

ORBEA

BLUE PAPERS

KERAM 2019

TECHNICAL MANUAL

INDEX

KERAM

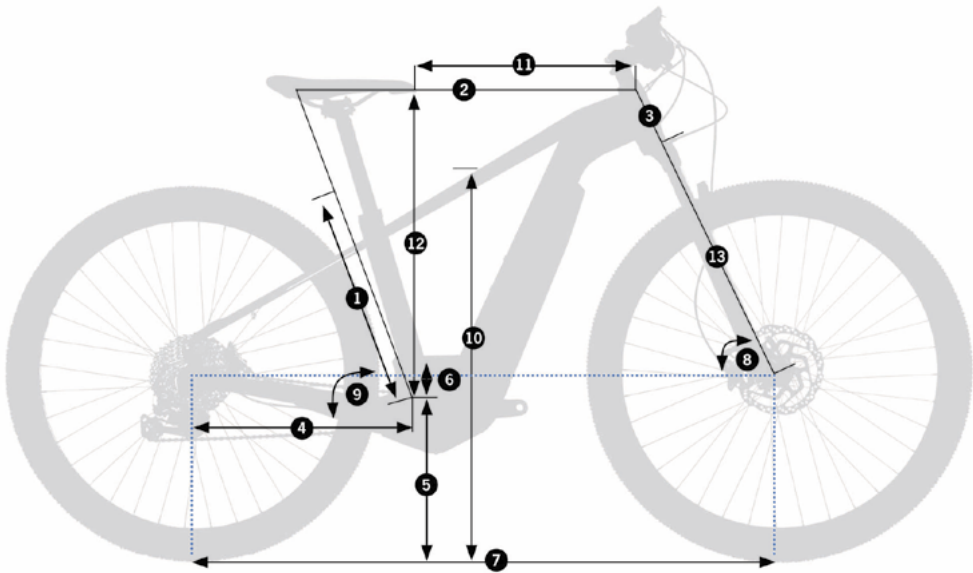
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GEOMETRY

SIZE	S 27,5	M 29	L 29	XL 29
1 - SEAT TUBE (C-C)	400	405	457	515
2 - TOP TUBE (EFF)	538	569	603	547
3 - HEAD TUBE	105	114	133	144
4 - CHAIN STAY	475	475	475	475
5 - BB HEIGHT	307	313	313	313
6 - BB DROP	43	63	63	63
7 - WHEELBASE	1112	1149	1173	980
8 - HEAD ANGLE	67	67	68	68
9 - SEAT ANGLE	73	73	73	73
10 - STANDOVER	798	825	861	893
11 - REACH	355	375	402	430
12 - STACK	600	636	659	752
13 - FORK LENGTH	518	530	530	530
14 - RAKE	42MM	51MM	51MM	51MM
15- TRAIL	103	104	97	97
BB To front axle	639	677	701	738

ERGONOMY

HEIGHT (cm)	HEIGHT (in)	SIZE
150-165	59.1"-65.0"	S
165-175	65.0"-68.9"	M
175-185	68.9"-72.8"	L
185-195	72.8"-76.8"	XL



SPECIFICATIONS

HEADSET	1" 1/8 - 1" ½ INTEGRATED
BB	BOSCH MOTOR
FRONT DERAILLEUR	NO
SEAT POST DIAMETER	31,6MM
SEATCLAMP DIAMETER	34.9MM
DROPOUT	STANDARD (135MM X 9MM) QR
CHAINSTAY PROTECTOR	PLASTIC
OTHER PROTECTORS	BATERY AND MOTOR
CABLE TYPE	INTERNAL
REAR HUB LENGHT	135MM

COMPATIBILITIES

BRAKE	V-BRAKE	NO
	DISC BRAKE	POST MOUNT 180MM
	CALIPER BRAKE	NO
LUGGAGE	BAG OPTION IN TOP TUBE	NO
	BOTTLE CAGE	DOWNTUBE (ALL THE SIZES)
	OPTION AERO AND STANDARD BOTTLE	NO
	REAR CARRIER OPTION	YES
	MUDGUARD OPTION	YES
	KICKSTAND	YES
GEARS	11 SPEED	YES
	DOUBLE CRANKSET	NO
	TRIPLE CRANKSET	NO
	OXYMETRIC	NO

PARTS & HARDWARE

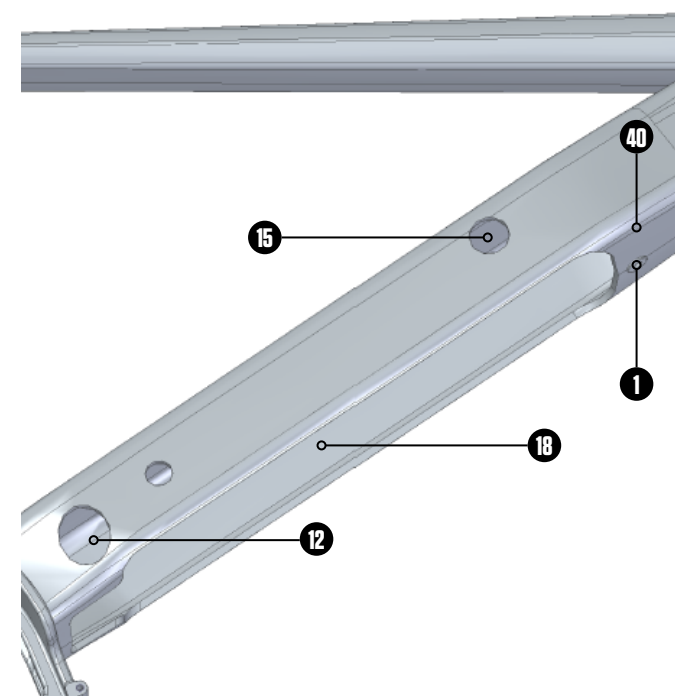
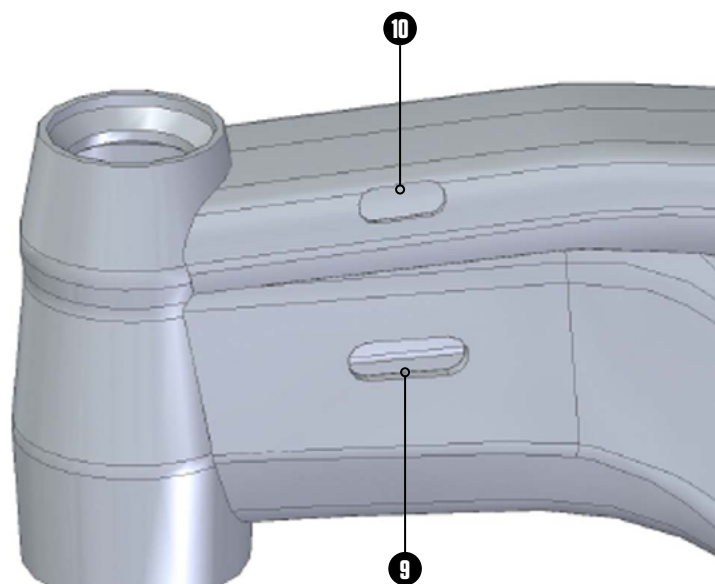
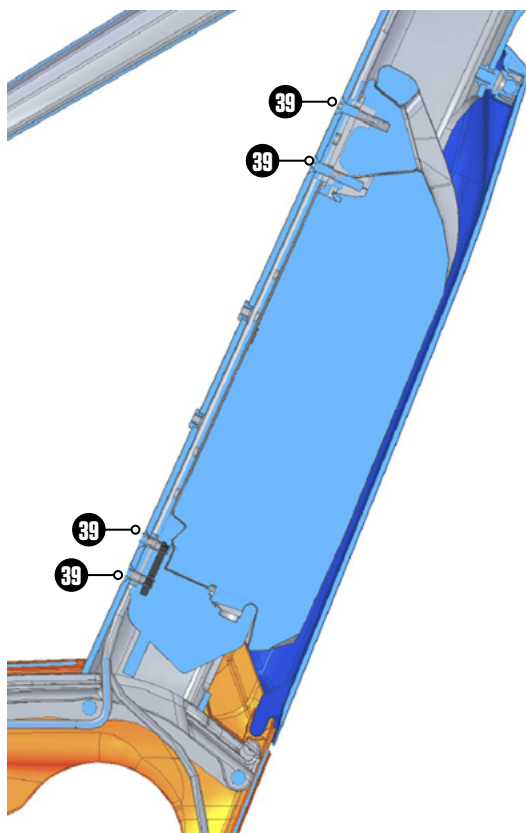
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1	11000460	CIERRE TAPA BATERIA MACHO
2	11000461	CIERRE TAPA BATERIA HEMBRA
4	12310061	TUERCA AMARRE BATERIA CARGADOR
6	12320060	SEPARADOR SOPORTE BATERIA-ALTURA 6,5MM
7	15430201	PATA DE CAMBIO MX STD
8	15430202	PATA DE CAMBIO MX DM
10	11001163	TAPON GOMA 3MM RANURA 22X8
9	11001165	TAPON GOMA 5MM RANURA 30X10
11	11160252	ABRAZADERA SILLIN KERAM 19 NEG
12	11000468	BOTON CARGADOR KERAM 19
13	11000471	PROTECTOR BASE DCHA KERAM 19
14	11000470	PROTECTOR BASE IZQD KERAM 19
15	11000467	BOTON CERRADURA KERAM 19
16	11000465	CARENADO MOTOR KERAM 19 DCHA
17	11000466	CARENADO MOTOR KERAM 19 IZQD
18	11000469	TAPA BATERIA KERAM 19 NEG
19	12300075	TORNILLO INOX M5X18 DIN7991
20	12300070	TORNILLO INOX M5X30 DIN7991
21	12300071	TORNILLO INOX M4X25 ISO14580
22	12300072	TORNILLO INOX M4X10 ISO14580
23	12310058	TUERCA INOX CUADRADA M5 DIN557
24	11000118	BRIDA 2.5X100 NEGRA

