POWERBASE

HOVERBOARD®

Air-suspended stretcher platform
with pneumatic lateral movement device
for Stryker PowerLoad

POWERBASE

HOVERBOARD®

With the new **Hoverboard POWERBASE** we create
a new dimension of protecting patients **and** paramedics.

POWERBASE

HOVERBOARD®

The new POWERBASE is a customized air-suspended Hoverboard
for the Stryker PowerLoad with a total payload of more than 500 kg/ 1100 lbs.

POWERBASE

HOVERBOARD®

Not only heavyweight patients, but also newborn babies in incubators
experience an easy and painless ride,
without paramedics becoming patients themselves.

Advantages for the patient

HOVERBOARD®

The fully automatic air suspension absorbs most of the incoming vibration energy.

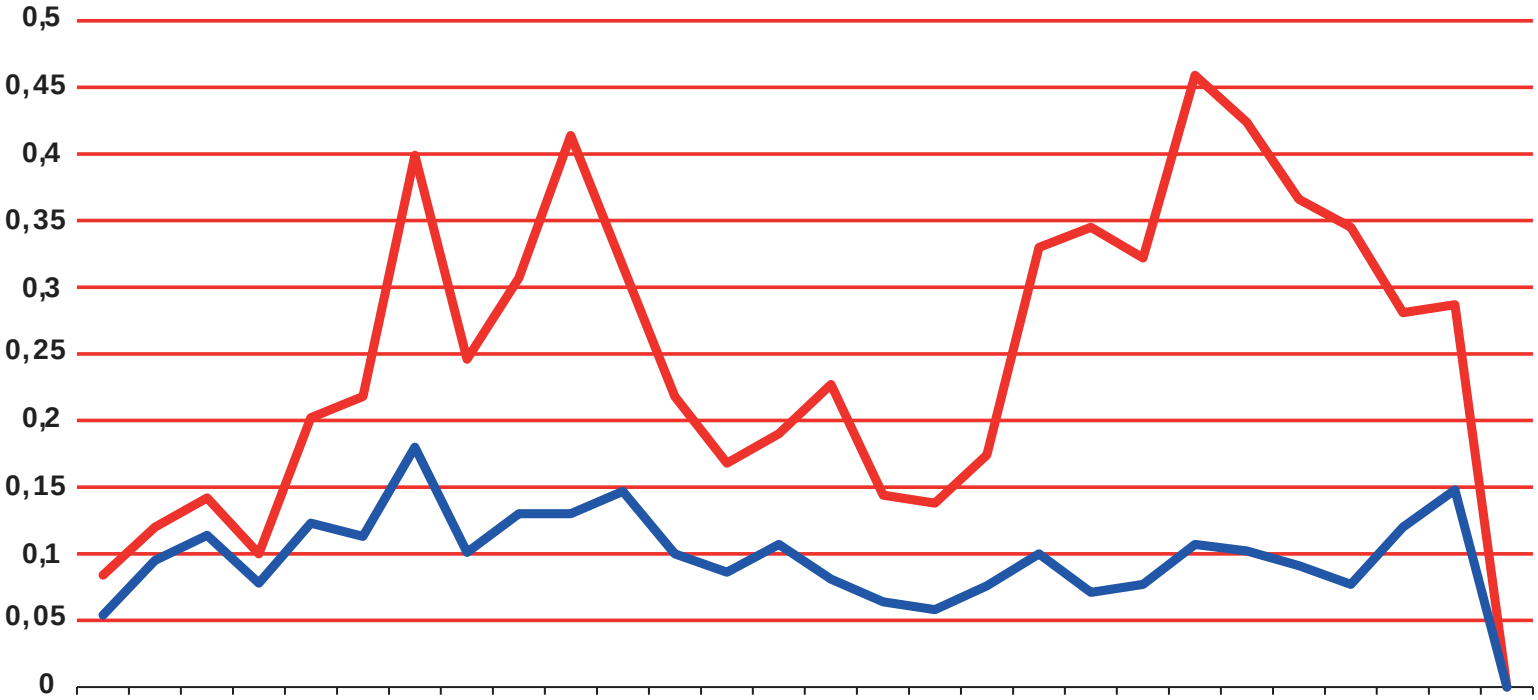
This provides the patient with optimum protection against road shocks, without the well-known nausea arising through large oscillation paths.

Besides, there is neither any tilt in curves or nodding of the patient´s head when braking

Advantages for the patient

HOVERBOARD®

Depending on road conditions, Hoverboard can absorb up to 80% of the impacts, but at least 50%.



