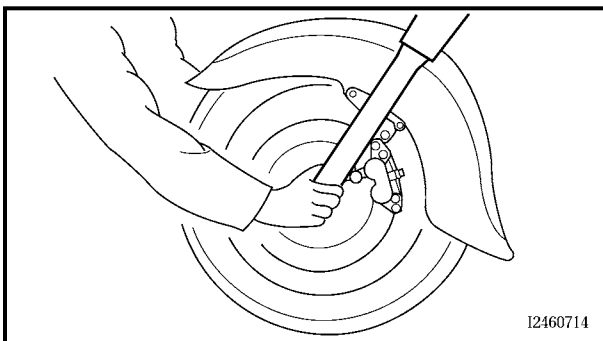


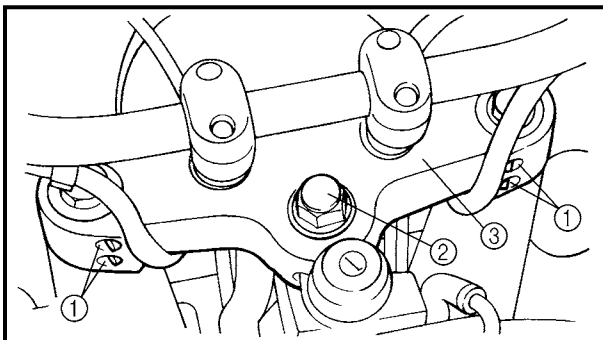
CHECKING AND ADJUSTING THE STEERING HEAD

CHK
ADJ

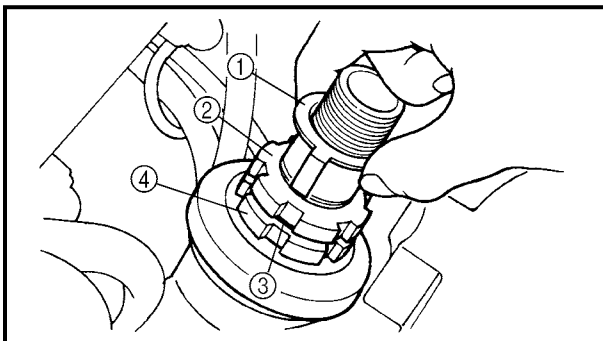


2. Check:
 - steering head
Grasp the bottom of the front fork legs and gently rock the front fork.
Binding/looseness → Adjust the steering head.

3. Remove:
 - meter assembly
Refer to "FUEL TANK".



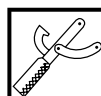
4. Loosen:
 - upper bracket pinch bolts ①
5. Remove:
 - steering stem nut ②
 - washer
 - upper bracket ③



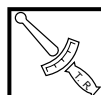
6. Adjust:
 - steering head

- a. Remove the lock washer ①, the upper ring nut ②, and the rubber washer ③.
- b. Loosen the lower ring nut ④ and then tighten it to specification with a ring nut wrench ⑤.

NOTE: _____
Set the torque wrench at a right angle to the ring nut wrench.



Ring nut wrench
YU-33975

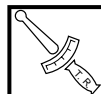


Lower ring nut (initial tightening torque)
52 Nm (5.2 m • kg, 37 ft • lb)

- c. Loosen the lower ring nut completely, then tighten it to specification.

⚠ WARNING _____

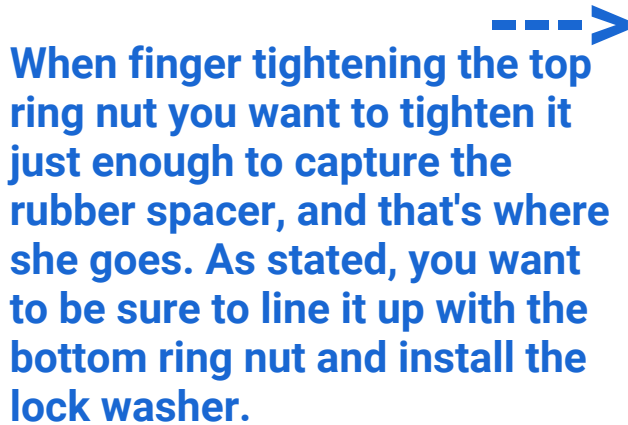
Do not overtighten the lower ring nut.



Lower ring nut (final tightening torque)
3 Nm (0.3 m • kg, ~~2.2 ft • lb~~)

Later manuals corrected the final tightening torque to 14.4 ft lb. Some guys indicate that it passes the flop test at 16 ft lb.

