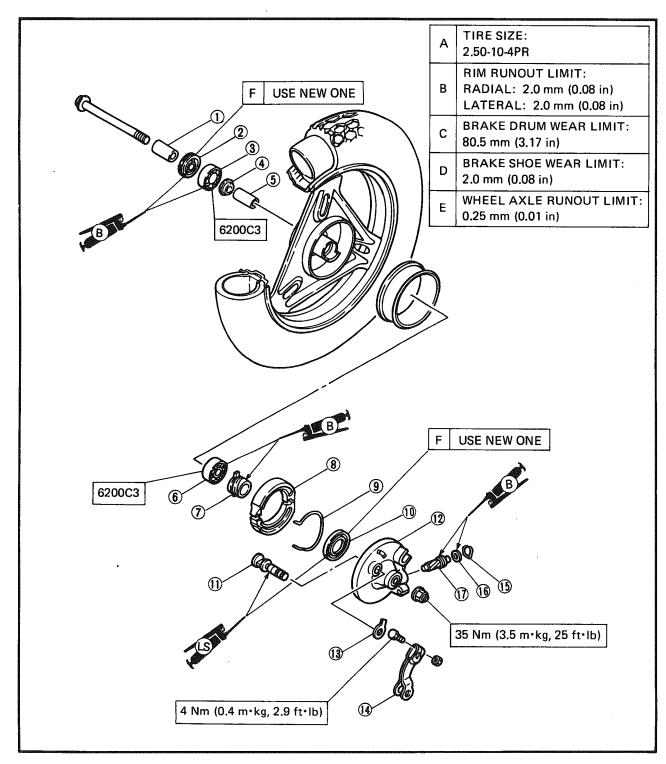
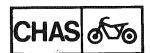
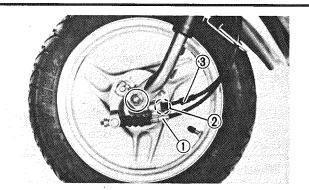
# **CHASSIS**

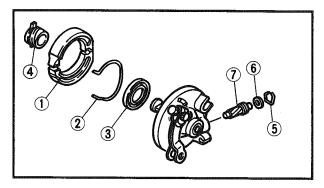
# **FRONT WHEEL**

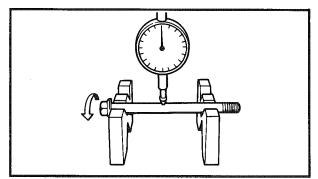
- 1 Collar
- 2 Dust seal
- 3 Bearing
- 4 Spacer (Flange)
- 5 Spacer
- 6 Bearing
- 7 Speedometer drive gear
- 8 Brake shoe
- Return spring
- (10) Dust seal
- (1) Brake cam shaft
- 12 Brake shoe plate
- (13) Wear indicator
- (14) Cam shaft lever
- 15 Stop ring
- 16 Plain washer
- (17) Speedometer driven gear











#### **REMOVAL**

- 1. Place the scooter on its centerstand.
- 2. Remove:
  - Brake cable ①
  - Stop ring ②
  - Speedometer cable (3)
  - Nut (Front axle)
  - Front wheel
  - Brake shoe plate
- 3. Remove:
  - Brake shoe ①
  - Return spring 2
  - Oil seal ③
  - Speedometer drive gear (4)
  - Stop ring
  - Plain washer 6
  - Speedometer driven gear (7)

#### INSPECTION

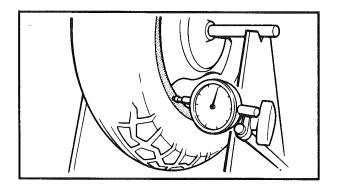
- 1. Measure:
  - Wheel axle runoutOut of specification → Replace.



Wheel Axle Runout Limit: 0.25 mm (0.01 in)

# **WARNING:**

Do not attempt to straighten a bent axle.



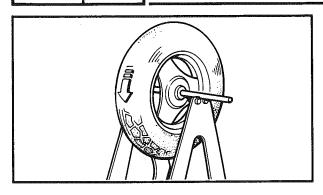
#### 2. Measure:

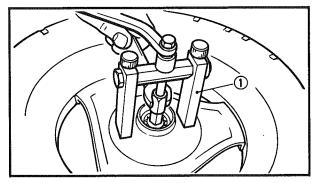
Wheel runout
 Out of specification → Replace.

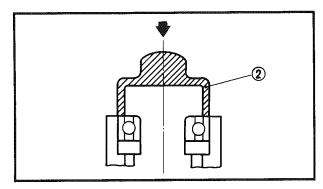


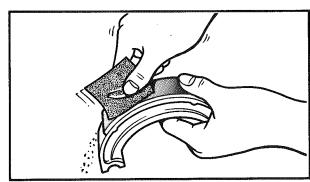
**Runout Limit:** 

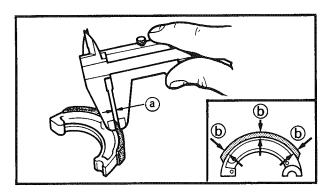
Radial: 2.0 mm (0.08 in) Lateral: 2.0 mm (0.08 in)











- 3. Inspect:
  - Wheel

Cracks/Bends/Warpage → Replace.

- 4. Inspect:
  - Wheel bearings Bearings allow play in the wheel hub or wheel turns roughly → Replace.

#### Wheel bearing replacement steps:

- Remove the dust seal.
- Clean the out side of the wheel hub.
- Remove the bearing using a general bearing puller (1).
- Install the new bearing.

NOTE: \_\_

Use a socket (2) that matches the outside diameter of the race of the bearing.

#### CAUTION:

Do not strike the inner race of balls of the bearing. Contact should be made only with the outer race.

