

ORBEA

BLUE PAPERS

ORCA
TECHNICAL MANUAL

CONTENT

ORCA OMR DISC

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ORCA OMR RIM

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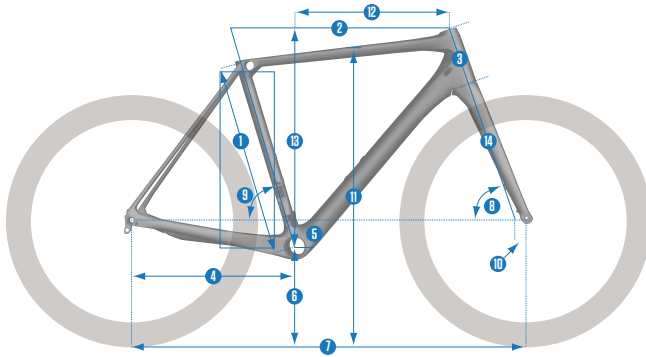
ORCA

OMR DISC

ORBEA

GEOMETRY

ORCA OMR DISC



SIZES (mm)	47	49	51	53	55	57	60
1- SEAT TUBE (C-T)	440	460	480	500	520	540	570
2- TOP TUBE (EFF)	510	522	536	548,5	560	576	590
3- HEAD TUBE	104	111	130	148	168	186	213
4- CHAIN STAY	415						
5- BB DROP	72			70			
6- BB HEIGHT	269,5			271,5			
7- WHEEL BASE	979	983	987	988	999	1009	1023
8- HEAD ANGLE	71°	71,5°	72,2°	72,8°	73°	73,2°	73,2°
9- SEAT ANGLE	74,5°	74°	73,7°	73,5°	73,5°	73,2°	73,2°
10- FORK OFFSET - RAKE	48		43				
11- STANDOVER HEIGHT	729	742	758	780	800	817	844
12- REACH	370	375	380	385	391	398	404
13- STACK	506	515	533	552	572	590	616
14- FORK LENGTH	370						
BB-FRONT WHEEL	575	578	583	583	593	683	618
REAR DERAILEUR ANGLE	65°	64°	64°	64°	64°	63°	63°
TRAIL	66,8°	63,3°	59,2°	60,7°	59,5°	58,2°	58,2°

Maximum tyre dimension: 28" [Maximum external dimension 687mm]

ERGONOMY

ORCA OMR DISC

SIZE (mm)	CYCLIST HEIGHT (cm)	CYCLIST HEIGHT (in)	CRANK	HANDLEBAR (c/c)	STEM
47	155-160	61-63	170	400	90
49	160-160	63-65	170	400	100
51	167-172	66-68	170	400	100
53	173-179	68-70	172.5	400	110
55	180-185	71-73	172.5	420	110
57	186-191	73-75	172.5	420	110
60	192-207	76-81	175	420	120

This result is only orientative. We can recommend the best size for you, based on your measurements, on our web: [http:// www.orbea.com/us-en/calculate-size/type/](http://www.orbea.com/us-en/calculate-size/type/)



SPECIFICATIONS

ORCA OMR DISC

BOTTOM BRACKET	BB386 Press Fit
CHAINGUIDE MOUNT	Proprietary Chain Watcher for double chaining setups, powermeter compatible
SEAT POST DIAMETER	∅ 27.2MM
SEAT COLLAR DIAMETER	Integrated
FRONT DERAILLEUR MOUNT	Braze On Type
HEADSET TYPE	Integrated style headset, 41.8MM upper, 51.8MM lower ABC, Cane Creek standard description: IS42/28.6, IS52/40
FORK STEERER TUBE	Tapered 1-1/8" x 1-1/2"
FRONT SPACING	Thru Axle 100MM x 12MM
FRONT BRAKE MOUNT	Flat or PM Adapter - Rotor MAX 160MM
REAR SPACING	Through Axle 135 or 142MM x 12MM
REAR BRAKE MOUNT	FM and PM compatible - Rotor MAX 160MM
BOTTLE CAGE MOUNTS	(2x) One down tube and one seat tube mount
TIRE SIZE	Fits most 27C tires (tire width varies by manufacturer and rim width, some combinations may not have desired clearance)
CRANKSET	Double Crankset - Outer ring MAX 56T, Inner ring MAX 46T

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

1) Keep your ORCA clean

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

2) Keep your ORCA lubed

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

3) Inspect your ORCA before you ride

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

indicate a loose headset, loose brake rotors or calipers, or worn fork bushings.

