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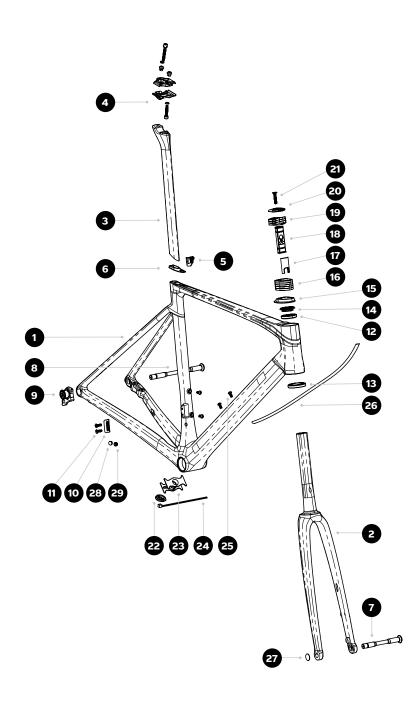


## **General Information**

This manual is a guideline for the official Colnago retailers in the assembly and adjustment of the Colnago V5Rs bicycle.

It assumes that the assembler is a well-trained professional bicycle mechanic, and, furthermore, it is not intended to replace any assembly and service instruction provided by third-party component manufacturers. This manual shows only the procedure associated with the installation of Colnago parts, as well as the routing of shifting and braking cables. All the Colnago proprietary parts listed below are available only through Colnago and/or its authorized distributors.

Failure to use the specified parts and to follow these assembly instructions may lead to serious injury or death.



### V5Rs frame-kit List of Parts

\* Size dependent

ITEM NO.	PART NUMBER	DESCRIPTION	QTY
1*	-	V5Rs – Painted Frame	1
2*	-	V5Rs - Painted Fork	1
3*	51574	V5Rs Seatpost -15 mm offset	1
4	51595	Colnago Seat Clamp kit – 2 bolts	1
5	51580	V5Rs Seatpost Clamp	1
6	51659	V5Rs Seatpost Rubber Grommet	
7	57109	Threaded Thru-Axle UDH Front 12 mm	1
8	53848	Threaded Thru-Axle UDH Rear 12 mm	1
9	51535	UDH Hanger	1
10	51534	Front Derailleur hanger	1
11	47092	M5x15 Flat head screw	2
12	51630	CS - Upper Bearing 1-1/8; 31x40x7 SLT	1
13	51634	CS – Lower Bearing 35x47x7 SLT	1
14	51635	V5Rs Compression Ring	1
15	51577	V5Rs Dust Cover	1
16	51676	V5Rs – CC01 Spacer 5 mm open	5
17	42332	D-Shape Plug	1
18*	41392	D-Shape Expander	1
19	51519	V5Rs - CC01 Spacer top	3
20	51672	Top Cap CC01 – D-Shape	1
21	58860	M6x30 Screw Colnago	1
22	59090	Rubber Battery Cap	1
23	51572	VsRs Di2-battery holder	1
24		Zip Tight	1
25	60863	M5x12 Botton head screw	1
26	27045	Foam Hose Cover	1
27	59083	Colnago front axle Sticker	1
28	20604	Non-drilled rubber cap Di2	1
29	20605	Drilled rubber cap Di2	1
	·		

# List of Recommended Tools and Supplies

The following tools and parts listed are required for mounting and adjusting procedures of Colnago parts. Colnago recommends any intervention on the bike to be performed by an authorized Colnago retailer.

Refer to each specific mounting procedure and requirements for the assembly of a specific component, provided its own manufacturer.

**NOTE:** If you are a Colnago V5Rs consumer/purchaser reading this manual, we suggest you consult your authorized Colnago retailer before undertaking any procedure in this manual.

Bike SupportStand	Allen key key 2 ÷ 12 mm	Torque wrenches with 2.5 Nm to 25 Nm			
Phillips and slot head screwdriver	Pedal wrench	Cable cutters			
Pliers	Brake rotor lockring tools (inner and outer)	Di2 wire tool - Shimano			
57					
Hydraulic bleed kit	Hacksaw (with carbon blades)	Saw cutting guide			
	0				
High quality grease & carbon assembly compound for bikes	Isopropyl alcohol				
compound for bikes					

## Seatpost installation

V5Rs Seatpost -15 mm offset
 V5Rs Seatpost clamp - Custom M8
 Headless screw
 TORQUE 7 Nm
 V5Rs Seatpost clamp - Pushing block
 V5Rs Seatpost Rubber Grommet

**Step 1:** Couple the Custom Headless Screw M8 (N. 5.1) with V5Rs seatpost Pushing Block (N. 5.2), inserting the flat end in the clamp as shown in the picture.

