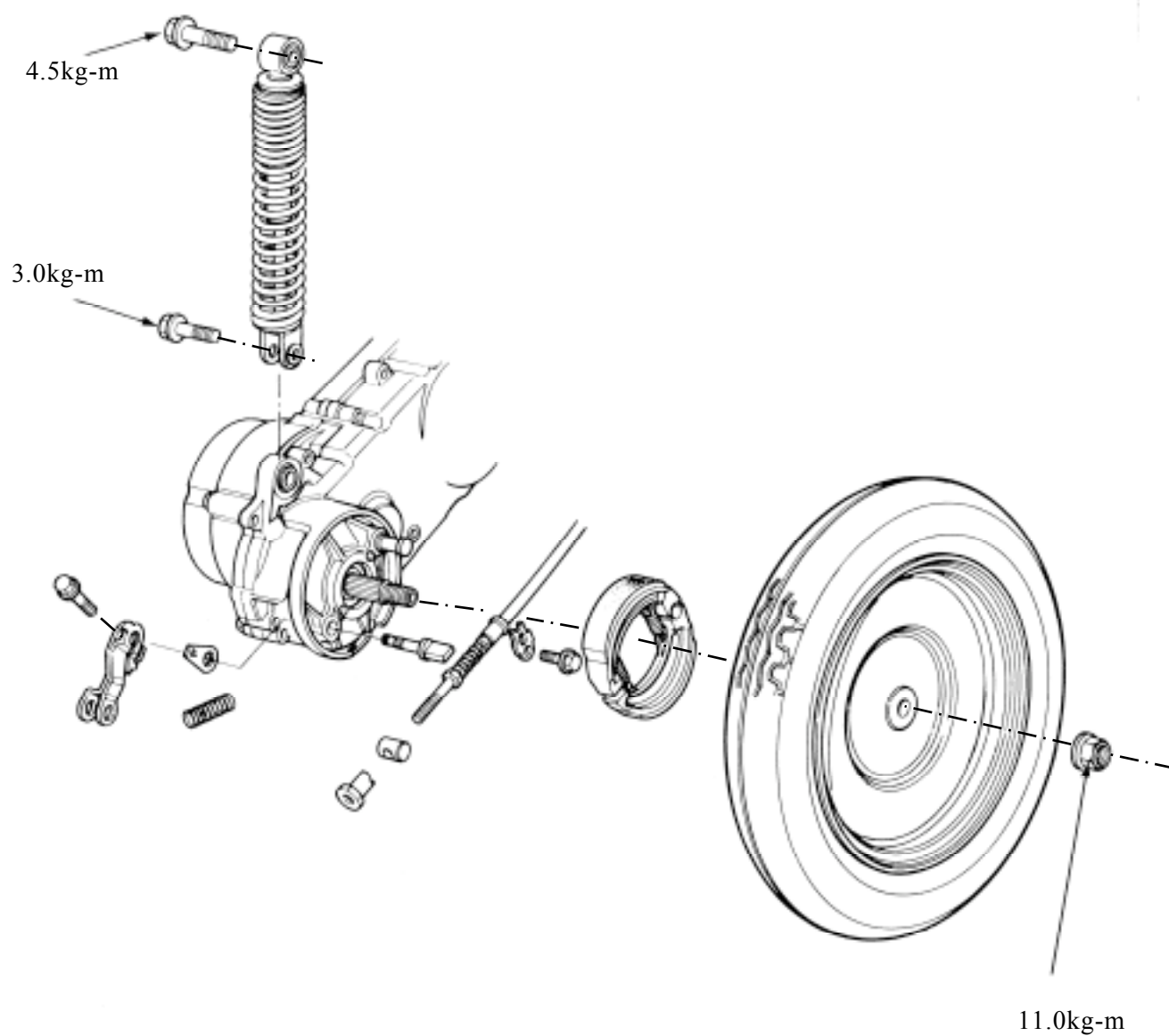


**-14-0**

## 14. REAR WHEEL/REAR BRAKE/REAR SHOCK ABSORBER

**KYMCO**  
ZX / SCOUT 50



## 14. REAR WHEEL/REAR BRAKE/REAR SHOCK ABSORBER

### SERVICE INFORMATION

#### SPECIFICATIONS

Item	Standard (mm)	Service Limit (mm)
Rear wheel rim runout		2.0
Rear brake drum I.D.	110	111
Rear brake lining thickness	4.0	2.0
Rear shock absorber spring free length	235.7	218.7

