



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.

HOVERBOARD GmbH

Gewerbepark 10

A-6068 Mils - AUSTRIA





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 Ferno Viper and Medirol Vivera
- * Height lowered: 135 mm 5.3" Height when active: 220 mm - 9.0" Height for reanimation (rigid): 310 mm - 12.2"
- * Standard length: 2003 mm 78.9"
- * Total weight 91/119 kg 200/262 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 stretcher 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) !

Brown	=	ground	(wire no. 31)
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.





Operation



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.

Serial number

The serial number is located on the bottom of the plate at the right end and contains the production date. E.g. serial number **212105** means: 20**21 - 21**th week, **5**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 stretcher.

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

<u>www.hover.at</u>

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.

Cuality

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.



HOVERBOARD®









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









30513JPT-crimp female30514JPT-crimp male30517JPT-connector 2 pins f30518JPT-connector 2 pins m35060JPT-connector 6 pins f35061JPT-connector 6 pins m

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

30211 External compressor (without Box)



30244Pressure tube 4 mm, red30248Teflo30245Pressure tube 4 mm, bluewhit30246Pressure tube 4 mm, yellow31080Ther30240Pressure tube 6 mm, redtube

30248 Teflon tube, white31080 Thermal protectiontube 30066 Pressure switch, pre-adjusted 8,5 bar



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



30072Reed switch30073Block magnet



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- 30083 Bellows, without lateral movement device30084 Bellows, with lateral movement device
- 30520 Load relay30521 Two-state relay30530 Relay socket
- 31283 Cable fixer, self-adhesive



35010 Main switch latching (blue)35013 Main switch momentary (blue)

- 35011 CPR switch latching (red)35014 CPR switch momentary (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



31020hose connector4-4-431021hose connector4-431022hose connector6-631023hose connector6-431024hose connector8-6

30251 fuse holder 30252 fuse 30A 30253 fuse 5A

Connector and cable for front pushbutton for rear pushbutton for main switch for CPR switch



31011 LMD pneumatic cylinder



31030 Linear bearing

51062 Rastbolzen

31040 Knob

62260

51031 Zahnkamm hinten 51041 Zahnkamm vorne



51031 Rear toothcomb 51041 Front toothcomb



51062 Locking bolt



62260 Care set for stainless steel









Terminal block

31270	grey
31271	green-yellow
31272	blue
31274	jumper
31275	orange

Terminal block

35071	grey
35072	orange
35073	red
35074	blue
35075	black
35076	jumper 2-way
35077	jumper 4-way



In line with our continuous improvement program, we are always grateful for your suggestions, requests, complaints and proposals for improvement.

Therefore we look forward to hearing from you at







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