Wave

TA indoor

A life in motion!

TA® SERVICE

Art.nr: 95346

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CE

1 WARNINGS.

Read the instructions carefully. It contains important warnings and instructions.

Do not reach into or under the chair when the seat lift and seat tilt is activated, because there is a risk of entrapment between the mechanical parts.

Be aware of others, especially children, is too close to the chair when the seat lift and seat tilt is activated.

TA Indoor Wave is not intended for users with a weight exceeding 120 kg

TA Indoor Wave should always be turned off when making entry and exit of the chair and when assisted by a helper, so that the chair does not accidentally run if the joystick is activated.

The chair is EMC tested. However, it is possible that the wheelchair can be affected by electromagnetic fields from mobile phones for example. Similarly, it cannot be excluded that the chair can emit electromagnetic fields that can affect the surroundings, such as alarm systems in stores.

Pay particular attention to late run when driving on ramps.
When the chair's brakes are disengaged, the chair may roll if it is on a sloping surface.

Slowing down by pressing the On /Off button there is a risk that the user's torso could fall over.
Ultimately, the user could fall out of the chair.
This kind of slowdown should to the fullest extent be avoided on sloping surfaces and ramps.

By forcing level differences, it is important that the chair runs perpendicular to the obstacle in order to minimize the risk that the chair should tilt.

By forcing level differences with the seat tilted or hoisted there is a risk that the chair can tip over. By forcing level differences, it is therefore important that the seat is elevated as little as possible and is as close to an upright position as possible to minimize this risk.

Driving on steeper slopes should be avoided where possible as this will affect the chairs natural stability, as the risk of the power chair tipping over is increased. When driving on slopes ensure the following factors are considered.
The seat should not be lifted, The tilt or backrest recline is not adverse to affect stability,. If in doubt please contact TA Service or your local dealer, Speed is not excessive, but considered safe in the environment.

When the power chair is used as a seat in a car, bus or similar, the power chair must always be secured with an approved car attachment. Using 4 point car attachment the hooks must only be attached in the 4 attachment loops on the power chairs. Fastening the hooks elsewhere will cause a high risk of danger to the user and damage to the power chair. When using a Dahl docking system the instructions from Dahl Engineering must be followed closely. Failure to follow instructions carefully, will cause a high risk of danger to the user and damage to the power chair

Avoid touching leaky batteries, as the contents can be harmful.

The temperature of some surfaces can increase and get very hot when in direct sunlight. Especially the armrest, joystick controller, back/seat and footplate surface, care should be taken to avoid touching with bare skin.

Repairs and programming of the power chair must be performed by TA Service or a repairer who is authorized by TA Service.

Unauthorized programming can cause the power chair to handle in a way that could cause danger to the user or the surroundings.

Only original parts or parts that are approved by TA Service should be used.

2 PREFACE

TA Services A/S hope you are satisfied with your new TA Indoor Wave.
TA Indoor Wave is designed to facilitate your daily movement indoors and outdoors close to your home. It has been very important to design the chair as small and compact as possible, without reducing the chair's stability and handling.

WARNING!
Read the instructions carefully. It contains important warnings and instructions.

Operating the wheelchair has been attempted designed simple, but it is nevertheless important that you read through this manual, so you're sure to get the most out of your TA Indoor Wave.
Keep this manual you can later use it as reference.

In this manual you will find the information you need to operate the wheelchair. If you have questions, comments, or suggestions, please feel free to contact us:

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TA Service A/S makes continuous product development and we reserve the right to make changes.

3 CE DECALRATION

CE

TA Indoor Wave is tested by TÜV, and complies with standard EN 12184:2014 and ISO 7176-14

TA Indoor Wave is EMC tested following standards EN 12184:2014 and ISO 7176-21:2009

TA Indoor Wave is Climate tested in accordance to EN 12184:2014 and ISO 7176-09

TA Indoor Wave is Crash tested in accordance to ISO 10542-5 &7176-19 – 2008.

Conforms to the requirements of Council Directive 93/42/EEC and Directive 2007/47/EC relating til Medical devices Class 1 Product Annex I

This handbook has been prepared in accordance with applicable requirements.

4 PRE-SALE INFORMATION

A) By request the user manual can be made with large font

B) The TA Indoor wave is designed for users with normal visual and cognizance ability. MAX. User weight 125 kg.

C) Can be used by occupant and/or assistant.

D) The TA Indoor wave is designed for use indoor and in the local community. When you drive indoors, you must be careful in, for example, narrow passages, when going through doors and entrances and when using lifts, ramps, etc.

E) The TA iQ is wheelchairs Class A

F) Dimensions:
560 mm widt, 400 mm height without seat, 695 mm length without legrests

G) ÷

H) Reversing width without legrest 560 mm

I) Max. safe slope 10°

J) Standard options: electrical lift, electrical tilt and electrical backrest.

K) can be used with air tyres or tires with infill

L) Operator adjustment: Speed, Electric seat funktion and light, depending of configuration

M) the headrest is removable 1.5 kg

N) No removable parts will have adverse beneficial effect on the wheelchair.

O) The wheelchair is not intended to be used in a car with standard configuration. 4-tie down system, or Dahl docking station can be retrofitted

P) The wheelchair can be transported by land or air transport – the batteries are non-spillable and non-dangerous goods by IATA

Q) Theoretical continues driving distance: 22 km. The distance will be reduced if the wheelchair is used frequently on slopes, rough ground or to climb kerbs etc.

R) MAX Height of kerbs: 65 mm

S) No programmable device is fitted to the chairs. Only authorized technical personal should program the chairs.

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5 TECHNICAL DATA

Wheelchair Type:	Class A: Wheelchairs mainly intended for indoor use and are not necessarily doing outdoor hurdles.

Dimensions:	**min.**	**max.**
Seat lift:		320 mm.
Overall length with legrest*		885 mm
Overall width		560 mm
Storage length – without footplate		695 mm
Storage width		560 mm
Storage height	585 mm	
Total mass - depending on configuration		113,5 kg.
Mass of the heaviest part		10.36 Kg
Static stability downhill	6°	
Static stability uphill	6°	
Static stability sideways	6°	
Energy consumption		22 km
Dynamic stability uphill	10°	12°
Obstacle climbing	30 mm	65 mm
Maximum speed forward		6 km/h
Minimum braking distance from max speed		1000 mm
Seat plane angle	0°	45°
Effective seat depth		590 mm
Effective seat width	370 mm	550 mm
Seat surfaceheight at front edge	400 mm	
backrest angle	50°	96°
backrest height***	540 mm	665 mm
footrest to seat distance	370 mm	580 mm
Leg to seat surface angle	90°	180°
armrest to seat distance ****	185 mm	285 mm
Front location***** armrest structure	370 mm	475 mm
Handrim diameter		
Minimum turning radius – without footplate	450 mm	
Floor clearance (measured engine part):		70 mm

* Depending on mounting of the seat

*** From top of cushion with standard brackets

**** with standard tubes. Possibility to cut off or extend

***** From back

Setup: Evolution 90 mm cushion - Manuel mono legrest.

User Weight:	Maximum user weight: 125 kg
Tires:	Tire sizes, rear: 200 x 50 - Recommended pressure: 2.0 bar / 29 psi/200 kPa Tire sizes, front: 260 x 85 (3.00 – 4) – Recommended pressure: 2,5 bar /36 psi/250 kPa In the event of puncture, the tube can be repaired the same way as a bicycle tire tube.

