M9 PRO

OWNERS MANUAL

INTENSE CYCLES.USA

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Introduction

Well, you did it! You are the proud owner of the fastest DH bike in the world. The M9-FRO was not a last minute creation. It comes from a long lineage of American Made, Intense M-series bikes. Starting with the first 'M' bike in 1994, the M9 is the latest in handmade magic. It started with our engineering and design team, we then unleashed the beasts to test the bike not only in real world conditions, but on the toughest tracks in the world - the World Cup circuit (Our M9 equipped race team was the #1 team in 2010).

Throughout the 2009-2010 seasons we crafted this machine into the M9-FRO. Please take your time to set it up, dial it in and enjoy, because you will be going faster than you have ever gone before, as well as having the biggest smile on the mountain.

Enjoy your new M9, it is the finest Downhill bike ever made and we are damn proud of it.

M9-FRO features

- *CNC machined head tube with pinch bolt release top cup, for ease of changing cane creek AngleSet*
- *Proprietary Monocoque upper shell*
- *Proprietary Hydro formed down tube*
- *CNC'd "backbone" which is the spine of the frame.*
- *9.5"x3" shock damper spec*
- *World Champion winning VPP suspension platform*
- *3 position travel adjustment*
- *CNC Machined Aluminum BB shell, with integrated main pivot and ISCG-05 tabs*
- *G3 adjustable dropouts*
- *Same race chassis that was ridden by the #1 Downhill team in the world*
- *2 Grease ports in main pivot locations for longer lasting bearings*

Warning! Although many catalogs, advertisements and articles about downhilling depict riders racing, jumping, riding hard off road, and/or stunt riding, this activity is extremely dangerous, increases the rider's risk of injury or death, and potentially increases the severity of any injury. The action depicted is being performed by experts with many years of training and experience. Even with that training and experience, cyclists who engage in such activity often get seriously injured. It is also foreseeable that during some jumps or stunts, and even some races, that the rider will exceed the design capacity of the frame or components, which may result in something on the bicycle bending or breaking. If a frame or component bends or breaks, such may lead to loss of control, serious personal injury or death.

WARNING! Make sure you have, reviewed and understand the warnings, instructions, and content of the manuals for your bike.

WARNING! Service on Intense bicycles requires special knowledge and tools. Intense recommends that all service and repairs be performed by an authorized Intense retailer.

CAUTION: Any modification of your frame, fork, or components means that your bike no longer meets our specifications and therefore voids your warranty.

WARNING! Never modify your frame or bicycle in any way. Do not sand, drill, fill, or remove parts. Do not install incompatible forks or suspension parts. An improperly modified frame, fork, or component, can cause you to lose control and fall.

Assembly

• Thread Prep:
Intense recommends prepping all threads with grease or Loc-tite (the medium strength (blue) formula) along with proper torque, is ideal for keeping the bolts snug.

• Tools Needed:
- grease
- blue loc-tite (242)
- dead blow hammer
- 2mm allen wrench (for lower link set screws)
- 4mm allen wrench (upper/front shock bolt)
- 5mm allen wrench (G3 bolts, shoulder bolts, pivot bolts)
- 6mm allen wrench (lower/rear shock bolt)
- 12mm open end wrench (upper/front shock nut)
- chain ring bolt tool (to hold down the back side of G3 chain ring bolts)

In the event you want to rebuild your M9, we recommend working with your local dealer or a race mechanic. This just a general guideline assembly list for the M9.

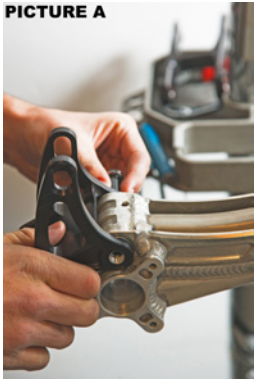
(Before starting assembly, apply blue loc-tite on the 4 shoulder bolts and the 2 lower pivot/ link bolts and let dry for 10 minutes and let the loc-tite fully cure for 24hrs from assembly and application)

Make sure to insert seat post at least 4" into the main frame, anything less than this amount could cause damage to the frame or even failure.

Step One
-->Lower link to main frame
A. Using the .5 x .75 x .06 steel washers, place a thin coat of grease to both sides of the washer.
B. place the washers onto the bearings and the grease application should make them hold in place until you bring up the lower link into place.

