

100h 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.

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:

À

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, 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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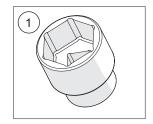
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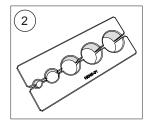
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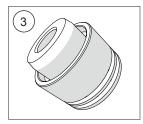
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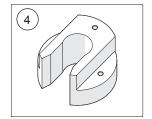
Tools

1	18860-01	Hex socket 28 mm
2	19245-01	Multi clamp
3	19246-02	Seal installation tool
4	18867-01	Coil kit tool
5	19246-01	Seal installation tool
6	-	Cassette lockring tool











Oil, grease, thread locker and sealant

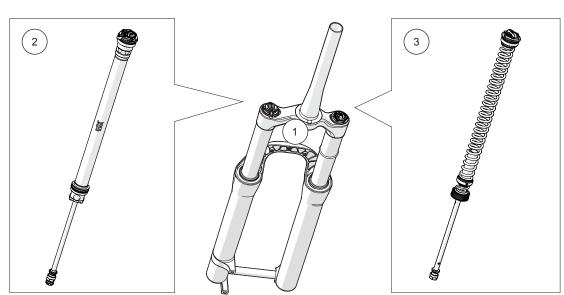
Damper fluid	01309-01 - High Performance Suspension fluid 1L
Fork lubrication fluid	01336-01 - Renep CGLP 68 Fork lube 1L
Function grease	01338-22 - Renolit SI 410 M Silicone grease 225g
Assembly grease	Slickoleum / Buzzy's Slick Honey
Loctite 243	01791-04

Overview - General layout

1 Chassis

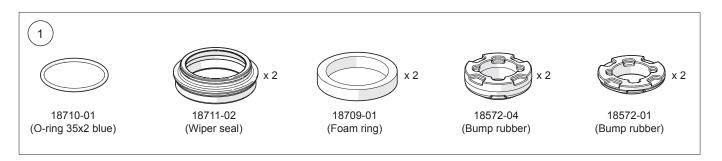
2 Damper Cartridge

3 Spring Cartridge

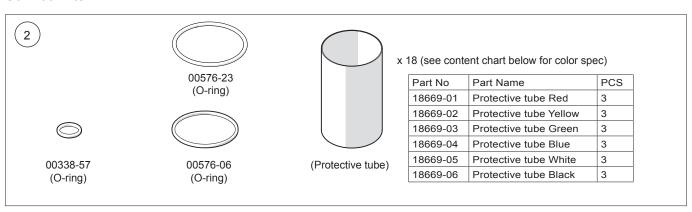


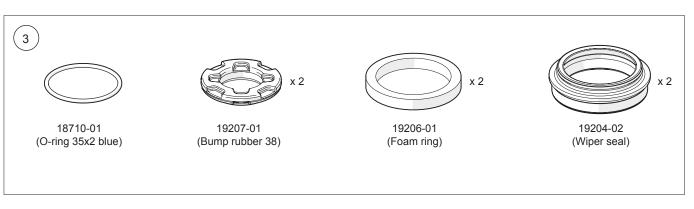
Service Kit Contents

Pos	Kit No	Description	Notes
1	18880-07	Service Kit chassis SKF RXF36	
2	18885-01	Service Kit RXF36/RXF38/DH38 Coil Kit	
3	19237-01	Service kit chassis RXF38/DH38	



Service Kits





Chassis 100-Hour Service

Note!

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

Note!

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.

Note!

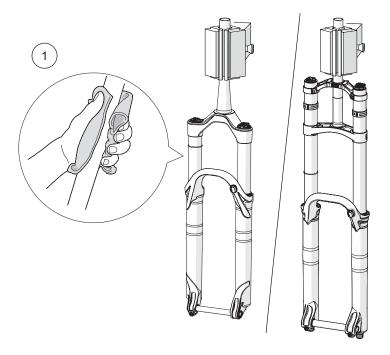
Record the rebound and preload adjuster settings before service.

