover
Installation..... page J2-41 | 17. Control lever end
Installation..... page J2-41 | 27. Oil seal (rear)
Do not remove if not
necessary
Replace
(on vehicle)... page J2-13 |
| 9. Extension housing
Removal page J2-13
Installation..... page J2-41 | 18. Select spring | |
| 10. Snap rings | 19. Change control case
Installation..... page J2-40 | |

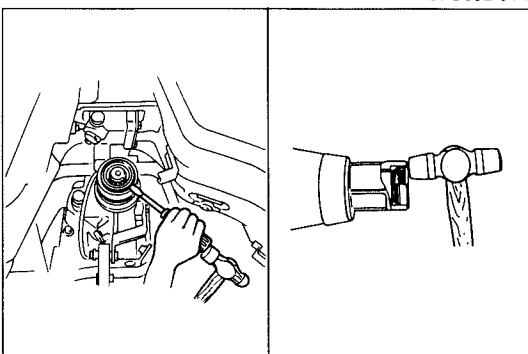
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97U0J2-013



97U0J2-014



97U0J2-015

Disassembly note Extension housing

1. Move the control rod end to the neutral position.
2. Remove the extension housing attaching bolts.

Note

Do not remove the change control case.

3. Turn the control rod in the direction of the arrow and remove the extension housing.

Locknut

Note

Use pads in the vise to prevent damaging the SST.

1. Connect the **SST** to the mainshaft and tighten it securely in a vise.
2. Remove the locknut with the **SST**.

On-vehicle replacement Oil seal (rear)

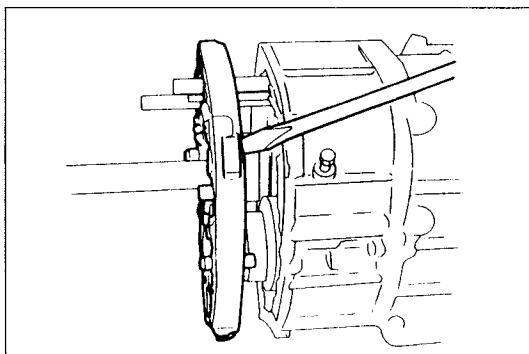
Caution

Do not damage the mainshaft splines.

1. Remove the exhaust pipe and heat insulator. (Refer to page J2-12.)
2. Remove the propeller shaft. (Refer to Section L.)
3. Remove the oil seal from the extension housing.
4. Apply transmission oil to outer periphery and lip surface.
5. Install the oil seal with a plastic hammer.
6. Install the propeller shaft. (Refer to Section L.)
7. Install the heat insulator and exhaust pipe. (Refer to page J2-43.)

- | | | |
|--|--|---|
| 1. 5th/Reverse shift rod end
Inspection page J2-23
Installation..... page J2-37 | 17. Center housing
Removal page J2-16
Installation..... page J2-35 | 32. 1st/2nd shift rod
Removal page J2-17
Installation..... page J2-34 |
| 2. 3rd/4th shift rod end
Inspection page J2-23
Installation..... page J2-37 | 18. Blind cover | 33. Locknut
Removal page J2-17
Installation..... page J2-33 |
| 3. 1st/2nd shift rod end
Inspection page J2-23
Installation..... page J2-37 | 19. Cap plug, spring, and detent ball
Removal page J2-16
Inspection page J2-25
Installation..... page J2-35 | 34. Clutch hub assembly
(5th/Reverse)
Removal page J2-17
Inspection page J2-24
Installation..... page J2-33 |
| 4. Bearing housing
Removal page J2-15
Installation..... page J2-37 | 20. Clip
Installation..... page J2-35 | 35. Synchronizer ring (Reverse)
Removal page J2-17
Inspection page J2-24 |
| 5. Snap ring | 21. Thrust lock washer
Installation..... page J2-34 | 36. Reverse gear
Inspection page J2-23
Installation..... page J2-33 |
| 6. Thrust washer | 22. Steel ball
Installation..... page J2-34 | 37. Bearing
Inspection page J2-24
Installation..... page J2-33 |
| 7. C-washer
Removal page J2-16
Installation..... page J2-37 | 23. Bearing
Inspection page J2-34 | 38. Inner race
Installation..... page J2-33 |
| 8. Retaining ring | 24. 5th gear
Inspection page J2-23
Installation..... page J2-33 | 39. Thrust washer
Installation..... page J2-33 |
| 9. Mainshaft rear bearing
Removal page J2-16
Inspection page J2-24
Installation..... page J2-36 | 25. Retaining ring
Installation..... page J2-33 | 40. Bearing cover
Removal page J2-17
Installation..... page J2-30 |
| 10. C-washer and retaining ring
Installation..... page J2-34 | 26. Synchronizer ring (5th)
Inspection page J2-24 | 41. Thrust washer
Installation..... page J2-33 |
| 11. Locknut
Removal page J2-16
Installation..... page J2-36 | 27. 5th/Reverse shift rod
Removal page J2-16
Installation..... page J2-34 | 42. Reverse idler gear shaft
Inspection page J2-25
Installation..... page J2-33 |
| 12. Countershaft rear bearing
Removal page J2-16
Inspection page J2-34
Installation..... page J2-36 | 28. 5th/Reverse shift fork
Removal page J2-17
Inspection page J2-24
Installation..... page J2-35 | 43. Reverse idler gear
Inspection page J2-25
Installation..... page J2-33 |
| 13. Counter 5th gear
Inspection page J2-23
Installation..... page J2-36 | 29. Interlock pin
Removal page J2-17
Installation..... page J2-34 | 44. Thrust washer
Installation..... page J2-33 |
| 14. Spacer
Installation..... page J2-36 | 30. 3rd/4th shift rod
Removal page J2-17
Installation..... page J2-35 | 45. Counter reverse gear
Inspection page J2-25
Installation..... page J2-33 |
| 15. Oil guide
Installation..... page J2-35 | 31. Interlock pin
Removal page J2-17
Installation..... page J2-34 | |
| 16. Set bolt and washer
Installation..... page J2-35 | | |

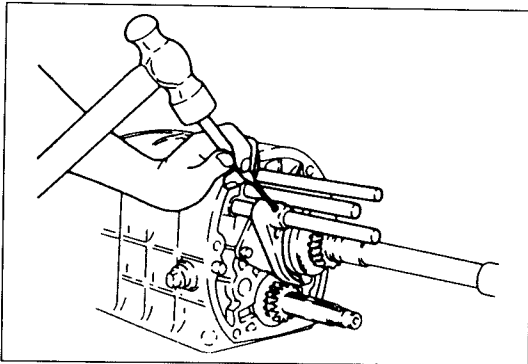
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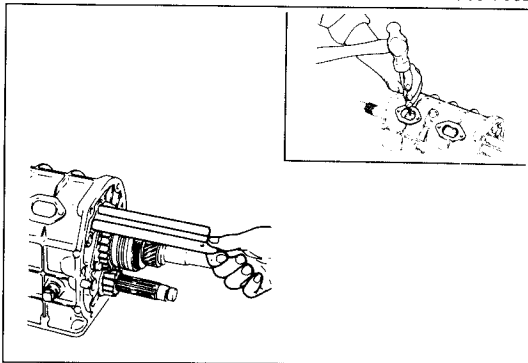
Disassembly note Bearing housing

Carefully pry the bearing housing away from the transmission case with a screwdriver, being careful not to damage the housing or case. Slide the bearing housing off the mainshaft.



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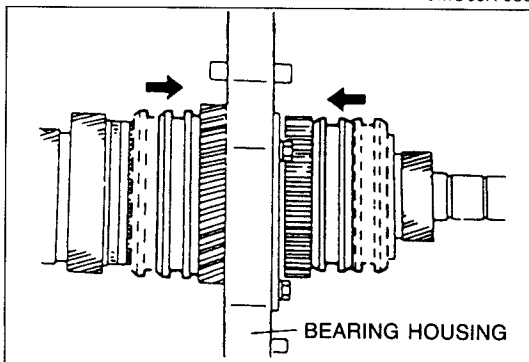
2. Drive the roll pin from the 5th/Reverse shift fork. Slide the 5th/reverse shift rod out of the transmission case.



