

# Spot Rollik 150 Suspension Setup Guide

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# Warning

Like any sport, bicycling involves risk of injury and damage. By choosing to ride a bicycle, you assume the responsibility for that risk, so you need to know—and to practice—the rules of safe and responsible riding and of proper use and maintenance. Proper use and maintenance of your bicycle reduces the risk of injury or death.

All bicycles should be assembled and maintained by an authorized bicycle mechanic. If you are not qualified to assemble, inspect, and maintain your bicycle, please visit your favorite local bike shop or contact Spot Brand for a referral to a qualified bicycle technician in your area.

This guide covers the details specific to tuning your Living Link™ suspension frame. It does not address complete bicycle assembly, fitting, inspection, maintenance, or riding techniques. Please refer to the Spot Brand Bicycle Owner’s Manual for further details.

Under no circumstances shall Spot Brand LLC be held liable for direct, incidental, or consequential damages, including, without limitation, damages for personal injury property damage, or economic losses, whether based on contract, warranty, negligence, product liability, or and other theory.

## A Note on Intended Use

The American Society for Testing and Materials (ASTM) has established a classification standard for bicycle use, outlined in document ASTM F2043. It is important to use any bicycle within it’s intended use classification to ensure rider safety, equipment longevity, and warranty coverage. The Spot Rollik 607 mountain bike is classified within Level 4 of this standard:

<b>1</b>	This is a set of conditions for the operation of a bicycle on a regular paved surface where the tires are intended to maintain ground contact.
<b>2</b>	This is a set of conditions for the operation of a bicycle that includes Condition 1 as well as unpaved and gravel roads and trails with moderate grades. In this set of conditions, contact with irregular terrain and loss of tire contact with the ground may occur. Drops are intended to be limited to 15cm (6") or less.
<b>3</b>	This is a set of conditions for operation of a bicycle that includes Condition 1 and Condition 2 as well as rough trails, rough unpaved roads, and rough terrain and unimproved trails that require technical skills. Jumps and drops are intended to be less than 61cm (24").
<b>4</b>	This is a set of conditions for operation of a bicycle that includes Conditions 1, 2, and 3, or downhill grades on rough trails at speeds less than 40 km/h (25 mph), or both. Jumps are intended to be less than 122cm (48").
<b>5</b>	This is a set of conditions for operation of a bicycle that includes Conditions 1, 2, 3, and 4; extreme jumping; or downhill grades on rough trails at speeds in excess of 40 km/h (25 mph); or a combination thereof.

# A. Setting Shock Air Pressure

Sag should be set to 25 – 30% of total shock travel

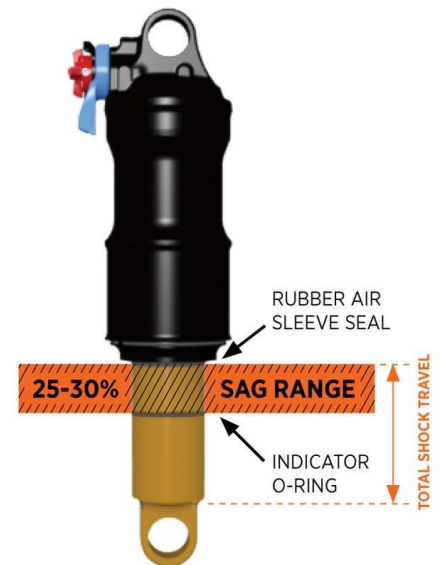
To achieve the best performance from your FOX suspension, adjust the air pressure to attain your proper sag setting. Sag is the amount your suspension compresses under your weight and riding gear. Sag range should be set to 25–30% of total shock travel.

Watch the sag setup video at [ridefox.com/sagsetup](http://ridefox.com/sagsetup)

Your shock has a 4 digit ID code on the shock rider. Use this number on the Help page at [www.ridefox.com](http://www.ridefox.com) to find out more information about your shock, including shock travel.

Turn the 3-position lever to the OPEN mode.

