

*ORBEA*

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# BLUE PAPERS

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*OCCAM* / ALUMINIUM  
TECHNICAL MANUAL

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# GEOMETRY / AM

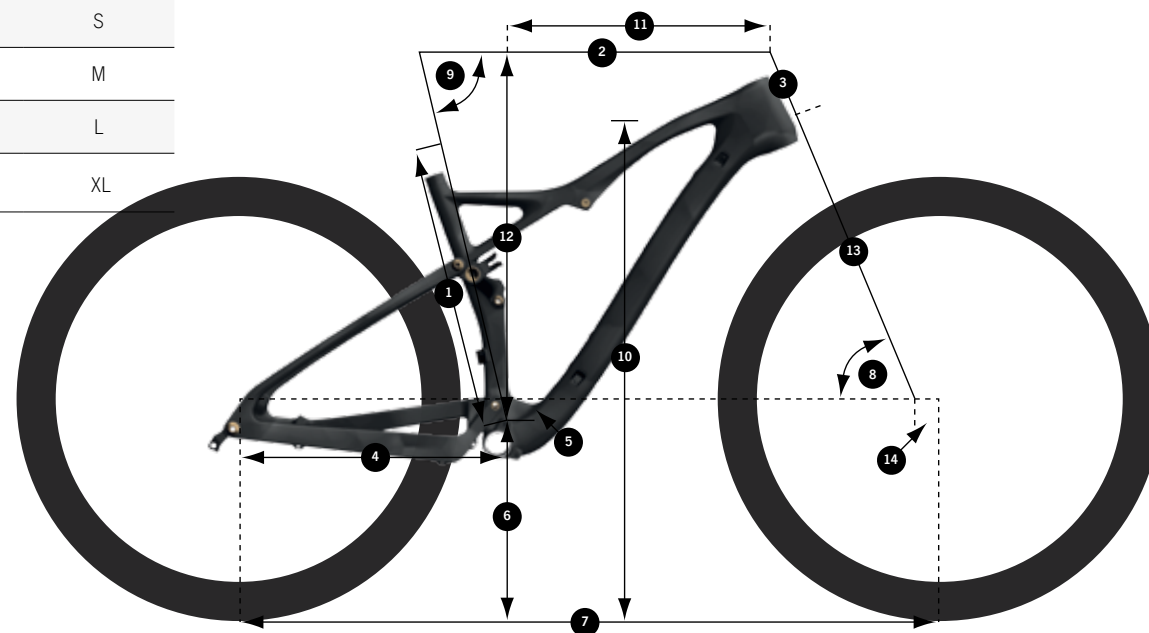


150MM 27.5

SIZES (mm)	27x15,5	27x17	27x18,5	27x20,5
1. Seat tube	Alloy 400	432	470	520
2. Top tube (EFF)	563	590	612	637
3. Head tube	110	120	130	145
4. Chain stay		425		
5. BB drop		13		
6. BB height		342		
7. Wheelbase	1121	1149	1173	1200
8. Head angle		66,5		
9. Seat angle		74,5		
10. Fork offset – Rake		44		
11. Standover	713	741	768	785
12. Reach	406	431	450	472
13. Stack	585	595	604	617
14. Fork length		539		

SIZE (mm)	S	M	L	XL
Crank	170	175	175	175
Stem	50	50	70	70
Handlebar	20mm rise	20mm rise	20mm rise	20mm rise

HEIGHT (cm)	SIZES
150-165	S
160-175	M
170-185	L
180-198	XL



\* Estimated measurements.

# GEOMETRY / TR

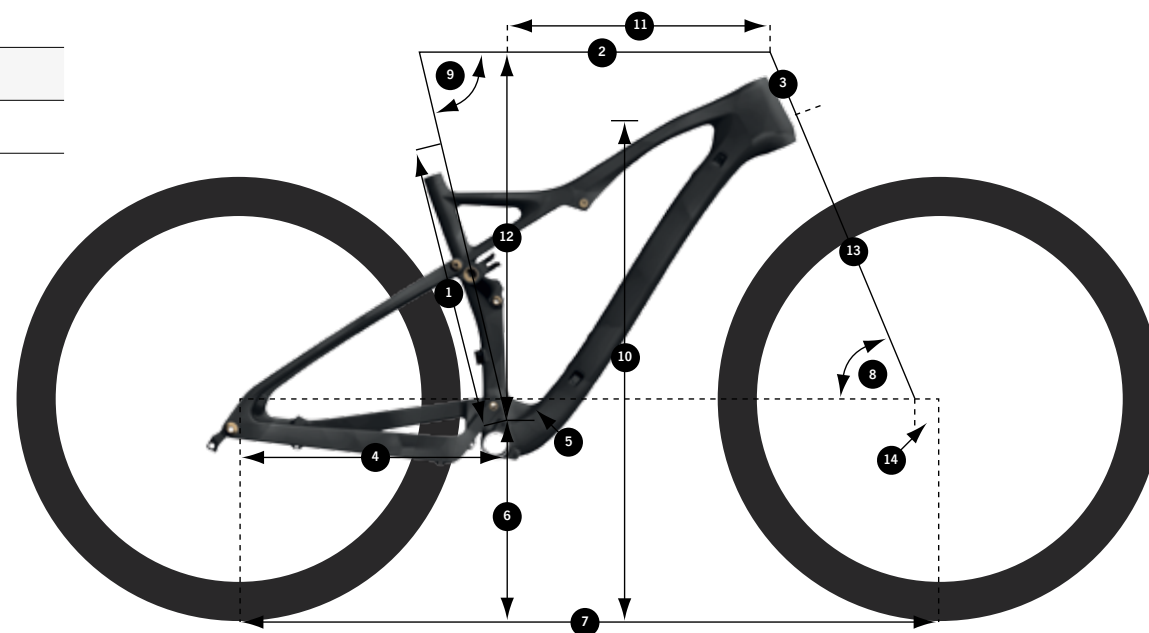


120MM 29

SIZES (mm)	29x17	29x18,5	29x20,5
1. Seat tube	432	470	520
2. Top tube (EFF)	599	621	647
3. Head tube	115	125	140
4. Chain stay		435	
5. BB drop		35	
6. BB height			
7. Wheelbase	1150	1173	1201
8. Head angle		68	
9. Seat angle		74	
10. Fork offset – Rake		51	
11. Standover	743	769	782
12. Reach	431	450	472
13. Stack	606	615	629
14. Fork length		520,8	

SIZE (mm)	M	L	XL
Crank	175	175	175
Stem	50	70	70
Handlebar	FLAT	FLAT	FLAT

HEIGHT (cm)	SIZES
160-175	M
170-185	L
180-198	XL



\* Estimated measurements.

