



Instruction Manual

Notes on Tuning and Maintenance of Ibis Bicycles, Rev. D (Mojos Edition)

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Bike Set-Up Tips and Tricks

Cable Routing

Cable Routing for Mojo HD and SL-R

It's designed to run full housing to the rear derailleur. This means that the housing has no interruptions, and runs as one continuous piece from the shifter to the rear derailleur.

The top-tube cable stops work best with front derailleur or adjustable height seatpost cables. See page 10 for an illustration of the proper rear derailleur cable routing. On the Mojo HD, if you're not going to be using them, remove the cable stops and screw the Allen head bolt back in place for a clean look.

Rear Brake Hydraulic Hose Routing for Mojo HD and SL-R

The easiest way to get the brake hose between the main frame and swing-arm is to feed it through when you disconnect the hose to cut down the lines. If you do not have to cut down the line the rear caliper *can* be fed between the main frame and swingarm without disconnecting the line. This saves having to bleed the brake system.

First, remove the rear shock eye bolt and move the swingarm to its most forward position. Then, remove one set of bolts from the upper link. (The forward ones where they attach to the front triangle are easiest.) At that point the rear caliper should just fit through the space between them and on back to its place on the rear dropout. Keep the line between the swingarm and the frame as short as possible or it could get pinched by the upper link bolt.

HD Cable Guard

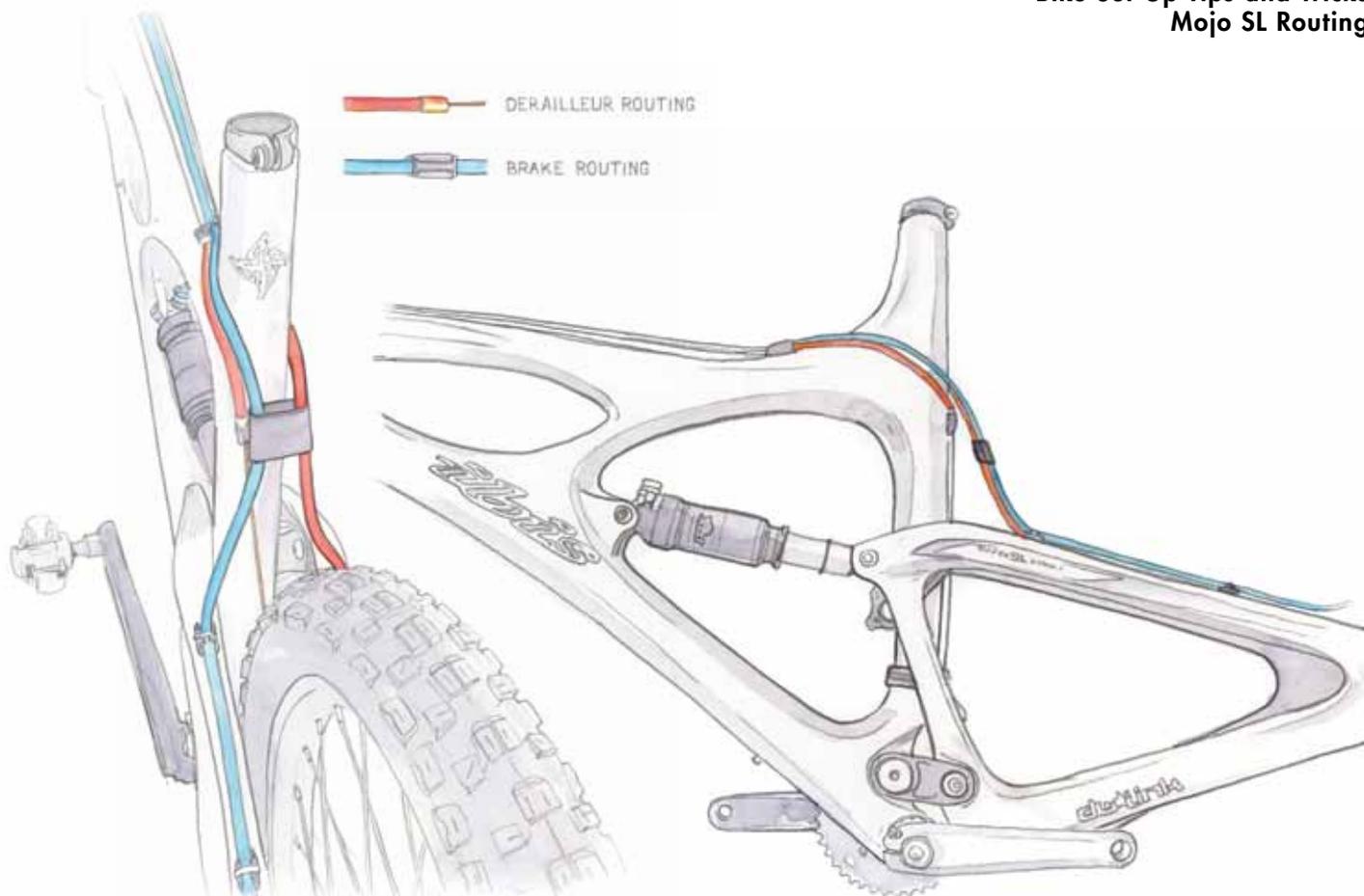
We've designed a cable bash guard to protect the cable housing along the downtube from rocks. The guard is optional, but should be used if you are riding in areas where big rocks might crush or slice the cable housing. It's available in the Ibis store on our website or through your Ibis retailer. You can also use this cable guard on the Mojo and Mojo SL and SL-R. On the Mojo and Mojo SL, you will need to secure the upper end of the guard, as the original Mojoes do not have the upper mounting bolt on the

down tube. We use double-stick tape for this when mounting the guard on a Mojo or Mojo SL.

Mojo / Mojo SL:

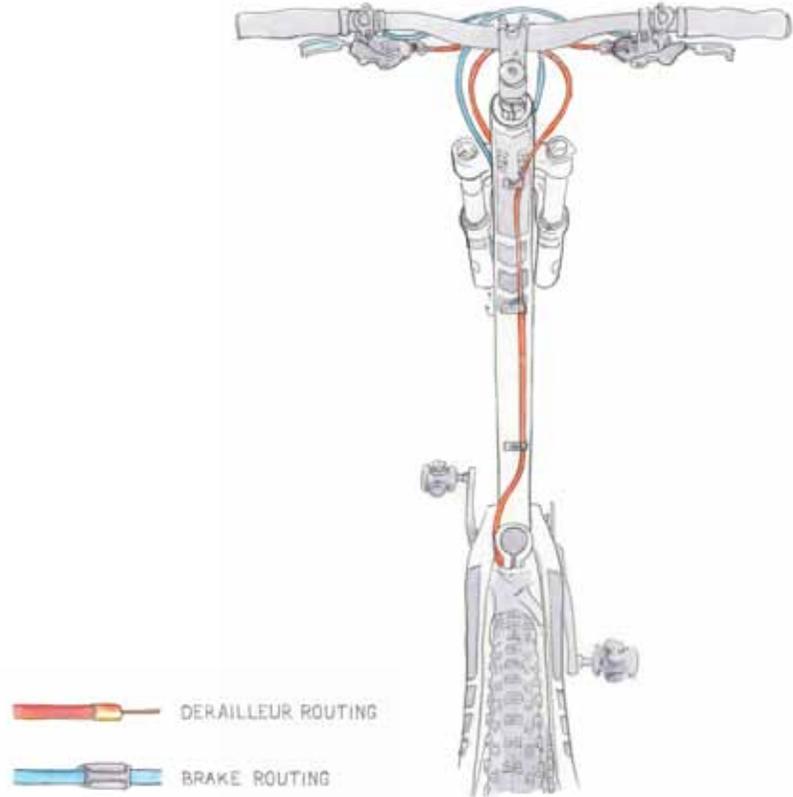
The derailleur housing and rear brake hydraulic hose can be routed around the opposite side of the stem. The length of housing between the rear top-tube stop and the upper swing arm stop for the rear derailleur should be kept as short as possible to keep it from bowing out and contacting your leg. We recommend you use a piece of innertube about 3 cm long, feeding the rear brake and derailleur cables through it just behind the seat tube as shown. Zip Ties work well too.

