

Guideline

Rebound damping	
Comfort	20 clicks
Standard	15 clicks
Sport	10 clicks
Full payload	10 clicks

i Info
Turn clockwise to increase damping; turn counter-clockwise to reduce damping.

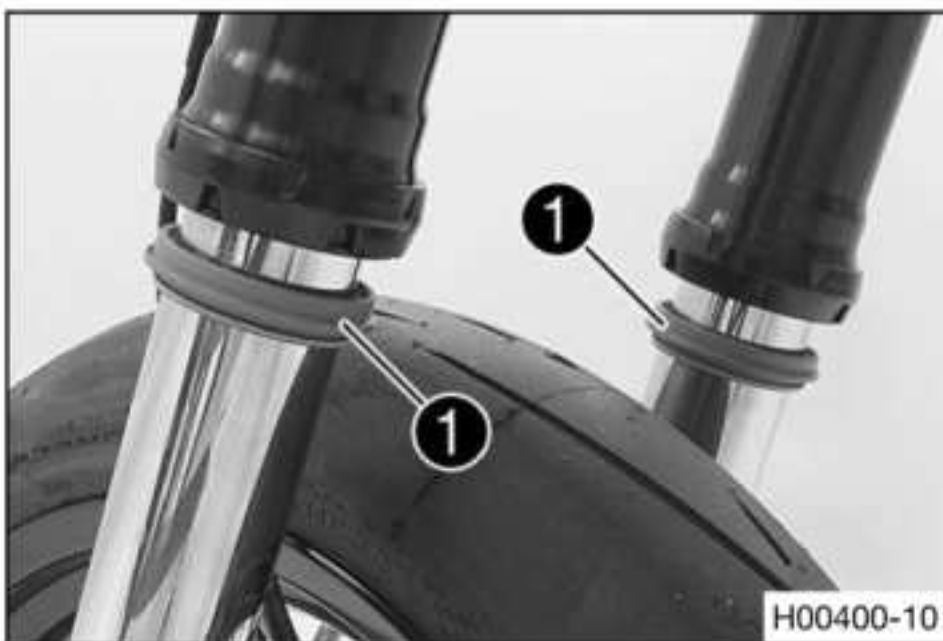
6.3 Cleaning the dust boots of the fork legs

Preparatory work

- Remove the fork protector. (📖 p. 20)

Main work

- Push dust boots ① of both fork legs downward.



i Info
The dust boots remove dust and coarse dirt particles from the inside fork tubes. Over time, dirt can accumulate behind the dust boots. If this dirt is not removed, the oil seals behind can start to leak.

! Warning
Danger of accidents Oil or grease on the brake discs reduces the braking effect.

- Always keep the brake discs free of oil and grease.
- Clean the brake discs with brake cleaner when necessary.

- Clean and oil the dust boots and inner fork tubes of both fork legs.

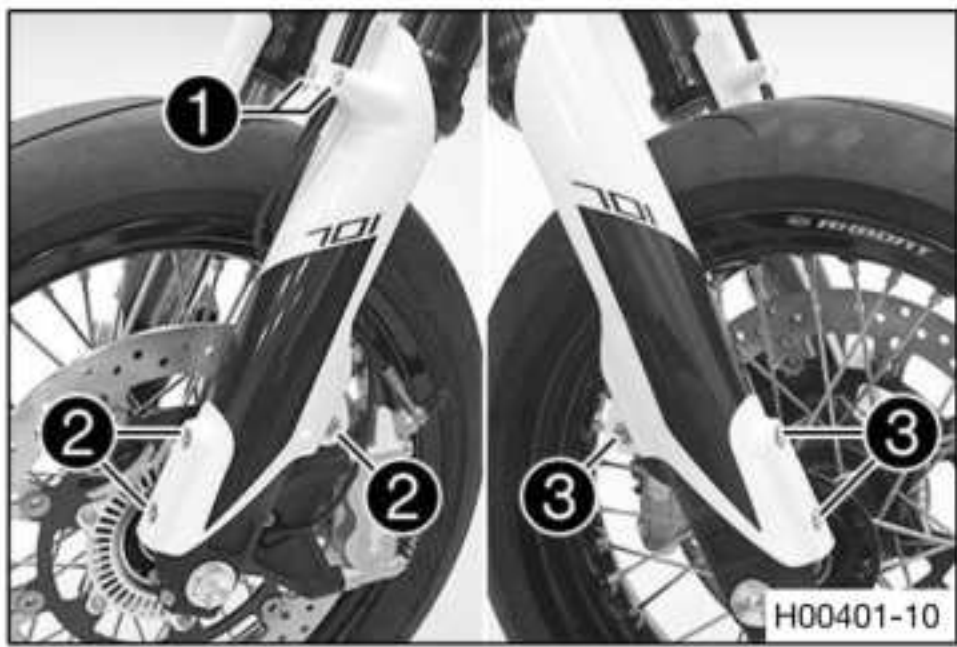
Universal oil spray (📖 p. 379)

- Press the dust boots back into their installation position.
- Remove excess oil.

Finishing work

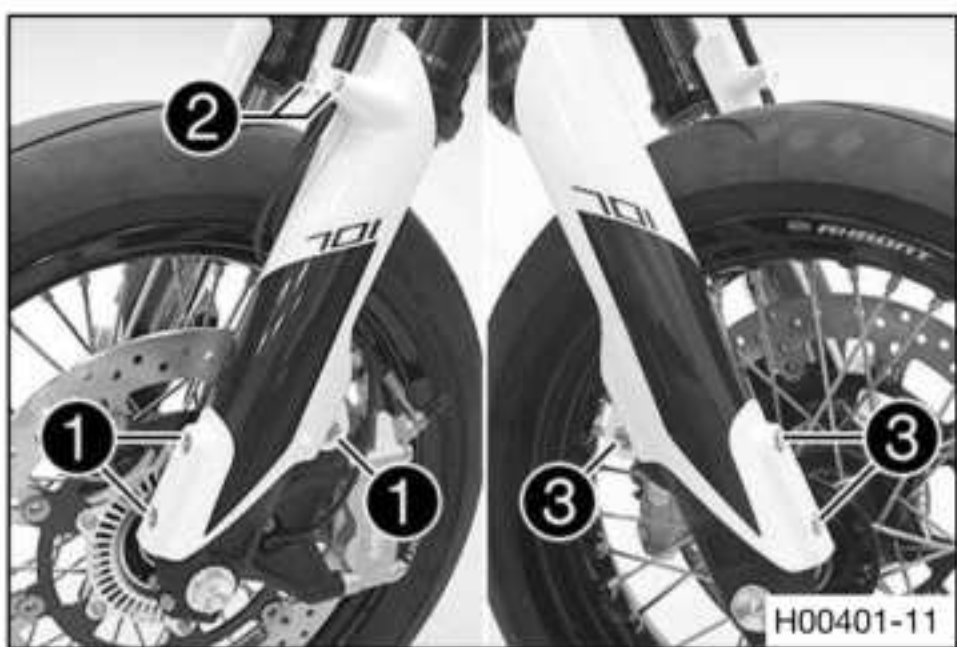
- Install the fork protector. (📖 p. 20)

6.4 Removing the fork protector



- Remove screws ❶ and take off the clamp.
- Remove screws ❷ on the left fork leg. Take off the fork protector.
- Remove screws ❸ on the right fork leg. Take off the fork protector.

