STREET PERFORMANCE SERIES SHOCKS
FOR HARLEY-DAVIDSON SOFTAIL MODELS

INSTALLATION AND SETUP



- IFP WITH QS3 REBOUND ADJUST

605-01-281 REV B

STREET PERFORMANCE SERIES SHOCKS

- IFP WITH QS3 REBOUND ADJUST

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
- Motorcycle floor jack
- Ratchet and assorted sockets or wrenches sized appropriately to your motorcycle's mounting hardware
- Loctite®
- Torque wrench
- Tape measure
- Strap wrench

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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.
- 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.

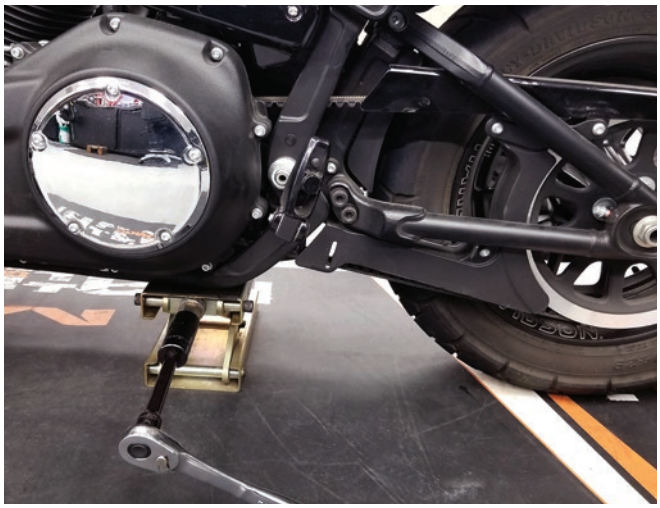
INSTALLATION GUIDELINES

⚠ 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.
- If you have difficulty adjusting your preload, you may find it easier to adjust preload with the shock off the motorcycle. Once the shock is removed, mount one of the eyelets in a vice so as not to cause damage to any of the shock components. You can then adjust the preload ring. If you cannot reach your optimal ride height within the shock's available preload adjustment, you will need to go up in spring rate to one that fits the application.

STREET PERFORMANCE SERIES SOFTAIL SHOCK INSTALLATION

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



1. Jack the rear of the bike to take the weight off the rear wheel.
2. Loosen the mounting hardware that secures your stock shock per vehicle manufacturer's workshop manual.
3. Adjust your floor jack so that the hardware and shock come off easily.
4. Inspect the mounting hardware and replace any hardware that's been damaged.

5. For easy set up we recommend pre-adjusting the spring preload on your new Fox shock according to the steps on page 5 prior to installation.
6. Install your new FOX shock with the QS3 adjuster facing upwards and toward the rear wheel (see pictures 1 and 2 on page 4).
7. Adjust the floor jack so the new shock and mounting hardware install easily.
8. Install and tighten the mounting hardware per vehicle manufacturer's workshop manual.
9. Carefully lower your bike to the ground and remove the floor jack.
10. Check to make sure shock has adequate clearance to adjacent components before riding.







STREET PERFORMANCE SERIES SOFTAIL SHOCK INSTALLATION

1. FOX Street Performance IFP-QS3 mounted as pictured below.

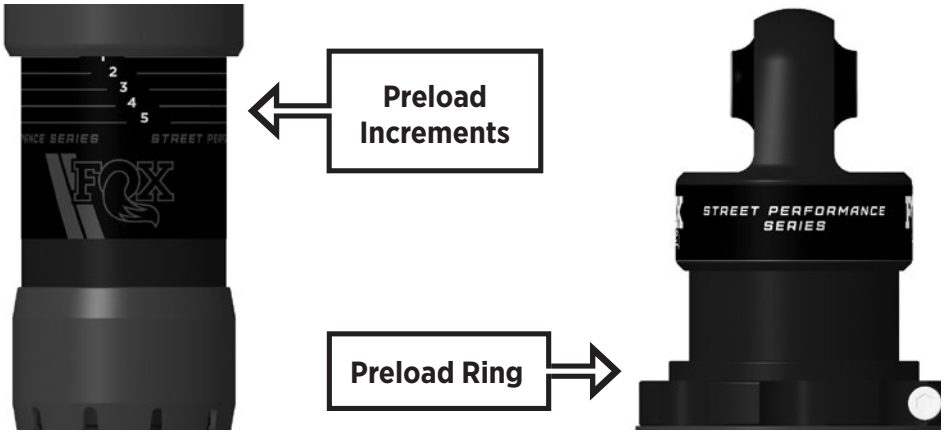


2. FOX Street Performance IFP-QS3 mounted with QS3 rebound adjuster facing rear wheel.



STREET PERFORMANCE SERIES IFP — QS3 SHOCK SETUP:

ADJUSTING SPRING PRELOAD



FOX Street Performance Series shocks are equipped with spring preload adjusters. To adjust the spring preload, loosen the pinch bolt and then, with a strap wrench, 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. To make a preload adjustment easier on an already installed shock, use a motorcycle jack to lift the rear wheel off the ground, minimizing the pressure on the preload ring.