Bike Set-Up Tips and Tricks Mojo SL Routing

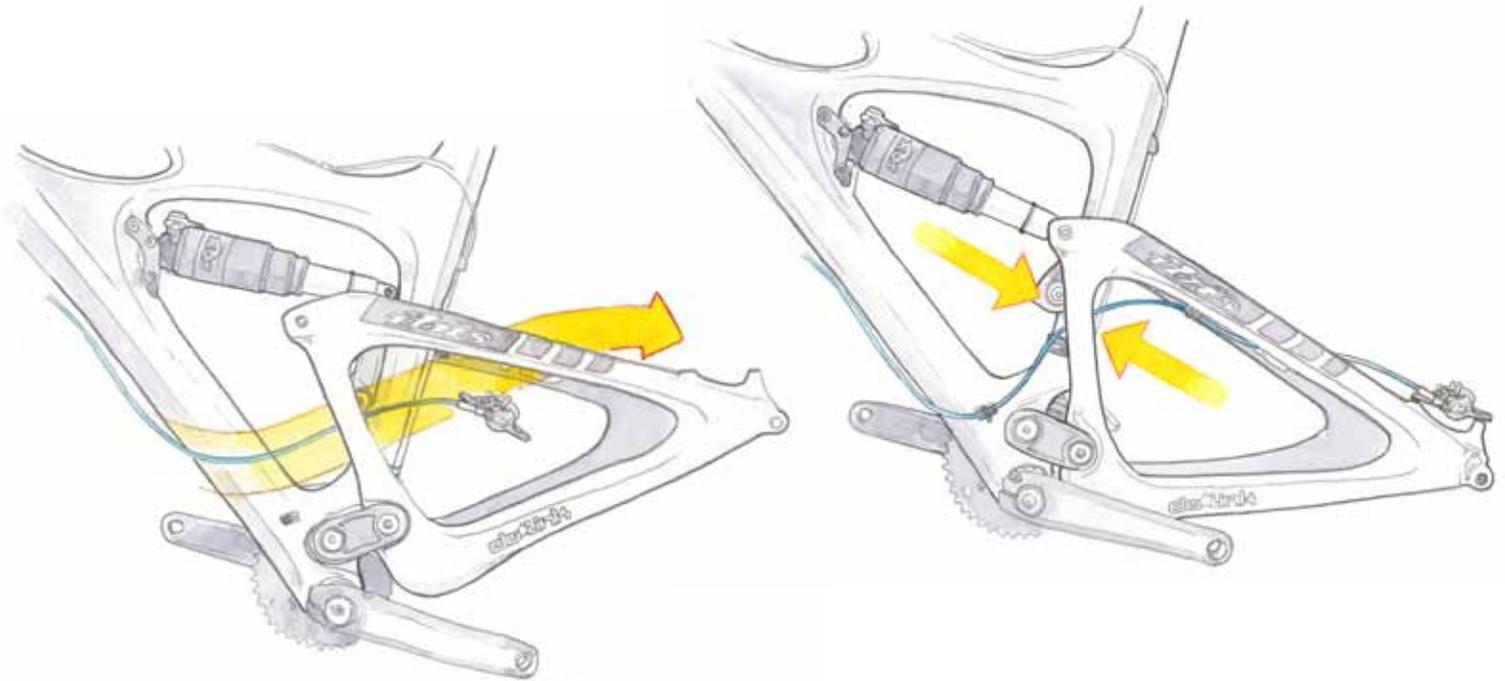


Bike Set-Up Tips and Tricks Cable Routing

Mojo HD and Mojo SL-R Routing



Mojo HD and Mojo SL-R
Caliper Routing



Bike Set-Up Tips and Tricks

Chain Guides

MRP and Ibis have designed two custom single ring chain guides for the Mojo HD and Mojo SL. They are called the G3 SL and the Lopes SL. Both mount directly to the frame via the bottom bracket and the main pivot shaft. This fixes the guide in place so it won't rotate. The pivot shaft on the HD is already drilled and threaded to accept either guide. For the Mojo SL, we make a special main pivot shaft that facilitates mounting of either chain guide.

If you're converting your triple crankset to be compatible with either guide, we recommend a non-ramped replacement chainring (34 and 36 tooth rings are available in our webstore.) To do this conversion you should start with a triple crank and remove the inner and outer rings. Double cranks do not have the right chainline to make the guides work.

The G3 SL is designed for a 32t-36t single chainring and features bash protection as well as chain retention.

The Lopes SL will accommodate chainrings from 32t-38t. (34 and 36 tooth rings are available in our webstore.)

Dual Ring Guides

The Ibis/MRP 2x dual ring guide works on the Ibis Mojo HD and Mojo SL (and is not compatible with the Mojo SL-R). It's available in our online store: <http://store.ibiscycles.com/product166>

This guide will work with:

- SRAM 2x10 cranks with a 26/39 or 28/42 ring combo, using a SRAM dedicated 2x10 front derailleur.
- Shimano 2x10 XTR/XT cranks with a 28/40 ring combo and a Shimano 2x10 front derailleur.
- Shimano 2x10 XT cranks with a 26/38 ring combo and a SRAM 2x10 34-38 front derailleur. (SRAM X.0 2x10 38/36t High Direct Mount Dual Pull Front Derailleur).

NOTE: MTB triple cranks down converted to a 2x10 (in the middle and granny positions) won't work with the 2x guide. This also includes the XTR 26/38 combo (which is built on 3x spacing).

To mount the guide, use the 1mm (extra thin) BB spacer provided with the guide between the BB shell and the guide, then a 2.5mm BB spacer between the guide and the BB cup. Use the provided

M8x12 bolt to bolt the guide directly to the main pivot shaft on the front triangle. Use blue Loctite on this bolt.

On a Mojo SL, replace the stock main pivot shaft with a "Mojo SL-MRP Chain-guide Adapter" pivot shaft available from our store:

<http://store.ibiscycles.com/product120>.

