

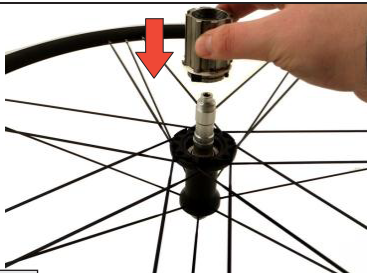


MAINTENANCE CARD WHEELS – ROAD

**REMOVAL AND INSTALLATION
OF FREEWHEEL BODY**

MAINTENANCE CARD

WHEELS		TYPE			OPERATION	REVISION	DESCRIPTION		
ROAD		INDUSTRIAL BEARINGS/ CUP AND CONES BEARINGS			004	11/2024	REMOVAL AND INSTALLATION OF FREEWHEEL BODY		
PRODUCTS ON WHICH TO APPLY THE PROCEDURE									
SPEED 55T / 40T	SPEED 55C / 40C	RACING CHRONO	RACING SPEED	RACING LIGHT	WIND 40 / 400	RACING ZERO CARBON	RACING QUATTRO CARBON	RACING ZERO NITE	RACING ZERO
RACING 1	RACING 3	RACING QUATTRO	RACING 4 /400 (since 2019)	RACING 5 (2014-2018)	RACING 5 /500 (since 2019)	RACING 6 /600 (since 2019)	RACING 7 (since 2014)		

 1	 2	 3
 4	 5	 6
 7	 8	 9
 10	 11	 12

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13

Fully insert the freewheel body.



14

Insert the spacer.



15

Screw the lock nut on the axle anticlockwise.



16

Insert the 5mm hex wrench inside the axle, hold the axle stationary and torque the lock nut with the a 17mm crows foot and a torque wrench.

15 Nm

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WHEELS	TYPE	OPERATION	REVISION	DESCRIPTION
ROAD - DISC BRAKE	INDUSTRIAL BEARINGS/ CUP AND CONES BEARINGS	004	11/2024	REMOVAL AND INSTALLATION OF FREEWHEEL BODY

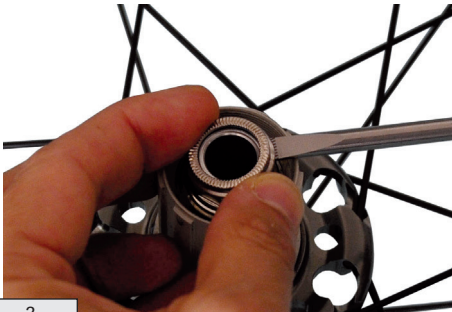
PRODUCTS ON WHICH TO APPLY THE PROCEDURE

RACING QUATTRO CARBON DB (2016)	RACING 5 DB (2016)								
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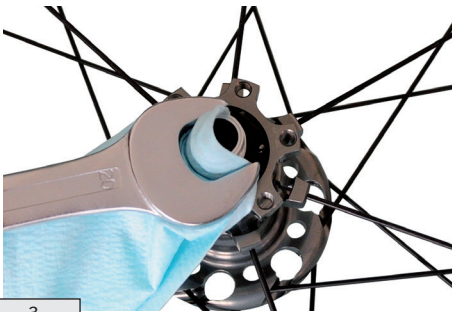
1

Ensure that the clearance recovery ring nut is tightened (screw tightened to 2.5 Nm) so that the ring nut does not turn.



2

Remove the right hand adaptor applying pressure outward with a flat screwdriver.



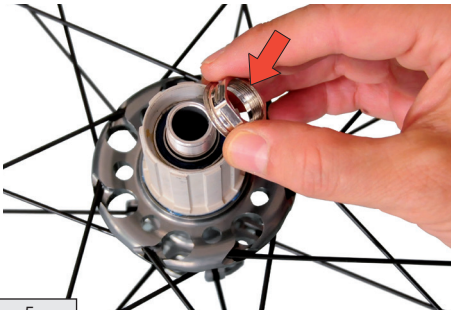
3

Place a fixed 20 mm wrench on the adjustment ring nut on the left, protecting it with workshop paper in order not to scrape it.



