



## *Glory Service Manual*

**Version 2.0**

- Maestro suspension performance. No brake influence, no pedal kickback, linear rising rate, superb traction, and efficient pedaling.
- A mile stiffer frame, especially the rear triangle, which makes high speed cornering rock stable and full power sprinting rocket fast.
- Best traction and steering thanks to the linear rising rate.
- 8.8-inch travel luxurious suspension.
- Oversized headset parts for greater strength & stiffness.

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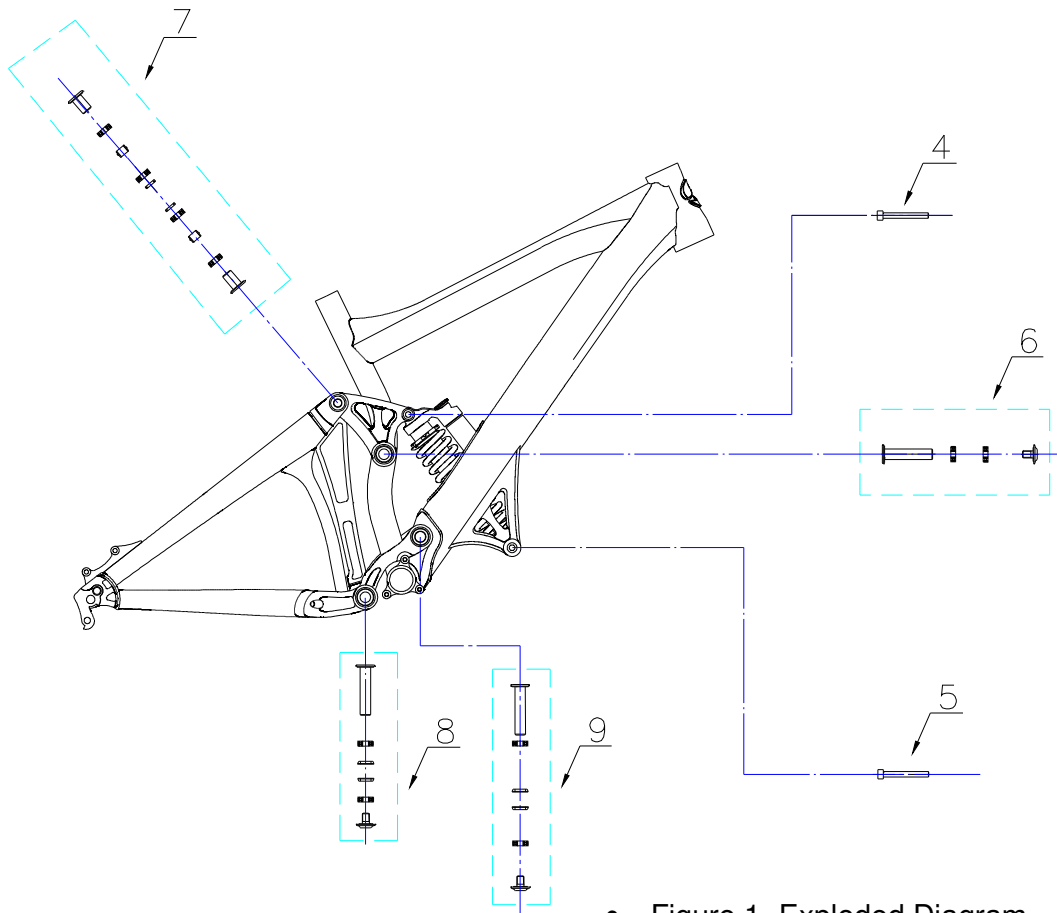
## ***Notice to authorized Giant dealers***

The Glory is a new Downhill bike equipped with the Maestro suspension system. It inherits all the excellences of Maestro suspension technology and is tuned and polished to be the most efficient downhill dominator. The Glory is enhanced in a generous way with better traction, steering, rigidity and acceleration, at the same time, no braking influence, pedaling kickback and bobbing, giving a great hand pushing the rider onto the podium.

