

STREET PERFORMANCE RSD SIGNATURE SERIES  
FOR HARLEY-DAVIDSON TOURING  
**INSTALLATION AND SETUP**



- QS3 WITH COMPRESSION AND REBOUND ADJUST

605-01-282\_REV\_A



# STREET PERFORMANCE SERIES SHOCKS

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- QS3 WITH COMPRESSION AND REBOUND ADJUST

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Thank you for choosing FOX direct-replacement shocks for your motorcycle. FOX products are designed, tested, and manufactured by the finest professionals in the industry.

Please read the entire manual before attempting to install the shocks on your motorcycle. If you have any questions call the FOX motorcycle shock service center at 831.740.4619

FOX recommends that you become completely familiar with the handling characteristics of your modified motorcycle before operating it under rigorous conditions, helping to avoid potential loss of control events. FOX further recommends that you use appropriate protective equipment at all times when operating your motorcycle.

To achieve the best performance and product longevity, periodic service and maintenance is required. Please refer to the SHOCKS NEED LOVE TOO section for more information.

## TOOLS REQUIRED

- Vehicle manufacturer's workshop manual for torque specifications
- Motorcycle floor jack
- Ratchet and assorted sockets or wrenches sized appropriately to your motorcycle's mounting hardware
- Red Loctite®
- Torque wrench
- Tape measure
- 4 mm Allen bit
- 3/16" Allen bit

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## SAFETY INSTRUCTIONS

### WARNING

- FOX direct-replacement shocks are designed to fit and allow proper clearance with the stock components. If aftermarket suspension components are installed it is the customer's responsibility to ensure that interference between the FOX shocks and other motorcycle components does not occur at any point in the shock stroke.
- FOX direct-replacement shocks should always be installed as a set for maximum performance.
- Proper installation and service procedures are essential for the safe and reliable operation of the suspension components, requiring the experience and tools specially designed for this purpose. Installation and maintenance procedures for this product must be performed by a qualified service technician, to avoid potentially unsafe motorcycle handling characteristics, which may result in **SERIOUS INJURY** or **DEATH**.
- Modifying your suspension will change the handling characteristics of your motorcycle. Under certain conditions, your modified motorcycle may be more susceptible to loss of control, which can result in **SERIOUS INJURY** or **DEATH**. Thoroughly familiarize yourself with the modified motorcycle handling characteristics before any rigorous vehicle operation. Wear protective body gear and a helmet when appropriate.
- FOX direct-replacement shocks are gas-charged and are highly pressurized. Placing shock bodies in a vise or clamp, applying heat, or attempting to open or service the shock without the proper tools and training can result in **SERIOUS INJURY** or **DEATH**. Do not attempt to modify, puncture or incinerate a FOX direct-replacement shock absorber.
- Any attempt to misuse, misapply, modify, or tamper with any FOX product voids any warranty and may result in **SERIOUS INJURY** or **DEATH**.

## INSTALLATION GUIDELINES

### WARNING

- Always use a motorcycle floor jack for the installation of shocks, and make certain that the raised motorcycle is securely attached to the lift to prevent the motorcycle from slipping, falling, or moving during the installation process.
- **DO NOT** install any FOX product without the necessary special tools, expertise and a motorcycle floor jack or you will subject yourself to the risk of **SERIOUS INJURY** or **DEATH**. Ensure that the motorcycle is: (1) on level ground, (2) that the wheel not in use during installation is supported to prevent unsafe movement of the motorcycle, (3) and that adequately secured stabilizer straps are used to support the motorcycle while it is elevated. **NEVER** work on the motorcycle until you have checked to ensure that the motorcycle will be stable during installation.
- FOX direct-replacement shocks are designed to fit your motorcycle's shock mounts without modification except the reservoir placement on specific models and applications.

## STREET PERFORMANCE RSD SIGNATURE SERIES TOURING SHOCK INSTALLATION

Use a motorcycle floor jack when installing shock absorbers to remove the load on the mounting hardware.