4

Unscrew the bushing on the right using an 18 mm socket wrench.
Attention: left hand thread!



5

Remove the right hand bushing.



6

Remove the FW body from the hub axle.



7

Grease the inside of the rack insert with lithium grease. The quantity of grease inserted should cover about 75% of the free space of the rack insert.



8

If necessary also grease the inside of the FW body pawls.



9

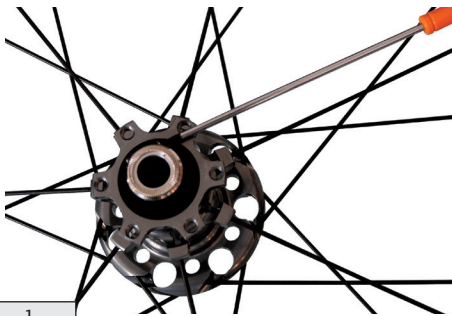
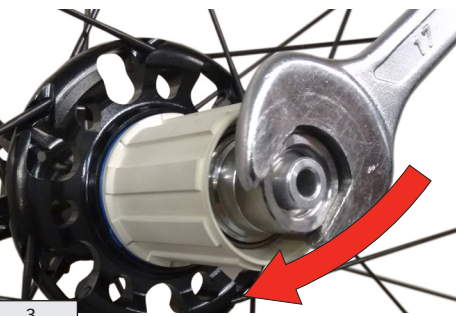
Insert the FW body on the axle.

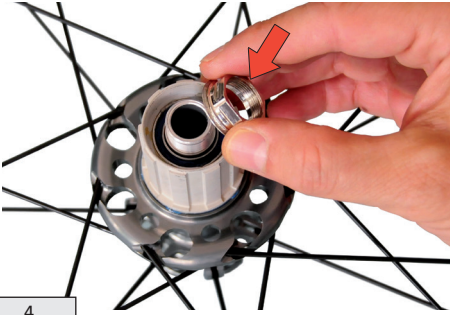
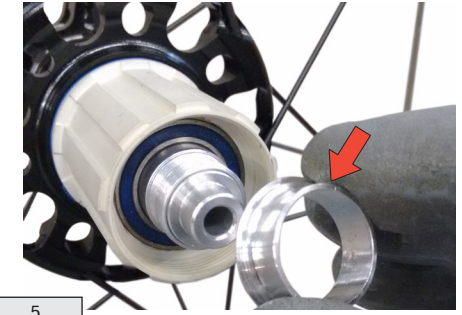
MAINTENANCE CARD

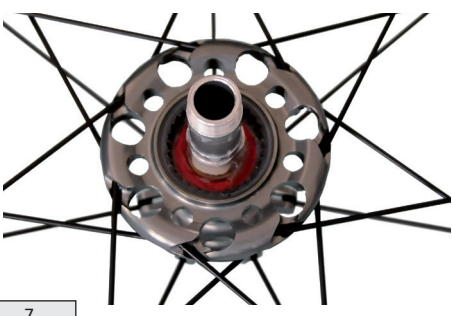
10 Using a screwdriver, move the pawls into the closed position and slowly rotate the FW body. Insert them in the rack.	11 Insert the FW body entirely.	12 Insert the bushing on the right and screw it on. Attention: left hand thread!
13 Place a fixed 20 mm wrench on the adjustment ring nut on the left, protecting it with workshop paper in order not to scrape it.	12 Nm 14 Screw in the bushing on the right using an 18 mm socket wrench and tightening to a torque of 12 Nm. Attention: left hand thread!	15 Reassemble the right hand adaptor.
In the case of industrial bearings, eliminate the clearance of the adjustment ring nut or in the event of cone-bottom bracket cup bearings, adjust the ring nut adjustment clearance: see OPERATION 001.		

