

2B



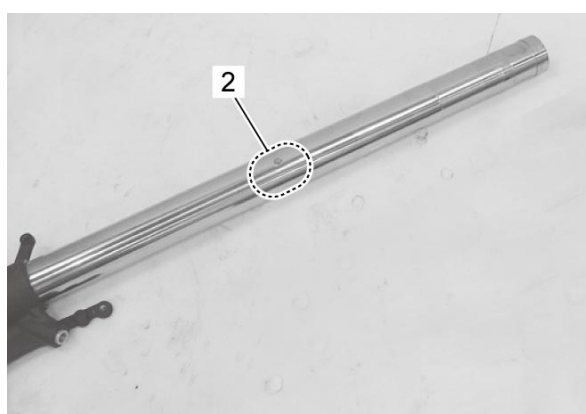
## Front Fork Disassembly and Reassembly

Refer to [Front Fork Assembly Removal and Installation](#).

[Reference: Front Fork Components](#)

### NOTICE:

Do not disassemble the front fork cap bolt (1) and stopper (2).

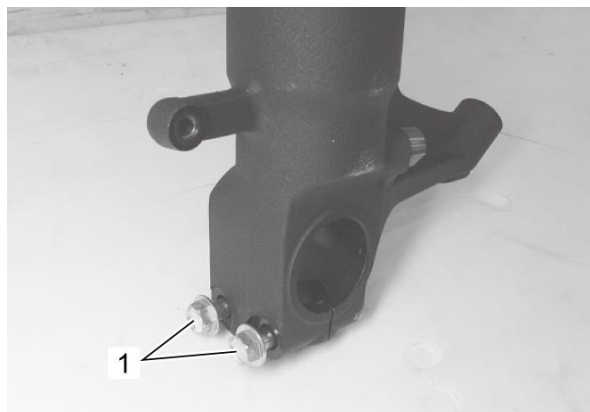


### NOTE:

The right and left front forks are installed symmetrically and therefore the disassembly procedure for one side is the same as that for the other side.

## Disassembly

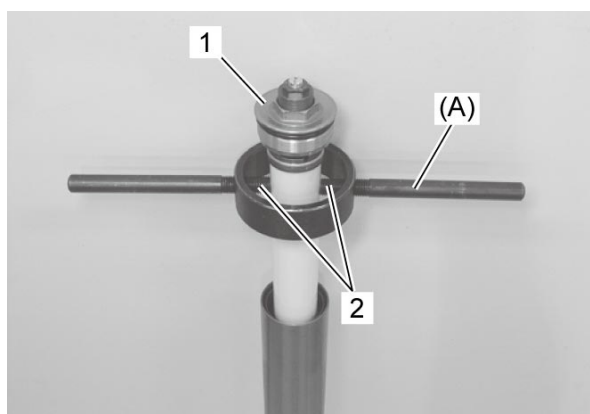
1) Remove the front axle pinch bolts (1).



- 2) Loosen the front fork cap bolt (1).
- 3) Install the special tool to the holes (2) on the spacer.

**Special Tool**

**(A): 09940-94930**

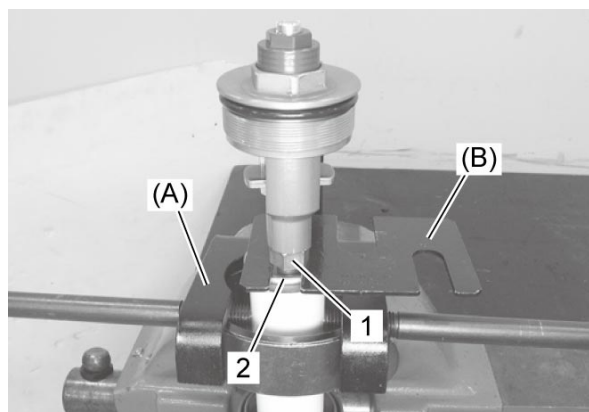


- 4) Set the special tool (A) referring to the manual.
- 5) Compress the fork spring using the special tool (A) and insert the special tool (B) between the lock-nut (1) and spring retainer (2).