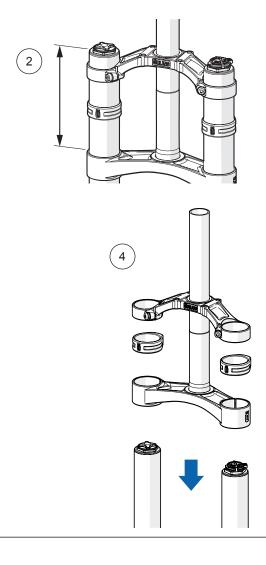
1. Thoroughly clean the outside of the fork from dirt or grit.

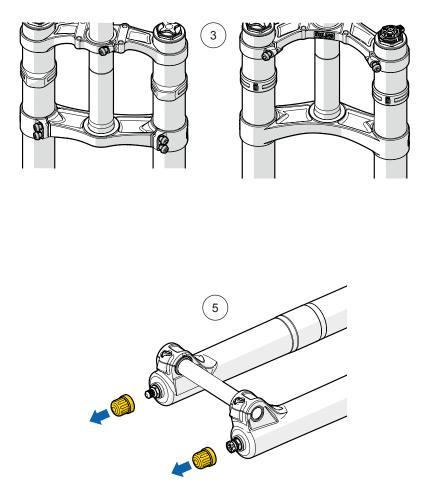
Note!

Steps 2-5 only valid for DH38 (FG38xx 19xx / FDMTB 38xx xxxx).

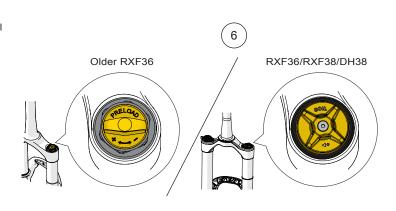
- 2. Measure and record the distance from the bottom crown to the top of the spring stanchion tube.
- 3. Loosen the crown bolts.
- **4.** Slide the stanchions out of the crowns. Use water to help remove the rubber fork bumper.
- 5. Remove the golden bash caps by unscrewing them by hand.

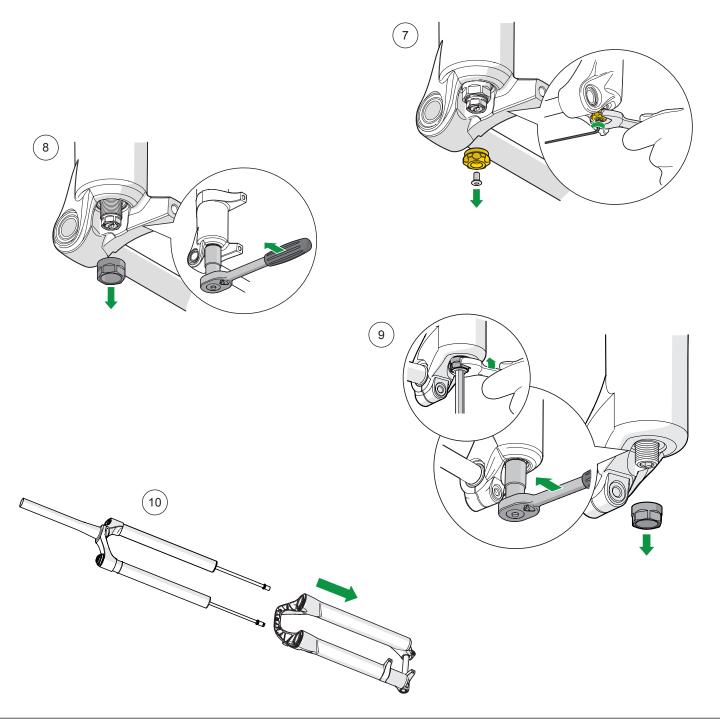






- **6.** Turn the preload adjuster knob anticlockwise towards minus until it stops (minimum preload position).
- 7. Use a 14 mm wrench to hold the rebound adjuster knob steady. With a 2 mm hex key remove the screw and the knob.
- 8. Remove the nut by using a socket wrench with a 14 mm deep hex socket.
- 9. Use a 6 mm hex wrench to hold the spring leg 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.
- 10. Slide the lower legs off the stanchions.
- 11. Drain the lower legs of all fluids.





- **12.** Use tweezers to cautiously remove the old foam rings in the lower legs.
- **13.** Carefully remove the old bump rubbers from the lower legs.
- **14.** Use a screwdriver or similar to remove the old wiper seals. Protect lowers and seal surfaces from scratches.
- **15.** Use a rag wrapped around a long rod or similar to clean the insides of the lower legs.

