

MANTHEY - RACING



Installation manual

Drinking system „Sprint“ & „Endurance“

Version _V2_2017/12

Contact

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Note

Due to the ongoing optimization of our products, this document will be updated on a regular basis. Please note that only the current version of this document is valid. The current documents are available in the download area.

Download area:

The installation and operating instructions as well as the technical manuals are available for download under the following link:

<http://www.manthey-racing.de/downloads.htm>

Warning and safety instructions

The classification of the warning and safety information is made using the respective signal word (Danger, Warning, Caution) in addition to the warning icon.

 **DANGER**

Warning of death or serious bodily injuries, which will occur in the event of non-compliance.

 **WARNING**

Warning of death or serious bodily injuries, which may occur in the event of non-compliance.

 **ATTENTION**

Warning of minor bodily injuries in the event of non-compliance.

NOTE

Warning of property damage in the event of non-compliance.

General safety instructions

DANGER

Risk of injury and risk of accident during and after work on the vehicle

- Repairs are to be carried out only if access to the repair handbooks in the PIWIS Information System is also available
- Observe the safety instructions
- Observe the repair handbooks of the vehicle series in the PIWIS Information System.

DANGER

Crashing vehicle

Squeezing or crushing

Damage to the vehicle

- Do not place any rigid objects under the lifted vehicle.
- Secure lifting platform against lowering.
- Remove any rigid objects before lowering.
- Lift the vehicle only at the pick-up points designated for this purpose.
- The outer pick-up points should be used as a matter of priority.

WARNING

Improper handling of safety-relevant fitting

Injuries

Torque reduction

- Use new fastening screws and nuts after every dismantling
- Observe the specified tightening torques.
- Visually inspect the parts used

NOTE

Always observe the currently valid „Technical Information“ (TI) of Porsche AG. These can be viewed and downloaded at motorsport.porsche.de.

If you do not have access to this portal, please contact gt4clubsport@porsche.de.

Always use this manual in accordance with the currently valid Technical Information (TI) of the Porsche AG.

⚠ WARNING

Working with compressed air

Eye injuries

Damage and contamination of components

- Wear safety goggles with side shield.
- Secure the compressed air discharge point with suitable materials.
- Place the compressed air discharge point on suitable areas.

⚠ WARNING

Toxic exhaust fumes

Suffocation

- When the engine is running, position the exhaust gas extraction system behind the exhaust end pipes of the vehicle and switch it on.

⚠ WARNING

Falling objects or loads

Squeezing or crushing

- Secure components against falling.

⚠ WARNING

Flying foreign bodies during grinding, drilling and milling

Eye injuries

- Wear safety goggles.

⚠ WARNING

No heat-resistant materials

Fire

- Avoid contact with hot components or sources of ignition.

⚠ ATTENTION

Sharp or sharp-edged objects

Cracks, punctures, cuts

- Wear personal protective equipment.

⚠ ATTENTION

Hot components

Burns

- Allow hot components to cool down.
- Wear personal protective equipment.

