

Front Fork

RXF38 m.3/m.2/m.1

Workshop Manual - Chassis and Air Spring 100 h



SAFETY PRECAUTIONS

General Warnings

Note!

When working with the Öhlins product, always read the Vehicle Service Manual.

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.

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

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 Service Centre.

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.

Note!

Before working on the product make sure that the vehicle is washed and cleaned properly. Do not use alcobased products on the outside or inside of the product.

Product Specific Warnings

This product was developed and designed exclusively for a specific vehicle model and shall only be installed on the intended vehicle model in its original condition as delivered from the vehicle manufacturer.

This product is pressurized. Do not open, service or modify this product without proper education (authorized Öhlins dealer/distributor) and proper tools.

Caution!

Do not use a pressure washer or a power washer when cleaning the fork.

SAFETY SYMBOLS

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

A

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

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, or to bystanders.

Caution!

The Caution Symbol means: Special precautions must be taken to avoid damage to the shock absorber.

Note!

The Note Symbol indicates information that is important regarding procedures.

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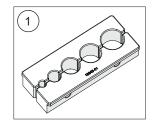
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Tools

1	19245-01	Multi clamp TTX18
2	19246-01	Seal installation tool
3	-	Cassette lockring tool



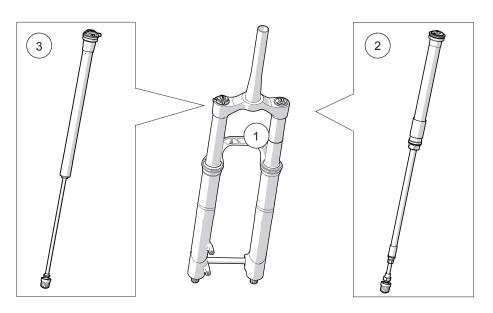


Oil, grease, thread locker and sealant

Damper fluid	01309-01 - High performance suspension fluid 1L		
Air spring lubrication fluid	01337-06 - Renep CGLP 220 Air spring lube 0.6L		
Function grease	01338-22 - Renolit SI 410 M Silicone grease 225g		
Assembly grease	Slickoleum / Buzzy's Slick Honey		

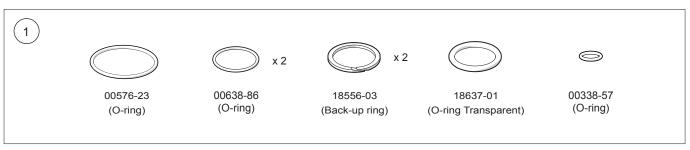
Overview - General layout

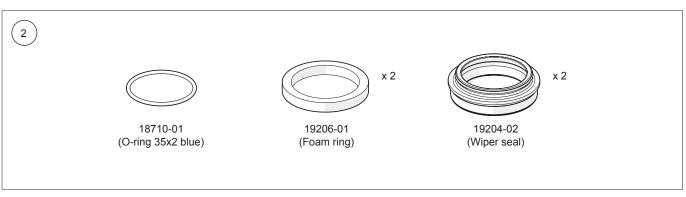
- (1) Chassis
- 2 Air Spring Cartridge
- 3 Damper Cartridge



Service Kit Contents

1	18850-12	Service Kit Air Spring 100h RXF38
2	19237-01	Service Kit Chassis RXF38/DH38





1

Chassis 100-Hour Service

We recommend using a bike stand to clamp the steering tube when working on the fork.

