

**Edition:** 10/2022

### User manual

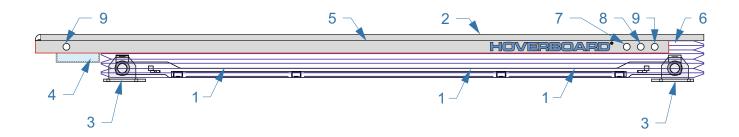


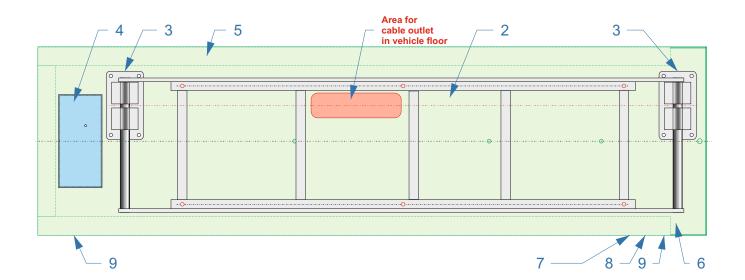
# General information

- \* It is essential that you and any other operator of this product read and understand the content of this manual before installing and using this product!
- \* In order to avoid operating errors, these manual must be accessible to the staff at all times.
- \* The Hoverboard should only be used for the purpose as described. Please refer particularly to the instructions of the used 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.

# Specification

- 1... Pneumatic suspensions with automatic weight adjustment from 40-520 kg/88-1146 lbs and hydraulic shock absorbers. Total vertical stroke 170 mm/6.7"
- 2... Stretcher mounting platform
- 3... Lateral movement device with pneumatic release (option)
- 4... Switch box, contains: a) 1x Relay for compressor, 12V
  - b) 2x Two-state relays for key circuit, 12V
  - c) 5x Magnetic valves 12V d) Terminal block
- 5... Air pressure tank (approx. 4.5 litres/1.2 gal) with pressure switch
- 6... Reed switch
- 7... Blue momentary main switch
- 8... Red momentary switch for highest (rigid) position (for CPR)
- 9... Momentary switches for pneumatic release of the lateral movement device (option)







### Assembly

The Hoverboard may only be installed by qualified personnel (e.g. car technicians or body fitters) and in accordance with the assembly instructions supplied.

The assembly operator is responsible for damages caused by improper assembly!

### Technical data

- \* Customized Hoverboard for Stryker PowerPro® with Stryker PowerLoad®
- \* Height lowered: 135 mm 5.3" Height when active: 220 mm - 9.0" Height for reanimation (rigid): 310 mm - 12.2"
- \* Standard length: 2273 mm 89.5", short version: 2153 mm/84.8"
- \* Total weight 98/124 kg 216/273 lbs without/with lateral movement device
- \* Maximum loading capacity 520 kg / 1146 lbs (incl. stretcher)
- \* Ignition AND main switch ON: Device ready Ignition OR main switch OFF: Device lowered (e.g. for loading)
- \* To ensure that the Stryker PowerLoad<sup>®</sup> is always ready for use, the permanent positive is passed through the Hoverboard for continuous charging of the battery.
- \* Electrical connection: Dimension of all wires must be at least 4,0 mm2 (AWG 12)!

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Brown = ground 		 (wire no. 31)
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Red = permanent positive (for charging the Stryker PowerLoad

and release of the lateral movement device)

fused in the vehicle with 15A (wire no. 30)

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

### 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
- \* Max. power consumption 25A at 12V DC



### Operation

After successfull assembly and electric connection, start ignition of vehicle and turn on the blue main switch.

The Hoverboard now automatically adjusts to the patient's weight and rises to the level for optimal suspension comfort, the switch lights up blue.

The Hoverboard is all-automatic, i.e. when the supply pressure decreases to 8 bar (116 psi), the compressor starts again for approx. 20 seconds, so that there is always sufficient operating pressure.

