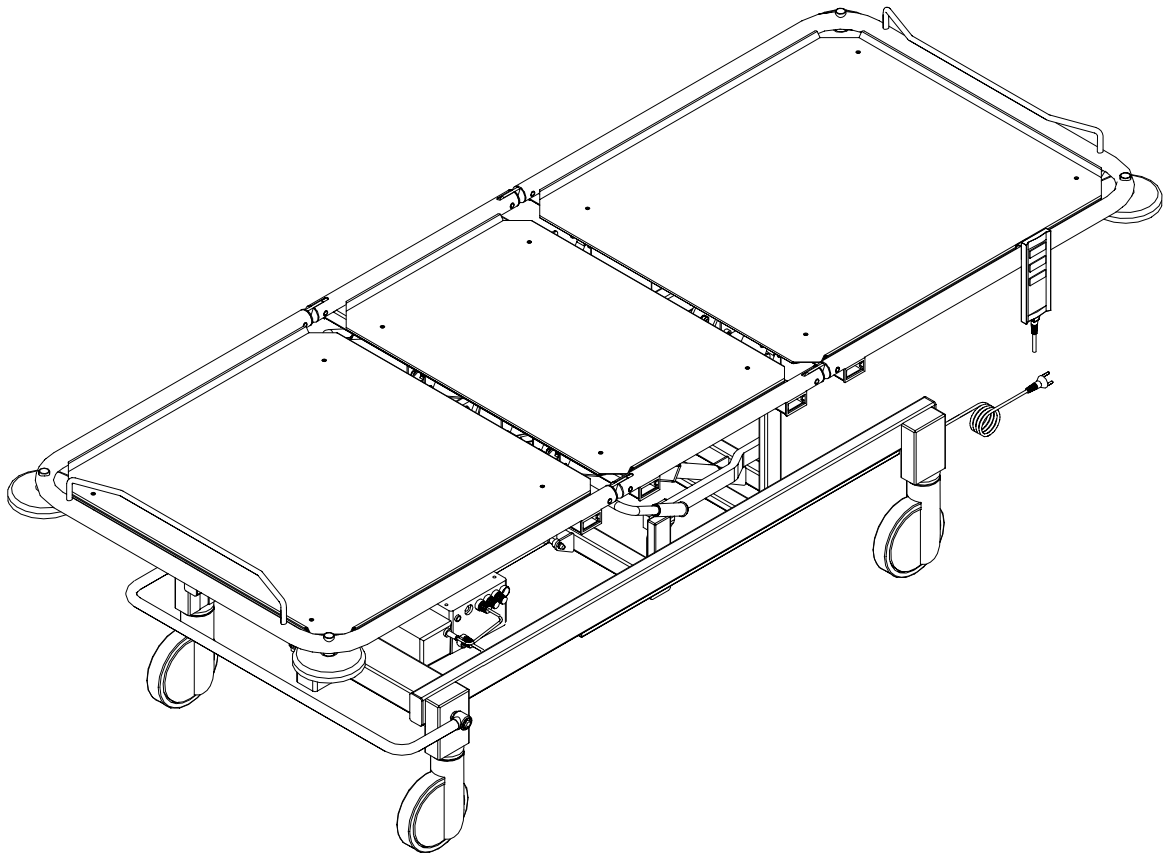
USER AND MAINTENANCE MANUAL

FUTURA PLUS



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MERIVAARA

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CE

1. GENERAL

Dear patient bed owner. The safe and fault-free use and maintenance of the equipment requires careful adherence to these instructions. When mounting accessories to the equipment, the instructions provided with them must be followed closely. Always keep the instructions for accessories together with this manual.

Warnings and observations in this instruction manual are indicated as follows:

WARNING! Please observe in order to ensure patient safety.

NOTE! Please observe in order to avoid causing damage to the equipment or its parts.

Must be lubricated during maintenance and when replacing parts.

- Warnings and Notes are given on page 9, 11, 12, 15, 16, 21 and 36.

The Futura Plus patient bed meets IEC 601-2-38, IEC 601-1-2 (EMC) and SFS-EN 60601-1 standards. The bed is a Class I product in accordance with directive 93/42/EEC (MDD), and bears a CE marking based on this classification.

Intended use

The Merivaara patient bed is intended for use in ICU and long-term treatment wards as well as for specialised applications in emergency and observation wards.

Your Specialist for integrated Medical Furniture and Equipment Systems.

Merivaara products form an integrated furnishing system for clinical, hospital and nursing home enviroments. The comprehensive range of Merivaara products includes high-quality tools and equipment needed in a variety of medical procedures.

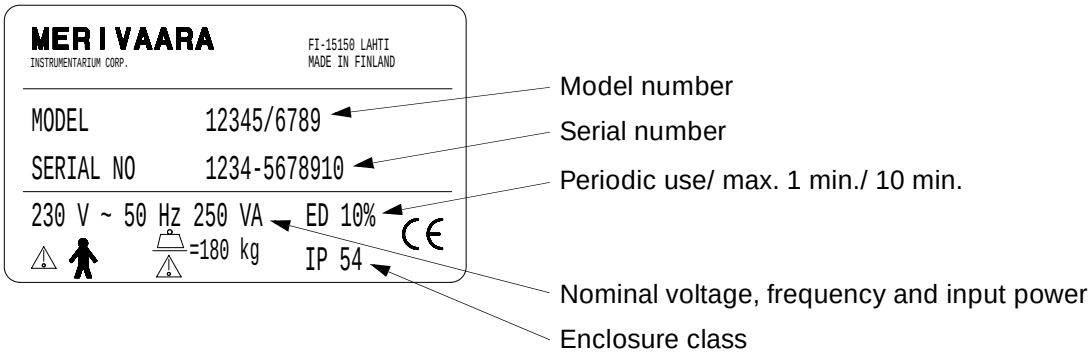
Merivaara products feature flexible design, turn easily into ideal working positions and offer high patient comfort. Daily nursing procedures are readily accommodated by the safe and easy operation of all Merivaara products. The comprehensive selection of (available) accessories make our products ideal for several speciality procedures.

You can get more information on Merivaara products, from our Sales Office. For matters related to equipment servicing, please contact the Merivaara After Sales Department.

2. TECHNICAL SPECIFICATIONS

2.1 Identification plate

The identification plate is located underneath the back section.



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2.1.1 Illustration designations

Protective grounding

Equipotential bonding

AC

B-type connector

Read instructions

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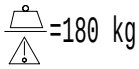

Safe working load (incl. patient, mattress and accessories)

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2.2 Properties and materials

2.2.1 Conditions

Ambient temperature	+10 ... +40 °C
Ambient pressure	700 ... 1060 mbar
Relative humidity	30% ... 75 %
Transport temperature	-10 ... +40 °C
Storage temperature	+10 ... +40 °C
Safe working load (incl. patient, mattress and accessories)	180 kg

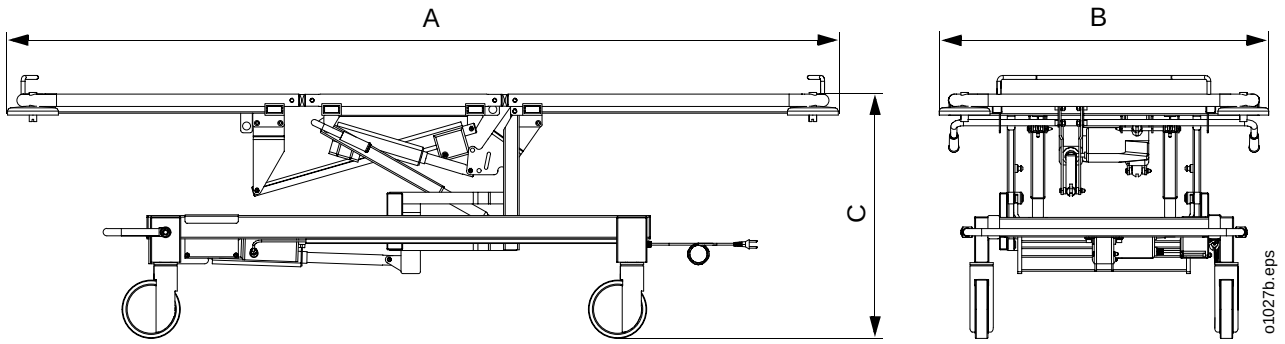
2.2.2 Classification data

Electric shock protection	class I equipment
Degree of electric shock protection	B-type equipment
Watertight protection	watertight equipment (IPX4)
Cleaning and disinfecting	in section 4.1 on page 13
Combustible anaesthetic gas protection	cannot be used together with combustible gases
Function type	periodic use

2.2.3 Dimensions

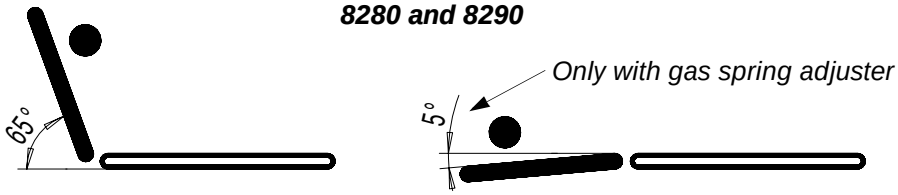
	8280	**8281**	**8290**	**8291**	**8380**	**8381**	**8390**	**8391**	**8490**	**8491**
Mattress bases	2-piece				3-piece					
Weight kg	Depending on the number of bed accessories included: approx. 79-91 kg									
Length (A)	2135 mm									
Width (B)	845 mm		945 mm		845 mm		945 mm			
Height (C)	Without adjusters: 600 mm, with hydraulic adjuster: 415-810 mm and with electric adjuster: 440-830 mm									
Castors	125 mm									

Table 1. Dimensions



2.2.4 Adjustment ranges

8280 and 8290



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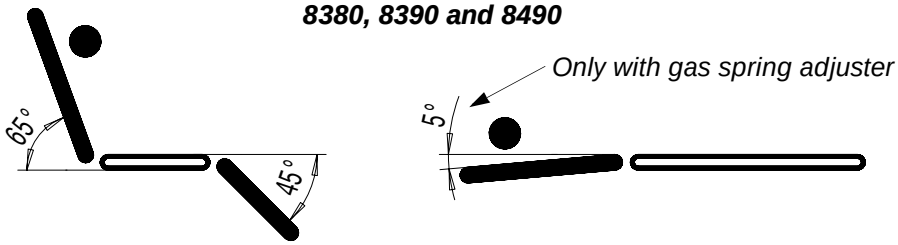
Trendelenburg adjustment	26° (height adjustment range 525 ... 810)
Anti-Trendelenburg adjustment	12° (height adjustment range 575 ... 810)

8281 and 8291

Trendelenburg adjustment	26° (height adjustment range 525 ... 830)
Anti-Trendelenburg adjustment	5° (height adjustment range 440 ... 830)

8380, 8390 and 8490



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Trendelenburg adjuster	26° (height adjustment range 525 ... 810)
Anti-Trendelenburg adjuster	12° (height adjustment range 575 ... 810)
Leg section adjuster	45° (height adjustment range 755 ... 810)

8381, 8391 and 8491

Trendelenburg adjuster	26° (height adjustment range 525 ... 830)
Anti-Trendelenburg adjuster	5° (height adjustment range 440 ... 830)
Leg section adjuster	48° (height adjustment range 765 ... 830)

2.2.5 Surface materials

Surface materials	**FUTURA PLUS**
Epoxy-powder coat, frame parts	X
Paint, base plates	X
Chroming, pedal bar, frame parts	X
ABS (acrylonitrile/butadiene/styrene), storage boxes	X
PP (polypropylene) bumper rollers, rail mounting brackets	X
PA 6 (polyamide) mattress base joint, handles, motors	X
TPE (thermoplastic elastomer) pedal pad	X
PPE/HIPS (modified polyphenylene ether/polystyrene) hand-held control unit	X

3. PRODUCT USE

3.1 Implementation

The patient bed is packaged pre-assembled. Check for damages that may have been caused during transport. If the bed has been in cold temperatures, allow to warm up to room temperature before connecting power. Cardboard packing materials should be recycled. Wood and plastic are energy waste.

3.1.1 Special instructions

WARNING!
Ensure that the power lead is not trapped between the moving parts of the bed, as this may expose or cut the lead. When adjusting the mattress base into the Trendelenburg or anti-Trendelenburg position, ensure that the lead is not caught between the mattress base and base frame. **Damaged power leads can result in electric shock!**

The maximum load capacity of the bed is 180 kg. Only one person may be on the bed when useing electrically controlled adjustments.