**Special Tool**

**(A): 09940-93110**

**(B): 09940-94922**

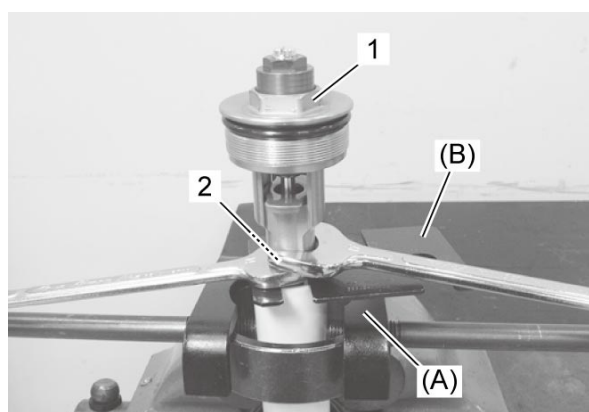


- 6) Remove the front fork cap bolt (1) from the inner rod/damper rod by loosening the lock-nut (2).
- 7) Remove the special tool (B).

**Special Tool**

(A): [09940-93110](#)

(B): [09940-94922](#)



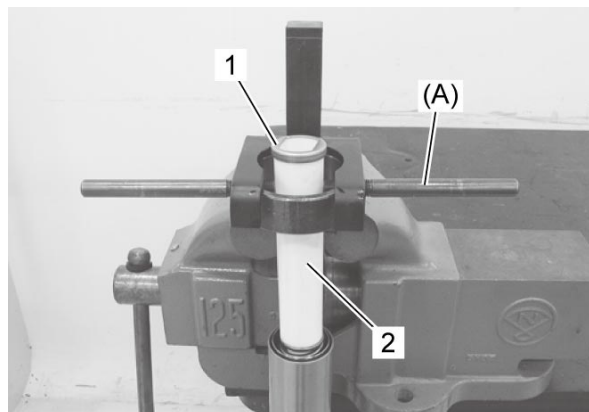
- 8) Remove the special tool (A) and remove the spring retainer (1) and spacer (2).

**NOTE:**

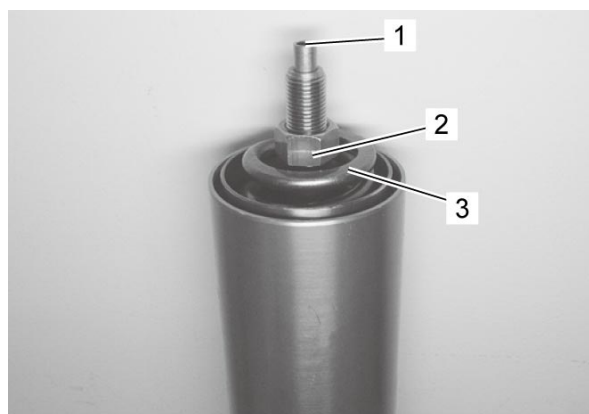
**Hold front fork leg by hand to prevent it sliding out of the outer tube.**

**Special Tool**

(A): [09940-94930](#)

