



Hydraulic kit mounting instruction For cartridge front fork

Note

Before installing this product, check the contents of the kit. If anything is missing, please contact your FG Gubellini dealer.

Attention

This kit should only be installed by an authorized FG Gubellini Centre. The installation procedure requires special tools.

Note

The front fork is a very important part of the vehicle and will therefore affect the stability of the vehicle. Read and make sure that you understand the information in this manual before you use this product. If you have any questions regarding installation or maintenance please contact us.

FG Gubellini s.r.l. can not be held responsible for any damage to the front fork, vehicle, other property or injury to persons, if the instructions for installing and maintenance are not followed exactly.

Warning

This product was developed and designed exclusively for a specific vehicle model and should only be installed on the intended vehicle model in its original condition as delivered from the vehicle manufacturer. After installing this product, take a test ride at low speed to make sure that your vehicle has maintained its stability.

Note

When working on this product, always consult your Vehicle Service Manual.

Some details about how to install the front fork hydraulic kit could be noted on a additional attached sheet. Before proceed please be sure to have the additional sheet.

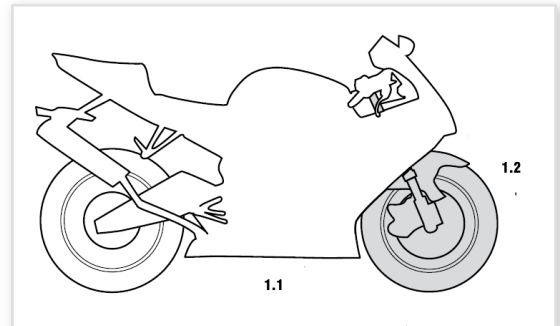
1. Remove the cartridge

Warning!

It is advisable to have an F.G. Gubellini s.r.l. dealer install the Fork hydraulic Kit. When installing, consult your Vehicle Service Manual.

1.1

Put the motorcycle on a rear and front stand so that the front wheel barely touches the ground.



Warning!

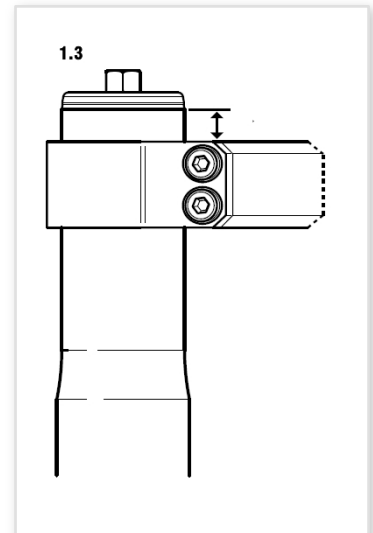
Make sure the vehicle is securely supported so that it will not tip.

1.2

Remove the front fender, brake calipers and the front wheel.

1.3

Measure the distance from the top of the outer fork leg to the top of the upper fork crown. Note here the measure (.....)



Note!

Note the distance. The upper fork crown should be reinstalled at the same position.

1.4

Release the spring preload and count the number of turns.

Note!

Note the number of turns.

1.5

Loosen the upper fork crown by loosening the screws.

1.6

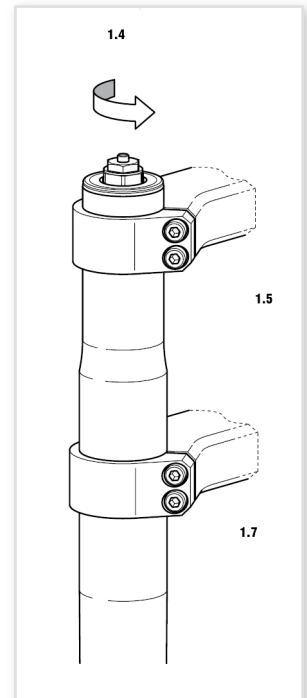
Loosen, but do not remove, the top cap half a turn.

1.7

Loosen the lower fork crown by loosening the screws.

1.8

Remove the fork legs from the fork crowns.



