



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 Judy performs as it should.
- Bushings on Judy forks are not replaceable. If you have loose or worn bushings, the lower leg assembly must be replaced.
- **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 create a clean work area for internals service.
4. Place oil pan under fork on floor.

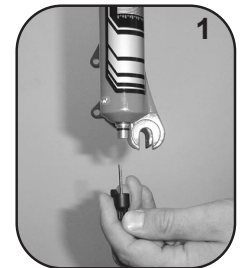
TOOLS

- Safety Glasses
- Clean Rags
- Oil Pan or Bucket
- Bicycle Stand/Clean Work Table/Area
- 24mm 6-point Socket
- Plastic-Faced Mallet
- Snap Ring Pliers (external)
- 2.5mm, 5mm, 6mm 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 and 15wt Suspension Oil



LOWER LEG / INTERNALS REMOVAL

1. **JUDY J2, J3, J4:** Gently pull external rebound adjuster knob and remove from right shaft bolt (fig. 1).

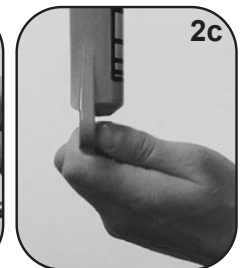
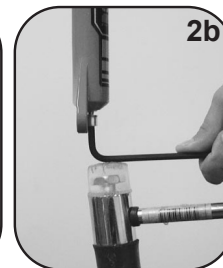
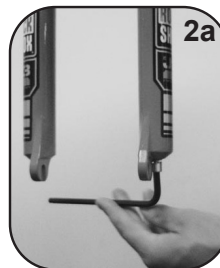


2. Using a hex wrench loosen both shaft bolts 3 to 4 turns (fig. 2a).

J1 - 6mm hex (left and right)

J2/J3 - 6mm hex (left), 5mm hex (right)

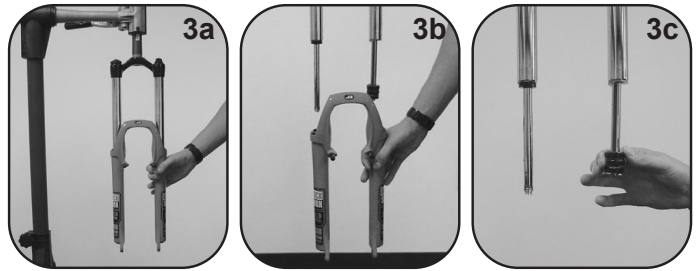
J4 - 5mm hex (left and right)



With hex wrench in shaft bolt, tap each bolt free with plastic mallet. Using your fingers, remove both shaft bolts completely (fig. 2b).

Damping oil is inside the right side lower leg. When shaft bolt is removed, oil will drain. Place an oil pan directly under the fork (fig. 2c).

- Firmly pull the lower leg assembly down by holding each leg or the brake arch (figs 3a & 3b). Remove lower leg assembly and allow all excess oil to drain into an oil pan (fig. 3c).



Remove shaft bottom bumper (fig 3c).

IMPORTANT! DO NOT STRIKE OR TAP THE BRAKE ARCH WITH A MALLET.

- Spray isopropyl alcohol onto and into each lower leg; wipe lower legs clean. Wrap a clean rag around long dowel and clean inside of lower legs, each side. Also wipe dust seals clean.

If dust seals are worn, replace with current SID/Pilot dust seals (11.4307.250.000). Refer to the 'Bushing Service Guide' for replacement procedure.

JUDY J4: SKIP TO STEP 8.

