



FOES 2:1 FXR ITD/XTD

2006 Model Frameset

OWNERS MANUAL

It is your responsibility to read this manual to fully understand your warranty on this Foes frameset



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CURNUTT SHOCKS

LIMITED WARRANTY

LIMITED TWO YEAR WARRANTY ON FOES FXR 2:1 SUSPENSION FRAMES

Foes warrants the original owner that a new FXR 2:1 bicycle frame is free from defects in material and workmanship for a period of two years from the date of the original purchase by the original consumer. Curnutt Shocks are covered under warranty by Foes Racing for a period of one year from the date of purchase. This warranty covers manufacturers defects in materials and workmanship. Foes limited warranties do not apply to paint/finish or any other part attached to the bicycle. Including Forks, drive train, brakes, seat, seatpost, handlebar, stem or wheels. Paint/Finish and stickers are covered under a limited one year warranty if deemed defective. Wear and tear are not covered under this warranty. The original owner shall pay all labor and freight charges associated with the repair or replacement of all parts under Foes limited warranties. Even if something is covered under Foes warranties, Foes will not pay the freight costs to, or from, Foes Racing.

WHAT IS NOT COVERED

Failure due to accident, abuse, neglect, normal wear, improper assembly, improper fit, use of dual crown forks, poor maintenance, maintenance (including assembly) by other than an authorized Foes dealer, or use of parts inconsistent with the use originally intended for the bicycle as sold are not covered by this warranty. What is the originally intended use? Riding in a consistent, smooth manner in an approved location for bicycles. Riding in a manner other than this – jumping repeatedly, jumping to flat ground, improper maintenance, no or maintenance will void the warranty.

Foes warranties remain valid under normal riding conditions and care for each type of frame. Foes warranties will be immediately voided if Foes determines that the frameset/shock's integrity has been compromised by lack of regular care; or has been used for a type of riding other than what the frameset was intended; or the rider's weight/skill level is different than what the shock was built for; or the bicycle was not assembled by a authorized Foes bicycle dealer. If it is determined that the shock has been bottomed repeatedly, or the shock has repeatedly not been able to fully use all of its travel (either of which can be easily determined) due to any of many reasons (low air pressure; incorrect spring rate; damaged shock, etc.), the Foes Warranties on the frame and shock will be voided.

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CURNUTT SHOCKS

All Curnutt ITD/XTD Shocks are built by hand under the supervision of Curnutt Racing Shocks, Inc. Each shock is tested and checked for problems before it leaves the Foes factory. There is no reason for any ITD or XTD shock to not perform correctly, once you have read and followed the instructions within this manual. Curnutt Shocks have a one year warranty against manufacturer's defects and materials. Shocks in question for warranty status will be determined by Foes at the time of inspection.

A FINAL WORD

Foes and Curnutt make the finest and toughest framesets and suspensions in the world, capable of standing up to the fastest pro riders and the most brutal courses in competition. But, what our frames don't hold up to is... ignorance, neglect and abuse. Many of the frames, shocks and forks returned to Foes for "Warranty" issues are clearly problems due to ignorance of the important information contained in this instruction manual (and a little common sense).

Therefore, it is vitally important that you read this manual thoroughly, follow its instructions, ride your bicycle as was intended, maintain and respect your Foes frameset, and ask for help from our technical department when questions arise. Following these guidelines will allow you to get the most performance and longevity from your Foes and Curnutt products.