<--- SEE NOTE

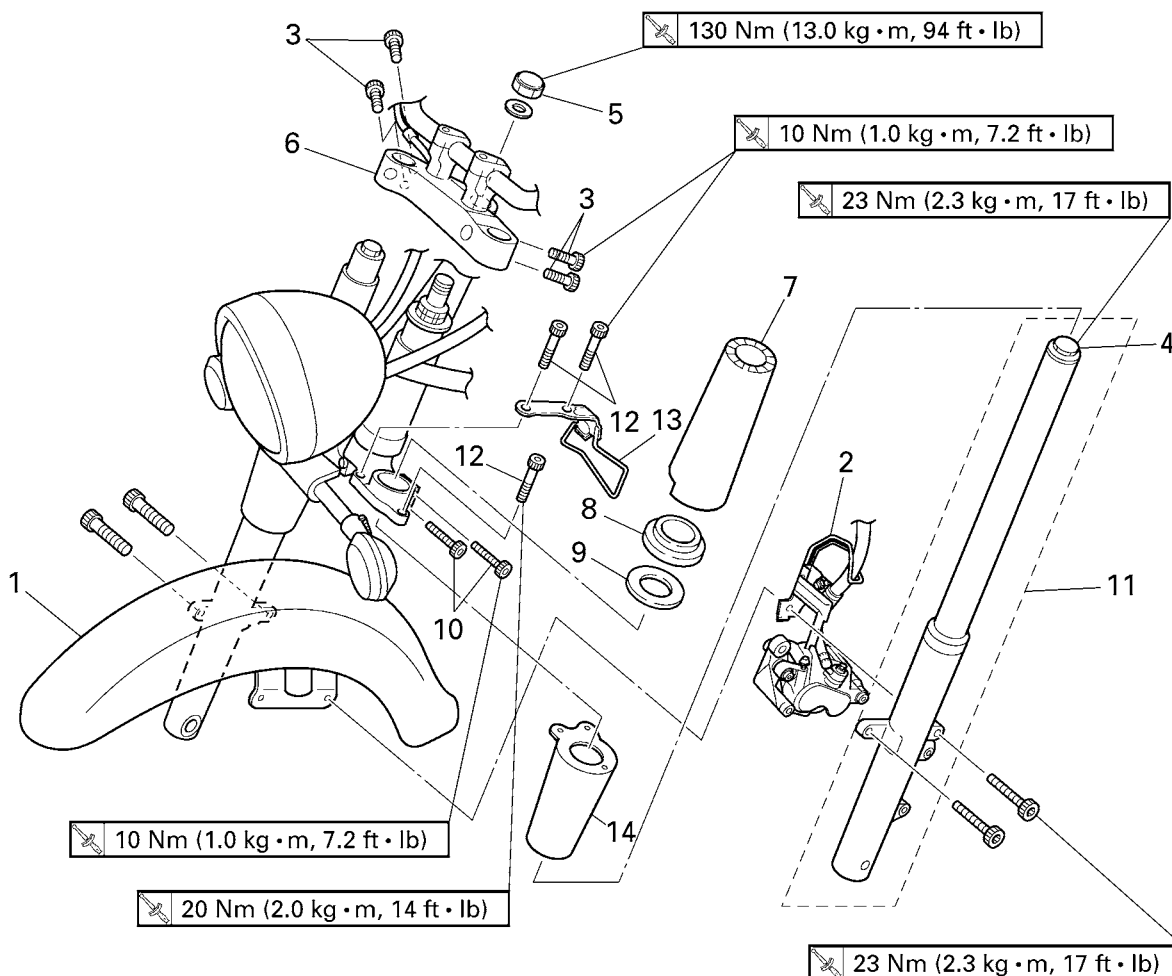


- 3 - 43

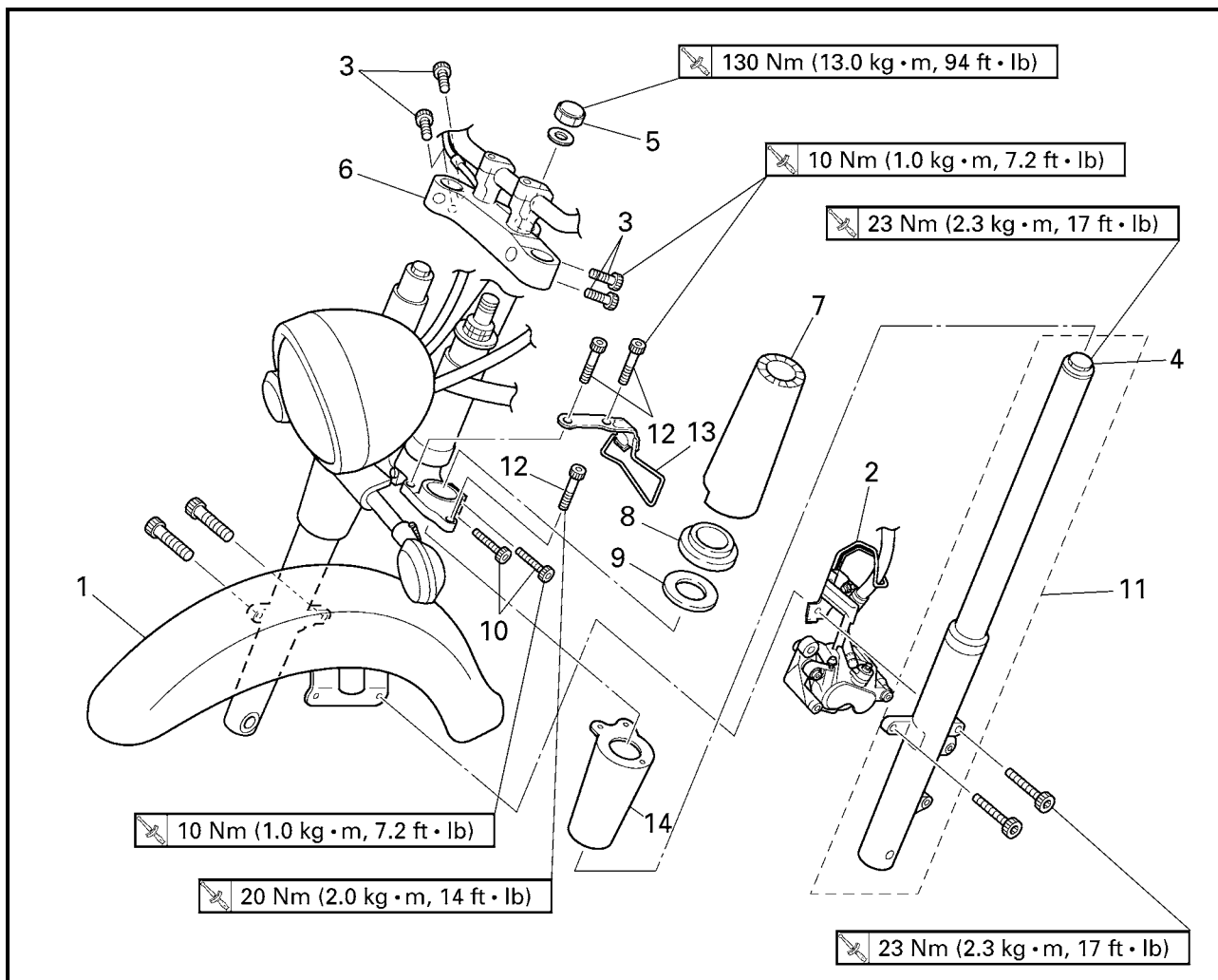


EAS00647

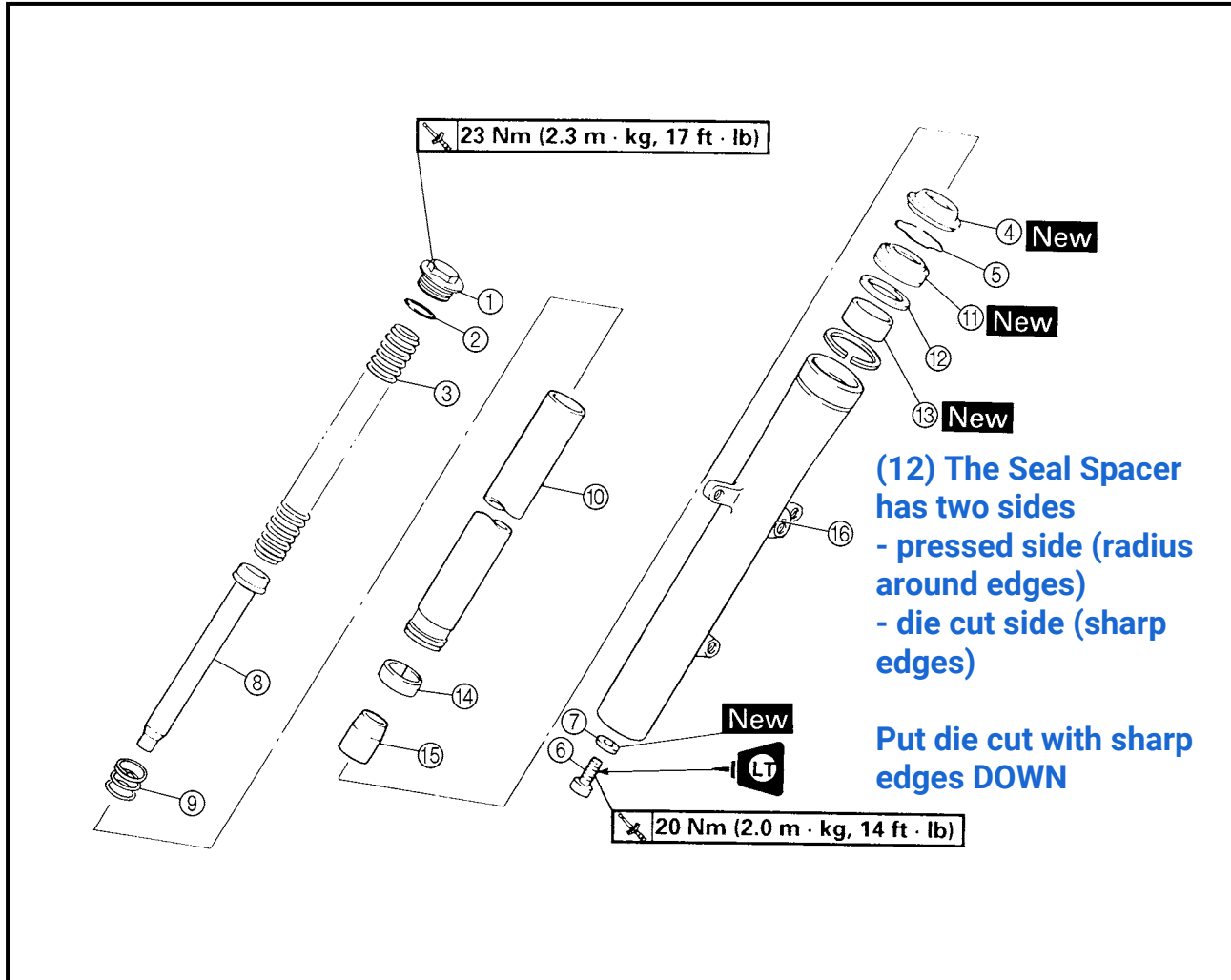
FRONT FORK



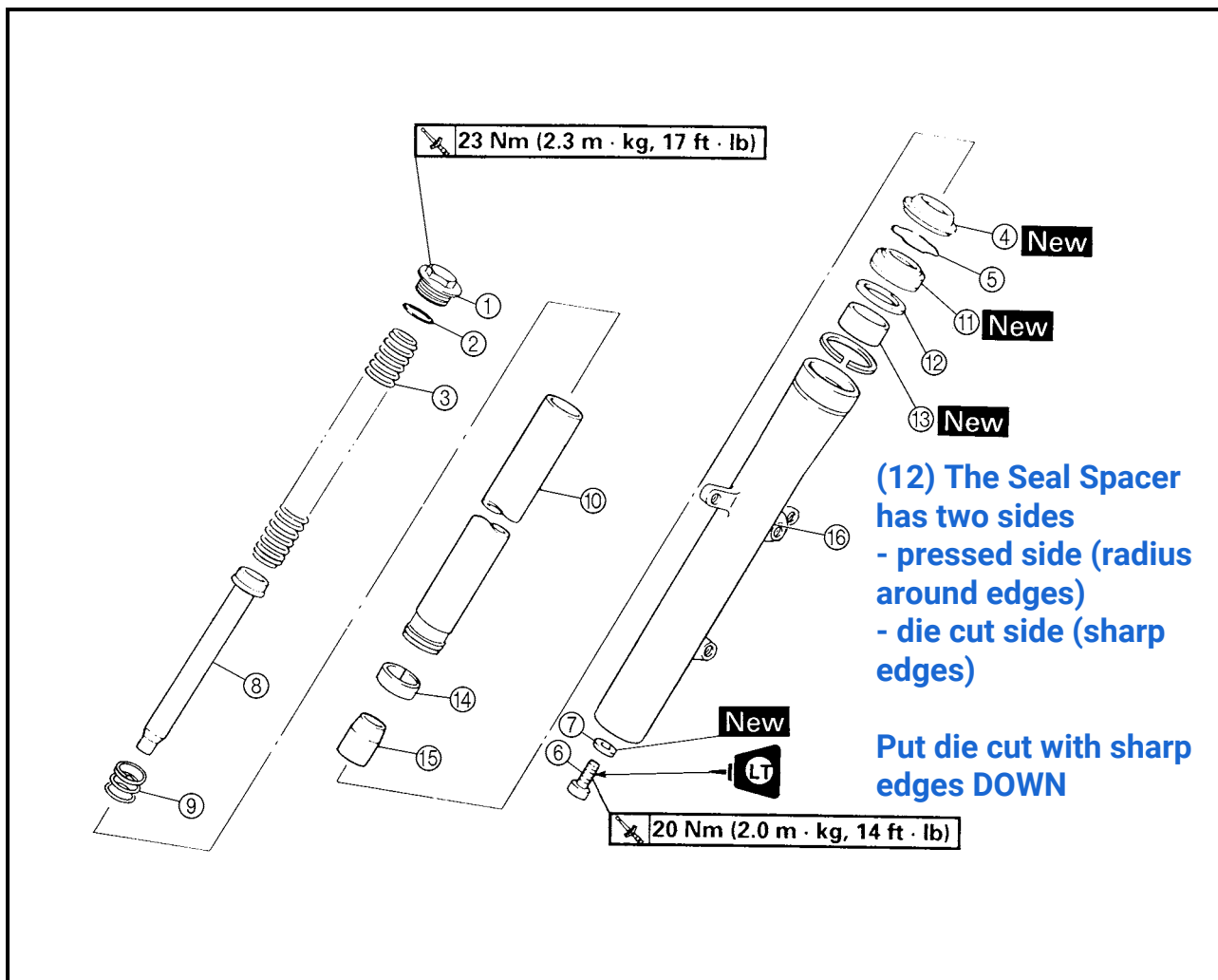
Order	Job/Part	Q'ty	Remarks
	Removing the front fork legs		Remove the parts in the order listed. The following procedure applies to both of the front fork legs.
	Front wheel		Refer to "FRONT WHEEL AND BRAKE DISCS".
	Meter assembly		Refer to "FUEL TANK" in chapter 3.
1	Front fender	1	Loosen.
2	Brake hose holder	1	
3	Upper bracket pinch bolt	4	
4	Cap bolt	1	
5	Steering stem nut	1	
6	Upper bracket	1	
7	Upper fork cover	1	
8	Upper fork cover spacer	1	
9	Upper fork cover washer	1	



Order	Job/Part	Q'ty	Remarks
10	Lower bracket pinch bolt	2	Loosen.
11	Front fork leg	1	
12	Bolt	3	
13	Brake hose guide	1	
14	Lower fork cover	1	
			For installation, reverse the removal procedure.



Order	Job/Part	Q'ty	Remarks
	Disassembling the front fork leg		Remove the parts in the order listed. The following procedure applies to both of the front fork legs.
