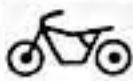


CHAPTER 5 CHASSIS

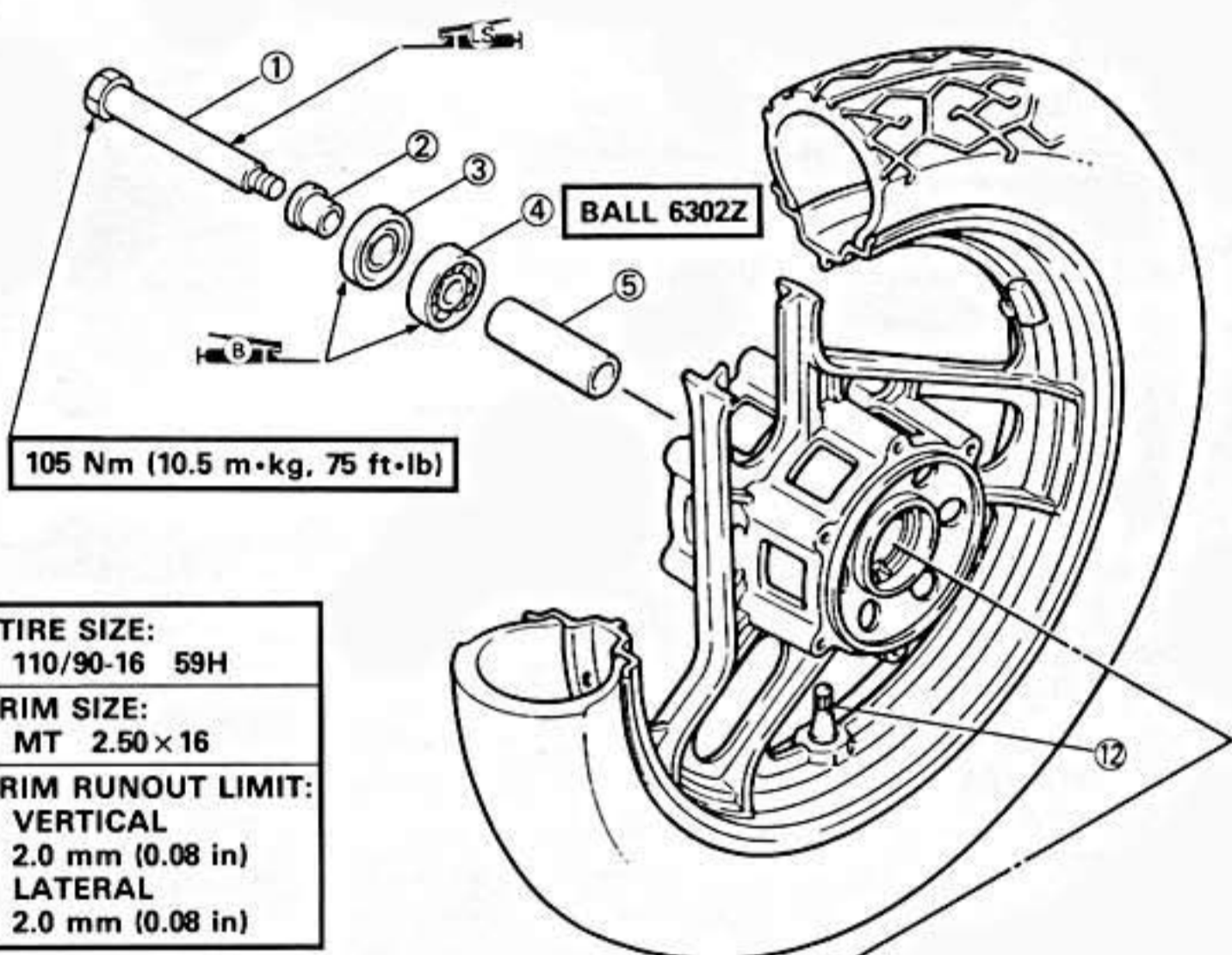
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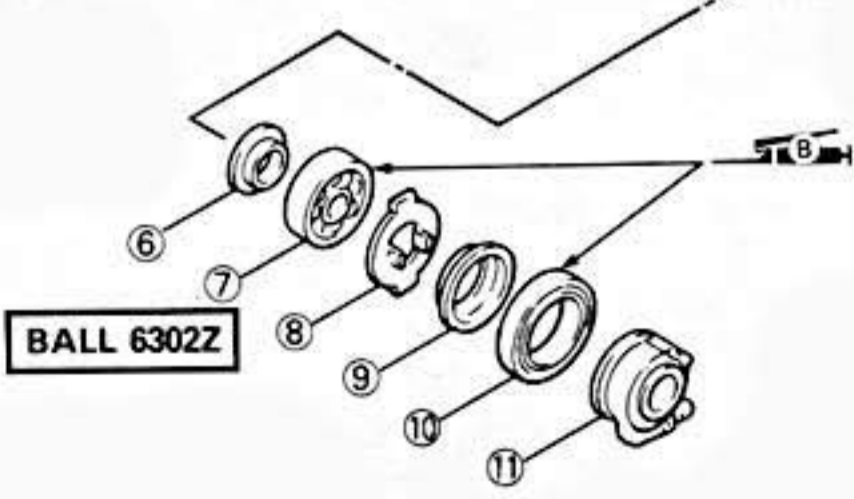
CHASSIS

FRONT WHEEL

- ① Front axle
- ② Collar
- ③ Oil seal
- ④ Bearing
- ⑤ Spacer
- ⑥ Flange spacer
- ⑦ Bearing
- ⑧ Meter clutch
- ⑨ Clutch retainer
- ⑩ Oil seal
- ⑪ Gear unit assembly
- ⑫ Front wheel



A	TIRE SIZE: 110/90-16 59H
B	RIM SIZE: MT 2.50×16
C	RIM RUNOUT LIMIT: VERTICAL 2.0 mm (0.08 in) LATERAL 2.0 mm (0.08 in)



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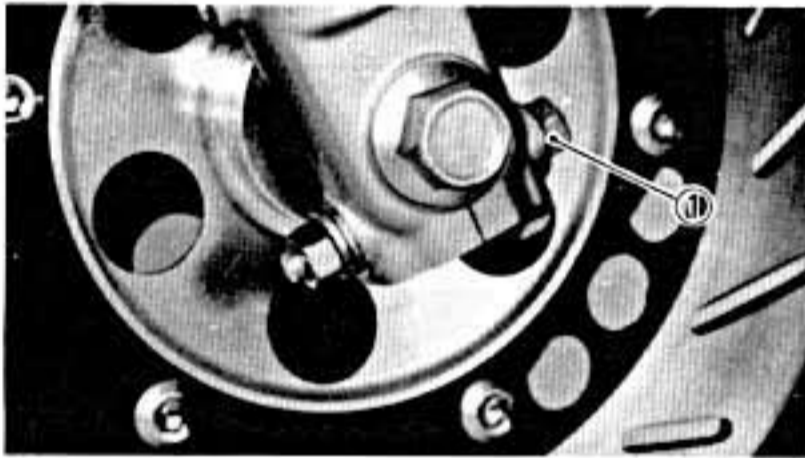


REMOVAL

1. Place the motorcycle on its centerstand.

WARNING:

Support the motorcycle securely so there is no danger of it falling over.



2. Remove:
 - Speedometer cable ①
 - Brake caliper (Left and right)

3. Loosen:
 - Pinch bolt ①
4. Remove:
 - Axle
 - Front wheel

NOTE:

Do not depress the brake lever when the wheel is off the motorcycle otherwise the brake pads will be forced shut.

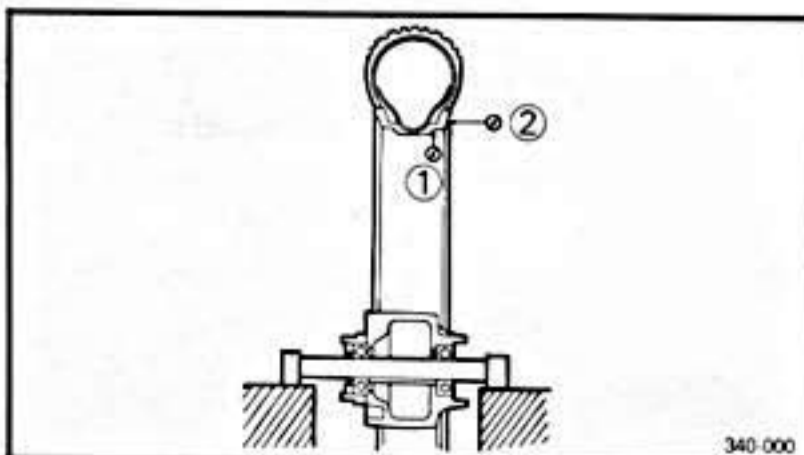
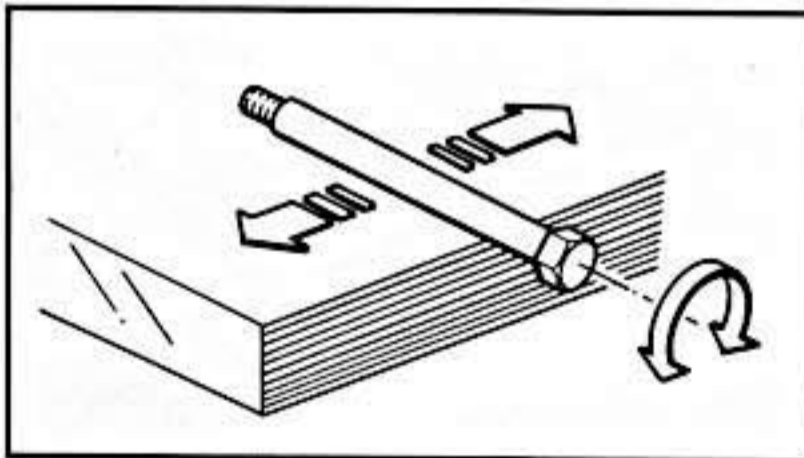
INSPECTION

1. Eliminate any corrosion from parts.
2. Inspect:
 - Front axle
 - Roll the axle on a flat surface.
 - Bends → Replace.

WARNING:

Do not attempt to straighten a bent axle.

3. Measure:
 - Wheel runout
 - Out of specification → Check the wheel and the bearing play.



Rim Runout Limits:

Radial ①: 2.0 mm (0.08 in)

Lateral ②: 2.0 mm (0.08 in)

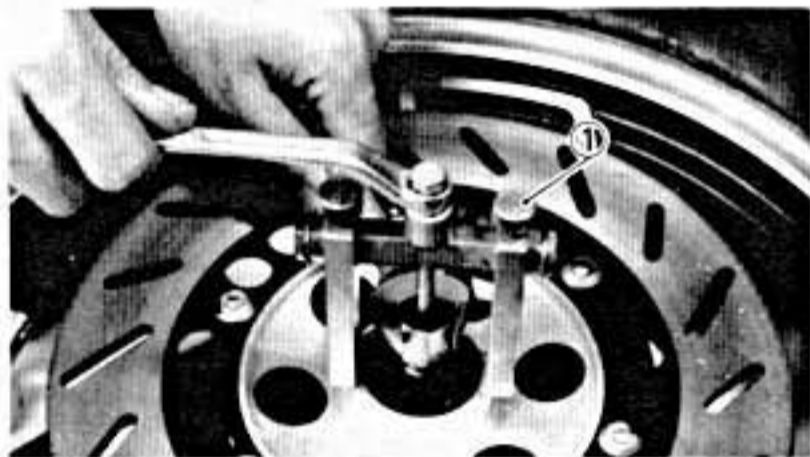


4. Inspect:

- Wheel
Cracks/Bends/Warpage → Replace.

5. Check:

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

**Wheel bearing replacement steps:**

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

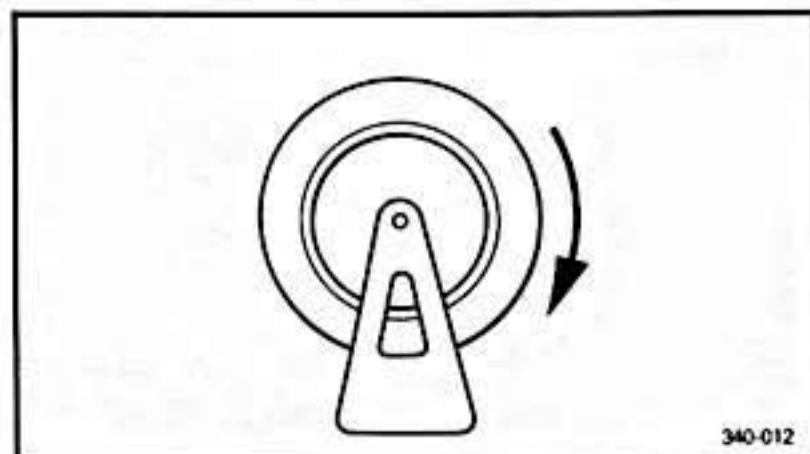
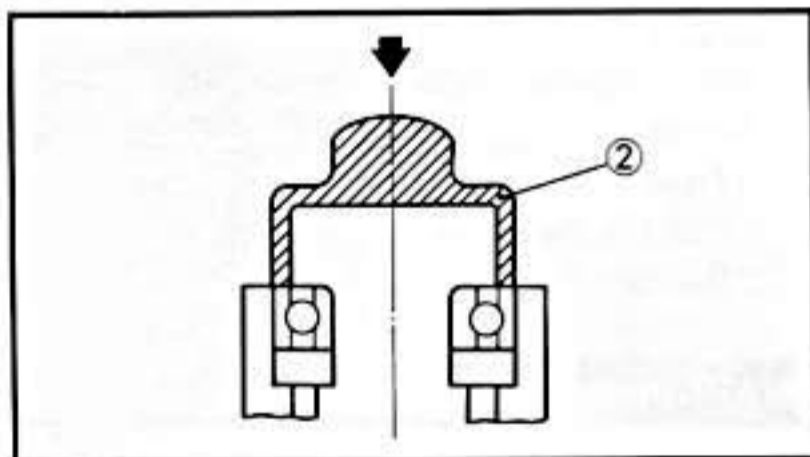
NOTE:

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.

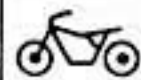
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340-012

6. Check:

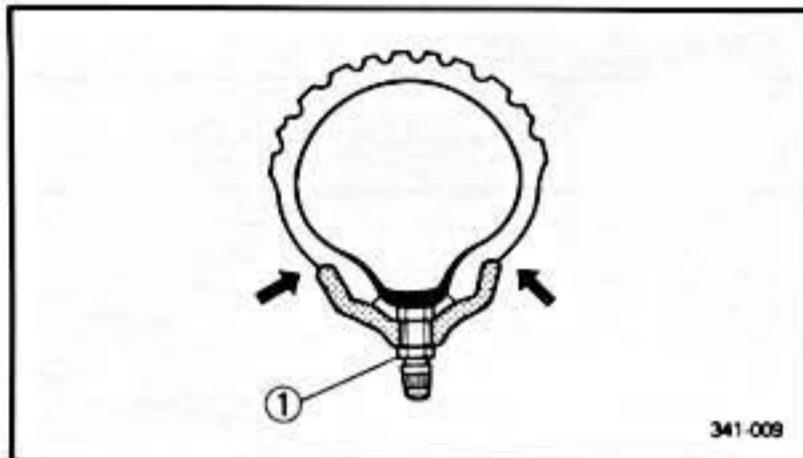
- Wheel balance
Wheel is not statically balanced if it comes to rest at the same point after several light rotations.
Out of balance → Install appropriate balance weight at lightest point (on top).

**NOTE:**

- Balance wheel with brake disc installed.

WARNING:

- After mounting a tire, ride conservatively to allow proper tire to rim seating. Failure to do so may cause an accident resulting in motorcycle damage and possible operator injury.
- After a tire repair or replacement, be sure to torque tighten the valve stem locknut ① to specification.



341-009

**Valve-Stem Locknut:**

1.5 Nm (0.15 m•kg, 1.1 ft•lb)

INSTALLATION

When installing the front wheel, reverse the removal procedure. Note the following points.

1. Apply:

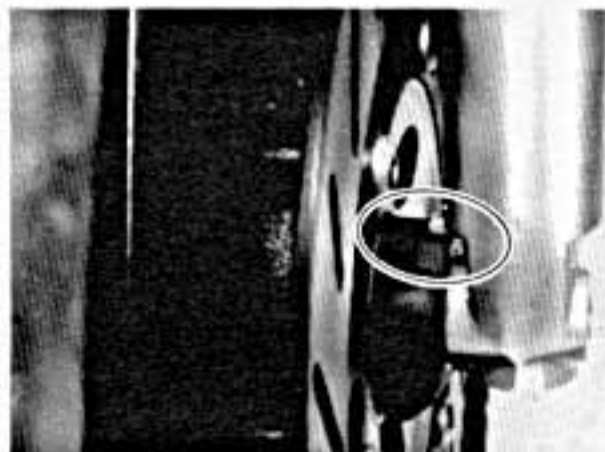
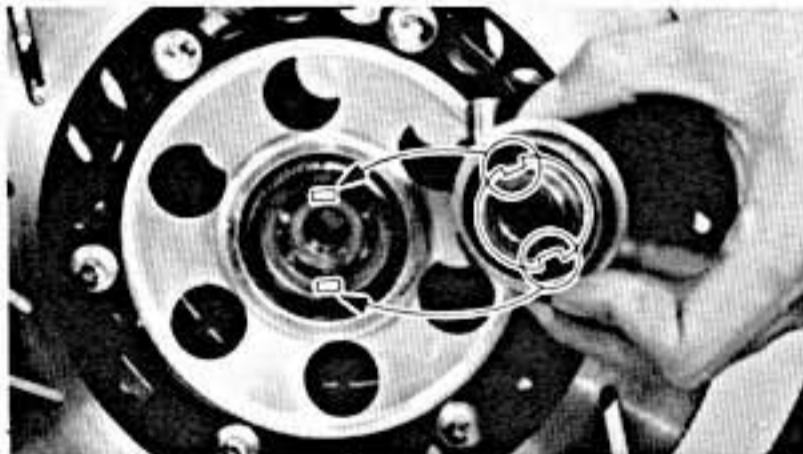
- Lithium base grease
- Lightly grease to the oil seal and gear unit.

2. Install:

- Gear unit assembly

NOTE:

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



3. Install:

- Front wheel assembly

NOTE:

Be sure the boss on the outer fork tube correctly engages with the locating slot on the gear unit assembly.

