

# TECHNICAL MANUAL SPARTAN HIGH PIVOT





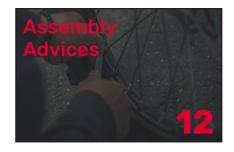
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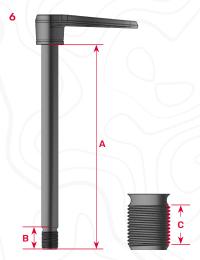






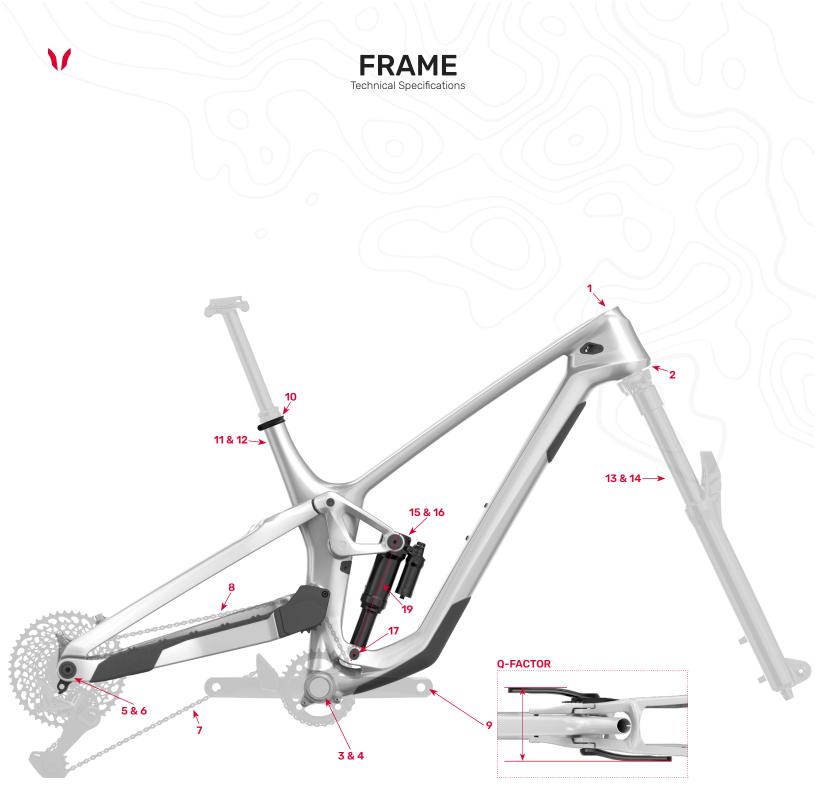


|  | HEADTUBE DIMENSIONS                                  |                  |  |  |  |  |  |
|--|--|------------------|--|--|--|--|--|
| 1. UPPER (S.H.I.S)                                 | ZS44   | 1-1/8" Zerostack |  |  |  |  |  |
| 2. LOWER (S.H.I.S)                                 | ZS56   | 1.5" Zerostack   |  |  |  |  |  |
|  | BOTTOM BRACKET                                       |                  |  |  |  |  |  |
| 3. STANDARD  | 73MM   | BSA              |  |  |  |  |  |
| 4. ISCG MOUNT                                      | ISCG 05,   | fixed            |  |  |  |  |  |
|  | MECHANICAL DRIVETRAIN (1X)                           |                  |  |  |  |  |  |
| 5. REAR HUB SPACING O.L.D (Over Locknut Dimension) | TA 12 x  | 157              |  |  |  |  |  |
| 6. AXLE STOCK IMPORTANT INFOS                      | A. LENGHT: 197   B. THREAD: 1.0MM   C. PITCH: M12xP1 |                  |  |  |  |  |  |
| 7. MAXIMUM & MINIMUM CHAINING                      | 387  | 28T              |  |  |  |  |  |
| 8. RECOMMENDED CHAINLINE                           | 56.5mm   |                  |  |  |  |  |  |
| 9. MIN Q-FACTOR                                    | 9. MIN Q-FACTOR 173mm                                |                  |  |  |  |  |  |
| SEATPOST AND SEATCLAMP                             |  |                  |  |  |  |  |  |
| 10. SEATPOST OUTSIDE DIAMETER (OD)                 | 34.9n  | nm               |  |  |  |  |  |
