TECHNICAL MANUAL

EN 01 | ES 36 | FR 71 | IT 106 | DE 141

BLUE PAPER

OIZ CARBON

OMX-OMR 2023

ORBEA

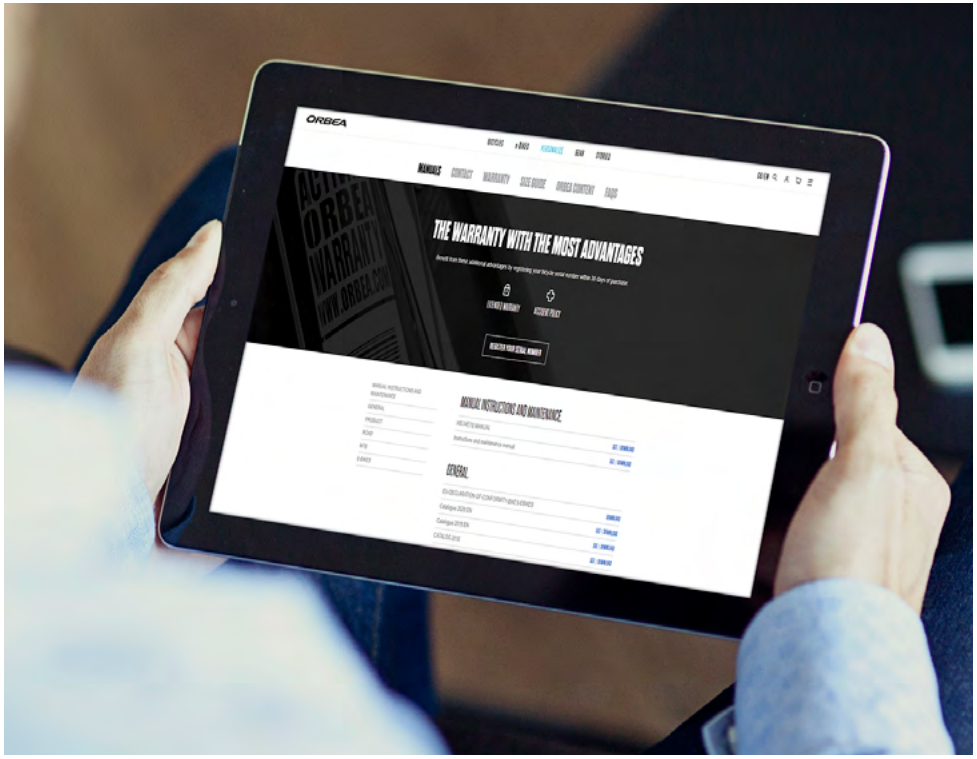
TABLE OF CONTENTS

This technical manual contains important information about your bicycle, on how to use it, its maintenance and spare parts. Read it carefully.

This document is a supplement to the General User Manual for Orbea bicycles and components, which describes the proper use and adjustment of general bicycle components in greater detail for safe riding and operation. You can view and download the User Manual, as well as the rest of the technical manuals for Orbea products, from our website:

www.orbea.com/gb-en/support/manuals

You can consult the relevant information on the use, maintenance and characteristics of the components from other manufacturers that are fitted to our bicycles, such as wheels, handlebars, pedal assistance systems, suspension forks, etc., on the website of the manufacturer in question or through their distributor in your country.



01 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 dangerous situations and to ensure the correct use and assembly of all components.

The meaning of these symbols is explained below. In this manual, the symbol may be accompanied only by the relevant instruction for the component it describes. Read the following information carefully to understand its meaning.

SAFETY INSTRUCTIONS

DANGER: Dangerous situation which, if not avoided, will result in serious injury or death.

WARNING: Dangerous situation which, if not avoided, could result in serious injury or death.

CAUTION: Dangerous situation which, if not avoided, may result in minor or moderate injury.

NOTICE Situation not related to physical injury. Relevant information.

The symbols DANGER and WARNING always imply a risk of accident if measures are not taken to avoid the situation they describe. An accident while riding a bicycle can always involve a risk of serious injury or even death. The risk of death will not always be repeated in this manual when these symbols appear, as the risk is detailed here.

TOOLS

SPANNER *TORX KEY*

ALLEN KEY *PHILLIPS SCREWDRIVER*

6 *The tool size to use appears inside the symbol*

6
10 N.m

TIGHTENING TORQUES: The required tightening torque (in Newton metres) is shown below the symbol for the tool to be used for the item it describes.

COMPOUND TYPES

OIL: Light lubrication of components such as chains or cables.

GREASE *GREASE:* Assembly grease to avoid creaking and seizing.

FIBER CARBON GRIP *CARBON PASTE:* Assembly compound to increase friction between carbon fibre components.

LOCTITE SERIES 600: Fixing cylindrical surfaces.

LOCTITE SERIES 200: Fixing or threadlocks. Medium resistance.

LOCTITE SERIES 400: Instant adhesive.

02 ORBEA GUARANTEE

Our continuous daily effort to provide our bicycles at the highest quality allows us to offer the following guarantee coverage and conditions:

LEGAL GUARANTEE

Orbea offers the original owner of the Orbea bicycle, rigid fork or OC component a legal guarantee of 3 years from the date of purchase of the items, or the period stipulated as the legal guarantee period in the country of purchase.

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

This guarantee does not, under any circumstances, cover damage as a result of 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, tyres, saddles, etc.

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

www.orbea.com/us-en/warranty

ORBEA LIFETIME GUARANTEE

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

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

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

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

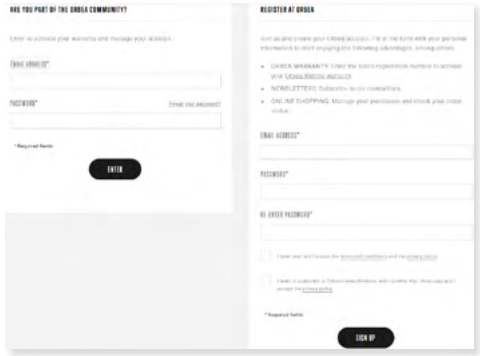
https://www.orbea.com/us-en/garantia#garantia-deporvida-orbea

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/gb-en/acceso-registro?from=register-plate/

01. REGISTER YOUR ACCOUNT



02. REGISTER YOUR BARCODE

03. WHERE TO FIND YOUR BARCODE

GUARANTEE CLAIMS PROCESS

All guarantee claims must be processed through an authorised 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 guarantee claim by Orbea.

We recommend that you always go to the dealer from whom you bought your bicycle to process a guarantee claim, or the dealer you chose during the process of buying a bicycle that was delivered directly to your home. If you cannot go to the original dealer, you can check the list of authorised dealers on our website or contact Orbea directly so we can let you know the dealer you should go to.

www.orbea.com/gb-en/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 aluminium frames and forks are extremely corrosion-resistant.

However, your bicycle components need regular maintenance 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 as new, and check the condition of the frame and its components. Do not use high pressure water, as it could damage components like bearings or the tubes of the frame.

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

⚠ Built-up 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 some parts of the bicycle frame such as the bearing housings and moving parts. Damage due to lack of cleaning and maintenance is not covered by the guarantee.

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 to prevent it from attracting dirt, causing the drivetrain to not work properly and the premature wear of the components.

⚠ Do not use aerosol lubricants to prevent them from sticking to the brake surfaces. Always check the brakes after lubricating the drivetrain.

INSPECT YOUR BICYCLE BEFORE EACH RIDE

Perform a quick inspection before each ride to verify that your bike is in optimal working order. You may encounter small problems that can turn into major incidents during the ride.

FRAME: Inspect the frame and the fork, looking for cracks or other damage. You should not hear any strange noises. If there is any damage to the frame, do not use the bicycle and contact your authorised 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 safely. Check the tightening torques of the components.

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

WHEELS: Make sure that the wheels turn smoothly and that there are no sideways movements. Pull the wheel slightly sideways to check that there is no lateral play in the bearings. Check for broken or loose spokes. Make sure that the axles and quick-release skewers are tightened securely and to the correct torque.

HEADSET: Activate the front brake and move the front part of the bicycle back and forth, applying pressure on the handlebars with the front 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.

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

BEARINGS: The bearings (bottom bracket, swingarm pivot points, headset, wheels, etc.) are elements subject to wear that must be regularly inspected to ensure that they operate correctly. Bearings in poor condition can damage the components in which they are installed. Bad weather speeds up bearing wear. Bearings that have excessive play or that do not turn smoothly must be replaced immediately. If you are in any doubt, consult your authorised dealer.

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

⚠ Failure to follow the recommendations outlined in this manual and riding a bicycle that shows any 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. Failure to follow these specifications may lead to a malfunction of the components, accidents and even death.

MAINTENANCE PERIODS

NOTICE The component maintenance periods indicated below are for reference, and depend largely on factors such as the weather conditions (adverse conditions considerably reduce the life of the components and maintenance times), cleanliness of the bicycle and its components (components with accumulated dirt wear out more quickly) and use (more demanding use of the bicycle will require shorter 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 Orbea's or the manufacturer's guarantee.

⚠ 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 every ride.
- Disassembly and inspection of the bearings after every 6 months of use.

BOTTOM BRACKET:
- Inspection of its operation before every ride.
- Disassembly and inspection of the bearings after every 6 months of use.

DRIVETRAIN:
- Inspection of its operation before every ride.
- Regular inspection of the 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. Failure to follow the manufacturer's recommendations for wear could necessitate the replacement of the rest of the parts of the drivetrain.

WHEELS:
- Inspection of its operation before every ride.
- Disassembly and inspection of the bearings and all components every 4-6 months.

SHOCKS AND SUSPENSION FORKS:
- Inspection of its operation before every ride.
- Inspection and full maintenance every 125 hours or once a year (whichever comes first) by the manufacturer's authorised dealer.

DROPPER SEATPOSTS:
- Inspection of its operation before every ride.
- Inspection and full maintenance every 125 hours or once a year (whichever comes first) by the manufacturer's authorised dealer.
- See the OC2 dropper seatpòst user manual for more details on its maintenance.

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PIVOT POINTS ON FULL SUSPENSION FRAMES:

- Inspection of its operation before every ride.
- Disassembly of the frame and manual inspection of all bearings every 125 hours of use or once a year (whichever comes first). These times may be shorter, according to the conditions in which the bicycle is ridden. More demanding use of the bicycle or use in adverse weather 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 every 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 requirements go beyond the mechanical knowledge of most bicycle users. If you are not qualified to perform the necessary maintenance, always go to an Orbea dealer for the maintenance of your bicycle and its components. Failure to perform proper maintenance can result in malfunctions and accidents with serious consequences.

NOTICE Incorrectly performed maintenance can damage the components, which are not covered by the guarantee.

SPARE PARTS

Always use original Orbea spare parts or those of the manufacturer of the component in question.

The use of non-original spare parts can cause damage resulting in breakdowns and accidents with severe consequences.

The installation of several of the parts shown in this technical manual is beyond the mechanical knowledge of most bicycle users. If you are not qualified to install these parts, always go to an Orbea dealer for your bicycle's maintenance. Failure to install spare parts properly can result in breakdowns, accidents and serious injuries.

NOTICE The installation of non-original spare parts may cause damage to your bicycle that is not covered by the guarantee.

See the full Orbea spare parts catalogue on our web site:

www.orbea.com/us-en/gear/spare-parts/

AFTER AN IMPACT OR A CRASH

Falling off the bike is inherent to cycling. If you have an accident on your Orbea bicycle, make sure you are okay and seek medical attention if necessary. If you have not suffered any injuries, you should check the condition of your bike before continuing.

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 immediately stop using the bicycle. On carbon frames, look for cracks or soft spots in the carbon. If you detect any of these symptoms, you must immediately stop using the bicycle.

The materials used on carbon frames and forks are rigid and strong, but if overloaded or if they suffer an impact, the fibres do not bend, and they will break. A sufficiently strong impact on this material could result in damage that, although not visible at first glance, could lead to material failure in the future. If you have any doubts about the consequences of a fall or accident, contact your Orbea distributor 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 notice any damage, pay close attention to the sound of your bike when you ride it again. Breakage and other problems may 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 AUTHORISED 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 cracks or other signs of deterioration.

A crash or impact can cause serious damage to your bicycle and its components, causing them to fail or wear out prematurely. Failures can occur suddenly and without warning, causing loss of control of the bicycle, serious injury or even death.

04 OIZ USE WARNINGS

MAXIMUM TYRE WIDTH

This technical manual specifies the maximum size of the tyres that can be fitted 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 or fork.

Also check the maximum and minimum tyre width that can be fitted on a given rim depending on its internal width. See the wheels compatibility information on the manufacturer's documentation.

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 guarantee.

MINIMUM SEATPOST INSERTION LENGTH

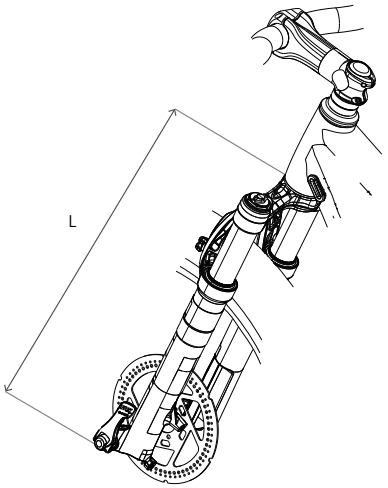
⚠ Always follow the minimum insertion given for the seatpost to be used or the frame. Failure to comply with these values can stress the materials beyond the range for which they were designed and cause breakages not covered by the guarantee, as well as accidents that can cause serious injuries.

MAXIMUM NUMBER OF HEADSET SPACERS

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

MAXIMUM FORK LENGTH (AXLE-TO-CROWN)

Always follow 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).



⚠ Failure to follow this requirement and installing forks with a length greater than the maximum specified can force the frame beyond its design characteristics, possibly resulting in malfunctions of the material that could cause accidents and serious injuries.

INTENDED USE

The intended use of all models is ASTM Condition 3, which provides for use under conditions 1 and 2, in addition to technical and natural trails with bench cuts and jumps up to 61 cm.

Use on this terrain requires technical skills and can lead to injury for beginners.

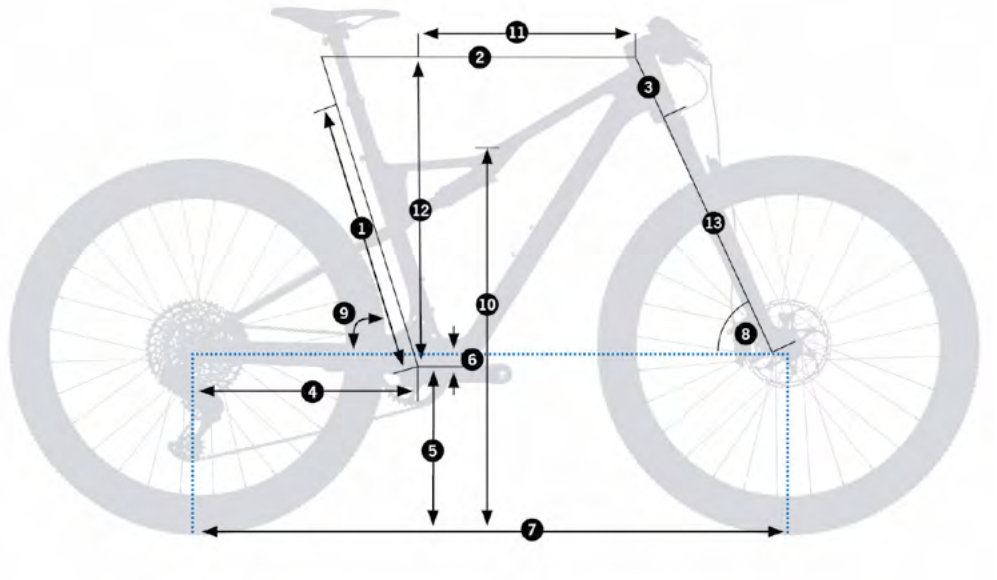
For all ASTM categories, please refer to the user manual.

OIZ CARBON

OMR & OMX 2023

05 GEOMETRY AND SIZING

OIZ OMX-OMR



SIZE	S	M	L	XL
1 - Seat tube (C-T)	405	432	460	510
2 - Top tube (EFF)	575	598	623	650
3 - Head tube	90	90	100	115
4 - Chainstay	432	432	432	432
5 - BB height	333	333	333	333
6 - BB drop	42	42	42	42
7 - Wheelbase	1138	1163	1189	1219
8 - Head angle	67º	67º	67º	67º
9 - Seat angle	76.5º	76.5º	76.5º	76.5º
10 - Standover	731	741	741	750
11 - Reach	425	450	472	496
12 - Stack	596	596	606	619
13 - Fork length	531	531	531	531
14 - Rake	44	44	44	44

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

** The measurements on the sizing table are for guidance only. The best way to find the correct frame size for you is to try a bike at one of our authorised dealers.*

MAXIMUM AND MINIMUM SEAT HEIGHTS WITH DROPPER SEATPOST

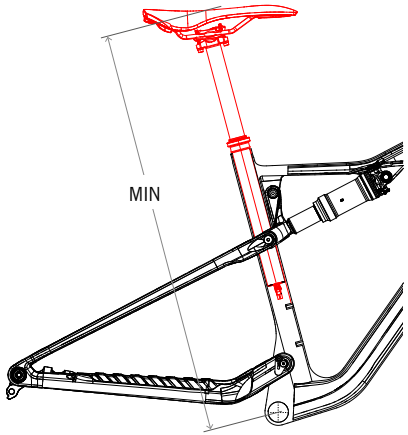
The following table gives the maximum and minimum seat heights with the dropper seatpost in the extended position for each frame size.

