

Öhlins Front Fork

FGR 25X

Owner's Manual/Workshop Manual

ÖHLINS®
ADVANCED SUSPENSION TECHNOLOGY



Öhlins Headquarters Upplands Väsby, Sweden

Öhlins Racing AB - The Story

It was the 1970's, a young man named Kenth Öhlin spent most of his spare time pursuing his favourite sport: motocross.

Being a careful observer, Kenth's attention was continously drawn to one specific detail - motocross bikes had more engine power than their suspension could handle. It was not long before Kenth realised that better performance could be achieved by improved wheel suspension.

Öhlins Racing was established in 1976, and just two years later the company won its first World Championship title. Despite being in the business for more than 40 years, the search for perfection and new functions is still the main focus of the company.

Congratulations! You are now the owner of an Öhlins product. More than four hundred World Championships and other major world titles are definitive proof that Öhlins products offer outstanding performance and reliability.

Every product has gone through rigorous testing and engineers have spent thousands of hours, doing their very best to use every possible experience from our more than 40 years within the racing sport.

The product that you now have in your possession is pure racing breed that is built to withstand.

By installing this product on your vehicle you have made a clear statement… you are a serious rider with a focus on getting the maximal handling ability and outstanding feedback from your vehicle. Along comes the fact that your Öhlins product will be a long lasting friend, delivering the very best of comfort and performance every time you go for a ride. Go explore!

SAFETY PRECAUTIONS

General Warnings

Note!

The shock absorber/front fork/steering damper is an important part of the vehicle and will affect the stability.

Note!

Read and ensure you understand the information in this manual and other technical documents provided by Öhlins, before using the product.

Note!

Öhlins Racing AB can not be held responsible for any damage to the shock absorber/front fork/steering damper, vehicle, other property or injury to persons, if the instructions for mounting, usage and maintenance are not followed exactly.

⚠ Warning!

After installing the Öhlins product, take a test ride at low speed to ensure your vehicle has maintained stability.

⚠ Warning!

If the suspension makes an abnormal noise, or the function is irregular, or if you notice any leakage from the product, stop the vehicle immediately and return the product to an Öhlins dealer.

⚠ Warning!

The product warranty shall only apply if the product has been operated and maintained in accordance with recommendations in this manual. If you have any questions regarding usage, service, inspection and/or maintenance please contact Öhlins.

⚠ Warning!

This product was developed and designed exclusively for specific vehicle dimensions and shall only be installed on a vehicle with dimensions according to chapter Technical information.

SAFETY SYMBOLS

In this manual, mounting instructions and other technical documents, important information concerning safety is distinguished by the following symbols:

⚠

The Safety Alert Symbol means: Warning! Your safety is involved.

⚠ Warning!

The Warning Symbol means: Failure to follow warning instructions can result in severe or fatal injury to anyone working with, inspecting or using the shock absorber/ front fork/steering damper, or to bystanders.

Caution!

The Caution Symbol means: Special precautions must be taken to avoid damage to the shock absorber/front fork/ steering damper.

Note!

The Note Symbol indicates information that is important regarding procedures.

⚠ Warning!

This product is designed for racing use only.

Note!

When working with the Öhlins product, always read the vehicle service manual.

Note!

This manual shall be considered as a part of the product and shall accompany the product throughout its life cycle.

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ÖHLINS FRONT FORK FGR 25X

The product in your hand is an artwork, prepared by our dedicated craftsmen at our Swedish facility in Upplands Väsby, Sweden. Its predecessors have battled their way on numerous race tracks in World Superbike, Supersport, Superstock and AMA, and the legacy continues in your front fork. Thousands of hours have been spent together with some of the best teams in the world to find the optimal design and functionality to give you as much performance as possible. You will feel the difference…be sure.

For the new FGR 250 SERIES Öhlins engineers set out a target to fill the gap between the popular FGRT 200 and our top of the line FGR 300 front fork.

Design

The FGR 250 SERIES, based on Öhlins popular FKR spring pressurized cartridge system, gives a more predictable pressurized feeling. Compression and rebound adjustments separated into each fork leg reduces the time it takes to fine-tune the fork. Micro-polished and TiN-coated inner tubes decrease the friction, increases wear resistance and enables the rider to set faster lap times.

New features on the FGR 250 SERIES

- Stronger and stiffer outer tubes
- New and lighter design
- Low friction
- Predictable pressurized function with spring pressurized cartridge system





SETTING UP THE FRONT FORK

Note!

The front fork is just one part of your motorcycle. To make it work properly, set up your motorcycle according to your vehicle service manual.

1 Mount Öhlins Front Fork

Put your motorcycle on a workstand and mount the Öhlins front fork with the splines facing out from the motorcycle (see figure below). Follow instructions in your vehicle service manual.

Lower triple clamp;

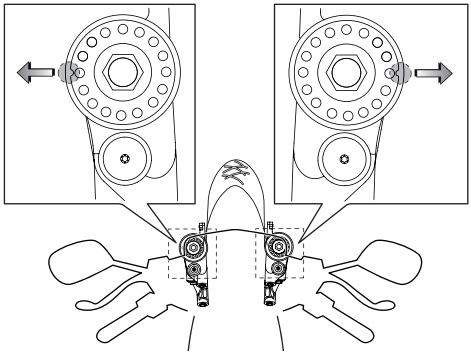
Tightening torque max. 12-15Nm

Upper triple clamp;

Tightening torque max. 18-22Nm

Caution!

If a Steering damper bracket is located around the upper front leg, do not exceed 12-15Nm. Too high torque may deform the front fork leg, affecting the function negatively.



Note!

For technical data see SPL for relevant front fork.

2 Check Ride Height

Note!

The following procedure should be performed on a flat surface. We recommend that the following procedure should be performed by two persons.

2.1

Put the motorcycle on a stand.
Ensure that the shock absorber is fully extended.

2.2

Measure the distance from a point marked by a piece of tape, immediately above the rear wheel axle, to the wheel axle (R1).

2.3

Make a similar measurement on the front axle, for example, from the bottom of the upper triple clamp to a fixed point, for example the front wheel axle (F1). Make sure that the front fork is fully extended.