Nº	REFERENCE	DESCRIPTION
28	12301060	TORNIL INOX M5X15 ISO7380
29	12300059	TORNILLO M4X8 DIN7991 PATA-QR
33	12330029	SEPARADOR 4MM MOTOR KERAM 2019
40	11000472	PROT GOMA T.DIAG+BAT KERAM 19
36	12301527	TORNILLO M8X50 DIN 931 INOX
35	11209912	TORNILLO M8X60
34	11209913	TUERCA M8-10
37	12300078	TORN AUTO DIAM 4X60MM- CL81Z
38	12311527	TUERCA M8 DIN985 INOX
39	11001164	TAPON GOMA CAB.ALLEN 3.10-3.00

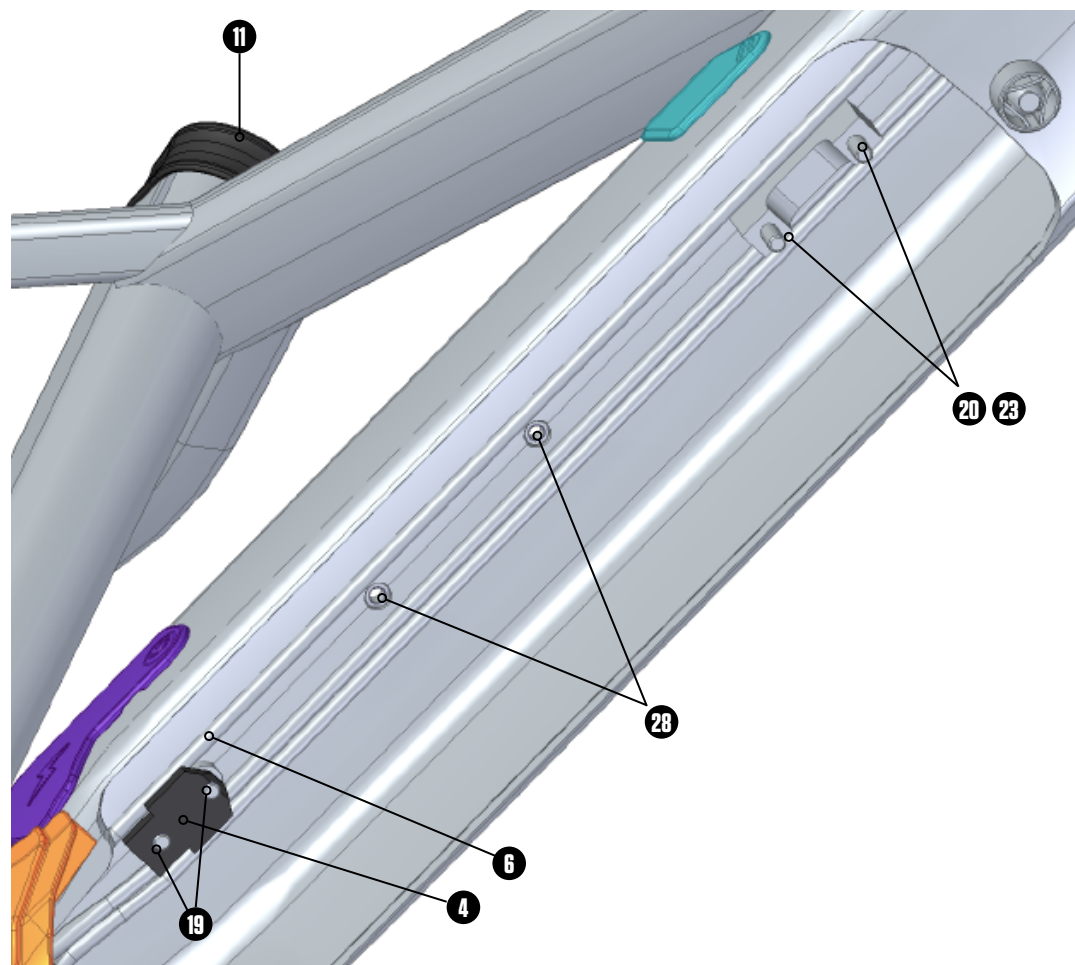
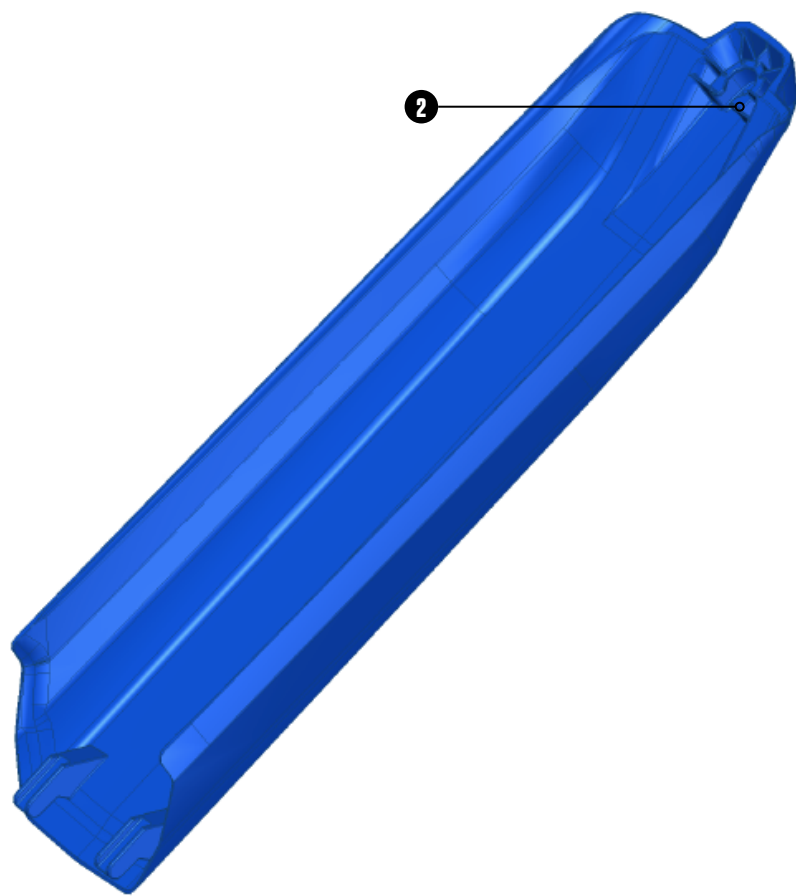
DUAL BATTERY PARTS

Nº	REFERENCE	DESCRIPTION
30	11000462	CHAPILLA DOBLE BATERIA KERAM
31	11000463	TUERCA DOBLE BATERIA KERAM
5	12330060	PIEZA U SOPORTE BATERIA-ALT 16.5MM