5



4. Tighten:
- Axle nut



105 Nm (10.5 m•kg, 75 ft•lb)

- Bolts (Brake caliper)



35 Nm (3.5 m•kg, 25 ft•lb)

- Pinch bolt



20 Nm (2.0 m•kg, 14 ft•lb)

MEMO



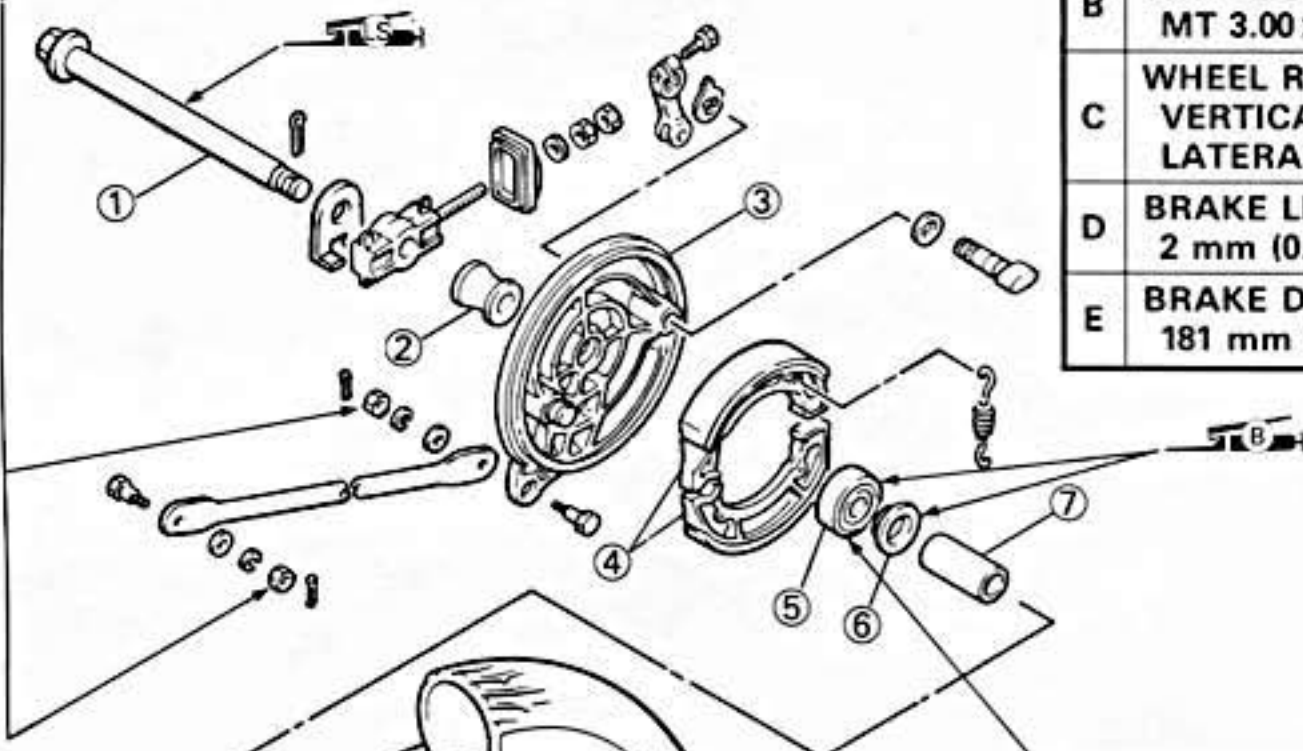
REAR WHEEL AND BRAKE

- ① Rear axle
- ② Collar
- ③ Brake shoe plate
- ④ Brake shoes
- ⑤ Bearing
- ⑥ Flange spacer
- ⑦ Collar
- ⑧ Rear wheel
- ⑨ Bearing
- ⑩ Hub
- ⑪ Drive chain
- ⑫ Driven sprocket
- ⑬ Collar
- ⑭ Bearing
- ⑮ Oil seal
- ⑯ Collar

20 Nm (2.0 m·kg, 14 ft·lb)

A	TIRE SIZE: 130/90-16 67H
B	WHEEL SIZE: MT 3.00 x 16
C	WHEEL RUNOUT LIMIT: VERTICAL 2.0 mm (0.08 in) LATERAL 2.0 mm (0.08 in)
D	BRAKE LINING WEAR LIMIT: 2 mm (0.08 in)
E	BRAKE DRUM WEAR LIMIT: 181 mm (7.12 in)

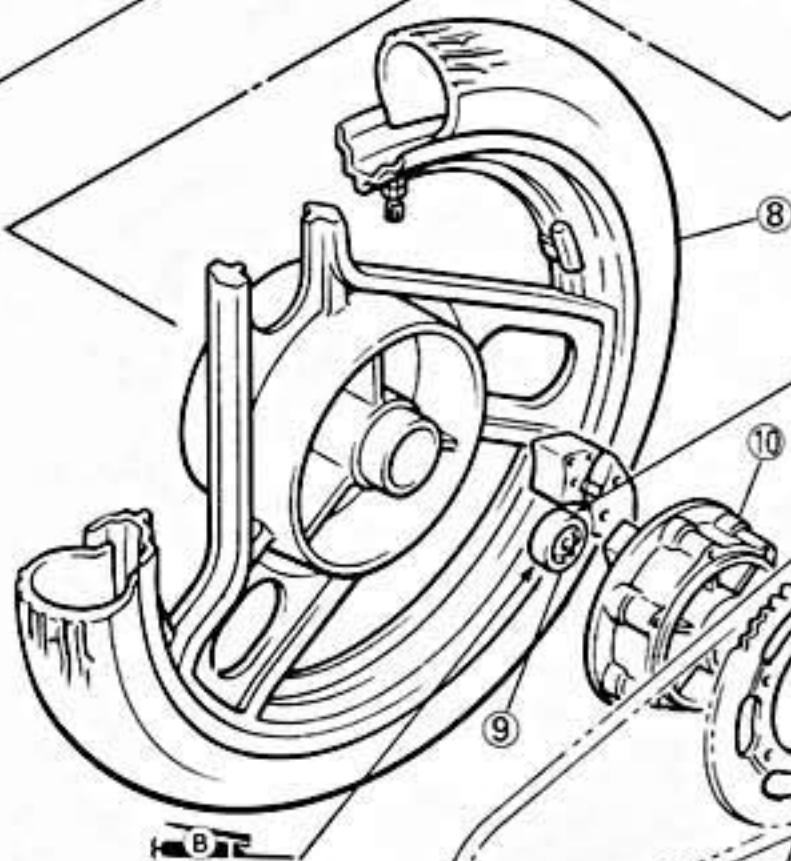
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BALL 6303RS

BALL 6304

32 Nm (3.2 m·kg, 23 ft·lb)



BALL 6203

F DRIVE CHAIN SLACK:
20 ~ 30 mm (0.8 ~ 1.2 in)

105 Nm (10.5 m·kg, 75 ft·lb)



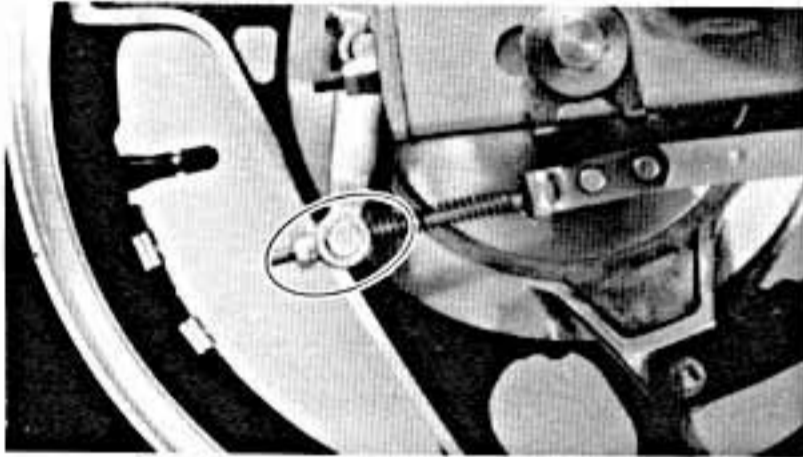


REMOVAL

1. Place the motorcycle on its centerstand.

WARNING:

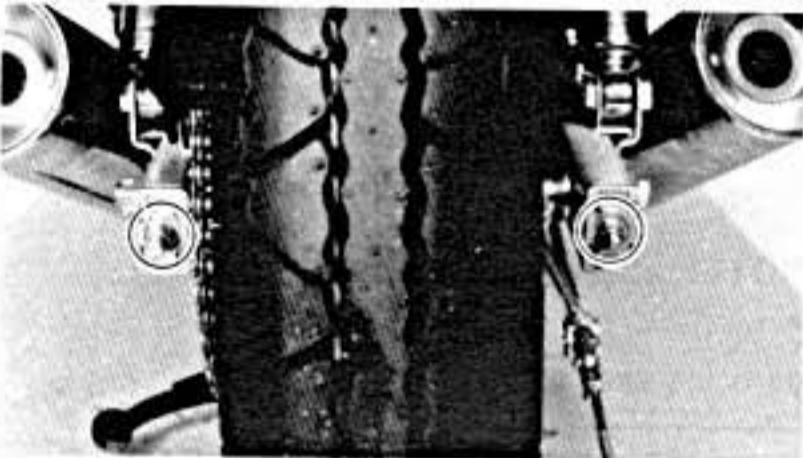
Support the motorcycle securely so there is no danger of it falling over.



2. Remove:
- Adjuster
 - Spring
 - Pin



3. Remove:
- Cotter pin
 - Nut
 - Spring washer
 - Plain washer
 - Bolt



4. Loosen:
- Lock nuts (Drive chain)
 - Adjuster (Drive chain)



5. Remove:
- Cotter pin
 - Nut
 - Rear axle
 - Rear wheel

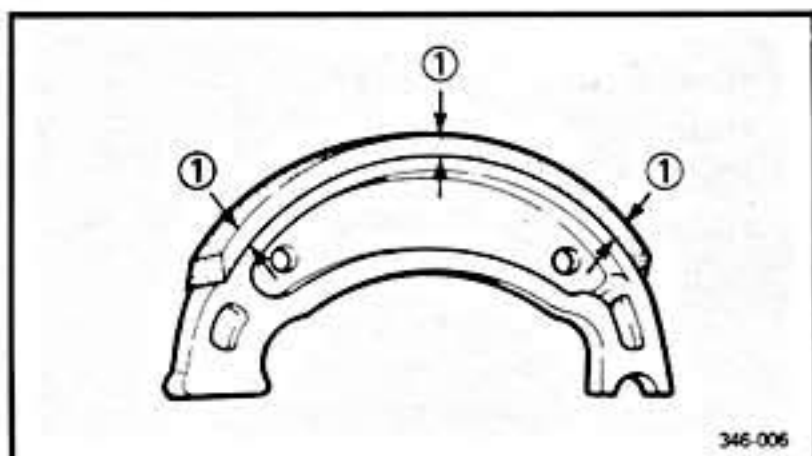
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INSPECTION

1. Inspect:
 - Rear axle
Refer to "FRONT WHEEL-INSPECTION" section.
2. Inspect:
 - Wheel runout
Refer to "FRONT WHEEL-INSPECTION" section.
3. Inspect:
 - Wheel
Refer to "FRONT WHEEL-INSPECTION" section.
4. Check:
 - Wheel bearings
Refer to "FRONT WHEEL-INSPECTION" section.
5. Check:
 - Wheel balance
Refer to "FRONT WHEEL-INSPECTION" section.

5



6. Inspect:
 - Brake lining surface
Glazed areas → Remove.
Use a coarse sand paper.

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

7. Measure:
 - Brake lining thickness
Out of specification → Replace.

① Measuring points

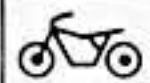


Brake Lining Thickness:

4 mm (0.16 in)

Wear Limit:

2 mm (0.08 in)



NOTE: _____

Replace the brake shoes as a set if either is found to be worn to the wear limit.

8. Inspect:

- Brake drum inner surface
Oil/Scratches → Remove.

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



9. Measure:

- Brake drum inside diameter
Out of specification → Replace rear wheel.

	Brake Drum Inside Diameter: 180 mm (7.08 in)
	Wear Limit: 181 mm (7.12 in)

10. Inspect:

- Camshaft face
Wear → Replace.

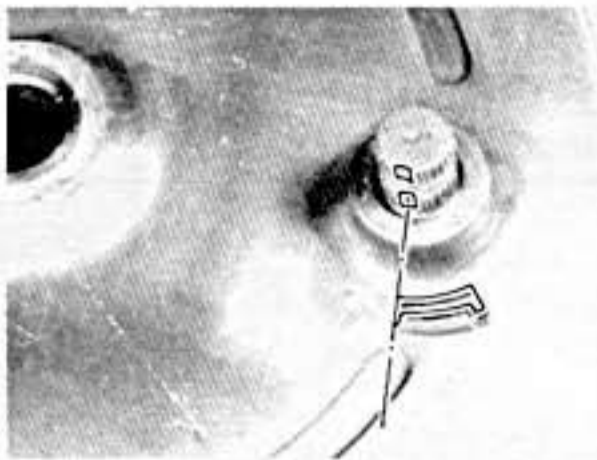
ASSEMBLY (BRAKE SHOE PLATE)

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

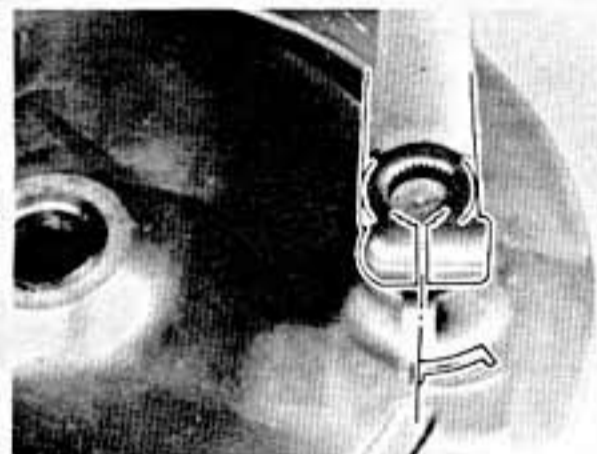
Note the following points.

1. Apply:

- Lithium-soap base grease
(to the brake cam shaft)



2. Install:
 - Brake cam shaft



3. Install:
 - Cam shaft lever

INSTALLATION

When installing the rear wheel, reverse the removal procedure.

Note the following points.

1. Apply:
 - Lithuim base grease

Lightly gerase to the oil seal lips.
2. Adjust:
 - Drive chain slack



Drive Chain Slack:
20 ~ 30 mm (0.8 ~ 1.2 in)

- Refer to "CHAPTER 2-DRIVE CHAIN SLACK ADJUSTMENT" section.

3. Tighten:
 - Axle nut



105 Nm (10.5 m•kg, 75 ft•lb)

- Nut (Tension bar)



20 Nm (2.0 m•kg, 14 ft•lb)



4. Install:
- Cotter pin

WARNING:

Always use a new cotter pin on the axle nut.

5. Adjust:
- Brake pedal free play



Free Play:
20 ~ 30 mm (0.8 ~ 1.2 in)

Refer to "CHAPTER 2-BRAKE PEDAL FREE PLAY ADJUSTMENT" section.

WARNING:

Check the operation of the brake light after adjusting the rear brake.