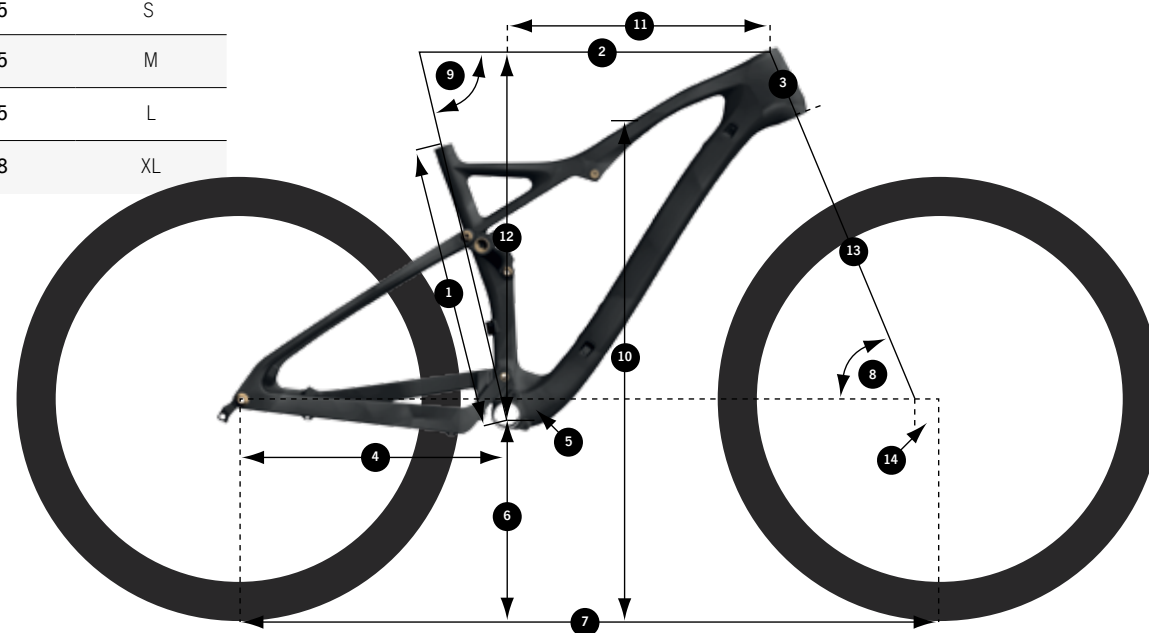
# GEOMETRY / TR



	S	M	L	XL
<b>SIZES (mm)</b>	<b>29x15,5</b>	<b>29x17</b>	<b>29x18,5</b>	<b>29x20,5</b>
1. Seat tube	393	432	470	520
2. Top tube (EFF)	572	599	621	647
3. Head tube	105	115	125	140
4. Chain stay		435		
5. BB drop		33		
6. BB height		342		
7. Wheelbase	1122	1150	1173	1201
8. Head angle		67,5		
9. Seat angle		74		
10. Fork offset – Rake		51		
11. Standover	725	743	769	782
12. Reach	406	431	450	472
13. Stack	596	606	615	629
14. Fork length		537,1		

SIZE (mm)	S	M	L	XL
Crank	175	175	175	175
Stem	50	50	70	70
Handlebar	FLAT	FLAT	FLAT	FLAT

HEIGHT (cm)	SIZES
150-165	S
160-175	M
170-185	L
180-198	XL



\* Estimated measurements.

# SPECIFICATIONS AM/TR

ALLOY		
	27	29
BB	92 mm press fit	
ISCG	NO	
Fork	150 mm	130 mm
Shock size	200x51	184x44
Suspension travel	150 mm	120 mm
Shock mounting hardware	21,84x8 mm front, 16,46x8 rear	
Seatpost	31,6 mm	
Seat clamp	35 mm	
Front derailleur	Direct mount side swing only, removable mount	
Head tube	Tapered 1,125"-1,5" integrated. Specs: FSA Orbit C-40 (NO.42)	
Rear axle standard	Boost 148	
Max tire size	2.4 (tire size varies by brand, some may not fit)	
Crankset	168 mm Q factor compatible	
Chainrings	2X: 24-38T max	
	1X: 32T max	

# FRAME AND MATERIAL

Orbea frames are carefully designed to be durable, efficient, and easy to maintain. Occam tubes are stiff and light, giving excellent steering precision and pedaling efficiency. Occam carbon frame is extremely resistant to corrosion, making it perfect for riding off road. With only a minimum amount of maintenance, it's easy to keep your Occam in top condition.

## 1) Keep your mountain bike clean

Washing your bike with mild soap and water will keep you looking stylish and allow you to check the condition of the frame and components. Don't use high water pressure and avoid spraying water into bearings or frame tubes. Citrus degreasers are biodegradable and do a great job of removing dirty grease from gears and chain.

## 2) Keep your mountain bike lubed

Once your bike is clean, it's a good time to put fresh lube on the chain. Use only enough to get inside the links and wipe off any excess because it will attract dirt. Headset and pivot bearings should be inspected every few months for smoothness and to ensure that the seals are intact and lube is clean.