| 11. SEATPOST LENGTH (S.M,L, XL)                    | 225mm, 250mm 285mm & 300mm                           |                  |  |  |  |  |  |
| 12. SEAT TUBE OUTSIDE DIAMETER (OD)                | 12. SEAT TUBE OUTSIDE DIAMETER (OD) 39.3mm           |                  |  |  |  |  |  |
| GEOMI  | ETRY INPUTS (BASED ON MEDIUM SIZE)                   |                  |  |  |  |  |  |
|  | 29er   FORK 170MM   TRAVEL 160MM                     |                  |  |  |  |  |  |
| 13. FRONT SUSPENSION (TRAVEL & SAG)                | 170mm  | 33%              |  |  |  |  |  |
| 14. FORK AXLE-TO-CROWN & OFFSET                    | 581mm  | 51mm             |  |  |  |  |  |
| 15. REAR SUSPENSION (TRAVEL & SAG)                 | 160mm  | 33%              |  |  |  |  |  |
| 16. SHOCK LENGTH & STROKE                          | 205 X 65mm   |                  |  |  |  |  |  |
| 17. SPRING TYPE COMPATIBILITY                      | AIR & COIL   |                  |  |  |  |  |  |
| 18. UPPER (OR FRONT) SHOCK HARDWARE DIMENSION      | Trunnion   |                  |  |  |  |  |  |
| 19. LOWER (OR REAR) SHOCK HARDWARE DIMENSION       | 35 X 10mm  |                  |  |  |  |  |  |
| 20. FRONT & REAR WHEEL GEOMETRY                    | 748mm / 29x2.5                                       | 748mm / 29x2.5   |  |  |  |  |  |
| 21. REAR WHEEL MAX DIMENSIONS                      | 29x2.5*  |                  |  |  |  |  |  |



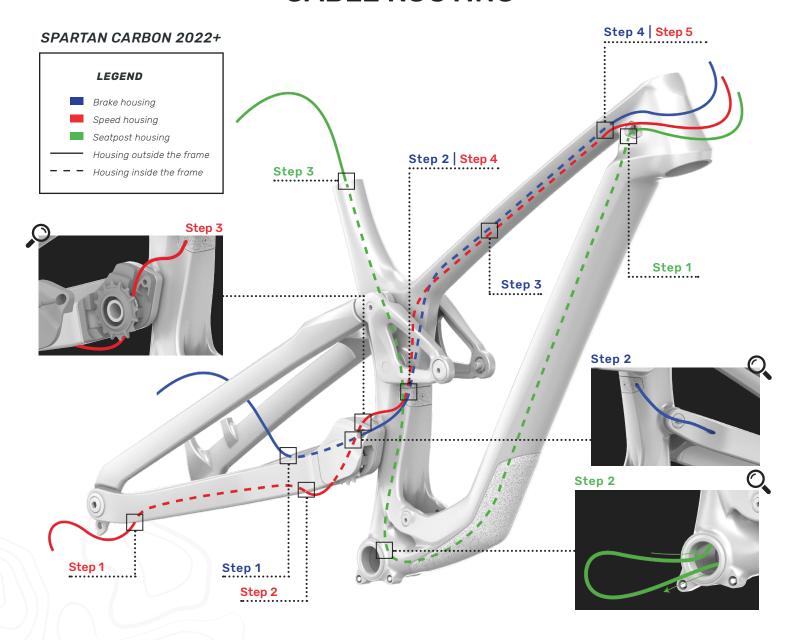
\* DISCLAIMER: We are testing many different tires to establish a clearance number that cover a wide spectrum of tires with appropriate frame clearance. However, it is impossible for us to test all tires and rim combination available on the market, so be mindful that some combinations may result in slight rubbing if higher than 66mm in actual width.