Before moving the bed, put the mattress base into the mid-position.

Always move the bed over thresholds (or similar obstacles) with the leg section in front, to keep impacts on the castors and other mechanical parts to a minimum.

Keep the mattress base of unattended beds in the lower position. (IEC 60601-2-38)

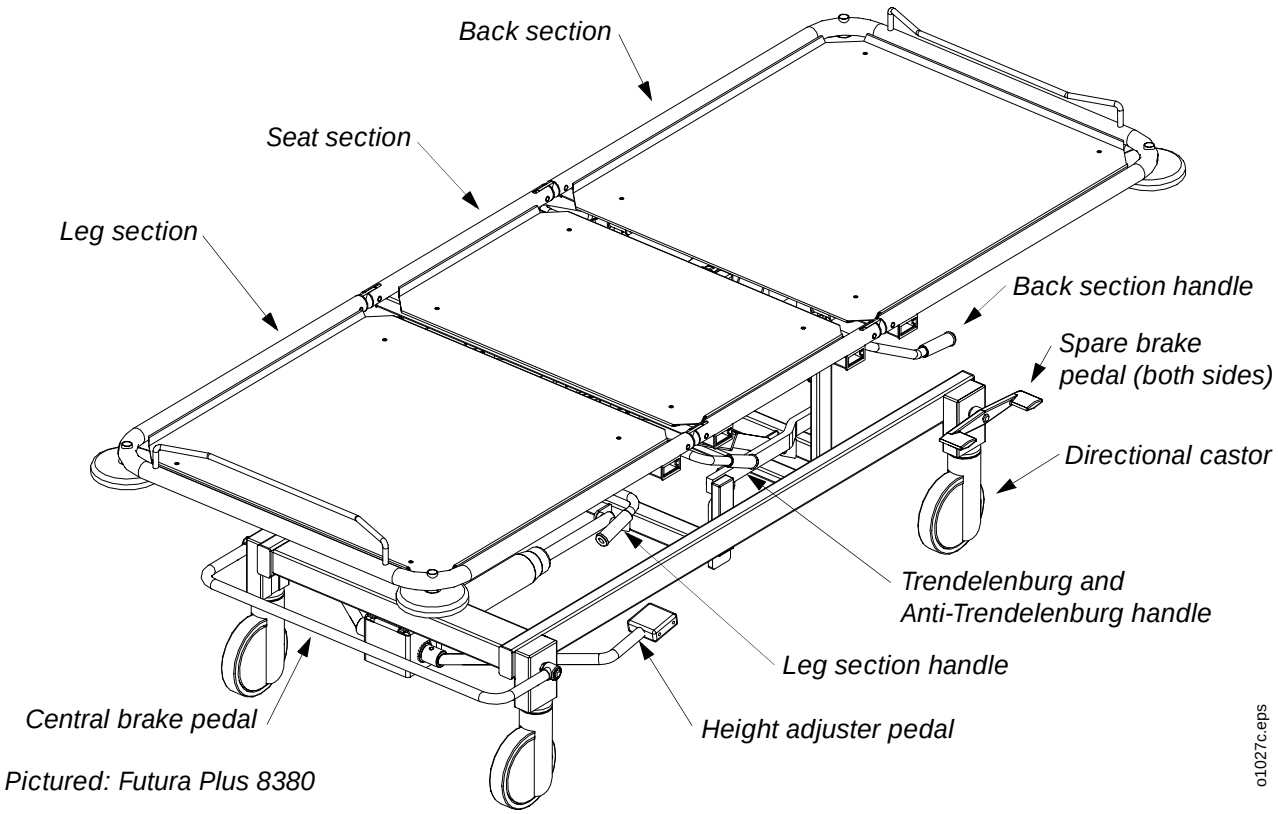
Whenever adjusting the bed, ensure that the patient's fingers, hands or other parts of the body are not caught between the bed and accessories or between the moving parts of the bed.

NOTE!
Do not operate the motors for more than one minute at a time (max. 1 min.). Continuous repetition of movements may overload and damage the motor.

Ensure that the hand-held control unit wire does not get caught between moving parts of the bed, as their movement may expose or cut the wire. An exposed or cut hand-held control unit wire is not life-threatening, as it operates on a 24 V safety voltage. When adjusting the mattress base into the Trendelenburg or anti-Trendelenburg position, ensure that the wire is not caught between the mattress base and base frame.

Use potential equalization set (asseccory 128005102) with patient monitoring equipment.

3.2 Structure and adjustments

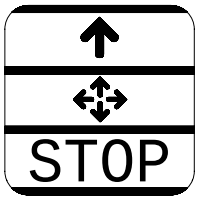


3.2.1 Central braking system and directional castor

When the pedal is up, the directional castor is locked in its steering position.

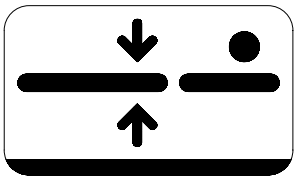
When the pedal is in the middle position, all castors will turn.

When the pedal is down, all wheels will lock.



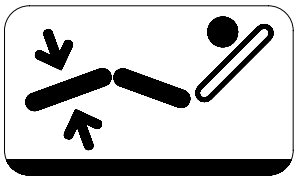
3.2.2 Height adjustment

Pressing the height adjuster pedal down will raise the mattress base.
Lifting the pedal will lower the mattress base.
The adjustment range is 370 mm.



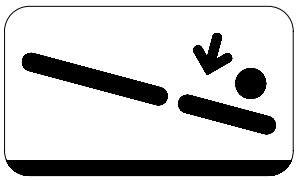
3.2.3 Leg section adjustment

Turn the adjuster bar and support the leg section end tubing with your other hand.

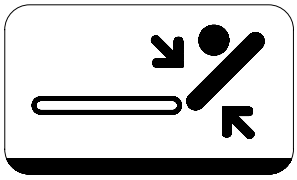


3.2.4 Trendelenburg and anti-Trendelenburg adjustment

Turn the adjuster bar and adjust the leg section trolley end tubing with your other hand.

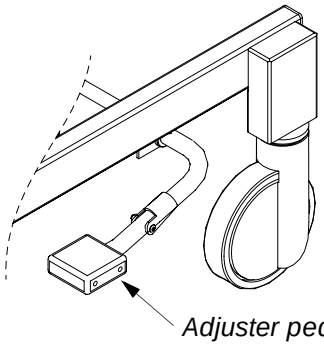


3.2.5 Back section adjustment.



Turn the back section adjuster bar and support the back section end with your other hand
Check the power of the back section adjustment in section 3.2.7 on page 11 as shown.

3.2.6 Back section adjustment with foot pedal

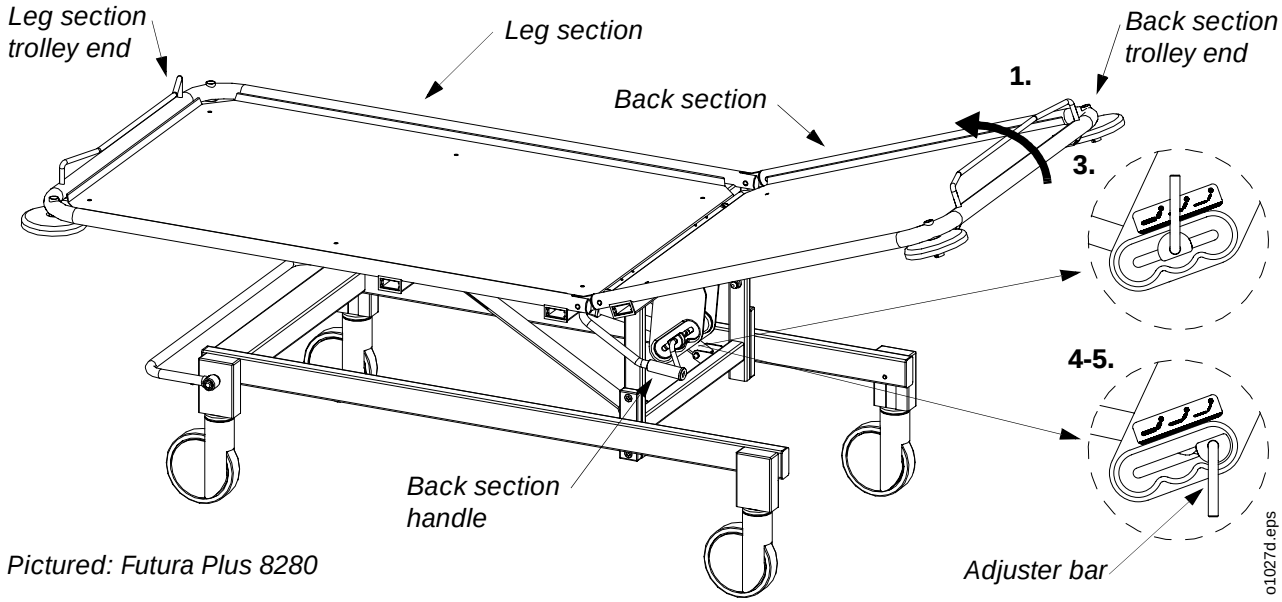


Depress pedal and support the back or leg section end with your free hand.
Check the power of the back section adjustment in section 3.2.7 on page 11 as shown.

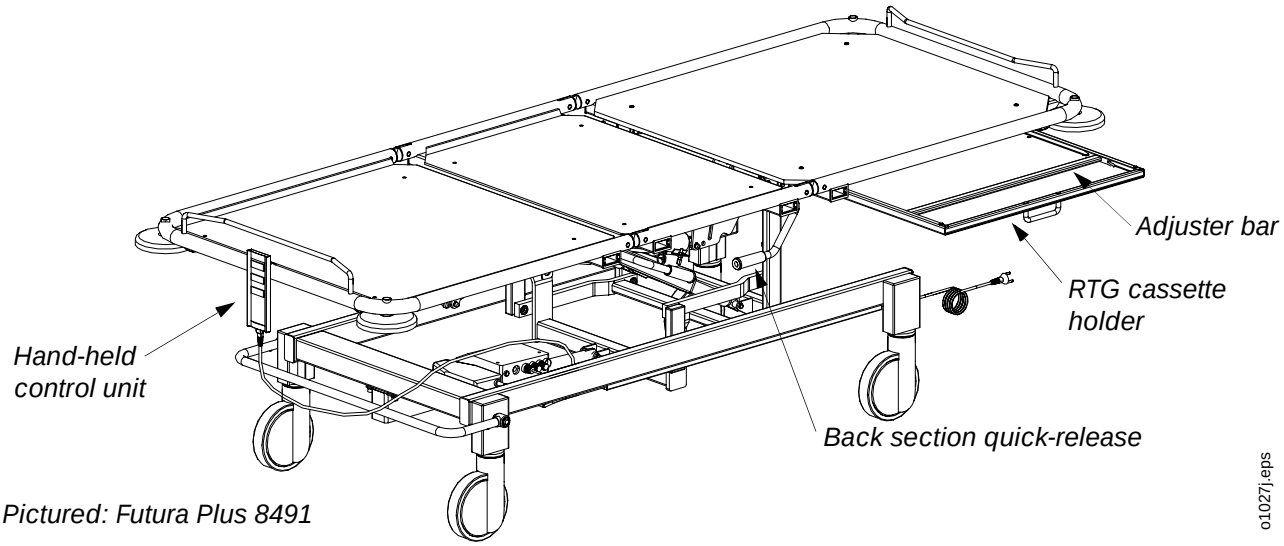
3.2.7 Power adjustment of back section adjustment

1. Bring the back section to a semi-sitting position.
2. Manually support the back section at the mattress base end.
3. Turn the adjuster bar one half turn.
4. Support the back section with your other hand and move the adjuster bar into the desired position.
5. Lock the adjuster bar by turning it one half turn. The adjuster bar should be FULLY lowered, whenever using the bed.

WARNING!The patient must not lean on the back section when adjusting.



Pictured: Futura Plus 8280



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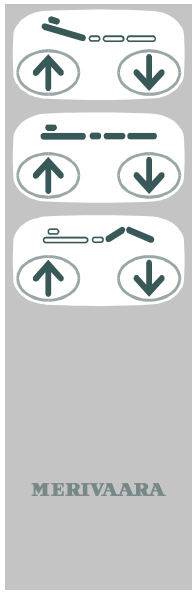
Pictured: Futura Plus 8491

3.2.8 Hand-held control unit operation



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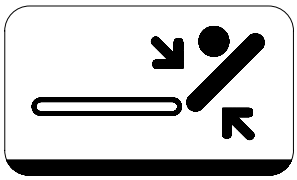
Adjustments are made electrically by pressing the buttons on the hand-held control unit. Press the button of the function you desire. The selected function will continue until you release the button or the outermost position is reached. If desired, you can operate several functions at the same time. If the function is interrupted when doing so, the overload protector has been tripped. Release all buttons and perform each function one at a time.