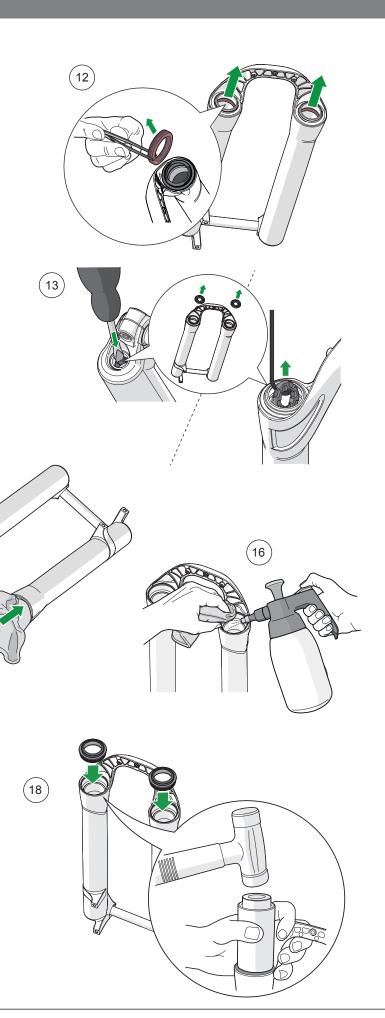
Note!

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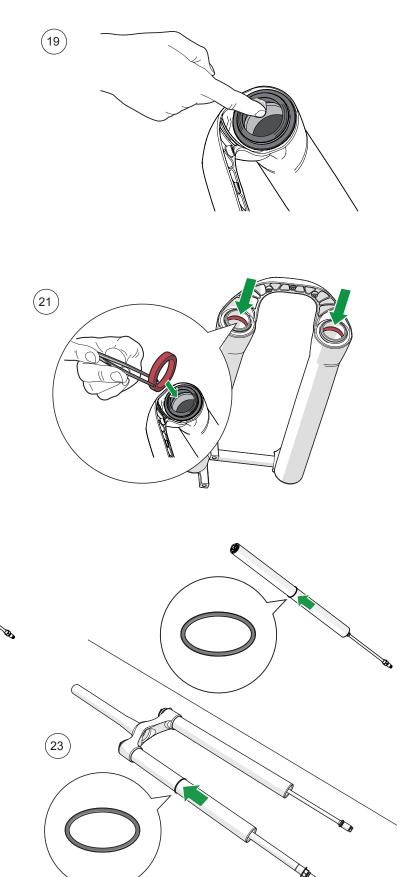
Be careful not to scratch the bushings.

- **16.** 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.
- **17.** Reinsert new bump rubbers into the lower legs. Use a long rod or similar to carefully put them in place. Make sure to use correct bump rubbers for the fork. Choose same thickness as mounted.
- **18.** Reinsert new wiper seals ((18711-01/18711-02 (RXF36) or 19204-02 (RXF38/DH38)) into the lower legs. Use the wiper seal tool (19246-02 (RXF36) or 19246-01 (RXF38/DH38)) and a soft hammer to put them in place.



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- **19.** Apply a thin layer of functional grease to the inner surfaces of the wiper seals.
- 20. Soak the foam rings in fresh fork lubrication fluid.
- **21.** Use tweezers or similar to carefully reinsert the soaked foam rings into the lower legs. Check that they are mounted correctly and not twisted.
- 22. Remove the old sag o-ring.
- 23. Install a new sag o-ring (18710-01) from the service kit.



Coil 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.

Note!

Use a vise and the appropriate shaft clamps when servicing the front fork.

- **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.

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.

Important!

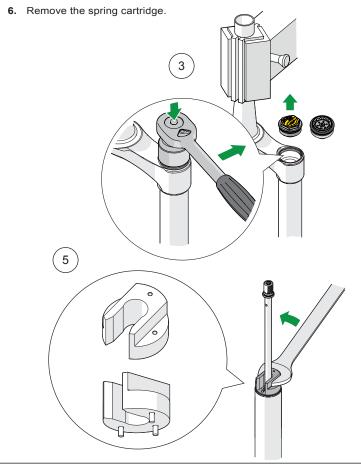
Apply pressure on socket while unthreading.

