

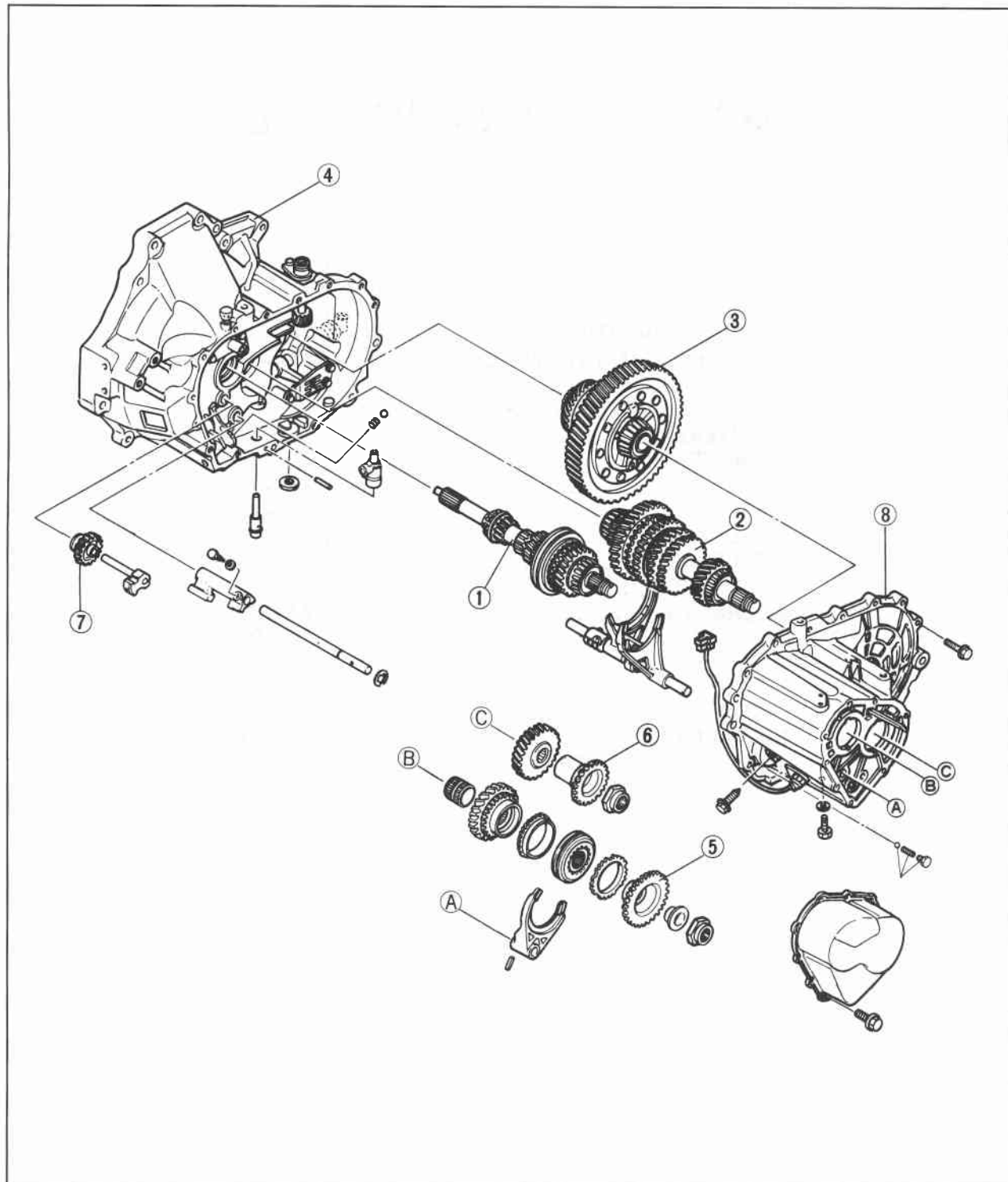
MANUAL TRANSAXLE

OUTLINE	7A— 2
STRUCTURAL VIEW	7A— 2
CROSS-SECTIONAL VIEW	7A— 3
SPECIFICATIONS	7A— 4
TROUBLESHOOTING GUIDE	7A— 5
ON-VEHICLE MAINTENANCE	7A— 6
TRANSAXLE OIL	7A— 6
DRIVESHAFT OIL SEALS	7A— 7
REMOVAL	7A—10
DISASSEMBLY	7A—18
STEP 1	7A—18
STEP 2	7A—20
STEP 3	7A—22
STEP 4	7A—25
INSPECTION	7A—26
ASSEMBLY	7A—29
STEP 1	7A—29
STEP 2	7A—31
STEP 3	7A—36
STEP 4	7A—44
INSTALLATION	7A—49
TRANSAXLE CONTROL	7A—58

76G07A-001

OUTLINE

STRUCTURAL VIEW

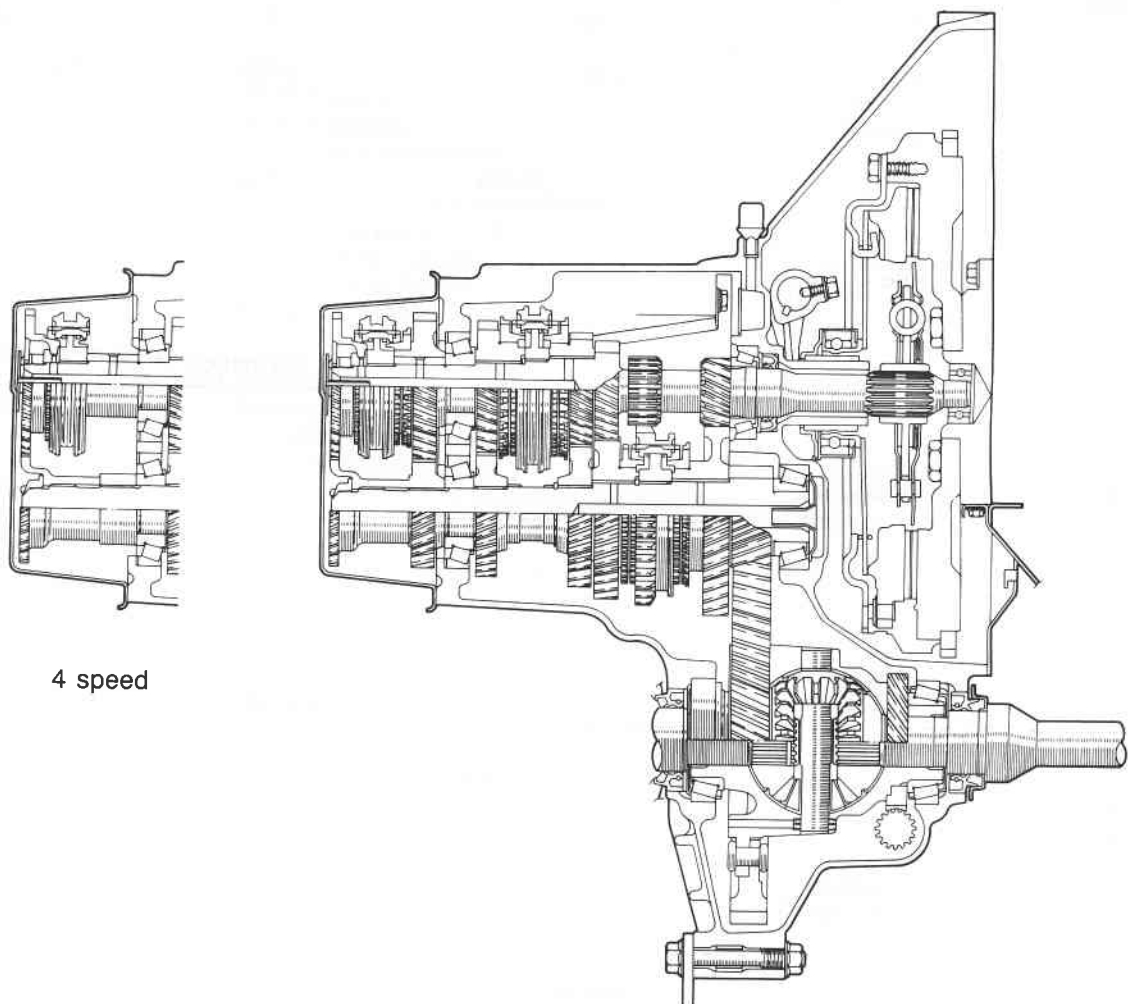


76G07A-002

1. Primary shaft gear assembly
2. Secondary shaft gear assembly
3. Differential assembly
4. Clutch housing

5. Primary reverse synchronizer gear
6. Secondary reverse synchronizer gear
7. Reverse idle gear
8. Transaxle case

CROSS-SECTIONAL VIEW



SPECIFICATIONS

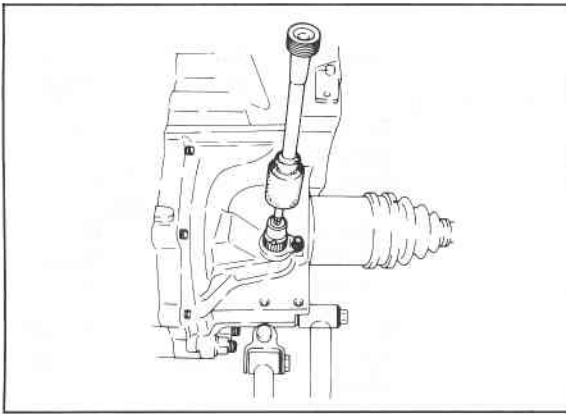
Engine model Item		FE DOHC		F6	FE 12-valve	FE 8-valve		F8	RF-N	RF-CX	
		Leaded	Unleaded			Carb.	FI				
Transaxle control		Floor shift									
Synchromesh system		Forward.....synchromesh, Reverse.....selective sliding and synchromesh									
Gear ratio	1st	3.307									
	2nd	1.833									
	3rd	1.310				1.233				1.161	
	4th	1.030				0.970				0.914	0.861
	5th	0.837				0.795				0.755	0.680
	Reverse	3.166									
Final gear ratio		4.105	3.850				4.105	3.850		4.105	
Oil	Type	ATF: DEXRON-II Above -18°C (0°F): API: GL-4 or GL-5 SAE 80W-90 or SAE 90									
	Capacity	3.35 liters (3.6 US qt, 3.9 Imp qt)									

76G07A-004

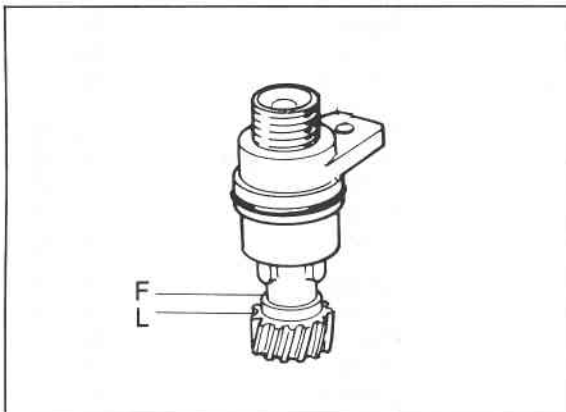
TROUBLESHOOTING GUIDE

Problem	Possible cause	Remedy	Page
Change lever won't shift smoothly, or is hard to shift	Seized change lever ball	Replace	7A—58
	Seized change control rod joint	Replace	7A—58
	Bent change control rod	Replace	7A—58
Too much play in change lever	Worn change control rod bushing	Replace	7A—58
	Weak spring of ball or change lever	Replace	7A—58
	Worn bushing of ball or change lever	Replace	7A—58
Difficult to shift	Bent change rod	Replace	7A—58
	No grease in transmission control	Lubricate with grease	7A—58
	Insufficient oil	Add oil	7A—6
	Deterioration of oil quality	Replace with oil of specified quality	7A—6
	Wear or play of shift fork or shift rod	Replace	7A—18
	Wear of synchronizer ring	Replace	7A—27
	Wear of synchronizer cone of gear	Replace	7A—27
	Bed contact of synchronizer ring and cone of gear	Replace	7A—27
	Excessive longitudinal play of gears	Replace	7A—22
	Wear of bearing	Adjust or replace	7A—22
	Wear of synchronizer key spring	Replace	7A—27
	Excessive shaft gear bearing preload	Adjust	7A—37
	Improperly adjusted change guide plate	Adjust	7A—20
Won't stay in gear	Bent change control rod	Replace	7A—58
	Worn change control rod bushing	Replace	7A—58
	Weak change lever ball spring	Replace	7A—58
	Improperly installed extension bar	Tighten	7A—58
	Wear of shift fork	Replace	7A—22
	Wear of clutch hub	Replace	7A—27
	Worn clutch hub sleeve	Replace	7A—27
	Worn gear sliding part of both shaft gears	Replace	7A—26
	Worn gear sliding part of each gear	Replace	7A—26
	Worn steel sliding groove of control end	Replace	7A—18
	Weak spring pressing against steel ball	Replace	7A—18
	Excessive thrust clearance	Replace	7A—33,35
	Worn bearing	Replace	7A—22
	Improperly installed engine mount	Tighten	7A—49
Abnormal noise	Insufficient oil	Add oil	7A—6
	Deterioration of oil quality	Replace	7A—6
	Worn bearing	Adjust or replace	7A—22
	Worn gear sliding surface of both shaft gears	Replace	7A—26
	Wear of sliding surfaces of gears	Replace	7A—26
	Excessive thrust clearance	Replace	7A—33,35
	Damaged gear teeth	Replace with oil of specified quality	7A—26
	Foreign material in gears	Replace	7A—22
	Damaged differential gear, or excessive backlash	Adjust or replace	7A—30

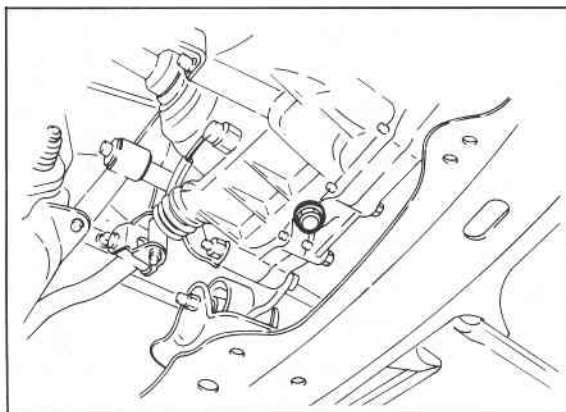
76G07A-005



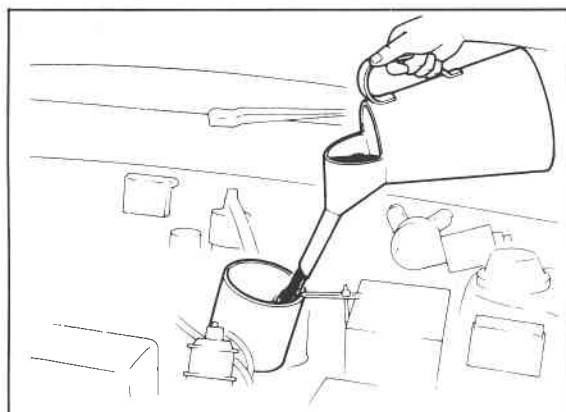
61G07X-189



61G07X-190



61G07X-191



76G07A-006

ON-VEHICLE MAINTENANCE

TRANSAXLE OIL

Inspection

1. Park the vehicle on level ground.
2. Remove the speedometer cable dust cover, and disconnect the cable from the speedometer driven gear.
3. After removing the bolt, pull the gear case to remove it from the housing. (Insert a flat-tipped screwdriver between the speedometer gear case and the clutch housing, and use it to pry the gear case loose if necessary.)
4. Check that the oil level is between the "F" and "L".
5. If not, add the necessary amount of the specified oil through the gear case hole.

Replacement

1. Park the vehicle on level ground.
2. Remove the speedometer driven gear. (See "**Inspection**" section above.)
3. Remove the drain plug, and drain the oil.
4. Replace the drain plug, and add the necessary amount of the specified oil through the speedometer gear case hole.

Specified oil

Type

ATF: DEXRON II

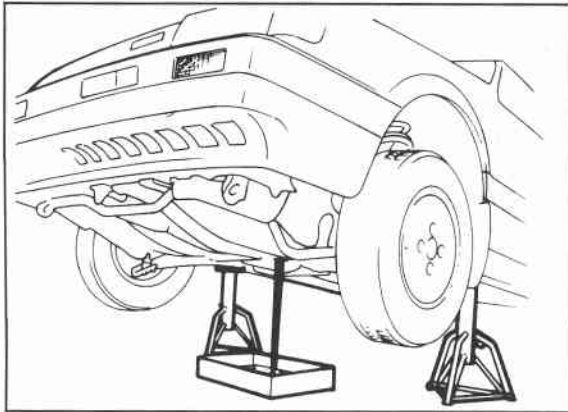
Above -18°C (0°F):

API: GL-4 or GL-5

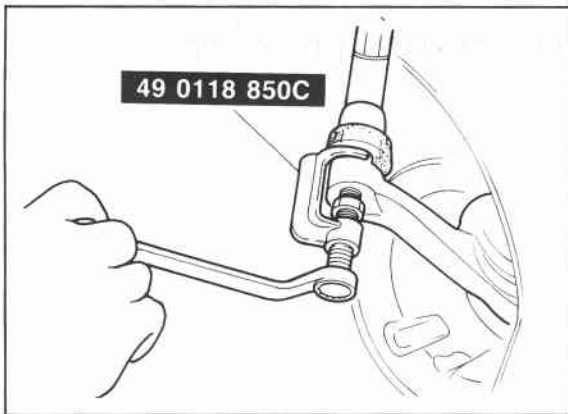
SAE 80W-90 or SAE 90

Capacity:

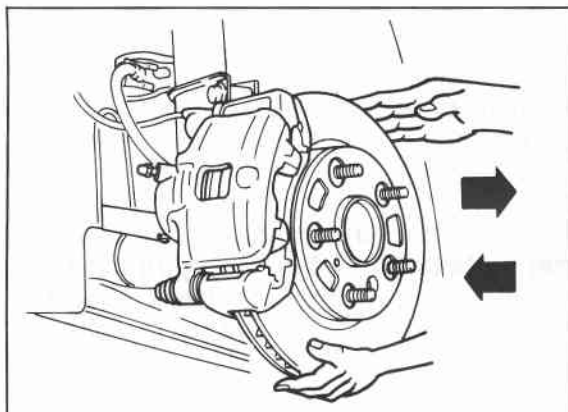
3.35 liters (3.6 US qt, 3.0 Imp qt)



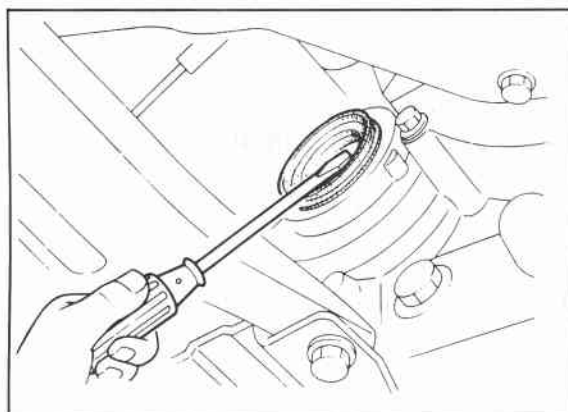
61G07X-170



86U07A-009



86U07A-010



86U07A-011

DRIVESHAFT OIL SEALS

Replacement

Jack up the vehicle, support it on safety stands, and then drain the transaxle oil. Next, use the following procedure to replace the driveshaft oil seals:

1. Remove the front wheel(s).
2. Remove the splash shield(s).
3. Separate the front stabilizer from the lower arm.

4. Remove the bolt and pull the lower arm downward. Separate the knuckle from the lower arm ball-joint.

Note

Be careful not to damage the ball-joint dust boot.

5. Remove the cotter pin then disconnect the tie-rod end with the **SST**.

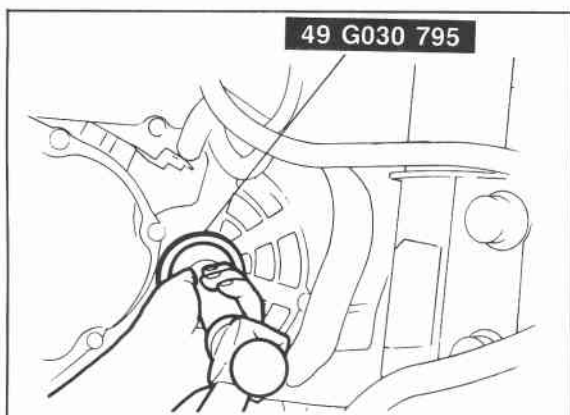
6. Separate the driveshaft by pulling the front hub outward. Do not use too much force at once, increase the force gradually.

Note

- a) Do not allow the driveshaft ball-joint to be bent to its maximum extent.
- b) Support the driveshaft using string, wire, etc.

7. Remove the oil seal with a flat-tipped screwdriver.

7A ON-VEHICLE MAINTENANCE

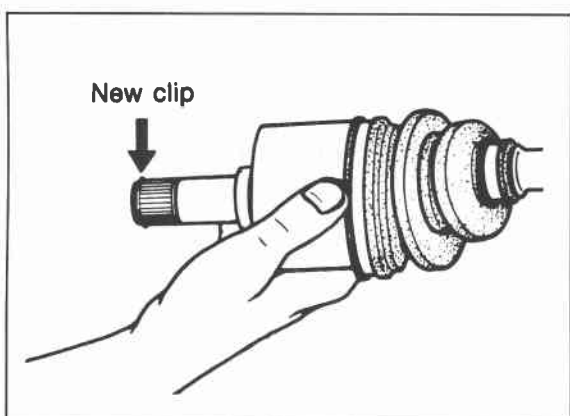


86U07A-012

8. Tap the new oil seal into the transaxle case with the **SST**.

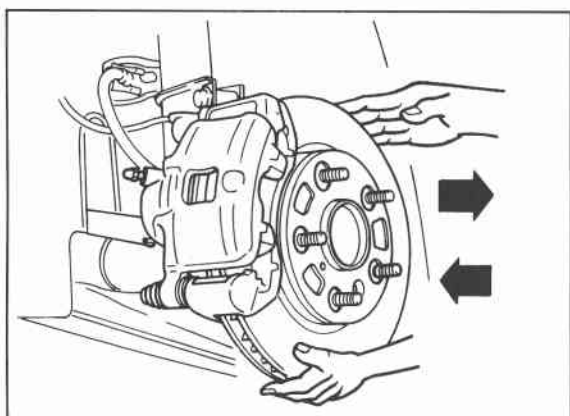
Note

- a) Tap in until the oil seal installer contacts the case.
- b) Coat the oil seal lip with transaxle oil.



86U07A-013

9. Replace the driveshaft end clip with a new one. Insert the clip with the gap at the top of the groove.

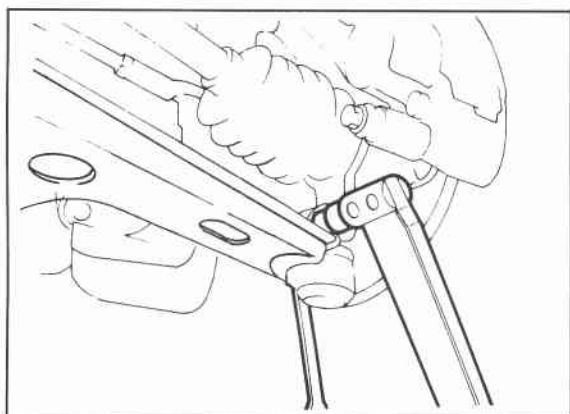


86U07A-014

10. Install the driveshaft as follows:
- (1) Pull the front hub outward, then fit the driveshaft into the transaxle.
 - (2) Insert the driveshaft into the transaxle by pushing on the wheel hub assembly.

Note

- a) Be careful not to damage the oil seal.
- b) After installation is finished, pull the front hub slowly outward to check that the driveshaft is held securely by the clip.



86U07A-015

11. Install the lower arm ball-joint to the knuckle, and tighten the clinch bolt.

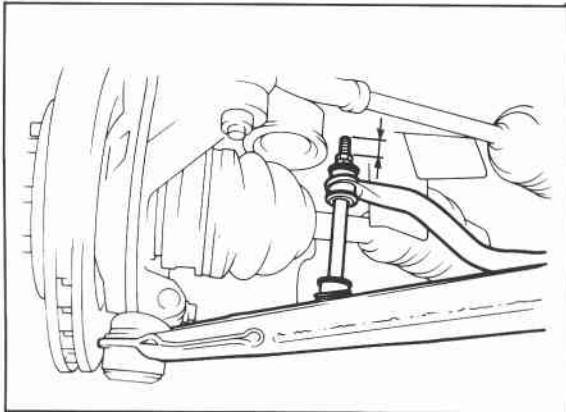
Tightening torque:

43—54 N·m (4.4—5.5 m·kg, 32—40 ft·lb)

12. Install the tie-rod end and new cotter pin.

Tightening torque:

29—44 N·m (3.0—4.5 m·kg, 22—33 ft·lb)



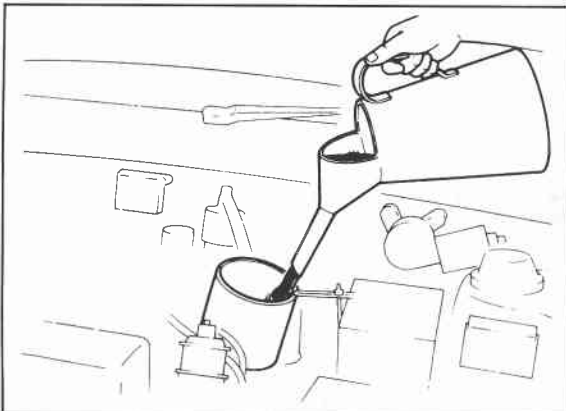
86U07A-016

13. Adjust and tighten the stabilizer.

Tightening torque:

16—23 N·m (1.6—2.3 m·kg, 12—17 ft·lb)

Dimension: 20.1 mm (0.79 in)



76G07A-007

14. Install the drain plug.

Tightening torque:

39—59 N·m (4.0—6.0 m·kg, 29—43 ft·lb)

15. Install the wheel.

Tightening torque:

88—118 N·m (9.0—12.0 m·kg, 65—87 ft·lb)

16. Add the correct quantity of the specified oil.

Type: A.T.F.: DEXRON II

Above -18°C (0°F):

API: GL-4 or GL-5

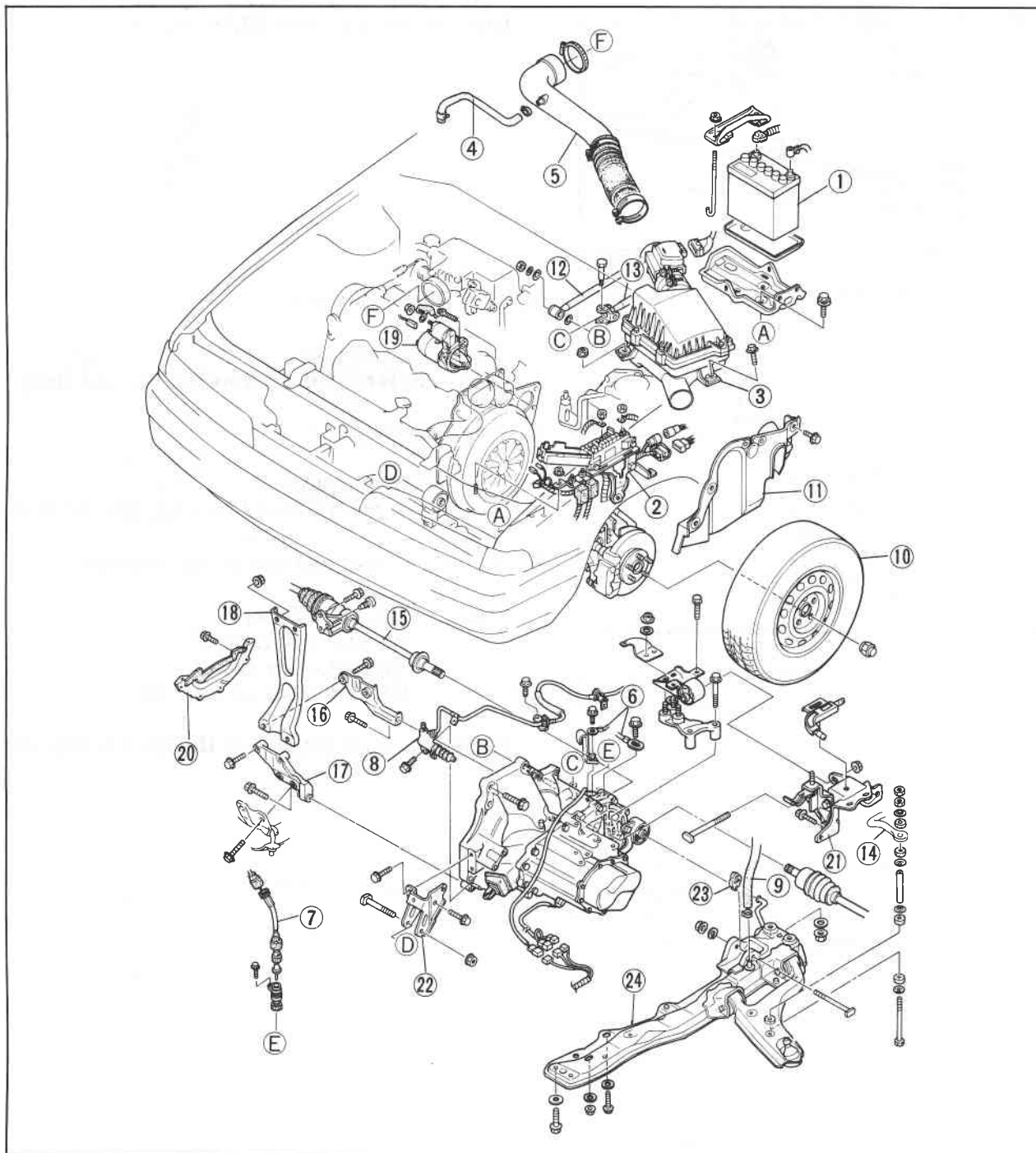
SAE 80W-90 or SAE 90

Capacity: 3.35 liters (3.6 US qt, 3.0 Imp qt)

