TT1

EN

Assembly istructions

COLNAGO

Colnago TT1 Mounting support manual

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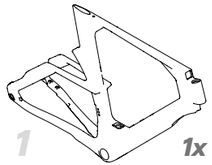
General Information

This manual is a guideline for the official Colnago retailers in the assembly and adjustment of the Colnago TT1 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.

TT1 Frame kit: List of parts

Macro parts



1 1x

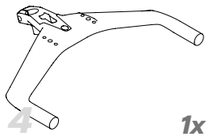
Framekit TT1 Disc

2 1x

Fork TT1 Disc

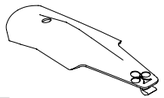
3 1x

Seatpost TT1Offset



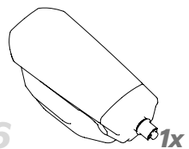
4 1x

Handlebar TT1



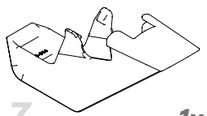
5 1x

Stem cover



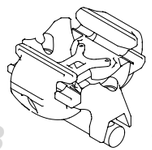
6 1x

Waterbottle TT1



7 1x

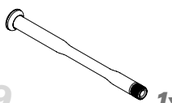
Bottlecage TT1



8 1x

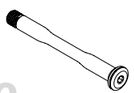
Seatpost head clamp

Threaded thru-axles:



9 1x

Rear. Ø 12 L 163 mm



10 1x

Front. Ø 12 L 121 mm

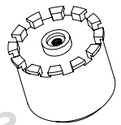
TT1 Frame kit: List of parts

Micro parts

Front zone:

11 2x

Bearing 19x30x6,5; 36x45°



12 1x

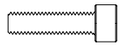
Custom headset preload nut TT1

13 1x

Custom hex drive drilled head M12x16

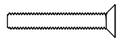
14 1x

Custom handlebar nut TT1 M5x10



15 1x

Hex drive socket head screw M5x20



16 1x

Hex drive flat head screw M3x20

Rear zone:

17 1x

Derailleur support TT1

18 2x

Hex drive flat head screw M5x16

19-20 2x

Drilled and non drilled cap Di2

21 1x

Rear hanger C series 2022 Disc BK

22 1x

Hex drive flat head screw M4x14

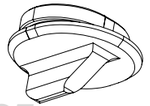
23 1x

Seatpost wedge clamp TT1 titanium

Central zone:

24 1x

Hex drive headless screw M8x16



25 1x

Shimano battery support TT1

26 1x

Elettr. interface cover TT1

27 2x

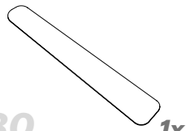
Hex drive flat head screw M3x8

28 2x

Hex drive socket head screw M5x12

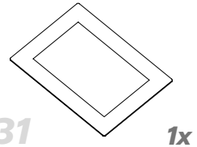
29 1x

Foam hose cover 800mm



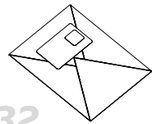
30 1x

Chainguard sticker transparent



31 1x

Grease sample



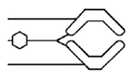
32 1x

Tag Kit NFC

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 TT1 consumer/purchaser reading this manual, we suggest you consult your authorized Colnago retailer before undertaking any procedure in this manual.



Professional cycle work stand

Allen hex key: 2,2.5,3,4,5,6,8,10,12mm

2.5-15Nm Torque wrenches tool

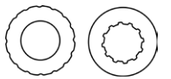
Open ended wrenches; 7-8-10-17mm

Phillips and slot-head screwdriver

Pedal wrench

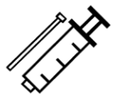
Cable cutters

Pliers



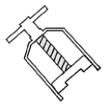
Brake rotor lockring tools (inner and outer)

Di 2 wire tool - Shimano



Hydraulic bleed kit

Hacksaw (with carbon blades)



