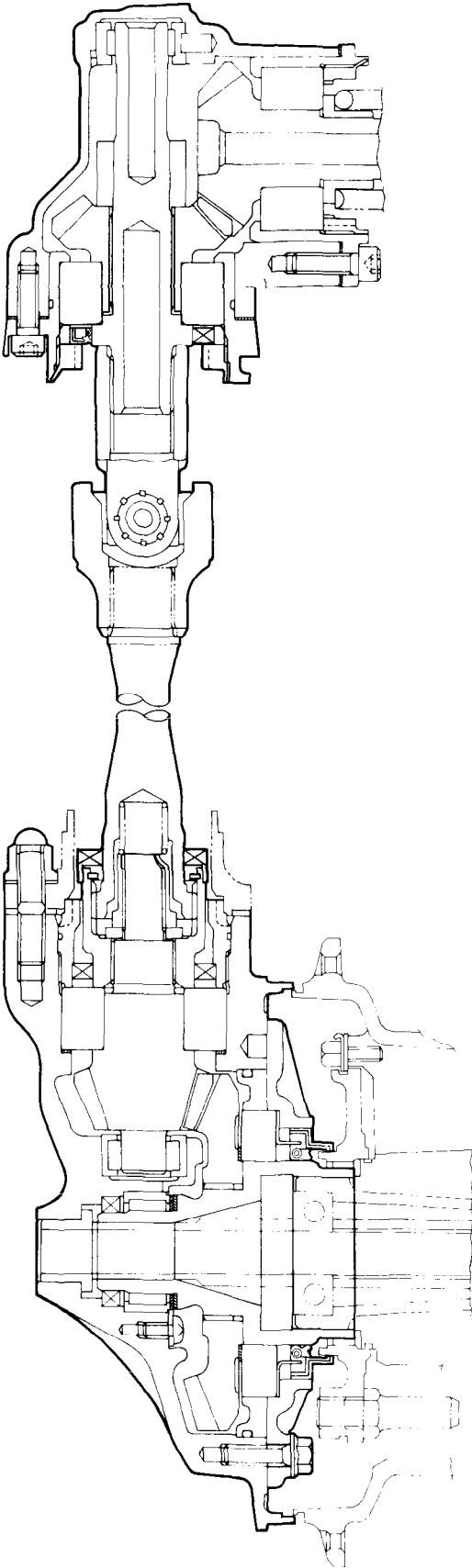


SHAFT DRIVE

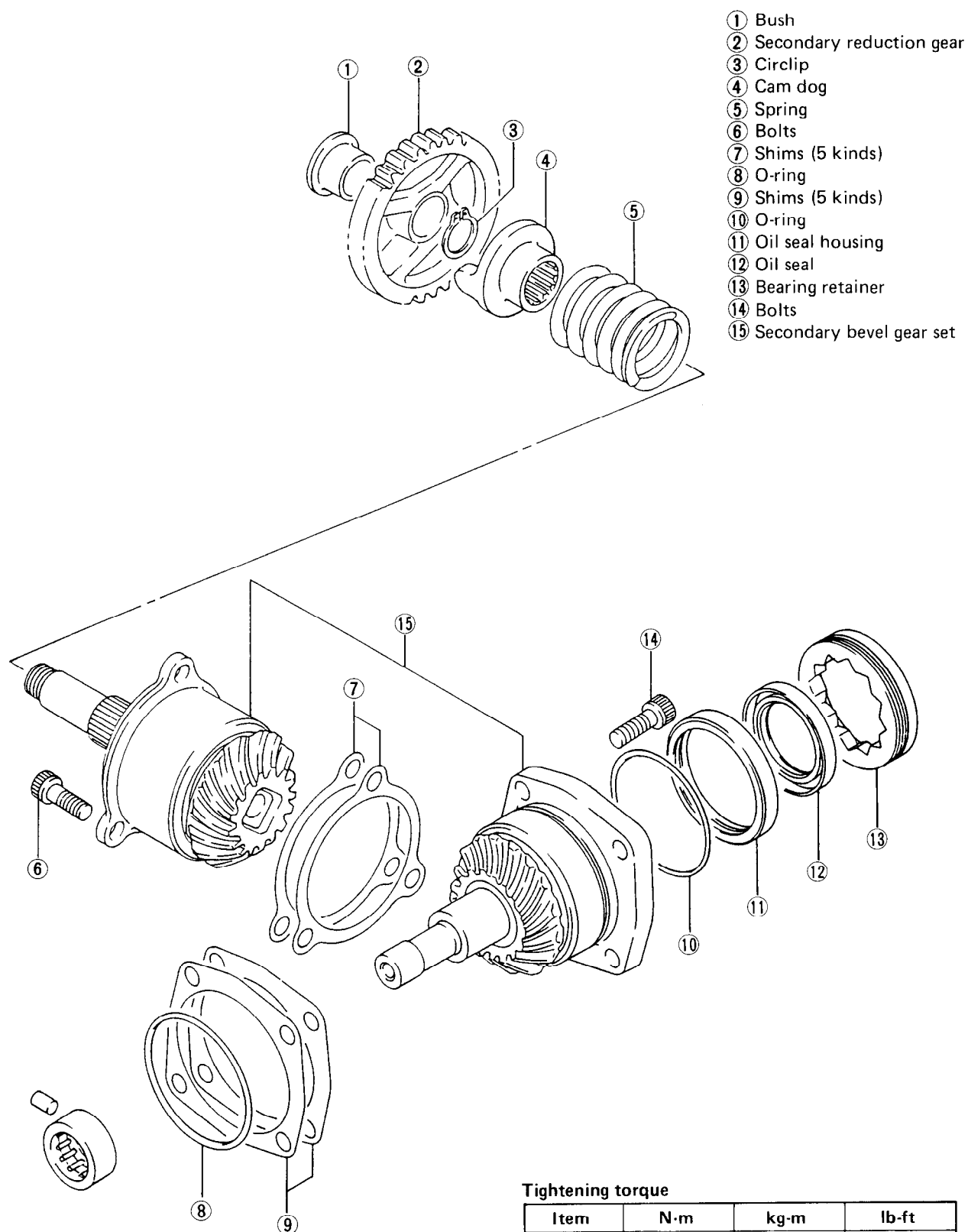
CONTENTS

SHAFT DRIVE	4- 1
SECONDARY BEVEL GEARS CONSTRUCTION	4- 2
REMOVAL AND DISASSEMBLY	4- 3
INSPECTION	4- 3
REASSEMBLY	4- 4
SECONDARY GEARS SHIM ADJUSTMENT	4- 4
BACKLASH	4- 4
TOOTH CONTACT	4- 6
FINAL ASSEMBLY AND REMOUNTING	4- 7
REASSEMBLY INFORMATION	4- 7
FINAL BEVEL GEARS CONSTRUCTION	4- 8
FINAL GEAR CASE BREATHER CIRCUIT	4- 9
AIR AND GEAR OIL FLOW IN FINAL GEAR CASE BREATHER CIRCUIT	4- 9
REMOVAL AND DISASSEMBLY	4-10
INSPECTION	4-13
REASSEMBLY	4-13
FINAL GEAR SHIM ADJUSTMENT	4-16
FINAL GEAR BEARING CASE SHIM CLEARANCE	4-16
BACKLASH	4-16
TOOTH CONTACT	4-18
FINAL ASSEMBLY AND REMOUNTING	4-19
REASSEMBLY INFORMATION	4-21

SHAFT DRIVE



SECONDARY BEVEL GEARS CONSTRUCTION



Tightening torque

Item	N·m	kg·m	lb·ft
⑥	18 – 28	1.8 – 2.8	13.0 – 20.0
⑭	18 – 28	1.8 – 2.8	13.0 – 20.0
⑬	90 – 120	9.0 – 12.0	65.0 – 87.0

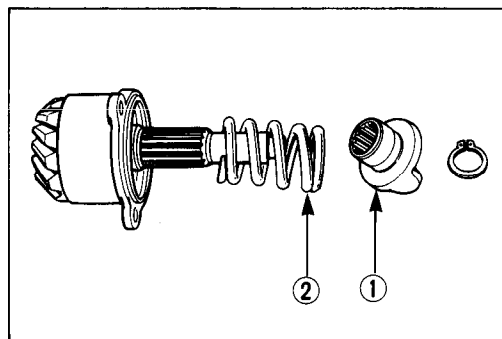
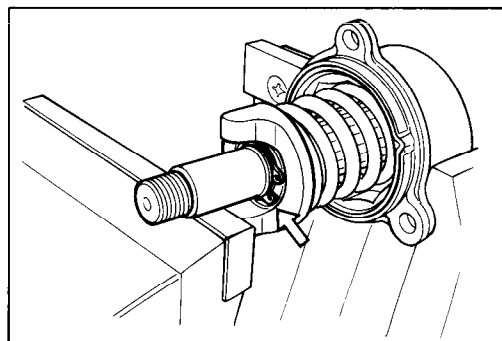
REMOVAL AND DISASSEMBLY

SECONDARY DRIVE BEVEL GEAR

- Remove the engine. (See page 3-3.)
- Remove the secondary drive bevel gear assembly. (See page 3-16.)
- Compress the damper spring with a vice, and remove the circlip with the special tool.

09900-06107 : Snap ring pliers

- Remove the cam dog ① and damper spring ②.



