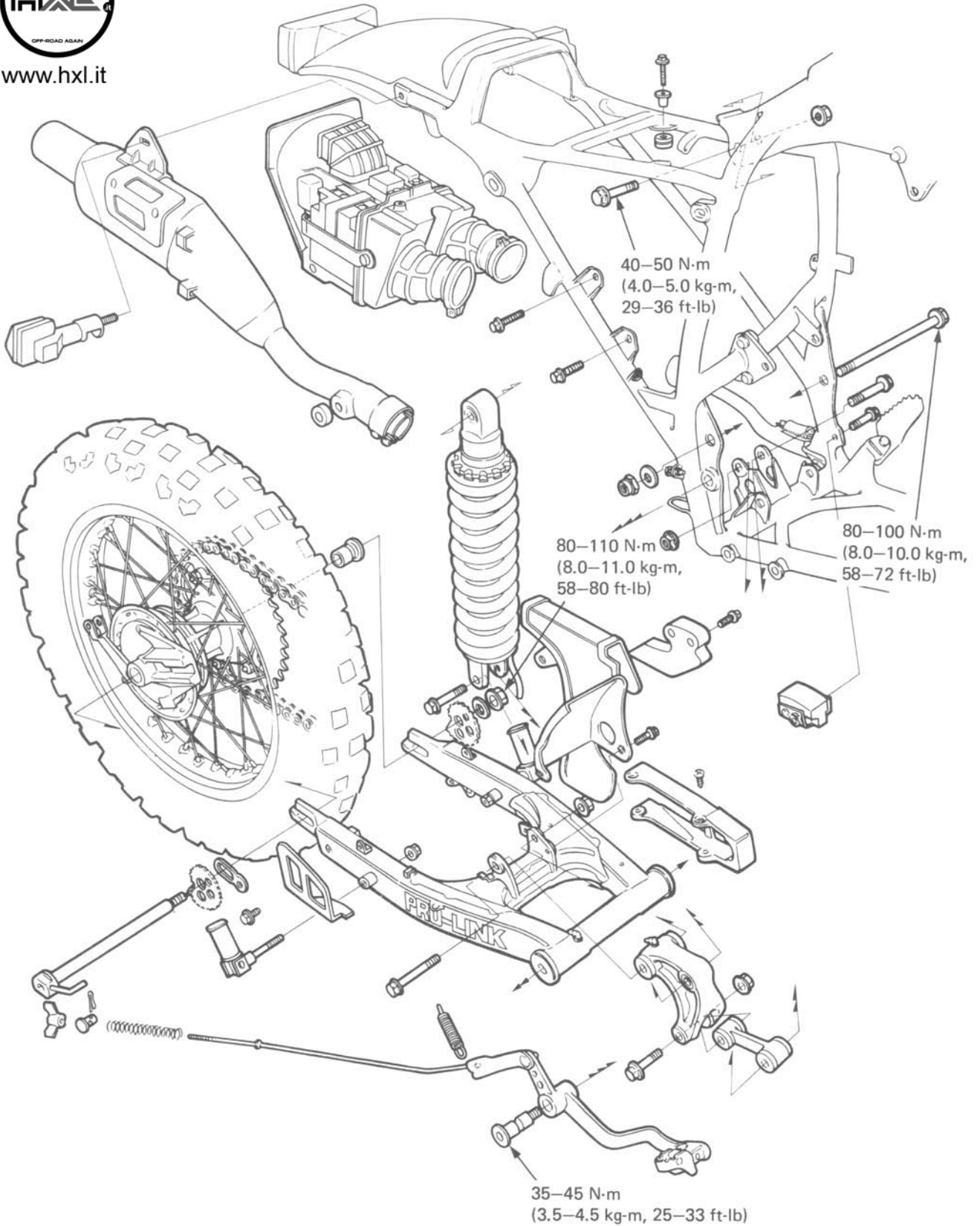




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## SERVICE INFORMATION

### GENERAL INSTRUCTIONS

- A jack block is required to support the motorcycle.
- Use genuine rear suspension linkage and shock absorber pivot/mount bolts.
- Note installation direction of the bolts.