## 3) Inspect your mountain bike before you ride

Do a quick check before every ride to make sure your bike is in excellent condition. It is very common to discover small issues at home that can become big problems on the trail. **CHAIN** Is the chain dirty, noisy or dry? Clean and lube your chain before riding. **BRAKES** Check your brakes to make sure they are working correctly. Check for missing/loose caliper and rotor bolts. **TIRES** Look for damage to the sidewalls of your tires. Check and adjust tire pressure. **WHEELS** Spin the wheels and look for wobbles, check for loose or broken spokes. Check quick release levers to make sure they are functioning properly. **FRONT END** Stand over the saddle, pull on the brakes and rock the bike back and forth. Feel for any play or knocking that might indicate a loose headset, loose brake rotors or calipers, or worn fork bushings. **TEST RIDE** Take a quick ride up and down the street to make sure your bike is shifting and braking properly. Listen for unusual noises.

## FULL SUSPENSION SPECIFIC MAINTENANCE NOTES

### Bolt torque check

Pivot point bolts should be retightened regularly

### Frame pivot bearings

Pivot point bearings should be replaced as soon as they show any play or signs of seizure, otherwise the assembly hardware and frame could be damaged beyond repair.

## AFTER A CRASH OR IMPACT

Falling is part of mountain biking and it's impossible to avoid minor accidents. If you crash your Occam, please make sure you are okay and seek medical attention if necessary. If you are not injured, you should check your bike before continuing:

**1) Inspect your frame and components for damage.** Do not ride your bike if any problems are detected.

## WHAT TO LOOK FOR

Inspect Frame and fork for evidence of cracking or bending. If cracks are discovered, discontinue use immediately.

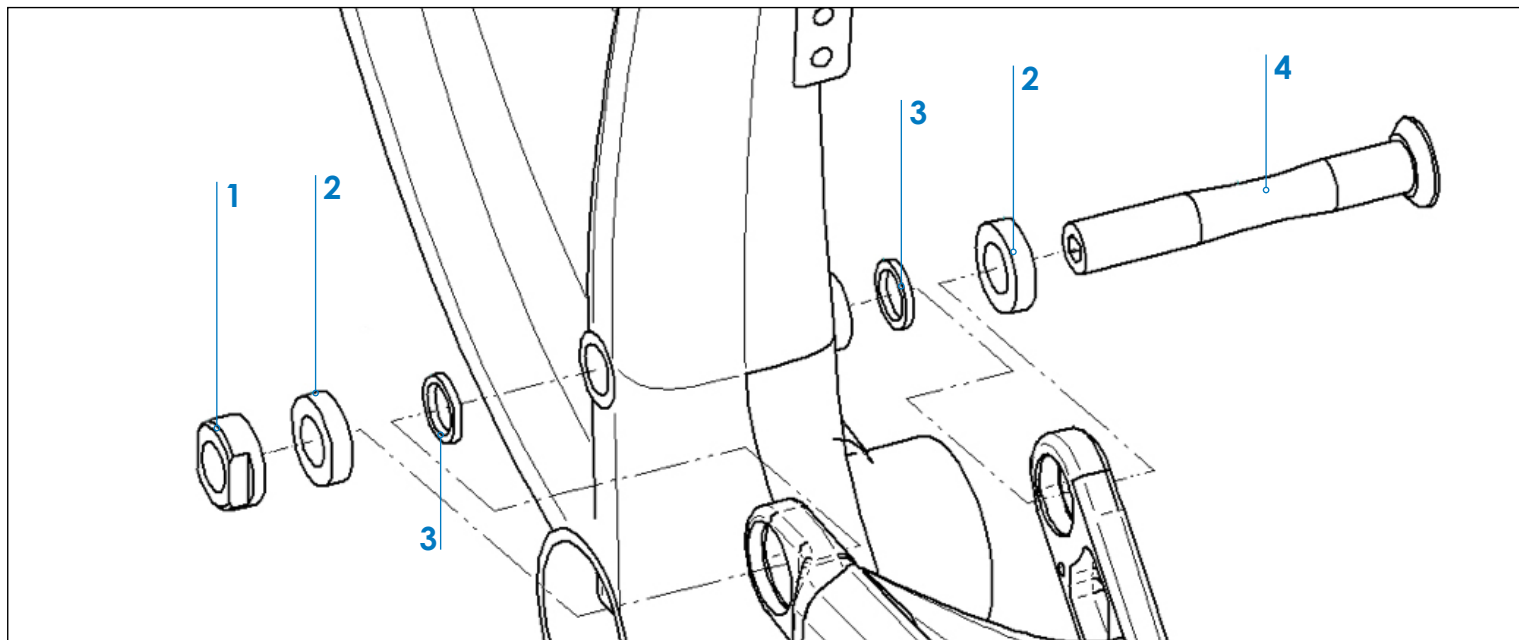
Check the drivetrain and spin the wheels to make sure components are operating correctly. If you discover damage to your components, discontinue use immediately.

Even if you don't find any damage, pay careful attention to the sound of your bike when you continue riding. Unusual noises can be caused by cracks or other problems. A well-maintained bike will be quiet and free of creaks or squeaks. Investigate and locate the source of any new noises.

**2) Bring your bike to your Orbea dealer for professional inspection.** Some damage can only be detected by disassembling the bike to check for cracks or other signs of stress.