NOTE! Do not operate the motors for more than one minute at a time. Continuous repetition of movements may overload and damage the motor.

3.2.9 Back section quick-release



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- Hold the back section with your right hand and the red quick-release lever with your left.
- Push the quick-release lever down until the back section can move freely.

WARNING! When using the quick-release lever, you must hold the back section so that it does not drop too quickly.

3.2.10RTG cassette holder

- Move the cassette rack to the side.
- Mount the RTG cassette on the cassette rack and lock it with the adjuster bar.

The bed frame tubing, cassette rack and adjuster bars all have measuring scales aligned with each other, which can be used to correctly place the cassette rack.

4. CLEANING

4.1 Bed cleaning and disinfecting

4.1.1 Bed

4.1.1.1 Cleaning

Remove all accessories. Clean by wiping down with a lightly alkaline detergent (pH 7-8).

4.1.1.2 Disinfecting

Wipe using, for example, a 3% chloramine-based disinfectant (Klorilli) or similar cleaning agent.

4.1.1.3 Drying

Dry thoroughly by wiping down immediately after cleaning or disinfecting.

4.1.2 Mattress

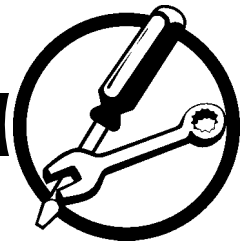
4.1.2.1 Cleaning mattress cover

Wipe down with soap and water. If necessary, machine wash at (max) 60°C. Use normal laundry detergent powder that does not contain biological detergents. Do not use bleach. If dry cleaning, use perchloroethylene. The fabric must be completely dry before storing.

4.1.2.2 Disinfecting mattress cover

A maximum of 0.1 % hypochlorite may be used in the hypochlorite disinfection solution. Disinfection cleaning temperatures and times are as follows: 65 °C: 10 minutes and 71 °C: 3 minutes.

5. MAINTENANCE AND REPAIR



5.1 Preventative maintenance

Mark the date taken into use next to the type badge on the patient bed back section. The date will provide a reference for annual servicing. Remember to mark the patient bed with the date when performing the annual servicing, so that the following service date will not require a separate reminder.

5.1.1 Daily maintenance

- When doing a normal cleaning, give the operating table a quick visual inspection and check for any loose screws or parts, cracks, surface damage or missing parts.
- Perform a monthly inspection of bed function by fully extending and retracting all its adjustments. Make the necessary repairs and adjustments.

5.1.2 Annual maintenance

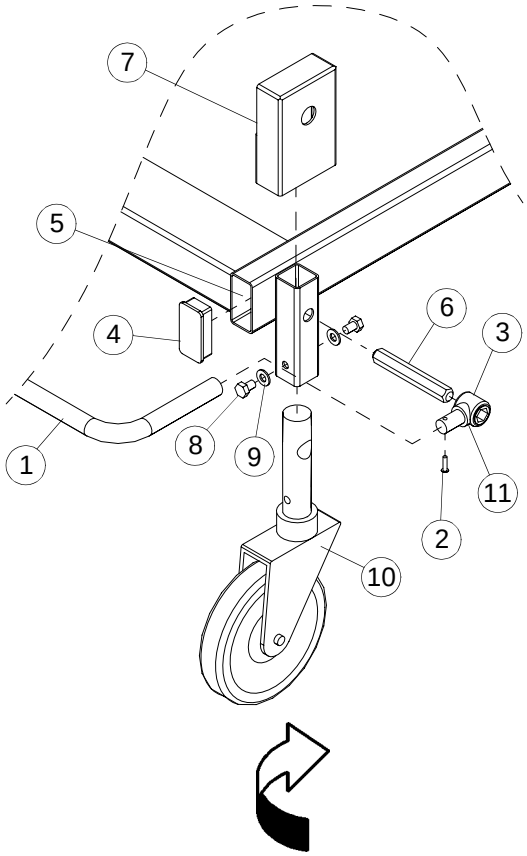
- Clean and lubricate all bed joints and cables with light machine oil.
- Check the condition of gas springs, release levers and cables, and adjust cables, if required.
- Check all table functions by fully extending and retracting them.

5.2 Troubleshooting

Problem	Cause	Repair
Mattress base will not rise.	• Oil level low. • Air in the hydraulic system.	Bleed pump.
Mattress base will not lower properly	• Air in the hydraulic system.	Bleed pump.
Mattress base not maintaining height.	• Faulty valve. • Faulty seal. • Dirt in the hydraulic system.	Replace pump.
The bed pulls to one side when pushing.	• A castor is sticking.	Replace castor.
Mattress base angle adjusters do not remain in place.	• The gas spring is damaged. • Gas spring is installed incorrectly.	Replace gas spring.
Motor does not work.	• Motor connection has come loose. • Control unit connection has come loose. • Power lead out of socket or control unit. • Fuse blown. • Faulty limit switch. • Fault in motor. • Control unit current limit exceeded due to overloading of motor.	Re-connect to control unit. Re-connect to control unit. Plug back into wall socket. Contact Service. **NOTE!** Replacements may only be performed by an authorised service representative. Contact Service. Contact Service. Only one person may be on the bed when the motor is being run.
Hand-held control unit does not work.	• Hand-held control unit connection has come loose. • Wire or hand-held control unit damaged.	Re-connect to control unit. Contact Service.
The function running does not correspond to the function button selected.	• Motor leads in wrong order.	Re-connect to control unit in numerical order.

5.3 Central braking system and castors

5.3.1 Central brake



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- Put brake pedal into free position (1) (pedal centred).
- Remove screw (2).
- Pull pedal bar (1) out from lever (3).
- Remove end plug (4).
- Loosen retaining screw (5) with a 3 mm Allen key.
- Pull pedal lever (3) and axle (6) out.
- Remove protective casing (7).
- Remove screws (8) and washers (9).
- Pull castor out from sleeve (10).

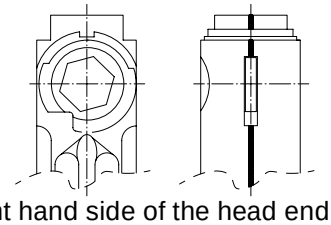
Re-install castor in reverse order.
Ensure that the brake pedal and cam are aligned
and that the castor is mounted in the correct direction.

5.3.2 Brake adjustment

- Engage brakes (1) (brake pedal down).
- Remove screw (2).
- Pull pedal bar (1) out from lever (3).
- Loosen lever retaining screw (11) with a 3 mm Allen key.
- Pull lever (3) out from the axle (6).
- Remove protective casing (7).
- Remove screws (8) and washers (9).
- Support the bed so that the castor being adjusted is off the floor.
- Braking power is increased by turning the castor clockwise
  (as seen from above) one half rotation at a time (as shown by the arrow).

Brake pedal centred
(free)

bed
head end



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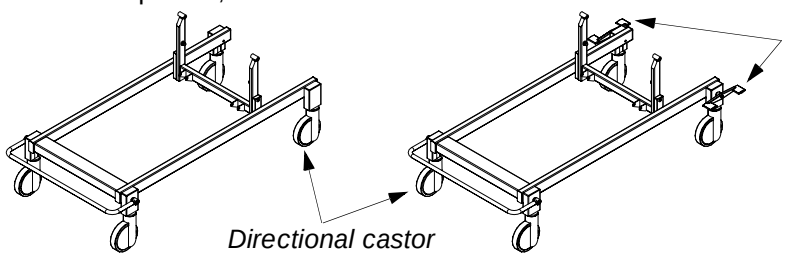
NOTE! The directional castor is located on the right hand side of the head end. If the bed is equipped with additional brake pedals, install the directional castor foot on the left hand side of the bed.



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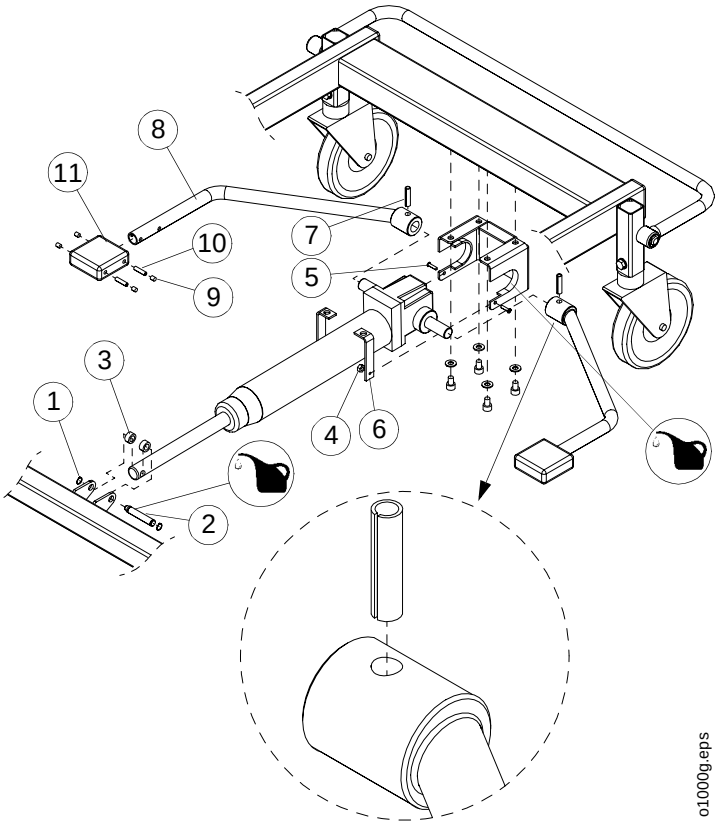
5.4 Hydraulics

5.4.1 Pump removal

- Bring mattress base into its upright position.
- Remove circlip (1).
- Remove tap pivot pin (2) and plastic bushings (3).
- Loosen nuts (4) and remove screws (5) from both sides.
- Remove limiters (6).
- Lift the pump out from its mounting.



5.4.2 Pedal removal

- Remove spring locking pin (7).
- Pull pedal (8) out from its mounting.
- When remounting the pedal, insert the pin as shown in picture.

5.4.3 Pedal pad removal

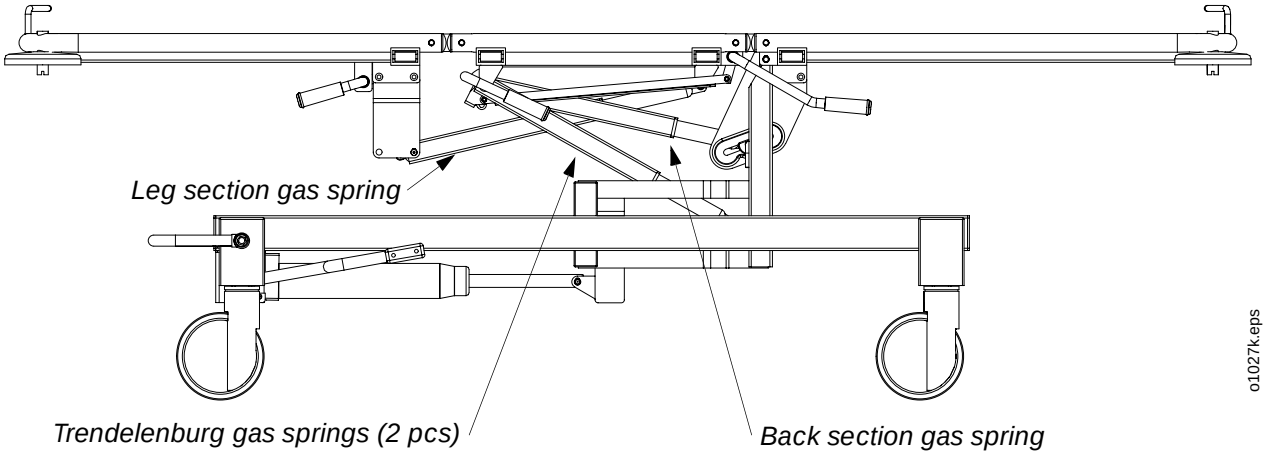
- Remove cover plugs (9).
- Remove spring locking pins (10).
- Pull pedal pad (11) off the pedal.