2 Remove cartridge from fork leg

2.1

Loosen the top cap from the outer fork leg and slide the outer fork leg all the way down.

2.2

Use tool to push the preload tube down to expose the lock nut. Insert a Stopper Plate Tool below the lock nut.

2.3

Loosen the top cap from the shaft.

2.4

Measure the distance between the lock nut and the top of the shaft.

Note!

Note the distance between the lock nut and the top of the shaft.

2.5

Remove the preload tube and the spring.

Note!

Note surrounding parts (if any), the order between the parts and the direction of the spring.

2.6

Turn the fork leg upside down and pour out the oil.

2.7

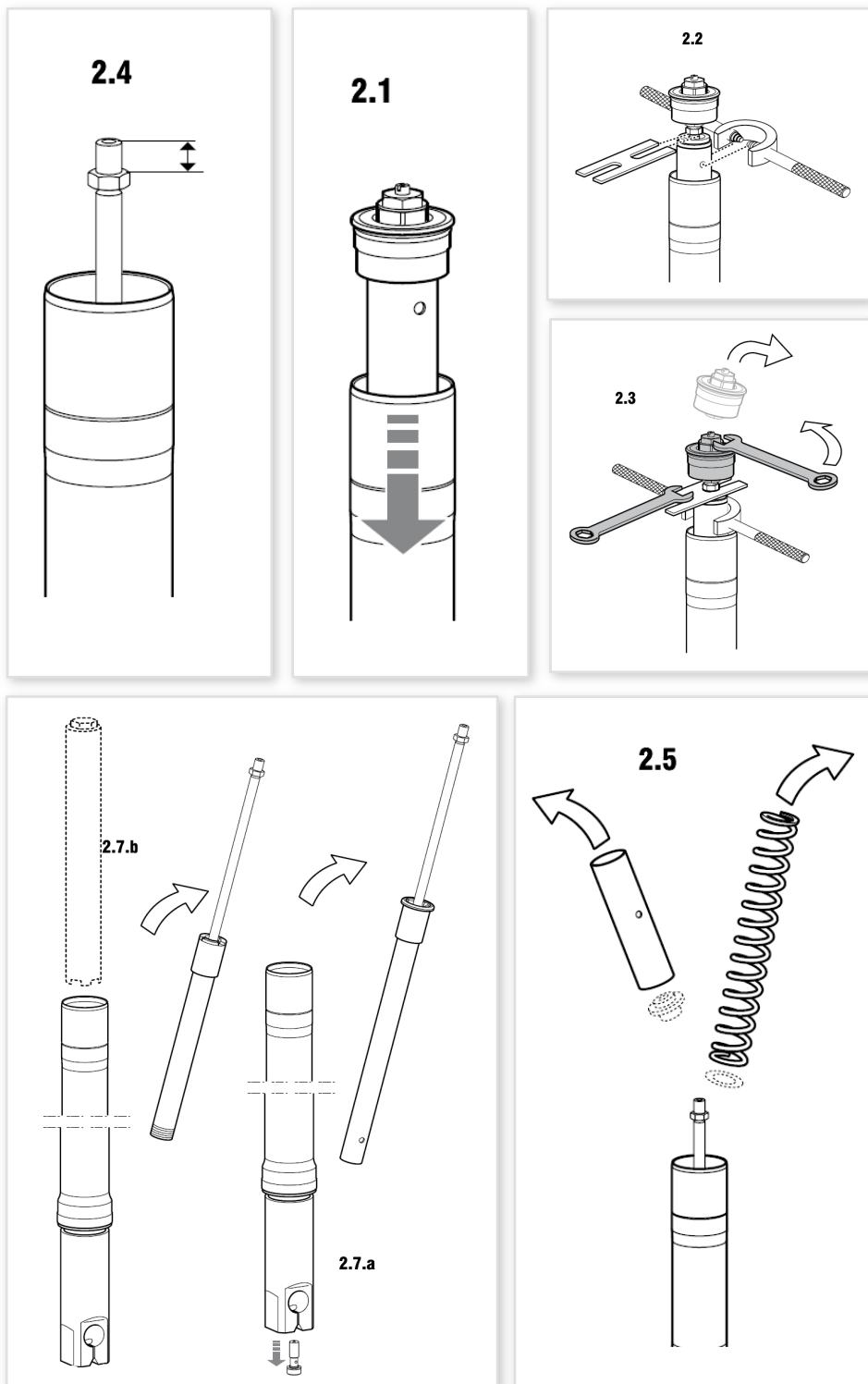
The procedure to remove the cartridge from the fork leg may depending on the type of front fork.