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1st/2nd, and 3rd/4th shift rods

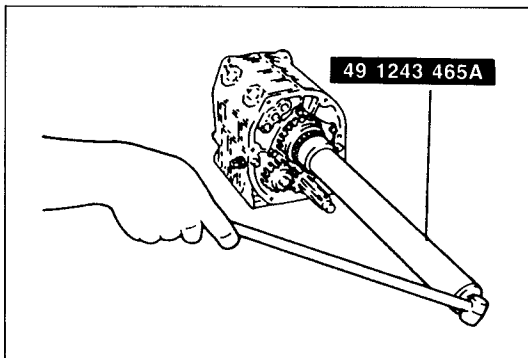
1. Remove the blind covers, gaskets, and clips.
2. Shift the transmission into 4th gear.
This will provide adequate space to drive out the roll pin. Drive the roll pin from the 3rd/4th shift fork.
3. Slide the 3rd/4th shift rod out from the rear of the transmission case.
4. Drive the roll pin from the 1st/2nd shift fork.
Slide the 1st/2nd shift rod out from the rear of the transmission case.
5. Remove the interlock pins.



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5th/Reverse clutch hub assembly

1. Uncrimp the tab of the locknut.
2. Shift into 1st gear and reverse gear to lock the rotation of the mainshaft.

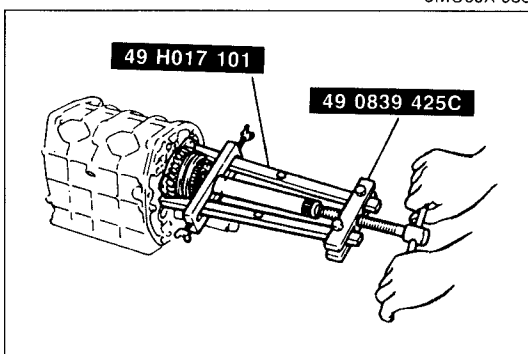


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Caution

Do not reuse the locknut.

3. Remove the locknut with the **SST**.

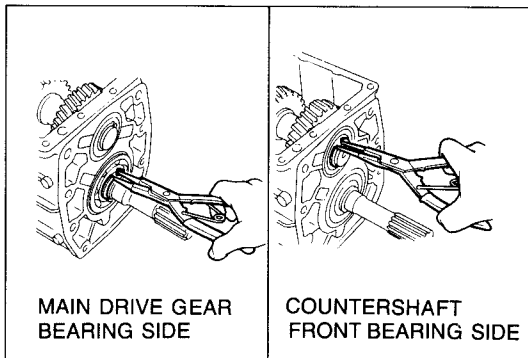


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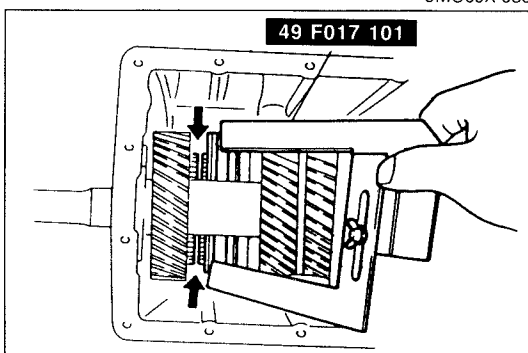
4. Remove the bearing cover installation bolts.
5. Attach the **SST** to the bearing cover and remove the assembly, which consists of the following parts:
 - 5th/Reverse clutch hub assembly
 - Synchronizer ring
 - Needle bearing
 - Inner race
 - Reverse gear
 - Thrust washer
6. Remove the thrust washers, reverse idler gear shaft, and reverse idler gear.

- | | | |
|--|---|---|
| <p>1. Snap ring
Removal page J2-19
Installation..... page J2-31</p> <p>2. Main drive gear bearing and adjustment shim
Removal page J2-19
Inspection page J2-24
Installation..... page J2-31</p> <p>3. Countershaft front bearing and adjustment shim
Removal page J2-20
Inspection page J2-24
Installation..... page J2-31</p> <p>4. Countershaft center bearing
Removal page J2-21
Inspection..... page J2-24
Installation..... page J2-30</p> <p>5. Mainshaft front bearing
Removal page J2-20
Inspection page J2-24
Installation..... page J2-30</p> <p>6. Countershaft
Removal page J2-21
Inspection..... page J2-23
Installation..... page J2-30</p> <p>7. Countershaft center bearing inner race
Removal page J2-22
Installation..... page J2-28</p> <p>8. Countershaft front bearing spacer
Removal page J2-22
Installation..... page J2-29</p> | <p>9. Main drive gear
Removal page J2-21
Inspection..... page J2-23
Installation..... page J2-30</p> <p>10. Synchronizer ring (4th)
Inspection page J2-24
Installation..... page J2-30</p> <p>11. Bearing
Inspection page J2-24
Installation..... page J2-30</p> <p>12. Thrust washer
Installation..... page J2-28</p> <p>13. 1st gear
Inspection page J2-23
Installation..... page J2-28</p> <p>14. Inner race
Installation..... page J2-28</p> <p>15. Synchronizer ring (1st)
Inspection page J2-24
Installation..... page J2-28</p> <p>16. Snap ring
Removal page J2-21
Installation..... page J2-28</p> <p>17. Clutch hub assembly (3rd/4th)
Removal page J2-21
Inspection..... page J2-24
Installation..... page J2-28</p> <p>18. Synchronizer ring (3rd)
Removal page J2-22
Inspection..... page J2-24
Installation..... page J2-28</p> | <p>19. Bearing
Removal page J2-22
Inspection..... page J2-24
Installation..... page J2-28</p> <p>20. 3rd gear
Removal page J2-22
Inspection page J2-23
Installation..... page J2-28</p> <p>21. Clutch hub assembly (1st/2nd)
Removal page J2-22
Inspection page J2-24
Installation..... page J2-28</p> <p>22. Synchronizer ring (2nd)
Removal page J2-22
Inspection page J2-24
Installation..... page J2-28</p> <p>23. 2nd gear
Removal page J2-22
Inspection page J2-23
Installation..... page J2-28</p> <p>24. Mainshaft
Inspection page J2-23</p> <p>25. 3rd/4th shift fork
Inspection page J2-24</p> <p>26. 1st/2nd shift fork
Inspection page J2-24</p> <p>27. Transmission case</p> |
|--|---|---|

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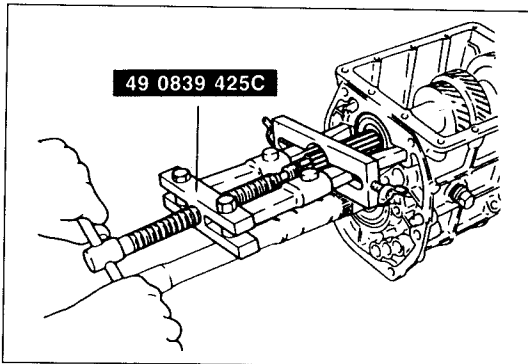
Disassembly note Snap ring

Caution
Do not reuse the snap ring.

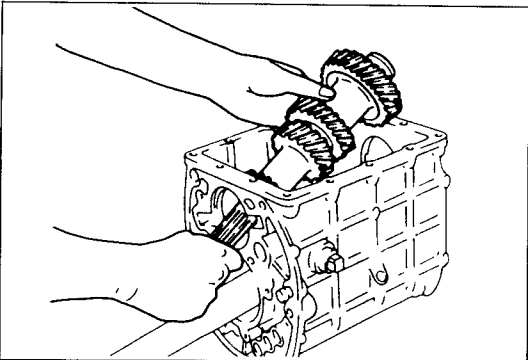
Remove the snap rings.

