

- Slowly turn in the spring adjuster ② by hand until it stops by finger tight.
- Holding the spring adjuster ② in this position, tighten the lock nut ④ to the specified torque.

**Front fork spring**

**adjuster lock nut:** 13.5 – 16.5 N·m  
(1.35 – 1.65 kg·m, 10.0 – 12.0 lb·ft)

**FRONT FORK CAP**

- Install the front fork cap to the spring adjuster.
- Install the front fork cap to the inner tube and tighten it to the specified torque.

**Front fork cap:** 15 – 30 N·m

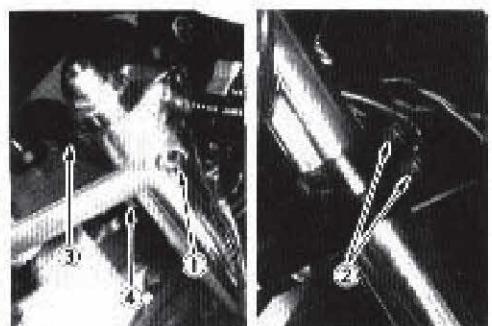
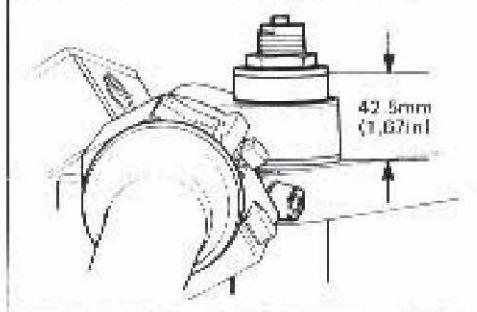
(1.5 – 3.0 kg·m, 11.0 – 21.5 lb·ft)

**FRONT FORK REMOUNTING**

- When remounting the front fork assembly, set the upper surface of the inner tube to 42.5 mm height above that of the steering stem upper bracket.

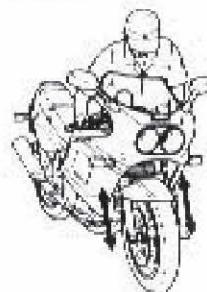
**TIGHTENING TORQUE**

- ① (Front fork upper clamp bolt):  
22 – 35 N·m (2.2 – 3.5 kg·m, 16.0 – 25.5 lb·ft)
- ② (Front fork lower clamp bolt):  
22 – 35 N·m (2.2 – 3.5 kg·m, 16.0 – 25.5 lb·ft)
- ③ (Handlebar holder mounting bolt):  
50 – 60 N·m (5.0 – 6.0 kg·m, 36.0 – 43.5 lb·ft)
- ④ (Handlebar holder mounting nut):  
22 – 35 N·m (2.2 – 3.5 kg·m, 16.0 – 25.5 lb·ft)

**NOTE:**

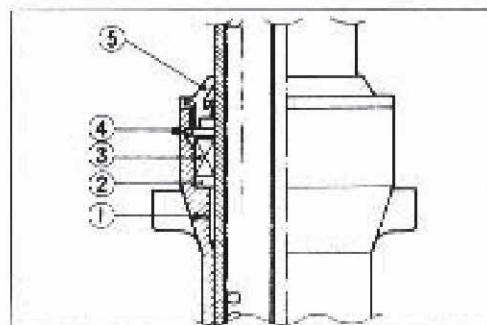
*Before tightening the front fender brace mounting bolts and axle pinch bolts, move the front fork up and down 4 or 5 times.*

*Refer to the 6-20 for steering damper mounting procedure.*



- After installing the oil seal, install the oil seal stopper ring and dust seal.

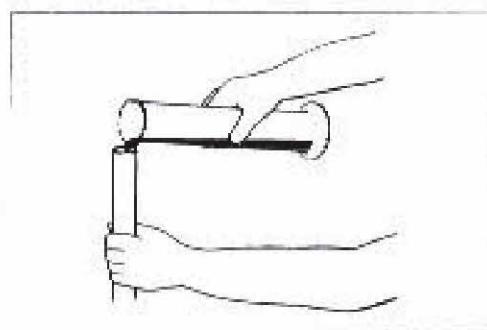
- (1) Anti-Friction metal
- (2) Oil seal retainer
- (3) Oil seal
- (4) Oil seal stopper ring
- (5) Dust seal



### FORK OIL

- Use front fork oil whose viscosity rating meets the specifications below.
- Fully stroke inner rod and inner tube to pump out air from cartridge and outer tube.

