

MiniLift200 SystemRoMedic

Valid from serial number:

200005000





Safety information

Visual inspection

Inspect lift unit functions regularly. Check to ensure that material is free from damage.

Before use

Ensure that the product is correctly assembled.

Check slingbar connection and safety latch function.

Check lift and base-width movement.

Check to ensure that the actuator is correctly installed.



Always read the user manual

Always read the user manuals for all assistive devices used during a transfer.

Keep the user manual where it is accessible to users of the product.

The lift unit may only be used by persons who have received instruction in the operation of the lift unit.



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Assembly

Final inspection

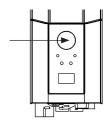
Check to ensure that no parts have been left in the packaging. Inspect the lift for signs of wear and damage.

Check all four castor wheels and castor wheel locks.

Check all connections and fixtures including screws and bolts.



Check the emergency stop function by activating the emergency stop, and then pressing either the up or down button. If nothing happens when the up or down buttons are pressed, the emergency stop is functioning properly.



Grasp the hand control, press the up button and run the lift arm all the way up. Then, press the down button and run the lift arm all the way down.

Test base-width adjustment function. Press the button for base-width adjustment to widen the base fully, and then press the other button to narrow the base again.



Test lift function by lifting a person (not a user) using an approved sling. At the same time, check the emergency lowering function with someone on the lift. See section on Emergency lowering.

If the lift is functioning correctly, connect the charger and check to ensure that the charging lamp on the control box lights up.

NOTE!

Before the lift is used for the first time:

- it must be charged for at least 4 hours. See section on charging batteries.
- the control box service counter needs to be reset. To reset the service counters press both lift buttons on the hand control at the same time for 5 seconds.

 An audio signal will indicate that the timer has been reset.



Keep the user manual where it is accessible to users of the product.

Using the product

Important Information

- The lift must be assembled according to the assembly instructions provided with the lift.
- The lift may only be used indoors and on a level floor.
- · Lifting accessories must be properly trial fitted and tested in relation to the user's needs and functional ability.
- Do not leave the user unattended during a transfer situation.



- Under no circumstances may max. load be exceeded. See section on Safe working load.
- Ensure that the user's feet do not get caught between the footplate and the floor. Ensure that the user's feet do not get caught between the footplate and the base when adjusting the base width.
- MiniLift200 is not intended for transporting users. It may only be used for short transfers.
- Never move the lift by pulling on the actuator!



- The lift must not be used or immersed in or under water including showering.
- The lift should not be left / stored in a high humidity environment.
- The lift must not be charged in a wet room.
- To ensure optimal function, the lift must be inspected regularly. See section on Maintenance.
- Warranty applies only if repairs or alterations are done by an authorized technician.
- Using lifting accessories other than those approved by Direct Healthcare Group can entail a risk.

Trouble-shooting

If the lift or base-width adjustment cannot be activated, check the following:

- That the emergency stop button is not pressed in.
- That all cables are properly and securely connected. Pull out the contact and plug it in again firmly.
- That battery charging is not in progress.
- That the battery is charged.

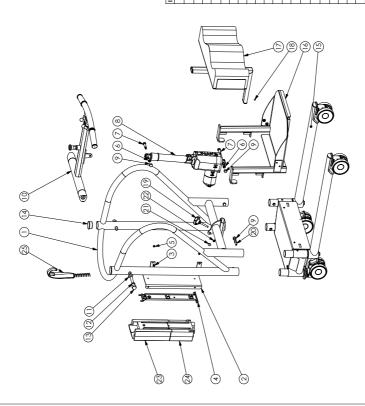
If the lift unit is not working properly, contact your dealer.

If the lift unit makes unusual noises:

- Try to determine the source of the sound. Take the lift unit out of operation and contact your dealer.

