

*ORBEA*

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**BLUE  
PAPERS**

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**AVANT OMP**  
TECHNICAL MANUAL

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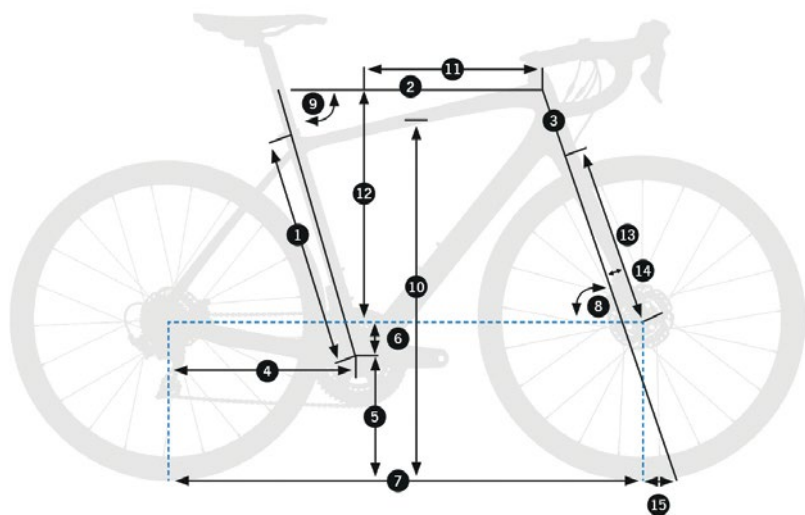
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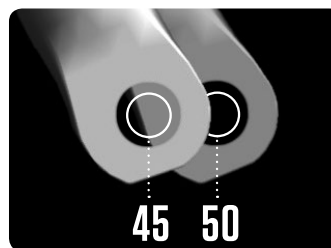
**AVANT OMP**

*ORBEA*

# GEOMETRY



| SIZES               | 47    | 49    | 51     | 53    | 55    | 57    | 60   |
|---------------------|-------|-------|--------|-------|-------|-------|------|
| 1 - Seat Tube (C-T) | 410   | 440   | 470    | 490   | 510   | 530   | 560  |
| 2 - Top Tube (EFF)  | 507   | 520   | 533    | 547   | 559   | 578   | 592  |
| 3 - Head Tube       | 108   | 121   | 138    | 158   | 181   | 200   | 221  |
| 4 - Chainstay       | 415   | 415   | 415    | 415   | 415   | 415   | 415  |
| 5 - BB Height       | 270   | 270   | 270    | 272   | 272   | 272   | 272  |
| 6 - BB Drop         | 75    | 75    | 75     | 73    | 73    | 73    | 73   |
| 7 - Wheelbase       | 978   | 979   | 989    | 992   | 1002  | 1013  | 1025 |
| 8 - Head Angle      | 71°   | 71,5° | 71,9°  | 72,4° | 72,6° | 72,8° | 73°  |
| 9 - Seat Angle      | 74,5° | 74°   | 73,75° | 73,5° | 73,5° | 73°   | 73°  |
| 10 - Standover      | 726   | 750   | 772    | 793   | 814   | 832   | 857  |
| 11 - Reach          | 365   | 368   | 372    | 378   | 383   | 390   | 398  |
| 12 - Stack          | 520   | 535   | 553    | 572   | 595   | 614   | 635  |
| 13 - Fork Length    | 380   | 380   | 380    | 380   | 380   | 380   | 380  |
| 14 - RAKE           | 50    | 50    | 50     | 45    | 45    | 45    | 45   |



# ERGONOMY



| SIZE | CRANK | HANDLEBAR | STEM |
|------|-------|-----------|------|
| 47   | 170   | 400       | 90   |
| 49   | 170   | 400       | 100  |
| 51   | 170   | 420       | 100  |
| 53   | 172.5 | 420       | 110  |
| 55   | 172.5 | 420       | 110  |
| 57   | 172.5 | 440       | 110  |
| 60   | 175   | 440       | 120  |

| HEIGHT (cm) | HEIGHT (in) | SIZE |
|-------------|-------------|------|
| 155-160     | 61-63       | 47   |
| 160-166     | 63-65       | 49   |
| 67-172      | 66-68       | 51   |
| 173-179     | 68-70       | 53   |
| 180-185     | 68-70       | 55   |
| 186-191     | 73-75       | 57   |
| 192-207     | 76-81       | 60   |

