

**Product Description:**Electric step for MB  
Sprinter**Type:** ETB**Vehicle type:**

MB Sprinter

**Model Year:** Sprinter  
from 06; from 2018 only  
RWD / Crafter 06 to 16**New item no:**

100487

Old article no.:

ETB 1200 MS-R



# Assembly instructions



Assembly time:  
approx. 3-4 hours



Load  
capacity : 240 kg



Wheelbase:  
L2/L3

Electric steps should be installed by AlphaDynamik authorised specialist companies so that your warranty claim remains intact. On request, we will send you contact details of specialist companies in your area.



Treads



Protection



Ramps



Safety



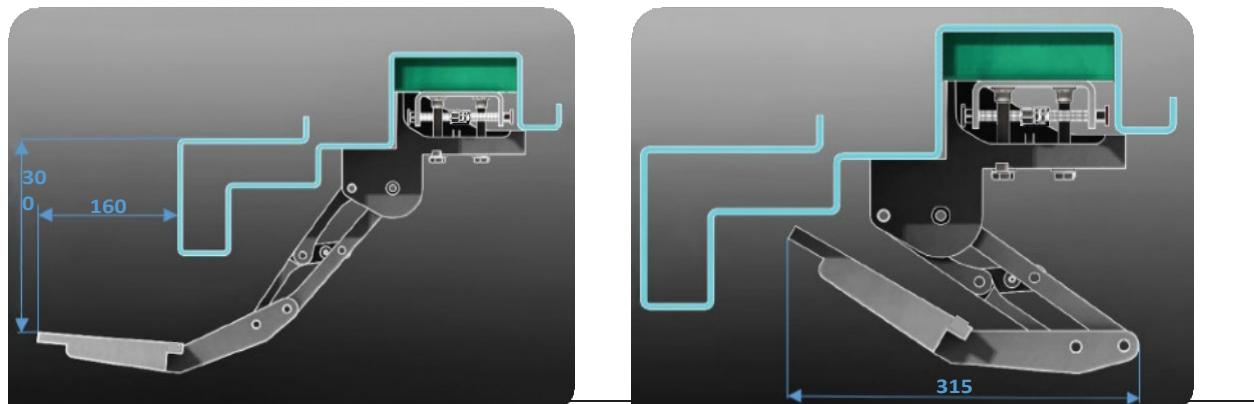
Roof rack

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# TECHNICAL FEATURES



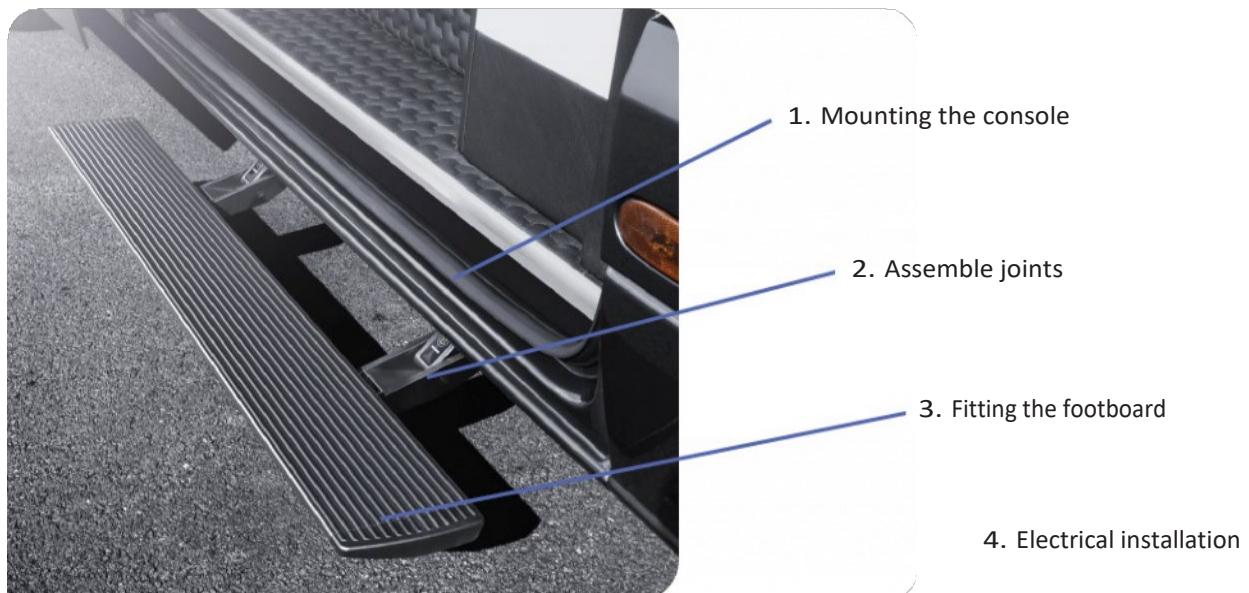
Operating voltage	12V			
Running board length, width, level	1200mm x 160mm with 7° pitch			
Maximum load capacity	<=300kg			
Description	item number	Number of pieces	ART	Z.-Nr.
<b>Footboard</b>	<b>6134100.3</b>	<b>1</b>	<b>BG</b>	
End cap left	6126100.3-1L	1	ET	A
Running board 1.2 cm	6126100.3-2	1	ET	B
End cap right	6126100.3-1R	1	ET	C
T-nuts	6126100.3-3	2	ET	D
Cylinder head screws with ISK M6x20		4		E
<b>Motor joint set</b>	<b>6126100.1</b>	<b>2</b>	<b>BG</b>	
Joint	6126100.1.1	2	ET	F
Motor	6124100.1.2B-R	2	ET	G
<b>Mounting kit</b>		<b>1</b>	<b>BG</b>	
Console	6126100.4-5	1	ET	H
Washer 10 mm		6	ET	I
Spring washer 10 mm		6	ET	J
Cylinder head screw with ISK M10x30		6	ET	K
<b>Screw set joint</b>		<b>1</b>	<b>BG</b>	
Washer 12 mm		4	ET	L
self-locking washer 12 mm		4	ET	M
Cheese head screw with shank M12x110		4	ET	N
Clamping screw	6126100.4-2	2	ET	O
Clamping nut	6126100.4-3	2	ET	P
Lock nut M16		4	ET	Q
Mounting plates	6126100.4-4	4	ET	R
Threaded plate	6126100.4-1	3	ET	S
<b>Electrical kit</b>		<b>1</b>	<b>BG</b>	
Control unit	6124100.4.6	1	ET	T
Cable set (control unit)	6126100.4.1	1	ET	U
Cable set motor long	6126100.4.3	1	ET	V
Cable connectors		2	ET	W
Cable tie short		20	ET	X1
Cable tie long		4	ET	X2
Fuse 25A		2	ET	Y

