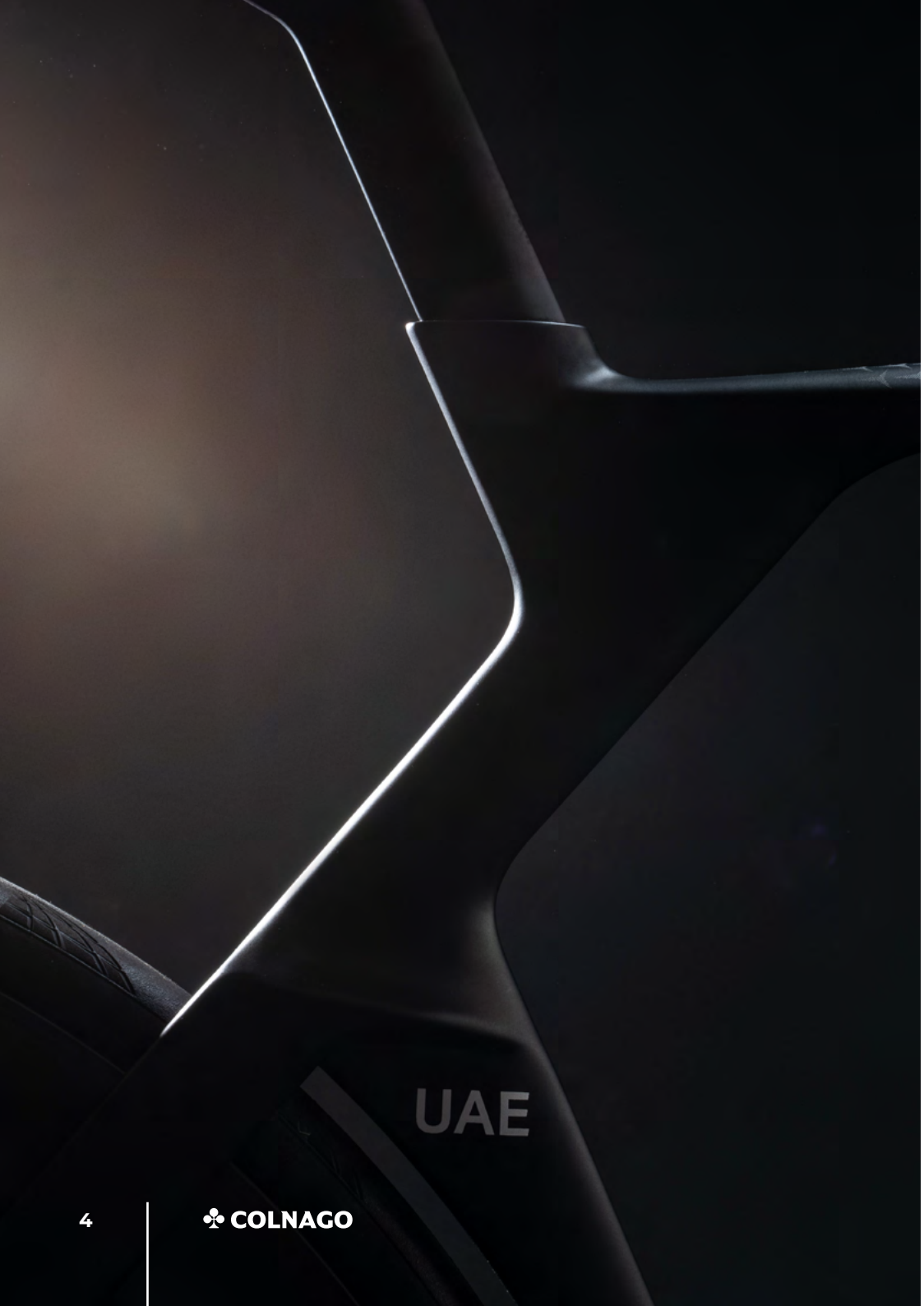
COLNAGO

Y1Rs
assembly support manual

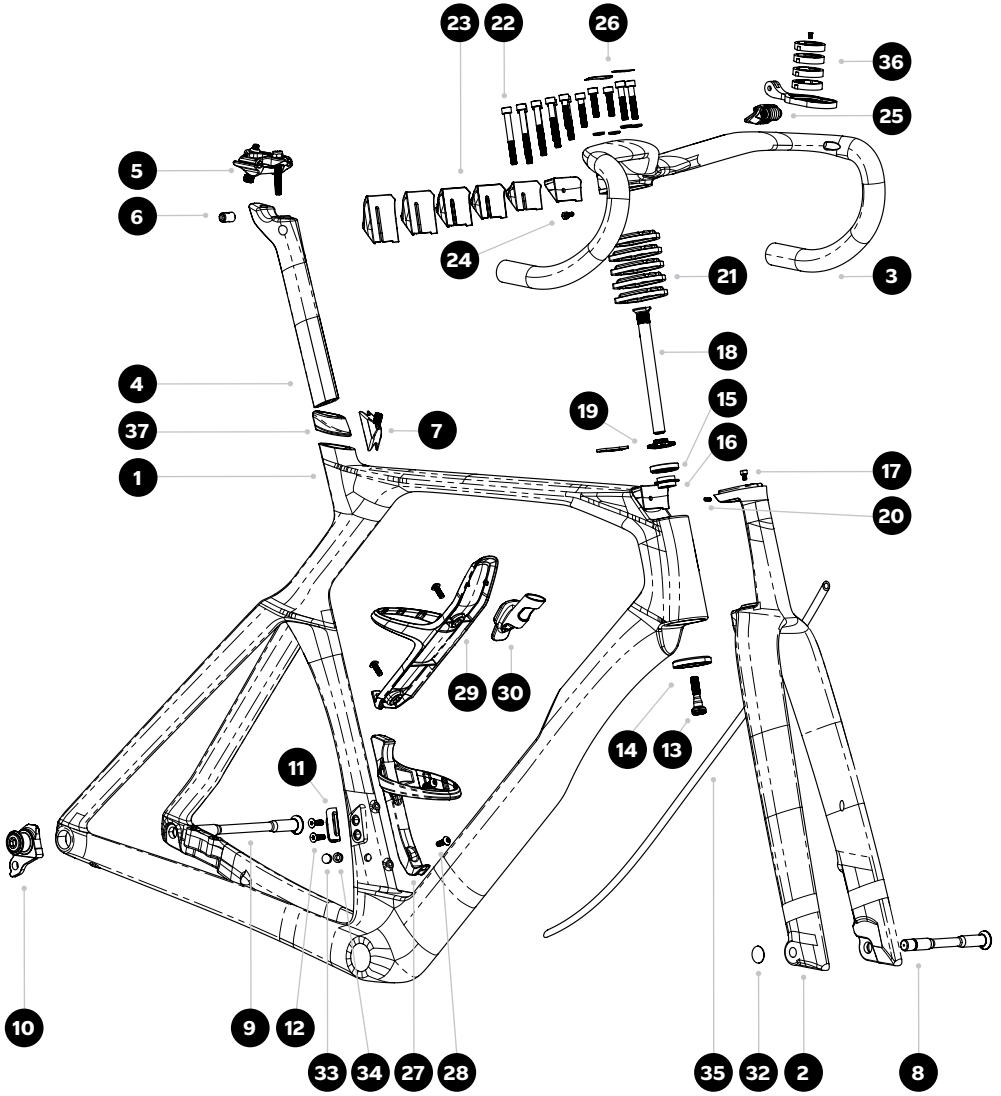
EN

Table of contents



General Information

This manual is a guideline for the official Colnago retailers in the assembly and adjustment of the Colnago Y1Rs 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.



Y1Rs frame-kit List of Parts

The numbers shown in the diagram do NOT correspond to the Colnago spare part purchase codes

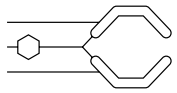
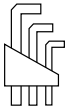
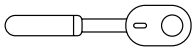
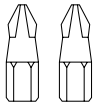
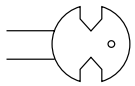
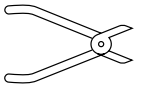
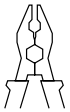
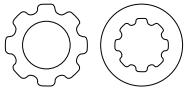
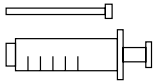
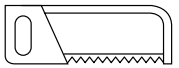
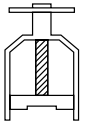
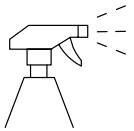
ITEM NO.	DESCRIPTION	QTY
1*	Y1Rs – Painted Frame	1
2*	Y1Rs - Painted Fork	1
3*	CCY1 Integrated Cockpit	1
4	Y1Rs Seatpost -15 mm offset	1
5	Colnago Seat Clamp kit – 2 bolts	1
6	Colnago Y1Rs Seatpost Nut	
7	Y1Rs Seatpost Clamp	1
8	Threaded Thru-Axle UDH Front 12 mm	1
9	Threaded Thru-Axle UDH Rear 12 mm	1
10	UDH Hanger	1
11	Front Derailleur hanger	1
12	M5x15 Flat head screw	2
13	Y1Rs Bottom Preload screw	1
14	CS - Lower Bearing 1-1/8; 31x40x7 SLT	1
15	CS - Upper Bearing 19x30x6.5 SLT	1
16	Y1Rs JP Steering block	1
17	M4x8 Socket head screw	1
18*	Y1Rs Preload Bolt	1
19	Y1Rs Preload Gear	1
20	M5x16 Headless screw	1
21	Y1Rs spacer - 5 mm	5
22	Handlebar Screw Kit M6	14 screws
23	Handlebar Rear Cap kit 0 - 25 mm	6 caps
24	M4x12 Hex head screw	1
25	Head unit support CCY1	1
26	Screw Sticker CCY1	1