### **WARNING**

**Please read this service manual carefully. Improper assembly of the rear shock, triangle, triangle link, rocker arm or malfunction of the suspension system can be extremely hazardous, and may lead to an accident causing injury or death.**

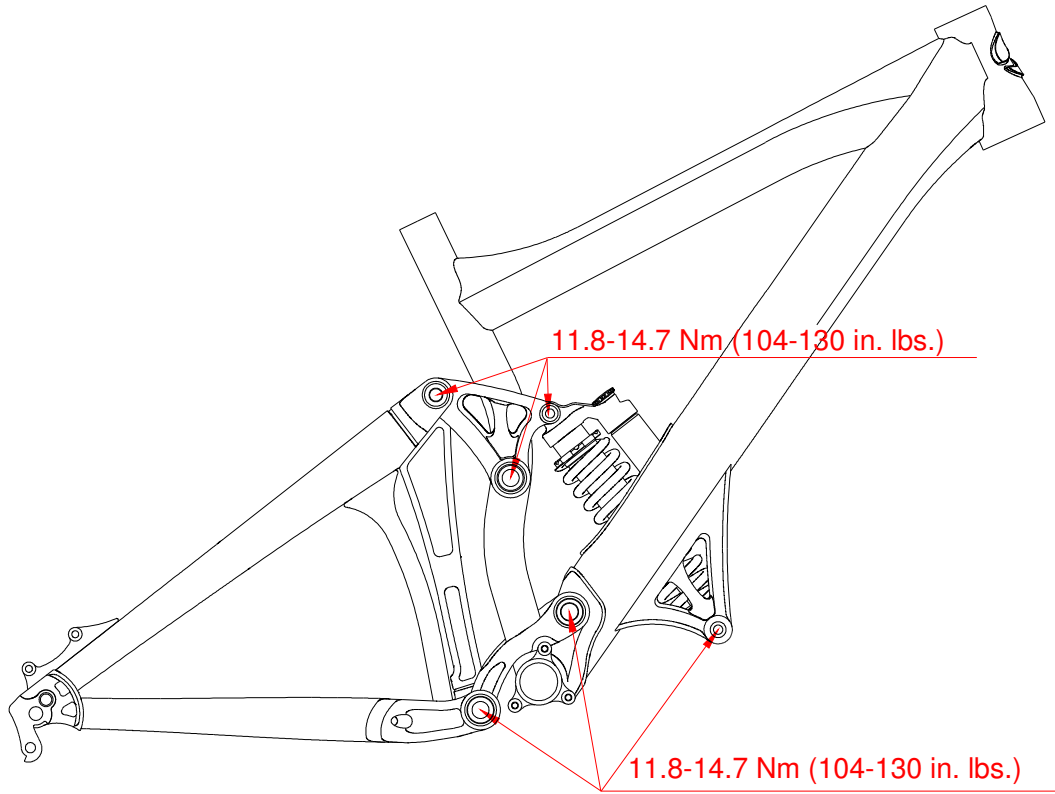
## Spare parts



• Figure 1- Exploded Diagram

Seq#	Articl#	Name	Description	Fig
0060	12806GU0072A1	DROPOUT	RE8D REPLACE END SET (FOR STANDARD)	
0070	12806GU0073A7	DROPOUT	RE8DA REPLACE END SET (FOR SHIMANO)	
0080	12806GU0074A4	DROPOUT	RE8DB REPLACE END SET (FOR ROCKSHOX)	
0460	12806GU0066A2	T.LINK+BOLT	GS0243 TOP ARM+BOLT(JP61 SIL) <b>(4+6+7)</b>	Figure 1
0470	12806GU0069A4	D.LINK+BOLT	GS0243 D.LINKAGE+BOLT(BP86A SIL) <b>(8+9)</b>	Figure 1
0480	12806GU0068A7	T.LINK BOLT	GS0243 TOP ARM BOLT <b>(4+6+7)</b>	Figure 1
0490	12806GU0067A1	R.FRAME BOLT	GS0243 R.FRAME PIVOT PARTS SET <b>(7+8)</b>	Figure 1
0500	12806GU0060A9	SHOCK BOLTSET	GS0243 REAR SHOCK BOLT SET <b>(4+5)</b>	Figure 1

## Torque Specifications



## Frame Technical Data

Rear wheel travel	8.8"		
Shock travel	3"		
Shock eye to eye	9.5" (240mm)		
Shock top mount	30mm	Hole	8mm
Shock lower mount	35mm	Hole	8mm
BB shell	83mm		
Seat Post Diameter	30.9mm		
Upper Head Parts Diameter	44.0mm		
Lower Head Parts Diameter	49.6mm		
Front Derailleur Diameter	34.9mm		
Rear O.L.D	150.0 mm		
RC Length	445.0mm		

Size (Design)	390	410	410	440
Size (Commercial)	XS	S	M	L
Stand over Height (mm)	874.6	861.3	856.5	841.1
Head Tube Length (mm)	115.0	115.0	115.0	130.0
Top Tube Horizontal length (mm)	504.9	555.3	566.5	644.7
Seat Angle (degree)	69.0	69.0	69.0	69.0
Head Angle (degree)	65.5	65.5	65.5	65.5
B.B Drop (mm)	-28.0	-28.0	-28.0	-28.0
Wheel Base (mm)	1117.8	1134.4	1145.5	1185.5

## ***Set-up of Rear shock and Front Suspension***

### **COIL SHOCK SET-UP**

All coil shock-equipped Giant bicycles use the same formula to determine “sag” and “rebound damping”.