#### **WARNING**

- *The rear shock absorber contains nitrogen under high pressure. Do not allow fire or heat near the shock absorber.*
- *Brake dust may contain asbestos which can be harmful to your health. Do not use compressed air to clean brake drums or brake panels. Use a vacuum with a sealed dust collector.*
- *Wear a protective face mask and thoroughly wash your hands when finished.*

### TOOLS

#### SPECIAL

Swing arm bearing remover	M967X-038-XXXXX (U.S.A. only)
or	
Bearing remover	07936-3710600
Remover handle	07936-3710100
Remover weight	07936-3710200 or 07741-0010201
Attachment	07946-3710400

#### COMMON

Attachment, 32 x 35 mm	07746-0010100	
	07946-3000100	
Attachment, 42 x 47 mm	07746-0010300 or 07945-3330100	
Driver	07749-0010000	
Pilot, 17 mm	07746-0040400	
Pilot, 20 mm	07746-0040500	
Retainer wrench body	07710-0010400	] or 07910-3230101
Retainer wrench attachment	07710-0010200	
Attachment, 37 x 40 mm	07746-0010200	
Wheel bearing remover head, 17 mm	07746-0050500	] or Equivalent tool commercially available in U.S.A.
Wheel bearing remover shaft	07746-0050100	

**REAR WHEEL/BRAKE/SUSPENSION****TORQUE VALUES**

Rear shock absorber (upper)	40–50 N·m (4–5 kg-m, 29–36 ft-lb)
(lower)	40–50 N·m (4–5 kg-m, 29–36 ft-lb)
Shock arm (swingarm)	90–120 N·m (9–12 kg-m, 65–87 ft-lb)
(Shock link)	40–50 N·m (4–5 kg-m, 29–36 ft-lb)
Connecting rod	40–50 N·m (4–5 kg-m, 29–36 ft-lb)
Spokes	2.5–5.0 N·m (0.25–0.5 kg-m, 1.8–3.6 ft-lb)
Final driven sprocket	32–35 N·m (3.2–3.5 kg-m, 23–25 ft-lb)
Rear axle nut	80–110 N·m (8–11 kg-m, 58–80 ft-lb)
Swingarm pivot bolt	80–100 N·m (8–10 kg-m, 58–72 ft-lb)
Right foot peg bolt	38–48 N·m (3.8–4.8 kg-m, 27–35 ft-lb)
Brake pedal pivot bolt	35–45 N·m (3.5–4.5 kg-m, 25–33 ft-lb)

ITEM	STANDARD	SERVICE LIMIT
Rear shock absorber spring free length	276 mm (10.87 in)	273 mm (10.75 in)
Rear wheel runout	Radial	2.0 mm (0.08 in)
	Axial	2.0 mm (0.08 in)
Rear axle runout	0.2 mm (0.008 in)	0.2 mm (0.008 in)
Rear brake drum I.D.	130 mm (5.12 in)	131 mm (5.16 in)
Rear brake shoe thickness	4.0 mm (0.16 in)	2.0 mm (0.08 in)
Rear suspension damper compression	28.5 kg (62.8 lb)	23.5 kg (51.8 lb)

**TROUBLESHOOTING****Wobber or vibration in motorcycle**

1. Bent rim
2. Loose wheel bearings
3. Loose or bent spokes
4. Damaged tire
5. Axle not tightened properly
6. Swingarm pivot bearing worn
7. Chain adjusters not adjusted equally

**Soft suspension**

1. Weak spring
2. Improper rear suspension spring preload.

**Hard suspension**

1. Improper rear suspension spring preload.
2. Spring thrust sleeve binding
3. Bent shock absorber rod
4. Swingarm pivot bearings damaged