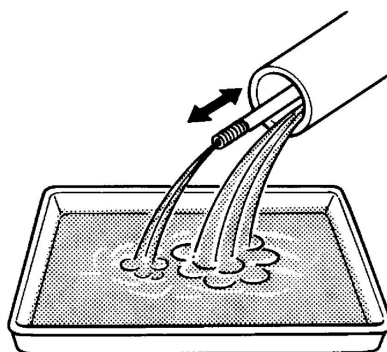


**9)** Remove the adjuster rod (1), lock-nut (2) and spring (3).



**10)** Invert the fork and stroke the inner rod/damper rod several times to drain out fork oil.

**11)** Hold the fork inverted for a few minutes to drain oil.

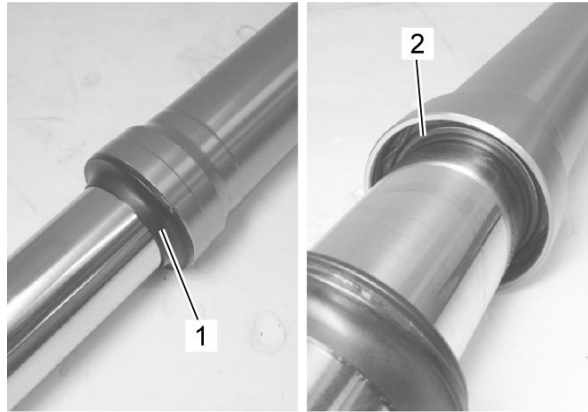


**12)** Remove the dust seal (1).

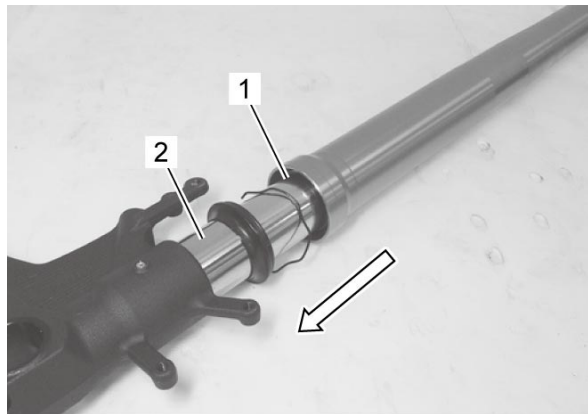
**13)** Remove the oil seal stopper ring (2).

**NOTICE:**

- Scratches on the inner tube could cause oil leaks.
- Avoid scratching when removing.

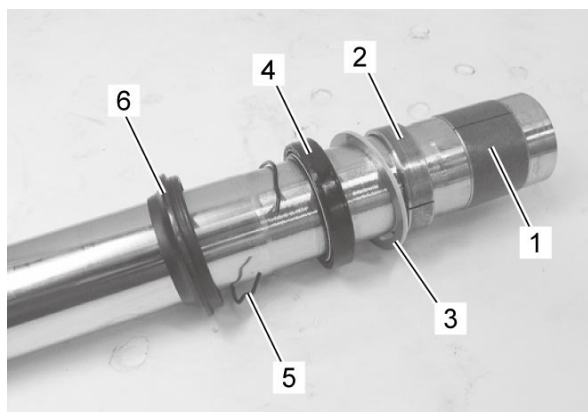


**14)** Remove the oil seal (1) by pulling out the inner tube (2).



**15)** Remove the following parts from the inner tube.

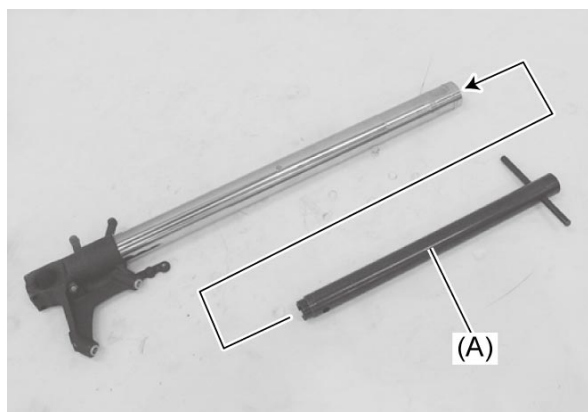
- Inner tube slide metal (1)
- Outer tube slide metal (2)
- Oil seal retainer (3)
- Oil seal (4)
- Oil seal stopper ring (5)
- Dust seal (6)



**16)** Loosen the inner rod/damper rod using the special tool.

**Special Tool**

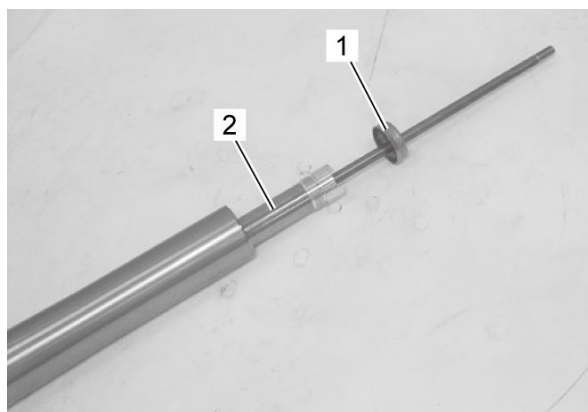
**(A): 09940-30221**



**17)** Remove the spring seat (1) and inner rod/damper rod (2).

**NOTE:**

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



## Reassembly

**Reference: Front Fork Inspection**

### **NOTICE:**

- Thoroughly wash all the component parts being assembled.  
Insufficient washing can result in oil leakage or premature wear of the parts.
- When reassembling the front fork, use new fork oil.
- Use the specified fork oil for the front fork.

