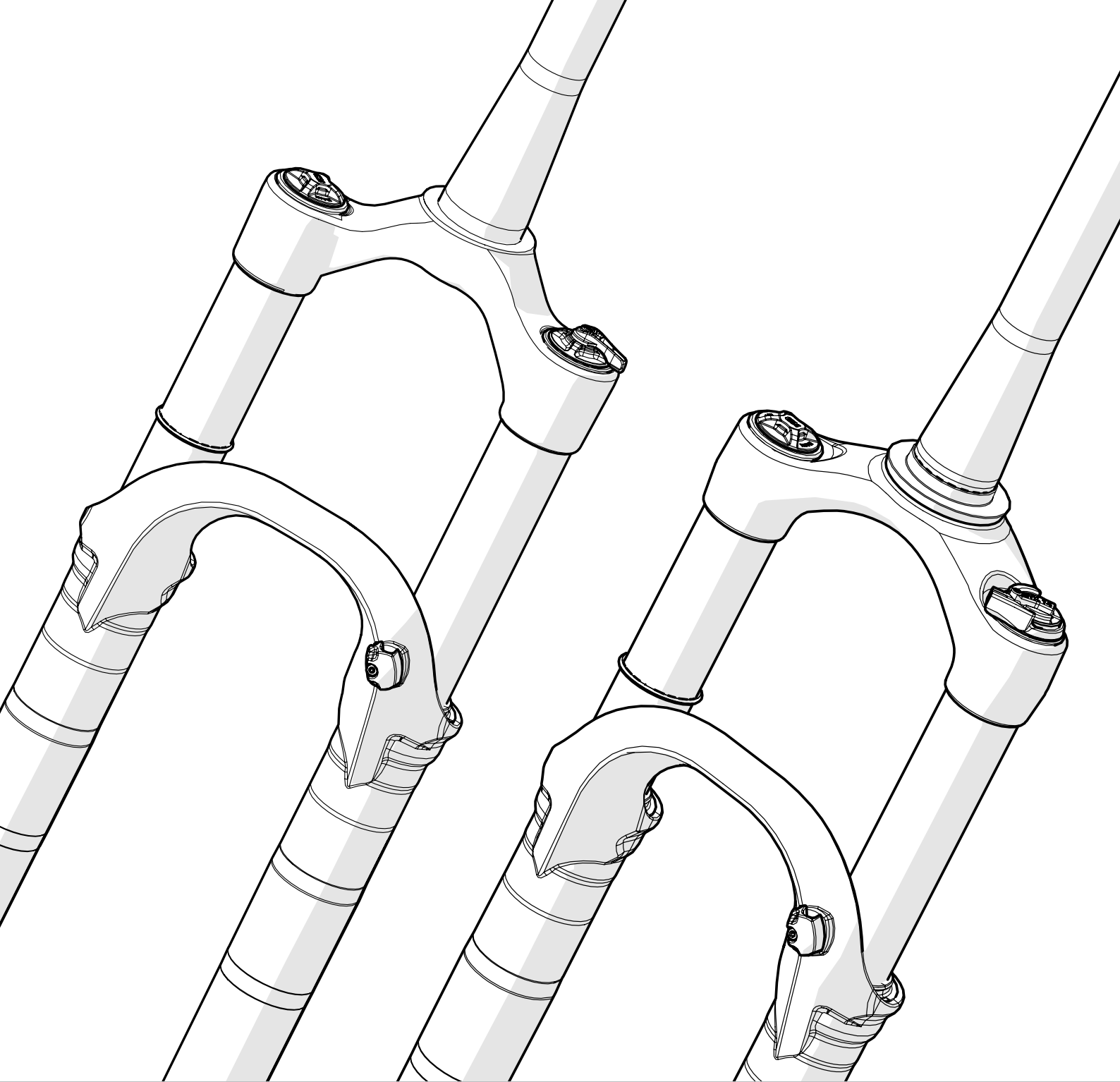




Front Fork

RXC34 m.1

Workshop Manual - OTX14 100h Service



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.

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 Service Centre.

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.

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

Warning!

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.

Warning!

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.

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OTX14 100h service.....	5
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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, 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.

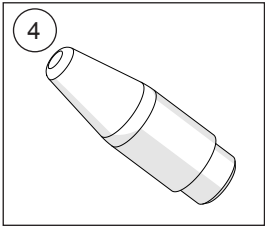
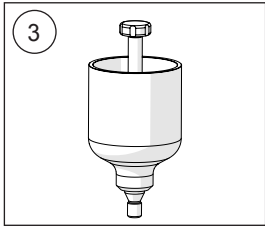
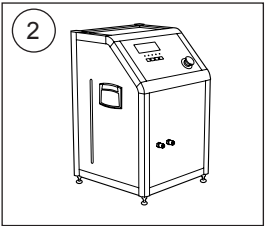
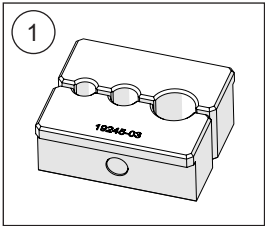
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OTX14 100H SERVICE

Tools

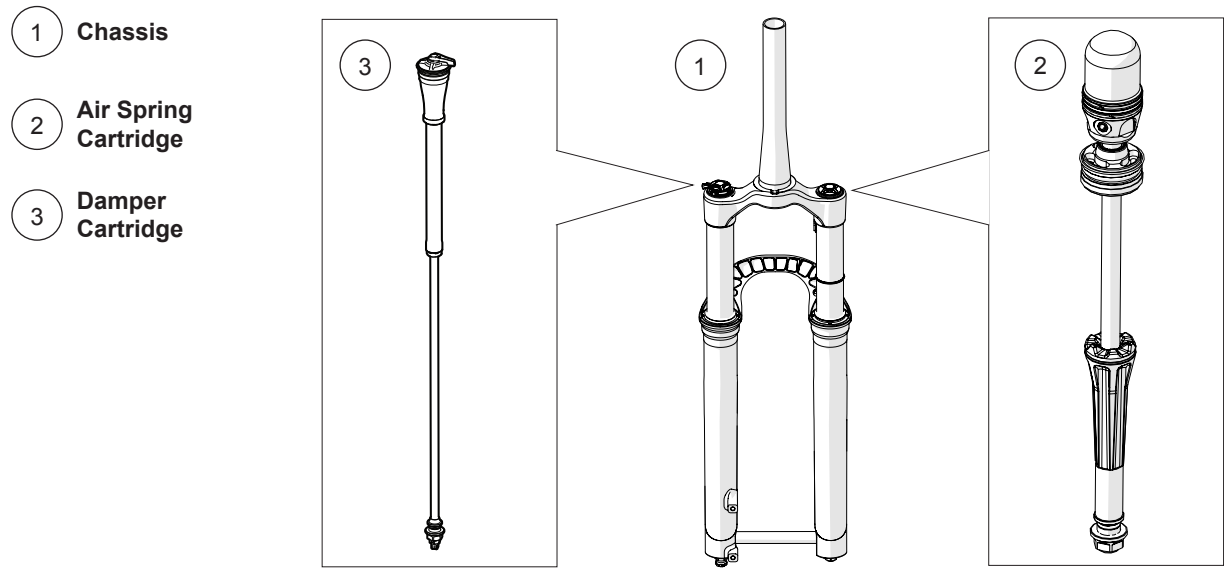
1	19245-03	Multi clamp OTX14
2	01840-04/05	Filling machine 220V/110V
3	19979-03	Bleed Cup M5
4	00739-07	Mouting tool shaft 8



Oil, grease, thread locker and sealant

Damper fluid	01309-01 - High performance suspension fluid 1L
Loctite 243	01791-04 - Loctite 243
Function grease	01338-22 - Renolit SI 410 M Silicone grease 225g
Assembly grease	Slickoleum / Buzzy's Slick Honey

Overview - General layout

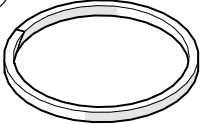


OTX14 100H SERVICE

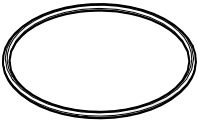
Service kit contents

1	19968-01	Service kit OTX14 100 h
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1



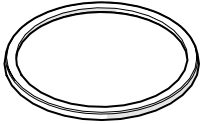
19953-02
(Seal)



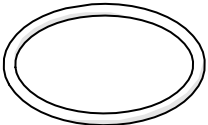
18612-18
(O-ring 27x1)



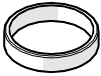
18612-04
(O-ring 10x1)



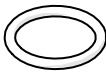
19940-01
(Dust seal)



00638-62
(O-ring 26.7x1.78)



19924-01
(Piston ring)



00438-22
(O-ring)



01027-35
(X-ring 7.52x3.53)



19752-04
(Back up ring 7.95/13.45/2)



00338-57
(O-ring 9.1x1.6)



00338-59
(O-ring 4.5x1.5)