TEST RIDE Take a quick ride up and down the street to make sure your bike is shifting and braking properly. Listen for unusual noises.

AFTER A CRASH OR IMPACT

Falling is part of riding and it's impossible to avoid minor accidents. If you crash your Ordu, please make sure you are okay and seek medical attention if necessary.

If you are not injured, you should check your bike before continuing:

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

WHAT TO LOOK FOR

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

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

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

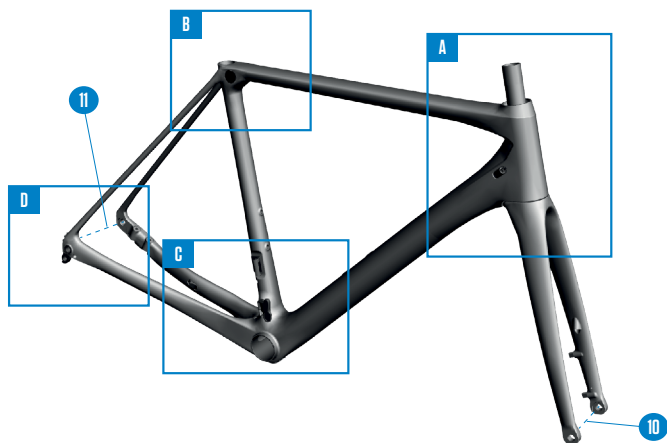
2) **Bring your bike to your Orbea dealer for professional inspection.** Some damage can only be detected by disassembling the bike to check for cracks or other signs of stress.