Then attach the guide to the main pivot shaft with the included M8x12 bolt.

Spacing on the HD and SL is identical.

Single Ring Guides

For you 1X10 lovers, we've found that Shimano's Shadow Plus and SRAM's Type II rear derailleur virtually eliminates the need for the lower half of your chain guide, while making your bike nearly silent. Both derailleurs provide heavier chain tension plus a friction stabilizer to dampen the cage and thus chain movement (chain slap), which dramatically reduces derailing of chains. Combine either rear derailleur with an e*thirteen XCX-ST D-Type or an MRP 1X upper guide and you should have very few chain issues.

Bike Set-Up Tips and Tricks Front Derailleur Compatibility

If You Use This Crank:

Mojo HD w/ 35mm Seat Tube OD:

Sram 36/22
Sram 38/24
Sram 39/26
Sram 42/28
XTR 38/26
XTR 40/28
Shimano & Sram 3x10

Mojo/SL/Tranny w/ 35mm Seat Tube OD:

Sram 36/22
Sram 38/24
Sram 39/26
Sram 42/28
XTR 38/26
XTR 40/28
Shimano & Sram 3x10

Mojo HD w/ Direct FD mounting:

Sram 36/22
Sram 38/24
Sram 42/28 and 39/26
Shimano 38/26
Shimano 40/28
Shimano & Sram 3x10

Mojo SL-R (Direct Mount):

Sram 36/22
Sram 38/24
Sram 42/28 and 39/26
Shimano 38/26
Shimano 40/28
Shimano & Sram 3x10

Ripley:

The Ripley is compatible with all high direct mount double and triple derailleurs

Use This Front Derailleur:

Not Compatible

Sram 2x10 High Direct Mount 38/36 w/ Problemsolvers adapter
Sram 2x10 High Direct Mount X.0/X.9 (XX does not exist) w/ Problem Solvers 68mm Direct Mount Adapter
Sram 2x10 High Direct Mount X.0/X.9 w/ Problem Solvers Adapter or XX High Clamp Top Pull 34.9, Modified
Shimano 2x9 Down Swing Dual Pull 34.9 SLX (M667L5)
Shimano 2x9 Down Swing Dual Pull 34.9 SLX (M667L5)
Shimano & Sram 3x10 Down Swing Dual Pull 34.9 (M981L6 / M77110L6 / M66110L6)

Sram 38/36 High Direct Mount with Problemsolvers adapter
Sram 38/36 High Direct Mount with Problemsolvers adapter
Sram 2x10 High Direct Mount X.0/X.9 (XX does not exist) w/ Problem Solvers 68mm Direct Mount Adapter
Sram 2x10 High Direct Mount X.0/X.9 w/ Problem Solvers Adapter or XX High Clamp Top Pull 34.9, Modified
Shimano 2x9 Down Swing Dual Pull 34.9 SLX (M667L5)
Shimano 2x10 Down Swing Dual Pull 34.9 XTR (M986L6)
Shimano & Sram 3x10 Down Swing Dual Pull 34.9 (M981L6 / M77110L6 / M66110L6)

Not Compatible

Sram 2x10 High Direct Mount 38/36
Sram 2x10 High Direct Mount X.0/X.9 (XX does not exist)

Not Compatible

Shimano 2x10 Direct Mount (M986-D / M786-D) not E-type
Shimano & Sram 3x10 Direct Mount (M981-D / M77110-D / M66110-D) not E-type

Sram 38/36 High Direct Mount

Sram 38/36 High Direct Mount

Sram 2x10 High Direct Mount X.0/X.9 (XX does not exist)

Not Compatible

Shimano 2x10 Direct Mount (M986-D / M786-D) not E-type

Shimano & Sram 3x10 Direct Mount (M981-D / M77110-D / M66110-D) not E-type



*We do our best to test as many possible combinations as possible, but we simply can't get to mocking up every permutation.

Bike Set-Up Tips and Tricks

Chain Length

To get the correct chain length shift into the large chainring and largest cog and let all the air out of your shock. Thread the chain through the gears and derailleurs, compress the suspension all the way to bottom out, and cut the chain at the minimum length needed with the rear derailleur stretched out.

Tapered Head Tube

The HD and SL-R feature a tapered headtube that works with new tapered steerer forks.

Known as mixed tapered, or “ZS44/28.6 | EC49/40” in the Standardized Headset Identification System. This standard is compatible with both the Chris King IS3 and certain Cane Creek headsets

(see our webstore for the offerings.)

The Hakkalügi Disc features a tapered steerer too, with the following S.H.I.S identification: IS41/IS52. If you want information about these standards visit www.bicycleheadsets.com.

This standard is compatible with both the Chris King Mixed Tapered and certain

Cane Creek headsets (see our webstore for the offerings.) If you are getting a King headset for your HD, be sure to order the ‘five over’ version.

If you’ve already got a perfectly usable fork with a traditional 1¹/₈” steerer tube that you’d like to use, simply install an adapter that will make your fork work on the Mojos HD and SL-R. Both Chris King and Cane Creek make adapter style headsets that will adapt our 1.5 cup to your 1¹/₈” fork.

For those who like to experiment with head angle and changing steering geometry, Cane Creek now offers a headset called the AngleSet, which is compatible with the Mojos HD and SL-R. The AngleSet allows you to adjust the head tube angle of the bike in 1/2° degree increments, from +1.5° to -1.5°.

Rear Dropouts and Disc Brake Mounts

The one-piece disc brake boss/non drive side dropout on the HD and SL-R is molded carbon. The rear axle is called a Maxle, and it’s very similar to the new

through axle fork axles. All mountain bikes except the Mojo SL and Tranny are designed to bolt a post-mount standard caliper directly to the frame for a 160mm rotor or to a 180mm or 185mm rotor with a post to post style adapter (The Hakkalügi disc is a 140mm post mount).

The derailleur hanger for the Mojo HD, SL-R, and Tranny are different than the one found on the Mojo Carbon, Mojo SL, and Tranny. Replacements are available via your Ibis retailer or in the online Ibis store. Depending on date of manufacture, the Mojo HD could have a 135mm or 142mm Maxle, easy to determine with a measurement. The Mojo SL-R has a 142mm x 12mm Maxle.

Tire Clearance

The Mojo HD will fit tires up to 685mm (26.95”) in diameter and most tires up to 2.5” width. Please note that there really isn’t much of a standard for measuring tire width, so not all 2.5” or smaller tires will fit. (We’ve found width has little to do with height.)

Bike Set-Up Tips and Tricks

The rim width will also affect the fit; wider rims tend to make the tires a bit larger in diameter.

The Mojo HD 140 is approved for use with 650b wheels. Mud clearance is minimal, so take that into account before you make the plunge. You can squeeze a Pacenti 2.3 Neo Moto in there with about 4mm of mud clearance—fine for Arizona, bad for the U.K. A search of the Ibis forum on mtbr.com will give you a lot of user generated reporting on 650b wheel sizes.