1. Start by setting the shock air pressure (psi) to equal **110%** your rider weight in pounds. With the air pump attached to the shock valve, slowly cycle your shock through 25% of its travel 10 times as you reach your desired pressure. This will equalize the positive and negative air chambers and will change the pressure on the pump gauge. Refill the air pressure to match your rider weight. **Do not exceed 300 psi (20.7 bar), the maximum FLOAT air pressure!**
2. Remove the pump.
3. Sit still on the bike in your normal riding position, using a wall or a tree for support.
4. Pull the sag indicator o-ring up against the rubber air sleeve seal.
5. Carefully dismount the bike without bouncing.
6. Measure the distance between the sag indicator o-ring and the rubber air sleeve seal. Compare your measurement to the 'Suggested Sag Measurements' table.
7. Add or remove air pressure until you reach your desired sag measurement.
8. You can fine tune the shock pressure slightly to match your riding style and preferences— less air will lower ride height and feel softer, more air will raise ride height and feel firmer. **Spot does not recommend using air pressure values less than 100% of rider weight as the air spring may not offer adequate support to resist hard bottom outs. Hard bottoming will shorten frame life, component life, and potentially cause loss of control. For more shock air tuning options, visit [www.spotbrand.com](http://www.spotbrand.com).**



Suggested Sag Measurements		
Rollik 150 Shock Stroke	25% Sag (Firm)	30% Sag (Plush)
55mm	13.8mm (.54in)	16.5mm (.65in)

## B. Setting Shock Rebound Damping

Rebound controls how fast the shock extends after compressing

The rebound adjustment is dependent on the air pressure setting. For example, higher air pressures require more rebound damping. Use your air pressure to help find your rebound setting.

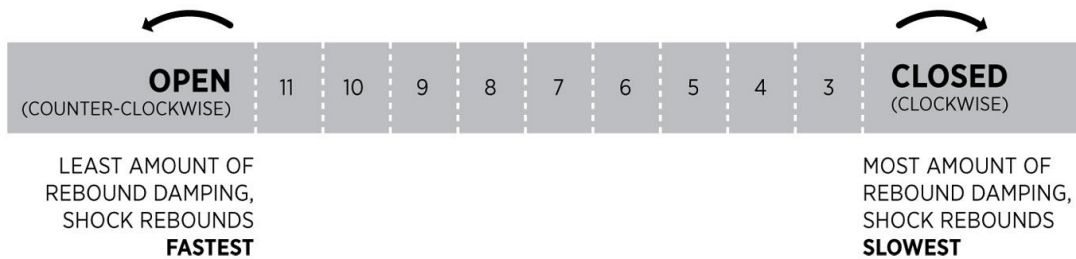
Turn your rebound knob to the closed position (full clockwise) until it stops. Then back it out (counter-clockwise) to the number of clicks shown in the table below.

### REBOUND



**Rebound** controls the rate of speed at which the shock extends after compressing.

Air Pressure (psi)	Rebound Setting (clicks from full slow)
<100	10
100-120	9
120-140	8
140-160	7
160-180	6
180-200	5
200-220	4
220-240	3
240-260	2
260-280	1
280-300	Closed (clockwise)



# C. Adjusting Compression Damping

Easy on-the-fly adjustments for unprecedented control and performance

**3-Position Lever:** The 3-position lever is useful to make on-the-fly adjustments to control shock performance under significant changes in terrain, and is intended to be adjusted throughout the ride. You can use the OPEN mode during rough descending, the MEDIUM mode for undulating terrain, and the FIRM mode for smooth climbing.

Spot recommends using the OPEN mode for the majority of off-road riding. The Living Link suspension system is very efficient. No pedal platforms or lockouts are necessary to get the most out of the system!



**Compression Damping:** Compression damping adjustment is very useful to control how much suspension travel the bike uses in the OPEN mode during various trail events. This compression adjustment affects all compression speeds, from low speed (like g-outs and pumping) to high speed (sharp impacts at speed, landing jumps and drops). Light riders will often set this adjustment near its lowest setting— full counterclockwise. Heavier and more aggressive riders will find that increasing the compression damping by turning the adjuster clockwise helps the suspension support fast maneuvers and bigger hits. Use a 3mm allen wrench to adjust this setting. Full counterclockwise will have a more plush feel and full clockwise will have a firmer, more damped feel. Spot Recommends beginning at full counterclockwise (softest) and adding damping as necessary to combat excessive travel usage and hard bottom outs.