Exploded view and components

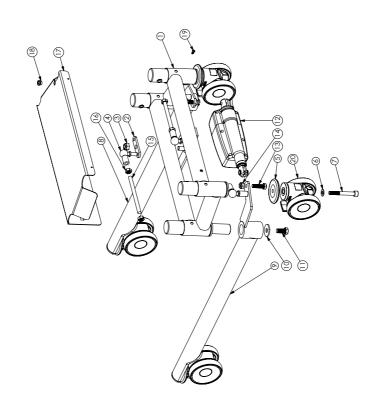
ITEM NO.	DOCUMENT NO.	REV.	тие	QTY.
_	90004082	10	Frame painted ML200	-
2	90004083	10	Battery holder	-
8	90004021	10	Screw K6S ISO7380 8.8 M6x8 fzb	2
4	980001889	04	Linak MBJ2 incl. screws	-
5	90004084	10	Cap nut DIN 1587 M5	2
9	90000056	03	Lock nut DIN985 M8 fzb	2
7	90000351	05	Shoulder bolt ISO7379 (DIN610) 12.9 10xM8x30	2
8	90005769	10	Actuator LA34 34420F+4X1851AX	_
6	90000330	05	Nutcover MSM8G	9
10	90004023	03	Liftam mounted ML200	-
=	90004085	10	Washer DIN125 13x25x2,5	2
12	90005772	10	Screw M6S DIN931 8.8 M12x65 fzb	2
13	90000493	05	Nutcover MSM12G	2
14	90004087	10	End cover Ø45x2mm Grey	2
15	90004068	05	Undercarriage mounted ML200	-
91	90004073	10	Footplate holder ML200	-
17	90004081	10	Kneepad holder ML200	-
18	90004078	10	Screw_RXS_DIN 7981-C_4,8x13_fzb	-
19	90004012	10	Handwheel with threaded bar ML200	-
20	90004471	01	Screw_MC6S_DIN912_8.8_M8x20_fzb	4
21	81880006	10	Nut cover M6 grey	ı
22	90002799	10	Screw P6SS DIN913 8.8 M8x12 fzb	-
23	90003166	05	BAJ1030-00 (Battery box CBJ grey, BAJ1)	-
24	19180006	10	Controlbox CBJCare w display LA34	ı
25	90003165	02	HB30021-01 (Hand control HB32 4 button)	-



Exploded view - Base EM

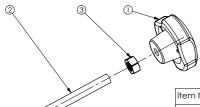
ģ. Screw_M6S_DIN933_8.8_M12x20_fzb Screw_M6S_DIN933_8.8_M10x35_fzb Screw MC6S DIN912 8.8 M10x80fzb Motion transmission plate painted Threaded steel rod DIN976-1 8.8 M10x200 fzb Screw K6S DIN7380 8.8 M4x12 fzb Lock nut DIN 985 CL6 M10 FZB Hex nut DIN934 M6M M10 fzb Lock nut DIN985 CL6 M12 fzb Washer DIN125 10.5x20x2 fzb Right leg mounted ML200 Washer DIN 9021 M12 Fzb Left leg mounted ML200 Undercarriage painted Ball joint M10 DIN71805 Actuator LA28 ML200 Hedge plate painted Rear wheel 100mm Wheel bumper 8 8 8 5 8 5 8 02 02 8 8 8 8 8 5 90004031 90004024 90003460 10900006 90000733 90004029 90004025 90001176 90004032 9000008 90004033 90000539 90002740 90000873 90004065 90004066 90000260 90000487 90004067 Part No. 0 15 17

Brako assembly number 742344334

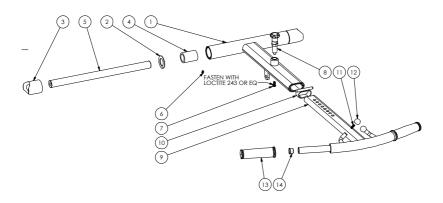


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Exploded view - Lifting arm

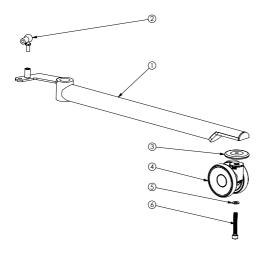


Item No.	Part No.	Rev.	Rev. Description	
1	90004010	01	Handwheel Ø50 M8 Grey	1
2	90004011	00	Threaded bar M8x75	1
3	90000504	01	Nut M6M DIN934 M8 fzb	1



