

Hygiene Equipment Designed for People

Service manual



Registered at Medical Products Agency, Sweden, as a MD Class 1 product, MDD 93/42EEC.

TR reserves the right to make design changes and/or improvements without notice.



Always study this manual carefully before operating the Shower Trolley.

Operating instructions and recommended maintenance procedures are explained in the following pages.

If you have any questions regarding the operation or maintenance of your Shower Trolley and cannot find the answer in this manual, please contact us. Only qualified staff who are trained and certified and who can understand all operating and safety procedures may operate and service this equipment.

The Trolley is designed for years of trouble free operation, with proper use and maintenance.

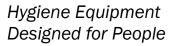
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Shower trolleys and Mobile Bath Lift System

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Product	Description	Art no
TR 2000	Hydraulic shower trolley, standard, L = 1900 mm	0522010
TR 2000-S	Hydraulic shower trolley, pediatric, L = 1600 mm	0522015
TR 2000-L	Hydraulic shower trolley, long, L = 2100 mm	0522016
TR 3000	Battery operated shower trolley, standard, L = 1900 mm	0522000
TR 3000-S	Battery operated shower trolley, pediatric, L = 1600 mm	0522005
TR 3000-L	Battery operated shower trolley, long, L = 2100 mm	0522006
TR 9651	Lift base combi. Battery operated, height adjustable for chair and/or stretcher. Incl battery charger.	0541020
TR 9651-S	Lift base with narrow legs for chair only. Battery operated, height adjustable. Incl battery charger.	0541025
TR 9654	Stretcher with solid seat, pillow and safety belts.	0541098-04
TR 9655	Chair with hygiene seat, armsupports and safety belts.	0541099
TR 9650	Chair Lift, Battery operated, height adjustable with chair. Including battery charger and safety belts.	0542000
TR 9650	Stretcher Lift, Battery operated, height adjustable with stretcher. Including battery charger and safety belts.	0542010
TR 9650	Combi Lift, Battery operated, height adjustable with chair. Including battery charger and safety belts.	0542020





Shower trolleys and Mobile Bath Lift System

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Spare part list



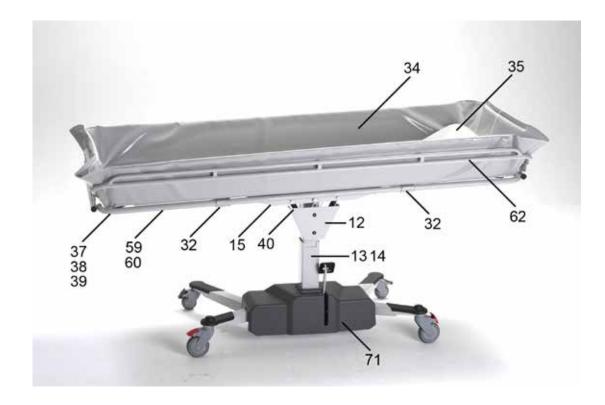
Versions produced from January 2007

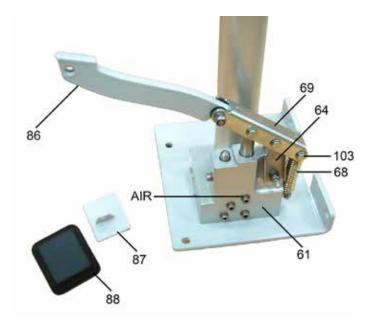
Please specify serial no. and art	icle no. when contacting T	R Equipment
TR 2000	Art. no.	0522010, -15, -16
TR 3000	Art. no.	0522000, -05, -06
TR 9651	Art. no.	0541020, -25
TR 9654	Art. no.	0541098
TR 9655	Art. no.	0541099
TR 9650 Chair Lift	Art. no.	0542000
TR 9650 Stretcher Lift	Art. no.	0542010
TR 9650 Combi Lift	Art. no.	0542020
TR 9650 Stretcher Side parts	Art. no.	0542030





TR 2000 - Hydraulic shower trolley



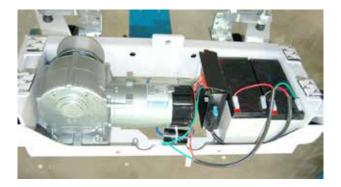




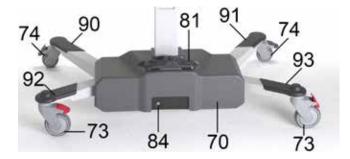


TR 3000 - Battery operated shower trolley















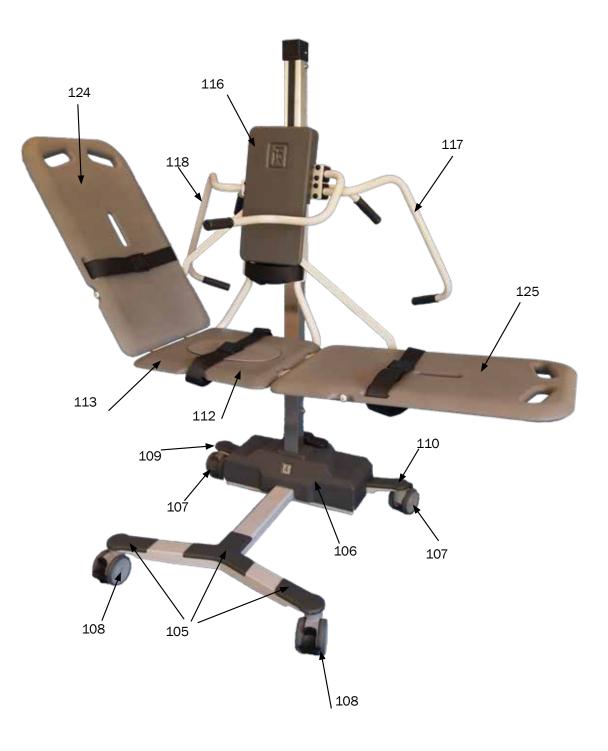
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TR 9650 - Mobile patient combilift





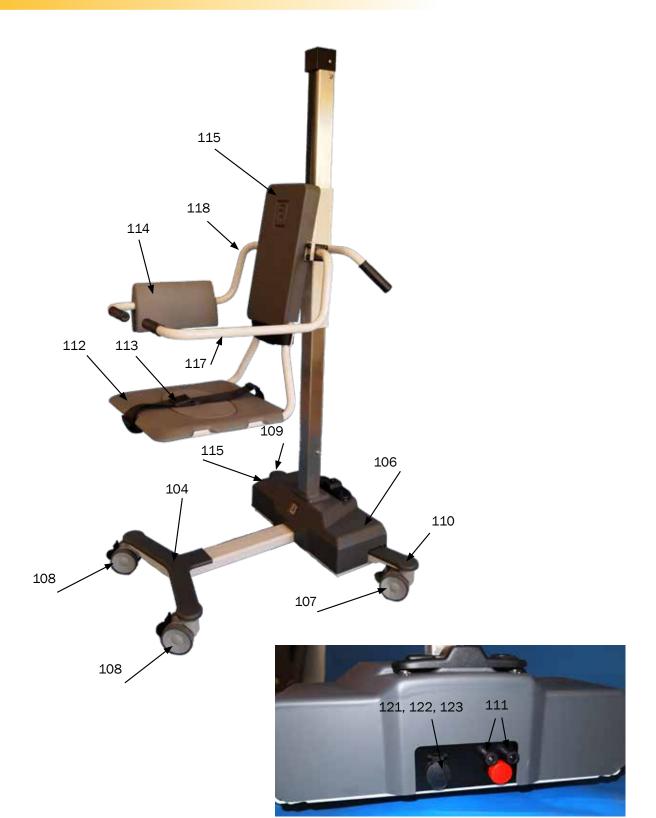








Shower trolleys and Mobile Bath Lift System







Shower trolleys and Mobile Bath Lift System

When ordering spare parts please specify model and serial number, see label on the shower trolley/patient lift.

Mobile patient- combilift	Shower trolley	Art. No.	Description
1	1	2419640	Motor complete
2		7418124	Drivebelt 9651
	2	7418618	Drivebelt 3000
	12	850268	Gasspring
13	13	3418126	Sliding washer
14	14	7418581	Shims
15		3419223	Attachment wheel
	15	3418684	Wire
16		850125	Rubber hand grip
	16	850260	Spring
18	18	819030	Battery
32		850260	Spring
	32	850263	Knob
33		3418373	Hinge for armsupport
34		7119253-03	Protection pad gray
	34	7330385	Mattress 1900 grey
		7330385-02	Mattress 1900 blue
		7330385-03	Mattress 1900 yellow
		7330385-04	Mattress 1600 grey
		7330385-05	Mattress 1600 blue
		7330385-06	Mattress 1600 yellow
		7330385-07	Mattress 2100 gray
35		7119251-03	Solid seat ABS gray
	35	7419488	Pillow grey
		7419488-04	Pillow blue
		7419488-07	Pillow yellow
36		7123623-03	Stretcher pad ABS gray
37		7418323	Safety belt lock L=1600 chest
	37	829392	Drainage
38		7419488-03	Pillow grey with belt loops
	38	829391	Plug
39		7419241	Belt for pillow
	39	820818-4224	Flexi drain hose
		820818-4224- 25	Flexidrain hose L=2.5 m
		3418682	Drainage hose (per meter)
	40	850266	Wire wheel
41		7119252-03	Hygiene seat ABS gray
42		7418320-02	Safety belt, legs
43		7418320	Safety belt lock, chair legs

Please, order two sets of no.37 drainage and no.38 plug with each shower trolley mattress.