2.7.a

If there is a bottom screw lose it to remove the cartridge assembly.

2.7.b

If there is not a bottom screw, use the tool to remove the cartridge assembly by loosening the cartridge from the fork bottom.



3 Disassemble the cartridge

Caution!

Work with only one fork leg at a time.
Do not mix the parts.

Caution!

The kit include many parts that replace the corresponding original parts inside the cartridge.

3.0

Remove the hydraulic stopper from the rod. Choose the correct procedure depending on the type of hydraulic stopper.

3.0.a

(the the graft for the wrench is visible)
Lose the hydraulic stopper by using two wrench. Remove the circlip below.

3.0.b

(the the graft for the wrench is not visible) Lock the rod in a vice. Put the wrench over the stopper and force it down by using a small hammer. Remove the circlip below.

3.1

If the compression valve is placed into the cartridge tube remove it from the tube.

3.1.a

Move the compression valve inside the cartridge tube (about 10 mm). Remove the circlip. Pull out the compression valve assembly pushing with the rod.

3.1.b

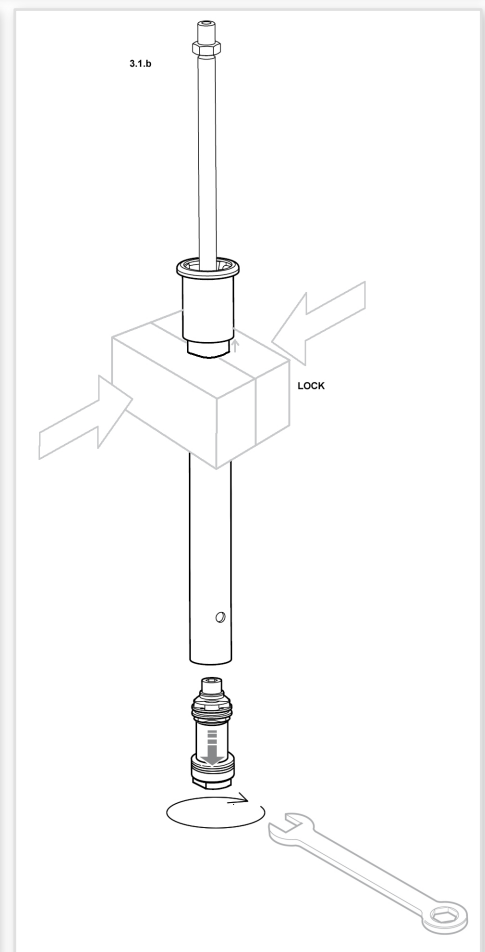
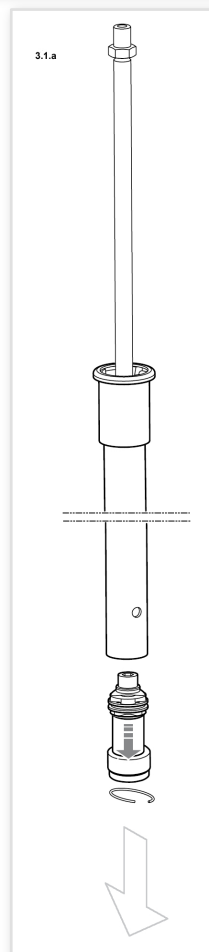
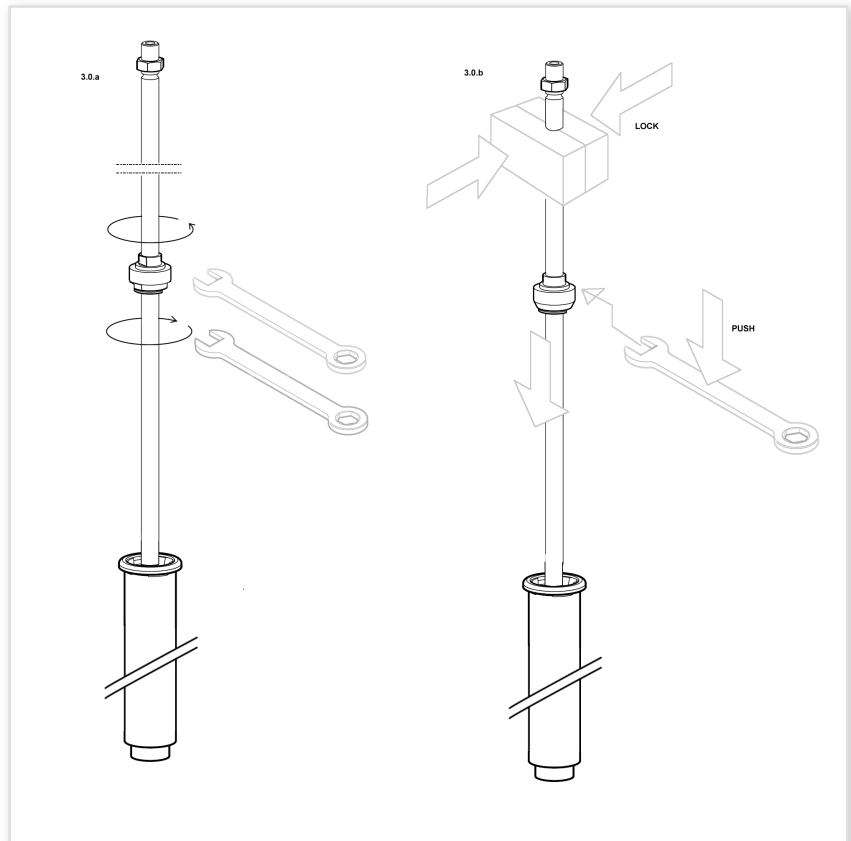
Block the cartridge tube in the vice. Loose and remove the compression valve assembly.