7A REMOVAL

REMOVAL

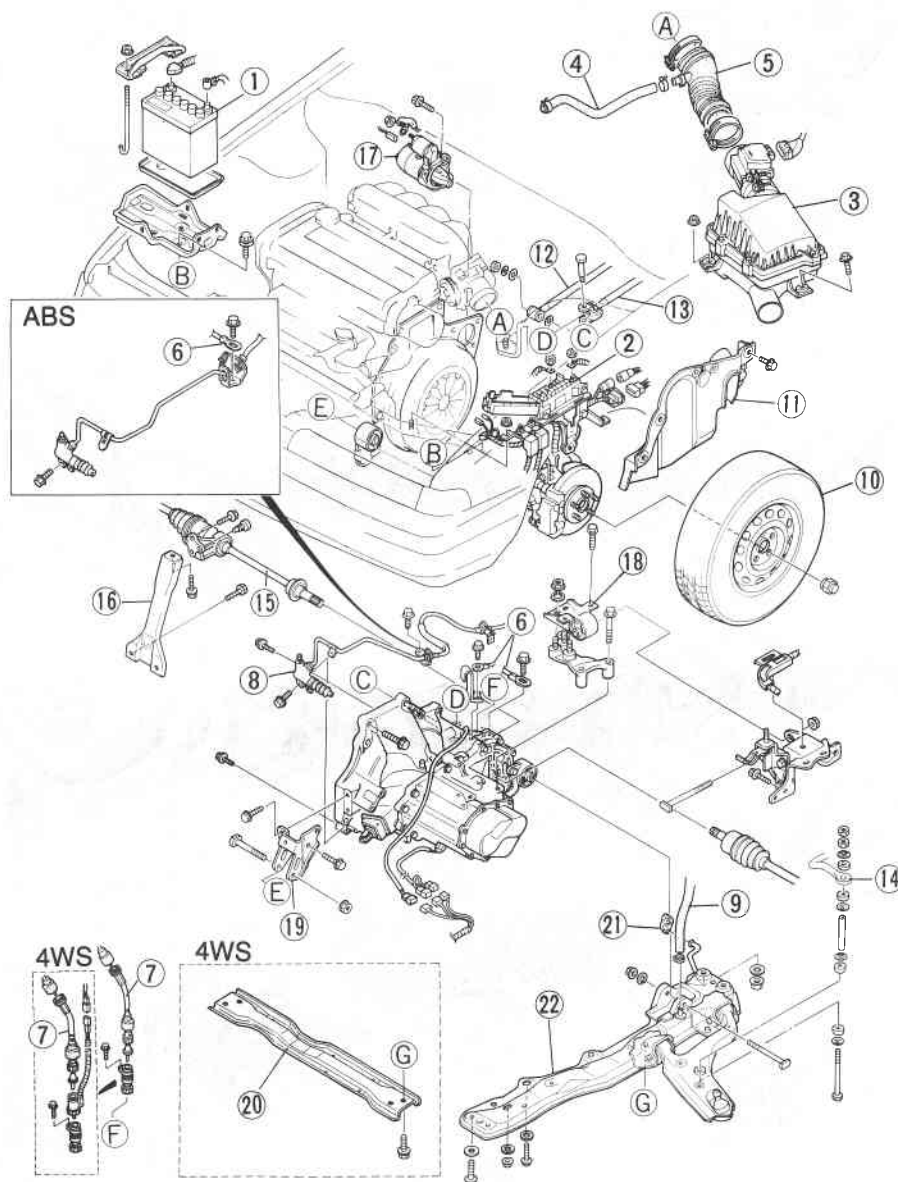
FI except DOHC



76G07A-008

- | | | |
|----------------------------|-------------------------|--------------------------|
| 1. Battery | 9. Canister hose | 17. Gusset plate (front) |
| 2. Main fuse block | 10. Wheel | 18. Surge tank bracket |
| 3. Air cleaner assembly | 11. Splash shield | 19. Starter |
| 4. Ventilation hose | 12. Extension bar | 20. Under cover |
| 5. Air hose | 13. Control rod | 21. Engine mount No.4 |
| 6. Ground(s) | 14. Stabilizer | 22. Engine mount No.2 |
| 7. Speedometer cable | 15. Joint shaft | 23. Hunger rubber |
| 8. Clutch release cylinder | 16. Gusset plate (rear) | 24. Crossmember |

DOHC

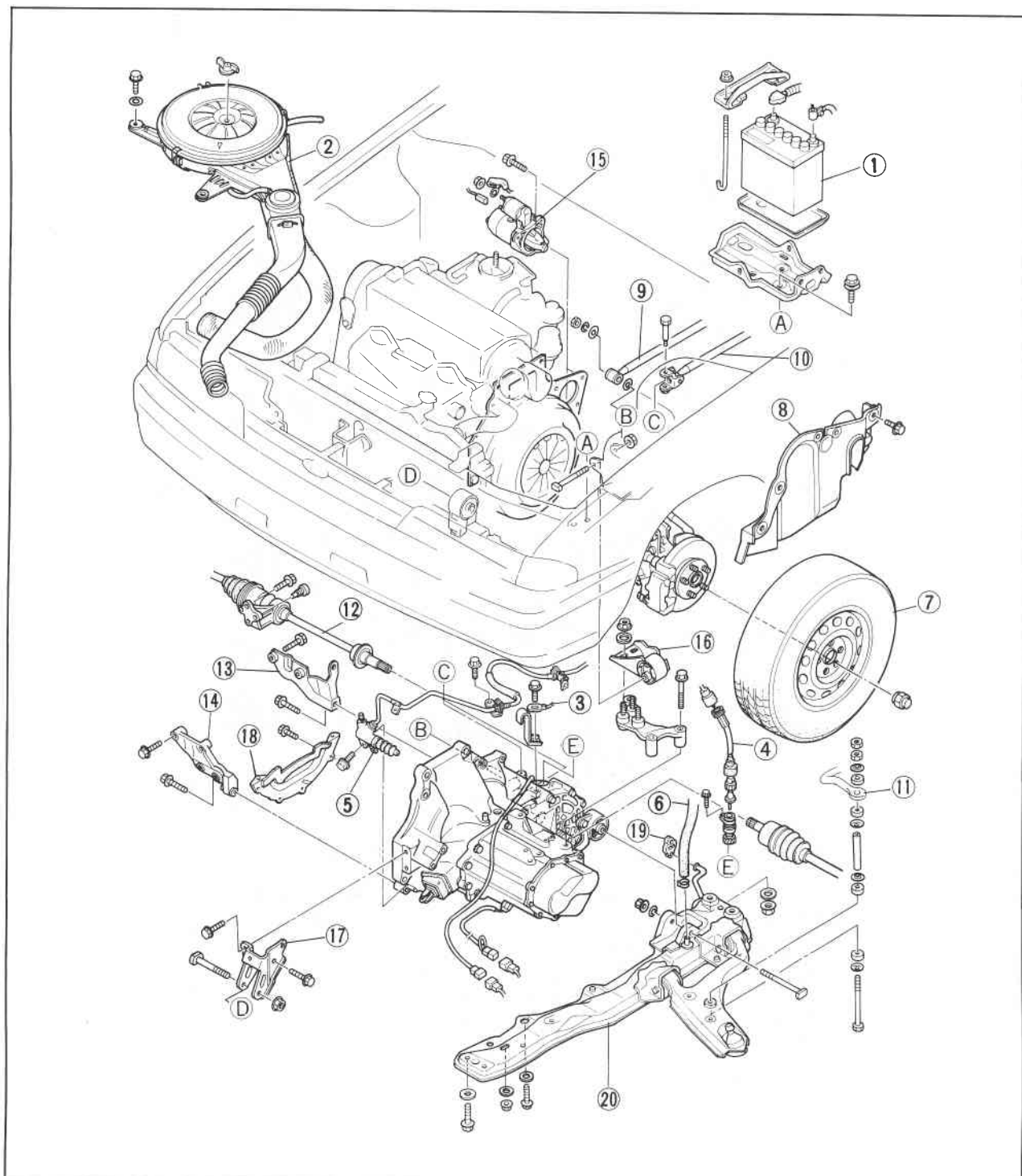


76G07A-009

- | | | |
|----------------------------|-------------------|------------------------|
| 1. Battery | 9. Canister hose | 16. Surge tank bracket |
| 2. Main fuse block | 10. Wheel | 17. Starter |
| 3. Air cleaner assembly | 11. Splash shield | 18. Engine mount No.4 |
| 4. Ventilation hose | 12. Extension bar | 19. Engine mount No.2 |
| 5. Air hose | 13. Control rod | 20. Rear member (4WS) |
| 6. Ground(s) | 14. Stabilizer | 21. Hunger rubber |
| 7. Speedometer cable | 15. Joint shaft | 22. Crossmember |
| 8. Clutch release cylinder | | |

7A REMOVAL

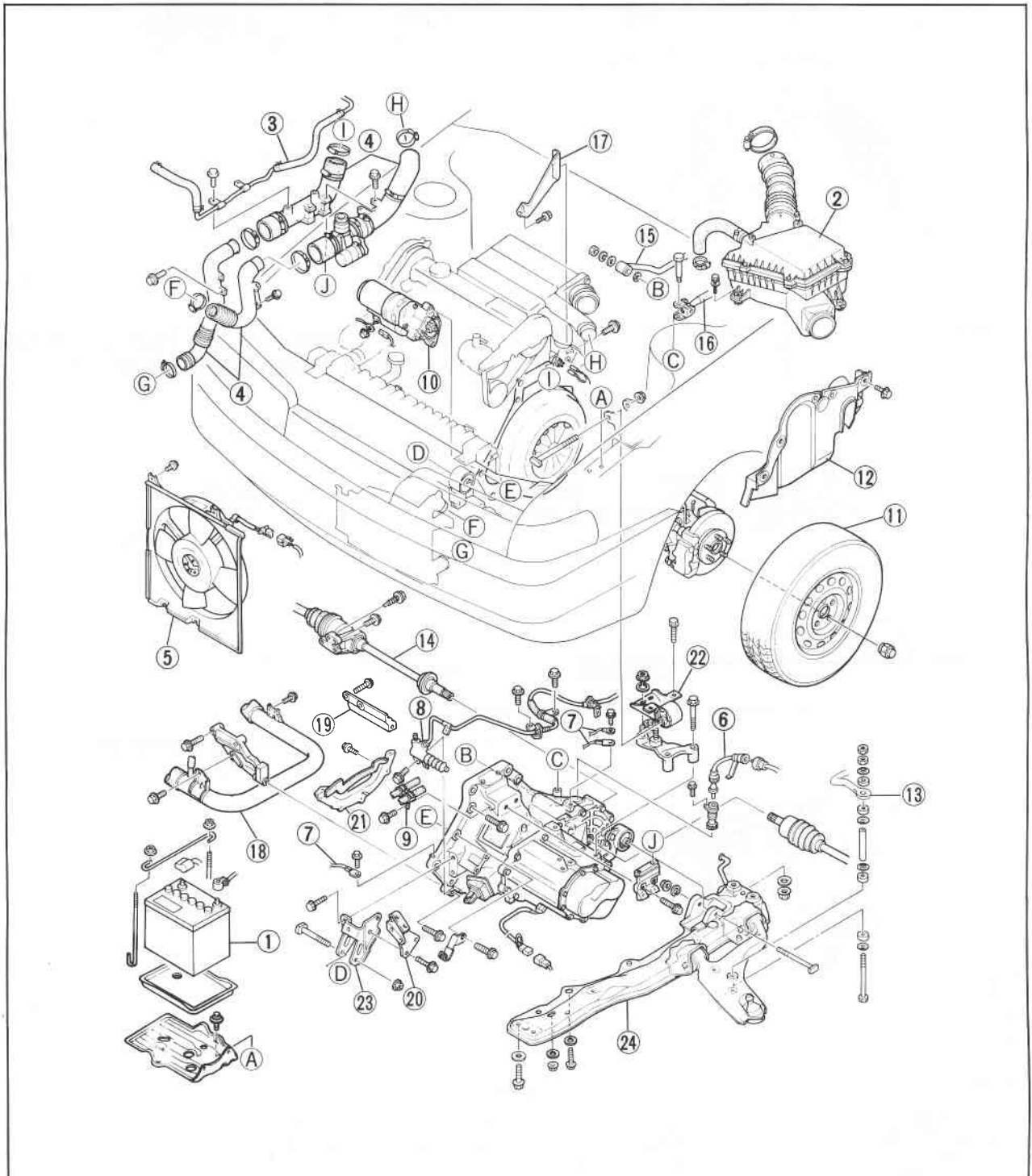
Carburator



76G07A-010

- | | | |
|----------------------------|--------------------------|-----------------------|
| 1. Battery | 8. Splash shield | 15. Starter |
| 2. Air cleaner assembly | 9. Extension bar | 16. Engine mount No.4 |
| 3. Ground | 10. Control rod | 17. Engine mount No.2 |
| 4. Speedometer cable | 11. Stabilizer | 18. Under cover |
| 5. Clutch release cylinder | 12. Joint shaft | 19. Hunger rubber |
| 6. Canister hose | 13. Gusset plate (rear) | 20. Crossmember |
| 7. Wheel | 14. Gusset plate (front) | |

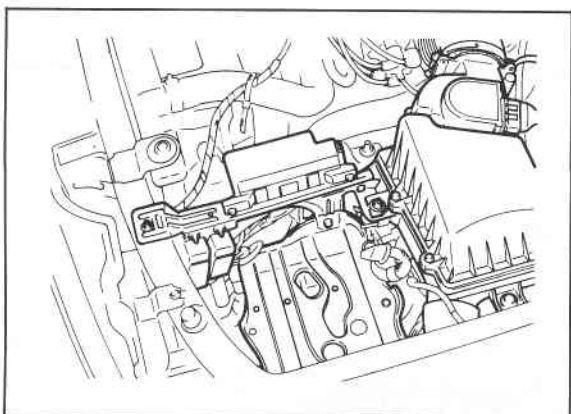
RF-N and RF-CX



76G07A-011

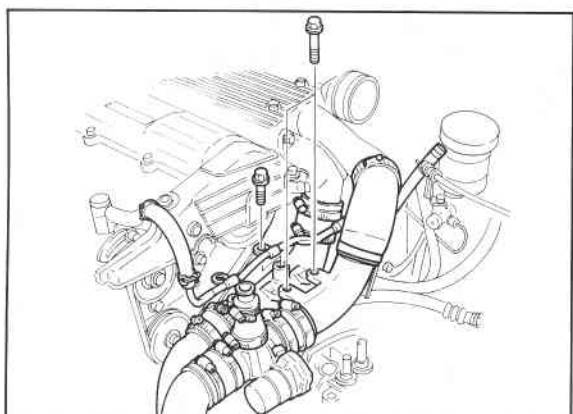
- | | | |
|---|--|--------------------------|
| 1. Battery | 9. Pressure and return hoses
(power steering) | 17. Exhaust pipe bracket |
| 2. Air cleaner assembly | 10. Starter | 18. Water pipe |
| 3. Vacuum hose | 11. Wheel | 19. Gusset plate (rear) |
| 4. Intercooler pipe and hose
(RF-CX) | 12. Splash shield | 20. Gusset plate (front) |
| 5. Electric fan | 13. Stabilizer | 21. Under cover |
| 6. Speedometer cable | 14. Joint shaft | 22. Engine mount No.4 |
| 7. Ground(s) | 15. Extension bar | 23. Engine mount No.2 |
| 8. Clutch release cylinder | 16. Control rod | 24. Crossmember |

7A REMOVAL



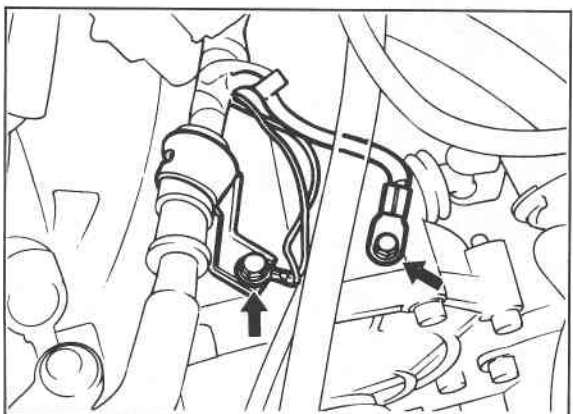
76G07A-012

1. Remove the battery and battery carrier.
2. Disconnect the main fuse block. (FI)
3. Disconnect the distributor lead.
4. Remove the air cleaner assembly.



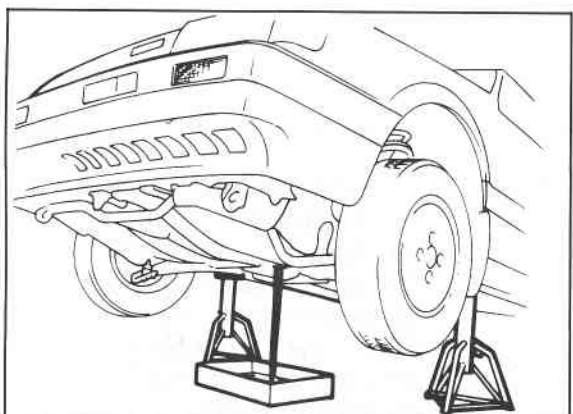
76G07A-013

5. Remove the vacuum hose, the intercooler hose (RF-CX) and the electric fan. (RF-N and RF-CX)



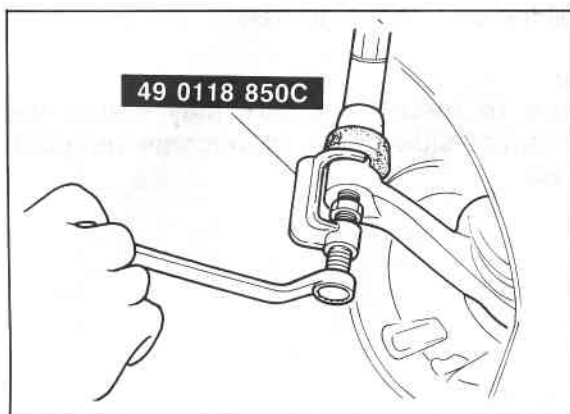
86U07A-021

6. Disconnect the speedometer cable.
7. Disconnect the grounds from the transaxle case.



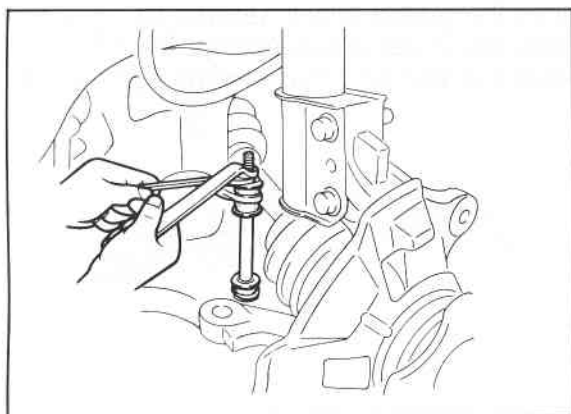
86U07A-022

8. Remove the front wheels.
9. Remove the splash shields.
10. Drain the transaxle oil.



86U07A-023

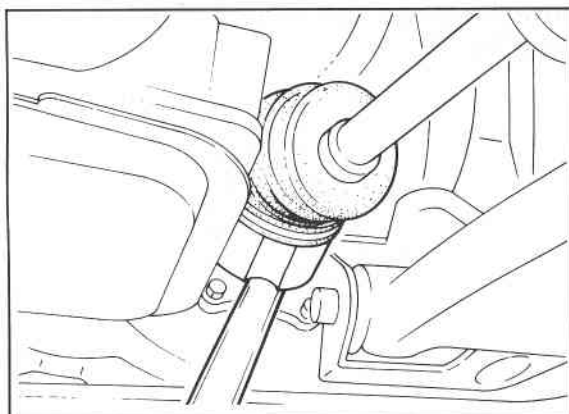
11. Disconnect the clutch release cylinder.
12. Disconnect the tie-rod ends using **SST**.



86U07A-024

13. Remove the stabilizer bar control links.
14. Remove the bolts and nuts at the left and right lower arm bolt joints.
15. Pull the lower arms downward to separate them from the knuckles.

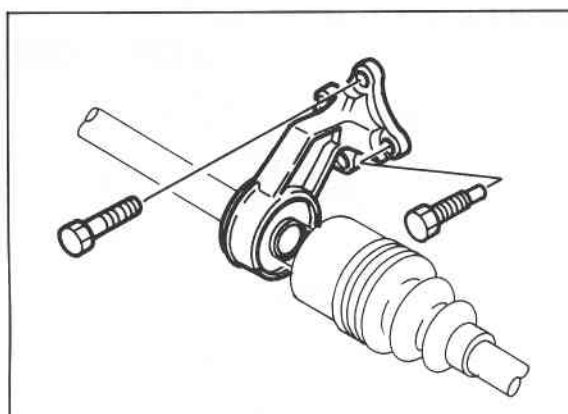
Note
Do not damage the ball-joint dust boots.



86U07A-025

16. Separate the left driveshaft from the transaxle by prying with a bar inserted between the shaft and the case.

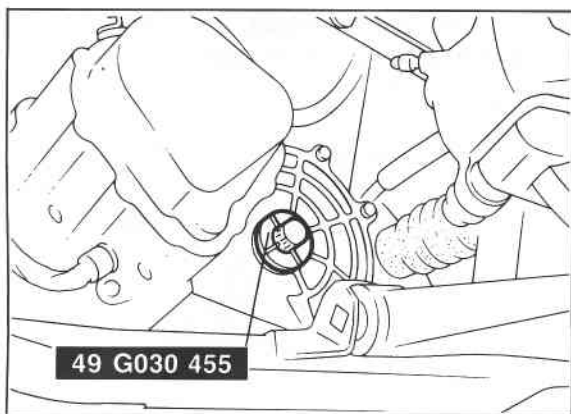
Note
Do not damage the oil seal.



86U07A-026

17. Remove the joint shaft bracket.
18. Separate the right driveshaft together with the joint shaft in the same manner.

7A REMOVAL

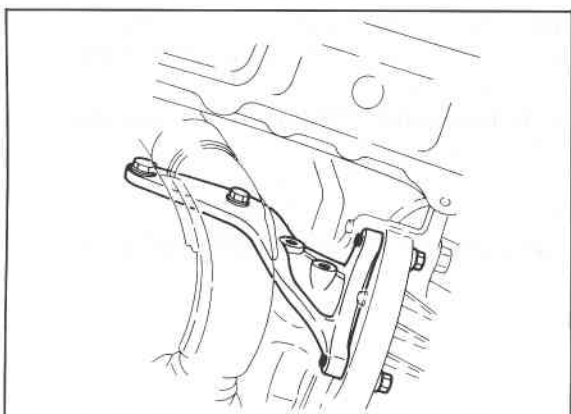


86U07A-027

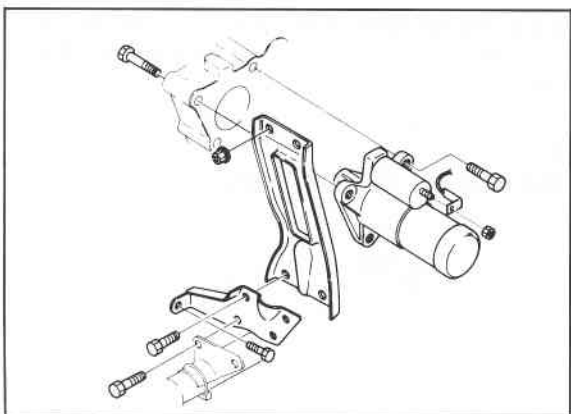
19. Install the **SST** to the differential side gear.

Note

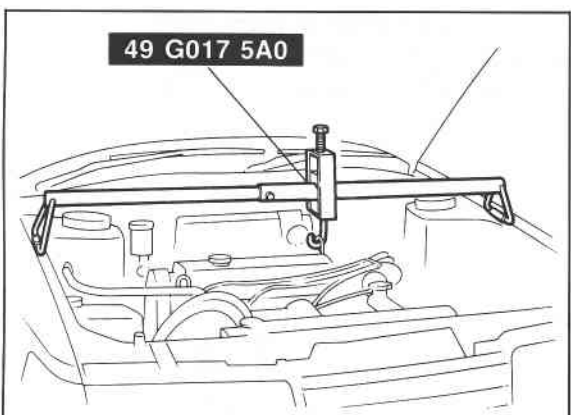
Failure to install the SST may cause the differential side gears to become mispositioned.



20. Remove the gusset plates. (except DOHC)
21. Remove the under cover. (except DOHC)
22. Remove the extension bar and the control rod.

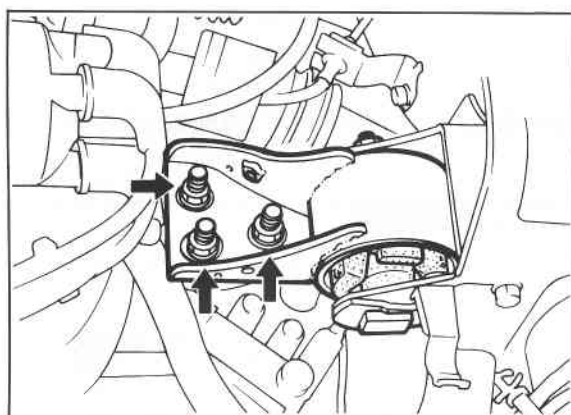


23. Remove the surge tank bracket. (FI)
24. Remove the starter.



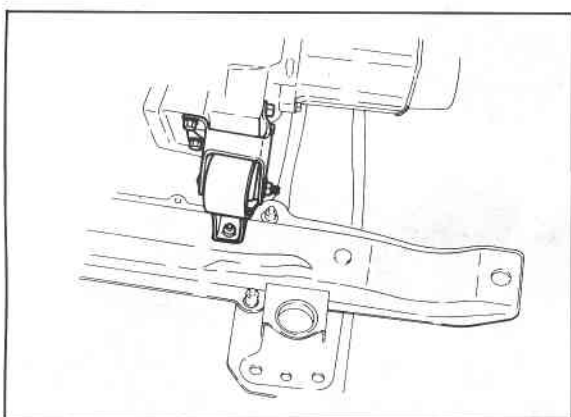
86U07A-030

25. Suspend the engine with the **SST**.



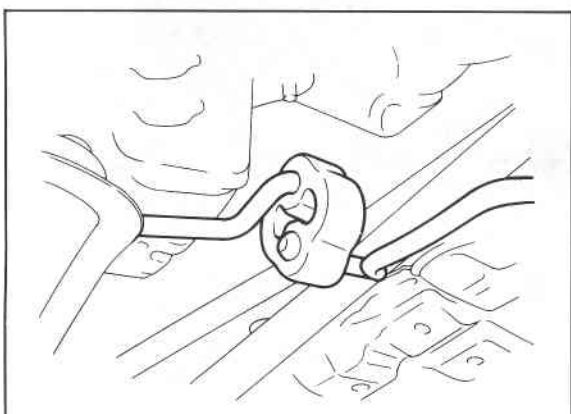
86U07A-031

26. Remove the engine mount No. 4 and bracket.



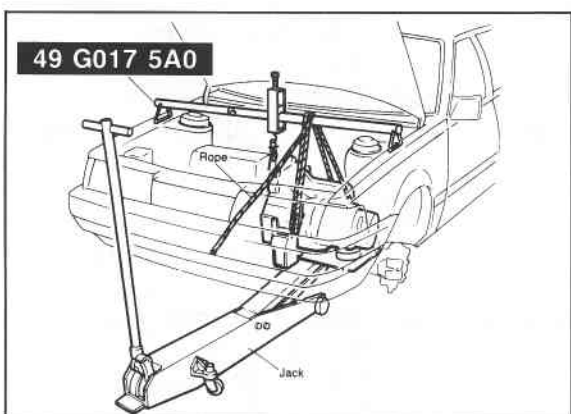
86U07A-032

27. Remove the engine mount No. 2.



86U07A-033

28. Disconnect the hanger rubber then remove the crossmember and the left side lower arm as an assembly.



86U07A-034

29. Lean the engine toward the transaxle.
30. Support the transaxle with a jack.
31. Remove the remaining transaxle mounting bolts.
32. Remove the transaxle.