6.5 Installing the fork protector

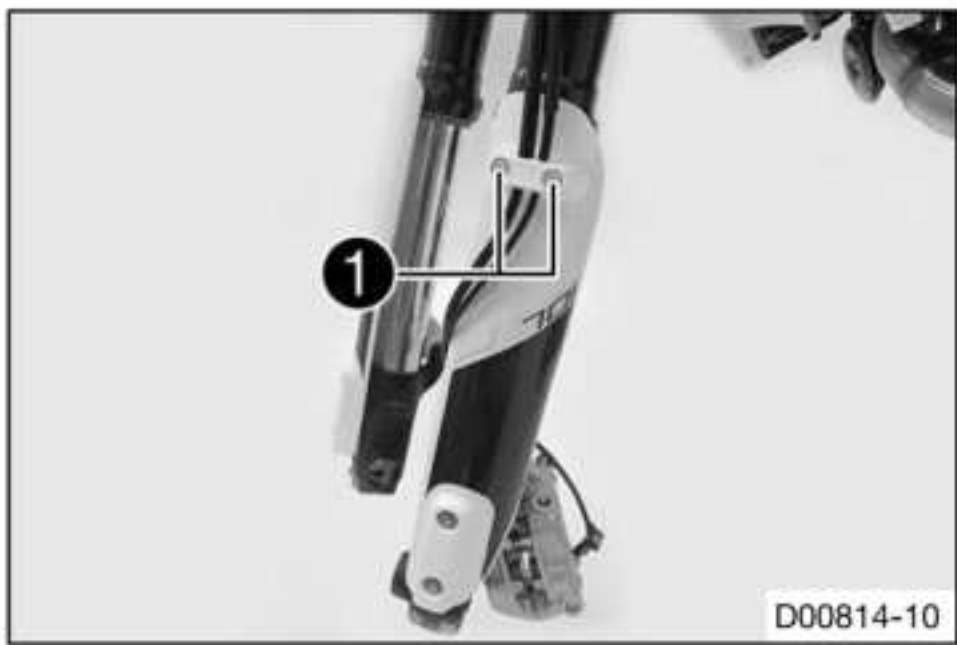


- Position the fork protector on the left fork leg. Mount and tighten screws ❶.
- Guideline
- | | | |
|---------------------------|----|--------------------|
| Remaining screws, chassis | M6 | 10 Nm (7.4 lbf ft) |
|---------------------------|----|--------------------|
- Position the brake line, wiring harness, and clamp. Mount and tighten screws ❷.
 - Position the fork protector on the right fork leg. Mount and tighten screws ❸.

Guideline

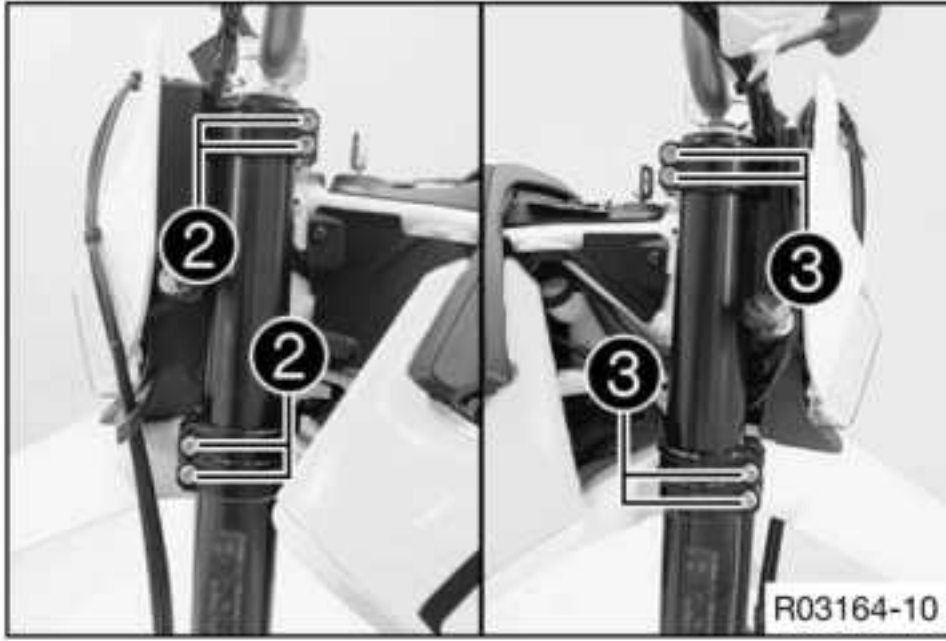
Remaining screws, chassis	M6	10 Nm (7.4 lbf ft)
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6.6 Removing the fork legs



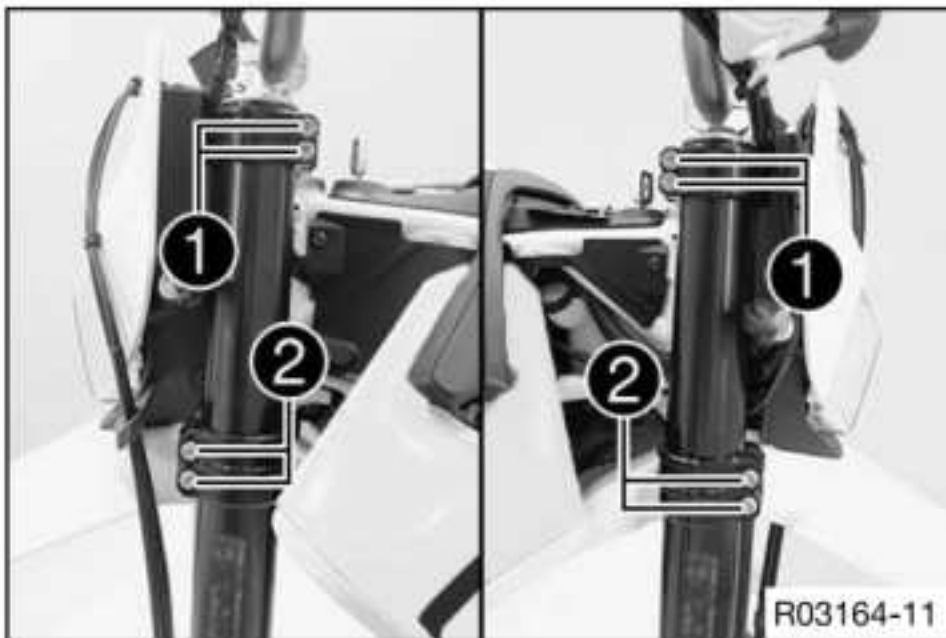
- Preparatory work**
- Raise the motorcycle with the work stand. (📖 p. 14)
 - Place a load on rear of the vehicle.
 - ✓ The front wheel is not in contact with the ground.
 - Remove front wheel using a work stand. (📖 p. 114)
- Main work**
- Remove screws ❶ and take off the clamp.
 - Allow the brake caliper and brake line to hang loosely to the side.

i Info
Do not actuate the hand brake lever when the front wheel is removed.



- Loosen screws ②. Remove the left fork leg.
- Loosen screws ③. Remove the right fork leg.

6.7 Installing the fork legs



Main work

- Position the fork legs.



Info

Grooves are milled into the side of the upper end of the fork legs. The second milled groove (from the top) must be flush with the top edge of the upper triple clamp.

- Tighten screws ①.

Guideline

Screw, top triple clamp	M8	17 Nm (12.5 lbf ft)
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- Tighten screws ②.

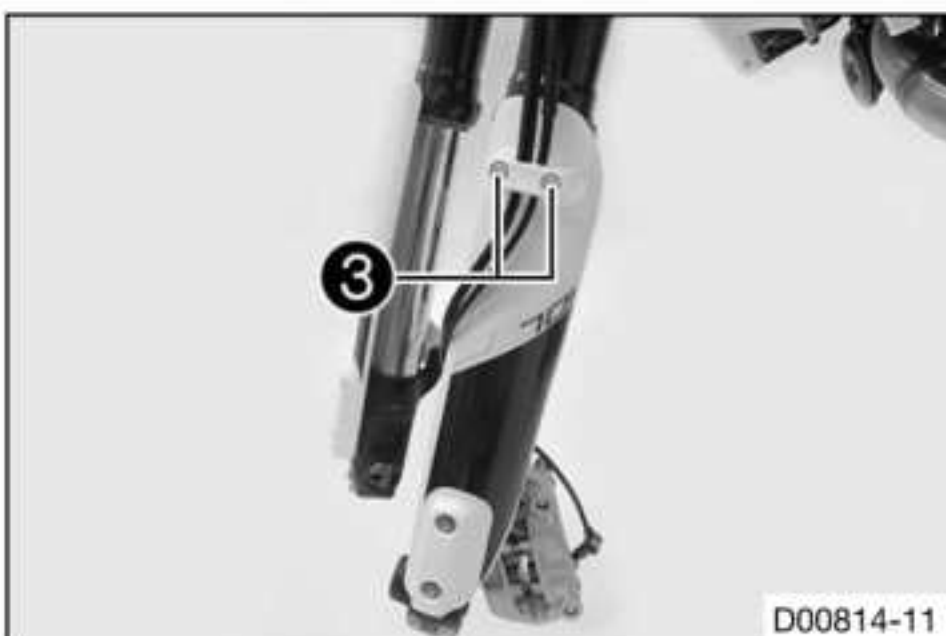
Guideline

Screw, bottom triple clamp	M8	12 Nm (8.9 lbf ft)
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- Position the brake line, wiring harness, and clamp. Mount and tighten screws ③.