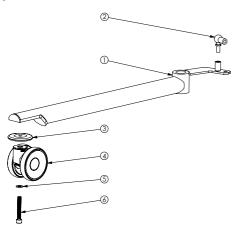
ITEM NO.	DOCUMENT NO.	REV.	TITLE	QTY.
1	90004016	01	Liting arm outer	1
2	90004017	02	Sliding washer SKF Ø26xØ44x1,5	2
3	90004018	01	Turning bar	2
4	90004019	01	Bronze bearing Ø35xØ25x50	2
5	90004020	01	Threaded bar	1
6	90004022	01	Screw_P6SS_M6x8_DIN916_8.8_fzb	2
7	90001252	01	Screw K6S DIN7380 8.8 M6x14 fzb	1
8	90003136	03	Plastic spring screw Grey	1
9	90002772	02	Lifting arm inner	1
10	90002691	02	Lifting arm sling stopper asm	1
11	90004013	01	Screw P6SS DIN916 M6x16	2
12	90002697	01	Lifting arm sling hook end	2
13	90002773	01	Lifting arm handle black	2
14	90004014	01	Plastic cap Ø20x1,4 Black	

Exploded view - Leg Right



Item No.	Part No.	Rev.	Description	Qty.
1	90004015	00	00 Right leg ML200	
2	90004024	00	Ball joint M10 DIN71805	1
3	90003460	01	Wheel bumper	1
4	90000259	01	Front wheel 100mm	1
5	90000601	01	Washer DIN125 10.5x20x2 fzb	1
6	90001175	00	Screw MC6S DIN 912 M10x70 8.8 fzb	1

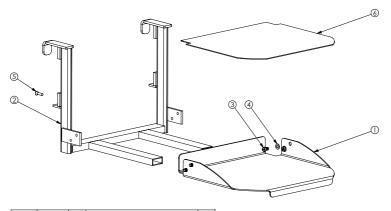
Exploded view - Leg Left



Item No.	Part No.	Rev.	Rev. Description	
1	90004028	00	00 Leg left ML200	
2	90004024	00	00 Ball joint M10 DIN71805	
3	90003460	01	Wheel bumper	1
4	90000259	01	Front wheel 100mm	1
5	90000601	01	Washer DIN125 10.5x20x2 fzb	1
6	90001175	00	Screw MC6S DIN 912 M10x70 8.8 fzb	1

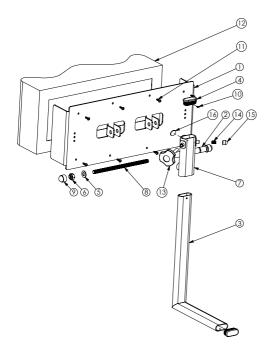
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Exploded view - Foot plate



Item No.	Part No.	Rev.	Description	
- 1	90004069	00	00 Footplate ML200	
2	90004070	00	Foot plate painted	1
3	90004071	00	00 Screw_MC6S_DIN7984_8.8_M8x12_fzb	
4	90000345	04	14 Washer DIN125 8.4x16x1.6 fzb	
5	90000605	01	MF6S DIN 7991 8.8 M6x20 FZB	
6	90004072	00	Rubber footplate ML200	1

Exploded view - Kneepad



Qty	Description	Rev.	Part No.	Item No.
1	Backplate	00	90004074	1
2	Bar - knee pad	00	90004075	2
1	Holder kneepad ML200	00	90004077	3
2	Plastic cover ovel 45x20 G	01	90002741	4
2	Washer DIN125 10.5x20x2 fzb	01	90000601	5
2	Lock nut DIN 985 CL6 M10 FZB	02	90000539	6
1	Clamping block	00	90004076	7
-1	Threaded steel rod DIN976-1 8.8 M10x200 fzb	00A	90002740	8
2	Nut cover MSM10G	01	90003132	9
o 1	Screw_RXS_DIN7981-C_4,8x13_fzb	00	90004078	10
o 8	Screw_RXS_DIN7981-C_4,2x16_fzb	00	90004079	11
1	Kneepad ML200	00	90004080	12
1	Handwheel with threaded bar ML200	01	90004012	13
1	Screw P6SS DIN913 8.8 M8x12 fzb	00A	90002799	14
1	Nut cover M6 grey	00	90003318	15
2	Rubber bumper	01	90002753	16