①	Cap bolt	1	
②	O-ring	1	
③	Fork spring	1	
④	Dust seal	1	
⑤	Oil seal clip	1	
⑥	Cartridge cylinder bolt	1	
⑦	Copper washer	1	
⑧	Cartridge cylinder	1	
⑨	Rebound spring	1	
⑩	Inner tube	1	



Order	Job/Part	Q'ty	Remarks
⑪	Oil seal	1	
⑫	Seal spacer	1	
⑬	Outer tube bushing	1	
⑭	Inner tube bushing	1	
⑮	Oil flow stopper	1	
⑯	Outer tube	1	
			For assembly, reverse the disassembly procedure.



EAS00649

REMOVING THE FRONT FORK LEGS

The following procedure applies to both of the front fork legs.

1. Stand the motorcycle on a level surface.

⚠ WARNING

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

NOTE:

Place the motorcycle on a suitable stand so that the front wheel is elevated.

2. Loosen:

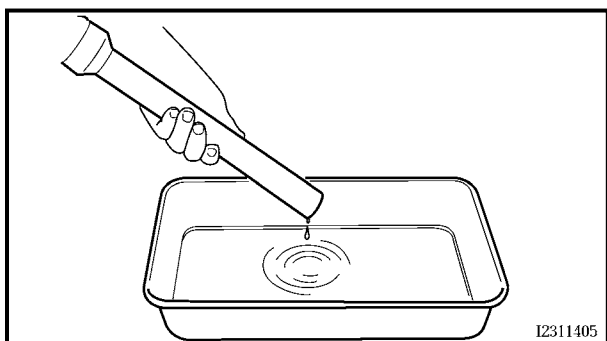
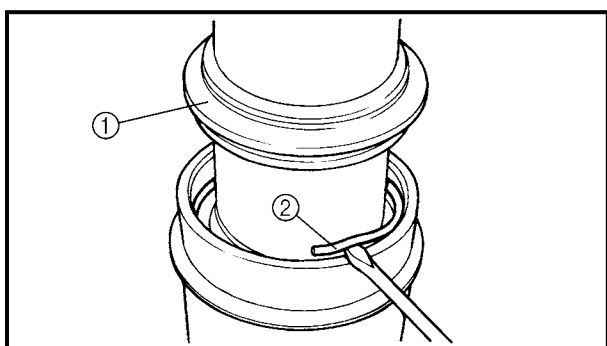
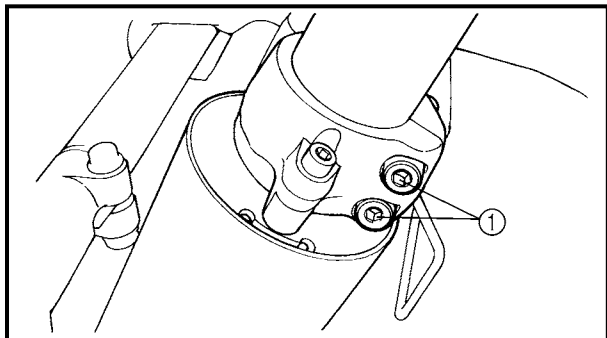
- lower bracket pinch bolts ①

⚠ WARNING

Before loosening the lower bracket pinch bolts, support the front fork leg.

