

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

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- Perform service every 100 hours of riding (less depending on riding conditions and riding style).
- Regular maintenance ensures your fork performs as it should.
- Bushings are not serviceable on 2004-2005 Judy forks.
- Right side equals rider's right; left side equals rider's left.

# GETTING STARTED

- 1. 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/Clean Work Table/Area
- 24mm 6-point Socket
- Plastic-Faced Mallet
- 6mm and 2mm hex wrench
- Long and Short Plastic or Wood Dowel, 3/4" diameter (non-metallic)
- Torque Wrench
- Sharp Pick/Dental Pick

- Oil Mixing Syringe and Measuring cup
- 5wt Suspension Oil
- Isopropyl Alcohol (in Spray Bottle)
- Judy Butter/Grease



# LOWER LEG / INTERNALS REMOVAL

- 1. Clamp fork steerer tube into bicycle stand clamp.
- 2. Using a 6mm hex wrench, loosen both shaft bolts three to four turns or half way.



**3.** With hex wrench in shaft bolt, tap right shaft bolt free with plastic mallet. This frees the shaft end from lower leg shaft bore press-fit, and allows lower leg to be removed from upper tubes.



- 4. Using your fingers, remove shaft bolts from both threaded shaft ends. Judy XC/SL: Damping oil is inside the right fork leg. When shaft bolt is removed, oil will drain. Place oil pan directly under the fork.
- 5. Firmly pull/slide lower leg assembly down by holding each leg or the brake arch (fig 5). Spray isopropyl alcohol into each leg. Wrap a clean rag around long dowel and clean inside of each lower leg, as well as both dust seals.

6. If dust seals are worn, replace with current SID/Pilot dust seals (11.4307.250.000). Using a rag, wipe dust seals clean. Spray both upper tubes and crown with isopropyl alcohol; wipe clean. Apply fresh grease to underside of the dust seal for lubrication (fig 6).

## INTERNALS: REMOVAL

8. Using a 24mm socket wrench, loosen and remove both the preload adjuster top cap (IT/C/ XC) and non-adjust top cap (all Judys). Judy SL: Loosen U-Turn spring top cap. The spring is attached to the top cap and spring shaft. Pull and lift entire spring assembly from upper tube.

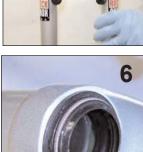
#### **IMPORTANT!** PRESS DOWN FIRM WHEN LOOSENING TOP CAPS.

7. Judy SL U-Turn: Using a 2mm hex wrench,

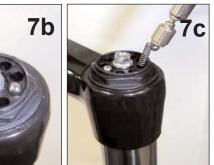
remove U-Turn knob screw. Lift and remove U-Turn adjuster knob. Using a magnet, remove the detent ball bearings and

springs from top cap.









- 9. Remove both shaft bottom-out bumpers (fg 10a). Push the spring shaft, from the bottom, up about an inch (fig 10b). Remove the spring and spacer from upper tube (fig 10c). Wipe spring and spacer(s) with a clean rag.
- 10. Remove fork from bicycle stand. Turn fork upside down, over work bench area. Compression shaft will slide down and out of upper tube. Remove spring shaft and set aside. You may need to insert a long thin dowel into right (damper) upper tube shaft guide to push rebound damper through and out of upper tube.
- 0h

9h

- 11. Wipe both shaft assemblies clean with a rag. Spray with isopropyl alcohol and wipe clean. Set parts aside.
- 12. Clamp steerer tube back into bicycle stand.
- 13. Spray isopropyl alcohol into each upper tube. Wrap a clean rag around a long dowel. Insert into each upper tube and wipe inside of upper tubes clean.
- 14. Spray all 'loose' parts with isopropyl alcohol and clean with a rag.

# INTERNALS: INSTALLATION

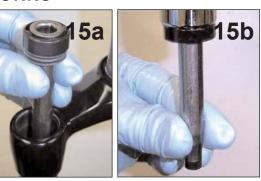
### **REBOUND DAMPER: ALL FORKS**

**15.** Insert the rebound shaft back into right-side upper tube, through the crown (fig 15a). Push down with long thin dowel if needed. You may need to align the end of the threaded shaft, through the center of the upper tube shaft guide, with your finger or a small hex wrench. Align and seat the spring shaft through shaft guide (fig 15b).