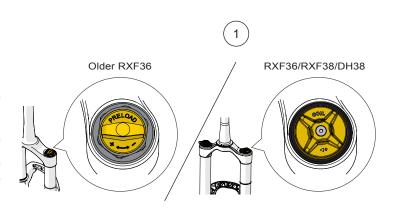
3. Use a socket wrench with a hex socket 28 mm (18860-01) or a cassette lockring tool to remove the preload adjuster assembly.

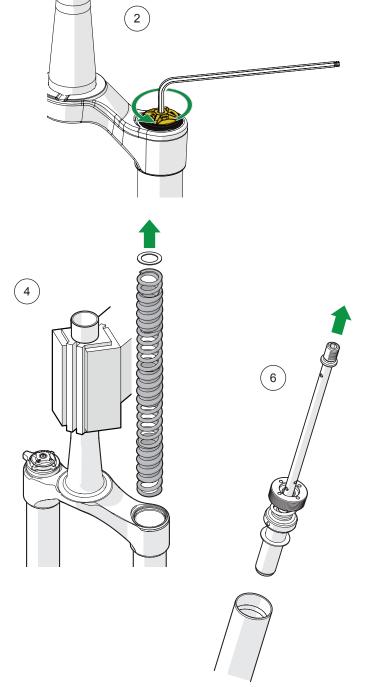
Note!

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

- 4. Remove the spring and the washer (only for RXF36 old design).
- **5.** Use the Coil kit tool (18867-01) and a 20 mm wrench to loosen the spring cartridge.







- 7. Clean the spring cartridge and washer with a paper cloth or soft rag. Remove the washer.
- 8. Remove the old o-ring from the piston rod end.
- **9.** Install a new o-ring (00338-57) from the service kit. Lubricate the o-ring with assembly grease.
- 10. Remove the old o-ring from the preload adjuster assembly.
- 11. If a cassette lockring tool was used to undo the top cap leave the preapplied thread locker(reusable) and continue. If a 28mm 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.

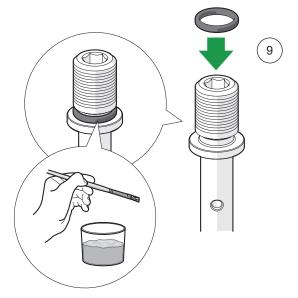
Note!

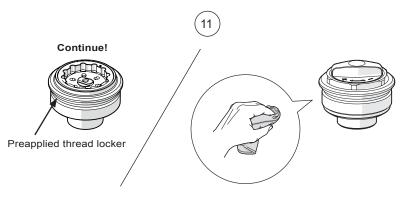
Do not use alcohol: alcohol reacts and causes damage to the seals.

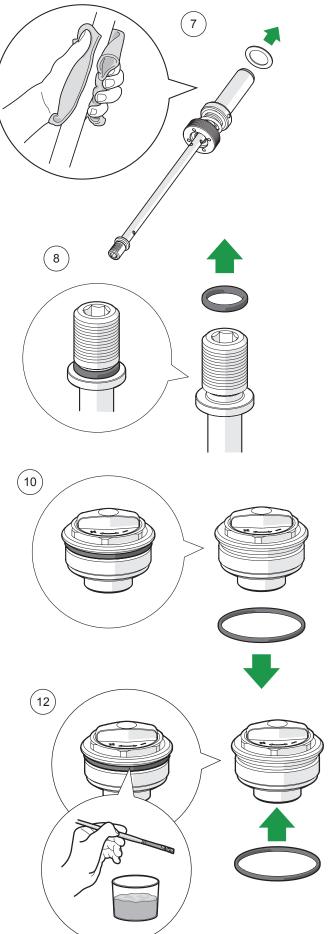
Important!

Make sure any old Loctite is removed.

12. Install a new o-ring (00576-06 (RXF36) 00576-23 (RXF38/DH38)) from the service kit. Lubricate the o-ring with assembly grease. Do not get grease on the threads.

