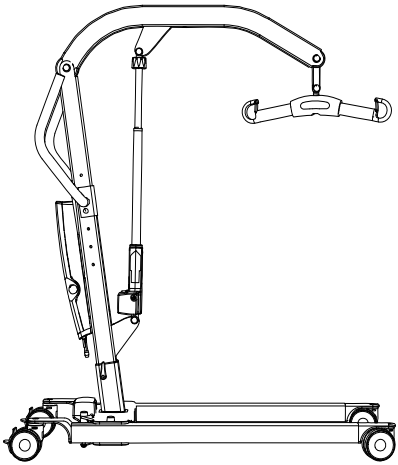
VanGo Maintenance Manual

VANCARE®
We move body and mind



Functional inspection

Visual inspection

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

Always read the instructions

Read instructions for all assistive devices used in connection with transfers. Keep the manual where it is accessible to users of the product.
Do not leave the patient unattended during a lifting situation.

Before use:

Make certain the lift is properly assembled.
Check Slingbar connection and safety latch function.
Check lifting function and base-width adjustment.
Under no circumstances may the lift be used by persons who have not received instruction in the operation of the lift.

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Important Information

• The lift must be assembled according to the assembly instructions provided by Vancare.

• The lift may only be used on a level floor.

• Lifting accessories must be properly trial fitted and tested in relation to the user's needs and functional ability.

• Under no circumstances may the safe working load be exceeded. See section on Technical information and the product label on the lift.

• Never move the lift by pulling on the actuator! 

• The lift must not be exposed to running water.

• Batteries control unit and actuators on the lift must not come in direct contact with water.

• The lift must not be charged in a wet room or used in connection with showering and bathing.

• To ensure optimal function, the lift must be inspected regularly. See section on other maintenance details.

• Warranty applies only if repairs or alterations are made to the product by personnel who are authorized by Vancare.

Technical information VANGO 440

Lifting speed:	23 mm/s without load.
Batteries:	Two 12V, 2,9 Ah valve-regulated, sealed, lead accumulator (gel-type batteries)
Charger:	Max. 400mA
Motor (mast):	DC 24V, 5 A. IP X4. Operationtime: 10% at maximum continous running of 2 minutes, maximum 5 switching cycles per minute. Push: 6000N.
Motor (base):	24V, 5 A, IP X4. Operationtime: 10% at maximum continous operation of 2 minutes, maximum 5 cycles per minute. Push: 3000N.
Sound level:	With load: upwards: 43 dB(A) downwards: 44 dB(A). Operations force for the handset: 4 N.
Material:	Aluminum
Emergency lowering:	Mechanical and electrical
Castors:	Front 4", 100 mm, back 4", 100mm
Weight:	75 lbs, 34 kg
IP class:	IP X4
Expected lifetime:	10 years
Operating forces controls:	Buttons on hand control: 4 N

The lift has been tested by an accredited testing institute and complies with the requirements of Council Directive 93/42/EEC of 14. June 1993 concerning medical devices

The device is intended for indoor use.

Type B, according to the degree of protection against electric shock.

Technical Information VanGo VG450

Lifting speed:	34 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 A. IP X4. Operationtime: 10% at maximum continous running of 2 minutes, maximum 5 switching cycles per minute. Push: 10 000N.
Motor (base):	24 V, 3 A, IP X4. Operationtime: 10% at maximum continous operation of 2 minutes, maximum 5 cycles per minute. Push: 3000N.
Sound level:	With load: upwards: 74.7 dB(A) downwards: 52.6 dB(A). Operations force for the handset: 4 N.
Material:	Aluminum
Emergency lowering:	Mechanical and electrical
Castors:	Front 4", 100 mm, back 4", 100mm
Weight:	75 lbs, 34 kg
IP class:	IP X4
Expected lifetime:	10 years
Operating forces controls:	Buttons on hand control: 4 N

The lift have been tested by an accredited testing institute and complies with the requirements of Council Directive 93/42/EEC of 14. June 1993 concerning medical devices

The device is intended for indoor use.

Type B, according to the degree of protection against electric shock.

Technical Information VanGo VG600

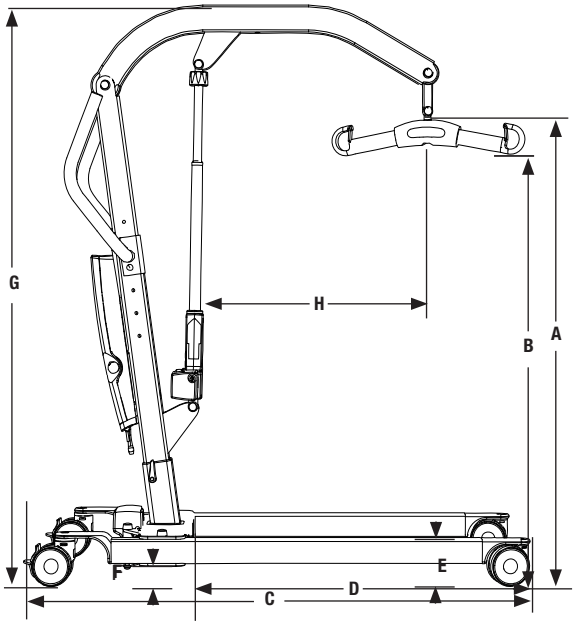
Lifting speed:	34 mm/s without load.
Batteries:	Two 12V, 2.9 Ah valve-regulated, sealed, lead accumulator (gel-type batteries)
Charger:	Max. 400mA
Motor (mast):	DC 24 V, 10 A. IP X4. Operationtime: 10% at maximum continous running of 2 minutes, maximum 5 switching cycles per minute. Push: 10 000N.
Motor (base):	24 V, 3 A, IP X4. Operationtime: 10% at maximum continous operation of 2 minutes, maximum 5 cycles per minute. Push: 3000N.
Sound level:	With load: upwards: 74.7 dB(A) downwards: 52.6 dB(A). Operations force for the handset: 4 N.
Material:	Aluminum
Emergency lowering:	Mechanical and electrical
Castors:	Front 4", 100 mm, back 4", 100mm
Weight:	86 lbs, 39 kg
IP class:	IP X4
Expected lifetime:	10 years
Operating forces controls:	Buttons on hand control: 4 N

The lift have been tested by an accredited testing institute and complies with the requirements of Council Directive 93/42/EEC of 14. June 1993 concerning medical devices

The device is intended for indoor use.