5.4.4 Hydraulic pump bleeding

The hydraulic pump is equipped with an automatic bleeding mechanism, which facilitates bleeding.

- Pump mattress base into its upright position.
- Give 2-4 extra pumps.
- Lower mattress base to its operating height.

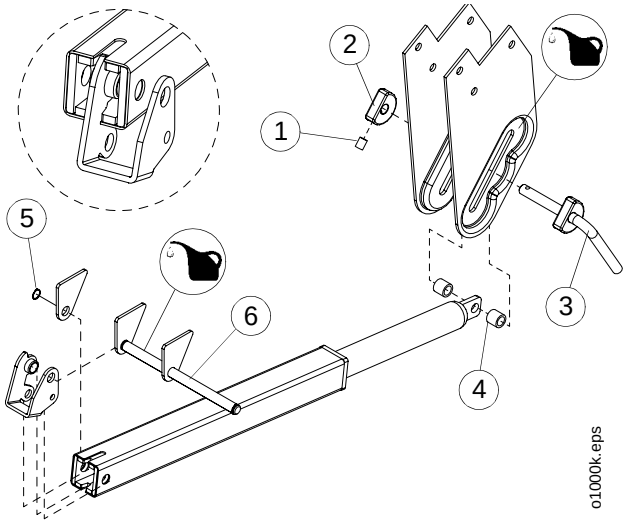
5.5 Gas springs



5.5.1 Removal of back section gas spring

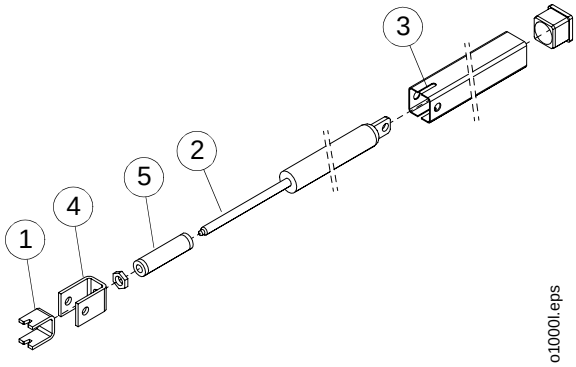
Put gas spring adjuster handle into centre position. Bring back section into upright position and support with, for example, a nightstand.

- Loosen locking screw (1) and remove cam (2).
- Remove adjuster handle (3) and plastic bushings (4).
- Remove circlip (5).
- Using a mandrel, tap out the tap pivot pins (6) until the gas spring comes free.



5.5.2 Removal of gas spring from protector sleeve

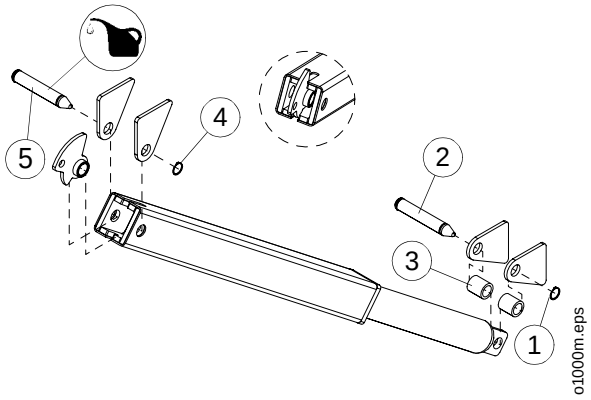
- Remove gas spring ram mount (1).
- Pull gas spring (2) out of protective sleeve (3).
- Unscrew mounting bracket (4). Count the rotations for remounting.
- Remove the limiter (5) (only with Trendelenburg gas springs).



5.5.3 Removal of Trendelenburg and leg section adjustment gas springs

Bring bed into Trendelenburg position
and support with, for example, a nightstand.

- Remove circlip (1).
- Using a mandrel, tap out tap pivot pin (2).
- Remove plastic bushings (3).
- Remove circlip (4).
- Using a mandrel, tap out tap pivot pin (5).

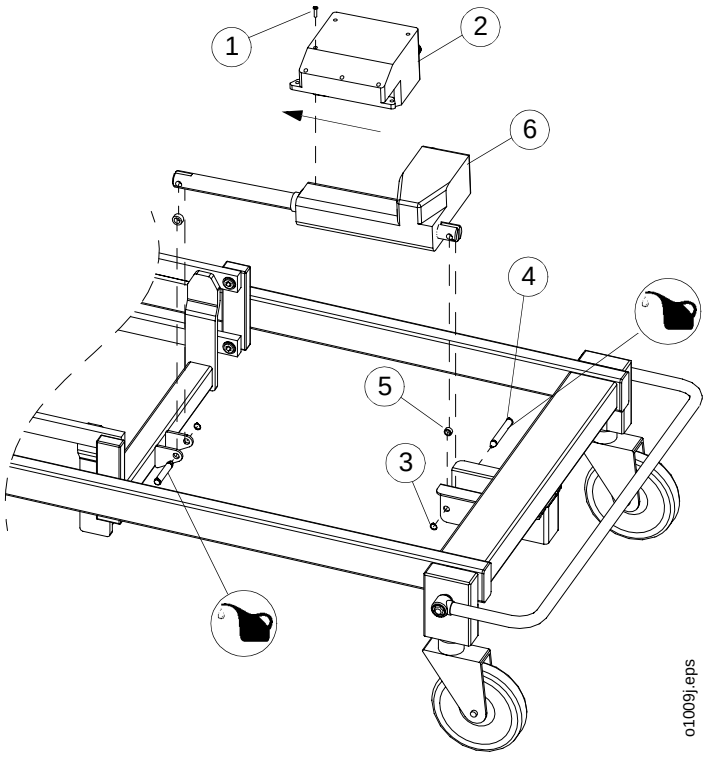


Removal of gas springs from protector sleeve
as in section 5.5.2 on page 18.

5.6 Replacement of motors and control unit

5.6.1 Control unit

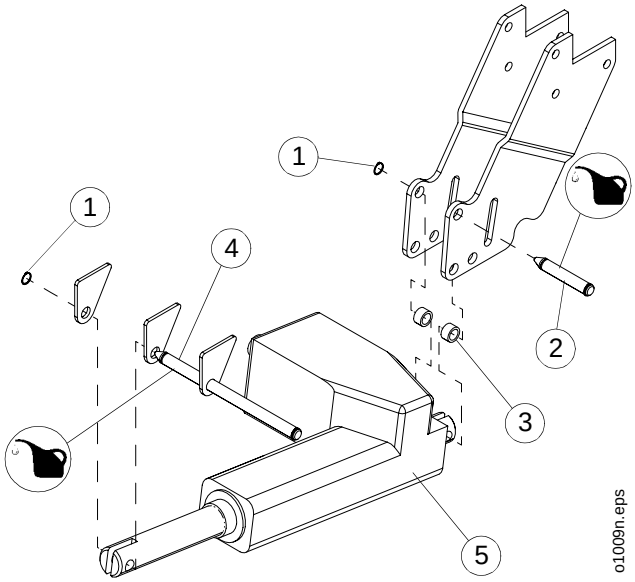
- Bring mattress base into its upright position and remove the power lead from the wall outlet.
- Loosen the screw (1) using a TORX wrench (T20).
- Pull the control unit (2) toward the motor arm.
- Remove circlip (3).
- Remove tap pivot pin (4) and plastic bushing (5).
- Lift the motor (6) out from its mounting.



5.6.2 Removal of back and leg section adjustment motors

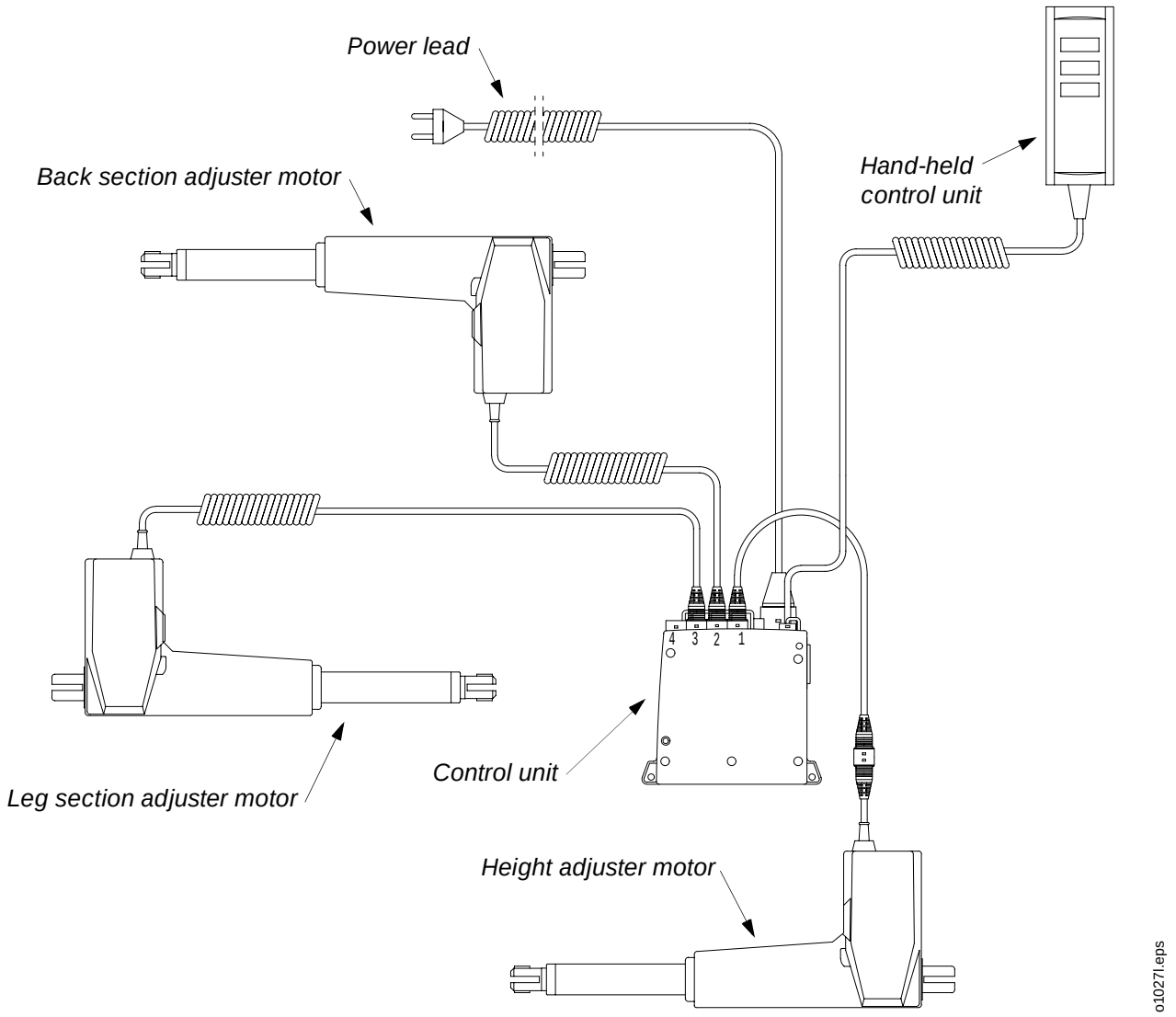
Before removing motor, carefully support the bed part below and
disconnect the power supply from the wall outlet.

- Remove circlip (1).
- Remove tap pivot pin (2) and plastic bushings (3).
- Using a mandrel, tap out the tap pivot pin (4) until the motor (5) comes loose.