#### TORQUE VALUES

Rear axle nut	11.0_	13.0kg-m
Rear shock absorber upper mount bolt	3.5_	4.5kg-m
Rear shock absorber lower mount bolt	2.4_	3.0kg-m
Rear shock absorber lower joint nut	3.5_	4.5kg-m (apply locking agent)

#### SPECIAL TOOL

Rear shock absorber remover  
Rear shock absorber compressor

#### TROUBLESHOOTING

##### Rear wheel wobbling

- Bent rim
- Faulty tire
- Axle not tightened properly

##### Soft rear shock absorber

- Weak shock absorber spring

##### Poor brake performance

- Brake not adjusted properly
- Contaminated brake linings
- Worn brake linings
- Worn brake shoes at cam contacting area
- Worn brake cam
- Improper engagement between brake arm and wear indicator plate

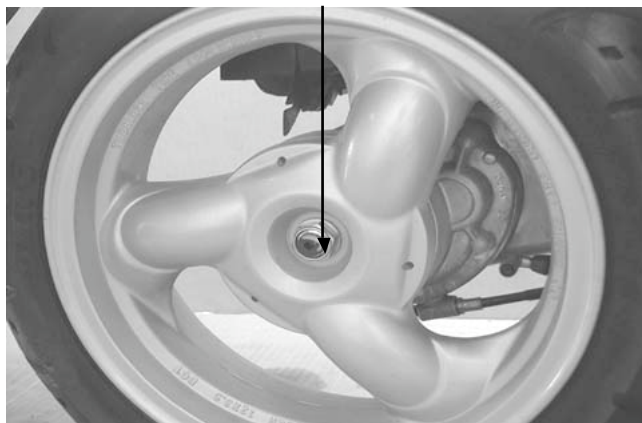
## 14. REAR WHEEL/REAR BRAKE/REAR SHOCK ABSORBER

### REAR WHEEL

#### REMOVAL

Remove the two exhaust muffler joint lock nuts.  
Remove the two exhaust muffler lock bolts.  
Remove the exhaust muffler.  
Remove the rear axle nut to remove the rear wheel.

Rear Axle Nut



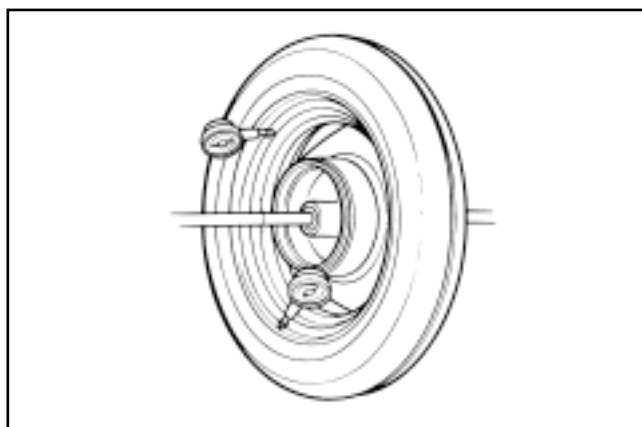
#### INSPECTION

Measure the rear wheel rim runout.

#### Service Limits:

Radial : 2.0mm replace if over

Axial : 2.0mm replace if over



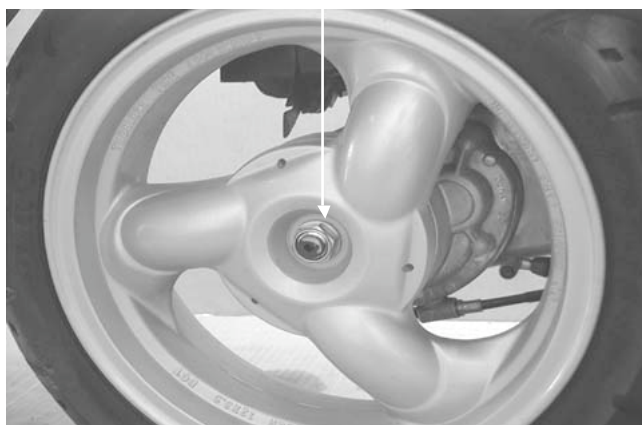
#### INSTALLATION

Install the rear wheel and apply SAE30# engine oil to the axle threads. Then, tighten the rear axle nut.