OTX14 100H SERVICE

OTX14 100h service

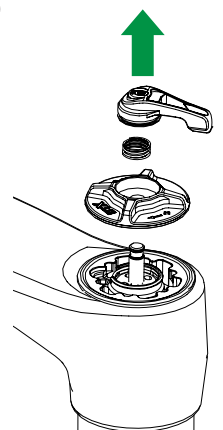
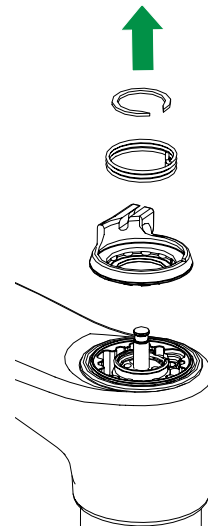
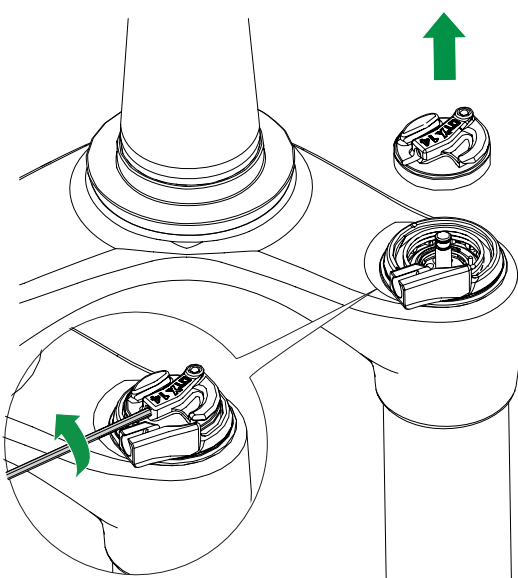
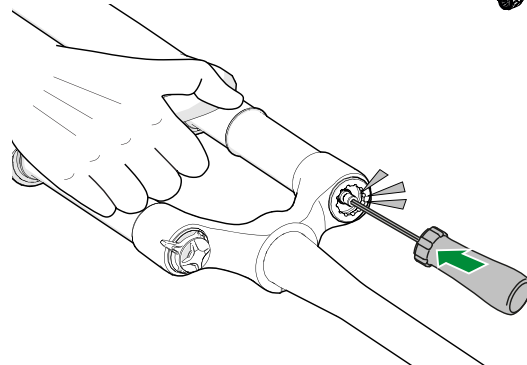
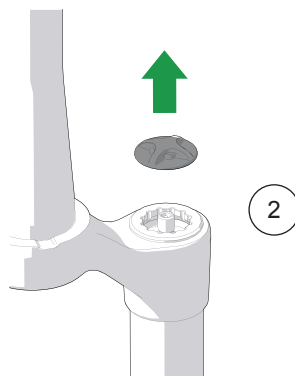
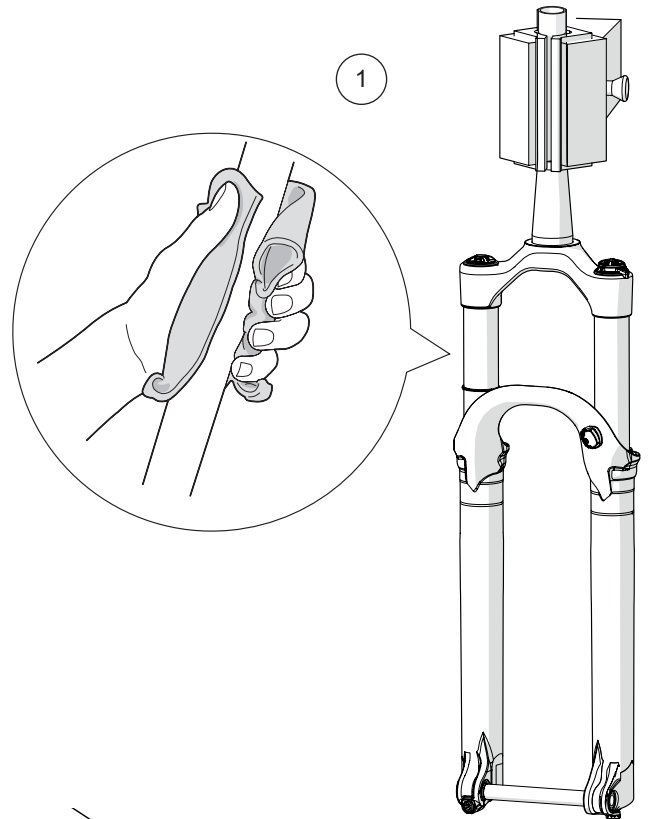
👁 Note!

Record the rebound adjuster setting and the pressure in the positive air chamber before service. We recommend using a bike stand to clamp the steering tube when working on the fork.

👁 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.

1. Thoroughly clean the outside of the fork from dirt or grit.
2. **Only necessary if Air spring is going to be serviced as well:** Release all the air from the main chamber and the negative chamber by holding the fork extended in the transfer position.
Tip! When almost all air is released from the spring, let go of the lower and let it compress about 30 mm until all the pressure is gone. This will help with getting the seal head out.
3. Use a 1.5 mm hex to remove the adjuster. Be aware of the pre-tension of the spring in the remote adjuster.
4. Remote: Remove the circlip.
5. Record Rebound and LSC and then sett all adjusters to the fully open position, this will help with bleeding the system later on.

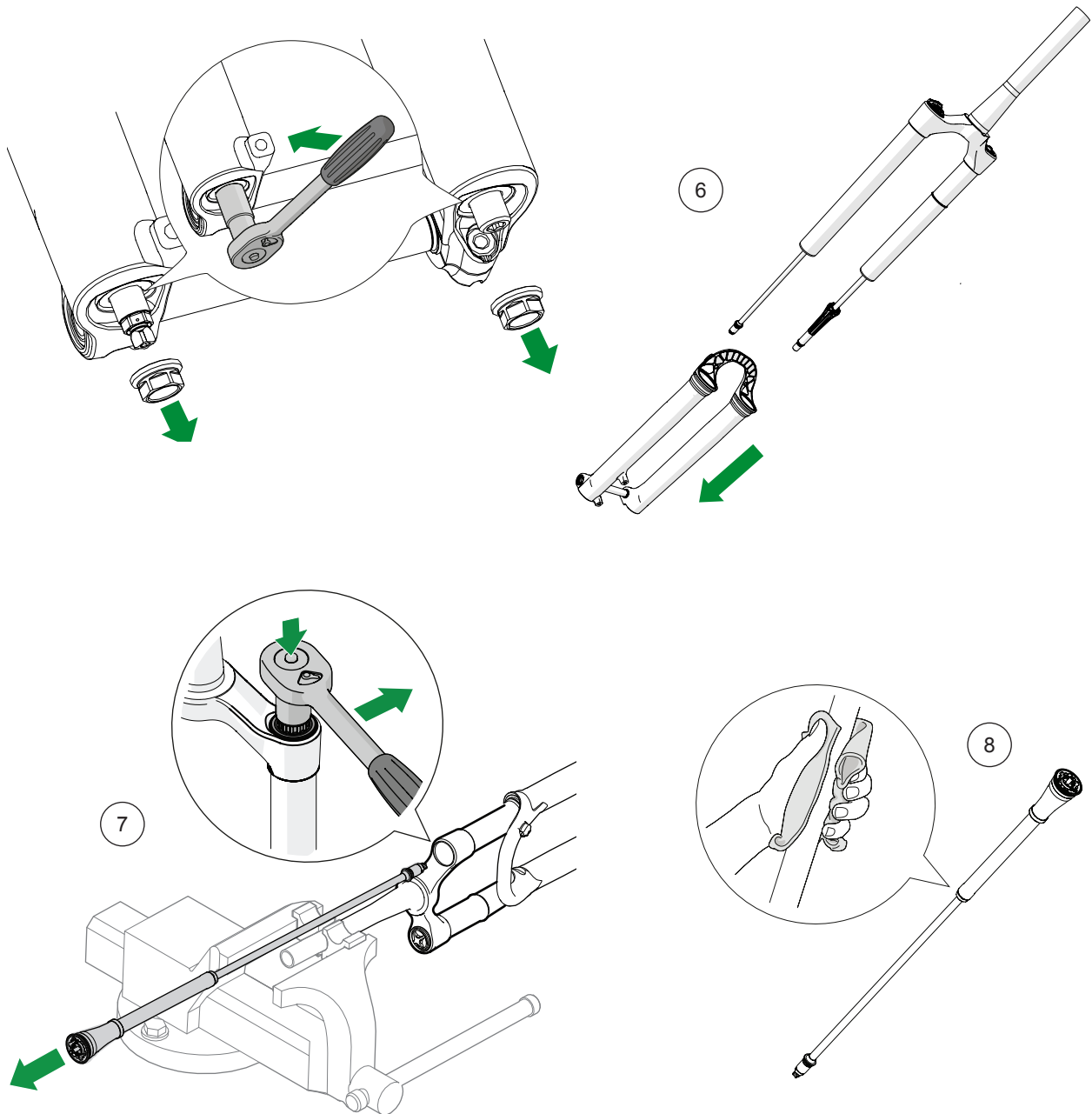


OTX14 100H SERVICE

👁 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.