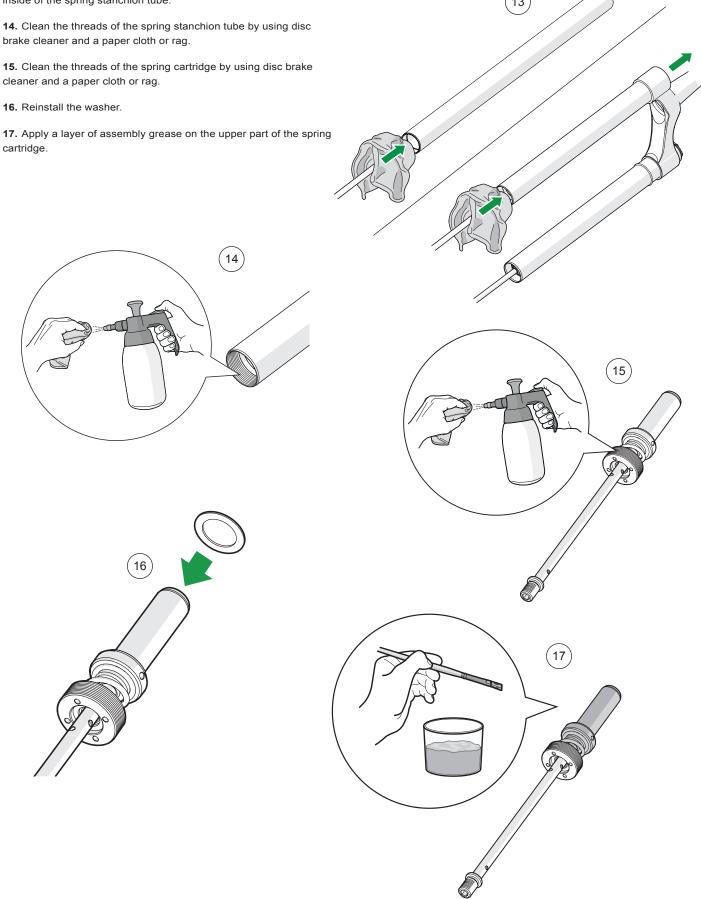






- 13. Use a rag wrapped around a long rod or similar to clean the inside of the spring stanchion tube.

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. Inspect the spring and clean it with a paper cloth or soft rag.

Note

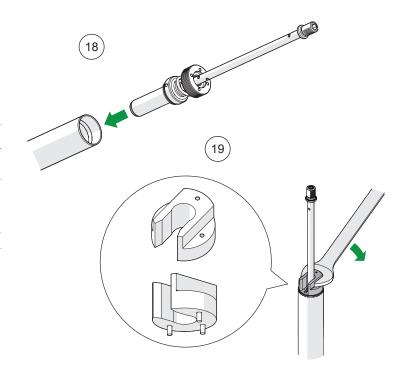
The section below explains the procedure on how to replace the protective tubes. Protective tubes are included in 18885-01 Service kit RXF36 /RXF38/DH38 Coil kit. Choose the same color of the protective tubes since this indicates the spring rate. Contact an Öhlins dealer for more information.

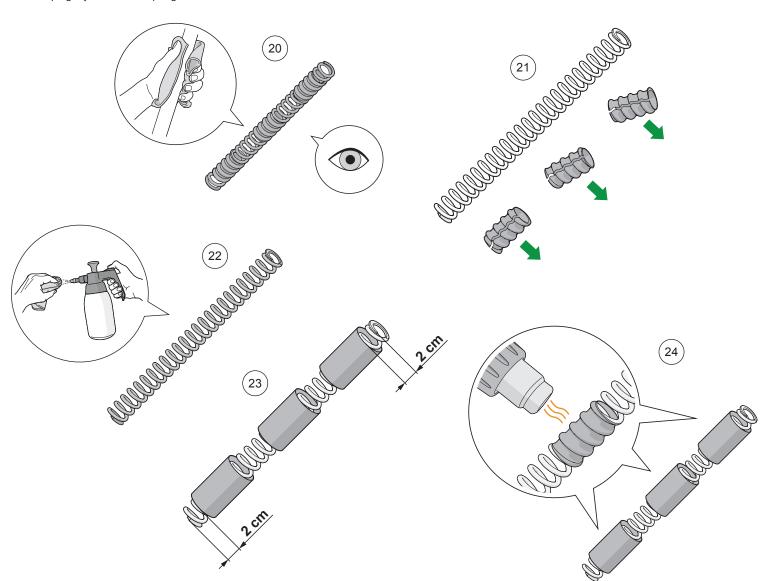
21. Cut off and remove the old protective tubes.

