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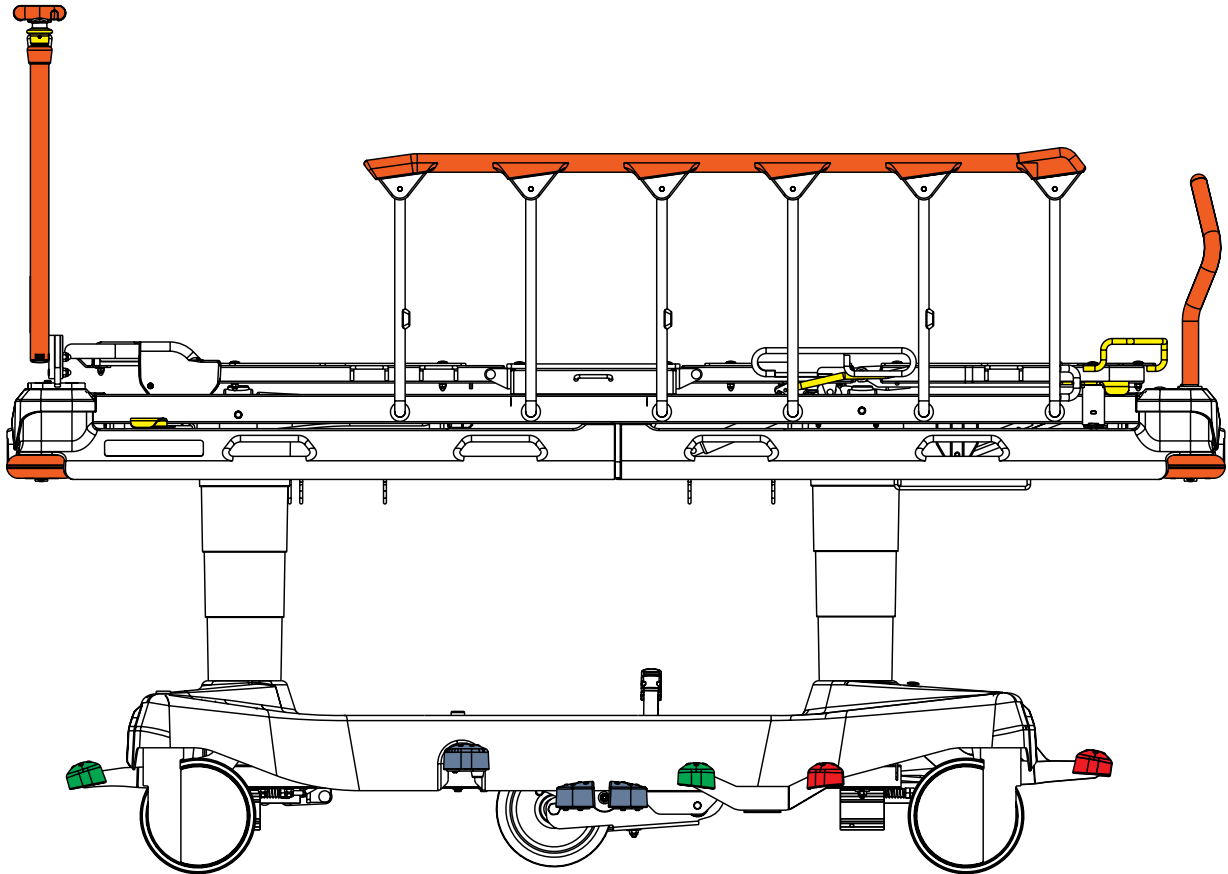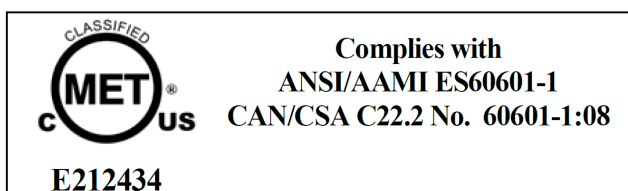# Instructions for Use and Technical Description

Sprint 100

Universal Transport Stretcher

with scales and without scales

LINET

Manufacturer:

L I N E T spol. s r.o.
Želevčice 5
274 01 Slaný

Tel.: +420 312 576 111
Fax: +420 312 522 668

E-mail: info@linet.cz
http://www.linet.com
Service department: service@linetgroup.com

Sprint 100
Universal Transport Stretcher

Author: L I N E T, s.r.o.
Related links: www.linet.com

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Table of Contents

1 Symbols and Definitions

1.1 Warning Notices

1.1.1 Types of Warning Notices

Warning notices are differentiated by the type of danger using the following key words:

► **CAUTION** warns about the risk of material damage.
► **WARNING** warns about the risk of physical injury.
► **DANGER** warns about the risk of fatal injury.

1.1.2 Structure of Warning Notices

SIGNAL WORDS!
Type and source of danger!
► Measures to avoid the danger.

1.2 Instructions

Structure of instructions:
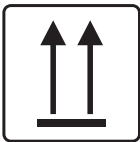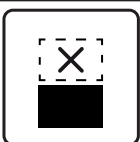
► Perform this step.
Results, if necessary.

1.3 Lists
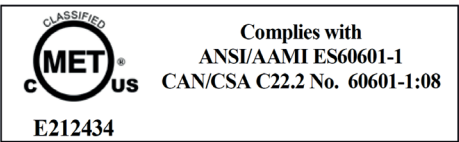
Structure of bulleted lists:

■ List level 1
　□ List level 2
　　● List level 3

1.4 Symbols on the Package

	FRAGILE, HANDLE WITH CARE
	THIS WAY UP
	KEEP DRY (PROTECT FROM HUMIDITY)
	PAPER RECYCLING SYMBOL
	DO NOT USE HAND TRUCK HERE
	DO NOT STACK DURING STORAGE

1.5 Symbols on the Bed

	READ INSTRUCTIONS FOR USE
320 kg	SAFE WORKING LOAD
	WARNING AGAINST CRUSHING OR TRAPPING
	JACK FOR ATTACHMENT OF CONDUCTOR FOR POTENTIAL EQUALISATION
	WARNING
	APPLIED PARTS TYPE **B**
	ONLY SUITABLE FOR INDOOR USE
	MAXIMUM WEIGHT OF PATIENT
	WEIGHT OF BED (depending on configuration)
Complies with ANSI/AAMI ES60601-1 CAN/CSA C22.2 No. 60601-1:08 E212434	**MET** MARK
	RECYCLING SYMBOLS
	DO NOT POLLUTE THE ENVIRONMENT

	MAXIMUM LOAD OF THE MONITOR SHELF 15 KG PLACE MONITOR ON THIS SIDE OF THE MONITOR SHELF
	MAXIMUM LOAD OF THE MONITOR SHELF 15 KG DO NOT PLACE MONITOR ON THIS SIDE OF THE MONITOR SHELF
	INSTRUCTION FOR PLACEMENT OF THE MONITOR SHELF (**L**=LEFT, **R**=RIGHT)
	MAXIMUM LOAD OF ONE HOOK 5 KG FOLD THE MARKED FOLDABLE INFUSION STAND AS THE FIRST ONE
	MAXIMUM LOAD OF ONE HOOK 5 KG FOLD THE MARKED FOLDABLE INFUSION STAND AS THE SECOND ONE
	MANUFACTURER
	MANUFACTURING DATE
REF	REFERENCE NUMBER (PRODUCT TYPE DEPENDING ON CONFIGURATION)
SN	SERIAL NUMBER
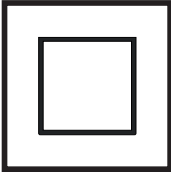
MD	MEDICAL DEVICE (COMPATIBLE WITH MEDICAL DEVICE REGULATION)
(WEEE symbol)	WEEE SYMBOL (RECYCLE AS ELECTRONIC WASTE, DO NOT PUT INTO THE HOUSEHOLD WASTE)
LOT	BATCH NUMBER (ACCESSORIES)
UDI	UNIQUE DEVICE IDENTIFICATION (FOR MEDICAL DEVICES)
(mass symbol)	MASS OF MOBILE HOSPITAL BED (MASS OF EMPTY BED + SAFE WORKING LOAD)
(double insulation symbol)	DOUBLE INSULATION SYMBOL, DEVICE OF THE PROTECTION CLASS II (CLASSIFIED ACCORDING TO THE TYPE OF PROTECTION FROM ELECTRIC SHOCK, ONLY FOR Sprint 100 WITH SCALES)

Fig. Warning, read instructions for use
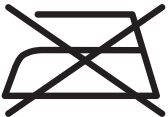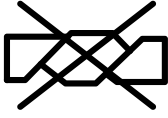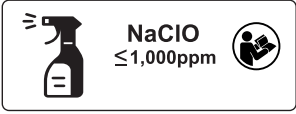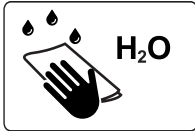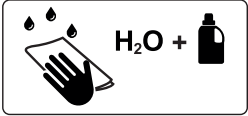
Fig. Example of Scales LW20 label (only Sprint 100 with scales)

1.6 Symbols on the Mattress

	READ INSTRUCTIONS FOR USE
$C\epsilon$	**CE** MARKING (PRODUCT NORMATIVELY HARMONIZED FOR EUROPEAN ECONOMIC AREA)
BS 7175 **5** **MEDIUM HAZARD**	COVER MATERIALS ARE FIRE RESISTANT TO BS7175, SOURCE 0, 1 AND 5
	DO NOT IRON
PHENOL	DO NOT USE PHENOL
	DO NOT WRING
?	REGULARLY INSPECT THE INSIDE OF THE COVER FOR CONTAMINATION
71°	MACHINE WASH AT MAX. 71°C FOR 3 MINUTES
NaClO ≤1,000ppm	DISINFECT USING SOLUTION CONTAINING LESS THAN 1000 ppm OF CHLORINE (REFER TO INSTRUCTIONS FOR USE)
H_2O	RINSE WITH WATER

	TUMBLE DRY ON LOW HEAT SETTING (MAX. 60°C)
	MATTRESS FOOT PART
	HANDWASH WITH DETERGENT (INITIAL TEMPERATURE OF HOT WATER SHOULD NOT EXCEED 50°C)

THIS PRODUCT IS PROTECTED BY ONE OR MORE OF THE FOLLOWING PATENTS:

US7492111	US7647659	US8024101
US10010465	US8959680	US10130538
US9585490	US8959680	US10206835
US9271887	US8452508	US10335333
US9205011	US8112836	US8746710
US10376216	US10383780	

Fig. Label with applied patents

1.7 Serial Label with UDI

1.7.1 Sprint 100 without scales

There is a serial label of the bed under the Backrest.
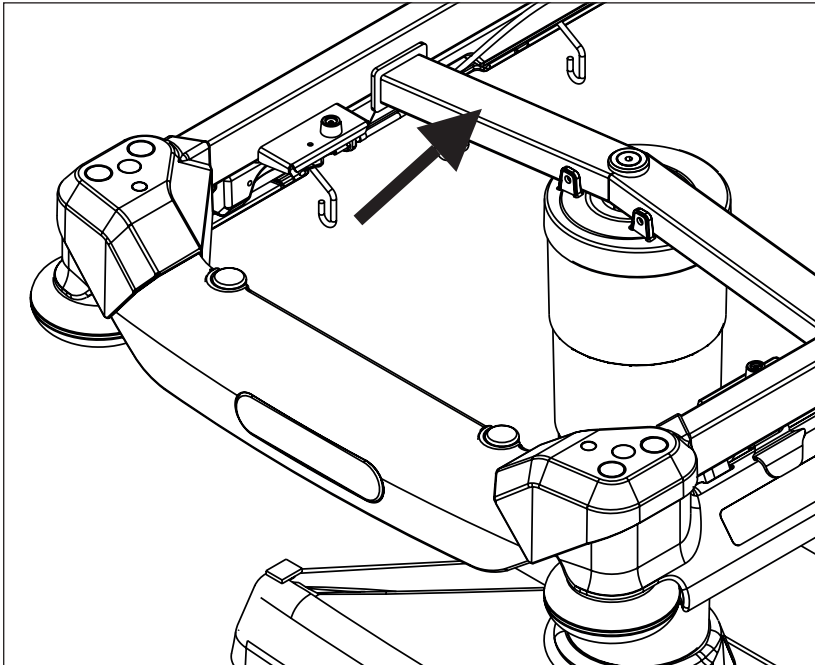
Fig. Position of serial label on the bed (Sprint 100 without scales)

1.7.2 Sprint 100 with scales

There is a serial label of the bed with scales on the left side of the frame of the mattress support platform next to the Backrest.

Fig. Position of serial label on the bed (Sprint 100 with scales)

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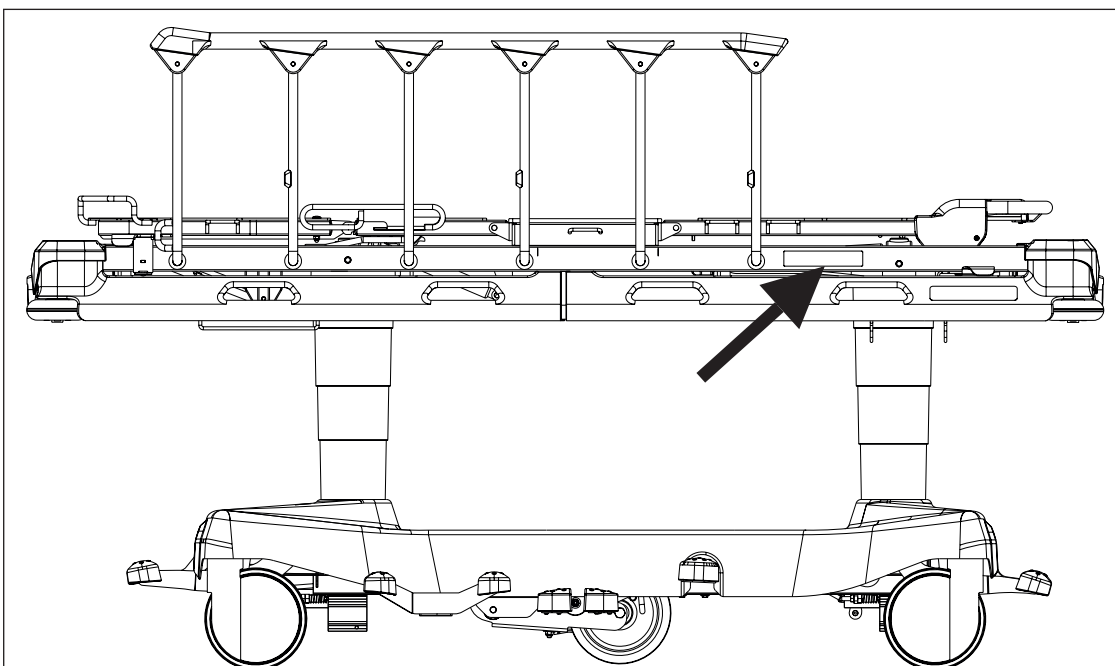
1.7.3 Serial Label with UDI (Sprint 100)

Pictures of serial labels below serve just for explanation of the signs and fields on the serial labels.
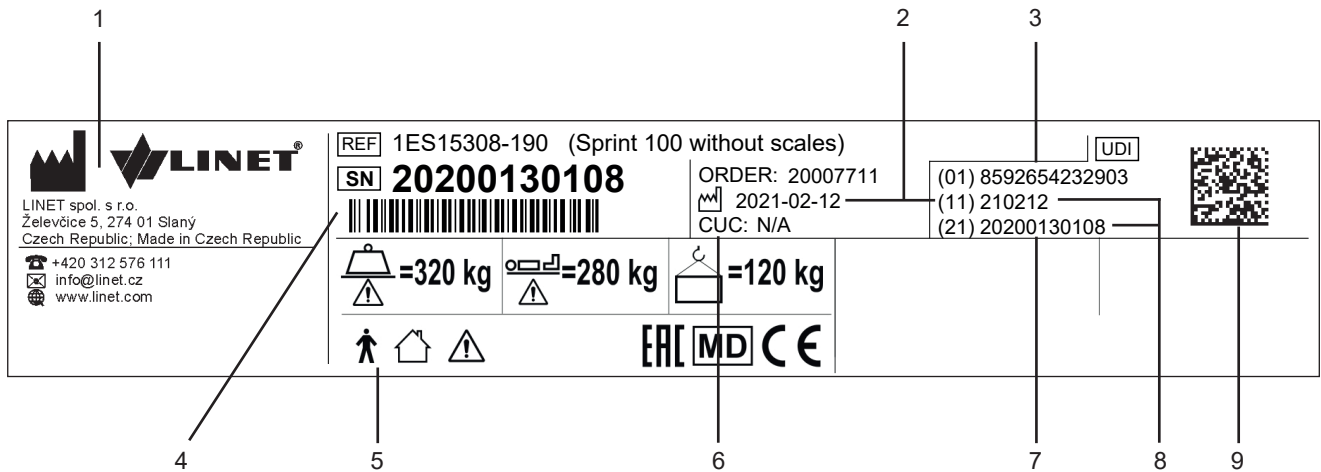
Fig. Serial Label with UDI (Sprint 100 without scales)
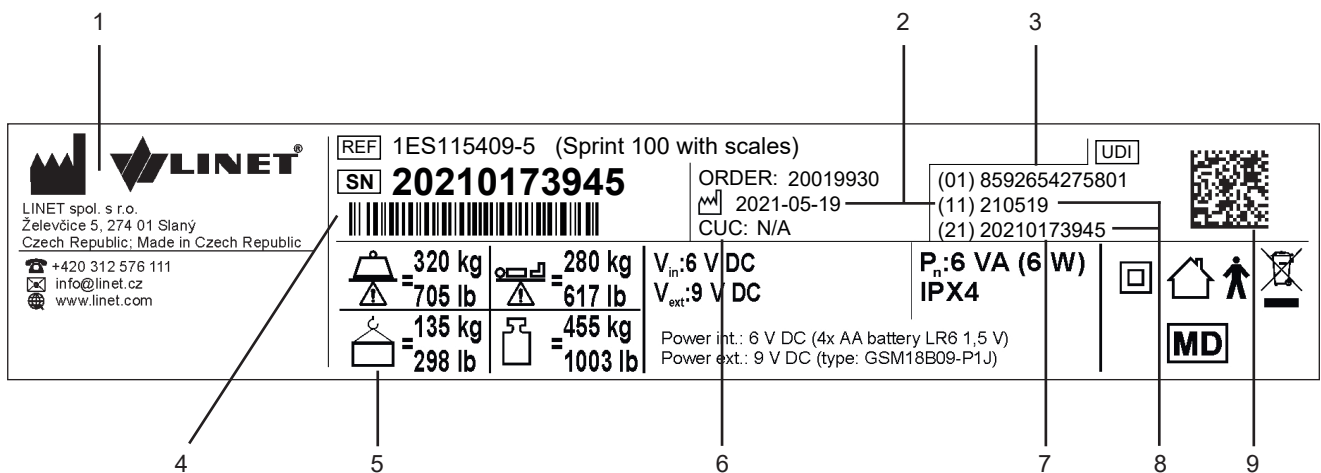
Fig. Serial Label with UDI (Sprint 100 with scales)

1	Address of Manufacturer
2	Manufacturing Date (Year-Month-Day)
3	DI (Device Identifier) / GTIN (Global Trade Item Number)
4	1D Bar code GS1-128 (Serial Number)
5	Symbols
6	Configuration number
7	Serial Number
8	PI (Product Identifier)
9	2D Bar Code (GS1 DataMatrix) **DI+PI=UDI**

1.7.4 Serial Label with UDI (mattress)
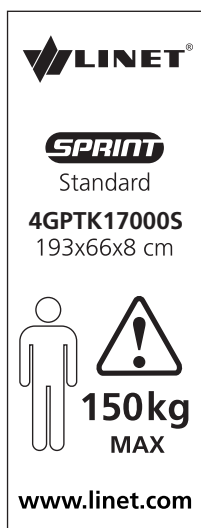
Fig. Mattress Label
(Sprint Standard
for Sprint 100 with
Standard Mattress
Support Platform)
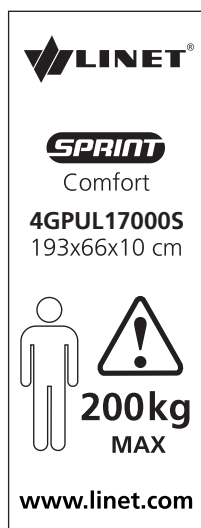
Fig. Mattress Label
(Sprint Comfort
for Sprint 100 with
Standard Mattress
Support Platform)
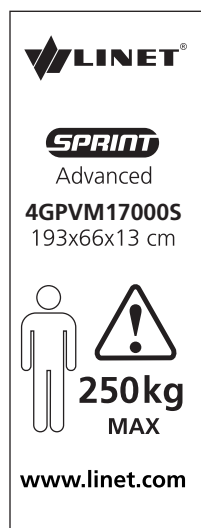
Fig. Mattress Label
(Sprint Advanced
for Sprint 100 with
Standard Mattress
Support Platform)
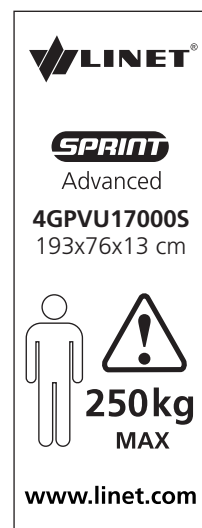
Fig. Mattress Label
(Sprint Advanced for
Sprint 100 with Wide
Mattress Support
Platform - version 1)
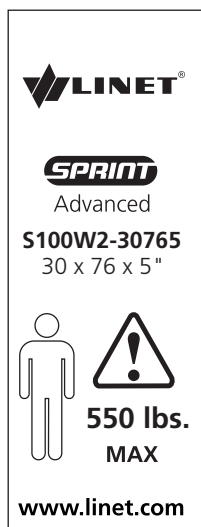
Fig. Mattress Label
(Sprint Advanced
for Sprint 100 with
2-part Wide Mattress
Support Platform -
version 2)
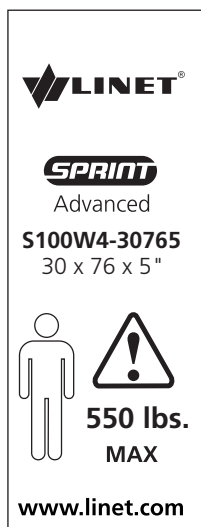
Fig. Mattress Label
(Sprint Advanced
for Sprint 100 with
4-part Wide Mattress
Support Platform -
version 3)

1.7.5 Serial Label (accessory)

Picture of serial label below serve just for explanation of the signs and fields on the serial label.
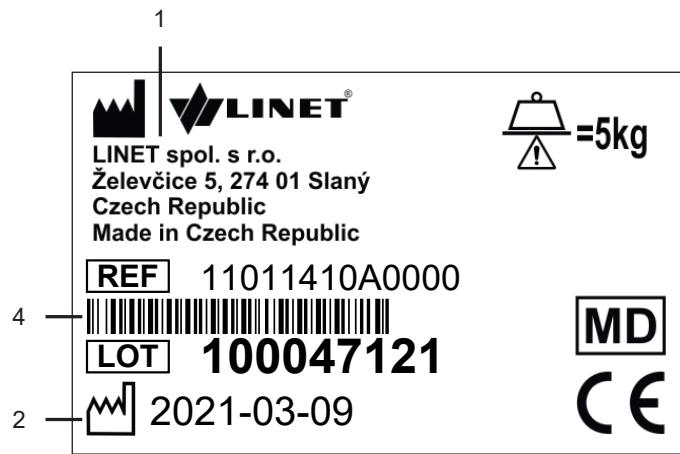
Fig. Accessory Label

1	Address of Manufacturer
2	Manufacturing Date (Year-Month-Day)
4	1D Bar code GS1-128 (Serial Number)

1.8 Acoustic signalisation (only Sprint 100 with scales)

SOUND	MEANING
REPEATED MELODY: beep, pause, beep, pause, beep, longer pause	Bed Exit Alarm
BEEP lasting 0,1s (depending on configuration)	Confirmation of the successfully activated Bed Exit Alarm Monitoring
BEEP lasting 0,2s	Confirmation of Stabilized Scales during Zeroing
3 BEEPS: 0,125s sound / 0,125s silence	Notification

1.9 Definitions

Basic Bed Configuration	the pricelist model configuration, not including a mattress
Bed Weight	The value depends on the product configuration, accessories or customer adjustments.
Clearance of Undercarriage	the height from the floor to the lowest point of the undercarriage between the castors, for the manipulation of accessories under a braked bed in the standard position
Reference number	Reference number depends on configuration.
Safe Working Load	the highest allowable load on the bed (patient, mattress, accessories and the load supported by those accessories)
Siderail Height	the height of the upper crossbar or the edges of the siderails (not the highest point of the siderail controls) from the patient surface
Standard Bed Position	- The height of the mattress support platform with regard to the floor is 56,5 cm (2-part Mattress Support Platform) or 55,5 cm (4-part Mattress Support Platform) - The Mattress Support Platform, including the individual parts, has to be in a horizontal (level - 0°) position. - The siderails are always locked in the upper position.
Adult	Patient having a physical size equal to or more than 146 cm, a mass equal to or more than 40 kg and a body mass index (BMI) equal to or more than 17 (according to IEC 60601-2-52).
Mass of mobile hospital bed	Sum of empty bed mass and Safe Working Load.

1.10 Abbreviations

AC (~)	Alternating Current
BEA	Bed Exit Alarm Monitoring
CPR	Cardiopulmonary Resuscitation
dBA	Sound Intensity Unit
DC (⎓)	Direct Current
CUC	Configuration number
EMC	Electromagnetic Compatibility
HF	High Frequency
HPL	High Pressure Laminate
IP	Ingress Protection
IV	Intravenous
LED	Light Emitting Diodes
ME	Medical Electrical (Equipment)
MET	MET Laboratories testing and certifying for the U.S. market
ON	Activation
OFF	Deactivation
ppm	parts per million, millionth (1000 ppm = 0,1%)
REF	Reference Number (product type depending on configuration)
SN	Serial Number
SWL	Safe Working Load
UDI	Unique Device Identification (for medical devices)
WEEE	Waste from Electrical and Electronic Equipment

2 Safety Instructions

⚠ **WARNING!**
Staff expert assessment is needed to consider all individual cases of contraindications!

⚠ **WARNING!**
Risk of trapping or squeezing because of patient´s body constitution disproportionate to the size of mattress support platform!

⚠ **WARNING!**
Certain bed positions are not suitable for specific diagnosis/medical conditions. Fowler position is not suitable for spinal cord injuries! Trendelenburg position is not suitable for patients with higher intracranial pressure!

⚠ **WARNING!**
Any serious incident that has occurred in relation to the device should be reported to the manufacturer and the competent authority of the Member State in which the user and/or patient is established!

⚠ **WARNING!**
This medical device is not intended for oxygen enriched environment!

⚠ **WARNING!**
This medical device is not intended for use with flammable substances!

⚠ **WARNING!**
This medical device is not portable medical electrical equipment!

⚠ **WARNING!**
Patient is allowed to use selected control elements only if hospital personnel had assessed that the patient´s physical and psychological state is in accordance with use of them and only if the hospital personnel had trained the patient in accordance with the instructions for use!

⚠ **WARNING!**
Hospital personnel is allowed to use the weighing system (scales) for weighing patients only if they had been trained according to the instructions for use!

⚠ **WARNING!**
Only authorised and trained personnel equipped with an appropriate tool are allowed to change fuse in Battery Box!

⚠ **WARNING!**
An additional multiple socket-outlet or extension cord shall not be connected to the medical electrical system of Sprint 100 with scales.

⚠ **WARNING!**
Inappropriate handling of the power supply cord of Sprint 100 with scales, e. g. by kinking, shearing or other mechanical damages is hazardous!

⚠ **WARNING!**
During specific investigations or treatments, the significant risks of reciprocal interference posed by Sprint 100 with scales ME equipment may occur.

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Additional Instructions for correct use:

► Follow the instructions for use carefully.
► Use the bed exclusively if it is in perfect working order.
► If necessary, check the bed functions daily or at each shift change.
► Ensure any user has read and understood this manual completely before operating the product.
► Ensure that the bed is operated exclusively by qualified personnel who have been trained according to the instructions for use.
► Ensure that the patient (health permitting) has been informed about the operation of the bed and all applicable safety instructions.
► Move the bed exclusively on even, hard-surfaced floors.
► Replace any damaged parts immediately with original spare parts.
► Ensure that maintenance and installation are performed exclusively by qualified personnel who have been trained by the manufacturer.
► Before peak loads or unavoidable excess loads (CPR), place Mattress Support Platform in the lowest position.
► Ensure that only one adult patient uses the bed at any time.
► Take care to avoid injuries or squeezing when operating moving parts.
► When using lifting poles or infusion stands, ensure that nothing will be damaged when you move or adjust the bed.
► Brake the castors when the bed is occupied.
► Keep the Mattress Support Platform in the lowest position when the patient is unattended by healthcare personnel in order to minimize risk of patient falls.
► Ensure that Siderails are operated exclusively by healthcare personnel.
► Never use the bed in areas where there is a hazard of explosion.
► Ensure that parts of the bed intended for movement are not blocked.
► To prevent failures, use exclusively the manufacturer's original accessories and mattresses.
► Ensure that the stipulated safe working load is not exceeded.
► If the patient's condition could lead to an entrapment, leave the mattress support platform in the flat position whilst unattended.
► Adjust bed height when transporting the bed in order to facilitate overcoming possible obstacles.
► Do not modify bed and its components without the manufacturer´s approval.
► Use the mattress system exclusively as specified in this manual and in perfect working order.
► Use the mattress system exclusively in its original state and do not modify it in any way.
► Have the mattress system used exclusively by or under supervision of trained and qualified nursing personnel.
► Have the mattress system serviced and installed exclusively by qualified personnel trained and authorised by the manufacturer.
► Do not exceed the maximum patient weight limit (see Mechanical Specifications).
► Do not use the bed in the case its parts have been removed unless these parts are designed to be removed.
► To avoid injury or crushing, take extra caution when operating any moving parts of the bed.
► When using infusion stands, ensure that nothing will be damaged when you move or adjust the bed.
► Hydraulic units and gas springs cointain an mineral oil. The mineral oil should not get into the sewerage because of toxicity for water organisms.

3 Intended use (Sprint 100 without scales)

The intended use is the short term hospitalization of the patient in the emergency departments and one day care departments, or other applicable departments, which includes above all the following aspects:

► Patient transport in the stretcher in the indoor environment. For the outdoor environment specific precautions in the instructions for use are valid.

► Adjustment of the positions needed for the, examinations, treatments, physiotherapy, sleeping, relaxation, preventive and mobilization reasons, routine nursing. These positions are further specified and described in the clinical evaluation of this device, together with their potential clinical outcomes and benefits.

► Providing the safe environment for the patient during all relevant procedures. The particular requirements on patient safety are the subject of the clinical evaluation, including evaluation of the risk/benefit ratio. The relevant safety issues are the part of the risk management file.

► Providing the suitable working conditions for the caregivers to perform the routine and specific tasks during the patient hospitalization.

3.1 User population

► Adult patients (weight >= 40 kg, height >= 146 cm, BMI >= 17) in the emergency and one day care units (Application Environment 1, 2 and 5 as in IEC 60601-2-52)

► Caregivers (nurses, doctors, technical personnel, transport personnel, cleaning personnel)

3.2 Contraindications

► The medical device is not intended for the pediatric patients use.

► The medical device is not intended for the use with patients exceeding the Maximum Patient Weight and whose body constitution is disproportionate to the size of Mattress Support Platform.

► The medical device is not intended for the long-term hospitalization with respect to dimensional parameters of the device and the used mattress.

► Certain positions are not suitable for specific diagnoses/medical conditions (e.g. spinal cord injuries vs. Fowler position, higher ICP patients vs. Trendelenburg). Staff expert assessment / nursing consideration is needed in all individual case of contraindication.

3.3 Operator

► Caregiver

► Patient (based on individual patient status assessment by caregiver the patient can utilize dedicated device functions)

4 Intended use (Sprint 100 with scales)

The intended use is the short term hospitalization of the patient in the emergency departments and one day care departments, or other applicable departments, which includes above all the following aspects:

► Patient transport in the stretcher in the indoor environment. For the outdoor environment specific precautions in the instructions for use are valid.

► Adjustment of the positions needed for the, examinations, treatments, physiotherapy, sleeping, relaxation, preventive and mobilization reasons, routine nursing. These positions are further specified and described in the clinical evaluation of this device, together with their potential clinical outcomes and benefits.

► Providing the safe environment for the patient during all relevant procedures. The particular requirements on patient safety are the subject of the clinical evaluation, including evaluation of the risk/benefit ratio. The relevant safety issues are the part of the risk management file.

► Providing the suitable working conditions for the caregivers to perform the routine and specific tasks during the patient hospitalization.

► Indicative measurement of the patient weight, used as supportive feature without direct diagnostic effect. It helps staff to assess the general patient status and apply the nutrition and medications.

4.1 User population

► Adult patients (weight >= 40 kg, height >= 146 cm, BMI >= 17) in the emergency and one day care units (Application Environment 1, 2 and 5 as in IEC 60601-2-52)

► Caregivers (nurses, doctors, technical personnel, transport personnel, cleaning personnel)

4.2 Contraindications

► The medical device is not intended for the pediatric patients use.

► The medical device is not intended for the use with patients exceeding the Maximum Patient Weight and whose body constitution is disproportionate to the size of Mattress Support Platform.

► The medical device is not intended for the long-term hospitalization with respect to dimensional parameters of the device and the used mattress.

► Certain positions are not suitable for specific diagnoses/medical conditions (e.g. spinal cord injuries vs. Fowler position, higher ICP patients vs. Trendelenburg). Staff expert assessment / nursing consideration is needed in all individual case of contraindication.

4.3 Operator

► Caregiver

► Patient (based on individual patient status assessment by caregiver the patient can utilize dedicated device functions)

5 Intended use (Sprint 100 mattresses)

The intended use is to provide basic support surface for patient being treated on LINET's Sprint range of stretchers only. They are designed to provide comfort during short term use. The use of these mattresses does not remove the need for regular repositioning in line with best clinical practice (ref: NPUAP, EPUAP).

5.1 User population

► Adult patients (weight >= 40 kg, height >= 146 cm, BMI >= 17) in the emergency and one day care units (Application Environment 1, 2 and 5, as in IEC 60601-2-52)

► Caregivers (nurses, doctors, technical personnel, transport personnel, cleaning personnel)

5.2 Contraindications

► patient with higher risk of pressure ulcers

► patients with higher weight than mattress weight limit

► patient's showing signs of pressure related tissue damage should be transfered onto an alternative support surface based on risk assessment, clinical reasoning and best clinical practice (EPUAP, NPUAP guidelines)

5.3 Operator

► Caregiver

6 Product Description

6.1 Hierarchy of Product Variants

1. level	Sprint 100					
2. level	Sprint 100 without scales				Sprint 100 with scales	
3. level	Sprint 100 with Standard Mattress Support Platform		Sprint 100 with Wide Mattress Support Platform		Sprint 100 with Wide Mattress Support Platform	
4. level	Sprint 100 with 2-part Mattress Support Platform	Sprint 100 with 4-part Mattress Support Platform	Sprint 100 with 2-part Mattress Support Platform	Sprint 100 with 4-part Mattress Support Platform	Sprint 100 with 2-part Mattress Support Platform	Sprint 100 with 4-part Mattress Support Platform

Following pictures show some common features of the product variants of the fourth level (2-part Mattress Support Platform and 4-part Mattress Support Platform).

6.2 SPRINT 100 WITH 4-PART MATTRESS SUPPORT PLATFORM
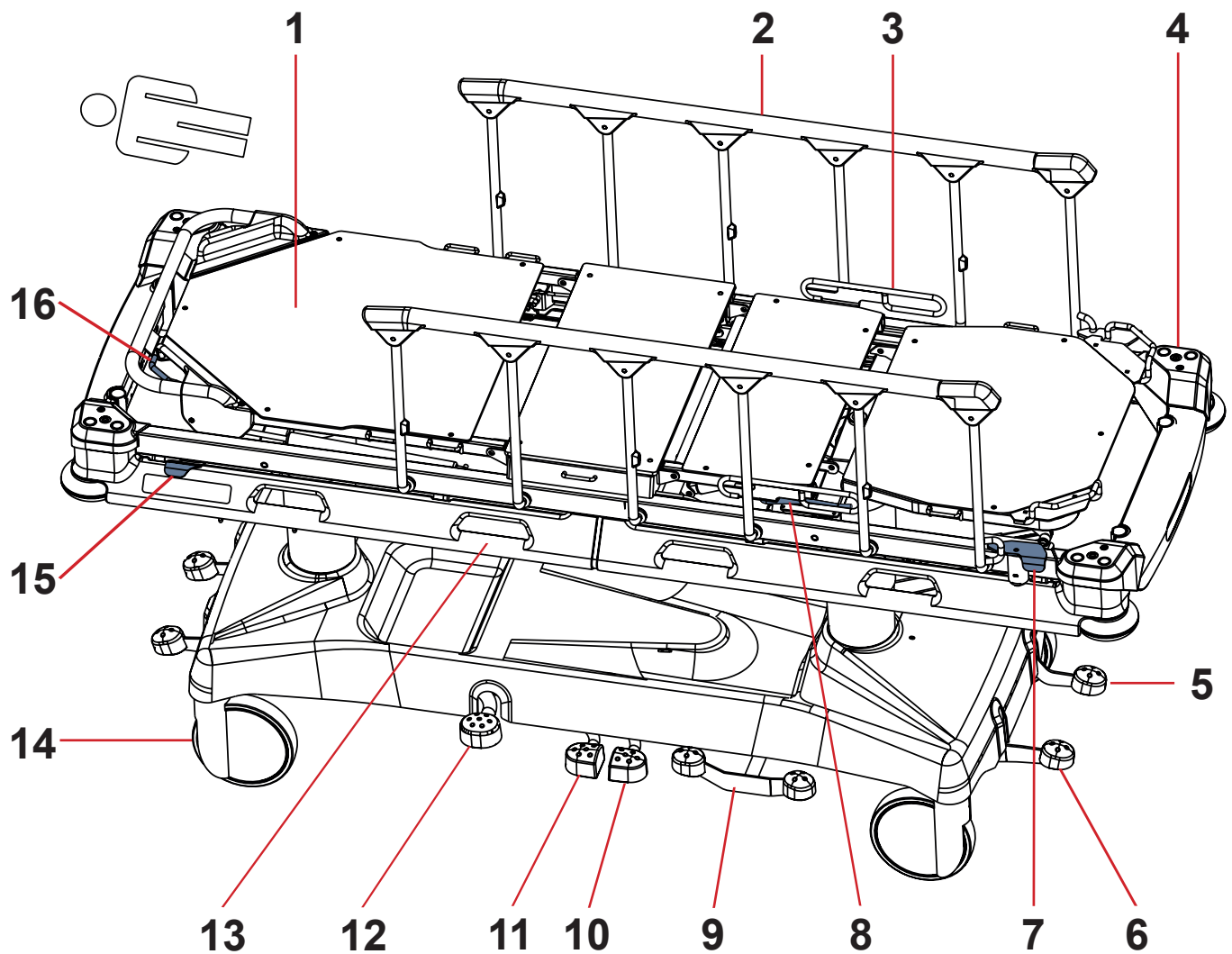
*Fig. Bed Overview (Sprint 100 with **4-part Mattress Support Platform**)*

1. Mattress Support Platform
2. Collapsible Siderail
3. Thighrest Handle
4. Bushings for Accessories
5. Corner Bumper
6. Brake Pedal
7. Siderail Release Mechanism
8. Thighrest Control
9. Drive Pedal and Brake Pedal (optional)
10. Foot End Lowering Pedal
11. Head End Lowering Pedal
12. Lifting Pedal
13. Space for Accessories or for means of fixing patient
14. Castor
15. Siderail Release Mechanism (optional)
16. Backrest Release Handle

6.3 SPRINT 100 WITH 2-PART MATTRESS SUPPORT PLATFORM
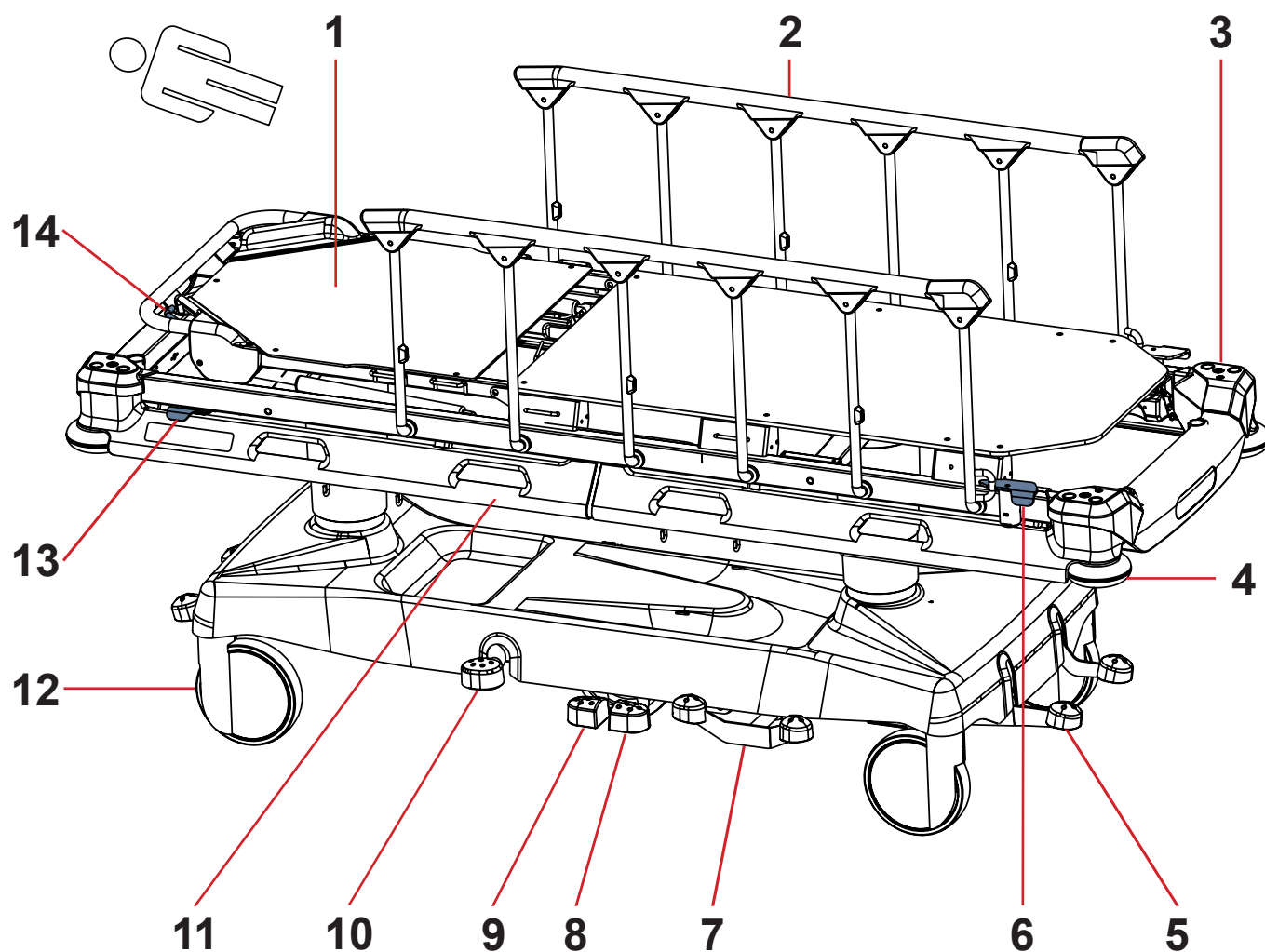
*Fig. Bed Overview (Sprint 100 with **2-part Mattress Support Platform**)*

1.   **Mattress Support Platform**
2.   **Collapsible Siderail**
3.   **Bushings for Accessories**
4.   **Corner Bumper**
5.   **Brake Pedal**
6.   **Siderail Release Mechanism**
7.   **Drive Pedal and Brake Pedal (optional)**
8.   **Foot End Lowering Pedal**
9.   **Head End Lowering Pedal**
10.   **Lifting Pedal**
11.   **Space for Accessories or for means of fixing patient**
12.   **Castor**
13.   **Siderail Release Mechanism (optional)**
14.   **Backrest Release Handle**

7 Technical Specification

All technical data are rated data and are subject to construction and manufacturing tolerances.