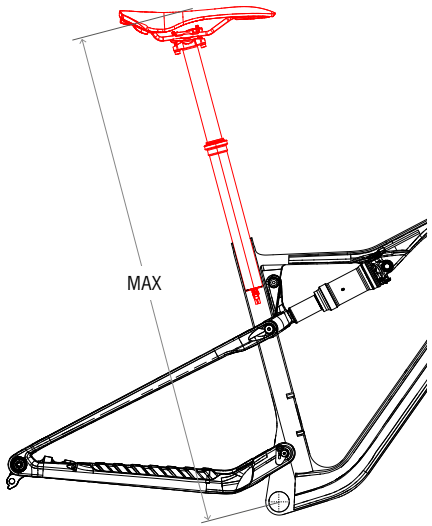
Maximum seat height refers to the height of the seat with the seatpost installed at its minimum insertion, defined by the seatpost. Minimum height refers to the height of the seat with the seatpost installed at its maximum insertion, defined by the frame.

Maximum and minimum heights are only given for the dropper seatpost and saddle options assembled by Orbea for a specific frame. For these dimensions when using a different dropper seatpost, see the seatpost manufacturer's specifications and refer to the maximum frame insertion measurements in the technical specifications section of this manual.

NOTICE The dimensions in the following table define the distance between the centre of the bottom bracket shell and the middle of the upper part of the saddle (saddle models assembled by Orbea).

Different saddles on the market can change the dimensions given by +/-5 mm depending on the height of the saddle model. If your seat height differs from a given dimension by less than 5 mm, it is possible to adjust this height by installing a different model of saddle available on the market. If your seat height differs from the given dimensions by more than 5 mm, you should choose a longer or shorter travel dropper seatpost.





		FRAME/SIZE			
DROPPER SEATPOST MODEL	**EXTENDED SADDLE HEIGHT**	**OIZ OMR/OMX (S)**	**OIZ OMR/OMX (M)**	**OIZ OMR/OMX (L)**	**OIZ OMR/OMX (XL)**
OC DP-MC20 31.6 125mm	Minimum height saddle extended	640mm*	660mm*	695mm*	740mm*
	Maximum height saddle extended	768mm*	785mm*	825mm*	870mm*
OC DP-MC20 31.6 150mm	Minimum height saddle extended	687mm*	695mm*	720mm*	768mm*
	Maximum height saddle extended	816mm*	848mm*	875mm*	920mm*
OC DP-MC20 31.6 170mm	Minimum height saddle extended	728mm*	728mm*	740mm*	785mm*
	Maximum height saddle extended	854mm*	882mm*	910mm*	960mm*
Fox Transfer SL 31.6x380 100mm	Minimum height saddle extended	610mm*	630mm*	665mm*	715mm*
	Maximum height saddle extended	760mm*	780mm*	810mm*	860mm*
Fox Transfer SL 31.6x430 100mm	Minimum height saddle extended	654mm*	660mm*	675mm*	720mm*
	Maximum height saddle extended	810mm*	842mm*	870mm*	920mm*
Fox Transfer 31.6 125mm	Minimum height saddle extended	621mm*	650mm*	680mm*	730mm*
	Maximum height saddle extended	718mm*	750mm*	780mm*	825mm*
Fox Transfer 31.6 150mm	Minimum height saddle extended	655mm*	675mm*	705mm*	750mm*
	Maximum height saddle extended	775mm*	805mm*	835mm*	885mm*
Fox Transfer 31.6 175mm	Minimum height saddle extended	714mm*	715mm*	730mm*	775mm*
	Maximum height saddle extended	834mm*	863mm*	890mm*	940mm*

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

06 TECHNICAL SPECIFICATIONS

OIZ CARBON 2023 FRAME 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 Fibre	
RECOMMENDED USE	XC, Marathon. ASTM Condition 3	
SIZES	S/M/L/XL	
SUSPENSION DESIGN	Single Pivot with UFO2 flex-stay technology	
COMPATIBLE FORKS	2023 Fox Push-to-Unlock Remote	2024 Forks with Push-to-Lock remote
FORK TRAVEL	120 mm	
MAXIMUM FORK LENGTH (AXLE-TO-CROWN)	531 mm	
FORK OFFSET	44 mm	
REAR TRAVEL	120 mm	
SHOCK	Fox DPS I-Line	
	2023 Push-to Unlock (PTU)	2024 Push-to-lock (PTL)
SHOCK DIMENSIONS	190 x 45	
SHOCK HARDWARE		
FRAME END	10 x 29.92 mm	
LINKAGE END	10 x 22.2 mm	
RECOMMENDED SAG	20%-25%	
HEADSET	Orbea ICR HS02 SIC (Sealed Internal Cabling) Spinblock 164º	
HEADSET BEARINGS	Top: 1-1/2 (with adaptor 1-1/2 to 1-1/8 for internal cabling)	
	Bottom: 1-1/2	
HEADSET SPACERS	See Headset and Stem sections	
MAXIMUM HEADSET SPACERS	Below the stem: 30 mm	
STEM	See Headset and Stem sections	
BOTTOM BRACKET STANDARD	BSA. Threaded	
BOTTOM BRACKET SHELL WIDTH	73 mm	
CHAINLINE	52 mm (Compatible with 55 mm)	
WHEEL SIZE	29"	

	OIZ OMX	OIZ OMR
MAXIMUM REAR TYRE WIDTH	2.40"	
MAXIMUM FRONT TYRE WIDTH	Depends on the fork (Fox 34 SC: 2.40")	
REAR AXLE STANDARD	Boost 12 x 148	
REAR AXLE MEASUREMENTS	12 x 171 mm	
REAR AXLE THREAD PITCH	1.0	
REAR AXLE THREAD LENGTH	13 mm	
SEATPOST DIAMETER	31.6 mm	
SEATPOST CLAMP	Specific Oiz Carbon 2023. Not integrated Diameter : 34.7 mm	
MAXIMUM SEATPOST INSERTION		
S	225 mm	
M	230 mm	
L	270 mm	
XL	330 mm	
DROPPER SEATPOST COMPATIBLE WITH INTERNAL CABLING	Yes	
FRONT DERAILLEUR	No. Single chainring only	
MAX SIZE. ROUND CHAINRING (52 mm chainline)	38T	
MAX SIZE. ROUND CHAINRING (55 mm chainline)	38T	
MAXIMUM SIZE OVAL CHAINRING (52 mm chainline)	36T (Depends on the chainring model)	
MINIMUM SIZE ROUND CHAINRING (52 mm chainline)	30T	
MINIMUM SIZE ROUND CHAINRING (55 mm chainline)	32T	
MINIMUM SIZE OVAL CHAINRING (52 mm chainline)	32T (Depends on the chainring model)	
BRAKE TYPE	Disc	
REAR BRAKE CALIPER STANDARD	Flat Mount*	Post Mount*
FRONT BRAKE CALIPER STANDARD	Depends on the fork (Fox 34 SC: Post Mount)	

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OIZ CARBON 2023 FRAME TECHNICAL SPECIFICATIONS

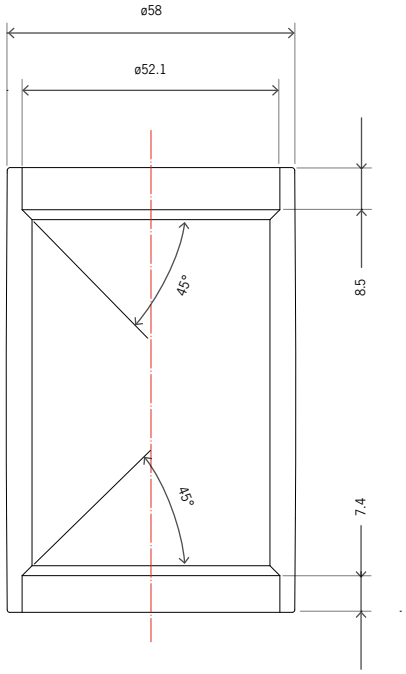
	OIZ OMX	OIZ OMR
REAR CALIPER FLAT MOUNT BOLT LENGTH. (Chainstay height = 25 mm)	Sram: 32 mm	-
	Shimano: 38 mm	-
MAXIMUM REAR DISC SIZE	160 mm	180 mm
MINIMUM REAR DISC SIZE	160 mm	
MAXIMUM FRONT DISC SIZE	Fox 34 SC: 180 mm	
MINIMUM FRONT DISC SIZE	Fox 34 SC: 160 mm	
CHAINGUIDE	Yes. Direct mount in swingarm	
ICGS	No	
CABLING	SIC (Sealed Internal Cabling)	
	Rear derailleur and rear brake: Internal in headset, downtube and chainstays. Full housing.	
	Front brake: External	
	Dropper seatpost: Internal in headset, downtube and seat tube. Full housing.	
	Shock remote: Internal in headset and top tube. Full housing.	
COMPATIBLE REAR LEFT BRAKE CABLING	Yes. Rear brake enters the frame from the right side of the headset collector	
BOTTLE HOLDER	2. On all sizes. Maximum seat tube: 600 ml Maximum downtube: 750 ml	
TRANSMISSION COMPATIBILITY	Shimano: 11S and 12S. MTB groupsets	
	Shimano: 11S and 12S. MTB groupsets	
COMPATIBLE SHIMANO DI2	No	
COMPATIBLE SRAM AXS	Yes	
COMPATIBLE SRAM T-TYPE	Yes	
POWERMETER COMPATIBILITY**	Quarq: Yes	
	Rotor Power: Yes	
TRAILER COMPATIBLE	No	
REAR RACK COMPATIBLE	No	
MUDGUARD COMPATIBLE	No	
CHILD SEAT COMPATIBLE	No	
MAXIMUM RECOMMENDED WEIGHT LIMIT (Rider + gear + luggage)	See the document Orbea Product Maximum Recommended Weights on our website	

** Not all disc and caliper models on the market are compatible with the frames. All the Orbea specified assemblies have been checked. For aftermarket assemblies, check the dimensions and tolerances before purchase.*
*** For powermeters other than those listed, refer to the manufacturer's dimensions and mounting options.*

COMPONENTS. EXPLODED PARTS, ASSEMBLY, USE AND SPARE PARTS

07 HEADSET HS02

HEAD TUBE DIMENSIONS



HS02 HEADSET SPECIFICATIONS

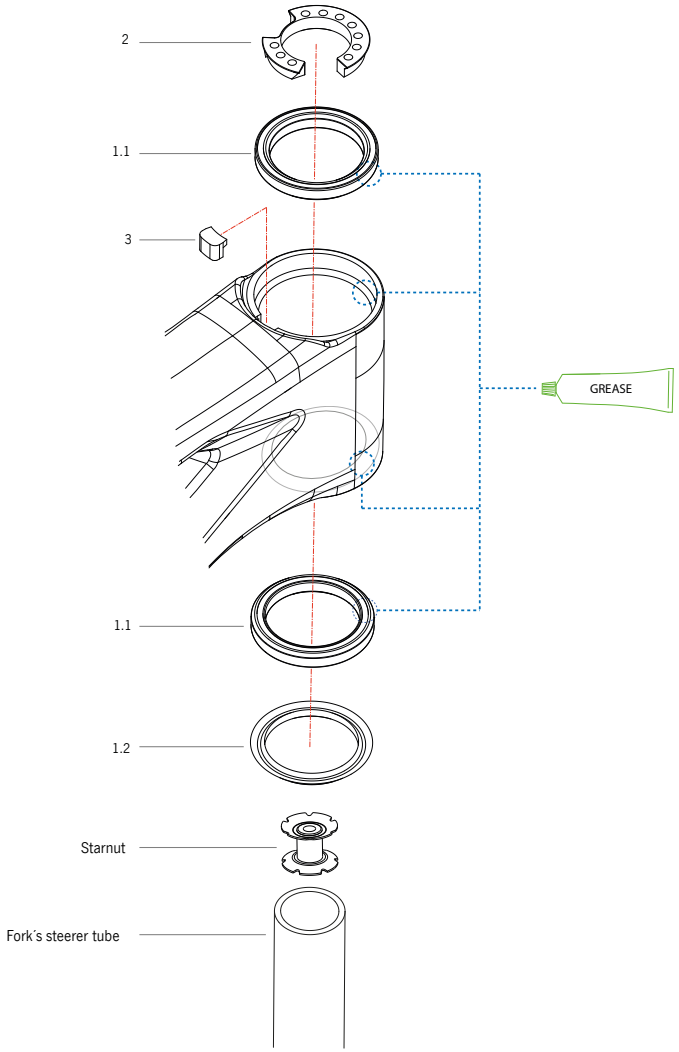
	TYPE	ID*	OD**	Headset bearing race angle	Preload ring ring/fork crown race angle	SHIS CODE	Bearing code Enduro	Bearing dimensions
TOP	1-1/8" Integrated 1-1/2" bearing with SIC 1-1/8" adapter	52.1 mm	58 mm	45º	45º	IS52/40	ACB 4545 150 SS 40x52x7; 45x45°; 1.5" SS HS	Angular contact bearing 52x40x7 mm
BOTTOM	1-1/2" Integrated	52.1 mm	58 mm	45º	45º	IS52/40	ACB 4545 150 BO 40x52x7; 45x45°; 1.5" BO HS	Angular contact bearing 52x40x7 mm

** ID: Headset tube internal diameter. ** OD: Headset tube outer diameter.*

HEADSET EXPLODED PARTS AND ASSEMBLY

BEARINGS AND SIC ADAPTER

SEE THE LIST OF COMPONENTS AT THE END OF THIS SECTION



"REGULAR STACK" AND "LOW STACK" HEADSET SETS (OPTIONAL)

The HS02 headset allows for two different assemblies "Regular Stack" and "Low Stack", depending on your preferred stem and handlebar height.

The "Low Stack" option can be chosen as an option at the time of purchase on select models, or can be fitted later on models with the "Regular Stack" option mounted.

REGULAR STACK

The "Regular Stack" option uses a separate frame cover (4) and SIC cabling collector (6).

The headset spacers to be used below the stem (5.1, 5.2) are mounted between the frame cover and the collector to achieve the desired stem height.

The headset spacers to be used on top of the stem (8.1, 8.2) are specific for assemblies with OC stems.

LOW STACK

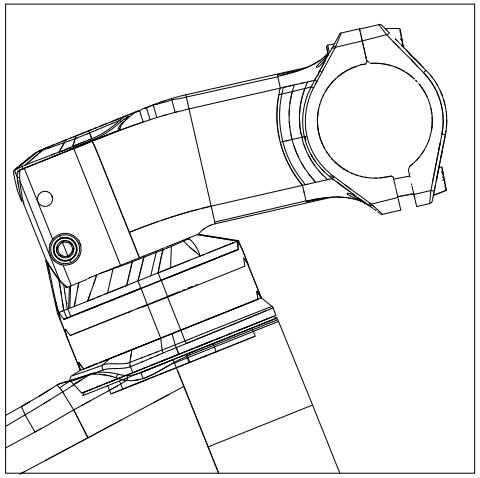
The "Low Stack" option uses a specific SIC cabling harness that acts as a frame cover (9).

This collector is not compatible with the use of steering spacers below the stem (5.1, 5.2) .