1. Loosen the upper and lower mounting hardware that secures your stock shocks.
2. Adjust your floor jack so that the hardware and stock shocks come off easily.
3. Inspect the mounting hardware and replace any hardware that's been damaged.
4. Use a straight edge to confirm shock mount surfaces are in line. You may need to use one or more of the supplied spacers to bring the upper and lower surfaces in line.
5. Install your new FOX shock by lining up the upper shock mount first.

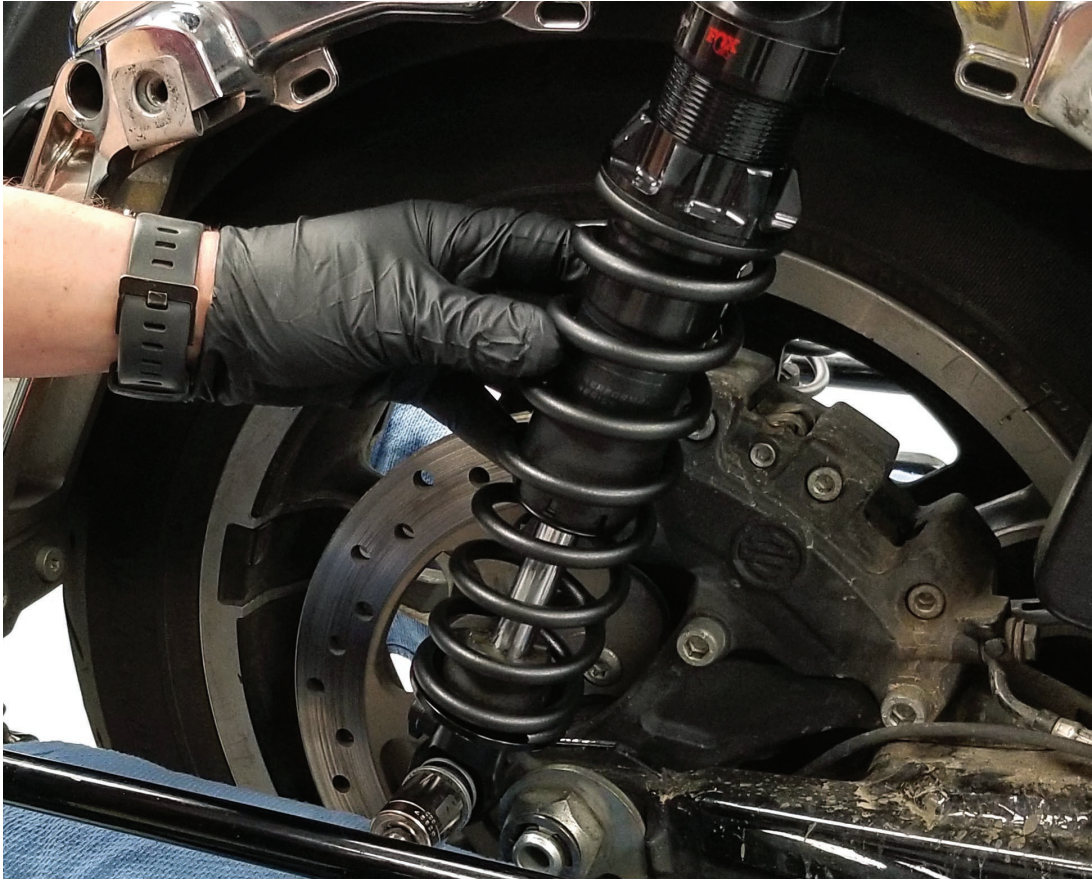


6. Position the rebound knob rearward.
7. Apply a dab of red Loctite® on the upper mounting threads and tighten the hardware to the vehicle manufacturer's torque specifications.