Main drive gear bearing

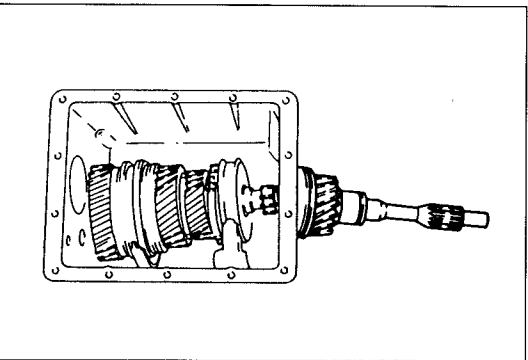
1. Install the **SST** between the 4th gear synchronizer ring and synchromesh gear on the main drive gear.



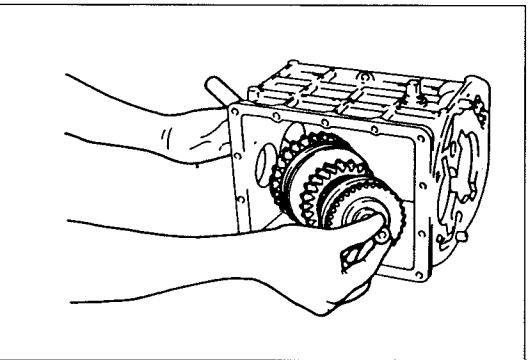
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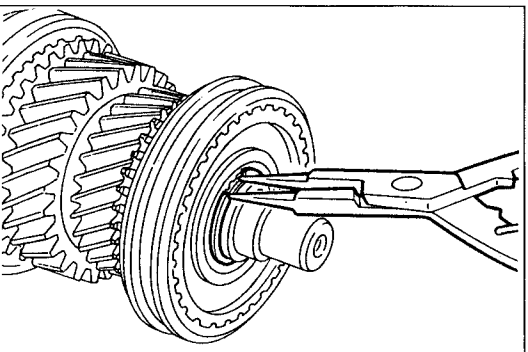
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77U07A-039



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Countershaft

1. Remove the countershaft center bearing with the **SST**.
2. Remove the countershaft.

Mainshaft and gear assembly

1. Remove the main drive gear from the transmission case.
2. Remove the mainshaft and gear assembly from the transmission case.

3rd/4th clutch hub assembly

Caution

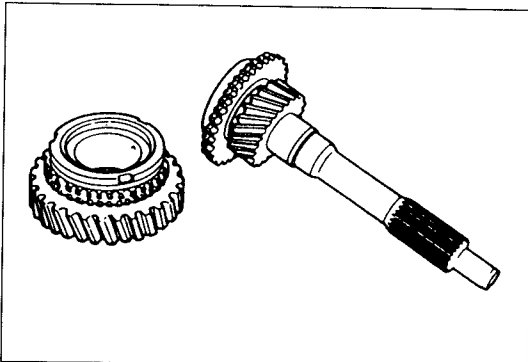
Do not reuse the snap ring.

1. Remove the snap ring from the front of the mainshaft.

INSPECTION

Inspect all parts, and repair or replace as necessary.

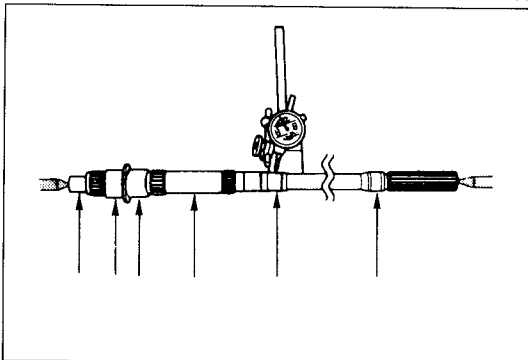
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Each gear and main drive gear

1. Inspect synchronizer cones for wear.
2. Inspect individual gear teeth for damage, wear, cracks.
3. Inspect synchronizer ring matching teeth for damage or wear.
4. Inspect main drive gear splines for damage or wear.



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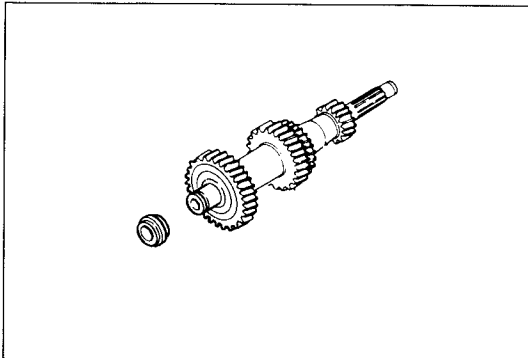
Mainshaft

1. Measure the mainshaft runout.

Maximum: 0.03mm (0.0012 in)

2. Inspect splines for damage or wear.
3. Measure the clearance between mainshaft and gear (or bush).

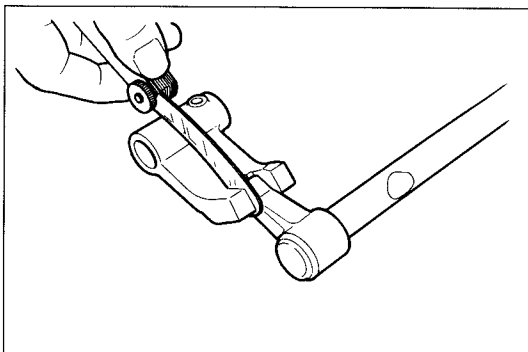
Maximum: 0.15mm (0.006 in)



9MU0JX-057

Countershaft

1. Inspect gear teeth for damage, wear, cracks.
2. Inspect splines for damage or wear.

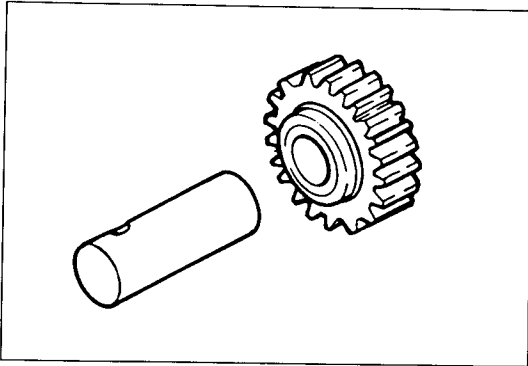


9BU0J2-050

Control lever and shift rod

Measure the clearance between the control lever and the gate of the shift rod.

Clearance: 0.8mm (0.031 in) max.



9MU0JX-064

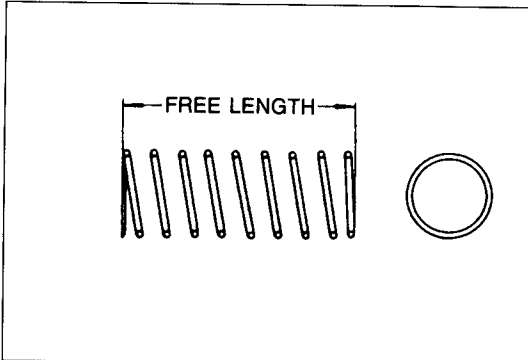
Reverse idler gear and shaft

1. Inspect gear teeth for damage, wear, cracks.
2. Measure the clearance between reverse idle gear bush and shaft.

Standard clearance:

0.02—0.05mm (0.0008—0.0020 in)

Maximum: 0.15mm (0.006 in)



97U0J2-018

Spring

Measure the free length of spring.