⚠ ATTENTION

Heavy components

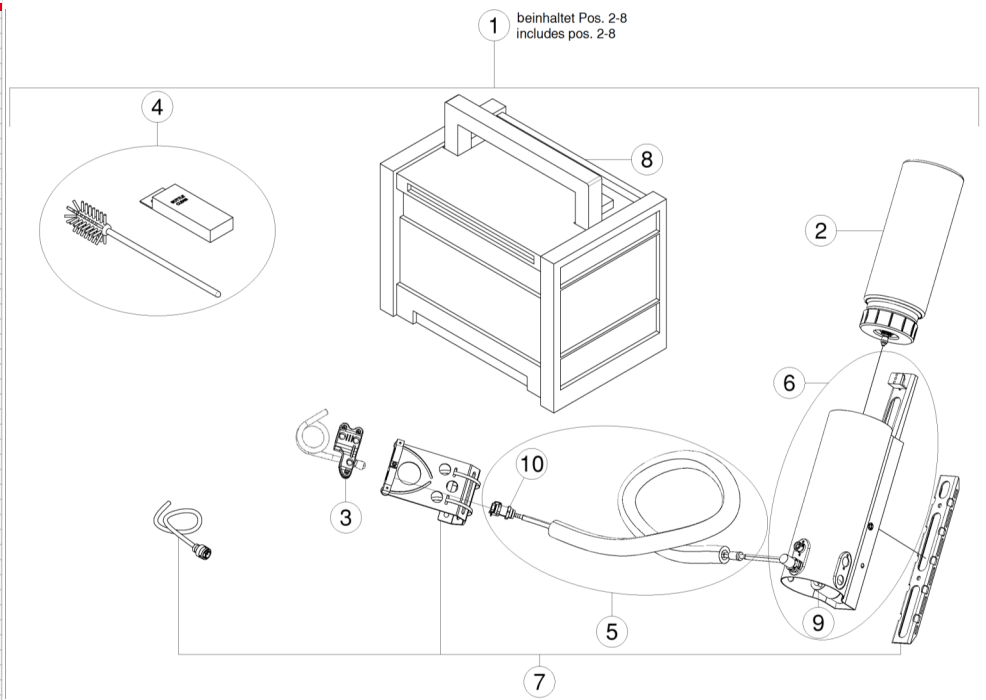
Crushing

- Wear personal protective equipment.
- If necessary call somebody to help you.

Observe the repair handbooks of the production vehicle!

Drinking system

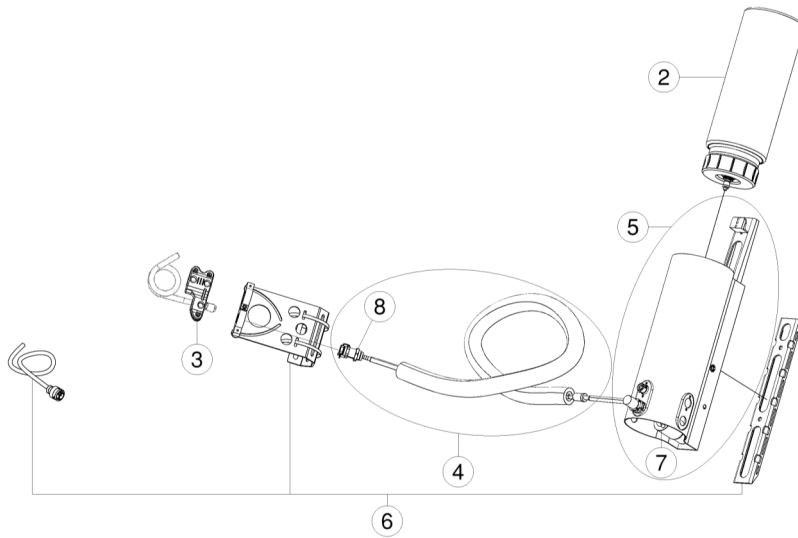
Drinking system „Endurance“ scope of delivery



Pos.	Bezeichnung / Description	M	A.	Teile Nr. / Part no.	
1	TRINK-SYSTEM ENDURANCE POS. 2-8 DRINKING SYSTEM ENDURANCE POS. 2-8	ANSCHLUSS RECHTS		0	MTH860003AE
		CONNECTION RIGHT			
		ANSCHLUSS LINKS		0	MTH860003BE
		CONNECTION LEFT			
		ANSCHLUSS MITTE		1	MTH860003CE
CONNECTION MIDDLE					
	UNGEBOHRT	0	MTH860003DE		
	UNDRILLED				
2	FLASCHENPAKET RACE SCHWARZ BOTTLE KIT		3	MTH860350	
3	HELMPAKET RACE HELMET PACKAGE		3	MTH860450	
4	REINIGUNGSPAKET CLEANING SET		1	MTH860500	
5	SCHLAUCHPAKET RACE HOSE PACKAGE		1	MTH860250	
6	Z-HALTER CARBON AS CARBON HOUSING	ANSCHLUSS RECHTS		0	MTH860120A
		CONNECTION RIGHT			
		ANSCHLUSS LINKS		0	MTH860110B
		CONNECTION LEFT			
		ANSCHLUSS MITTE		1	MTH860100C
CONNECTION MIDDLE					
	UNGEBOHRT	0	MTH860130D		
	UNDRILLED				
7	MONTAGEPAKET RACE ASSEMBLY PACKAGE RACE		1	MTH860550	
8	TRANSPORTKISTE RACE HANDLING CASE		1	MTH860400	
9	PUMPE PUMP		1	MTH860405	
10	KUPPLUNG CONNECTOR		1	MTH860881	

