

TECHNICAL MANUAL

EN | ES

BLUE PAPER OIZ CARBON

OMR 2019 & OMX 2021

ORBEA



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EN P.03 | ES P.57

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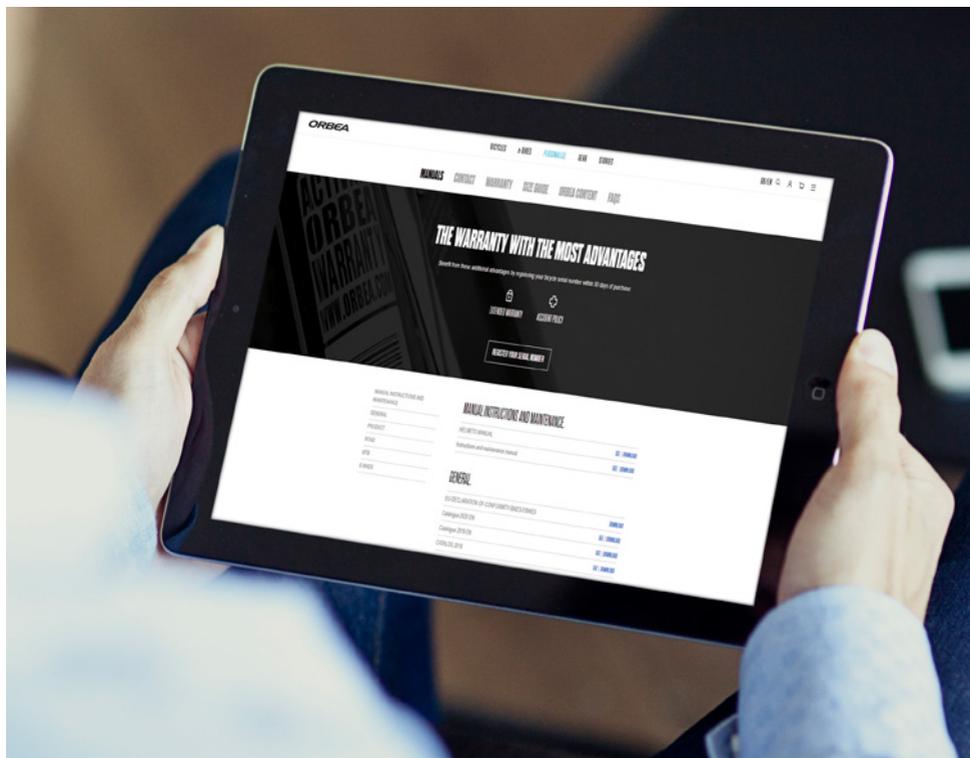
01 INTRODUCTION

This technical manual contains important information about your bicycle, its use, maintenance and replacement parts. Please read it carefully.

This document is a supplement to the General User's Manual for Orbea bicycles and components, which describes in a more detailed manner their appropriate use and the adjustment of the general components of the bicycles for safe riding and operation. You can see and download the User's Manual and the rest of the technical manuals for Orbea products from our website:

www.orbea.com/us-en/soporte/manuales

You can consult the information on the use, maintenance and characteristics of the components of other manufacturers that are assembled on our bicycles, such as wheels, handlebars, pedaling assistance systems, suspension forks, etc, on the manufacturer's website or through their dealer in your country.



KEY TO SYMBOLS

Throughout this technical manual, various symbols are used that indicate instructions and warnings for use, maintenance and assembly. Pay attention to these symbols to avoid hazardous situations and ensure the correct use and assembly of all components.

The meaning of these symbols is explained below. In this manual, the symbol may appear accompanied only by the relevant instruction for the component described. Read the following information carefully in order to understand their meanings.

SAFETY INSTRUCTIONS

 **DANGER:** Immediately hazardous situation. If not avoided, serious injury or even death will occur.

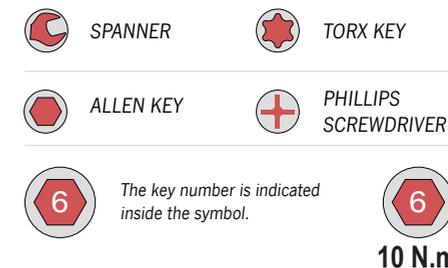
 **WARNING:** Potentially hazardous situation. If not avoided, serious injury or even death may occur.

 **CAUTION:** Potentially hazardous situation. If not avoided, minor or moderate injury may occur.

NOTICE Not related to injury. Property situation hazard.

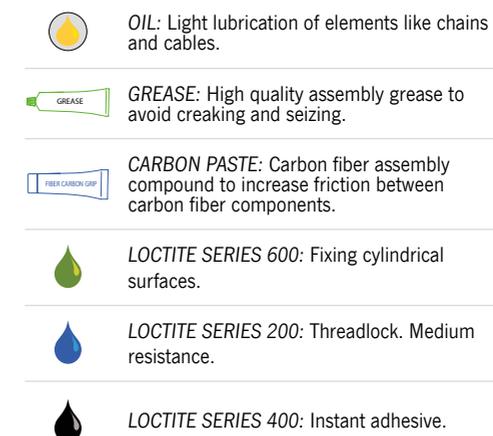
The symbols DANGER and WARNING inform about a dangerous situation that, if not avoided, may cause an accident. An accident while riding a bicycle always poses risk of serious injury or even death. In this manual, the risk of death may therefore not always be mentioned when these symbols appear, since the risk is explained here.

TOOLS AND TIGHTENING TORQUES



TIGHTENING TORQUES: The corresponding tightening torque (in Newtons/meter) is indicated beneath the symbol of the tool to use for the element described.

ASSEMBLY COMPOUNDS



02 ORBEA WARRANTY

Our continuous daily effort to provide maximum quality of our bicycles allows us to offer the following warranty and coverage conditions:

LEGAL WARRANTY

Orbea offers the original owner of the Orbea bicycle, rigid fork or OC component a legal warranty of 2 years from the date of purchase of the items, or the period stipulated as the legal warranty in the country of purchase.

This warranty covers all Orbea products against manufacturing defects and/or lack of compliance and guarantees the repair or replacement of the defective product at no cost to the affected customer. Likewise, this warranty also covers paint, varnish and corrosion defects on all frames and rigid forks assembled on our bicycles during the period specified in the previous paragraph of this warranty.

This warranty does not cover in any case damage derived from inappropriate use, falls or accidents or the lack of maintenance, as well as the normal wear and tear of consumable parts, such as, by way of example, but without limitation: seals, bearings, handlebar tape, spokes, tires, saddles, etc.

For a full description of the coverage conditions and the legal warranty, please visit:

www.orbea.com/us-en/garantia

ORBEA LIFETIME WARRANTY

As a supplement to the legal warranty, Orbea offers the original buyer of the bicycle the Orbea lifetime commercial warranty, as long as they have registered their product on the Orbea website within 30 days of its purchase. This lifetime warranty covers the frames and rigid forks that we mount on our bicycles against manufacturing defects and material conformity issues with no time limitation.

This warranty extends the original period of coverage against paint, varnish or corrosion defects on the frames and rigid forks for one additional year after the end of the legal warranty period.

Orbea's lifetime commercial warranty only covers frames and rigid forks, but not OC components.

For a full description of the warranty conditions for the lifetime warranty, please visit:

www.orbea.com/us-en/garantia#garantia-deporvida-orbea

REGISTER YOUR BICYCLE

In order to benefit from the Orbea lifetime warranty extension, you must register your bicycle within 30 days of its purchase at:

www.orbea.com/es-es/acceso-registro?from=register-plate/

01. REGISTER YOUR ACCOUNT

02. REGISTER YOUR BARCODE

03. WHERE TO FIND YOUR BARCODEA



WARRANTY CLAIM PROCESS

All warranty claims must be processed through an authorized Orbea dealer, who will perform the initial diagnosis and send Orbea all the necessary documentation for a complete diagnosis of the claim in question. The dealer will inform the owner about the status of the process and the decision made on the warranty claim by Orbea.

We recommend that you always visit the dealer where you purchased your bicycle to process a warranty claim, or the dealer you chose during the process of purchasing a bicycle that was delivered directly to your home. If you cannot visit the original dealer, you can check the list of authorized dealers on our website or contact Orbea directly so we can indicate the dealer you should visit.

www.orbea.com/es-es/distribuidores/?country

www.orbea.com/us-en/contacto

03 MAINTENANCE

Orbea products are carefully designed to be long-lasting, efficient and easy to maintain. The carbon and aluminum frames and forks are extremely corrosion-resistant.

However, your bicycle needs regular maintenance of its components in order to ensure that it works properly and safely, and to ensure its longevity.

KEEP YOUR BICYCLE CLEAN

Clean your bicycle with mild soap and water on a regular basis to keep it working like new, and check the condition of the frame and its components. Do not use pressurized water, since it could damage components like bearings or the tubes of the frame.

Citrus-based degreasers are biodegradable and very effective in removing grease from drivetrain components and the chain.



Accumulated dirt can complicate the visual inspection of the components and hide damage that could potentially cause malfunctions or accidents.

NOTICE

Built-up dirt causes the premature wear of components and can even damage the bicycle frame in areas such as the bearing housings and moving parts. Damage due to the lack of cleaning and maintenance is not covered by the warranty.

KEEP YOUR DRIVETRAIN LUBRICATED

Once you have cleaned your bicycle, lubricate the drivetrain, specifically the chain. Use the minimum amount necessary to lubricate the links, removing any excess amounts to prevent them from attracting dirt, causing the drivetrain to not work properly and the premature wear of the components.



Avoid the use of aerosol lubricants to prevent them from adhering to the brake surfaces. Always check the brakes after lubricating the drivetrain.

INSPECT YOUR BICYCLE BEFORE EVERY RIDE

Do a quick check before each ride to make sure that your bicycle is in optimal operating conditions. You might discover small problems that could turn into major issues during the ride.

FRAME: Inspect the frame and the fork, looking for cracks or other damage. No strange noises should be heard. In the event of any damage to the frame, avoid using the bicycle and contact your authorized dealer for inspection.

CHAIN: Ensure it's clean and lubricated. The drivetrain should not make any abnormal noises.

BRAKES: Check that the brakes operate properly and in a safe manner. Check the tightening torques of the components.

TIRES: Check for worn tires and look for cuts on the tread or sides. If you spot damage, replace the tire. Make sure that the tire pressure is adequate.

WHEELS: Check that the wheels turn smoothly and show no signs of lateral deviations. Turn the wheel slightly from side to side to check that there is no lateral play in the bearings. Make sure that there are no broken or loose spokes. Check that the axles or quick-release levers are securely tightened with the correct tightening torque.

HEADSET: Activate the front brake and move the front part of the bicycle back and forth, applying pressure on the handlebars with the rear wheel on the ground. Check for strange noises or movement of the headset, which could indicate that the bearings are worn or the headset has not been correctly tightened. Once the headset is correctly adjusted, check that it turns smoothly.

LINKAGE PIVOT POINTS: On full suspension bicycles, check that all the linkage pivot points rotate smoothly and show no signs of play in the bearings. Pull the linkages from side to side on the bicycle and pay attention to any noise or play at the pivot points. If the linkages do not operate smoothly or show signs of play, it could be a sign that the tightening torques are incorrect or that the bearings are worn or damaged.

BEARINGS: The bearings (bottom bracket, linkage pivot points, headset, wheels, etc.) are elements subject to wear that must be inspected on a regular basis to ensure that they operate correctly. Bearings in poor condition can damage the components in which they are installed. Adverse weather conditions speed up bearing wear. Bearings that have excessive play or that do not turn smoothly must be replaced immediately. In the case of any doubt, consult your authorized dealer.

NOTICE

Damage to components like the frame, bicycle wheels, etc. associated with the lack of maintenance and the replacement of the bearings are not covered by the warranty conditions.



Failure to follow the recommendations outlined in this manual and riding a bicycle that shows signs of the symptoms described above may cause accidents and serious injuries.



TIGHTENING TORQUES. Always check the tightening torques and install the components described in this manual according to the tightening torque specifications. Follow the tightening torque specifications for components from other manufacturers installed on your Orbea bicycle. The failure to follow these specifications may lead to the malfunction of the components, accidents and even death.

