

TECHNICAL MANUAL

EN | ES

BLUE PAPER ALMA CARBON

OMR & OMX 2021

OR



INDEX

EN P.03 | ES P.47

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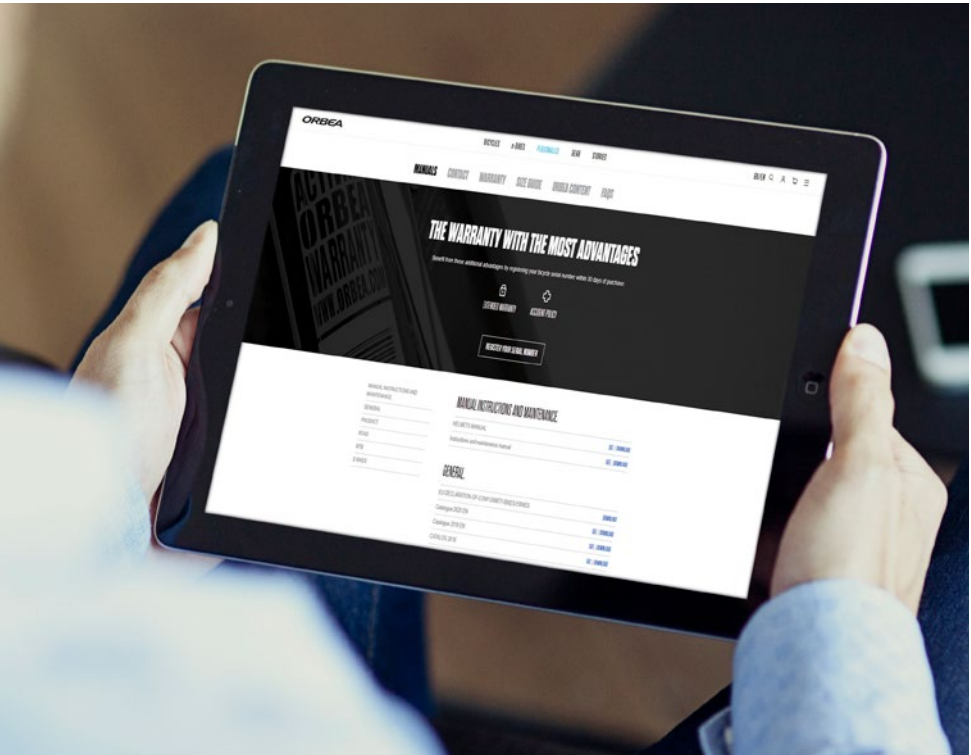
01 INTRODUCTION

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

 SPANNER

 TORX KEY

 ALLEN KEY

 PHILLIPS SCREWDRIVER

 The key number is indicated inside the symbol.

 10 N.m

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

 OIL: Light lubrication of elements like chains and cables.

 GREASE: High quality assembly grease to avoid creaking and seizing.

 CARBON PASTE: Carbon fiber assembly compound to increase friction between carbon fiber components.

 LOCTITE SERIES 600: Fixing cylindrical surfaces.

 LOCTITE SERIES 200: Threadlock. Medium resistance.

 LOCTITE SERIES 400: Instant adhesive.

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

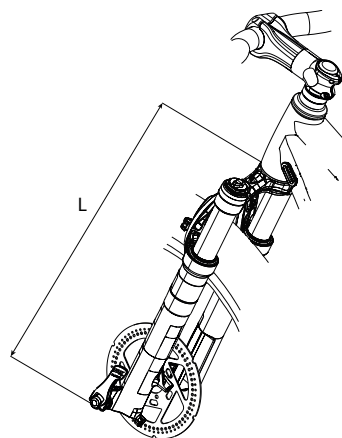
! Always follow the specifications regarding the minimum insertion depth of the seatpost or the frame on road bicycles with exclusive Orbea seatposts. The failure to follow these instructions can cause stresses on the materials beyond the conditions for which they were designed and cause damage not covered 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.



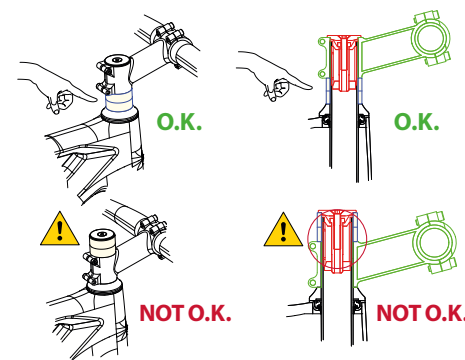
MAXIMUM NUMBER OF HEADSET SPACERS



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.



