



For exploded diagram and part number information, refer to the Spare Parts Catalog available on our website at www.rockshox.com.

Contact your local distributor or visit the RockShox website at www.rockshox.com for ordering information.

Information contained in this publication is subject to change at anytime without prior notice.

For the latest technical information, visit our website at www.rockshox.com.

Names used in this manual may be trademarks or registered trademarks of others.

TOOLS NEEDED

- Clean work area
- 24mm and 10mm Socket Wrench
- Dental, or sharp, pick
- 300 psi Shock Pump
- Lint-free rags
- Judy Butter, RockShox RedRum or oil-soluble grease
- Torque wrench
- Safety glasses
- Bicycle work stand
- 5mm and 2.5mm hex wrenches
- Plastic mallet
- Oil Pan
- RockShox 5wt and 15wt oil
- Isopropyl alcohol in a spray bottle

TIPS: BEFORE YOU GET STARTED:

Right side of the fork equals rider's right, if on the bike. Left side equals rider's left. This service is best performed with fork removed from bike.

Thoroughly read this guide BEFORE performing service on your RockShox fork. All spare parts needed, are listed in the Spare Parts Catalog. www.rockshox.com or www.sram.com

PSYLO AND DUKE

IMPORTANT! REFERENCE THE LOWER LEG REMOVAL AND INSTALLATION GUIDE FOR INSTRUCTIONS ON LOWER LEG REMOVAL AND INSTALLATION (WWW.ROCKSHOX.COM OR WWW.SRAM.COM).

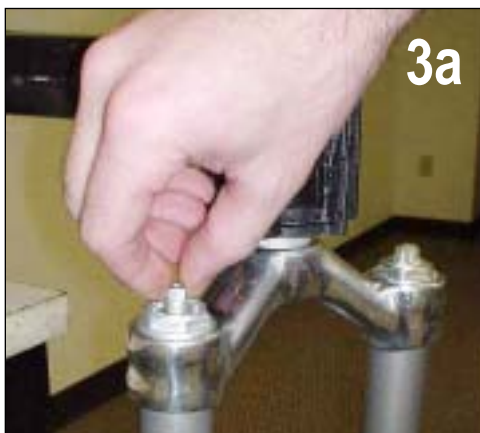
SERVICING THE PURE DAMPER WITH CLIMB-IT CONTROL

DISASSEMBLY

1. Using a 2mm or 2.5mm hex wrench, remove the Pure Climb-It Control knob screw (fig. 1).
 - 2001-2002 features a 2mm screw.
 - 2003-2004 features a 2.5mm screw.
2. Lift the Pure knob up gently (fig. 2a). Below the knob is a 5/32" ball bearing, and a detent spring. Remove the ball and spring with a magnet, or invert the fork and catch the ball and spring in your hand (fig. 2b).



3. Using your fingers, unthread the compression adjuster hex rod and remove (fig. 3a and 3b).
4. Remove the fork from the bike work stand.



5. Turn the fork over, and aim the compression top cap into the oil pan (fig. 5)
6. Using your hand, push on the rebound damper shaft, and cycle all of the oil out of the Pure damper (fig. 5).
7. Re-clamp the fork steerer tube, right side up, into the work stand.
8. Using a 24mm Socket tool, loosen and unthread the Pure compression damper top cap from crown/upper tube (fig. 8)
9. When the top cap is completely unthreaded pull the top cap/compression damper assembly slowly out of the Pure tube. You need to pull fairly hard, while twisting slightly side to side. This will help work the damper free from the tube.



TIP: IT ALSO HELPS TO HOLD A RAG AROUND THE EXPOSED COMPRESSION DAMPER ASSEMBLY AS YOU PULL AND TWIST IT FREE. THE RAG WILL ALSO COLLECT EXCESS OIL THAT MAY SPILL (FIG. 9A AND 9B)



10. Pour out any excess oil from the Pure tube.

11. With the Pure tube now empty, and oil disposed of, remove the rebound damper assembly seal head snap ring with snap ring pliers (fig. 11a and 11b).

12. The Pure tube and rebound damper assembly should slide out of the upper tube easily (fig. 12)



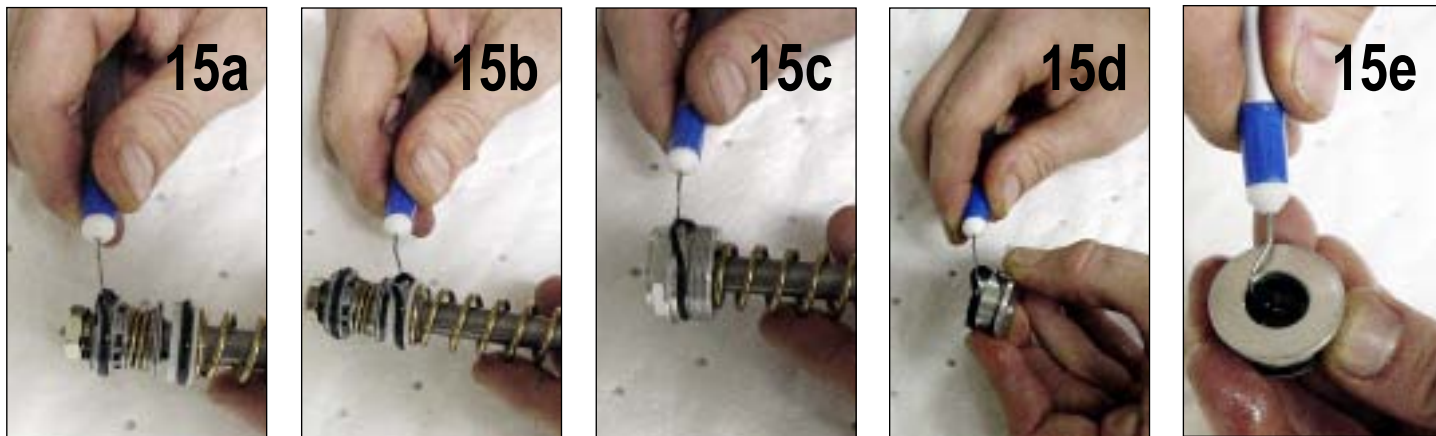
13. Hold the Pure tube assembly over oil pan, and pull the Pure rebound damper seal head from the PURE tube. Pull gently and twist. It helps to hold a rag over the seal head while pulling, to prevent splatter of excess of oil. Any remaining oil will come out when you separate the two pieces fig. 13a, 13b and 13c.



14. The rebound damper, Pure tube, and compression damper assemblies make up the Psylo/Duke PURE system (right side of the fork). Inspect all o-rings for cuts, wear, tears, or nicks (fig. 14)



15. To remove worn o-rings, use a sharp pick. Be careful not to damage the plastic pistons or seal head (fig 15a, 15b, 15c, 15d, 15e).



16. Replace all o-ring as necessary using the Pure Damper O-ring Service Kit (11.4306.245.000).

- Compression damper internal floating piston o-ring
- Compression damper compression piston o-ring
- Rebound damper outer seal head o-ring
- Rebound damper inner seal head o-ring

17. Apply oil-soluble grease or RedRum to all new o-rings. Fig 17a, 17b, 17c



NOTE: ALL PURE REBOUND SEAL HEADS PRODUCED IN MODEL YEAR 2004 AND LATER, ARE MADE OF ALUMINUM (FIG. 12). 2001 - 2003 ARE MADE OF WHITE PLASTIC.

REASSEMBLY

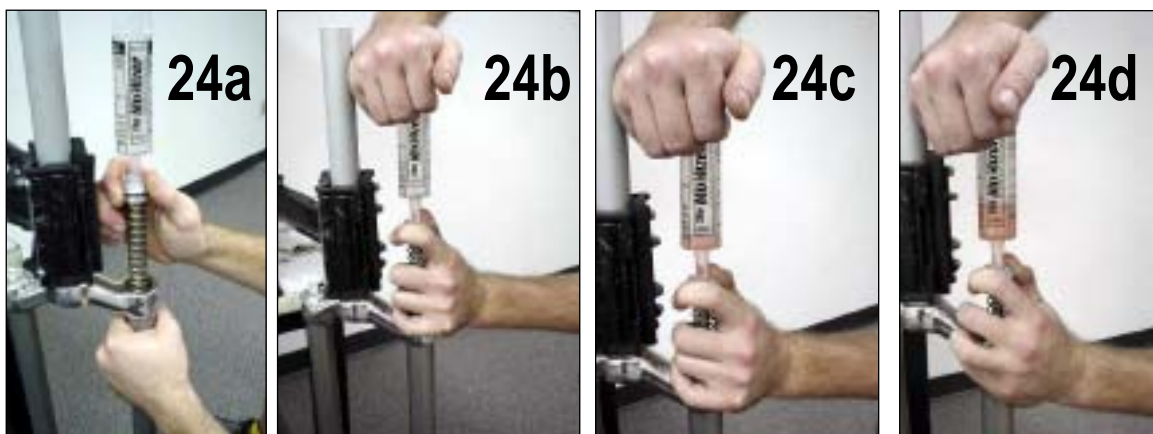
18. With all o-rings replaced, greased or oiled, re-insert the rebound damper assembly back into the Pure tube, the same way it was removed. The seal head should press/snap right into the bottom of the pure tube (fig. 18a and 18b)
19. Slide the Pure tube into the upper tube through the bottom of the upper tube (fig 19).



20. Using snap ring pliers, insert the snap ring, sharp side out, into the upper tube groove (fig. 20)
21. Pull the rebound damper shaft to the fully extended position. Insert rebound damper adjuster knob, and turn rebound damper to the full-open position (counterclockwise). This will open the damper, and allow oil to flow through the valve (fig. 21).
22. Pour 5wt-suspension oil into the top of the Pure tube until full (fig. 22a and 22b).
23. Insert the tip of the oil-mixing syringe into the top of the compression damper adjuster rod hole. Press firm to fix it tightly (fig. 23).



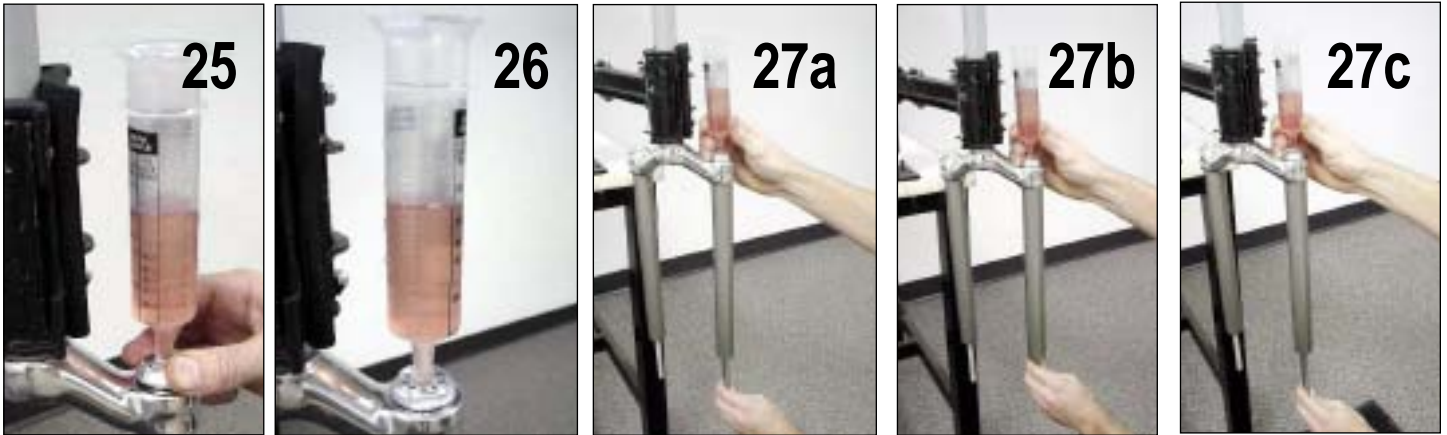
24. With the fork in the vertical position, insert and push the compression damper into the top of the Pure tube. Use a rag to cover the top of the oil-mixing syringe to prevent oil from splattering. Oil will displace into the oil syringe as you push down (fig. 24a, 24b, 24c, 25d)



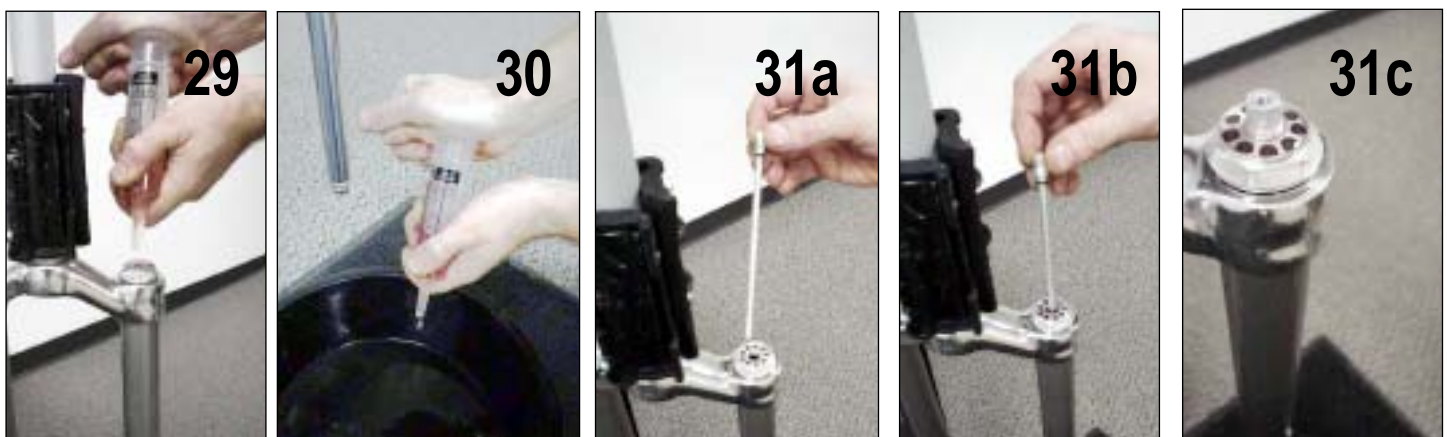
25. Using your fingers, press down on the compression damper top cap, and thread the compression damper top cap about 2/3 into the threads of the upper tube (fig. 25).
26. Your mixing syringe should be about 1/2 full of oil. Air bubbles should be visible as the rebound damper is cycled (fig. 26).

BLEEDING THE DAMPER

27. Using one hand to hold the oil-mixing syringe in place, hold the bottom of the rebound damper shaft and slowly push up and pull down on the shaft. You will see air bubbles rise to the top of the oil in the syringe (fig. 27a, 27b, 27c).



28. Continue to cycle the rebound shaft until you no longer see air bubbles in the excess, displaced oil. If air is left in the oil, the lockout feature will not function.
29. When all air is out of the oil, cup your hand firmly on the top of the syringe, and remove the syringe (fig. 29).
30. Drain the excess oil into the oil pan or back into to the oil bottle (fig. 30).
31. Insert the tip of the compression adjuster rod into the top of the compression damper hole, and let go. The adjuster rod will slowly 'sink' into the damper assembly, and oil will be displaced (fig 31a, 31b, 31c).



32. Hand-tighten the adjuster rod to the full-closed/tight position (fig. 32).
33. Turn the compression adjuster-rod ¼ turn counterclockwise.
34. Using a 24mm socket, tighten the Compression damper top cap to 60 in-lb (fig. 34).
35. Again, hand-tighten the adjuster rod to the full-closed/tight position (fig. 32).
36. Wipe away the excess oil from the compression damper top cap with a rag. Spray the top cap with isopropyl alcohol and clean with a rag until dry (fig. 36).



TESTING THE DAMPER

37. With the compression damper adjuster rod in the full-closed/clock-wise position, place the Pure Lockout knob on the hex fitting of the compression adjuster rod, with the dial closest to the back of the crown. This is the lockout position (fig. 37).
38. Try to push the rebound damper shaft up. It should not move. This is the lockout position. If the damper shaft does move, then air is still trapped inside the pure tube. Repeat the oil bleeding procedure (fig. 38).
39. Turn the Pure lockout knob one full turn counterclockwise and cycle the rebound damper shaft. It should move smoothly, with no air gaps (fig. 39a and 39b)
40. Turn the compression damper rod to the full-closed/clockwise position and re-test the lockout.
41. Turn the Pure lockout knob to the full-closed position (fig. 37)
42. Remove the Pure lockout knob.



INSTALL THE PURE KNOB

43. Turn the compression adjuster rod to the full-closed/clockwise position (fig. 32)
44. Insert the small detent spring into the compression top cap, detent hole, in the 6 o'clock position, from the back of the crown.
45. Gently place the detent ball bearing on top of the detent spring (fig. 45)
46. Place the Pure compression/lockout knob on the hex fitting of the compression adjuster rod, with the dial closest to the back of the crown. This is the 'Lockout' position. The crown acts as the lockout dial stop point
47. Insert the screw, and tighten snug (fig. 47). Not too tight!

NOTE: SEE THE LOWER LEG REMOVAL AND INSTALLATION SECTION TO RE-INSTALL THE LOWER LES.



SID DUAL AIR MODELS

IMPORTANT: REFERENCE THE LOWER LEG REMOVAL & INSTALLATION GUIDE FOR INSTRUCTION ON LOWER LEG REMOVAL AND INSTALLATION.

SERVICING THE PURE DAMPER WITH CLIMB-IT CONTROL

DISASSEMBLY

1. Remove black bottom-out bumper on damper shaft (right side).
NOTE: 2004 SID TEAM/WORLD CUP WILL NOT HAVE THIS BOTTOM OUT BUMPER ON DAMPER SHAFT. THIS IS NORMAL. THE BOTTOM-OUT BUMPERS ARE LOCATED IN THE O4 SID LOWER LEG ASSEMBLY.
2. Using a 2mm or 2.5mm hex wrench, remove the Pure Climb-It Control knob screw. (fig. 2).
 - 2001-2002 features a 2mm screw.
 - 2003-2004 features a 2.5mm screw.
3. Lift the PURE knob up gently. Below the knob is a 5/32 ball bearing, and a detent spring. Remove the ball and spring with a magnet, or invert the fork and catch the ball and spring in your hand (fig. 3).
4. Using a 24mm Socket tool, loosen PURE compression damper top cap from crown/upper tube.

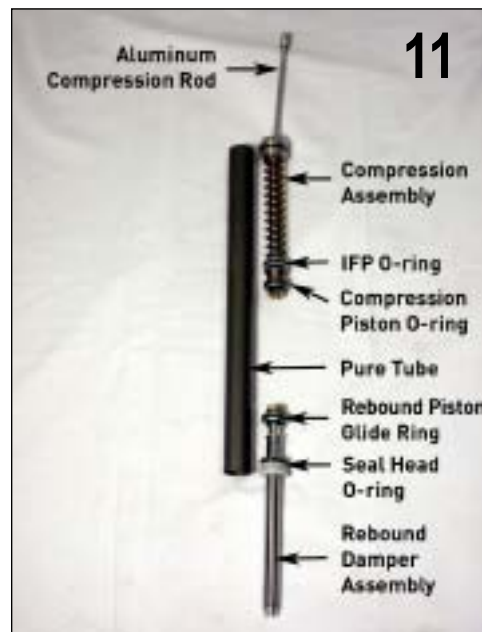


5. Using your fingers, loosen and remove the aluminum compression adjuster rod (fig 5)
6. When the top cap is completely unthreaded, pull the entire PURE damper assembly, by the top cap, up and out of the upper tube. The entire assembly pulls straight out of the upper tube, through the crown (fig. 6)
7. Turn damper tube assembly upside down, with compression damper top cap aimed inside of your oil pan. Push on the rebound damper shaft to cycle the oil from Pure tube assembly, into the oil pan. Cycle until all, or most, of the oil is drained from the tube (fig. 7).
8. Pull the top cap/compression damper assembly slowly out of the Pure tube. You need to pull fairly hard, while twisting slightly side to side. This will help work the damper free from the tube (fig. 8).

TIP: IT ALSO HELPS TO HOLD A RAG AROUND THE EXPOSED COMPRESSION DAMPER ASSEMBLY AS YOU PULL AND TWIST IT FREE. THE RAG WILL ALSO COLLECT EXCESS OIL THAT MAY SPILL.



9. Pour out any excess oil from the Pure tube.
10. With the Pure Tube now empty, and oil disposed of, remove the rebound damper assembly by pulling the Pure rebound damper seal head from the Pure tube. Pull gently and twist. It helps to hold a rag over the seal head while pulling, to prevent splatter of excess of oil. Any remaining oil will come out when you separate the two pieces (fig. 10).
11. The rebound damper, Pure tube, and compression damper assemblies make up the Pure system (right side of the fork). Inspect all o-rings for cuts, wear, tears, or nicks (fig. 11).



12. To remove worn o-rings, use a sharp pick (fig. 12a to 12e). Be careful not to damage the plastic pistons or seal head.

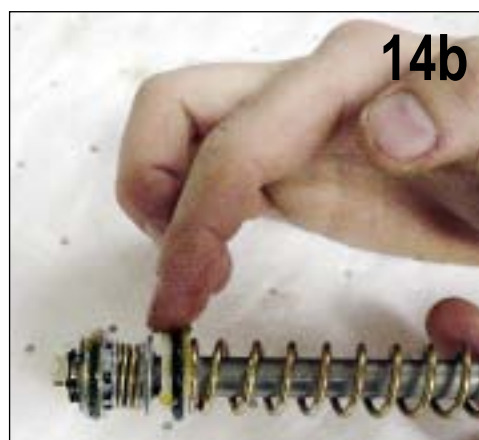
13. Replace all o-ring as necessary using the Pure Damper O-ring Service Kit (11.4306.245.000).

- Compression damper internal floating piston o-ring
- Compression damper compression piston o-ring
- Rebound damper outer seal head o-ring
- Rebound damper inner seal head o-ring



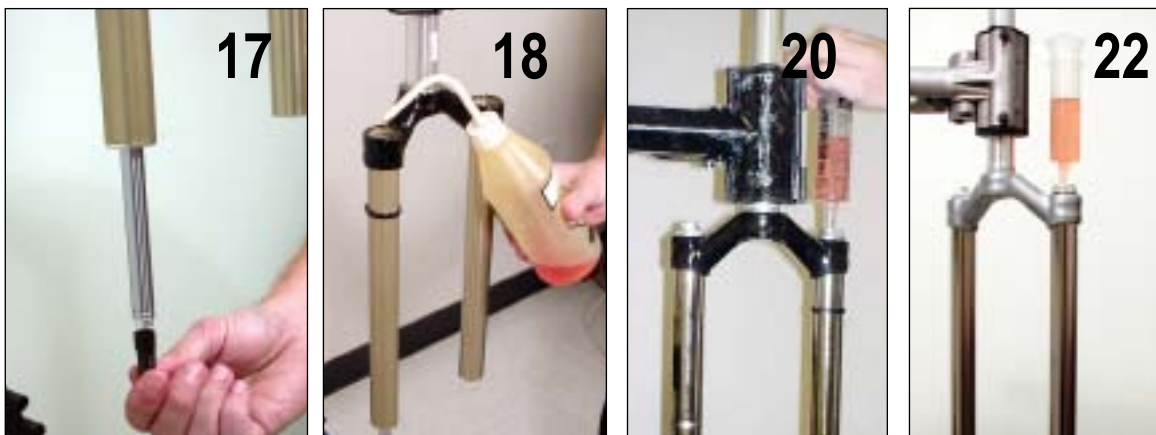
14. Apply oil-soluble grease or RedRum to all new o-rings (fig. 14a and 14b).

NOTE: ALL PURE REBOUND SEAL HEADS PRODUCED IN MODEL YEAR 2004 AND LATER, ARE MADE OF ALUMINUM. 2001 - 2003 ARE MADE OF WHITE PLASTIC.



REASSEMBLY

15. With all o-rings replaced, greased or oiled, re-insert the rebound damper assembly back into the Pure tube, the same way it was removed. The seal head should press/snap right into the bottom of the pure tube (fig. 10)
16. Insert the Pure tube/rebound damper assembly back into the top of the left side upper tube, through the top of the crown, damper shaft first.
17. Pull the rebound damper shaft to the fully extended position. Insert rebound damper adjuster knob, and turn rebound damper to the full-open position (counter-clockwise). This will open the damper, and allow oil to flow through the valve (fig. 17).
18. Pour 5wt-suspension oil into the top of the Pure tube until full (fig. 18).
19. Insert the tip of the oil-mixing syringe into the top of the compression damper adjuster rod hole. Press firm to fix it tightly.
20. With the fork in the vertical position, insert and push the compression damper into the top of the Pure tube. Use a rag to cover the top of the oil-mixing syringe to prevent oil from splattering. Oil will displace into the oil syringe as you push down (fig. 20).
21. Using your fingers, press down on the compression damper top cap, and thread the compression damper top cap about 2/3 into the threads of the upper tube (see fig. 20).
22. Your mixing syringe should be about 1/2 full of oil. Air bubbles should be visible as the rebound damper is cycled (fig. 22)