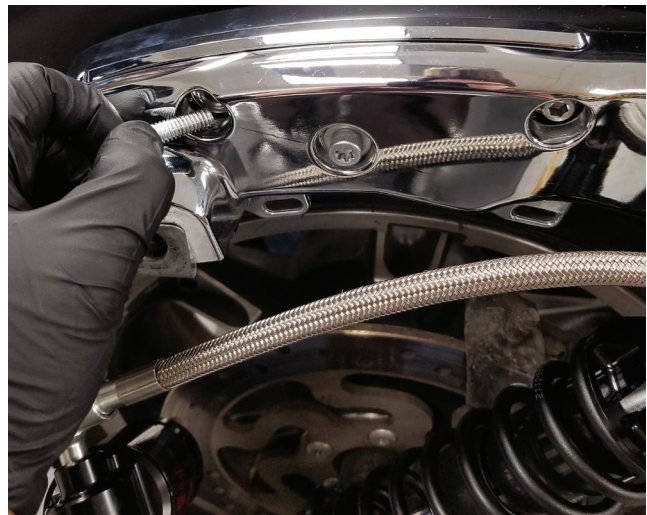
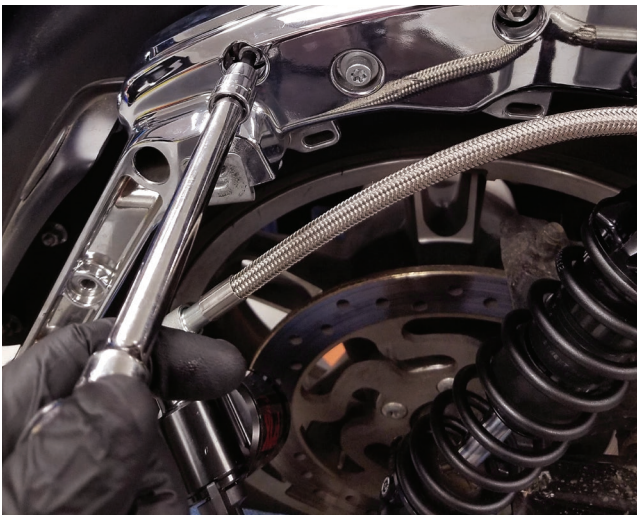




8. Adjust your floor jack so the new shock eyelets and lower shock mounts line up.
9. Apply a dab of red Loctite® on the lower mounting threads and tighten the hardware to the vehicle manufacturer's torque specifications.



10. Remove the rear most fender brace screw.





11. Remove middle fender brace screw.



12. Thread a M6X16 button head cap screw into the reservoir clamp, but leave it loose.



13. Use the M6X16 button head screws to attach the reservoir bracket to the reservoir clamp in the orientation shown below. Ensure the clamp's pinch bolt is oriented upwards. Torque to 72 in-lbs.

