Unmatched enduro trail bike versatility.

It's no wonder that MTBR.com honored the Mach 6 with their most versatile Enduro bike award, saying, "If we had one basket to put all our eggs in, the Pivot Mach 6 would be it." The Mach 6 excels over rugged terrain, equally capable on imposing climbs one moment, and rough downhill sections the next. The dw-link® suspension's famed anti-squat delivers unparalleled traction and pedaling efficiency for uphill grinds, while the variable wheel travel path provides incredible square edge bump absorption and control on technical descents.

As a professional race bike, the technical terrain of the Enduro World Series is where the Mach 6 truly shines. The 27.5" wheels, slack head angle, short chainstays, low bottom bracket height and incredible suspension performance, make for a stable, confident bike at speed that raises any rider's ability to conquer insanely aggressive terrain with ease. Whether you're riding trails that look more like a World Cup DH course or just trying to clean a section on your local trail that's challenged you for years, the Mach 6 is designed to enhance your riding capabilities and reward those willing to push their limits to a whole new level.

"From this point on, any bike that claims to be the most versatile, capable and fun will have to beat the Mach 6. Yes, it is that good."
-Mountain Bike Action Magazine

2015 Mach 6 Carbon Features

- 6.1" (155mm) travel next generation dw-link® suspension design with position-sensitive, anti-squat that pedals, accelerates and handles like nothing else for aggressive trail riding conditions.
- Pivot-exclusive hollow box, high-compression internal mandrel technology allows for greater compaction and smoother internal walls resulting in a lighter, stronger, highly-optimized frame design with the best stiffness to weight ratio in its class.
- Pivot-specific, custom tuned Fox Float or Float X CTD shock technology: increased performance and adjustment range allows riders to quickly and easily adjust for changing course or ride conditions.
- Internal top tube shift cable routing and down tube dropper seat post routing keeps cables clean and running smooth.
- Rubberized leather chainstay, inner seat stay, and down tube protectors for a quiet ride and higher impact resistance.

MACH 6 CARBON

Frequently Asked Questions

Which size bike should I purchase?

To ensure the best sizing, we recommend that you visit your local Pivot dealer to get a professional fit and refer to our geometry chart to check your measurements. However, we can provide a rough guideline:
X-Small: 4'11" – 5'4"
Small: 5'4" – 5'8"
Medium: 5'7" – 5'10"
Large: 5'10" – 6'2"
X-Large: 6'2" +

How do I enduro?

#1 Purchase a blue Mach 6. The black and green or stealth black will work, but ideally your bike will match your Enduro blue kit. If your bike and kit do not match, you will not look as cool nor go as fast.
#2 Document everything. Every ride, session, and race must be thoroughly recorded in no less than two manners. Appropriate methods of documentation include Go Pros, Strava, and having your photographer/ videographer friend follow you around and make sick edits.
#3 Enduro-specific helmets and goggles are required at all times when descending. Be sure to bring your spare XC lid for climbing.
#4 You must wear a minimum of three articles of Troy Lee Designs clothing at all time. If you cannot afford Troy Lee, have fun on your cross country ride.
#5 Create a Hookit profile to maximize sponsorship exposure.
#6 Be sure to get pro name decals with your state/ country flag so that you can easily identify your bike.
#7 Equip your bike with Enduro-specific components, including but not limited to stems, wheels, and grips. (Fortunately, these are all included in our awesome Pivot complete builds.)

What bottom bracket is used on the Mach 6 and which cranks are compatible?

Pivot is the first frame manufacturer to feature the 92mm wide bottom bracket shell standard, originally developed in conjunction with Shimano XTR. With the press fit 92 system, there are no external washers or threads in the shell. The bearings are housed in light composite resin cups with a full sealed sleeve to keep out the elements. This design allows for easy crank installation, with no frame facing or special spacers required. Chain line is perfectly optimized and as an added advantage, the bearings are extremely easy to replace. Another bonus is that the XTR version includes a 3 year warranty from Shimano. The system works with Shimano, FSA and Race Face cranks (all compatible with the Shimano cup design) as well as the SRAM GXP system for which SRAM offers both standard and ceramic versions. In addition, Enduro and several other aftermarket companies offer both replacement bottom brackets and bearings to support every major crank brand.

Are there any other bottom brackets that will work with the Mach 6? Can you upgrade to ceramic bearings?

We use a Press Fit 92 BB (sometimes called PF92 or BB92) design. Almost every crank and BB manufacturer offers a bottom bracket that is compatible with the Press Fit 92 system.

What is the narrowest Q factor crank that the Mach 6 will accept?

The Mach 6 will accept cranks with a Q factor measurement as low as 156mm (Such as the narrower option in the SRAM XX1 or the new XTR Race crank). Of course, anything greater than 156mm will work as well. Most standard MTB Q factor measurements are at 163mm.

What hub/wheel spacing does the Mach 6 use?

The Mach 6 uses the 142mm X 12mm hub/wheel spacing. Our custom 12mm DT Swiss axle is included with the frame. The axle is based off of Shimano's 12mm through axle specifications for length and thread pitch so if you were ever to lose your axle, a Shimano or Shimano compatible axle will work properly as well.

What size seatpost does the Mach 6 use?

The Mach 6 frame uses a 30.9mm seatpost.

What size seat clamp does the Mach 6 use?

The Mach 6 frame uses a 34.9mm or 35mm (as some manufacturers call it) seatpost clamp.

Can I use a dropper post with this frame?

Yes, both internally and externally-routed dropper posts are compatible with the Mach 6 frame.

What front derailleur does the Mach 6 use?

The Mach 6 uses a DM (direct mount) style front derailleur. You can use a SRAM direct mount top pull X-9 or XO version for any 2X system. The SRAM top pull is best if you are running a 10 speed rear cassette and a large front chainring smaller then a 38 tooth. If you are running a 2X or 3X Shimano system with 10 speed rear cassette then use a Shimano direct mount FD. You will need to look at Shimano's technical specifications in order to source the correct Shimano top pull DM front derailleur for the front chainring combination you are using.

Can I mount a chain guide on my Mach 6?

Yes. Most upper guides on the market will fit. For full upper and lower guides, the two chain guides we found that fit best are the Blackspire Twinty2x, ISG05/36T - 40t and the 32 - 36t.

What headset do I need for the Mach 6?

The Mach 6 uses a ZS (zero stack) 44mm top and (zero stack) 56mm bottom, or a Chris King Inset 2.

What travel fork can I use on my Mach 6?

The Mach 6 was designed for either a 150mm or 160mm fork. The maximum travel length that can be used on the Mach 6 is 160mm travel.

What is the fork offset on the Mach 6?

The fork offset on the Mach 6 is 44mm.

How wide of a tire can I run on the Mach 6?

The Mach 6 was designed to fit most 2.35 tires on a rim with a 22.5mm or greater inner width. We use the Maxxis High-Roller II 2.3 in our complete bike builds. The Mach 6 will also clear the Maxxis High-Roller II 2.4 model as well. For other tires in the market, most will fit, but rim width and tire manufacture sizing call outs and tire inconsistency can result in huge difference among both tire brands and individual tires. For tire brands other then Maxxis, we suggest you check the fit with your chosen rim and tire combination to make sure it has proper clearance before riding.

How large of a rotor will fit on the Mach 6?

The Mach 6 was designed for either a 160mm or 180mm rotor. However, a 203mm rotor will clear as well.

What type of rear brake adapter do I need?

No brake adapter is needed for a 160mm rotor. However, many manufacturers make adapters for larger rotor sizes, in which case you would need a 160mm direct mount/ post to post adapter.

What is the eye-to-eye shock length and stroke length on the Mach 6?

The eye-to-eye shock length is 8.5 inches and the stroke length is 2.5 inches.

If I want to run a different brand of shock on my Mach 6, what else do I need to know?

The Mach 6 shock uses M8 through bolt hardware on the front and no hardware on the rear. Shock spacer dimensions are 22mm wide front. On the rear of the shock, the spacer hardware and bushing will need to be removed as the strut mounts directly to the shock body. Some shocks may have a different spec then the Fox shock (that the Mach 6 is designed for) and may not fit properly. Also, as we cannot test every shock on the market, riders assume some risk if they choose a shock that does not fit properly or is not tuned correctly for the bike. The frame is designed around a large volume air can. With the Fox shock, we run a +.4 or +.6 cubic inch volume spacer in the can to reduce the volume back down. We run medium compression valving and medium rebound damping.

Can I run a Cane Creek Double Barrel shock on my Mach 6?

Yes, as long as you order the correct eyelet size (15mm eyelet). Additionally, the fit of the Cane Creek shocks into our strut is not as precise as that on the Fox shocks so extra care needs to be taken to make sure that the shock is not able to rotate or move in the strut as any sideways movement during riding can damage the frame.

Can I put a coil-over shock on my Mach 6?