# OVERVIEW OF THE COMPONENTS

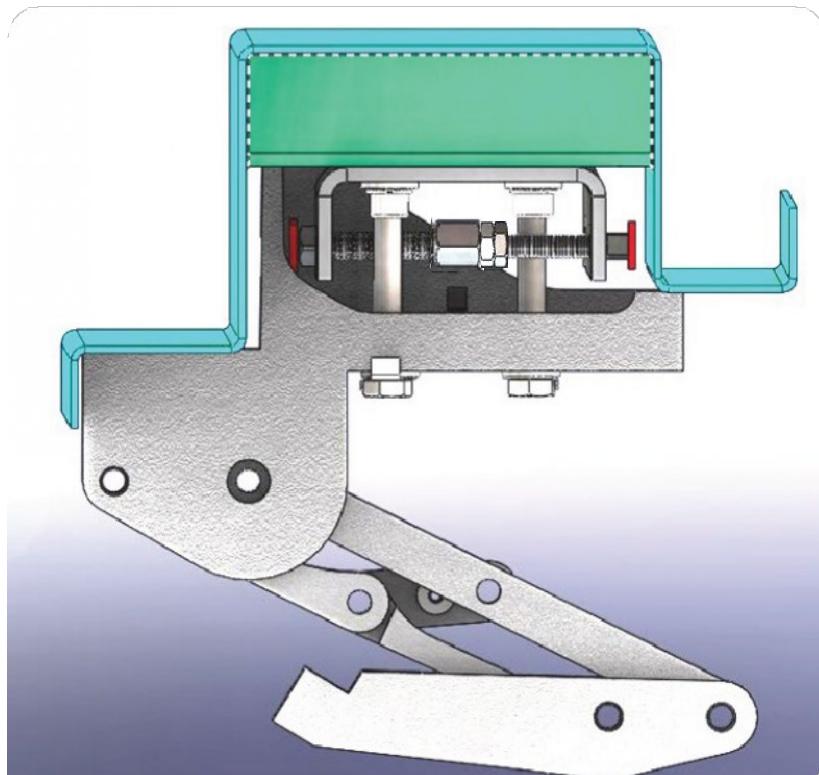

# INSTALLATION

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## WORK ORDER



## OVERVIEW ASSEMBLY



# 1. MOUNT CONSOLE

## A. PREPARE MOUNTING POINTS

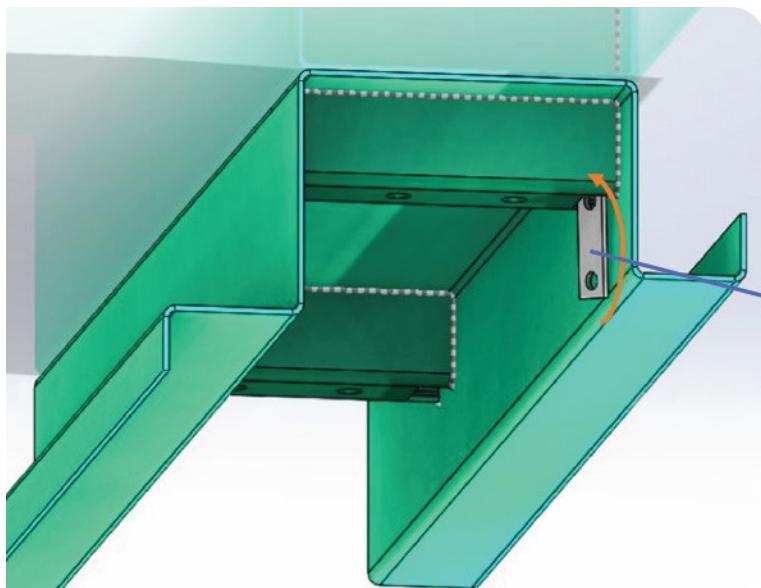


Figure 1: Insert threaded plate

There are 3 fixing points under the vehicle. At these points, the threaded plates can be carefully inserted into the existing cutouts.



Figure 2: Alternatively use anchor rivet nuts M10

**As an alternative to** the threaded plates, M10 anchor rivet nuts can also be used. These can be inserted directly into the existing holes.

This variant should only be used in exceptional cases if it is not possible to insert the threaded plates.