Guideline

Remaining screws, chassis	M6	10 Nm (7.4 lbf ft)
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Finishing work

- Install the front wheel using a work stand. (📖 p. 116)
- Remove the motorcycle from the work stand. (📖 p. 15)

6.8 Disassembling the fork legs

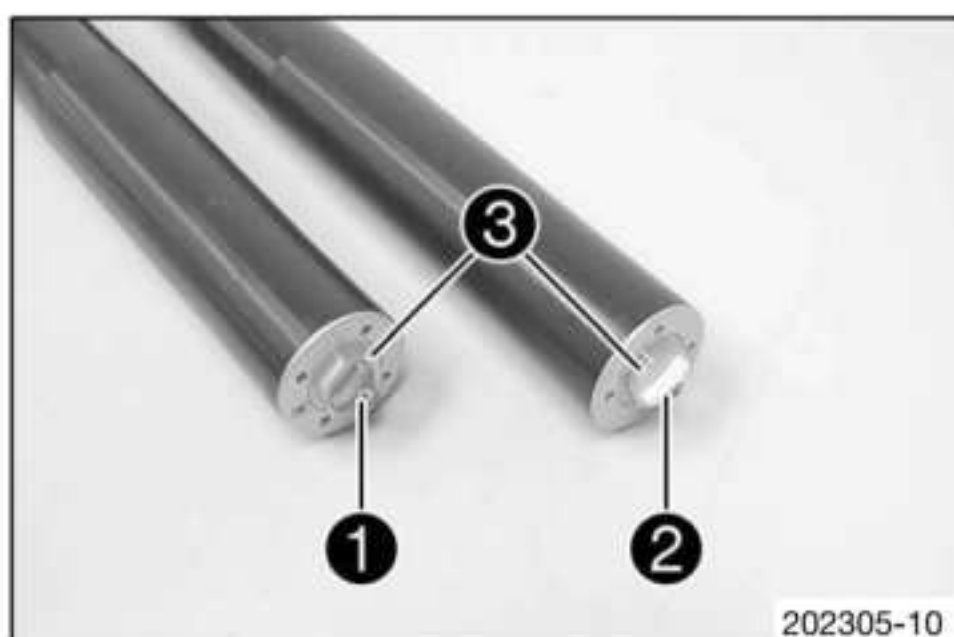


Info

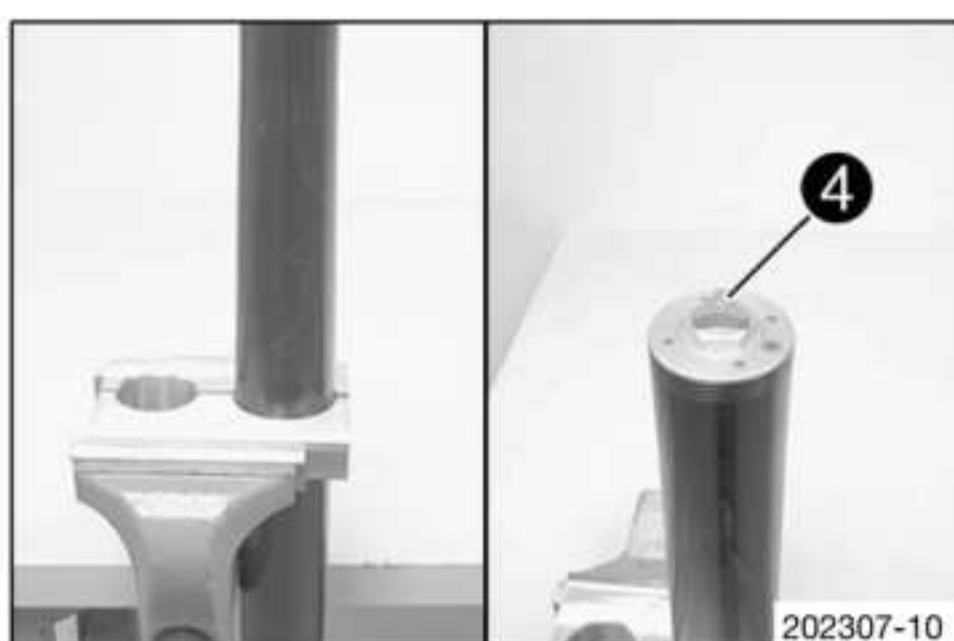
The operations are the same on both fork legs.

Condition

The fork legs have been removed.



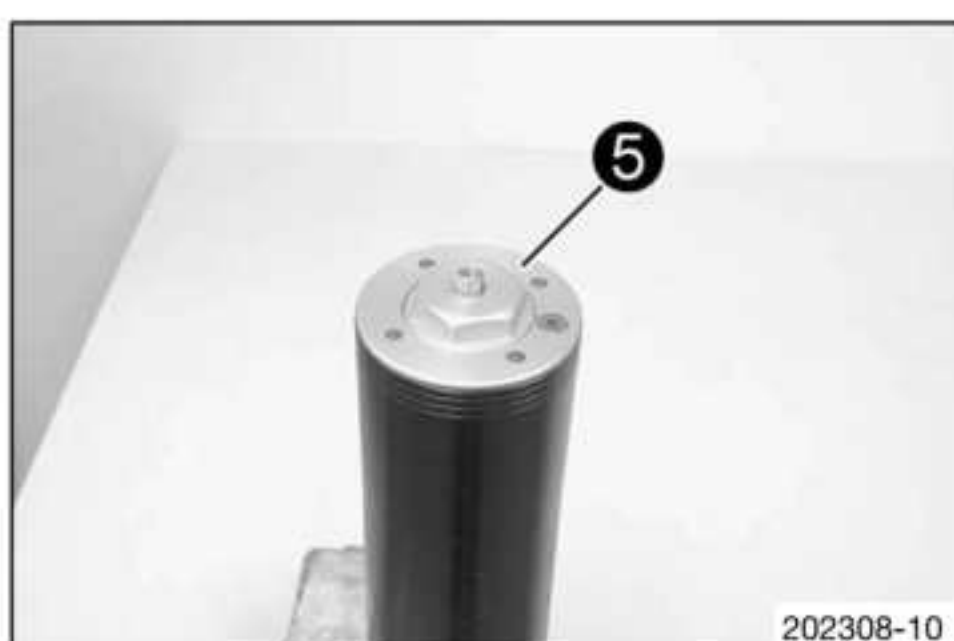
- Make a note of the present state of rebound ❶ and compression damping ❷.
- Note down the current state of the spring preload ❸.
- Completely open the adjusters of the rebound damping, compression damping, and spring preload.



- Clamp the fork leg in the area of the lower triple clamp.

Clamping stand (T1403S) (📖 p. 398)

- Remove adjuster ❹.



- Loosen the Preload Adjuster ❺.

