

50h Coil kit Service for

RXF36/RXF38/DH38

Workshop Manual



SAFETY PRECAUTIONS

General Warnings

Note!

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

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:

Λ

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!

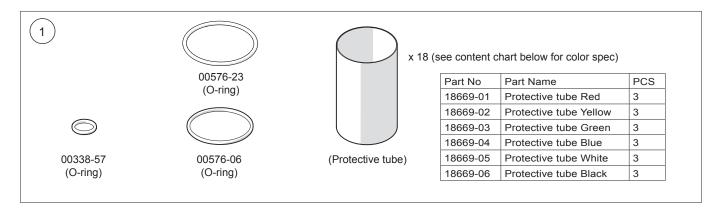
The Note Symbol indicates information that is important regarding procedures.

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Service Kit Contents

1 18885-01 Service Kit RXF36/RXF38/DH38 Coil kit

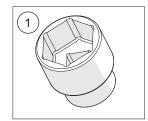


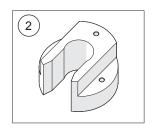
Oil and grease

Damper fluid	01309-01 - High Performance Suspension fluid 1L
Fork lubrication fluid	01336-01 - Renep CGLP 68 Fork lube 1L
Function grease	01338-22 - Renolit SI 410 M Silicone grease 225g
Assembly grease	Slickoleum / Buzzy's Slick Honey
Loctite 243	01791-04 Loctite 243

Tools

1	18860-01	Hex socket 28 mm
2	18867-01	Coil kit tool
-	-	Cassette locking tool





For RXF36/RXF38

Note!

Use a bike stand or a vise and a appropriate multicamp when working with the fork.

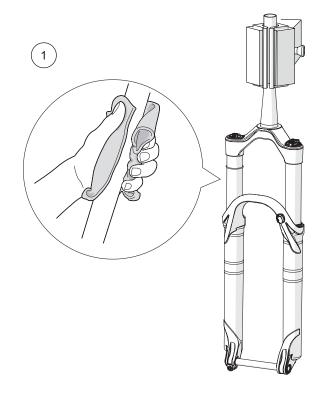
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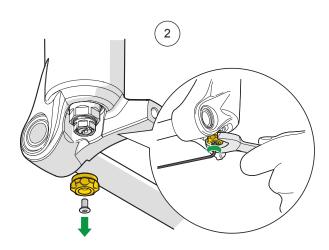
Clean all parts using disc brake cleaner and a rag to remove dirt, old grease before reassembling. Lubricate new o-rings with fresh assembly grease if no other grease is specified.

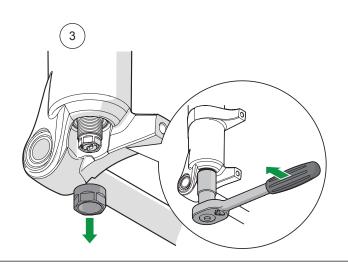
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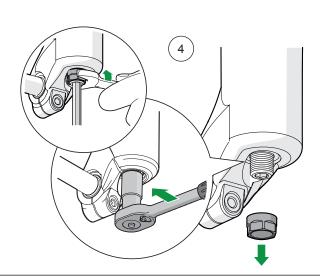
Record the rebound and preload adjuster settings before service.

- 1. Thoroughly clean the outside of the fork from dirt or grit.
- 2. Use a 14 mm wrench to hold the rebound adjuster knob steady. With a 2 mm hex wrench remove the screw and the knob.
- 3. Remove the nut by using a socket wrench with a 14 mm deep hex socket.
- **4.** Use a 6 mm hex wrench to hold the spring cartridge steady and loosen the nut with a 14 mm wrench. Use a socket wrench with a 14 mm deep hex socket to remove the nut.