**A crash or impact can put extraordinary stress on your bike and components, causing them to fail or to fatigue prematurely. Failure can happen suddenly with no warning, causing loss of control, serious injury or death.**

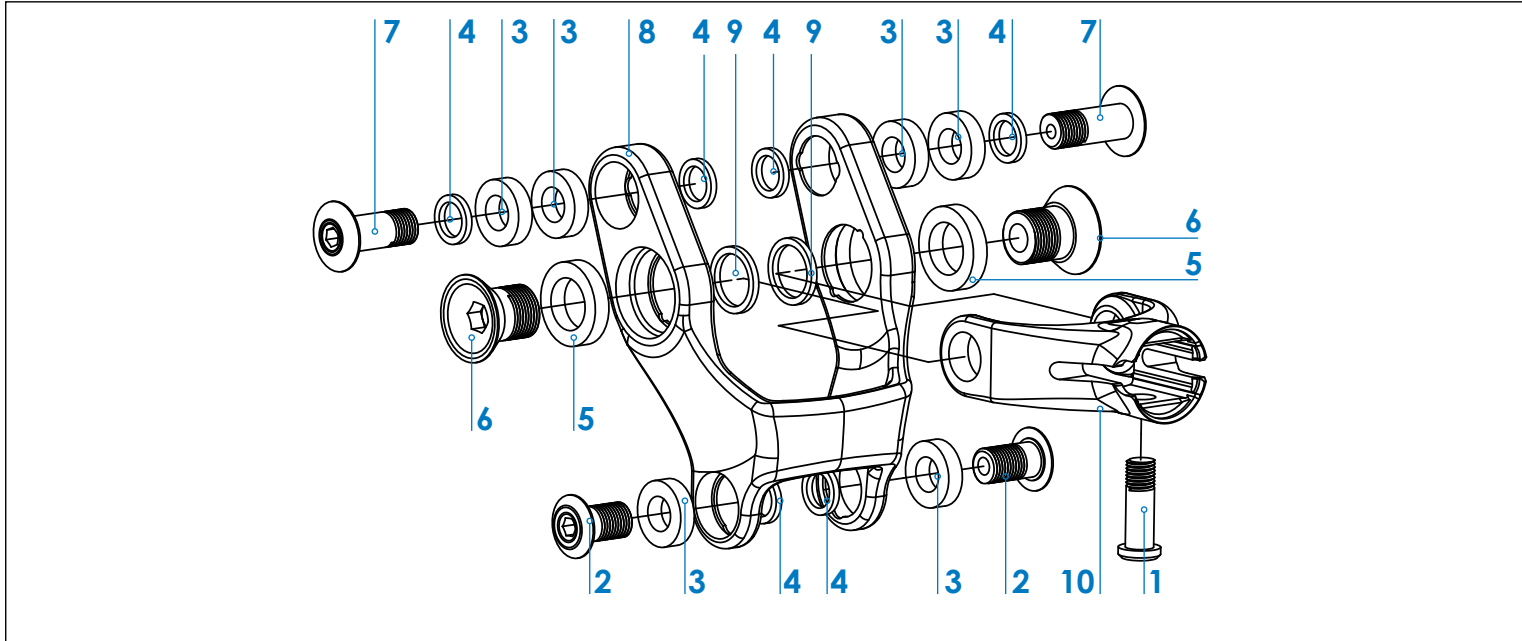
# PARTS & HARDWARE



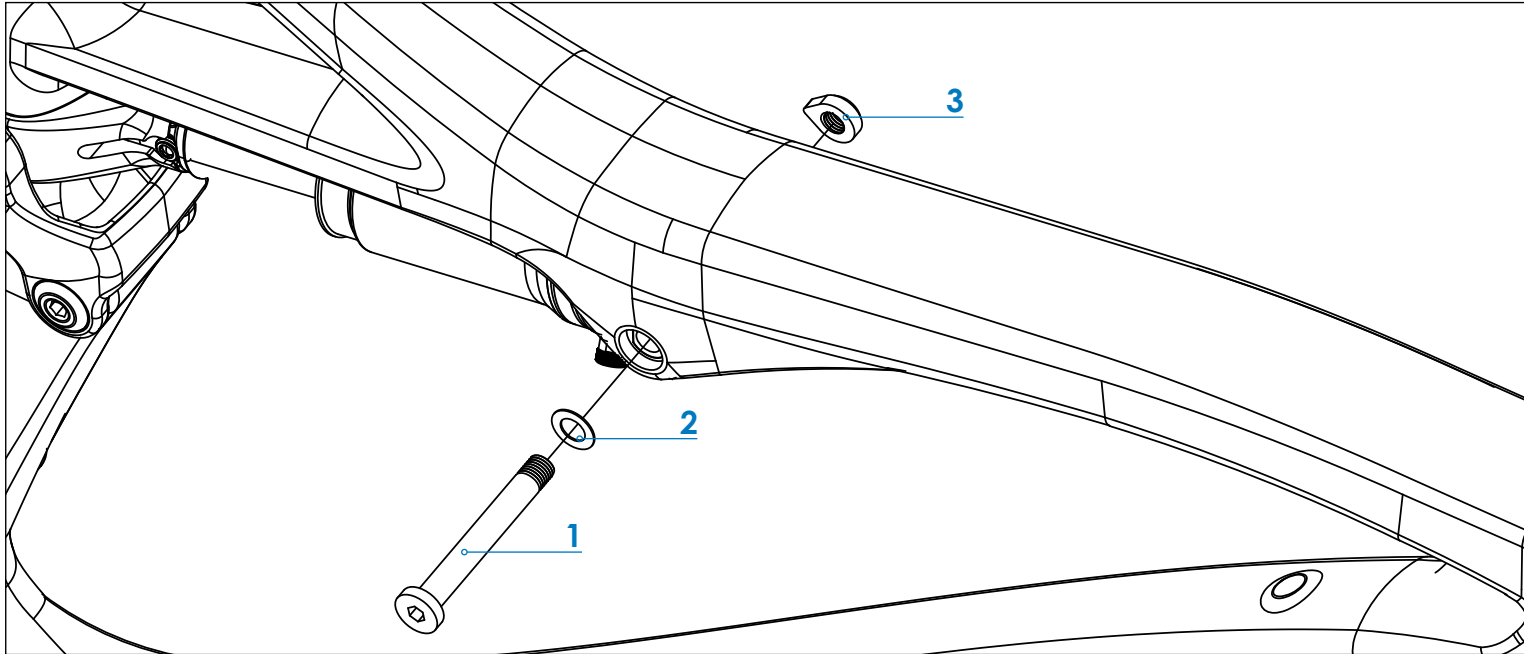
MAIN PIVOT (ALLOY ONLY)

