

# Rea<sup>®</sup> Azalea<sup>®</sup>

Azalea<sup>®</sup> Assist, Azalea<sup>®</sup> Base, Azalea<sup>®</sup> Max, Azalea<sup>®</sup> Minor, Azalea<sup>®</sup> Tall

en Manual wheelchair passive Service Manual



CE

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# 1 General

# 1.1 Introduction

This document contains important information about assembly, adjustment and advanced maintenance of the product. To ensure safety when handling the product, read this document and the user manual carefully and follow the safety instructions.

Find the user manual on Invacare's website or contact your Invacare representative. See addresses at the end of this document.

Invacare reserves the right to alter product specifications without further notice.

Before reading this document, make sure you have the latest version. You find the latest version as a PDF on the Invacare website.

For pre-sale and user information, see the user manual.

For more information about the product, for example product safety notices and product recalls, contact your Invacare representative. See addresses at the end of this document.

# **1.2** Delivery check

4

Any transport damage must be reported immediately to the transport company. Remember to keep the packaging until the transport company has checked the goods and a settlement has been reached.

# 1.3 Symbols in This Manual

Symbols and signal words are used in this manual and apply to hazards or unsafe practices which could result in

personal injury or property damage. See the information below for definitions of the signal words.



I

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### WARNING

Indicates a hazardous situation that could result in serious injury or death if it is not avoided.

#### CAU India

CAUTION

Indicates a hazardous situation that could result in minor or slight injury if it is not avoided.

IMPORTANT Indicates a hazardous situation that could result in damage to property if it is not avoided.

Tips Gives useful tips, recom

Gives useful tips, recommendations and information for efficient, trouble-free use.

Tools Identifies required tools, components and items which are needed to carry out certain work.

# 1.4 Limitation of Liability

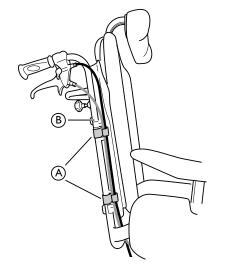
Invacare accepts no liability for damage arising from:

- Non-compliance with the user manual
- Incorrect use
- Natural wear and tear
- Incorrect assembly or set-up by the purchaser or a third party
- Technical modifications
- Unauthorised modifications and/or use of unsuitable spare parts

# 2 Assembly

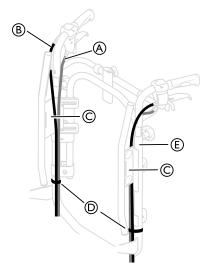
# 2.1 Placing the wires

# 2.1.1 Wires with backrest plate



- 1. Thread the wires on the outside of the backrest tubes  $(\mathbb{B})$ .
- 2. Place the wires in the holders/clips (A) in order to hold them in place.
  - $\underbrace{\tilde{l}}_{\underline{l}} \qquad \mbox{Fold the slack of the wires under the seat to} \\ \mbox{get them out of the way.}$

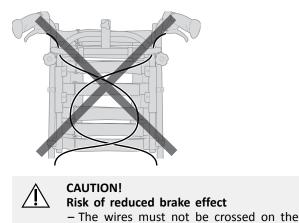
### 2.1.2 Wires with tension adjustable backrest



- 1. Place the wires (A) and (B) as shown on the picture above.
  - Risk of damage to the wires

     It is important that the cable for the assistant brake (A) is placed on the inside of the backrest tubes.
- 2. Place the wire for the backrest/seat recline  $\ensuremath{\mathbb{B}}$  outside of the backrest tubes.

- 3. Place both of the wires on the inside of the backrest attachment  $\mathbb{C}.$
- 4. Attach the wires to the backrest tubes  $\ensuremath{\mathbb{E}}$  with the straps  $\ensuremath{\mathbb{D}}.$ 
  - $\underbrace{\tilde{\mathbb{I}}}_{\mathbb{I}} \qquad \mbox{Fold the slack of the wires under the seat to} \\ \mbox{get them out of the way.}$

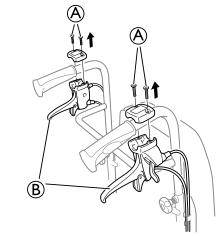


backrest!

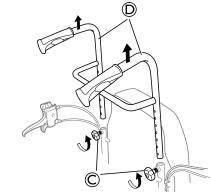
1.

2.

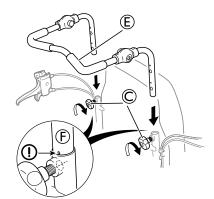
# **2.2** Mounting the angle adjustable push bar



Loosen and remove the screws A and the brake handles B.



Loosen the handwheels  $\mathbb C$  and remove the push handles  $\mathbb D.$ 



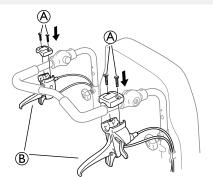
Mount the push bar E in the backrest tubes and tighten the handwheels C.

# WARNING!

The push bar can loosen from the attachments

- Make sure that the marking (F) on the tubes are fitted against the backrest tube.
  Check that the handwheels can be
- tightened properly, the screw of the handwheel should barely be visible. If the push bar is in the wrong position, the handwheel will not be possible to tighten properly.

4.



Re-mount the brake handles B and tighten the screws A.

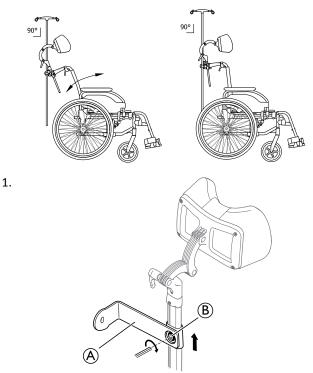
Torx driver T20

# 2.3 Mounting the Drip stand



### WARNING! Risk of tippir

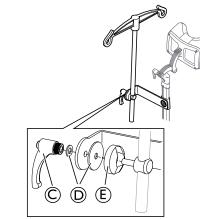
**Risk of tipping / injury** - Max load on the drip stand: 4 kg (2 x 2 kg).



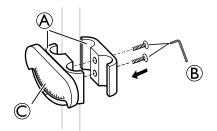
Mount the holder for the drip stand A on the neckrest holder and tighten the screw B.

5 mm Allen key



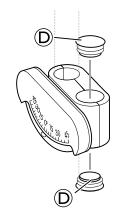


Mount the lever  $\mathbb{C}$ , the washers  $\mathbb{D}$  and the holder with the drip stand  $\mathbb{E}$  in the attachment and tighten the lever.



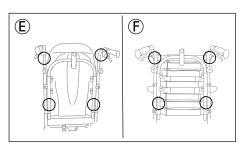
Attach the clamps A with the tilt scale C to the push bar/push handles or the backrest tubes and tighten the screws B.

2.



Place the end plugs  $\mathbb{D}$  in the empty holes.

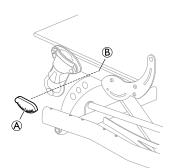
3.



Place the tilt scale for the backrest angle on the push bar/push handle or on the backrest tubes according to picture (E) or (F) above.

# 2.5 Tilt scale seat

1.



Place the tilt scale for the seat (A) on the seat frame (B).

 $\tilde{I}$  The tilt scale should be placed on the left side.

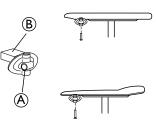
# **2.6** Mounting the attachment for table tray

1.

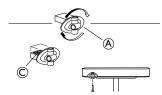
2.

1.

2.



Mount the table attachment B with the attachment part facing outwards. The plain surface B of the attachment should be placed upwards when using the table on the thin armrests.



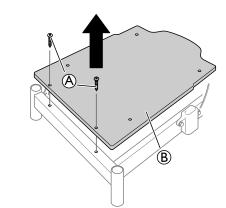
To fit the table attachment A to the wide armrest, turn the attachment around, the patterned surface C should now be facing upwards.

# 2.7 Mounting the sliding seat

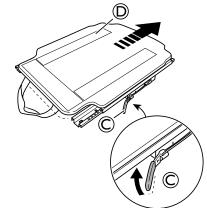
## WARNING!

Risk of injury

- Be aware of the pinching risk when moving the sliding seat back- and forwards.



Loosen and remove the screws  $\textcircled{\sc B}$  and the seat plate  $\textcircled{\sc B}.$ 

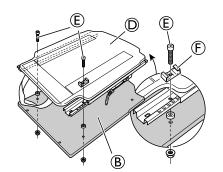


Press the release handle  $\mathbb C$  and push the sliding seat  $\mathbb D$  backwards.