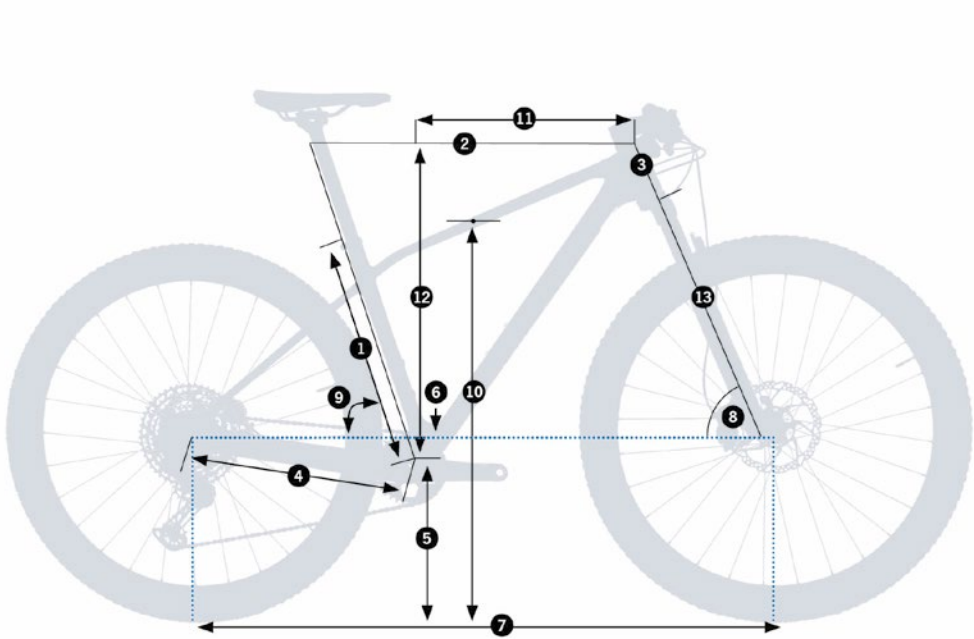


05 ALMA CARBON

OMR & OMX 2021

GEOMETRY AND SIZING

ALMA OMR



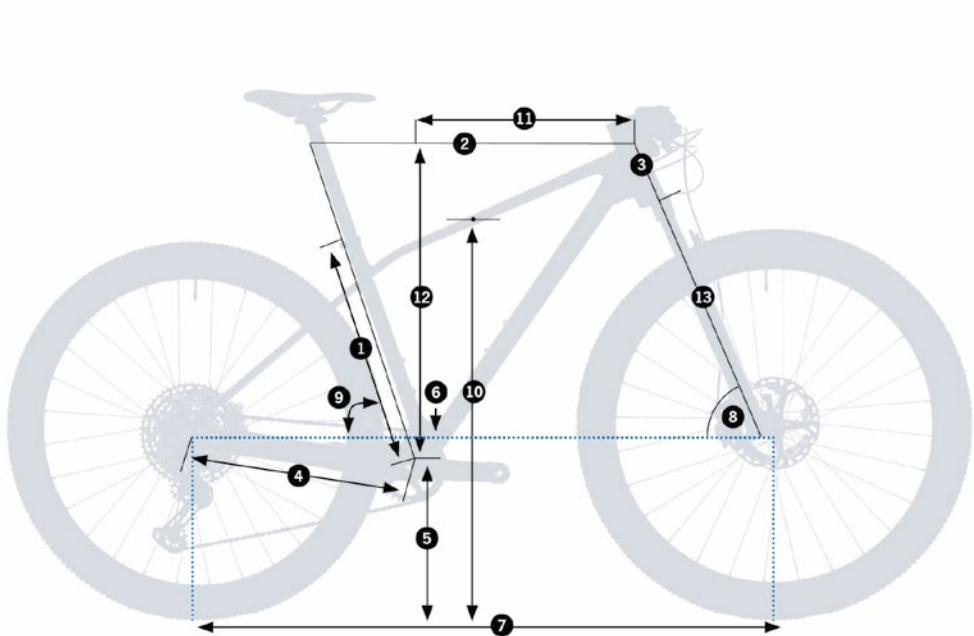
SIZES	S	M	L	XL
1 - Seat Tube (C-T)	400	445	483	533
2 - Top Tube (EFF)	559	593	618	647
3 - Head Tube	90	100	110	125
4 - Chainstay	430	430	430	430
5 - BB Height	309	309	309	309
6 - BB Drop	61	61	61	61
7 - Wheelbase	1,083	1,118	1,144	1,175
8 - Head Angle	68	68	68	68
9 - Seat Angle	74.5	74.5	74.5	74.5
10 - Standover	693	729	749	819
11 - Reach	395	426	448	474
12 - Stack	593	602	612	625
13 - Fork Length	500.8	500.8	500.8	500.8

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.

GEOMETRY AND SIZING

ALMA OMX



SIZES	S	M	L	XL
1 - Seat Tube (C-T)	400	445	483	533
2 - Top Tube (EFF)	559	593	618	647
3 - Head Tube	90	100	110	125
4 - Chainstay	430	430	430	430
5 - BB Height	309	309	309	309
6 - BB Drop	61	61	61	61
7 - Wheelbase	1.083	1.118	1.144	1.175
8 - Head Angle	68	68	68	68
9 - Seat Angle	74.5	74.5	74.5	74.5
10 - Standover	693	729	749	819
11 - Reach	395	426	448	474
12 - Stack	593	602	612	625
13 - Fork Length	500.8	500.8	500.8	500.8

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

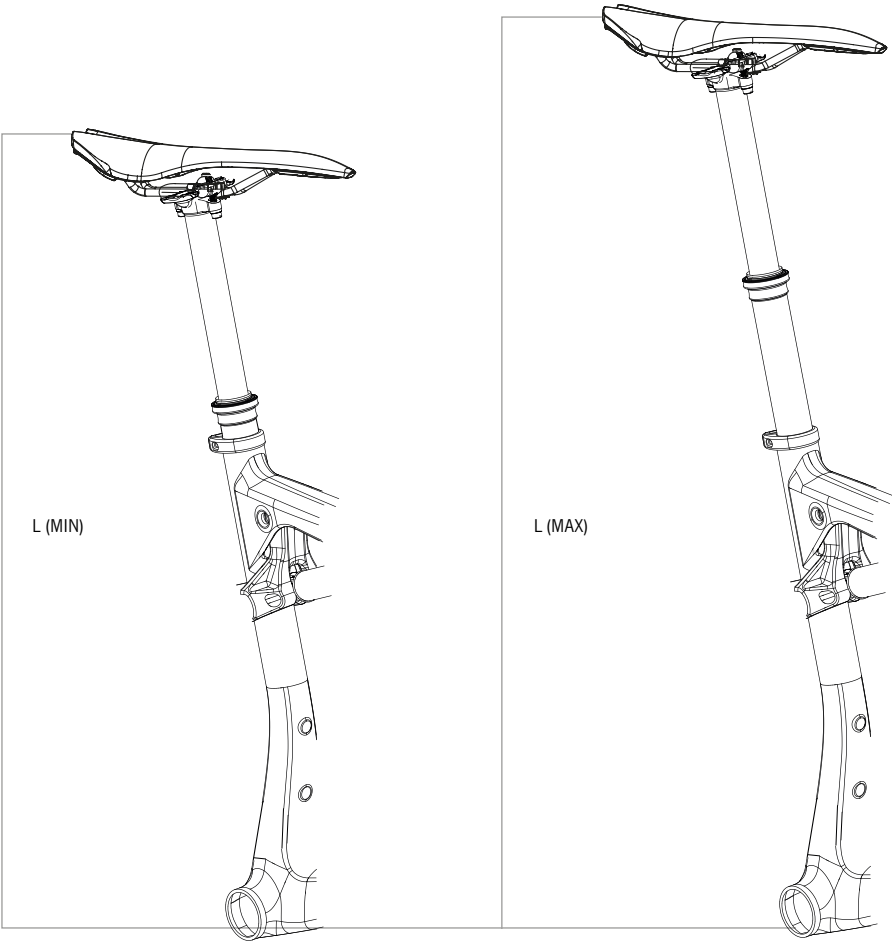
The measurements given show the distance between the center of the bottom bracket shell to the middle of the saddle's top (saddle models specified from Orbea).