Note!

Use a heat gun to loosen the Loctite between the compression valve holder and the cylinder tube.

3.1.c

If the compression valve is placed outside (into the foot of fork leg) just remove it from the foot.



3.2

Remove the rod assembly from the lower side of cartridge tube

3.3

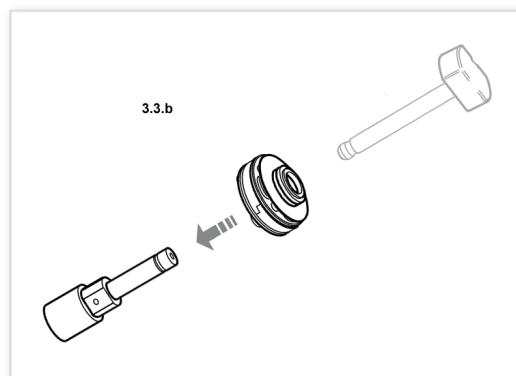
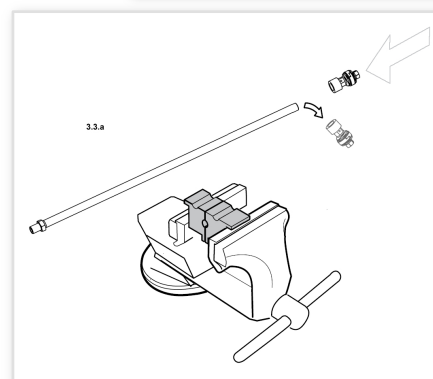
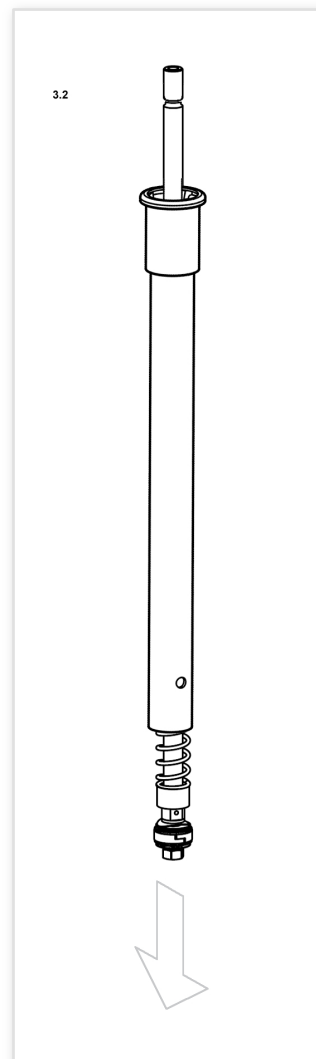
Put the shaft in a vice.