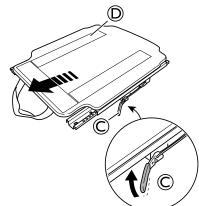
4.

5.

6.

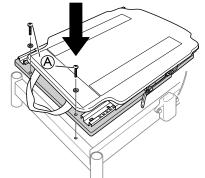


- a. Mount the sliding seat D on the seat plate B.
- b. Attach the stop block **(F)**.
- c. Attach the front screws and nuts E.
- d. Tighten the screws and nuts E.



Press the release handle  $\mathbb C$  and push the sliding seat  $\mathbb D$  forwards.

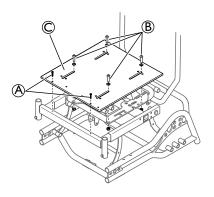
Attach and tighten the rear screws and nuts G.



- a. Re-mount the seat plate and the sliding seat on the seat frame.
- b. Re-mount and tighten the screws and nuts for the seat plate  $\textcircled{\basis}.$

# 2.8 Azalea Base seat attachment

### Seat plate



- $\underbrace{\mathring{l}}_{\underline{l}} \quad \text{The seat plate can either be used as a base for a seat cushion or for attaching seat shells and other seating modules.}$
- The seat plate © can either be used as a base for a seat cushion or for attaching seat shells and other seating modules.
- When delivered, the seat base is fixated with two screws (A).
- If a seat shell is to be attached, the seat plate needs to be fixated with four additional screws (B). These are delivered with the wheelchair.
- $\tilde{I}$  The seat plate is adjustable in depth.

### Seat plate with wedge

 $\frac{0}{2}$  The seat plate with wedges is an option that gives the possibility of 5° extra tilt either in front or in the back.

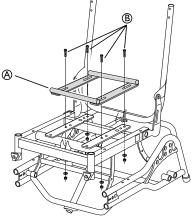


### CAUTION! Risk of damage

The one-piece moulded seat attachments might break.

 The back should not be reclined when the Azalea Base is equipped with one-piece moulded seat attachments.

### H-bracket



- A H-bracket
- B Attachment screws
- $\begin{tabular}{ll} $\widehat{l}$ & The H-bracket is used when attaching a quick-release seat shell to the Azalea Base. \end{tabular}$
- $\tilde{\parallel}$  The H-bracket is adjustable in depth.

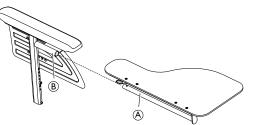
#### 2.9 Mounting the table tray



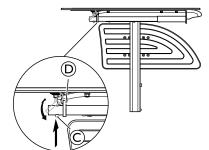
Mount the table tray  $\triangle$  in the table tray attachments  $\bigcirc$ .

#### Mounting the half tray 2.10

### Mounting the half tray

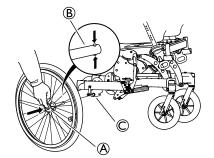


1. Insert the tube of the half tray (A) into the attachment <sup>®</sup> under the arm pad.



- Push on the push pin © and insert the ring © on the 2. tube A.
- Release the push pin ©. 3.

#### 2.11 Mounting the rear wheels



- 1. Press and hold in the quick-release button A.
- Place the rear wheel axle B in the rear wheel 2. attachment ©.
- Pull the wheels outwards to check that the wheel is 3. securely locked in position.



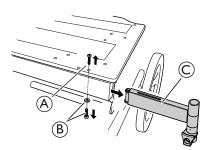
### WARNING! **Risk of injury**

- Check that the rear wheel is securely locked in position! It should not be possible to remove the wheels when the quick-release button (A) is inactivated.

### 2.12 Mounting the legrest attachment for high position

- With the high position legrest attachment, the ĵ fixation of the legrest will be 5 cm higher.
- The high position legrest attachment is ĵ recommended for users with a height of 185 cm and taller.

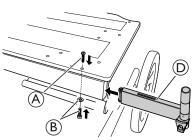
1.



Remove the upper screw (A) and the lower screw and washer <sup>(B)</sup>. Remove the ordinary legrest attachment <sup>(C)</sup>.

Tools: Screwdriver (PH 2) for screw (A), allen key 5 mm for screw <sup>(B)</sup>.

2.

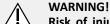


Mount the high legrest attachment  $\ensuremath{\mathbb{D}}$  in the seat frame. Re-insert the upper screw (A) and the lower screw and washer (B). Re-tighten the screws.

Tools: Screwdriver (PH 2) for screw (A), allen key 5 ĵ mm for screw <sup>(B)</sup>.

#### 2.13 Mounting the drum brake

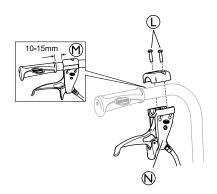
### 2.13.1 Drum brake for 16" wheels



**Risk of injury** 

- Poor brake affect
  - Check the brake effect after mounting or adjusting the brake.

1.



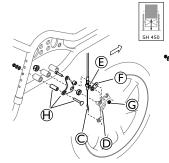
Mount the lever for the assistant maneuvered drum brake  $\triangle$  on the push handle and attach the screws  $\bigcirc$ .

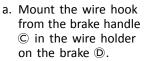
- Torx driver T20

2.

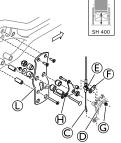
Seat height 450 mm

Seat height 400 mm

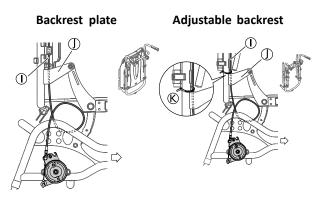




- b. Mount the wire (E) in the attachment washer (F).
- c. Mount the wire on the brake D and tighten the nut G.
- d. Mount the screw for the attachment washer (f) on the chassis.
- e. Mount the wheel and the chase on the chassis and tighten attachment the nuts.
   and the chase on the e. Mount the attachment attachment ⊕ together



- a. Mount the wire hook from the brake handle
   © in the wire holder on the brake D.
- b. Mount the wire (E) in the attachment washer (F).
- c. Mount the wire on the brake D and tighten the nut G.
- d. Place the height attachment <sup>(1)</sup> between the attachment washer <sup>(2)</sup> and the chassis.
- Mount the attachment washer
   together with the height attachment plate on the chassis.
- f. Mount the wheel with the brake on the chassis and tighten the nuts.



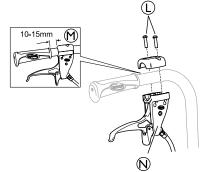
- a. Thread the brake wire
   ① on the inside of the backrest attachment
   ①.
- b. Place the brake wire
  ① in the clips on the backrest tubes.
- a. Thread the brake wire
  ① on the inside of the backrest attachment
  ①.
- b. Fixate the brake wire
   ① with a strap on the backrest tubes <sup>®</sup>.

### 2.13.2 Drum brake 22-24" wheels



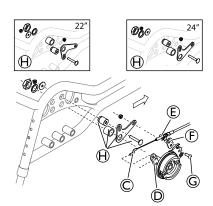
### WARNING! Risk of injury

- Poor brake affect
- Check the brake effect after mounting or adjusting the brake.
- 1.



Mount the lever for the assistant maneuvered drum brake  $\triangle$  on the push handle and attach the screws  $\triangle$ .

- Torx driver T20
- 2.



a. Mount the wire hook from the brake handle  $\mathbb C$  in the wire holder on the brake  $\mathbb D.$ 

- b. Mount the wire on the brake  $\ensuremath{\mathbb{D}}$  and tighten the screw  $\ensuremath{\mathbb{G}}.$
- c. Mount the attachment washer  $\ensuremath{\mathbb H}$  on the chassis.
  - $\underbrace{\mathring{l}}_{\underline{l}} \quad \mbox{The attachment washer } \textcircled{H} \mbox{ is placed in different positions depending on the size of the rearwheel.}$
- d. Mount the wheel with the brake on the chassis and tighten the nuts.

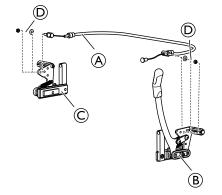
Backrest plate Adjustable backrest

a. Thread the brake wire a
① on the inside of the backrest attachment
①.

3.

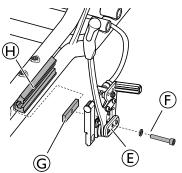
- a. Thread the brake wire
  ① on the inside of the backrest attachment
  ①.
- b. Place the brake wire
  ① in the clips on the backrest tubes.
- b. Fixate the brake wire  $\bigcirc$  with a strap on the backrest tubes  $\circledast$ .
- $\underbrace{\overset{\circ}{\mathbb{I}}}_{l} \quad \ \ \text{The brake unit is mounted in different positions} \\ \text{depending on the size of the rearwheel.}$

# 2.14 Mounting the wire for the One arm brake



- 1. Attach the wire B to both sides of the brake B and C.
- 2. Fixate the wire with the nut and washer D.