3. Remove:

- front fork leg



I2311405

EAS00652

DISASSEMBLING THE FRONT FORK LEGS

The following procedure applies to both of the front fork legs.

1. Remove:

- dust seal ①
- oil seal clip ②
(with a flat-head screwdriver)

CAUTION:

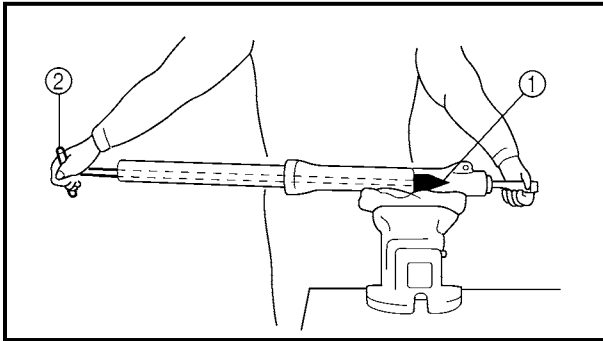
Do not scratch the inner tube.

2. Drain:

- fork oil

NOTE:

Stroke the outer tube several times while draining the fork oil.



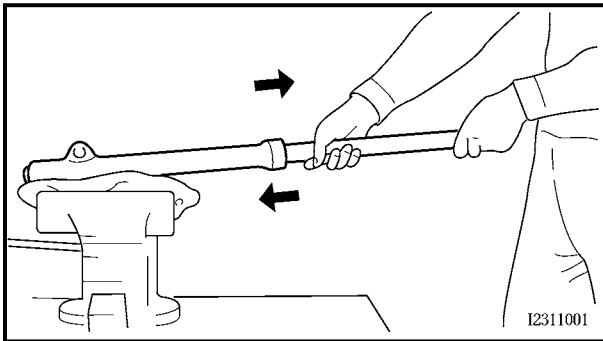
3. Remove:
 - cartridge cylinder bolt

NOTE:

While holding the cartridge cylinder with the damper rod holder ① and T-handle ②, loosen the cartridge cylinder bolt.



Damper rod holder
YM-1300-1
T-Handle
YM-01326

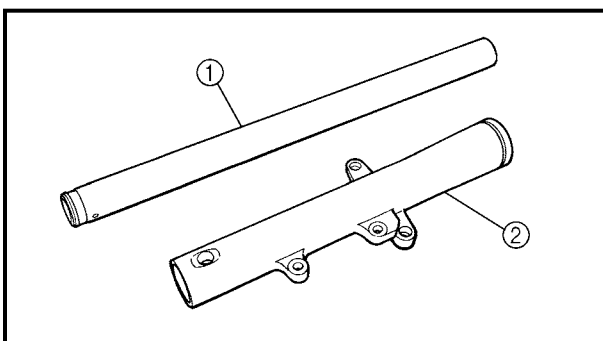


4. Remove:
 - inner tube

- a. Hold the front fork leg horizontally.
- b. Securely clamp the brake caliper bracket in a vise with soft jaws.
- c. Separate the inner tube from the outer tube by pulling the inner tube forcefully but carefully.

CAUTION:

- Excessive force will damage the oil seal and bushing. A damaged oil seal or bushing must be replaced.
- Avoid bottoming the inner tube into the outer tube during the above procedure, as the oil flow stopper will be damaged.



EAS00656

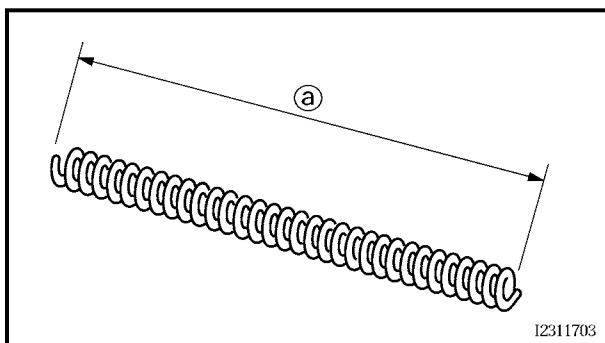
CHECKING THE FRONT FORK LEGS

The following procedure applies to both of the front fork legs.

1. Check:
 - inner tube ①
 - outer tube ②
 Bends/damage/scratches → Replace.

WARNING

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

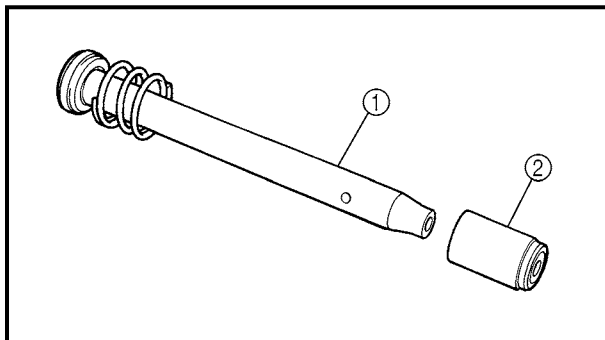


2. Measure:

- spring free length ①
Out of specification → Replace.

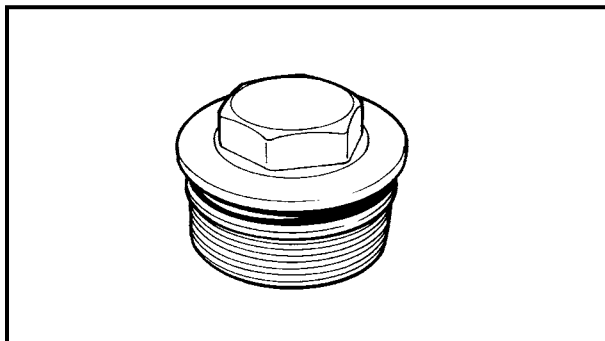


**Spring free length limit
566 mm (22.3 in)**



3. Check:

- cartridge cylinder ①
Damage/wear → Replace.
Obstruction → Blow out all of the oil passages with compressed air.
- oil flow stopper ②
Damage → Replace.



4. Check:

- cap bolt O-ring
Damage/wear → Replace.

EAS00658

ASSEMBLING THE FRONT FORK LEGS

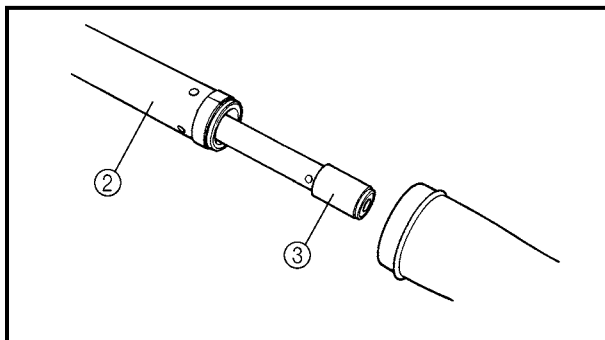
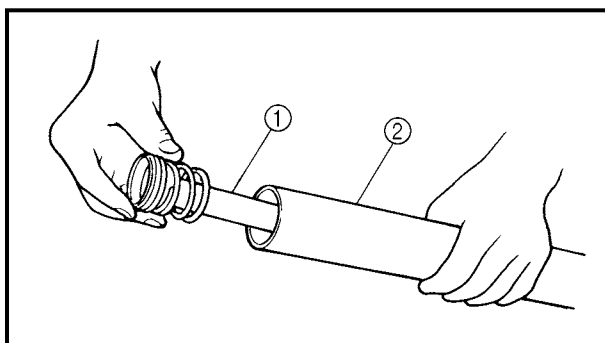
The following procedure applies to both of the front fork legs.