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

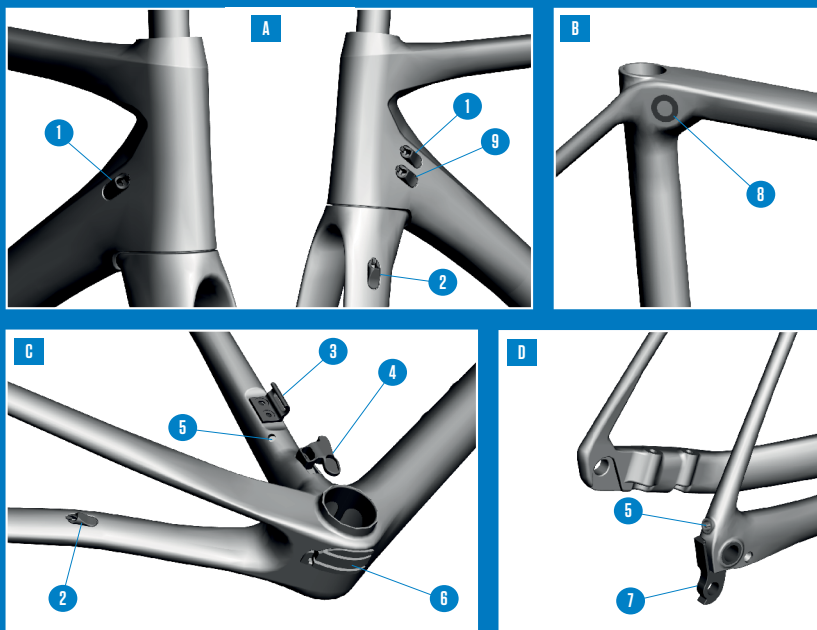
PARTS & HARDWARE

ORCA OMR DISC

Mechanic groupset



DETAIL

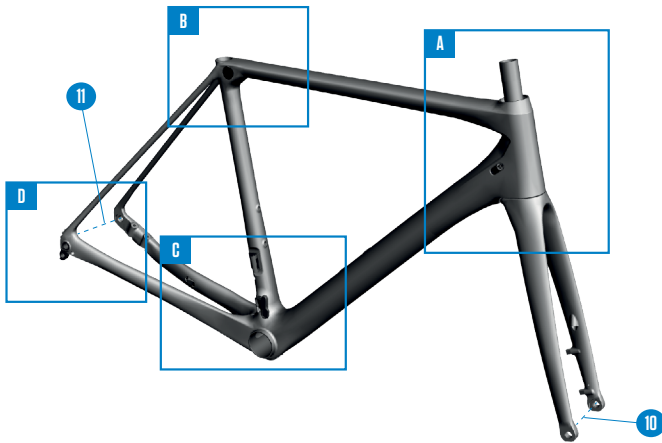


Mechanic groupset

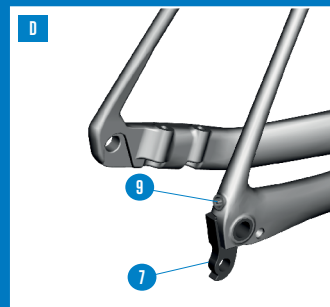
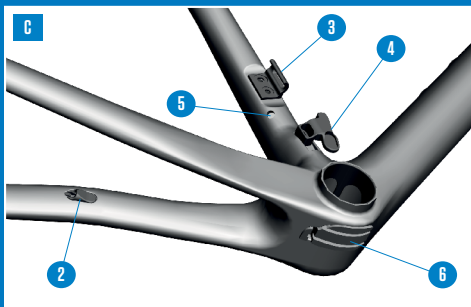
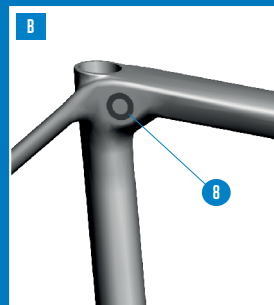


	NUMBER	NAME / DESCRIPTION
1	11000432	Tope plastico tubo diagonal Mecanico "clip"
2	11000433	Tapon freno "clip"
3	11200700	Chapilla desviador road 17
4	11250500	Guia cadena -SRM
5	16100123	Tapon desv S/AGUJ D6
6	11200701	Guia BB Mecanico-Di2-17
7	15430250	Pata de cambio 142x12mm-17
8	11160200	Abrazadera integrada Orca 17
	12300050	Tornillo M6x30 DIN 912 Abr Orca
9	16100119	Tope tirante ORCA 15 NEG
10	11100085	Eje delantero 12mmx120mm,paso 1,5
	12320004	Arandela eje tra 12mm
11	11100185	Eje trasero 12mmx165mm,paso 1,5

