



# Redefining All Mountain, again...

- 185-110-0mm Travel Settings with OTS Twinloc shock technology
- Carbon mainframe moulded in a single piece with IMP5 technology
- Frame weight of 2.8kg (6.2lb) including shock (535g)





traction control







#### Lighter, longer All Mountain performance

• Travel to weight ratio equal to Genius trail bike – more travel per gram than Ransom and even Spark









	SPARK	GENIUS	GENIUS LT	VOLTAGE FR	GAMBLER
Travel	110mm 4.4in	150mm 5.9in	185mm 7.3in	135-180mm 5.3 <b>–</b> 7.1in	190-230mm 7.5-9.1in
Uphill	75%	50%	40%	5%	
Downhill	25%	50%	60%	95%	100%

# GenU5



#### **Geometry – Ransom Refined**

- Two geometry settings for versatility, changed in seconds with shock chip
- Low Position Lower BB and slacker head angle compared to Ransom
- High Position BB Higher than Ransom, head angle the same
- · Geometry refined through prototyping and rider feedback



Ransom



		Low	High
Rear Wheel Travel	165mm - 6.5"	185mm - 7.3"	189mm - 7.4"
BB Offset	16mm - 0.6"	15mm - 0.6"	23mm - 0.9"
BB Height with Schwalbe 2.4" @ Zero Travel	360mm - 14.2"	359mm - 14.1"	367mm - 14.4"
Head Angle	67°	66.3°	67°
Chainstay Length	430mm - 16.9"	428mm - 16.9"	426mm - 16.8"

















Updated Geometry, Improved Kinematic

- Frame and shock developed as a system in collaboration with DT Swiss
- · Complete control of kinematic and shock curve







- Building on proven Equalizer 2 shock
- Shock is inverted compared to Equalizer 2, this;
  - Increases clearance allowing our existing OTS technology to be applied to a bike with such long travel and short chainstays
  - Reduces the bike's unsprung mass by 400g enabling the swing arm to react faster to impacts
  - Lowers the bike's centre of gravity during impacts









- Stroke increased from 50-65mm ratio reduced 3:1 to 2.8:1, reducing shock pressures 15%
- Sag Indicator Ease of shock setup greatly improved
- Improved sealing at main piston and traction control cable entry
- New fender design encloses shock
- More Linear Volumes Adjusted

Comparison of Equalizer 2 and 3





# **Genus**





- Kinematic targets and performance were well defined from history
- Final kinematic between progressive Trail Bike curve of Genius, and linear curve of Ransom







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# GenU5





Emile



# Twinloc System on all models

- Still unique in the industry
- · The tool that frees us to design such a versatile bike













- Low BB height for best control
- Slacker head angle and longer wheelbase for more high speed stability







# TRACTION CONTROL MODE – Ride Position





(Low BB Setting)

Rear Wheel Travel	Tw	Front Wheel Travel
·///////.0·////////	Lockout	:////////0///////
//4.3// <b>110</b>	traction control	180mm - 7.1"
7.2 / <b>185</b>	Full Mode	180mm - 7.1"



(Low BB Setting)

Rear Wheel Travel		Front Wheel Travel		
	Lockout			
// 4.3 // <b>110</b> ]/////	traction control		180mm - 7.1"	
7.2 / <b>185</b>	Full Mode		180mm - 7.1"	

# <u>G</u>CNUS



#### Mainframe Structure -

• One piece carbon Mainframe with IMP5 technology

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• Tapered head tube increases stiffness and steering precision and allows the down tube/ head tube junction to be optimized







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#### Mainframe Structure -

• IMP5 allows use to reduce dramatically the separate components require to construct the mainframe









### **Ransom Head Tube**

- Old Tube to Tube process
- Manufacture is convenient but excess material and discontinuity at joint

### Genius LT Head Tube

- IMP5 process cancels excess material and allows fibre layers to continue around critical joint
- Rewards of a more complex process













### **Ransom Bottom Bracket**

- · Large alloy piece bonded to carbon structure
- Requires Extra thickness at bond

# **Genius LT Bottom Bracket Area**

**B.B** 192 IP.F.

• IMP5 process allows us a fully integrated BB and main pivot, no joins, lighter weight, continuous fibres.