# 1. MOUNT CONSOLE

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## B. MOUNT CONSOLE

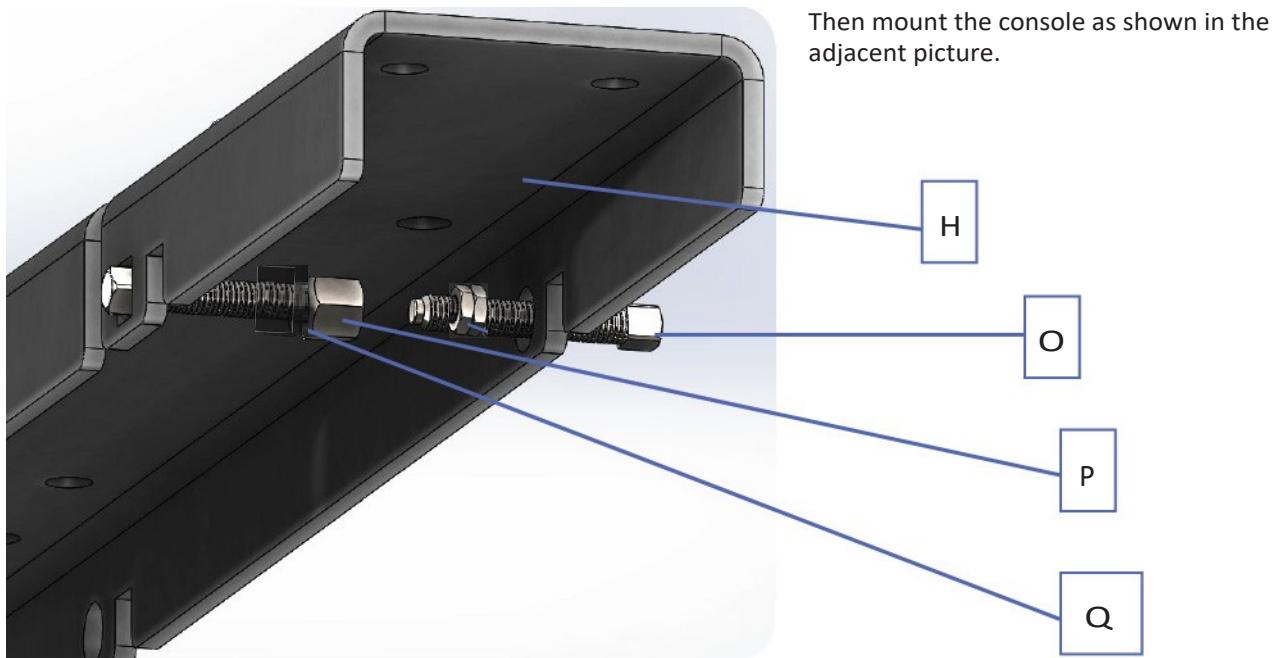


Figure 3: Pre-assemble console

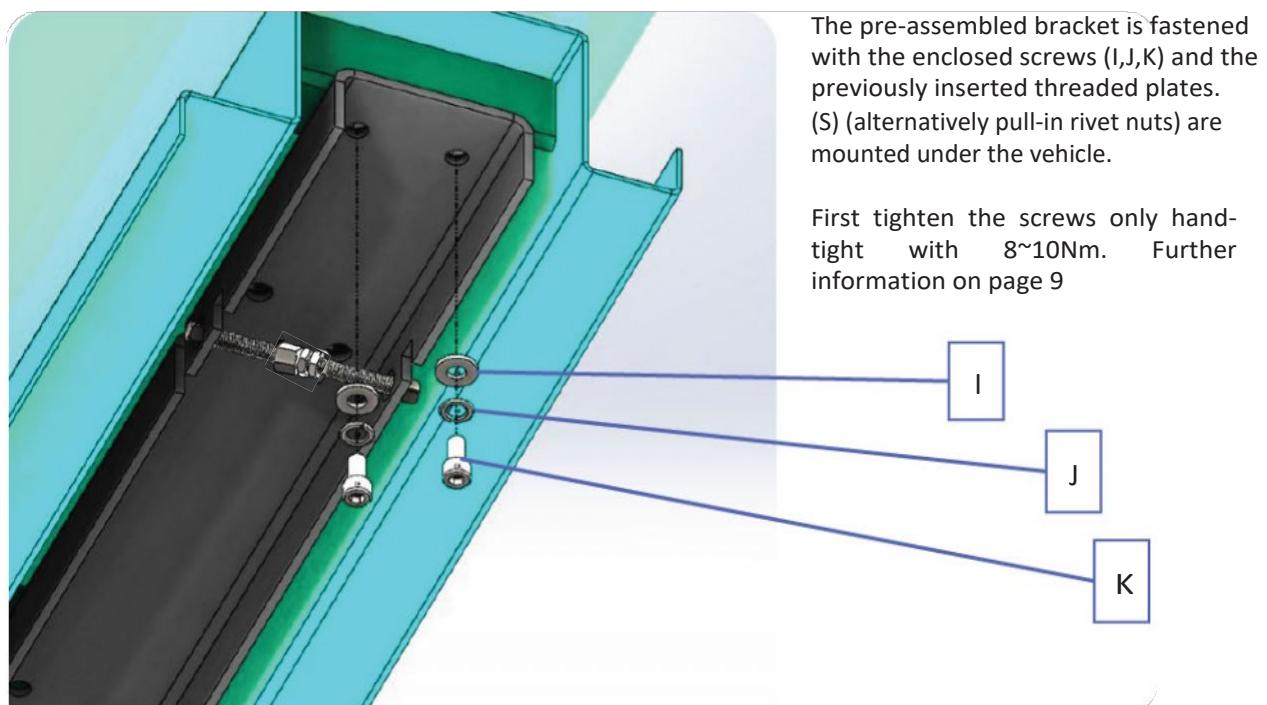


Figure 4: Mounting the console

## 2. MOUNT JOINTS

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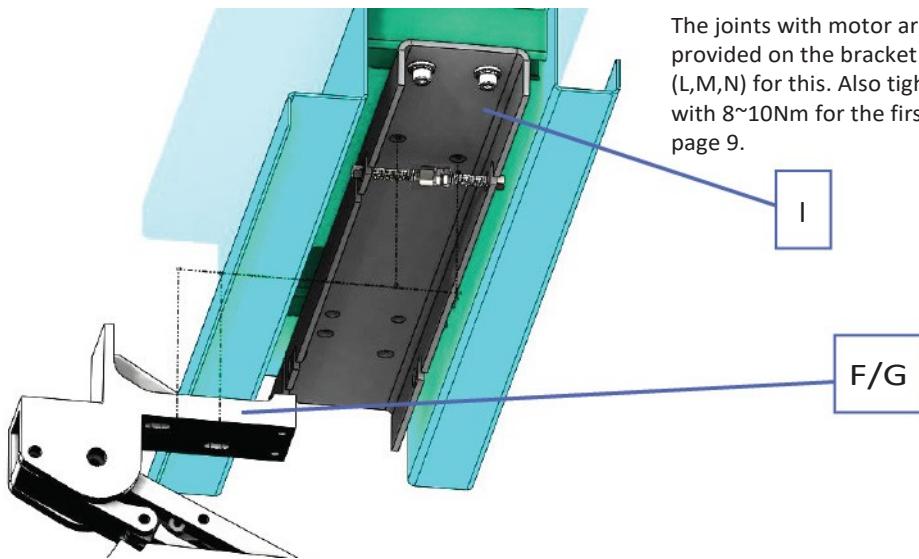


Figure 5: Fastening points joints

The joints with motor are mounted on the mounting points provided on the bracket (H). Use the enclosed screws (L,M,N) for this. Also tighten these screws only hand-tight with 8~10Nm for the first time. Further information on page 9.

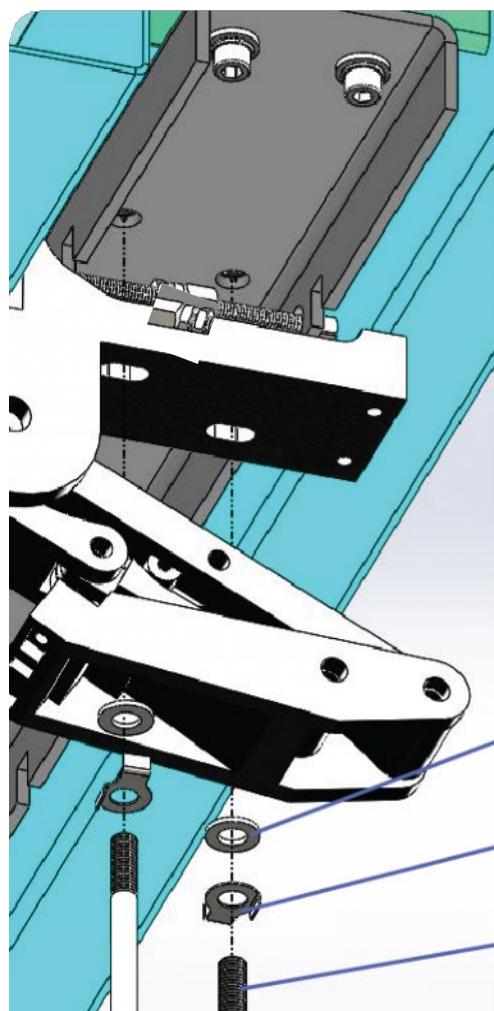
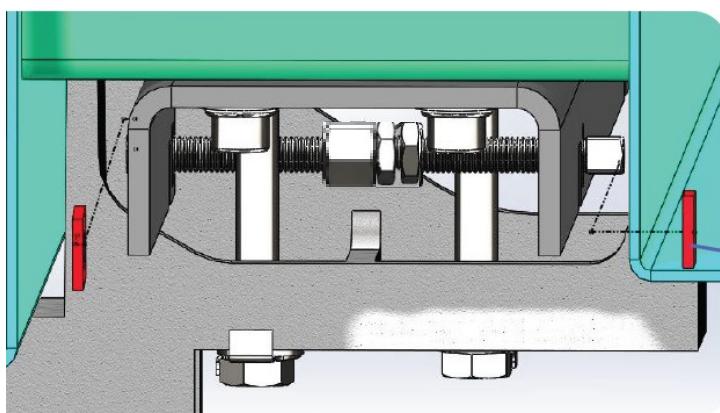