Drinking system „Sprint“ scope of delivery

1 beinhaltet Pos. 2-6
includes pos. 2-6



Pos.	Bezeichnung / Description		M	A.	Teile Nr. / Part no.
1	TRINK-SYSTEM SPRINT POS. 2-6 DRINKING SYSTEM SPRINT POS. 2-6	ANSCHLUSS RECHTS CONNECTION RIGHT		0	MTH860003AS
		ANSCHLUSS LINKS CONNECTION LEFT		0	MTH860003BS
		ANSCHLUSS MITTE CONNECTION MIDDLE		1	MTH860003CS
		UNGEBOHRT UNDRILLED		0	MTH860003DS
2	FLASCHENPAKET RACE SCHWARZ BOTTLE KIT			1	MTH860350
3	HELMPAKET RACE HELMET PACKAGE			1	MTH860450
4	SCHLAUCHPAKET RACE HOSE PACKAGE			1	MTH860250
5	Z-HALTER CARBON AS CAR- BON HOU- SING	ANSCHLUSS RECHTS CONNECTION RIGHT		0	MTH860120A
		ANSCHLUSS LINKS CONNECTION LEFT		0	MTH860110B
		ANSCHLUSS MITTE CONNECTION MIDDLE		1	MTH860100C
		UNGEBOHRT UNDRILLED		0	MTH860130D
6	MONTAGEPAKET RACE ASSEMBLY PACKAGE RACE			1	MTH860550
7	PUMPE PUMP			1	MTH860405
8	KUPPLUNG CONNECTOR			1	MTH860881

NOTE

The AS Carbon housing can either be attached to a suitable strut of the safety cell by means of the included bracket or can be screwed directly to the car body without the bracket at the two fastening points.

NOTE

This instruction describes the installation of the drinking system with bracket on a strut of the safety cell.

Step 1:

Attach the supplied bracket to the AS Carbon housing with the M5x12 flat head screws also included in the scope of delivery.

Attachment can also be carried out alternatively without the bracket, directly with the car body or the like. The distance between the mounting points are shown in the figure below.