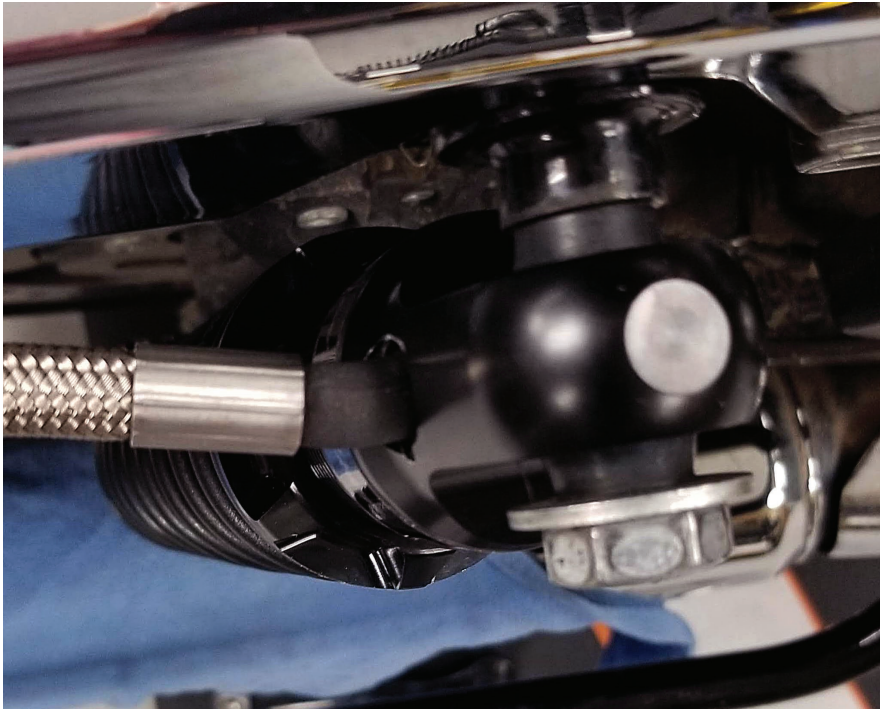


14. Slide the reservoir into the reservoir clamp in the orientation shown below and temporarily tighten the pinch bolt finger tight.





15. Rotate the reservoir hose out of the body cap, so that the hose points towards the fender brace.



16. Slide black spacer into the bore for the rear fender brace screw.



17. Install the 5/16-18 x 1.75" button head rear fender brace screw with a 3/16" Allen bit and torque to the vehicle manufacturer's specification.



18. Loosen the reservoir clamp bolt to help with lining up the middle fender brace hole with the forward reservoir bracket hole.





19. Install the middle 5/16-18 x 1.75" button head fender brace screw with a 3/16" Allen bit and torque to the vehicle manufacturer's specification.



20. Orient the reservoir so the reservoir band decal is visible through the slot of the reservoir clamp. Rotate the reservoir so that the RSD circle logo faces upwards. Tighten the pinch screw to 72 in-lbs.





21. Repeat steps 4 through 20 for the second shock.
22. Carefully lower your bike to the ground and remove the floor jack.



23. Install the saddle bags and open the lids to make sure they don't interfere with the reservoirs.

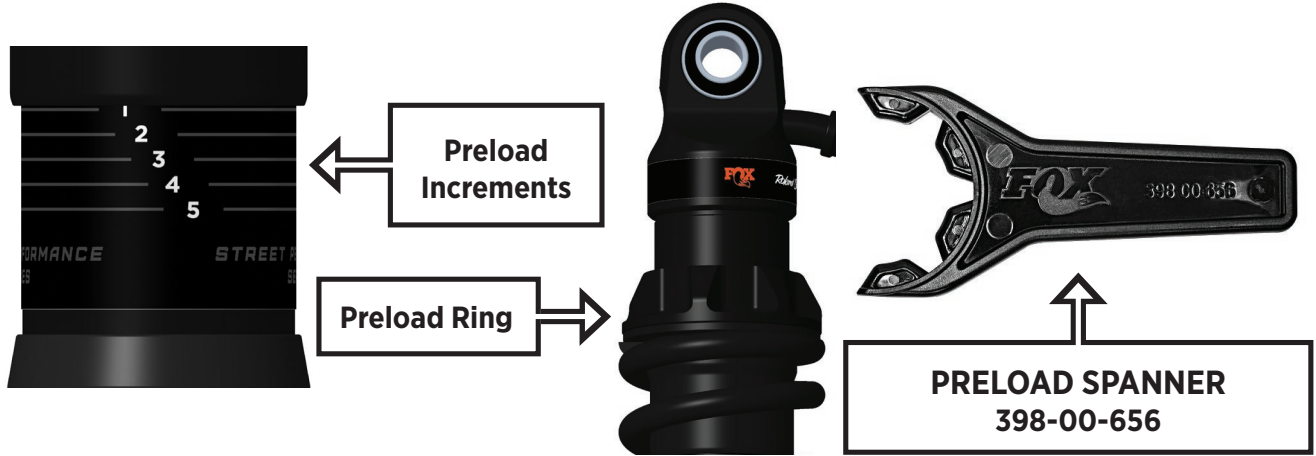


24. Check to make sure shocks have adequate clearance to adjacent components before riding.

## STREET PERFORMANCE RSD SIGNATURE SERIES TOURING SHOCK SETUP

### ADJUSTING SPRING PRELOAD

Be sure to remove your saddle bags before adjusting your spring preload.