Figure 6: Screw fastening bracket/joint

After assembly, the long flag on the locking plate should be bent upwards around the aluminium block to prevent the screw connection from coming loose unintentionally.

## 2. MOUNT JOINTS

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After mounting the joints, they are braced to the body using the enclosed mounting plates (R) and the pre-mounted screw connection. Ensure correct Make sure that the mounting plates are seated correctly. Please refer to the pictures on the left for the individual steps.

R

Figure 7: 1. positioning the mounting plates

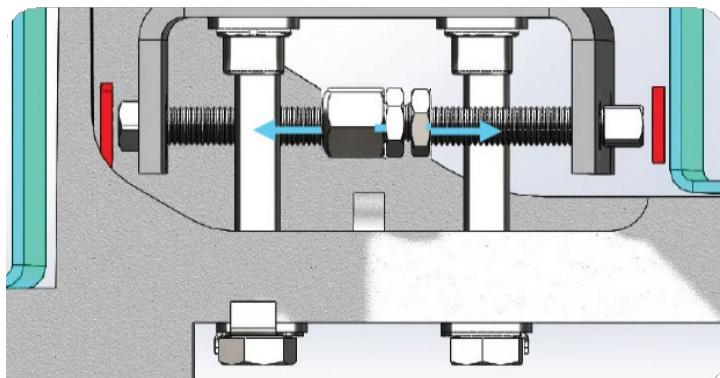


Figure 8: 2nd tightening of the screw connection

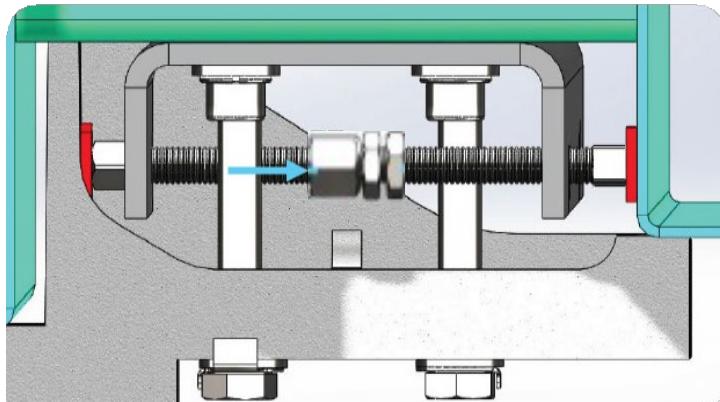


Figure 9: 3. secure screw connection with lock nuts

Then check all parts again for correct fit!

Now tighten the 6 screws "K" with 45Nm. And the 4 screws "N" are tightened with 24Nm.

No more, to avoid damage to the aluminum block.

Finally, fold over the short flags on the retaining ring at the screw head.

### 3. FITTING THE FOOTBOARD

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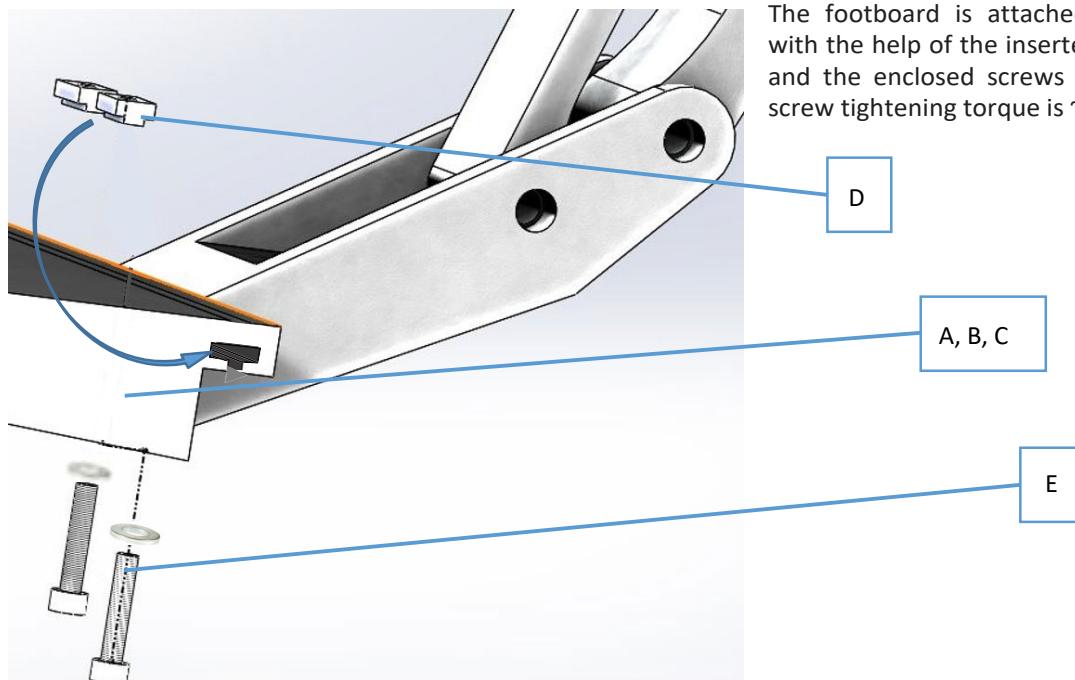