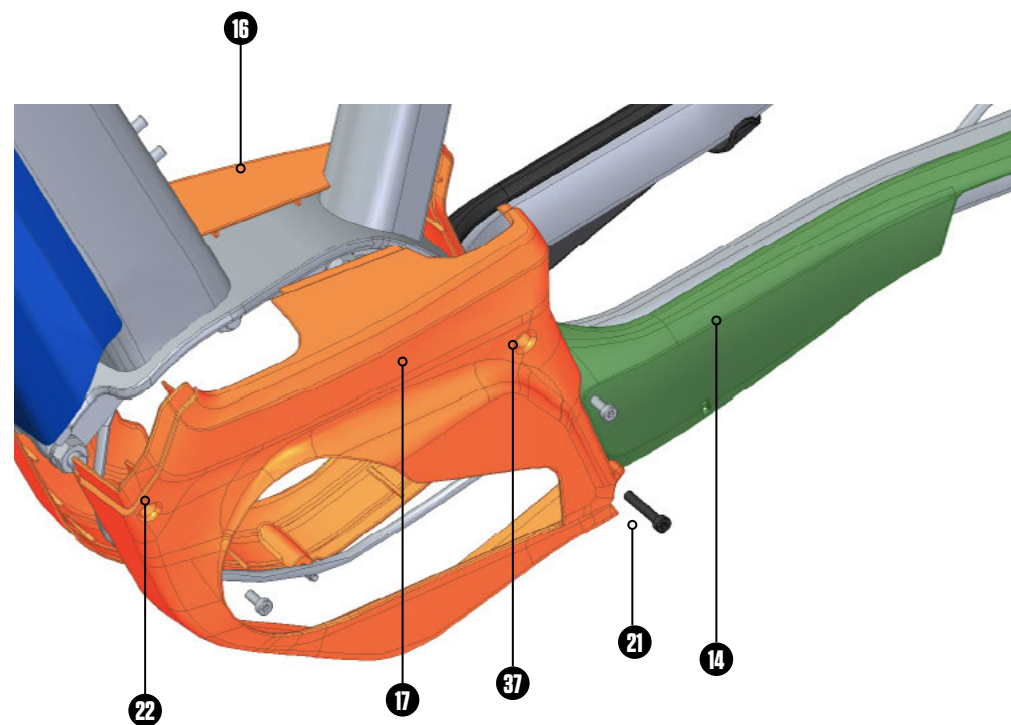
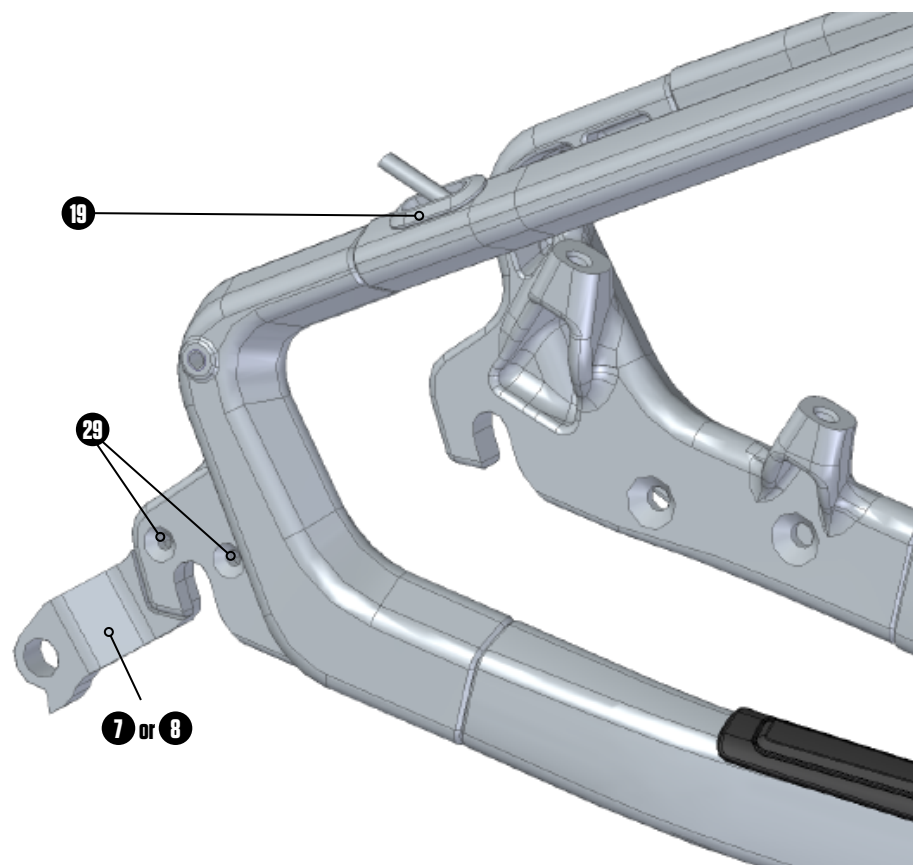
PARTS & HARDWARE



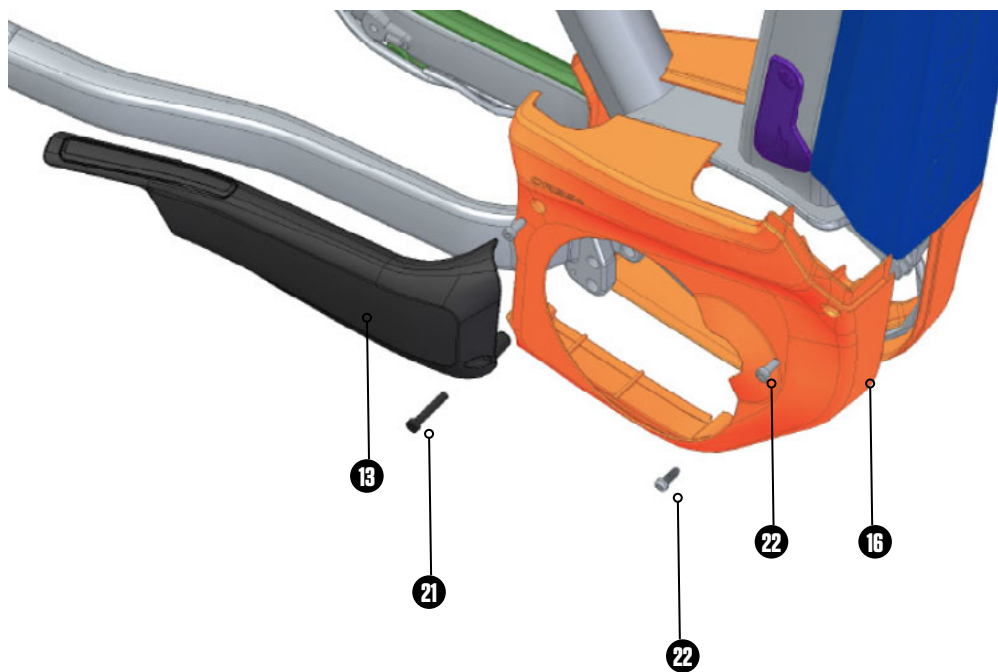
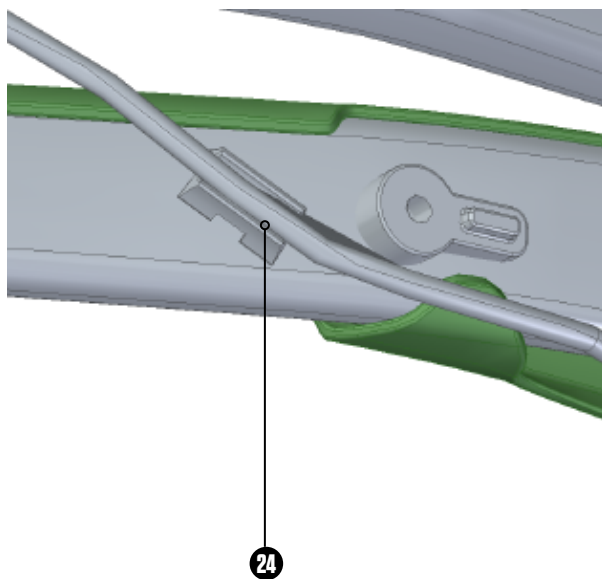
PARTS & HARDWARE