Red line: Acceleration values on the vehicle floor under the hoverboard

Blue line: Acceleration values at the plate surface of the hoverboard

Advantages for the patient

HOVERBOARD®

Due to the higher position in the vehicle, the patient is at eye level with the physician or paramedic, as in a hospital bed.

The oppressive feeling of lying on the ground is completely eliminated.

Advantages for physician and paramedic

The height adjustment allows the patient to be brought into the perfect position for the required treatment.

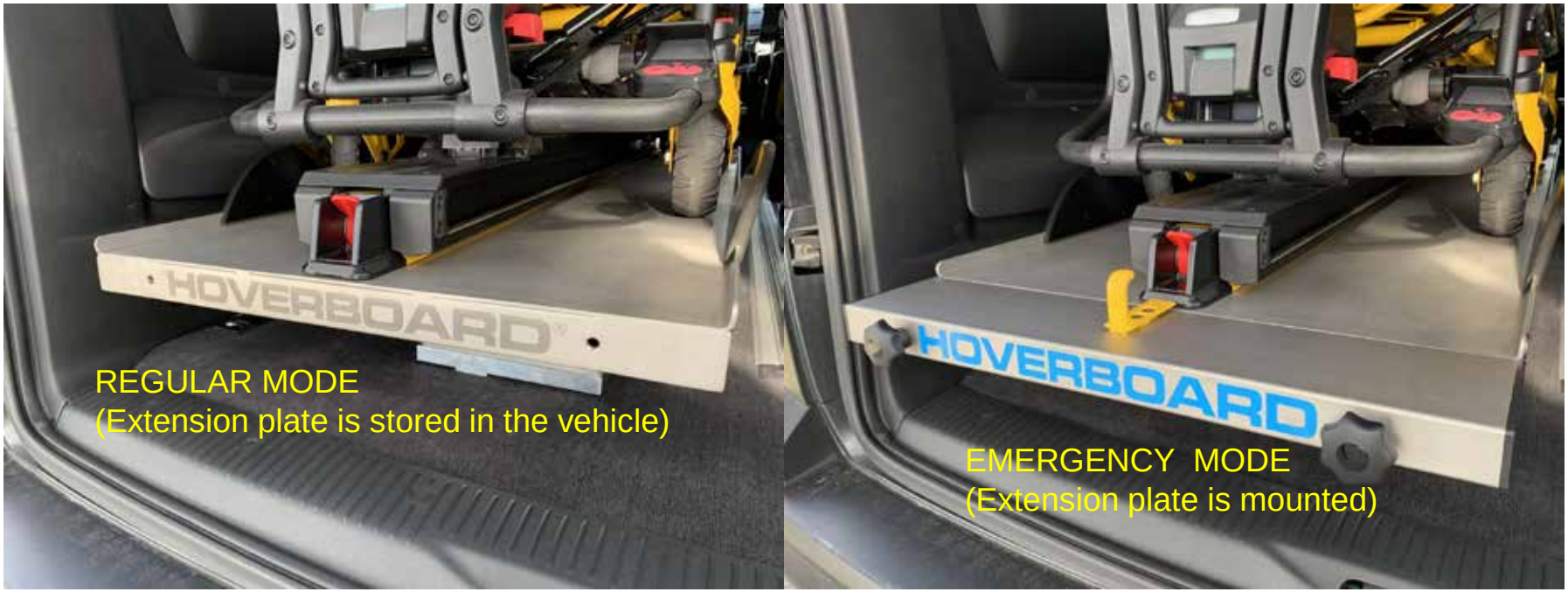
This means that treatment can always be carried out in an upright posture or alternatively in a seated position and the spine is significantly relieved.

Advantages for physician and paramedic

The short version of the Powerbase platform offers additional 120 mm/4.7“ of space in front of the Hoverboard, in the region of the patient´s head.

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

In addition, the shorter plate allows the cut-out at the boarding ramp are not required.



