

# Service & Maintenance manual TR9650 Mobile bath lifts

Incl. Spare parts lists and Maintenance check list



Mobile bath lifts Mod.12

Manufactured from 2012 and onwards



Mobile bath lifts Mod.07 Manufactured between 2007 - 2011





Mobile bath lifts
Manufactured before 2007

The recommended frequency of the maintenance procedures will depend on how often the equipment is used but an annual maintenance should be performed every 12-months. It is good practice to establish these routine procedures on a weekly basis and adjust the frequency based on usage of the equipment.



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# Before every use

Make a visual inspection of the TR9650 bath lift before every use:

- Make sure that it stands securely on the floor.
- Make sure that it is possible to raise and lower the lift.
- Make sure that there are no damages on seat, backrest, arm supports, safety belts etc. that might hurt the patient.



## Daily maintenance

- Repeat **Before every use**
- Clean the TR9650 mobile bath lift and pillow after each use. See cleaning instructions in the operating manual.
- Safety belts may be machine washed and dried. Velcro strips must be pressed together during washing and drying to preserve their gripping power.
- We recommended that the batteries are charged daily or whenever the lift is not in use. The batteries can't be over charged.



#### Warning:

Never clean any parts in a gas sterilization unit



#### Important:

Lifts should not be used if defects are noted. Prompt service is required.



#### **Important:**

Dry all surfaces after cleaning to avoid stains and discoloration.



# Monthly maintenance

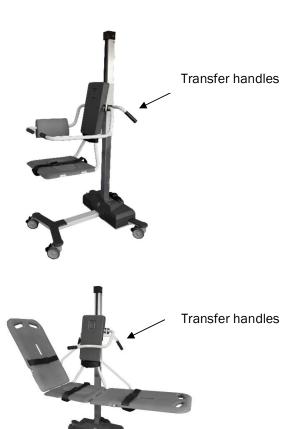
- Repeat **Daily maintenance**.
- Check that all screws and bolts are tightened (castors, lifting column, seat, side parts etc.)
- Make sure the safety belts are clean and that the belt buckles are working properly.
- To keep the TR9650 mobile bath lift running smoothly, keep the square column clean and sprayed with multi spray such as Tri-Flow, CRC 5-56, WD40 etc. Spray all four sides of the column over and below the column sledge. Run the lift seat up and down afterwards for best result.



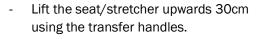


#### **Annual maintenance**

- Repeat Daily maintenance and Monthly maintenance.
- Use the check list at the end of this manual during the maintenance and save it.
- Inspect the Drive belt visually for signs of wear. Replace if necessary.
- Check the voltage on each battery. Replace if necessary.
- Unscrew the PUR seat and clean the underside of the seat.
- Perform an Auto Stop test to verify that the Auto Stop function is OK in case of a belt failure.



# Auto stop test:





 Drop the seat/stretcher down and the auto stop shall be activated.
 Drive belt will be slacking.



- Press the UP symbol on the foot pedal to release the auto stop and straighten the drive belt.



## Warning:

If the Auto Stop isn't activated during the test, the lift must immediately be taken out of use. Contact TR Equipment or your TR Equipment representative immediately.



The recommended frequency of these maintenance procedures will depend on how often the equipment is used. It's good practice to establish these procedures and then adjust the frequency as your conditions indicate.

## Maintenance every 3 year

- Repeat Daily maintenance, Monthly maintenance, and Annual maintenance.

#### Replace following parts:

- Replace the drive belt

- Replace the 12V batteries (2pcs),

Part.no 7418124. Part.no 819030.







#### Maintenance every 5 years

- Repeat Daily maintenance, Monthly maintenance, and Annual maintenance.

#### Replacements:

- Replace the castors:

Castors with brake, Part no: 851760

Castor with straight steering, Part.no: 851761

- Replacement of the lifting motor Part.no: 2419640



#### Warranty:

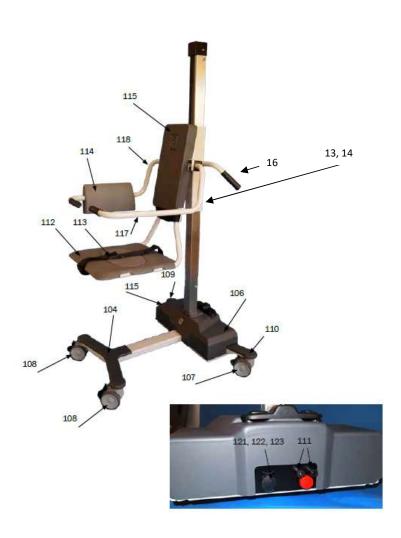
- Maintenance and/or repairs may only be carried out by the manufacturer or qualified staff authorized by the manufacturer. Otherwise warranty expires immediately.



Manufactured from 2012 - onwards



















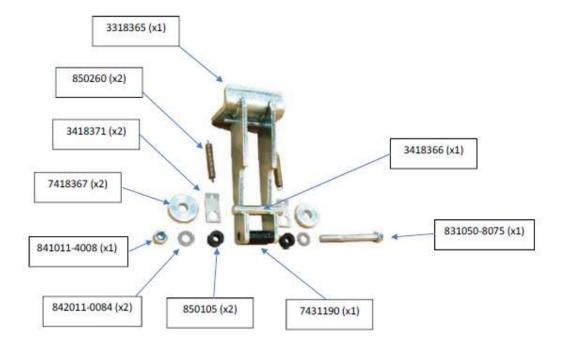


No:	Spare part:	Article number:
1.	Electric motor unit	2419640
2.	Drivebelt	7418124
13.	Sliding washer	3418126
14.	Shims	7418581
16.	Rubber hand grip	850125
18.	Battery 12V	819030
49	Emergency stop	819310
50	Contact block for emergency stop	819312
78	Micro switch UP/DOWN	7329676
82	Switch	819430
83	Rubber cap for micro switch	819432
85	Circuit board	819351
104	Front fender, Chairlift Mod.12	7331128
105	Front fender, Combi/Stretcher lift Mod.12	7331129
106	Grey Cover, Lifts Mod.12	7228380
107	Castor Ø100mm with brake Mod.12 (Grey lever)	851760
108	Castor Ø100mm with straight steering Mod.12 (Black lever)	851761
109	Rear fender Left Mod.12	7429578
110	Rear fender Right Mod.12	7429578-02
111	Protection for emergency stop	850161
112	PUR seat Grey Mod.12	7119252-04
113	Plug for PUR seat	7119252-05
114	Backrest PUR Grey	7219254-04
115	Protection pad, Chair lift Mod.12	200103-02
116	Protection pad, Stretcher/Combi lift Mod.12	200104-02



No:	Spare part:	Article number:
117	Arm support Right Mod.12	3231041
118	Arm support Left Mod.12	3231041-02
121	Mag code power port 24V	819148
122	Power clip mounted on charger (included in 0541226)	819149
123	Mag code port cover	819150
124	PUR Side part Grey, Left Mod.12	0542030-02
125	PUR side part Grey, Right Mod.12	0542030-03
126	Charger Mag Code	0541226
127	EU Plug	819140
128	US Plug	819141
129	UK Plug	819142
130	Pillow TR9650 Mod.12	7431135
131	Belt for pillow	7419241