SECONDARY DRIVEN BEVEL GEAR

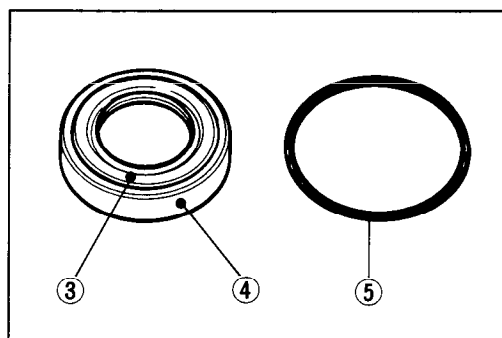
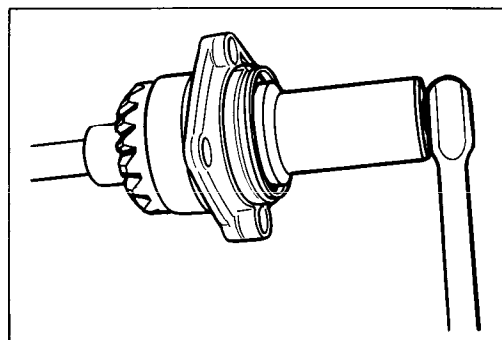
- Remove the secondary driven bevel gear assembly. (See page 3-15.)
- Remove the bearing retainer with the special tool.

09921-21820 : Bearing retainer wrench

- Remove the oil seal ③, oil seal housing ④ and O-ring ⑤.

CAUTION:

The removed oil seal and O-ring should be replaced with new ones.



INSPECTION

Inspect the removed parts for the following abnormalities.

- * The drive and driven bevel gears must be inspected thoroughly for excessive wear or damage. It is important that both gears be in good condition to maintain proper tooth contact.
- * Abnormal noise of bearings
- * Bearing damage or wear.

REASSEMBLY

Reassemble the secondary bevel gears in the reverse order of disassembly and also carry out the following steps:

NOTE:

Before reassembly, thoroughly clean all parts in cleaning solvent.

- Apply grease to the lip of oil seal and O-ring.

(For U.S.A. model)

99000-25030 : SUZUKI SUPER GREASE "A"

(For the other models)

99000-25010 : SUZUKI SUPER GREASE "A"

CAUTION:

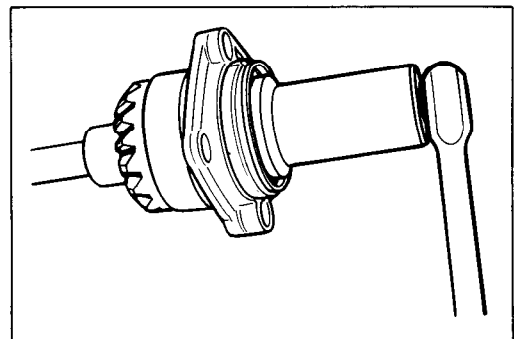
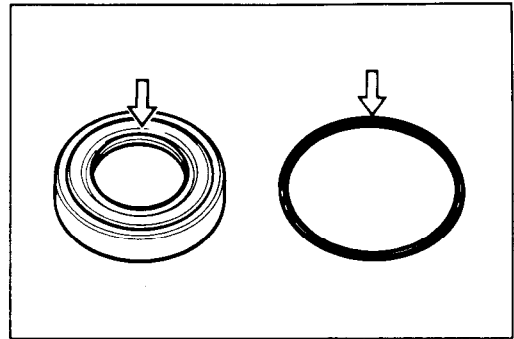
Always use a new oil seal and O-ring.

- Tighten the bearing retainer to the specified torque.

Tightening torque : 90 – 120 N·m

(9.0 – 12.0 kg-m, 65.0 – 87.0 lb-ft)

09921-21820 : Bearing retainer wrench



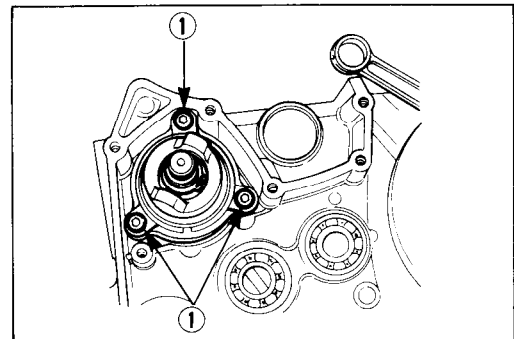
SECONDARY GEARS SHIM ADJUSTMENT

BACKLASH

- Install the secondary drive bevel gear assembly and removed shims, and tighten the three bolts ① to the specified torque.

Tightening torque : 18 – 28 N·m

(1.8 – 2.8 kg-m, 13.0 – 20.0 lb-ft)



4-5 SHAFT DRIVE

- Install the secondary driven bevel gear assembly and removed shims, and tighten the two bolts ② to the specified torque.

NOTE:

Do not install the O-ring on the driven gear housing at this point. O-ring is installed after backlash and tooth contact are correct.

- Hold the bearing with the special tool or secondary bevel gear case.

09921-21810 : Bearing holder

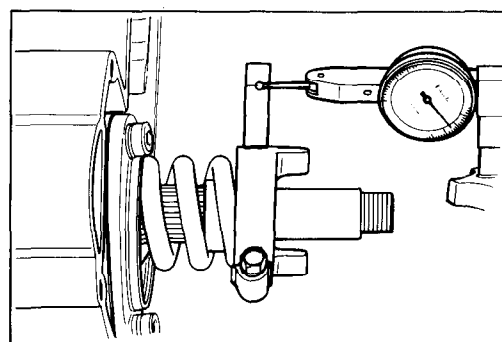
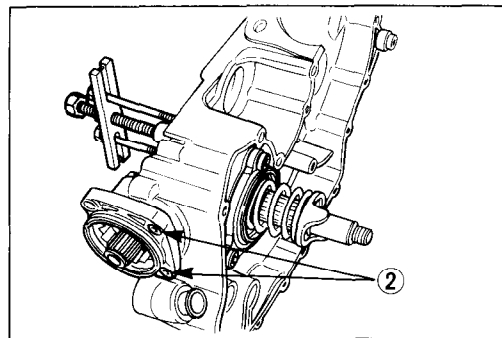
Tightening torque : 18 – 28 N·m

(1.8 – 2.8 kg·m, 13.0 – 20.0 lb·ft)

- Install the backlash measuring tool on the drive bevel gear cam dog, and set-up a dial gauge as shown in the illustration.

09924-34510 : Backlash measuring tool (27 – 50 mm)

Secondary gear backlash	0.05 – 0.32 mm (0.002 – 0.013 in)
--------------------------------	--



- Adjust the dial gauge so that it touches the backlash measuring tool arm at the mark; hold the driven bevel gear securely, and turn the drive bevel gear in each direction, reading the total backlash on the dial gauge.
- If the backlash is not within specification, the shims must be changed and the backlash should be re-checked until correct.

Refer to the right chart for appropriate changes.

Backlash	Shim adjustment
Under 0.05 mm (0.002 in)	Increase shim thickness
0.05 – 0.32 mm (0.002 – 0.013 in)	Correct
Over 0.32 mm (0.013 in)	Decrease shim thickness

NOTE:

When changing the shims, measure the thickness of old shims. Using the thickness of the old shims as a guide, adjust the backlash by referring to the right chart.

List of shims ① (Refer to page 4-7)

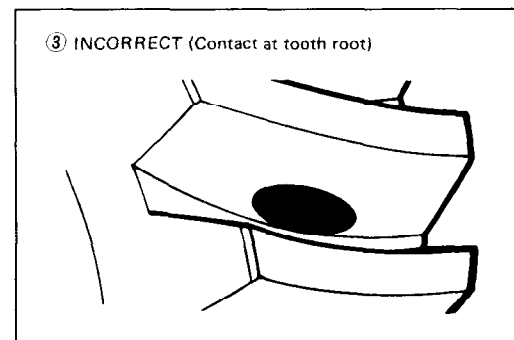
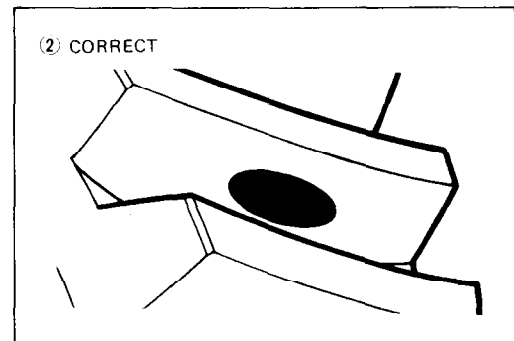
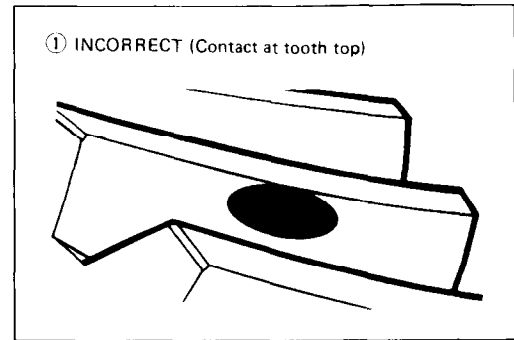
Part No.	Shim thickness
24945 - 05A00 - 0A0	0.30 mm
24945 - 05A00 - 0B0	0.35 mm
24945 - 05A00 - 0C0	0.40 mm
24945 - 05A00 - 0D0	0.50 mm
24945 - 05A00 - 0E0	0.60 mm

TOOTH CONTACT

- After bringing the backlash within specification by changing the secondary driven bevel gear shims, it will be necessary to check tooth contact.
- Remove the drive bevel gear assembly from the crankcase.
- Clean and degrease the secondary drive bevel gear teeth, and apply a coating of machinist's layout dye or paste to several teeth.
- Reinstall the secondary drive bevel gear assembly, with correct shim, onto the secondary gear housing.
- Rotate the secondary driven bevel gear several turns in both directions.
- Remove the secondary drive bevel gear from the crankcase, and observe the tooth contact pattern made in the dye or paste.
- Compare the tooth contact pattern to the examples as shown in ①, ② and ③.
- If tooth contact is found to be correct, go to the Final Assembly (See page 3-45).
- If tooth contact is found to be incorrect, the shims of the secondary drive bevel gear and secondary driven bevel gear must be changed, tooth contact should be re-checked until correct.