Caution!

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

- **22.** Clean the spring by using disc brake cleaner and a paper cloth or rag.
- **23.** Slide three new protective tubes over the spring. Position them in the middle and 2 cm from each end.
- **24.** Use a heat gun and gently heat the protective tubes until they wrap tightly around the spring.





- 25. Let the spring cool down to room temperature.
- **26.** Apply a generous layer of assembly grease on the spring and protective tubes.
- **27.** Reinstall the spring into the stanchion tube. If a washer was removed in step 4 (page 9) 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.

- 28. If the 28 mm hex socket was used to loosen the top cap perform step 29 applying loctite. Skip step 29 if the cassette lock ring tool was used since the top cap has preapplied loctite
- **29.** Apply blue Loctite 243 to the first (lower) two (2) threads of the top cap (male).
- **30.** 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.

Important!

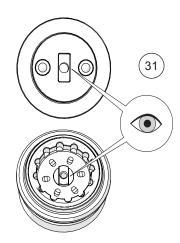
Apply pressure on socket while torqueing.

- **31.** 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.
- **32.** 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.
- 33. Wipe off eventual excessive Loctite 243

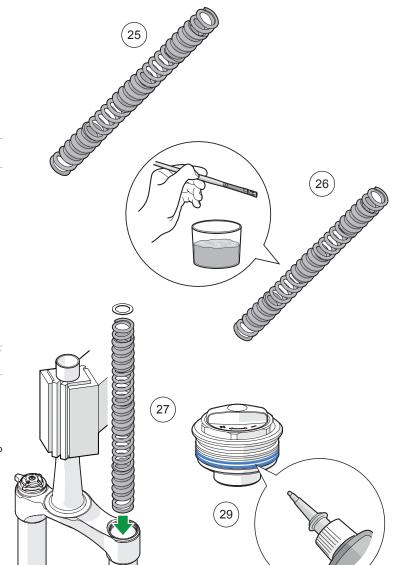
Important!

Leave the Loctite to cure for 24 hours before riding.









- 34. Clean the stanchion tubes with a paper cloth or a soft rag.
- **35.** Reinstall the stanchion tubes into the lower legs. Clean out old oil before installing.
- **36.** 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.

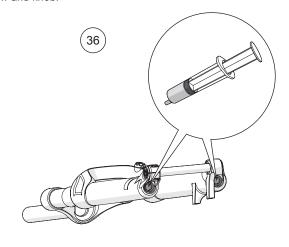
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leg	σ	ğ

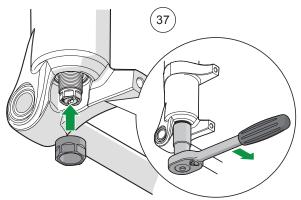
		Damper fork leg		Spring fork leg	
Model	Fork part no.	Oil	Volume	Oil	Volume
RXF36	FG361x 1770	Fork lubrication fluid	2 ml	Fork lubrication fluid	10 ml
RXF36	FG361x 192x	Fork lubrication fluid	5 ml	Fork lubrication fluid	10 ml
RXF36	FG361x 194x	Fork lubrication fluid	5 ml	Fork lubrication fluid	10 ml
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

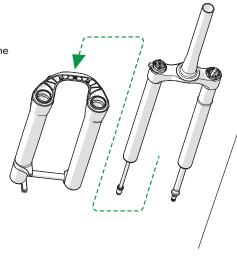
See appendix A to detemine the part no. of the fork.

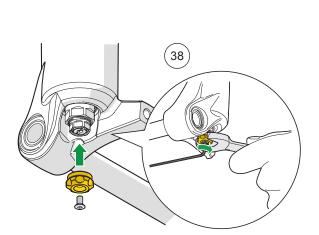
37. Reinstall the rebound adjuster nut. Use a torque wrench with a 14 mm hex socket and tighten to 10 Nm.

38. 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.