Di2 groupset



DETAIL



Di2 groupset

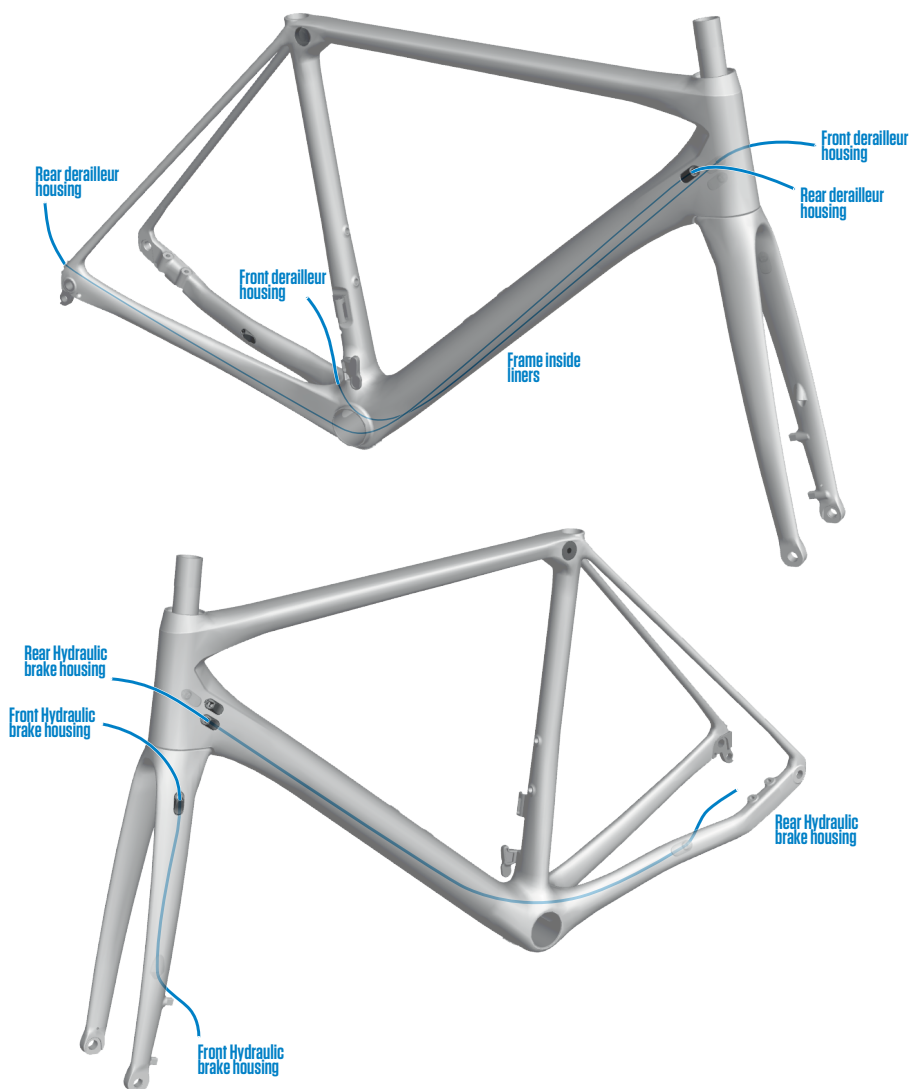


	NUMBER	NAME / DESCRIPTION
1	11000431	Tope plastico tubo diagonal opturado "clip"
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5	11001123	Tapon SHIM DI2 (D6) NEG 13
6	11200701	Guia BB Mecanico-Di2-17
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8	11160200	Abrazadera integrada Orca 17
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	12320004	Arandela eje tra 12mm
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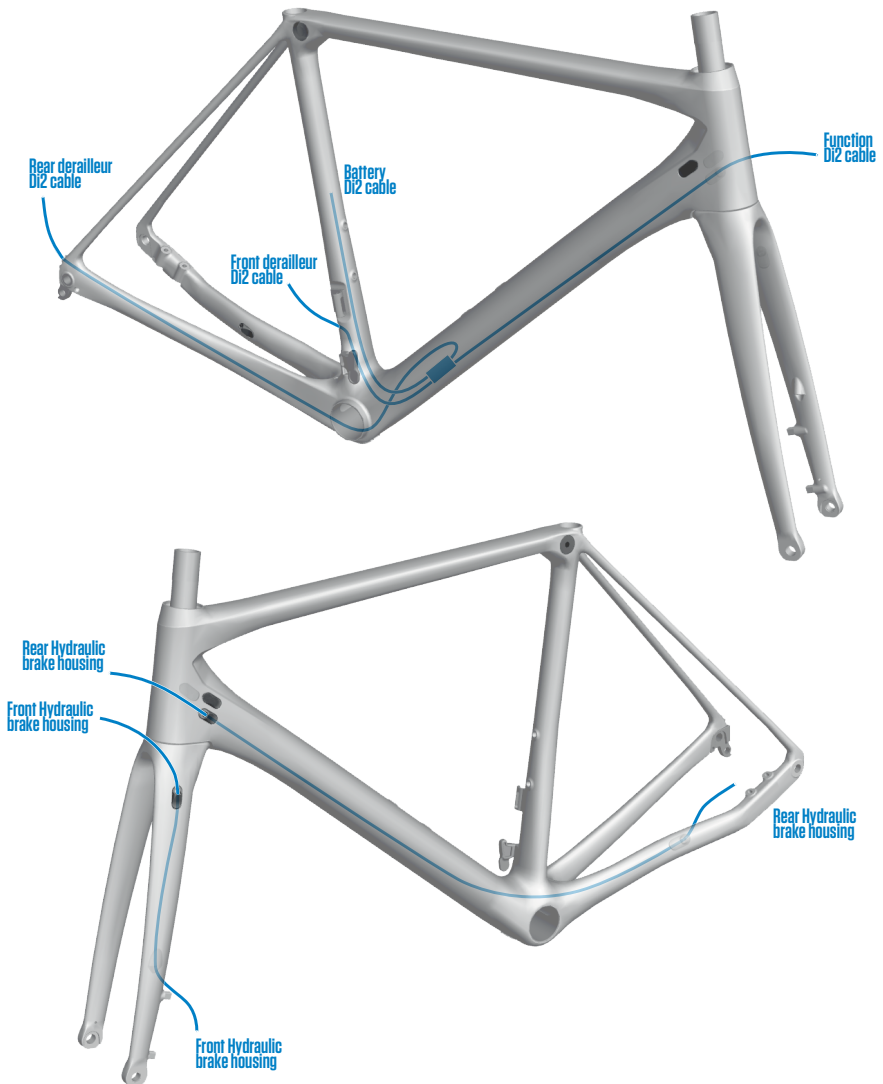
CABLE ROUTING