Bottlecage

There are two heavy duty Riv-Nut inserts on the underside of the down tube of most of our bikes, to allow the mounting of a bottle cage. We've put them there primarily for a spare water bottle, a tool kit or for a battery if you're night riding.

Please do not attempt to retrieve a water bottle from this cage location during riding!

There are extra long socket head screws provided for your use in these holes. They are longer than your

average screw. We suggest using a heavy-duty cage for holding batteries since the lighter weight cages don't seem to hold up to this sort of abuse.

Mojo Head Angle Chart

	120mm Fork	140mm Fork	150mm Fork	160mm Fork	180mm Fork
Mojo SL	n/a	69°	68.5°	67.5°	n/a
Mojo HD140	n/a	68.5°	68°	67°	n/a
Mojo HD 160	n/a	68.5°	68°	67°	66°



Fork Setup

Fork Setup Information

Read this first for a general understanding of fork set-up or skip straight to the air pressure charts (p. 23) if you just want to go ride.

Positive Pressure

This is the main air spring that supports your weight. Adjust the air pressure so that you come close to using all the travel on a typical ride. Usually you can mimic your maximum impacts by grabbing the front brake and pushing down HARD on the bars. If you are getting 80–90% of the fork's travel doing this, your positive air spring is in the right range. Actual riding will often push the fork a little further than this test.

Low Speed Compression Damping

Low speed compression damping is used to reduced unwanted movement and over travel due to low speed changes like out of the saddle pedaling and subtle variations in the trail that can cause wallowing etc. Adjust to your preference.

Lockout

As the name implies this turns the fork rigid (or close to it) for out of the saddle efforts or riding on the road. Most forks have a “blowoff” so that the fork will move if a large enough impact is felt. The threshold or “blowoff” when the lockout lets the fork start to move is often adjustable. It's called *Gate* in Rock Shox parlance and *Blowoff Threshold* in Fox's language. Usually the goal is to have the lockout at the minimum setting needed to stop the fork movement while pedaling out of the saddle, but allowing it to still move fairly easily when an impact is felt.

High Speed Compression Damping

If your fork has a high speed compression damping control, this would usually be used to slow things down during big hits to avoid bottoming. It would usually be set at the lowest level needed to avoid bottoming out.

Rebound

Adjust the rebound so that the front end does not bounce off the ground

after a drop off or large bump.

If adjusted too slow, the fork may “pack down” and feel sluggish.

In order to conserve momentum and remain compliant the suspension needs to recover fairly quickly and push off the back side of bumps and holes. If the rebound is adjusted too slow, rolling energy is lost to damping and vibration. If it is adjusted too fast the bike will bounce after bumps and drops. Adjust to your preference.

Fox Float CTD

For 2013 Fox added features to their line of Float forks and shocks to make it easier for the user to adjust to changing trail conditions. It's called CTD (Climb Trail Descend) and is changed by the lever at the top of the right fork leg. As with prior Fox forks, cranking the blue lever clockwise increases the amount of force it takes to make the fork move. Just think of 'Righty Tightly, Lefty Loosie' (same goes for the shock).

Fox Float RLC (Model Year 2012)

Rebound damping, lockout and compression damping are all adjusted via the knobs at the top and bottom of the right fork leg.

Lockout and blowoff controls are the ones on top. (Note: rebound was moved to the bottom of the right fork leg for 2010.) The blowoff threshold can be adjusted so that when the fork is locked out it will not move during out of the saddle climbing, yet still soaks up the bumps.

Fox Talas 32

Fox Talas forks feature adjustable travel. We supply a custom 150/130mm travel version of the Talas 32 (The standard Talas is 150/120mm.) The rest of the adjustments are the same as the Float RLC. The air pressures required are slightly different than the Float so we're reprinting them (on page 23.) The travel adjustment knob is on top of the left fork leg. By turning it, the fork can be set to 150 or 130mm of travel. Rebound, lockout, blowoff and compression

damping are all adjusted via the knobs at the top and bottom of the right fork leg. (Note: rebound was moved to the bottom of the right fork leg for 2010.)

Fox Float 34

On the Mojo HD, the standard fork is now a Float 34 CTD with 160mm of travel. The 34 is nearly as stiff as last year's 36, and is .44 pounds lighter. The front axle is now a 15QR.

Fox Talas Forks

Fox Talas forks feature adjustable travel, via a lever on top of the left fork leg. We supply a custom 150/130mm travel version of the Talas 32 CTD (The standard Talas is 150/120mm) for the Mojo SL-R. For the Mojo HD, we are supplying a 160/130mm travel CTD fork (the standard Talas is 160/120). Other than the travel adjust feature, the adjustments are the same as the Float forks. The air pressures required are slightly different than the Float so we're reprinting them (on page 23.)

CTD

Climb enables a firm low-speed compression setting. We'd use it for paved or smooth fire road climbs. Trail mode dials back the low-speed compression damping from climb mode. And once you set the lever to Trail mode, changing between soft, medium, and firm settings on the outer dial enable you to further fine tune the low-speed compression damping (If on Trail mode, we usually prefer the soft setting). Fox recommends the Trail setting for an optimal blend of pedaling efficiency and bike control on variable terrain. Descend mode changes the compression setting to full-open for maximum control and plush performance on steep, aggressive descents.



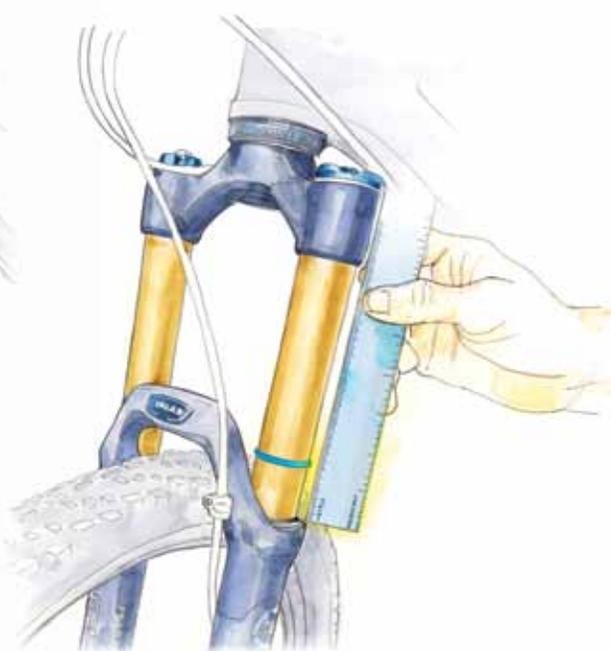
Fork Setup



1. Add recommended air for rider weight (see chart on facing page). With bike on level ground, bounce up and down a bit to overcome stock stiction. Settle into your riding position.