C. Take one of the pivot bolts and slide through the link and thread into the other side of the link. (picture A)

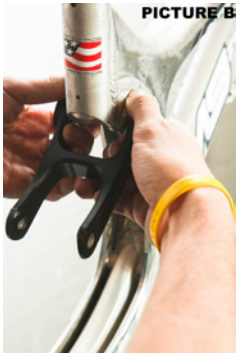
PICTURE A



D. Once tightened (115 in/lbs) insert e-clip onto pivot pin axle.
E. Check lower link for smooth movement and be sure there is no play

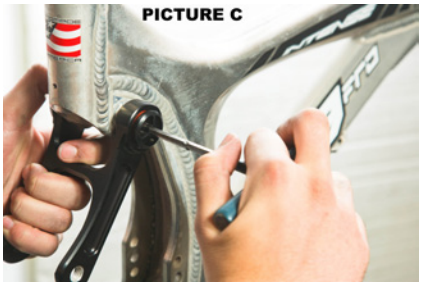
Step Two
-->Assemble Top Link to frame
A. Using the .486 x .717 x.140 alum spacers, place a thin coat of grease onto the washers. Place the washers onto the bearings in the top link. (picture B)

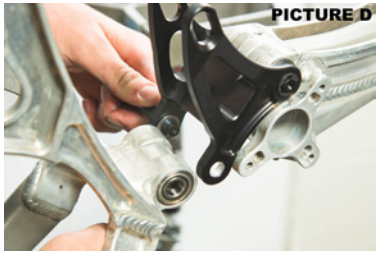
PICTURE B



B. Place the top link (bearing side up top and arcing towards the rear) onto the 'barbell' and slide in the shoulder bolts in and tighten to 300 in/lbs. (picture C)

PICTURE C



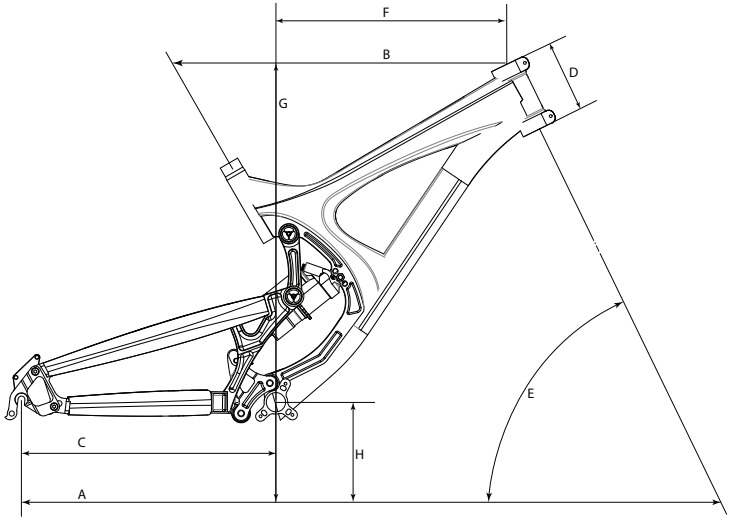


Step Three
-->Assemble swing arm to main frame, lower linkage first
A. Using the .5 x .75 x .06 steel washers, place a thin coat of grease to both sides of the washer. (picture D)
B. Place the washers on the bearing surfaces on the rear end
C.. Slide the swing arm in between the link and slide the lower pivot bolt into place securing to 150 in/lbs (picture E | picture F)
D. Attach E-Clip to pivot bolt
-->--> **Assemble upper part of swingarm to upper link**
A. You want to start with attaching the upper stays to the upper link
B. Using the .486 x .717 x.140 alum spacers, place a thin coat of grease onto the washers and set them in the swing arm on the inner side. The grease helps them stay in place as you attach the swing arm. (picture G)
C. Position the rear stays in alignment with the lower link and slide in the shoulder bolts and tighten to 300 in/lbs. (picture H)

• Cable Routing:
Intense uses clip on cable guides, that are welded to the frame. Housing and brake lines can be fixed to these guides by the enclosed plastic clips, or for a more permanent tighter application you can use zip ties. The main theme to achieve in routing housing and brake lines is to use nice, flowing curves.

