

# DIVINUS 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)

# **DIVINUS**

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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 DIVINUS 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!

DIVINUS 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 DIVINUS bike are manufactured specifically for DIVINUS. Be sure to use genuine components. Using non-genuine parts may lead to serious issues, including damage to the parts and accidents. DIVINUS-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.

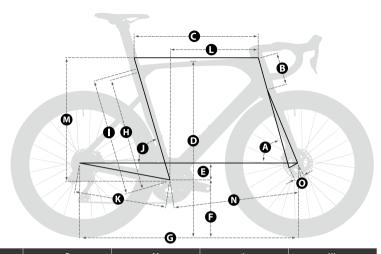


#### Warning!

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.

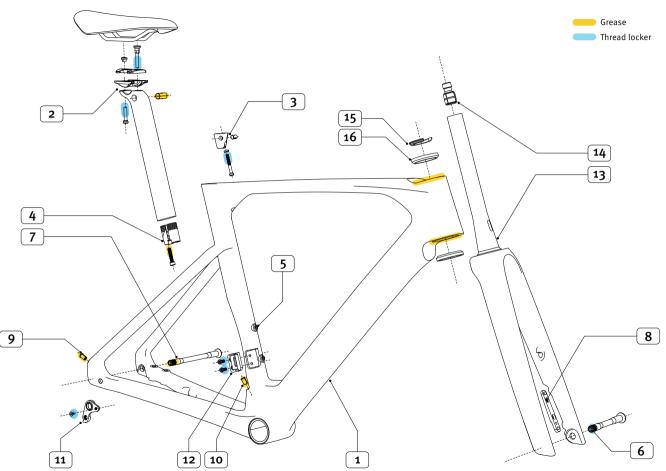
# 2. Frame Geometry

# **DIVINUS**



	XXS	XS	S	M	L	XL
A. Head tube Angle	71	72	72.5	73	73.5	73.5
B. Head Tube Length	97	101	115	130	150	178
C. Top Tube Length (Horizontal)	500	516	534	548	565	579
D. Stand over Height	735	755	771	789	812	848
E. Bottom Bracket Drop	72	72	72	70	70	70
F. Bottom Bracket Height	263	263	263	265	265	265
G. Wheel base	968	974	978	981	993	1006
H. Seat Tube Length (B-B Center to Center)	453	480	497	512	537	564
I. Seat Tube Length (B-B Center to Top)	465	491	509	525	550	578
J. Seat Tube Angle	75	75	74	73-5	73.5	73.5
K. Chain Stay Length	410	410	410	410	410	410
L. Reach	368	380	384	389	400	405
M. Stack	500	507	522	537	558	585
N. Front-Center	568	574	578	581	593	606
O. Fork Offset	46	46	46	43	43	43

# 3. Bicycle Specification



#### Frame components

		TOOL 5175	TOPOUE(N)	
	•	TOOL SIZE	TORQUE(Nm)	
1	Frame	-		
_	Seatpost	6mm hex wrench	7Nm	
2	Seatpost	5mm hex wrench	7Nm	
3	Seatpost Wedge	4mm hex wrench	8Nm	
4	Dia Battery Mount	5mm hex wrench	5Nm	
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	Mechanical Shifter Grommet	-		
11	Rear Derailleur Hanger	4mm hex wrench	4Nm	
12	Front Derailleur Hanger	4mm hex wrench	5Nm	
13	Fork	-	-	
14	Expander Plug	6mm hex wrench	9Nm	
15	Compression Ring / C-Ring	-	-	
16	Upper & Lower Headset Bearings (51.8mm OD x 40.0mm ID x 8mm X 45°)	-	-	



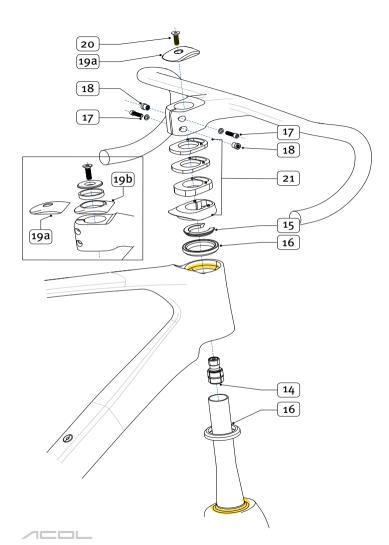
#### Warning!