FOX Street Performance Series shocks are equipped with spring preload adjusters. Use the preload spanner to adjust spring preload. To adjust the spring preload, rotate the preload ring above clockwise to increase spring preload and counter clockwise to decrease spring preload. Keep track of the spring preload by using the numbered preload increments as seen on the shock body above. Both shocks should be adjusted to the same position.

### ADJUSTING SPRING PRELOAD

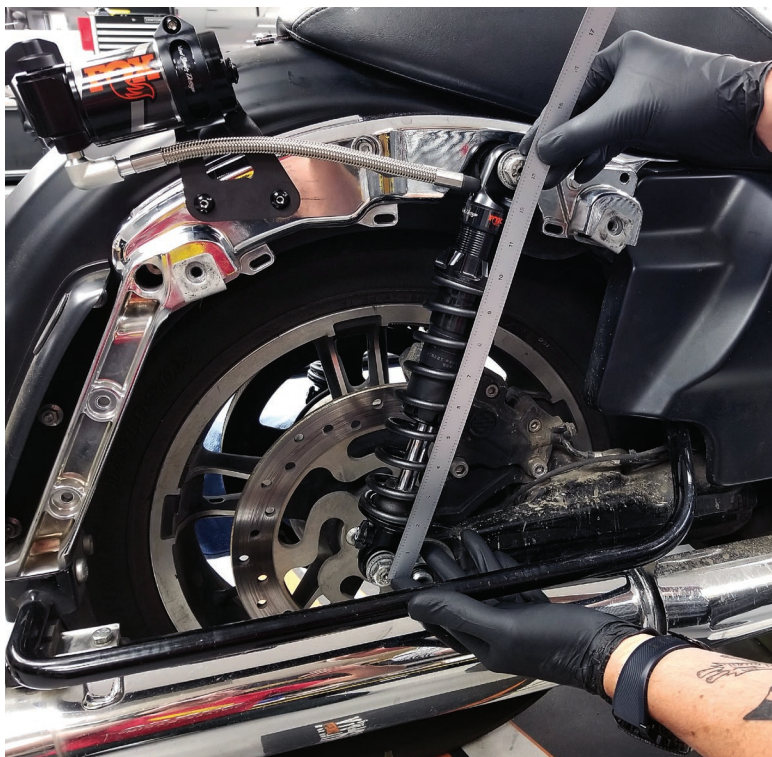
PRELOAD CHART						
12" & 13" STREET PERFORMANCE RSD SIGNATURE SERIES TOURING SHOCK						
COMBINED RIDER WEIGHT (LBS.)	280	5	Spring Preload Position			
	255	4	5			
	230	3	4	5		
	205	2	3	4	5	
	180	1	2	3	4	5
		0	25	50	75	100
Luggage Weight (lbs.)						

**Example: Standard Spring**  
 230 lb. rider(s) + 50 lbs. of luggage  
 = Spring preload required (5).

## STREET PERFORMANCE RSD SIGNATURE SERIES TOURING SHOCK SETUP

### SETTING RIDE HEIGHT

All motorcycles and loading conditions can vary. It is best to confirm that the spring preload is set correctly after using the spring preload chart on page 11.



To set the ride height, the rider (passenger and luggage) should be seated on the bike in riding position, while an assistant or wheel chock holds the front end upright. With the rider (passenger and luggage) seated, have an assistant measure the eye to eye length of the shock and adjust the spring preload to obtain the target shock lengths listed below (rider not shown).