⚠ WARNING

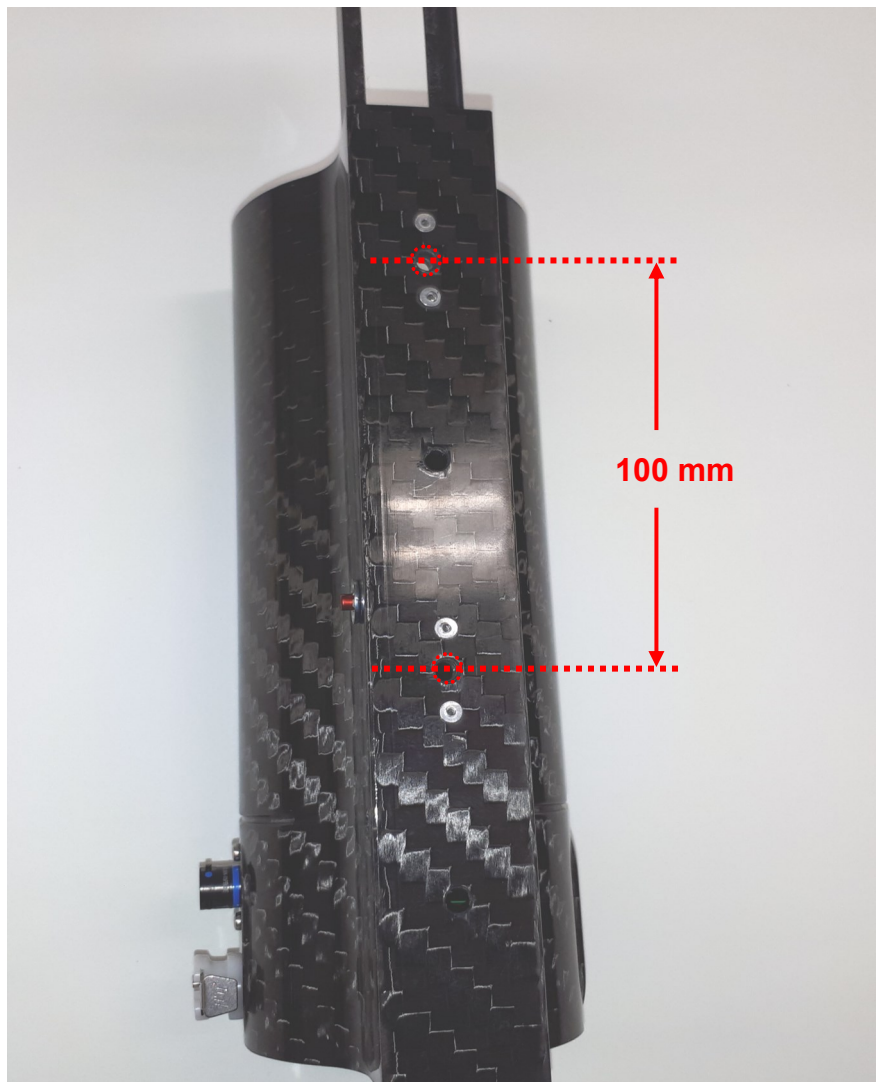
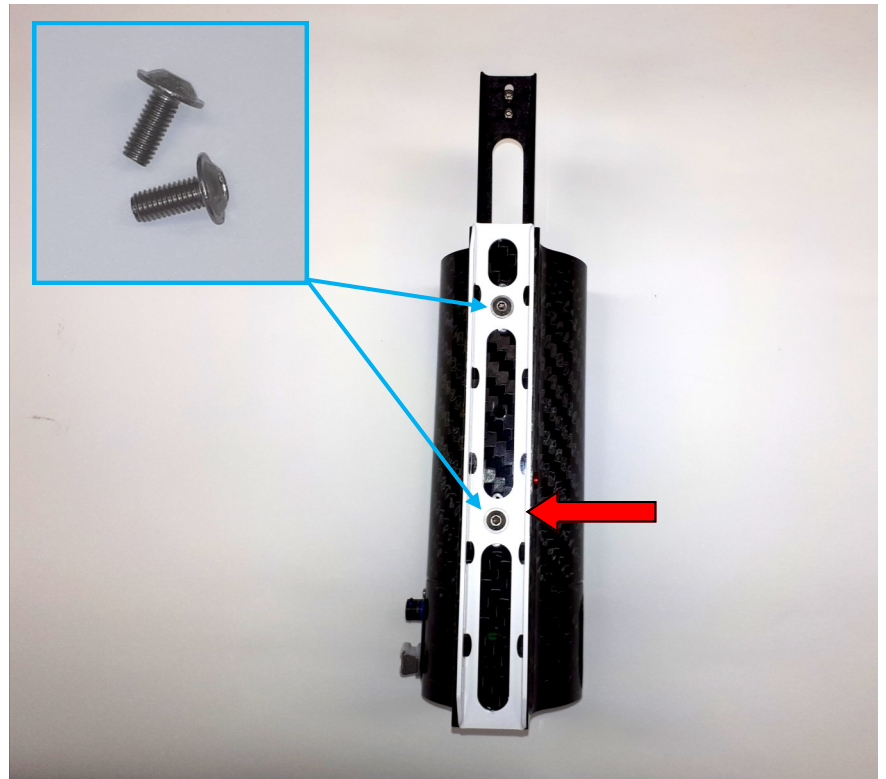
Ensure that the system is securely fastened and that any disengagement in all conditions is prevented