#### Torque values:

Rear axle nut: 11.0\_ 13.0kg-m

Rear Axle Nut



## 14. REAR WHEEL/REAR BRAKE/REAR SHOCK ABSORBER

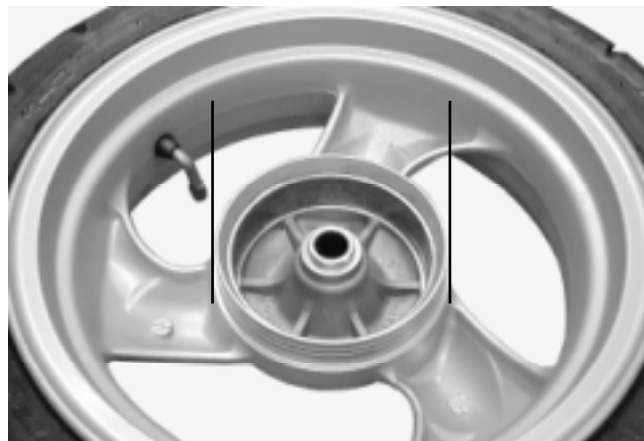
### REAR BRAKE

Remove the rear wheel. (⇒ 14-3)

Inspect the rear brake drum.

Measure the rear brake drum I.D.

**Service Limit:** 95.5mm replace if over



### BRAKE LINING INSPECTION

Measure the brake lining thickness.

**Service Limit:** 2.0mm replace if below

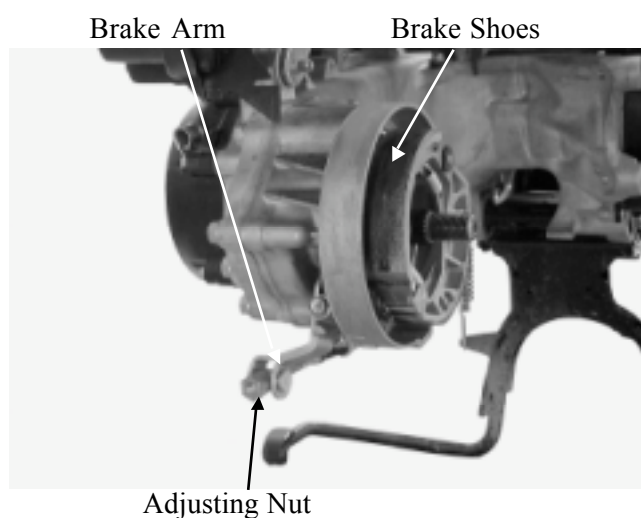
\* Keep oil or grease off the brake linings.



### REAR BRAKE DISASSEMBLY

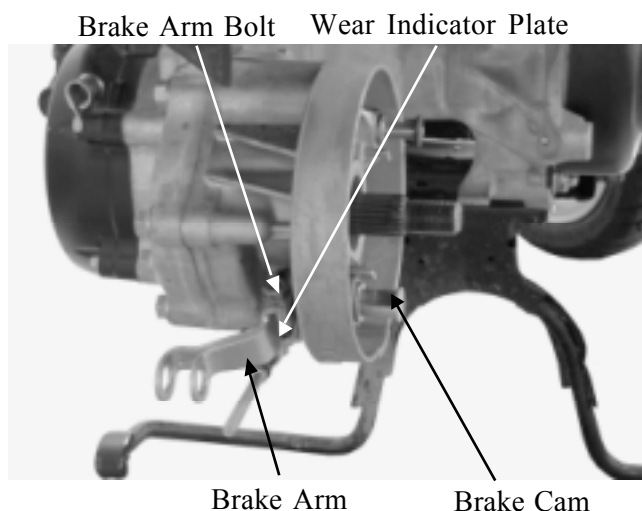
Remove the rear brake adjusting nut and disconnect the rear brake cable.

Remove the rear brake shoes.



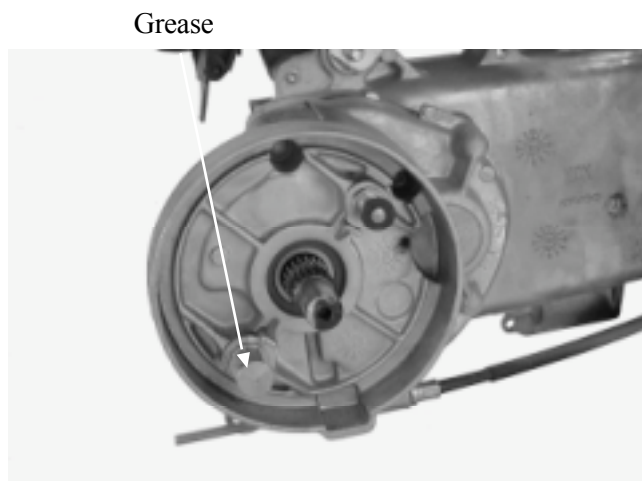
## 14. REAR WHEEL/REAR BRAKE/REAR SHOCK ABSORBER

Remove the brake arm bolt to remove the brake arm, wear indicator plate and felt seal. Remove the brake cam.