TR EQUIPMENT



Shower trolleys and Mobile Bath Lift System

Mobile patient combilift	Shower trolley	Art. No.	Description
44		7219254-03	Backrest ABS gray on arm
	60	7418606	PVC plate 1900
	60	7418606-02	PVC plate 1600
	61	7419058	Hydraulic jack
	62	3118491	Siderail 1900
		3118491-02	Siderail 1600
	64	6419692	Linkarm
	68	850258	Spring
	69	3319018	Pedal bracket
49		819310	Emergency button
50		819312	Switch, emergency
51		850160	Fender chrome
53		3219643	Cover for hinge, armsupport
	70	7229591	Gray cover 3000
	71	7228379	Gray cover 2000
72		7228378	Gray cover 9651
72		7229592	Gray cover 9651-S
73	73	850510	Castor 100 mm brake
74	74	850514	Castor 75 mm straight steering
		0522030	Castors set for raising
		850512	Castor 125 mm brake
		850516	Castor 100 mm straight steering
77	77	7329677	Wire charging
78	78	7329676	Wire set micro switch
80	80	3330035	Pedal metal plate
81	81	7329582	Pedal plastic
82	82	819430	Switch
83	83	819432	Rubber (switch)
84	84	819434	DC jack
85	85	819351	Circuit board
	86	3328404	Pedal arm 2000
	87	3428405	Pedal plate 2000
	88	7429583	Pedal plate cover 2000
90	90	7429578	Fender front left
91	91	7429578-02	Fender front right
92	92	7429579	Fender back left
93	93	7429579-02	Fender back right
	103	831210-0630	Pinbolt
		7418116	Drivebelt top roller
		7418113	Top roller axle







Shower trolleys and Mobile Bath Lift System

1			
	833160-8016D	Top roller axle screw	
	7429678	Cable DC Jack	
	3330036	Pedalbracket Lift	
	3418482	Column Jacket steering	
4	3118210	Armsupport Right	
6	3118210-02	Armsupport Left	
	0541225	Battery charger	
	819141	US plug type A	
	819140	Euro plug type C	
	819142	UK plug type G	
	819230	Capacitor	
	0529002	Pedal spare part kit TR 2000 produced after January 2007	
	0529001	Pedal spare part kit TR 2000 produced before January 2007	
	0541226	Batterycharger Magcode Mod 12 On TR 3000 from serial no: 1401-21704	
104	7331128	Fender front Chairlift Mod 12	
105	7331129	Fender front Combi/Stretcherlift Mod 12	
106	7228380	Gray Cover Lift Mod 12	
107	851760	Castor 100 mm brake Mod 12	
108	851761	Castor 100 mm straight steering Mod 12	
	851762	Castor 75 mm brake Linea	
109	7429578	Fender back left Mod 12	
110	7429578-02	Fender back right Mod 12	
111	850161	Protection emergency stop Mod 12	
112	7119252-04	Seat PUR Gray Mod 12	
113	7119252-05	Plug for seat PUR Gray Mod 12	
114	7219254-04	Backrest PUR Gray Mod 12	
115	200103	Protection pad Gray chair Mod 12	
116	200104	Protection pad Gray combi/stretcher Mod 12	
117	3231041	Armsupport right Mod 12	
118	3231041-02	Armsupport left Mod 12	
121	819148	Power Port 24 V Magcode (mounted in chassi)	
122	819149	Power Clip 24 V Magcode (connector mounted on charger)	
123	819150	Port Cover Magcode	
124	0542030-02	Sidepart PUR grey left side, Mod. 12	
125	0542030-03	Sidepart PUR grey right side, Mod. 12	





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Spare part list



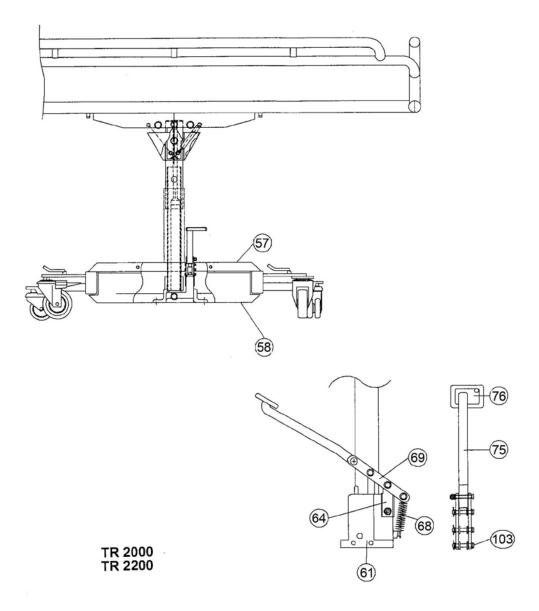
Versions produced before January 2007

Please specify serial	no. when ordering spare par	ts
TR 2000	Art. no.	0521005, -06
TR 3000	Art. no.	0521001, -02
TR 9651	Art. no.	0541005, -06
TR 9671	Art. no.	0541007





TR 2000 - Hydraulic shower trolley

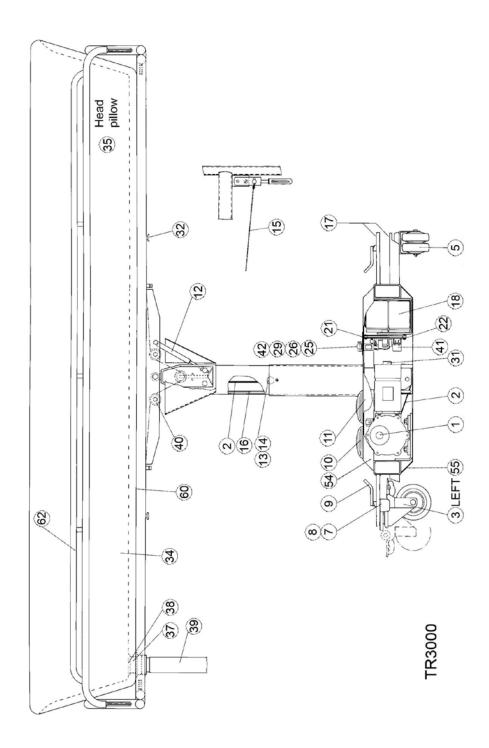






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TR 3000 - Battery operated shower trolley



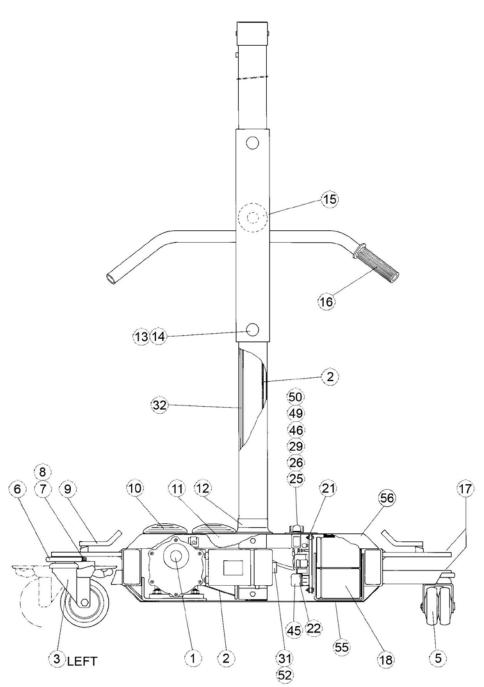




Shower trolleys and Mobile Bath Lift System

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TR 9651



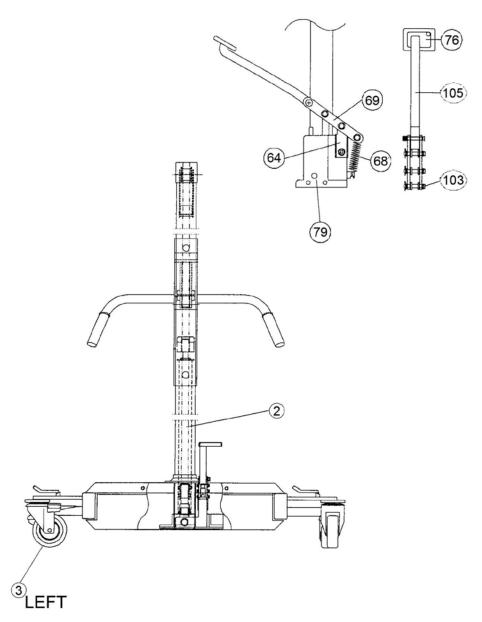
TR 9651





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TR 9751

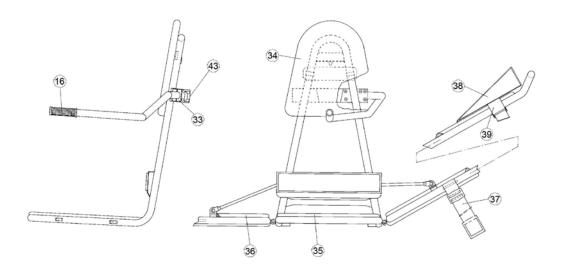


TR 9751

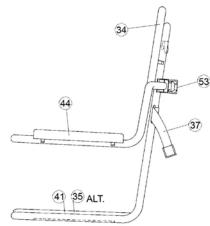


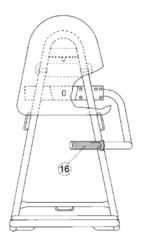


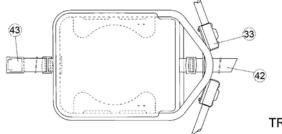
TR 9654 and TR 9655



TR 9654







TR 9655







When ordering spare parts please specify model and serial number, see label on the shower trolley/patient lift.

Mobile patient combilift	Shower trolley	Art. No.	Description
1	1	2419640	Motor complete
2		7418124	Drivebelt TR 9651
2		7319716	Drivebelt TR 9751
	2	7418618	Drivebelt TR 3000
3	3	3418751	Castor with brake, left
		3418751-02	Castor with brake, right
5	5	850135	Twincastor
		842012-4012	Washer (spacer)
6		3418128	Bumper guard
7	7	842013-0102	Spring washer
8	8	843501-0010	Seeger ring
9	9	3418710	Straight steering lever
10	10	819024	Foot control pad
11	11	819046	Rubber grommet
12		7418181	Rubber spats
	12	850268	Gasspring
13	13	3418126	Sliding washer
14	14	7418581	Shims
15		3419223	Attachment wheel
	15	3418684	Wire
16		850125	Rubber hand grip
	16	850260	Spring
17		6321280-03	Slipguard L=118 mm
17		6321280-02	Slipguard L=358 mm
17	17	6321280	Slipguard L=233 mm
	17	6321280-04	Slipguard L=118 mm Left
	17	6321280-05	Slipgurad L=118 mm Right
18	18	819030	Battery
21	21	0530012	Labels
22	22	0530063-02	Circuit board kit 1993-2004
22	22	819350-02	Circuit board from Oct 04
26	26	819316	Springing cap
29	29	819355	Low battery light





Shower trolleys and Mobile Bath Lift System

When ordering spare parts please specify model and serial number, see label on the shower trolley/patient lift.