2.4

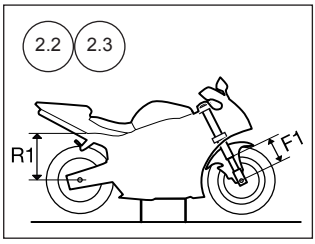
Put the motorcycle on the ground so that the front and the rear suspensions are slightly compressed. Repeat the measuring procedures (R2 and F2).

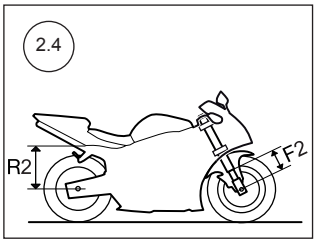
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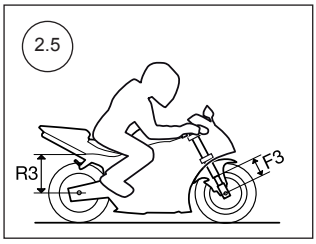
Sit on the motorcycle in normal riding position, properly outfitted in your riding gear. Correct riding position is important so that the weight is balanced on the front and rear wheel in the same way as when riding. Repeat the measuring procedure (R3, F3).

3

The measurements should not differ from the following: Rear 30±5 mm (**R1-R3**)
Front 35±5 mm (**F1-F3**)







4

If the measures differ significantly from the measures in step 3, you need to set the spring preload (see below).

Note!

The spring preload is very important since it affects the height of the motorcycle and the fork angle. Consequently, handling characteristics can be changed, even negatively.

5

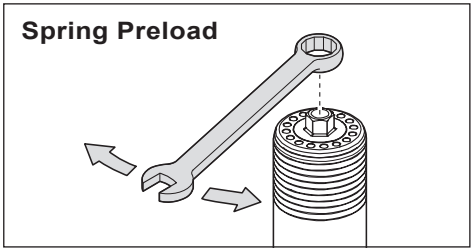
If the measures still differ, you may need to change spring. Contact an Öhlins dealer for advice.

ADJUST SPRING PRELOAD, REBOUND AND COMPRESSION

Adjust Spring Preload

1. Use a 14 mm wrench.
2. Turn the nut on the top of the fork leg. Turn clockwise to increase spring preload, turn counter clockwise to decrease it.
   1 turn on the adjustment nut will change spring preload 1 mm.

Recommended static sag (F1-F2): 25-30 mm



Rebound and Compression Adjusters

- Compression damping adjuster

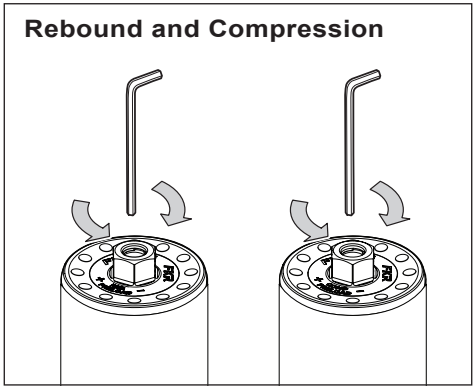
Left hand side front fork leg.

- Rebound damping adjuster

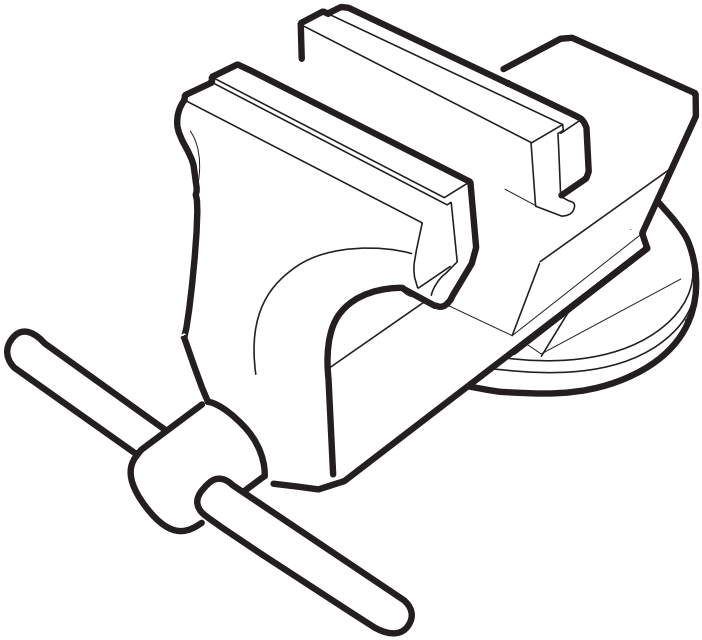
Right hand side front fork leg.

Adjust Compression and Rebound;
Use a 3 mm hex key. Adjustment range from fully closed valve (clockwise) to fully open valve (counterclockwise) is about 30 “clicks”.

Recommended adjustment “clicks” from closed position: See spec. card

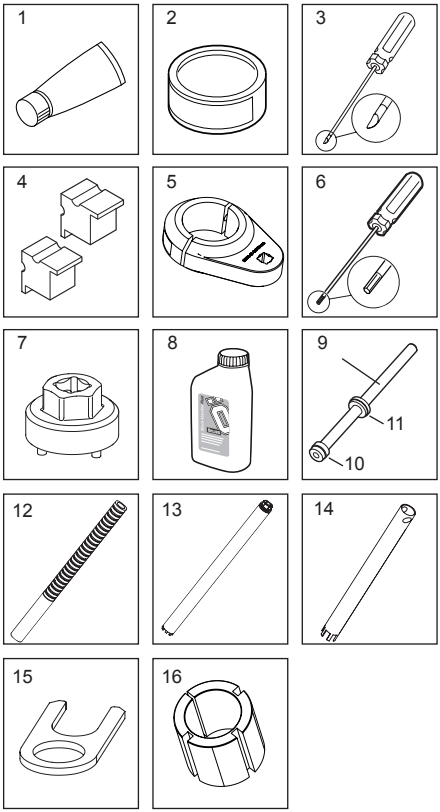


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4 Replace inner/outer tube 15
5 Disassemble and assemble shaft assembly 17
6 Assemble front fork 21