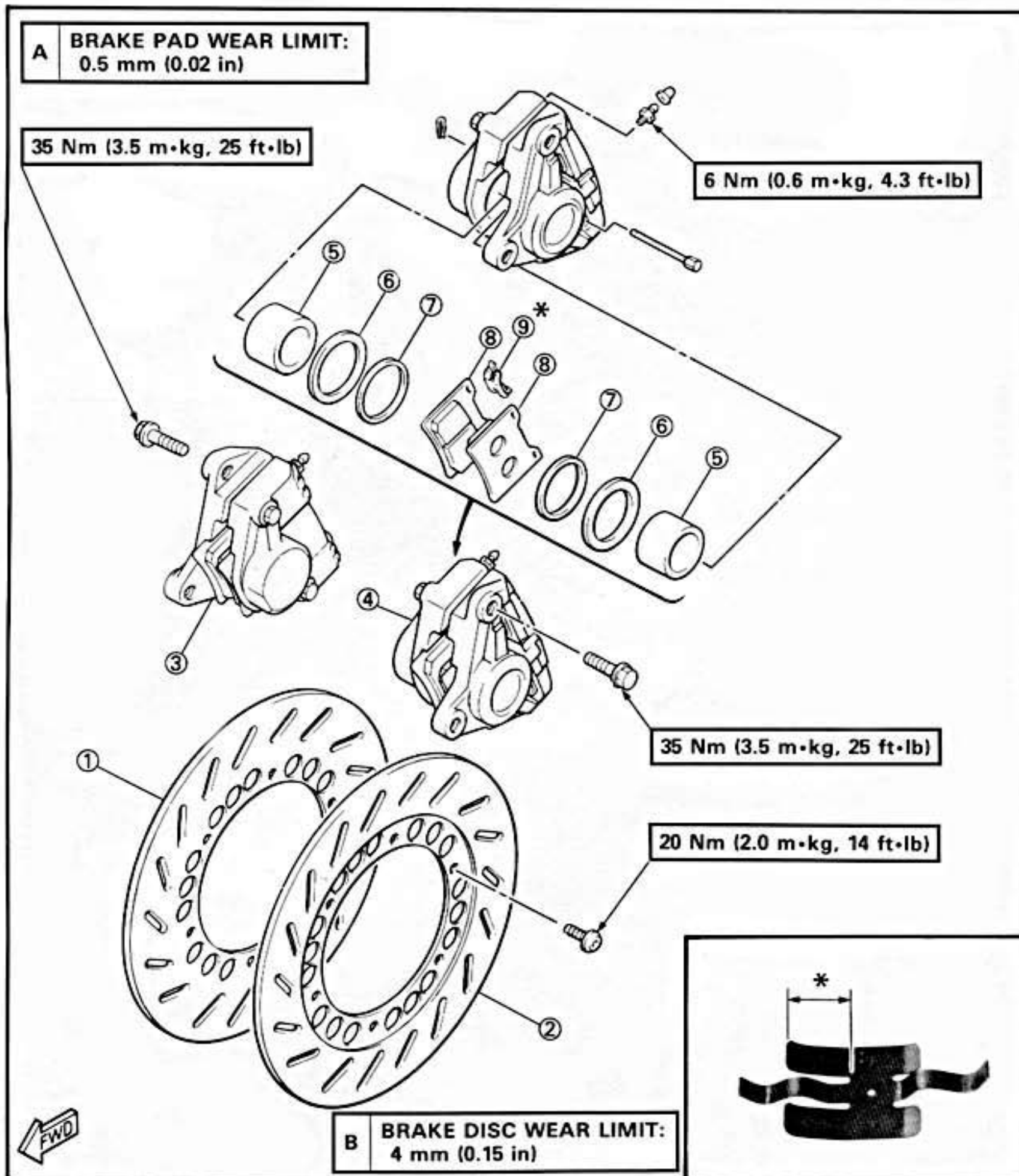


FRONT BRAKE

BRAKE CALIPER

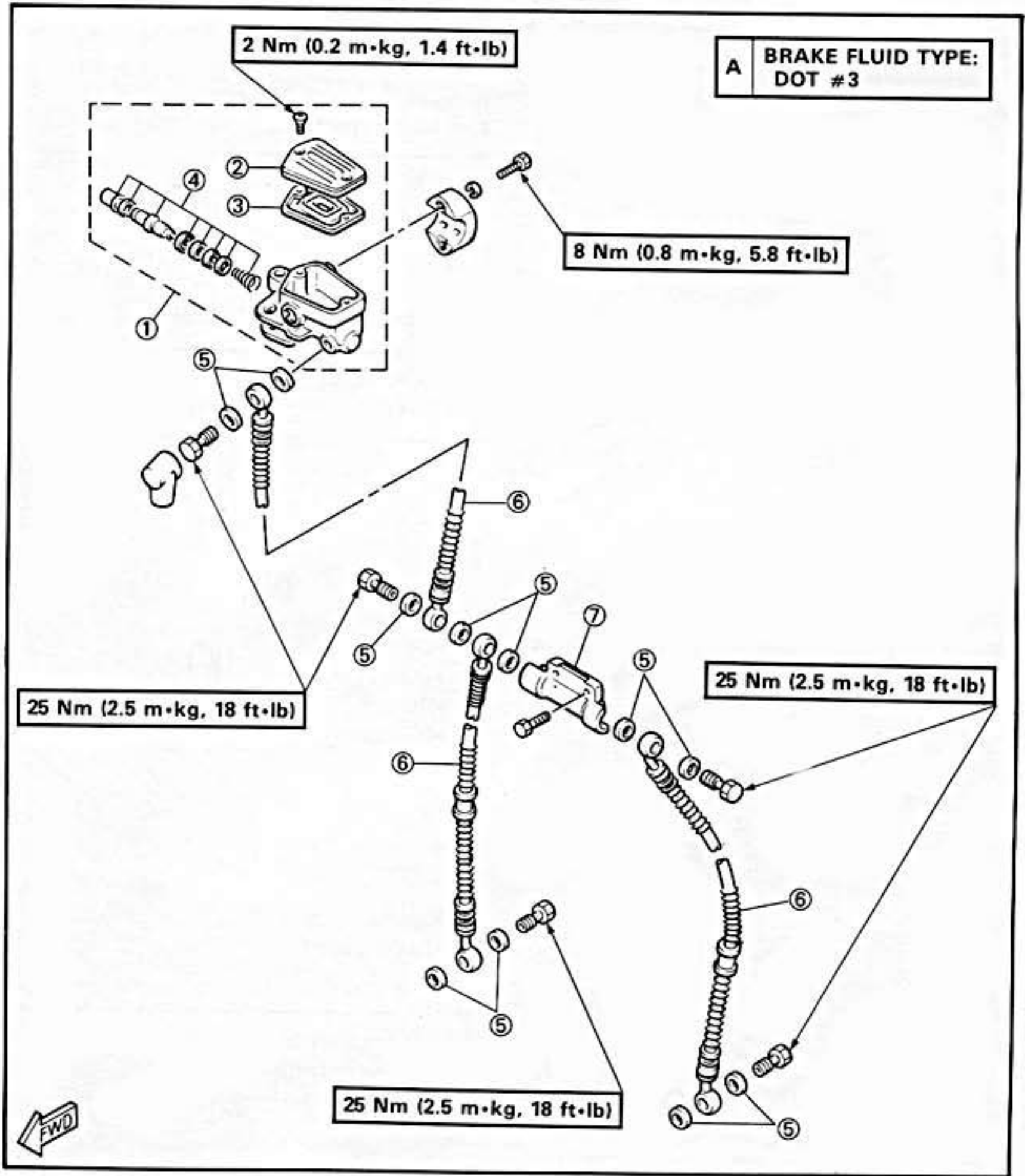
- ① Brake disc (Right)
- ② Brake disc (Left)
- ③ Brake caliper (Right)
- ④ Brake caliper (Left)
- ⑤ Piston
- ⑥ Piston seal
- ⑦ Dust seal
- ⑧ Brake pad
- ⑨ Pad spring

* Install the pad spring with its longer tangs facing towards the disc rotation direction.



BRAKE MASTER CYLINDER

- ① Master cylinder assembly
- ② Master cylinder cap
- ③ Rubber seal
- ④ Master cylinder kit
- ⑤ Copper washer
- ⑥ Brake hose
- ⑦ Joint



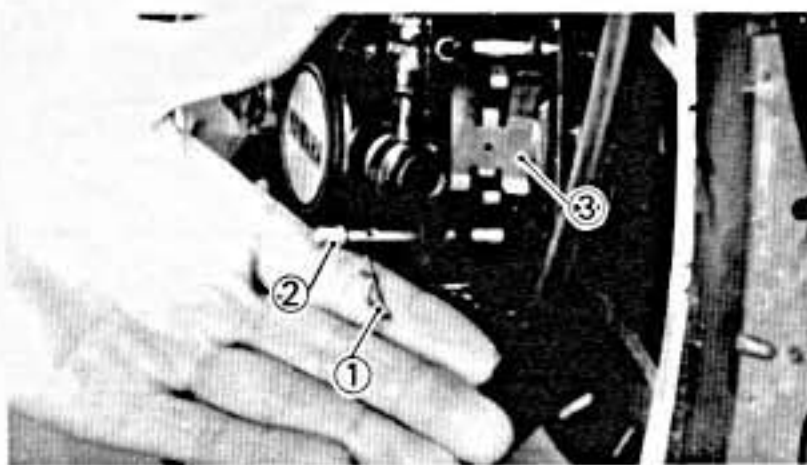
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**CAUTION:**

Disc brake components rarely require disassembly. Do not disassemble components unless absolutely necessary. If any hydraulic connection in the system is opened, the entire system should be disassembled, drained, cleaned and then properly filled and bled upon reassembly. Do not use solvents on brake internal components. Solvents will cause seals to swell and distort. Use only clean brake fluid for cleaning. Use care with brake fluid. Brake fluid is injurious to eyes and will damage painted surfaces and plastic parts.

CALIPER PAD REPLACEMENT**NOTE:**

It is not necessary to disassemble the brake caliper and brake hose to replace the brake pads.

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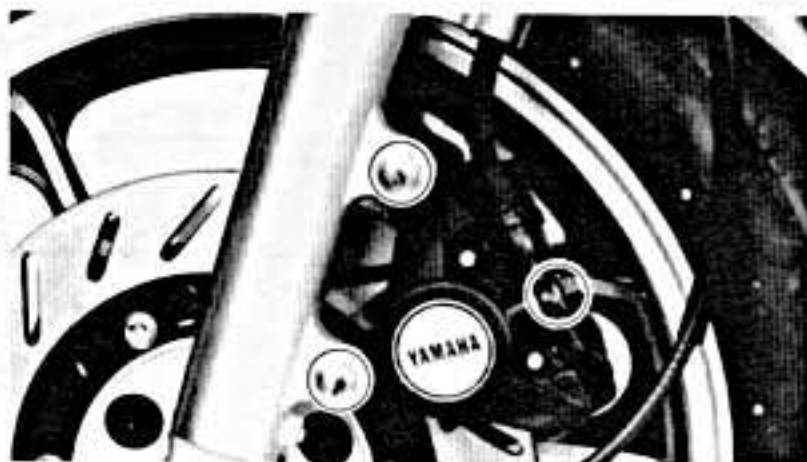
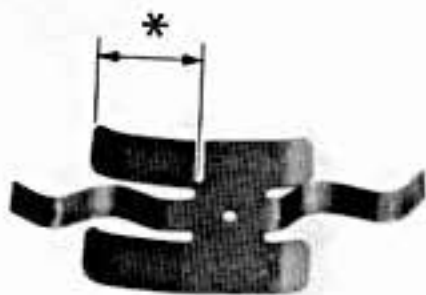
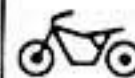
1. Remove:
 - Cover
 - Clips ①
 - Pins ②
 - Pad spring ③



2. Replace:
 - Brake pads ①

NOTE:

Replace the pads as a set if either is found to be worn to the wear limit.



3. Install:

- Pad spring
- Pins
- Clips
- Cover

NOTE:

Install the pad spring with its longer tangs facing towards the disc rotation direction.

CALIPER DISASSEMBLY**NOTE:**

Before disassembling the caliper, drain the brake fluid.

1. Remove:

- Brake caliper

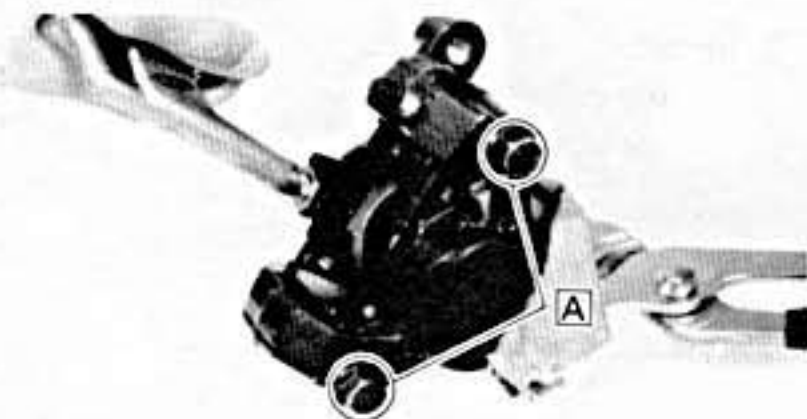
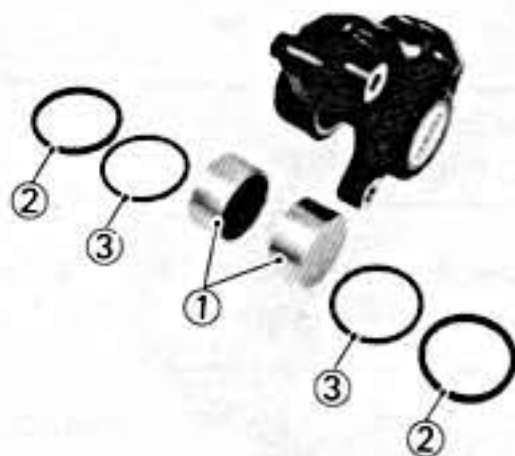
2. Remove:

- Brake pad

Refer to "CALIPER PAD REPLACEMENT" section.

3. Remove:

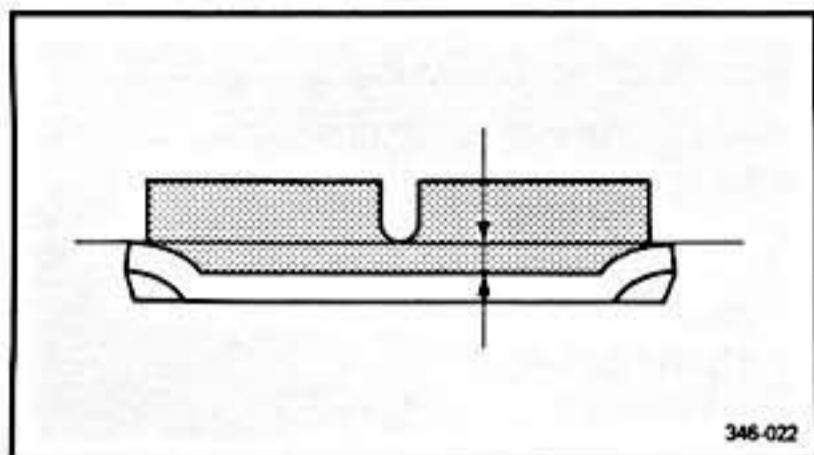
- Piston ①
- Piston seal ②
- Dust seal ③

**Caliper piston removal steps:**

- Using a rag, lock the right side piston.
- Blow compressed air into the hose joint opening to force out the left side piston from the caliper body.
- Remove the dust and piston seals and reinstall the piston.
- Repeat previous step to force out the right side piston from the caliper body.

A DO NOT LOOSEN

5



INSPECTION

1. Inspect:

- Caliper piston
Rust/Wear → Replace.
- Caliper cylinder body
Wear/Scratches → Replace.

- Brake pads
Out of specification → Replace.



Pad Wear Limit:
0.5 mm (0.02 in)

INSTALLATION

1. Assemble:

- Brake caliper(s)
Reverse disassembly steps.

WARNING:

- All internal parts should be cleaned in new brake fluid only.
- Internal parts should be lubricated with brake fluid when installed.

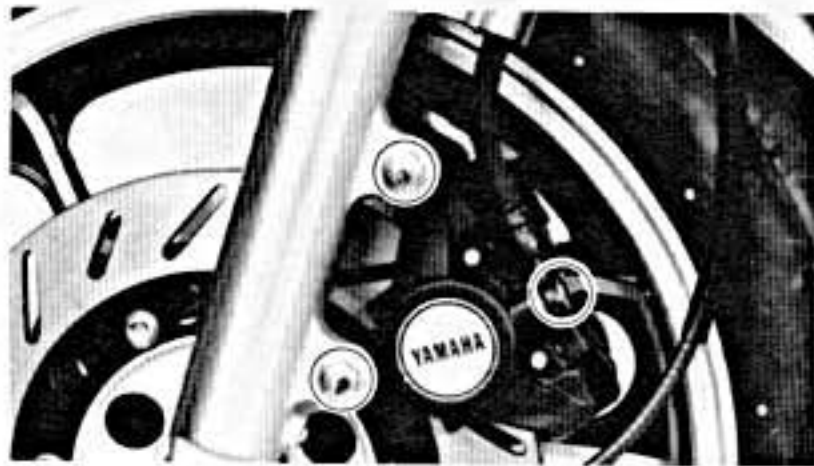
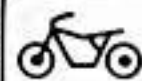


Brake Fluid:
DOT #3

- Replace the dust and piston seals whenever a caliper is disassembled.

2. Install:

- Brake caliper
- Brake hose



3. Tighten:
 - Bolt (Brake hose)
 - Bolts (Caliper)



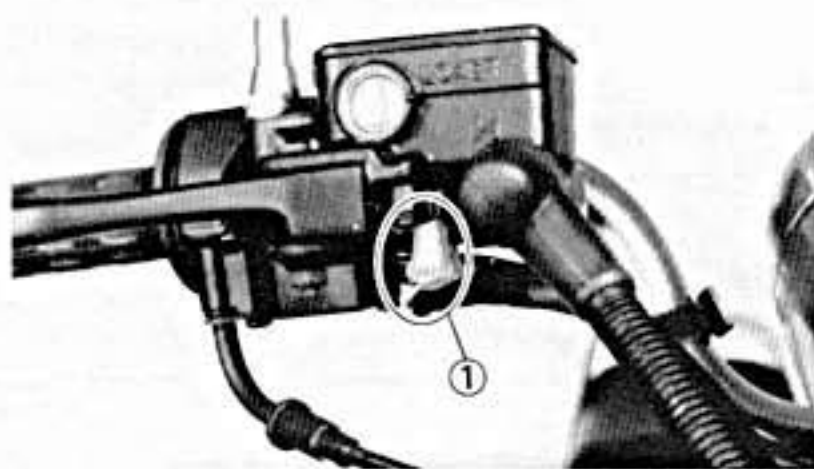
Bolt (Brake hose):
25 Nm (2.5 m•kg, 18 ft•lb)
Bolts (Caliper):
35 Nm (3.5 m•kg, 25 ft•lb)

4. Fill:
 - Brake system



Recommended Brake Fluid:
DOT #3

5. Bleed the air completely from the brake system.
Refer to "AIR BLEEDING" section.
6. Check:
 - Brake fluid level
 Refer to "CHAPTER 2-FRONT BRAKE FLUID INSPECTION" section.

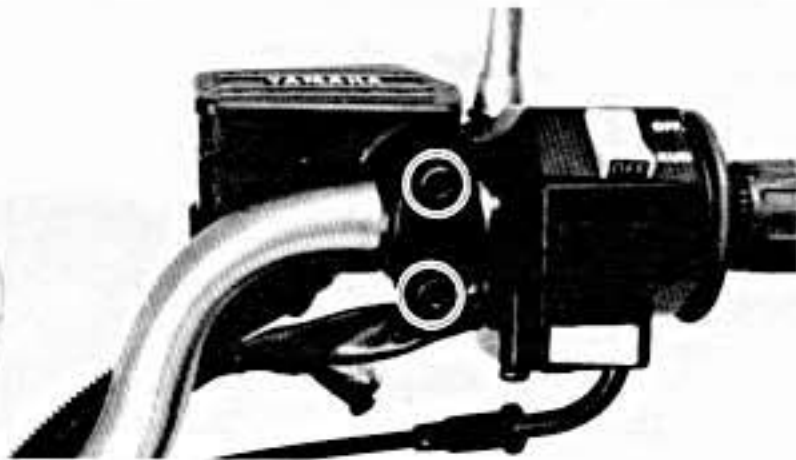


MASTER CYLINDER DISASSEMBLY

NOTE: _____
Before disassembling the master cylinder, drain the brake fluid.

1. Disconnect:
 - Brake switch leads ①
2. Remove:
 - Brake hose ①
 - Brake lever ②
 - Spring ③

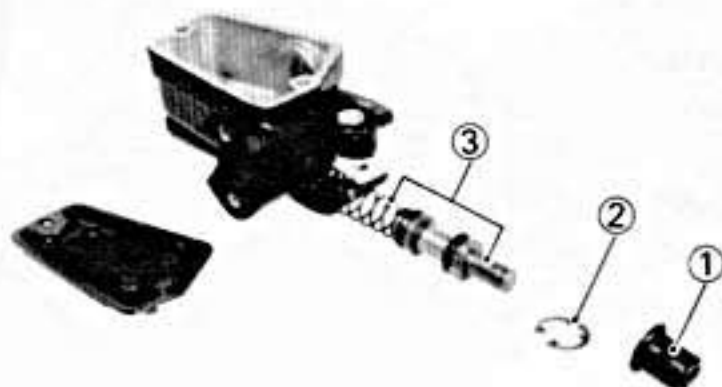
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3. Remove:
- Master cylinder assembly



4. Remove:
- Master cylinder cap
 - Rubber seal



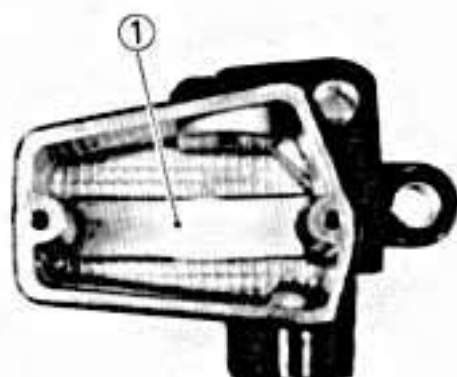
5. Remove:
- Dust boot ①
 - Circlip ②
 - Master cylinder kit ③

5

INSPECTION

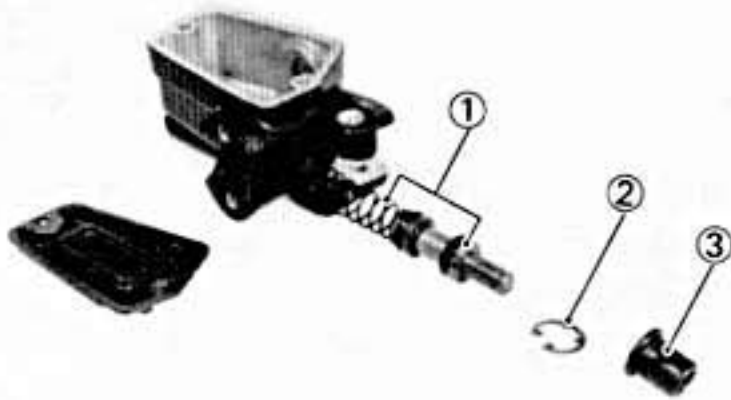
1. Inspect:
- Master cylinder body
Scratches/Wear → Replace.