MAINTENANCE SCHEDULE

NOTICE

Maintenance periods for the components indicated below are general guidelines and largely depend on factors such as weather conditions in which your bicycle is ridden (adverse conditions considerably reduce the life of the components and increase maintenance frequency), the cleanliness of your bicycle and its components (components with accumulated dirt wear more quickly), and use (more demanding use of the bicycle will require more frequent maintenance periods).

For components from other brands mounted on Orbea bicycles, you can check the recommended or mandatory maintenance periods on the manufacturer's website or by contacting the distributor of that brand in your country.

NOTICE

Damage to components as a result of failing to follow the recommended maintenance periods could result in damage that is not covered by the warranty conditions of Orbea or the component manufacturer.



The failure to comply with maintenance periods could result in damage to the components and lead to malfunctions and accidents.

HEADSET:

- Inspection of its operation before each ride.
- Disassembly and manual inspection of the bearings once every 6 months of use.

BOTTOM BRACKET:

- Inspection of its operation before each ride.
- Disassembly and manual inspection of the bearings once every 6 months of use.

DRIVETRAIN:

- Inspection of its operation before each ride.
- Regular inspection of chain wear every 500 km. A chain that is worn beyond the manufacturer's recommendations

must be replaced to prevent damage to the rest of the drivetrain components. The failure to observe the manufacturer's recommendations in terms of wear could necessitate the replacement of the rest of the parts of the drivetrain.

WHEELS:

- Inspection of its operation before each ride.
- Disassembly and manual inspection of the bearings and all components once every 6 months.

SHOCKS AND SUSPENSION FORKS:

- Inspection of its operation before each ride.
- Inspection and full maintenance every 125 hours or once a year (whichever occurs first) by the manufacturer's authorized dealer.

TELESCOPIC SEAT POSTS:

- Inspection of its operation before each ride.
- Inspection and full maintenance every 125 hours or once a year (whichever occurs first) by the manufacturer's authorized dealer.

PIVOT POINTS ON FULL SUSPENSION FRAMES:

- Inspection of its operation before each ride.
- Disassembly of the frame and the manual inspection of all the bearings every 125 hours of use or once a year (whichever occurs first). These times may be shorter depending on the conditions in which the bicycle is ridden. More demanding use of the bicycle or use in adverse weather conditions or in mud requires the disassembly and inspection of the frame once every 75 hours of use or once every 6 months (whichever comes first). If a bearing does not turn smoothly or has excessive play, it must be replaced immediately.

GEAR CABLES AND HOUSING:

- Inspection of its operation before each ride.
- Replacement of gear cables every 6 months to 1 year depending on the conditions in which the bicycle is used.

BRAKES:

- Inspection of the operation and wear of the brake pads or shoes before each ride.
- Check the wear on disc brakes and the cables or hydraulic lines every 6 months to 1 year depending on the conditions in which the bicycle is used. Flush the hydraulic lines once a year.



Some of these checks and maintenance needs go beyond the mechanical knowledge of most bicycle users. If you are not qualified to perform the necessary maintenance, always visit an Orbea dealer for maintenance on your bicycle and its components. The failure to perform proper maintenance can result in malfunctions and accidents with serious consequences.

NOTICE

Maintenance performed incorrectly can damage the components, which are not covered by the warranty conditions.

REPLACEMENT PARTS

Always use original Orbea replacement parts or those from the component manufacturer in question.



The use of non-original replacement parts may cause damage that results in malfunctions and accidents with serious consequences.



The installation of some of the replacement parts in this technical manual are beyond the mechanical knowledge of most bicycle users. If you are not qualified to install these replacement parts, always visit an Orbea dealer for maintenance on your bicycle and its components. The failure to properly install replacement parts can result in malfunctions, accidents and serious injuries.

NOTICE

The installation of non-original replacement parts can damage your bicycle and is not covered by the warranty conditions.

AFTER A CRASH OR AN IMPACT

Falling off your bike is part of cycling. If you have an accident on your Orbea bicycle, be sure that you're okay and seek medical care, if necessary. If you are uninjured, you should check the condition of your bicycle before continuing to ride.

INSPECT THE FRAME AND THE BICYCLE COMPONENTS TO SEE IF THEY HAVE BEEN DAMAGED IN ANY WAY

If you detect any problem, do not continue to ride the bicycle.

POINTS TO CHECK

Inspect the frame and the fork to identify whether either of these components have been broken or bent. If you detect any damage or cracks, you must stop using the bicycle immediately. On carbon frames, look for cracks or soft spots in the carbon. If you detect any of these symptoms, you must stop using the bicycle immediately.



The materials used on carbon frames and forks are rigid and strong, but if overloaded or if they suffer an impact, the fibers do not bend, and they will break. A strong enough impact to this material could cause damage that, while not visible at first glance, could cause the materials to fail in the future. In the case of any doubt about the consequences of a fall or accident, contact your Orbea dealer for a correct diagnosis of the materials.

Check the drivetrain and the wheels to make sure that the components operate correctly. If you discover any damage to the components, stop using the bicycle immediately.

Even if you do not observe any damage, pay close attention to the sound of your bicycle when you ride it again. Damage and other problems can cause unusual noises. If you notice any unusual noise, stop using your bicycle immediately and contact your Orbea dealer for a correct diagnosis of the problem.

TAKE YOUR ORBEA BICYCLE TO AN AUTHORIZED DEALER FOR A PROFESSIONAL INSPECTION

Some of the consequences of a fall or accident can only be detected by completely disassembling the bicycle to check for the presence of damage or other signs of deterioration.



A collision or impact can cause serious damage to your bicycle and its components, causing them to malfunction or wear out prematurely. Malfunctions can occur suddenly and without notice, causing you to lose control of your bicycle and suffer serious injuries, or even death.

04 WARNINGS OF USE

MAXIMUM TYRE WIDTH

This technical manual specifies the maximum size of the tyres that can be mounted on the frame. Always follow these guidelines when installing tyres on your bicycle.

However, the real measurements of the tyre circumference and width may change from one manufacturer to another. When installing a tyre other than that originally mounted on your Orbea bicycle, check that there is at least 6 mm between the top and the sides of the tyre and any part of the frame.

NOTICE Damage to the frame or components due to the use of a tyre that does not comply with these measurements is not covered by the warranty conditions.

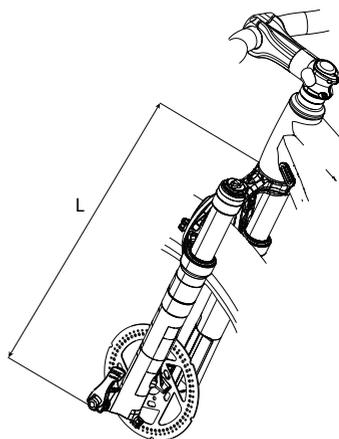
MINIMUM SEATPOST INSERTION

Always follow the specifications regarding the minimum insertion depth of the seatpost or the frame on road bicycles with exclusive Orbea seatposts. The failure to follow these instructions can cause stresses on the materials beyond the conditions for which they were designed and cause damage not covered by the warranty conditions, as well as accidents that can result in serious injuries.

MAXIMUM FORK LENGTH (AXLE TO CROWN)

Always abide by the maximum fork length listed in the technical specifications section of this manual. The maximum fork length refers to the distance between the fork axle and the bottom part of the head tube (axle to crown).

⚠ The failure to abide by this measurement and install forks with a length greater than the maximum specifications can force the frame beyond its design characteristics, possibly resulting in malfunctions of the material that could cause accidents and serious injuries.

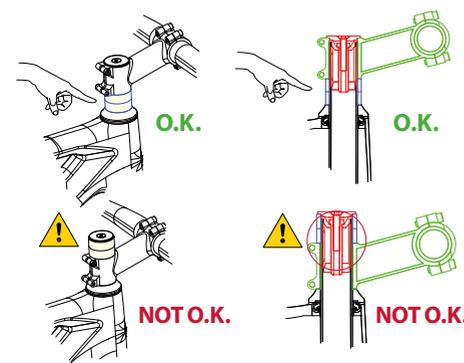


MAXIMUM NUMBER OF HEADSET SPACERS

⚠ Never use more headset spacers below the stem than those specified for the frame. Consult the specifications tables to find out the maximum number of headset spacers that are acceptable for use on an Orbea frame. Installing more spacers than those permitted can stress the materials beyond the use for which they were designed, which can cause accidents and serious injuries.

HEADSET SPACERS ABOVE THE STEM

CARBON EXPANDER POSITION INSIDE THE FORK STEERER TUBE



⚠ Never install headset spacers above the stem. Placing spacers above the stem, especially on forks with a carbon steerer tube, can cause the carbon expander inside the fork tube to be positioned above the lower limit of the steerer tube, which can stress the materials beyond the use for which they were designed, possibly causing accidents and serious injuries.

⚠ The length of the fork steerer tube must always be appropriate for the position of the stem in the fork. The stem must always be installed in the steerer tube of the fork so that both fastening bolts on the back of the stem are positioned above the surface of the steerer tube of the fork. Never mount the stem so that the top fastening bolt of the stem remains above the top edge of the fork steerer tube. This will stress the materials beyond the use for which they were designed, possibly causing accidents and serious injuries.

INTENDED USE

The intended use of all models is ASTM Condition 3, that includes Condition 1 and 2 as well as technical natural trails with jumps and drops up to 61 cm.

The use of a bicycle on this terrain requires technical skills and may cause beginners to sustain injuries.

For information about all ASTM categories, consult the General User Manual.



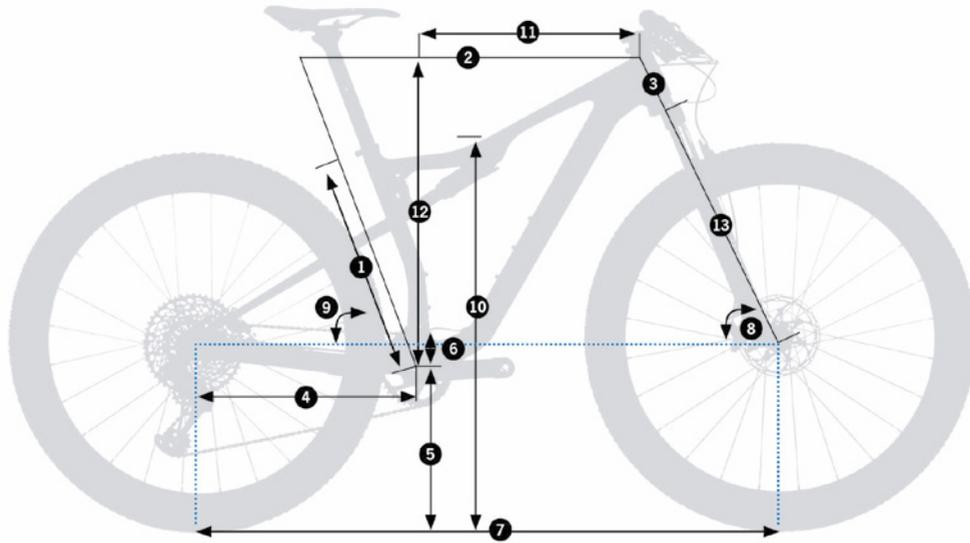


05 OIZ CARBON

OMR 2019 & OMX 2021

GEOMETRY AND SIZING

OIZ OMR



SIZES	S-27.5"***	S-29"	M-29"	L-29"	XL-29"
1 - Seat Tube (C-T)	405	405	432	470	520
2 - Top Tube (EFF)	557	564	593	617	641
3 - Head Tube	95	90	95	105	120
4 - Chainstay	425	435	435	435	435
5 - BB Height	328	327	327	327	327
6 - BB Drop	29	47	47	47	47
7 - Wheelbase	1,081	1,094	1,123	1,148	1,173
8 - Head Angle	69°	69°	69°	69°	69°
9 - Seat Angle	75°	75°	75°	75°	75°
10 - Standover		717	732	742	749
11 - Reach	407	407	435	456	476
12 - Stack	558	586	591	600	614
13 - Fork Length	488	504	504	504	504

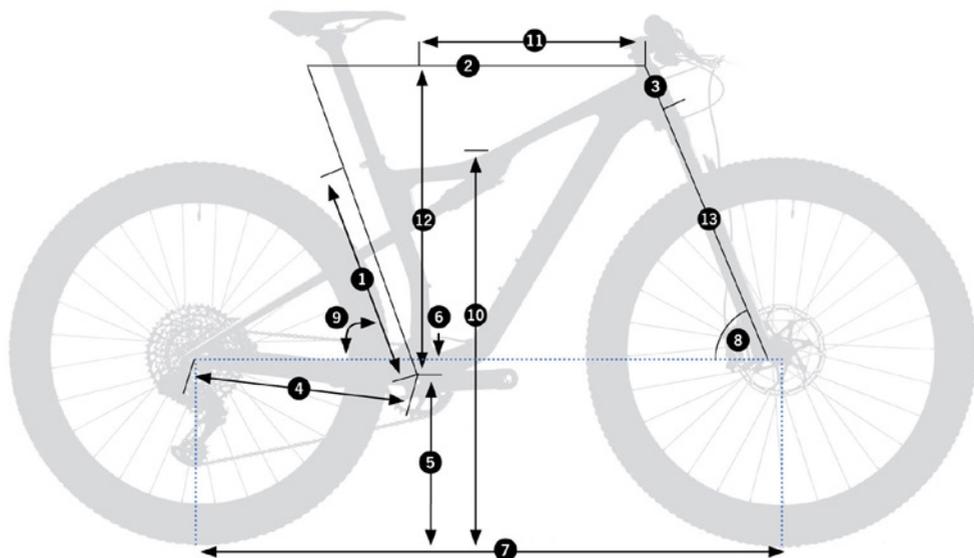
HEIGHT (CM)	HEIGHT (IN)	SIZE*
155-170	61.1"-66.9"	S-27.5"
155-170	61.1"-66.9"	S-29"
165-180	65.0"-70.9"	M-29"
178-190	70.1"-74.8"	L-29"
185-198	72.8"-78.0"	XL-29"

* These sizing measurements are an approximate guide. The most effective method to choose the right size for you is to try the bicycle at one of our authorized dealers.