M9 Geo

The M9 is the most adjustable bike on the market today. We have designed the bike around what our riders, pro racers and engineers feel are the optimal settings with everything set at a baseline. That being said, with different tires and forks your geometry will vary. We have come up with these starting point geometries based on a 2.35 Maxxis tire and Fox 40 forks with an axle to crown of 575mm



M9-FRO		SMALL	MEDIUM	LARGE
wheel base	A	*45.5"-46.5"*	*46.5"-47.5"*	*47.5"-48.5"*
toptube	B	*22"*	*23"*	*24"*
chainstay	C	*17.25"/17.5"/17.75"*	*17.25"/17.5"/17.75"*	*17.25"/17.5"/17.75"*
head tube	D	*4.5" w/ Upper Pinch Bolt*	*5" w/ Upper Pinch Bolt*	*5" w/ Upper Pinch Bolt*
head angle	E	*64° (+/-.5/1.0/1.5)*	*64° (+/-.5/1.0/1.5)*	*64° (+/-.5/1.0/1.5)*
reach	F	*15.5"*	*16.25"*	*17.25"*
stack	G	*23"*	*23.5"*	*23.5"*
BB height	H	*14.2"-14.5" w/ ISCG 05*	*14.2"-14.5" w/ ISCG 05*	*14.2"-14.5" w/ ISCG 05*

Maintenance

M9-FRO Torque specs:
Upper swing link shoulder bolts : 300 in/lbs (33 N-m)
Lower link main pivot pin/axles : 100 in/lbs (11 N-m)
G3 dropout bolts : 48-72 in/lbs (5.5-8 N-m)
Head tube pinch bolt : 35 in/lbs (3.5 N-m)
Upper shock mount bolts :
Lower shock mount bolts :
Following are guidelines, depending on your components:
ISCG Tabs : 40 in/lbs (40 N-m)
Rear derailleur : 70-88 in/lbs (8-10 N-m)

Replace bearings as needed, which are available through Intense an dealer or www.intensecycles.com. Below is a general maintence schedule:

	Every:			
PERFORM	**Ride**	**Month**	**3 months**	**Year**
check all bolts/fasteners	**X**			
check tires and pressure	**X**			
Wipe bike down or wash if muddy	**X**			
check air pressure on shock	**X**			
Check headset, adjust if needed		**X**		
pump grease into fittings		**X**		
check spoke tension		**X**		
check chain for bent links or stretched overall length			**X**	
remove shock and cycle frame to check bearings			**X**	
Complete tune by authorized INTENSE dealer				**X**

Shock setup

Please see the CaneCreek special section at the end of the manual (page 17-18) for specific shock setup and tuning. Below is a general guideline for the FOX RC4 shock. More specific shock tuning can be found on www.foxracingshox.com

Rider weight (lbs)	spring rate	preload	Sag	Boost Valve	Boost Valve Progression	LSC (clicks out)	HSC (clicks out)	Rebound (clicks out)
Under 120	300	1 turn-till snug	1" | 25mm	140 psi	3.5	12	1 revolution	1 revolution
120-140	350	1 turn-till snug	1" | 25mm	160 psi	3.5	10	1 revolution	1 revolution
140-160	350-400	1 turn-till snug	1" | 25mm	160 psi	3.5	10	1 revolution	1 revolution
160-180	400	1 turn-till snug	1" | 25mm	160 psi	3.5	9	1 revolution	1 revolution
180-200	450	1 turn-till snug	1" | 25mm	160 psi	3.5	9	1 revolution	1 revolution
200-220	450	1 turn-till snug	1" | 25mm	160 psi	3.5	7	1 revolution	1 revolution
Over 220	500	1 turn-till snug	1" | 25mm	160 psi	2	6	1 revolution	1 revolution

Adjustments

AngleSet adjustable headset

M9-FRO comes standard with the revolutionary Cane Creek AngleSet headset. You can use different angled TOP cups to produce varying degrees of head angles. Your M9 comes with a 0° (giving you the M9's stock 64° head angle) and a +/- .5° (giving you 64.5° or 63.5°) cup and a +/- 1.0° (giving you 63° or 65°). Cane Creek also offers a +/- 1.5° available at your local dealer.