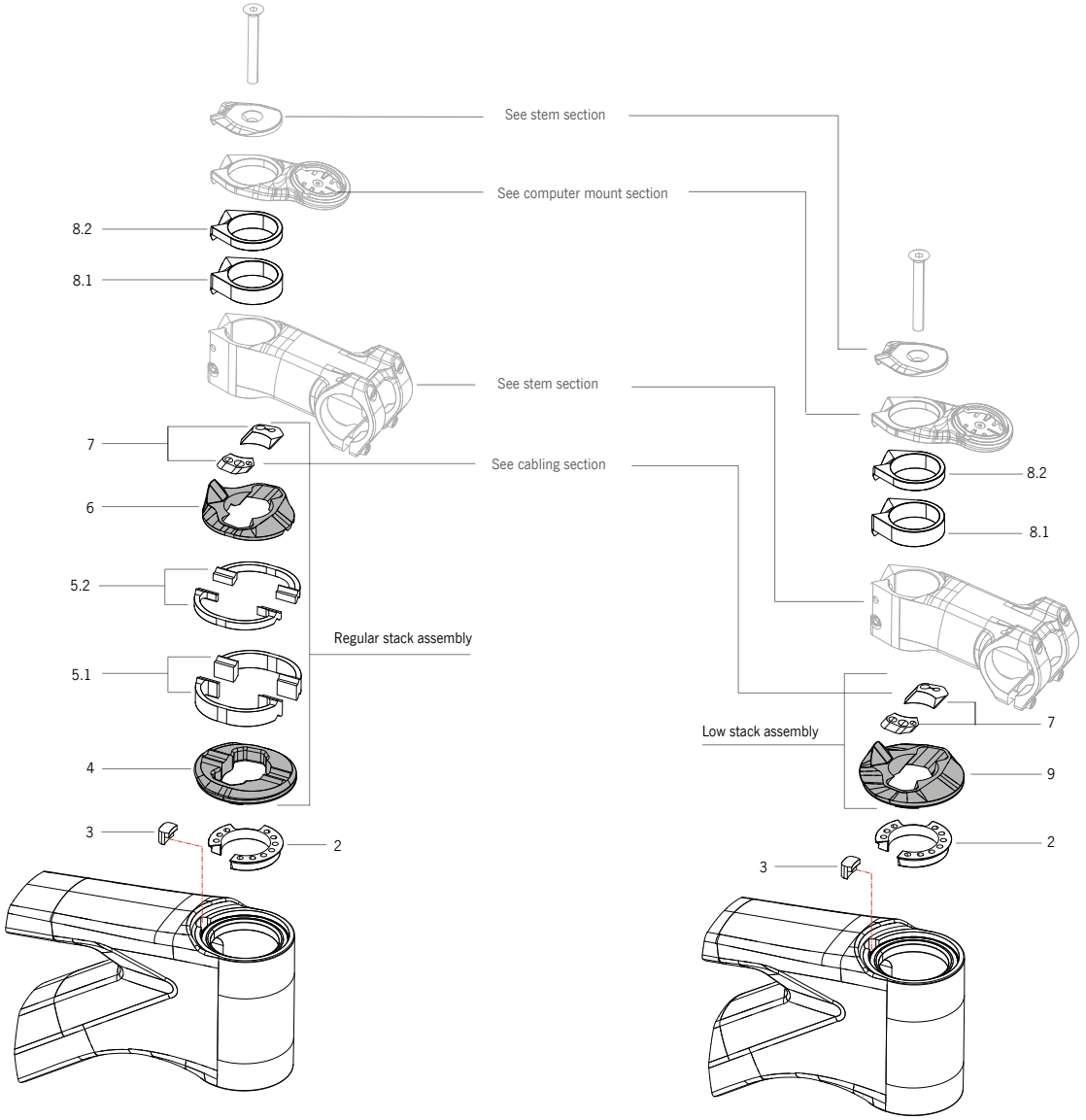
The headset spacers to be used on top of the stem (8.1, 8.2) are specific for assemblies with OC stems.

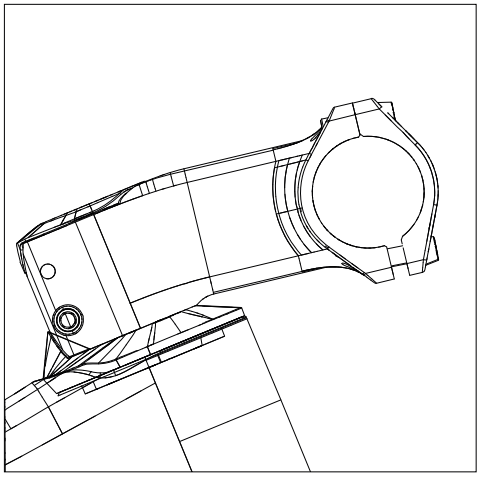
NOTICE The "Regular Stack" and "Low Stack" headsets are only compatible with the use of OC stems compatible with the Spinblock function. (see Spinblock section in this chapter).

SEE THE LIST OF COMPONENTS AT THE END OF THIS SECTION



REGULAR STACK





LOW STACK

NOTICE See the routing of the cables through the HS02 headset in the cabling sections of this manual.

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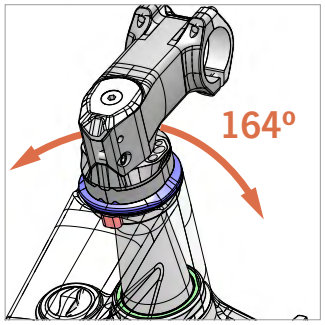
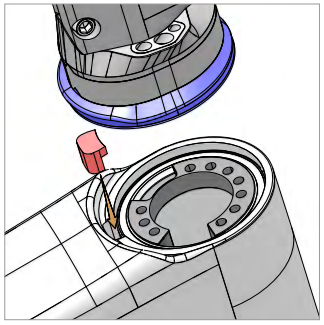
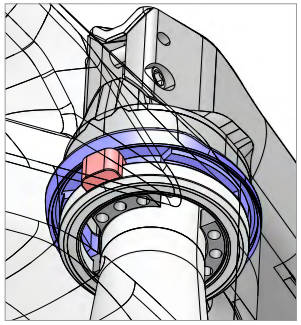
SPINBLOCK FUNCTION
HEADSET STEERING LIMITER

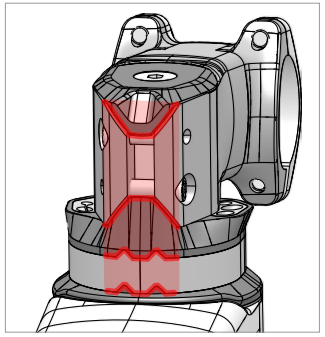
The Oiz Carbon headset has a Spinblock function, which limits the headset rotation to 164º, allowing all the necessary manoeuvrability, but preventing the handlebar and its components from hitting the frame in the event of a fall.

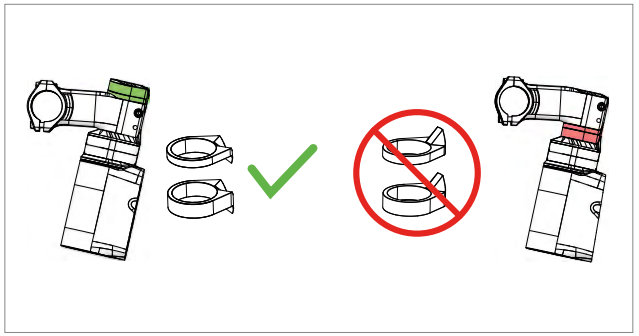
The SpinBlock function is achieved with a stop housed in the rear part of the head tube and a rotation channel in the lower part of the head cover (or the collector in "Low Stack" mounts that limit the rotation of the assembly).











NOTICE For the Spinblock function to work correctly, all components of the headset, including the stem, must be Spinblock compatible.

The frame cover, the steering spacers, the SIC collector and the stem must have the mounting profiles shown in the image to ensure that the headset rotation limit is transmitted to the stem.

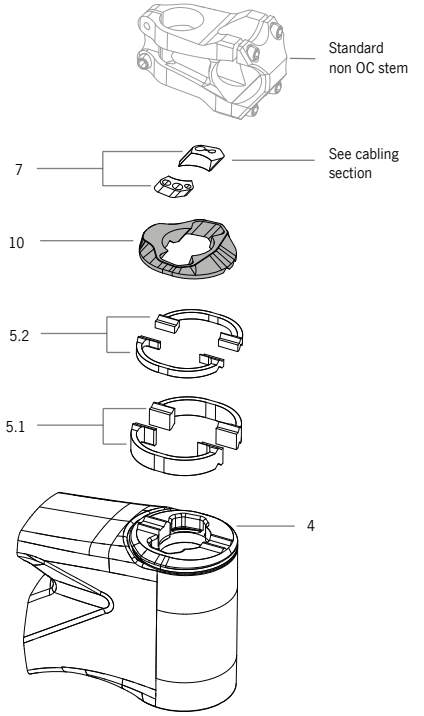
NOTICE On frames with Spinblock function, do not install the HS02-07/08 headset spacers below the stem. They are not designed for this use and may be damaged.

If these spacers are installed below the stem, the Spinblock function may be affected, possibly causing damage to the frame in case of a fall if the Spinblock funtion does not work correctly. Damage to the components caused due to an incorrect assembly are not covered by the warranty terms.

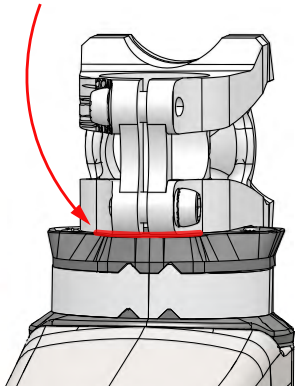
USING STEMS WITH NO SPINBLOCK FUNCTION

Non-specific stems without Spinblock function compatible with the use of round headset spacers can be used on Oiz Carbon by replacing the "Regular Stack" SIC collector with the universal SIC collector (10.1).

SEE THE LIST OF COMPONENTS AT THE END OF THIS SECTION



No Spinblock function with Universal Collector and regular stems



NOTICE The use of standard stems that are not compatible with the Spinblock function will cause the headset steering limit to be lost, since the steering limit cannot be transmitted to the stem since the universal collector and the stem do not have the necessary mounting profiles. Keep this in mind when mounting non-OC stems that require the use of the universal SIC collector.

NOTICE Orbea does not guarantee the compatibility of stems not specified in original Orbea assemblies. Check that the stem measurements to be used allow a correct assembly of all the components and that they allow the entry of the cables and housings through the SIC collector.

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HEADSET COMPONENTS

01 ICR HS02 HEADSET BEARINGS

PART NO.: XC50		QUANT.
	1.1 Headset bearing 1.5 (52 x 40 x 7 mm. 45º/45º)	2
	1.2 Fork crown race 1.5 45º	1

03 SPINBLOCK FRAME STOP HS02-02

PART NO.: XC53		QUANT.
	Spinblock frame stop HS02-02	1

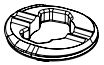
05 HS02 SPLIT HEADSET SPACER KIT

PART NO.: XC55		QUANT.
	5.1 HS02-04 Split headset spacer 10 mm	3
	5.2 HS02-03 Split headset spacer 5 mm	1

02 ALUMINIUM PRELOAD RING 1-1/8 HS02-01

PART NO.: XC51		QUANT.
	Aluminium preload ring 1-1/8 HS02-01	1

04 OIZ HS02-15 HEADSET SPINBLOCK COVER REGULAR STACK

PART NO.: XC54		QUANT.
	OIZ HS02-15 headset cover Spinblock Regular Stack	1

06 HS02-05 SIC SPINBLOCK COLLECTOR REGULAR STACK

Includes seal kit for all cabling options

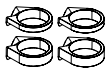
PART NO.: XC56		QUANT.
	6.1 HS02-05 SIC Collector Spinblock. Regular Stack	1
	6.2 SIC L1 HS02-42 seal. 4mm + 4mm blind	1
	6.3 SIC L2 HS02-43 seal. 4mm + 4mm	1
	6.4 SIC L3 HS02-44 seal. 4mm + 4mm + 3mm	1
	6.5 SIC R1 HS02-45 seal. 5mm	1
	6.6 SIC R2 HS02-46 seal. 4mm + 5mm	1
	6.7 SIC R2e HS02-47 seal. 3mm + 5mm	1
	6.8 SIC R3 HS02-48 seal. 4mm + 3mm + 3mm	1

07 SIC COLLECTOR SEAL KIT HS02

For all cabling options

PART NO.: XC57		QUANT.
	7.1 SIC L1 HS02-42 seal. 4mm + 4mm blind	1
	7.2 SIC L2 HS02-43 seal. 4mm + 4mm	1
	7.3 SIC L3 HS02-44 seal. 4mm + 4mm + 3mm	1
	7.4 SIC R1 HS02-45 seal. 5mm	1
	7.5 SIC R2 HS02-46 seal. 4mm + 5mm	1
	7.6 SIC R2e HS02-47 seal. 3mm + 5mm	1
	7.7 SIC R3 HS02-48 seal. 4mm + 3mm + 3mm	1

08 SPINBLOCK ABOVE STEM SPACER KIT

PART NO.: XC58		QUANT.
	8.1 HS02-08 10 mm Spinblock above stem spacer	2
	8.2 HS02-07 5 mm Spinblock above stem spacer	2

09 OIZ HS02-16 HEADSET COVER + SPINBLOCK COLLECTOR LOW STACK

Includes seal kit for all CABLING options

PART NO.: XC59		QUANT.
	9.1 Oiz HS02-16 Headset + collector Spinblock Low Stack	1
	9.2 SIC L1 HS02-42 seal. 4mm + 4mm blind	1
	9.3 SIC L2 HS02-43 seal. 4mm + 4mm	1
	9.4 SIC L3 HS02-44 seal. 4mm + 4mm + 3mm	1
	9.5 SIC R1 HS02-45 seal. 5mm	1
	9.6 SIC R2 HS02-46 seal. 4mm + 5mm	1
	9.7 SIC R2e HS02-47 seal. 3mm + 5mm	1
	9.8 SIC R3 HS02-48 seal. 4mm + 3mm + 3mm	1

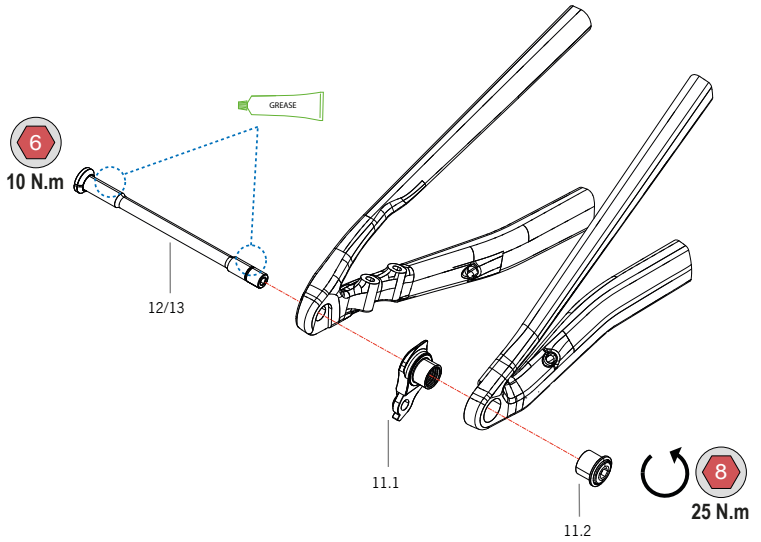
10 HS02-06 NO SPINBLOCK UNIVERSAL COLLECTOR STANDARD STEM

Includes seal kit for all cabling options

PART NO.: XC60		QUANT.
	10.1 Oiz HS02-06 SIC Universal collector No Spinblock	1
	10.2 SIC L1 HS02-42 seal. 4mm + 4mm blind	1
	10.3 SIC L2 HS02-43 seal. 4mm + 4mm	1
	10.4 SIC L3 HS02-44 seal. 4mm + 4mm + 3mm	1
	10.5 SIC R1 HS02-45 seal. 5mm	1
	10.6 SIC R2 HS02-46 seal. 4mm + 5mm	1
	10.7 SIC R2e HS02-47 seal. 3mm + 5mm	1
	10.8 SIC R3 HS02-48 seal. 4mm + 3mm + 3mm	1

08 REAR AXLE AND DERAILLEUR HANGER

Always use the tightening torque recommended by Orbea



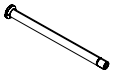
11 SRAM UDH STD X12 HT OPTION DERAILLEUR HANGER

PART NO.: X004		QUANT.
	11.1 Sram UDH X12 derailleur hanger	1
	11.2 Bolt for Sram UDH X12 hanger	1

12 ORBEA REAR AXLE 12 X 171 (1.0 x 13) LITE

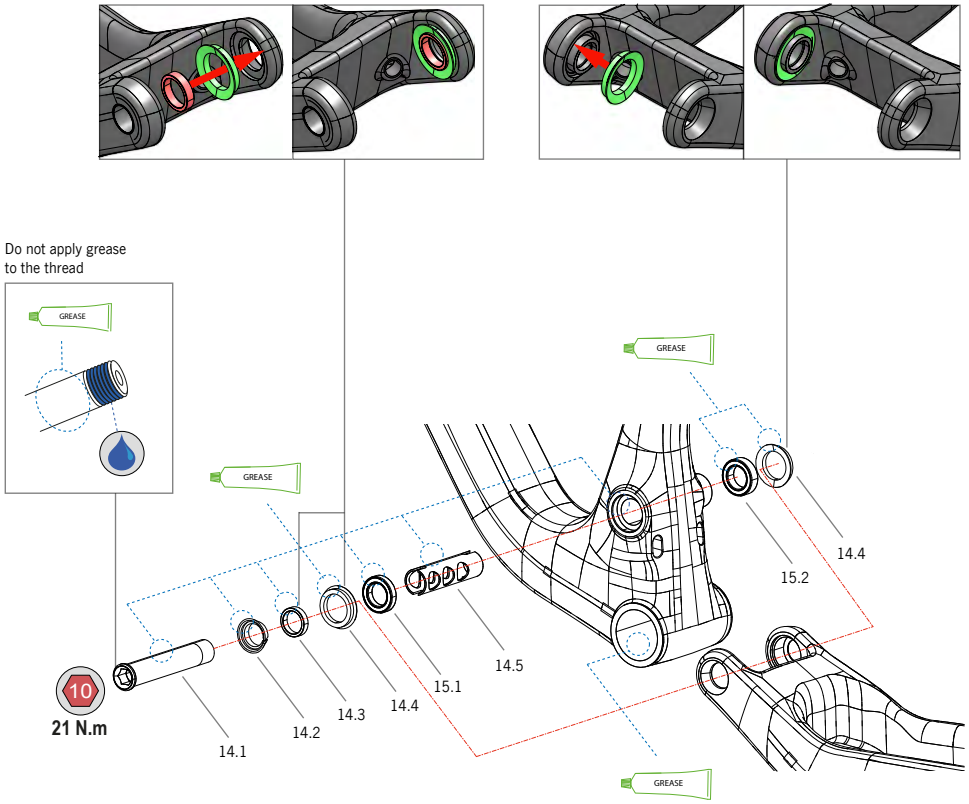
PART NO.: X032		QUANT.
	Orbea rear axle 12 x 171 (1.0 x 13) Lite	1

13 ORBEA REAR AXLE 12 X 171 (1.0 x 13) HOLLOW

PART NO.: X041		QUANT.
	Orbea rear axle 12 x 171 (1.0 x 13) hollow	1

NOTICE The Hollow and Lite rear thru-axles are both compatible with Oiz OMR and OMX frames, with the Lite axle being the lightest option used on OMX builds.