Available sizes **S|M|L|XL** 





### **CABLE ROUTING**



### **BRAKE HOUSING**

**Step 1** Pass the brake housing through the cavity on the top of the base.

**Step 2** | Pull out the housing through the cavity on the outer surface of the base, attach to the support created for this purpose, then pass the brake housing through the left opening of the stopper located on the seat tube.

**Step 3** | Slide the brake housing into the top tube.

**Step 4** | Remove the cap from on the guide located on the left side of the down tube (use the upper cavity). \* Do not replace the cap \* Slide the anti-impact foam tube over the housing up into the down tube.

### SHIFTER HOUSING

**Step 1** Pass the shifter housing through the right opening of the stopper located on the seat tube. Slide the speed housing into the top tube.

**Step 2** | Pull out the housing through the stopper located on the left side of the diagonal (use the lower cavity). \* Put back the stop cap \*

**Step 3** | Pass the shifter housing under the pulley cap.

**Step 4** Take the shifter housing out through the cavity under the base, at the front.

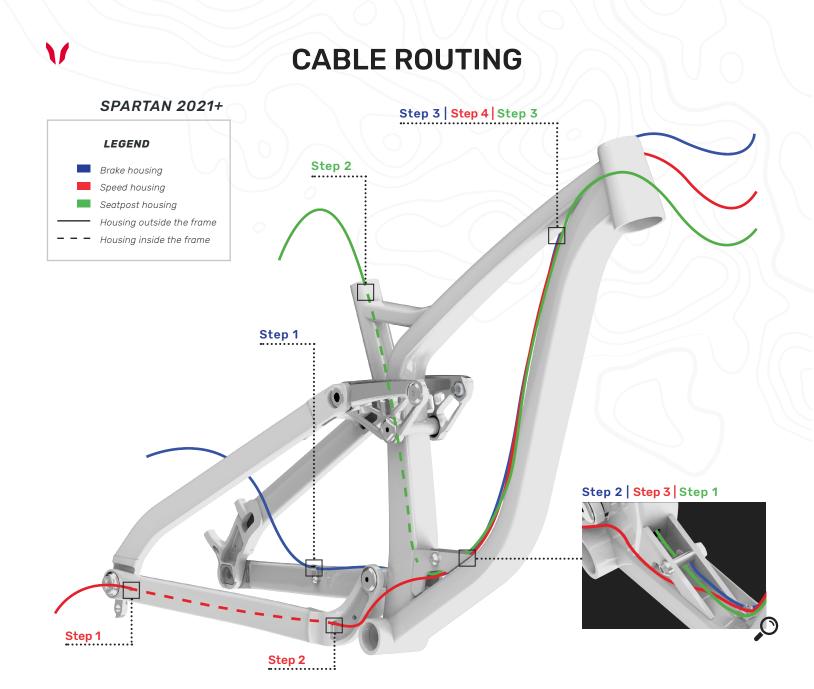
**Step 5** Pass the shifter housing through the opening located below the base.

### **SEATPOST HOUSING**

**Step 1** Pass the seat post housing through the stopper on the right side of the diagonal.

**Step 2** | Pull out the seat post housing through the bottom bracket cavity. Slide the anti-impact foam tube over the housing up into the down tube.

**Step 3** Create a loop with the sleeve to reinsert it into the seat tube. Pull out the seat post cover at the end of the tube.



### **BRAKE HOUSING**

**Step 1** Attach the brake housing to the tie and the cavity (using a clip) on the top of the base.

**Step 2** | Pass the brake housing under the shock.

**Step 3** Attach the brake housing to the guide located on the left side of the diagonal. Orient to the left side.

### SHIFTER HOUSING

**Step 1** Pass the shifter housing through the rear opening of the base so that it pops out at the front.

**Step 2** Secure the shifter housing with a clip under the front of the base using the cavity created for this purpose.

**Step 3** | Pass the shifter housing under the shock.

**Step 4** | Fix the shifter housing in the center of the stops of the diagonal. Orient to the left side.

### **SEATPOST HOUSING**

**Step 1** Pass the seatpost housing under the shock.

**Step 2** | Pass the housing through the opening located at the bottom of the seatpost all the way to the top. Pull out the housing at the end of the seat tube.