Mobile patient combilift	Shower trolley	Art. No.	Description
31	31	819352	Wire set one switch
31	31	819352-02	Wire set two switches
31	31	6319638	Bracket for switches
	32	850263	Knob
32		850260	Spring
33		3418373	Hinge for armsupport
34		7119253-03	Protection pad gray
	34	7330385	Mattress 1900 gray
		7330385-02	Mattress 1900 blue
		7330385-03	Mattress 1900 yellow
		7330385-04	Mattress 1600 gray
		7330385-05	Mattress 1600 blue
		7330385-06	Mattress 1600 yellow
		7330385-07	Mattress 2100 gray
35		7119251-03	Solid seat ABS gray
	35	7419488	Pillow grey
		7419488-04	Pillow blue
		7419488-07	Pillow yellow
36		7123623-03	Stretcher pad ABS gray
37		7418323	Safety belt lock L=1600 stretcher
	37	829392	Drainage
38		7419488-03	Pillow grey with belt loops
	38	829391	Plug
39		7419241	Belt for pillow
	39	820818-4224	Flexidrain hose
	40	850266	Wire wheel
41		7119252-03	Hygiene seat ABS gray
42		7418320-02	Safety belt chair chest
43		7418320	Safety belt lock chair legs
44		7219254-03	Backrest ABS gray on arm
45	41	819302	Relay 24 V
46	42	819318	Charging socket
		819099	Charging plug
49		819310	Emergency button

Please, order two sets of no.37 drainage and no.38 plug with each shower trolley mattress.





When ordering spare parts please specify model and serial number, see label on the shower trolley/patient lift.

Mobile patient combilift	Shower Trolley	Art. No.	Description
50		819312	Switch, emergency
53		3219643	Cover for hinge, armsupport
	54	3325521	Topcover TR 3000
55	55	3118065	Bottom cover TR 3000/TR 9651
56		3325519	Topcover TR 9651
	57	3219689	Topcover TR 2000
	58	3219690	Bottom cover TR 2000
	60	7418606	PVC plate 1900
	60	7418606-02	PVC plate 1600
	61	7419058	Hydraulic jack
	62	3118491	Siderail 1900
64	64	6419692	Linkarm
68	68	850258	Spring
69	69	3319018	Pedal bracket
	75	3319028-02	Pedal
76	76	859034	Rubber to pedal
79		7320417	Hydraulic jack
103	103	831210-0630	Pinbolt
105		3319028	Pedal
		819139	Secondary Charge Plug
		850134	Twincastor with brake 75 mm
		3319028-02	Pedal (short
		0541222	Battery charger (pl 819099)
		819141	US plug type A
		819140	Euro plug type C
		819142	UK plug type G





Shower trolleys and Mobile Bath Lift System

Pedal spare part kit for TR 2000 produced before Januart 2007

Pos.	Name	Art. No.	Quantity
64	Linkarm (länkarm)	6419692	2 pcs.
68	Spring (fjäder)	850258	1 pc.
69	Pedal bracket (fäste)	3319018	1 pc.
103	Pinbolt (pinnbult)	831210-0630	3 pcs.
	Screw (skruv)	833300-6030	1 pc.
	Screw (skruv)	831050-6035	1 pc.
	Nut (mutter)	841031-4006	2 pcs.
	Pin (saxpinne)	843810-1220	3 pcs.
	Washer nylon (bricka)	850179	2 pcs.
	Washer ss (bricka)	842041-0064	7 pcs.
75	Pedal (pedal kort)	3319028-02	1 pc.
76	Rubber (gummi)	859034	1 pc.





Shower trolleys and Mobile Bath Lift System

Pedal spare part kit for TR 2000 produced after January 2007

Pos.	Name	Art. No.	Quantity
64	Linkarm (länkarm)	6419692	2 pcs.
68	Spring (fjäder)	850258	1 pc.
69	Pedal bracket (fäste)	3319018	1 pc.
103	Pinbolt (pinnbult)	831210-0630	3 pcs.
	Screw (skruv)	833300-6030	1 pc.
	Screw (skruv)	831050-6035	1 pc.
	Nut (mutter)	841031-4006	2 pcs.
	Pin (saxpinne)	843810-1220	3 pcs.
	Washer nylon (bricka)	850179	2 pcs.
	Pedal (pedal kort)	3319028-02	1 pc.
	Washer ss (bricka)	842041-0064	9 pcs.
86	Pedal arm	3328404	1 pc.
87	Pedal plate	3428405	1 pc.
88	Pedal plate cover	7429583	1 pc.
	Spacer washer (bricka)	850189	2 pcs.
	Screw (skruv)	831680-8020	1 pc.
	Nut (mutter)	841011-4008	1 pc.
	Tape 5952 (tejp)	850227	0,1 m





Hygiene Equipment Designed for People

Shower trolleys and Mobile Bath Lift System

Pedal spare part kit for TR 9751 (0541010)

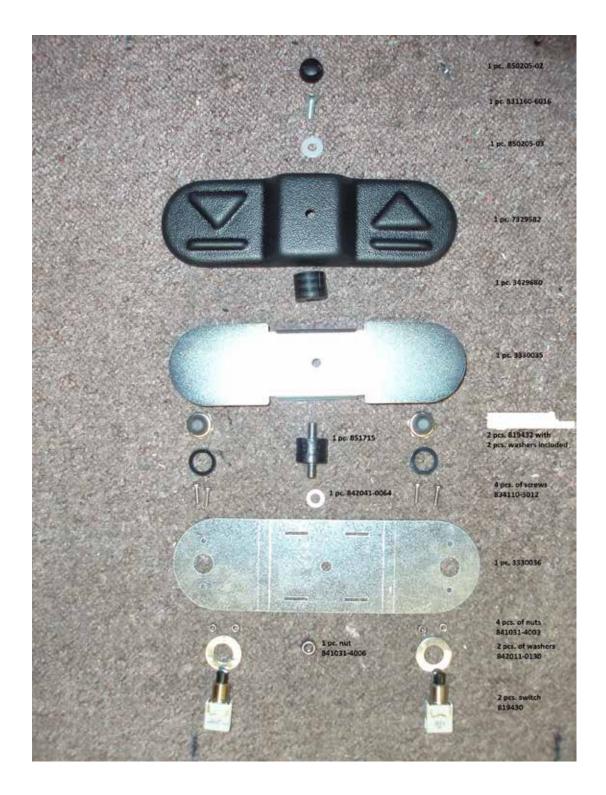
Pos.	Name	Art. No.	Quantity
64	Linkarm (länkarm)	6419692	2 pcs.
68	Spring (fjäder)	850258	1 pc.
69	Pedal bracket (fäste)	3319018	1 pc.
103	Pinbolt (pinnbult)	831210-0630	3 pcs.
	Screw (skruv)	833300-6030	1 pc.
	Screw (skruv)	831050-6035	1 pc.
	Nut (mutter)	841031-4006	2 pcs.
	Pin (saxpinne)	843810-1220	3 pcs.
	Washer nylon (bricka)	850179	2 pcs.
	Washer ss (bricka)	842041-0064	7 pcs.
	Washer ss (bricka)	842041-0064	9 pcs.
	Pedal arm	3328404	1 pc.
75	Pedal	3319028	1 pc.
76	Rubber (gummi)	859034	1 pc.





Hygiene Equipment Designed for People

TR 3000 and TR 9650, Footpedal assembly

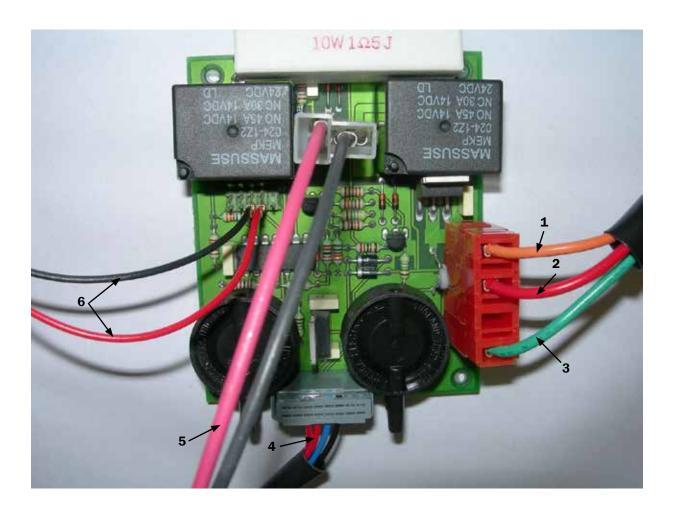






Technical information

TR 3000 / TR 9650 (-2006) - Circuit Board

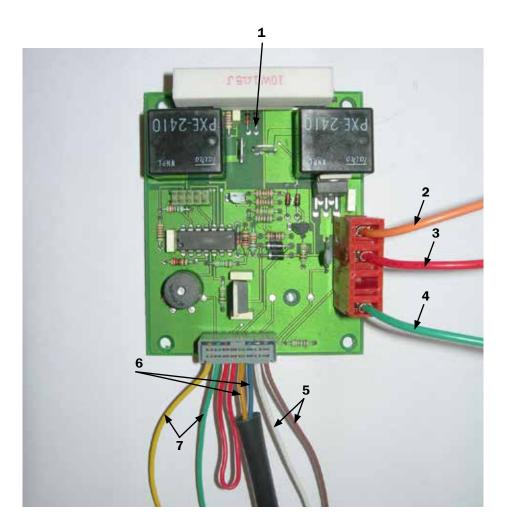


No	Colour / Connection	Connection to
1	Orange	Charging inlet +
2	Red	Battery +
3	Green	Charging inlet -
4	Black, Blue, Red, Red (black cover)	Microswitch
5	Black, Red	Motor
6	Red, Black	LED





TR 3000 / 9650 (2007-) - Circuit Board



No	Colour / Connection	Connection to
1	Flat connection	Motor
2	Orange	Charging inlet +
3	Red	Battery +
4	Green	Charging inlet -
5	Brown and White	UP Pedal
6	Blue and Yellow (black cover)	Microswitch
7	Green and Yellow	DOWN Pedal





Shower trolleys and Mobile Bath Lift System

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TR 3000/TR 9650 (-2006) - Battery Charger







Shower trolleys and Mobile Bath Lift System

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TR 9650 (2007 - 2011) - Battery Charger TR 3000 (2007 - 2013) - Battery Charger







Shower trolleys and Mobile Bath Lift System

Magcode Charger







Hygiene Equipment Designed for People

Trouble shooting







Shower trolleys and Mobile Bath Lift System

Operating instructions (2007-)

- Charge the lift/trolley when the audible tone sounds while pressing the foot control.
- Use only the 24 V DC battery charger model delivered by TR.
- Connect the battery charger to the lift/trolley before it is connected to the mains.
- Insert the battery charger plug in the lift/trolley. Be sure that the plug is completely in place.
- Plug the battery charger into a GFI (ground fault interrupter) Hospital grade receptacle.
- When the battery charger is properly connected, an indicator on the battery charger will lit orange and change to green when the battery is fully charged. If not, recheck the connection on the mains and the charging plug.
- Maximum charging time is approximately 8 hours. The lift/trolley can never be overcharged.
- When the charging is completed, disconnect the charger from the mains before you disconnect the charger from the lift/trolley.
- When the chair or stretcher hits the top position it stops. Press the "down" foot control to lower.
- The circuit board is protected from overload. When overloaded stop and press the "down" foot control to lower.
- A fuse is connected between the two batteries.
- Emergency Stop on the lift cuts the power from the batteries.