Fork oil type	Fork oil #5
Fork oil capacity (For U.S.A. model)	453 ml (15.3/16.0 US/Imp oz)
Fork oil capacity (For the other models)	418 ml (14.1/14.7 US/Imp oz)



### 99000-99044-05G: SUZUKI FORK OIL #5

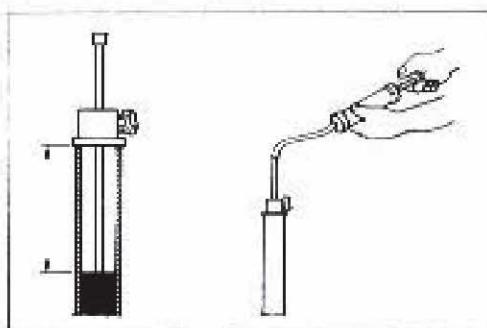
- Hold the front fork vertical and adjust fork oil level with the special tool.

#### NOTE:

When adjusting fork oil level, remove the fork spring and compress the inner tube fully.

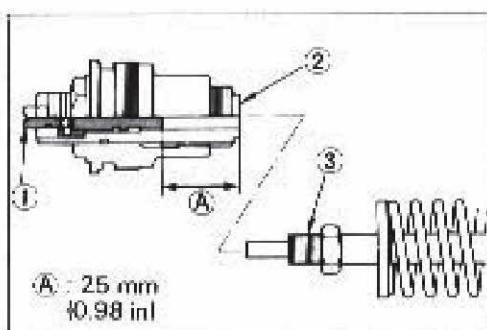
### 09943-74111: Fork oil level gauge

Front fork oil level	Standard	
	For U.S.A. model	113 mm (4.45 in)
For the other models		146 mm (5.75 in)



### REBOUND DAMPING FORCE ADJUSTER AND SPRING ADJUSTER

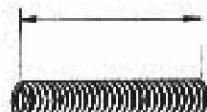
- Adjust the depth (A) to 25 mm from the bottom end of the spring adjuster (2) by turning the rebound damping force adjuster (1), and then install the spring adjuster (2) to the inner rod (3) as shown in the illustration.



**FORK SPRING**

Measure the fork spring free length. If it is shorter than the service limit, replace it with a new one.

**Service limit: 347 mm (13.7 in)**

**REASSEMBLY AND REMOUNTING**

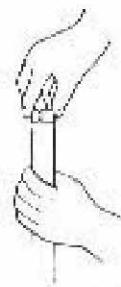
Reassemble and remount the front fork in the reverse order of removal and disassembly. Pay attention to the following points:

**INNER TUBE METAL**

- Hold the inner tube vertically and clean the metal groove and install the metal by hand as shown.

**CAUTION:**

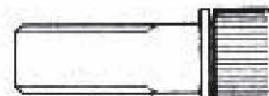
Use special care to prevent damage to the "TEFLON" coated surface of the Anti-Friction metal when mounting it.

**DAMPER ROD BOLT**

- Apply THREAD LOCK "1342" to the damper rod bolt and tighten it to the specified torque with the special tool and hexagon wrench.

**99000-32050: THREAD LOCK "1342"**

Front fork damper: 34 – 46 N·m  
rod bolt (3.4 – 4.6 kg·m, 24.5 – 33.5 lb·ft)

**09940-54820: Front fork assembler****09900-00401: "L" type hexagon wrench set**

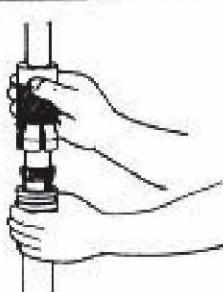
Thread Lock "1342"

**OUTER TUBE METAL, OIL SEAL AND DUST SEAL**

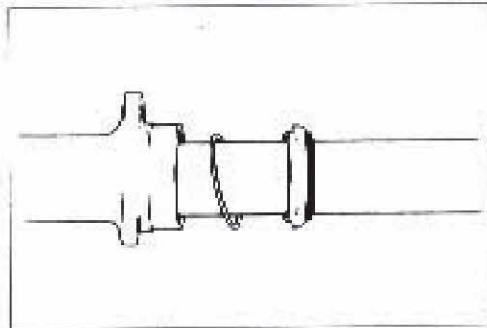
- Clean the metal groove of outer tube and metal outer surface.
- Install the outer tube metal, oil seal retainer and oil seal.

**09940-50112: Front fork oil seal installer****CAUTION:**

Use special care to prevent damage to the "TEFLON" coated surface of the Anti-Friction outer tube metal when installing it.



