



USER MANUAL



Welcome!

1.1. Freedom One Life Mission Statement

Most powerchair users have their life choices restricted by limited range, breakdowns and fear of being stranded. This can mean users avoid travel, face social isolation, and risk unemployment. By combining lived experience with industry leading design, we are dedicated to enabling powerchair users to live the life they choose.

Table of Contents

1. Welcome	3
1.1. Freedom One Life Mission Statement	3
2. Safety	8
2.1. Explanation of Warning Symbols in the User Manual	8
2.2. General Safety Instructions	9
3. Product Description	10
3.1. General Description	10
3.2. Intended Use	10
3.3. User	10
3.4. User Environment	11
3.5. Labels	12
4. Features	13
4.1. General	13
4.2. Centre Mounted Footrest	13
4.2.1. Centre Mounted Footrest Position	13
4.2.2. Centre Mounted Footrest Folding	13
4.3. Swing Away Footrest	14
4.3.1. Swing Away Footrest Removal	15
4.3.2. Swing Away Footrest Position	15
4.3.3. Swing Away Footrest Folding	16
4.4. Electric Centre Mounted Footrest	16
4.4.1. Electric Centre Mounted Footrest Position	16
4.4.2. Electric Centre Mounted Footrest Folding	17
4.5. Armrest	18
4.5.1. Armrest Height Adjustment	18
4.5.2. Armrest Levelling	18
4.5.3. Armrest Rotation	18
4.6. Power Seating	19
4.6.1. Tilt	19
4.6.2. Lift	20
4.6.3. Recline	21
4.6.4. Leg Raise	22

4.7. Fixed Position User Interface	22
4.7.1. Position Adjustment	23
4.7.2. Removal	23
4.8. Swing Away User Interface	24
4.8.1. Position Adjustment	25
4.8.2. Removal	26
4.9. Charging Panel	27
4.9.1. Charging Point	27
4.10. Freewheel Mode	28
4.11. Battery Isolation Key	29
4.12. Lights	30
4.12.1. Headlights and Tail Lights	30
4.12.2. Indicators	30
4.12.3. Hazard Lights	30
4.13. Horn	31
4.14. Fit and Removal of Seat Cushion	31
4.15. Belts	32
4.15.1. Padded Lap Belt	32
4.15.2. Adjustable Belt	33
4.16. Headrest Adjustment	34
4.16.1. Position Adjustment	34
4.17. Security Lock	35
4.17.1. Set 4 Digit Security Code	35
4.17.2. Lock the Series 5	35
4.17.3. Unlock the Series 5	36
4.17.4. Forgotten Security Code	36
4.18. Hoist Clamp	37
4.18.1. Removal	38
4.18.2. Positioning	39
4.19. Battery Gauge	40
4.20. Drive Modes	40
4.20.1. Drive Modes Settings Adjustment	41

5. Delivery, Adjustments and Initial Use	42
5.1. Transfer To and From the Wheelchair	42
5.2. Power On	43
6. Driving the Series 5	44
6.1. Checking the Wheelchair Before Use	44
6.2. Driving Controls	44
6.3. Curves	45
6.4. Braking and Emergency Stops	45
6.5. Pushing the Wheelchair/Freewheel Mode	46
7. User Interface	46
a. Display	46
b. Loading Screen	46
c. User Interface Overview	47
d. Home Screen with Warnings	47
e. Power Seating	48
f. Drive Mode Selection	50
g. Chair Settings	50
h. General Settings	51
i. Charging Screen	54
8. Battery, Charging and Range	55
8.1. Battery	55
8.1.2. Charging Batteries	55
8.1.3. Range	56
8.1.4. Replacing Batteries	56
9. Storage and Transportation	56
9.1. Storage – General	56
9.1.2. Storage – Short Term	56
9.1.3. Storage – Long Term	56
9.2. Using the Series 5 as a Seat in a Motor Vehicle	57
9.3. Dahl Docking Systems	58
10. Maintenance	66
10.1. Tools Required for Maintenance	66

10.2. General Maintenance	66
10.3. Daily Checks	66
10.4. Weekly Checks	66
10.5. Cleaning and Disinfection	67
10.6. Servicing and Repairs	68
11. Reuse and Disposal	68
11.1. Reuse	68
11.1.2. Chair Disposal (Including Battery)	68
12. Technical Specification	69
12.1. Standards	69
12.2. Series 5 Technical Specification	70
13. Troubleshooting	72
a. Battery Low	72
b. Freewheel Mode Engaged	72
c. Centre Joystick	72
d. Speed Limiter	73
e. Charger Error	73
f. Battery Management System (BMS) Error	73
g. Battery Management System (BMS) No Communication	74
h. System Controller Error	74
i. System Controller No Communication	74
j. Motor Controller No Communication	75
k. Left Motor Fault	75
l. Right Motor Fault	75
m. Left Hall Sensor Fault	76
n. Right Hall Sensor Fault	76
o. Left Brake Fault	76
p. Right Brake Fault	77
q. Abnormal Voltage	77
r. Joystick Error	77
s. Motor Over Current	78
14. Warranty and Terms & Conditions	79
15. Contact Information	80
16. Reporting Requirements	81

2. Safety

2.1. Explanation of Warning Symbols in the User Manual

Warning Symbol	Definition
 DANGER	Potential risk of injury or serious injury or death.
 WARNING	Potential risk of injury.
 CAUTION	Potential damage to equipment.
RECOMMENDATION	Guidance on best practice.

2.2. General Safety Instructions

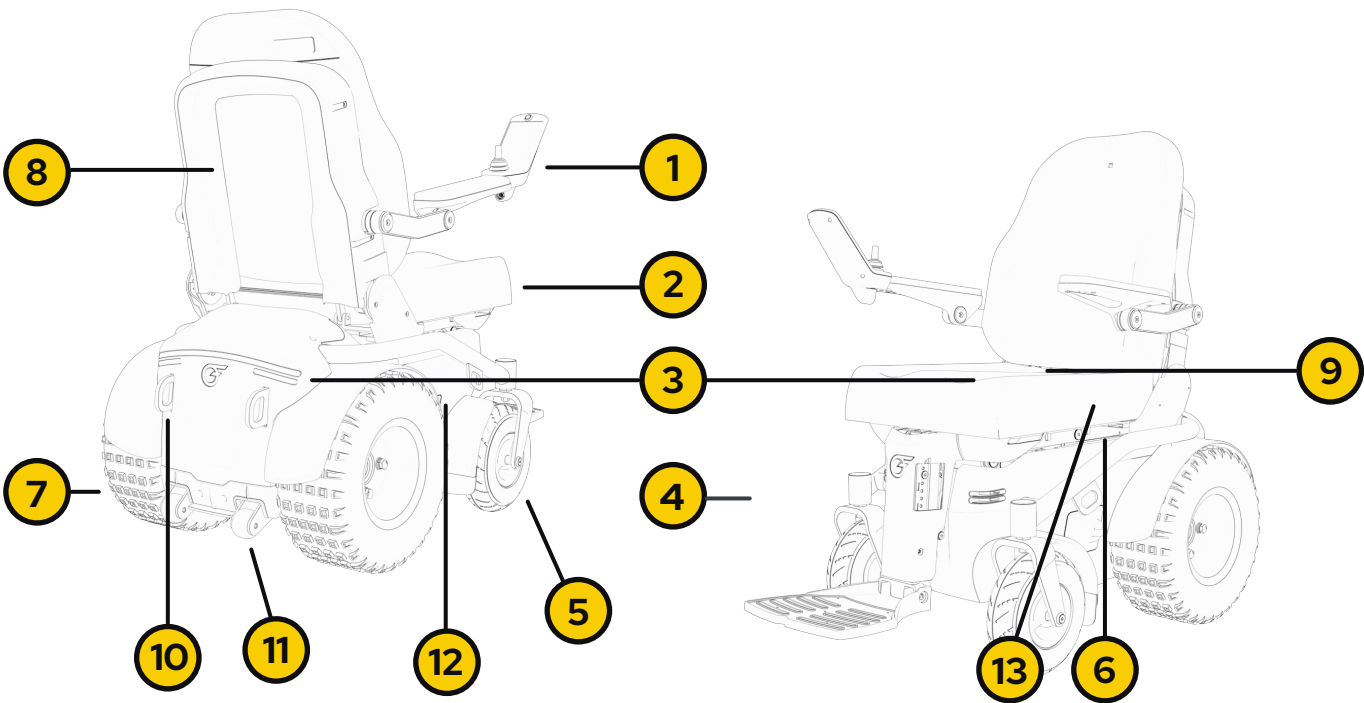
 DANGER	This powerchair uses small parts which under certain circumstances may present a choking hazard to young children.
	Contact with moving parts may result in serious physical injury or damage to the wheelchair. Contact with the moving parts of the wheelchair should be avoided.
 WARNING	Improper product operation resulting in falling, tipping over or collision. • The product may only be used by a trained user. • Read the entire instruction manual before use. • The product must be used as intended and within specifications outlined in the user manual.
	If you are under the influence of medicines that can affect your ability to drive, you are not permitted to drive a wheelchair.
	No more than one person at a time can be seated in the wheelchair.
 CAUTION	It cannot be excluded that electromagnetic radiation may have an influence on the wheelchair. For example: • mobile phones. • large-scale medical apparatus. • other sources of electromagnetic radiation. It cannot be excluded that the wheelchair may interfere with electromagnetic fields. For example: • shop doors. • burglar alarm systems in shops. • garage door openers. In the unlikely event such problems occur, we request you notify Freedom One Life or your authorised distributor immediately.
	While driving this seating system in the reclined, elevated, or tilted position use caution.
	If using rear bag hooks, the maximum bag weight must not exceed 10kg.
	When tilting or reclining be aware of any items hanging from the rear bag hooks and ensure they do not get caught/jammed between the backrest and the base unit.
	In certain circumstances when tilting, reclining or lifting the seat with a bag attached to the rear bag hooks, the Series 5 may become unstable. Do not ascend steep inclines or climb high kerbs with a bag on the rear bag hooks.
	Take care when driving with the seat in a tilt, lift or reclined position. Do not drive on steep inclines, rough terrain or up/down steps when the chair is in a tilt, lift or reclined position. Power seating is designed to be used indoors or outdoors on flat, even surfaces.

3. Product Description

3.1. General Description

The Series 5 power wheelchair combines compact design with a purpose-built lithium-ion battery powering efficient brushless motors, allowing the Series 5 to offer greater than 40km of real world range. The rear wheel drive configuration of the Series 5 gives this wheelchair optimal performance in both indoor and outdoor environments.

Product Description	Product Code
Freedom One Life, Series 5	FOL-S5



Item	Description
1	User Interface (UI)
2	Cushion
3	Lights
4	Footrest
5	Castor Wheels
6	Charging Panel
7	Driving Wheels

Item	Description
8	Backrest
9	Body Panels
10	Rear Tie Downs
11	Anti-Tip Wheels
12	Flight Mode Panel
13	Front Tie Downs

3.2. Intended Use

The Series 5 is a rear wheel drive (RWD) power wheelchair designed for both indoor and outdoor use. In addition to its powered chair functionality, motor-driven electronic seating capabilities allow the user to adjust the seating height and angle, backrest recline and footrest raise and lower.

3.3. User

- Indication:
- Significant to full impairment of mobility/walking/with structural and/or functional damage to lower extremities (including amputation, sequelae of injury, musculoskeletal/neuromusculoskeletal related movement disorders).
 - Significantly impaired strength and grip function of the arms/hands
 - Sufficient orientation and coordination function
 - To ensure mobility indoors and outdoors (reaching the immediate vicinity and doing everyday tasks).

- To enable further activities relevant to everyday life to be carried out independently using the lifting device (objects/activities located or attached above wheelchair armrest level, for example light switches, door handles, cupboards, shelves, etc.).

For use outdoors/on the road, it must be ensured that proper operation of an electric motor drive is possible and that there are no concerns regarding fitness to drive (sufficient functions of, among others, sense of sight, sense of hearing, awareness, orientation, attention, coordination of arm and hand movements).

Contraindications:

- Usage of Series 5 in road traffic by users who have any mental limitations which can temporarily or permanently limit attentiveness and judgment.
- Usage of Series 5 by users without preserved cognitive, physical, and visual abilities.

3.4. User Environment

This wheelchair has been designed to accommodate both indoor and outdoor use (EN12184 (2014) Class B). When driving the wheelchair outdoors, drive only on paved roads, pavements, footpaths and bicycle paths. The speed must be adapted to suit the environment.

WARNING

- Drive carefully on slippery roads resulting from rain, ice or snow.
- You are required to turn on lights in case of limited visibility.
- When driving at higher speeds you must be extra careful. Select a lower maximum speed indoors, on the pavement and in pedestrian areas.
- Do not drive off high obstacles.
- Do not attach a weight to the wheelchair without approval from a qualified specialist. This may negatively affect the stability of the product.

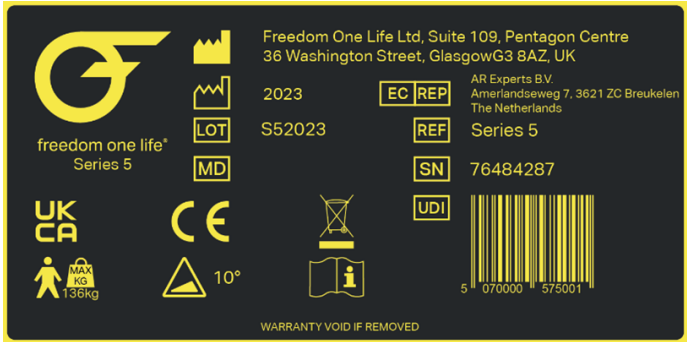
CAUTION

- Prevent the wheelchair from coming into contact with sea water; salt water is caustic and may damage the wheelchair.
- Do not use the wheelchair if temperatures are below -25°C or above +50°C.

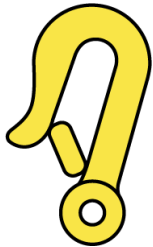
3.5. Labels

Product Label

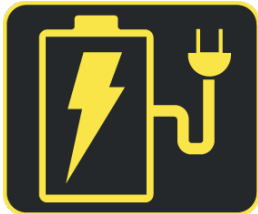
This is found on the seat base underneath the cushion.



For use with tie downs for use as seat in motor vehicles as defined in ISO 7176:19



Charging Panel Symbol



Finger Trap Symbol



Flight Mode Panel Symbol



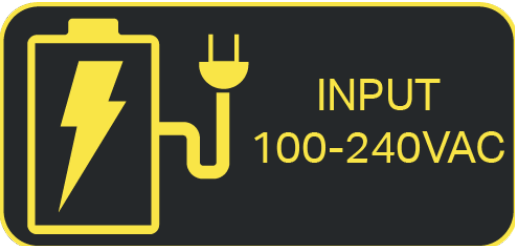
Freewheel Mode Symbol



Isolation Key



Charging Symbol

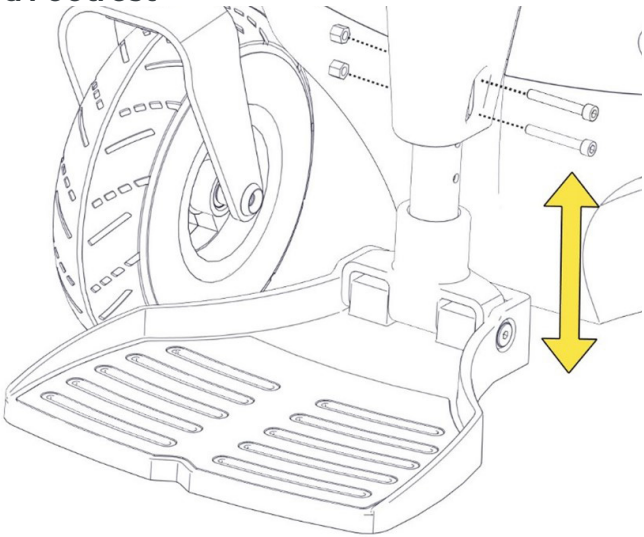


4. Features

4.1. General

Only products specified and approved by Freedom One Life can be used with the Series 5.

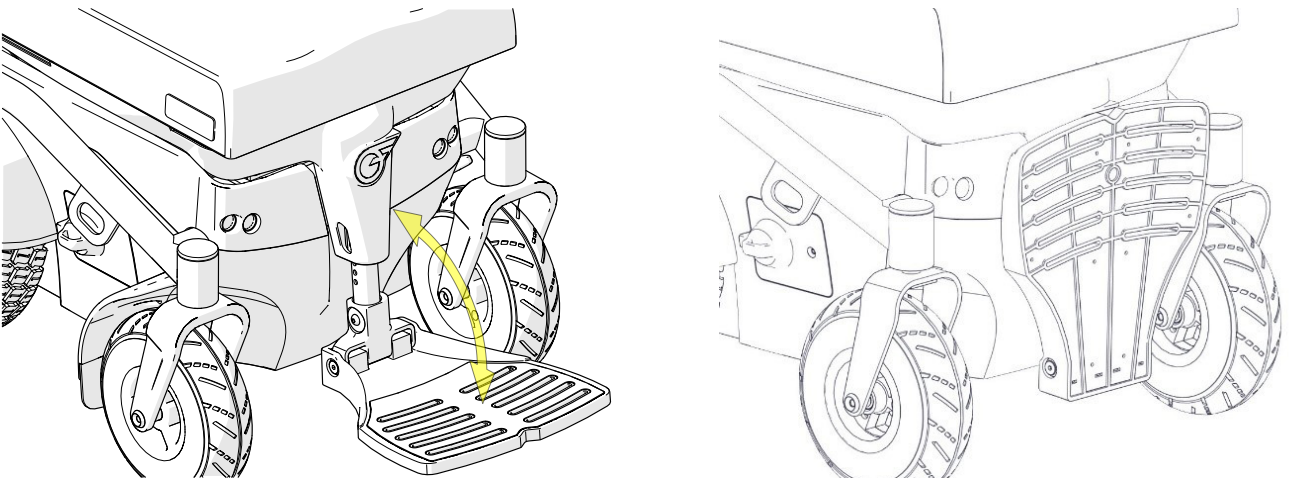
4.2. Centre Mounted Footrest



4.2.1. Centre Mounted Footrest Position

- Remove nut and bolts using a 5mm hex key and 10mm socket.
- Reposition the footrest while aligning the holes.
- Insert the bolts and tighten the nuts using a 5mm hex key and 10mm socket.

