

CURNUTT

XTD-FXR SHOCK: SET-UP

Congratulations on purchasing the finest rear shock ever produced for the mountain bike industry. The XTD shock is the result of four years' testing by the Foes Mountain Bike Racing Team and Curnutt Shocks. The FXR version of the XTD shock is the first shock to use this technology in a Cross-Country application. Curnutt introduced "Position Sensitive" or "Platform-damped" technology to the bicycle industry, and has sent a serious wake-up call to the "big boys" in the bicycle suspension field. We highly recommend you take the time to fully read and perform the following set-up instructions.

XTD MAIN FEATURES

1. Ramping Adj. Knob
(for bottoming control)
2. Schraeder Valve
(adjusts compression-threshold/anti-bob damping)
3. Rebound Adj. Knob
(adjusts rebound speed)



Recommended Base Set-up

*Set Ramping Adjustment knob (Fig. 1) at two turns out (there is a total of four revolutions; turn knob clockwise all the way in until it stops & then back it off two complete revolutions). **VERY IMPORTANT- DO NOT FORCE KNOB TO BACK OUT MORE THAN FOUR COMPLETE REVOLUTIONS-DOING SO COULD CAUSE LEAKAGE/FAILURE.**

*Use Schrader valve (Fig. 2) to pressurize to 75 psi (use a quality high pressure shock pump intended for this application-obtainable at decent bike shops)

*Set total sag. Shock should measure 8 3/4" to 8 7/8" from eye-to-eye with the rider's full weight on the bike. The best way is to have someone help support the rider check this measurement while the rider is balanced upon the bike. This operation must be performed on a level surface (no incline!!!). You should use the preload adjuster (Fig. 4) only as a spring holder-*excessive preload is absolutely not recommended.* Once set, put a mark on the preload adjuster and another on the shock body to make sure it isn't backing off after riding. Check sag weekly!

To determine the correct spring rate:

With the shock fully extended, loosen preload adjuster until it no longer touches the spring. Tighten until preload adjuster first touches the spring. Using a felt tip marker, put a mark on the spring, and another on the shock body. This will help you determine EXACTLY when one full turn of the preload adjuster has been made. If LESS than one full turn of the preload adjuster is used to obtain the proper 1/2" of sag at the shock, the spring rate is too heavy, and the next softer spring should be used. If MORE than four full turns are needed to achieve the proper sag, the spring rate is too light, and the next firmer spring should be used. **NEVER USE MORE THAN FIVE FULL TURNS OF SPRING PRELOAD.** A full range of springs is available in steel or titanium from Foes.

Spring rates (by colored mark on spring):

White = 250 lb. Black = 275 lb. Yellow = 300 lb. Green = 350 lb. Blue = 400 lb.

Optimum pressure range is 60 psi (minimum) to 100 psi (maximum). Note: CHECK PRESSURE BEFORE EVERY RIDE! REMEMBER: NO PRESSURE= NO DAMPING

WARNING: NEVER EXCEED 100PSI. EXCEEDING 100 PSI COULD RESULT IN FAILURE!

Make sure your pump is working properly. Put in 75 psi. Remove pump and re-install. Pressure drop should be about 15 psi. Gauge should read about 60 psi. This is normal and indicates no leakage. The 15 psi drop occurs because of the added volume necessary to cause the pump to read.

Setting and Adjusting Compensator Chamber pressure

As noted above, there are a total of four turns of adjustment available on the Ramping Adjustment Knob. When readjusting, if there is any doubt where the adjustment is set, turn knob clockwise until it stops and back off as necessary, to a maximum of four counterclockwise revolutions. **REMEMBER, DO NOT FORCE PAST FOUR TURNS.**

The Ramping Adjustment Knob controls how stiff the shock gets during the last 30% of the total stroke.

If at 75 psi you are happy with the overall ride and sensitivity but are never using all of the travel, back the Ramping Adjustment Knob out 1 turn at a time. This will allow the XTD unit to use more of the stroke.

If at 75 psi (with correct sag) you are bottoming out, turning the Ramping Adjustment Knob in 1 turn at a time will minimize this.

Lower pressure will increase sensitivity to small impact forces. **NEVER GO BELOW 50 PSI**

As you experiment with lower pressures, expect to adjust the Ramping Adjustment Knob clockwise to prevent bottoming. If you are running 60 psi (the minimum recommended) and occasionally bottom, going to 50 psi (not

recommended) will result in serious bottoming unless Ramping Adjustment Knob is turned clockwise as pressure is reduced.

Higher pressures will result in improved pedaling efficiency (anti-bob). DON'T MISTAKE THIS FOR STICTION-It is SUPPOSED to ignore small bump or rider inputs. This is what makes "anti-bob" possible.

WARNING: EXCEEDING 100 PSI COULD RESULT IN FAILURE! Don't do it!

Once you find an acceptable setting, never think this is the final adjustment. Some courses/terrain may have more pedaling sections (higher pressure), some may have more "chatter bumps" (lower pressure), some may have excessive big hits & landings (higher pressure and more ramp). Consider the Curnutt XTD shock and adjustments a tool easily customized to meet your needs.

Adjusting Rebound Damping

Located near the opposite end of the shock is the Rebound Adjustment Knob (Fig. 3). You will see an arrow marked "S" (slow) and "F" (fast). Moving the Rebound Adjustment Knob in the direction of "S" will slow down the rebound movement. Moving the Rebound Adjustment Knob in the direction of "F" will speed up the rebound movement. Total adjustment occurs in about 1 turn. Move in small increments. The XTD's rebound speed is designed to be slow at the top and fast in the middle to bottom. It would be normal for the XTD to be returning (rebounding) slower than a standard shock during the last 1/2" of stroke. This is by design. Even though it may feel slower than what you are used to at this point it will be fast enough in mid-stroke. Run rebound as fast as you can be comfortable with. You should be able to feel it slowing at the top.

The XTD shock isn't merely closing off a bypass hole in the main shaft, as do most other standard shocks. The XTD actually preloads the rebound plate, simulating a thicker or more resistant plate. To simulate this adjustment on standard shocks, you would have to completely depressurize & disassemble the shock to change the valve plate/stack.

TROUBLESHOOTING & OTHER TIPS

The XTD shock may feel a bit sticky for the first few rides until it breaks in. Spray a small amount of WD-40 on the main shaft as often as possible. This will minimize sticking and promote shock life.

Any sign of oil leakage is BAD! If something is going wrong internally, oil will leak out from the Rebound Adjustment Knob area. If you are seeing oil in this area and you are sure it is not the WD-40 you lubed the shaft with (which would run out through the hole in the lower spring cap in the same area), internal failure has occurred. DO NOT CONTINUE TO USE THE UNIT-RETURN IT FOR SERVICE!

Directly below the Ramping Adjustment Knob you will see two lines scribed into the shock body & cap. These lines should match up. If they do not, this would indicate that the shock body is loosening from the end cap. If this occurs turn the shock body clockwise until tight and lines match up once again.

TECHNICAL SUPPORT:

FOES RACING TECH LINE: (626) 683-8368
(ask for tech support) support via e-mail: info@foesracing.com

Fax Tech Questions to: (626) 683-8622

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Foes Racing 62 N. Sierra Madre Blvd. Pasadena, CA 91107 see us at www.foesracing.com