27	Y1Rs Bottle Cage ST	1
28	M5x14 Socket head screw	4
29	Y1Rs Bottle Cage DT	1
30	Y1Rs Di2 battery support	1
31	Preload tightening tool	1
32	Colnago front axle Sticker	1
33	Non-drilled cap Di2	1
34	Drilled cap Di2	1
35	Foam hose cover 800 mm	1
36	Universal Arm Support Kit	1
37	Y1Rs Seatpost rubber grommet	1

* Size dependent

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 Y1Rs 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 
Hydraulic bleed kit 	Hacksaw (with carbon blades) 	Saw cutting guide 
High quality grease & carbon assembly compound for bikes 	Isopropyl alcohol 	

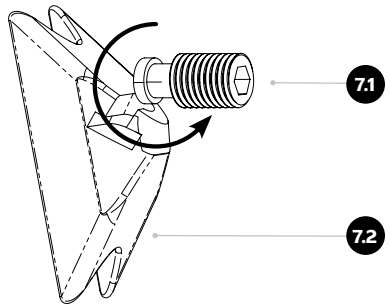
Seatpost installation

7.1	Y1Rs Seatpost clamp Custom M8 Headless screw **TORQUE 7 Nm**
7.2	Y1Rs Seatpost clamp Pushing block
4	Y1Rs Seatpost
37	Seatpost rubber grommet

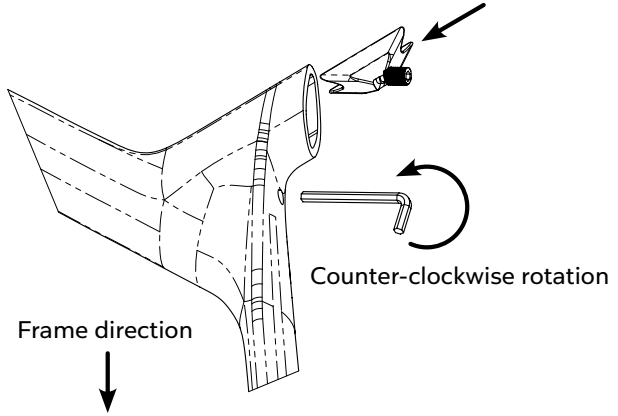
Step 1: Couple the Custom Headless Screw M8 with Y1Rs seatpost clamping block, inserting the flat end in the clamp and rotating it as shown in the picture.
Step 2: Keeping the frame in vertical position, in order to avoid the seatclamp to fall into the frame, gently insert the assembled seatpost clamp in the frame, centering the screw with its seat. It may be helpful to use a small allen key to facilitare the insertion of the seatpost clamp. Once the clamp is in seat, fix it to the frame by screwing counter-clock wise (unscrewing) the **Step 3:** After cutting the seatpost at a proper lenght using the dedicated tool, insert the seatpost into the frame and thight the M8 headless screw at the recommended torque (7 Nm). It may be necessary to screw for a few degree the seatpost clamp to facilitate the first seatpost insertion.

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.