CAUTION:

After the tooth contact adjustment has been performed, the backlash must be re-checked, because it may have changed. Refer to the backlash check sub-section, and readjust until tooth contact and backlash are both within the specifications. If you can not maintain the correct tooth contact when adjusting backlash, both the drive and driven bevel gears should be replaced.



Tooth contact	Shim adjustment
Contact at tooth top ①	Decrease thickness of shims ① or ②
Contact at tooth root ③	Increase thickness of shims ① or ②

List of shim ①

Part No.	Shim thickness
24945 - 05A00 - 0A0	0.30 mm
24945 - 05A00 - 0B0	0.35 mm
24945 - 05A00 - 0C0	0.40 mm
24945 - 05A00 - 0D0	0.50 mm
24945 - 05A00 - 0E0	0.60 mm

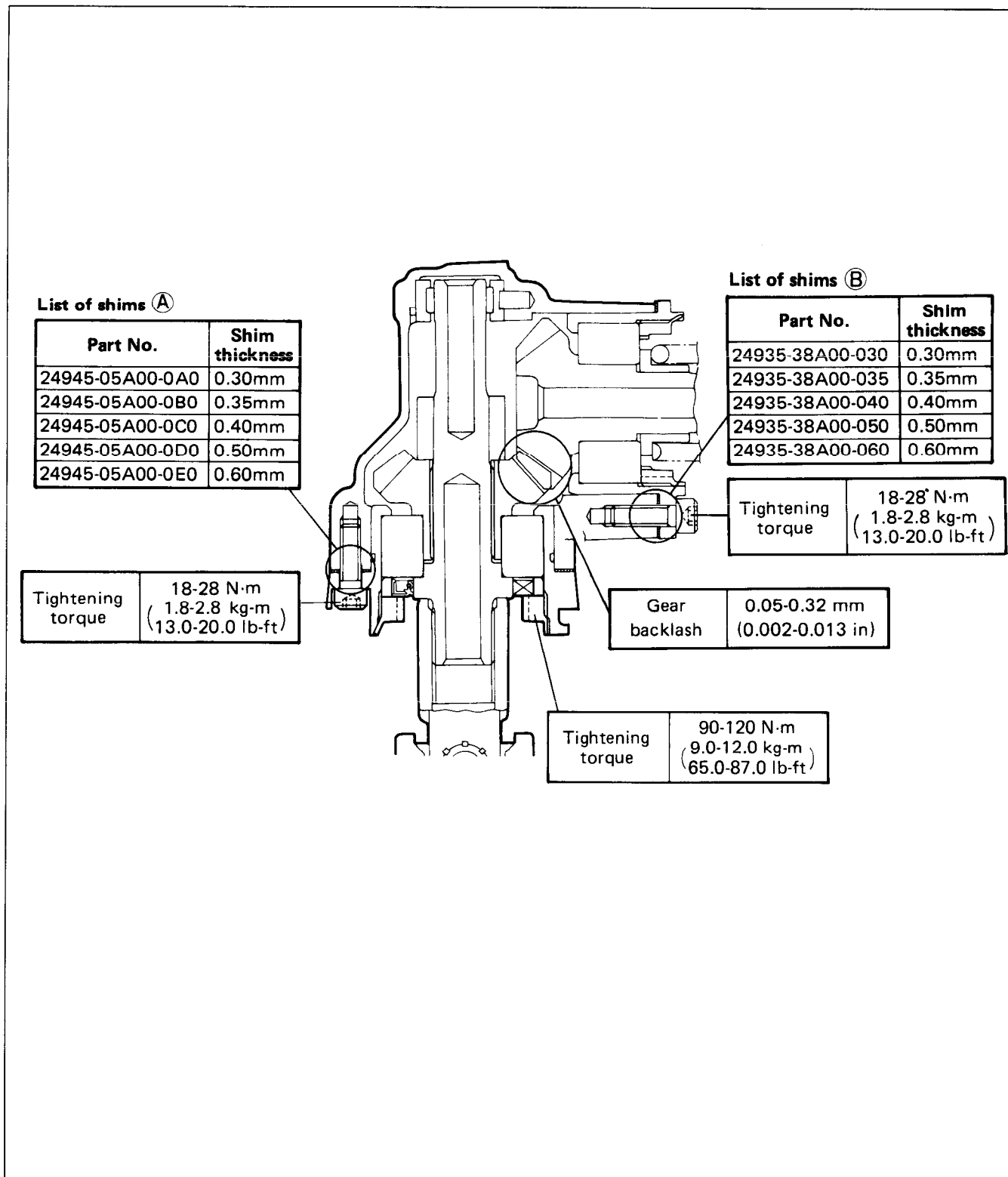
List of shims ②

Part No.	Shim thickness
24935 - 38A00 - 030	0.30 mm
24935 - 38A00 - 035	0.35 mm
24935 - 38A00 - 040	0.40 mm
24935 - 38A00 - 050	0.50 mm
24935 - 38A00 - 060	0.60 mm

FINAL ASSEMBLY AND REMOUNTING

- See pages 3-45, 3-48 and 3-49.

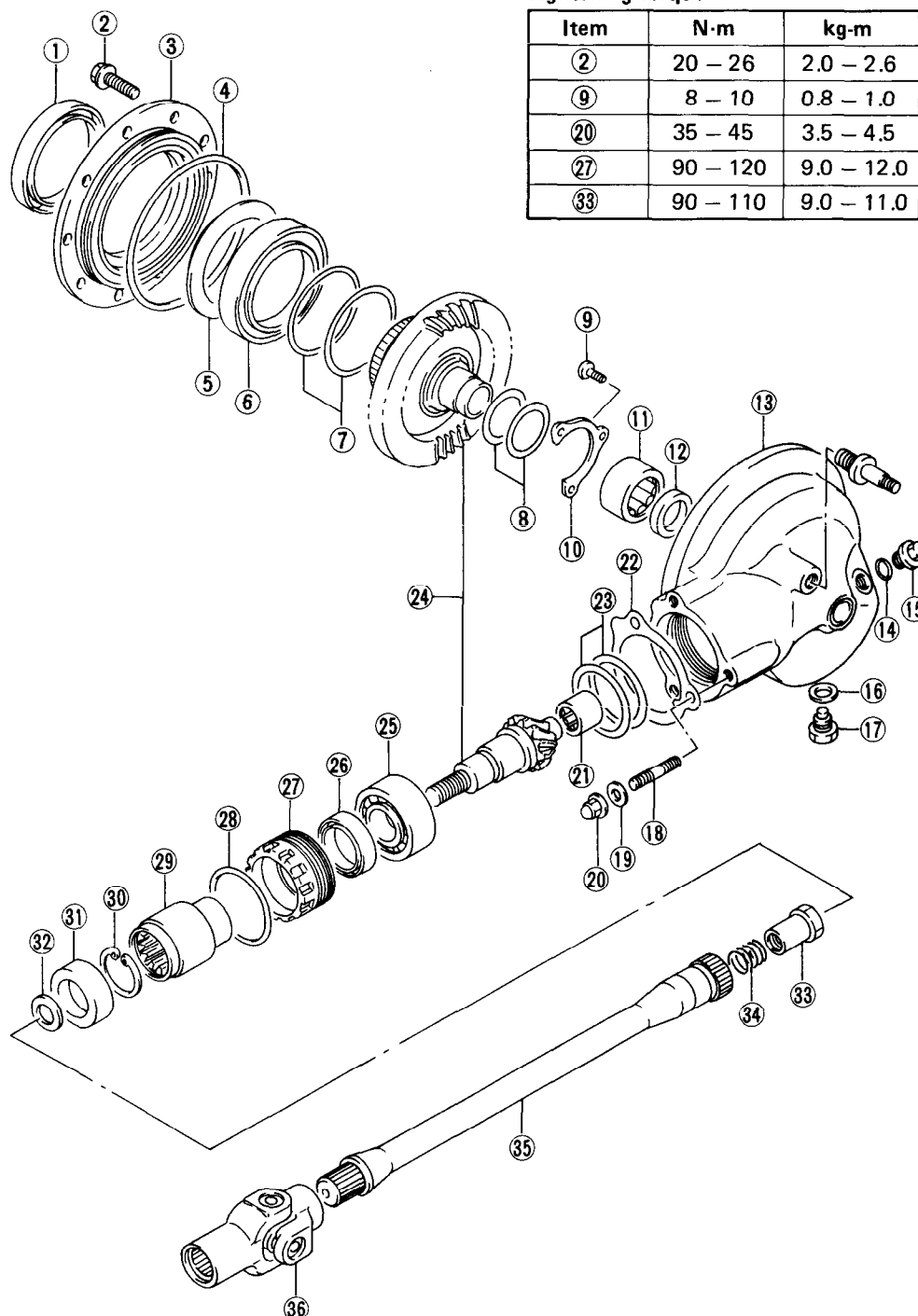
REASSEMBLY INFORMATION



FINAL BEVEL GEARS CONSTRUCTION

Tightening torque

Item	N·m	kg·m	lb·ft
②	20 – 26	2.0 – 2.6	14.5 – 19.0
⑨	8 – 10	0.8 – 1.0	6.0 – 7.0
⑳	35 – 45	3.5 – 4.5	25.5 – 32.5
㉓	90 – 120	9.0 – 12.0	65.0 – 87.0
㉖	90 – 110	9.0 – 11.0	65.0 – 79.5