Spare part list

Art no.	Product	Unit	Components	Parts
80100045	Cable for charger US	1 pce	1 x Charger cable	*
80100046	Cable for charger Uk	1 pce	1 x Charger cable	80100048
80100047	Cable for charger AUS	1 pce	1 x Charger cable	
80100048	Cable for charger EU	1 pce	1 x Charger cable	
80100001	Front castor 100 mm	1 set	1 x Front castor 1 x Locking nut M10	
			T X LOOKING THAT WITO	6
80100002	Rear castor 100 mm	1 set	1 x Rear castor 1 x Locking nut M10	80100001 80100002
			T X LOOKING THAT WITO	
80100074	Bumper kit	1 set	4 x Bumper	80100074
80100040	Actuator legspreading LA28	1 set	1 x Actuator LA28 leg spreading	
			2 x Locking nut 0,25 x Cardboard	80100040
80190031	Actuator mast LA34	1 set	1 x Actuator LA34 mast 2 x Locking nut M8	80100040
			0,5 x Cardboard	80190031
80100072	Actuator mast LA31-L4	1 pce		
80100161	Battery box CBJ Grey BAJ1	1 pce		000
80100057	Battery CBJ	1 pair	2 x Batteries	
80100149	Control box CBJC	1 pce	1 x Control box	80100149 80100161

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Art no.	Product	Unit	Components	Parts
80100156 80100130	Hand control HB32-4 Hand control Tester Linak	1 pce	1 x Hand control 4-buttons	
80100079	Footplate complete 200	1 pce	1 x Footplate holder mounted	80100156
80100080	Knee pad complete 200	1 pce	1 x Knee pad	80100080
80100070	Leg strap plate kit	1 set	2 x Leg strap plate 4 x Screw	0 80100070
80100077	Locking handle knee pad set	1 set	2 x Handle	80100077
80100081	Lift arm adjustment pin	1 set	2 x Position bolt	80100081
80100082	Lifting arm front part 200	1 pce	1 x Hoop 2 x Grip 2 x Screw 2 x Ball 2 x Plastic cap	80100082

Changing of spare parts

80100045. -46. -47. -48.

Connect the charger cable to the control box, and then plug it into a wall socket.

80100049/ 80100050 Front/Rear castor kit 80mm

Using an Allen key, remove the screw. Replace the castor, apply Loctite 2701 or similar, and then secure the castor with the screw.

80100001, 80100002 Front/rear castor 100 mm

Using an Allen key, remove the screw that holds the castor in place. Replace the castor, apply Loctite 2701 or similar, and then secure the castor with the screw.

80100074 Bumper kit

Remove the castors and remove the bumper. Install the new bumper and castors. Adjust direction of the lift by turning the bumper.

80100040 Acuator legspreading LA28

Run the actuator until the legs are drawn in fully. Activate emergency stop. Remove the foot plate and the cover by loosen the four screws. Disconnect the actuator from the control box. Loosen and remove the screw that holds the actuator. Remove the actuator. Remove the rubber cover on the actuator cord and move it to the new actuator. Install the new actuator, use the accompanying lock nut. Connect the actuator to the control box. Mount the cover and foot plate again.

80190031 Actuator mast LA34

Lower the lift arm to the lowest position. Activate the emergency stop. Disconnect the actuator from the control box. Loosen the nut and pull the screw out; then, loosen the screw and nut on the lower end of the actuator. Lift the lift arm and remove the actuator. Install the new actuator. Start by fitting the lower end, and then lift the lift arm and fit the upper end. Secure the actuator with the existing screws and the new, accompanying lock nuts. Connect the actuator to the control box.

80100149 Control box CBJC MiniLift200

Activate the emergency stop, and then disconnect the actuator and hand control. Remove the battery, loosen the long screw and remove the control box. Install the new control box and secure it with the screw. Replace the battery, and then connect the actuator and hand control.

80100161 Battery box CBJ Grey BAJ1

Remove the battery by lifting it straight up and out of the holder in the control box. Install the new battery in the holder. Note! The battery must be charged for at least four hours before it is used for the first time.

80100057 Battery CBJ

Remove the lift battery box and remove the screws. Disconnect the battery connectors and remove the batteries. Install the new batteries in the battery box and connect the connectors. Place the cover on the box and secure it with the screws. Note! The battery box must be charged for at least four hours before it is used for the first time.

80100156 Hand control HB32-4

Activate the emergency stop, and then disconnect the hand control. Connect the new hand control.