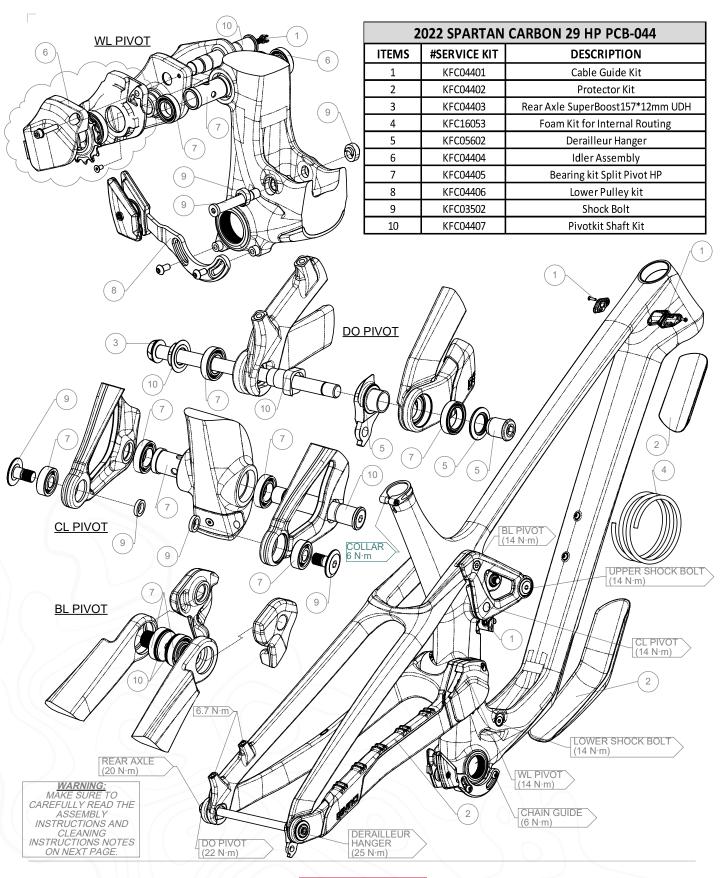
**Step 3** | Attach the housing to the guide located on the right side of the diagonal. Orient to the right side.

\*Follow the seat post manufacturer's instructions for adjusting the length of the housing.

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### **SERVICE KIT**



SPARTAN CARBON 29 HP PCB-044



Revision A



#### ASSEMBLY INSTRUCTIONS:

- 1- THOROUGHLY CLEAN THE INTERIOR OF EACH BEARING HOUSING TO REMOVE ANY DIRT OR OLD GREASE;
- 2- APPLY HIGH QUALITY WATERPROOF GREASE ON THE INSIDE FACE AND INSIDE DIAMETER OF ALL BEARING HOUSINGS BEFORE PRESS-FIT:
- 3- APPLY HIGH QUALITY WATERPROOF GREASE TO ALL PIVOT PARTS THAT CONTACT WITH THE INNER DIAMETER OF THE BEARINGS.
- **4-** APPLY HIGH QUALITY WATERPROOF GREASE TO ALL NON-THREADED METAL-TO-METAL INTERFACES (EX.: PLANAR FACE OF THE PIVOT SPACER THAT CONTACTS THE LATERAL FACES OF THE FRONT TRIANGLE WL PIVOT). THESE INSTRUCTIONS ALSO APPLY TO THE SHOCK ASSEMBLY;
- 5- UNLESS OTHERWISE SPECIFIED, APPLY BLUE LOCTITE 242 ON ALL THREADS BEFORE ASSEMBLY TO THE SPECIFIED TORQUE VALUE;
- 6- TO PREVENT DAMAGE TO THE FRAME, THE SEATPOST MUST HAVE A MINIMUM INSERTION IN THE SEAT TUBE.