09 MAIN SWINGARM PIVOT POINT



Always use the tightening torque recommended by Orbea.

14 OIZ CARBON 23 MAIN PIVOT POINT HARDWARE KIT

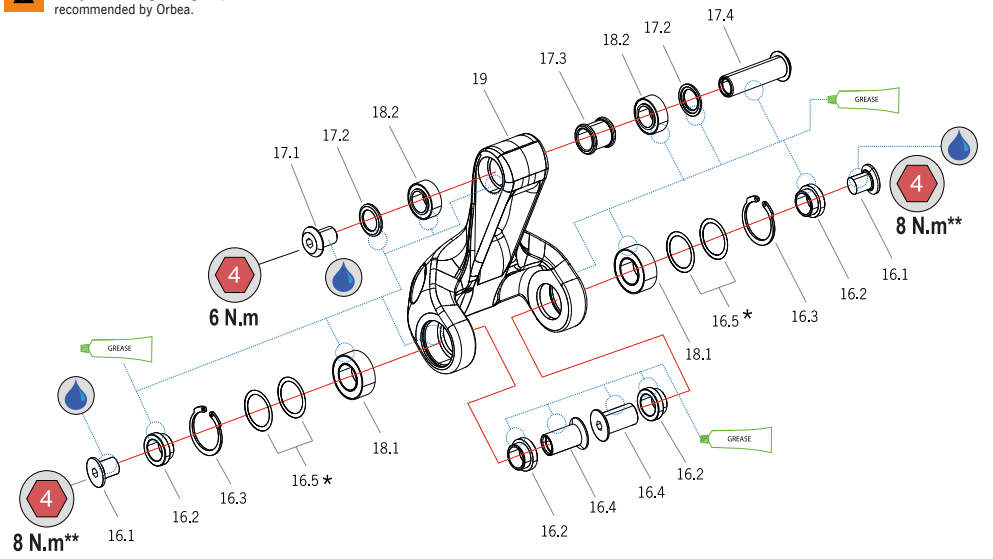
PART NO.: XC61		QUANT.
	14.1 Oiz carbon 23 main pivot point axle	1
	14.2 Oiz carbon 23 main pivot point axle cone	1
	14.3 Oiz carbon 23 NDS main swingarm pivot point washer	1
	14.4 17.50 x 19 60NBR Vring main pivot pt	2
	14.5 Oiz carbon 23 main pivot point bearing spacer	1

15 OIZ CARBON 23 MAIN PIVOT POINT BEARING KIT

PART NO.: XC62		QUANT.
	15.1 Enduro 6802 LLU MAX BO 15 x 24 x 5 bearing	1
	15.2 Enduro 3802 LLU MAX BO 15 x 24 x 7 bearing	1

10 LINKAGE

Always use the tightening torque recommended by Orbea.



**Tighten to 5 N.m if the nut on the internal side of the seatstay does not show a torque indication.
If the nut shows a torque indication, tighten according to instruction (8 N.m)

16 LINKAGE-S/STAYS HARDWARE KIT OIZ CB 23

ART N°: XC63		CANT.
	16.1 Linkage-s/stay bolt Oiz 23	2
	16.2 Linkage-s/stay adapter Oiz 23	4
	16.3 Circlip JV-22	2
	16.4 Linkage-s/stay nut Oiz 23	2
	16.5* Bearing compensation washer kit Includes: Two 21 x 15 x 0.3 washers Includes: Four 21 x 15 x 0.3 washers	1

17 OIZ CARBON 23 LINKAGE-FRAME HARDWARE KIT

PART NO.: XC65		QUANT.
	17.1 Oiz 23 linkage-frame axle bolt	1
	17.2 Oiz 23 linkage-frame axle washer	2
	17.3 Oiz 23 linkage-frame bearing spacer	1
	17.4 Oiz 23 linkage-frame axle	1

18 OIZ 23 LINKAGE BEARING KIT

PART NO.: XC66		QUANT.
	18.1 Enduro Double MAX 12 x 21 x 8 3801 bearing	2
	18.2 Enduro Double Row 10 x 17 x 6/7 10177 2RS bearing	2

19 OIZ CARBON 23 LINKAGE

PART NO.: XC67		QUANT.
	19.1 Oiz Carbon 23 linkage. Carbon. Raw black	1
	19.2 Threaded insert. See Shock Mounting section	1

* USE OF THE LINKAGE-SEATSTAYS COMPENSATION WASHERS

The Linkage and seatstays pivot point hardware kit (XC63) includes various compensation washers to ensure the pivot point action is always tight and free of any play.

Three washers per pivot point (one 0.3 mm washer and two 0.1 mm washers) are included with the set.

Follow the method given below to install the correct number of washers between the bearing and the circlip:

1. With the bearing installed, fit the circlip fully into the groove (you can rotate the circlip in its groove to check that it is correctly installed).

2. Try to move the bearing sideways in its housing to check whether there is any play.

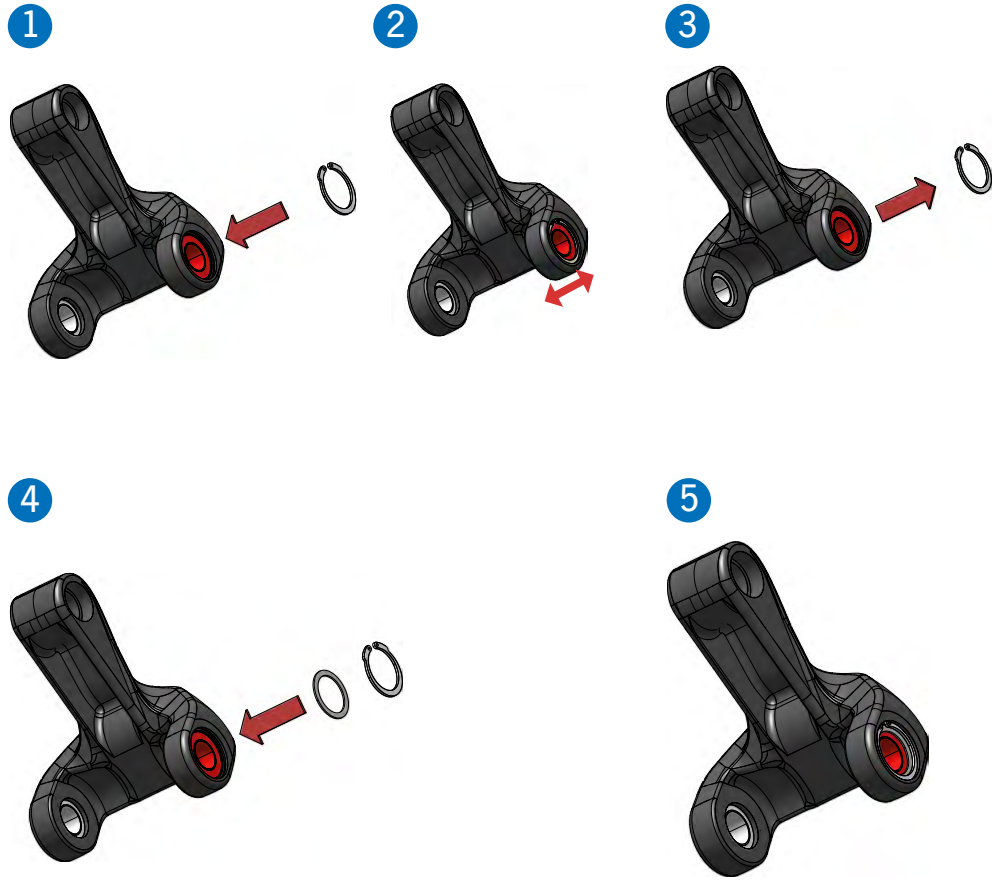
If there is no play, the installation is correct. You do not need to install any compensation washers and you can continue with the installation of the rest of the pivot components.

3. If there is sideways play in the bearing, remove the circlip.

4. Install the 0.3 mm washer and reinstall the circlip, checking for bearing sideways play with the circlip fully installed.

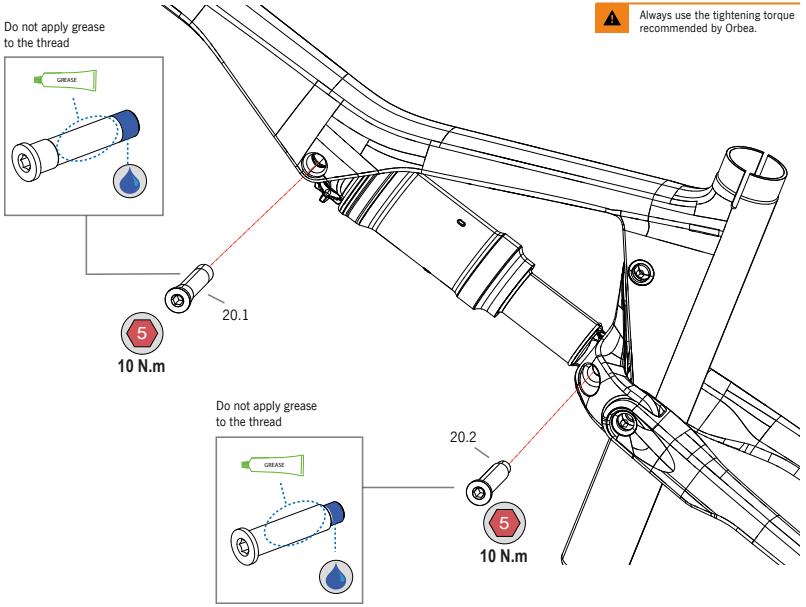
4.1. If you cannot install the circlip when the 0.3 mm washer has been installed, remove that washer and install two 0.1 mm washers. If it is not possible to install the circlip when both 0.1 mm washers have been installed, remove one of them and reinstall the circlip.

5. When there is no play after installing the circlip, the installation is correct. You can continue with the installation of the rest of the pivot components.



11 SHOCK MOUNTING

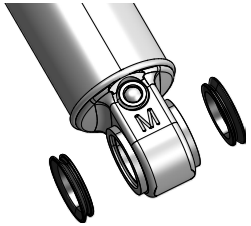
SHOCK MOUNTING



20 OIZ CARBON 23 SHOCK MOUNTING KIT

PART NO.: XC68			QUANT.
	20.1	Oiz carbon 23 shock-frame bolt	1
	20.2	Oiz carbon 23 shock-linkage bolt	1

2024- SHOCK HARDWARE SPACERS



The lower shock hardware spacers used on Oiz are custom 17.7x3.1mm spacers. If the shock hardware is replaced, use the original Orbea spacers instead of the spacers included with the 10x22.2mm shock hardware.

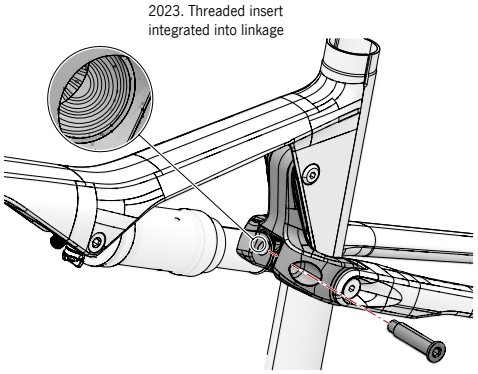
NOTICE These spacers are only mounted together with the 2024- linkage with threaded bushing (see next page). On older versions of the link, standard 10x22.2 hardware spacers must be used.

C OIZ CARBON 24 LOWER SHOCK HARDWARE SPACER KIT

PART NO.: XH49			QUANT.
	C	17.7x3.1mm lower shock spacer Oiz Carbon 24	2

2023 LINKAGE

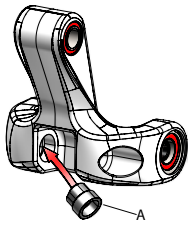
On 2023 and beginning of 2024 model year frames the linkage has an integrated threaded insert for the installation of the shock-linkage fixing bolt.

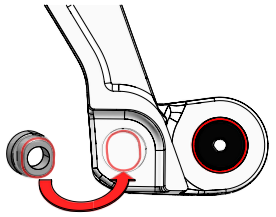


2024 - LINKAGE

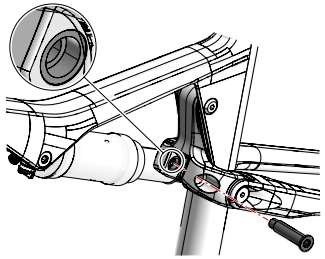
From mid 2024 model year, the thread for the installation of the shock-linkage fixing bolt is on a separate insert housed on the right side of the linkage. The insert is included with the linkage.

1. Install the threaded insert on the right side of the linkage, matching the flat sides of the insert with those of the linkage.





2. Install the shock-linkage fixing bolt.



A 2024- LINKAGE THREADED INSERT

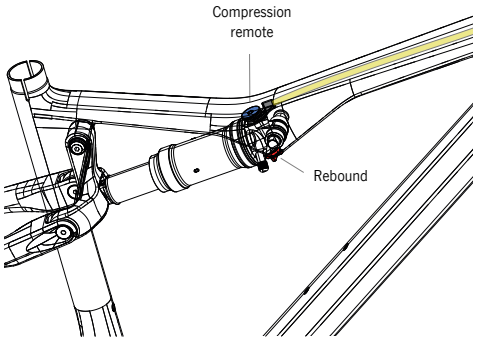
ART Nº: XF17			QUANT.
	A	2024- linkage threaded insert	1

I-LINE SHOCK

For the cleanest way to route the remote shock cable through the frame, Oiz is only compatible with Fox DPS I-Line shocks, where the remote compression adjustment cable entry allows the cable to reach without bends through the downtube.

The rebound adjustment is positioned on the opposite side of the shock (compared to non-I-Line shocks) to allow rebound adjustment.

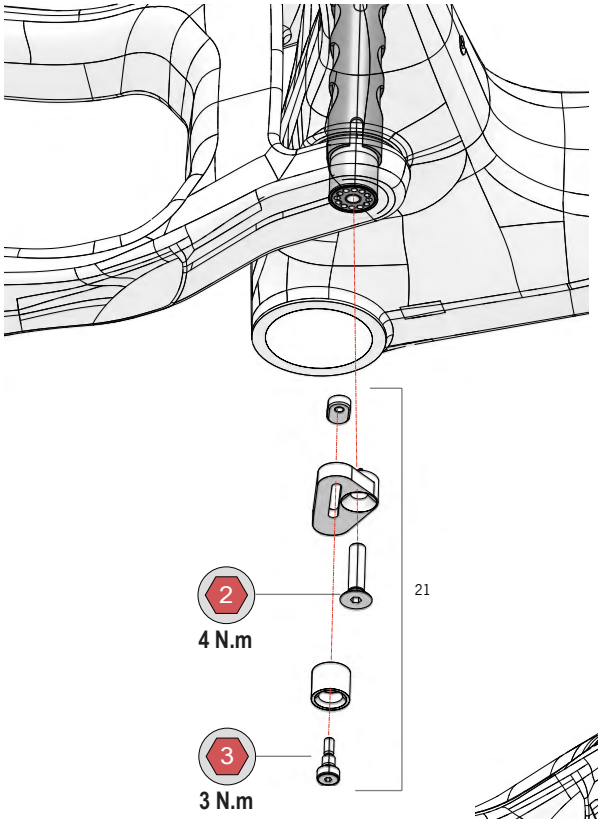
The DPS I-Line shock on Oiz 2023 models has different adjustment and frame mounting hardware than the DPS I-Line shocks on Oiz 2019-2022 mounts.



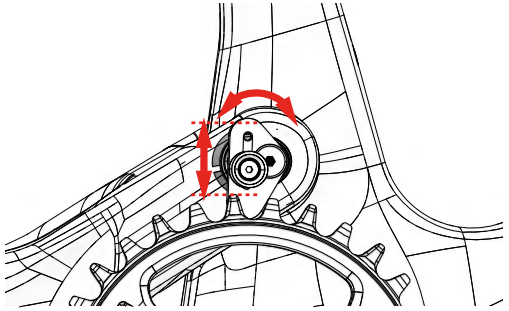
12 CHAINGUIDE

The Oiz Carbon chainguide is fixed to the internal thread of the pivot point axle of the swingarm.

