

**Hoverboards create a new dimension
of protecting patients and paramedics.**



The Hoverboard POWERBASE is a customized , air suspended Hoverboard for the Stryker PowerLoad system.



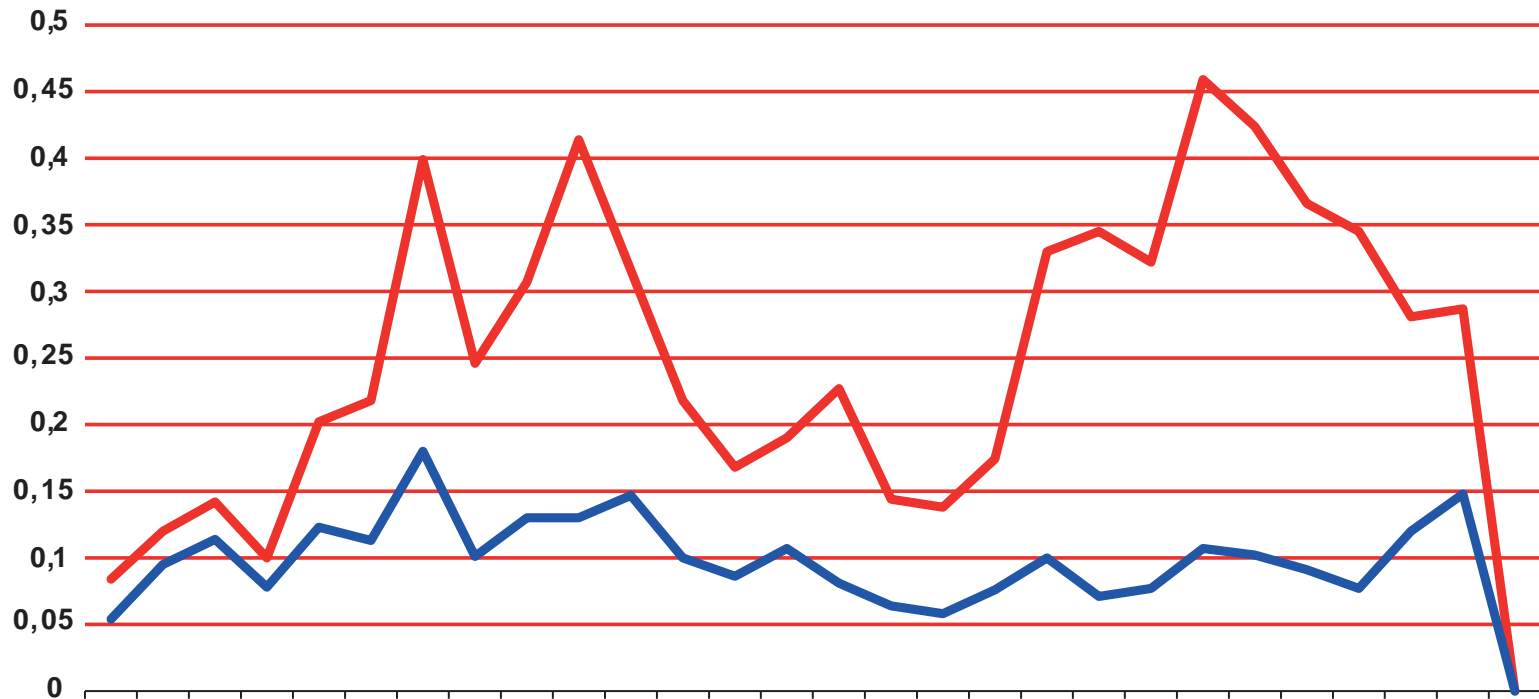


The fully automatic air suspension absorbs most of the incoming vibration energy.

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

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



Benefits for the patient

HOVERBOARD®

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



Benefits for the patient

HOVERBOARD®

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

The oppressive feeling of lying down on the floor is completely eliminated.



Benefits for the patient

HOVERBOARD®

The elaborate safety measures allow the patient a high chance of survival even in the event of a serious accident.



Benefits for physician and paramedics

HOVERBOARD®

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 in a seated position and the spine of the physician is significantly relieved.