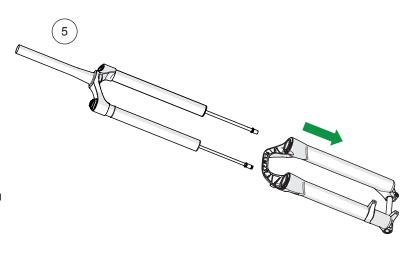


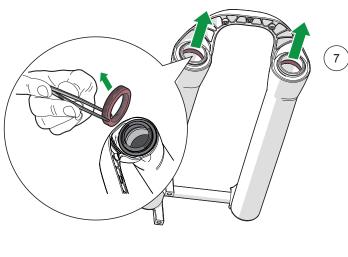


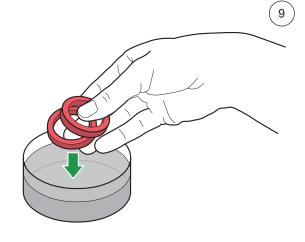


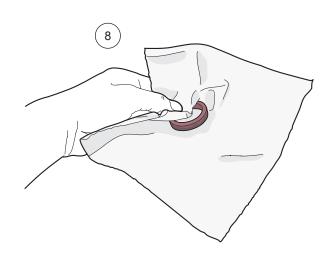


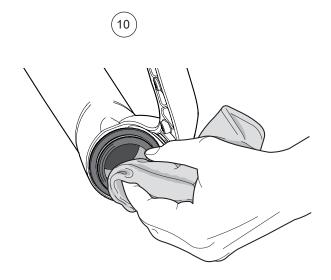
- 5. Slide the lower legs off the stanchions.
- 6. Drain the lower legs of all fluids.
- **7.** Use tweezers to cautiously remove the foam rings in the lower legs.
- **8.** Carefully clean the foam rings using disc brake cleaner and a paper cloth or rag to remove old suspension fluid and dirt. Inspect for damages and replace if necessary.
- 9. Soak the foam rings in fresh fork lubrication fluid.
- **10.** Hold the lower legs upside down and clean the wiper seals and the upper bushings with a soft rag.









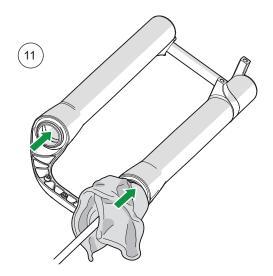


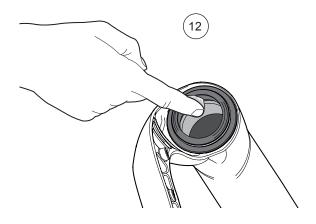
11. Use a rag wrapped around a long rod or similar to clean the insides of the lower legs.

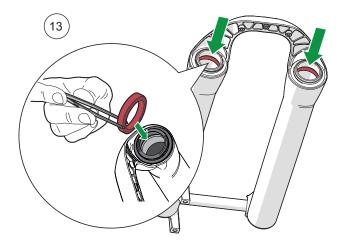
Note!

Be careful not to scratch the bushings.

- **12.** Apply a thin layer of functional grease to the inner surfaces of the wiper seals.
- **13.** Use tweezers to carefully re-insert the soaked foam rings into the lower legs. Check that they are mounted corrrectly and not twisted