Saw cutting guide

High quality grease & carbon assembly compound for bikes

Isopropyl alcohol

Framekit Preparation

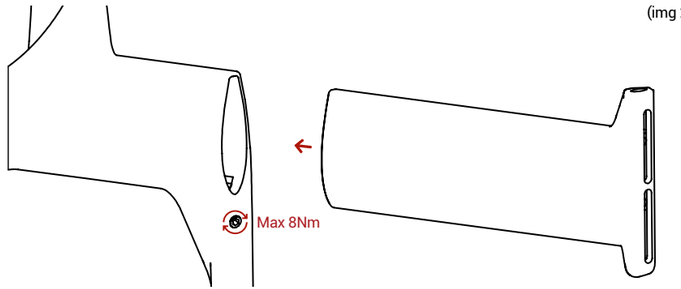
Seatpost installation

1 Apply carbon compound both to the inner face of the seat tube and to the seatpost **(N.3).**

2 Gently hold the frame with the top tube in vertical position and the headset pointing to the floor.

(img 1)

(img 2)



3 Lay the Titanium Seatpost wedge **(N.23)** in its seat in the seat tube and screw a few threads of the M8x16 endless screw **(N.24)**. (img 1)

4 Insert the seatpost in the top tube.

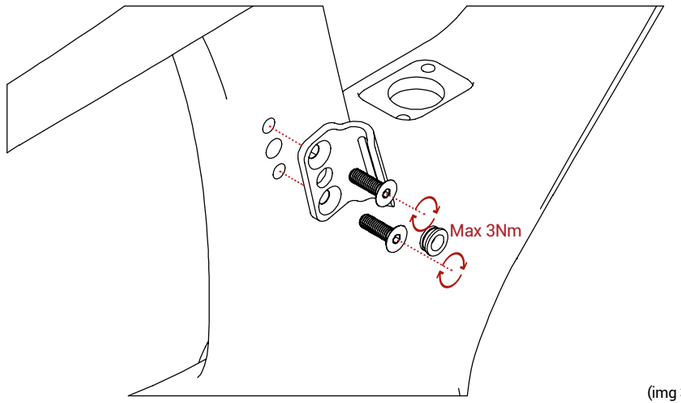
5 Adjust height and torque to ***8 Nm*** maximum. (img 2)

Note: Hold the frame and bicycle through a secured seatpost only. Clamping the top tube may cause damage and void the frame warranty.

Front Derailleur Hanger installation

1 Fix the front derailleur support TT1 **(N.17)** with screws M5x16 **(N.18)** torqued to **3 Nm.**

2 Insert the required rubber cap in the hole in between the two screws **(N.19 or N.20),** according to the type of front derailleur (wired or wireless).



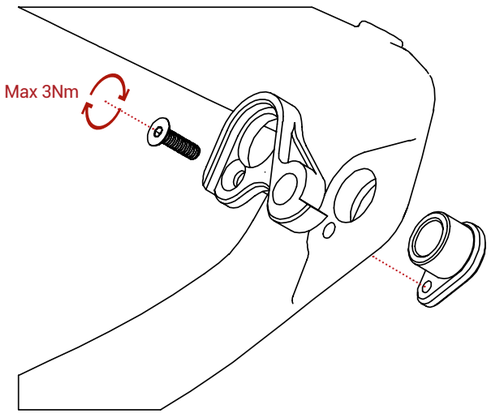
(img 3)

Rear Derailleur Hanger installation

1 Put the two parts constituting the Rear Hanger C Series 2022 Disc BK kit **(N.21)** in their seats in the rear dropout, matching the shapes.

2 Screw the two parts together using M4x14 screw **(N.22)** applying a mild torque **< 3 Nm.**

3 Lightly grease the inner threaded interface with the thru-axle.



(img 4)