6. Remove the nut on both sides by using a socket wrench with a 14 mm deep hex socket.
7. Use a socket wrench or a cassette lock ring socket to loosen the damper cartridge. Pull the damper cartridge out from the stanchion tube.
8. Use a rag or cloth to wipe the cartridge clean from old fork oil.



OTX14 100H 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.

9. Use a 2.5 mm hex wrench to undo the bleed port screw.

10. Holding the cartridge upside down, drain the cartridge of oil by cycling the piston rod until the system is mostly empty.

11. Place the cartridge in the multi clamp.

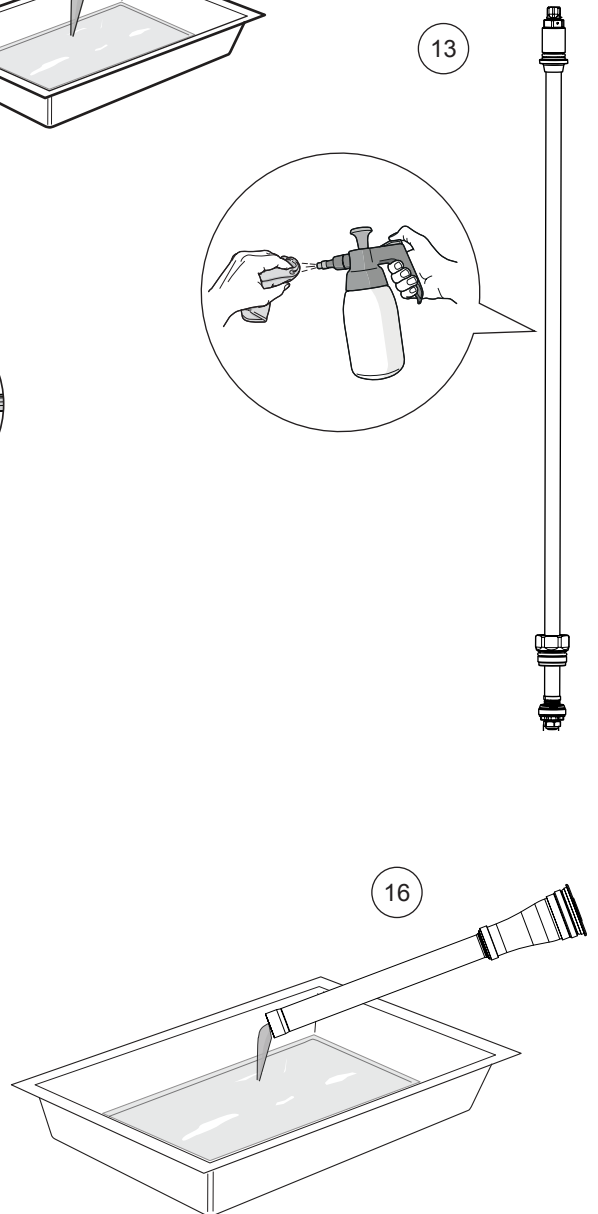
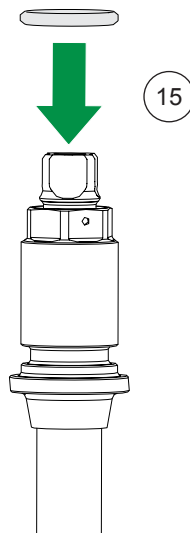
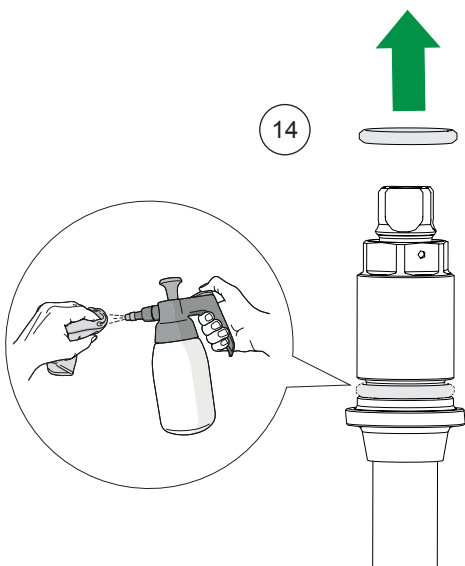
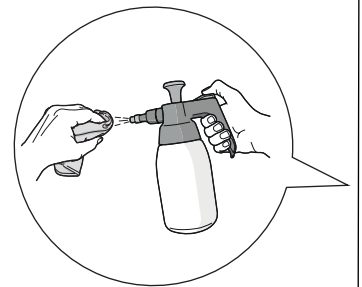
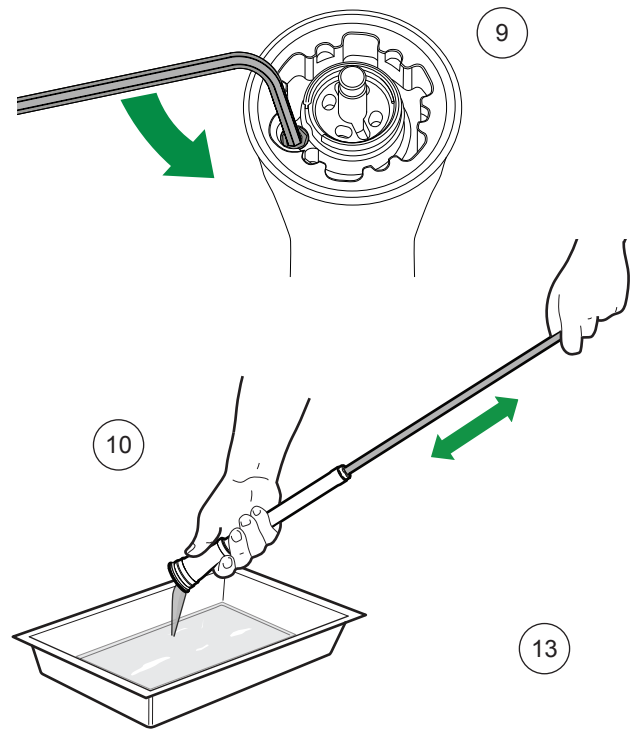
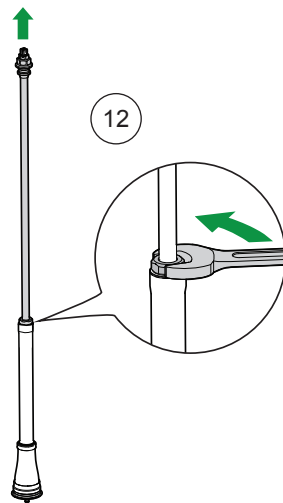
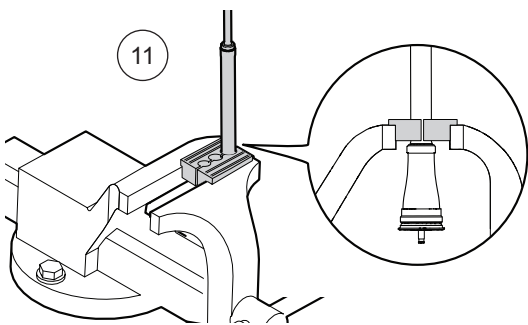
12. Use a 16 mm wrench to remove the piston rod assembly.

13. Clean the piston rod assembly.

14. Remove the old o-ring (00338-57) from the rod end.

15. Install the new o-ring (00338-57) on the rod end.

16. Set the cylinder tube aside and let any remaining oil drain from it.



OTX14 100H 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.

👉 Caution!

Be careful not to damage the surface of the piston.