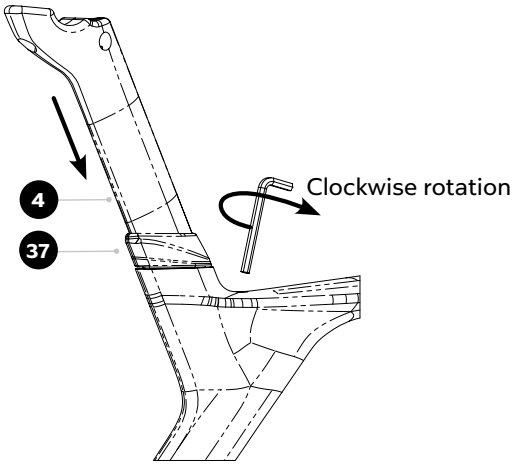
Step 1



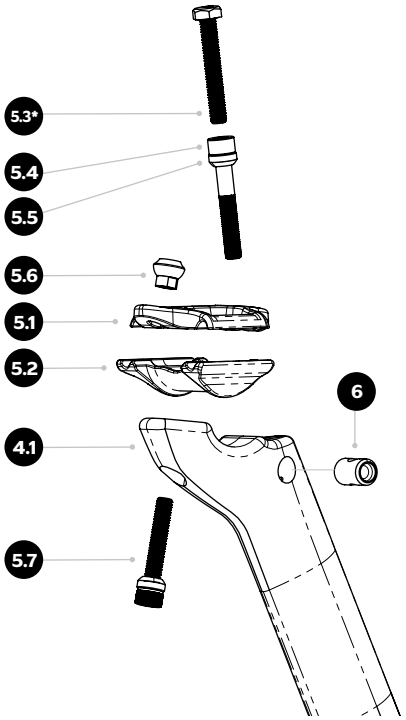
Step 2



Step 3



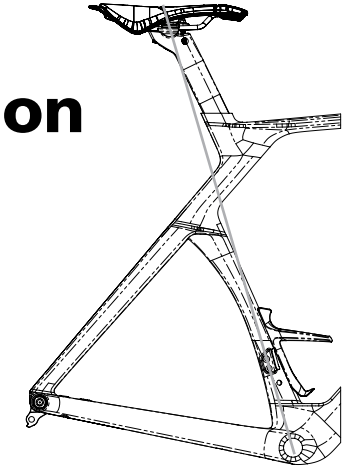
Saddle clamp installation



4	Y1Rs Seatpost
5.1	Saddle Clamp - Top
5.2	Saddle Clamp - Bottom
5.3*	M6x40 Hex Head Screw
5.4	M6x40 Socket Head Screw
5.5	Spherical Washer M6 - 2 pcs
5.6	M6 Custom Nut
5.7	M6x35 Socket Head Screw **TORQUE 8 Nm**
6	Y1RS Seatpost – M6 round nut

* 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

Seatpost cut recommendation

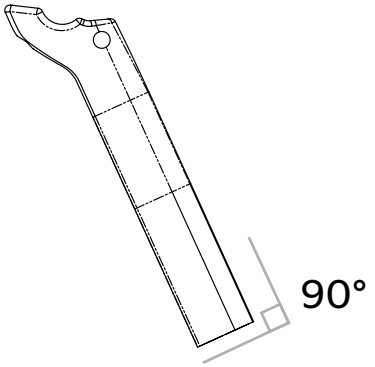


Step 1

Gently insert the uncut seatpost, complete with saddle and saddle clamp, into the seat tube all the way down to the bottom. Measure the saddle height from the bottom bracket (BB) or another reference point.

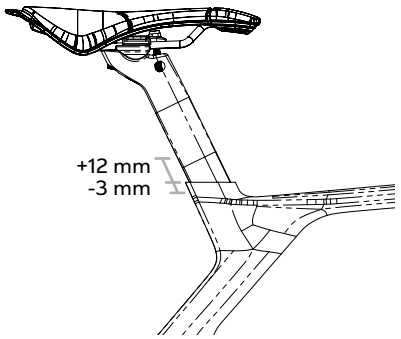
Step 2

Cut the seatpost at a 90° angle, removing only as much as needed to reach the desired saddle height. It is recommended to cut approximately 3 mm more.

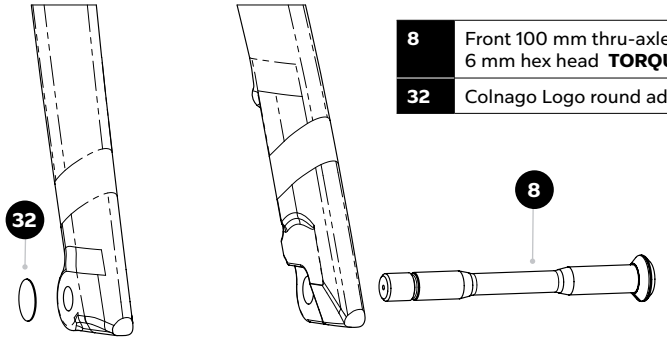


Step 3

Insert the seatpost into the seat tube and tighten it using the recommended torque. The total seatpost adjustment range is 15 mm. Therefore, if the seatpost has been cut as described in Step 2, the saddle can be raised by approximately 12 mm or lowered by 3 mm from the target height. If additional adjustment is needed, further trim the seatpost.