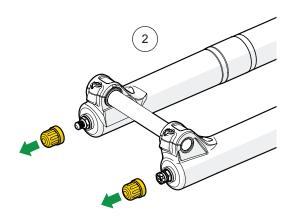


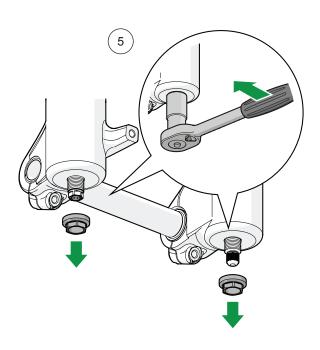


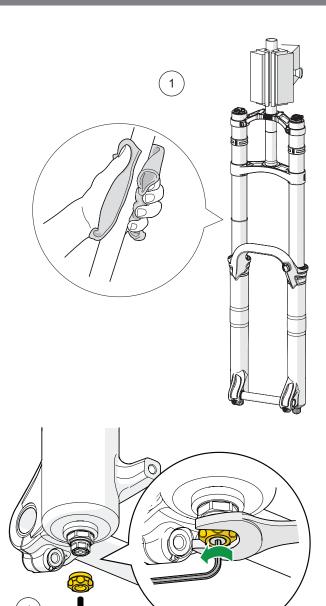
For DH38

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

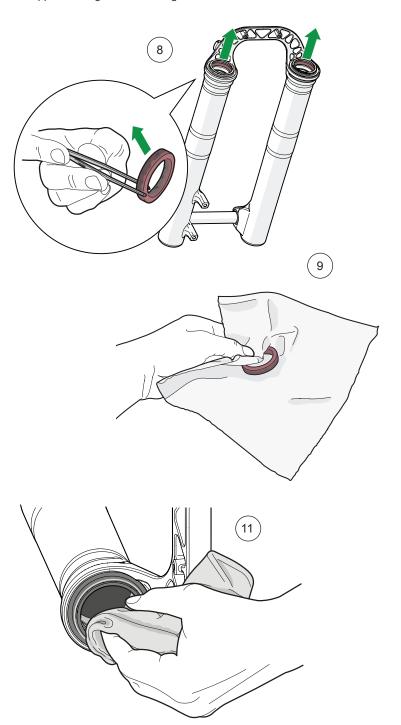
- 1. Thoroughly clean the outside of the fork from dirt or grit.
- 2. Remove the golden bash caps by unscrewing them by hand.
- 3. Measure and record LSC, HSC and Rebound clicks.
- **4.** Use a 14 mm wrench to hold the rebound adjuster knob steady. With a 2 mm hex wrench remove the screw and the knob.
- Remove the nut on both sides by using a socket wrench with a
 mm deep hex socket.

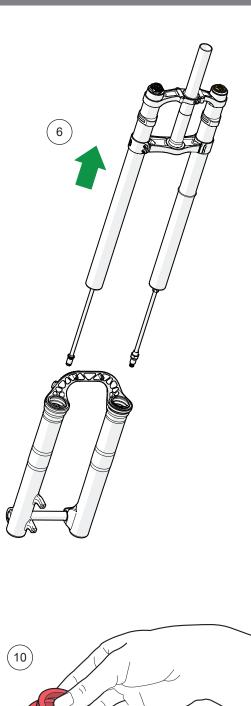


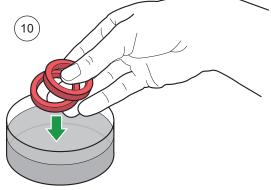




- 6. Slide the lower legs off the stanchions.
- 7. Drain the lower legs of all fluids.
- 8. Use tweezers to cautiously remove the foam rings in the lower legs.
- **9.** Carefully clean the foam rings using disc brake cleaner and a paper cloth or rag to remove old suspension fluid and dirt. Inspect for damages and replace if necessary.
- 10. Soak the foam rings in fresh fork lubication fluid.
- **11.** Hold the lower legs upside down and clean the wiper seals and the upper bushings with a soft rag.





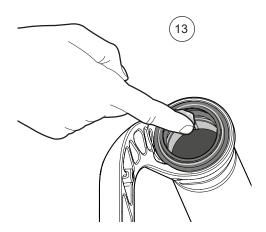


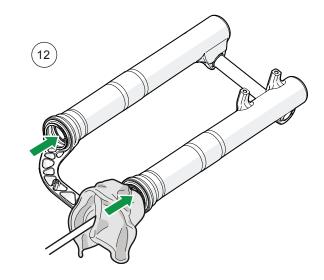
12. Use a rag wrapped around a long rod or similar to clean the insides of the lower legs.

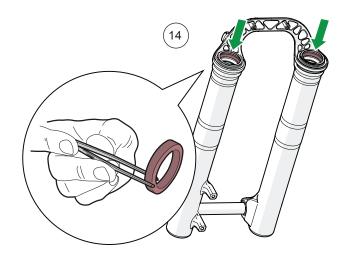
Note!

Be careful not to scratch the bushings.

- **13.** Apply a thin layer of functional grease to the inner surfaces of the wiper seals.
- **14.** Use tweezers to carefully re-insert the soaked foam rings into the lower legs. Check that they are mounted corrrectly and not twisted.







For RXF36/RXF38/DH38:

- 1. Turn the preload adjuster knob anticlockwise towards minus until it stops (minimum preload position).
- 2. If there is a screw holding the preload adjuster knob use a 2 $\,$ mm $\,$ allen key to remove the screw and the knob.
- 3. Use a socket wrench with a hex socket 28 mm (18860-01) or a cassette lockring tool to remove the preload adjuster assembly.