NOTE

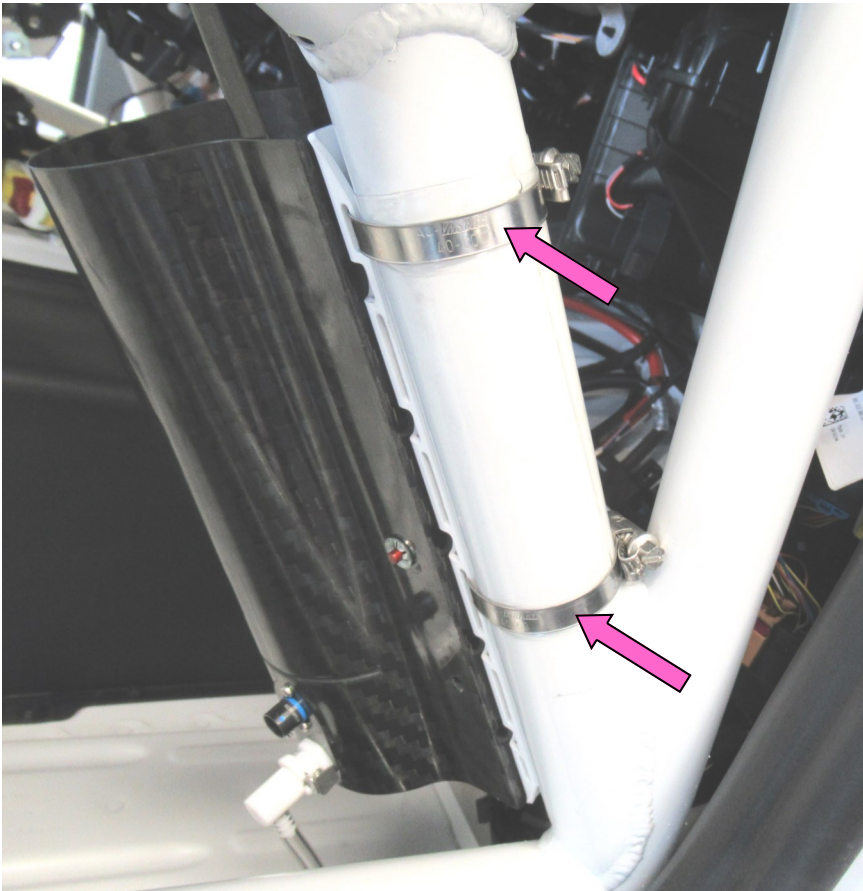
Tightening torque: 10Nm

Drinking system

Step 1:



Step 2:



Step 2:

↓ The system (bracket screwed) is now mounted on a suitable strut of the safety cell with the supplied clamps.

NOTE

To protect the paintwork on the strut, it is recommended to use protective foil under the clamps and the bracket.

Step 3:

↓ Slide the 90° quick coupling as far as possible into the drinking hose. Be sure to mount the coupling to the hose end WITHOUT the non-return valve.

Step 4:

↓ Plug the quick coupling into the connector on the AS Carbon housing. This must lock into place.

Step 5:

Place the drinking hose from the drinking system to the B-pillar (top) of the driver's side. Secure the hose with cable ties at regular intervals.

NOTE

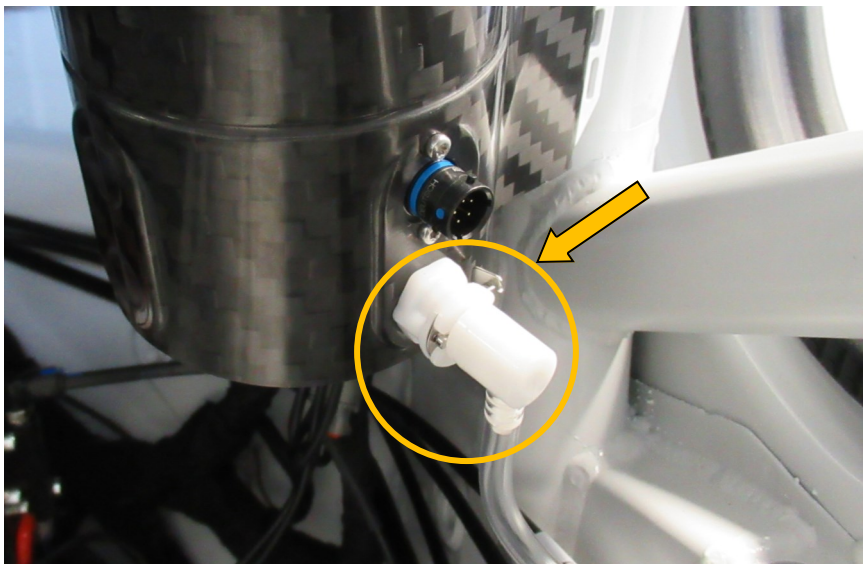
Ensure that it is properly laid out without bending. Do not over-tighten the cable ties, the hose could get pinched.

Step 3:

Mount the 90° coupling HERE!



Step 4:



Step 6:

The included bracket is designed for installation on the main strut (B-pillar) driver's side.

Mount the holder for the drinking coupling and the radio plug with two flat head screws (included) on the bracket. The holder can be aligned for an optimal operation via the guides.