- 1) Cover the inner tube with a plastic film.

### **NOTICE:**

Scratches on the oil seal lip may cause oil leakage. When installing the seals, place a plastic film over the slide bushing groove and edges of the inner tube to avoid damaging the seals' lip.

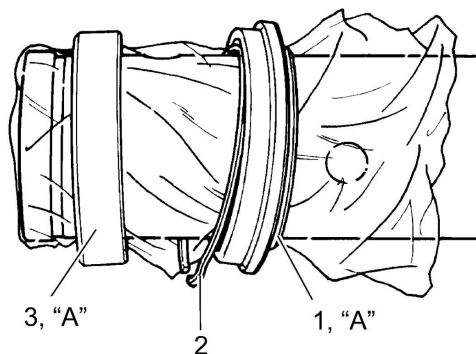
- 2) Install the following parts to the inner tube.
  - New dust seal (1)
  - Stopper ring (2)
  - New oil seal (3)

### **NOTE:**

Face the stamp mark side of the oil seal to the dust seal side.

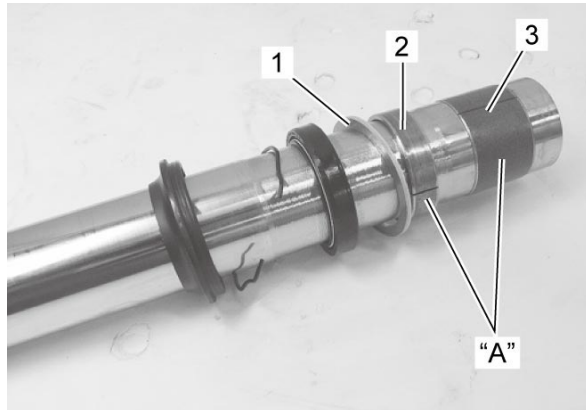
- 3) Apply fork oil to the dust seal lip and oil seal lip.

**"A": Fork oil 99000-99044-L01 (SUZUKI FORK OIL L-01)**



- 4) Remove the plastic film and install the oil seal retainer (1), new outer tube slide metal (2) and new inner tube slide metal (3) keep them free from dust.
- 5) Apply fork oil to the outer slide metal (2) and inner tube slide metal (3).

**"A": Fork oil 99000-99044-L01 (SUZUKI FORK OIL L-01)**



- 6) Insert the inner tube into the outer tube.
- 7) Press fit the oil seal (1) using the special tools until the stopper ring groove on the outer tube can be seen.

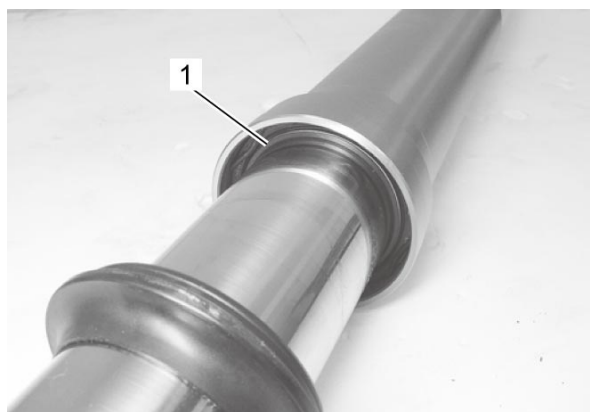
**Special Tool**

**(A): 09940-52861**

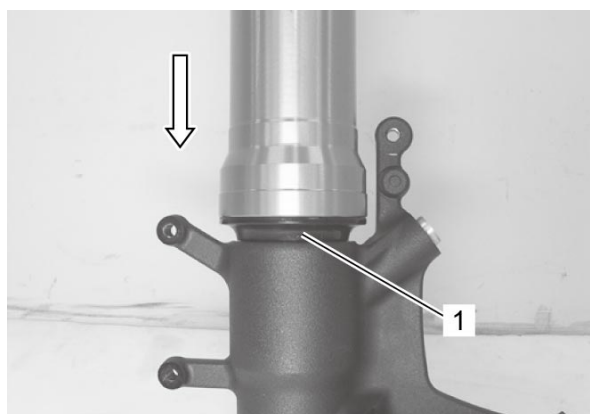


- 8) When installing the stopper ring (1), make sure that the stopper ring is fitted securely into the groove.