### CARBON FRAME:

SMALL / MEDIUM / LARGE / X-LARGE - 100mm INSERTION

#### \*ALWAYS VERIFY CONNECTOR CLEARANCE BEFORE FULLY INSERTING A DROPPER POST.

7- FRG ADJUSTABLE: THIS DESIGN ALLOWS RIDERS TO CHOOSE BETWEEN A LOW OR HIGH POSITION. WITH FRG ADJUSTABLE TECHNOLOGY, YOU CAN FINE-TUNE YOUR RIDE TO PERSONAL TASTES OR SPECIFIC TRAIL TYPES USING A FLIP-FLOP PIVOT MECHANISM THAT SLIGHTLY CHANGES THE BIKE'S GEOMETRY AS SHOWN BELOW.



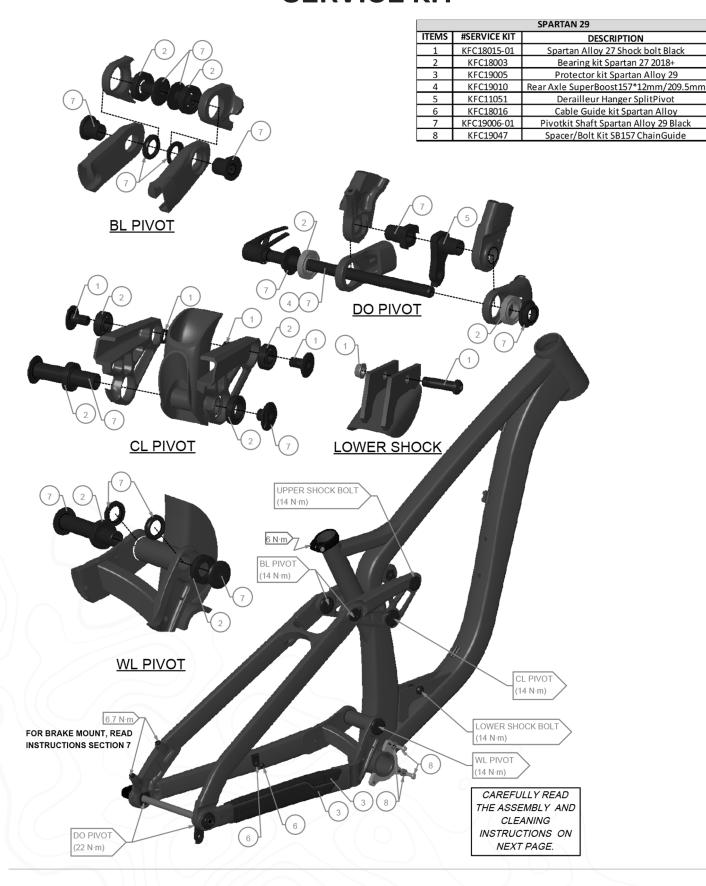
#### **CLEANING INSTRUCTIONS:**

IT IS A WELL KNOWN FACT THAT A CLEAN BIKE PERFOMS BETTER. DEVINCI RECOMMENDS WASHING YOUR BIKE REGULARLY USING A BRUSH AND SOAPY WATER. HOWEVER, DEVINCI DO NOT RECOMMEND THE USE OF A PRESSURE WASHER, SINCE THIS MAY SIGNIFICANTLY REDUCE THE SERVICE LIFE OF BALL BEARINGS. EVEN THOUGH OUR BALL BEARINGS ARE EQUIPPED WITH HIGH QUALITY DOUBLE-LIP SEALS, HIGH PRESSURE WATER CAN STILL PASS THESE SEALS AND REMOVE THE GREASE INSIDE THE BEARING. THIS MAY CAUSE PREMATURE CORROSION AND WEAR OF THE BALL BEARINGS.