Adjust the angle and height of the chainguide for optimal positioning depending on the chainring mounted.



Always use the tightening torque recommended by Orbea.



21 OIZ 23 CHAINGUIDE KIT

PART NO.: XC69		QUANT.
	Oiz Carbon 23 chainguide kit	1

13 BOTTOM BRACKET SPACER

SHIMANO FC-M8100/FC-M7100 CRANKSETS

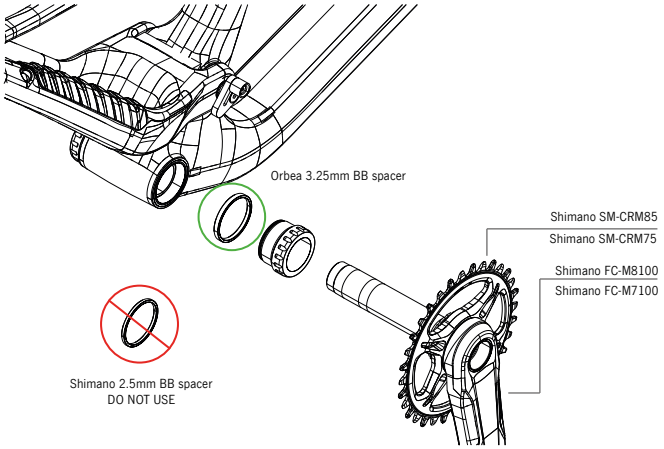
NOTICE In order to mount the Shimano XT FC-M8100 crankset (specificated on Orbea Oiz M10 2023 models) or the Shimano SLX FC-M7100 crankset with 52mm chainlines on Oiz Carbon 2023, it is necessary to replace the 2.5mm BB spacer provided with compatible bottom brackets for the Orbea 3.25mm BB spacer (X915) between the frame and the right BB cup (already installed on Orbea assemblies with these cranksets).

If a 2.5mm spacer is used on this crankset models and their respective chainrings (SM-CRM85 or SM-CRM75), there is risk of interference between the back of the chainring and the right chainstay.

If you replace the bottom bracket cups on Oiz Carbon 2023 models equipped with these Shimano cranksets, replace the 2.5mm spacer provided with the new BB cups with the Orbea 3.25mm spacer originally assembled on the bicycle.

If you install any of these cranksets and their respective chainrings on Oiz Carbon 2023 models that did not equip these components originally, you can purchase the 3.25mm spacer from an Orbea dealer (X915).

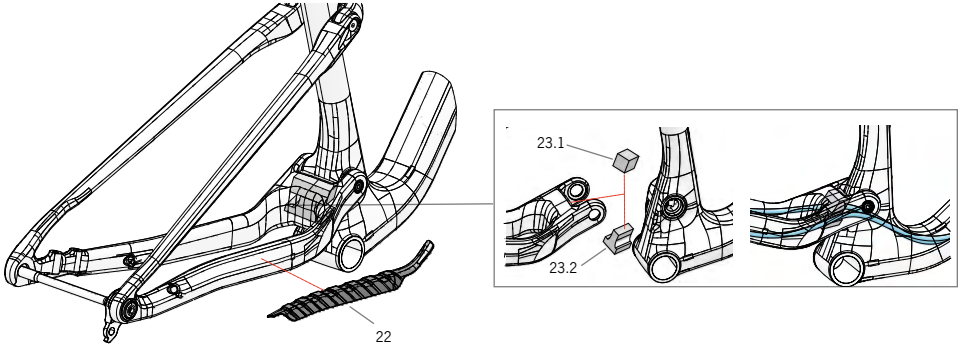
When installing these cranksets on Oiz Carbon 2023 models, check that the back of the chainring does not interfere with the right chainstay before using the bicycle.

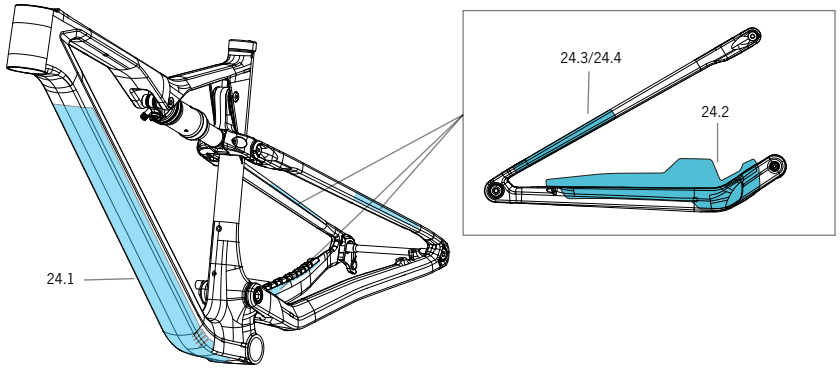


BB SPACER 3.25mm CL52

PART NO.: X915		QUANT.
	BB spacer 3.25mm CL52	1

14 FRAME PROTECTORS





22 OIZ CARBON 23 CHAINSTAY RUBBER ADHESIVE PROTECTOR

PART NO.: XC70		QUANT.
	Chainstay rubber adhesive protector Oiz Carbon 23	1

24 OIZ CARBON 23 TRANSPARENT PROTECTORS KIT

PART NO.: XC72		QUANT.
	24.1 Oiz carbon 23 downtube adhesive transparent protector	1
	24.2 Oiz carbon 23 right chainstay adhesive transparent protector	1
	24.3 Oiz carbon 23 right seatstay adhesive transparent protector	1
	24.4 Oiz carbon 23 left seatstay adhesive transparent protector	1

23 OIZ CARBON 23* FOAM FRAME-SWINGARM PROTECTOR

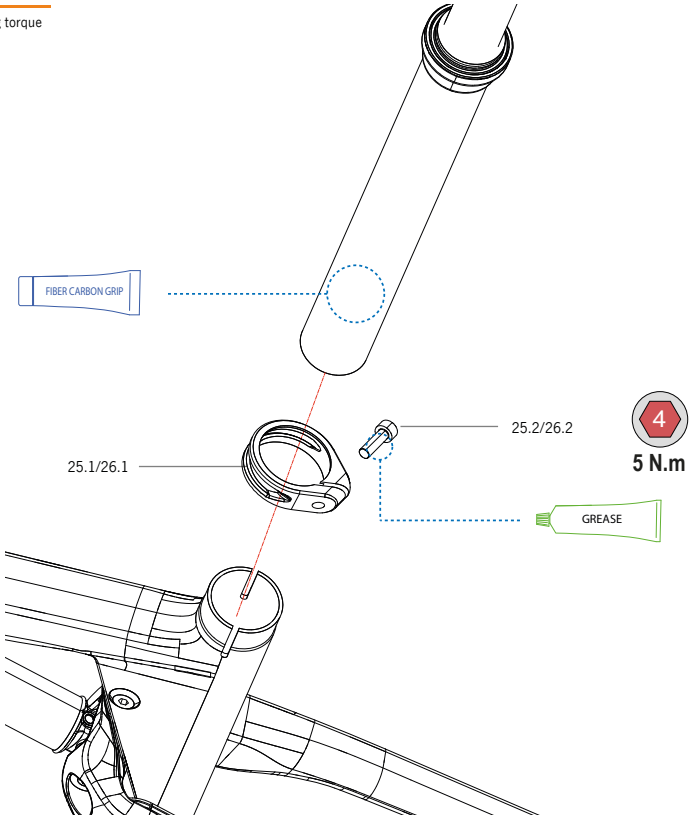
PART NO.: XC71		QUANT.
	23.1 Oiz carbon 23 top frame-swingarm protector	1
	23.2 Oiz carbon 23 bottom frame-swingarm protector	1

** The main pivot point of the frame swingarm needs to be disassenbled to replace the foam protector.*

Both halves of the foam protector come with double-sided tape to stick them to the swingarm.

15 SEATPOST CLAMP

Always use the tightening torque recommended by Orbea.



25 OIZ CARBON 23 SEATPOST CLAMP

Titanium bolt

PART NO.: XC73		QUANT.
	25.1 Oiz carbon 23 34.7 saddle clamp	1
	25.2 Ti clamp bolt	1

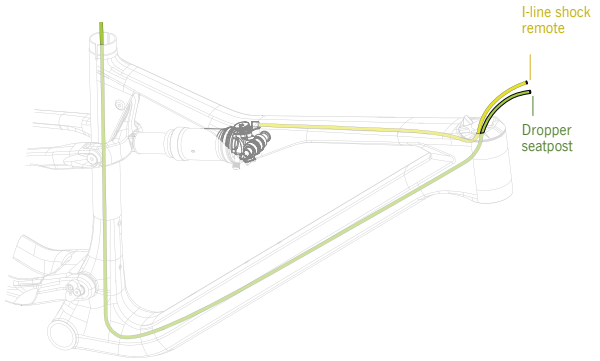
26 OIZ CARBON 23 SEATPOST CLAMP

Steel bolt

PART NO.: XC74		QUANT.
	26.1 Oiz carbon 23 34.7 saddle clamp.	1
	26.2 Steel clamp bolt	1

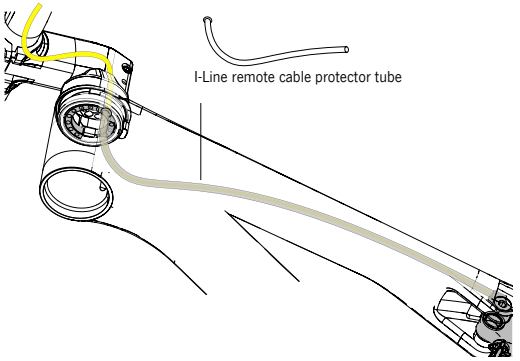
16 CABLING

CABLE ROUTING OF THE SHOCK REMOTE AND THE DROPPER SEATPOST THROUGH THE FRAME



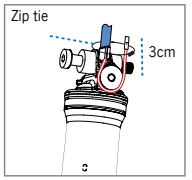
I-LINE SHOCK REMOTE CABLING TUBE

NOTICE The I-Line shock remote housing is protected by an additional tube that runs from the bottom of the headset compression ring to the remote housing on the shock.



NOTICE The shock remote cable should be left with a minimum of 3 cm of excess and tucked into the horizontal tube parallel to the housing.

Use a cable tie to hold the excess to the housing and prevent it from rubbing against the frame. Do not overtighten the cable tie to allow proper operation of the shock remote.



The lipped end of the tube should be positioned against the headset compression ring. The length of the tube is specific to each frame size. If you must cut the tube to the specific size for your frame size, always cut from the shock end (without the lip).

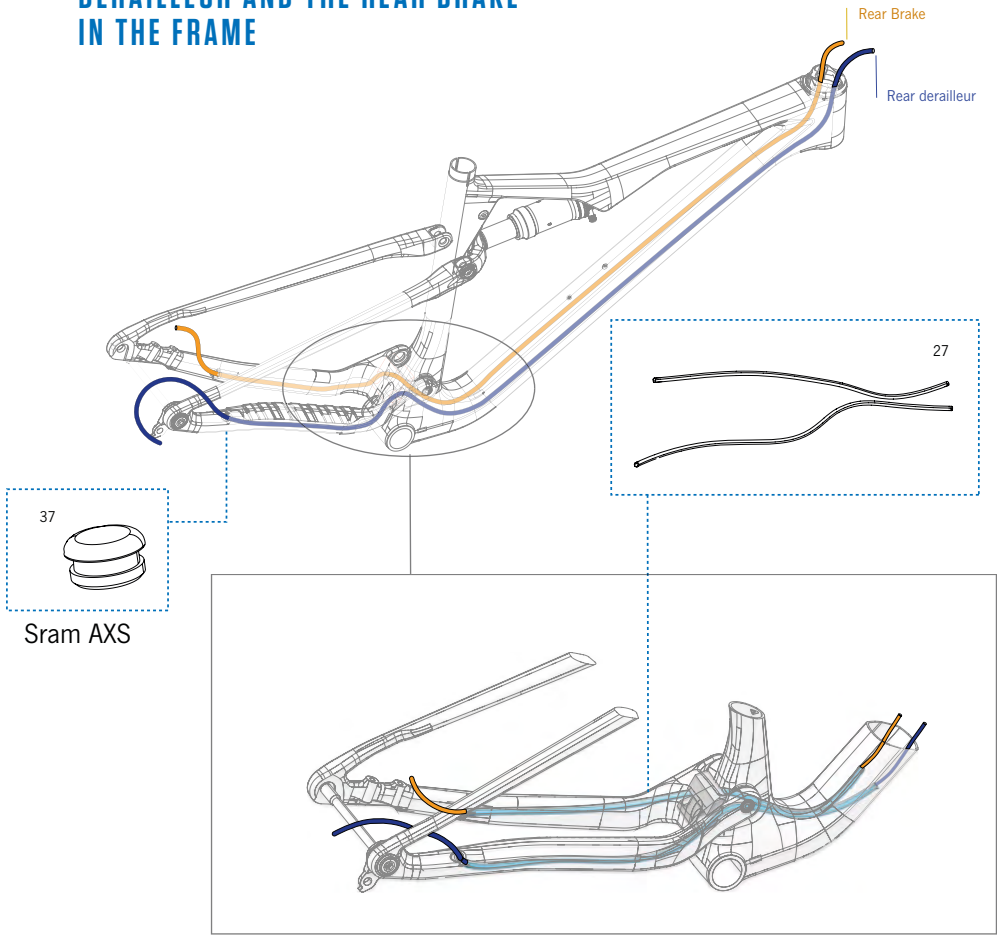
FRAME SIZE	TUBE LENGTH
S	340mm
M	370mm
L	390mm
XL	420mm

When installing the tube on a frame that did not originally have it installed, it may be necessary to replace the shock remote cable housing with a longer one to allow for proper steering operation.

A I-LINE SHOCK REMOTE TUBE

PART NO.: XF69			QUANT
	A	I-Line shock remote tube	1

CABLE ROUTING OF THE REAR DERAILLEUR AND THE REAR BRAKE IN THE FRAME



27 ICR 23 SWINGARM CABLING TUBE KIT

PART NO.: XC75			QUANT.
	27	500 mm swingarm cabling tube	2

37 BLIND PLUG DIAM 6mm CHAINSTAY SRAM AXS

PART NO.: X522			QUANT.
	37	Blind plug diam 6mm chainstay Sram AXS	2

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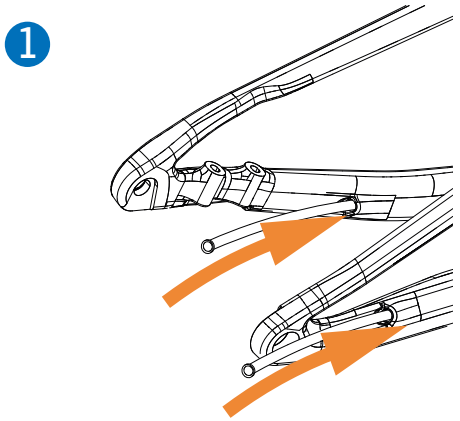
FITTING THE ICR TUBES TO THE SWINGARM

NOTICE The swingarm must be completely removed from the bike to install the ICR tubes.

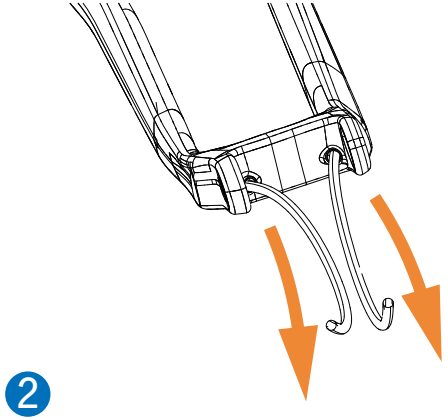
1. Insert the ICR tubes from the rear of the swingarm.

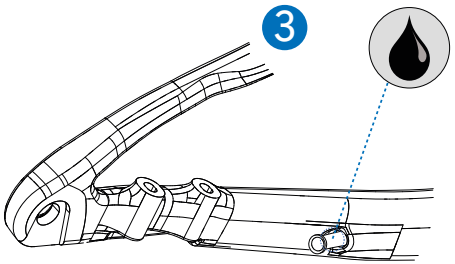
Insert the end of the un-flared end of the ICR tubes into the swingarm hole.



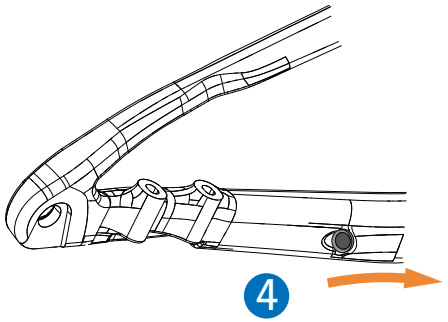
2. Guide the ICR tubes to their corresponding outlet (same side) on the front of the swingarm.

Leave a small part of the tube not inserted into the swingarm.