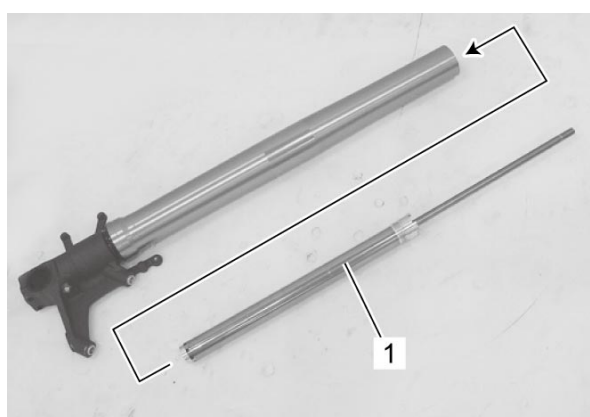




**9)** Press fit the dust seal (1).



**10)** Install the inner rod/damper rod (1) and into the inner tube.

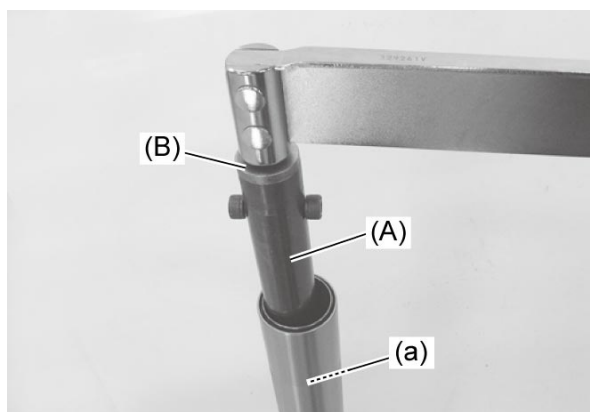


**11)** Tighten inner rod/damper rod to the specified torque using the special tools.

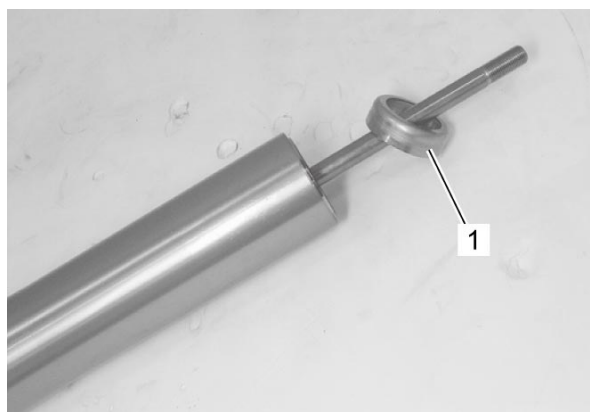
**Special Tool**

**(A): 09940-30221**

**(B): 09940-54860**

**Tightening torque****Inner rod/damper rod (a): 70 N·m (7.0 kgf-m, 51.0 lbf-ft)**

**12)** Install the spring seat (1) into the inner tube.

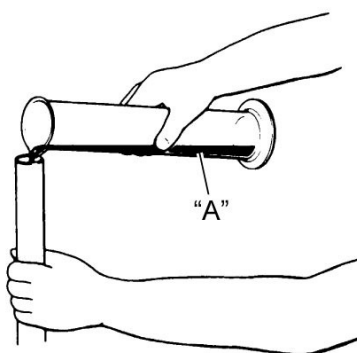


**13)** Place the front fork vertically without spring.

**14)** Compress it fully.

**15)** Pour specified front fork oil up to the top level of the inner tube.

**"A": Fork oil 99000-99044-L01 (SUZUKI FORK OIL L-01)**

**Front fork oil capacity (each leg)****569 ml (19.2/20.0 US/Imp oz)**



- 16)** Move the inner rod/damper rod slowly using the special tool (A) more than ten times until bubbles do not come out from the oil.