TOOLS

Pos	Part No	Description	Notes
1	00146-01	Öhlins red grease	
2	01888-01	WD-40	
3	00715-01	Sharp screw driver	
4	00727-06/-12	Soft jaws Ø34	
	00727-08	Soft jaws Ø8	
	00727-09	Soft jaws Ø28 and Ø36	
5	24670-01	Clamp tool	ø 43
6	00794-01	Screwdriver Allen key	3 mm
7	00797-08	Sleeve pin	
8	01309-01	Öhlins Front Fork fluid	
9	01757-01	Attachment bar tool	
10	01758-04	Bar guide	
11	01759-07	Bushing tool	Dismantling
	01759-08	Bushing tool	Installation
12	01765-03	Pull up tool	
13	01797-07	Seal head tool Ø32	
14	01797-04	Seal head tool Ø35	
15	02810-01	Clip	
16	24669-02	Sleeve Ø43	
		Brass wire brush	
		Heat gun	
		Torque Wrench	
	01791-13	Loctite 648	
	01791-25	Loctite 2400	
	01791-27	Loctite 2700	
	01791-23	Loctite 6300	
		Rag	
		Teflon tape	
		Vice	
		Waste fluid container	
		Wire with hook	
		Wrench	13 mm
		Wrench	14 mm
		Wrench	19 mm
		Wrench	20 mm
		Wrench	23 mm
		Socket	13 mm
		Socket	14 mm
		Allen key socket	14 mm



1 REPLACE SPRING

Note!

This procedure can be performed with the front fork on the vehicle, front wheel off the ground.

1.1

Release spring preload. Use a 14mm wrench. Turn the Adjustment nut counter clockwise until stop, make a note of position.

Caution!

Do not use the Preload adjuster to tighten or loosen the Top cap assembly.

1.2

Loosen the screws attaching the fork legs in the upper triple clamp.

1.3

Loosen Top cap assembly from the Outer tube. Use Sleeve Pin tool (00797-08), lower the front so that the front fork is fully compressed.

1.4

Remove Top cap assembly from the Shaft extension. Use a 14 mm wrench on the Top cap and a 19 mm wrench on the Shaft extension.

1.5

Remove Spring support and Spring. Use a wire with a hook and carefully pull up Preload tube.

1.6

Check oil level according to Chapter *Oil level*.

1.7

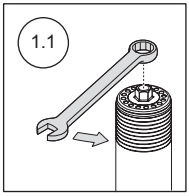
Remount Preload tube, new Spring (marking facing up) and Spring support.

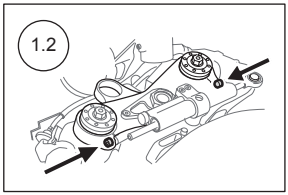
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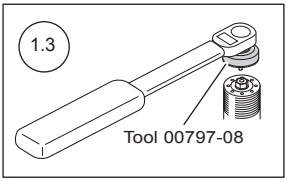
Make sure compression and rebound bleed and preload adjusters are fully opened, counterclockwise, before installing Top cap. Remount the Top cap assembly on the Shaft extension. Tightening torque 20 Nm.

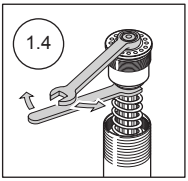
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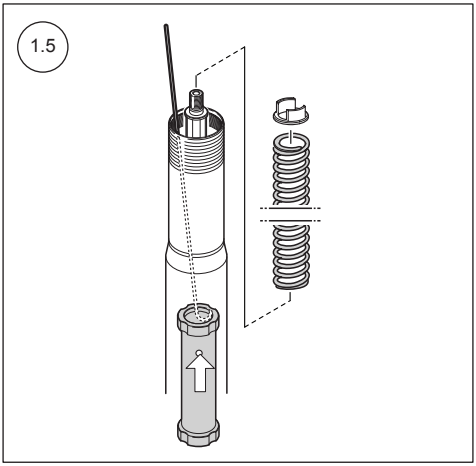
Apply Öhlins Red grease (00146-01) on the Top cap thread and O-ring.

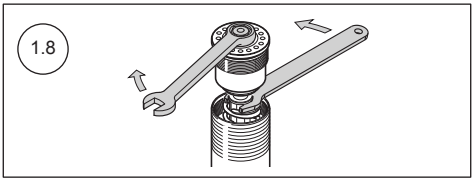












1.10

Remount Top cap into the Outer tube, with the fork fully extended. Use sleeve Pin tool (00797-08). See figure 1.3. Tightening torque 10 Nm.

1.11

Tighten the upper triple clamp and reset the preload, rebound and compression adjusters, see page 6.

2 DISASSEMBLE FRONT FORK

2.1

Count and note Adjuster settings. Open the Adjusters to fully open. Loosen the upper clamp screws and loosen the Top cap ½ turn use tool 00797-08.
Remove the Front fork from the motorcycle.

2.2

Fasten the Fork leg in a vice with soft jaws.

2.3

Release spring preload. Use a 14 mm wrench. Turn the Adjustment nut counter clockwise until stop, make a note of position.

Caution!

Do not use the Preload adjuster to tighten or loosen the Top cap assembly.

2.4

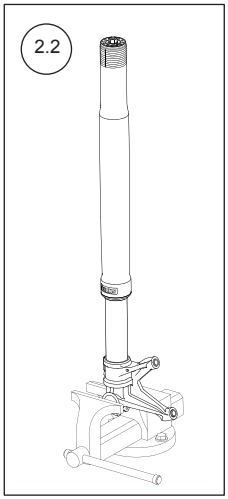
Loosen Top cap assembly from the Outer tube. Use sleeve Pin tool (00797-08), push down the Outer tube.

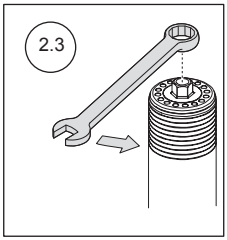
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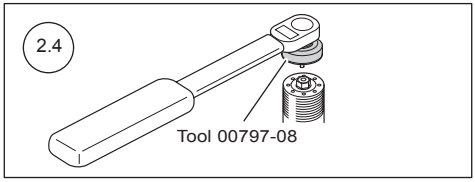
Remove Top cap assembly from the Shaft extension. Use a 14 mm wrench on the Top cap and a 19 mm wrench on the Shaft extension.

