# ORBEA PAPERS TECHNICAL MANUAL



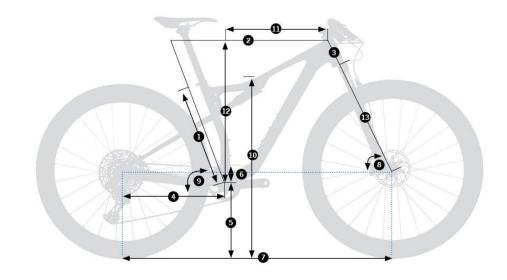
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## **GEOMETRY**

- a) All the measurements must in mm
- b) Seat tube length from Center to Top (c-t)



	XC VERSION			TR VERSION						
SIZE	S 27	S	M	L	ХL	S 27	S	M	L	ХL
1. SEAT TUBE (C-T)	405	405	432	470	520	405	405	432	470	520
2. TOP TUBE (EFF)	557	564	593	617	641	559	567	596	619	643
3. HEAD TUBE	95	90	95	105	120	95	90	95	105	120
4. CHAIN STAY	425	425 435			425		4:	35		
5. BB DROP	29	29 47			21	40				
6. BB HEIGHT	328		32	27		336	334			
7. WHEEL BASE	1081	1094	1123	1148	1173	1088	1101	1131	1155	1181
8. HEAD ANGLE	69 69°			68		6	8°			
9. SEAT ANGLE	75 75°			74		7.	4°			
10. FORK OFFSET- RAKE	44	44 44			44		4	4		
11. STANDOVER HEIGHT	715	717	732	742	749	722	724	739	749	756
12. REACH	407	407	435	456	476	397	497	425	446	466
13. STACK	558	586	591	600	614	565	593	598	608	622
14. FORK LENGTH	488 504			508		53	24			



## GTP

#### SIZES

	S/M/L
FRONT TRIAGLE	27S, 29S, 29M, 29L, 29XL
REAR TRIANGLE	27/29
LINK	S FOR 27 AND 29 S / L FOR THE REST

#### COLORS

FRONT TRIAGLE	-
REAR TRIANGLE	-

#### SUSPENSSION

FRONT TRIAGLE	FOX 32 SC 100 MM/ FOX 34 SC 120 MM
REAR TRIANGLE	190X40 / 190X45



## GTP

#### CHARACTERISTICS

HEADSET	1" 1/8 - 1" 1/5
BB	PF92
FRONT DERAILLEUR	
FRONT DERAILLEUR TP/DP	
FD ANGLE	•
SEAT POST DIAMETER	31,6 MM
SEAT CLAMP	37 MM (CUSTOM)
DROPOUT	BOOST 148
CHAINSTAY PROTECTOR	PLASTIC-RUBBER
OTHER PROTECTORS	DT TRANSPARENT
CABLE TYPE	FULL HOUSING
REAR HUB LENGHT	148
MAX CHAINRING SIZE 2X	-
MAX CHAINRING SIZE 1X	36T
MIN CHAINRING SIZE FOR MECHANICAL FD	
MIN CHAINRING SIZE FOR DI2 FD	-



## **OPTIONS**

#### BRAKE

V-BRAKE	NO
DISC BRAKE	ONLY
REAR BRAKE IS/PM+DIAMETER DISC	PM160, 180 COMPATIBLE

#### LUGGAGE

-
1 FOR S SIZES, 2 FOR M, L, XL
-
-
-
-

#### GEARS

11 SPEED	YES
12 SPEED	YES
DOUBLE CRANK	NO
COMPACT CRANK (34X50T) (ROAD)	-
TRIPLE CRANK	NO
OXYMETRIC	NO



## **OPTIONS**

#### **GROUPSETS** MTB

SHIMANO
1X11
SRAM
1X11
1X12



## **OPTIONS**

#### WHEELS

MAXIMUN SIZE -

#### **TYRES**

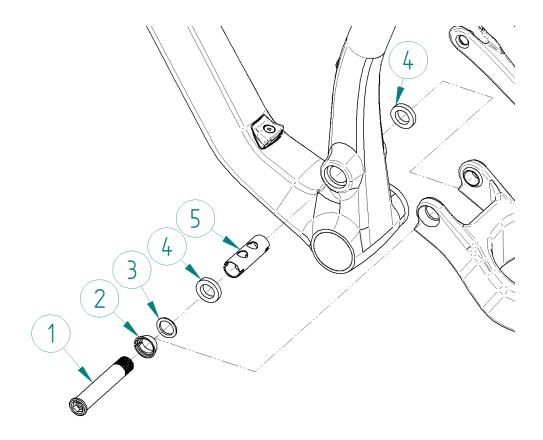
MAXIMUN SIZE 2,4

#### CABLE ROUTING

"LEFT ROAD" CABLE ROUTING READY	YES, BUT REAR BRAKE HOSE WILL GO LEFT TO LEFT
MECHANICAL SYSTEM (W/INTERNAL CABLE ROUTING)	FULL HOUSING
ELECTRONIC DI2 SYSTEM ( W/INTERNAL CABLE ROUTING)	YES
EXTERNAL SHIMANO BATTERY (IN LEFT CHAINSTAY)	-
CAMPAGNOLO EPS	-