# Auto stop mechanism



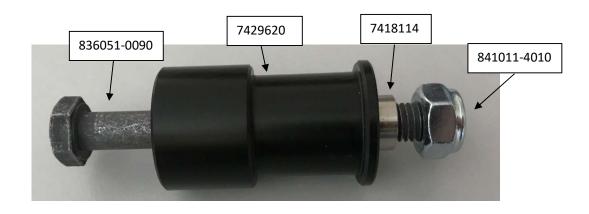


# Lifting column parts

Upper belt roller

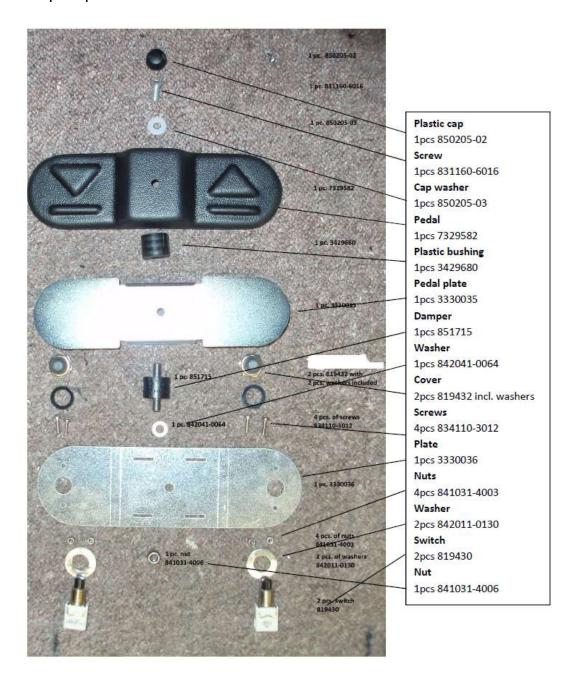


## Lower belt roller





## Foot pedal parts





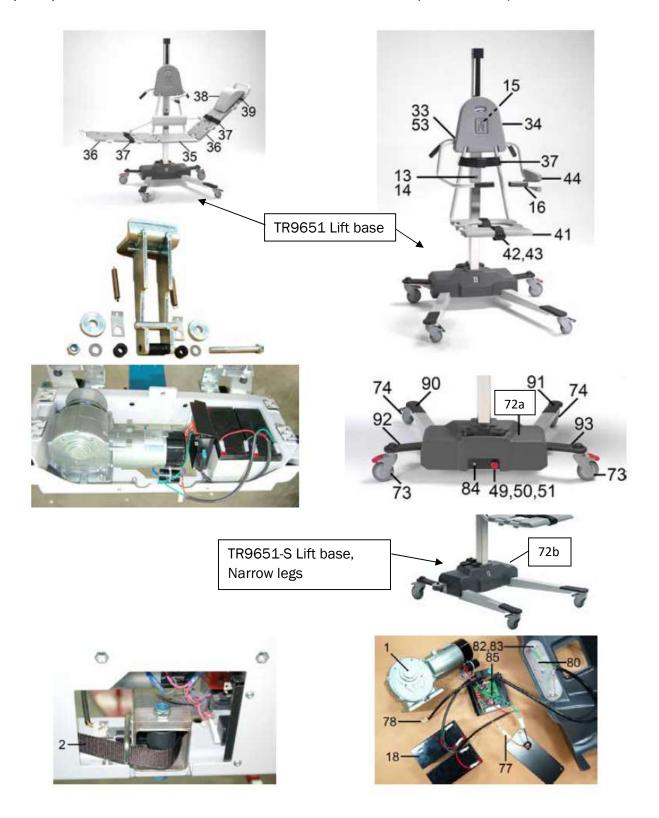
# Spare parts list TR9651, 9651-S, 9654, 9655 Mod.07

Manufactured between 2007 - 2011







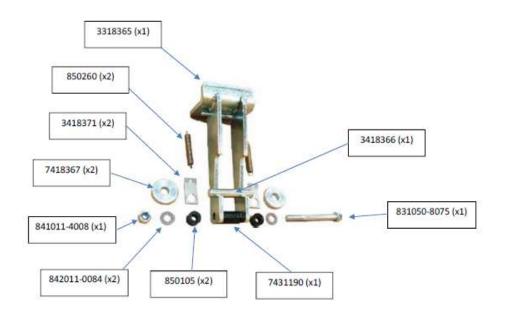




No:	Spare part:	Article number:
1.	Electric motor unit	2419640
2.	Drivebelt	7418124
13.	Sliding washer	3418126
14.	Shims	7418581
15.	Attachment wheel (behind TR cover)	3419223
16.	Rubber hand grip	850125
18.	Battery 12V	819030
33.	Hinge for arm support	3418373
34.	Protection pad Grey	7119253-03
35.	Solid seat ABS Grey	7119251-03
36.	Stretcher pad ABS Grey	7123623-03
37.	Safety belt lock L=1600 chest	7418323
38	Side part pillow	7431135
39	Belt for side part pillow	7419241
41.	Hygiene seat ABS Grey	7119252-03
42.	Safety belt, legs	7418320-02
43.	Safety belt lock, chair legs	7418320
44.	Backrest ABS Grey on arm	7219254-03
49	Emergency stop	819310
50	Contact block for emergency stop	819312
51	Fender, Chrome	850160
53	Cover for hinge, arm support	3219643
72a	Gray cover for TR9651 Lift base	7228378
72b	Gray cover for TR9651-S Lift base with narrow legs	7229592
73	Castor 100 mm brake	850510
74	Castor 75 mm straight steering	850514
77	Cabling	7329677
78	Micro switch UP/DOWN	7329676
82	Switch	819430
83	Rubber cap for micro switch	819432
84	DC jack	819434
85	Circuit board	819351
90	Fender front left	7429578
91	Fender front right	7429578-02
92	Fender back left	7429579
93	Fender back right	7429579-02



# Auto stop mechanism



# **Battery charger**





# Foot pedal parts





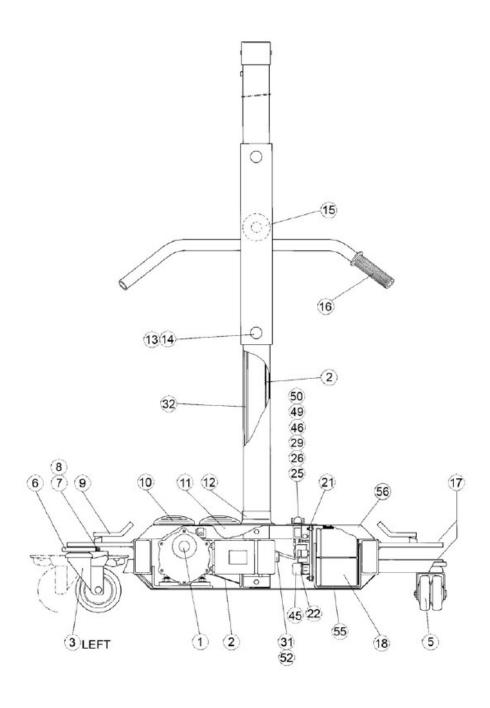
# Spare parts list TR9651, 9651-S, 9654, 9655 older models

