Introduction

Salutations
This Set-Up Guide will help you with assembly tips, get you started on adjusting the suspension, maintaining your frame and explain how to perform basic mechanical jobs. This guide does not attempt to address full bike assembly, fitting, brake and shifting setup, riding techniques etc. Please utilize a professional level service for these items to get the best performance and enjoyment from your Ibis. This Set-Up Guide is also available online with enhanced functions and additional information: www.ibiscycles.com/downloads/setupguide.pdf

Contents

Introduction 3
Build
Geometry/Quick Specs 4–7
Cable Routing 8–11
Chain Guides 12
Front Derailleur Compatibility Chart 13
Head Angle Chart 15
Ride
Fork Setup 20–22
Fork Air Pressure Chart 23
Rear Shock Set-Up 24–27
Rear Shock Air Pressure Chart 27
Maintain
A Note on Chainsuck 28–29
Frame Hardware Drawings 32–35
Frame Hardware Torque Spec Chart 36
Swingarm Removal 38–39
Warranty/Warranty Registration 40
Serial Number 41
Chuck’s Recipe 42
Contact Info 43
<table>
<thead>
<tr>
<th>Size</th>
<th>Small</th>
<th>Medium</th>
<th>Large</th>
<th>X-Large</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wheels</td>
<td>1053.5mm</td>
<td>1054.5mm</td>
<td>1105mm</td>
<td>1155mm</td>
</tr>
</tbody>
</table>

**Mojo Sl-R**

- High Direct mount front derailleur
- For tapered steerer, use this headset: IS ZS44/28.6 | EC49/40
- Shock Specs: 7.875” (200mm) eye to eye, 2.0” (50mm) travel
- BB92/Press GXP Bottom Bracket

**Mojo Sl**

- 135mm hub with a 12mm through axle*
- 31.6mm seat post
- 130 to 160mm fork travel compatibility
- 68mm bottom bracket
- 2.52:1 leverage ratio
- 34.9mm clamp top pull front derailleur
- *Measurements Taken With 150mm Fork.

*Measurements Taken With 160mm Fork, Geometry Specs with 180mm Fork Available on Ibis website.

**Mojo Hd 140**

- 140mm rear wheel travel
- 130 to 160mm fork travel/compatibility
- 31.6mm seat post
- 135mm hub with a 12mm through axle
- 68mm bottom bracket
- 2.8:1 leverage ratio
- For tapered steerer, use this headset: IS ZS44/28.6 | EC49/40
- For 11/8” straight steerer, use this headset: IS ZS44/28.6 | EC49/30

*Measurements Taken With 160mm Fork.

**Mojo Hd 160**

- 160mm rear wheel travel
- 130 to 160mm fork travel/compatibility
- 31.6mm seat post
- 135mm hub with a 12mm through axle
- 68mm bottom bracket
- 2.8:1 leverage ratio
- For tapered steerer, use this headset: IS ZS44/28.6 | EC49/40
- For 11/8” straight steerer, use this headset: IS ZS44/28.6 | EC49/30

*Measurements Taken With 160mm Fork, Geometry Specs with 180mm Fork Available on Ibis website.
Frame Geometry Chart

### Silk SL

- **Fork**: 100mm flat top
- **Rear Axle**: 135mm center
- **Front Derailleur**: 34.9mm top pull
- **Bottom Bracket**: S.H.I.S. IS41/28.6 upper, IS 52/40 lower
- **Seatpost Diameter**: 31.6mm
- **Seattube Diameter**: 34.9mm
- **Chainstay**: 430mm
- **Top Tube**: 520mm
- **Head Tube**: 550mm

### Trance

- **Fork**: 100mm flat top
- **Rear Axle**: 135mm center
- **Front Derailleur**: 34.9mm top pull
- **Bottom Bracket**: S.H.I.S. IS41/28.6 upper, IS 52/40 lower
- **Seatpost Diameter**: 31.6mm
- **Seattube Diameter**: 34.9mm
- **Chainstay**: 430mm
- **Top Tube**: 520mm
- **Head Tube**: 550mm

### Hakkalugi

- **Fork**: 100mm flat top
- **Rear Axle**: 135mm center
- **Front Derailleur**: 34.9mm top pull
- **Bottom Bracket**: S.H.I.S. IS41/28.6 upper, IS 52/40 lower
- **Seatpost Diameter**: 31.6mm
- **Seattube Diameter**: 34.9mm
- **Chainstay**: 430mm
- **Top Tube**: 520mm
- **Head Tube**: 550mm

### Hakkalugi Disc

- **Fork**: 100mm flat top
- **Rear Axle**: 135mm center
- **Front Derailleur**: 34.9mm top pull
- **Bottom Bracket**: S.H.I.S. IS41/28.6 upper, IS 52/40 lower
- **Seatpost Diameter**: 31.6mm
- **Seattube Diameter**: 34.9mm
- **Chainstay**: 430mm
- **Top Tube**: 520mm
- **Head Tube**: 550mm

---

**Frame Geometry Chart**

<table>
<thead>
<tr>
<th>Size</th>
<th>47</th>
<th>50</th>
<th>53</th>
<th>58</th>
<th>61</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Head Tube</strong></td>
<td>1004mm</td>
<td>1010mm</td>
<td>1016mm</td>
<td>1030mm</td>
<td>1032mm</td>
</tr>
<tr>
<td><strong>Top Tube</strong></td>
<td>72°</td>
<td>72°</td>
<td>72°</td>
<td>72°</td>
<td>72°</td>
</tr>
<tr>
<td><strong>Seat Tube</strong></td>
<td>75.2°</td>
<td>71.5°</td>
<td>71.5°</td>
<td>71.5°</td>
<td>71.5°</td>
</tr>
<tr>
<td><strong>Wheelbase</strong></td>
<td>979mm</td>
<td>979mm</td>
<td>979mm</td>
<td>979mm</td>
<td>979mm</td>
</tr>
</tbody>
</table>

**Note:**
- **Wheelbase:** 979mm
- **Head Tube:** 1004mm
- **Top Tube:** 72°
- **Seat Tube:** 75.2°
Bike Set-Up Tips and Tricks

Cable Routing

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 inner tube 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.

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 Mojos 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.