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.



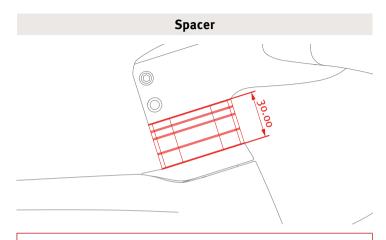
#### Warning!

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.



# **Cockpit components**

		TOOL SIZE	TORQUE (Nm)
17	Cockpit Steerer Clamp Bolt / Washer	4mm hex wrench	5Nm
18	Cockpit Steerer Clamp Nut	4mm hex wrench	5Nm
19	Cockpit Top Closed (a) / Open (b) Cap	-	
20	Cockpit Top Bolt	4mm hex wrench	5Nm
21	Cockpit Headset/Spacer Kit	-	
22	Cockpit Accessory Mount (Unmarked)	2mm hex wrench	1Nm



# Λ

#### 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**

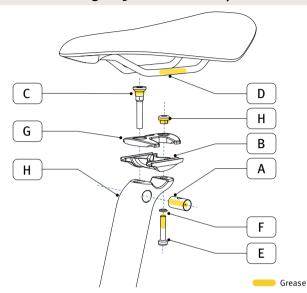
Component	Compatible Size	
Upper Headset Bearing	51.8mm OD x 40.0mm ID x 8mm X 45°	
Lower Headset Bearing	51.8mm OD x 40.0mm ID x 8mm X 45°	
Front Thru-Axle	12 X 100	
Rear Thru-Axle	12 X 142	
Minimum/Maximum Chainring	34t~42t / 48t~55t	
Minimum/Maximum Front Rotor	140mm / 160mm	
Minimum/Maximum Rear Rotor	140mm / 160mm	
Minimum/Maximum Tire	700c x 24mm / 700c x 32mm	

There are many types and sizes of bicycle tires. A minimum gap of 6 mm is required between the frame, fork, and tires. To select the appropriate tire, please consult an ACOL dealer or a specialty bicycle dealer for recommendations based on your riding needs.



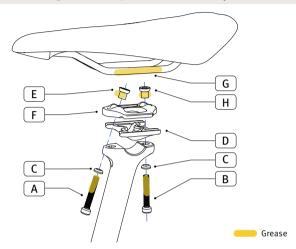
# 4. Seatpost

#### Installing a 25mm Offset Seatpost



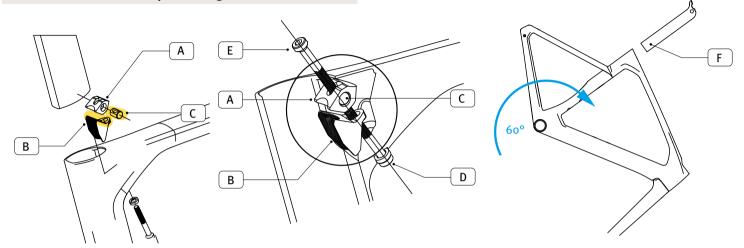
- 1. Apply grease, then install the M6 barrel nut (A) into the seatpost.
- 2. Install the lower cradle (B).
- 3. After applying grease, attach the M6 bolt (C) to the front of the cradle.
- 4. Apply grease to the saddle rail (D), place it on the lower cradle, and install the upper cradle.
- 5. Apply grease, insert the M5 bolt (E) with the washer (F) through the seat post bolt hole, the lower cradle (B), and the upper cradle (G), then lightly tighten the M5 nut (H).
- $6. \ Adjust the front and rear positions of the saddle, then set the angle by adjusting the M6 bolt (C).\\$
- 7. Tighten the bolt (E) to 7 Nm with a torque wrench, then check the saddle angle. If further angle adjustment is needed, alternately loosen and tighten bolts (E) and (C) 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).
- 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 Wedge**