ORCA OMR DISC

Mechanic groupset

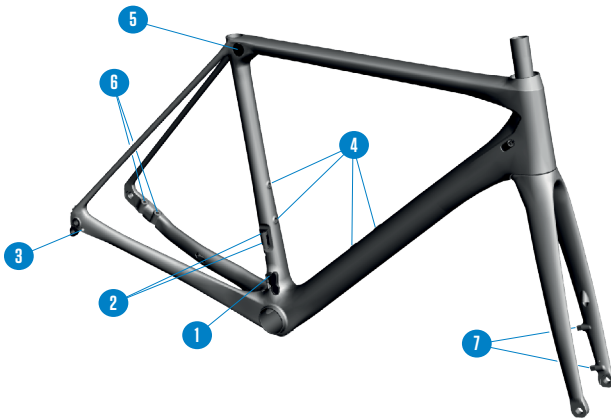


Di2 groupset



TORQUE SPECIFICATIONS

ORCA OMR DISC



Fastener	Required tools	Torque
1	? mm hex	? Nm
2	? mm hex	? Nm
3	? mm hex	? Nm
4	? mm hex	? Nm
5	? mm hex	? Nm
6	? mm hex	? Nm
7	? mm hex	? Nm

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



CHECKING AND ADJUSTING TORQUE

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

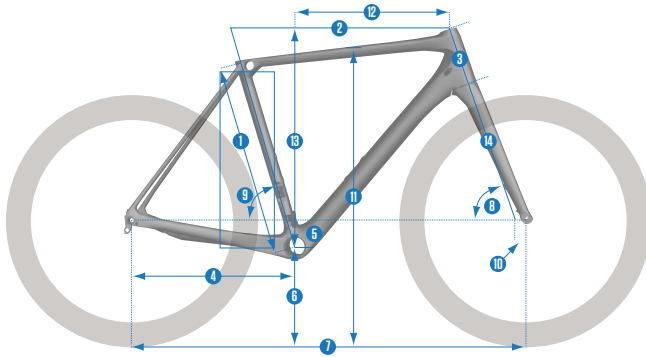
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FRONT SPACING	100MM x QR
FRONT BRAKE MOUNT	Rim Caliper
REAR SPACING	130MM x QR
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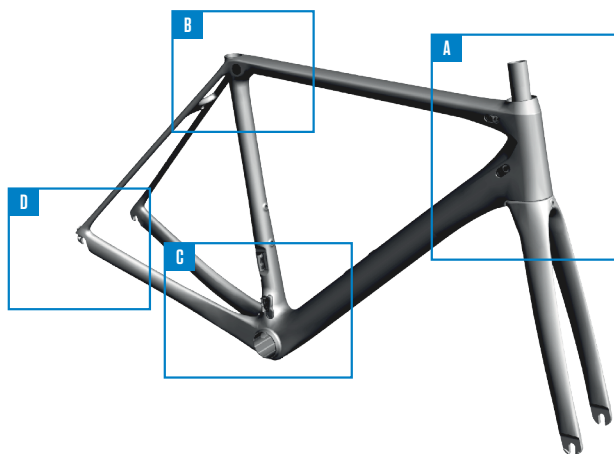
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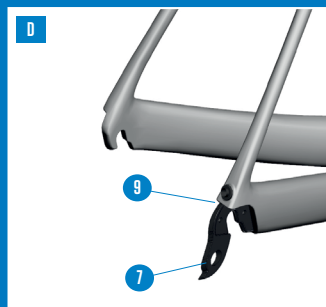
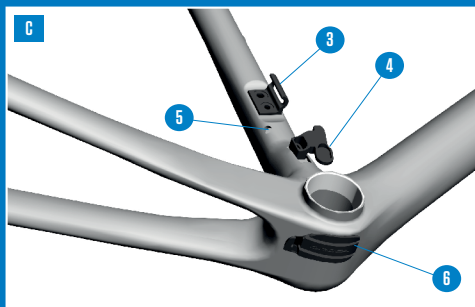
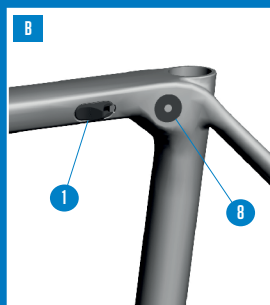
PARTS & HARDWARE