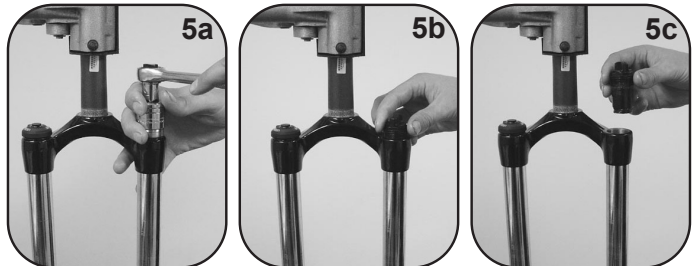
JUDY SPRING ASSEMBLY

SPRING REMOVAL - JUDY J1, J2, J3

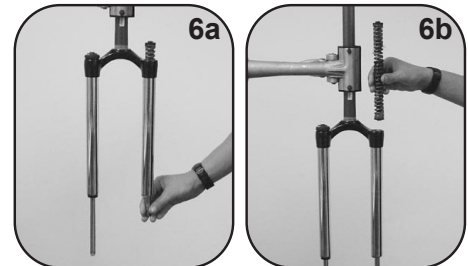
- Using a 24mm socket wrench, loosen and remove spring top cap assembly from upper tube/crown (fig 5a).

IMPORTANT! PRESS DOWN FIRM AND SQUARE WHEN LOOSENING TOP CAP.

Pull top cap up and out, and remove from upper tube/crown (figs 5b & 5c).

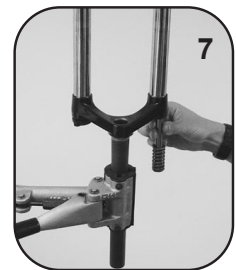


- Push the spring shaft, from the bottom, up about an inch or two (fig 6a). Remove spring and spring spacers from upper tube (fig 6b). Spray spring assembly with isopropyl alcohol and wipe with clean rag.



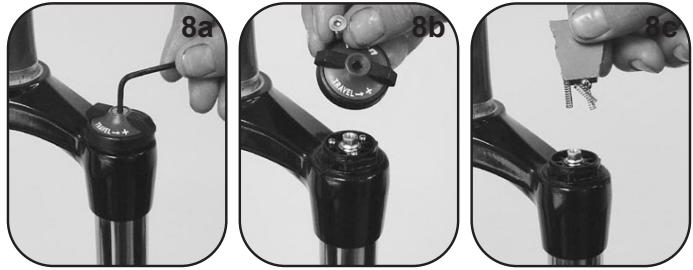
- Turn fork upside down in fork stand. The spring shaft assembly will slide down and out of upper tube. Remove spring shaft and set aside (fig 7). Clean and inspect for damage.

Spray inside of upper tube with isopropyl alcohol. Wrap a clean rag around a long dowel. Insert rag into upper tube and wipe inside of upper tube clean.

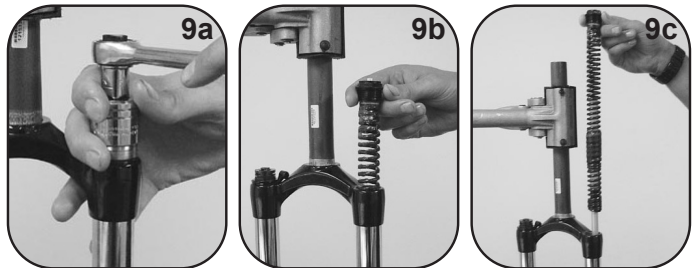


U-TURN SPRING REMOVAL - JUDY J4

8. Using a 2.5mm hex wrench, remove U-Turn knob screw (fig 8a). Lift and remove U-Turn adjuster knob (fig 8b). Using a magnet remove the detent ball bearings and springs from top cap (fig 8c).



9. Using a 24mm socket wrench loosen U-Turn spring assembly top cap (fig 9a). Pull up and remove U-Turn spring assembly from upper tube (figs 9b & 9c). The spring is attached to the top cap and spring shaft.



Spray U-Turn spring assembly with isopropyl alcohol and wipe with a clean rag.

