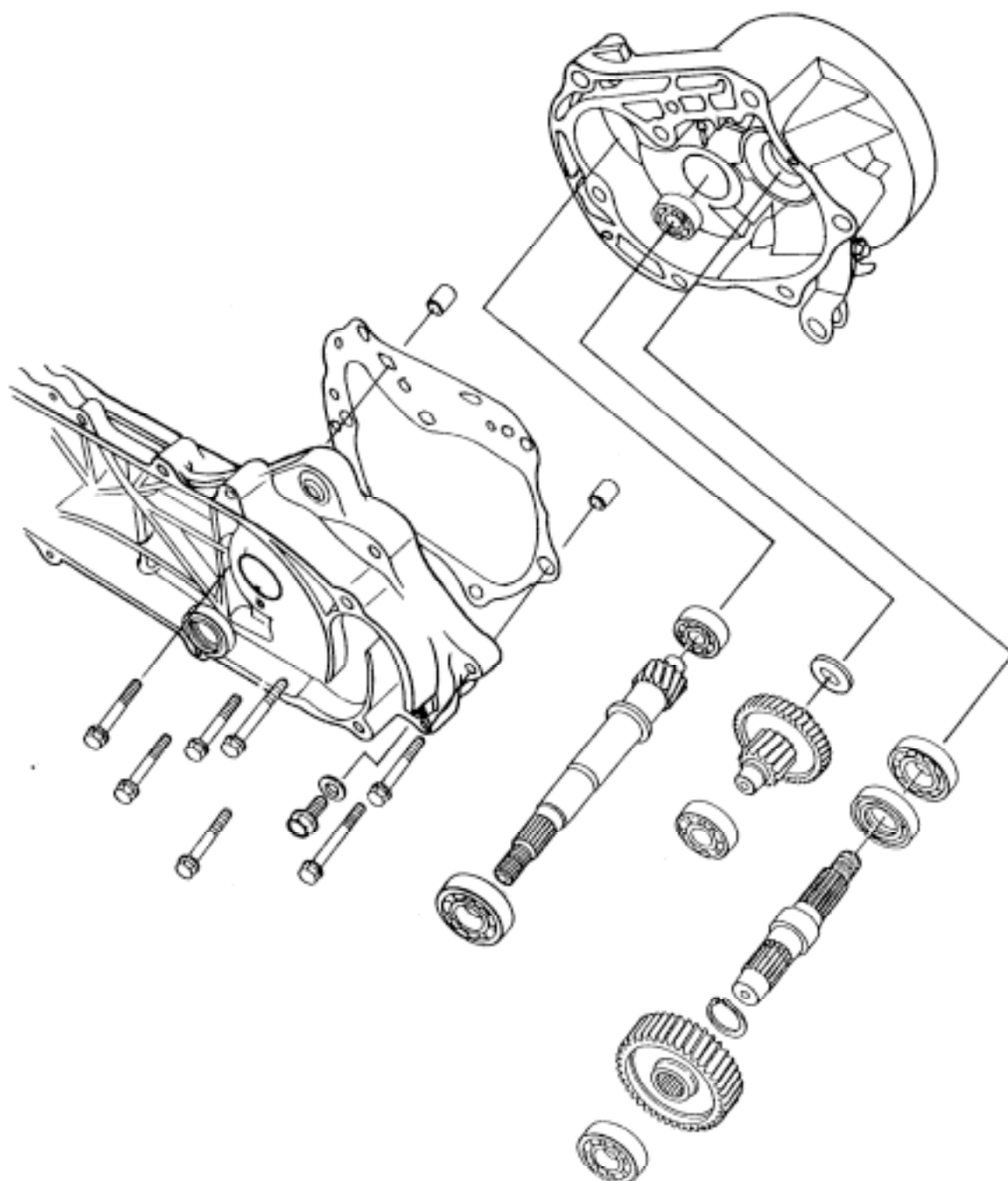


# 10. FINAL REDUCTION



**10**

## **10. FINAL REDUCTION**

SERVICE INFORMATION .....	10-1	FINAL REDUCTION INSPECTION.....	10-2
TROUBLESHOOTING .....	10-1	BEARING REPLACEMENT .....	10-3
FINAL REDUCTION DISASSEMBLY....	10-2	FINAL REDUCTION ASSEMBLY .....	10-4

### **SERVICE INFORMATION**

#### **SPECIFICATIONS**

Specified Oil: GEAR OIL SAE 90#

Oil Capacity:           At disassembly : 0.11 liter  
                              At change           : 0.10 liter

#### **SPECIAL TOOLS**

Bearing puller, 10,12,15,18mm

### **TROUBLESHOOTING**

#### **Engine starts but motorcycle won't move**

- Damaged transmission
- Seized or burnt transmission
- Faulty drive belt
- Faulty clutch

