
10. The Final Transmission Assembly

Topic	Page	Topic	Page
General Information	10-2	Replacing the Bearing	10-5
Dismantling the Final	10-3	(on the side of the crankcase)	
Transmission Assembly		Assembling the Final Gear Set	10-5
Replacing Bearing	10-4		
(on the side of the			
transmission gearbox cover)			

General Information

- Designated oil: SAE 90# Gear Oil
- Filling 0.12L 4 ounces
- Changing 0.10L 3.5 ounces



- Bearing pulling set 12mm
- Bearing pulling set 15mm
- Sleeve shaft for assembling the crankshaft
- Sleeve lever for assembling the crankshaft



- Bearing outer race driver 3740mm
- Bearing outer race driver 3235mm
- Guide lever for the bearing driver 17mm
- Guide lever for the bearing driver 15mm
- Guide lever for the bearing driver 12mm
- Bearing driver

Troubleshooting

The scooter doesn't run after the engine is started

- The transmission gear failed
- The driving belt is worn or broken
- The clutch failed

Developing abnormal noise when it runs

- The gear is worn, burnt or has damaged teeth
- The bearing is worn and getting loose

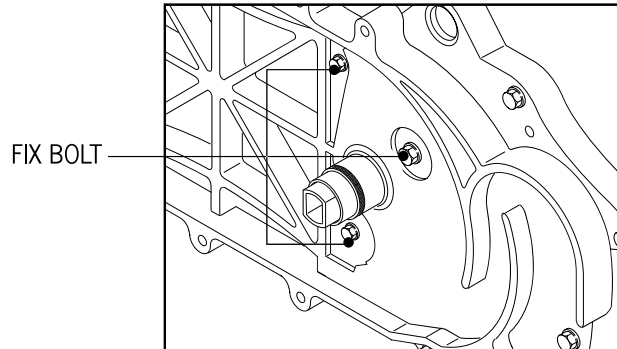
Oil leakage

- Too much oil
 - The oil seal is broken
-

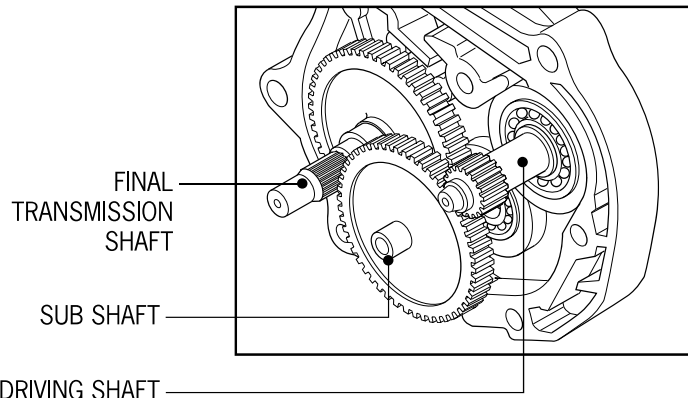
10. The Final Transmission Assembly

Dismantling the final transmission assembly

1. Remove the rear brake cable.
2. Remove the rear wheel (refer to 13-3).
3. Remove the left crankcase cover (refer to 9-2).
4. Remove the driven pulley of the clutch (refer to 9-5).

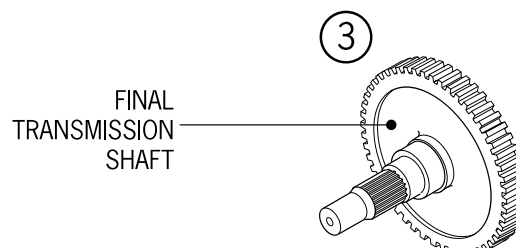
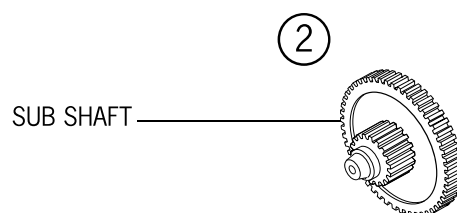


5. Drain the oil out of the final transmission.
6. Remove the bolts of the final transmission gearbox.
7. Remove the transmission gearbox cover.
8. Remove the gasket and the locating pin.



Detach the final transmission gearbox cover

1. Check the final transmission assembly.
2. Check if the sub shaft gear is worn or damaged.
3. Check if the final transmission gear is burnt or damaged.



10. The Final Transmission Assembly

4. Check if the bearing in the left crankcase and the oil seal are worn or damaged.

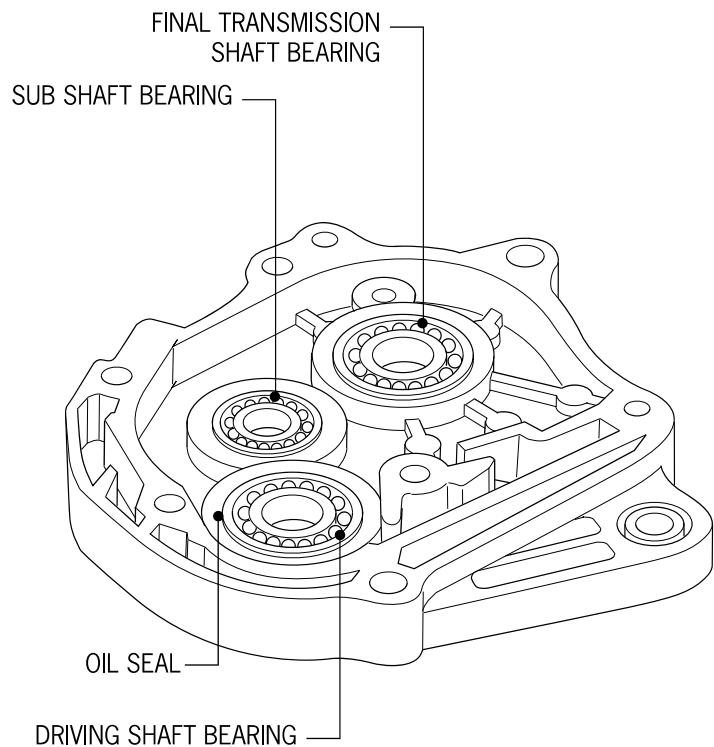
5. Check if the driving shaft (the main clutch shaft) and the gear are worn or damaged.