**Suspension noise**

1. Faulty rear damper
2. Loose fasteners
3. Worn suspension linkage pivot bushings

**Poor brake performance**

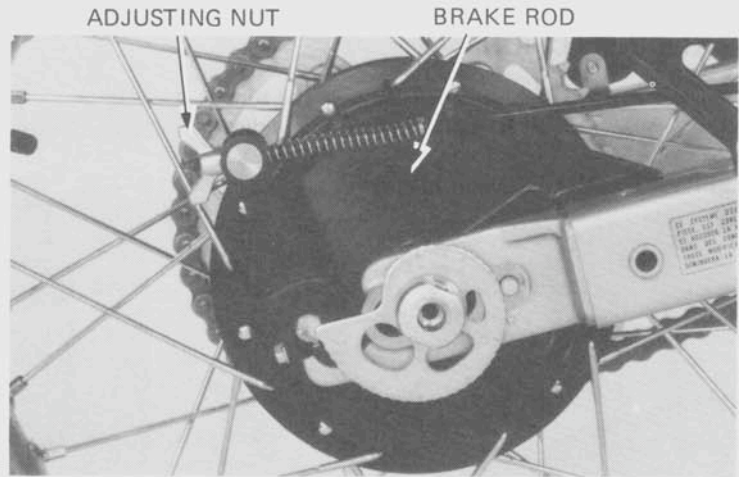
1. Improper brake adjustment
2. Worn brake shoes
3. Brake linings oily, greasy or dirty
4. Worn brake cam
5. Worn brake drum
6. Brake arm serrations improperly engaged
7. Brake shoes worn at cam contact area



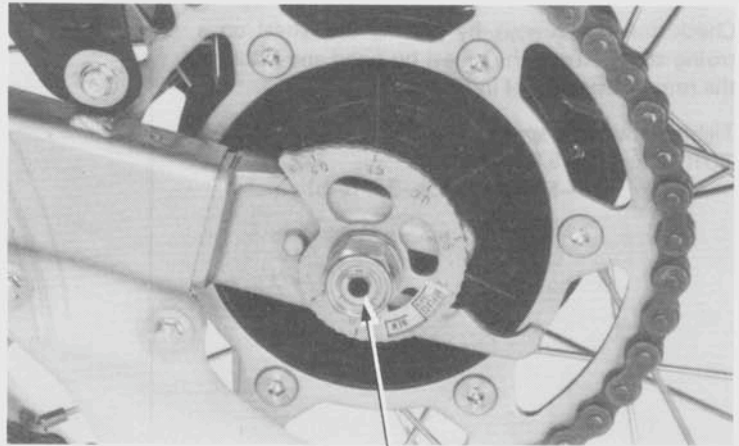
## REAR WHEEL

### REAR WHEEL REMOVAL

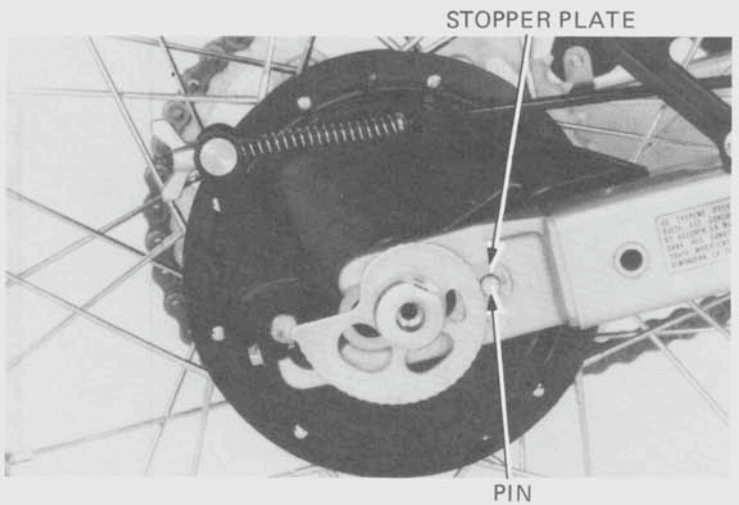
Raise the rear wheel off the ground by placing a box or workstand, under the engine.  
Pull the brake arm for disconnect the brake rod from the brake arm.



Loosen the rear axle nut.  
Turn both adjusters so the rear wheel can be moved all the way forward for maximum drive chain slack.  
Move the rear wheel forward.



Derail the drive chain from the driven sprocket.  
Lift the stopper plate clear of the pin on the swingarm's right side.  
Remove the rear wheel with the rear axle.