- 1. Apply grease to the contact surfaces of the upper seatpost wedge (A), lower seatpost wedge (B), barrel nut (C), and lower wedge bolt (D).
- 2. Attach the upper wedge (A) and barrel nut (C) using the upper fixing M5 bolt (E).
- 3. Insert the wedge bolt (D) into the lower bolt hole of the frame. Then, insert the lower wedge (B) into the frame and hook it onto the lower wedge bolt (D). Hold the bolt (D) in place using a 4 mm wrench.
- 4. After inserting the assembled upper wedge (A), align the wedge bolt (D), which is hooked onto the lower wedge (B), with the upper wedge (A). Then, turn the lower wedge bolt to secure it to the upper wedge (A).
- 5. Ensure that the upper wedge (A) is properly tightened by pulling on the assembled bolt (E) to confirm that it doesn't come loose. If it is secure, remove the upper wedge's bolt (E).
- 6. Tilt the frame to approximately 60° and insert the seatpost (F).



#### Warning!

Before tightening the seatpost wedge, ensure that all parts are fully seated within the space inside the frame.



#### Caution

Be careful not to pinch the Di2 cable when inserting the seatpost.

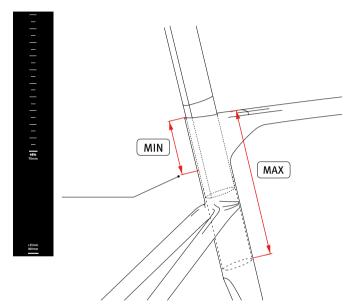


#### Caution

When removing the seatpost, do not fully loosen the wedge bolt. If the bolt is completely loosened, the lower wedge and barrel nut may fall into the seat tube.



#### Seatpost insert



#### Minimum insertion

Seatposts require a minimum insertion depth of 75 mm. Ensure that it is inserted deeply enough so the minimum insertion mark on the seatpost 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)	
XXS	185	
XS	212	
S	226	
М	233	
L	258	

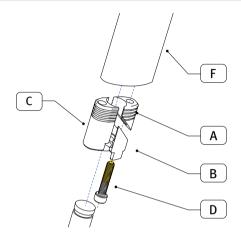


#### Warning!

When inserting the seatpost, ensure there is enough clearance between the bottom end of the seatpost and the frame to prevent frame damage.

If the desired seat height cannot be achieved within the minimum and maximum insertion limits, the seatpost must be replaced with one of the correct size. The seatpost should fit smoothly into the seat tube but must be tightened adequately to prevent movement. If issues arise during fastening, such as improper installation or movement of the seatpost, it should be inspected by an ACOL dealer.

#### Dia Battery (Dia Version bike)



#### Assembly

- 1. The Di2 battery must be secured within the seatpost using a battery mount, so it must be installed before inserting the seatpost into the seat tube.
- 2. Join the top (A) and bottom (B) parts of the mount using M5 bolts (D).
- 3. Align the mounts (C) and (B) with the recessed sections of the battery (E). Insert them into the seatpost (F) and tighten using a 5 mm hex wrench. Ensure the battery connection point protrudes below the seatpost.

#### Decomposition

- 1. Unscrew the battery mount bolt (D) and carefully remove the battery mount and battery (E).
- 2. After disassembly, separate the battery (E) from the mount.

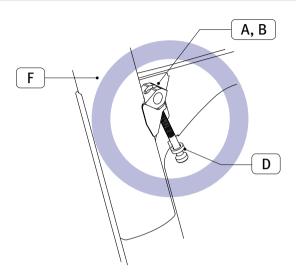
#### Warning!



The Di2 battery must be inserted in the correct position. If not, the cable may come loose from the seatpost, causing noise, damage, or preventing shifting adjustments.