### V

### **SERVICE KIT**



**SPARTAN** 

Devinci



#### ASSEMBLY INSTRUCTIONS:

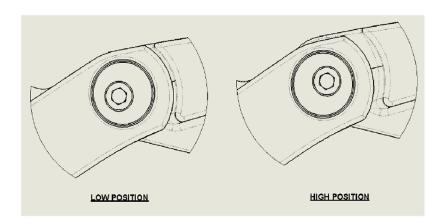
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- 5- UNLESS OTHERWISE SPECIFIED, APPLY BLUE LOCTITE 242 ON ALL THREADS BEFORE ASSEMBLY TO THE SPECIFIED TORQUE VALUE:
- 6- TO PREVENT DAMAGE TO THE FRAME, THE SEATPOST MUST HAVE A MINIMUM INSERTION IN THE SEAT TUBE.

#### **ALUMINIUM FRAME**:

SMALL / MEDIUM / LARGE / X-LARGE - 100mm INSERTION

\*ALWAYS VERIFY CONNECTOR CLEARANCE BEFORE FULLY INSERTING A DROPPER POST.

- 7- REAR BREAK MOUNT: DURING THE ASSEMBLY, YOU WILL NOTICE THAT THE NATURAL BEND OF THE BRAKE CABLE MAY COME IN CONTACT WITH THE WEEL'S SPOKES OR THE FRAME. WE SUGGEST TO GIVE A FULL ROTATION OF THE BRAKE BEFORE MOUNTING IT. IT WILL GIVE A TWIST TO THE CABLE AND PREVENT POTENTIAL CONTACTS
- 8- FRG ADJUSTABLE: THIS DESIGN ALLOWS RIDERS TO CHOOSE BETWEEN A LOW OR HIGH POSITION. WITH FRG ADJUSTABLE TECHNOLOGY, YOU CAN FINE-TUNE YOUR RIDE TO PERSONAL TASTES OR SPECIFIC TRAIL TYPES USING A FLIP PIVOT MECHANISM THAT SLIGHTLY CHANGES THE BIKE'S GEOMETRY AS SHOWN BELOW.



### **CLEANING INSTRUCTIONS:**

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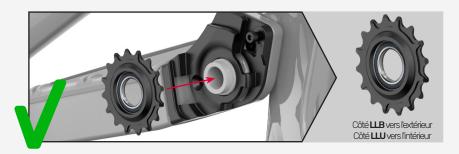


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### **ASSEMBLY ADVICE**

### 1. Idler

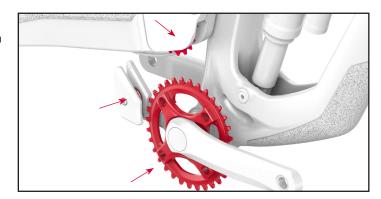
Make sure to insert the flange outwards when positioning the idler (green on the inside, black on the outside).

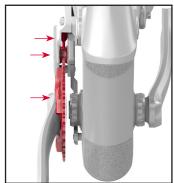




### 2. Caster alignment

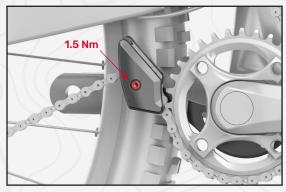
Make sure the crank, chain guide and idler are aligned.

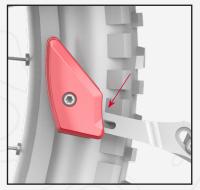


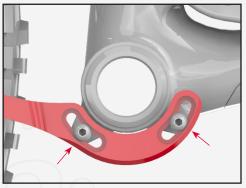


### 3. Chain Guide

- 3.1 Make sure that the torque exerted on the caster is equal to 1.5 Nm.
- 3.2 Make sure that the chain guide is adjusted as far as possible towards the rear of the bicycle.
- 3.3 Make sure that the chain guide frame attachment is adjusted to the center.