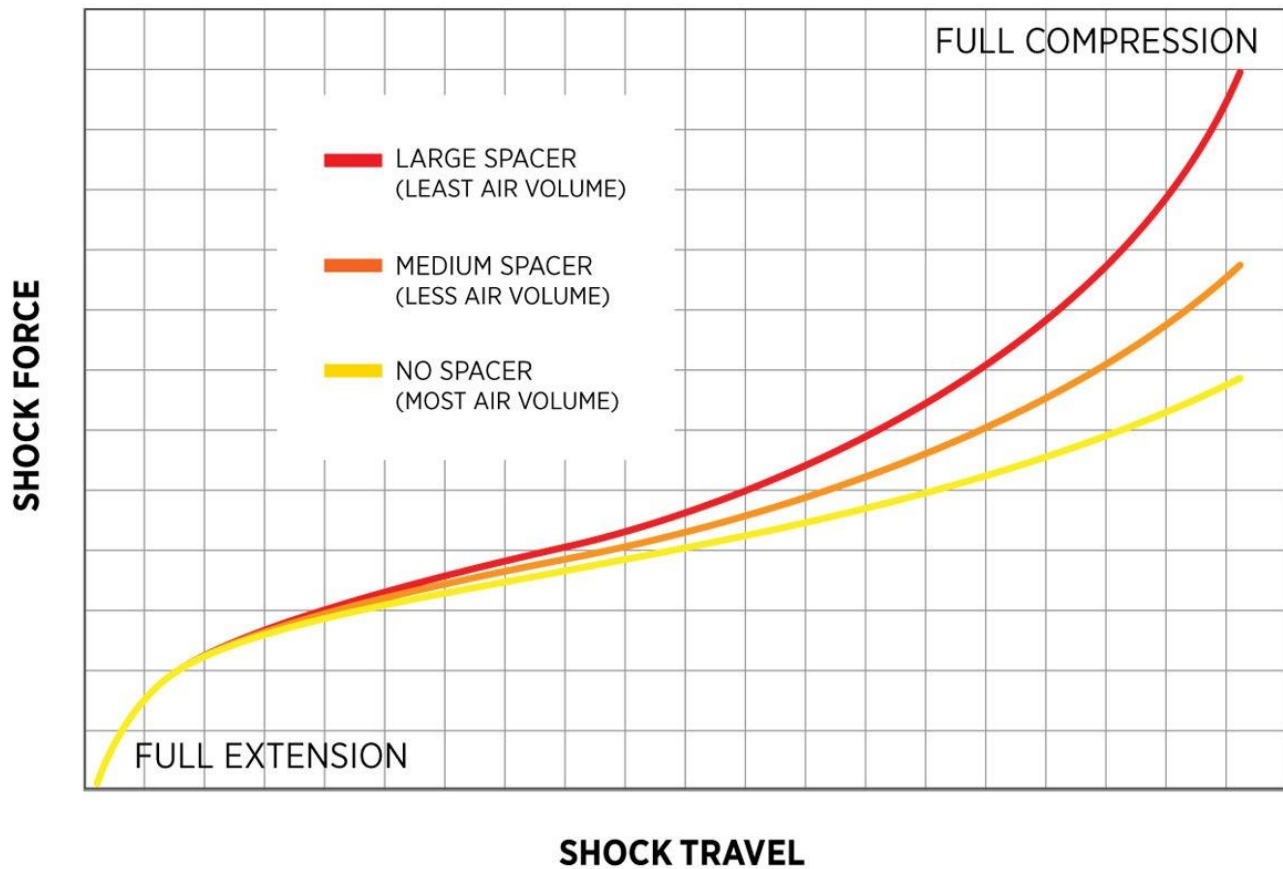


## D. Tuning With Air Volume Spacers

Changing volume spacers in the shock is an internal adjustment that allows you to change the amount of mid stroke and bottom out resistance.