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		ALMA OMR (S) ALMA OMX (S)	ALMA OMR (M) ALMA OMX (M)	ALMA OMR (L) ALMA OMX (L)	ALMA OMR (XL) ALMA OMX (XL)
OC 27.2 80mm drop	Maximum saddle height	727mm*	774mm*	810mm*	860mm*
	Minimum saddle height	652mm*	652mm*	670mm*	722mm*

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



TECHNICAL SPECIFICATIONS

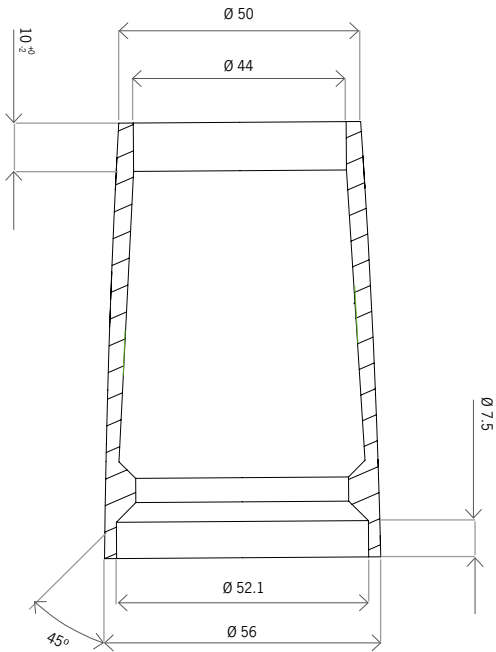
	ALMA OMR	ALMA OMX
Frame material	ORBEA OMR CARBON	ORBEA OMX CARBON
Recommended use	XC, MARATHON	
Sizes	S/M/L/XL	
Fork travel	100mm	
Maximum fork travel	100mm	
Maximum fork lenght (axle-to-crown)	510.8mm	
Maximum number of headset spacers	30mm	
Wheel size	29"	
Maximum tyre width (rear)	29x2.40	
Fork offset	44mm	
Bottom bracket shell width	92mm	
Bottom bracket standard	PF92	
Chainline	52mm	
Headset	1" 1/8-1" 1/2	
	TOP SEMI-INTEGRATED Option BlockLock steering limiter 164º	
	BOTTOM INTEGRATED	
Rear axle standard	BOOST 148 THRU-AXLE	
Rear axle measurements	12x171mm	
Rear axle thread pitch/lenght	1.0x13mm	
Seatpost diameter	27.2mm	
Seatpost clamp diameter	31.2mm	
Seatpost maximum insertion	S (200mm), M (250mm), L (285mm), XL (285mm)	
Internal cabling of dropper seatpost	YES	
Front derailleur	NO. 1X ONLY	
Maximum chainring size	36T	
Maximum size oval chainring	34T	

	ALMA OMR	ALMA OMX
Minimum chainring size	30T	
Brake type	DISC*	
Rear brake caliper standard	POST MOUNT	FLAT MOUNT
Rear caliper flat mount bolt lenght (chainstay height = 25mm)	-	SHIMANO: 38mm
	-	SRAM: 32mm
Maximum rear rotor size	160mm	160mm
Minimum rear rotor size	160mm	
Compatible chainguide	YES. Between pressfit cup and frame	
ISCG	NO	
Cabling	Internal downtube and chainstays. Full sleeve	
Compatible rear brake left	YES. Rear brake hose enters the Frame on the left	
Bottle holder	2. In all sizes	
Transmission compatibility	SHIMANO (11S and 12S)	
	SRAM (11S and 12S)	
Compatible SHIMANO DI2	NO	
Compatible SRAM AXS	YES	
Powermeter compatibility**	STAGES. LEFT CRANK. YES	
	4iiii. LEFT CRANK. YES	
	QUARQ. YES (without chainguide)	
	ROTOR INSPIDER. NO	
	ROTOR INPOWER. 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 componets speciflicated from Orbea have been tested.
For aftermarket options, check componentes dimensions and tolerances before purchasing.
** For other powermeters, consult the compatibility and dimensions with the manufacturer.

HEADSET

HEADTUBE DIMENSIONS

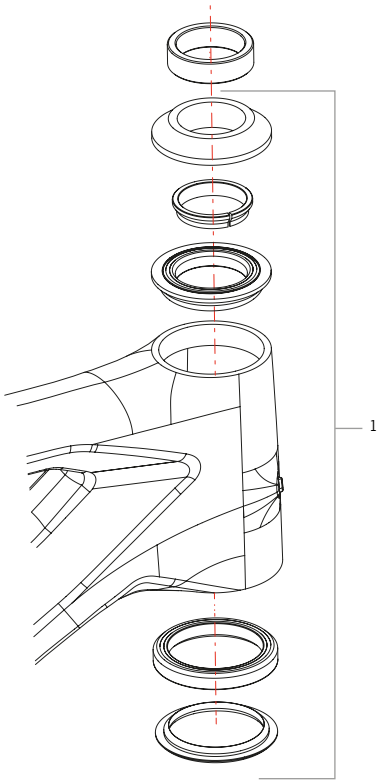


OC1 STANDARD STEM ASSEMBLIES WITHOUT BLOCKLOCK HEADSET

WITH ROUND HEADSET SPACERS

HEADSET SPECIFICATIONS	TYPE	ID*	OD**	BEARING ANGLE	SHIS CODE	BEARING DIMENSIONS
TOP	1-1/8" Semi integrated	44mm	50mm	Semi integrated Replace assembly	ZS44/28.6	Semi integrated Replace assembly
BOTTOM	1-1/2" Integrated	52.1mm	56mm	45°	IS52/40	Angular contact bearing 40x52x7mm

* ID: Internal headtube diameter.
** OD: External headtube diameter.



01 HEADSET 1 1/8-1 1/2. TOP SEMI INTEGRATED. BOTTOM INTEGRATED

Starnut and stem topcap not included

ART N°: X040	QUANTITY
1.1 TOP BEARING 1-1/8"+CUP	1
1.2 BOTTOM BEARING 1-1/2"	1
1.3 COMPRESSION RING	1
1.4 HEADSET COVER	1
1.5 FORK CROWN RACE 1-1/2"	1

HEADSET

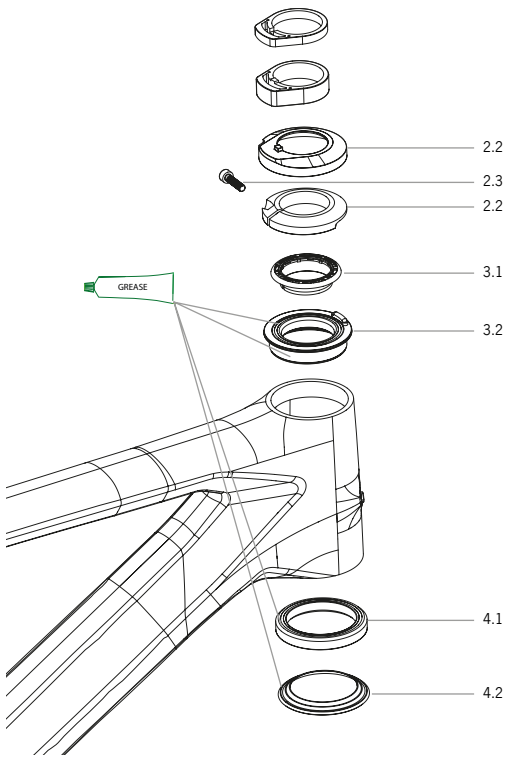
OC3 STEM ASSEMBLIES. WITH BLOCKLOCK HEADSET

Alma OMX and some models and options in Alma OMR include the Blocklock headset option with the OC3 MTB stem, which limits the steering angle to 164° without affecting maneuverability to avoid impacts of the levers on the frame in case of an accident, specially in assemblies without any headset spacers or with the stem positioned with a negative angle.