By switching off the ignition or pressing the main switch again, the Hoverboard lowers automatically for easy loading and unloading. It also lowers by unlocking the stretcher on the Hoverboard.

Pressing the red switch for the CPR-position (for resuscitation) raises the Hoverboard to the highest (fixed) position, the switch lights up red. This function is only active when the main switch is switched on. By pressing it again, the Hoverboard gently lowers to suspended mode.

### **ATTENTION:**

When lifting to the highest position, the compressor runs continuously up to 4 minutes. Multiple lifting in short intervals will overheat the compressor!

The thermal protection switch will turn off the compressor and it takes approx. 1 hour to cool down!



By pushing one of the pushbuttons, the lateral movement device (option) will unlock pneumatically. While keeping pushed, you can move the Hoverboard crosswise in 8 positions of 32 mm / 1,25" (total = 256 mm / 10"). Releasing the button means locking in the nearest position. This option also works with ignition off.



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The pneumatic release is supplied by the air tank, which will only be refilled when the main switch is on.

Frequently use while the Hoverboard is switched off leads to temporary malfunction.

In case of malfunction or lack of air pressure you may unlock it by the knobs.

For correct loading and unloading please refer to the instructions of the stretcher. Please pay attention to the correct locking of the stretcher on the Hoverboard.

### Plate extension

The short version of the Powerbase platform provides additional 120 mm/4.7" of space in front of the Hoverboard, in the patient's head area.

In case of a malfunction of the Powerload/PowerPro, the extension plate is temporarily fitted within a few seconds for fail-safe operation.

In addition, the shorter platform avoids an extra recess at the boarding ramp, because the PowerPro can be moved out 120 mm/ $4.7^{\circ}$  more.

When the plate extension is mounted, the vehicle doors cannot be closed!





NORMAL OPERATION
Plate extension stowed in the vehicle

EMERGENCY OPERATION Plate extension is mounted



### Serial number

The serial number is located on the bottom of the plate at the rear right end and contains the production date.

E.g. serial number **204004** means:

20**20 - 40**th week, **4**th production unit.

Please always quote this number for any complaints or spare parts orders!



### Maintenance

One of the many advantages of the Hoverboard-types Airbase, Powerbase, Inbase and Vivibase compared to conventional stretcher tables is that they are not classified as medical devices according to Medical Devices Act (MPG) and are therefore not required to be checked mandatory every year.

Hoverboards are basically maintenance-free, but we recommend an annual inspection with a functional check, regarding e.g. the Powerbase, as part of the maintenance of the Stryker PowerLoad.

This can be managed by one of our certified service partners, whom you find up-to-date on

### www.hover.at

You may also contact us directly if you have any questions or problems.

### **Purification**

All Hoverboards are made of high quality stainless steel of the type 1.4301 and are carefully processed in protective atmosphere.

However, "stainless" does not mean that the material is resistant to all aggressive chemicals, such as e.g. ionized chlorine solutions.

At outside temperatures below -5 ° (23F), calcium chloride is often used as antifreeze solution, which is much more aggressive than the commonly used sodium chloride ("common salt").

This aggressive solution is brought to the surface of the plate by the wheels of the stretcher and causes surface corrosion as a result.

For a consistently beautiful appearance, it is therefore important to rinse and wipe the surface of the plate daily with clear water during such conditions.

A final impregnation with oil-based stainless steel care products can also help prevent corrosion.

On request, we will be happy to send you a special cleaning and care set.





### Disinfection

On the European market, there is such an abundance of disinfectants, solvents and cleaning agents, so that not every single product can be tested.

In addition, the manufacturers are constantly changing and adapting their recipes.

That is why we only use 1.4301 quality for all stainless steel parts, because it means the optimal synthesis of corrosion protection, processability and cost.

The correct (means not too high) concentration of the disinfectant is most important. Never use disinfectants with chloroacetic acid or other corrosive ingredients!

The bellows is made of polyester fabric with a PVC coating and a PVC support frame. These materials are generally trouble-free, but too high concentrations of disinfectants may cause color damage (bleaching).