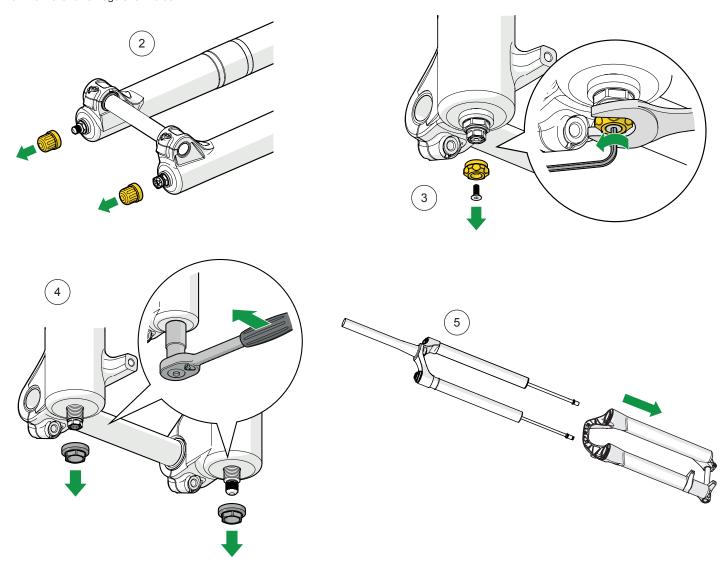
Note!

Record the rebound adjuster setting and the pressure in the positive air chamber and ramp up chamber before service.

1. Thoroughly clean the outside of the fork from dirt or grit.

Only for RXF38 m.1!

- 2. Remove the golden bash caps by unscrewing them by hand.
- **3.** Use a 14 mm wrench to hold the rebound adjuster knob steady. With a 2 mm hex wrench remove the screw and the knob.
- **4.** Remove the nut on both sides by using a socket wrench with a 14 mm deep hex socket.
- **5.** Slide the lower legs off the stanchions.
- 6. Drain the lower legs of all fluids.



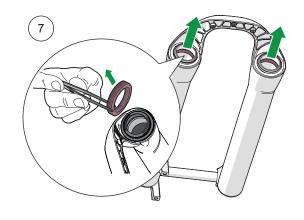


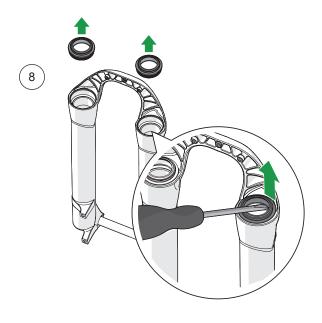
- **7.** Use tweezers to cautiously remove the old foam rings in the lower legs.
- 8. Use a screwdriver or similar to remove the old wiper seals.

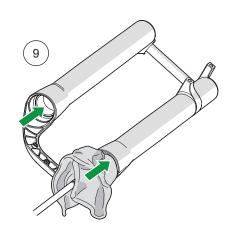
Note

Be careful not to scratch the bushings.

- **9.** Use a rag wrapped around a long rod or similar to clean the insides of the lower legs.
- **10.** Carefully clean the wiper seal and foam ring areas using disc brake cleaner and a paper cloth or rag to remove old suspension fluid and dirt.