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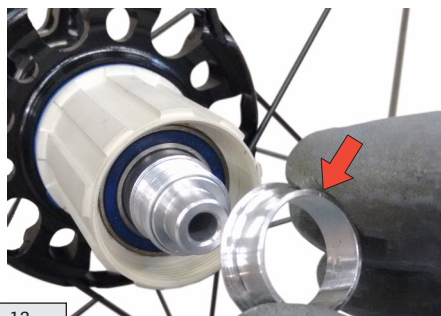
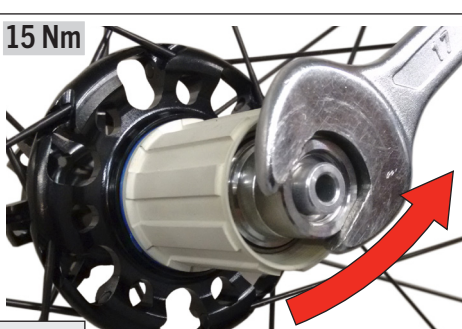
WHEELS		TYPE			OPERATION	REVISION	DESCRIPTION		
ROAD - DISC BRAKE		INDUSTRIAL BEARINGS/ CUP AND CONES BEARING			004	11/2024	REMOVAL AND INSTALLATION OF FREEWHEEL BODY		
PRODUCTS ON WHICH TO APPLY THE PROCEDURE									
RACING QUATTRO CARBON DB (2017)	RACING 5 DB (2017)	RACING 4 DB (2018-2021)	RACING 5 DB (2018-2021)	RACING 6 DB (2018-2021)	RACING 7 DB (2018-2021)	RACING 400 DB (2018-2021)	RACING 500 DB (2018-2021)	RACING 600 DB (2018-2021)	RACING 700 DB (2018-2021)

 1	 2	 3
Ensure that the clearance recovery ring nut is tightened (screw tightened to 2.5 Nm) so that the ring nut does not turn.	Place a fixed 20 mm wrench on the adjustment ring nut on the left, protecting it with workshop paper in order not to scrape it.	Unscrew the bushing on the right using a 17 mm wrench. Attention: left hand thread!

 4	 5	 6
Remove the right hand bushing.	Remove the spacer.	Remove the FW body from the hub axle.

 7	 8	 9
Grease the inside of the rack insert with lithium grease. The quantity of grease inserted should cover about 75% of the free space of the rack insert.	If necessary also grease the inside of the FW body pawls.	Insert the FW body on the axle.

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10 Using a screwdriver, move the pawls into the closed position and slowly rotate the FW body. Insert them in the rack.	11 Insert the FW body entirely.	12 Insert the spacer.
		
13 Place a fixed 20 mm wrench on the adjustment ring nut on the left, protecting it with workshop paper in order not to scrape it.	14 15 Nm Screw in the bushing on the right using a 17 mm wrench and tightening to a torque of 15 Nm. Attention: left hand thread!	In the case of industrial bearings, eliminate the clearance of the adjustment ring nut or in the event of cone-bottom bracket cup bearings, adjust the ring nut adjustment clearance: see OPERATION 001.

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WHEELS	TYPE	OPERATION	REVISION	DESCRIPTION
ROAD - DISC BRAKE	INDUSTRIAL BEARINGS	004	11/2024	REMOVAL AND INSTALLATION OF FREEWHEEL BODY
PRODUCTS ON WHICH TO APPLY THE PROCEDURE				
RACING SPORT	RACING SPORT DB QUICK RELEASE (STEEL AXLE)			



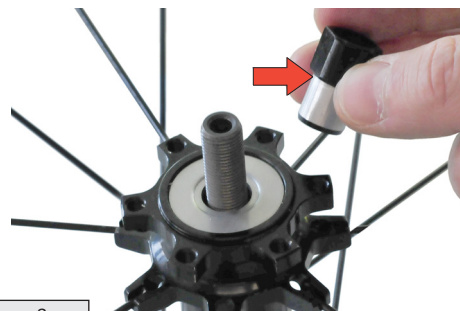
1

On the left side, unscrew the locknut with a 17 mm wrench, blocking the lower bush with a 15 mm wrench.