Figure 10: Running board assembly

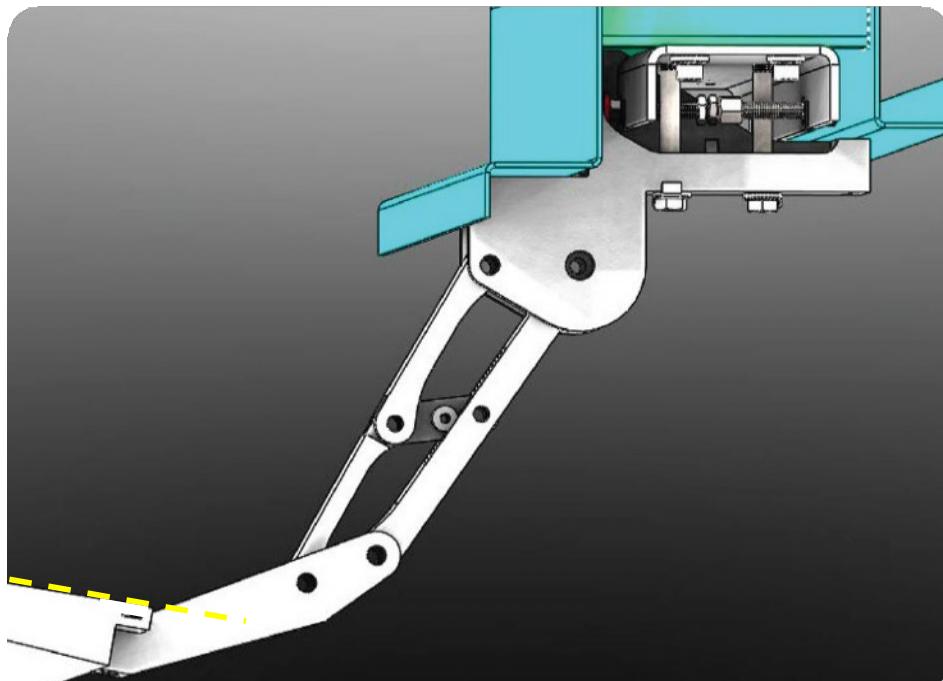


Figure 11: Complete assembly Tread surface has 7° incline, design-related

#### 4. ELECTRICAL INSTALLATION

## A. OVERVIEW OF ELECTRICAL COMPONENTS

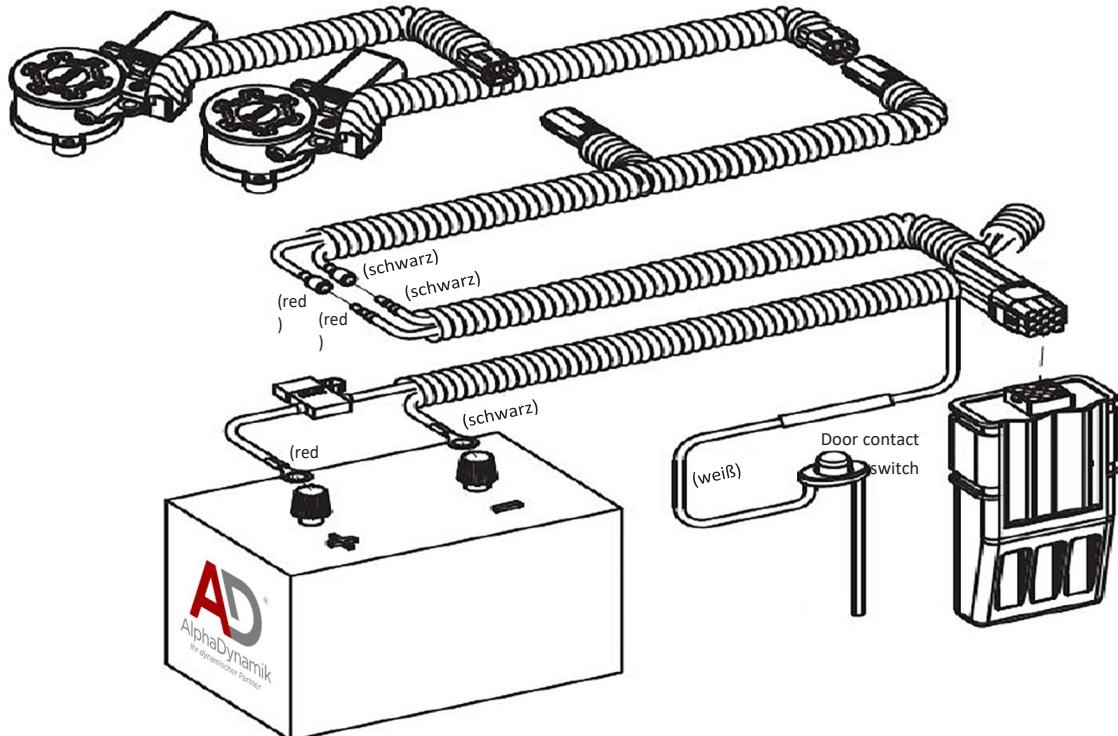


Figure 12: Electrical components until May 2021

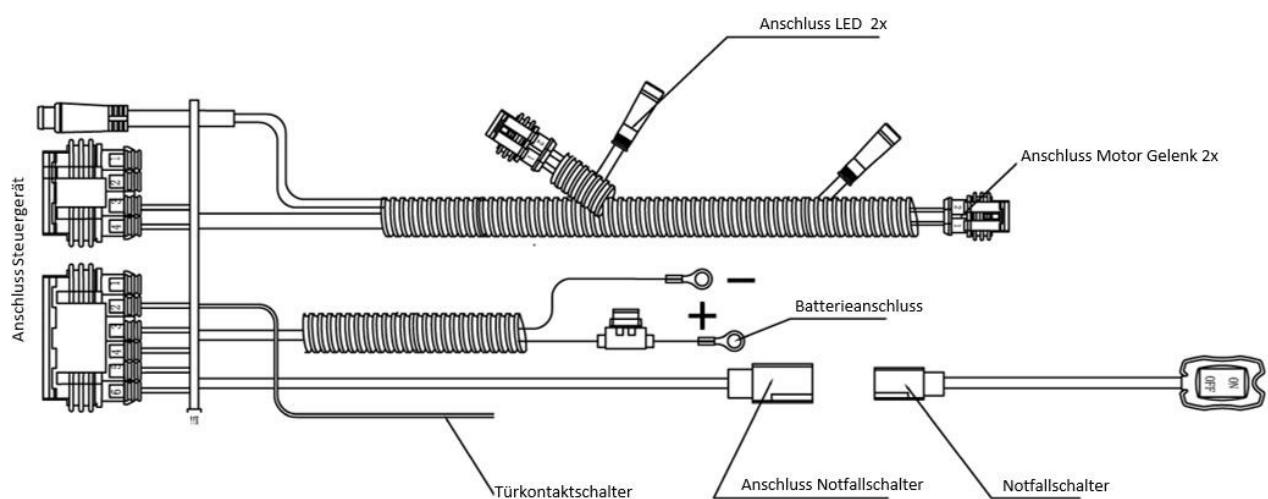


Figure 12a: Electrical components as of May 2021