### TOURING

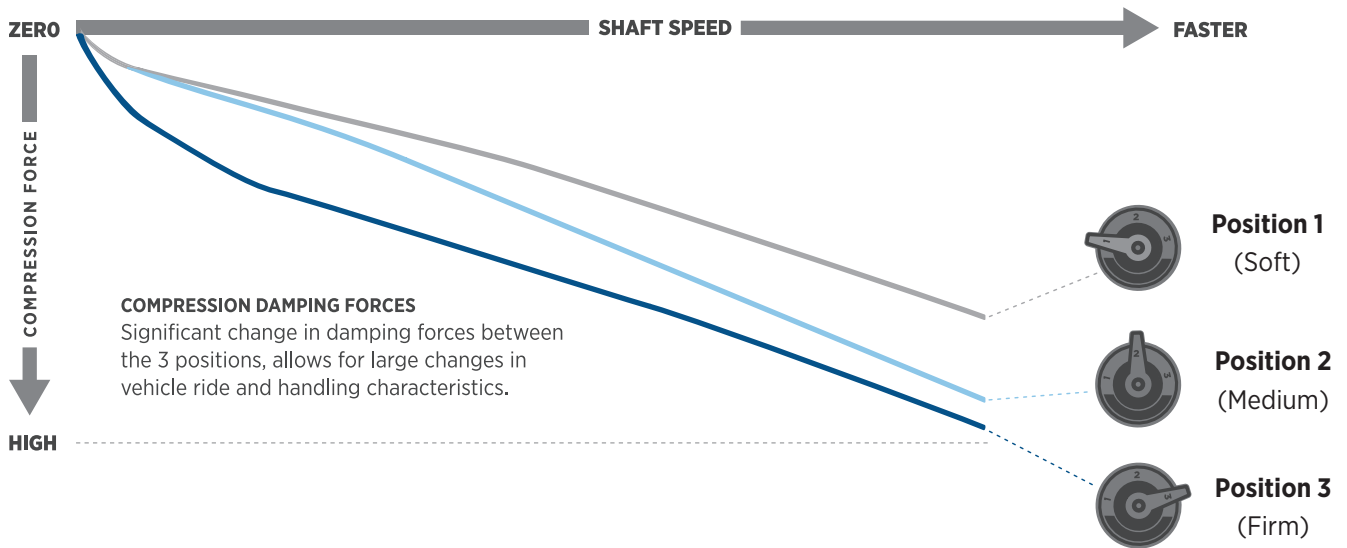
- 12 inch shocks should measure from 11 3/4 to 11 7/8 inches between eyelets with rider and passenger on bike.
- 13 inch shocks should measure from 11 7/8 to 12 1/8 inches between eyelets with rider and passenger on bike.

If you cannot reach your optimal ride height with the shock's available preload adjustment, please contact the FOX Service Center at 831-740.4619. You may need a different shock kit to suit your motorcycle.

\* Reference pages 13-14 for setting compression and rebound.



