GIANT CREST FLOTRAC REAR SUSPENSION

USER MANUAL

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1. INTRODUCTION

Congratulations with the purchase of your new GIANT CREST FLOTRAC shock. GIANT CREST FLOTRAC shocks are specially designed and tuned to work seamlessly with our proven MAESTRO and FlexPoint suspension technologies.

GIANT CREST FLOTRAC shocks feature modern air spring design with riding efficiency in mind, plus a wide range of rebound adjustment. It is essentially a package to tackle most trail challenges, while staying user friendly to be custom-tuned.

Lightweight while robust, a GIANT CREST FLOTRAC shock is your optimal weapon of choice for ploughing down the most tricky trails.

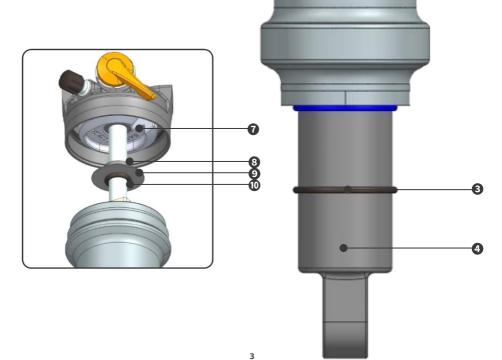
ACAUTION

Please read the instructions thoroughly before installing and using this shock. Failure to follow the instructions may result in serious injury or death.

- Adjusting shock rebound and/or compression mode, also as known as lock-out, during the ride
 can affect the handling, or cause the loss of control in the worst scenario. Before hitting your
 local trail, please familiarize yourself with operating the adjustment on-the-fly in a safe,
 manageable surrounding and speed.
- Never ride with a GIANT CREST FLOTRAC shock that is modified. Any modifications will void the warranty.
- Loose, over-tightened, damaged, or worn parts may cause unexpected malfunction. Periodically
 check the shock for wear or damage. If there are any indications of major wear, cracks, or dents
 shown on the exterior or any of its parts, stop riding immediately and find an authorized GIANT
 or Liv retailer for inspection, repair or replacement.
- Please check that all fasteners on the GIANT CREST FLOTRAC shock have been properly fastened within the recommended torque settings before you ride.

2. PARTS LIST

- Air valve
- 2 Air can
- 3 Travel indicator ring
- 4 Damper shaft
- **5** Rebound adjuster knob
- **6** Compression lever
- **7** Token
- 8 Travel reducer
- Bottom-out washer
- 10 Bottom-out bumper



MODEL

WEIGHT (G)

3. SPECIFICATIONS



FLOTRAC LITE



FLOTRAC

290

EYE-TO-EYE LENGTH	165 MM	185 MM
TRAVEL (STROKE)	45 MM	50 MM
REBOUND AJUSTABILITY	YES	YES
LOW SPEED COMPRESSION	OPEN, LOCKOUT	OPEN, MEDIUM, LOCKOUT
COMPRESSION TUNE	LITE	TRAIL
MAX. TOKEN QUANTITY	1	1
MOUNT TYPE	TRUNNION	TRUNNION
E-BIKE COMPATIBILITY	NO	NO
FACTORY-SET PRESSURE	100 PSI	200 PSI

280

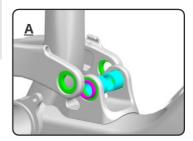
4. INSTALLATION AND REMOVAL

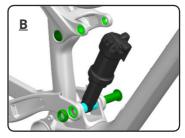
⚠ CAUTION

- Shock replacement requires basic maintenance skills and tooling. If you're new to this, have an
 experienced mechanic overseeing the whole process. If in doubt, consult an authorized GIANT
 or Liv retailer for assistance.
- The bike should be in an upright position during the process. It is ideal to have the bike fixed in a repair stand. To ease the effort, temporally remove rear wheel and bottle cage.
- Before the process, clean the shock and the mounting area as good as possible
- Use masking tape or protective foams around the seat tube to avoid unwanted interference and surface damage.
- If aligning the mounting holes with hardware present difficulties, or the assembly is stubborn to remove, use a shock pump to gradually release all air so you can manipulate the connection of assembly.