NOTE

Tightening torque for the clamping: 1,5 Nm

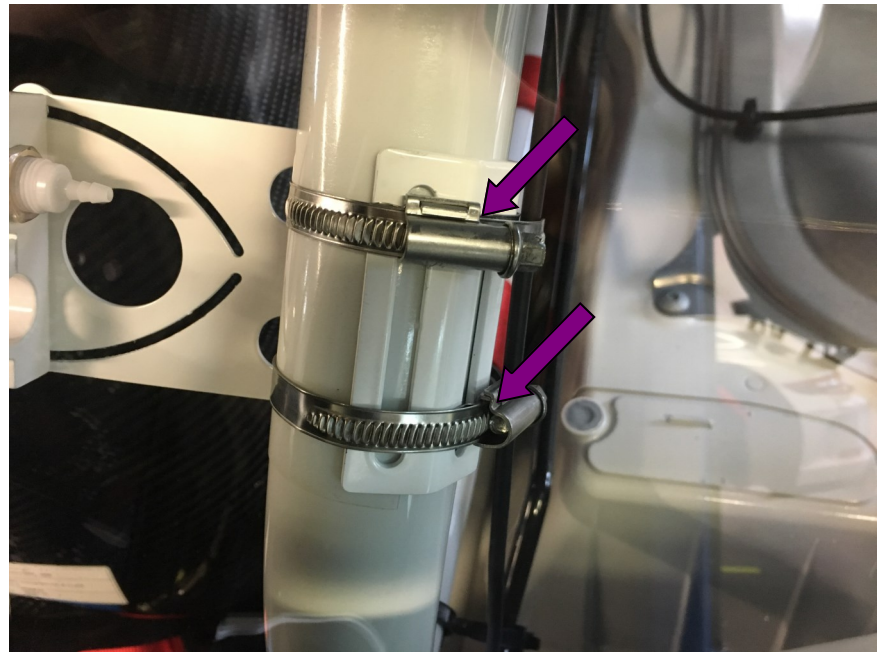
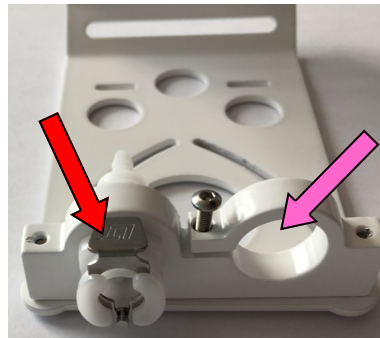
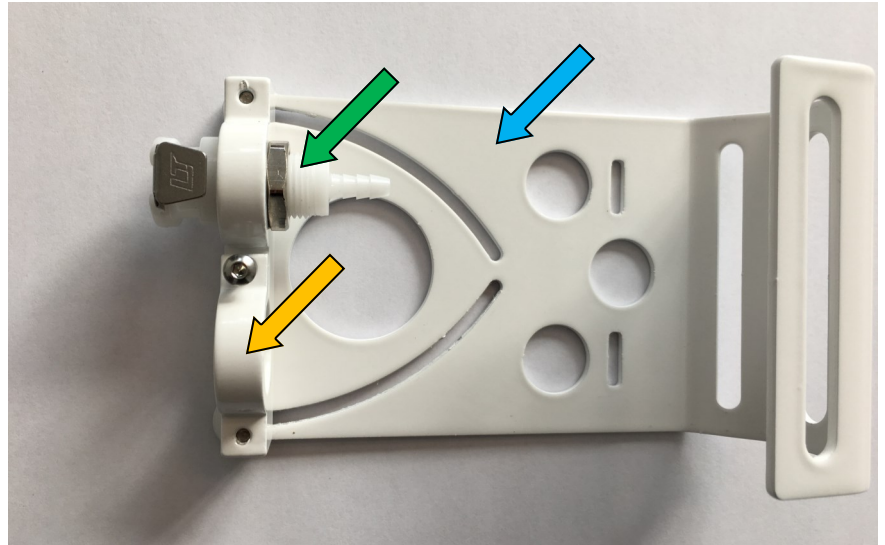
Mount the quick coupling into the clamping piece of the bracket. Orientate the quick coupling so that the release button points outwards. The connector plug of a radio system can be installed in the second clamp.