# Manufactured before 2007

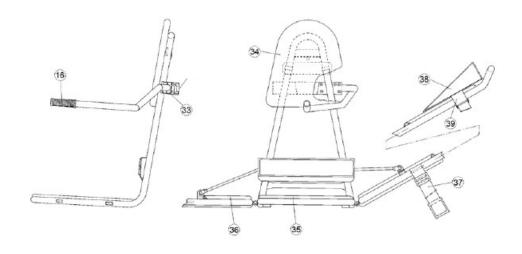




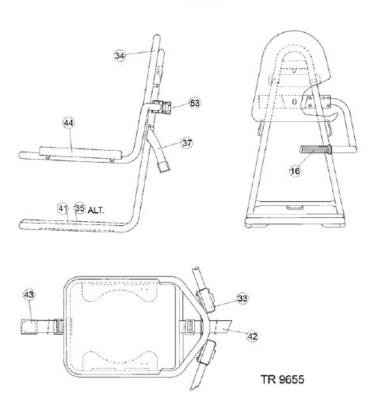








TR 9654



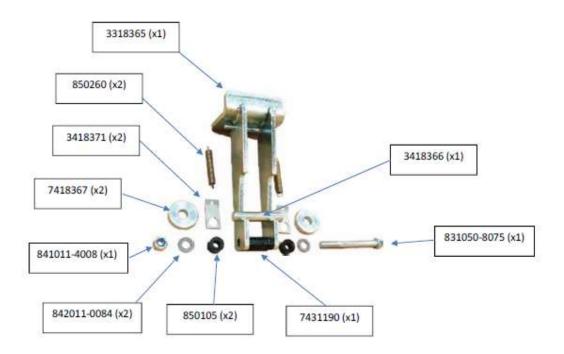


No:	Spare part:	Article number:
1.	Electric motor unit	2419640
2.	Drivebelt	7418124
	Castor with brake, <b>Left</b>	3418751
3.	Castor with brake, <b>Right</b>	3418751-02
5.	Twin castor	850135
5.	Twin castor with brake	850134
5.	Washer/spacer	842012-4012
6.	Bumper guard	3418128
7.	Spring washer	842013-0102
8.	Seeger ring	843501-0010
9.	Straight steering lever	3418710
10.	Foot control pad	819024
11.	Rubber grommet	819046
12.	Rubber spats	7418181
13.	Sliding washer	3418126
14.	Shims	7418581
15.	Attachment wheel (behind TR cover)	3419223
16.	Rubber hand grip	850125
17.	Slip guard L=118mm	6321280-03
17.	Slip guard L=358mm	6321280-02
17.	Slip guard L=233mm	6321280
18.	Battery 12V	819030
21.	Label	0530012
22.	Circuit board Retro fit kit 1993-2004	0530063-02
22.	Circuit board from Oct.2004	819350-02
26.	Springing cap	819316
29.	Low battery light	819355
31.	Wire set, one switch	819352
31.	Wire set, two switches	819352-02
31.	Bracket for switch	6319638
32.	Spring	850260
33.	Hinge for arm support	3418373
34.	Protection pad Grey	7119253-03
35.	Solid seat ABS Grey	7119251-03
36.	Stretcher pad ABS Grey	7123623-03
37.	Safety belt lock L=1600 chest	7418323

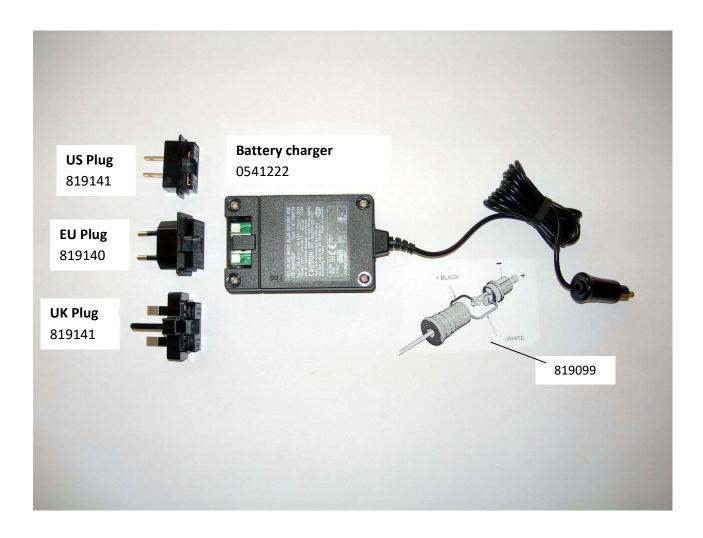


No:	Spare part:	Article number:
38.	Side part pillow	7431135
39.	Belt for side part pillow	7419241
41.	Hygiene seat ABS Grey	7119252-03
42.	Safety belt, legs	7418320-02
43.	Safety belt lock, chair legs	7418320
44.	Backrest ABS Grey on arm	7219254-03
45.	Relay 24VDC	819302
46.	Charging socket	819318
49.	Emergency stop	819310
50.	Contact block for emergency stop	819312
56.	Top cover TR9651	3325519

# Auto stop mechanism











Mobile bath lifts Mod.12
Manufactured from 2012 and onwards



Mobile bath lifts Mod.07 Manufactured between 2007 - 2011



Mobile bath lifts
Manufactured before 2007





#### How to replace the drive belt

Chair-, stretcher- and Combi lift Mod.12, Mod.07 and older models.

- 1. Remove the chair or the stretcher. If possible, run the lift halfway up using the foot pedal or manually, using the transfer handles. Remove the top cover on the column and the bottom cover under the chassis.
- 2. Unscrew the lower stop screw on the column and pull the plastic cover upwards, or remove metal cover, depending on what model you have.
- Make sure you see the way the old drive belt was assembled in the lift, before you follow the instructions below. It 's very important that the belt is assembled correctly and not twisted.
- 4. Remove the drive belt from the motor pulley by pressing the DOWN button on the foot pedal with your hand and pull the belt with pressure on the tension mechanism upwards through with your other hand. Loosen and remove the screws holding the belt on the motor pulley (orange ring).
- 5. Pull out the belt from the auto stop to decrease the pressure on the axle and bolt
- 6. Lean the lift or lay it down on the floor. Pull the belt out from underneath. Fasten the new drive belt to the old one with tape. This makes it easier to pull the new drive belt through the column. Note the position of the seam on the belt, important that it comes on the correct side.
- 7. The drive belt shall not be twisted more than 90 degrees inside the column.
- 8. Pull the belt through the slacken mechanism and column. If necessary, release the mechanism by compressing it.