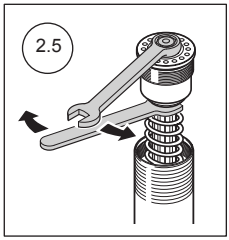
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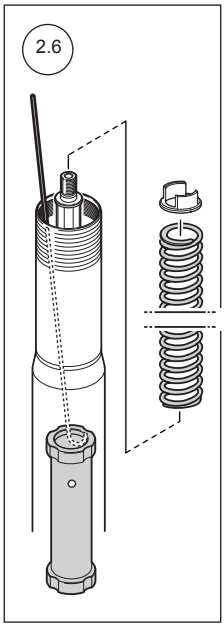
Remove Spring support and Spring. Use a wire with a hook and carefully pull up Preload tube.











2 DISASSEMBLE FRONT FORK

2.7

Remove Shaft assembly from the fork leg.
Use Seal Head tool 01797-07.

Caution!

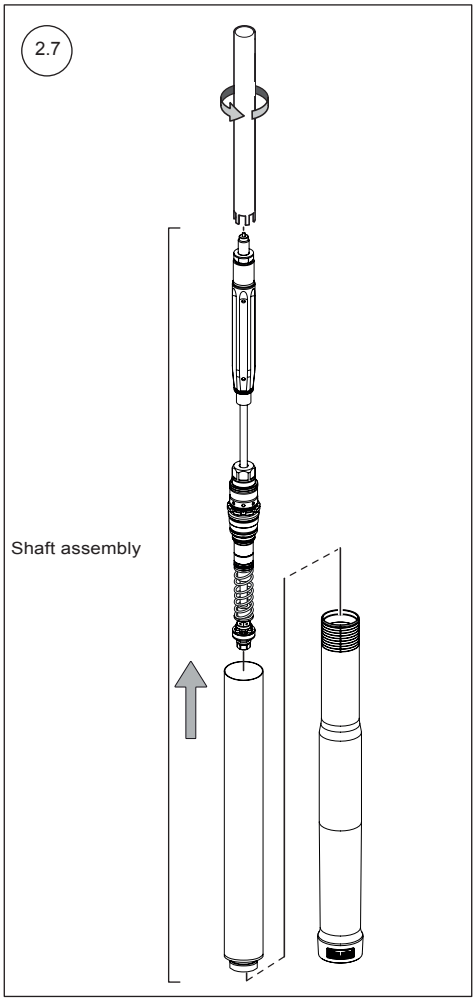
Shaft assembly is pressurized.

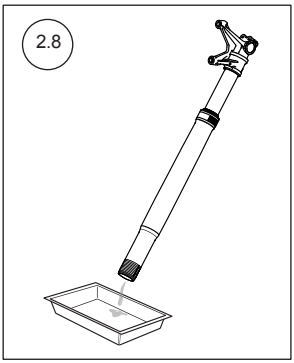
2.8

Drain all oil from the fork leg.

→ To Replace Seal an bushings
go to Chapter 3 *Replace Seal and Bushings*.

→ To Disassemble Shaft assembly
go to Chapter 5 *Disassemble Shaft*.





2 DISASSEMBLE FRONT FORK

2.9

Remove the cylinder tubes from the fork leg. Use a heat gun to break down the Loctite between the Adaptor and the Fork bottom. Use a 14 mm allen key with extensions to loosen the cylinder tubes and Adaptor from the Fork bottom.

2.10

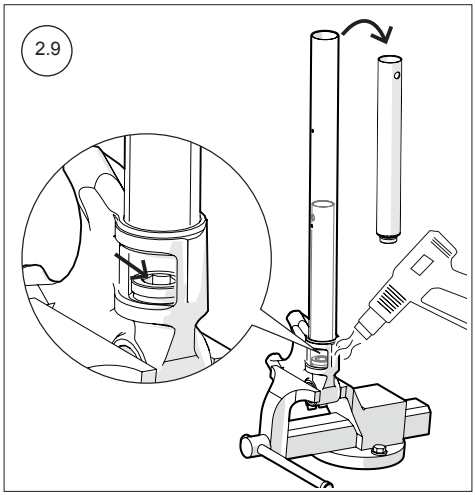
Install the fork tube tool (24670-01 & 24669-02) between the two Ø5 mm holes on the Inner tube. Use a heat gun to break down the Loctite between the Inner tube and the Fork bottom. Loosen and remove the Inner tube from the Fork bottom.

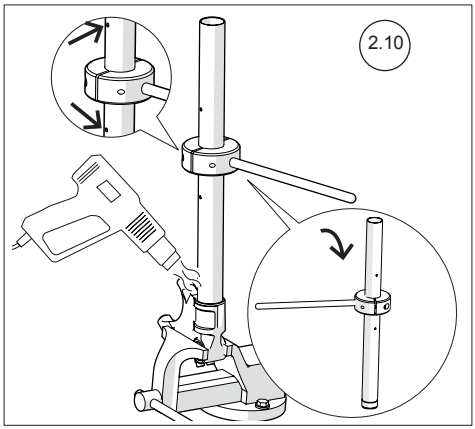
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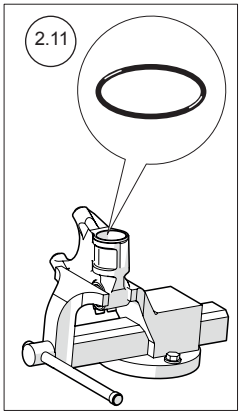
Remove the O-ring from the Fork bottom and examine for damage. Replace if needed.

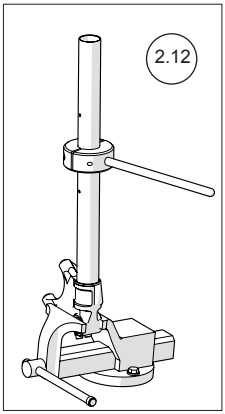
2.12

Clean the Fork bottom. Make sure to remove all grease and Loctite.









3 REPLACE SEAL AND BUSHINGS

3.1

Remove Top cap and Shaft assembly according to Chapter 2 Disassemble Front Fork.

3.2

Remove the Outer tube.

3.3

Clean the Scraper and the Seal and check for damage.

3.4

If Seal is damaged replace by removing the Scraper, the Circlip, Seal and Washer.

3.5

Apply a thin layer of Red grease on the Washer and the outer surface of the Seal.