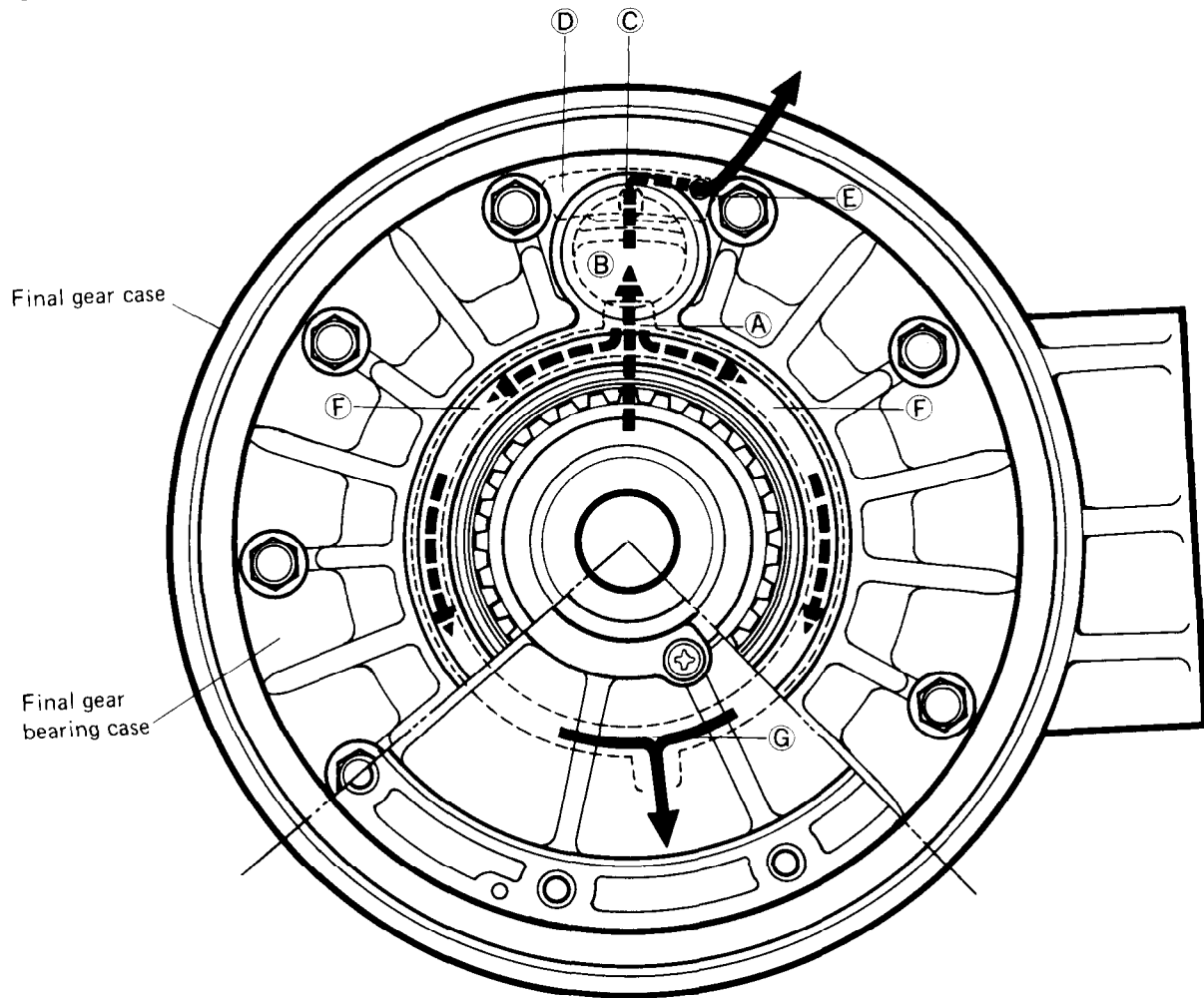


- | | | | |
|---------------------------|--------------------------|--|----------------------------|
| ① Oil seal | ⑩ Bearing retainer plate | ⑲ Lock washer | ㉓ Bearing retainer |
| ② Bolts | ⑪ Needle bearing | ⑳ Nuts | ㉔ O-ring |
| ③ Final gear bearing case | ⑫ Oil seal | ㉑ Pilot bearing | ㉕ Final drive coupling |
| ④ O-ring | ⑬ Final gear case | ㉒ Bearing retainer stopper plate (2 kinds) | ㉖ Circlip |
| ⑤ Bearing plate | ⑭ O-ring | ㉓ Shims (5 kinds) | ㉗ Oil seal |
| ⑥ Bearing | ⑮ Oil filler plug | ㉔ Final bevel gear set | ㉘ Washer |
| ⑦ Shims (4 kinds) | ⑯ Gasket | ㉕ Bearing | ㉙ Nut |
| ⑧ Shims (8 kinds) | ⑰ Oil drain plug | ㉖ Oil seal | ㉚ Spring |
| ⑨ Screws | ⑱ Stud bolts | | ㉛ Propeller shaft |
| | | | ㉜ Propeller shaft coupling |

FINAL GEAR CASE BREATHER CIRCUIT

AIR AND GEAR OIL FLOW IN FINAL GEAR CASE BREATHER CIRCUIT

Final gear case breather circuit (passage) consists of the final gear case and final gear bearing case. Air/oil mixed gas flows through the following routes.



AIR PASSAGE

When the air pressure in the final gear case becomes higher than atmospheric pressure, both air and oil flow in the following passages.

- Air flows from hole (A) to chamber (B) and passes through the hole (C) and chamber (D) to the atmosphere through the breather hole (E).

OIL PASSAGE

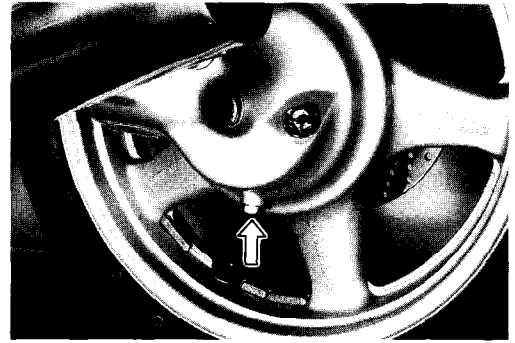
When the final gear case pressure rises abruptly or when the gear case oil level changes during cornering, the gear oil may sometime flow out into the air passage.

- In this case, the gear oil which has traveled into hole (A) goes into chamber (B), where the oil is separated from the air.
- The air flows through the hole (C) and chamber (D), and goes out through the breather hole (E).
- The gear oil, however, flows through the passage (F) and returns to the gear case from gear oil return port (G).

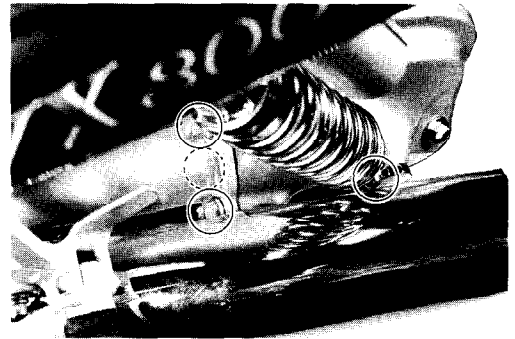
REMOVAL AND DISASSEMBLY

FINAL GEAR CASE

- Place an oil pan under the final gear case and remove the drain plug to drain out gear oil.
- Remove the rear wheel. (See page 8-26.)



- Remove the final gear case from the swingarm by removing the three nuts and shock absorber mounting nut.



PROPELLER SHAFT

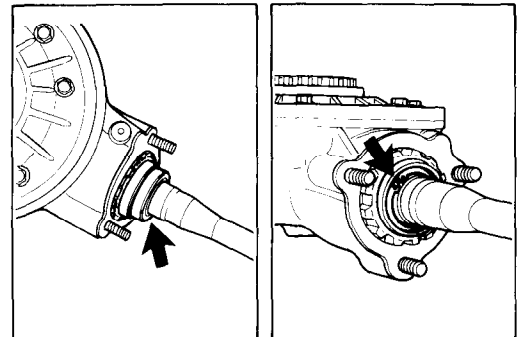
- Remove the oil seal.

CAUTION:

The removed oil seal should be replaced with a new one.

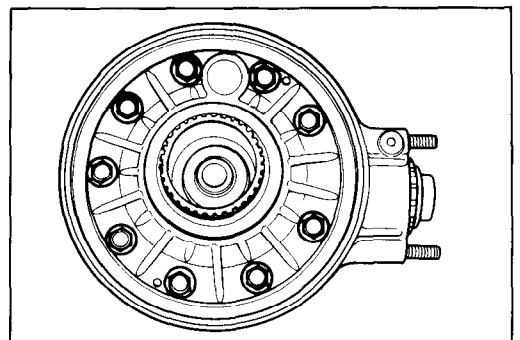
- Remove the circlip with the special tool and take off the propeller shaft and spring.

09900-06108 : Snap ring pliers

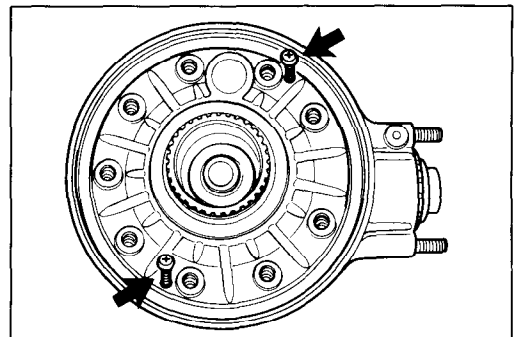


DRIVEN BEVEL GEAR

- Remove the final gear bearing case bolts.