HEADSET SPECIFICATIONS	TYPE	ID*	OD**	BEARING ANGLE	SHIS CODE	BEARING DIMENSIONS
TOP	1-1/8" Semi integrated BlockLock	44mm	50mm	Semi integrated Replace assembly	Orbea specific	Orbea specific Replace assembly
BOTTOM	1-1/2" Integrated	52.1mm	56mm	45°	IS52/40	Angular contact bearing 40x52x7mm

* ID: Internal headtube diameter.
** OD: External headtube diameter.

The Blocklock assemblies include the OC3 MTB stem, which determines also the use of specific OC headset spacers, headset cover and stem topcap.



02 BLOCKLOCK HEADSET COVER ASSEMBLY

ART N°: X030		QUANTITY
2.1	BLOCKLOCK HEADSET COVER TOP	1
2.2	BLOCKLOCK HEADSET COVER BOTTOM	1
2.3	BOLT M4x16	1

03 BLOCKLOCK CUP AND BEARING ASSEMBLY

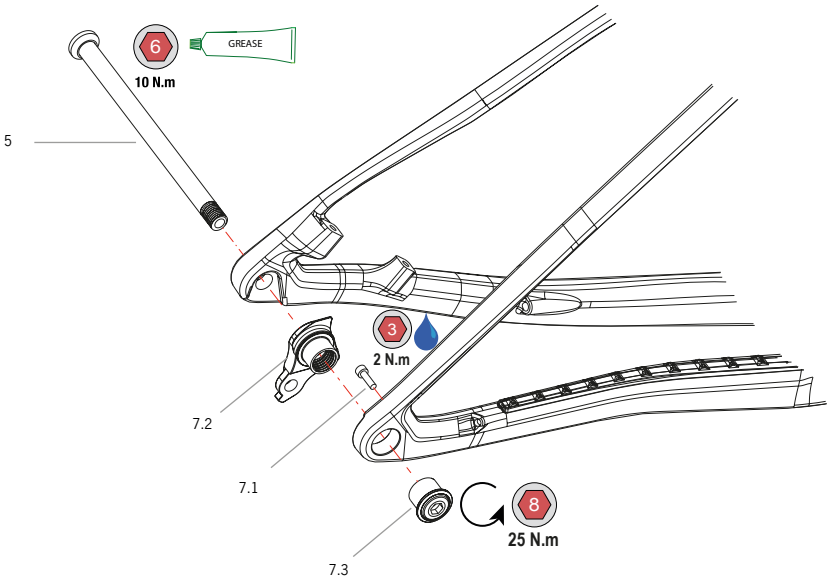
ART N°: X031		QUANTITY
3.1	BLOCKLOCK COMPRESSION RING	1
3.2	BLOCKLOCK CUP+BEARING ASSEMBLY	1

04 BOTTOM BEARING KIT

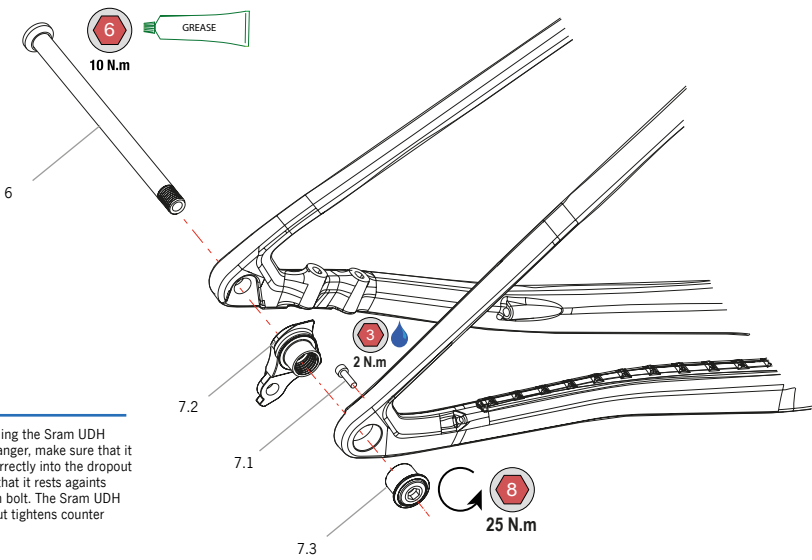
ART N°: X022		QUANTITY
4.1	ANGULAR CONTACT BEARING 40x52x7	1
4.2	FORK CROWN RACE 1-1/2"	1

REAR AXLE / DERAILLEUR HANGER

ALMA OMR



ALMA OMX



NOTICE When installing the Sram UDH derailleur hanger, make sure that it is seated correctly into the dropout recess and that it rests against the anti-turn bolt. The Sram UDH derailleur nut tightens counter clock-wise.

⚠ Always follow the recommended torque settings.

05 ORBEA THRU-AXLE 12X171 (1.0x13) HOLLOW

ART N°: X041	QUANTITY
ORBEA THRU-AXLE 12x171 (1.0x13) HOLLOW	1

NOTICE The hollow and lite rear thru-axles are both compatible with Alma OMR and OMX frames, the Lite version being the lightest option.