#### SPRING ASSEMBLY: JUDY TT/C/XC

- 16. Repeat procedure for spring shaft assembly; left upper tube.
- 17. Apply grease to outside of entire coil spring (fig 17a). Insert spring into left upper tube through crown (fig 17b). The coil spring will rest on the spring shaft assembly inside upper tube.







9a



### SPRING ASSEMBLY: JUDY SL

18. Apply grease to outside of entire coil spring and spring isolators (fig 18a). Insert spring assembly into left upper tube, through crown (fig 18b). Align and seat spring shaft through shaft guide.

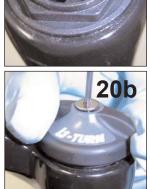
**19.** Using your fingers, press down on U-Turn spring assembly top cap and hand-thread top cap into upper tube. Using a 24mm socket wrench, tighten top cap to 60 in-lb.

**20.** Insert each detent spring into top cap detent holes, evenly spaced. Place each detent ball bearing on top of each detent spring (fig 20a). Place U-Turn adjuster knob on top of hex. Secure with knob screw. Tighten screw with 2mm hex wrench (fig 20b).

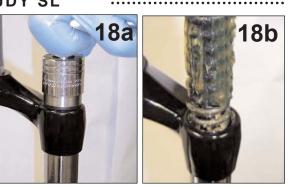
# LOWER LEG INSTALLATION

- **21.** Wipe upper tubes with clean rag.
- **22.** Slide lower leg assembly over and onto the ends of each upper tube. Make sure both dust seals slide onto the tubes correctly and dust seals do not fold under.





19





- **23.** Slide lower leg up onto upper tubes and align threaded shaft ends with shaft holes at bottom of lower leg. You may need to use a thin hex wrench or screwdriver to align the shaft ends. The threaded shaft end should appear in the center of shaft hole (fig 23a). Hand-thread the spring side (left) shaft bolt into threaded shaft end, through lower leg shaft hole. Using a 6mm hex wrench, tighten to 60 in-lb (fig 23b)
- 24. Insert long thin dowel through right-side of the crown, into upper tube. Hold down on dowel to firmly seat rebound/shaft assembly into bottom of upper tube (fig 24a). Hand-thread the rebound side (right) shaft bolt into threaded shaft end, through the lower leg shaft hole. This secures the damper shaft into bottom of lower leg while threading the shaft bolt (fig 24b). Using a 5mm hex wrench, tighten to 60 in-lb. Remove dowel.
- 25. Wipe lower leg and shaft bolts with clean rag.

#### JUDY TT AND C, SKIP TO STEP 27.

# OIL FILL

- **26.** Judy XC/SL only: Measure and pour RockShox 5wt suspension oil into right-side upper tube, through crown.
  - Judy XC 80mm100cc/mlJudy XC 100mm130cc/mlJudy SL U-Turn150cc/ml



27b

**27.** Apply a light coat of grease to non-adjust top cap threads and o-ring. Insert into upper tube/crown and hand thread (fig 27a). Using a 24mm socket wrench, tighten to 40 in-lb (fig 27b).

28. Spray entire fork with isopropyl alcohol and clean with a clean rag.

27a



# TUNING COIL SPRINGS

### JUDY TT/C/XC

Rider Weight (approximate)	PART #
<140lb (63kg)	11.4308.640.000 (Soft)
* > 140lb (63kg)	*11.4308.294.000 (Standard)

\*Add tuning bumper to increase spring rate. (11.4306.171.000, Tuning Bumper Kit)

#### JUDY SL U-TURN

Rider Weight (approximate)	PART #
<140 lbs (63 kg)	11.4308.292.001 (Soft)
140-170 lbs (63 to 85 kg)	11.4308.292.000 (Standard)
>180 lbs (80 kg)	11.4308.292.003 (Firm)

## TROUBLE-SHOOTING

### DECREASE OR LOSS OF SMOOTH COMPRESSION STROKE

• Fork upper tubes are dry or dirty. Disassemble, clean and regrease.

### FORK 'BOTTOMS-OUT' EASILY

• Spring is too light. Install tuning bumper to increase spring rate (resistance to compression).

### FORK IS DIFFICULT TO COMPRESS WITH STANDARD SPRING RATE

• Install soft tuning spring to decrease spring. Works best for lighter riders.

### OIL LOSS

- Inspect your shaft bolt crush washers. Replace if worn or damaged.
- Inspect your top cap o-rings. Replace if torn or knicked.