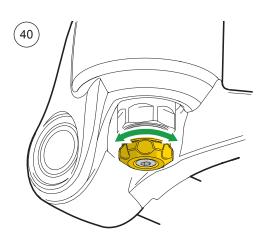


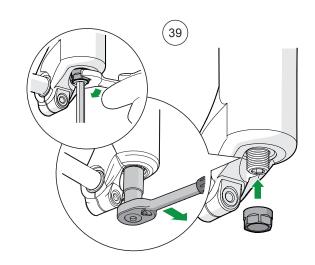


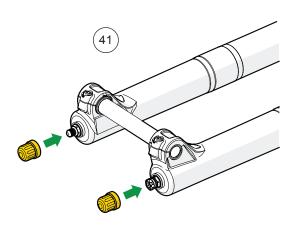


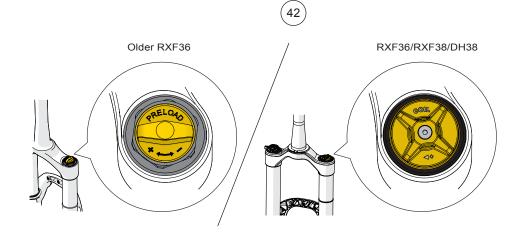
- **39.** Reinstall the spring cartridge nut. Use a 6 mm hex wrench to hold the spring cartridge steady and fasten the nut with a 14 mm wrench. Use a socket wrench with a 14 mm deep hex socket to tighten the nut to 10 Nm.
- 40. Adjust the rebound setting.
- **41.** Reinstall the golden bash caps. Tighten by hand. (Only for DH38)
- 42. Adjust the preload setting.
- **43.** Install the fork on the bike according to instructions in the Owner's manual. Remember to position the bottom crown at distance recorded at step 2 from top of stanchion tube (only DH38).

If the bottom crown is mounted too low the crown will make contact with the tire when bottoming. Always remove air spring pressure and compress the fork fully after mounting to ensure proper tire clearance. Please consult the Owner's manual for further details.



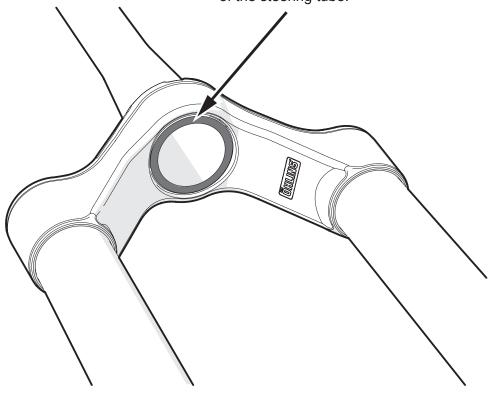


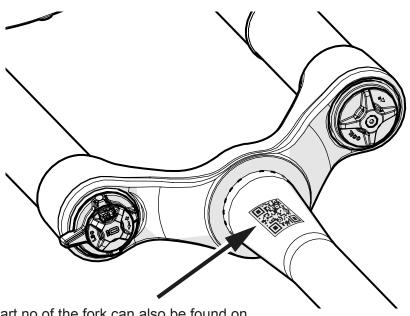




Appendix A (For RXF36/RXF38)

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

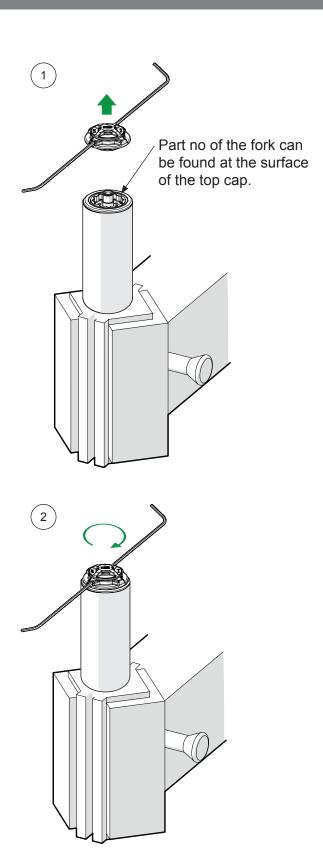




The part no of the fork can also be found on the steerer tube as a QR-code. Use a QR-code reader in a smartphone to receive the part no.

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



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