⚠ WARNING

- **Make sure the oil levels in both front fork legs are equal.**
- **Uneven oil levels can result in poor handling and a loss of stability.**

NOTE:

- When assembling the front fork leg, be sure to replace the following parts:
 - inner tube bushing
 - outer tube bushing
 - oil seal
 - dust seal
- Before assembling the front fork leg, make sure all of the components are clean.



1. Install:
 - cartridge cylinder ①

CAUTION:

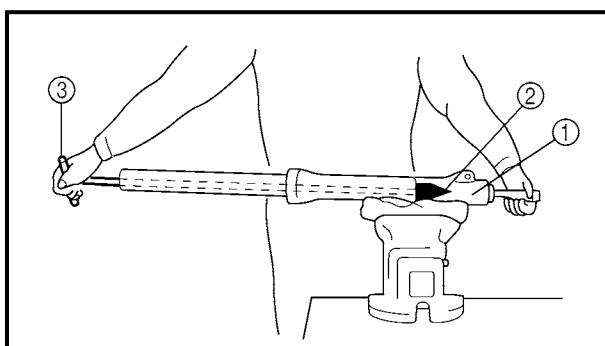
Allow the cartridge cylinder to slide slowly down the inner tube ② until it protrudes from the bottom of the inner tube. Be careful not to damage the inner tube.

2. Install:
 - oil flow stopper ③
3. Lubricate:
 - inner tube's outer surface



Recommended lubricant
Yamaha fork and shock oil 5WT
or equivalent

4. Install:
 - outer tube
(onto the inner tube)
 - copper washer **New**
 - cartridge cylinder bolt



5. Tighten:
 - cartridge cylinder bolt ①

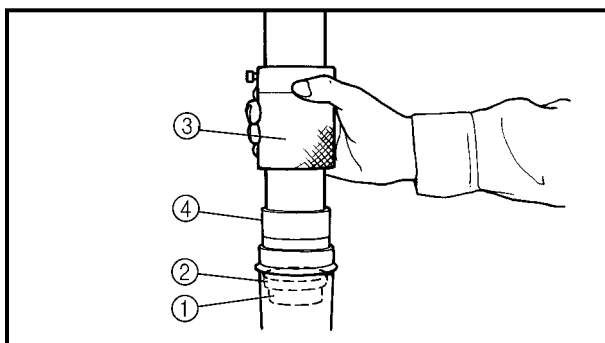
20 Nm (2.0 m · kg, 14 ft · lb)

NOTE:

- Apply the locking agent (LOCTITE® 204) to the threads of the cartridge cylinder bolt.
- While holding the cartridge cylinder with the damper rod holder ② and T-handle ③, tighten the cartridge cylinder bolt.



Damper rod holder
YM-1300-1
T-handle
YM-01326

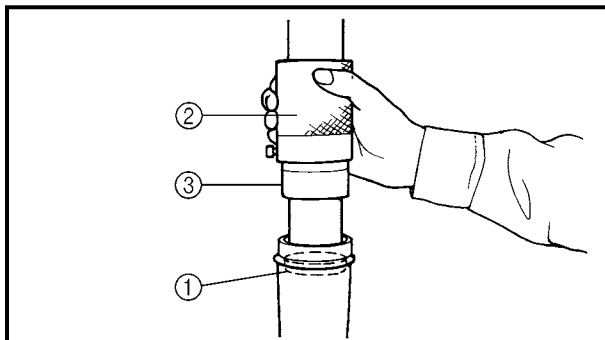


6. Install:

- outer tube bushing ① **New**
- seal spacer ②
(with the fork seal driver weight ③ and adapter ④)



Fork seal driver weight
YM-33963
Adapter
YM-8020



7. Install:

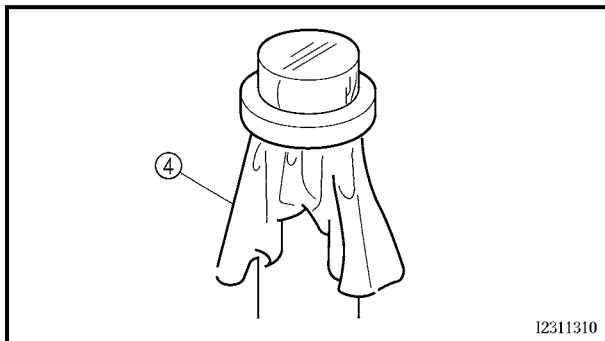
- oil seal ① **New**
(with the fork seal driver weight ② and adapter ③)

CAUTION:

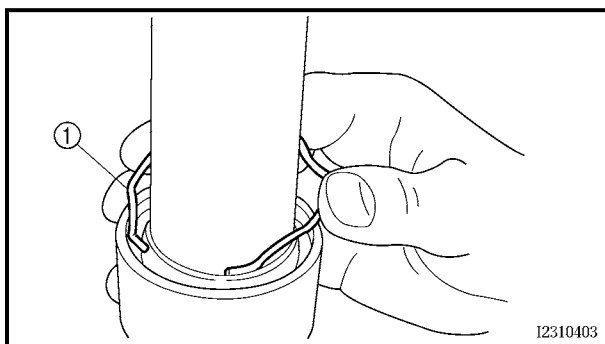
Make sure the numbered side of the oil seal faces up.

NOTE:

- Before installing the oil seal, lubricate its lips with lithium soap base grease.
- Lubricate the outer surface of the inner tube with fork oil.
- Before installing the oil seal, cover the top of the front fork leg with a plastic bag ④ to protect the oil seal during installation.



I2311310

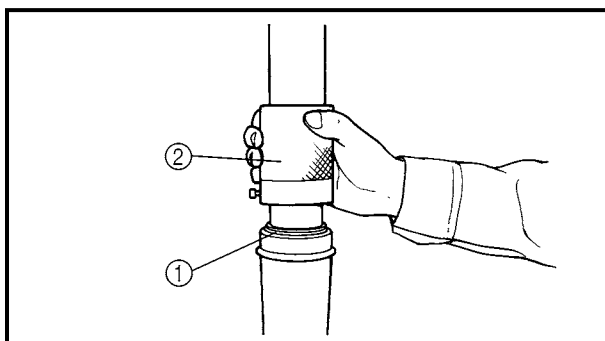


8. Install:

- oil seal clip ①

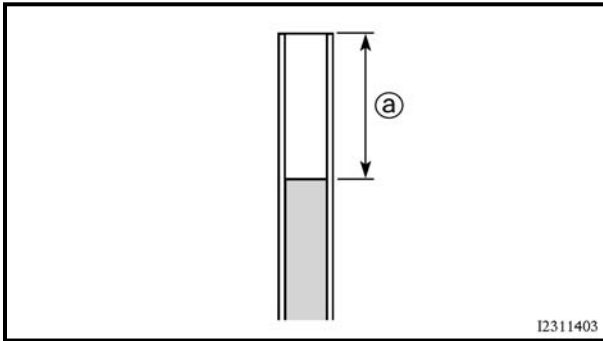
NOTE:

Adjust the oil seal clip so that it fits into the outer tube's groove.



9. Install:

- dust seal ① **New**
(with the fork seal driver weight ②)



10.Fill:

- front fork leg
(with the specified amount of the recommended fork oil)



Quantity (each front fork leg)
554 L (488 Imp qt, 589 US qt)

Front fork leg oil level ①
(from the top of the inner tube,
with the inner tube fully compressed,
and without the fork spring)

110 mm (4.33 in)

Recommended oil

**Yamaha fork and shock oil 5WT
or equivalent**

NOTE:

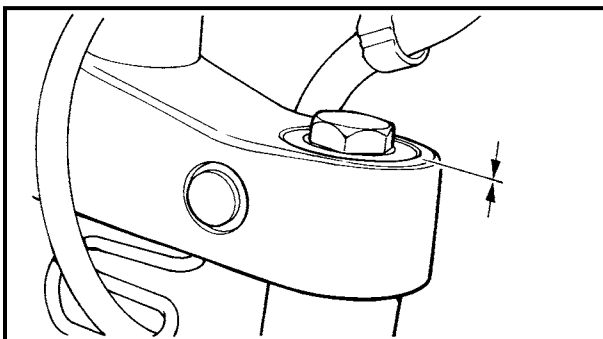
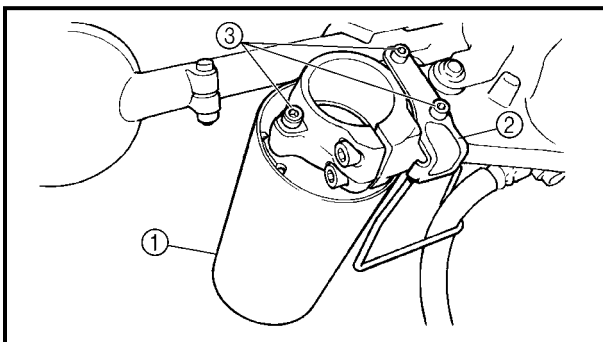
- While filling the front fork leg, keep it upright.
- After filling, slowly pump the front fork leg up and down to distribute the fork oil.