NOTE: _____
 Clean all passages with new brake fluid.



- Brake hoses
Cracks/Wear/Damage → Replace.
- Master cylinder kit
Scratches/Wear → Replace.

① Oil baffle plate



INSTALLATION

1. Install:

- Master cylinder kit ①

WARNING:

Internal parts should be lubricated with brake fluid when installed.

- Circlip ②
- Dust boot ③

2. Install:

- Master cylinder
- Brake hose (With copper washers)
- Brake lever

NOTE:

Grease the pivot point.

3. Tighten:

- Bolts (Master cylinder bracket)
- Bolt (Brake hose)



Bolts (Master cylinder bracket):

8 Nm (0.8 m•kg, 5.8 ft•lb)

Bolt (Brake hose):

25 Nm (2.5 m•kg, 18 ft•lb)

4. Connect:

- Brake switch leads

5. Fill:

- Brake system



Recommended Brake Fluid:

DOT #3

6. Bleed the air completely from the brake system.

Refer to "AIR BLEEDING" section.

7. Check:

- Brake fluid level
- Refer to "CHAPTER 2-FRONT BRAKE FLUID INSPECTION" section.

5



5

AIR BLEEDING

WARNING:

Bleed the brake system if:

- The system has been disassembled.
- A brake hose has been loosened or removed.
- The brake fluid is very low.
- The brake operation is faulty.

A dangerous loss of braking performance may occur if the brake system is not properly bled.

1. Air bleeding

Air bleeding steps:

- a. Add proper brake fluid to the reservoir.
- b. Install diaphragm.
Be careful not to spill any fluid or allow the reservoir to over flow.
- c. Connect the clear plastic tube (4.5 mm, 3/16 in inside dia.) tightly to the caliper bleed screw ①.
- d. Place the other end of the tube into a container.
- e. Slowly apply the brake lever several times.
- f. Pull the lever in. Hold the lever in position.
- g. Loosen the bleed screw and allow the lever to travel towards its limit.
- h. Tighten the bleed screw when the lever limit has been reached; then release the lever.
- i. Repeat steps (e) to (h) until of the air bubbles have been removed from the system.

NOTE:

If bleeding is difficult, it may be necessary to let the brake fluid system stabilize for a few hours. Repeat the bleeding procedure when the tiny bubbles in system have disappeared.

2. Tighten:

- Bleed screw
- Screws (Master cylinder cap)



Bleed Screw:

6 Nm (0.6 m•kg, 4.3 ft•lb)

Screws (Master cylinder cap):

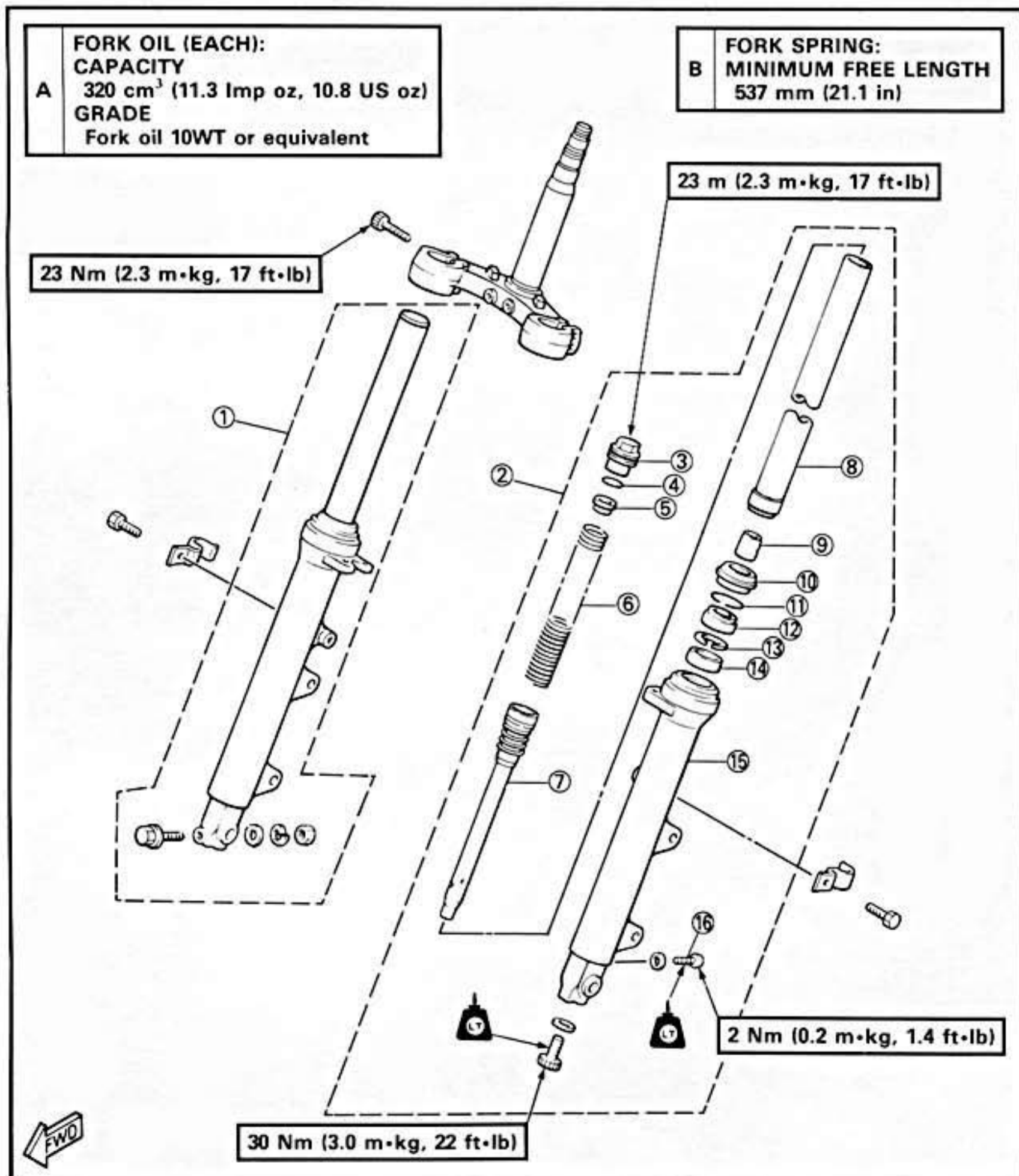
2 Nm (0.2 m•kg, 1.4 ft•lb)

MEMO



FRONT FORK

- ① Front fork assembly (Right)
- ② Front fork assembly (Left)
- ③ Cap bolt
- ④ O-ring
- ⑤ Spring seat
- ⑥ Fork spring
- ⑦ Damper rod
- ⑧ Inner fork tube
- ⑨ Oil lock piece
- ⑩ Dust seal
- ⑪ Retaining clip
- ⑫ Oil seal
- ⑬ Plain washer
- ⑭ Guide bush
- ⑮ Outer fork tube
- ⑯ Drain screw



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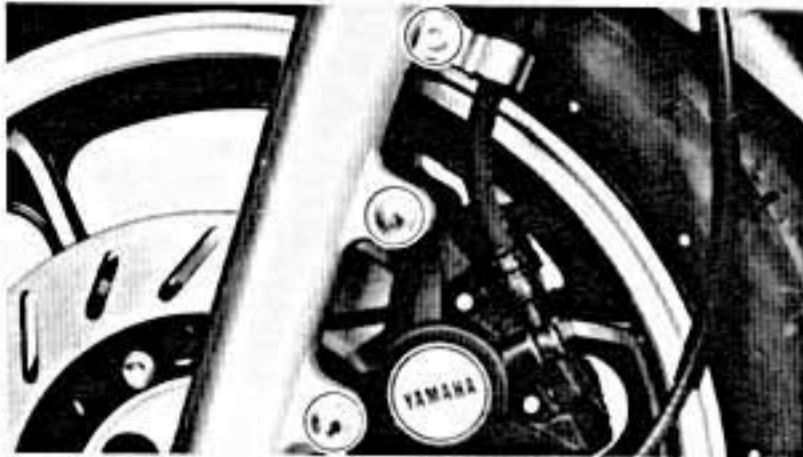


REMOVAL

1. Place the motorcycle on its centerstand.

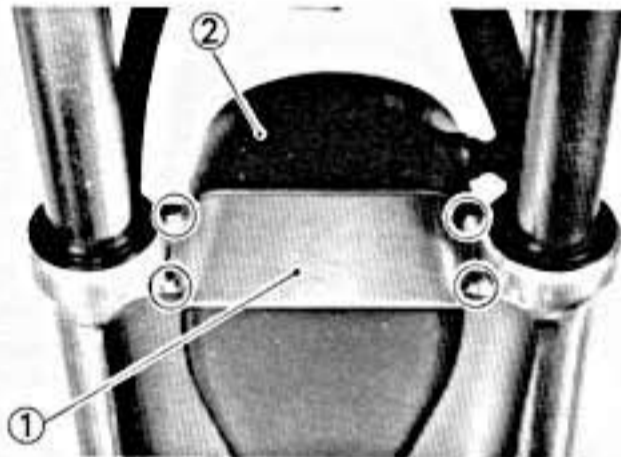
WARNING:

Support the motorcycle securely so there is no danger of it falling over.

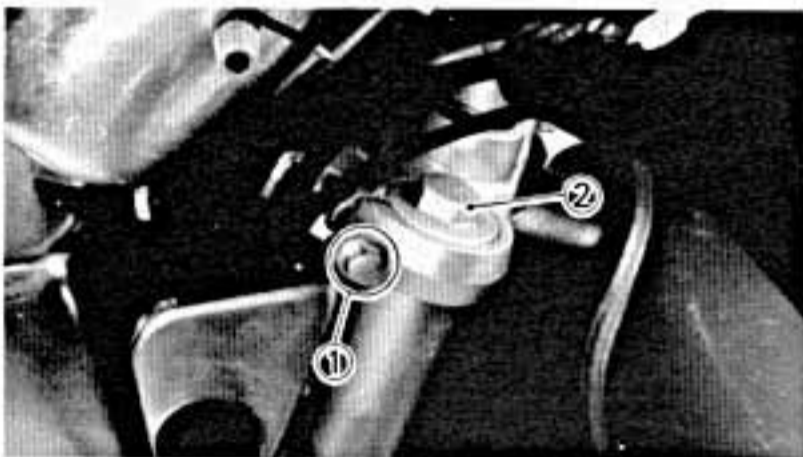


2. Remove:
 - Bolts (Brake caliper)

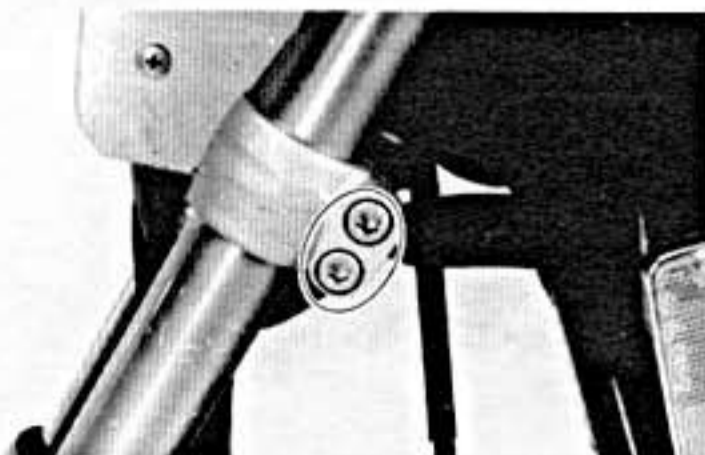
3. Remove:
 - Front wheel
 Refer to "FRONT WHEEL-REMOVAL" section.



4. Remove:
 - Front fork brace ①
 - Front fender ②



5. Loosen:
 - Pinch bolt (Handle crown) ①
 - Cap bolt ②

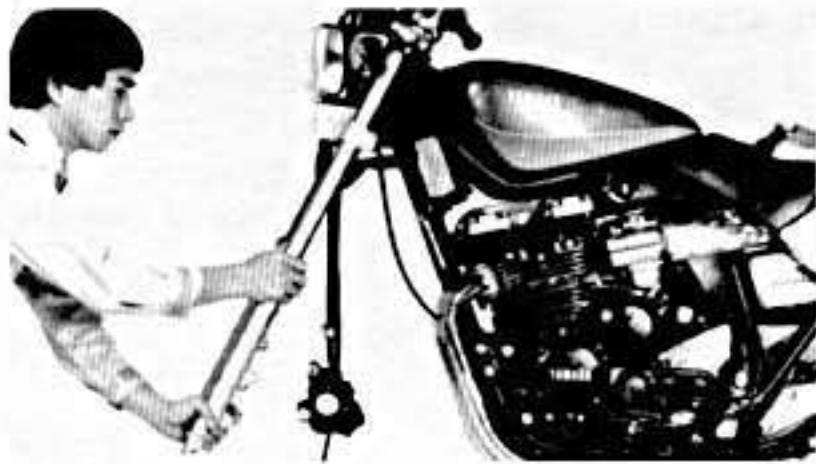


6. Loosen:
 - Pinch bolts (Under bracket)

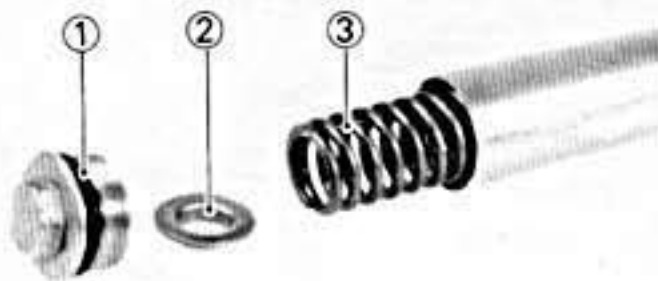
CAUTION:

Support the fork before loosening the pinch bolts.

5

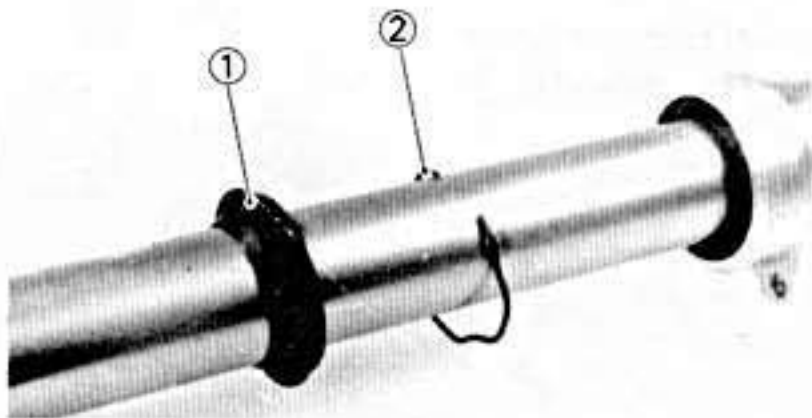


7. Remove:
•Front fork

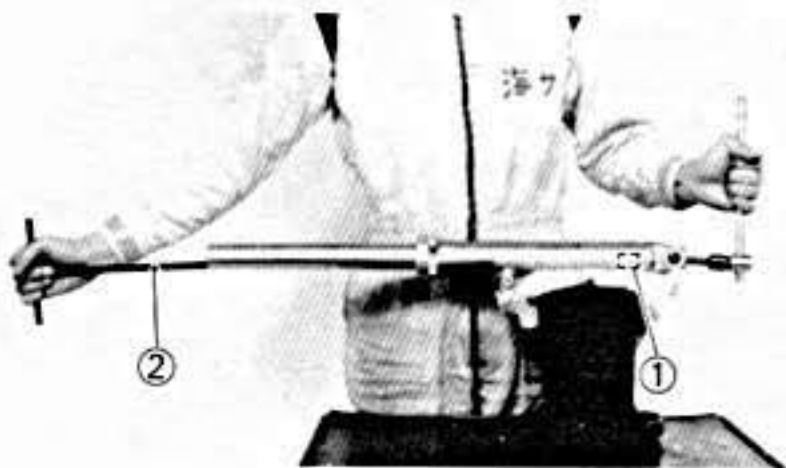


DISASSEMBLY

1. Remove:
 - Cap bolt ①
 - Spring seat ②
 - Fork spring ③
2. Drain:
 - Fork oil
3. Remove:
 - Dust seal ①
 - Retaining clip ②



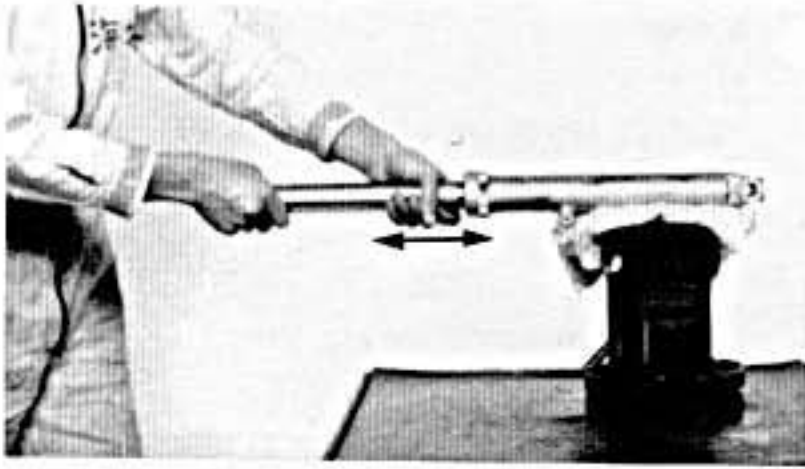
5



4. Remove:
 - Cylinder securing bolt
 - Use the Holder (YM-33298) ① and T-Handle (YM-01326) ② to lock the damper rod.

5. Remove:
 - Damper rod





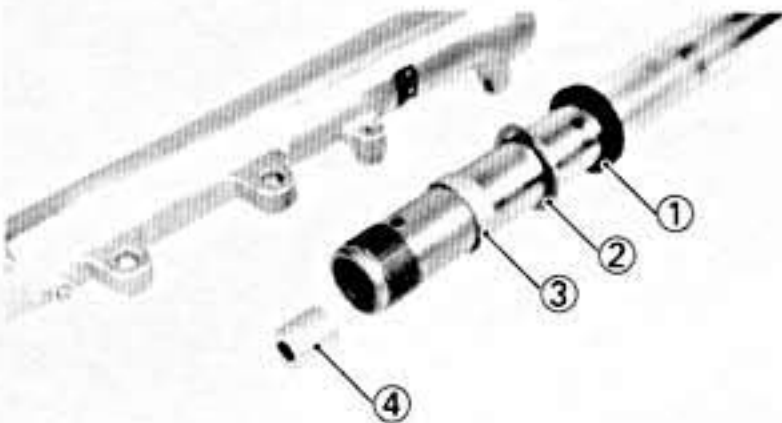
6. Remove:
- Inner fork tube

Inner fork tube removal steps:

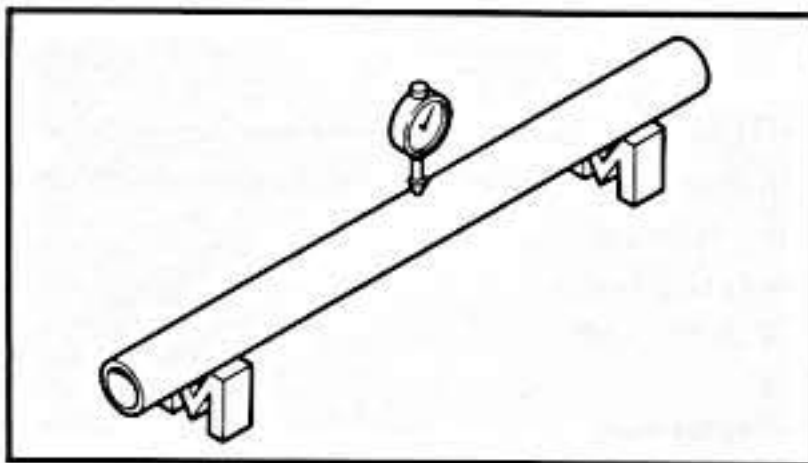
- Hold the fork leg horizontally.
- Pull out the inner fork tube from the outer tube by forcefully, but carefully, withdrawing the inner fork tube.