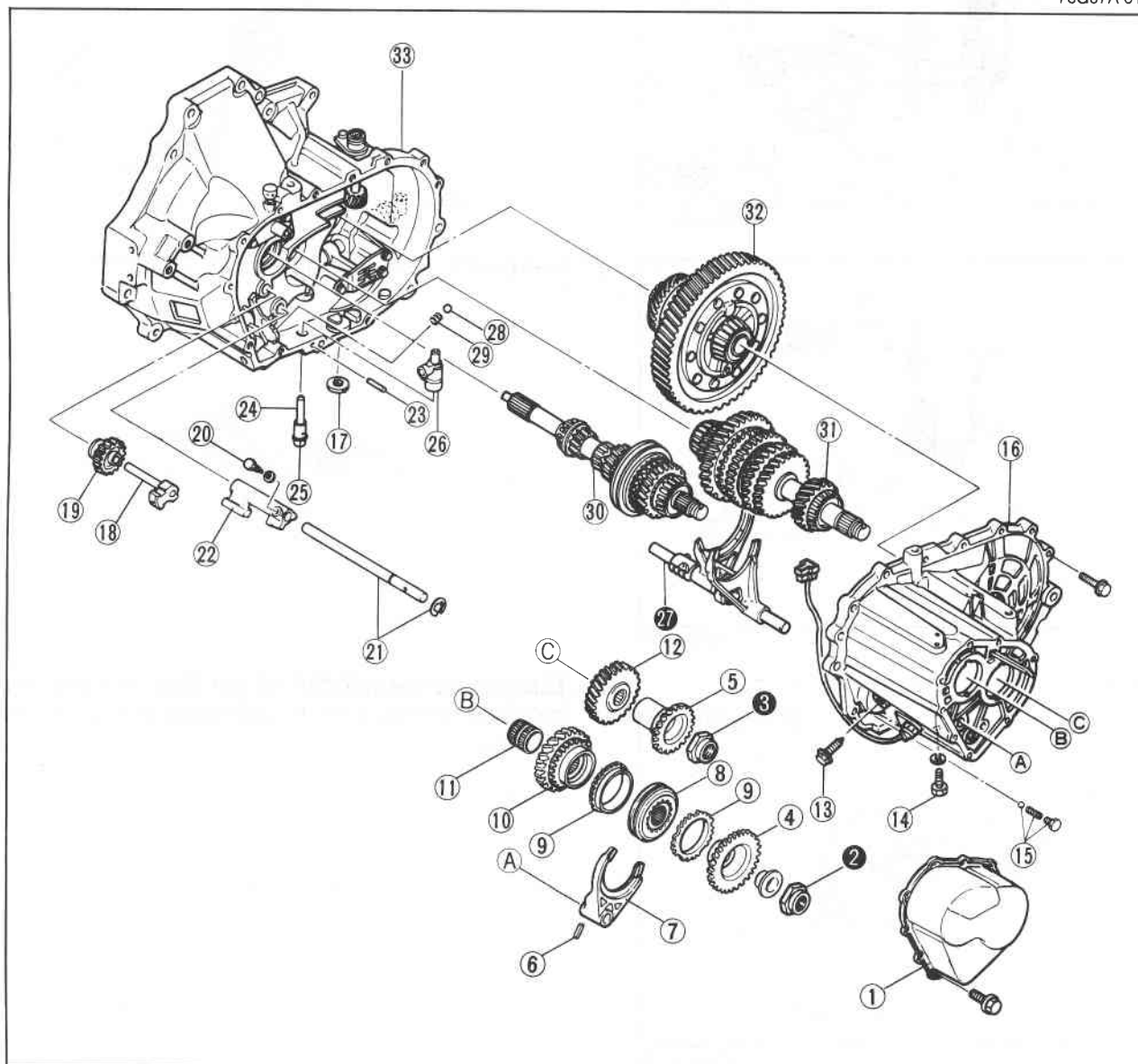
7A DISASSEMBLY

DISASSEMBLY

STEP 1

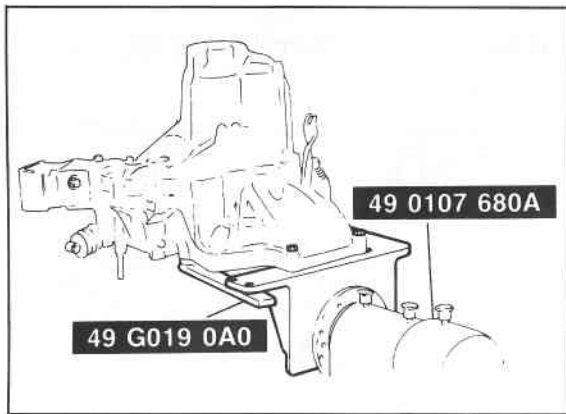
Disassemble in the sequence shown in the figure referring to disassembly note for the specially marked parts.

76G07A-016



76G07A-017

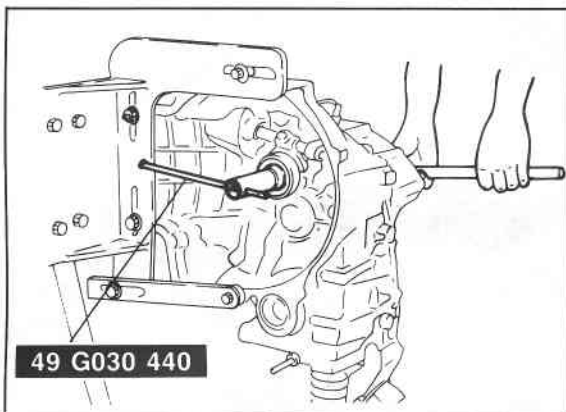
- | | | |
|--|--|---------------------------------------|
| 1. Rear cover | 12. Secondary 5th gear | 24. Crank lever shaft |
| 2. Lock nut | 13. Lock bolt | 25. O-ring |
| 3. Lock nut | 14. Guide bolt | 26. Crank lever assembly |
| 4. Primary reverse synchronizer gear | 15. Lock bolt, ball and spring | 27. Shift fork and shift rod assembly |
| 5. Secondary reverse synchronizer gear | 16. Transaxle case | 28. Steel ball |
| 6. Roll pin | 17. Magnet | 29. Spring |
| 7. Shift fork | 18. Reverse idle shaft | 30. Primary shaft gear assembly |
| 8. Clutch hub assembly | 19. Reverse idle gear | 31. Secondary shaft gear assembly |
| 9. Synchronizer ring | 20. Lock bolt | 32. Differential assembly |
| 10. 5th gear | 21. Shift rod (5th and reverse) and clip | 33. Clutch housing |
| 11. Gear sleeve | 22. Gate | |
| | 23. Pin | |



86U07A-037

Disassembly Note Transaxle

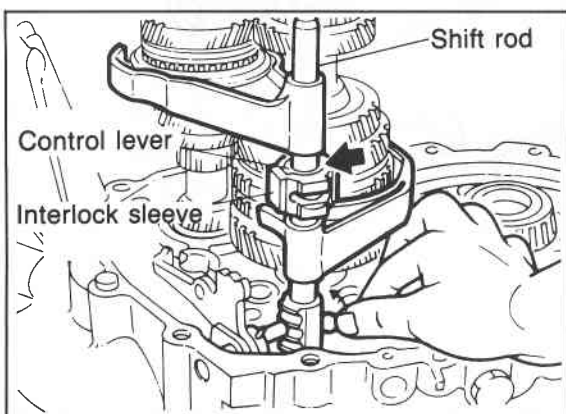
Mount the transaxle on the **SST**.



86U07A-038

Lock nut

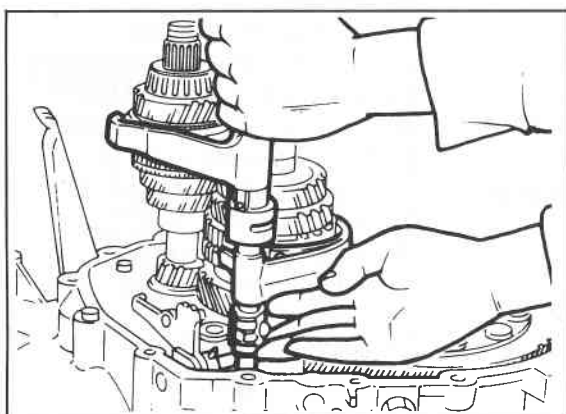
1. Lock the primary shaft with the **SST**.
2. Shift to 1st or 2nd gear.
3. Remove the lock nut.



86U07A-039

Shift fork and shift rod assembly

1. Align the ends of the interlock sleeve and of the control lever, then turn the shift rod counter-clockwise.
2. While holding the 1st-2nd shift fork with one hand and the 3rd-4th shift fork with the other, raise them both at the same time and shift each of the clutch hub sleeves.



76U07A-227

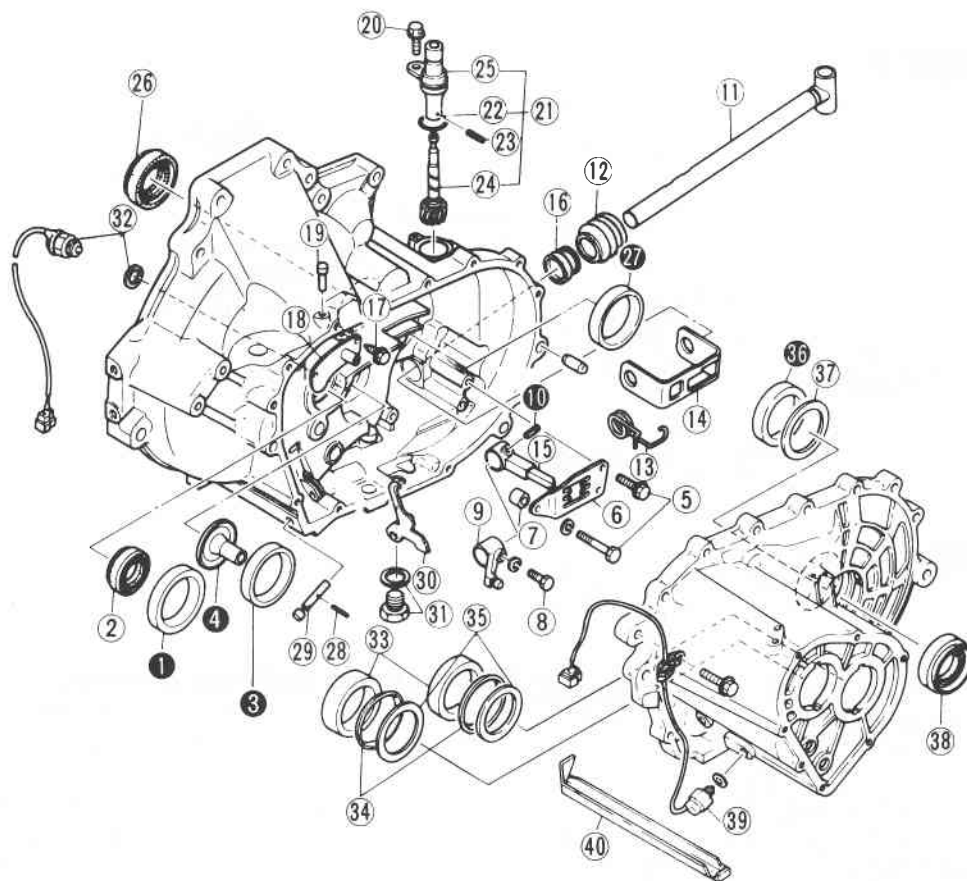
3. Lift the control end and remove the steel ball, and, at the same time, remove the shift rod from the clutch housing.
4. Separate the shift rod and shift fork assembly from each of the clutch hub sleeves.

7A DISASSEMBLY

STEP 2

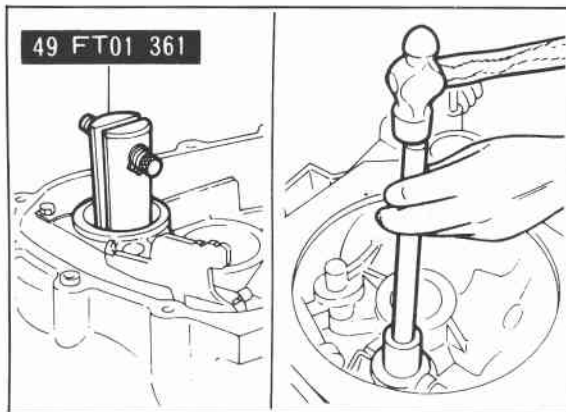
Disassemble in the sequence shown in the figure referring to disassembly note for the specially marked parts.

76G07A-018



76G07A-019

- | | | |
|-----------------------|--------------------------------------|-------------------------------|
| 1. Bearing outer race | 15. Selector | 28. Roll pin |
| 2. Oil seal | 16. Oil seal | 29. Reverse lever shaft |
| 3. Bearing outer race | 17. Bolt | 30. Reverse lever |
| 4. Funnel | 18. Bleeder cover | 31. Drain plug and washer |
| 5. Bolts | 19. Bleeder | 32. Neutral switch and gasket |
| 6. Guide plate | 20. Bolt | 33. Bearing outer race |
| 7. Pipe | 21. Speedometer driven gear assembly | 34. Diaphragm spring |
| 8. Bolt | 22. O-ring | 35. Adjust shim |
| 9. Change arm | 23. Roll pin | 36. Bearing outer race |
| 10. Roll pin | 24. Driven gear | 37. Adjust shim |
| 11. Change rod | 25. Gear case | 38. Oil seal |
| 12. Boot | 26. Oil seal | 39. Back-up light switch |
| 13. Spring | 27. Bearing outer race | 40. Oil passage |
| 14. Reverse gate | | |

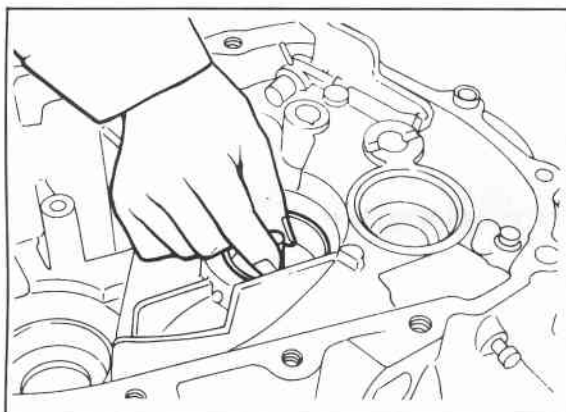


86U07A-041

Disassembly Note

Bearing outer race (primary shaft)

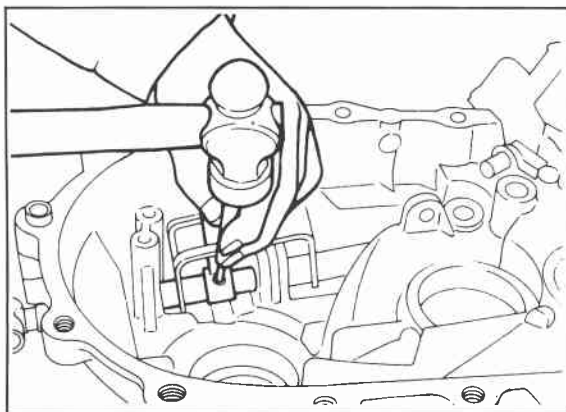
Remove the bearing outer race with the **SST**.



86U07A-042

Bearing outer race (secondary shaft)

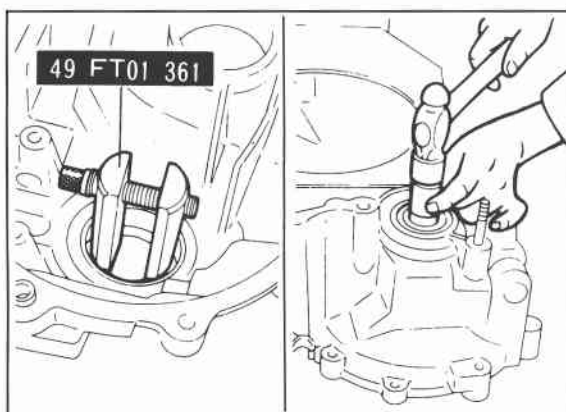
Remove the bearing outer race by lifting out the funnel and race together.



76G07A-020

Roll pin

Align the groove for removal of the clutch housing pin with the position of the roll pin, then tap the pin out using a pin punch.



86U07A-044

Bearing outer race (differential)

Remove the bearing outer race with the **SST**.

7A DISASSEMBLY

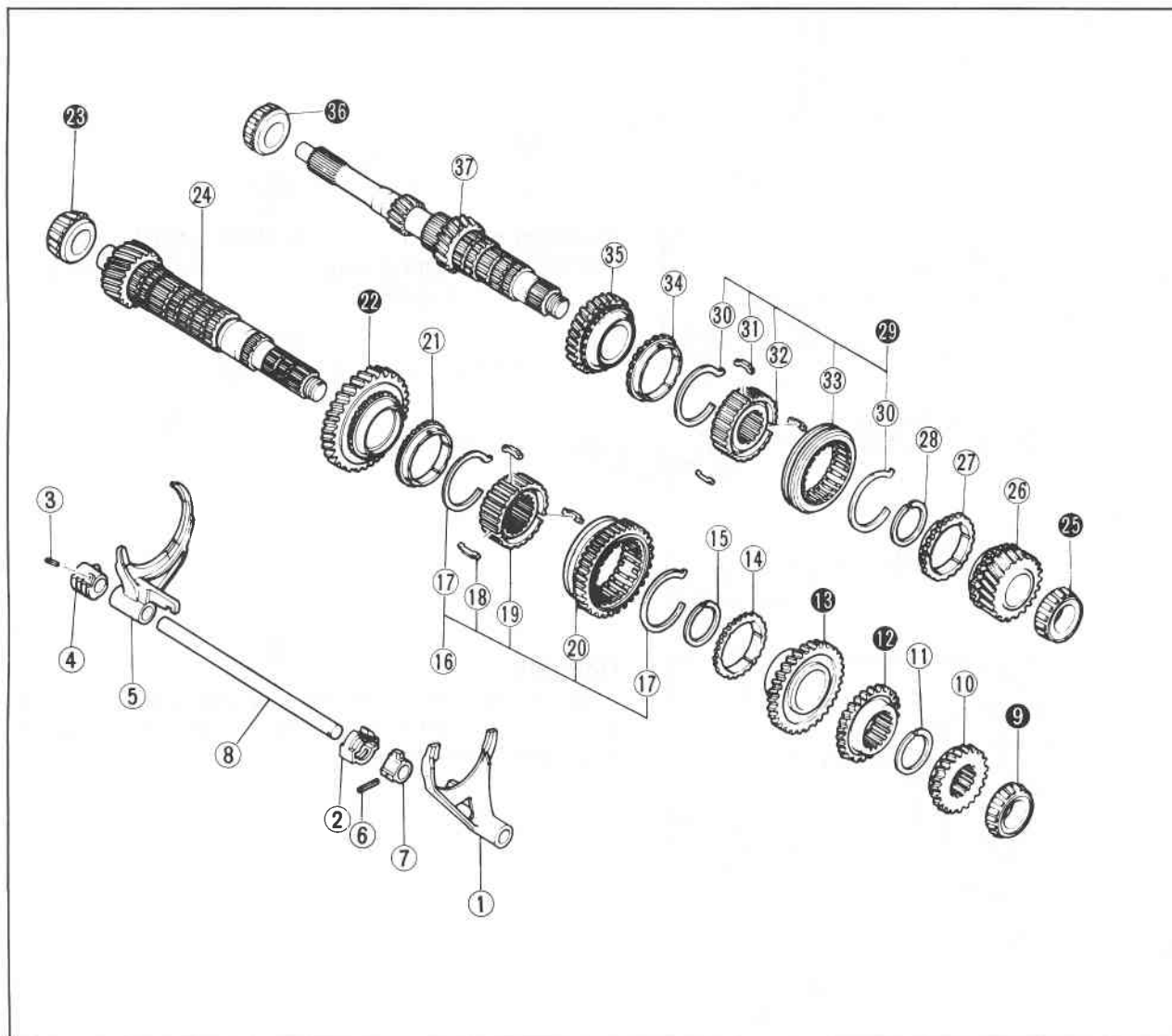
STEP 3

Disassemble in the sequence shown in the figure referring to disassembly note for the specially marked parts.

Note

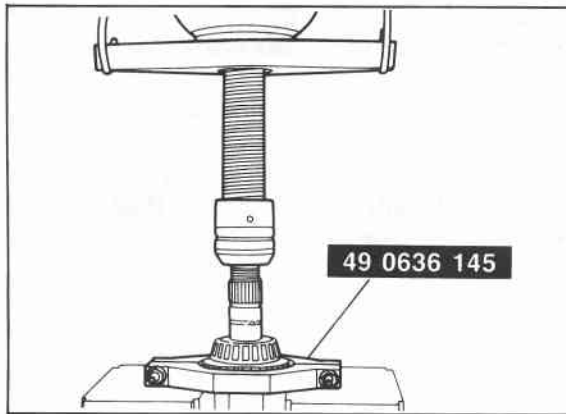
a) Replace the bearings with new ones whenever they are disassembled.

b) Before disassembly, check the thrust clearance of all gears. (Refer to page 7A—33, 35.)



76G07A-021

- | | | |
|-----------------------------------|--------------------------------------|---|
| 1. Shift fork (3rd and 4th gears) | 13. 2nd gear | 26. 4th gear |
| 2. Interlock sleeve | 14. Synchronizer ring | 27. Synchronizer ring |
| 3. Roll pin | 15. Retaining ring | 28. Retaining ring |
| 4. Control end | 16. Clutch hub assembly | 29. Clutch hub assembly (3rd and 4th gears) |
| 5. Shift fork (1st and 2nd gears) | 17. Synchronizer spring | 30. Synchronizer spring |
| 6. Roll pin | 18. Synchronizer key | 31. Synchronizer key |
| 7. Control lever | 19. Clutch hub | 32. Clutch hub |
| 8. Control rod | 20. Clutch hub sleeve (reverse gear) | 33. Clutch hub sleeve |
| 9. Bearing outer race | 21. Synchronizer ring | 34. Synchronizer ring |
| 10. Secondary 4th gear | 22. 1st gear | 35. 3rd gear |
| 11. Retaining ring | 23. Bearing inner race | 36. Bearing inner race |
| 12. Secondary 3rd gear | 24. Secondary shaft | 37. Primary shaft |
| | 25. Bearing inner race | |



76G07A-022

Disassembly Note

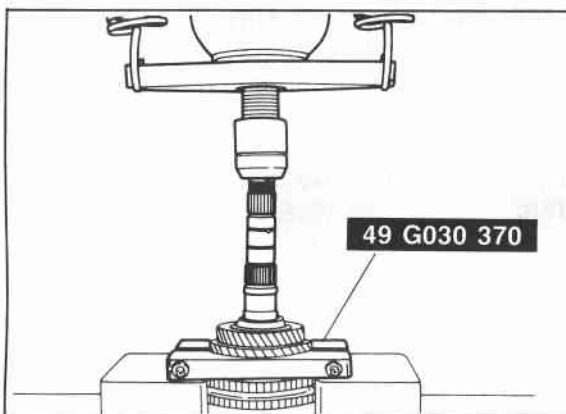
Secondary Shaft

Bearing inner race (secondary 4th gear end)

Remove the bearing inner race and secondary 2nd gear with the **SST**.

Caution

Hold the shaft with one hand so that it does not fall.



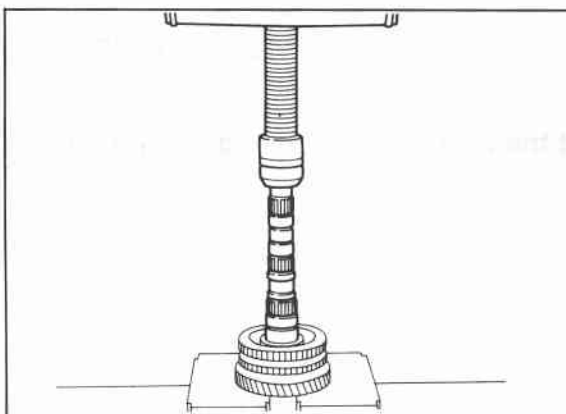
86U07A-047

Secondary 3rd gear and 2nd gear

1. Remove the retaining ring.
2. Shift the gears to 1st gear.
3. Remove the secondary 3rd gear and 2nd gear with the **SST**.

Caution

Hold the shaft with one hand so that it does not fall.



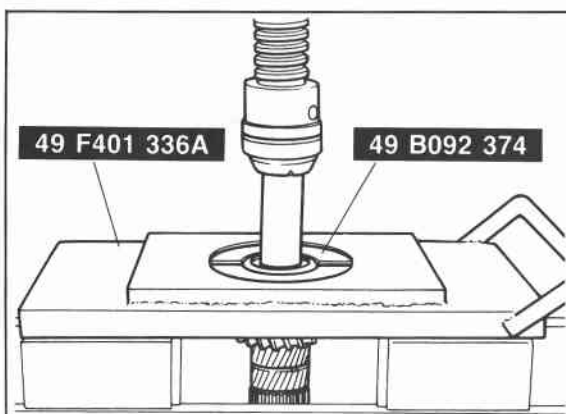
86U07A-048

1st gear

1. Remove the retaining ring.
2. Remove the clutch hub assembly (reverse gear) and 1st gear as shown in the figure.

Caution

Hold the shaft with one hand so that it does not fall.



76G07A-023

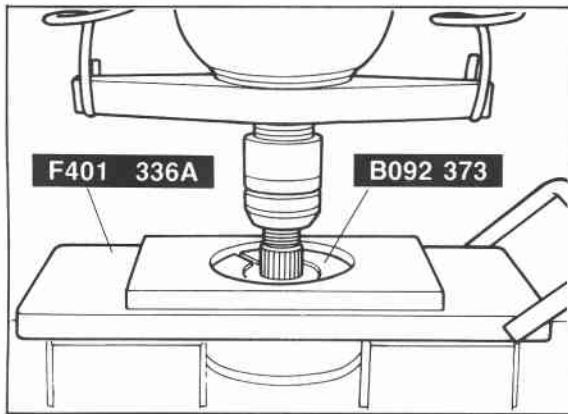
Bearing inner race

Remove the bearing inner race with the **SST**.

Caution

Hold the shaft with one hand so that it does not fall.

7A DISASSEMBLY



76G07A-024

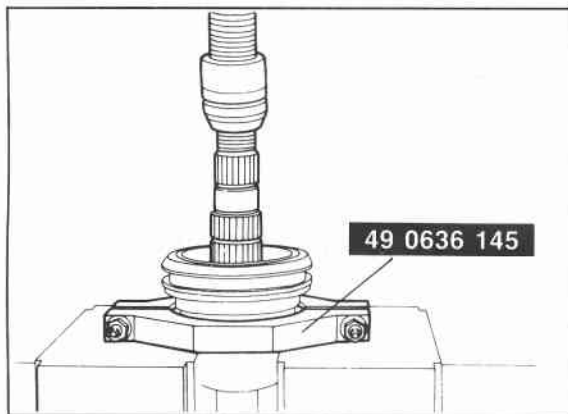
Primary Shaft

Bearing inner race (4th gear end)

1. Remove the retaining ring.
2. Remove the bearing inner race with the **SST**.

Caution

Hold the shaft with one hand so that it does not fall.