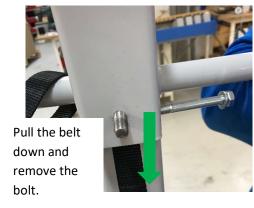


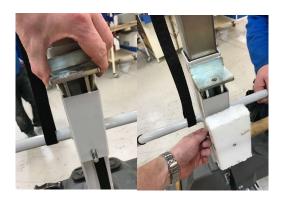


How to replace the drive belt

Chair-, stretcher- and Combi lift Mod.12, Mod.07 and older models

- Remove the old belt from the auto stop mechanism by loosening and removing bolt, washer, and nut. Pull the belt down to make it easier to remove the bolt and the plastic bushings inside.
- 10. Lift the auto stop mechanism up and hit with a plastic hammer to remove it from the column.
- 11. Loosen the belt from the auto stop mechanism by removing the rollers and axle.





12. Pull the new belt through the column opening and through the pocket on the column sledge.





How to replace the drive belt

Chair-, stretcher- and Combi lift Mod.12, Mod.07 and older models

- 13. Assemble the new belt on the auto stop mechanism. Note the position of the seam.
- 14. Loop the belt as shown on the picture.



15. Put the auto stop mechanism back into the pocket on the column sledge.



16. Pull the belt downwards and hit the auto stop (yellow arrow) to get it into the pocket on the column sledge.





## How to replace the drive belt

## Chair-, stretcher- and Combi lift Mod.12, Mod.07 and older models

17. Release the auto stop mechanism by pulling the belt downwards and fasten the belt in released position with a clamp.

This to be able to assemble bolt, plastic parts, washer, and nut.



and lock it into position with a clamp.

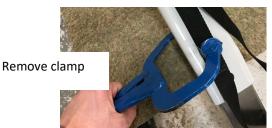
18. Assemble the bolt, washers, plastic parts, and nut as the picture shows. Fasten bolt and nut.





19. When bolt, plastic parts, washers, and nut is fastened remove the clamp from the belt.







How to replace the drive belt

Chair-, stretcher- and Combi lift Mod.12, Mod.07 and older models

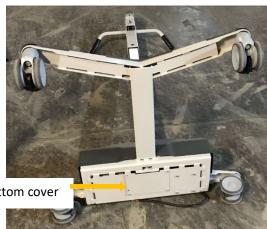
- 20. Fasten the belt on the motor pulley again.
- 21. Press the DOWN symbol on the foot pedal to roll up the belt on the pulley.
- 22. Re-assemble the top and bottom cover again.
- 23. Put the chair-seat or stretcher-seat back onto the column sledge again.





Column top cover

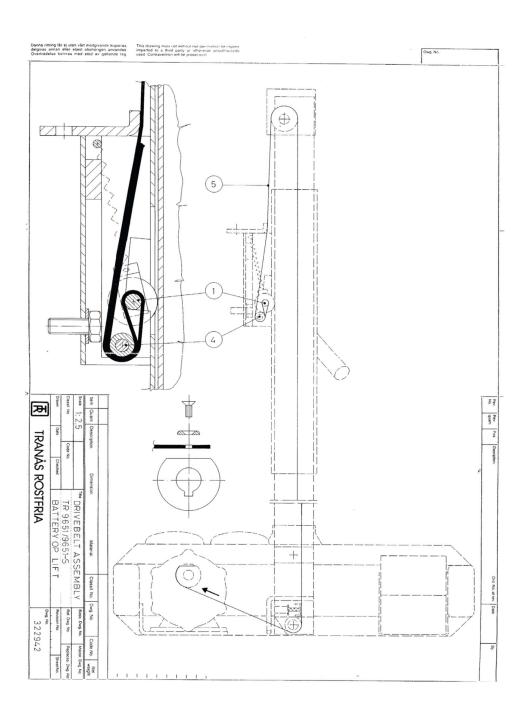






How to replace the drive belt

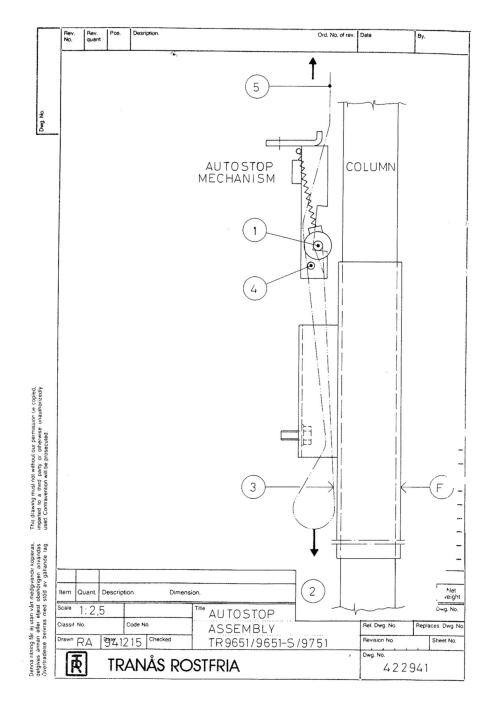
Chair-, stretcher- and Combi lift Mod.12, Mod.07 and older models





How to replace the drive belt

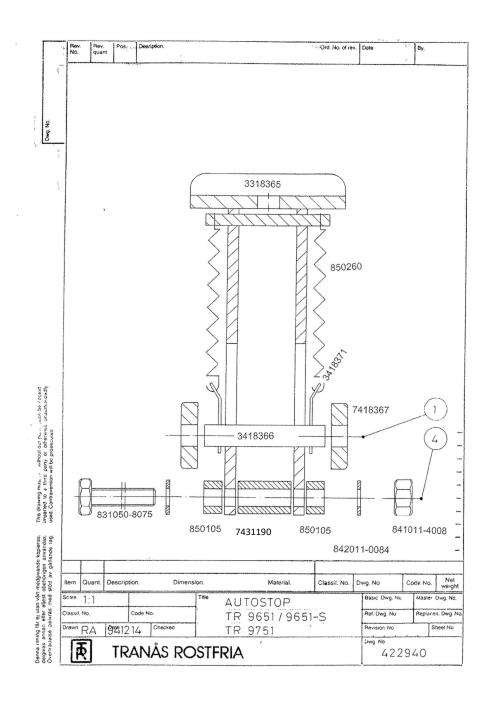
Chair-, stretcher- and Combi lift Mod.12, Mod.07 and older models





How to replace the drive belt

Chair-, stretcher- and Combi lift Mod.12, Mod.07 and older models





#### **Trouble shooting**

Chair-, stretcher- and Combi lift Mod.12, Mod.07 and older models

#### The lift doesn't work:

1. <u>Is the Emergency stop activated?</u>

If it is activated, release it by turning the red knob clockwise. See arrows on the knob.

- 2. <u>Connect the charger to the charging connector on the lift and then connect it to the mains</u>. If there is an immediate Green light the problem is the batteries, fuse, or the circuit board.
- 3. Check the voltage on both batteries?

If both batteries are fully charged and have 12V (24V in series) or more, they are ok.

4. Check the fuse between the batteries

If the 15A fuse is broken, replace the fuse.