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REBOUND DAMPING - ITD/XTD

Rebound Damping is your shock’s ability and speed to get back into its neutral position (sag setting) to accept another compression or bump. Rebound damping is sometimes more correctly referred to as rebound speed, and is controlled by the red knob found at the bottom of your shock. The knob has an ‘S’ for Slow and an ‘F’ for Fast etched into its face. The knob has a range of 5 full turns. Turning the knob all the way ‘in’ – clockwise – is the slowest setting. From this ‘seated’ position, turning the knob ‘out’ – counterclockwise – 5 complete turns will put you at the fastest rebound setting. Dialing your rebound to a medium setting (2 ½ turns from seated) is a good way to start. From there you can test different settings (1/2 turn at a time) over the same set of obstacles. Please note that, by design, Curnutt shocks rebound progressively more slowly than standard shocks as they reach the end of the rebound stroke (neutral sag setting). So, in the first ½ of the stroke rebound will be faster, and in the last ½ of the stroke the rebound will progressively slow. This feature – impossible for standard shocks – makes your ride incredibly smooth and mostly free from pedaling interruptions.

Your appropriate rebound speed setting is, basically, dependent on two variables: 1) the contour of the terrain, and 2) the speed with which you ride over this terrain. The faster you ride over obstacles, the faster your rebound will have to be. If you find your rear wheel bouncing, you should slow your rebound, as your shock is expanding back to its neutral position too fast. If you find that your rear suspension is too harsh, it may be that your rear wheel is not rebounding back into its neutral position fast enough for the next consecutive bump. This is called ‘packing’, and it forces the shock to remain in, or near, the compressed or ‘packed’ position, un-ready for the next obstacle. The correct setting is the ‘fastest’ one that allows the rear wheel to neither bounce, nor pack. Your correct rebound setting will become obvious by testing various settings over the same set of obstacles at nearly identical speeds.

SPRING RATE - RIDER WEIGHT CHART

2:1 FXR SPRING RATE IN LBS	RIDER WEIGHT WITH GEAR IN LBS
200	120 - 150
250	150 - 175
300	175 - 200
350	200 - 230
400	230 - 255

WHAT FOES WILL DO UNDER THE WARRANTY

Foes will repair or replace any part that is determined by Foes to be covered by this warranty. This limited warranty is made ONLY to the original owner and is not transferable. All claims must be made through an Authorized Foes Dealer, and must be accompanied by the original bill of sale or proof of purchase that identifies the bicycle frame by serial number. The original owner is responsible for this and any and all labor and transportation charges associated with the warranted repair or replacement of parts, even if Foes determines that it is under warranty.

WHAT IF YOUR FRAME IS NOT COVERED

If the warranty claim on your Foes frame is determined to be invalid, Foes Racing will offer a replacement frame/swingarm/part of at least equal value at a reduced price. This transaction will be offered only through an Authorized Foes Dealer, and under the following conditions: the frame has been registered with Foes Racing; the Frame is the property of the original purchaser; the owner provides a valid sales receipt. This crash replacement is only available to the original owner, and, for a time period of three years from the original purchase date. The replacement frame must be assembled by an Authorized Foes Dealer to maintain the Foes warranty. All freight charges associated with the crash replacement are the responsibility of the original owner.

FOES FRAMES SHOULD BE INSPECTED PERIODICALLY BY A FOES DEALER

We cannot stress enough that building-up a pro-level frame is not an endeavor recommended for home mechanics. Special tools and skills accumulated over time are needed to accomplish this successfully, and your dealer can answer 99% of all the questions related to the complete build of a high-end frameset. Due to this fact, this manual covers only the most elemental information.

USEFUL PRODUCT LIFE

Every Foes Frameset has a useful product life. The length of this product life will vary with the construction and materials of the frame or fork, the maintenance and care the frame and fork receives over its useful product life, and the type and amount of use the frame or fork is subject to. Users in competitive events, trick riding, jumping, ramp jumping, aggressive riding, riding on severe terrain, riding in severe climate or weather, ...continued