6. Remove the dust seal and oil seal stopper ring.



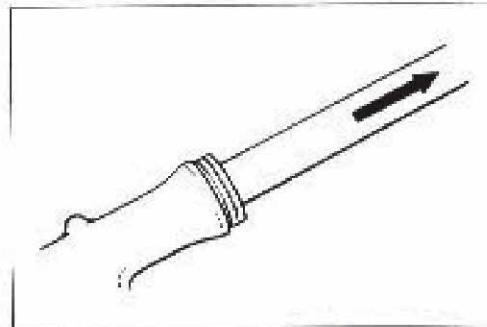
7. Separate the inner tube out of the outer tube.

**NOTE:**

*Be careful not to damage the inner tube.*

**CAUTION:**

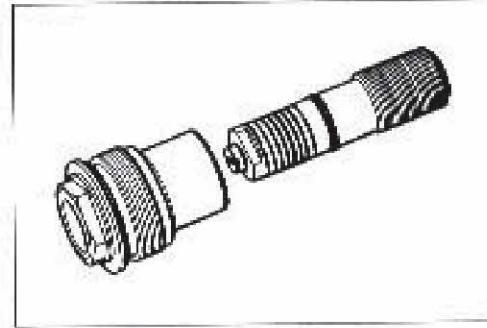
**The outer tube and inner tube "ANTI-FRICTION" metals must be replaced along with the oil seal and dust seal, when assembling the front fork.**



8. Turn in the spring adjuster and remove it from the front fork cap.

**CAUTION:**

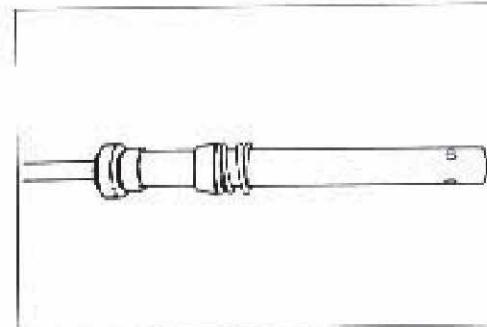
**The O-ring removed should be replaced with a new one.**



## INSPECTION

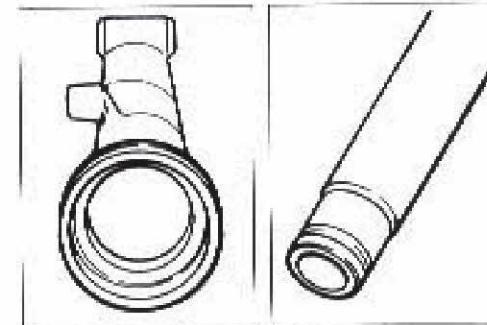
### DAMPER ROD

Inspect the damper rod for wear and damage.



### INNER AND OUTER TUBE

Inspect the inner tube sliding surface and outer tube sliding surface for any scuffing.

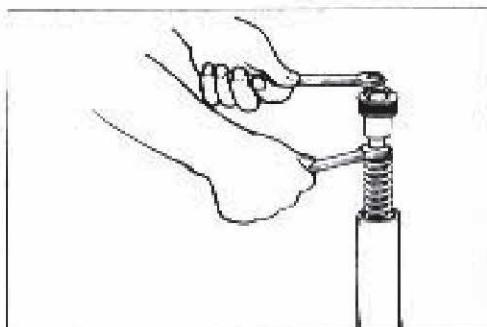


6. Loosen the handlebar holder mounting bolts and nuts.
7. Loosen the front fork upper and lower clamp bolts.
8. Remove the front forks.

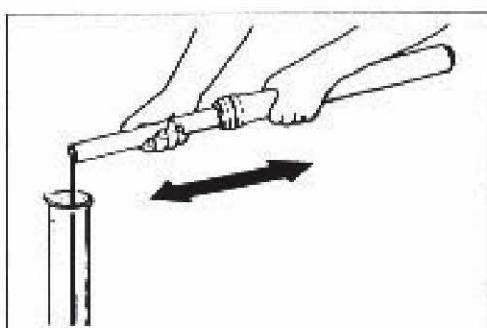
**09900-00410: Hexagon wrench set**  
(Not available in U.S.A.)

## DISASSEMBLY

1. Push the inner tube down and loosen the spring adjuster lock nut, and remove the front fork cap, spring retainer and spring.



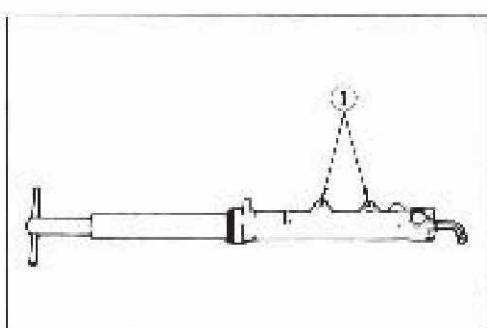
2. Invert the fork and stroke it several times to let out fork oil.
3. Under the inverted condition of front fork, drain oil to hold it for a few minutes.