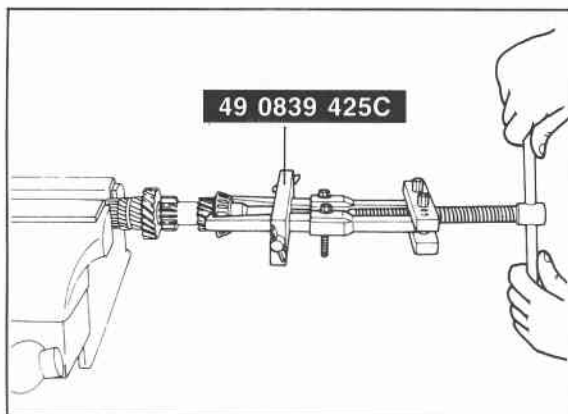
86U07A-051

Clutch hub assembly (3rd/4th)

1. Remove the retaining ring.
2. Remove the clutch hub assembly with the **SST**.

Caution

Hold the shaft with one hand so that it does not fall.



76G07A-025

Bearing inner race

Remove the bearing inner race with the **SST**.

Caution

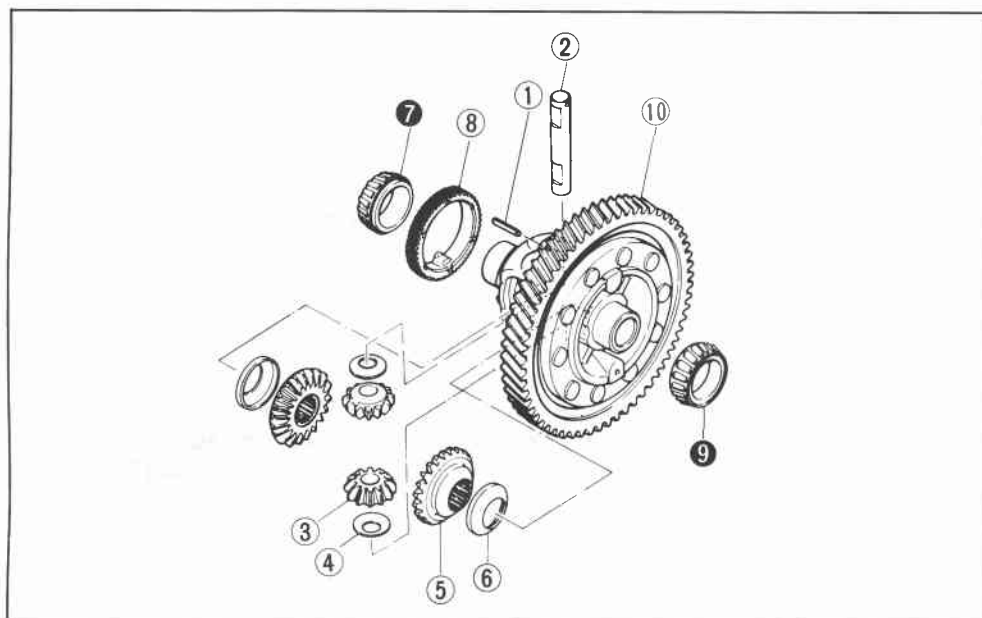
Hold the shaft with one hand so that it does not fall.

STEP 4 (DIFFERENTIAL)

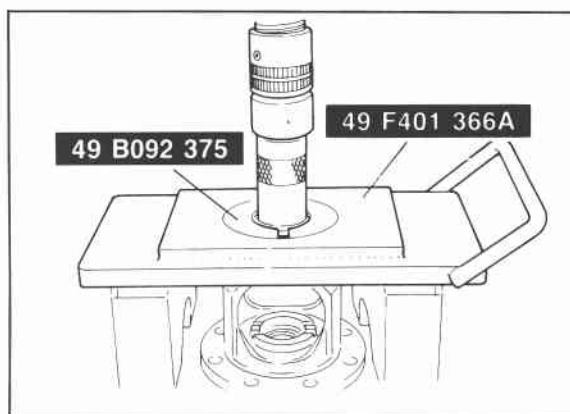
Disassemble in the sequence shown in the figure referring to disassembly note for the specially marked parts.

Note

- a) If the bearing inner races are removed replace them with new ones.
- b) Before disassembly, check the backlash of the side gears and pinion gears.
(Refer to page 7A—30)



76G07A-026



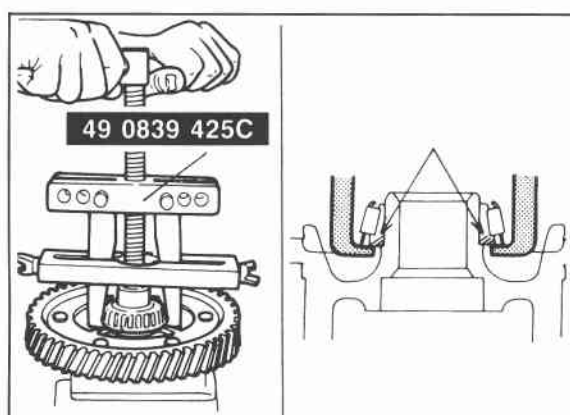
76G07A-027

Disassemble Note

Side bearing inner race (side opposite ring gear)
Remove the race from the gear case with the SST.

Caution

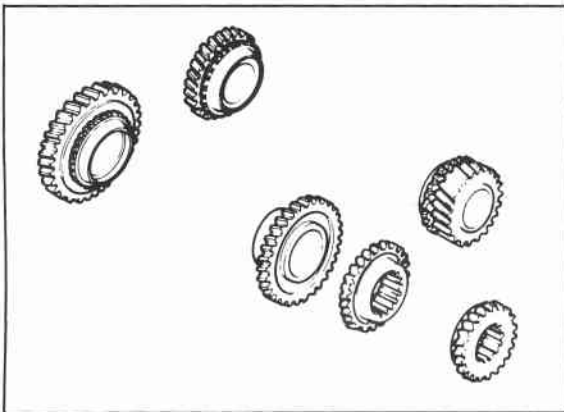
Hold the gear case with one hand so that it does not fall.



86U07A-055

Side bearing inner race (ring gear side)

Remove the race with a combination of parts from the SST.



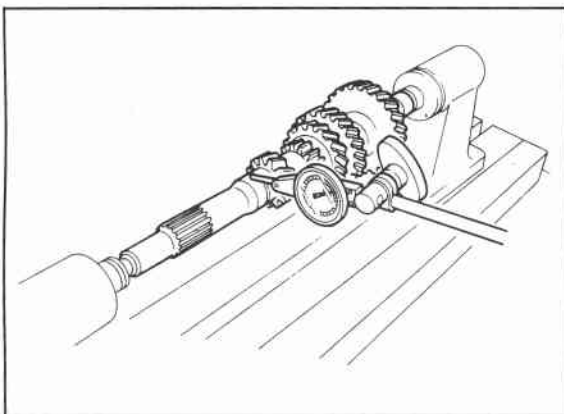
63U07A-064

INSPECTION

Check the following parts, and replace if necessary.

1st, 2nd, 3rd, 4th, and 5th gears

1. Worn or damaged synchronizer cone.
2. Worn or damaged hub sleeve coupling.
3. Worn or damaged teeth.
4. Worn or damaged inner surface or end surface of gears.



76G07A-028

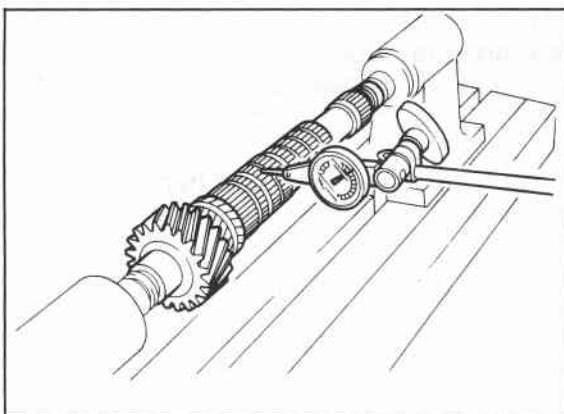
Primary Shaft Gear and Primary Gear

1. Worn teeth
2. Primary shaft gear run-out

Run-out: 0.05 mm (0.002 in) max.

Note

If the shaft gear is replaced, adjust the bearing preload. (Refer to page 7A—37)

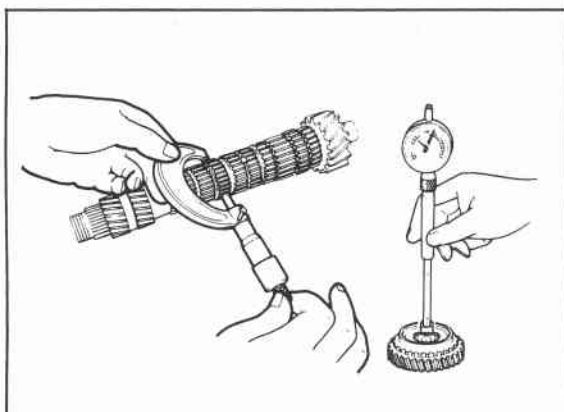


63U07A-068

Secondary Shaft Gear

1. Worn or damaged gear contact surface.
2. Worn or damaged splines.
3. Worn teeth.
4. Clogged oil passage.
5. Secondary shaft gear run-out.

Standard run-out: 0.015 mm (0.0006 in)



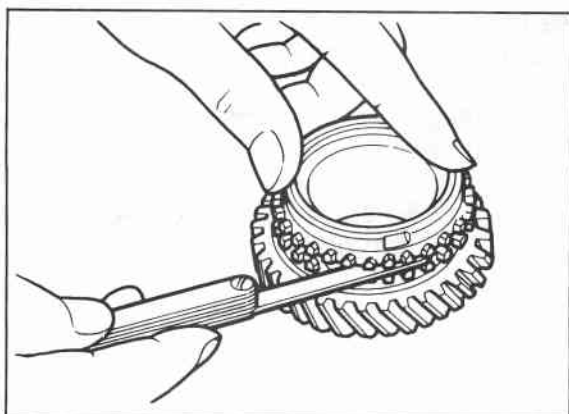
63U07A-069

6. Oil clearance between secondary gear shaft and gears.

Standard: 0.03—0.08 mm (0.001—0.003 in)

Caution

If the shaft gear is replaced, adjust the bearing preload.



86U07A-057

Synchronizer Ring

1. Engagement with gear
2. Worn or damaged teeth
3. Worn or damaged tapered surface
4. Clearance from side of gear

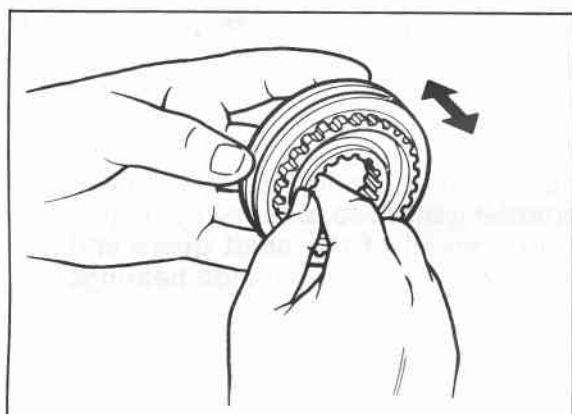
Clearance: 1.5 mm (0.059 in)

Minimum: 0.8 mm (0.031 in)

Note

a) Press the synchronizer ring uniformly against the gear and measure around the circumference.

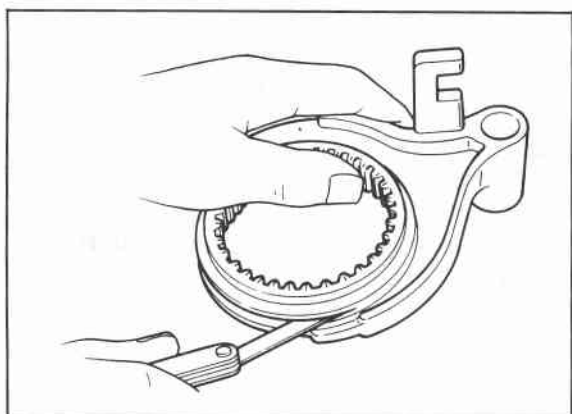
b) If the clearance is less than specified, replace the synchronizer ring or gear.



63U07A-070

Clutch Hub

1. Worn or damaged splines.
2. Worn or damaged synchronizer key groove.
3. Worn end surface.
4. Operation of the hub sleeve when it is installed.



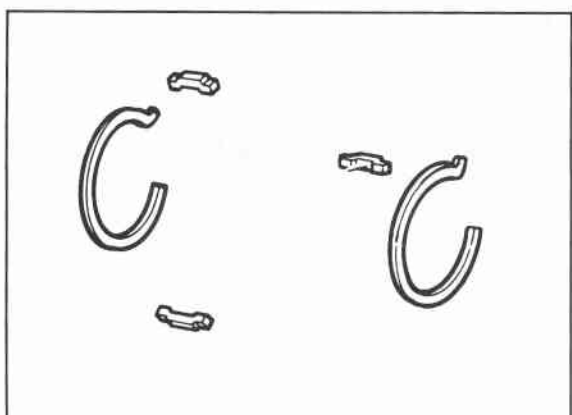
63U07A-071

Clutch Hub Sleeve

1. Worn or damaged hub splines.
2. Worn or damaged sleeve fork groove.
3. Clearance between sleeve and shift fork.

Standard: 0.2—0.458 mm (0.008—0.018 in)

Limit: 0.5 mm (0.020 in)

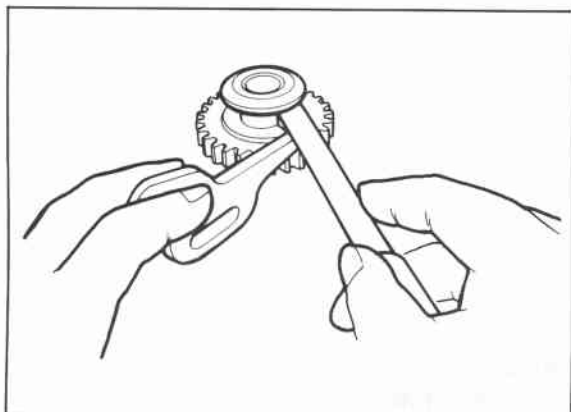


63U07A-072

Synchronizer Key and Spring

1. Worn key.
2. Bent spring.

7A INSPECTION

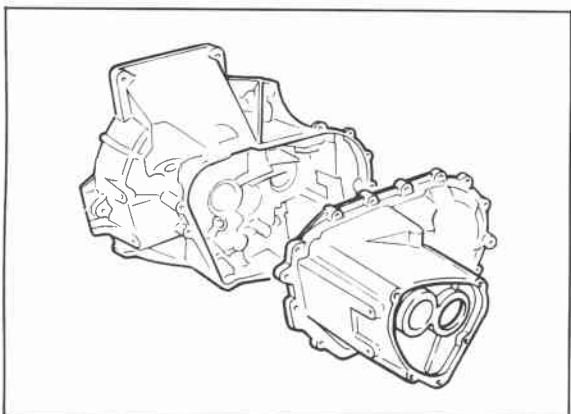


86U07A-058

Reverse Idle Gear

1. Worn or damaged bushing.
2. Worn or damaged teeth.
3. Worn or damaged release lever coupling groove.
4. Clearance between sleeve and reverse lever.

Standard: 0.095—0.318 mm (0.004—0.013 in)
Maximum: 0.5 mm (0.020 in)



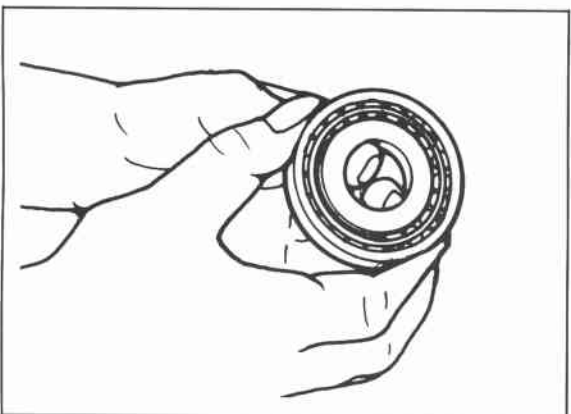
63U07A-074

Clutch Housing, Transaxle Case, Rear Cover, and Differential Gear Case

Cracks or damage.

Caution

If the clutch housing, transaxle case, or differential gear case is replaced, adjust the bearing preload of the shaft gears and the preload of the differential side bearings.



63U07A-075

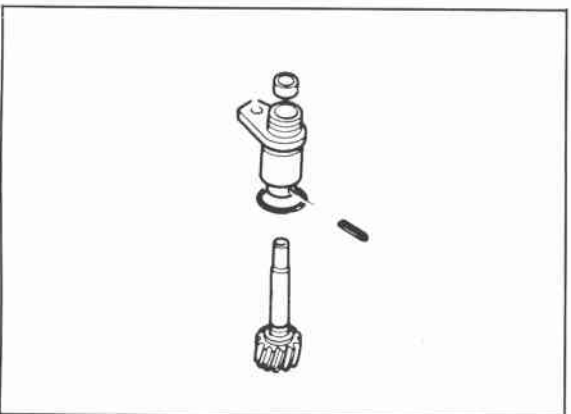
Bearing

1. Roughness or noise while turning
2. Worn or damaged outer race or rollers

Caution

a) Replace the bearing, the outer race, and the inner race as a unit.

b) If the bearing is replaced, adjust the preload.



63U07A-076

Speedometer Driven Gear Assembly

1. Worn or damaged teeth.
2. Worn or damaged O-ring.

Ring Gear Speedometer Drive Gear

Worn or damaged teeth.

Oil Seal

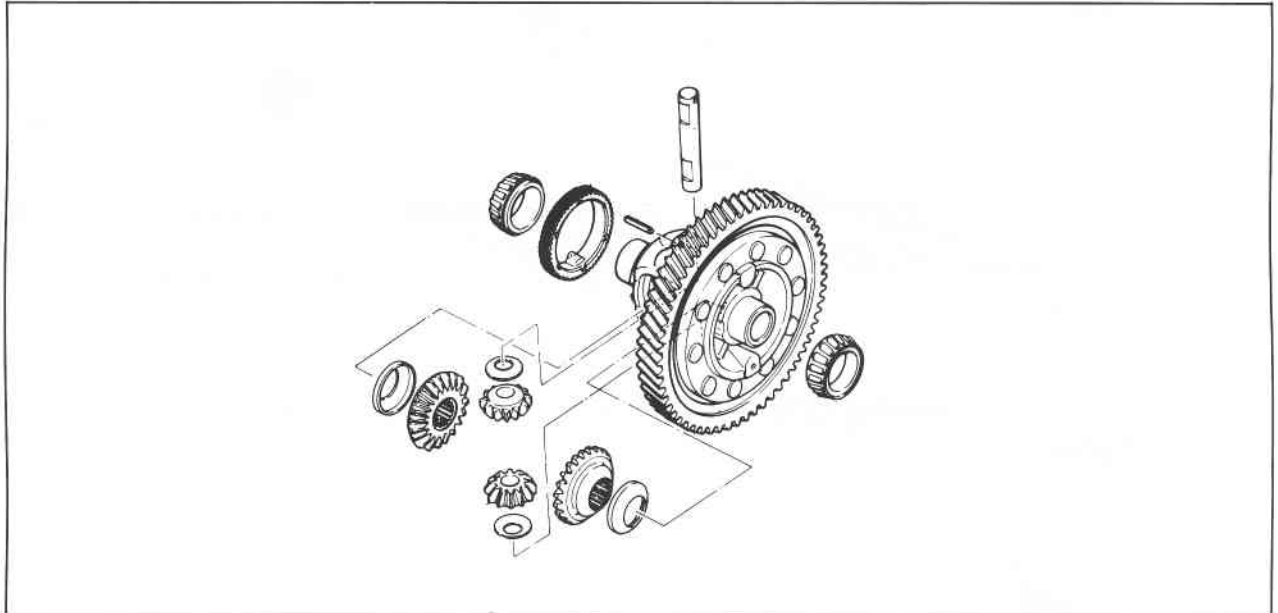
Damaged or worn lip.

ASSEMBLY

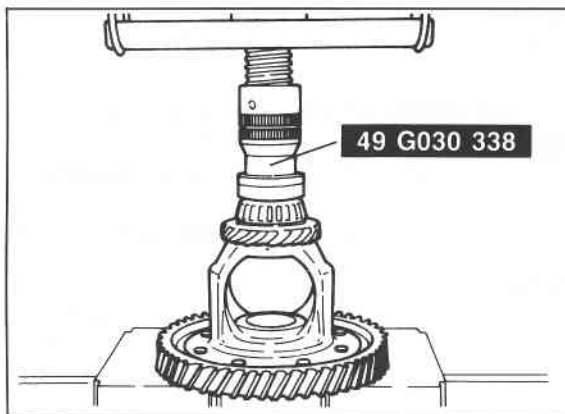
Note

- a) Wash all parts.
- b) Apply oil to all friction surfaces.
- c) Use new roll pins and retaining rings.

STEP 1 (DIFFERENTIAL)



86U07A-059



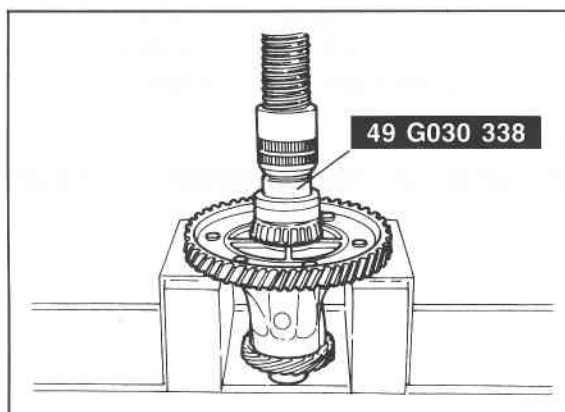
86U07A-060

Assembly

1. Install the speedometer drive gear and the new bearing inner race with the **SST**.

Note

Press to 19,620 N (2,000 kg, 4,400 lb).



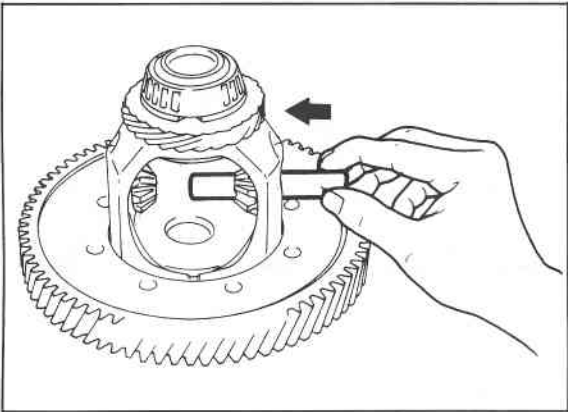
86U07A-061

2. Install the new bearing inner race with the **SST**.

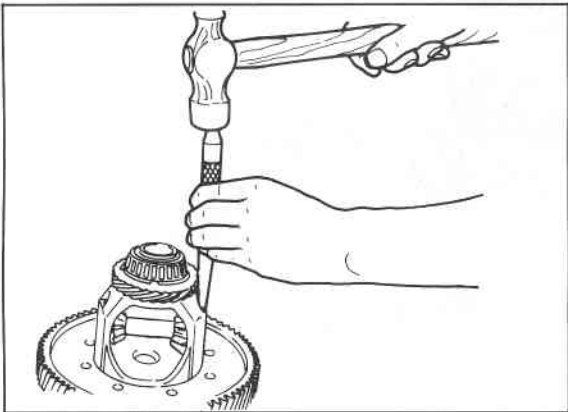
Note

Press to 19,620 N (2,000 kg, 4,400 lb).

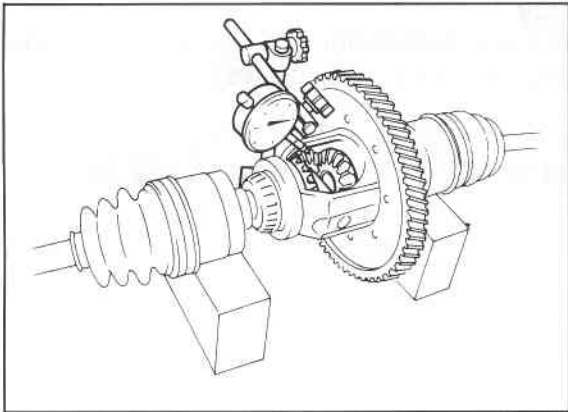
7A ASSEMBLY



86U07A-062



86U07A-063



86U07A-064

Identification mark	Thickness
0	2.0 mm (0.079 in)
1	2.1 mm (0.083 in)
2	2.2 mm (0.087 in)

86U07A-065

- 3. Install the thrust washers and pinion gears.
- 4. Install the pinion shaft.

- 5. Install the knock pin, then crimp it so that it cannot come out of the gear case.
- 6. Install the thrust washers and the side gears.

- Check and adjust using the following procedure.
- 7. Install the left and right driveshafts in the differential assembly.
 - 8. Support the driveshafts on V-blocks as shown in the figure.
 - 9. Measure the backlash of both pinion gears.

Backlash: 0—0.1 mm (0—0.004 in)

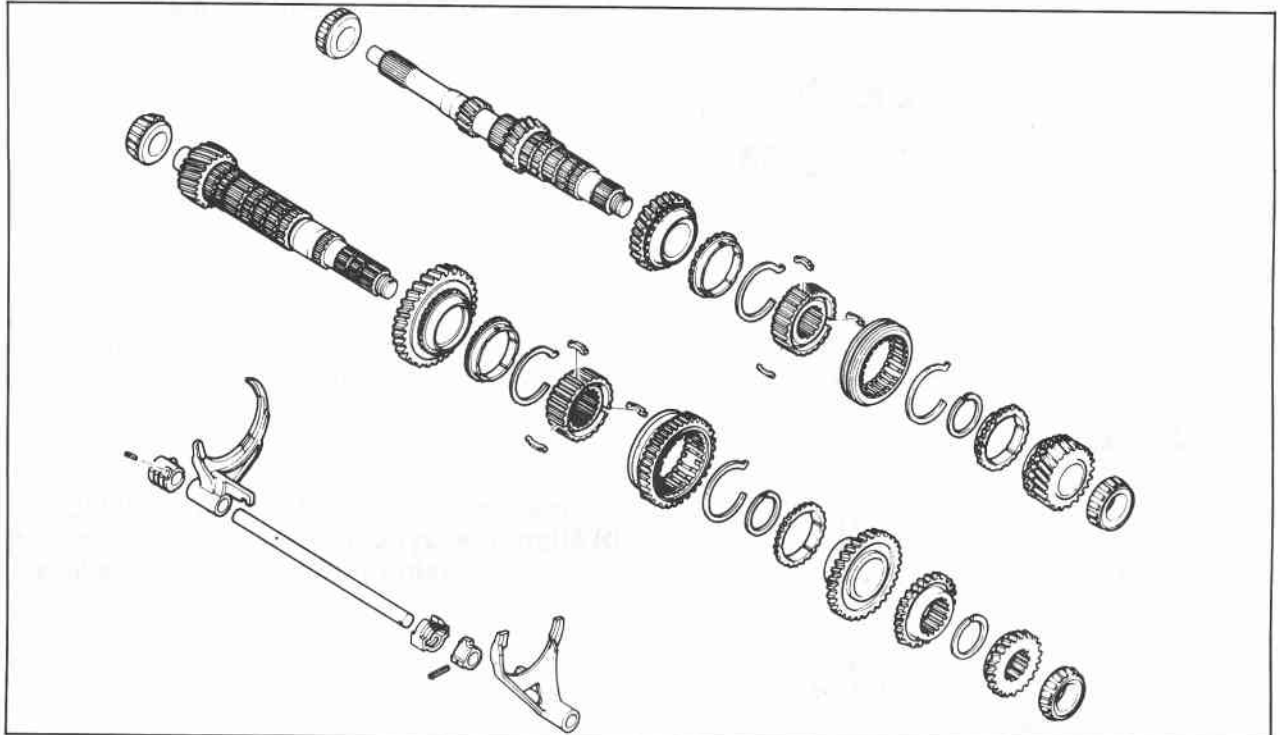
- 10. If the backlash is more than specified, adjust by selecting thrust washers from the table and install them between the case and side gears.

Note
Use the same thickness thrust washer on each side.