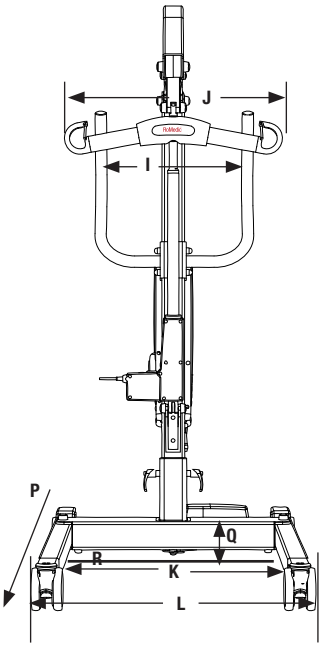
Type B, according to the degree of protection against electric shock.

Dimensions VanGo VG400



	A	B
A1	58-186	22.85-73.28
A2	63-191	24.82-75.25
A3	68-196	26.79-77.22
B1	50-169	19.70-66.59
B2	54-174	21.28-68.56
B3	59-179	23.25-70.53
C	130	51,22
D	88	34,67
E	11,5	4,53
F	6	2,36
G1	133-192	52.4-75.65
G2	138-197	54.37-77.62
G3	143-202	56.34-79.59
H	55	21.67

Column A measurement is in cm and weight is in kg.
Column B measurement is in inch and weight is in lbs.

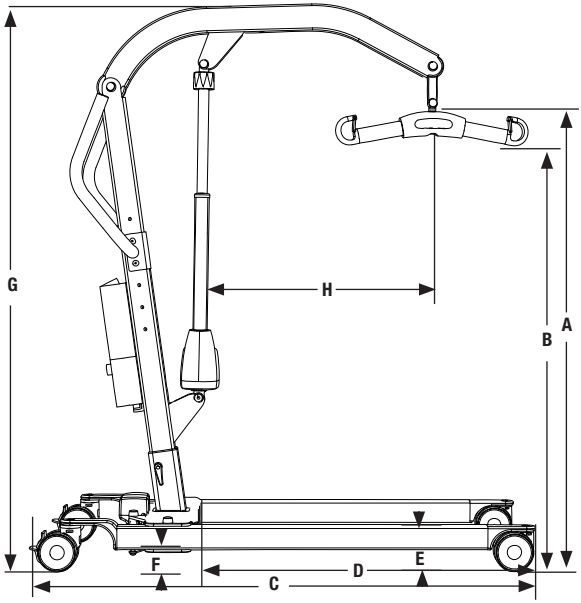


	A	B
I	44	17.34
J	45	17.73
K	58,5-88	23.05-34.67
L	68.5-98	26.99-38.61
M	134	54
N	34	74.9
O	14,5	31.9
Q	27	10.64
S	41	16,1
T	22	8,7
U	45	17,7

M is turning diameter
N is total weight of lift
O is the weight of the heaviest component
P is movement in forward direction
R is referencemeasure 70 cm with max legspreading

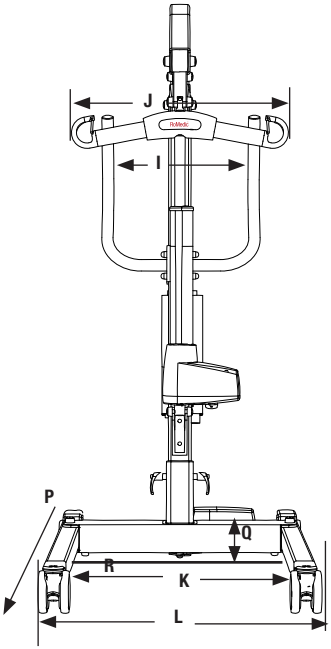
S is minimum distance from wall to slingbar at maximum height (legs spread).
T is minimum distance from wall to slingbar at maximum reach (legs spread).
U is minimum distance from wall to slingbar at minimum height (legs spread).

Dimensions VanGo VG450



	A	B
A1	58-186	22.85-73.28
A2	63-191	24.82-75.25
A3	68-196	26.79-77.22
B1	50-169	19.70-66.59
B2	54-174	21.28-68.56
B3	59-179	23.25-70.53
C	130	51,22
D	8	34,67
E	11,5	4,53
F	6	2,36
G1	133-192	52.4-75.65
G2	138-197	54.37-77.62
G3	143-202	56.34-79.59
H	55	21.67

Column A measurement is in cm and weight is in kg.
Column B measurement is in inch and weight is in lbs.



	A	B
I	44	17.34
J	45	17.73
K	58,5-88	23.05-34.67
L	68.5-98	26.99-38.61
M	134	54
N	34	74.9
O	14,5	31.9
Q	27	10.64
S	41	16,1
T	22	8,7
U	45	17,7

M is turning diameter
N is total weight of lift
O is the weight of the heaviest component
P is movement in forward direction
R is referencemeasure 70 cm with max legspreading

S is minimum distance from wall to slingbar at maximum height (legs spread).
T is minimum distance from wall to slingbar at maximum reach (legs spread).
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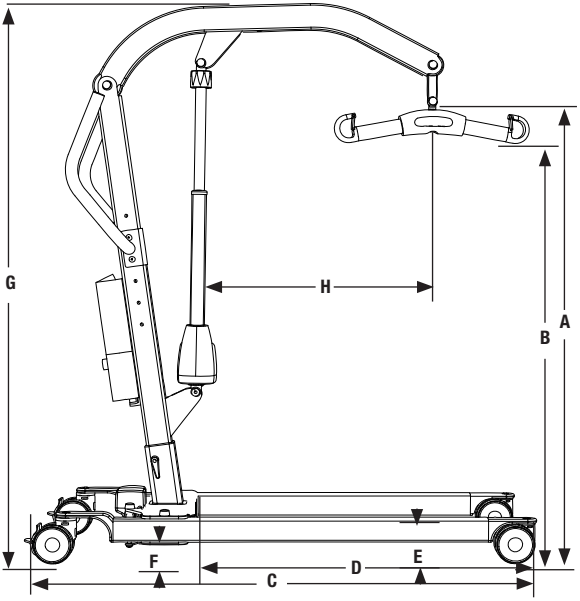
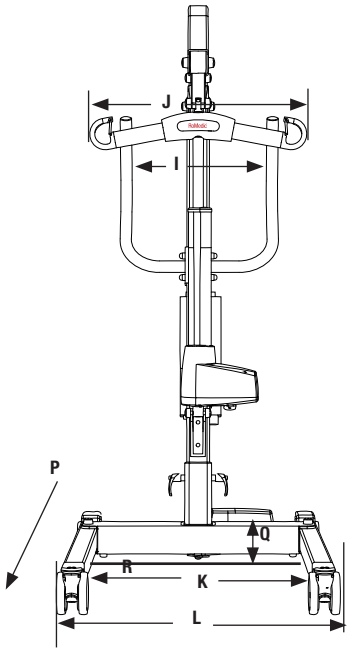
Dimensions VanGo VG600



	A	B
A1	58-186	22.85-73.28
A2	63-191	24.82-75.25
A3	68-196	26.79-77.22
B1	50-169	19.70-66.59
B2	54-174	21.28-68.56
B3	59-179	23.25-70.53
C	141	55,55
D	88	34,67
E	11,5	4,53
F	6	2,36
G1	133-192	52.4-75.65
G2	138-197	54.37-77.62
G3	143-202	56.34-79.59
H	55	21.67

Column A measurement is in cm and weight is in kg.
Column B measurement is in inch and weight is in lbs.