Standard free length

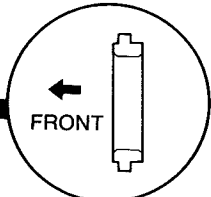
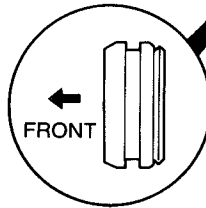
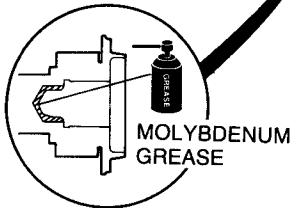
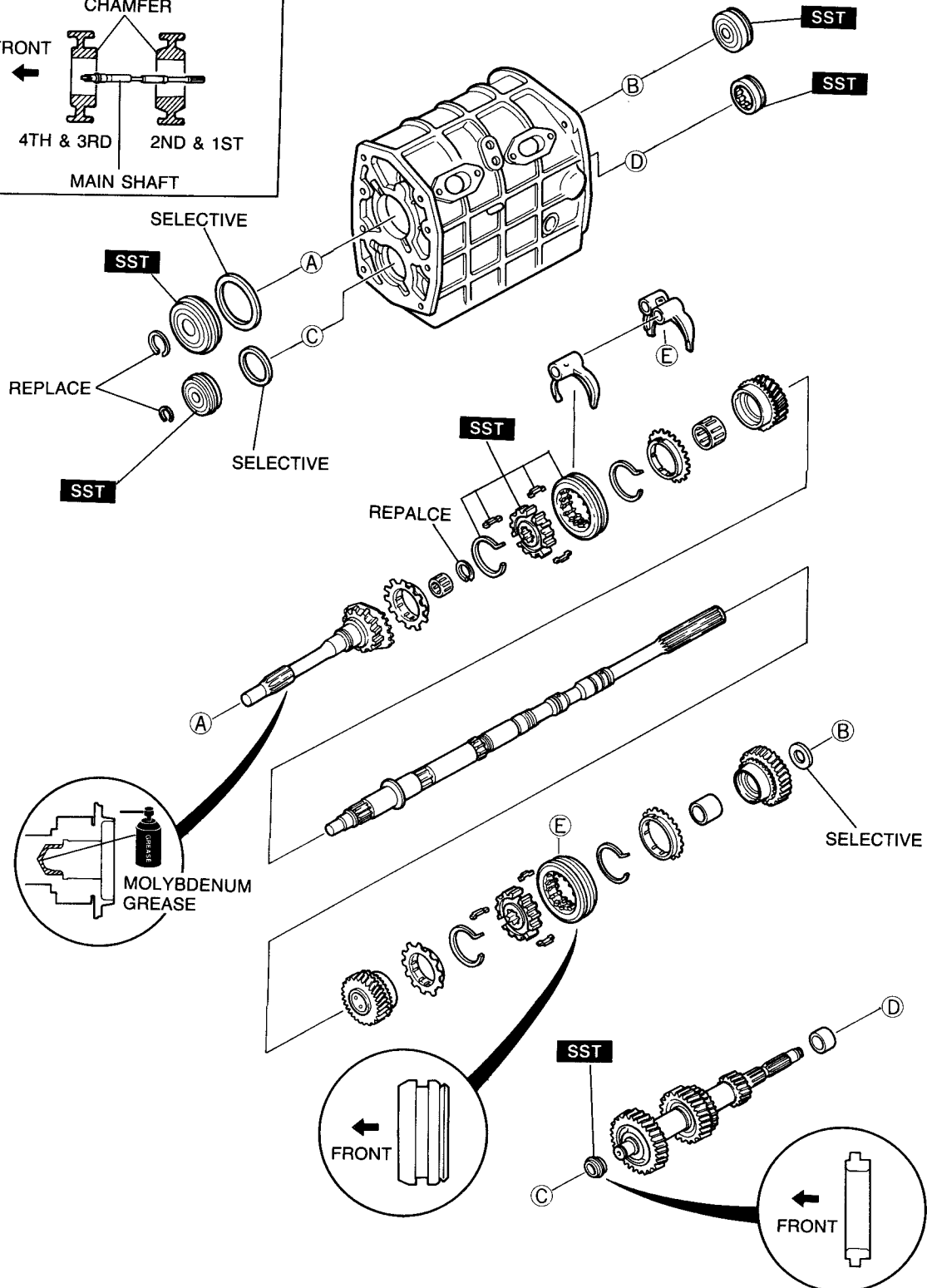
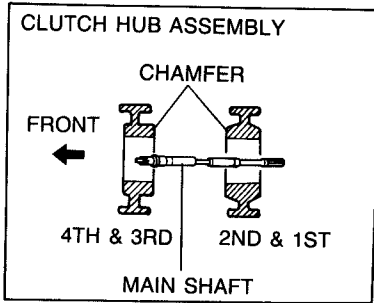
Detent ball spring: 22.5mm (0.886 in)

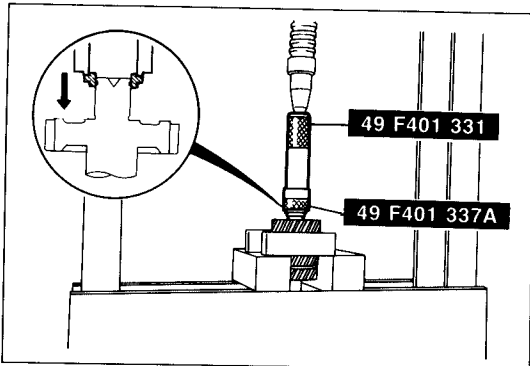
Mainshaft

Assemble in the reverse order of disassembly, referring to the **Assembly Note**.



APPLY SPECIFIED OIL TO INDIVIDUAL PARTS





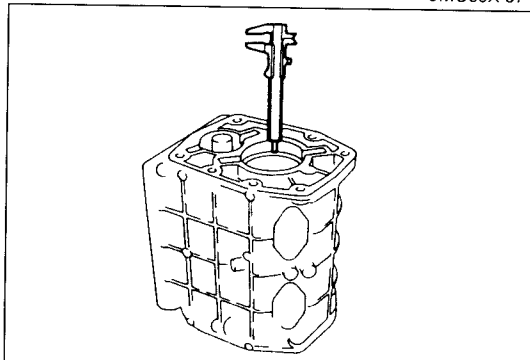
9MU0JX-074

Countershaft front bearing spacer

Note

Replace the countershaft front bearing and countershaft front bearing spacer as one assembly.

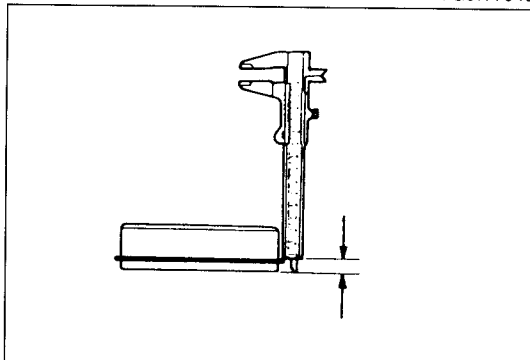
1. Install the friction gear, diaphragm spring, and countershaft front bearing spacer.
2. Press the countershaft front bearing spacer onto the countershaft with the **SST**.



77G07A-046

Measurement of Bearing Thrust Play Mainshaft front bearing

1. Measure the depth of the mainshaft front bearing bore in the rear of the transmission case.



7EG07A-056

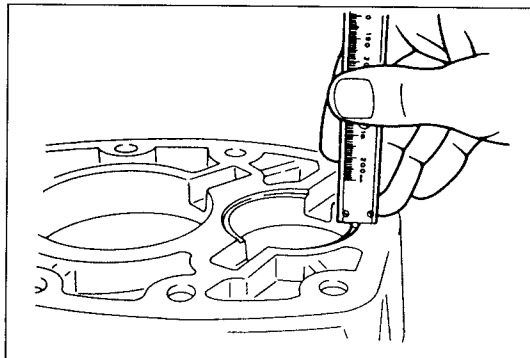
2. Measure the mainshaft front bearing height. The difference between the two measurements indicates the required thickness of the adjustment shim.

Standard thrust play:

0—0.1mm (0—0.004 in)

Adjustment shim thickness:

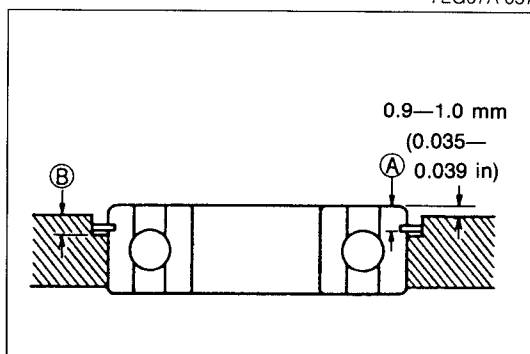
0.1mm (0.004 in), 0.3mm (0.012 in)



7EG07A-057

Countershaft front bearing

1. Measure depth B of the countershaft front bearing bore in the transmission case.



7EG07A-058

2. Measure the countershaft front bearing snap ring height A.
3. Choose an adjustment shim that will allow the difference between the two measurements to be equal to the standard bearing height.