5. <u>Check that the connectors from motor and cablings are properly fastened on the circuit board.</u>

If they are not properly fastened, reconnect them.

6. Remove the motor connector from the circuit board and connect the lifting motor directly to the batteries using external + and – cables.

If the motor works, replace the circuit board.

If the lifting motor does not work, replace the lifting motor.

7. If you have a lift produced before 2007:

Check that the pneumatic hoses from the pneumatic pads for UP and DOWN are connected to the circuit board properly.

Check the Pneumatic pads for UP and DOWN. If the pad is flat or leaks, replace the pad



#### **Trouble shooting**

Chair-, stretcher- and Combi lift Mod.12, Mod.07 and older models

## There is a beeping sound from the lift

1. Are the batteries charged?

Most often a beeping sound indicates that the batteries needs to be charged.

2. If the beeping sound continues:

Clean the column from lime and spray lubricant (Tri-flow, 5-56, WD40) on the column.

3. If the beeping sound continues:

Replace the UP and DOWN switch under the foot pedal.

## There is a fast beeping sound from the lift

1. A fast beeping sounds when the lift hits the stop screw at the reaches the highest and lowest position.

This is normal.

2. A fast beeping sound is also heard when the lift is not in highest or lowest position.

Press the lever on the micro switch under the plastic cover and at the same time press the UP or DOWN symbol on the foot pedal.

## The seat is stuck onto the column

1. The auto stop mechanism has probably been activated.

Press the UP pedal on the foot pedal to release it.

If the motor is running and the seat does not move the belt has probably been cut off or the gearbox on the motor is broken. If the gearbox is broken a clicking sound will be heard.



### Service instructions

# TR9650 Chair-, stretcher- and Combi lift Mod.12 Produced from 2012 and onwards.





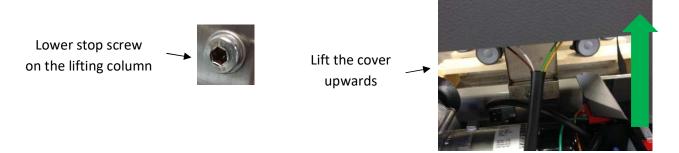
How to replace the lifting motor

Chair-, stretcher- and Combi lift Mod.12 Produced from 2012 and onwards.

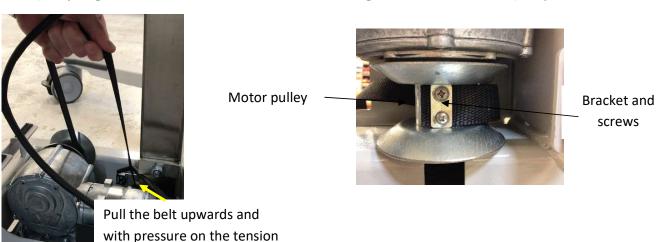
mechanism.

1. Run the seat halfway up. Unscrew the lower stop screw on the column, lift the plastic cover upwards to get access to the motor. The cover is fastened with Velcro.

If the motor is broken and the seat or stretcher are in the lowest position, manually lift the seat or stretcher by using the transfer handles half way up, to be able to lift the plastic cover upwards and to get access to the motor.



2. Remove the belt from the motor pulley by pressing the DOWN button on the foot pedal with your hand and at the same time pull the belt upwards with pressure on the tension mechanism with your other hand. Unscrew and remove the screws and bracket holding the belt on the motor pulley. If the motor is broken, manually remove the belt from the motor pulley to get access to the screw and bracket holding the belt on the motor pulley.





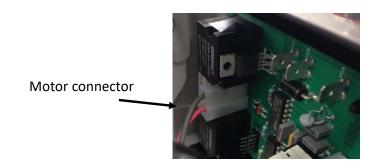
How to replace the lifting motor

Chair-, stretcher- and Combi lift Mod.12

Produced from 2012 and onwards.

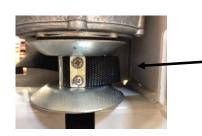
3. Unscrew and remove the bolts holding the motor (Yellow rings and arrows). Remove the connector from the circuit board.





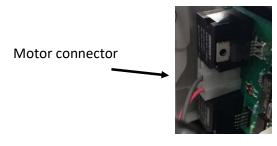
4. Fasten the new motor onto the chassis (Yellow rings and arrows). Put the belt back on the motor pulley and fasten it with the screws and bracket.





Assemble the belt from the side.

5. Re-connect the motor connector to the circuit board and press the UP symbol on the foot pedal to roll the belt up on the motor pulley.







#### How to replace the batteries

Chair-, stretcher- and Combi lift Mod.12

Produced from 2012 and onwards.

- 1. Lift the plastic cover upwards. The cover is fastened with Velcro.
- 2. Disconnect the 15A fuse (Orange ring) from the fuse holder or activate the Emergency stop.
- 3. Disconnect the RED and BLACK cables coming from the circuit board cabling (Green Rings).
- 4. Disconnect the RED and BLACK cables coming from the fuse cabling (Blue ring).
- 5. Replace the batteries.
- 6. Connect the batteries again in reversed order, starting with no.4.









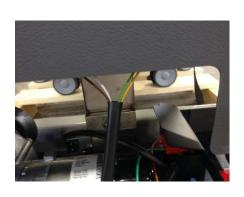


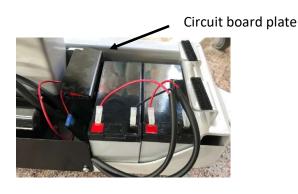
#### How to replace the circuit board

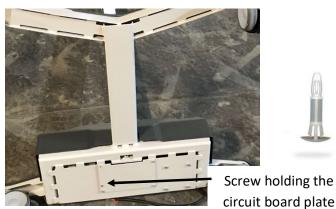
Chair-, stretcher- and Combi lift Mod.12

Produced from 2012 and onwards.

- 1. Lift the plastic cover upwards. The cover is fastened with Velcro. If the seat is in the lowest position and it's not possible to lift the cover, try to manually lift the seat to a higher position using the transfer handles.
- 2. The circuit board is mounted on a plate next to the batteries. The plate is fastened with a screw from underneath. Carefully lay the lift down on the floor to loosen and remove the screw holding the circuit board plate.
- 3. Lift the plate and remove connectors from motor and cables.
- 4. The circuit board is fastened with plastic locking supports (4pcs). Carefully loosen the circuit board by pressing the locking supports at the ends.
- 5. Assemble the new circuit board on the plastic locking supports again and reconnect connectors from motor and cables.
- 6. Fasten the circuit board plate again with the screw from underneath.

















#### How to replace the plastic cover

Chair-, stretcher- and Combi lift Mod.12 Produced from 2012 and onwards.

- 1. Run the seat to the highest position by pressing the UP symbol on the foot pedal.
- 2. Remove the top the lower stop screw on the column to be able to push the plastic cover upwards.
- 3. Remove chair or stretcher from the column sledge.
- 4. Remove the belt from the motor pulley by loosening and removing the screws and bracket. Pull the belt out of the column.
- 5. Remove the upper belt roller by unscrewing the roller axle. At the same time remove the upper stop screw.