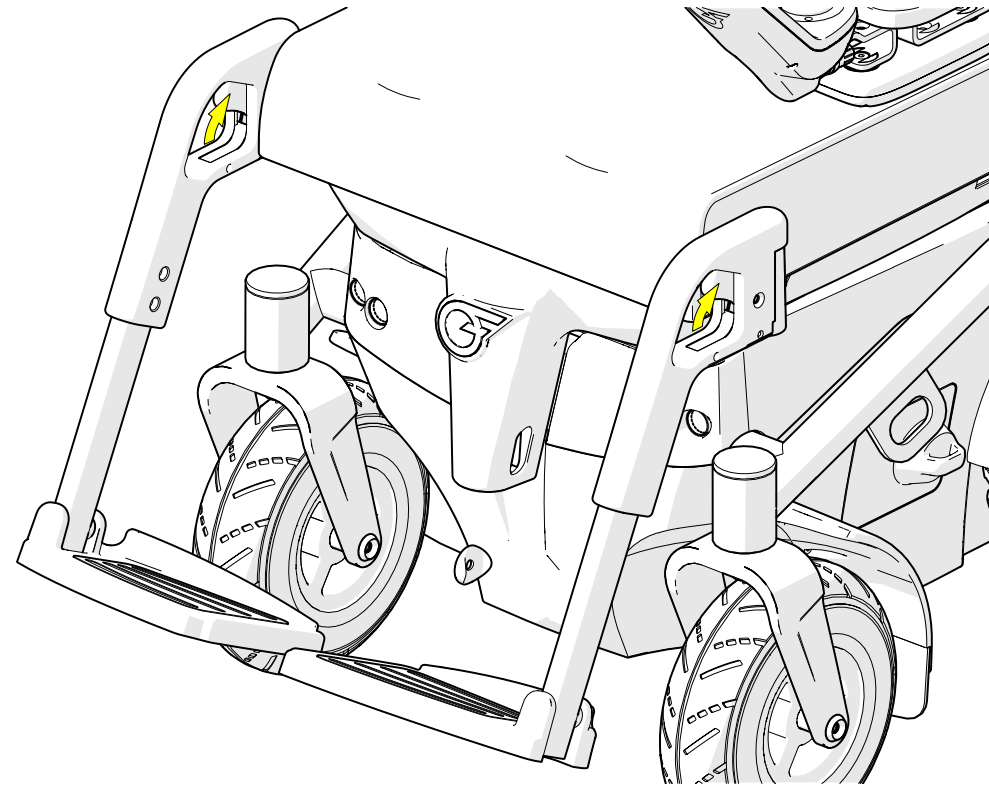
4.2.2. Centre Mounted Footrest Folding



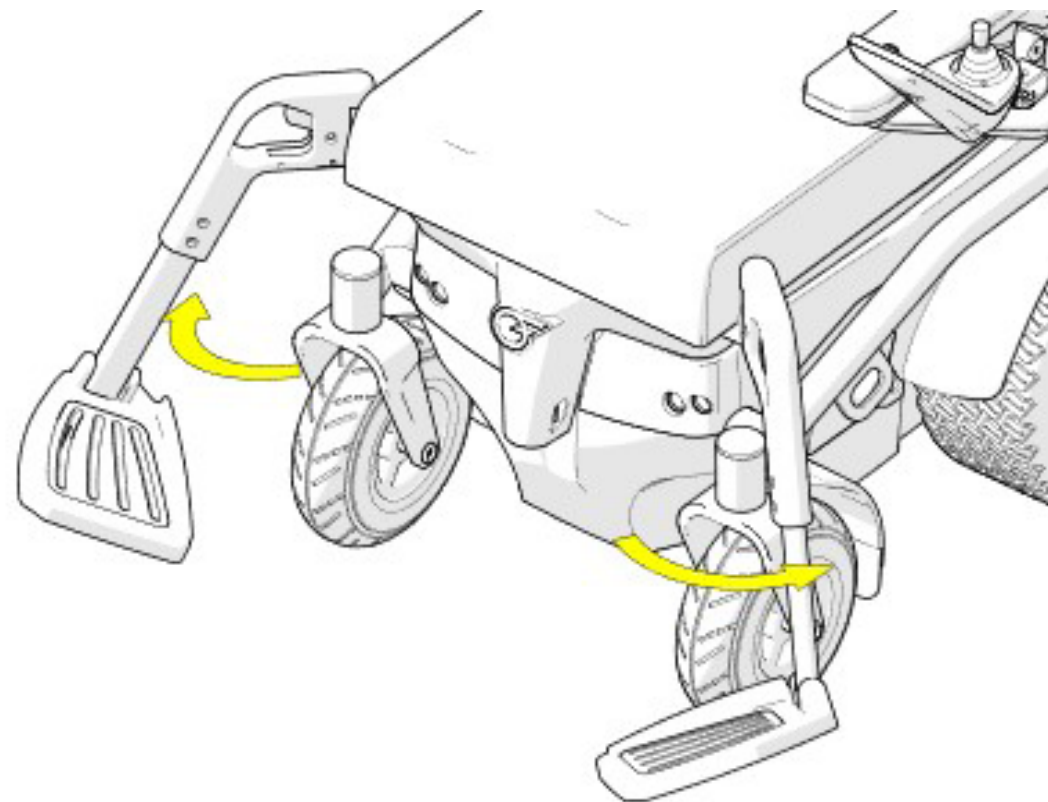
- To fold up footrest, lift until it reaches its limit.

 WARNING	The footrest is not to be used for lifting or carrying the wheelchair.
RECOMMENDATION	Fixings may become loose during regular use. All fixings should be checked periodically for tightness.

4.3. Swing Away Footrest

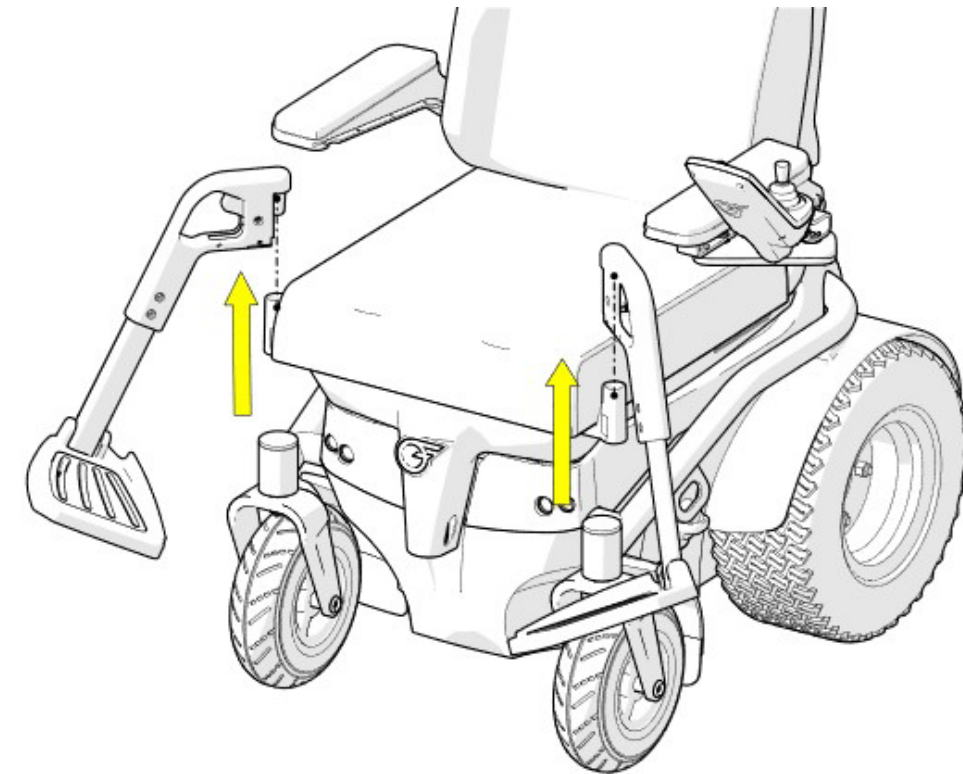


- Squeeze/pull the lever in the swing away footrest bracket.



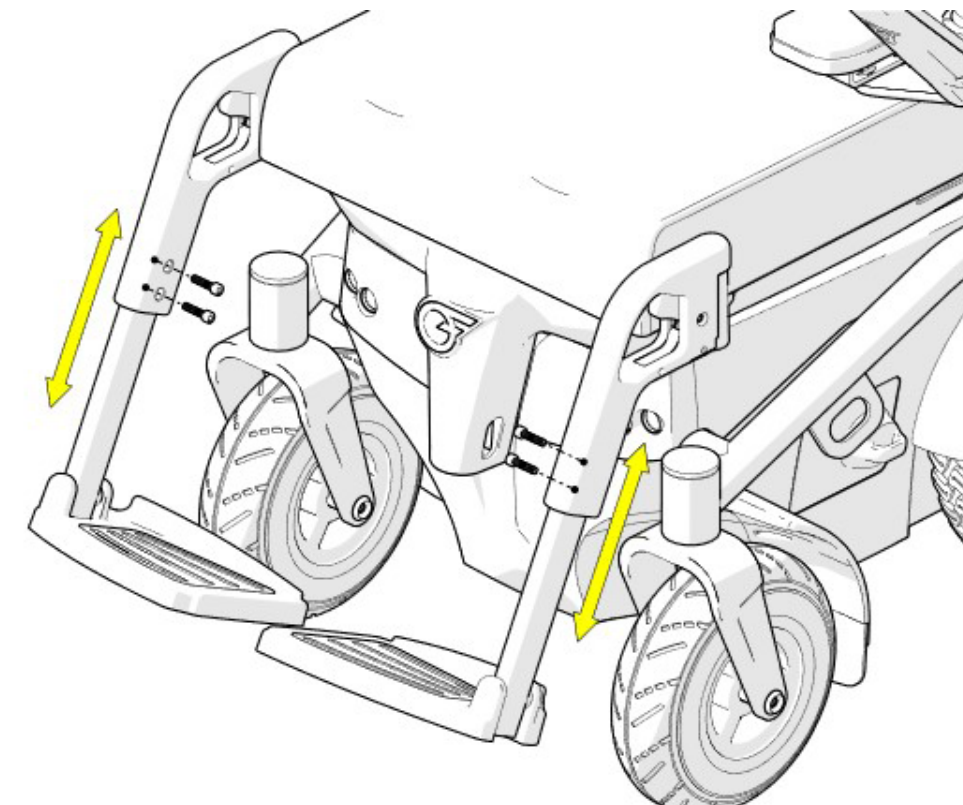
- Rotate the footrest to the required position.

4.3.1. Swing Away Footrest Removal



- Squeeze/pull the lever in the swing away footrest bracket.
- Rotate the footrest.
- Lift the footrest up to remove from the bracket.

4.3.2. Swing Away Footrest Position



- Remove the 2 bolts using a 5mm hex key.
- Reposition the footrest to the desired location while aligning the holes.
- Insert the bolts and tighten using a 5mm hex key.

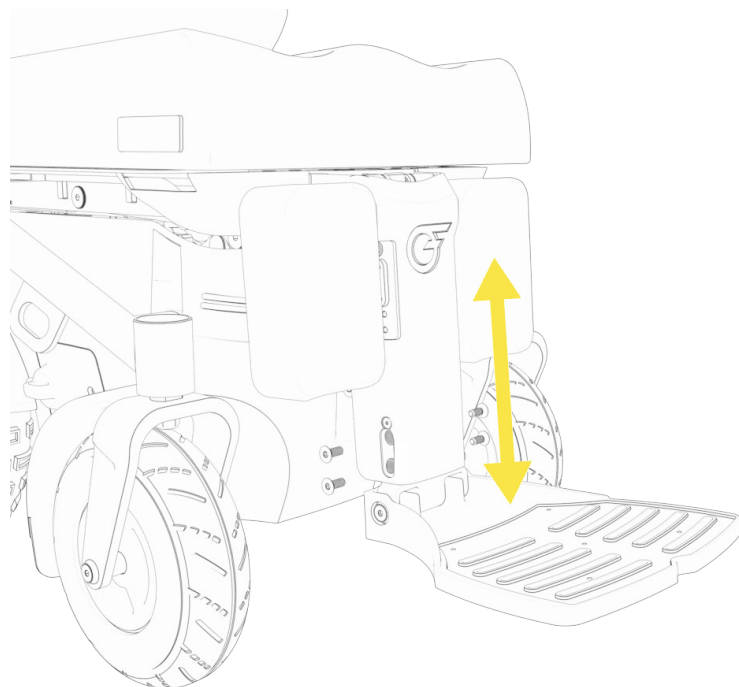
4.3.4. Swing Away Footrest Folding



- To fold up footrest, lift until it reaches its limit.

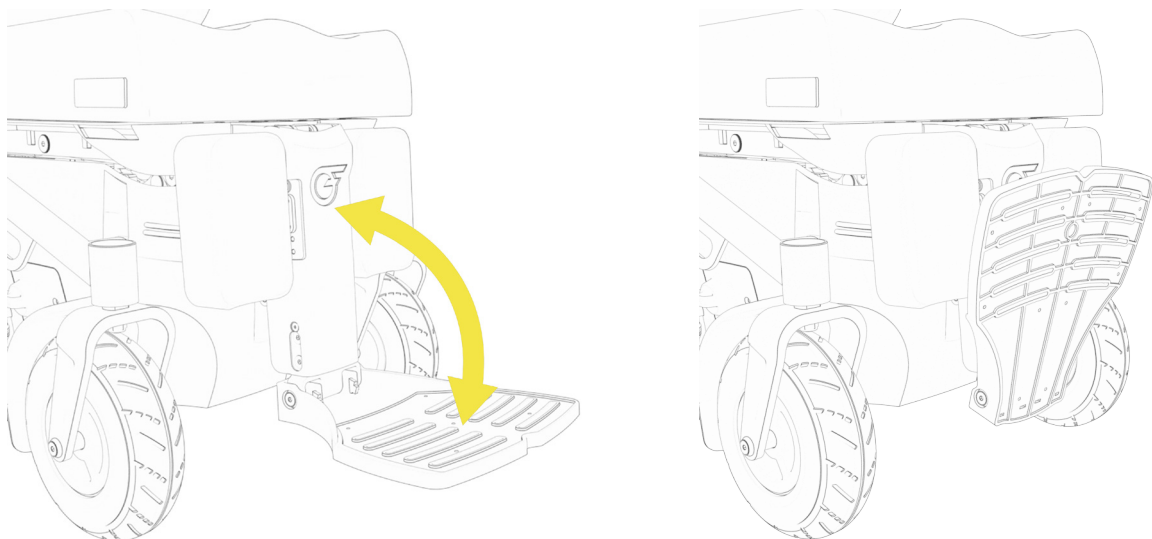
4.4. Electric Centre Mounted Footrest

4.4.1 Electric Centre Mounted Footrest Position



- Remove 4x bolts using a 5mm hex key.
- Reposition the footrest while aligning the holes.
- Insert the bolts and tighten using a 5mm hex key.

4.4.2 Electric Centre Mounted Footrest Folding



- To fold up footrest, lift until it reaches its limit.

 WARNING	The footrest should not be used to lift or carry the wheelchair.
RECOMMENDATION	Fixings may become loose during regular use. All fixings should be checked periodically for tightness.

4.5. Armrest

The height and angle of the armrest can be adjusted to suit user requirements. The armrest has two pivot points which alter the height and pad angle.

4.5.1. Height Adjustment

- To adjust the height, locate the pivot point on the armrest, closest to the back of the chair.
- Loosen the bolt using a 4mm hex key.
- Support the armrest and hold the inner coupling. Pull the armrest out to disengage the coupling teeth for height/angle adjustment.
- Hold the inner coupling and rotate the armrest to the desired height/angle. Push the armrest in to re-engage the teeth on the coupling.
- Reinsert the bolt then tighten with a 4mm hex key.



4.5.2. Armrest Levelling

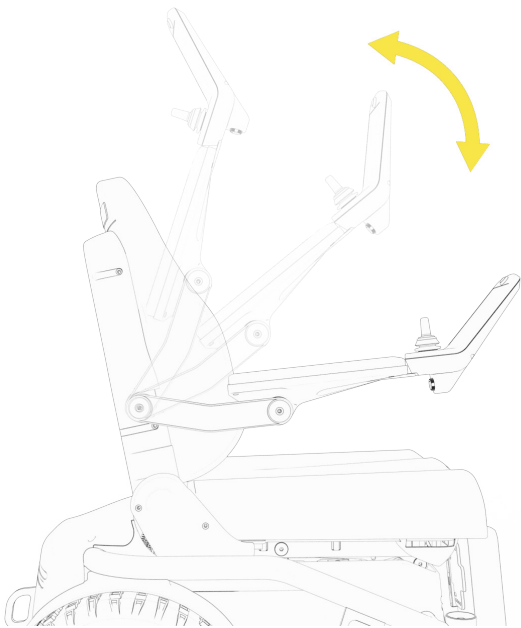
After height adjustment, the pivot point closest to the front can be used to adjust the levelling/sloping of the armrest.

- Loosen the bolt using a 4mm hex key.
- Adjust the teeth of the coupling to a suitable angle.
- Reinsert the bolt then tighten with a 4mm hex key.



4.5.3. Armrest Rotation

- The armrest has the ability to fold up 90°.
- There is no locking mechanism on the armrest.
- The armrests can be freely moved up and down.



 WARNING	The armrest should not be used to lift or carry the wheelchair.
RECOMMENDATION	Fixings may become loose during regular use. All fixings should be checked periodically for tightness.

4.6. Power Seating
4.6.1. Tilt

Up to 50° tilt is designed to allow the user to change their seating position and to alleviate pressure that may develop during extended periods of being in the powerchair.



- On the home screen, click the power seating icon.
- Select the tilt option.
- Using the left and right arrows, adjust the angle of the seat with stepless adjustment. The left arrow adjusts tilt backwards up to a maximum of 50°, the right arrow adjusts tilt forwards up to a maximum of 0° which is a normal seating position. Releasing the button at any point will stop movement completely. Pressing the button and releasing quickly will allow for fine tuning of the seating position.
- Press the back icon on the bottom of the screen to return home.

 WARNING	The maximum bag weight must not exceed 10kg.
	When tilting or reclining be aware of any items hanging from the rear bag hooks and ensure they do not get caught/ jammed between the backrest and main body panel.

4.6.2. Lift

Lift up to 300mm can be used to access hard to reach cupboards, have a discussion face to face or sit at a high table.



- On the home screen, press the power seating icon.
- Select the lift option
- Use the up arrow to lift the seat up to a maximum additional height of 300mm, and down arrows to lower the seat with stepless adjustment. Releasing the button at any point will stop movement completely. Pressing the button and releasing quickly will allow for fine tuning of the seating position.

Auto Lift

- You can also use the auto function to raise or lower the seat automatically to the upper and lower limit. Pressing any button will stop the auto lift feature.
- Press the back icon on the bottom of the screen to return home.



4.6.3. Recline

Powered recline up to 155° allows users to change the angle of their backrest to find their most comfortable seating position as well as alleviate pressure during extended powerchair use.



- On the home screen, press the power seating icon.
- Select the recline option.
- Use the left arrow to recline the backrest, and right arrow to raise the backrest. Releasing the button at any point will stop movement completely. Pressing the button and releasing quickly will allow for fine tuning of the seating position.
- Press the back icon on the bottom of the screen to return home.

	
	The maximum bag weight must not exceed 10kg.
	When tilting or reclining be aware of any items hanging from the rear bag hooks and ensure they do not get caught/ jammed between the backrest and the base unit.
WARNING	
In certain circumstances when tilting, reclining or lifting the seat with a bag attached to the rear bag hooks, the Series 5 may become unstable. Do not ascend steep inclines or climb high kerbs with a bag on the rear bag hooks.	

4.6.4. Leg Raise

Up to 80° powered leg raise allows for finetuning of leg height to provide maximum comfort in every situation. Adjusting powerchair position reduces pressure which may develop after extended time seated.



- On the home screen, press the power seating icon.
- Select the leg raise option.
- Use the right arrow to raise the footrest, and left arrow to lower it. Releasing the button at any point will stop movement completely. Pressing the button and releasing quickly will allow for fine tuning of the seating position.
- Press the back icon on the bottom of the screen to return home.



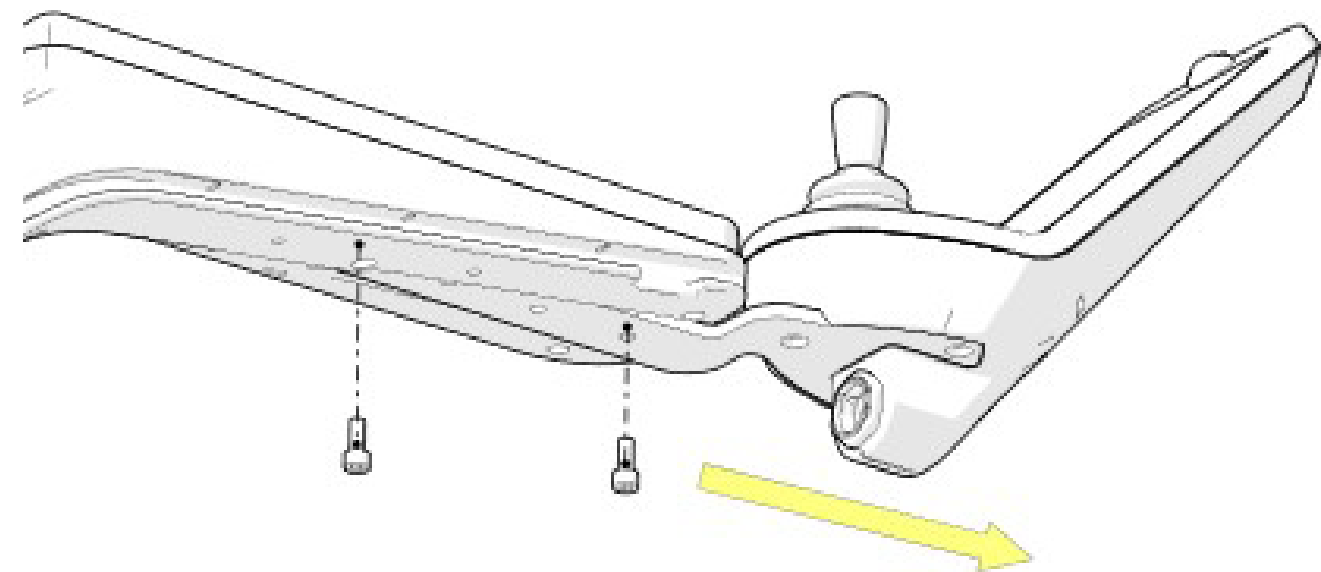
DANGER

Do not insert any body parts or any other objects in to the tilt/lift mechanism during use. Doing so could result in damage to the equipment, serious injury or death. Ensure children or pets are clear of mechanism when operating.

Take care when driving with the seat in a tilt and/or lift position. Do not drive on steep inclines, rough terrain or up/ down steps when the chair is in a tilt and/or lift position.

Power seating is designed to be used on flat, even surfaces.