# SPECIFICATIONS

|                        | AVANT DISC BRAKE  | AVANT RIM BRAKE | AVANT HYDRO   |
|------------------------|---|-----------------|---------------|
| BOTTOM BRACKET         | BB386 PRESS FIT   | BB86 PRESS FIT  |               |
| CHAINGUIDE MOUNT       | PROPRIETARY CHAIN WATCHER FOR DOUBLE CHAINRING SETUPS   | NA              | NA            |
| SEAT POST DIAMETER     | Ø 27.2MM  |                 |               |
| SEAT COLLAR DIAMETER   | Ø 31.8MM  |                 |               |
| FRONT DERAILLEUR MOUNT | BRAZE ON TYPE   |                 | CLAMP-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"   |                 |               |
| FORK SPACING           | THRU AXLE 100MM x 12MM  | 100MM x QR      |               |
| FORK BRAKE MOUNT       | FLAT OR POST MOUNT ADAPTER COMPATIBLE - MAX 160MM ROTOR   | RIM CALIPER     |               |
| REAR SPACING           | THROUGH AXLE 142MM x 12MM   | 130MM x QR      |               |
| REAR BRAKE MOUNT       | RIM CALIPER   |                 |               |
| WATER BOTTLE MOUNTS    | (2X) ONE DOWN TUBE AND ONE SEAT TUBE MOUNT  |                 |               |
| TIRE SIZE              | FITS MOST 28C 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  |                 |               |

# FRAME AND MATERIAL

Orbea frames are carefully designed to be durable, efficient, and easy to maintain. Avant tubes are stiff and light, giving excellent steering precision and pedaling efficiency. Avant 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 Avant in top condition.

## 1) Keep your Avant 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 Avant 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 Avant 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 hOMP 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 Avant, 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.

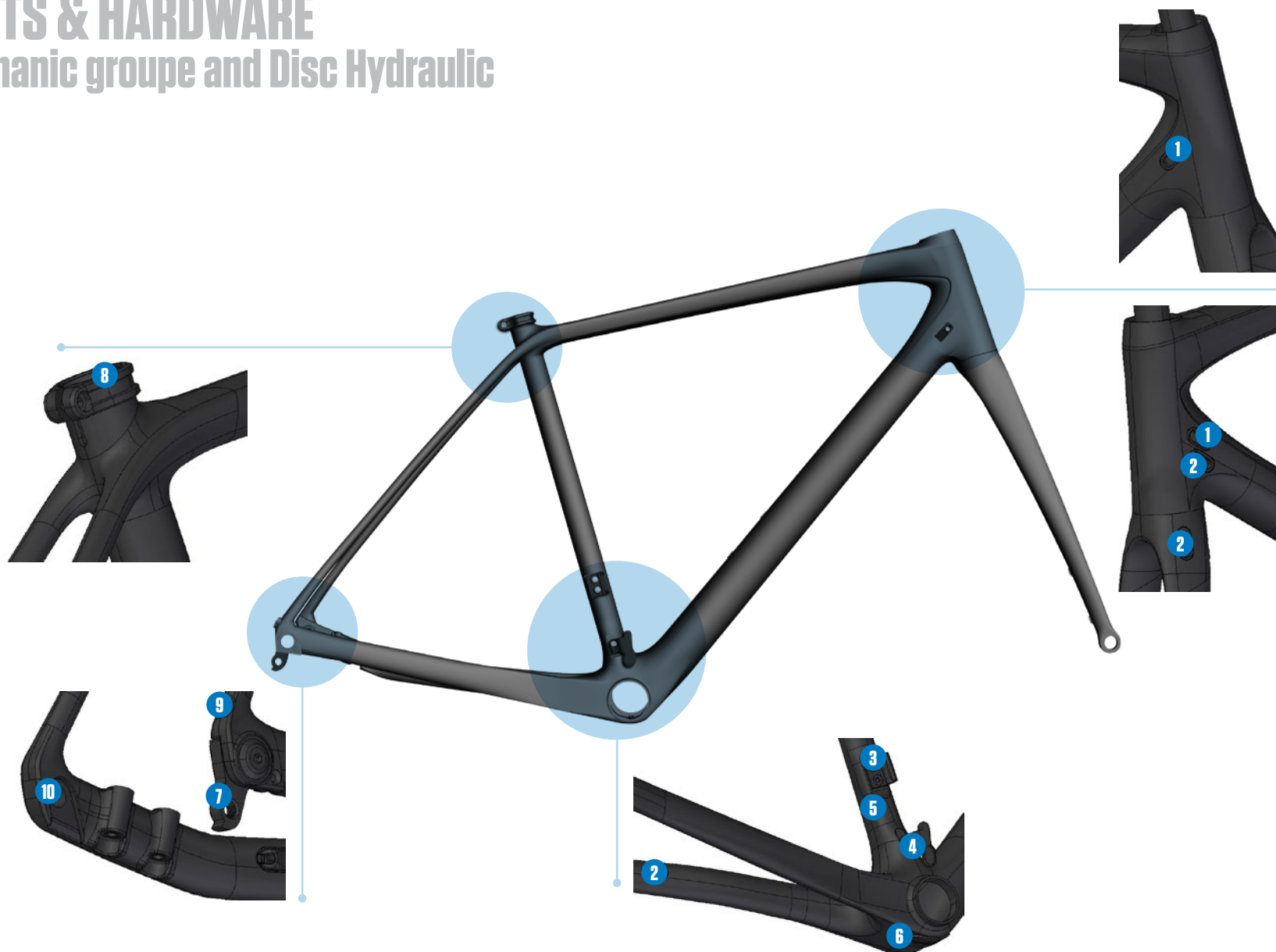
Even if you don't find any damage, pay careful attention to the sound of your bike when you continue riding. Unusual noises can be caused by cracks or other problems. A well-maintained bike will be quiet and free of creaks or squeaks. Investigate and locate the source of any new noises.