**Please refer to the manufacturer’s technical information for specific details regarding shock function and set-up prior to riding Giant bicycle.**

### **SETTING AND ADJUSTING SAG**

1. Turn the spring’s tension collar counter clockwise until there is minimal tension on the spring.
2. With a felt-tip marker, place a dot on the edge of the collar so you can measure full rotations of the shock collar.
3. With no load on the bike, measure the distance between the two fixing bolts (eye-to-eye distance) at the top and bottom of the shock.
4. Position your bicycle next to a wall so that you can sit on the bike with both feet on the pedals while steadying yourself with one arm. Gently sit on the saddle without bouncing. Have a partner measure the eye-to-eye distance while the rider is seated on the bike. Dismount gently.
5. Subtract the weighted eye-to-eye distance from the un-weighted eye-to-eye distance to determine sag. See Sag Recommendations charts for sag distances. For your convenience, compressed shock measurements have been provided.
6. For general purpose riding, the shock should compress approximately one quarter of its travel. Turn the shock’s tension collar clockwise to increase spring tension/decrease shock sag.
7. If you sit on the bike with minimal tension on the spring and there is less than one quarter shock travel, a lighter weight spring is needed. If you turn the shock tension collar three turns and the shock compresses more than a quarter of the shock’s travel, a heavier spring is needed.



**Never tighten the spring tension collar past three turns from minimum tension as doing so can cause damage to the spring and internal workings of the shock.**

## **Suspension Settings and Recommendations Glory with Maestro™ (8.8" rear suspension travel)**

Giant's Maestro rear suspension design precisely positions the pivots and linkages to give you efficient pedaling and small bump compliance. Maestro's pivot placement allows the rear suspension to be completely active under braking, allowing the rear wheel to react constantly to the terrain.

Maestro-equipped mountain bikes rely on rear suspension "sag". Sag is a critical performance component and is relative to the individual rider's weight. Giant's Glory frame designs and travel is intended for aggressive freeriding and recreational/competitive downhill riding. The sag range can accommodate a wide variety of riding styles and terrain.

### **GLORY Sag Recommendations**

The Giant Glory are downhill-specific bicycles made for both recreational and competitive downhill riding and extreme freeriding. The multi-tunable shock can be almost infinitely adjusted for all types of terrain and riding styles.

<b>Glory Sag Recommendation:</b>		
<b>EYE-TO-EYE</b>	<b>SAG</b>	<b>COMPRESSED SHOCK LENGTH</b>
9.5" (240mm)	Freeriding: .75" (19.0mm)	8.75" (211.0mm)
	Downhill: .90" (22.8mm)	8.6" (217.2mm)

For Manitou 6-Way coil shock tuning set-up (high-speed and low speed compression damping, SPV pressure and volume), please refer to shock manufacturer's technical manual.

**NOTE: These settings must be made prior to standard sag and rebound damping settings.**

### **SETTING AND ADJUSTING REBOUND DAMPING**

1. If you are unfamiliar with rebound damping, perform this procedure: With full body weight, push down on the saddle forcefully to compress the shock. Watch (and feel) how the shock rebounds from compression.
2. Next, turn the rebound damping knob clockwise until it stops and compress the shock under full body weight. Note that the shock rebounds very slowly. Next, turn the damping knob counterclockwise a few turns and re-perform your compression testing until the shock rebounds just slightly more slowly than with no damping.

3. To check the rebound damping rate while riding, ride off a curb while seated. The rear suspension should bounce only once upon rebound (the heavier the rider, the more damping will be required). Adjust accordingly to accomplish this motion. If the suspension bounces more than once, turn the damping knob in the appropriate direction until one bounce is achieved.

## **FRONT SUSPENSION TRAVEL & SAG GUIDE**

**To determine bike's front suspension travel adjustments and recommended settings, please refer to the fork manufacturer's technical manual.**

A suspension fork is effective at both absorbing bump forces and helping the tire track the ground for improved traction and braking control.

When in active mode, a fork will rely on sag to keep the front tire in better contact with the ground during braking. The chart should be used as a general guideline.