** Size S 27.5" is not available from range 2021.

GEOMETRY AND SIZING

OIZ OMX



SIZES	S-XC	M-XC	L-XC	XL-XC	S-TR	M-TR	L-TR	XL-TR
1 - Seat Tube (C-T)	405	432	470	520	405	432	470	520
2 - Top Tube (EFF)	564	593	617	641	567	596	619	643
3 - Head Tube	90	95	105	120	90	95	105	120
4 - Chainstay	430	430	430	430	430	430	430	430
5 - BB Height	327	327	327	327	334	334	334	334
6 - BB Drop	47	47	47	47	40	40	40	40
7 - Wheelbase	1,089	1,119	1,143	1,168	1,096	1,126	1,150	1,176
8 - Head Angle	69°	69°	69°	69°	68°	68°	68°	68°
9 - Seat Angle	75°	75°	75°	75°	74°	74°	74°	74°
10 - Standover	717	732	742	749	724	739	749	756
11 - Reach	407	435	456	476	397	425	446	466
12 - Stack	586	591	600	614	593	598	608	622
13 - Fork Length	504	504	504	504	524	524	524	524

HEIGHT (CM)	HEIGHT (IN)	SIZE*
155-170	61.1"-66.9"	S
165-180	65.0"-70.9"	M
178-190	70.1"-74.8"	L
185-198	72.8"-78.0"	XL

* These sizing measurements are an approximate guide. The most effective method to choose the right size for you is to try the bicycle at one of our authorized dealers.

MAXIMUM AND MINIMUM SADDLE HEIGHT WITH A DROPPER SEATPOST

Find below a table with the maximum and minimum possible height with the seatpost in its extender position.

The maximum height refers to the seatpost installed in its minimum insertion, which is defined by the seatpost.

The minimum height refers to the seatpost installed in its maximum insertion, which is defined by the frame.

Only the measurements with the seatpost and saddle options offered by Orbea for a given frame are listed. To know these measurements for any other seatpost brand and model, consult the seatpost dimensions with the manufacturer and check the maximum insertion for each size frame on this manual.

NOTICE The measurements given show the distance between the center of the bottom bracket shell to the middle of the saddle's top (saddle models specified from Orbea).

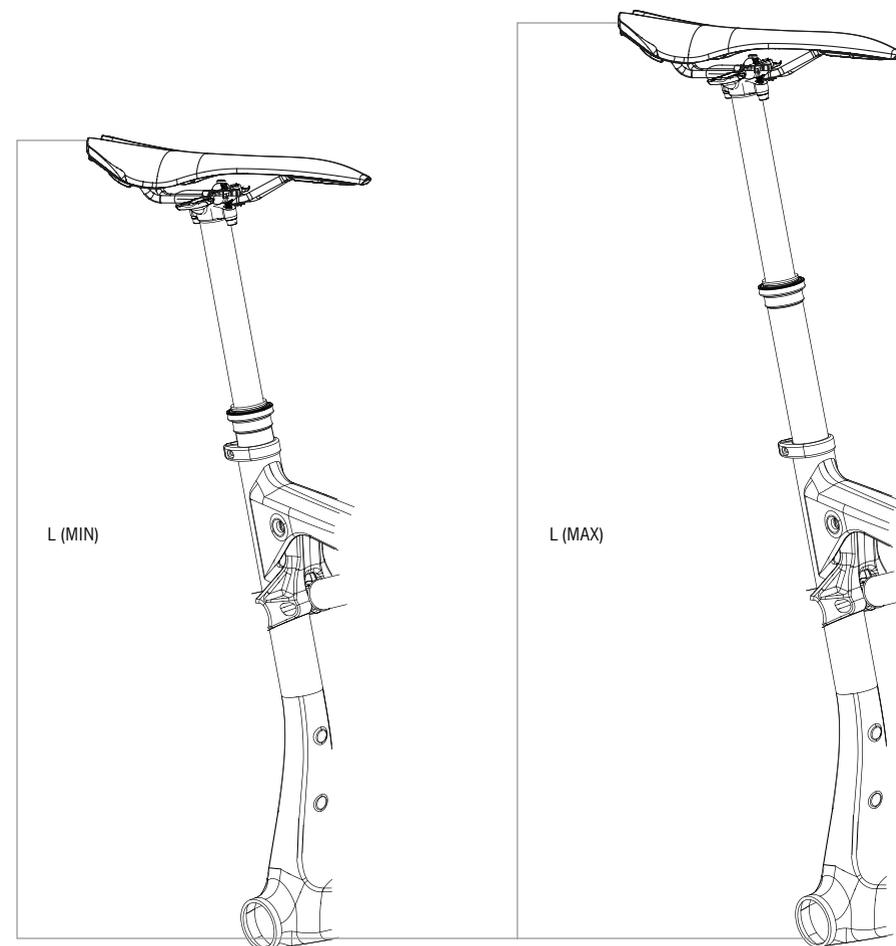
Different saddle models in the market may vary these heights by +/-5mm depending on the saddle model height. If your saddle height differs from the values on the table by less than 5mm, it may be possible to adjust the height by means of an aftermarket saddle of a different height.

If your saddle height differs from the values on the table by more than 5mm, choose a longer or shorter travel seatpost.

FRAME/SIZE

DROPPER SEATPOST MODEL		OIZ OMR (S) OIZ OMX (S)	OIZ OMR (M) OIZ OMX (M)	OIZ OMR (L) OIZ OMX (L)	OIZ OMR (XL) OIZ OMX (XL)
OC2 31.6 125mm drop	Maximum saddle height	759mm*	786mm*	824mm*	876mm*
	Minimum saddle height	640mm*	660mm*	699mm*	748mm*
OC2 31.6 150mm drop	Maximum saddle height	809mm*	836mm*	874mm*	924mm*
	Minimum saddle height	691mm*	694mm*	724mm*	772mm*
FOX TRANSFER 31.6 125mm drop	Maximum saddle height	714mm*	741mm*	779mm*	830mm*
	Minimum saddle height	614mm*	641mm*	681mm*	730mm*
FOX TRANSFER 31.6 150mm drop	Maximum saddle height	769mm*	793mm*	834mm*	883mm*
	Minimum saddle height	651mm*	665mm*	706mm*	755mm*

* The measurements may vary +/-5mm depending on the height of the saddle model.



TECHNICAL SPECIFICATIONS

	OIZ OMX	OIZ OMR
FRAME MATERIAL		
Front triangle	ORBEA OMX CARBON	ORBEA OMR CARBON
Swingarm	ORBEA OMX CARBON	ORBEA OMR CARBON
Linkage	CARBON	ALUMINUM (Carbon on certain OIZ OMR 2019-2020 models)
RECOMMENDED USE		
	XC, MARATHON	
Sizes	27S (only until MY2020) S/M/L/XL	
Fork travel	100mm (XC) / 120mm (TR)	
Maximum fork length (axle-to-crown)	524mm	
Maximum number of headset spacers	30mm	
Rear travel	100mm (XC) / 120mm (TR)	
Shock	FOX I-LINE	
SHOCK MEASUREMENTS (EYE-TO-EYE)		
XC	190x40	
TR	190x45	
SHOCK HARDWARE		
Frame end	8x30mm	
Linkage end	8x21.84mm	
Recommended SAG	20%-25%	
Wheel size	29"	
Maximum tyre width (rear)	2.40"	2.40"
Maximum tyre width (front)	Defined by fork (FOX 32>2.40")	
Fork offset	44mm	
Bottom bracket shell width	91.5mm	
Bottom bracket standard	(PRESS FIT) PF92	
Chainline	52mm	
Headset	1" 1/8-1" 1/2 INTEGRATED	
Rear axle standard	BOOST 12X148	
Rear axle measurements	12x177mm	12x182mm
Rear axle thread pitch/length	1.0x13mm	1.5x15mm
Seatpost diameter	31.6mm	
Seatpost clamp diameter	37mm	

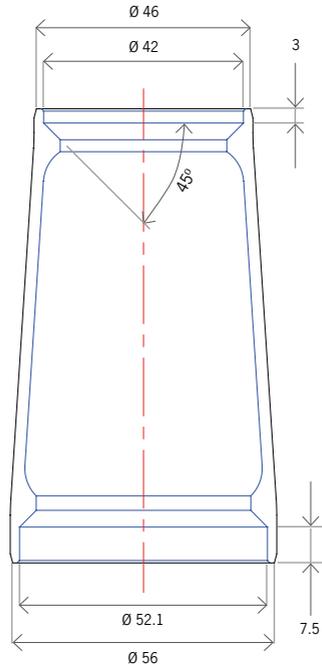
	OIZ OMX	OIZ OMR
SEATPOST MAXIMUM INSERTION		
S	222mm	
M	252mm	
L	291mm	
XL	346mm	
Internal cabling of dropper seatpost		
	YES	
Front derailleur		
	N/A 1X ONLY	
Maximum chainring size		
	36T	
Maximum size oval chainring		
	34T	
Minimum chainring size		
	32T	30T
Minimum size oval charing		
	32T	30T
Brake type		
	DISC	
Rear brake caliper standard		
	FLAT MOUNT*	POST MOUNT*
Rear caliper flat mount bolt length (chainstay height = 25mm)		
	SRAM: 32mm	-
	SHIMANO: 38mm	-
Maximum rear rotor size		
	160mm	180mm
Minimum rear rotor size		
	160mm	
Chainguide		
	YES. Direct mount in swing arm	
ICGS		
	NO	
Cabling		
	Internal. Full length outer	
Compatible rear brake left		
	YES. Rear brake hose enters the frame on the left	
Bottle holder		
	1 in size S. 2 In rest of sizes	
Transmission compatibility		
	SHIMANO: 11S and 12S	
	SRAM: 11S and 12S	
Compatible shimano DI2		
	NO	
Compatible SRAM AXS		
	YES	
Powermeter compatibility**		
	QUARQ: OIZ OMR RANGE 2019: NO OIZ OMR FROM RANGE 2020: YES OIZ OMX: YES	
	ROTOR: NO 4iiii: NO	
Trailer compatible		
	NO	
Rear rack compatible		
	NO	
Fixed mudguard compatible		
	NO	
Child seat compatible		
	NO	

* Not all calipers and rotors in the market are compatible with all frames. All components specified from Orbea have been tested. For aftermarket options, check component dimensions and tolerances before purchasing.