	Number	Name / Description
1	12310021	Occam alu main pivot nut
2	16100241	12x21x5 bearing
3	12320008	Occam alu main pivot spacer
4	12330009	Occam alu main pivot axle



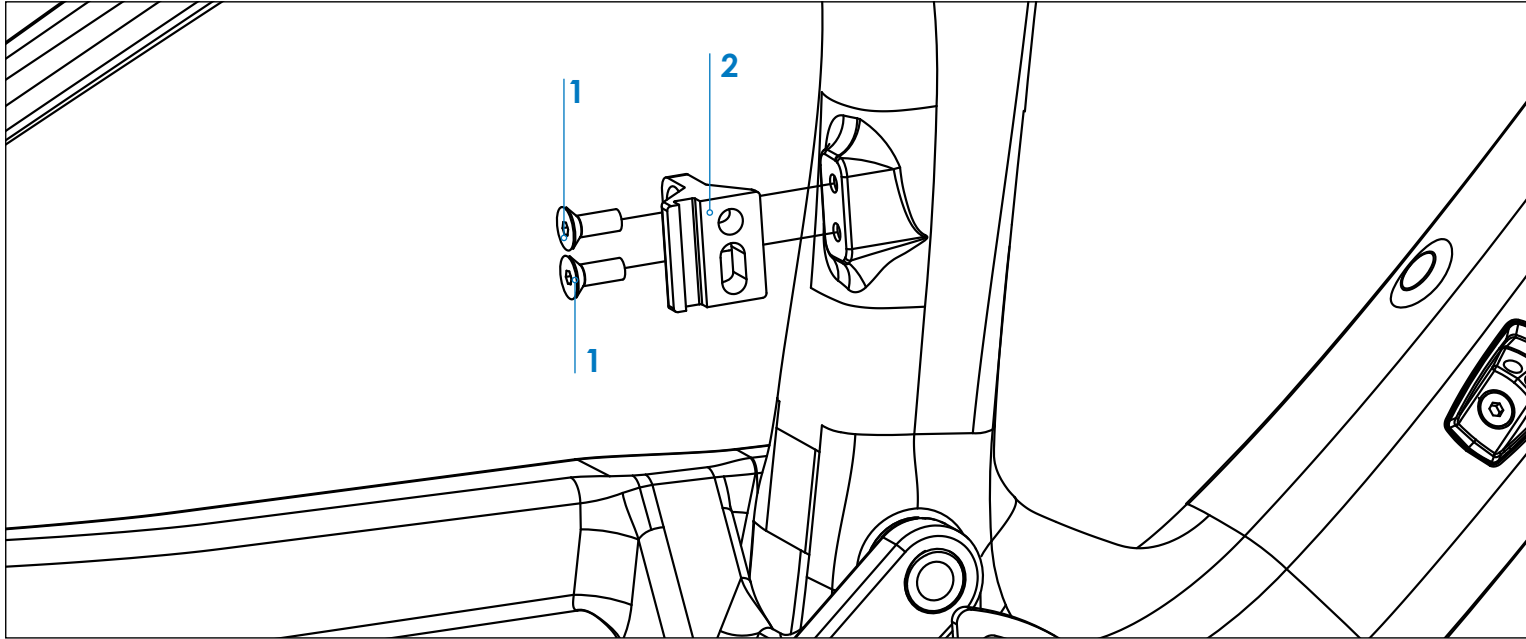


LINK			
	Number		Name / Description
1	12300025		Shock bushing bolt
2	12300024		Link/front triangle pivot bolt
3	16100240		10x19x5 bearing
4	12320005		Link/front triangle pivot spacer
5	16100242		15x24x5 bearing
6	12300020		Shock extender pivot bolt
7	12300021		Link/seatstay pivot bolt
8	12330003		Link
9	12320001		Shock extender pivot spacer
10	12330004		Shock extender



