

# **Assembly instructions**

**Edition:** 4/2023



#### 1) General information

- \* The Hoverboard may only be installed by skilled professionals (e.g. automotive technicians).
- \* The Hoverboard complies with EN 1789:2020, EN 1865-5:2012 and ECE R17 (20g). Anchorage spots in the vehicle and the connection to the stretcher must be adequately strong and, if necessary, must be approved by a state-authorized testing institute (e.g. TÜV, Dekra etc.)!
- \* The Hoverboard must be fused with 30A (ignition/15) and 15A (permanent positive/30) in the vehicle and requires supply wires with a cross-section of min. 4 mm² (AWG 12)
- \* Please refer particularly to the assembly instructions of the stretcher.
- \* The illustrations do not necessarily correspond to the delivered equipment and are not true to scale.
- \* We take no liability for damages caused by operating errors or incorrect assembly or repair.
- \* Please pay close attention to the country-related, applicable safety regulations for patient transfer.
- \* Subject to technical changes.



# 2) Vehicle preparation

To avoid making installation unnecessarily difficult for service and/or repairs, we strongly recommend the following procedure:

- > Reinforce the vehicle floor with suitable welding plates (or similar) so you can fasten the Hoverboard according to EN 1789:2020 and according to the installation drawings in the attachment.
- > Please use weld-in nuts or threaded bushes M10 for easier disassembly in case of repairs.
- > For Hoverboards with lateral movement device, the drilled holes must be exactly aligned to each others and to driving direction in order to ensure proper function.
- > Please refer to the attached installation drawing for the position of the holes.
- > Electrical connection: Dimension of supply wires at least 4 mm² (AWG 12)!

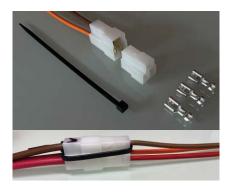
To ensure that the stretcher is always ready for use, a permanent positive is passed through the Hoverboard for continuous charging of the battery.

Orange = ignition positive, fused in the vehicle with 30A (wire no. 15)

Brown = ground (wire no. 31)

Red = permanent positive (for charging the stretcher and release of the lateral movement device) fused in the vehicle with 15A (wire no. 30)

The enclosed cable tie must be assembled safely!



#### Never connect the ignition line together with permanent positive!

This could lead to consequential damages, which are not covered by warranty!

The valve-control-circuit is internally fused with 5A.

> The assembly is much easier when the Hoverboard is on power.
First lift it into the vehicle and connect the power supply (12V, poles 15, 30 and 31) according to the assignment of the 3-pole socket.

Then connect the external compressor and switch on the Hoverboard, preferably to the highest position.

This will allow better access to the mounting spots.

#### **ATTENTION:**

When lifting to the highest position, the compressor runs continuously for approx. 3 minutes. Multiple lifting in short intervals will overheat the compressor! The thermal protection switch will turn off the compressor and needs approx. 1 hour to cool down!

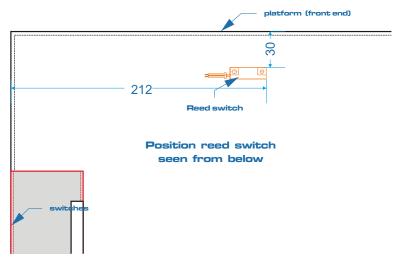
> The plug with another 5 connections can be used optionally if you want to expand the circuitry of the Hoverboard to one or more external switch groups, e.g. via panels on the side wall and/or at the rear door > details see chapter 3.



# 2) Vehicle preparation

In order to get the Hoverboard working before installation, we have fixed a block magnet with red adhesive tape to the plate surface.

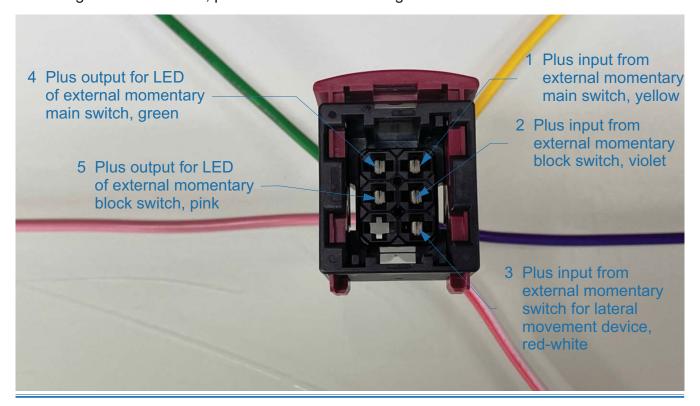
This activates the reed switch, which is mounted underneath the platform.



If you turn on the main switch, the Hoverboard lifts up.

# 3) Option: Additional external switches

This Hoverboard is ready for additional external momentary switches by integrated bistable relays and the corresponding 6-pole connector (Junior Power Timer) according to the illustration, please note the numbering:



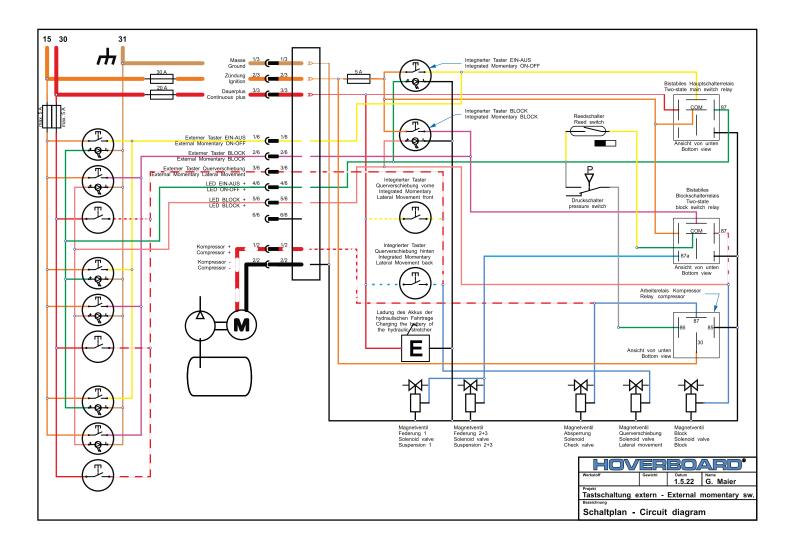


# 3) Option: Additional external switches

Connect the external momentary main switch and CPR switch (block position) to the ignition (terminal 15) according to the circuit diagram (left area).

Connect the external buttons for the lateral movement device via permanent plus (terminal 30) so that the device works even when the ignition is switched off.

Please keep the supply lines as short as possible and use at least 1 mm<sup>2</sup> (AWG 18).



Do not forget the fuse protection of wires 15 (30A) and 30 (15A) in the vehicle!

For Hoverboards with lateral movement device, please take into account the movement range at the cable length (see chapter 6)!

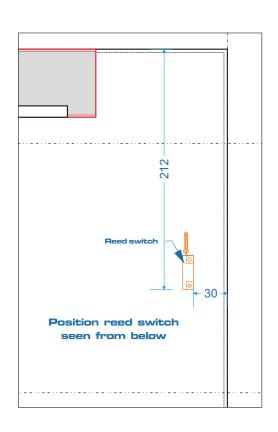


### 4) Mounting the stretcher on the Hoverboard

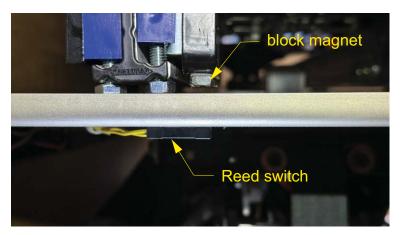


For the assembly and the correct mounting of the slide please refer to the assembly instructions of the stretcher, using the original screws and nuts.

Then detach the block magnet glued to the plate and attach it to the slide, as shown in the picture:







Finally, turn on the Hoverboard and push the slide forward.

As soon as the slide has reached the front position, the block magnet actuates the underneath reed switch and the Hoverboard positions itself automatically to the current loading weight.



### 5) External compressor

A hermetically sealed box (IP 66) with a stainless steel mounting plate for installation underneath the vehicle floor is supplied with the external compressor.

The compressor sucks clean air from inside the vehicle through the black tube and blows it back through the pressure hose.

This way suction of dirty and salty outdoor air is avoided.



Fasten the box in a suitable place underneath the vehicle, preferably in the rear area, but by never close to the exhaust or in an inaccessible place that causes difficult replacement of the compressor!

Box dimensions: L 240 mm x W 160 x H 121 mm / L 9.5" x W 6.3" x H 4.8" Hole pattern of the base plate: L 251 x W 196,  $\varnothing$  6,5 mm / L 9.88" x W 7.72",  $\varnothing$  0.26" Dimensions of the base plate: L 270 x W 216 x H 2,5 mm / L 10.6" x W 8.5" x H 0.1"

Depending on the position of the Hoverboard in the vehicle, drill a  $\emptyset$  30 mm/1,2" hole in the vehicle floor in the red area of the enclosed assembly drawing.

Lead the cable conduit through the hole and seal it on the outside. Please make sure that it is not damaged and that the tube nozzle remains completely free, so that the compressor can take in sufficient air!

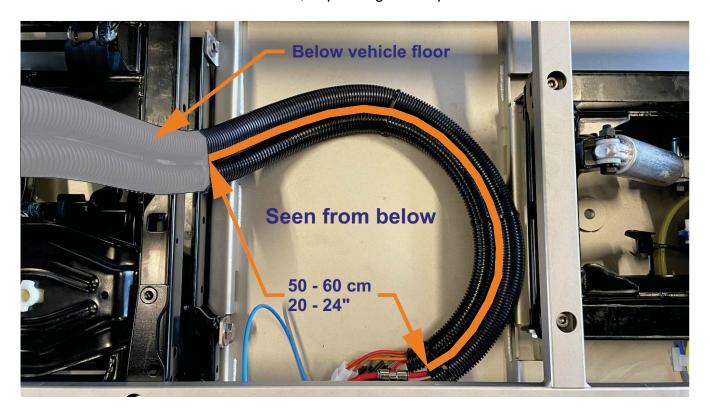
In the interior of the vehicle, allow the cable conduit to protrude at least 25 mm / 1" above the floor level, so that no spilled liquids can penetrate into the cable conduit.



### 6) Cable and tube layout

Then set the tube and cable together with or parallel to your on-board cables (for the supply wires and, if necessary, external wiring) in a single loop of a suitable length, so that the Hoverboard does not jam or scratch the wires in movement of suspended mode or lateral movement.

The length between the tube outlet (on the floor) and the plug/air connection should be between 50 and 60 cm / 20" and 24", depending on the position of the tube outlet.



Finally, check the installation by moving the Hoverboard up and down, left and right in suspended mode, while somebody is watching the movement of the tube package.

If you have any questions, please call our service at +43 - 660 - 800 9000

# HOVERBOARD®



In terms of our continuous improvement process (CIP), we really appreciate your requests, complaints and suggestions for improvement.

Therefore we look forward to hearing from you

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Subject to technical changes



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