NOTE:

- Excessive force will damage the oil seal, plain washer and/or bushings. The oil seal and bushings must be replaced.
- Avoid bottoming the inner tube in the outer tube during the above procedure, as the oil lock piece will be damaged.



7. Remove:
- Oil seal ①
 - Plain washer ②
 - Guide bush ③
 - Oil lock piece ④



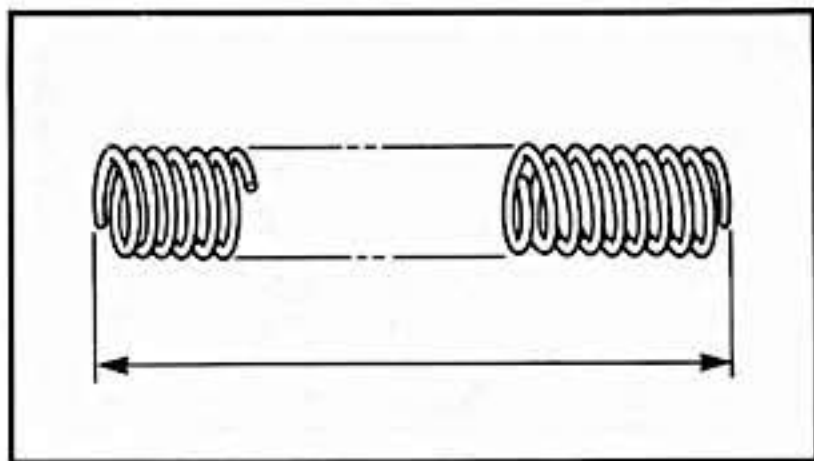
INSPECTION

1. Inspect:
- Inner fork tube
Scratches/Bends → Replace.

WARNING:

Do not attempt to straighten a bent inner fork tube as this may dangerously weaken the tube.

2. Inspect:
- Outer fork tube
Scratches/Bends/Damage → Replace.

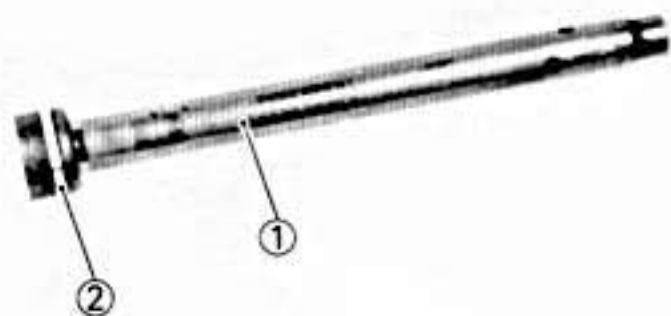


3. Measure:

- Fork spring
- Out of specification → Replace.



Fork Spring Free Length:
542 mm (21.3 in)
Minimum Free Length:
537 mm (21.1 in)



4. Inspect:

- Damper rod ①
- Ring ②
- Wear/Damage → Replace.

NOTE:

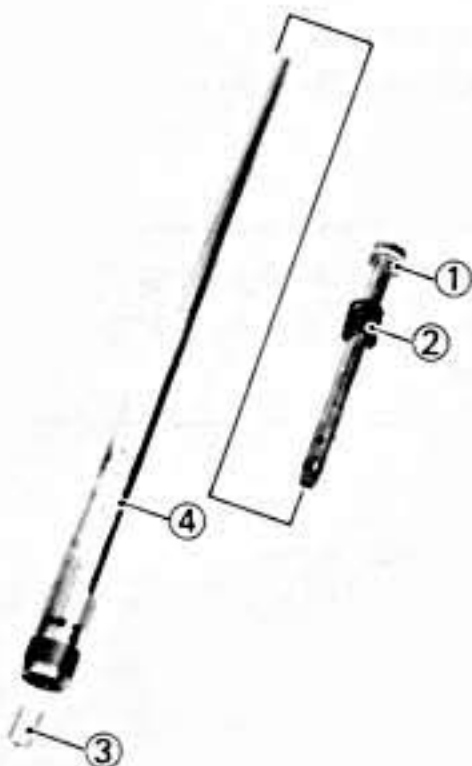
Blow out all oil passages with compressed air.



5. Inspect:

- Oil lock piece ①
- O-ring ②
- Damage → Replace.

5

**REASSEMBLY****NOTE:**

- In front fork reassembly, be sure to use following new parts.
 - * Guide bush
 - * Slide bush
 - * Oil seal
 - * Dust seal
- Make sure all components are clean before reassembly.

1. Install:

- Damper rod ①
- Rebound spring ②
- Oil lock piece ③
- Inner fork tube ④

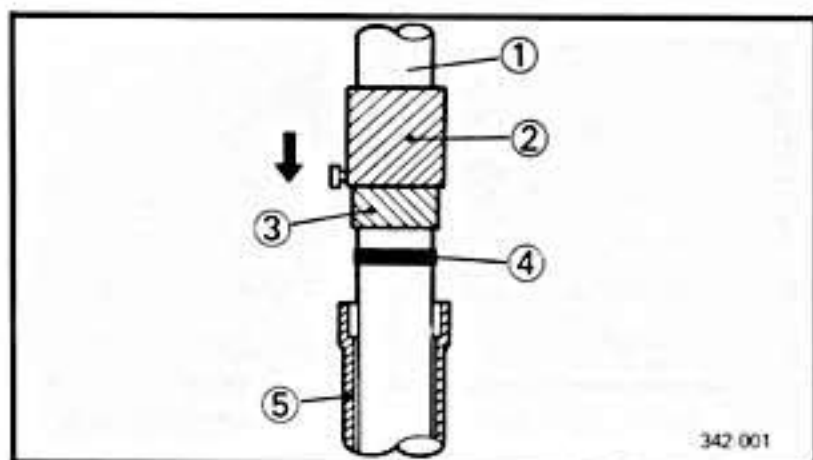


2. Install:

- Cylinder securing bolt
- Use the Holder (YM-33298) and T-Handle (YM-01326) to lock the damper rod.



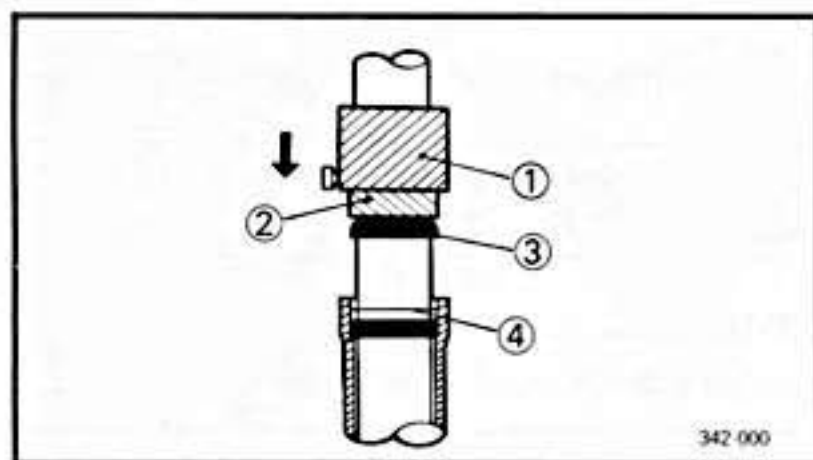
30 Nm (3.0 m•kg, 22 ft•lb)
Apply LOCTITE®.



3. Install:

- Guide bush (4)
- Use the Fork Seal Driver Weight (YM-33963) (2) and Adapter (YM-08010) (3).

- ① Inner tube
- ⑤ Outer tube



4. Install:

- Plain washer (4)
- Oil seal (3) (New)
- Use the Fork Seal Driver Weight (YM-33963) (1) and Adapter (YM-08010) (2).
- Retaining clip
- Dust seal

5. Fill:

- Front fork



Each Fork:

320 cm³ (11.3 Imp oz, 10.8 US oz)

Fork Oil 10 WT or equivalent
After filling, slowly pump the fork up and down to distribute oil.

6. Install:

- Fork spring (with smaller pitch side up)
- Spring seat
- Cap bolt (Temporarily)

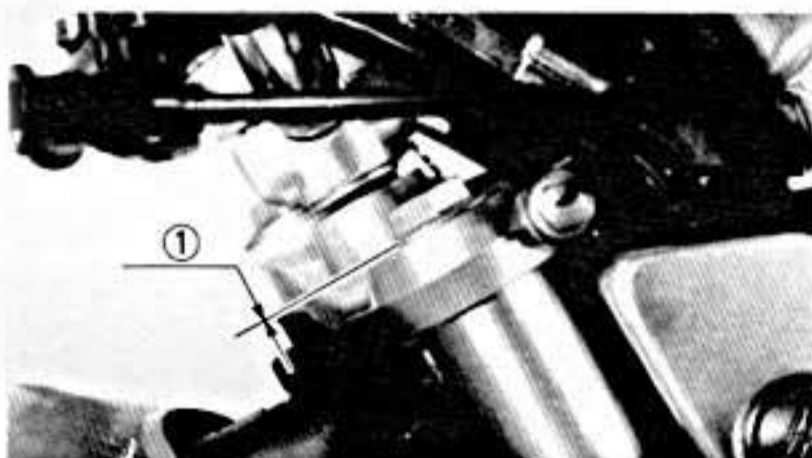
5



INSTALLATION

When installing the front fork, reverse the removal procedure.

Note the following points.



1. Install:

- Front fork(s)
- Temporarily tighten the pinch bolts.

NOTE: _____

Level the top of the cap bolt with the top of the handle crown.

① Flush

2. Tighten:

- Pinch bolts (Under bracket)



Pinch Bolt (Under Bracket)
23 Nm (2.3 m•kg, 17 ft•lb)

NOTE: _____

Do not tighten the handle crown pinch bolt.

3. Tighten:

- Cap bolt
- Pinch bolt (Handle crown)



Cap Bolt:
23 Nm (2.3 m•kg, 17 ft•lb)
Pinch Bolt (Handle crown):
20 Nm (2.0 m•kg, 14 ft•lb)

4. Install:

- Front fender
- Front fork brace



Bolts (Front Fender):
8 Nm (0.8 m•kg, 5.8 ft•lb)



5. Install:

- Front wheel
- Brake caliper

Refer to "FRONT WHEEL-INSTALLATION" section.



Nut (Front Axle):

105 Nm (10.5 m•kg, 75 ft•lb)

Bolts (Brake Caliper):

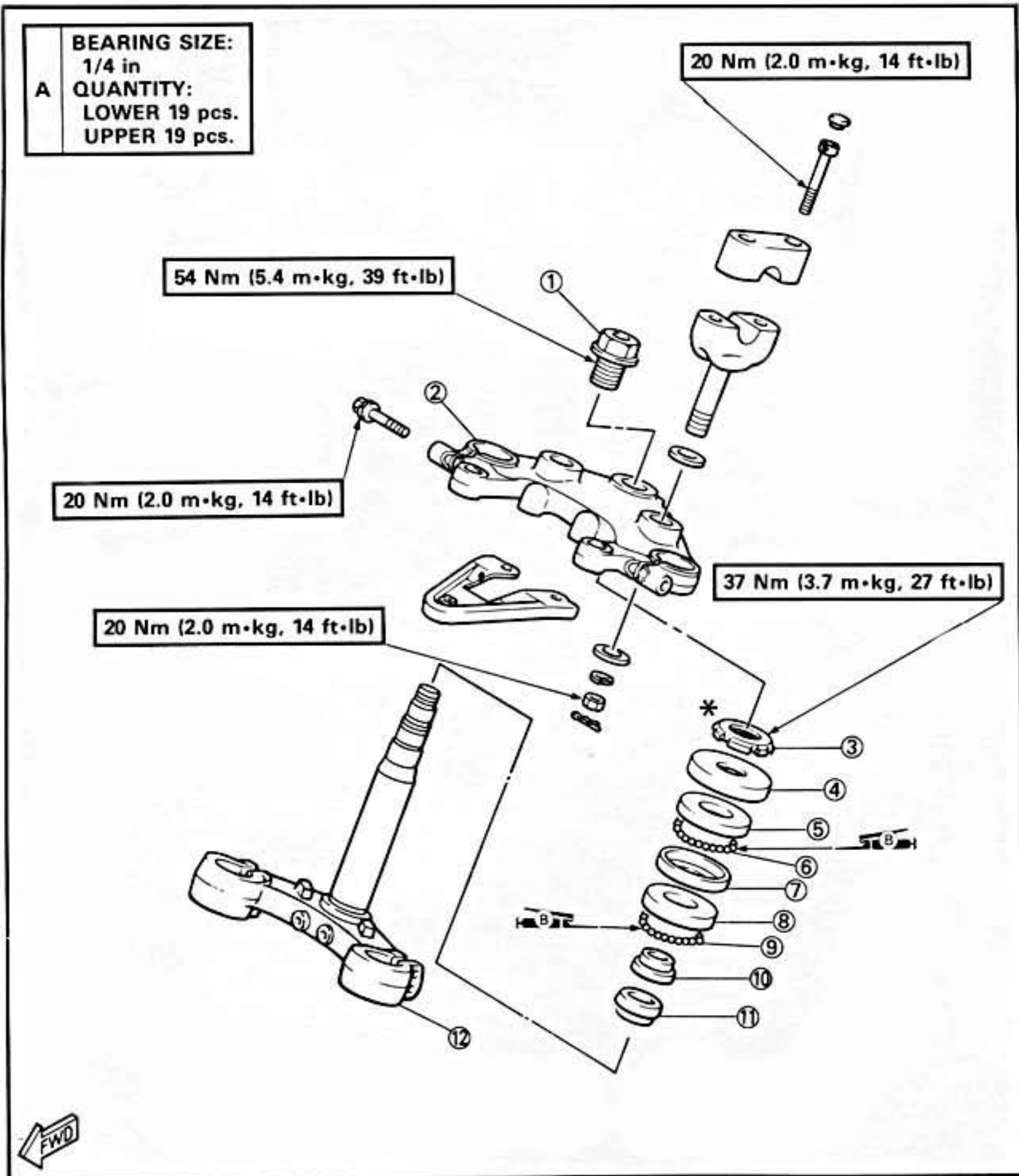
35 Nm (3.5 m•kg, 25 ft•lb)



STEERING HEAD

- ① Steering stem bolt
- ② Handle crown
- ③ Ring nut
- ④ Bearing race cover
- ⑤ Bearing race
- ⑥ Bearing
- ⑦ Bearing race
- ⑧ Bearing race
- ⑨ Bearing
- ⑩ Bearing race
- ⑪ Dust seal
- ⑫ Under bracket

* Tighten to specified torque.
If steering is binded, loosen the ring nut so that there is no free play on bearing.



5

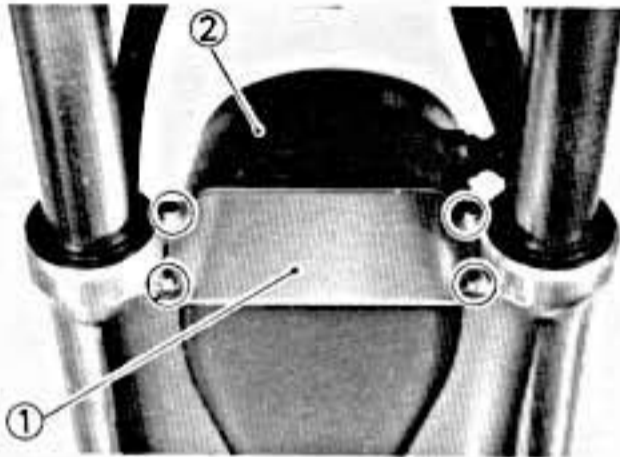


REMOVAL

1. Place the motorcycle on the centerstand.

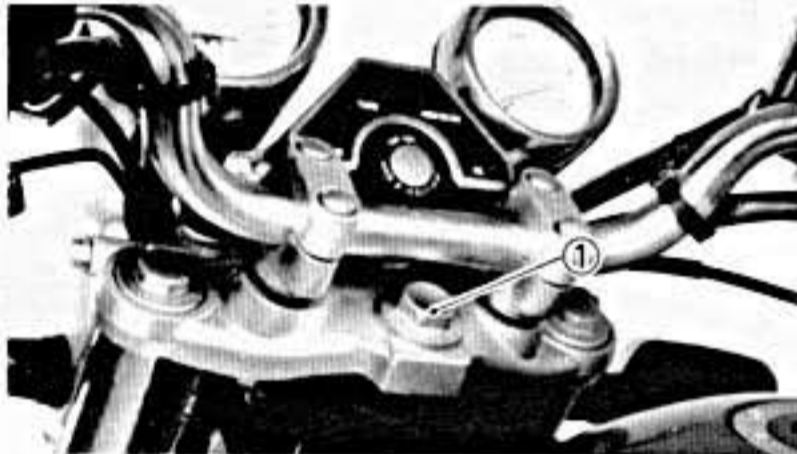
WARNING:

Securely support the motorcycle so there is no danger of it falling over.