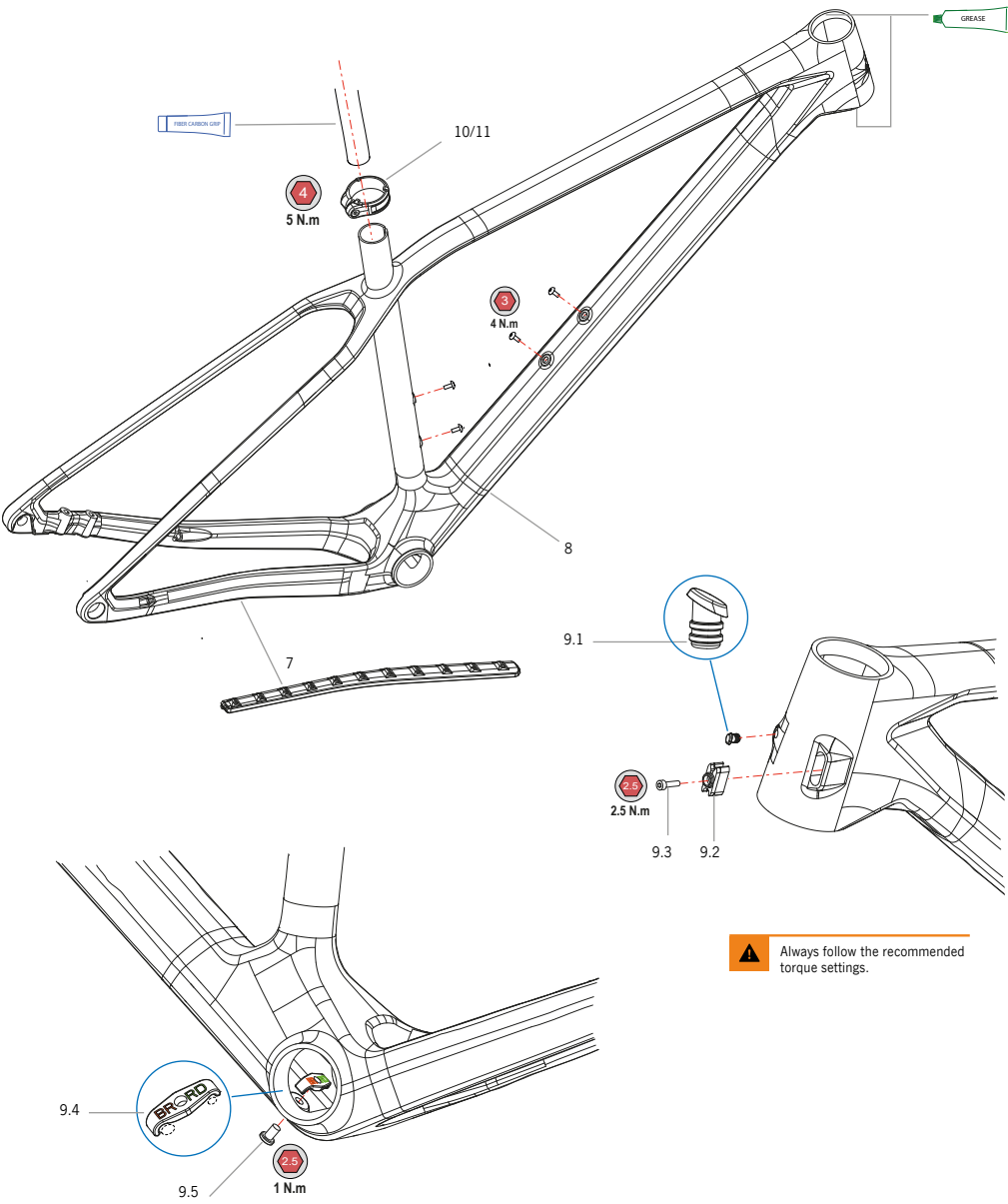
06 ORBEA THRU-AXLE 12x171 (1.0x13) LITE

ART N°: X032	QUANTITY
ORBEA THRU-AXLE 12x171 (1.0x13) LITE	1

07 SRAM UDH REAR DERAILLEUR STD X12

ART N°: X004	QUANTITY
7.1 ANTITURN BOLT M4x8	1
7.2 SRAM STD REAR DERAILLEUR X12	1
7.3 SRAM REAR MECH NUT X12	1

FRAME HARWARE



PROTECTORS

07 CHAINSTAY RUBBER PROTECTOR
ALMA OMR/OMX 21

ALMA OMR/OMX

ART N°: X033	QUANTITY
CHAINSTAY RUBBER PROTECTOR ALMA OMR/OMX 21	1

08 TRANSPARENT DOWNTUBE PROTECTOR FILM
OMR/OMX 21

ALMA OMR/OMX

ART N°: X034	QUANTITY
TRANSPARENT DOWNTUBE PROTECTOR FILM OMR/OMX 21	1

CABLEGUIDES

09 CABLEGUIDE KIT ALMA OMR/OMX 21

ALMA OMR/OMX

ART N°: X035	QUANTITY
9.1 FRONT BLIND GROMMET. NO DROPPER SEATPOST ASSEMBLIES	1
9.2 FRONT CABLEGUIDE BRAKE AND REAR DERAILLEUR	1
9.3 BOLT M3x15	1
9.4 CABLEGUIDE INTERNAL BB	1
9.5 BOLT M5x12	1

SEATPOST CLAMP

10 SEATPOST CLAMP 31.2 ALMA OMX

ALMA OMX

ART N°: X036	QUANTITY
SEATPOST CLAMP 31.2 ALMA OMX	1

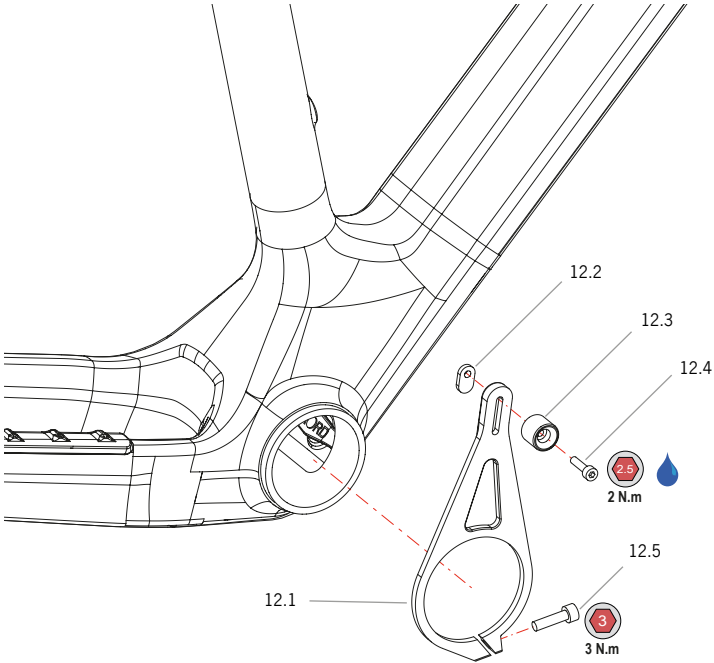
11 SEATPOST CLAMP 31.2 ALMA OMR

ALMA OMR

ART N°: X042	QUANTITY
SEATPOST CLAMP 31.2 ALMA OMR	1

CHAINGUIDE

ALMA OMR/ALMA OMX



Always follow the recommended torque settings.