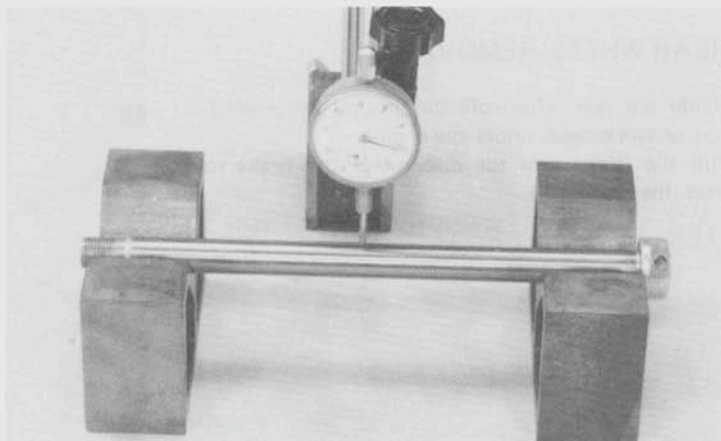




**AXLE INSPECTION**

Set the axle on V blocks and measure the runout. The actual runout is 1/2 of the total indicator reading.

**SERVICE LIMIT: 0.2 mm (0.008 in)**

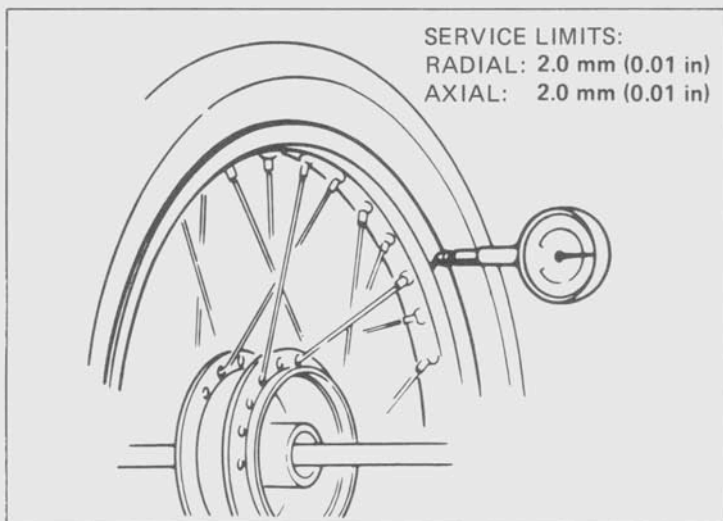


**REAR WHEEL RIM RUNOUT**

Check the rim runout by placing the wheel on a truing stand. Turn the wheel by hand and measure the runout using a dial indicator.

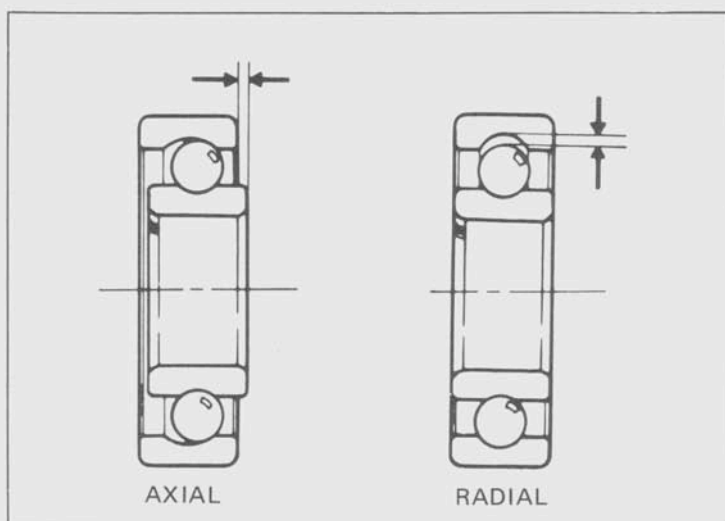
Tighten any loose spokes.