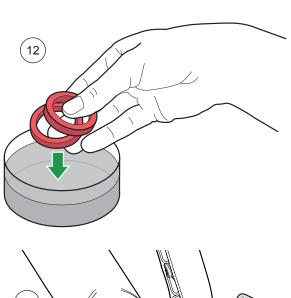


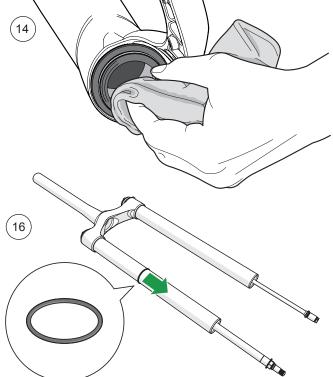


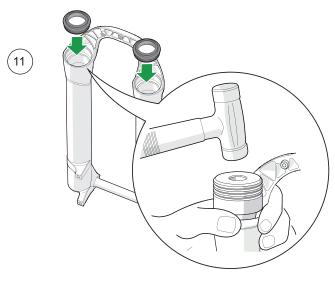


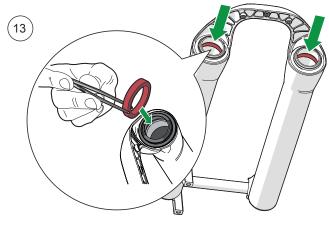


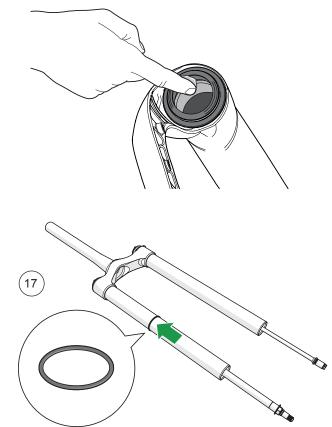
- **11.** Reinsert new wiper seals into the lower legs. Use the wiper seal tool and a soft hammer to put them in place.
- 12. Soak the foam rings in fresh damper fluid.
- 13. Use tweezers or similar to carefully reinsert the soaked foam rings into the lower legs. Check that they are mounted corrrectly and not twisted.
- **14.** Hold the lower legs upside down and use a soft rag inside the wiper seals to wipe of any oil residues from previous step.
- **15.** Apply a thin layer of function grease to the inner surfaces of the wiper seals.
- 16. Remove the old sag o-ring.
- 17. Install a new sag o-ring from the service kit.











15

Air Spring Cartridge 100-Hour Service

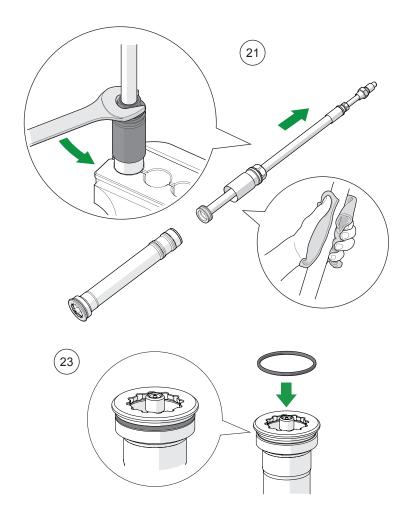
Note!

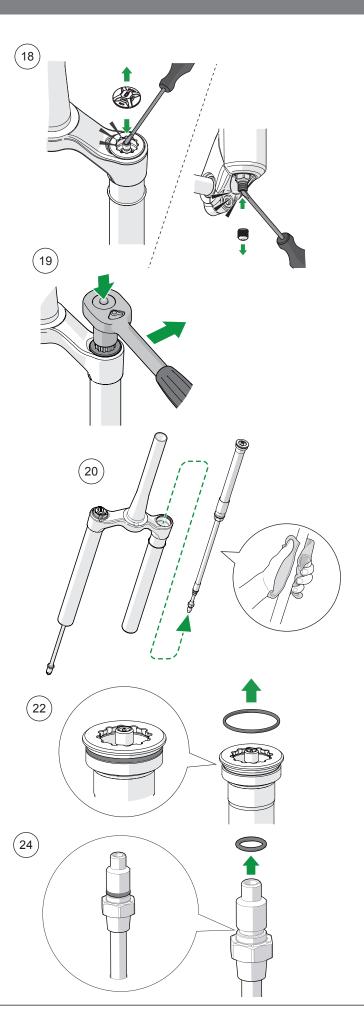
Clean all parts using disc brake cleaner and a rag to remove dirt, old grease and thread sealant before reassembling. Lubricate new o-rings/x-rings etc. with fresh assembly grease if no other grease is specified.

Note!

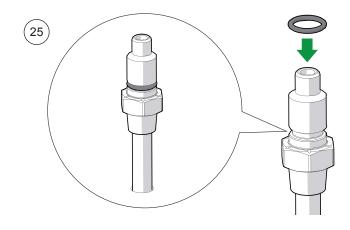
Use a vise and the appropriate multiclamp when servicing the front fork.