riding with heavy loads, commercial activities, and other types of non-standard use can dramatically shorten the useful life of the Foes Frame or Fork. Any one or a combination of these factors and conditions may result in an unpredictable failure of a Foes Frame or Fork that would not be covered by warranty. ALL FOES FRAMES, FORKS, AND SHOCKS SHOULD BE PERIODICALLY CHECKED BY A RETAIL OUTLET OR A FOES DEALER for indicators of stress and/or potential failure, including cracks, deformation, corrosion, paint peeling, dents, and any other indicators of potential problems. These are important safety checks, and may be very important to help prevent accidents, bodily injury to the rider, and a shortened life of the Foes frameset or fork. THIS IS AN INTEGRATED AND FINAL STATEMENT OF THE FOES LIMITED WARRANTY. FOES DOES NOT AUTHORIZE OR ALLOW ANYONE, INCLUDING FOES DEALERS OR RETAIL BICYCLE OUTLETS, TO EXTEND ANY OTHER WARRANTIES, EXPRESSED OR IMPLIED, FOR FOES. NO OTHER REPRESENTATION, AND NO STATEMENT FROM ANYONE BUT FOES, INCLUDING A DEMONSTRATION OF ANY KIND BY ANYONE SHALL CREATE ANY WARRANTY REGARDING THIS FRAME OR FORK. ALL OF THE REMEDIES AVAILABLE TO THE ORIGINAL OWNER ARE STATED HEREIN. IT IS AGREED THAT FOES LIABILITY UNDER THIS LIMITED WARRANTY SHALL BE NO GREATER THAN THE ORIGINAL PURCHASE PRICE AND IN NO EVENT SHALL FOES BE LIABLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES.

DISCLAIMER

All other remedies, obligations, liabilities, rights, or warranties, expressed or implied, arising from law or otherwise including, but not limited to, any claimed implied warranty of merchantability, any claimed implied warranty arising from course of performance, course of dealing or usage of trade, and any claimed implied warranty of fitness, are disclaimed by Foes and waived by the original owner. Some states, jurisdictions, countries, and provinces do not allow some or all of the limitations set herein or the exclusion or limitation of incidental or consequential damages. If any provision is found enforceable, only that provision shall be stricken and all others shall apply. This limited warranty does not provide the original owner with certain legal rights and recourse, and the original owner may possess other rights or recourse, depending on the state, jurisdiction, country or province.

WARNING: BICYCLE RIDING MAY BE HAZARDOUS TO YOUR HEALTH, AND EVEN FATAL! ALWAYS WEAR A HELMET AND PROTECTIVE CLOTHING.

BOTTOMING CONTROL - XTD

Once you have your 'optimum' air pressure in your Curnutt XTD, You may fine tune your Bottoming control using your XTD Ramping Dial. This dial, essentially, reduces the volume of air in your shock, effectively increasing the air pressure without using your pump. There are four full turns of adjustment in your Ramping Adjustment Knob. When re-adjusting, if there is any doubt about where the adjustment is set, turn the knob clockwise until it stops (the seated position), and then back it out as necessary to a maximum of four counter-clockwise revolutions from seated. **DO NOT FORCE PAST 4 TURNS FROM SEATED – THIS CAN FORCE THE COMPENSATOR ACTUATOR OUT OF ITS PRESSED-IN POSITION, AND WILL REQUIRE A FOES TECHNICIAN TO PRESS IT BACK IN.**

The Ramping Adjustment Knob controls how stiff the shock gets in the last 25% of the shock's stroke.

If at 65 psi you are happy with the overall ride and sensitivity, but are never using all of the travel, turn the Ramping Adjustment Knob counter-clockwise 1 full turn at a time. This will allow the XTD to use more of the stroke. If at 65 psi you are bottoming out, turn the Ramping Adjustment Knob clockwise 1 turn at a time to stiffen the last part of the shock's stroke. If you are bottoming consistently when the Ramping Knob is seated, then introduce more air pressure using your hand pump -10 psi at a time. Then, re-test. You will have to do some air pressure-ramping adjustment tests to get a feel for the optimum adjustments for both.