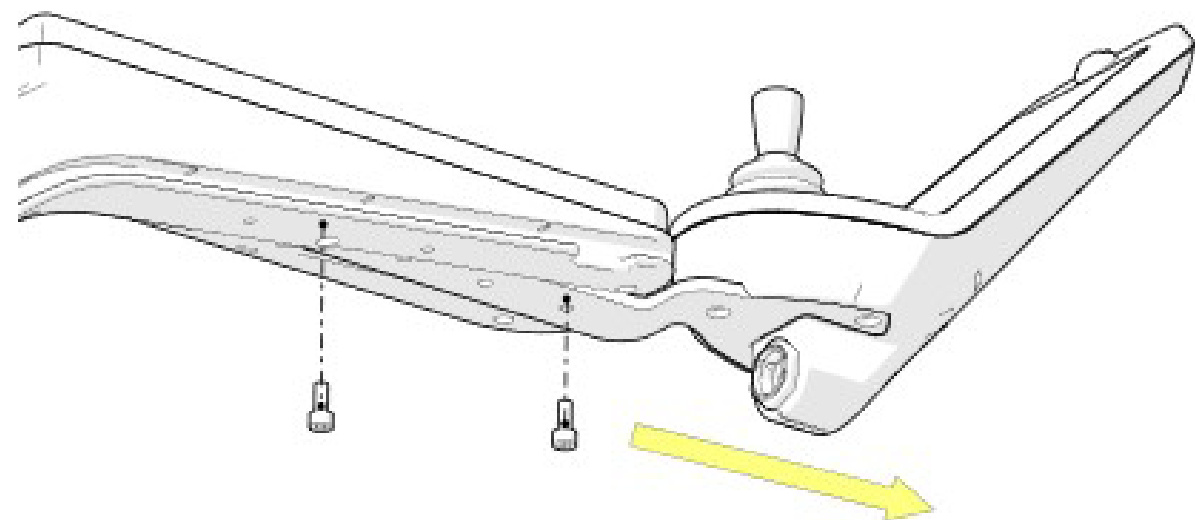
4.7. Fixed Position User Interface
4.7.1. Position Adjustment



- Power OFF the user interface.
- Remove all bolts using a 4mm hex key.
- Locate the user interface in the desired position.
- Replace bolts and secure using 4mm hex key.

Note: a minimum of 2 bolts should be used.

4.7.2. Removal



- When travelling or leaving the chair for extended periods of time, it may be desirable to remove the user interface to prevent damage or theft. This can be done by:
- Power OFF the user interface.
 - Pulling the cable connector to release from the mating half on the user interface (see images below).
 - Remove the fixings from underneath the armrest. Ensure the user interface is held when removing the final fixings to prevent damage from dropping.
 - To ensure the fixings are not lost, it is recommended they are reinserted into the threads on the armrest.



1 Hold the middle of the connector



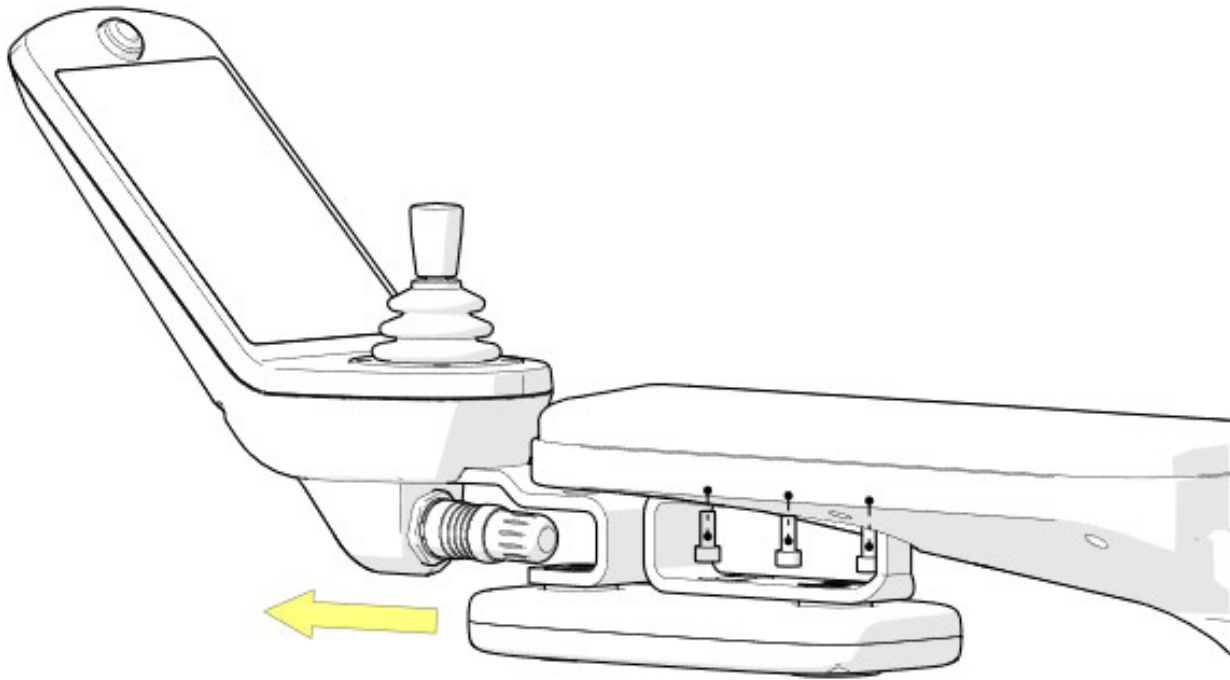
2 Pull back slider



3 Pull to release

 WARNING	All fixings should be checked periodically for tightness.
	Injury to the user and/or damage to the power wheelchair can occur when using the user interface as an anchor point while transferring to and from the wheelchair.
	Ensure the power wheelchair is off when adjusting the location of the user interface.

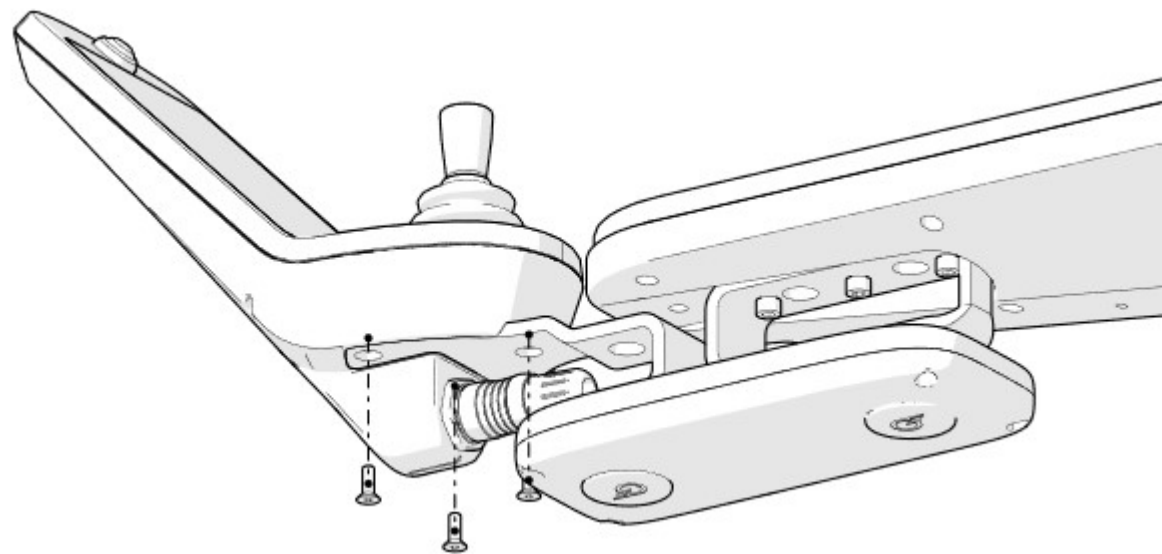
4.8. Swing Away User Interface
4.8.1. Position Adjustment



- Power OFF the user interface.
- Remove all bolts using a 3mm hex key.
- Locate the user interface in the desired position.
- Replace bolts and secure using 3mm hex key.

Note: a minimum of 2 bolts should be used.

4.8.2. Removal



When travelling or leaving the chair for extended periods of time, it may be desirable to remove the user interface to prevent damage or theft. This can be done by:

- Power OFF the user interface.
- Pull the cable connector to release from the mating half on the user interface (see section 4.7.2).
- Remove the fixings from underneath the user interface using a Phillips-head screwdriver. Ensure the user interface is held when removing the final fixings to prevent damage from dropping.
- To ensure the fixings are not lost, it is recommended that they are reinserted in to the threads on the user interface.

 WARNING	All fixings should be checked periodically for tightness.
	Injury to the user and/or damage to the power wheelchair can occur when using the user interface as an anchor point while transferring to and from the wheelchair.
	Ensure the power wheelchair is off when adjusting the location of the user interface.

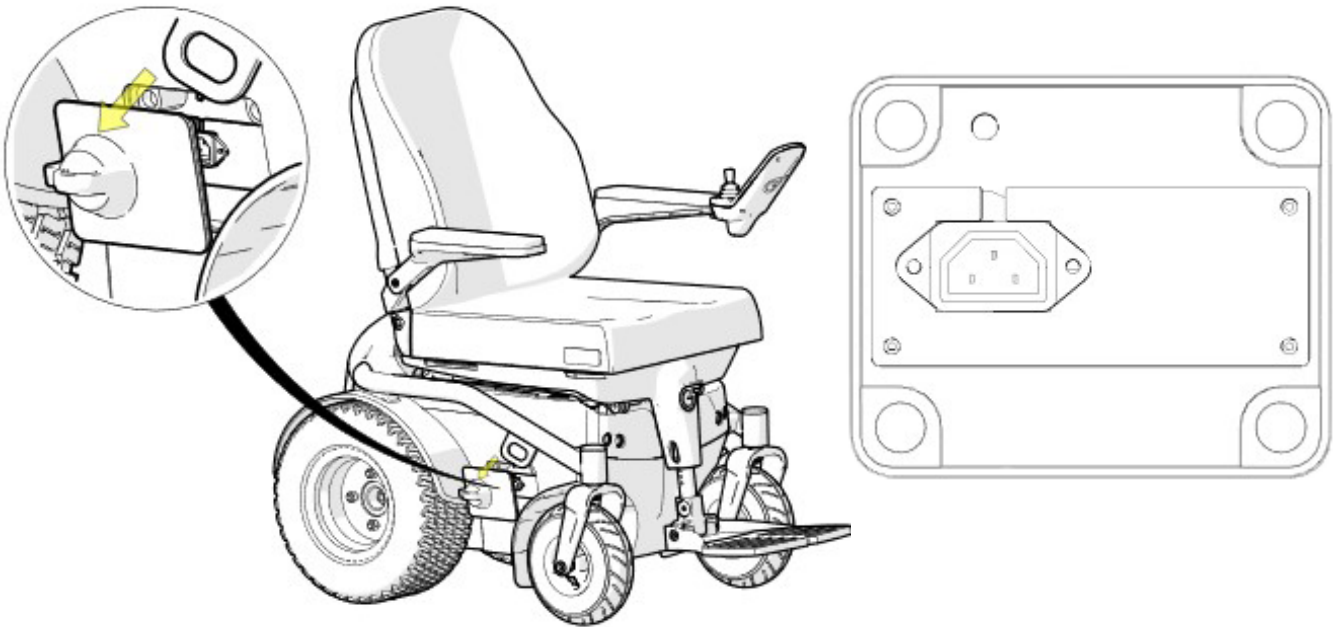
4.9. Charging Panel

Pull handle to remove magnetic panel cover on the right hand side - this reveals the charging point.

4.9.1. Charging Point

The Series 5 comes with a C13 cable for the country of purchase for charging the powerchair (see section 8 for charging instructions).

The panel cover must be closed when not in use.



 WARNING	Never plug in a wet cable to the socket or AC power socket.
	Use a cable approved by Freedom One Life.
	Cable may cause a tripping hazard.
	Use 100-240V standard household AC power.
	Only charge indoors.
	Do not clean or perform maintenance while charging.
 CAUTION	Never smoke or allow a spark or flame in the vicinity of the battery or charger.
	Only replace the fuse in the plug with same rating (UK only) when required.
	When battery state of charge reads under 20%, consider charging as soon as possible. Lithium-ion batteries can deplete rapidly under 20%.
Ensure the panel cover is reattached before driving the wheelchair.	

4.10. Freewheel Mode

The freewheel levers can be accessed on the side of the wheelchair, below the magnetic panel.

- Both levers must be engaged for freewheel mode to work.
- The levers should both be in an upwards position to engage freewheel mode.
- Return both levers to a downwards position to disengage freewheel mode.
- If in freewheel mode and the Series 5 is turned on, a message will appear on screen to show that freewheel mode is engaged.
- Freewheel mode must NOT be engaged when travelling in any kind of vehicle



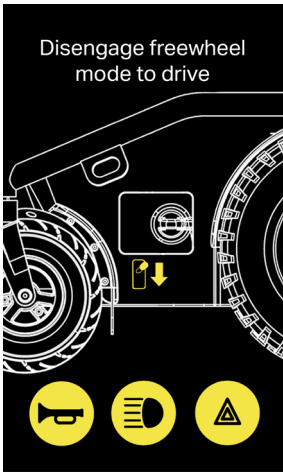
Freewheel lever location



Freewheel mode disengaged



Freewheel mode engaged

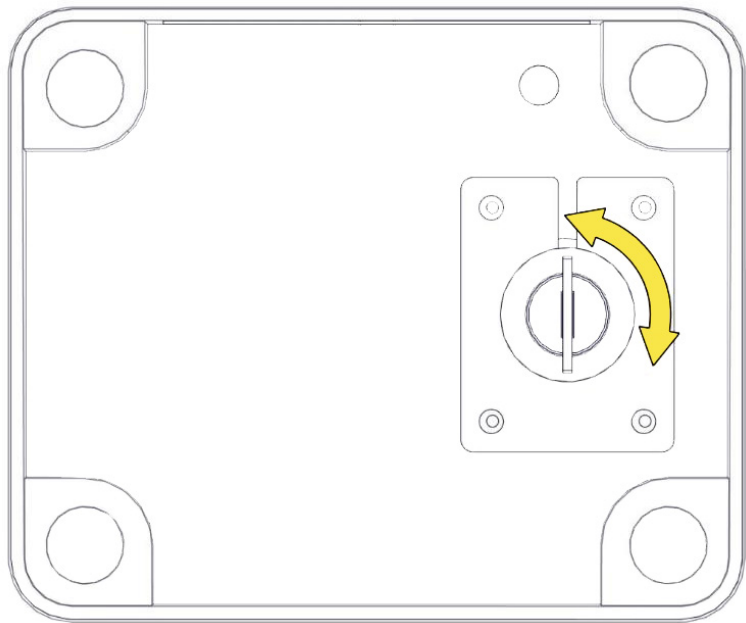
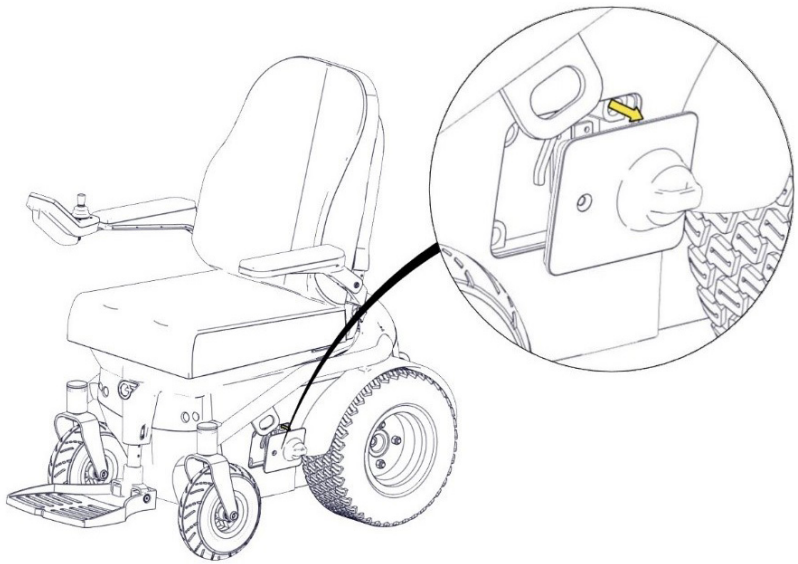


On-screen message

 DANGER	A seated user may never be left unattended while the wheelchair is in freewheel mode.
	Never activate freewheel mode when on a slope. This would make it possible for the wheelchair to roll uncontrollably down the slope.
	When freewheel mode is no longer needed, the lever should be returned to the original position.

4.11. Battery Isolation Key

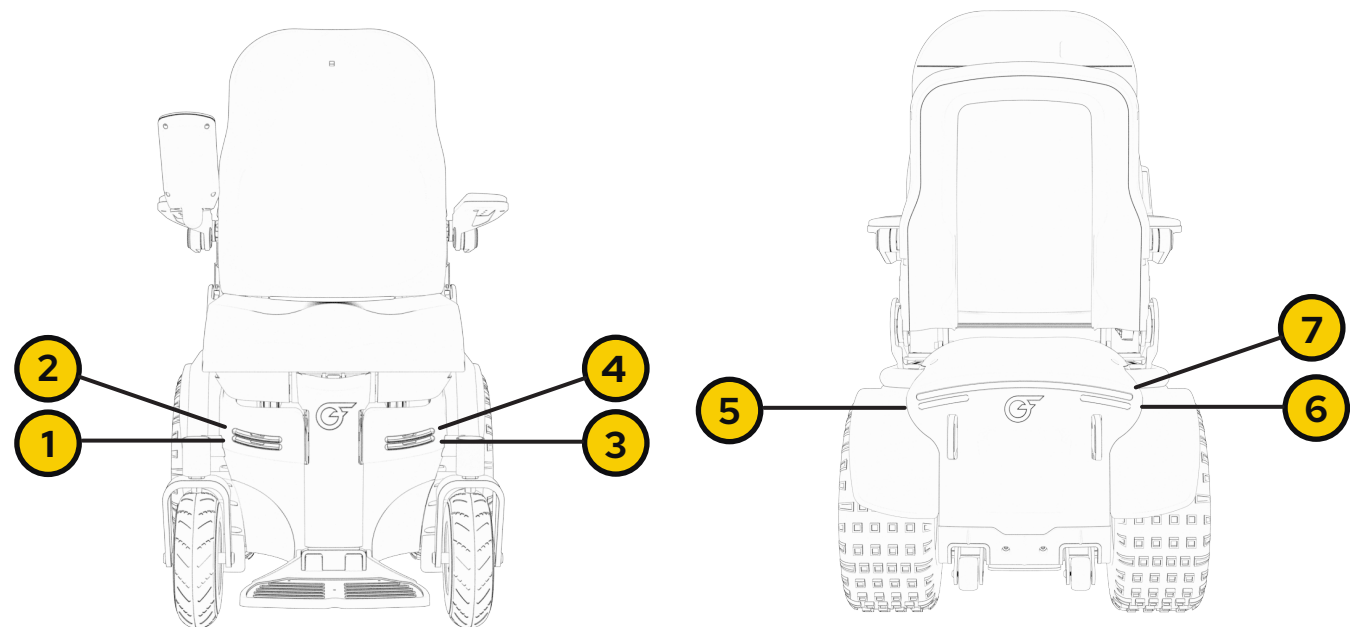
Pull handle to remove magnetic panel cover - this reveals the battery isolation key.



Removing the isolation key disconnects the battery from all components to preserve power during extended storage and prevents the wheelchair from turning on during transport such as air travel.

 CAUTION	Ensure the panel cover is reattached before driving the powerchair.
 WARNING	The isolation key presents a potential choking hazard when removed.

4.12. Lights



Item	Description
1	Front Right Indicator
2	Front Right Headlight
3	Front Left Indicator
4	Front Left Headlight

Item	Description
5	Rear Left Indicator
6	Rear Right Indicator
7	Rear Tail Light

4.12.1. Headlights and Tail Lights

- On the main home screen, press the lights icon to turn on both the headlights and tail lights.
- Press the lights icon again to turn off the lights.

4.12.2. Indicators

- On the main home screen, press the left or right arrow to indicate direction.
- To turn off the indicator, press the arrow again.

4.12.3. Hazard Lights

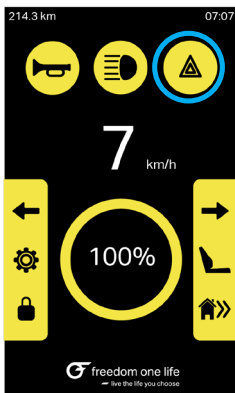
- On the main home screen, press the hazard icon to turn on the hazard light
- Press the icon again to turn the light off.



Headlights and Tail Lights



Indicators



Hazard Light

**WARNING**

The lights are designed to aid visibility of the wheelchair to pedestrians and traffic in low light conditions. They are not intended to be used to drive on a road.