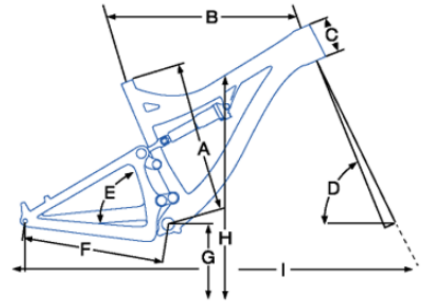
You cannot run a coil-over on your Mach 6! The Mach 6 was designed to work with the progressiveness of an air spring. A coil-over shock (even one with separate bottoming control) does not offer the progressive spring curve that the Mach 6 requires. Running a coil-over shock on the Mach 6 will result in hard bottoming and damage to the frame.

What are the torque specs?

A detailed PDF of the torque specs can be found under the "Tech Specs" tab.

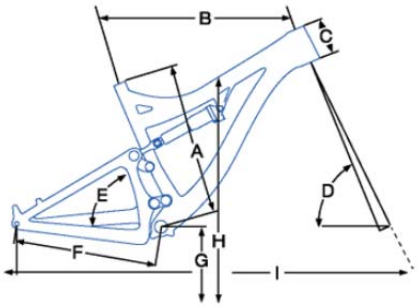
MACH 6 CARBON

Geometry Chart



		XS	S	M	L	XL
A	Seat Tube Length (C-T)	14.50	16.00	17.50	19.00	20.50
B	Top Tube Length	21.70	22.68	23.25	23.90	24.70
C	Head Tube Length	3.50	4.00	4.25	4.72	5.90
D	Head Tube Angle	66.00°	66.00°	66.00°	66.25°	66.50°
E	Seat Tube Angle	72.30°	72.30°	72.30°	72.30°	72.30°
F	Chain Stay Length	16.95	16.95	16.95	16.95	16.95
G	Bottom Bracket Height	13.60	13.60	13.60	13.60	13.60
H	Standover Height	27.90	28.00	28.80	29.00	29.00
I	Wheelbase	43.22	44.25	44.85	45.43	46.24
	Stack	22.83	23.05	23.28	23.76	24.90
	Reach	14.47	15.31	15.81	16.30	16.74

Values in inches CM

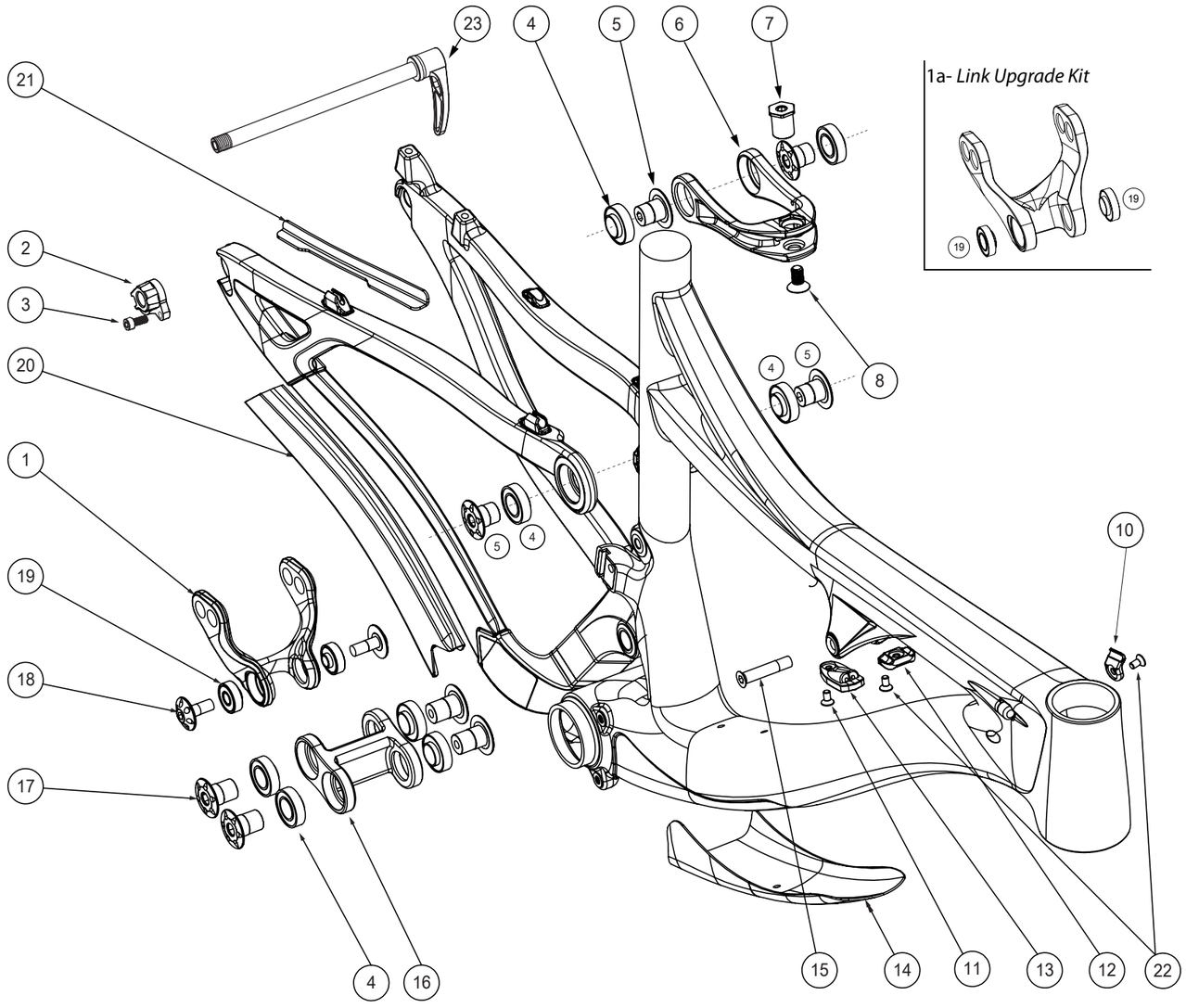


		XS	S	M	L	XL
A	Seat Tube Length (C-T)	36.83	40.64	44.45	48.26	52.07
B	Top Tube Length	55.12	57.61	59.05	60.71	62.74
C	Head Tube Length	8.89	10.16	10.79	11.99	14.99
D	Head Tube Angle	66.00°	66.00°	66.00°	66.25°	66.50°
E	Seat Tube Angle	72.30°	72.30°	72.30°	72.30°	72.30°
F	Chain Stay Length	43.05	43.05	43.05	43.05	43.05
G	Bottom Bracket Height	34.54	34.54	34.54	34.54	34.54
H	Standover Height	70.87	71.12	73.15	73.66	73.66
I	Wheelbase	109.78	112.39	113.92	115.39	117.45
	Stack	57.99	58.55	59.13	60.35	63.25
	Reach	36.75	38.89	40.16	41.40	42.52

Values in centimeters IN

MACH 6 C

NUMBER	PART NAME	DESCRIPTION	Torque	*
1	FP-LNK-UL-57MM-V1-R1	*LINK UPPER 57MM VER1 REV1*		
1a	FP-LNK-UL-57MM-V1-R2	*M6C UL 57MM V1 R2 HD*		
2	FP-RDH-TA-12MM-BLK-V1	*REAR DERAILLEUR HANGER THROUGH AXLE 12MM BLACK V1*		
3	FP-SCW-SCK-M5*10	*SCREW SOCKET 5X10*	7 Nm *(5 lb·ft)*	□
4	FP-BRG-6902-LLUMAXECN	*6902 LLU MAX-E CN*		
5	FP-BLT-M14*17-GRY	*BOLT 14X17 GRAY*	35 Nm *(27 lb·ft)*	□
6	FP-CLV-94MM-V1-R1	*CLEVIS 94MM VER1 REV1*		
7	FP-PIN-CLV-M8*15O-BLK-R1	*PIN CLEVIS 8X15 BLACK REV1*		
8	FP-SCW-FLT-M8*16	*SCREW FLAT 8X16*	32 Nm *(23 lb·ft)*	◉
10	FP-CLM-MECH-HT-V1	*CLAMP MECHANICAL HEADTUBE*		
11	FP-SCW-FLT-M4*12	*SCREW FLAT 4X12*		
12	FP-CLM-MECH-TT-V1	*CLAMP MECHANICAL TOPTUBE*		
13	FP-STP-SHFT-V1	*STOP SHIFTER V1*		
14	FP-PRO-429C-DT-V1-R1	*DOWNTUBE GUARD*		
15	FP-BLT-M8*38-BLK	*BOLT 8X38 BLACK*	13 Nm *(10 lb·ft)*	●
16	FP-LNK-LL-BLK-V3-R1	*LINK LOWER BLACK VER3 REV1*		
17	FP-BLT-M14*20-GRY	*BOLT 14X20 GRAY*	35 Nm *(27 lb·ft)*	□
18	FP-BLT-M8*20-GRY	*BOLT 8X20 GRAY*	13 Nm *(10 lb·ft)*	□
19	FP-BRG-608-LLUMAXE	*608 LLU MAX-E*		
20	FP-PRO-M6CV1-CS-V1-R1	*MACH 6 CBN CHAINSTAY GUARD*		
21	FP-PRO-M6CV1-SS-V2-R1	*MACH 6 CBN SEATSTAY GUARD V2 (W/ RECESS)*		
22	FP-SCW-FLT-M5*14	*SCREW FLAT 5X14*		
23	DT SWISS 142 RWS	*DT SWISS 142 RWS*		



*	○ = grease	● = anti-seize	◉ = anti-seize *or* grease	□ = loctite 243

SUSPENSION SETUP GUIDE

Setting Rebound and Propedal on FOX CTD Rear Shocks with Boost Valve: In general, rebound should be turned all the way out and dialed back in 1-5 clicks depending on rider weight. A sub 145lb rider is full out (fastest setting). Average is 1 click in on a Mach 4, 2 clicks in on a Mach 5.7, and 4 clicks in on a Mach 6/Firebird. We generally recommend starting your ride with the CTD open (descend mode) for all bikes other then the Mach 5.7, Mach 6, and Firebird. With these models, the Trail 1 setting provides the best all around general starting set up and you can tune from there.