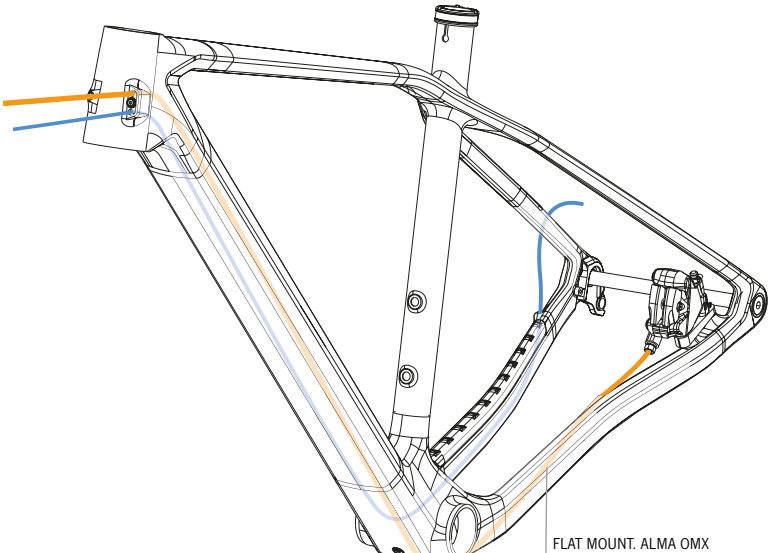
12 CHAINGUIDE KIT BB ALMA OMR/OMX

Assembly between pressfit cup and BB shell

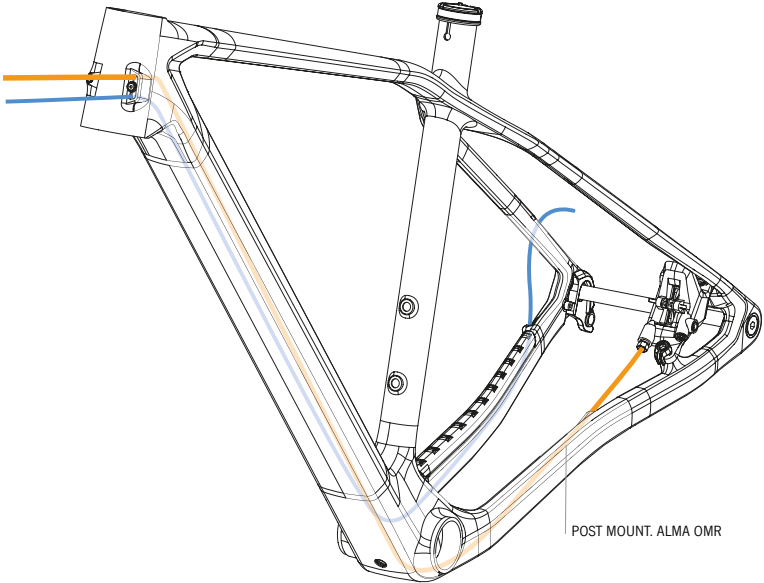
ART N°: X037		QUANTITY
12.1	PRESSFIT BB CHAINGUIDE PLATE	1
12.2	CHAINGUIDE NUT	1
12.3	CHAINGUIDE STOP	1
12.4	BOLT M3x10	1
12.5	BOLT M4x16	1

CABLING

REAR BRAKE AND REAR DERAILLEUR
ALMA OMX

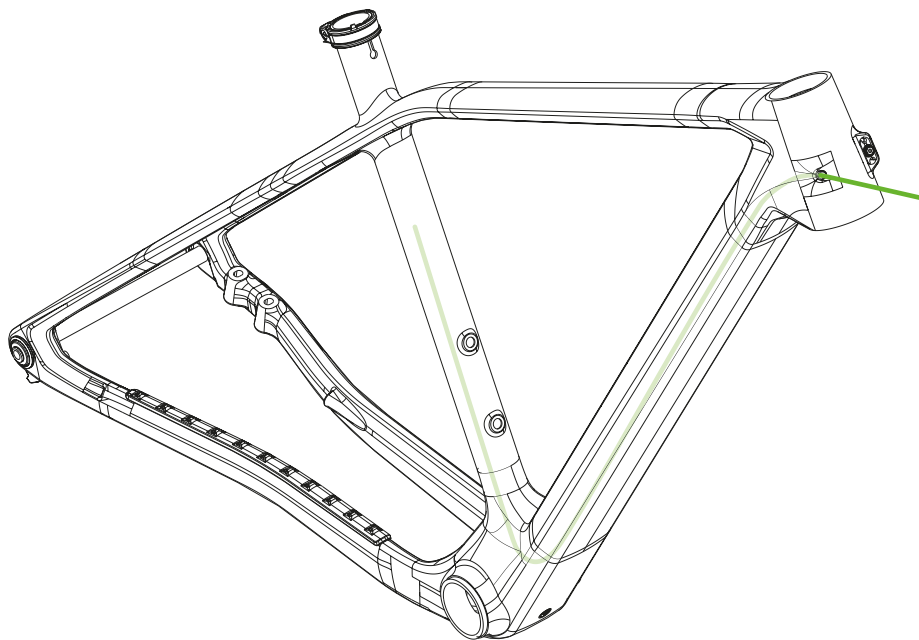


REAR BRAKE AND REAR DERAILLEUR
ALMA OMR

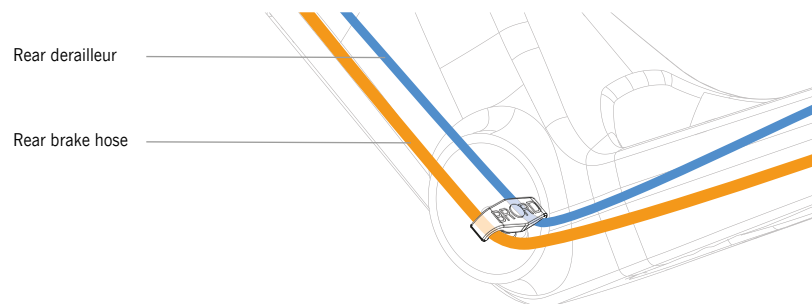


CABLING

DROPPER SEATPOST REMOTE ALMA OMR / ALMA OMX



BOTTOM BRACKET ALMA OMR / ALMA OMX



SUSPENSION

Due to the several different fork option assembled on Alma OMR and OMX models, Orbea does not include a setting guide for every fork in this manual.

You can consult the specifications and settings for your fork model in the manufacturer documentation in the links below.