7.1 Identification of Applied Parts (Type B)

All part of the bed (and accessories) the patient can reach are type B Applied Parts.

- Mattress Support Platform Frame, Parts of Mattress Support Platform
- Siderails
- Bed Ends
- Mattress

7.2 Mechanical Specifications (Sprint 100)

7.2.1 Sprint 100 with Standard Mattress Support Platform

SPRINT 100 WITH 4-PART MATTRESS SUPPORT PLATFORM

Parameter	Value
External Dimensions in Standard Bed Position (length x width)	211 cm / 83,1 inch x 76 cm / 29,9 inch
Siderail Height above Mattress Support Platform (minimum ; maximum)	4 cm / 1,6 inch ; 36,5 cm / 14,4 inch
Siderail Length	125 cm / 49,2 inch
Distance between siderail bars	21 cm / 8,3 inch
Mattress dimensions (length x width)	193 cm / 76 inch x 66 cm / 26 inch
Maximum Mattress Height	13 cm / 5,1 inch
Castor diameter	20 cm / 7,9 inch
Minimum — Maximum Mattress Support Platform Height above floor (without Mattress)	55,5 cm / 21,9 inch — 88 cm / 34,6 inch
Maximum Backrest Angle	90°
Maximum Thighrest Angle	40°
Maximum Calfrest Angle	21°
Trendelenburg/Anti-Trendelenburg Position (Angle)	+18°/-18°
Bed Weight (depending on configuration)	120 kg / 265 lb
SWL (Bed Safe Working Load)	320 kg / 705 lb
Maximum Patient Weight	280 kg / 617 lb
Mass of Mobile Hospital Bed (Mass of empty bed + Safe Working Load)	440 kg / 970 lb

SPRINT 100 WITH 2-PART MATTRESS SUPPORT PLATFORM

Parameter	Value
External Dimensions in Standard Bed Position (length x width)	211 cm / 83,1 inch x 76 cm / 29,9 inch
Siderail Height above Mattress Support Platform (minimum ; maximum)	3 cm / 1,2 inch ; 35,5 cm / 14 inch
Siderail Length	125 cm / 49,2 inch
Distance between siderail bars	21 cm / 8,3 inch
Mattress dimensions (length x width)	193 cm / 76 inch x 66 cm / 26 inch
Maximum Mattress Height	13 cm / 5,1 inch
Castor diameter	20 cm / 7,9 inch
Minimum — Maximum Mattress Support Platform Height above floor (without Mattress)	56,5 cm / 22,2 inch — 89 cm / 35 inch
Maximum Backrest Angle	90°
Trendelenburg/Anti-Trendelenburg Position (Angle)	+18°/-18°
Bed Weight (depending on configuration)	120 kg / 265 lb
SWL (Bed Safe Working Load)	320 kg / 705 lb
Maximum Patient Weight	280 kg / 617 lb
Mass of Mobile Hospital Bed (Mass of empty bed + Safe Working Load)	440 kg / 970 lb

7.2.2 Sprint 100 with Wide Mattress Support Platform

SPRINT 100 WITH 4-PART MATTRESS SUPPORT PLATFORM

Parameter	Value
External Dimensions in Standard Bed Position (length x width)	211 cm / 83,1 inch x 86 cm / 33,9 inch
Siderail Height above Mattress Support Platform (minimum ; maximum)	4 cm / 1,6 inch ; 36,5 cm / 14,4 inch
Siderail Length	125 cm / 49,2 inch
Distance between siderail bars	21 cm / 8,3 inch
Mattress dimensions (length x width)	193 cm / 76 inch x 76 cm / 29,9 inch
Maximum Mattress Height	13 cm / 5,1 inch
Castor diameter	20 cm / 7,9 inch
Minimum — Maximum Mattress Support Platform Height above floor (without Mattress)	55,5 cm / 21,9 inch — 88 cm / 34,6 inch
Maximum Backrest Angle	90°
Maximum Thighrest Angle	40°
Maximum Calfrest Angle	21°
Trendelenburg/Anti-Trendelenburg Position (Angle)	+18°/-18°
Bed Weight (depending on configuration)	135 kg / 298 lb
SWL (Bed Safe Working Load)	320 kg / 705 lb
Maximum Patient Weight	280 kg / 617 lb
Mass of Mobile Hospital Bed (Mass of empty bed + Safe Working Load)	455 kg / 1003 lb

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SPRINT 100 WITH 2-PART MATTRESS SUPPORT PLATFORM

Parameter	Value
External Dimensions in Standard Bed Position (length x width)	211 cm / 83,1 inch x 86 cm / 33,9 inch
Siderail Height above Mattress Support Platform (minimum ; maximum)	3 cm / 1,2 inch ; 35,5 cm / 14 inch
Siderail Length	125 cm / 49,2 inch
Distance between siderail bars	21 cm / 8,3 inch
Mattress dimensions (length x width)	193 cm / 76 inch x 76 cm / 29,9 inch
Maximum Mattress Height	13 cm / 5,1 inch
Castor diameter	20 cm / 7,9 inch
Minimum — Maximum Mattress Support Platform Height above floor (without Mattress)	56,5 cm / 22,2 inch — 89 cm / 35 inch
Maximum Backrest Angle	90°
Trendelenburg/Anti-Trendelenburg Position (Angle)	+18°/-18°
Bed Weight (depending on configuration)	135 kg / 298 lb
SWL (Bed Safe Working Load)	320 kg / 705 lb
Maximum Patient Weight	280 kg / 617 lb
Mass of Mobile Hospital Bed (Mass of empty bed + Safe Working Load)	455 kg / 1003 lb

7.3 Electrical Specifications (only Sprint 100 with scales)

Parameter	Value
Input Voltage (Sprint 100 with scales)	6 / 9V DC
Maximum Power Input (Sprint 100 with scales)	max. 3 VA
Scales Adaptor	GSM18B09-P1J
Input Voltage, Frequency (Scales Adaptor)	100 - 240V AC, 50/60 Hz
Output (Scales Adaptor)	9V DC / 18W
Ingress Protection according to EN 60529 (Sprint 100 with scales)	IPX4
Ingress Protection according to EN 60529 (Scales Adaptor)	IP22
Protection Class (Scales Adaptor)	Class II
Batteries (Sprint 100 with scales)	4 x AA LR6 1,5V (6V DC)
Fuse in the Battery Box (Sprint 100 with scales)	1A

7.4 Environment Conditions (Sprint 100)

Parameter	Value
Use Conditions	
Ambient Temperature	10°C — 40°C
Relative Humidity	30% — 75 %
Atmospheric Pressure	795 — 1060 hPa
Storage and Transport Conditions	
Ambient Temperature	-20°C — 50°C
Relative Humidity	20% — 90 %
Atmospheric Pressure	795 — 1060 hPa

7.5 Electromagnetic Compatibility (only Sprint 100 with scales)

Bed is intended for hospitals except for near active HF surgical equipment and the RF shielded room of a medical system for magnetic resonance imaging, where the intensity of EM disturbances is high.

Bed has defined no essential performance.

⚠ **WARNING!**
It is recommended to avoid the use of this device next to or in block with other device, because it could lead to improper operation. If such use is needed, this device and the other equipment should be under surveillance to verify proper operation.

List of used cables:
► **Mains cable**, maximum length 6 m

⚠ **WARNING!**
Use of the accessories, converters and other cables, than specified and provided by manufacturer of this bed could lead to increase of electromagnetic emission or lower the electromagnetic immunity of this bed and lead to improper operation.

⚠ **WARNING!**
Mobile RF communication device (including end use devices like antenna cables and external antenna) should not be used closer than 30 cm (12 inches) from any part of this stetcher Sprint 100 with scales, including cables specified by manufacturer. Otherwise this could lead to deterioration of functionality of this bed.

⚠ **WARNING!**
Do not overload the bed (SWL) and consider chapter 23 Maintenance in order to maintain the basic safety with regard to electromagnetic disturbances for the expected service life.

7.5.1 Manufacturer instructions - electromagnetic emissions

Emission Test	Compliance
RF emissions CISPR 11	Group 1
RF emissions CISPR 11	Class A
Harmonic emissions IEC 61000-3-2	Class A
Voltage fluctuations / flicker emissions IEC 61000-3-3	Complies

NOTE   The EMISSIONS characteristics of this equipment make it suitable for use in industrial areas and hospitals (CISPR 11 class A). If it is used in a residential environment (for which CISPR 11 class B is normally required) this equipment might not offer adequate protection to radio-frequency communication services. The user might need to take mitigation measures, such as relocating or re-orienting the equipment.

7.5.2 Manufacturer instructions - electromagnetic susceptibility

Immunity Tests	Compliance level
Electrostatic discharge (ESD) IEC 61000-4-2	± 8 kV for contact discharge ± 15 kV for contact discharge
Radiated RF IEC 61000-4-3 Proximity fields from RF wireless communications equipment IEC 61000-4-3	3 V/m 80 MHz – 2,7 GHz 80 % AM at 1 kHz See Table 1
Fast electrical transients / burst IEC 61000-4-4	±2 kV for power line repetition frequency 100 kHz
Surge IEC 61000-4-5	± 1 kV Line-to-line ± 2 kV Line-to-ground
Conducted RF IEC 61000-4-6	3 V (0,15 MHz – 80 MHz) 6 V in ISM bands between 0,15 MHz and 80 MHz 80 % AM at 1 kHz
Power frequency (50/60 Hz) magnetic field IEC 61000-4-8	30 A/m
Voltage dips, short interruptions on power supply input lines IEC 61000-4-11	0 % UT; 0,5 cycle At 0°, 45°, 90°, 135°, 180°, 225°, 270° and 315° 0 % UT; 1 cycle and 70 % UT; 25/30 cycle Single phase: at 0° 0 % UT; 250/300 cycle

Table 1 - IMMUNITY to RF wireless communications equipment

Test frequency (MHz)	Band (MHz)	Service	Modulation	Immunity Test Level V/m
385	380 - 390	TETRA 400	Pulse modulation 18 Hz	27
450	430 - 470	GMRS 460, FRS 460	FM ± 5 kHz deviation 1 kHz sine	28
710 745 780	704 - 787	LTE band 13, 17	Pulse modulation 217 Hz	9
810 870 930	800 - 960	GSM 800/900, TETRA 800, iDEN 820, CDMA 850, LTE band 5	Pulse modulation 18 Hz	28
1 720 1 845 1 970	1 700 - 1 990	GSM 1800; CDMA 1900; GSM 1900; DECT; LTE band 1, 3, 4, 25; UMTS	Pulse modulation 217 Hz	28
2 450	2 400 - 2 570	Bluetooth, WLAN, 802.11 b/g/n, RFID 2450, LTE band 7	Pulse modulation 217 Hz	28
5 240 5 500 5 785	5 100 - 5 800	WLAN 802.11 a/n	Pulse modulation 217 Hz	9

NOTE There are applied no deviations to requirements of IEC 60601-1-2 ed. 4

NOTE There are no known other measures for keeping the basic safety based on EMC phenomena.

8 Use and Storage Conditions

DANGER!
Danger to life due to electric shock in the case of Sprint 100 with scales!
►   Do not use broken power adaptor.
►   Avoid damaging the adaptor power supply cord and its connector.

WARNING!
Remove the 4 batteries from the Battery Box before storage of the Sprint 100 with scales!

Sprint 100 with scales is designed for use in rooms for medical purposes. Electrical installations must therefore meet local norms laying down the necessary conditions for electrical installations.
►   Disconnect the Sprint 100 with scales from the mains in exceptional cases (i.e. lightnings, earthquake).

Respect values of the parameters connected with environment conditions in the chapter Technical Specification during use and storage of the product.
Sprint 100 is not suitable for indoor environments containing flammable gases (except oxygen cylinders).
Sprint 100 with scales is suitable for continuous operation.

9 Scope of Delivery and Product Variants

9.1 Delivery

► Upon receipt, check that the shipment is complete as specified on the delivery note.
► Notify the carrier and supplier of any deficiencies or damages immediately as well as in writing or make a note on the delivery note.

9.2 Scope of Delivery

- Sprint 100 Universal Transport Stretcher
- Instructions for use

9.3 Sprint 100 Variants

Basic Configuration:

- 2-part Mattress Support Platform
- 4x Tente 200 mm castors
- □ directional castor on head end
- □ directional castor on foot end
- Brakes from Head End and from Foot End
- Undercarriage Cover
- Siderails
- Foot Siderail Release Mechanism

Optional bed features:

- Mattress Support Platform
- □ 4-part Mattress Support Platform
- □ Wide Mattress Support Platform
- □ Fifth Castor (FlexiDrive)
- □ Head and Foot Siderail Release Mechanism
- □ X-Ray Cassette Holder (2-part Mattress Support Platform)
- □ X-Ray Cassette Holder (4-part Mattress Support Platform)
- □ C-arm ready bed
- Siderails
- □ Siderail shock absorber (SoftDrop)
- Handles
- □ 1x pair of Foldable handles (Head End)
- □ 1x pair of Foldable handles (Foot End)
- □ 1x pair of Foldable Infusion Stands/Foldable Pushing Handles (IV&Drive) (Head End or Foot End)
- □ 1x pair of Removable handles
- □ 1x pair of Fixed handles
- Undercarriage
- □ Brakes on side
- Accessory Holders
- □ on side
- □ on Head End
- □ on Foot End
- Accessory Rails with plastic hooks
- □ on side
- □ on Head End
- □ on Foot End
- DIN Rails
- □ on side
- □ on Head End
- □ on Foot End
- Angle Indicators
- □ Backrest and Seat section of Mattress Support Platform (on side)
- □ Mattress Support Platform frame (on side in seat section)
- Potential Interconnection
- □ with Potential Interconnection
- Scales
- □ with Scales

10 Putting into Service

⚠️ **WARNING!**
Risk of injury when working on the bed!
► Ensure that the castors are locked prior to putting into service and maintenance.

⚠️ **CAUTION!**
Material damage due to incorrect putting into service!
► Ensure that putting into service is performed exclusively by manufacturer´s customer service or trained hospital personnel.

⚠️ **CAUTION!**
Material damage due to incorrect use!
► Do not use pedals for lifting or lowering if the bed undercarriage is not in horizontal position!

NOTE For safe, easy handling, LINET ® recommends having two technicians assemble the bed.

Set up the bed as follows:

► Unpack the bed.
► Check the delivery (see Scope of Delivery and Bed Variants).
► Ensure that all of the required mechanisms are available on site.
► Raise siderails up.
► Install accessories.
► Set up the bed exclusively on a suitable floor surface (see Transport).

HOOKS ON THE ACCESSORY RAIL (optional)

If the bed is equipped with accessory rail on the head end / foot end hooks on the accessory rail are delivered in the safety position. In order to use the hooks remove them and place them on the accessory rail from the outer side (reversely).
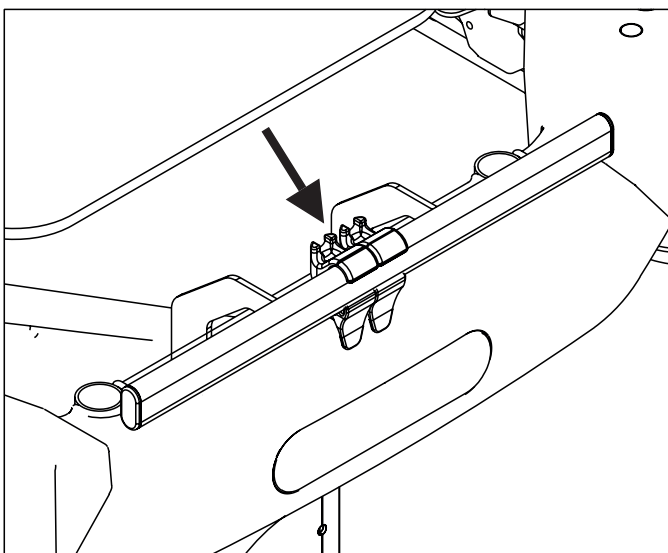
Fig. Hooks in original position

10.1 Mattress Support Platform

Sprint 100 has Mattress Support Platform with two sections or four sections.

2-PART MATTRESS SUPPORT PLATFORM
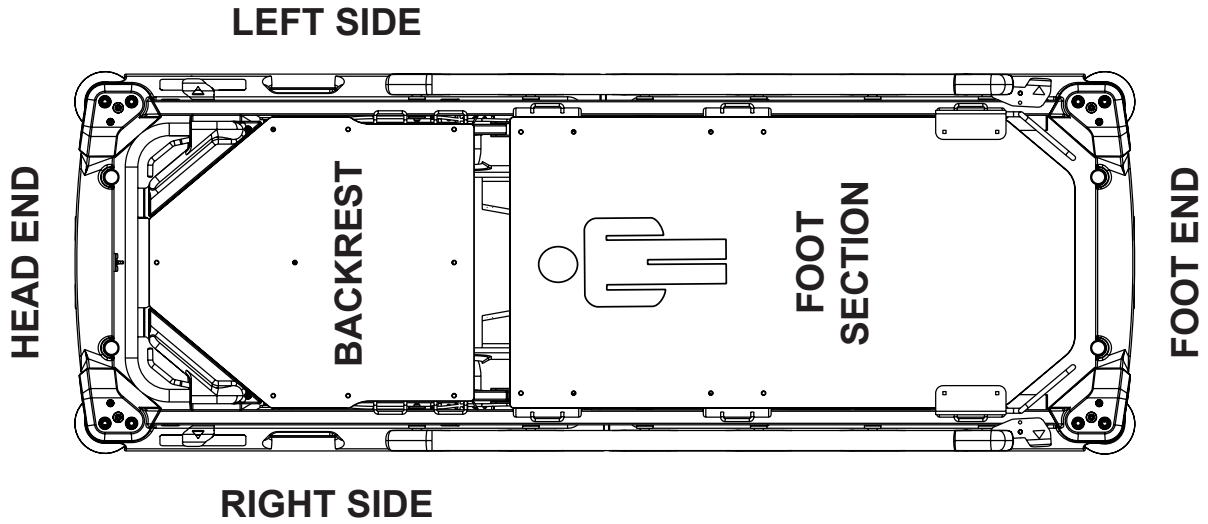
Fig. 2-part Mattress Support Platform

4-PART MATTRESS SUPPORT PLATFORM
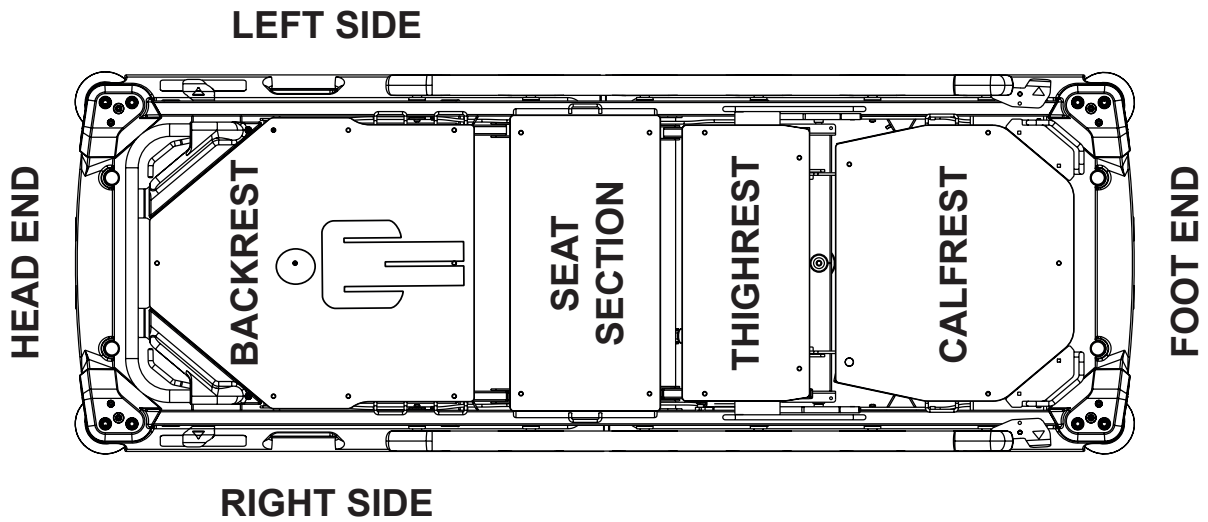
Fig. 4-part Mattress Support Platform

10.2 Potential Interconnection (optional)

The bed is equipped with a standard protective connector. This connector is used for potential equalisation between the bed and any intravascular or intracardiac device connected to the patient to protect the patient from static electric shocks.
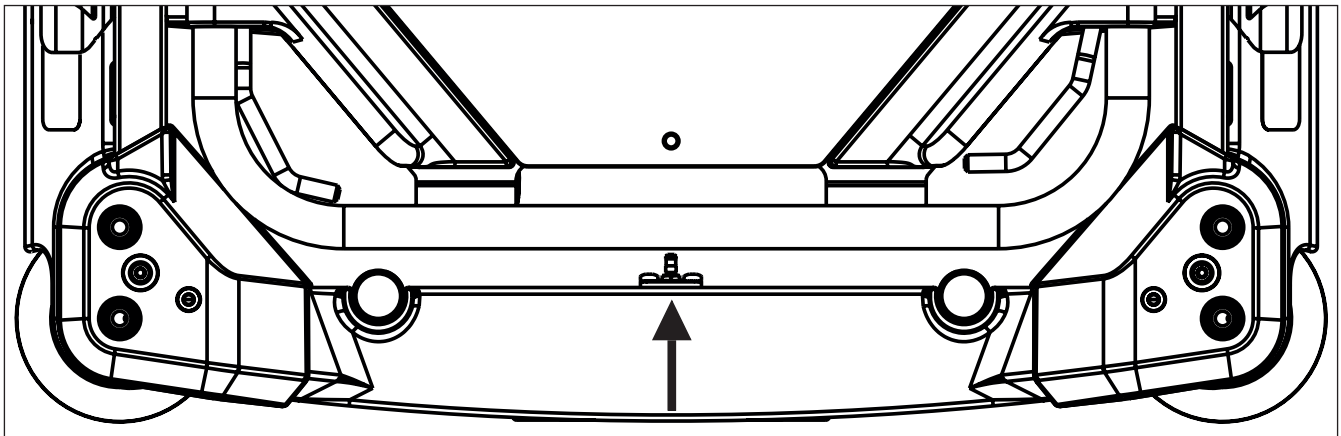
Fig. Potential equalisation - male (head end)

Use equalisation connector if:

■ the patient is connected to any intravascular or intracardiac device.

Before connecting the patient to an intravascular/intracardiac device:

► Connect the ground wire of the device to the potential equalisation connector on the bed on which the patient in question is lying.
► Use a standard hospital connector.
► Make sure that the connectors match.
► Make sure that there is no possibility for inadvertent disconnection.
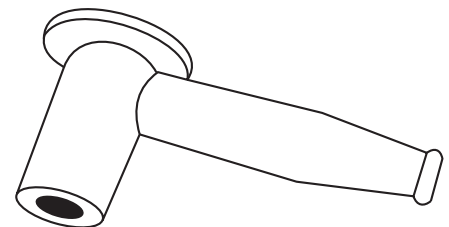
Fig. Potential equalisation connector - female

Before moving the bed:

► Disconnect the patient from the intravascular or intracardiac device.
► Disconnect the potential equalisation connector.

10.3 Before Use

Prepare the bed for use as follows:

► Perform bleeding procedure of hydraulic units in the highest bed position by pressing lifting pedal 10 times.
► Raise the Mattress Support Platform to the highest position.
► Lower the Mattress Support Platform to the lowest position.
► Tilt the Mattress Support Platform to Trendelenburg position.
► Position the Mattress Support Platform to Anti-Trendelenburg tilt.
► Check that the castors as well as main brake work correctly.
► Check that the Siderails function properly.
► Dispose of all packaging (see „24 Disposal (Sprint 100 without scales)" on the page 108 or see „25 Disposal (Sprint 100 with scales)" on the page 109).

10.4 Transport

For a safe transport, observe the following:

► Ensure that no cables are run over when moving a bed.
► Ensure that the castors are not braked before moving the bed.
► Adjust bed height to at least 20 cm below maximum height.
► Push bed by handles on Head End or Foot End.
► Move the bed exclusively on suitable floor surfaces.
► Ensure the bed is braked when it should not move (see „13.2 Castor Control" on the page 48).
► For longer distances, ensure that the castor steering function (main control) is activated.
► Ensure that the brakes are released before moving the bed.

Suitable surfaces:

- Tile
- Hard linoleum
- Poured flooring

Unsuitable surfaces:

- Too soft, unsealed or defective flooring
- Soft wooden flooring
- Soft and porous stone floors
- Carpeted floors with underlay
- Soft linoleum

Outdoor transport (especially from heliport) is allowed under these conditions:
Surface of an outdoor environment is not too soft and too segmented and too coarse but hard and flat as required for indoor use.

10.5 Firmware

The bed includes firmware that can be updated only by an authorised service technician.
This firmware is protected against unauthorised access by mechanical housing (tool is needed to access), by seal (components with processor are sealed), by exclusive compatibility with an authorised software tool and by check of compatibility of the new firmware with the bed.

11 Adaptor and Power Supply Cord (only Sprint 100 with scales)

⚠ **WARNING!**
Where the integrity of the external protective conductor in the installation or its arrangement is in doubt
► **Use the other power source that is not in doubt.**

⚠ **WARNING!**
Inappropriate handling of the power supply cord, e. g. by kinking, shearing or other mechanical damages is hazardous!

⚠ **WARNING!**
When routing cable from the Adaptor in a Sprint 100 with scales avoid squeezing the cable between parts of the Sprint 100 with scales!

⚠ **WARNING!**
An additional multiple socket-outlet or extension cord shall not be connected to the Sprint 100 with scales.

⚠ **WARNING!**
It is not possible to use Bed Exit Alarm Monitoring when Sprint 100 with scales is disconnected from the mains power! No Bed Exit Alarm can be triggered when Sprint 100 with scales is disconnected from the mains power!

⚠ **WARNING!**
If Sprint 100 with scales is equipped with adaptor the whole product is not protected from splashing water no matter the direction (the whole product is not IPX4 certified)!

⚠ **WARNING!**
Use exclusively the power supply cord and the adaptor in perfect condition!
► Ensure the power supply cord and the adaptor are not damaged before each use!

⚠ **WARNING!**
Power Supply Cord connected to the Adaptor and to the mains must not be tightened or stretched during use!
► Ensure the Power Supply Cord hangs loosely between the Sprint 100 with scales and the wall where the Power Supply Cord is connected to the mains.

Attachment plug is means of connecting and disconnecting Sprint 100 with scales from the mains.

11.1 Connection of the Power Supply Cord to the Adaptor

⚠ **WARNING!**
Ensure the connector of the Power Supply Cord is safely connected to the Adaptor! Do not expose the place of connection to liquids! Use only a damp cloth or a wet wipe to clean the Power Supply Cord, Adaptor and the place of connection of the Adaptor to the Power Supply Cord!

⚠ **WARNING!**
Ensure the bed height adjustment will not damage the Power Supply Cord connected to the Sprint 100 with scales!

⚠ **WARNING!**
Power Supply Cord must not be wound around the Accessory Rail or DIN Rail at head end of the Sprint 100 with scales before and when the Power Supply Cord is connected to the mains power!

⚠ **WARNING!**
Adaptor connected to the Power Supply Cord must be inserted to the Adaptor Holder during use!
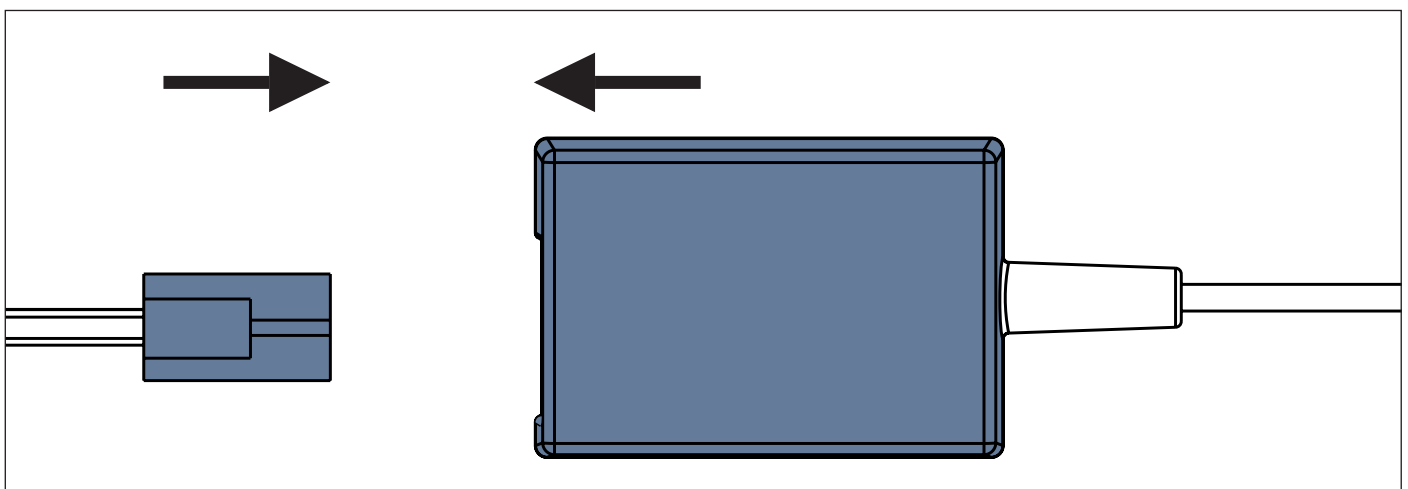
Fig. Connector of the Power Supply Cord (on the left) and connector in the Adaptor (on the right)
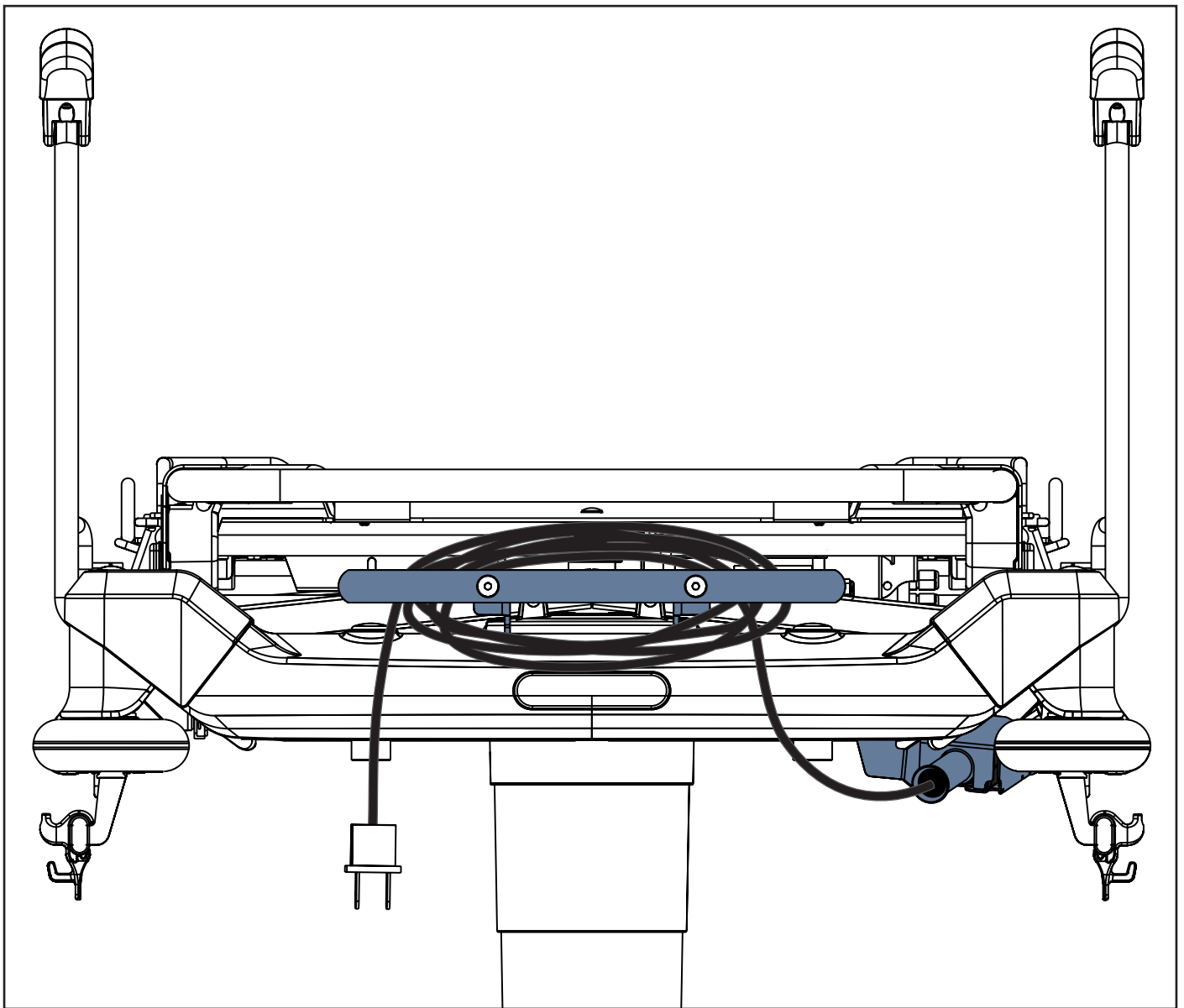
Fig. Power Supply Cord leading from the Adaptor Holder and wound around the DIN Rail

To place Power Supply Cord to safety position when Bed Exit Alarm Monitoring is not required:

►   Wind the Power Supply Cord loosely around the Accessory Rail or DIN Rail at head end of the Sprint 100 with scales as on the picture above.

To connect Sprint 100 with scales to the mains power:

►   Unwind the whole Power Supply Cord from the Accessory Rail or DIN Rail at head end of the Sprint 100 with scales.
►   Connect the attachment plug of the Power Supply Cord to the mains power.

To disconnect Power Supply Cord from the Sprint 100 with scales:

►   Disconnect the Power Supply Cord from the mains.
►   Pull the Power Supply Cord out of the Adaptor Holder.
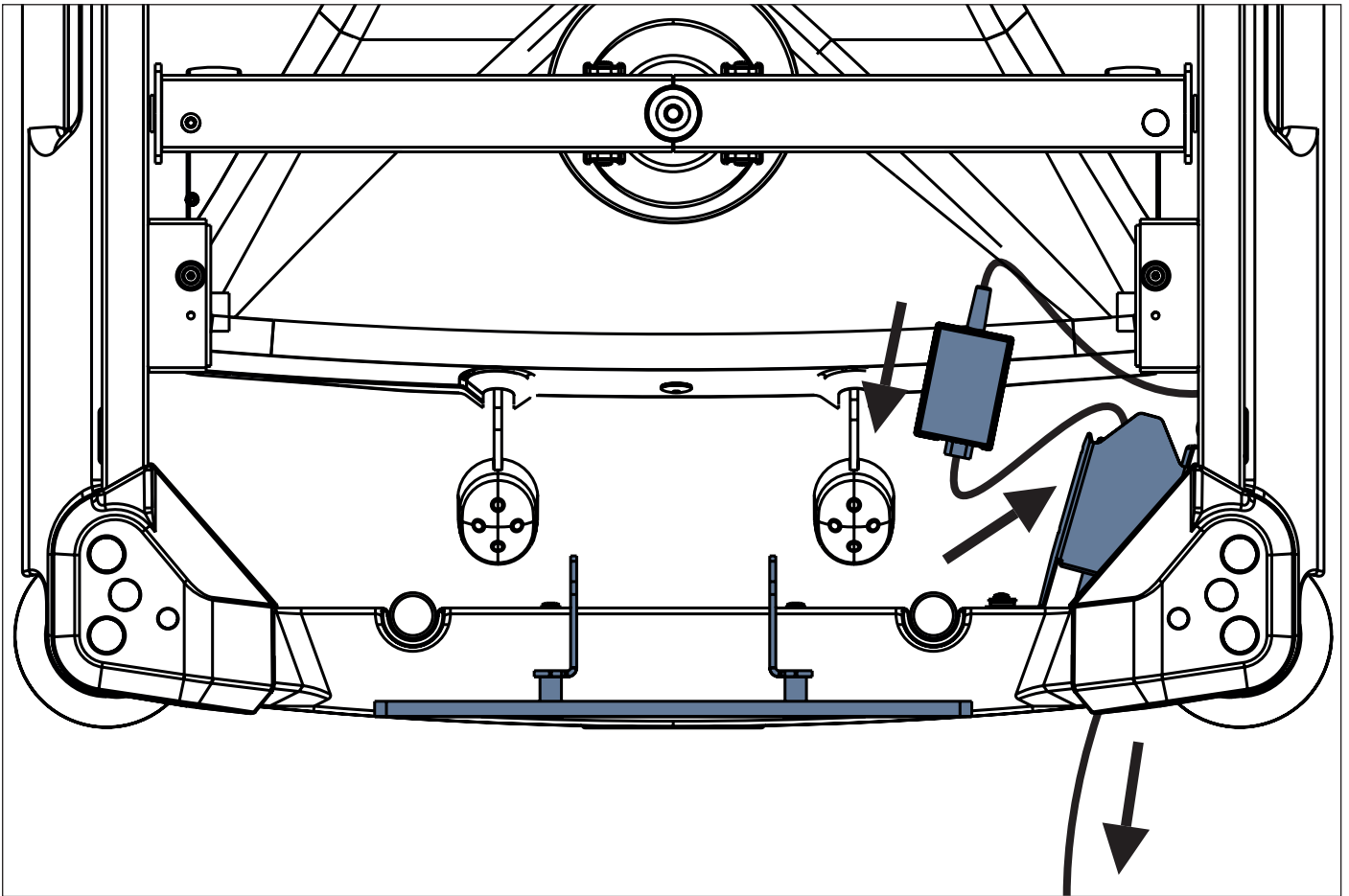
Fig. Adaptor Holder at head end of the Sprint 100 with scales

To connect Power Supply Cord to the Adaptor:

►   Raise the Backrest as needed.
►   Remove the Adaptor from the Adaptor Holder.
►   Run the Connector of the Power Supply Cord through the tube-like part of the Adaptor Holder.
►   Connect Connector of the Power Supply Cord to the Adaptor.
►   Insert connected Adaptor back to the Adaptor Holder.
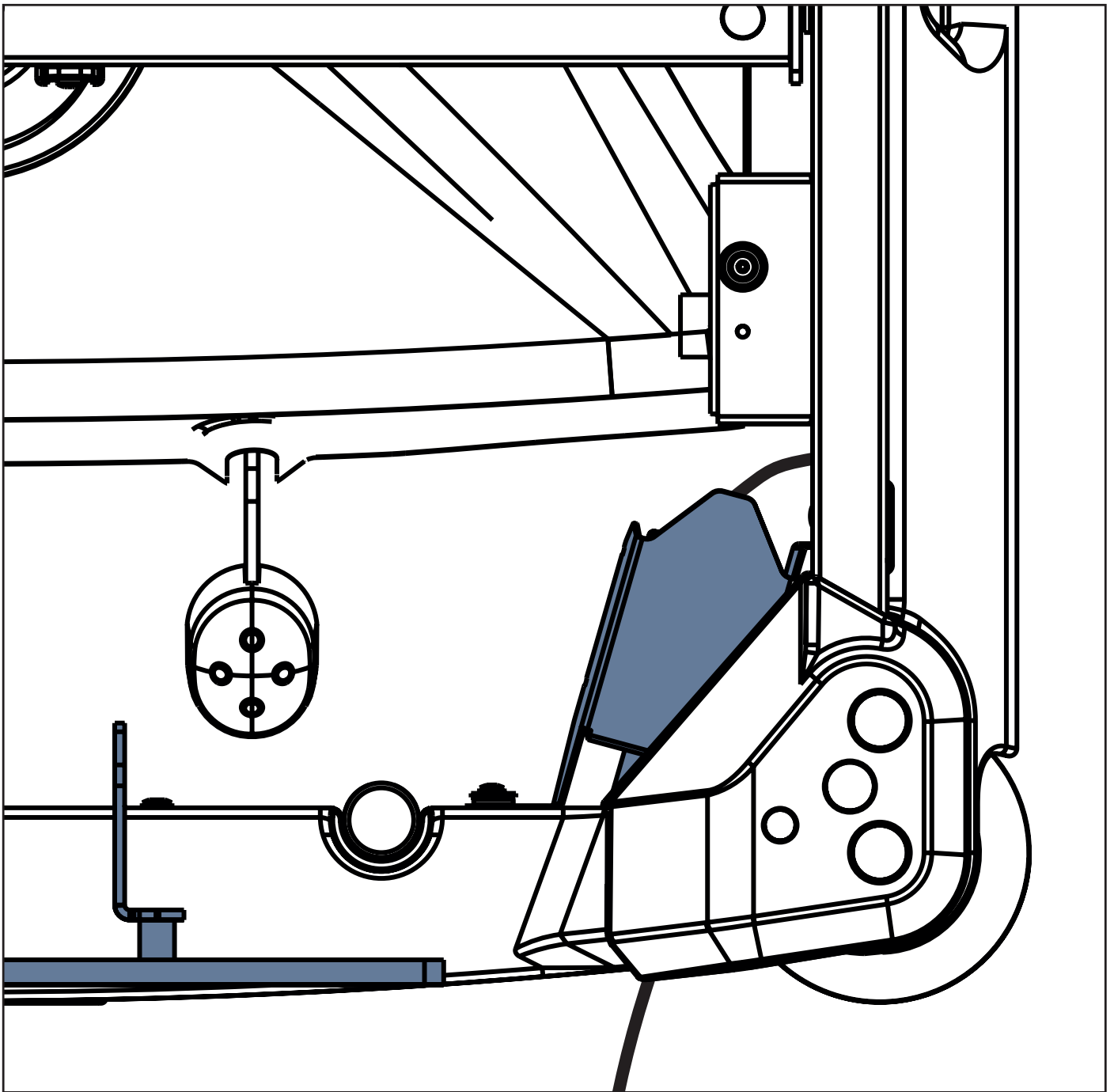
Fig. Correct position of the Adaptor connected to the Power Supply Cord
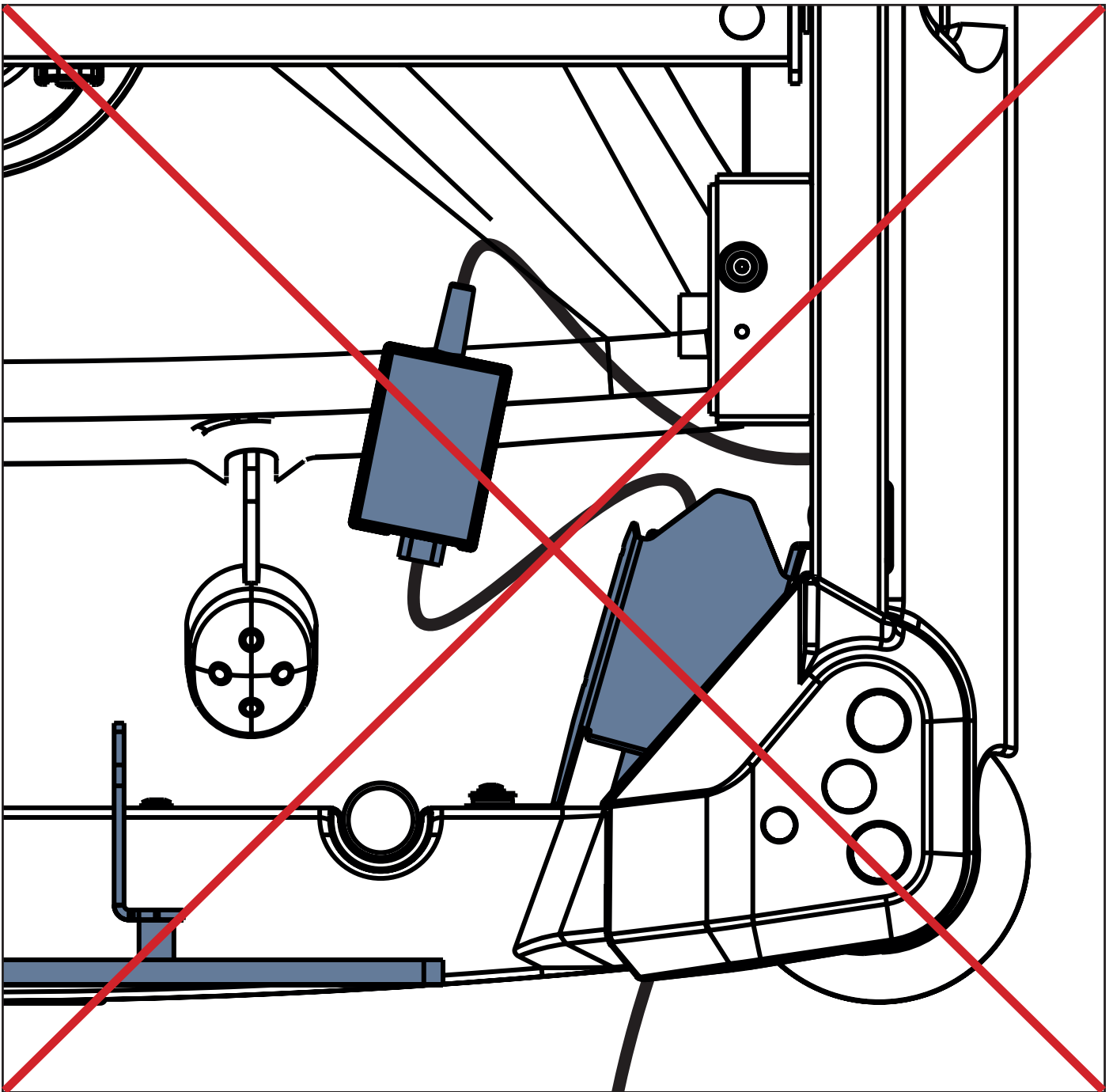
Fig. Incorrect position of the Adaptor connected to the Power Supply Cord

11.2 Indication of the bed connected to the mains

Connection to the mains power is visually indicated on the display of Scales and Bed Exit Alarm Control Panel.