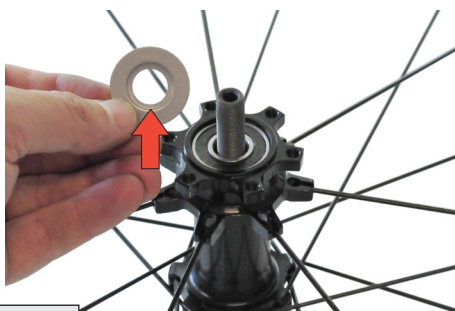
2

Remove the locknut.



3

Unscrew the threaded bush.



4

Remove the protective shield.



5

Remove the axle, sliding it out from the right side.



6

With a bearing puller, remove the bearing from the left side (for example, use the Cyclus puller P/N 720110)



7

Position a 12 mm Allen wrench in a vice.



8

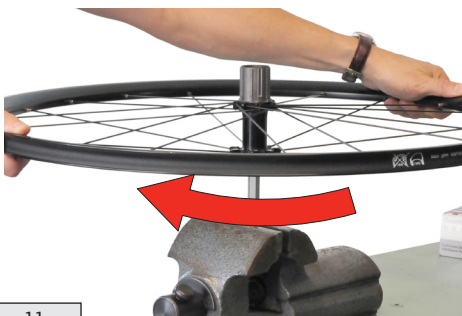
Position the wheel so that the left side is facing downward and insert the Allen wrench in the free wheel locking screw. Turn the wheel anticlockwise.



9

Remove the screw and the body.

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 10	 11	 12
REASSEMBLY Position the screw on the Allen wrench.	Rotate the body and then the wheel clockwise until the screw is completely tightened.	Press the bearing to the travel limit using a press with the bushes of the same diameter as the external diameter of the bearing (for example, use a Cyclus puller tool P/N 720113)
 13	 14	 15
Insert the axle from the right side.	Position the protective shield.	Tighten the threaded bush with a 13 mm wrench to eliminate the axle play.
 16		
Tighten the locknut with a 17 mm wrench to lock the threaded bush into place.		

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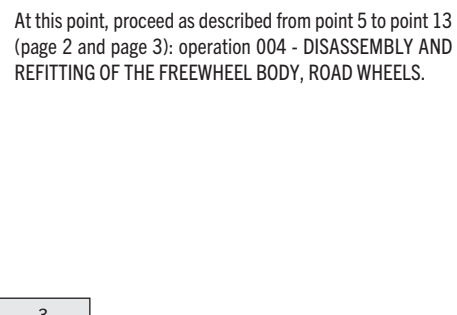
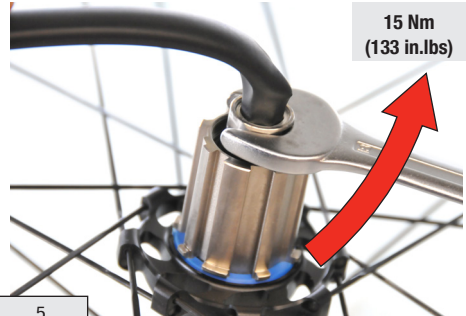
WHEELS		TYPE			OPERATION	REVISION	DESCRIPTION		
ROAD - DISC BRAKE		INDUSTRIAL BEARINGS/ CUP AND CONES BEARINGS			004	11/2024	REMOVAL AND INSTALLATION OF FREEWHEEL BODY		
PRODUCTS ON WHICH TO APPLY THE PROCEDURE									
SPEED 25 DB	SPEED 40 DB SPEED 42 DB	SPEED 55 DB SPEED 57 DB	SHARQ	WIND 40 DB	WIND 55 DB	RACING 3 DB	RACING 4 DB (since 2022)	RACING 400 DB (since 2022)	RACING 5 DB (since 2022)
RACING 500 DB (since 2022)	RAPID RED 3 DB	RAPID RED 300 DB	RAPID RED 5 DB	RAPID RED 500 DB	E-RACING 4	E-RACING 400			

		
1	2	3
Insert a flat screwdriver into the slot on the axle cover and turn it to widen it.	Pull the axle cover outwards.	Lock the axle in place with a 14 mm spanner.