To remove the cup and insert a different offset cup OR turn your current cup around:

- *Loosen the head tube pinch bolt with a 5mm allen*
- *You should be able to pull the cup out with your fingers*
- *In the event your cup will not come out with fingers, worst case you might need to lightly tap it out from below.*
- *Once the cup is in your desired setting, re-tighten the 5mm pinch bolt to 30 in/lbs, just enough to snug it up.*

Shock Progression

M9-FRO comes with the ability to change shock progression in addition to all the other adjustments. There are 3 positions to make this change and they are located on the main frame on what we call the 'backbone'. The front most shock mount area. Your bike ships in the middle setting which is what we designed the bike around for a perfect middle ground.

-->To increase progression or 'steepen the shock curve:

- *Use a 4mm allen wrench and a 12mm open end wrench to loosen the shock bolt*
- *Remove the bolt and aluminum nut*
- *Move shock into the bottom most setting (closest to the ground) and slide bolt through the frame hole and shock pin itself*
- *Tighten shock bolt to 150 in/lbs*

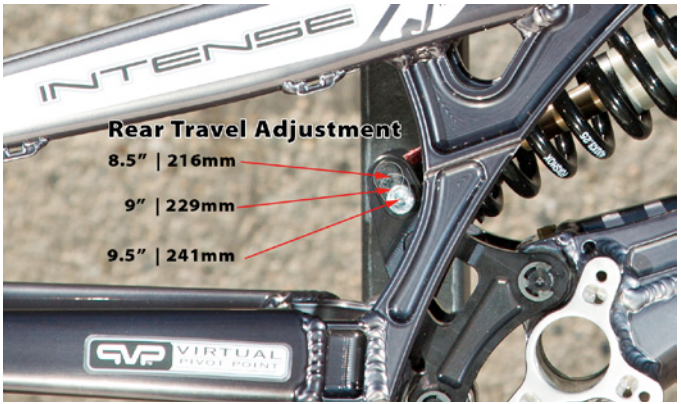
-->To decrease progression or 'flatten the shock curve':

- *Use a 4mm allen wrench and a 12mm open end wrench to loosen the shock bolt*
- *Remove the bolt and aluminum nut*
- *Move shock into upper most setting (closest to the saddle) and slide bolt through the frame hole and shock pin itself*
- *Tighten shock bolt to 150 in/lbs*

Rear travel adjustments via The 'Flip Chips'

M9-FRO comes with the ability to change suspension travel to an amazing 3 different settings, all in 1/2" increments. Your bike ships with 2 sets of travel adjustment chips, one set is offset for the 2 most extreme settings;
shortest-8.8" (top hole)
longest-9.8" (bottom hole)
The set of chips that has a bolt hole in the complete center of the chip is for the middle travel setting which is 8.5". These chips are precision machined to match the receiver built into the main lower link, be sure to place these chips in

straight, not crooked.
• Undo the M8x50 steel shock bolt with a 6mm allen wrench
the 'flip chips' will now be free to remove
• Put in the other set of chips OR if using the offset ones, flip the chip over to use the opposite side
• Slide in rear shock bolt and tighten to 190 in/lbs