** For other powermeters, consult the compatibility and dimensions with the manufacturer.

HEADSET

HEADTUBE DIMENSIONS



WITH STANDARD STEMS*

Round headset spacers

HEADSET SPECIFICATIONS	TYPE	ID**	OD***	BEARING ANGLE	SHIS CODE	BEARING DIMENSIONS
TOP	1-1/8" Integrated	42mm	46mm	45°	IS42/28.6	Angular contact bearing 30x41.8x8mm
BOTTOM	1-1/2" Integrated	52.1mm	56mm	45°	IS52/40	Angular contact bearing 40x52x7mm

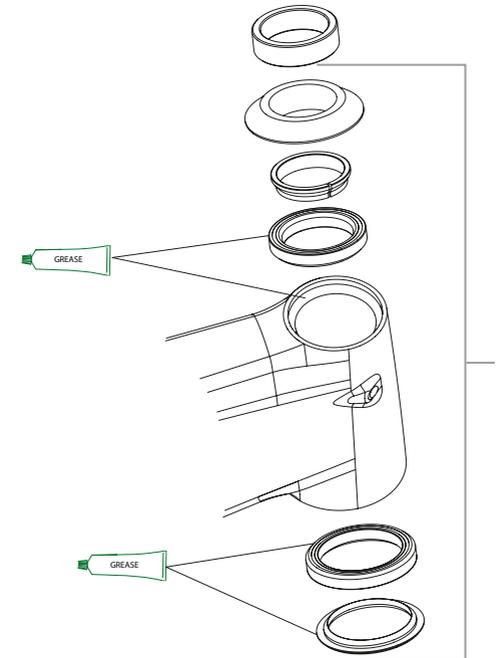
* On OIZ OMR 27" and 29" 2019-2020 and some OIZ OMR 2021- models.

** ID: Internal headtube diameter.

*** OD: External headtube diameter.

STANDARD STEM OPTION

Round headset spacers



01 INTEGRATED HEADSET KIT 1 1/8"-1 1/2"

Includes starnut, bolt and stem topcap

ART N°: X023		QUANTITY
1.1	STEM TOPCAP	1
1.2	HEADSET PRELOAD BOLT	1
1.3	1 1/8" STARNUT	1
1.4	HEADSET COVER	1
1.5	PRELOAD RING	1
1.6	TOP BEARING	1
1.7	LOWER BEARING	1
1.8	FORK CROWN RACE	1

HEADSET

WITH OC3 STEM*

Profiled headset spacers

HEADSET SPECIFICATIONS	TYPE	ID**	OD***	BEARING ANGLE	SHIS CODE	BEARING DIMENSIONS
TOP	1-1/8" Integrated	42mm	46mm	45° Lower 36° Top	Orbea specific	Angular contact bearing 30.1x41.8x8mm 36/45
BOTTOM	1-1/2" Integrated	52.1mm	56mm	45°	IS52/40	Angular contact bearing 40x52x7mm

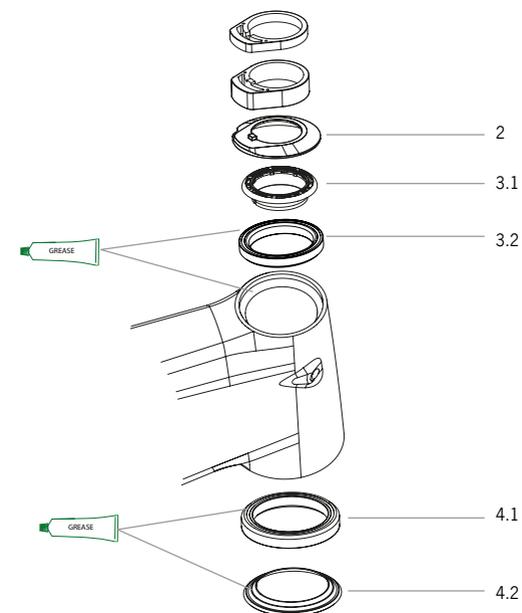
* On OIZ OMR 27" and 29" 2019-2020 and some OIZ OMR 2021- models.

** ID: Internal headtube diameter.

*** OD: External headtube diameter.

OC3 STEM OPTION

Profiled headset spacers



02 HEADSET COVER MTB OC3 46 DIAM

ART N°: X001	QUANTITY
HEADSET COVER MTB OC3 46 DIAM	1

03 TOP BEARING ASSEMBLY

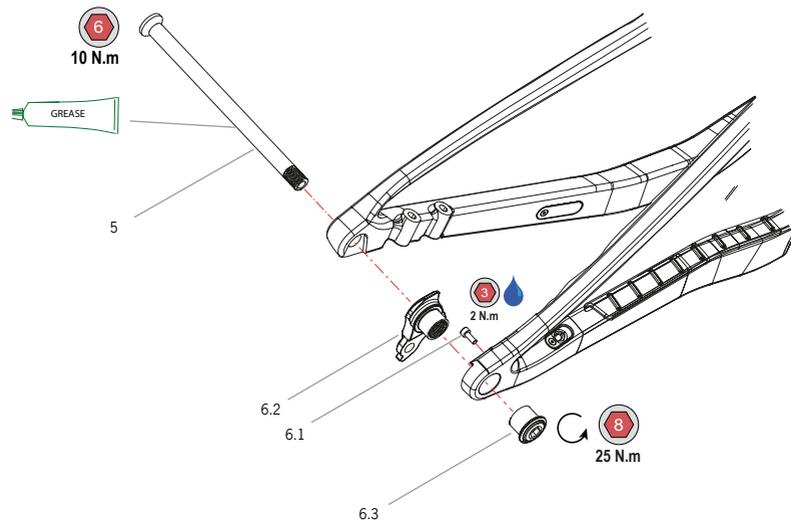
ART N°: X002	QUANTITY
3.1 PRELOAD RING	1
3.2 TOP BEARING 30.1x41.8x8mm 36/45	1

04 LOWER BEARING ASSEMBLY

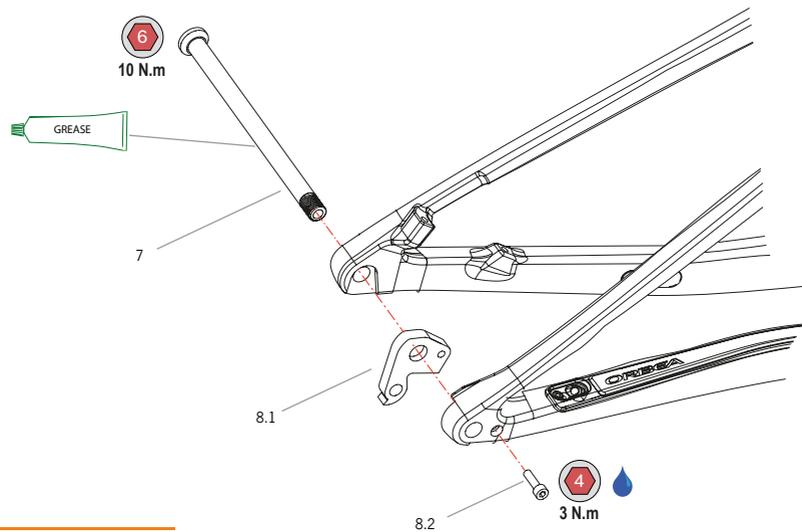
ART N°: X022	QUANTITY
4.1 LOWER BEARING 40x52x7mm	1
4.2 SEALED FORK CROWN RACE 1 1/2"	1

REAR AXLE / DERAILLEUR HANGER

OIZ OMX 2021



OIZ OMR 27" AND 29" 2019



 Always follow the recommended torque settings

05 ORBEA REAR AXLE 12X177 (1.0x13)

OIZ OMX

ART N°: X003

QUANTITY

ORBEA REAR AXLE 12x177 (1.0x13)

1

06 SRAM UDH REAR DERAILLEUR STD X12

OIZ OMX

ART N°: X004

QUANTITY

6.1 ANTITURN BOLT M4x8

1

6.2 SRAM STD REAR DERAILLEUR X12

1

6.3 SRAM REAR MECH NUT X12

1

07 ORBEA REAR AXLE 12x182 (1.5x15)

OIZ OMR

ART N°: X024

QUANTITY

ORBEA REAR AXLE 12x182 (1.5x15)

1

08 REAR DERAILLEUR STD X12

OIZ OMR

ART N°: X025

QUANTITY

8.1 REAR DERAILLEUR STD X12

1

8.2 BOLT M5x18

1

09 REAR DERAILLEUR DIRECT MOUNT X12

OIZ OMR

ART N°: X026

QUANTITY

9.1 REAR DERAILLEUR MTB DM X12

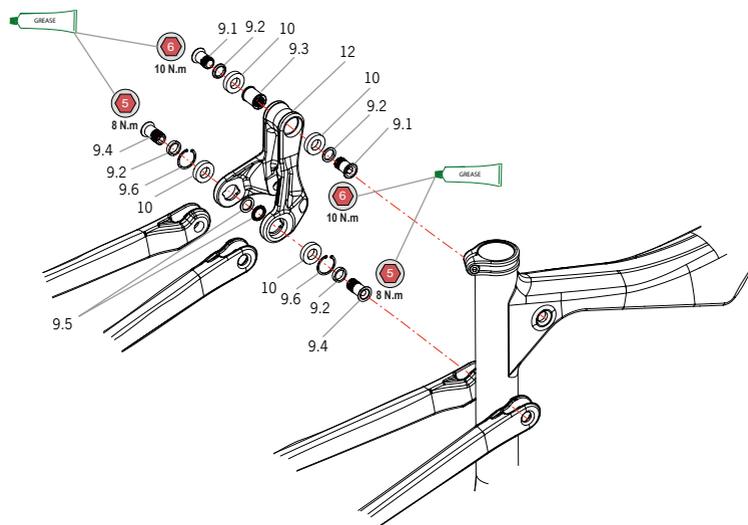
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9.2 BOLT M5x18

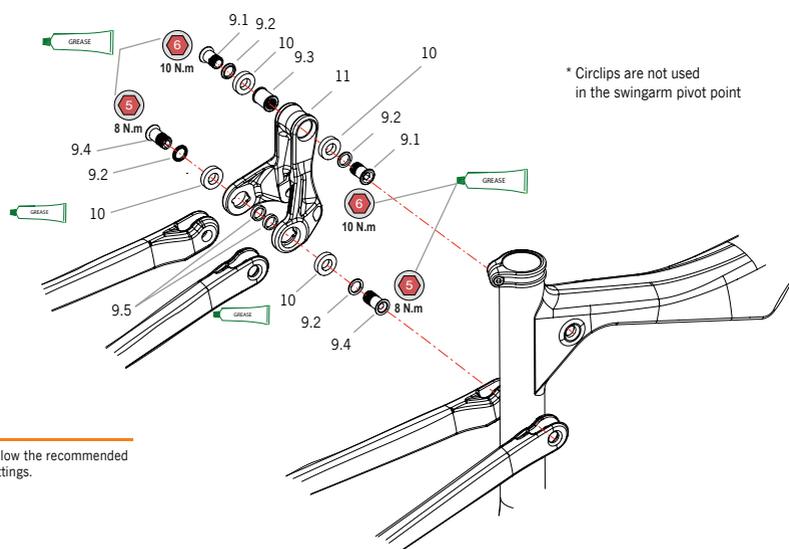
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LINKAGE

LINKAGE ASSEMBLY AND HARDWARE. MODELS WITH CARBON LINKAGE
OIZ OMR 2019, OIZ OMR 2020 (All models except M20 and M30), OIZ OMX



LINKAGE ASSEMBLY AND HARDWARE. MODELS WITH ALUMINUM LINKAGE
OIZ OMR 2020 M20-M30, OIZ OMR 2021



 Always follow the recommended torque settings.