Indicator	Meaning
	Sprint 100 with scales is connected to the mains.
	Sprint 100 with scales is disconnected from the mains.

12 Batteries (only Sprint 100 with scales)

⚠️ **WARNING!**
Hospital technician is authorised to remove the discharged batteries and to insert new 4 batteries according to these instructions for use! Use only type of the batteries mentioned in the Electrical Specifications (AA LR6 1,5V)! Replace the 4 batteries every 2 years!

⚠️ **WARNING!**
Remove the 4 batteries from the Battery Box before storage of the Sprint 100 with scales!

⚠️ **WARNING!**
Do not charge removed battery (type LR6 is non-rechargeable)!

⚠️ **WARNING!**
Incorrectly inserted batteries cause a blown fuse in the Battery Box! Only authorised and trained service technician is allowed to change the fuse in the Battery Box!

Sprint 100 with scales is delivered with 4 batteries in the Battery Box under the Seat Section.
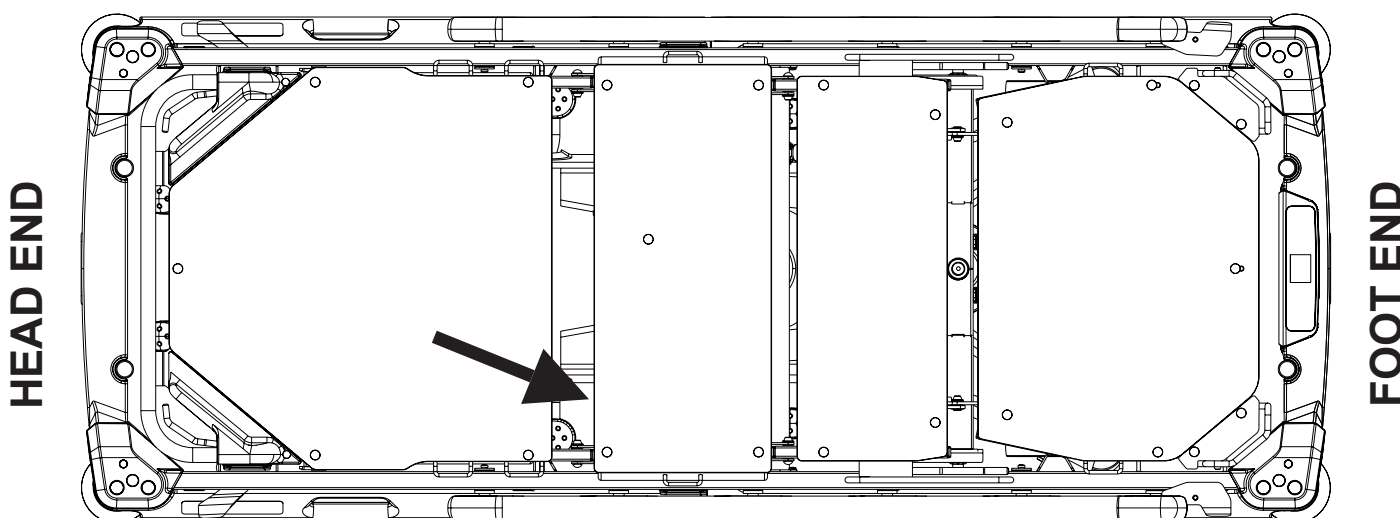
Fig. Position of the Battery Box under the Seat Section of Sprint 100 with scales

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12.1 Battery Activation
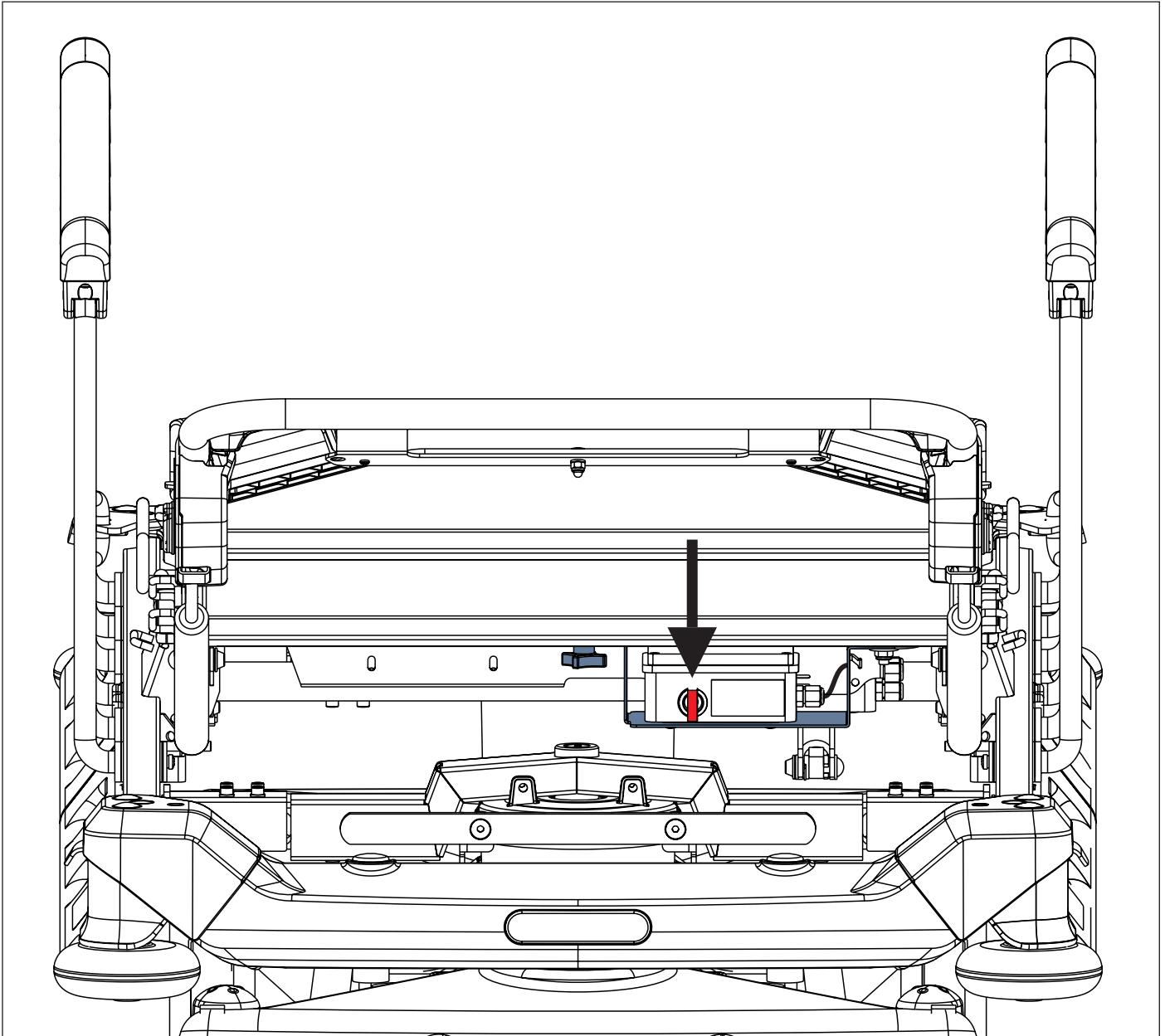
Fig. Battery Box with Battery Isolating Foil under the Seat Section

To remove Battery Isolating Foil:

►   Remove a plug from the front side of the Battery Box to make the Battery Isolating Foil accessible.
►   Remove the Battery Isolating Foil from the Battery Box by pulling the Battery Isolating Foil.
►   Check if the Battery Isolating Foil is complete and undamaged. If the Battery Isolating Foil is damaged, contact the manu-facturer's service department immediately.
►   Insert the plug to the front side of the Battery Box.
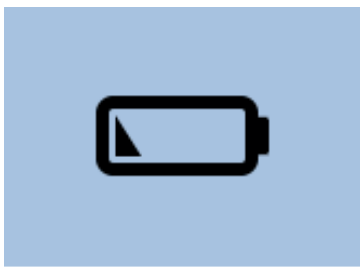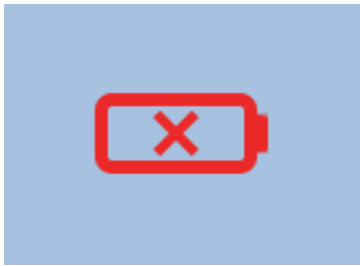
NOTE   The Battery Isolating Foil is sharp-edged. Remove it carefully to avoid cuts or personal injury.

12.2 Battery Capacity Status Indicators

Battery Capacity Status	Indication
Capacity 100% - 83%	
Capacity 82% - 50%	
Capacity 49% - 16%	
Low Batteries (Capacity 15% - 4%)	LOW BATTERY
Critically Discharged Batteries (Capacity 3% or less)	BAD BATTERY NO BATTERY

12.3 Pop-up windows connected with Battery Capacity Status

Pop-up windows are indicated on the display of Scales and Bed Exit Alarm Control Panel.

Status (Pop-up window)	Meaning	How to change the status
	Operator activates the Bed Exit Alarm Monitoring when battery is low.	Replace the 4 batteries and activate the Bed Exit Alarm Monitoring.
	Operator activates the Bed Exit Alarm Monitoring when battery is critically discharged or disconnected.	Replace the 4 batteries and activate the Bed Exit Alarm Monitoring.

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12.4 Change of the 4 batteries in Battery Box
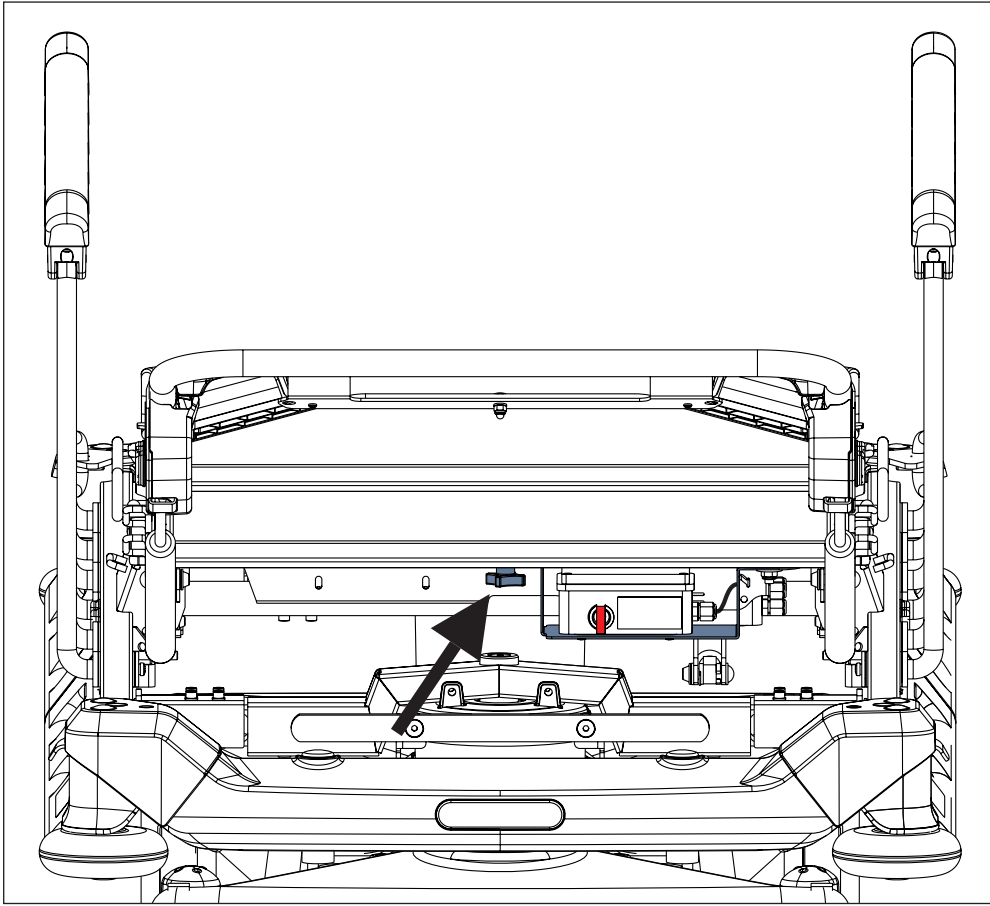
Fig. Fixation of the Battery Box under the Seat Section

To change the 4 batteries in the Battery Box:
►   Raise the Backrest of the Sprint 100 with scales.
►   Unlock the Battery Box Holder by turning the star-like fixing element.
►   Tip the Battery Box Holder out to make the Battery Box accessible.
►   Unscrew the 4 screws in the Battery Box Cover by the corresponding screwdriver to unlock the Battery Box Cover.
►   Replace the 4 batteries with new 4 batteries according to the label on the Battery Box Cover.
►   Close the Battery Box by the Cover.
►   Lock the Battery Box Cover by tightening the 4 screws.
►   Give the Battery Box Holder back to its original position under the Seat Section.
►   Lock the Battery Box Holder by turning the star-like fixing element.
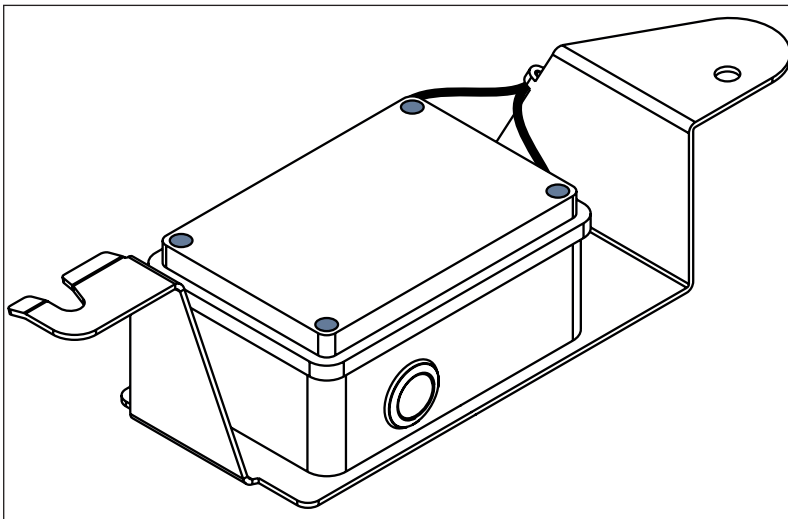
Fig. Battery Box with Cover fixed with 4 screws
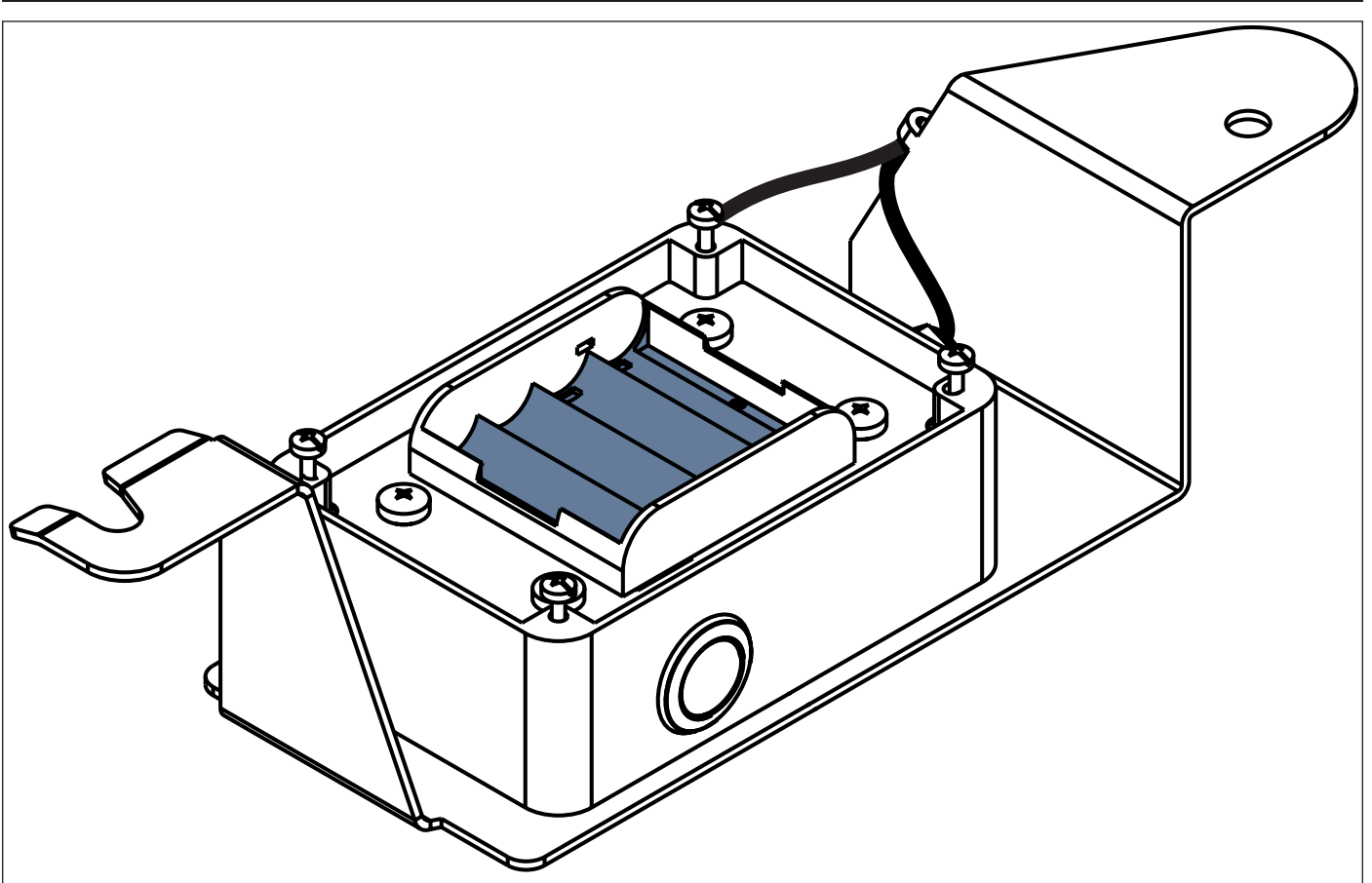
Fig. Opened Battery Box without batteries

1,5 V AA (size M)
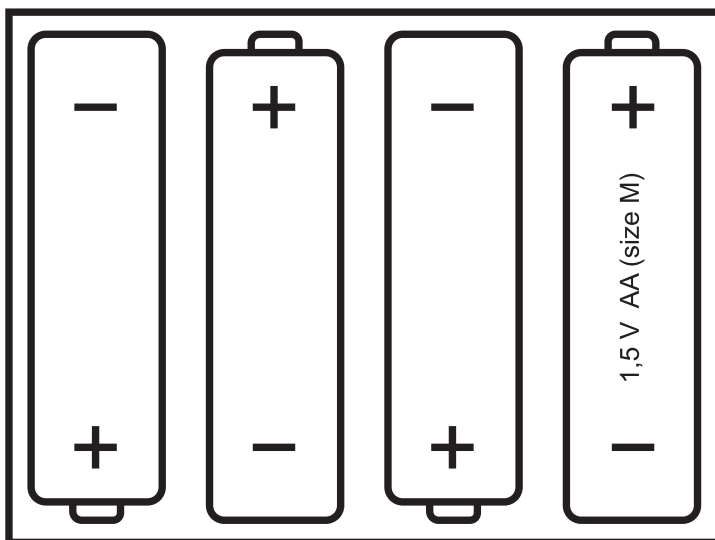
Fig. Label indicating positions of the 4 batteries (on the Battery Box Cover)

13 Manipulation

⚠️ **WARNING!**
Risk of injury when adjusting the bed!
► Ensure that there are no body parts between the Mattress Support Platform elements and the Mattress Support Platform frame when adjusting the bed.
► Ensure that there are no body parts below the Mattress Support Platform frame before adjusting the bed.

⚠️ **WARNING!**
Risk of injury when sitting on the Foot End!
► Extra care must be taken when sitting on the Foot End of the bed!

⚠️ **WARNING!**
Risk of injury when getting in and getting out of the bed!
► Patient is allowed to get into the bed or get out of the bed just from the right side or left side of the bed!

Control Signs	Meaning
	Backrest Control
	Thighrest Control
	Fold siderail down
	Lift Mattress Support Platform up
	Lower Mattress Support Platform down
	Trendelenburg Tilt
	Anti-Trendelenburg Tilt

13.1 Collapsible Siderails

The collapsible siderails are components of the bed in contact with patient.
The nursing personnel are responsible for the siderails being raised up while the patient is in bed.

⚠️ **WARNING!**
Risk of injury due to incorrectly latched siderail!
► Ensure that siderail is secured in the upper position or folded down to the lowest position.

⚠️ **WARNING!**
Risk of injury due to incorrect position of siderails!
► Ensure that siderails are folded up while the patient is in bed.

⚠️ **WARNING!**
Risk of injury due to incorrect manipulation with siderails!
► Ensure that there is no body part between siderail bars during folding siderail down.

SIDERAIL DESCRIPTION

1. Siderail Handle
2. Siderail Release Mechanism
3. Siderail Release Mechanism (optional)
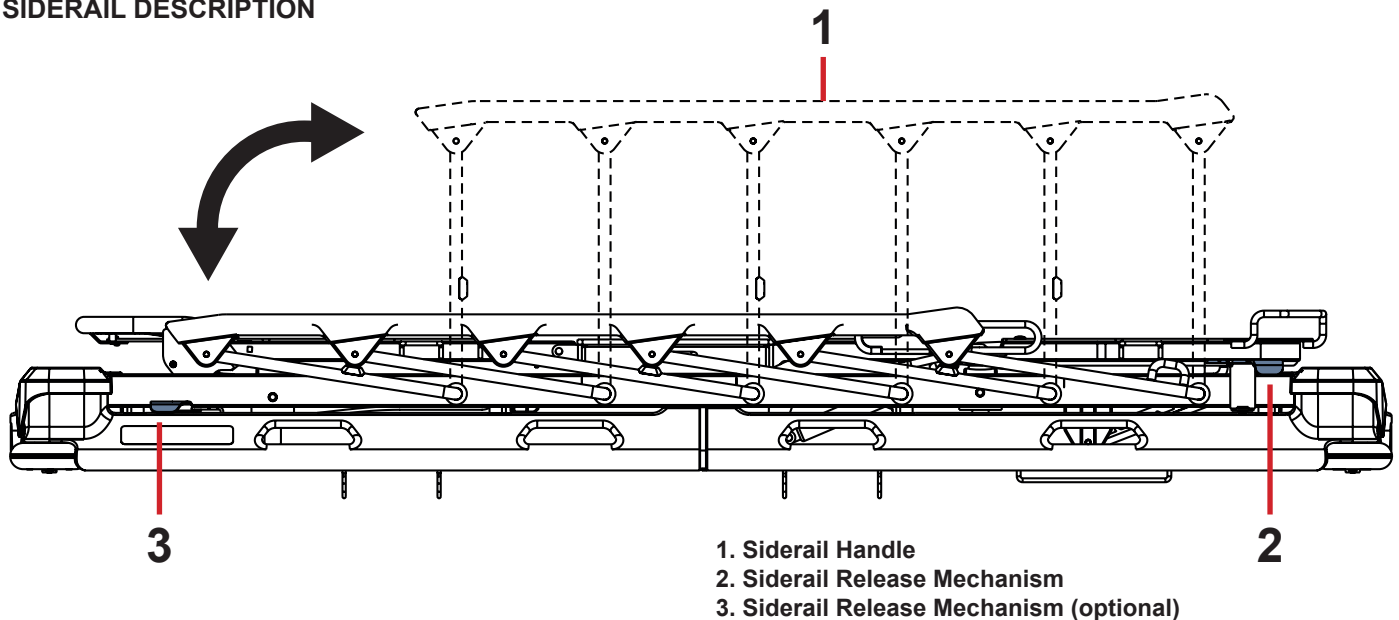
Fig. Manipulation with Collapsible Siderail

MANIPULATION

To raise siderail up:

► Grab siderail by Siderail Handle (**1**).
► Pull siderail up until it latches.

To release siderail down:

► Unlock siderail by pulling Siderail Release Mechanism (**2** or **3**) at Foot End or at Head End.
► Fold down siderail slowly.

NOTE   Siderail Release Mechanisms are connected. Pulling Siderail Release Mechanism at Foot End means pulling Siderail Release Mechanism at Head End and pulling Siderail Release Mechanism at Head End means pulling Siderail Release Mechanism at Foot End at the same time.

![LINET]
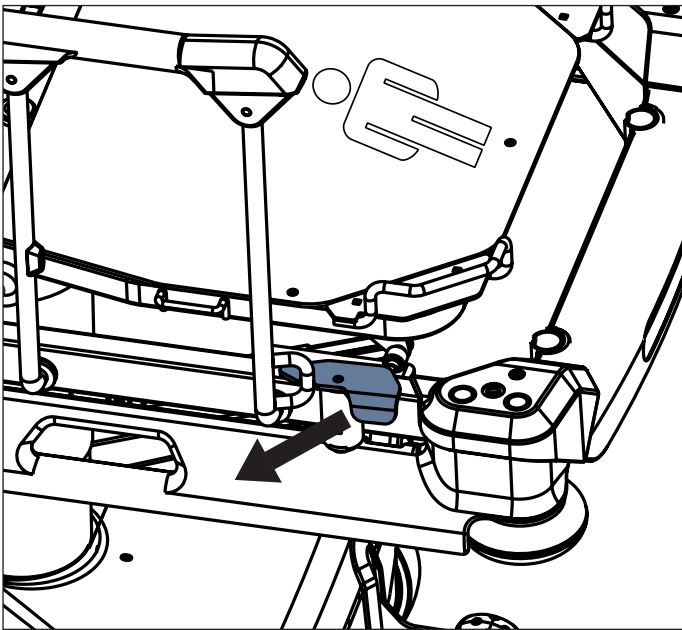
Fig. Manipulation with Siderail Release Mechanism at foot end
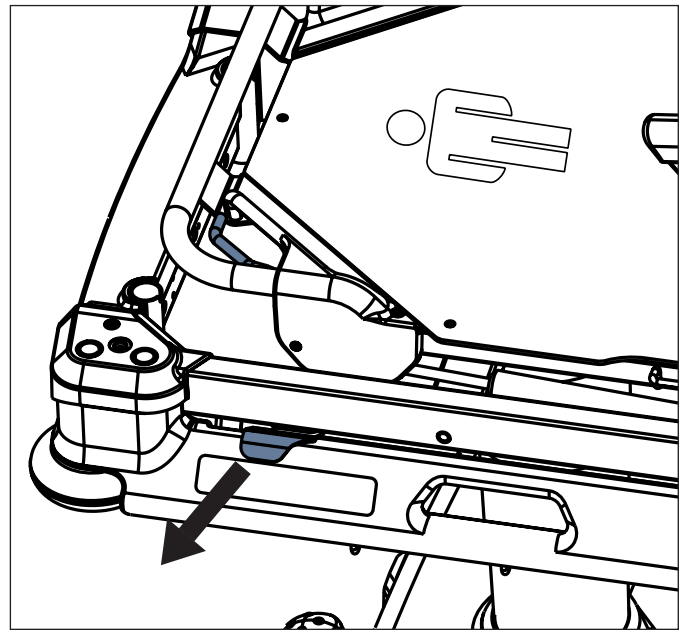
Fig. Manipulation with Siderail Release Mechanism at head end

13.2 Castor Control

⚠️ **CAUTION!**
Material damage due to incorrect transport and involuntary movement!
► Ensure that the castors are braked prior to assembly, disassembly and maintenance.
► Ensure that the castors are braked when the bed is occupied.
► Ensure that the castors are braked when the bed should not move.

The bed is equipped with central castor control and brake system.
A directional castor can be situated at head end or foot end depending on bed configuration.
The castor control pedals are located at head end and foot end.
Optionally, castor control pedals are located on the bed sides also.

At head end and foot end there are green and red pedals.
Red colour refers to braking and green colour refers to steering.

Each pedal has 3 control positions.
Pedals are interconnected such that all pedal functions belong to each pedal. In following table the pedal functions are described.
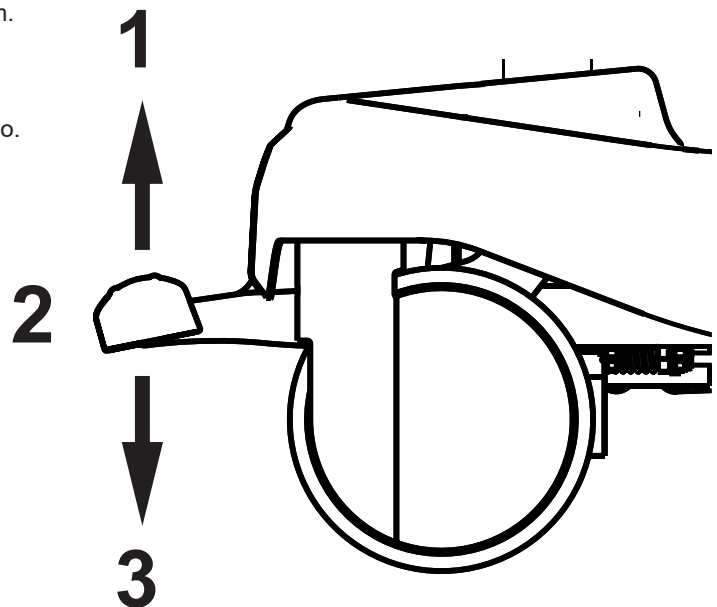
Fig. Three Pedal Positions

Pedal Colour	Upper Position (1)	Middle Position (2)	Lower Position (3)
GREEN	BRAKED	UNRESTRICTED MOVEMENT	STEERING / FIFTH CASTOR
RED	STEERING / FIFTH CASTOR	UNRESTRICTED MOVEMENT	BRAKED

13.2.1 Braked Bed

To brake the bed:

► Press red Brake pedal (**1 or 2**) to the lower position.
All four castors are braked.
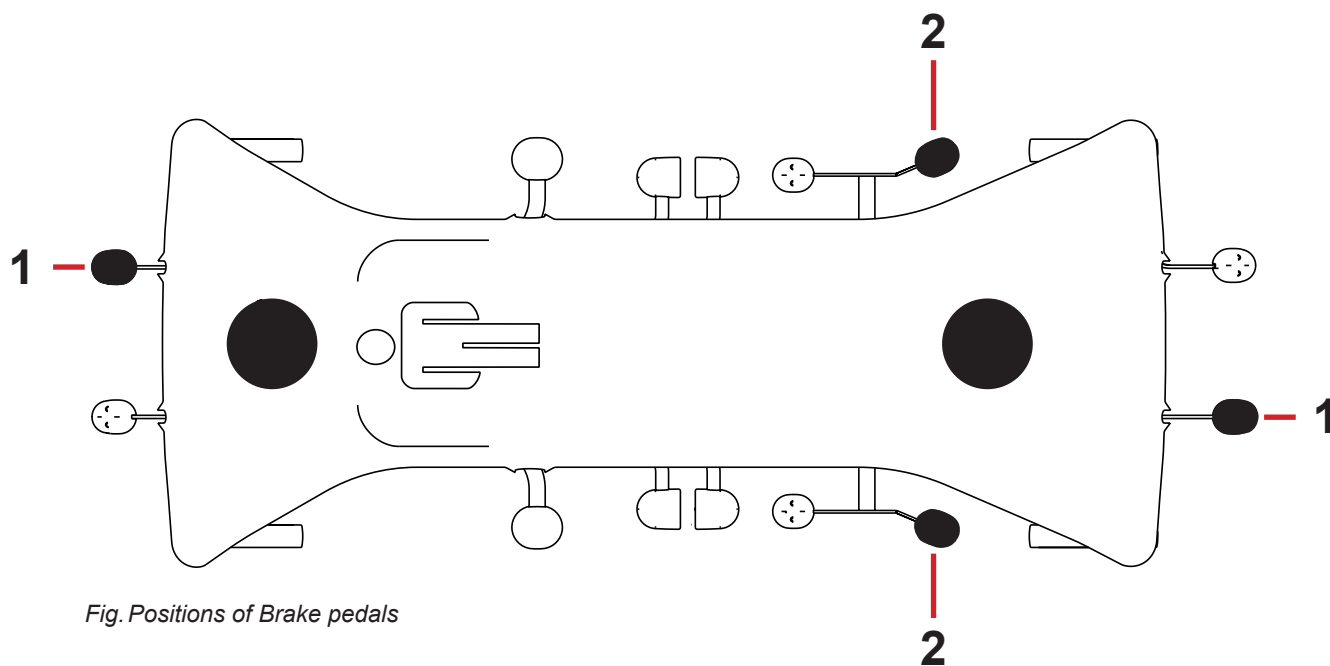
Fig. Positions of Brake pedals

1. Brake Pedal (standard) - RED
2. Brake Pedal (optional) - RED

13.2.2 Forward Movement (Steering)

To set forward movement:

► Press green Drive pedal (**3 or 4**) to the lower position.
The front **left castor** is locked after its forward movement was reached. The bed moves straight ahead.
If the bed is equipped with a **fifth castor**, this castor determines the direction of movement.
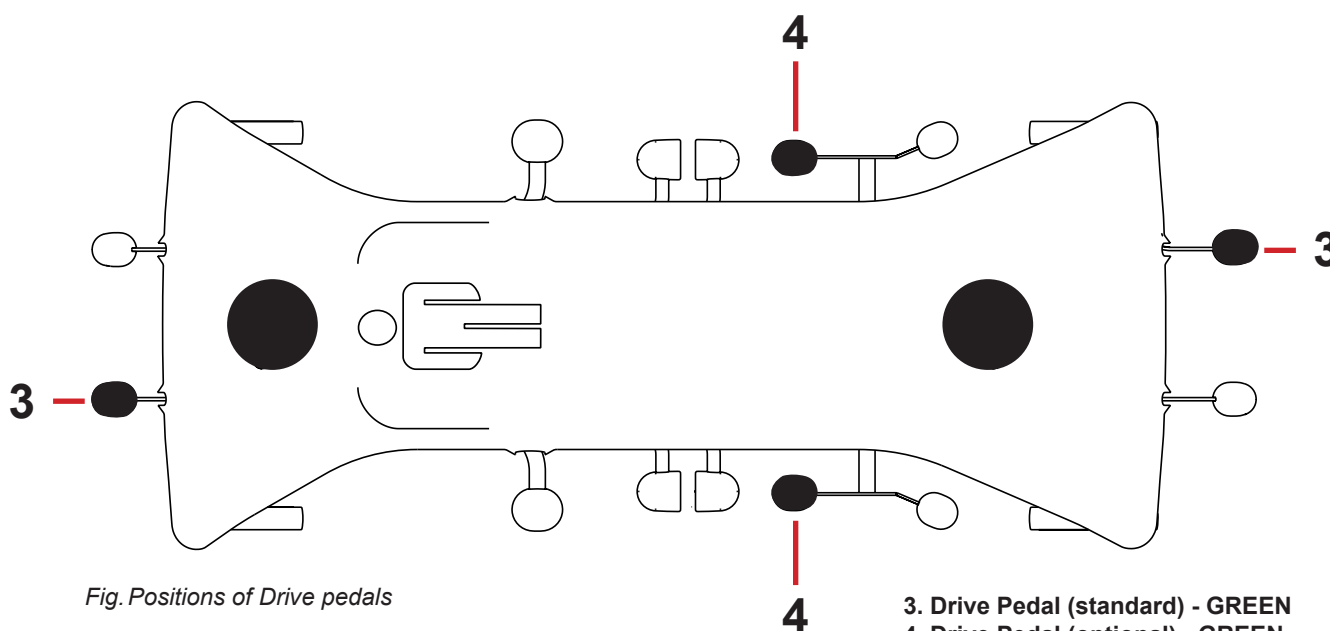
Fig. Positions of Drive pedals

3. Drive Pedal (standard) - GREEN
4. Drive Pedal (optional) - GREEN

13.2.3 Unrestricted Movement

To set unrestricted movement:

► Leave all Brake pedals and Drive pedals in their middle position.
All four castors are unlocked.
Unrestricted movement is enabled.

13.3 Bed Positioning

13.3.1 Backrest
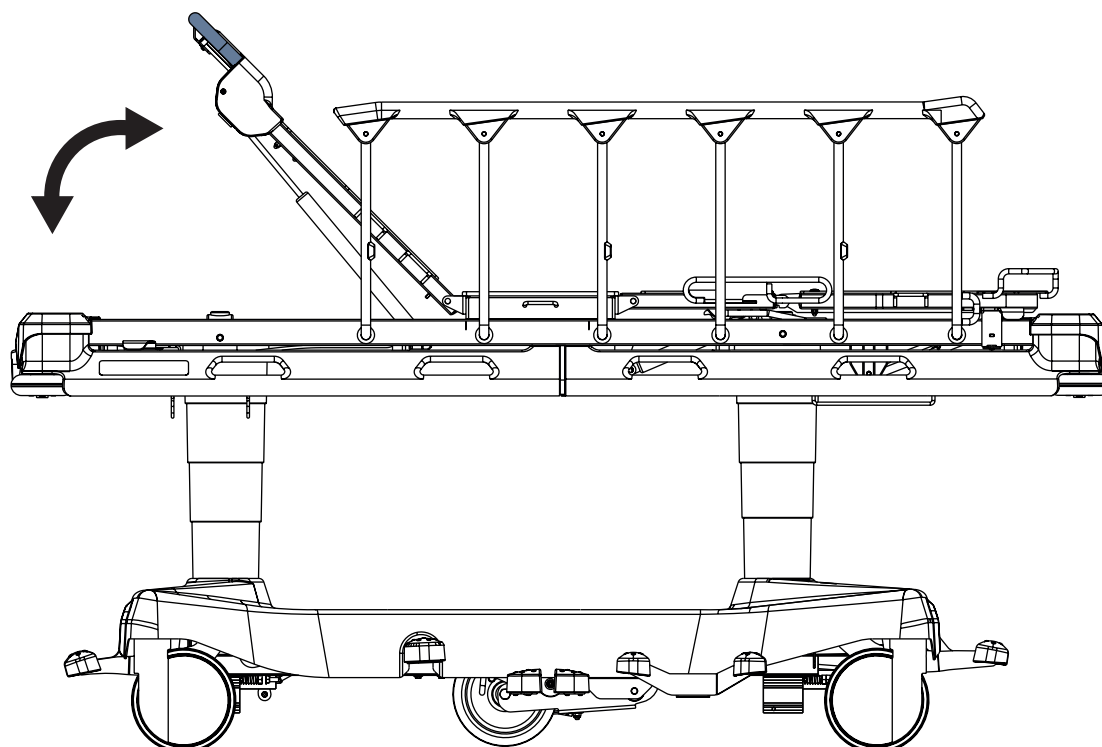
WARNING!
Risk of injury or material damage due to incorrect lifting of the Backrest without any patient on the mattress support platform!
► During lifting the Backrest up without any patient on the mattress support platform, hold the Backrest carefully so that a fast movement of the Backrest does not hit you!
► Before lifting the Backrest up without any patient on the mattress support platform, ensure that there are no objects or body parts between the lateral bars of raised siderails and the Backrest!