Installation

- A. Start with the lower mount, Place washers (shown in purple) between the bearings from lower linkage and the downtube mount. 1 washer each side. For bikes with FlexPoint technology, you might need to lightly budge the chain stay away to yield a slot for washers to pass through.
- B. Attach both shock lower eyelet spacers (shown in blue) to the inner side of mount. Then place the shock lower eyelet so it's sandwiched by spacers. Insert the lower bolt from the non-drive side. A few mild taps with a plastic hammer will ease the task. Thread the fixing nut from the drive side. Tighten to specified torque.
- C. Attach both shock upper eyelet washers (shown in **purple**) to the inner side of upper linkage. Thread-in corresponding pivot bolts and tighten to torque.
- D. Use a shock pump to gradually release all air. Compress the shock by pushing the rear triangle a few times to check if there are any clearance issues.

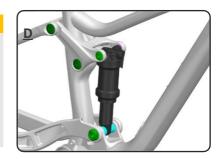






⚠ CAUTION

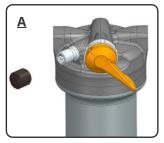
- Ensure all fasteners are properly torqued. Torque information are mostly etched on the fastener. If said information cannot be found, please consult an authorized GIANT or Liv retailer for assistance.
- Do not ride if any clearance issue is found. Please consult an authorized GIANT or Liv retailer for assistance.

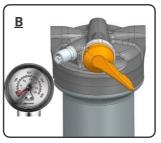


Removal

- A. Start from the upper mount. Loosen and remove both pivot bolts from each side of upper eyelet. Keep the washers in a safe place.
- B. To remove the lower fasteners, use either a 19mm wrench, an adjustable wrench, or a plier wrench to hold the fixing nut, undo the lower bolt with a 8mm hex key. You might need to unweight the rear triangle for easier disassembly. Keep those washers and spacers in a safe place.

5. ADJUSTMENT Using Suspension Pump







Modern bicycle suspension utilized air-type spring to suit a wide range of rider weight and riding styles. A specific suspension pump, also known as shock pump is required.

- A. Set the compression lever to the open position. Unthread and remove the valve cap.
- B. Attach the pump connection securely. A current pressure readout is shown. Consult the recommended pressure chart or follow the setup procedure in the latter chapter to get a base pressure setting. If the pressure increases or decreases over 50 PSI, compress the shock for 5 times, each time about 50% of travel, between each pressure change. This is to balance the air chamber.
- C. Once the target pressure is reached, compress the shock for another 5 times, each time about 50% of travel. Check the pressure. Remove the pump connection and replace the valve cap at finger-tight.

↑ WARNING

- Do not exceed the maximum pressure in any situation. GIANT CREST FLOTRAC shocks have a
 maximum pressure of 300 PSI. Over-pressurizing the shock can lead to catastrophic failure and
 void the warranty.
- Do not ride with pressure less than 50 PSI. A unusual low pressure in the shock can affect bike geometry, suspension function and bikes handling will also be compromised.
- If a proper SAG is not able to be reached either at maximum and minimum pressure, please consult your local Giant authorized retailer.

⚠ CAUTION

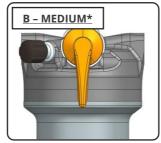
- Failure to balance the air chambers (compress the shock a few times) may lead to false reading
 of pressure, causing incorrect setup.
- Valve cap plays an important role in long-term airtight performance. Always have a cap fitted, finger-tight is sufficient.

NOTE

- GIANT CREST FLOTRAC shocks come with a factory-set pressure of 200 PSI. Whereas the LITE version comes with 100 PSI.
- Each time the shock pump connection is attached, the overall volume of air chamber is temperately expanded and causing a minor pressure drop of a few PSI. This is absolutely normal.
- Once the target pressure is reached and pump connection is removed. A swift hissing sound is heard which is caused by the remaining air that escapes from the pump. This is not a sign of pressure change from the shock.

Compression Lever







*Not featured in LITE version.

The compression lever, oftentimes called as a lockout lever, is a handy feature to suit different riding terrain. It is designed to be easily switched between modes during the ride.

- A. **OPEN** mode gives you full capability of the shock to absorb any coming impact, big or small.
- B. **MEDIUM** mode is ideal for riding flat trail, asphalt or most pavement. The firmer action yields a balance of both pedal efficiency and shock absorption.
- C. LOCKOUT mode, as the name suggests, it restricts the internal flow which limit the shock telescopic action. A full power transmission is then achieved. This mode is ideal to be ridden in most climbing situation, or the last sprint before the finish line.