6. Put adhesive tape around the column sledge to hold the plastic washers in place when removing the sledge form the column.











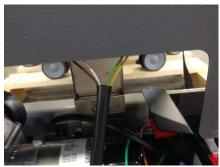
How to replace the plastic cover

Chair-, stretcher- and Combi lift Mod.12 Produced from 2012 and onwards.

- 7. Pull the belt down and lift the sledge off the column.
- 8. Lift the plastic cover upwards a bit and remove the connectors from the UP and DOWN switches inside the cover.
- 9. Lift the plastic cover off. If the pedal parts are ok, remove them from the broken cover and put them on the new cover.
- 10. Place the new cover over the column and pull it downwards. Re-connect the connectors to the UP and DOWN switches.
- 11. Carefully re-assemble the column sledge on the column. Pull the belt downwards and pull the sledge down the column.

12. Re-assemble the upper stop screw and belt roller.







Re-assemble the top roller and upper stop screw



How to replace the plastic cover

Chair-, stretcher- and Combi lift Mod.12 Produced from 2012 and onwards.

13. Place the belt over the roller and let the belt fall down the column.

To make it easier to get the belt through the column attach the belt together with a pre-assembled strap and pull the strap and belt through the column and tension mechanism.

14. Peel the belt out of the slacken mechanism.

Make sure the belt is not twisted inside the column.



15. Re-assemble the belt on the motor pulley. Note the position of the belt.



- 16. Make sure the lift works ok before putting the chair seat or stretcher back on the column sledge by using the foot pedal. Make sure the belt is not twisted inside the column.
- 17. Put the top cover back onto the column and fasten the lower stop screw onto the column again.









#### How to replace the castors

Chair-, stretcher- and Combi lift Mod.12

Produced from 2012 and onwards.

- 1. Carefully lay the lift down on the floor. Remove the castors by loosening and removing the castor bolts.
- 2. Assemble the castors with brake function by fastening the bolt into the chassis. Use Loctite 243 on the threads.
- 3. When re-assembling the straight steering castors, place the straight steering washer between castor and chassis. When the straight steering castors is activated and locked into position the pedal shall be pointing at opposite direction from the moving direction.

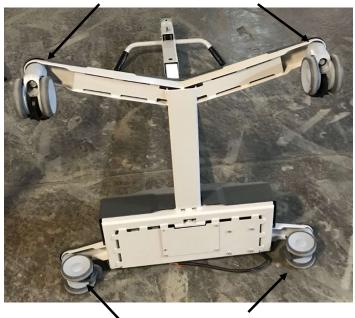


Straight steering washer



Pedal Moving direction

Straight steering castors





#### How to install a spacer kit

Chair-, stretcher- and Combi lift Mod.12

Produced from 2012 and onwards.

To get more space between floor and chassis it's possible to assemble spacers between the chassis and castors. With the spacer kit mounted on the TR9650 mobile bath lift you get 52mm extra space between floor and chassis.

TR9650 spacer kit Part number: 0542032

#### Including:

2pcs Spacers for the castors with brake,

1pcs Spacer **LEFT** for straight steering castor

1pcs Spacer **RIGHT** for straight steering castor

2pcs Castors with brake, Grey pedal

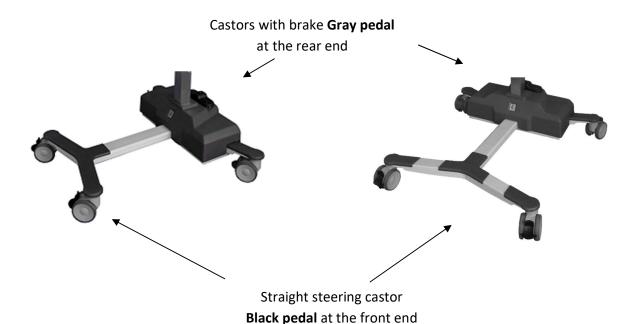
2pcs Straight steering castors, Black pedal

2pcs Friction washers for the castors with brake

4pcs Bolts and washers

#### 1. Chair lift chassis

#### Stretcher- & Combi lift chassis





How to install a spacer kit

Chair-, stretcher- and Combi lift Mod.12 Produced from 2012 and onwards.

#### Installing a spacer kit, castors with brake

The castors with brake have a Gray pedal.





Spacers for castors with brake includes a thin friction washer.



Put the bolts through the castors and spacers and fasten it onto the chassis.

Make sure that the Black friction washer is between castor and spacer before tightening the bolts.

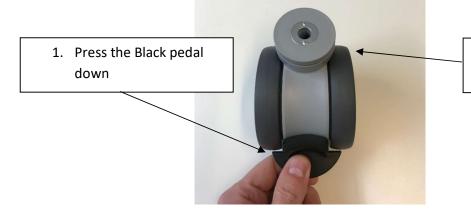


#### How to install a spacer kit

Chair-, stretcher- and Combi lift Mod.12 Produced from 2012 and onwards.

#### Installing a spacer kit, straight steering castors

The straight steering castors have a Black pedal and two small holes in the disc.



2. Rotate the disc until you hear a click.





Moving direction

- 3. The spacer for the straight steering castors has two small locating pins that fits with the two small holes on the castor disc. The spacers are delivered with one spacer for the Left side and one spacer for the Right side.
- 4. Put the bolts through castors and spacers and fasten it in the chassis. Make sure the locating pins are in the holes on the disc before tightening the bolts.
- When mounted and locked into position the castor pedals shall point towards each other.
  - Only one of the straight steering castors shall be activated during transport.



#### Service instructions

# TR9651, 9651-S, 9654 & 9655 Chair-, stretcher- and Combi lift Mod.07 Produced between 2007 - 2011





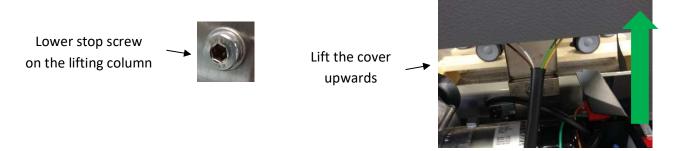
How to replace the lifting motor

Chair-, stretcher- and Combi lift Mod.07

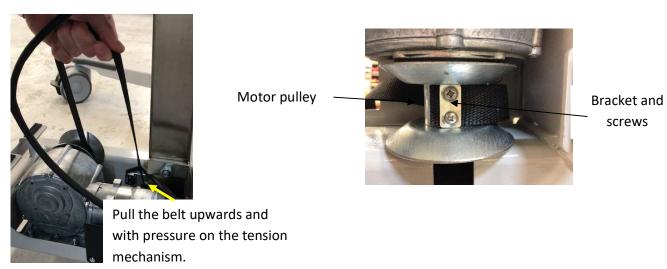
Produced between 2007 - 2011

1. Run the seat halfway up. Unscrew the lower stop screw on the column, lift the plastic cover upwards to get access to the motor. The cover is fastened with Velcro.

If the motor is broken and the seat or stretcher are in the lowest position, manually lift the seat or stretcher by using the transfer handles half way up, to be able to lift the plastic cover upwards and to get access to the motor.