80100130 Hand control tester Linak

Follow the accompanying instructions.

80100079 Footplate complete 200

Remove the old footplate and install the new one. Replace the screws with the ones included if needed.

80100080 Kneepad complete 200

Loosen the locking screw. Loosen the lower locking handle and pull the knee pad straight out to remove it. Insert the new knee pad in the tube and tighten the locking handle. Refit the locking screw.

80100070 Leg strap plate kit

Remove the screws on either side of the lower-leg support/knee pad. Replace the leg strap plate and secure it with the accompanying screws.

80100077 Locking handle knee pad set

Unscrew the old handle and install the new one.

80100081 Lift arm adjustment pin

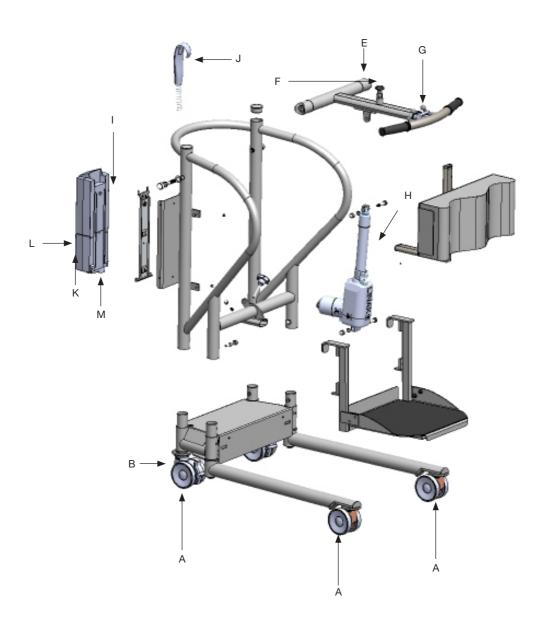
Using an wrench, remove the screw that holds the adjustment pin in place on the lift arm. Apply Loctite 2701 or similar on the new adjustment pin and then secure it with the wrench.

80100082 Lift arm front part 200

Unscrew the locking screw on the bottom of the lifting arm. Pull the lift arm adjustment pin up and pull the handle out. Insert the new lift arm in the tube and replace and lift the spring screw to secure th elifting arm. Make sure the spring screw is klicking back into place. Apply Loctite 2701 or similar on the locking screw and screw it back on the bottom of the lift arm.

Lift type	Daic inspection - protocol	Contract no:			
s/n:		Name:			
Version:		Address:			
Prod. ye Sling ba		Situation of use:	Home	Institution	Other
Commen	nts: 1. Attention 2. Correct 3. Do not use!				
Base:					
	Check for visible damage				
	Check:				
А	Castor				
В	Brakes				
С	Screws				
Upper pa	art:				
	Inspect the mast				
	Check:				
D	Screws				
Е	Lift arm hardware etc				
F	Lift arm adjustment pin				
G	Slingbar and the function of the safety latches				
Н	Mast actuator				
1	Battery and cable installations				
J	Hand control				
К	Emergency stop				
L	Emergency lowering				
М	Charging				
N	Product label				
Test of s	safe working load:				
	Safe working load test upper part				
	Safe working load test base				
	Mechanical emergency lowering				
Accesso	ories:				
Docume	entation:				
	Instructions / manuals				
Controll	box:				
	Reset the control box service counter				
D-4	_				
Date: Load te	st weight:		Sen	viced by:	

Description for periodic inspection



Periodic inspection - instruction

Base

-Check the base for visible damage to the surfaces, finish, etc.

Castors

- Roll the lift unit unloaded on the floor, check that the castors roll and turn freely.
- Check that the castor fasteners are tight.
- Check that the lift runs straight. If Necessary, adjust the bumpers by loosening the screws slightly and turning the bumpers.

Brakes

- Lock the brakes. Check that the castors do not turn when the lift unit is pushed.
- Run the base width adjustment and listen for peculiar noise or vibrations.

Screws

- Check screws.

Upper part

- Check the mast for visible damage to the surfaces, finish etc.
- Check screws, nuts, bolts etc.

Footplate

- Check the footplate for visible damage to the surfaces, finish, etc. Make sure it is correctly assembled.

Liftarm, hardware

- Check the liftarm for visible damage to the surfaces, finish etc.
- Check screws, nuts, bolts etc.