**2) Bring your bike to your Orbea dealer for professional inspection.** SOMP 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

## Mechanic groupe and Disc Hydraulic





# PARTS & HARDWARE

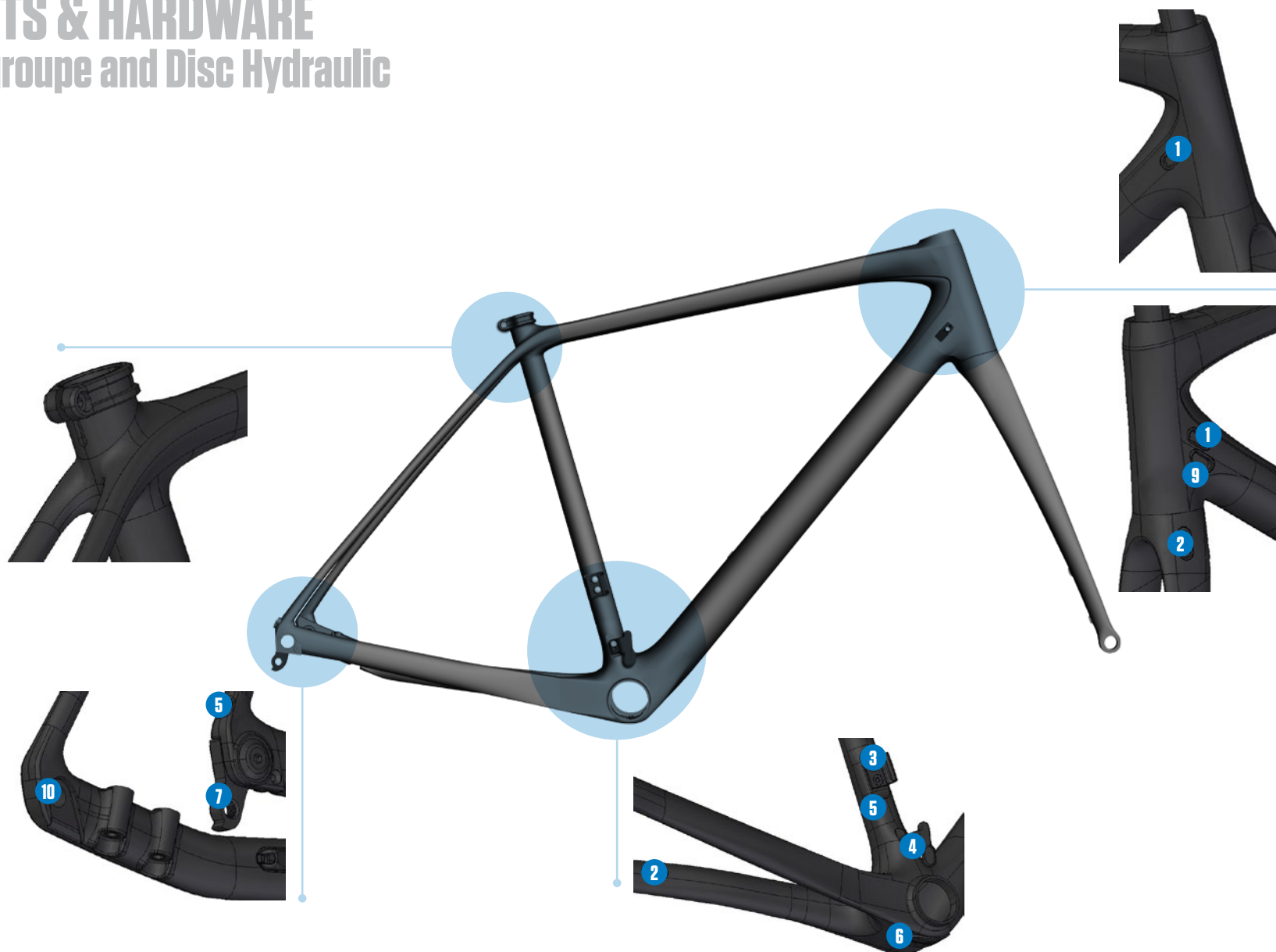
## Mechanic groupe and Disc Hydraulic



| PART NUMBER | REFERENCE | ORBEA DESCRIPTION   |
|-------------|-----------|---|
| 1           | 11000432  | MECHANICAL CABLE GUIDE  |
| 2           | 16100127  | DI2 CABLE GUIDE   |
| 3           | 11200700  | FRONT DERAILLEUR HANGER   |
| 4           | 11250500  | CHAIN DROP PROTECTOR  |
| 5           | 16100123  | DI2 PORT COVER  |
| 6           | 11200701  | BOTTOM BRACKET CABLE GUIDE  |
| 7           | 15430250  | THROUGH AXLE REAR DERAILLEUR HANGER   |
| 8           | 11160734  | SEAT POST CLAMP   |
| 9           | 16100119  | SEAT STAY REAR DERAILLEUR HOUSING STOP  |
| 9a          | 15430088  | SHOULD NOT BE INCLUDED WITH THE DISC FRAME PARTS LIST. THIS IS THE NON-DISC DERAILLEUR HANGER |
| 10          | 11100085  | FRONT THROUGH AXLE 12MM X 100MM   |
| 10a         | 12320004  | 12MM AXLE WASHER  |
| 11          | 11100085  | REAR THROUGH AXLE 12MM X 142MM  |