Temperature:	Storage Temperature: -20° C to 50° C Operation Temperature: -20° C to 50° C
Batteries:	2 pcs. 12V/38Ah Type: gas-tight lead acid (Rekombinationsbattery). Capacity: 35 for Ah Battery Connection Type: Bolt, 5 mm Size: • Width: 130 mm • Length: 195 mm • Height incl. poles: 170 mm Maintance free
Engines:	2 pcs. 24V/450 Watt
Driving Data:	Maximum driving distance (theoretical): 22 km Maximum climbing ability over short distances (theoretically): 12 ° Maximum climbing ability over long distances: 10 ° Maximum speed, forward driving: 6 km / h Maximum speed, revers driving: 3 km / h Clearance from floor: 70 mm Maximum level difference that can be forced: Forward without run-up: 30 mm (anti-tip in midle) Forward without run-up: 50 mm (anti-tip in top) Forward with run-up: 50 mm (anti-tip in midle) Forward with run-up: 65 mm (anti-tip in top) Backwards without run-up: 40 mm Backwards with run-up: 50 mm

Charger Specifications:	See user's guide included charger - 24V / 5 A.
Electronics:	Penny and Giles R-Net Drive Control
Brakes:	Motor Brake and Electric Brake. Motor brake acts as brake-lock brakes, and is activated when the control stick is released. From you release the control stick and until the chair stands still there is a small “late run” on the chair. This “late run” can be adjusted depending on whether you want a soft or a sharp slowdown. It is possible to set how fast the chair's slowdown will be. If this change is wanted please contact TA Service A/S. Electromagnetic brake is activated when the chair is stationary and serves as a "parking" brake.
Working conditions electrical functions	Lift actuator: 10 % (1 min. work 9 min rest) Tilt actuator: 10 % (2 min work 18 min rest) Back rest: 10 % (6 min/hour) Leg rests: 10 % (6 min/hour)
Mechanical lever operating force	1.3 N – Nominal (@ 10° deflection)

5.1 4.1 Serial number

The wheelchair has a uniq
ue serial number.

The serial number is located on a label on the frame at the rear side of the wheelchair.

The label also contains other information about the wheelchair e.g. max user weight and production time Figure 1.

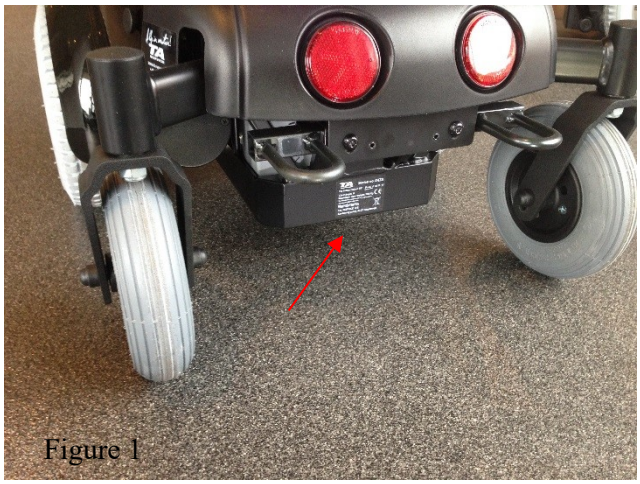


Figure 1

6 BEFORE DRIVING:

WARNING!
TA Indoor Wave is not intended for users with a weight exceeding 125 kg

WARNING!
TA Indoor Wave should be turned off when making entry and exit of the chair and when assisted by a helper, so that the chair does not accidentally run if the joystick is activated.

Footplate / foot rests can usefully be looked up to facilitate the entry and exit.

Before you use TA Indoor Wave, check the following:

- The chair's **speed** is sufficiently low.

- Any **footrests** are properly mounted and locked so they do not swing out while driving.

- The **seat lift** is set at the lowest possible level and the **seat tilt** is as close to horizontal (neutral) position as possible.

NB!
When the seat is raised above 80 mm, the power chair seat can only tilt 15 °. If the seat is not lifted higher than 80 mm, the seat can be tilted fully
When the seat is tilted more than 15° the seat can only be raised 80 mm. If the seat is not tilted more than 15°, the seat can be lifted fully
When the seat is raised more than 80 mm or by tilted over 15° the chair speed automatic reduces by 15%.

The first drives in TA Indoor Wave should be conducted where there is plenty of room around the chair and the chair's speed should be low.

WARNING!!
Do not reach into or under the power chair when the seat lift and seat tilt is activated, because there is a risk of entrapment of hand and fingers between the mechanical parts.

WARNING!!
Be aware that others, especially children, aren't too close to the power chair when the seat lift and seat tilt is activated.

WARNING!!
When the control box is swung to the side or in to place there is a risk of entrapment in the swing away bracket. Watch out for your own and the fingers of others.

CAUTION!
Place your feet on the foot rest before lowering the foot rest to avoid risk of entrapment between the foot rests and the power chair.

CAUTION!
High speed starts can put people in the surrounding area in danger.

6.1 *Performance check*

The electronic circuits in your control system have been designed to be extremely safe and reliable. The on-board microcomputer carries out safety checks at up to 100 times per second. To supplement this safety monitoring you should carry out the following periodic checks.
If the control system fails any of these checks, do not use the wheelchair and contact your service agent.

Daily Checks
Joystick: With the control system switched off, check that the joystick is not bent or damaged and that it returns to the center when you push and release it. If there is a problem do not continue with the safety checks and contact TA Service or your service agent.

Weekly Checks
Parking brake: This test should be carried out on a level floor with at least one meter clear space around the wheelchair.

- Switch on the control system.

Check that the screen remains on after initialization and that the battery gauge is displaying a reasonable amount of charge.

- Push the joystick slowly forwards until you hear the parking brakes operate. The chair may start to move.
- Immediately release the joystick. You must be able to hear each parking brake operate within a few seconds.

Repeat the test a further three times, pushing the joystick slowly backwards, left and right.

Connectors: Check all connectors are secure, properly mated and free from damage

Cables: Check condition of all cables for damage

Joystick gaiter: Check the thin rubber gaiter around the base of the joystick for damage or splitting. Check visually only, do not handle the gaiter.

Mounting: Make sure the controller is securely fixed to your wheelchair. Do not over tighten any screws.

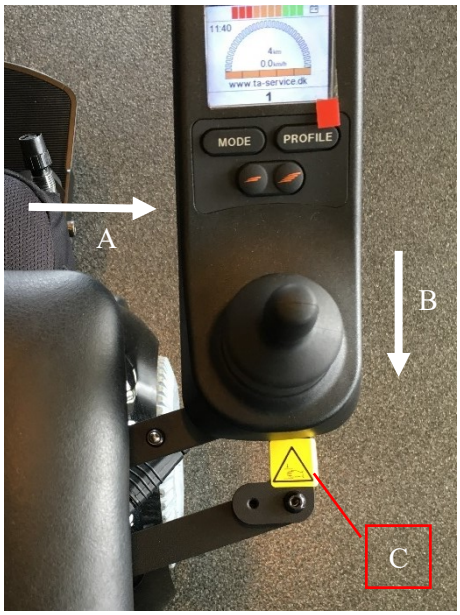
6.2 *Swing-away bracket*

When getting in or out of the wheelchair or if you drive close to a table, the controller can be swung away to the side, parallel to the armrest.

The control box is locked with a ball catch when it is in drive position.

Push the inside of the control box to get it out to the side (A), and then drag the controller backwards to get it parallel with the armrest (B)

CAUTION!
Risk of squeezing when swing joystick/bracket out/in – figure (c)



6.3 Getting in and out of the wheelchair

! Before getting in and out of the wheelchair, make sure that the wheelchair is turned off.

If the user can transfer itself, lower the tilt and the lift to the lowest position.