Fork and basebar Installation

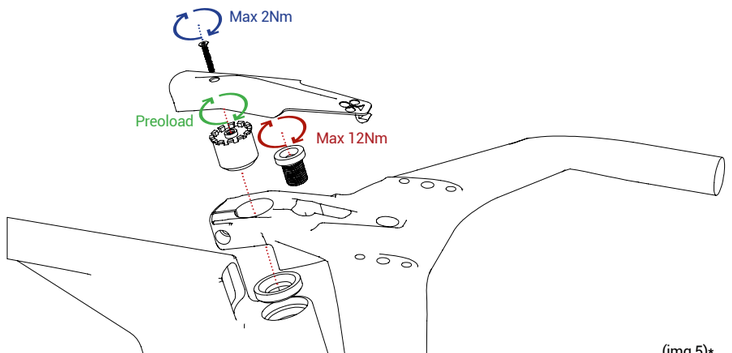
Before assembling the parts, check all the required components and make sure there are no sharp or rough edges on any surfaces, which could cut or create damage. If any rough edges are detected, repair the components itself (sharp edges removed) or replace it.

1 Lightly grease bearings and any threads.

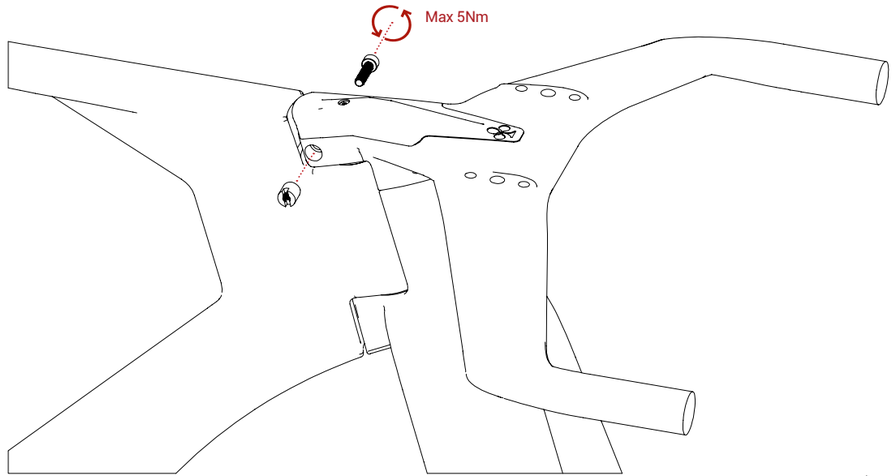
2 Insert upper and lower headset bearings into the frame **(N.11)** in their seats in the head tube.

3 Insert the steering tube of fork into the head tube, through the lower and upper bearings.

4 Insert the basebar into the steering tube matching the shape of the fork front plate.



(img 5)*



(img 6)*

5 Screw the drilled screw M12x16 **(N.13)** in the fork front plate hole. Recommended torque **12 Nm.** Later, the front brake hose should run inside the hole in the center of this screw.

6 Screw the Custom preload nut **(N.12)** till having smooth steering action without any play, using a standard Shimano cassette wrench tool.

7 Fix the basebar to the steering tube with the nut M5x10 Nut **(N.14)** from the drive side and the screw M5x20 **(N.15)** from the non-drive side. Recommended torque **5 Nm.**

8 After completing the mounting of the basebar and the cable routing, lay the Stem cover **(N.5)** on the stem itself, matching the cover front rib with the hole in the basebar, and fix it with screw M3x20 **(N.16).** Recommended torque max **2 Nm.**

NOTE: Always respect the recommended tightening torque on screws, nuts, bolts, and fasteners. Too low torques may lead to unexpected disassembly of components. Too high torques may lead to thread stripping, deformation and breaking of components. Both situations can cause subassembly failure with consequential losing of vehicle control and fall.

* The presented pictures are for assembly reference only. During complete assembly, hoses and electric cables will be present. Colnago basebar system is compatible with different dual-column layout extension systems. For the mounting and cable routing of the extension and groupset, follow the instructions provided by specific manufacturers.