To position Backrest:

► press Backrest Release Handles towards the Backrest frame
► hold the Backrest and position it carefully
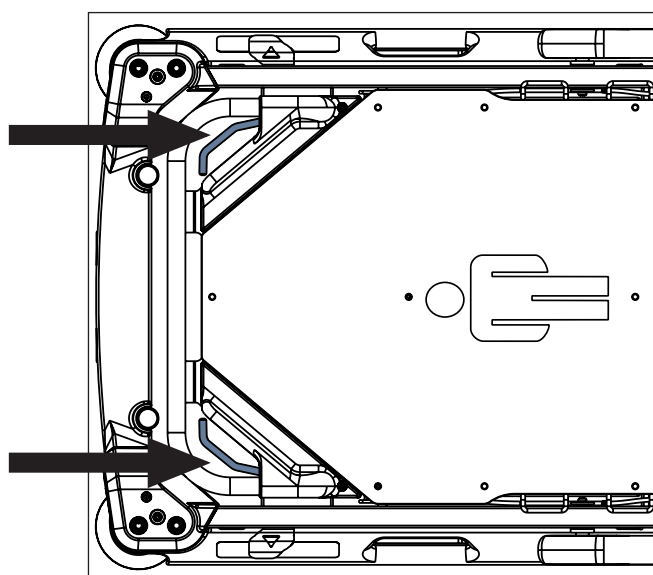
Fig. Positions of Backrest Release Handles
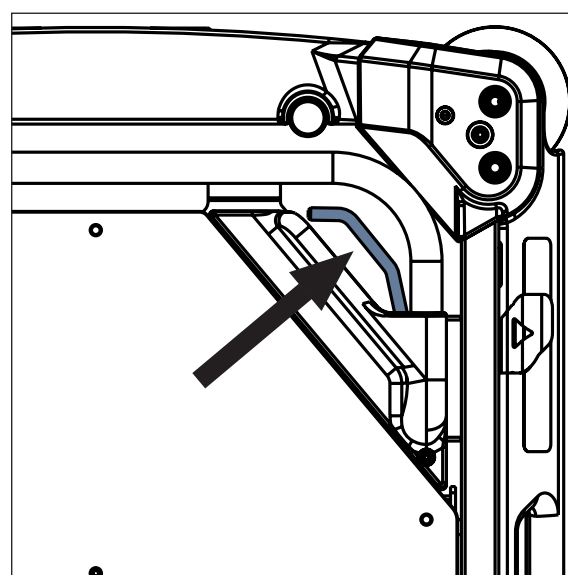
Fig. Manipulation with Backrest Release Handle

13.3.2 Thighrest (only 4-part Mattress Support Platform)
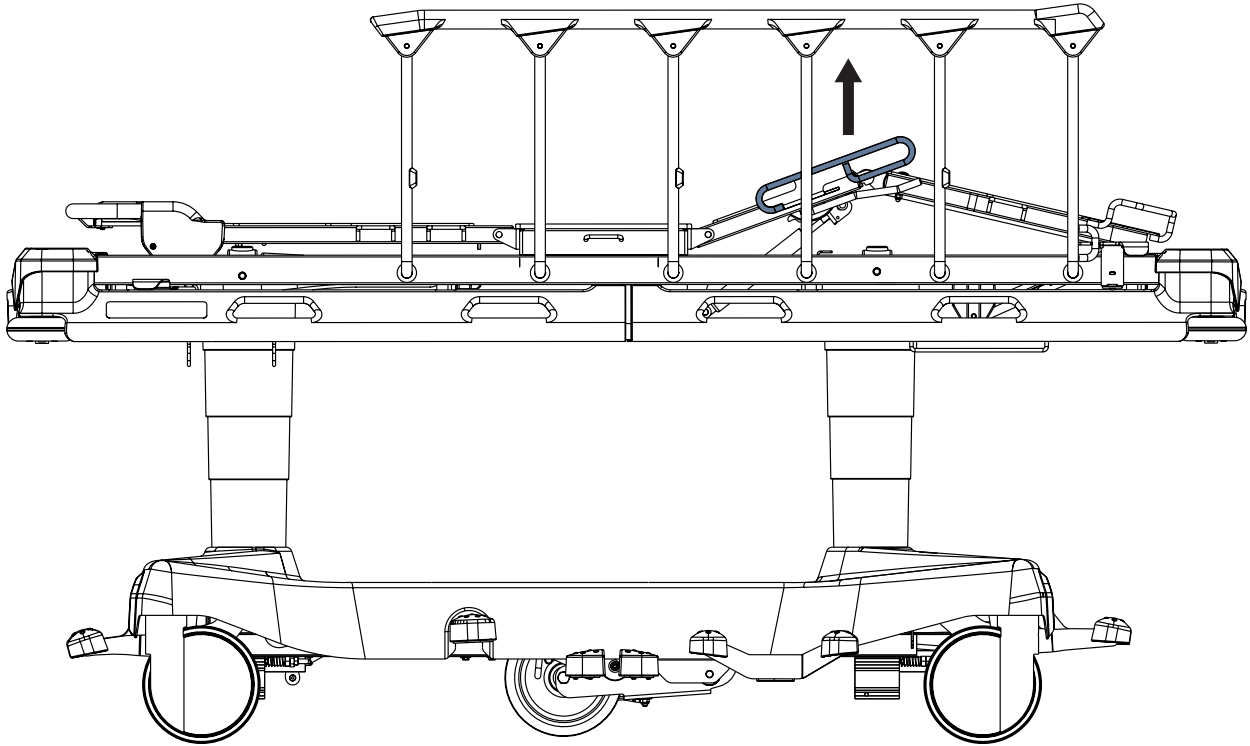
To lift Thighrest:

► press Thighrest control and repeat it until intended position is reached
If the Thighrest is loaded use Thighrest handle to lift the Thighrest.

To lower Thighrest:

► press and hold Thighrest control and push Thighrest down until intended position is reached
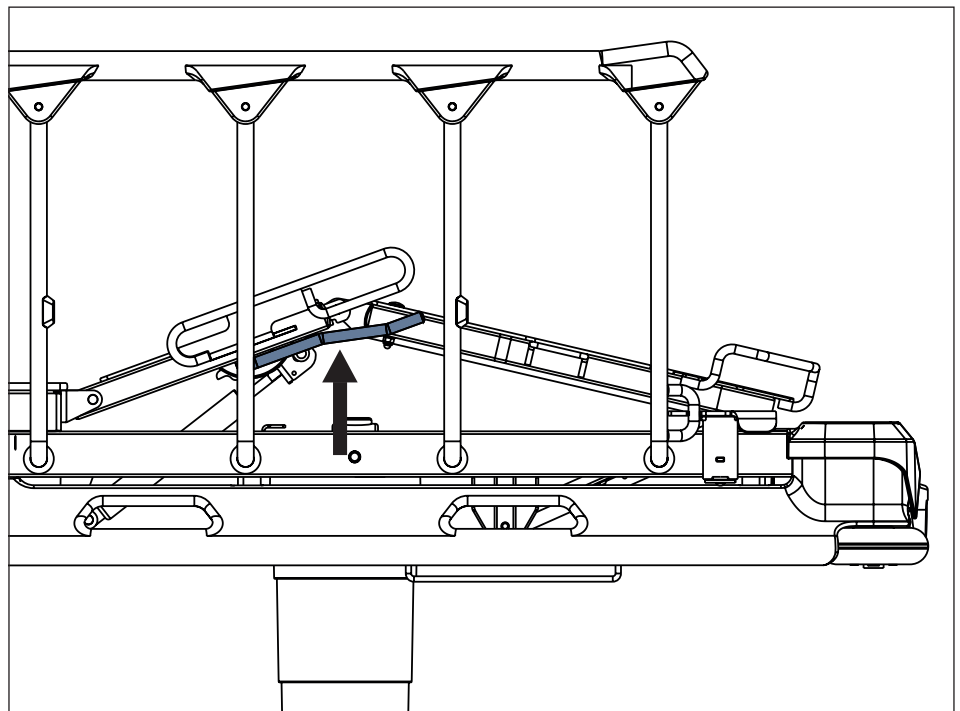
Fig. Positions of Thighrest Control

13.3.3 Calfrest (only 4-part Mattress Support Platform)
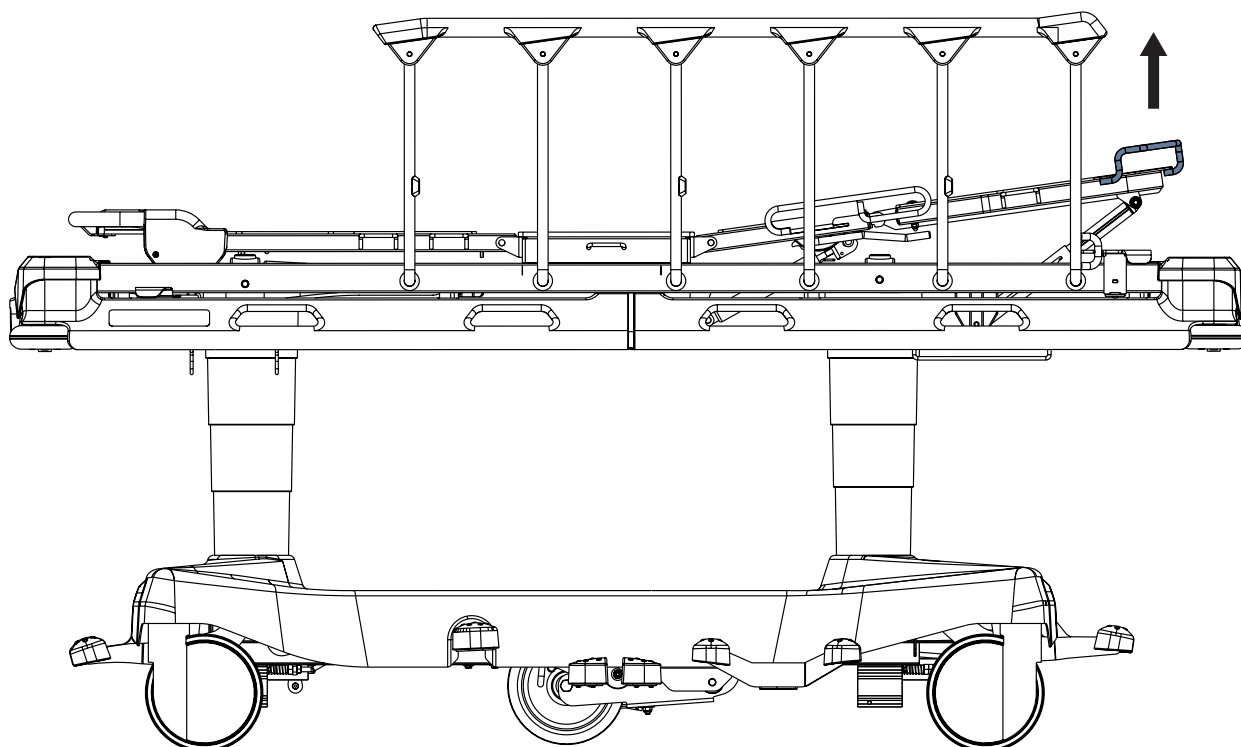
To position Calfrest, position Thighrest firstly.

To lift Calfrest:

► lift Calfrest by the handle to intended position
► lower the Calfrest so that catch fits in the ratchet-bar

To lower Calfrest:

► lift Calfrest slightly by the handle
► lower Calfrest to intended position
► ensure the catch fits in the ratchet-bar during slight lifting of the Calfrest
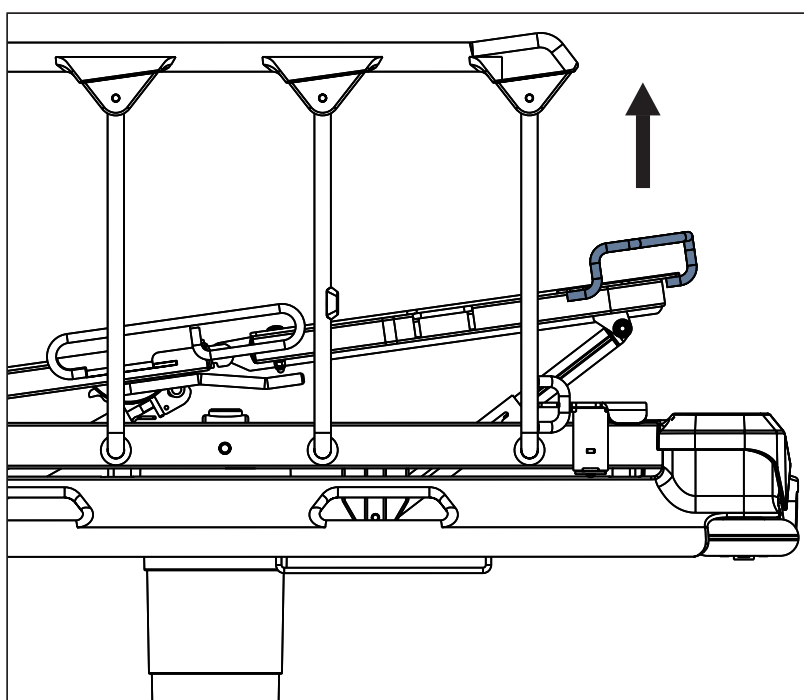
Fig. Calfrest Positioning
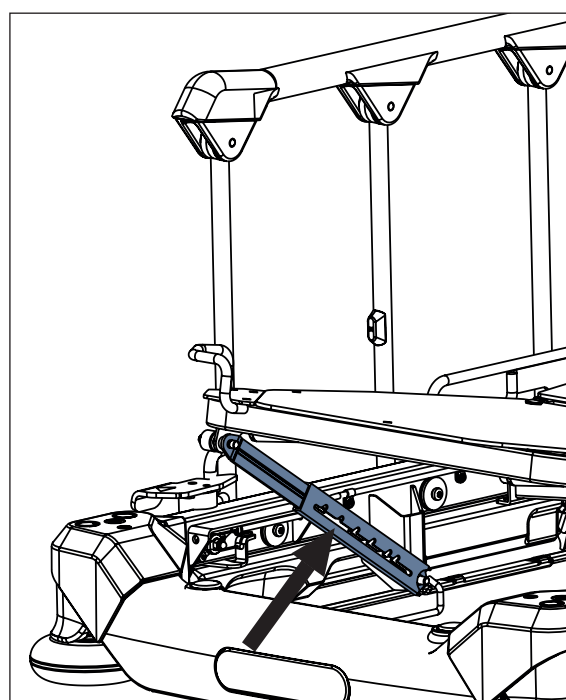
Fig. Catch in the ratchet-bar

13.3.4 Lifting
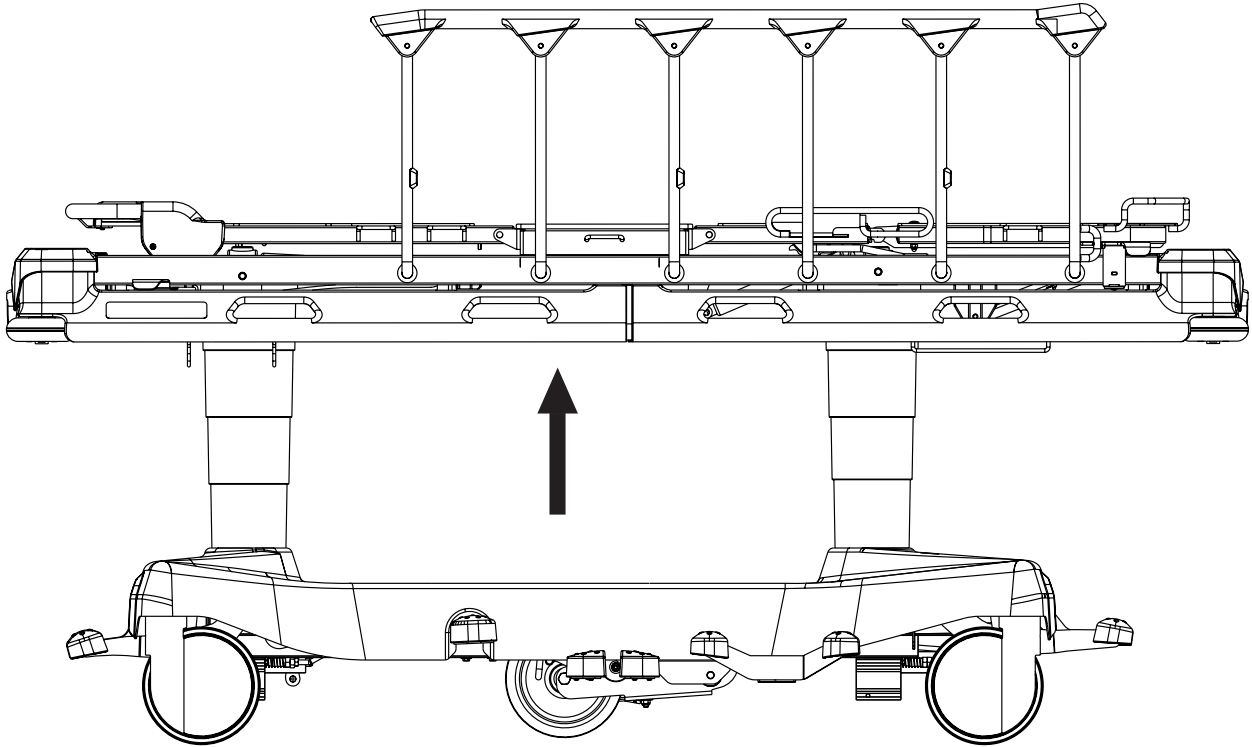
To lift Mattress Support Platform:

► press Lifting pedal and repeat it until intended position is reached

To perform bleeding procedure of hydraulic units:

► press Lifting pedal 10 times in the highest bed position
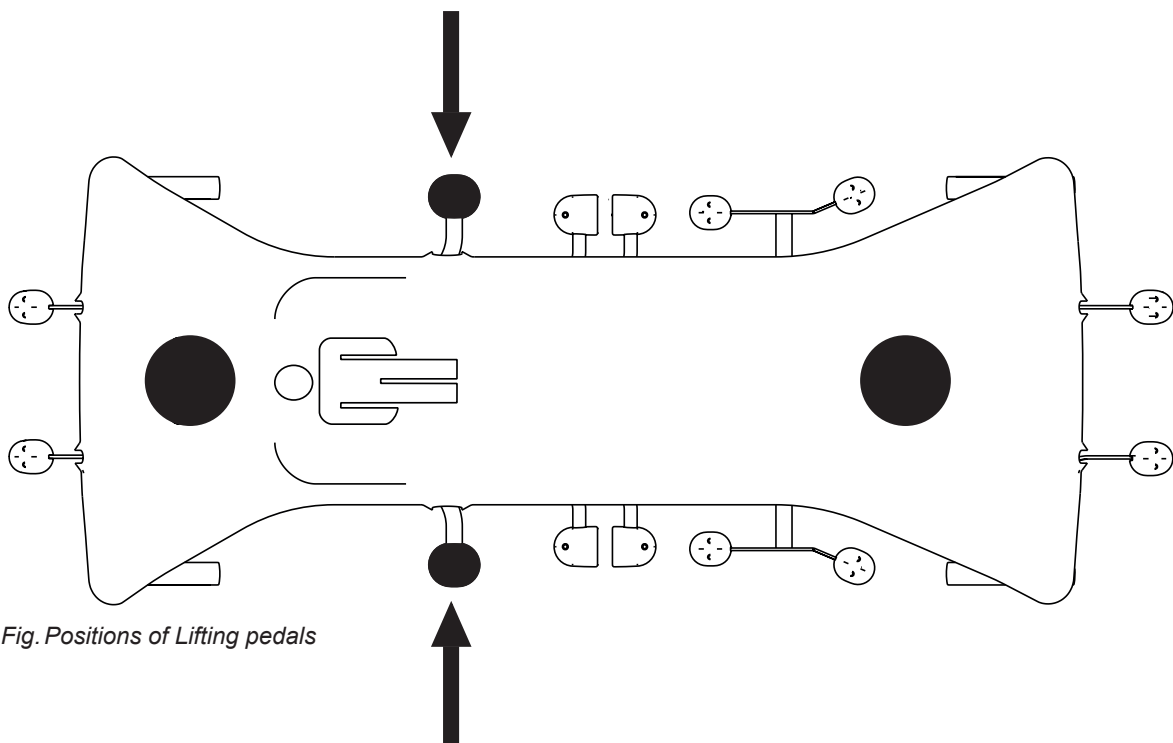
Fig. Positions of Lifting pedals

13.3.5 Lowering
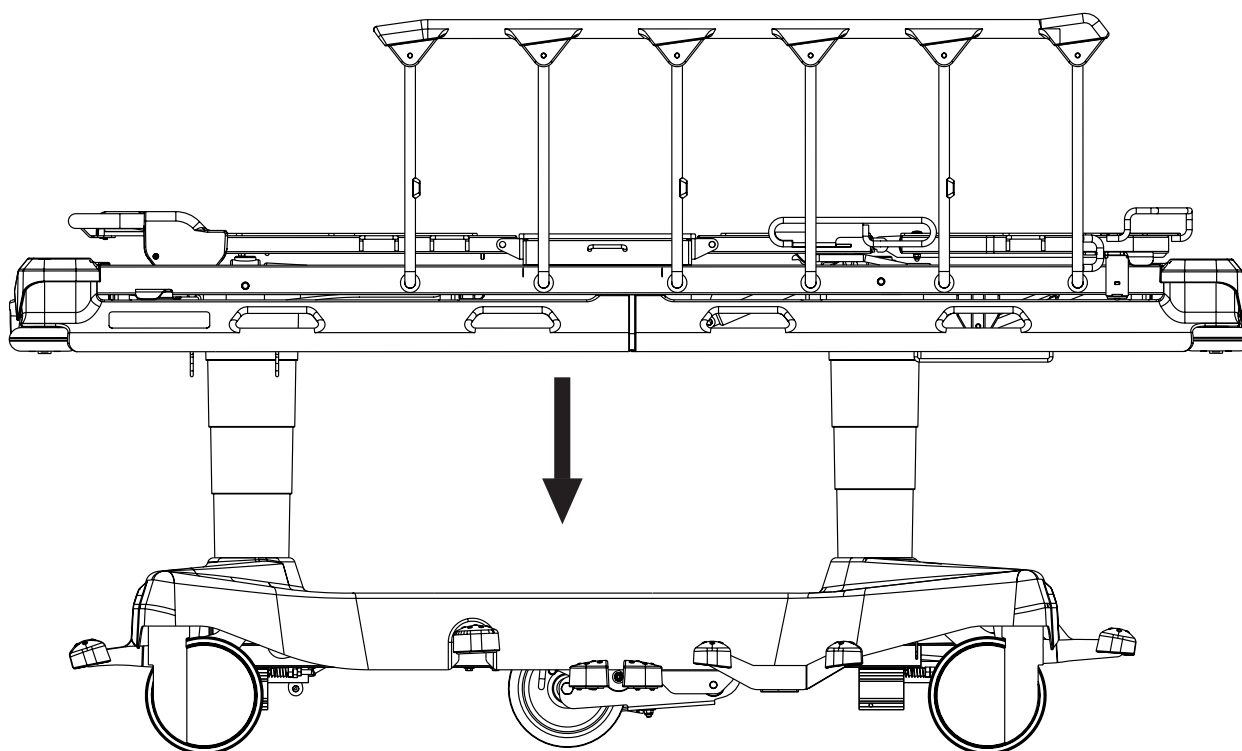
⚠ **CAUTION!**
Risk of material damage due to objects on the undercarriage cover!
►   Do not place objects on the undercarriage cover outside storage space!
►   Respect dimensions of objects placed in storage space of the undercarriage cover!
►   For information about objects intended for storage in the space of undercarriage cover
    follow chapter Accessories.

To lower Mattress Support Platform:

► press and hold Head End Lowering pedal and Foot End Lowering pedal at the same time until intended position is reached
If the horizontal position is required ensure this position was reached.
In order to eliminate a remaining longitudinal tilt use corresponding pedal.
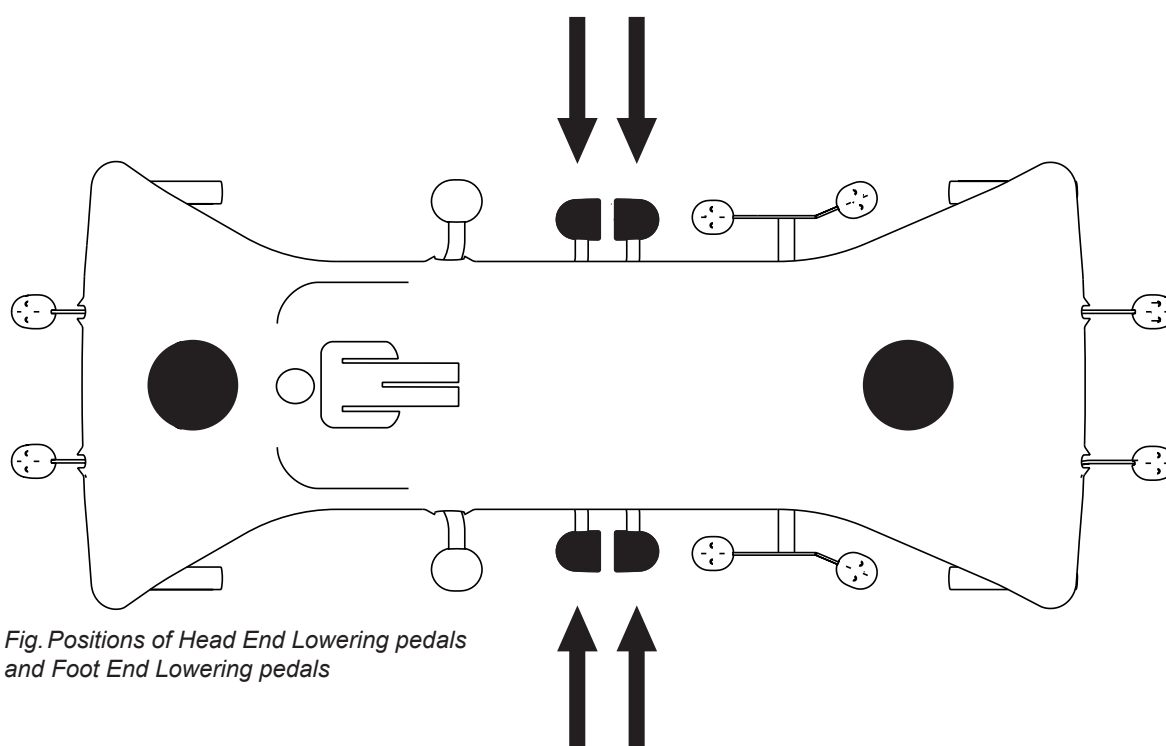
*Fig. Positions of Head End Lowering pedals
and Foot End Lowering pedals*

13.3.6 Trendelenburg Position
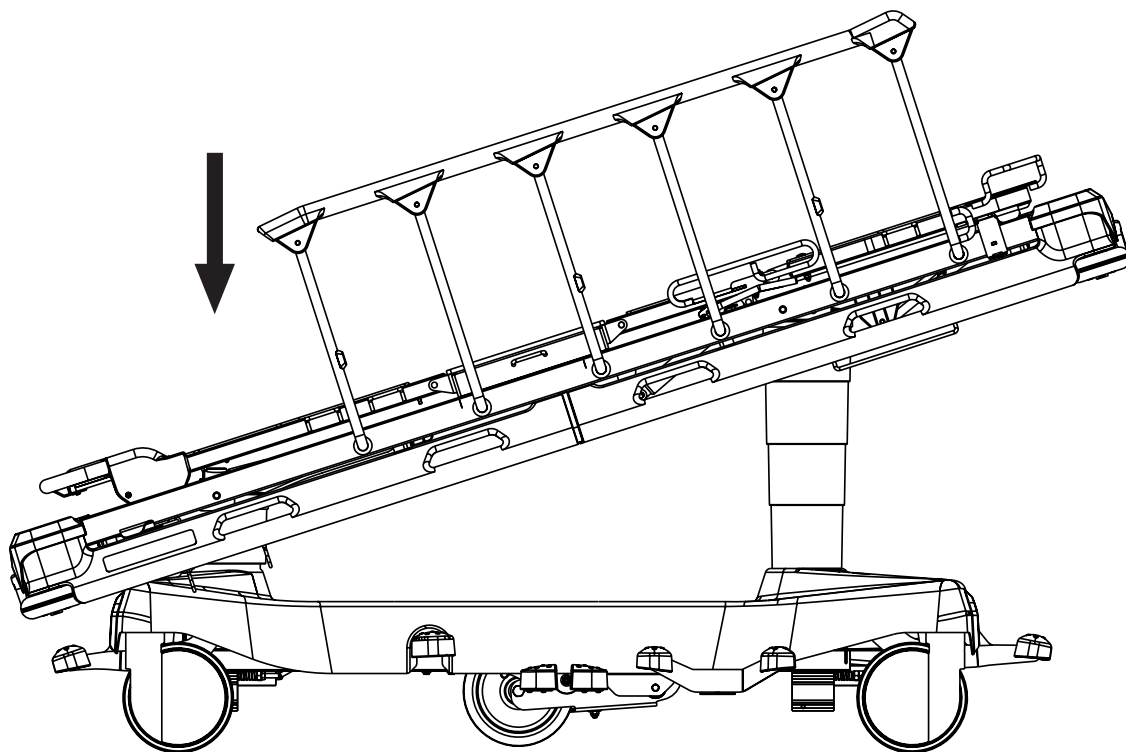
⚠️ **WARNING!**
Risk of injury due to improper use of Trendelenburg Position!
► Hospital staff is responsible for assessing if the physical and psychological state of the patient is in accordance with use of the Trendelenburg Position.
► Hospital staff is responsible for assessing whether used bedclothes increase the risk of patient´s sliding from the bed!

To reach Trendelenburg position:

► press Head End Lowering pedal until intended position is reached
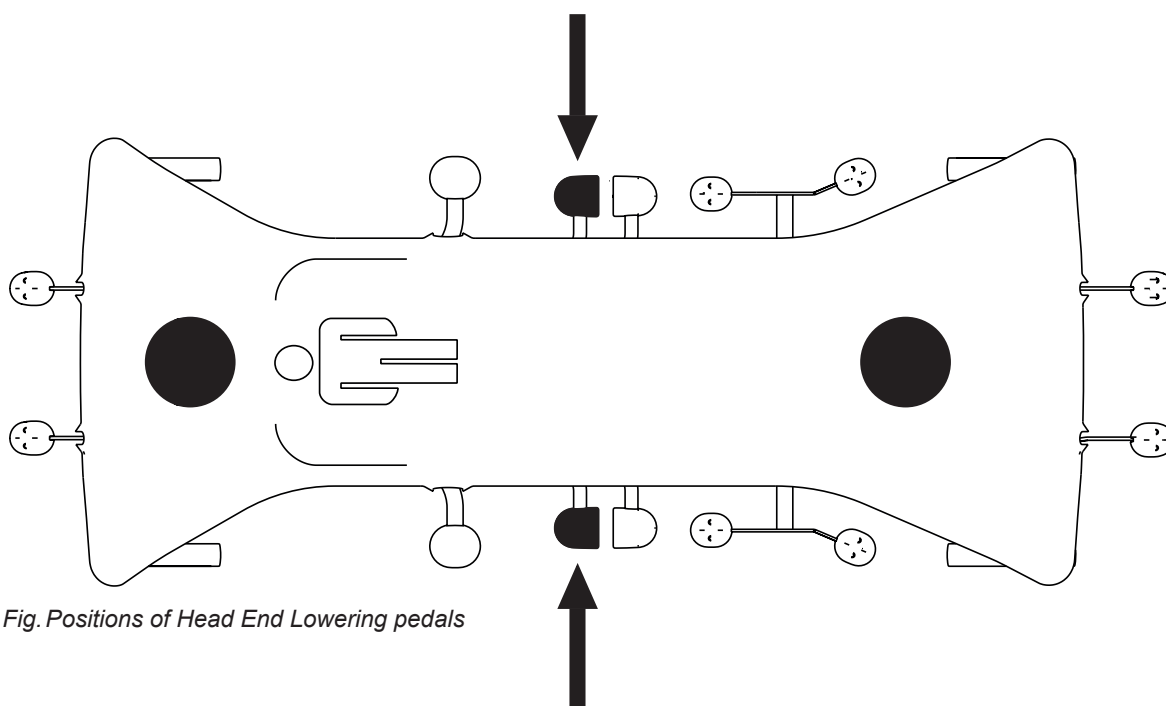
Fig. Positions of Head End Lowering pedals

13.3.7 Anti-Trendelenburg Tilt
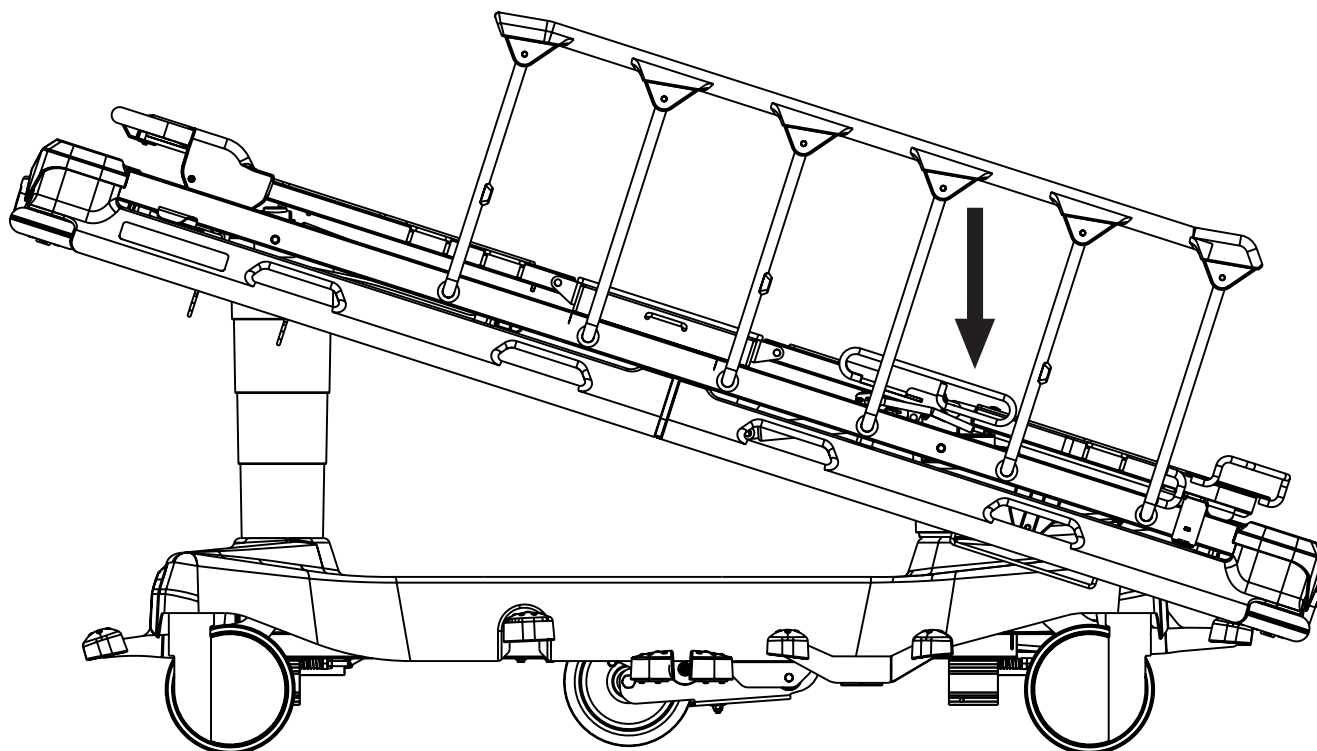
![WARNING triangle] **WARNING!**
Risk of injury due to patient´s sliding!
► Hospital staff is responsible for assessing whether used bedclothes increase the risk of patient´s sliding from the bed!

To reach Anti-Trendelenburg Tilt:

► press Foot End Lowering pedal until intended position is reached
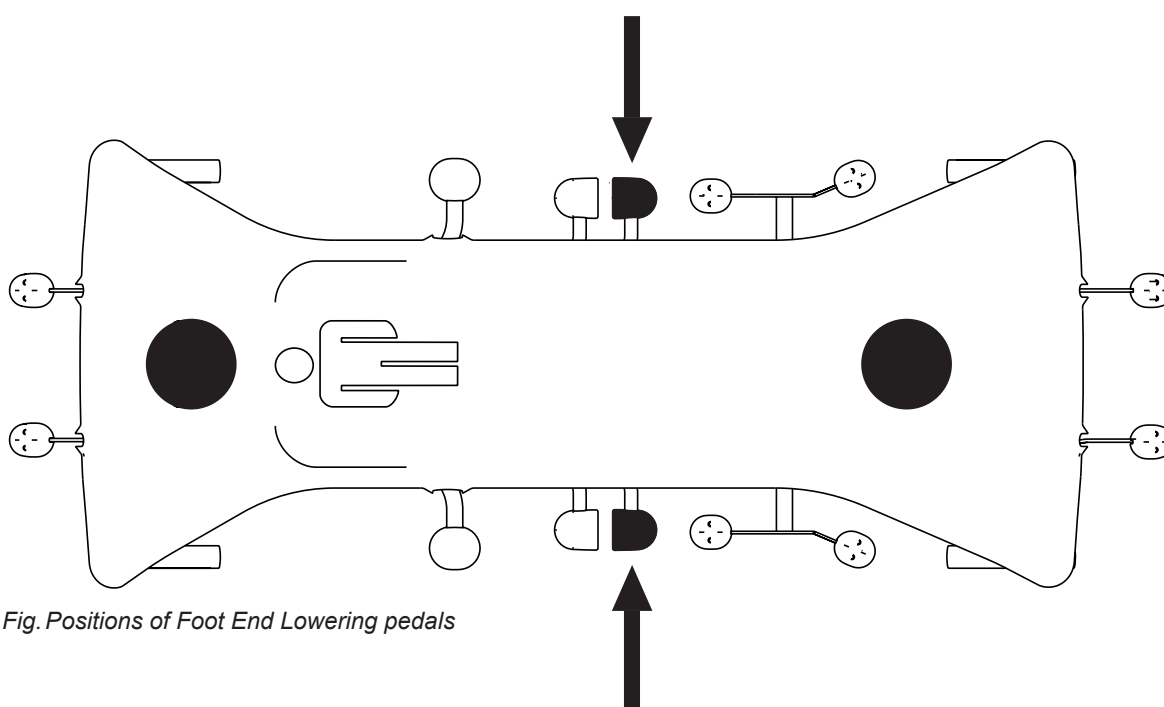
Fig. Positions of Foot End Lowering pedals

13.3.8 Cardiac Chair Position (only 4-part Mattress Support Platform)
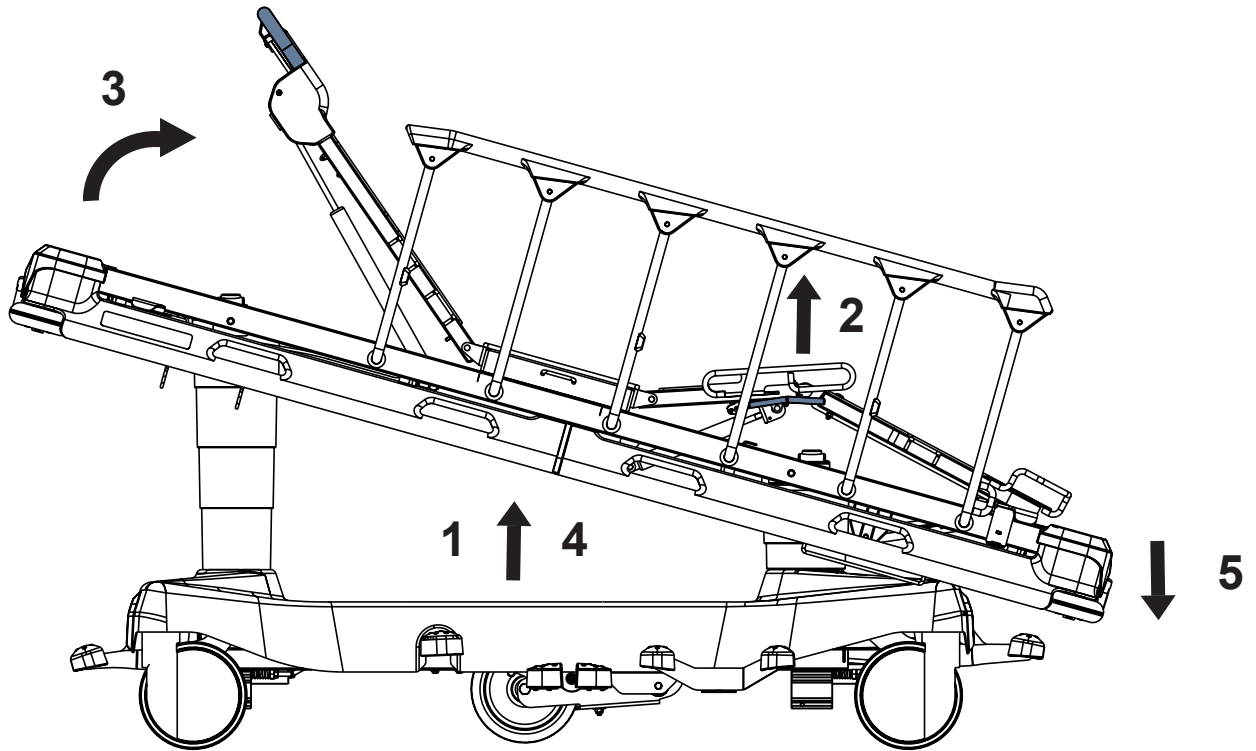
To reach Cardiac Chair Position:

► lift the Mattress Support Platform to facilitate Thighrest and Backrest positioning (**1**)
► lift the Thighrest (**2**)
► lift the Backrest (**3**)
► lift the Mattress Support Platform to the maximum position (**4**)
► use Foot End Lowering pedal until intended position is reached (**5**)

13.4 CPR Backrest Release

In order to adjust Mattress Support Platform for Cardiopulmonary Resuscitation (CPR) it is necessary to position Backrest to the lowest position and Mattress Support Platform to the lowest position. In the case of Mattress Support Platform with 4 sections position Backrest and Thighrest to the lowest position and Mattress Support Platform to the lowest position.