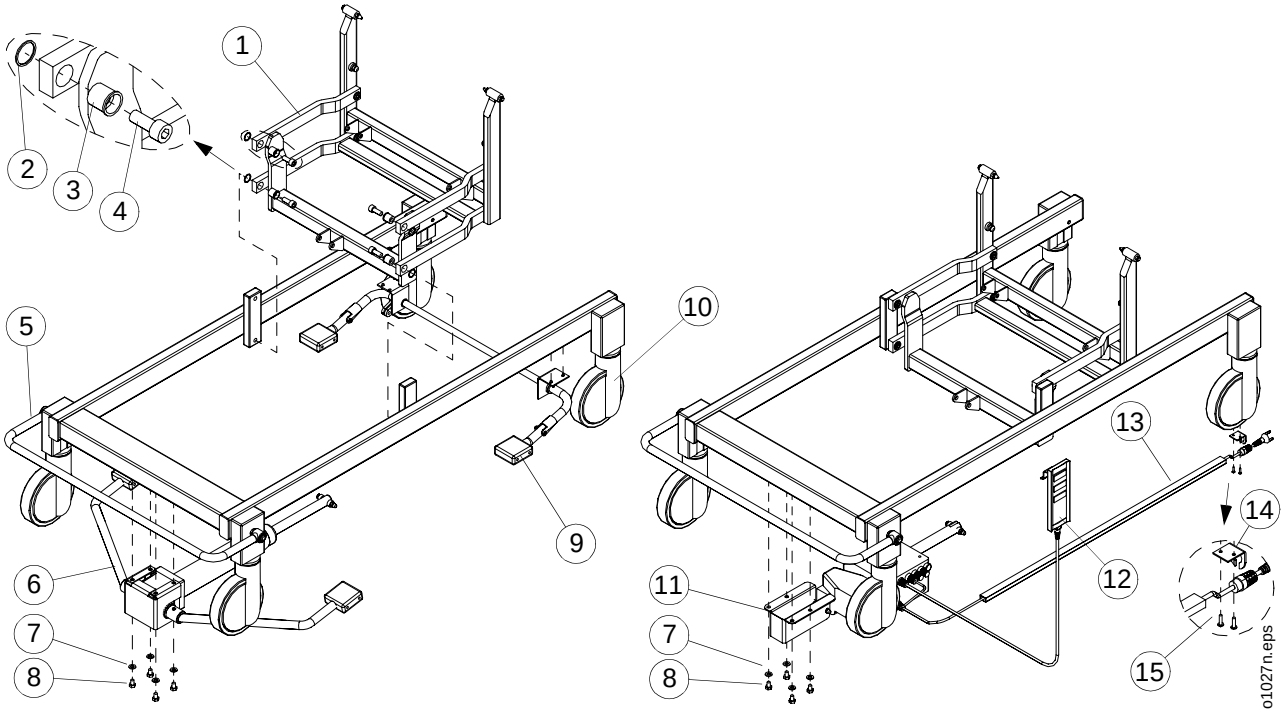
5.7 Connection schematic

NOTE! In order to avoid accidents, always remember to disconnect the power lead before servicing!



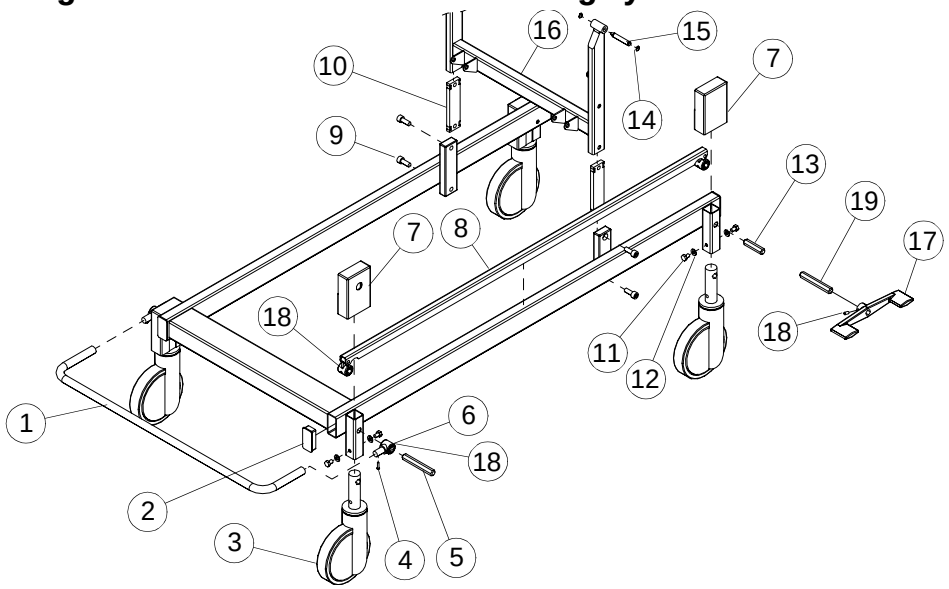
6. SPARE PARTS

6.1 Height-adjustable lower frame and lift levers



			Number of parts in assembly
Part	Code	Part name	Additional information
1		Height adjustment	See section 6.2.2 on page 25.	1
2	709851	Bushing		4
3	A4540000	Bearing retainer		4
4	70645	Allen screw	SFS 2219-M10x25	4
5		Central braking system	See section 6.2 on page 23.	1
6		Hydraulic pump	See section 6.2.1 on page 24.	1
7	70772	Washer	DIN 6978-J8.2	4
8	70635	Screw	SFS 2219-M8x20	4
9		Foot release pedal	See section 6.3.4 on page 30.	1
10		Braking and tracking castor	See section 6.6 on page 35.	4
11		Height adjuster motor	See section 6.2.2 on page 25.	1
12	71335462 71335463	Hand-held control unit Hand-held control unit	HB 72-2MV, 2 control buttons HB 73-3MV, 3 control buttons	1
13	713342	Adhesive strip		1
14	A4823800	Mounting bracket		1
15	70522	Screw	SFS 2759-3.5x13	2

6.2 Fixed-height lower frame and central braking system



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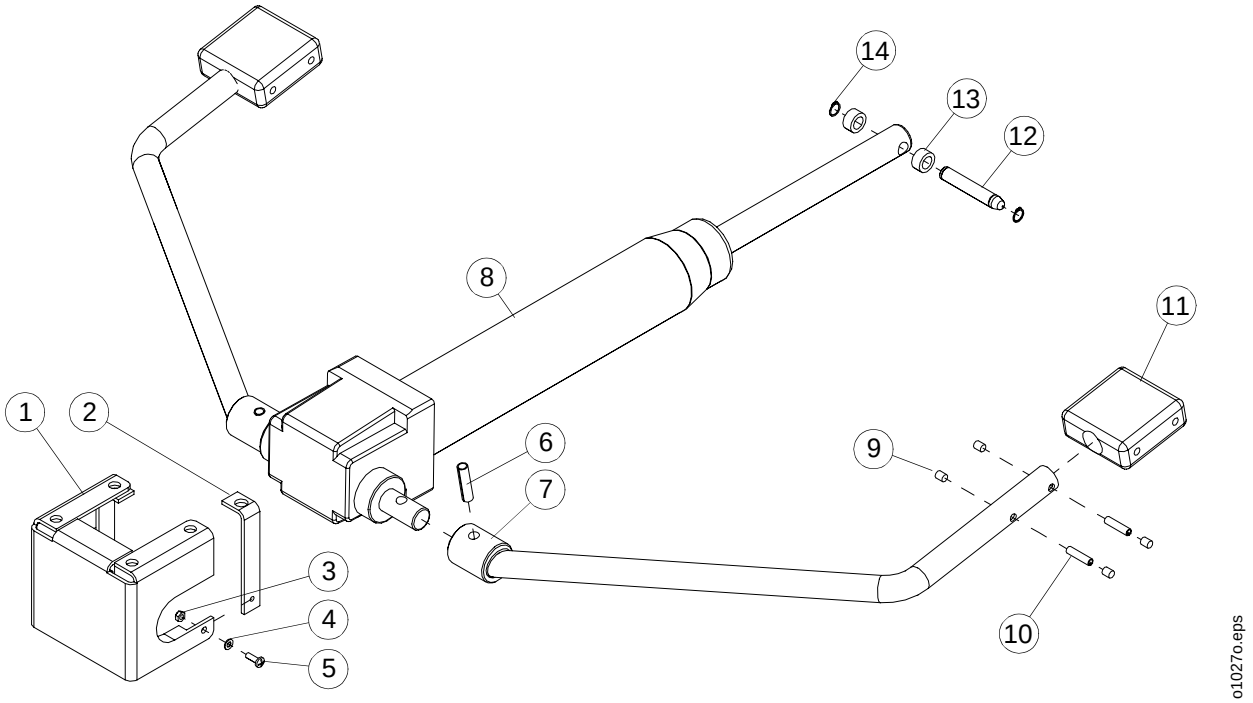
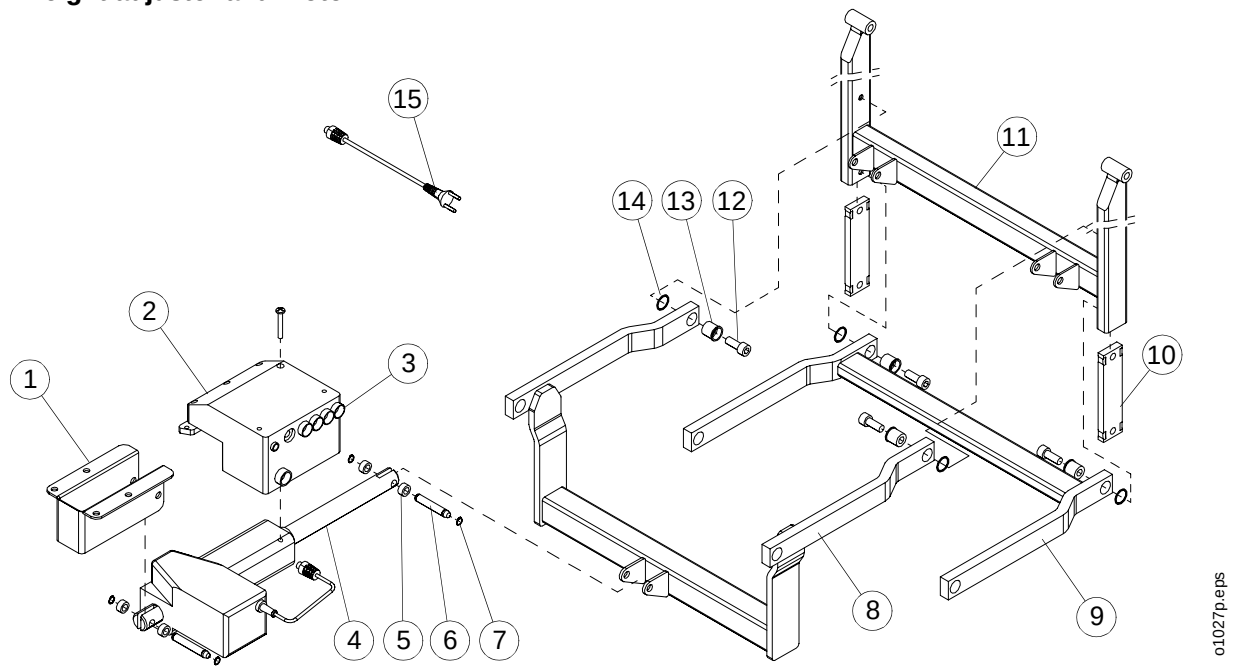
			Number of parts in assembly
Part	Code	Part name	Additional information
1	A2400100	Pedal	1
2	710219	Side rail plug	Grey 4
3		Castor	See section 6.6 on page 35. 4
4	70530	Screw	SFS 2759-4.2x1.3 2
5	A4724500	Axle	2
6	A4724700	Fixing lever	2
7	7107069	Protective housing	Specify the need for a hole when placing an order 4
8	A3450000	Brake connecting rod	) 2
9	70645	Screw	SFS 2219-M10x25 4
10	A4539500	Mounting plate	2
11	70632	Screw	SFS 2219-M8x12 8
12	707782	Washer	DIN 6796-8 8
13	A4724600	Axle	2
14	A4541500	Pivot pin	2
15	70792	Retaining ring	DIN 471-10x1 4
16	A2400500	Centre frame	Request colour. 1
17	7125112 7125113	Spare brake pedal Spare brake pedal	Left side 1 Right side 1
18	706831	Retaining screw	DIN 916-M6x8 8
19	A4809100	Axle	2

6.2.1 Height adjuster hydraulic pump



			Number of parts in assembly	
Part	Code	Part name	Additional information	
1	A2334500	Mounting case		1
2	70409	Limiter		2
3	707410	Nut	Nyloc DIN 985-M5	2
4	70777	Washer	DIN 125-A5.5	2
5	70452	Screw	SFS 2976-M5x12	2
6	70814	Spring pin	DIN 1481-8x32	2
7	A2404301 A2413300	Pedal bar Pedal bar	Bed width 845 mm Bed width 945 mm	2
8	7115691	Hydraulic pump		1
9	709773	Plug		8
10	70810	Spring pin	DIN 1481-6x40	4
11	709772	Pedal pad		2
12	A4541500	Pivot pin		1
13	709931	Bushing		2
14	70792	Retaining ring	DIN 471 10x1	2
15	A3778100	Hydraulics pack	Includes positions 6-14	