- To remove the final gear bearing case from the final gear case, use two 5 mm screws.



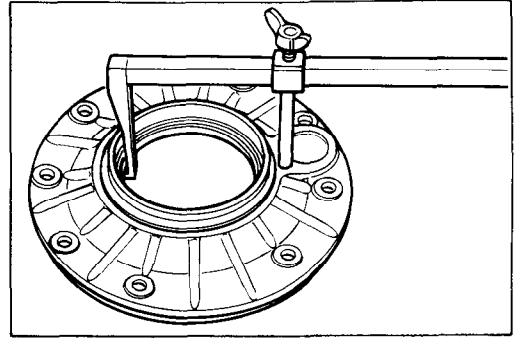
4-11 SHAFT DRIVE

- Remove the oil seal from the final gear bearing case with the special tool.

09913-50121 : Oil seal remover

CAUTION:

The removed oil seal should be replaced with a new one.

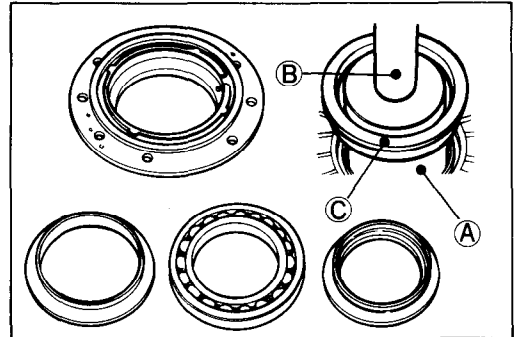


- Remove the bearing plate along with the bearing by using the special tools.

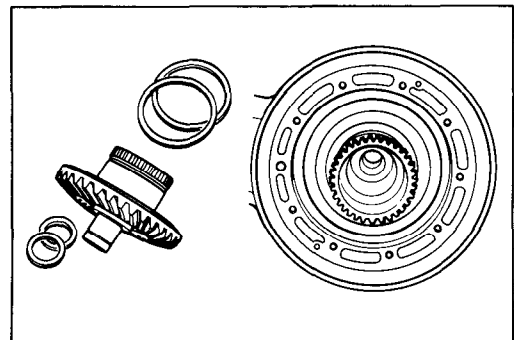
09924-74570 : Final driven gear bearing installer and remover **A**

09924-74510 : Handle **B**

09924-74520 : Oil seal installer and remover **C**



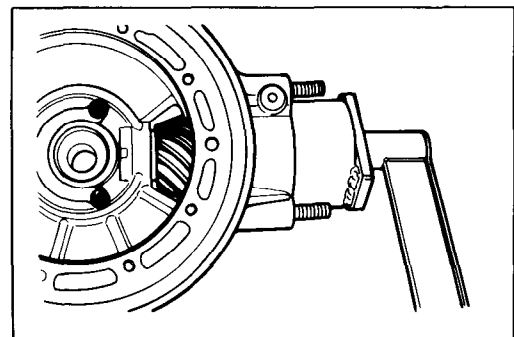
- Remove the final driven bevel gear from the final gear case.
- Remove the shims which are located at both sides of final driven bevel gear.



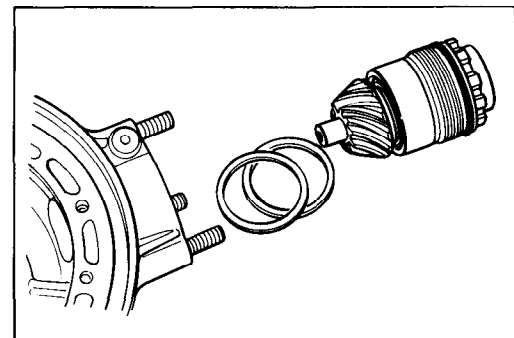
DRIVE BEVEL GEAR

- Loosen the bearing retainer with the special tool.

09924-62410 : Final drive gear bearing retainer wrench



- Remove the drive bevel gear assembly and shims.



- Remove the drive bevel gear nut with the special tools and remove the coupling and bearing retainer.

09924-62420 : 22 mm long socket wrench

09924-64510 : Final drive gear coupling holder

- | | |
|------------|--------------------|
| ① Nut | ④ Bearing retainer |
| ② Washer | ⑤ Bearing |
| ③ Coupling | ⑥ Drive bevel gear |

- Remove the bearing ⑤ from the drive bevel gear with the bearing remover.

09941-84510 : Bearing race remover

NOTE:

The removed bearing ⑤ should be replaced with a new one.

- Remove the oil seal ① and O-ring ②.

CAUTION:

The removed oil seal and O-ring should be replaced with new ones.

- Remove the bearing retainer by removing the three screws.

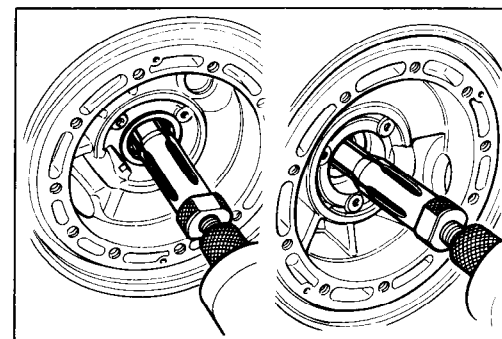
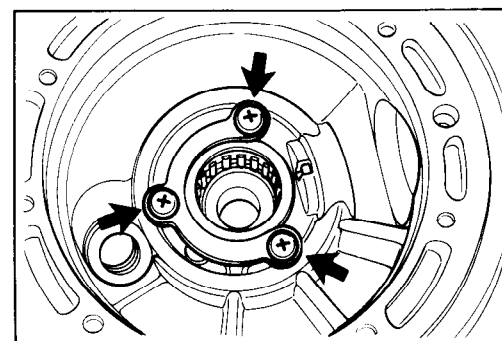
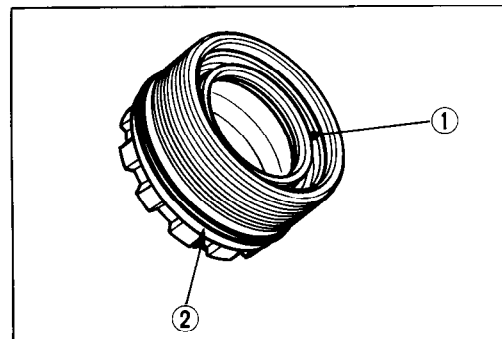
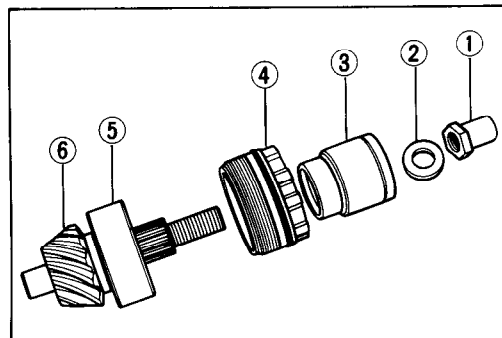
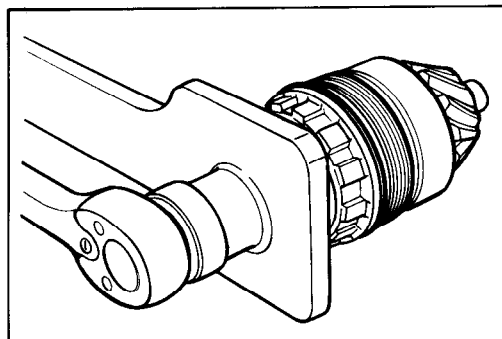
- Remove the needle roller bearing and oil seal from the final case with the special tools.

09941-64510 . Bearing and oil seal remover

09930-30102 : Sliding shaft

CAUTION:

The removed bearing and oil seal should be replaced with new ones.



4-13 SHAFT DRIVE

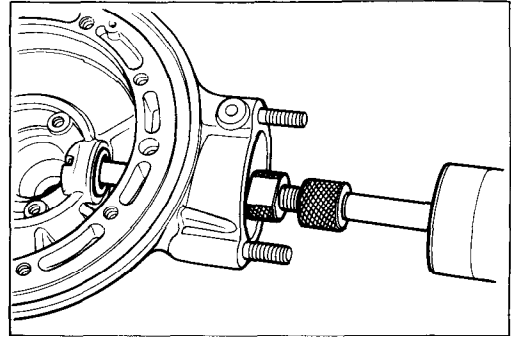
- Remove the needle roller bearing of drive bevel gear side with the special tools.

09930-30102 : Sliding shaft

09923-73210 : Bearing remover

CAUTION:

The removed bearing should be replaced with a new one.



INSPECTION

Inspect the removed parts for the following abnormalities.

- * The drive and driven bevel gears must be inspected thoroughly for excessive wear or damage. It is important that both gears be in good condition to maintain proper tooth contact.
- * Abnormal noise of bearings
- * Bearing damage or wear

REASSEMBLY

Reassemble the final bevel gears in the reverse order of disassembly, and also carry out the following steps:

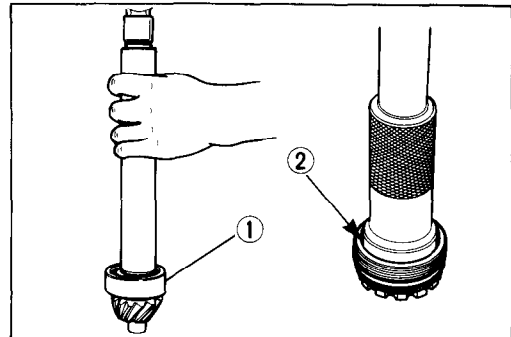
NOTE:

Before reassembly, thoroughly clean all parts in cleaning solvent.