6. Check if the oil seal in the bearing of the transmission gearbox cover and that of the bearing of the final gear shaft are worn or have failed.



Attention:

Don't dismantle the final transmission gearbox, except that some parts have to be replaced. While replacing the driving shaft, the oil seal must be replaced by new ones.



Replacing Bearing (on the side of the transmission gearbox cover)

1. Use a bearing puller to remove the bearing in the final transmission gearbox.

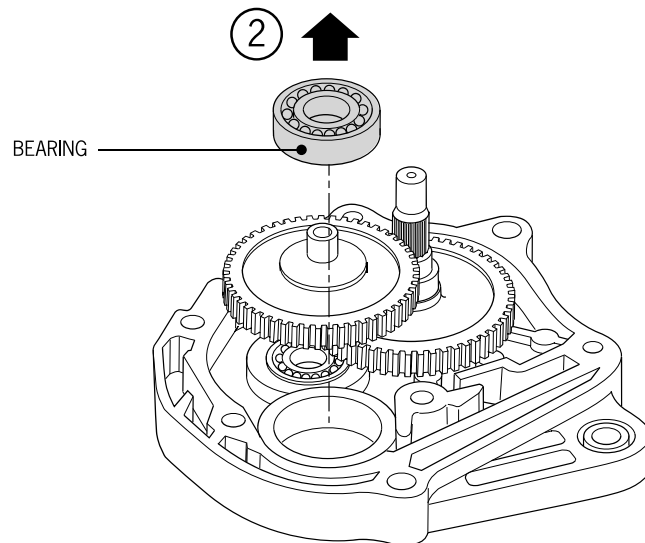
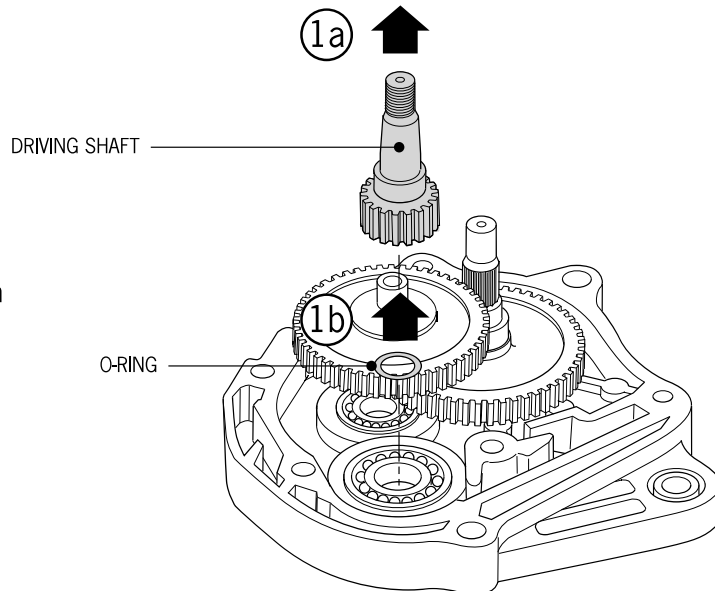
2. Remove the oil seal on the final transmission shaft.

3. Drive in the new bearing to the final transmission cover.

10. The Final Transmission Assembly

Replacing the Bearing (on the side of the crankcase)

1. Remove the driving shaft (the clutch main shaft). Then remove the oil seal of the shaft.
2. Use a bearing puller to remove the bearing in the final transmission gearbox.
3. Drive the new bearing into the final transmission gearbox. Install the new oil seal for the drive shaft.



Assembling the Final Gear Set

1. First, install the drive shaft into the final gearbox. Then install the final transmission gear shaft (output shaft) to the final gearbox.

10. The Final Transmission Assembly

3. Attach the sub shaft and the washer to the final transmission gearbox. Install the resin washer to the sub shaft; install the locating pin and the new gasket.

4. Put on the final gearbox cover.

5. Tighten the bolts of the final gearbox cover.

6. Assemble the clutch/driving pulley disk (refer to 9-8).

7. After assembling, fill the gear box with 90w gear oil (refer to 3-7).

Designated gear oil: SAE 90#

Volume of the gearbox:

Filling: 0.12L 4 ounces

Changing: 0.10L 3.5 ounces

8. Screw up the oil screw and tighten it.

Torque: 1.0-1.4kg/m 8-10ft lbs

9. Start the engine to check if there is oil leakage.

10. Check the oil level. Replenish it with the designated gear oil when the oil is not sufficient (through the oil checking hole).