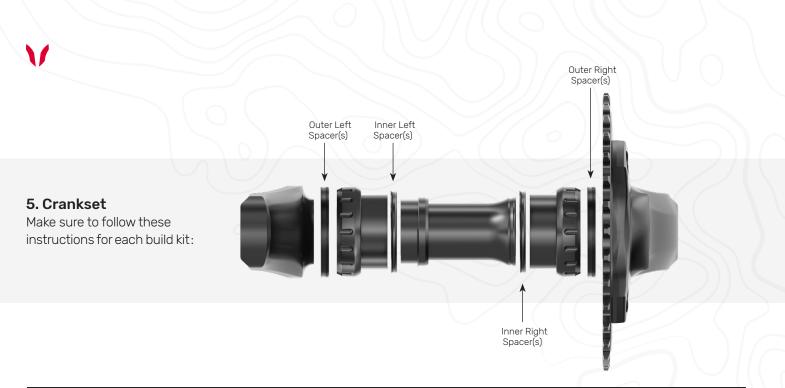




3.1 3.2 3.3

### 4. Chain

Small / Medium: Make sure the chain has 124 links. Large / X-Large: Make sure the chain has 126 links.



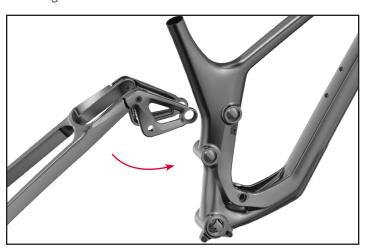
| SHIMANO XTR |                           |          |                            |   |       |                           |                            |       |                  |        |
|-------------|---------------------------|----------|----------------------------|---|-------|---------------------------|----------------------------|-------|------------------|--------|
|             | ell Interface<br>Ith (mm) | Crankset | Outer Left Spacers<br>(mm) |   | acers | Inner Left Spacer<br>(mm) | Inner Right Spacer<br>(mm) | Outer | Right Sp<br>(mm) | oacers |
| BSA         | 73                        | -        | 2.5                        | 1 | 1     | -                         | 2.5                        | 1     | 1                | 2.5    |

|   | SHIMANO XT |                           |                           |                            |                            |     |  |  |
|---|------------|---------------------------|---------------------------|----------------------------|----------------------------|-----|--|--|
| Frame Shell Interface and Width (mm) Crankset |            | Outer Left Spacer<br>(mm) | Inner Left Spacer<br>(mm) | Inner Right Spacer<br>(mm) | Outer Right Spacer<br>(mm) |     |  |  |
| BSA   | 73         | Super Boost +             | 4.5                       | 2.5                        | _                          | 4.5 |  |  |

|     | SRAM GX                                       |             |                           |                           |                            |                            |  |  |
|-----|---|-------------|---------------------------|---------------------------|----------------------------|----------------------------|--|--|
|     | Frame Shell Interface and Width (mm) Crankset |             | Outer Left Spacer<br>(mm) | Inner Left Spacer<br>(mm) | Inner Right Spacer<br>(mm) | Outer Right Spacer<br>(mm) |  |  |
| BSA | 73  | Super Boost | 4.5                       | -                         | -                          | 9                          |  |  |

### 6. Top Pivot

Make sure to assemble the linkages with the seatstay before installing them on the bike.



### 7. Pivot Thread

Make sure not to get grease on the threads of the pins below:





## DEVINCI'S RIDE IN PEACE WARRANTY

ALL OUR FRAMES ARE GUARANTEED FOR LIFE.

### WARRANTY PERIOD FROM DEVINCI CYCLES INC

The frames of cycles devinci inc. are guaranteed against all manufacturing defects, for the periods specified below, as of the date of the initial purchase. During these specific periods, devinci will replace or repair without charge, and at its discretion, the devinci frames that display a manufacturing defect. The parts replaced or repaired in accordance with this warranty, will be covered for a period equal to the remaining portion of the warranty of the original equipment. Replacement parts are subject to availability. In certain cases, color and/or model may differ from the original parts.