# PARTS & HARDWARE

## Di2 groupe and Disc Hydraulic



# PARTS & HARDWARE

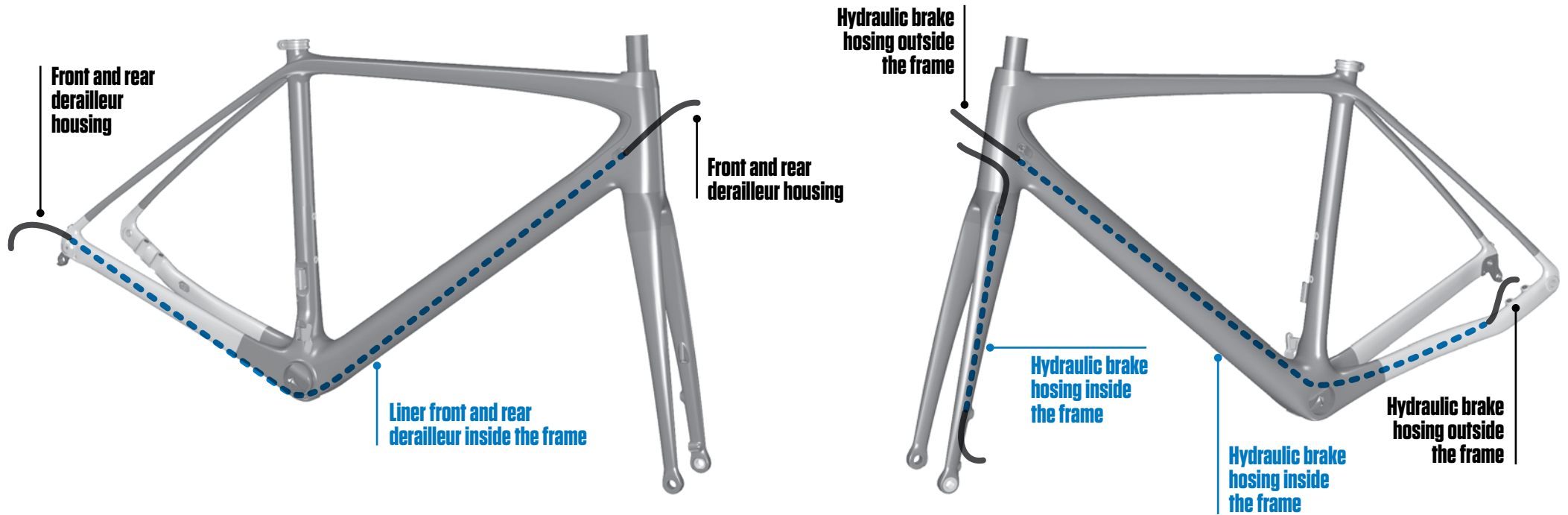
## Di2 groupe and Disc Hydraulic



| PART NUMBER | REFERENCE | ORBEA DESCRIPTION                               |
|-------------|-----------|---|
| 1           | 11000431  | DOWN TUBE PORT COVER                            |
| 2           | 16100127  | DI2 CABLE GUIDE                                 |
| 3           | 11200700  | FRONT DERAILLEUR HANGER                         |
| 4           | 11250500  | CHAIN DROP PROTECTOR                            |
| 5           | 11001123  | DI2 RUBBER GROMMET                              |
| 6           | 11200701  | BOTTOM BRACKET CABLE GUIDE                      |
| 7           | 15430250  | THROUGH AXLE REAR DERAILLEUR HANGER             |
| 8           | 11160734  | SEAT POST CLAMP                                 |
| 9           | 11000430  | TOP DIAGONAL TUBE PLASTIC "CLIP"- DI2+HYDRAULIC |
| 10          | 11100085  | FRONT THROUGH AXLE 12MM X 100MM                 |
| 10a         | 12320004  | 12MM AXLE WASHER                                |
| 11          | 11100185  | REAR THROUGH AXLE 12MM X 142MM                  |