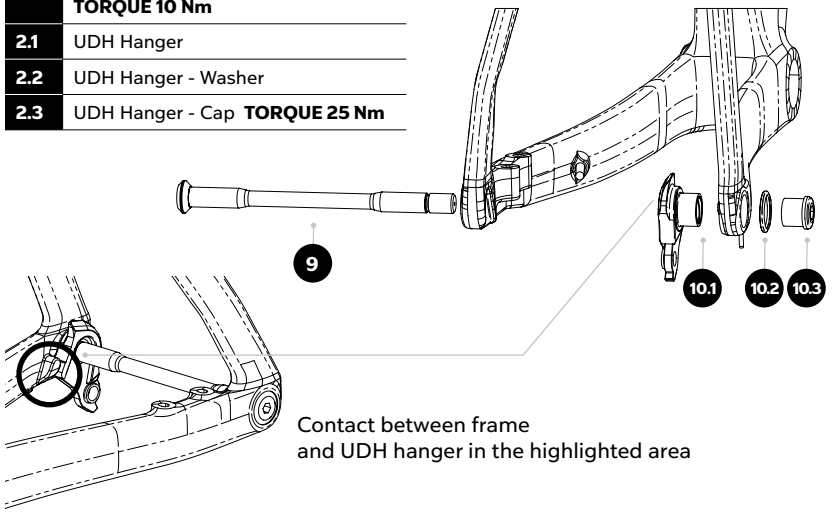
Front axle installation



8	Front 100 mm thru-axle 6 mm hex head **TORQUE 10 Nm**
32	Colnago Logo round adhesive sticker

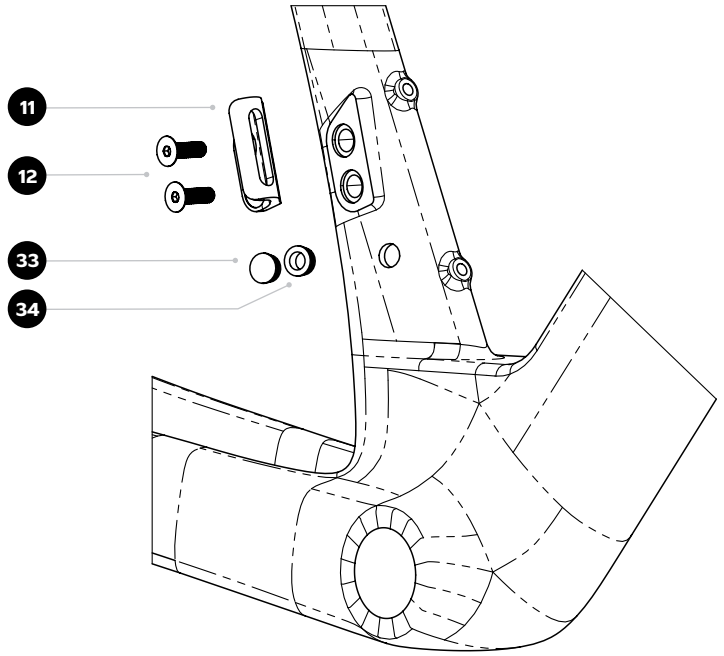
UDH - rear derailleur hanger installation

1	Thru-axle UDH – 6 mm hex head **TORQUE 10 Nm**
2.1	UDH Hanger
2.2	UDH Hanger - Washer
2.3	UDH Hanger - Cap **TORQUE 25 Nm**



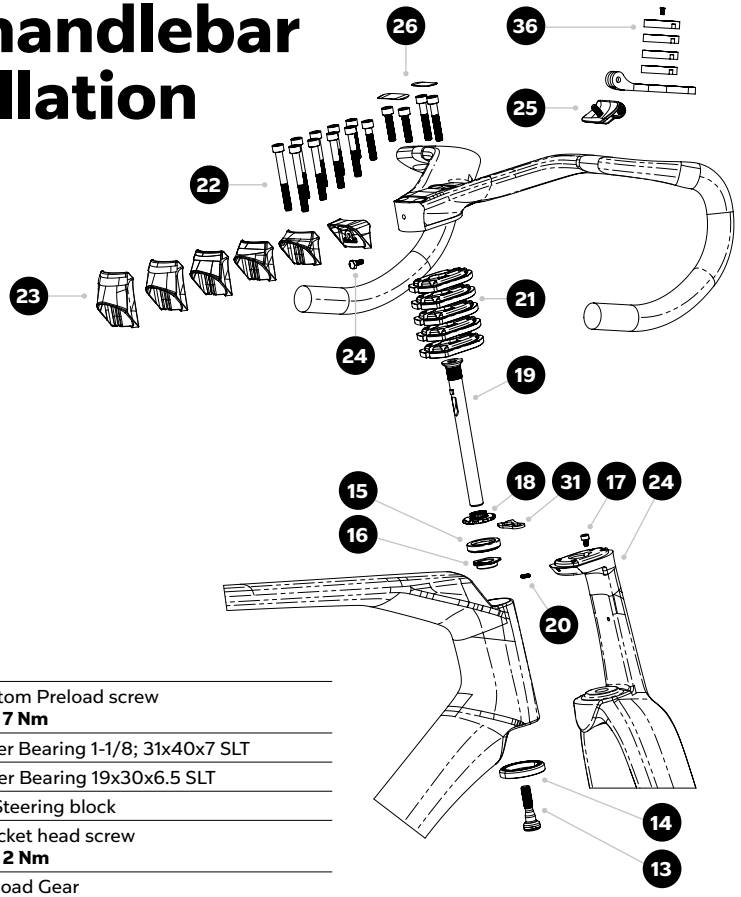
Contact between frame
and UDH hanger in the highlighted area

Front derailleur hanger installation



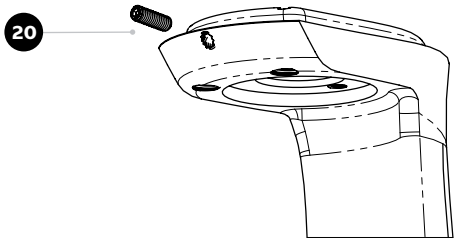
11	Front Derailleur Hanger
12	M5x15 Flat head screw **TORQUE 3 Nm**
33	Non-drilled cap Di2
34	Drilled cap Di2

Fork, headset and handlebar installation



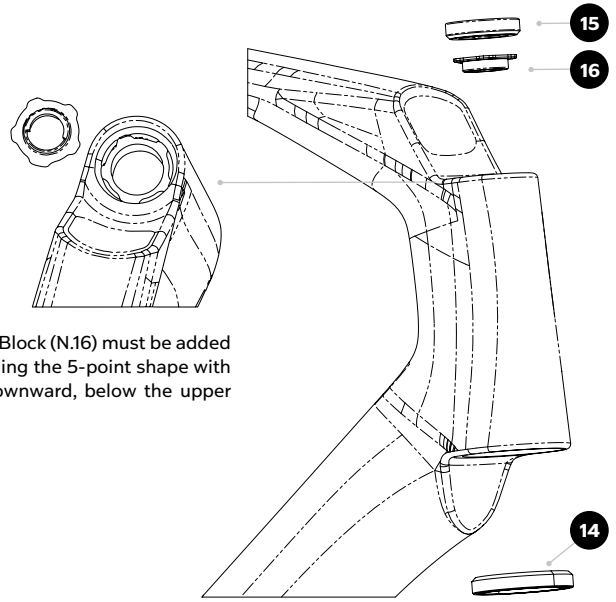
13	Y1Rs Bottom Preload screw **TORQUE 7 Nm**
14	CS - Lower Bearing 1-1/8; 31x40x7 SLT
15	CS - Upper Bearing 19x30x6.5 SLT
16	Y1Rs JP Steering block
17	M4x8 Socket head screw **TORQUE 2 Nm**
18	Y1Rs Preload Gear
19	Y1Rs – Top Preload bolt
20	M5x16 Headless screw
21	Y1Rs spacer - 5 mm
22	Handlebar Screw Kit M6
23	Handlebar Rear Cap kit 0 - 25 mm
24	M4x12 Hex head screw **TORQUE 2 Nm**
25	Head unit support CC.Y1
26	Screw Cap CC.Y1
31	Preload tightening tool
36	Universal Arm Support Kit

Step 1



Step 1: Before to assemble frame and fork, remove the M5X16 headless screw (N.20), if already fitted in the fork top plate.