### **AIR SPRUNG FORKS**

As a general guide, pump the main chamber (main spring) to a psi equal to 70% of your body weight. Ride off a curb or similar object. If there is little or no movement from the fork, decrease psi in 10-psi increments until desired movement is achieved. If the fork bottoms out, increase the psi in 10-psi increments until desired movement is achieved.

To check rebound, turn the rebound damping knob (if applicable) counter clockwise until it stops. With full body weight, push down on the fork forcefully with the front brake on, watch (and feel) how the fork rebounds. Turn the rebound damping knob clockwise until the fork rebounds slightly slower than with no damping (the heavier the rider, the more damping will be required).

## SPRING AND ELASTOMER SPRUNG FORKS

Springs on these types of forks are set at the factory. Most have a simple adjuster that allows the rider to make the fork firmer or softer depending on rider weight. The heavier the rider, the firmer the spring setting should be.

<b>SUGGESTED FRONT SUSPENSION SAG GUIDE</b>	<b>(ALL TYPES)</b>
<b>FORK TRAVEL (mm)</b>	<b>SAG* (mm)</b>
75	12-15
80	12-16
100	15-20
120	18-30
145	29-37
170	34-50
180	36-54
200	40-60

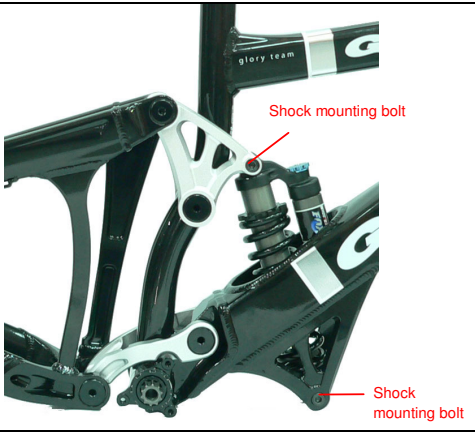
\*Manitou Forks with SPV may not sag upon initial rider weight. To check sag on an SPV fork, inflate the main spring cartridge to 70% of rider's weight, and the SPV cartridge to 30% of rider's weight (check the manufacturer's technical info for details).

## Maintenance

### General Maintenance

- Inspect all suspension bolts and tighten if necessary to required torque settings.
- Do not use high-pressure water sources to wash or rinse bicycle. Doing so can displace any lubricants that are present, as well as possibly forcing water and/or contaminants into the bearing that can harm the pivot and bearing, reduce performance, and cause premature wear. Use only low pressure water, or a water bucket with a soft nylon bristle brush and mild dish soap to clean the frame and components.
- Always use Loctite™ Primer (#7649) and Loctite™ blue Removable Threadlock (#242) or similar material on thread of fixing bolts of callipers and rotors during re-assembly.

### Replacement of rear shock

	<p>Step 1: Loosen the shock mounting bolt and remove the shock.</p>
<p>Repeat Step 1 in reverse to reassemble the rear shock.</p>	

#### **WARNING**

Recommended torque for the mounting shock bolt is 120-150Kgf/cm (104-130 in.-lbs.).

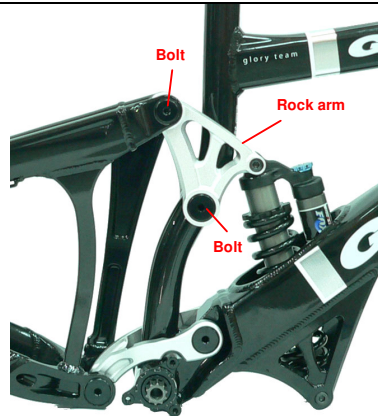
#### **CAUTION**

After replacement of rear shock, you will need to readjust your spring preload setting as described in the preceding section.

## Replacement of rocker arm

Before dismantling the rocker arm:

- Remove the rear shock.



Step 1:  
Loosen the bolt and remove the rocker arm.

Repeat Step 1 in reverse to reassemble the rocker arm.

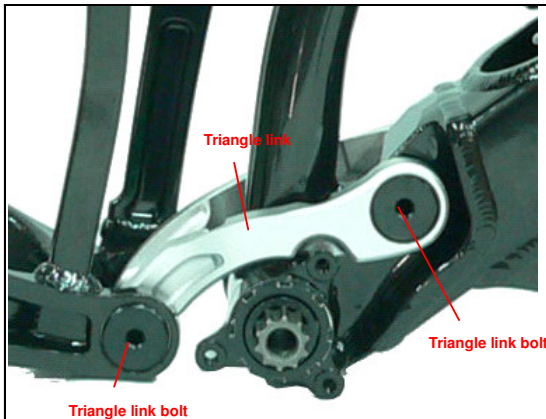
### **WARNING**

Recommended torque for the rocker arm bolt is 120-150Kgf/cm (104-130 in.-lbs.).