### REAR BRAKE ASSEMBLY

Apply grease to the anchor pin and brake shoe moving parts.  
Apply grease to the brake cam and install it.



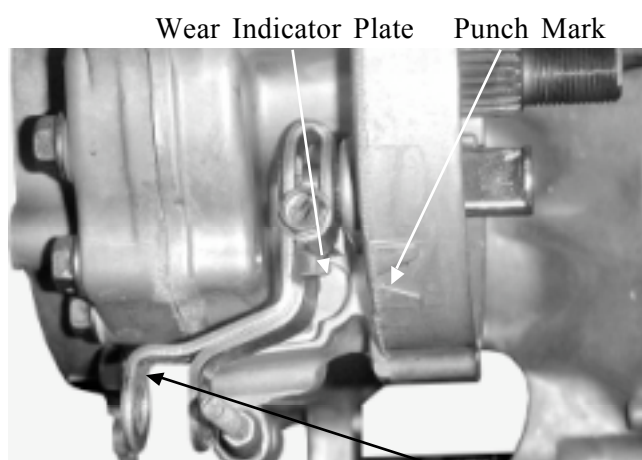
Apply engine oil to the felt seal and install it to the brake cam.

\* Install the wear indicator plate.

Align the wide tooth of the wear indicator plate with the wide groove on the brake cam.

\* Install the brake arm onto the brake cam.

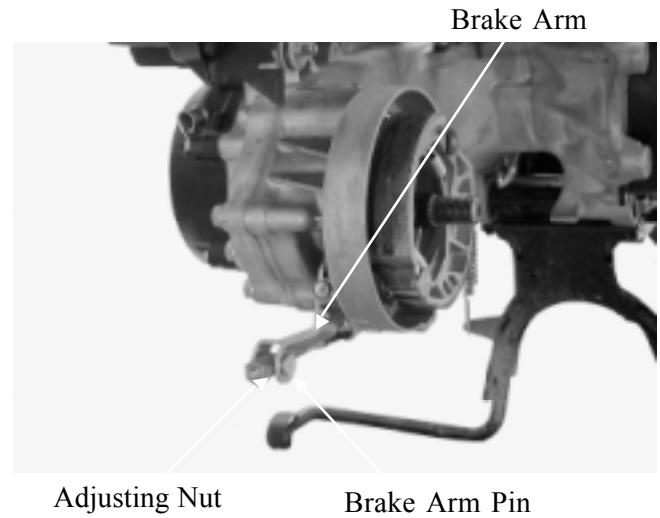
Align the punch mark on the brake arm with the scribed line on the brake cam.



Install and tighten the brake arm bolt.  
Install the brake arm return spring.  
Install the brake shoes.

## 14. REAR WHEEL/REAR BRAKE/REAR SHOCK ABSORBER

Install the brake arm pin.  
Connect the brake cable and install the adjusting nut.  
Install the rear wheel. (⇒ 14-3)  
Adjust the rear brake lever free play.  
(⇒ 3-4)



## 14. REAR WHEEL/REAR BRAKE/REAR SHOCK ABSORBER

### REAR SHOCK ABSORBER

#### REMOVAL

Remove the rear carrier. (⇒ 12-5)  
Remove the met-in box. (⇒ 12-4)  
Remove the air cleaner case. (⇒ 5-2)  
Remove the rear shock absorber upper and lower mount bolts to remove the rear shock absorber.



Upper Mount Bolt      Lower Mount Bolt      Rear Shock Absorber

#### DISASSEMBLY

Install the rear shock absorber compressor as the figure shown.

\*

Install the rear shock absorber lower joint into the rear shock absorber compressor.

Compress the rear shock absorber spring.

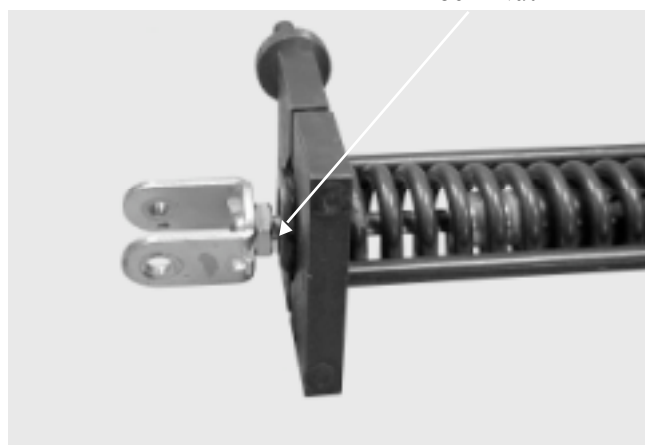
Rear Shock Absorber Compressor



Rear Shock Absorber Remover

Loosen the lower joint lock nut.  
Remove the lower joint.  
Remove the lock nut, rubber and damper.