## B. OVERVIEW WIRING

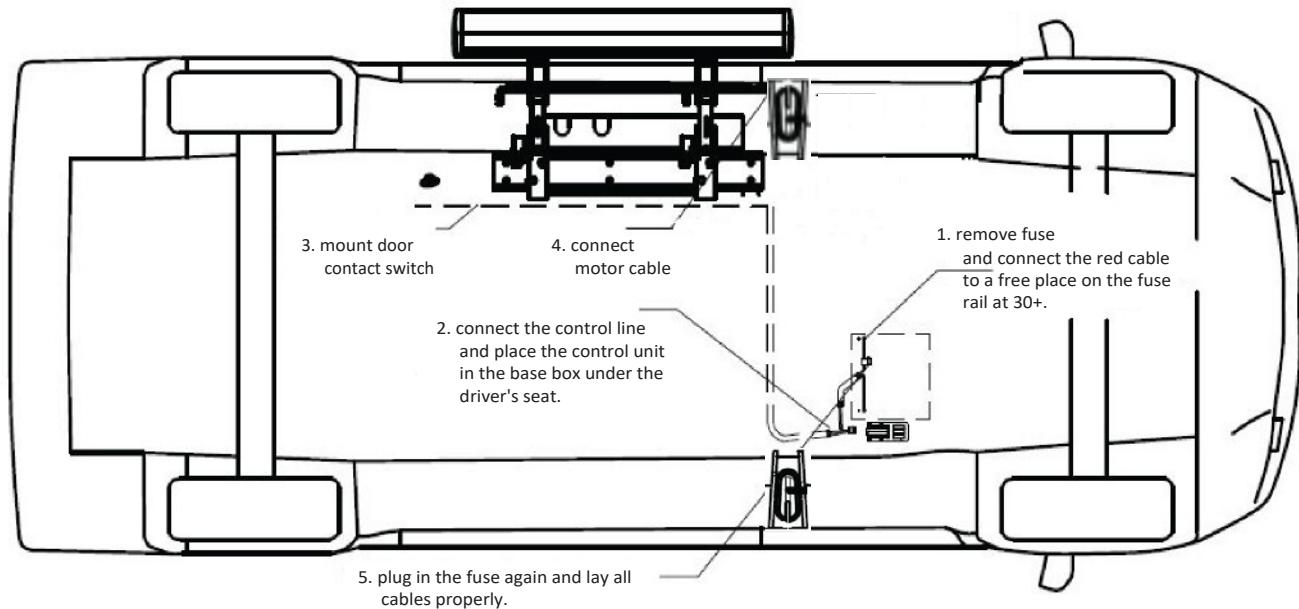
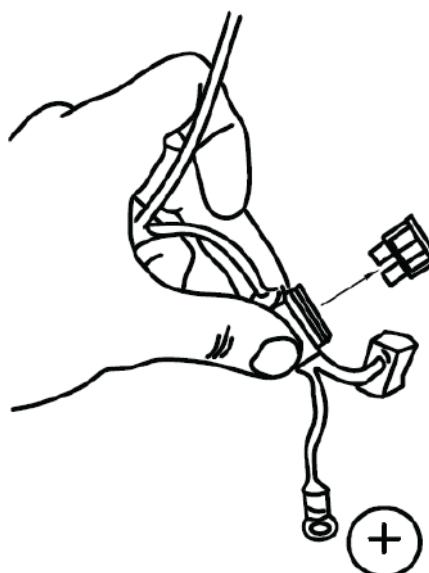


Figure 13: Wiring procedure

## C. PROCEDURE FOR CONNECTING ELECTRICAL COMPONENTS

### 1. REMOVE THE FUSE



Before starting work, remove the 25A fuse in the supply line (U)!

### 2. LAY CABLES

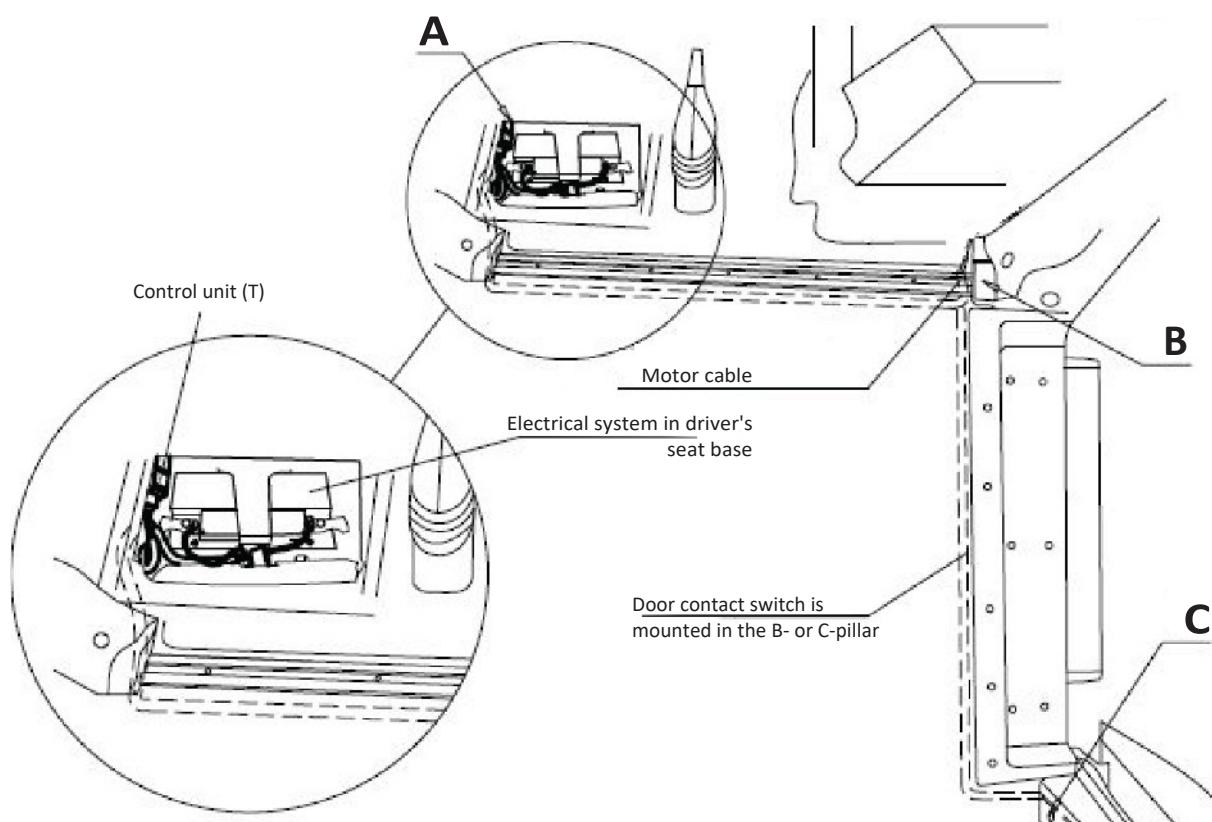


Figure 14:

Lay the cable in the dry and protected area of the floor up to under the driver's seat.