**Step 2:** Keeping the frame in vertical position, in order to avoid the seatclamp to fall into the frame, gently insert the assembled seatpost clamp in the frame, centering the screw with its seat.

**Step 3:** Once the clamp is in seat, fix it to the frame by screwing counter-clock wise (unscrewing)

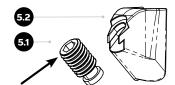
**Step 4:** Fit the V5Rs seatpost (N.3) with the custom V5Rs Rubber Grommet (N.6) and insert the seatpost into the seat tube. After regulating the saddle height, apply 7 Nm torque to prevent sliding.

#### NOTE:

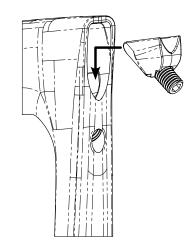
Apply carbon compound both to the inner face of the seat tube and to the carbon seatpost

After installation, hold the frame and bicycle through a secured seatpost only. Clamping the top tube may cause damage and void the frame warranty.

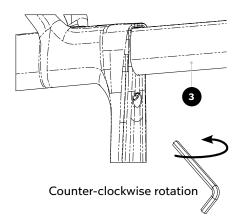
#### Step 1



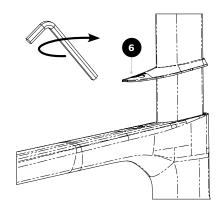
#### Step 2



Step 3



Step 4



### Saddle clamp installation

V5Rs Seatpost

M6 Custom Nut

**TORQUE 8 Nm** 

Saddle Clamp - Top

Saddle Clamp - Bottom

M6x40 Hex Head Screw

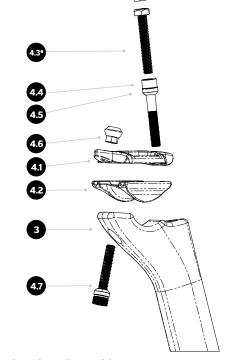
M6x40 Socket Head Screw

Spherical Washer M6 - 2 pcs

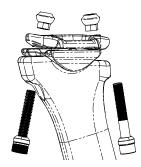
M6x35 Socket Head Screw

4.1

4.4

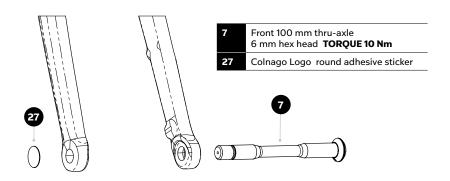


<sup>\*</sup> The saddle clamp kit is provided both with socket and hex head M6x40 front screws. The second one is recommended to ease the mounting of closed saddles

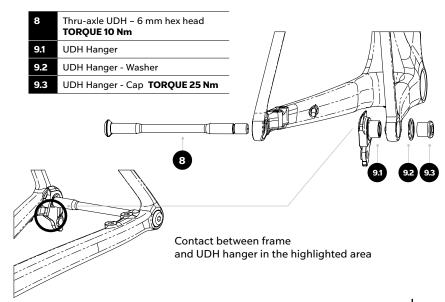


**NOTE:** seatpost 0-offset must be fixed with the 2 bolts from the bottom, featured with the dedicated spherical washers (N. 4.5)