Advantages for constructor

HOVERBOARD®

The hoverboard is perfectly prepared for mounting the Stryker PowerLoad:

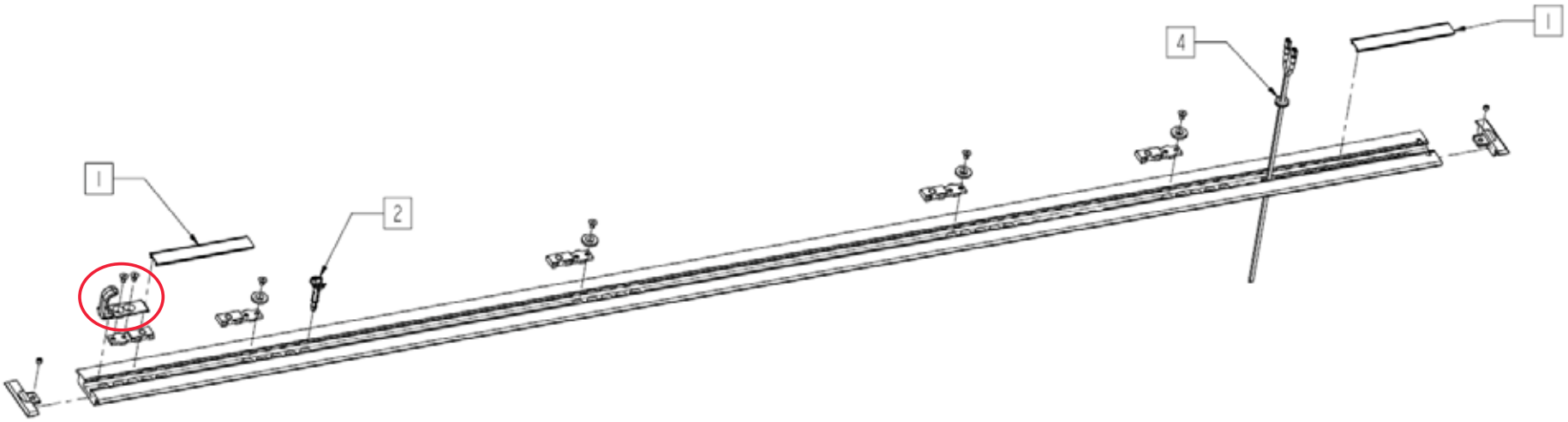
- Ø The time-consuming installation of the Stryker PowerLoad on the vehicle floor with milling of the cable routing etc. is completely eliminated.

- Ø The additional staircase for box vehicles is also omitted because the hoverboard is mounted further forward.

Advantages for constructor

HOVERBOARD®

- The carriage is attached to the hoverboard with Stryker's original 7/16" screws.
- From the Stryker original base plate kit, only the hook for the extension protection is required (see red circle).
- This can save significant costs.

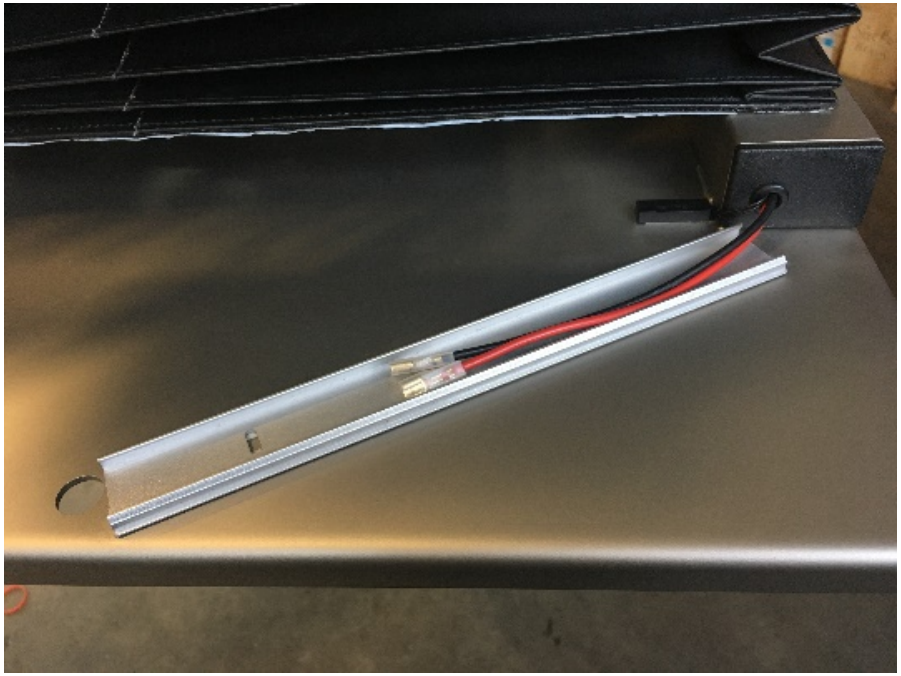


Advantages for constructor

HOVERBOARD®

- The power supply for the Power-LOAD is routed through the hoverboard and supplied via the original Stryker terminals.