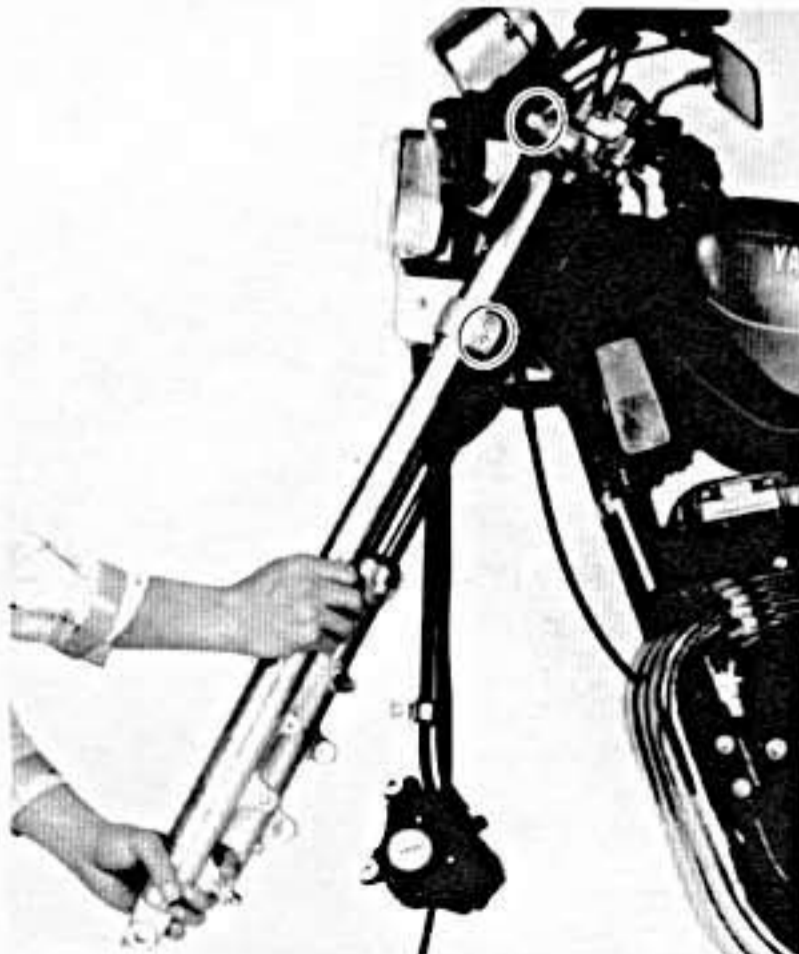


2. Remove:
 - Front wheel
Refer to "FRONT WHEEL-REMOVAL" section.

3. Remove:
 - Front fork brace ①
 - Front fender ②

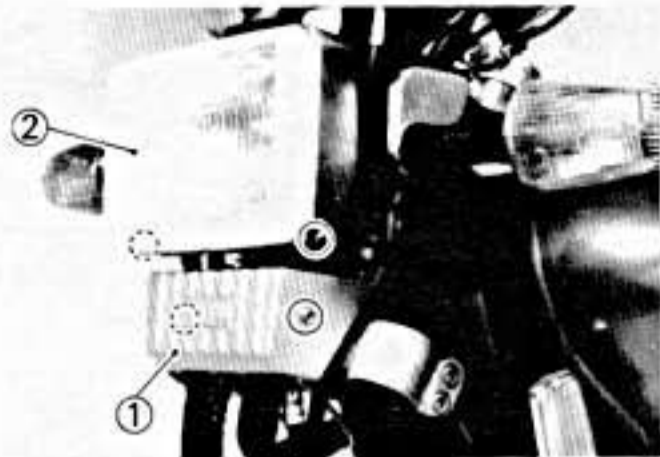


4. Loosen:
 - Steering stem bolt ①



5. Remove:
 - Front forks

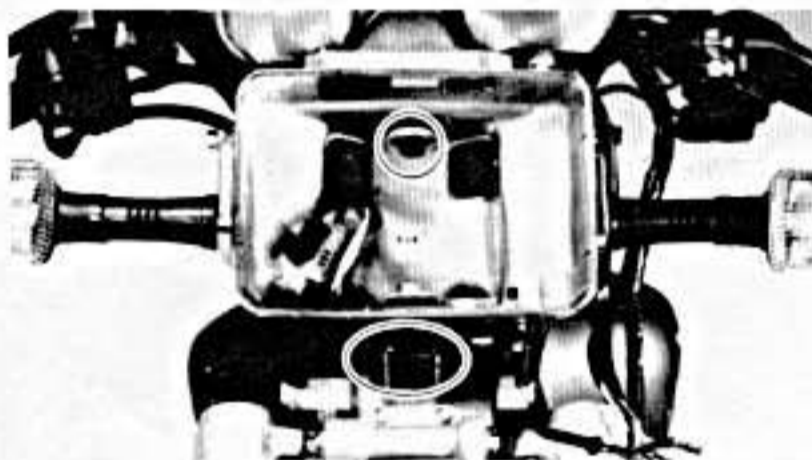
5



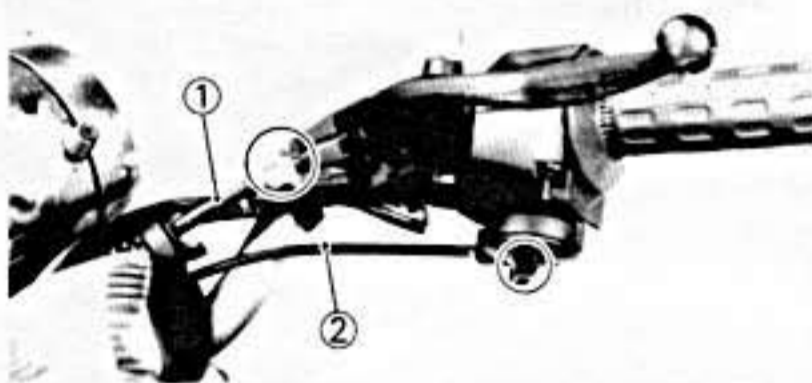
6. Remove:
- Front cover ①
 - Headlight lens unit ②



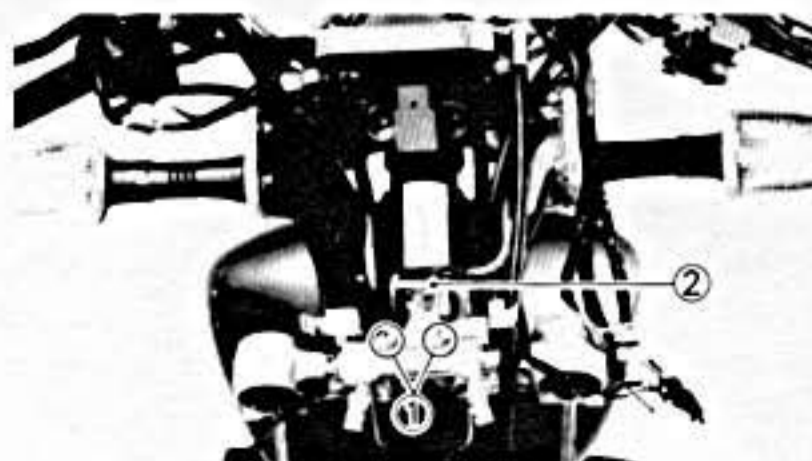
7. Disconnect:
- Meter leads
 - Handlebar switch leads
 - Flasher light leads



8. Remove:
- Headlight body

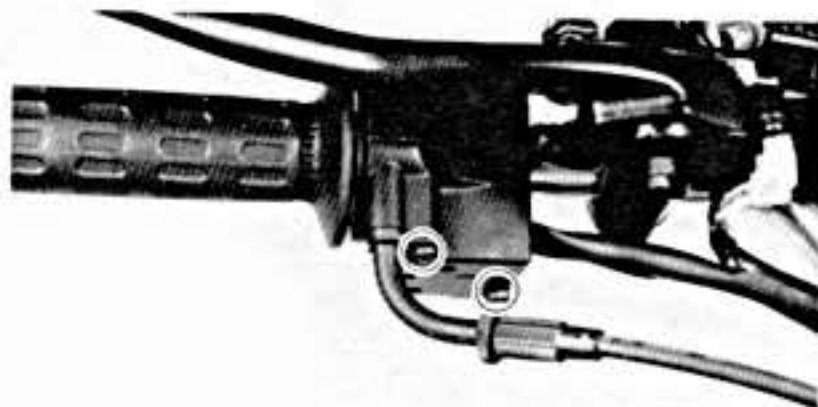
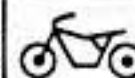


9. Remove:
- Clutch cable ①
 - Starter cable ②

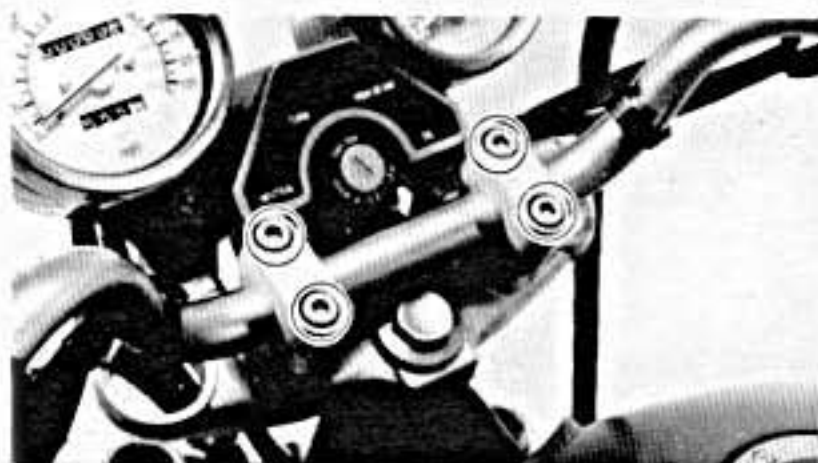


10. Remove:
- Bolts (Brake hose joint) ①
 - Headlight stay ②

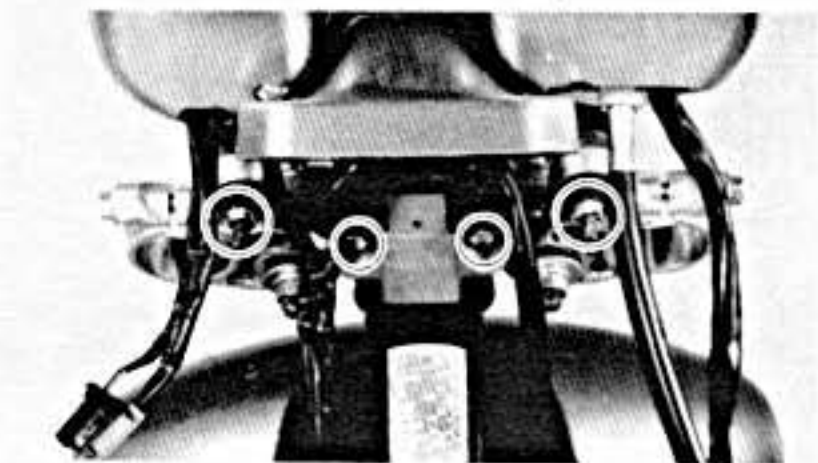
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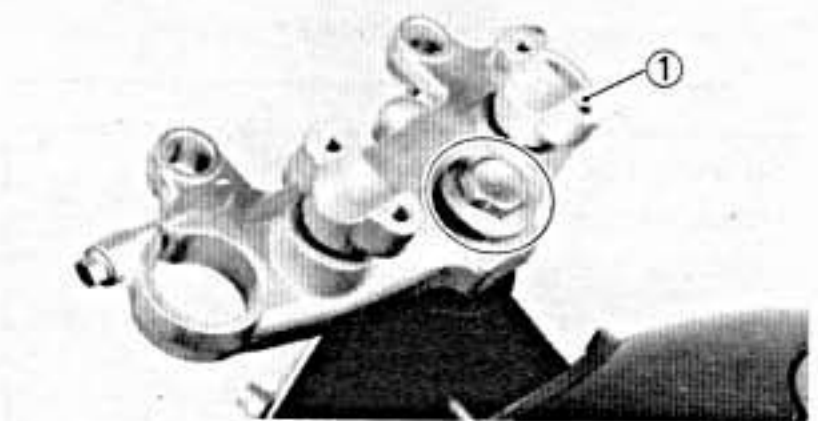
11. Loosen:
- Screws (Right handlebar switch)



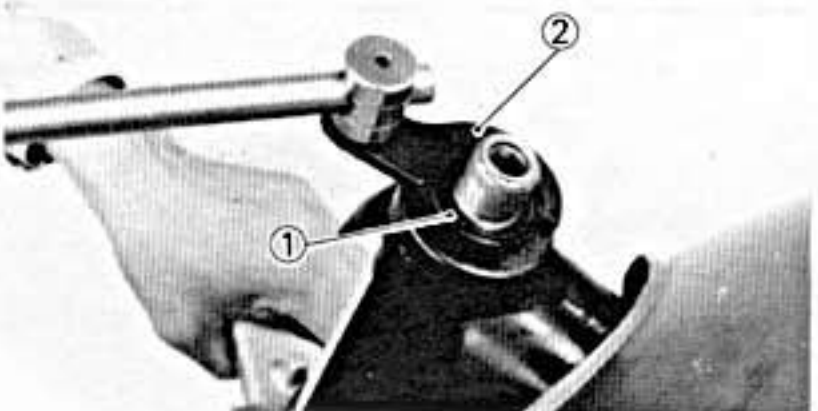
12. Remove:
- Handlebar



13. Remove:
- Meter assembly
 - Main switch



14. Remove:
- Handle crown ①

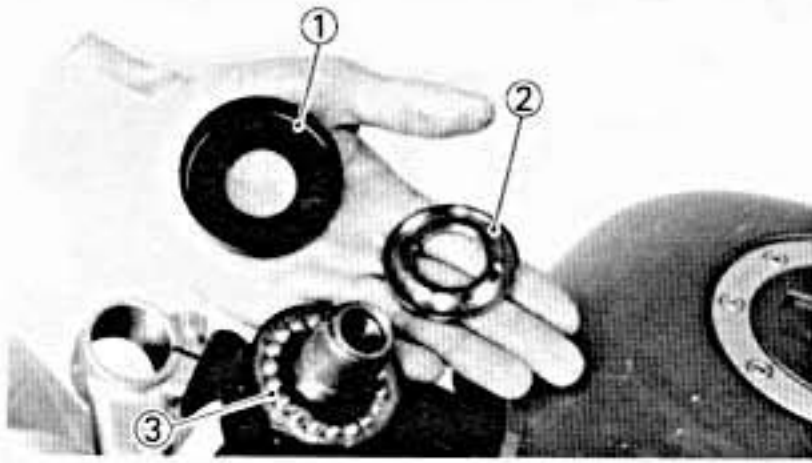


15. Remove:
- Ring nut ①
 - Use Ring Nut Wrench (YU-33975) ②.

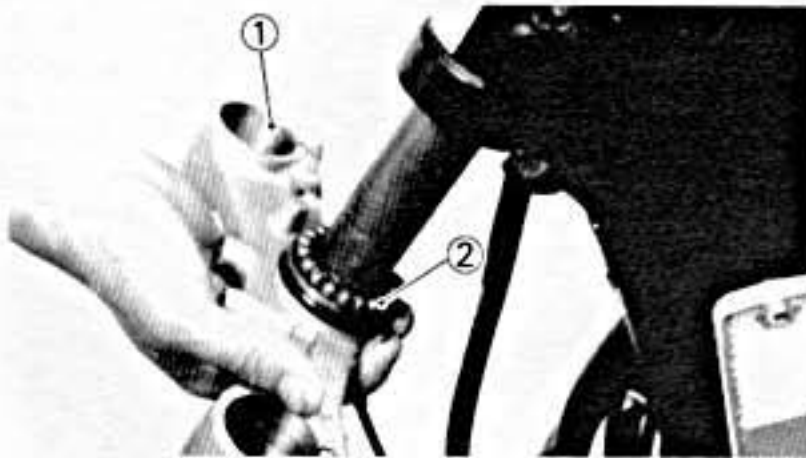
WARNING:

Support the under bracket so that it may not fall down.

5



16. Remove:
- Bearing race cover ①
 - Bearing race ②
 - Bearings ③



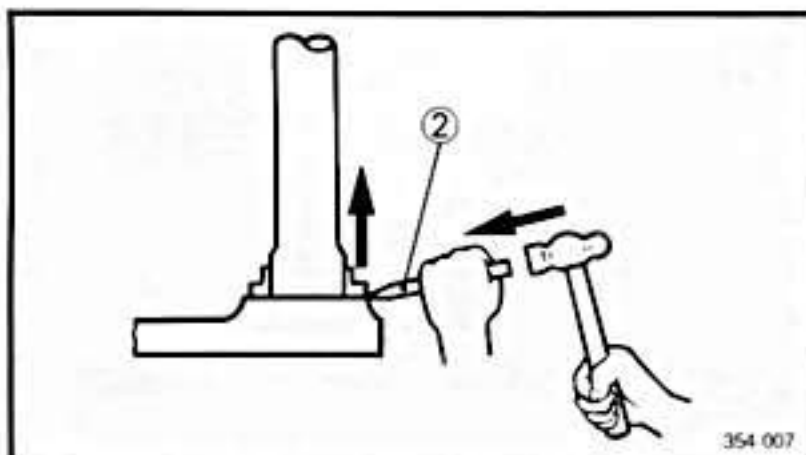
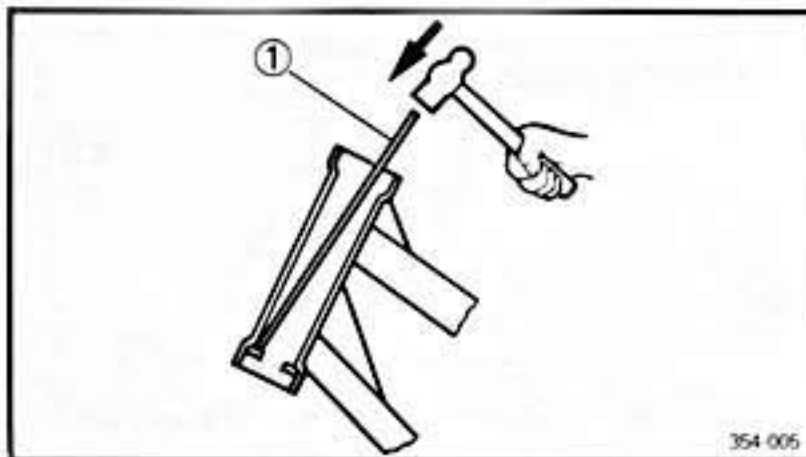
17. Remove:
- Under bracket ①
 - Bearings ②

INSPECTION

1. Wash the bearings in a solvent.
2. Inspect:
 - Bearings
 - Ball races
 - Pitting/Damage → Replace.

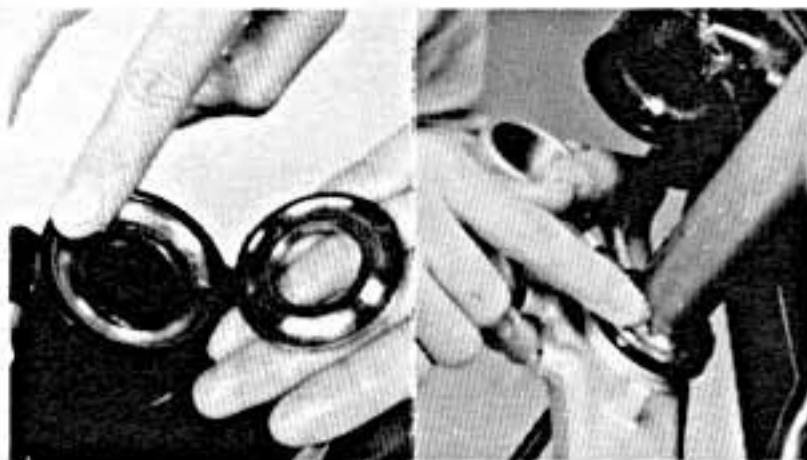
NOTE: _____

Always replace bearings and races as a set.