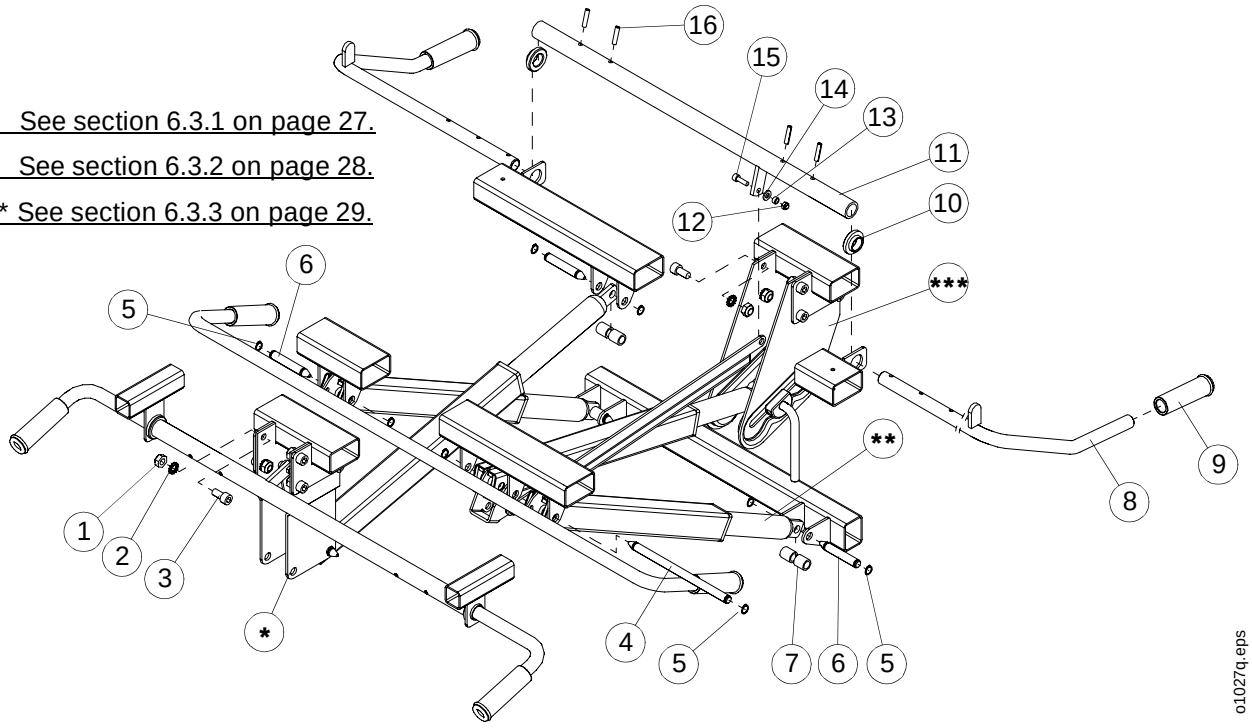
6.2.2 Height adjuster and motor



			Number of parts in assembly	
Part	Code	Part name	Additional information	
1	A2474400	Mounting case		1
2	71336063 71336066 71336067 71336072	Control unit for 2 motors Control unit for 3 motors Control unit for 2-3 motors Control unit for 2-3 motors	CB09LO-2T-24, IP 54, 230 V CB09LO-3T-24, IP 54, 230 V CB09LO-3BT-24, IP 66, 230 V CB09LO-3BT-24, IP 66, 120 V	1
3	71336075 71336078	Protective plug Protective plug	For motor outlet For battery outlet	1 1
4	71335454 71335452	Height adjuster motor Height adjuster motor	LA31.40BM-200-24-001, IP 54 LA31.40JBM-200-24-001, IP 66	1
5	709931	Bushing		4
6	A4381800	Pivot pin		2
7	70792	Retaining ring	DIN 471 10x1	4
8	A2400700	Lift lever	Request colour.	1
9	A3490000	Support lever	Request colour.	1
10	A4539500	Mounting plate		2
11	A2400600	Centre frame	Request colour.	1
12	70645	Allen screw	SFS 2219-M10x25	4
13	A4540000	Bearing retainer		4
14	709851	Bushing		4
15	71336085	Power cord		1

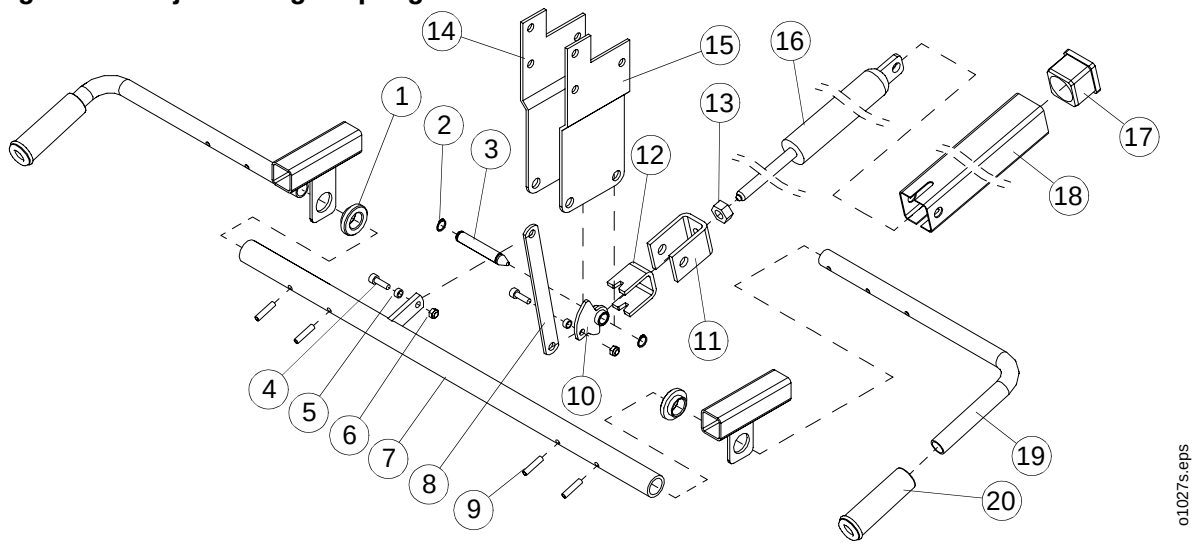
6.3 Gas spring adjusters

* See section 6.3.1 on page 27.
** See section 6.3.2 on page 28.
*** See section 6.3.3 on page 29.



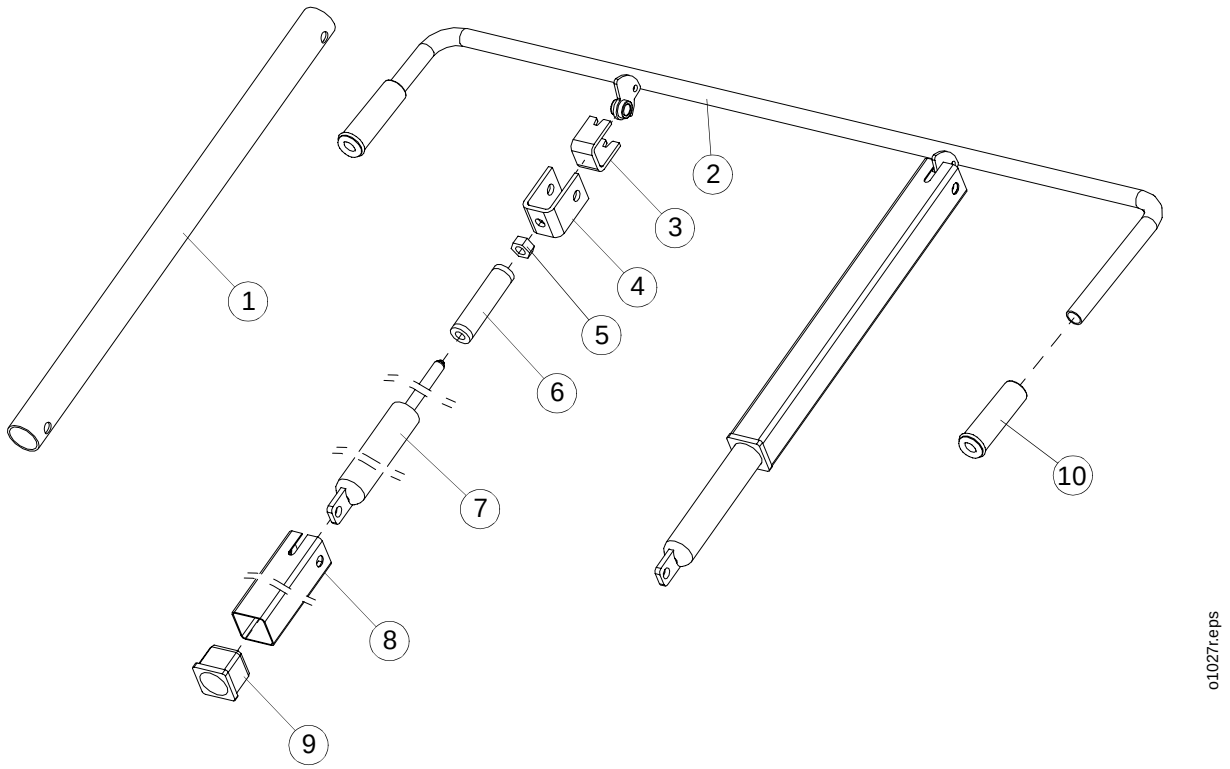
			Number of parts in assembly	
Part	Code	Part name	Additional information	
1	70743	Nut	Nyloc DIN 985-M8	12
2	70772	Star washer	DIN 6978-J8.2	12
3	70634	Allen screw	SFS 2219-M8x16	12
4	A4541600	Pivot pin		1
5	70792	Retaining ring	DIN 471-10x1	12
6	A4541500	Pivot pin		5
7	709876	Bushing		6
8	A2401700 A2401701	Adjuster bar Adjuster bar	Right side Left side	1 1
9	709774	Handle protector	White	4
10	A4375600	Slide bearing		4
11	A3490400	Cross bar		1
12	70742	Nut	Nyloc DIN 985-M6	4
13	78006	Washer sleeve		2
14	707771	Washer	DIN 125-A6.4	2
15	70623	Allen screw	SFS 2219-M6x16	4
16	70850	Spring pin	DIN 1481-5x22	8

6.3.1 Leg section adjustment gas spring



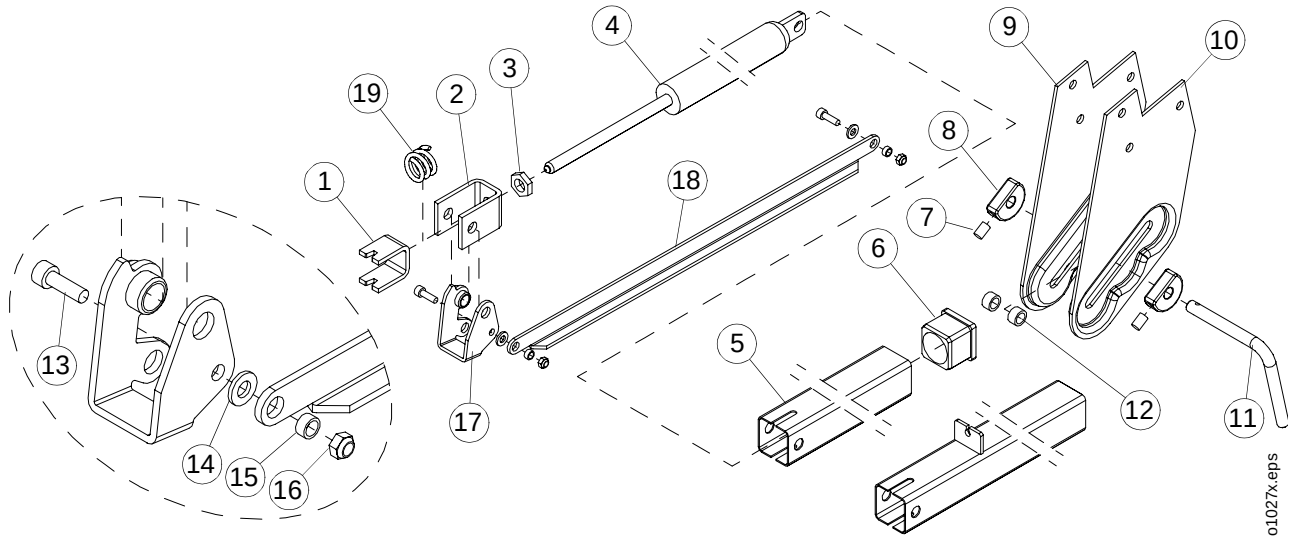
			Number of parts in assembly	
Part	Code	Part name	Additional information	
1	A4375600	Slide bearing		2
2	70792	Retaining ring	DIN 471-10x1	2
3	A4541500	Pivot pin		1
4	70623	Allen screw	SFS 2219-M6x16	2
5	78006	Washer sleeve		2
6	70742	Nut	Nyloc DIN 985-M6	2
7	A3490600	Cross bar		1
8	A45429B00	Cross bar		1
9	70850	Spring pin	DIN 1481-5x22	4
10	A4473300	Release lever		1
11	A3357400	Mounting bracket		1
12	A3357500	Ram mount		1
13		Nut	M10x1	1
14	A3399300	Support bracket	Right	1
15	A3399301	Support bracket	Left	1
16	71257	Gas spring	150mm/620N	1
17	709781	Bearing retainer		1
18	A3357300	Protective sleeve	Request colour.	1
19	A3490700	Adjuster bar		2
20	709774	Handle protector	White	2