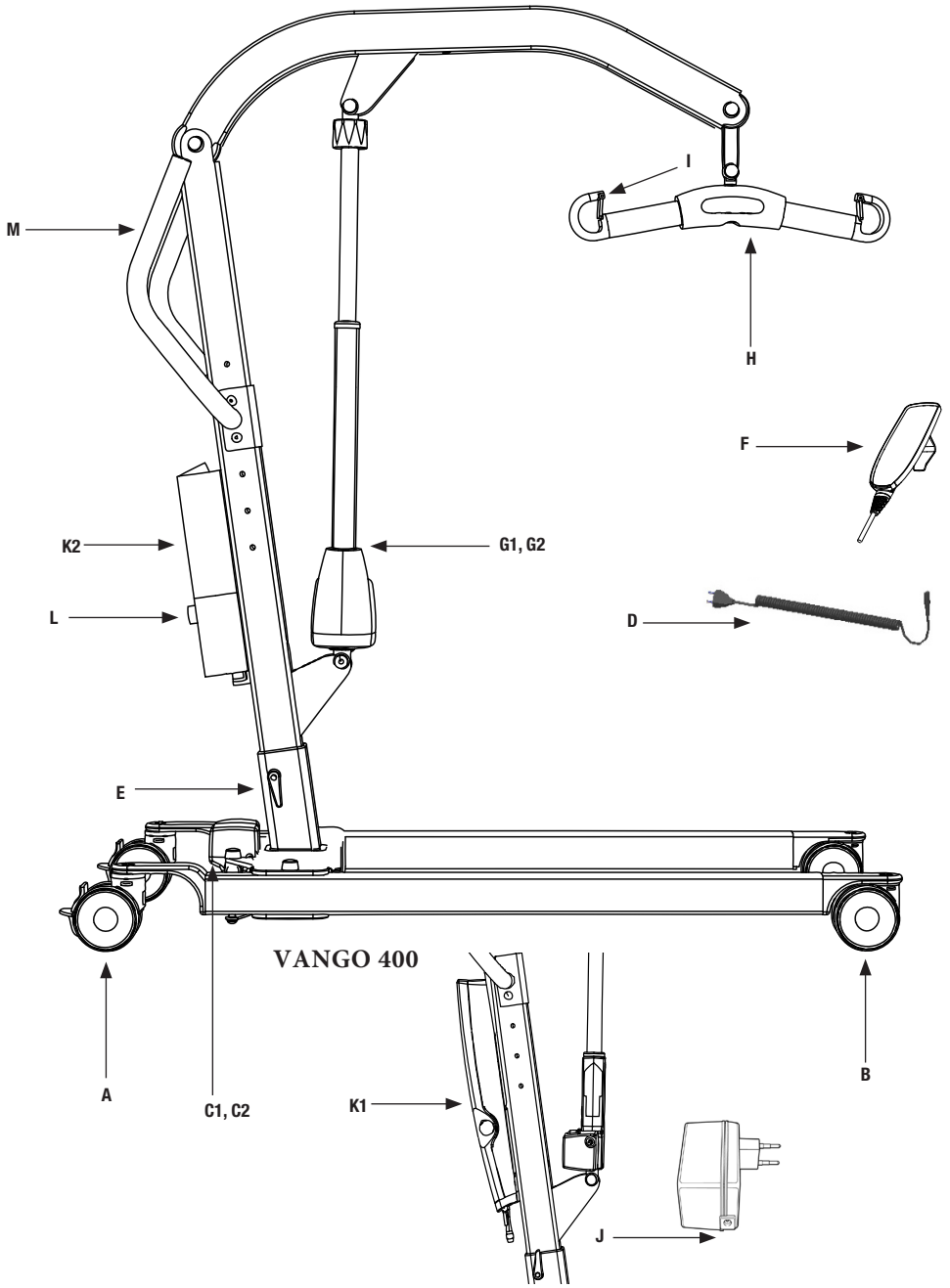


	A	B
I	44	17.34
J	45	17.73
K	65-105	25.61-41.37
L	75-115	29.55-45.31
M	134	54
N	39	74.9
O	14,5	31.9
Q	27	10.64
S	41	16,1
T	22	8,7
U	45	17,7

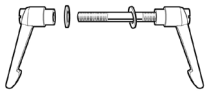
M is turning diameter
N is total weight of lift
O is the weight of the heaviest component
P is movement in forward direction
R is referencemeasure 70 cm with max legspreading

S is minimum distance from wall to slingbar at maximum height (legs spread).
T is minimum distance from wall to slingbar at maximum reach (legs spread).
U is minimum distance from wall to slingbar at minimum height (legs spread).

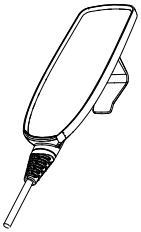
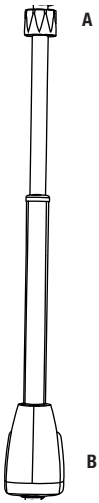
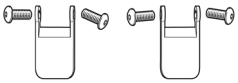
Description of parts



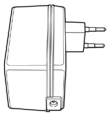
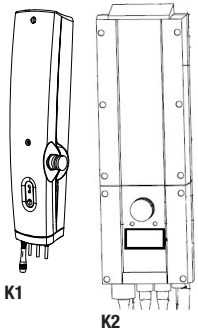
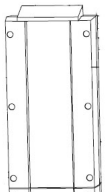
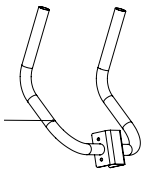
Spare parts and attachments

Pos	Articleno	Product	Unit	Assemb. parts	Parts
A	80100002	Rearcastor	2	Screw Nut	
B	80100001	Frontcastor	2	Screw Nut	
C1	80100055	Actuator leg-spreading 400	1	Screw Nut Bushing	
C2	80100056	Actuator leg-spreading 450/600	1	Washer nutcap Nutcap	
D	80100048	Cable for charger EU 450/600		1	
E	80100032	Lever	2	Treahed stud	