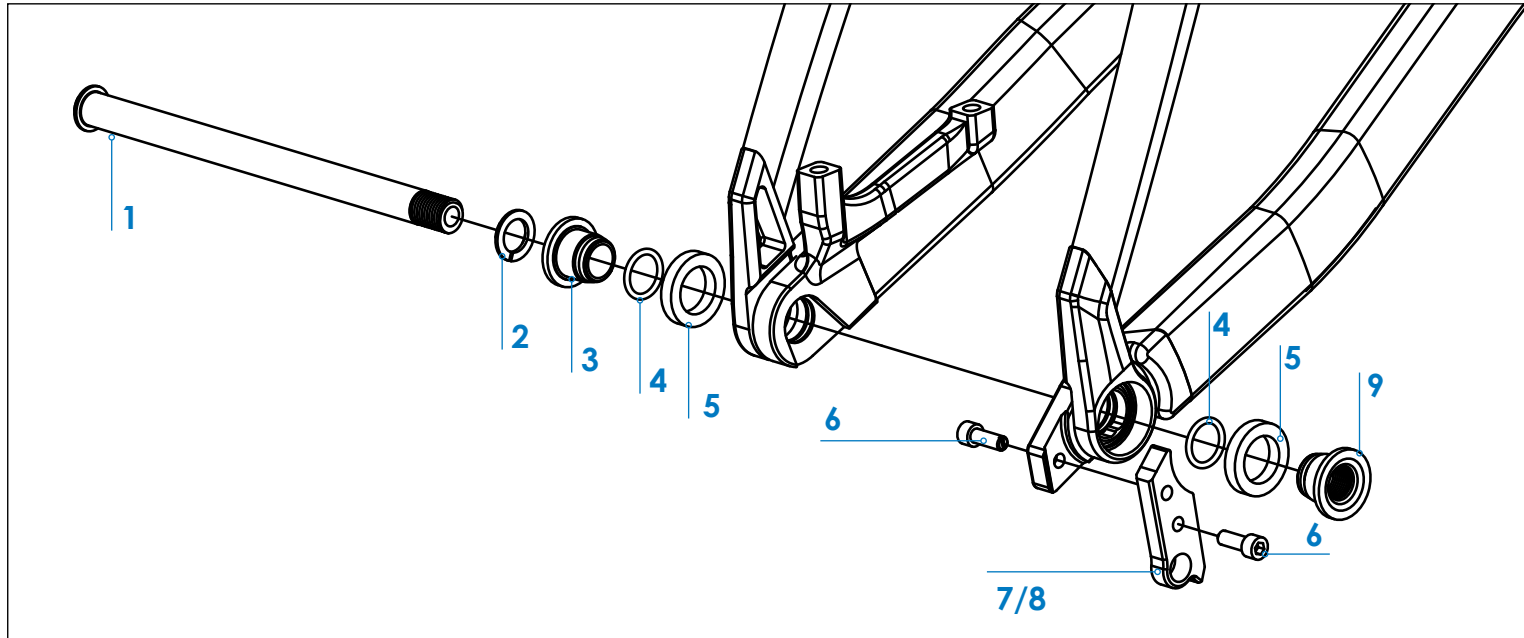
SHOCK FRONT TRIANGLE PIVOT

	Number	Name / Description
1	12300023	Front triangle shock bolt
2	12320003	Front triangle shock bolt washer
3	12310020	Front triangle shock nut



REMOVABLE FD MOUNT

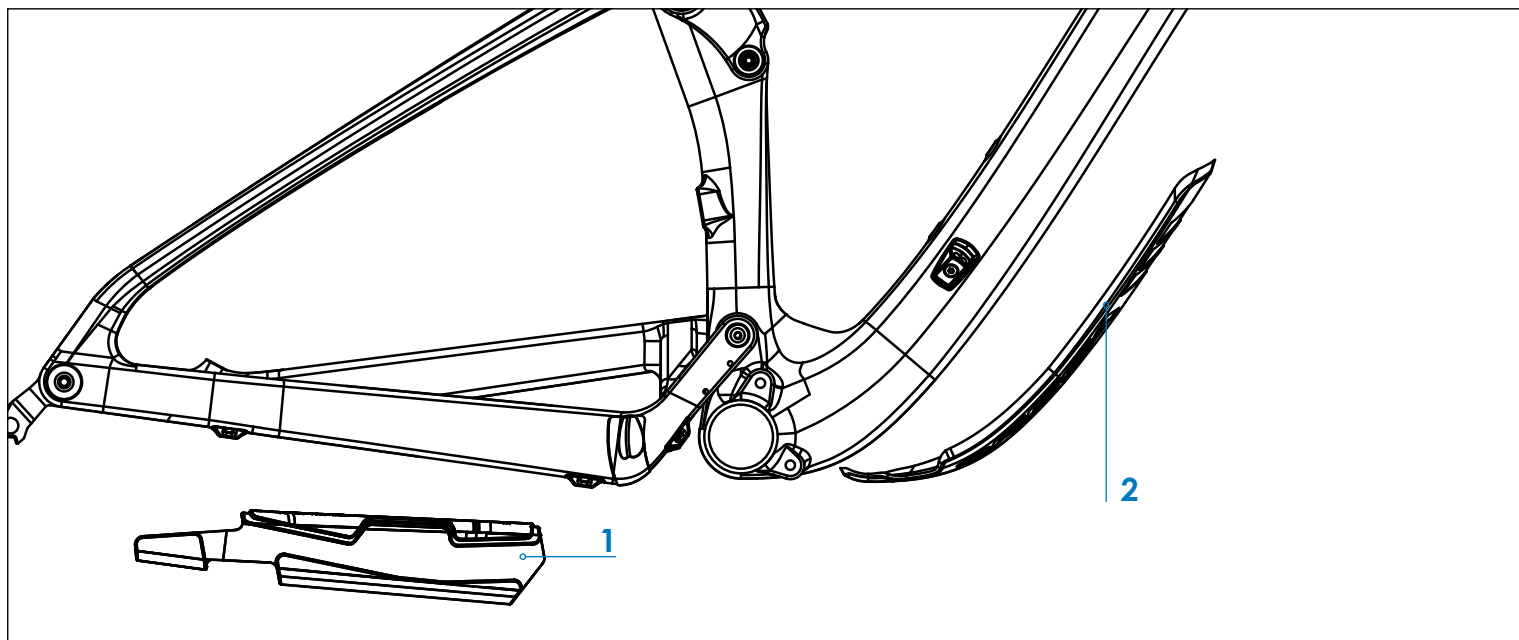
	Number	Name / Description
1	12309052	TORNILLO INOX M5x10 DIN7991
2	11200250	FD ADAPTER



REAR AXLE PIVOT (ALLOY ONLY)

	Number	Name / Description
1	11100055	Occam 12x148 axle
2	12320004	Axle washer
3	12330007	Occam alu rear axle pivot left insert
4	11100155	Insert clipping O-ring 15,6x1,78
5	16100243	17x26x5 Bearing
6	12300026	Fuse hanger bolt
7	15430162	Direct mount hanger
8	15430163	Standard hanger
9	12330008	Occam alu rear axle pivot right insert