Cable Routing Mojo SL Routing

HD Cable Guard
This cable guard works well too.

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 Mojos 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.

Cable Routing Mojo SL Routing

HD Cable Guard
This cable guard works well too.
Bike Set-Up Tips and Tricks

Cable Routing

Mojo SL Routing

Mojo HD and
Mojo SL-R Routing

Mojo HD and Mojo SL-R
Caliper Routing
The Mini-G is designed for a 32–36 single chaining and features bush protection as well as chain retention. The Lopes SL is nearly identical to the guide that helped Brian Lopes win his 5th consecutive Air DH race at Crankworx 2010. At 104 grams, it’s the lightest full chain retention system on the market. If you want chain retention and you’re willing to sacrifice bash protection, this is the guide for you. The Lopes SL will accommodate chainrings from 32–38t (34, 36, and 38 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 chainsteering to make the guide work.

### Dual Ring Guides

For dual ring guide compatibility, we recommend getting a new rear derailleur call the XTR Shadow Plus. It uses heavier chain tension plus a friction stabilizer to dampen the cage and thus chain movement (chain slap). It also dramatically reduces derailing of chains. Combined with either an e*thirteen XCK-ST D-Type (available August 2011) or an MRP 1X, the Shadow Plus virtually eliminates the need for the lower half of your chain guide, plus makes your bike nearly silent.

### Single Ring Guides

For 1X10 lovers, we’ve got great news. In June 2011, Shimano began shipping a new rear derailleur call the XTR Shadow Plus. If you’re converting your triple crank 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 chainsteering to make the guide work.

---

**Bike Set-Up Tips and Tricks**

MPR and Ibis have designed two custom single ring chain guides for the Mojo HD and Mojo SL. They are called the Mini-G and the Lopes SL. Both mount directly to the frame via the bottom bracket area of 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 and Mojo SL, we make a special main pivot shaft that facilitates mounting of either chain guide. If you’re converting your triple crank 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 chainsteering to make the guides work.

---

**Chain Guides**

Bike Set-Up Tips and Tricks

**Freestyle DH Chain Guide**

- **Mini-G:**
  - **http://store.ibiscycles.com/Produc134**
  - **Product134**
  - **Series 14/32**
  - **Series 38/42**
  - **Series 2x10 Down Swing Dual Pull 34.9 (M986L6)**
  - **XTR 40/28 Shimano 2x10 Down Swing Dual Pull 34.9 XTR (M667L5)**
  - **Mojo HD w/ Direct FD mounting:**
    - **Shimano 3x10 Shimano 3x10 Down Swing Dual Pull 34.9 (M981L6 / M77110L6 / M66110L6)**
    - **Sram 3x10 Shimano 3x10 Down Swing Dual Pull 34.9 (M981-D / M77110-D / M66110-D) not E-type**
  - **Mojo/SL/Tranny w/ 35mm Seat Tube OD:**
    - **Shimano 3x10 Shimano 3x10 Down Swing Dual Pull 34.9 (M981L6 / M77110L6 / M66110L6)**
    - **Sram 3x10 Shimano 3x10 Down Swing Dual Pull 34.9 (M981D / M77110D / M66110D) not E-type**
  - **Sram 38/26 Not Compatible**
  - **Sram 42/28 Sram 2x10 High Direct Mount X.O/X.9 w/ Problem Solvers Adapter or XX High Clamp Top Pull 34.9, Modified**
  - **Sram 36/39 Sram 2x10 High Direct Mount X.O/X.9 w/ Problem Solvers 68mm Direct Mount Adapter**
  - **Sram 38/24 Sram 2x10 High Direct Mount 38/36 w/ Problemsolvers adapter**
  - **Sram 36/22 Not Compatible**

---

**Bike Set-Up Tips and Tricks**

**Freestyle DH Chain Guide**

- **Mini-G:**
  - **http://store.ibiscycles.com/Produc134**
  - **Product134**
  - **Series 14/32**
  - **Series 38/42**
  - **Series 2x10 Down Swing Dual Pull 34.9 (M986L6)**
  - **XTR 40/28 Shimano 2x10 Down Swing Dual Pull 34.9 XTR (M667L5)**
  - **Mojo HD w/ Direct FD mounting:**
    - **Shimano 3x10 Shimano 3x10 Down Swing Dual Pull 34.9 (M981L6 / M77110L6 / M66110L6)**
    - **Sram 3x10 Shimano 3x10 Down Swing Dual Pull 34.9 (M981-D / M77110-D / M66110-D) not E-type**
  - **Mojo/SL/Tranny w/ 35mm Seat Tube OD:**
    - **Shimano 3x10 Shimano 3x10 Down Swing Dual Pull 34.9 (M981L6 / M77110L6 / M66110L6)**
    - **Sram 3x10 Shimano 3x10 Down Swing Dual Pull 34.9 (M981D / M77110D / M66110D) not E-type**
  - **Sram 38/26 Not Compatible**
  - **Sram 42/28 Sram 2x10 High Direct Mount X.O/X.9 w/ Problem Solvers Adapter or XX High Clamp Top Pull 34.9, Modified**
  - **Sram 36/39 Sram 2x10 High Direct Mount X.O/X.9 w/ Problem Solvers 68mm Direct Mount Adapter**
  - **Sram 38/24 Sram 2x10 High Direct Mount 38/36 w/ Problemsolvers adapter**
  - **Sram 36/22 Not Compatible**