- If you have set your sag correctly and are using full travel (bottoming out) too easily, then you should install a larger spacer to increase bottom out resistance. **Similar to other high performance lightweight vehicles, frequent hard bottom outs will shorten the life of your frame and other components!**
- If you have set your sag correctly and are not using full travel, then you could install a smaller spacer to decrease bottom out resistance and improve ride comfort.

### TYPICAL AIR SPRING CURVES



- FLOAT DPX2 (1/2" shaft) Air Spring Volume Tuning Kit is available from Fox: PN 803-01-251
- Changing volume spacers is a **simple procedure** that can be performed by the end user. In the case of Spot suspension frames, the shock doesn't even need to be removed from the bike. For instructions on this procedure, please visit the Fox website:

<http://www.ridefox.com/help.php?m=bike&id=555#tuningwithairvolumespacers>

# E. Setting Fork Pressure

## Sag should be set to 15 – 20% of total fork travel

To achieve the best performance from your suspension fork, adjust the air pressure to attain your proper sag setting. Sag is the amount your suspension compresses under your weight and riding gear. Sag range should be set to 15–20% of total fork travel.

Watch the sag setup video at [ridefox.com/sagsetup](http://ridefox.com/sagsetup)

1. Unscrew the air cap on top of the left fork leg counter-clockwise to expose the Schrader valve.
2. Attach a shock pump to the Schrader valve.
3. Pump your fork to the appropriate pressure as listed in the suggested air pressure table.
4. Using your fork’s sag setting o-ring on the left upper tube (or temporarily install a zip tie to the upper tube), slide the o-ring (or zip tie) down against the fork dust wiper.

Rotate the large 3-Position knob to the full open position.

- Dressed to ride (including a filled hydration pack, if you use one), position your bike next to a wall or table to support yourself. Mount your bicycle. Assume your riding position for at least 10 seconds, allowing the suspension to fully settle. Make sure you distribute your weight evenly between the saddle, handlebars and pedals.
- While in your riding position, slide the o-ring (or zip tie) down against the fork dust wiper.
- Dismount your bike without bouncing, to avoid further moving the o-ring or zip tie. Measure the distance between the dust wiper and the o-ring or zip tie. This is your sag measurement. Suggested sag measurements are listed in the table below.
- Add or remove air pressure until your sag measurement is between 15-20% of your fork’s total travel.
- Repeat steps 2-8 and recheck sag measurement.
- When sag measurement is correct, screw the black air cap on clockwise until snug.

Suggested Starting Points for Setting Sag		
Fork Travel	15% Sag (firm)	20% Sag (plush)
160mm/ 6.3 in	24mm/ 0.95 in	32mm/ 1.26 in

Recommended Air Pressure Starting Point for Setting Sag—Fox 36		
Rider Weight (lbs)	Rider Weight (kgs)	Pressure (psi/ bar)
<140	<64	42psi / 2.9bar
140-160	64-73	45psi / 3.1bar
160-180	73-82	52psi / 3.5bar
180-200	82-91	60psi / 4.1bar
200-220	91-100	68psi / 4.9bar
>220	>100	75psi / 5.1bar



# F. Setting Fork Rebound Damping

## Rebound damping controls how fast the fork extends after compressing

The rebound adjustment is dependent on the air pressure setting. For example, higher air pressures require more rebound damping. The rebound damping is controlled by the red knob on the bottom of the right side fork leg.

Use your air pressure to find your rebound setting. Turn your rebound knob to the closed position (full clockwise) until it stops. Then back it out (counter-clockwise) to the number of clicks shown in the table below.

Rebound settings can vary based on rider preference. If the fork feels too bouncy—like it springs like a pogo stick on big bumps, increase the rebound damping to slow the return. If the fork feels harsh, and rides lower and lower through successive bumps, reducing the rebound damping will increase the return speed and allow the fork to recover for the next bump.