For transferring from the front tilt the footplate up figure 1


Figure 1

For sideways transfer it is possible to lift the armrest up (both sides can be lifted)

Push on the release button on the bracket to be able lift the armrest – figure 2

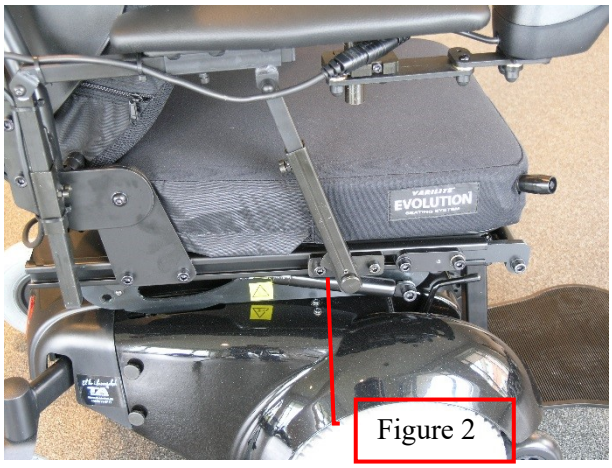


Figure 2

The armrest can be lifted up along the back rest - figure 3


Figure 3

If the user shall be transferred by lift, it is an advantage to tilt the seat and the back to get the pelvis all into the back rest – figure 4

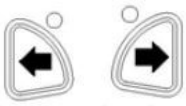

Figure 4

7 WHILE DRIVING:

TA Indoor Wave's driving characteristics including: braking, maximum speed and acceleration can be set to suit the individual needs.
Setting the chair's driving characteristics is performed by TA Services A/S.

WARNING!
The driving characteristics can be programed outside the safety parameters in special cases (a programming tool is needed)

7.1 Speed and profiles

TA Indoor Wave is switched on by a light pressure on the Power button.	
The chair's speed is increased by pressing the speed-up button.	
The chair's speed is decreased by pressing the speed-down button.	
Driving profiles are selected by pressing the profile button, if they are programmed. Profiles can be customized by TA. Service and are individual. **Light*:** Turn on the light by pushing the button. When the light is on, the LED next to the symbol is turned on. Push the button again to turn the light of. **Direction indicator*:** The button activates the left and right flasher lamp. The LED next to the symbol indicates which side is on. Push the button again to turn it off. * Accessories on some versions	  

7.2 *Braking.*

The chair brakes by releasing the control stick, so it returns to the vertical position.
It is possible to adjust how fast the chair is slowing down and thus reduce any late run on the chair. This adjustment is carried out by TA Service A/S.
At a short late run, braking will be experienced very sharp.

WARNING!
Pay particular attention to late run when driving on ramps.
When driving on ramps let go of the control stick before you reach the ramp leading edge.

7.3 Mechanical disengaging the brakes.

The brake can be disengaged by the need for manual towing.

It can be disengaged by the assistant or user if the user is able to reach it when sitting in the wheelchair, or when getting out of the wheelchair.

This is done by twisting the brake handles away from TA Indoor Wave logo onto the wheels in both sides. Figure 1

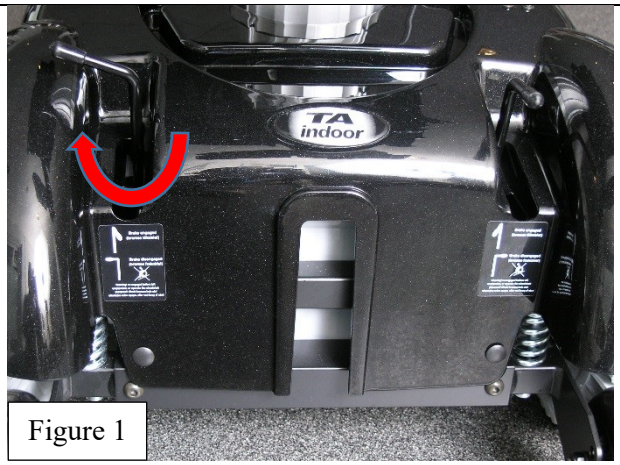


Figure 1

When the brake is released, the chair cannot be moved with the control stick. This can only be done again when the brake handles is twisted back in vertical position - away from the center, and the rake is engaged again.

WARNING!
When the chair's brakes are disengaged, the chair may roll if it is on a sloping surface.

7.4 Emergency brake.

The chair can emergency brake by pressing the On / Off button.

This brake method results in a very abrupt deceleration and should **only** be performed in an emergency and only if the user of the chair is prepared.

WARNING!
Slowing down by pressing the On /Off button there is a risk that the user's torso could fall over. Ultimately, the user could fall out of the chair.
This kind of slowdown should to the fullest extent be avoided on sloping surfaces and ramps.

7.5 Force of obstacles.

TA Indoor Wave can climb obstacles, making it able to run over smaller doorsteps and the like.
At very steep increases may be necessary inlet and a certain speed.

Never exceed the max of height kerb as described under TECHINCHAL DATA SHEET

WARNING!
By forcing level differences, it is important that the chair runs perpendicular to the obstacle in order to minimize the risk that the chair should tilt.

By forcing level differences with the seat tilted or hoisted there is a risk that the chair can tip over. By forcing level differences, it is therefore important that the seat is elevated as little as possible and is as close to an upright position as possible to minimize this risk.

7.6 Driving on slopes.

Driving on sloping surfaces should be carried out forwards and at a slow pace.

Never exceed the max safe slope as described under TECHNICAL DATA SHEET

WARNING!
The stopping distance can be significantly greater on slopes than on level ground

WARNING!
Driving on slopes should be avoided because a slope to the site will give a risk that the chair can tip over.
When driving on slopes, seat should not be lifted to keep the chair's stability.

7.7 Surfaces

TA Indoor wave is fitted with a pattern tread on the big drive wheel for best grip. If the tread is worn, it will affect the grip on the surface.

When driving on uneven surfaces, pay extra attention (like on sand, ice/show, grass etc.) it can have an effect on the stability and the steering.

If a tyre without a tread pattern is used, it will have the same effect as if the tread is worn.

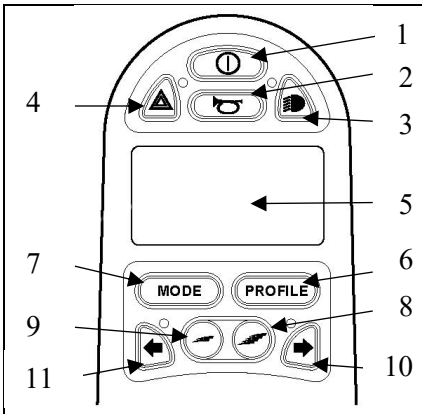
8 AFTER DRIVING.

Always leave the chair off and put on lowest speed.

NB! Leaving the chair turned on will draw power from batteries, with reduced remaining driving distance to follow.

9 CONTROLLER/ADJUSTENTS

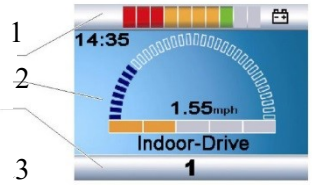
9.1 Controller



1 Power button
2 Horn
3 Light*
4 Hazard*
5 Display
6 Profile
7 Switching between driving and menu
8 Speed up button.
9 Speed down button.
10 Right indicator light*
11 Left indicator light *

* - Accessories on some versions

Display



1 - Battery indicator:

2 - Main Screen

3 - Profile indicator

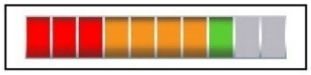


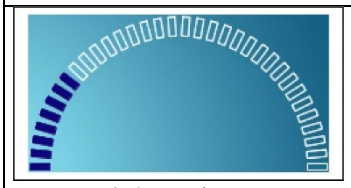
Figure A

Battery indicator – figure A

All 10 bar lights (red, yellow and green): The chair is fully charged

7 bar lights (red and yellow): The chair must be recharged as soon as possible

3 bar lights or blinks slowly (red): The chair must be recharged immediately in order not to destroy the batteries.



3.0 Km/t

Speed Display

Shows with graphs and numbers the current speed.

Figure B

Tortoise shows that the chair is limited. – Figure B

When the seat is lifted above 80 mm, the seat can be tilted max 15°.
When the seat is tilted more than 15° the seat can max lift 80 mm.

By seat lift more than 80mm or by seat tilt more than 15° reduces the chair speed automatic with 50%.