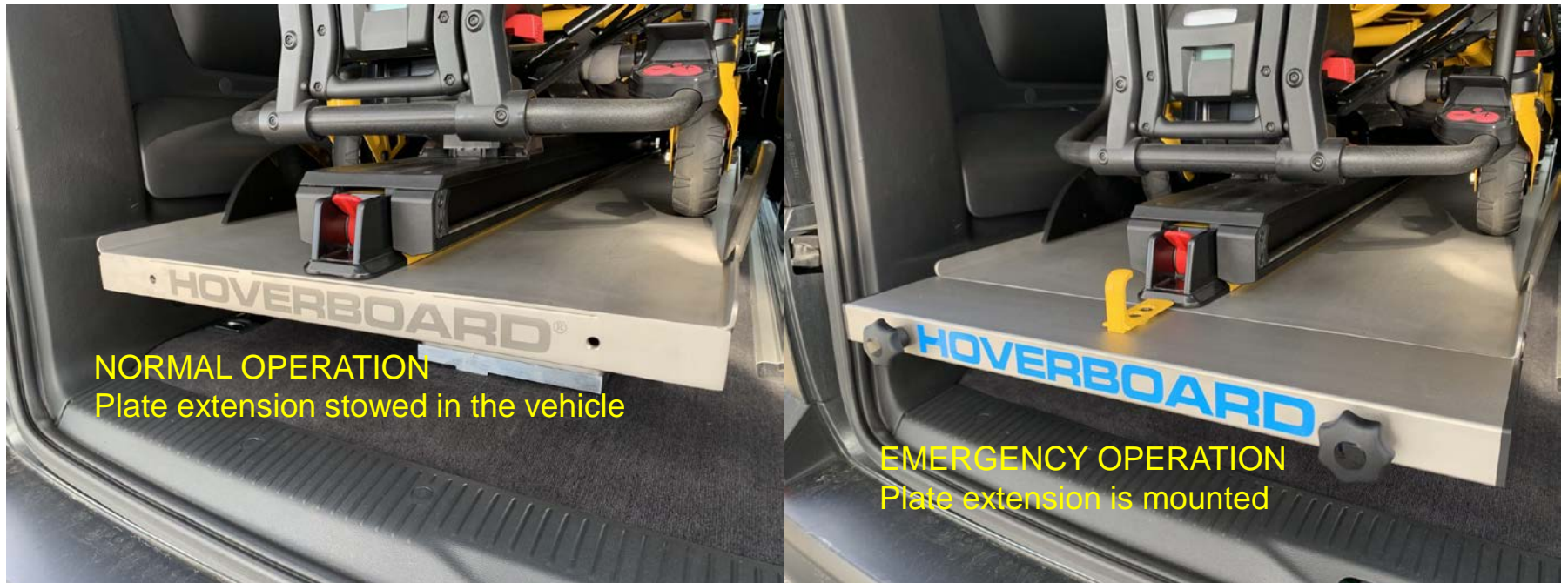
Benefits for physician and paramedics

HOVERBOARD®

The short version of the Powerbase platform provides additional 120 mm/4.7" of space in front of the Hoverboard, around 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 avoids the cut-out at the boarding ramp.



Benefits for ambulance builder and customer

HOVERBOARD®

The Hoverboard is perfectly prepared for the assembly of the Stryker PowerLoad:

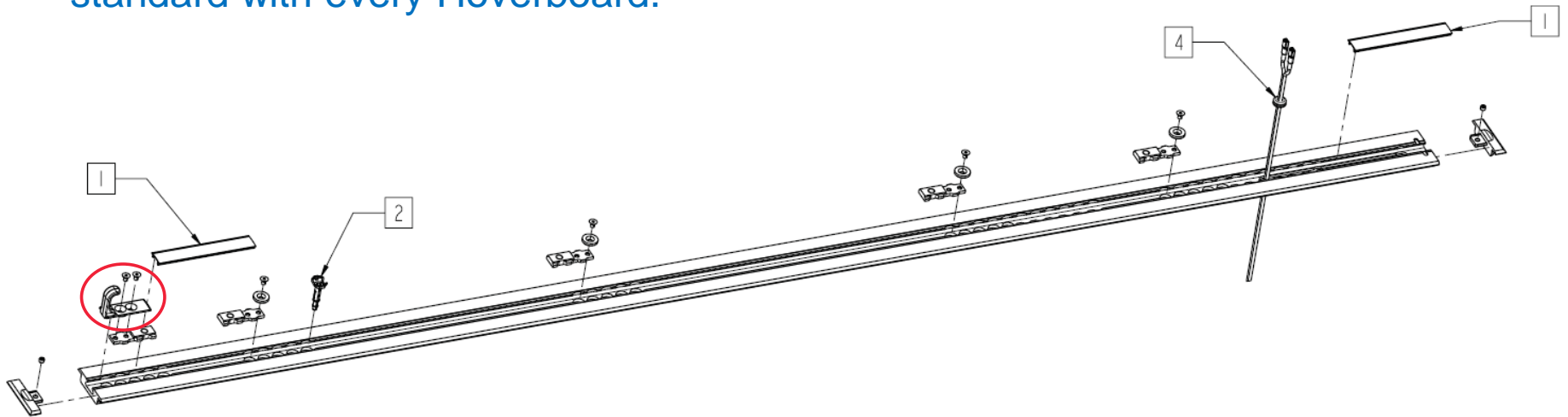
- The time-consuming installation of the Stryker PowerLoad on the vehicle floor with milling of the cable routing etc. is completely eliminated.
- **This means saving cost of at least 5 working hours.**
- The additional staircase for box vehicles is also omitted because the Hoverboard is mounted further forward.



Benefits for ambulance builder and customer

HOVERBOARD®

- The original Stryker base plate kit (6390-700-001 or 6390007000100 or 6390-028-000) is not required at all because the Stryker anchor rail is attached directly to the Hoverboard with Stryker's original 7/16 "screws.
- **This saves costs of more than €1.000,-- !**
- The original Stryker hook (see below) for the roll-out protection is supplied as standard with every Hoverboard.



Benefits for ambulance builder and customer

HOVERBOARD®

- Power supply for the PowerLoad is routed through the Hoverboard and supplied by the original Stryker terminals.
- Mating connectors are mounted on the Hoverboard.



Version for PowerLoad until 12/2020

Benefits for ambulance builder and customer

HOVERBOARD®

- Power supply for the PowerLoad is routed through the Hoverboard and supplied by the original Stryker connector.
- Mating connector is mounted on the 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.



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 lights up in 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 in 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 positions, each 32mm. Releasing the button locks the Hoverboard in the nearest position.

If required, the Hoverboard can also be controlled via the vehicle panel (ceiling or side panel).

Suspension

Top position

Unlock lateral



on/off

on/off

movement device

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



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

The compressor 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.

All Hoverboards
are successfully crash-tested

at the prestigious DEKRA Automobil-Testcenter in Klettwitz/Germany

All versions **with and without lateral movement device**
are according to the latest standards