---

**Bike Set-Up Tips and Tricks**

**Freestyle DH Chain Guide**

- **Mini-G:**
  - **http://store.ibiscycles.com/Produc134**
  - **Product134**
  - **Series 14/32**
  - **Series 38/42**
  - **Series 2x10 Down Swing Dual Pull 34.9 (M986L6)**
  - **XTR 40/28 Shimano 2x10 Down Swing Dual Pull 34.9 XTR (M667L5)**
  - **Mojo HD w/ Direct FD mounting:**
    - **Shimano 3x10 Shimano 3x10 Down Swing Dual Pull 34.9 (M981L6 / M77110L6 / M66110L6)**
    - **Sram 3x10 Shimano 3x10 Down Swing Dual Pull 34.9 (M981D / M77110D / M66110D) not E-type**
  - **Mojo/SL/Tranny w/ 35mm Seat Tube OD:**
    - **Shimano 3x10 Shimano 3x10 Down Swing Dual Pull 34.9 (M981L6 / M77110L6 / M66110L6)**
    - **Sram 3x10 Shimano 3x10 Down Swing Dual Pull 34.9 (M981D / M77110D / M66110D) not E-type**
  - **Sram 38/26 Not Compatible**
  - **Sram 42/28 Sram 2x10 High Direct Mount X.O/X.9 w/ Problem Solvers Adapter or XX High Clamp Top Pull 34.9, Modified**
  - **Sram 36/39 Sram 2x10 High Direct Mount X.O/X.9 w/ Problem Solvers 68mm Direct Mount Adapter**
  - **Sram 38/24 Sram 2x10 High Direct Mount 38/36 w/ Problemsolvers adapter**
  - **Sram 36/22 Not Compatible**
Bike Set-Up Tips and Tricks

Chain length
To get the correct chain length shift into the large chaining 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. 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 1 1/8” steerer tube that you’d like to use, simply install an adapter that will make your fork work on the Mojo HD. Both Chris King and Cane Creek make adapter style headsets that will adapt our 1.5 cup to your 1 1/2” 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 Mojo HD and Mojo 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 bosses 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.

Bottlecage
There are extra long socket head screws provided for you 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.

There are two heavy duty Riv–Nut inserts on the underside of the down tube of all of the Mojos to allow the mounting of a bottle cage. We’ve put it 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!

Mojo Head Angle Chart

<table>
<thead>
<tr>
<th>Fork Length</th>
<th>HD 140</th>
<th>HD 150</th>
<th>HD 160</th>
</tr>
</thead>
<tbody>
<tr>
<td>140mm</td>
<td>68°</td>
<td>68°</td>
<td>68°</td>
</tr>
<tr>
<td>150mm</td>
<td>68.5°</td>
<td>68°</td>
<td>68°</td>
</tr>
<tr>
<td>160mm</td>
<td>68°</td>
<td>67°</td>
<td>66°</td>
</tr>
<tr>
<td>180mm</td>
<td></td>
<td></td>
<td>n/a</td>
</tr>
</tbody>
</table>

There are extra long socket head screws provided for you 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.

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

Bike Set-Up Tips and Tricks

Mojo Head Angle Chart

<table>
<thead>
<tr>
<th>Head Angle Chart</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low Speed, Tight and Twisty, Technical</td>
</tr>
</tbody>
</table>
of the Slot Machine. Slide the rear end onto the frame, then assemble and install the upper pivot shaft and bolts. Smatter a healthy dose of grease on the inside of the Slot Machine shaft (on the threads) and insert it through the Slot Machine. Assemble the gray Slot Machine bolt with the small steel washer, followed by the larger aluminum washer. Thread the bolt in, but don’t tighten it to fighting specs all the way quite yet. After building the complete bike, put it on the ground with the Slot Machine bolt still loose. Push down firmly on the seat, and the chain will become taught. Now you’re ready to torque down the Slot Machine bolt, which requires a good torque wrench. Start by torquing the bolt to 15 ft lbs. That’s a lot, so use a good, fresh 5mm Allen wrench bit. A ball end bit isn’t going to work for this amount of torque.

Hold the rear brake and give the right pedal a swift kick forward. If this causes the chain to become noticeably slacker, that’s ok, as the frame may need to complete its break-in cycle. Loosen the bolt, re-tension the chain, and torque the Slot Machine bolt back to 15 ft lbs. Your Slot Machine will now stay tight, but we recommend that you take something better than a multi tool on the first ride just to be safe.

Single Speed Build Suggestions

Use a single speed specific rear hub to take advantage of a dishless wheel build. Doing so is well worth the effort, as it makes for a responsive and durable wheel. Use a BMX chain, a rampless chainring, and a single speed specific cog for best performance.

There is a single speed specific drop out hanger replacement available in the Ibis store or installed on the frame when originally ordered as a single speed set-up.

The chainstays on a Tranny are large so we recommend using a bigger chainring and cog combo than might be considered “normal”.

Anything less than a 34T ring up front and you’re apt to get noisy chain slap—even when properly tensioned. Bigger ring/cog combos are smoother and more efficient. If you want to use smaller chain rings, you can use a neoprene or rubber chain stay protector to silence things.

Cable Stops

The Tranny has special cable stops that can be removed if you’re not using gears. The derailleur cable stops on the top-tube are removable by unscrewing the brake hose guides and removing the derailleur stop portions of the assemblies. If you’re using a mechanical disk brake you’ll need to run full housing down the seat stay. The derailleur stops on the right seat stay aren’t designed to withstand brake forces, so don’t use them as brake stops on the left.
Silk
Building a Silk SL from a frame to a complete bike is straightforward, using standard practices. Be sure to use assembly lube on a carbon seatpost. The integrated headsets use more preload than you might be used to. If you hear any creaking in the head tube area after your first ride, simply increase the headset top cap tension slightly, until the creak goes away.
Use an approved fork, please call for a current list: 831–461–1435.
Brake Set-Up:
Adjust the pads so the front of the pad contacts first. This will help to reduce noise and shuddering. You can also trim trailing edge with a razor blade if needed to stop shudder. Another way to improve braking performance is to make sure the straddle cable is straight with minimal slack. A higher straddle placement in front improves modulation.