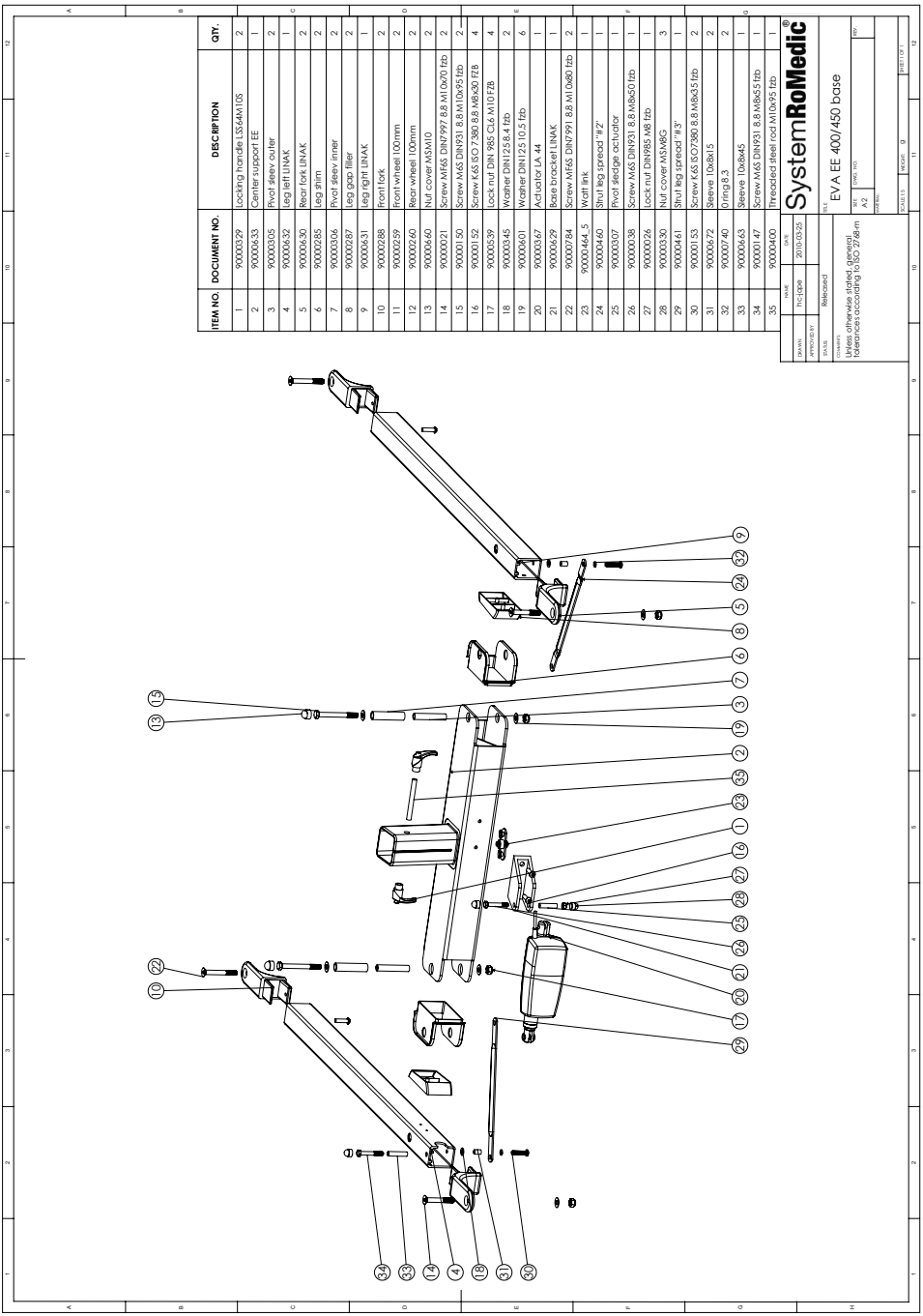
Spare parts and attachments

Pos	Articleno.	Product	Unit	Assemb. parts	Parts
F	80100044	Handcontrol	1		
G1	80100053	Actuator 400 Mast	1	A. Screw Nut Bushing	
G2	80100054	Actuator 450/600 Mast	1	Washer nutcap Nutcap B. Screw Nut Bushing Washer nutcap Nutcap	
H	70200002	SlingBar M	1		
I	80100023	Hangerstrap- Lock	2	Screws	

Spare parts and attachments

Pos	Articleno.	Product	Unit	Assemb. parts	Parts
J	80100052	Charger EU	1	Cable for charger	 EU
K1	80100051	Controlbox 400	1	Plate Screws	 K1 K2
K2	80100042	Controlbox 450/600	1		
L	80100043	Batterybox 450/600	1		
M	80100034	Push-handlebar	1	Screw Nut Washer for nutcap Nutcap	

Exploded view - chassies VanGo VG400/VG450



ITEM NO.	DOCUMENT NO.	DESCRIPTION	QTY.
1	900003?9	Locking handle LSS64M10S	2
2	900006?3	Center support EE	1
3	900003?5	Pivot sleev outer	2
4	900006?2	Leg left LINAK	1
5	900006?0	Rear fork LINAK	2
6	900002?5	Leg shim	2
7	900003?6	Pivot sleev inner	2
8	900002?7	Leg gap filler	2
9	900006?1	Leg right LINAK	1
10	900002?8	Front fork	2
11	900002?9	Front wheel 100mm	2
12	900002?0	Rear wheel 100mm	2
13	900006?0	Nut cover M5M10	2
14	900000?1	Screw M?6S DIN7997 8.8 M10x70 ftb	2
15	900001?0	Screw M6S DIN931 8.8 M10x95 ftb	2
16	900001?2	Screw K6S ISO 7380 8.8 M8x30 FTB	4
17	900003?9	Lock nut DIN 985 Cl.6 M10 FTB	4
18	900003?5	Washer DIN125 8.4 ftb	2
19	900006?1	Washer DIN125 10.5 ftb	6
20	900003?7	Actuator LA 44	1
21	900006?9	Base bracket LINAK	1
22	900007?4	Screw M?6S DIN7991 8.8 M10x80 ftb	2
23	900014?4_5	Kraft link	1
24	900004?0	Strut leg spread "#2"	1
25	900003?7	Pivot sledge actuator	1
26	900000?8	Screw M6S DIN931 8.8 M8x50 ftb	1
27	900000?6	Lock nut DIN985 M8 ftb	1
28	900003?0	Nut cover M5M8G	3
29	900004?1	Strut leg spread "#3"	1
30	900001?3	Screw K6S ISO7380 8.8 M8x35 ftb	2
31	900006?2	Sleeve 10x8x15	2
32	900007?0	O'ring 8.3	2
33	900006?3	Sleeve 10x8x45	1
34	900001?7	Screw M6S DIN931 8.8 M8x55 ftb	1
35	900004?0	Threaded steel rod M10x95 ftb	1