- Matching counterparts are mounted on the hoverboard.



Operation

HOVERBOARD®

- When the stretcher is loaded in and locked, the hoverboard automatically adjusts to the patient's weight and lifts to the level for optimal suspension comfort.
- When switching off the ignition or the main switch, the Hoverboard lowers gently.
- **The Hoverboard Powerbase also lowers by unlocking the Stryker PowerLoad.**
- So the patient only has to be pushed, but never lifted.

Operation

HOVERBOARD®

By pressing the main switch, the hoverboard automatically adjusts to the patient's weight and rises to the level for optimal suspension comfort, the switch glows blue.

If the switch for the reanimation position is also pressed, the hoverboard is lifted within seconds into the highest position and remains there rigid, the switch lights up red.

Pressing one of the pushbuttons (front or backside) unlocks the cross motion device. As long as you press, you can move the Hoverboard sideways in 8 postions, each 32mm. Releasing the button locks the Hoverboard in the nearest postion.

If required, the hoverboard can also be controlled via the vehicle panel (ceiling panel).

Assembly

HOVERBOARD®

For utterly noiseless operation Hoverboard provides an optional hermetic box with an external compressor.

This box is mounted on the underside of the vehicle with a stainless steel mounting plate.

The compressor then takes in clean air from the vehicle interior through the black armoured tube and compresses it back through the pressure tube.

This prevents the intake of dirty and salty outside air.

Safety

HOVERBOARD®

At the DEKRA Automobil-Testcenter in Klettwitz/Germany
the new Hoverboards Airbase und Powerbase

have been successfully crash – tested.

All new versions **with and without cross motion device**
are according to the latest standards

EN 1789:2014

EN 1865-5:2012

ECE R17 (Crash with 20 g)

DEKRA

Alles im grünen Bereich.

Safety

HOVERBOARD®

The Hoverboard Powerbase also was successfully tested for compatibility and compliance according to the strict regulations of the Stryker Corporation.

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Test 1: Inclined loading

Task: It was required to check if the Stryker PowerPro can still be loaded and unloaded, if the vehicle stands inclined to an angle of at least 5°, e.g. on a pavement with one side.

Process: As a reference we situated the vehicle in a horizontal position, measured by an electronic level:

Then we used ramps to situate the vehicle in an angle of 5,8°:

Test 2: Heavy load test

Task: It was required to load the double of the maximum load of the Stryker PowerPro, (which means 640 kg/1411 lbs) in the maximum extended position.

Process: We managed to get a pallet with lead car batteries with a total weight of 642 kg/1415 lbs:

Then we loaded that pallet to the Stryker PowerPro by means of a forklift. Loading is logged on the video *„Stryker heavy load test 1635.mov"*

Result: There was considerable elastic displacement at the Stryker PowerPro as well as at the PowerLoad, but we found not a single plastic (permanent) deformation afterwards.

The Hoverboard was lightly elastically displaced, but there also was not any permanent deformation.

Both devices are still working perfectly after the test.

Safety

HOVERBOARD®

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Medical

Memo

From: Brandon Naber

Date: 06 Sept. 2016

DHF#: DHF-1488

Rev: A

Subject: Power-LOAD compatibility with a Hoverboard Powerbase table.

Dear Valued Customer:

Stryker is committed to providing real solutions to patient transport situations encountered by EMS personnel. In certain cases it is a combination of technology that provides that solution. The purpose of this letter is to provide information regarding the compatibility of Stryker's Power-LOAD cot fastener system and Hoverboard Powerbase table. The following two areas of compatibility were assessed.

1. EN 1789 – EN 1865-5 + Annex B: A test fixture, designed to replicate Stryker's Power-LOAD system, and Hoverboard's Powerbase device were tested to EN 1789:2007+A2:2014 by Dekra. Refer to the attached certification by Dekra.

2. Functionality – Stryker performed a functionality check per the operations manual and determined that Stryker's Power-LOAD (model 6390) and Power-PRO XT (model 6506) are functional in combination with Hoverboard's Powerbase table.

It is important to note that the specifications and requirements provided in the Power-LOAD operations manual shall be maintained when installed in combination with Hoverboard Powerbase. Stryker is not responsible for any design changes that are made to Hoverboard Powerbase tables.