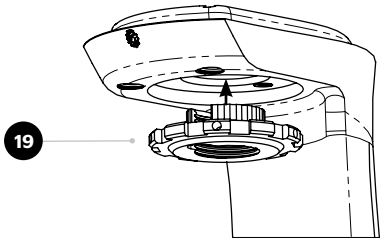
Step 2



NOTE: JP Steering Block (N.16) must be added into its seat, matching the 5-point shape with the lip pointing downward, below the upper bearing (N.15).

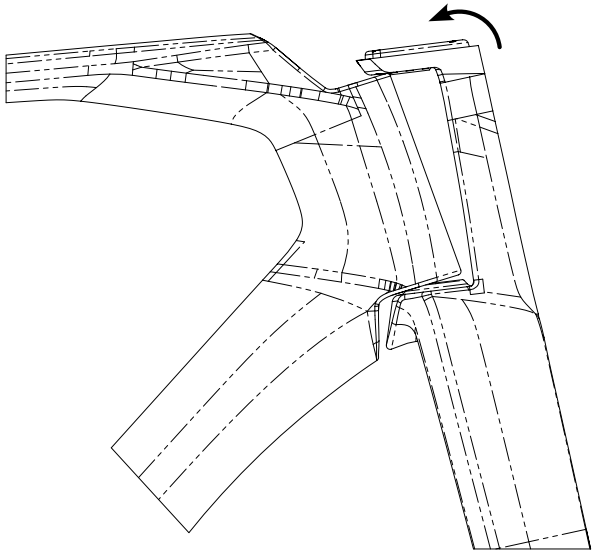
Step 2: Apply a thin layer of dedicated bearing grease in bearing seats and put in their seats in the Head Tube the JP steering block (N.16), upper (N.15) and lower (N.14) bearings, in this order, as shown in the picture.

Step 3



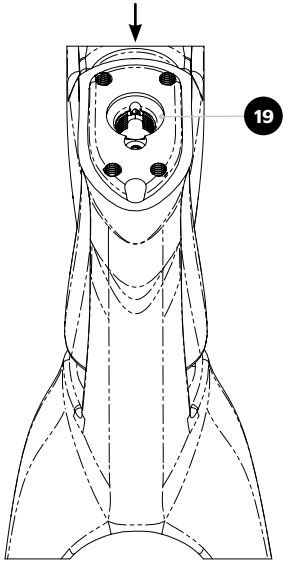
Step 3: Fit the preload gear (N.19) into its seat in the lower face of fork top plate.

Step 4



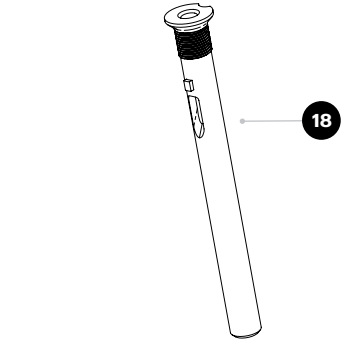
Step 4: Keeping the preload gear in its seat (Step 3) and all the frame head tube components in theirs (Step 2), insert the fork in the frame head tube as shown in the picture, starting from the lower part and applying a rotation around the lower bearing.

Step 5



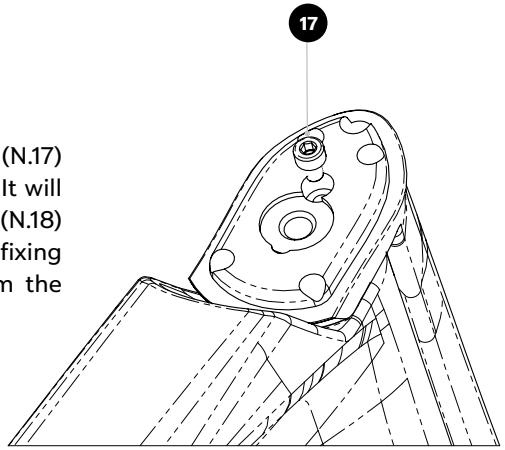
Step 5: Make sure the vertical groove of the preload gear (N.19) is pointing rearward, being aligned with the same vertical groove in fork top plate hole.

Step 6



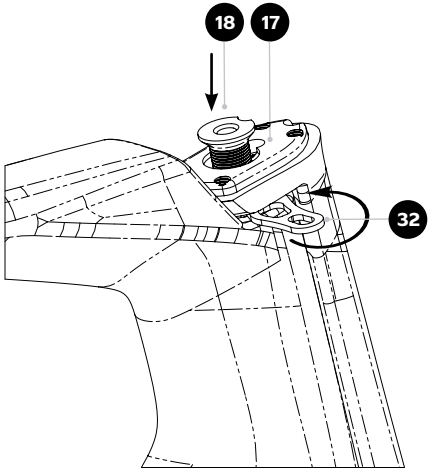
Step 6: Insert the preload bolt (N.18*), whose length depends on frame size, from the top. The dent and hole below the tread must pass throught the preload gear (N.19) groove and must point rearward.

Step 7



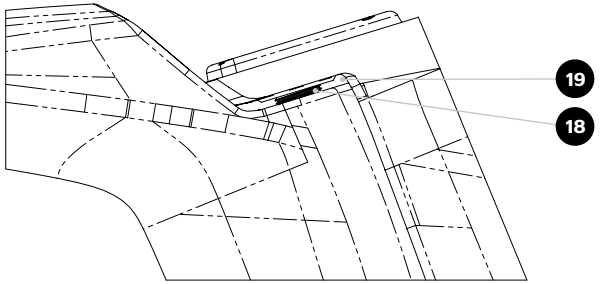
Step 7: Secure the M4x8 screw (N.17) in its seat in the fork top plate. It will match the shape of preload bolt (N.18) to prevent its rotation while fixing preload fixing screw (N.13) from the bottom of the fork crown.