The disinfectant also should not remain on the surface anywhere, but should be wiped off after it has acted or also rinsed away with clear water.

# Quality

All Hoverboards are tested in accordance with the latest standards by DEKRA in Klettwitz and comply with EN 1789: 2020, EN 1865-5: 2012 and ECE R17 (20 g test).

The Hoverboard Powerbase has also been tested by Stryker Medical EMS (USA) and is homologated for use with the Stryker PowerLoad and PowerPRO XT.

The exclusive use of components of ISO certified pre-suppliers provides industrial manufacturing quality.

Because of our CIP (Continuos improvement programme) and advancement of our products, your Hoverboard may vary from this description.

In case of malfunctions or questions, please contact our hotline

Phone +43 - 660 - 800 9000

Mail <u>info@hover.at</u>

www.hover.at

# HOVERBOARD

# Spare parts







Air suspension 30620 > with shock absorber 30621 > without shock absorber

30311 Air cushion

30302 Adjustable shock absorber



30057 Magnetic valve block

30058 Magnetic valve 1

30059 Magnetic valve 2



30291 Level control valve

30292 Valve control bow

30272 Air fittings

### Spare parts



30211 External compressor (without Box)

62002 External box (without compressor) 62003 External box (with compressor)

Reed switch 30072 30073 Block magnet



30244 Pressure tube 4 mm, red 30245 Pressure tube 4 mm, blue

30246 Pressure tube 4 mm, yellow 30240 Pressure tube 6 mm, red

30248 Teflon tube, white 31080 Thermal protectiontube

30066 Pressure switch, pre-adjusted 8,5 bar



Wheel guide 51091

62182 Cable and connector for PowerLoad

62220 Stryker hook

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# Spare parts



52014 Switch box, empty 62302 Switchbox for momentary switches, complete with valves, terminal block and two-state relays



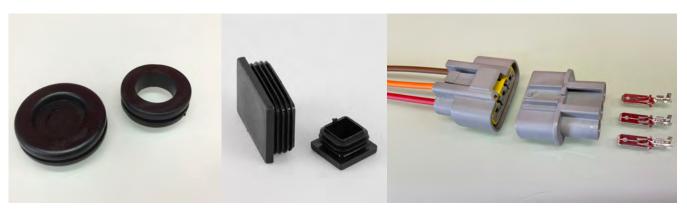
52021 Plate extension complete 31043 Rotary knob



35010 Main switch (blue)

35011 CPR switch (red)

35012 Pushbutton for lateral movement device



30344 Rubber bushing

30361 Plug 60 x 40

35080 Plug combination including contacts

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# Spare parts



30083 Bellows, without lateral movement device 30084 Bellows, with lateral movement device

30520 Load relay 30521 Two-state relay 30530 Relay socket

31283 Cable fixer, self-adhesive





31011 LMD pneumatic cylinder

31030 Linear bearing

31040 Knob

51031 Zahnkamm hinten 51041 Zahnkamm yorne

51062 Rastbolzen

62260 Edelstahlpflegeset



51031 Rear toothcomb 51041 Front toothcomb



51062 Locking bolt



62260 Care set for stainless steel

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# Spare parts





31020	hose connector	4-4-
31021	hose connector	4-4
31022	hose connector	6-6
31023	hose connector	6-4
31024	hose connector	8-6

30251	fuse	holder
30252	fuse	30A
30253	fuse	5A

Connector and cable 35022 for front pushbutton 35023 for rear pushbutton 35024 for main switch 35025 for CPR switch



Terminal blocks Compact

35071	grey	
35072	orange	
35073	red	
35074	blue	
35075	black	
35076	Jumper	double
35077	Jumper	four



30513	JPT-crimp female
30514	JPT-crimp male
30517	JPT-connector 2 pins f
30518	JPT-connector 2 pins m
35060	JPT-connector 6 pins f
35061	JPT-connector 6 pins m

# Have always a save ride with your new

# HOVERBOARD®