



TECH HELP CENTER / BIKE / OWNERS-MANUALS / SHOCK- 2024 FLOAT SL AND FLOAT X

OWNER'S MANUALS

SHOCK- 2024 FLOAT SL AND FLOAT X

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For general information and installation instructions click [here »](#)

Installing Your Shock



WARNING: Rear shock setup and configuration varies greatly between different bicycle manufacturers. Be sure to refer to the owner's manual for your bicycle. FOX products should be installed by a qualified bicycle service technician, in accordance with FOX installation specifications. Improperly installed shocks can fail, causing the rider to lose control, resulting in **SERIOUS INJURY OR DEATH**.

CHECK FOR CLEARANCE BEFORE RIDING.

If you are installing your shock on a bike for which the shock was not original equipment, follow the steps below to ensure proper clearance before riding.

1. Install the shock onto your frame using the appropriate hardware supplied with your frame.
2. Remove the air cap, attach a shock pump, then **SLOWLY** release all air out of the main air chamber.
3. Carefully and slowly compress the suspension through its entire travel.
4. Check that no part of your shock contacts any portion of your frame or linkage as it cycles through its travel.
5. Add air pressure to the main air chamber in ~50 psi (3.4 bar) increments, slowly cycling the shock after every 50 psi (3.4 bar) addition.

6. Set your main air chamber to between 50-300psi to prepare to set sag as described in the "Setting Shock Air Pressure" section below.

All shock mounting hardware will have some inherent level of axial float which is required to achieve smooth performance. This is normal and is not a safety or performance concern. If your shock mounting hardware exhibits what you believe to be excessive float or makes noise, please contact FOX for assistance. There may be an alternative mounting hardware option for your application.

Before You Ride

MAKE SURE THAT YOUR SHOCK IS READY TO RIDE

1. Clean the outside of your shock with mild soap and water and wipe dry with a soft rag.
 - Do not use any solvents or de-greasers as these products can damage the shock's exterior finish.
 - Do not use a high pressure washer or spray water directly at the seal/shock body junction.
2. Inspect the exterior of your shock. The shock should not be used if any of the exterior parts appear to be damaged
 - Contact your local FOX dealer or FOX directly for further inspection or repair.
3. Make sure that your quick-release levers (or thru-axles) are properly adjusted and tightened.
4. Check your headset adjustment. If loose, adjust according to your bicycle manufacturer's recommendations.
5. Check that all brake cables or hoses are properly fastened.
6. Test the proper operation of your front and rear brakes on level ground.

Using the EVOL Air Sleeve

The EVOL air sleeve comes standard on FLOAT SL and FLOAT X models. The EVOL air sleeve provides an external negative air chamber integrated into the main air sleeve to significantly reduce the force to initiate travel, providing excellent small bump performance. The system is also more linear in its progression offering improved mid stroke support and better bottom out resistance. It is important to add or remove air from the EVOL sleeve as detailed below to experience the best possible performance.

When adding air to the air chamber, it is important to equalize the positive and negative air chambers by slowly compressing the shock through 25% of its travel 10-20 times after every 50psi addition.

- Adding air to the shock without periodically equalizing the air chambers can lead to a condition in which the shock has more pressure in the positive chamber than the negative. In this condition the shock will be very stiff and can top-out. You can equalize the air chambers by slowly compressing the shock until you feel and hear a transfer of air. Hold the shock at this point for a few seconds to allow the air to transfer from the positive to the negative chamber.

When releasing air from the air chamber, it is important to do this slowly so the shock can transfer air from the negative to positive chamber and then be released through the Schrader valve.

- Releasing the air pressure too quickly can induce a condition in which the negative chamber has more pressure than the positive chamber. In this condition the shock will compress into its travel and not fully extend. You can remedy this by adding air pressure until the shock extends, then slowly compressing the shock through 25% of its travel 10-20 times.

Setting Shock Air Pressure



FLOAT SL EVOL and FLOAT X shocks have a maximum pressure of 350psi (24.1 bar)

FLOAT SL Non-EVOL shocks have a maximum pressure of 300psi (20.7 bar)



NOTE: Pressure measured at an ambient temperature of 70-75F. Normal operating temperature range for FOX products is 20-140F.

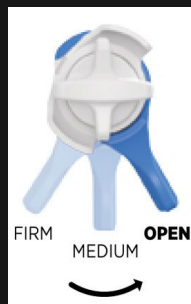
SAG SHOULD BE SET TO 25 - 30% OF TOTAL SHOCK TRAVEL

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

Your shock has a 4 digit ID code on the shock body. Use this number on the Help page at www.ridefox.com to find out more information about your shock, including shock travel.