2. Slide o-ring until it rests on wiper, then dismount without disturbing o-ring's position.



3. Measure sag—the distance from o-ring to wiper. Start with sag of 25% of travel and adjust to your preference.

2013 32 Talas 130-150

RIDER WEIGHT		26"	
lb	kg	psi	bar
≤125	<57	45	3.10
125-135	57-61	50	3.45
135-145	61-66	55	3.79
145-155	66-71	65	4.48
155-170	70-77	70	4.83
170-185	78-84	75	5.17
185-200	84-91	80	5.52
200-215	91-97	90	6.21
215-230	98-104	100	6.90
230-≥250	104-113	110	7.58

2013 36 Talas 140-180

RIDER WEIGHT		26"	
lb	kg	psi	bar
<125	<57	45	3.10
125-135	57-61	48	3.31
135-145	61-66	50	3.45
145-155	66-71	53	3.65
155-170	70-77	55	3.79
170-185	78-84	60	4.14
185-200	84-91	70	4.83
200-215	91-97	80	5.52
215-230	98-104	90	6.21
230-250>	104-113	100	6.90

2013 34 Talas 130-160

RIDER WEIGHT		26"		650b	
lb	kg	psi	bar	psi	bar
≤125	<57	50	3.10	45	3.10
125-135	57-61	55	3.45	50	3.45
135-145	61-66	60	3.79	55	3.79
145-155	66-71	65	4.48	60	4.48
155-170	70-77	70	4.83	65	4.83
170-185	78-84	75	5.17	70	5.17
185-200	84-91	80	5.52	75	5.52
200-215	91-97	85	6.21	80	6.21
215-230	98-104	90	6.90	90	6.90
230-≥250	104-113	95	7.58	100	7.58

2013 32 Float CTD

RIDER WEIGHT		29"/120mm		26"/140mm	
lb	kg	psi	bar	psi	bar
≤125	<57	50	3.45	55	3.79
125-135	57-61	50	3.45	60	4.14
135-145	61-66	55	3.79	65	4.48
145-155	66-71	65	4.48	75	5.17
155-170	70-77	75	5.17	80	5.52
170-185	78-84	80	5.52	85	5.86
185-200	84-91	85	5.86	90	6.21
200-215	91-97	95	6.55	100	6.90
215-230	98-104	100	6.90	110	7.58
230-≥250	104-113	110	7.58	120	8.27

2013 34 Float 140

RIDER WEIGHT		26"	
lb	kg	psi	bar
<125	<57	45	3.10
125-135	57-61	48	3.31
135-145	61-66	50	3.45
145-155	66-71	53	3.65
155-170	70-77	55	3.79
170-185	78-84	60	4.14
185-200	84-91	70	4.83
200-215	91-97	80	5.52
215-230	98-104	90	6.21
230-250>	104-113	100	6.90

2013 34 Float 160

RIDER WEIGHT		160mm-26"		160mm-650b	
lb	kg	psi	bar	psi	bar
≤125	<57	45	3.10	45	3.10
125-135	57-61	50	3.45	50	3.45
135-145	61-66	55	3.79	55	3.79
145-155	66-71	65	4.48	65	4.48
155-170	70-77	70	4.83	70	4.83
170-185	78-84	75	5.17	75	5.17
185-200	84-91	80	5.52	80	5.52
200-215	91-97	90	6.21	90	6.21
215-230	98-104	100	6.90	100	6.90
230-≥250	104-113	110	7.58	110	7.58

*Compression ratios and thus pressures have changed from 2012 to 2013.

Rear Shock Setup



Mojo SL, and SL-R Sag

We recommend starting with air pressure in the RP23 equal to 90% of your riding weight in pounds. Shoot for .5" (~13mm) of sag on the shock.

Mojo HD Sag

We recommend starting with air pressure in the RP23 equal to your riding weight in pounds. Shoot for .625" (~16mm) of sag on the shock. Also, see the chart on page 31

Check the Sag

With the shock in descend mode (or ProPedal turned off for earlier shocks), sit on your bike in a normal riding position. Reach down and slide the o-ring up the shock shaft against the wiper seal. Next, gently step off of the bike taking care not to further compress the suspension. For the Mojos up to HD140, the distance from the o-ring to the wiper seal should be about 10–13mm for XC type riding and 13–15mm for more gravity oriented off road riding.

On the Mojo HD, sag should be

about 16mm for XC and 19–21mm for gravity rides. Experiment and see what works best for your trails and riding style.

Trail Adjust

The new RP23 CTD (Climb, Trail, Descend) is set-up much like the Float CTD fork:

Climb mode enables a firm low-speed compression setting. We'd use it for paved or smooth fire road climbs. Trail mode dials back the low-speed compression damping from climb mode. And once you set the lever to Trail mode, changing between soft, medium, and firm settings on the dark outer dial enable you to further fine tune the low-speed compression damping.

Descend mode changes the compression setting to full-open for maximum control and plush performance on steep, aggressive descents.

The pedaling efficiency of the dw-link suspension renders many of the features of the RP23 CTD superfluous.

Rear Shock Setup

For all but smooth pavement or fire road climbing, we recommend running the RP23 in the Descend setting. The increased low speed compression damping that Trail and Climb settings provide cut out much of the small bump sensitivity that our bikes are so well known for.

Adjusting Rebound

The RP23 has adjustable rebound damping. It's adjusted by turning the red dial on the inside of the CTD lever (or ProPedal adjust lever on older RP23s). Generally you want it as fast as you can set it without getting bounced off the saddle after a bump or drop (like riding off a curb in the saddle.) If the rebound setting is too slow the shock will be partially compressed when you hit the next bump resulting in "packing down". Too fast and the bike will bounce you up in the air after bumps and drops. Adjust to your preference.

ProPedal

This is a damping system used by Fox to

minimize unwanted suspension bob. The dw-link suspension is good at minimizing suspension bob but there are situations where you might want to use some ProPedal. It is turned on or off with the simple movement of the easily accessible blue lever at the top of the shock. You can run the shock open or engage the ProPedal settings on any of the shocks.

2011 and Earlier RP23 (non-Kashima)

Note: We don't usually run ProPedal on our bikes except in rare circumstances like riding on the road. Choose the ProPedal level 1, 2 or 3 by pulling out and turning the outer blue knob on top of the lever. If you want to experiment with ProPedal though, a good all around setting is #1. If you are riding on the road or doing a lot of out of the saddle climbing, the #2 or #3 positions work well.

On the Fly RP23 ProPedal controls

Position 1: blue lever towards the drive side=shock open, no ProPedal.

Position 2: blue lever toward the non-drive side=ProPedal level based on dial setting 1-3.

Kashima RP23

The 2012 Kashima shocks have Adaptive Logic, and work differently than the prior RP23's. Set the lever to the left, and you have the firmest ProPedal setting. To the right is 0 (open) or ProPedal 1 or 2. The other settings are the same as prior RP23s.

Rear Shock Set-Up

The Mojos uses the following shocks and shock hardware:

Upper Hardware:

- 21.8mm wide with an 8mm bore

Lower Hardware:

- 40mm wide with an 8mm bore

Mojo HD shock:

8.5" eye to eye 2.5" shaft travel

Mojo SL shock:

7.875" eye to eye 2.0" shaft travel.