## HARDWARE MAIN PIVOT

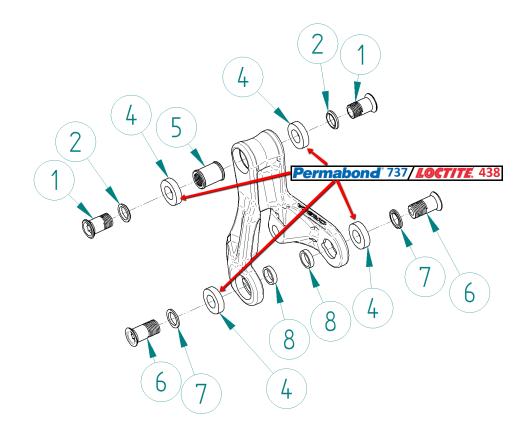


PART NUMBER	ORBEA			
	REFERENCE	DESCRIPTION	PIECES PER Frame	
1	12330034	EJE P.GIRO PRINCIPAL OIZ 19	1	
2	12330033	CONO EJE P.GIRO OIZ 19	1	
3	12320067	SEPARADOR BASES-P.GIRO OIZ 19	1	
4	16100242	15x24x5 bearing	2	
5	12330032	SEPARADOR RODAMIENTOS P.GIRO	1	



## HARDWARE

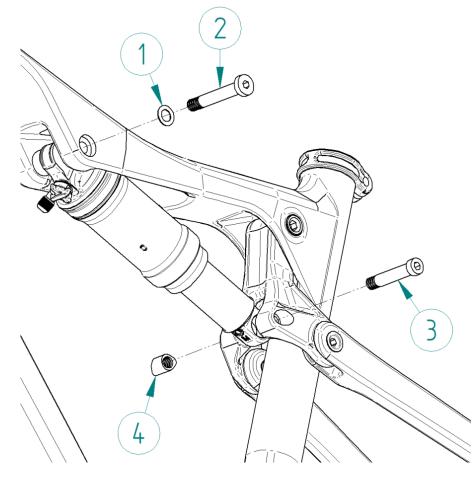
LINK



PART NUMBER	ORBEA		
	REFERENCE	DESCRIPTION	PIECES PER Frame
1	12300065	TORNILLO BIELETA-FT OIZ 19	2
2	12320065	ARANDELA BIELETA-FT OIZ 19	2
4	16100240	10x19x5 bearing	4
5	12320069	SEPARADOR ROD BIEL-FT OIZ 19	1
6	12300066	TORNILLO BIELETA-RT OIZ OMR 19	2
7	12320066	ARANDELA EXT BIELETA-RT OIZ 19	2
8	12320068	ARANDELA INT BIELETA-RT OIZ 19	2



## HARDWARE SHOCK MOUNTING HARDWARE

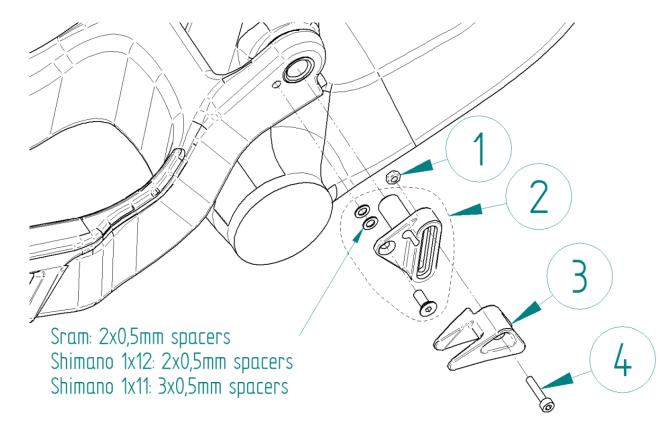


PART NUMBER		ORBEA	
	REFERENCE	DESCRIPTION	PIECES PER Frame
1	12320070	ARANDELA TORN AMORT-FT OIZ 19	1
2	12300068	TORNILLO AMORT-FT OIZ 19	1
3	12300067	TORNILLO AMORT-BIELETA OIZ 19	1
4	12330035	PIEZA ROS TORN AMO-BIEL OIZ 19	1