Caution!

Do not use an adapter between wrench and socket, as this will increase the risk of damaging the anodized finish of the top cap.

Apply pressure on socket while unthreading.

4. Remove the old o-ring from the preload adjuster assembly.

Note!

For the older design of the RXF36 preload adjuster there is a washer between the spring/preload adjuster.

- 5. Remove the spring and the washer (only for RXF36 old design).
- 6. If a cassette lockring tool was used to undo the top cap leave the preapplied thread locker (reusable) and continue. If a 28 mm socket was used clean the top cap threads (male and female) using a rag covered by degreaser or brake cleaner. Use a nylon bristled brush to remove any remaining residue from threads.

Note!

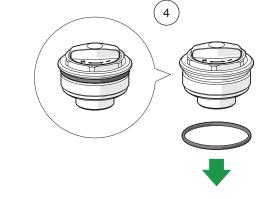
Do not use alcohol: alcohol reacts and causes damage to the seals.

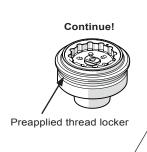
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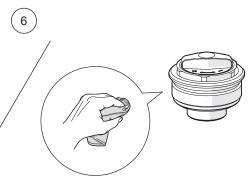
Make sure any old Loctite is removed.

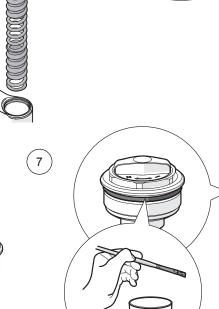
7. Install a new o-ring and lubricate with assembly grease. RXF36: 00576-06

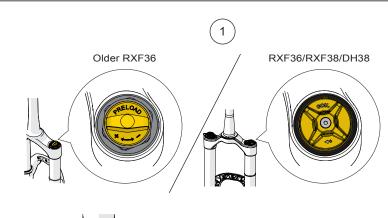


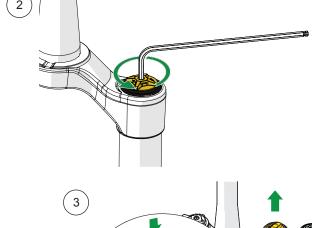






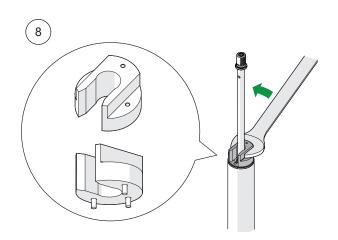


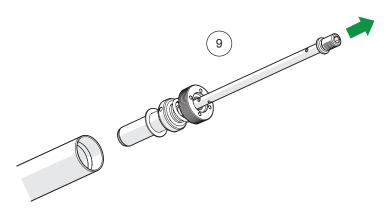


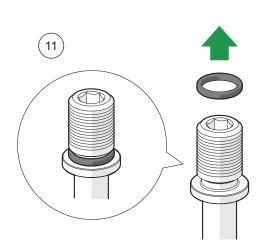


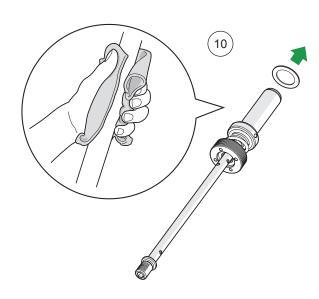


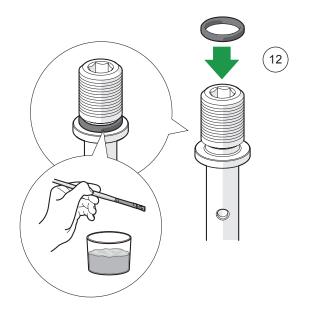
- **8.** Use the Coil kit tool (18867-01) and a 20 mm wrench to loosen the spring cartridge.
- 9. Remove the spring cartridge.
- **10.** Clean the spring cartridge and washer with a paper cloth or soft rag. Remove the washer.
- **11.** Remove the old o-ring from the piston rod end.
- **12.** Install a new o-ring (00338-57) from the service kit (18885-01). Lubricate the o-ring with assembly grease.