17. Using a small box cutter, remove the old piston ring (19924-01).

18. Clean the piston assembly.

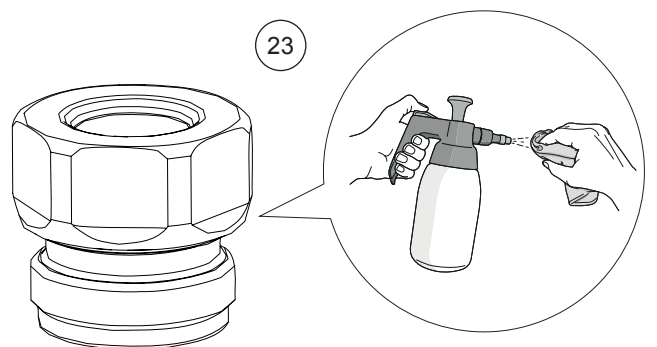
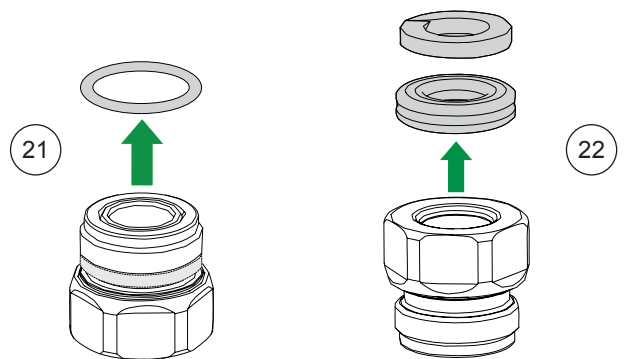
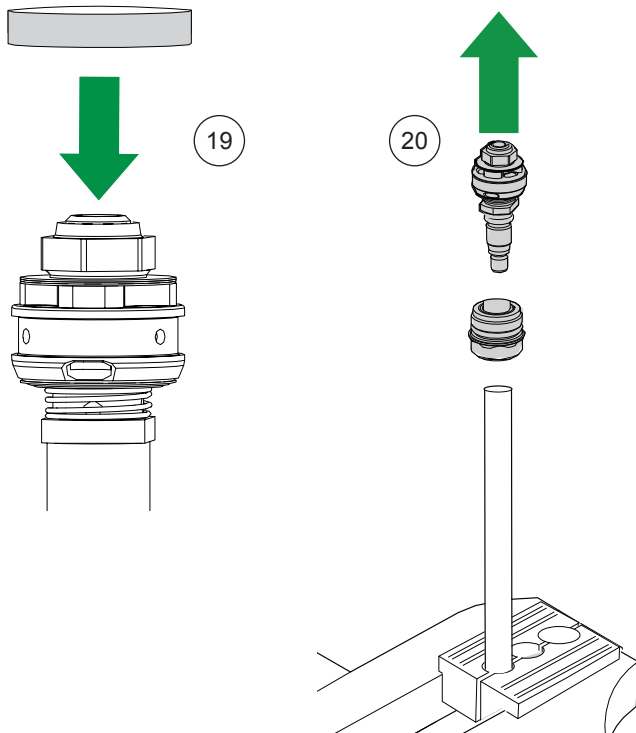
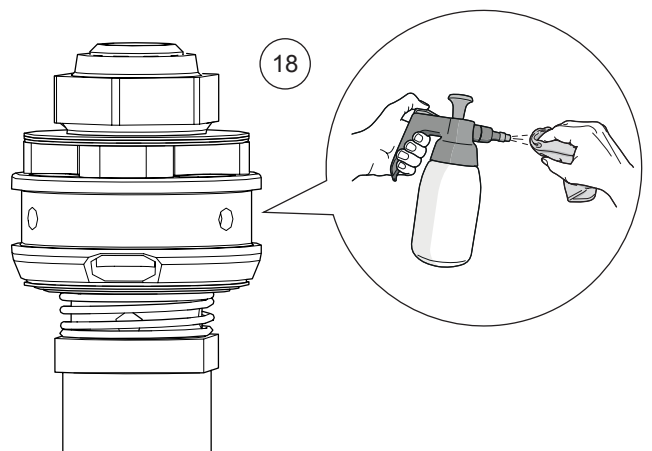
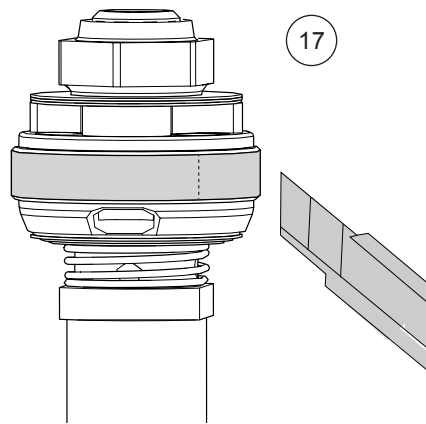
19. Install the new piston band (19924-01) on the piston.

20. Place the piston rod assembly in the multi clamp. Using a 8 mm wrench, remove the piston assembly and the seal head assembly.

21. Remove the o-ring (00438-22) from the seal head.

22. Remove the X-ring (01027-12) and the back up ring (01032-43) from the seal head.

23. Clean the seal head.



OTX14 100H 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.

24. Apply a thin layer of Function Grease to the new X-ring (01027-12) and the new back up ring (01032-43) and install them in the seal head.

25. Install the new o-ring (00438-22) on the seal head.

26. Carefully re-enter the seal head assembly on to the piston shaft using the Mounting tool shaft 8 (00739-07).

27. Remove the old o-ring (00338-59) from the piston assembly.

28. Install the new o-ring (00338-59) on the piston assembly.

29. Apply Loctite 243 to the threads of the piston assembly.

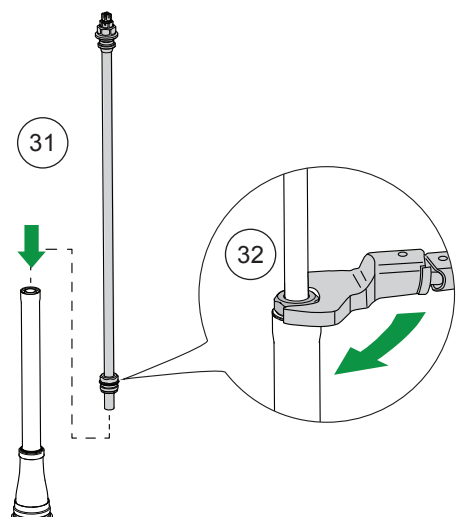
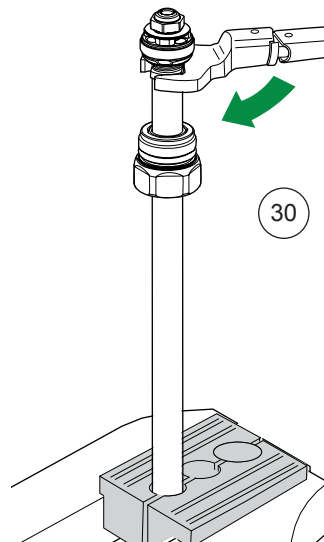
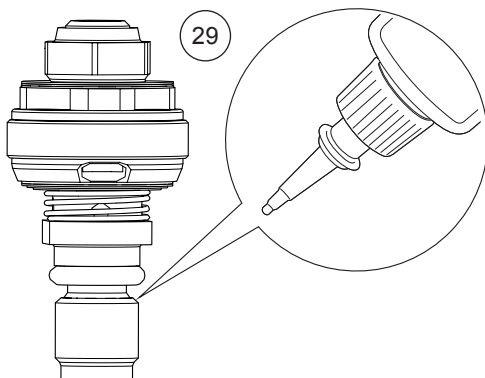
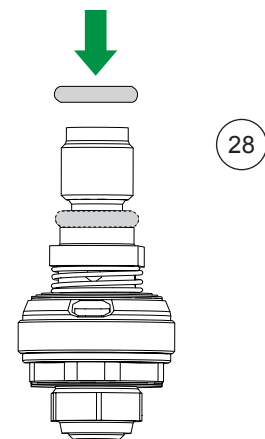
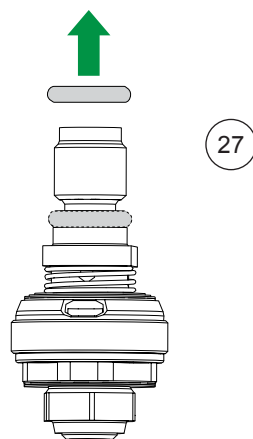
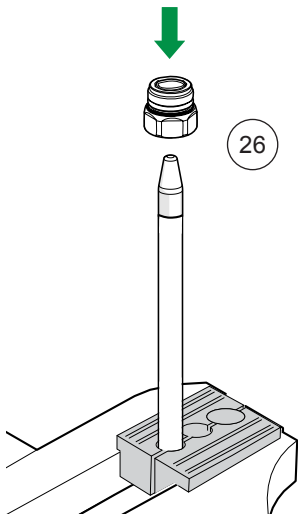
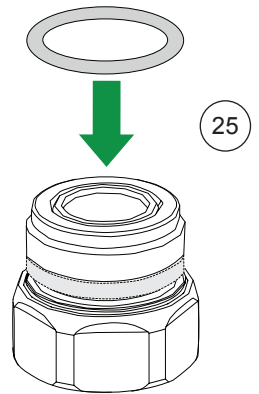
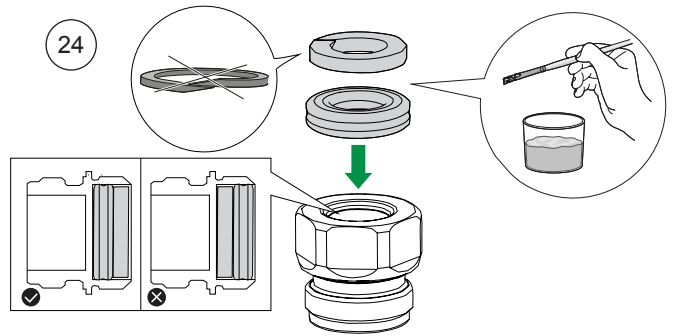
Caution!

Too much Loctite can cause the rebound needle so seize.

30. Using a 8 mm open torque wrench piston assembly to the piston shaft. Torque 5 Nm.

31. Re-install the Piston shaft assembly into the cylinder tube.

32. Using a 16 mm open torque wrench tighten the seal head to the cylinder tube. Torque 7 Nm.



OTX14 100H 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.