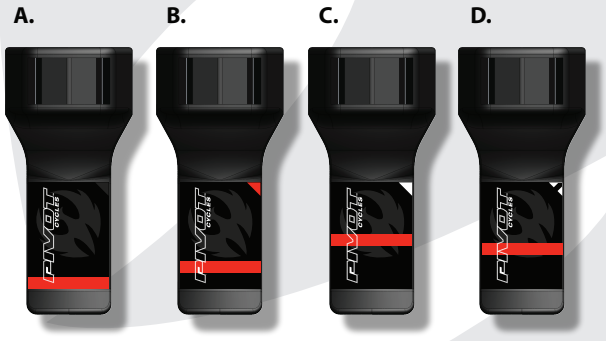
Setting Rebound, Bottom Out, and Boost Valve on DHX Air Shocks: In general, a good starting rebound setting is 7 clicks in from full open for a rider weight of 170lbs. We recommend setting the bottom-out with two lines showing on the reservoir. A good starting Boost Valve pressure is 170psi. We do not recommend going below 150psi on the Firebird.

Setting Rebound, Bottom Out, Boost Valve, High Speed Compression and Low Speed Compression damping adjustments on RC4 Coil Shocks for Phoenix DH: In general, for a rider between 160-180lbs, we recommend the following baseline settings:

- Rebound: 5 clicks out from all the way in
- High Speed Compression: 7 clicks out from all the way in
- Low Speed Compression: 10 clicks out from all the way in
- Bottom Out: Two turns in on the reservoir.
- Boost Valve: A good starting Boost Valve pressure is 160psi. We do not recommend going below 130psi on the Phoenix DH.

Setting rear shock sag on mountain bikes: Always set sag with the CTD lever turned to the open position (Descend Mode), which means the lever is turned toward the non-drive side of the bike. (In the case of the Float X CTD this means that the lever will be flipped towards the remote reservoir). Have the rider sit on the bike (preferably with their hydration pack on) and have them sit down hard into the saddle to achieve accurate sag settings. The rider does not need to bounce up and down nor should they sit down gently. If they sit down hard once, the suspension will cycle well into the stroke and return to the natural sag setting with the rider in the saddle. With the rider in the saddle (not moving), slide the O-ring up into position against the air can. Once the O-ring is set in place, have the rider slowly step off the bike so as not to move the O-ring. The O-ring needs to line up with the red line on the sag indicator. Add or remove air as required to get the O-ring to line up with the red line. If there is no sag indicator on the shock, set the sag to the recommended setting shown below. (Different models and sizes of Pivot bikes use different length shocks and therefore require different sag settings.

- Mach 4 (all years) XX-Small and X-small: Sag = .49” or 12.4mm (Sag indicator C)
- 2010 and older Mach 4 Small, Medium, Large, X-large, Mach 5 X-Small and Small, and all 429 Alloy’s : Sag = .65” or 16.5mm (Sag indicator B)
- 2011-2014 Mach 4 Small, Medium, Large, X-large as well as All years for Mach 429 Carbon: Sag = .55” or 14mm (Sag indicator D)
- Mach 5.7/Mach 5.7 Carbon X-Small, Small, Medium, Large, X-large and Mach 5 Medium, Large and X-large: Sag = .74” or 18.8mm (Sag indicator A)
- Mach 6, Firebird and Firebird 27.5”: Sag = .8” or 20.3mm. We use Sag indicator A on these models where the red line is .74” or 18.8mm and the end of the indicator is .98” or 24.9mm. If you set sag just past the red line, towards the end of the indicator, this will give you the proper sag setting on these models.
- Phoenix DH: Sag = .99” or 25mm



Spring Weight recommendations for RC4 Coil Shocks on the Phoenix DH:

- Rider Weight: 130-160lbs Spring Weight: 300lb coil
- Rider Weight: 160-190lbs Spring Weight: 350lb coil
- Rider Weight: 190-220lbs Spring Weight: 400lb coil
- Rider Weight: 220-250lbs Spring Weight: 450lb coil

Setting Rebound, Low Speed Compression damping, and Lockout threshold on all Fox 32 RLC forks with Fit Damper:

- Rebound: Make sure the lock out is fully open (not locked out), and that the rebound is not set too fast or too slow. Rebound adjust-ment is highly dependent on rider weight and air pressure. You will need to cycle the fork several times after making a change to the rebound.
- Low Speed Compression: The LSC (low speed compression) is the blue large serrated outer knob on the top of the right fork leg. Start with the knob turned about 5 clicks from full open. Full open is all the way to the left (counter clockwise) and then turn 5 clicks to the right.
- Lockout Threshold: There is a blue lever on the top of the fork that turns the lockout on or off. There is a black knob is in the center of the adjusters that determines how locked out the fork is and how easily the lockout will "blow off" on an impact when the lockout is in the locked position. Unless racing, we recommend running the threshold all the way open or close to all the way open (counter clockwise) for maximum oil flow.

Setting Rebound, High Speed Compression and Low Speed Compression damping adjustments on Fox 36 RC2 Fit damper forks for Firebird 26": In general, for a rider between 160-180lbs, we recommend the following baseline settings:

- Rebound: 10 clicks out from all the way in
- High Speed Compression: 15 clicks out from all the way in
- Low Speed Compression: 17 clicks out from all the way in

Setting Rebound, High Speed Compression and Low Speed Compression damping adjustments on Fox 40 Dual Crown forks for Phoenix DH: In general, for a rider between 160-180lbs, we recommend the following baseline settings:

- Rebound: 8 clicks out from all the way in
- High Speed Compression: 15 clicks out from all the way in
- Low Speed Compression: 18 clicks out from all the way in

Setting Fork Pressures on Fox CTD Air forks: We start with the manufacturers recommended air pressure charts for rider weight. We have found that these charts tend to run on the high side of the range (too much air) so we will typically go one pressure setting below the setting shown for the recommended rider weight as per the charts below:

Mach 6 and Firebird

2014 34 FLOAT 27.5"

Rider Weight	150mm	160mm
≤125 (lbs)	45psi	45psi
125 - 135	50psi	50psi
135 - 145	55psi	55psi
145 - 155	65psi	65psi
155 - 170	70psi	70psi
170 - 185	75psi	75psi
185 - 200	80psi	80psi
200 - 215	90psi	90psi
215 - 230	100psi	100psi
230 - ≥250	110psi	110psi

Mach 4

2014 32 FLOAT 26"

Rider Weight	120mm
≤125 (lbs)	50psi
125 - 135	50psi
135 - 145	55psi
145 - 155	65psi
155 - 170	75psi
170 - 185	80psi
185 - 200	85psi
200 - 215	95psi
215 - 230	100psi
230 - ≥250	110psi

Mach 5.7

2014 34 FLOAT 26"

Rider Weight	150mm
≤125 (lbs)	45psi
125 - 135	50psi
135 - 145	55psi
145 - 155	65psi
155 - 170	70psi
170 - 185	75psi
185 - 200	80psi
200 - 215	90psi
215 - 230	100psi
230 - ≥250	110psi

Mach 429 and Les

2014 32 FLOAT 29"

Rider Weight	100mm	120mm
≤125 (lbs)	55psi	50psi
125 - 135	55psi	50psi
135 - 145	60psi	55psi
145 - 155	70psi	65psi
155 - 170	80psi	75psi
170 - 185	85psi	80psi
185 - 200	90psi	85psi
200 - 215	95psi	95psi
215 - 230	100psi	100psi
230 - ≥250	110psi	110psi

Les 27.5

2014 32 FLOAT 27.5"

Rider Weight	100mm
≤125 (lbs)	55psi
125 - 135	55psi
135 - 145	60psi
145 - 155	70psi
155 - 170	80psi
170 - 185	85psi
185 - 200	90psi
200 - 215	95psi
215 - 230	100psi
230 - ≥250	110psi

Spring Weight recommendations for Fox 40 Coil Forks on the Phoenix DH:

- Rider Weight: 120-150lbs Spring Weight: *Optional Light*
- Rider Weight: 150-185lbs Spring Weight: *Stock Medium*
- Rider Weight: 185lbs + Spring Weight: *Optional Heavy*

Washing & Maintenance Tips for Mach 4, Mach 5, Mach 5.7 and Mach 429

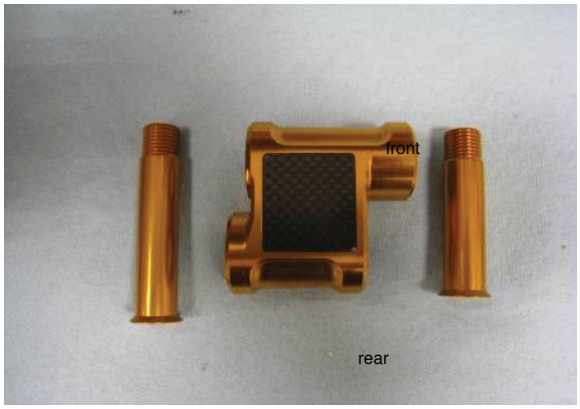
Cleaning and Washing : If the bike gets past the point of basic wipe down or it is a really muddy day, then a true washing is acceptable.
The preferred method is a warm bucket of water sponges and Palmolive and a light hose rinse **(NO POWER WASHER!).**
Towel dry and use compressed air to get the water out of the tight spots. Lube chain and derailleurs after washing.
Avoid pressurized water on bearing seals.