Pin wrench (T103) (📖 p. 396)

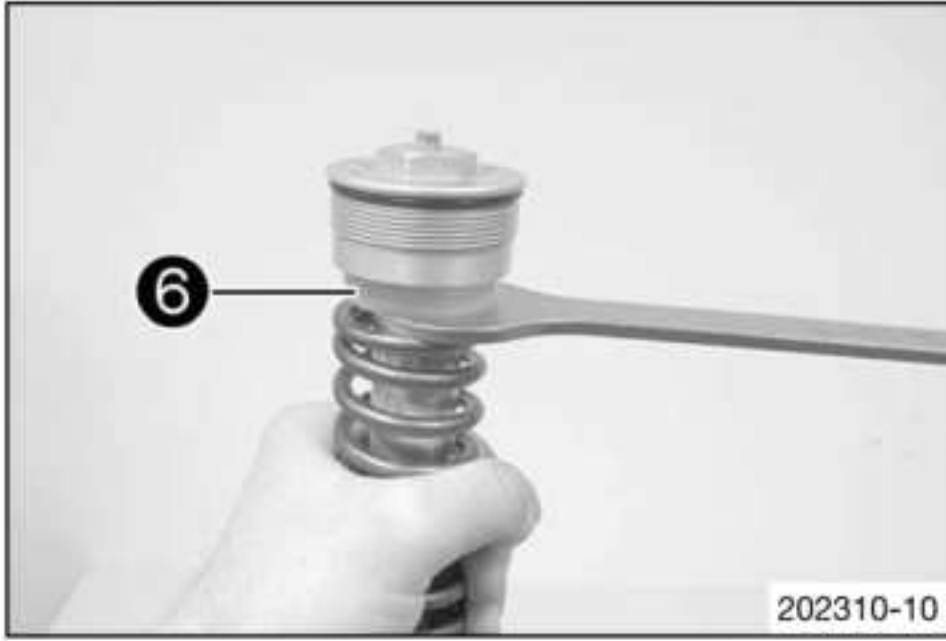


Info

The Preload Adjuster cannot be removed yet.



- Unclamp the fork leg.
- Drain the fork oil.



- Unclamp the fork leg with the axle clamp.

Guideline

Use soft jaws.

- Push the outside fork tube downwards.
- Pull the spring downward. Mount the special tool on the hexagonal part.

Open end wrench (T14032) (p. 398)

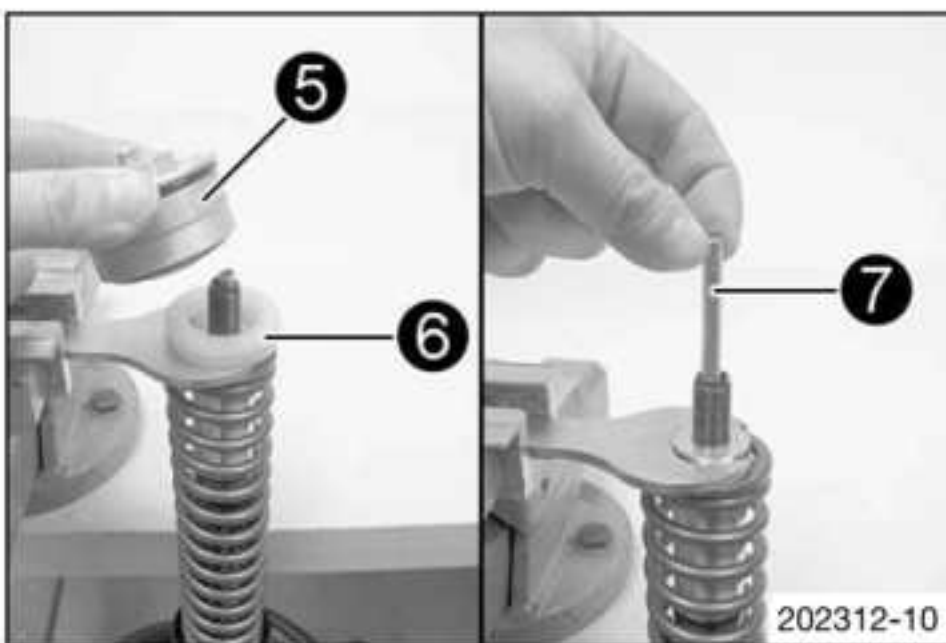


Info

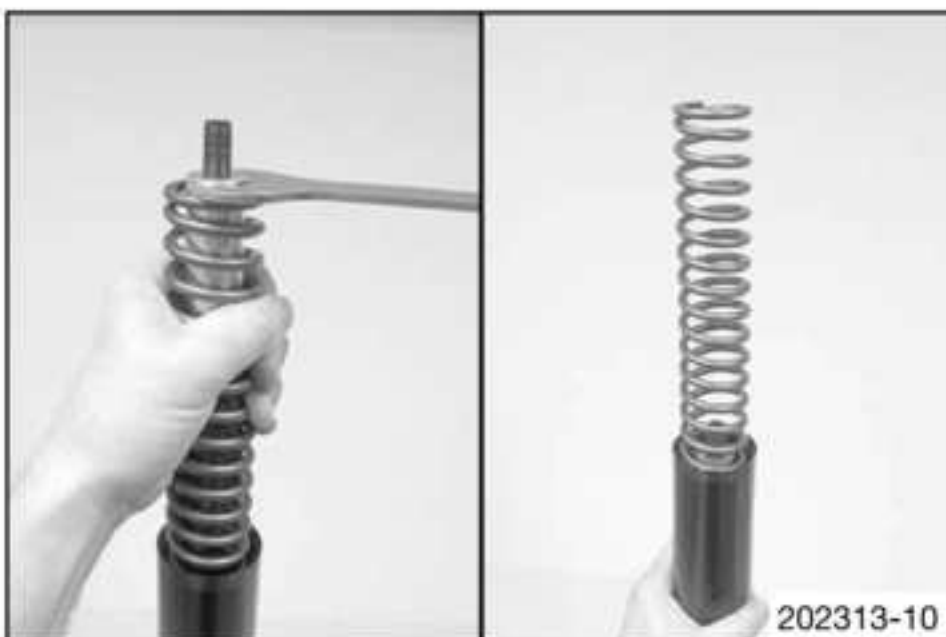
Preload spacers 6 should be above the special tool.



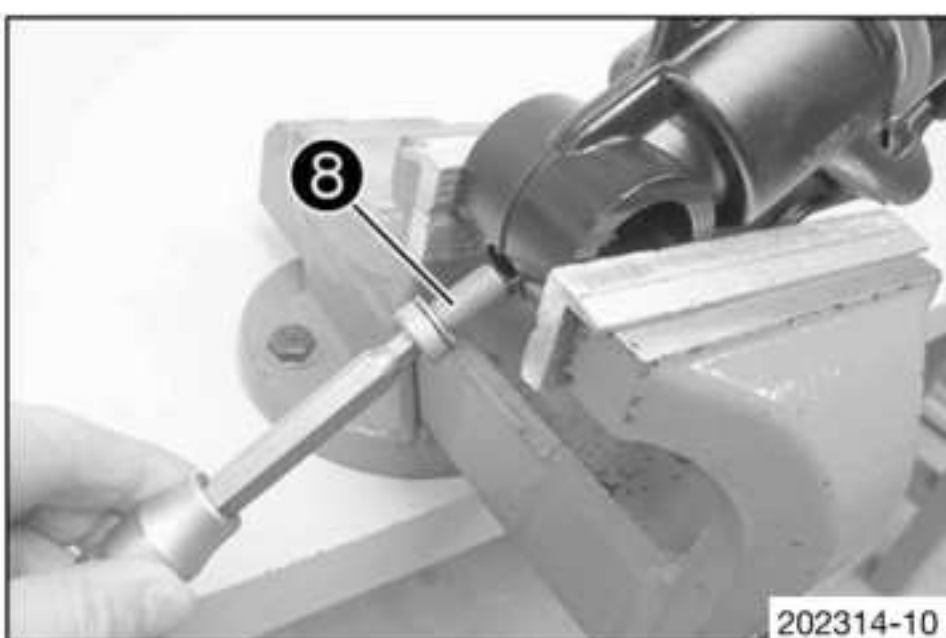
- Clamp the special tool in the vise. Loosen the Preload Adjuster 5.



- Remove the Preload Adjuster 5 with preload spacers 6.
- Remove adjusting tube 7.



- Pull the spring downward. Remove the special tool.
- Remove the spring.



- Clamp the fork leg with the axle clamp.

Guideline

Use soft jaws.

- Remove screw 8 of the cartridge.