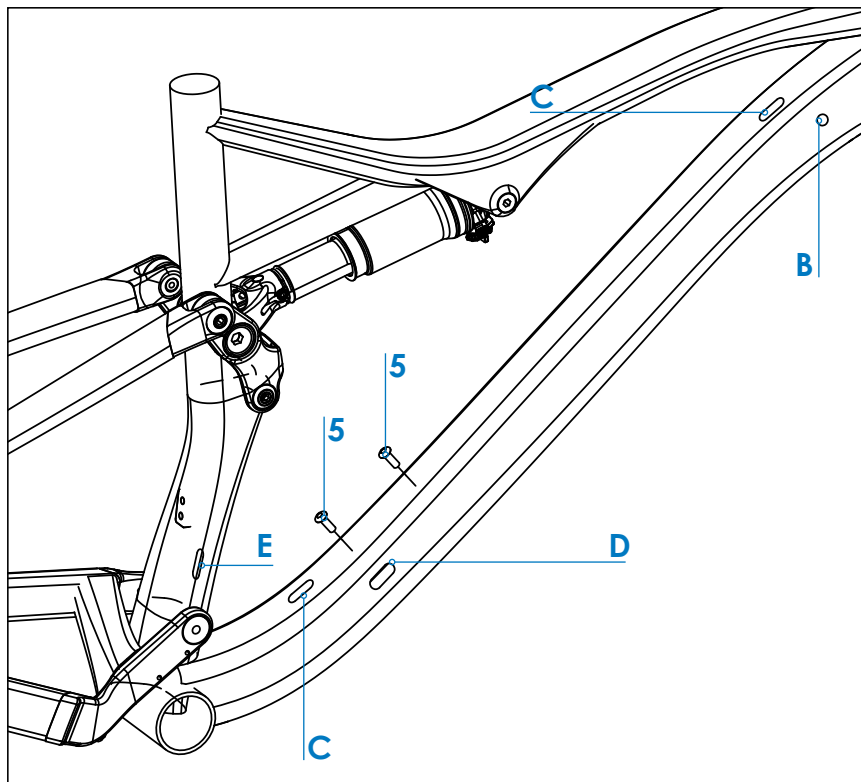
# PARTS & HARDWARE



## FRAME PROTECTORS

	Number	Name / Description
1	11000366	CHAINSTAY
2	11000368	DOWNTUBE

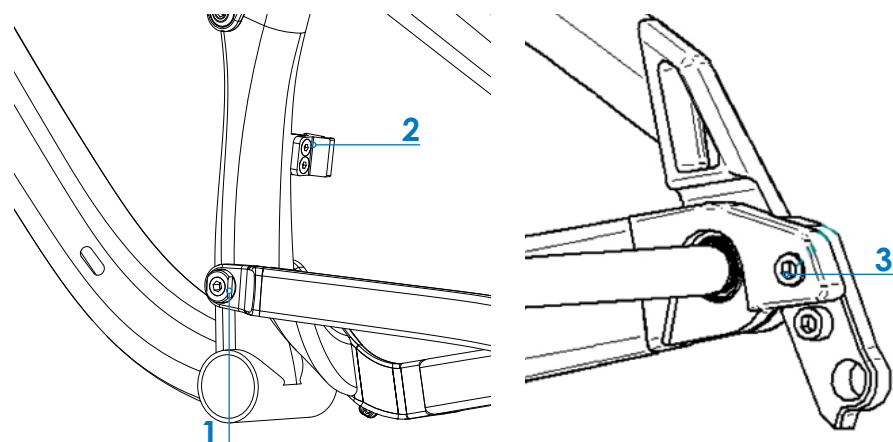
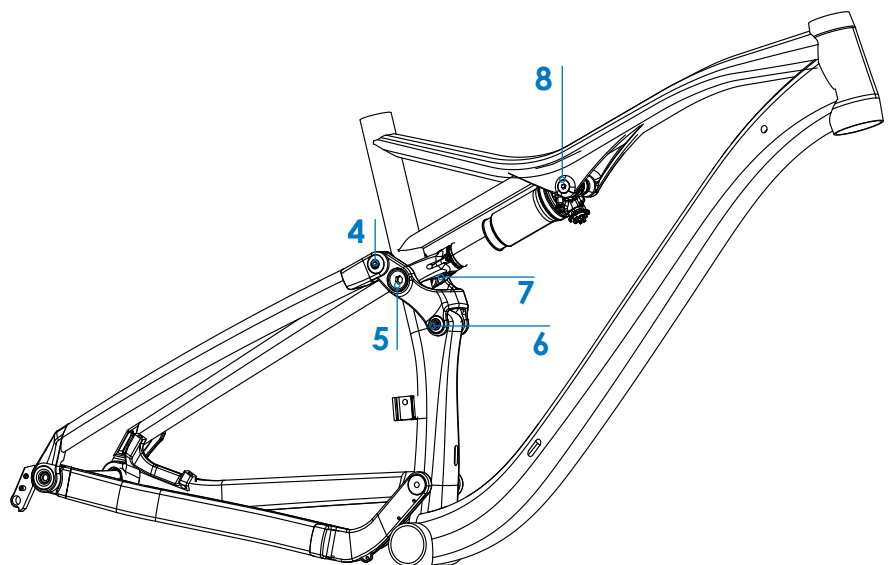
# CABLE ROUTING / ALU



REAR AXLE PIVOT (ALLOY ONLY)		
	Number	Name / Description
1	16100125	8x22 rubber cap
2	11001149	8 mm hole cap for 4 mm cable
3	16100113	-
4	11001176	-
5	12309051	Tornillo portabidon

GUIDES / CAPS												
Guide position	2X without seat post remote		2X with seat post remote		1X without seat post remote		1X with seat post remote		Di2 without seat post remote		Di2 with seat post remote	
	Guide type	Cables	Guide type	Cables	Guide type	Cables	Guide type	Cables	Guide type	Cables	Guide type	Cables
a	1	RB+RD	1	RB+RD	1	RB+RD	1	RB+RD+SP	5	RB	3	RB + SP
b	2	FD	2	SP	3	-	2	FD	6	1 cable	6	1 cable
c	1	RB	1	RB+SP	1	RB	1	RB	5	RB	3	RB
d	1	FD+RD	1	RD	1	RD	1	FD+RD	6	1 cable	6	1 cable
e	1	-	1	SP	1	-	1	SP	1	-	1	-

# TORQUE SPECS / ALU



OCCAM TORQUE SPECIFICATIONS		
Fastener	Required tools	Torque
1	15 mm spanner + 6 mm hex	15 Nm
2	3 mm hex	5 Nm
3	4 mm hex	5 Nm
4	5 mm hex	12 Nm
5	8 mm hex	12 Nm
6	5 mm hex	12 Nm
7	5 mm hex	6 Nm
8	5 mm hex	6 Nm

Use hex key to hold the axle and tighten nut with spanner



## CHECKING AND ADJUSTING TORQUE

Bolt tightening torques should be checked frequently, specially if any kind of malfunctioning, noise, play or vibration is detected in the bike.