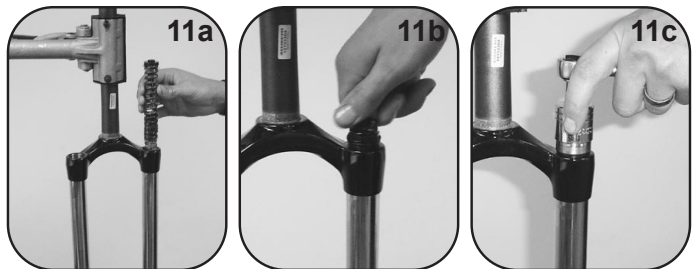
SPRING INSTALLATION - JUDY J1, J2, J3

10. Insert and drop spring shaft into upper tube, through crown (fig 10a). Guide the threaded end through shaft guide at bottom of upper tube. Pull through to pull extension (fig 10b).



Apply fresh grease to spring/spring spacer assembly (fig 10c).

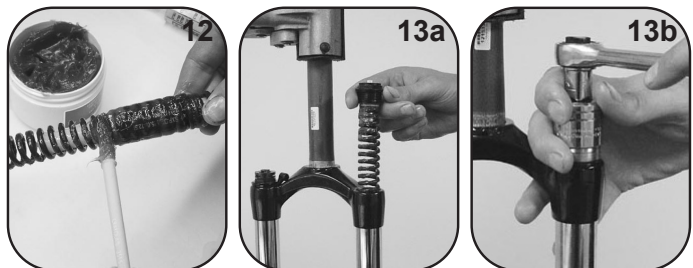
11. Insert spring assembly into upper tube through crown and drop into upper tube (fig 11a).



Clean top cap, and apply a small amount of grease to top cap threads. Insert into upper tube/crown and hand-thread into upper tube (fig 11b). Using a 24mm socket wrench, tighten to 60 in-lb (fig 11c). Wipe away any excess grease.

U-TURN SPRING INSTALLATION - JUDY J4

12. Apply fresh grease to U-Turn spring assembly (fig 12).



13. Clean top cap, and apply a small amount of grease to top cap threads. Insert spring assembly, shaft first, into upper tube through crown and drop into upper tube (fig 13a).

Press top cap down and hand-thread into upper tube. Using a 24mm socket wrench, tighten to 60 in-lb (fig 13b). Wipe away any excess grease.

14. Insert each detent spring into top cap detent holes, evenly spaced. Place each detent ball bearing on top of each detent spring. Place U-Turn adjuster knob on top of hex (fig 14a).

Secure with knob screw. Tighten knob screw with 2.5mm hex wrench (fig 14b).

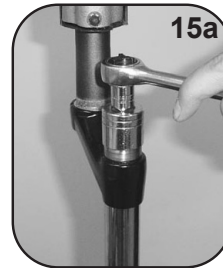


TURNKEY DAMPER SERVICE

REBOUND DAMPER REMOVAL - JUDY J2 REBOUND ONLY (JUDY J1 NOT REQUIRED)

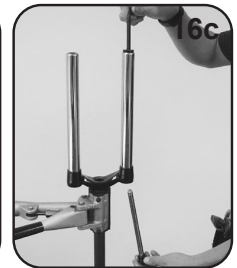
15. Using a 24mm socket wrench, loosen and remove rebound damper top cap (flat non-adjust top cap) (fig 15a).

Remove fork from bicycle stand and pour out any damping oil in upper tube (fig 15b).



16. Turn fork upside down and push damper shaft through shaft guide (figs 16a & 16b).

Push damper out of upper tube with a long thin dowel/rod to help push damper piston past upper tube threads. Remove damper from upper tube (fig 16c).



17. Pinch rebound damper o-ring and remove (fig 17a). Replace o-ring and apply grease to new o-ring (fig 17b).

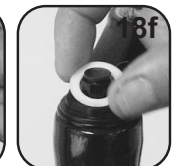
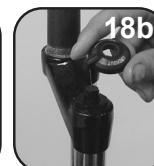
SKIP to step 23 for installation.