Step 8



Step 8: Firmly holding the preload bolt (N.18) head and screw from the side the preload gear counterclock wise with the dedicated tool (N.32). The head of the preload bolt (N.18) will go down till it fits in its seat. The preload head matching the shape of the M4x8 screw (N.17) will prevent unwanted rotations of the bolt.

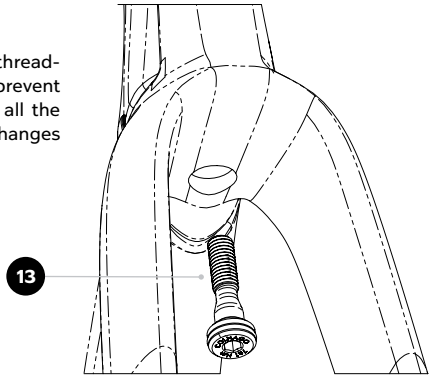
Step 9



Step 9: Once counterclock rotation is not possible anymore, the head of preload bolt (N.18)must be fully into the fork top plate and the preload gear (N.19) should be raised with respect to the frame from lateral view.

Step 10

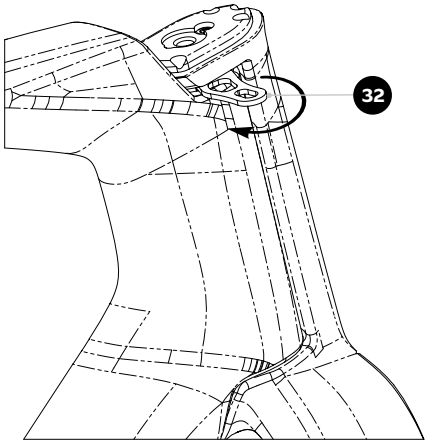
Preload fixing screw (N.13) features thread-locker and a rubber o-ring on its head to prevent unscrewing. This screw is the same for all the sizes, while preload bolt (N.18) length changes with sizes.



Step 10: Tight the lower preload fixing screw (N.13) up to 7 Nm.

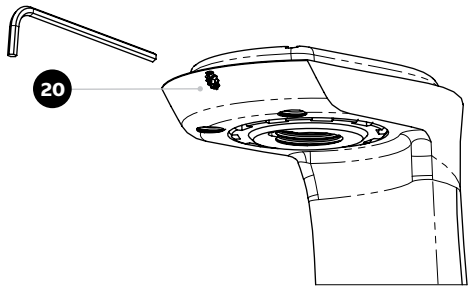
NOTE: once the preload fixing screw has been secured, the steering has to be still loose. It will be fixed applying the proper preload in Step 11

Step 11



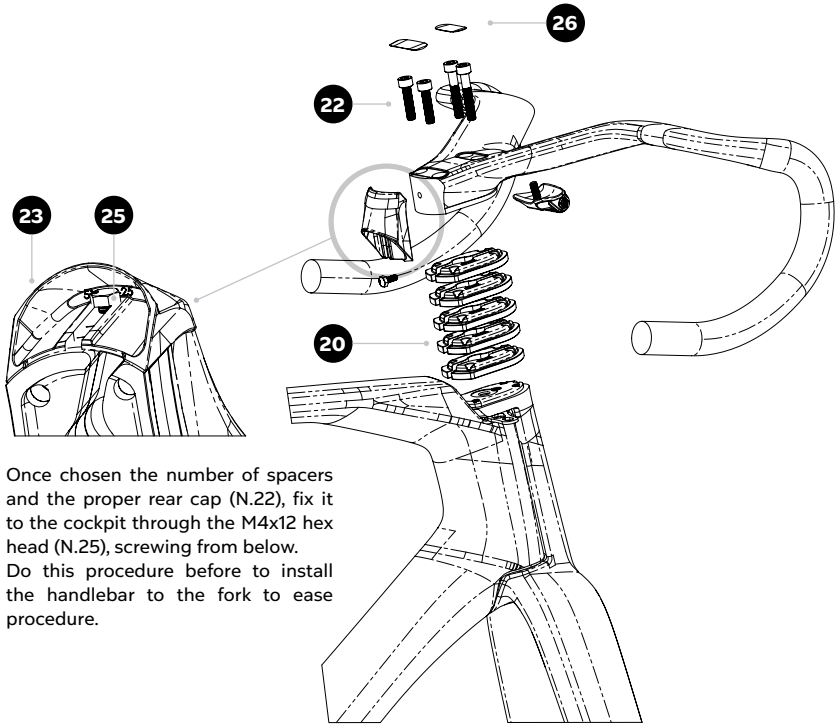
Step 11: Apply the required preload to the headset by screwing clockwise the preload ring (N.19) using the dedicated tool (N.32). After this Step, the fork must be completely fixed to the frame with steering rotation as the only possible movement. If some other movements are still possible or there is still play between fork and frame, carefully check that the installation procedure has been correctly carried out.

Step 12



Step 12: Fix the M5x16 headless screw (N.20) removed in Step 1 in the rear side of fork top plate till its point touches the preload gear, in order to prevent its unscrewing.

Handlebar installation



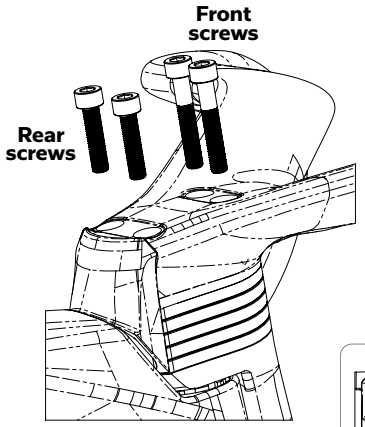
Once chosen the number of spacers and the proper rear cap (N.22), fix it to the cockpit through the M4x12 hex head (N.25), screwing from below.
Do this procedure before to install the handlebar to the fork to ease procedure.