PARTS & HARDWARE

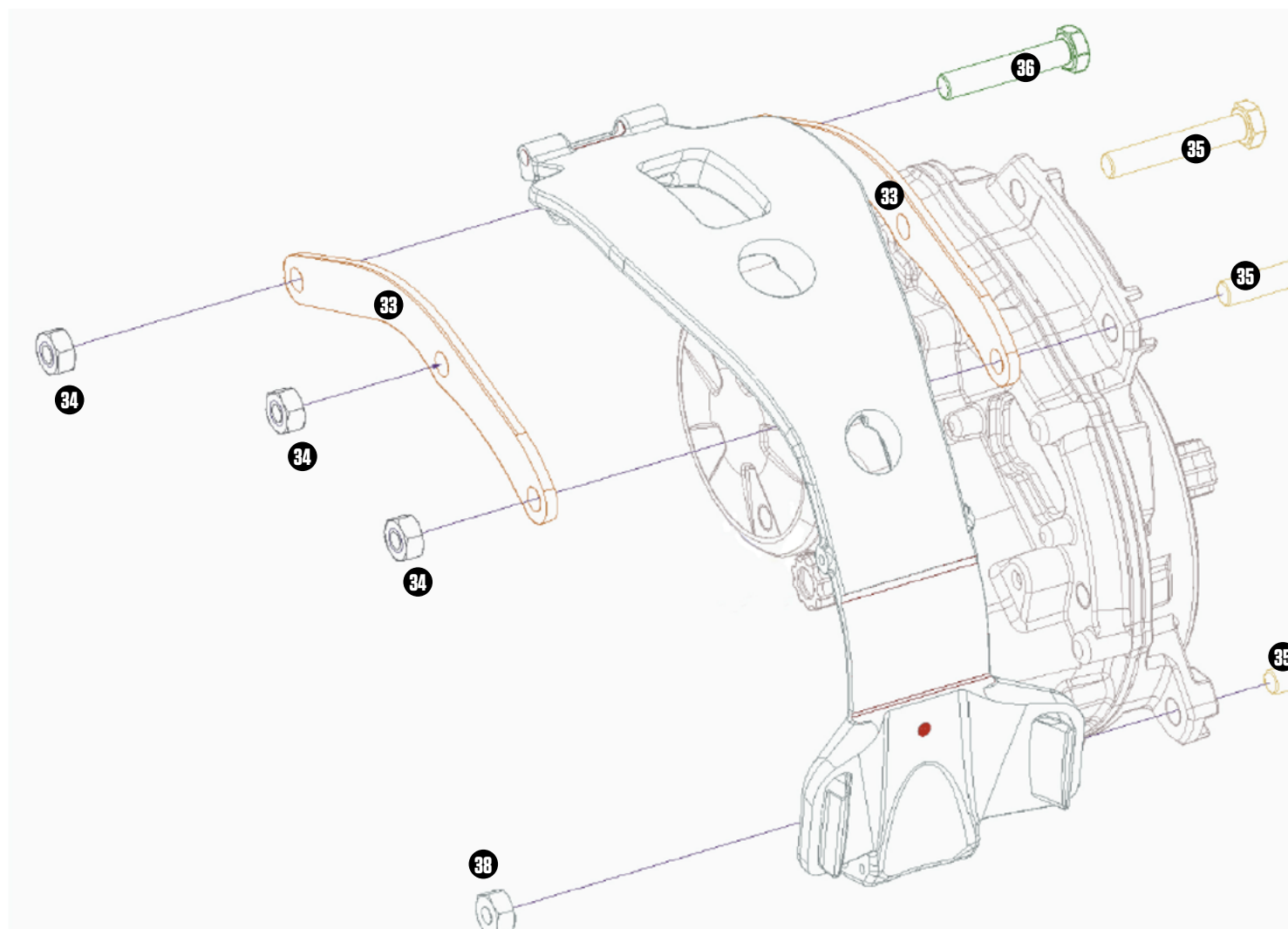


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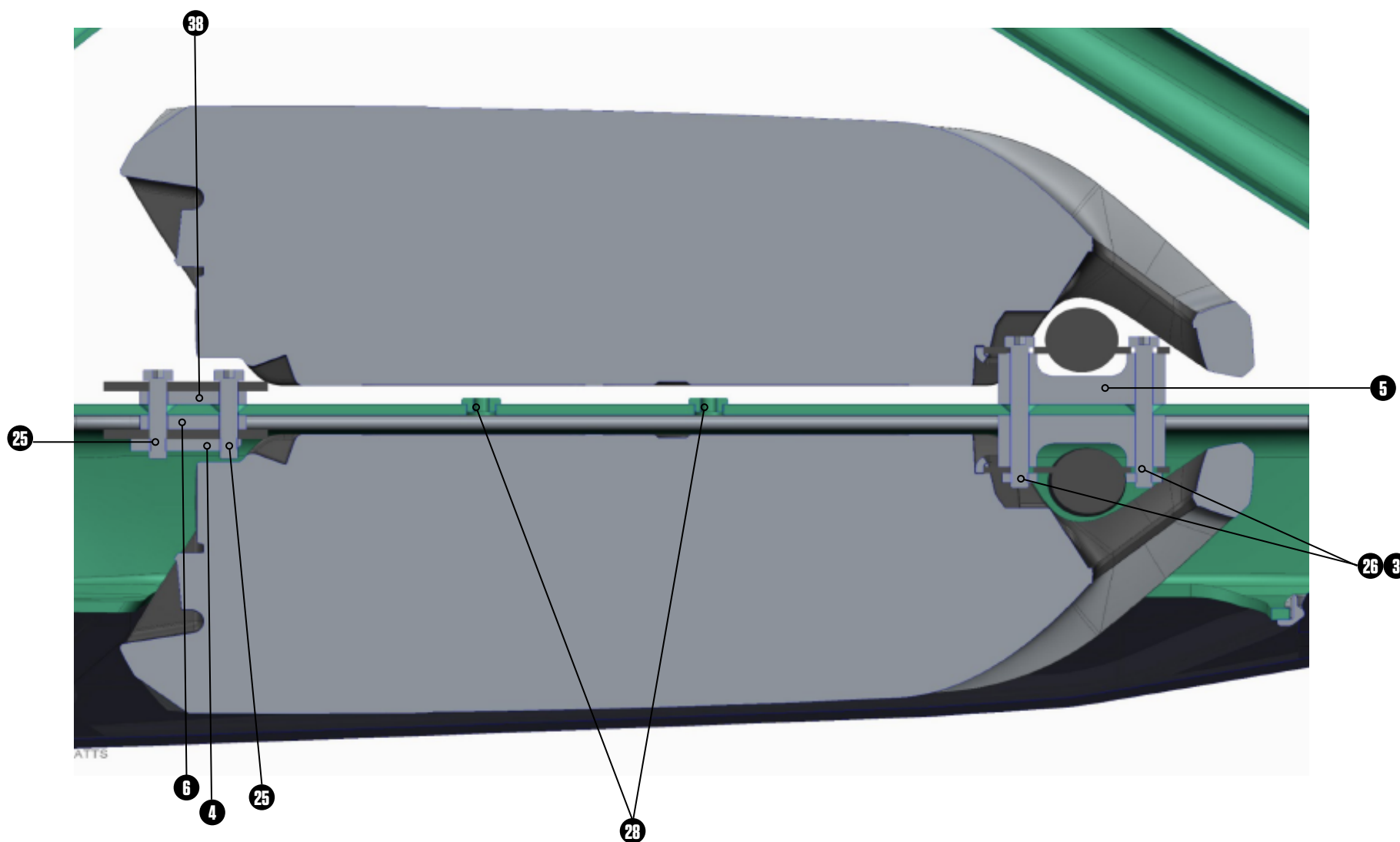
PARTS & HARDWARE

MOTOR BRACKET



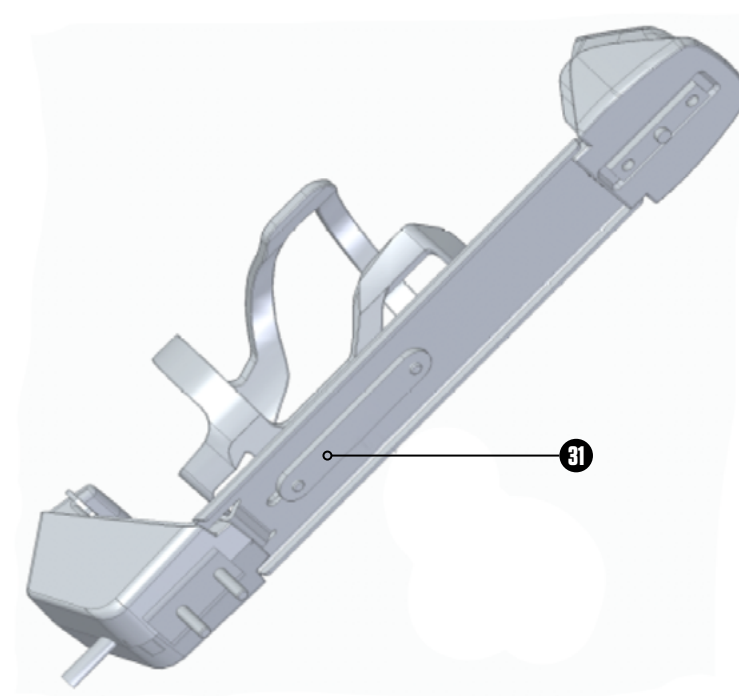
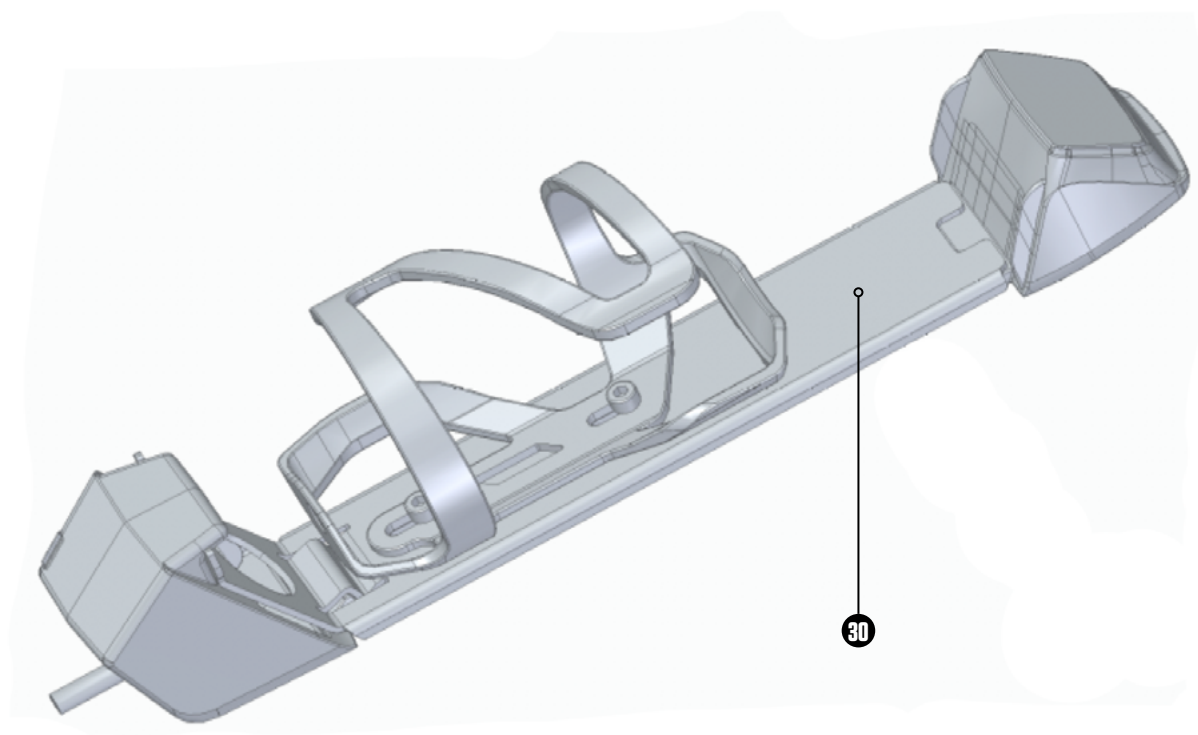
PARTS & HARDWARE