If you really want to Harness the Gnarness of the Mojo HD

If you generally like how the RP23 feels, but wish for a bit more end stroke resistance, you may want to try an air can volume reducer kit from Fox. By making the volume of air the RP23 smaller, the spring rate will become much more progressive.

The stock RP23 is quite linear, which is why aggressive riding can often result in

bottoming. By making the shock more progressive, you won't give up much (if any) small bump compliance at the beginning of the stroke, but you'll get a much firmer feel towards the end of the stroke. Contact Fox for an Air Can Volume Reducer Kit. Want to go bigger still? We offer the optional DHX RC4. See 'tuning the RC4', below.

If you want to source your own shock, the Cane Creek Double Barrel Air, X-Fusion Vector Air, X-Fusion Vector Coil HLR, the RockShox Monarch Plus RC3 and the RockShox Vivid Air R2C are all great options. Note that the stock tunes of the Fox (that we provide) and Cane Creek shocks work well.

The X-Fusion benefits from a custom tuning, and the RockShox units work best with a low compression, medium rebound tune (with low comp/low rebound being the second best RockShox tune).

Balance That Thing

A balanced bike will ride best. If you are planning on using an aggressive fork, such as a Fox unit with the RC2

damper, or a RockShox with an RC2 DH damper, a larger rear shock will create a well-balanced ride. However, if you're planning on sticking with the stock Fox 34 CTD 160 fork, a much larger rear shock will result in an unbalanced bike.

Opinions on the aftermarket shocks differ greatly. That said, a shock where the progressivity can be adjusted will usually work best. Air shocks often are easily adjusted via changing the air can volume- a smaller volume is more progressive, and will better resist bottoming. More linear shocks, with a higher air volume, will bottom more easily. If using a coil, be sure you have good late stroke damping control so you can mimic the progressive nature of an air shock at the end of the stroke.

Note: the RC4 will not fit on a small Mojo HD. A great option for a shock more aggressive than the RP23 is the RockShox Monarch Plus.

The Monarch Plus is also the only reservoir shock that will fit on the small Mojo HD. It'll fit with the reservoir down and toward the back of the

Rear Shock Set-Up

Tuning the RC4

There is a wide range of adjustment on the RC4 and you can control damper movement very precisely. Make the adjustments in this order—and make only one change at a time so you know how each adjustment affects ride.

- 1) Check sag and make sure the spring rate is correct first. If you can't get sag in the ballpark within 1-2 turns of preload you'll need a different spring rate.
- 2) Set rebound to personal preference. We always go as fast as possible without getting bucked.
- 3) At first, leave Boost Valve pressure where it comes from the factory—160psi. We've found 160psi works great on most bikes so don't touch this adjustment until you've had a chance to ride first. On DHX RC shocks, BV pressure only controls the last 1/3 of the stroke. Changing BV pressure will not affect your pedaling feel or mid stroke feel—only deep stroke & bottom out.

- 4) Set the low speed compression adjuster to control pedaling & cornering feel. This is personal preference, but it's probably good to start in the middle. There are normally 18-20 detents of adjustment here so start halfway... 9 clicks out from full closed. If you find that's too harsh on the small stuff then back off another halfway... 4-5 clicks to make a noticeable difference. Conversely if you feel the bike is wallowing or too mushy, or geometry is changing too much in the corners you can firm it up 4 clicks. The key is to make each adjustment about half of what the last adjustment was, continually narrowing down the range until you arrive at the best setting. This technique is called bracketing and can be used on all shock tuning adjustments in turn to get a very precise setup.
- 5) Set the high speed compression adjuster (a 2.5mm hex key fits in the holes) to control feel on big spiky hits and square-edged bumps. Again this is personal preference and can be

tuned by bracketing. Faster, aggressive riders or courses with really big hits require more HSC damping to keep from using excessive travel and rebounding harshly. There are around 12 detents of adjustment here so start in the middle at 6. If it's too harsh then back off 3. Too soft, increase by 3. Then narrow your changes to 1-2 clicks each time.

- 6) Once you have high & low speed dialed, use the bottom out volume adjuster (blue cylinder on the end of the reservoir) to increase or decrease bottom out resistance. Turning the adjuster in – clockwise – increases bottom out resistance and vice-versa. Again, start in the middle and bracket. If you're bottoming too hard turn the adjuster all the way in and re-test. If that's too much and prevents full travel go halfway. If you then find halfway is too soft then go halfway between half and full in, etc.
- 7) If you find you're still bottoming too hard with the volume adjuster all the

way in, raise Boost Valve pressure to max-200psi-and re-test. Conversely if you're unable to achieve full travel at the factory spec 160psi with the bottom out volume adjuster all the way out, lower BV pressure to the minimum 125psi and re-test. Changing BV pressure will probably require going back to re-bracket the bottom out volume adjustment since they are related. A warning on BV pressure: whatever you do, **DO NOT GO BELOW 125psi**. Too little pressure in the reservoir will cause the damping oil to emulsify (foam up). 125psi is the bare minimum to keep the shock functional.

RP23 Rear Shock Pressure

RIDER WEIGHT		MOJO, SL, HD140		HD 160		RIPLEY	
lbs	kg	psi	bar	psi	bar	psi	bar
100	45	90	6.2	105	7.2	105	7.2
110	50	99	6.8	116	8.0	116	8.0
120	55	108	7.4	126	8.7	126	8.7
130	59	117	8.1	137	9.4	137	9.4
140	64	126	8.7	147	10.1	147	10.1
150	68	135	9.3	158	10.9	158	10.9
160	73	144	9.9	168	11.6	168	11.6
170	77	153	10.6	179	12.3	179	12.3
180	82	162	11.2	189	13.0	189	13.0
190	86	171	11.8	200	13.8	200	13.8
200	91	180	12.4	210	14.5	210	14.5
210	95	189	13.0	221	15.2	221	15.2
220	100	198	13.7	231	15.9	231	15.9
230	105	207	14.3	242	16.7	242	16.7
240	109	216	14.9	252	17.4	252	17.4
250	114	225	15.5	263	18.1	263	18.1

Maintenance

Working on your Mojo SL, SL-R, HD

The link assemblies on the Mojos are designed to be easily removed and replaced. Be sure to purchase a fresh link set before removing the old ones to skip any downtime. There are no bearings to press out, nor any axles to hammer. New Lopes Link (upper) and lower pivot assemblies are available in the *buy* section of our website, or you can have your dealer order them from Ibis for you. Replacement is super simple and requires these common tools:

- 2x 4mm Allen wrenches
- 2x 6mm Allen wrenches
- 2x 5mm Allen wrenches
- Loctite 242 blue thread locker or anti-seize (depending on model of bike)

Linkages

The upper and lower links for the HD are more robust versions of the ones used on the original Mojo and Mojo SL. Please don't try to mix and match them. It looks like they might fit but they are not interchangeable. Removal and instal-

lation procedures are identical. Please refer to the section on Mojo SL and Mojo Carbon link maintenance in this manual (PP 38–39.)