General Frame Information
Care for Carbon
The carbon fiber monocoque frame is extremely strong, and should provide years of trouble–free use, provided you care for it properly and don’t overly huck every 50 foot gap you see. Keep your bike clean and inspect it often. Although each and every bike gets tested at the factory for strength, it never hurts to look at the areas where the tubes join, where the shocks and dropouts mount and any other areas that may receive stress during usage. Check for loose bearings, headsets, shocks and forks and such. Visually inspect the bike before each ride and also during each cleaning.
Carbon Assembly Compound
This stuff is grease, but with a bunch of tiny plastic beads added. This increases friction between components, great for holding your carbon seat post or handlebars in place without excessive clamping force. While grease won’t hurt any of our seat tubes, carbon assembly paste works even better.
Do not use the carbon assembly compound when installing the headsets. There is care for it properly and don’t overly huck every 50 foot gap you see. Keep your bike clean and inspect it often. Although each and every bike gets tested at the factory for strength, it never hurts to look at the areas where the tubes join, where the shocks and dropouts mount and any other areas that may receive stress during usage. Check for loose bearings, headsets, shocks and forks and such. Visually inspect the bike before each ride and also during each cleaning.
Carbon Assembly Compound
This stuff is grease, but with a bunch of tiny plastic beads added. This increases friction between components, great for holding your carbon seat post or handlebars in place without excessive clamping force. While grease won’t hurt any of our seat tubes, carbon assembly paste works even better.
Do not use the carbon assembly compound when installing the headsets. There is care for it properly and don’t overly huck every 50 foot gap you see. Keep your bike clean and inspect it often. Although each and every bike gets tested at the factory for strength, it never hurts to look at the areas where the tubes join, where the shocks and dropouts mount and any other areas that may receive stress during usage. Check for loose bearings, headsets, shocks and forks and such. Visually inspect the bike before each ride and also during each cleaning.

Hakkalügi
Building a Hakkalügi from a frame to a complete bike is straightforward, using standard practices. Be sure to use assembly lube on a carbon seatpost. The integrated headsets use more preload than you might be used to. If you hear any creaking in the head tube area after your first ride, simply increase the headset top cap tension slightly, until the creak goes away.
Use an approved fork, please call for a current list: 831–461–1435.
Brake Set-Up:
Adjust the pads so the front of the pad contacts first. This will help to reduce noise and shuddering. You can also trim trailing edge with a razor blade if needed to stop shudder. Another way to improve braking performance is to make sure the straddle cable is straight with minimal slack. A higher straddle placement in front improves modulation.

1. Shoot off the front using the slingshot draft off the group, soft pedal as they catch you with a big reaction. Do it again in a minute or so, then again.
2. About the 3rd or 4th time you do this, they will give you some slack and not chase you down right away.
3. Gradually apply some power until you get 150–200+ meters and then ramp up to full pace. They will all look at each other eventually and wait for someone to do it and it’s often a standoff since nobody wants to spend that much energy. At some point a few cross–eyed guys may show up exhausted from the battle that happens followed by the bridge up.
4. Hakkalügi for added emphasis.

Paint
There is a protective clear coat applied over the final carbon weave on all of our gloss clear or matte clear frames. You can repair small chips and scratches with clear nail polish (not supplied.) Colored frames are painted with a high quality polyurethane enamel. You should have received a small bottle of touch–up paint with your colored frame. If it’s used up or lost, you can call and order one from us. Both of these finishes can wear through with repeated rubbing of cables or chain slap. Using the set of adhesive vinyl protectors provided to guard against cable rub and chain slap can help limit wear and tear on your frame.
Fork Setup

Fork Setup Information
Read this first for a general un- derstanding of fork setup 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 sup- ports you upright. Adjust the air pressure so that you come close to using all the travel on a typical ride. Usually, the pressure limit will be maxi- mum impacts by grabbing the front brake and pushing down HARD on the bars. If you are getting 80–90% of the fork’s travel during big hits, your positive air spring is in the right range. Actual riding will often push the fork a little further than this test.

Negative Pressure
On forks where you can adjust the negative air spring, start with a pres- sure close to what you ended up with in the test. As the pressure is adjusted, your positive spring pressure rides higher and has a smoother transition.

Low Speed Compression Damping
Low speed compression damping is used to reduce unwanted move- ment and over travel due to low- speed changes like out of the saddle pedaling and subtle variations in the trail that can cause wallow- ing 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 thresh- old 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 efficient, decrease for maximum small bump compliance. The larger blue knob is the high speed compression damper. Turn this knob to its extreme clockwise position and it will activate the lockout. The red knob at the bottom of the fork is the rebound adjuster.

Rock Shox Revelation Team Fork Shock refers to two chambers, one being positive and the other negative. Fill the positive air chamber by adding air to the Schrader valve on the top of the left leg. We have found that the spring rate graphic printed on the left fork leg suggests air pressures that make the fork ride significantly too stiff for our liking. The negative chamber uses the Schrader valve on the right fork leg. Try various air pressures in both chambers, but it is important to keep a higher or equal air pressure in the positive chamber than in the negative one.

Damping adjustments are on the right fork leg. The small gold knob adjusts “Floodgate”. Increase the Floodgate for maximum pedaling ef- ficiency, decrease for maximum small bump compliance. The red knob at the bottom of the right fork leg is the rebound adjuster.

Fork Float RLC
Rebound damping, lockout and com-pression damping are all adjusted via the knobs at the top and bottom of the right fork leg. Lockout and high speed rebound controls are the ones on top. (Note: rebound was moved to the bottom of the right fork leg for 2010.) The blowoff valve is adjusted so that when the fork is locked out it will not move during out of the saddle clim- ing, yet still soaks up the bumps.

Fork Adjustments
The travel adjustment knob is on top of the left fork leg. By turning it, the fork can be set to 160mm or 120mm of travel. Lockout, rebound, lockout and compression damping are all adjustable 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 Talas
We supply the 160/120mm travel version of the Talas 36. It has the same adjustability as the Float RLC. The air pressures required are slightly different than the Float so we’re reprinting them on page 23.

Fork Talas 32
Fox Talas forks feature adjust- able travel. We supply a custom 150/130mm travel version of the Talas 32 (the Float RLC is 150/120mm.) The rest of the adjust- ments 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 adjustable via the knobs at the top and bottom of the right fork leg.
1. Add recommended air for rider weight (on facing page.) Slide o-ring until it rests on the wiper.