Maintenance: Replace cables and housing and lube with Slick Honey any time shifting becomes less then perfect.
Check brake pads regularly for wear. Replace as needed.
For disc brakes, check lever for spongy feel and bleed brakes if needed. Make sure brakes are not dragging and adjust as required.
Check bar, stem, seat post head and rear derailleur mounting bolts and grease bolts regularly.
Lube compression sleeve in headset to avoid creaking
Apply grease to shock mounts to avoid squeaks

Install long shock bolt using anti-seize and torque to (10lb. ft, 120lb. in, 13Nm.)

Install short shock bolt. Use blue loctite on the M5 bolt. Torque M5 bolt to (5lb.ft, 60lb.in, 7Nm.)

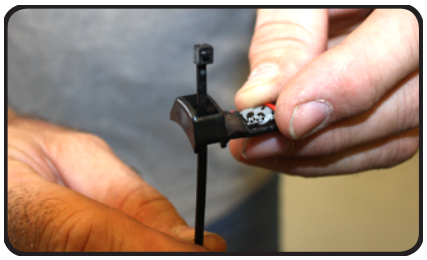
Install rocker bolts using grease or anti-seize. Torque to (10 lb.ft, 120 lb.in, 13 Nm.)



Use anti-seize and torque link pins to (27lb ft, 35 Nm.)

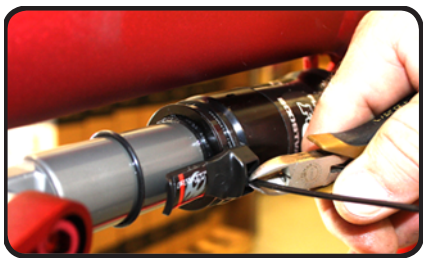
PIVOT CYCLES

Setting Up Your Sag Indicator (Meet Your New Travel Companion)



1

- Insert the supplied zip tie into your Sag Indicator, making sure the head of the zip tie is facing outward.

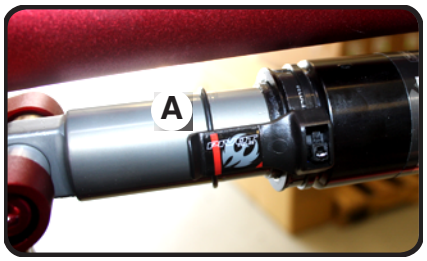


2

- Place the Sag Indicator above the bottom collar of the shock body.
- Tightly pull zip tie tail until indicator is tightly secured to shock before cutting excess.
- Cut excess zip tie.

3

- The Sag Indicator will rotate around the shock body if it is properly installed. Use your Suspension Set Up Guide (provided separately) to ensure proper sag.

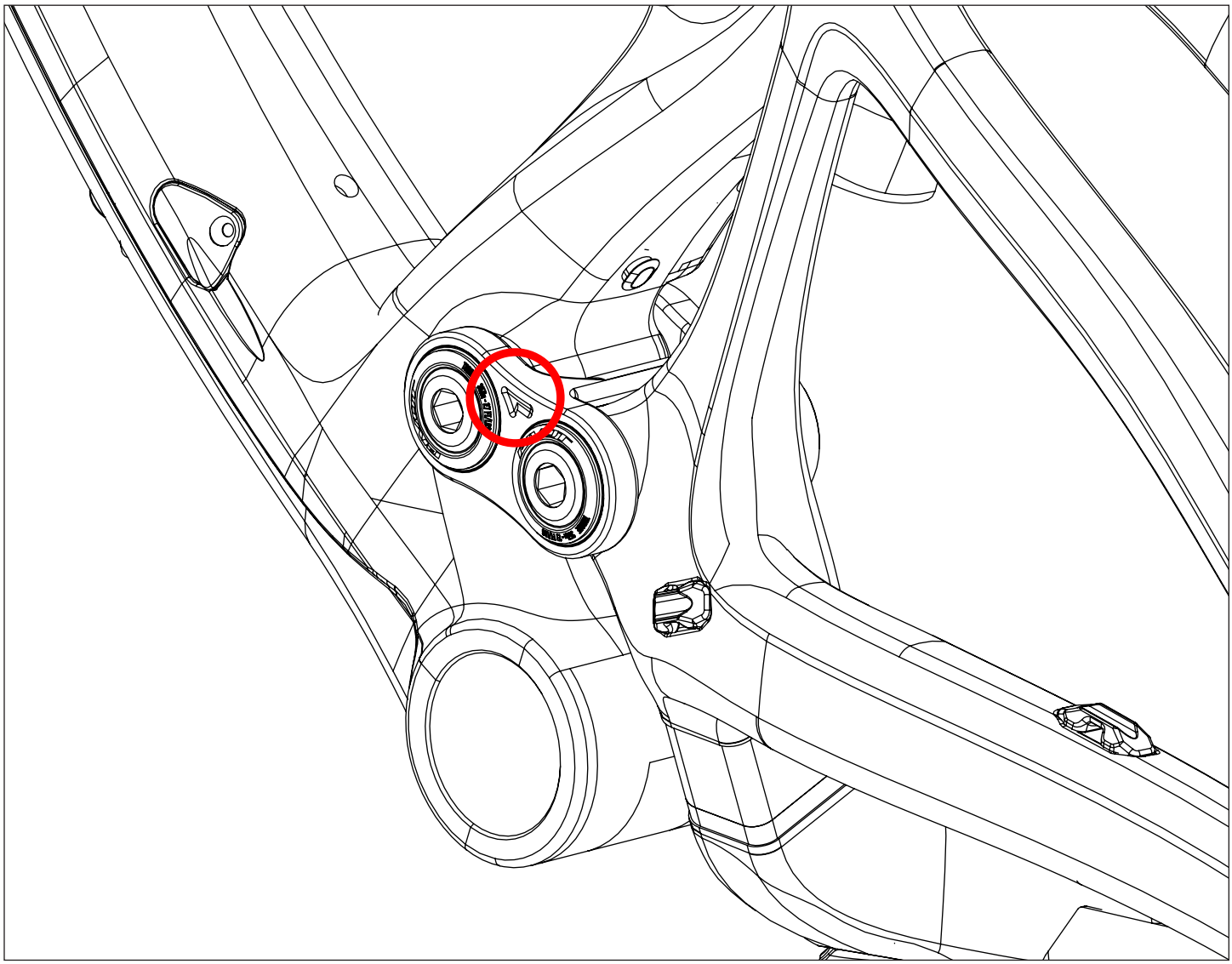


4

- You will know you've achieved proper sag when the rubber gasket aligns perfectly with the red line on the Sag Indicator (A).

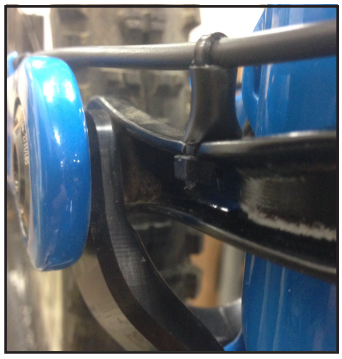
You MUST rotate the Sag Indicator to the bottom of the shock body before riding! (B) Otherwise you risk breaking and losing the Sag Indicator.

Mach 6 Carbon / Mach 4 Carbon Lower Link Orientation



The Mach 6 Carbon and Mach 4 Carbon lower linkage is correctly oriented with the engraved arrow at the top of the link on the non-drive side, pointing toward the front of the bicycle, as shown in the drawing above. Incorrect installation will result in permanent, non-warranty damage to the bicycle frame. If you have any questions, be sure to consult your Pivot Dealer prior to attempting maintenance on your own.

1



It is important to use a small diameter tube and a zip tie to creat a standoff as shown so that the cable does not rub on the frame, clevis or shock shaft. ***Be sure to thread the zip tie up through the clevis hole so that the mechanical end is tucked in the clevis and not rubbing on the frame***. Mach 6 frames/bikes are supplied with both the tubing and zip ties to ensure proper set up. Rear derailleur housing routes from the drive-side seat stay to the non-drive side of the top tube. Front derailleur housing routes from the drive side of the seat tube to the drive side of the top tube. Brake housing routes from the non-drive seat stay to the non-drive side of the top tube.