## HARDWARE

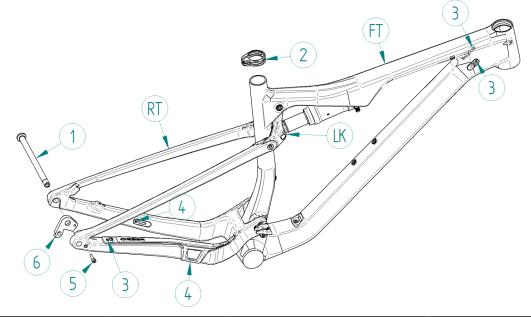
CHAIN GUIDE



PART NUMBER		ORBEA	
	REFERENCE	DESCRIPTION	PIECES PER Frame
1	12319077	M3 DIN 934 acabado negro	1
2	11250001	GUIA CADENA PLAST OIZ 19 1X	1
3	11250501	Pieza de plastico guiacadenas 1X	1
4	12309077	M3x15 DIN 912 acabado negro	1



## HARDWARE GENERAL

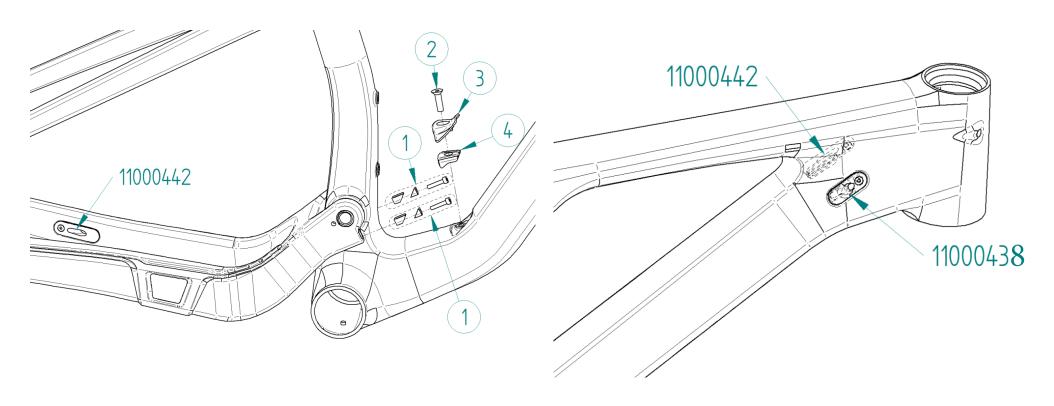


PART NUMBER		ORBEA	
	REFERENCE	DESCRIPTION	PIECES PER FRAME
1	11100067	EJE RDA TRA ORBEA 12x182x1.5	1
2	11160203	ABRAZAD SILLIN 34.9 OIZ 19 NEG	1
3	12309075	M3x12 DIN 7991 NEGRO	4
4	11000381	PROTECTOR BASE GOMA OIZ 19	1
5	12300061	TORNILLO M5x14 DIN912 PATA-X12	1
6	15430203	PATA CAMBIO MTB 18 STD X12	1
FT	58071600	FT.19 OIZ OMR 27 15.5/S	1
	58081600	FT.19 OIZ OMR 29 15.5/S	1
	58081700	FT.19 OIZ OMR 29 17/M	1
	58081900	FT.19 OIZ OMR 29 18.5/L	1
	58082100	FT.19 OIZ OMR 29 20.5/XL	1
RT	58090000	RT.19 OIZ OMR 27 (148)	1
	58100000	RT.19 OIZ OMR 29 (148)	1
LK	12330030	BIELETA OIZ OMR 19 M/L/XL	1
	12330031	BIELETA OIZ OMR 19 XS/S	1



## CABLE ROUTING

MECHANICAL + SEAT POST REMOTE

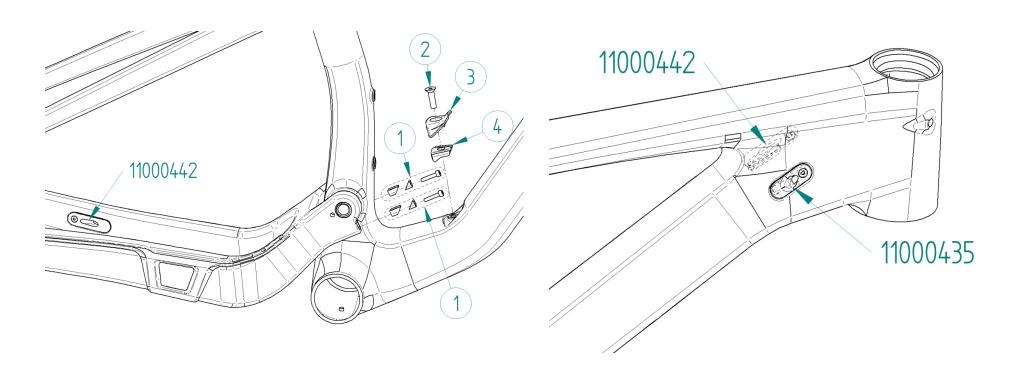


PART NUMBER		ORBEA	
	REFERENCE	DESCRIPTION	PIECES PER FRAME
1	12330036	CUÑA CABLES P.GIRO OIZ 19	2
2	12300075	TORNILLO INOX M5x18 DIN7991	1
3	11000444	GUIA CABLES PLAS DT BB EXT	1
4	11000443	GUIA CABLES GOMA DT BB INT	1