13.4.1 The 2-part Mattress Support Platform

Set the position as follows:

►   Adjust Backrest to the lowest position.
►   Adjust Mattress Support Platform to the lowest position.
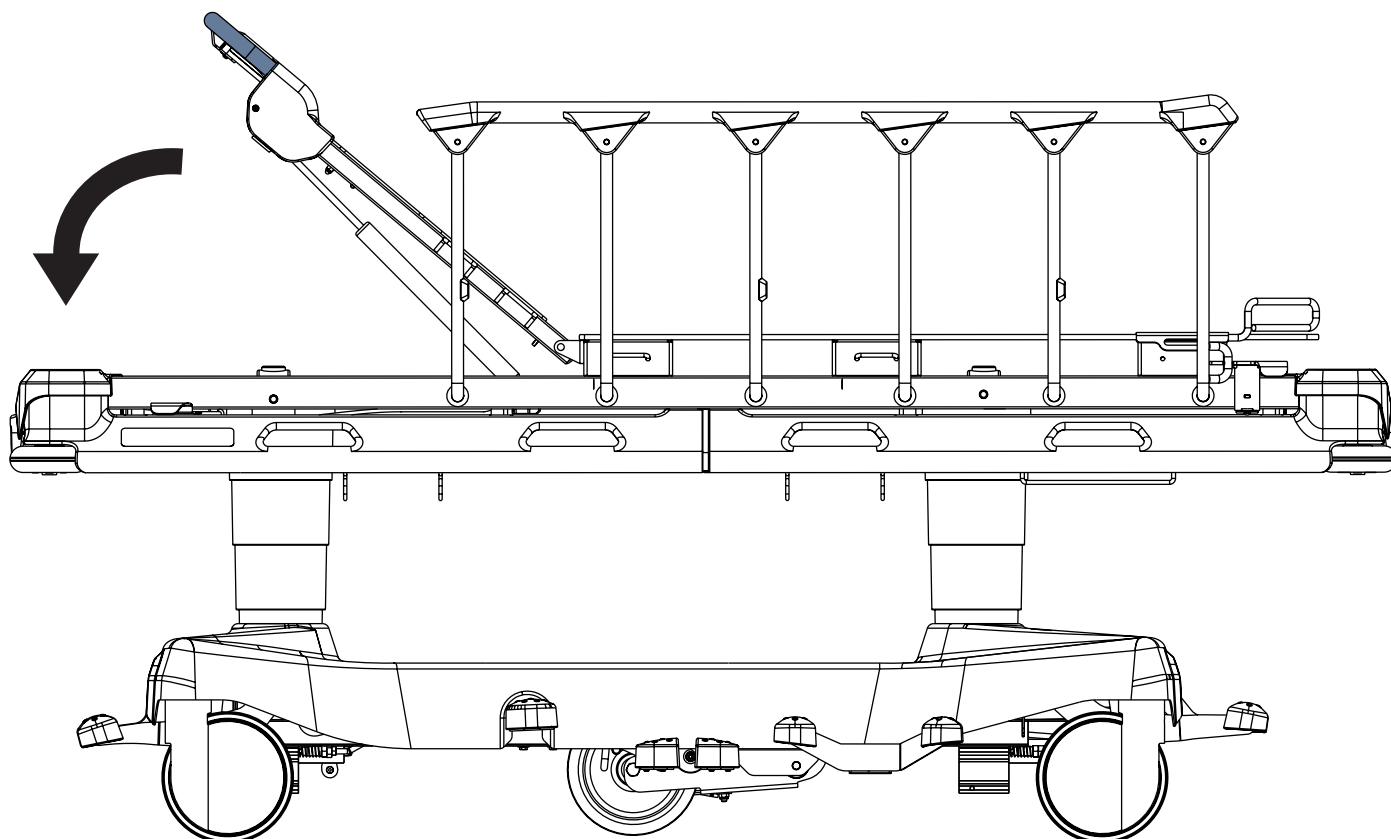
Fig. Preparation for Cardiopulmonary Resuscitation (2-part Mattress Support Platform)

13.4.2 The 4-part Mattress Support Platform

Set the position as follows:

►   Adjust Backrest and Thighrest to the lowest position.
►   Adjust Mattress Support Platform to the lowest position.
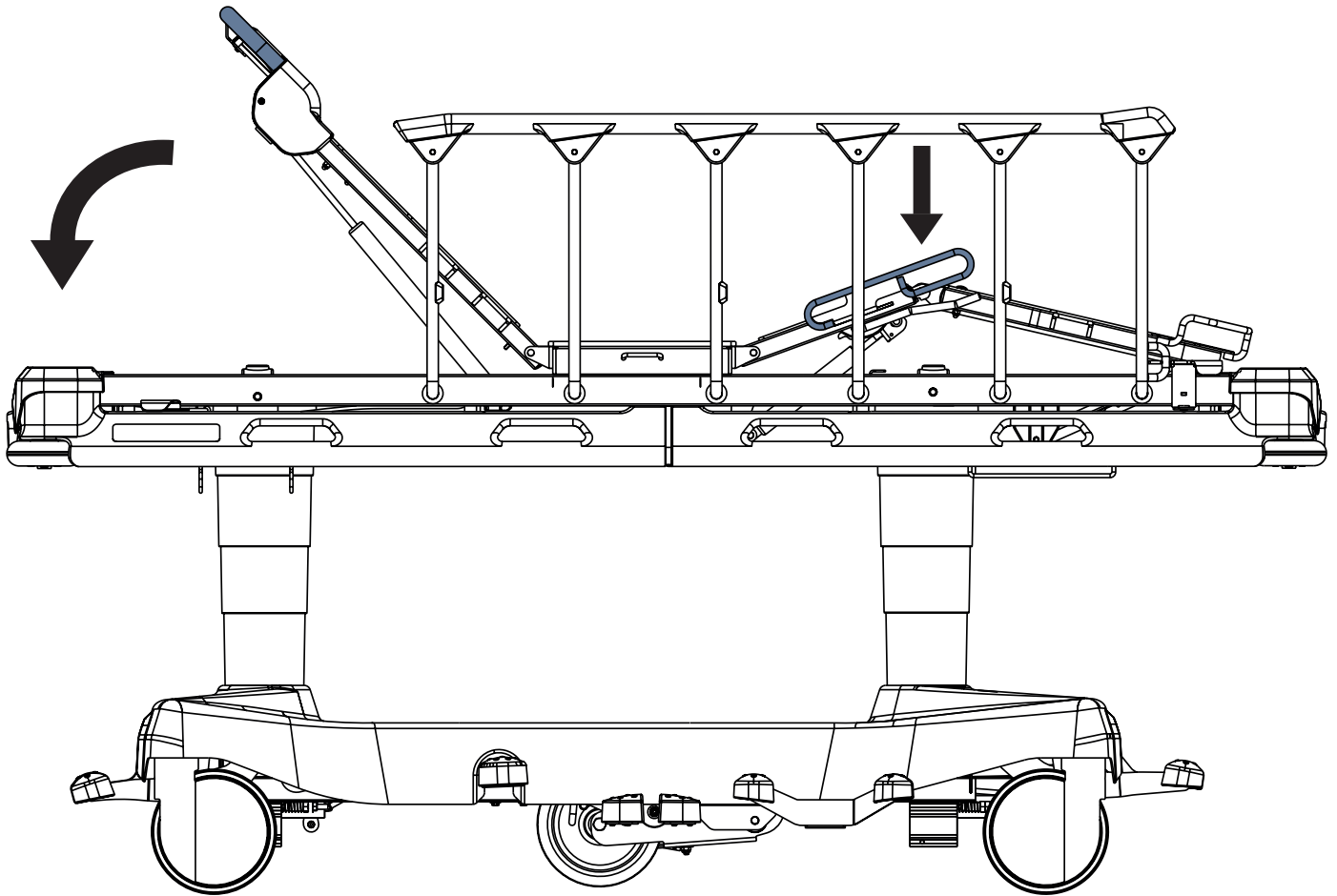
Fig. Preparation for Cardiopulmonary Resuscitation (4-part Mattress Support Platform)

14 Scales Control (only Sprint 100 with scales)

⚠️ **WARNING!**
Scales system LW20 has no direct diagnostic effect on the application of nutrition and medications! Staff expert assessment is needed to consider the correct application of nutrition and medications!

Scales and Bed Exit alarm Monitoring Control Panel is situated at foot end of the Sprint 100 with scales.
Long press on a button of the control panel (lasting more than 60s) causes keyboard fault.

Fig. Scales and Bed Exit Alarm Monitoring Control Panel (keyboard and display)
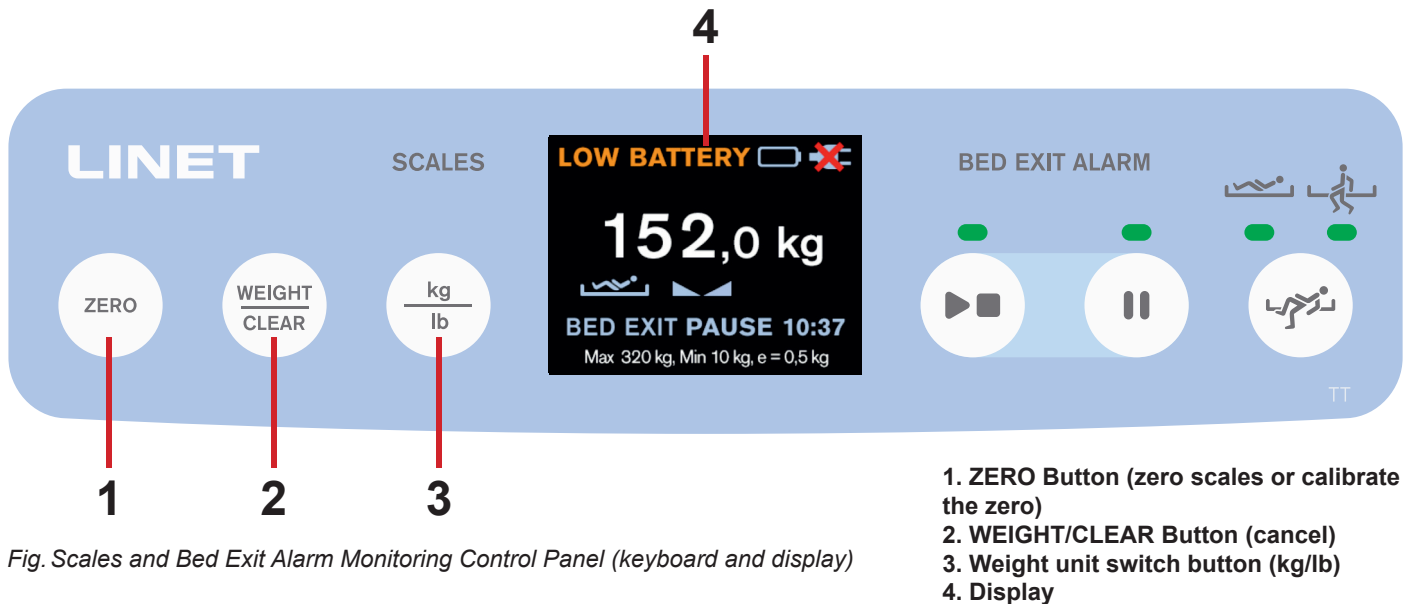
1. ZERO Button (zero scales or calibrate the zero)
2. WEIGHT/CLEAR Button (cancel)
3. Weight unit switch button (kg/lb)
4. Display

14.1 Preparation

⚠️ **CAUTION!**
Incorrect use of scales due to incomplete preparation!
► Before each patient admission zero the scales.
► Do not add accessories on the bed and do not remove accessories from the bed during weighing!

► Install mattress and accessories to prepare bed before patient admission and using the scales.

14.2 Displaying

Display shows the calibrated and metrological weight value.
Verification Scale Interval is 0,5 kg.

Fig. Display description (scales)

1. Weight value with unit of weight (kg/lb)
2. Stabilized Scales Icon
3. Scales Specification (Max - maximum capacity of the weighing instrument, Min - minimum capacity of the weighing instrument, e - verification scale interval)

14.3 Zeroing

Zeroing can be done in a range of 6,4kg to 319,5kg. Zeroing is used to set "0" on the display before placing the patient on the bed. Zeroing must be done with an unloaded bed with mattress, bed sheets, pillows and necessary accessories, without the patient. It is recommended to position mattress support platform about 20 cm above the lowest horizontal position.

To zero scales:

► Ensure that nothing and nobody touches the bed except you.
► Press and hold ZERO Button until **IN PROGRESS...** appears on the display and weight value starts to flash.
► Release ZERO Button.
PRESS ZERO appears on the display.
► Press ZERO Button again.
► Wait until a beep indicates stabilized scales during Zeroing.
"0" is shown on the display.
Place the patient on the bed.

To cancel Zeroing:
► Press WEIGHT/CLEAR Button while Zeroing.

Status of the Zeroing	Signalisation
1) First step of the Zeroing: **processing after the press and hold of the ZERO Button.**	157,5 kg IN PROGRESS... BED EXIT OFF Max 320 kg, Min 10 kg, e = 0,5 kg
2) Second step of the Zeroing: **instruction to press ZERO Button again.**	157,5 kg PRESS ZERO BED EXIT OFF Max 320 kg, Min 10 kg, e = 0,5 kg
3) Third step of the Zeroing: **"0" is shown on the display.**	0,0 kg BED EXIT OFF Max 320 kg, Min 10 kg, e = 0,5 kg

14.4 Bed Overload

If load of the bed is over 330 kg:
► Warning popu-up window is shown on the display.

Fig. Sprint 100 with scales is overloaded (pop-up)

14.5 Bed Underload

If the bed is underloaded:
► Display shows the „**LOW**".

14.6 Weighing in tilt

It is possible to use the scales in any position of the mattress support platform of the Sprint 100 with scales if its undercarriage is situated on the horizontal floor. Weighing accuracy is reduced in the Trendelenburg Position if Sprint 100 with scales is used with compatible Storage Space and its mattress support platform is loaded with more than 180 kg!

14.7 Calibration of the Zero

Calibration of the Zero is only possible in a range of ±6,4kg from factory zero. Calibration of the Zero is used to reset weight on the display and set up user zero, which sets the maximum weight range of the weighing system. Calibration of the Zero must be done with an empty, unloaded bed, without the mattress and accessories. Calibration of the Zero is done after installation, weight verification or servicing.

To calibrate the Zero:
► Position the bed about 20 cm above the lowest position and set the mattress support platform to the horizontal position. Ensure that nothing touches the bed except you.
► Press and hold ZERO Button until weight value starts to flash. Release ZERO Button.
► Press ZERO Button to confirm Calibration of the Zero.
"0" is shown on the display and an acoustic signal confirms Calibration of the Zero.

To cancel the Calibration of the Zero:
► Press WEIGHT/CLEAR Button while Calibration of the Zero.

14.8 Pop-up windows connected with Scales Control

Pop-up windows are indicated on the display of Scales and Bed Exit Alarm Control Panel.

Status (Pop-up window)	Meaning	How to change the status
	Scales fault (fault number starts with letter **F**).	Contact service department approved by manufacturer.
	Fault of the communication between scales system components.	Contact service department approved by manufacturer.
	Fault of the Scales and Bed Exit Alarm Monitoring Control Panel. This fault can be caused by an object pushing on the keyboard or by a long press on a button of the Control Panel lasting more than 60s or by the damaged keyboard.	Contact service department approved by manufacturer if cause of this fault cannot be removed from the keyboard.

15 Bed Exit Alarm Monitoring (only Sprint 100 with scales)

⚠️ **WARNING!**
It is not possible to use Bed Exit Alarm Monitoring when Sprint 100 with scales is disconnected from the mains power! No Bed Exit Alarm can be triggered when Sprint 100 with scales is disconnected from the mains power!

⚠️ **WARNING!**
Do not use Bed Exit Alarm Monitoring and do not rely on the acoustic Bed Exit Alarms if no beep sounds after the activation of the Bed Exit Alarm Monitoring!

Bed Exit Alarm Monitoring is intended for informing the hospital personnel about highly probable patient´s absence in ordered position on the Sprint 100 with scales. Bed Exit Alarm Monitoring triggers alarms when it detects that patient is not present in the expected position.
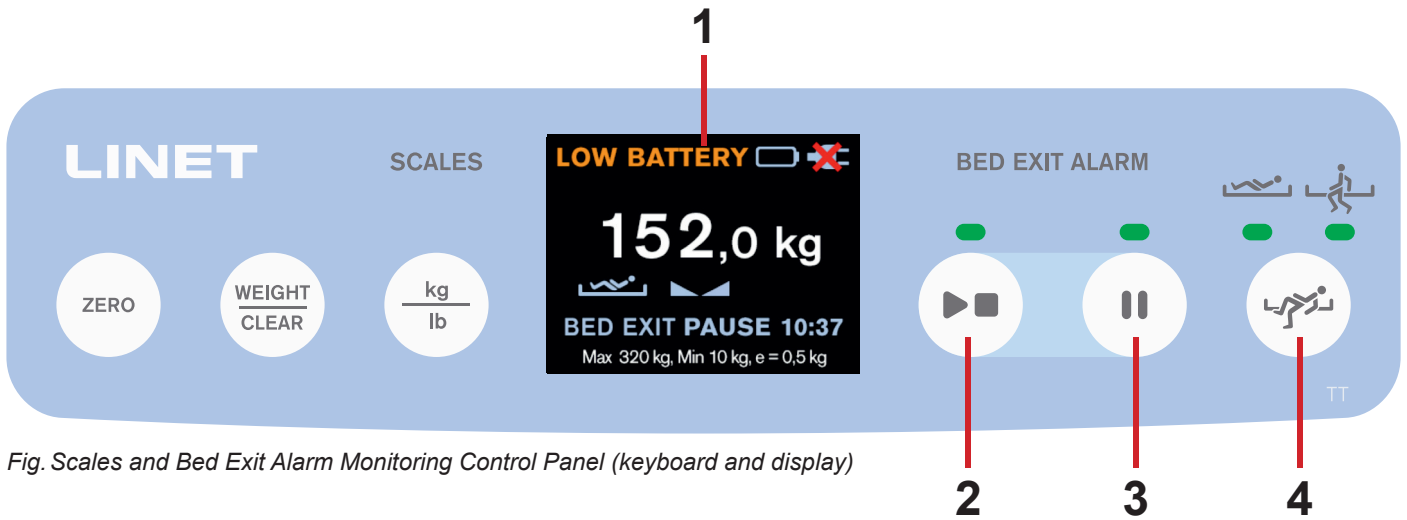
Fig. *Scales and Bed Exit Alarm Monitoring Control Panel (keyboard and display)*

1. Display
2. PLAY/STOP Button with Green Indicator above (lit green indicator - monitoring ON, not lit green indicator - monitoring OFF)
3. PAUSE Button with Green Indicator above (lit green indicator - monitoring PAUSED, not lit green indicator - monitoring NOT PAUSED)
4. Bed Exit Alarm Monitoring Button with 2 Green Indicators above (lit left green indicator - Inner Zone monitoring activated, lit right green indicator - Outer Zone monitoring activated)

15.1 Preparation

▶   Place a patient on the bed with suitable mattress.
▶   Place the patient towards the middle of the bed for the correct function of the Bed Exit Alarm Monitoring in Inner Zone.

15.2 Displaying

Display shows statuses and settings of the Bed Exit Alarm Monitoring.

Fig. *Display description (Bed Exit Alarm Monitoring)*

Indicator	Meaning
	Inner Zone Monitoring
	Outer Zone Monitoring

1. Indicator of Monitored Zone (Inner Zone or Outer Zone)
2. Status of Bed Exit Alarm Monitoring

Status	Meaning
BED EXIT ON	Bed Exit Alarm Monitoring is activated and alarms can be triggered.
BED EXIT OFF	Bed Exit Alarm Monitoring is deactivated and alarms cannot be triggered.
BED EXIT PAUSE 14:59	Bed Exit Alarm Monitoring is PAUSED and alarms cannot be triggered for 15 minutes.
BED EXIT WAITING	Operator activates Bed Exit Alarm Monitoring without patient on the Sprint 100 with scales. Bed Exit Alarm Monitoring will be activated after patient will be detected on the bed.

15.3 Activation

To activate Bed Exit Alarm Monitoring:
► Press PLAY/STOP Button (**2**) when patient is on the bed.
BED EXIT ON is displayed on the display.
Beep sounds after the activation of Bed Exit Alarm Monitoring.
Left Green Indicator above the Bed Exit Alarm Monitoring Button (**4**) is lit and Inner Zone Monitoring is activated by default.

If you press PLAY/STOP Button (**2**) without patient on the bed, the Bed Exit Alarm Monitoring is not activated.
BED EXIT WAITING is displayed on the display.
Minimum patient weight for Bed Exit Alarm Monitoring is **35 kg**.
Bed Exit Alarm Monitoring will be activated after patient will be detected on the bed.

15.4 Monitored Zone

Bed Exit Monitoring provides Inner Zone Monitoring or Outer Zone Monitoring.
The Inner Zone detects shifts in weight on the mattress support platform within a limited field of coverage.
The Outer Zone detects whether weight is on the mattress support platform.
Inner Zone Monitoring is set by default.

To set Outer Zone Monitoring:
► Press Bed Exit Alarm Monitoring Button (**4**) when Left Green Indicator above this button is lit.
Right Green Indicator above the Bed Exit Alarm Monitoring Button (**4**) is lit and Outer Zone Monitoring is activated.

To set Inner Zone Monitoring:
► Press Bed Exit Alarm Monitoring Button (**4**) when Right Green Indicator above this button is lit.
Left Green Indicator above the Bed Exit Alarm Monitoring Button (**4**) is lit and Inner Zone Monitoring is activated.
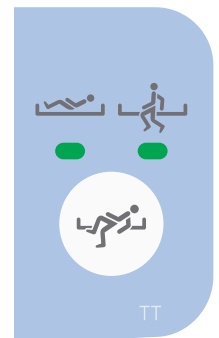
Fig. Bed Exit Alarm Monitoring Button with 2 Green Indicators above

15.5 PAUSE

During PAUSE mode the Bed Exit Alarm Monitoring is temporarily interrupted and alarms are not activated.
PAUSE period is terminated automatically and the Bed Exit Alarm Monitoring is reactivated again when patient returns just to the selected zone.

To PAUSE Bed Exit Alarm Monitoring:
► Press PAUSE Button (**3**).
Green indicator above PAUSE Button is lit.
Before terminated PAUSE period when patient is in ordered position, the Bed Exit Alarm Monitoring is reactivated again.

To extend the PAUSE period:
► Press PAUSE Button (**3**) to extend the countdown to 15 minutes period again.

To terminate the PAUSE period:
► Press PLAY/STOP Button (**2**).

15.6 BED EXIT ALARM

Audible alarm is triggered when patient has left selected monitored zone or when PAUSE period is terminated and patient is not just in the ordered position.

To stop Alarm:
► Press PLAY/STOP Button (**2**).
Bed Exit Monitoring is deactivated and BED EXIT OFF is displayed on the screen.
The audible alarm is muted.

To pause Alarm:
► Press PAUSE Button (**3**).
Countdown timer (15 min) appears on the display. The audible alarm is muted.

Fig. Visual signalisation of the Bed Exit Alarm on the display (yellow field and black symbols)

Fig. Two pictures alternating during triggered Bed Exit Alarm

15.7 Deactivation

To deactivate Bed Exit Alarm Monitoring:
► Press PLAY/STOP Button (**2**).
BED EXIT OFF is displayed on the display.

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15.8 Pop-up windows connected with Bed Exit Alarm Monitoring

Status (Pop-up window)	Meaning	How to change the status
PLUG IN TO ENABLE BEA	Sprint 100 with scales is disconnected from the mains when operator turns on the Bed Exit Alarm Monitoring.	Connect Power Supply Cord to the mains and activate the Bed Exit Alarm Monitoring.
BEA WITH LOW BATTERY	Battery becomes low (or bad) during activated Bed Exit Alarm Monitoring.	Connect Power Supply Cord to the mains.
BED IS UNPLUGGED BEA IS DEACTIVATED	Bed Exit Alarm Monitoring is activated and Sprint 100 with scales becomes disconnected from the mains.	Connect Power Supply Cord to the mains.

16 Equipment

Product equipment depends on product configuration.

16.1 Accessory Holders

Accessory holders are intended for hanging accessories.
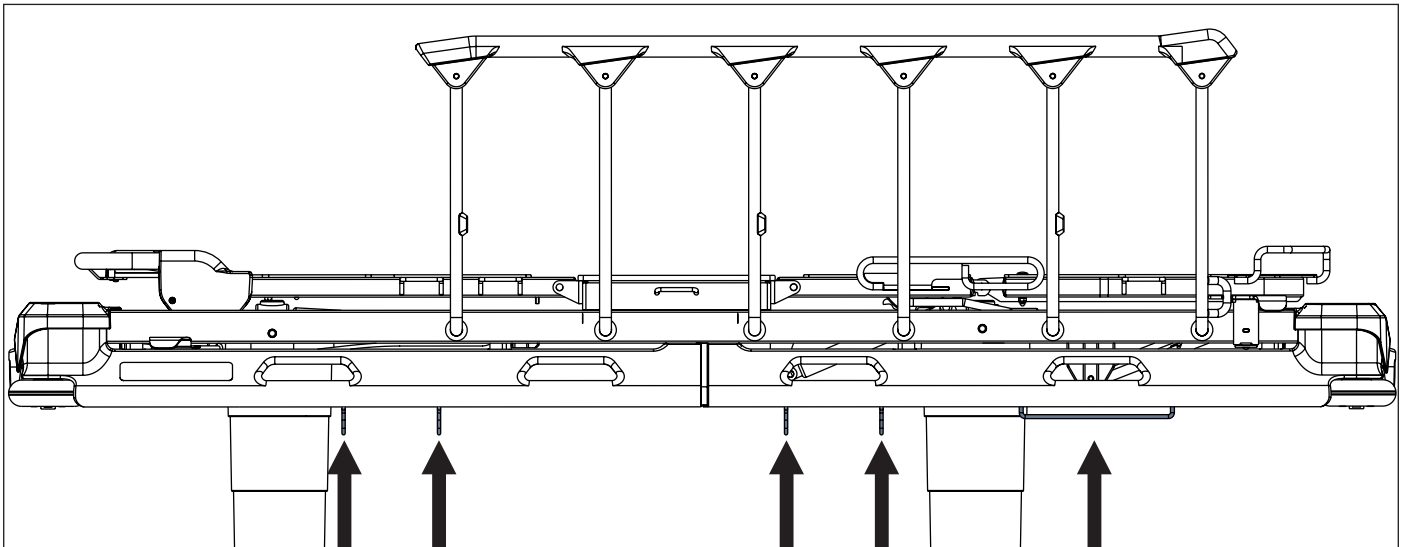
Fig. Accessory holders - 4 hooks (on side)
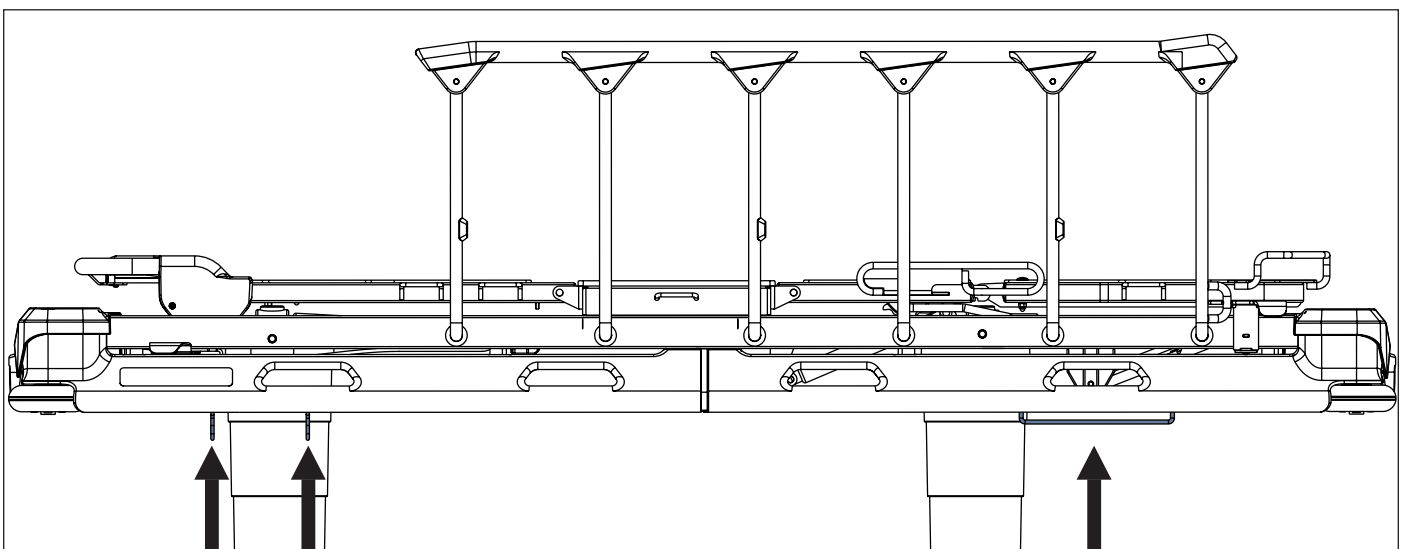
Fig. Accessory holders - 2 hooks (on side)

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16.2 Accessory Rail with plastic hooks

⚠ **CAUTION!**
It is not recommended to place the hooks suspended on the accessory rail and the accessories suspended on these hooks directly above the pedals on the sides of Sprint 100 in order to facilitate the use of pedals during bed height adjustment and the use of brake pedals during bed transport!

Accessory rail with 4 plastic hooks is intended for hanging accessories.
It is located on the sides of bed or at head end / foot end.
Power Supply Cord in safety position must be wound around the Accessory Rail at head end in the case of Sprint 100 with scales.
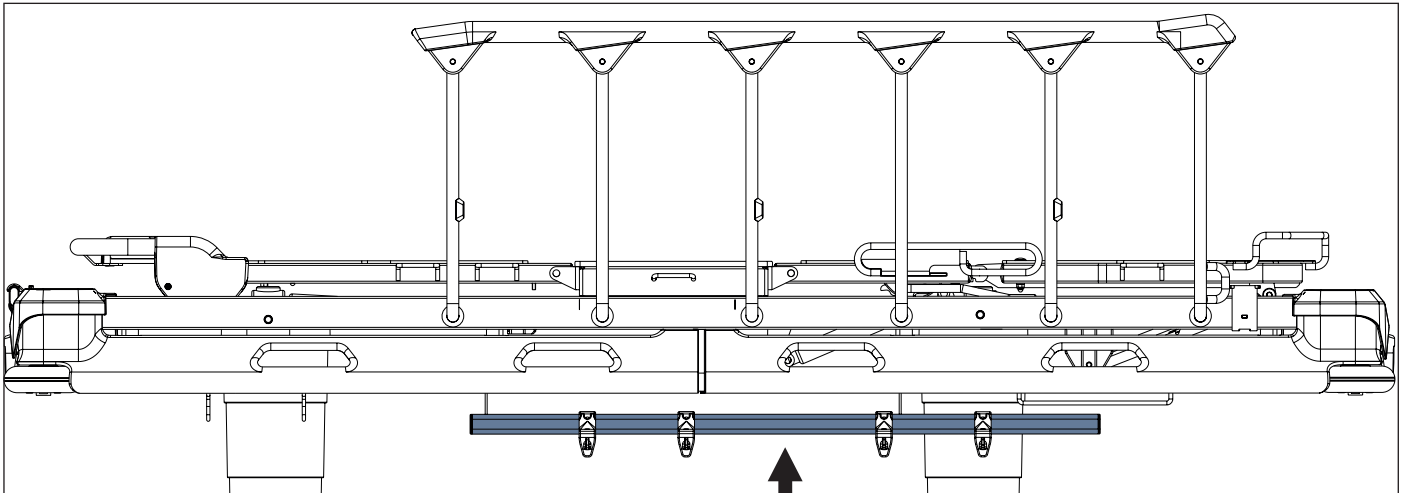
Fig. Accessory Rail with plastic hooks (on side)
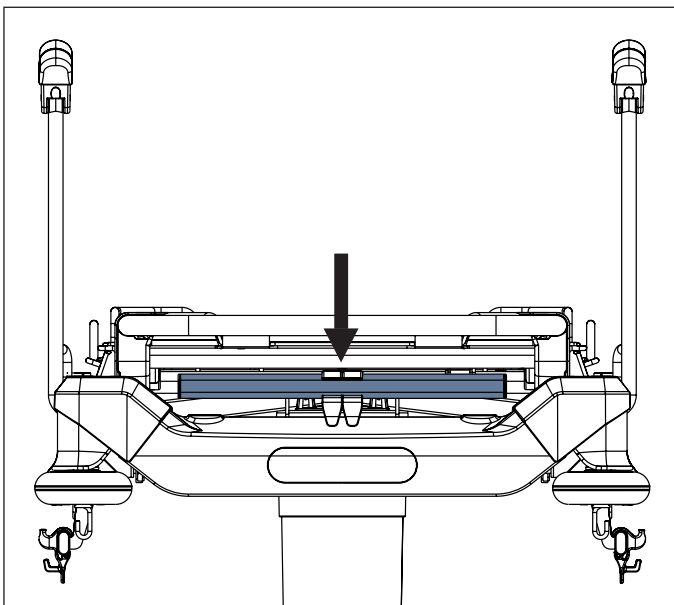
Fig. Accessory Rail with plastic hooks (at head end or foot end)

16.3 DIN Rail

DIN Rail is intended for hanging accessories.
It is located on the sides of bed or at head end / foot end.
Power Supply Cord in safety position must be wound around the DIN Rail at head end in the case of Sprint 100 with scales.
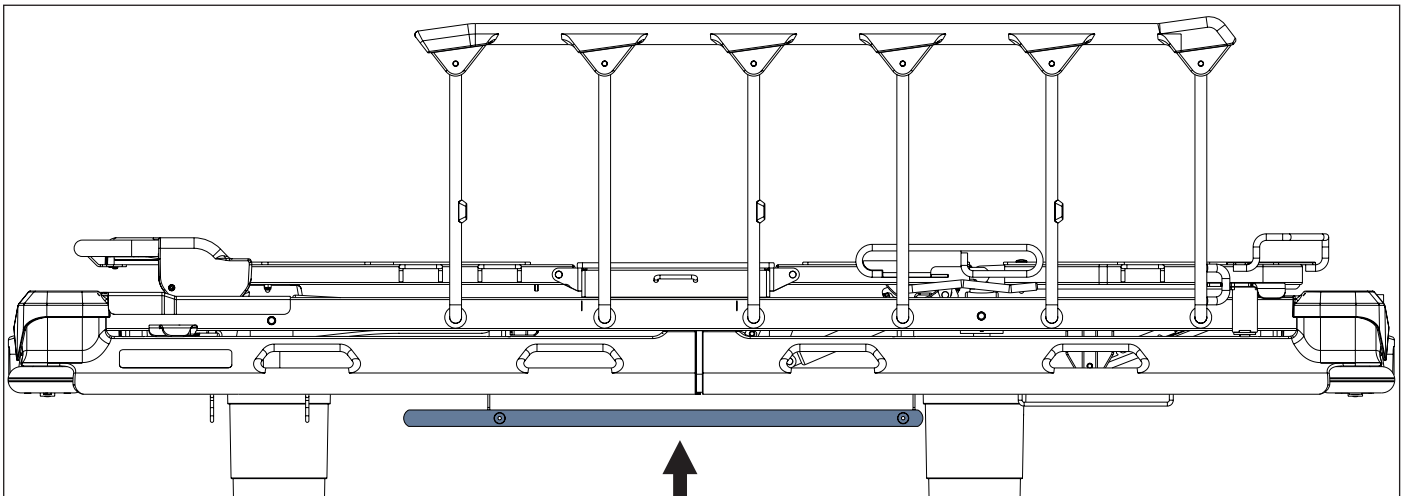
Fig. DIN Rail (on side)
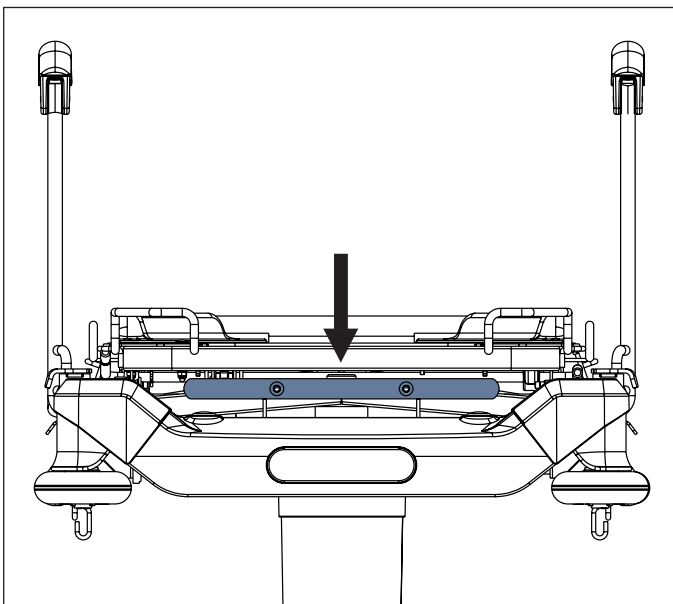
Fig. DIN Rail (at head end or foot end)

LINET

16.4 Undercarriage Cover

⚠ **CAUTION!**
Risk of material damage due to objects on the undercarriage cover!
► Do not place objects on the undercarriage cover outside storage space!
► Respect dimensions of objects placed in storage spaces of the undercarriage cover during lifting, lowering and tilting of the bed!

There are 2 types of storage spaces of the undercarriage cover. Longitudinal storage spaces (**1**) are intended for oxygen bottle (with capacity 10 litres (type E only), 5 litres or less). Suitable oxygen bottle can be fixed with quick-release strap. Rectangular storage space (**2**) is intended for objects with maximum height of 25 cm.
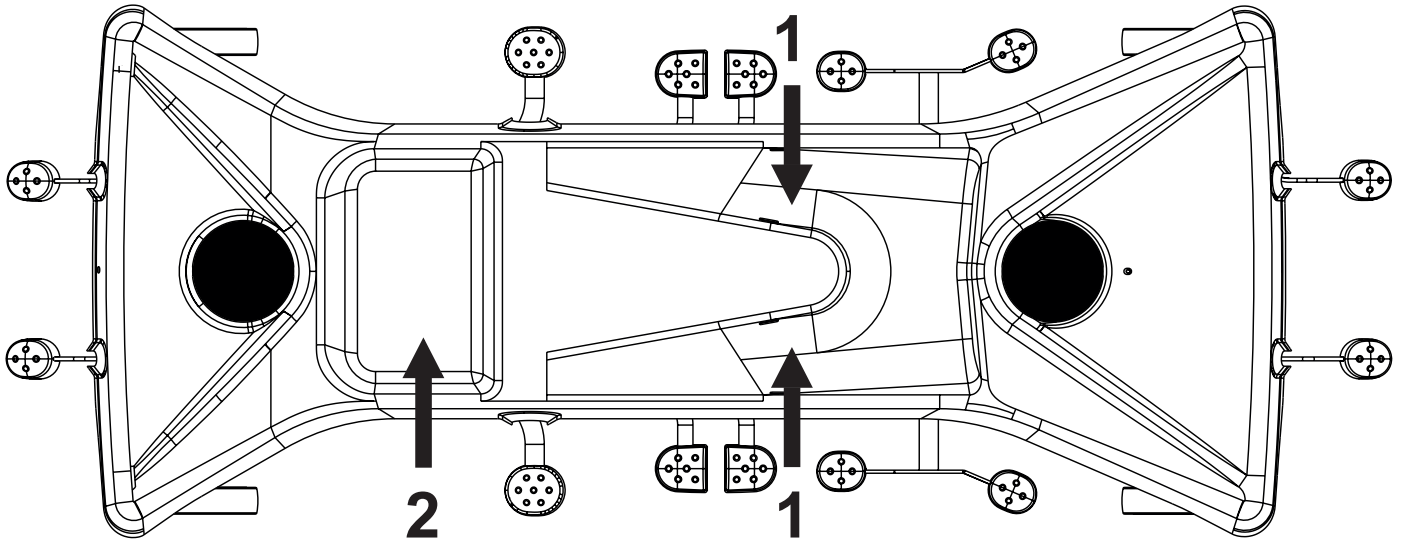
Fig. Storage spaces (Undercarriage Cover)

16.5 FlexiDrive (Sprung Retractable Fifth Castor)

During middle position of pedals Sprung Retractable Fifth Castor is around 12 mm above floor.
When bed is braked Sprung Retractable Fifth castor is around 65 mm above floor.

To activate the Fifth castor:

► Press green Drive pedal to the lower position.

To retract the Fifth castor:

► Leave all Brake pedals and Drive pedals unpressed in their middle position.
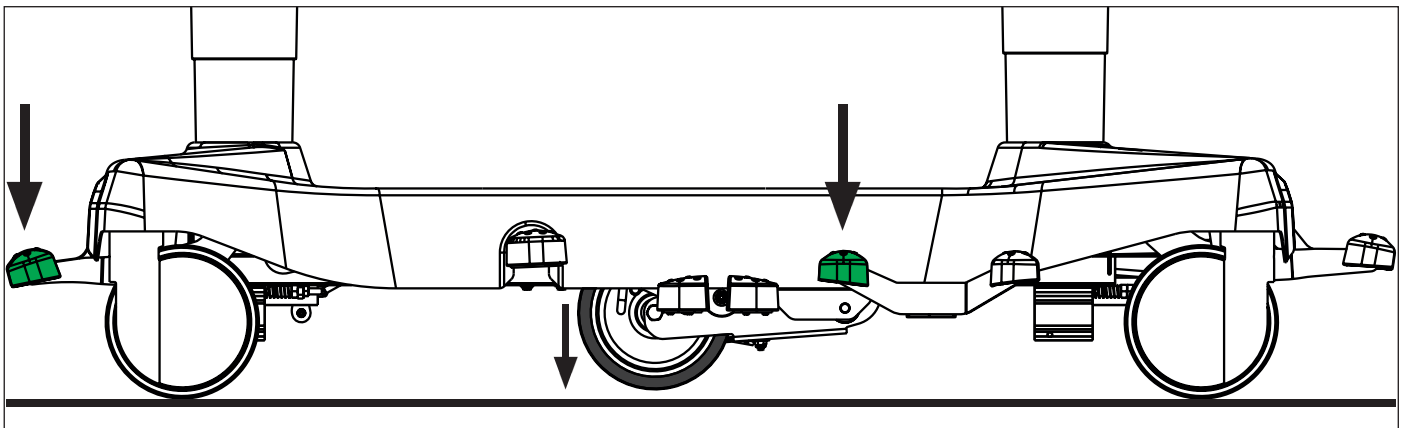
Fig. Activation of Fifth castor

16.6 IV&Drive (Infusion Stands/Pushing Handles)

⚠️ **WARNING!**
Risk of injury due to incorrect placement of an infusion pump!
► Ensure the infusion pump on the Foldable infusion stand will not collide with any movable parts of the Sprint 100 (especially Backrest) or with the patient!