EN 1789:2020

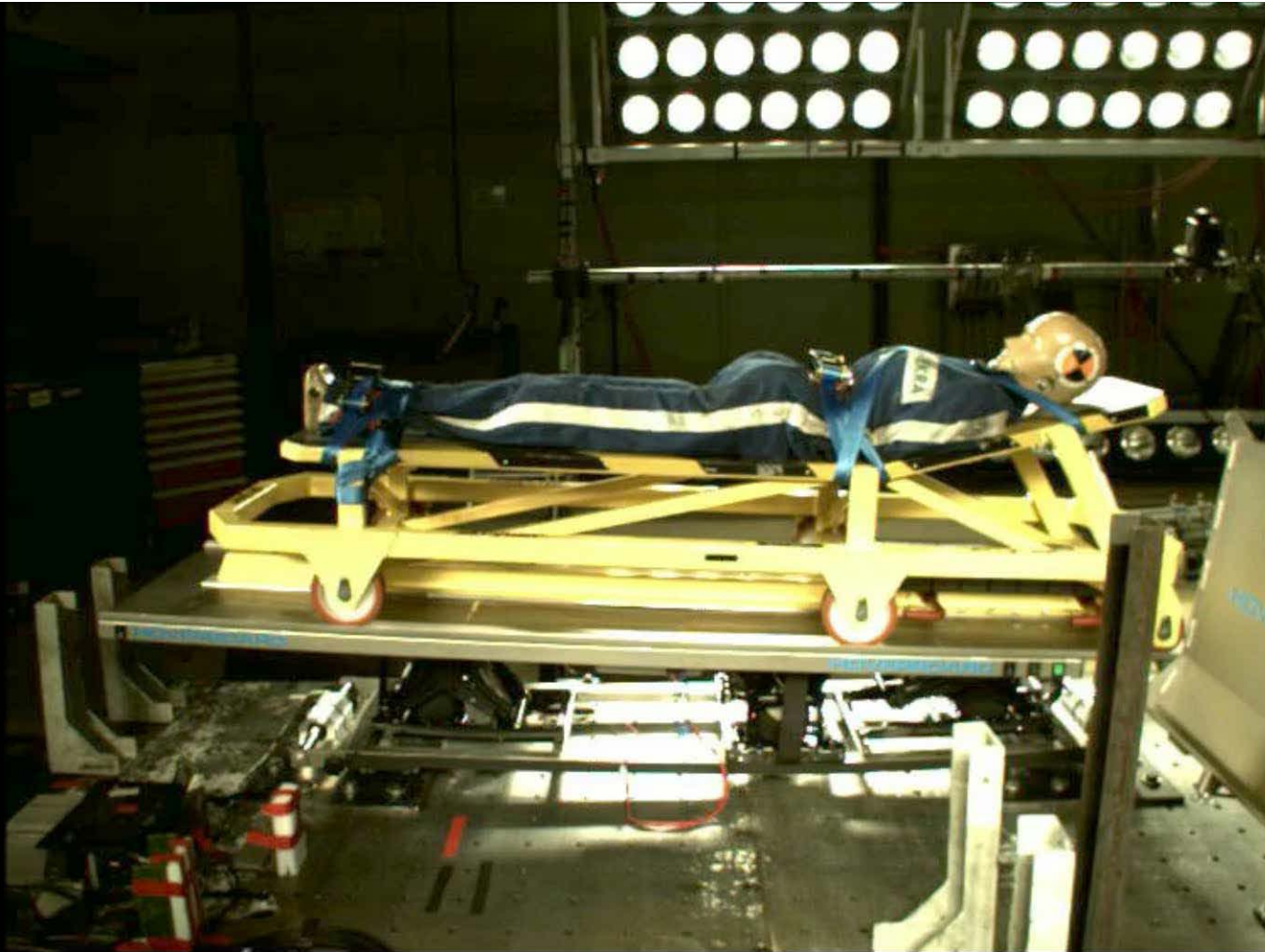
EN 1865-5:2015

ECE R17 (crash with 20 g)



Alles im grünen Bereich.

Crashtest (20g)