TURNKEY COMPRESSION DAMPER REMOVAL - JUDY J2, J3, J4

18. Using external snap ring pliers remove external compression damper adjuster knob retaining ring (figs 18a & 18d). Remove compression adjuster knob and o-ring (figs 18b & 18c), or remote spool and white top cap seal (figs 18e & 18f).

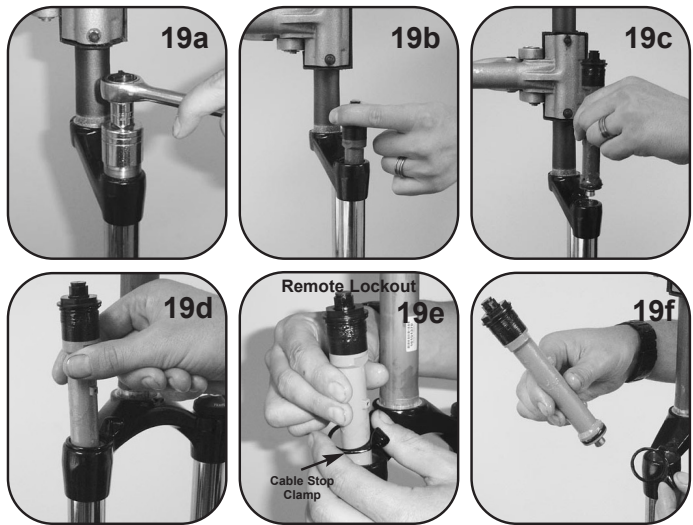
NOTE: REMOTE COMPRESSION ADJUSTER SPOOL USES A WHITE PLASTIC TOP CAP SEAL. THE STANDARD COMPRESSION KNOB USES AN O-RING TOP CAP SEAL.



19. Using a 24mm socket wrench, loosen compression damper top cap from upper tube (fig 19a).

By hand, slowly pull and remove compression damper from upper tube (figs 19b - 19d). Use care when removing compression damper from upper tube. Use a slow twisting motion while pulling up slowly. This helps ease the piston o-ring past the upper tube threads.

Remote: Remove cable-stop clamp which is positioned just under compression damper top cap (figs 19e & 19f).



20. Replace compression damper top cap o-ring (located at top of damper).

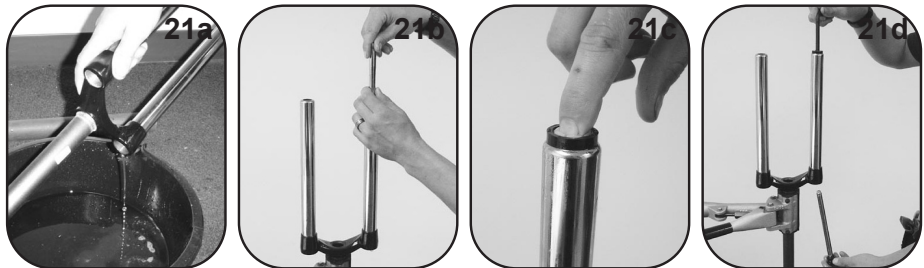
Pinch compression damper o-ring seal. Remove and install a new o-ring piston seal. Apply a few drops of suspension oil (5wt), or grease, to new o-ring seal.



21. Remove fork from bicycle stand and pour damper oil into oil pan (fig. 21a).

Turn fork upside down and push rebound damper shaft through shaft guide (figs 21b & 21c).

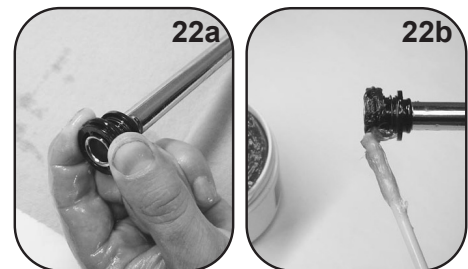
Push rebound damper out of upper tube with a long thin dowel/rod to help push damper piston past upper tube threads. Remove damper from upper tube (fig 21d).