Higher air pressures will result in improved pedaling efficiency (anti-bob). **DON'T MISTAKE THIS FOR STICTION – it is supposed to ignore small bump or rider input. This is what makes 'anti-bob' possible.**

**EXCEEDING 100 psi COULD RESULT IN SHOCK FAILURE...
DON'T DO IT!**

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

HOW TO CORRECTLY PUMP YOUR SHOCK

To get the correct pressure in your shock it is important to follow some guidelines. Thread the pump's connector onto the Schraeder valve on the shock. Pump to the desired pressure. Quickly unthread the connector from the Schraeder valve until the connector breaks free. The pressure you have in your shock is the one you pumped to. At this point do not re-attach the pump to check your setting, as it will be inaccurate. This is due to some of the shock's air rushing into the pump's hose, making the reading wildly incorrect.

COMPRESSION DAMPING AND BOTTOMING RESISTANCE

Compression Damping is your shock's ability to absorb the bumps and obstacles found on your trail ride, and is mostly set at the factory to your specs. Optimum compression damping includes your shock being able to use all of its travel (5" or 6") over the entire range of obstacles and terrain found on a typical ride. Once you have broken-in your bicycle, it is normal for your Curnutt to bottom once in a while during a ride - this will not damage your shock. However, the repeated bottoming of your shock during a ride is indicative of too little air pressure, and will eventually damage the shock's seal head and lead to other maladies, such as the coil-binding of your spring and the transmission of unwanted energies through your frame, increasing the likelihood of stress cracks. Therefore, it is very important to maintain the optimum air pressure inside your shock before each and every ride.

Controlling bottoming your of your rear suspension is achieved by air pressure in your shock. Too little air pressure and your shock will bottom too easily. Too much air pressure and your rear suspension will not bottom, but it can become harsh and stiff. This is because, as well as controlling resistance to bottoming (the last one-fourth of your shock's travel), air pressure can also affect damping in the first three-fourths of the shock's travel, effectively reducing small bump compliance if used too much. That is, as you increase your air pressure to control bottoming, this will stiffen the shock over the entire stroke, to some degree. The point is... there are diminishing returns when you increase air pressure to control bottoming, and these returns result in shock stiffness. The best air pressure is the least amount of pressure that will yield consistent bottoming resistance. Foes recommends an initial setting of 65 psi, yet, your optimum setting for each course or trail will avail itself only by riding and testing different pressures over each terrain. NEVER GO UNDER THE 50 PSI!

GENERAL SETUP

CAUTION! YOU WILL DAMAGE YOUR FRAME AND SHOCK IF YOU DO NOT CORRECTLY SET UP AND MAINTAIN YOUR REAR SHOCK AND SUSPENSION.

SHOCK AIR PRESSURE WARNING

If you bottom out your shock on a regular basis, you are undersprung or have too little air pressure in your shock, and will damage your frame and shock. Bottoming your shock on a consistent basis is considered by Foes to be improper care of your bicycle frame and shock, and will void the warranty for both, and all other warranties. If you bottom your shock consistently, STOP!... and first check to make certain you have proper air pressure in your shock. (It is vitally important to check the air pressure on the Curnutt ITD/XTD Shock EVERY TIME YOU RIDE.) If you have proper air pressure, then your shock is either undersprung, or it has a problem. At this point it is extremely important to not ride the bicycle, and make plans to get the shock to a Foes technician to have it checked out and/or sprung correctly.

FOES SPECS FOR BUILDING

FOES FRAME SPECS FOR BUILDING

- Bottom Bracket Width: 68mm shell
- Bottom Bracket Axle Length: determined by crank choice
- Seat Post Diameter: 31.6mm
- Head Tube Diameter: 1 1/8" headset only
- Fork Type/Length: The FXR 2:1 was designed around, and works best with a 5" or 6" single crown fork. NO DUAL CROWN FORKS! Use of Dual Crown Forks on the FXR 2:1 will void all warranties!
- Front Derailleur: 34.9mm Top Pull
- Rear Hub Spacing: 135mm Quick Release Hub
- Disc Brake: The Foes FXR 2:1 accepts a standard 6" I.S. rear caliper mounted on the swingarm. Use of larger rotors requires the appropriate manufacturer-sized caliper adapter.