33. Remove the o-ring (00638-62) from the top cap.

34. Install the new o-ring (00638-62) on the top cap.

👉 Caution!

Never connect the damper to the filling machine without having it installed in the stanchion tube. Failing to do so will over inflate the bladder.

35. Re-insert the OTX14 cartridge in to the CSU. Using a torque wrench with a cassette locking tool tighten the top cap to 20 Nm.

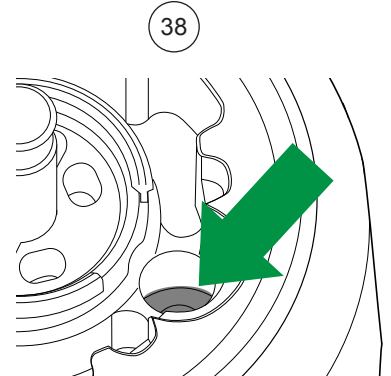
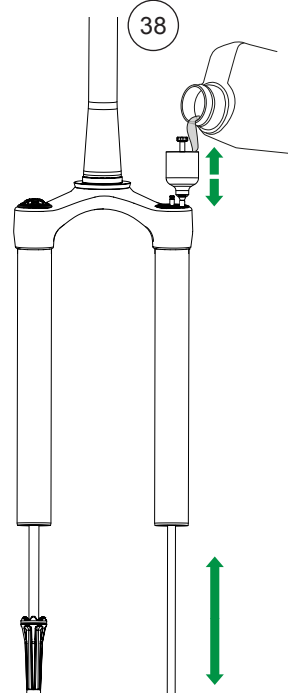
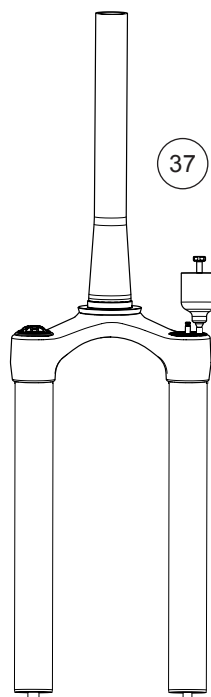
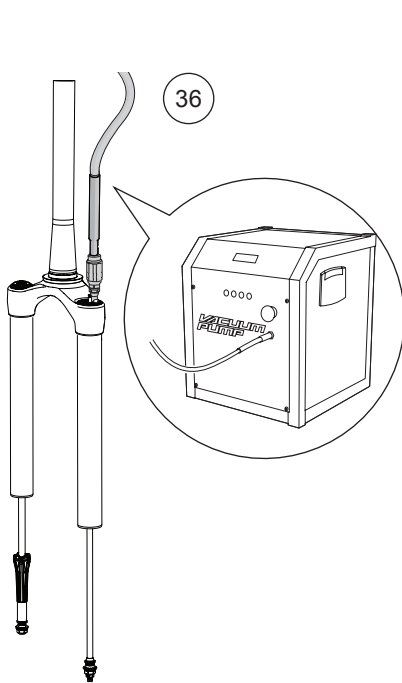
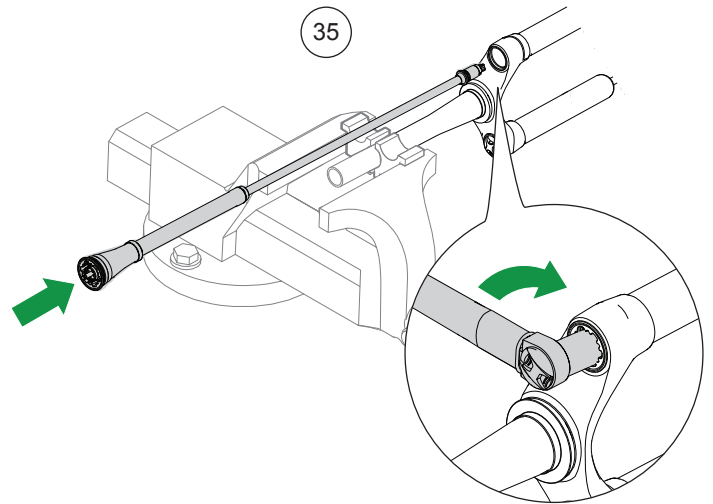
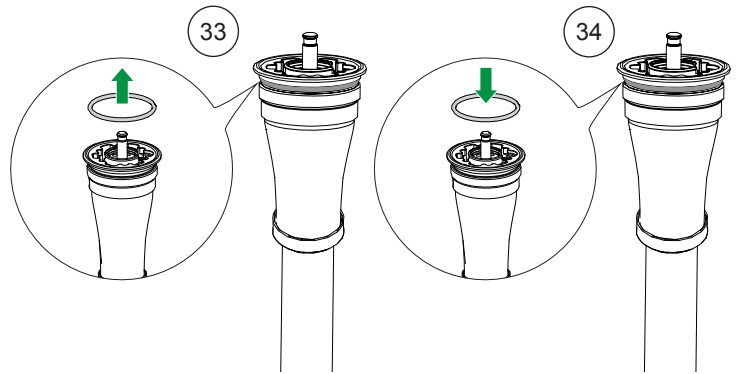
👉 Caution!

Never allow the damper to fully bottom out. This might cause damage to the system. This is especial important during the vacuum phase of the filling. Always clamp or hold the piston rod in it's fully extended position during filling with the machine.

36. Connect the damper to the vacuum filling machine via the bleed port to fill the damper. Oil: 01309-01

37. In a upright position, disconnect the filling machine and connect the "Bleed Cup M5" (19979-03).

38. Fill the "bleed cup" half way with 01309-01, push the cup down to open the valve. Cycle the damper until any remaining air is gone. Start unthreading the bleed cup and then close the valve by pulling the cup up. The oil level should be visible in the bleed port.



OTX14 100H 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.

39. Use a torque wrench 2.5 mm hex to re-install the bleed port screw. Torque 1 Nm

40. Clean the top cap from any residual oil.

Remote adjuster:

41. Return the LSC needle to the original setting recorded in step 5. Lock ring pliers can be used.

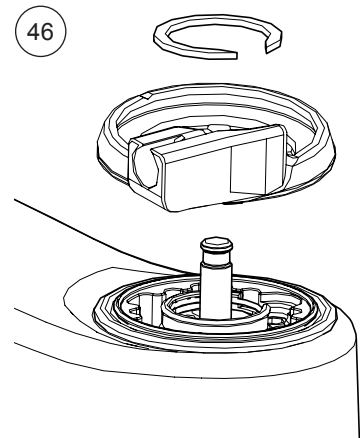
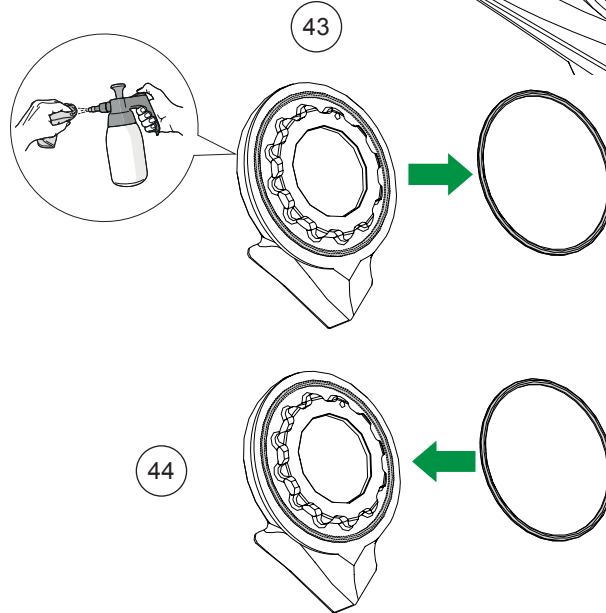
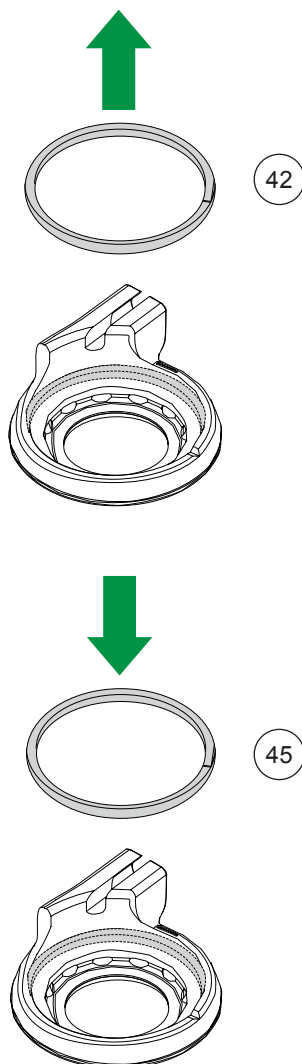
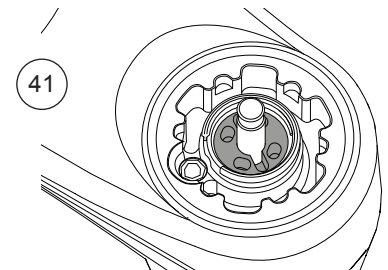
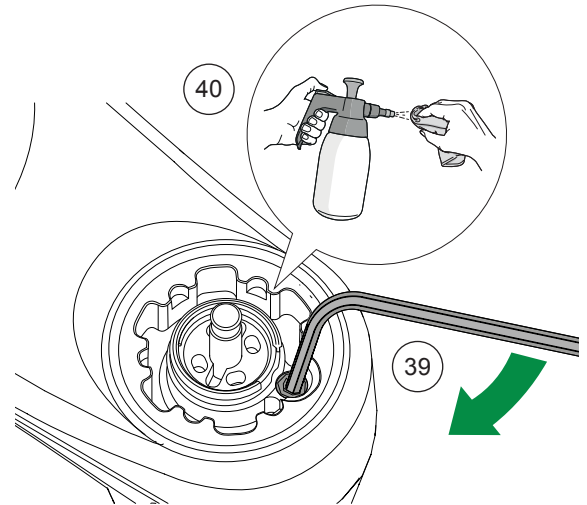
42. Remove the seal (19953-02) from the remote connection body.