Operating instructions (-2006)

- Charge the lift when the low battery light flashes while pressing a foot pad.
- Use only the 24 V DC battery charger model delivered by TR.
- Connect the battery charger to the lift/trolley before it is connected to the mains.
- Lift cap covering the charger input and insert the battery charger plug. Be sure that the plug is completely in place.
- Plug the battery charger into a GFI (ground fault interrupter) Hospital grade receptacle.
- When the battery charger is properly connected, an indicator on the battery charger will be lit. If not, recheck the connection on the mains and the charging plug.
- This indicator on the battery charger explains the charging cycles and when the batteries are fully charged.
- Normal charging time is approximately 8 hours. The lift/trolley can never be overcharged.
- When the charging is completed, disconnect the charger from the mains before you disconnect the charger from the lift/trolley.
- When the chair or stretcher hits the top position it stops. The low battery light flashes while pressing the "up" foot pad. Press the "down" foot pad to lower.
- The circuit board is protected from overload. If overloaded, the low battery light will flash while pressing the "up" foot pad. Press the "down" foot pad to lower.
- A fuse is connected between the two batteries.
- Emergency Stop on the TR 9651 lift cuts the power from the batteries.





Shower trolleys and Mobile Bath Lift System

Versions produced from January 2007

Please specify serial no. and article no. when contacting TR Equipment

TR 2000	Art. no.	0522010, -15, -16
TR 3000	Art. no.	0522000, -05, -06
TR 9651	Art. no.	0541020, -25
TR 9650 Chair Lift	Art. no.	0542000
TR 9650 Stretcher Lift	Art. no.	0542010
TR 9650 Combi Lift	Art. no.	0542020
TR 9650 Stretcher Side parts	Art. no.	0542030

If the Lift or Trolley does not work properly please, try the following:

Stainless steel column

• Clean the stainless steel column on the Lift and grease the column on the Trolley.

If the shower trolley starts to jerk and vibrate when lowering, do as follows:

- Hang the mattress alongside and lift the white hinged support shelf.
- Remove the square lid on top of the column.
- Use some silicone grease and spray between the two square stainless steel tubes.
- Raise and lower, up and down a couple of times to smear out the grease.
- Check that both the top and bottom roller move freely.

Charger

Make sure that the wire and charging plug is not damaged and that the charger indicator lits green when connected to the mains.

Fuse

The 15 A fuse is placed between the two batteries. Lift the plastic cover straight up.

It is kept in place on the chassis by Velcro. On the lift, first remove the hexagon screw on the column.

Batteries (18)

Lift the plastic cover straight up. Remove the fuse (between the batteries) and measure the two 12 V gel sealed lead batteries one by one if they have any voltage. The batteries might also need to be replaced if they are too old or not being charged enough. The batteries cannot be overcharged.

Deposit batteries in accordance with local regulations.

Footcontrol for up and down (80)

Make sure that the black plastic pedal for up and down is working. Remove the plastic pedal and the supporting metal plate. Make sure that the switches (82/83) are working correctly. Lift the plastic cover and make sure that the switch wires are not loose.

Circuit board (85)

If the batteries are charged and the lift/trolley still doesn't move up or down, check if there is a miss contact or wire loose on the circuit board. Use contact spray and spray at the grey connection from the limit switch and at the orange wire connection.





Hygiene Equipment Designed for People

Shower trolleys and Mobile Bath Lift System

Limit switch (78)

An overload protection built in the circuit board stops the motor when the chair/stretcher is at its top position. Press the down pad for lowering.

There is a limit switch placed at the bottom end of the stainless steel column. When a chair/stretcher hits an obstacle while lowering or is at its lowest position, the mechanism and switch feel the lack of tension in the drive belt and stops the motor from unwinding the drive belt. When the drive belt slackens press the up pad to tension it.

Drive belt (2)

Make sure that the drive belt is free from damages all the way. If it has to be changed please, read the separate instruction.

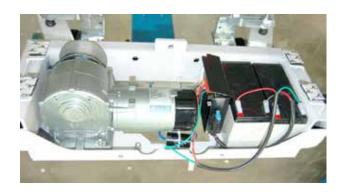
Motor (1)

There is hardly any fault with the motor. In very doubtful cases first check the fuse and the electrically wires. Test the motor function by connecting the motor to the batteries directly and via the capacitor to check if the capacitor is faulty.

Warning: Be careful when running the motor from winding to the drive belt to the top position as the limit switch will be out of function.

Spareparts

When ordering spare parts please, specify model and serial number, see label on the lift/trolley base. Serial no. starts on 0701-.....













Shower trolleys and Mobile Bath Lift System

Versions produced before January 2007

Please specify serial no. and article no. when contacting TR Equipment

TR 2000	Art. no.	0521005, -06
TR 3000	Art. no.	0521001, -02
TR 9651	Art. no.	0541005, -06

If the Lift or Trolley does not work properly please, try the following:

Stainless steel column

• Clean the stainless steel column on the Lift and grease the column on the Trolley.

If the shower trolley starts to jerk and vibrate when lowering, do as follows:

- Hang the mattress alongside and lift the white hinged support shelf.
- Remove the square lid on top of the column.
- Use some silicone grease and spray between the two square stainless steel tubes.
- Raise and lower, up and down a couple of times to smear out the grease.
- Check that both the top and bottom roller move freely.

Charger

Check if the charger is functioning and if the wire to the charging plug has the correct polarity.

Fuse

Check the 15 A fuse, placed between the two batteries. Remove the bottom cover and tilt the lift/trolley to its side for easy access.

Batteries

Remove the bottom cover and tilt the lift/trolley to its side for easy access.

Check if the two 12 V gel sealed lead batteries have any voltage. Remove the fuse and check one by one.

The batteries might also need to be replaced if they are too old or not being charged often or long enough. The batteries cannot be overcharged. Deposit batteries in accordance with local regulations.

Pneumatic pads for up and down

Check if the black pads for up and down are flat or leaking. Loosen and blow some air in the hose if vacuum. board needs to be replaced.

Circuit board

Misconduct on the Circuit board:

If the batteries are charged and the lift/trolley still doesn't move up or down, check if there is a miss contact or wire loose on the circuit board. Use contact spray and spray at the grey connection from the limit switches and at the orange wire connection.

Pneumatic air switches on the Circuit board:

If the lift/trolley still doesn't lower/raise, push the up/down footpads and listen if the pneumatic switches are "clicking". If not, it can be an air leakage in the footpads or in the hoses. Loosen the air hoses and blow into them to level the air pressure. A pneumatic switch can be out of order and the circuit board needs to be replaced.

Relays on the Circuit board:

When pressing the pads the pneumatic switch "clicks" and at the same time a "click" shall be heard from one of the relays. It may be difficult to hear, but listen carefully. If the lift/trolley only moves one way, up or down, it may be a relay that needs to be replaced. Check by interchanging the relays. They are similar. On lifts/trolleys produced later than October 2004 the circuit board must be changed.





Shower trolleys and Mobile Bath Lift System

Limit switches

There are two limit switches mounted on the same metal bracket at the bottom end of the column. One to stop the motor at the top position and one for stopping the motor if the chair/stretcher hits an obstacle when lowering or at the lowest position.

Limit switch for stopping the chair/stretcher at the top position.

When you press the up pad and go to the top position an adjustable rod inside the stainless steel column lifts and hits a limit switch which stops the motor from further winding.

Later models without rod, has an overload protection built in the circuit board which stops the motor when the chair/ stretcher is at the top position. Press the down pad for lowering.

Limit switch for stopping the chair/stretcher at it lowest position.

The chair/stretcher runs up or down when there is a tension in the drivebelt. When a chair/stretcher hits an obstacle while lowering or is at its lowest position, the mechanism feels the lack of tension in the drivebelt and stops the motor from unwinding. When the drivebelt slackens press the up pad to tension the drivebelt and the chair/stretcher runs upwards.

Motor

There is hardly any fault with the motor. In very doubtful cases first check the fuse and the electrically wires. Test the motor function by connecting the motor to the batteries directly and via the capacitor to check if the capacitor is faulty. Warning: Be careful when running the motor from winding to the drive belt to the top position as the limit switch will be out of function.

Drivebelt

Check the drivebelt from damages all the way. See info later in this document how to change the drivebelt.

Spare parts

When ordering spare parts please, specify model and serial number, see label on the lift/trolley.



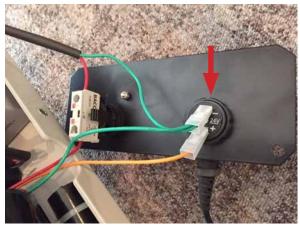


Electrical trouble shooting

- 1. Check that emergency stop is not activated.
- Check voltage on both batteries.
 Should be min. 12 V+ on each battery (24 V+ in series).
 If not: batteries are not charged or need to be replaced.
- 3. Check that all cables are connected.
- 4. Check fuse.
- 5. Check that the charger is working correctly. When the battery charger is proberly connected the LED indicator first lights up in amber. When the trolley/lift is fully charged the LED indicator will turn green. Plug in charger and measure on the charger plug (24 V+) – If not: charger is broken.