Lock Nut

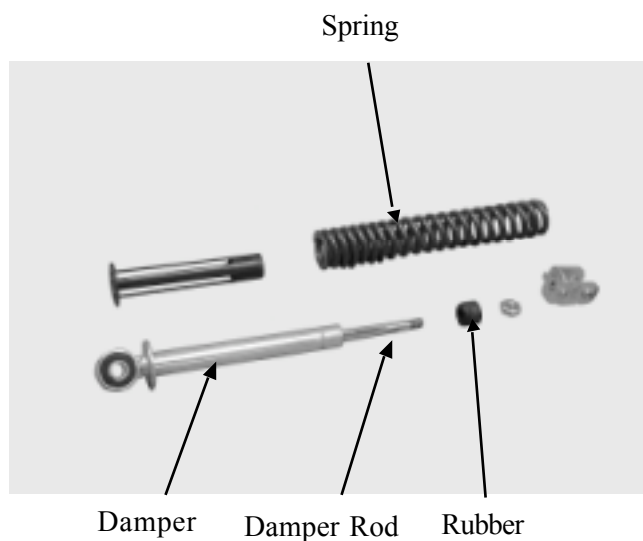




## 14. REAR WHEEL/REAR BRAKE/REAR SHOCK ABSORBER

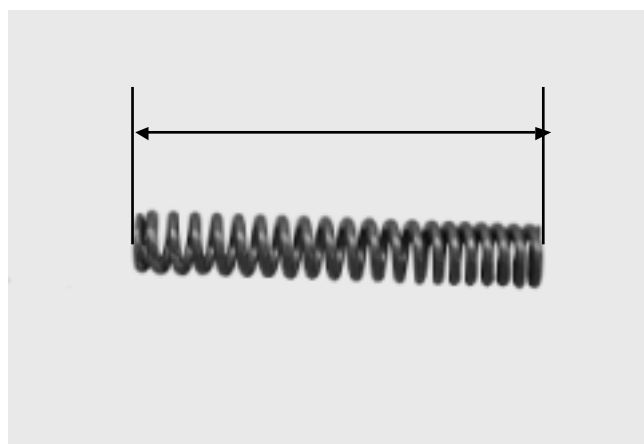
### INSPECTION

Inspect the damper rod for bending or damage.  
Inspect the damper for oil leaks.  
Inspect the damper rubber for deterioration or damage.



Measure the rear shock absorber spring free length.

**Service Limit:** 232mm replace if below



### ASSEMBLY

Assemble the rear shock absorber in the reverse order of disassembly.

**\***

- Install the shock absorber spring with loosely wound coils facing down.
- Apply locking agent to the lock nut thread and then install and tighten the lock nut.

Tighten the lock nut.

**Torque:** 3.5\_ 4.5kg-m



## 14. REAR WHEEL/REAR BRAKE/REAR SHOCK ABSORBER

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**KYMCO**  
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### INSTALLATION

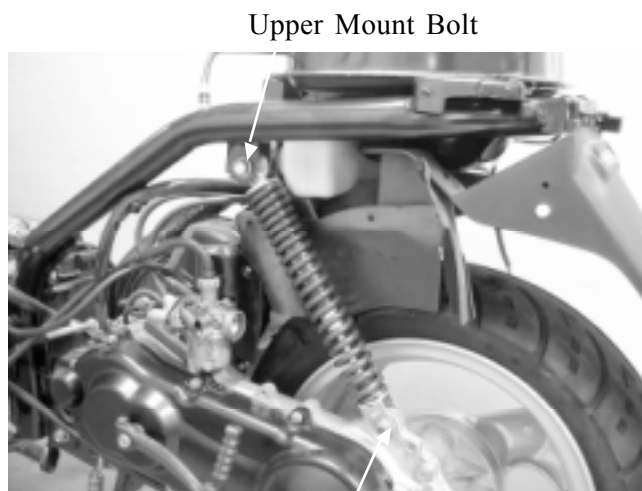
Install the rear shock absorber.  
Install the rear shock absorber upper mount bolt and then install the lower mount bolt.

#### Torque:

**Upper Mount Bolt:** 3.5\_ 4.5kg-m

**Lower Mount Bolt:** 2.4\_ 3.0kg-m

Install the frame body cover. (⇒ 12-5)



Upper Mount Bolt

Lower Mount Bolt