## CABLE ROUTING

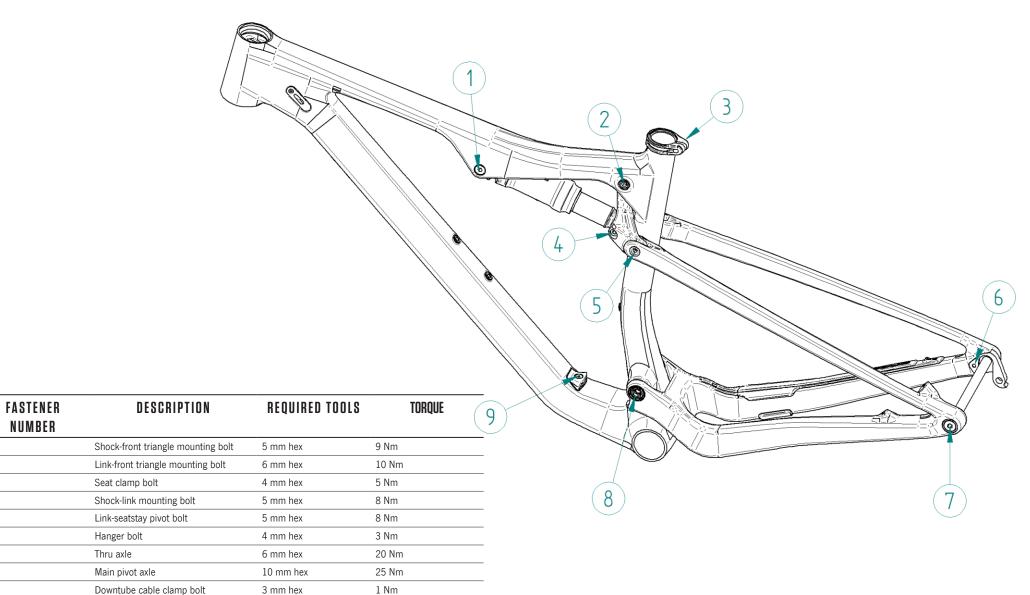
#### MECHANICAL WITHOUT SEAT POST REMOTE



PART NUMBER	ORBEA		
	REFERENCE	DESCRIPTION	PIECES PER FRAME
1	12330036	CUÑA CABLES P.GIRO OIZ 19	2
2			1
3	11000444	GUIA CABLES PLAS DT BB EXT	1
4	11000443	GUIA CABLES GOMA DT BB INT	1



## TORQUE SPECTS





## SHOCK PRESSURE CHART

		XC (190X40)		TR (190X45)	
RIDER WEIGHT	AIR PRESSURE	REBOUND	AIR PRESSURE	REBOUND	
KG	PSI	CLICKS (FROM COMPLETELY OPEN)	PSI	CLICKS (FROM COMPLETELY OPEN)	
60	150	2	141	1	
65	162	3	153	2	
70	175	4	165	3	
75	187	5	176	4	
80	200	6	188	5	
85	212	7	200	6	
90	225	8	211	7	
95	237	9	223	8	
100	250	10	235	9	



## FRAME AND MATERIAL

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

#### 1) KEEP YOUR OIZ 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 biodegradeable and do a great job of removing dirty grease from gears and chain.

#### 2) KEEP YOUR OIZ 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 OIZ 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 guick 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 Oiz, 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.



## 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 wecan 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 highend 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 ofparts 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



#### TWITTER

www.twitter.com/Orbea/



#### YOUTUBE

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

www.youtube.com/user/OrbeaBicycles



#### INSTAGRAM

www.instagram.com/orbeabicycles

#### ORBEA CONTENT

View and download photos, videos and documents.

content.orbea.com/us-en/

#### ORBEA UNIVERSITY

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

#### **BLOG ORBEA**

www.orbea.com/es-es/blog/

#### YOUR ORBEA DEALER

Our dealers are experts and should be able to assist you with setting up and maintaining your Orbea bicycle. A complete listing of Orbea dealers and distributors can be located on our website: www.orbea.com/us-en/dealers/?country=INT

#### AFTER SALES SERVICE

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