↑ CAUTION

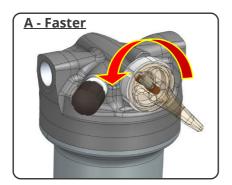
 The compression lever can be easily switched by your finger force. It also gives a responsive index feedback between modes. Please consult your local Giant authorized retailer if a stubborn lever, or a floppy switch is present.

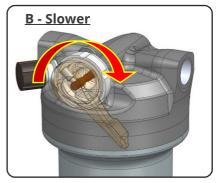
- Although it is designed to be easily switched during the ride, the full control of handling should be maintained. Only operate the switch when riding in a stable pace.
- It is best to set to OPEN mode if you are unfamiliar with the bike, and/or the trail characteristics.
- **LOCKOUT** mode should be avoided if drops or any major impacts are expected.
- If a major impact is applied to the shock while in LOCKOUT mode, the shock will temporally
 override the LOCKOUT and absorb the impact. This is a safety feature called Blowoff. The shock
 will remain in LOCKOUT mode afterwards unless it's been switched-off.

■ NOTE

- GIANT CREST FLOTRAC LITE shocks only come with OPEN mode and LOCKOUT mode.
- When in LOCKOUT mode, the compression lever may present a little free play. This is by design.

Rebound Adjuster Knob





The **Rebound Adjuster Knob** is a round knob behind the **Compression Lever**. It controls the internal valve to further control the return speed of the shock. Optimal suspension performance is never without proper rebound adjustment.

- A. To set the rebound **FASTER**, turn the knob **COUNTER-CLOCKWISE**
- B. To set the rebound SLOWER, turn the knob CLOCKWISE.

The initial rebound adjustment oftentimes requires counting clicks from a fully closed state, **fully closed means that it is needed to** turn it clockwise until it stops. Detailed procedure will be described in the latter chapter.





MODEL	FLOTRAC LITE	FLOTRAC	
REBOUND*	7 CLICKS	15 CLICKS	

^{*}Due to manufacturing tolerance, the index of rebound may be 1 click more, or less. It doesn't affect its function.

6. INITIAL SETUP - THE EASY WAY

NOTE

 This section is dedicated for LITE version which is specially designed for youth dual-suspension bikes. For other versions, please refer to the next chapter INITIAL SETUP – THE GENERAL WAY.

Ouick reference from fork sticker RIDER WEIGHT SHOCK **FORK** PRESSURE REBOUND PRESSURE REBOUND LITE SETUR KG LB (PSI) CLICK (PSI) CLICK <26 <57 15 14 67 7 26-32 57-71 15-22 12 67-82 6 32-38 71-84 22-30 82-99 10 5 38-44 84-97 30-37 8 99-122 4 44-50 97-110 37-44 122-140 6 3 50-56 110-123 44-51 4 140-157 2 56-62 123-136 51-58 2 157-173 1 136 60* 180* *DO NOT EXCEED | MAX. TOKEN QTY: 2

GIANT CREST FLOTRAC LITE **shocks come** with a suspension system setup in mind. A quick reference can be found on rear side **on the left leg of a Crest fork.**

In case you're unfamiliar about how to set up the shock, This information gives a base setting which will be suitable for most riders from beginners to veterans.

Here are some simple steps.

- Find the row that shows your rider weight.
 Be mindful, the rider weight stands for your body weight plus all your riding gears including helmet, backpack, protective pads and cycling shoes.
- 2. Set the air pressure to the corresponding pressure. Follow the procedure listed in the *ADJUSTMENT Using Suspension Pump* section. This pressure should give you a proper 30% SAG.
- 3. Set the rebound click according to the corresponding clicks count. Remember the index starts from the rebound is turned fully clockwise.
- 4. Your shock is now set. Go for a few rides.

■ NOTE

Remember, you can always trial and error with these adjustment to suit your riding style, terrain

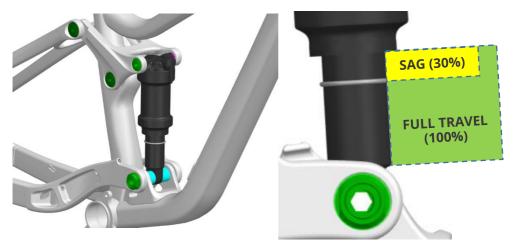
and trail features. It is recommended to change gradually between rides, For example, 5 PSI per pressure change, 1~2 clicks per rebound change.

7. INITIAL SETUP - THE GENERAL WAY SETTING SAG

New CREST FLOTRAC shocks come with a factory-set pressure. Please check *SPECIFICATIONS* chapter for this information.