09 OIZ LINKAGE HARDWARE KIT. OIZ H/OMR/OMX

For alloy and carbon linkage. Circlips are not used on alloy linkage

ART N°: X005	QUANTITY
9.1 LINKAGE-FRAME BOLT	2
9.2 LINKAGE-FRAME/LINKAGE-C/STAYS WASHER	4
9.3 LINKAGE-FRAME BEARING SPACER	1
9.4 LINKAGE-SWINGARM BOLT	2
9.5 LINKAGE-SWINGARM WASHER	2
9.6 LINKAGE-SWINGARM CIRCLIP (Not used in alloy linkage)	2

10 LINKAGE BEARING KIT OIZ H/OMR/OMX

For alloy and carbon linkage

ART N°: X006	QUANTITY
BEARING 6800 10x19x5	4

11 ALLOY LINKAGE OIZ H/OMR

ART N°: X027	QUANTITY
THE LINKAGE IS SIZE SPECIFIC · One size for M/L/XL frames. · One size for 27S/29S frames	1

12 CARBON LINKAGE OIZ CARBON

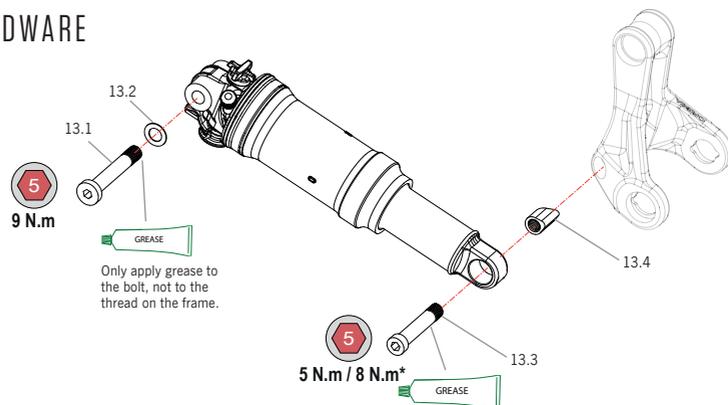
The carbon linkage for OIZ OMR (2019-2020) and OIZ OMX is only available as a warranty or crash replacement item through an Orbea dealer.

SHOCK

ASSEMBLY AND HARDWARE ON CARBON LINKAGE MODELS

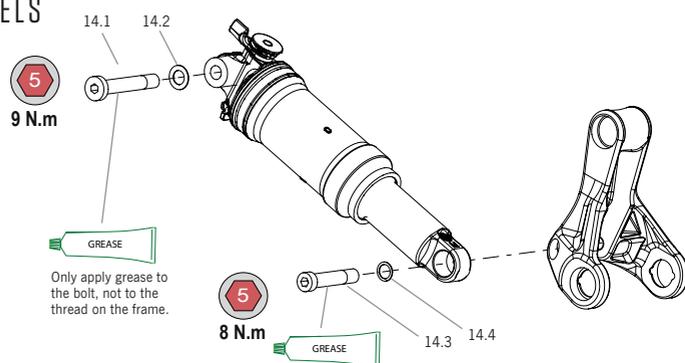
OIZ OMR 2019
OIZ OMR 2020
(All the models
except M20 and M30)
OIZ OMX

* There are two versions of the screw with different tightening torque. Check the tightening torque on the screw head.



ASSEMBLY AND HARDWARE ON ALLOY LINKAGE MODELS

OIZ OMR 2020 M20-M30
OIZ OMR 2021



Always follow the recommended torque settings.

13 SHOCK FIXING HARWARE KIT

For carbon linkage

OIZ OMR (2019-2020) / OIZ OMX

ART N°: X008	QUANTITY
13.1 SHOCK-FRAME BOLT	1
13.2 SHOCK-FRAME WASHER	1
13.3 SHOCK-LINKAGE BOLT	1
13.4 SHOCK-LINKAGE NUT	1

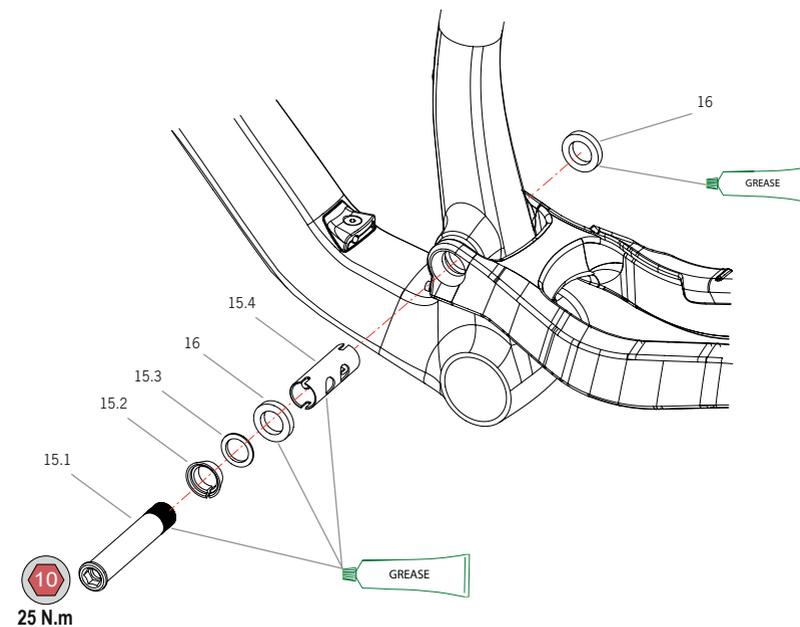
14 SHOCK FIXING HARWARE KIT

For alloy linkage

OIZ OMR 2020-2021

ART N°: X028	QUANTITY
14.1 SHOCK-FRAME BOLT	1
14.2 SHOCK-FRAME WASHER	1
14.3 SHOCK-LINKAGE BOLT	1
14.4 SHOCK-LINKAGE WASHER	1

MAIN PIVOT



Always follow the recommended torque settings.

15 MAIN PIVOT HARDWARE KIT

OIZ OMR / OIZ OMX

ART N°: X009	QUANTITY
15.1 MAIN PIVOT AXLE	1
15.2 MAIN PIVOT CONE	1
15.3 MAIN PIVOT WASHER	1
15.4 BEARING SPACER	1

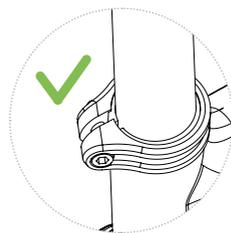
16 MAIN PIVOT BEARING KIT

OIZ OMR / OIZ OMX

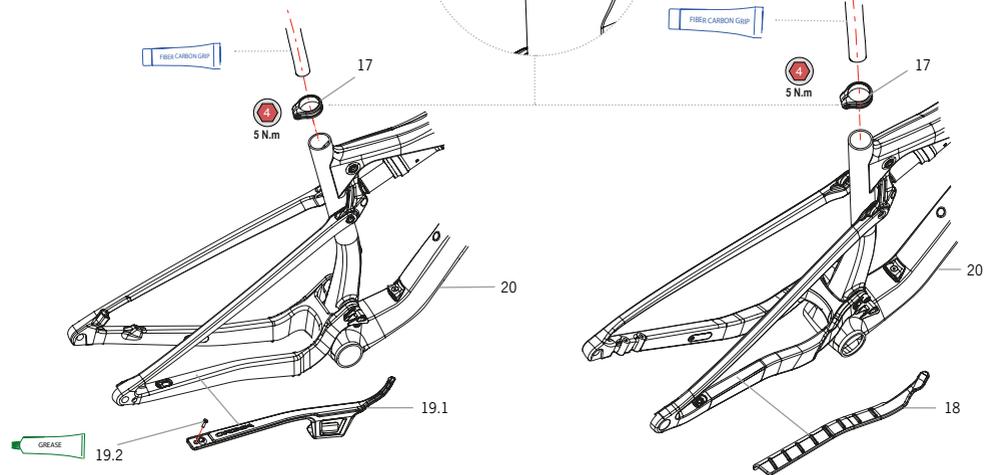
ART N°: X010	QUANTITY
BEARING 6802 15x24x5	2

SEATPOST CLAMP AND PROTECTORS

Always follow the recommended torque settings.



Correct clamp position



OIZ OMR

OIZ OMX

17 SEATPOST CLAMP OIZ 37MM OIZ CARBON

OIZ OMR / OIZ OMX

ART N°: X011	QUANTITY
SEATPOST CLAMP OIZ 37mm OIZ CARBON	1

18 C/STAY ADHESIVE RUBBER PROTECTOR OIZ OMX

OIZ OMX

ART N°: X012	QUANTITY
C/STAY ADHESIVE RUBBER PROTECTOR OIZ OMX	1

19 C/STAY RUBBER PROTECTOR OIZ OMR

OIZ OMR

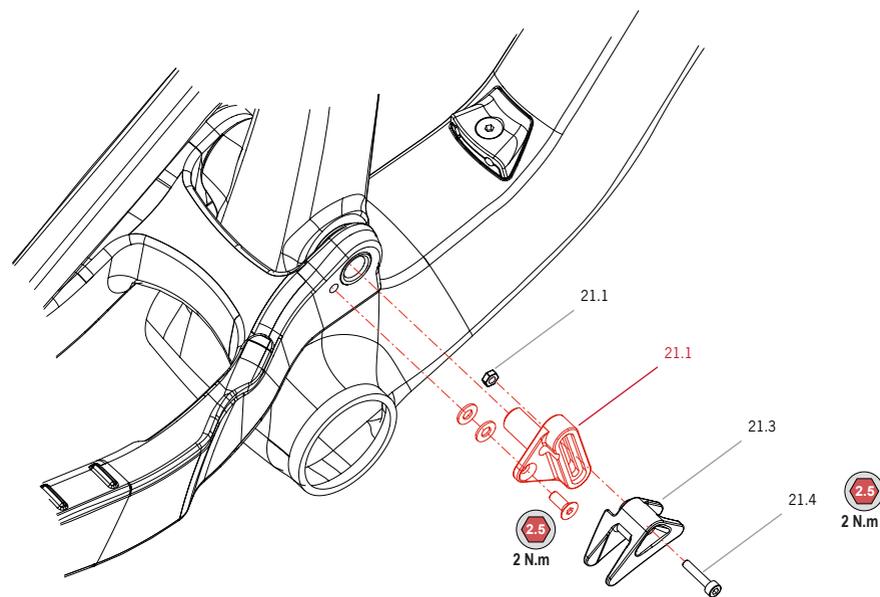
ART N°: X029	QUANTITY
19.1 C/STAY RUBBER PROTECTOR OIZ OMR	1
19.2 BOLT M3x12	1

20 DOWNTUBE ADHESIVE TRANSPARENT PROTECTOR

OIZ OMR / OIZ OMX

ART N°: X013	QUANTITY
DOWNTUBE ADHESIVE TRANSPARENT PROTECTOR	1

CHAINGUIDE



WASHERS

SRAM	2x0.5mm
SHIMANO 1X12	3x05mm with Raceface cranks and chainring
SHIMANO 1X11	2x0.5 mm

Always follow the recommended torque settings.

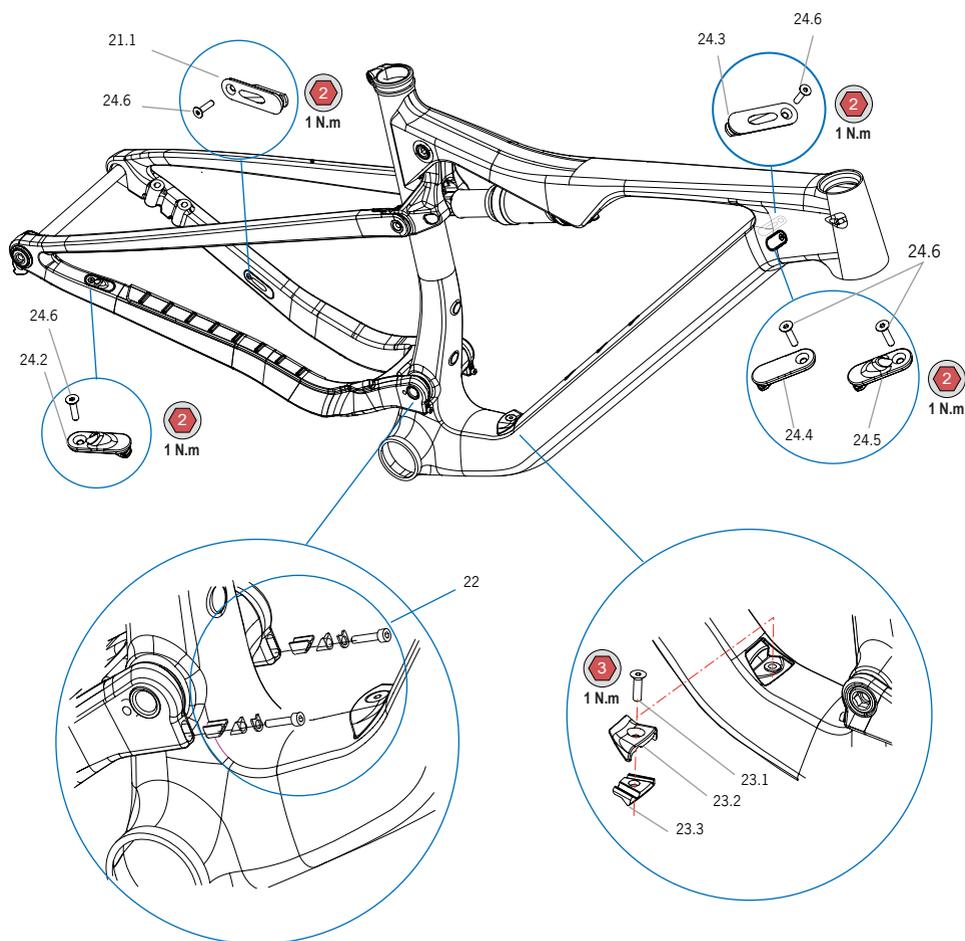
21 CHAINGUIDE OIZ OMR/OMX

OIZ OMR / OIZ OMX

ART N°: X014	QUANTITY
21.1 NUT M3	1
21.2 CHAINGUIDE KIT OIZ CARBON Chainguide bracket (X1) Washers 0.5mm (X3) Chainguide bolt (X1)	1
21.3 CHAINGUIDE 1X	1
21.4 BOLT M3x15	1

