

TUSCIA USER MANUAL

This manual is printed based on ISO 4210: 2023 regulation. This product is tested of ISO 4210-2: 2023 Safety requirements for bicycles(racing), ISO 4210-6: 2023 Frame and fork test methods(racing)

TUSCIA

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1. Product Introduction

This manual contains important information on safety, performance, and inspection. It must be read and kept for reference after purchasing and beginning to ride a bicycle. This manual is specifically for the TUSCIA model from ACOL, and the "User Product Manual" should also be reviewed. If the User Manual or Product Manual is unavailable, you may download it from acol.bike.



Warning!

This symbol, accompanied by the word "WARNING," indicates a situation that could result in death or serious injury if the instructions are not followed. Bicycle accidents often lead to serious injury or death, so please exercise caution. This warning phrase is not repeated throughout the manual.



Caution!

This symbol, combined with the word "CAUTION," alerts you to a risk of minor or moderate injury if instructions are not followed or if a hazardous action is taken. Failure to follow instructions may result in serious damage to your bicycle or void warranty coverage.





This mark requires the application of high quality grease or threadlocker to the area.

1.1. Warranty Repair

Check the manual provided with your bike and visit www.acol.bike/warranty for the latest warranty guidelines.

1.2. Aseembly

This manual does not contain information on assembly, usage, or maintenance. For assistance with these topics, please contact your local ACOL dealer.

When performing assembly or maintenance, use a repair stand. Attach the stand to the seatpost, not the frame, to avoid potential damage. If the repair stand is attached to the frame, it may cause damage to the frame.

Please note that the components described in this manual are subject to change.



Warning!

TUSCIA bicycles require proper knowledge and skills for assembly. Be sure to have the bicycle assembled and inspected by an ACOL dealer before riding.



Warning!

The components of the TUSCIA bike are manufactured specifically for TUSCIA. Be sure to use genuine components. Using non-genuine parts may lead to serious issues, including damage to the parts and accidents. TUSCIA-specific components should not be used on other bicycles, even if they appear compatible. The customer is responsible for any problems arising from the use of non-genuine or misused components.

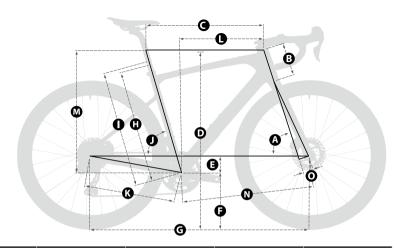


Warning!

Do not modify any part of the bicycle, including the frame. Actions such as grinding, drilling, or installing incompatible parts may cause accidents, resulting in serious injury or death.

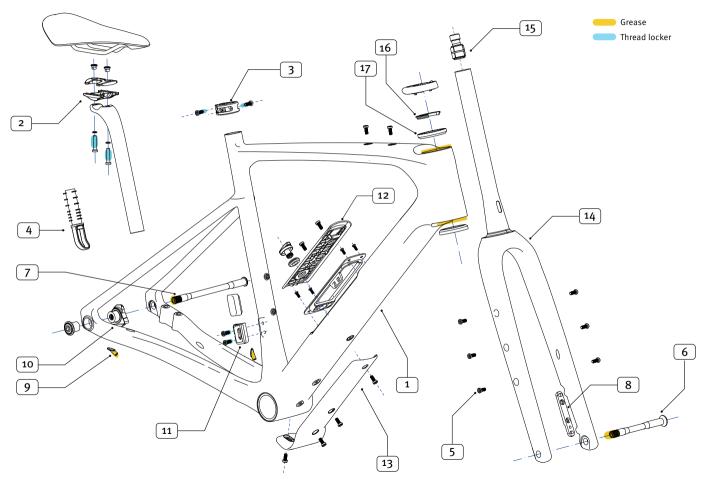
2. Frame Geometry

TUSCIA



	XS	S	M	L	XL	XXL
A. Head tube Angle	70.5	72	72.5	73	72.3	72.5
B. Head Tube Length	92	110	127	147	167	191
C. Top Tube Length (Horizontal)	515	542	553	571	586	600
D. Stand over Height	741	763	782	805	832	857
E. Bottom Bracket Drop	75	75	75	75	75	75
F. Bottom Bracket Height	278	278	278	278	278	278
G. Wheel base	1009	1018	1025	1034	1046	1058
H. Seat Tube Length (B-B Center to Center)	611	635	455	484	516	544
I. Seat Tube Length (B-B Center to Top)	448	472	491	520	550	580
J. Seat Tube Angle	75.5	74	74	73.5	73.5	73.5
K. Chain Stay Length	425	425	425	425	425	425
L. Reach	381	388	394	401	409	416
M. Stack	518	537	555	576	596	620
N. Front-Center	595	596	611	620	632	645
O. Fork Offset	50	50	50	50	50	50