Modern trail bikes are often recommended with 30% of SAG; however, it is also OK to adjust the SAG with 5% more, or 5% less.

- 1. Position the bike next to a wall. Set yourself on the bike with all your riding gears, including helmet, backpack, protective pads and cycling shoes.
- 2. Compress the shock a few times with your body weight, then stay in a neutral position while leaning against the wall.
- 3. Without further compressing the shock, carefully pull the travel indicator ring up until it touches the air can.
- 4. Carefully dismount without compressing the shock. Measure the distance between the air can and the travel indicator ring.



- 5. This distance divided by the shock travel in percentage is your **Current SAG.**
- 6. Current SAG is **less** than 30% **Decrease** air pressure and repeat from step 1. Current SAG is **more** than 30% **Improve Improve** Increase air pressure and repeat from step 1.
- 7. Repeat a few times with 10~20 PSI per change.
- 8. Once you have reached proper SAG setting, proceed with rebound setting.

SETTING REBOUND

A basic way to set rebound is called bracketing. Bracketing requires a few test rides and follow-up adjustment.

- 1. Refer to REBOUND ADJUSTER KNOB chapter. Set the rebound at the half way point.
- 2. Find a local trail that you're familiar with. Pick a section that is flat or slightly descending. This section should include some basic trail features and *flowy* to ride.
- 3. Ride this section with a speed that is manageable with your skill level.
- 4. Feel the performance of how the shock dealing the terrain.

Shock sinks down over the ride: Increase rebound speed by 4 clicks* counter-clockwise

The bike "pogosticks" or bounces: **Decrease** rebound speed by 4 clicks* clockwise

*For LITE version, please turn 2 clicks.

- 5. Ride the same section with the new setting. Repeat step 3 and 4; however this time dial it with 2 clicks increment of adjustment.
- 6. Repeat until satisfactory.

∴ CAUTION

- Please note above setting procedure is to set a base setting. If the trail features/terrain change dramatically, the rebound setting should to be changed accordingly.
- Before attempting any unfamiliar trail with more technical sections, major drops, it is recommended to increase the rebound by 2 clicks and fine-tune it afterwards.

■ NOTE

 Once you have the pressure and rebound setting dialed, take a note in your cycling computer, cycling APP for future reference.

• Or simply note it down here.

DATE	TRAIL	PRESSURE (PSI)	REBOUND(CLICKS)

8. TOKEN INSTALLATION

AWARNING

Token installation involves partial air can removal. Always release all air by using a shock pump. Attempt on removing a pressurized air can lead to serious injury or death.

Token is specifically designed to tune the shock performance. Use only GIANT CREST FLOTRAC genuine parts.

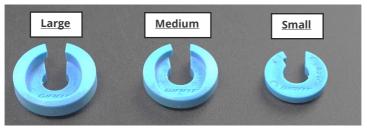
The token comes with a variety of volume. Do not use more than 1 token.

Improper token setup can lead to unwanted noise or malfunction. If in doubt, please consult an authorized Giant or Liv retailer for assistance.

■ NOTE

- Your shock may have a token factory-fitted already.
- After changing the token, you might need to reset the SAG.

Modern suspension utilize air pressure to be light-weight and versatile to suit most range of rider weights. To sweeten the performance, a specially designed "token" can be added inside. This token modifies the air volume and therefore change the characteristics at the end stroke. We also refer it as bottom-out performance.



To make the best of the shock, we should use full travel without a harsh bottom-out feedback. The travel indicator ring shows how much travel you use during the ride.

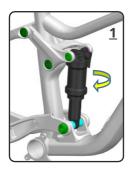
When do we use the end stroke? Most likely when a significant drop is encountered, for example a drop deeper than half of the wheel diameter.

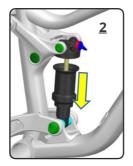
A. Your shock constantly bottoms-out, or a harsh bottoms-out feeling after the drop, although SAG and rebound are set correctly.

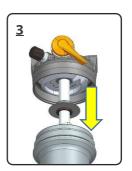
You can consider adding a token, or replacing the installed token with a larger volume token to improve it.

B. Your shock rarely bottoms-out. No matter how deep the drop you ride.

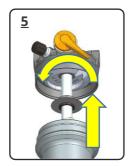
You can consider removing the token, or replacing the installed token with a **smaller** volume token to improve it.

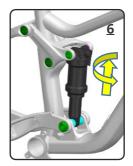












Token installation is fairly easy as following steps.