If the seat is not lifted higher than 80 mm, the seat can be tilted fully (45°).
If the seat is not tilted more than 15°, the seat can be lifted fully (320 mm)

 Electric back – Figure C	Electrical functions – Figure C Pressing the "Mode" button to get into the menu from which electrical functions can be operated with a joystick. You select function by flipping the pages with the joystick, and activate the feature by taking the control stick forward or backward.
 Figure D	Joystick activated – Figure D If you activate the joystick before or just when you turn on, the symbol will blink. Release and center the joystick to use the chair. If the joystick is not released and centered within 5 seconds, the chair will not run, even though the joystick is released. Turn on and off the chair again to make it run.
 Figure E	Driving Profile – Figure E The chair can be programmed for different driving profiles. Contact TA Service A/S for further instruction and programming

WARNING!
The chair is EMC tested. However, it is possible that the wheelchair can be affected by electromagnetic fields from mobile phones for example. Similarly, it cannot be excluded that the chair can emit electromagnetic fields that can affect the surroundings, such as alarm systems in stores.

DANGER!!!
Programming of the power chair must be performed by TA Service or repairer who is authorized by TA Service.
Unauthorized programming can cause that the power chair will handle in a way that could cause danger to the user or the surroundings.

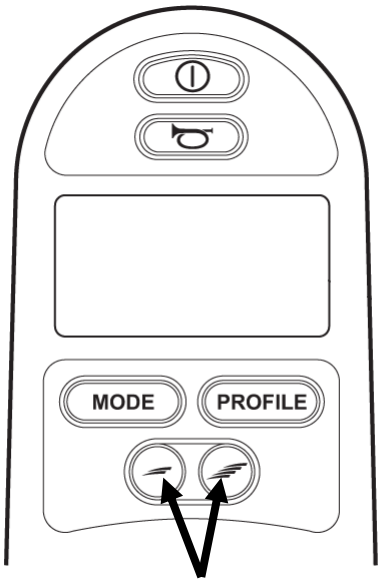
9.2 Locking the Joystick

Locking the system: When the chair is on, press and hold the "Power" button. 1. After 1 second the chair beeps, release "On-Off" 2. Press the joystick forward until a beep appears 3. Press the joystick back until a beep appears 4. Release the joystick, there is now a long beep 5. The chair is now locked. - Symbol is shown in display – Figure 1 **Locking up the system:** 1. If the chair is off, turn on the chair 2. Press the joystick forward until a beep appears 3. Press the joystick back until a beep appears 4. Release the joystick, there is now a long beep 5. The chair is now locked up - the symbol disappears.	Figure 1  In case of lock this symbol appears in display

9.3 *Setting Menu*

In the setting menu it is possible to change the clock, brightness, backlight and color, and odometer.

To get into the options menu you must hold **both** buttons *speed up* and *speed down* simultaneously. See arrow A - Figure 1



Figur 1

The following points are then displayed in the menu: (figure 2)

1.1.1. Set time:

Adjust the time. Press the control stick right to set the time. Select exit at the bottom of the menu to come back.

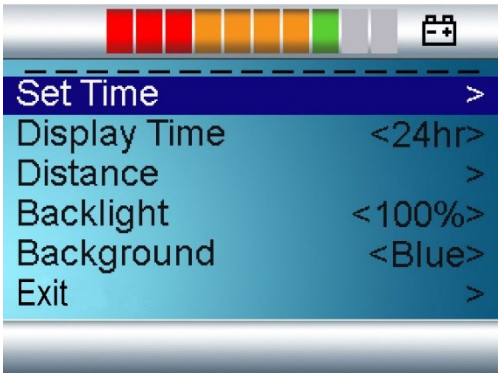


Figure 2

1.1.2. Display time:

Selecting time format to display.
Features: 12h, 24h, Off

1.1.3. Backlight:

Backlight.
Features: 0% to 100% in increments of 10%

1.1.4. Background:

Background. Here you can choose background color .

Blue = blue light in all profiles

White = White background in all profiles -
(The display is more visible with a white background in bright sunlight)

Auto = The power chair can be programmed to display different backgrounds at different profiles. Contact TA Service for special adaptation.

1.1.5. Distance

following submenu appears: (figure 3)
Total distance: total distance power module has been running

Trip distance: Trip odometer - can be reset.

Display distance: option on the trip or total to be shown in display

Clear Trip distance: Resetting the trip odometer

Exit: Exit the menu.

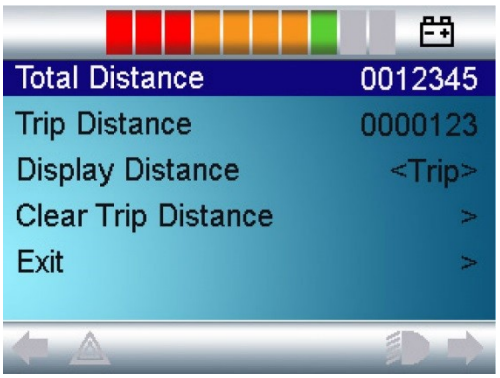


Figure 3

9.4 Setting the power functions

The wheelchair may depending on model have the following power functions:

- Seat lift
- Seat tilt
- Back
- Right legsupport
- Left legsupport

Figure 1

The functions are activated by pressing the "Mode" button on the control box, then there's a picture of power features (figure 1). Find the function to be used by flipping the pages of the control stick. When the feature is found, activate it by taking control stick forward or backward, depending on which way the function should run.

Note:

When the seat is raised above 80 mm, the seat can tilt max 15 °.
When the seat is tilted more than 15° the seat can max be lifted 80 mm.
By seat lift more than 80 mm or by seat tilt more than 15° reduces chair speed automatic with 15%.

Note:
To avoid over heating the actuators for electric functions they must only work 10 % and then rest 90 %.

Lift actuator: 10 % (1 min. work 9 min rest)
Tilt actuator: 10 % (2 min work 18 min rest)
Back rest: 10 % (6 min/hour)
Leg rests: 10 % (6 min/hour)

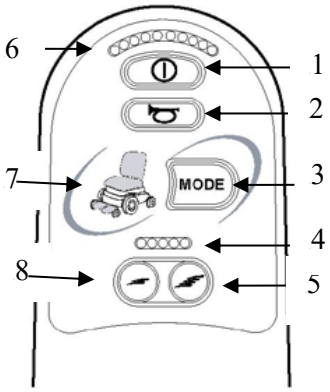
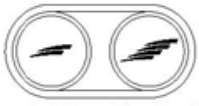
WARNING!
Do not reach into the chair when the seat lift and seat tilt is activated because there is a risk of entrapment between the mechanical parts.

WARNING!
Be aware of others, especially children, is too close to the chair when the seat lift and seat tilt is activated.

CAUTION!
Place your feet on the foot rest before lowering the foot rest to avoid risk of entrapment between the foot rests and the power chair.

10 ALTERNATIVE CONTROLS/FUNCTIONS

10.1 Controller without display

	**Joystick buttons** 1 Power button 2 Horn 3 Switching between driving and menu 4 Driving Profile 5 Speed up button. 6 Battery indicator 7 Function indicator 8 Speed down button. ! For light see section “CONTROLLER”
	ON/OFF switch. Battery indicator lights up when the power chair is on.
	Horn switch
	Mode switching between driving and menu Here you can choose between the different electric functions and profiles, depending on your selected functions and programming.
	**Speed indicator**. **Constant light**: Shows maximum speed: 1 light diode is lowest speed and 5 light diodes is maximum speed. **Flashing light diodes**: speed is limited for safety reasons. (see under setting the power functions) **Light diodes runs up and down**: The Joystick has been locked, see ”Locking joystick” **Profile indicator:** If a profile has been chosen instead of max speed, the light diodes will show the chosen profile. If fx profile 4 has been chosen **only** light diode number 4 from the left will light. The system is set up to function as max speed. If profiles (fx 1 slow and 1 quick) are wanted instead, please contact TA Service for different programming.
	Adjusting speed (or choice of profile, depending on setting)
	Battery indicator Shows that the power chair is on, plus status of batteries.

Red, yellow and green light (1-10 lights: This indicates all is well.

Red and yellow light (1-7 lights): The control system is functioning correctly, but you should charge the battery as soon as possible.