Bearing Replacement:

If you're handy with a bench vice and have a good supply of sockets, you can attempt the replacement of the bearings in the Lopes Link and lower link yourself. While we don't have step-by-step instructions, you are welcome to purchase the bearings and try it yourself. New links with bearings installed are available in the Ibis webstore as well. The current version of the Mojo SL lower link has been extensively redesigned and provides a 100% increase in torsional stiffness along with a 7.5% increase in lateral stiffness. You may want to consider this upgrade rather than replacing your bearings.

Mojo Bearing Specs:

Mojo, Mojo SL, SL-R, HD Upper Link

- 608 2RS 8 ID x 22 OD x 7 W
(Enduro P/N 608 2RS MAX)

Mojo, Mojo SL, SL-R Lower Link

- Front: 15 ID x 28 OD x 7 W
(Enduro P/N 6902 2RS)
- Rear: 10 ID x 22 OD x 6 W
(Enduro P/N 6900 2RS)

Mojo HD Lower Link

- Front: 15 ID x 26 OD x 10 W Dual Row Angular Contact
(Enduro DR 1526 RS)
- Rear: 15 ID x 28 OD x 7 W
(Enduro P/N 6902 2RS)

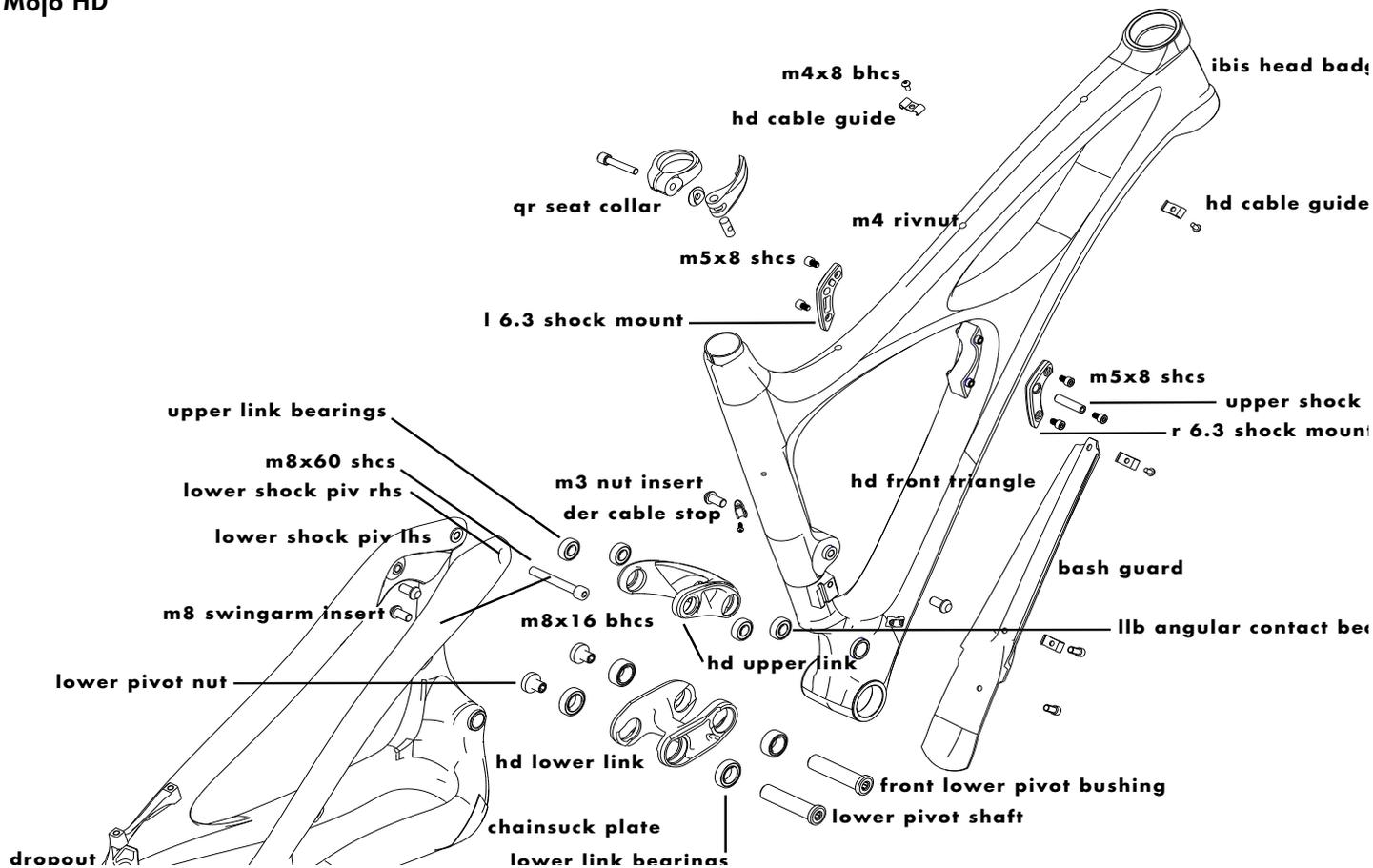
You can find bearings used on the Mojo here:

www.endurobearings.com/bicycle/enduro_bearings.html on the Enduro website. Here's the direct link to the Ibis Mojo/SL bearing kit: www.enduroforkseals.com/id245.html