There connect the red cable to a free fuse 20A on the 30+ strip.

And connect the black cable to a designated mass point screw M6. Also stow the control unit in the pedestal box.

## C. PROCEDURE FOR CONNECTING ELECTRICAL COMPONENTS

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Open the battery compartment inside the driver's compartment. For ease of handling, the driver's seat may need to be pushed all the way back.

Connect the lead/control cable (U) from the control unit to the vehicle battery. Connect the red lead to the positive (+) terminal of the battery, and the black lead to the negative (-) terminal of the battery. The cable is then connected to the control unit (T) and can be placed in battery compartment A (see Figure 15).

Remove the carpet on the driver's side. Route the cables as shown in the picture above (dashed lines). The motor cable is routed to the outside in area B (see figure 15 & 16). The signal cable is further routed to position C (see figure 15).

Motor cable from the interior

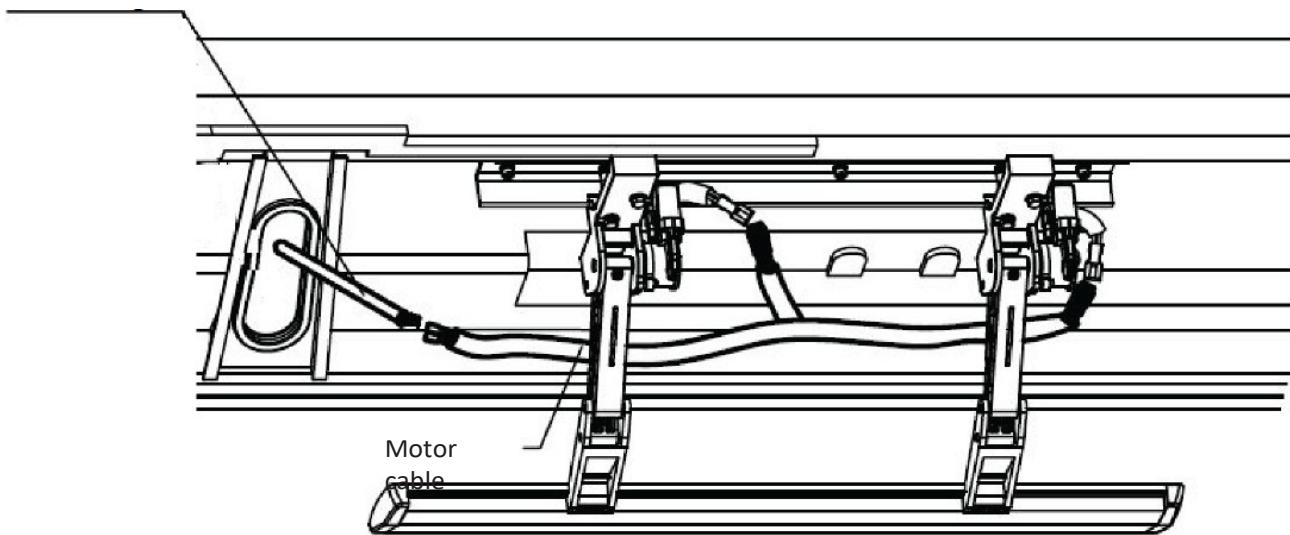


Figure 15: Plug connection motor cable inside-outside

The motor cable from the indoor area is connected to the motor cables in the outdoor area (see Figure 16). Please pay attention to the same colour coding. Afterwards, the cables in the outdoor area can be laid in a weather-protected and professional manner and fastened to the vehicle with cable ties.

### 3. DOOR CONTACT

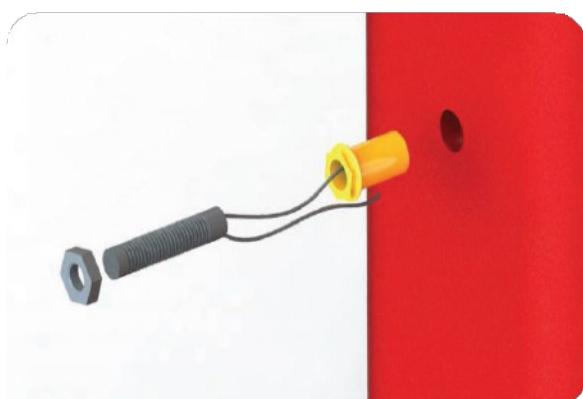
#### MOUNTING MAGNET ON DOOR SIDE



The magnet can be attached to the door using the self-tapping screw. Alternatively, this can also be glued with suitable means.

**Please note to reseal drilled holes with suitable means!**

#### MOUNTING MAGNETIC SWITCH ON BODY SIDE

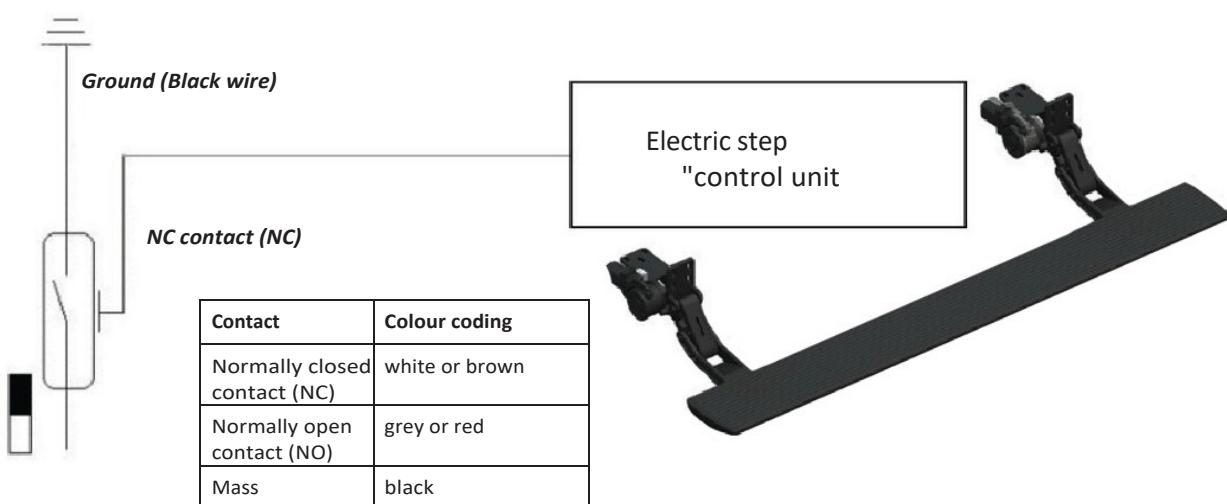


The retractable nut should be positioned so that it is concentric with the magnet. Then drill a hole Ø11mm and seal the hole. The pull-in nut can then be fastened with a suitable tool. Then screw in the magnetic switch and secure it with the counter nut. The length of the magnetic switch can be adjusted according to the user's situation by screwing it in or out.