3.6

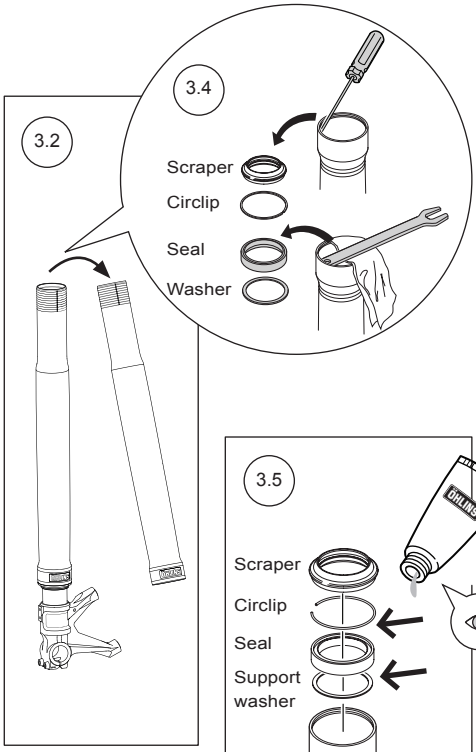
Mount the Washer and the Seal into the Outer tube. Mount the Circlip into the groove.

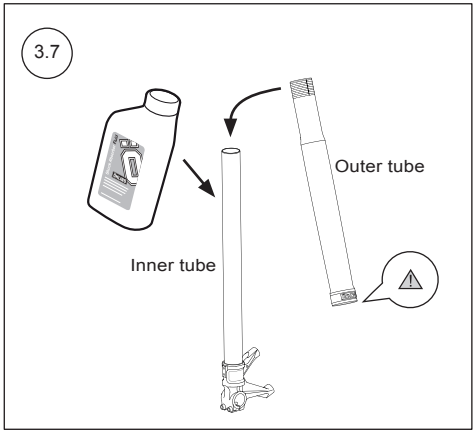
3.7

Apply some Öhlins Front Fork fluid (01309-01) on the inside of the Seal and the outside of the Inner tube, do not use grease inside the Seal. Slide the Outer tube carefully on to the Inner tube.

⚠ Warning!

Be careful - Not to damage the Fork seal!





3 REPLACE SEAL AND BUSHINGS

Note!

We recommend to remove and install the bushings while the Outer tube is warm.

3.8

Use a heat gun on the Outer tube to approx 100°C (212°F) at the upper bushing position.

3.9

Put the Outer tube with the Seal side down on a soft surface, for example wood. Use the attachment bar (01757-01) and the dismantling sleeve (01759-07) and tap the bar gently with a plastic hammer to remove the upper and the lower Bushing.

3.10

Clean all parts.

Install the upper bushing

3.11

Use a brush to apply Loctite 648 on the upper bushing seat on the Outer tube.

3.12

Put the Outer tube on a soft surface with the Seal side up.

3.13

Use the attachment bar (01757-01) with the installation sleeve (01759-08) and guide ring (01758-04) to install the upper Bushing. Tap the attachment bar gently with a plastic hammer until the Bushing reaches a solid stop.

Install the lower bushing

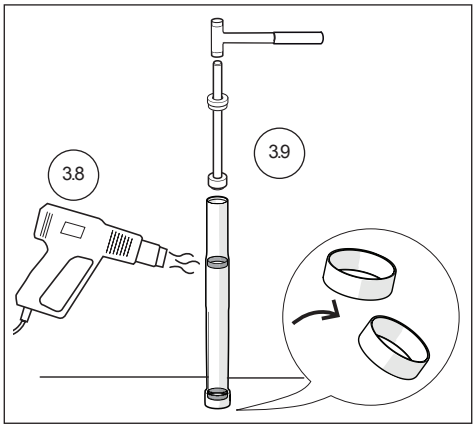
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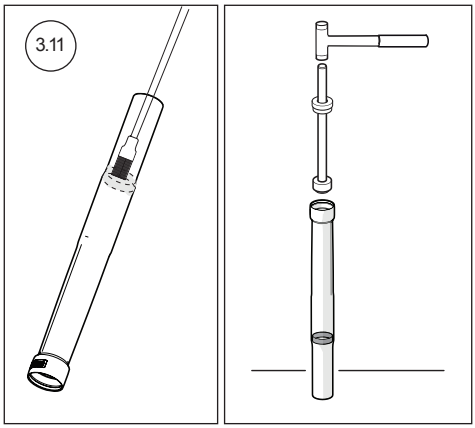
Apply red grease (00146-01) on the lower bushing seat in the Outer tube. No Loctite on the lower Bushing.

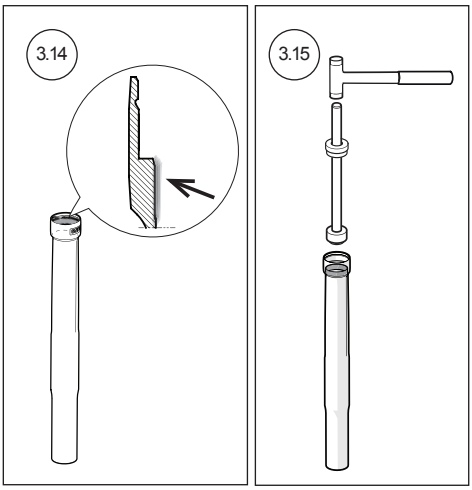
3.15

Use the installation sleeve (01759-08) and the attachment bar (01757-01) to install the lower Bushing. Tap the attachment bar until the Bushing reaches a solid stop.

→ To reassemble Front Fork
go to Chapter 6 *Assemble Front Fork*







4 REPLACE INNER/OUTER TUBE

4.1

Remove Top cap and Shaft assembly according to Chapter 2 Disassemble Front Fork.

4.2

Remove the Outer tube.

4.3

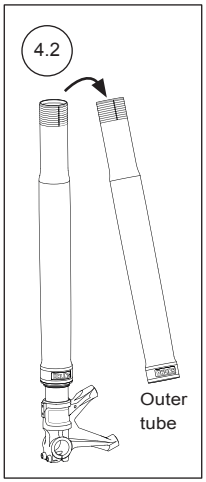
Mount clamp tool and sleeve (24670-01 and 24669-02) on the Inner tube (Make sure both are clean), as high as possible above the lower ø5 mm oil bleed hole. Use a heat gun to heat up the Fork bottom. Loosen and remove the Inner tube. Clean the thread from all Loctite. We recommend to replace the O-ring (00338-63).