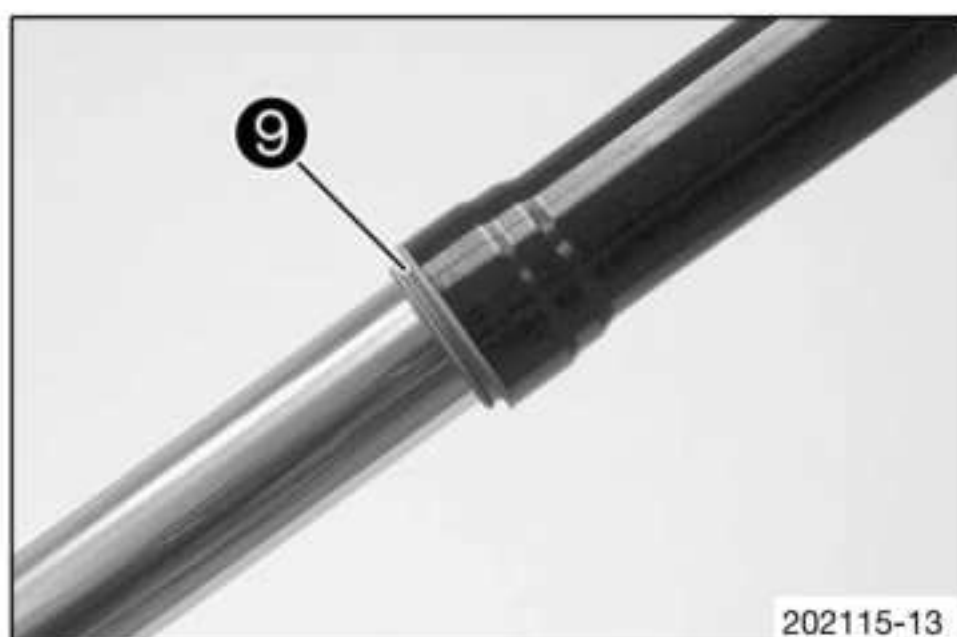
Info

Place a collecting container underneath as some oil will usually still run out.

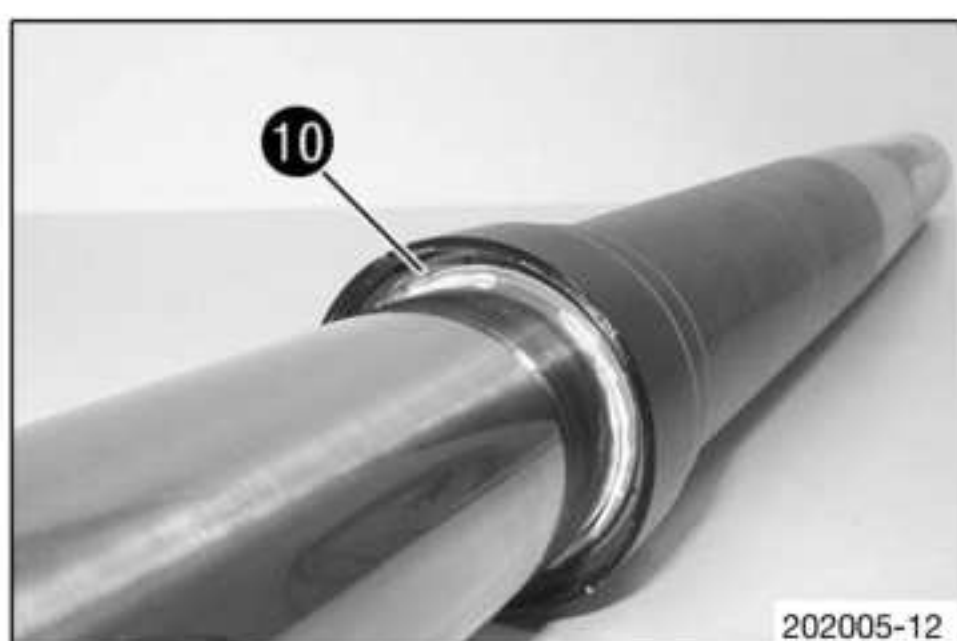
6 FORK, TRIPLE CLAMP



- Remove the cartridge.



- Remove dust boot 9.

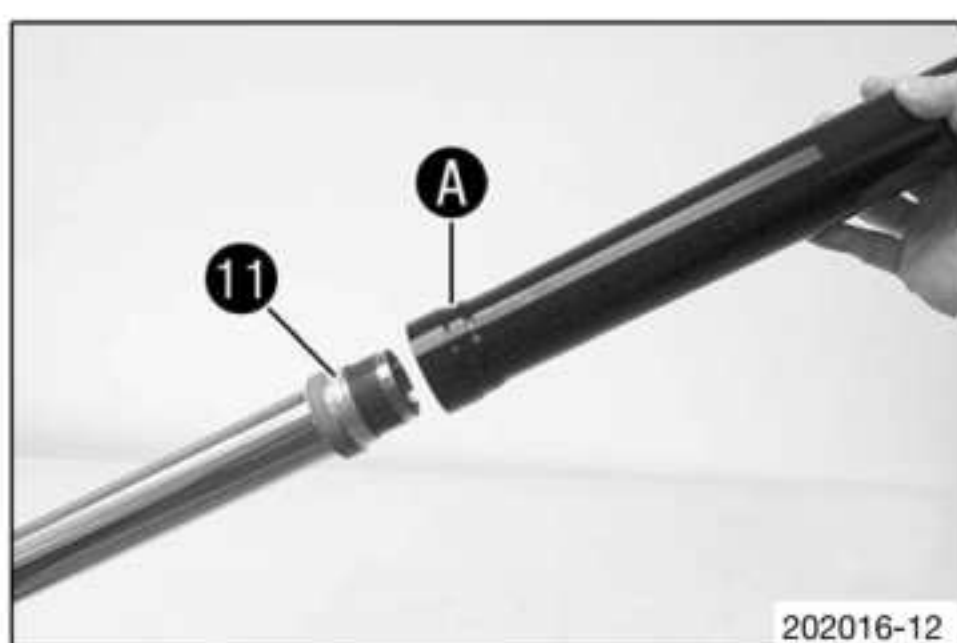


- Remove lock ring 10.



Info

The lock ring has a beveled end where a screwdriver can be applied.



- Warm up the outside fork tube in area A of the lower sliding bushing.

Guideline

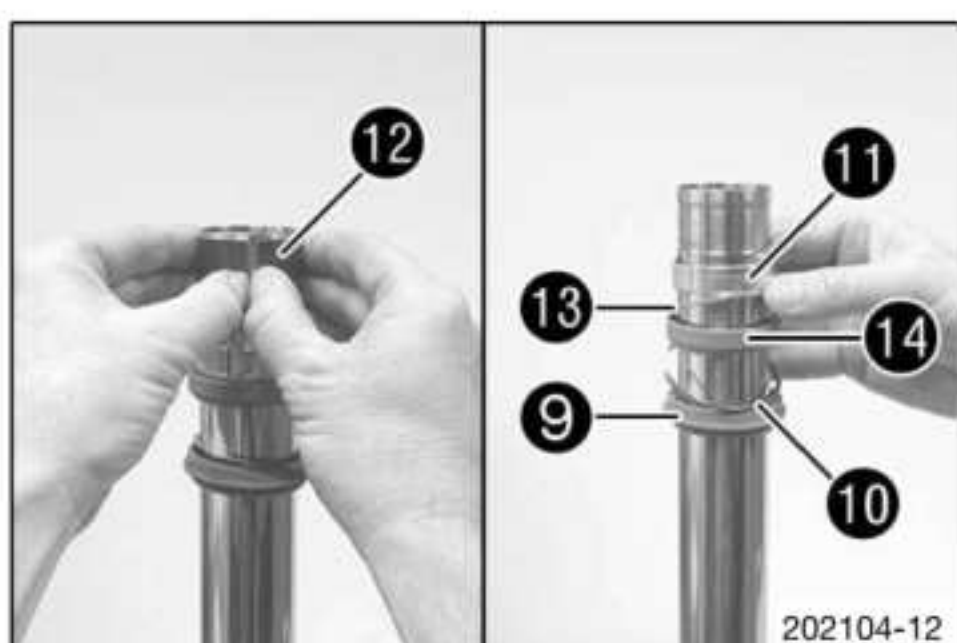
50 °C (122 °F)

- Pull the outside fork tube off the inside fork tube with a jerk.