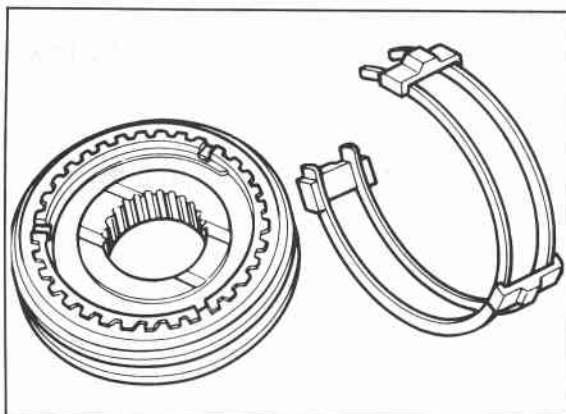
STEP 2

Note

During assembly, check the thrust clearance of each gear. (Refer to page 7A—33, 35)



76G07A-029



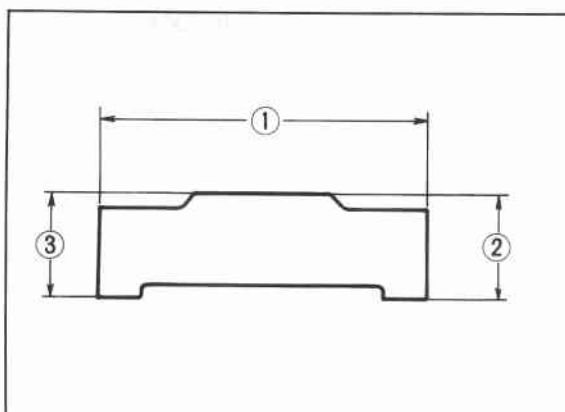
86U07A-067

Assembly

Install the synchronizer key spring in the clutch hub with the hook in the groove. This holds the three synchronizer keys in place.

Note

a) The sizes of the synchronizer keys are different.



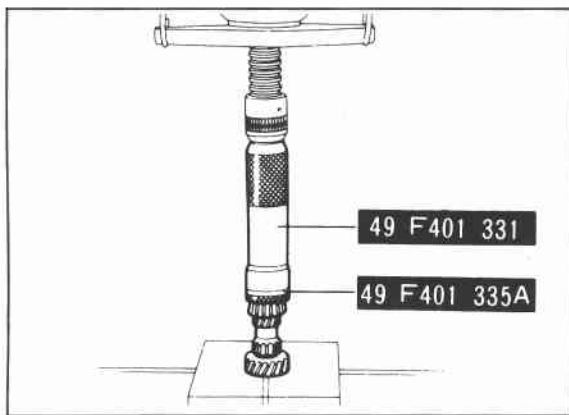
86U07A-068

Specification:

mm (in)

	①	②	③
1st/2nd	19 (0.7480)	4.25 (0.1673)	4.25 (0.1673)
3rd/4th 5th/Rev.	17 (0.6693)	4.25 (0.1673)	4.25 (0.1673)

7A ASSEMBLY



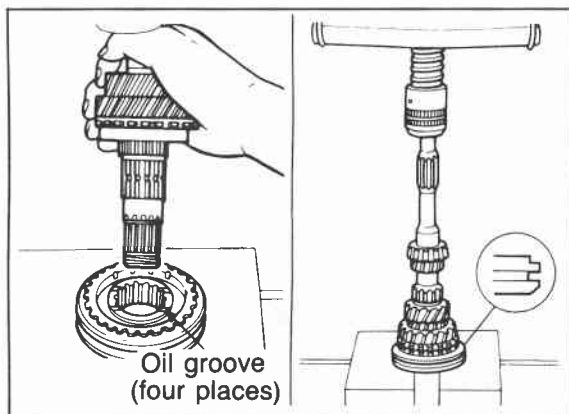
86U07A-069

Primary Shaft

1. Install the new bearing inner race with the **SST**.

Note

Press to 19,620 N (2,000 kg, 4,400 lb).



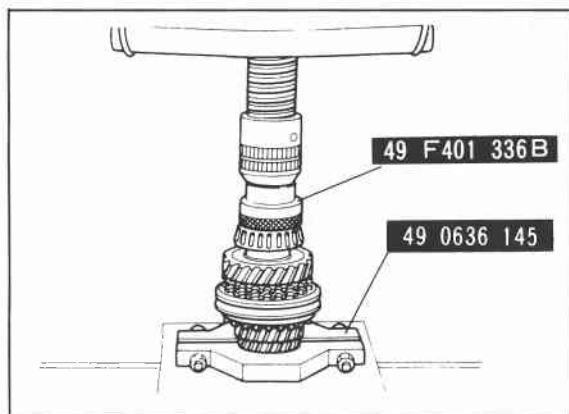
76G07A-030

2. Install the 3rd gear, synchronizer ring, and clutch hub assembly with the **SST**. (Refer to page 7A—33)

Note

a) Press to 19,620 N (2,000 kg, 4,400 lb).

b) Align the synchronizer ring groove and clutch housing hub key when installing.

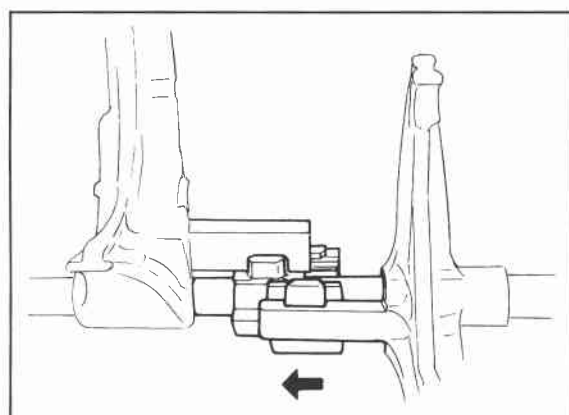


86U07A-071

3. Install the retaining ring.
4. Install the synchronizer ring, 4nd gear, and bearing inner race with the **SST**.

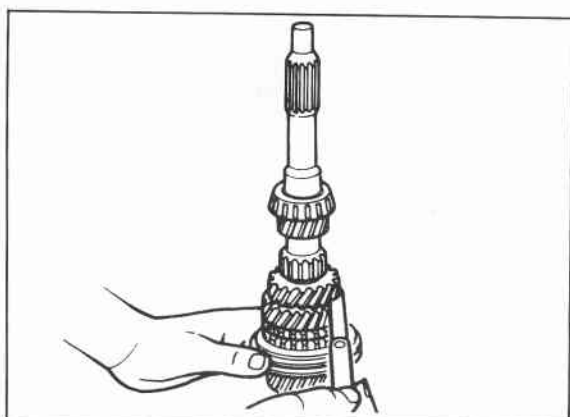
Note

Press to 19,620 N (2,000 kg, 4,400 lb).



86U07A-072

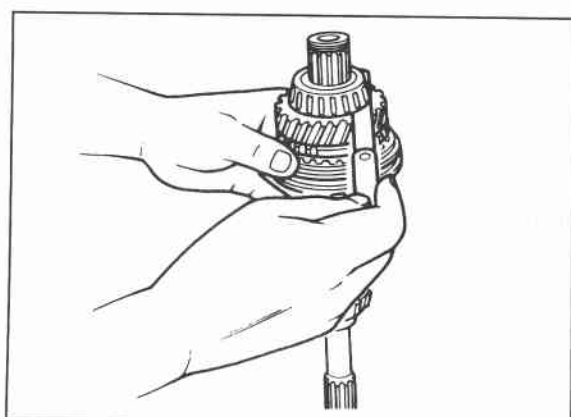
5. Install both shift forks and the interlock sleeve, as in the figure.



86U07A-073

6. Measure the clearance between the 3rd gear and 2nd gear.

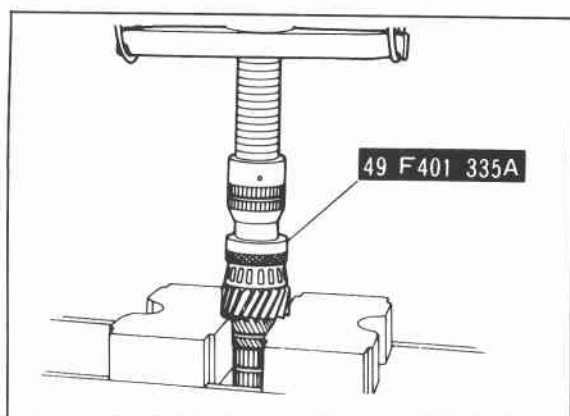
Clearance: 0.05—0.20 mm (0.0020—0.0079 in)
Maximum: 0.25 mm (0.0098 in)



86U07A-074

7. Measure the clearance between the 4th gear and bearing inner race.

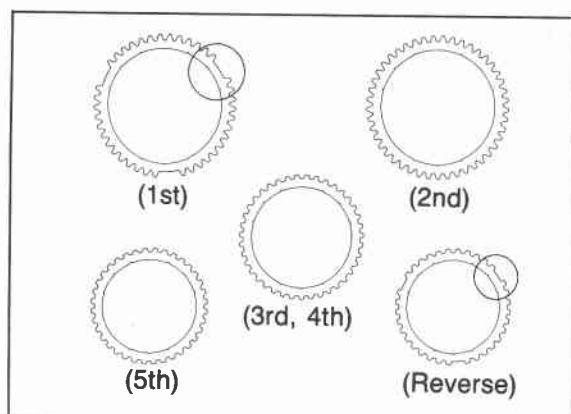
Clearance: 0.165—0.365 mm
(0.0064—0.0144 in)
Maximum: 0.415 mm (0.0163 in)



86U07A-075

8. Install the new bearing, inner race with the **SST**.

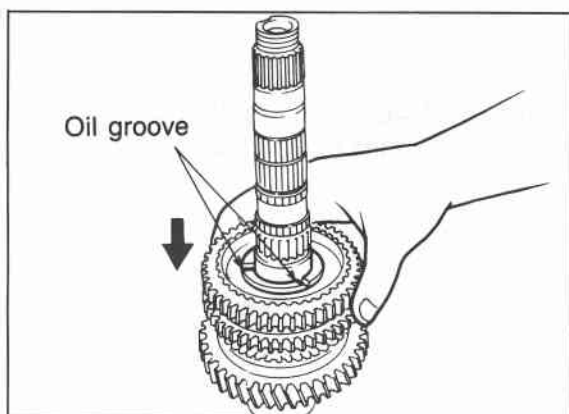
Note
Press to 19,620 N (2,000 kg, 4,400 lb).



86U07A-076

Note
The styles and sizes of synchronizer rings are different as shown in the illustration.

7A ASSEMBLY



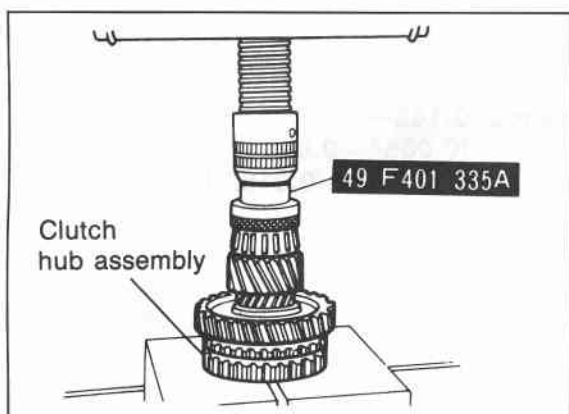
86U07A-077

Secondary Shaft

1. Assemble the 1st gear, synchronizer ring, and clutch hub assembly (reverse gear), as shown in the figure.

Note

Align the synchronizer ring, groove and clutch housing hub key when installing.



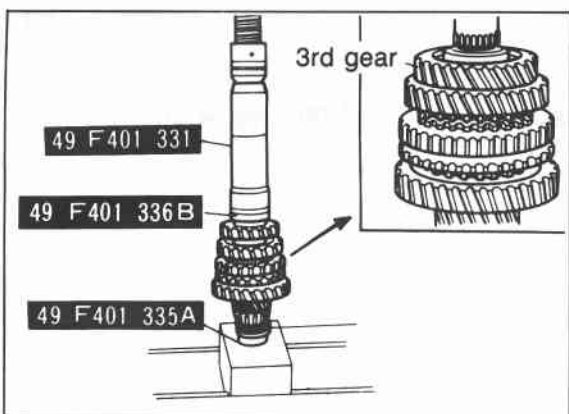
86U07A-078

2. Press on the clutch hub assembly (reverse gear) with the **SST**.

Note

Press to 19,620 N (2,000 kg, 4,400 lb).

3. Install the retaining ring.

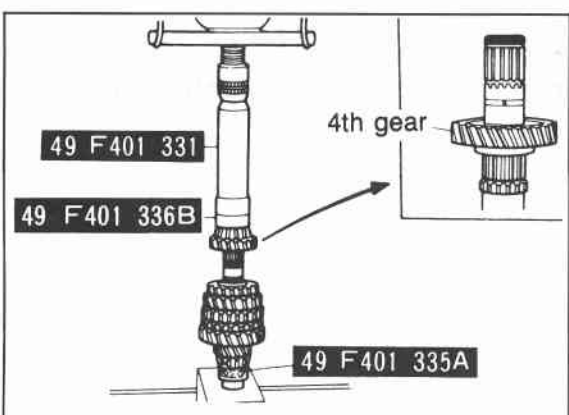


86U07A-079

4. Install the synchronizer ring and 2nd gear.
5. Install the secondary 3rd gear with the **SST**.

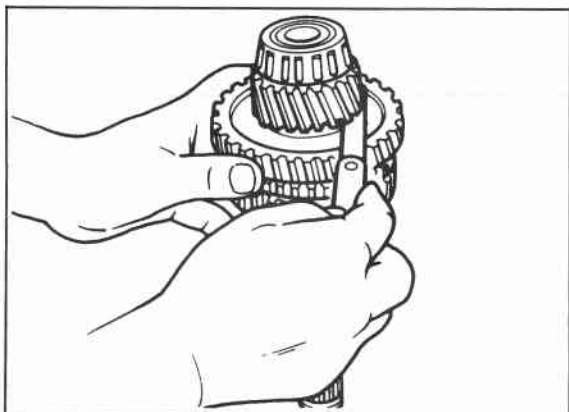
Note

Press to 19,620 N (2,000 kg, 4,400 lb).



86U07A-080

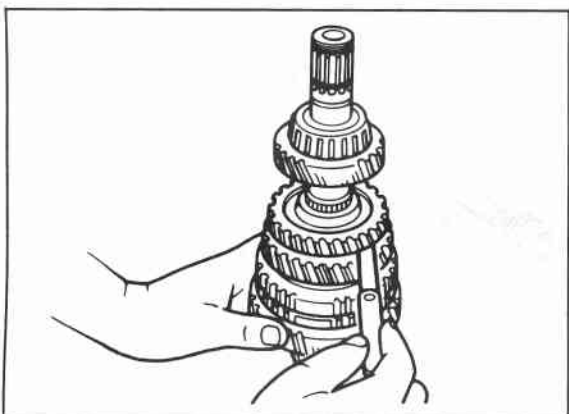
6. Install the retaining ring.
7. Install the secondary 4th gear and new bearing inner race.



86U07A-081

8. Measure the clearance between the 1st gear and differential drive gear.

Clearance: 0.05—0.28 mm (0.0020—0.0110 in)
Maximum: 0.33 mm (0.0199 in)



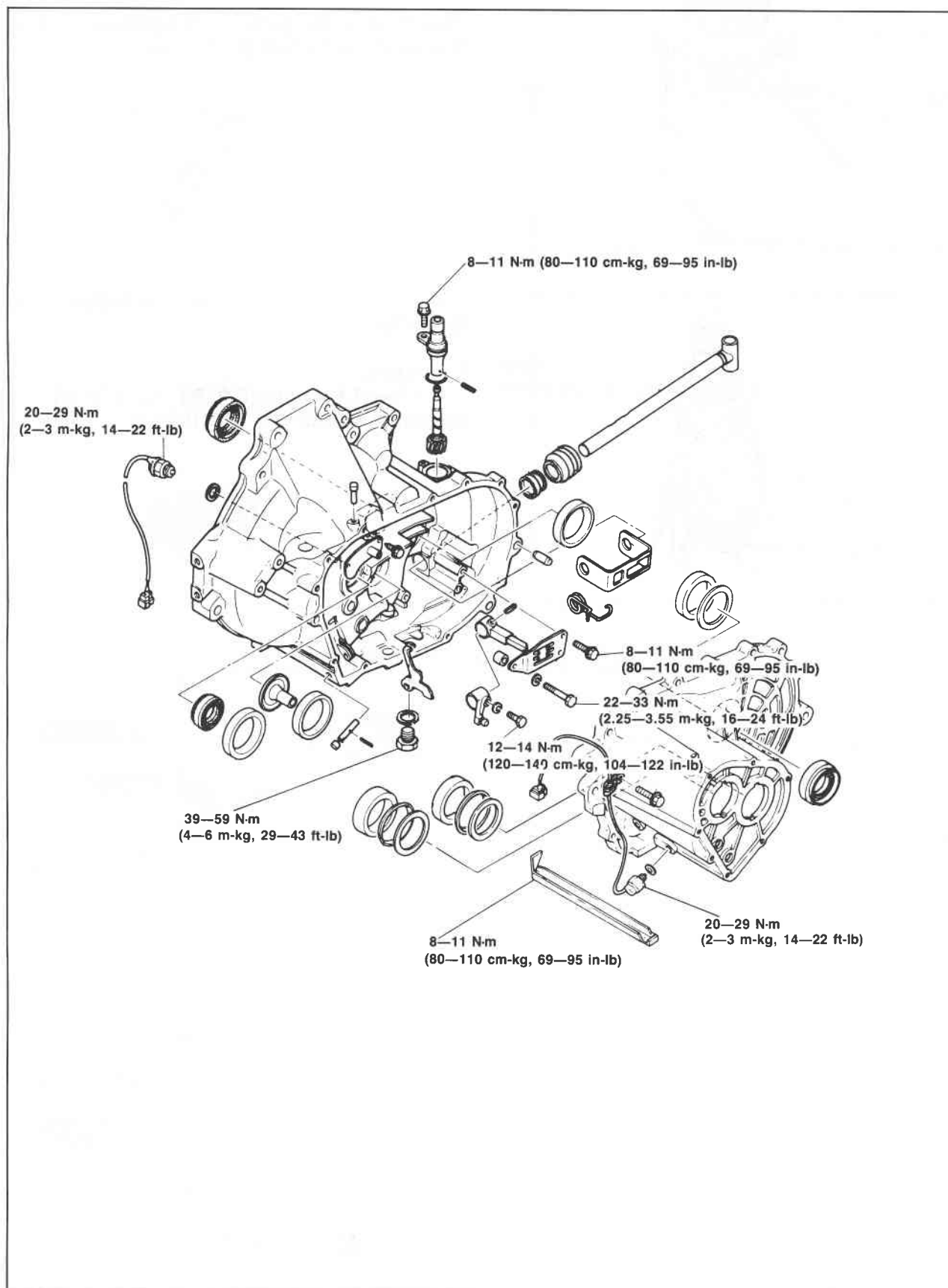
86U07A-082

9. Measure the clearance between the 2nd gear and secondary 3rd gear.

Clearance:
0.175—0.455 mm (0.0069—0.0179 in)
Maximum: 0.505 mm (0.0199 in)

7A ASSEMBLY

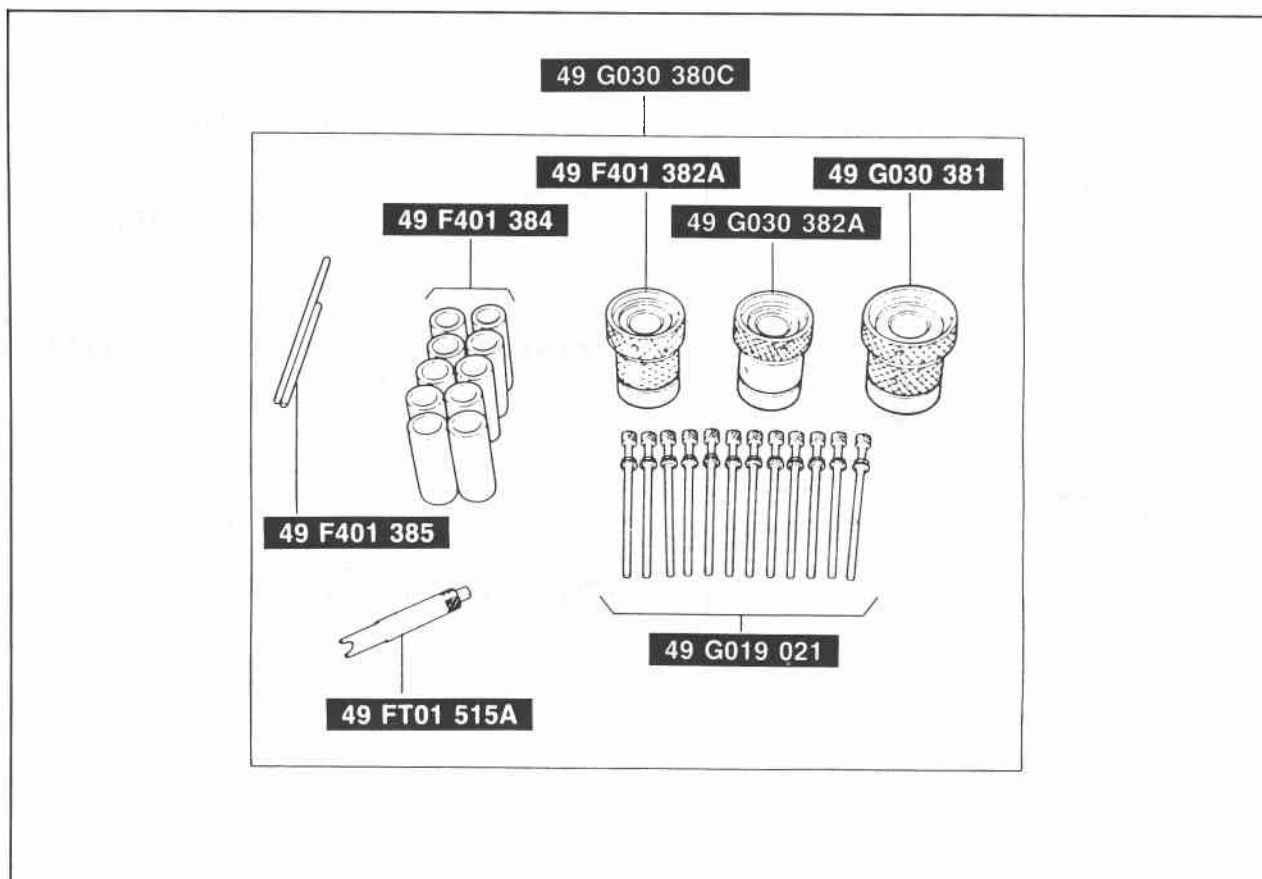
STEP 3 Torque specifications



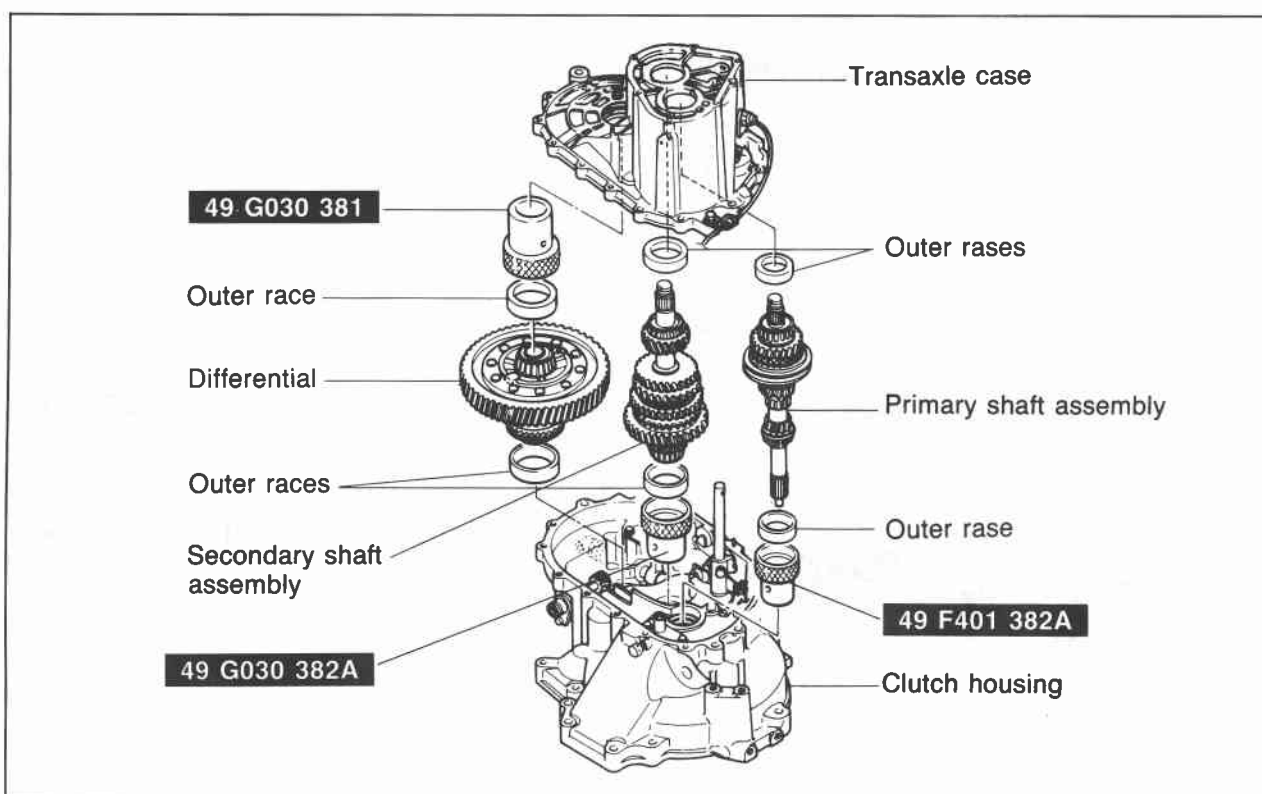
76G07A-031

Bearing Preload

Adjust the bearing preload through the use of adjust shim(s).

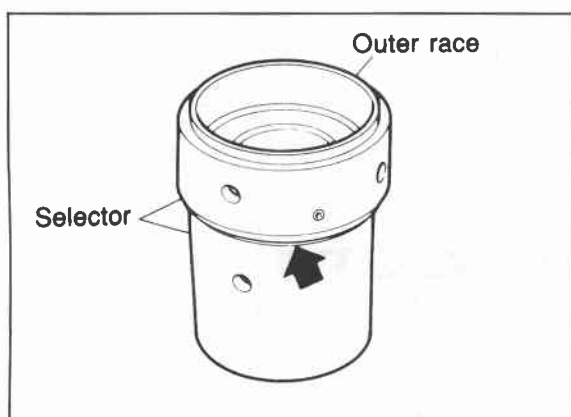


83U07A-099

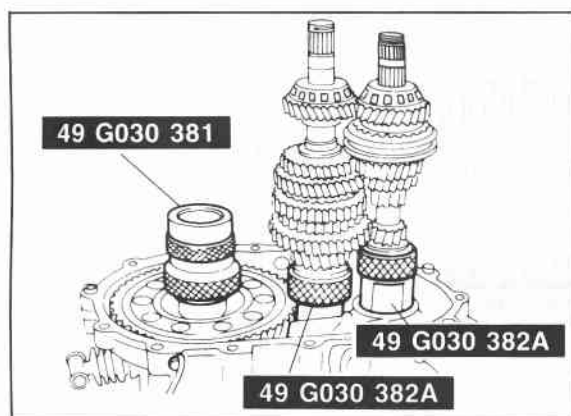


83U07A-033

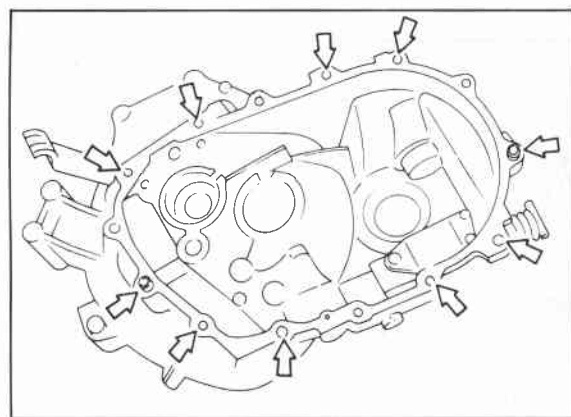
7A ASSEMBLY



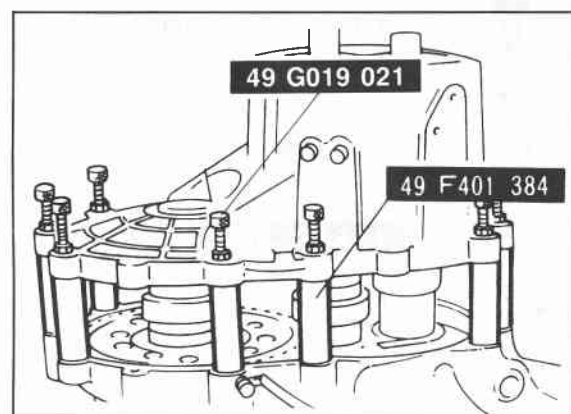
76G07A-032



76G07A-033



76G07A-034



76G7A-035

1. Install the primary and secondary shaft bearing outer races into the transaxle case (diaphragm springs and shims removed).
2. After mounting the clutch housing onto the transaxle hanger, and set the differential bearing outer race into the clutch housing, and tap in with a hammer until it contacts the clutch housing, and tap in with a hammer until it contacts the clutch housing.
3. Assemble the outer races into the **SST** (selector) as shown in the figure.