ORCA OMR RIM

Mechanic groupset



DETAIL

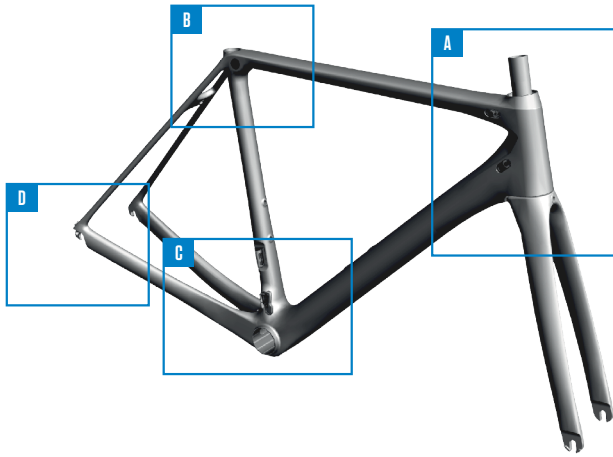


Mechanic groupset

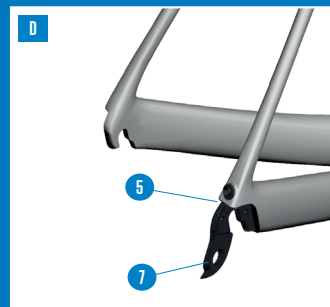
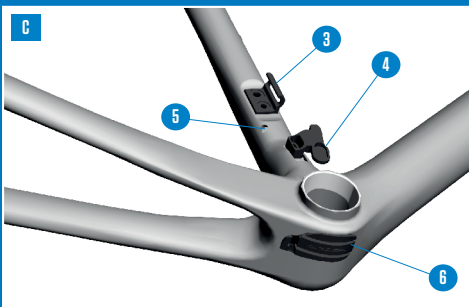
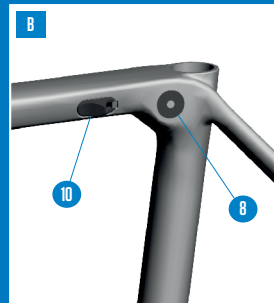


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4	11250500	Guía cadena -SRM
5	16100123	Tapón desv S/AGUJ D6
6	11200701	Guía BB Mecanico-Di2-17
7	15430088	Pata de cambio Orca 16 Ref15-26mm
8	11160200	Abrazadera integrada Orca 17
9	16100119	Tope tirante ORCA 15 NEG