If charger is ok. Attach charger to the lift and measure on the pins on connector mounted in chassi. Should be min. 24 V+.

If not: charger connector mounted in chassi is broken.



6. Disconnect the outer connections on the batteries and measure.

Should be (24 V+).

If not: the circuit board and/or cables needs to be replaced.



7. Check that micro switch is activated. If not: problem is mechanical/related to belt.



 When pushing up or down on the foot pedal, listen for a click and measure that voltage is coming from circuit board (24 V+) to the motor. Measure on the below marked white connectors. If not: problem can be mechanical fault with the foot control or the circuit board and/or cables needs to be replaced.



If all points mentioned above are OK, then it is the motor that is damaged and not working.





Hygiene Equipment Designed for People

Service instructions







Shower trolleys and Mobile Bath Lift System

TR 2000 (-2006) - Bleeding the hydraulic jack

- 1. Let the trolley stand on its wheels.
- 2. Remove the bottom metal cover.
- 3. Lift and support the top metal cover.
- 4. Loosen screw AIR (do not remove it) on the side of the jack, using an Allen key 4 mm.
- 5. Slowly press the pedal down. Oil and air bubbles will come out of the screw AIR. When pedal at the bottom, tighten the screw.
- 6. Slowly let the pedal up, to suck oil from the tank.
- 7. Repeat procedure until no oil with air bubbles comes out of the AIR screw.
- 8. Test by pumping the pedal. To lift the stretcher from min to max it takes about 33 strokes. If more strokes are needed there is still air in the pump, repeat airing.

If the stretcher does not reach the top position while pumping, the jack needs more oil.

Removing the jack for filling hydraulic oil:

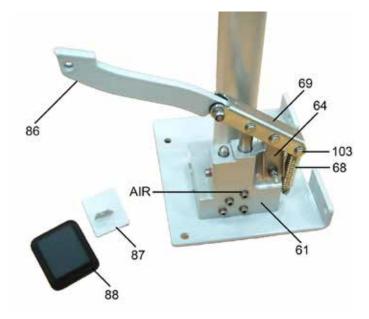
Lift the mattress and the white shelf to remove the screw (hexagon 8) at the top of the piston. Tilt the trolley on its side.

Remove the jack with the four screws in the chassis. Do never keep the jack up side down, try to hold it as vertically not to get air in the pump.

Fill oil in the small hole in the jack's top nut, remove the hexagon screw 2 mm.

Do not tighten this screw it shall not seal completely as the tank must breath when temperatures changes. Oil volume 20 cl.

Air the jack after assembling.







Shower trolleys and Mobile Bath Lift System

Bleeding the hydraulic pump on the TR 2000 (2007-)

- 1. Let the shower trolley stand on its castors in normal position.
- 2. Remove the pedal plate. Use a Torx T40 for the screw and a 13 mm spanner for the M8 nut.



- 3. Lift the grey plastic cover straight up, fastened with velcro.
- 4 Loosen the AIR screw marked with an "A" (do not remove it) on the side of the pump, using an Allen key 4 mm.



- 5. Then slowly press the pedal down. Oil and air bubbles will now come out of the Air screw. When the pedal is pushed down to the bottom position, hold it there and then tighten the AIR screw. When the AIR screw is tightened - slowly let the pedal up again, so that the pump sucks oil from the tank.
- 6. Repeat this procedure until oil with NO air bubbles come out of the AIR screw.
- 7. Test the hydraulic pump by pumping the pedal. To lift the stretcher from min to max height takes about 33 strokes. If more strokes are needed there is still some air in the pump. If so, repeat the bleeding procedure.

And if the stretcher does not reach the top position while pumping, the pump needs to be filled with more oil.





Remove hydraulic pump on TR 2000 (2007-) for filling of oil

 Remove the mattress from the trolley and lift up the white plastic plate on the stretcher.
 Then remove the screw M8x16 (Torx T40) at the top of the

column.



2 Remove the pedal plate. Use a Torx T40 for the screw and a 13 mm spanner for the M8 nut.



- 3. Carefully put the shower trolley on its side, so that you can reach the bottom plate under the chassi.
- 4 Remove the 5 pcs. of screws that holds the base plate and the protective tube marked in photo below.



- 5. Now carefully lift out the hydraulic pump from the shower trolley.
- Never hold the hydraulic pump upside down, try to hold it as vertically as possible so that you don't get air into the pump.
- 7 The piston should be in its top position before you start to fill oil into the tank. Remove the hexagon screw 2 mm marked below and fill oil into the small hole. Total oil volume is approx. 20 cl. Use Hydraulic Oil "Shell Tellus 46".



- 8. When oil has been filled into the pump, mount the hexagon screw 2mm again but do not tighten this screw because it must not seal completely as the tank must be able to breathe when the temperature changes.
- 9 Unscrew the 2 pcs. of M6x12 screws a little bit. The hydraulic pump needs to be a little bit loose on the base plate, just to be able to mount the M8x16 screw into the piston at the top of the column.





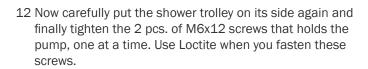




10 Now put the hydraulic pump + base plate into the column and fasten the 5 pcs. of M8x20 screws marked in photo. Use Loctite when you fasten these screws.



11 Then turn the shower trolley back up on its castors to normal position and mount the M8x16 screw into the piston of the hydraulic pump at the top of the column. You might need to pump on the pedal to be able to get the piston into the correct position.





- 13 You are now ready and can turn the shower trolley back up on its castors to normal position.
- 14 Always bleed the hydraulic pump after assembly. See instruction "Bleeding the hydraulic pump"







Replacing hydraulic pump on TR 2000 (2007-)

1. Remove the mattress from the trolley and lift up the white plastic plate on the stretcher.

Then remove the screw $M8x16\ (Torx\ T40)$ at the top of the column.



2. Remove the pedal plate. Use a Torx T40 for the screw and a 13 mm spanner for the M8 nut.



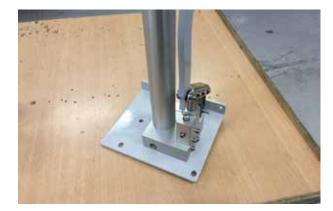
- 3. Carefully put the shower trolley on its side, so that you can reach the bottom plate under the chassi.
- 4. Remove the 5 pcs. of screws that holds the base plate and the protective tube marked in photo below.







- 5. Now carefully lift out the hydraulic pump from the shower trolley.
- 6. Never keep the hydraulic pump upside down, try to hold it vertically as possible so that you don't get air into the pump.
- 7. Remove the base plate from the hydraulic pump by unscrewing the 2 pcs. of M6x12 screws (Torx T30).





- 8. Mount the new hydraulic pump on the base plate with the 2 pcs. of M6x12 screws, but do not tighten the screws. The hydraulic pump needs to be a little bit loose on the base plate, just to be able to mount the M8x16 screw into the piston at the top of the column. Also remember to remove the pedal arm from the old pump and mount it on the new pump.
- Now put the new hydraulic pump + base plate into the column and and fasten the 5 pcs. of M8x20 screws marked in photo. Use Loctite when you fasten these screws.







TR 2000 (2007-) - Change the plastic cover and sledge

- 1. Lower the stretcher by pressing the hydraulic pedal to the bottom. Remove the pillow, drainage hose and the mattress.
- 2. Lift the white shelf and loosen one end of the wire for the tilting and pull it out from the sledge. Remove the two screws on top of the gas springs, the two screws holding the stretcher and remove the stretcher. Two persons are needed for this work.
- 3. Remove the screw on top of the sledge, see picture which holds the hydraulic pistonrod. We recommend you to put some adhesive tape around the sledge to keep the top and bottom sliding washers with shims in place, otherwise they will fall out when you remove the sledge. Before pulling off the sledge completely, test by pulling it up and down a few times by hand to get a feeling of how tight the shimsing is, if you shall change to a new sledge and need new shims.
- 4. If you need to change the top cover, first remove the pedal plate from the footpedal. Trolleys produced before January 2007 have metal top and bottom covers. Do not tilt a hydraulic trolley on its side.
- 5. Before the sledge is mounted, clean the stainless steel column and add some very thin oil or grease.

- 6. If a new sledge shall be mounted, put some adhesive tape around the sledge to cover the holes for the sliding washers. Put shims and the sliding washers from inside the sledge and press the washers to stick to the tape.
- 7. Push the sledge all the way down on the column and remove all the tape.
- 8. If a new sledge is mounted, you may have to test some times with different shims to get it as steady as above (3). It is better to shims little tighter than too loose. When testing you maybe need to change the tape.
- 9. Mount the hexagon screw on top of the sledge. If the piston rod does not match the hole in top of the sledge, centre the piston rod by adjusting the 4 bolts holding the jack. Do not tilt an hydraulic trolley on its side.
- 10. Mount the stretcher, gas springs and the wire. Test the trolley by raising and lowering it some times after the mattress, pillow and drainage hose are in place.















TR 2000 (-2006) - Change the metal cover and sledge

- 1. Lower the stretcher by pressing the hydraulic pedal to the bottom. Remove the pillow, drainage hose and the mattress.
- 2. Lift the white shelf and loosen one end of the wire for the tiling and pull it out from the sledge. Remove the two screws on top of the gas springs, the two screws holding the stretcher and remove the stretcher. Two persons are needed for this work.
- 3. Remove the screw on top of the sledge, see picture which holds the hydraulic pistonrod. We recommend you to put some adhesive tape around the sledge, see picture to keep the top and bottom sliding washers with shims in place, otherwise they will fall out when you remove the sledge. Before pulling off the sledge completely, test by pulling it up and down a few times by hand to get a feeling of how tight the shims is, if you shall change to a new sledge and need new shims.
- 4. Now you can remove and change the top cover (if needed). Do not tilt a hydraulic trolley on its side.

- 5. Before the sledge is mounted, clean the stainless steel column and add some very thin oil or grease. If a new sledge shall be mounted, put some adhesive tape around the sledge to cover the holes for the sliding washers. Put shims and the sliding washers from inside the sledge and press the washers to stick to the tape.
- 6. Push the sledge all the way down on the column and remove all the tape.
- 7. If a new sledge is mounted, you may have to test some times with different shims to get it as steady as above (3). It is better to shims little tighter than too loose. When testing you maybe need to change the tape.
- 8. Mount the hexagon screw on top of the sledge. If the piston rod does not match the hole in top of the sledge, centre the piston rod by adjusting the 4 bolts holding the jack. Do not tilt an hydraulic trolley on its side.
- 9. Mount the stretcher, gas springs and the wire. Test the trolley by raising and lowering it some times after the mattress, pillow and drainage hose are in place.