4								
	Unscrew the nut on the FW body. Attention: left hand thread!							

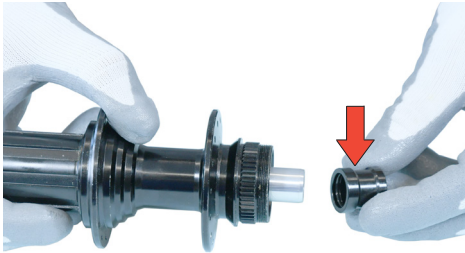
MAINTENANCE CARD

WHEELS		TYPE			OPERATION	REVISION	DESCRIPTION		
ROAD - DISC BRAKE		CUP AND CONES BEARINGS			004	11/2024	REMOVAL AND INSTALLATION OF FREEWHEEL BODY		
PRODUCTS ON WHICH TO APPLY THE PROCEDURE									
SPEED 40T DB	SPEED 55T DB	RACING ZERO DB							

 1 Insert the tool (UT-WHDB001 or UT-WHDB002) on the right of the axle.	 2 Using an 18 mm spanner, loosen the nut (Attention! The nut is left-threaded) and then remove the nut and the spacer.	 3 At this point, proceed as described from point 5 to point 13 (page 2 and page 3): operation 004 - DISASSEMBLY AND REFITTING OF THE FREEWHEEL BODY, ROAD WHEELS.
 4 Insert the spacer and tighten the nut (Attention! The nut is left-threaded).	 5 Insert the tool (UT-WHDB001 or UT-WHDB002) on the right of the axle. Using an 18 mm spanner, tighten to a torque of 15 Nm (133 in.lbs).	

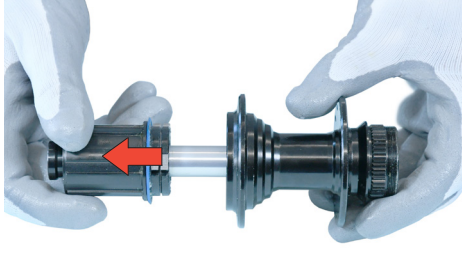
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WHEELS		TYPE			OPERATION	REVISION	DESCRIPTION		
ROAD - DISC BRAKE		INDUSTRIAL BEARINGS			004	11/2024	REMOVAL AND INSTALLATION OF FREEWHEEL BODY		
PRODUCTS ON WHICH TO APPLY THE PROCEDURE									
AIRBEAT 550 DB	AIRBEAT 400 DB	RACING 6 / 600 DB (since 2022)	RACING 800 DB	RACING 900 DB	RAPID RED 900	E-RACING 900			



1

Remove the left-hand adapter, using pliers if necessary.



2

Remove the freewheel body, along with the axle.



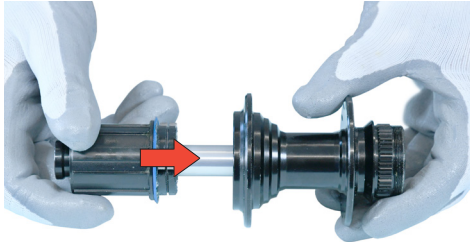
3

It is now possible to remove the freewheel body from the axle.



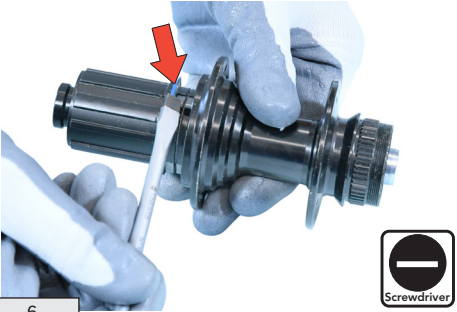
4

On the axle, reassemble: the external spacer, the dust cover, the freewheel body and the internal spacer.



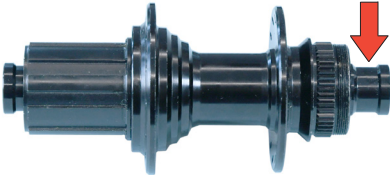
5

Insert the axle into the hub.



6

Insert the freewheel body into the hub, pressing the ratchets with a flathead screwdriver and simultaneously pushing the freewheel body towards the hub.



7

Reinstall the left-hand adapter.