22. Remove rebound damper o-ring and replace (fig 22a).

Using a sharp pick, remove damper inner seal-head o-ring (located in seal head at bottom of upper tube) and replace with a new o-ring. Do not scratch o-ring gland with pick. Scratches may cause oil to leak.

Apply fresh grease to new o-rings (fig 22b).



OPTIONAL UPGRADE: NON-REMOTE TO REMOTE ADJUST

UPGRADING A NON-REMOTE COMPRESSION ADJUST FORK (CROWN-MOUNTED ADJUSTER KNOB) TO REMOTE COMPRESSION ADJUST (REMOTE POPLOC LEVER ADJUSTER), REQUIRES REPLACING THE NON-REMOTE COMPRESSION DAMPER WITH A REMOTE COMPRESSION DAMPER AND CABLE-STOP CLAMP. THE REMOTE RETURN SPRING IS DESIGNED INTO THE COMPRESSION DAMPER, AND IS REQUIRED FOR USE WITH THE POP-LOC REMOTE LEVER ASSEMBLY.

SPARE PART KITS REQUIRED:

- 11.4310.664.000 JUDY J3/J4 DAMPER KIT, REMOTE
- 11.4310.673.000 JUDY J3/J4 COMPRESSION DAMPER KNOB/CLAMP KIT
- 11.4308.848.000 POPLOC LEVER, LEFT

INSTALLATION - REBOUND DAMPER / OIL

23. Clamp fork back into bicycle stand. Insert rebound damper back into right side upper tube, shaft first (fig 23a).

Press rebound damper piston into upper tube past upper tube threads (fig 23b).

Insert a long dowel, or screwdriver, into upper tube and push damper into upper tube. Guide rebound damper shaft through damper seal head at bottom of upper tube and pull shaft through (fig 23c).



24. With rebound damper shaft in the fully-extended position, measure and pour or inject RockShox 5wt suspension oil into upper tube, through crown (fig 24).

Fork	Amount	Oil Weight
J1	20cc/ml	15wt
J2 Rebound Only	150cc/ml	5wt
J2/J3 w/ Turnkey Compression Damper (80/100mm)	93cc/ml	5wt
J2/J3 w/ Turnkey Compression Damper (125mm)	109cc/ml	5wt
J4 U-Turn w/ Turnkey Compression Damper	109cc/ml	5wt



IMPORTANT! OIL VOLUME IS CRITICAL. TOO LITTLE OIL DECREASES DAMPING PERFORMANCE. TOO MUCH OIL REDUCES AVAILABLE FORK COMPRESSION/TRAVEL, AS WELL AS RISK DAMAGE TO FORK FROM COMPRESSION BOTTOM-OUT.

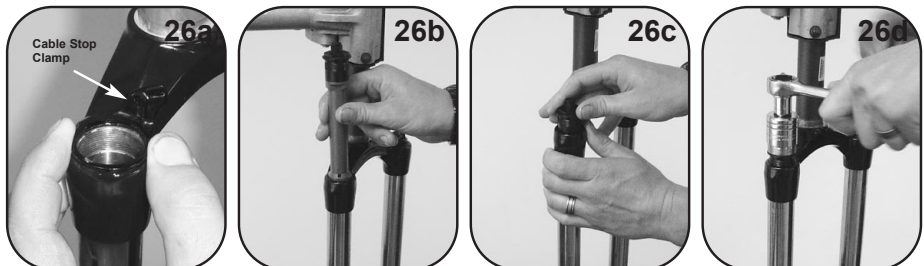
25. Judy J1/J2: Install rebound top cap. Hand-thread; tighten to 60 in-lb with a 24mm socket wrench.

SKIP to step 32.