Suggested Starting Points for Setting Rebound Damping	
Pressure (psi/ bar)	Rebound Setting (clicks from full slow)
45psi / 3.1bar	13
55psi / 3.7bar	11
65psi / 4.4bar	9
75psi / 5.1bar	7
85psi / 5.8bar	5
95psi / 6.5bar	3
105psi / 7.1bar	1



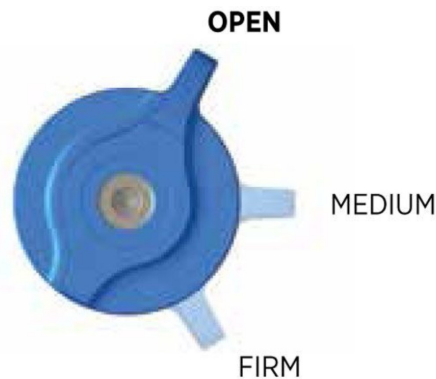


# G. Setting Fork Compression Damping

## Fox 34 Factory Series—FIT4 damper

Easy on-the-fly adjustments for unprecedented control and performance

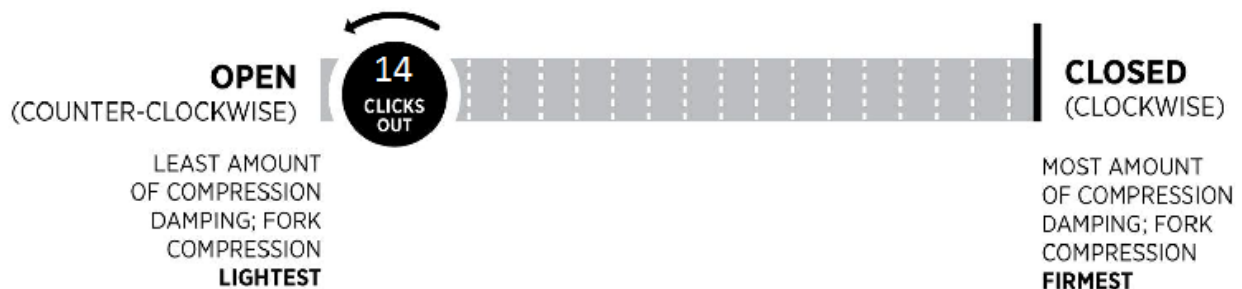
**3-Position Lever:** The 3-position lever is useful to make on-the-fly adjustments to control fork performance under significant changes in terrain, and is intended to be adjusted throughout the ride. You can use the OPEN mode during rough descending, the PEDAL mode for undulating terrain, and the LOCKOUT mode for smooth climbing.



Spot recommends using the OPEN mode for the majority of off-road riding.

**Low Speed Compression Adjust:** Low speed compression adjust is useful to control fork performance under rider weight shifts, G-outs, and slow inputs. Low speed compression adjust provides 14 additional fine tuning adjustments for the OPEN mode. Setting 14 will have a more plush feel and setting 1 will have a firmer feel.

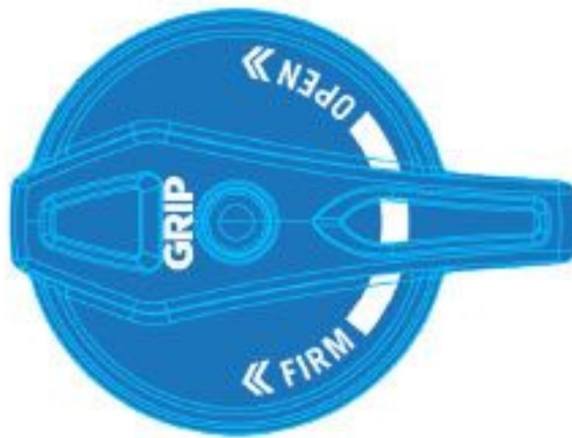
Spot recommends beginning with the low speed compression adjust set to 14 clicks out (counter-clockwise) from fully closed (clockwise). Add more low speed compression damping by turning clockwise one click at a time. If the fork becomes too firm, back the low speed compression adjust off to retain comfort.