3.3.a

In case of the hydraulic kit include the complete rebound kit (piston, holder and shims). Replace the original piston holder assembly with the FG Gubellini one. Put some drops of loctite on the thread.

3.3.b

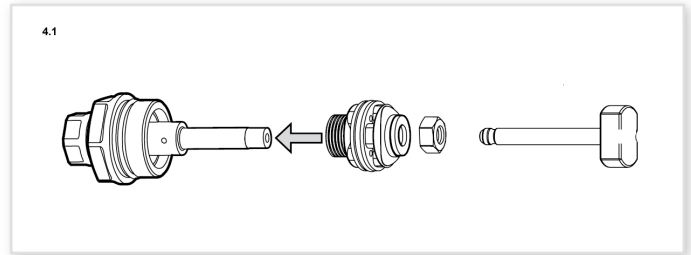
In case of the hydraulic kit does not include the complete rebound kit (only shims). Remove the holder nut and replace the original shim with the shims included in to the FG Gubellini kit (more details about how to do are on the added page). Tighten the holder nut with some drops of loctite on the thread.



4 Assemble the cartridge

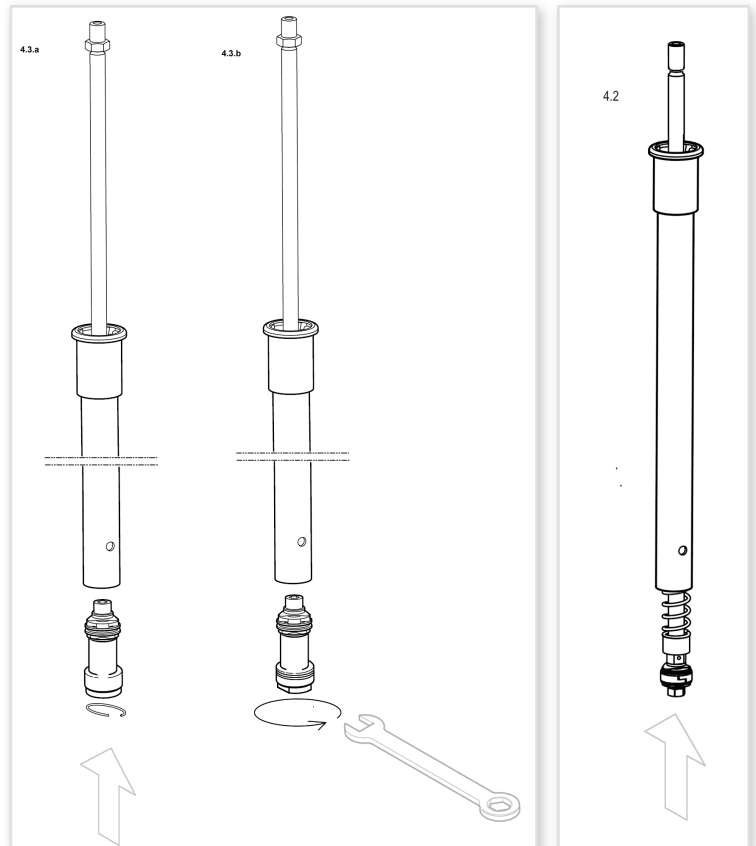
4.1

In case of the hydraulic kit does not include a complete compression valve kit (only shims included). Remove the holder nut of compression valve. Replace the original shims with the shims included in to the FG Gubellini kit (more details about how to do are on the added page). Tighten the holder nut with some drops of loctite on the thread.