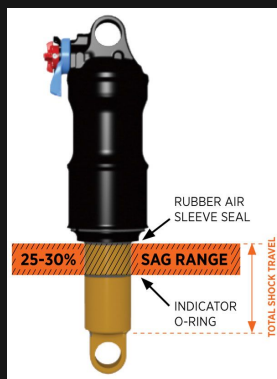
1. Turn the compression lever or knob to the OPEN mode.



2. Start by setting the shock air pressure (psi) to match your body 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.

DO NOT EXCEED THE MAXIMUM FLOAT AIR PRESSURE!

3. Remove the pump.
4. Sit still on the bike in your normal riding position, using a wall or a tree for support.
5. Pull the sag indicator o-ring up against the rubber air sleeve seal.
6. Carefully dismount the bike without bouncing.
7. Measure the distance between the sag indicator o-ring and the rubber air sleeve seal. Compare your measurement to the 'Suggested Sag Measurements' table.



8. Add or remove air pressure until you reach your desired sag measurement.

SUGGESTED SAG MEASUREMENTS		
Travel	25% sag (Firm)	30% sag (Plush)
25 mm (1.0 in)	6 mm (0.25 in)	7 mm (0.30 in)
32 mm (1.25 in)	8 mm (0.31 in)	10 mm (0.37 in)
38 mm (1.5 in)	10 mm (0.38 in)	11 mm (0.45 in)
44 mm (1.75 in)	11 mm (0.44 in)	13 mm (0.53 in)
51 mm (2.0 in)	13 mm (0.50 in)	15 mm (0.60 in)
57 mm (2.25 in)	14 mm (0.56 in)	17 mm (0.68 in)
63 mm (2.5 in)	16 mm (0.63 in)	19 mm (.75 in)
76 mm (3.0 in)	19 mm (0.75 in)	23 mm (0.90 in)

Adjusting Rebound

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.

FLOAT SL:

REBOUND



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

Air Pressure (psi)	Recommended Rebound Setting
<100	Open (counter-clockwise)
100-120	11
120-140	10
140-160	9
160-180	8
180-200	7
200-220	6
220-240	5
240-260	4
260-280	3
280-300	Closed (clockwise)

↶

OPEN
(COUNTER-CLOCKWISE)

11 10 9 8 7 6 5 4 3

LEAST AMOUNT OF REBOUND DAMPING, SHOCK REBOUNDS **FASTEST**

11 10 9 8 7 6 5 4 3

↷

CLOSED
(CLOCKWISE)

MOST AMOUNT OF REBOUND DAMPING, SHOCK REBOUNDS **SLOWEST**

FLOAT X:

REBOUND



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

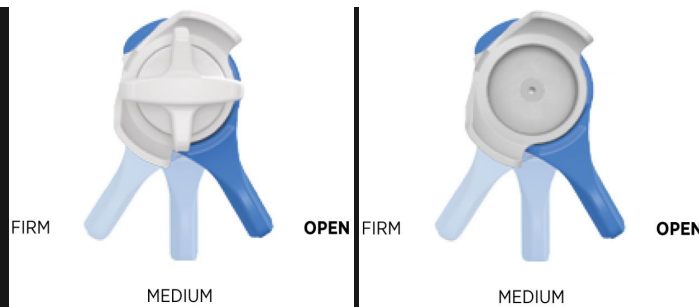
Air Pressure (psi)	Starting Rebound Setting
<100	10
100-120	10
120-140	9
140-160	8
160-180	7
180-200	6
200-220	5
220-240	4
240-260	3
260-280	2
280-300	1

Adjusting Compression Damping

EASY ON-THE-FLY ADJUSTMENTS FOR UNPRECEDENTED CONTROL AND PERFORMANCE

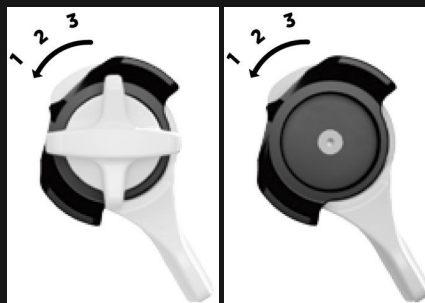
3-POSITION LEVER: The 3-position lever is useful to make on-the-fly adjustments to control shock performance under significant changes in terrain, and is intended to be adjusted throughout the ride. You can use the OPEN mode during rough descending, the MEDIUM mode for undulating terrain, and the FIRM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

FOX recommends beginning with the 3-position lever in the open mode.