**NOTE:**

**Refill front fork oil up to the top of the inner tube to find bubbles while bleeding air.**

**Special Tool**

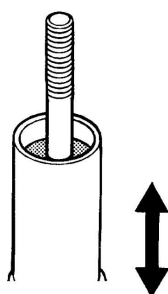
**(A): 09940-52841**



- 17)** Refill specified front fork oil up to the top level of the inner tube again. Move the outer tube up and down several strokes until bubbles do not come out from the oil.
- 18)** Keep the front fork vertically and wait 5 – 6 minutes.

**NOTE:**

- **Always keep oil level over the inner rod/damper rod top end, or air may enter the inner rod/damper rod during this procedure.**
- **Take extreme attention to pump out air completely.**



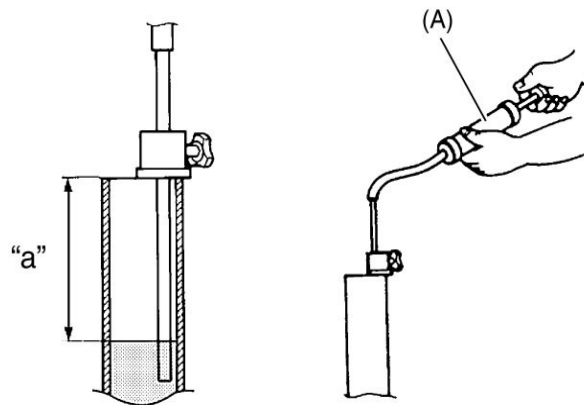
- 19)** Hold the front fork vertically and adjust fork oil level "a" with the special tool.

**NOTE:**

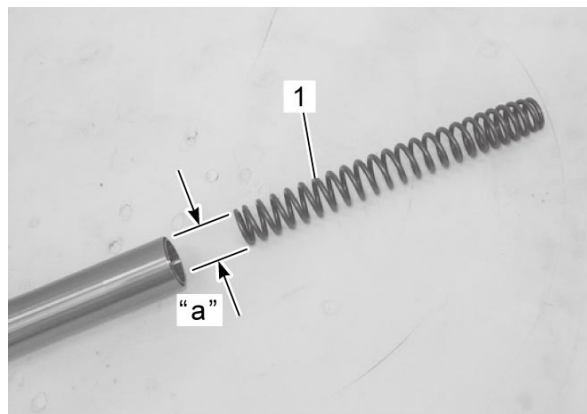
**When adjusting the fork oil level, remove the fork spring and compress the outer tube fully.**

**Front fork oil level**

**120 mm (4.7 in)**

**Special Tool****(A): 09943-74111**

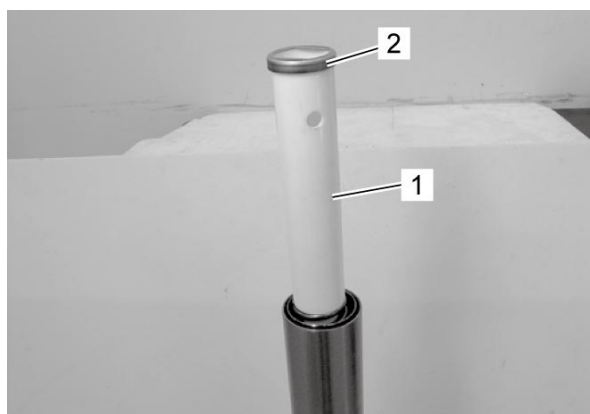
- 20)** Install the fork spring (1) into the inner tube with its larger diameter "a" facing the bottom side.



- 21)** Install the adjuster rod (1).  
**22)** Turn the lock-nut (2) until stops on the inner rod/damper rod threads.



- 23)** Install the spacer (1) and spring retainer (2).



- 24)** Install the special tool (A) to the holes (1) on the spacer.  
**25)** Set the special tool (B) referring to the manual.  
**26)** Pull up the inner rod/damper rod using the special tool (C).  
**27)** Compress the spring using the special tool (B) and then insert the special tool (D) between the lock-nut and spring retainer.