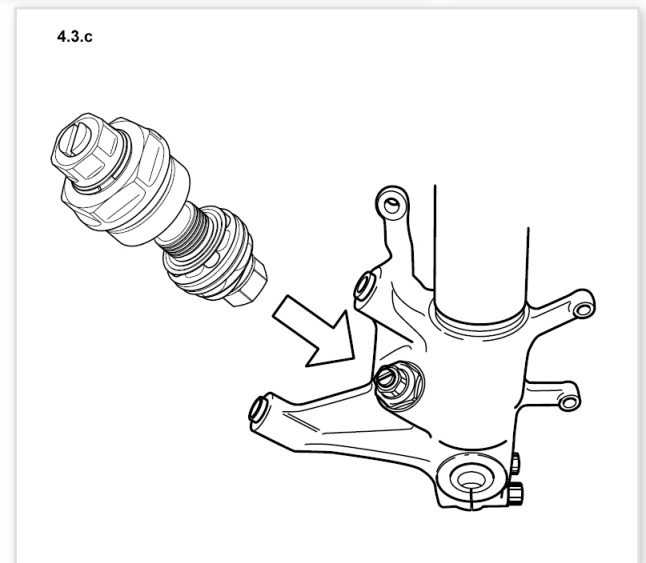
4.2

Insert the rod of rebound group inside the cartridge tube. (do not forget the rebound spring).



4.3

In case of the hydraulic kit include a complete compression valve kit (compression valve holder, valve and shims included). Fit the compression valve in to the original position (inside the cartridge tube).



5 Install the Cartridge Assembly into the Fork Leg

5.1

Install the cartridge assembly into the fork leg and tighten it to the fork bottom (Tightening torque: 20 Nm). Use Loctite 270.

5.2

Pour approximately 0,5 litre of Front Fork fluid into the fork leg.

5.3

Install the top cap directly to the shaft, no spring or preload tube. Pull up the outer fork leg and screw it to the top cap. Handtighten only. Pump out all air from the damping system by pulling the outer fork leg up and down 10-15 times.

5.4

Remove the top cap.

5.5

Make sure that the shaft is in the bottom of the cartridge and the outer fork leg is in its bottom position. Measure the distance from the top of the outer fork leg to the oil surface. Adjust the oil quantity to get the correct oil level. The recommended level is noted on the additional sheet.

5.6

Set the distance between the shaft lock nut and the top of the shaft.

Note!

Use the same distance between the lock nut and the top of the shaft as in chapter 2.3

5.7

Drop the spring and preload tube on top of the cartridge.

Note!