Red lights (1-3 lights constant or flashing): The power chair must be charged immediately not to destroy the batteries.

Light diodes run up: The power chair batteries are being charged. You will not be able to drive the power chair until the charger is disconnected and you have switched the control system off and on again.

Light diodes run up and down:
Release and center joystick to resume normal operation.
If you do not release the joystick within 5 seconds, the power chair will not be able to move, even though the joystick is released.

7 light diodes will flash (count from left)
Power cycle the power chair again to use the power chair.

If another number of light diodes are flashing, it could mean a fault in the system. Please contact TA. Service.

Setting the power functions

Push the "Mode" button to choose between driving and setting the power functions.
-When no symbols /back, seat, leg rests) is lighted, the power chair is set for driving.
-When 1 symbol is lighted, the power function can be set.

Push the joystick to one of the sides to choose which function to set. Push the jo forwards or backwards to activate, depending on which way the function should

Following symbols light up when the function has been chosen:
(depending on which functions are available)

Left leg rest: the symbol for left leg rest lights up
Right leg rest: the symbol for right leg rest lights up
Both leg rests: both symbols (L and R) lights up
Back rest: the symbol for back rest lights up
Tilt: the symbol for back rest and seat flashes and both leg rests lights up
Lift: the symbol for seat flashes, back and both leg rests lights up

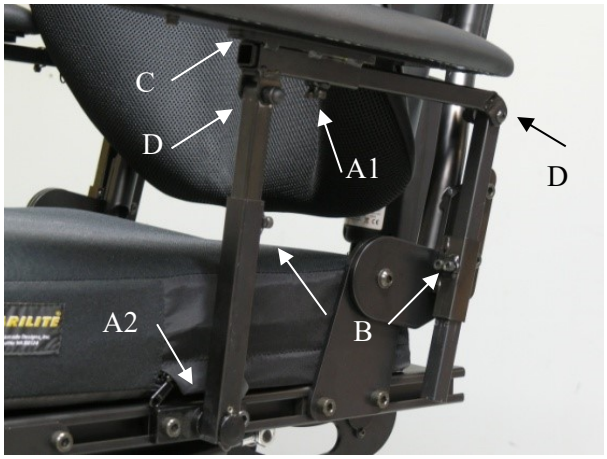
Note:
When the seat is raised above 80 mm, the seat can tilt max 15 °.
When the seat is tilted more than 15° the seat can max be lifted 80 mm.
By seat lift more than 80 mm or by seat tilt more than 15° reduces chair speed automatic with 15%.
Speed indicator is flashing

11 ADJUSTMENTS

WARNING!
Adjusting the seat or seat depth can cause the wheelchair to be out of safe limits.

11.1 Setting the armrests.

Armrest cushion position relative to the back is adjusted by loosening the 2 screws under the horizontal tube with a 4 mm Allen key (A1), and the 2 screws in the c-profile with a 6 mm Allen key (A2)

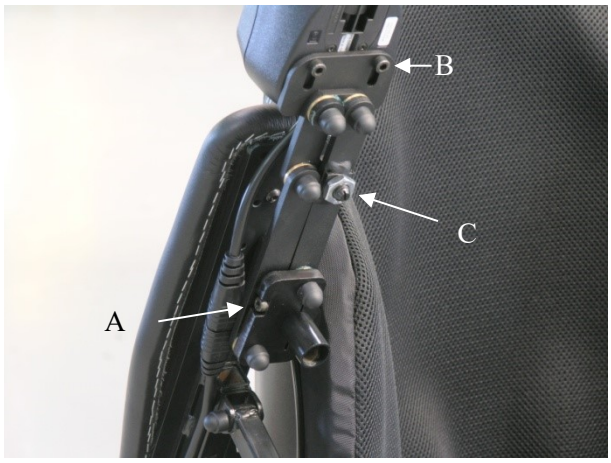


Armrest height is adjustable by loosening screws (B) on the armrest vertical tube with a 4mm Allen key.

Armrest cushion can be moved sideways by screwing out the 2 screws in the armrest cushion with a 4 mm Allen key (C) – The armrest must first be dismounted by loosening the 2 screws (A1) (4 mm Allen key)

If the armrest is too loose or too tight to flip up tighten or loosen the screws (D) with a 4 mm Allen key and a 10 mm spanner

11.2 Swing- away bracket



The swing-away bracket is adjustable height if you want to raise or lower the controller, or turning it by loosen the screw (A) on the tube with a 4 mm Allen key.

If the swing-away bracket is being offset on the tube, the controller can be aligned by loosening the two screws (B) under the control box with a 4 mm Allen key.

The ball catch can be adjusted in hardness by loosening the nut (C) with a 17 mm spanner, turning the ball catch with a slotted screwdriver and tighten the nut again while holding against the screwdriver so the ball catch do not turn while tightening.

11.3 Setting up the leg rest.

The leg rest is mounted on the chairs seat frame.

Leg rest position relative to the seat is adjusted by loosening the 2 bolts on both sides of the power chair with a 6 mm Allen key (A). Pull or push the leg rest and then tighten all 4 bolts again.

The angle of the leg rest is adjusted by loosening 1 bolt on both sides of the leg rest with a 6 mm Allen key (B) **as well as** the bolt on both sides under the leg rest with a 6 mm Allen key and a 13 mm spanner (C). Angle the leg rest and tighten all 4 bolts again.

The height of the leg rest is adjusted by loosening the bolt (D) with a 4 mm Allen key, adjusting the height and tightening the bolt again.

The angle of the footplate relative to the leg rest is adjusted by pushing the footplate up and adjusting the set screw (E) behind the footplate with a 5 mm Allen key.

11.4 Mounting of hipbelt.

It is possible to mount a hip belt on TA Indoor Wave.

TA Service recommends that the hip belt is attached by the back bracket (A) or on the bracket of the seats C-profile. Use a 6 mm Allen key

12 TRANSPORTATION BY CAR.

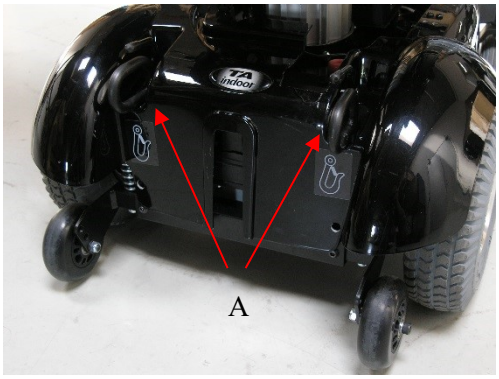
TA Indoor Wave is crash tested with 4-point car tiedown (accessories) and Dahl Docking System (accessories), so it can be used as a seat in the car, bus or similar.
The user can use the TA Indoor Wave during transport by car, bus or similar, if the TA Indoor Wave is equipped with TA 4-point car tiedown and/or Dahl Docking system.

The seat and lift must always be in the lowest position when transported by car.

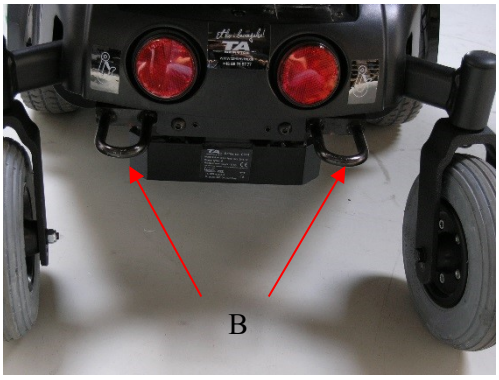
If a belt is mounted on the wheelchair, it will not replace the cars seat belt.
The cars seat belt must always be used.

12.1 4-point car tiedown.

4 attachment eyes are mounted on the wheelchair, which can
be used together with an approved
4-point car tiedown system.