	NAME	DATE
DRAWN	TH-Pape	2010-03-25
APPROVED BY		
STATUS	Released	

Unless otherwise stated, general tolerances according to ISO 2768-m

SystemRoMedic

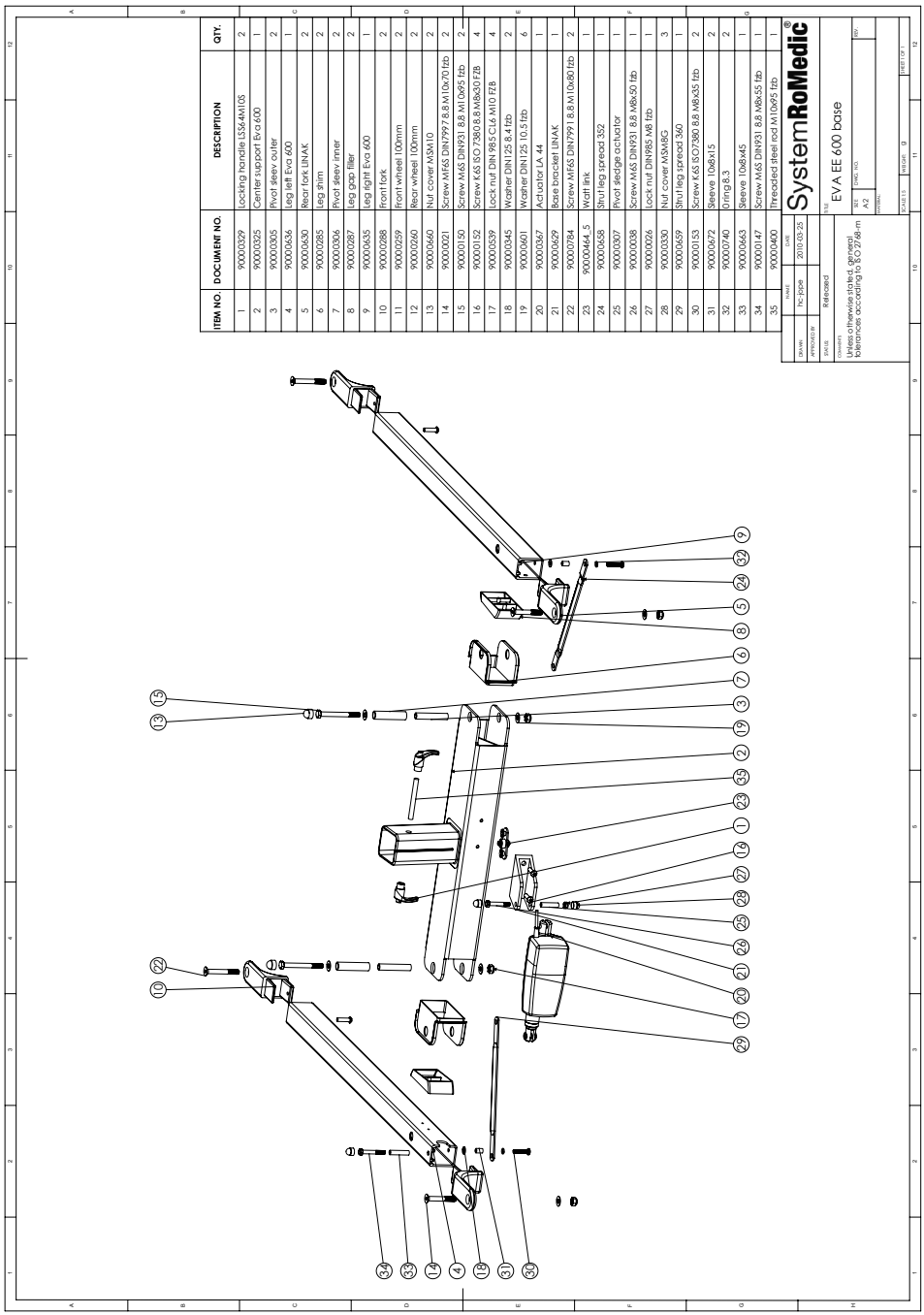
TITLE: EVA EE 400/450 base

SIZE: A2 | DWG NO: | REV:

MATERIAL:

SCALE 1:5 | WEIGHT: g | SHEET 1 OF 1

Exploded view - chassies VanGo VG600



ITEM NO.	DOCUMENT NO.	DESCRIPTION	QTY.
1	90000329	Locking handle LS36.4M10S	2
2	90000325	Center support Evo 600	1
3	90000305	Pivot sleev outter	2
4	90000636	Leg left Evo 600	1
5	90000630	Rear fork LINAK	2
6	90000285	Leg shim	2
7	90000306	Pivot sleev inner	2
8	90000287	Leg gap filler	2
9	90000635	Leg right Evo 600	1
10	90000288	Front fork	2
11	90000259	Front wheel 100mm	2
12	90000260	Rear wheel 100mm	2
13	90000660	Nut cover M5M10	2
14	90000021	Screw M6S DIN7997 8.8 M10x70 ftb	2
15	90000150	Screw M6S DIN931 8.8 M10x95 ftb	2
16	90000152	Screw K6S ISO7380.8.8 M8x30 FZB	4
17	90000339	Lock nut DIN985 CL6 M10 FZB	4
18	90000345	Washer DIN125 8.4 ftb	2
19	90000601	Washer DIN125 10.5 ftb	6
20	90000367	Actuator LA 44	1
21	90000629	Base bracket LINAK	1
22	90000784	Screw M6S DIN7991 8.8 M10x80 ftb	2
23	90000464_5	Wrath link	1
24	90000658	Strut leg spread 352	1
25	90000307	Pivot sledge actuator	1
26	90000038	Screw M6S DIN931 8.8 M8x50 ftb	1
27	90000026	Lock nut DIN985 M8 ftb	1
28	90000330	Nut cover M5M8G	3
29	90000659	Strut leg spread 360	1
30	90000153	Screw K6S ISO7380 8.8 M8x35 ftb	2
31	90000872	Sleeve 10x8x15	2
32	90000740	O'ring 8.3	2
33	90000663	Sleeve 10x8x45	1
34	90000147	Screw M6S DIN931 8.8 M8x55 ftb	1
35	90000400	Threaded steel rod M10x65 ftb	1