CABLING

FRAME STOPS / CABLEGUIDES (OIZ OMR/OIZ OMX)



22 SWINGARM CABLE GUIDE WEDGE KIT OIZ CARBON

OIZ OMR / OIZ OMX

ART N°: X015	QUANTITY
22.1 BOLT CABLEGUIDE WEDGE	2
22.2 WASHER CABLEGUIDE WEDGE	2
22.3 EXTERNAL WEDGE	2
22.4 INTERNAL WEDGE	2

23 DOWNTUBE BB CABLEGUIDE KIT OIZ CARBON

OIZ OMR / OIZ OMX

ART N°: X016	QUANTITY
23.1 COUNTERSUNK BOLT M5x18	1
23.2 DOUBLE CABLE GUIDE TOP	1
23.3 DOUBLE CABLE GUIDE BOTTOM	1

24 FRAME CABLEGUIDE KIT OIZ CARBON

OIZ OMR / OIZ OMX

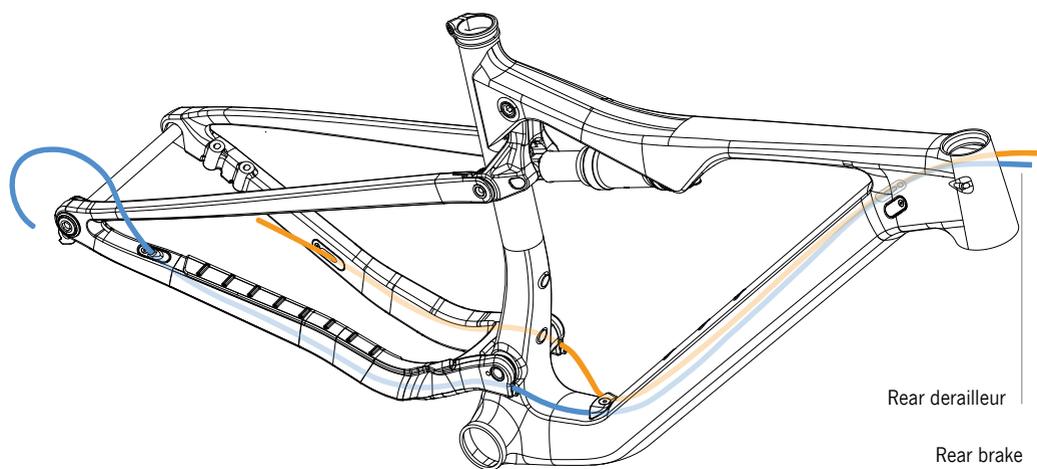
ART N°: X017	QUANTITY
24.1 CABLEGUIDE BRAKE LEFT C/STAY	1
24.2 CABLEGUIDE DERAIL. RIGHT C/STAY Not used in OIZ OMR	1
24.3 CABLEGUIDE BRAKE-DERAIL. D/T RIGHT	1
24.4 BLIND FRAMESTOP D/T Models without dropper seatpost	1
24.5 CABLEGUIDE DROPPER SEATPOST D/T	1
24.6 COUNTERSUNK BOLT M3x12	4



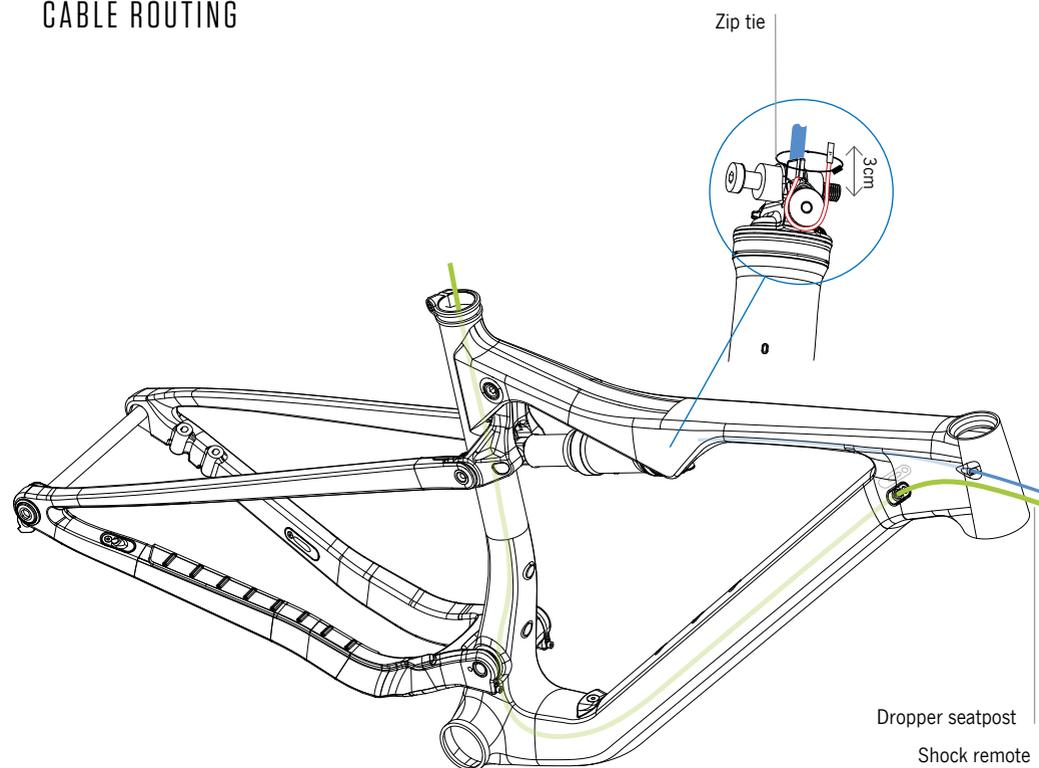
Always follow the recommended torque settings.

CABLING

REAR BRAKE AND REAR DERAILLEUR CABLE ROUTING



SHOCK AND DROPPER SEATPOST REMOTES CABLE ROUTING



NOTICE The rear shock remote cable must be cut at least 3 cm from the point it leaves the remote dial.

The excess should be left inside the toptube and parallel to the remote outer cable. Use a zip tie to hold the inner cable to the outer to avoid contact with the frame. No do tighten the zip tie too much to allow for the correct operation of the remote.

SUSPENSION

FOX DPS I-LINE SHOCK

Recommended shock pressures

XC (190X40)			TR (190X45)	
TOTAL WEIGHT CICLIST+GEAR	AIR PRESSURE	CLICKS REBOUND	AIR PRESSURE	CLICKS REBOUND
kg	psi	from open	psi	from open
60	150	2	141	1
65	162	3	153	2
70	175	4	165	3
75	187	5	176	4
80	200	6	188	5
85	212	7	200	6
90	225	8	211	7
95	237	9	223	8
100	250	10	235	9

These are recommended pressures. They can vary depending on the riding style and terrain conditions.

Orbea y Fox recommend to adjust the air pressure until the desired SAG measurement is achieved. A 20% SAG will provide a firm riding feeling with more support, while a 25% SAG will provide a smoother riding feeling.

Once the desired SAG is achieved, adjust the Rebound dial according to the air pressure reading.

Consult the Fox DPS shock tuning guide here:

www.ridefox.com/dl/bike/my21/605-00-219-FLOAT-DPS-Tuning-Guide-white-RevA.pdf

FOX 34 FORK

Consult the complete Fox 34 tuning guide here:

www.ridefox.com/fox17/help.php?m=bike&id=1081

The following are recommended fork settings, they may vary depending on the riding style and terrain conditions.

FOX 34 FORK AIR PRESSURE SUGGESTIONS*			
WEIGHT OF CYCLIST+GEAR		AIR PRESSURE	
lbs	kg	psi	bar
120-150	54-68	58-68	4.0-4.7
150-180	68-82	72-82	5.0-5.7
180-210	82-95	86-96	5.9-6.6
210-250	95-113	100-114	6.9-7.9

* Recommended initial air pressures to adjust SAG on 34 SC, Float and Rhythm forks

FOX 34 FORK REBOUND SETTINGS SUGGESTIONS

34mm FLOAT SC Air pressure psi/ bar)	FIT4 Rebound	GRIP Rebound
65psi/ 4.5 bar	12	13
70psi/ 4.8 bar	11	12
74psi/ 5.1 bar	10	11
80psi/ 5.5 bar	9	10
85psi/ 5.9 bar	8	9
90psi/ 6.2 bar	7	8
96psi/ 6.6 bar	6	7
101psi/ 7.0 bar	6	6
106psi/ 7.3 bar	5	5
111psi/ 7.6 bar	4	4
117psi/ 8.0 bar	3	3
122psi/ 8.4 bar	2	2
126psi/ 8.7 bar	1	1

The rebound adjustment depends on the shock air pressure. The more air pressure, the more closed the rebound circuit will have to be.

Use the final air pressure on your shock to find the correct rebound setting. Turn the rebound dial clock-wise to the fully closed position.

Then count "clicks" as per the table below.

06 SHOCK, FORK AND DROPPER REMOTE LEVER OC SQUIDLOCK

Consult the full Squidlock user guide from the manuals section on our web.

TECHNICAL SPECIFICATIONS

MATERIALS	
Body	ALUMINIUM
Levers	ALUMINIUM
Dropper remote	ALUMINIUM
Compatible forks	WTH FOX FIT4 PUSH-TO-UNLOCK CARTRIDGE
Compatible shocks	FOX FLOAT DPS I-LINE
Suspension remote positions	3*
Clamp diameter	22.2mm
Cable tension adjustment	INTEGRATED

* Squidlock unlocks the full performance of the FOX DPS shocks, which allow you to choose from three position –Open, Medium and Firm– enabling the bike to conform to any terrain. With Squidlock you will be able to access that third middle position, enjoying the full potential of the DPS technology.

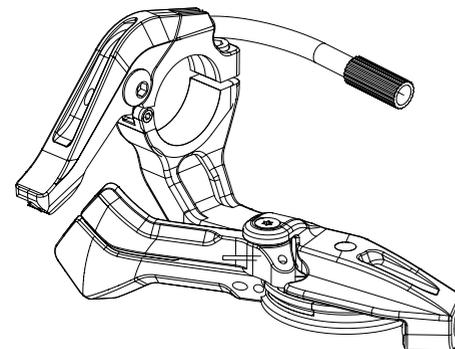
At the same time, Squidlock allows you to access to an intermediate position on the compression settings of FOX forks with GRIP cartridge (Performance Series).

FOX forks with FIT4 cartridge (Factory Series) will have 2 positions available (Firm and Open), but you will be able to tune the Open position compression setting with the black dial on top of the right leg.

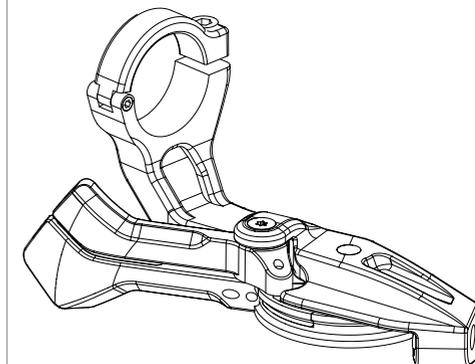
If in the description of your FOX fork with FIT4 cartridge (Factory Series) it specifies “2Pos”, it will mean that when Squidlock is in its middle position (DPS shock intermediate compression setting), it will mean that your fork will be kept in the Open mode, but you will be able to adjust the compression setting manually with the black dial.