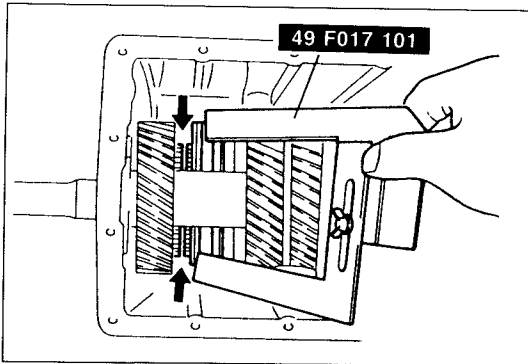
A—B + Adjustment shim(s) = 0.9—1.0mm (0.035—0.039 in)

Standard bearing height on installing:

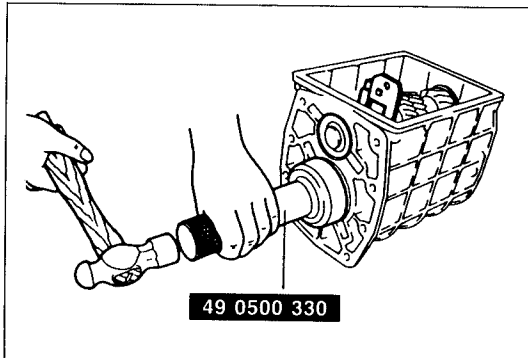
0.9—1.0mm (0.035—0.039 in)

Adjustment shim thickness:

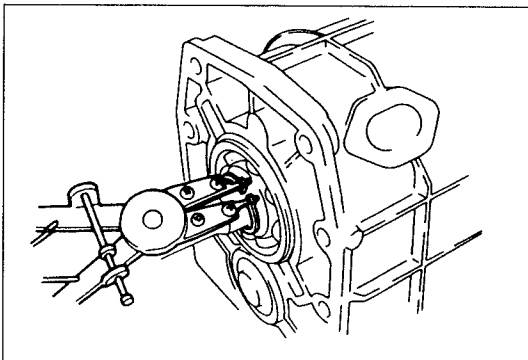
0.1mm (0.004 in), 0.3mm (0.012 in)



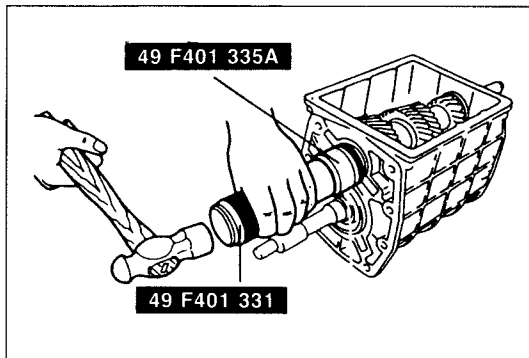
77G07A-051



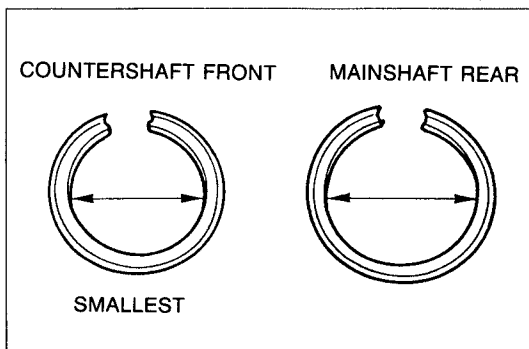
77G07A-052



9MU0JX-077



9MU0JX-078



9MU0JX-079

5. Install the **SST** between the 4th synchronizer ring and synchromesh gear on the main drive gear.

6. Drive on the main drive gear bearing with the **SST**.

7. Install a new snap ring to secure the main drive gear bearing.

Note

Replace the countershaft front bearing and countershaft front bearing spacer as one assembly.

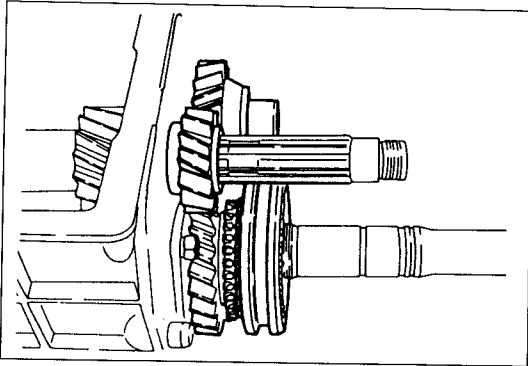
8. Install the correct shim into the countershaft front bearing as determined by "Measurement of Bearing Thrust Play".

9. Drive on the countershaft front bearing with the **SST**.

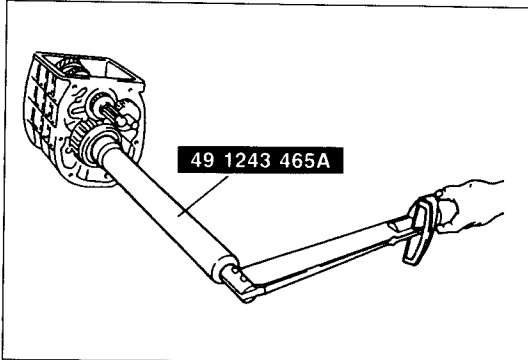
Note

Do not confuse the front and rear bearing snap rings. The countershaft front snap ring is smallest.

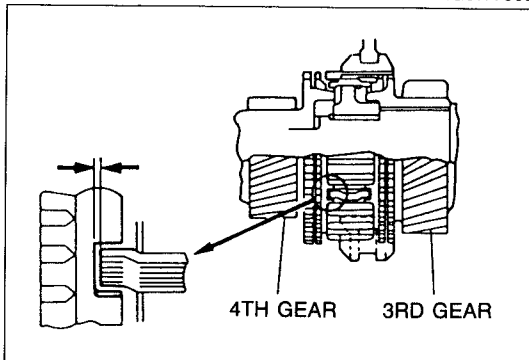
10. Install a new snap ring to secure the countershaft front bearing.



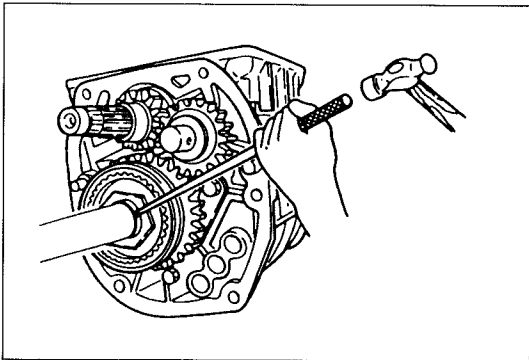
7EG07A-064



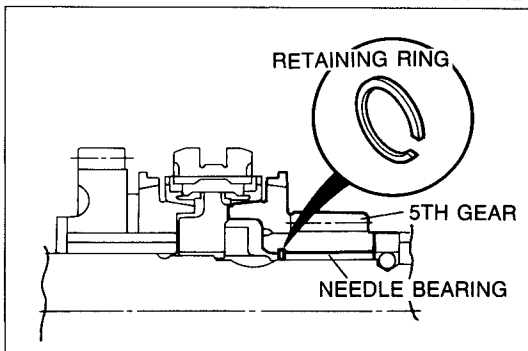
7EG07A-065



9MU0JX-081



69G07A-124



9MU0JX-082

Assembly note

Reverse gear

1. Install the reverse idler gear and shaft with a spacer on each side of the gear.
2. Install the counter reverse gear (chamfer side forward) and spacer.
3. Install the thrust washer, reverse gear, synchronizer ring, inner race, needle bearing, and clutch hub assembly.
4. Shift into 1st gear and reverse gear to lock the rotation of the mainshaft.
5. Install a new locknut and tighten it with the **SST**.

Tightening torque:

128—196 N·m (13—20 m·kg, 94—145 ft·lb)

Caution

The total combined thickness of the front and rear thrust washers must equal 6.0mm (0.236 in).

6. Check the clearance between the synchronizer key and the exposed edge of the synchronizer ring. If it is not as specified, adjust with the thrust washers on the front and rear of the mainshaft front bearing.