11.Install:

- fork spring
- cap bolt

NOTE:

- Before installing the cap bolt, lubricate its O-ring with grease.
- Temporarily tighten the cap bolt.



EAS00662

INSTALLING THE FRONT FORK LEGS

The following procedure applies to both of the front fork legs.

1. Install:

- lower fork cover ①
- brake hose guide ②
- bolts ③

10 Nm (1.0 m · kg, 7.2 ft · lb)

2. Install:

- front fork leg

NOTE:

- When aligning the fork tube do not install the upper fork cover.
- Temporarily tighten the lower bracket pinch bolts.



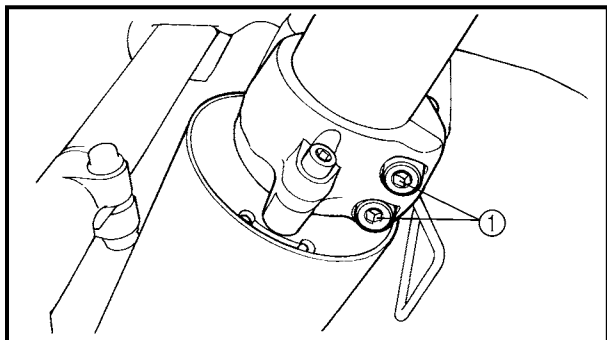
3. Install:

- Upper bracket
- Steering stem nut

130 Nm (13.0 m · kg, 94 ft · lb)

NOTE:

Make sure the inner fork tube is flush with the top of the upper bracket.



4. Tighten:

- lower bracket pinch bolt ①

20 Nm (2.0 m · kg, 14 ft · lb)

- cap bolt

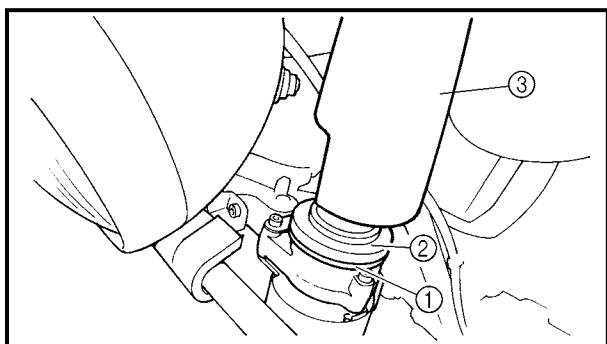
23 Nm (2.3 m · kg, 17 ft · lb)

⚠ WARNING

Make sure the brake hoses are routed properly.

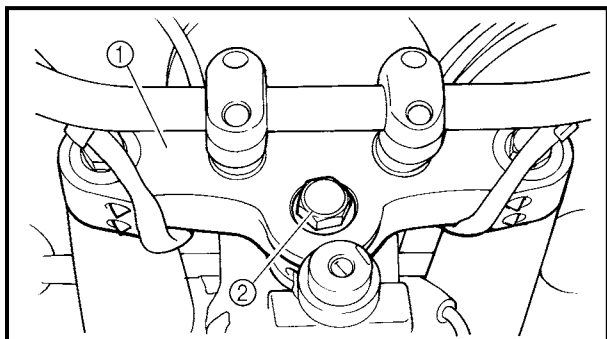
5. Remove:

- steering stem nut
- upper bracket



6. Install:

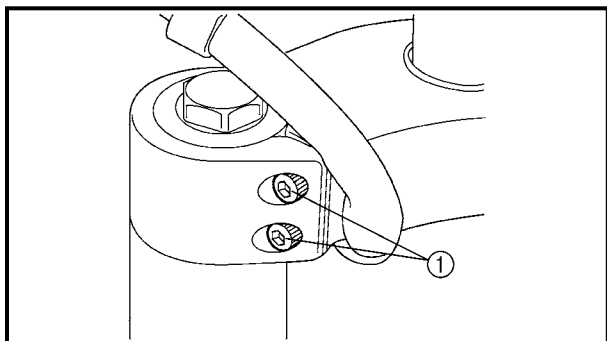
- upper fork washer ①
- upper fork spacer ②
- upper fork cover ③



7. Install:

- upper bracket ①
- steering stem nut ②

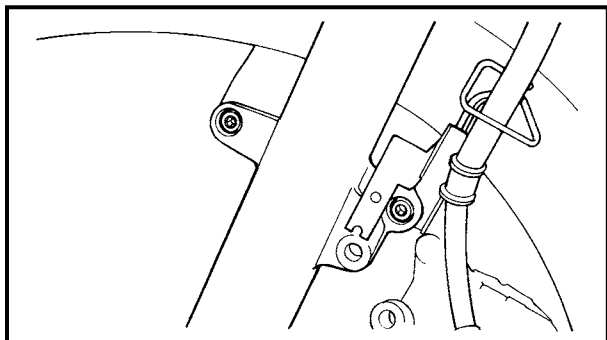
130 Nm (13.0 m · kg, 94 ft · lb)