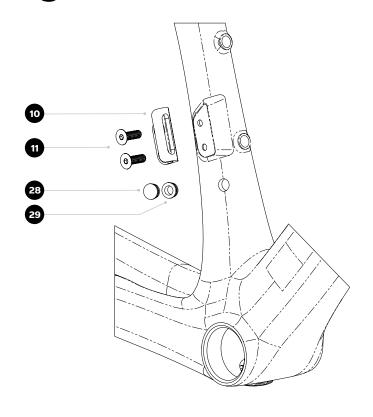
### Front axle installation



## **UDH - rear derailleur hanger installation**

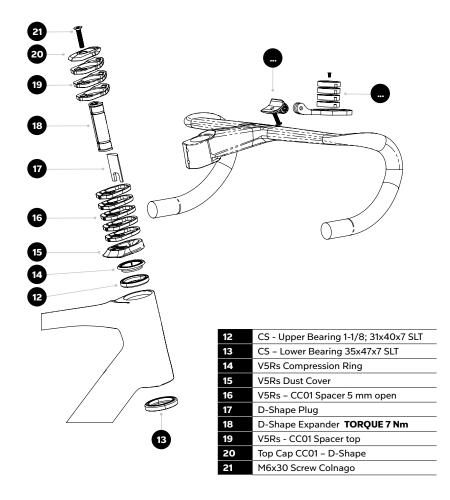


## Front derailleur hanger installation



10	Front Derailleur Hanger
11	M5x15 Flat head screw <b>TORQUE 3 Nm</b>
29	Non-drilled cap Di2
30	Drilled cap Di2

## Fork and headset installation



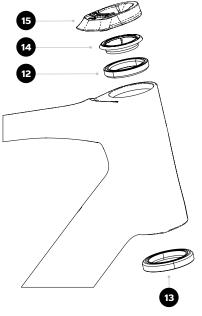
#### NOTE:

For integrated cockpit CC.01 mounting refer to specific CC.01 instruction manual

#### Fork and headset installation

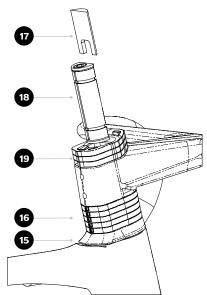
#### Step 1

Apply the specific grease in bearing seats and insert the two bearings (N.13 Bottom and N.12 Top), the Compression Ring (N.14) and the V5Rs Dust Cover (N.15)



#### Step 2

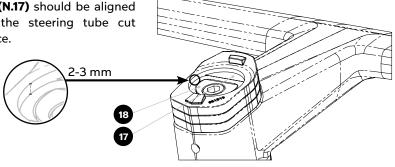
Once the fork steering tube has been cut at proper length, according to the desired number of spacers, insert and fix in the steering tube the D-Shape Expander (N.18, Torque 7 Nm) and the D-Shape Plug **(N.17)** 



#### Fork and headset installation

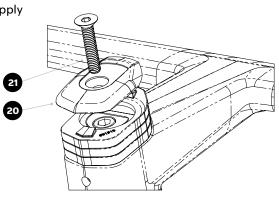
#### Step 3

Check that the fork is cut 2-3 mm below the cockpit or top spacer top surface. D-shape Expander (N.18) and D-shape Plug (N.17) should be aligned with the steering tube cut surface.



#### Step 4

Use the top cap **(N.20)** and the M6x30 screw **(N.21)** to apply the required preload.



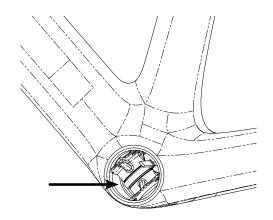
## Di2 Battery support assembly

#### Step 1

Fit the V5Rs Di2 battery holder (N.23) with the standardprovided zip tight (N.24) without completely lock it.

#### Step 2

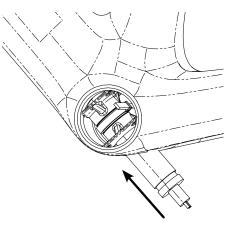
Insert the V5Rs Di2 battery holder, fiti with the zip tight in the bottom bracket, aligning its direction with the downtube and the hole below the bottom bracket.



#### **Di2 Battery support assembly**

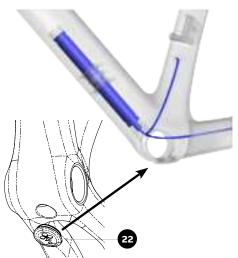
#### Step 3

Insert the Di2 battery from the bottom, positioning the V5Rs Battery Holder (N.23) roughly in the center of the battery. Then fix the zip tight to prevent battery sliding.



#### Step 4

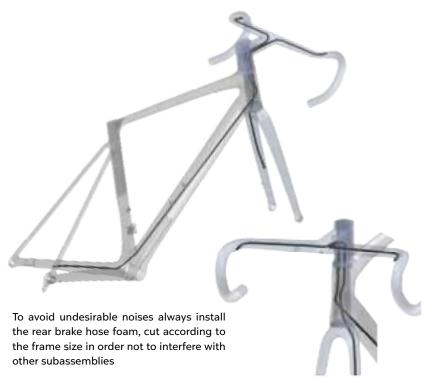
Push the Di2 battery and the Battery holder in the downtube, just above the bottom bracket, in order to ease a future removal.



After fitting the battery int the frame, close the hole below the bottom bracket using Battery Rubber cap (N.22)

## Brake hose routing

It is recommended that the rear hydraulic brake hose is installed before electric wires. These routing illustrations are intended as a supplement to the installation instructions only. For each specific brake system, please refer to the component manufacturer's service center or website for further information.