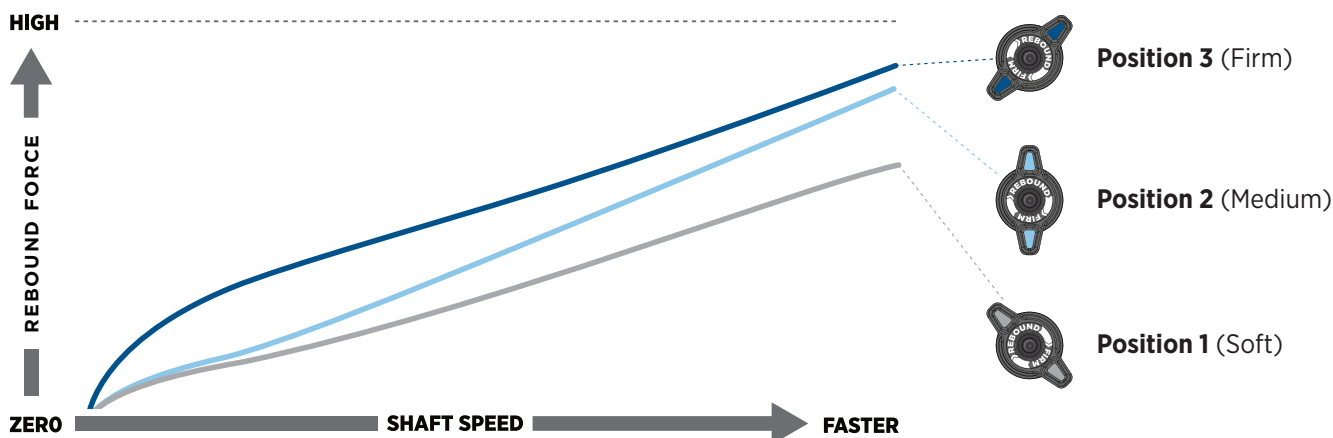
## QS3 COMPRESSION ADJUST DAMPING CHART



Our QS3 tool-free adjuster allows for simple repeatable suspension setting changes on the fly. Its wide range of compression adjustment provides noticeable changes of ride quality and handling without the complications of counting clicks. Choose a QS3 setting that gives you the most confidence, comfort, or handling characteristics with just a “flip of a switch.”

TUNING COMPRESSION DAMPING	
SYMPTOM	REMEDY
Rigid, harsh ride	Turn counter clockwise
Excessive weight transfer	Turn clockwise
Bottoms out often	Turn clockwise
Suspension not using full travel	Turn counter clockwise

## QS3 REBOUND ADJUST DAMPING CHART



### QUICK SWITCH WITH REBOUND EXPLAINED

The Quick Switch 3 with rebound adjust feature gives you the ability to easily adjust the shock's rebound damping with three easy clicks. The factory setting is in the second, middle click. The performance of the shock at this setting is close to the performance of the non-adjustable shock and is a good all-around setting. For slower rebound, turn the knob clockwise. For faster rebound turn the knob counter-clockwise.

Rebound damping affects how quickly the shock extends (rebounds). Adjusting the rebound affects how quickly the wheel rebounds when traveling through a series of bumps and also determines how quickly the rear end responds in corners.



Rebound Knob

The optimum rebound setting usually requires the least amount of damping possible without the motorcycle feeling like it is bouncing off of every bump. Excessive rebound damping will typically be felt as harsh "suspension packing". This can often be seen or felt as the vehicle travels through a series of similar-sized, successive bumps. It works well for the first two or three bumps and then bottoms hard on the third or fourth. This is because the shock has not rebounded quickly enough and continues to "pack" further into the compression stroke before it can fully extend.

TUNING REBOUND DAMPING	
SYMPTOM	REMEDY
Harsh over bumps	Turn counter clockwise
Bottoms out often	Turn clockwise
Wallows in corners	Turn clockwise
Excessive weight transfer	Turn clockwise
Suspension not using full travel	Turn counter clockwise



## **MAINTENANCE**

PROPER INSPECTION AND MAINTENANCE IS ESSENTIAL TO MAINTAIN THE PERFORMANCE AND RELIABILITY OF YOUR SHOCK ABSORBERS.

To avoid corrosion, you should keep the shocks and springs clean, free of dirt and moisture. The wiper seal will clean deposits from the shaft, but the shock won't necessarily fully compress every time. This means you could accumulate dirt at the bottom of the shaft and underneath the jounce bumper. Make sure you clean these areas completely to prevent shaft corrosion. Avoid using a high-pressure washer near the shaft seals or adjusters, as this could drive dirt inside the shock.

Make sure the ends of the spring and shock threads are clean and free of dirt before adjusting the preload ring. This will make the adjustment easier and reduce wear.

Ideally, the shocks should be clean around the adjusters. Use a small amount of contact cleaner or brake cleaner before making adjustments will keep these parts clean and operating smoothly for years

## **SALES AND TECHNICAL INQUIRIES**

Please view the full warranty terms and conditions at [www.ridefox.com/ps-warranty](http://www.ridefox.com/ps-warranty).

All FOX products have a one-year warranty on defects in materials or workmanship.