TR 3000 (-2006) - Change the metal cover and sledge

Removing

- 1. Lower the stretcher to its lowest position by pressing the down pad and remove the pillow and mattress. Lift the white shelf and remove the square lid on top of the sledge.
- 2. Release the "rod grub screw" seen inside the column. Push the rod from underneath to unload the pressure from its spring.

Remove the stretcher in three phases:

- 3. Two persons needed for lifting the stretcher about 100 mm/4 inches. A third man has to put adhesive tape around the sledge to keep the top sliding washers and the shims in place (to make it easier later on when assembling).
- 4. Lift the stretcher some more and put also adhesive tape on the lower plastic washers, see picture.
- 5. Lift the stretcher and remove the screw holding the drive belt (see photo) on the sledge, see picture. Lift off the stretcher with the sledge completely and place it on the floor beside the chassis.
- 6. Lay down the chassis on its side and remove the bottom cover and loosen the top cover.
- 7. Disconnect wires and hoses on the circuit-board and remove the top cover.





Assembling

- 8. Change to the new top cover, install the circuit board and connect the terminals and hoses.
- 9. Mount the bottom cover and raise the chassis on wheels.
- 10. Remount the sledge and stretcher. When pulling the drive belt in the sledge be sure of that the drive belt is not twisted. Put the belt shaft into the belt loop and tighten the screw. Push the sledge further down and remove all the tape
- 11. Fasten the grub screw (2) on the rod, inside the column. Push the rod from underneath to unload the spring pressure.
- 12. Mount the square lid on top of the sledge and put the mattress and pillow back on the stretcher. Make a final test by going up and down with the stretcher.









Shower trolleys and Mobile Bath Lift System

TR 3000 (2007-) - Change the plastic cover and sledge

Removing

- 1. Lower the stretcher to its lowest position by pressing the down pad and remove the pillow and mattress. Lift the white shelf and remove the square lid on top of the column.
- 2. Release the sledge stop screw, see picture, inside the column.

Remove the stretcher and sledge in three phases:

- 3. Two persons needed for lifting the stretcher about 100 mm/4 inches. A third man has to put adhesive tape around the sledge to keep the top sliding washers and the shims in place (to make it easier later on when assembling).
- 4. Lift the stretcher some more and put adhesive tape on the lower plastic washers.
- 5. Lift the stretcher and remove the screw holding the drive belt bolt, see picture, on the sledge. Lift off the stretcher completely and place it on the floor beside the chassis.
- Lift the plastic cover some and disconnect the wires to the switches for up/down pedal, underside the cover. Lift off the cover and change it (maybe you need to remove and assemble the pedal and switches to the new cover).



Assembling

- 7. Connect the wires to the switches in the new plastic cover.
- 8. Mount the drive belt to the sledge (5). Check so the belt is not twisted.
- 9. Control that the adhesive tape holds the sliding washers and shims in place.
- 10. Lift the stretcher (still three men) with sledge and push the sledge so far over the column that the lower washers are in place. Push the sledge further down so the top washers are in place all the way down. Remove all adhesive tape.
- 11. Mount the grub screw (2).
- 12. Make a final test by going up and down with the stretcher.
- 13. Mount the square lid on top of the sledge. Put the mattress and pillow back on the stretcher.









TR 3000 Products produced later than 2007 Instruction how to change the Drivebelt

Removing

- 1. Lower the stretcher to its lowest position by pressing the down button. Remove the pillow and mattress and fold up the white plastic plate. Remove the square lid on top of the sledge.
- 2. Release and remove the stop screw, inside the column, see picture.



3. Now remove the stretcher and sledge in three phases:



- a. Two persons needs to lift the stretcher about 100 mm (4 inches) for a third person to put tape around the sledge to keep the top sliding washers and the shims in place, see picture. This makes it easier when assembling the trolley later on.
- b. Then lift the stretcher some more and remove the screw and stainless steel pin holding the drivebelt on the sledge, see picture.
 Then tape the lower plastic washers.
- c. Lift off the stretcher + sledge completely and place it on the floor. Do this carefully so that the sliding washers don't fall out.

- Lift the plastic cover a little bit (it's fastened by velcro) and disconnect the wires to the switches for up/down pedal. Notice where the wires were connected, since you need to connect them again later. Lift off the plastic cover completely.
- 5. Lay the trolley on its side and remove the bottom steel cover on the chassi.



6. Notice and remember how the drivebelt runs. Remove the old drivebelt from the motor.

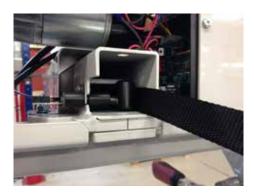




Shower trolleys and Mobile Bath Lift System

Assembling:

 Push in the new drivebelt from the bottom of the column. Press on the belt slacking mechanism to let the drivbelt pass all the way to the top of the column. Mount the drivebelt on the motor and make sure the drivebelt is not twisted. Remount the bottom steel cover on the chassi.





- 2. Connect the wires to the switches in the plastic cover and mount the plastic cover on the chassi again. Raise the trolley on its wheels.
- 3. Now two persons lift up the stretcher + sledge over the column. The third person mounts the drivebelt on the screw and stainless steel pin to the sledge (see photo under pos. 3b. above) Make sure the belt is not twisted!

- Very carefully push the sledge onto the column so that the sliding washers and shims don't fall out.
 Remove all the tape while slowly lowering the sledge on the column. Then push the sledge all the way down on the column.
- 5. Mount the stop screw inside the column again. Be careful not to drop it.



- 6. Mount the square lid on top of the sledge. Fold down the white plastic shelf and put the mattress and pillow back.
- 7. Make a final test. First by pressing the up button to reach the stretcher top position and then the down button.





TR 9650 - Test instruction for auto stop mechanism on the lift

The auto stop mechanism is of great importance and will lock the chair/stretcher to the column if the drivebelt brakes.

When the chair/stretcher hits an obstacle when lowering, the micro switch feels the lack of tension in the drivebelt and stops the motor from further unwinding. At the same time the auto stop mechanism locks the chair/stretcher to the stainless steel column.

To release the auto stop, press the up pad and the chair/stretcher goes upwards.

Test the autostop function. Position the chair/stretcher at a middle high on the column. Lift the chair/stretcher about 30 cm with both your hands and let it go. The autostop shall stop and lock the falling chair/stretcher within 10-20 cm.





Shower trolleys and Mobile Bath Lift System

TR 9650 - Assemble the drive belt (for pictures see following pages)

- 1. Remove the chair or the stretcher and lean the lift to the side while changing the drive belt. Dismount the bottom cover.
- 2. Make sure you know the way the old drive belt were placed in the lift, before you follow the instructions below.
- 3. Fasten the new drive belt to the old one. This makes it easier when pulling the new drive belt through the column. Follow the instructions below and the drawings on the following pages.
- 4. The drive belt shall not be twisted more than 90 degrees inside the column.
- 5. Release the belt slacken mechanism by compressing it.
- 6. See drawing how to mount the drive belt to the motor shaft.
- 7. Mount the drive belt to the autostop mechanism. First, loop the drive belt into the lift arm and pull, see no. 2.

Mount the drive belt to the pin with the springs and rollers no 1.

Mount the rollers in the correct way, no. 1 on drawing 422940.

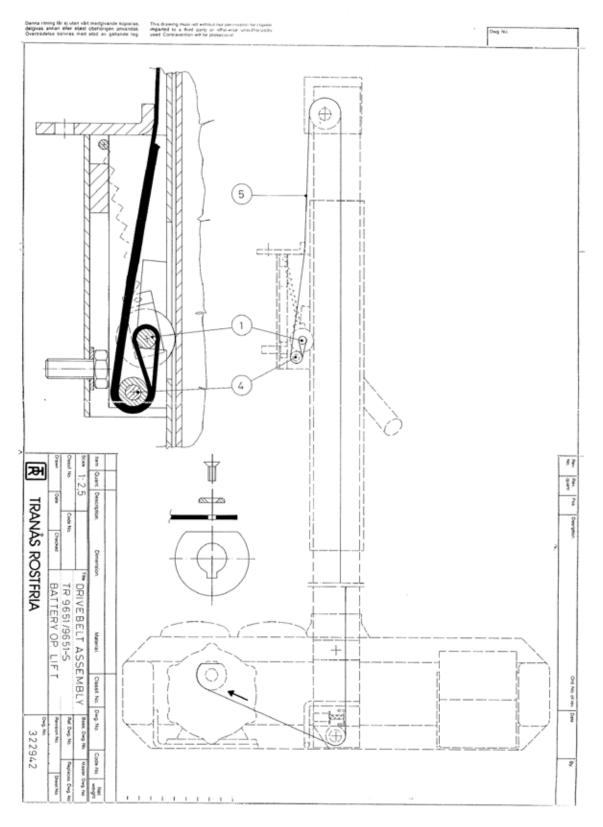
- 8. When mounting the autostop mechanism to the lift arm, pull the drive belt loop no. 2 at the same time as you pull and lower the mechanism to the lift arm. This to release the force from the springs and rollers which makes it easier too mount the mechanism to the lift arm.
- 9. When the autostop mechanism is in place, clamp the free drive belt loop no. 3 to lift arm F.
- 10. Ensure that the drive belt loop is correct before mounting the screw no. 4.
- 11. Loosen clamp no. 3. Pull the drive belt no.2 and control that the autostop mechanism is functioning.
- 12. Pull the drive belt no.5 by hand or by pressing the "up" pad.