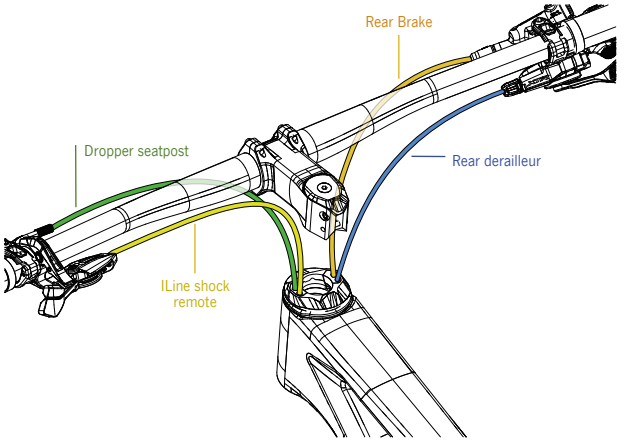


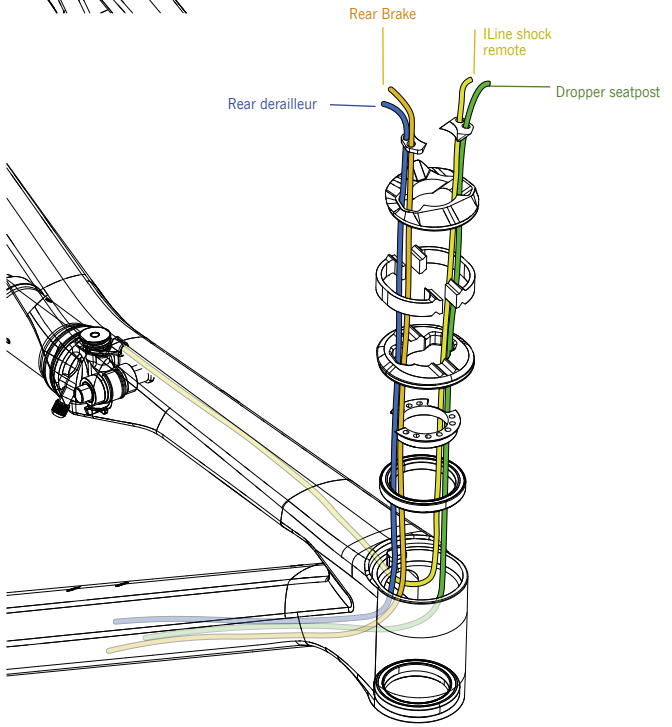
3. Apply a small amount of mild bi-component or instant adhesive to the part of the tube that will contact the hole in the swingarm. Orbea recommends the use of Araldite 2022-1.



4. Pull the ICR tubes from the front of the swingarm until the tube is seated correctly and makes contact with the outer wall of the hole in the swingarm. Immediately wipe off any excess adhesive on the swingarm with isopropyl alcohol. Allow it to set according to the adhesive manufacturer's instructions.

CABLING THROUGH SIC HSO2 HEADSET





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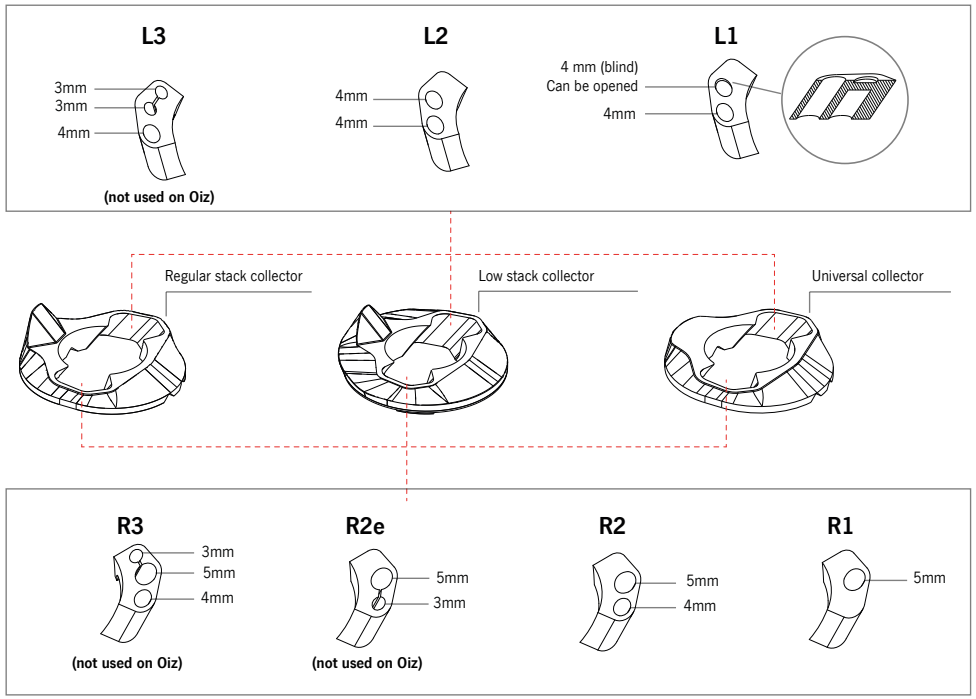
SIC SEALS FOR HS02 HEADSET COLLECTOR (CABLING OPTIONS)

There are different SIC rubber grommets depending on the mounting on each Oiz model to cover all cabling options.

The seals are the same for the three types of HS02 headset (regular stack, low stack and universal collector for stems without Spinblock function).

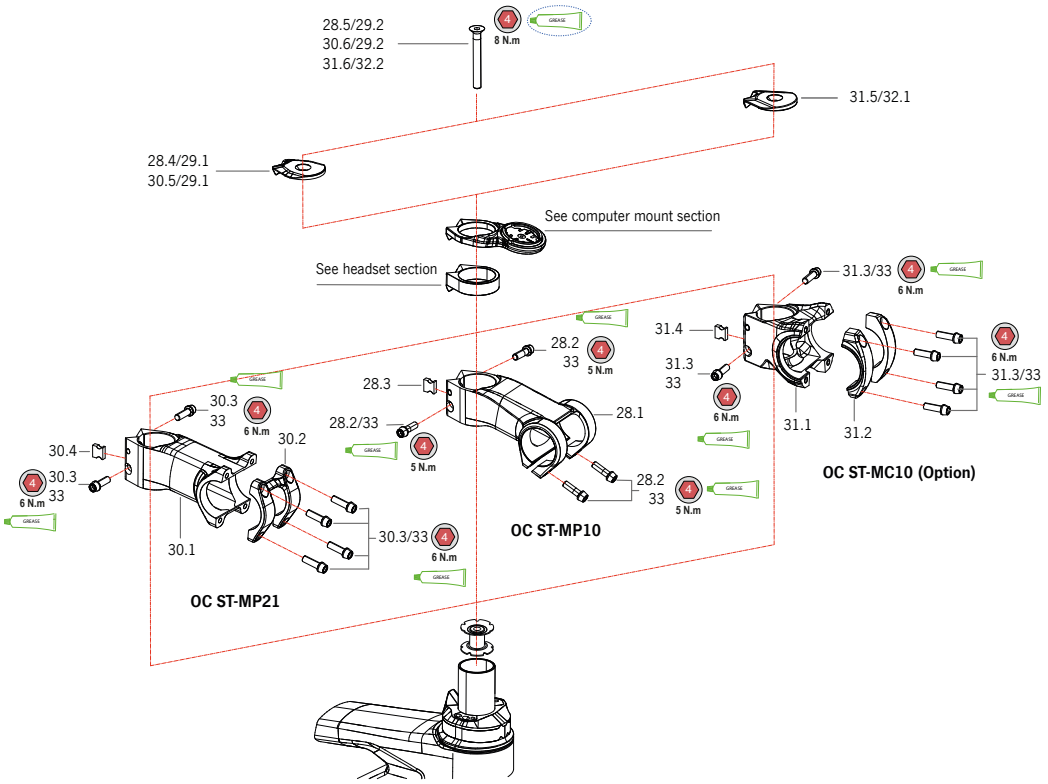
See the headset section of this manual for part and mounting codes for all components of the HS02 headset.



17 OC STEM

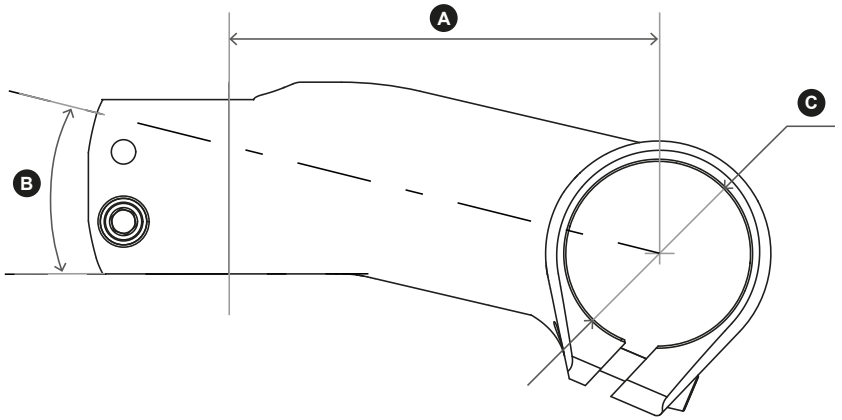
EXPLODED PARTS AND ASSEMBLY OF OC ST-MP10, ST-MP21 AND ST-MC10 STEMS

NOTICE For the use of non-OC stems on Oiz Carbon, see the Headset section of this manual.



SEE THE LIST OF COMPONENTS AT THE END OF THIS SECTION

OC ST-MP10 STEM

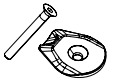


OC RANGE	Mountain Performance
MATERIAL	CNC Aluminium
Ø FORK	1 1/8"
Ø HANDLEBAR (C)	31.8 mm
MOUNTING HEIGHT IN FORK TUBE	32 mm
ANGLE (B)	-10º
AVAILABLE LENGTHS (A)	60 mm - 75 mm - 90 mm
INTERNAL CABLING	No
SPINBLOCK FUNCTION	Yes
SIC COMPATIBLE	Yes
HEADSET STANDARD COMPATIBILITY	Orbea HS02
WEIGHT	115 g (75 mm)
STEM TOPCAP	HS02-30 Topcap. ST-MP10/21
STEM TOP SPACERS	HS02-08 10/5 mm Spinblock stem top spacer
STEM BOTTOM SPACERS	HS02-04/03 10/5 mm split headset spacer
	Beneath SIC HS02 headset collector
COMPUTER MOUNT (Optional)	OC CM-04 XC HS02. On stem. 5 mm ISS02 interface

28 OC ST-MP10 STEM

PART NO.: XA98			QUANT.
	28.1	OC ST-MP10 Stem (60 mm - 75 mm - 90 mm)	1
	28.2	M5x15 R8 Tapered bolt. CrMo	4
	28.3	Steerer clamp limit ST-MP10-11. 10 mm x 3 mm	1
	28.4	HS02-30 Topcap. ST-MP10/21	1
	28.5	M6x50 DIN 7991 bolt	1

29 ST-MP10/21 TOPCAP. HS02-30

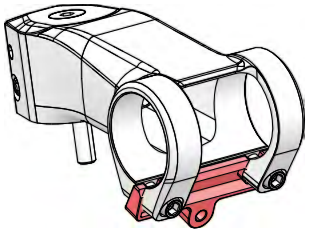
PART NO.: XC77			QUANT.
	29.1	HS02-30 Topcap. ST-MP10/21	1
	29.2	M6x50 DIN 7991 bolt	1

33 OC STEM BOLT KIT

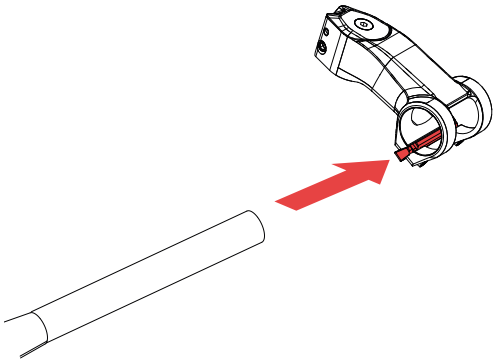
PART NO.: XC78			QUANT.
	33	M5x15 R8 Tapered bolt. CrMo	6
		Compatible with all OC stems except ST-RP21	

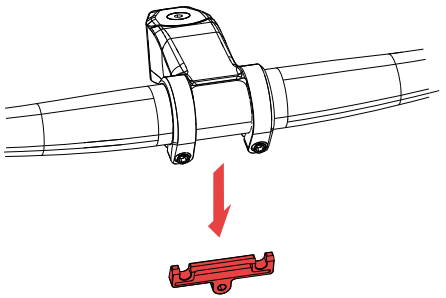
HANDLEBAR ASSEMBLY ON OC ST-MP10 STEM

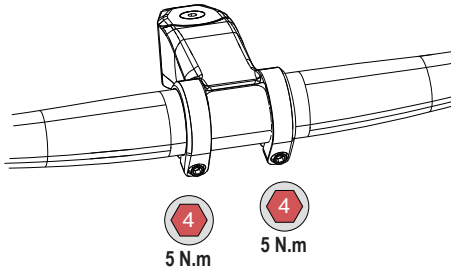
To allow the handlebar to be mounted on the OC ST-MP10 stem with integrated faceplate, and to avoid aesthetic damage to the handlebar when inserting the handlebar into the stem, the stem has a spacer installed in the lower part, which opens the clamping area to allow the handlebar to be inserted into the stem.



Without removing the spacer from the stem, install the handlebar onto the stem and centre it in the desired position. Then remove the spacer from the bottom of the stem.



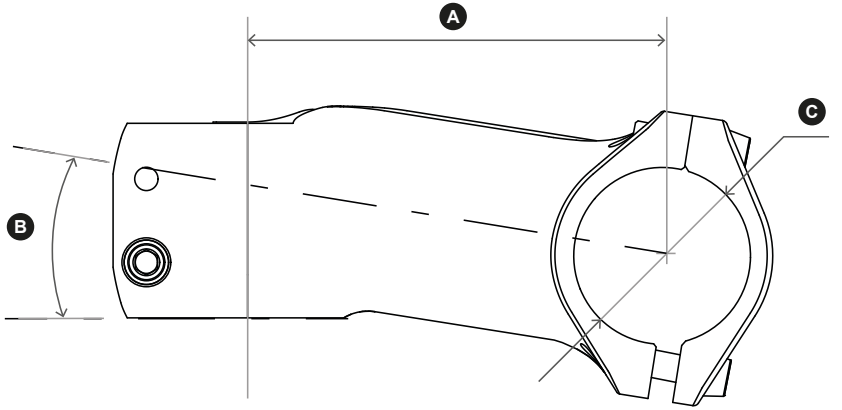




Centre the handlebar in its final position and tighten the stem clamp bolts to the specified torque.

Save the spacer for future use if you need to replace the handlebar.