⚠️ **CAUTION!**
Risk of material damage due to incorrect placement of an infusion pump!
► Place an infusion pump carefully on the orange non-telescopic part of the Foldable infusion stand in order to prevent the risk of injury or damage!

Foldable infusion stand equipped with 2 hooks is intended for carrying IV bags or baskets for intravenous solutions.
The pair of Foldable infusion stands can serve as handles for bed transport when they are raised.
It is possible to extend height of the Foldable infusion stand and to fold down the Foldable infusion stand again.
Pair of the Foldable infusion stands is located in corners of head end or foot end.
Maximum load of one hook is 5 kg.

FOLD THE MARKED FOLDABLE INFUSION STAND AS THE SECOND ONE.

max 5 kg

FOLD THE MARKED FOLDABLE INFUSION STAND AS THE FIRST ONE.
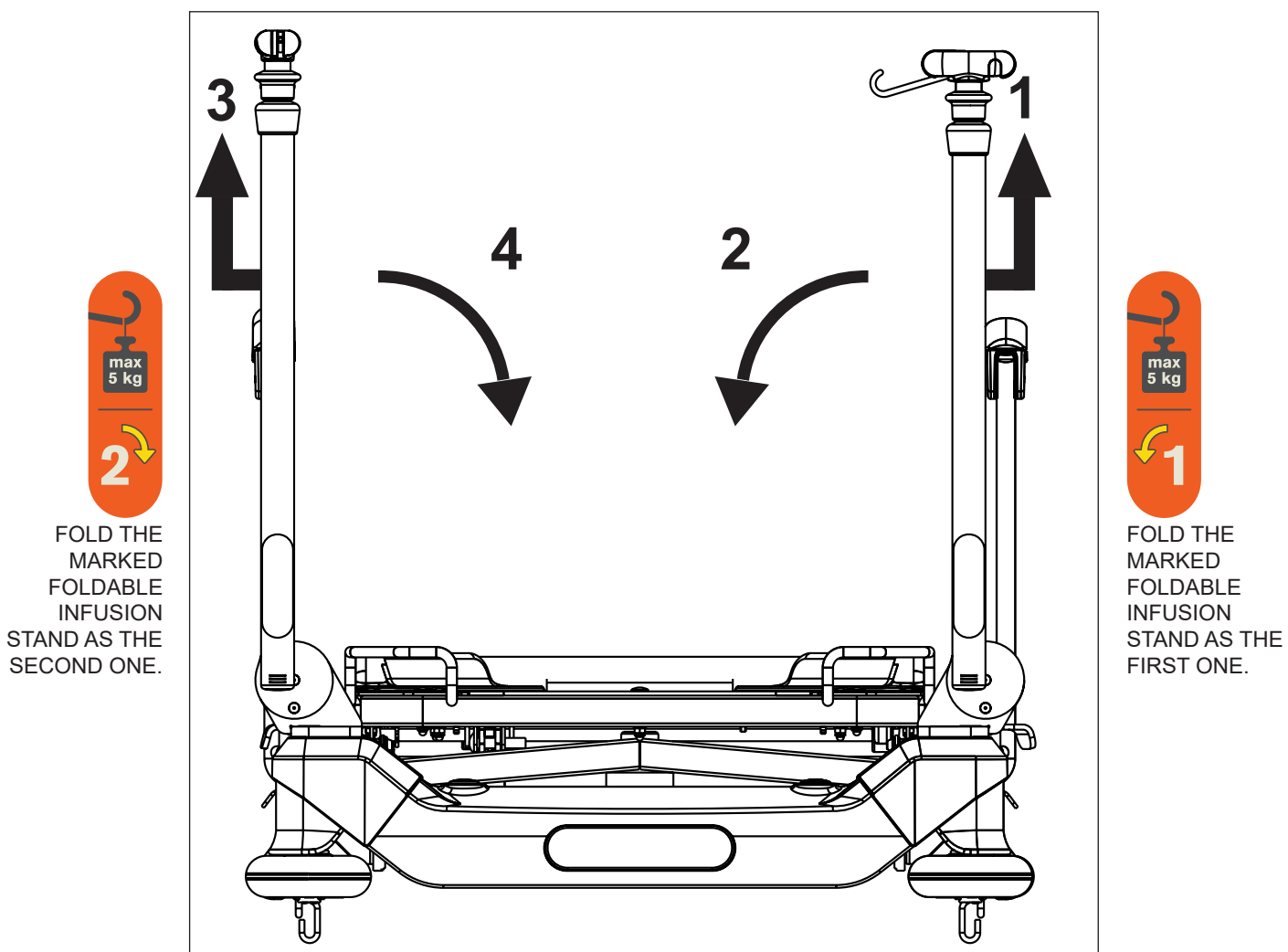
Fig. Pair of Foldable infusion stands (foot end)

To fold Foldable infusion stands down:

► Ensure the right Foldable infusion stand is not extended.
► Grasp orange bar of the right Foldable infusion stand.
► Lift the right Foldable infusion stand up (**1**) to unlock it.
► Fold the right Foldable infusion stand down (**2**).
► Ensure the left Foldable infusion stand is not extended.
► Grasp orange bar of the left Foldable infusion stand.
► Lift the left Foldable infusion stand up (**3**) to unlock it.
► Fold the left Foldable infusion stand down (**4**).

To lift Foldable infusion stands up:

► Grasp orange bar of the left Foldable infusion stand.
► Lift the left Foldable infusion stand up.
► Check if the left Foldable infusion stand is locked in place.
► Grasp orange bar of the right Foldable infusion stand.
► Lift the right Foldable infusion stand up.
► Check if the right Foldable infusion stand is locked in place.

To extend Foldable infusion stand:

► Put control ring up (**5**).
► Extend the Foldable infusion stand by taking its telescopic part out.

To shorten Foldable infusion stand:

► Put control ring up (**5**).
► Insert the telescopic part into the Foldable infusion stand.

To prepare hooks of the Foldable infusion stand:

► Take a hook out (**6**).
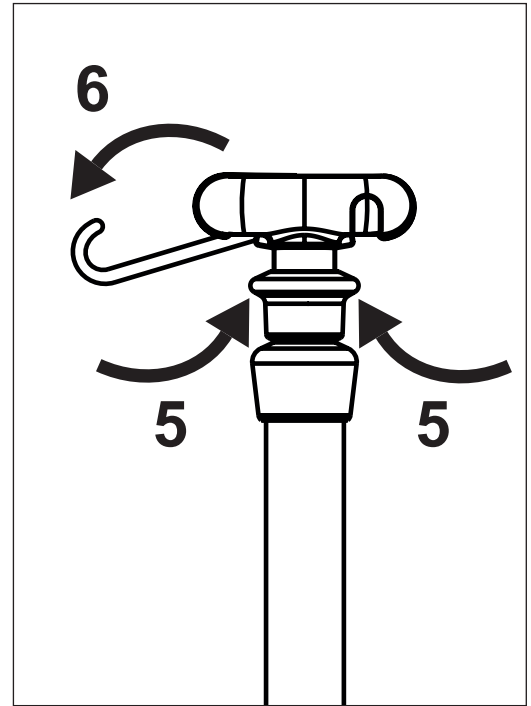
Fig. Control ring and hooks

16.7 Handles

Pair of handles is intended for bed transport.
The handles are located in head end corners or in foot end corners.
There are 3 types of the handles: removable, foldable or fixed in their positions.

16.7.1 Removable handles

Removable handles can be removed by pulling them out of their place in corners of the bed on head end or on foot end.
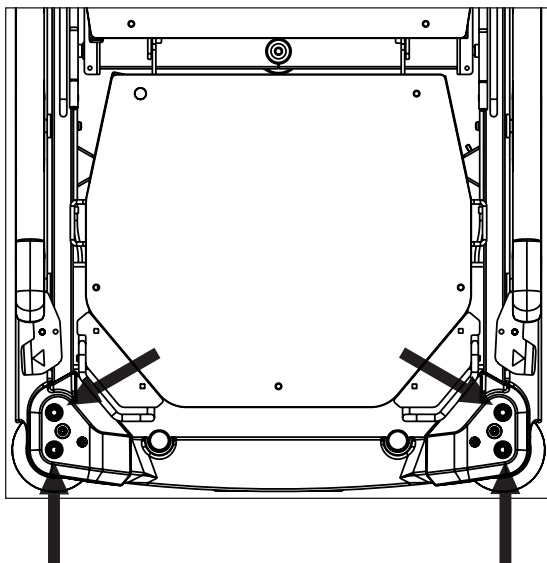
Fig. Positions for Removable handles
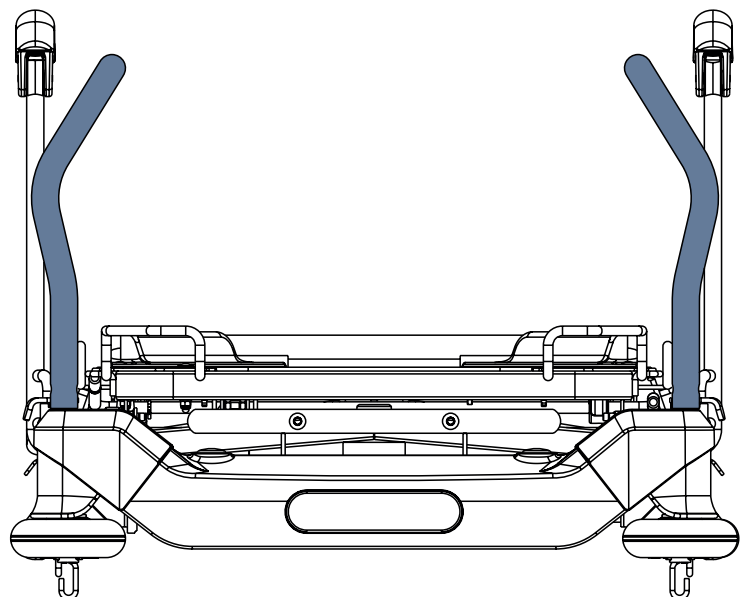
Fig. Removable handles (front view)

D9U001ES1-0110_08
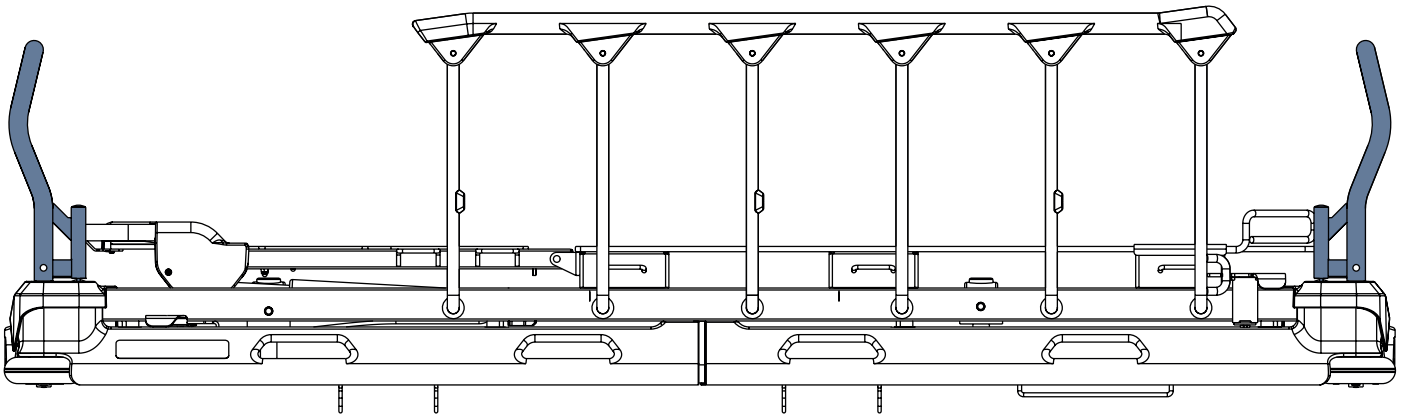
Fig. Removable handles on head end and on foot end (side view)

16.7.2 Foldable handles

To fold Foldable handle down:

► Lift the Foldable handle up (**1**) to unlock it.
► Fold the Foldable handle down (**2**).

To lift Foldable handle up:

► Lift the Foldable handle up.
► Check if Foldable handle is locked in place.
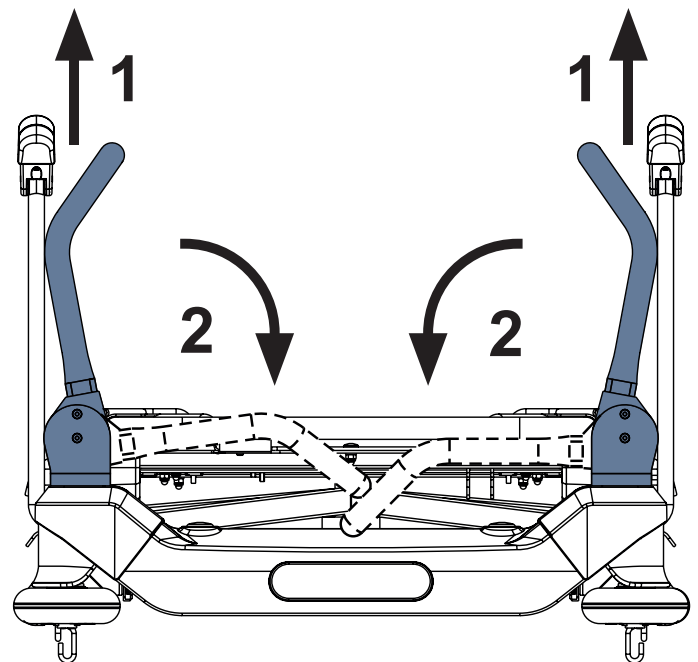
Fig. Foldable handles (front view)
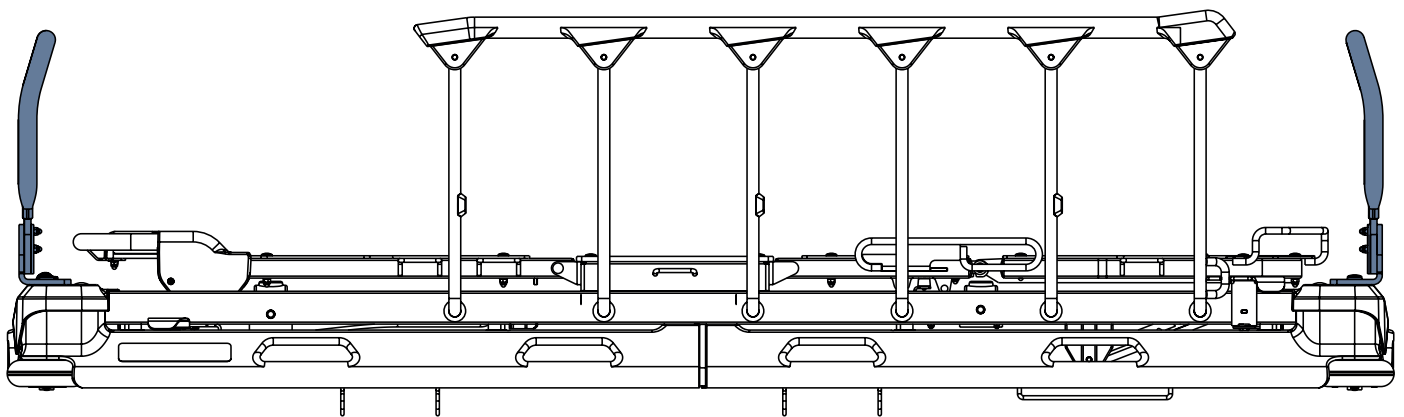
Fig. Foldable handles on head end and on foot end (side view)

16.7.3 Fixed handles

Fixed handles are screwed to corners of the bed on head end or on foot end. User is not allowed to change positions of the Fixed handles. Removal and installation must be performed by trained service technician according to the corresponding service instruction provided by manufacturer.
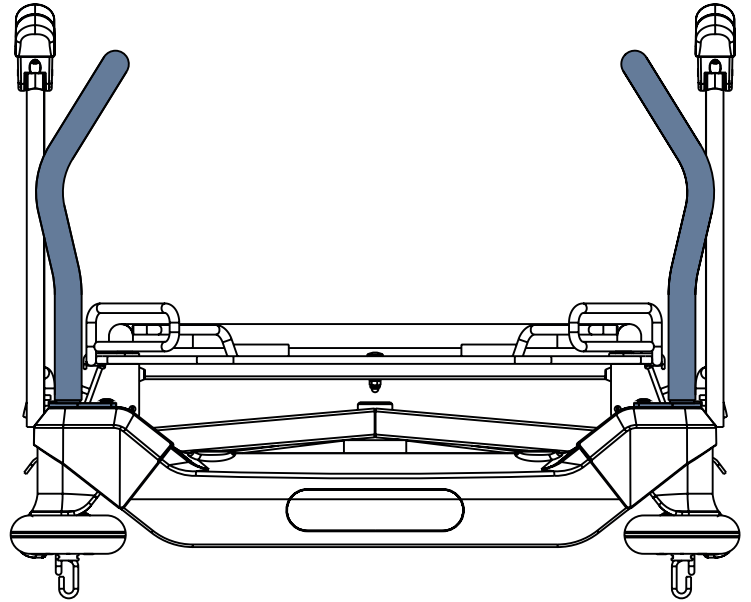
Fig. Fixed handles (front view)
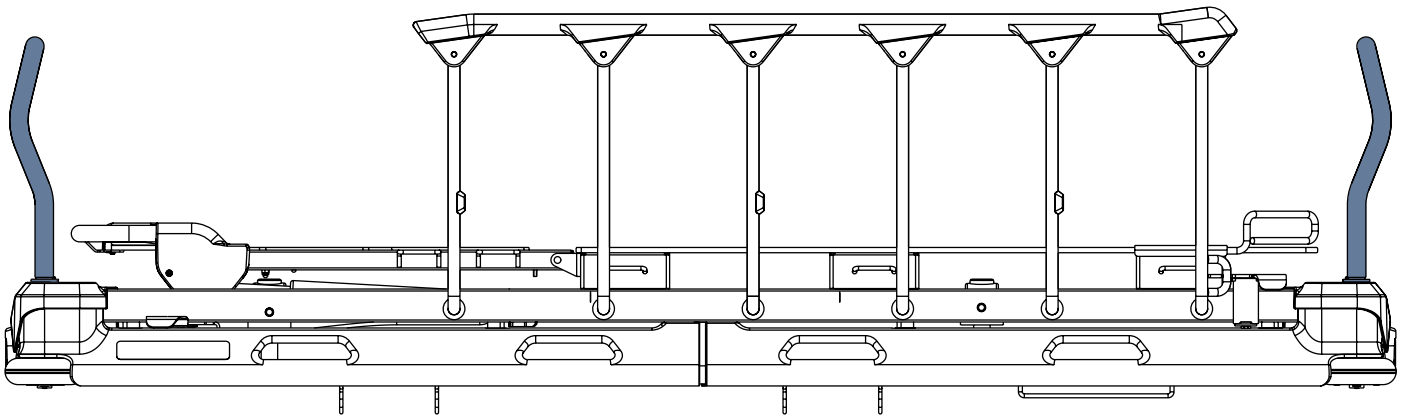
Fig. Fixed handles on head end and on foot end (side view)

16.8 Angle Indicators (optional)

Angle Indicators are optionally situated on both sides of the Backrest or on both sides of the Backrest and on both sides of Mattress Support Platform frame in seat section. Backrest angle indicators are intended for an approximate Backrest angle measurement. Angle indicators in the seat section are intended for an approximate measurement of Trendelenburg tilt and Anti-Trendelenburg tilt.
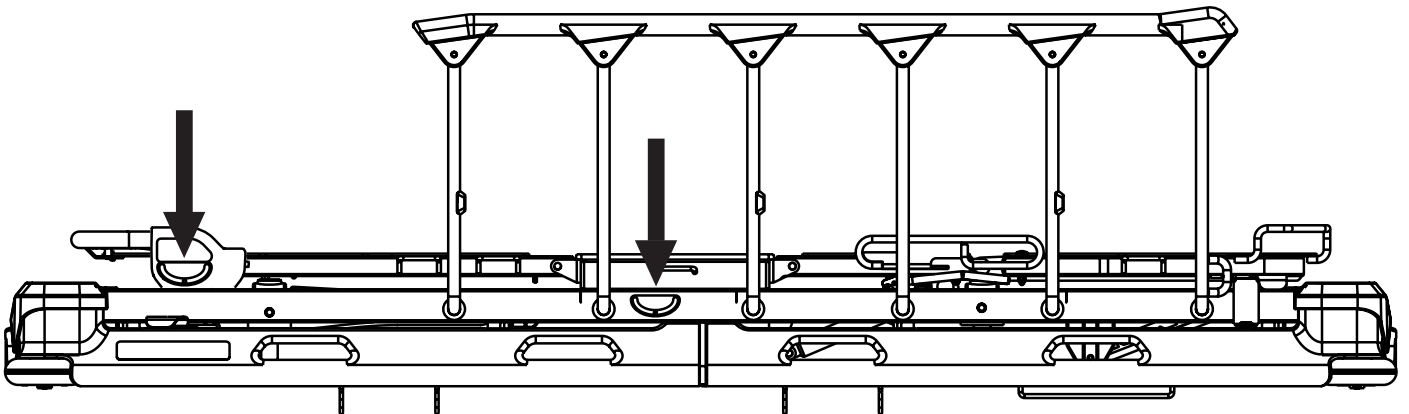
Fig. Angle Indicators

16.9 Examination with C-arm (in-bed fluoroscopy)

⚠️ **WARNING!**
Respect dimensions of space intended for C-arm between undecarriage and Mattress Support Platform (88 cm x 39 cm and 44 cm x 32 cm)!
► Do not use a C-arm with dimensions exceeding the dimensions of space intended for C-arm!

⚠️ **WARNING!**
Prevent C-arm and Sprint 100 bed from being damaged!
► Do not lower the Mattress Support Platform when using a C-arm!

⚠️ **WARNING!**
Prevent C-arm from being damaged!
► Sprint 100 with hooks and accessory rails on the sides is not intended for use with C-arm!
► Sprint 100 with Wide Mattress Support Platform is not intended for use with C-arm!

⚠️ **CAUTION!**
Prevent x-ray images from being devalued!
► Do not use Sprint 100 bed with Backrest which is not intended for use with C-arm!

Mattress Support Platform Covers are x-ray translucent. The construction of the bed allows C-arm-assisted operations (mainly cardiological operations such as temporary external cardiostimulation) without moving the patient. The in-bed C-arm examination is suitable above all for the unstable patients contraindicated to be moved. Sprint 100 beds intended for use with C-arm have different structure of the Backrest in order to avoid artifacts on the x-ray images.
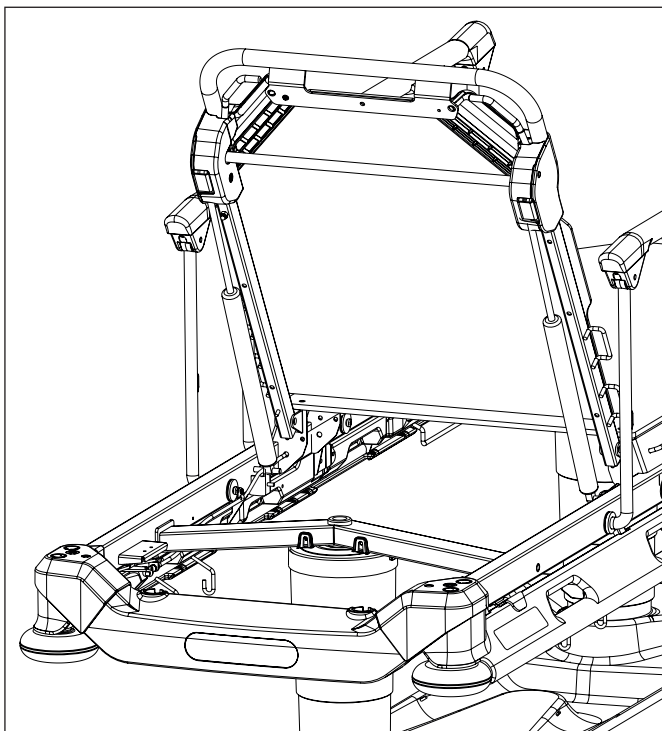
Fig. Sprint 100 intended for C-arm (only with Standard Mattress Suport Platform)
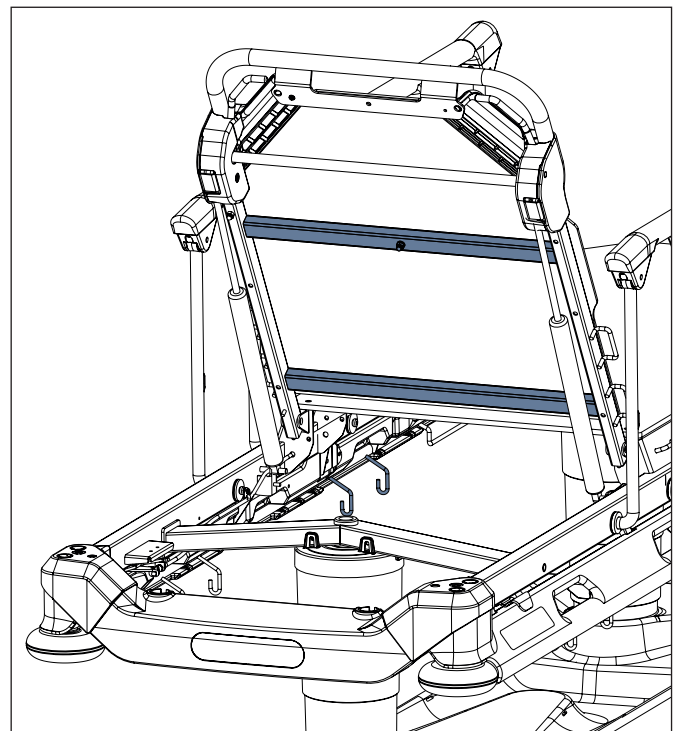
Fig. Sprint 100 not intended for C-arm
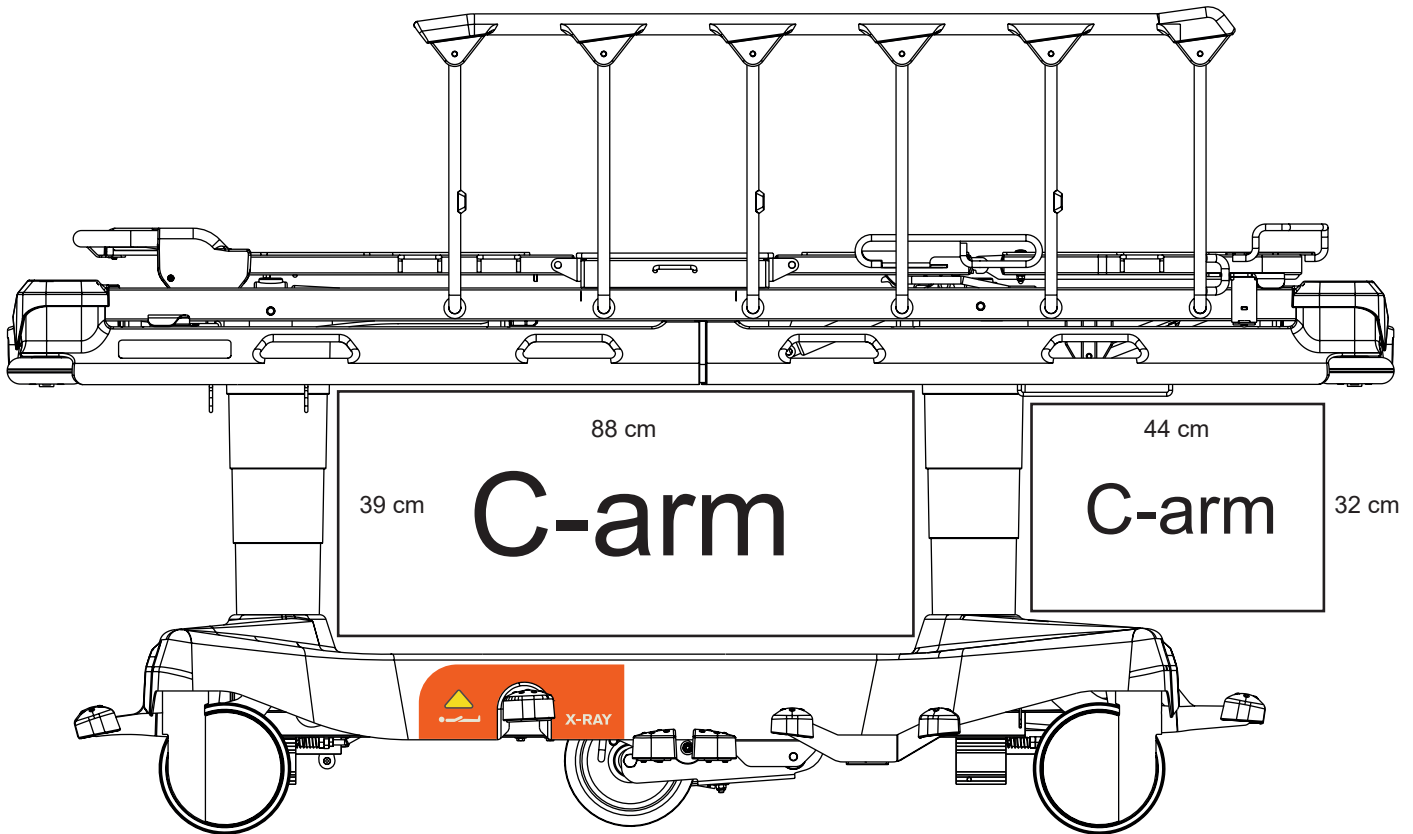
Fig. Space for the lower part of C-arm (Sprint 100 with Standard Mattress Support Platform)

Necessary steps before the examination with C-arm:

► Make sure that Mattress Support Platform is in the highest position.
► Position upper part of C-arm above the patient.
The x-ray tube of the C-arm is located between the undercarriage and the Mattress Support Platform.
► Adjust position of siderails accordingly - depending on the C-arm position.

NOTE In some cases the bed may cause artifacts on the x-ray image. Do the patient risk assessment accordingly and evaluate the positive effect on the in-bed examination versus impact of artifacts.

17 Mattress

CAUTION!
Incompatibility with bed due to incorrect mattress dimensions!
► In the case of other mattresses check maximum approved mattress dimensions (chapter Technical Specification) and its specific shape.

WARNING!
Risk of injury or material damage due to incorrect use!
► **Compatible mattresses manufactured by different manufacturers (Sprint Advanced - version S100W2-30765 and S100W4-30765) have their own instructions for use. It is necessary to read the instructions for use of the compatible mattress with instructions for use of the Sprint 100 to respect especially technical parameters, warning notifications, cleaning and maintenance instructions for the Sprint 100 and for the compatible mattress at the same time!**

Sprint 100 bed is designed for special passive mattresses from LINET portfolio and from Alpha Tekniko portfolio.
The manufacturer recommends the use of the following mattresses on the Sprint 100 bed:

SPRINT 100 PASSIVE MATTRESSES

■ **Sprint Standard**
■ **Sprint Comfort**
■ **Sprint Advanced**

Mattresses (without Sprint 100) are not designed for patient transport.

17.1 Anti-slip coating

⚠ **CAUTION!**
This anti-slip coating is not intended to prevent mattress movement when subjected to large forces so care must be taken during patient ingress & egress or with agitated patients.

⚠ **CAUTION!**
Placing any loose material such as sheets between the Sprint 100 mattress support platform and the bottom surface of the mattress will reduce the effect of the anti-slip coating and extra care must be taken during patient ingress & egress or with agitated patients.

The bottom surface of the Sprint 100 mattress has an 'anti-slip' coating. This is intended to help prevent the mattress moving around on the Sprint 100 mattress support platform during patient transport, mattress support platform articulation or whilst the patient is moving around.

17.2 Installation of Passive Mattress

The Sprint 100 passive mattresses are shaped to fit the Mattress Support Platform during bed positioning.
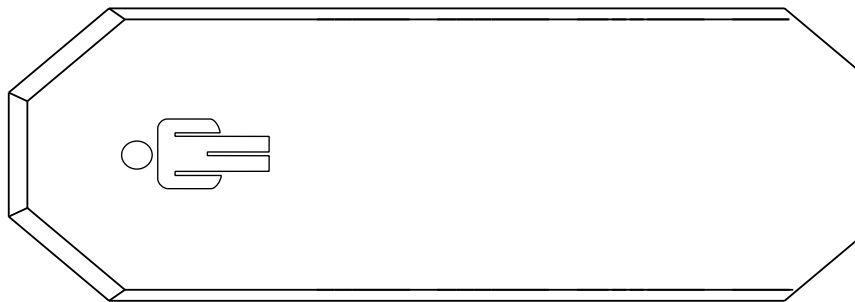
Fig. Passive Mattress (Sprint 100 with 2-part mattress support platform)
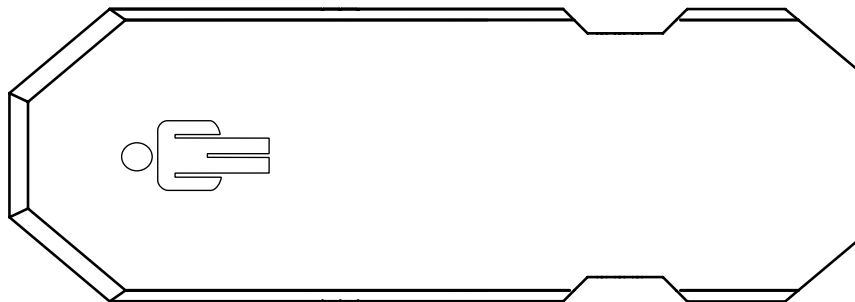
Fig. Passive Mattress (Sprint 100 with 4-part mattress support platform)

17.2.1 Straps with side release buckles

The Sprint 100 passive mattresses can be equipped with straps with buckles to fix mattress on the Mattress Support Platform.

To fix mattress on the Mattress Support Platform:

▶ Run four straps through the four corresponding holders on the frame of Mattress Support Platform.
▶ Lock the four side release buckles by connecting their male and female parts together.

To remove mattress from the Mattress Support Platform:

▶ Release the four buckles by pressing them from both sides and by disconnecting their male and female parts.
▶ Pull four straps out of the four holders on the frame of Mattress Support Platform.
▶ Remove mattress from the Mattress Support Platform.
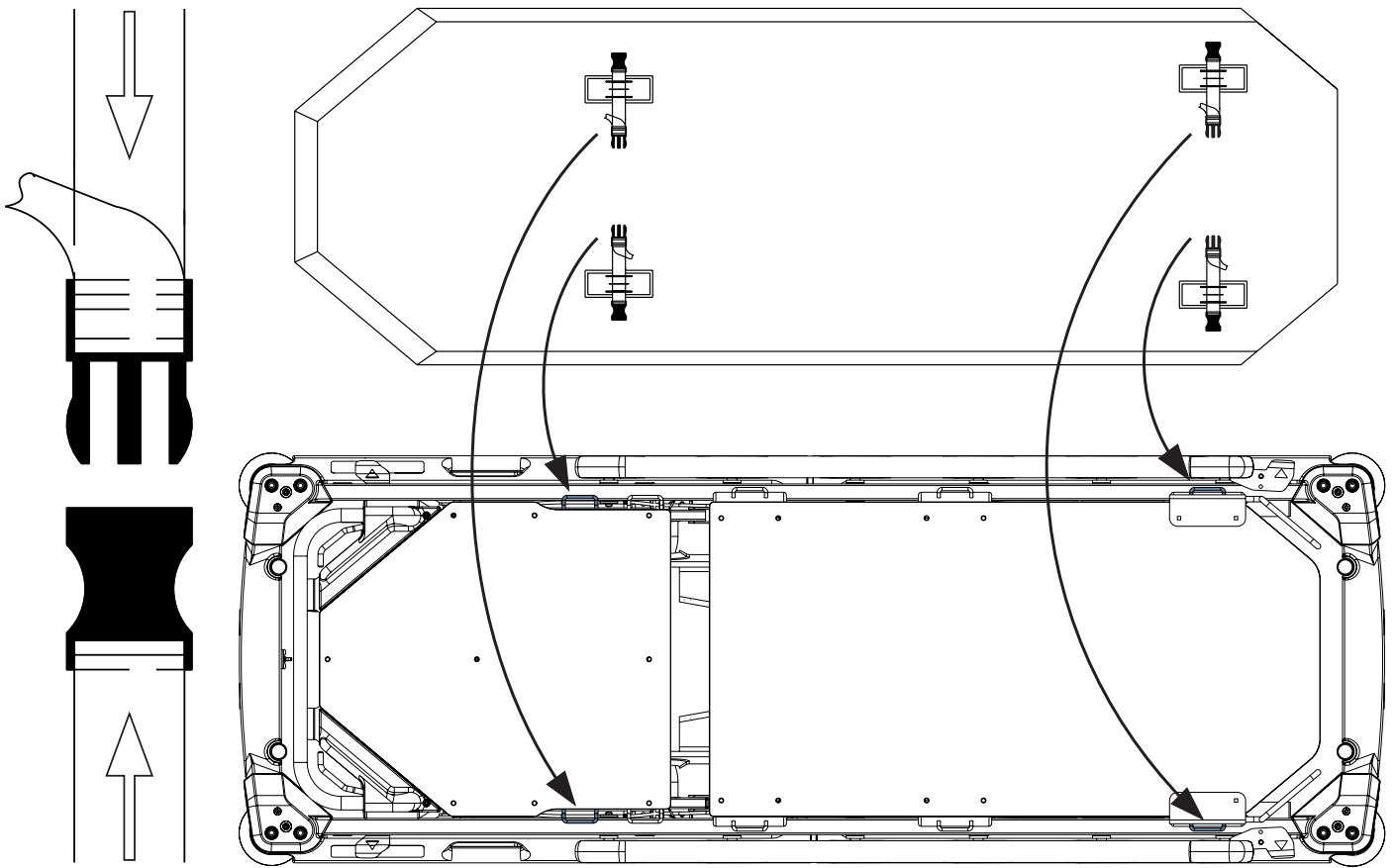
Fig. Fixation of mattress with straps on the Sprint 100 with 2-part mattress support platform
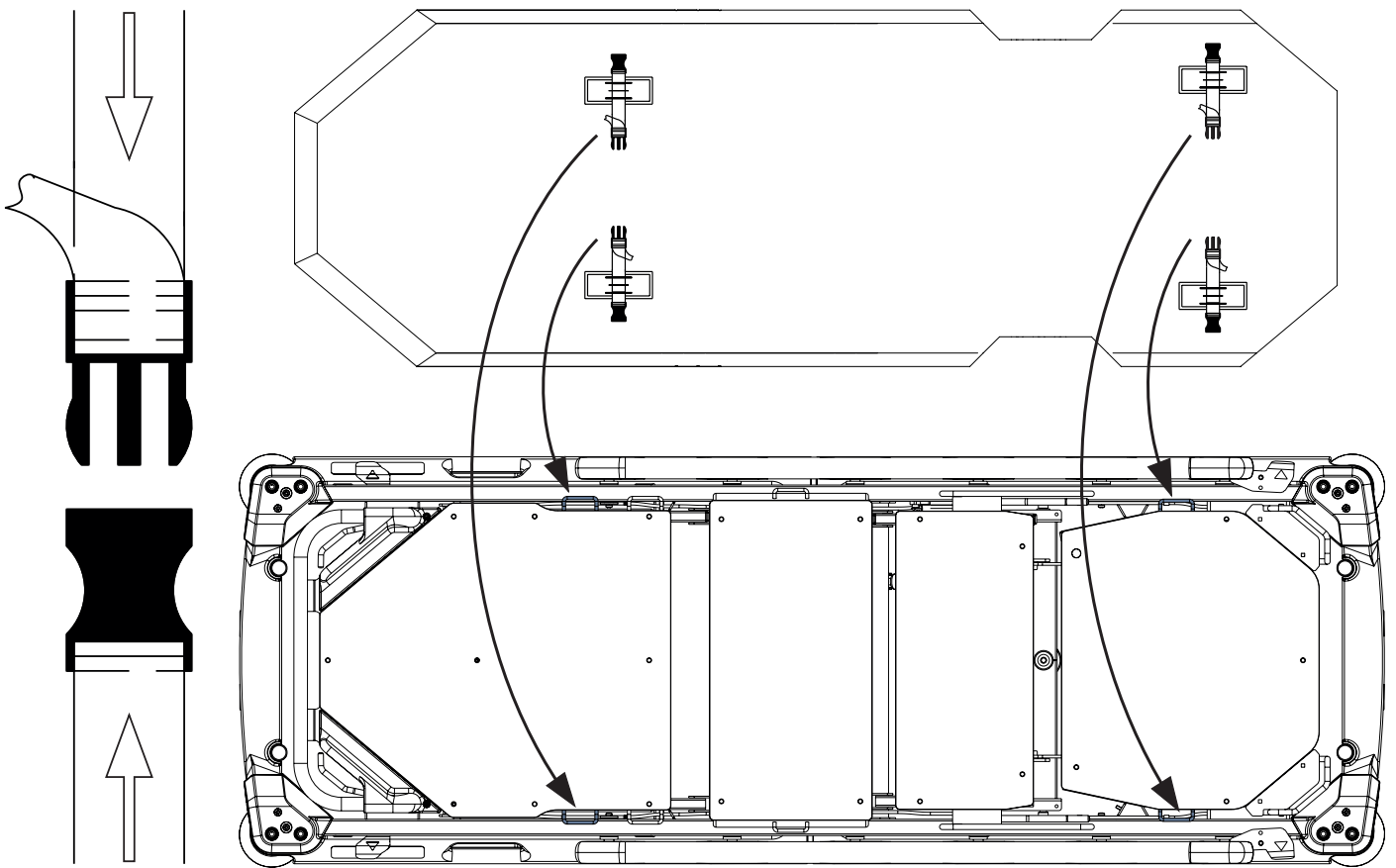
Fig. Fixation of mattress with straps on the Sprint 100 with 4-part mattress support platform

17.3 Mattresses Specifications

17.3.1 Sprint 100 with Standard Mattress Support Platform

MATTRESS FOR 2-PART STANDARD MATTRESS SUPPORT PLATFORM

Specification	Sprint Standard	Sprint Comfort	Sprint Advanced
Length	193 cm / 76 inch	193 cm / 76 inch	193 cm / 76 inch
Width	66 cm / 26 inch	66 cm / 26 inch	66 cm / 26 inch
Height	8 cm / 3,1 inch	10 cm / 3,9 inch	13 cm / 5,1 inch
Maximum Mattress Weight		7 kg / 14 lb	
Foam Type	one sided	one sided	one sided
Number of Layers	1	2	2
Used Materials (Foam)	Polyurethan	Polyurethan + Viscoelastic	Polyurethan + Viscoelastic
Thermo-sensitive Top Layer	✗	✗	✔
Vapour Permeability (Cover)	✔	✔	✔
Antislip Feature (Base Cover)	✔	✔	✔
Fluid Resistance (Cover)	✔	✔	✔
Stetchable Material (Cover)	4 way stretch	4 way stretch	4 way stretch
Zipper with Zipper Protection	270°	270°	270°
Patient Weight Limit	150 kg / 331 lb	200 kg / 441 lb	250 kg / 551 lb

MATTRESS FOR 4-PART STANDARD MATTRESS SUPPORT PLATFORM

Specification	Sprint Standard	Sprint Comfort	Sprint Advanced
Length	193 cm / 76 inch	193 cm / 76 inch	193 cm / 76 inch
Width	66 cm / 26 inch	66 cm / 26 inch	66 cm / 26 inch
Height	8 cm / 3,1 inch	10 cm / 3,9 inch	13 cm / 5,1 inch
Maximum Mattress Weight		7 kg / 14 lb	
Foam Type	one sided	one sided	one sided
Number of Layers	1	2	2
Used Materials (Foam)	Polyurethan	Polyurethan + Viscoelastic	Polyurethan + Viscoelastic
Thermo-sensitive Top Layer	✗	✗	✔
Vapour Permeability (Cover)	✔	✔	✔
Antislip Feature (Base Cover)	✔	✔	✔
Fluid Resistance (Cover)	✔	✔	✔
Stetchable Material (Cover)	4 way stretch	4 way stretch	4 way stretch
Zipper with Zipper Protection	180°	180°	180°
Patient Weight Limit	150 kg / 331 lb	200 kg / 441 lb	250 kg / 551 lb

17.3.2 Sprint 100 with Wide Mattress Support Platform

MATTRESS FOR 2-PART STANDARD MATTRESS SUPPORT PLATFORM

Specification	Sprint Advanced
Length	193 cm / 76 inch
Width	76 cm / 29,9 inch
Height	13 cm / 5,1 inch
Maximum Mattress Weight	11 kg / 24 lb
Foam Type	one sided
Number of Layers	2
Used Materials (Foam)	Polyurethan + Viscoelastic
Thermo-sensitive Top Layer	✔
Vapour Permeability (Cover)	✔
Antislip Feature (Base Cover)	✔
Fluid Resistance (Cover)	✔
Stetchable Material (Cover)	4 way stretch
Zipper with Zipper Protection	270°
Patient Weight Limit	250 kg / 551 lb

MATTRESS FOR 4-PART STANDARD MATTRESS SUPPORT PLATFORM

Specification	Sprint Advanced
Length	193 cm / 76 inch
Width	76 cm / 29,9 inch
Height	13 cm / 5,1 inch
Maximum Mattress Weight	11 kg / 24 lb
Foam Type	one sided
Number of Layers	2
Used Materials (Foam)	Polyurethan + Viscoelastic
Thermo-sensitive Top Layer	✔
Vapour Permeability (Cover)	✔
Antislip Feature (Base Cover)	✔
Fluid Resistance (Cover)	✔
Stetchable Material (Cover)	4 way stretch
Zipper with Zipper Protection	180°
Patient Weight Limit	250 kg / 551 lb

17.4 Cleaning of Passive Mattress

⚠️ **CAUTION!**
Incorrect cleaning/disinfection can damage the mattress!
► Do not use pressure or steam cleaners.
► Follow the instructions and observe the dosages recommended by the manufacturer.
► Ensure that disinfectants are selected and applied by qualified hygiene experts only.
► The surface of the mattress should not be exposed to liquids for a long time.