**TORQUE: 2.5–5.0 N·m**  
**(25–50 kg-cm, 1.8–3.6 ft-lb)**



**REAR WHEEL BEARING PLAY**

Check the wheel bearing play by placing the wheel in a truing stand and spinning the wheel by hand. Replace the bearings with new ones if they are noisy or have excessive play.



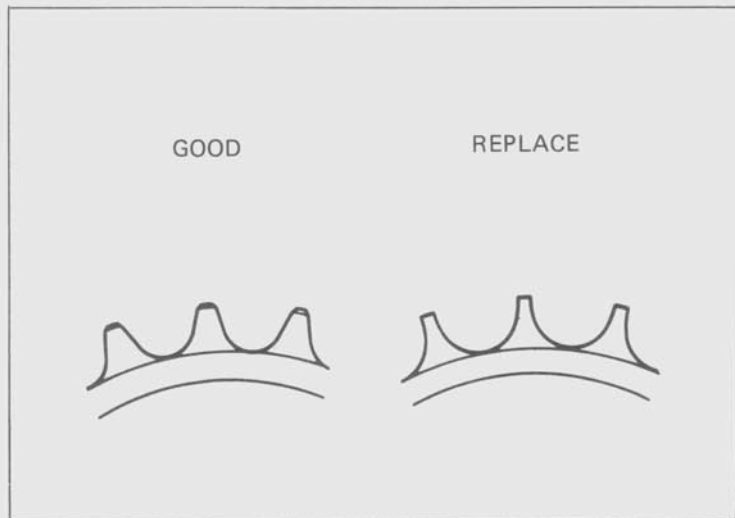


### FINAL DRIVEN SPROCKET

Check the condition of the final driven sprocket teeth.  
Replace the sprocket if worn or damaged.

#### NOTE

The drive chain and drive sprocket must also be inspected if the driven sprocket is worn or damaged.



### BRAKE LINING

Measure the rear brake lining thickness.  
**SERVICE LIMIT: 2.0 mm (0.008 in)**



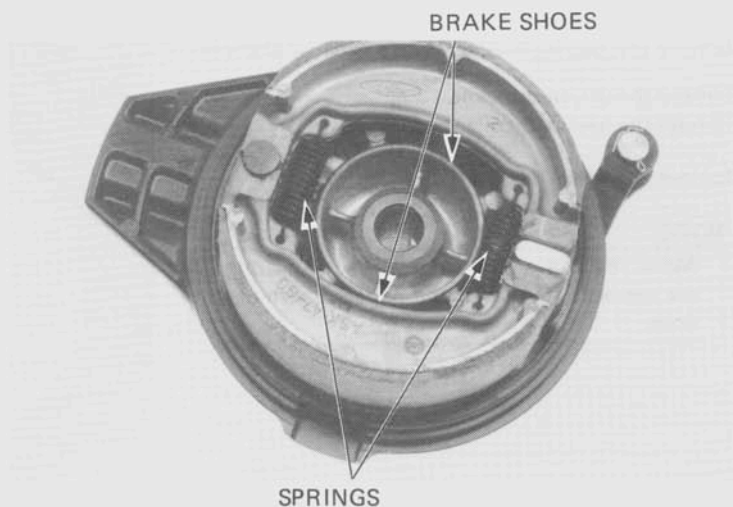
### REAR BRAKE SHOE REPLACEMENT

Remove the brake arm, wear indicator plate and the brake shoes.

Apply grease to the face of the brake cam and anchor pin.  
Install the brake cam and new brake shoes.  
Install the springs.

#### WARNING

*Grease on the brake linings reduces stopping power. Keep grease off the linings.  
Wipe excess grease off the cam.*





Install the wear indicator plate onto the brake cam.