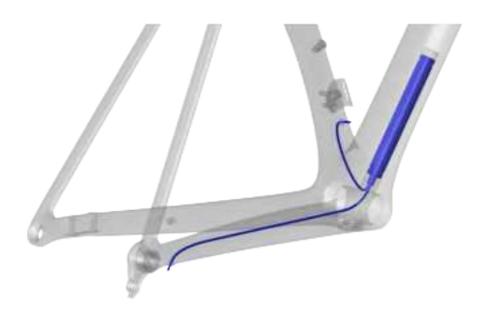


To ease the procedure it is recommended to route the brake hoses before installing the headset and the Di2 battery.

Once installed and routed the rear brake hose in the dowtube, with a dedicated wiring tool with magnet in the end, pull the it through the preload bolt hole as shown in the pictures below.

## **Electric Di2 wire routing**

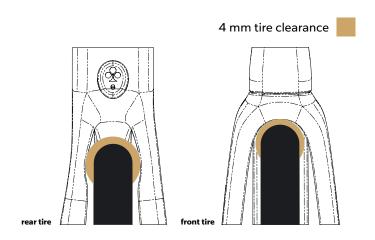
Colnago recommends installing electric cables and junction points after brake hose. The presented routing schematics are intended as a supplement to the groupset manufacturers' installation. For any more detailed information, please refer to the manufacturers' technical manual, website, or service center.



### Tire clearance

Colnago frames and forks are designed to comply with ISO 4210-2 standard for tire clearance. For the off-road category, a minimum of 4 mm of clearance must remain between the tire and the frame or fork. The effective width and diameter of the tire can vary depending on the tire brand, the rim geometry and dimension and the tire inflation pressure. Colnago always recommends to check and respect the minimum clearance before choosing both front and rear tire.

#### **Maximum Allowed Tire 32 mm**



#### NOTE:

Contact between the tire and the frame or fork may lead to a component or subassembly failure while riding, with potentially serious injury for the rider. Damage to the bicycle due to non-compliant tire clearance is not covered by the bicycle warranty.

## Intended Use for Colnago V5Rs

#### Road Racing Bicycle - Specific for races and expert users

**Intended surface:** Colnago V5Rs is designed for riding on a paved surface with both the tires always in contact with the ground.

**Not Intended surfaces and uses:** Colnago V5Rs is not conceived for off-road, cyclocross, touring with additional extra bags of racks, or mounting child seats or trailers.

Colnago V5Rs is designed both light weight and aerodynamic performance. You must understand that these types of bikes are intended to give an expert racer or competitive cyclist the maximum performance over a relatively short product life. Furthermore, the position of the bicycle is racing oriented; this implies that, to ride the bicycle safely and enjoy the experience in all the conditions, especially on open roads, it requires advanced riding skills. Light frames and components need frequent inspection. These frames are likely to be damaged or broken in a crash.

#### WARNING:

Any abuse in the usage is hazardous and may lead to serious consequences.

### **Weight Limit**

Colnago bicycles are tested to a maximum admissible mass\* of 110kg.

### COLNAGO V5Rs Max Admissible Mass **110kg - 242.5lbs**

#### NOTE:

Each component has different weight limits, and if replaced can alter the maximum safe bike weight limit, since the most restrictive one is defining the limit of the whole vehicle. Consult your Colnago retailer about what components are suitable for your Colnago V5Rs.

\*Maximum admissible mass is the sum of the bicycle with all its components (groupset, cockpit, wheels, etc.), plus the rider and any luggage or accessory (head unit, filled bottles, storage mounts, etc.).

### Torque and fasteners recommendation

To maintain correct tightening torques of all the threaded fasteners is crucial to your safety. Always tighten fasteners to the correct torque. Too high torques can stretch and deform fasteners. Too low torques can cause unwanted fastener movements leading to unfastening and fatigue failures.

Use only a correctly calibrated torque wrench with a proper scale to tighten critical fasteners on your bike. Carefully check to have the proper tools and follow their manufacturer's instructions on how to set and use the tool for accurate results before attempting any adjustments yourself. Before assembling and tightening any bolts, all threads must be greased with a quality, non-lithium type grease unless the bolt is pre-coated with thread locker. All bolts should have either grease or thread locker - but never both.