2

Rear shifter

Rear brake

Front shifter

Front brake

Dropper (optional)
can be routed
from L or R side.

Route both brake and shifter housing to the opposite sides of head tube as shown.

If you are running your brakes moto style then it is ok to route the rear brake housing to the same side.

Front derailleur arc from under shock tab as shown.

In order to install the shifter and brake housing, you need to remove the rear shock. Please follow the steps below so the frame is not scratched or damaged in the process.

1

Place foam or other protective material on frame.

2

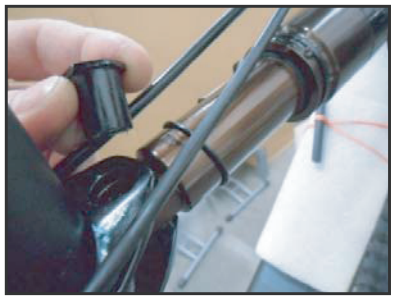
Remove forward shock mounting bolt.

3

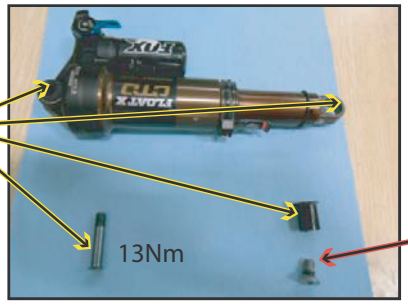
Rotate shock body while lowering forward portion of shock.

Continue rotating until reservoir is horizontal.

4



Remove rear bolt and remove shock from frame.



Reverse this process to install shock. Torque forward bolt to 13Nm and rear bolt to 32 Nm. Use grease or anti-seize as indicated.

1

It is important to use a small diameter tube and a zip tie to creat a stando as shown so that the cable does not rub on the frame, clevis or shock shaft. ***Be sure to thread the zip tie up through the clevis hole so that the mechanical end is tucked in the clevis and not rubbing on the frame.*** Mach 6 frames/bikes are supplied with both the tubing and zip ties to ensure proper set up. Rear derailleur housing routes from the drive-side seat stay to the non-drive side of the top tube. Front derailleur housing routes from the drive side of the seat tube to the drive side of the top tube. Brake housing routes from the non-drive seat stay to

2

Rear Shifter

Rear Brake

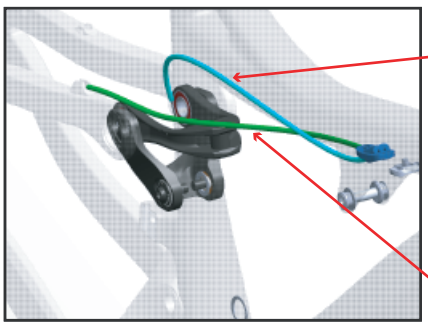
Front Shifter

Front Brake

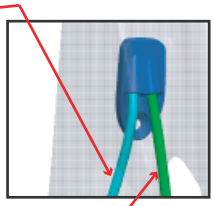
Dropper (optional)
Can be routed from
Left or Right side

Route both brake and shifter housing to the opposite sides of head tube as shown.

If you are running your brakes moto style then it is ok to route the rear brake housing to the same side.



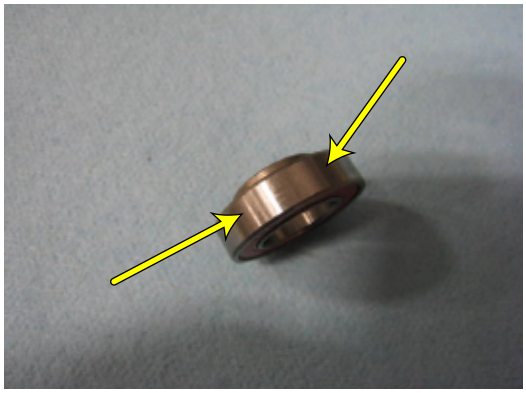
Front derailleur exits drive side cable port.



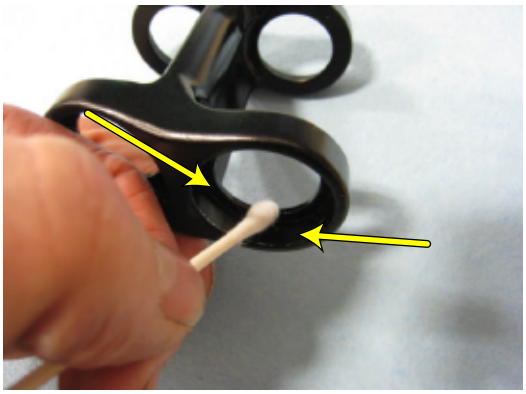
Rear derailleur exits non drive side cable port.

1 *LOWER LINK AND BEARINGS*

2 Bearing race must be clean of oil or grease



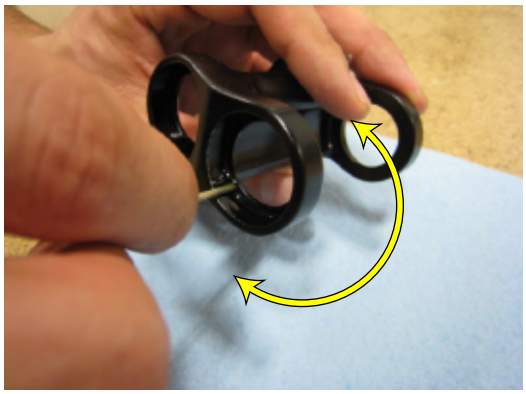
3 Bearing pocket must be clean of oil or grease



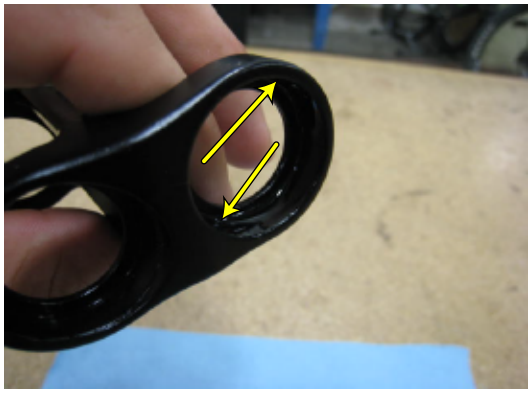
It is best to use alcohol to clean bearings, bearing pockets, and threads to ensure no oil or grease is on any of the surfaces during the assembly process

4 Apply Loctite 609 or equivalent to all bearing pockets

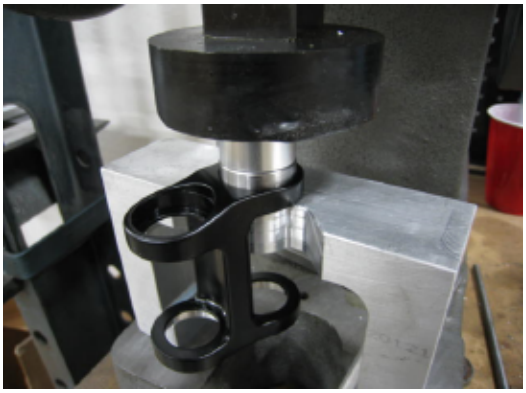
5 Use a toothpick to spread the Loctite to coat bearing pocket



6 Use enough Loctite to cover surface until wet



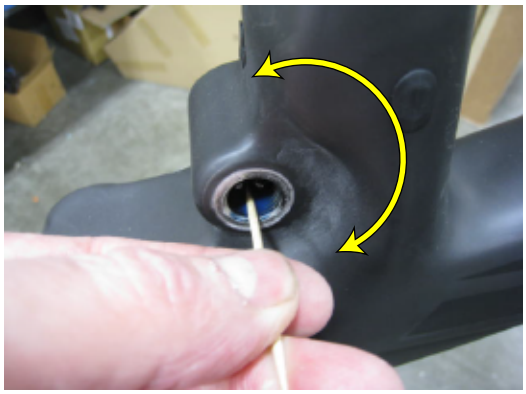
7 Press bearings into link



8 Apply Loctite 242 or 243 to threads in frame

9 Apply enough Loctite to cover threads as shown

10 Use a toothpick to spread the Loctite to coat threads



11 ***DO NOT*** apply Loctite on bolt threads

12 Install lower link with arrow on NDS facing forward

13 Torque bolts to 35Nm

14 Check motion of link to ensure free movement

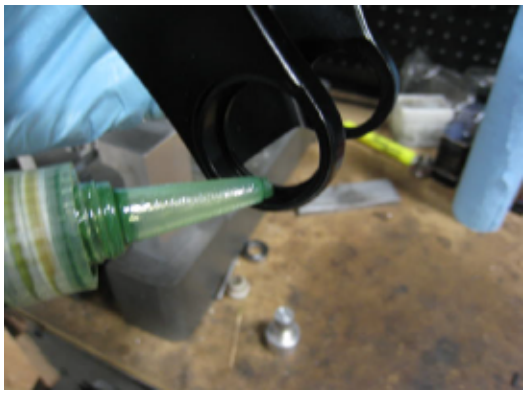
15 *UPPER LINK AND HARDWARE*

Before installation clean oil and grease off of bearings and link.