DRIVE BEVEL GEAR

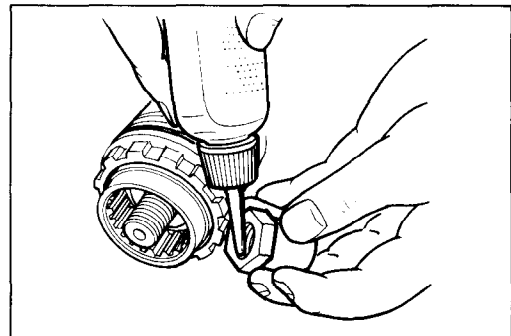
- Install the bearing ① to the drive bevel gear by using the special tool.
- Install the oil seal ② to the bearing retainer.

09941-74910 : Bearing installer



- Apply THREAD LOCK SUPER "1303" to the nut and tighten it with the specified torque by using the special tools.

99000-32030 : THREAD LOCK SUPER "1303"



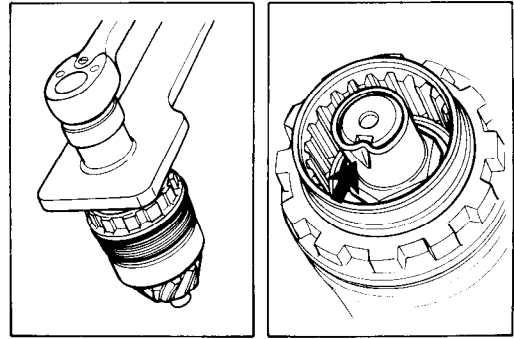
09924-62420 : 22 mm long socket wrench

09924-64510 : Final drive gear coupling holder

Tightening torque : 90 – 110 N·m

(9.0 – 11.0 kg-m, 65.0 – 79.5 lb-ft)

- Bend the collar of the nut over into the notch in the drive bevel gear shaft.



FINAL GEAR CASE AND BEARING CASE

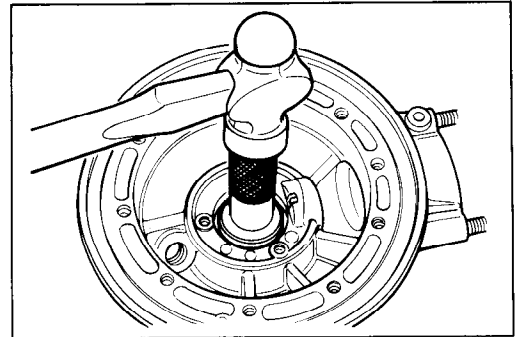
- Install the oil seal into the final gear case with the special tools.

09924-74550 : Bearing installer

09924-74510 : Handle

NOTE:

The lip of oil seal faces driven bevel gear side.



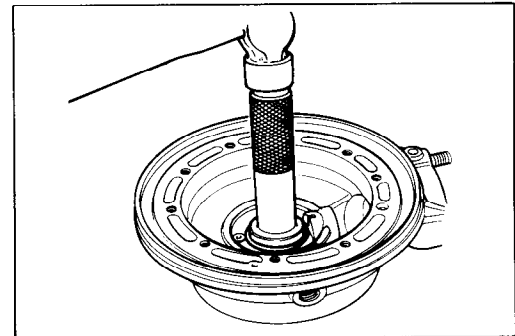
- Install the needle roller bearing into the final gear case with the special tools.

09924-74510 : Handle

09924-74550 : Bearing installer

NOTE:

The bearing case has a stamped mark on its one end, which must face inside.

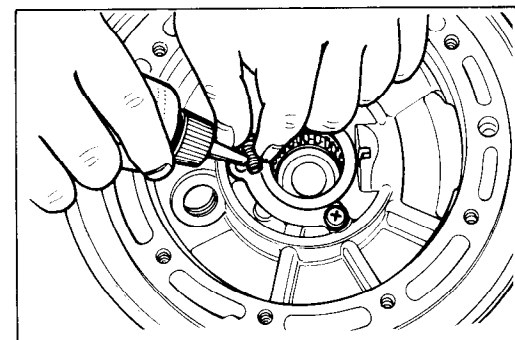


- Install the bearing retainer. Apply THREAD LOCK SUPER "1303" to the screws and tighten them to the specified torque.

99000-32030 : THREAD LOCK SUPER "1303"

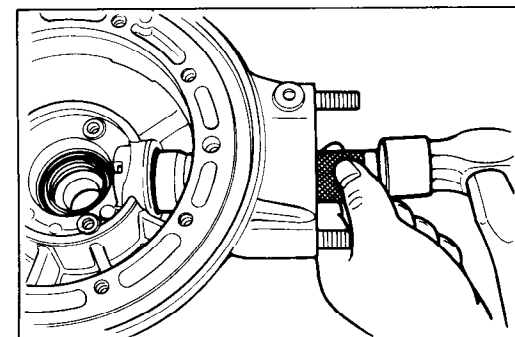
Tightening torque : 8 – 10 N·m

(0.8 – 1.0 kg-m, 6.0 – 7.0 lb-ft)



- Install the needle roller bearing for the final drive bevel gear into the final gear case with the special tool.

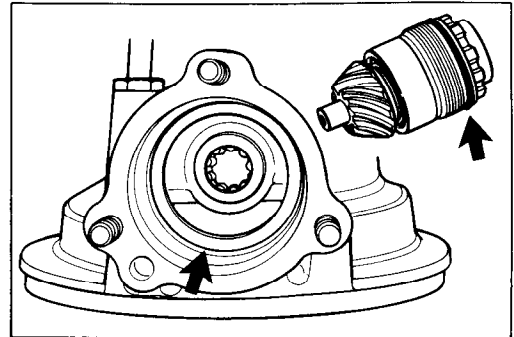
09913-75820 : Bearing installer



- Install the removed shims and drive bevel gear assembly to the final case.

NOTE:

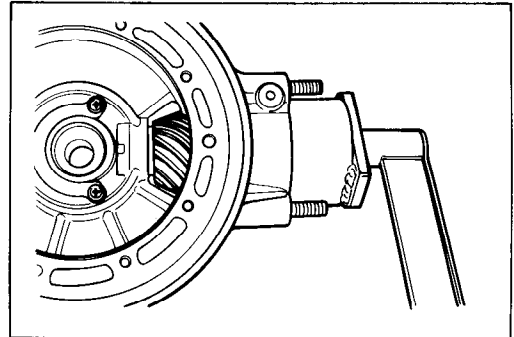
Do not install the O-ring at this point. O-ring is installed after backlash and tooth contact are correct.



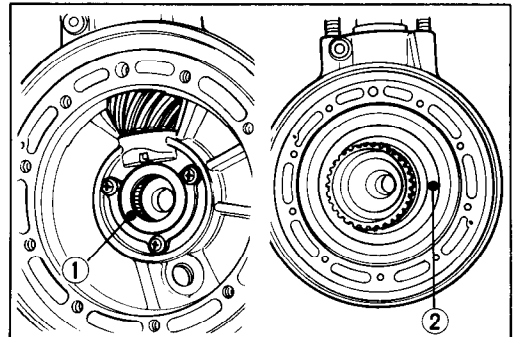
- Tighten the bearing retainer to the specified torque with the special tool.

09924-62410 : Final drive gear bearing retainer wrench

**Tightening torque : 90 – 120 N·m
(9.0 – 12.0 kg-m, 65.0 – 87.0 lb-ft)**



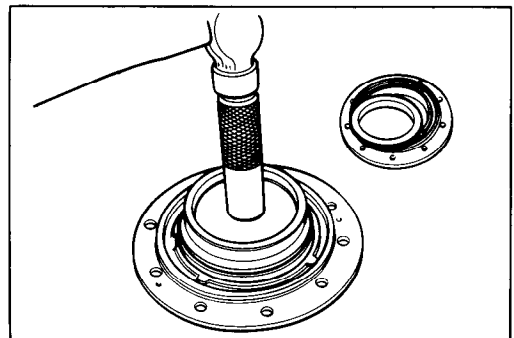
- Install the driven bevel gear shims, ① and ②, removed during disassembly on the needle bearing and driven bevel gear.



- After installing the bearing plate into the final gear bearing case, install the bearing with the special tools.

09924-74510 : Handle

09924-74520 : Bearing installer



- Install a new oil seal into the final gear bearing case with the special tools.

09924-74510 : Handle

09924-74520 : Bearing installer

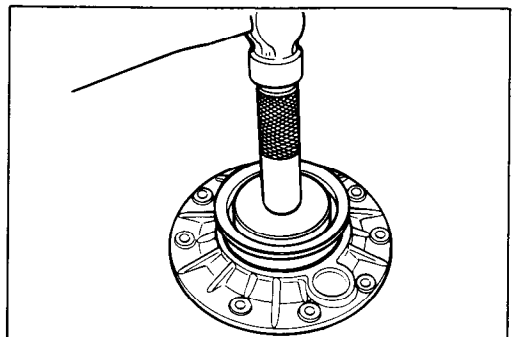
- Apply grease to the lip of oil seal.

(For U.S.A. model)

99000-25030 : SUZUKI SUPER GREASE "A"

(For the other models)

99000-25010 : SUZUKI SUPER GREASE "A"



- Place the plastigauge on the final driven bevel gear shim.

09900-22302 : Plastigauge (Not available in U.S.A.)

- Tighten the bearing case bolts to the specified torque.

Tightening torque : 20 – 26 N·m
(2.0 – 2.6 kg-m, 14.5 – 19.0 lb-ft)

NOTE:

Do not rotate the final driven bevel gear when plastigauge is in place.