INSTALLATION - COMPRESSION DAMPER / KNOB / REMOTE SPOOL

26. REMOTE ONLY: Position cable-stop to the 10 o'clock position on the crown, around upper tube hole (rider's right side)(fig 26a).

Insert compression damper into upper tube, through crown (fig 26b). Push down slowly on compression damper, as the piston o-ring passes upper tube threads (fig 26c). Press down firm and hand-thread top cap. Tighten top cap to 60 in-lb with a 24mm socket wrench (fig 26d).



27. Insert compression damper top cap seal (o-ring or plastic) over top cap (figs 18c & 18f).

Place compression knob or remote spool onto compression damper top cap, with knob dial or cable set screw at 3 o'clock position (figs 18b & 18e).

Using external snap ring pliers, secure compression knob or remote spool with external retaining ring (figs 18a & 18d).

28. Motion Control Remote Forks: Cable Installation

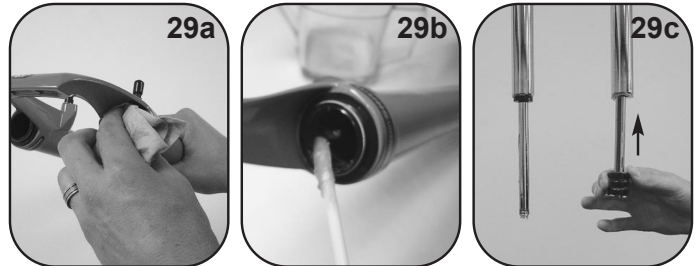
- 1) Thread remote cable through cable-stop clamp on crown.
- 2) Thread cable around compression spool, under cable set-screw, and tighten with 2mm hex wrench. Knob should be positioned in 3 o'clock position in full-open position.
- 3) Test PopLoc remote lever for proper lockout/compression adjust.
- 4) Adjust cable tension as needed.

LOWER LEG INSTALLATION

- 2006 Judy forks do not include replaceable bushings. If your Judy fork has loose or worn bushings, the entire fork must be replaced.
- If your Judy has damaged upper tubes, steerer tube or crown (CSU), the entire fork must be replaced.
- There are no replacement CSU or Lower Leg replacement kits available for 2006 Judy forks. Please contact your dealer or distributor for replacement fork options.

29. Clean the inside surface of each dust seal with a rag and isopropyl alcohol (fig 29a). Apply fresh grease to the inside of each dust seal (fig 29b).

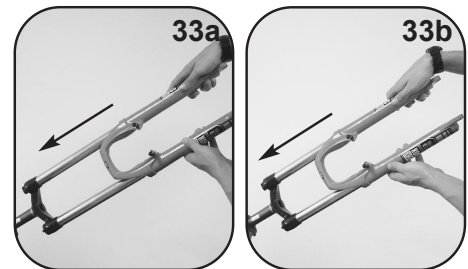
Insert bottom-out bumper back onto spring shaft end (fig 29c).



30. Invert fork in bicycle stand to 45 degree angle, upper tubes facing up. Spray upper tubes with isopropyl alcohol and wipe with a clean rag.

Slide lower leg assembly over and onto the ends of each upper tube. Make sure both dust seals slide onto the tubes correctly and do not fold under (fig 33a).

Slide lower leg assembly onto upper tubes until you feel the lower bushings touch the end of the upper tubes. Stop (fig 33b).



31. Measure and pour (or inject...an oil syringe works best) 5, 10 or 15wt RockShox suspension oil into lower legs, through the shaft bolt holes (fig 31).