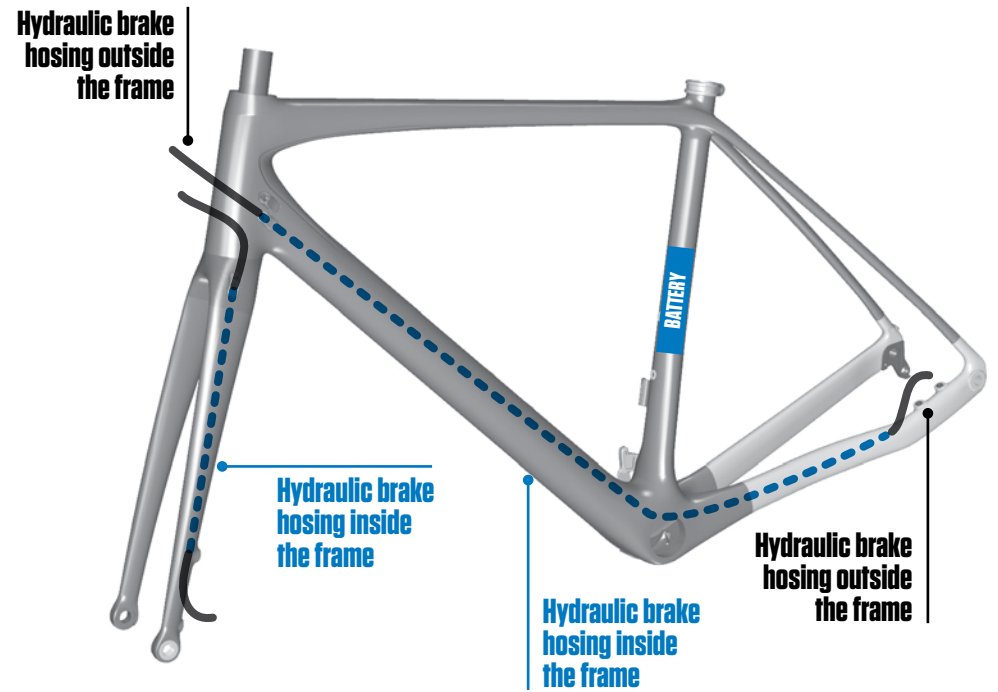
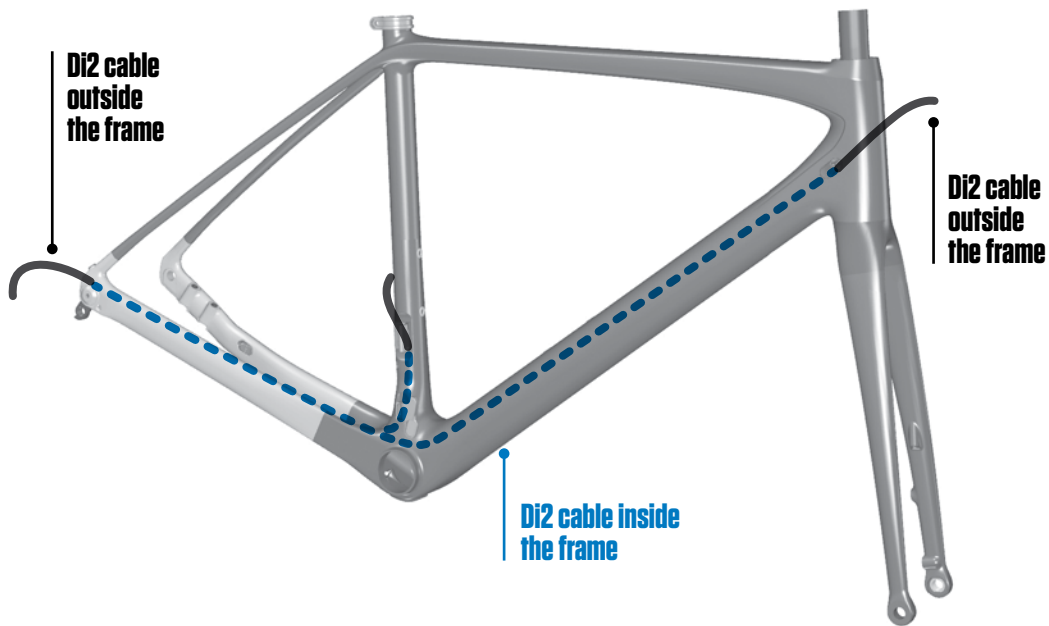
# CABLE ROUTING

## Mechanic groupe and Disc Hydarulic



# CABLE ROUTING

## Di2 groupe and Disc Hydraulic



# 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](http://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](http://www.orbea.com).

## WHAT ARE THE ADVANTAGES?

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

## ORBEA WARRANTY

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

- 1) We back each frame and rigid fork in our bicycles with a lifetime warranty against materials and manufacturing defects. Frames with travel longer than 170 mm are covered by a 2-year warranty. We warrant each frame and fork in our bikes against paint or varnish defects and corrosion for 3 years. This warranty covers the original purchaser only and is non-transferable. For the lifetime warranty to be valid, customers must fill in the online warranty form within one month of purchase, and proof of purchase in the form of cash register receipt or sales ticket is required.
- 2) Warranty claims are subject to the decision made by our technical staff about the nature of the defect after thorough inspection of the faulty part.
- 3) All the parts assembled in our bicycles are protected against assembly or manufacturing defects for 2 years, and repairs qualifying under this warranty will be performed by authorized dealers in each country.

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

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

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

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

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

# ADDITIONAL INFORMATION

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

## FACEBOOK

[www.facebook.com/OrbeaBicycles](http://www.facebook.com/OrbeaBicycles)

## TWITTER

[www.twitter.com/Orbea/](http://www.twitter.com/Orbea/)

## YOUTUBE

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

[www.youtube.com/user/OrbeaBicycles](http://www.youtube.com/user/OrbeaBicycles)

## INSTAGRAM

[www.instagram.com/orbeabicycles](http://www.instagram.com/orbeabicycles)

## ORBEA CONTENT

View and download photos, videos and documents.

[content.orbea.com/us-en/](http://content.orbea.com/us-en/)

## ORBEA UNIVERSITY

[www.orbea.com/es-es/university/](http://www.orbea.com/es-es/university/)

## BLOG ORBEA

[www.orbea.com/es-es/blog/](http://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](http://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>

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