# 2.15 Mounting the One arm brake



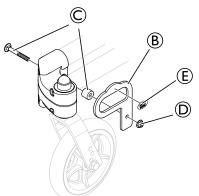
- 1. Attach the brake E to the attachment nut G.
  - $\label{eq:linear} \begin{tabular}{ll} $$ $$ In some configurations, the attachment nut @ needs to be placed in the attachment $$ $$ $$ prior to attaching the brake. \end{tabular}$
- 2. Fixate the attachment nut  $\ensuremath{\mathbb{G}}$  with the screw and washer  $\ensuremath{\mathbb{F}}$  .
- 3. Attach the brake E and the attachment nut G to the attachment on the chassis H.
- 4. Adjust the distance between the brake tap and the rear wheel.
- 5. Adjust the brake effect.
  - $\tilde{\mathbb{I}}$  See section "Adjusting the brake" for more information.
- 6. Tighten the screw **(F)**.
- 7. Repeat the procedure on the opposite side.

# 2.16 Mounting castor locking and transport attachment

## Without castor locking

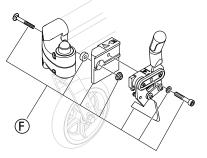


1. Remove and scrap the screw and nut  $\triangle$ .

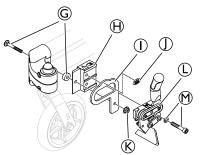


- 2. Mount the transport attachment  $(\mathbb{B})$ .
- 3. Fixate the attachment with the screw, spacer  $\mathbb C$  and the nut  $\mathbb D.$
- 4. Tighten the nut with  $9 \pm 1$  Nm.
- 5. Add the sticker E to the transport attachment.

# With castor locking



1. Remove and scrap the castor locking and the screws and nuts  $\bar{\mathbb{G}}.$ 



- 2. Mount the new transport attachment and the fixation  $\bigcirc$  and B.
- 3. Fixate the transport attachment and the fixation ① and ⊕ with the screw, spacer ₲ and the nut 𝔅.
- 4. Tighten the nut with  $10 \pm 1$  Nm.
- 5. Add the sticker ① to the transport attachment ①.
- 6. Mount the castor locking L.
- 7. Fixate the castor locking with the screw and washer  $\mathfrak{B}$ .
- 8. Tighten with  $10 \pm 1$  Nm.

# 2.17 Mounting the electrical system



# WARNING!

Risk of injuryMake sure that all parts are disconnected from the power source.

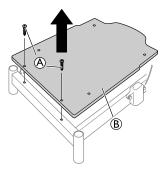
# CAUTION!

# Risk of short circuit

 Be aware of electrostatic discharge (ESD) when working on electrical parts.

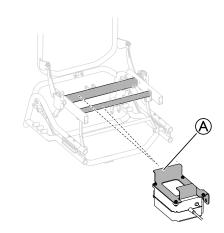
## 2.17.1 Mounting the battery

 $\overset{\circ}{\square}$  When changing the battery, the hand control cable needs to be connected for at least 10 seconds to be able to indicate the levels of the new battery.



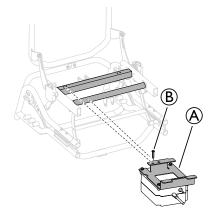
1. Loosen and remove the screws (Å) and the seat plate (B).

### Azalea



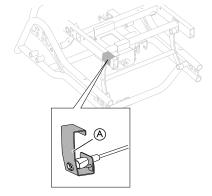
1. Mount the attachment with the battery  $\textcircled{\sc B}$  on the frame.

### Azalea Max

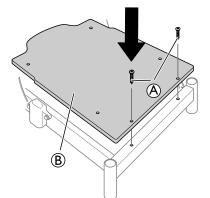


- Mount the attachment with the battery (A) on the 1. frame.
- Fixate the battery on the frame with the screw <sup>(B)</sup>. 2.

Mounting the holder for the battery cable

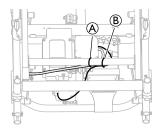


1. Place the holder with the battery cable A on the marked area of the frame.



- 2. Re-mount the seat plate <sup>B</sup>.
- 3. Tighten the screws A.

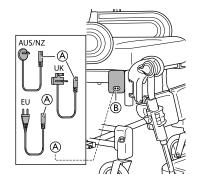
### Attaching the cables



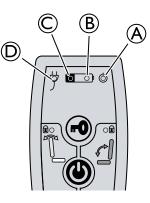
Attach the cable for the battery charger (A) and for the 1. battery <sup>®</sup> to the frame with two separate cable ties.

### Charging the battery

- Damage to the battery
  - The battery must be charged 24 hours before using the system the first time.
    - Unplug the mains cable after charging and before using the wheelchair.
- The battery charger has different charging cables ĭ in order to adapt to different local electrical standards.
- When the battery level is low (20 V), the hand ĭ control beeps when it is used.



- Connect the charger cable supplied with the chair into 1. a wall socket.
- 2. Insert the charger cable A into the connector B which is on the side of the wheelchair.
- 3. Unplug the cable when the battery is fully charged.



- (A) Green light - ON - Hand control is activated
  - Green light ON Battery level is above 20%
    - Green light blinking ON Battery is charging (fixed light when the battery is fully loaded)
- Yellow light ON Battery level is low, © below 20%
  - Yellow light OFF Battery is fully loaded
- Green light ON Battery cable is connected D (lights up about 5 seconds after connecting the cable)

### 2.17.2 Mounting the actuators

# WARNING!

(B)

### **Risk of injury**

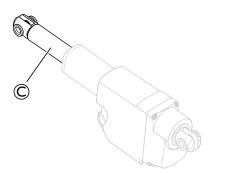
- The wheelchair may collapse
- Check that the locking washers are securely locked.
- If the safety pin is used, make sure that the lock shackle / loop is securely locked.



### WARNING! Safety risk

The wheelchair may collapse

- Remember to always reinsert and fasten the safety pin when it has been removed.
- Check that the lock shackle / loop is securely locked.



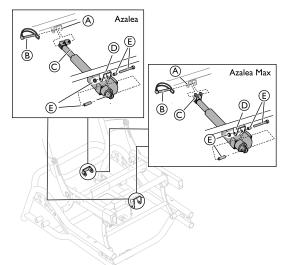


### WARNING! Electrical version

The backrest may come loose if the piston rod is accidentally detached from its housing.

- Before attaching the piston to the backrest,
- turn the piston rod © maximum clockwise.
- When aligning the holes, only turn the piston rod © maximum a half turn counterclockwise.

## Mounting the backrest actuator

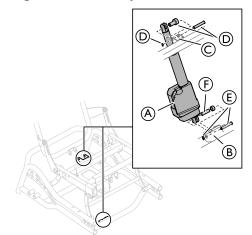


- 1. Place the attachment to the piston for the backrest recline  $\mathbb C$  in the attachment  $\mathbb A$  on the frame.
- 2. Fixate the attachment with the safety pin B.
- 3. Place the front part of the piston in the front attachment <sup>(D)</sup> on the frame.

4. Fixate the piston with the screw, sleeves and nut E.

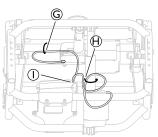
- The screw, sleeves and nut also fixates the battery to the front attachment D. See section "Mounting the battery" for more instruction about how to mount the battery.
- 5. Tighten the screw.
  - 6 mm allen key / 13 mm fixed spanner

### Mounting the electrical piston for seat tilt



- 1. Place the upper part of the piston for the tilt  $\textcircled{\sc a}$  in the attachment  $\textcircled{\sc c}$  on the frame.
- 2. Fixate the piston with the safety pin, sleeve and locking washer  $\mathbb{D}.$
- 3. Place the lower part of the piston for the tilt (A) in the lower attachment (B) on the frame.
- 4. Fixate the lower part with the sleeves (E), safety pin and the locking washer (E).
- 5. Tighten the screws.
  - Nippers

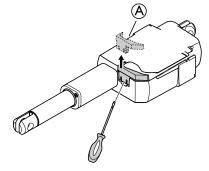
## Attaching cables - Electrical backrest and seat



- 1. Attach the cable for the seat tilt  $\ensuremath{\mathbb{G}}$  to the frame with a cable tie.
- 2. Attach the cable for the backrest recline to the piston with a cable tie.
- 3. Attach both cables to the control box  ${\rm (}{\rm )}$  with a cable tie.