Hygiene Equipment Designed for People

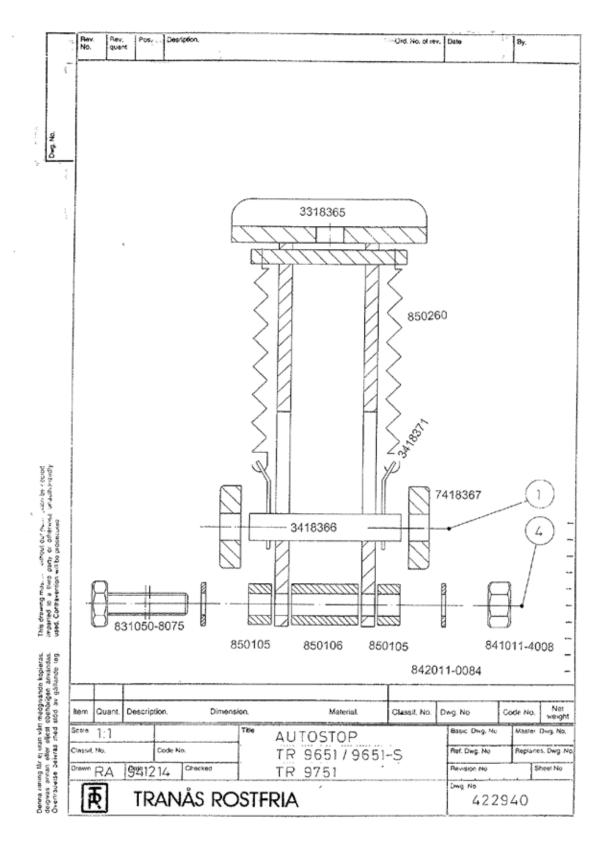
Shower trolleys and Mobile Bath Lift System







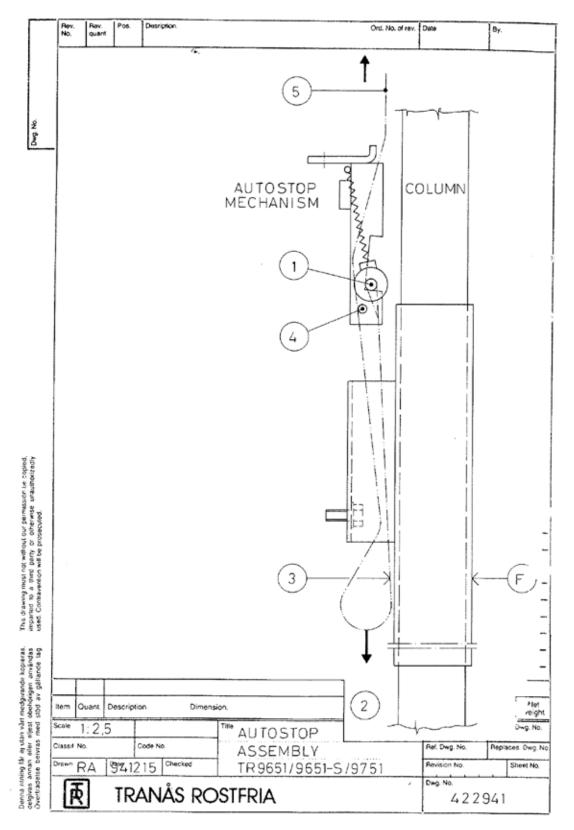
Shower trolleys and Mobile Bath Lift System







Shower trolleys and Mobile Bath Lift System







Shower trolleys and Mobile Bath Lift System

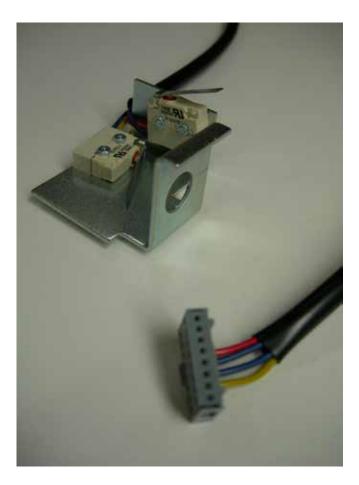
TR 3000/TR 9650 (-200408) - Changing the belt micro switch

The product had two micro switches one for the belt slacking mechanism and one to stop the motor at the top.

There is a possibility to change the belt slacken switch by following the instruction below.

- 1. Lay down the trolley on its side and remove the bottom cover.
- 2. Remove the fuse.
- **3.** Remove the gray wire socket on the circuit board, coming from the switches.
- 4. Cut the four wires close to the gray socket.

- 5. Remove the black hose protecting the wires.
- 6. Remove the faulty belt slacking micro switch from its backet.
- 7. Mount the new belt slacken switch (with its new wires and hose) on the bracket.
- 8. Put also the two existing wires from the "top switch" in the black hose.
- 9. Cut the red wire loop on the new gray socket and connect them to the "top switch" wires.
- 10. Assemble the bottom cover and test.







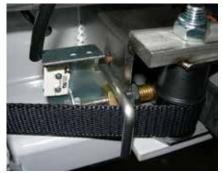


TR 3000/TR 9650 - Adjust the drivebelt tension mechanism

Grease the mechanism some.

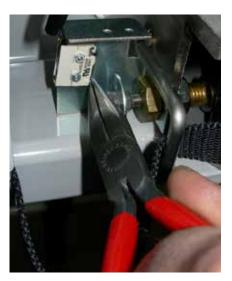
Push a 12.5 mm (1/2") square bar into the stainless steel pipe to simulate a tensioned drivebelt, pic A. The washer in the mechanism shall activate the limit switch pic B, without hurting the switch house or its bracket. If an empty chair does not lower properly when pressing the down pad, carefully bend the metal wing on the limit switch pic C as the switch shall still be activated in pic D to lower the light weight chair. If necessary, adjust the washer by removing the bar and loosening the 10 mm nuts pic E. The washer shall leave the limit switch completely when the drivebelt slacken pic F. The lift/trolley shall stand up for the final testing.





С

В









G







TR 2000, Instruction how to remove the stretcher part from the base

• Remove the triangular protection plate by unscrewing the two screws in below photo.



- Then remove the screw and nut that holds the stainless steel wire on one side only!
- Then pull out the wire from the opposite side.
 Make sure that customer first checks how the wire is routed so that he later can route it back in the same way.



- Then remove the two screws and nuts that holds the top of the gassprings and fold the gassprings down.
- Then carefully remove the two center bolts and nuts that connects the stretcher to the base. (You can see one of them in this photo (4) and the other one is a little bit further into the center of the stretcher.

Make sure that someone holds or that you have some kind of support for the stretcher when these bolts are removed! Otherwise the stretcher will fall to the floor !



- You are now ready and you can lift off the stretcher part from the base.
- And when you have moved it to the 2nd floor, just mount it together again by reading this instruction in reversed order.





Hygiene Equipment Designed for People

Rethreading the TR2000/3000 bed tilt cable



- Take the wire and put the black washer in the loop. Then put the wire loop and the washer inside the handle.
- Fix it on the handle with the screw, lock washer and nut.







- Then pull the wire through the "bullseye" and over the wire wheel on the stretcher.
- Then put the wire down into the round hole in the sled. Inside the sled you have another wire wheel and you pull the wire under this wire wheel and up again and out through the round hole on the other side of the sled.



• Then pull the wire up and over the wire wheel on the stretcher and then also through the "bullseye" and to the second handle.





• Finally fix the wire loop to the second handle like you did in point 1 & 2.





TR EQUIPMENT



TR 3000, Instruction how to change the drivebelt (2007-)

Removing

- Lower the stretcher to its lowest position by pressing the down button.
 Remove the pillow and mattress and fold up the white plastic plate.
 Remove the square lid on top of the sledge.
- 2 Release and remove the stop screw, inside the column, see picture.



- 3 Now remove the stretcher and sledge in three phases:
- Two persons needs to lift the stretcher about 100 mm (4 inches) for a third person to put tape around the sledge to keep the top sliding washersand the shims in place, see picture. This makes it easier when assembling the trolley later on.



• Then lift the stretcher some more and remove the screw and stainless steel pin holding the drivebelt on the sledge, see picture. Then tape the lower plastic washers.



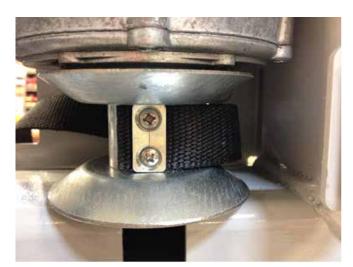
- Lift off the stretcher + sledge completely and place it on the floor. Do this carefully so that the sliding washers don't fall out.
- Lift the plastic cover a little bit (it's fastened by velcro) and disconnect the wires to the switches for up/down pedal. Notice where the wires were connected, since you need to connect them again later.
 Lift off the plastic cover completely.
- 5 Lay the trolley on its side and remove the bottom steel cover on the chassi.
- 6 Notice and remember how the drivebelt runs. Remove the old drivebelt from the motor.

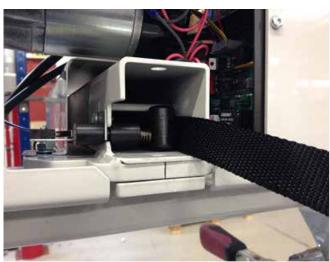




Assembling:

1 Push in the new drivebelt from the bottom of the column. Press on the belt slacking mechanism to let the drivebelt pass all the way to the top of the column. Mount the drivebelt on the motor and make sure the drivebelt is not twisted. Remount the bottom steel cover on the chassi.





- 2 Connect the wires to the switches in the plastic cover and mount the plastic cover on the chassi again. Raise the trolley on its wheels.
- 3 Now two persons lift up the stretcher + sledge over the column. The third person mounts the drivebelt on the screw and stainless steel pin to the sledge (see photo under pos. 3b. above) Make sure the belt is not twisted !
- Very carefully push the sledge onto the column so that the sliding washers and shims don't fall out.
 Remove all the tape while slowly lowering the sledge on the column. Then push the sledge all the way down on the column.
- 6 Mount the stop screw inside the column again. Be careful not to drop it.



- 7 Mount the square lid on top of the sledge. Fold down the white plastic shelf and put the mattress and pillow back.
- 8 Make a final test. First by pressing the up button to reach the stretcher top position and then the down button.





Shower trolleys and Mobile Bath Lift System

Hygiene Equipment Designed for People

TR 9650, Installing the spacer kit

The locking casters can be identified by the light gray pedal



The straight steer caster can be identified by the dark gray pedal and the two locating pin holes in the top.

The locking caster spacer can be identified by black thin rubber washer.



The straight steer caster spacer can be identified by the two locating pins in the top.



Closeup of the locating pins.



Assembly of the stright steer spacer to the straight steer caster:

The bolt is 16 mm and runs up through the caster and into the base of the TR 9650.