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#### Structural design – Stiffness to match Travel

- Oversized bearings and hardware Main pivot Ø17mm, linkage pivots Ø15mm
- Main pivot bearings are spaced 15mm wider than Ransom to maximise torsional stiffness
- Full length seat tube pivot meets extra stiffness requirements of longer travel
- CST much longer weld contact than Ransom





### **Optimised Linkage**

• One piece aluminium design







# IDS-SL

- Our lightest IDS system everDesigned for use with DT RWS axle/skewers
- Very simple wheel assembly and tightening
- Three hub options







Hub	Axle/ Skewer	IDS LH	Hanger	IDS RH
142x12mm (Genius LT 10,20,30)	12mm RWS	142 AVS	142-RWS12	14 H-14 H
135x12mm (Aftermarket)		135 PUS	Street of the st	12-2-2-2-2-2-2-2-2-2-2-2-2-2-2-2-2-2-2-
135x10mm - 5mm RWS (Genius LT 40)	5mm RWS		A STO OF A S	Hand Contraction of the second

# **FCNUS**



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- Stiffer mount
- Caliper and cable protected, cancelled parts save weight









### Chain Blocker

- · Plate sandwiches chain between small chainring
- Compatible with 3x and 2x chainsets
- Prevent chain drop damaging frame



## ISCG 05

- Optional adaptor for riders wishing to run a chain device for single or 2x chainset
- Removable to leave clean light mainframe





### **Tyre Clearance**

• Increased 4mm compared to Ransom chain stay



# **GenUS**



### **Cable Routing**

- · Full length housings throughout best sealing and security
- All Cables run under down tube zip tie guides allow fiddle free cable replacement
- Clean routing for telescopic seat post cable or hydraulic



Internal CST Cable routing

- · Rear Derailleur cable runs inside RH CST
- Cable is protected, lines are clean







Versatility

Accepts 750ml water bottle

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• Possible to drop a full length seat post Ø31.6mm

# **FLNUS**





Size		М			L		
Chip Setting	Low	High	Low	High	Low	High	
Vertical Rear Wheel Travel mm	186	190	186	190	186	190	
Fork Rake mm			41				
Head Tube Angle mm	66.3°	67.0°	66.3°	66.9°	66.3°	66.9°	
Fork Length mm			565	5		_	
Lower Headset Length mm			3				
Head Tube Length mm			120	)			
Horizontal Top Tube Length mm	560	558	585	583	610	608	
Top Tube Actual Length mm	502 523		54	544			
Seat Tube Angle	73.5°	74.2°	73.5°	74.1°	73.5°	74.1°	
BB Centre to Top of Seat Tube mm	440 460 4		49	90			
BB Centre to Top Tube Centre mm	440 460		49	490			
Chainstay Length mm	428	426	428	426	428	426	
BB Offset mm	15	23	15	23	15	23	
BB Height @0% Travel mm	358	367	15	23	15	23	
Wheel OD mm	687						
Standover Height @100mm fwd BB mm	775	788	775	776	783	796	
Wheel Base mm	1125	1122	1150	1147	1175	1172	
Reach mm	383	390	408	414	433	439	
Stack mm	599	594	599	594	599	594	
Stem Length mm	60	)	60	)	70	70	
Cockpit Length mm	620	618	645	643	680	678	

Size	S		N	1	L	-	
Chip Setting	Low	High	Low	High	Low	High	
Vertical Rear Wheel Travel "	7.3	7.5	7.3	7.5	7.3	7.5	
Fork Rake "		1.6					
Head Tube Angle	66.3°	67.0°	66.3°	66.9°	66.3°	66.9°	
Fork Length "			22.	2			
Lower Headset Length "			0.1				
Head Tube Length "		_	4.7	7			
Horizontal Top Tube Length "	22.0	22.0	23.0	23.0	24.0	23.9	
Top Tube Actual Length "	19.8	3	20	20.6		21.4	
Seat Tube Angle	73.5°	74.2°	73.5°	74.1°	73.5°	74.1°	
BB Centre to Top of Seat Tube "	17.3 18.1			19.3			
BB Centre to Top Tube Centre "	17.3 1		18	.1 19.		.3	
Chainstay Length "	16.9	16.8	16.9	16.8	16.9	16.8	
BB Offset "	0.6	0.9	0.6	0.9	0.6	0.9	
BB Height @0% Travel "	14.1	14.4	0.6	0.9	0.6	0.9	
Wheel OD "	27.0						
Standover Height @100mm fwd BB "	30.5	31.0	30.5	30.6	30.8	31.3	
Wheel Base "	44.3	44.2	45.3	45.2	46.2	46.2	
Reach "	15.1	15.3	16.0	16.3	17.0	17.3	
Stack "	23.6	23.4	23.6	23.4	23.6	23.4	
Stem Length "	2.4		2.	4	2	.8	
Cockpit Length "	24.4	24.3	25.4	25.3	26.8	26.7	