Clearance: 2.0mm (0.079 in) max.

Available thrust washer thickness

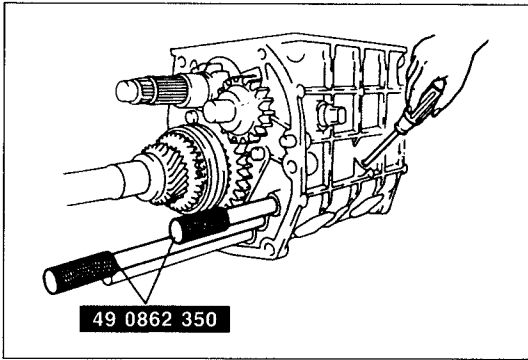
2.5mm (0.098 in), 3.0mm (0.118 in)

3.5mm (0.138 in)

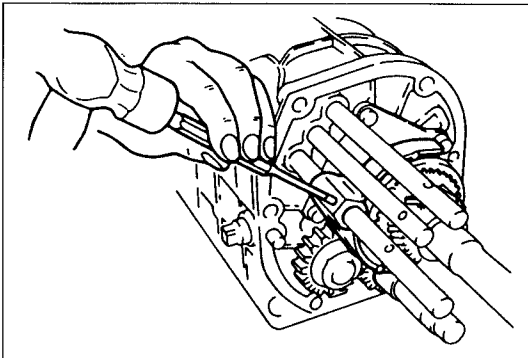
7. Stake the locknut into the mainshaft groove.

5th gear

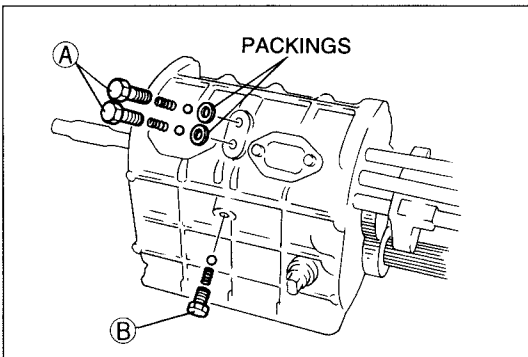
1. Install the retaining ring to the 5th gear.



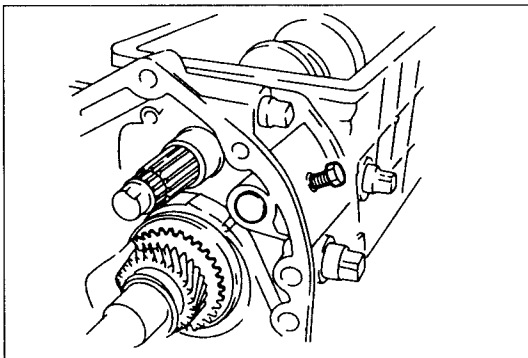
7EG07A-070



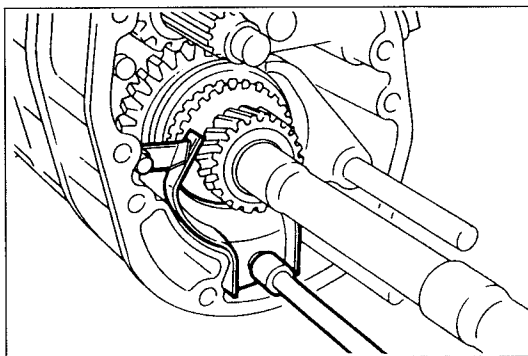
97U0J2-019



97U0J2-020



9MU0JX-089



9MU0JX-090

3. Slide the two **SST** into the transmission case to guide the interlock pins, and insert the first pin.
4. Remove the 3rd/4th shift fork guide from the case.
5. Slide the 3rd/4th shift rod into the case.
6. Secure the 3rd/4th shift rod onto the fork with the new roll pin.
7. Insert the remaining interlock pin and remove the **SST**.

8. Install the 5th/Reverse shift rod.
9. Secure the 5th/Reverse shift fork onto the shift rod with a new roll pin.
10. Install new clips onto the 1st/2nd shift rod and 3rd/4th shift rod.

11. Install the two blind covers and gaskets.

Tightening torque:

7.8—12 N·m (80—120 cm·kg, 69—104 in·lb)

12. Install the packings, detent balls, springs, and cap bolts.

Tightening torque:

Ⓐ: 39—59 N·m (4.0—6.0 m·kg, 29—43 ft·lb)

Ⓑ: 19—25 N·m (1.9—2.6 m·kg, 14—19 ft·lb)

Center housing

1. Apply sealant to the contact surfaces of the transmission case and center housing.
2. Install the center housing.
Align the reverse idler gear shaft with the set bolt hole; then install the set bolt and gasket.

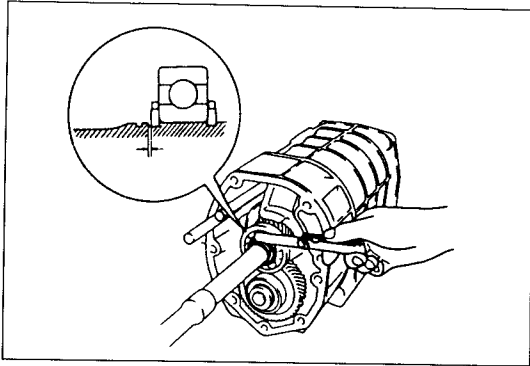
Tightening torque:

19—25 N·m (1.9—2.6 m·kg, 14—19 ft·lb)

3. Install the oil guide.

Tightening torque:

7.8—11 N·m (80—110 cm·kg, 69—95 in·lb)



9MU0JX-095

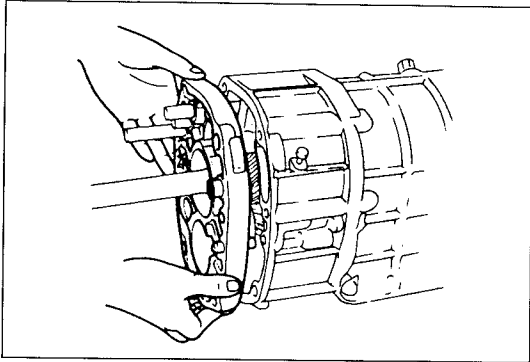
7. Install the C-washers and hold them in place with the retaining ring.
8. Measure the clearance between the C-washers and the groove.
If the clearance is not as specified, select the proper C-washers.

Standard: 0—0.1mm (0—0.004 in)

Available C-washer thicknesses:

2.9mm (0.114 in), 3.0mm (0.118 in)

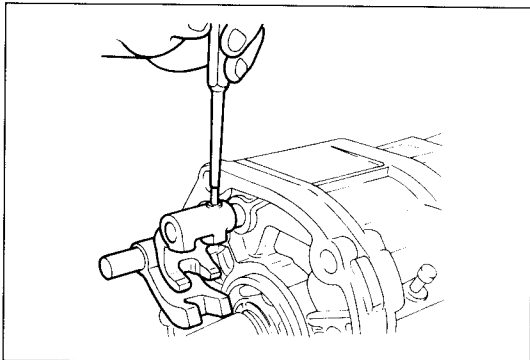
3.1mm (0.122 in), 3.2mm (0.126 in)



9MU0JX-096

Bearing housing

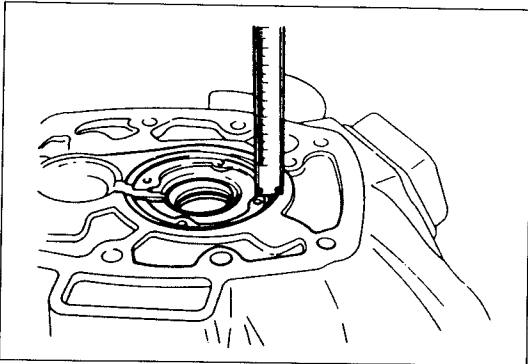
1. Apply sealant to the contact surfaces of the center housing and bearing housing.
2. Install the bearing housing onto the center housing.