After adding the desired number spacers (N.20) up to a maximum of 5, fix the handlebar (previously equipped with the custom rear cap according to the spacer height). Using 4 M6 screws **whose lengths depend on the number of spacers** (check 'Screws and cap choice' section), to fix the handlebar applying a torque of 6 Nm in each screw. Finally cover the screaw head with the dedicated caps (N.26)

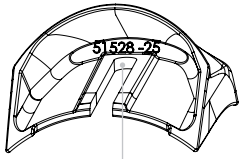
Handlebar installation

screws and cap choice

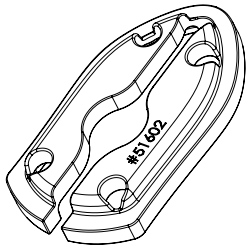
NOTE: Front screws 5 mm longer



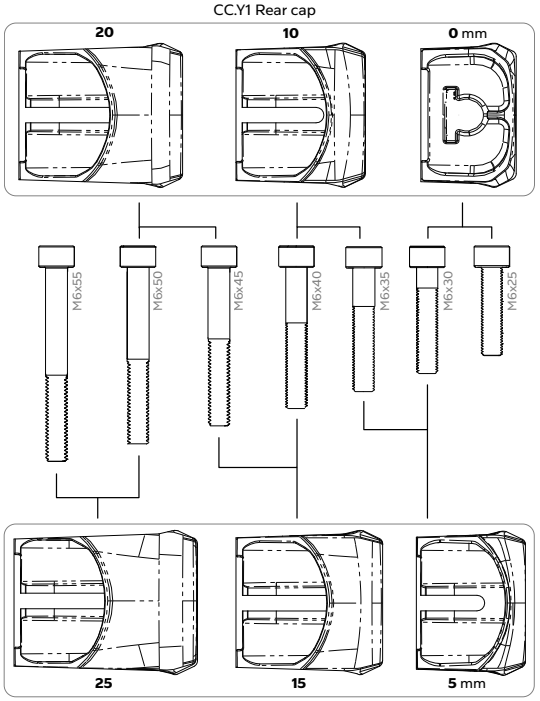
Ex. 5 mm spacer needs
M6x30 rear screws
and M6x35 front screws



Cap height is written
inside the cap

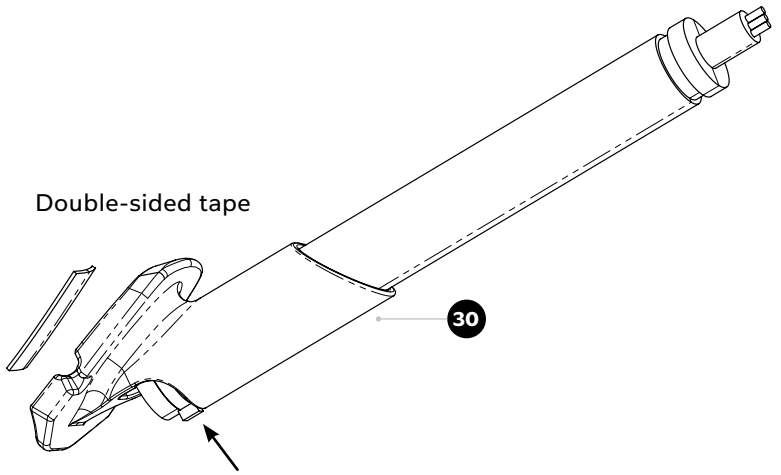


Spacer height 5 mm



Di2 Battery support assembly

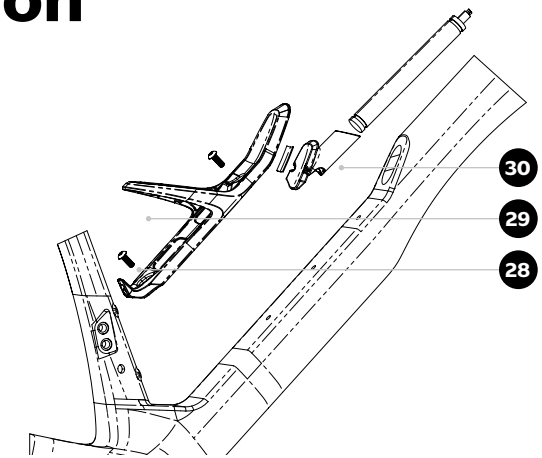
Double-sided tape



Insert the Di2 battery in the Di2 Battery Support (N.30). Use a thin zip tight to secure the battery using the rear battery groove, as shown by the red arrow. Apply double-sided tape as shown in the picture to fix the battery support to the bottlecage, once both of them are installed.

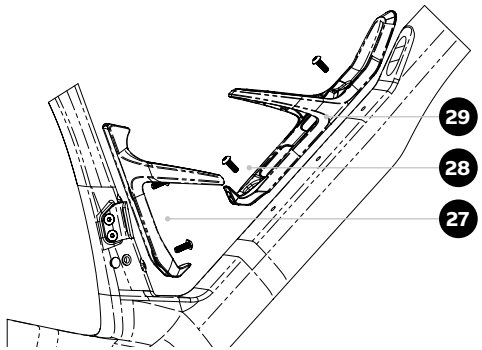
Y1Rs custom bottle cages installation

Step 1



In case of Shimano Di2 groupsets, insert the battery into the battery support (N.30) and fix with a zip-thight or similar. Then, fix the battery support to the DT Bottle cage (N.29) with the provides sticky tape. Connect Di2 cables already routed in the frame and insert the battery in the hole on the downtube and screw as shown in the picture.

Step 2



Fix the DT and ST custom bottle cages (N.29 and N.27) with the dedicated screws (N.28). In case of Di2 setup, follow Step 1 before. Colnago Y1Rs is compatible with conventional bottle cages; however, clearance and bottle handling depend also and the adopted brand and model and must be checked by the user.

Brake hose routing

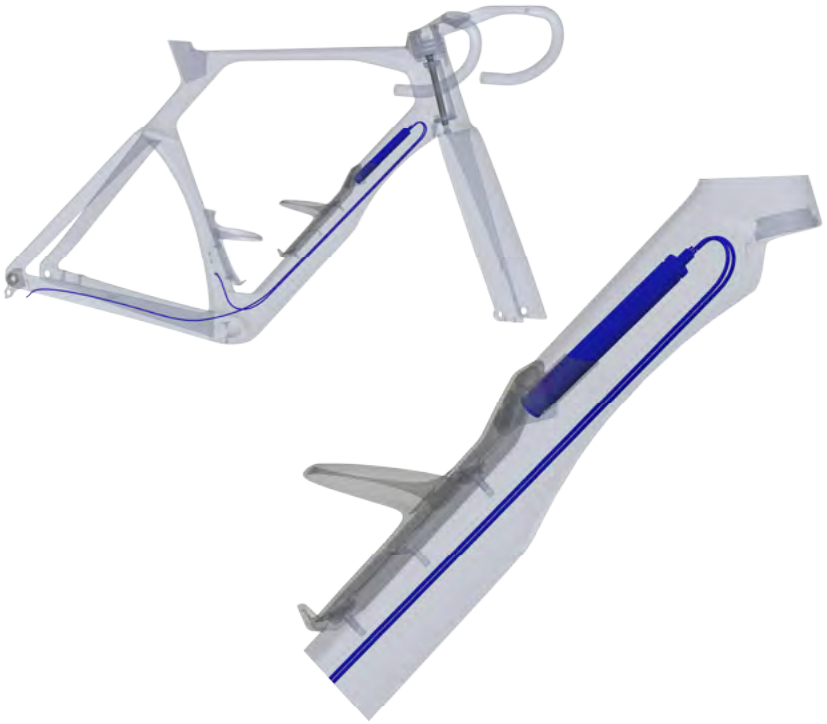
It is recommended that the rear hydraulic brake hose is installed before electric wires. These routing illustrations are intended as a supplement to the installation instructions only. For each specific brake system, please refer to the component manufacturer's service center or website for further information.