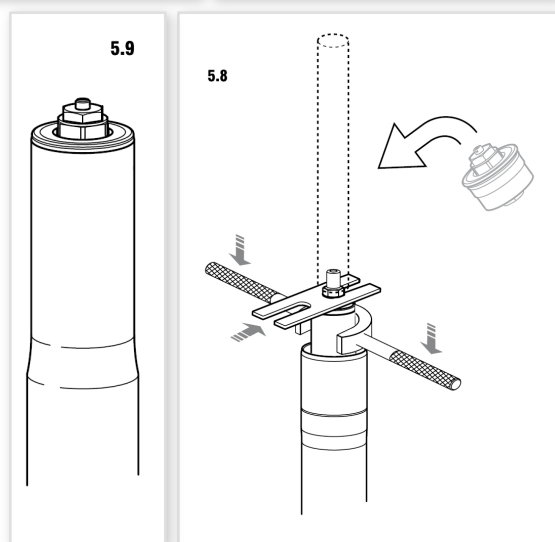
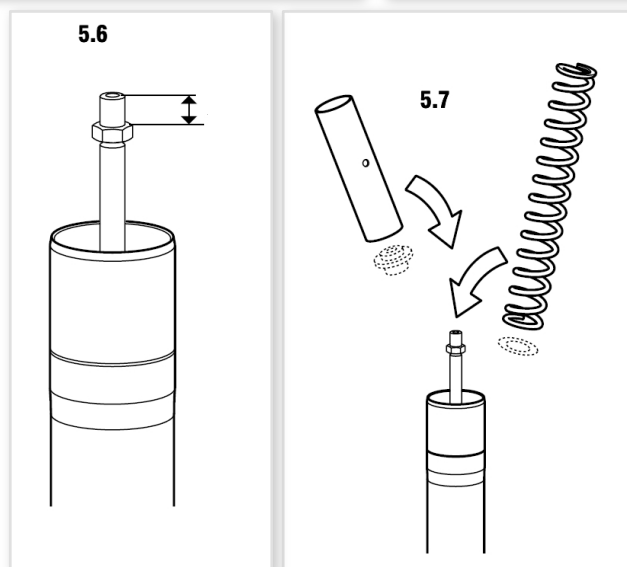
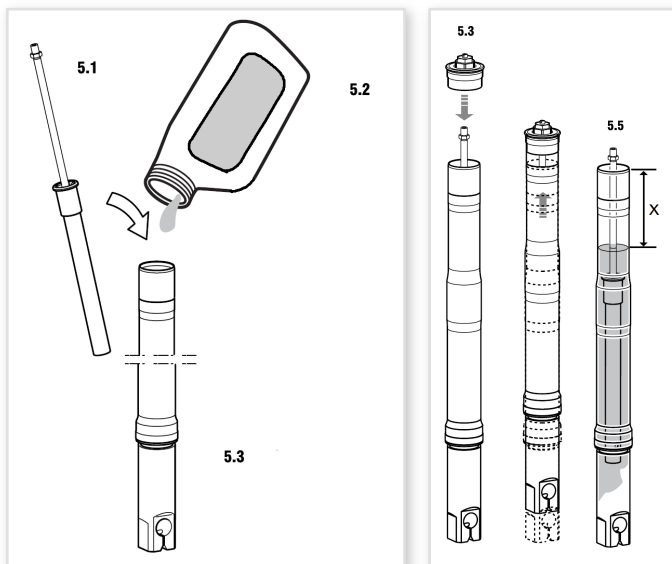
Parts in the same order as in chapter 2.5

5.8

Use tool to push down the preload tube. Pull up the shaft and insert a Stopper plate tool. Assemble the top cap to the shaft by tightening it to the lock nut. Tightening torque: 15 Nm.

Note!

Make sure that the distance between the shaft lock nut and the top of the shaft does not change when assembling the top cap.

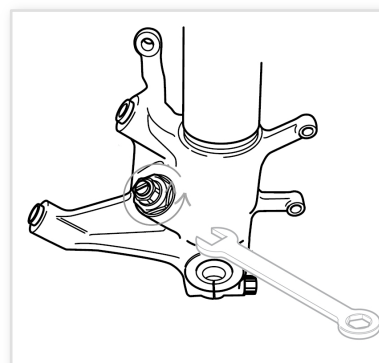


5.9

Assemble the top cap to the outer fork leg. Tightening torque: 10 Nm. Put some grease on the thread and the oring. Make sure that the Front Fork is fully extended when tightening the top cap.

5.10

If the hydraulic kit include the compression needles. Put the fork leg horizontally. Remove the compression needles and replace it with the one included in to the kit.



6 Install the Front Fork

6.1

Install the front fork legs into the fork crowns.

Tightening torque upper fork crown: 20 Nm

Tightening torque lower fork crown: 10 Nm

Note!

Make sure that the distance between the top of the fork leg and the upper fork crown is the same as measured in chapter 1.3.

6.2

Reinstall the front fender, brake calipers and the front wheel. Do not tighten yet.

6.3

Put the motorcycle on the ground, apply the front brake and compress the front fork 3-4 times. This will put the legs in an exact parallel position.

6.4

Tighten the front wheel, brake calipers and the front fender. Consult your Vehicle Service Manual for correct tightening torques.

Note!

Make sure that nothing restricts the fork movement when fully compressed.