2. Remove the belt from the motor pulley by pressing the DOWN button on the foot pedal with your hand and at the same time pull the belt upwards with pressure on the tension mechanism with your other hand. Unscrew and remove the screws and bracket holding the belt on the motor pulley. If the motor is broken, manually remove the belt from the motor pulley to get access to the screw and bracket holding the belt on the motor pulley.





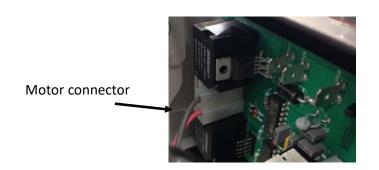
How to replace the lifting motor

Chair-, stretcher- and Combi lift Mod.07

Produced between 2007 - 2011

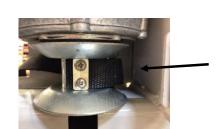
1. Unscrew and remove the bolts holding the motor (Yellow rings and arrows). Remove the connector from the circuit board.





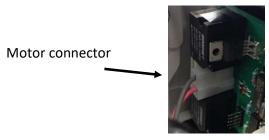
2. Fasten the new motor onto the chassis (Yellow rings and arrows). Put the belt back on the motor pulley and fasten it with the screws and bracket.





Assemble the belt from the side.

3. Re-connect the motor connector to the circuit board and press the UP symbol on the foot pedal to roll the belt up on the motor pulley.





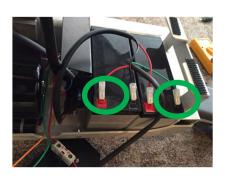


#### How to replace the batteries

Chair-, stretcher- and Combi lift 2007 - 2011 Produced from 2007 - 2011

- 1. Lift the plastic cover upwards. The cover is fastened with Velcro.
- 2. Disconnect the 15A fuse (Orange ring) from the fuse holder or activate the Emergency stop.
- 3. Disconnect the RED and GREEN cables coming from the circuit board cabling (Green Rings).
- 4. Disconnect the RED and BLACK cables coming from the fuse cabling (Blue ring).
- 5. Replace the batteries.
- 6. Connect the batteries again in reversed order, starting with no.4.









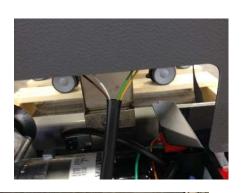


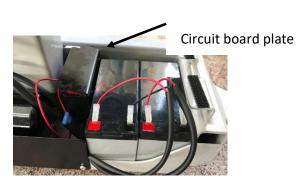
#### How to replace the circuit board

Chair-, stretcher- and Combi lift 2007 - 2011 Produced from 2007 - 2011

#### How to replace the circuit board

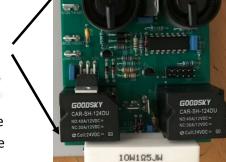
- 1. Lift the plastic cover upwards. The cover is fastened with Velcro. If the seat is in the lowest position and it's not possible to lift the cover, try to manually lift the seat to a higher position using the transfer handles.
- 2. The circuit board is mounted on a plate next to the batteries. The plate is fastened with a screw from underneath. Carefully lay the lift down on the floor to loosen and remove the screw holding the circuit board plate.
- 3. Lift the plate and remove connectors from motor and cables.
- 4. The circuit board is fastened with plastic locking supports (4pcs). Carefully loosen the circuit board by pressing the locking supports at the ends.
- 5. Assemble the new circuit board on the plastic locking supports again and reconnect connectors from motor and cables.
- 6. Fasten the circuit board plate again with the screw from underneath.













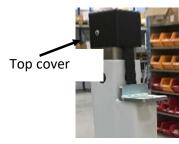


#### How to replace the plastic cover

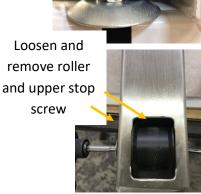
Chair-, stretcher- and Combi lift Mod.12 Produced from 2012 and onwards.

- 1. Run the seat to the highest position by pressing the UP symbol on the foot pedal.
- 2. Remove the lower stop screw on the column to be able to push the plastic cover upwards.
- 3. Remove chair or stretcher from the column sledge.
- 4. Loosen the belt from the motor pulley by loosen and remove the screws and bracket. Pull the belt out of the column.
- 5. Remove the upper belt roller by unscrewing the roller axle. At the same time remove the upper stop screw.

6. Put adhesive tape around the column sledge to hold the plastic washers in place when removing the sledge form the column.







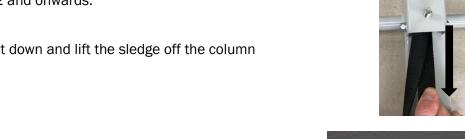




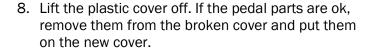
How to replace the plastic cover

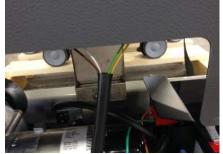
Chair-, stretcher- and Combi lift Mod.12 Produced from 2012 and onwards.

7. Pull the belt down and lift the sledge off the column

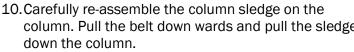


7. Lift the plastic cover upwards a bit and remove the connectors from the UP and DOWN switches inside the cover.





- 9. Place the new cover over the column and pull it downwards. Re-connect the connectors to the UP and DOWN switches.
- column. Pull the belt down wards and pull the sledge down the column.





11. Re-assemble the upper stop screw and belt roller.





How to replace the plastic cover

Chair-, stretcher- and Combi lift Mod.12 Produced from 2012 and onwards.

13. Place the belt over the roller and let the belt fall down the column.

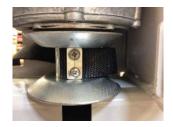


**12.** Peel the belt out of the slacken mechanism.

Make sure the belt is not twisted inside the column.



13. Re-assemble the belt on the motor pulley.



- 14. Make sure the lift works ok before putting the chair seat or stretcher back on the column sledge by using the foot pedal. Make sure the belt is not twisted inside the column.
- 15. Put the top cover back onto the column and fasten the lower stop screw onto the column again.



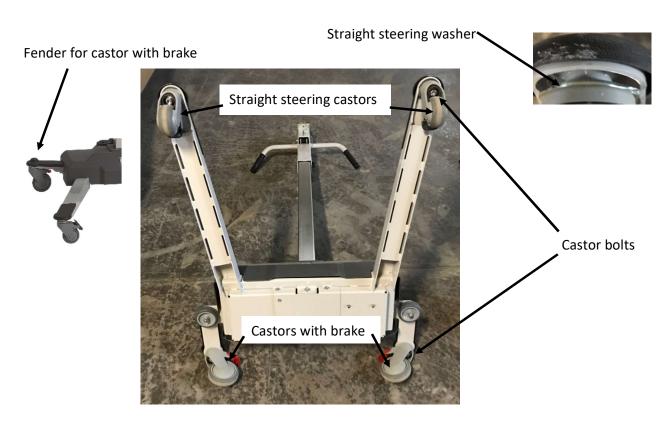




#### How to replace the castors

Chair-, stretcher- and Combi lift 2007 - 2011 Produced from 2007 - 2011

- Carefully lay the lift down on the floor. Remove the straight steering castors by loosening and removing the castor bolts. Peel off the straight steering washer and use it on the new castor.
- 2. Remove the plastic fenders for the castors with brake.
- 3. Remove the castors with brake by loosening and removing the locking nut and bolt for the castors with brake.
- 4. Assemble the castors with brake by fastening the bolt and locking nut again. Place a new plastic fender over the locking nut.
- 5. Assemble the straight steering castor by fasten the bolt into the chassis. Make sure the straight steering washer are properly mounted between castor and chassis.
- 6. When the straight steering function is activated, and the castor locked into position the Grey pedal shall be in opposite direction from the moving direction.