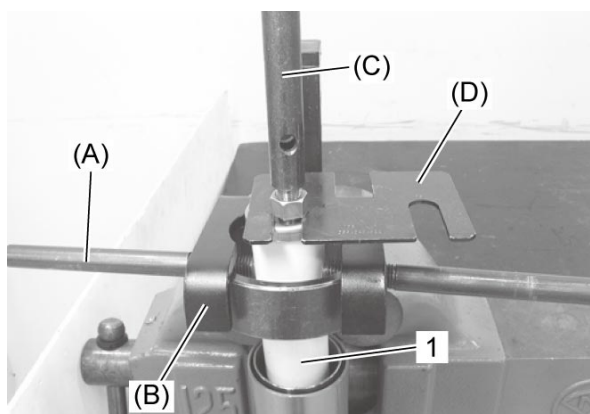
**Special Tool**

**(A): 09940-94930**

**(B): 09940-93110**

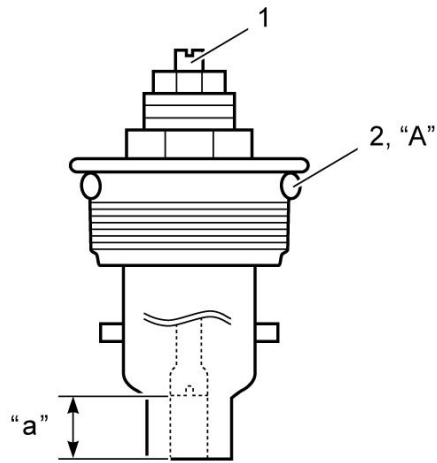
**(C): 09940-52841**

**(D): 09940-94922**



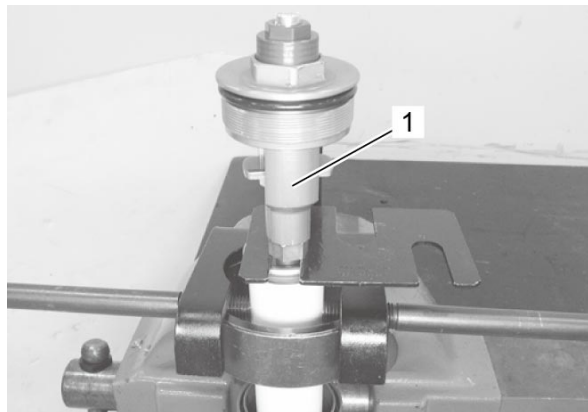
- 28)** Turn the rebound damping force adjuster (1) clockwise until the first click is heard after distance "a" is obtained (stiffest position).  
**29)** Apply fork oil to the new O-ring (2).

**"A": Fork oil 99000-99044-L01 (SUZUKI FORK OIL L-01)**



"a":	13 mm (0.5 in)
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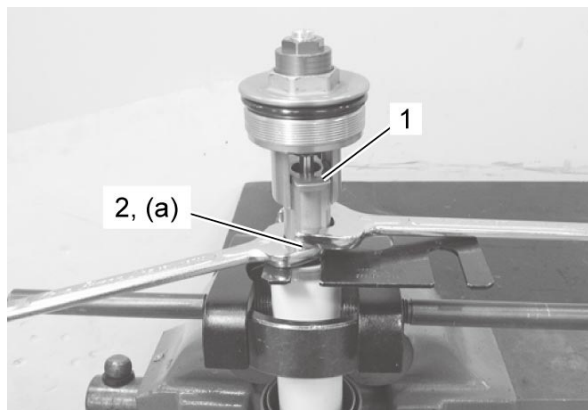
- 30)** Slowly turn the front fork cap bolt (1) completely by hand until the end of the front fork cap bolt (1) seats on the inner rod end.



- 31)** Hold the front fork cap bolt (1) and tighten the lock-nut (2) to the specified torque.

**Tightening torque**

**Front fork inner rod lock-nut (a): 15 N·m (1.5 kgf-m, 11.0 lbf-ft)**





- 32)** Remove the special tools.
- 33)** Tighten the front fork cap bolt to the outer tube temporarily.
- 34)** After installing the front fork, adjust the spring pre-load and two kinds of damping force.