Do not install the bearing case O-ring at this point. O-ring is installed after backlash and tooth contact are correct.

“FINAL GEAR SHIM ADJUSTMENT” is necessary
(See pages 4-16 to 4-18).

FINAL GEAR SHIM ADJUSTMENT

FINAL GEAR BEARING CASE SHIM CLEARANCE

- Remove the final gear bearing case and measure the clearance between the shims and bearing with the compressed plastigauge. If it is not within the specification, the shims must be changed.

Final gear bearing case shim clearance : 0.10 mm
(0.004 in)

09900-22302 : Plastigauge (Not available in U.S.A.)

List of shims [Ⓐ] (Refer to page 4-21)

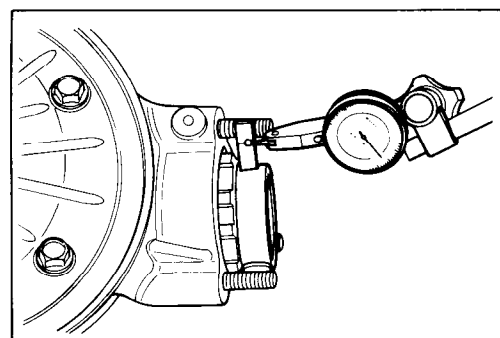
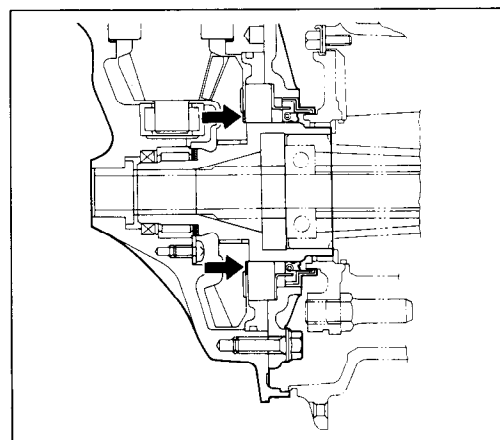
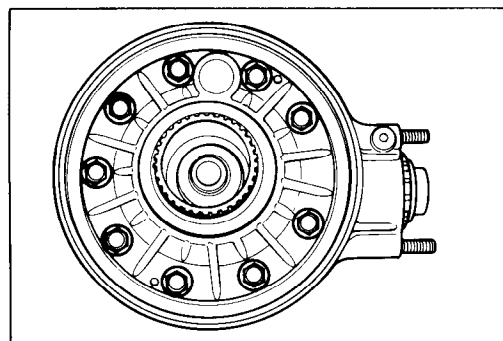
Part No.	Shim thickness
27327-34200	0.35 mm
27327-34210	0.40 mm
27327-34220	0.50 mm
27327-34230	0.60 mm

BACKLASH

- Install the backlash measuring tool on the drive bevel gear coupling, and set-up a dial gauge as shown in the illustration.

09924-34510 : Backlash measuring tool (27 – 50 mm)

Final gear backlash : 0.03 – 0.64 mm
(0.001 – 0.025 in)

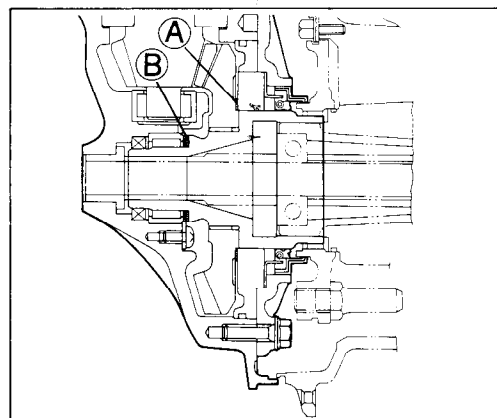


- Adjust the dial gauge so that it touches the backlash measuring tool arm at the mark; hold the final driven bevel gear securely, and turn the final drive bevel gear coupling slightly in each direction, reading the total backlash on the dial gauge.

NOTE:

If the backlash is not within specification, adjust the shim thickness as follows:

- Remove shims from final gear bearing case and final gear case, and measure total thickness.
- In order not to change the clearance between final driven bevel gear and bearing, the total thickness of the shims installed after a change is made must equal the original total thickness of shims.
- If backlash is too large:
 - Install a thinner shim pack ② between final driven bevel gear and final gear case.
 - Increase thickness of shims ① between final driven bevel gear and bearing by an amount equal to decrease above.
- If backlash is too small:
 - Install a thicker shim pack ② between final driven bevel gear and final gear case.
 - Decrease thickness of shims ① between final driven gear and bearing by an amount equal to increase above.



List of shims ② (Refer to page 4-21)

Part No.	Shim thickness
27326-34201	1.05 mm
27326-34211	1.10 mm
27326-34221	1.20 mm
27326-34231	1.25 mm
27326-34241	1.35 mm
27326-34201-140	1.40 mm
27326-34201-145	1.45 mm
27326-34201-150	1.50 mm

List of shims ① (Refer to page 4-21)

Part No.	Shim thickness
27327-34200	0.35 mm
27327-34210	0.40 mm
27327-34220	0.50 mm
27327-34230	0.60 mm

EXAMPLE:

② Final gear to case shims;

$$1.35 \text{ mm} + 1.05 \text{ mm} = 2.40 \text{ mm}$$

① Final gear to bearing shims;

$$0.50 \text{ mm} + 0.40 \text{ mm} = 0.90 \text{ mm}$$

$$\text{Original total measurement} = 3.30 \text{ mm}$$

Backlash too large:

② Final gear to case shims;

$$1.25 \text{ mm} + 1.10 \text{ mm} = 2.35 \text{ mm}$$

① Final gear to bearing shims;

$$0.60 \text{ mm} + 0.35 \text{ mm} = 0.95 \text{ mm}$$

$$\text{Total thickness} = 3.30 \text{ mm}$$

Backlash too small:

② Final gear to case shims;

$$1.35 \text{ mm} + 1.10 \text{ mm} = 2.45 \text{ mm}$$

① Final gear to bearing shims;

$$0.50 \text{ mm} + 0.35 \text{ mm} = 0.85 \text{ mm}$$

$$\text{Total thickness} = 3.30 \text{ mm}$$

TOOTH CONTACT

- After backlash adjustment is carried out, the tooth contact must be checked.
- Remove the 9 bolts from the final gear bearing case, and remove the case, using the two 5 mm screws (see page 4-10). Do not misplace the shims. Remove the final driven bevel gear.
- Clean and de-grease several teeth on the final driven bevel gear. Coat these teeth with machinist's dye or paste, preferably of a light color.
- Re-install the final driven bevel gear with shims in place, positioning the coated teeth so that they are centered on the final drive bevel gear.
- Re-install the final gear bearing case and tighten the bolts to the specified torque.

Final gear bearing case bolt

Tightening torque : 20 – 26 N·m

(2.0 – 2.6 kg-m, 14.5 – 19.0 lb-ft)

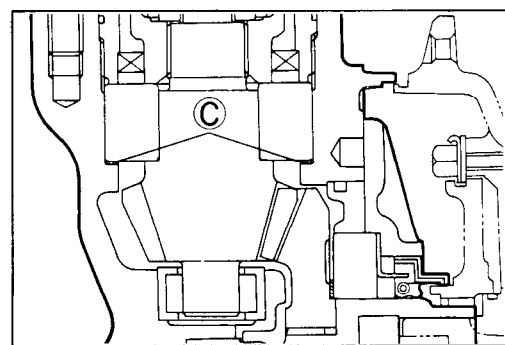
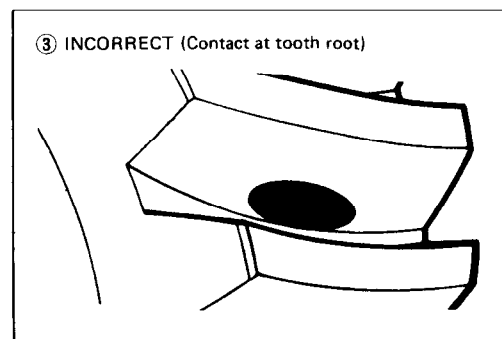
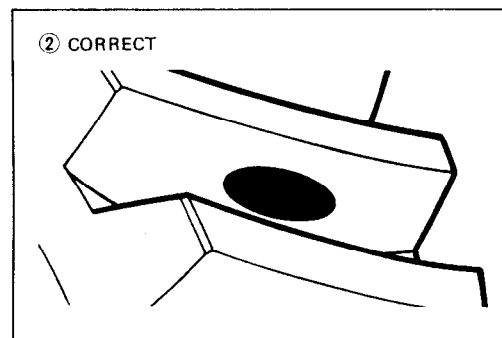
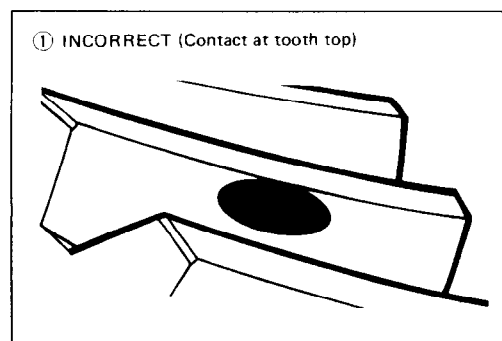
- Using a long socket wrench and handle on the final drive bevel gear coupling nut, rotate the final drive bevel gear several turns in each direction, while loading the final driven bevel gear. This will provide a contact pattern on the coated teeth of the driven bevel gear.
- Remove the final gear bearing case and final driven bevel gear, and inspect the coated teeth of the driven bevel gear. The contact patch should be as shown at right:
- If the tooth contact pattern is correct, as shown in Fig. ②, go to the Final Assembly sub-section.
- If the tooth contact pattern is incorrect, as shown in Fig. ①, a thinner shim is needed between the final drive bevel gear bearing and final gear case.
- If the tooth contact pattern is incorrect, as shown in Fig. ③, a thicker shim is needed between the final drive bevel gear bearing and final gear case.
- If the tooth contact pattern is incorrect for either reason, the appropriate shim must be installed, and the tooth contact pattern rechecked by repeating the tooth coating procedure above.