Brake hose routing

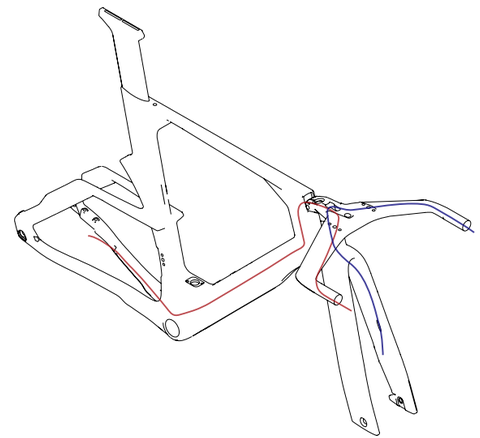
It is recommended that the rear hydraulic brake hose is installed before electric wires. These routing illustrations are intended as a supplement to the installation instructions only. For each specific brake system, please refer to the component manufacturer's service center or website for further information.

1 Route the rear brake hose from chainstay up to the front end of the top tube, passing through the bottom bracket area.

2 Once the hose is inside the frame, starting from the headset, slightly wet the inner face of the foam hose cover **(N.29)** with some alcohol and slide it around the rear brake hose.

3 Route the front brake hose from the top of the fork up through the fork front plate, passing through the hole in the screw **N.13.**

(img 7)



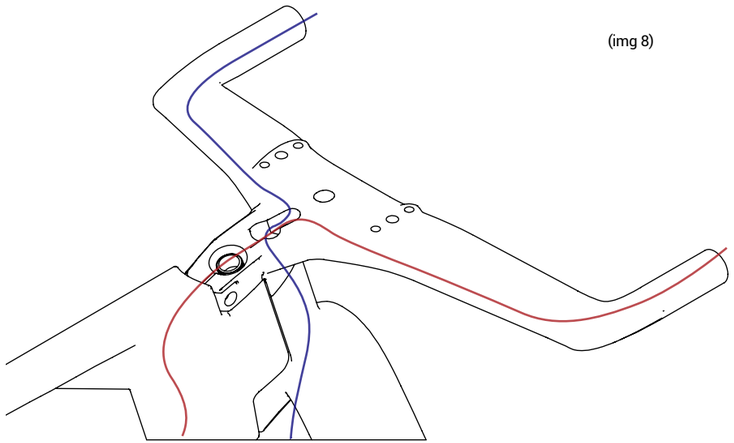
4 Once the hoses are inside the frame, fork and basebar, run the electric wires according to the instruction in the section 'Electric wire routing'.

5 Following the specific manufacturer instructions, connect wires and hoses to the levers and install them on the basebar.

6 Adjust the hose lengths cutting the exceeding parts from the caliper ends.

7 Complete the brake mounting and adjustment following the manufacturer instructions.

(img 8)



Electric 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.

(img 9)

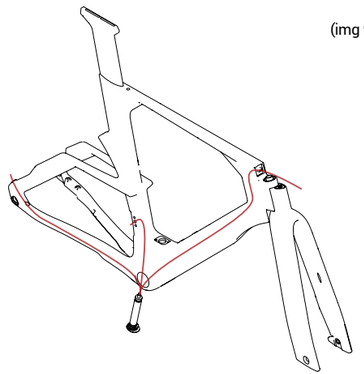


Figure 9: Shimano Di2 frame wire routing

(img 10)