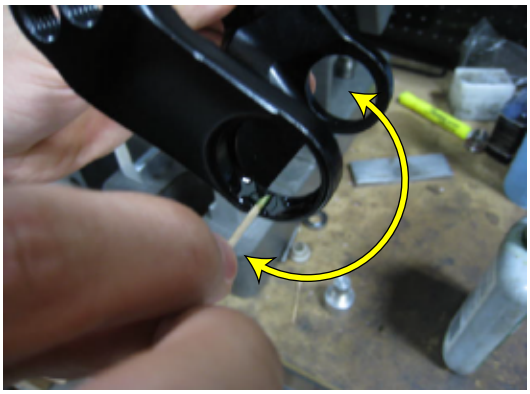
It is best to use alcohol to clean bearings, bearing pockets, and threads to ensure no oil or grease is on any of the surfaces during the assembly process

Follow steps 16-19 only if the DS bearing is not pre-installed

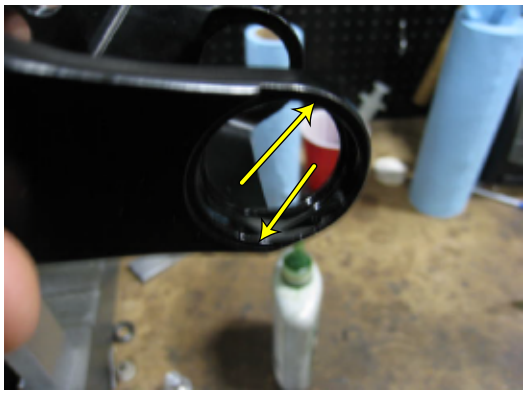
16 Apply Loctite 609 or equivalent to DS bearing pocket only



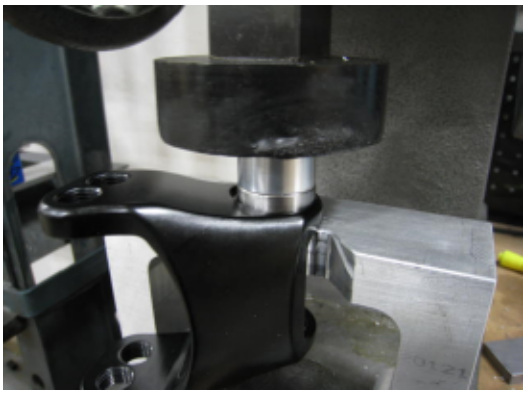
17 Use a toothpick to spread the Loctite to coat bearing pocket



18 Use enough Loctite to cover surface until wet



19 Install bearing on DS only



20 Apply Loctite 242 or 243 to upper mount threads (both sides)

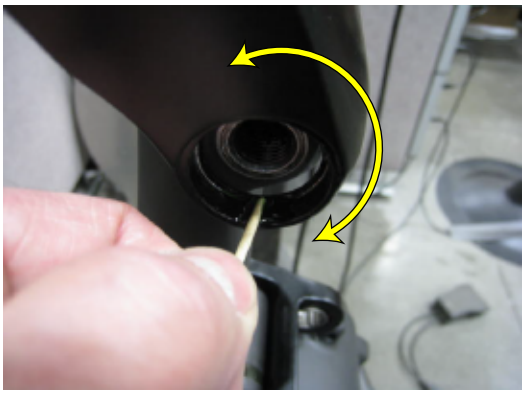
21 Use a toothpick to spread the Loctite to coat threads

22 Install bolt in DS

23 Torque bolt to 35Nm

24 Apply Loctite 609 or equivalent to NDS bearing pocket

25 Use a toothpick to spread the Loctite to coat bearing pocket



26 Place bolt in bearing and install in link

27 Torque bolt to 35Nm

28 Check motion of link to ensure free movement

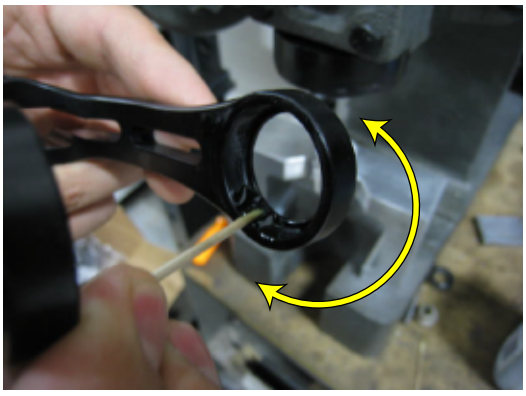
29 *CLEVIS AND HARDWARE*

Before installation clean oil and grease off of bearings and clevis.

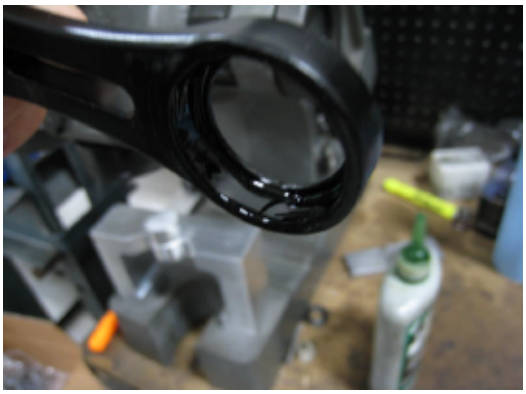
It is best to use alcohol to clean bearings, bearing pockets, and threads to ensure no oil or grease is on any of the surfaces during the assembly process

30 Apply Loctite 609 or equivalent to DS bearing pocket only

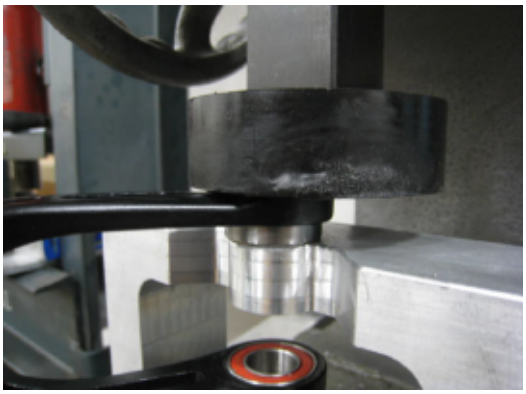
31 Use a toothpick to spread the Loctite to coat bearing pocket



32 Use enough Loctite to cover surface until wet

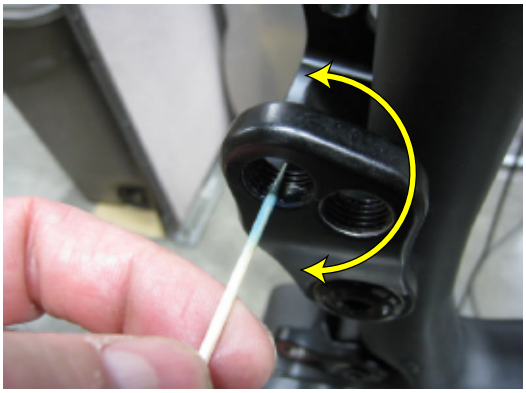


33 Install bearing and repeat process for other side



34 Apply loctite 243 to all UL threads

35 Use a toothpick to spread the Loctite on threads



36 Place clevis with threaded side up

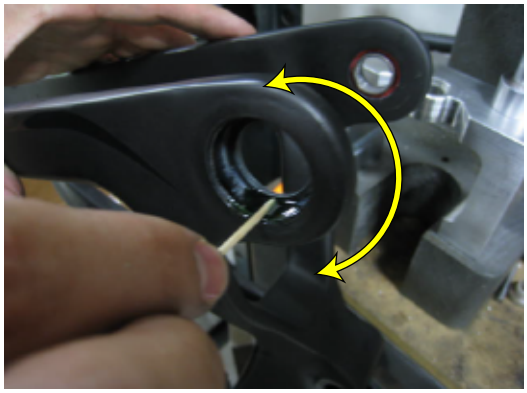
37 Install bolt in NDS

38 Install bolt in DS

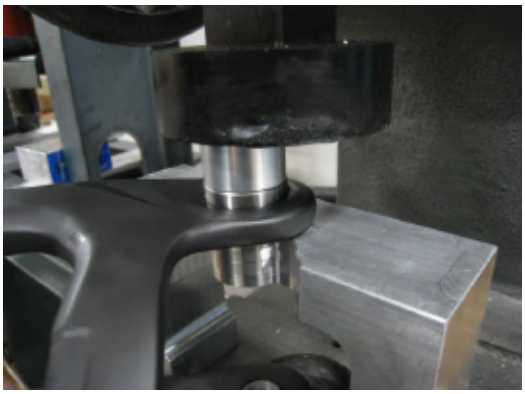
39 Torque bolts to 35Nm
See step 48 for alternate technique