ADJUSTING SPRING PRELOAD

Preload Chart SOFTAIL 12.5" SHOCK						
COMBINED RIDER WEIGHT (LBS.)	371	5	5	5	Spring Preload Position	
	318	4	4	4	5	5
	266	3	3	3	4	4
	213	2	2	2	3	3
	160	1	1	1	2	2
		0	13	25	38	50
Luggage Weight (lbs.)						

Preload Chart SOFTAIL 13.0" SHOCK						
COMBINED RIDER WEIGHT (LBS.)	333	5	5	Spring Preload Position		
	290	4	4	5	5	5
	247	3	3	4	4	4
	203	2	2	3	3	3
	160	1	1	2	2	2
		0	13	25	38	50
Luggage Weight (lbs.)						

Example: Softail 12.5" Shock
266 lb. rider(s) + 25 lbs. of luggage
= Spring preload required (3).

Preload Chart SOFTAIL 13.5" SHOCK						
COMBINED RIDER WEIGHT (LBS.)	301	5	5	Spring Preload Position		
	266	4	4	5	5	5
	231	3	3	4	4	4
	195	2	2	3	3	3
	160	1	1	2	2	2
		0	13	25	38	50
Luggage Weight (lbs.)						

STREET PERFORMANCE SERIES SOFTAIL IFP-QS3 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 charts on page 5.

1. To set the ride height, first place a non-permanent mark on the frame above the rear wheel axle (e.g. a piece of tape). Jack the rear wheel off the ground and then measure the distance between the rear wheel axle and the mark.
   A. Record this as **Distance A:** _____







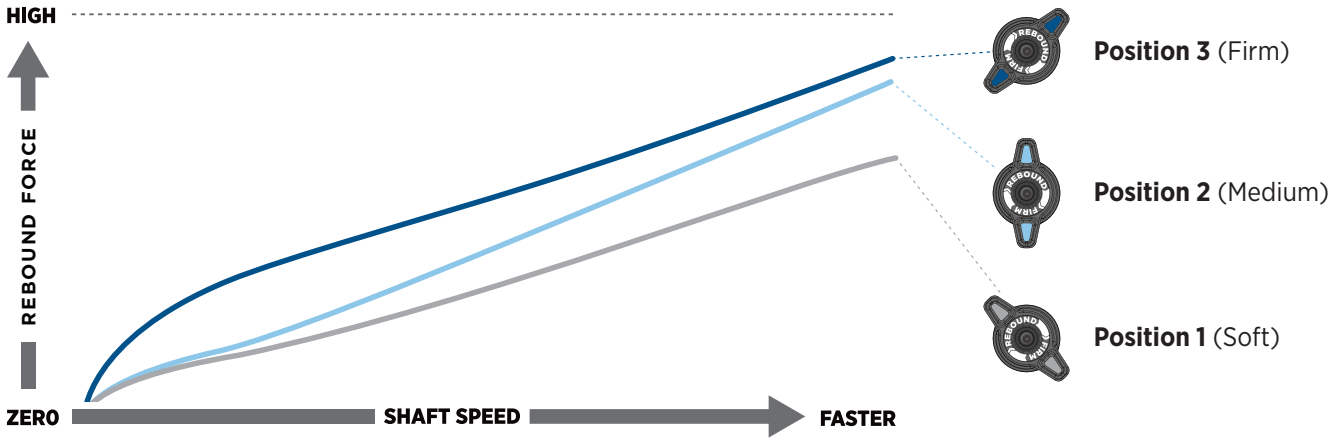
2. With the bike off the jack, the rider (passenger and luggage) should be seated on the bike in riding position while an assistant or wheel chock holds the frontend upright. With the rider (passenger and luggage) seated, have an assistant measure the distance from the rear wheel axle to the same mark on the frame.
   B. Record this as **Distance B:** _____



3. Subtract the two measurements to calculate your sag.
   C. Distance A - Distance B = **Sag:** _____
4. Compare your sag measurement to the target sag lengths listed below. If your sag measures less than the target, decrease the spring preload. If your sag measures more than the target, increase the spring preload.

Softail 12.5” Shock	**Softail 13.0” Shock**	**Softail 13.5” Shock**
Target sag = 1”	Target sag = 1.25”	Target sag = 1.75”

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 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. This 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**.

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



WARNING: Cancer and Reproductive Harm – www.P65Warnings.ca.gov