2. Sit on bike in riding position, on level ground. 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.

**36 Talas Air Pressure**

<table>
<thead>
<tr>
<th>Rider Weight</th>
<th>140mm</th>
<th>150mm</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;125</td>
<td>45 5.10</td>
<td>45 5.10</td>
</tr>
<tr>
<td>125-135</td>
<td>57 5.31</td>
<td>57 5.31</td>
</tr>
<tr>
<td>135-145</td>
<td>61 5.45</td>
<td>61 5.45</td>
</tr>
<tr>
<td>145-155</td>
<td>66 5.65</td>
<td>66 5.65</td>
</tr>
<tr>
<td>155-170</td>
<td>70 5.99</td>
<td>70 5.99</td>
</tr>
<tr>
<td>170-185</td>
<td>75 6.34</td>
<td>75 6.34</td>
</tr>
<tr>
<td>185-200</td>
<td>80 6.71</td>
<td>80 6.71</td>
</tr>
<tr>
<td>200-215</td>
<td>84 7.08</td>
<td>84 7.08</td>
</tr>
<tr>
<td>215-230</td>
<td>89 7.46</td>
<td>89 7.46</td>
</tr>
</tbody>
</table>

**Revelation Air Pressure**

<table>
<thead>
<tr>
<th>Rider Weight</th>
<th>140mm</th>
<th>150mm</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;125</td>
<td>45 5.10</td>
<td>45 5.10</td>
</tr>
<tr>
<td>125-135</td>
<td>57 5.31</td>
<td>57 5.31</td>
</tr>
<tr>
<td>135-145</td>
<td>61 5.45</td>
<td>61 5.45</td>
</tr>
<tr>
<td>145-155</td>
<td>66 5.65</td>
<td>66 5.65</td>
</tr>
<tr>
<td>155-170</td>
<td>70 5.99</td>
<td>70 5.99</td>
</tr>
<tr>
<td>170-185</td>
<td>75 6.34</td>
<td>75 6.34</td>
</tr>
<tr>
<td>185-200</td>
<td>80 6.71</td>
<td>80 6.71</td>
</tr>
<tr>
<td>200-215</td>
<td>84 7.08</td>
<td>84 7.08</td>
</tr>
<tr>
<td>215-230</td>
<td>89 7.46</td>
<td>89 7.46</td>
</tr>
</tbody>
</table>

**32 Talas Air Pressure**

<table>
<thead>
<tr>
<th>Rider Weight</th>
<th>140mm</th>
<th>150mm</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;125</td>
<td>45 5.10</td>
<td>45 5.10</td>
</tr>
<tr>
<td>125-135</td>
<td>57 5.31</td>
<td>57 5.31</td>
</tr>
<tr>
<td>135-145</td>
<td>61 5.45</td>
<td>61 5.45</td>
</tr>
<tr>
<td>145-155</td>
<td>66 5.65</td>
<td>66 5.65</td>
</tr>
<tr>
<td>155-170</td>
<td>70 5.99</td>
<td>70 5.99</td>
</tr>
<tr>
<td>170-185</td>
<td>75 6.34</td>
<td>75 6.34</td>
</tr>
<tr>
<td>185-200</td>
<td>80 6.71</td>
<td>80 6.71</td>
</tr>
<tr>
<td>200-215</td>
<td>84 7.08</td>
<td>84 7.08</td>
</tr>
<tr>
<td>215-230</td>
<td>89 7.46</td>
<td>89 7.46</td>
</tr>
</tbody>
</table>

**32 Float RLC Air Pressure**

<table>
<thead>
<tr>
<th>Rider Weight</th>
<th>140mm</th>
<th>150mm</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;125</td>
<td>45 5.10</td>
<td>45 5.10</td>
</tr>
<tr>
<td>125-135</td>
<td>57 5.31</td>
<td>57 5.31</td>
</tr>
<tr>
<td>135-145</td>
<td>61 5.45</td>
<td>61 5.45</td>
</tr>
<tr>
<td>145-155</td>
<td>66 5.65</td>
<td>66 5.65</td>
</tr>
<tr>
<td>155-170</td>
<td>70 5.99</td>
<td>70 5.99</td>
</tr>
<tr>
<td>170-185</td>
<td>75 6.34</td>
<td>75 6.34</td>
</tr>
<tr>
<td>185-200</td>
<td>80 6.71</td>
<td>80 6.71</td>
</tr>
<tr>
<td>200-215</td>
<td>84 7.08</td>
<td>84 7.08</td>
</tr>
<tr>
<td>215-230</td>
<td>89 7.46</td>
<td>89 7.46</td>
</tr>
</tbody>
</table>

**32 Float RLC Air Pressure**

<table>
<thead>
<tr>
<th>Rider Weight</th>
<th>140mm</th>
<th>150mm</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;125</td>
<td>45 5.10</td>
<td>45 5.10</td>
</tr>
<tr>
<td>125-135</td>
<td>57 5.31</td>
<td>57 5.31</td>
</tr>
<tr>
<td>135-145</td>
<td>61 5.45</td>
<td>61 5.45</td>
</tr>
<tr>
<td>145-155</td>
<td>66 5.65</td>
<td>66 5.65</td>
</tr>
<tr>
<td>155-170</td>
<td>70 5.99</td>
<td>70 5.99</td>
</tr>
<tr>
<td>170-185</td>
<td>75 6.34</td>
<td>75 6.34</td>
</tr>
<tr>
<td>185-200</td>
<td>80 6.71</td>
<td>80 6.71</td>
</tr>
<tr>
<td>200-215</td>
<td>84 7.08</td>
<td>84 7.08</td>
</tr>
<tr>
<td>215-230</td>
<td>89 7.46</td>
<td>89 7.46</td>
</tr>
</tbody>
</table>
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. You can run the shock open or engage the ProPedal settings on any of the shocks.

Rear Shock Setup

Mojo, Mojo SL, and SL-R Sag
We recommend starting with air pressure in the RP23 equal to your riding weight in pounds. You should measure about 10–13mm for XC type riding and 13–15mm for more gravity oriented off road riding.

Check the Sag
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.

Adjusting Rebound
The RP23 has adjustable rebound damping. It’s adjusted by turning the red dial on the inside of the ProPedal adjust lever. Turning the dial clockwise slows the rebound, and counterclockwise achieves faster rebound. 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). 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.

Mojo HD Sag
We recommend starting with air pressure in the RP23 equal to your riding weight in pounds. You should measure about 62.5” (~16mm) of sag on the shock.

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.

RPL
The RPL is a full lockout capable shock. It features three adjustable on the fly settings. This shock is often chosen for XC racing use due to the lockout function. Set sag and rebound damping is identical to the RP23, mentioned above.