17.4.1 General Guidance

For safe and gentle cleaning:

► Do not use any strong acids or alkalines, (optimum pH range 6 – 8. Do not exceed pH of 9).
► Only use detergents that are suitable for cleaning medical equipment.
► Do not use abrasive powders, steel wool, or other material and cleaning agents that might damage the mattress. Do not scrub mattress surface.
► Never use any corrosive or caustic detergents.
► Never use detergents that deposit calcium carbonate.
► Never use detergents with solvents that might affect the structure and consistency of the plastics (benzene, toluene, acetone etc.).
► Use only hospital-approved cleaners and observe local directives concerning infection control.
► Always rinse with water after cleaning and dry thoroughly before use.
► Observe local directives concerning infection control.

Mattress parts to be cleaned	Recommended Cleaning Agents (General Cleaning
Top Cover, Bottom Cover	Standard hospital detergents, Alcohol or Quaternary Ammonium based disinfectants, Chlorine based disinfectants containing up to 0,1% Chlorine, followed by rinsing with water and drying thoroughly before use.
	Decontamination: Blood spills/C-diff. etc
	Chlorine based disinfectants containing up to 0,1% Chlorine. Dwell time on surface at 0,1% of 5 minutes, followed by rinsing with water and drying thoroughly before use.
Mattress Core	**Do not clean!**

Due to the variety of laundry equipment, chemicals and conditions in use, customers should satisfy themselves through pretesting. It is essential that cover be thoroughly rinsed and dried after all cleaning procedures and before storage or reuse. Wet or damp PU surfaces are more prone to mechanical damage than when dry.

As stated above, after application of a suitable cleaner, the surface must be rinsed with water and dried before use. (Even if the cleaner instructions say that this is not required). This prevents a build-up of chemicals on the mattress surface which could be reactivated during use and affect biocompatibility.

NOTE Continued use of high concentration, chlorine-based disinfectants may significantly reduce the performance and the working life of a coated material.

NOTE If disinfecting is not required, cleaning with soap and water should be enough to remove dirt stains.

NOTE Cleaning and disinfecting products based on solvent, bleach, abrasives or very high (over 70%) alcohol concentrations can damage this product.

Type of Cleaning	Parts to be cleaned
Routine Cleaning and Disinfection	external of mattress cover
Full Cleaning and Disinfection	external of mattress cover

17.4.2 Routine Cleaning and Disinfection

Cleaning the mattress:

►   Check mattress cover top for any signs of damage or for liquid ingress.
►   Replace or repair and completely disinfect mattress cover top if damaged. Also check if the mattress core is not contaminated. In case of core contamination, do not use the mattress and dispose the core ecologically.
►   Leave mattress cover on mattress.
►   Clean with water with cleaning detergent.
►   Rinse mattress with cold water.
►   Let mattress air dry or wipe dry.
►   Wipe mattress with disinfectant and rinse mattress with cold water.
►   Let mattress dry or wipe dry.

17.4.3 Complete Cleaning and Disinfection

Cleaning Top/Bottom Cover:

Use standard hospital detergents, Alcohol based cleaners or Quaternary Ammonium based disinfectants. Suitable Chlorine based cleaners can be used at a concentration of 0,05%. Stronger concentrations of chlorine can be used if required, (up to 0,1%), with a maximum dwell time of five minutes followed by rinsing with water and drying thoroughly before use.

After application of a suitable cleaner, the surface should be rinsed with water and dried before use. (Even if the cleaner instructions say that this is not required). This prevents a build up of chemicals on the mattress surface that could reactivate during use and affect biocompatibility.

Cleaning the mattress:

►   Check mattress cover top and base for any signs of damage.
►   Replace or repair and completely disinfect mattress cover top and base if damaged. Also check if the mattress core is not contaminated. In case of core contamination, do not use the mattress and dispose the core ecologically.
►   Leave mattress cover on mattress.
►   Clean with water with cleaning detergent.
►   Rinse mattress with cold water.
►   Let mattress air dry or wipe dry.
►   Wipe mattress with disinfectant.
►   Rinse mattress with cold water.
►   Let mattress air dry or wipe dry.

Machine washing of the top/base mattress covers:

►   Remove cover.
►   If machine washing mattress top/base covers, the temperature should be raised during the wash cycle, to 71°C/160° F, for 3 - 10 minutes, using hospital approved detergents and rinsing agents.
►   Dry cover in tumble dryer at low temperature.

NOTE   Maximum wash temperature 75°C (but it decreases lifetime period of the product).

17.4.4 Mattress Core

The entire core of the mattress does not require any major cleaning. The core does not need disinfection. Once a month it is recommended to ventilate the mattress core (remove the mattress cover and leave the mattress core on ventilated area for 12 -24 hours). The mattress core cannot be washed by water or by disinfection.

18 Accessories

⚠️ **WARNING!**
Risk of injury due to incompatible accessories!
► **Use exclusively original accessories from the manufacturer.**
The manufacturer is not responsible for the use of unapproved accessories.

⚠️ **WARNING!**
Risk of injury due to damaged accessories!
► **Use exclusively accessories in perfect condition.**

⚠️ **WARNING!**
Risk of injury or material damage due to incorrect use!
► **Compatible accessories manufactured by different manufacturers have their own instructions for use. It is necessary to read instructions for use of a compatible accessory with instructions for use of the compatible LINET product to respect especially technical parameters, warning notifications, cleaning and maintenance instructions of LINET products and their compatible accessories!**

Compatible Accessories	Identification Numbers	Compatible Configurations	
		Sprint 100 with Standard Mattress Support Platform (2-part Mattress Support Platform and 4-part Mattress Support Platform)	Sprint 100 with Wide Mattress Support Platform (2-part Mattress Support Platform and 4-part Mattress Support Platform)
Infusion Stand	4MAS6016306	✔	✔
Telescopic Infusion Stand	4PV348405X00	✔	✔
Chart Holder	11023900A0000	✔	✔
Monitor Shelf	11026300A0009	✔	✖
Paper Roll Holder	11013700A0000	✔	✔ (only Sprint 100 without scales)
Storage Space	1106000080002	✔	✖
Storage Space	11060000800WD	✖	✔
Oxygen Bottle Holder	11026300A0010	✔	✖
X-Ray Cassette Holder	adjustable holder: 11026300A0012 fixed holder: 11026300A0011	✔	✖

LINET

18.1 Infusion Stand

⚠️ **WARNING!**
Risk of injury due to incorrect placement of an infusion pump!
► Ensure the infusion pump on the Infusion stand will not collide with any movable parts of the Sprint 100 (especially Backrest) or with the patient!

⚠️ **WARNING!**
Risk of injury and risk of material damage due to incorrect use!
► Do not use the infusion stand as driving/pushing device during the bed transport.

Infusion Stand is intended for carrying IV bags or baskets for intravenous solutions.
It can be located in bushings for accessories at a bed corner.
Maximum load of one hook is 5 kg.

Fig. Infusion stand (at bed end corners)
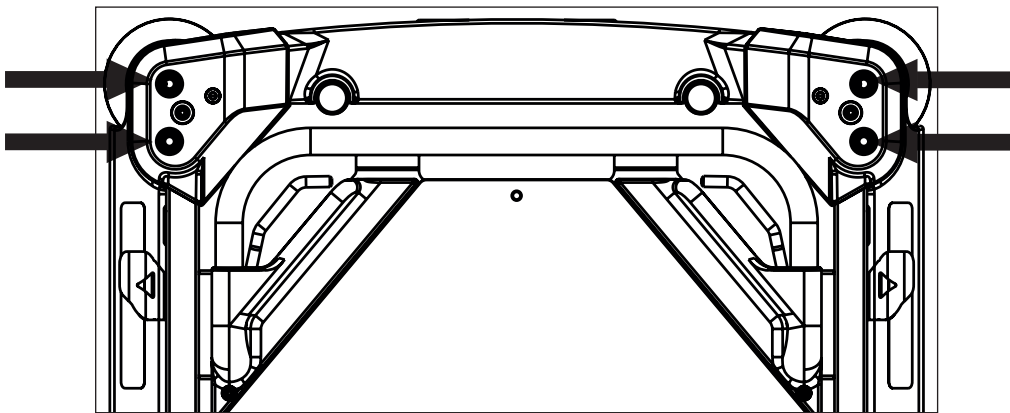
Fig. Positions for Infusion Stand
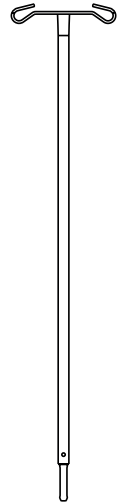
18.2 Telescopic Infusion Stand

⚠️ **CAUTION!**
Risk of material damage due to incorrect placement of an infusion pump!
► Place an infusion pump carefully on the telescopic part of the Telescopic Infusion Stand in order to prevent the telescopic part from being damaged!

⚠️ **WARNING!**
Risk of injury due to incorrect placement of an infusion pump!
► Ensure the infusion pump on the Infusion stand will not collide with any movable parts of the Sprint 100 (especially Backrest) or with the patient!

⚠️ **WARNING!**
Risk of injury and risk of material damage due to incorrect use!
► Do not use the infusion stand as driving/pushing device during the bed transport.

Telescopic Infusion Stand is intended for carrying IV bags or baskets for intravenous solutions.
It can be located in bushings for accessories at a bed corner.
Maximum load of the Telescopic Infusion Stand is 20 kg.

Fig. Telescopic Infusion stand (at bed end corners)
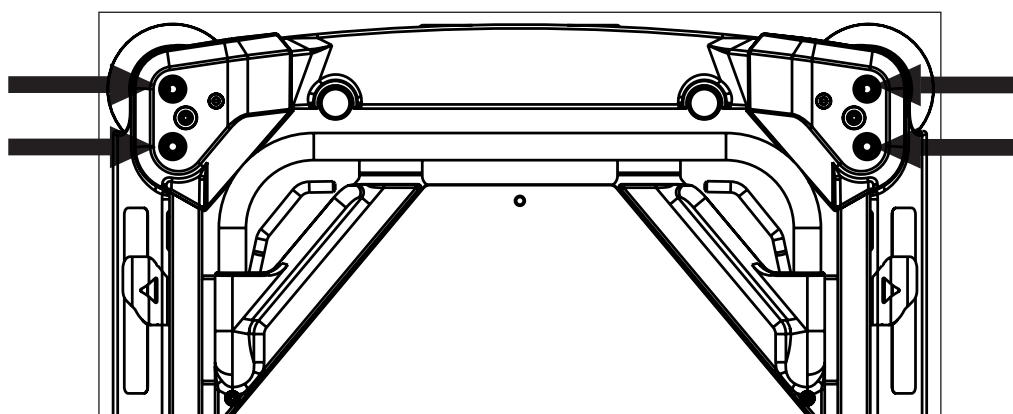
Fig. Positions for Telescopic Infusion Stand
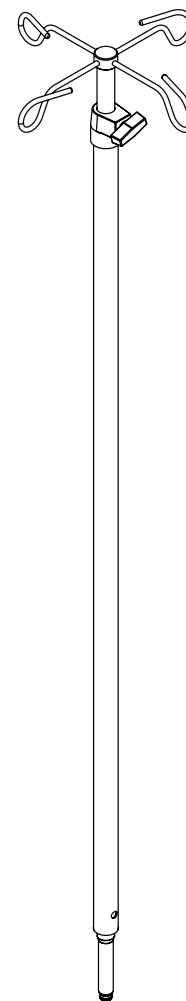
18.3 Chart Holder

Chart Holder is intended for placing charts, which are registering the development of health condition of the patient.
Chart Holder is located on a siderail.
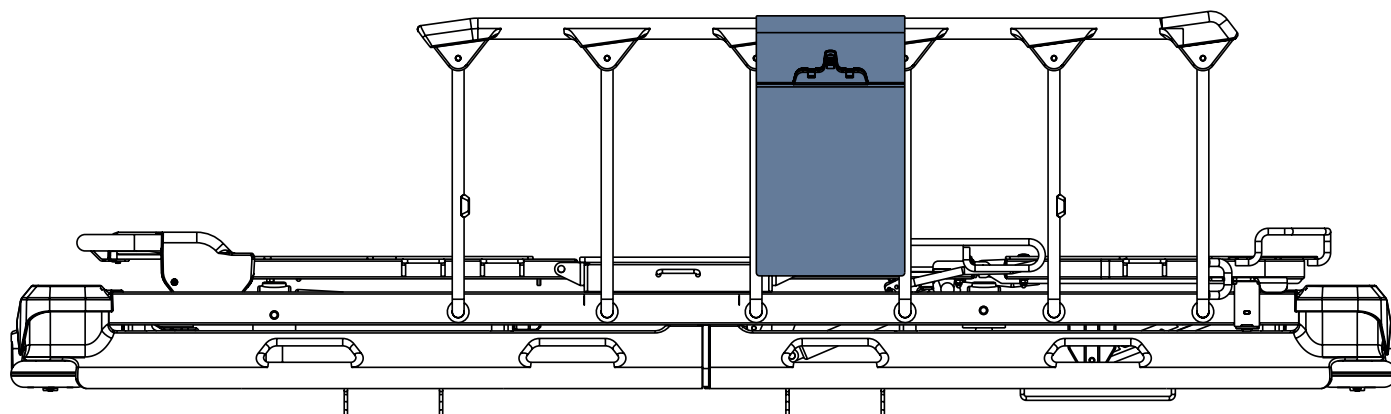
Fig. Chart Holder (on siderail)

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18.4 Monitor Shelf

Monitor shelf is intended for carrying a monitor when the monitor shelf is folded towards the bed (**4**). When the monitor shelf is folded away from the bed (**3**) it serves for writing. When the monitor shelf is folded down (**2**) it serves as a foot board. Monitor shelf is equipped with straps to fix a monitor on the monitor shelf. Maximum load of the monitor shelf in position for carrying a monitor (**4**) and for writing (**3**) is 15 kg.
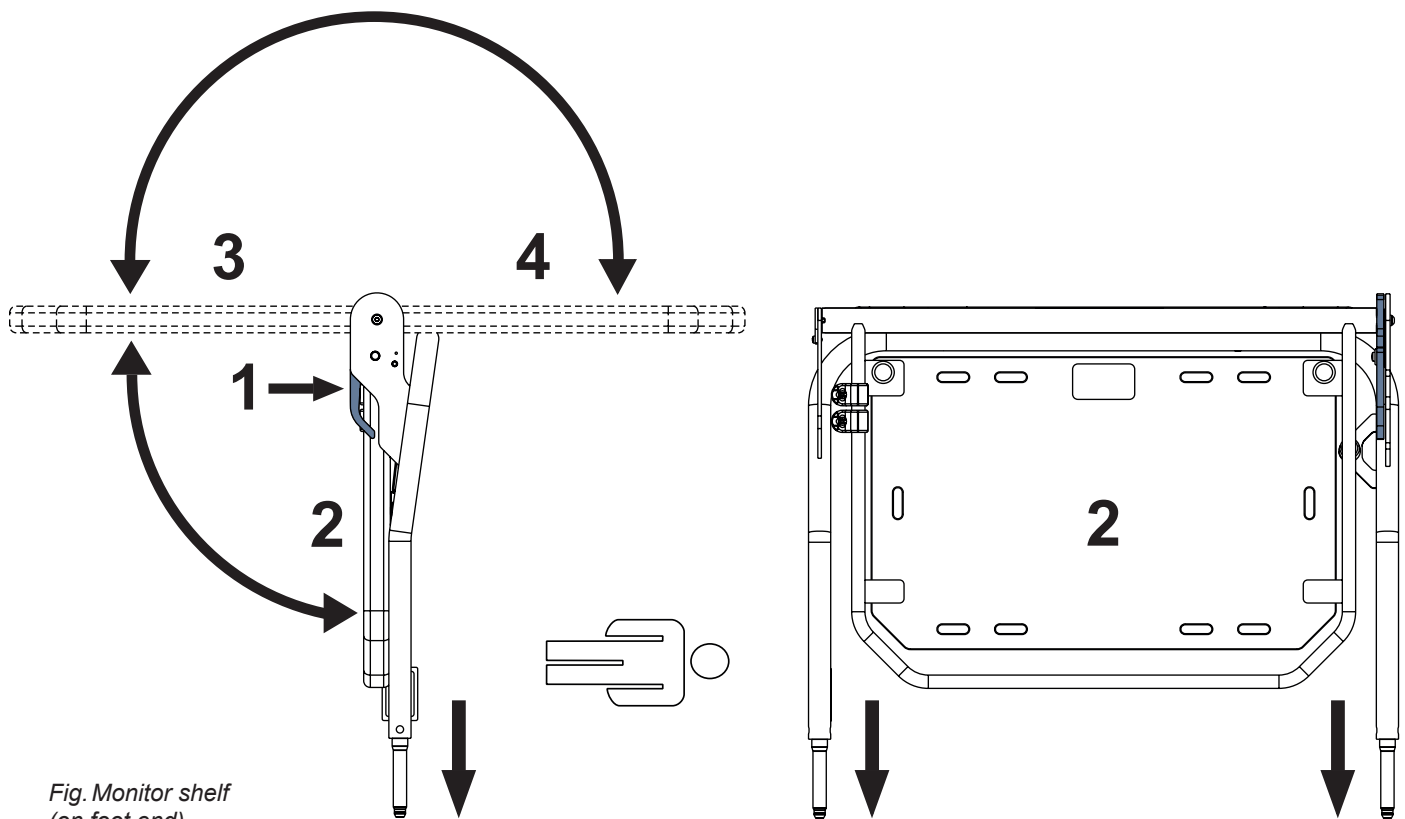
Fig. Monitor shelf (on foot end)

To change position of the board:

► Pull a control lever (**1**).
► Change position of the board.
► Release the control lever (**1**) in order to the control lever latches.
► Move the board up and down to ensure the board is fixed.

Fig. Instruction for placement of the monitor shelf to the bed end

HOOKS

The position of hooks placed on the frame of Monitor Shelf can be changed to a more convenient position!

Respect maximum load of the Monitor Shelf when hanging things on the hooks!
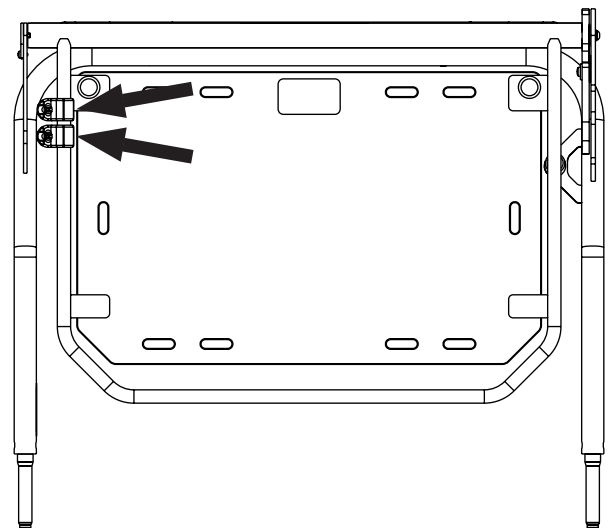
18.5 Paper Roll Holder

Paper Roll Holder is intended for holding a paper bed sheet.
Paper Roll Holder is located at foot end.
On the opposite bed end, the paper bed sheet can be fixed under the mattress.
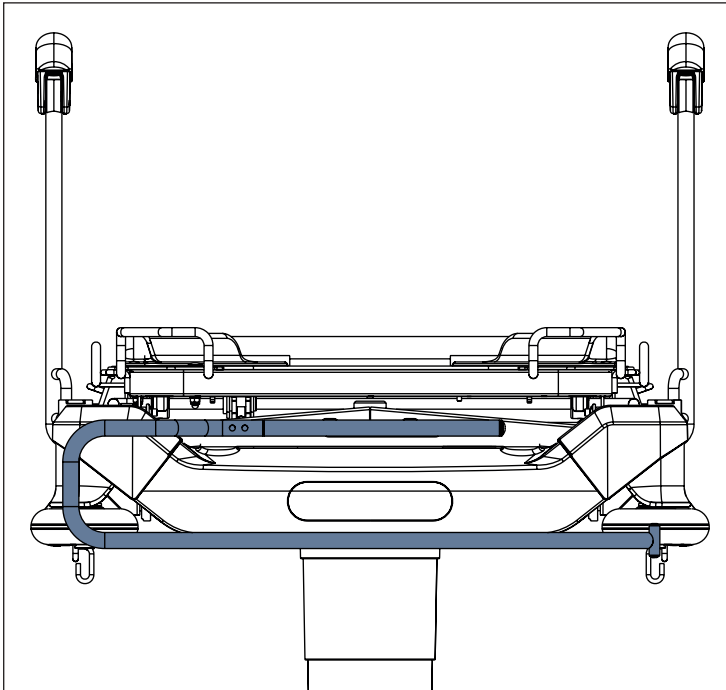
Fig. Paper Roll Holder (at foot end)
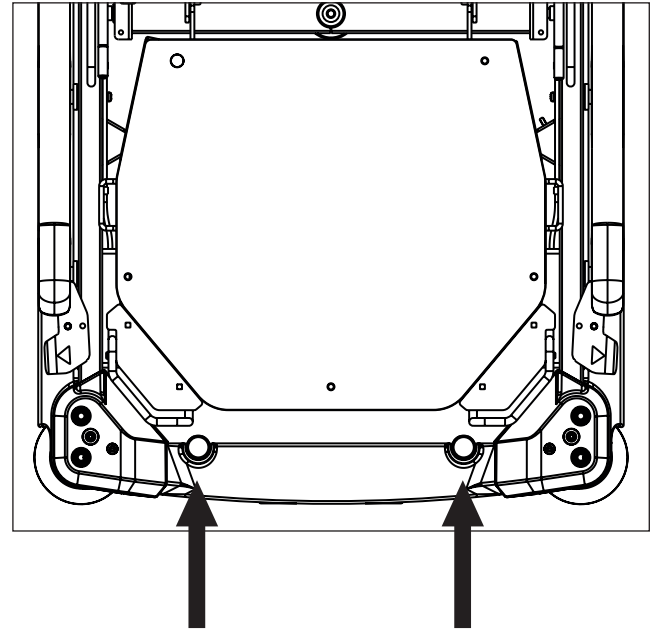
Fig. Positions for Paper Roll Holder

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18.6 Storage Space

⚠️ **WARNING!**
Things exceeding the upper edge of the Storage Space could reduce weighing accuracy in the case of Sprint 100 with scales!
► Respect the upper edge of the Storage Space when putting things into it!

⚠️ **WARNING!**
Weighing accuracy is reduced in the Trendelenburg Position if Sprint 100 with scales is used with compatible Storage Space and its mattress support platform is loaded with more than 180 kg!
► Do not use scales when Sprint 100 with scales is in Trendelenburg Position and its mattress support platform is loaded with more than 180 kg!

Storage Space is intended for patient´s things.
Storage Space is located under the Backrest.
Maximum load of the Storage Space is 10 kg.
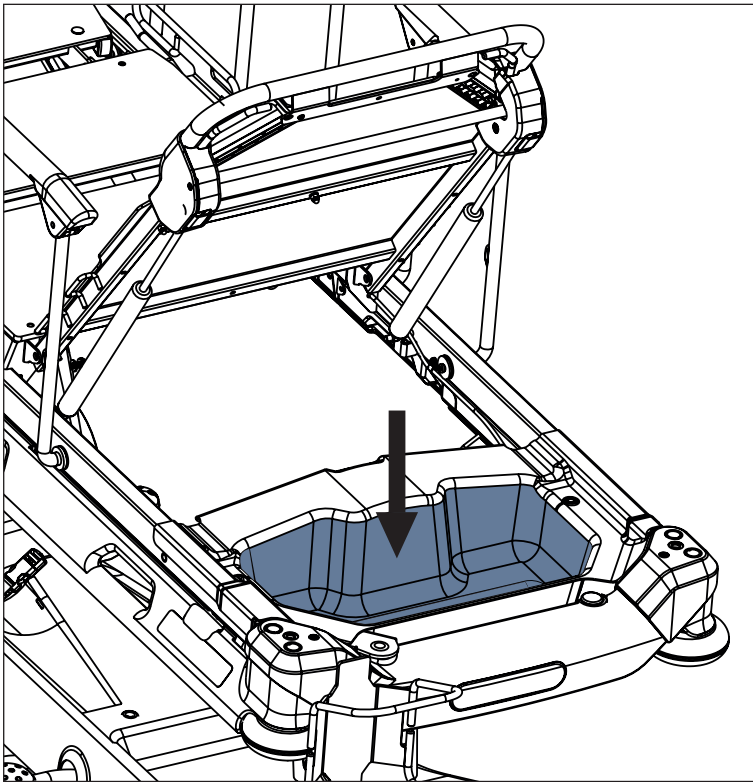
Fig. Storage Space (under the Backrest)

To clean the Storage Space:

► remove it from its place.

To perform X-Ray Examination under the Backrest:

► remove the Storage Space from its place.

18.7 Oxygen Bottle Holder

⚠ **WARNING!**
Risk of injury with Oxygen Bottle Holder due to incorrect use or due to careless driving!
► Ensure the Oxygen Bottle Holder is correctly fitted in correct position.
► It is necessary to place Oxygen Bottle Holder (with or without O2 bottle) before transport to secure transport position.
► Be aware of people or objects in close proximity when driving or manipulating the bed equipped with Oxygen Bottle Holder.
► Secure the oxygen bottles against falling or involuntary movement with rubber strap.
► Place the Oxygen Bottle Holder on the bed by following instructions.
► Ensure the oxygen bottle valve will not get damaged by careless or incorrect manipulation or placement.

Oxygen Bottle Holder is intended for transporting oxygen bottles with a weight of up to 15 kg and a volume of 5 litres.
Oxygen Bottle Holder with adapter is located at head end on the left.

Fig. Placement of Oxygen Bottle Holder (head end)
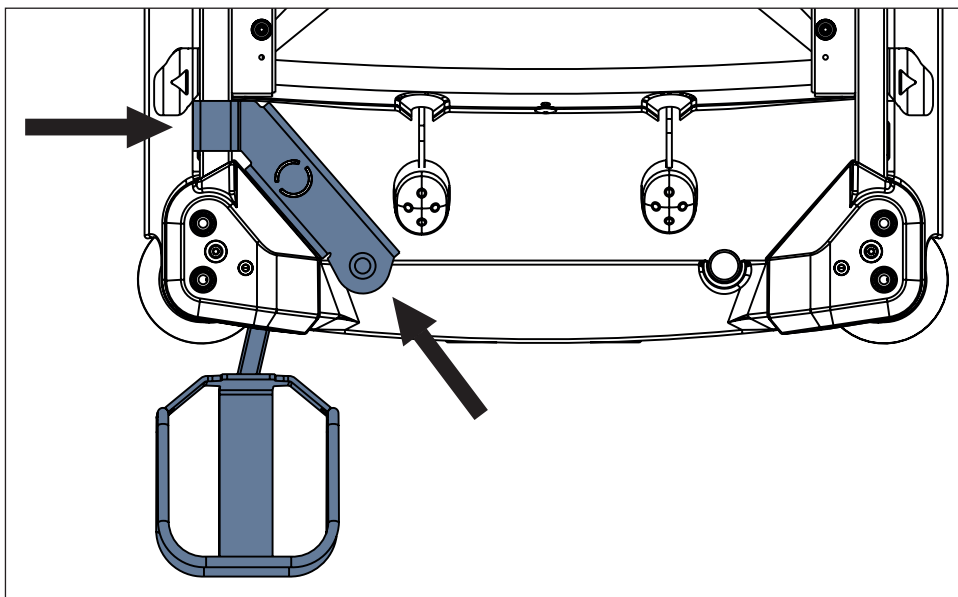
To place the Oxygen Bottle Holder:

► Lift the Backrest.
► Place Oxygen Bottle Holder with adapter to designated positions on the frame of Mattress Support Platform.

Fig. Removal of Oxygen Bottle Holder
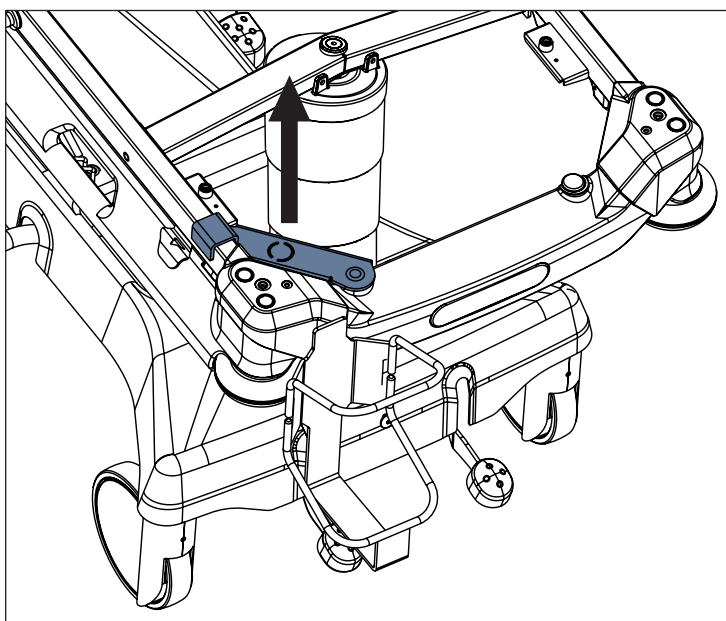
To remove the Oxygen Bottle Holder:

► Lift the Backrest.
► Lift the part of Oxygen Bottle Holder which is attached to the frame of Mattress Support Platform.
► Lift the rest of Oxygen Bottle Holder through the frame of Mattress Support Platform.

To adjust position of the Oxygen Bottle Holder:

► Move Oxygen Bottle Holder to intended position.
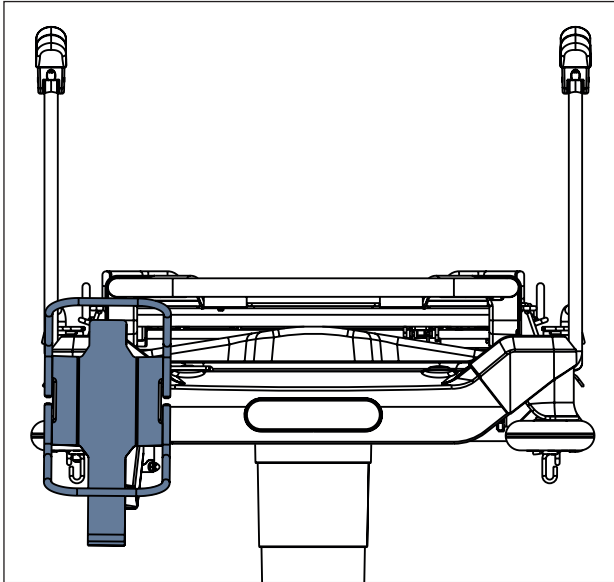
Fig. Oxygen Bottle Holder (at head end on the left) - position 1
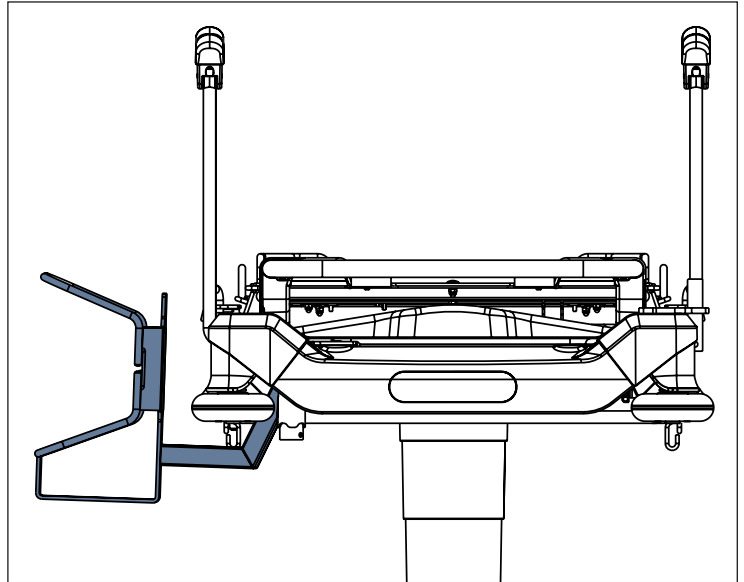
Fig. Oxygen Bottle Holder (at head end on the left) - position 2

18.8 X-Ray Cassette Holder

WARNING!
Respect maximum dimensions of x-ray cassettes!
► Maximum dimensions of any x-ray cassette for Adjustable X-Ray Cassette Holder are 47 cm x 46 cm x 2,2 cm!
► Maximum dimensions of any x-ray cassette for Fixed X-Ray Cassette Holder are 58 cm x 46 cm x 2,4 cm!

WARNING!
Safe Working Load for both types of the X-Ray Cassette Holder (Adjustable X-Ray Cassette Holder and Fixed X-Ray Cassette Holder) is 5 kg!
► Do not use any x-ray cassettes exceeding the Safe Working Load!

WARNING!
Prevent x-ray cassettes from being damaged!
► Do not leave any x-ray cassette in the Adjustable X-Ray Cassette Holder or in the Fixed X-Ray Cassette Holder if X-Ray Examination should not be performed!

CAUTION!
Prevent x-ray images from being devalued!
► Take x-ray images when the bed is braked and no part of the bed is forced to move!
► Follow the instructions in the instructions for use how to use the Adjustable X-Ray Cassette Holder and the Fixed X-Ray Cassette Holder!

WARNING!
Risk of collision with the other accessories!
► Accessory rail at head end is not compatible with both X-Ray Cassette Holders when Backrest is down!
► Accessory rail at foot end (only Sprint 100 with 2-part Mattress Support Platform) is not compatible with both X--Ray Cassette Holders!
► Both X-Ray Cassette Holders in the most remote position on the Backrest are not compatible with an oxygen bottle on the undercarriage cover!
► Storage Space is not compatible with x-ray cassettes in both X-Ray Cassette Holders when Backrest is down!

Mattress Support Platform Covers are x-ray translucent. The Sprint 100 with 2-part Mattress Support Platform can be equipped with an X-Ray Cassette Holder which can be inserted under the Backrest or under the Foot section. The Sprint 100 with 4-part Mattress Support Platform can be equipped with an X-Ray Cassette Holder which can be inserted just under the Backrest. This accessory allows taking x-ray images of the patient´s body parts without moving the patient manually. This procedure is above all suitable for patients who cannot be moved due to critical conditions (e. g. internal bleeding) or unstable patients. There are two types of the X--Ray Cassette Holder which are compatible with Sprint 100 (Adjustable X-Ray Cassette Holder and Fixed X-Ray Cassette Holder). The Adjustable X-Ray Cassette Holder and the Fixed X-Ray Cassette Holder are compatible with Sprint 100 with 2-part Mattress Support Platform and with Sprint 100 with 4-part Mattress Support Platform.
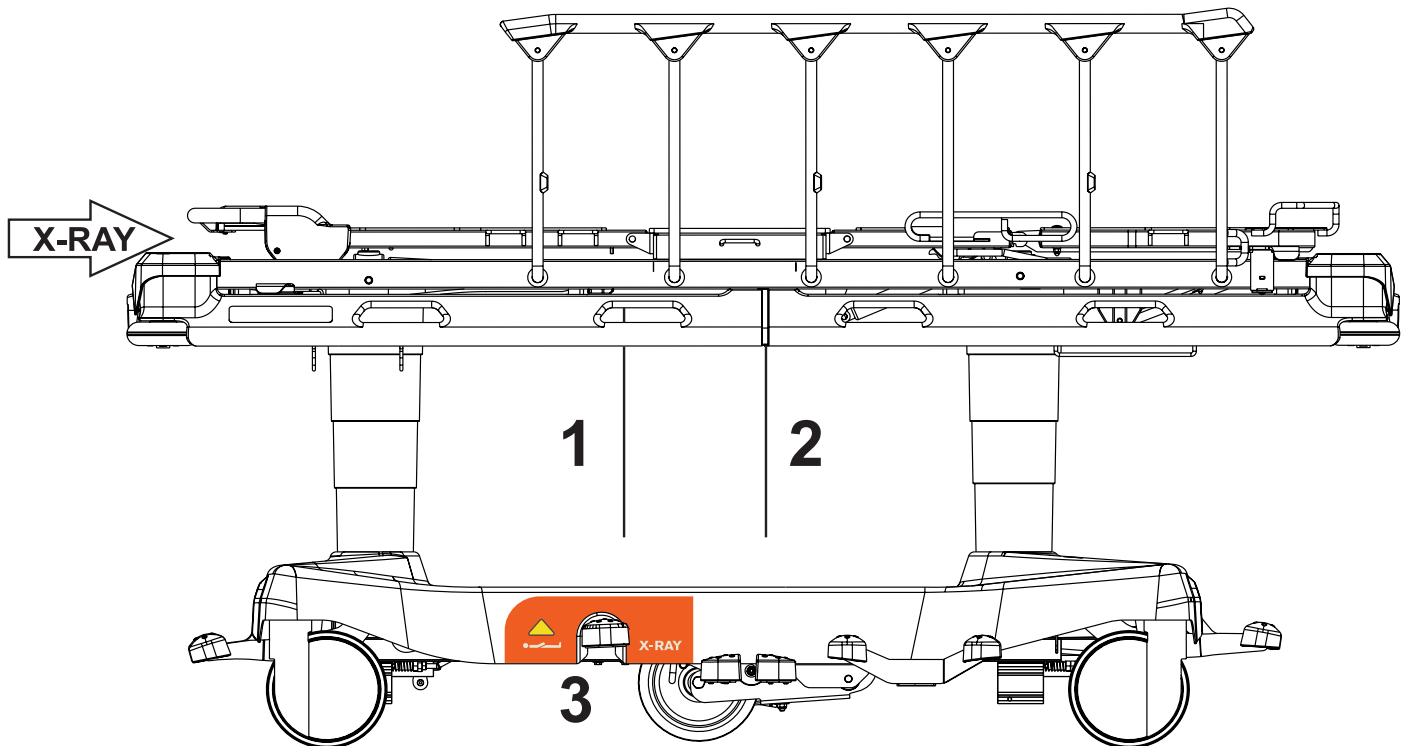
Fig. Sprint 100 with 4-part Mattress Support Platform (equipped with X-Ray Cassette Holder)

1. Strip indicating where the inserted X-Ray Cassette Holder ends (Standard Position)
2. Strip indicating where the inserted X-Ray Cassette Holder ends (The Most Remote Position)
3. Label indicating the bed is intended for X-Ray Examination
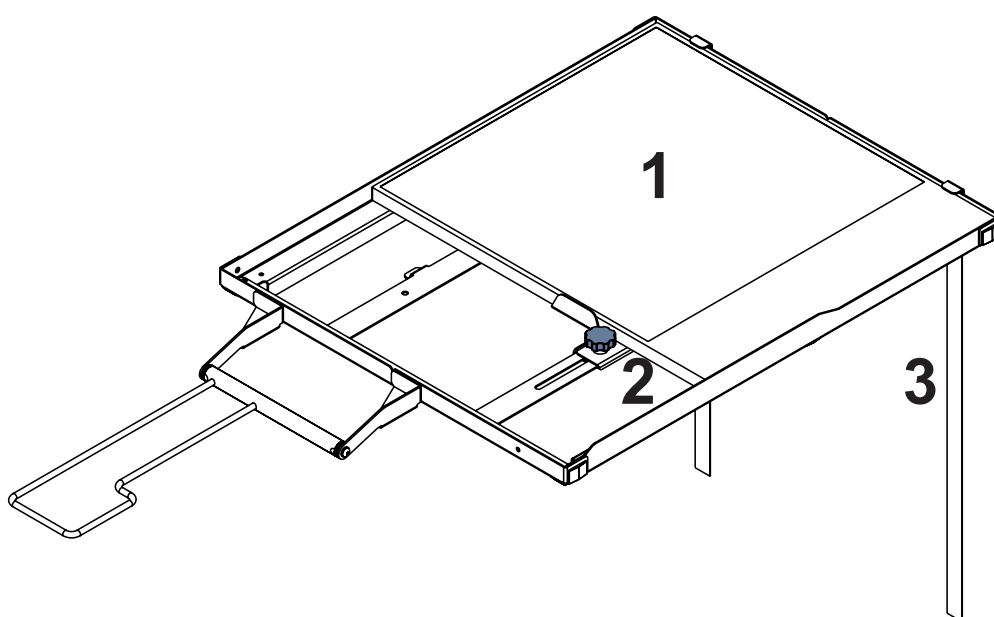
Adjustable X-Ray Cassette Holder

This X-Ray Cassette Holder can be adjusted for the x-ray cassettes with length from 30 cm to 47 cm.