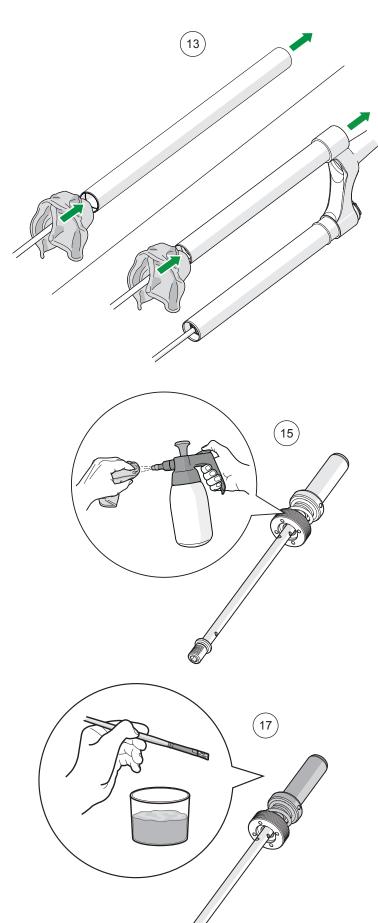


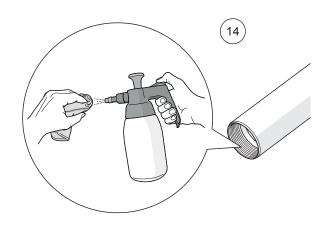


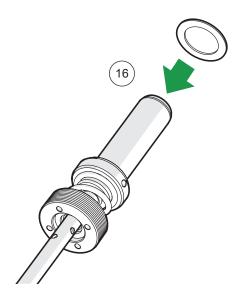




- **13.** Use a rag wrapped around a long rod or similar to clean the inside of the spring stanchion tube.
- **14.** Clean the threads of the spring stanchion tube by using disc brake cleaner and a paper cloth or rag.
- **15.** Clean the threads of the spring cartridge by using disc brake cleaner and a paper cloth or rag.
- 16. Reinstall the washer.
- **17.** Apply a layer of assembly grease on the upper part of the spring cartridge.







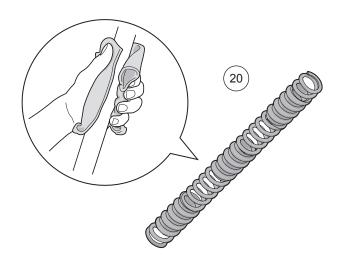
- 18. Reinstall the spring cartridge into the stanchion tube.
- **19.** Use the Coil kit tool and a 20 mm wrench to tighten the spring cartridge to 15 Nm.
- **20.** Clean the spring and protective tubes with a paper cloth or soft rag.
- **21.** Inspect the spring and protective tubes. If the protective tubes are intact and not damaged, continue with **step 27**.

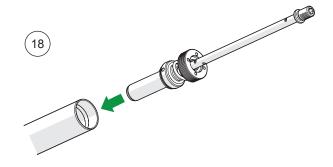
Caution!

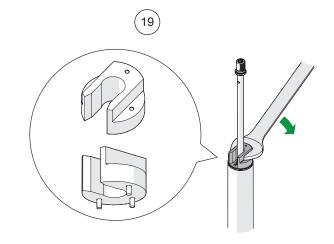
If the protective tubes are damaged they have to be replaced not to damage inner tube and to prevent noice from spring touching inner tube.

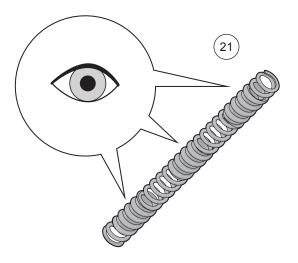
Note!

The section below explains the procedure on how to replace the protective tubes. Protective tubes are included in 18885-01 Service kit RXF36 Coil kit. Choose the same color of the protective tubes since this indicates the spring rate. Contact an Öhlins dealer for more information.