Note

Turn the selector to eliminate the gap indicated by the arrow in the figure.

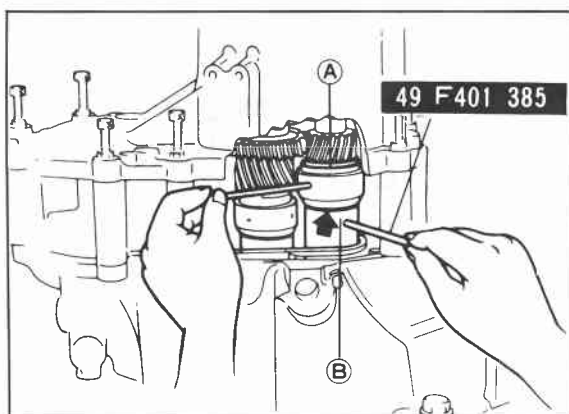
4. Set the differential assembly onto the clutch housing, then mount the bearing outer race and the selector on the differential. Set the assembled selectors for the primary and secondary shaft in the clutch housing. Mount the shaft gear assemblies as shown in the figure.

5. Set the **SST** (collars) in the positions shown in the figure.

6. Install the transaxle case then tighten the **SST**(bolts) to the specified torque.

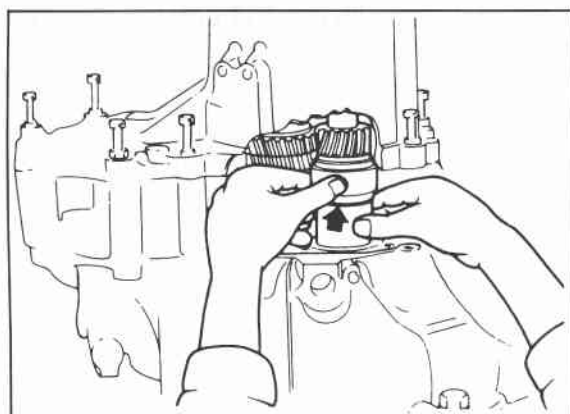
Tightening torque:

37—52 N·m (3.8—5.3 m·kg, 27—38 ft—lb)



76G07A-036

7. To seat the bearings, mount the **SST** (bars) on parts (A) and (B) of the selector, and then turn the selector so the gap is widened. Then turn it in the reverse direction until the gap is eliminated.



76G07A-037

8. Manually expand the selector until the selector no longer turns by hand.

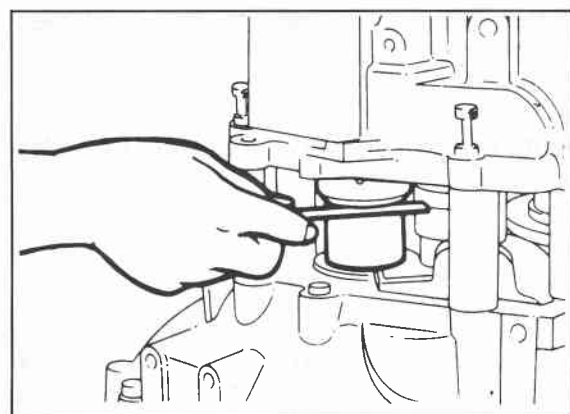
Note

Check that each shaft turns smoothly.

9. Use a feeler gauge and measure the gap in the selector.

Note

Measure the gap around the entire circumference of the selector.



76G07A-038

10. Take the maximum reading and determine the shim to be used as follows:

< Primary shaft adjust shim >

- Subtract the diaphragm spring thickness (0.70 mm, 0.0276 in) from the gap determined in the step 9.
- Select the closest thinner shim from the table.

Example

**1.22 mm (0.0480 in) — 0.70 mm (0.0276 in) =
0.52 mm (0.0204 in)
Shim: 0.50 mm (0.020 in)**

< Secondary shaft adjust shim >

- Subtract the diaphragm spring thickness (0.70 mm, 0.0276 in) from the gap determined in the step 9.
- Select the closest thicker shim from the table.

Example

**1.22 mm (0.0480 in) — 0.70 mm (0.0276 in) =
0.52 mm (0.0204 in)
Shim: 0.55 mm (0.022 in)**

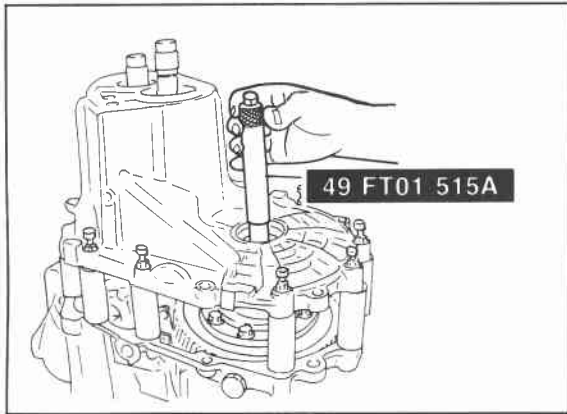
Note

Use a maximum of two shims.

Thickness (Shaft gears)	mm (in)
0.20 (0.008)	0.50 (0.020)
0.25 (0.010)	0.55 (0.022)
0.30 (0.012)	0.60 (0.024)
0.35 (0.014)	0.65 (0.026)
0.40 (0.016)	0.70 (0.028)
0.45 (0.018)	

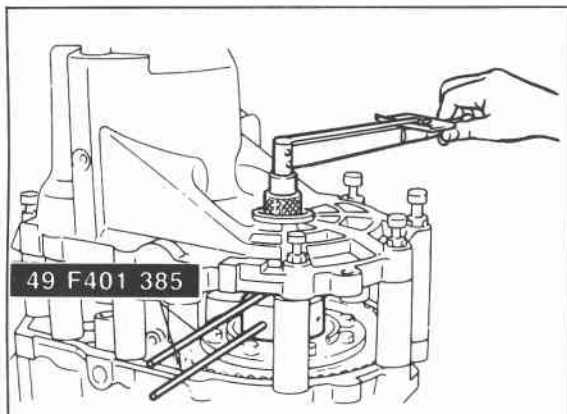
76G07A-072

7A ASSEMBLY



76G07A-039

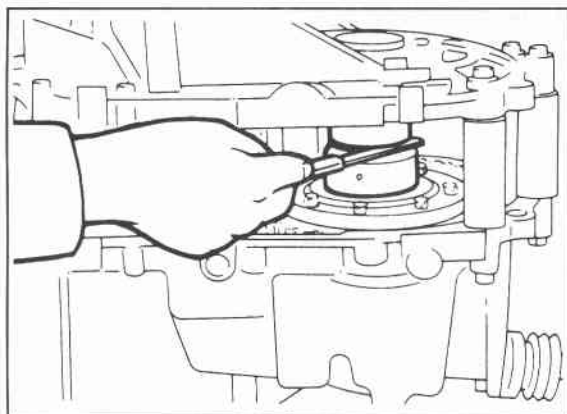
11. Install the **SST**.



76G07A-040

12. Adjust the selector with the **SST** until the specified preload is obtained.

Preload:
0.5 N·m (5 cm·kg, 4.3 in·lb)



76G07A-041

13. Use a feeler gauge to measure the gap in the selector for the differential.

Note
Measure the gap around the entire circumference of the selector

14. Add **0.15 mm (0.0059 in)** to the measured clearance and select the combination of shims whose thickness added is nearest higher than that valve. See the table for available shim sizes.

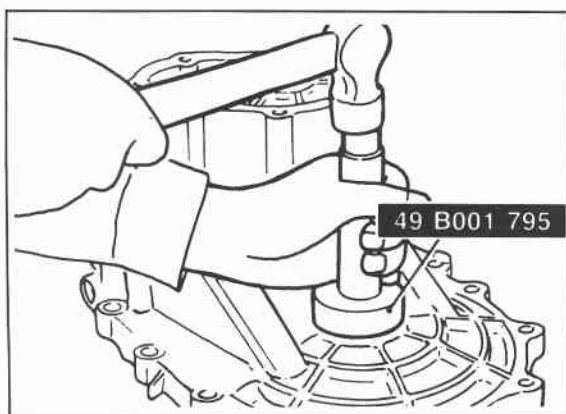
Example: 0.32 mm (0.013 in)
0.32 mm (0.013 in) + 0.15 mm (0.006 in) =
0.47 mm (0.019 in).
So the nearest shim (on the thick side) to 0.47 mm (0.019 in) is 0.50 mm (0.020 in).

Note
Use a maximum of two shims.

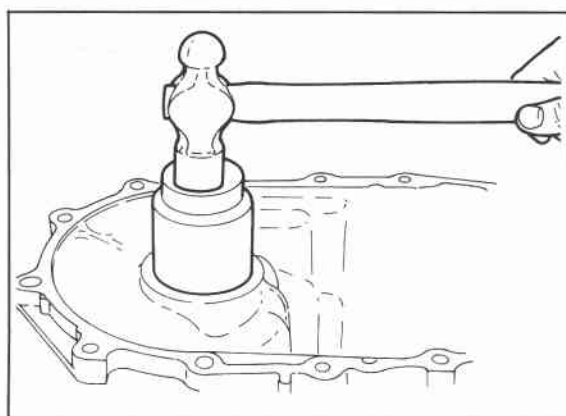
15. Remove the **SST** and transaxle case.
16. Remove the primary shaft assembly and the differential.
17. Remove the bearing outer races.

Thickness (Differential)	mm (in)
0.10 (0.004)	0.70 (0.026)
0.15 (0.006)	0.75 (0.028)
0.20 (0.008)	0.80 (0.030)
0.25 (0.010)	0.85 (0.032)
0.30 (0.012)	0.90 (0.034)
0.35 (0.014)	0.95 (0.036)
0.40 (0.016)	1.00 (0.038)
0.45 (0.018)	1.05 (0.040)
0.50 (0.020)	1.10 (0.042)
0.60 (0.022)	1.15 (0.044)
0.65 (0.024)	1.20 (0.046)

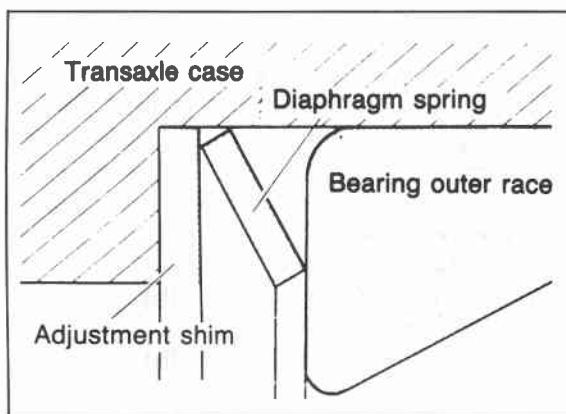
76G07A-042



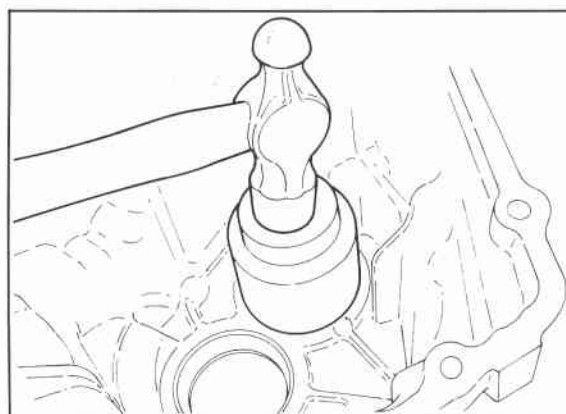
86U07A-102



86U07A-103



76G07A-043



86U07A-105

Assembly

1. Install the neutral switch.
2. Install the drain plug.
3. Install the back-up lamp switch.
4. Install the new oil seals with the **SST**.

5. Install the differential adjust shim(s) and the bearing outer race with a suitable pipe.

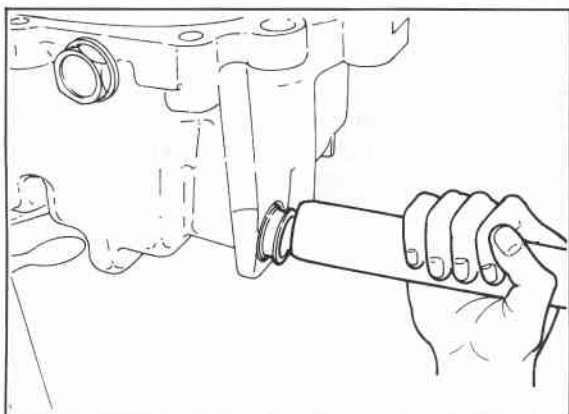
6. Install the adjust shims, diaphragm springs, funnel, and bearing outer races.

Note

Install the diaphragm spring as shown in the figure.

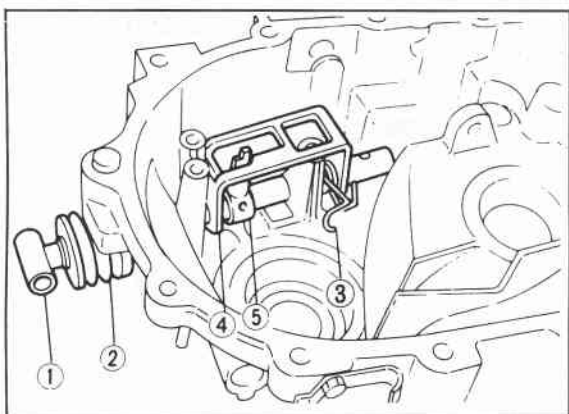
7. Install the bearing outer races with a suitable pipe.

7A ASSEMBLY



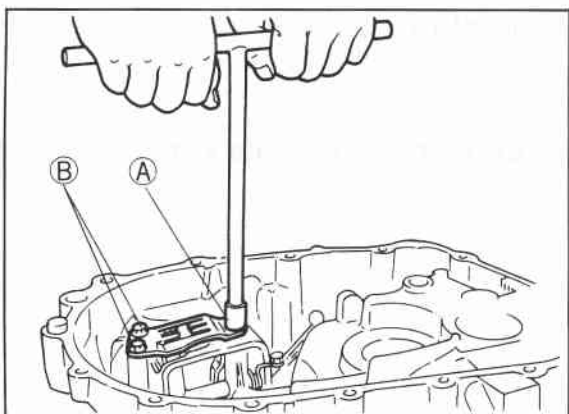
86U07A-106

8. Install the new breather.
9. Install the new change rod oil seal.



86U07A-107

10. Install the change rod ①, the boot ②, the spring ③, the reverse gate ④, and selector ⑤, as shown.
11. Install the new roll pin.



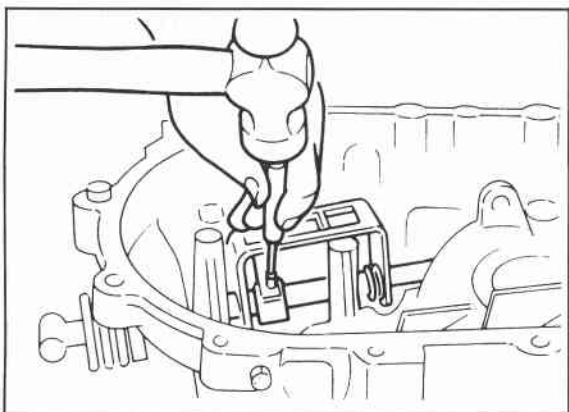
86U07A-108

12. Install the change arm.

Tightening torque: 12—14 N·m
(120—140 cm·kg, 104—122 in·lb)

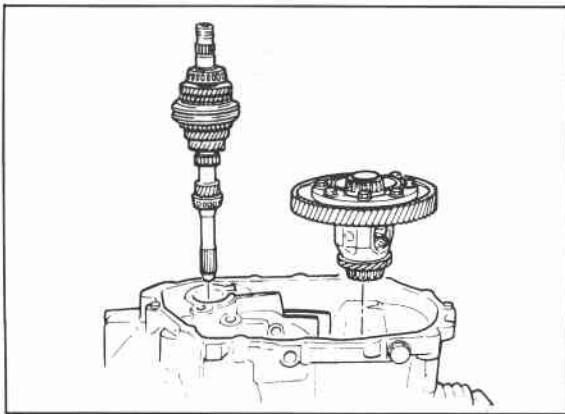
13. Install the guide plate.

Tightening torque:
Ⓐ 8—11 N·m
 (80—115 cm·kg, 69—100 in·lb)
Ⓑ 22—33 N·m
 (2.25—3.35 m·kg, 16—25 ft·lb)



86U07A-109

14. Install reverse lever, and reverse lever shaft.
15. Install the new roll pin.
16. Install the speedometer driven gear assembly.



76G07A-044

Bearing Preload

Check the shaft gears and the differential bearing preload.

Note

- a) Check that the correct adjust shims were selected.
- b) If the bearing preload is not within specification, adjust again.

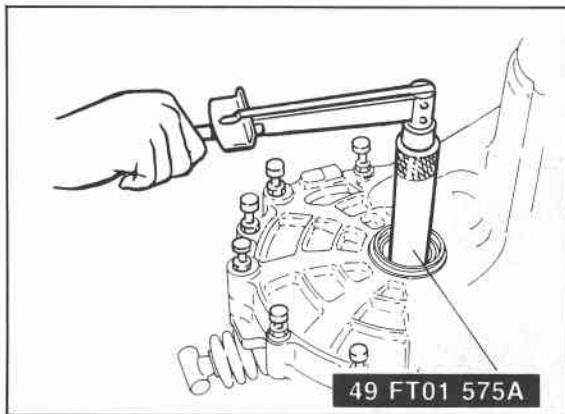
1. Set the primary shaft gear and the differential into the clutch housing.
2. Install the transaxle case, and tighten to the specified torque.

**Tightening torque: 37—52 N·m
(3.8—5.3 m·kg, 27—38 ft·lb)**

3. Connect the **SST** and install it through the driveshaft hole.
4. Measure the preload.

**Preload: 1.4—2.0 N·m
(14—20 cm·kg, 12.1—17.3 in·lb)**

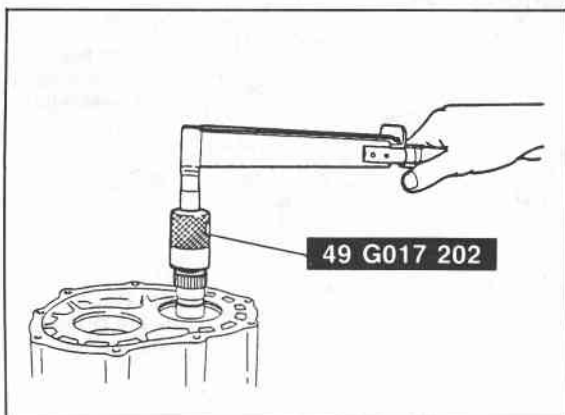
5. Remove the **SST**.



76G07A-045

6. Install the **SST** to the primary shaft gear.
7. Measure the preload.

**Preload: 0.1—0.25 N·m
(1.0—2.5 cm·kg, 0.87—2.18 in·lb)**



76G07A-046

8. Remove the **SST**, transaxle case, primary shaft gear and differential.
9. Install the secondary shaft gear and transaxle case then tighten to the specified torque.

**Tightening torque: 37—52 N·m
(3.8—5.3 m·kg, 27—38 ft·lb)**

10. Check the secondary shaft preload with the **SST**.

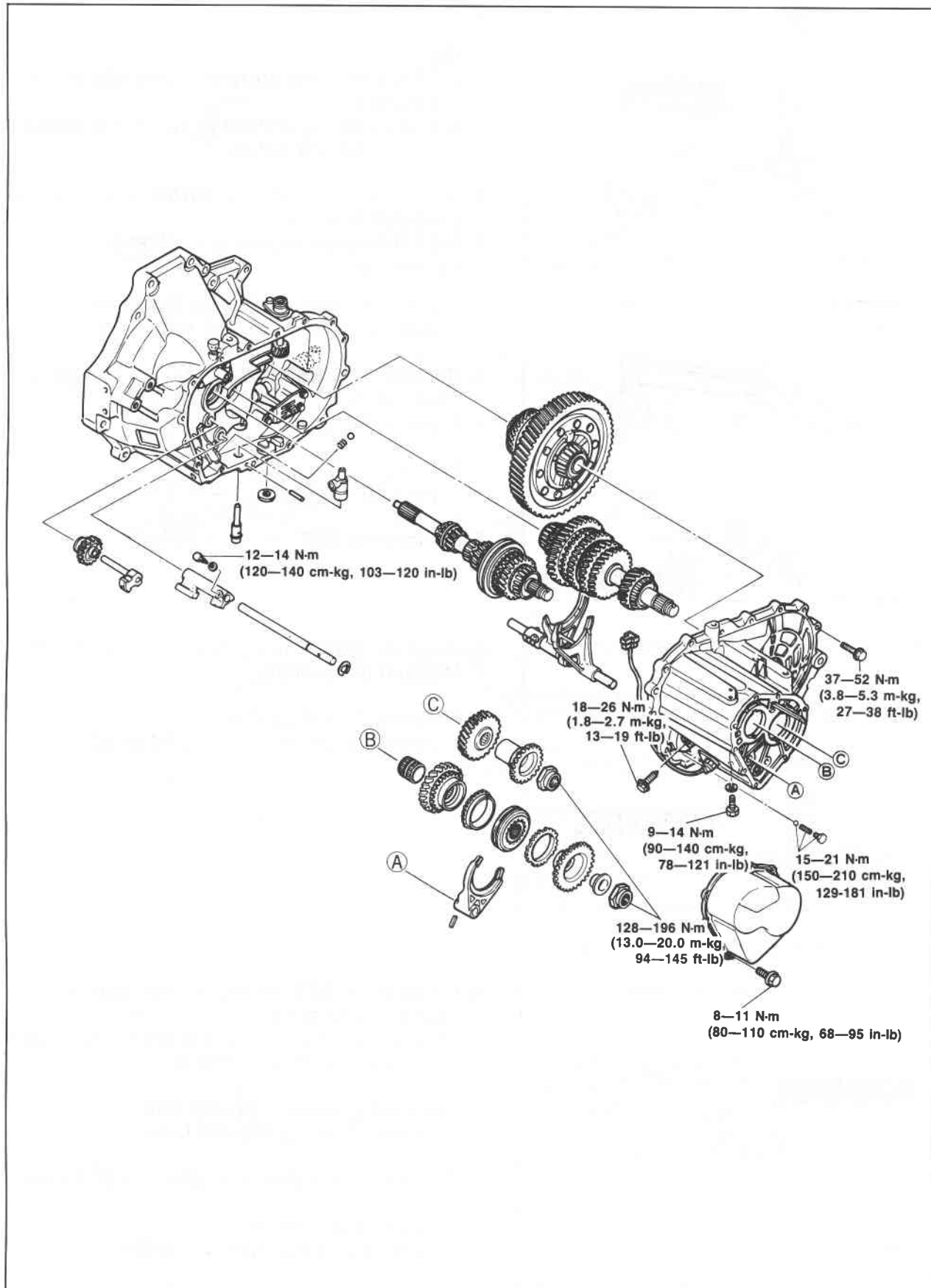
**Preload: 0.2—0.4 N·m
(2.0—4.0 m·kg, 1.7—3.4 in·lb)**



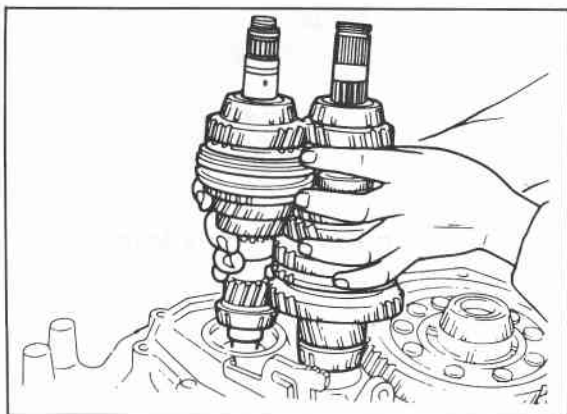
76G07A-047

7A ASSEMBLY

STEP 4 Torque Specifications

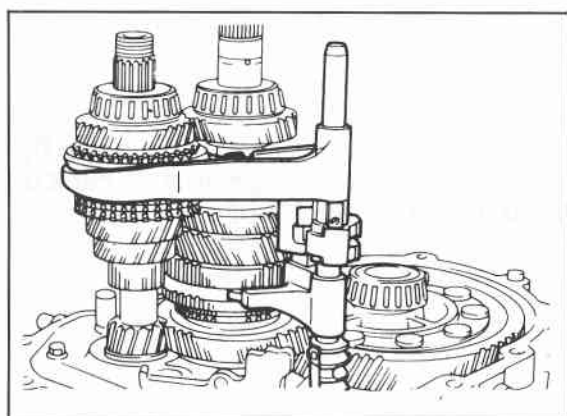


86U07A-110



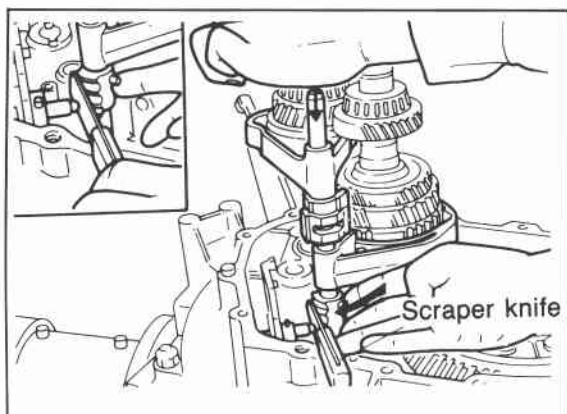
86U07A-111

1. Install the magnet and the differential assembly.
2. Install the primary shaft gear assembly and the secondary shaft gear assembly together.



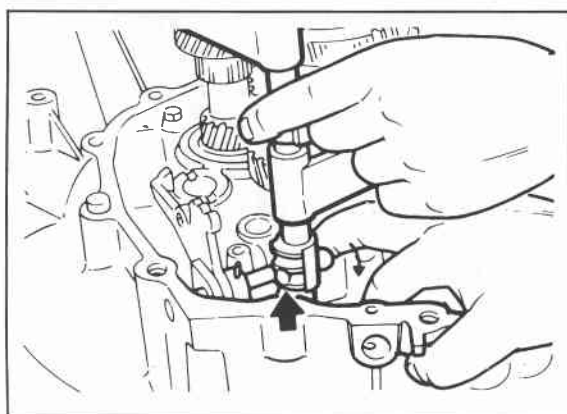
86U07A-112

3. Shift to 2nd gear and position the shift fork and shift rod assembly as shown.



76U07A-284

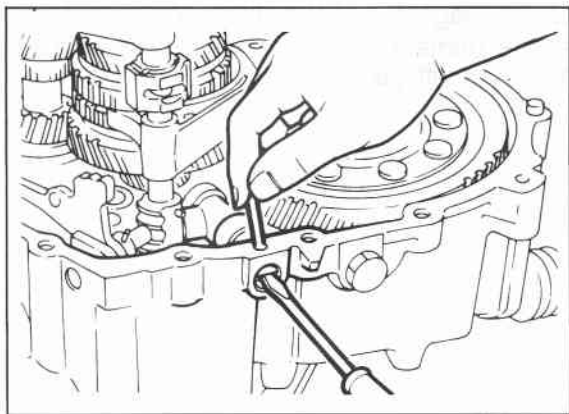
4. Insert the spring seat and spring into the reverse lever shaft, install the steel ball, and place a scraper knife so that it contacts the steel ball.
5. With the edge of the control end against the knife, when the control end is pushed in the direction of the arrow in the figure so that the ball goes into the shaft, the rod will at the same time line up with the shift rod coupling hole in the clutch housing.



76U07A-119

6. Set each clutch hub sleeve to the neutral position, and tap the shift rod from above so that the steel ball goes into the center groove (of the 3 grooves in the control end).
7. Pull the ball part of the control end forward so that the steel ball goes into the detent in the groove.