These eyes are marked with a hook symbol – Figure A and B

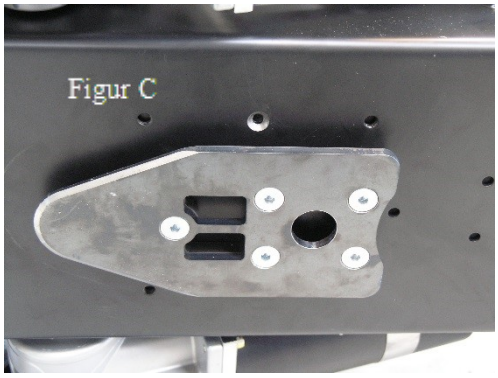


DANGER!!!
Using 4 point car attachment the hooks must only be attached to the 4 attachment loops on the power chairs. Fastening the hooks elsewhere will cause a high risk of danger to the user and damage to the power chair.

12.2 Dahl Docking System

If Dahl Docking System should be used, a plate is mounted in the bottom of the wheelchair which will lock into the docking system. Figure C

! A reinforcement plate must be mounted inside between the chassis and the lifting column.



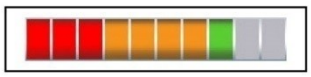
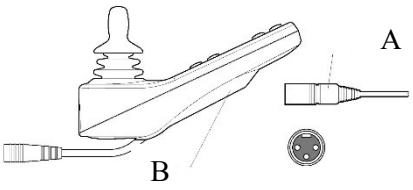
13 CHARGING.

The Charger **CAN BE USED** for **GEL & AGM VRLA Batteries.**

THIS CHARGER **IS NOT** TO BE USED ON OPEN LEAD ACID OR LITHIUM BATTERIES.

TA iQ is equipped with a battery level indicator at the top of the control box - the long series of LEDs.

As the power chair is used the battery level falls and the LEDs turn off. See the following explanation:

	Battery indicator: **All 10 bar lights** (Red, yellow and green): The chair is fully charged**.** **7 bar lights** (red and yellow): The power chair has does not need to be recharged, under normal driving needs. **3 bar lights** or blinks slowly (red): The chair must be charged up.
	The charging plug from the charger (A) is connected to TA Indoor Wave in the front of the control box in the charger socket (B)

TA Indoor Wave should be turned off when batteries are charging.

RECOMMENDATION!
The batteries shall first be charged when the green LED (battery indicator) goes out, you can advantageously continue so that the yellow LEDs goes out, and only the red ones are on.

DO NOT CHARGE EVERY NIGHT UNLESS NEEDED.

If you don't use this much current in 1 day, you can skip a charge one night.

When charging is finished the charger automatically turns off.

See also BATTERTY under MAINTENANCE AND SERVICE section.

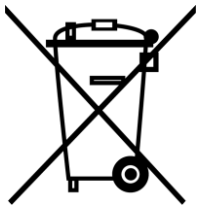
RECOMMENDATION!
TA Services A/S recommends that batteries be recycled.

WARNING!!
Avoid touching leaking batteries, as the contents can be harmful.

13.1 Charger

See the separate user manual for the charger.

14 DISPOSAL.



TA Indoor Wave must be disposed as electrical scrap, which means that the product cannot be disposed with ordinary waste. It has to be disposed of in an environmentally correct way.

The product can be delivered to TA Service or local dealer which will see that it is disposed of in an environmentally correct way.

The batteries cannot be disposed with ordinary waste, contact your local dealer or TA Service, who will make sure they are disposed correct.

15 RESISTANCE TO IGNITION

Part	Level of resistance to ignition
VL Icon back system	ISO 7176-16 , ISO 8191-1, ISO 8181-2
Vl Ecolution PSV cushion	ISO 7176-16 , ISO 8191-1, ISO 8181-2
Protection for battery pole	V-O classified, ISO UL94

16 WARRANTY.

There is 2 year warranty on TA Indoor Wave. Valid from date of purchase. Any warranty repairs will be performed free of charge with regard to working hours and spare parts. The warranty period on batteries and supplied by TA Service is 1 year from purchase date.

Warranty repairs must be performed by TA Service.

The warranty is voided if the used battery charger is not approved by TA Service, or if the batteries are run down.

If there is doubt about whether a particular battery charger can be used contact TA Services A/S.

17 PACKING AND SHIPPING

If the wheelchair needs to go to the dealer or TA Service contact the local dealer who will arrange the transport to the dealer or TA Service.

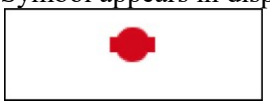
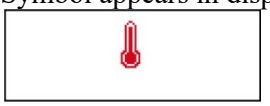
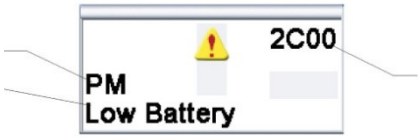
In cases where the dealer decides not to pick the wheelchair up, and the transport shall be carried out by a transport company, the wheelchair must be securely fastened to a pallet and protected with cardboard or plastic. The wheelchair must be switched off and the brakes engaged.

18 TRANSPORT UNOCCUPIED

When the wheelchair shall be transported unoccupied then wheelchair shall be turned off, the seat and tilt shall be in lowest position and the brakes shall be engaged.
For transport in a car, 4-point tie down or Dahl docking system can be mounted (both options) –
see section “TRANSPORTATION BY CAR”

It’s not necessary to take any parts off under transport

19 TROUBLESHOOTING – CONTROLLER WITH DISPLAY

Problem:	Cause:	Solution:
The power chair cannot run	1. Charging connector is connected to the control box.	Remove the charging plug.
	2. Motor brake is disengaged.	Connect the motor brakes.
	3. Other cause.	Contact authorized service center.
The chair drives slowly. Symbol appears in display 	1. Speed is being limited because of lifted and/or tilted seat.	Lower the seat and /or tilt the seat back to nearly horizontal.
	2. Other cause.	Contact authorized service center.
Symbol appears in display 	1. The control system has intentionally reduced the power to the motors to protect them against heat damage.	Stop running and let the engines cool. The engines were overloaded and exposed to more load than they are intended for.
	2. Other cause	Contact authorized service center.
Symbol appears in display 	1. Control system was too hot and has reduced the impact.	Turn of the power chair and let it cool off.
	2. Other cause	Contact authorized service center.
Symbol appears in display 	1. The control system has generated an error and displays a text, module and an error code.	Contact authorized service center.
Symbol appears in display 	1. Joystick activated If you operate the joystick before or just after you switch the system on, the symbol will blink.	Release and center joystick to resume normal operation. If you do not release the joystick within 5 seconds, the power chair will not be able to move, even though the joystick is released. Power cycle the power chair again to use the power chair.
Symbol appears in display 	1. joystick is locked.	See "lockdown joysticks" to unlock the joystick.
The power chair ”bips” and writes ”PM Brake error” in the display	1. The brake has been disengaged.	Connect the brake; see Mechanically disengaging the brakes, page 17.
	2. Bad connection to brake.	Check that the motor/brake cable is properly connected to the power module on the power chair. Contact authorized service center.
CHARGER:	See supplied user manual	

19.1 Troubleshooting – controller without display

If a system failure should occur, you can find the cause by counting the number of light diodes flashing –
If light diodes lights constant – see chapter "CONTROLLER WITHOUT DISPLAY"

Number of light diodes flashing:	**Cause:**	**Solution:**
1 LED 	1. Batteries need charging.	Charge the power chair.
	2. Bad connection to the batteries.	Check the connection to the batteries.
2 LED 	Bad connection to the left* motor.	Check connection to the motor.
3 LED 	The left* motor has a short-circuit to a battery connection.	Contact authorized repairer.
4 LED 	Bad connection to the right* motor.	Check connection to the motor.
5 LED 	The right* motor has a short-circuit to a battery connection.	Contact authorized repairer.
6 LED 	The power chair has been prevented from driving, by an external signal. Fx a special contact solution.	Cause is depending on the special contact solution. Contact TA. Service or your supplier.
7 LED 	1 Joystick is not centered.	Turn OFF the power chair, center the joystick and turn ON again.
	2. Joystick error.	Contact authorized repairer.
8 LED 	1. System error.	Check all connections.
9 LED  + control box "bips"	1. Brake are mechanically disengaged	Connect the brake; see Mechanical disengaging the brakes,
	2. Bad connection to brake.	Check that the motor/brake cable is properly connected to the power module on the power chair. Contact authorized service center.
10 LED 	Too much voltage has occurred in the control system.	This is normally caused by a bad connection to the batteries. Check the connection to the batteries.
7 LED+ S 	1. Bad connection in the cables.	Check cable connections between the control box, seat module and power module.
	2. Broken cable.	Change the cable.
Actuator Flash 	Power module failure.	Test if one of the electric functions doesn't work. Check if one of the connections from the electonics to the actuators doesn't work.