DUAL BATTERY



PARTS & HARDWARE

DUAL BATTERY



PARTS & HARDWARE



7



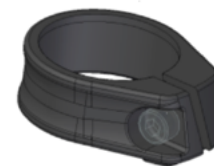
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10



11



12



13



14



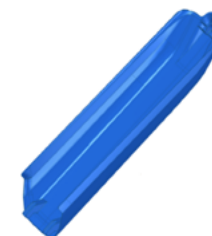
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17



18

PARTS & HARDWARE



19



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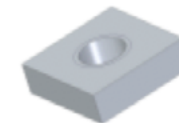
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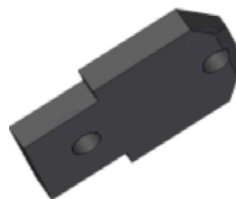
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23



2



4



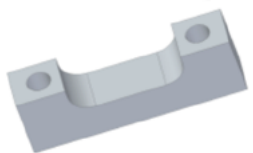
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PARTS & HARDWARE

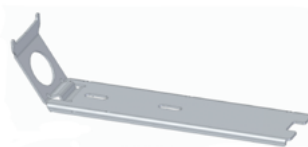
DUAL BATTERY



5



31

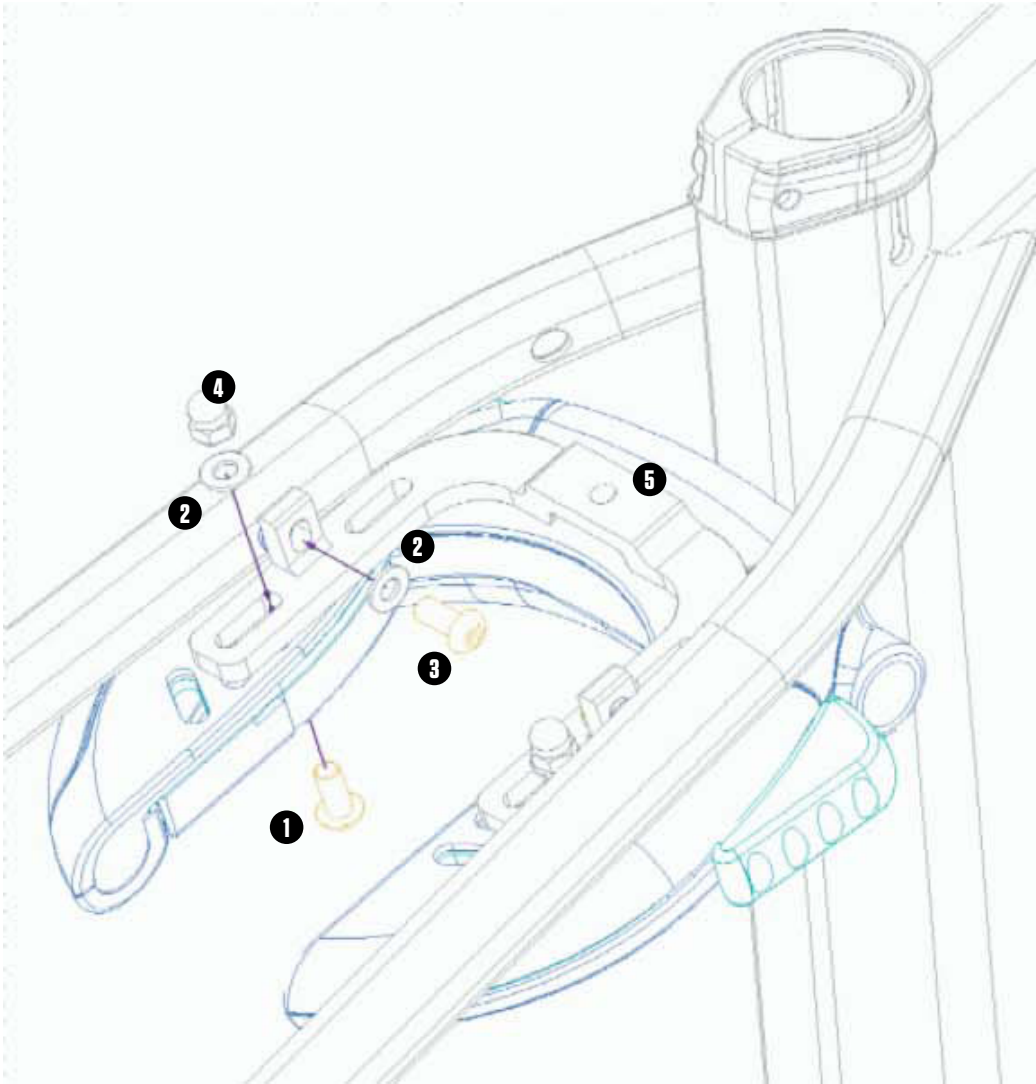


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PARTS & HARDWARE

FRAME LOCK KIT

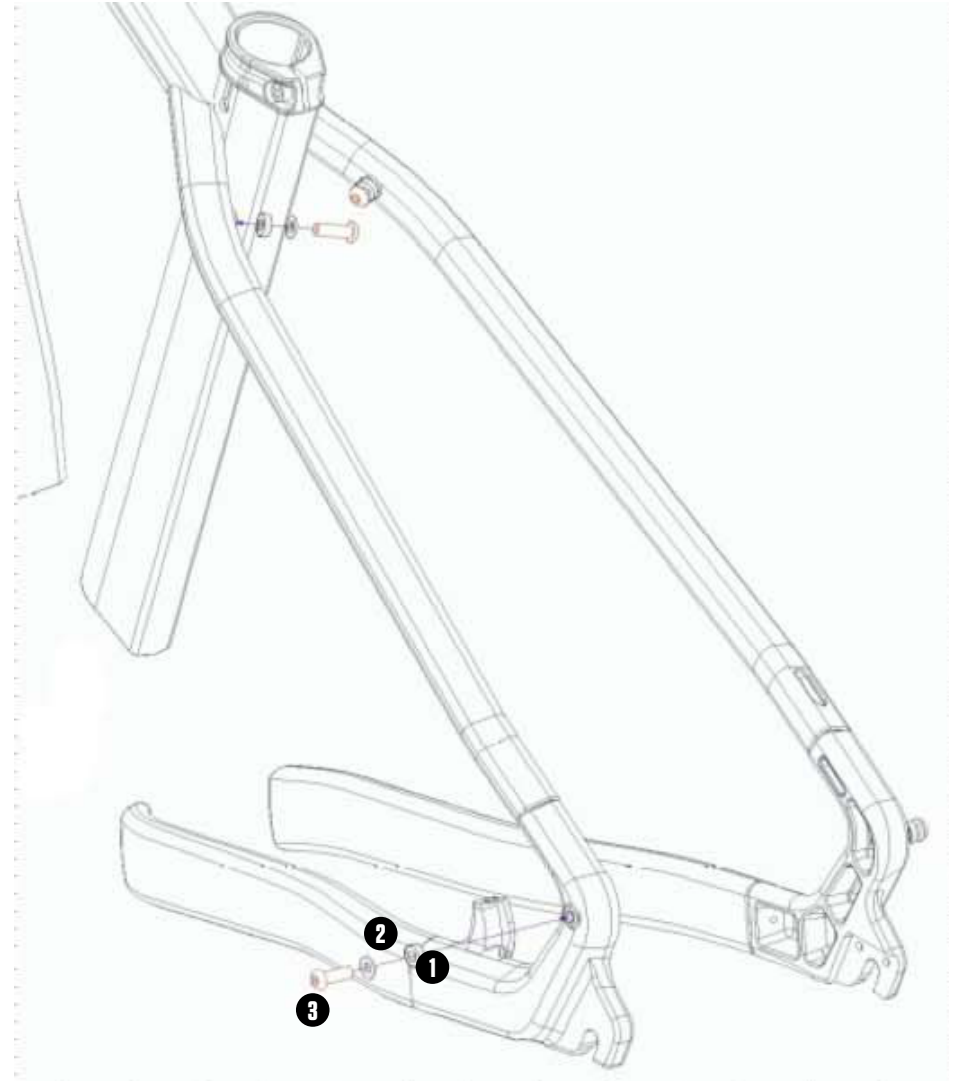
Nº	REFERENCE	DESCRIPTION
1	12301060	TORNIL INOX M5X15 ISO7380
2	12321020	ARANDELA INOX M5
3	12301077	TORNIL INOX M5X12 ISO7380
4	12311522	TUERCA M5 5,6 DIN1587
5	01160624	HERRADURA CANDADO KERAM 19