40 Apply Loctite 609 or equivalent to bearing pocket

41 Use a toothpick to spread the Loctite on bearing pocket



42 Press bearing into upright pockets



43 Apply Loctite 242 or 243 to RT threads on both sides

44 Use enough Loctite to cover threads as shown

45 Use a toothpick to spread the Loctite on threads

46 Install RT Bolts

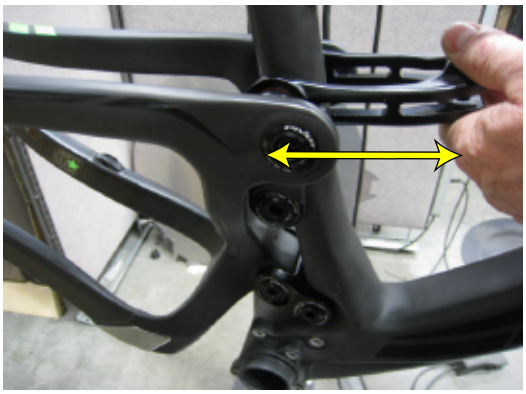
47 Torque bolts to 35Nm

48 Clevis bolts may be torqued to 35Nm at this time if not done previously

49 Install upper bolts in RT

50 Torque bolts to 35Nm

51 Check motion of assembly to ensure free movement



52 Apply grease or anti-seize to clevis pin

53 Insert pin into shock eye

54 Apply grease or anti-seize to clevis bolt

55 Install bolt with washer into clevis from bottom

56 Twist shock at 45˚ angle to allow oil canister to clear frame

57 Once frame is cleared, align shock vertically in tabs

58 Apply grease or anti-seize to shock bolt

59 Install shock tab bolt

60 Torque shock tab bolt to 13Nm

61 Torque clevis bolt to 28Nm

MACH 6 CARBON

PIVOT CYCLES

The Mach 6 has been in development for over two years and the excitement brewing behind this bike is nothing short of explosive.

The Mach 6 isn't like anything else in our line-up. Hell, it's not quite like anything we've built before! It's an all new machine designed from the ground up to optimize the 27.5" wheel platform and take the growing Enduro racing scene by storm. The Mach 6 is built with the singular purpose of going faster than anything else in the most aggressive terrain (both up and down).

PIVOT CYCLES

MACH 6 CARBON

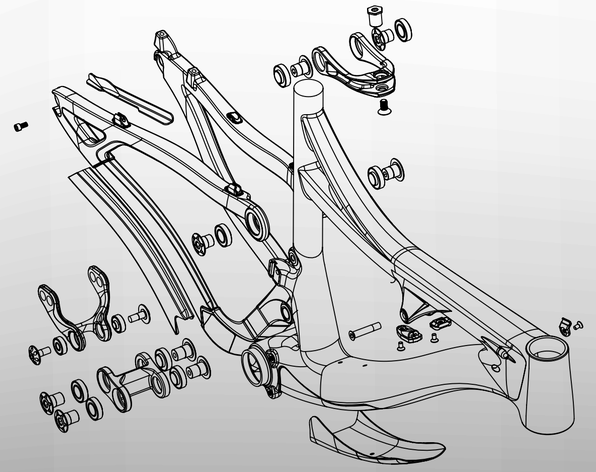
Built from the inside, out.

We use a proprietary hollow core internal molding technology to create our Pivot carbon frames. This technology is extraordinary and sets the bar well above everything else that's out there. Other high-end brands utilize previous generation molding techniques, but we've taken the technology to the next level of development to produce a frame that is unmatched in nearly every conceivable category.

The quality of the frame that exits the mold is near perfection inside and out and requires little to no finish work prior to painting. It's a shame we have to paint them at all!

Traditional Methods

Other frames require hours of work after they come out of the molds filling the voids and imperfections with epoxy filler which not only adds weight but can also compromise strength and stiffness in critical areas. Our hollow core internal molding technology produces a much lighter and stiffer frame because there is less material required to fill imperfections. This also produces a better ride because an ultra precise and carbon layup can be optimized and tuned to provide the perfect feel without needing to worry about adding extra material.



Both our full suspension and hardtail models require less material to achieve target stiffness and strength numbers - meaning a lighter frame with greater stiffness and much higher quality structures. All of this combines to produce a frame that goes above and beyond the engineering to create bikes that are much greater than the sum of their parts.

Pressure and control.

All carbon bikes are not created equal. A nice looking frame on the outside does not tell the story of what's going on inside. Without giving away too many secrets, we can tell you a little bit about how carbon frames are made and what sets Pivot's hollow core internal molding technology apart. Traditional molding is done with standard polybag bladders. Basically, plastic tubes (similar in material to a plastic zip-lock sandwich bag) are placed inside the frame and inflated with pressure while the carbon frame is in the mold and being heated. The pressure from the poly bags push the carbon into the mold creating pressure from the inside that results in the material following the form of the mold and creating the final shape of the carbon frame.

This is the way that the vast majority of carbon frames are made. It's a perfectly fine way to make carbon frames and there is nothing wrong with it. It is simply not a very precise process. Pressure may not be constant in all areas resulting in internal wrinkles and weak spots that require the manufactures to compensate by using more material in key areas. Some of the more advanced companies with lighter frames in the market go one step further and use pre-shaped latex bladders (the internal bladders are made to the shape of the actual internal structure) this method is better as it helps eliminate wrinkles, but there is still a possibility of inconsistent pressure in critical areas and it is much more difficult to control the lay-up on soft, flexible bladders.

Hollow core internal molding.

Pivot's hollow core internal molding process goes well beyond this by using hard internal forms for both lay-up and molding that eliminate the possibility of inconsistent pressures, providing the highest levels of compaction and extremely precise control over the entire structure.

The other key part of this is that **we also have greater control over the individual carbon layup that goes into each frame.** This is a true attention to detail item that sets the best apart from the rest. The "kitting" of composites is more on par with making a precision road fork lay-up or handlebar where tuning is critical to the ride and strength is paramount. It is not simply a matter of taking sheets of mid modulus composites and placing them at 45 degree angles in the mold like many other manufacturers.

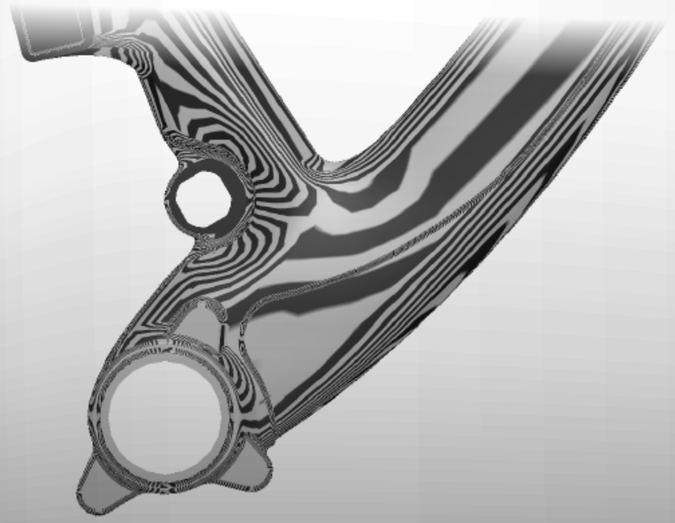
How we got there.

A lot of testing goes into exactly which composites are needed in each location and of what type to optimize the frame. So, we know it makes for a fascinating discussion to throw out material names with super high modulus numbers, and to quote crazy high compaction pressures for marketing purposes. However, the real magic happens in product development and testing.

At Pivot, we are committed to taking the time, effort and high cost involved with developing the perfect lay-up structures, and using all the best materials available in just the right places, in order to develop a truly optimized frame, **with a stiffness to weight ratio and superior ride tuning that puts the competition to shame**.