6.3.2 Trendelenburg adjustment gas spring



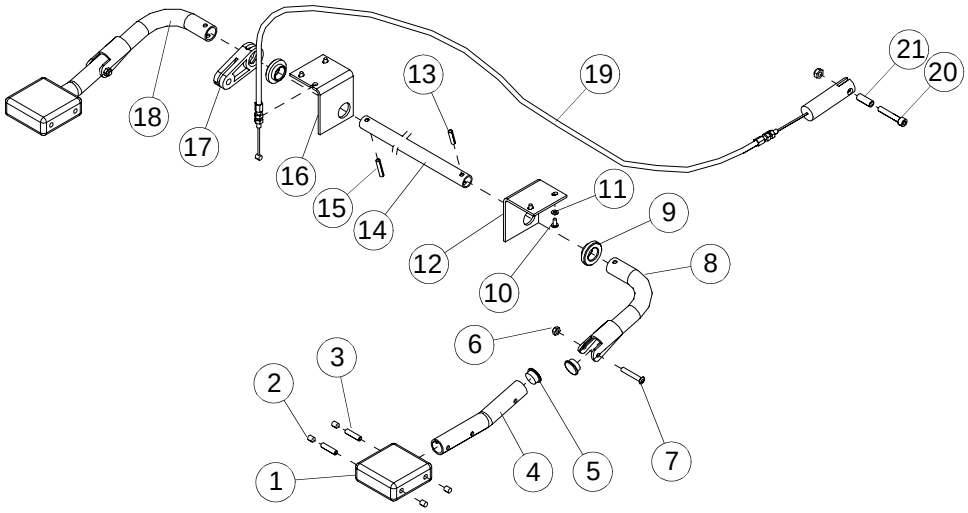
			Number of parts in assembly	
Part	Code	Part name	Additional information	
1	A34012A00	Support bar		2
2	A202000	Adjuster bar		1
3	A3357500	Ram mount		1
4	A3357400	Mounting bracket		1
5		Nut	M10x1	1
6	A2474501	Stopper bushing		2
7	712583	Gas spring	180 mm/420N	1
8	A33573	Protective sleeve	Request colour.	2
9	709781	Bearing retainer		2
10	7097746	Handle protector	Red	2

6.3.3 Back section adjustment gas spring



			Number of parts in assembly	
Part	Code	Part name	Additional information	
1	A3357500	Ram mount		1
2	A3357400	Mounting bracket		1
3		Nut	M10x1	1
4	71260	Gas spring	180 mm/720N	1
5	A33573 A33573A	Protective sleeve Protective sleeve	Request colour. Request colour. Only with foot release.	1
6	709781	Bearing retainer		1
7	706912	Retaining screw	DIN 916-M8x12	2
8	A4541900	Cam		2
9	A3399200	Adjuster bracket	Right	1
10	A3399201	Adjuster bracket	Left	1
11	A4541800	Adjuster bar		1
12	709871	Bushing		2
13	70623	Allen screw	SFS 2219-M6x16	2
14	A4493300	Washer	DIN 125-A6.4	2
15	78006	Washer sleeve		2
16	70742	Nut	Nyloc DIN 985-M6	2
17	A4728800	Release lever		1
18	A4541700	Cross bar		1
19	711489	Compression spring	Only with foot release.	1

6.3.4 Back section adjustment with foot pedal



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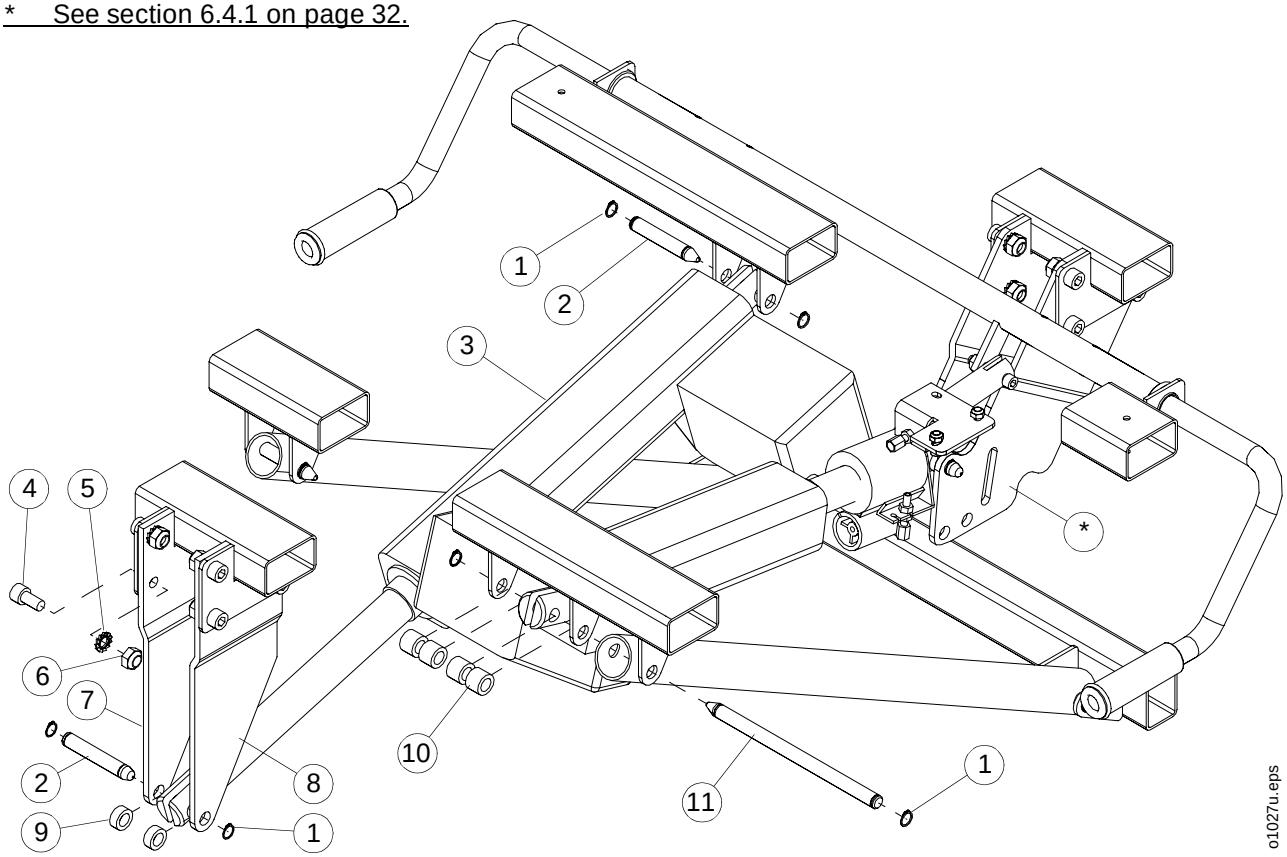
			Number of parts in assembly
Part	Code	Part name	Additional information
1	709772	Pedal pad	2
2	709772	Plug	8
3	70810	Spring pin	DIN 1481-6x40 4
4	A4980400	Pedal bar	2
5	70992	Cover plug	4
6	70742	Nut	DIN 985-M6 3
7	706374	Screw	ISO 7380-M6x32 2
8	A4980300	Pedal bar	Left side 1
9	A4375600	Bearing retainer	2
10	70526	Screw	SFS 2759-3.9x13 4
11	71378	Washer	4
12	A4730500	Support	Left side 1
13	70849	Spring pin	DIN 1481-5x20 1
14	A4729000	Cross bar	1
15	70852	Spring pin	DIN 1481-5x26 1
16	A4729100	Support	Right side 1
17	709776	Pedal lever	1
18	A4980301	Pedal bar	Right side 1
19	A3493301	Release cable	1
20	70626	Screw	SFS 2219-M6x25 1
21	A4729300	Washer sleeve	1

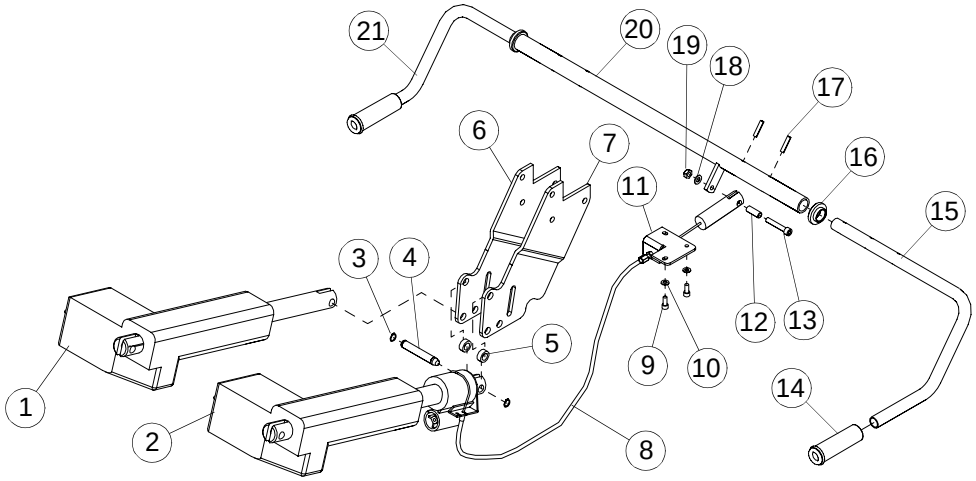
6.4 Electric motor adjusters

* See section 6.4.1 on page 32.



			Number of parts in assembly	
Part	Code	Part name	Additional information	
1	70792	Retaining ring	DIN 471-10x1	14
2	A4381800	Pivot pin		3
3	71335455 71335451	Leg section motor Leg section motor	LA31.2M-200-24-301, IP 54 LA31.2M-200-24-301, IP 66	1
4	70634	Allen screw	SFS 2219-M8x16	12
5	70772	Star washer	DIN 6978-J8.2	12
6	70743	Nut	Nyloc DIN 985-M8	12
7	A34590A00	Adjuster bracket	Left side	1
8	A34590A01	Adjuster bracket	Right side	1
9	709931	Washer sleeve		2
10	709871	Washer sleeve		4
11	A4541600	Pivot pin		1