* If there has been switch in the program, it could be the opposite motor.

20 SERVICE AND MAINTENANCE

A service manual is available for dealers and service agents – contact TA. Service for more information

TA Service recommends that the wheelchair get service at a Dealer or at the factory of TA Service.

! Maintenance and service that are not listed under SERVICE AND MAINTENANCE and ADJUSTMET shall be done by the service agent, dealer or TA Service.

All programming must be performed by the Dealer or TA Service.

Incorrect program settings or wrong service and maintenance could result in us danger situations where the wheelchair is uncontrollable or dangerous for the user and the surroundings. This will void the warranty of the wheelchair.

Only original parts or parts that are approved by TA Service can be used.

For changes and recalls for patient safety see web page www.ta-service.dk which also refer to local agents or on facebook.com/taservice.dk

20.1 Maintenance

When you use the wheelchair it gets loose and worn by use. Therefore is it important that you inspect and maintain the wheelchair regularly. Especially the armrest, legrest and seat will get loose by movement over time.

Check regularly, approximately once per month that the screws are intact and tighten.
See section ***11 Adjustments***

Tools:
For general maintenance Allen keys and 8, 10, 13 mm spanners and screwdrivers shall be used.

! Certain repairs can require other tools than the listed tools.

20.2 Cleaning.

Coated metal:
Wash coated metal surfaces with a cloth soaked in detergent water, rinse and dry

Plastic:
TA Indoor Wave shield can be cleaned with a cloth dampened in household detergent.
Do not use solvents on the shield.

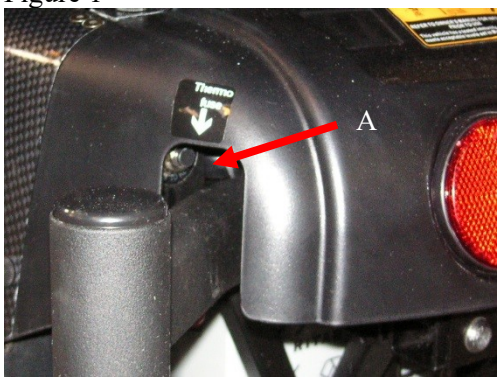
WARNING!!
TA Indoor Wave or parts of it will not withstand immersion in water.
Please note that all electrical components do not tolerate water.
TA Indoor Wave cannot be washed with a pressure washer
TA Indoor Wave cannot be washed with a water hose.
The Wheelchair must always be shut off while cleaning.

20.3 Fuse

Under the back shield in the left side is an overload protection (Fig. 1).
Fuse cuts power if the wheelchairs maximum consumption exceeds 50A

The fuse is a circuit breaker that switches off at overload. To reconnected the fuse button is pressed which sits inside the shield (arrow A)

Figure 1



20.4 Batteries:

The batteries are maintenance-free. (no topping up)

It is recommended that only the dealer or TA service replaces the batteries, they will also take care of the disposal.

If the batteries run out of current the wheelchair can be pushed, see section:
MECHANICAL DISENGAGING THE BRAKES.

About recycling of used batteries see section ***14 Disposal.***

! *A battery drains on its own, a discharged battery will be damaged and should never be discharged under 10,5V.*

Battery capacity
See section ***5 Technical Data and 14 Disposal.***

20.5 Storage:

If the wheelchair is stored without being used the batteries should always be charged once per month.

See also section ***13 Charging.*** for recharging.

WARNING!!
Avoid touching leaky batteries, as the contents can be harmful.

20.6 Tyre punctures:

Start by lifting the wheelchairs wheel free from the ground, either by using a lift or by putting something stable between the bottom frame and the ground. Figure 1

! Tilt or lift only the wheelchair when the user is not in the wheelchair

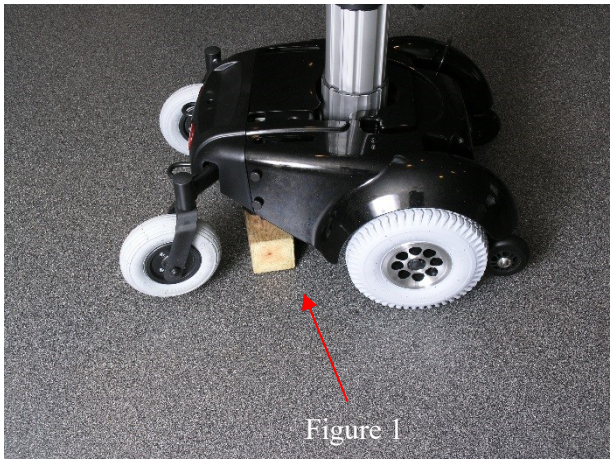


Figure 1

Castors

Screw the nut off the bolt with a 13 mm spanner, hold the bolt with a 13 mm spanner – figure 2

Take the bolt off the wheel and fork.

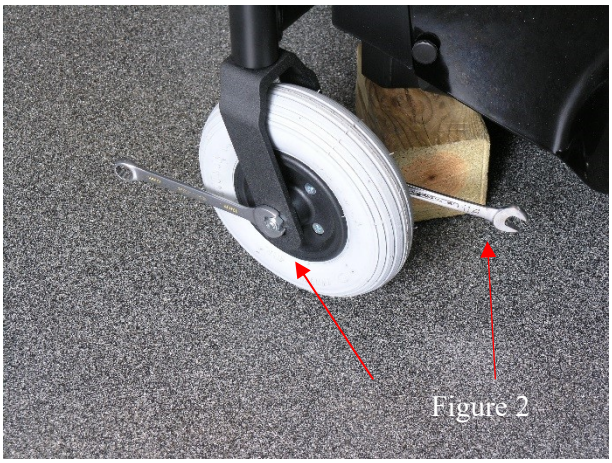


Figure 2

Before splitting the rim, let the air out of the tube, by pressing on the valve - figure 3

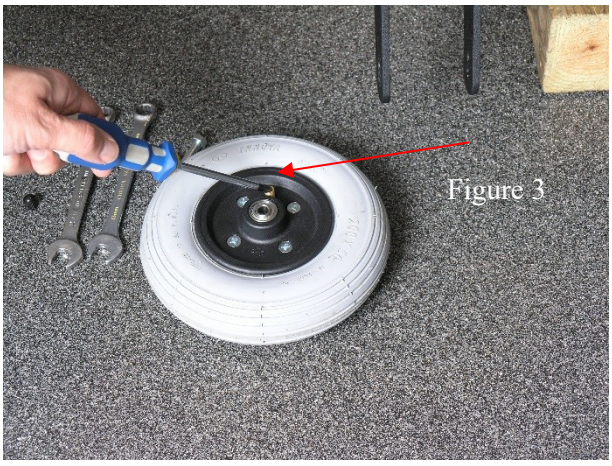


Figure 3

Split the rim, by screwing the 4 bolts off with a crosshead The nuts are hold by the rim on the other side. – figure 4

Repair or replace the tube with a new one, and assemble the wheel again

For tyre pressure see: 5 Technical Data

! Be aware not to squeeze the tube between the two rim parts when assembling.

! Never inflate to more than the tyre is marked.