PARTS & HARDWARE

REAR RACK KIT

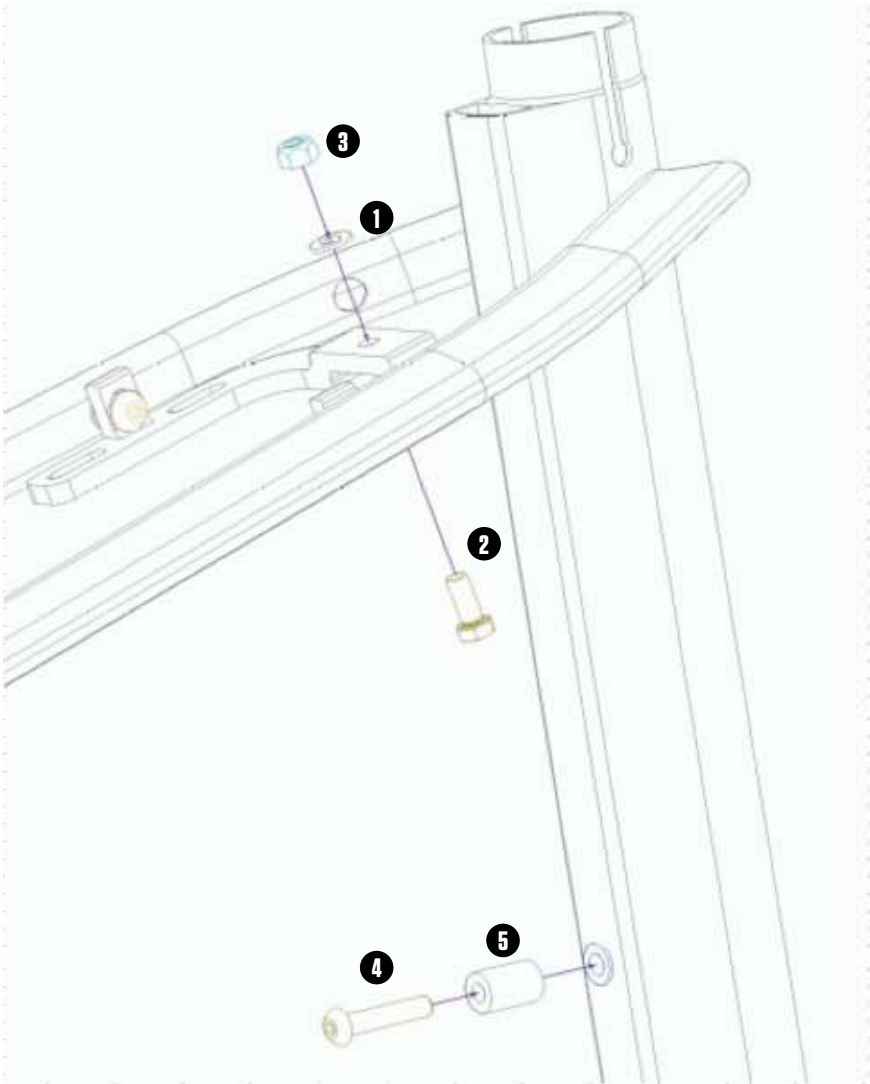
Nº	REFERENCE	DESCRIPTION
1	11069036	ARANDELA SEPARADORA PLAS 4.5MM
2	12321020	ARANDELA INOX M5
3	12301060	TORNIL INOX M5X15 ISO7380



PARTS & HARDWARE

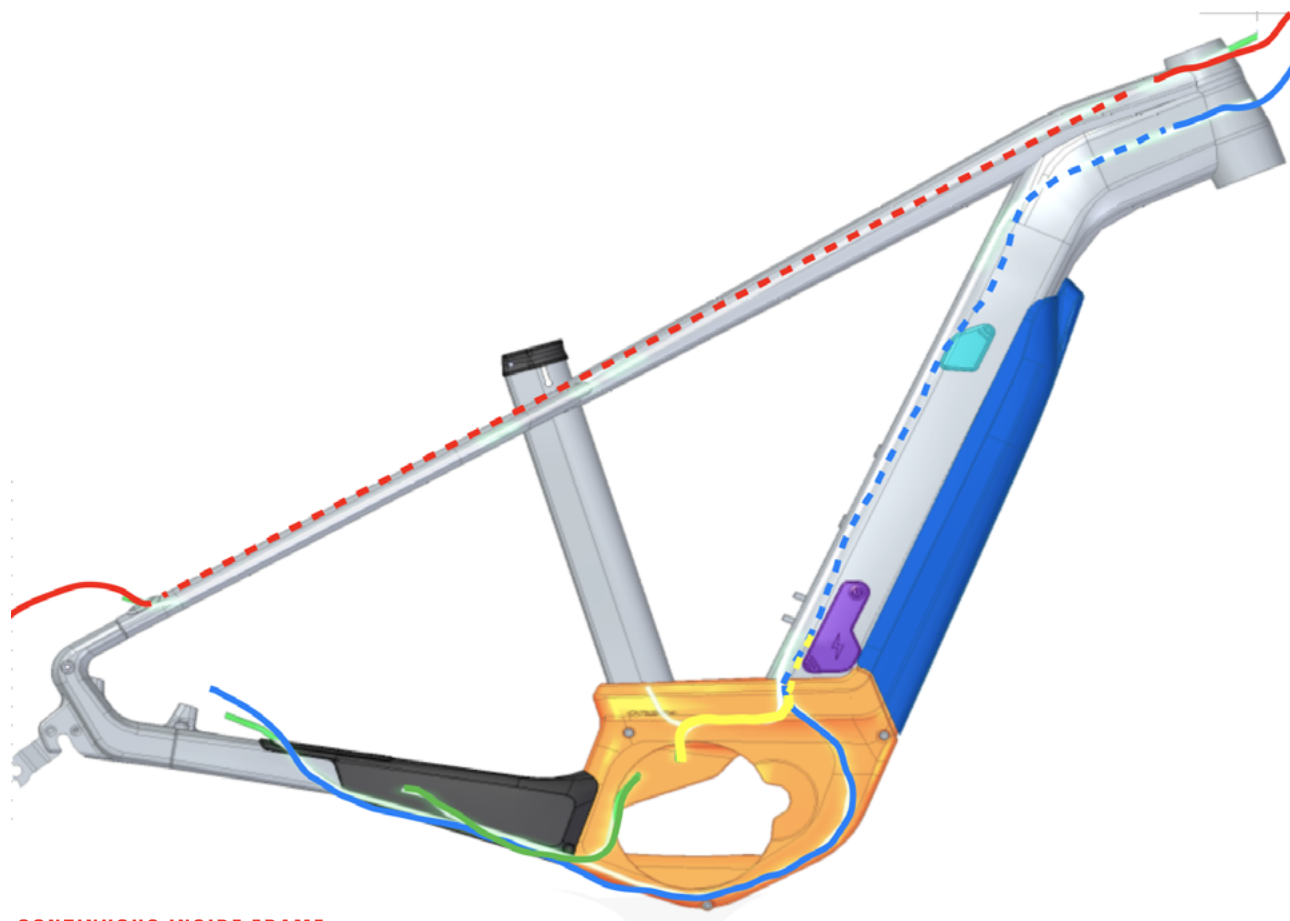
FENDER KIT

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1	12321020	ARANDELA INOX M5
2	12301080	TORNIL M5X12 8,8 DIN933
3	12311020	TUERCA INOX ALLEN M5 DIN985
4	11069038	ARANDELA SEPARADORA 15MM
5	12301070	TORNIL INOX ALLEN5X25 ISO7380