ROCKSHOX FORK MODELS

USER MANUAL:

www.servicearchive.sram.com/sites/default/files/techdocs/gen.0000000006209_rev_a_suspension_setup_and_tuning_guide_english.pdf

AIR AND REBOUND SETTING

Access the chart and look for your fork model:

www.sram.com/globalassets/document-hierarchy/service-manuals/rockshox/front-suspension/gen.0000000005952-2020-fs-oil-air-coil-token-specification-english-rev-a.pdf

FOX 32 FORK MODELS

Consult the manufacturer settings manual in the link below:

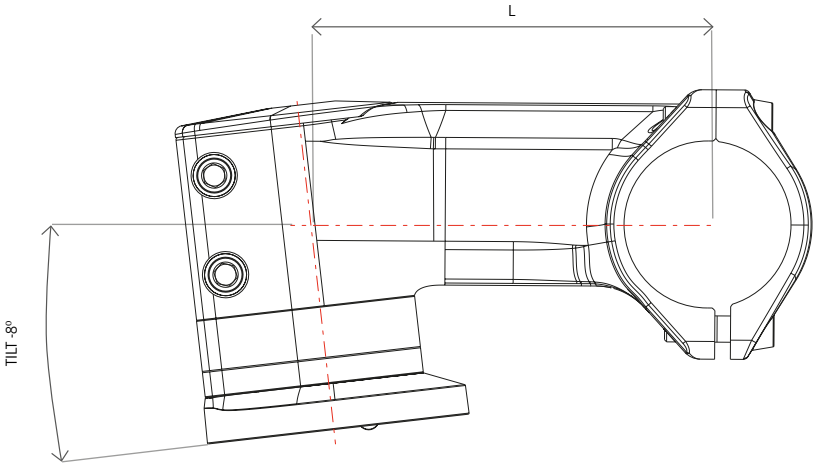
www.ridefox.com/fox17/help.php?m=bike&id=1081

06 OC3 STEM

The OC3 MTB is assembled in Alma OMX models and as an option in Alma OMR models.

When replacing a standard stem for an OC3 MTB stem on Alma, the components below need to be replaced:

- Stem topcap
- Headset spacers
- Blocklock headset cover assembly
- Blocklock top bearing assembly (bearing cup+bearing and compression ring).



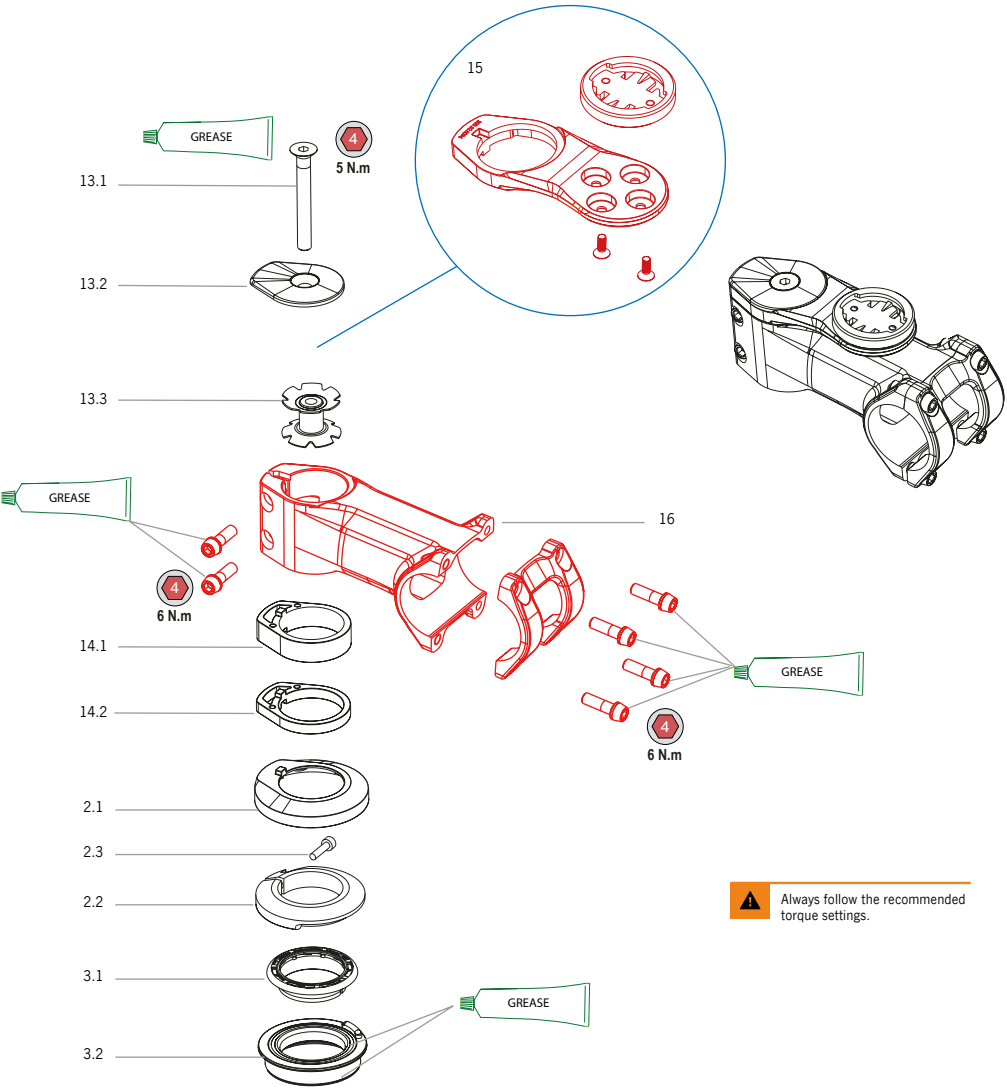
⚠ Never install headset spacers on top of the stem. The fork steerer must have the correct length so spacers are not needed on top of the stem and both stem fixing bolts clamp the steerer tube.

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

TECHNICAL SPECIFICATIONS

MATERIAL	ALUMINUM
FORK STEERER TUBE	
Diameter	Ø1" 1/8
Clamping height	35mm
Maximum headset spacers	Depends on the frame
HANDLEBAR	
Diameter	Ø31.8mm
Available lengths (L)	60mm
	75mm
	90mm
TILT	-8°
FRAME. BLOCK-LOCK ASSEMBLIES	
Headset cover height	10.35mm
Headtube external Ø	50mm
Top bearing external Ø	41mm
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



13 OC3 TOPCAP KIT

Includes starnut and preload bolt

ART N°: X018		QUANTITY
13.1	BOLT M6x50	1
13.2	OC3 TOPCAP	1
13.3	STARNUT 1 1/8"	1

Do not use a starnut on fork with a carbon steerer tube, it will damage the steerer tube. Use a carbon expander instead.