4.13.Horn

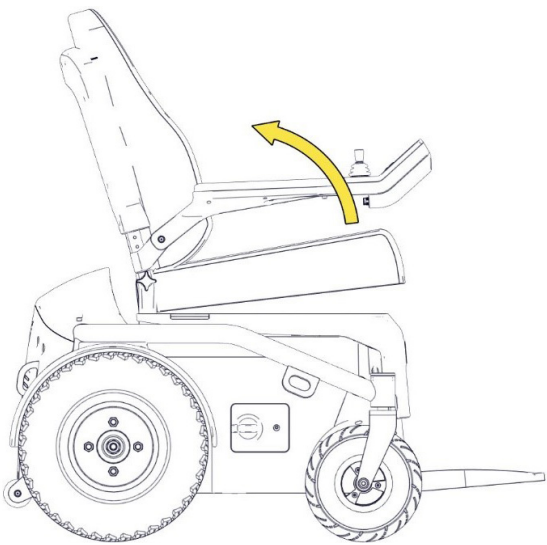
To sound a horn to aid getting the attention of people in close proximity.

- On the main home screen, press the horn icon to sound the horn. The horn will sound as long as the icon is pressed.
- Release the icon to stop the horn.



Horn

4.14. Fit and Removal of Seat Cushion



The seat cushion can be removed for storage of the chair or to reduce the height during transportation. The cushion is secured using Velcro to prevent it slipping during use. To remove the cushion:

- Pull the cushion to separate it from the seat base.
- To fit the cushion, align the back of the cushion with the back of the seat base and place it down firmly.

4.15. Belts

Belts will be fitted on your chair in a predetermined location depending on the cushion and backrest configuration selected.

Note: If alternative support options are required (eg. anterior pelvic support), please contact Freedom One Life or your distributor for more details and instruction on how to fit.

4.15.1 Padded Lap Belt



1 Move both sides of the lap belt over your legs.



2 Insert part 1 into part 2 and you will hear a click to confirm connection.

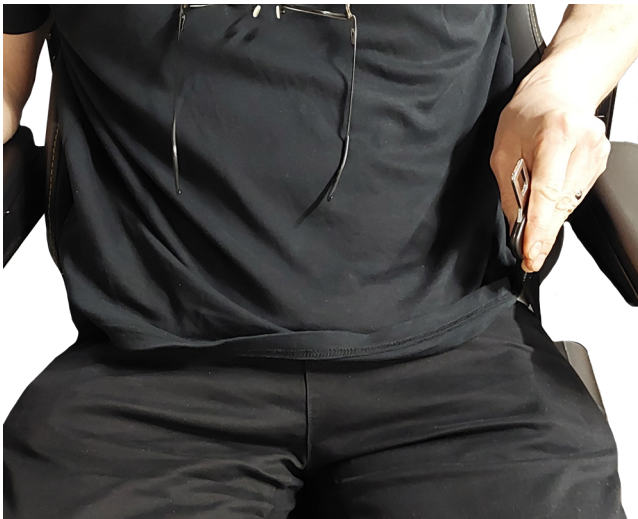


3 Adjust the fit of the lap belt using the adjustable strap.



4 To release the lap belt, pull the front plate up.

4.15.2 Adjustable Belt



1 Pull the adjustable belt up and across your lap.



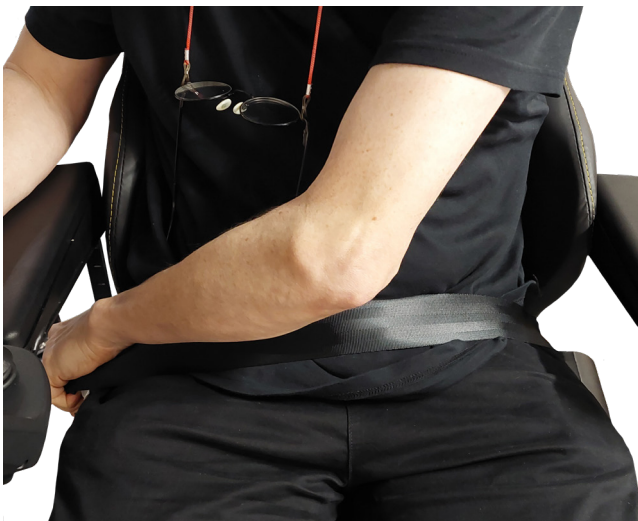
2 Insert part 1 into part 2 and you will hear a click to confirm connection.



Part 1



Part 2



3 To release press the red button.



4.16. Headrest adjustment
4.16.1. Position Adjustment



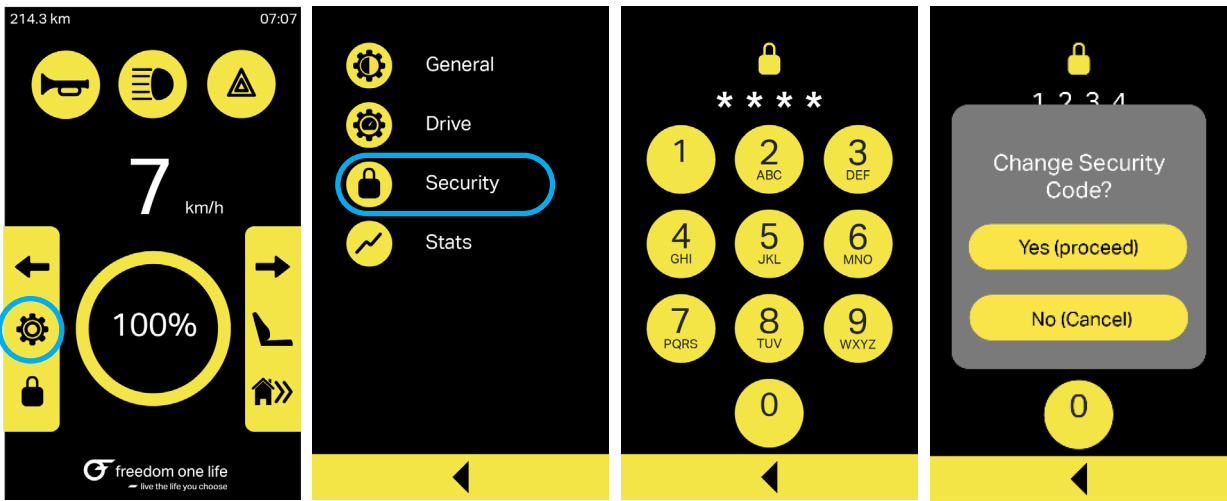
1 Loosen the star knob on the back of the headrest.



2 Slide the headrest up or down to the desired height and tighten the star knob.

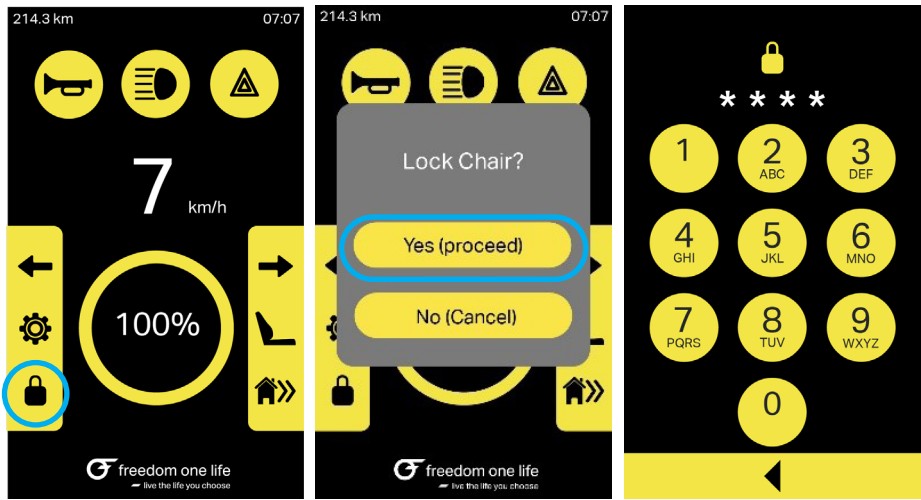
3 Finer adjustment can be made by manually moving the headrest up, down, forward or backwards. Tilt can also be adjusted manually.

4.17. Security Lock
4.17.1. Set 4 Digit Security Code



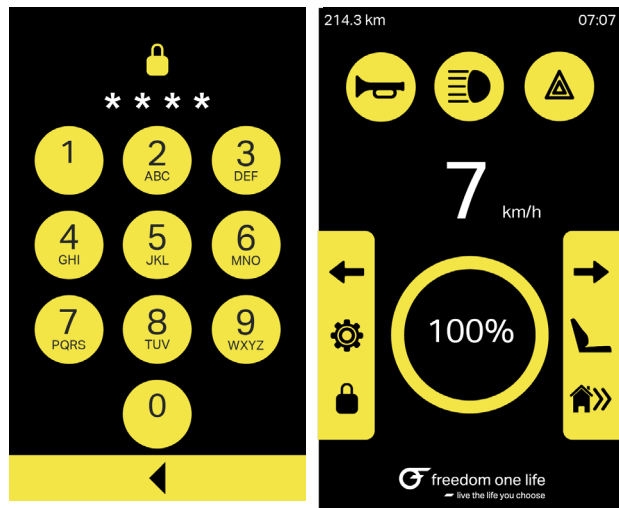
- From the main screen, select settings, then select security.
- Enter a 4 digit code. Ensure it is something memorable.
- Select yes (proceed) to confirm your pin.
- Press back to return to settings and back again to return to the main screen. See section 7 for more information on the display.

4.17.2. Lock the Series 5



- From the main screen, touch the lock icon.
- A pop up will appear asking you to confirm if you would like to lock the Series 5.
 - If yes is selected, the chair will be locked.
 - If no is selected, you will return to the main display.
- The Series 5 is now locked and driving is not possible. If you turn the power OFF and then back on ON, the lock screen will appear and driving will not be possible.

4.17.3. Unlock the Series 5



- Enter the 4 digit security code set in section 4.17.1.
- You will return to the main display.

Note: If the security code is entered incorrectly, just try again, you have an unlimited number of attempts to unlock your Series 5.

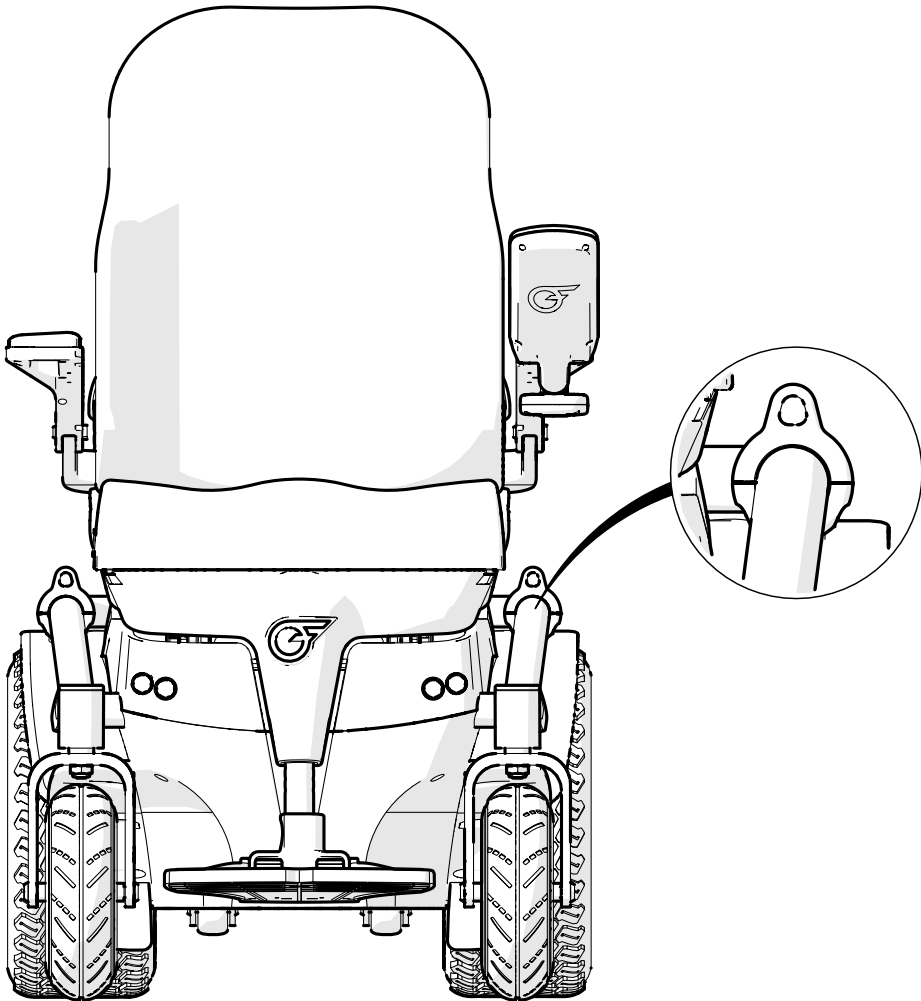
4.17.4. Forgotten Security Code

- If you forget your security code, you can unlock the chair by entering '3 7 3 3 3 6 6' (FREEDOM).

4.18. Hoist Clamp

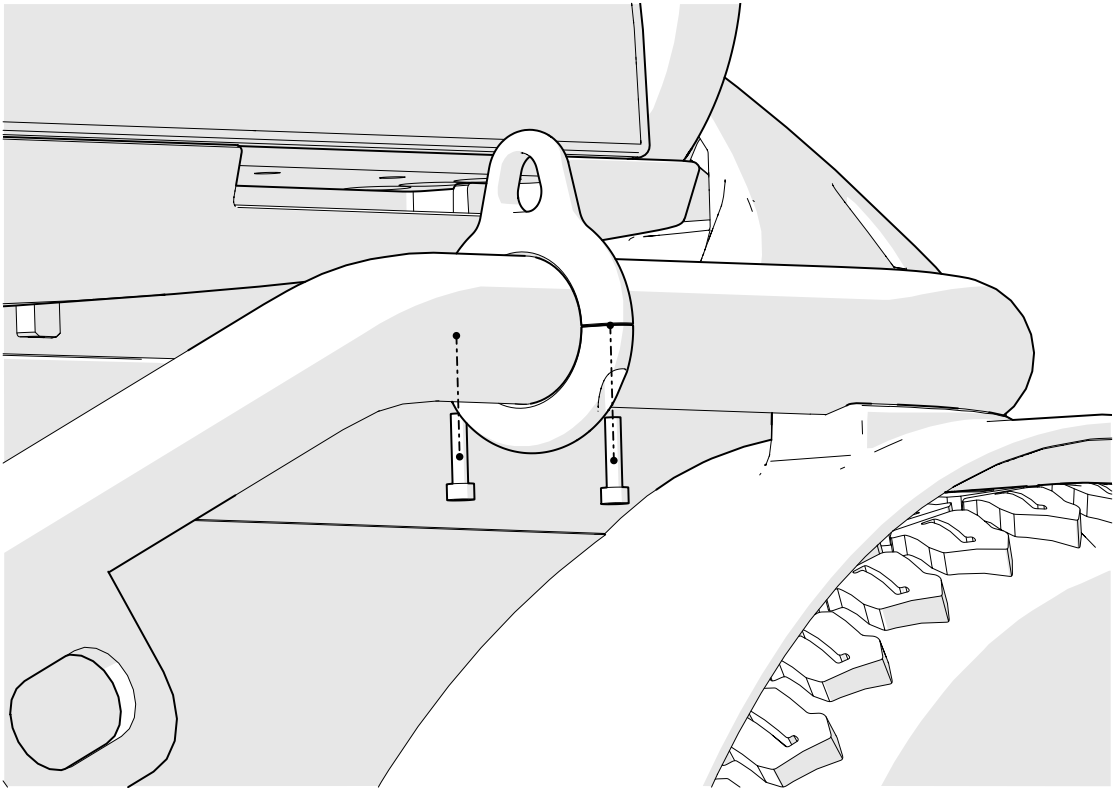
The hoist clamp allows a user to attach a hoist to the chair such that it can be lifted in a stable position to and from a vehicle. This will be pre-fitted to your chair.

- One hoist bracket is fixed on either side of the chassis, two in total.
- Please follow the instructions provided by the hoist manufacturer.

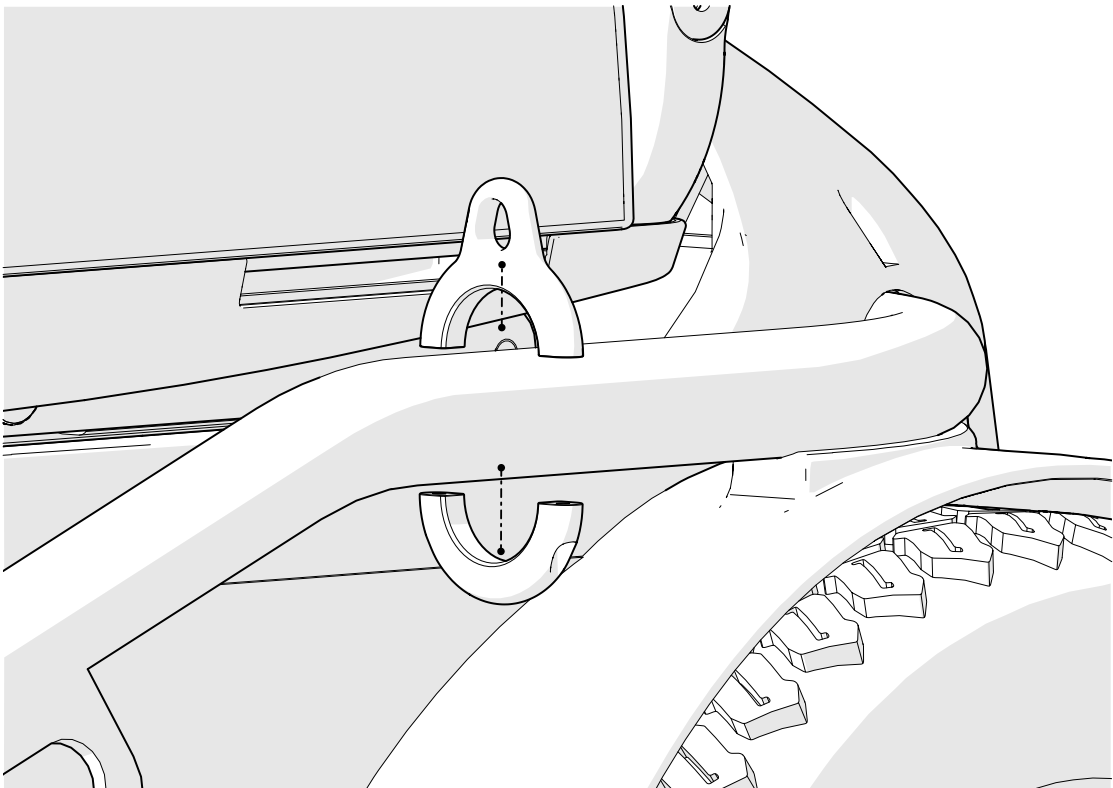


4.18.1. Removal

- Remove the two screws fixing both halves of the hoist clamp with a 3mm hex key.



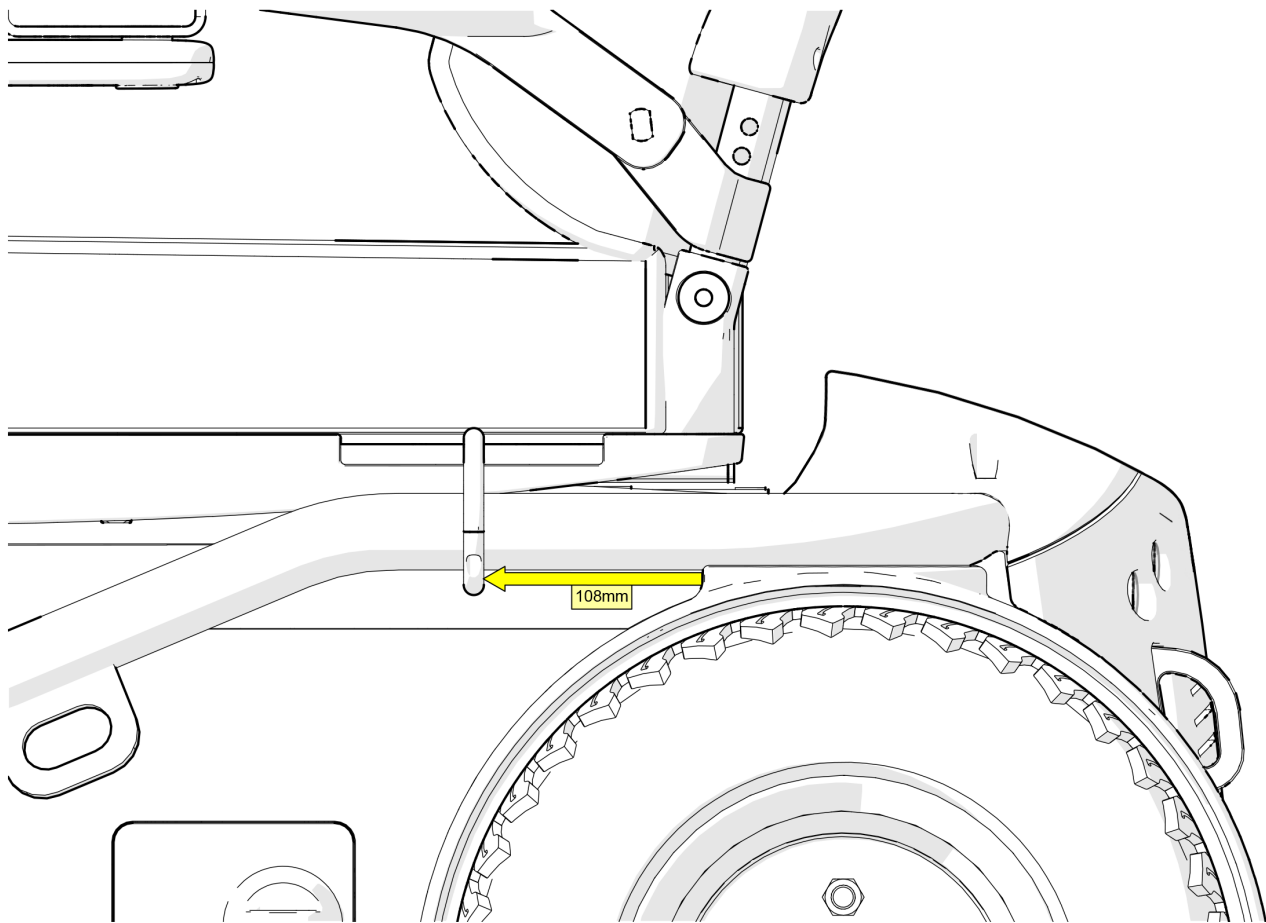
- Remove the two halves of the hoist clamp from the chassis



- Repeat for the other hoist clamp.