8. Tighten:

- upper bracket pinch bolts ①

10 Nm (1.0 m · kg, 7.2 ft · lb)



9. Install:

- brake hose holder
- front fender

23 Nm (2.3 m · kg, 17 ft · lb)

10. Install:

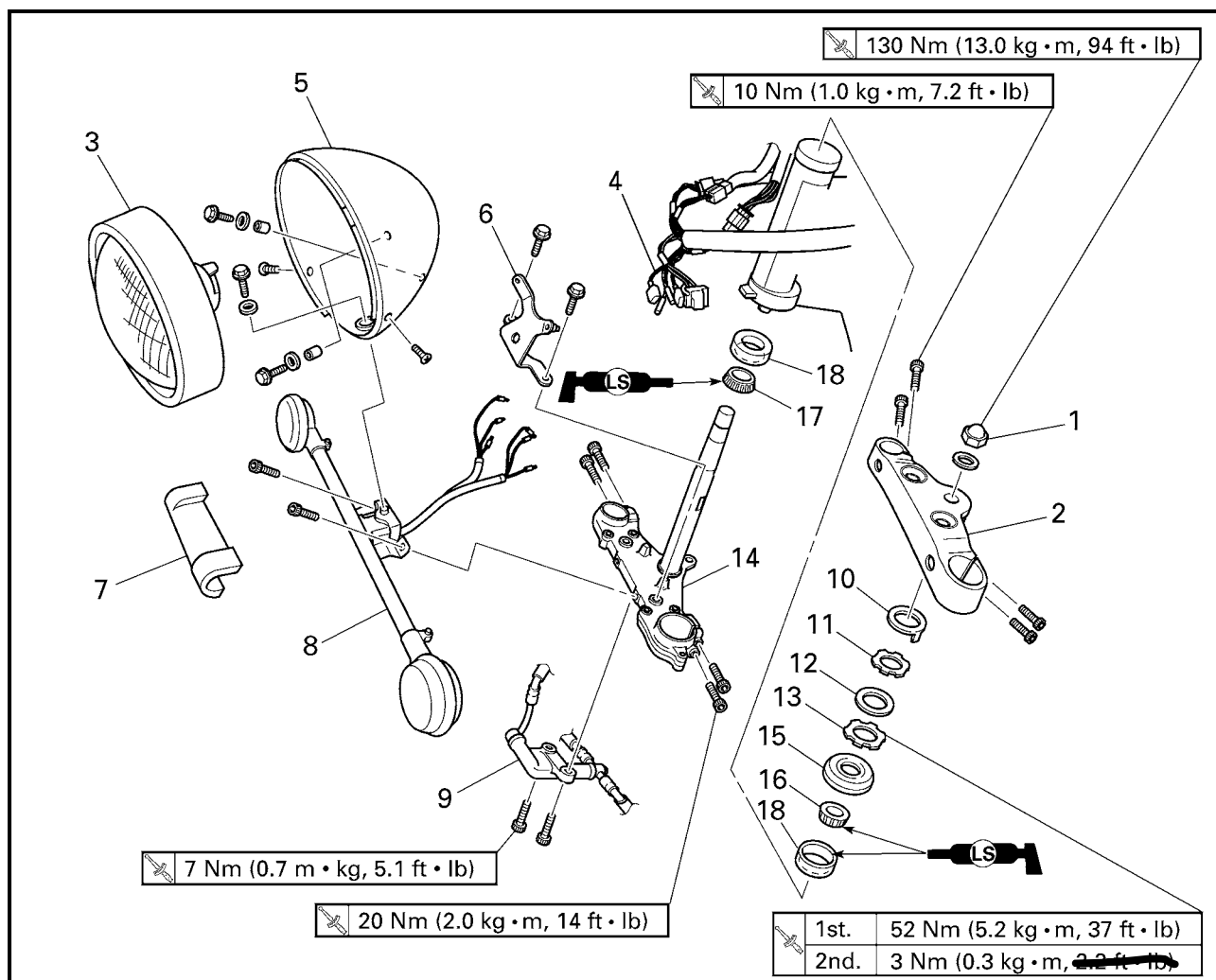
- front wheel

Refer to "FRONT WHEEL AND BRAKE DISCS".



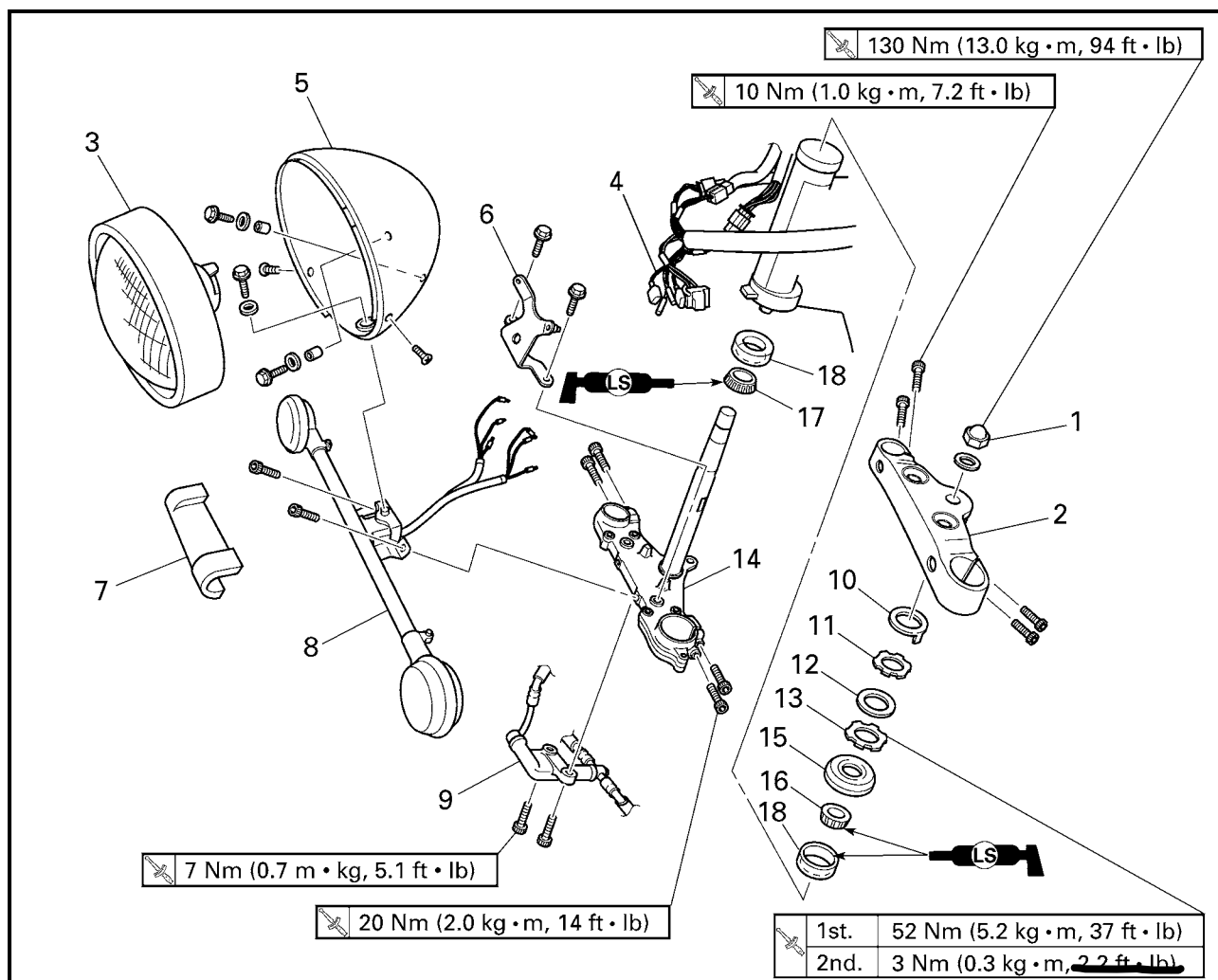
EAS00676

STEERING HEAD



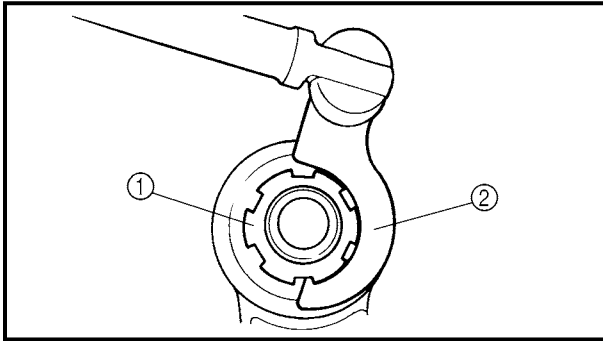
14.4 lb lb

Order	Job/Part	Q'ty	Remarks
	Removing the lower bracket		
	Meter assembly		Remove the parts in the order listed.
	Front fork legs/fork covers		Refer to "FUEL TANK" in chapter 3.
	Front wheel		Refer to "FRONT FORK".
	Handlebar/handlebar holders		Refer to "FRONT WHEEL AND BRAKE DISCS".
	Refer to "HANDLEBAR".		
1	Steering stem nut	1	
2	Upper bracket	1	
3	Headlight lens unit	1	
4	Lead (in the headlight body)	1	
5	Headlight body	1	
6	Headlight bracket	1	
7	Chrome turn signal light bracket cover	1	
8	Turn signal light bracket assembly	1	



14.4 lb lb

Order	Job/Part	Q'ty	Remarks
9	Brake hose joint	1	
10	Lock washer	1	
11	Upper ring nut	1	
12	Rubber washer	1	
13	Lower ring nut	1	
14	Lower bracket	1	
15	Bearing cover	1	
16	Upper bearing	1	
17	Lower bearing	1	
18	Bearing outer race	2	
			For installation, reverse the removal procedure.