Info

Lower sliding bushing 11 must be drawn from its bearing seat.



- Remove upper sliding bushing 12.



Info

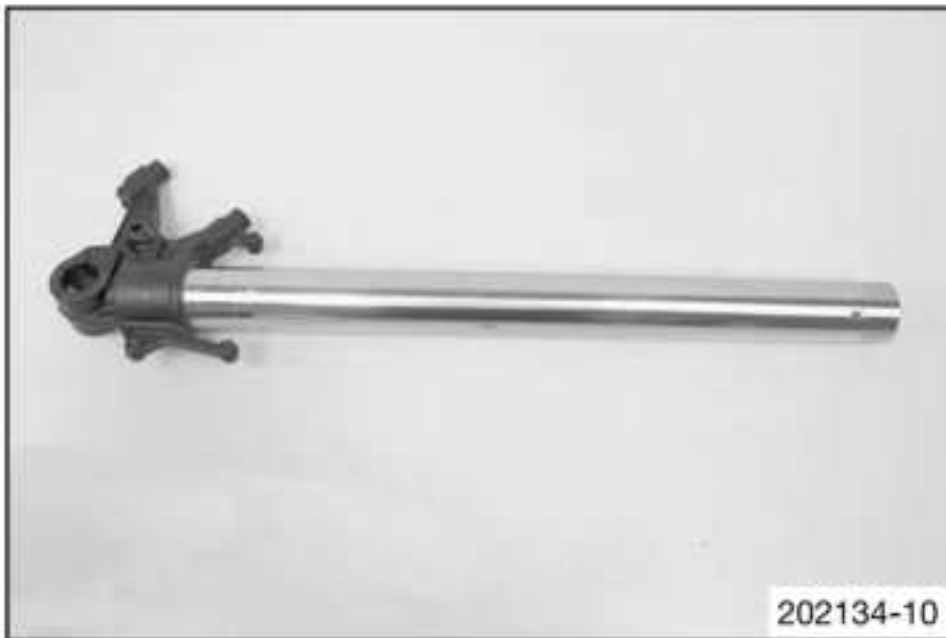
Without using a tool, pull the stack slightly apart by hand.

- Take off lower sliding bushing 11.
- Take off support ring 13.
- Take off seal ring 14.
- Take off lock ring 10.
- Take off dust boot 9.
- Unclamp the fork leg.

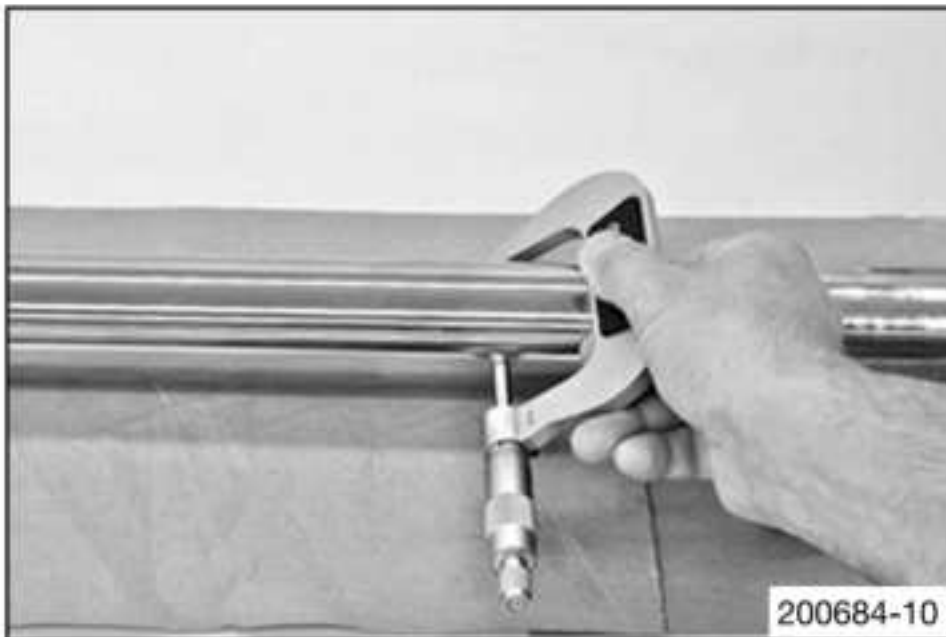
6.9 Checking the fork legs

Condition

The fork is disassembled.



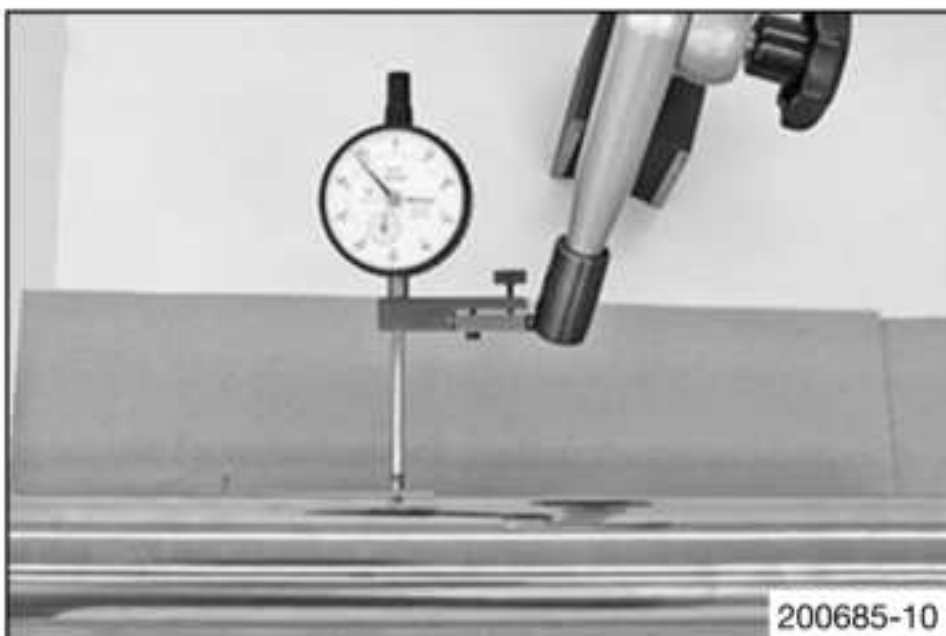
- Check the inside fork tube and the axle clamp for damage.
 - » If damage is found:
 - Change the inside fork tube.



- Measure the outside diameter of the inside fork tube at several places.

Outside diameter of the inside fork tube	47.975 ... 48.005 mm (1.88878 ... 1.88996 in)
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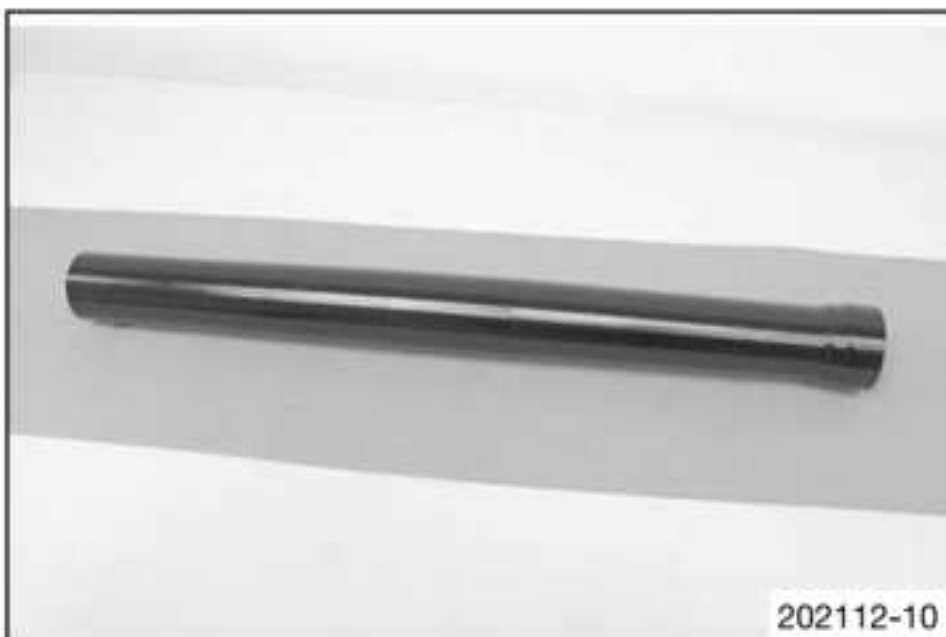
- » If the measured value is less than the specified value:
 - Change the inside fork tube.