A WORD ABOUT FORK CHOICE

The Foes FXR 2:1 is a full suspension bicycle! It has 5" or 6" of rear travel, depending on the shock ordered with the frame, and was designed as a trail/XC bicycle. The Foes FXR 2:1 is not, by any means, a freeride, jumping, or stunt riding frame. It is made for trail rides that, at one point or another, require the full amount of travel of the shock. The FXR 2:1 was made for riders who want to take advantage of longer wheel travel, yet want the lightness for long climbs. This is the reason it is designed around a single crown fork. Therefore, a 6" single-crown fork works well with this frame.

GOOD RIDER BICYCLE MAINTENANCE

1) Keep your bike clean. Riding a dirty bike will cause all of your bearings, bushings, contact points, finish, shock shaft and seal head area, and every other moving part to wear much faster than if they were cleaned regularly. Keeping your bike clean will also give you that satisfied feeling of taking care of your investment in a high quality hand-crafted frame. Foes recommends first rinsing loose dust and mud with hose water, taking care not to blast water into areas that water could damage over time by lack of evaporation quickly, like, pivots, bushings, bearings and shock parts, as well as the components installed on your frame, like bottom brackets, head sets, gear sets and the like. Wash the bicycle with a mild dilution of detergent and a soft cloth. Rinse again, taking care not to force water into those areas mentioned. Dry with a towel. A light coating of a light lubricant, like WD-40, can help displace water from areas that are hard to reach. However, it is important to note that these light lubricants can actually wash away oil and grease used to lubricate the bicycle, and render brakes inoperable. If you use a light lubricant, use it only to displace water, and keep it away from brake pads and rotors.

2) Keep your bike lubricated. After cleaning your bike, lubricate your chain and drive train with an appropriate lube.

3) Periodically check all of the bolts and fasteners on your bike. Do not over-tighten anything, as this too will void your warranties – just check and “snug” each fastener. Also, it is a good idea to check all of your frame’s welds and tube junctions for cracks and any damage. Aluminum has a limited life – inspect your frame in a well lit area, and inspect carefully – especially after crashes.

4) Keep the shock shaft, and surrounding areas, clean of dirt, debris and crud – wipe it off after every ride.

MINIMUM - MAXIMUM SEAT POST INSERTION

In addition to the minimum seat post insertion mark on most seat posts, you must follow the following recommendations for seat post insertion: a 31.6mm seat post must be inserted a minimum of 4” into the seat tube of the frame. Anything less than this will not be covered under warranty.

REPLACEABLE DERAILLEUR HANGERS

The 2006 Foes FXR 2:1 is equipped with a replaceable derailleur hanger. This part is installed as a safety feature, as well as a convenience to you, the owner. It is not uncommon for foreign objects, such as sticks, stones and other debris to bend your hanger. A bent hanger can occur from shifting hard under load, and/or transporting your bicycle. Foes derailleur hangers are designed to bend and break! This inherent design actually keeps more

incorrect spring rate. A full range of spring rates in steel or titanium are available from Foes authorized dealers.

BOTTOMING CONTROL

Since your Curnutt was actually built, valved, sprung and pre-loaded according to your specific rider weight, skill level and type of riding you mostly enjoy, your Curnutt shock is about 95% tuned to you right from the factory. The other 5% will be the Bottoming Control, and tuning your Rebound Damping. This section will speak to Bottoming Control and the air pressure that affects it. Rebound Damping will be addressed in a following section. Your Curnutt ITD/XTD Shock is a true fluid-damped, coil-over shock which, uniquely, uses air pressure to control bottoming (as well as reduce fluid foaming). The range of air pressure needed inside your Curnutt ITD/XTD is between 65 and 100 psi. This means, between these minimum and maximum pressures lies an ideal setting for the control of bottoming the rear suspension over a given terrain. As said initially, your shock’s compression damping is mostly set for you at the factory, yet, adjusting the air pressure will tune your shock’s ability to resist bottoming – an important feature for the life and longevity of your Curnutt Shock and Foes Frame.