#### **BICYCLE FRAMES & WARRANTY PERIOD**

Since 2006, all the frames bike model, including all mountain, freeride, downhill frames and dirt jump are guaranteed for life. Paint and decals for all models of frame: 1 year the pivots\* for double suspension frames: 1 year the components assembled on devinci frames are guaranteed by their respective manufacturers. Please contact your authorized devinci retailer. For more information regarding the applicable warranties.

\* the pivots include the bearings, bolts and axles holding together the elements of the suspension of the rear triangle.

#### **WARRANTY EXCLUSIONS**

Each devinci bicycle was conceived for a specific use. The operational life of a bicycle varies according to its construction, maintenance and the care provided. Intensive use or use with a heavy load, use during competitions or for activities other than those for which the bicycle was conceived, greatly diminish its operational life. Any of these conditions may lead to random failure. Abusive use will therefore cancel the warranty.

#### **EXCHANGE POLICY IN CASE OF ACCIDENT**

Devinci is aware that the purchase of a high performance bicycle is done with the heart. This is why our customer service applies an exchange policy at a low price to accommodate claims that would have been refused for one of the reasons mentioned in the section "warranty exclusions". This policy applies only to the initial buyer. Please contact your devinci retailer for more information.

Limitation of liability: this is an integral warranty, complete and final, for devinci frames. Devinci does not give authorization to any other person, including the authorized devinci retailers, to assume or grant, expressly or implicitly, any or all addition(s) or extension(s) to the warranty specified herein. Any other obligation or responsibility expressed by any other person(s) and any demonstration or illustration of devinci frames is in no way linked to devinci and is furthermore excluded from this warranty.

Devinci assumes no liability in case of any property damage, moral or bodily injury to the user, the buyer or any other person(s), resulting from the use of a devinci frame or one of its components.

Except as limited or expressly forbidden by law, regarding any other condition or guarantee, express or implied, based in law, established commercial customs and usage, including, but not limited to, guarantee of merchantability or adaptation to a specific end, devinci declines any responsibility for any amount exceeding the actual purchase price of the bicycle nor for any particular, accessory or consecutive damages that may occur in connection with said bicycle.

With regard to the exercising of rights resulting from the present warranty, the buyer of a devinci frame agrees to elect domicile in the judicial district of chicoutimi, in the province of quebec, canada, as an appropriate place for the hearing of all claims or legal proceedings.

### V

# DEVINCI'S RIDE IN PEACE WARRANTY | CONDITIONS

### THIS WARRANTY DOES NOT COVER

- X Regular maintenance (cleaning, lubrification or inspection);
- X TranOptimum S or shipping charges incurred as a result of the execution of the warranty;
- Cost of labour related to the assembly, disassembly, repair or replacement parts;
- X Damages caused by normal wear and tear including damages caused by material fatigue.

#### THE WARRANTY DOES NOT APPLY IF:

- X The damages were caused by a fortuitous event;
- X The bicycle was purchased from a retailer other than those authorized by devinci;
- X The bicycle was not entirely assembled by an authorized devinci retailer;
- The bicycle was repaired by a person other than an authorized devinci retailer;
- X You are not the original owner of the bicycle;
- X The instructions contained in the user's manual for all frames and the technical manual for frames with double suspension were not respected;
- ★ The periodic inspection recommended in the user's manual for all frames and in the technical manual for the frames with double suspension was not carried out;
- X Parts not supplied by devinci with the bicycle or not indicated in the user's manual for all frames or the technical manual for the frames with double suspension were used;
- X The bike paint is damaged as a result of an adhesive frame protector installation;
- X The bicycle was used for an activity other than those for which it was conceived;
- The bicycle and/or its components were subject to abusive use, negligence, abnormal and/or excessive use or was implicated in an accident;
- The frame is too small for you;
- ★ The frame and/or its components were modified (ex: polishing, structural or mechanical modification or addition, stripping, sanding, strain hardening, shot peening);
- ✗ You continued to use your bicycle while it was damaged.





### **Head Office**

1555 Manic Chicoutimi (Quebec) Canada G7K 1G8

www.devinci.com

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