#### **Service instructions**

# TR9651, 9651-S, 9654 & 9655 Chair-, stretcher- and Combi lift Older models Produced before 2007





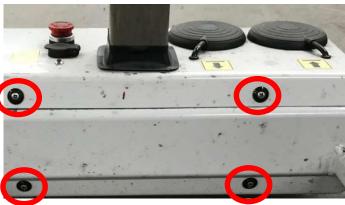


#### How to replace the lifting motor

#### Older version

- 1. Loosen and remove the screws holding the metal covers (Red rings).
- 2. Remove the 15A fuse or activate the Emergency stop.
- 3. Remove the bottom cover and push the upper cover upwards.
- 4. Disconnect the motor cable connector from the circuit board.
- 5. Remove the motor by loosening and removing the four screws (orange rings).
- 6. Remove the belt from the motor pulley and remove the motor from the lift.
- 7. Unscrew and remove the screws and bracket holding the belt on the motor pulley (green ring). Assemble the new motor in reversed order.













#### How to replace the batteries

#### **Old versions**

- 1. Loosen and remove the screws holding the metal cover (Red rings).
- 2. Remove the cover
- 3. Disconnect the 15A fuse (Orange ring) from the fuse holder or activate the Emergency stop.
- 4. Pull the batteries out from the chassis.
- 5. Disconnect the cables coming from the circuit board cabling (Green rings).
- 6. Disconnect the cables coming from the fuse cabling (Blue ring).
- 7. Replace the batteries.
- 8. Connect the batteries again in reversed order, starting with no.4.











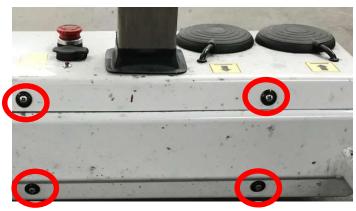


#### How to replace the circuit board

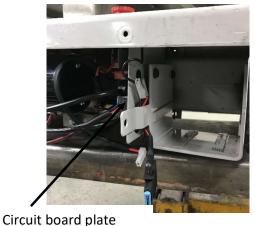
#### **Old versions**

- 1. Loosen and remove the screws holding the metal covers (Red rings).
- 2. Remove the lower cover and push the upper cover upwards.
- 3. The circuit board plate is mounted on the upper cover.
- 4. Disconnect the 15A fuse (Orange ring) from the fuse holder or activate the Emergency stop.
- 5. Loosen and remove the circuit board from the plate.
- 6. Disconnect connectors from motor, cablings, and hoses from the foot pads.
- 7. Replace the circuit board.
- 8. Connect the connectors from motor, cablings, and hoses from the foot pads again and reassemble everything in reversed order.











#### How to replace the castors

#### Old versions

Produced before 2007

- 1. Carefully lay the lift down on the floor.
- 2. Remove the castor with brake and straight steering function by loosening and removing the castors bolts.
- 3. Remove the twin castors by loosening and removing the castor bolts.
- 4. Assemble the new castors with brake and straight steering by fasten the castor bolts into the chassis. Make sure the bumper guard is properly attached between castor and chassis.

  Observe that there is a Left and Right version of the castor with brake and straight steering.
- 5. Assemble the twin castors by fasten the castor bolt into the chassis. Make sure the bumper guard is properly attached between castor and chassis.

Castors with double function, Straight steering and brake.





Bumper guard for each castor

Twin castors

Available with and without brake.



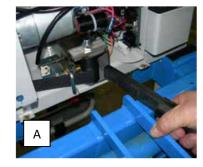
#### How to adjust the drivebelt tension mechanism

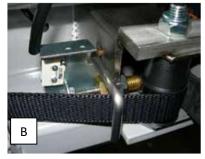
#### Old versions

- 1. Grease the mechanism some.
- 2. 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.



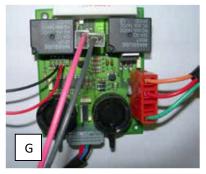














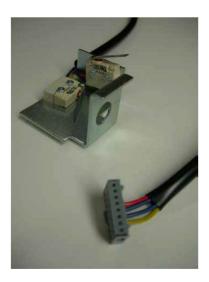
How to replace the belt micro switch (-200408)

#### Old versions

Produced before 2007

The product has 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 bracket.
- **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.





## **Check list**

### **Annual maintenance**

Visual control		
Are seat and side parts in a good condition.	Comment:	Action:
Yes No		
Is the Grey plastic cover complete and free from damage? Replace the Grey cover if it's damaged.  Yes No	Comment:	Action:
Are there any nicks or cracks that can hurt the patient? Yes No	Comment:	Action:
Is the bath-lift properly cleaned?  Yes No	Comment:	Action:
Are all fenders in place? Replace if they are damaged or missing.  Yes No	Comment:	Action:
Is the drive belt in good condition and without visible damages? Replace if there are signs of wear.  Yes No	Comment:	Action:



Function control		
Is it possible to raise and lower the seat by pressing the foot pedal?  Yes No	Comment:	Action:
Is the column cleaned and is the sledge running smoothly? Spray all four sides of the column with Tri-Flow, 5-56 or WD40 over and under the column sledge. Run the seat up and down for best result.	Comment:	Action:
Yes No		
Are the batteries in a good condition? Replace if necessary.  Yes No	Comment:	Action:
La the control of the	Comment	Addison
Is the motor working ok? Replace if the lift is older than 5 years.  Yes No	Comment:	Action:
Is it possible to adjust the side parts to it's different positions? (Stretcher and Combi-lift)	Comment:	Action:
Yes No No		
Is the brake function on the castors working ok?	Comment:	Action:
Yes No		
Is the straight steering function on the castors working ok?  Yes No	Comment:	Action:
Are the castors running smoothly? Replace if lift is older than 5 years.	Comment:	Action:
Yes No		



Perform an Auto Stop test. See Annu	al maintenance.				
Auto Stop test ok?	Comment:	Action:			
Yes No No					
If the Auto Stop isn't working, the lift must immediately be taken out of use!					
Immediately contact your local TR Equipment representative.					
Equipment approved and OK to u	se?				
Yes No					
Company / Person:		Serial number:			
Maintenance date:		Signature:			



### **Maintenance record**

Date:	Comment:	Signed by: