



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.

- Perform service every 100 hours of riding (less depending on riding conditions and riding style).
- Regular maintenance ensures your fork performs as it should.
- For bushing removal and installation, please reference the Bushing Service Guide.
- **Right side equals rider's right; left side equals rider's left.**

GETTING STARTED

1. Remove upper crown, and remove fork from bicycle.
2. Spray entire fork with isopropyl alcohol and wipe all dirt and mud from fork. Clean around dust seals and upper tubes.
3. Lay tools out on work bench, and provide a clean work area for internals service.
4. Place oil pan under fork on floor.

TOOLS

- Safety Glasses
- Clean Rags
- Oil Pan or Bucket
- Bicycle Stand and Clean Work Table/Area
- 24mm 6-point Socket
- Plastic-Faced Mallet
- Snap Ring Pliers (internal and external)
- 2.5mm, 5mm Hex Wrench
- Long and Short Plastic or Wood Dowel, 3/4" diameter (non-metallic)
- Torque Wrench
- Sharp Pick/Dental Pick
- Oil Mixing Syringe & Measuring cup
- Isopropyl Alcohol/Spray Bottle
- 5wt Suspension Oil or Oil Soluble Grease
- Isopropyl Alcohol (in Spray Bottle)

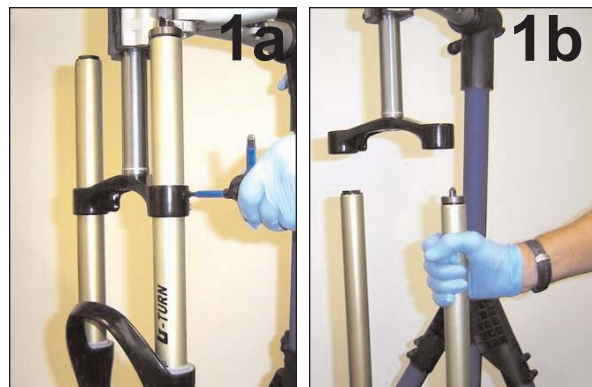


LOWER LEG / INTERNALS REMOVAL

1. Clamp the fork steerer tube into bicycle stand.

Using a 4mm hex wrench, loosen lower crown bolts. Slide each upper tube down and out of crown. (fig 1a & 1b)

Remove crown/steerer assembly from bicycle stand.



2. Clamp right (damper side) upper tube into bicycle stand. Using a 5mm hex wrench, loosen right shaft bolt 2 to 3 turns. Do not remove shaft bolt completely. (fig 2a) Tap shaft bolt free using a plastic mallet. This frees the damper shaft press-fit from the inner shaft bore inside bottom of lower leg. (fig 2b)

NOTE: RIGHT SIDE EQUALS RIDER'S RIGHT; LEFT SIDE EQUALS RIDER'S LEFT.



3. Position oil pan directly below fork. Firmly pull lower leg down from upper tube. Oil will drain into oil pan. (fig 3a) Remove lower leg completely, and allow all oil to drain into oil pan. Wipe lower leg clean with a rag. The left upper tube will still be installed in left side of the lower leg. (fig 3b) Remove right side upper tube/damper assembly from bicycle stand clamp, and place on clean rag

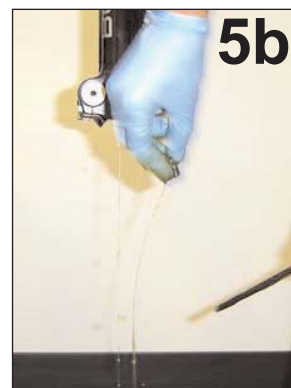


4. Clamp left (spring side) upper tube into bicycle stand clamp. (fig 4a) Using a 5mm hex wrench, loosen left shaft bolt 2 to 3 turns. Do not remove shaft bolt completely. (fig 4b)



5. Using a plastic mallet, tap shaft bolt. (fig 5a) This frees the damper shaft press-fit from the inner shaft bore inside the bottom of the lower leg.

Remove shaft bolt completely, and allow oil to drain into oil pan. (fig 5b)



6. Firmly push or pull the lower leg down upper tube. (fig 6a) Remove the lower leg assembly completely, and allow all oil to drain into oil pan. (fig 6b & 6c) Remove upper tube from bicycle stand and set on clean rag.

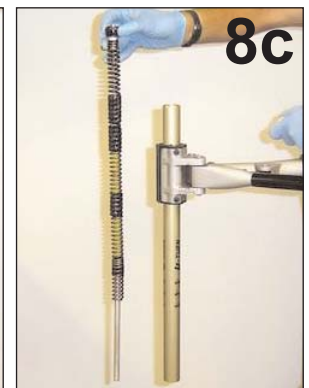


U-TURN SPRING DISASSEMBLY

7. With the U-Turn spring upper tube still clamped in the bicycle stand clamp, use a 2.5mm hex to remove U-Turn knob screw. (fig 7a) Remove U-Turn knob. (fig 7b) Using a magnet, remove all three detent ball bearings and springs. (fig 7c)



8. Using a 24mm socket, remove the U-Turn spring top cap. (fig 8a) Pull the top cap up and lift the entire spring assembly out of the upper tube. (fig 8b) The U-Turn spring assembly consists of the top cap, spring and shaft assemblies. (fig 8c) Spray the top cap threads and U-Turn spring and spring isolators with isopropyl alcohol and wipe clean. Apply fresh grease to the spring and spring isolators.



9. Remove the upper tube from the bicycle stand clamp. Using snap ring pliers, remove U-Turn spring base plate retaining ring from bottom of upper tube. (fig 9a & 9b) Remove base plate assembly. Check for damage, clean with isopropyl alcohol and a rag. (fig 9c) Insert base plate assembly back into upper tube, and secure with retaining ring, sharp end of retaining ring first. (Reverse removal procedure)



REBOUND DAMPER DISASSEMBLY

10. Clamp the right (rebound damper) upper tube assembly back into the bicycle stand. Using a 24mm socket, loosen and remove the damper top cap. (fig 10a & 10b) Clean top cap threads with isopropyl alcohol and a rag. Remove upper tube from bicycle stand clamp.



11. Using snap ring pliers, remove the rebound damper base valve retaining ring. (fig 11a) Pull to remove the damper assembly and damper base valve from upper tube. (fig 11b)



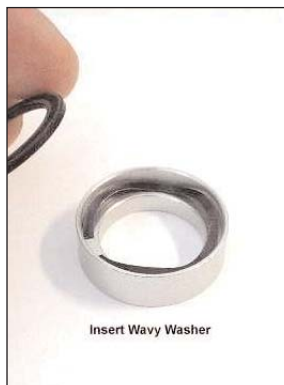
12. Using a dental pick, or sharp pick, check and remove the rebound damper glide ring. (fig 12a) If worn, replace with a new rebound damper glide ring.



HC2 REBOUND DAMPER BASE VALVE ASSEMBLY

The HC2 rebound damper base valve assembly consists of:

- Red base valve
- Wavy spring washer
- Plastic valve washer
- Base valve carrier



REBOUND DAMPER INSTALLATION

13. Insert the rebound damper into bottom of the right upper tube, piston first. (fig 13a) Slide base valve assembly into bottom of upper and seat snug into upper tube step. (fig 13b) Using snap ring pliers, insert and secure retaining ring, sharp end positioned out, into upper tube retaining ring groove. (fig 13b) Pull rebound damper shaft down to fully extended position.



LOWER LEG INSTALLATION

14. Apply fresh grease around inside of oil seal and dust seal. (fig 14)

NOTE: REFERENCE THE 'BUSHING SERVICE GUIDE' FOR OIL SEAL AND DUST SEAL REPLACEMENT PROCEDURES.



15. Clamp rebound damper upper tube into bicycle stand clamp. Pull rebound damper shaft down, to the fully extended position. Position dust seal over end of upper tube, and slide lower leg assembly up and over rebound damper upper tube. Check for proper dust seal fit. Slide lower leg up upper tube and position damper shaft end into lower leg shaft hole. (fig 15a) Clean the hollow rebound shaft bolt with isopropyl alcohol, and check the crush washer for damage. Replace if damaged. (fig 15b) Hand-thread the hollow rebound shaft bolt into threaded shaft end, and tighten with a 5mm hex wrench to 60 in-lb. (fig 15c)



NOTE: INSERT A LONG PLASTIC OR WOODEN DOWEL INTO THE UPPER TUBE TO KEEP REBOUND DAMPER IN FULLY EXTENDED POSITION. THIS HELPS WHEN TIGHTENING THE SHAFT BOLT. (FIG 20c)

16. When shaft bolt has been tightened, pull down to extend upper tube fully. Measure and pour 220cc of 5wt suspension oil into upper tube. (fig 16a) Clean top cap threads with isopropyl alcohol and a rag. Insert into top of upper tube, and hand-thread tight. Using a 24mm socket wrench, tighten to 60 in-lb. (fig 16b)