	NAME	DATE
DRAWN	Nc-Jope	2010-03-25
APPROVED		
STATUS	Released	

Unless otherwise stated, general tolerances according to ISO 2768-m

SystemRoMedic

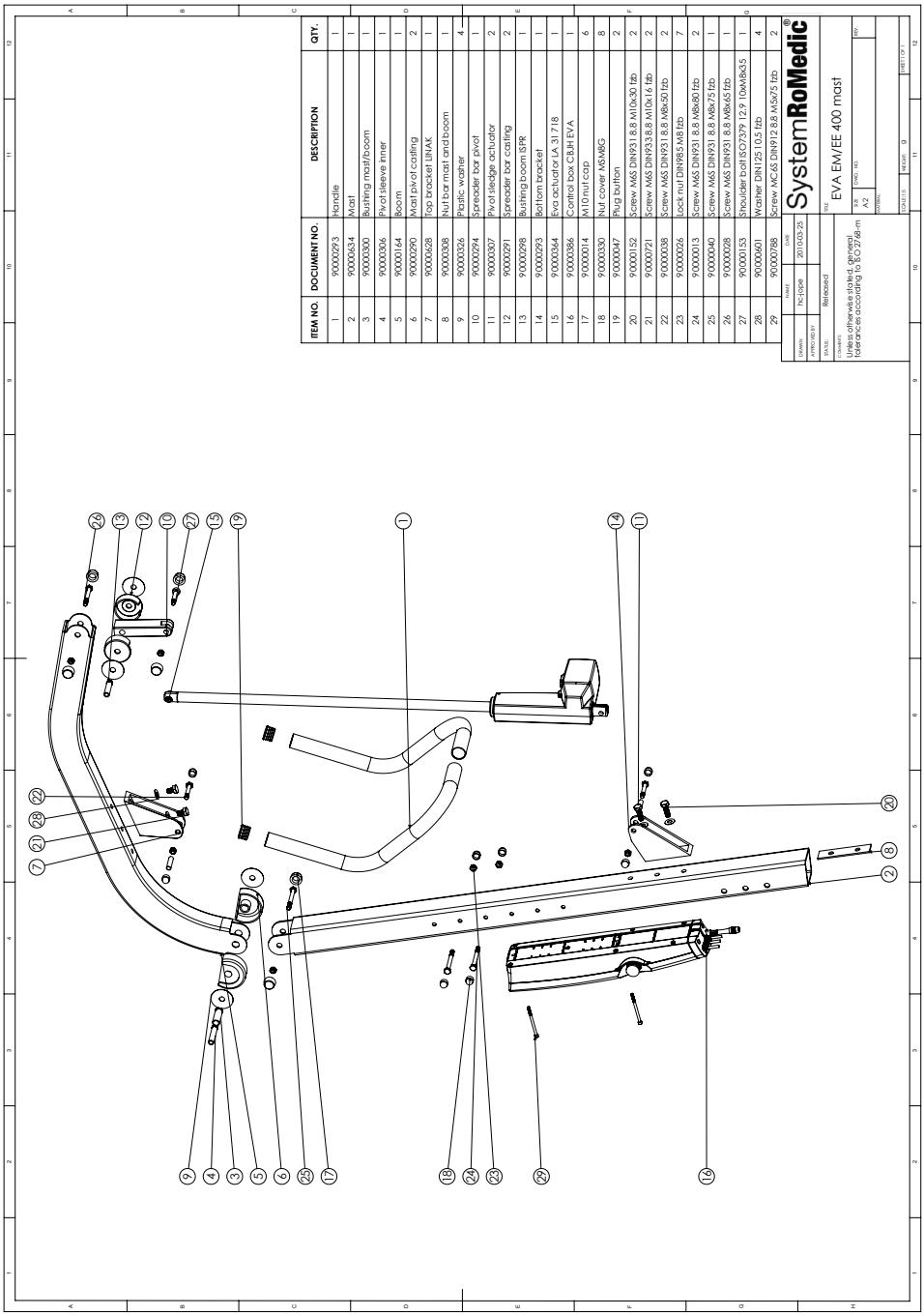
TITLE: EVA EE 600 base

SIZE: A2 | DWG NO: | REV:

CUSTOMER:

SCALE 1:5 | WEIGHT: g | SHEET 1 OF 1

Exploded view - mast and boom VanGo VG400



ITEM NO.	DOCUMENT NO.	DESCRIPTION	QTY.
1	90000293	Handle	1
2	90000634	Mast	1
3	90000300	Bushing mast/boom	1
4	90000306	Pivot sleeve inner	1
5	90000164	Boom	1
6	90000290	Mast pivot casting	2
7	90000628	Top bracket LINAK	1
8	90000308	Nut bar mast and boom	1
9	90000326	Plastic washer	4
10	90000294	Spreader bar pivot	1
11	90000307	Pivot sledge actuator	2
12	90000291	Spreader bar casting	2
13	90000298	Bushing boom SPR	1
14	90000293	Bottom bracket	1
15	90000364	Evo actuator LA 31 7 18	1
16	90000386	Control box CB-H EVA	1
17	90000014	M10 nut cap	6
18	90000330	Nut cover M5/M6G	8
19	90000047	Plug button	2
20	90000152	Screw M6S DIN931 8.8 M10x30 ftb	2
21	90000721	Screw M6S DIN933 8.8 M10x16 ftb	2
22	90000398	Screw M6S DIN931 8.8 M8x50 ftb	2
23	90000026	Lock nut DIN985 M8 ftb	7
24	90000013	Screw M6S DIN931 8.8 M8x80 ftb	2
25	90000040	Screw M6S DIN931 8.8 M8x75 ftb	1
26	90000028	Screw M6S DIN931 8.8 M8x65 ftb	1
27	90000153	Shoulder bolt ISO7379 12.9 10xM8x35	1
28	90000601	Washer DIN125 10.5 ftb	4
29	90000788	Screw MC-6S DIN912 8.8 M5x75 ftb	2

	NAME	DATE
DRAWN	hc/pce	2010-03-25
APPROVED BY		
STATUS	Released	

GENERAL TOLERANCES
Unless otherwise stated, general tolerances according to ISO 2768-m