## Cable lock — actuator

Cable lock removal



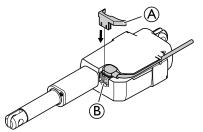
- 1. Loosen the cable lock A.
  - $\hat{j}$  Use a screwdriver to loosen the cable lock.
- 2. Remove the cable lock from the actuator.



# CAUTION!

Damage to the productWhen a cable lock is removed, it must be replaced by a new one.

### Mount the cable lock



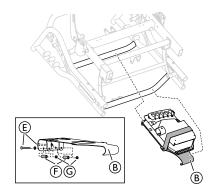
- 1. Place the cable in the holder  $\ensuremath{\mathbb{C}}$  on the seat tilt actuator.
  - $\begin{tabular}{ll} $\widehat{l}$ & The cable must be fully pressed into the holder before adding the cable lock (B). \end{tabular} \end{tabular}$
- 2. Attach the cable lock <sup>®</sup> by pushing it into place on the seat tilt actuator.



### CAUTION! Risk of damage to the product

- The cable lock must be mounted when washing the wheelchair.

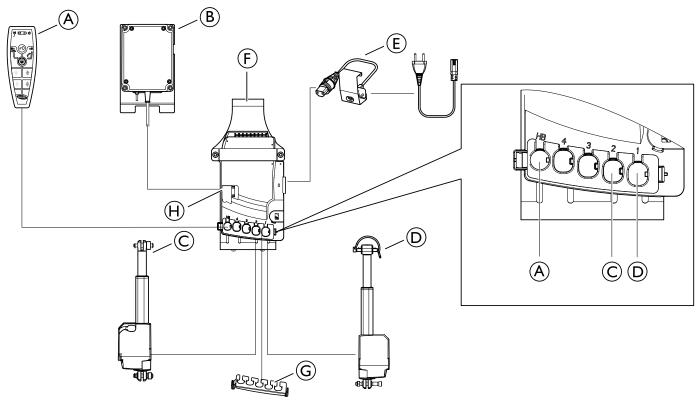
# 2.17.3 Mounting the control box



- 1. Mount the attachment (B) with the attached control box on the chassis.
- 2. Fixate the attachment (B) with the screws and washers (E), sleeves (F) and nuts (G).
- 3. Tighten the screws.

3 mm allen key / 8 mm spanner

# 2.17.4 Electrical schedule



A	Hand control
B	Battery
©	Seat tilt actuator
D	Backrest recline actuator
E	Mains cable
Ð	Control box
G	Cable lock actuators
θ	Cable lock battery cable



# CAUTION!

**Risk of malfunction** The system may not work properly

- Connect all functions before connecting the mains cable.
- Connect the hand control first. The connection at the control box is marked with "HB".
- Connect the different actuators according to the schedule above.
- Check that all plugs are well connected and firmly pushed into the connection plug.
- Check that the cable locks are engaged in order for the cables to be secured in the control box.
- Connect the battery.
- Connect the mains cable and turn on the power.
- Control boxes must only be connected to the mains voltage specified on the label. See chapter "Electrical system" for more information.
- Make sure that the cables are not trapped, tensed or exposed to sharp objects when using the system.

# 2.18 Assemble gas piston — Backrest and seat

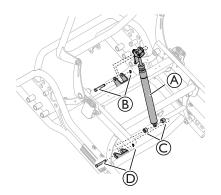


WARNING! Safety risk

- The wheelchair may collapse
- Be careful when removing the safety pins for the backrest or seat gas pistons.
- Always reinsert and fasten the safety pins or the safety shackle when they have been removed.
- Check that the safety pins or the lock shackle
   / loop is securely locked.

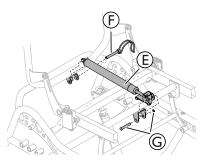
2.18.1 Assembling gas piston to the chassis

Seat tilt



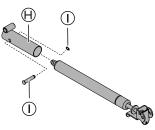
- 1. Assemble the gas piston (A) to the front and the rear attachment.
- 2. Fixate the gas piston (A) with the safety pin and the locking washer (B) in the rear attachment.
- 3. Fixate the gas piston (A) with the plastic spacers (C) and the safety pin and locking washer (D) in the front attachment.

### Backrest

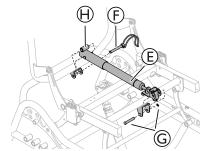


- 1. Assemble the gas piston (E) to the front and the rear attachment.
- 2. Fixate the gas piston with the safety shackle  $\ensuremath{\mathbb{E}}$  in the rear attachment.
- 3. Fixate the gas piston with the pin and locking washer  $\ensuremath{\mathbb{G}}$  in the front attachment.

### Gas piston attachment Azalea Max



- 1. Assemble the gas piston attachment  $\ensuremath{\textcircled{}}$  on the gas piston.
- 2. Fixate the attachment with the safety pin and the locking washer ①.



- 3. Assemble the gas piston  $\ensuremath{\mathbb{E}}$  to the front and the rear attachment.
- 4. Fixate the gas piston with the safety shackle  $\ensuremath{\bar{\mathbb{F}}}$  in the rear attachment.
- 5. Fixate the gas piston with the pin and locking washer  $\ensuremath{\mathbb{G}}$  in the front attachment.

# 2.18.2 Assembling wire for gas piston



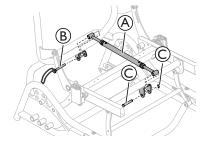
- 1. Place the wire (A) as shown on the picture.
- 2. Make sure that the wire is fully stretched, straight backwards.
- 3. Place the wire in the attachment.
  - $\begin{tabular}{ll} $\widehat{\label{eq:linear} l}$ There should not be any distance between the wire end <math display="inline">\begin{tabular}{ll} $\mathbb{C}$ and the front part of the attachment. \end{tabular}$
- 4. Attach the wire to the chassis with an attachment clip.
- 5. Fixate the wire with the nuts <sup>B</sup>.
  - $\underbrace{\mathring{l}}_{\underline{l}} \qquad \text{Both nuts should be touching the wire attachment.}$
- 6. Tighten the nuts.
  - 10 mm fixed spanner

# 2.19 Mounting the Rigging screw

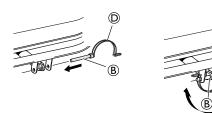


### WARNING! Safety risk

- The wheelchair may collapse
- Remember to always reinsert and fasten the safety pin when it has been removed.
- Check that the lock shackle / loop is securely locked.

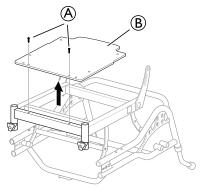


- 1. Attach the Rigging screw (A) in the front and the rear attachments.
- 2. Fixate the Rigging screw A in the rear attachment with the safety shackle B.



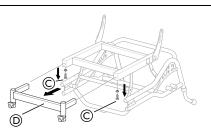
- 3. Close the safety shackle <sup>(B)</sup> with the lock shackle <sup>(D)</sup> to secure the Rigging screw <sup>(A)</sup>.
- 4. Fixate the Rigging screw (A) in the front attachment with the safety pin and the locking washer  $\mathbb{C}$ .

# 2.20 Azalea Tall kit



- 1. Loosen and remove the screws (A).
- 2. Remove the seat plate <sup>B</sup>.

Screwdriver

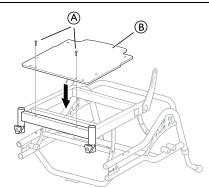


- 3. Loosen and remove the screws  $\mathbb{C}$ .
- 4. Remove the legrest attachment D.



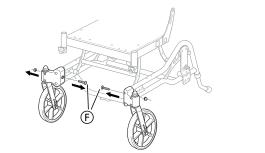
5. Attach the legrest attachment for Azalea Tall  $\textcircled{\sc E}.$ 

- 6. <u>Re-mount the screws © and tighten with 10 Nm.</u>
  - 5 mm allen key

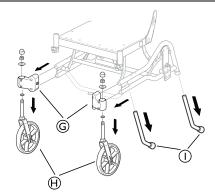


- 7. Re-mount the seat plate  $\mathbb{B}$ .
- 8. Re-mount the screws (A) and tighten with 3,5 Nm.

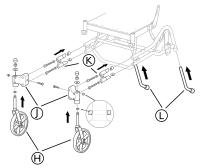
# Screwdriver



- 9. Loosen the screws to the castor attachment F.
  - 10 mm socket wrench



- 10. Remove the castor attachment G.
- 11. Loosen and remove the castors  $\boldsymbol{\varTheta}.$ 
  - 19 mm socket wrench
- 12. Remove the antitippers ①.