NOTE

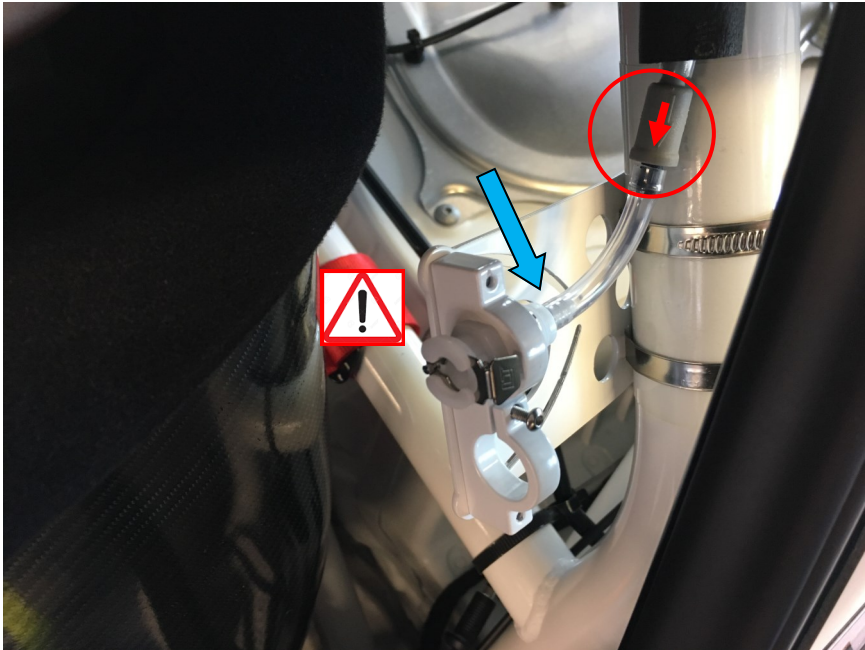
Tightening torque for the clamping: 1,5 Nm

Mount the prepared bracket with the two clamps included in the kit to the main strut (B-pillar, driver's side).

Step 6:



Step 7:



Step 7:



Point the bracket in a way, that it can not collide with the seat over its entire travel.

If the bracket is attached, the drinking hose must be fitted to the quick coupling. To do this, slide the hose as far as it will go over the connector on the quick coupling.

NOTE

If necessary, the hose can be shortened. Make sure that the check valve is replaced again.

Observe flow direction!

In the picture below you can see the included helmet set. The quick coupling is already pre-assembled. If you are using a radio system, you can fix the radio connector in the second clamping by means of the two countersunk head screws.

NOTE

Tightening torque for the clamping: 1,5 Nm

NOTE

The safety catch of the quick release can be removed when a radio system is used at the same time and if the self-locking of the radio plug assures the coupling of the drinking system.

For an optimal fit, the bracket and/or the radio plug must be adapted with suitable tools.

Drinking system

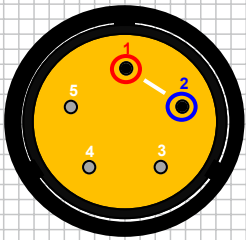
The hose on the helmet can be shortened if necessary. Care must be taken that the hose can only be shortened on the side of the quick coupling. Do not connect the short hose to the quick coupling (observe the direction of flow of the check valve!).

Step 8:

The pump is electrically controlled via the 5-pin connector.

A prefabricated cable with mounted connector is included in the scope of delivery.

The drawing below shows which pins of the connector are in use.



Pin 1: +12 Volt (red cable)

Pin 2: ground (blue cable)

Pin 3-5: not used

NOTE

The system should be switched by ground.

NOTE

A push button is recommended for operating the drinking system.

(not included)