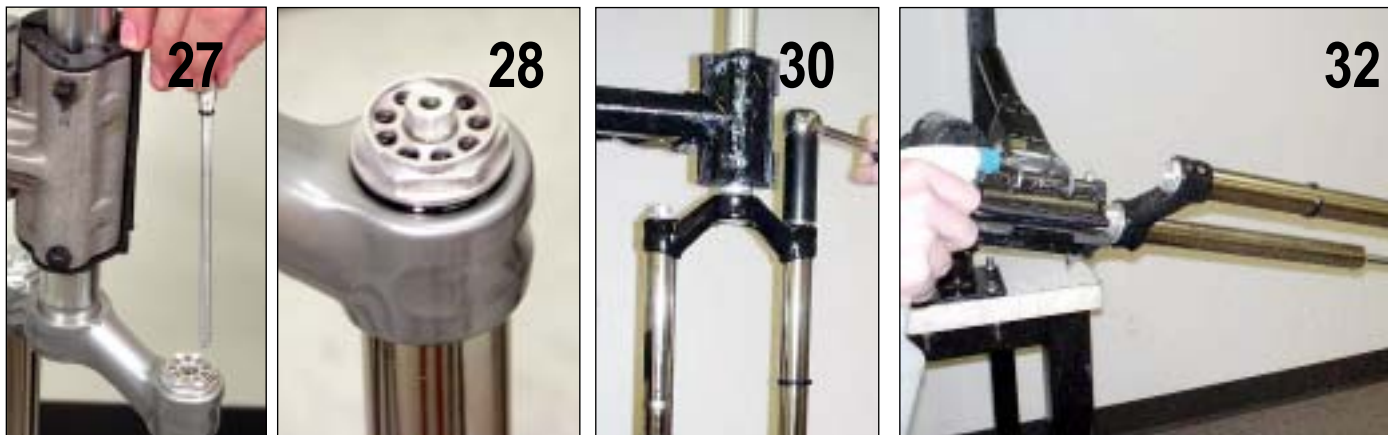


BLEEDING THE PURE SYSTEM

23. Using one hand to hold the oil-mixing syringe in place, hold the bottom of the rebound damper shaft and slowly push up and pull down on the shaft. You will see air bubbles rise to the top of the oil in the syringe.
24. Continue to cycle the rebound shaft until you no longer see air bubbles in the excess, displaced oil. If air is left in the oil, the lockout feature will not function.
25. When all air is out of the oil, cup your hand firmly on the top of the syringe, and remove the syringe (fig. 25).
26. Drain the excess oil into the oil pan or back into to the oil bottle.

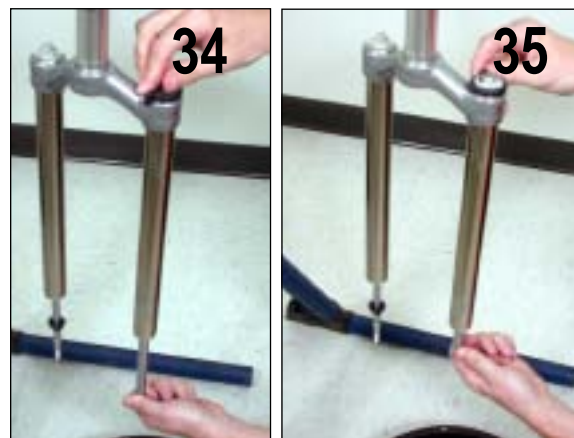


27. Insert the tip of the compression adjuster rod into the top of the compression damper hole, and let go. The adjuster rod will slowly 'sink' into the damper assembly, and oil will be displaced (fig. 27)
28. Hand-tighten the adjuster rod to the full-closed/tight position (lockout position). See fig. 28.
29. Turn the compression adjuster-rod $\frac{1}{4}$ turn counter-clockwise (open).
30. Using a 24mm socket, tighten the Compression damper top cap to 60 in-lb (fig. 30).
31. Again, hand-tighten the adjuster rod to the full-closed/tight position (fig. 28).
32. Wipe away the excess oil from the compression damper top cap with a rag. Spray the top cap with isopropyl alcohol and clean with a rag until dry (fig. 32).



TESTING THE PURE DAMPER

33. With the compression damper adjuster rod in the full-closed/clock-wise position, place the Pure Lockout knob on the hex fitting of the compression adjuster rod, with the dial closest to the back of the crown. This is the lockout position.
34. Try to push the rebound damper shaft up. It should not move. This is the lockout position. If you are able to move the rebound damper shaft, then air is still trapped inside the Pure tube. Repeat the oil bleeding procedure (fig. 34).
35. Turn the Pure lockout knob counterclockwise to the open position, and cycle the rebound damper shaft. It should move smoothly, with no air gaps (fig. 35).
36. Turn the compression damper rod to the full-closed/clockwise position and retest the lockout.
37. Turn the Pure lockout knob to the full-closed position (fig. 34)
38. Remove the Pure lockout knob.



INSTALL THE PURE KNOB

38. Insert the small detent spring into the compression top cap, detent hole, in the 6 o'clock position, from the back of the crown.
39. Gently place the detent ball bearing on top of the detent spring (fig. 39).
40. Place the Pure compression/lockout knob on the hex fitting of the compression adjuster rod, with the dial closest to the back of the crown. This is the 'Lockout' position. The crown acts as the lockout dial stop point
41. Insert the screw, and tighten snug. Not too tight (fig. 41).



SEE THE LOWER LEG REMOVAL AND INSTALLATION SECTION TO RE-INSTALL THE LOWER LEGS.