OC ST-MP21 STEM



OC RANGE	Mountain Performance
MATERIAL	CNC Aluminium
Ø FORK	1 1/8"
Ø HANDLEBAR (C)	31.8 mm
MOUNTING HEIGHT IN FORK TUBE	32 mm
ANGLE (B)	-6º
AVAILABLE LENGTHS (A)	60 mm - 75 mm - 90 mm
INTERNAL CABLING	No
SPINBLOCK FUNCTION	Yes
SIC COMPATIBLE	Yes
HEADSET STANDARD COMPATIBILITY	Orbea HS02
WEIGHT	155 g (75 mm)
STEM TOPCAP	HS02-30 Topcap. ST-MP10/21
STEM TOP SPACERS	HS02-08 10/5 mm Spinblock stem top spacer
STEM BOTTOM SPACERS	HS02-04/03 10/5 mm split headset spacer
	Beneath SIC HS02 headset collector
COMPUTER MOUNT (Optional)	OC CM-04 XC HS02. On stem. 5 mm ISS02 interface

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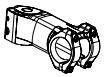
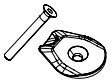
30 OC ST-MP21 STEM

PART NO.: XA99			QUANT.
	30.1	Stam OC ST-MP21 (60mm - 75mm - 90mm)	1
	30.2	Faceplate ST-MP21	1
	30.3	Bolt M5x15 R8 Tapered. CrMo	6
	30.4	Steerer clamp limit ST-MP21-11. 15mm x 4,25mm	1
	30.5	Topcap HS02-30. ST-MP10/21	1
	30.6	Bolt M6x50 DIN 7991	1

29 ST-MP10/21 TOPCAP. HS02-30

PART NO.: XC77			QUANT.
	29.1	HS02-30 Topcap. ST-MP10/21	1
	29.2	M6x50 DIN 7991 bolt	1

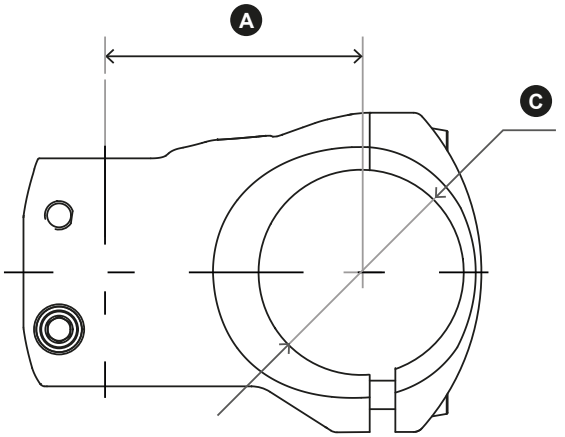


33 OC STEM BOLT KIT

PART NO.: XC78			QUANT.
	33	M5x15 R8 Tapered bolt. CrMo	6

Compatible with all OC stems except ST-RP21

OC ST-MC10 STEM

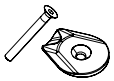


OC RANGE	Mountain Control
MATERIAL	CNC Aluminium
Ø FORK	1 1/8"
Ø HANDLEBAR (C)	35 mm
MOUNTING HEIGHT IN FORK TUBE	40 mm
ANGLE (B)	0º
AVAILABLE LENGTHS (A)	35 mm - 40 mm - 50 mm
INTERNAL CABLING	No
SPINBLOCK FUNCTION	Compatible with internal routing for electronic cables.
SIC COMPATIBLE	Yes
HEADSET STANDARD COMPATIBILITY	Orbea HS02
WEIGHT	150 g (40 mm)
STEM TOPCAP	HS02-31 Topcap. ST-MC10/20
STEM TOP SPACERS	HS02-08 10/5 mm Spinblock stem top spacer
STEM BOTTOM SPACERS	HS02-04/03 10/5 mm split headset spacer
	Beneath SIC HS02 headset collector
COMPUTER MOUNT (Optional)	OC CM-05 MC HS02. On stem. 5 mm ISS02 interface

31 OC ST-MC10 STEM

PART NO.: XB01			QUANT.
	31.1	Stem OC ST-MC10 (35mm - 40mm - 50mm)	1
	31.2	Faceplate stem OC ST-MC10	1
	31.3	Bolt M5x15 R8 Tapered. CrMo	6
	31.4	Steerer clamp limit ST-MC10-11. 20mm x 3,75mm	1
	31.5	Topcap HS02-31. ST-MC10/20	1
	31.6	Bolt M6x50 DIN 7991	1

32 ST-MC10/20 TOPCAP. HS02-31

PART NO.: XC79			QUANT.
	32.1	HS02-30 Topcap. ST-MP10/21	1
	32.2	M6x50 DIN 7991 bolt	1

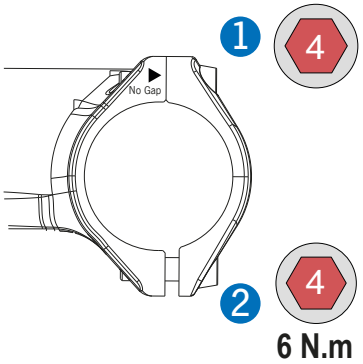
33 OC STEM BOLT KIT

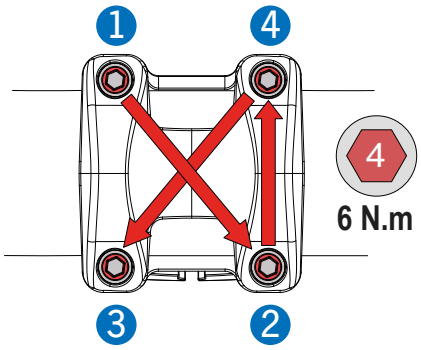
PART NO.: XC78			QUANT.
	33	M5x15 R8 Tapered bolt. CrMo Compatible with all OC stems except ST-RP21	6

METHOD FOR FIXING THE FACEPLATE OF THE STEM ON "NO GAP" MTB STEMS

On stems marked "No Gap" the fastening point bolts marked "No Gap" must first be tightened until the faceplate and stem body make contact.

Then tighten the opposite bolts to the final torque given for the model. Check the tightening torque of the 4 faceplate bolts in a cross pattern.

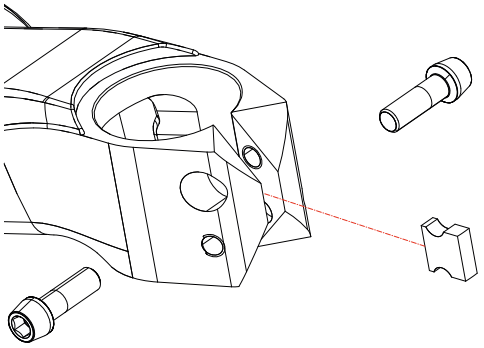


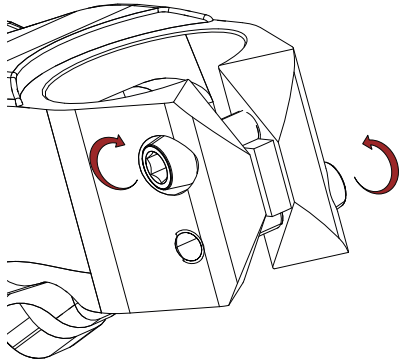


USE OF THE TORQUE STOP OF THE STEM TO THE FORK TUBE

The OC Mountain Performance and Mountain Control stems compatible with the Spinblock function have a stop in the area where the stem is attached to the fork's steerer tube to ensure that the recommended torque is not exceeded.

The torque stop is specific to each stem model, and is installed on the stem.





If it is necessary to reinstall the torque stop on the stem, it is necessary to remove the bolts from the clamp area of the stem to the fork to install the torque stop and then reinstall the stem bolts.

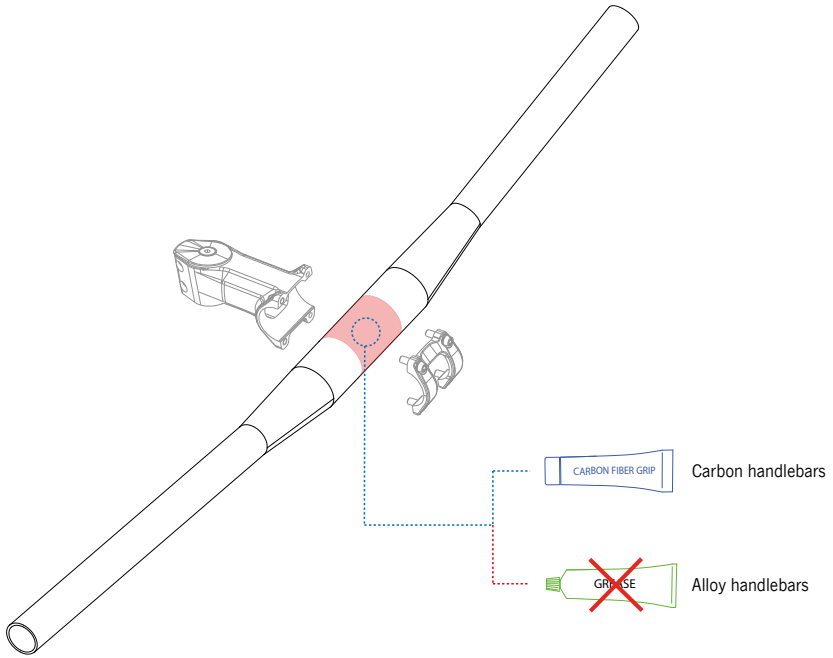
The torque stop is not essential for the use of OC stems. If the torque stop is not installed, be sure to follow the stem bolt torque directions for each OC stem model.

ASSEMBLY COMPOUNDS FOR HANDLEBARS

On carbon handlebars, apply a light coating of carbon friction compound to the handlebar-to-stem mounting surface.

For aluminium handlebars with aluminium stems, do not apply any mounting compound to the clamping area of the handlebar.

If you are going to use a carbon stem, whether the handlebar is aluminium or carbon, apply a light coating of carbon friction compound to the mounting surface of the handlebar to the stem.



18 CYCLING COMPUTER MOUNTS

The OC CM-04 and OC CM-05 computer mounts are specific for each OC stem category.

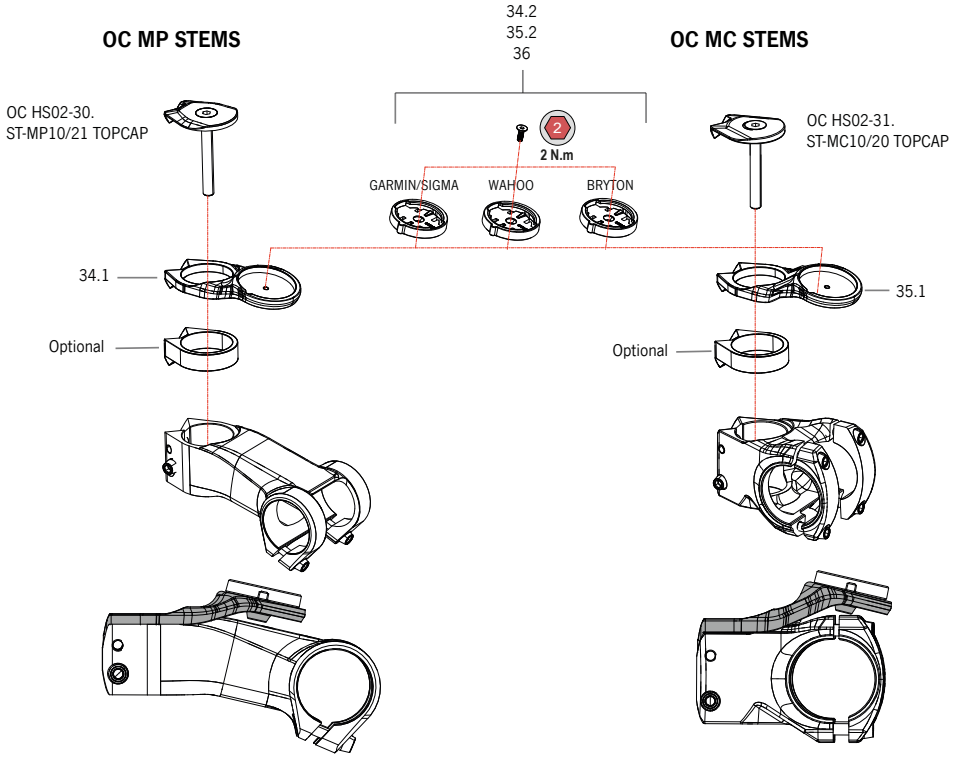
The CM-04 mount is designed for use with OC ST-MP (Mountain Performance) stems.

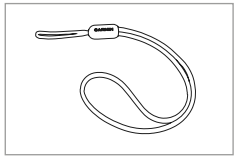
The CM-05 mount is designed for use with OC ST-MC (Mountain Control) stems.

The adapters for the different models of cycling computers (Garmin/Sigma, Wahoo and Bryton) are compatible with both mounts (CM-04 and CM-05).

The CM-04 and CM-05 mounts are only compatible with HS02 standard OC stems compatible with Spinblock function.

Oiz assemblies that include OC cycling computer mounts only include the adapter for Garmin/Sigma units. If you want to use a device from another brand, you will need to purchase the Garmin/Sigma, Wahoo, Bryton CT-02 adapter kit.





NOTICE Orbea reminds you of the GPS unit manufacturers' recommendation to use the safety cord supplied with the cycling computers around the handlebars or the stem to avoid damage to the unit or its loss in the event of an accident or fall.

34 OC CM-04 COMPUTER MOUNT

For OC ST-MP (Mountain Performance) stems

PART NO.: XC80			QUANT.
	34.1	OC CM-04 cycling computer mount body	1
	34.2	CT-02 Adapter kit for Garmin/Sigma, Wahoo, Bryton	1
	34.3	M3x8 DIN 7991 bolt	1

35 OC CM-05 COMPUTER MOUNT

For OC ST-MC (Mountain Control) stems

PART NO.: XC81			QUANT.
	35.1	OC CM-05 cycling computer mount body	1
	35.2	CT-02 Adapter kit for Garmin/Sigma, Wahoo, Bryton	1
	35.3	M3x8 DIN 7991 bolt	1

36 CT-02 ADAPTER KIT

For Garmin/Sigma, Wahoo, Bryton
Compatible with CM-04 and CM-05 mounts

PART NO.: XC86			QUANT.
	36.1	Adapter kit for Garmin/Sigma, Wahoo, Bryton	1
	36.2	M3x8 DIN 7991 bolt	1

19 OC SH-MP10 INTEGRATED COCKPIT

Click on the link below to access the user and technical manual for the OC SH-MP10 integrated cockpit:
https://orbea.dash.app/browse/all/609cb858-0553-481c-9615-0899fd12e0d4?portal=orbea-manuals

20 OC RL-MP20 SQUIDLOCK. SHOCK, FORK & DROPPER SEATPOST REMOTE

See the complete manual for the OC Squidlock remote in the manuals section of our website.

TECHNICAL SPECIFICATIONS

MATERIAL	
BODY	Aluminium
LEVERS	Aluminium
SEATPOST REMOTE	Aluminium
COMPATIBLE FORKS **COMPATIBLES SHOCKS**	Forks and shocks with 3 position remote compression cartridge. Both the fork and shock must have the same lockout logic (Push-to Lock -PTL- or Push-to-Lock -PTU).
POSITIONS FOR THE SUSPENSIONS REMOTE	3*
CLAMP DIAMETER	22.2 mm
CABLE TENSION ADJUSTMENT	Integrated

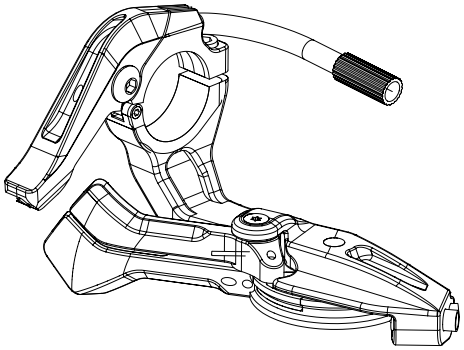
** The SQUIDLOCK allows you to get the most out of your FOX DPS shocks, which allow you to choose between 3 settings –Open, Medium, and Firm– allowing the bike to adapt to any type of terrain. With the SQUIDLOCK you will unlock that intermediate setting, taking full advantage of FOX's DPS technology. At the same time, it allows access to an intermediate setting on the compression adjustment of FOX forks with GRIP cartridge (Performance Series).*

FOX forks with FIT4 cartridge (Factory Series) will still have two positions (Firm and Open), but you will have the compression adjustment of the Open position, through the black dial on the right leg.

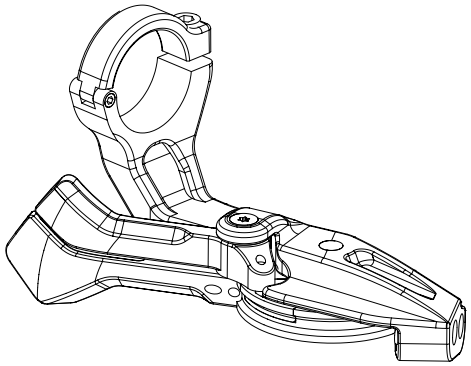
If the description of your FOX fork with FIT4 (Factory Series) cartridge contains the following specification: 2Pos, this means that the SQUIDLOCK in its intermediate position will act so that the suspension will remain Open, thus maintaining only two positions on the fork, but also having the compression adjustment of the Open position, through the black dial on the right leg.