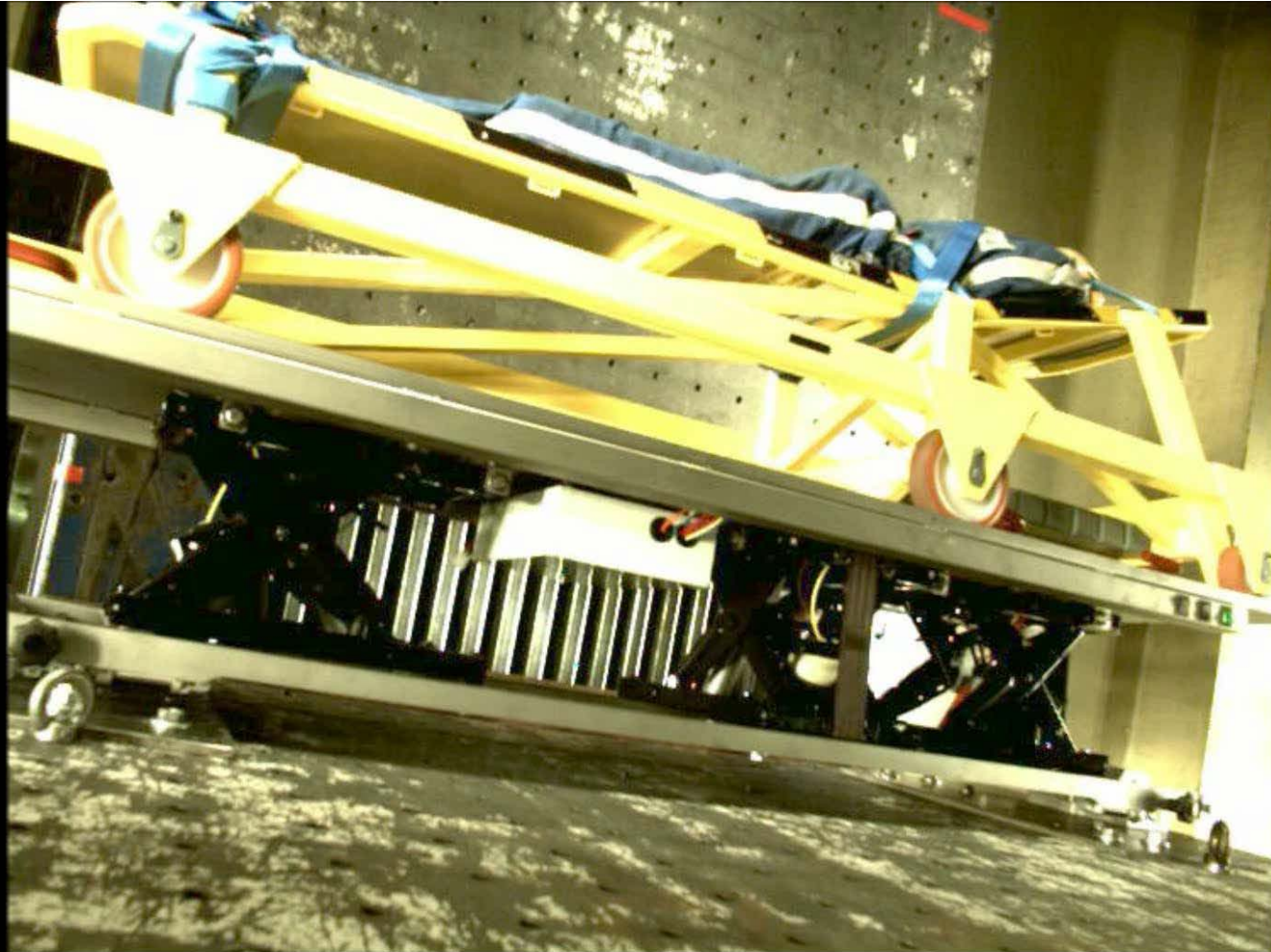


frame : 1

t in ms

V160607001_P

Crashtest (10g)



frame : 1

t in ms

V160608001_P

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



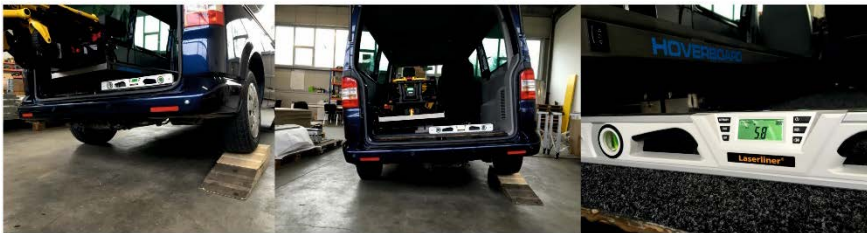
Test 1: Inclined loading

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.

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
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Iveco Daily by Fahrtec for the German armed forces



Iveco Daily by Fahrtec for the German armed forces



Mercedes Sprinter by Ambulanzmobile for German Red Cross Bad Homburg



Reference

HOVERBOARD®

Mercedes Sprinter by Ambulanzmobile for German Red Cross Bad Homburg



Mercedes Sprinter by Ambulanzmobile for German Red Cross Bad Homburg



Mercedes Sprinter by Dlouhy (A) for Austrian Red Cross



Mercedes Sprinter by Dlouhy (A) for Austrian Red Cross



Mercedes Sprinter by Fahrtec for the German armed forces



Reference

HOVERBOARD®

Mercedes Sprinter by Fahrtec for the German armed forces



Mercedes Sprinter by GSF for the Johanniter Blomberg (Germany)



Mercedes Sprinter by GSF for the Johanniter Blomberg (Germany)



Mercedes Sprinter by Miesen for German Red Cross Hennef



Mercedes Sprinter by Miesen for German Red Cross Hennef



Reference

HOVERBOARD®

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



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



Mercedes Sprinter by WAS for Kreis Lippe (Germany)



Mercedes Sprinter by WAS for Kreis Lippe (Germany)



Thank you for your attention !