U-TURN SPRING INSTALLATION

17. Insert the U-Turn spring assembly, shaft first, into U-Turn spring upper tube (gradients printed on outside of tube). Seat the shaft end through the base plate and pull shaft through base plate. (fig 17)



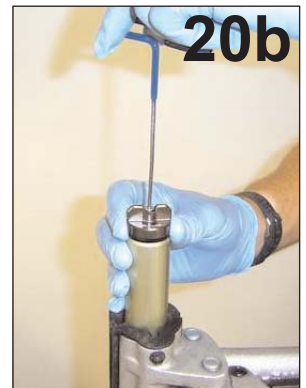
18. Insert the U-Turn spring assembly into the upper tube, shaft end first. Slide the upper tube into the dust seal and push into lower leg. Ensure the dust seal does not fold over upper tube. The threaded shaft end should be aligned into lower leg shaft bolt hole. (fig 18a) Clean the hollow rebound shaft bolt with isopropyl alcohol, and check the crush washer for damage. Replace if damaged. Hand-thread the hollow rebound shaft bolt into threaded shaft end, and tighten with a 5mm hex wrench to 60 in-lb. (fig 18b)



19. Using an oil mixing syringe, measure 50 cc/ml of 10wt suspension oil, and inject slowly into upper tube, through coil spring. (figs 19a) Using your hand, press down on spring top cap and hand-thread top cap into upper tube. (fig 19b) Using a 24mm socket wrench, tighten to 60 in/lbs. (fig 19c)



- 20.** Insert each (3) detent spring into the top cap, evenly spaced. (fig 15a) Place each (3) detent ball bearings on top of each detent spring. (fig 15a) Place U-Turn adjuster knob on top of top cap, over hex adjuster shaft. (fig 15b) Using a 2.5mm hex wrench, insert hex screw into adjuster shaft, through knob hole and tighten. (fig 15c)

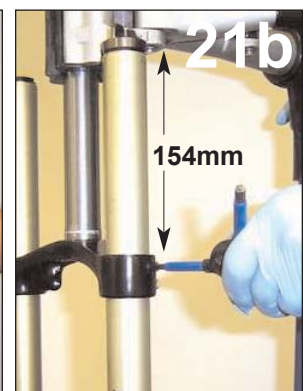


FINISHING UP

- 21.** Clamp fork steerer tube into bicycle stand. (fig 21a)

Insert each upper tube into each side of crown, and slide up into crown. (fig 21a)

From the tapered crease on top of upper tube, measure 154mm down to top of crown. Hold upper tube in place, and tighten crown bolt with a 4mm hex wrench. (fig 21b)



- 22.** Spray isopropyl alcohol onto entire fork, and wipe clean with a clean rag.
- 23.** Remove fork from bicycle stand clamp. Place bottom of lower legs on rubber mat, or rag, holding top of upper tubes with your hands. Slowly cycle fork up and down to circulate damping oil through rebound damper.

OIL

Right Leg Top (Volume)	Oil Weight	Left Leg Top (Volume)	Oil Weight
220 cc/ml	5wt	50 cc/ml	10wt

SPRINGS

Rider Weight (approximate)	PART #
< 150 lbs (60 kg)	11.4309.239.000 (Silver/Yellow, X-SOFT)
150 - 175 lbs (60 - 80 kg)	11.4309.240.000 (Yellow, SOFT)
175 - 200 lbs (80 - 90 kg)	11.4309.241.000 (Yellow/Red, MED)
200 - 225 lbs (90 - 102 kg)	11.4309.242.000 (Red, FIRM) Standard
> 225 lbs (102 kg)	11.4309.870.000 (Black, X-FIRM)

TROUBLE-SHOOTING

NOISE DURING COMPRESSION STROKE

- Inspect coil spring isolators. Remove top caps and springs. Check spring isolators. Replace or add additional isolators, if necessary. See MY05 Spare Parts Catalog for part#s.

LOSS, OR DAMPING VARIANCE

- Check shaft bolts and dust seals for oil leaks. Remove rebound damper and inspect for damage. Replace if necessary. Replace oil and dust seals, if worn. Refill with new oil to correct oil volumes and weights.

LIMITED COMPRESSION STROKE

- Replace coil spring with lighter spring rate. See chart above. If fork bottoms easily during compression stroke, replace with firmer spring rate.
- Check oil volumes; replace oil if necessary with correct oil volumes.