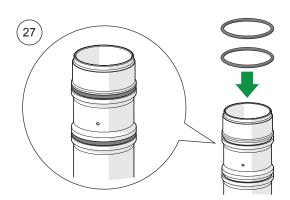
- **18.** Release the air from the positive air chamber at the top and the ramp up chamber at the bottom.
- **19.** Use a socket wrench with a cassette lockring socket to loosen the air spring.
- 20. Slide the air spring off the stanchion tube.
- **21.** Use a 24 mm wrench to loosen the seal head. Slide the cylinder tube off the air spring.
- 22. Remove the old o-ring (00576-23) from the top cap.
- 23. Install a new o-ring (00576-23) on the top cap.
- 24. Remove the old o-ring from the base cap.

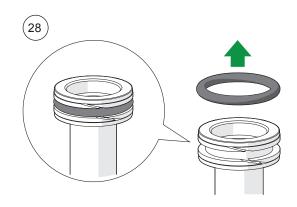


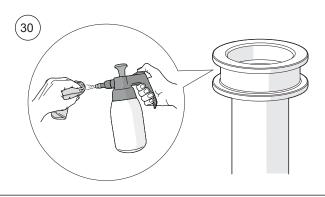


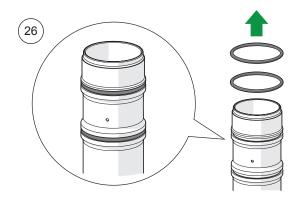
- 25. Install o-ring 00338-57.
- **26.** Remove the two old o-rings (00638-86) from the upper air chamber cylinder tube.
- **27.** Install two new o-rings (00638-86) on the upper air chamber cylinder tube. Apply assembly grease on o-rings.
- 28. Remove the old o-ring (18637-01) from the piston.
- 29. Remove the two old back-up rings (18556-03).
- **30.** Carefully clean the piston using disc brake cleaner and a paper cloth or rag to remove old grease and dirt.
- **31.** Install a new o-ring (18637-01) on the piston between the back-up rings.