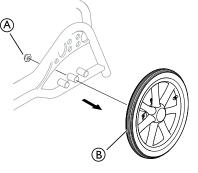
- 13. Mount the chassis extenders  ${\mathfrak K}$  on the chassis tubes.
- 14. Tighten the screws with 18 Nm.

- 15. Re-mount the castors  $\oplus$  in the new castor attachments Ф.
- 16. Mount the castor attachments  ${\rm I\!O}$  on the chassis.
- 17. Tighten the nut with 10 Nm.
- 18. Mount the new antitippers (L).

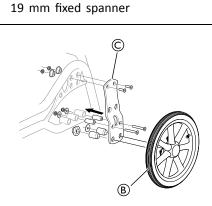
ĬĬ	٠	10 + 19 mm socket wrench
	٠	5 mm allen key

## 2.20.1 Rear wheel attachment — Azalea Tall

### 16 inch wheels

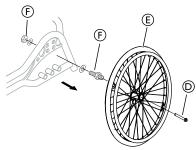


- Loosen and remove the nut A. 1.
- Remove the wheel <sup>B</sup>. 2.



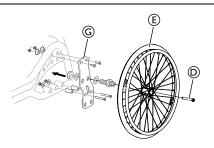
- 1. Attach the new rearwheel plate C and the screws, nuts and sleeves.
- Tighten the screws with 10 Nm. 2.
- Re-mount the wheel <sup>B</sup>. 3.
- 4. Repeat the procedure on the opposite side.
  - 4 mm allen key

## 22-24 inch wheels



- Press the quick release pin D. 1.
- Remove the rearwheel (E). 2.
- 3. Loosen and remove the nut and the screw E.

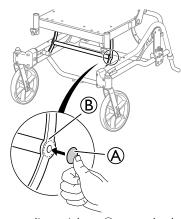
24 mm fixed spanner



- 1. Attach the new rearwheel plate G and the screws, nuts and sleeves.
- Tighten the screws with 10 Nm and the nuts with 40 2. ± 5 Nm.
- 3. Re-mount the wheel E and the quick release pin D.
- 4 Repeat the procedure on the opposite side.
  - 4 mm allen key łĭ
  - 24 mm fixed spanner

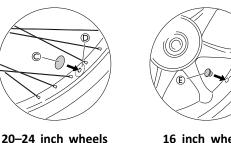
#### Wash sealing kit 2.21

1.



Add the first sealing stickers (A) over the holes of the cross tube <sup>B</sup> on both sides.

2.



16 inch wheels

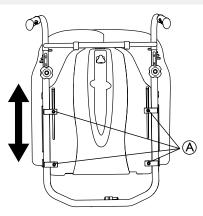
Add the second sealing sticker C or the sealing plug E over the draining hole on the wheels D or E.

#### 3 Settings and Adjustments

#### **Backrest plate** 3.1

#### 3.1.1 Height adjustment backrest plate

- **Risk of damage** 
  - Poor functionality on the backrest. - Any adjustments made to the backrest should be evaluated by trained personnel.



You can easily adjust the backrest plate (+130 mm).

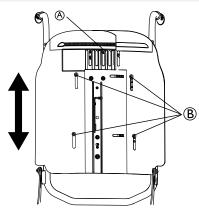
- Loosen the four screws A. 1.
- 2. Set the backrest plate to the required height.
- 3. Re-tighten the screws.
- Ĩ Tools: 5 mm Allen Key.
- The height of the "Laguna" backrest plate is ື່ງໃ adjusted in the same way. Maximum height adjustment is 110 mm.
- The "Laguna" backrest cushion is the only available Ĭ cushion choice for the "Laguna" backrest plate.
- Any adjustments made to the backrest should be Ĭ evaluated by trained personnel.



### CAUTION! **Risk of pinching**

When adjusting the height these is a risk of pinching your finger.

- Be careful when adjusting the height.



- Upper screws for additional height adjustment (A)
- Lower screws for additional height adjustment **B**

For additional height adjustment (50 mm):

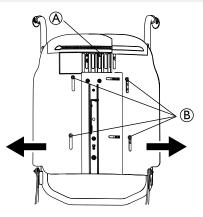
- 1. Loosen screws.
- Set the required height. 2.
- Re-tighten the screws. 3.
  - ĩ Tools: 5 mm Allen Key

#### Width adjustment backrest plate 3.1.2



### WARNING! **Risk of breakage**

The backrest might brake if adjusted too wide. - If you have seat width 490 mm (max seat width) the backrest should NOT be adjusted to the widest possibility (+100 mm).



ĭ Tools: 5 mm Allen Key

For width adjustment:

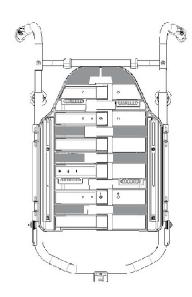
- Remove the upper screw A, and loosen the lower 1. screws <sup>B</sup>.
- Adjust to the required width (+25 or 50 mm on each 2. side).
- Re-insert the upper screw and tighten. 3.
- Tighten the lower screws 4.
  - The "Laguna" backrest plate is not possible to ື່ງໃ adjust in width, only in height.

#### Special adaptation of Flex 3 backrest 3.2



### WARNING! Safety risk

- All changes to the back are seen as a special adaptation of the product. That means that the rules for special adaptation are in force. All adaptations must be documented and a risk asessment must be carried out. The adaptor is responsible for the adaptions.



- 1. Remove the width adjustment plates.
- Remove the screws on the front and remove the front and back plates. The shaded areas indicates where drilling can be done. Max. diameter of drill hole is 6 mm. Use washers with the minimum 18 mm diameter beneath the nut on the inside of the screws.
- 3. Return the parts, re-insert the screws and tighten them with 3,2 Nm.

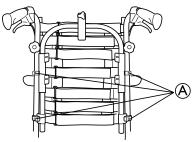
# 3.3 Tension adjustable backrest

# 3.3.1 Adjustment height — tension adjustable backrest

There are two ways of adjusting the height for the tension adjustable backrest:

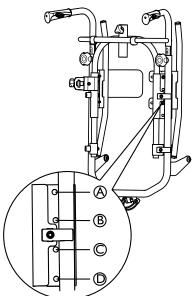
# Height adjustment — alternative 1

You can easily adjust the tension adjustable backrest (max. +120 mm).



- 1. Loosen the four screws (A) as shown above.
- 2. Set at the required height.
- 3. Re-tighten the screws.

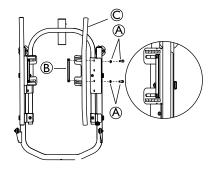
Height adjustment — alternative 2



A to D Screws for alternative height adjustment

 $\tilde{\parallel}$  Tools: 5 mm Allen Key

An additional height adjustment can be made by mounting the backrest attachment either in position B and C or in position B and D on the backrest tubes, as shown in the picture above.



j ĭ Tools: 5 mm Allen Key

- 1. Remove the screws and the washers (A), the long nut (B), and the backrest attachment (C).
- 2. Support nut <sup>®</sup>, screws and washers <sup>A</sup> in order to prevent them from falling to the ground.
- 3. When the position of the backrest attachment © is changed, re-mount everything and tighten the screws.

# 3.3.2 Width adjustment — Tension adjustable backrest

- Risk of damage
- Poor functionality on the backrest.
  - Any adjustments made to the backrest should be evaluated by trained personnel.

The tension adjustable backrest must be adapted and adjusted according to the individual needs of the user. The following steps guides you through the adjustment of the backrest.

# Turning of the backrest tubes

The tension adjustable backrest is designed with different angles as shown in picture A and B below. This allows for different adjustments according to how the backrest is mounted. Position A (the part of the backrest with the longer angle turned upwards) gives the user more room for the shoulder area while position B gives more room for the bottom.

Determine if the user needs more space in the shoulder area or in the bottom area. The design of the backrest tubes with different angles allows for these adjustments.

- 1. Loosen and remove screws on both sides.
- 2. Turn the backrest.
- 3. Reinsert the screws.
- 4. Make sure to fasten properly.



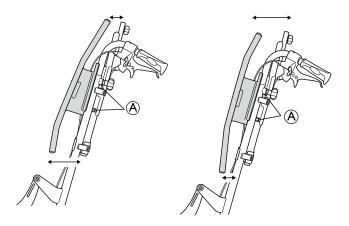
The backrest tubes have a width adjustment of 25 mm. The upper and lower parts of the tubes can be adjusted individually to accommodate for different needs. The outward movement will embrace the user and offer lateral support.