BREAK-IN PERIOD

For the break-in period Foes recommends that you introduce a low pressure, like 65 psi, to start. This is a good setting to break-in your shock, and will allow you to get a good feel for what this pressure will do over a variety of terrain. Your Curnutt will break-in properly in about 10 hours of ‘normal’ riding. This means that, much like a new motor, the contact-moving surfaces of the shock will ‘seat’ better if they are allowed to move throughout their entire range or stroke, without introducing them to undue or violent spikes of energy (as in landing from jumps). Once your shock has broken-in, you will be able to, much more accurately, feel what the shock is doing with more or less air pressure. Adjusting air pressure during the break-in period will be confusing at best. That being said, if your shock repeatedly bottoms over normal trail terrain during break-in, it is appropriate to introduce more air pressure to compensate – 10 psi at a time. Additionally, it should be remembered that proper break-in requires the shock to cycle through its entire stroke or travel. If it appears that your shock is not using its entire stroke (too stiff) – over normal riding conditions - then reducing its air pressure would be an appropriate measure – BUT NEVER GO UNDER 50 PSI!. Once your Curnutt ITD is broken-in, controlling bottoming with proper air pressure will be more accurately achieved.

SETTING TOTAL SAG

Sag can be measured at the rear wheel’s axle or at the shock. These instructions approach this measurement at the shock. Your ITD/XTD Shock should have 3/8” of sag for the 5” travel model, and 1/2” of sag for the 6” travel model when the rider’s full weight with gear is at rest on the bicycle. The best way to do this is to have someone check the total length of your shock, eye to eye, while you are feet on the pedals and balanced on the bike on level ground. You can use a nearby wall to assist you in your balancing... but don’t lean against it – this will give a false measurement. Next (or first), measure the length of your shock at rest (bike lifted at the rear and allowing the shock to fully extend). The difference of these two measurements is your sag.

To adjust the sag you must adjust the spring’s preload. This is done by unlocking (loosening the ring’s allen set screw) and turning the retaining ring. To get more sag turn the ring counter-clockwise (this will extend the spring). To get less sag turn the retaining ring clockwise (this will compress the spring). Be sure to re-lock the retaining ring! Only through spending the time testing and re-testing will you get proficient at sag setting. Foes recommends that you do not touch your sag until you are very familiar with how your rear suspension works and feels.

DETERMINING PROPER SPRING RATE

Proper spring rate is the one that allows you to make adjustments in Damp- ing and Rebound to achieve effective overall bump compliance and bottom- ing control described in this manual. If your rear suspension is not behaving the way this manual describes, your shock may have a problem, or your spring rate may be wrong for your weight and riding skill. To test for the proper spring rate follow these steps:

While the shock is fully extended, loosen the preload adjuster ring until it no longer touches the spring. Tighten until the preload adjuster first touches the spring. Using a felt tip marker, like a Sharpie, put a mark on the spring, and another on the shock body next to the first. 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 length of sag (3/8” for the 5” travel model, and 1/2” for the 6” travel model), the spring rate is too heavy, and the next softer spring rate 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 rate should be used. Never use more than five full turns of preload. The Foes warranty will not be granted to Curnutt shocks and springs if excessive preload is used, or if the shock has been ridden with the

expensive damage to your swingarm from occurring. If these were stronger and more resistant to bending and breaking, there is a good chance that these forces would bypass the hangers and destroy the area of the frame attached to the hangers. Derailleur Hangers are available from your Foes Dealer for a nominal fee, and are not covered under any of the Foes warranties. It is a good idea to purchase a few extra hangers to prevent a breakage from interrupting your riding time. The part number for the derailleur hanger for the FXR 2:1 is HA04.