SystemRoMedic®

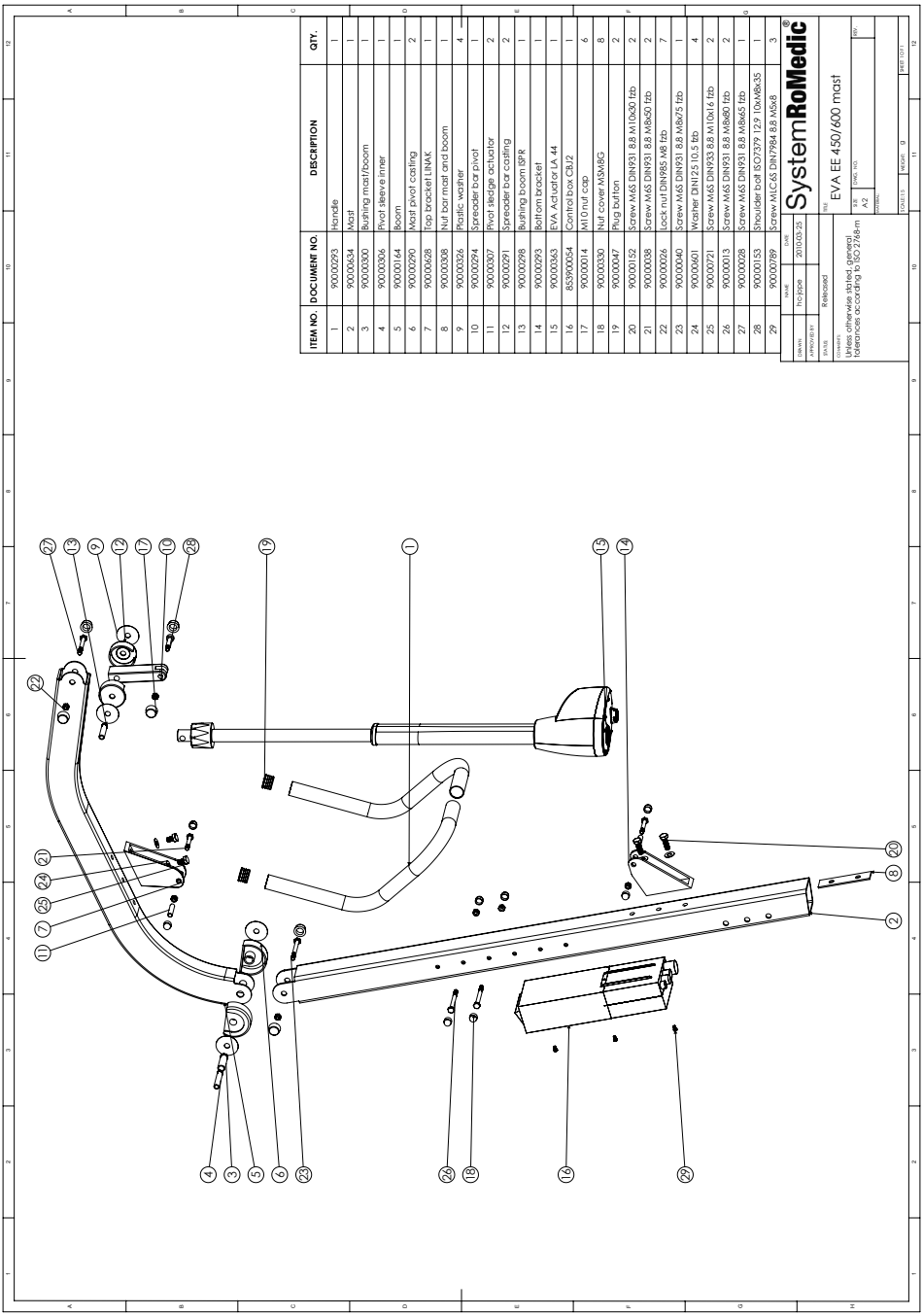
TITLE: EVA-EM/EE 400 mast

SIZE: A2 | DWG. NO. | REV.

MATERIAL:

SCALE: 0.15 | WEIGHT: kg | SHEET 1 OF 1

Exploded view - mast and boom VanGo VG450/VG600



ITEM NO.	DOCUMENT NO.	DESCRIPTION	QTY.
1	90000293	Handle	1
2	90000634	Mast	1
3	90000300	Bushing mast/boom	1
4	90000306	Pivot sleeve inner	1
5	90000164	Boom	1
6	90000290	Mast pivot casting	2
7	90000628	Top bracket LINAK	1
8	90000308	Nut bar mast and boom	1
9	90000326	Plastic washer	4
10	90000294	Spreader bar pivot	1
11	90000307	Pivot sledge actuator	2
12	90000291	Spreader bar casting	2
13	90000298	Bushing boom ISPR	1
14	90000293	Bottom bracket	1
15	90000363	EVA Actuator LA 44	1
16	853900054	Control box CBJ2	1
17	90000014	M10 nut cap	6
18	90000300	Nut cover M3x8G	8
19	90000047	Plug button	2
20	90000152	Screw M6S DIN931 8.8 M10x30 fzb	2
21	90000038	Screw M6S DIN931 8.8 M8x50 fzb	2
22	90000026	Lock nut DINP85 M8 fzb	7
23	90000040	Screw M6S DIN931 8.8 M8x75 fzb	1
24	90000601	Washer DIN125 10.5 fzb	4
25	90000721	Screw M6S DIN933 8.8 M10x16 fzb	2
26	90000013	Screw M6S DIN931 8.8 M8x80 fzb	2
27	90000028	Screw M6S DIN931 8.8 M8x65 fzb	1
28	90000153	Shoulder bolt ISO7379 12.9 10xM8x35	1
29	90000789	Screw M6C6S DIN7984 8.8 M5x8	3

	NAME	DATE
DRAWN	TH Pipe	2010-03-25
APPROVED BY		
STATUS	Released	

Unless otherwise stated, general tolerances according to ISO 2768-m

SystemRoMedic®

EVA EE 450/600 mast

SIZE A2 | DWG. NO. | REV.

SCALE 1:5 | WEIGHT | SHEET 1 OF 1

Periodic inspection

Lift type:
s/n:
Version:
Prod. Year:

Contract no:
Name:
Address:

Comments: 1. Attention 2. Correct 3. Do not use!

		Chassie	
		Check for visible damage	
		Check:	
A		Castors	
B		Brakes	
C		Legspreading	
		Mast	
		Inspect the mast	
		Check:	
D		Locking handles	
E		Lift arm hardvare etc	
F		Link	
G		Slingbar and the function of the safety latches	
H		Mast actuator	
I		Battery and cable installations	
J		Handcontrol	
K		Emergency stop	
L		Emergency lowering	
M		Charging	
N		Product lable	
		Test of max. load	
		Max. load test mast	
		Max. load test base	
		Mechanical emergency lowering	
		Accessories	
		Documentation	
		Instructions / manuals	