#### **Abnormal noise**

- Worn, seized or chipped gears
- Worn bearing

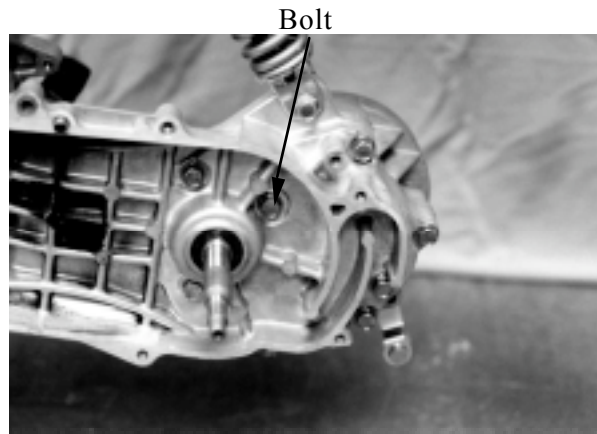
#### **Oil leaks**

- Oil level too high
- Worn or damaged oil seal

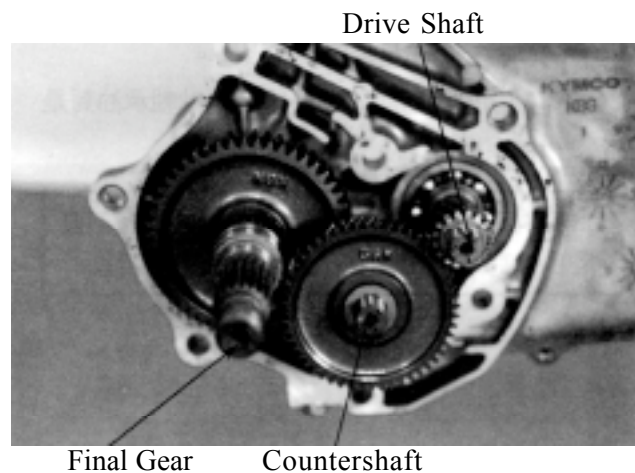
# 10. FINAL REDUCTION

## FINAL REDUCTION DISASSEMBLY

Remove the rear brake cable. (⇒13-3)  
 Remove the rear wheel. (⇒13-2)  
 Remove the left crankcase cover. (⇒9-2)  
 Remove the clutch/driven pulley. (⇒9-10)  
 Drain the transmission gear oil into a clean container.  
 Remove the transmission case cover attaching bolts.  
 Remove the transmission case cover.  
 Remove the gasket and dowel pins.

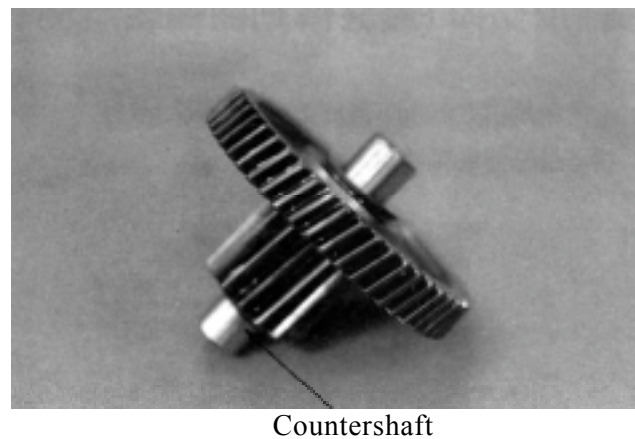


Remove the final gear and countershaft.

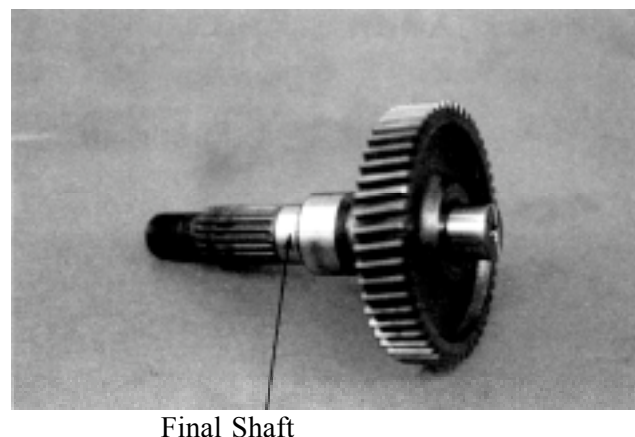


## FINAL REDUCTION INSPECTION

Inspect the countershaft and gear for wear or damage.



Inspect the final gear and final shaft for wear, damage or seizure.