On the Fly RP23 ProPedal controls
Position 1: blue lever towards the drive side=snow 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.

RPL
The RPL is a full lockout capable shock. It features three adjustable on the fly settings. This shock is often chosen for XC racing use due to the lockout function. Set sag and rebound damping is identical to the RP23, mentioned above.

On the Fly RP23 ProPedal controls
Position 1: blue lever towards the drive side=snow open, no ProPedal
Position 2: blue lever toward the non–drive side=ProPedal
Position 3: blue lever pointing up=Shock locked out

DHX Air
The DHX Air has a main air spring, a boost chamber, a bottom out resistance adjuster, a rebound adjuster, and the option of turning ProPedal on or off at the flick of a switch. With all these variables it requires more attention to be set–up properly. Follow these guidelines to get the most out of the DHX Air. For a much more complete set of instructions, follow the Fox Manual or get it from their website:

Rear Shock Set-Up
ProPedal
On the DHX Air, ProPedal is adjusted using the blue dial at the top of the reservoir. Clockwise adjustment increases ProPedal, and vice versa. There are 15 clicks of adjustment. Adjust it to where you like it. There is also a blue lever to turn the ProPedal on or off.

Bottom Out Resistance
This can be set by a knob adjuster at the bottom of the air reservoir. There are three rotations of adjustment available. Start with a pressure in the Schrader boost valve of 125 psi. For more bottom out resistance, turn the knob clockwise; it might help to use a 4mm Hex key inserted in the holes in the knob if you have difficulty moving it by hand. With the DHX Air, do not exceed 200 psi and do not go below 125 psi pressure in the bottom out air reservoir.

Coil Spring Shocks:
Coil shocks will work on the Mojo HD if they have late stroke compression control to mimic the more progressive spring curve of an air shock. We are offering the excellent Fox RC4 coil shock as a result. The RC4 is available for the HD in the 160mm travel configuration only.

Fitting Your Own Coil Shock
We like the Fox shocks for their performance and reliability but realize that some people might want to use another brand. If you do, be sure the stroke and eye to eye lengths are IDENTICAL on the new shock, otherwise you could be dealing with a catastrophic frame failure.

Pertinent Specs
All Mojos use the same shock mounting hardware:
  Upper Hardware: 21.8mm wide with an 8mm bore
  Lower Hardware = 40mm wide with an 8mm bore
Majo HD shock: 8.5” eye to eye  2.5” shaft travel
Majo SL shock: 7.875” eye to eye  2.0” shaft travel.

Spring and Rebound Balance
When you get the suspension set up, ride around a little bit and push down on the pedals and bars to load the bike and note how it feels. Does it feel balanced front to rear? Adjust if needed. The springy feel and return speed should be close to the same front and rear.

Spring and Rebound Pressure

<table>
<thead>
<tr>
<th>Rider Weight</th>
<th>RP23 Rear Shock Pressure</th>
</tr>
</thead>
<tbody>
<tr>
<td>LBS</td>
<td>KG</td>
</tr>
<tr>
<td>100</td>
<td>45</td>
</tr>
<tr>
<td>110</td>
<td>50</td>
</tr>
<tr>
<td>120</td>
<td>55</td>
</tr>
<tr>
<td>130</td>
<td>60</td>
</tr>
<tr>
<td>140</td>
<td>65</td>
</tr>
<tr>
<td>150</td>
<td>70</td>
</tr>
<tr>
<td>160</td>
<td>75</td>
</tr>
<tr>
<td>170</td>
<td>80</td>
</tr>
<tr>
<td>180</td>
<td>85</td>
</tr>
<tr>
<td>190</td>
<td>90</td>
</tr>
<tr>
<td>200</td>
<td>95</td>
</tr>
<tr>
<td>210</td>
<td>100</td>
</tr>
<tr>
<td>220</td>
<td>105</td>
</tr>
<tr>
<td>230</td>
<td>110</td>
</tr>
<tr>
<td>240</td>
<td>115</td>
</tr>
<tr>
<td>250</td>
<td>120</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>HD 160</th>
<th>LBS</th>
<th>KG</th>
<th>PSI</th>
<th>BAR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rider Weight</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>100</td>
<td>45</td>
<td>0.2</td>
<td>105</td>
<td>7.3</td>
</tr>
<tr>
<td>110</td>
<td>50</td>
<td>0.8</td>
<td>116</td>
<td>8.0</td>
</tr>
<tr>
<td>120</td>
<td>55</td>
<td>2.4</td>
<td>126</td>
<td>8.7</td>
</tr>
<tr>
<td>130</td>
<td>60</td>
<td>3.1</td>
<td>137</td>
<td>9.4</td>
</tr>
<tr>
<td>140</td>
<td>65</td>
<td>4.7</td>
<td>147</td>
<td>10.1</td>
</tr>
<tr>
<td>150</td>
<td>70</td>
<td>6.3</td>
<td>158</td>
<td>10.8</td>
</tr>
<tr>
<td>160</td>
<td>75</td>
<td>8.0</td>
<td>168</td>
<td>11.6</td>
</tr>
<tr>
<td>170</td>
<td>80</td>
<td>9.6</td>
<td>179</td>
<td>12.3</td>
</tr>
<tr>
<td>180</td>
<td>85</td>
<td>11.2</td>
<td>190</td>
<td>13.0</td>
</tr>
<tr>
<td>190</td>
<td>90</td>
<td>12.8</td>
<td>200</td>
<td>13.8</td>
</tr>
<tr>
<td>200</td>
<td>95</td>
<td>14.4</td>
<td>210</td>
<td>15.4</td>
</tr>
<tr>
<td>210</td>
<td>100</td>
<td>16.0</td>
<td>220</td>
<td>15.9</td>
</tr>
<tr>
<td>220</td>
<td>105</td>
<td>17.6</td>
<td>230</td>
<td>17.2</td>
</tr>
<tr>
<td>230</td>
<td>110</td>
<td>19.2</td>
<td>240</td>
<td>18.5</td>
</tr>
<tr>
<td>240</td>
<td>115</td>
<td>20.8</td>
<td>250</td>
<td>19.8</td>
</tr>
</tbody>
</table>