G3 Adjustable Rear Dropout

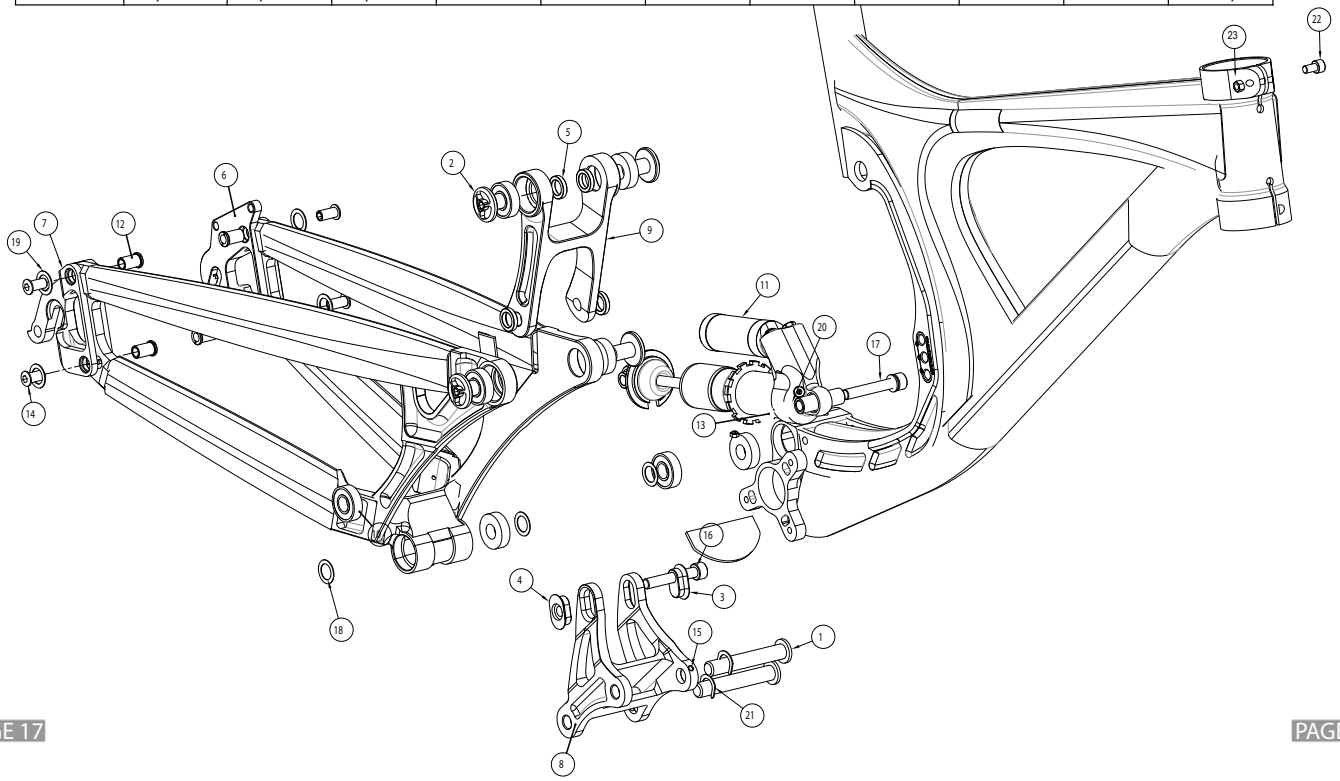
G3 rear dropouts can adjust your wheel base in 1/4" increments. It will also slightly effect the head angle and bottom bracket height. These changes are different depending on tires, fork, current AngleSet cup. A general estimate is that with every position change of the G3 you effect the bottom bracket height about 1/8th"(4mm) and you effect the head angle about a 1/4° with each change of the G3.

The G3 is fixed with standard chain ring bolts that can be found at a local bike shop.

To change the position of the G3:
• First loosen the top and bottom bolt to relieve tension on the G3 assembly
• Completely undo the bottom G3 bolt and remove the male and female sides, the washer will probably come out as well. (there is only one washer for each of the bolts (.5 x .75 x .025) and this washer should be placed in between the swing arm and the G3, on the inside of the frame.)
• You can now move the G3 assembly to the desired position, of the 3 available positions.
• Align the holes of the desired setting, slide in the female side bolt from the 'inside' of the frame while sliding up the thin washer between swing arm tabs and G3.
• Slide in the male side of the bolt, tighten up to 100 in/lbs of torque
• Be sure to tighten the top/fixed pivot bolt set of the G3 as well, also to 100 in/lbs

ITEM	1	2	3	4	5	6	7	8	9	10	11
PART #	130009	130087	130089	130090	130011	130053	130054	130088	130086	430002	350232
QTY	2	4	1	1	4	1	1	1	1	8	1
DESCRIPTION	Pivot Bolt	Shoulder Bolt	Left Flip Chip	Right Flip Chip	486 x .717 x .14(	Left Drop Out	Right Drop Out	Box Link	Top Link	6200 Bearing	Fox RC4 Shock

ITEM	12	13	14	15	22	16	17	18	19	20	21
PART #	400004	400005	410006	410008	410009	410011	410012	420002	420003	420004	420008
QTY	4	1	4	2	1	1	1	4	4	2	2
DESCRIPTION	Dropout Nut	Dropout Bolt	Dropout Nut	M4 Set Screw	M5 x 12	M8 x 50	M8 x 65	.5 x .75 x .06	.5 x .75 x .025	M8 Washer	E-Clip