3. Bicycle Specification



Frame components

	•	TOOL SIZE	TORQUE(Nm)
1	Frame	-	-
2	Seatpost	5mm hex wrench	7Nm
3	Seatpost Clamp	4mm hex wrench	6Nm
4	Dia Battery Mount	-	-
5	Water Bottle Cage Bolts	4mm hex wrench	4Nm
6	Front Axle (12mm x 100mm)	6mm hex wrench	12Nm
7	Rear Axle (12mm x 142mm)	6mm hex wrench	12Nm
8	Fork Brake Flat Mount Adapter	+	-
9	Dia Rear Derailleur Grommet	-	-
10	UDH (Universal Derailieur Hanger)	+	-
11	Front Derailleur Hanger / Cover	3mm hex wrench	5Nm
12	Storage Cover	4mm hex wrench	4Nm
13	Downtube Protect Cover	4mm hex wrench	4Nm
14	Fork	-	-
15	Expander Plug	6mm hex wrench	9Nm
16	Compression Ring / C-Ring	-	-
17	Upper & Lower Headset Bearings (51.8mm OD x 40.0mm ID x 8mm X 45°)	-	



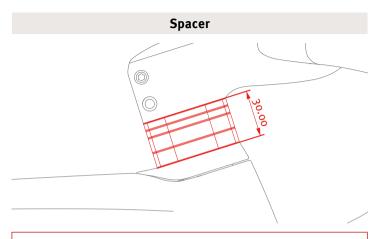
Warning!

Be sure to tighten all parts and components to the recommended torque. Overtightening can damage the shape or integrity of the hardware or components. If not tightened sufficiently, parts may come loose or detach. In both cases, there is a risk of damage to the bike and a serious accident for the rider.



Warning!

Thread locker must be applied to fasteners to prevent them from loosening. In case of reuse, the screw fixer must be cleaned and then reapplied.



Warning!



Make sure the headset spacer does not exceed 30 mm above or below the stem. If the spacer height exceeds 30 mm, the steerer tube may become damaged and break, potentially leading to a collision and causing injury.

Component Compatibility

Component	Compatible Size	
Upper Headset Bearing	51.8mm OD x 40.0mm ID x 8mm X 45°	
Lower Headset Bearing	51.8mm OD x 40.0mm ID x 8mm X 45°	
Front Thru-Axle	12 X 100	
Rear Thru-Axle	12 X 142	
Minimum/Maximum Chainring	30-48t	
Minimum/Maximum Front Rotor	140mm / 160mm	
Minimum/Maximum Rear Rotor	140mm / 160mm	
Maximum Tire	45C	

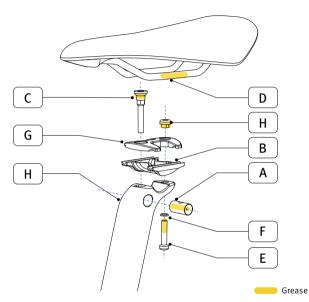
There are many types and sizes of bicycle tires. A minimum gap of 6mm is required between the frame, fork and tires.

To choose the right tire, please visit a ACOL dealer or specialty bicycle dealer for consultation and recommendation for a tire that suits your riding purpose.



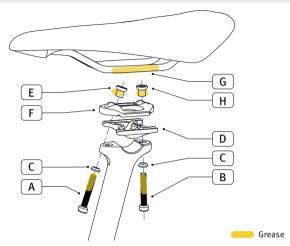
4. Seatpost

Installing a 25mm Offset Seatpost



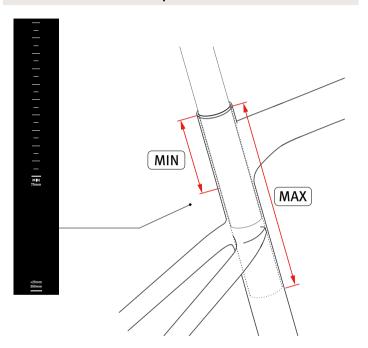
- 1. Attach the lower cradle (A).
- ${\it 2. Apply grease to the saddle \, rails \, (B), \, place \, them \, on \, the \, lower \, cradle, \, and \, attach \, the \, upper \, cradle \, (C).}$
- 3. Insert nuts (D) into the upper cradle (C).
- 4. After applying grease, install the M6 bolts (E, F) with washers (G) at the front and back of the cradle.
- 5. Adjust the front and rear position of the saddle, then set the angle by tightening the M6 bolts (E, F).
- 6. Tighten the bolts (E, F) to 7 Nm with a torque wrench and check the saddle angle. If angle adjustment is necessary, alternate loosening and tightening bolts (E) and (F) to achieve the desired saddle angle.