*OPEN MODE ADJUST: Open mode adjust is useful to control shock performance during rider weight shifts, G-outs, and slow inputs. Open mode adjust provides 3 additional fine tuning adjustments for the OPEN mode. Lift the open mode adjuster, rotate it to the 1, 2, or 3 position, and press it in to lock the position. It is recommended to make these adjustments with the 3-position lever in the Medium or Firm mode. Setting 1 will have a more plush feel and setting 3 will have a firmer feel.

FOX Recommends beginning with the open mode adjust set to 1.



FLOAT X LOW-SPEED COMPRESSION: The Low-Speed Compression knob allows for changes in low-speed compression damping. Turn the knob clockwise to increase compression damping and counter-clockwise to decrease compression damping.



FLOAT X 2-POSITION LEVER: The 2-position lever is useful to make on-the-fly adjustments to control shock performance, and is intended to be adjusted throughout the ride. The OPEN mode utilizes your standard LSC, preset low-speed compression setting. The preset low-speed compression adjustment only has an affect on compression damping when the

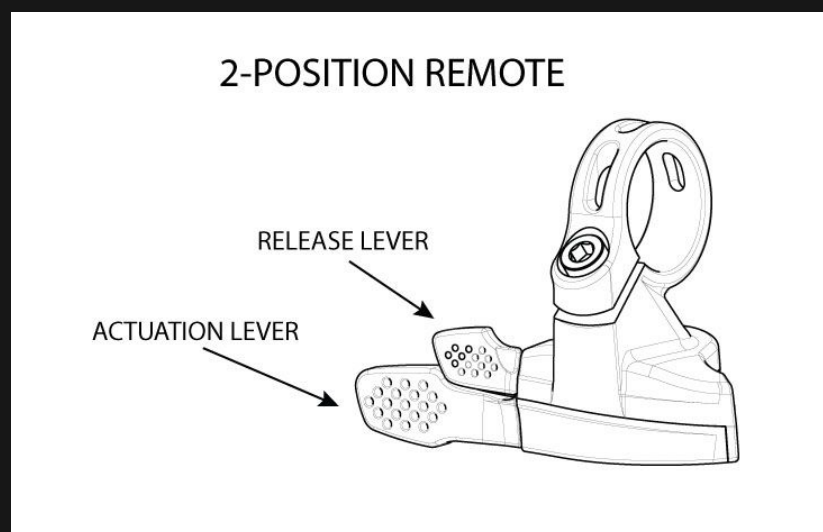
lever is in the OPEN position. The FIRM mode has a very firm low-speed compression setting and is useful for climbing and sprinting.



*Factory and Performance Elite Series non-remote shocks only.

Using the 2-Position Remote

The 2-position remote is designed to be used in place of a front shifter, under the handlebar on the rider's left side. The 2-position remote can be used with 2 cables to control both the front fork and rear shock simultaneously.



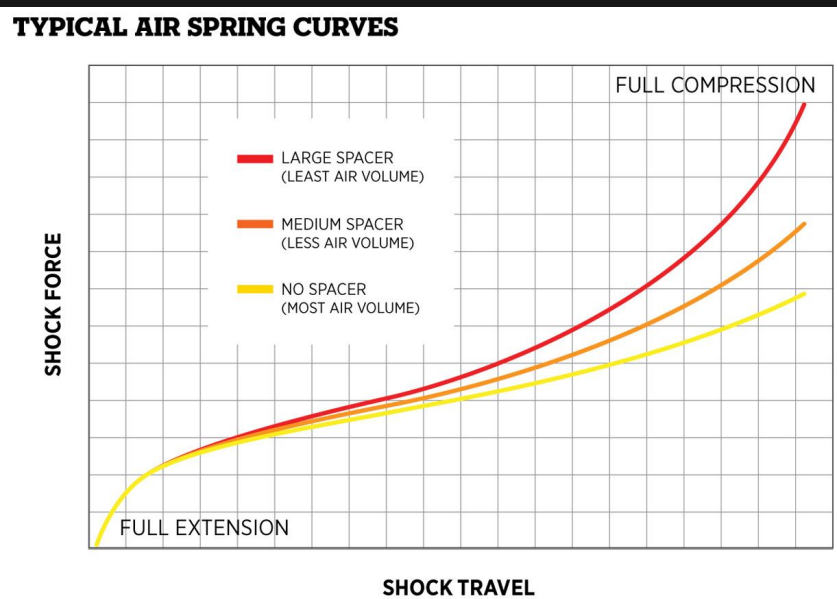
The 2-Position Remote lets you to switch between the OPEN and FIRM modes while riding.