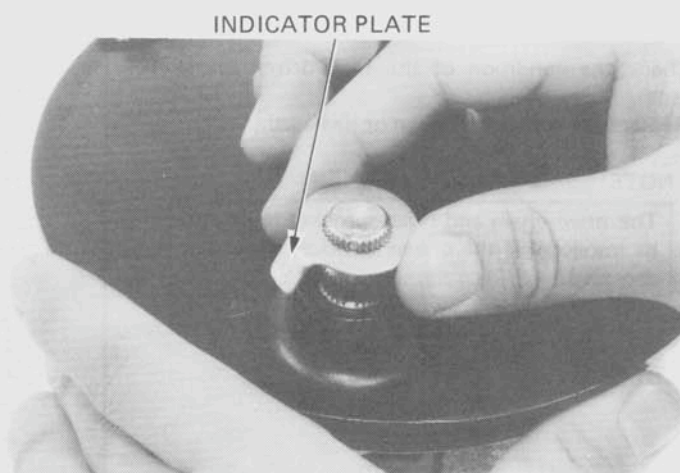
**NOTE**

Align the indicator tab with the cut-out in the brake camshaft.

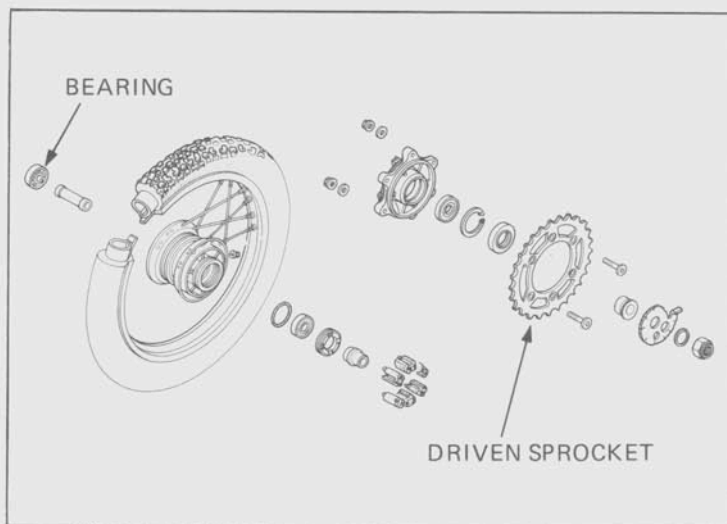
Install the brake arm aligning the punch mark with the punch mark on the brake cam.

Torque the brake arm bolt.

**TORQUE:** 8–12 N·m  
(0.8–1.2 kg·m, 6–9 ft·lb)



REAR WHEEL DISASSEMBLY



WHEEL BEARING REMOVER HEAD 17 mm  
07746-0050500 AND WHEEL BEARING REMOVER SHAFT  
07746-0050100 OR EQUIVALENT TOOL COMMERCIALY  
AVAILABLE IN U.S.A.

Remove the bearing retainer with a retainer wrench.

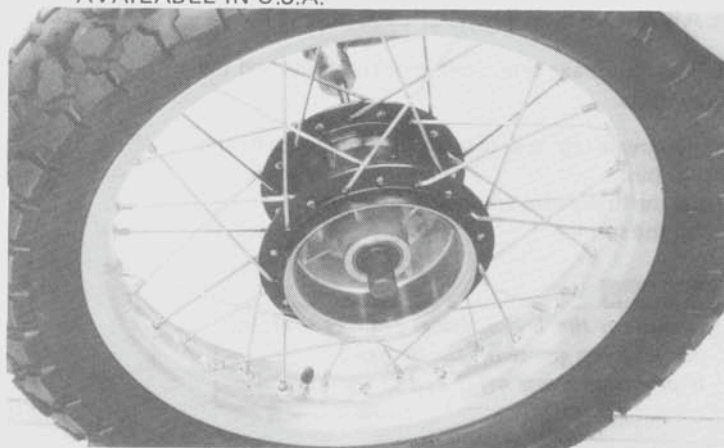
Remove the driven sprocket.

Remove the bearings, collar and O-ring.

Remove the wheel bearing.