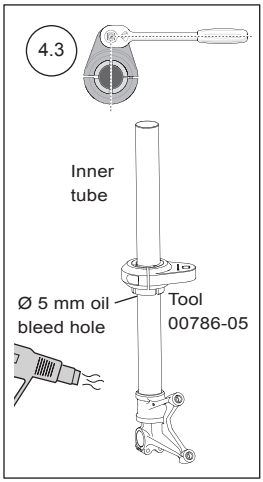
4.4

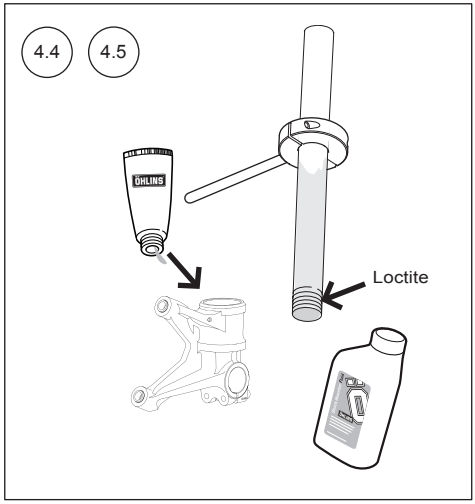
Mount the new Inner tube. Use clamp tool and sleeve (24670-01 and 24669-02) and make sure both tool and tube are clean. Install the tool as high as possible above the lower ø 5 mm oil bleed hole. Apply Red grease on the O-ring on the Cylinder tube extension.

4.5

Apply Loctite 2700 on the Inner tube thread. Tightening torque 160 Nm







4 REPLACE INNER/OUTER TUBE

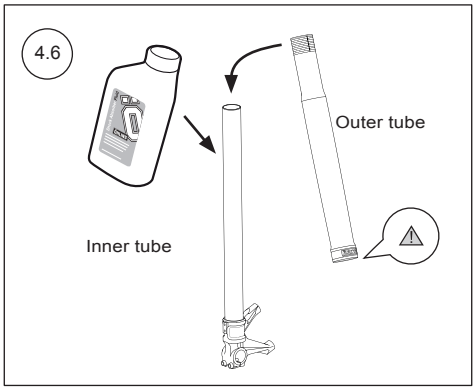
4.6

Apply some Öhlins fork fluid (01309-01) on the Inner tubes outer surface and inside the Seal, do not use grease inside the Seal. Slide the Outer tube carefully on to the Inner tube.

⚠ Warning!

Be careful - Not to damage the Fork seal!

→ To reassemble Front Fork
go to Chapter 6 *Assemble Front Fork*



5 DISASSEMBLE AND ASSEMBLE SHAFT ASSEMBLY

Disassemble shaft assembly

Note!

If the guide sleeve and/or shaft extension need to be removed, note that there is an O-ring that keeps the parts tightly together.

Note!

If the top-out spring and/or the sleeve need to be removed, note that the top-out spring is tightly attached to the sleeve.

5.1

Remove Top cap and Shaft assembly according to Chapter 2 Disassemble Front Fork.

5.2

Pull off the Top-out spring from the Piston holder.

5.3

Use the soft jaws (00727-08) and clamp around the Shaft near the Piston holder. Fasten the Shaft and soft jaws in a vise.

Caution!

Do not tighten the jaws too hard, the Shaft can be damaged.

Note!

We strongly recommend that you work with one leg at a time to not mix the parts. Before removal, note in which order the parts are placed and the orientation of each part.

5.4

Use a 13 mm socket to remove the Nut from the Piston holder.
If needed, use a heat gun to break down the Loctite on the Nut.

5.5

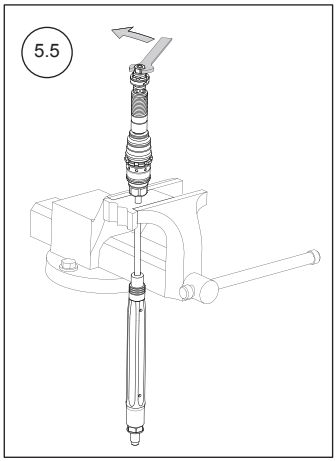
Remove Piston, Shims and setting parts from the Piston holder in one unit.

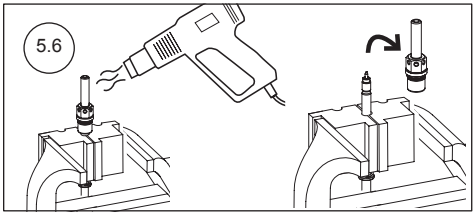
5.6

Use a heat gun to break down the Loctite on the Piston holder. Use a long 14 mm socket to remove the Piston holder from the Shaft. Remove the Top-out spring, Sleeve, spacers and O-ring from the Shaft.

Caution!

Seal head is pressurized.





5 DISASSEMBLE AND ASSEMBLE SHAFT ASSEMBLY

5.7

Install seal head tool (01797-04) on Seal head. Install pull up tool (01765-03) through seal head tool's Ø22 holes. Fasten the pull up tool in a vise. Use a 23 mm wrench to remove the Cap seal head from the Seal head. Remove the Seal head from the Shaft.

5.8

Wrap Teflon tape around the Shaft thread (to protect the Seal) and remove the Piston dividing, Spring and Cap seal head.

5.9

Remove the Shaft from the vise.

5.10

Use a thin rod or equivalent to push the Adjustment rod into the Shaft, to remove the Needle and Spring from the Shaft.

5.11

Remove the Bump rubber, Spacers and Guide sleeve from the Shaft.

5.12

Clean all components. Examine all components for wear. Replace if needed.

5.13

Use the soft jaws (00727-08) and clamp around the Shaft near the Shaft extension nut. Fasten the Shaft and soft jaws in a vise.

5.14

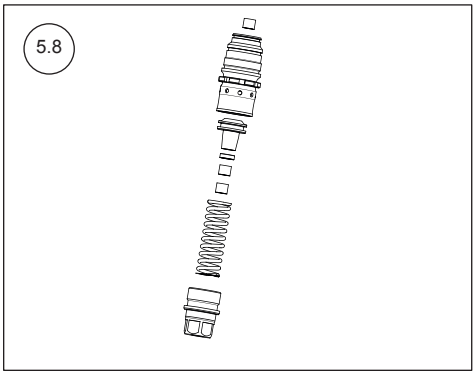
Remove the O-ring from the shaft extension.