CABLE ROUTING

SINGLE BATTERY

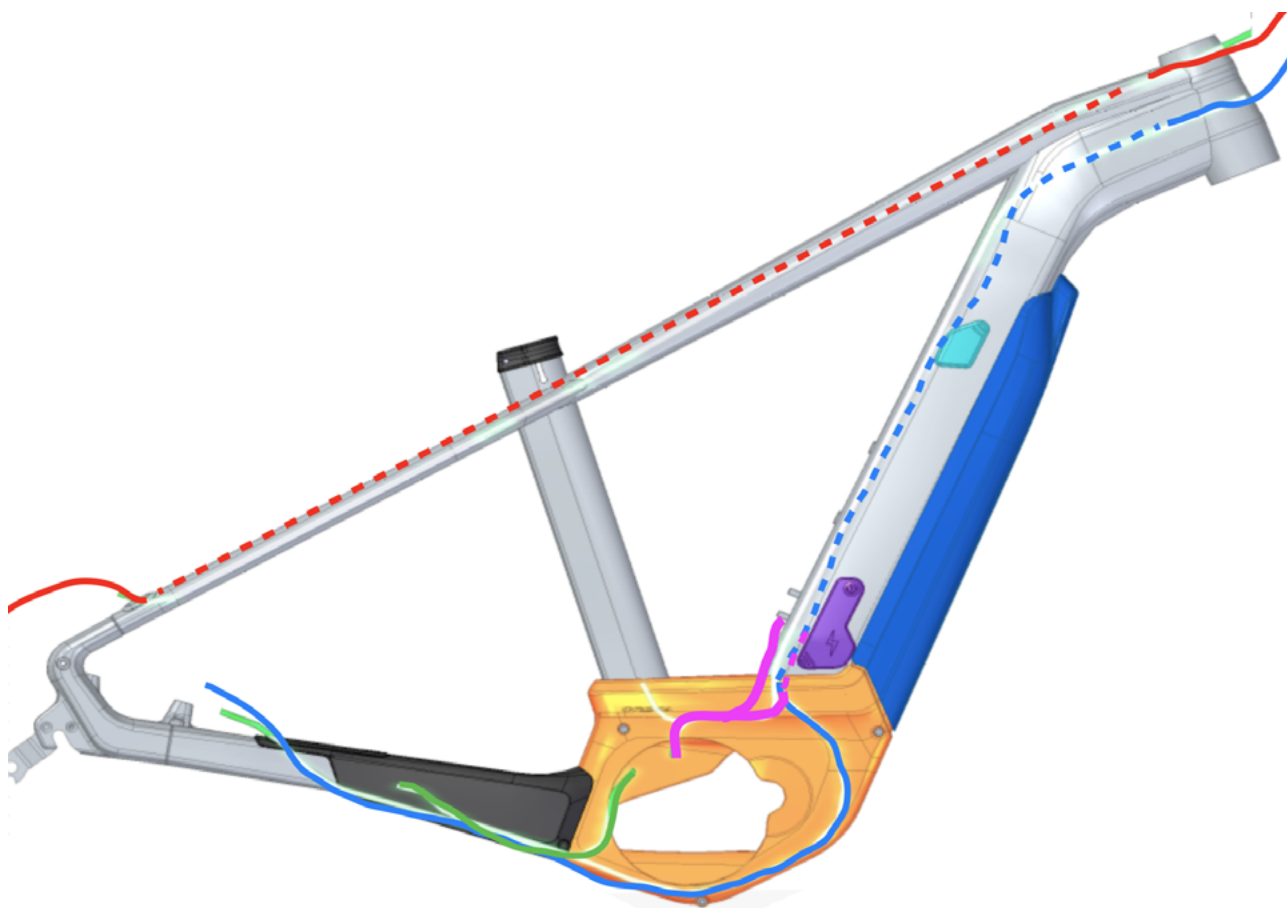


REAR DERAILEUR
REAR BRAKE
SPEED SENSOR
BATTERY

CONTINUOUS INSIDE FRAME
DISCONTINUOUS INSIDE FRAME

CABLE ROUTING

DUAL BATTERY

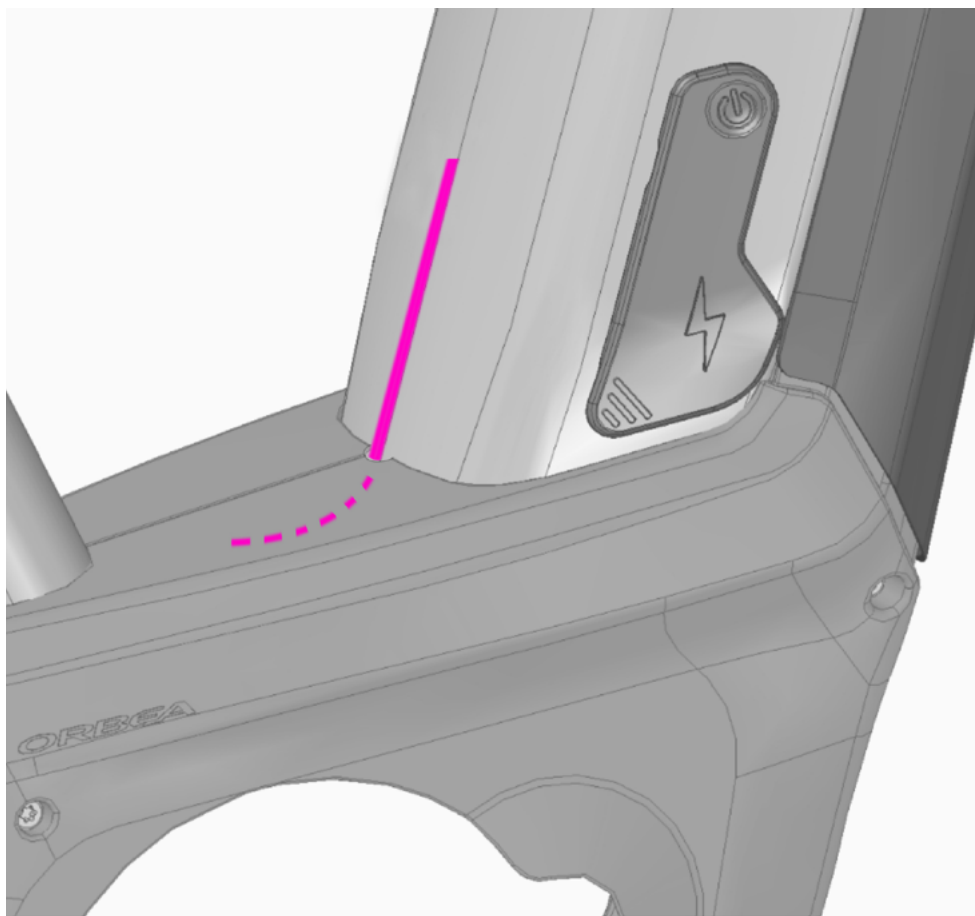


REAR DERAILEUR
REAR BRAKE
SPEED SENSOR
BATTERY

CONTINUOUS INSIDE FRAME
DISCONTINUOUS INSIDE FRAME

CABLE ROUTING

DUAL BATTERY

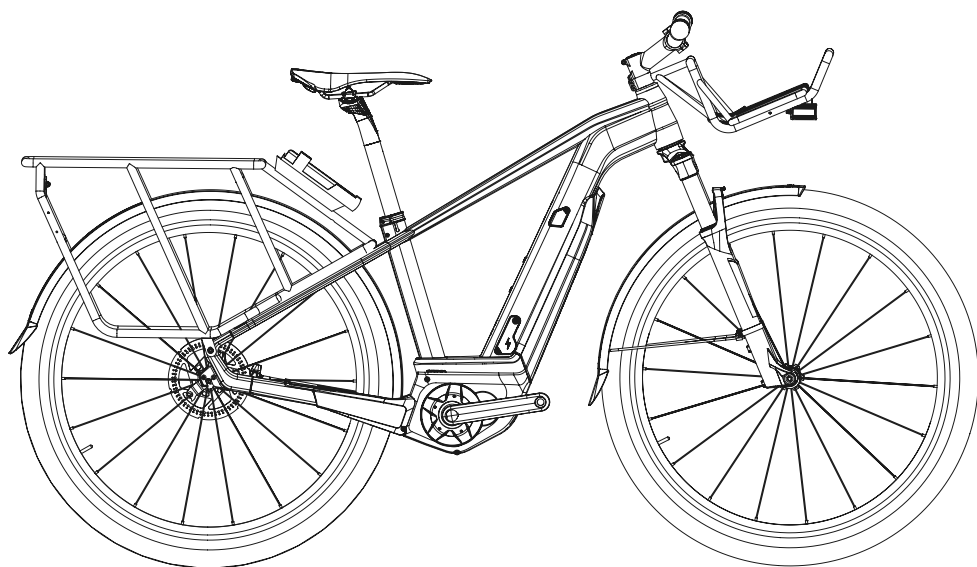


* CUT THE PLASTIC FLANGE IN ORDER TO BRING THE CABLE THROUGH.

KERAM SUV 2021 MODELS

FRONT RACK ASSEMBLY. INFORMATION FOR DEALERS.

Keram SUV 2021 models are equipped with Orbea original rear and front racks, Lezyne lights and mudguards.



FRONT RACK KERAM SUV

MATERIAL	ALUMINUM
LOAD LIMIT	15kg

REAR RACK KERAM SUV

MATERIAL	ALUMINUM
LOAD LIMIT	25kg

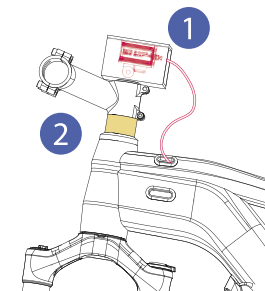
Follow the steps below for the assembly of the front rack and front light on Keram SUV models when taking the bicycle out of the box.