9BU0J2-020

Shift rod end

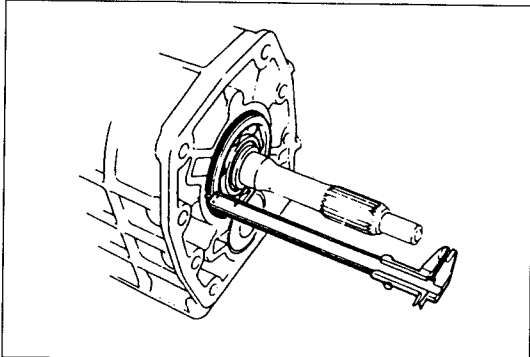
Install the shift rod ends onto the proper shift rods, and secure them with new roll pins.



9MU0JX-100

Assembly note Clutch housing

1. Measure the depth of the main drive gear bearing bore in the clutch housing with vernier calipers.



9MU0JX-101

Note

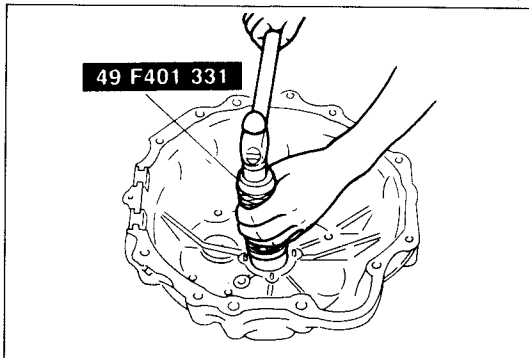
Make this measurement after assembling the transmission case.

2. Measure the main drive gear bearing height. The difference between the two measurements indicates the required thickness of the adjustment shim.

Standard thrust play: 0—0.1mm (0—0.004 in)

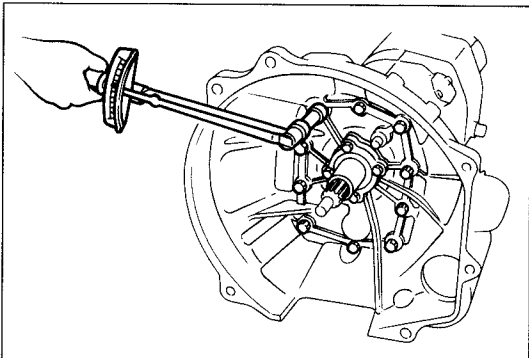
Adjustment shim thickness:

**0.3mm (0.012 in), 0.4mm (0.016 in),
0.5mm (0.020 in), 0.6mm (0.024 in),
0.7mm (0.028 in)**



89U07A-056

3. Apply oil to the oil seal lip, and install it to the clutch housing with the **SST**.

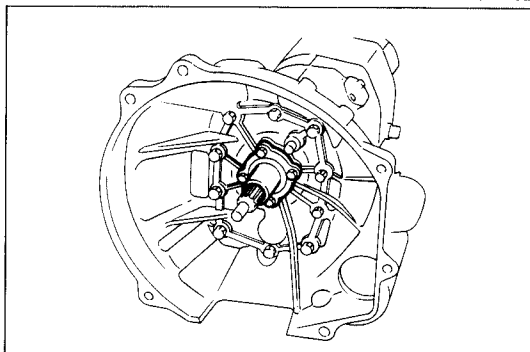


9MU0JX-102

4. Apply sealant to the contacting surfaces of the clutch housing and transmission case.
5. Install the correct adjustment shim on the main drive gear bearing.
6. Install the clutch housing.

Tightening torque:

41—55 N·m (4.2—5.6 m·kg, 30—41 ft·lb)

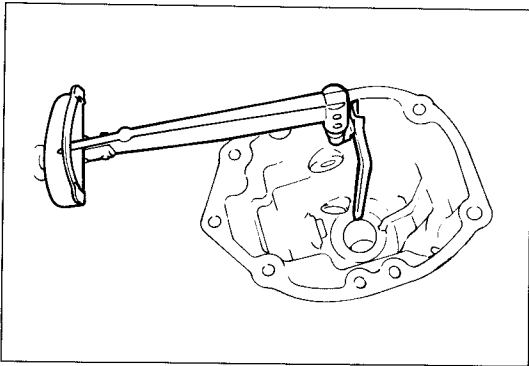


97U0J2-044

7. Install the front cover on the clutch housing.

Tightening torque:

7.8—11 N·m (80—110 cm·kg, 69—95 in·lb)

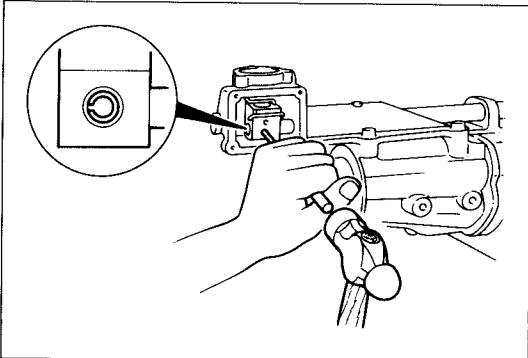


97U0J2-025

3. Install the oil passage.

Tightening torque:

7.8—11 N·m (80—110 cm·kg, 69—95 in·lb)



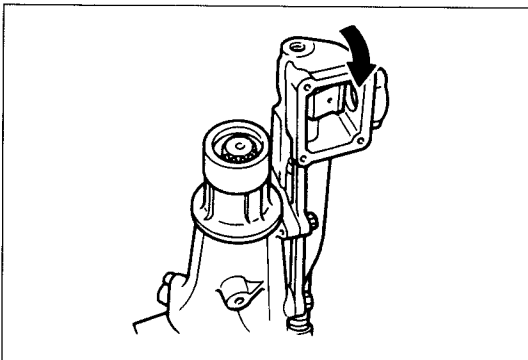
97U0J2-026

4. Install the control lever and control rod end.

Caution

The roll pin should be installed so that the seam of the pin face as shown in the figure.

5. Install a new roll pin into the control lever end.



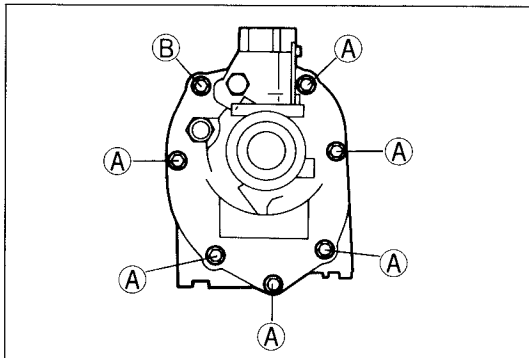
97U0J2-027

Note

Align the inner shift lever and shift rod end groove.

6. Apply sealant to the contact surfaces of the extension housing and bearing housing.

7. Turn the control rod in the direction of the arrow and install the extension housing.



97U0J2-028

8. Apply sealant to the bolt threads, then install the bolts.

Tightening torque:

(A): 41—55 N·m (4.2—5.6 m·kg, 30—41 ft·lb)

(B): 31—46 N·m (3.2—4.7 m·kg, 23—34 ft·lb)

9. Install the select-lock spindle, spring, and spring cap.

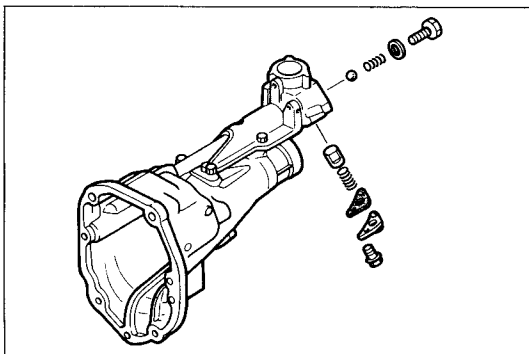
Tightening torque:

7.8—11 N·m (80—110 cm·kg, 69—95 in·lb)

10. Apply sealant to the spring cap threads.

Note

If the select-lock spindle is not pushed down, the ball will not correctly engage it.