4.18.2. Positioning

- Place both halves of the hoist clamp on the chassis and keep it straight and pointing up.
Ensure the back of the hoist clamp is 108mm from the top of the rear mud guard for optimal stability.



- Attach two M4 x 18mm screws using a 3mm hex key and tighten to a torque value of 5 Nm.
Repeat on the opposite side of the chair with the second hoist clamp.

 DANGER	The wheelchair must only be hoisted without the occupant
---	--

4.19. Battery Gauge



Battery gauge
When the battery state of charge is between 100% and 21%, the indicator will appear yellow.



Battery low (less than 20%)
When the state of charge is 20% or less, the indicator will turn red. Charge the battery as soon as possible.

WARNING

Do not to operate the wheelchair with depleted batteries, since the occupant could be stranded or stop in an unsafe environment.

4.20. Drive Modes



Step 1
From the main display, touch the drive mode at the bottom right.



Step 2
Select the drive mode you would like or press the back button at the bottom. The maximum speed of each setting is set by the user.

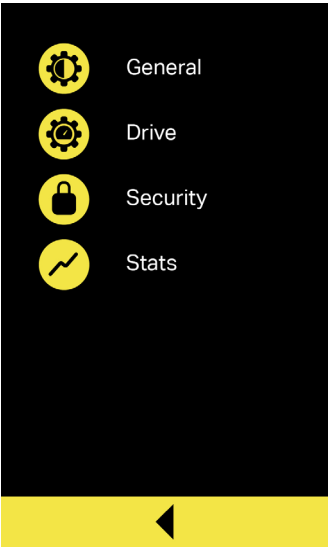


Step 3
You will return to the main display with the selected settings.

4.20.1. Drive Modes Settings Adjustment



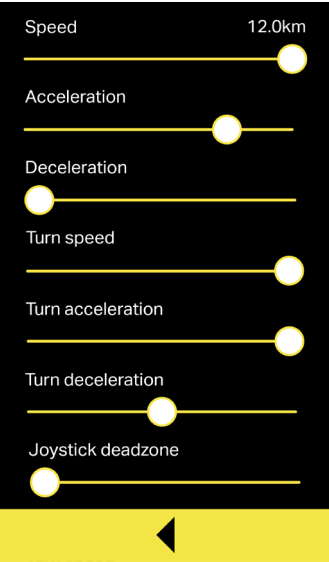
Step 1
Select settings.



Step 2
Select drive.



Step 3
Select the drive mode for which you wish to adjust



Step 4
Each setting has 5 positions.

- Forward acceleration:** adjust the rate of increase in speed.
- Forward deceleration:** adjust the rate of decrease in speed.
- Turn acceleration:** adjust the rate of increase in speed when making a turn.
- Turn deceleration:** adjust the rate of decrease in speed when making a turn.
- Turn speed:** adjust the speed of turning.
- Joystick deadzone:** the amount of movement required before drive begins.

Your speed settings will vary based on the version of your Series 5:

Speed Setting	12km/h version	10km/h version	6km/h version
Indoor	2 - 4km/hr (1.2 - 2.5mph)	2 - 4km/hr (1.2 - 2.5mph)	2 - 4km/hr (1.2 - 2.5mph)
Outdoor	4 - 6km/hr (2.5 - 3.7mph)	4 - 6km/hr (2.5 - 3.7mph)	4 - 6km/hr (2.5 - 3.7mph)
Outdoor Fast	6 - 10km/hr (3.7 - 6.2mph)	6 - 10km/hr (3.7 - 6.2mph)	-
Extreme	10 - 12km/hr (6.2 - 7.5mph)	-	-

5. Delivery, Adjustments and Initial Use

Your Series 5 will arrive fully assembled and ready for your use. The following tasks may be required by the distributor or assistant:

- Turn isolation key (see section 4.11.)
- Fully charge the powerchair (see section 4.9.1).

5.1. Transfer to and from the Wheelchair

Freedom One Life recommend that you consult your healthcare professional for assistance in developing your personal front or side transfer technique to best suit your needs and avoid any personal injury.

i. Front Transfer

- Ensure the distance between the wheelchair and the desired landing space is at its minimum.
- Ensure the power wheelchair is turned off before entering or leaving the wheelchair.
- Fold the footrest up (see section 4.2.2).
- If required, ensure transfers take place with assistance.

ii. Side Transfer

- Ensure the distance between the wheelchair and the place to which the user is transferring is at its minimum.
- Ensure the power wheelchair is turned off before entering or leaving the wheelchair.
- Fold the footrest up (see section 4.2.2).
- Fold the armrest(s) up (see section 4.5.3).
- If required, ensure transfers take place with assistance.

 DANGER	To prevent falling or tipping over due to incorrect handling: • Turn the chair off when transferring to and from the chair. • Ensure the power seating is in its lowest position.
 WARNING	Do not step on footplate when getting in and out. Do not lean on armrests when getting in and out.

5.2. Power On

- Ensure the battery isolation key is in place and in the ON position (see section 4.11.).
- Press the power button above the screen to turn on the UI.



 CAUTION	Ensure joystick is centred on start-up.
	Pulling the joystick back or switching off the user will cause the chair to stop abruptly. Make sure you are always seated securely, especially on slopes.

6. Driving the Series 5

6.1. Checking the Wheelchair Before Use

Perform the following daily check routine before driving:

- Visually check the tyres:
 - o Check for any signs of punctures.
 - o Check tyres are sufficiently inflated (see section 10.4.).
- Check the state of charge:
 - o Ensure you have charged the Series 5.
- Check the seating:
 - o Ensure the backrest is connected and adjusted to suit your needs.
 - o Ensure the seat cushion is in place.
- Check the lights and indicators:
 - o Ensure all lights are functioning correctly.
 - o Ensure all lenses are clean.
- Check freewheel lever is in drive position (see section 4.10.).
- Check the weather before departing:
 - o In cold weather you may experience reduced driving range. Range may be reduced by approximately 15% at temperatures below 0°C.
- Check clothing for potential entrapment:
 - o Ensure all clothes and clothing accessories are clear of moving parts.

 DANGER	Contact with moving parts may result in physical injury to the user or damage to the equipment. Contact with the following parts should be avoided: - Wheels (drive wheels and castor wheels). - Power seating mechanism.
 WARNING	Ensure feet are located correctly on the footrest to prevent casters hitting feet/legs while driving. Do not operate the wheelchair if it is behaving abnormally or erratically.

6.2. Driving Controls

The Series 5 by Freedom One Life is controlled by a joystick.

- The powerchair has electromagnetic brakes that are on by default; moving the joystick releases the brakes.
- The further the joystick moves from the centre position, the faster the power wheelchair will drive in this direction.
- Maximum speed is dictated by the driving options (see section 4.20.1).
- Releasing the joystick will result in the chair coming to a controlled stop and the brakes engaging.

Obstacles

Note: For information on the critical obstacle height see section 12.2.

- Obstacles must be approached directly from the front.
- Always reduce speed to cross an obstacle.

- Never descend an obstacle backwards.
- We recommend that users with limited upper body strength wear restraint systems to keep the upright body position during ascending or descending obstacles.
- Only cross railway systems and railway tracks at the designated level crossings.
- Do not negotiate level crossings too close to the edge of the crossing. Otherwise, the wheels could accidentally move before it is safe to cross.
- Even if it is clear to cross, stop before the level crossing and check to the left and right for safety.

Gradients and Slopes

Note: For information on gradients and slopes, see section 12.2.

- Speed may reduce when climbing slopes due to increased load.
- Reduce speed on downhill gradients, never descend a slope backwards.

Terrain

- Drive with caution and reduce speed on the following terrains:
 - o Uneven surfaces.
 - o Rough, loose or soft surfaces.
 - o Icy or snow-covered conditions.
 - o Narrow paths.

RECOMMENDATION	On first use, to learn how the powerchair responds, set a slower speed mode on and drive on flat, even ground.
 WARNING	Stopping distances on slopes may be significantly greater than on level ground.

6.3. Curves

We recommend that sharp turns be taken at slower speeds. This is particularly important when travelling up, down or across a slope. Indicators can be used when changing direction.

 DANGER	Slow down for turns. Attempting to turn at full speed could result in the wheelchair tipping over. This is particularly important when travelling across or down a slope.
---	---

6.4. Braking and Emergency Stops

There are three methods to stop your wheelchair during driving:

- Releasing the joystick will bring the chair to a controlled stop.
- Pulling the joystick back will bring the chair to a fast or emergency stop.
- Switching off the user interface whilst the chair is moving will activate an emergency stop.

 WARNING	Pulling the joystick back or switching off the user interface will cause the chair to stop abruptly. Make sure you are always seated securely, especially on slopes.
--	--

6.5. Pushing the Wheelchair/Freewheel Mode

Freewheel mode disengages the brakes to allow the chair to be pushed. To engage or disengage freewheel mode, see section 4.10.

7. User Interface

a. Display

The Series 5 comes with an intuitive touch display. The display is tuned to work in all environments including rain.



WARNING

If an error occurs, the chair will come to a sudden stop.

b. Loading Screen



c. User Interface Overview

Item	Description
1	Power Button
2	Trip
3	Time
4	Horn
5	Front and Rear Lights
6	Hazard Lights
7	Speedometer
8	Left Indicator
9	Right Indicator
10	Chair Settings
11	Power Seating
12	Lock Mode
13	Drive Mode
14	Battery State of Charge
15	Joystick



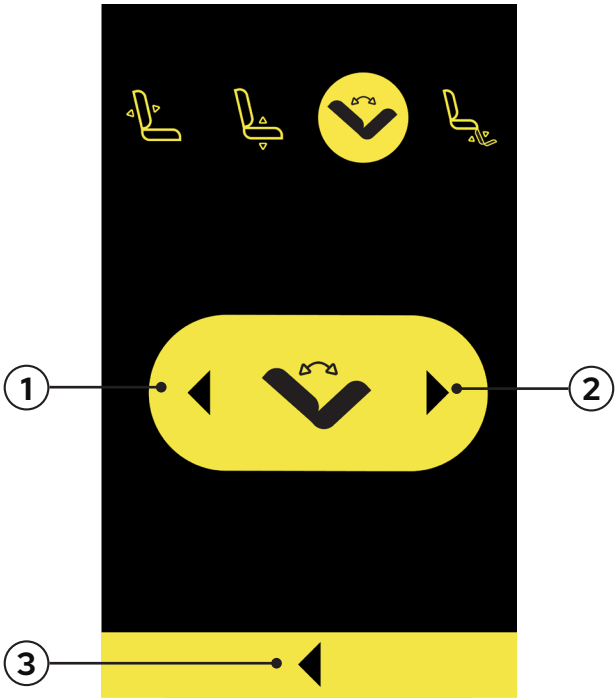
d. Home Screen with Warnings

Item	Description
1	Motor Overheating Warning
2	Speed Limiter



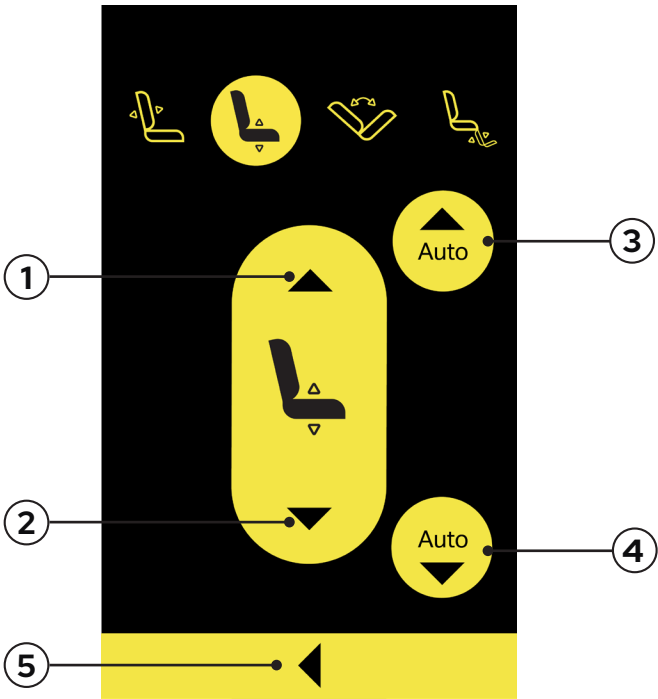
e. Power Seating
i. Tilt

Item	Description
1	Tilt Seat Backwards
2	Tilt Seat Forwards
3	Return to Previous Page



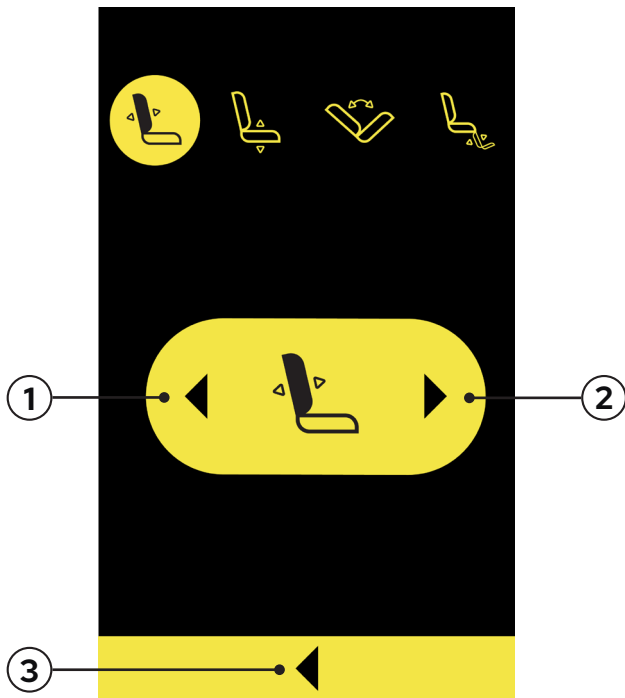
ii. Lift

Item	Description
1	Lift Seat
2	Lower Seat
3	Auto Lift Seat
4	Auto Lower Seat
5	Return to Previous Page



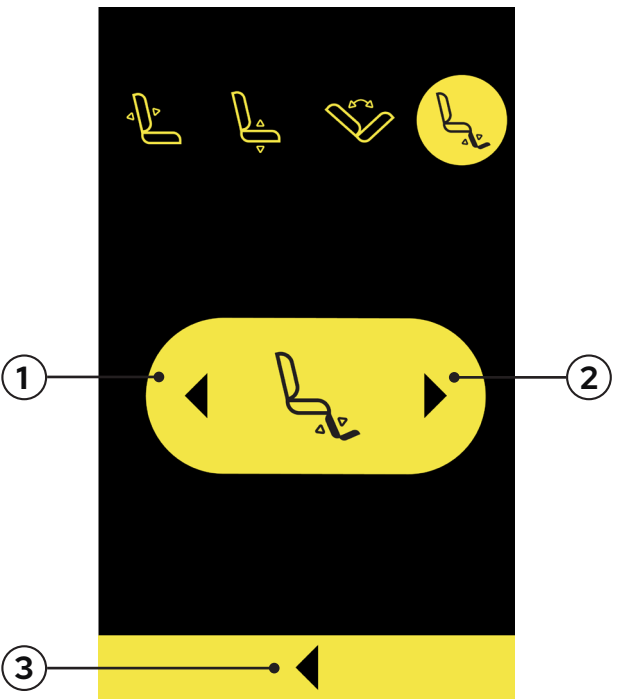
iii. Recline

Item	Description
1	Recline Seat Back
2	Recline Seat Forward
3	Return to Previous Page



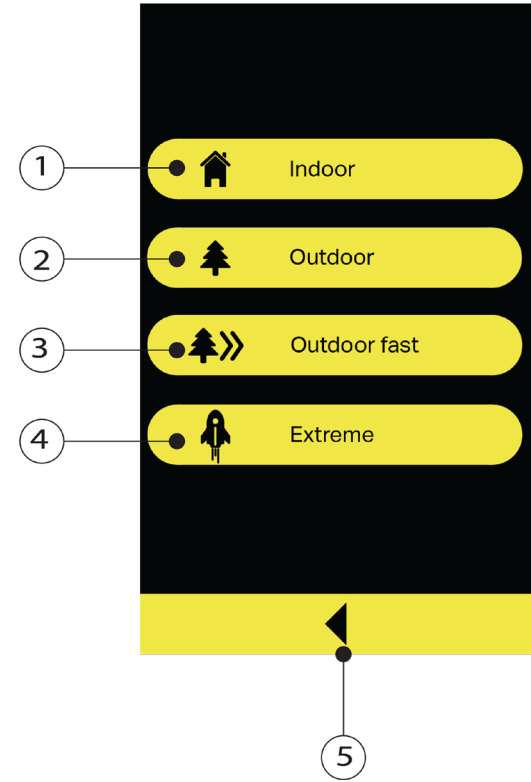
iv. Leg Raise

Item	Description
1	Raise Footplate
2	Lower Footplate
3	Return to Previous Page



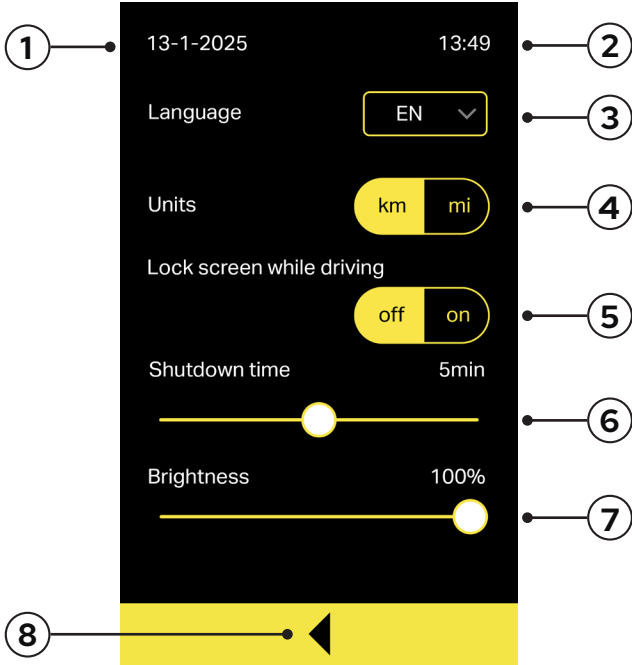
f. Drive Mode Selection

Item	Description
1	Indoor Mode
2	Outdoor Mode
3	Outdoor Fast Mode
4	Extreme Mode
5	Return to Previous Page



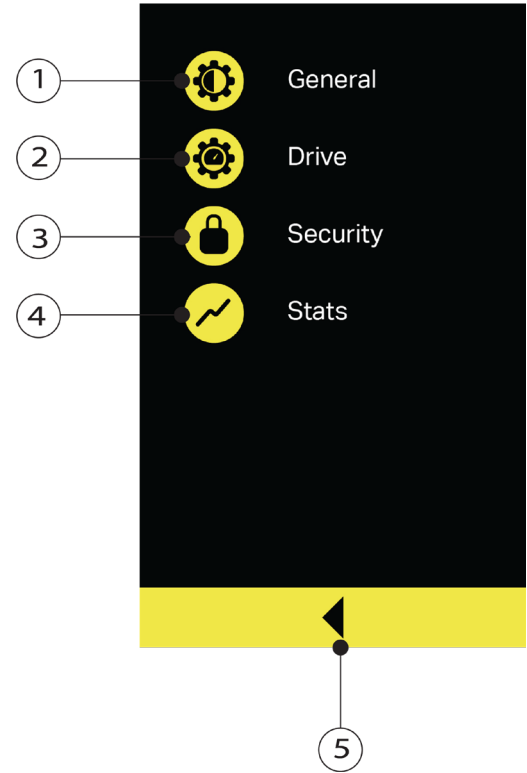
h. General Settings

Item	Description
1	Date
2	Time
3	Language
4	Distance Units (km/miles)
5	Lock Screen While Driving (all buttons on screen will be unusable while the chair is moving)
6	Shutdown Time (1-10 mins)
7	Screen Brightness (10-100%)
8	Return to Previous Page