Di2 groupset



DETAIL



Di2 groupset

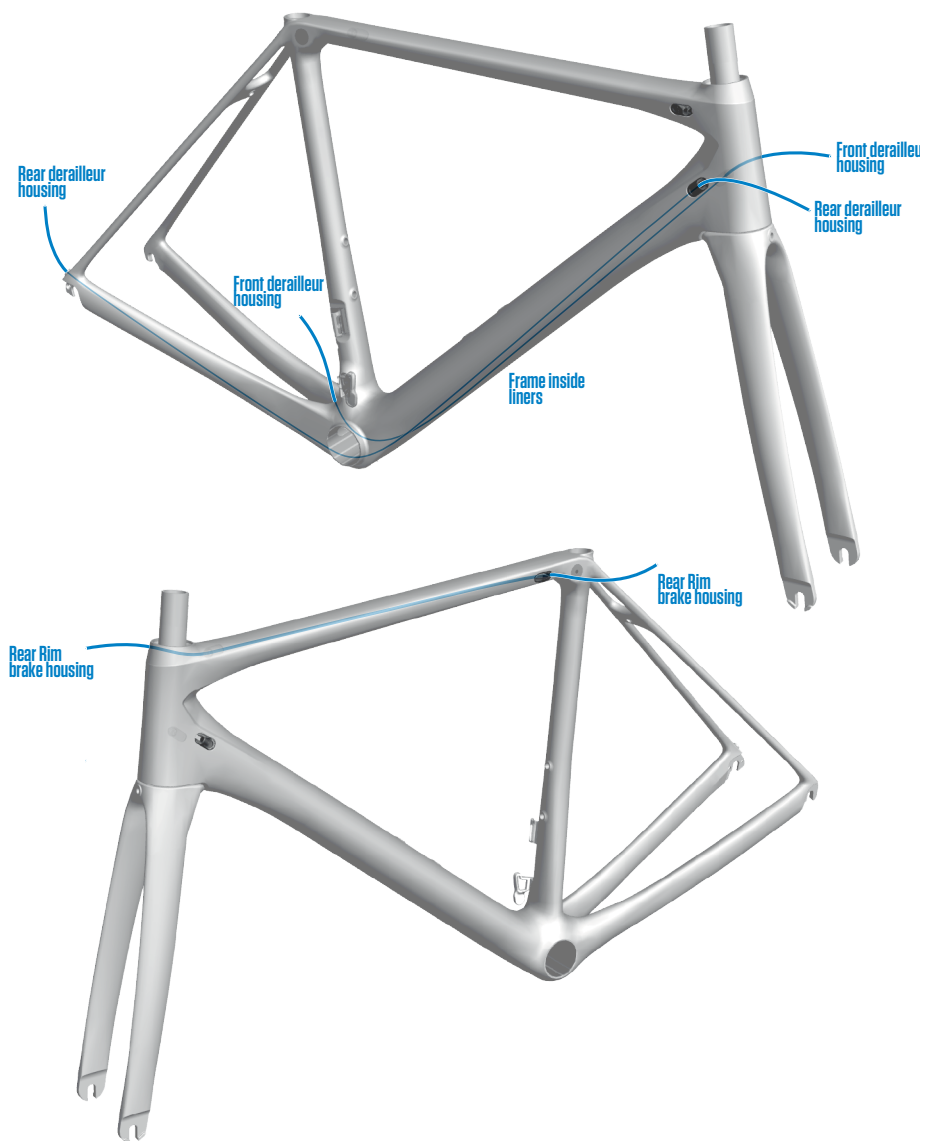


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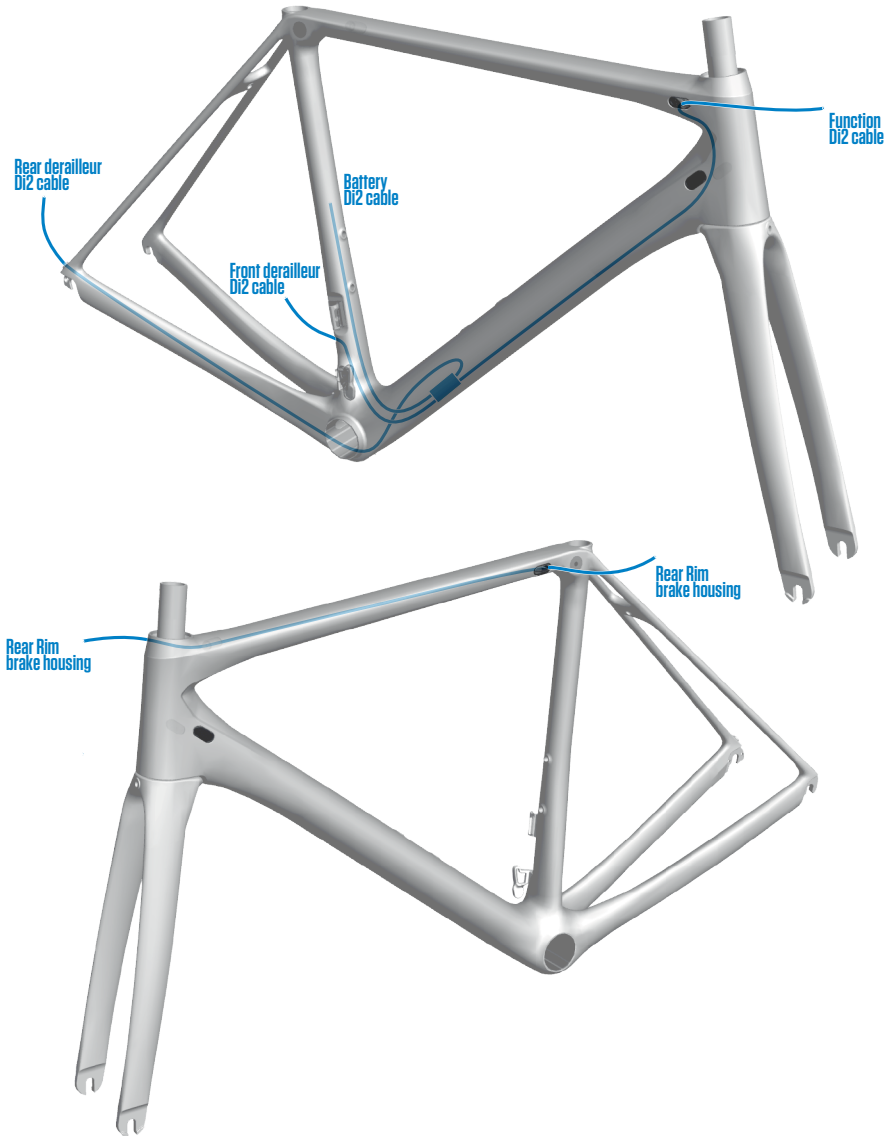
CABLE ROUTING

ORCA OMR RIM

Mechanic groupset



Di2 groupset



ORBEA WARRANTY

HOW DO I ACTIVATE MY LIFETIME WARRANTY?

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

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

WHAT ARE THE ADVANTAGES?

- Lifetime guarantee of your frame against breakage.
- Two-year guarantee on all components.
- Identification of your bicycle and all its characteristics to our Technical Assistance Service so that we can provide our best response to any problems. Access to special offers, events and prize drawings.

ORBEA WARRANTY

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

1) We back each frame and rigid fork in our bicycles with a lifetime warranty against materials and manufacturing defects. Frames with travel longer than 170 mm are covered by a 2-year warranty. We warrant each frame and fork in our bikes against

paint or varnish defects and corrosion for 3 years. This warranty covers the original purchaser only and is non-transferable. For the lifetime warranty to be valid, customers must fill in the online warranty form within one month of purchase, and proof of purchase in the form of cash register receipt or sales ticket is required.

2) Warranty claims are subject to the decision made by our technical staff about the nature of the defect after thorough inspection of the faulty part.

3) All the parts assembled in our bicycles are protected against assembly or manufacturing defects for 2 years, and repairs qualifying under this warranty will be performed by authorized dealers in each country.

4) This warranty does not cover parts that naturally wear over time, such as tires, brake pads, handlebar grips, cranksets, bearings, etc.

5) This warranty does not cover damages or defects caused by negligence, improper use, assembly of parts or accessories that are not original, or defective repair or maintenance work. of the bicycle, non original accessories being fitted to it, or unsuitable maintenance operations or handling.

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

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

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

ADDITIONAL INFORMATION

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



www.facebook.com/OrbeaBicycles



www.twitter.com/Orbea



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

www.youtube.com/user/OrbeaBicycles



www.instagram.com/orbeabicycles

ORBEA CONTENT

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content.orbea.com/us-en

ORBEA UNIVERSITY

www.orbea.com/es-es/university/

ORBEA BLOG

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

AFTER SALES SERVICE

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

<mailto:Orbea@Orbea.com>

ORBEA