Sincerely,

Brandon Naber
Engineering Product Manager
Stryker EMS
t: 269 532 0602
brandon.naber@stryker.com

Reference

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Iveco Daily by Fahrtec for the German armed forces

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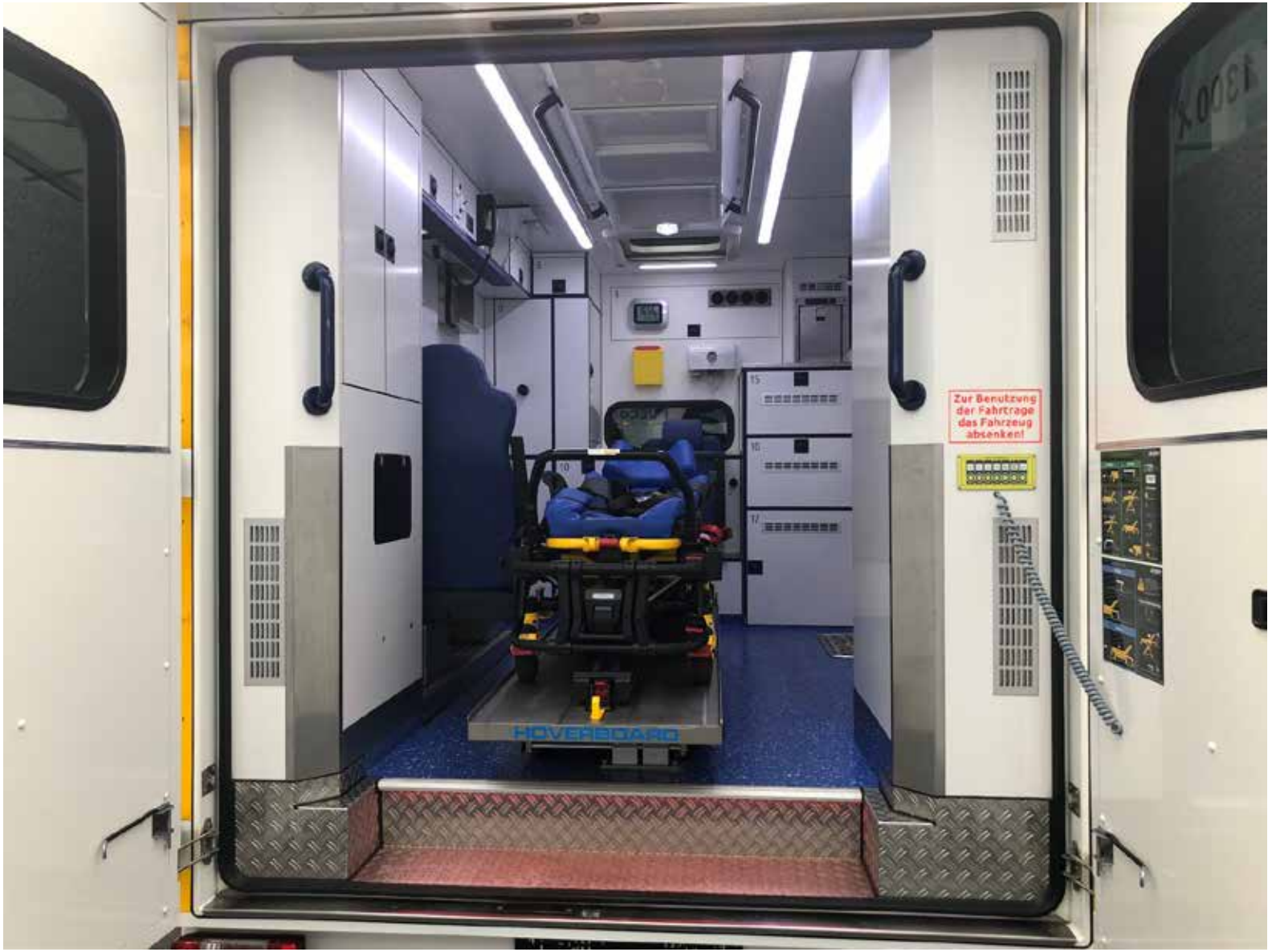

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Mercedes Sprinter by Ambulanzmobile for German Red Cross Bad Homburg