14 OC3 MTB HEADSET SPACERS KIT

ART N°: X021		QUANTITY
14.1	OC3 HEADSET SPACER 10mm	2
14.2	OC3 HEADSET SPACER 5mm	2

02 BLOCKLOCK HEADSET COVER ASSEMBLY

ART N°: X030		QUANTITY
2.1	BLOCKLOCK HEADSET COVER TOP	1
2.2	BLOCKLOCK HEADSET COVER BOTTOM	1
2.3	BOLT M4x16	1

03 BLOCKLOCK CUP AND BEARING ASSEMBLY

ART N°: X031		QUANTITY
3.1	BLOCKLOCK COMPRESSION RING	1
3.2	BLOCKLOCK CUP+BEARING ASSEMBLY	1

15 OC3 STEM TOPCAP COMPUTER HOLDER KIT

ART N°: X020		QUANTITY
15.1	OC3 TOPCAP COMPUTER HOLDER	1
15.2	GARMIN ADAPTER	1
15.3	WAHOO ADAPTER	1
15.4	COUNTERSUNK BOLT M3x8	2

OC3 STEMS

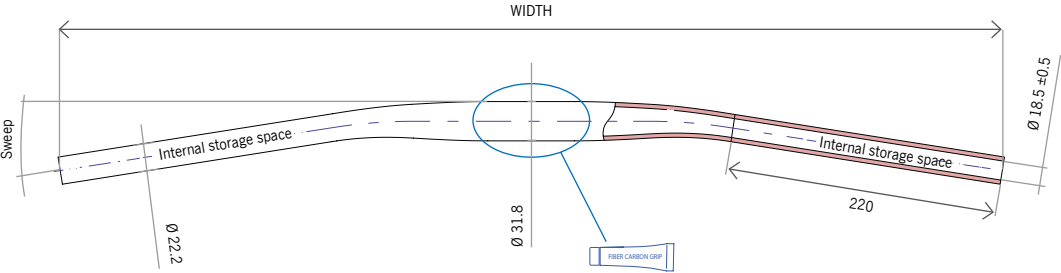
16 OC3 MTB STEM

ART N°: X019		QUANTITY
OC3 MTB STEM. TOPCAP NOT INCLUDED. INCLUDES FACEPLATE AND M5x15 BOLTS (x6)		1

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

07 OC3 MTB CARBON HANDLEBAR

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



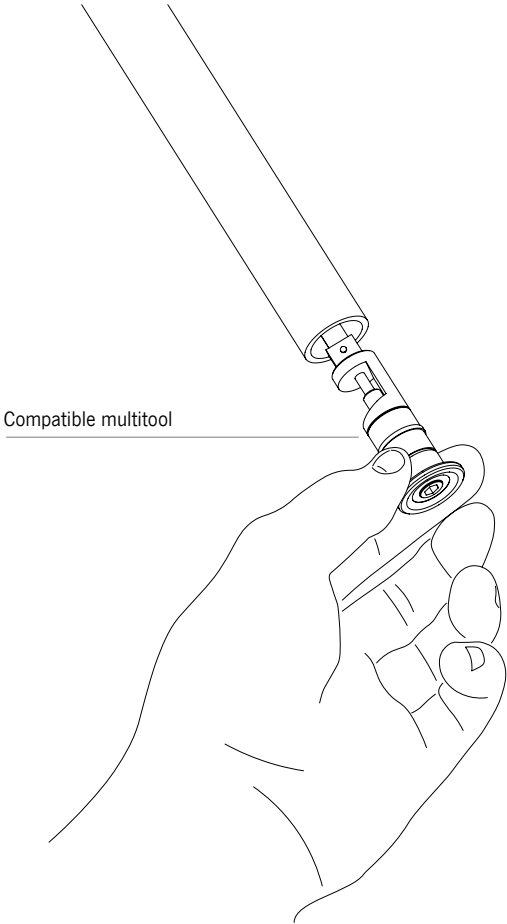
TECHNICAL SPECIFICATIONS

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 (mutitool storage)	18mm ± 0.5mm
Multitool storage area lenght	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.

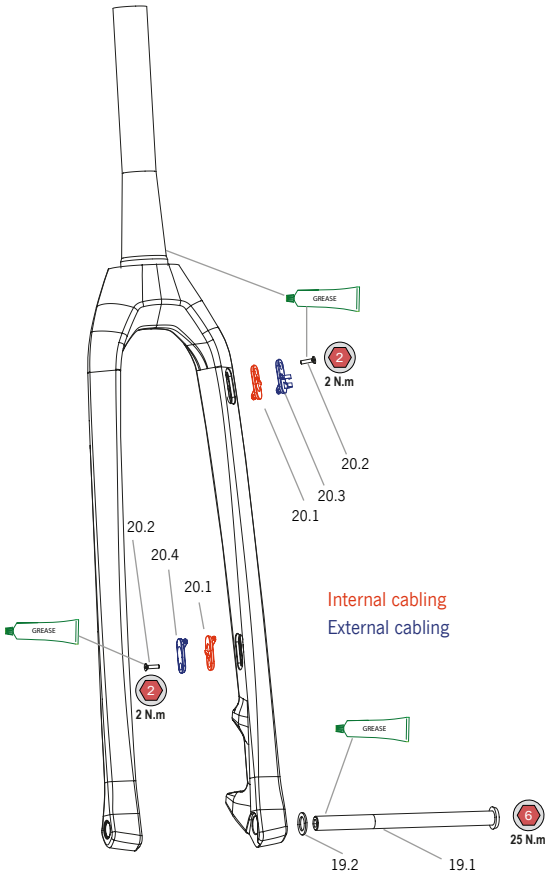


08 SPIRIT FORK

TECHNICAL SPECIFICATIONS

MATERIAL	
Blades	ORBEA OMX CARBON
Steerer tube	ORBEA OMX CARBON
Front hub standard	15x110mm
15x100mm hub compatible (with adaptors)	NO
Front axle measurements	15x158mm
Thread pitch	1.5mm
Offset	44mm
	479mm
Fork lenght (axle-to-crown)*	The SPIRIT fork replicates the geometry of a 100mm travel fork with a 20% SAG
Steerer tube/headsets	TAPERED. 1 1/8" TOP, 1 1/2" BOTTOM
Steerer tube lenght (uncut)	220mm
Integrated crown race	NO
Wheel size	29"
Maximum tyre with	2.4"
Brake type	DISC
Brake caliper standard	POST MOUNT
Brake rotor minimum diameter	160mm
Brake rotor maximum diameter	160mm
Cabling	INTERNAL AND EXTERNAL (with specific cableguide set)

* Consult the complete Spirit 2021 fork in the manuals section of our website.



Always follow the recommended torque settings.

19 SPIRIT THRU-AXLE

ART N°: X038		QUANTITY
19.1	SPIRIT AXLE 15x110x1.5mm	1
19.2	SPIRIT AXLE WASHER	1

20 EXTERNAL/INTERNAL CABLEGUIDE KIT

ART N°: X039		QUANTITY
20.1	INTERNAL CABLEGUIDE STOP 5.2mm	2
20.2	COUNTERSUNK BOLT M3x12	4
20.3	EXTERNAL CABLE GUIDE STOP	1
20.4	BLIND COVER	1

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 está 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

(Signature and Stamp)

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/