Rear Shock Set-Up

26
The Dark Art of Shifting in Mud: How to Avoid Chainsuck

“Chainsuck” is when your chain does not detach correctly from the bottom of your chainring, and instead wraps around the ring until something jams. Chainsuck happens when the force provided by the rear derailleur is less than the force causing the chain to stick to your chainring. There are many ways to reduce chainsuck, but they can be broken down into two categories:

1. Preventing the chain from sticking to your chainring
2. Maintaining chain tension while riding

1. Preventing the chain from sticking to your chainring

- The most important thing you can do is keep your drivetrain clean and your chainring as large or more in diameter than the force causing the chain to stick. If it’s time for a new chainring, then be sure to carefully check your rings. Another thing that causes chains to stick is mud. It all depends on what type of mud you have, but if the drivetrain gets too dirty, the chain is going to start sticking and it will take careful chain management to keep it from sticking.
- That brings us nicely to the next part; maintaining chain tension. Let’s assume that your chain is the minimum length needed to go around the big chainring and large cog at bottom out (standard full suspension chain length spec.) The more tension you have, the less likely the chain will become stuck to the teeth. The component that provides this chain tension is the rear derailleur.
- However, the derailleur’s pulling force is not always the same. It pulls less in smaller gears and more in larger ones. This means that you should use your smallest chainring as little as possible. If you’re in the small ring and more than three or four gears from the top of your cassette then it is time to shift back into the middle ring for a larger diameter gear combination. For example, instead of running a 22 front 24 rear, run the 32 front 34 rear for the same ratio but much higher tension.
- Another way to increase your average chain tension and still use the small ring is to remove the big chainring and instead wrap the chain around the small ring. This will provide significantly more chain tension. If you’retrudging through really dirty mud you probably don’t need that high of a gear.
- A final trick is to tighten your rear derailleur’s B tension screw a few more turns than normal to increase the rear derailleur’s pulling force. This nice feature works both ways, if you ease up a bit you can actually reduce the chain force against the chainring by more than three or four gears down from the top of the cassette then it is time to shift back into the middle ring for a larger diameter gear combination. For example, instead of running a 22 front 24 rear, run the 32 front 34 rear for the same ratio but much higher tension.
- Another factor that influences the chainsuck is the chainrings. To do that the chain must wind up past where it normally detaches. Depending on the roller design, it may be impossible to keep the chain on your ring without some spring tension and in fact is there to keep the chain in place. If you do have to shift down try to plan ahead so that your suspension is not rebounding at the same time as you are shifting. If you do suddenly put down full power without shifting, the drivetrain will thank you.
- The lower roller of a dual ring chainring is not the cause of the chainsuck. They can make it more difficult to keep the chain on the ring.
- Sometimes the mud is just so bad that nothing is going to help. In that case light weight is the best tool for the job!

2. Maintaining chain tension while riding

- If you’re riding in the mud, stay ridin’! Another cause of sticking is a worn chainring. For example, if you’re riding with Shimano and SRAM chainrings. We have had the best luck with Shimano chainrings. Some chainrings are more or less worn than the force causing the chain to stick.
- There’s no real way around this but if you do everything mentioned above it’s not usually an issue. It’s all about managing the combination of factors, so if you’re riding in the mud, stay out of the small ring as much as possible.
- This works both ways, if you ease up a bit you can actually reduce the chain force against the chainring by more than three or four gears down from the top of the cassette then it is time to shift back into the middle ring for a larger diameter gear combination. For example, instead of running a 22 front 24 rear, run the 32 front 34 rear for the same ratio but much higher tension.
- However, the derailleur’s pulling force is not always the same. It pulls less in smaller gears and more in larger ones. It can increase chain suck because the chain is being forced the other direction. Depending on the roller design, it may be impossible to keep the chain on your ring without some spring tension and in fact is there to keep the chain in place. If you do have to shift down try to plan ahead so that your suspension is not rebounding at the same time as you are shifting. If you do suddenly put down full power without shifting, the drivetrain will thank you.
- The lower roller of a dual ring chainring is not the cause of the chainsuck. They can make it more difficult to keep the chain on the ring.
- Sometimes the mud is just so bad that nothing is going to help. In that case light weight is the best tool for the job!

Before we finish let’s stop up to clear some misconceptions:

1. Low chainrings do not cause chain suck. They can make it more difficult to extract the chain if it gets caught above or against the chainring but it is not the cause of the chainsuck.
- 2. Aftermarket / new parts are not a guarantee that chainsuck will be solved. In addition to the factors discussed above, some chainrings are better than others at releasing the chain, even when new. We have had the best luck with Shimano and SRAM chainrings.
- 3. The higher roller of a dual ring chainring is not the cause of the chainsuck. It doesn’t provide any additional spring tension and in fact is there to keep the chain on your ring past where it normally detaches.
- Depending on the roller design, it may be impossible to keep the chain on your ring without some spring tension and in fact is there to keep the chain in place. If you do have to shift down try to plan ahead so that your suspension is not rebounding at the same time as you are shifting. If you do suddenly put down full power without shifting, the drivetrain will thank you.
- The lower roller of a dual ring chainring is not the cause of the chainsuck. They can make it more difficult to keep the chain on the ring.
- Sometimes the mud is just so bad that nothing is going to help. In that case light weight is the best tool for the job!

Before we finish let’s stop up to clear some misconceptions:

1. Low chainrings do not cause chain suck. They can make it more difficult to extract the chain if it gets caught above or against the chainring but it is not the cause of the chainsuck.
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 installation 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 website 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.

Bearing Specs:

Mojo, Mojo SL, SL-R Lower Link

• Front: 15 ID x 28 OD x 7 W
  (Enduro P/N 6902 2RS)

Mojo HD Lower Link

• Front: 15 ID x 26 OD x 10 W  
  Dual Row Angular Contact 
  (Enduro DR 1526 RS)

Mojo HD Upper Link

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

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.

Maintenance

31

Mojo, Mojo SL, SL-R Upper Link

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

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 website 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.