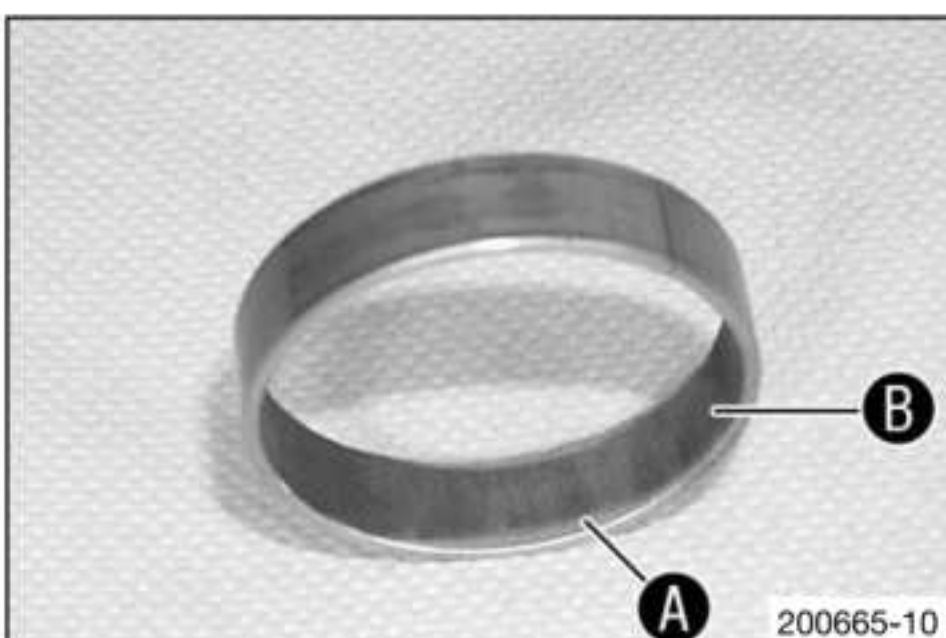
- Measure the run-out of the inside fork tube.

Run-out of the inside fork tube	≤ 0.20 mm (≤ 0.0079 in)
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- » If the measured value is greater than the specified value:
 - Change the inside fork tube.



- Check the outside fork tube for damage.
 - » If damage is found:
 - Change the outside fork tube.



- Check the surface of the sliding bushings.
 - » When bronze-colored layer **A** becomes visible under gliding layer **B**:
 - Change the guiding bushes.

6 FORK, TRIPLE CLAMP



- Check the spring length.

Guideline

Spring length with preload spacer(s)	468 mm (18.43 in)
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- » If the measured value is greater than the specified value:
 - Reduce the thickness of the preload spacers.
- » If the measured value is less than the specified value:
 - Increase the thickness of the preload spacers.

6.10 Assembling the fork legs

i Info
The operations are the same on both fork legs.



Preparatory work

- Check the fork legs. (📖 p. 25)

Main work

- Clamp the inside fork tube using the axle clamp.
- Mount the special tool.

Protecting sleeve (T1401) (📖 p. 398)

- Grease and push on dust boot ①.

Lubricant (T14034) (📖 p. 378)

i Info
Always replace the dust boot, lock ring, seal ring, and support ring.
Mount the dust boot with the sealing lip and spring expander facing downward.

- Push on lock ring ②.
- Grease and push on seal ring ③.

Lubricant (T14034) (📖 p. 378)

i Info
Sealing lip downward, open side upward.

- Push on support ring ④.
- Remove the special tool.
- Sand the edges of the sliding bushings with 600 grit sandpaper; then clean and grease the bushings.

Fork oil (SAE 4) (48601166S1) (📖 p. 377)
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- Push on lower sliding bushing **5**.
- Mount upper sliding bushing **6**.



Info

Without using a tool, pull the stack slightly apart by hand.



- Warm up the outside fork tube in area **A** of the lower sliding bushing.

Guideline

50 °C (122 °F)

- Push the outside fork tube onto the inside fork tube.
- Hold the lower sliding bushing with the longer side of the special tool.

Mounting tool (T14040S) (p. 399)

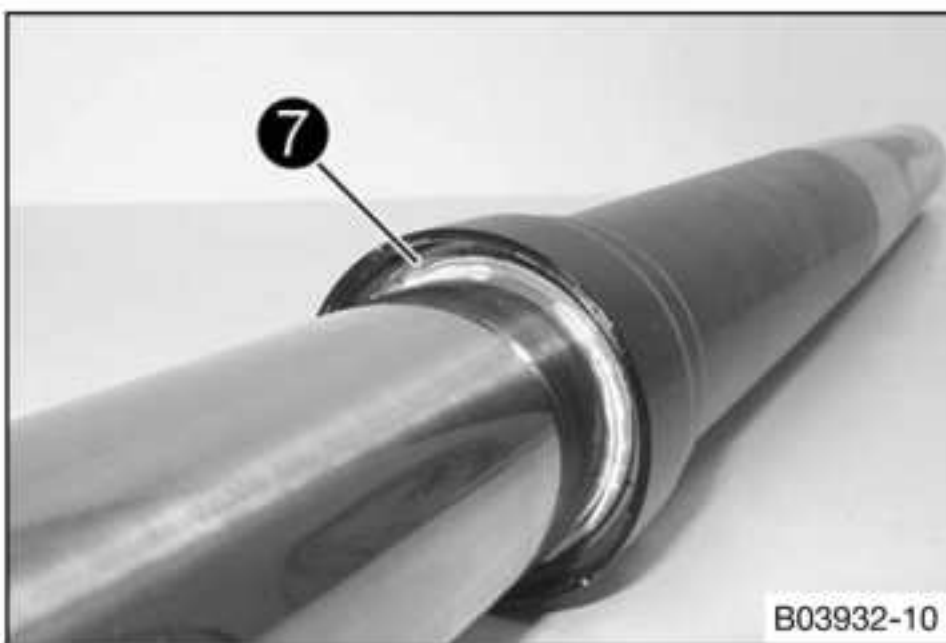


- Press the sliding bushing all the way into the outside fork tube.

- Position the support ring.
- Hold the seal ring with the shorter side of the special tool.

Mounting tool (T14040S) (p. 399)

- Press the seal ring and support ring all the way into the outside fork tube.

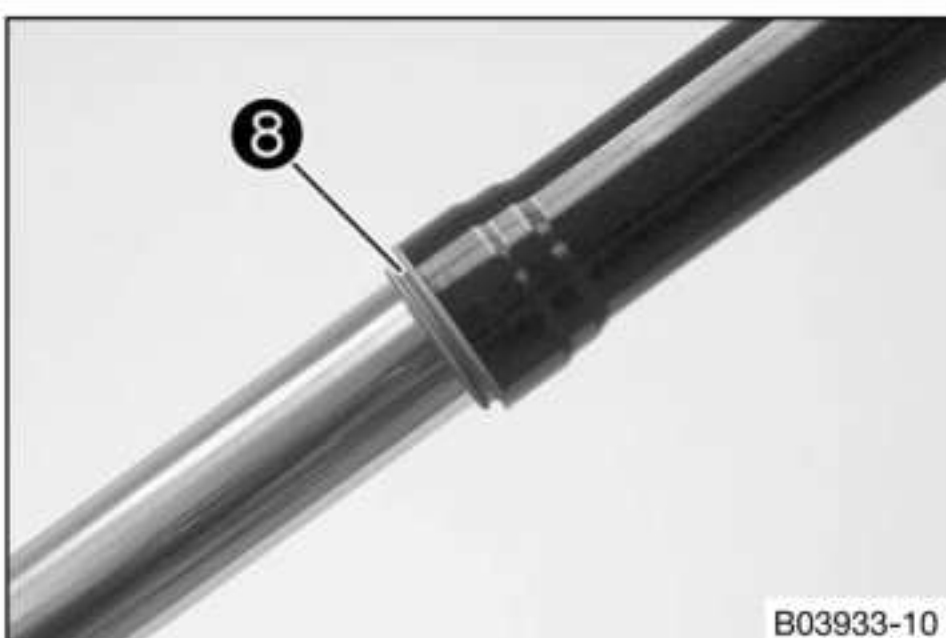


- Mount lock ring **7**.