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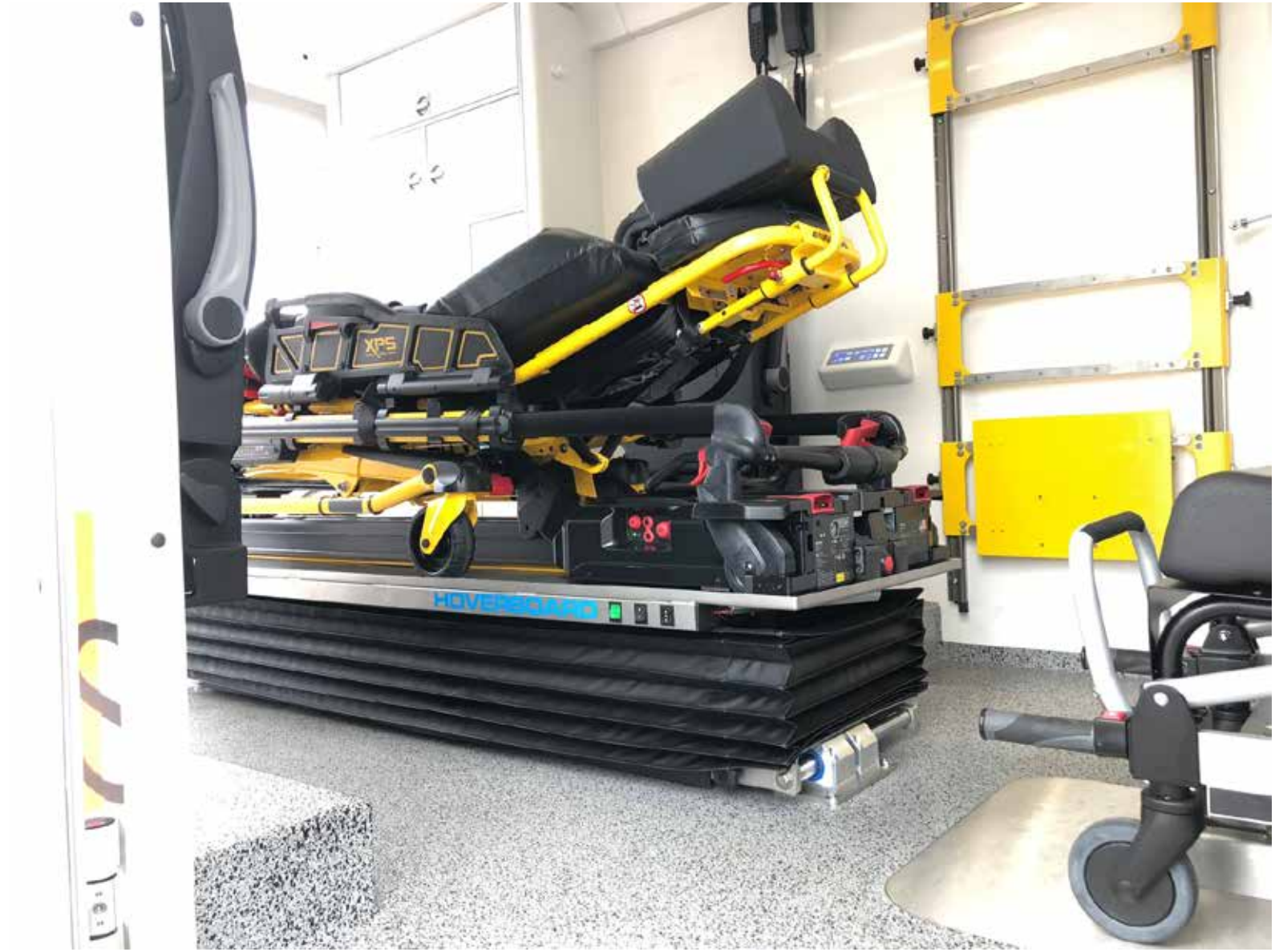

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Mercedes Sprinter by Ambulanzmobile for German Red Cross Bad Homburg

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Mercedes Sprinter by Dlouhy (A) for Austrian Red Cross

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HOVERBOARD®

Mercedes Sprinter by GSF for the Johanniter Blomberg (Germany)

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Mercedes Sprinter by Miesen for German Red Cross Hennef

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Mercedes Sprinter by Strobel (D) for Londero (Switzerland)

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Mercedes Sprinter by Strobel (D) for Londero (Switzerland)

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Mercedes Sprinter by WAS for Kreis Lippe (Germany)

Reference

HOVERBOARD®

Mercedes Sprinter by WAS for Kreis Lippe (Germany)