# SHOCK PRESSURE CHART / ALLOY AM

Rider weight (kg)	ALLOY			
	EVOL		non EVOL	
	Pressure	Rebound clicks	Pressure	Rebound clicks
60	162	3	114	3
65	184	4	130	4
70	199	5	140	5
75	213	6	150	6
80	228	7	161	7
85	242	8	171	8
90	256	9	180	9
95	271	10	191	10
100	285	11	203	11

**PRESSURE AND REBOUND CLICKS:** The values provided in the chart are just a starting point, in order to achieve maximum performance the shock setup should be suited to the rider and terrain.





# SHOCK PRESSURE CHART / ALLOY TR

Rider weight (kg)	ALLOY			
	TR			
	EVOL		non EVOL	
	Pressure	Rebound clicks	Pressure	Rebound clicks
60	160	3	117	3
65	182	4	133	4
70	197	5	144	5
75	211	6	154	6
80	226	7	165	7
85	240	8	175	8
90	254	9	185	9
95	269	10	196	10
100	283	11	206	11

PRESSURE AND REBOUND CLICKS: The values provided in the chart are just a starting point, in order to achieve maximum performance the shock setup should be suited to the rider and terrain.



# ORBEA WARRANTY



## HOW DO I ACTIVATE MY LIFETIME WARRANTY?

Orbea provides a lifetime warranty on all its frames. Only a brand that knows the materials, masters the technologies and has the skills can guarantee that your frame is totally invincible. Only Orbea takes you a step beyond.

Orbea's lifetime warranty is activated using the registration number you will find on all frames from the 2009 range onwards. When you have activated it at your dealer or at [www.orbea.com](http://www.orbea.com), your bike will automatically receive its lifetime warranty. The registration number is a unique, non-transferable code that you will find on the underside of your bike's downtube. Activate your frame's warranty using this number at your dealer's or at [www.orbea.com](http://www.orbea.com).

## WHAT ARE THE ADVANTAGES?

Lifetime guarantee of your frame against breakage.

Two-year guarantee on all components.

Identification of your bicycle and all its characteristics to our Technical Assistance Service so that we can provide our best response to any problems. Access to special offers, events and prize drawings.

## ORBEA WARRANTY

The ongoing efforts we make at Orbea to design high-end bicycles enable us to provide customers with the following warranty:

- 1) We back each frame and rigid fork in our bicycles with a lifetime warranty against materials and manufacturing defects. Frames with travel longer than 170 mm are covered by a 2-year warranty. We warrant each frame and fork in our bikes against paint or varnish defects and corrosion for 3 years. This warranty covers the original purchaser only and is non-transferable. For the lifetime warranty to be valid, customers must fill in the online warranty form within one month of purchase, and proof of purchase in the form of cash register receipt or sales ticket is required.
- 2) Warranty claims are subject to the decision made by our technical staff about the nature of the defect after thorough inspection of the faulty part.
- 3) All the parts assembled in our bicycles are protected against assembly or manufacturing defects for 2 years, and repairs qualifying under this warranty will be performed by authorized dealers in each country.
- 4) This warranty does not cover parts that naturally wear over time, such as tires, brake pads, handlebar grips, cranksets, bearings, etc.
- 5) This warranty does not cover damages or defects caused by negligence, improper use, assembly of parts or accessories that are not original, or defective repair or maintenance work. of the bicycle, nonoriginal accessories being fitted to it, or unsuitable maintenance operations or handling.

6) This warranty includes only replacement or repair coverage of the parts under it and in no case shall it cover personal damages directly or indirectly caused by the failure of said parts during use.

7) All claims must be reported to an authorized dealer. In case there is no such a dealer near the buyer's location, please contact Orbea so that we can decide how to solve the problem.

8) In case of crashes, the Orbea warranty shall be considered null and void.

# ADDITIONAL INFORMATION

Orbea participates actively on facebook and Twitter with our fantastic global community of riders. Looking to find spots to ride or plan a vacation? Someone will have the answers:

[www.orbea.com](http://www.orbea.com)

Occam microsite:

<https://www.orbea.com/gb-en/bicycles/brands-mountain/>

## FACEBOOK

[www.facebook.com/OrbeaBicycles](http://www.facebook.com/OrbeaBicycles)

## TWITTER

[www.twitter.com/Orbea/](http://www.twitter.com/Orbea/)

## INSTAGRAM

[www.instagram.com/orbeabicycles](http://www.instagram.com/orbeabicycles)

## ORBEA CONTENT

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## ORBEA UNIVERSITY

[www.orbea.com/es-es/university/](http://www.orbea.com/es-es/university/)

## ORBEA BLOG

[www.orbea.com/es-es/blog/](http://www.orbea.com/es-es/blog/)

## YOUR ORBEA DEALER

Our dealers are experts and should be able to assist you with setting up and maintaining your Orbea bicycle. A complete listing of Orbea dealers and distributors can be located on our website:

<http://www.orbea.com/int-en/dealers/?country=INT/>

## AFTER SALES SERVICE

Our service technicians are trained to handle any questions you might have about your Orbea bicycle.

<mailto:Orbea@Orbea.com>



WHAT MAKES UNIQUE  
#ORBEAOCCAM

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ORBEA OCCAM  
|WELCOME HOME|

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*ORBEA*