7A ASSEMBLY

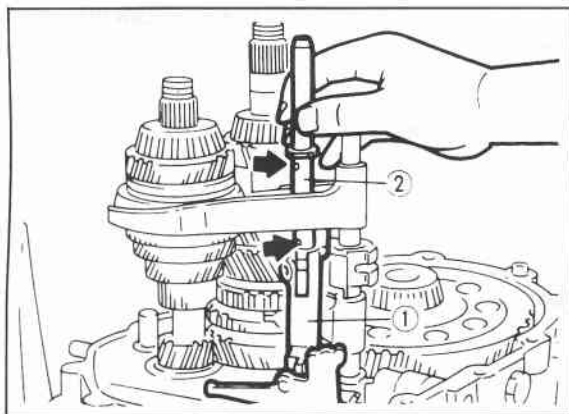


86U07A-113

8. Fit the crank lever in between the change arm and the control end, and connect the crank lever shaft to the crank lever.
9. Align the pin holes of the crank lever shaft and the clutch housing, and insert the pin.

Note

Use a new O-ring for the crank lever shaft.

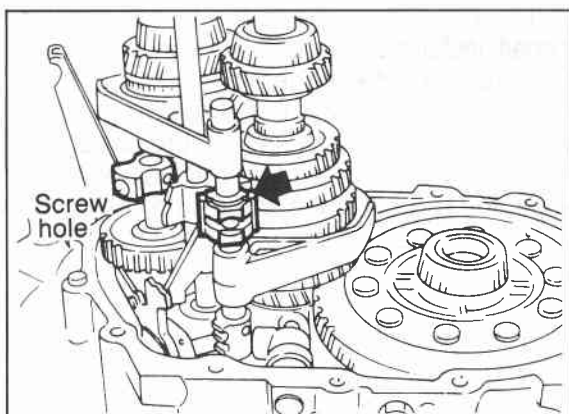


76U07A-121

10. Install the gate ① and the shift rod ②, and tighten the gate mounting bolt.

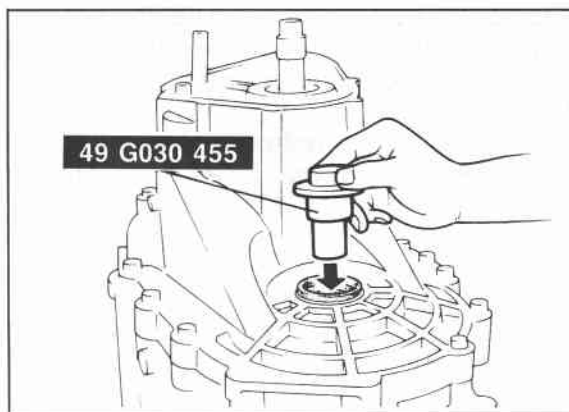
Note

The mark (indicated by the arrow in the figure) and the gate mounting bolt hole must be in the same direction.



76U07A-122

11. Install the reverse idle gear and the reverse idle shaft.
12. Connect the magnet to the clutch housing.
13. Align the end of the interlock sleeve with the control lever indicated by the arrow, and, at the same time, face the reverse idle shaft screw hole in the direction shown in the figure.



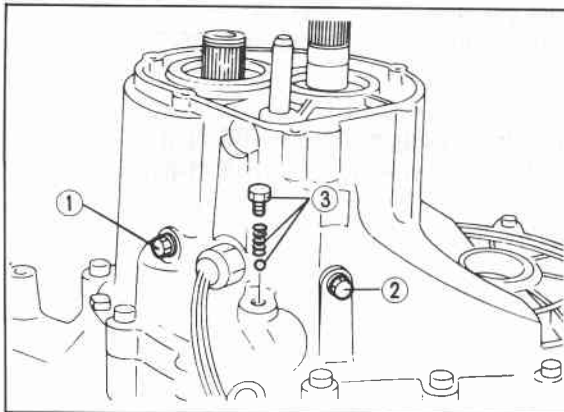
86U07A-114

14. Apply a thin coat of sealant to the contact surfaces of the clutch housing and transmission case, tighten the transaxle case installation bolts to the specified torque.

Tightening torque:

18—26 N·m (1.8—2.7 m·kg, 13—18.8 ft·lb)

15. Insert the SST to driveshaft coupling hole.



76G07A-048

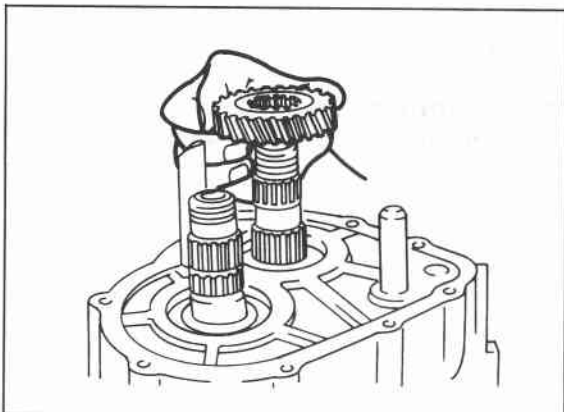
16. Install the lock bolt ①, the guide bolt ②.
17. Install the ball, spring and lock bolt ③.

Tightening torque:

- (1) 18—26 N·m
(1.8—2.7 m·kg, 13—19 ft·lb)
- (2) 9—14 N·m
(90—140 cm·kg, 78—121 in·lb)
- (3) 15—21 N·m
(150—210 cm·kg, 129—181 in·lb)

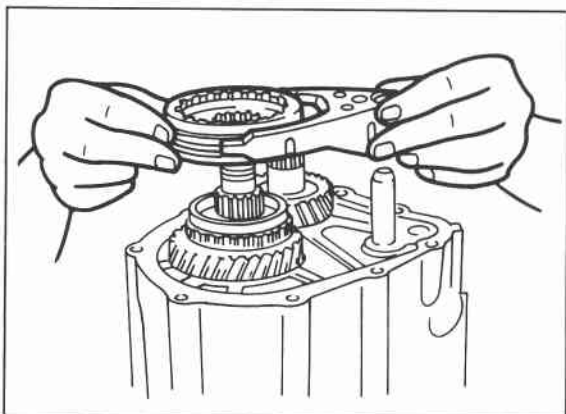
Note

Check that gear change operation is smooth.



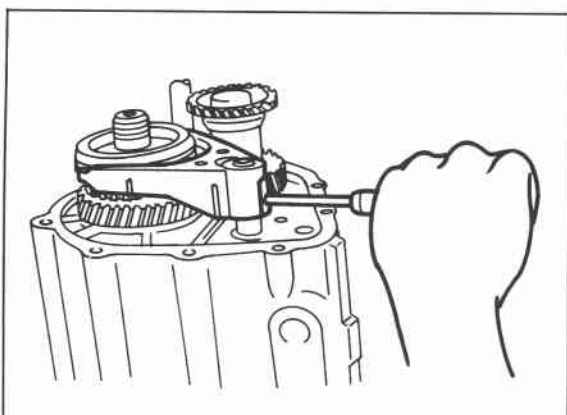
86U07A-116

18. Install the secondary 5th gear as shown.



86U07A-117

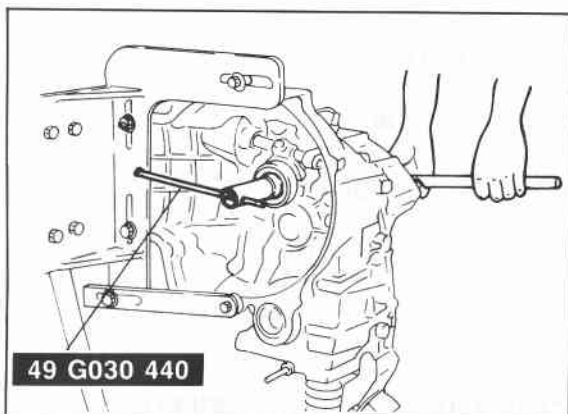
19. Install the gear sleeve, the 5th gear and synchronizer ring to primary shaft.



86U07A-118

20. Tap in the roll pin.
21. Install the synchronizer ring and the reverse synchronizer gears.

7A ASSEMBLY

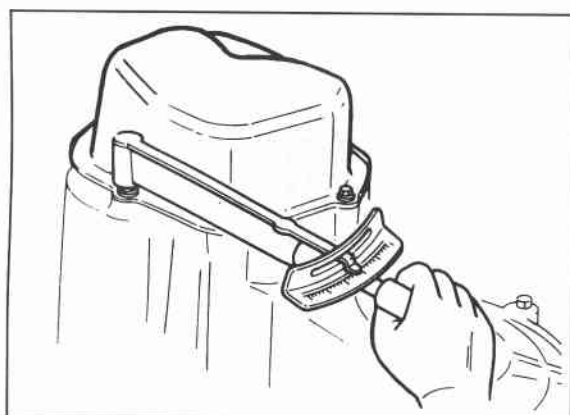


86U07A-119

22. Shift to 1st gear.
23. Lock the primary shaft with the **SST**.
24. Tighten new lock nuts.

**Tightening torque: 128—196 N·m
(13.0—20.0 m·kg, 94—145 ft·lb)**

25. Stake the lock nuts.



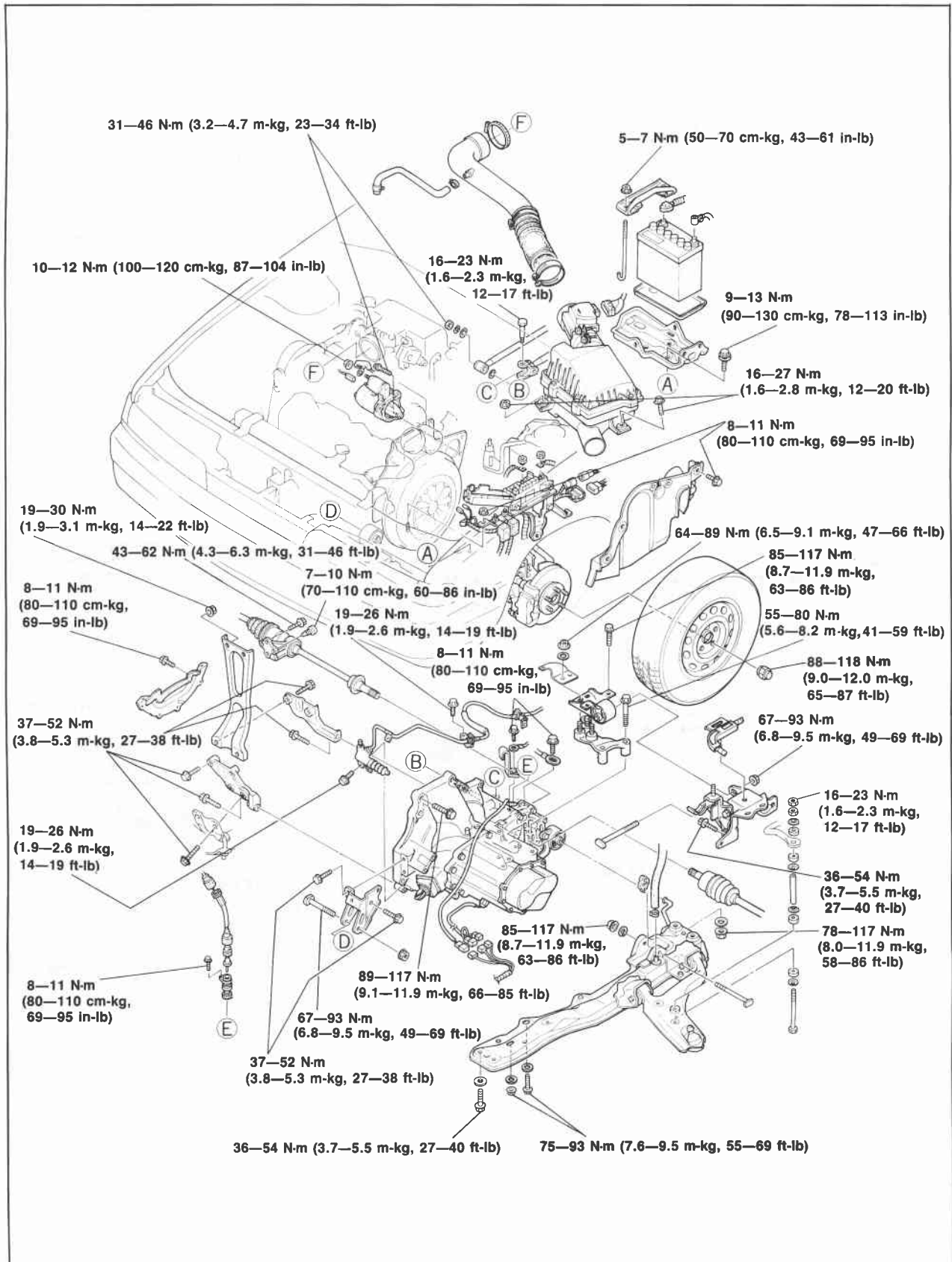
76G07A-049

26. Clean and coat the both surfaces and install the rear cover.

**Tightening torque: 8—11 N·m
(80—110 cm·kg, 69—95 in·lb)**

INSTALLATION (FI except DOHC)

Torque Specifications

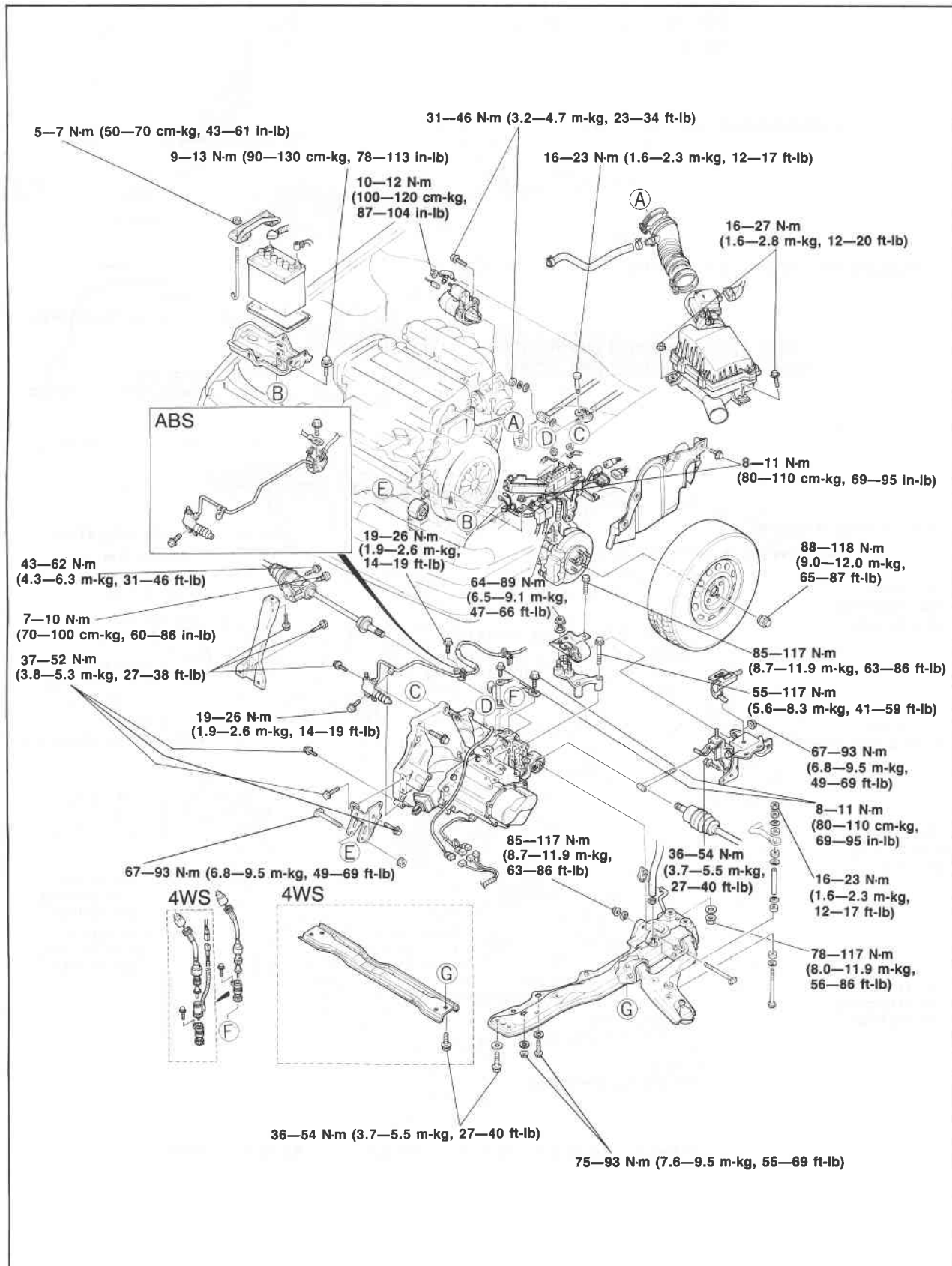


76G07A-050

7A INSTALLATION

INSTALLATION (DOHC)

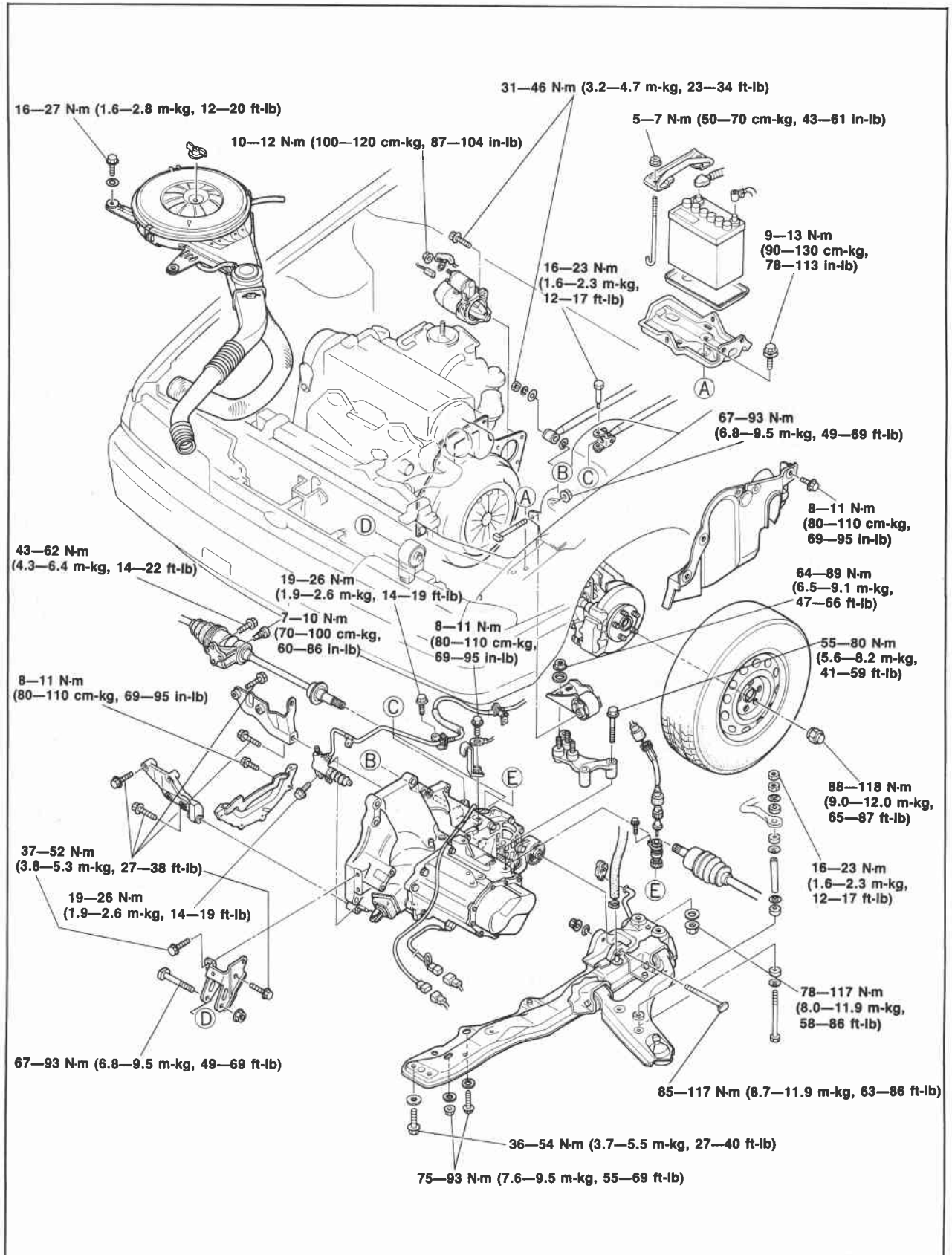
Torque Specifications



76G07A-051

INSTALLATION (Carburator)

Torque Specifications



INSTALLATION (RF-N and RF-CX)

8—11 N·m (80—110 cm·kg, 69—95 in·lb)

10—12 N·m (100—120 cm·kg, 87—104 in·lb)

19—26 N·m (1.9—2.6 m·kg, 14—19 ft·lb)

43—62 N·m (4.3—6.3 m·kg, 14—22 ft·lb)

7—10 N·m (70—100 cm·kg, 60—86 in·lb)

37—52 N·m (3.8—5.3 m·kg, 27—38 ft·lb)

19—26 N·m (1.9—2.6 m·kg, 14—19 ft·lb)

8—11 N·m (80—110 cm·kg, 69—95 in·lb)

5—7 N·m (50—70 cm·kg, 43—61 in·lb)

8—11 N·m (80—110 cm·kg, 69—95 in·lb)

67—93 N·m (6.8—9.5 m·kg, 49—69 ft·lb)

9—13 N·m (90—130 cm·kg, 78—113 in·lb)

31—46 N·m (3.2—4.7 m·kg, 23—34 ft·lb)

37—52 N·m (3.8—5.3 m·kg, 27—38 ft·lb)

16—23 N·m (1.6—2.3 m·kg, 12—17 ft·lb)

16—27 N·m (1.6—2.8 m·kg, 12—20 ft·lb)

19—26 N·m (1.9—2.6 m·kg, 14—19 ft·lb)

67—93 N·m (6.8—9.5 m·kg, 49—69 ft·lb)

8—11 N·m (80—110 cm·kg, 69—95 in·lb)

85—117 N·m (8.7—11.9 m·kg, 63—86 ft·lb)

64—89 N·m (6.5—9.1 m·kg, 47—66 ft·lb)

88—118 N·m (9.0—12.0 m·kg, 12—17 ft·lb)

16—23 N·m (1.6—2.3 m·kg, 12—17 ft·lb)

78—117 N·m (8.0—11.9 m·kg, 56—86 ft·lb)

19—26 N·m (1.9—2.6 m·kg, 14—19 ft·lb)

85—117 N·m (8.7—11.9 m·kg, 63—86 ft·lb)

36—54 N·m (3.7—5.5 m·kg, 27—40 ft·lb)

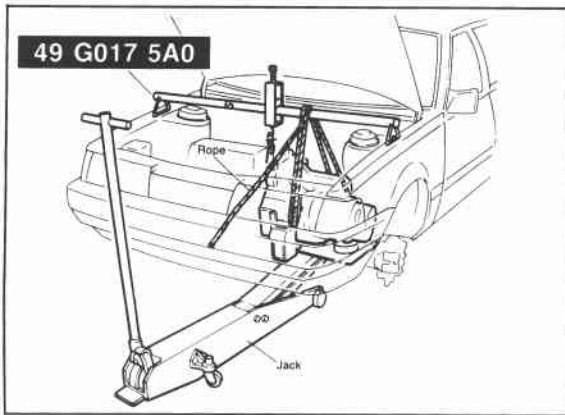
75—93 N·m (7.6—9.5 m·kg, 55—69 ft·lb)

37—52 N·m (3.8—5.3 m·kg, 27—38 ft·lb)

55—80 N·m (5.6—8.2 m·kg, 41—59 ft·lb)

89—117 N·m (9.1—11.9 m·kg, 66—85 ft·lb)

7A—52



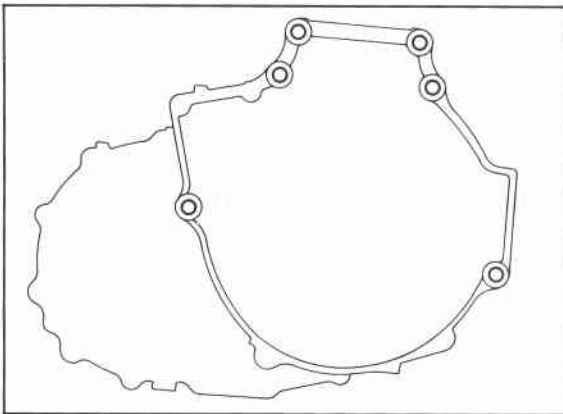
86U07A-210

1. Attach rope at 2 places on the transaxle and place a board on the jack and position the transaxle on it.

Caution

The transaxle is not well balanced; be careful when positioning on the jack.

2. Move the transaxle into the place and attach the rope (attached to the transaxle in step 1) to the SST.



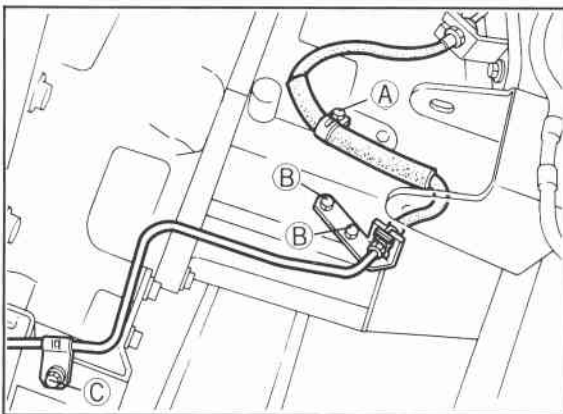
86U07A-211

3. Install the transaxle onto the engine.

Note

Lift the transaxle using the jack pulling the rope.