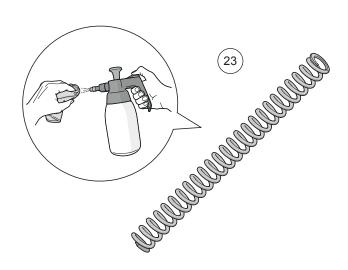


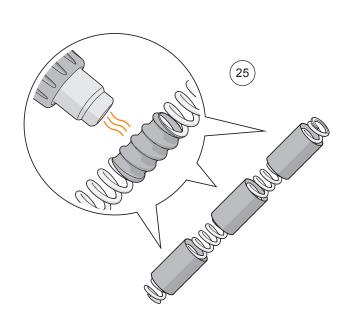
22. Cut off and remove the old protective tubes.

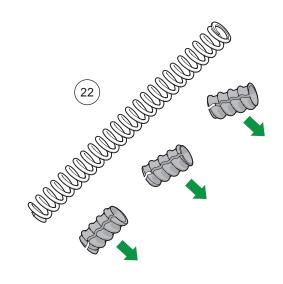
Caution!

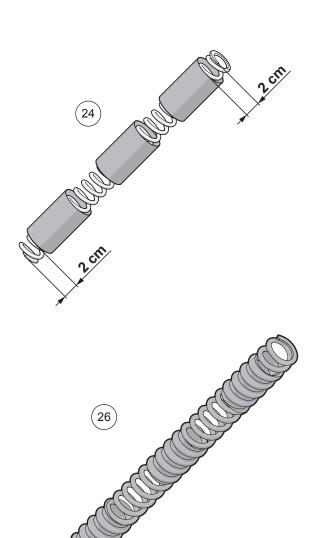
Be careful not to damage the spring when cutting off the protective tubes.

- **23.** Clean the spring by using disc brake cleaner and a paper cloth or rag.
- **24.** Slide three new protective tubes, with same color, over the spring. Position them in the middle and 2 cm from each end.
- **25.** Use a heat gun and gently heat the protective tubes until they wrap tightly around the spring.
- **26.** Let the spring cool down to room temperature.









- **27.** Apply a generous layer of assembly grease on the spring and protective tubes.
- **28.** Reinstall the spring into the stanchion tube. If a washer was removed in step 5 (page 10) apply grease to the washer and place it on top of the spring.

Note!

When assembling the coil kit, put pressure on the wrench while threading the top cap to make sure that the thread enters straight and not get damaged.

- **29.** If the 28 mm hex socket was used to loosen the top cap perform step 30 applying loctite. Skip step 30 if the cassette lock ring tool was used since the top cap has preapplied loctite.
- **30.** Apply blue Loctite 243 to the first (lower) two (2) threads of the top cap (male).
- **31.** Use a torque wrench with a 28 mm hex socket (18860-01) or a cassette lockring tool to tighten the preload adjuster assembly to 32 Nm.

Caution!

Do not use an adapter between wrench and socket, as this will increase the risk of damaging the anodized finish of the top cap.

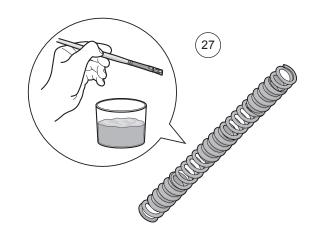
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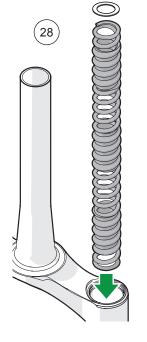
Apply pressure on socket while torqueing.

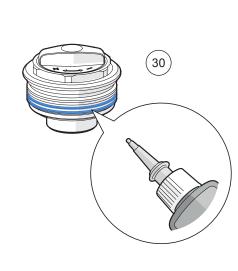
- **32.** Find the rectangular slot in the preload adjuster knob to place it onto the rectangular knob in the top cap assembly. Apply pressure to the preload adjuster by hand to hold it in place.
- **33.** If a cassette lockring tool was used in step 23 use a 2 mm allen key to tighten the screw and the preload adjuster knob.
- 34. Wipe off eventual excessive Loctite 243.

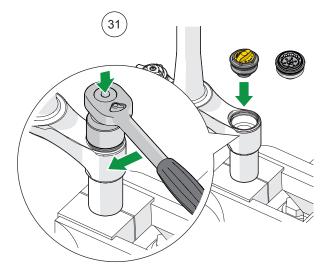
Important!