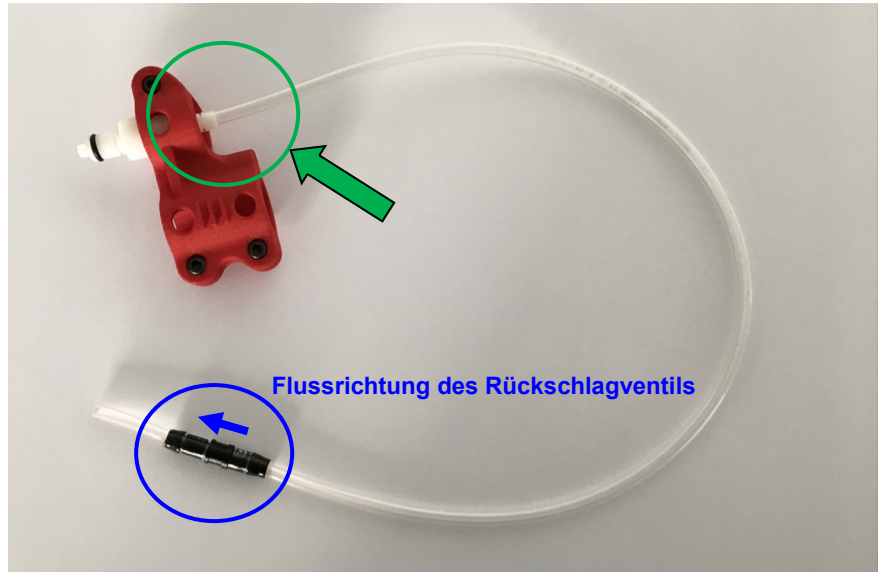
WARNING

The electrical circuit of the pump must be protected with a 3 Ampere fuse.

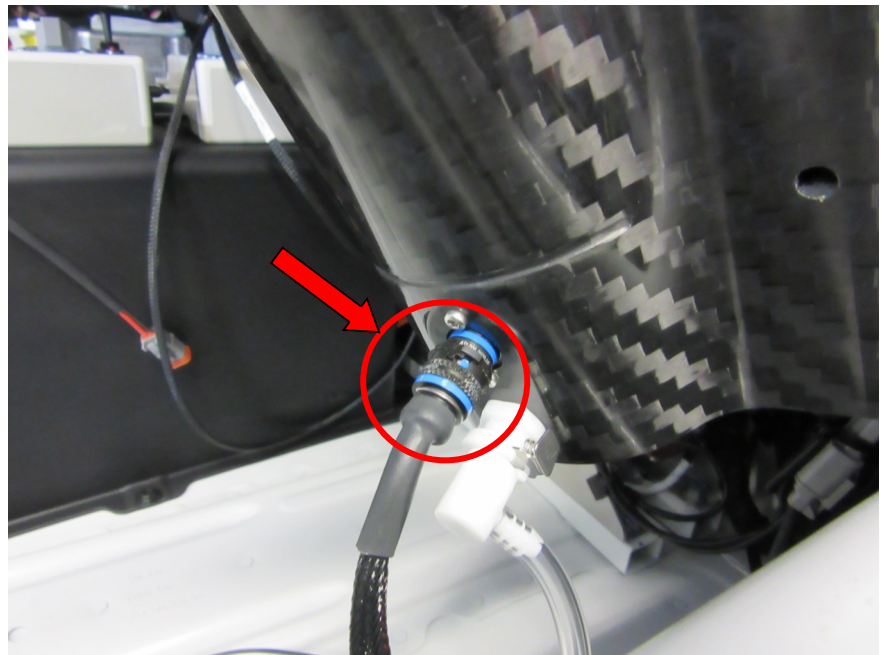
WARNING

Reversing the polarity of the pump can lead to malfunctions and/or destruction of the pump.

Drinking system



Schritt 8:



Handling and care instructions



Handling:

↓ Insert the water bottle into the system. The locking lever is pushed aside by the bottle. The quick coupling in the system opens automatically.

When the bottle is fully inserted, the coupling is automatically closed. The bottle is now held securely by the coupling and the latching.

↓ To remove the bottle, press the latching to the side. The bottle is simultaneously released from the coupling in the system and can be removed.

NOTE

The system must only be used only with non-carbonated water. Isotonic additives can lead to malfunction of the pump.

Care instructions:

- For hygienic reasons, the system must be cleaned after each use.
- A brush for cleaning the bottle and cleaning tablets are included for this purpose in the scope of delivery.
- Clean the bottle and the hoses as instructed on the packaging of the cleaning tablets.
- The bottles should always be stored without screw caps.
- It is recommended to replace all hoses once a year.

NOTE

The drinking system is available with several positions for the connections.

Find attached the available connections.

Drinking system „Sprint“:

- MTH860003**AS** → Connection right
- MTH860003**BS** → Connection left
- MTH860003**CS** → Connection middle
- MTH860003**DS** → undrilled

Drinking system „Endurance“:

- MTH860003**AE** → Connection right
- MTH860003**BE** → Connection left
- MTH860003**CE** → Connection middle
- MTH860003**DE** → undrilled

Available variants