ASSEMBLY OPTIONS

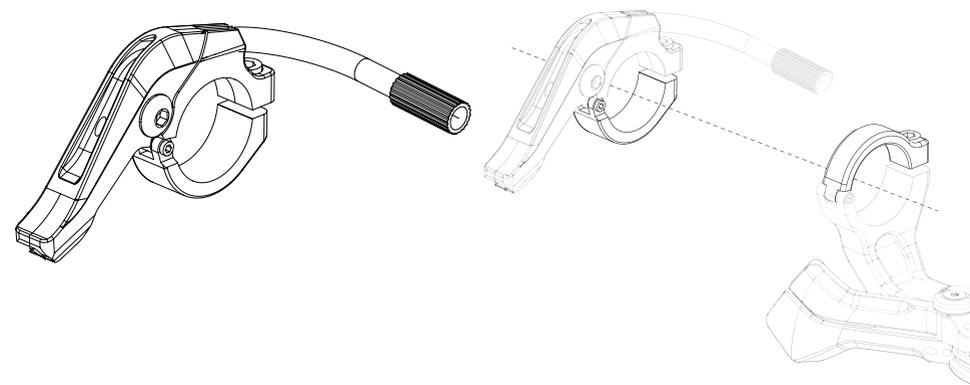
01. FORK+SHOCK+DROPPER REMOTE



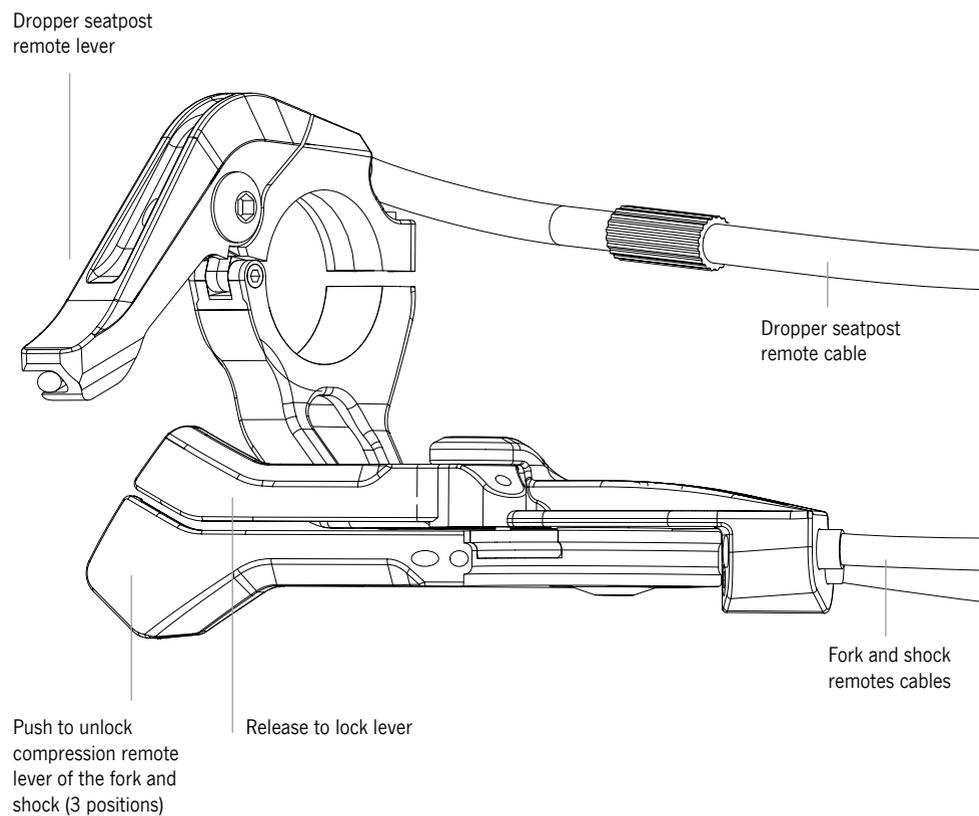
02. FORK+SHOCK REMOTE



03. DROPPER SEATPOST REMOTE



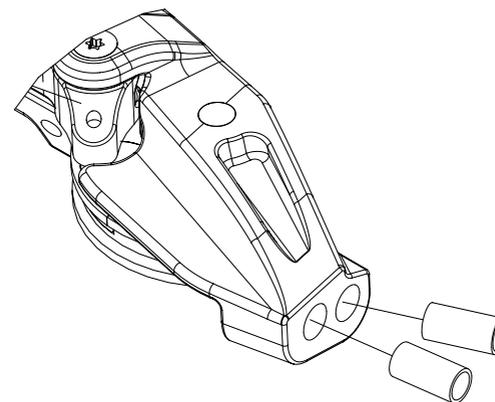
OPERATION



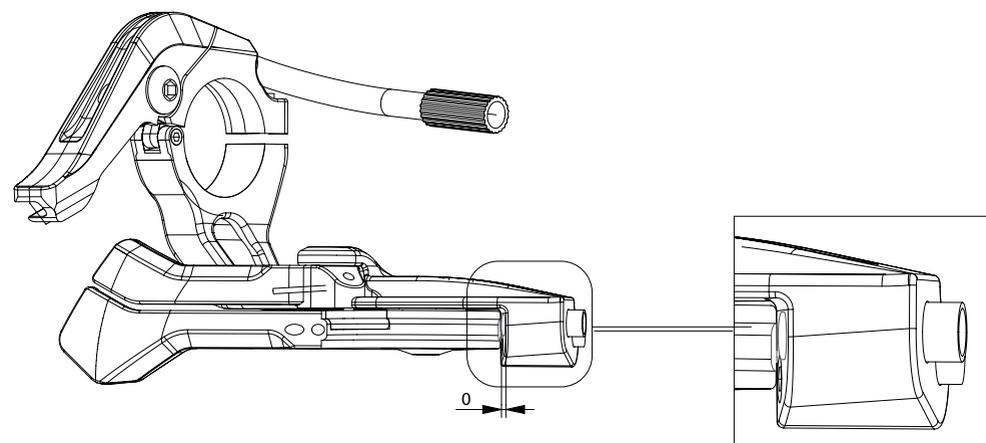
ASSEMBLY AND CABLE TENSION ADJUSTMENT

SUSPENSIONS CABLE TENSION ASSEMBLY AND ADJUSTMENT

01. Install the 4mm Jagwire metal ferrules on the shock and fork outers.



02. Start by setting the bolts flush with the inside face of the remote.

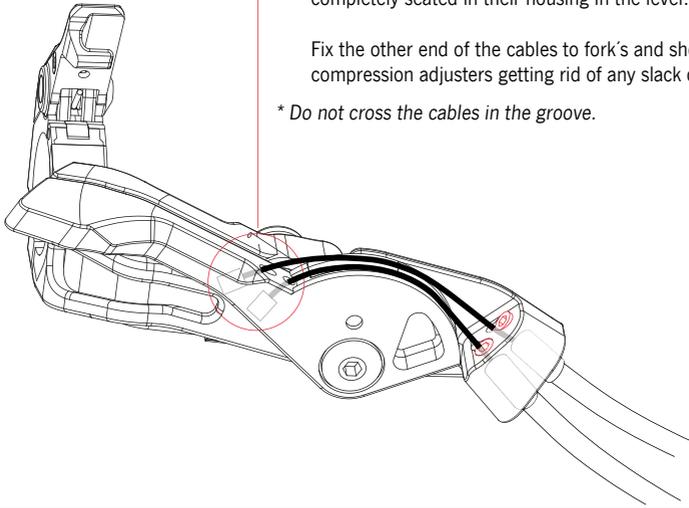


ASSEMBLY AND CABLE TENSION ADJUSTMENT

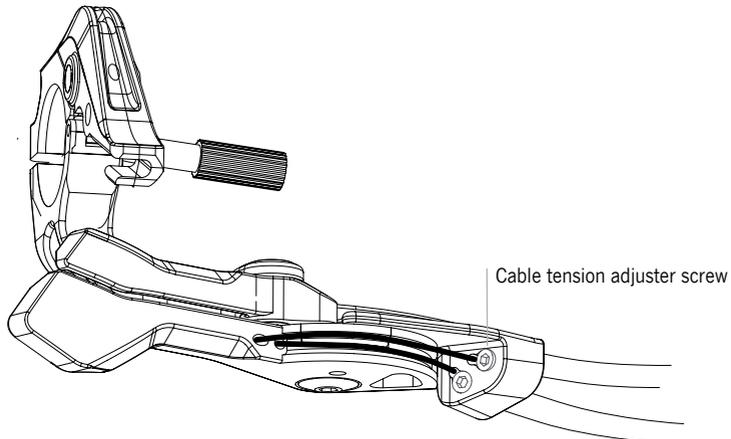
03. Install both cables, making sure that the cables's ends are completely seated in their housing in the lever.

Fix the other end of the cables to fork's and shock's compression adjusters getting rid of any slack on the cables.

** Do not cross the cables in the groove.*

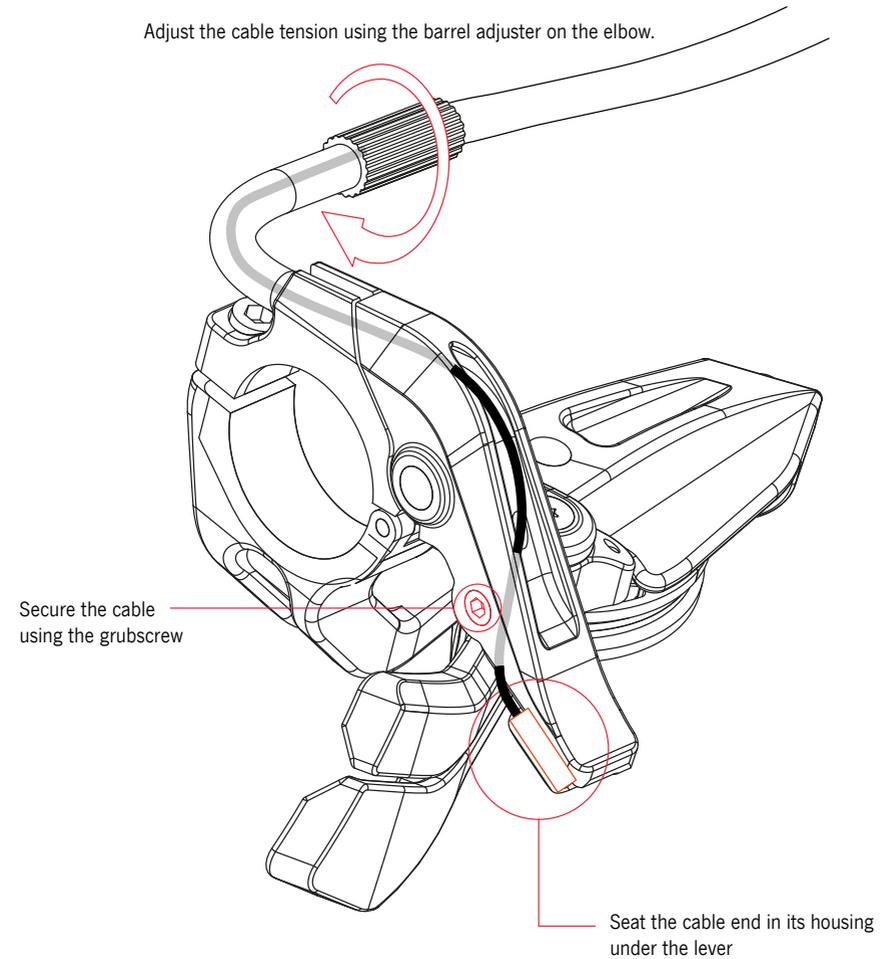


04. Use the adjuster screws to remove any slack left and do any fine adjustments to the cable tension.



DROPPER SEATPOST CABLE TENSION ASSEMBLY AND ADJUSTMENT

Adjust the cable tension using the barrel adjuster on the elbow.