Kneepad

- Check the kneepad for visible damage to the surfaces, finish, etc. Make sure it is correctly assembled.

Slingbar and safety latch function

- Check to ensure that there is no visible wear or damage.
- Check the function of the safety latches.

Mast actuator

- Verify that the upper and lower actuator fasteners to the mast are tight.
- Visual inspection.
- Check limit switch function by running the lift arm up/down.
- Check of abnormal noise level.
- Check safety spline on actuator by running it downwards and obstructing the movement by hand. The actuator should stop. It is necessary to run the lift slightly upwards before continuing the downward movement.

Battery and cable installations

- Check battery and electrical cable.
- Verify that all cables are properly inserted.

Hand control

-Verify that all functions on the hand control are working.

Emergency stop

-Verify that the lift unit does not operate when emergency stop is pressed in.

Electric emergency lowering

-Verify the function of emergency lowering. Use a narrow object such as a pen.

Charging

-Verify that charging is operating. Yellow lamp on the controllbox should light up when charging.

Product label

- Check the serial number so that the label is there and readable. Note the serial number on the protocol.

Test loading

Test loading of MiniLift200 is done with 150 kg weight, which corresponds to a user weight of 200 kg.

Test loading with loose weights

NOTE! Both hooks must bear the weight. When one weight is used, the weight must be distributed over both hooks. Ensure that the weight pack is well clear of the actuator.

Weights must be attached to the hooks as shown in picture.

Remove the lower-leg support and footrest before test loading; this allows more space for the weight that is to be lifted.

NOTE! Replace the lower-leg support and footrest after test loading.

Move the lift arm to the outermost position and apply 150 kg.

- Run the actuator 160 mm up/down as shown in picture. The lift arm is loaded with 150 kg and placed in the outermost position.

Listen for unusual sounds during raising/lowering.

Connector hooks

- Lift 150 kg clear of the floor and wait for 20 sec.

NOTE! Load the hooks according to picture.

The base is loaded with 200 kg.

- Place 200 kg on the footrest, within the frame for foot placement. Run the base-width adjustment in/out and listen for unusual sounds.

Mechanical emergency lowering

-Verify the function of emergency lowering. With the lift loaded, round plastic knob on the actuator clockwise.

Documentation

- Check that the manual is available and up-to-date.

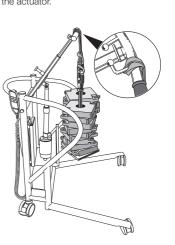
Accessories

-Check the accessories to the lift unit.

To reset the service counters press both lift buttons on the hand control at the same time for 5 seconds. An audio signal will indicate that the timer has been reset.







Maintenance

The lift must undergo thorough inspection at least once per year. Inspection must be performed by authorized personnel and in accordance with Direct Healthcare Group's service manual.

Repairs and maintenance may only be done by authorized personnel using original spare parts.



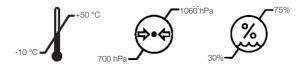
Used batteries are to be left at the nearest recycling station. Used batteries can also be returned to Direct Healthcare Group or a Direct Healthcare Group dealer for recycling.

Cleaning/disinfection

If necessary, clean the lift with warm water or a soap solution and check that the castors are free from dirt and hair. Do not use cleaning agents containing phenol or chlorine, as this could damage the aluminium and the plastic materials. If disinfection is needed, 70 % ethanol, 45 % isopropanol or similar should be used.

Storage and transportation

If the lift is not to be used for some time or e.g., during transport, we recommend that the emergency stop button be pressed in. The hoist should be transported and stored in -10 $^{\circ}$ C to + 50 $^{\circ}$ C and in normal humidity, 30% -75 %. The air pressure should be between 700 and 1060 hPa. Let the hoist reach room temperature before the batteries are charged or the hoist is used.



Service agreements

Direct Healthcare Group offers the possibility of service agreements for maintenance and regular testing of your mobile lift. Contact your local Direct Healthcare Group representative.