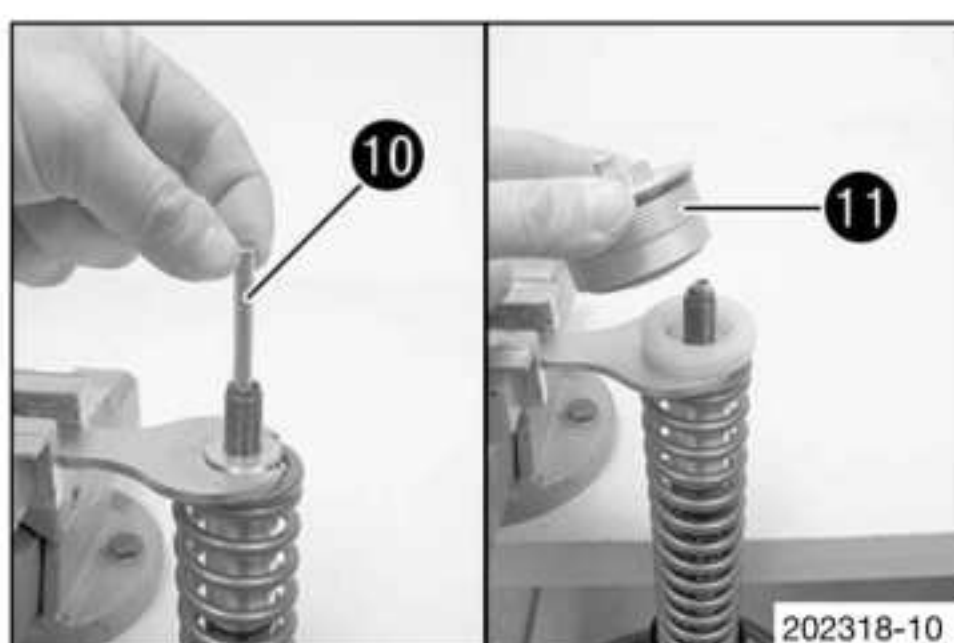
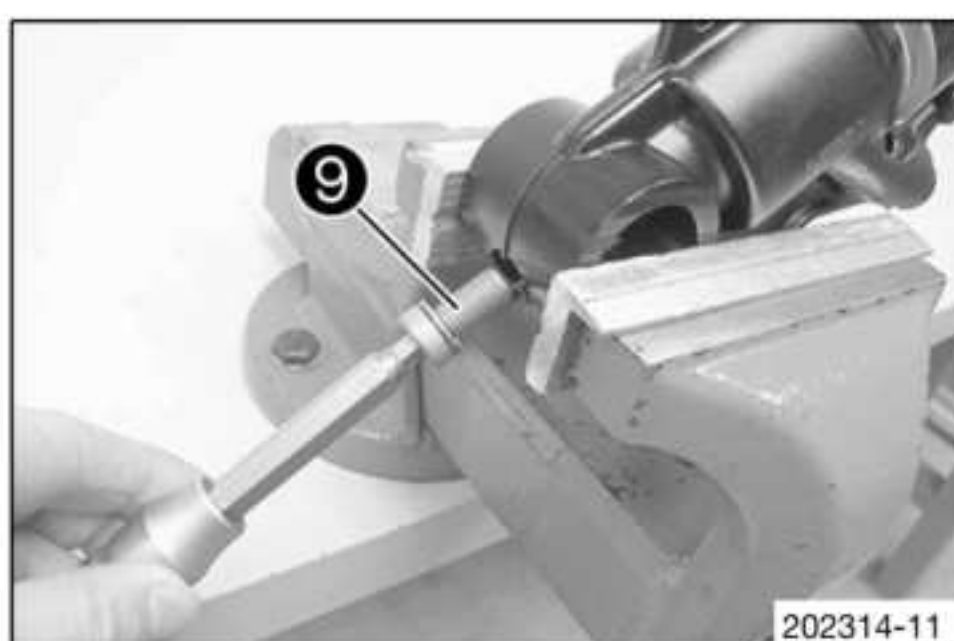
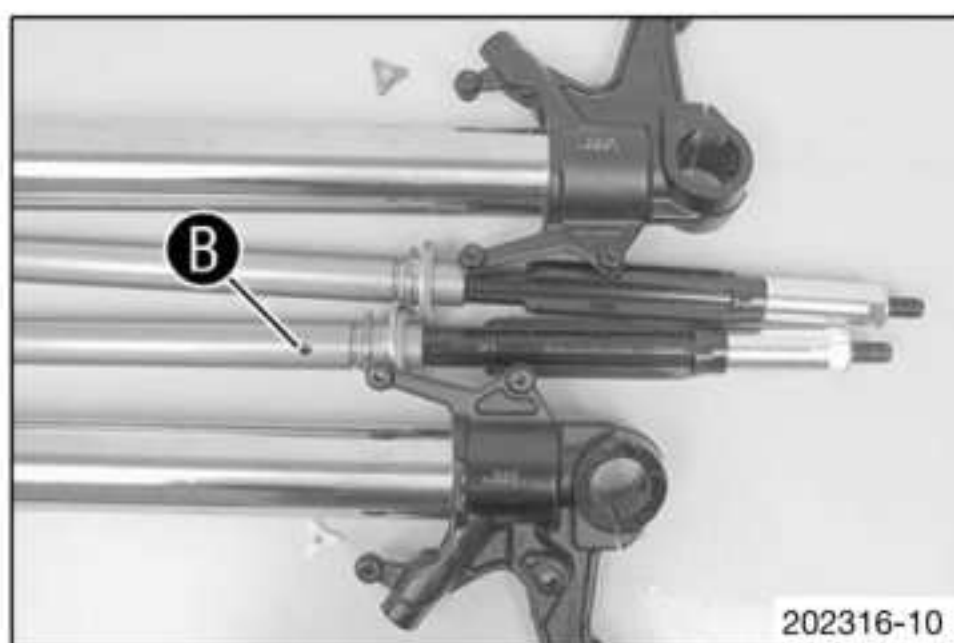
Info

The lock ring must engage audibly.



- Mount dust boot **8**.

6 FORK, TRIPLE CLAMP



- Assemble the individual components that belong together.

i Info

Compression damping side: cartridge with additional oil holes **B**, white adjuster, axle clamp marked **L**.
Rebound damping side: cartridge without additional oil holes, red adjuster, axle clamp marked **R**.

- Mount cartridge.

- Mount and tighten screw **9** of the cartridge.

Guideline

Screw, cartridge	M12x1	25 Nm (18.4 lbf ft)
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- Mount special tool on the cartridge; remove pin **C** of the special tool.

Support tool (T14026S1) (p. 398)

- Pull out the piston rod. Mount the spring. Mount the pin again.
- Pull up cartridge with special tool. Pull the spring downward and slide the special tool onto the hexagonal part.

Open end wrench (T14032) (p. 398)

- Remove the special tool.

Support tool (T14026S1) (p. 398)

- Clamp the special tool in the vise.

- Mount adjusting tube **10**.

✓ The adjusting tube protrudes 5 mm (0.197 in) from the cartridge and can be pressed in against the resistance of the spring.

✗ The adjusting tube protrudes more than 7 mm (0.275 in) from the cartridge and cannot be pressed in against the spring force.

- Lubricate the thread of the piston rod.

Lubricant (T159) (p. 378)