**NOTE**

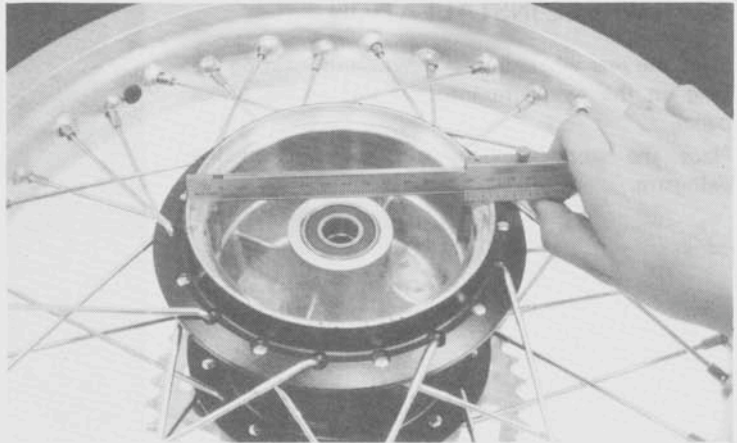
Never reinstall old bearings; once the bearings are removed, they must be replaced with new ones.





**REAR BRAKE DRUM I.D.**

Measure the rear brake drum I.D.  
**SERVICE LIMIT: 131 mm (5.16 in)**



**REAR WHEEL ASSEMBLY**

Install the final driven flange bearing.

Install the final driven sprocket and tighten the sprocket bolts.

**TORQUE VALUE: 32–35 N·m**  
**(3.2–3.5 kg·m, 23–25 ft·lb)**

Pack the bearing cavities with grease.

Install the right and left wheel bearings in the wheel hub.

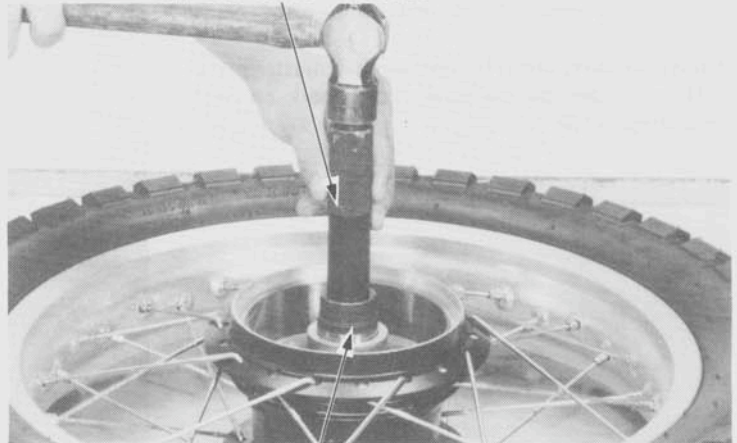
Install the bearings with the sealed end facing out.

**WARNING**

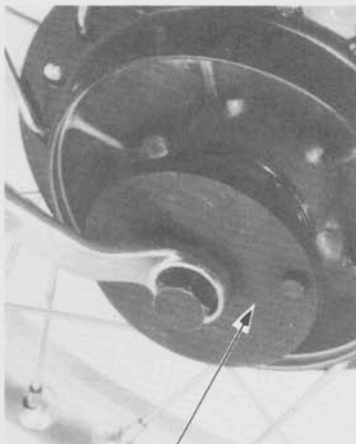
*Grease on the brake linings reduces stopping power. Keep grease off the linings.*

Grease and install the bearing retainer with the retainer wrench and body.

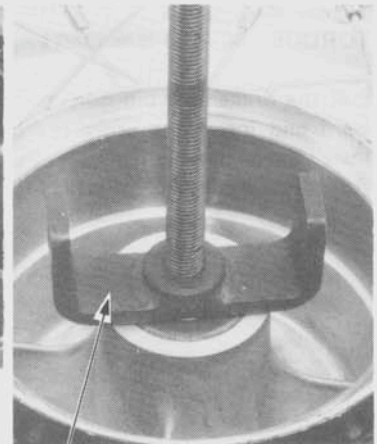
DRIVER 07749-0010000



WHEEL BEARINGS: ATTACHMENT, 37 x 40 mm 07746-0010200 AND PILOT, 17 mm 07746-0040400  
FINAL DRIVEN FLANGE BEARING: ATTACHMENT, 42 x 47 mm 07746-0010300 AND PILOT, 20 mm 07746-0040500



RETAINER WRENCH ATTACHMENT 07710-0010200



RETAINER WRENCH BODY 07710-0010401