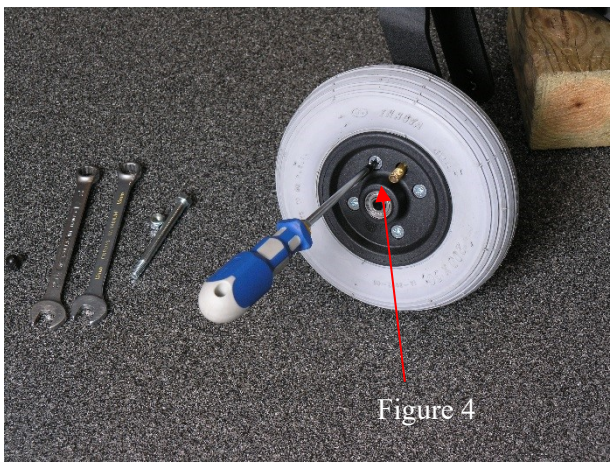


Figure 4

Drive wheel

Lift the wheelchair – see introduction and figure 1

Take the plastic cover off the nut with a screwdriver. Figure 5

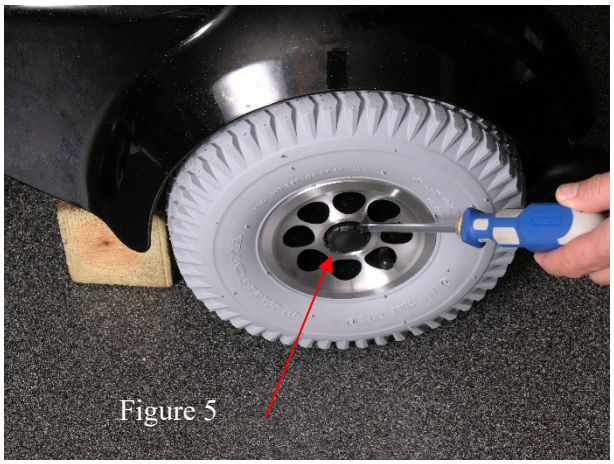


Figure 5

Loosen the bolt in the center of the wheel with a 17 mm socket spanner and pull off the wheel from the shaft. Figure 6

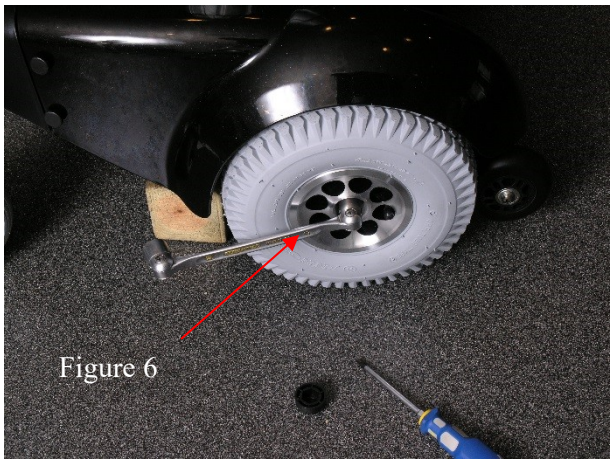


Figure 6

Before splitting the rim, let the air out of the tube, by pressing on the valve – figure 7

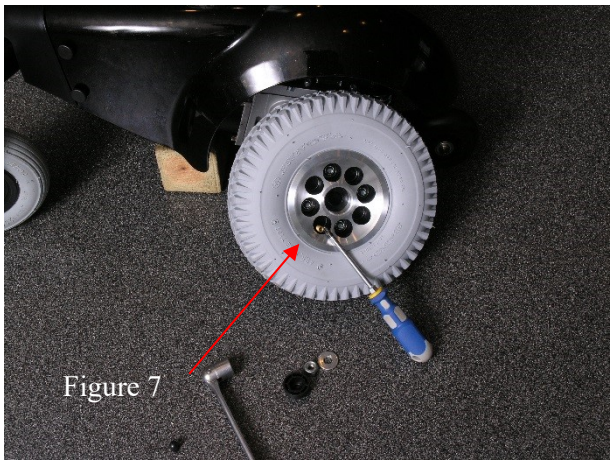


Figure 7

Screw the 4 nuts out of the rim with an 13 mm socket spanner – figure 8

Repair or replace the tube with a new one, and assemble the wheel again

For tyre pressure see: 5 Technical Data

! Be aware not to squeeze the tube between the two rim parts when assembling.

! Never inflate to more than the tyre is marked.

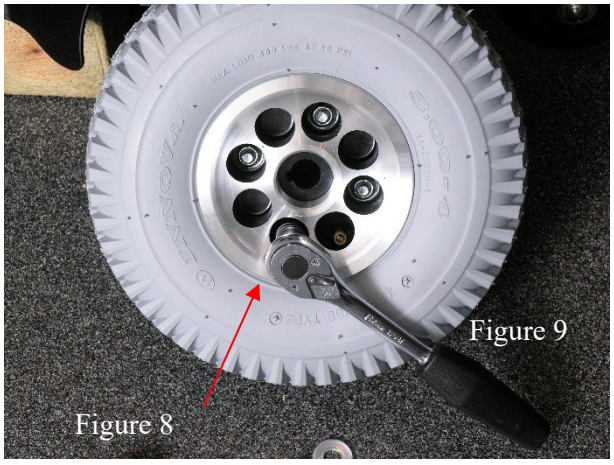


Figure 9

Figure 8

When putting the wheel on the shaft again, be aware that the keyway on the rim shall fit at the keyway on the shaft. Figure 9

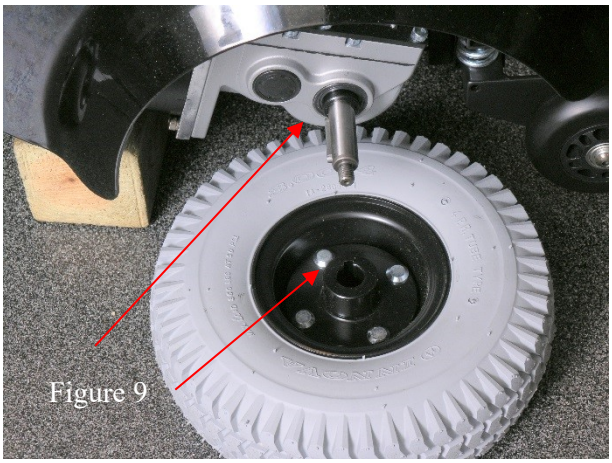


Figure 9

21 ACCESSORIES AND SPAREPARTS

TA Service is constantly developing various accessories. For more information about accessories and spare parts contact the local dealer or TA Service.

The expected service life of this product is 7 years.

22 CELL POWER BATTERIES TRANSPORT INFO

CELL POWER | VRLA Batteries | MSDS

Date: 2015-24-06

13 Transport information

Cellpower valve regulated lead acid batteries are exempt from dangerous goods regulations under the ADR regulations (road transport), IMDG code (sea transport) and the IATA regulations (air transport).

Proper shipping name: Batteries, Wet, Non-spillable. Electric Storage UN number: 2800

These batteries are exempt in the ADR regulations under special provision #238 (b) as can be found in chapter 3.3 of the ADR regulations.

These batteries are exempt in the IMDG code under special provision #238 (2) as can be found in chapter 3.3 of the IMDG code.

These batteries are exempt in the IATA Dangerous Goods Regulations 55th edition under special provision #A67 as can be found in chapter 4.4 of the IATA Dangerous Goods Regulations 55th edition.

14 Regulatory information

Signal word:
Danger

Hazard statements:
H301 Toxic if swallowed.
H312 Harmful in contact with skin.
H315 Causes skin irritation.
H318 Causes serious eye damage.
H332 Harmful if inhaled.

Precautionary statements:
P102 Keep out of reach of children.
P260 Do not breathe dust/fume/gas/mist/vapors/spray.
P262 Do not get in eyes, on skin, or on clothing.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P280 Wear protective gloves / protective clothing / eye protection / face protection.

According to the European directive 2006/66/EC every single Cellpower battery is providedwith a disposal sign and the text “Pb”.