Bearing race replacement steps:

- Remove the bearing races using long rod ① and the hammer as shown.
- Remove the bearing race on the under bracket using the floor chisel ② and the hammer as shown.
- Install the new dust seal and races.

**INSTALLATION**

Reverse the removal procedure.
Note the following points.

1. Apply:
 - Grease
To bearing races.



Wheel Bearing Grease

2. Install:
 - Bearings
Arrange the bearings around race, and apply more grease.

Ball Quantity/Size

Upper 19 pcs./1/4 in

Lower 19 pcs./1/4 in

3. Install:
 - Under bracket

CAUTION:

Hold the under bracket until it is secured.



4. Tighten:
 - Ring nut
Use Ring Nut Wrench (YU-33975).



37 Nm (3.7 m•kg, 27 ft•lb)

NOTE:

If steering is binded, loosen the ring nut so that there is no free play on bearings.

5. Tighten:
 - Bolts (Handlebar)



20 Nm (2.0 m•kg, 14 ft•lb)

5



6. Pass the meter leads, handlebar switch leads and the flasher light leads through the headlight body holes.

Refer to "CHAPTER 7-CABLE ROUTING" section.

7. Connect:

- Meter leads
- Handlebar switch leads
- Flasher light leads


NOTE: _____

The leads of identical colors should be connected.

8. Install:


- Front forks

Refer to "FRONT FORK-INSTALLATION" section.

	Pinch Bolts (Under Bracket):
	23 Nm (2.3 m•kg, 17 ft•lb)
	Pinch Bolts (Handle Crown):
	20 Nm (2.0 m•kg, 14 ft•lb)

9. Tighten:

- Steering stem bolt ①

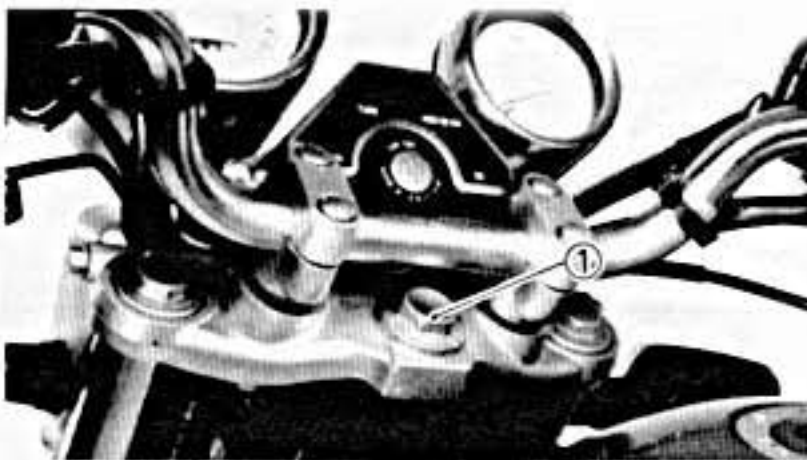
	54 Nm (5.4 m•kg, 39 ft•lb)
---	-----------------------------------

10. Install:

- Front fender
- Front fork brace

	Bolt (Front Fender):
	8 Nm (0.8 m•kg, 5.8 ft•lb)

5





11. Install:

- Front wheel
- Brake caliper

Refer to "FRONT WHEEL-INSTALLATION" section.



Nut (Front Axle):

105 Nm (10.5 m•kg, 75 ft•lb)

Bolts (Brake Caliper):

35 Nm (3.5 m•kg, 25 ft•lb)

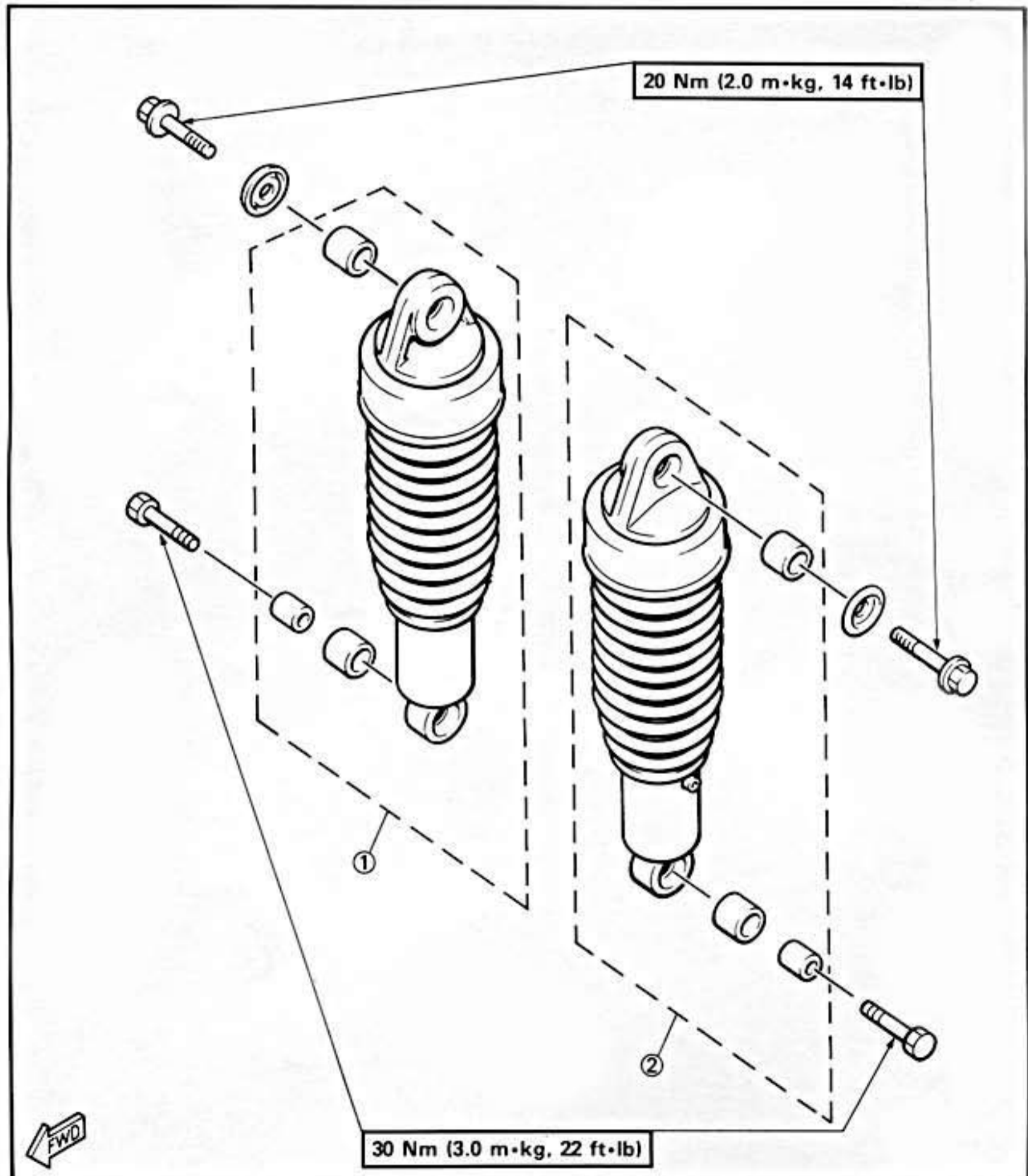
12. Bleed the air completely from the brake system.

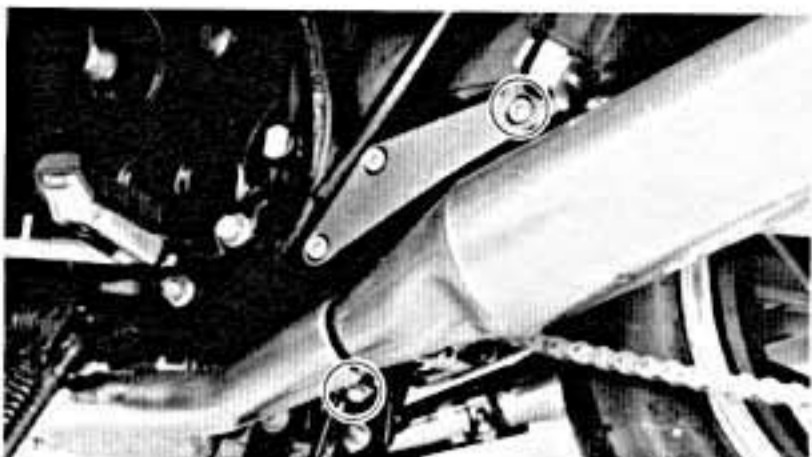
Refer to "FRONT BRAKE-AIR BLEEDING" section.



REAR SHOCK ABSORBER

- ① Rear shock absorber (Right)
- ② Rear shock absorber (Left)





REMOVAL

1. Place the motorcycle on its centerstand.
2. Remove:
 - Muffler
3. Remove:
 - Rear shock absorber


INSPECTION

1. Inspect:
 - Rear shock absorber
 - Oil leaks/Damage → Replace.


INSTALLATION

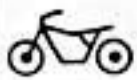
Reverse the removal procedure.
Note the following points.

1. Install:
 - Rear shock absorber

	Bolt (Shock Absorber and Frame): 20 Nm (2.0 m•kg, 14 ft•lb) Bolt (Shock Absorber and Swingarm): 30 Nm (3.0 m•kg, 22 ft•lb)
---	---

2. Install:
 - Muffler

	Bolt (Muffler and Footrest Bracket): 25 Nm (2.5 m•kg, 18 ft•lb)
---	---



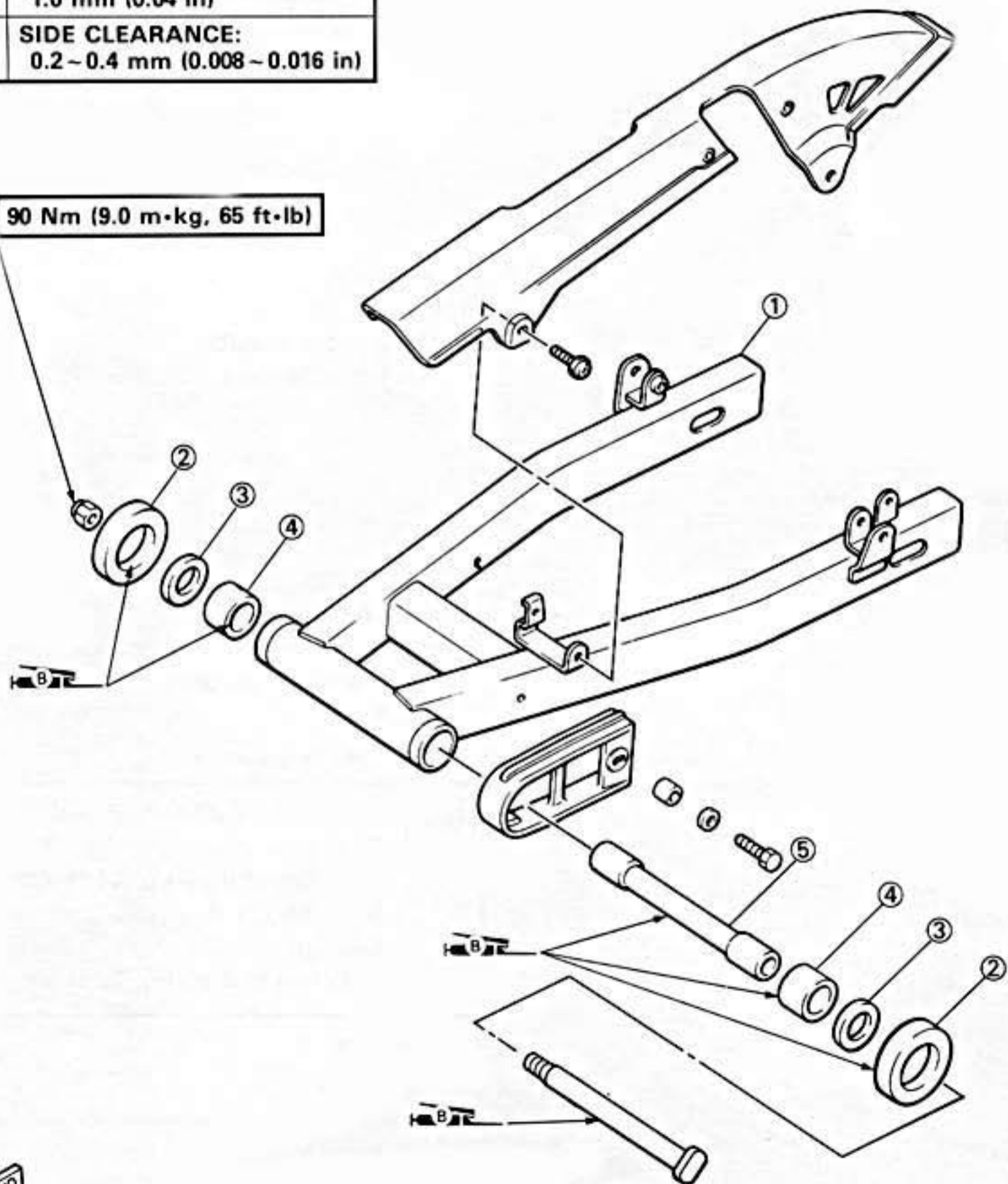
SWINGARM

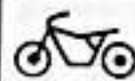
- ① Swingarm
- ② Thrust cover
- ③ Shim
- ④ Bearing
- ⑤ Bush

A	SIDE PLAY: 1.0 mm (0.04 in)
B	SIDE CLEARANCE: 0.2 ~ 0.4 mm (0.008 ~ 0.016 in)

90 Nm (9.0 m·kg, 65 ft·lb)

5

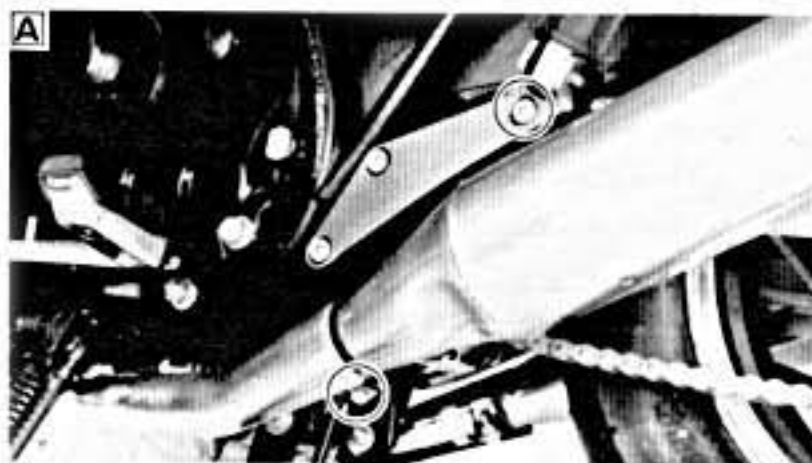


**REMOVAL**

1. Place the motorcycle on its centerstand.

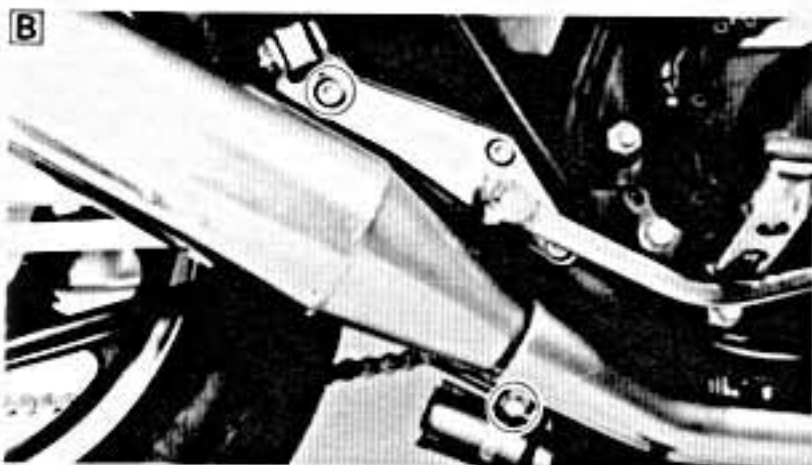
WARNING:

Support the motorcycle securely so there is no danger of it falling over.

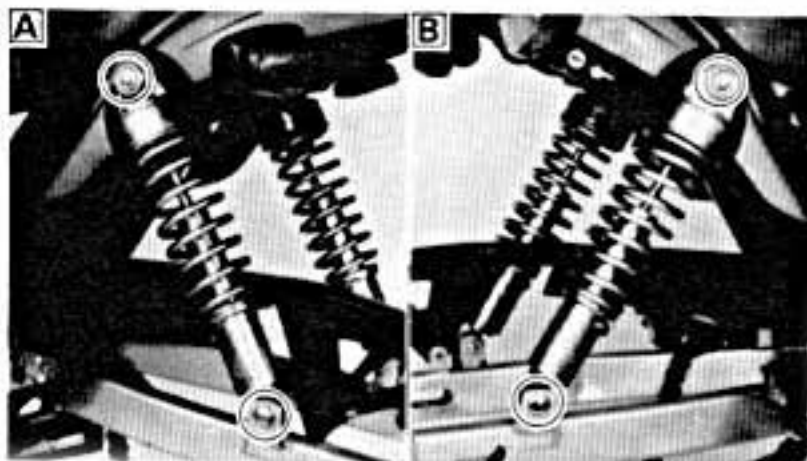


2. Remove:
 - Mufflers

- A** Left side
- B** Right side

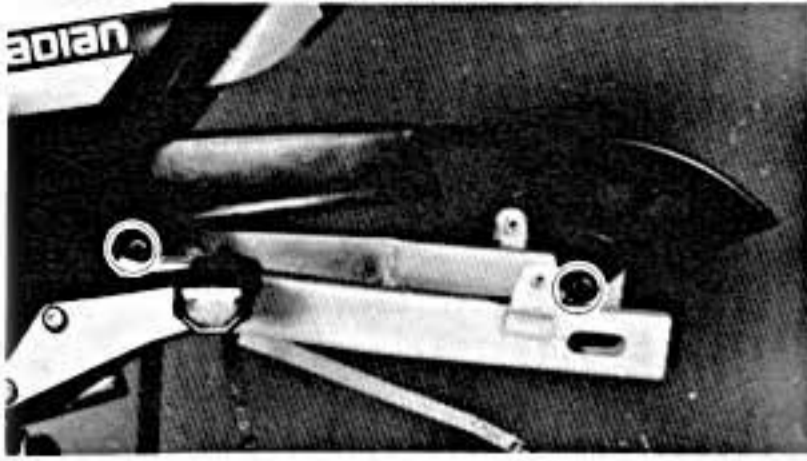


3. Remove:
 - Rear wheelRefer to "REAR WHEEL-REMOVAL" section.

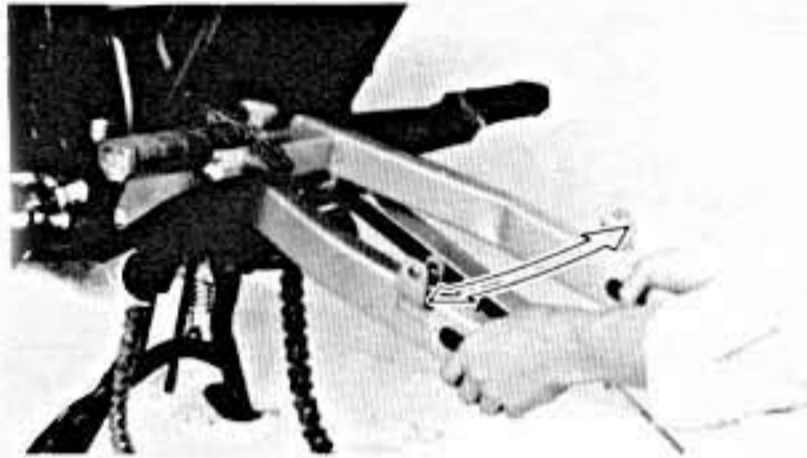
5

4. Remove:
 - Rear shock absorbers

- A** Left side
- B** Right side



5. Remove:
- Chain cover



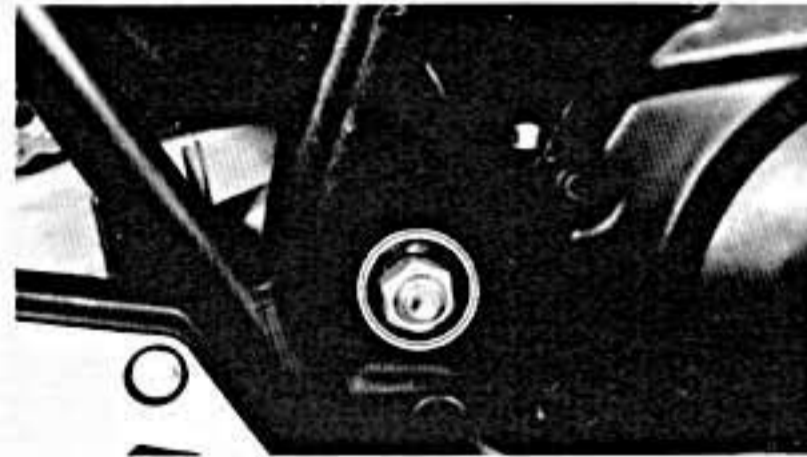
6. Check:
- Swingarm (Side play)
Over specified limit → Inspect bush length and adjust side play using shims.
Move swingarm from side to side.