6.4.1 Back section adjustment motor and quick-release



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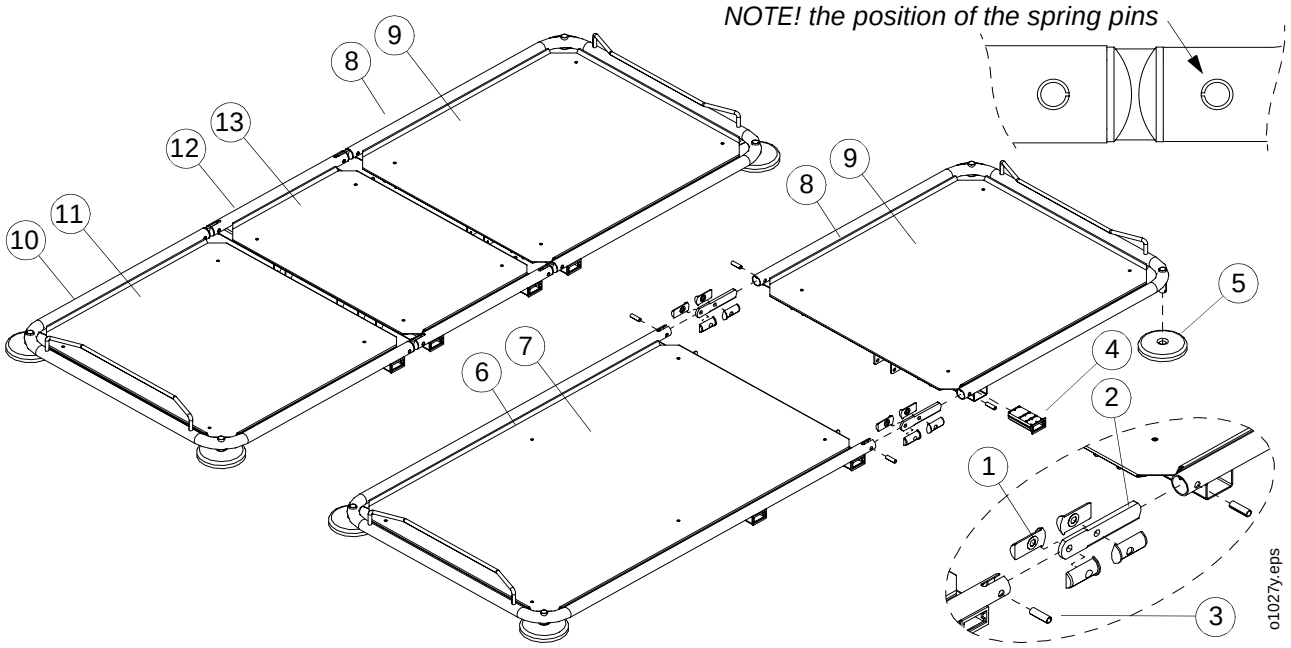
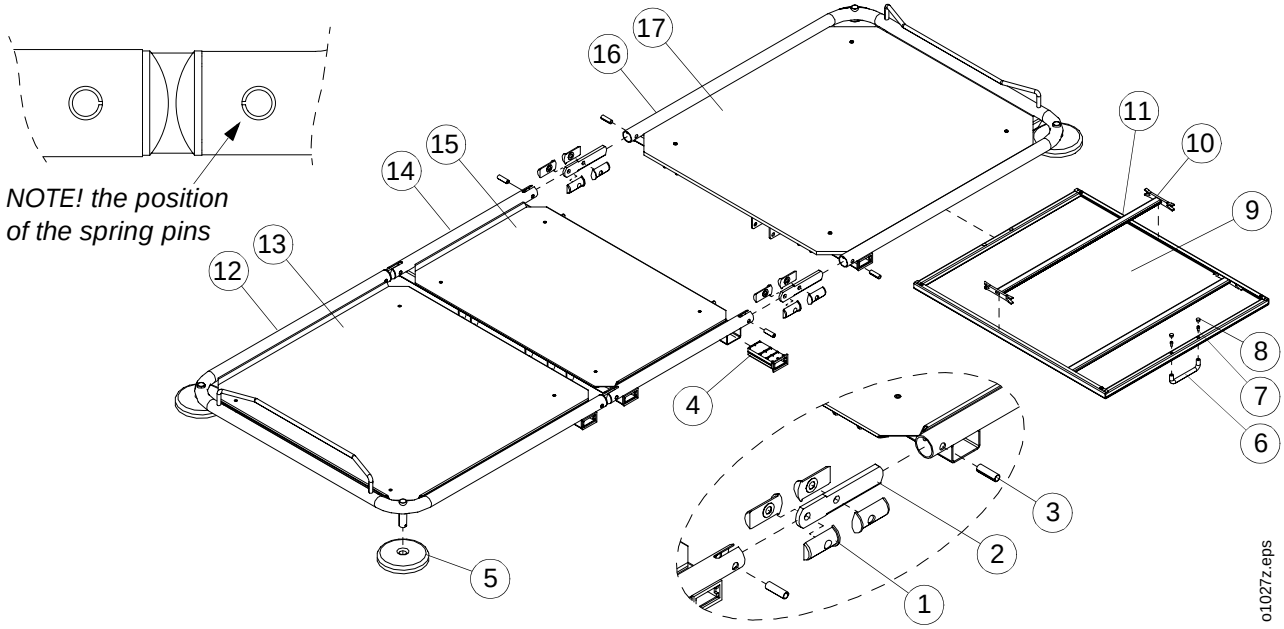
			Number of parts in assembly
Part	Code	Part name	Additional information
1	71335455 71335451	Back section motor Back section motor	LA31.2M-200-24-301, IP 54 LA31.2M-200-24-301, IP 66	
2	71335449	Back section motor	LA31.2Q1M-150-24-005, IP 66	1
3	70792	Retaining ring	DIN 471-10x1	2
4	A4381800	Pivot pin		1
5	709931	Washer sleeve		2
6	A3620400	Adjuster bracket	Left side	1
7	A3620401	Adjuster bracket	Right side	1
8	A36664D00	Quick-release cable		1
9	70614	Screw	SFS 2219-M5x12	2
10	70777	Washer	DIN 125-A5.3	2
11	A4857000	Mounting plate		1
12	A47293A00	Bushing		1
13	70629	Screw	SFS 2219-M6x35	1
14	7097746	Handle protector	Red	2
15	A3779101	Adjuster bar	Right side	1
16	A4375600	Slide bearing		2
17	70850	Spring pin	DIN 1481-5x22	4
18	707771	Washer	DIN 125-A6.4	1
19	70742	Nut	DIN 985-M6	1
20	A3490400	Cross bar		1
21	A3779101	Adjuster bar	Left side	1

6.5 Mattress bases



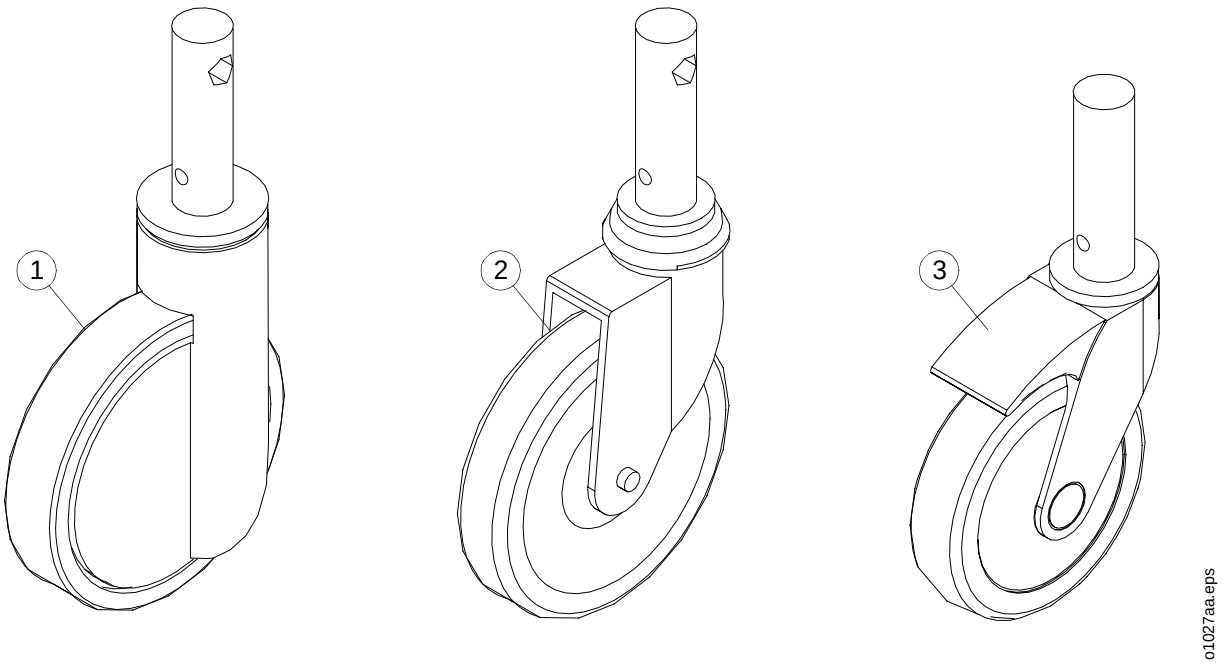
			Number of parts in assembly	
Part	Code	Part name	Additional information	
1	70962	Pivot plug half-piece		24
2	A4331700	Pivot bar		6
3	70815	Spring pin	DIN 1481-10x32	12
4	709782	Rail mounting bracket		14
5	709752	Bumper reel		8
6	A24008 A24009	Mattress base Mattress base	Request colour. Width 800 mm Request colour. Width 900 mm	1
7	A3482700 A3483500	Mattress base baseplate Mattress base baseplate	Width 800 mm Width 900 mm	1
8	A24010 A24011	Back section Back section	Request colour. Width 800 mm Request colour. Width 900 mm	1
9	A3482400 A3483200	Back section baseplate Back section baseplate	Width 800 mm Width 900 mm	1
10	A24014 A24015	Leg section Leg section	Request colour. Width 800 mm Request colour. Width 900 mm	1
11	A3482600 A3483400	Leg section baseplate Leg section baseplate	Width 800 mm Width 900 mm	1
12	A24012 A24013	Seat Seat	Request colour. Width 800 mm Request colour. Width 900 mm	1
13	A3482500 A3483300	Seat baseplate Seat baseplate	Width 800 mm Width 900 mm	1

Mattress bases



			Number of parts in assembly	
Part	Code	Part name	Additional information	
1	70962	Pivot plug half-piece		16
2	A4331700	Pivot bar		4
3	70815	Spring pin	DIN 1481-10x32	8
4	709782	Rail mounting bracket		8
5	709752	Bumper reel		4
6	715121	Handle		2
7	70530	Screw	SFS 2759-4.2x16	4
8	709985	Cover stud		4
9	A1361900	RTG cassette holder	Incl. parts 6, 7, 8, 10 and 11	1
10	A1357101	Adjuster bar		2
11	7117507	Measuring label	Incl. left and right-hand labels	1
12	A24015	Leg section	Request colour. Width 900 mm	1
13	A3483400	Leg section baseplate	Width 900 mm	1
14	A24013	Seat	Request colour. Width 900 mm	1
15	A3483300	Seat baseplate	Width 900 mm	1
16	A24168	Back section	Request colour. Width 900 mm. Incl. part 17	1
17	A24166	Back section baseplate	Width 900 mm	1

6.6 Braking and directional castors



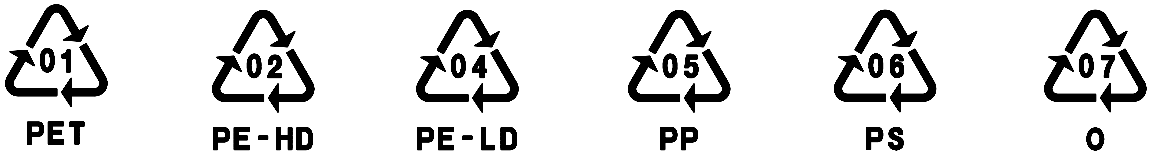
Part	Code	Part name	Additional information
1	712405 712406 7123232 7123233	Brake castor Directional castor Brake castor Directional castor	Ø 125 Ø 125 Ø 150 Ø 150
2	7123211 7123111	Brake castor Directional castor	Ø 125 Ø 125
3	712479 712471	Brake castor Directional castor	Ø 125 Ø 125

7. RECYCLING

7.1 Metals and plastics

When disposing of a patient bed or replacing any of its parts, check the recyclability of each item. A majority of the metal used on the patient bed is steel. There are also zinc and aluminium castings and brass bushings.
When recycling plastic parts, determine the material type. The table on page 8 lists part materials, which will provide assistance in determining the correct recycling procedure. If a part material is missing from the table, contact your sales representative. For more information on recycling, contact your local waste management facility or visit related sites on the Internet.

Below are recycling symbols, which are marked on parts made of plastic. Products marked with these symbols can be used as energy waste.



7.1.1 Gas springs

Gas springs can be disposed of as metal waste after all nitrogen gas and oil has been removed from them.

WARNING! Releasing nitrogen gas is strictly prohibited, without following the proper instructions. Your sales representative will provide the necessary instructions for the correct disposal of gas springs.

NOTE! Gel batteries are considered problem waste and must therefore be disposed of at a problem waste facility.

NOTES

ORDER FORM

Delivery address:	Invoicing address:
Mark / reference:	Mark / reference:
Orderer: / Telephone:	Order date: / Transport mode:

Pcs.	Part	Code	Part name

Information:

Merivaara Corp.
Puustellintie 2
FIN - 15150 LAHTI, FINLAND

Telephone: +358 3 3394 6152
Fax: +358 3 3394 6249