Install the dust seal.

- 5. Inspect:
  - Brake shoes

Glazed parts → Sand with coarse sandpaper.

NOTE: \_\_

After using the sand paper, clean of the polished particles with cloth.

6. Measure: • Brake shoe thickness (a) Out of specification → Replace.

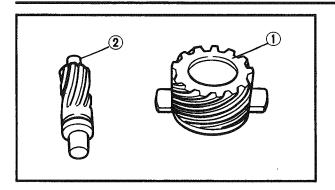


**Brake Shoe Thickness:** 

Standard: 3.5 mm (0.14 in)

Limit: 2.0 mm (0.08 in)

(b) Mesuring point



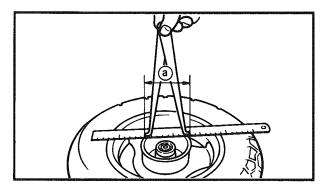
## 7. Inspect:

- Speedometer drive gear (1)
- Speedometer driven gear ②
   Wear/Damage → Replace.

## 8. Inspect:

Brake drum inner surface
 Oil/Scratches → Remove.

Oil	Use a rag soaked in lacquer thinner or solvent.
Scratches	Use an emery cloth (Lightly and evenly polishing).

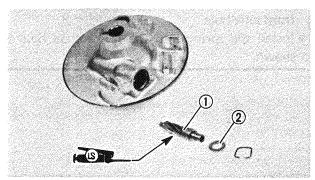


#### 9. Measure:

Brake drum inside diameter (a)
 Out of specification → Replace.



Brake Drum Wear Limit: 80.5 mm (3.17 in)



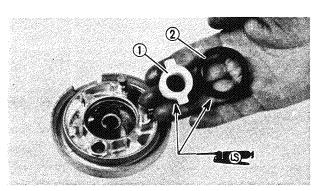
## **ASSEMBLY**

When assembling the brake shoe plate, reverse the removal procedure.

Note the following points.

- 1. Apply:
  - Lithium-soap base grease

    To speedometer driven gear ①.



# 2. Apply:

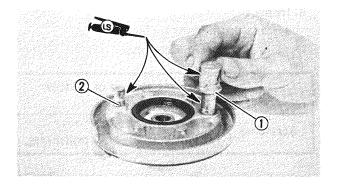
Lithium-soap base grease
To speedometer drive gear ① and dust seal
② .



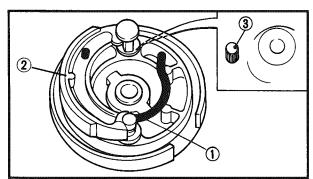
- 3. Install:
  - Dust seal (New)

NOTE: \_

Install the dust seal with the manufacturer's marks or numbers facing outward.



- 4. Apply:
  - Lithium-soap base grease To the brake cam shaft 1 and pivot pin



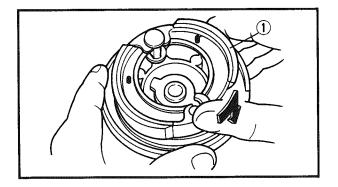
- 5. Install:
  - Return spring 1
  - Brake shoe (Left) ②

CAUTION:

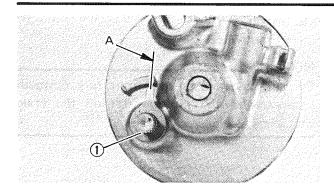
When installing the brake shoe, take care not to apply grease to the brake shoe.

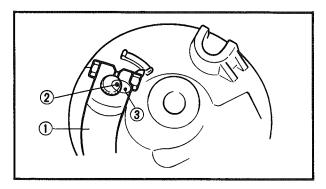
NOTE:

- Install with the camshaft mark (3) toward the front axle hole.
- Install the spring into the brake shoe hole as shown.



- 6. Install:
  - Brake shoe ①





7. Install:

- Brake cam shaft
- Wear indicator ①

NOTE: \_\_\_

Align the wear indicator projection with "A" line as shown.

8. Install:

NOTE: \_\_\_

Align the cam shaft mark ② with the lever mark ③ as shown.



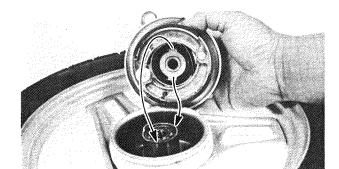
Bolt (Cam Shaft Lever) ①: 4 Nm (0.4 m·kg, 2.9 ft·lb)

- 9. Check:
  - Brake shoe operation
     Unsmoothly operation → Repair.

#### INSTALLATION

When installing the front wheel, reverse the removal procedure.

Note the following points.

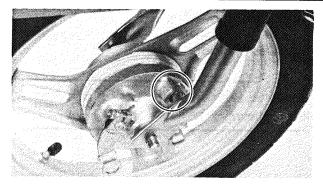


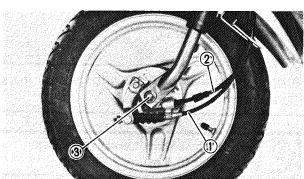
- 1. Install:
  - Brake shoe plate

NOTE: \_\_\_

Make sure the projections inside the gear unit are meshed with the flats in the wheel hub.







- 2. Install:
  - Front wheel

NOTE: \_\_\_

Be sure the boss on the front fork correctly engages with the locating slot on the brake shoe plate assembly.

- 3. Install:
  - Front brake cable ①
  - Speedometer cable ②
  - Nut (Front wheel axle) 3



Nut (Front Wheel Axle): 35 Nm (3.5 m·kg, 25 ft·lb)

- 4. Adjust
  - Front brake lever free play
     Refer to "CHAPTER 2 FRONT BRAKE ADJUSTMENT" section.