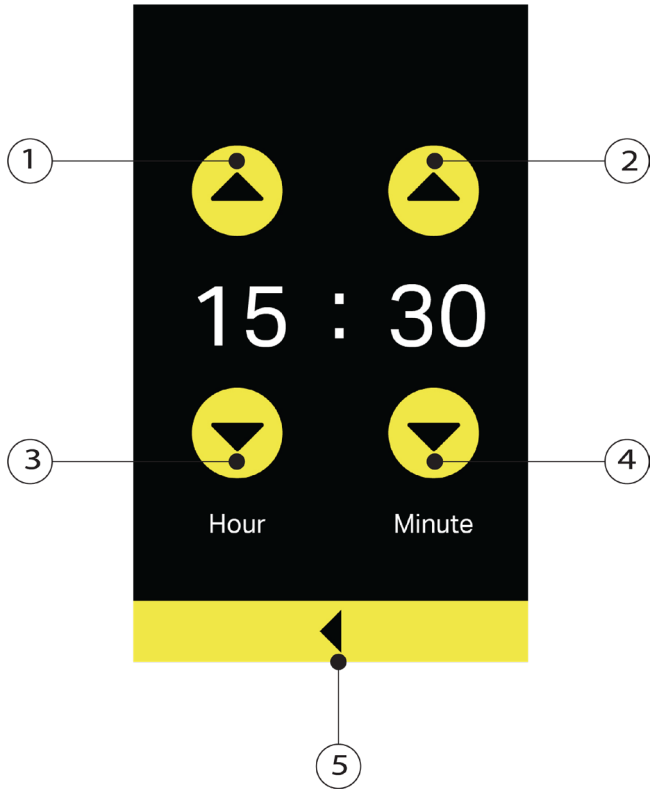
g. Chair Settings

Item	Description
1	General Settings
2	Drive Settings
3	Security Settings
4	Stats
5	Return to Previous Page



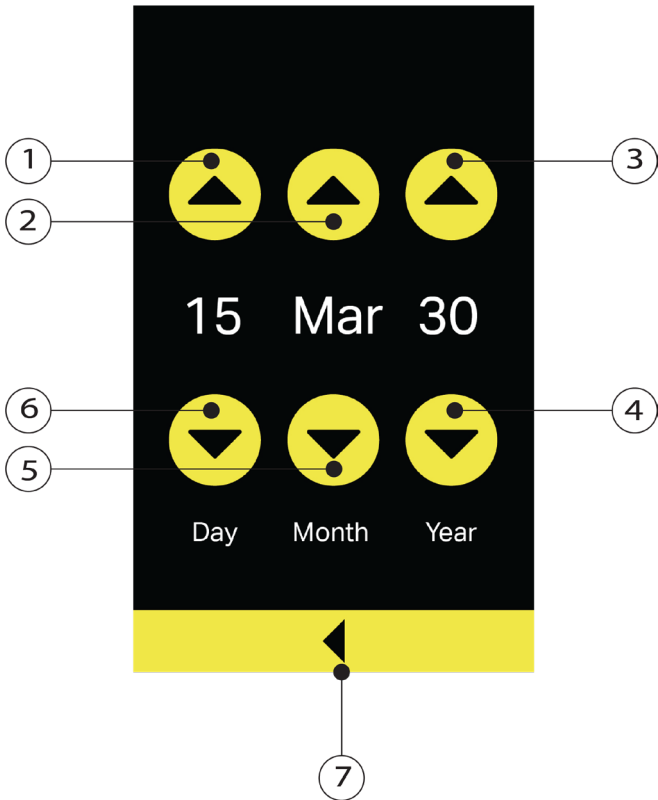
i. General Settings – Time

Item	Description
1	Increase Hours
2	Increase Minutes
3	Decrease Hours
4	Decrease Minutes
5	Return to Previous Page



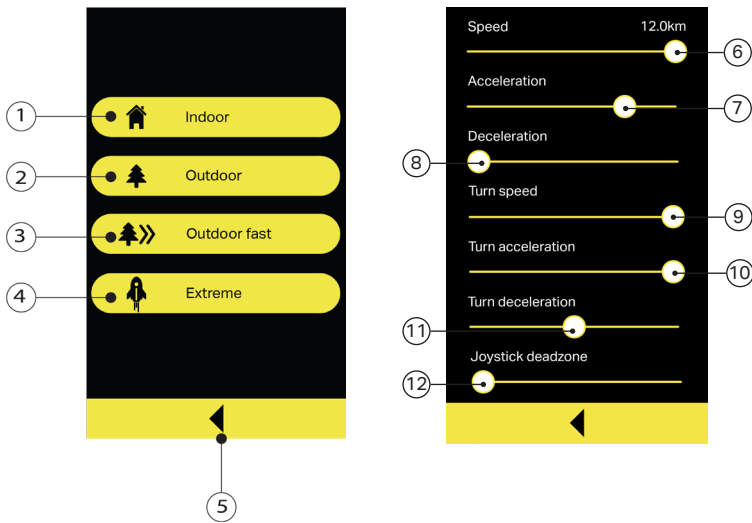
ii. General Settings – Date

Item	Description
1	Increase Day
2	Increase Month
3	Increase Year
4	Decrease Day
5	Decrease Month
6	Decrease Year
7	Return to Previous Page



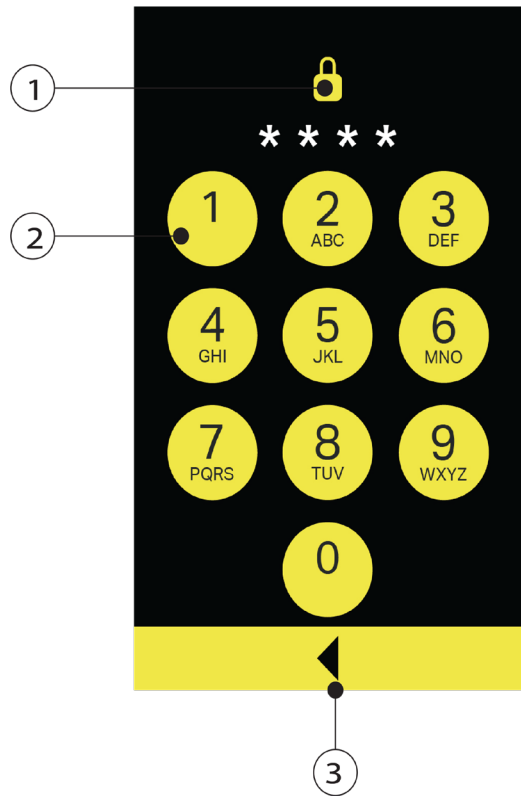
iii. General Settings – Drive Settings

Item	Description
1	Indoor Mode
2	Outdoor Mode
3	Outdoor Fast Mode
4	Extreme Mode
5	Return to Previous Page
6	Speed
7	Acceleration
8	Deceleration
9	Turn Speed
10	Turn Acceleration
11	Turn Deceleration
12	Joystick Deadzone



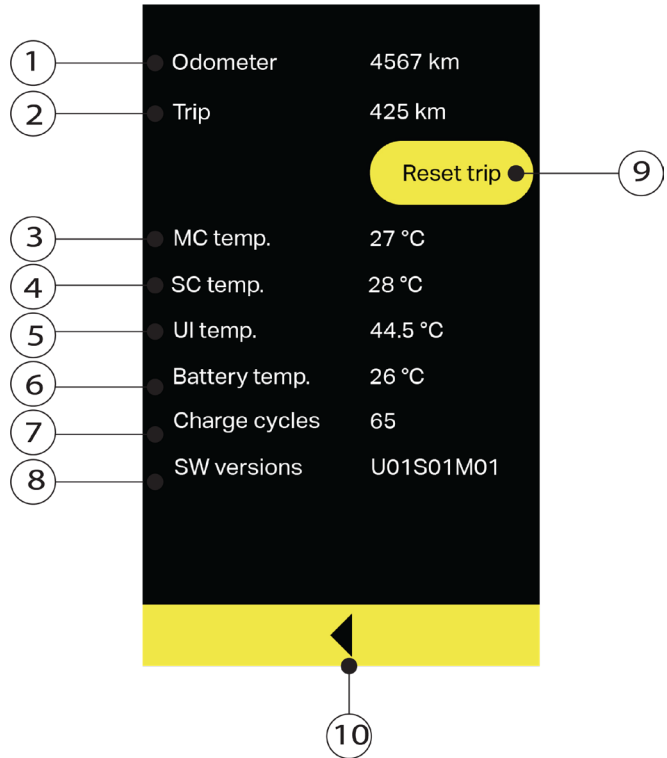
iv. General Settings – Security Settings

Item	Description
1	Set 4 Digit Pin
2	Keypad
3	Return to Previous Page



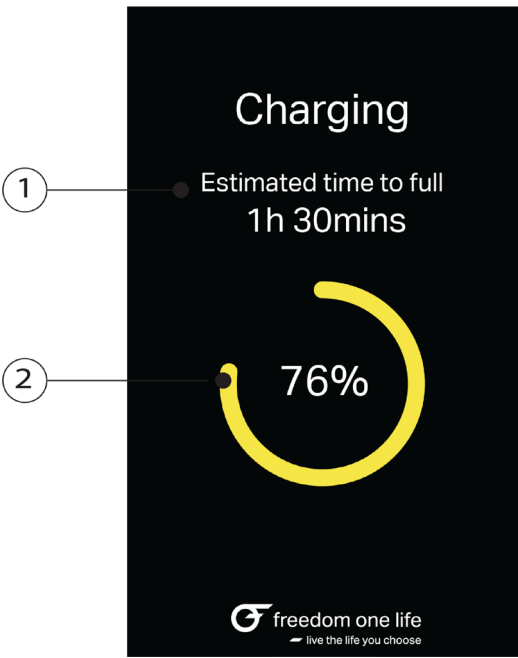
v. General Settings – Statistics

Item	Description
1	Odometer
2	Trip
3	Motor Controller Temperature
4	System Controller Temperature
5	User Interface Temperature
6	Battery Temperature
7	Charge Cycles
8	SW Version
9	Reset Trip
10	Return to Previous Page



i. Charging Screen

Item	Description
1	Estimated Time for Full Charge
2	State of Charge

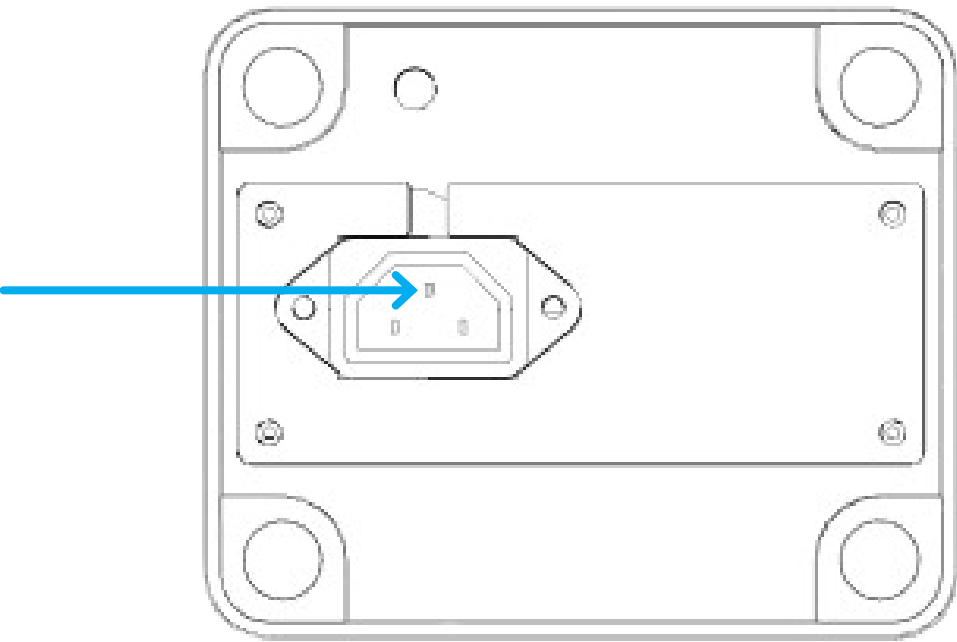


8. Battery, Charging and Range

8.1. Battery

The Series 5 is powered by a maintenance-free rechargeable Lithium-ion battery. This battery is designed to only be removed by a trained service engineer. For full battery specification, see section 12.

8.1.2. Charging Batteries



- 1. Remove cover.
- 2. Insert IEC 13 connector into the wheelchair socket.
- 3. Plug AC plug into mains power socket.
- 4. When charging is complete, remove IEC C13 connector.
- 5. Replace cover.

The chair will be inoperable during charging and will only be operable once the cover has been replaced correctly.

The battery is designed to be used until fully depleted, however, for maximizing the battery life, charge daily after use.

Fully charge battery to maximise battery life. Avoid partial charging.



WARNING

Never plug in a wet cable to the socket or AC power socket.
Use a cable approved by Freedom One Life.
Cable may cause a tripping hazard.
Use 100-240V standard household AC power.
Only charge indoors.
Don't clean or do maintenance on the chair while charging.
Never smoke or allow a spark or flame in the vicinity of the battery or charger.
Only replace the fuse in the plug with same fuse rating (UK only).
When battery state of charge reads under 20%, consider charging as soon as possible. Lithium-ion batteries can deplete rapidly under 20%.

8.1.3. Range

See section 12 for expected range. Factors which will influence the range of the product include:

- Battery capacity.
- Tyre pressure.
- Tyre tread.
- Body weight of the user.
- Ambient temperature.
- Driving conditions.
- Driving style.

8.1.4. Replacing Batteries

Batteries may only be replaced by Freedom One Life or your authorised distributor.

9. Storage and Transportation

9.1. Storage – General

- Store the wheelchair in a location protected from external elements.
- Maintain an ambient temperature between 10°C and 25°C.
- Ensure the powered wheelchair is not stored near sources of heat or cold.

9.1.2. Storage – Short Term

- Store the powered wheelchair in a safe location.
- Ensure it is protected against external elements.
- Power OFF the user interface.

9.1.3. Storage – Long Term

When storing the powered wheelchair for extended periods of time (greater than one week):

- Fully charge the powerchair.
- Store the wheelchair in a location protected from external elements.
- Turn off the user interface and remove the isolation key (see section 5.2 and 4.11.)
- For extended storage, it is recommended the tyres are rotated weekly to prevent permanent deformation.
- Fully charge the powerchair every 3 months to maintain battery health.



CAUTION

When leaving the power wheelchair unused for over 1 week, remove the isolation key (see section 4.11). Failure to do so could result in damage to the battery.
Exposing the chair to extreme hot and cold temperatures may injure the user as certain parts may cause burns if touched.
Using the product under incorrect environmental conditions may cause product failure. For information on operating temperatures, please see section 3.4.

9.2. Using the Series 5 as a Seat in a Motor Vehicle.

The Series 5 has four tie-down points and has been successfully tested as a seat in a motor vehicle using a four point tie-down system and occupant restraint system as defined in ISO 7176:19.

The Series 5 is suitable for use as a forward facing seat in a motor vehicle, with a maximum recommended user mass of 136kg. The Series 5 must be secured using a four point tie-down system and the occupant restrained using a vehicle anchored three point lap and diagonal restraint system, both in compliance as a system with ISO 10542-1:2012.

The wheelchair tie-downs must be attached to the specified securement points at the front and rear of the wheelchair, as shown below. It is recommended that securement straps with karabiner end fittings are used at all wheelchair securement points.

After a vehicle collision

If you have been involved in a vehicle collision, it's important that a Magic Mobility authorised agent inspects your powerchair before you use it again. If the damage is questionable or there is concern about its condition, then Magic Mobility recommends that the chair is replaced.

Attention powerchair users – your powerchair warranty is void if it's been involved in a collision.



The occupant restraint system should be fitted as close fitting to the occupant as possible. The lap belt must be placed low on the pelvis of the occupant to ensure effective restraint. The shoulder belt should be anchored above and behind the shoulder of the occupant, run across the centre of the chest, over the sternum and depart midway on the shoulder of the occupant

Items of luggage attached to the Series 5, such as a back-pack or equipment bag should be removed during wheelchair transport.



WARNING

A headrest must be used if using the Series 5 as a seat in a vehicle.

9.3. Dahl Docking Systems

To install a Dahl Docking System:

Notes before installation:

No disassembly of the Series 5 is required
Dahl special nuts are pre-installed on all Series 5 powered wheelchairs produced from 2026 onwards.
Any Series 5 produced from 2023-2025 must return to Freedom One Life or an approved partner for modification prior to installation. Contact Freedom One Life for a quotation.



CAUTION

The installation should only be performed by a qualified technician. Read all instructions carefully before proceeding with the installation.

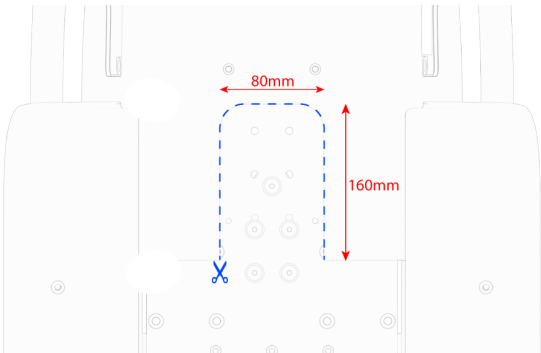
The Series 5 comes with special nuts 502848 pre-fitted. They are held in place using screws, these screws must not be used for installation of the docking system.

Ensure screws 502800 are provided by Dahl and used for installation of the Dahl docking system.

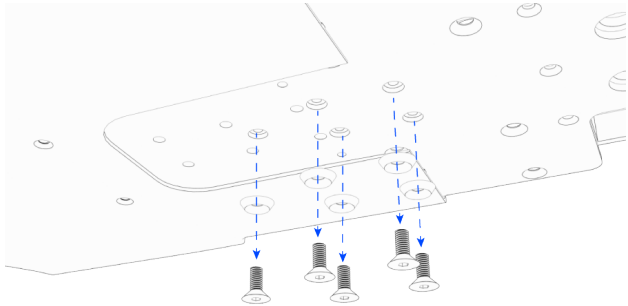
For MKII system use item 501750. For VarioDock system use item 503600.

1. Cut the panel underneath the chair following the dimensions on the image.

Please contact Freedom One Life if you require a cutting template.



2. Remove the 5x M8 countersunk washer and fixings and discard.



3. It is essential to use the **special high-tensile countersunk screws 502800** and NOTHING ELSE.

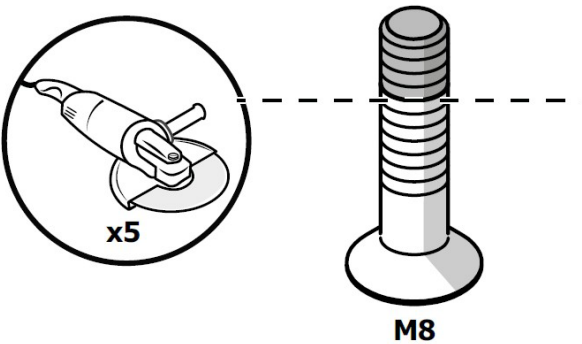
Cut the screw to the thickness of the spacers plus an additional 14mm .

It is very important that the fitter checks that the length of the bolts are correct.

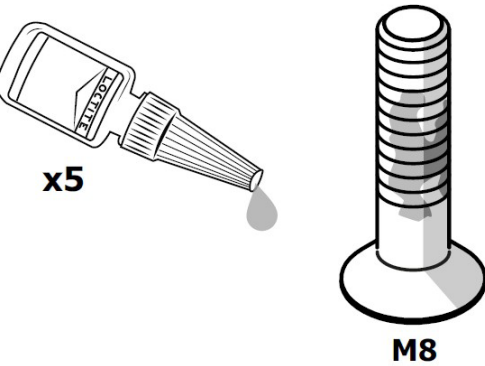
If bolts are too short to reach through all the threads - they will not have the strength to carry the loads required.

If bolts are too long the batteries or other wheelchair components can be damaged.

If necessary replace with longer bolts, or shorten them.