01

Remove the protective packaging from the front light.

02

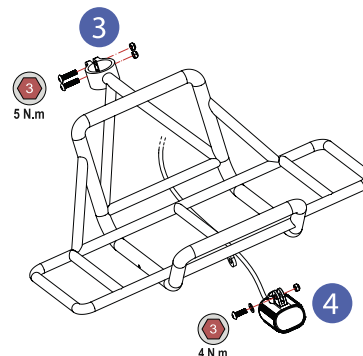
Diassemble the stem from the bicycle and remove the cardboard spacer from the fork steerer tube.



03

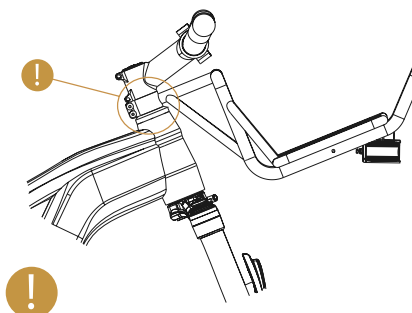
Install the front rack on the fork steerer tube and install the stem.

Adjust the headset preload and tighten the stem bolts to the recommended torque setting (5-6Nm)



04

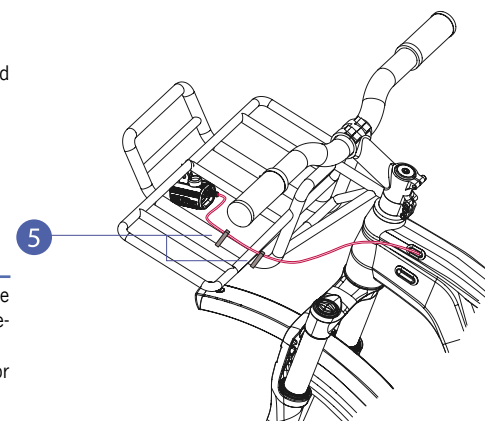
Install the front light onto the rack.



Do not install any extra headset spacers. The front rack functions as all the headset spacers allowed for Keram SUV.

05

Fasten the front light cable to the rack with zipties and introduce any excess cable into the frame.



NOTICE

The Bosch front lights cable and the Lezyne light are fitted with a JST connector for a better interface.
If it is necessary to replace the lights cable or the front light, contact Orbea.

REAR MUDGUARD AND RACK ASSEMBLY

NOTICE The Keram SUV rear mudguard is specific for rear rack assemblies. The mudguard blade is attached to the rear rack tubes.

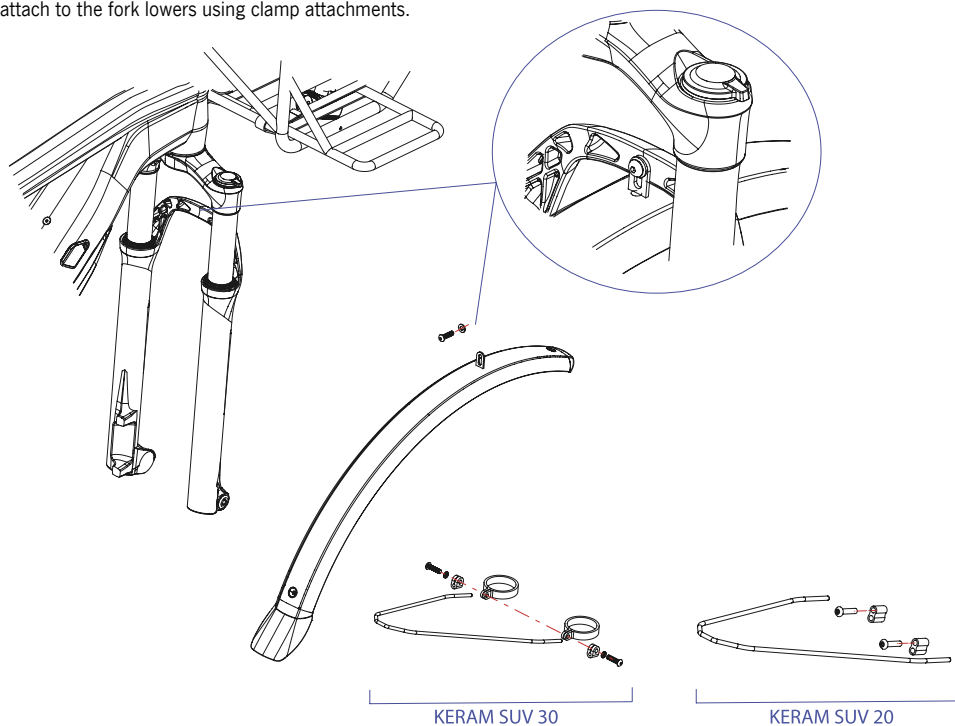
The Keram SUV mudguard set and racks are only available as a replacement item through an Orbea dealer due to breakage or a warranty claim.

FRONT MUDGUARD

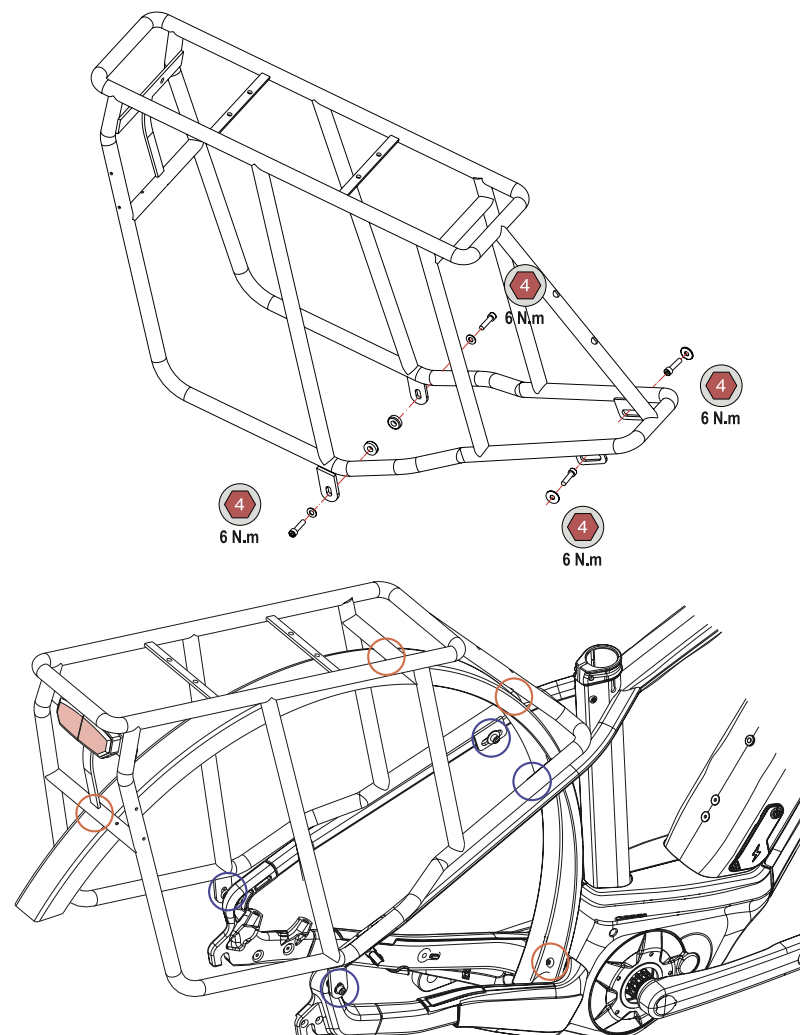
The front mudguard rods attach to the fork differently depending on the Keram models.

- On Keram SUV 30 with Suntour XCR32 forks, the rods attach to the fork lowers using clamp attachments.

- On Keram SUV 20 models with Suntour XCR34 forks, the rods attach directly to the fork lowers with the hardware provided.



REAR RACK AND MUDGUARD



○ Rear mudguard attachment points.

○ Rear rack attachment points.

FRAME AND MATERIAL

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

1) KEEP YOUR KERAM 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 KERAM 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 KERAM 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.

AFTER A CRASH OR IMPACT

Falling is part of riding and it's impossible to avoid minor accidents. If you crash your Keram, 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.

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, 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.

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:

FACEBOOK

www.facebook.com/OrbeaBicycles

TWITTER

www.twitter.com/Orbea/

YOUTUBE

Visit our Orbea Channel on You Tube for a variety of helpful setup and tech videos:

www.youtube.com/user/OrbeaBicycles

INSTAGRAM

www.instagram.com/orbea

ORBEA CONTENT

View and download photos, videos and documents.

content.orbea.com/us-en/

ORBEA UNIVERSITY

www.orbea.com/en-en/university/

BLOG ORBEA

www.orbea.com/en-en/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:

www.orbea.com/us-en/dealers/?country=INT

AFTER SALES SERVICE

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

orbea@orbea.com

ORBEA