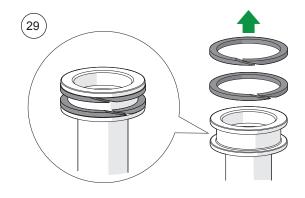


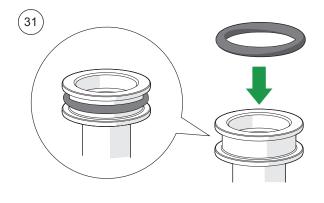




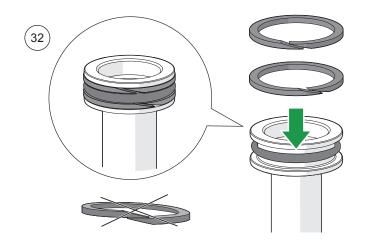


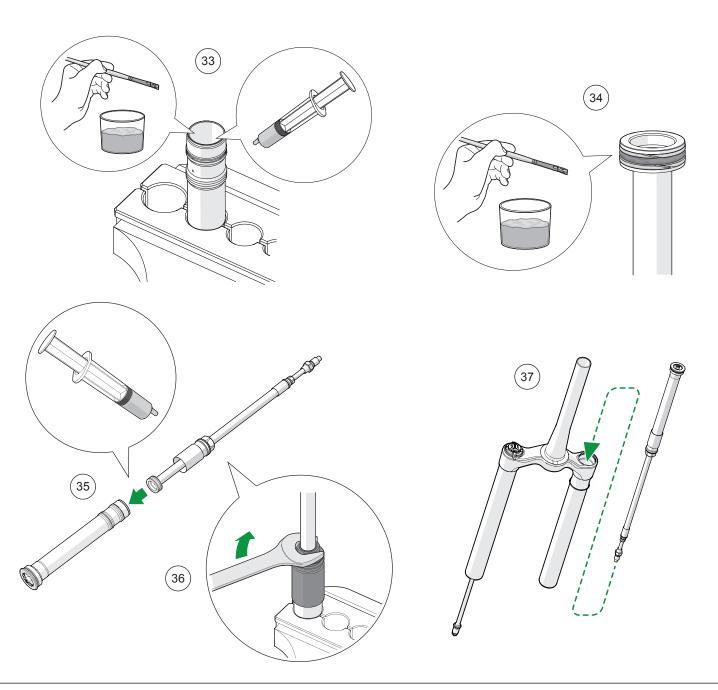




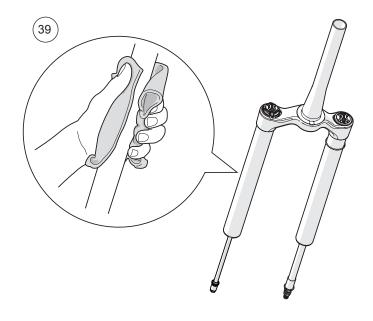


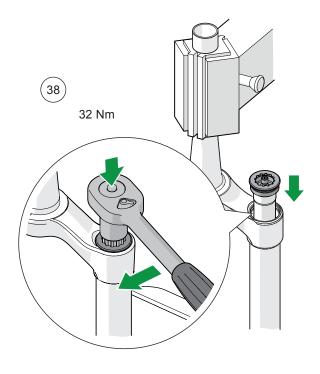
- 32. Install two new back-up rings (18556-03) on the piston.
- **33.** Apply 2 ml of function grease at the inside of the cylinder tube (smeared around). Add 0,5 ml of air spring lubrication fluid distributed on top of the grease.
- **34.** Apply a thin layer of function grease on the o-ring and the back-up rings on the main piston.
- **35.** Insert main piston in the cylinder tube and add 0,5 ml of air spring lubrication fluid inside the cylinder tube. Slide the seal head onto the cylinder tube and screw them together hand-tight.
- **36.** Use a 24 mm torque wrench to tighten the seal head to 10 Nm.
- 37. Reinstall the Air spring cartridge into the stanchion tube.

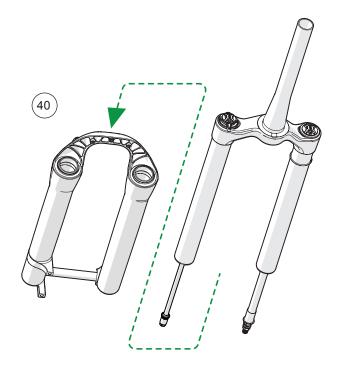




- **38.** Use a torque wrench with a cassette lockring socket to tighten the top cap to 32 Nm.
- **39**. Clean the stanchion tubes with a paper cloth or soft rag.
- 40. Reinstall the stanchion tubes into the lower legs.







41. Use fluids in spring and damper fork leg according to table below. It is important not to overfill as that will affect fork performance.

		Damper fork leg		Spring fork leg	
Model	Fork part no.	Oil	Volume	Oil	Volume
RXF38 m.3/m.2	FGxxx 381x 25xx/22xx	Damper fluid	15 ml	Damper fluid	15 ml*
RXF38 m.1	FGxxx 381x 21xx	Damper fluid	10 ml	Damper fluid	10 ml

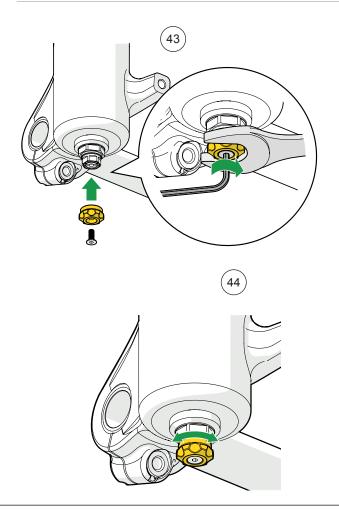
* For coil spring forks add 20 ml instead of 15 ml in the spring fork leg.