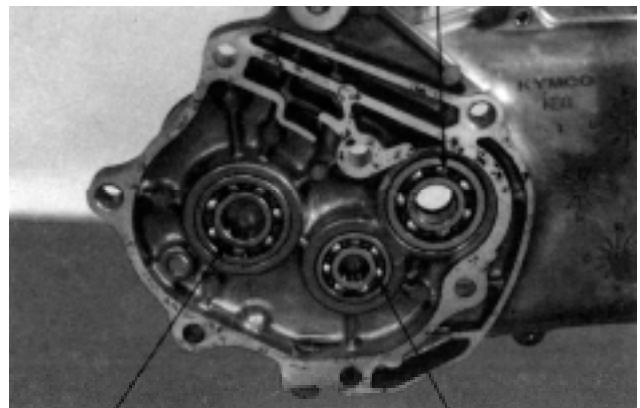


## 10. FINAL REDUCTION

**FILLY LX 50**

Check the left crankcase bearings for excessive play and inspect the oil seal for wear or damage.

Drive Shaft Bearing



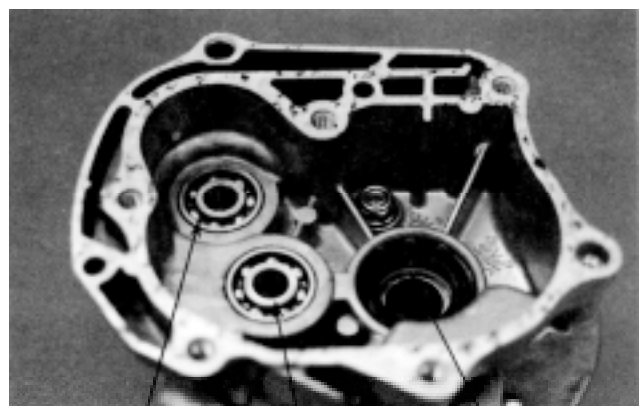
Final Shaft Bearing

Countershaft Bearing

Inspect the drive shaft and gear for wear or damage.  
Check the transmission case cover bearings for excessive play and inspect the final shaft bearing oil seal for wear or damage.

\*

Do not remove the transmission case cover except for necessary part replacement. When replacing the drive shaft, also replace the bearing and oil seal.



Countershaft Bearing Drive Shaft Bearing Oil Seal

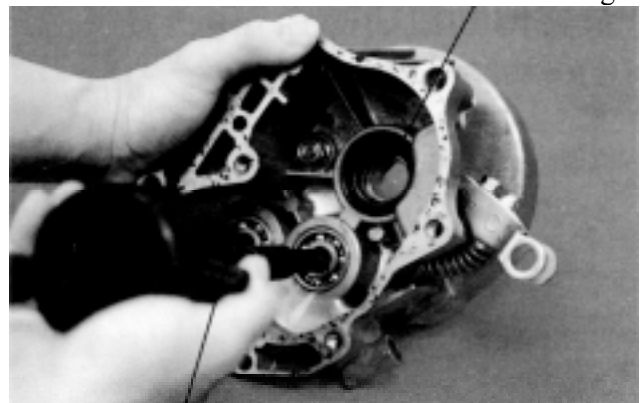
Final Shaft Bearing

### BEARING REPLACEMENT (TRANSMISSION CASE COVER)

Remove the transmission case cover bearings using a bearing puller.  
Remove the final shaft oil seal.

Specia

Bearing Puller



Bearing Puller

Drive new bearings into the transmission case cover.



Outer Driver, 32x35mm

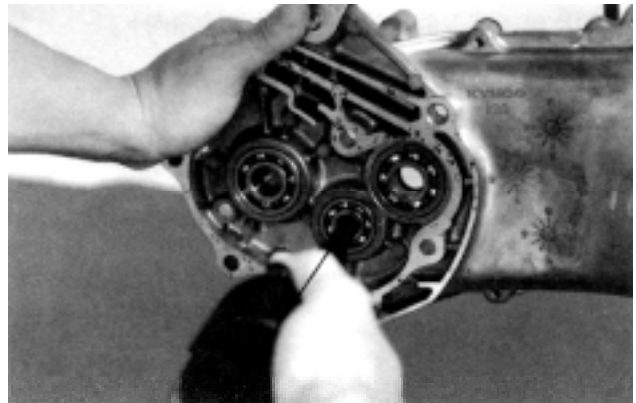
## 10. FINAL REDUCTION

### BEARING REPLACEMENT (LEFT CRANKCASE)

Remove the drive shaft.  
Remove the drive shaft oil seal.  
Remove the left crankcase bearings using a bearing puller.