To adjust this X-Ray Cassette Holder for a length of suitable x-ray cassette:
► adjust the Adjusting element (**2**) by turning.

1. X-ray cassette
2. Adjusting element
3. Strip indicating where the X--Ray Cassette Holder ends

Fig. Adjustable X-Ray Cassette Holder

Fig. Fixed X-Ray Cassette Holder
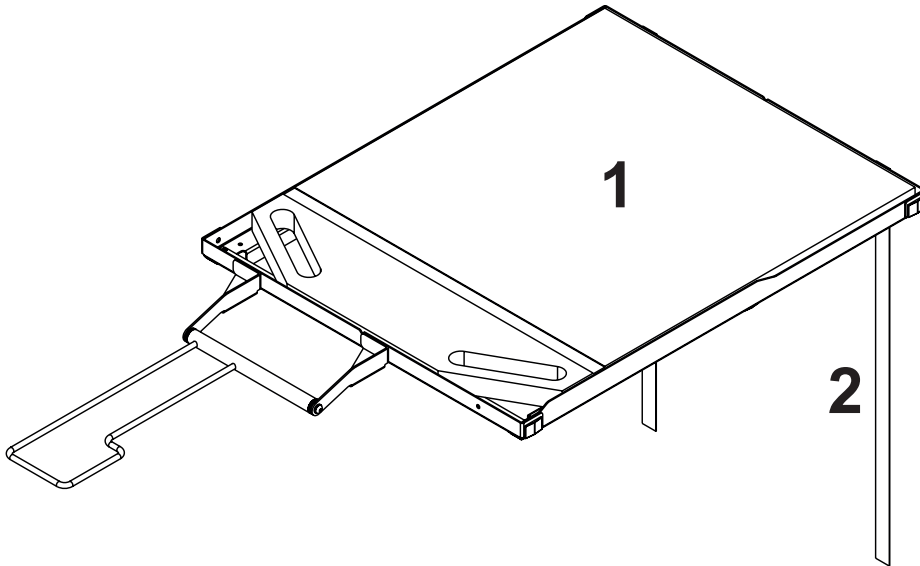
Fixed X-Ray Cassette Holder

This X-Ray Cassette Holder can be used for the x-ray cassettes with length 58 cm.

1. X-ray cassette
2. Strip indicating where the X-
-Ray Cassette Holder ends

Positions of the X-Ray Cassette Holder

Both X-Ray Cassette Holders can be fixed in 4 positions under the Backrest and both of them can be pushed to the most remote position without restriction of the Backrest adjustment during X-Ray Examination. In the case of the Sprint 100 with 2-part Mattress Support Platform the both X-Ray Cassette Holders can be adjusted also under the Foot section without fixation or both of them can be pushed to the most remote position.

Standard Position

Prepared X-Ray Cassette Holder is placed in its standard position. In the standard position the X-Ray Cassette Holder is fixed under the Backrest in the first position (arrow on the picture).
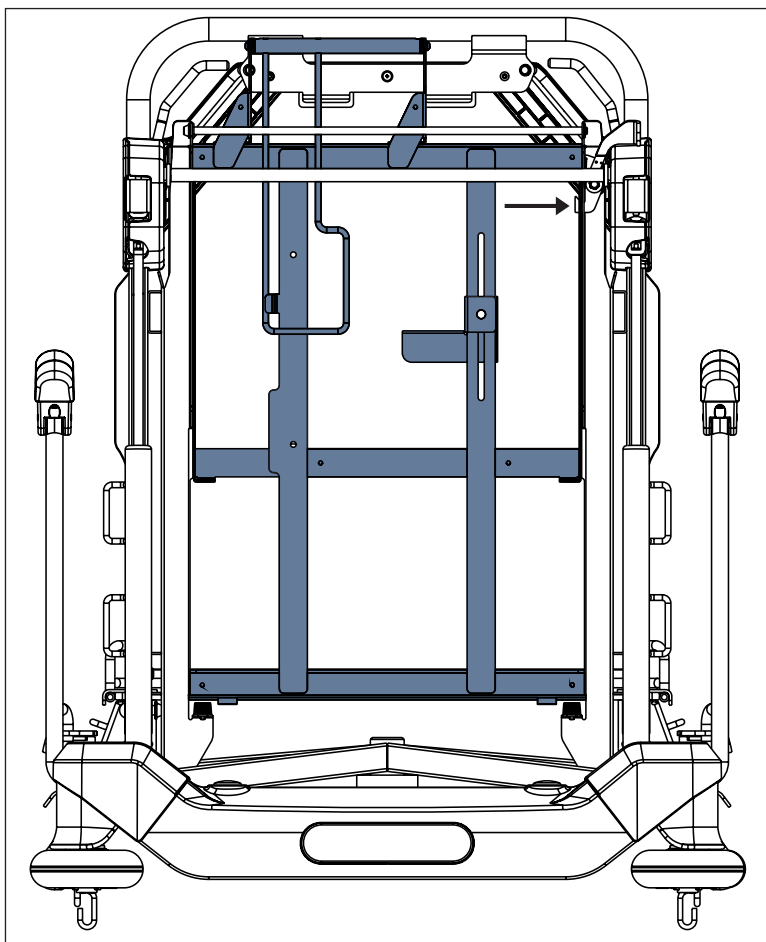
Fig. Standard position of X-Ray Cassette Holder (under the Backrest)

To change position of the X-Ray Cassette Holder:

► Press the catch towards the bed.
► Change position of the X-Ray Cassette Holder.
► Ensure the catch is inserted into the selected position of the X-Ray Cassette Holder.
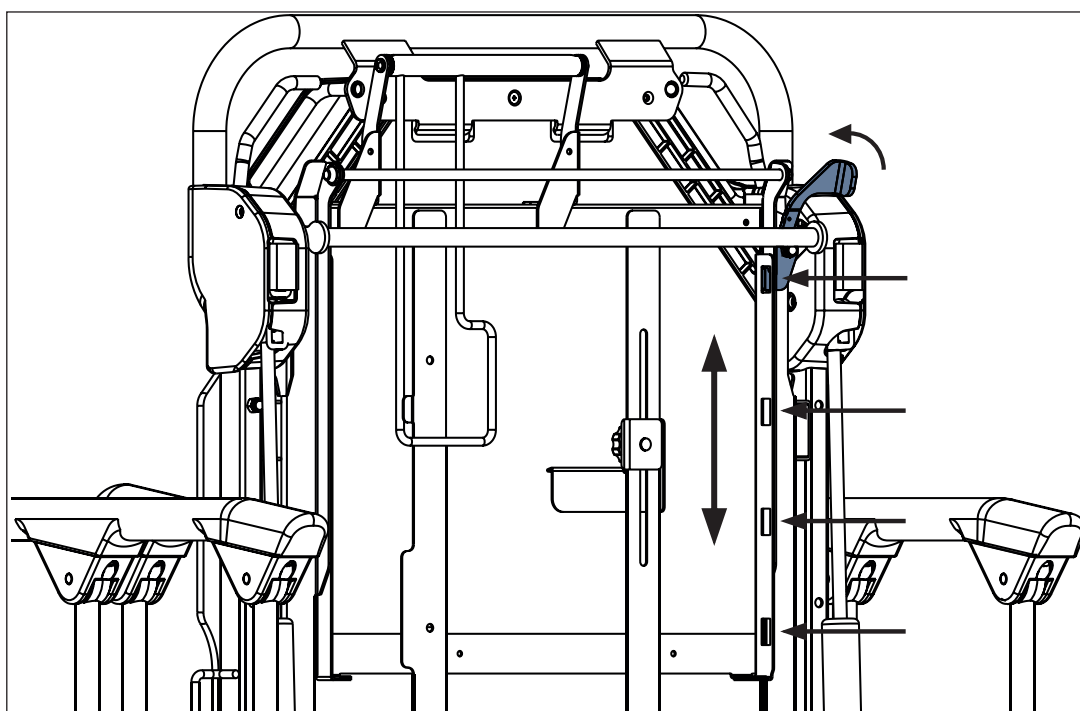
Fig. Catch inserted into the X-Ray Cassette Holder (under the Backrest)
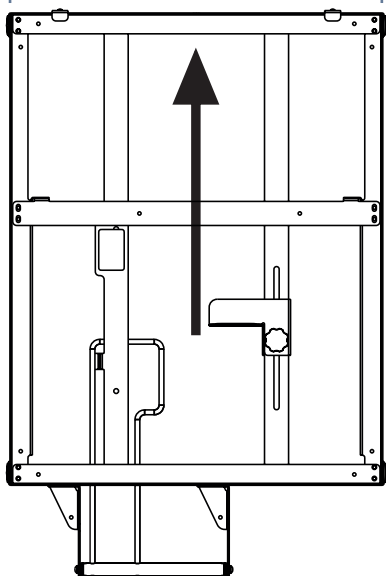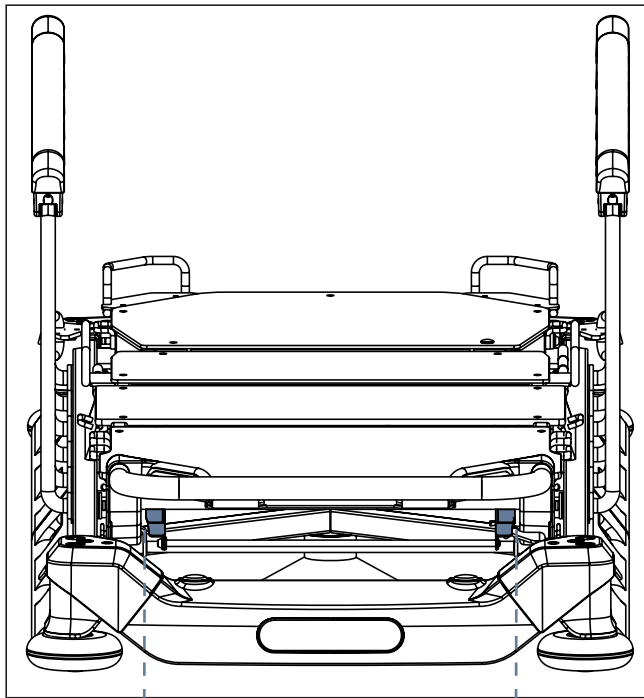
Fig. Adjustable X-Ray Cassette Holder under the Foot section (Sprint 100 with 2-part Mattress Support Platform)

Fig. Adjustable X-Ray Cassette Holder under the Backrest (Sprint 100 with 4-part Mattress Support Platform)

To fix X-Ray Cassette Holder under the Backrest:

► Insert the rightly oriented X-Ray Cassette Holder into the intended holders under the Backrest.
► Ensure the catch is inserted into the selected position of the X-Ray Cassette Holder.

To fix X-Ray Cassette Holder under the Foot section:

► Insert the rightly oriented X-Ray Cassette Holder to the intended holders under the Foot section.
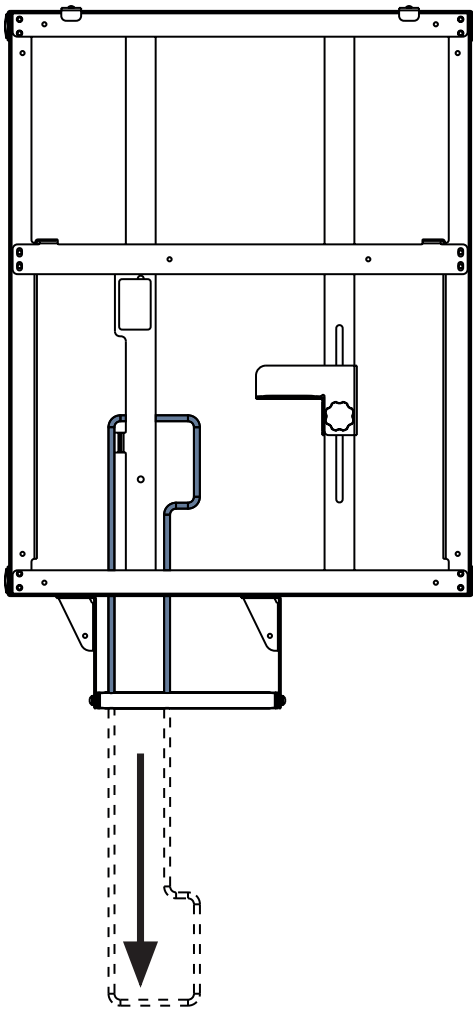
Fig. Extension of Adjustable X-Ray Cassette Holder (tilted position)
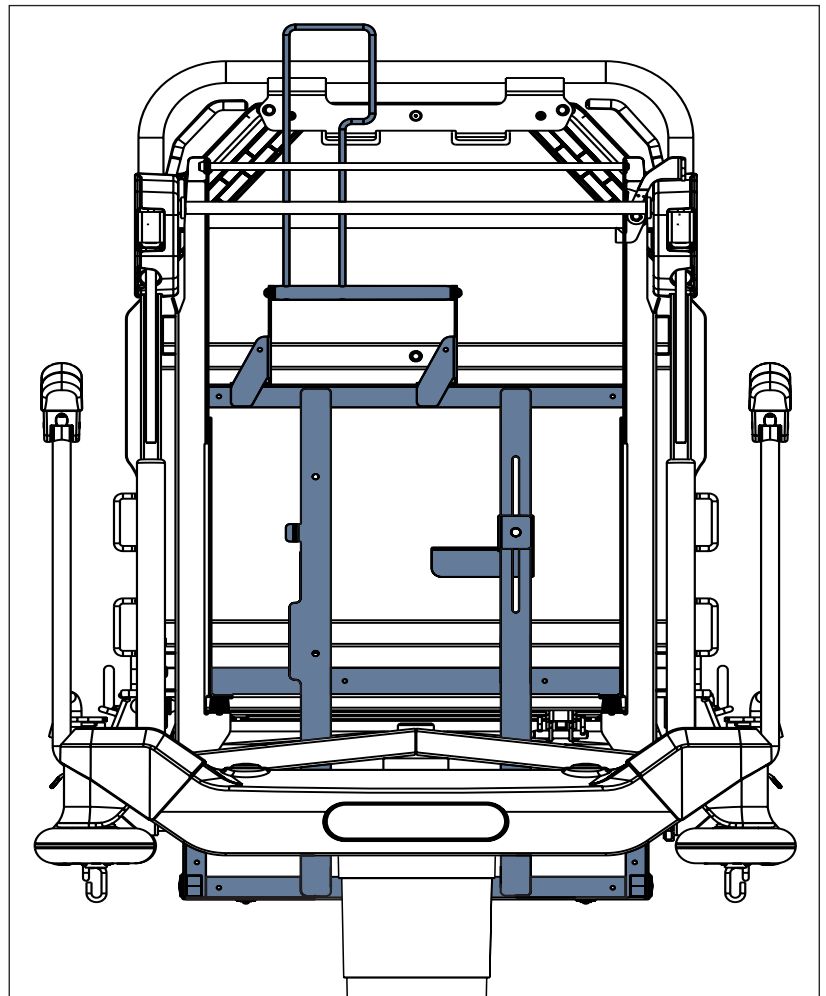
Fig. The most remote position of Adjustable X-Ray Cassette Holder (under the Backrest)

The Most Remote Position

► Tilt the extension of X-Ray Cassette Holder (Adjustable X-Ray Cassette Holder or Fixed X-Ray Cassette Holder) to extend the X-Ray Cassette Holder.
► Push the X-Ray Cassette Holder to the most remote position under the Backrest (or also under the Foot section in the case of Sprint 100 with 2-part Mattress Support Platform).
► Ensure the X-Ray Cassette Holder remains in its place.

18.8.1 Instructions for X-Ray Examination

► Make sure that patient is in the centre of bed.
► Make sure that Backrest is in the lowest position and siderails are raised up.
► Pull out X-Ray Cassette Holder.
► Insert the x-ray cassette (maximum dimensions 58 cm × 46 cm x 2,4 cm for the Fixed X-Ray Cassette Holder and 47 cm x 46 cm x 2,2 cm for the Adjustable X-Ray Cassette Holder) into the X-Ray Cassette Holder in the horizontal position. If the x-ray cassette has length from 30 cm to 47 cm, fix it with the adjusting element in the case of the Adjustable X-Ray Cassette Holder.
► Insert back the X-Ray Cassette Holder with x-ray cassette to the intended position under the Backrest (or also under the Foot section in the case of Sprint 100 with 2-part Mattress Support Platform).
► Adjust parameters of the x-ray device and do the image.
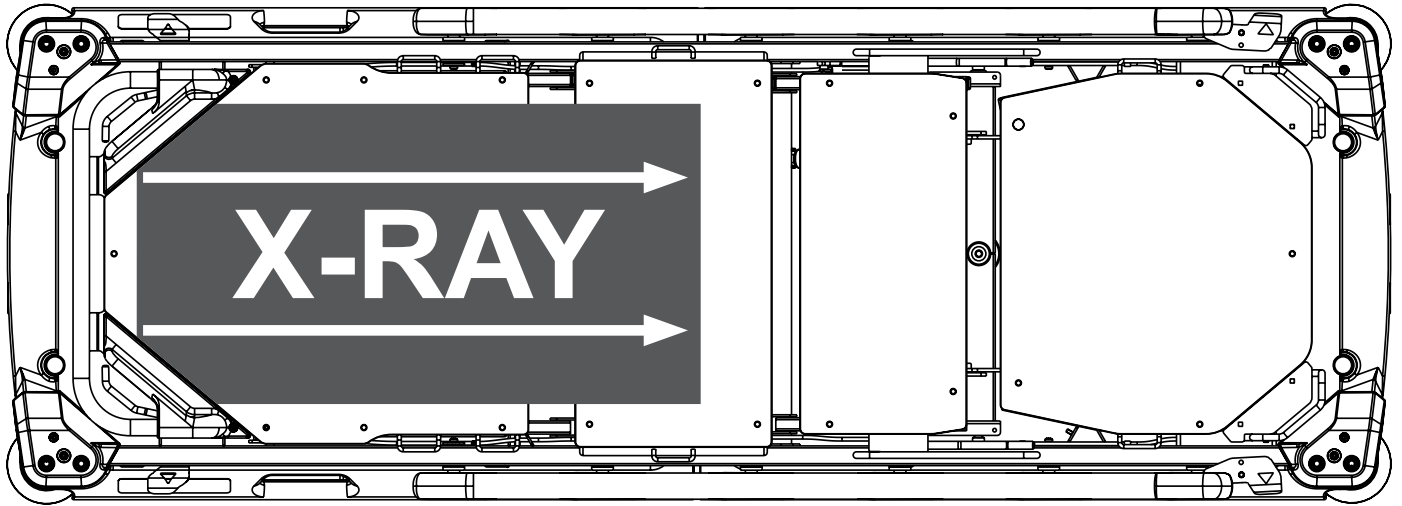
Fig. *Scope of the X-Ray Examination under the Backrest (Sprint 100 with 4-part Mattress Support Platform)*
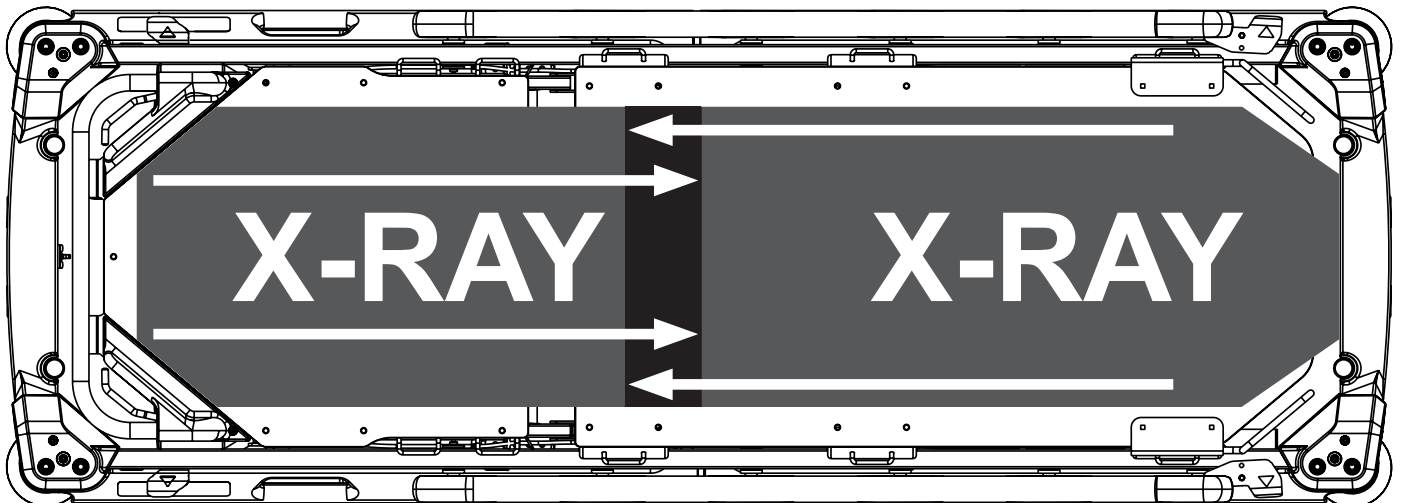
Fig. *Scope of the X-Ray Examination under the Backrest and under the Foot section (Sprint 100 with 2-part Mattress Support Platform)*

Scope of the X-Ray Examination (Sprint 100 with 2-part Mattress Support Platform)

It is possible to perform the X-Ray Examination under all parts of the Mattress Support Platform of the Sprint 100 with 2-part Mattress Support Platform because the both X-Ray Cassette Holders can be placed under the Backrest or under the Foot section.

19 Cleaning/Disinfection

⚠️ **WARNING!**
Risk of injury due to incorrect preparation!
►   Ensure pedals will not be pressed accidentally during cleaning.
►   **Ensure the Sprint 100 with scales is disconnected from the mains before cleaning the Sprint 100 with scales.**

⚠️ **WARNING!**
If oil leaks from hydraulic units or gas springs contact the manufacturer´s service department!

⚠️ **WARNING!**
Use only a damp cloth or a wet wipe to clean the Power Supply Cord, Adaptor and the place of connection of the Adaptor to the Power Supply Cord!

⚠️ **CAUTION!**
Material damage due to incorrect cleaning/disinfection!
►   Do not use washing tunnels to clean the bed.
►   Do not use pressure or steam cleaners.
►   Follow the instructions and observe the dosages recommended by the manufacturer.
►   Ensure that disinfectants are selected and applied exclusively by qualified hygiene experts.
►   Respect used materials during cleaning and desinfection! For information see the following table.
►   **Check if used cleaning agents and disinfectants are compatible with materials that the product consists of! For information see the following table.**

BED COMPONENTS THAT ARE INTENDED TO BE CLEANED Do not clean what is not mentioned in this column!	MATERIALS (SURFACES OF THE MENTIONED BED COMPONENTS) Competent user is responsible for check if used cleaning agents and disinfectants are compatible with mentioned materials!
Bed ends (Head end and Foot end)	Polypropylene (PP) + Lacquered steel
Siderails	Polypropylene (PP) + Lacquered steel
Mattress support platform cover (Backrest)	High Pressure Laminate (HPL)
Mattress support platform cover (Thighrest/Foot section)	High Pressure Laminate (HPL)
Mattress support platform cover (Calfrest)	only Sprint 100 with 4-part mattress support platform: High Pressure Laminate (HPL)
Seat section	only Sprint 100 with 4-part mattress support platform: High Pressure Laminate (HPL)
Castors	Polypropylene (PP)
Castor control levers, lifting levers with pedals, lowering levers with pedals	Polyamide (PA6) + Lacquered steel
Frame of the mattress support platform	Lacquered steel
Column covers	Polypropylene (PP)
Undercarriage cover	Acrylonitrile butadiene styrene (ABS)
Corner covers	Polypropylene (PP)
Covers of mattress support platform sides	Polypropylene (PP)
Corner bumpers	Polypropylene (PP)
Labels	BO319-transfer PET white top / S8002 / HF140 with lamination PP20 matt transparent
Accessory rails	Lacquered steel + Stainless steel
Fixed handles, Foldable handles	Lacquered steel
Foldable infusion stands	Lacquered steel + Stainless steel + Polypropylene (PP)
Power Supply Cord (only Sprint 100 with scales)	Thermoplastic Polyurethane (TPU)
Scales Control Panel (only Sprint 100 with scales)	Autotex film + Acrylonitrile butadiene styrene (ABS)
Scales System LW20 Boxes (only Sprint 100 with scales)	GWplast
Cables (only Sprint 100 with scales)	Polyvinyl chloride (PVC)

For safe and gentle cleaning:

► Do not use any strong acids or bases (optimum pH range 6 - 8).
► Exclusively use detergents that are suitable for cleaning medical equipment.
► Do not use abrasive powders, steel wool, or other materials and cleaning agents that might damage the mattress replacement system.
► Never use any corrosive or caustic detergents.
► Never use detergents that deposit calcium carbonate.
► Never use detergents with solvents that might affect the structure and consistency of the plastics (benzene, toluene, acetone, etc.).
► Observe local directives regarding infection control.
► Make sure any cleaning agent used is approved by:
  ■ the facility in which the mattress replacement system is to be used.
  ■ by the environmental protection agency of the country in which the mattress replacement system is to be used.

19.1 Cleaning (Sprint 100)

Prepare for cleaning as follows:

► Put the Mattress Support Platform in the highest position.
► Adjust the Backrest and Thighrest/Foot section so that the reverse sides are accessible.
► Move the bed to the location where it will be cleaned.
► Lock the brakes on the bed.

19.1.1 Cleaning before Changing Patients

Clean the following bed parts:

■ All control elements for adjusting the bed
■ All handles
■ Bed ends
■ Siderails (in highest position)
■ Freely accessible mattress surface
■ Accessory rails

19.1.2 Daily Cleaning

Clean the following bed parts:

■ All control elements for adjusting the bed
■ All handles
■ Bed ends
■ Siderails (in highest position)
■ Freely accessible mattress surface
■ Accessory rails
■ All Mattress Support Platform covers
■ Plastic undercarriage covers
■ Column covers
■ Mattress on all sides
■ Freely accessible metal parts of Mattress Support Platform
■ Infusion stand sleeve fitting
■ Bumpers
■ Castors
■ Brakes

19.1.3 Complete Cleaning and Disinfection

Clean the following bed parts:

- All control elements for adjusting the bed
- All handles
- Bed ends
- Siderails (in highest position)
- Freely accessible mattress surface
- Accessory rails
- All Mattress Support Platform covers
- Plastic undercarriage covers
- Column covers
- Mattress on all sides
- Freely accessible metal parts of Mattress Support Platform
- Infusion stand sleeve fitting
- Bumpers
- Castors
- Brakes

20 Troubleshooting (Sprint 100 without scales)

Error/Fault	Cause	Solution
Faulty Mattress Support Platform Height Adjustment	Obstacle on the undercarriage cover.	Remove the obstacle.
	Obstacle under the pedals.	Remove the obstacle.
	Faulty pedal.	Notify the manufacturer´s service department.
Lowering Backrest from the upright position not possible	Obstacle under the Backrest or in the drive mechanism.	Remove the obstacle
	Backrest Release Handle is defective.	Notify the manufacturer´s service department.
Adjusting Siderails not possible	Obstacle in the Siderail Release Mechanism.	Remove the obstacle.
	Siderail Release Mechanism is defective.	Notify the manufacturer´s service department.
Faulty brakes	Obstacle blocking brakes mechanically.	Remove the obstacle.
	The brake mechanism is defective.	Notify the manufacturer´s service department.

21 Troubleshooting (Sprint 100 with scales)

Error/Fault	Cause	Solution
Faulty Mattress Support Platform Height Adjustment	Obstacle on the undercarriage cover.	Remove the obstacle.
	Obstacle under the pedals.	Remove the obstacle.
	Faulty pedal.	Notify the manufacturer´s service department.
Lowering Backrest from the upright position not possible	Obstacle under the Backrest or in the drive mechanism.	Remove the obstacle.
	Backrest Release Handle is defective.	Notify the manufacturer´s service department.
Adjusting Siderails not possible	Obstacle in the Siderail Release Mechanism.	Remove the obstacle.
	Siderail Release Mechanism is defective.	Notify the manufacturer´s service department.
Faulty brakes	Obstacle blocking brakes mechanically.	Remove the obstacle.
	The brake mechanism is defective.	Notify the manufacturer´s service department.
Bed Exit Alarm Monitoring cannot be activated.	Sprint 100 with scales is disconnected from the mains.	Connect Sprint 100 with scales to the mains.
Scales and Bed Exit Alarm Monitoring Control Panel indicates no battery.	Incorrectly inserted batteries.	Replace the 4 batteries correctly.
Negative weight value is displayed on the display.	No Zeroing was performed.	Zero the scales.
Stabilized Scales Icon is flashing all the time.	Scales are not stabilized.	Disconnect Sprint 100 with scales from the mains and do not touch the Sprint 100 with scales.
Indicator of the bed disconnected from the mains is lit all the time.	Power Supply Cord is disconneted from the mains or from the Sprint 100 with scales.	Ensure the Sprint 100 with scales is correctly connected to the mains power.
BED EXIT WAITING is shown on the display.	Insufficient weight on the mattress support platform of Sprint 100 with scales is detected.	Place patient on the mattress support platform before activation of the Bed Exit Alarm Monitoring. Minimum patient weight for Bed Exit Alarm Monitoring is 35kg.

21.1 Fault Codes

Fault Code (according to the starting letter)	Fault Type
A	Keyboard fault (It can also be caused by a long press on a button of the Control Panel.)
B	Fault of the scales system hardware
F	Scales system fault

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21.2 Pop-up windows

Status (Pop-up window)	Meaning	How to change the status
	Operator activates the Bed Exit Alarm Monitoring when battery is low.	Replace the 4 batteries and activate the Bed Exit Alarm Monitoring.
	Operator activates the Bed Exit Alarm Monitoring when battery is critically discharged or disconnected.	Replace the 4 batteries and activate the Bed Exit Alarm Monitoring.
PLUG IN TO ENABLE BEA	Sprint 100 with scales is disconnected from the mains when operator turns on the Bed Exit Alarm Monitoring.	Connect Power Supply Cord to the mains and activate the Bed Exit Alarm Monitoring.
BEA WITH LOW BATTERY	Battery becomes low (or bad) during activated Bed Exit Alarm Monitoring.	Connect Power Supply Cord to the mains.
BED IS UNPLUGGED BEA IS DEACTIVATED	Bed Exit Alarm Monitoring is activated and Sprint 100 with scales becomes disconnected from the mains.	Connect Power Supply Cord to the mains.

Status (Pop-up window)	Meaning	How to change the status
	Scales fault (fault number starts with letter **F**).	Contact service department approved by manufacturer.
	Fault of the communication between scales system components.	Contact service department approved by manufacturer.
	Fault of the Scales and Bed Exit Alarm Monitoring Control Panel. This fault can be caused by an object pushing on the keyboard or by a long press on a button of the Control Panel lasting more than 60s or by the damaged keyboard.	Contact service department approved by manufacturer if cause of this fault cannot be removed from the keyboard.
	Critical Fault.	There is a fault number starting with letter A or B or F under the warning triangle shown on the display. Contact service department approved by manufacturer.
OVERLOAD	Sprint 100 with scales is overloaded.	Remove overload!

22 Maintenance (Sprint 100 without scales)

⚠ **WARNING!**
Risk of injury when working on the bed!
► Ensure that the castors are locked prior to installation, putting into service, maintenance and deinstallation.

⚠ **WARNING!**
Risk of injury due to defective bed!
► Have a defective bed repaired immediately.
► If the defect cannot be repaired, do not use the bed.

⚠ **CAUTION!**
Material damage due to incorrect maintenance!
► Ensure that maintenance is performed exclusively by manufacturer´s customer service or by authorised service personnel certified by the manufacturer.
► If the defect cannot be repaired, do not use the bed.

LINET ® recommends attaching the maintenance plaque to the bed.

22.1 Regular maintenance

► Check regularly movable parts for wear.
► Perform regularly visual check of the product (with delivery note if necessary).
► Ask service department of the manufacturer for addition of the original spare parts if some product parts are missing.
► Ask service department of the manufacturer for replacement of any damaged product parts by the original spare parts.
► Check regularly that all accessories are working properly.
► Replace damaged accessories immediately.

22.2 Spare Parts

The serial label is located on the frame of the mattress support platform. The serial label contains information for claims and ordering replacement parts.

Information about spare parts is available from:
■ Manufacturer´s customer service
■ Sales department

22.3 Safety Technical Checks

⚠ **WARNING!**
Risk of injury due to incorrect safety technical checks!
► Ensure that safety technical checks are performed exclusively by manufacturer´s customer service or by authorised service personnel certified by the manufacturer.
► Ensure that the safety technical checks are recorded in the service and maintenance log.

Safety technical check of the medical bed must be performed at least once every 12 months.

The procedure for performing the safety technical check is stipulated in EN 62353:2014.

NOTE On request, the manufacturer will provide service documentation (e.g. circuit diagrams, component part lists, descriptions, calibration instructions etc.) for service personnel for the repair of the equipment designated by the manufacturer as repairable by service personnel.

23 Maintenance (Sprint 100 with scales)

⚠️ **WARNING!**
Risk of injury when working on the bed!
► Ensure that the bed is disconnected from the mains power prior to installation, putting into service, maintenance and deinstallation.
► Ensure that the castors are locked prior to installation, putting into service, maintenance and deinstallation.
► No part of the Sprint 100 ME equipment shall be serviced or maintained while in use with a patient.

⚠️ **WARNING!**
Risk of injury due to defective bed!
► Have a defective bed repaired immediately.
► If the defect cannot be repaired, do not use the bed.

⚠️ **CAUTION!**
Material damage due to incorrect maintenance!
► Ensure that maintenance is performed exclusively by manufacturer´s customer service or by authorised service personnel certified by the manufacturer.
► If the defect cannot be repaired, do not use the bed.

LINET ® recommends attaching the maintenance plaque to the bed.

23.1 Regular maintenance

► Check regularly movable parts for wear.
► Perform regularly visual check of the product (with delivery note if necessary).
► Ask service department of the manufacturer for addition of the original spare parts if some product parts are missing.
► Ask service department of the manufacturer for replacement of any damaged product parts by the original spare parts.
► Check that the batteries are working properly. Disconnect the bed from the mains power to check signalisation of battery indicator according to the instructions for use.
► Have the batteries replaced if they are not working properly.
► Check regularly that all accessories are working properly.
► Replace damaged accessories immediately.

23.2 Spare Parts

The serial label is located on the frame of the mattress support platform. The serial label contains information for claims and ordering replacement parts.

Information about spare parts is available from:
■ Manufacturer´s customer service
■ Sales department

23.3 Safety Technical Checks

⚠️ **WARNING!**
Risk of injury due to incorrect safety technical checks!
► Ensure that safety technical checks are performed exclusively by manufacturer´s customer service or by authorised service personnel certified by the manufacturer.
► Ensure that the safety technical checks are recorded in the service and maintenance log.

Safety technical check of the medical bed must be performed at least once every 12 months.

The procedure for performing the safety technical check is stipulated in EN 62353:2014.

NOTE On request, the manufacturer will provide service documentation (e.g. circuit diagrams, component part lists, descriptions, calibration instructions etc.) for service personnel for the repair of ME equipment designated by the manufacturer as repairable by service personnel.

24 Disposal (Sprint 100 without scales)

24.1 Environment Protection

The company LINET® is aware of the importance of environmental protection for future generations. Within this company the environmental management system is applied in accordance with the internationally agreed standard ISO 14001. The compliance with this standard is annually tested by the external audit executed by an authorised company.

Materials used in this product are not environmentally hazardous. LINET® products meet valid requirements of national and European legislation in the areas of **RoHS** and **REACH**, so they do not contain any prohibited substances in excess quantities.
None of the wooden parts is made of tropical wood (such as mahogany, rosewood, ebony, teak etc.) or made of timber from the Amazon region or from similar rainforests. Product noise (sound pressure level) meets requirements of the regulations for the protection of public health against undesirable effects of noise and vibration in protected interior spaces of buildings (according to standard IEC 60601-2-52). Used packaging materials are in accordance with requirements of the Packaging Act (**Zákon o obalech**).
For disposal of packaging materials after installation of products contact your sales representative or manufacturer´s customer service about the possibility of a free take-back of packaging through an authorized company (more details on **www.linet.cz**).

24.2 Disposal

24.2.1 Within Europe

To dispose of the equipment:

►   The equipment must not be disposed of as household waste.
►   Dispose of this equipment at designated collection points or take-back points.

LINET® participates in a collective system with take-back company REMA System (see **www.remasystem.cz/sberna-mista/**).
By bringing electric and electronic equipment to a take-back point, you participate in recycling and you save primary raw material resources while protecting your environment from effects of unprofessional disposal.

24.2.2 Outside Europe

►   Dispose of the product or its components in accordance with local laws and regulations!
►   Hire an approved waste disposal company for disposal!

25 Disposal (Sprint 100 with scales)

25.1 Environment Protection

The company LINET® is aware of the importance of environmental protection for future generations. Within this company the environmental management system is applied in accordance with the internationally agreed standard ISO 14001. The compliance with this standard is annually tested by the external audit executed by an authorised company. Based on the Directive No. 2002/96/EC (Directive **WEEE** - Waste, Electric and Electronic Equipments) the company LINET, s. r. o. is registered in the List of Electric and Electronic Equipment Producers (**Seznam výrobců elektrozařízení**) on the Ministry of the Environment of the Czech Republic (Ministerstvo životního prostředí).

Materials used in this product are not environmentally hazardous. LINET® products meet valid requirements of national and European legislation in the areas of **RoHS** and **REACH**, so they do not contain any prohibited substances in excess quantities. None of the wooden parts is made of tropical wood (such as mahogany, rosewood, ebony, teak etc.) or made of timber from the Amazon region or from similar rainforests. Product noise (sound pressure level) meets requirements of the regulations for the protection of public health against undesirable effects of noise and vibration in protected interior spaces of buildings (according to standard IEC 60601-2-52). Used packaging materials are in accordance with requirements of the Packaging Act (**Zákon o obalech**). For disposal of packaging materials after installation of products contact your sales representative or manufacturer´s customer service about the possibility of a free take-back of packaging through an authorized company (more details on **www.linet.cz**).

25.2 Disposal

The main objective of the obligations arising from the European Directive No. 2012/19/EU on Waste, Electric and Electronic Equipments (nationally regulated in Act No. 185/2001 Coll. as amended. On Waste and in Decree of the Ministry of the Environment No. 352/2005 Coll. as amended), is to increase the re-use, material recovery and recovery of electric and electronic equipment at the required level, thereby avoiding the production of waste and thereby avoiding the possible harmful effects of hazardous substances contained in electric and electronic equipment on human health and the environment. LINET® electric and electronic equipments that have a built-in battery or accumulator are designed so that the used batteries or accumulators can be safely removed by LINET® qualified service technicians. There is an information about its type on the built-in battery or accumulator.

25.2.1 Within Europe

To dispose of the electric and electronic equipment:

► The electric and electronic equipment must not be disposed of as household waste.
► Dispose of this equipment at designated collection points or take-back points.

To dispose of the other equipment:

► The equipment must not be disposed of as household waste.
► Dispose of this equipment at designated collection points or take-back points.

LINET® participates in a collective system with take-back company REMA System (see **www.remasystem.cz/sberna-mista/**). By bringing electric and electronic equipment to a take-back point, you participate in recycling and you save primary raw material resources while protecting your environment from effects of unprofessional disposal.

25.2.2 Outside Europe

► Dispose of the product or its components in accordance with local laws and regulations!
► Hire an approved waste disposal company for disposal!

26 Warranty

LINET ® will only be held responsible for the safety and reliability of products that are regularly serviced, maintained and used in accordance with the safety guidelines.

Should a serious defect arise that cannot be repaired during maintenance:

►   Do not continue to use the bed.

This product is covered by a 12-month warranty from the date of delivery. The warranty covers all material and manufacturing-related failures and errors. Failures and errors caused by incorrect use and external effects are not covered. Justified complaints will be fixed free of charge during the warranty period. Proof of purchase, with the date of purchase, is required for all warranty service. Our standard terms and conditions apply.

27 Standards and Regulations

27.1 Sprint 100

Apllied norms:

- **IEC 60601-1**
- **IEC 60601-1-6**
- **ISO 14971**
- **ANSI/AAMI ES60601-1**
- **CAN/CSA C22.2 NO. 60601-1**

27.2 Manufacturer

The manufacturer adheres to a certified quality management system in compliance with the following standards:

- **ISO 9001**
- **ISO 14001**
- **ISO 13485**
- **MDSAP (Medical Device Single Audit Program)**