EAS00677

REMOVING THE LOWER BRACKET

1. Stand the motorcycle on a level surface.

WARNING

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

- lower ring nut ①
(with the special tool ②)



Ring nut wrench YU-33975

⚠ WARNING

Securely support the lower bracket so that there is no danger of it falling.

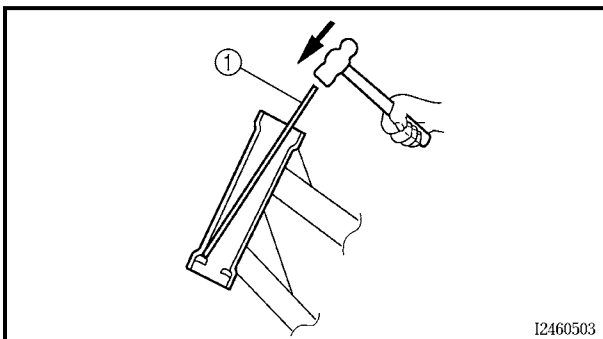
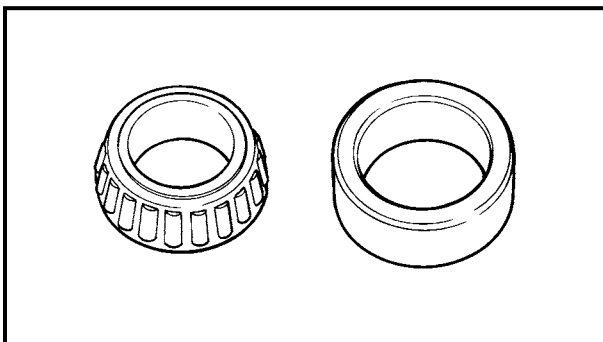
EAS00681

CHECKING THE STEERING HEAD

1. Wash:
 - bearings
 - bearing races



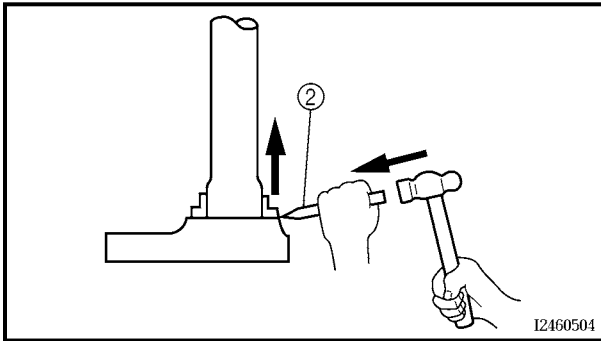
Recommended cleaning solvent
Kerosene



2. Check:
- bearings
 - bearing races
- Damage/pitting → Replace.

- ### 3. Replace:
- bearings
 - bearing races

- a.** Remove the bearing races from the steering head pipe with a long rod ① and hammer.
- b.** Remove the bearing race from the lower bracket with a floor chisel ② and hammer.



- c. Install a new rubber seal and new bearing races.



CAUTION:

If the bearing race is not installed properly, the steering head pipe could be damaged.

NOTE:

- Always replace the bearings and bearing races as a set.
- Whenever the steering head is disassembled, replace the rubber seal.

4. Check:
- upper bracket
 - lower bracket
- (along with the steering stem)
Bends/cracks/damage → Replace.

EAS00683

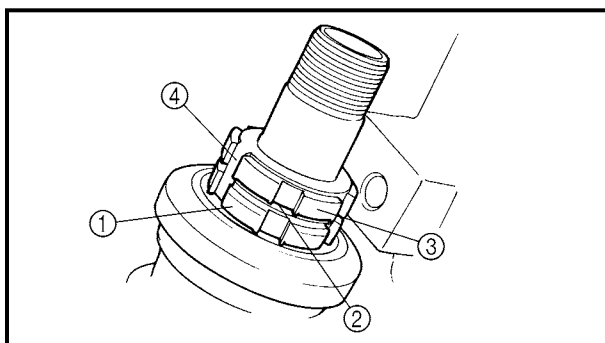
INSTALLING THE STEERING HEAD

1. Lubricate:
 - upper bearing
 - lower bearing
 - bearing races



Recommended lubricant
Lithium soap base grease

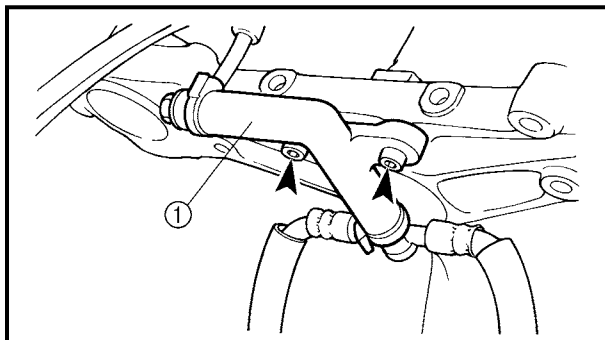
- upper bearing
- lower bearing
- bearing races
- bearing cover
- lower bracket



3. Install:

- lower ring nut ①
- rubber washer ②
- upper ring nut ③
- lock washer ④

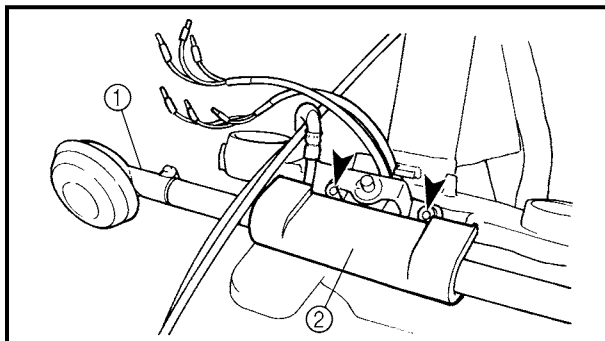
Refer to "CHECKING AND ADJUSTING THE STEERING HEAD" in chapter 3.



4. Install:

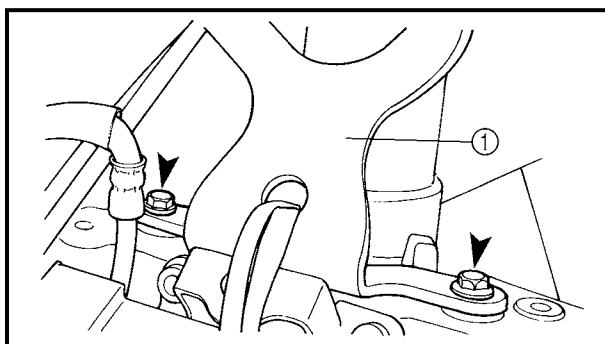
- brake hose joint ①

7 Nm (0.7 m · kg, 5.1 ft · lb)



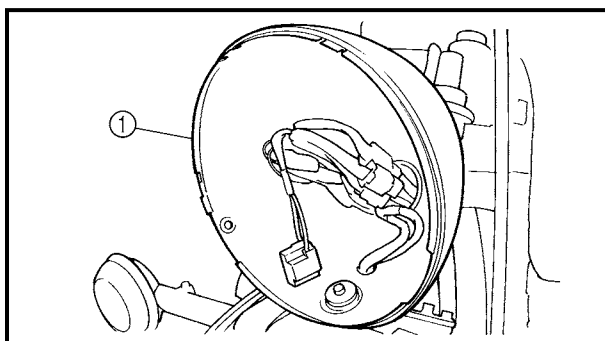
5. Install:

- turn signal light bracket assembly ①
- chrome turn signal light bracket cover ②



6. Install:

- headlight bracket ①



7. Install:

- headlight body ①

8. Connect:

- leads
(in the headlight body)

9. Install:

- headlight lens unit

**10.Install:**

- upper bracket
- steering stem nut
- front fork legs

Refer to "FRONT FORK".

11.Install:

- handlebar
Refer to "HANDLEBAR".
- front fork legs
Refer to "FRONT FORK".

- meter assembly
Refer to "FUEL TANK" in chapter 3.