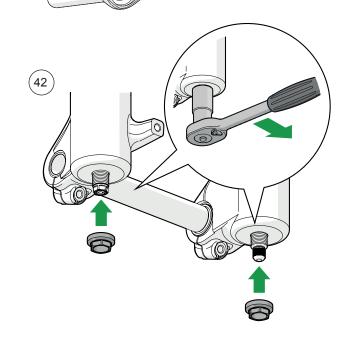
See appendix A to detemine the part no. of the fork.

- **42.** Reinstall the nuts. Use a torque wrench with a 14 mm hex socket and tighten to 10 Nm.
- **43.** Reinstall the rebound adjuster knob and screw. Use a 14 mm wrench to hold the knob steady. With a 2 mm hex wrench tighten the screw and knob.
- **44.** Adjust the rebound setting according to values recorded at step 3.
- **45.** Adjust the LSC and HSC setting according to values recorded at step 3.
- **46**. Inflate the ramp up chamber (A) at the bottom and then the positive air chamber (B) at the top to the desired air pressures.

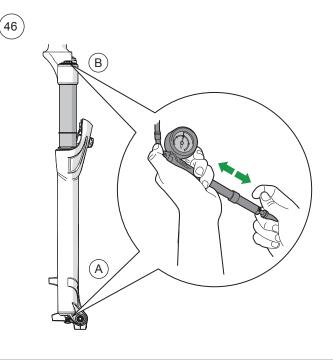
Caution!

Inflate the ramp up chamber (A) at the bottom first.





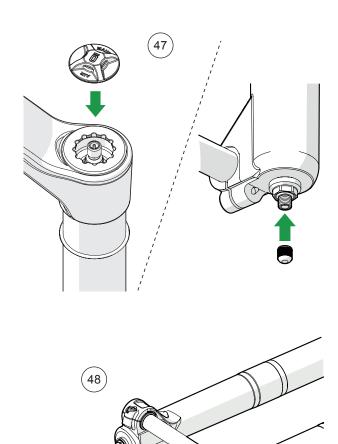
[41[°]



47. Reinstall the air spring knob and air valve cap.

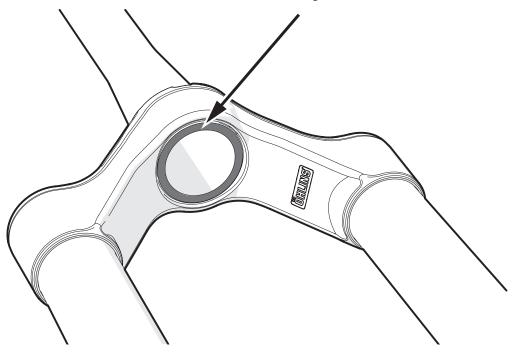
Only for RXF38 m.1!

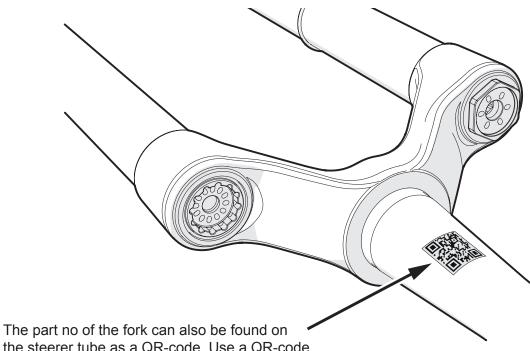
48. Reinstall the golden bash caps. Tighten by hand.



Appendix A

Part no of the fork can be found at the bottom of the steering tube.





the steerer tube as a QR-code. Use a QR-code reader in a smartphone to receive the part no.



Your Öhlins retailer:

Öhlins Racing AB Box 722 SE-194 27, Upplands Väsby Sweden

Phone: +46 (0)8 590 025 00 Fax: +46 (0)8 590 025 80 www.ohlins.com