- Clean up the shock and its surrounding area. Use a shock pump to gradually release all air
 pressure. Use both hands to grab the air can firmly, turn it clockwise (from top-view) all the
 way to disconnect the air can from upper unit. Pull it down just enough to have access to the
 bottom-out bumper and washer.
- 2. Temporally pull down the bottom-out bumper, washer and travel reducer (if present) just enough so you can access the token area.

- 3. Turn the existing token (if present) clockwise until it hits a stop, then pull it out from the upper eyelet.
- 4. The token is directional. Make sure the side with GIANT logo is facing towards you. To fit the desired token, align the ball bearings with the groove. Push it onto the groove and turn it counter-clockwise until it hits a stop.
- 5. Push the travel reducer, the washer and the bumper back into place.
- 6. Pull the air can upwards and thread it into the upper unit. Thread until the sticker is facing forward.
- 7. Pump it up to your original pressure and go for a ride.

9. SERVICE INTERVAL

AWARNING

- All suspension service must be performed by a Giant or Liv authorized retailer or service center.
 Function or quality issues caused by malpractice from non-authorized party is not covered in warranty.
- When cleaning the shock, avoid solvent-based cleaner. Avoid using pressurized water jet.

■ NOTE

- When the shock is new or has just been serviced, a minor seepage from the air can may present.
 Simply wipe it off clean. This initial seepage is normal and should be gone after first few rides.
- Suspension components often utilize lightweight alloy on sliding parts, once the surface
 treatment is worn, it is worn. Periodical service should be considered as a preventive measure
 which keeps the shock in tip top condition. To ensure long-lasting performance, please consult
 your local Giant or Liv authorized retailer for maintenance advice.
- Below chart is a basic recommendation. For riders who ride in extreme condition or race events
 a shorter service interval should be considered.

Action	Pre/Post each ride	50-hr of ride	150-hr of ride
General wipe down or clean the exterior with mild soap. Inspect for obvious crack or leakage.	V		
Perform 50-hour service including air can service and seal replacement.		V	
Perform 150-hour service including full rebuild, damper oil change and nitrogen recharge.			V

You can note down your ride history here to easily back-track your shock usage.

DATE	TRAIL	RIDE HOURS	NOTE

10. GIANT LIMITED WARRANTY

Giant guarantees the GIANT CREST FLOTRAC rear shock for a period of two (2) years from the date of purchase for the original owner only.

REQUIRED ASSEMBLY WHEN PURCHASED

This warranty applies only to this product when purchased new from an Authorized Giant or Liv Dealer and assembled by that dealer at the time of purchase.

LIMITED REMEDY

Unless otherwise provided, the sole remedy under the above warranty, or any implied warranty, is limited to the replacement of defective parts with those of equal or greater value at the sole discretion of Giant. This warranty extends from the date of purchase, applies only to the original owner, and is not transferable. In no event shall Giant be responsible for any 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 any other theory.

EXCLUSIONS

The above warranty, or any implied warranty, does not cover:

- Normal wear and tear on parts in situations where there are no assembly or material defects.
- Products serviced by other than an authorized Giant dealer.
- Modifications of the product from its original condition.
- Use of this product for abnormal, competition and/or commercial activities or for purposes other than those for which this product was designed.
- Damage caused by failing to follow the instructions in this manual..
- Paint, finish and decal damage resulting from taking part in competitions, jumping, downhill
 and/or training for such activities or events or as a result of exposing the product to, or operating
 the product in, severe conditions or climates.
- Labor charges for part replacement or changeover.

Except as is provided by this warranty and subject to all additional warranties, Giant and its employees and agents shall not be liable for any loss or damage whatsoever (including incidental and consequential loss or damage caused by negligence or default) arising from or concerning any Giant product.

Giant makes no other warranties, express or implied. All implied warranties, including the warranties of merchantability and fitness for a particular purpose are limited in duration to that of the express warranties stated above.

Any claim against this warranty must be made through an Authorized Giant Dealer or distributor. The purchase receipt or other proof of the date of purchase is required before a warranty claim may be processed. Claims made outside the country of purchase may be subject to fees and additional restrictions. Warranty duration and details may differ by country. This warranty gives you specific legal rights, and you may also have other rights which may vary from place to place. THIS WARRANTY DOES NOT AFFECT YOUR STATUTORY RIGHTS.

SERVICE CENTERS

To find a Giant retailer near you, please visit: www.giant-bicycles.com