Colnago recommends the use of carbon assembly compound/ friction paste for all areas of clamping to carbon fiber (seatpost to frame, stem to fork, and handlebar to stem joints). Such a paste reduces corrosion potential, and a decrease in required clamping force needed to support a given load. The paste should be evenly spread on the carbon surface under the clamped area.

#### WARNING:

In case of any doubt or disagreement or a conflict between the following list and any supplier literature on recommended torque values for original equipment components, please contact a Colnago retailer for review and clarification of the required torque before to keep on with the installation.

### **Torque setting tab\***

Colnago is concerned about the resistance and quality of their frames. In order to guarantee the perfect conservation and durability of the frame over time, is important to maintain it correctly, by using a torque wrench.

#### REASONS WHY TO USETHE TORQUE WRENCH

- **1.** Ensuring the frame and components are not over tightened which can cause damage or from components loosening from being under tightened. Cracks and damages caused by overtightening the bolts are not covered by Colnago Warranty.
- **2.** Avoiding any harm to the cyclist whilst riding, due to the failure of incorrect installation.
- **3.** Frameset and components benefit from a longer lifespan, even after multiple maintenance and service schedules during its lifetime.

DESCRIPTION	MAX TORQUE (approx.)	TOOL
Pushing block CC.01	4 Nm	3 mm Allen key
Head Unit Support CC.01	3 Nm	4 mm Allen key
Colnago Bottom Bracket cups	30-35 Nm	BSA key
Colnago Seatpost clamp bolt	7 Nm	4 mm Allen Key
Colnago Saddle clamp bolt	8 Nm	5 mm Allen Key
Bottle cage bolts	2.5 Nm	4 mm Allen Key
Wheel thru-axle	10 Nm	5 mm Allen Key (6 mm for UDH std)
Brake Caliper bolts	6-8 Nm	4 mm Allen Key
UDH Hanger	25 Nm	8 mm Allen key
Front Derailleur hanger (on frame)	3 Nm	4 Allen key

<sup>\*</sup> The presented table includes toque setting indication provided by Colnago. It is always recommended to check indication provided by each specific component' manufaturer.

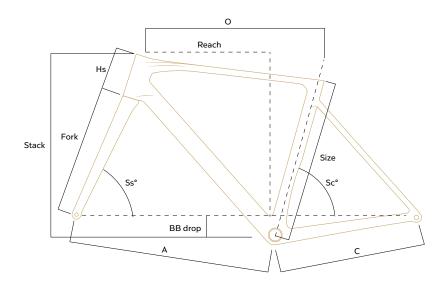
### **Technical Information**

COLNAGO V5Rs	
Model Year	2025
Frame Size	420 - 455 - 485 - 510 - 530 - 550 - 570
Available Colors	
Brake Mount Type	Flat Mount disc rear - 140 mm rotor (160 mm with spacer) Post Mount front 160 mm
Chainstay Height (Flat Mount)	20 mm
Wheel Size	700c
ВВ Туре	BSA - 68 mm
Upper Headset Bearing Dimensions	1-1/8; 41x30x7;
Lower Headset Bearing Dimensions	1-1/4; 47x35x7
Seatpost	Custom V5Rs Seatpost – Available with offset -15mm and 0 mm.
Seatpost Clamp	Custom V5Rs Seatpost pushing block
RD Hanger	Standard UDH
Front Axle Dimensions	Thru-axle 12mm – 100 mm hub
Rear Axle Dimensions	Thru-axle 12mm – 142 mm hub - UDH Thread
Maximum Tire Width (Actual)*	32 mm with 4 mm clearance

<sup>\*</sup> Tire measurements shall be taken at the widest point and at the maximum diameter when it is installed on the rim and inflated for at least 24 hours. 4 mm of distance is required between the tire and any frame or fork element.

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### **Geometry Chart**



	Sloping													
Size	Cf	Fork	rake	Sc°	A	С	Hs	Ss°	bbdrop	o	Stack	Reach	Trail (28-622 tire)	Standover (28-622 tire)
420	420	377	47	75.5	579	408	101	70.6	74	503	509	371	70	683
455	455	377	47	75.3	581.5	408	112	71.5	74	514	523	377	65	714
485	485	377	47	74.8	586.5	408	127	72.3	72	530	539	384	59.5	743
510	510	377	47	74.5	596.5	408	146	72.5	72	544	557	390	58.5	766
530	530	377	43	73.8	600	408	162	73	72	564	575	397	59.5	784
550	550	377	43	73.5	612.5	408	181	73	72	578	593	404	59.5	801
570	570	377	43	73.3	622	408	199	73.5	72	595	612	411	57.5	820



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