# H. Setting Fork Compression Damping

## Fox 34 Performance Series—GRIP damper

**3-Position Micro Adjust:** The 3-position lever is useful to make on-the-fly adjustments to control fork performance under significant changes in terrain, and is intended to be adjusted throughout the ride. Turning the lever to the full counter-clockwise position sets the fork in the Open mode. Turning the lever to the middle detent position sets the fork in the Medium mode. Turning the lever to the full clockwise position sets the fork in Firm mode. The positions between the Open, Medium, and Firm modes can be utilized to fine tune your compression damping.



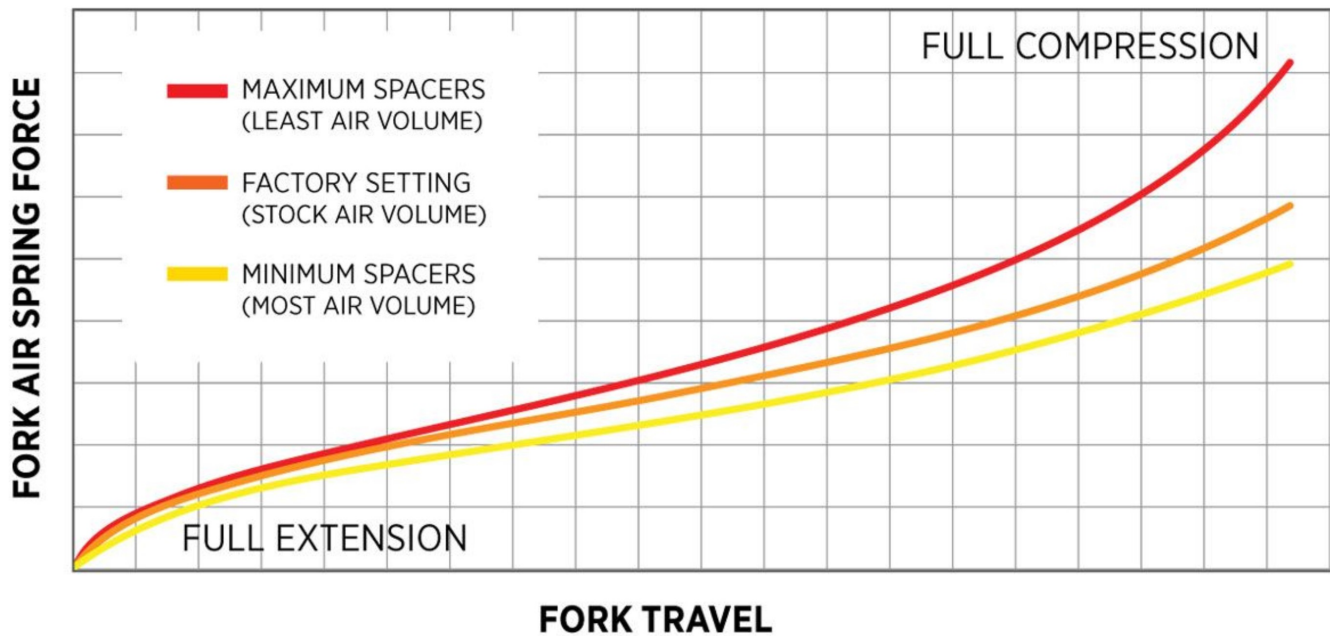
Spot recommends beginning with the 3-position lever fully open, and fine tuning between fully open and the middle position.

# I. Tuning With Air Volume Spacers

Changing volume spacers in the fork is an internal adjustment that allows you to change the amount of mid stroke and bottom out resistance.

- If you have set your sag correctly and are using full travel (bottoming out) too easily, then you should install a larger spacer to increase bottom out resistance. **Similar to other high performance lightweight vehicles, frequent hard bottom outs will shorten the life of your frame and other components!**
- If you have set your sag correctly and are not using full travel, then you could install a smaller spacer to decrease bottom out resistance and improve ride comfort.

## TYPICAL AIR SPRING CURVES



- 36mm FLOAT volume spacers are available from FOX: PN 234-04-736
- Changing volume spacers is a **simple procedure** that can be performed by the end user. In the case of Spot suspension frames, the fork doesn't even need to be removed from the bike. For instructions on this procedure, please visit the Fox website:

<http://www.ridefox.com/help.php?m=bike&id=614>