# **5. Precautions for Assembly**

#### **Seatpost Removal**

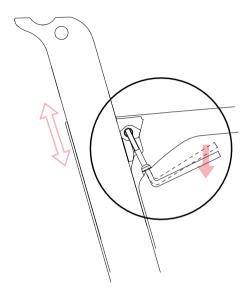


- 1. When removing the seatpost (F), do not fully remove the wedge bolt (D). Instead, loosen it by turning it 5 to 6 times, leaving it loosely connected.
- 2. If the wedge bolt (D) is fully removed, the connected upper and lower seatpost wedges (A, B) may shift out of place, potentially causing damage to the seatpost.
- 3. Gently tap the rear side of the seatpost (F) to create space between the connected seatpost wedges (A, B), then lift and remove the seatpost (F).

# A, B

- 1. When fully removing the seatpost wedge from the frame, insert a 4 mm wrench into the lower bolt (D) to hold it in place and prevent it from turning.
- 2. While holding the wrench, connect the M5 bolt (E) to the upper wedge, then loosen the lower bolt (D). This will prevent the wedge from falling inside the frame.

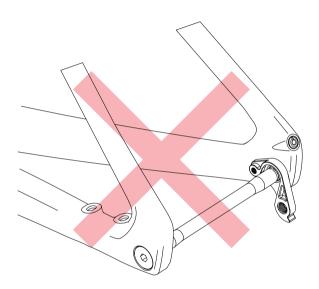
#### How to Adjust the Seatpost



- · Loosen the lower wedge bolt (E) by 5 to 6 turns.
- · Tap the rear side of the seatpost (F) to create space between the seatpost wedges (A, B).
- ·Tilt the frame or insert a wrench into the lower bolt to hold it in place while adjusting the seatpost.



# **Avoid Overtightening Axle**



- Do not overtighten the axle of the rear triangle and fork without the hub installed. This could damage the frame.

# 6. Replacement Parts and Accessories

	•				
			CODE		
		360mm x 70mm	ABC1691WNW0250		
		380mm x 80mm	ABC1691WNW0258		
		400mm x 80mm	ABC1691WNW0265		
		400mm x 90mm	ABC1691WNW0266		
1	Integrated handlebar	400mm x 100mm	ABC1691WNW0267		
		420mm x 90mm	ABC1691WNW0273		
		420mm x 100mm	ABC1691WNW0274		
		420mm x 110mm	ABC1691WNW0275		
		420mm x 120mm	ABC1691WNW0276		
- Carlonit		it stoorer helt/washer	DBC50BTWNW0002/		
2	2 Cockpit steerer bolt/washer		DBC5oWSWNWooo3		
3 Cockpit		t top cap closed/open	DBC50HBR110001		
		t top cap closed/open	DBC50HBR110002		
4	Spacer (round)		ABC1691NNN0012		
	Seatpost (300mm 5mm offset)		ABC1672WNW0061		
_	Seatpos	st (380mm 5mm offset)	ABC1672WNW0062		
5	Seatpos	t (300mm 25mm offset)	ABC1672WNW0059		
	Seatpost (360mm 25mm offset)		ABC1672WNW0060		
6	Seatpost wedge		DBC50SCR110001		
7	S	Saddle rail clamp DBC50PTWNW0004			
			DBC50BTWNW0018		
0	Control	-4 h - 14 / + / h 1 +	DBC50BTWNW0019		
8	Seatpo	st bolt/nut/barrel nut	DBC50BTR0100011		
			DBC50BTWNW0015		
9	Front	axle (12mmx100mm)	ABC1676R110001		
10	Rear	axle (12mmx142mm)	ABC1676R110002		
11	Fror	nt derailleur hanger	DBC50FDR110001		
12	Rea	r derailleur hanger	DBC50RDR110001		
13	D	i2 battery mount	DBC50PTR050003		
14		Bottle cage bolt	DBC50BTWNW0004		
			DBC50PTR050001		
			DBC50PTWNW0001		
15		Cable grommet	DBC50PTR080003		
			DBC50PTWNW0002		
16	Foam sleeve		DBC5oPTWNWooo3		