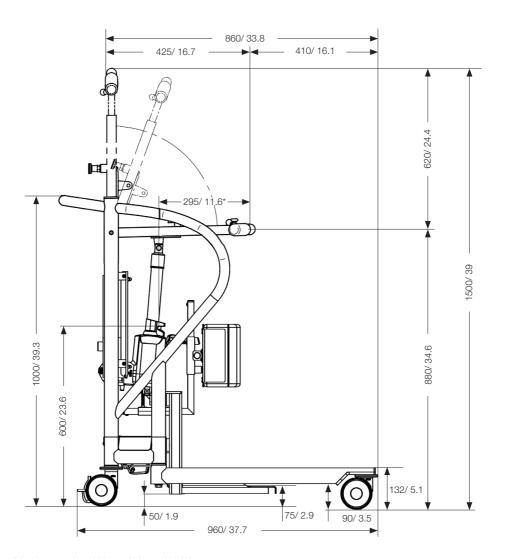
Symbols

(3) [i]	Read user manual
	May not be discarded in domestic waste
CE	The product complies with the requirements of the Medical Devices Directive 93/42/EEC.
†	Type B, according to the degree of protection against electric shock.
(-	The device is intended for indoor use.
	Class II equipment
TUV SUD C NATL US	This product is tested and approved in regards to safety in the workplace according to the requirements of the US Occupational Safety & Health Administration. "US" stands for compliance with the requirements of US authorities, "C" for compliance with Canadian requirements.
\triangle	Always Read The User Manual

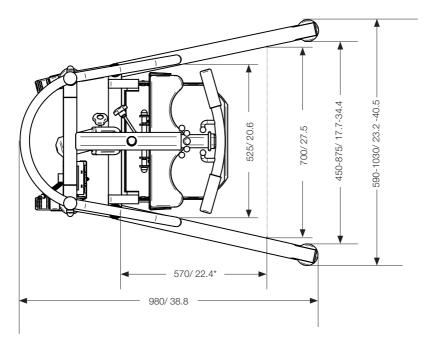
Technical Information

Lifting speed	35 mm/s without load
Batteries	Two 12V, 2.9 Ah valve-regulated, sealed, lead accumulator (gel-type batteries)
Charger	Max. 400mA
Motor (mast)	DC 24 V, 10.5 Ah. Operating time: 10% maximum continuous operation for 2 minutes Push: 7500N
Motor (base)	DC 24 V, 12.3 Ah. Operating time: 10% maximum continuous operation for 2 minutes Push: 2000N
Sound level	55.8 dB(A)
Material	Steel
Emergency lowering	Manual and electrical
Castors	Front 3.9", 100 mm, back 3.9", 100 mm
Weight	49 kg/108 lbs
IP class	IP X4
Expected lifetime	10 years
Operating forces buttons on	4 N
hand control	
Max. load	200 kg/ 441 lbs

Medical Device Class I. The product complies with the requirements of the Medical Devices Directive 93/42/EEC.



^{*} Maximum reach at 600 mm (referens height)



* Reach from base with legs spread to 700 mm (referens)

System RoMedic

Simple solutions for great results

SystemRoMedic® is the name of Direct Healthcare Group's unique easy transfer concept, the market's widest and most comprehensive range of clever, easy-to-use and safe transfer and lifting aids designed to make life easier, both for the user and for the caregiver. SystemRoMedic® is a complete solution that provides for the majority of patient transfer or manual handling requirements. From the simplest to the most complex scenarios, from the lightest to the heaviest. The concept encompasses assistive devices for four different categories of transfers:

- Transfer, assistive devices for manual transfers of users between two locations.
- Positioning, assistive devices for manual repositioning of users within the same location.
- Support, assistive devices for mobility support e.g., during sit-to-stand or gait training.
- Lifting, assistive devices for manual and mechanical lifting of users.

Improved work environment, improved quality of care and cost savings

The philosophy behind SystemRoMedic is focused on the prevention and reduction of occupational injuries while allowing users to experience a greater sense of independence and dignity. Through a unique combination of training and a complete range of efficient transfer aids, SystemRoMedic offers improvement of both work environment and quality of care and, at the same time, achieves significant cost savings.

Always make sure that you have the correct version of the manual

The most recent version of all manuals are available for downloading at/from our website; www.directhealthcaregroup.com

For questions about the product and its use

Please contact your local Direct Healthcare Group and SystemRoMedic® representative. A complete list of all our partners with their contact details can be found on our website; www.directhealthcaregroup.com.



Medical Device Class I