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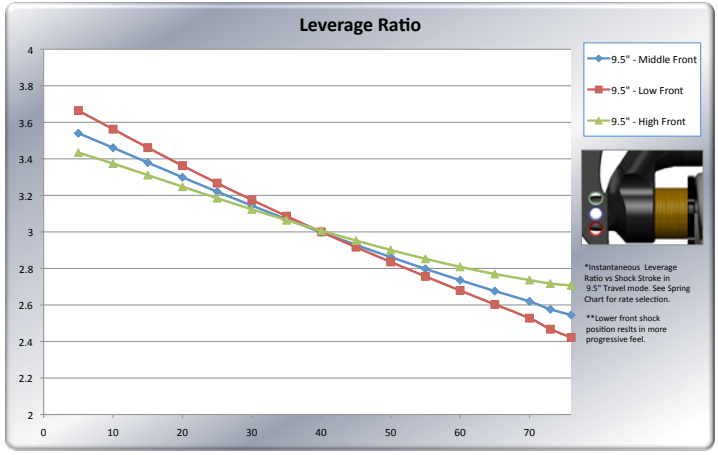
Travel Setting	Lever Ratio at sag point
8.5	2.88
9	3
9.5	3.22

*Sag results may vary.
Expect 30-35% based on calculations.
Adjust preload accordingly.

Rider Weight with Gear (lb)/(kg)	Frame Travel (in)	Spring Rate (lb/in)	Preload (turns)	Sag (%)
130/59	8.5/9	250	2-4	34
140/64	8.5/9	300	I	34
150/68	8.5/9	300	I	34
160/73	8.5/9	300	2-4	34
170/77	8.5/9	350	I	34
180/82	8.5/9	350	2-4	34
190/86	8.5/9	400	I	34
200/91	8.5/9	400	2-4	34
210/95	8.5/9	450	I	34
220/100	8.5/9	450	2-4	34
230/105	8.5/9	500	I	34
240/109	8.5/9	500	2-4	34
250/114	8.5/9	550	I	34
Rider Weight with Gear (lb)/(kg)	Frame Travel (in)	Spring Rate (lb/in)	Preload (turns)	Sag (%)
130/59	9.5	300	I	34
140/64	9.5	300	2-4	34
150/68	9.5	350	I	34
160/73	9.5	350	2-4	34
170/77	9.5	400	I	34
180/82	9.5	400	2-4	34
190/86	9.5	450	I	34
200/91	9.5	450	2-4	34
210/95	9.5	500	I	34
220/100	9.5	500	2-4	34
230/105	9.5	550	I	34
240/109	9.5	550	2-4	34
250/114	9.5	600	I	34

CANE CREEK
Double Barrel Spring Chart



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Warranty statement:

1. All Intense Frames are under warranty for two years from the date of purchase to the original owner only.
2. For warranty issues on Fox Shox call (800)Fox-Shox. Please note that Intense does not warranty or repair shocks.
3. For warranty issues on CaneCreek headsets or shocks call 800-234-2725. Please note that Intense does not warranty or repair shocks or headsets.
4. Your completed frame warranty card must be returned to Intense within 30 days of purchase to secure warranty coverage.
5. The warranty will not cover normal wear and tear, normal maintenance items, damage, failure, accidents, crashing, abuse, mis-use, neglect, or any damage caused by bicycle components.
6. Intense frames are not intended for use in stunt riding, ramp riding, hucking or any similar activity.
8. Intense Cycles will not assume any shipping charges for warranties or repairs and will not accept any frame(s) returned freight collect or without a return authorization number (RA#).
9. Any repairs or modifications performed by anyone other than an authorized Intense Cycles agent will void the warranty.
10. No cash refunds
11. No upgrades or trade-ins.
12. Although Intense Cycles assumes no responsibility for owner-induced damage, we will repair damaged frames to the owner for a minimal charge.
13. Intense Cycles assumes no responsibility for bodily injury or frame damage due to frame failure caused by abuse, neglect, misuse, or improper maintenance or set up.
14. Frames purchased from U.S. dealers in countries with authorized Intense international distribution will void the 2 year factory warranty.

NOTE: To handle a warranty or service claim, contact your local bike shop, dealer/distributor. If none of these options work, contact Intense Cycles at cs@intensecycles.com to get a return authorization number (RA#). Intense Cycles WILL NOT ACCEPT any warranty or repair returns without an RA#.