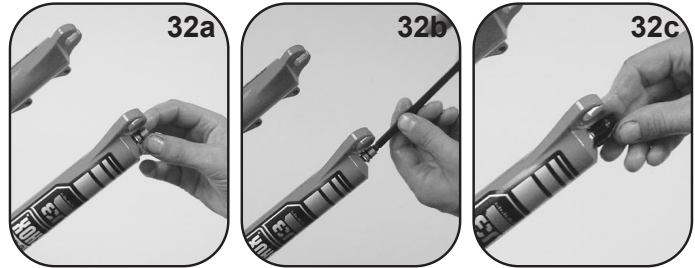
J2/J3/J4 RIGHT LEG: 10cc/ml
J4 LEFT LEG: 30cc/ml

Wipe all excess oil from lower legs.



32. Inspect and clean both damper and spring shaft bolts and nylon crush washers. Replace crush washers and crush washer retainers if damaged. Damaged or dirty crush washers can cause oil to leak.

Insert rebound damper and spring shaft bolts into threaded shaft ends, through lower leg shaft holes, and tighten with a 5mm or 6mm hex wrench to 60 in-lb (figs 32a & 32b).



Insert external rebound damper knob into rebound damper shaft bolt. Push in to secure (fig 32c). Adjust as desired.

33. Spray a light coating of isopropyl alcohol onto entire fork, and wipe with a clean rag. Replace decals if needed.

JUDY J1, J2, J3 SPRINGS

RIDER WEIGHT	SPRING COLOR	SPRING ASSEMBLY PART#
<140 lbs (63 kg)	Black (80-100mm), Yellow (125mm)	11.4311.122.000
140-160 lbs (63-72 kg)	Yellow (80-100mm), Red (125mm)	11.4311.121.000
160-180 lbs (72-82 kg)	Red (80-100mm), Blue (125mm)	11.4310.668.000
>180 lbs (82 kg)	Blue (80-100mm), Black (125mm)	11.4310.674.000

JUDY J4 U-TURN SPRINGS

RIDER WEIGHT AND U-TURN TRAVEL 80-125mm	SPRING COLOR	SPRING ASSEMBLY PART#
<140 lbs (63 kg)	Yellow	11.4310.669.000
140-160 lbs (63 to 70 kg)	Red (Standard)	11.4310.670.000
160-180 lbs (70-80 kg)	Blue	11.4310.671.000
>180 lbs (80 kg)	Black	11.4310.672.000

OIL

	RIGHT TOP	OIL WT	RIGHT BOTTOM	OIL WT	LEFT TOP	OIL WT	LEFT BOTTOM	OIL WT
J1	20cc/ml	15wt	x	x	x	x	x	x
J2	150cc/ml	5wt	x	x	x	x	x	x
J2 TURNKEY LOCKOUT/ J3 (80/100mm)	93cc/ml	5wt	10cc/ml	15wt	x	x	10cc/ml	15wt
J2 TURNKEY LOCKOUT/ J3 (125mm)	109cc/ml	5wt	10cc/ml	15wt	x	x	10cc/ml	15wt
J4 (U-TURN)	109cc/ml	5wt	10cc/ml	15wt	x	x	10cc/ml	15wt

TROUBLE-SHOOTING

DECREASE OR LOSS OF SMOOTH TRAVEL

- Fork upper tubes are dry or dirty. Disassemble, clean and re-grease.

LOSS OF, OR VARIANCE IN DAMPING

- Inspect all damper o-rings. Replace and lubricate.
- Inspect damper oil volume. Remove damper top cap/compression damper assembly. Add or remove oil as needed.
- Remote: Inspect remote cable tension. Cable may stretch, or become loose. Loosen cable screw, tension cable, and tighten. Test. Adjust as needed.

SPRING RATE

- If spring is too light/soft, install heavier tuning spring to increase spring rate (resistance to compression force).
- If spring is too heavy/firm, install lighter/softer tuning spring to decrease spring rate (resistance to compression force).

OIL LOSS

- Check oil volume. Too much oil can cause a leak. Drain and re-fill to correct oil volume measurement.
- Inspect your shaft bolt crush washers. Replace if worn or damaged.
- Inspect your top cap o-rings. Replace if torn or knicked.