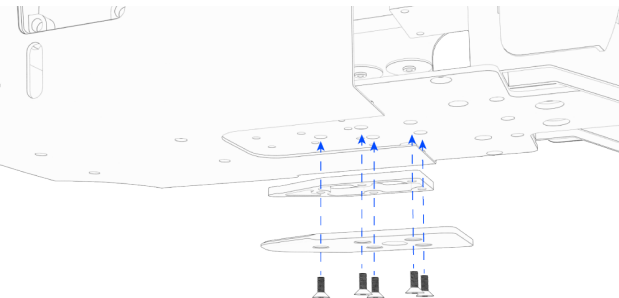


4. Apply Loctite 243 (or an equivalent product) onto the screw.

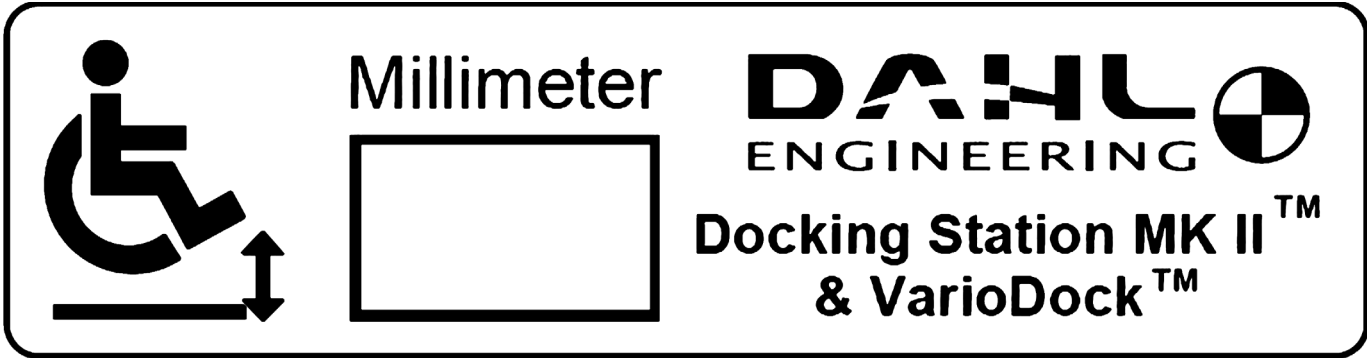


5. Attach the five screws together with the spacer/ spacers.

(Tightening torque: 16-18 Nm/13.3 lb.ft)



Sticker identifying wheelchairs with Dahl Docking locking plate installed



The value noted on the sticker expresses the wheelchair’s ground clearance (minus 1-2 mm).

For the power height adjustable VarioDock™ this is the height that the display must be set to.
For the MK II this is the final height that the docking unit must be installed at.

Failure to set/install the docking unit to the correct height might impede the locking plate from sliding smoothly into the docking unit or prevent the Docking station and wheelchair from connecting altogether.

The installer of the locking plate must measure the ground clearance after installation with the user seated in the wheelchair and note the final height on the sticker.

Make sure that the wheels are inflated to the correct tire pressure.

Attach the sticker to a location that is readily visible to a driver or an assistant.

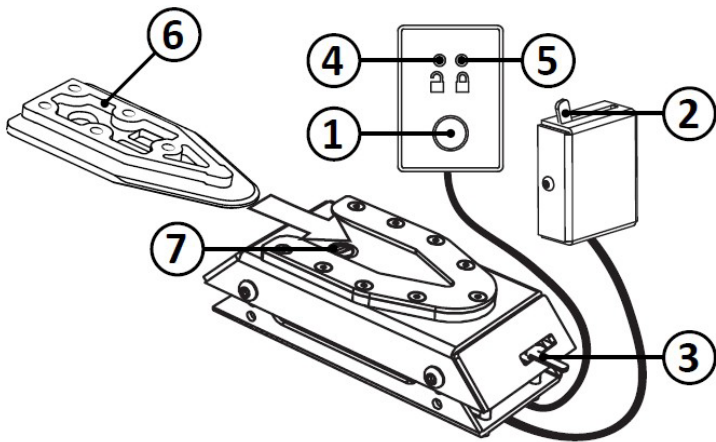
Please also refer to the Dahl Docking Station Mk II and VarioDock user and installation instructions for further details.

Final checks for DAHL Docking system

Perform final check by connecting the wheelchair to the docking station. Check that it is securely locked and make sure that all release methods work as intended.

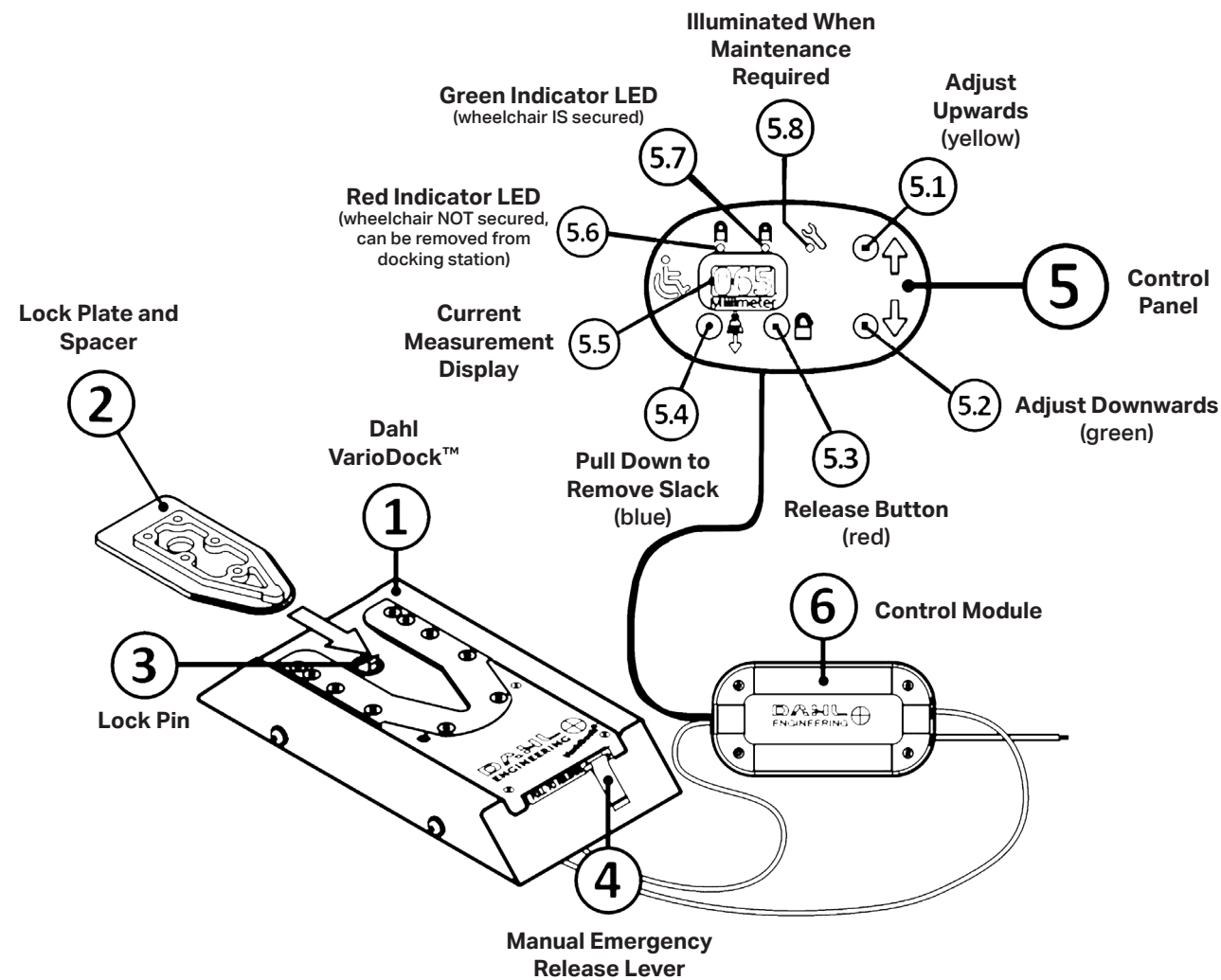
A warning tone will sound if the lock plate is not properly engaged.

Item	Description
1	Release Button
2	Manual Operating Lever
3	Emergency Release
4	Red LED
5	Green LED
6	Lock Plate
7	Lock Pin



VarioDock

Description of how the Dahl VarioDock™ functions:



The Dahl VarioDock™ (1.) is designed to retain manual and electric wheelchairs, as well as Dahl’s seat bases in the vehicle’s floor.

A control module (6.) controls and monitors Dahl VarioDock™’s features, distributes power to the various components, as well as receiving and sending signals to and from the control panel.

Wires are included. Do not carry out any modifications to the supplied wiring or other components.

A lock plate and spacers (2.) must be fitted under the wheelchair. When the wheelchair is manoeuvred towards the VarioDock™, the wheelchair is guided into place by means of the lock plate. When the lock plate is fully engaged in the VarioDock, a springloaded lock pin (3.) automatically secures the lock plate.

VarioDock™ is equipped with a built-in control switch that indicates whether the lock plate is correctly secured in the VarioDock™. As soon as the lock plate comes into contact with the locking pin, a warning tone will sound (a high-pitched alarm sound), and the red LED (5.6.) in the control panel will light up until the lock plate is either fully engaged or else the wheelchair is removed from the VarioDock™.

With the wheelchair correctly secured, the warning tone stops and the green LED (5.7.) in the control panel will light up to indicate, that the wheelchair is properly secured.

The control panel (5.) is connected to an electromagnet which triggers/releases the lock pin for approx. 5 or 8 seconds, after which it is automatically locked once more.

In case of an electrical fault, there is a manual emergency release (4.) on the front edge of the VarioDock. The red piece of webbing on the release arm should be pulled sideways and held in order to release the wheelchair. You can also use the emergency release tool, which is delivered with the VarioDock™.

Securing the wheelchair in the docking station:

Make sure that the leg rests are not colliding with the ramp or the docking station when entering the vehicle.

1. Manoeuvre the wheelchair slowly and in a uniform direction over the docking station. The lock plate under the wheelchair helps to guide the wheelchair into place in the docking station. When the lock plate is fully engaged in the docking station, a spring-action locking pin automatically secures the lock plate.
2. The docking station is equipped with a control switch that indicates whether the lock plate is correctly secured in the docking station. As soon as the lock plate comes into contact with the locking pin, a warning tone will sound (a highpitched howl), and the red diode/lamp (LED) in the control panel will light up until the lock plate is either fully engaged or else the wheelchair is removed from the docking station.
3. As an indication that the wheelchair is properly secured, the warning tone will cease, the red diode in the control panel will go out and the green diode lamp (LED) will light up.
4. Do not forget to buckle up for driving.

Release from the docking station:

1. When the vehicle has been brought to a halt, remove the safety belt.
2. To unlock commence by driving the wheelchair forward to release pressure on the lock pin and then press the red release button in the control panel. The locking pin will be triggered/released for approx. 5 seconds, after which the locking pin is automatically locked/activated again. Do not attempt to reverse out of the docking station until the red LED on the control module, which indicates the unlock position, has been illuminated.
3. Move the wheelchair away from the docking station within this 5-second period.

**WARNING**

Attempting to reverse the wheelchair before the red LED has been illuminated will result in blocking the docking stations lock mechanism, which makes it impossible to reverse. If this happens repeat unlocking procedure.

Manual release in case of electrical failure

1. In the event of electrical failure, a manual emergency release is located at the front edge of the docking station. Move wheelchair forward to release pressure on the lock pin and push the red release arm to one side and hold it there while the wheelchair reverses out of the docking station.
2. A cable-activated manual operating lever can also be fitted (accessory). The red release arm must pushed to one side and should be held there whilst the wheelchair moves away.
3. If the described manual release procedures fails, an emergency release tool made from red plastic comes with each docking station. Move wheelchair forward to release pressure on the lock pin and place the emergency release tool in the gap between the locking plate and the docking station. Push the release tool forward until the locking pin will has been forced down - after which the wheelchair can be reversed out of the docking station.

Please also refer to Dahl Engineering instructions for Installation, Use and Maintenance

The wheelchair as a passenger seat

A wheelchair secured in a vehicle will not provide the equivalent level of safety and security as a vehicle seating system. Freedom One Life recommends that the user transfers to the vehicle seating and uses the vehicle installed restraint system wherever possible. Freedom One Life recognises that it is not always practical for the user to be transferred and in these circumstances, where the user must be transported whilst in the wheelchair, the following advice must be followed:

**DANGER**

- The safety of the user during transportation depends upon the diligence of the person securing the tie down restraints and they should have received appropriate instructions and/or training in their use.
- Wherever possible remove and stow safely away from the wheelchair all auxiliary equipment, e.g. crutches, loose cushions, tray tables, etc.
 - i. Removed and secured separately in the vehicle, or
 - ii. Secured to the wheelchair, but with energy-absorbing padding placed between the table and the user.
- Articulating/elevating leg rest should not be used in the elevated position when the wheelchair and user are being transported.
- If applicable: Reclining backrests should be returned to an upright position.
- If applicable: Seat elevators should be in the lowest position.

Occupant restraint Instruction

**DANGER**

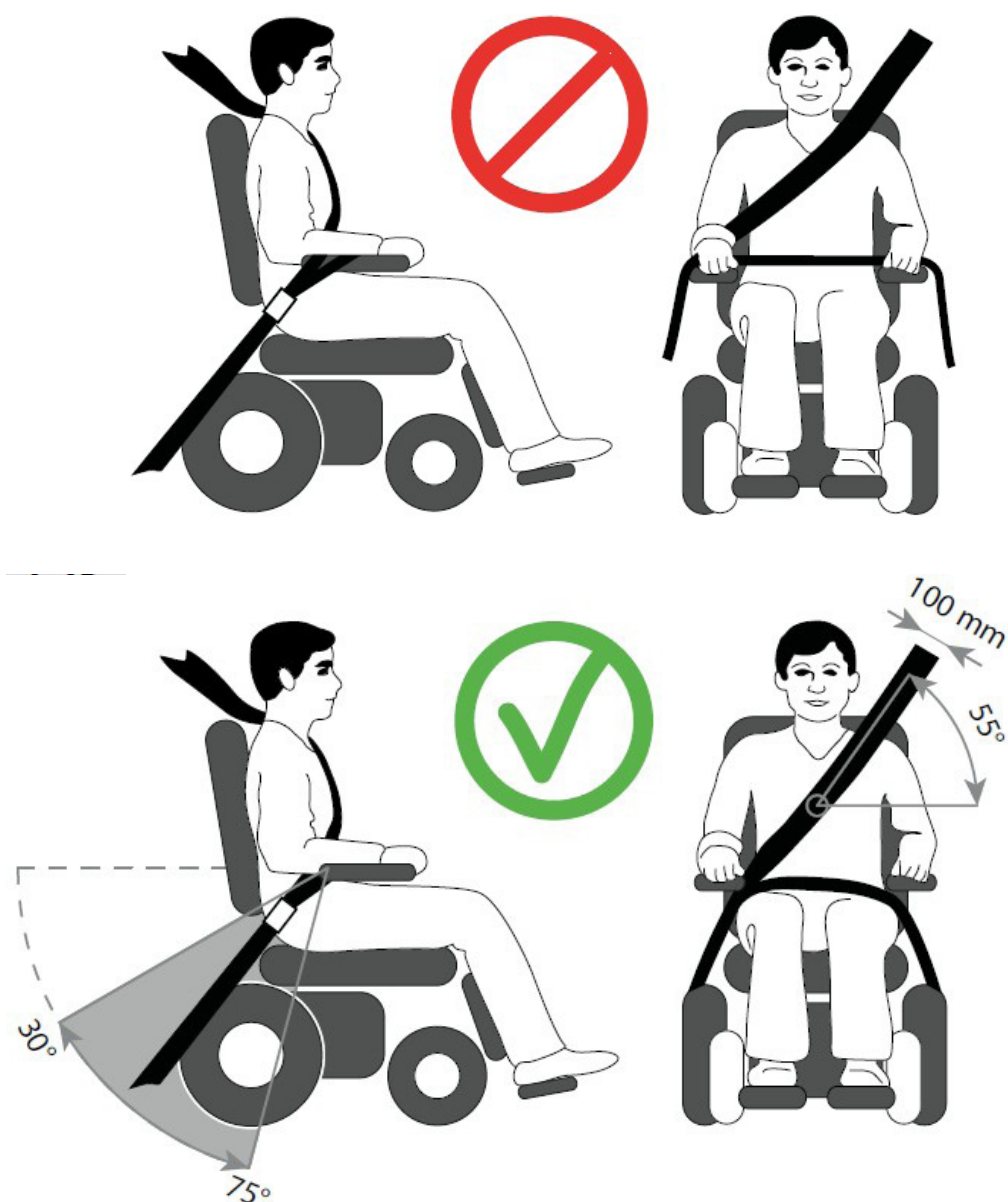
- Use a 3-point occupant restraint system to secure the occupant.
- Both pelvic and upper torso restraint belts must be used to restrain the occupant to reduce the possibility of head and chest impacts with the vehicle components.
- Restraints should be mounted to the appropriate vehicle pillar and should not be held away from the body by wheelchair components such as armrest or wheels.
- Use a suitable positioned headrest when being transported in a wheelchair.
- Any wheelchair anchored occupant restraint i.e. 3-point belt, harness or postural supports (lap straps, lap belts) should not be used or relied on for occupant restraint in a moving vehicle, regardless if labeled ISO 7176-19, ISO 10542-1, SAE J2249 or any other. Use a vehicle anchored and certified occupant restraint system instead.

Positioning the occupant restraint



DANGER

- Belt restraints should make full contact with the shoulder, chest and pelvis and pelvic belts should be positioned low on the pelvis near the thigh-abdominal junction (meeting the requirements specified in ISO 7176-19:2008).
- The pelvic restraint belt must be worn low across the front of the pelvis so that the angle of the pelvic belt is within the preferred zone of 30° to 75° to the horizontal.
- A steeper (greater) angle within the preferred zone is desirable i.e. closer to, but never exceeding 75° degrees i. The upper torso restraint belt must fit over the shoulder and across the chest as illustrated. Restraint belts must be adjusted as tightly as possible consistent with user comfort.
- Restraint belt webbing must not be twisted when in use.
- Care should be taken when applying the occupant restraint to position the seatbelt buckle so that the release button will not be contacted by wheelchair components during a crash.



Passenger with a user weight < 22 kg.

When the user being transported is a child, less than 22 kg mass and the vehicle involved has less than eight (8) seated passengers it is recommended that they be transferred to an UNCE Regulation 44 compliant child restraint system (CRS).

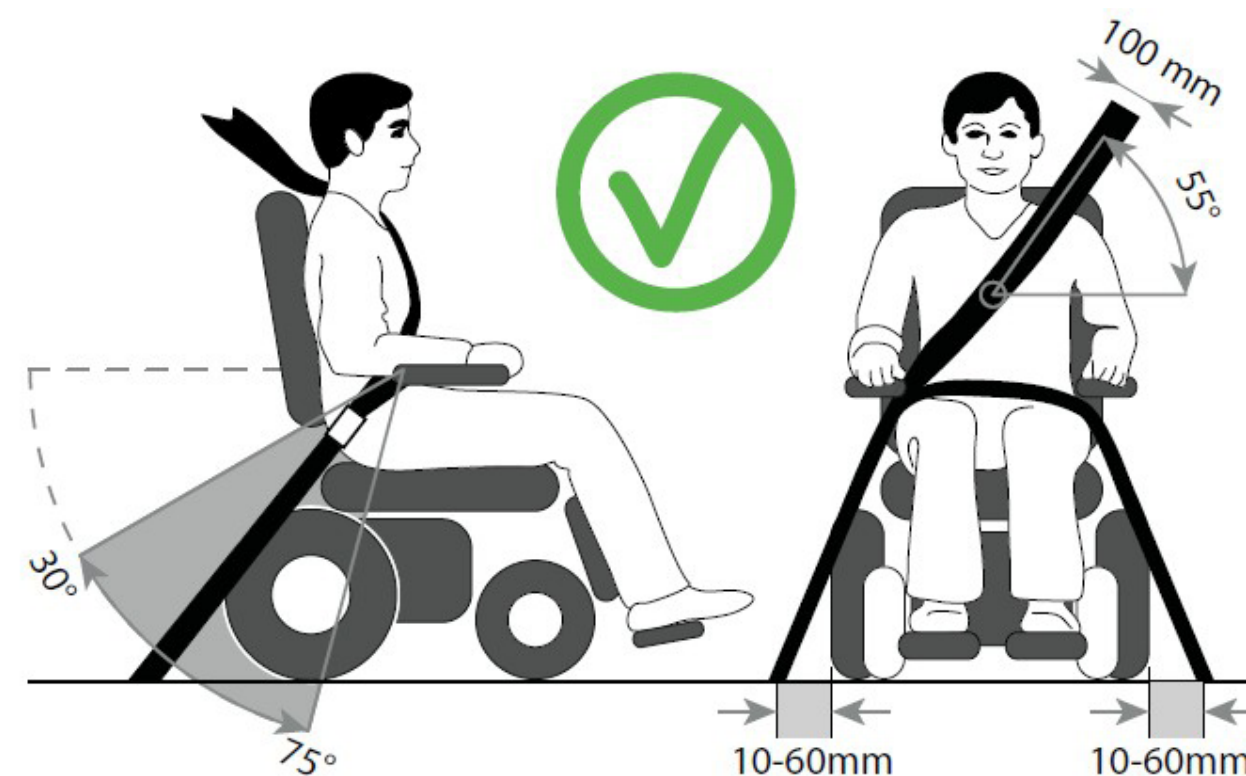
This type of restraint system provides a more effective occupant restraint system than the conventional 3 point occupant restraint system and some CRS systems also include additional postural supports to assist in maintaining the position of the child when seated.