## **Backrest positioning**

Angle the backrest- and seat tilt a couple of degrees in order to obtain a stable seating position for the user.

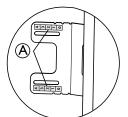


- A Position A − The longer angle of the backrest is turned upwards.
- B Position B The longer angle of the backrest is turned downwards.



- A Screws for adjustment of the backrest tubes.
- ∬ Tools: 5 mm Allen Key

3.3.3 Angle adjustment — Tension adjustable backrest

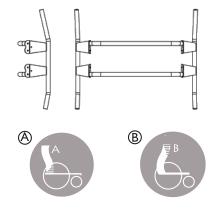


The backrest tubes can be angled individually, the indication labels A on the backrest tubes are a help in order to get the same angle on both sides.



- 1. Move the user from the chair.
- 2. Remove the backrest cover and loosen the hook and loop straps the straps should slack about 5 cm.
- 3. Loosen the backrest tubes and adjust them in order to fit the shape of the user.
- 4. Re-tighten the screws after adjustment.

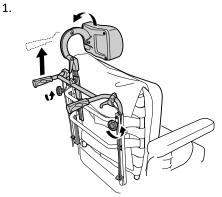
# 3.4 Backrest for Azalea Max



- A Position A The longer angle of the backrest is turned upwards.
- B Position B The longer angle of the backrest is turned downwards.

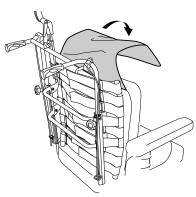
The backrest for the Azalea Max is designed with different angles. This allows for different adjustments according to how the backrest is mounted. Position (A) (the part of the backrest with the longer angle turned upwards) gives the user more room for the shoulder area while position (B) gives more room for the bottom.

# 3.4.1 Adjustment backrest Azalea Max

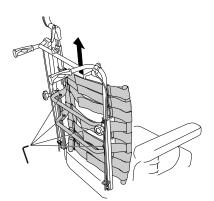


Loosen the handwheels and raise the push handles as far as possible.

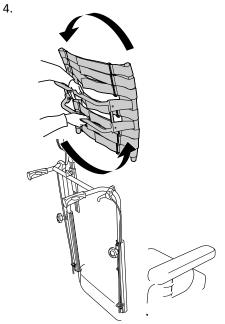
2.



- Remove the cover.
- 3.

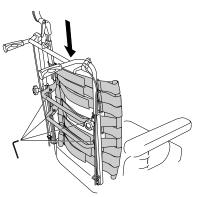


Loosen screws and remove the backrest by lifting upwards.

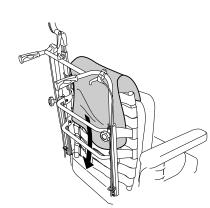


Turn the backrest 180°

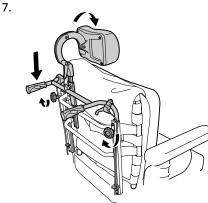
5.



Put the backrest back by fitting it to the receivers on the tubes. Tighten the screws.

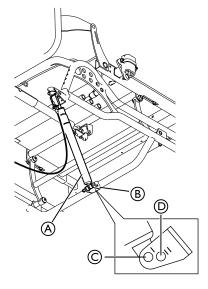


Put the cushion and cover back.



Lower the push handles and tighten the hand wheels.

## 3.4.2 Azalea Max angle settings



- (A) Gas spring
- (B) Chassis attachment
- $\ensuremath{\mathbb{C}}$   $\ensuremath{\mbox{ Gas}}$  spring position when electric tilt is used
- D Gas spring position when electric tilt is not used

There is a possibility to change the range of available angles for the seat by changing the position of the gas spring on the chassis attachment.



# WARNING!

**Risk of damage** Incorrect mounting of the gas spring

- This presedure revet only he perform
- This procedure must only be performed by a service technician.

Other Azalea models can use either gas spring position ( $\mathbb{C}$  or  $\mathbb{D}$ ).

 $\overset{\circ}{\underline{l}} \qquad \mbox{When using electric tilt though, only gas spring position $\widehat{\mathbb{C}}$ can be used. }$ 



# WARNING!

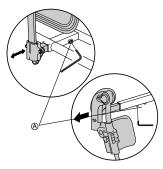
Risk of pinching
The wheelchair should be tipped over sideways before the gas spring is loosened from the chassi attachment. Otherwise there is a risk of pinching.

Angles obtained:

Gas piston position -1 - +23 degrees © with 16 inch rear wheels: Gas piston position -1 - +23 degrees © with 24 inch rear wheels: Gas piston position +1 - +24 degrees D with 16 inch rear wheels: Gas piston position +1 - +24 degrees D with 24 inch rear wheels:

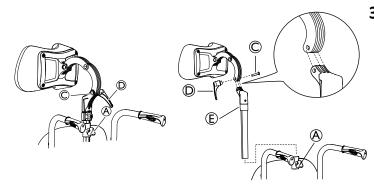
# 3.5 Re-adjustment — armrest / legrest

- Risk of poor adjustment
  - There must not be any pressure on the armrest / legrest while adjusting the screw.



 $\overset{\circ}{\underline{l}} \quad \mbox{After a period of use, the screws (A) may need to be re-tightened (12Nm).}$ 

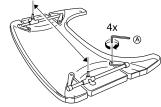
# **3.6** Positioning the headrest / neckrest to the front



- $\overset{\circ}{\underline{\mathbb{I}}} \qquad \mbox{You can also adjust the angle and depth by turning the attachment for the headrest / neckrest.}$
- 1. Loosen the handwheel A.
- 2. Remove the headrest / neckrest.
- 3. Loosen the handle D.
- 4. Remove the screw and the handle.
- 5. Rotate the headrest / neckrest attachment pole including the attachment  $(\mathbb{E})$ .
- 6. Return the headrest / neckrest to the attachment.
  - $\overset{\circ}{\underline{l}}$  Note that the screw to the headrest / neckrest attachment C and the handle D must be mounted on the opposite side due to the groves in the screw hole.
- 7. Return the headrest / neckrest to the attachment on the backrest.
- 8. Re-tighten the handle  $\bigcirc$  and the handwheel A.

# **3.7** Adjusting the width of the table tray



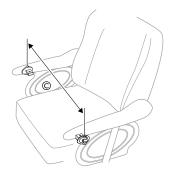


Loosen the 4 screws A.



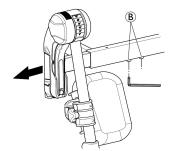
Adjust the attachment bars (B) in order to fit the table to the desired width. Re-tighten the screws.





Fit the table to fit the width of the chair  $\mathbb C.$ 

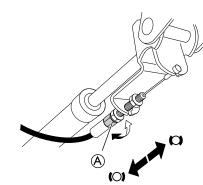
**3.8** Adjusting the width of the leg rest



- 1. Loosen the screws A.
  - ັງ Tools: 5 mm allen key
- 2. Adjust the leg rests to the desired width.
- 3. Re-tighten the screws.

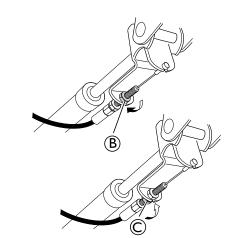
# 3.9 Adjusting the user operated tilt





Adjust the tilt resistance with the adjustment nut  $\ensuremath{\textcircled{}}$  on the wire.

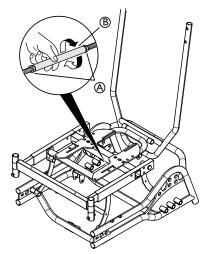
2.



Fixate the wire in the holder with the fixation nut (B). When the desired tilt resistance is achieved, fixate the position with the fixation nut  $\mathbb{C}$ .

#### 3.10 Azalea Base — tilt and recline

#### Backrest angle — rigging screw 3.10.1



- To adjust the angle of the backrest, first loosen nuts 1. A on the rigging screw.
  - Ĭ Tools: 17 mm fixed spanner.
- 2. Turn the metal tube <sup>B</sup> to set the desired angle for the back.
- Re-tighten the nuts. 3.

# CAUTION!

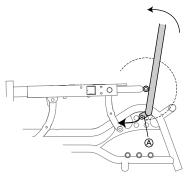
# Risk of discomfort for the user

The low pivot point causes shearing when the back is reclined, this might result in discomfort for the user.

- Make sure that the user is well positioned after each adjustment.

#### 3.10.2 Backrest tilt — carer operated

- The Azalea Base can also be equipped with gas pistons for carer operated controls.
- You can adjust the angle of the backrest forwards or backwards and tilt the whole seat unit including the backrest.
- These two functions can either be controlled manually or electrically.