- Push-to-Lock – Push the actuation lever to set the fork to FIRM mode. Push the release lever to set the fork to OPEN mode.
- Push-to-Unlock – Push the actuation lever to set the fork to OPEN mode. Push the release lever to set the fork to FIRM mode.

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 could install a larger spacer to increase bottom out resistance.
- 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.



- FLOAT SL (9MM SHAFT) AIR SPRING VOLUME TUNING KIT: PN 803-01-250
- FLOAT X AIR VOLUME TUNING KIT: PN 803-01-725

Detailed information on FLOAT X volume spacers can be found here: [FLOAT X Volume Spacer Installation »](#)

Detailed information on FLOAT SL volume spacers can be found here: [2002-2026 Air Volume Reduction »](#)

The Video below shows basic instructions for installing or removing air volume spacers from FLOAT based shocks.



02:55



WARNING: FOX suspension products contain pressurized nitrogen, air, oil, or all 3. Suspension misuse can cause property damage, **SERIOUS INJURY OR DEATH**. DO NOT puncture, incinerate or crush any portion of a FOX suspension product. DO NOT attempt to disassemble any portion of a FOX suspension product, unless expressly instructed to do so by the applicable FOX technical documentation, and then **ONLY** while strictly adhering to all FOX instructions and warnings in that instance.



WARNING: Modification, improper service, or use of aftermarket replacement parts with FOX forks and shocks may cause the product to malfunction, resulting in **SERIOUS INJURY OR DEATH**. DO NOT modify any part of a fork or shock, including the fork brace (lower leg cross brace), crown, steerer, upper and lower leg tubes, or internal parts, except as instructed herein. Any unauthorized modification may void the warranty, and may cause failure or the fork or shock, resulting in **SERIOUS INJURY OR DEATH**.



WARNING: Never attempt to pull apart, open, disassemble, or service a FOX shock that is in a "stuck down" condition. A "stuck down" condition results from a failure of the dynamic air seal (located between the positive and negative air chambers within the non-EVOL shock air sleeve), resulting with the negative chamber retaining a higher pressure than the positive chamber. To test whether the shock is in fact "stuck down":

1. Remove the air cap and depress the Schrader valve, to completely release air pressure from the positive chamber of the shock.
2. If the shock body retracts into the air sleeve near bottom-out after the air is released from the positive chamber, attach a FOX high pressure pump and pressurize the shock to 250psi (17 bar).
3. If the shock does not fully extend, it is in a "stuck down" condition.

Any attempt to service FOX air shocks in the "stuck down" condition can lead to **SERIOUS INJURY OR DEATH**. Contact FOX or an Authorized Service Center for repair.

Service Intervals

To best maintain the performance and durability of your product under normal use, FOX recommends that you have regular fork and shock maintenance performed according to the service intervals listed below.

Recommended Minimum Shock Maintenance

	Every Ride	Regularly	Every 125 Hours/Yearly, or whichever comes first.*
Clean exterior with mild soap and water only, then wipe dry with a soft towel. Inspect your product for visual damage and function of all controls.	●		
Check sag and damper settings. Inspect your product for visual damage and function of all controls.		●	
Full shock service (Full internal/external inspection, damper rebuild, air seal replacement for air shocks)			●

*Suspension product will require more frequent servicing the harder they are worked. For those who ride lift-accessed DH, Park, or Extreme Freeride or in extremely wet/muddy or dry/dusty environmental conditions where trail debris is sprayed onto the fork or shock while on the trail, or e-mtb's, FOX encourages riders to perform maintenance earlier than recommended above as needed. If you hear, see, or feel something unusual, stop riding immediately and contact a FOX Authorized Service Center for proper servicing.



WARNING: FOX products should be serviced by a qualified bicycle service technician, in accordance with FOX specifications. If you have any doubt whether or not you can properly service your FOX product, then DO NOT attempt it. Improperly serviced products can fail, causing the rider to lose control resulting in SERIOUS INJURY OR DEATH.

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