97U0J2-029

11. Push the select-lock spindle down by pushing on the control rod.

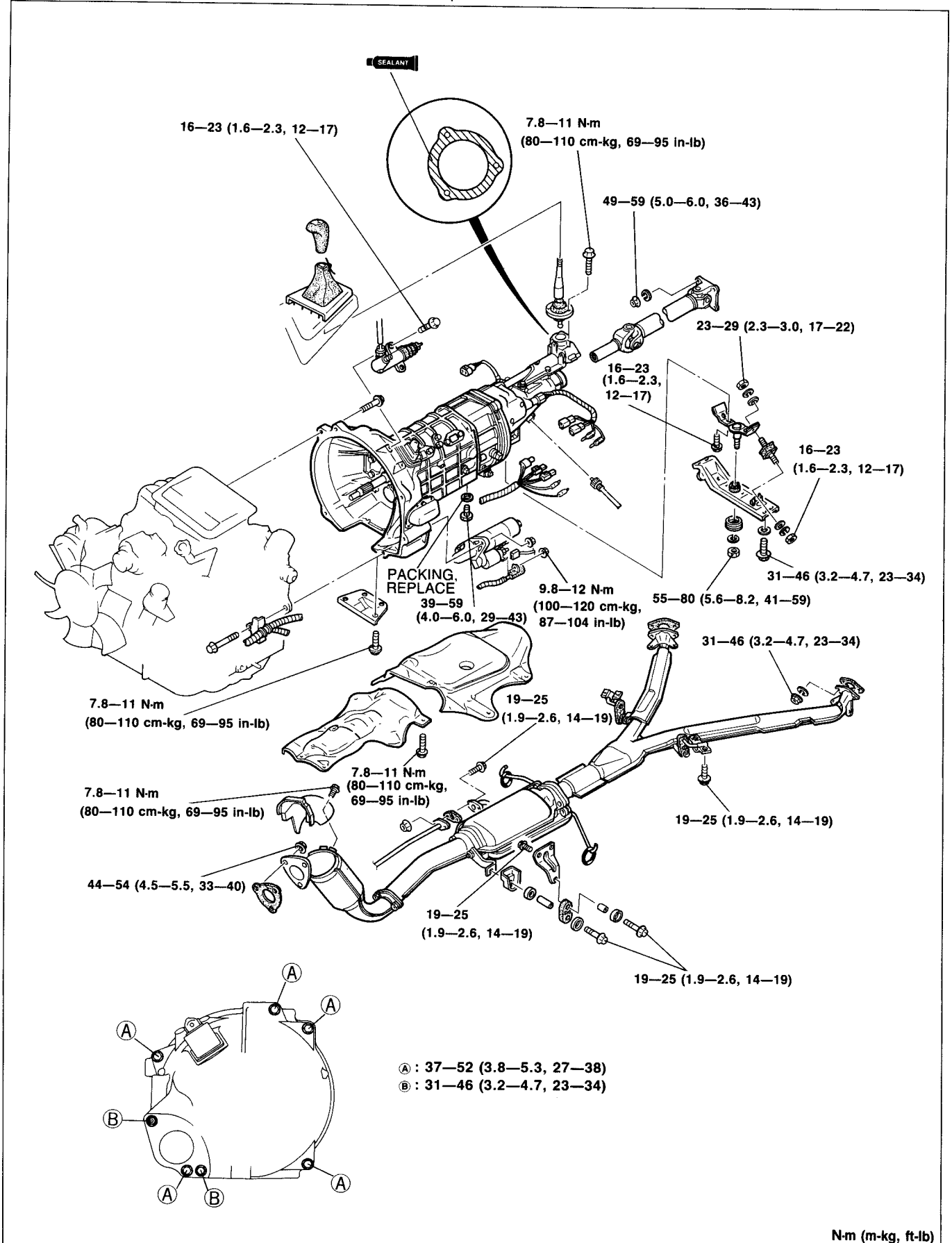
12. Insert the ball and spring, and install the spring cap.

Tightening torque:

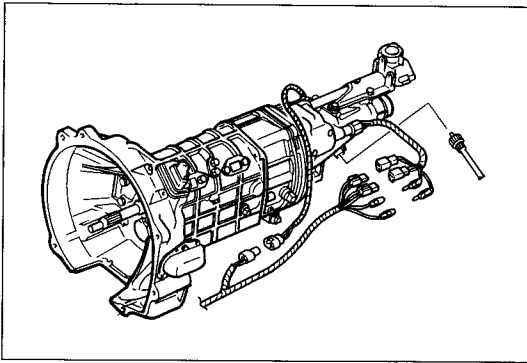
3.9—5.9 N·m (40—60 cm·kg, 35—52 in·lb)

INSTALLATION

1. Install in the reverse order of removal, referring to **Installation Note**.
2. After installation, fill the transmission with the specified oil.



N-m (m-kg, ft-lb)

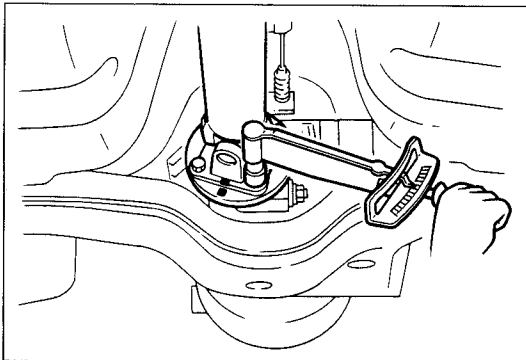


97U0J2-035

9. Connect the neutral switch, and back-up light and 5th switch connectors.
10. Install the speedometer cable.

Note

Align the matching marks and install the propeller shaft.



97U0J2-036

11. Install the propeller shaft. (Refer to Section L.)

Tightening torque:

49—59 N·m (5.0—6.0 m·kg, 36—43 ft·lb)

12. Install the heat insulator and exhaust pipes.

Tightening torque:

Heat insulator:

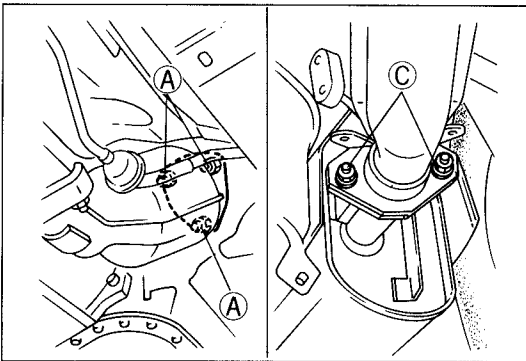
7.8—11 N·m (80—110 cm·kg, 69—95 in·lb)

Exhaust pipes:

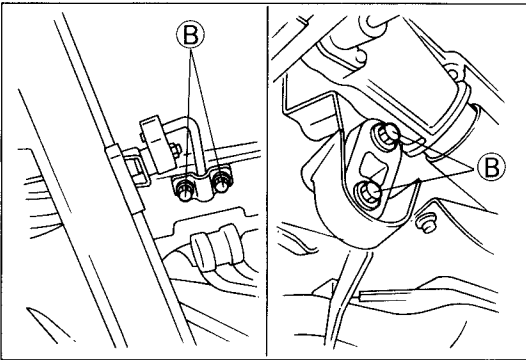
Ⓐ: 44—54 N·m (4.5—5.5 m·kg, 33—40 ft·lb)

Ⓑ: 19—25 N·m (1.9—2.6 m·kg, 14—19 ft·lb)

Ⓒ: 31—46 N·m (3.2—4.7 m·kg, 23—34 ft·lb)



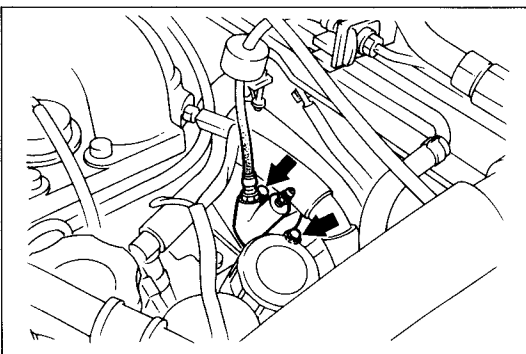
97U0J2-037



13. Install the clutch release cylinder.

Tightening torque:

16—23 N·m (1.6—2.3 m·kg, 12—17 ft·lb)



97U0J2-038