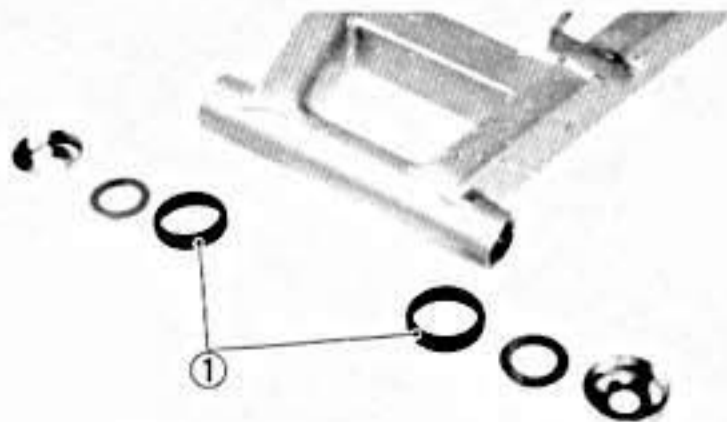
Side Play (At End of Swingarm):
1.0 mm (0.04 in)



7. Check:
- Swingarm (Vertical movement)
Tightness/Binding/Rough Sports → Replace bearings.
Move swingarm up and down.



8. Remove:
- Swingarm



INSPECTION

1. Inspect:
- Oil seal ①
Damage → Replace thrust cover.

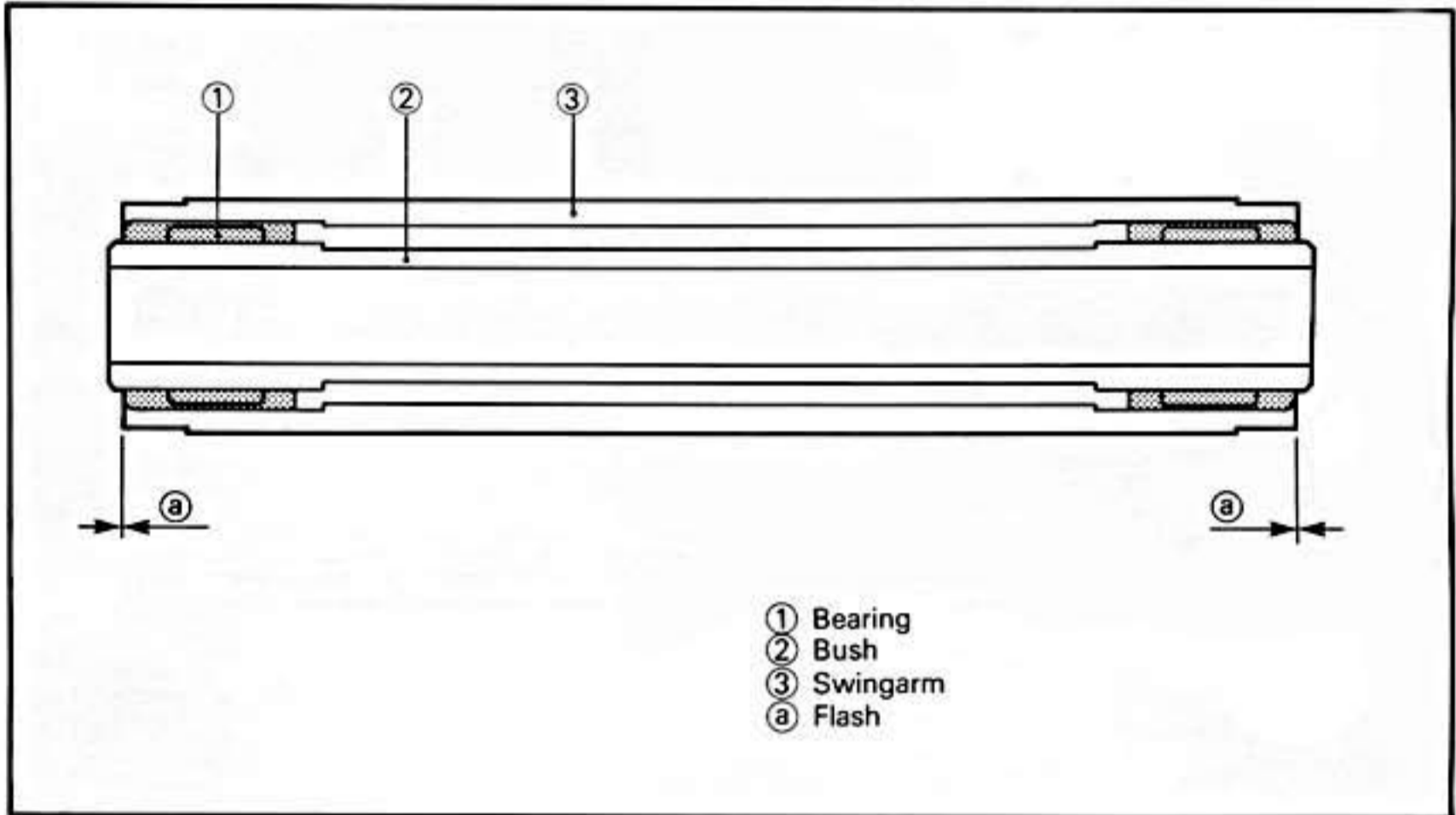


ADJUSTMENT

NOTE: _____

When replacing the bush and bearings, note attention to the following points;

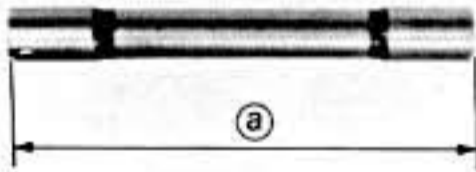
- Bearings should be exactly located as shown in the illustration.
- Grease them liberally with wheel bearing grease.




- ① Bearing
- ② Bush
- ③ Swingarm
- ⓐ Flash

1. Measure:

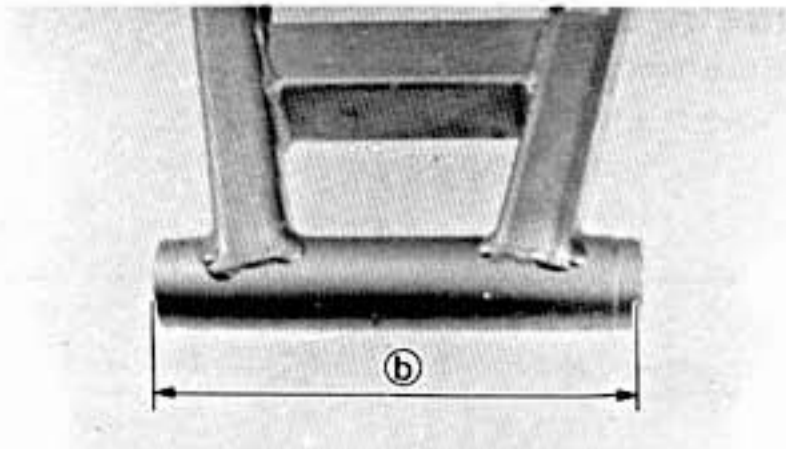
- Bush length ⓐ
- Out of specification → Replace bush.



 **Standard Length:**
197.4 ~ 197.6 mm (7.77 ~ 7.78 in)

2. Measure:

- Swingarm end length ⓑ



5



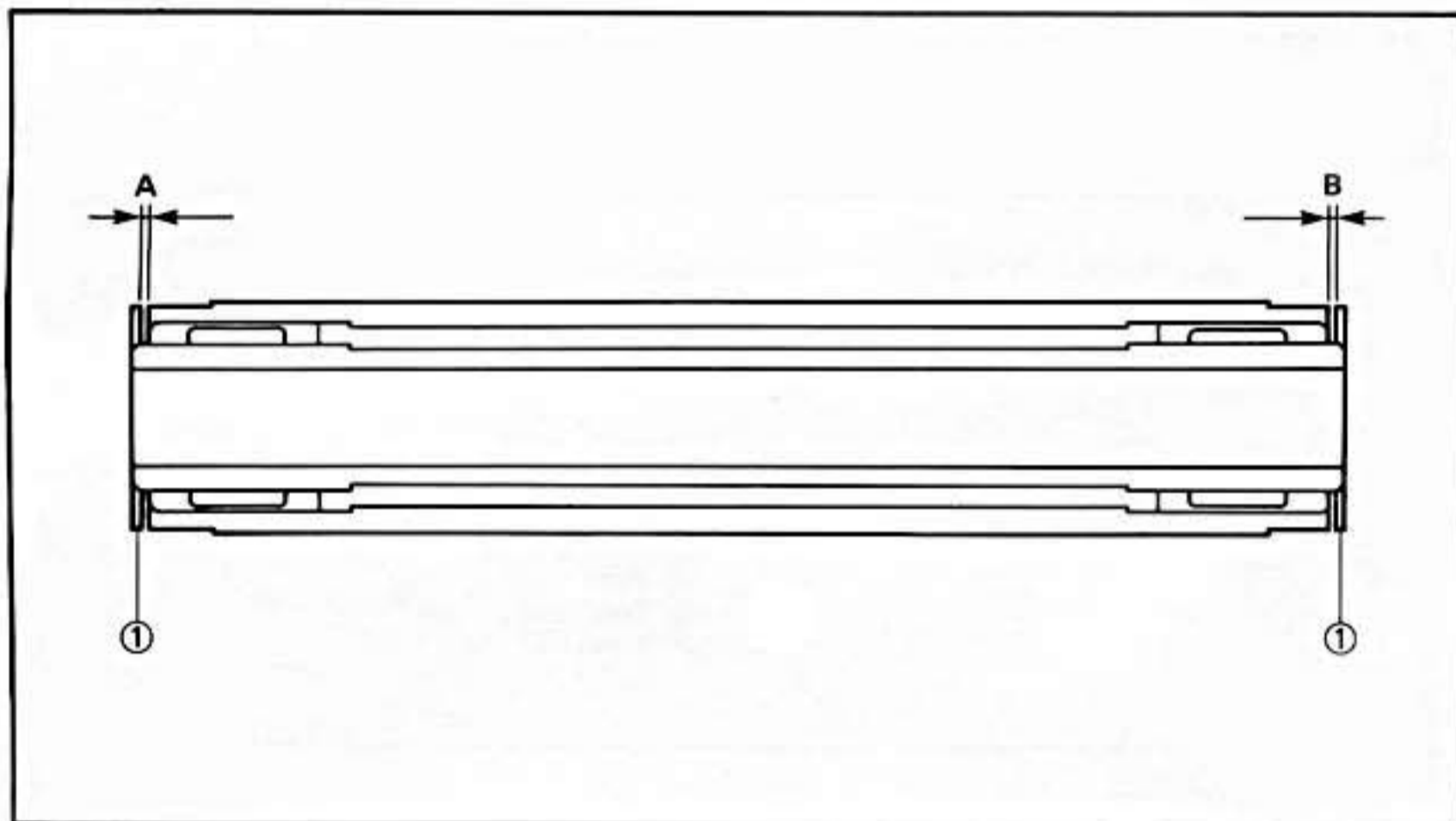
3. Select the proper shim ① thickness to obtain standard swingarm side play (A + B).



Standard Side Play (A + B):
0.2 ~ 0.4 mm (0.008 ~ 0.016 in)



Available Shim Thickness:
1.9 ~ 2.0 mm (0.0748 ~ 0.0787 in)
2.0 ~ 2.1 mm (0.0787 ~ 0.0826 in)
2.1 ~ 2.2 mm (0.0826 ~ 0.0866 in)



5

INSTALLATION

Reverse the removal procedure.
Note the following points.

1. Install:
 - Swingarm



Nut (Pivot Shaft):
90 Nm (9.0 m•kg, 56 ft•lb)



2. Install:

- Rear shock absorbers



Bolt (Shock Absorber and Frame):

20 Nm (2.0 m•kg, 14 ft•lb)

Bolt (Shock Absorber and Swingarm):

30 Nm (3.0 m•kg, 22 ft•lb)

3. Install:

- Rear wheel

Refer to "REAR WHEEL-INSTALLATION" section.



Axle Nut:

105 Nm (10.5 m•kg, 75 ft•lb)

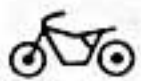
4. Install:

- Mufflers



Bolt (Muffler and Footrest Bracket):

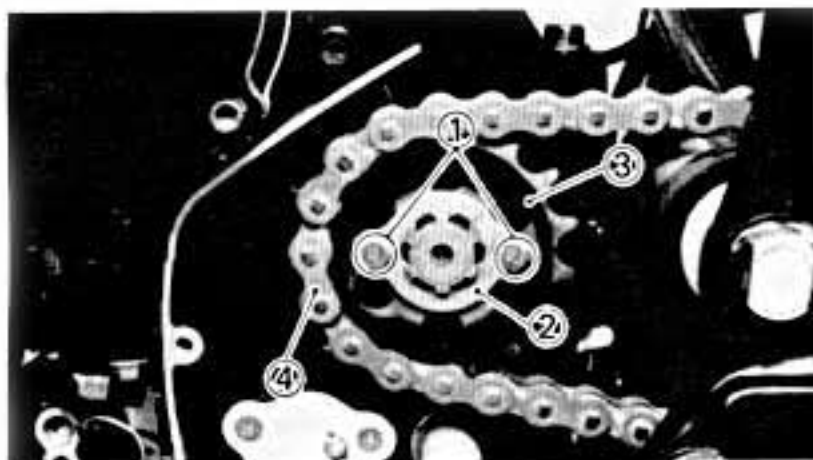
25 Nm (2.5 m•kg, 18 ft•lb)



DRIVE CHAIN AND SPROCKETS REMOVAL

Drive Sprocket

1. Removal:
 - Footrest (Left)
 - Change pedal
 - Drive sprocket cover



2. Remove:
 - Bolts (drive sprocket) ①
Apply the rear brake.
 - Holding plate ②
 - Drive sprocket ③
 - Drive chain ④

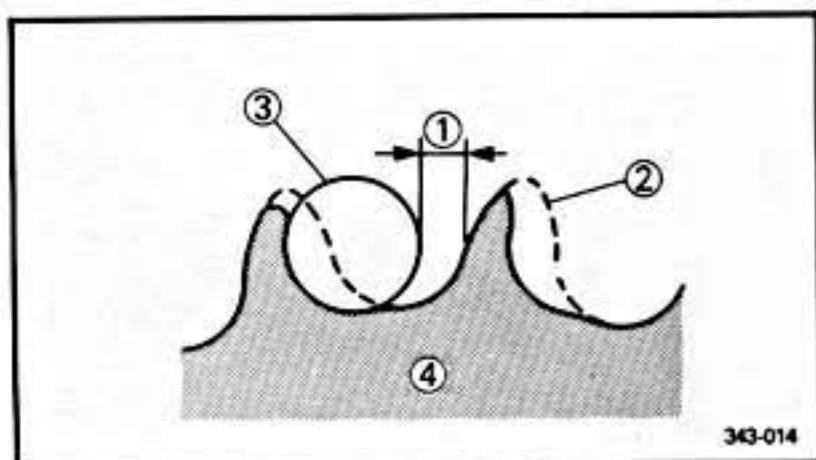
Drive Sprocket

1. Remove:
 - Rear wheel
Refer to "REAR WHEEL-REMOVAL" section.
2. Remove:
 - Nuts (drive sprocket)
 - Driven sprocket

INSPECTION

Drive Chain

1. Inspect:
 - O-rings
Damage/Miss → Replace.
 - Rollers and side plates
Damage/Wear → Replace.

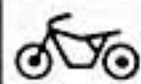


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Drive and Driven Sprockets

1. Inspect:
 - Drive and driven sprockets
Wear/Damage → Replace.

- ① 1/4 tooth
- ② Correct
- ③ Roller
- ④ Sprocket

**ASSEMBLY**

When assembling the sprockets, reverse the removal procedure. Note the following points.

1. Tighten:

- Bolts (drive sprocket)
- Nuts (driven sprocket)

**Bolts (Drive Sprocket):****10 Nm (1.0 m•kg, 7.2 ft•lb)****Nuts (Driven Sprocket):****32 Nm (3.2 m•kg, 23 ft•lb)****Apply LOCTITE®.**

2. Adjust:

- Drive chain slack
- Rear brake free play

Refer to "CHAPTER 2-DRIVE CHAIN SLACK ADJUSTMENT and BRAKE PEDAL FREE PLAY ADJUSTMENT" section.

**Drive Chain Slack:****20 ~ 30 mm (0.8 ~ 1.2 in)****Rear Brake Free Play:****20 ~ 30 mm (0.8 ~ 1.2 in)**