Parents or care providers may consider the option, in some circumstances, for their child to remain in their wheelchair whilst in transport due to the level of posture control and comfort provided by the set up in the wheelchair.

We would recommend in such circumstances that a risk assessment be carried out by your healthcare professional and relevant competent persons.

For use with Dahl Docking system only

When using wheelchair with Dahl Docking system, the floor anchorage points for occupant restraint should be



10. Maintenance

10.1. Tools Required for Maintenance:

- Armrest
 - o 4mm hex key
 - o 10mm socket/spanner
- Footrest
 - o 5mm hex key
 - o 13mm socket/spanner

10.2. General Maintenance

- Loose fixings should be re-tightened to the following torque values using a torque wrench:

Torque Settings	
M4	2.6 Nm
M5	5.1 Nm
M6	8.8 Nm
M8	21.4 Nm

- If a broken or loose component is discovered, stop use immediately and contact your authorised Freedom One Life supplier for a replacement.

**WARNING**

After performing any maintenance or repairs on the wheelchair you must make sure that it is functioning correctly before it is used.

All fixings must be replaced like for like using the correct length, tensile strength and materials.

10.3. Daily Checks

For daily maintenance see section 6

10.4. Weekly Checks

The following weekly check routine should be carried out before driving:

Check Parking Brake

- Perform this test on a level floor with one metre clearance all around the chair.
- Switch on the chair.
- Check the battery state of charge.
- Slowly push the joystick forward until a click is heard from each brake (note: the chair may start to move).
- Immediately release the joystick. A click should be heard from each brake within a few seconds.

Tyre Maintenance and Pressures

It is critical that tyre pressure and tread checks take place regularly. Failure to do so could result in reduced range and increased stopping distance. Notes regarding tyres:

- Ensure tyre pressures are within the recommended range.
 - o Castor wheels pressure should be 35 PSI.
 - o Rear wheels pressure should be 5 PSI for outdoor tyres and 10 PSI for hybrid tyres.
- If the wheelchair is parked for an extended period of time, tyres may become deformed (flat spots).
- If you discover a puncture, please contact Freedom One Life or your authorised distributor.

Checking Connectors and Cables

- Make sure that all connectors are secure.
- Check the condition of all cables and connectors for damage.

Light Maintenance

- Ensure that all the lights are clean. Clean with a damp cloth.
- Ensure that all lights are working before each journey.
- If any lights are not working, please contact Freedom One Life or your authorised distributor.

**DANGER**

Do not inflate beyond the maximum allowed tyre pressure.

10.5. Cleaning and Disinfection

The wheelchair should be wiped over once per week with a slightly damp, not wet, cloth and any fluff or dust that has accumulated around the motors should be blown or dusted away.

All metal material is either Aluminium or Stainless Steel and has been powder coated to protect against corrosion.

Customary household disinfection methods and commercial disinfectants can be used subject to the cautions below.

Hygiene Measures When Being Re-Used:

Prior to the wheelchair being re-used, it must be carefully prepared. All surfaces which come into contact with the user must be treated with a disinfection spray.

To do this, you must use a suitable disinfectant for rapid alcohol-based disinfection of medical products and medical devices. Please take into account the manufacturer's instructions for the disinfectant you are using.

**CAUTION**

Do not use solvents, bleaches, abrasives, synthetic detergents, wax polishes or aerosols.

Disinfectants may be used in dilution as specified by their manufacturer.

Ensure surfaces are rinsed with clean water and dried thoroughly.

Do not jet wash the powerchair, water may get inside the body panels and damage electrical components.

Cleaning the User Interface

Should the user interface of your wheelchair become soiled or dirty, it can be wiped with a damp cloth with a dilute disinfectant until clean.

**DANGER**

If the wheelchair is to be used by more than one person, follow the cleaning and disinfection instructions carefully to ensure that there is no cross contamination.

10.6. Servicing and Repairs

Servicing should take place annually or if a fault occurs.

Servicing must be completed by Freedom One Life or by your distributor.

The expected service life is a minimum of 5 years.

**WARNING**

Using the product beyond the specified expected service life leads to increased residual risk and should only take place subject to the diligence and deliberations of qualified personnel.

If the service life is reached, the user or a responsible attendant should contact the qualified personnel who fitted the product or the manufacturer's servicing department. Here the user can obtain information about known risks and the current options for refurbishing the product.

11. Reuse and Disposal

11.1. Reuse

- The Series 5 must be fully inspected and serviced by Freedom One Life or an authorised dealer.
- The product must be cleaned and disinfected prior to use by another user (see section 10.5).

11.1.2. Chair Disposal (Including Battery)

Contact Freedom One Life or your authorised distributor for disposal.

12. Technical Spec

12.1. Standards

The Series 5 meets the requirements of the following standards:

- EN 12184-2014
- ISO 7176-1
- ISO 7176-2
- ISO 7176-3
- ISO 7176-4
- ISO 7176-6
- ISO 7176-8
- ISO 7176-9
- ISO 7176-10
- ISO 7176-14
- ISO 7176-15
- ISO 7176-16
- ISO 7176-19
- ISO 7176-21
- EN 55011:2016 + A1:2017 + A11:2020 Class B
- EN 61326-1:2013
- EN 61326-2-1:2013
- EN IEC 61000-3-2:2019 + A1:2021
- EN61000-3-3:2013 + A1:2019
- EN60601-1:2006 + A1:2013 + A12:2014

12.2. Series 5 Technical Specification

Model	Series 5
Drive Configuration	Rear wheel drive (RWD)
EN12184 class	B
Total Series 5 weight	160kg
Maximum user weight	136kg

Dimensions		Min	Max
Total length	Centre footrest	1115mm	
	Swing away footrest	1115mm	
Total width		650mm	
Total height	Standard	1080mm	
	With headrest	1240mm	1400mm
Tilt angle		0°	45°
Lift height		0mm	300mm
Backrest recline angle		85 °	155 °
Footrest angle		5°	80°
Total transport length		860mm	
Total trasnport width		650mm	
Total transport height		685mm	

Performance	Min	Max
Max speed forward	-	12km/h
Range ¹	-	40km
Ground clearance	-	100mm
Turning radius	-	890mm
Turn in corridor	-	1250mm
Max obstacle climb	-	120mm
Rated slope	-	10°
Static stability downhill/uphill/sideways	-	9°
Dynamic stability: Maximum safe slope	-	10°

Seating		Min	Max
Seat plane angle		-	0°
Effective seat width		420mm	500mm
Effective seat depth		400mm	480mm
Backrest height		500mm	640mm
Armrest to seat distance		270mm	380mm
Floor to seat height		-	480mm
Legrest lengths (from seat base)	Centre footrest	300mm	400mm
	Swing away footrest	340mm	420mm
	Powered footrest	330mm	420mm

Battery & Charger		Min	Max
Type	Lithium-ion		
Charge time from empty	8 hours		
Capacity	57Ah/3kWh		
Mimimum charge cycles ²	1000		
Normal Battery Voltage	50.4V		
Maximum charging current	8A		
Charger AC voltage	100VAC	240VAC	
UN38.3 Transport Safety Certified			

Tyres	Min	Max
Caster tyre dimensions	10 x 3.5 x 4"	
Caster tyre pressure	-	35PSI (2.4 BAR)
Drive wheel dimensions	16 x 6.5 x 8"	
Rear wheel pressure (fine tread tyre)	-	10PSI (0.7 BAR)
Rear wheel pressure (thick tread tyre)	-	5PSI (0.35 BAR)

¹ Can vary depending on usage, temperature and charge routine

² Can vary depending on usage and charge routine

**WARNING**

Do not exceed the maximum load capacity of 136kg.

13. Troubleshooting

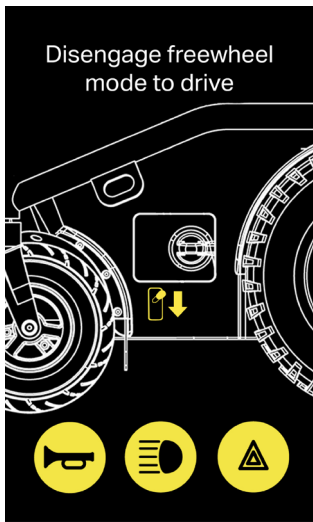
a. Battery Low

- 1. Battery critically low, charge the powerchair as soon as possible.



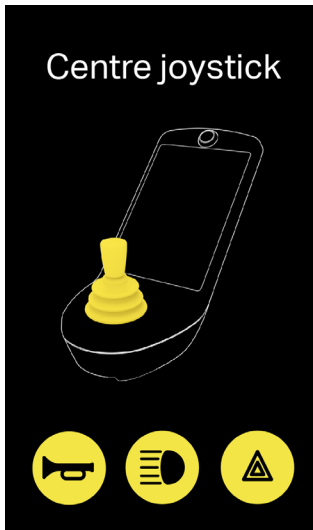
b. Freewheel Mode Engaged

- 1. Check that both freewheel levers are in the downwards position (see section 4.10.).
- 2. If the error persists, turn off chair and contact support and reference the error message.



c. Centre Joystick

- 1. Ensure your hand or no other object is touching the joystick during start-up or when exiting a menu on the user interface. When the joystick is released, the error message should automatically clear.
- 2. If error persists, turn off chair and contact support and reference the error message.



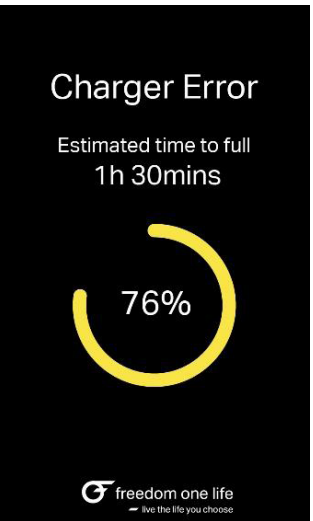
d. Speed Limiter

- 1. When the power seating is in a tilt or lift position, a speed limiter will be activated.
- 2. Adjust the power seating to the normal seating position and the symbol will disappear.
- 3. If the symbol does not disappear and the speed is still limited, contact support and reference the error message.



e. Charger Error

- 1. Unplug the charger and wait for the charge screen to disappear. The Series 5 should now be powered OFF.
- 2. Turn chair ON using the power button (see section 5.2.).
- 3. With the Series 5 power ON, reconnect the charging cable and observe if the error reappears.
- 4. If the error message appears again, contact support and reference the error message.



f. Battery Management System (BMS) Error

- 1. Turn chair OFF and back ON using the power button (see section 5.2.) and observe if the message appears again.
- 2. If the error message appears again, turn the chair OFF using the battery isolation key (see section 4.11.), wait 10 seconds then turn the key to power the chair ON.
- 3. If the message appears again, contact support and reference the error message.



g. Battery Management System (BMS) No Communication

- 1. Turn chair OFF and back ON using the power button (see section 5.2.) and observe if the message appears again.
- 2. If the error message appears again, turn the chair OFF using the battery isolation key (see section 4.11.), wait 10 seconds then turn the key to power the chair ON.
- 3. If the message appears again, contact support and reference the error message.



h. System Controller Error

- 1. Turn chair OFF and back ON using the power button (see section 5.2.) and observe if the message appears again.
- 2. If the error message appears again, turn the chair OFF using the battery isolation key (see section 4.11.), wait 10 seconds then turn the key to power the chair ON.
- 3. If the message appears again, contact support and reference the error message.



i. System Controller No Communication

- 1. Turn chair OFF and back ON using the power button (see section 5.2.) and observe if the message appears again.
- 2. If the error message appears again, turn the chair OFF using the battery isolation key (see section 4.11.), wait 10 seconds then turn the key to power the chair ON.
- 3. If the message appears again, contact support and reference the error message.



j. Motor Controller No Communication

- 1. Turn chair OFF and back ON using the power button (see section 5.2.) and observe if the message appears again.
- 2. If the error message appears again, turn the chair OFF using the battery isolation key (see section 4.11.), wait 10 seconds then turn the key to power the chair ON.
- 3. If the message appears again, contact support and reference the error message.



k. Left Motor Fault

- 1. Turn chair OFF and back ON using the power button (see section 5.2.) and observe if the message appears again.
- 2. If the error message appears again, turn the chair OFF using the battery isolation key (see section 4.11.), wait 10 seconds then turn the key to power the chair ON.
- 3. If the message appears again, contact support and reference the error message.



l. Right Motor Fault

- 1. Turn chair OFF and back ON using the power button (see section 5.2.) and observe if the message appears again.
- 2. If the error message appears again, turn the chair OFF using the battery isolation key (see section 4.11.), wait 10 seconds then turn the key to power the chair ON.
- 3. If the message appears again, contact support and reference the error message.



m. Left Hall Sensor Fault

- 1. Turn chair OFF and back ON using the power button (see section 5.2.) and observe if the message appears again.
- 2. If the error message appears again, turn the chair OFF using the battery isolation key (see section 4.11.), wait 10 seconds then turn the key to power the chair ON.
- 3. If the message appears again, contact support and reference the error message.



n. Right Hall Sensor Fault

- 1. Turn chair OFF and back ON using the power button (see section 5.2.) and observe if the message appears again.
- 2. If the error message appears again, turn the chair OFF using the battery isolation key (see section 4.11.), wait 10 seconds then turn the key to power the chair ON.
- 3. If the message appears again, contact support and reference the error message.



o. Left Brake Fault

- 1. Turn chair OFF and back ON using the power button (see section 5.2.) and observe if the message appears again.
- 2. If the error message appears again, turn the chair OFF using the battery isolation key (see section 4.11.), wait 10 seconds then turn the key to power the chair ON.
- 3. If the message appears again, contact support and reference the error message.



p. Right Brake Fault

- 1. Turn chair OFF and back ON using the power button (see section 5.2.) and observe if the message appears again.
- 2. If the error message appears again, turn the chair OFF using the battery isolation key (see section 4.11.), wait 10 seconds then turn the key to power the chair ON.
- 3. If the message appears again, contact support and reference the error message.



q. Abnormal Voltage

- 1. Turn chair OFF and back ON using the power button (see section 5.2.) and observe if the message appears again.
- 2. If the error message appears again, turn the chair OFF using the battery isolation key (see section 4.11.), wait 10 seconds then turn the key to power the chair ON.
- 3. If the message appears again, contact support and reference the error message.



r. Joystick Error

- 1. Turn chair OFF and back ON using the power button (see section 5.2.) and observe if the message appears again.
- 2. If the error message appears again, turn the chair OFF using the battery isolation key (see section 4.11.), wait 10 seconds then turn the key to power the chair ON.
- 3. If the message appears again, contact support and reference the error message.



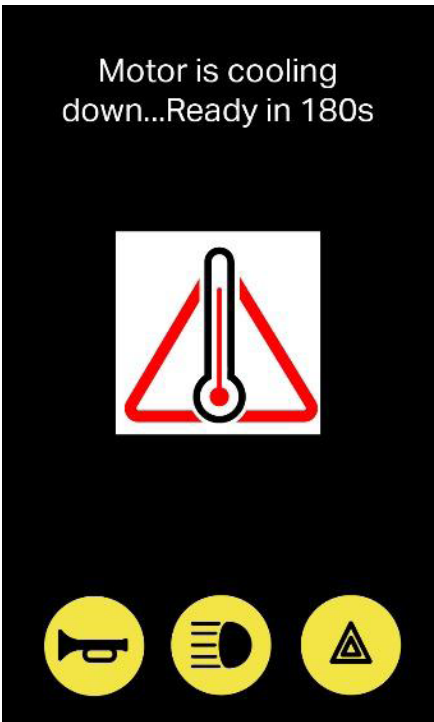
s. Motor Over Current

This error appears when the motors are being driven over their safe limits. This may occur when you are trying to climb an obstacle that is above specification or if you are driving against an immovable object.

- 1. Release the joystick
- 2. If possible, move in a different direction and try to overcome the obstacle in a different way or go around it.
- 3. The error will disappear and normal performance will resume once the Series 5 is no longer stuck.

Stall Condition

- 1. If movement is continued against an object while the Motor Over Current symbol is present, the chair will stall and an error message will appear for a period of 3 minutes to allow the motors to cool sufficiently.
- 2. Wait for this error message to clear itself.
- 3. Once the error message disappears, normal use can continue.



14. Warranty and Terms & Conditions

THIS WARRANTY DOES NOT AFFECT YOUR STATUTORY RIGHTS.

If you would like to exercise your rights under this warranty, please contact the Authorised Distributor from whom you first purchased your product to refer your claim onto Freedom One Life, or contact Freedom One Life Directly at:

Email: info@freedomonelifelife.com
Phone: +44 (0) 141 258 3150

Freedom One Life provides a warranty under the following conditions.

Warranty Conditions:

- 1. Should a part or parts of 'Series 5' powerchair require repair or replacement as a result of a manufacturing and/or material fault within 3 years of the date the product is delivered to you, then the affected part or parts will be repaired or replaced. The warranty only covers the costs of repair or replacement of parts due to manufacturing defects and associated labour is subject to the exclusions set out below.
- 2. Accessories provided by Freedom One Life Limited are subject to a 12 month warranty from the date the product is delivered to you, subject to the conditions of this warranty and the exclusions set out below. For the avoidance of doubt this warranty does not include any of the costs associated with transporting the goods for repair under warranty. Where we at our discretion agree to collect the goods from you we reserve the right to charge you for our costs incurred in doing so.
- 3. To make a claim under this warranty, please contact Freedom One Life or the Authorised Distributor from whom you purchased your product. Please retain your proof of purchase as this will be required to verify your warranty claim. If this is not available, please provide your full customer details to Freedom One Life or your Authorised Distributor in order to help us to verify your warranty claim.
- 4. The product must always be repaired by Freedom One Life, an Authorised Distributor or a service centre authorised by Freedom One Life to undertake repair and servicing of our products, regardless of warranty status. The costs of repairs or servicing carried out by persons not authorised by Freedom One Life will not be reimbursed under any circumstances.
- 5. You will be required to pay for the costs of packaging and shipping the product under warranty to us, your Authorised Distributor or the Authorised Service Centre, and for return of the products to you.
- 6. Parts which have been repaired or exchanged within the conditions of the warranty, are covered for the remainder of the original product warranty period.
- 7. If parts are required outside of the warranty period or scope, these will be fitted at the customer's expense (including the costs of transport of the product for fitting of new parts, the parts and labour). These will have a 12-month warranty from the date fitted and the same warranty conditions and exclusions apply.

8. This Warranty does not cover:
- (a) Damage arising due to overloading of the product. The maximum load weight of the 'Series 5' powerchair is 136kg (including user weight and any bags and their contents, accessories and luggage).
 - (b) Normal wear and tear in the course of ordinary and intended use, which includes but is not limited to the following parts where fitted: batteries, armrest pads, upholstery, tyres (including punctures).
 - (c) Cosmetic damage and defects including scuffing, scratches or paint damage.
 - (d) Damage or defects arising as a result of the product not being maintained or serviced in accordance with Freedom One Life's recommendations as shown in the user manual.
 - (e) Damage or defects caused by accessories that have been used which are not specified as official Freedom One Life accessories.
 - (f) Damage caused by industrial pollution, external heat or chemicals.
 - (g) Product damage caused accidentally or through neglect, including without limitation damage caused by improper handling or storage or by natural disasters such as earthquakes, fire and flooding.
 - (h) Changes and/or modifications which have been made to the product, which deviate from the manufacturer's specifications set out in the user manual for the product.
 - (i) Repairs which have not been carried out by an Authorised Distributor or other third party approved by Freedom One Life.
 - (j) Damage arising from the use, handling or operation by individuals or entities moving or handling the product on your behalf, including without limitation transportation staff, shipping companies, moving services and similar.
9. Freedom One Life Limited is not responsible for any consequential loss or damage, whether direct or indirect, that arise from any incident necessitating repairs under this warranty, including without limitation, the costs of seeking alternative transportation and/or disruptions to travel and other plans.
10. This Warranty is subject to the laws of the country in which the product was purchased from Freedom One Life or the Authorised Distributor.

15. Contact Information

Please contact Freedom One Life or the local distributor for any Technical Support queries using the contact details below:

Manufacturer:

Freedom One Life Ltd.
The Pentagon Centre, 36 Washington St
Glasgow
G3 8AZ
United Kingdom

Email address:

info@freedomonelife.com

Telephone No:

+44(0) 141 258 3150

16. Reporting Requirements

Any serious incident that occurs in relation to this device must be reported to Freedom One Life, your authorised distributor and the competent authority of the country in which the user is established.

EC Rep:

AR Experts B.V.
Boeingavenue 209
1119PD Schiphol-Rijk
The Netherlands

Telephone:

+31 (0) 850 07 32 10

Email:

info@certification-experts.com

Notes

[illegible][illegible]