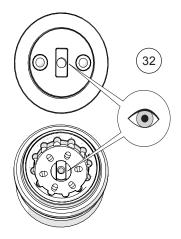
Leave the Loctite to cure for 24 hours before riding.







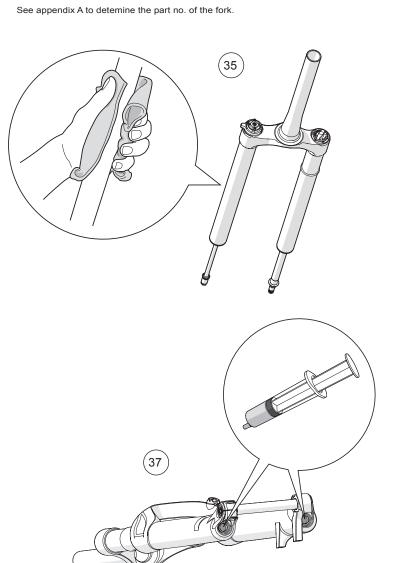


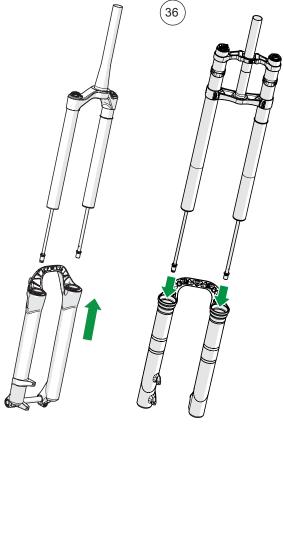




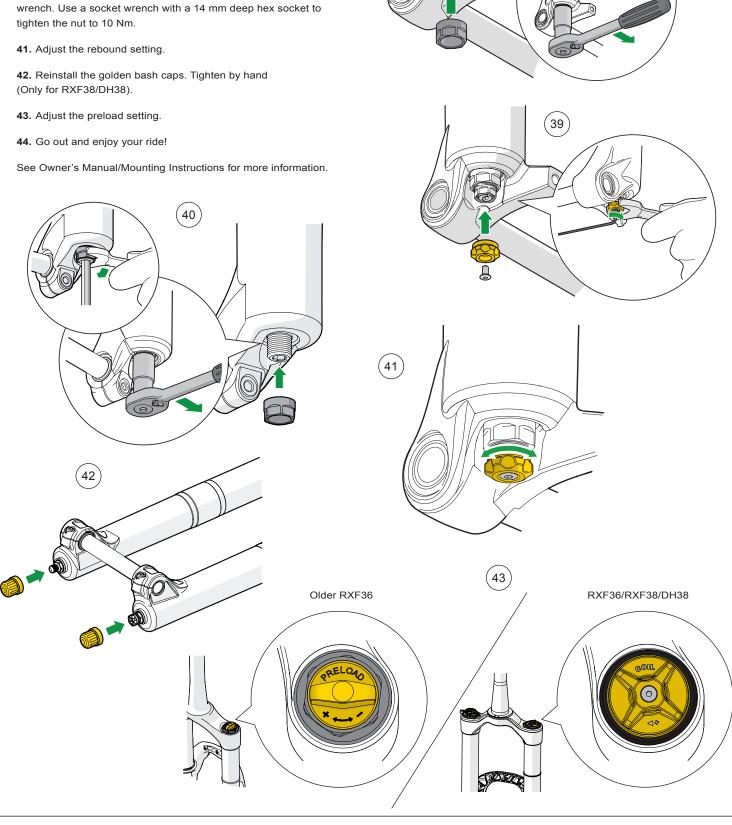
- 35. Clean the stanchion tubes with a paper cloth or soft rag.
- **36.** Reinstall the stanchion tubes into the lower legs.
- **37.** Pull the fork apart a bit to be able to place the syringe in the holes in the lower leg, direct the syringe away from the piston rod end so that the oil hits the wall of the lower leg and not the thread of the piston rod end. Use fluids in the damper/spring leg according to the table below. It is important to not overfill as it will affect fork performance.