**Please note to reseal drilled holes with suitable means!**

#### ELECTRICAL CONNECTION DOOR CONTACT

The electrical connection should be made by a specialist company depending on the installation situation. Electrical connection elements are therefore not included in the scope of delivery. The door contact switch should be tested by means of a continuity tester or similar before installation. The door contact switch is a **changeover contact**. The **ground connection** and the **normally closed contact (NC)** are required. The normally open contact (NO) is not required and can be isolated.

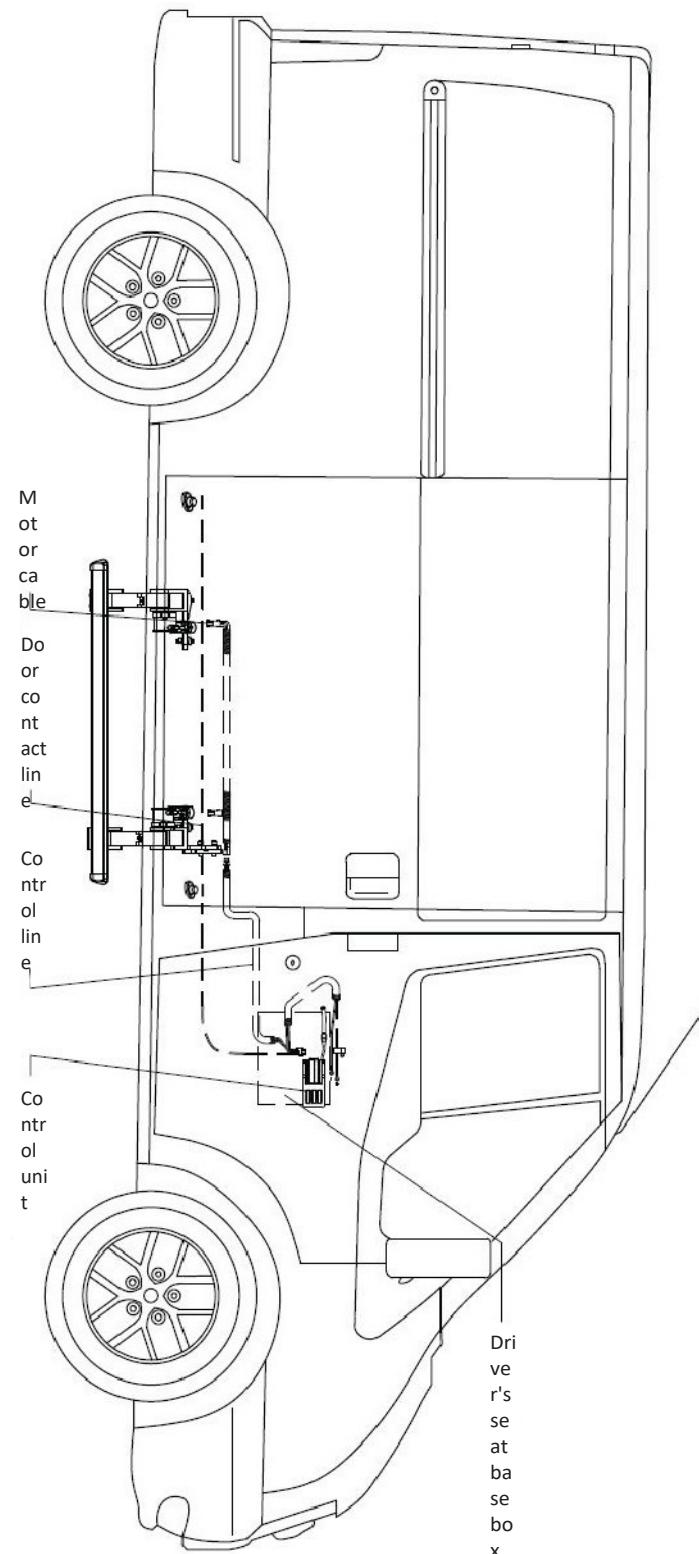


***When the door is open, ground must be switched!***

## 4. ELECTRICAL INSTALLATION

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### D. SUMMARY OF ELECTRICAL COMPONENTS



Afterwards the fuse can be plugged in again and the stage can be checked for function. If the step does not work, all steps should be checked again. A switch is installed on the control unit. This should be set to "0" position. Switch in position "1" is the so-called "**workshop mode**", so that an unintentional extension is avoided in the repair or maintenance mode.

## 5. USE OF THE STAGE

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The stage should be tested after installation. Follow the instructions below to do this:

### 1. Visual inspection

#### 2. Tread surface has 7° slope, due to construction.

Check that all screws are in their intended locations and tightened.

### 3. Function

Extend and retract the step several times. Check whether there are any unusual noises or irregular movements.

### 4. If you have any concerns, please contact our customer service. Contact details can be found in the last chapter.

## 6. MAINTENANCE AND TROUBLESHOOTING

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Maintenance		
Every 3 months	Check the function of the joints	
	Check all electrical plug connections	
	Check screws for tightness	
If required	Remove icing on footboard and joints before use	
	Thoroughly remove heavy soiling before use	
Cause of error		
Stage does not move as soon as door is opened or closed	Electrical fault	Battery cable not connected
		Door contact not connected correctly
		Control unit error
		Motor cable - plug connections interrupted
		Switch control unit to "1" Workshop mode
		Swapped cables - check all connections
	Mechanical fault	Something blocked (stone, or similar)
		Running board not symmetrically mounted

If the step functions poorly or no longer due to dirt or frost, all hinges must be cleaned or thawed. The moving parts should be treated with a PTFE spray. Please do not use grease.

The step must be cleaned as part of the vehicle's normal cleaning cycle. This depends on how the vehicle is used and the degree of soiling caused by operation. Normal, mild cleaning agents should be used, just as for cleaning the other parts of the vehicle. The use of high pressure cleaners is not recommended. Do not use aggressive solvents. These could damage the paint and glue used in the manufacture of the step.

## 7. DISPOSAL

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Only allow qualified specialists to dispose of the electric step after its period of use. The manufacturer accepts no liability for damage caused by improper disposal.

## 8. CUSTOMER SERVICE

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The customer service of Alphadynamik GmbH & Co KG is at your disposal for ordering spare parts, for maintenance and repair work and for problems and questions.

The address is:

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51588 Nümbrecht  
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