Bearing Specs:

Mojo, Mojo SL, SL-R Lower Link

• Front: 15 ID x 28 OD x 7 W
  (Enduro P/N 6902 2RS)

Mojo HD Lower Link

• Front: 15 ID x 26 OD x 10 W 
  Dual Row Angular Contact 
  (Enduro DR 1526 RS)

Mojo HD Upper Link

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

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 Torque Specs

#### By Model

<table>
<thead>
<tr>
<th>Frame Hardware Torque Specs, by Model</th>
</tr>
</thead>
<tbody>
<tr>
<td>Metric: Male St.</td>
</tr>
<tr>
<td>Frame Bracebar 5.5 (150mm Tylo)</td>
</tr>
<tr>
<td>Front Shock Mount Bolt</td>
</tr>
<tr>
<td>Rear Shock Bolt</td>
</tr>
<tr>
<td>Upper Link Bolt</td>
</tr>
<tr>
<td>Lower Link Bolt</td>
</tr>
<tr>
<td>Megs 910 and St.4</td>
</tr>
<tr>
<td>Front Dural 10 (150mm Tylo)</td>
</tr>
<tr>
<td>Rear Dural 10 (150mm Tylo)</td>
</tr>
<tr>
<td>Upper Link Bolt</td>
</tr>
<tr>
<td>Lower Link Bolt</td>
</tr>
<tr>
<td>Rear Shock Mount Bolt</td>
</tr>
<tr>
<td>Rear Seat Bolt</td>
</tr>
<tr>
<td>Top Tube Bolt</td>
</tr>
<tr>
<td>Bottom Tube Bolt</td>
</tr>
<tr>
<td>Frame Cap</td>
</tr>
<tr>
<td>Chain Stay</td>
</tr>
<tr>
<td>Bottom Stay Mount Bolt</td>
</tr>
<tr>
<td>Chain Stay Bolt</td>
</tr>
<tr>
<td>Bottom Stay Bolt</td>
</tr>
<tr>
<td>Upper Link Bolt</td>
</tr>
<tr>
<td>Lower Link Bolt</td>
</tr>
<tr>
<td>Rear Shock Mount Bolt</td>
</tr>
<tr>
<td>Rear Seat Bolt</td>
</tr>
<tr>
<td>Rear Seat Bolt</td>
</tr>
</tbody>
</table>

**Note:** Values are in ft-lbs and must be used as a guide for assembly. Always consult the user manual for specific instructions.
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 assemble 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.
Warranty
Ibis Cycles warrants Ibis frames to be free from defects in materials and workmanship for a period of 3 years from date of sale. This limited warranty applies to the original owner and is non-transferable. Ibis will, at its sole discretion, repair or replace any frame or frame component that it determines to be defective. This warranty does not cover normal wear and tear, nor does it apply to damage that is the result of abuse, neglect, improper assembly, improper maintenance, alteration, misuse or massive-hucking. The costs of disassembly, reassembly or repair of any attached components are not covered by this warranty and are the responsibility of the original owner. Under no circumstance are the costs of shipping to or from Ibis covered by this limited warranty. This warranty applies exclusively to Ibis bicycles manufactured after July 1, 2005. No Fault Replacement Should your Ibis be involved in a crash or other non-warranty situation, Ibis Cycles will make replacement parts available at a minimum charge to the original owner. Ibis Cycles does this at its sole discretion and reserves the right to refuse this offer, so don’t go crashing your bike. 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 Ibis Cycles. In no event shall Ibis Cycles be held responsible for direct, incidental or consequential damages, including, without limitation, damages for personal injury, property damage, or economic loss, whether based on contract, warranty, negligence, product liability, or any other theory.

Warranty Registration
Don’t forget to register your warranty online at: http://www.ibiscycles.com/support/warranty/warranty_registration/
The Fox forks and shocks we use on our bikes are warranted for one year.
For USA Warranty Service:
(800) FOX-SHOX / 369-7469
service@foxracingshox.com
For International Warranty Service:
Contact a FOX service center:
http://www.foxracingshox.com/
fox_tech_center/service.htm

Parts
Find these online at the buy portion of our website or get them directly from your Ibis dealer. Contact us or your dealer for more info. We recommend you always ride with one or two spare derailleur hangers.

Serial Number
We recommend you write down your serial number for future reference. The serial number is located under the bottom bracket. Note that if you have a Mojo HD with a cable guard installed, you will need to remove the cable guard to obtain the serial number. We want you to register the serial numbers on the front triangle, not the swingarm.

Crash or other non–warranty situation, Ibis Cycles will make replacement parts available at a minimum charge to the original owner. Ibis Cycles does this at its sole discretion and reserves the right to refuse this offer, so don’t go crashing your bike. 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 Ibis Cycles. In no event shall Ibis Cycles be held responsible for 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.

Specifications and construction details given are not binding.

Ride More, Work Less.
Chuck’s Recipe

Impress your Riding Buddies with Chuck’s Homemade Energy Bars

Ingredients
• 1/2 cup salted almonds
• 1/2 cup roasted sunflower seeds, or other chopped nuts
• 2 cups raisins, or other chopped dried fruit
• 2 cups rolled or instant oats
• 2 cups toasted rice cereal, such as Rice Krispies
• 1/4 cup toasted wheat germ, (optional)
• 1/2 cup creamy or crunchy natural almond butter
• 1/2 cup packed brown sugar
• 1/2 cup honey (substitute for agave sweetener)
• 1 teaspoon vanilla extract

Preparation
2. Combine almonds, sunflower seeds (or other nuts), raisins (or other dried fruit), oats, rice cereal and wheat germ (if using) in a large bowl.
3. Combine almond butter, brown sugar and corn syrup (or honey) in a large microwaveable bowl; microwave on High until bubbling, 1 to 2 minutes. Add vanilla and stir until blended. Pour the almond butter mixture over the dry ingredients and stir until coated.
4. Transfer the mixture to the prepared pan. Press down firmly. (It helps to coat your fingers with cooking spray) Let stand for about 1 hour to harden. Cut into bars.

Tips & Notes
• Make Ahead Tip: Individually wrap and keep at room temperature for up to 1 week or freeze for up to 1 month. Thaw at room temperature. Makes 16 Bars, better than Method Man in his prime.

Nutrition
For serving: 255 calories, 9g fat (1g sat, 2g mono), 0 mg cholesterol; 42g carbohydrates, 5g protein, 95mg sodium; 242mg potassium.