MOUNTING OPTIONS

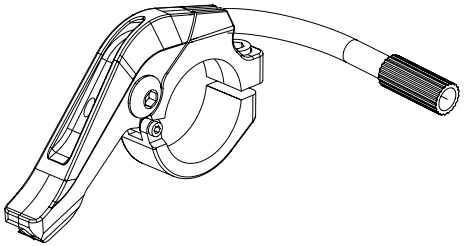
01. FORK + SHOCK + DROPPER SEATPOST REMOTE

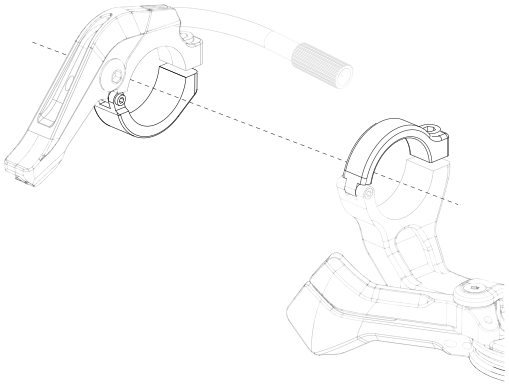


02. FORK + SHOCK REMOTE

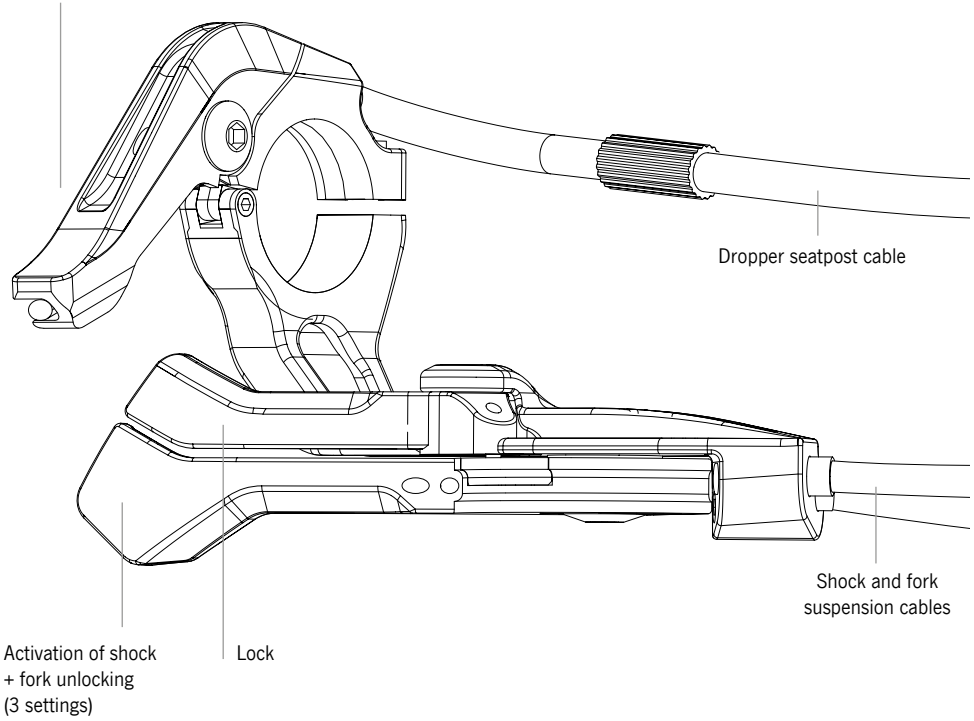


03. DROPPER SEATPOST REMOTE





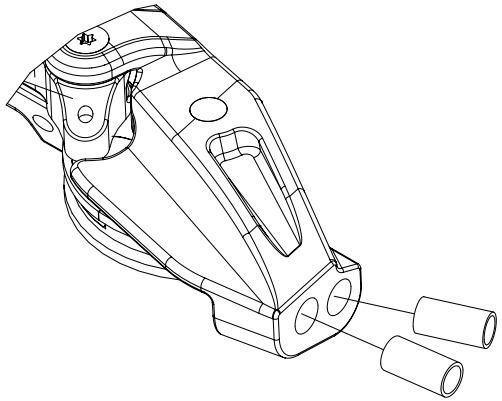
OPERATION



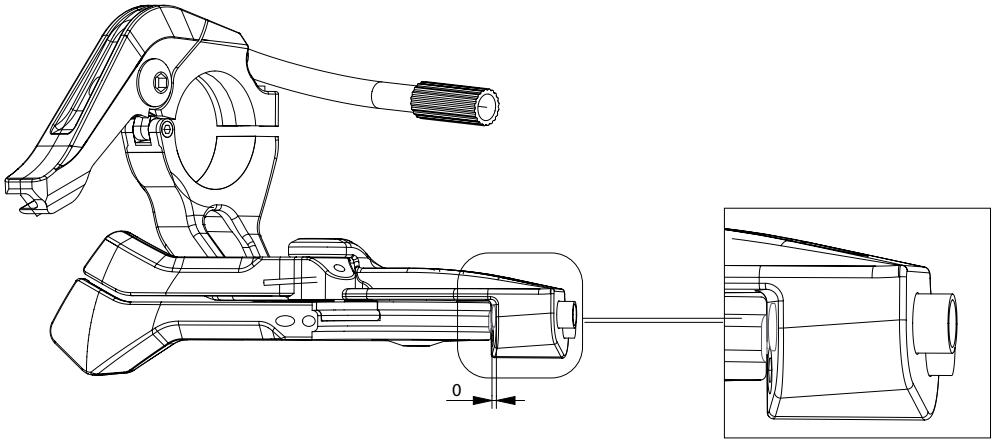
MOUNTING AND ADJUSTING THE CABLE TENSION

FIXING AND ADJUSTING THE CABLE TENSION OF THE FORK AND SHOCK REMOTE

01. Install the 4mm metal Jagwire housing stops on the shock and fork cable housings.



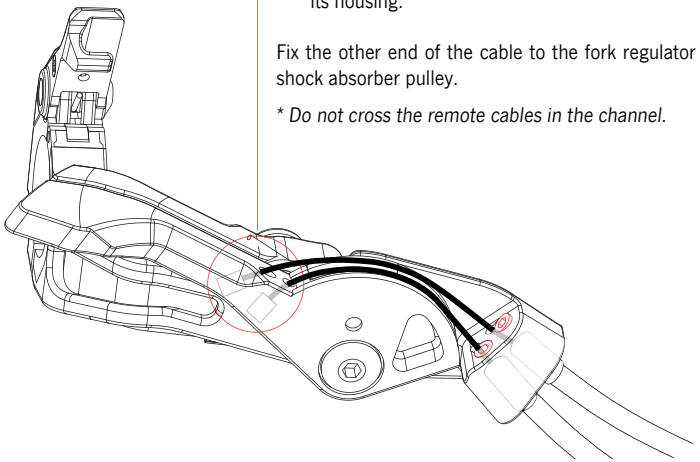
02. Start by setting the tensioning bolts flush.



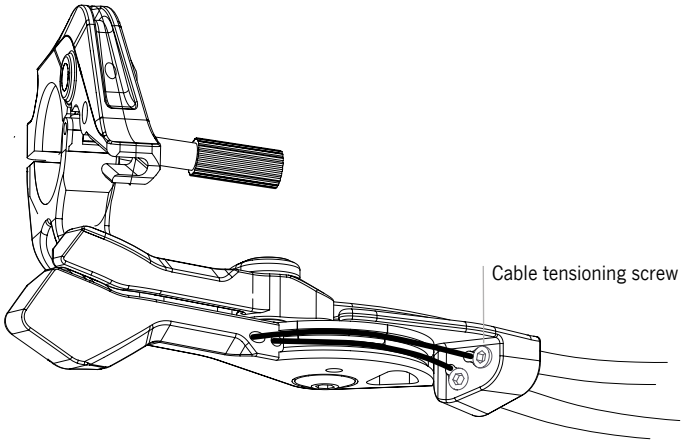
03. Mount both cables, making sure that the end is positioned in its housing.

Fix the other end of the cable to the fork regulator or to the frame shock absorber pulley.

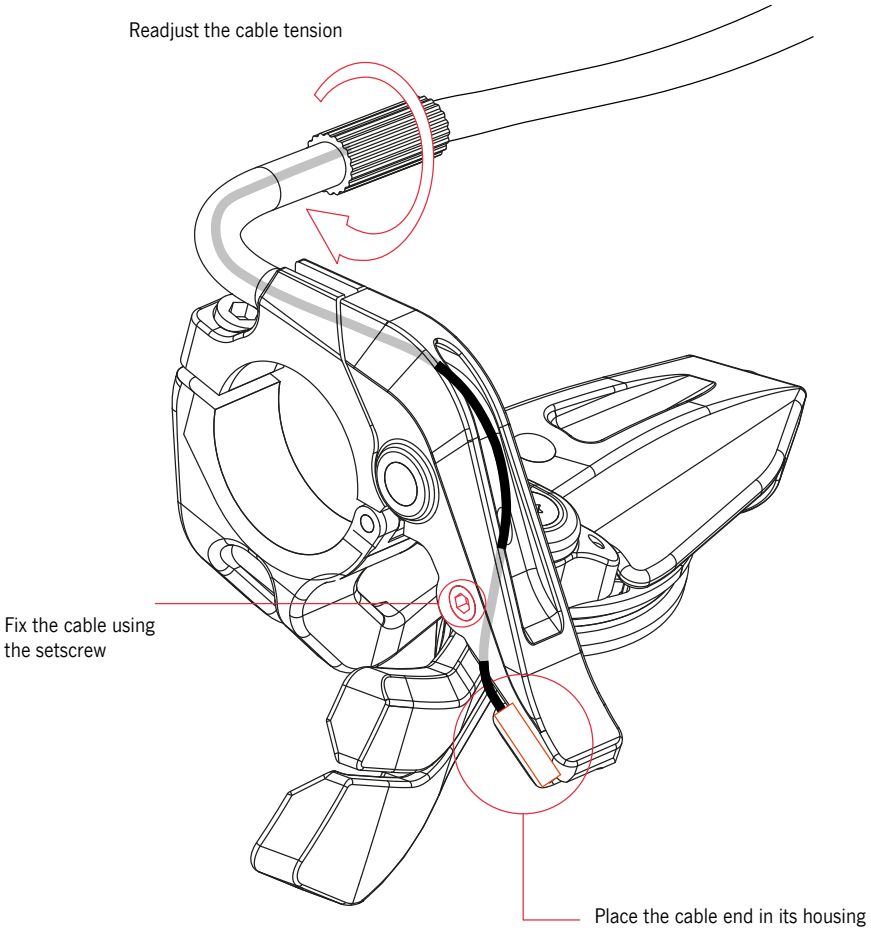
** Do not cross the remote cables in the channel.*



04. Adjust later using the cable tensioning screws.



FIXING AND ADJUSTING THE TENSION IN THE SEATPOST REMOTE CABLE



21 OC RL-MP11 SQUIDLOCK SUSPENSION REMOTE LOCKOUT

Click on the link below to access the user and technical manual for the OC RL-MP11 Squidlock remote suspension lockout:
https://orbea.dash.app/browse/all/dc19e071-11e5-4c27-b8aa-baac2f02c2b6?portal=orbea-manuals

22 SUSPENSION ADJUSTMENT

FOX DPS I-LINE SHOCK

FOX DPS I-LINE OIZ 2023 SHOCK SPECIFICATIONS

FOX DPS PERFORMANCE I-LINE 190X45 PTU	2023, FLOAT DPS, P-Se, A, Remote up, Evol SV, PTU, Rebound Reverse, Orbea, Oiz, 190, 45, BBC001, LRM, CMF
FOX DPS FACTORY I-LINE 190x45 PTU	2023, FLOAT DPS, F-S, K, Remote Up, Evol SV, PTU, Rebound Reverse, Orbea, Oiz, 190, 45, BBC001, LRM, CMF

FOX DPS I-LINE OIZ 2024- SHOCK SPECIFICATIONS

FOX DPS FACTORY I-LINE 190X45 PTL	2024, FLOAT SL, F-S, K, Remote Up, Evol SV, PTL, Rebound Reverse, Orbea, Oiz, 190, 45, BC002, RF, CMF
FOX DPS PERFORMANCE I-LINE 190X45 PTL	2024, FLOAT SL, P-Se, A, Remote up, Evol SV, PTL, Rebound Reverse, Orbea, Oiz, 190, 45, BC002, RF, CMF

RECOMMENDED SHOCK PRESSURES

120 mm (190 X 45)		
Rider weight (kg)	**Air pressure (psi)**	**Rebound clicks (from open)**
60	141	1
65	153	2
70	165	3
75	176	4
80	188	5
85	200	6
90	211	7
95	223	8
100	235	9
95-100	210-220	6
100-104	220-230	5
104-109	230-240	3
109-113	240-250	2

These pressures are approximate, they may vary depending on riding style and terrain conditions. Orbea and Fox recommend adjusting the pressure of the shock until you reach the target SAG. 20% SAG will give you a firm feel with more support, while 25% SAG will give you a softer ride.

Once you've reached your desired sag, adjust the rebound according to the air pressure in the shock. See the Fox DPS shock setup guide here:

www.ridefox.com/fox17/help.php?m=bike&id=1147

+»

AIR VOLUME REDUCERS ON FOX DPS I-LINE SHOCKS

REDUCER CONFIGURATION		
Travel	**Factory fitted**	**Maximum No of reducers**
(190 x 45) SV	0	0

FOX 34 FORK

See the full Fox 34 SC fork adjustment manual in the manufacturer's documentation:

https://www.ridefox.com/fox17/help.php?m=bike&id=2829

The following tables give approximate values, they may vary depending on the riding style and terrain conditions.

FOX 34 SC FORK AIR PRESSURE ADJUSTMENT SUGGESTIONS

RECOMMENDED SAG ADJUSTMENT STARTING AIR PRESSURE IN 34 SC, FLOAT AND RHYTHM FORKS			
Weight of rider + 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

FOX 34 SC FORK REBOUND ADJUSTMENT SUGGESTIONS

The rebound setting depends on the air pressure. The higher the air pressure, the more closed the rebound circuit should be.

Use your fork's final air pressure to find your rebound setting.

Turn the rebound dial to the closed position (turn clockwise).

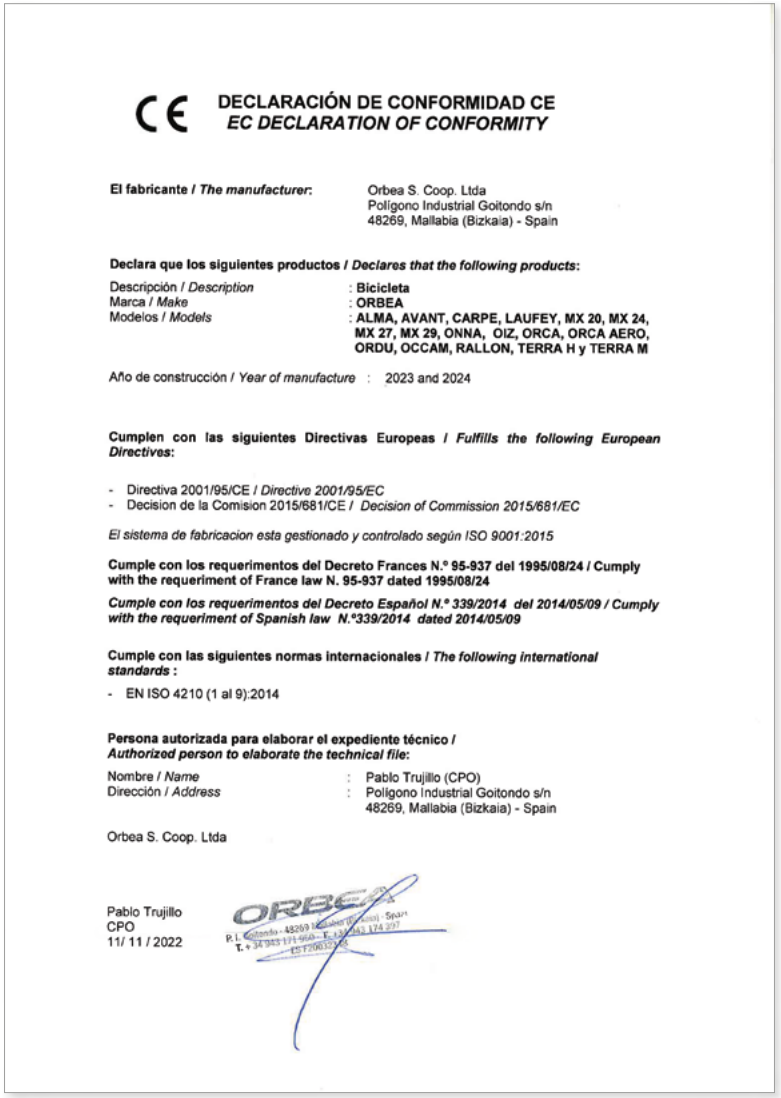
Then count as many "clicks" as appear on the table in an anti-clockwise direction.

REBOUND ADJUSTMENT SUGGESTION FOR 34 SC FORKS		
34 mm 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

FOX 34 SC FLOAT FORK AIR VOLUME REDUCERS

REDUCER CONFIGURATION (10 CC REDUCERS) GREEN COLOUR		
Travel	**Factory fitted**	**Maximum No of reducers**
120 mm	1	4

23 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, LAUFEY, MX 20, MX 24, MX 27, MX 29, ONNA, OIZ, ORCA, ORCA AERO, ORDU, OCCAM, RALLON, TERRA H y TERRA M**

Año de construcción / *Year of manufacture* : 2023 and 2024

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

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

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

Cumple con los requerimentos del Decreto Frances N.º 95-937 del 1995/08/24 / Cumply with the requeriment of France law N. 95-937 dated 1995/08/24

Cumple con los requerimentos del Decreto Español N.º 339/2014 del 2014/05/09 / Cumply with the requeriment of Spanish law N.º339/2014 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* : Pablo Trujillo (CPO)
Dirección / *Address* : Polígono Industrial Goitondo s/n
48269, Mallabia (Bizkaia) - Spain

Orbea S. Coop. Ltda

Pablo Trujillo
CPO
11/ 11 / 2022

24 ADDITIONAL INFORMATION

ORBEA actively participates on Facebook and Twitter with its fantastic global community of cyclists. Are you looking for a place to ride a bike or spend your holidays? Someone will assuredly give you some interesting ideas:

FACEBOOK

www.facebook.com/OrbeaBicycles

TWITTER

www.twitter.com/Orbea/

YOUTUBE

Visit the Orbea channel on YouTube; There you will find various very useful technical and configuration videos:

www.youtube.com/user/OrbeaBicycles

INSTAGRAM

www.instagram.com/orbeabicycles

ORBEA CONTENT

View and download photos, videos, and documents.

content.orbea.com/gb-en/

ORBEA BLOG

www.orbea.com/us-en/blog

ORBEA DEALERS

Our dealers are highly specialised, so they will help you configure and maintain your Orbea bicycle. You can find a complete list of Orbea distributors on our website:

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

CONTACT

Access our data and contact form at:

www.orbea.com/us-en/contacto

USA:

www.orbea.com/us-en/contact