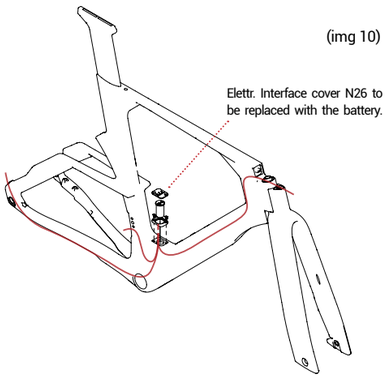


Figure 10: Campagnolo frame wire routing

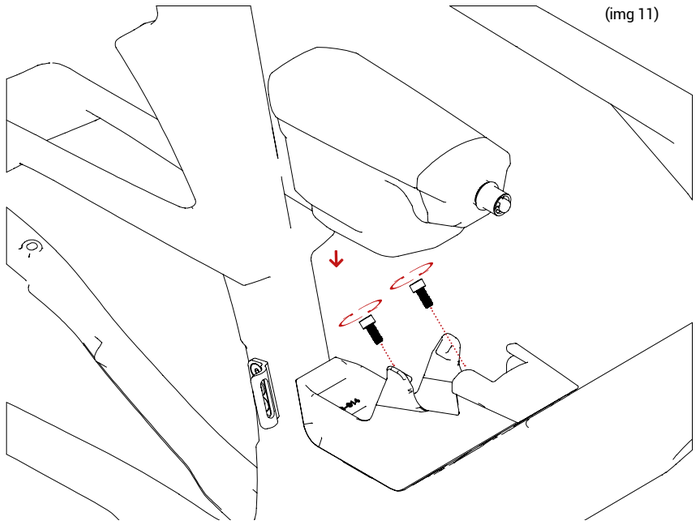
TT1 Aero water bottle installation

1 Put the custom Aero bottle cage in its seat in the frame **(N.7).**

2 Fix it to the frame through screws M5x12 **(N.28).** Recommended torque **3 Nm.**

3 Insert and remove the dedicated TT1 water bottle **(N.6)** from the top.

(img 11)



Seatpost cut

Frame insertion: Minimum 6.5 cm - Maximum 14 cm.

Not respecting this requirement may result in damage to the frame not covered by warranty policy, and/or serious injury to rider

1 Measure and mark the cut-off location on the seatpost, with a greased pencil or with paper tape.

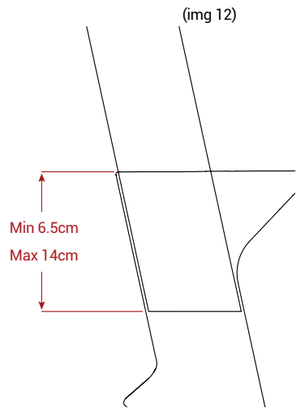
2 Insert the TT1 seatpost in specific saw guide so that the cut-off line that can be clearly seen.

3 Using a blade designed specifically for cutting carbon composite materials (or a fine-tooth blade with greater than 32 teeth per inch); cut the seatpost along the cut-off line.

4 Using fine grit sandpaper, carefully sand the cut end to remove any fraying or burring.

5 Proceed with the Seatpost assembly phase, as described in the dedicated section.

(img 12)



Seatpost head clamp mounting

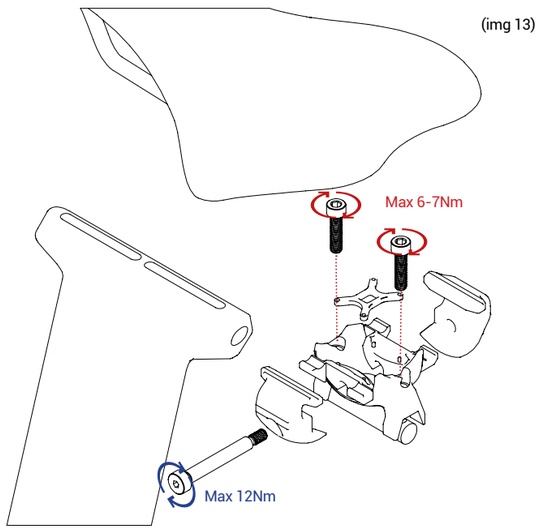
1 Insert the cylindrical bracket from the head clamp subassembly **(N.8)** in its seat in the seatpost **(N.3).**

2 Fix the saddle mount to the bracket using lightly greased M5 screws of the subassembly **(N.8).** Recommended torque **6-7 Nm.**

3 Install lightly greased M6 Rail Binder Bolt of the subassembly **(N.8).**

4 Adjust the saddle position and clamp the saddle rail between the Rail Binder. Recommended torque **12 Nm.**

(img 13)



Thru-axle installation

1 Lightly grease the axle and the axle thread.

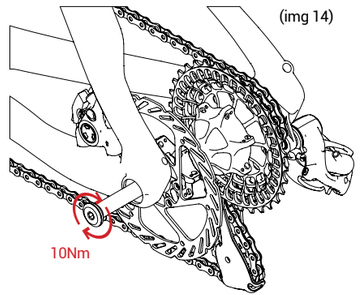
2 Insert the axle through the drop out and the wheel hub (**N.9** Rear axle, **N.10** Front axle), aligning the threaded end of the axle with the threaded insert.