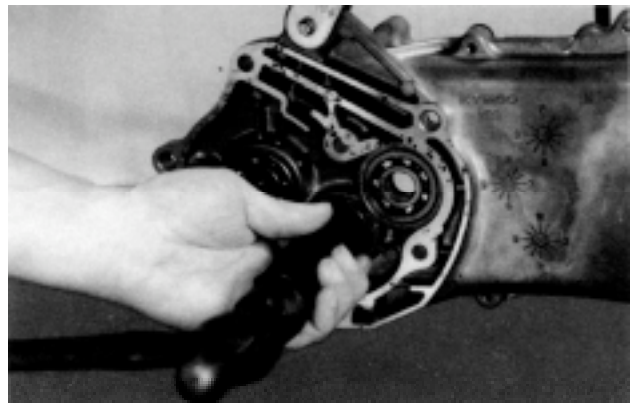
Specia

Bearing Puller



Bearing Puller, 12mm

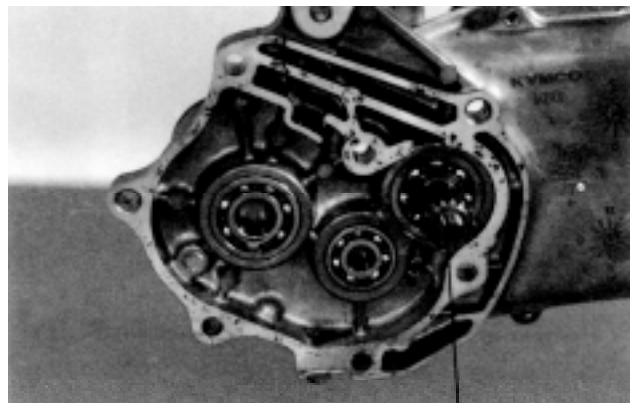
Drive new bearings into the left crankcase.  
Install a new drive shaft oil seal.



Pilot

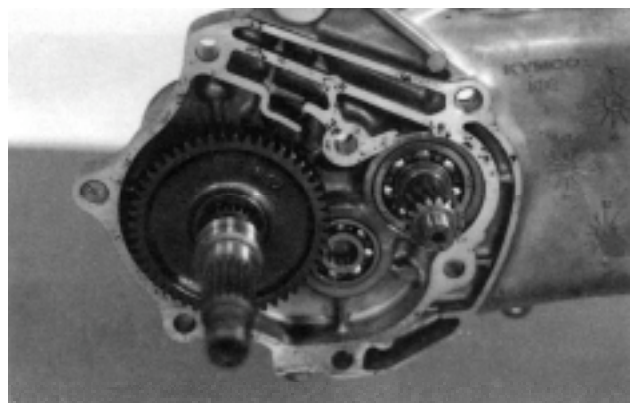
### FINAL REDUCTION ASSEMBLY

Install the drive shaft into the left crankcase.



Drive Shaft

Install the final gear and final shaft into the left crankcase.





## 10. FINAL REDUCTION

**FILLY LX 50**

Install the countershaft and gear into the left crankcase.  
Install the resin washer onto the countershaft.  
Install the dowel pins and a new gasket.

Resin Washer

Countershaft



Gasket

Dowel Pins

Install the transmission case cover.



Transmission Case Cover

Install and tighten the transmission case cover bolts.

Install the clutch/driven pulley. (⇒9-13)

After installation, fill the transmission case with the specified oil. (⇒3-7)

**\***

- Place the motorcycle on its main stand on level ground.
- Check the oil sealing washer for wear or damage.

**Specified Gear Oil:** SAE90#

**Oil Capacity:**

At disassembly : 0.11 liter

At change : 0.10 liter

Install and tighten the oil check bolt.

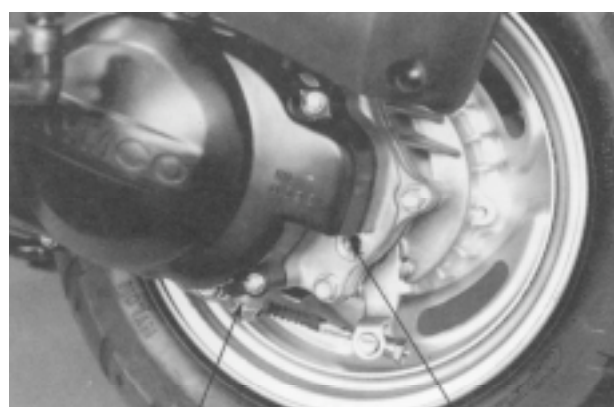
**Torque:** 0.8\_ 1.2kgf-m

Start the engine and check for oil leaks.

Check the oil level from the oil check bolt hole and add the specified oil to the proper level if the oil level is low.



Bolt



Drain Bolt

Oil Check Bolt Hole/Oil Filler