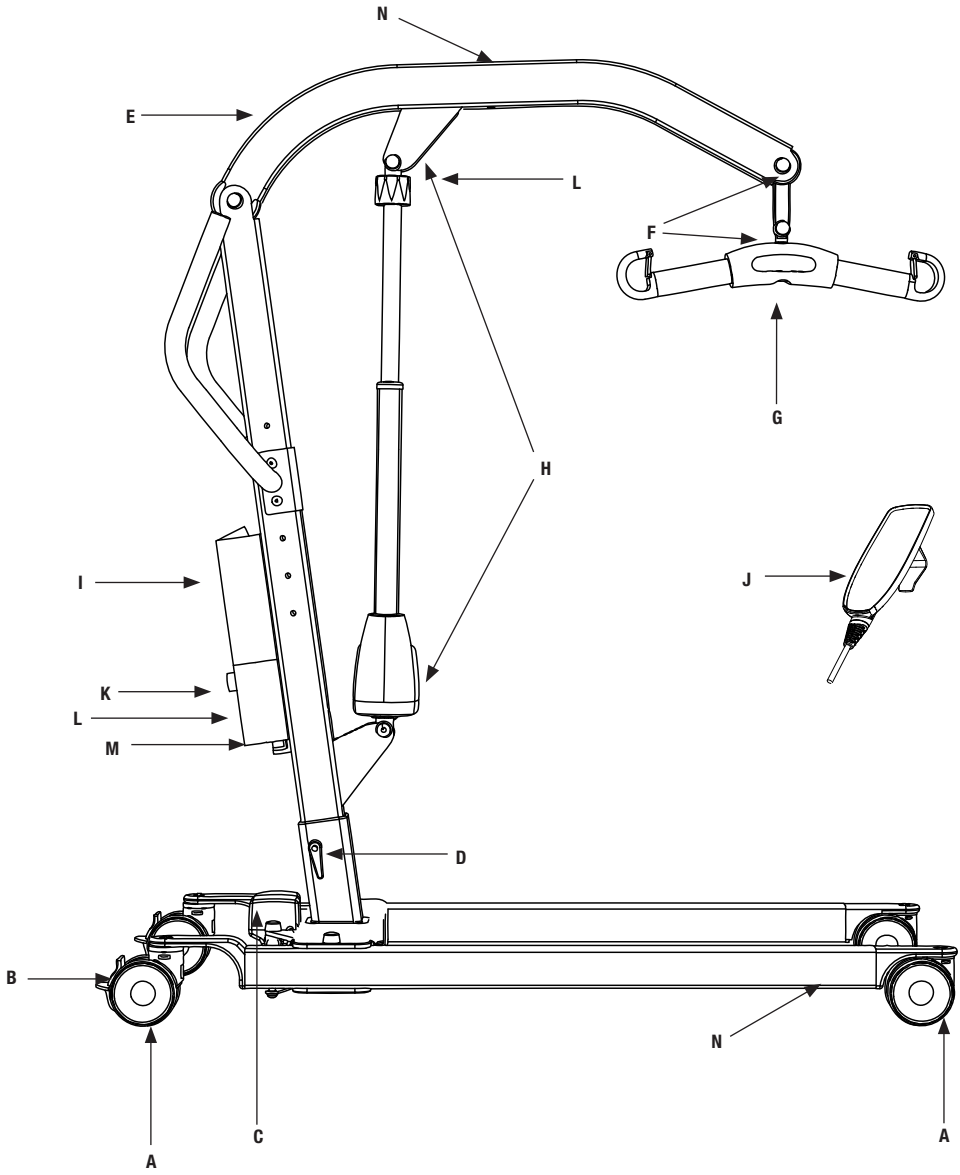
In accordance whith ISO 10535:2007 Annex A-Periodic inspection

Date: _____ Load test weight: _____

Serviced by: _____

_____

Description for periodic inspection



Periodic inspection

Instruction:

Check the base

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

Castors

-Roll the lift unloaded on the floor, check that the castors roll and turn freely.

-Check that the castor fasteners are tight.

Brakes

-Lock the brakes. Check that the castors do not turn when the lift is pushed.

Check the legspreading actuator

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

-Check screws, bolts and links etc.

Check the mast

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

-Check screws, nuts, bolts etc.

Locking handles

-Check the locking handles. Verify that threads are not damaged or binding.

Liftarm, hardwear

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

-Check screws, nuts, bolts etc.

Link

-Check the link, slingbar to mast, hardware and covers.

-Check screws, bolts and links etc.

Slingbar and safety latch function

-Check to ensure that there is no visible wear or damage.

Check the mast actuator

-Verify that the upper and lower actuator fasteners to the mast are tight.

-Visual inspection.

-Check of abnormal noise level.

Periodic inspection

Instruction:

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

Controlbox
-Verify that all functions on the control panel are working

Handcontrol
-Verify that all functions on the handcontrol are working.

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

Emergency lowering
-Verify the function of emergency lowering.

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

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

Max. load test
Mast max. load
-Run the lift with maximum load, all the way up and down, listen for peculiar noises and vibrations.

Base max. load
-Widen the base with maximum load, listen for peculiar noises and vibrations.

Accessories
-Check the accessories to the lift.

Documentation
-Instruction / Manual

Trouble-shooting

If the lift is not working properly (up or down), check the following:

- The emergency stop device is not pressed in.
- All cables are properly connected.
- The battery charges via the adaptor.

If the lift is not working properly, contact your local distributor.

The lift can be raised but not lowered (or vice versa), or the base-width adjustment only works in one direction. Check the following:

That all cables are properly and securely connected. Pull out the contact and plug it in again firmly.

If the lift makes unusual noises:

Try to locate the source of the sound, take the lift out of operation .

Final inspection

Inspect the lift for signs of wear and damage. Check all four castors and castor brakes.

Check all connections and fixtures including screws and bolts. Check the packaging to ensure that there are no loose parts.

Check emergency stop function by depressing 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 liftarm all the way down.
Test base-width adjustment function by pressing the button for base-width adjustment. Widen the base to max. width and then press the other button to narrow it 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 in the lift, see section on Emergency lowering.

If the equipment is satisfactory upon inspection, connect the charger to the lift and to a power outlet, and then 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.

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

Maintenance

The lift must undergo thorough inspection at least once per year. Inspection must be performed by authorized personnel and in accordance with Vancare's service manual.
Repairs and maintenance may only be done by authorized personnel using original spare parts.

Spent batteries are to be left at the nearest recycling station.

Cleaning/disinfection

When necessary, clean the lift with warm water or rubbing alcohol and ensure that the castors are free of dirt and hair. Do not use cleaning agents containing phenol or chlorine, as this may damage aluminum and polyamide materials.

Storage

If the lift is not to be used for some time or e.g., when transporting, we recommend the emergency stop button to be pushed in. Store the lift at a temperature exceeding freezing and at normal relative humidity (about 60%).

For more information on your VanGo lift and accessories, please call 1-800-694-4525 for your nearest distributor. Or go to our website at www.vancare.com for more information.

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Manufactured for:

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402-694-4525
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