43. Remove the o-ring (18612-12) from the remote connection body. Clean the remote connection body.

44. Install a new o-ring (18612-12) on to the remote connection body.

45. Install the new seal (19953-02) in the remote connection body.

46. Re-install the remote connection body and the circlip on to the top cap.



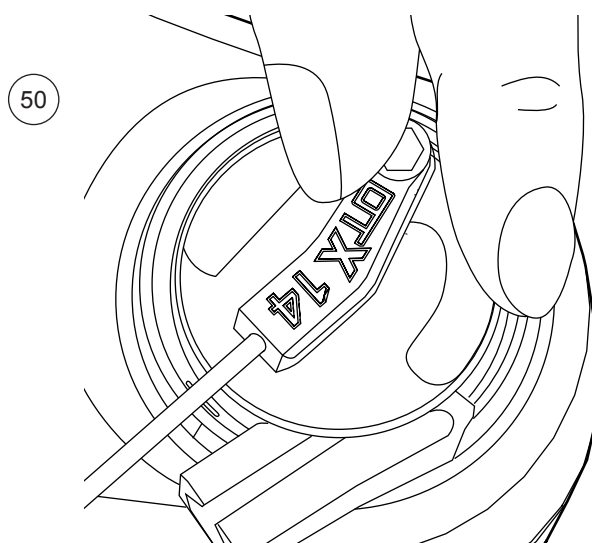
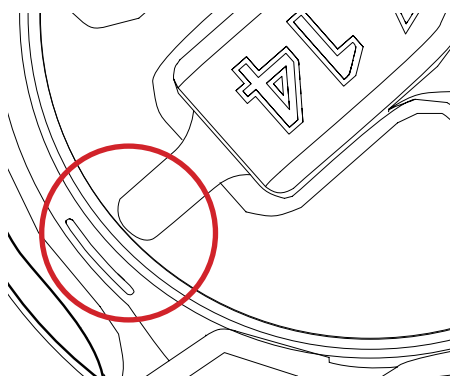
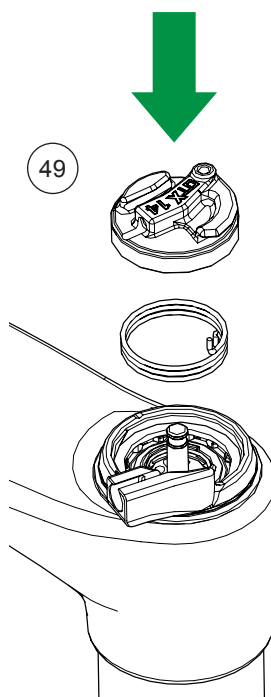
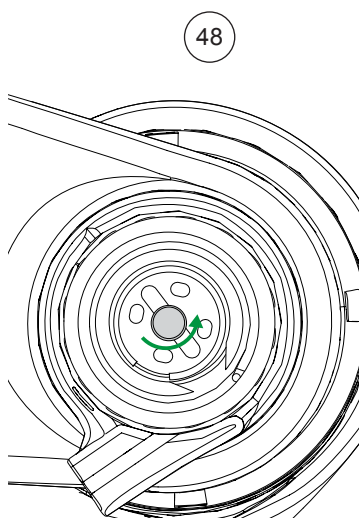
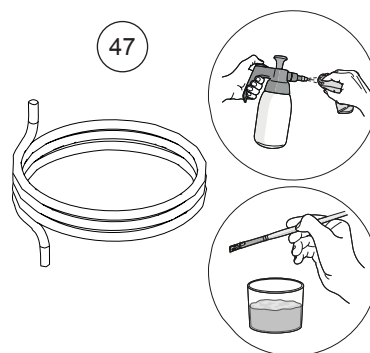
OTX14 100H SERVICE

47. Clean the remote connection spring and coat it in a thin layer of Function Grease.

48. Make sure that the pedal mode adjustment rod is in Open position, against the end stop counter clockwise.

49. Install the spring and adjuster. Make sure that the spring shanks seats properly in the retention holes.

50. Using a 1.5 mm hex key while holding the adjuster down lightly with a finger, pre-tension the spring until the hex key aligns with the mark on the remote connection body. Tighten the screw to 0.5 Nm.



OTX14 100H 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.

Regular adjuster

51. Remove the seal (19940-01) from the LSC knob and clean it.

52. Apply a thin layer of Function Grease to the new seal (19940-01) and install it on the LSC knob.

53. Remove the o-ring (18612-04) from the Ride Mode adjuster and clean it.

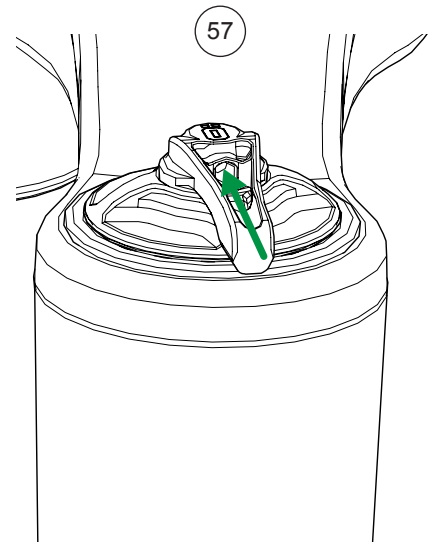
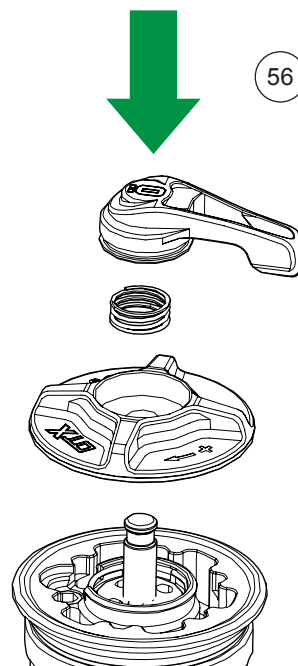
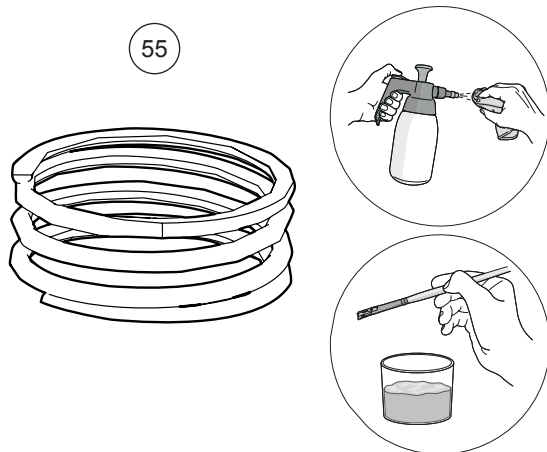
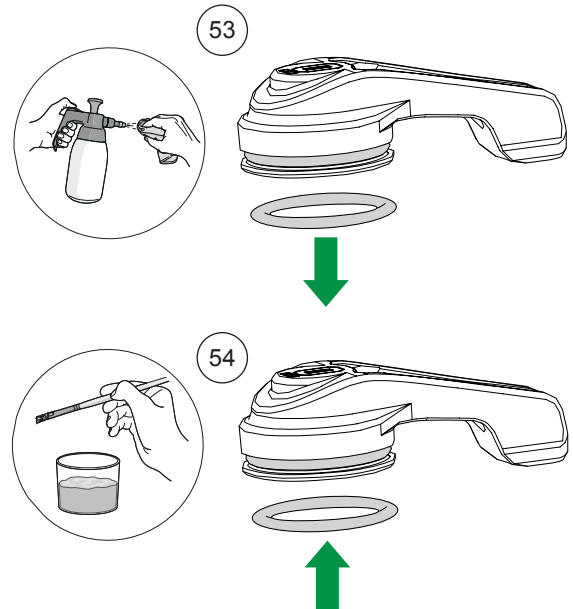
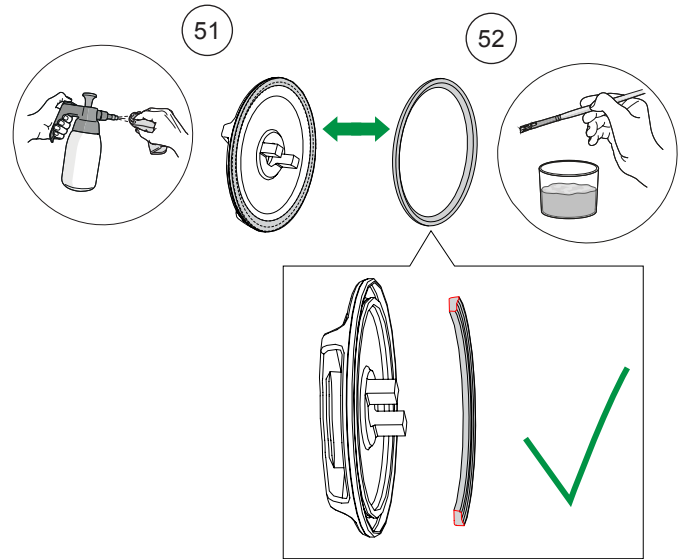
54. Apply a thin layer of Function Grease to the new o-ring (18612-04) and install it on the Ride mode adjuster.