4. While holding the caliper mounting portion ① by vise and remove the damper rod bolt with the special tool and hexagon wrench.

**09940-54820: Front fork disassembling tool**

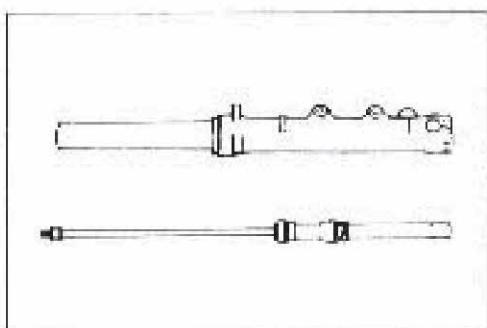
**09900-00401: "L" type hexagon wrench set**



5. Remove the inner rod/damper rod out of the inner tube.

**CAUTION:**

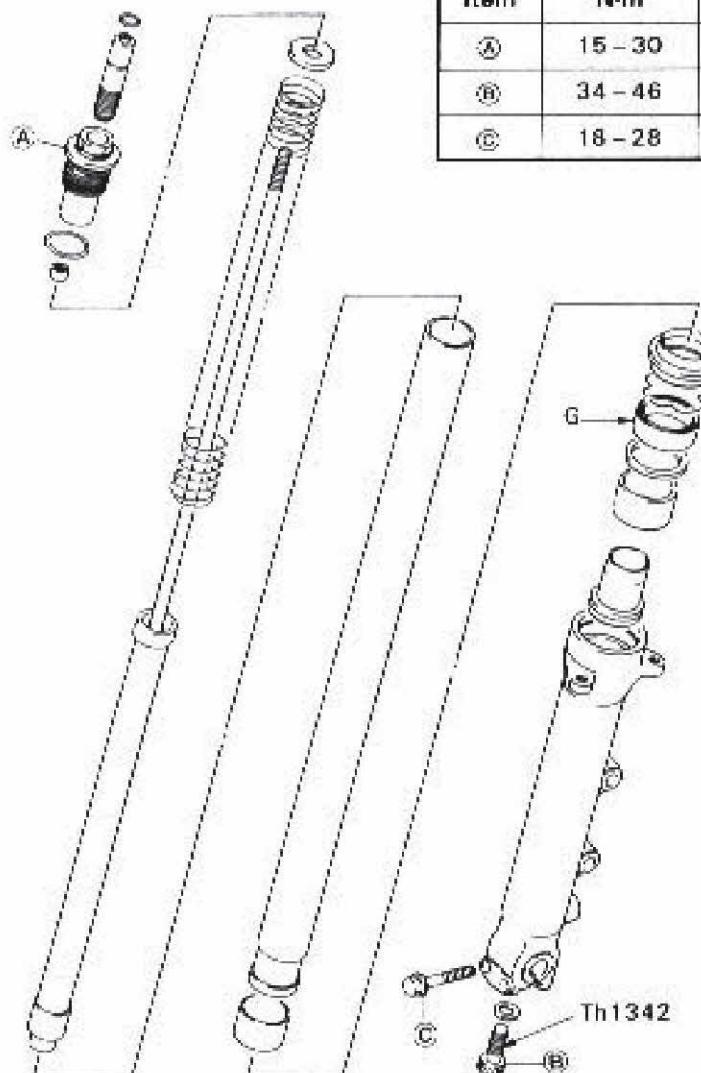
**Do not attempt to disassemble the inner rod/damper rod.**



## FRONT FORK

Tightening torque

Item	N·m	kg·m	lb·ft
Ⓐ	15 - 30	1.5 - 3.0	11.0 - 21.5
Ⓑ	34 - 46	3.4 - 4.6	24.5 - 33.5
Ⓒ	18 - 28	1.8 - 2.8	13.0 - 20.0



G: Apply SUPER GREASE "A".  
Th1342: Apply THREAD LOCK "1342".

## REMOVAL

1. Remove the lower fairing assembly.
2. Support the motorcycle with a jack or wooden block.
3. Remove the front wheel.
4. Remove the front fender.
5. Remove the front fender brace.

09900-00401: L-type hexagon wrench

**NOTE:**

*Slightly loosen the front fork cap to facilitate later disassembly before loosening the front fork clamp bolts. When removing the left front fork make sure to loosen the steering damper bracket bolt Ⓢ.*