### CAUTION! **Risk of damage**

The gas piston attachment A will scratch the surface on the chassis cross tube. This might eventually lead to corrosion.

- The seat unit needs to be tilted slightly before the back is dismounted/folded.



### CAUTION! Risk of discomfort for the user

- The low pivot point causes shearing when the back is reclined, this might result in discomfort for the user.
- Make sure that the user is well positioned after each adjustment.

#### 3.11 Foot box



### WARNING! **Risk of injury**

- When using the foot box, the settings and adjustments of the option and the wheelchair, must always be performed by an authorized personnel or competent person with knowledge of seating and positioning.

# ∕!∖

### WARNING! **Risk of injury**

The user might fall when getting in and out of the chair.

- When using the foot box, it is recommended to use a lifter.

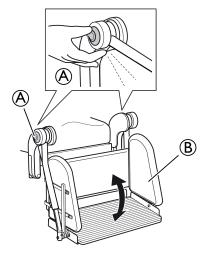
## WARNING!



Risk of injury and/or damage to the product - Hold the foot box to secure it before releasing

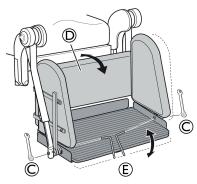
- the levers, otherwise it will fall down.
- The foot box should not be removed from the ື່ງໃ wheelchair during use, unless it needs to be replaced.
- The adjustment of the foot box must be carried ĩ out by two persons.

## **Position adjustment**



- Press the release handles A. 1.
- Adjust the position of the foot box <sup>B</sup>. 2.
- Let go of the release handles A. 3.
  - Make sure that the foot box is locked in Ĭ position.

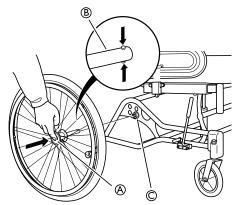
# Angle adjustment



- 1. Loosen the nuts  $\mathbb{O}$ .
- 2. Adjust the foot box  $\mathbb{D}$  to the desired angle.
- 3. Re-tighten the nuts  $\mathbb{C}$ .
  - $\mathring{l} \qquad \mbox{Fixate the screw with the Allen key } \ensuremath{\mathbb{E}}\ \mbox{and} \ \mbox{loosen the nut with the spanner } \ensuremath{\mathbb{C}}\ \mbox{.} \label{eq:loosen}$



# 3.12 Rear wheels



- 1. Push the quick-release button A.
- Pull the rear wheel straight out and remove the wheel and the rear wheel axle 
   <sup>®</sup> from the rear wheel attachment 
   <sup>©</sup>.



# WARNING!

Risk of overturning

The longitudinal position of the rear wheels axis of the wheelchair compared to the backrest position can affect its stability.

- A forwards position makes the wheelchair less stable and increase the risk of tipping backwards, but improves its maneuverability by a better grip position of the handrim and a short turning radius.
- Conversely, by moving the rear wheels axis backwards, the wheelchair is more stable and tilts less easily, but its maneuverability is reduced.
- Depending on the user's abilities and its particular safety limits, the decrease in stability can be compensated for by installing an anti-tipper device.

# 3.12.1 Adjustment rear wheels 16 inch



### WARNING! Safety risk

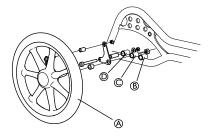
 When you have fitted the wheels in the correct position, it is important that you check thoroughly that the nuts and screws are tightened securely. This is important for your own safety!



### CAUTION! Risk of tipping

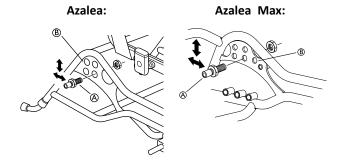
When accessories are mounted on the back of the wheelchair the tip risk increases.

- When accessories are mounted on the back of the wheelchair, the rear position should be used.



- A 16 inch rear wheel
- B Front position for the rear wheel
- © Middle position for the rear wheel (standard position)
- D Rear position for the rear wheel

# 3.12.2 Adjustment 22-24 inch wheels



 ${
m }$  Tool: 24 mm fixed spanner

### Horizontal position

- 1. Loosen the rear wheel attachment (A) with a spanner.
- 2. Move the housing to the required position on the rear wheel position plate (B), either further forwards or backwards.
- 3. Check the position of the brakes, and that the user can move the chair safely in its new balance position.

- $\begin{tabular}{ll} $\widehat{\sc l}$ For the Azalea Max there are three different horizontal positions for the rear wheel. \end{tabular}$
- The axle housing should be tightened with a manual and dynamometric wrench calibrated to 40 Nm.

### Height

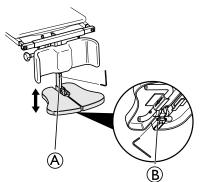
- 1. Loosen and remove the attachment (A) using a spanner.
- 2. Move the rear wheel attachment to the required height.
- 3. Re-tighten the attachment.

See section: 7.7 Seat height tables, page 40 for correct positioning of the rear wheel.

# 3.13 Central legrest

# 3.13.1 Adjusting the height of the central legrest

You can adjust the height of the legrest in the following two ways:



### Alternative 1:

- 1. Loosen the screw  $\textcircled{\sc arr}$  on the front of the telescopic tube.
  - <sup>η</sup> Tools: 5 mm Allen key
- 2. Place the legrest in the desired position.
- 3. Secure the legrest into place using the Allen screw.

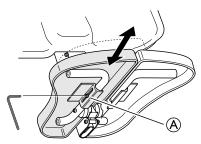
### Alternative 2:

1. Loosen the Allen screw <sup>B</sup> by the legrest attachment.

j Tools: 5 mm Allen key

- 2. Adjust to the desired height.
- 3. Re-tighten the screw

# 3.13.2 Adjusting the depth of the central legrest

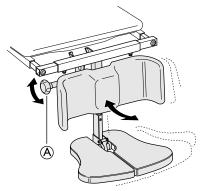


1. Loosen the frontal screw (A) on the side of the tube.

j Tools: 5 mm Allen key

- 2. Adjust the depth of the foot plate.
- 3. Tighten the screw (A) when you have found the desired depth.
- 4. Repeat this procedure to adjust the depth of the other foot plate.

# 3.13.3 Adjusting the angle of the central legrest



- 1. Loosen the adjustment knob A.
- 2. Hold the foot plate with the other hand.
- 3. Adjust to the appropriate leg angle.
- 4. Re-tighten the knob.



### WARNING! Risk of trapping fingers

When adjusting the foot plate, the fingers might get trapped.

 Loosen the adjustment knob with one hand and hold the foot plate with the other hand to avoid trapping yours or anyone else's fingers.



### CAUTION! Risk of damage

The legrest might cause damage to the floor.

- When the seat is tilted forwards on a chair with a long legrest length and low seat height, there is a risk of the legrest hitting the floor and causing damage.

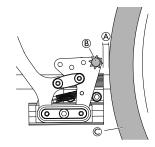
# 3.14 Adjusting the leg rests

To adjust the leg rests, refer to the User Manual paragraphs:

- 1. Swing away, angle adjustable leg rest.
- 2. Swing away leg rest (fixed).

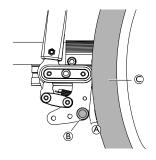
# 3.15 Adjusting the brake effect

# Brake type 1



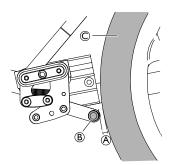
 $\begin{tabular}{ll} $\widehat{\]}$ & The distance (A) between the pin (B) and the tire (C) should be max. 2 mm. \end{tabular}$ 

# Brake type 2 (not available on all models)



 $\begin{tabular}{ll} $\widehat{\]}$ The distance (A) between the pin (B) and the tire (C) should be max. 15 mm. \end{tabular}$ 

# Brake type 3 (16" wheels)



 $\begin{tabular}{ll} $\widehat{\]}$ The distance (A) between the pin (B) and the tire (C) should be max. 6 mm. \end{tabular}$ 

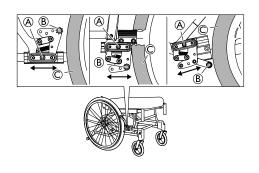
# 3.15.1 User brake — adjustment

To attain the correct braking effect, the brake pin should press into the tire when you apply the brake. The brake may therefore require depth adjustment.



### WARNING! Risk of reduced brake effect

 Incorrect setting or use of the brake reduces the braking effect.



- ${\parallel}$  Tool: 5 mm Allen key
- 1. Loosen the screw A.
- 2. Move the brake to the required position.
- 3. Re-tighten the screw (A).