		Damper fork leg		Spring fork leg	
Model	Fork part no.	Oil	Volume	Oil	Volume
RXF36	FG361x 1770	Fork lubrication fluid	2 ml	Fork lubrication fluid	10 ml
RXF36	FG361x 192x	Fork lubrication fluid	5 ml	Fork lubrication fluid	10 ml
RXF36	FG361x 194x	Fork lubrication fluid	5 ml	Fork lubrication fluid	10 ml
RXF36	FG361x 197x	Fork lubrication fluid	5 ml	Fork lubrication fluid	10 ml
RXF36	FG361x 199x	Fork lubrication fluid	5 ml	Fork lubrication fluid	10 ml
RXF36 m.2	FGxxx 2xxx	Fork lubrication fluid	10 ml	Fork lubrication fluid	10 ml
RXF38 m.2	FGxxx 381x 22xx	Damper fluid	15 ml	Fork lubrication fluid	15 ml
RXF38 m.1	FGxxx 381x 21xx	Fork lubrication fluid	10 ml	Fork lubrication fluid	10 ml
DH38 m.1	FDxxx 382x 21xx	Damper fluid	15 ml	Fork lubrication fluid	15 ml



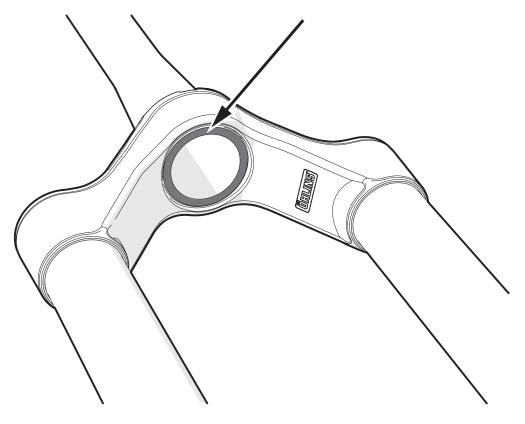


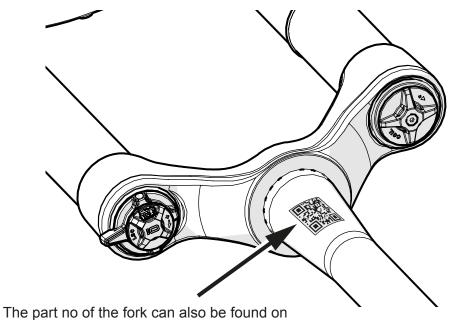
- **38.** Reinstall the rebound adjuster nut. Use a torque wrench with a 14 mm hex socket and tighten to 10 Nm.
- **39.** Reinstall the rebound adjuster knob and screw. Use a 14 mm wrench to hold the knob steady. With a 2 mm hex wrench tighten the screw and knob.
- **40.** Reinstall the spring cartridge nut. Use a 6 mm hex wrench to hold the spring cartridge steady and fasten the nut with a 14 mm wrench. Use a socket wrench with a 14 mm deep hex socket to tighten the nut to 10 Nm.



Appendix A

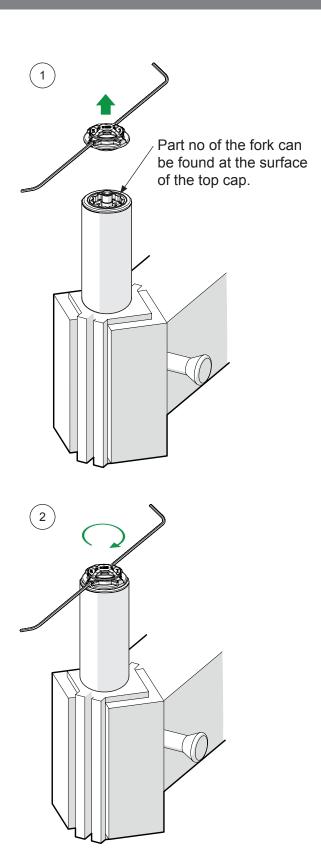
Part no of the fork can be found at the bottom of the steering tube.





For (DH38)

- 1. Use a 2 mm allen key to remove the adjuster knob assembly, including both high and low speed compression knobs.
- 2. Use a 2 mm hex key to reinstall the adjuster knob assembly. Place the high speed compression lever 90 degrees from the direction of travel. Torque: 0.8 Nm



Your Öhlins retailer:

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