TR EQUIPMENT



Shower trolleys and Mobile Bath Lift System

Hygiene Equipment Designed for People



Lay TR 9650 on it's back (column on the ground). Straight steer casters are located on the top/T section of the base. Unbolt (16 mm) caster and remove from lift.



A thin metal D-shaped plate should be removed from the caster. Gently pry off.

D-Bracket end of the spacer should fit inside the base. Reassemble bolting the caster through the spacer to the base of the TR 9650. Make sure the locating pins on the spacer are aligned with the locating holes on the caster. Coat the threads on the end of the screw with the red Loctite supplied and tighten the bolt into the base.





Shower trolleys and Mobile Bath Lift System

Hygiene Equipment Designed for People



Incorrect installation!

The spacers have a right & left orientation to the "D" end. If installed incorrectly, the casters willlock in a position that will not allow for straight steering. This will be quite obvious.



Correct installation!

The spacers, if installed correctly, will be parallel to the ground allowing for straight steering





Hygiene Equipment Designed for People



Locking caster spacer assembly is similar to the straight steering. The thin black rubber spacer goes in between the caster and the spacer.



Proper assembly with the D end of the spacer on top.



Prior to use, make sure all casters work properly. Check the both straight steering and locking casters to assure they are functioning properly. Stability of the lift will not be affected by the installation of the spacer kit so the installation should be only noticable by appearance and not by function.

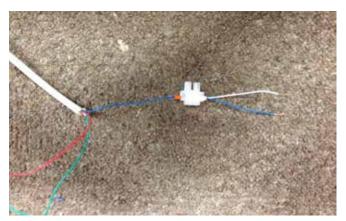






Adapting the TR9650 with a hand control

- 1. To adapt the TR 9650 with a handcontroll you need that have:
- Hand control for TR 1700, item number 819184
- Linak female connector, item number 819097
- 2. Remove the plastic cover and drill a 15 mm hole in the chassis next to the charging outlet and mount the connector. Be sure to add silicon to back side of the connector to seal it properly
- For the TR 9650 to work with the hand control there needs to be 2 COM (one for each foot switch) and therefore the blue cable need to be split in two. Cut two equally long pieces of wire , one white and one blue, and connect these to the remaining blue wire on the hand control cable (see Pic .1 below)



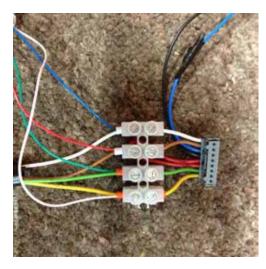
4. For the work to be a Little bit simpler from now please cut the reaming brown, orange and white wire from the hand control cable as they are not need

5. Take a terminal block and connect the wires as follow: Mount the white wire from the "hand control cable " together with the yellow wire on the "footswitch cable" and connect to the yellow wire form the microswith cable.

Mount the green wire from the "hand control cable " together with the green wire on the "fotswitch cable" and connect to the green wire form the microswith cable

Mount the blue wire from the "hand control cable " together with the white wire on the "fotswitch cable" and connect to the white wire form the microswith cable.

Mount the red wire from the "hand control cable " together with the brown wire on the "fotswitch cable" and connect to the brown wire form the microswith cable (See pic. 2).



6. All cable are now connected and ready to use





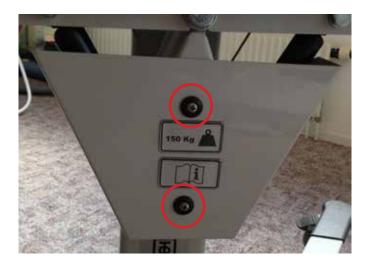
Hygiene Equipment Designed for People

Changing the tilt gas springs.

Remove mattress from the shower trolley.

Flip up the hinged white stretcher board.

Remove the triangular plate by unscrewing the two screws shown in below photo.



Loosen the wire in one (either) stretcher short end. Do **not** remove the wire.







Changing the tilt gas springs.

Loosen the top bolt for the gas spring and release the gas spring so it folds down.



Check the gas spring visually. The most common problem with the gas spring is the metal pin shown in photo below, see red arrow.

This metal pin is either:

- Stuck in the bottom position
- · Metal pin is bent
- Metal pin has been broken off

All three of these problems are visual and you immediately see which gas spring is broken.

If you cannot see anything wrong with the metal pin then the gas spring is broken internally.

Then the only way to figure out which gas spring is broken is to replace one at a time.

Reattach the wire and test tilt function.

To remove the broken gas spring loosen the black nut and unscrew the gas spring see photo below.



Screw the new gas spring in place and tighten the black nut to lock it in place. Attach the gas spring with the top bolt. If both gas springs need to be replaced just repeat the above steps. When gas springs are replaced reattach the wire and the triangular plate.





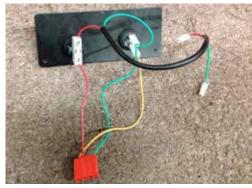
Shower trolleys and Mobile Bath Lift System

Hygiene Equipment Designed for People

Instruction Retrofit TR 9650/TR 3000 with magnetic charger connection



TR 9651/TR 9651-S



New metal plate for TR 9650/TR 9651-S



TR 3000



New metal plate for TR 3000

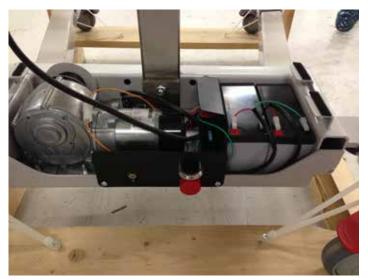


Remove the bolt on the column (Allen Key 5 mm) (TR 9650)



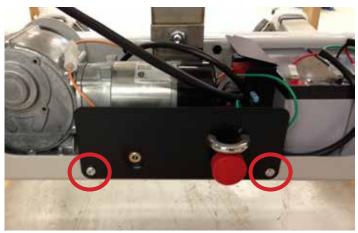


Shower trolleys and Mobile Bath Lift System

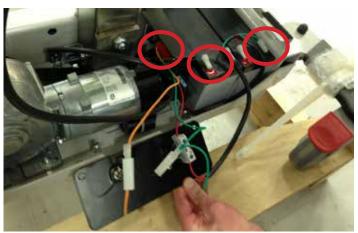




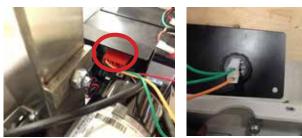
Lift the chassis cover



Loosen the bolts (Torx 25) to remove the metal plate



Remove the cable from the circuit board and the two outer connections on the battery.



Use the new metal plate and attach the connector to the circuit board and the two connections to the batteries. Make sure that - (negative) on the charging connection is connected to - (negative) on the battery.



Attach the metal plate to the chassis with the two bolts. Make sure that the cables are not kinked. Lower the chassis cover and fasten the screw on the column.





Shower trolleys and Mobile Bath Lift System

Instruction how to replace the cover on a TR 9650

1. Unscrew and remove the knob or the locking nut depending on the age of the lift and remove the chair from the lift.



 Unscrew and remove the stop screw in the bottom part of the column and then raise the sled to the middle of the column by pressing ^ on the foot control. Then lift the sled manually a little bit more so that you get a slack on the lift band.



 Unscrew the nut and remove the screw that holds the auto stop mechanism.
 Be careful and take care of all the parts that will fall

out! See right photo. Then knock out the auto stop with a plastic hammer.









4. Unscrew and remove the stop screw in the top of the column and unscrew and remove the two screws that hold the black lid.





5 Unscrew and remove the screw, sleeve and the lift band roller.







6. Put adhesive tape around the sled over all 8 pcs. of sliding washers, so that they won't fall out of the sled when you remove the sled from the column. Then carefully lift off the sled straight up from the column so that the sliding washers don't fall out. Also make sure that the lift band does **not** fall down into the column.







Hygiene Equipment Designed for People

 Pull up the grey plastic cover and carefully remove the connectors that are connected to the foot control underneath the cover. (Make sure that you remember how the wires were connected so that you connect them correctly in the same way on the new cover.) Brown/White wire on one side and Green/Yellow on the other.

Then completely remove the damaged cover from the column and replace it with the new one.







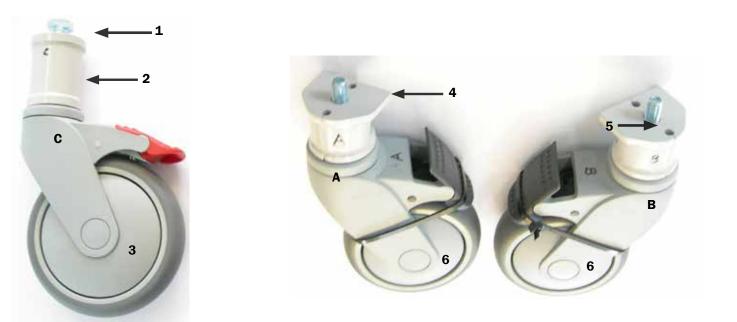
- 8. Then follow point 1-7 in reverse order to restore the lift to its original appearance.
- 9. Please see separate instruction for assembling the auto stop mechanism.





Hygiene Equipment Designed for People

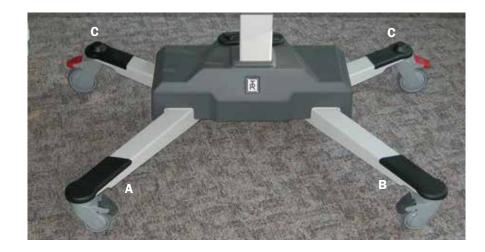
Assembly Instructions - Raised chassis set



Important: Make sure to attach the wheels in the right position and tighten the screws properly using Loctite.

No	Art no	Number needed
1	831051-2025	2
2	3430462	2
3	850510	2
4	3430063	1
5	3430063-02	1
6	850516	2

Articles included in the set, 0522030

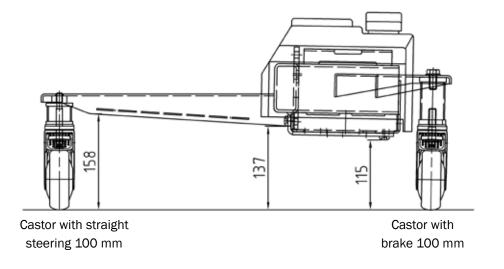






Shower trolleys and Mobile Bath Lift System

Trolley with raised chassis set, 0522030



Trolley with standard chassis