## Replacement of triangle link

Before dismantling the triangle link:

- Remove the crank set.



Step 1:  
Loosen the triangle link bolt and remove the triangle link.

Repeat Step 1 in reverse to reassemble the triangle link.

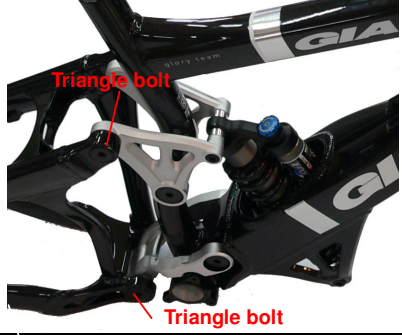
### **WARNING**

Recommended torque for the triangle link bolt is 120-150Kgf/cm (104-130 in.-lbs.).

## Replacement of rear triangle

Before dismantling the rear triangle:

- Remove the rear wheel.
- Remove the crank set and chain.
- Remove the rear brake.
- Remove the rear derailleur.

	<p>Step 1: Loosen the rear triangle bolt and remove the rear triangle.</p>
<p>Repeat Step 1 in reverse to reassemble the rear triangle.</p>	



**Recommended torque for the lower mounting shock bolt is 120-150Kgf/cm (104-130 in.-lbs.).**

## Replacement of front triangle

Step 1: Remove the rear shock, rocker arm

Step 2: Remove the rear triangle (follow rear triangle disassembly steps).

Step 3: Remove the triangle link.

Step 4: Remove the front fork, saddle, seat post, seat post clamp.

## Replacement of dropout

Each GLORY comes with three types of dropouts. The stock Glory comes stock with the Type 1 standard for a regular derailleur and traditional axle. You can swap this unit out for a Type 2 system which will allow you use a SHIMANO SAINT derailleur or Type 3 system which will allow you to use a ROCKSHOX MAXLE thru axle.

The assembly order of the parts are listed in the following table

### DROPOUT TYPE 1 :



<u>GIANT Dropout</u> RE8D Compatible with standard rear derailleur, thru axle	<u>Standard type rear derailleur</u> (For example □ SRAM X.9 or SHIMANO XTR)	<u>Standard type thru axle</u> O.L.D 150mm. 12mm thru-axle type
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### DROPOUT TYPE 2:



<u>GIANT Dropout</u> RE8DA Compatible with SHIMANO SAINT derailleur, rear freehub and thru axle. For 12mm thru-axle	<u>SHIMANO SAINT rear derailleur</u> RD-M805-SS/RD-M805-GS/RD-M805-SGS O.L.D. 150mm	<u>SHIMANO SAINT rear axle</u> FH-M805 150mm O.L.D. with 12mm thru-axle
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### DROPOUT TYPE 3:



<u>GIANT Dropout</u> RE8DB Compatible with Rockshox rear maxle thru axle	<u>Standard type rear derailleur</u> (For example □ SRAM X.0 or SHIMANO XTR)	<u>ROCKSHOX Maxle type axle</u> O.L.D 150mm. 12mm thru-axle type
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## How to swap the dropout from type 1 to type 2 or type 3

### Tools

- 5 mm and 6 mm Allen key
- 19 mm wrench



- Step 1: Use a 5mm Allen key, remove the rear derailleur from the dropout.
- Step 2: Use a 6mm Allen key and 19mm wrench, remove the thru axle.
- Step 3: Use a 5 mm Allen key, remove the upper dropout mounting bolt.
- Step 4: Install the Type 2 or Type 3 dropout and tighten to the proper torque of **7.8-9.7 Nm ( 69-86 in-lbs.)**
- Step 5: To install the derailleur and thru axle, please refer to the manufacturer's technical information.

## ***Troubleshooting***

### **Q1: If the frame pivots or links have any looseness or play**

1. Make sure that the pivot bolts are tightened to the appropriate torque value
2. If the pivot bolt is not tightened to the appropriate torque value, unthread the bolt enough to expose the receiving threads on frameset or linkage.
3. Put one drop of **blue** Loctite™ on the exposed receiving threads.
4. Tighten the bolt to the appropriate torque value.
5. Wipe off excess **blue** Loctite™ on the back of the threads.