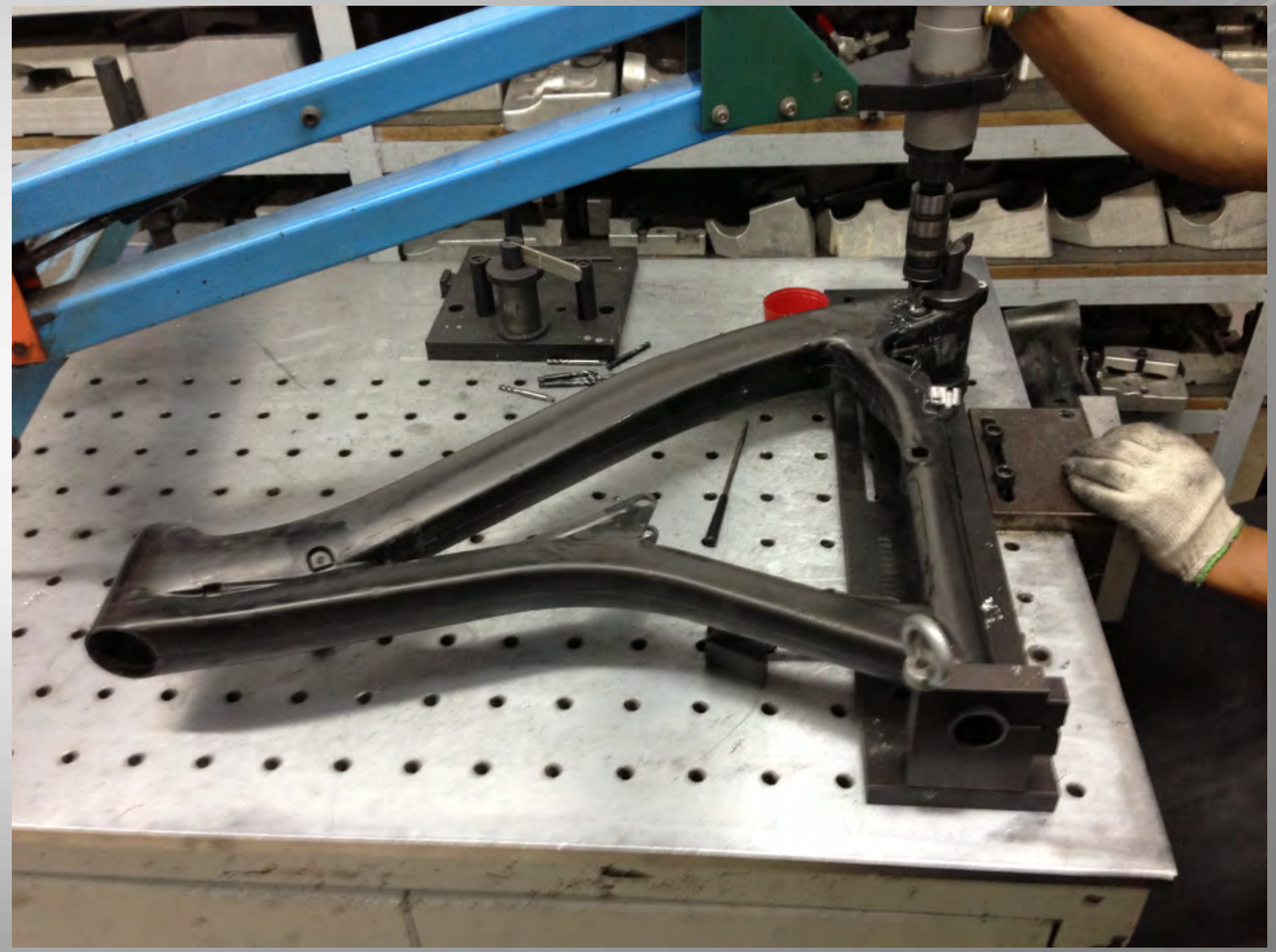
Real World Testing.

In the creation of Pivot's truly ground breaking line of composite frames, we didn't just rely on FEA programs or engineering data alone- we tested the frames in the real world with real riders. We built numerous versions of the frame, each with a slightly different lay-up schedule- producing more stiffness, less stiffness and ultimately the right stiffness. We changed the lay-up and the materials until we were happy with the frames stiffness and ride characteristics as much as the test data.



Crunching the numbers.

We do live by the test data! We spend a ton of time crunching the numbers and comparing them to those of the other premium brands. We test the competitor's products as a benchmark and go about developing a better frame. In the case of our suspension frames that means a superior stiffness to weight ratio with the highest strength standards in the sport. With our non-suspended models, we focus on achieving the maximum stiffness in the bottom bracket, head tube and rear triangle side to side so that all the riders power gets to the rear wheel. At the same time we develop the perfect lay-up structure that makes the frame both comfortable and lively.



What this means for the rider.

The end result is a frame that actually lives up to the words “laterally stiff, yet vertically compliant”. In the case of bikes like our Mach 5.7 and 429, our superior chassis stiffness has become a huge differentiator between us and the competition. Every magazine test report features comments regarding the precision and the immediate acceleration that occurs when getting on a Pivot carbon bike. When it comes to our LES model, these comments are also followed up with compliments on the bikes overall ride quality and light weight. Several testers have written that the LES is the most perfectly balanced hard tail mountain bike they have ever ridden. We know we have done our home work so that you can have a better bike when we get comments like that.

CARBON TECHNOLOGY

Additional Pivot Carbon Frame Technology

Along with the Hollow Box molding process, we use several other technologies to make Pivot bikes as light, stiff and reliable as possible.

Rubberized Leather Protection

Rubberized leather chainstay, inner seat stay, and down tube protectors for a quiet ride and higher impact resistance.

Tapered 1.5’ Headtube

Wider head tube allows us to take full advantage of oversized tubes to create amazing stiffness to weight ratios while keeping the ride quality at what you expect from a Pivot.

Press Fit 92 Bottom Bracket

PF92 bottom bracket 92mm shell allows for wider pivots and better bearing support for increased frame strength and stiffness while maintaining better control over the chain-line. The PF92 design also means that our carbon frames are 100% molded carbon with no threaded metal bottom bracket inserts required.

CARBON TECHNOLOGY

Direct Mount Front Derailleur

Stiffer, lighter and more precise. Allows for ease of set up and perfect front shifting.

Oversized Bearings

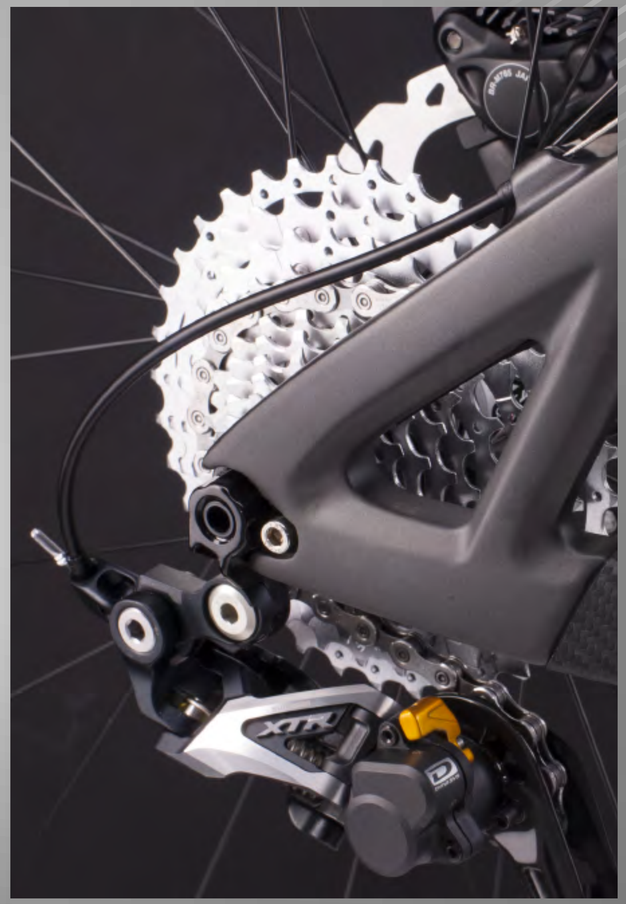
Oversized bearings all around and double row Enduro Max bearings in the dw-link.

142 X 12mm through axle design

142 X 12mm through axle design with forged 7075-T6 derailleur hanger and integrated axle nut adds even more stiffness to the carbon rear triangle.

Direct Mount rear brake posts

160mm bosses mount calipers directly to rear triangle resulting in higher levels of stiffness and lower overall system weight.



PIVOT CYCLES

6.1” (155mm) travel next generation dw-link® suspension design with position-sensitive anti-squat that pedals, accelerates, and handles like nothing else for aggressive trail riding conditions.

Pivot specific, **custom tuned Fox Float or Float X CTD** shock technology: Increased performance and adjustment range allows riders to quickly and easily adjust for changing course or ride conditions.

MACH 6 CARBON

PIVOT CYCLES

All new upper linkage design provides additional control over the suspension curve making it even more possible a bike that can **descend like a full DH machine** and **climb like an XC race bike**.

This new Mach 6 linkage design also eliminates the rear shock bushing; replacing it with two large Enduro max cartridge bearings resulting in a substantial improvement in small to mid size bump compliance and better traction in all conditions. It is also compatible with most shocks in the marketplace so it **does not require a proprietary shock design**.

MACH 6 CARBON

PIVOT CYCLES

The new Mach 6 linkage design was one of the keys to achieving short (even for 26” wheels) **430mm (16.9”) chainstays** and 155mm of rear travel while clearing 27.5” X 2.35” tires.

The new ultra-short dw lower link accommodates larger Pivot custom double row Enduro Max bearings for improved stiffnessand durability.

Pivot exclusive hollow box, high-compression internal molding technology allows for **greater compaction and smoother internal walls** resulting in a lighter, stronger, highly optimized frame design with the best stiffness to weight ratio in the class.

MACH 6 CARBON

PIVOT CYCLES

Internal top tube shift cable routing and down tube dropper seat post routing keeps cables clean and running smooth.

MACH 6 CARBON

PIVOT CYCLES

Rubberized leather chainstay, inner seat stay, and down tube protectors for a quiet ride and higher impact resistance.

Press Fit 92BB, ISCG05 tabs and direct mount front derailleur.

MACH 6 CARBON

PIVOT CYCLES

Assymetric Chainstays for a stiffer rear triangle to optimize each pedal stroke and allow for ultimate control when cornering hard.

142mm X 12mm through axle and **post mount brake** tabs add further to the frame stiffness and rider's connection to the rear wheel.

MACH 6 CARBON