**Tightening torque: 89—117 N·m
(9.1—11.9 m·kg, 66—85 ft·lb)**



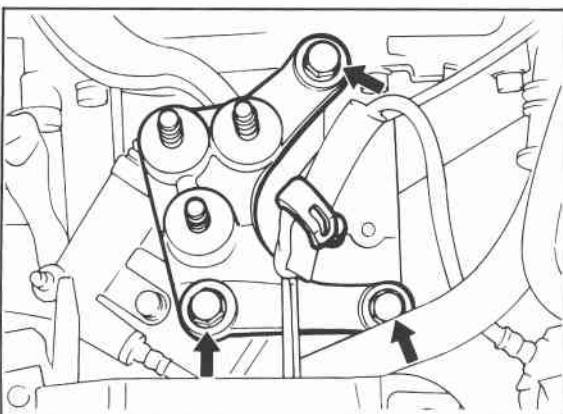
76G07A-054

4. Install the clutch pipe.

Tightening torque:

**A, B: 19—26 N·m
(1.9—2.6 m·kg, 14—19 ft·lb)**

**C: 8—11 N·m
(80—110 cm·kg, 69—95 in·lb)**



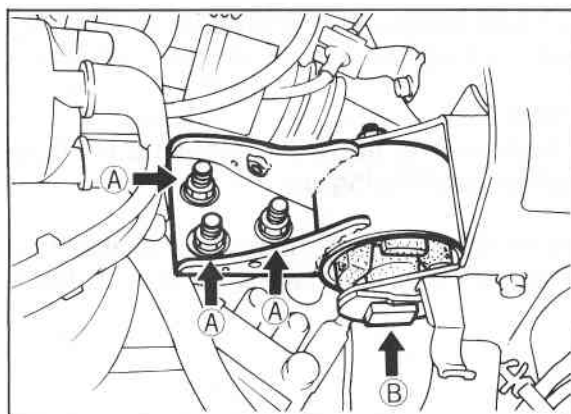
76G07A-055

5. Install the engine mount bracket.

Tightening torque:

55—80 N·m (5.6—8.2 m·kg, 41—59 ft·lb)

7A INSTALLATION

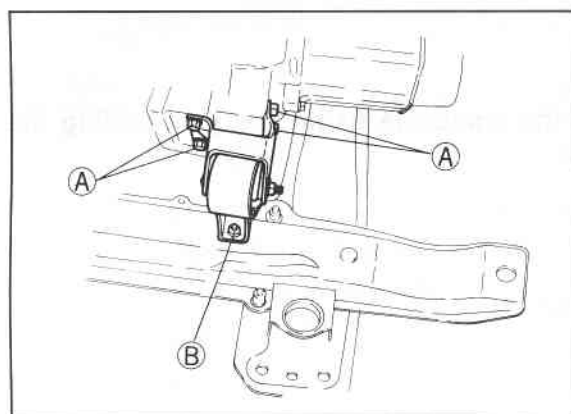


76G07A-056

6. Install the engine mount rubber No.4.

Tightening torque:

- Ⓐ: 64—89 N·m
(6.5—9.1 m·kg, 47—66 ft·lb)
- Ⓑ: 67—93 N·m
(6.8—9.5 m·kg, 49—69 ft·lb)

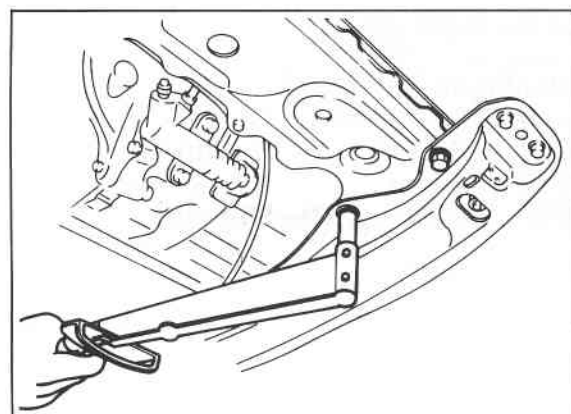


76G07A-057

7. Install the engine mount No. 2.

Tightening torque:

- Ⓐ 37—52 N·m
(3.8—5.3 m·kg, 27—38 ft·lb)
- Ⓑ 67—93 N·m
(6.8—9.5 m·kg, 49—69 ft·lb)



76G07A-058

8. Install the crossmember and the left side lower arm as an assembly.

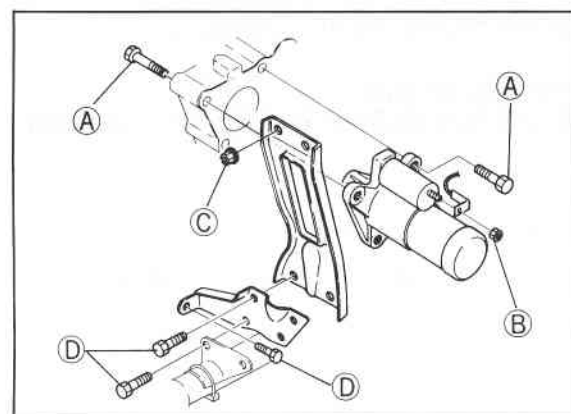
- Tightening torque: Bolts, 36—54 N·m**
(3.7—5.5 m·kg, 27—40 ft·lb)
- Nut, 75—93 N·m**
(7.6—9.5 kg, 55—69 ft·lb)

9. Remove the jack and take off the rope.

10. Remove the **SST**.

11. Install the end plate.

- Tightening torque: 8—11 N·m**
(80—110 cm·kg, 69—95 in·lb)



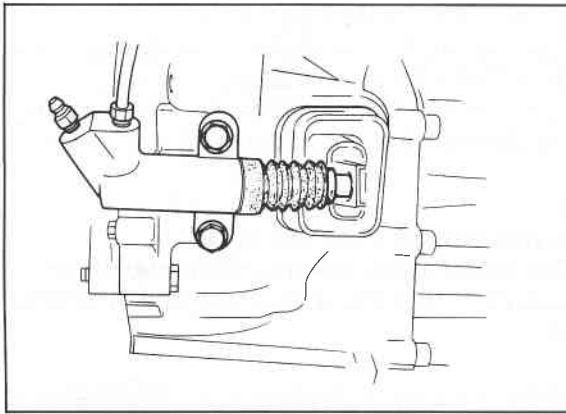
76G07A-059

12. Install the starter and harnesses.

13. Install the surge tank bracket and the gusset plate.

Tightening torque:

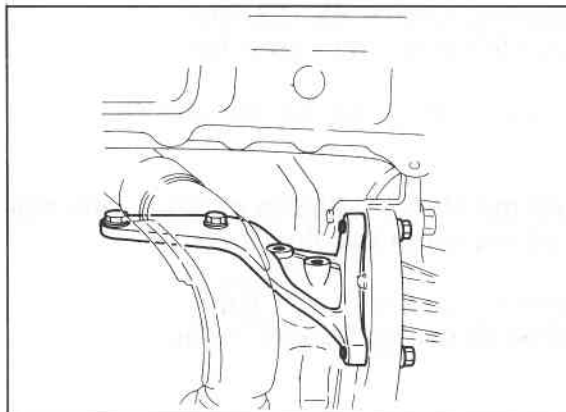
- Ⓐ . 31—46 N·m
(3.2—4.7 m·kg, 23—34 ft·lb)
- Ⓑ . 10—12 N·m
(100—120 cm·kg, 87—104 in·lb)
- Ⓒ . 19—30 N·m
(1.9—3.1 m·kg, 14—22 ft·lb)
- Ⓓ . 43—61 N·m
(4.4—6.2 m·kg, 32—45 ft·lb)



76G07A-060

14. Install the clutch release cylinder.

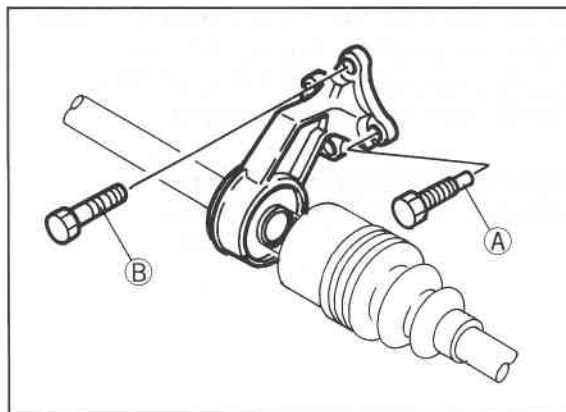
**Tightening torque: 19—26 N·m
(1.9—2.6 m·kg, 14—19 ft·lb)**



76G07A-061

15. Install the gusset plates.

**Tightening torque: 37—52 N·m
(3.8—5.3 m·kg, 27—38 ft·lb)**



76G07A-062

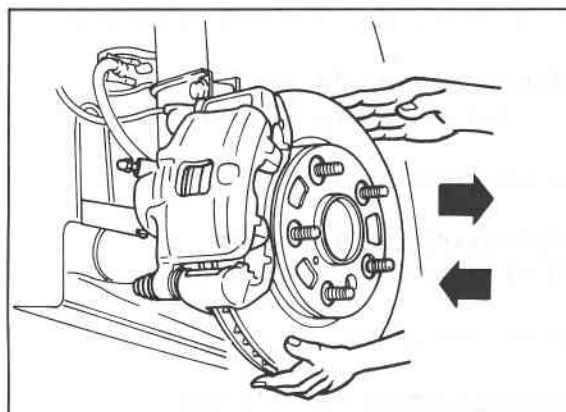
16. Replace the clips at the end of the driveshafts and joint shaft with new ones.

17. Install the joint shaft and right driveshaft as follows:
(1) Install and tighten the reamer bolts (A); then install and tighten the standard bolts (B).

Tightening torque:

**(A) : 7—10 N·m
(70—100 cm·kg, 43—61 in·lb)**

**(B) : 42—62 N·m
(4.3—6.3 m·kg, 31—46 ft·lb)**



86U07A-219

(2) Remove the **SST** and insert the shaft into the transaxle.

(3) Pull the front hub outward and connect the driveshaft to the joint shaft.

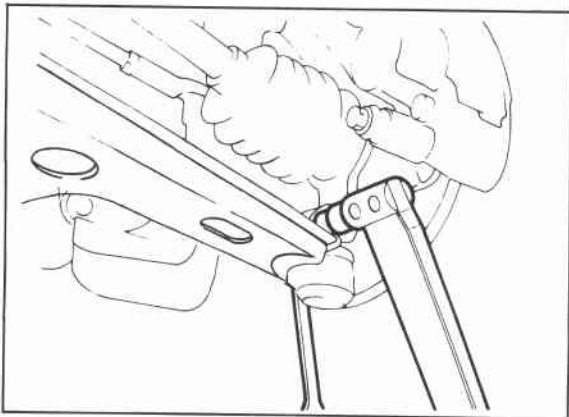
(4) Push the joint at the differential side to securely connect the driveshaft to the joint shaft.

Note

a) After installation, pull the front hub outward to confirm that the driveshaft doesn't come out.

b) Do not damage the oil seal.

7A INSTALLATION

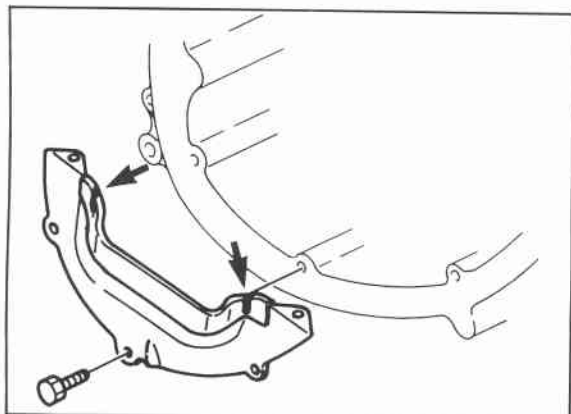


76G07A-063

18. Install the left driveshaft as follows:
- (1) Pull the front hub outward and insert the driveshaft into the transaxle.
 - (2) Push the joint at the differential side to connect the driveshaft to the differential side gear.

Note

- a) Do not damage the oil seal.
- b) After installation, pull the front hub outward to confirm that the driveshaft doesn't come out.



76G07A-064

19. Install the lower arm ball joints to the knuckles and tighten the bolts and nuts.

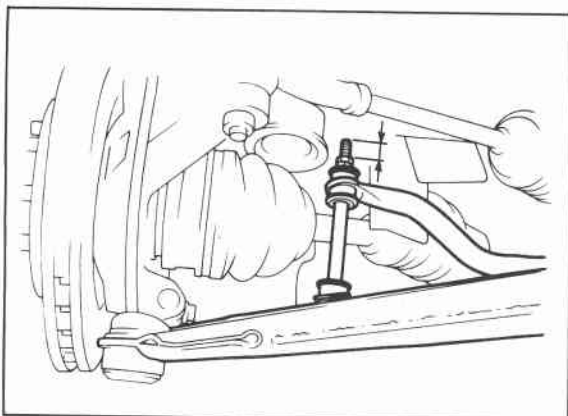
Tightening torque: 43—54 N·m
(4.4—5.5 m·kg, 32—40 ft·lb)

20. Install the under cover. (except DOHC)

Note

Before installation, fill the notches with silicon as shown in the figure.

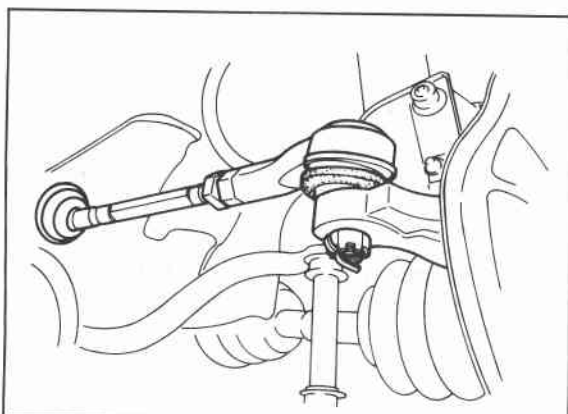
Tightening torque: 8—11 N·m
(80—110 cm·kg, 69—95 in·lb)



76G07A-065

21. Install the stabilizer bar control links as follows.
- (1) Install the stabilizer bar control link.
 - (2) Adjust protrusion to 20.1 mm (0.79 in)
 - (3) Tighten bolt to specified torque.

Tightening torque: 16—23 N·m
(1.6—2.3 m·kg, 12—17 ft·lb)



76G07A-066

22. Install the tie-rod ends and new cotter pins.

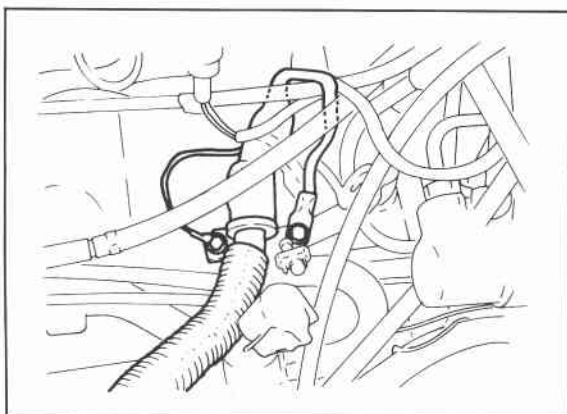
Tightening torque: 29—44 N·m
(3.0—4.5 m·kg, 22—33 ft·lb)

23. Install the splash shields.

Tightening torque: 8—11 N·m
(80—110 cm·kg, 69—95 in·lb)

24. Install the front wheels.

Tightening torque: 88—118 N·m
(9.0—12.0 m·kg, 65—87 ft·lb)



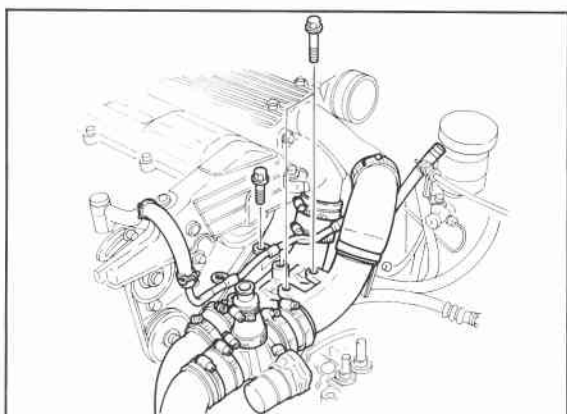
76G07A-067

25. Install the grounds to the transaxle case.

Tightening torque:

8—11 N·m (80—115 cm·kg, 69—100 in·lb)

26. Connect the speedometer cable.



76G07A-068

27. Install the intercooler pipe and hose. (RF-CX)

Tightening torque:

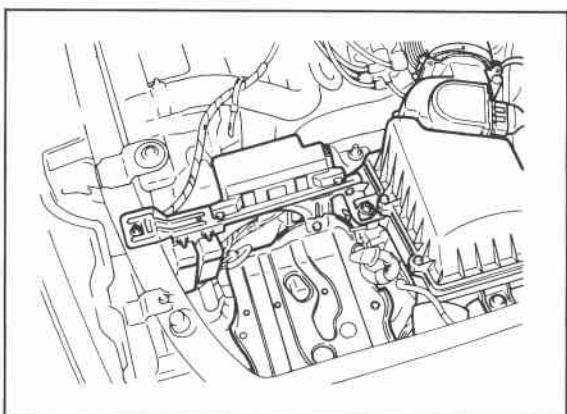
19—26 N·m (1.9—2.6 m·kg, 14—19 ft·lb)

28. Install the brake vacuum pipe. (RF-CX)

Tightening torque:

8—11 N·m (80—110 cm·kg, 69—95 in·lb)

29. Connect the brake vacuum hose. (RF-CX)



76G07A-069

30. Install the air cleaner assembly and connect the air flow meter connector.

Tightening torque:

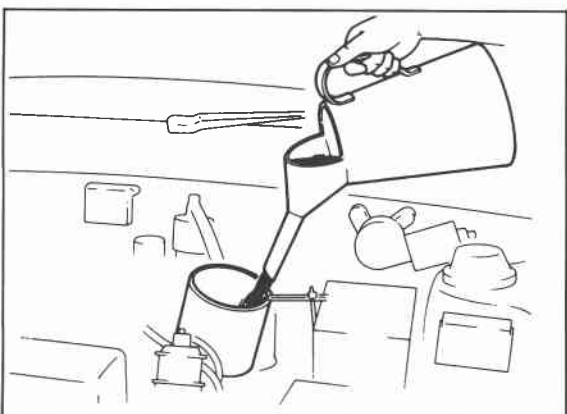
16—27 N·m (1.6—2.8 m·kg, 12—20 ft·lb)

31. Connect the distributor lead.

32. Connect the main fuse block.

Tightening torque:

8—11 N·m (80—110 cm·kg, 69—95 in·lb)



76G07A-070

33. Install the battery carrier and battery.

34. Add the correct quantity of the specified transaxle oil.

**Specified
Type**

A.T.F.: DEXRON II

Above 0°F:

API: GL-4 or GL-5

SAE 80W-90 or SAE 90

Capacity:

3.35 liters (3.6 US qt, 3.0 Imp qt)

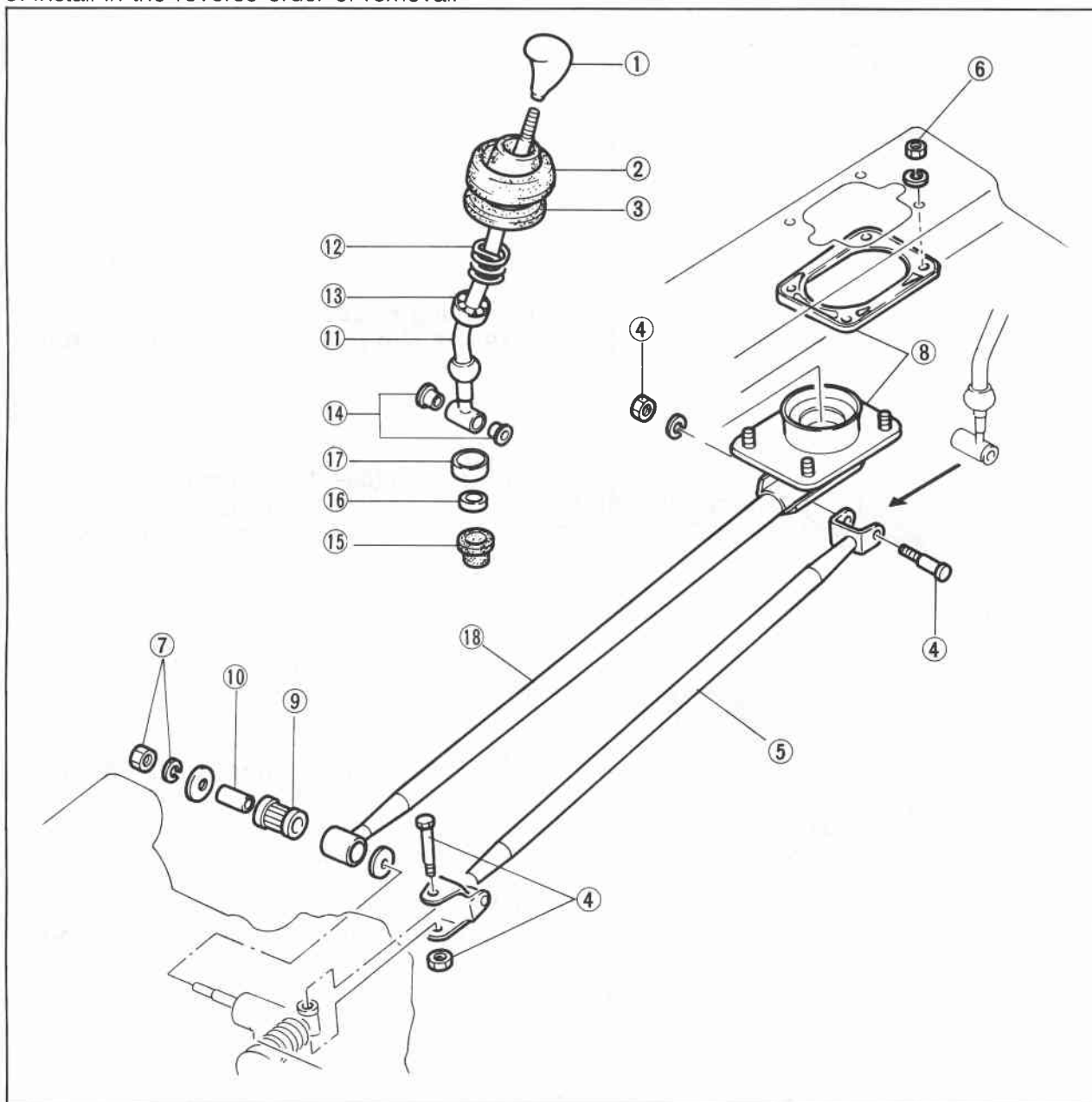
7A TRANSAXLE CONTROL

TRANSAXLE CONTROL

REMOVAL AND INSTALLATION

1. Jack up the vehicle and support it with safety stands.
2. Remove in the sequence shown in the figure.
3. Install in the reverse order of removal.

61G07X-165

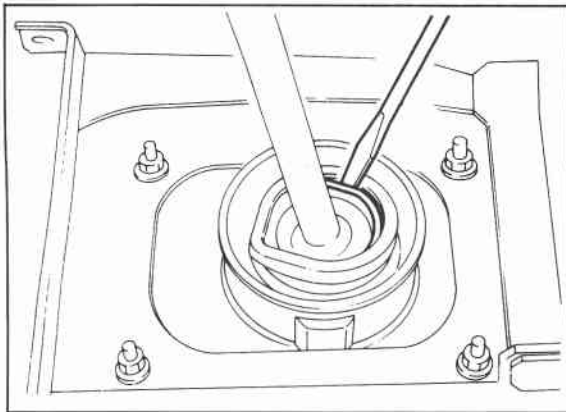


86U07A-230

- | | | |
|------------------------------|--|-----------------------|
| 1. Change lever knob | 7. Nut and washer | 12. Spring |
| 2. Assist boot | 8. Extension bar bracket assembly and gasket | 13. Ball seat (upper) |
| 3. Mounting rubber boot | 9. Bushing | 14. Bushings |
| 4. Bolts and nuts | 10. Pipe | 15. Boot |
| 5. Change control rod | 11. Change lever | 16. Holder |
| 6. Bracket installation nuts | | 17. Ball seat (lower) |
| | | 18. Extension bar |

Note

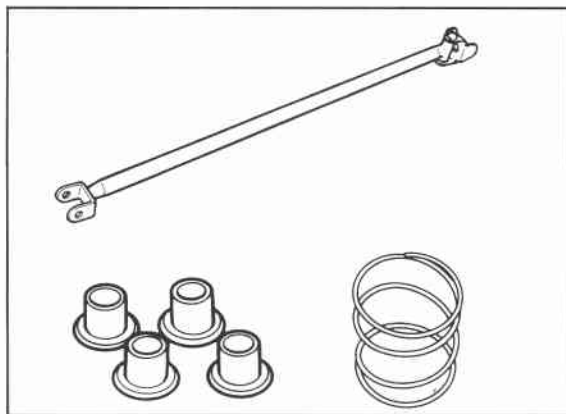
Apply a coat of grease (lithium base, NLGI No. 2) to the change lever ball, the ball seats, and each joint.



63U07A-151

Spring

Remove the spring by prying on the hooked part of the spring with a screwdriver.

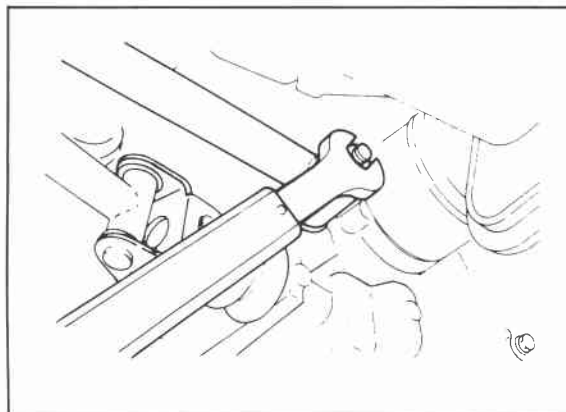


61G07X-192

INSPECTION

Check the following, and replace if necessary:

1. Bent control rod.
2. Wear, damage, or malfunction of any joint.
3. Damaged gear shift lever ball.
4. Weak spring.
5. Wear or damage of bushing.



63U07A-153

INSTALLATION

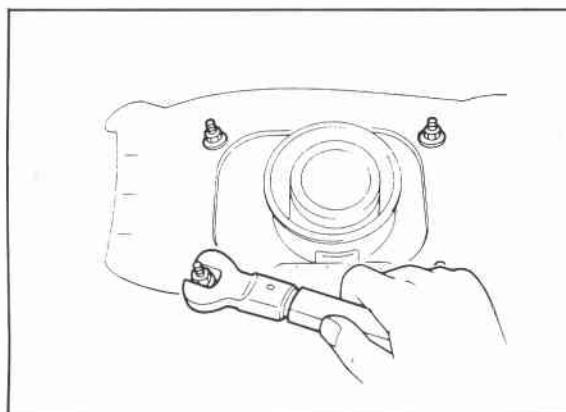
Install in the reverse order of removal and note the following:

Extension Bar

First, install the extension bar to the floor, and then install it onto the transaxle.

Tightening torque:

31—46 N·m (3.2—4.7 m·kg, 23—34 ft·lb)



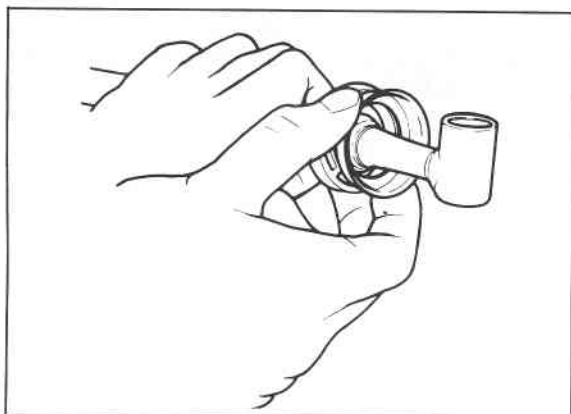
76G07A-071

Bracket Installation

Tighten the bracket installation nuts to the specified torque.

**Tightening torque: 7—10 N·m
(70—100 cm·kg, 61—87 in·lb)**

7A TRANSAXLE CONTROL



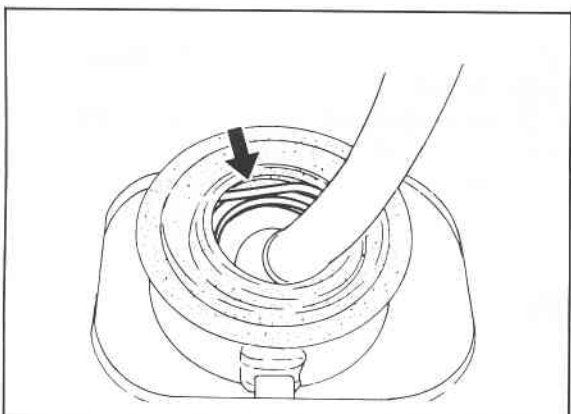
61G07X-193

Gear Shift Lever Ball

Apply grease to the ball seat surface, and install the upper and lower ball seat, holder, and boot.

Note

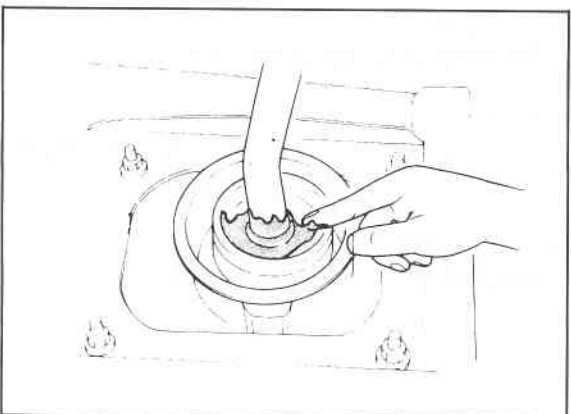
Apply grease to all joints.



63U07A-156

Spring

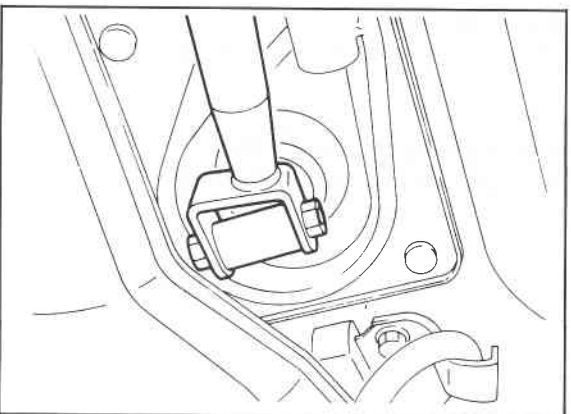
Make sure that the hooked part of the spring is properly seated in the bracket groove, as shown in the figure.



63U07A-157

Bracket Cavity

Put grease in the bracket cavity.



61G07X-195

Change Control Rod

Install the change control rod so that its relationship with the shift lever is as shown in the figure.

Tightening torque:

16—22 N·m (1.6—2.3 m·kg, 12—17 ft·lb)