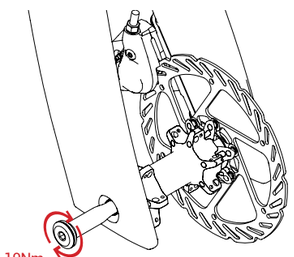
3 Once aligned and engaged, thread the axle (clockwise) into the threaded component of the insert until the axle is secured tightly. Recommended torque both front and rear axle **10 Nm.**

NOTE: Please follow the instructions from the specific component manufacturer to set and adjust brakes or rear derailleur.

NOTE: An incorrect assembly of the thru-axle may result in an accident with potential serious injury or death to the rider. Follow the procedure after any wheel dismounting

(img 14)

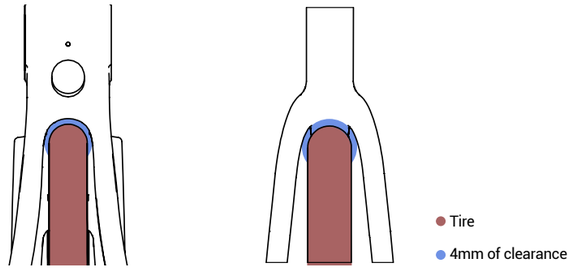




Tire clearance

Colnago frames and forks are designed to comply with ISO 4210-2 standard for tire clearance. For the road racing 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.Gently hold the frame with the top tube in vertical position and the headset pointing to the floor.

(img 15)



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 TT1

Road Racing Bicycle – Time Trial and Triathlon application.

Intended surface: Colnago TT1 is designed for riding on a paved surface with both the tires always in contact with the ground.

Not Intended surfaces and uses: Colnago TT1 is not conceived for off-road, cyclocross, touring with additional extra bags of racks, or mounting child seats or trailers.

Colnago TT1 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 rather extreme and 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 TT1 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 TT1.

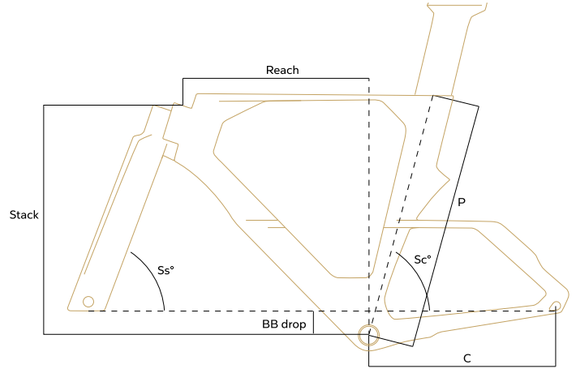
*Maximum admissible mass is the sum of the bicycle with all its components (groupset, cockpit, wheels, etc.), plus the rider and any luggage or accessory (head unit, filled bottles, storage mounts, etc.).

Colnago TT1 Technical Information

COLNAGO TT1	
Model year	2023
Frame size	S - M - L
Brake Mount Type	Flat Mount disc rear, Post Mount front
Chainstay Height (Flat Mount)	20mm
Wheel Size	700c
BB Type	BSA 68mm
Upper Headset Bearing Dimensions	19x30x6,5; 36x45°
Lower Headset Bearing Dimensions	19x30x6,5; 36x45°
Seatpost	Colnago TT1 Custom
Seatpost Clamp	Colnago TT1 Custom wedge + M8x16 Headless screw
RD Hanger	Colnago TT1 Custom
Front Axle Dimensions	12 X 100mm
Rear Axle Dimensions	12 X 142mm
Maximum Tire Width (Actual)*	28 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.

Colnago TT1 Geometry Chart



TT1							
Size	**P**	**Sc°**	**C**	**Ss°**	**BBdrop**	**Stack**	**Reach**
S	508	77	400	72	70	471,73	396,55
M	528	77	400	72	70	490,75	406,55
L	528	77	400	72	70	490,75	426,55

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