55. Clean the adjuster spring and apply a thin layer of Function grease to it.

56. Install the LSC knob, adjuster spring and Ride Mode adjuster on the damper cartridge.

57. While holding the adjuster down lightly with a finger, using a 1.5 mm hex key tighten the screw to 0.5 Nm.

58. Adjust the LCS to the value recorded in step 5.

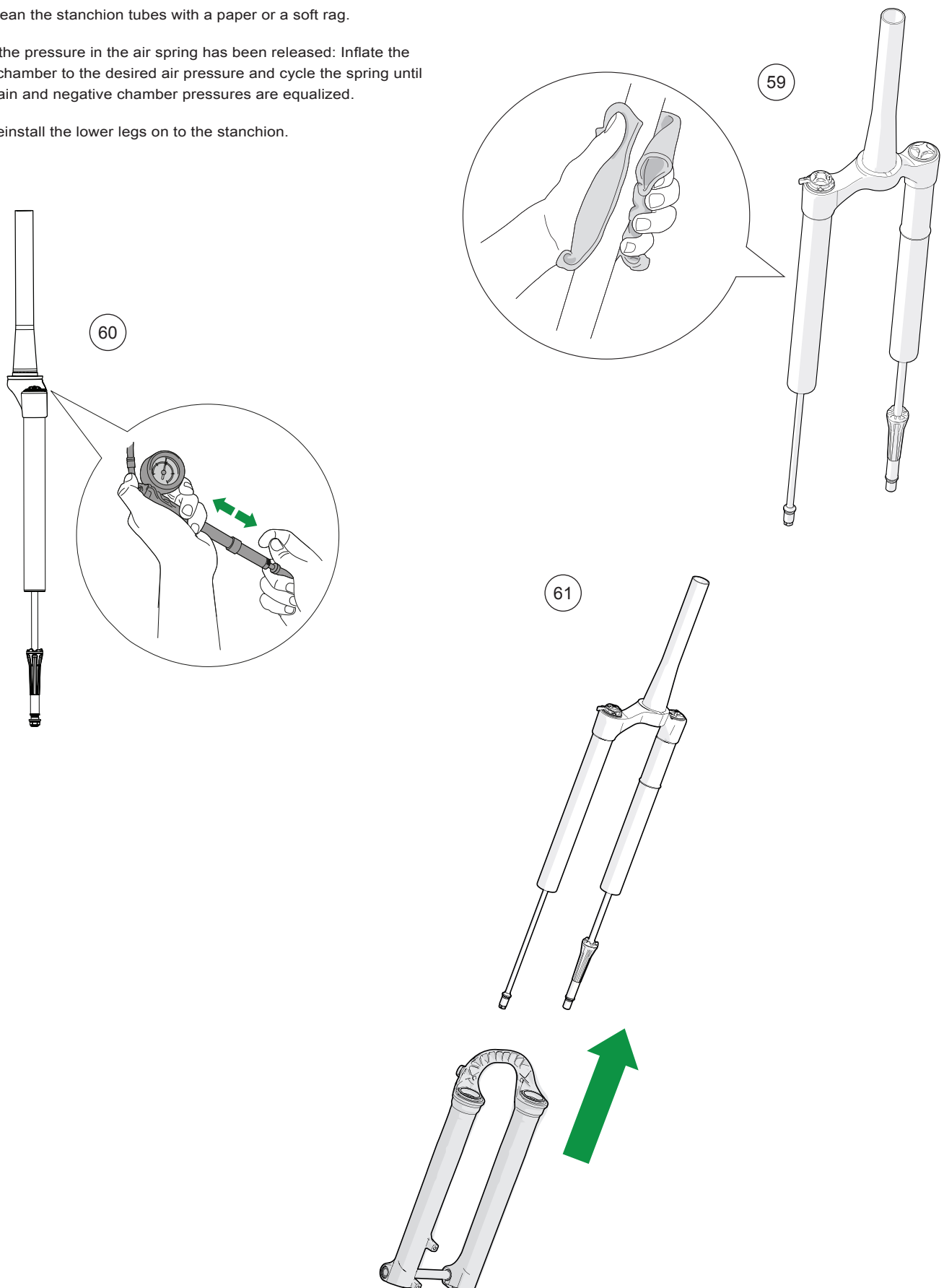


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59. Clean the stanchion tubes with a paper or a soft rag.

60. If the pressure in the air spring has been released: Inflate the main chamber to the desired air pressure and cycle the spring until the main and negative chamber pressures are equalized.

61. Reinstall the lower legs on to the stanchion.



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

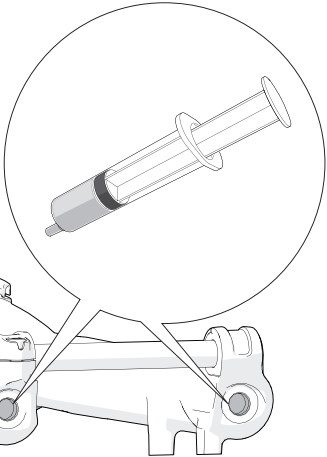
Model	Fork part no.	Damper fork leg		Spring fork leg	
		Oil	Volume	Oil	Volume
RXF34 m.2	FGxxx 34xx 22xx	Damper fluid	10 ml	Damper fluid	10 ml
RXC34 m.1	FGxxx 34xx 23xx	Damper fluid	10 ml	Damper fluid	10 ml

See appendix A and B to determine the part no. of the fork.

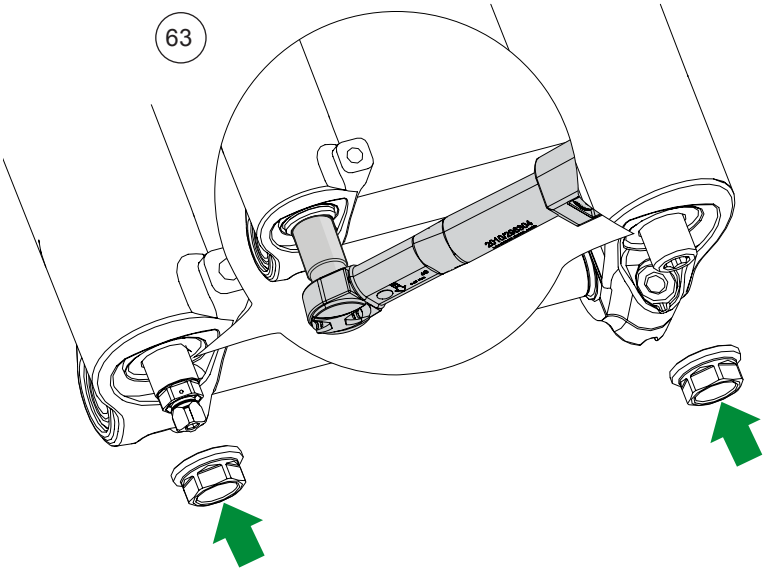
63. Reinstall the nuts. Use a torque wrench with a 14 mm hex socket and tighten to 10 Nm.