Installing a Zero, 15mm Offset Seatpost



- After applying grease, assemble the M6 bolts (A, B) with the washer (C) and attach them to the seat post.
- 2. Install the lower cradle (D) so that its elongated section faces the rear.
- 3. Apply grease and attach the M6 nut (E) to the upper cradle (F) with its protruding surface facing forward, then combine it with the front bolt (A).
- 4. Apply grease to the saddle rail (G) and place it on the lower cradle (D), followed by attaching the upper cradle (F).
- 5. After applying grease, fasten the rear bolt (B) with the nut (H) through the seat post bolt hole, lower cradle (D), and upper cradle (F).
- 6. Adjust the saddle's forward and backward position, then use the M6 bolts (A, B) to fine-tune the angle.
- 7. Tighten bolts (A, B) to 7 Nm using a torque wrench and check the saddle angle. If further adjustments are needed, alternately loosen and tighten bolts (A, B) until the desired saddle angle is achieved.

Seatpost insert



Minimum insertion

Seatposts require a minimum insertion depth of 75mm. It must be inserted sufficiently so that the minimum insertion amount mark on the seat post is not visible.

Maximum insertion

The shape of the seat tube changes as you go down, so the maximum insertion depth specified for each frame size is different. Please refer to the table below.

Frame Size	Maximum Insertion (mm)	
XS	210	
S	230	
М	235	
L	280	
XL	310	
XXL	340	



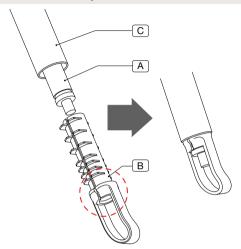
Warning!

When inserting the seat post, be sure to leave enough clearance between the bottom end of the seat post and the frame to avoid damage to the frame.

If the desired seat height cannot be achieved within the minimum and maximum insertion amount conditions, it must be replaced with a product of the correct size.

The seat post must fit smoothly into the seat tube, but must be tightened appropriately so that it does not move. If a problem occurs during fastening, such as the seat post not being installed properly or moving, it must be inspected by a ACOL dealer.

Dia Battery (Dia Version bike)



Assembly

- 1. The Di2 battery (A) must be secured within the seatpost (C) using the battery mount (B). This installation must be completed before inserting the seatpost into the seat tube.
- 2. Align the connection point of the battery (A) facing downward with the marked indentation on the battery mount (B) and insert it accordingly.
- 3. Push the battery mount (B) fully into the end of the seatpost (C).

Decomposition

- 1. Carefully pull the handle at the bottom of the battery mount (B) to remove it.
- 2. After disassembly, detach the battery (A).

Warning!

The Di2 battery must be inserted in the proper position. If not, the cable may fall out of the seatpost, causing noise or damage, or the cable may fall out, making shifting adjustments impossible.

5. Replacement Parts and Accessories

			CODE		
1 Stora		Storage cover	DBC50FPGR10001		
		Strorage knob	DBC50FPGR10002		
	Storage	Rubber busing	DBC50FPGR10003		
		Rubber ring	DBC50FPGR10004		
		Storage D/T cover	DBC50FPGR10005		
2	Dov	vntube protect cover	DBC50FPGR10006		
3		Headset cover	DBC50HSR110002		
4	Spacer (round)		ABC1691NNN0012		
	Seatpost (300mm, 0mm offset)		ABC1672WNW0063		
5 Seatpos	st (380mm, omm offset)	ABC1672WNW0064			
	st (300mm 15mm offset)	ABC1672WNWoo65			
	Seatpo	st (380mm 15mm offset)	ABC1672WNW0066		
	Seatpost (400mm 25mm offset)		ABC1672WNW0046		
6	Seatpost Clamp		DBC50SCR060001		
_	_	Saddle rail clamp	DBC50PTWNW0004		
7		Saddle fall Claffip	DBC50PTWNW0012		
			DBC50BTWNW0018		
			DBC50BTWNW0019		
8	Control	ost Bolt/Nut/Barrel Nut	DBC50BTR0100011		
0	Seatpt	ost bott/Nut/barret Nut	DBC50BTWNW0015		
			DBC5oPTWNWoo13		
			DBC50PTWNW0014		
9	Front	axle (12mmx100mm)	ABC1676NBR0004		
10	Rear	axle (12mmx142mm)	ABC1676NBR0005		
11	Fro	nt derailleur hanger	DBC50FDGR10001		
12	Fro	ont derailleur cover	DBC50FDGR10002		
13		Dia Battery mount	DBC50PTR080001		
14		Bottle cage bolt	DBC50PTWNW0015		
15		Cable grommet	DBC5oPTWNWoo16		
16	Foam sleeve		DBC5oPTWNWooo3		