To avoid undesirble noises always install the rear brake hose foam, cut according to the frame size in order not to interfere with other subassemblies

Before to route the brake hoses it is recommendable to install the headset and fork following the Steps 1 and 2 in the dediceted section.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.

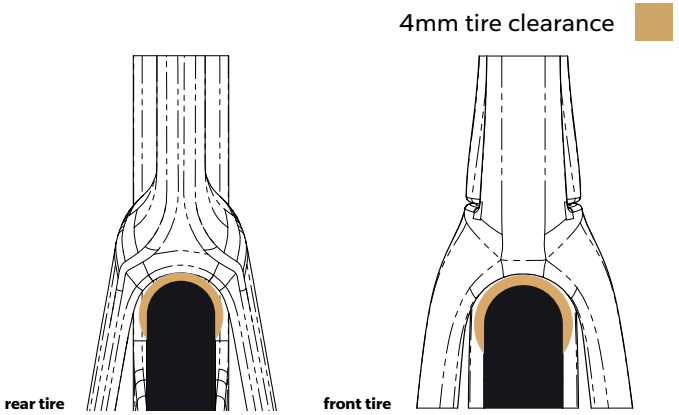


Run the Di2 wires from the front and rear derailleurs to the hole in the downtube, below the bottle cage. Connect the wires to the battery, already fixed to the bottle cage with the specific support, insert into the frame and fix the bottlecage following the steps in section ' Y1Rs Custom bottle cages installation'.

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 Y1Rs

Road Racing Bicycle – Specific for races and expert users

Intended surface: Colnago Y1Rs is designed for riding on a paved surface with both the tires always in contact with the ground.

Not Intended surfaces and uses: Colnago Y1Rs is not conceived for off-road, cyclocross, touring with additional extra bags of racks, or mounting child seats or trailers.

Colnago Y1Rs 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 Y1Rs
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 Y1Rs.
*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
CCY1 Top Screw torque	6 Nm	5 mm Allen Key
Lower Preload Screw	7 Nm	6 mm Allen Key
CCY1 Rear Cap Screw	2 Nm	7 mm Hex Key
Head Unit Support CC1Y	3 Nm	4 mm Allen key
Preload rotation blocking screw	2 Nm	3 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

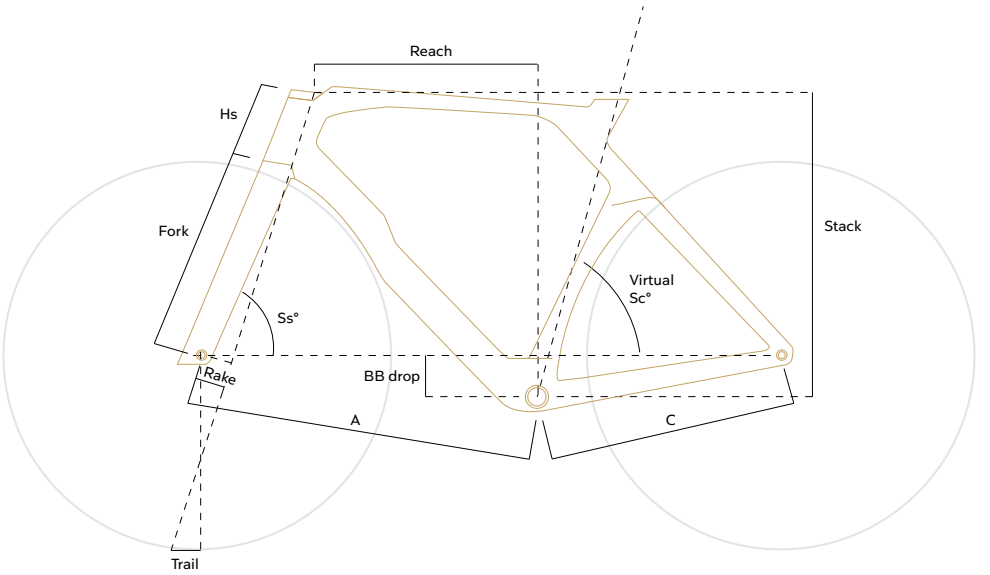
* The presented table includes toque setting indication provided by Colnago. It is always recommended to check indication provided by each specific component' manufaturer.

Technical Information

COLNAGO Y1Rs	
Model Year	2025
Frame Size	XS – S - M – L – XL
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
BB Type	BSA – 68 mm
Upper Headset Bearing Dimensions	30x19x6.5
Lower Headset Bearing Dimensions	1-1/8; 41x30x7;
Seatpost	Custom Y1Rs Seatpost – Available with offset -15mm and 0 mm.
Seatpost Clamp	Custom Y1Rs Seatpost pushing block
RD Hanger	Standard UDH
Front Axle Dimensions	12 X 100mm
Rear Axle Dimensions	12 X 142mm – UDH Thread
Maximum Tire Width (Actual)*	32 mm with 4 mm clearance

* 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.

Geometry Chart



Size	Ss°	Sc°	Reach	Stack	Fork lenght	Rake	Trail (28-622 tyre)	Hs	C	A	BB drop
XS	70.8	75	368	495	376.5	55	61	88.5	408	577.5	74
S	71.9	74.5	377	520	376.5	49.5	59.5	108.5	408	579.5	74
M	73	74	386	540	376.5	45	57.5	126.5	408	581	72
L	73.5	73.7	395	565	376.5	42.5	57	150.5	408	590	72
XL	73.5	73	404	590	376.5	42.5	57	176.5	408	606	72

V5_08_25

COLNAGO

colnago.com
info@colnago.com