64. Adjust the rebound setting according to values recorded.

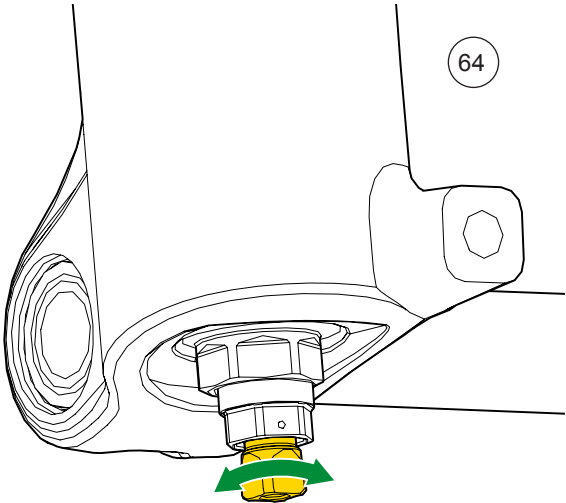
62



63



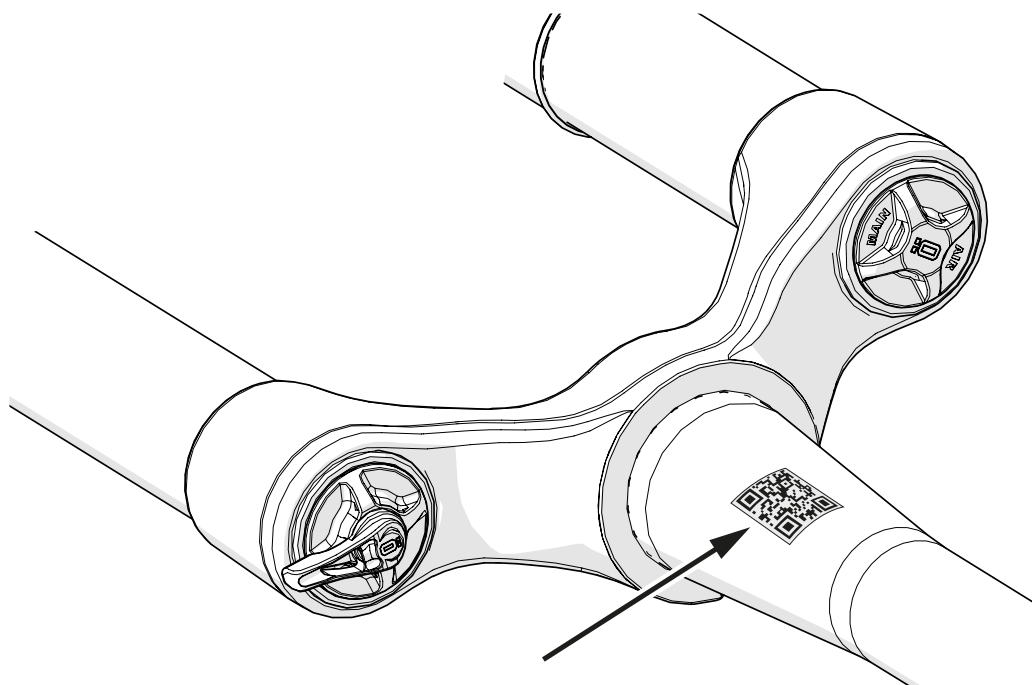
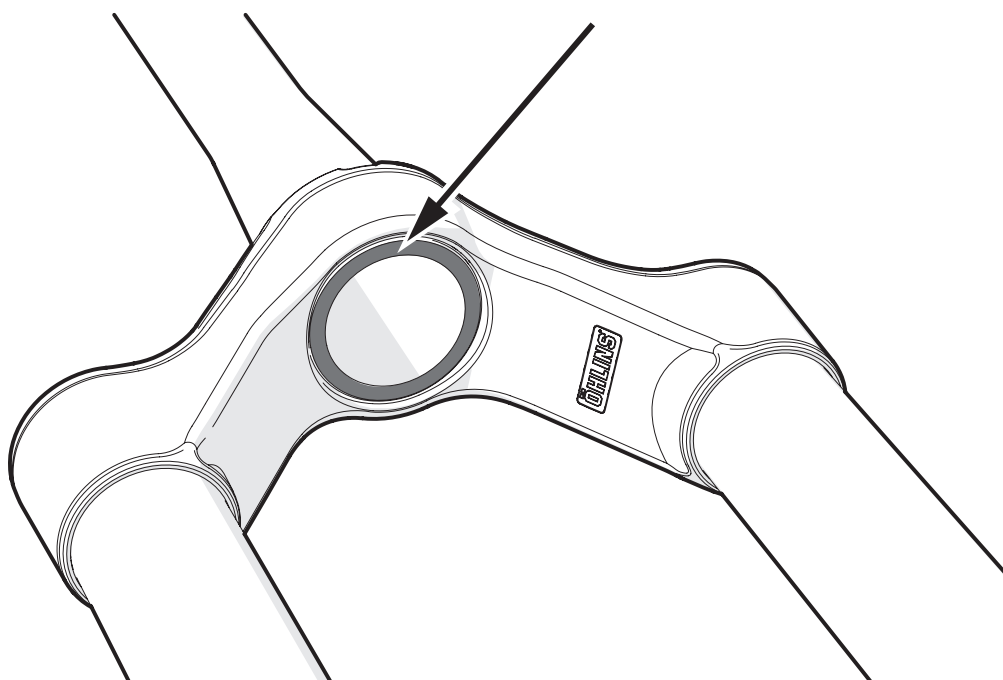
64



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Appendix A. RXF34 m.2/RXC 34 m.1

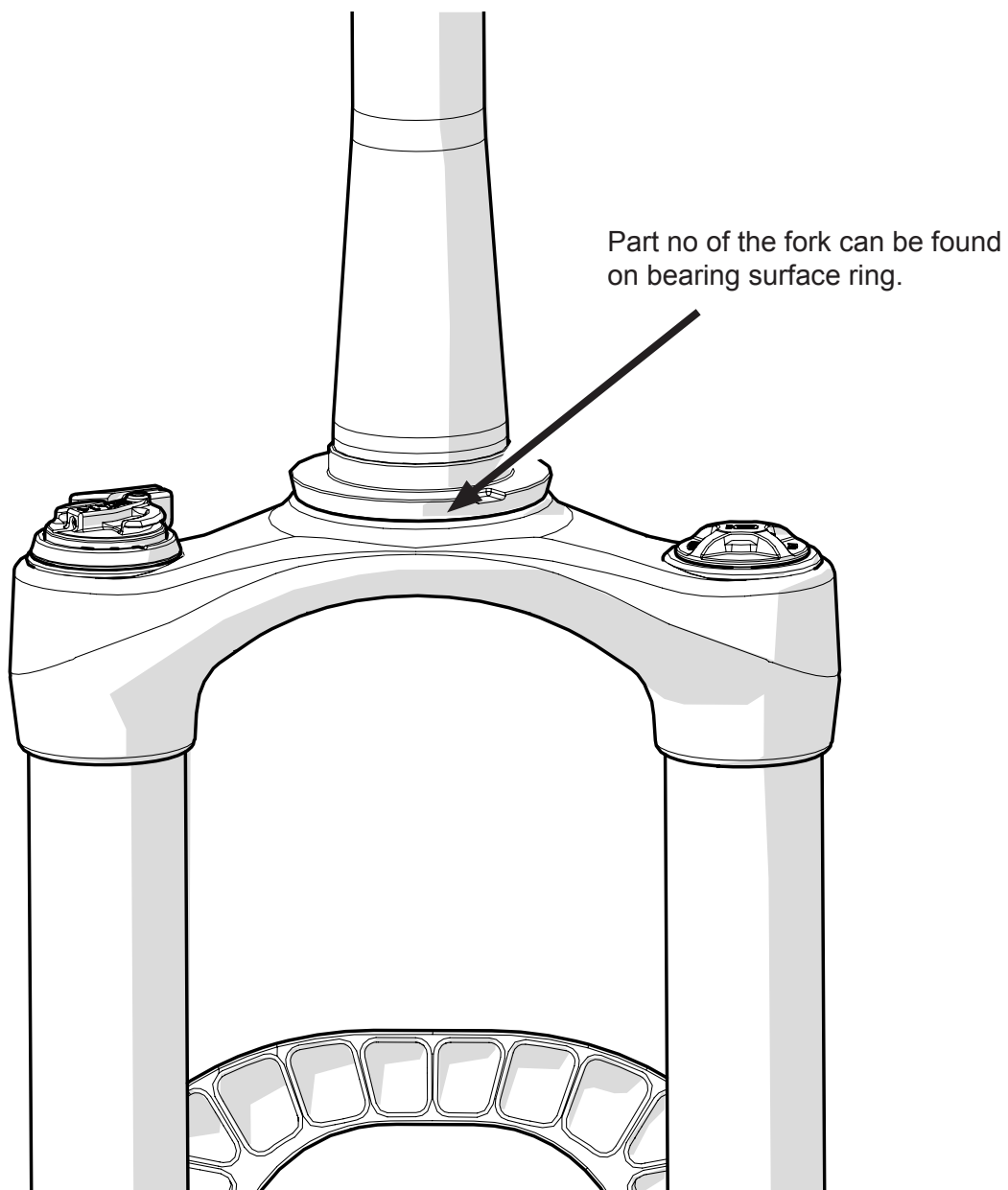
Part no of the fork can be found at the bottom of the steerer tube.



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.

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Appendix B. RXC34 m.1 Carbon



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Box 722
SE-194 27, Upplands Väsby
Sweden

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