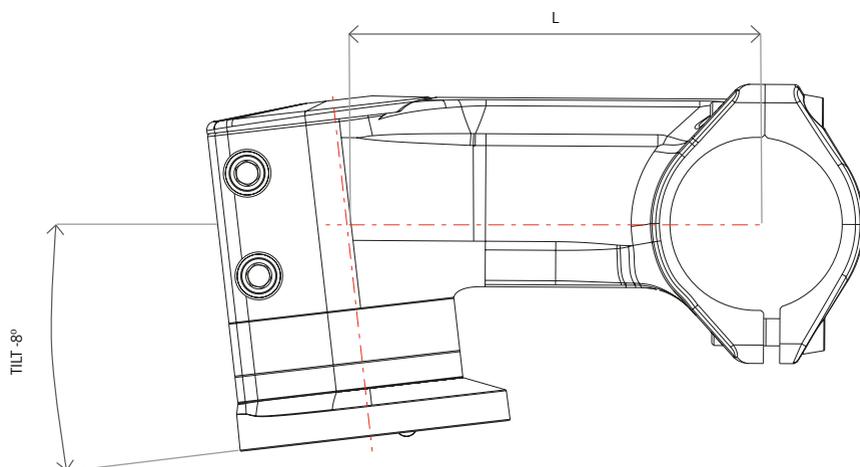


07 OC3 STEM

The OC3 MTB stem is assembled on all Oiz OMX models and some Oiz OMR models as an option.

To replace a standard stem for an OC3 stem on Oiz, the following components need to be replaced:

- Stem topcap
- Headset spacers
- Headset cover



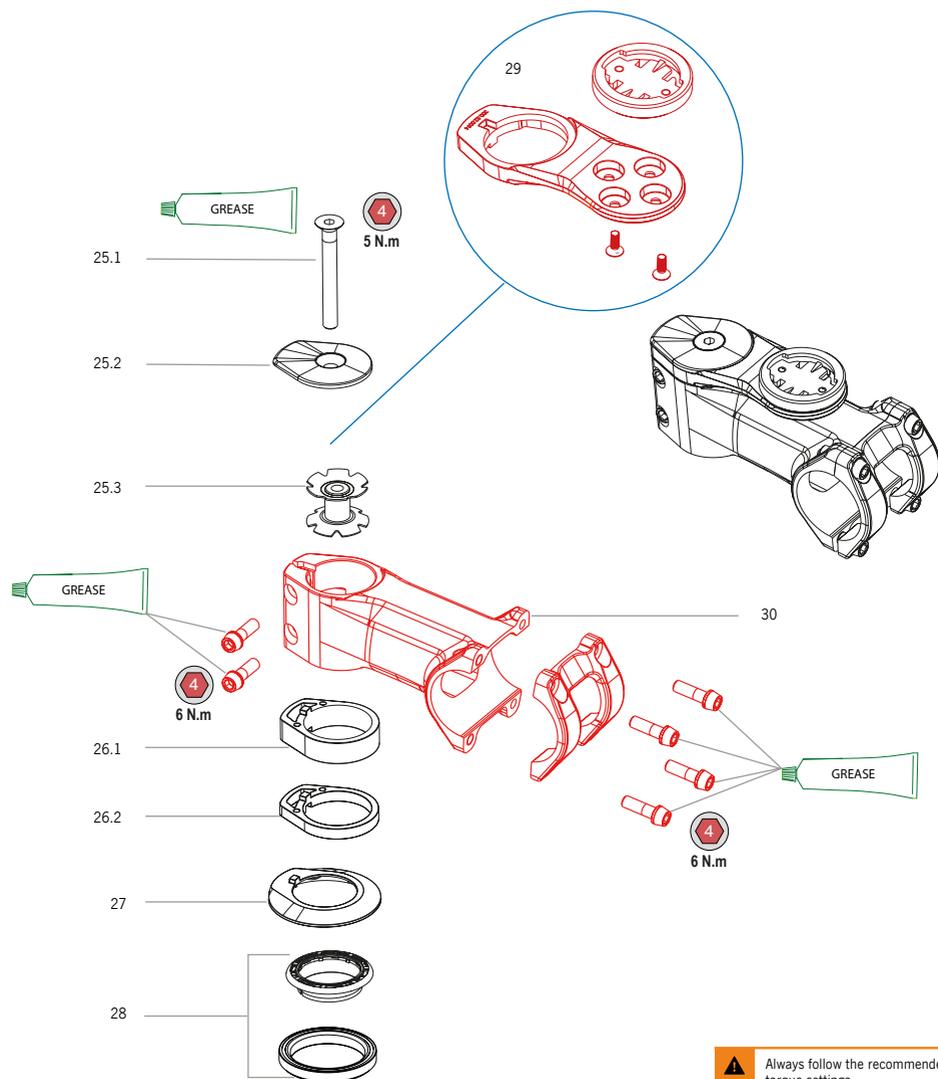
⚠ Never install headset spacers on top of the stem. The fork steerer must have the correct length so spacers are not needed on top of the stem and both stem fixing bolts clamp the steerer tube.

⚠ Do not install more than 30mm worth of headset spacers below the stem.

TECHNICAL SPECIFICATIONS

MATERIAL	ALUMINIUM
FORK STEERER TUBE	
Diameter	Ø1" 1/8
Clamping height	35mm
Maximum headset spacers	Depends on the frame
HANDLEBAR	
Diameter	Ø31.8mm
	60mm
Available lengths (L)	75mm
	90mm
TILT	-8°
FRAME. CONVENCIONAL. NO BLOCKLOCK	
Headset cover height	5.9mm
Headtube external Ø	46mm
Top bearing external Ø	42mm
Top bearing stack outside of the headtube	2.9mm
HEADSET SPACERS	Specific Orbea profiled
STEM TOPCAP	Specific Orbea profiled
COMPUTER HOLDER (OPTIONAL)	
Specific Orbea	Without computer weight or size limit
COMPATIBLE COMPUTERS	Garmin
	Wahoo
WEIGHT	125gr (75mm)

OC3 STEM



 Always follow the recommended torque settings.

25 OC3 MTB STEM TOPCAP KIT

Includes starnut and preload bolt

ART N°: X018	QUANTITY
25.1 BOLT M6x50	1
25.2 OC3 TOPCAP	1
25.3 STARNUT 1 1/8"	1

26 OC3 MTB HEADSET SPACERS KIT

ART N°: X021	QUANTITY
26.1 OC3 HEADSET SPACER 10mm	2
26.2 OC3 HEADSET SPACER 5mm	2

27 HEADSET COVER OC3 MTB DIAM 46

ART N°: X001	QUANTITY
HEADSET COVER OC3 MTB DIAM 46	1

NOTICE 28 The OC3 MTB headset is compatible with the Acros headset installed by Orbea on Oiz OMR models with a standard stem. It is not necessary to replace the top bearing and the compression ring assembly if these are currently installed on the bicycle. If the top bearing assembly has been replaced previously for a different one, the OC3 headset cover may not work correctly. In this case, the top bearing and the compression ring must be replaced for the article X002, listed on the headset section of this manual.

29 OC3 TOPCAP COMPUTER MOUNT KIT

ART N°: X020	QUANTITY
29.1 TOPCAP COMPUTER MOUNT	1
29.2 GARMIN ADAPTER	1
29.3 WAHOO ADAPTER	1
29.4 BOLT M3x8 COUNTERSUNK	2

OC3 STEMS

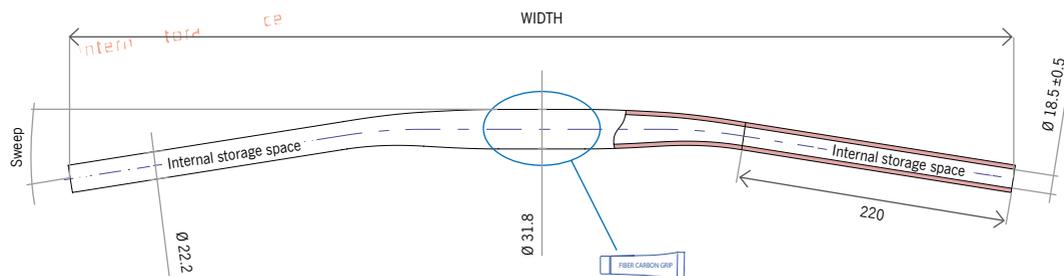
30 OC3 MTB STEM

ART N°: X019	QUANTITY
OC3 MTB STEM*	1
Topcap not included Includes faceplate and 6 bolts M5x15	

* Available in sizes: 60mm, 75mm, 90mm.

08 OC3 MTB CARBON HANDLEBAR

The OC3 MTB carbon handlebar is assembled on some Oiz OMX/OMR models and is available as an option on other models.



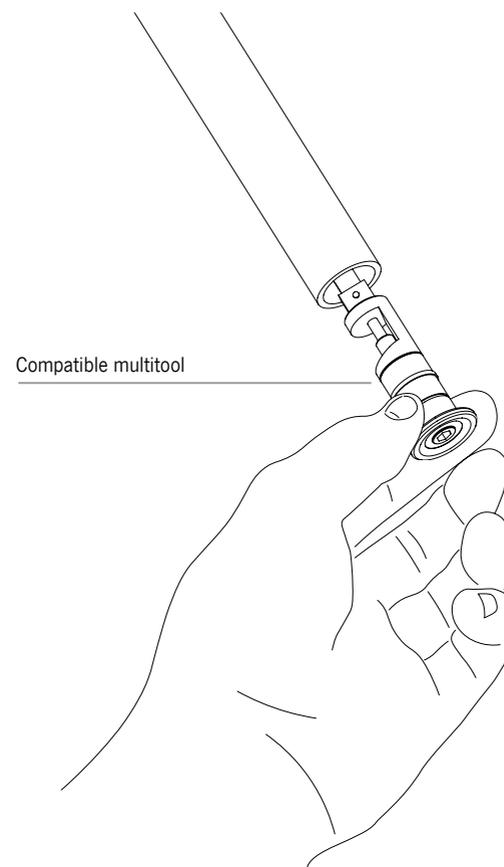
TECHNICAL SPECIFICATIONS

Material	CARBON
Recommended use	XC
Weight	197gr
Width	780mm
Sweep	9°
Rise	0mm
Effective reach	38mm
Stem clamping diameter	31.8mm
Levers external diameter	22.2mm
Internal diameter (multitool storage)	18mm ± 0.5mm
Multitool storage area length	220mm

MULTITOOL STORAGE

The OC3 MTB carbon handlebar allows for storage of tools of up to 18mm diameter inside the handlebar.

Introduce your compatible multitool into the handlebar end and fix it in position with the multitool fixing method so it remains secure during riding.



09 DECLARATION OF CONFORMITY

CE **DECLARACIÓN DE CONFORMIDAD CE**
EC DECLARATION OF CONFORMITY

El fabricante / The manufacturer: Orbea S. Coop. Ltda
Polígono Industrial Goitondo s/n
48269, Mallabia (Bizkaia) - Spain

Declara que los siguientes productos / Declares that the following products:

Descripción / Description	: Bicicleta
Marca / Make	: ORBEA
Modelos / Models	: ALMA, AVANT, CARPE, COMFORT, DUDE, GROW, MX 27, MX 29, MX 24, MX 20, MX 16, KATU, LOKI, OIZ, ORCA, ORDU, OCCAM, RALLON y SPORT.

Año de construcción / Year of manufacture : 2020 and 2021

Cumplen con las siguientes Directivas Europeas / Fulfills the following European Directives:

- Directiva 2001/95/CE / Directive 2001/95/EC
- Decision de la Comisión 2015/681/CE / Decision of Commission 2015/681/EC

El sistema de fabricación esta gestionado y controlado según ISO 9001:2015

Cumple con los requerimientos del Decreto Frances N.º 95-937 del 1995/08/24 / Comply with the requirement of France law N. 95-937 dated 1995/08/24

Cumple con los requerimientos del Decreto Español N.º 339/2014 del 2014/05/09 / Comply with the requirement of Spanish law N.º 339/2014 dated 2014/05/09

Cumple con las siguientes normas internacionales / The following international standards :

- EN ISO 4210 (1 al 9):2014

Persona autorizada para elaborar el expediente técnico / Authorized person to elaborate the technical file:

Nombre / Name	: Aitor Juaristi
Dirección / Address	: Polígono Industrial Goitondo s/n 48269, Mallabia (Bizkaia) - Spain

Orbea S. Coop. Ltda



Aitor Juaristi
Quality Manager
26/ 06 / 2020

10 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/orbeabicycles

ORBEA CONTENT

View and download photos, videos and documents.

content.orbea.com/us-en/

BLOG ORBEA

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:

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

CONTACT

Access Orbea's contact details and form at:

www.orbea.com/es-es/contacto

USA:

www.orbea.com/us-en/contact/