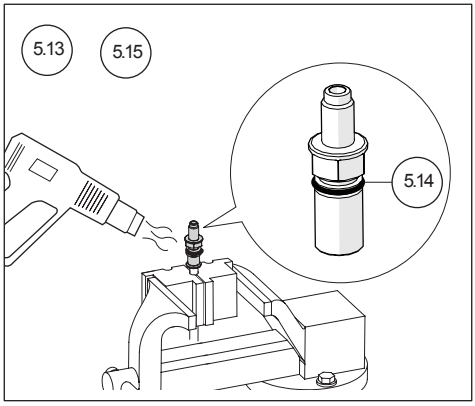
5.15

Use a 13 mm wrench to loosen the Nut from the Shaft. Use a 19 mm wrench to loosen the Shaft extension from the Shaft.

5.16

Replace the shaft and/or shaft extension and/or shaft extension nut.





5 DISASSEMBLE AND ASSEMBLE SHAFT ASSEMBLY

Assemble shaft assembly

Caution!

Do not use sharp tools.

5.17

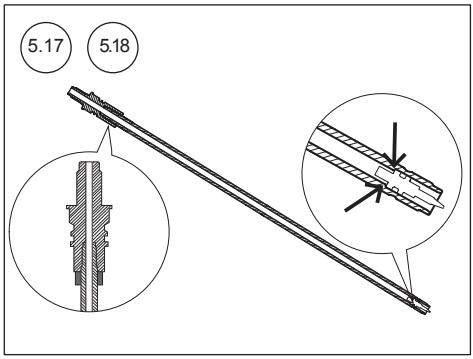
Use the soft jaws (00727-08) and clamp around the Shaft, where the Shaft end that fits the Shaft extension points upwards. Fasten the Shaft and soft jaws in a vise.

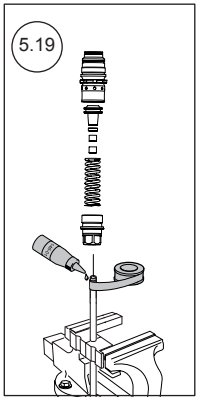
5.18

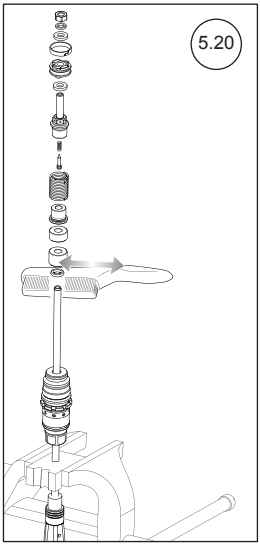
Apply Red grease on the Shaft thread. Thread the Nut on the Shaft until it stops against the Shaft. Thread the Shaft extension on Shaft until it stops against the Shaft. The Shaft extension shall not stop against the Nut. Tighten the Nut against the Shaft extension. Tighten to 12 Nm. Remove the Shaft from the vise. Install the Guide sleeve, spacers and Bump rubber on the Shaft. Apply Red grease on the O-ring and install the O-ring on the Shaft extension. Connect the Guide sleeve on the Shaft extension. You will hear a noticeable click.

5.19

Apply red grease on Seal and Piston dividing O-ring. Install the Seal and bushings in the Piston dividing according to Chapter Spare parts list. Install the O-ring on Piston dividing. Use the soft jaws (00727-08) and clamp around the Shaft, where the Shaft end that fits the piston holder points upwards. Fasten the Shaft and soft jaws in a vise. Wrap Teflon tape around the Shaft thread (to protect the Seal). Apply Red grease on the tape, Shaft end, Seal head thread, inside Seal head bore, Seal head contact surface against Cap seal head, O-rings and spring ends. Remount the Cap seal head, Spring, Piston dividing and Seal head on the Shaft. Remove the Shaft from the vise. Install seal head tool (01797-04) on Seal head. Install pull up tool (01765-03) through seal head tool's Ø22 holes. Fasten the pull up tool in a vise. Use torque wrench on Cap seal head hexagon and tighten to 40 Nm.







5.20

Use a brass wire brush to clean the Shaft from tape.

5.21

Install the O-ring, Spacers, Sleeve and the Top-out spring.

5.22

Make sure that the Top-out spring is correctly installed on the Sleeve. You will hear a noticeable click.

5.23

Clean the Shaft thread and the Needle. Apply red grease (00146-01) on the O-ring. Insert the Needle and Spring together with the O-ring inside the Shaft.

5.24

Clean the piston holder. Apply Loctite 2400 on the Shaft thread. Use a long 14 mm socket to install the Piston holder on the Shaft. Tighten to 12 Nm.

5.25

To change setting - see http://world.ohlins.com. Move the Piston, Shims and setting parts in one unit to the Piston holder. Replace the Piston ring if worn.

Note!

Make sure to install the parts in the same order and orientation in which they were before disassembly.

5.26

Apply Loctite 2400 on the Nut.
Use a 13 mm socket and tighten to 7 Nm.

5.27

Insert the Top-out spring on the Piston holder. You will hear a noticeable click.

6 ASSEMBLE FRONT FORK

6.1

Inner tube and Outer tube are installed according to Chapter 4 Replace Inner/Outer Tube

6.2

Apply Loctite 6300 on Cylinder tube M28 threads and Adaptor internal threads. Tighten to 20 Nm.

Apply Loctite 6300 on Cylinder tube M31 thread and Adaptor external threads. Tighten to 60 Nm.

Apply Loctite 2400 on Adaptor M24 thread and fork bottom thread. Use a 14 mm allen key socket with extensions to tighten the Adaptor in the fork bottom. Tighten to 60 Nm.

6.3

Pour approximately 0.5 litre Öhlins suspension fluid in front fork leg.

⚠ Warning!

Fluid level must be approximately 50 mm above top of cylinder tube assembly.

6.4

Install pull up tool (01765-03) on Shaft extension.

6.5

Install seal head tool (01797-07) on Seal head.

Note!

Make sure seal head tool teeth are securely connected to seal head.

6.6

Compress Top-out spring fully and insert clip (02810-01).

⚠ Warning!