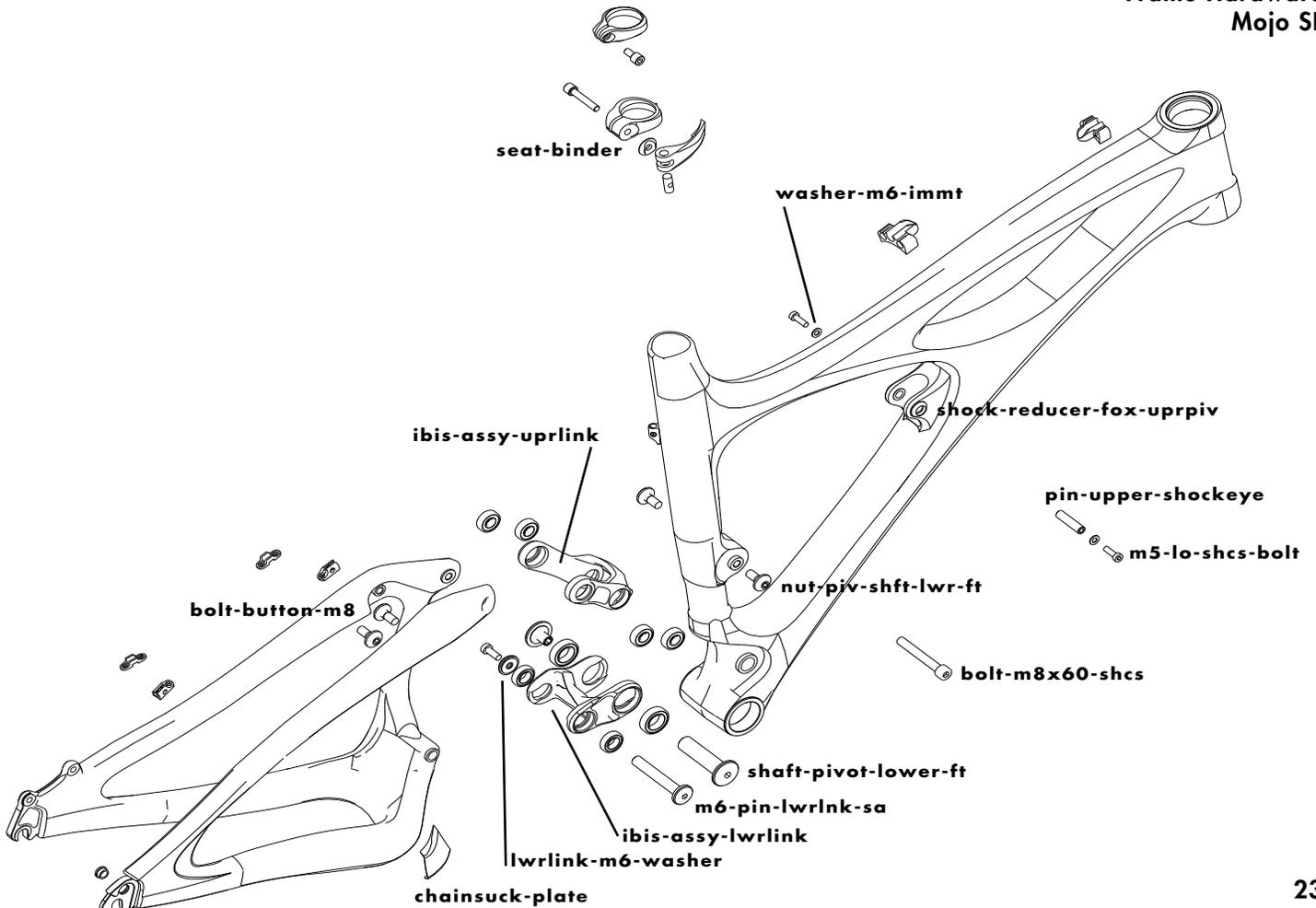
The kit includes bearings for the upper and lower links.



Frame Hardware Mojo HD

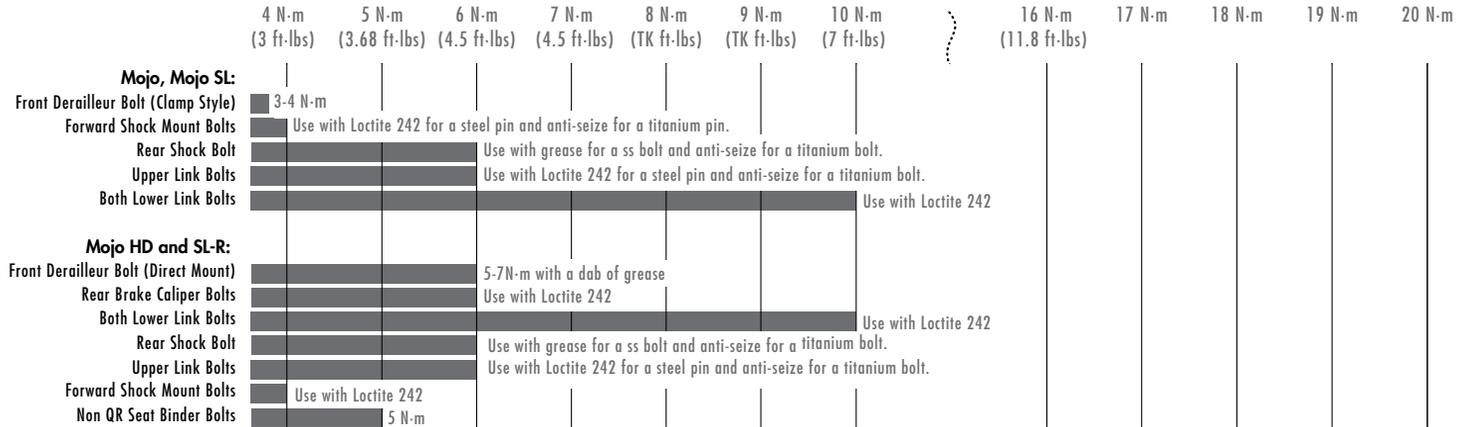


Frame Hardware
Mojo SL

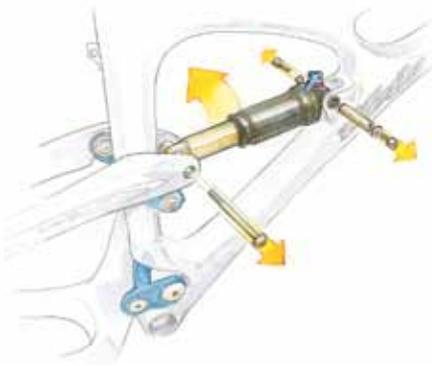


Frame Hardware Torque Specs

Frame Hardware Torque Specs, by Model

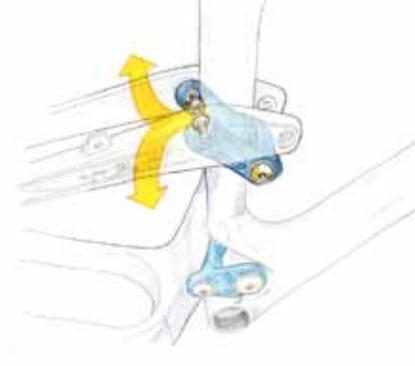


Mojo Swingarm Removal



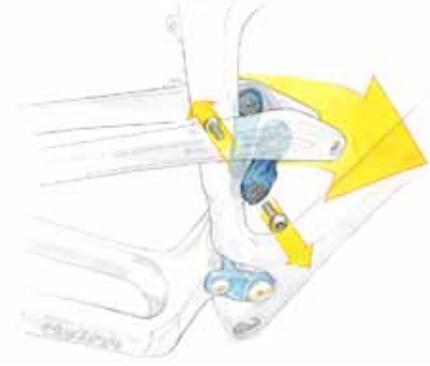
Step 1

Put your freshly cleaned Mojo in a work stand. Remove the front derailleur, cranks, and the rear wheel. Remove the shock by removing the shock bolts with two 4mm and one 6mm Allen wrench.



Step 2

Using a 5mm Allen wrench, remove all four 5mm bolts that hold the upper link to the swingarm and front triangle. Since the strut on the swingarm blocks access to the final bolt, rotate the swingarm up to remove that last 5mm bolt.



Step 3

Remove the upper link from the front triangle. It will help to slightly spread apart the stays of the swingarm while you remove the link.



Step 4

Next, remove the axle in the lower link that passes through the front triangle with two 6mm Allen wrenches. This might take some force since we use Loctite on this interface.

Step 5

Remove this main pivot axle. Pull the swingarm and the lower link away from the front triangle.

Step 6

Remove the axle in the lower link that passes through the swingarm using two 5mm Allen wrenches.

*To reassemble your bike, follow the steps in reverse order. Remember to use a little Loctite blue thread locker on all steel and aluminum fasteners, and to use anti-seize on all titanium fasteners.