GENERAL SIZING GUIDELINES BY RIDER HEIGHT
Small – Riders up to 5’6” (168cm)
Medium – Riders 5’6” to 6’ (168cm to 183cm)
Large – Riders 6’ and up (183cm +)

FOES FXR2:1 FRAME GEOMETRY

- A Size
- B Head Tube Length (inches)
- C Head Tube Angle (degrees)
- D Seat Tube Angle (degrees)
- E Bottom Bracket Height (inches)
- F Chainstay Length (inches)
- G Estimated Wheelbase (inches)
- H Top Tube – Actual (inches)
- I Top Tube – Effective (inches)
- J Seatpost Diameter (mm)
- K Rear Wheel Travel (inches)

A	B	C	D	E	F	G	H	I	J	K
S 17.2	4.5	68	73	13.2	16.8	42.2	21	22	31.6	5, 6
M 18.5	4.5	68	73	13.2	16.8	42.9	22	23	31.6	5, 6
L 19.7	5	68	73	13.2	16.8	43.9	23	24	31.6	5, 6

CURNUTT OPTIONS AND UPGRADES

Please note that the FXR 2:1 comes as either a 5” or 6” travel frameset in either ITD (Internal Threshold Damping - standard option) or XTD configuration (External Threshold Damping - optional upgrade at time of ordering). Curnutt ITD shocks cannot be upgraded to XTD after purchase, nor vice versa. Additionally, changing a 5” travel Curnutt into a 6” travel is not offered after purchase. However, since the FXR 2:1 framesets are identical for all of the options and upgrades, changing configurations can be done with the purchase of a new Curnutt shock.

CURNUTT ITD/XTD SHOCK SET-UP

Read all of the following instructions before making any adjustments! Congratulations on purchasing the finest rear shock ever produced in the mountain bike industry. The XTD/ITD shock is the result of five years of testing by the Foes Mountain Bike Racing Team and Curnutt Shocks. The XTD's first full season of use at National and World Cup levels resulted in a NORBA National Champion and a Junior World Champion. Curnutt introduced "Position-Sensitive" or "Platform-Damped" technology to the bicycle industry, and this 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.

CURNUTT WARRANTY

Foes Racing will not warranty or perform warranty service for shocks that have been ridden undersprung, ridden with excessive preload or air pressure, or what Foes deems to be rider error due to improper use or maintenance. Conversely, if you take care of your bike and perform routine maintenance and inspections of your frame, parts and accessories, and you happen to notice problems, like the shock bottoming out, and you stop riding before damage occurs to the frame or shock, then your warranty will remain intact. Riders who keep riding while their Curnutt Shocks are undersprung, bottoming out consistently, or overall, appear not to be in proper working condition, will not receive warranty status, upon inspection of the shock.

BASICS

There are three main types of adjustments that you can make to your Curnutt, whether it is ITD or XTD: **Spring Preload, Bottoming Control, and Rebound Damping.**

Spring Preload, or just preload, is the amount of squish adjusted into your shock's spring via the adjuster/lock ring found on the top part of the spring. Preload, in turn, controls the amount of rear wheel 'sag' that your bicycle has at the neutral or 'ready for bump' position. Sag allows your shock to absorb not only negative forces (obstacles, bumps) that compress or shorten the shock on the trail, but also positive forces (pot holes, etc.) that extend the shock. Having the proper sag will enable your shock to be ready to absorb these negative and positive forces found on the trail with aplomb. Your Preload comes set according to your specs from the factory. However, once you have gone through the break-in period and you have some experience with adjusting the other settings (Damping and Rebound), it is normal for riders to test using more or less preload (sag).