For more information or to file a warranty claim, contact a FOX Warranty representative at 1.800.FOX.SHOX (1.800.369.7469). ext. 4





## **FOX LIMITED WARRANTY**

FOX Factory, Inc., a Georgia corporation having an office at 6634 Highway 53 Braselton, GA 30517 (“FOX”), makes the following LIMITED WARRANTY with respect to its suspension products:

### **LIMITED ONE (1) YEAR WARRANTY ON SUSPENSION PRODUCTS**

Subject to the limitations, terms and conditions hereof, FOX warrants, to the original retail owner of each new FOX suspension product, that the FOX suspension product, when new, is free from defects in materials and workmanship. Unless otherwise required by law, this warranty expires one (1) year from the date of the original FOX suspension product retail purchase from an authorized FOX dealer or from a FOX authorized Original Equipment Manufacturer where FOX suspension is included as original equipment on a purchased vehicle. If law requires a warranty duration of greater than one (1) year, then, subject to the other provisions hereof, this warranty will expire at the end of the minimum warranty period required by such law.

## **TERMS OF WARRANTY**

This warranty is conditioned on the FOX suspension product being operated under normal conditions and properly maintained as specified by FOX. This warranty is only applicable to FOX suspensions purchased new from an authorized FOX source and is made only to the original retail owner of the new FOX suspension product and is not transferable to subsequent owners. This warranty is void if the FOX suspension product is subjected to abuse, neglect, improper or unauthorized repair, improper or unauthorized service or maintenance, alteration, modification, accident or other abnormal, excessive, or improper use.

Should it be determined by FOX in its sole and final discretion, that a FOX suspension product is covered by this warranty, it will be repaired or replaced, by a comparable model, at FOX’s sole option, which will be conclusive and binding. THIS IS THE EXCLUSIVE REMEDY UNDER THIS WARRANTY. ANY AND ALL OTHER REMEDIES AND DAMAGES THAT MAY OTHERWISE BE APPLICABLE ARE EXCLUDED, INCLUDING, BUT NOT LIMITED TO, INCIDENTAL OR CONSEQUENTIAL DAMAGES OR PUNITIVE DAMAGES.

This limited warranty does not apply to normal wear and tear, malfunctions or failures that result from abuse, improper assembly, neglect, alteration, improper maintenance, crash, misuse or collision. This limited warranty gives the consumer specific legal rights. The consumer may also have other legal rights which vary from state to state or country to country. Some states and countries do not allow the exclusion or limitation of incidental or consequential damages or warranties, and if dictated by law the above limitations or exclusions may not apply to you. If it is determined by a court of competent jurisdiction that a certain provision of this limited warranty does not apply, such determination shall not affect any other provision of this limited warranty and all other provisions shall remain in full effect

THIS IS THE ONLY WARRANTY MADE BY FOX ON ITS SUSPENSION PRODUCTS AND COMPONENTS, AND THERE ARE NO WARRANTIES WHICH EXTEND BEYOND THE DESCRIPTION HEREIN. ANY WARRANTIES THAT MAY OTHERWISE BE IMPLIED BY LAW INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE ARE EXCLUDED



# SHOCKS NEED LOVE TOO

## FOX SHOCKS SERVICE & UPGRADES

HAVE YOUR FOX SHOCKS SERVICED BY FOX TECHNICIANS. CALL OUR MOTORCYCLE SERVICE CENTER AT 831.740.4619 TO GO OVER THE SERVICE OPTIONS AVAILABLE FOR YOUR SHOCKS. ONCE YOU'VE SETUP YOUR SERVICE YOU WILL RECEIVE A RETURN AUTHORIZATION NUMBER AND SHIPPING INSTRUCTIONS.

## COMPLETE SERVICE INTERVALS

- NORMAL USE:  
EVERY 50,000 MILES
- EXTREME USE:  
MAY REQUIRE MORE FREQUENT SERVICE.

## SERVICE MENUS & PRICING

VISIT [RIDEFOX.COM/SERVICE](http://RIDEFOX.COM/SERVICE)



**WARNING: Cancer and Reproductive Harm –**  
[www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)