NOTE:

If it is necessary to adjust the shim thickness between final drive bevel gear bearing and final gear case, the final gear backlash may change, and should be re-checked according to the procedure outlined under the Backlash Measurement sub-section. Both adjustments may be needed until both backlash and tooth contact are correct.

CAUTION:

Refer to page 4-21.

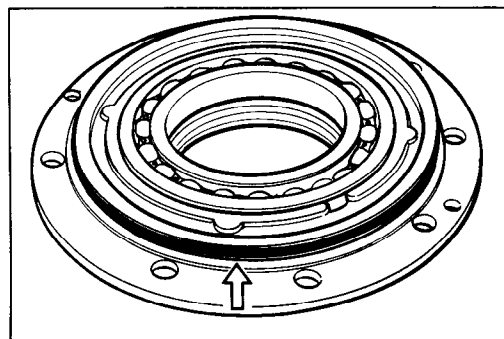
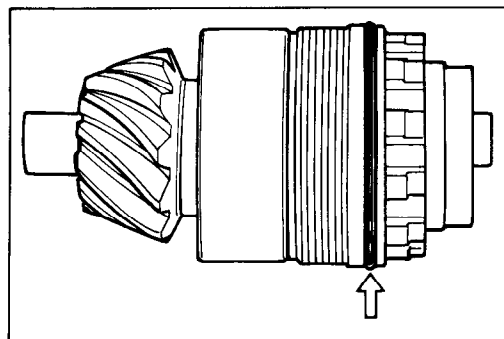


List of shims © (Refer to page 4-21)

Part No.	Shim thickness
27445 - 38A00 - 030	0.30 mm
27445 - 38A00 - 035	0.35 mm
27445 - 38A00 - 040	0.40 mm
27445 - 38A00 - 050	0.50 mm
27445 - 38A00 - 060	0.60 mm

FINAL ASSEMBLY AND REMOUNTING

- After adjusting the backlash, tooth contact and clearance between the bearing case and the bearing, remove the final gear bearing case and final drive bevel gear assembly from the final gear case.
- Clean off any machinist's dye or paste from the gear teeth, and lubricate the teeth with Hypoid gear oil.
- Install the new O-rings to the final gear bearing case and final drive bevel gear bearing retainer. Coat the O-rings with grease.
- Install the final drive bevel gear assembly into the final gear case.

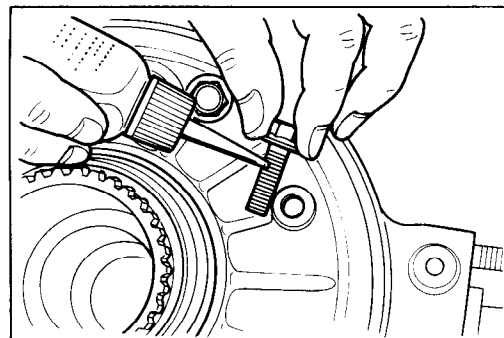


- Install the final gear bearing case to the final gear case and apply a small quantity of THREAD LOCK "1342" to the 9 bolts and tighten them to the specified torque.

99000-32050 : THREAD LOCK "1342"

Tightening torque : 20 – 26 N·m

(2.0 – 2.6 kg-m, 14.5 – 19.0 lb-ft)



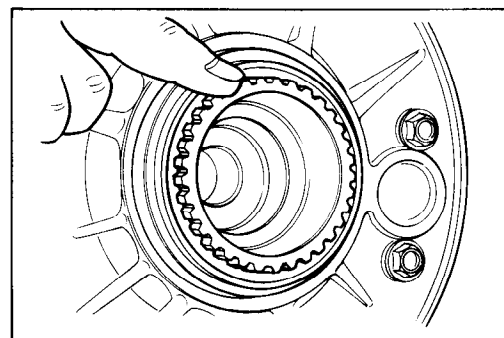
- Apply grease to the final driven bevel gear coupling.

(For U.S.A. model)

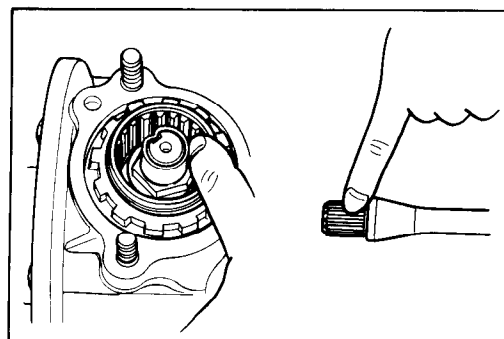
99000-25030 : SUZUKI SUPER GREASE "A"

(For the other models)

99000-25010 : SUZUKI SUPER GREASE "A"



- Apply Lithium Base Molybdenum grease (NLGI # 2) to the propeller shaft splines and universal joint coupling.



- Install the spring, propeller shaft and circlip.
- Install the bearing retainer stopper plate ①.

CAUTION:

When installing the plate ①, align the lug ② of plate to the bearing retainer stopper groove.

NOTE:

There are two kinds of plate.

- Install the new oil seal.
- Apply SUZUKI BOND NO. 1207B/NO. 1215 to the mating surface of swingarm and final gear case.

(For U.S.A. model)

99104-31140 : SUZUKI BOND NO. 1207B

(For the other models)

99000-31110 : SUZUKI BOND NO. 1215

- Tighten the three nuts ③ and shock absorber mounting nut ④ to the specified torque.

Tightening torque ③ : 35 – 45 N·m

(3.5 – 4.5 kg-m, 25.5 – 32.5 lb-ft)

④ : 22 – 35 N·m

(2.2 – 3.5 kg-m, 16.0 – 25.5 lb-ft)

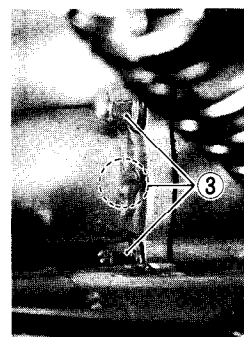
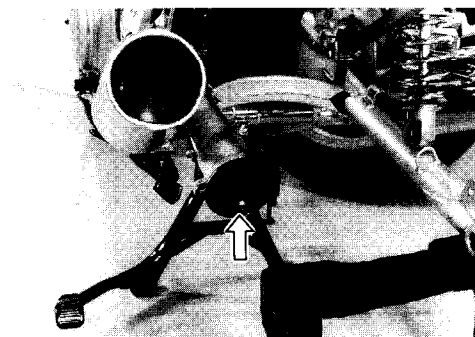
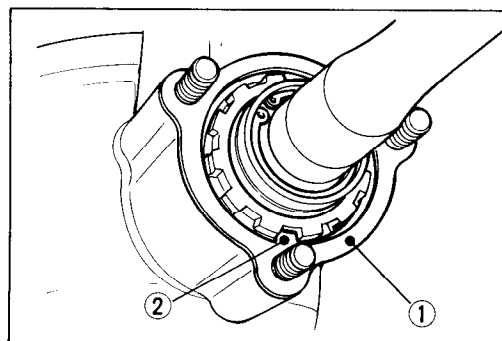
NOTE:

After remounting the final gear case, the following service is necessary.

* Fill the final gear case with Hypoid gear oil.

Specified capacity : 200 – 220 ml

(6.8/7.0 – 7.4/7.7 US/Imp oz)



REASSEMBLY INFORMATION

Tightening torque 35-45 N·m
(3.5-4.5 kg-m)
(25.5-32.5 lb-ft)

Lithium Base Molybdenum grease (NLGI # 2)

SUZUKI Bond No. 1207B/No. 1215

List of shims (C)

Part No.	Shim thickness
27445-38A00-030	0.30mm
27445-38A00-035	0.35mm
27445-38A00-040	0.40mm
27445-38A00-050	0.50mm
27445-38A00-060	0.60mm

List of shims (B)

Part No.	Shim thickness
27326-34201	1.05 mm
27326-34211	1.10 mm
27326-34221	1.20 mm
27326-34231	1.25 mm
27326-34241	1.35 mm
27326-34201-140	1.40 mm
27326-34201-145	1.45 mm
27326-34201-150	1.50 mm

Tightening torque 8-10 N·m
(0.8-1.0 kg-m)
(6.0-7.0 lb-ft)
Thread Lock Super "1303"

List of shims (A)

Part No.	Shim thickness
27327-34200	0.35mm
27327-34210	0.40mm
27327-34220	0.50mm
27327-34230	0.60mm
Shim clearance	0.10mm (0.004in)

Tightening torque 90-110 N·m
(9.0-11.0 kg-m)
(65.0-79.5 lb-ft)
Thread Lock Super "1303"

Tightening torque 90-120 N·m
(9.0-12.0 kg-m)
(65.0-87.0 lb-ft)

Gear backlash 0.03-0.64 mm
(0.001-0.025 in)

Tightening torque 20-26 N·m
(2.0-2.6 kg-m)
(14.5-19.0 lb-ft)
Thread Lock "1342"

CAUTION:
After the tooth contact adjustment has been performed, the backlash must be re-checked, because it may have changed. Refer to the backlash check sub-section, and readjust until tooth contact and backlash are both within the specifications. If you can not maintain the correct tooth contact when adjusting backlash, both the driven and drive bevel gears should be replaced.