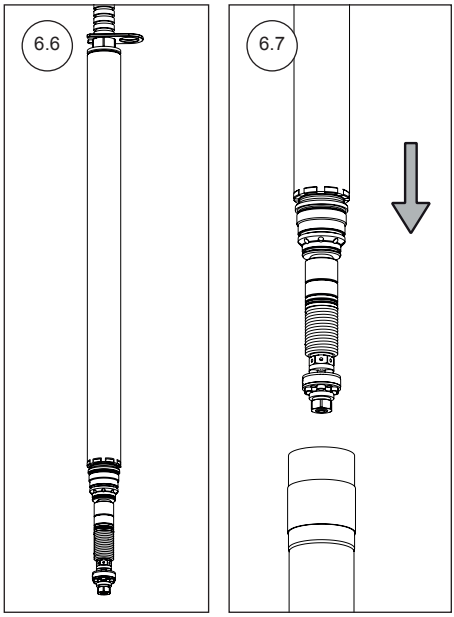
If top out spring is not completely compressed, adjust shaft extension tool to achieve complete compression of top out spring.

6.7

Apply Red grease on Seal head thread. Insert Shaft assembly in front fork leg.

⚠ Warning!

Make sure no air is trapped in piston by carefully pumping shaft assembly up and down with piston below fluid surface.



6.8

When no air is trapped in piston, install Shaft assembly and tighten with your hand.

6.9

Remove clip and pull up tool.

6.10

Tighten Seal head to 30 Nm and remove Seal head tool.

6.11

Make sure that Shaft assembly and Outer tube are in their bottom positions.
Set suspension fluid level according to Setup data in Mounting instruction/ Spare part list for concerned front fork.

6 ASSEMBLE FRONT FORK

6.12

Install pull up tool (01765-03) on Shaft extension.
Install Preload tube (A), Main spring (B) and Spring support (C) over pull up tool. Select Main spring according to Setup data in Mounting instruction/ Spare part list for concerned front fork.

6.13

Pull up shaft assembly and grab spring support with a 19 mm wrench.

6.14

Remove pull up tool.

6.15

Make sure that compression and rebound adjusters are fully open before installing Top cap. Use a 3 mm hex key to open compression and rebound adjusters.

6.16

Install o-ring on Top cap. Apply grease on o-ring and Shaft extension thread.

6.17

Install Top cap on Shaft extension. Tighten to 20 Nm with a 14 mm socket.

6.18

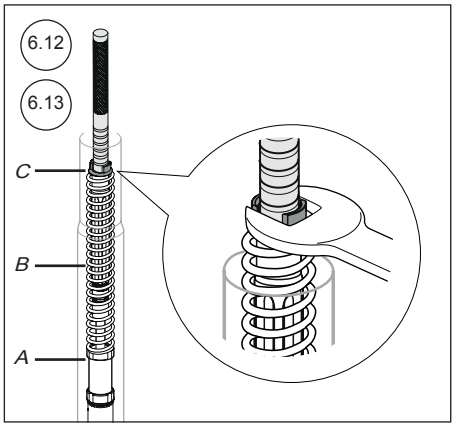
Remove wrench from Spring support.

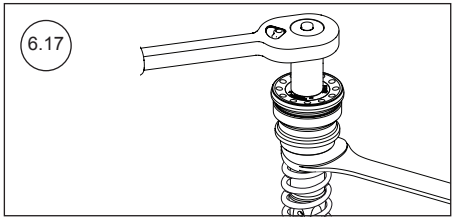
6.19

Pull up Outer tube. Make sure front fork leg is in a fully extended position. Use sleeve pin (00797-08) to tighten Top cap to Outer tube. Tighten to 10 Nm.

6.20

Set compression, rebound and main spring adjusters according to Setup data in Mounting instruction/ Spare part list for concerned front fork. Use a 3 mm hex key for compression and rebound adjusters. Use a 14 mm socket for main spring preload adjuster.





Troubleshooting

The whole motorcycle setup affects the front fork. Make sure you understand how the front fork works, and make adjustments step by step.

Note!

Adjust only one thing at a time.

Below you will find a few examples of how to adjust for the most common stability problems in Road Racing driving.

1

The front wheel "chatters" entering a corner, the problem goes away, as soon as you let the brakes off, or when you get on the power.

A

The fork is working too low in the travel and reaches the progressive, hard part at the end of the travel.

Try one of the following

→ Increase preload.
→ Change to a harder spring.
→ If a lot of stroke remains after riding, drop the oil level. See oil level chart.
→ Make sure the front fork has no friction.

B

Rear ride height is too high, too much rear spring preload.

Try one of the following

→ Lower the rear end by taking off preload from rear shock spring.

2

The front wheel is jumping during the last part of braking.

Try one of the following

→ If a lot of stroke remains, the oil level is too high. Lower the oil level.
→ If the fork is bottoming, install harder springs and keep the oil level.

3

The front end feels unpredictable and unsafe in the middle of the corner (between braking and getting on power).

Try one of the following

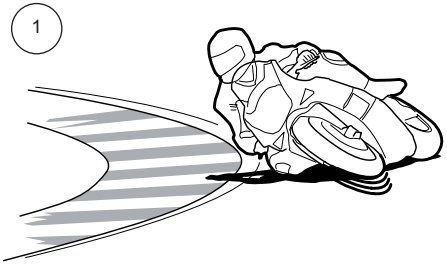
→ Not enough rebound damping. Add more damping.
→ Too much rebound damping. If it at the same time feels harsh, reduce rebound damping.
→ Too much compression damping. Also gives a harsh feeling. Reduce compression damping.

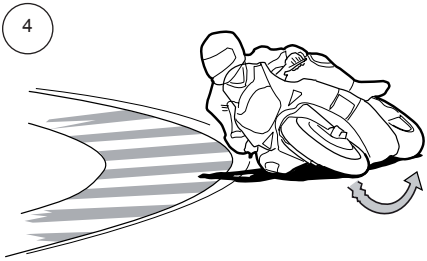
4

The front end loses grip coming out of a corner.

Try one of the following

→ Not enough rebound damping. Add more rebound damping.
→ Too much preload. Reduce preload.
→ Rear end is too soft. Install harder rear spring.
→ Front end is too high. Lower the front end by pulling the fork legs through the triple clamps.





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