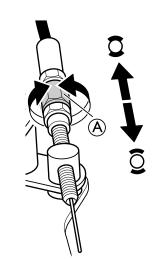


### CAUTION! Risk of trapping fingers

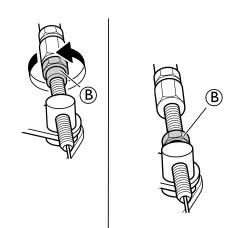
## 3.15.2 Drum brake — adjustments

### 1.

2.



Adjust the brake effect with the adjustment nut  $\textcircled{\sc b}$  on the wire.



When the desired brake effect is achieved, fixate the brake wire with the fixation nut  $(\mathbb{B})$ .



- WARNING!
- **Risk of injury** Poor brake effect Check the brake effect after mounting or adjusting the brake.

# 4 Maintenance

# 4.1 Safety information

Regular checks and maintenance of the wheelchair ensure the user's safety and the expected lifetime of the chair.

# 4.2 Maintenance Electrical Version

### General

 $\mathring{\underline{l}}$  The electrical products are closed units and require no internal maintenance.



CAUTION! Risk of damage to the product

- The plastic parts in the system cannot tolerate cutting oil.
- Do not use chemicals, inspect the system yearly for damage and wear.
- Do not use strong solvents, basic or alkaline liquids.
- The system must be cleaned at regular intervals to remove dust and dirt.
- The system must be inspected at regular intervals for mechanical damages, wear and breaks.
- The system must be inspected at attachment points, wires, piston rods, cabinets and plugs.

### Battery

 $\underbrace{\overset{\circ}{l}}_{n} \quad \text{The electrical products are closed units and require no internal maintenance.} }$ 



# CAUTION!

- Risk of damage to the product
- Handle the battery carefully.
- The battery should be replaced after 4 years at the latest depending on the usage frequency.
- For an optimum lifetime, the product must be connected to the mains voltage as often as possible. It is recommended to load the battery at least every 3rd month.
- Test the battery function at least once a year.

# 4.3 Flat tire

 n case of a tire puncture consult a suitable workshop (e.g. bike repair shop, bicycle dealer ...) to have the tube replaced by a skilled person.

# 4.4 Cleaning

- Wipe metal parts and the upholstery regularly with a damp cloth.
- A mild detergent may be used.
- If necessary, the upholstery can be washed at 60° C.
- Normal washing powder/liquid may be used.
  - if possible, always overlap hook and loop strips (the self-gripping parts) when washing, to minimize lint and thread build-up on hook strips and prevent damage to upholstery fabric by these.

# 4.5 Washing

- 1. Remove all loose and removable covers and wash them in a washing machine according to the washing instructions for each cover.
- 2. Remove all padded parts such as seat cushions, armrests, headrest or neckrest with fixed padded parts, calf pads and so on and clean them separately.
  - $\underbrace{\overset{\circ}{l}}_{high-pressure cleaner or water jet. } The padded parts can not be cleaned with a$
- 3. Spray the wheelchair chassis with detergent, for example a car-cleaning agent with wax, and leave on to work.
- 4. Rinse the wheelchair chassis with a high-pressure cleaning or ordinary jet of water depending on how dirty the wheelchair is. Do not aim the jet towards bearings and draining holes. If the wheelchair chassis is washed in a machine the water must not be hotter than 60° C.
  - $\hat{j}$  Only use water and soft soap to clean the table.
- 5. Leave the wheelchair to dry in a drying cabinet. Remove parts where water has collected for example in end tubes, ferrules etc. If the wheelchair has been washed in a machine, blow-drying with compressed air is recommended.

### Multi stretch polyurethane (PU) coated fabric

Lighter stains on the fabric may be neutralized with a soft damp cloth and some neutral detergent. To neutralize larger, more persistent stains, wipe the fabric with alcohol or turpentine substitutes, and wash with hot water and a neutral detergent.

The fabric can be washed at temperatures up to  $60^{\circ}$  C. Normal detergents can be used.

All parts of the wheelchair with multi stretch polyurethane (PU) coated fabric upholstery, such as armrest pads, calf pads, headrest or neckrest, should be cleaned according to the instruction above.

## 4.5.1 Electrical version

- Important!
  - The wheelchair with electrical backrest or tilt is protected according to IPX6. This means that the product can be washed with a brush and water. The water can be under pressure (garden hose or equivalent), but high pressure water must not be sprayed directly towards the electrical system.
    - Max washing temperature 20º C.
    - Do not use a steam cleaner.
    - Before cleaning, make sure that the power plug is not connected.
    - Interconnected cables must remain plugged in when cleaning the product.
  - Retract the actuator to the innermost position when cleaning to avoid degreasing of the piston rod.

# 4.6 Disinfection

The wheelchair may be disinfected by spraying or wiping with tested, approved disinfectants.

Spray a soft cleaning and disinfecting product (bactericidal and fungicide meeting the EN1040 / EN1276 / EN1650 standards) and follow the instructions given by the manufacturer.

# 4.7 Reconditioning

- 1. Wipe down all generally accessible surfaces with a soft cloth and ordinary household disinfectant.
- 2. Allow the product to air-dry.

Main parts of the wheelchair						
)  ] Lubricate all removal	ble parts with a dry Teflon® based spray, e.g. "Viso 900–B5".					
Chassis	All parts must be checked for cracks or other damages. Pay special attention to areas close to welds. If damages are discovered, the chassis must be discarded.					
Backrest angle	Check that the angle is easy to adjust, it should be easy to fold and the locking mechanism must function properly.					
Push handles / Push bar         Check that the push handles / push bar works properly. They should be find screws must be tightened properly.						
Back- and seat covers	<ul> <li>Check that the self-gripping strips are intact and can be fixed properly.</li> <li>Check that the covers are intact and clean, if not see section: "Washing" and "Disinfection"</li> <li>If the fabric is torn, replace the cover.</li> </ul>					
Seat angle	Check the function by changing the angle from the lower to the upper position. <b>Risk of damage</b> – The gas piston must not be opened, it contains oil and gas under high pressure.					
	CAUTION! Risk of damage – The gas piston must not be opened, it contains oil and gas under high pressure.					
Carer-operated brakes	Check that the brake function is good, if not:					
	<ol> <li>Check that the wire is intact, if not, it must be replaced.</li> <li>Check that the wire cover is intact, if not, the wire must be replaced.</li> <li>Adjust the wire at the handle and/or at the wheel hub.</li> <li>Tighten the wire until the optimal brake function is achieved.</li> </ol>					
Armrests / side rests	Check that the armrests / side rests are intact, they should be easy to detach / attach.					
Leg rests	Check that the leg rests are:					
	<ul> <li>Easy to detach</li> <li>Easy to attach</li> <li>Easy to adjust in height and angle</li> </ul>					
Anti-tipper device	<ul> <li>Check that the anti-tipper device is easy to adjust and fold.</li> <li>Check that the screws are tight, if not, retighten.</li> </ul>					
Rear wheels	<ul> <li>Change the tyres if the pattern is worn.</li> <li>Replace missing spokes and tighten loose spokes.</li> <li>Fasten the hand rim if it is loose.</li> <li>Check that the hand rim is smooth and that there are no cracks or sharp edges. If so, replace the hand rim.</li> <li>Check the rear wheel axle, it should be completely inserted into the axle housing. Check that the rear wheel axle locks properly. Pull on the rear wheel to check that the removable axle does not come off.</li> <li>Check the air pressure — recommended max air pressure is written on the tyres.</li> </ul>					

Main parts of the wheelchair				
Rear wheel attachment	<ul> <li>Check:</li> <li>That the screws on the rear wheel attachment are tight.</li> <li>That the axle housing is correctly placed.</li> <li><u>n</u> The standard axle housing should be tightened with a manual and dynamometer wrench calibrated to 40 +/-5 Nm, the One Arm Drive axle housing to 45 0/+5 Nm.</li> </ul>			
Brakes	<ul> <li>Check that the hub brakes work properly on both tyres.</li> <li>Check the positioning of the user brakes.</li> <li>Check that the brake pin is not worn down. If so, replace it.</li> <li>Check that the screws are tightened.</li> <li>Test the brake function. When braking, the brake pin should press the tyre down by 5 mm.</li> <li>Make sure that you have the correct air pressure in the tyres to attain the optimal brake effect.</li> </ul>			
Castors	<ul> <li>Detach the castors and clean the castor forks.</li> <li>Remove any dirt or hair from the castors.</li> <li>Attach the castors again and check that the castors turn freely.</li> <li>If the castors are air filled, check the pressure — recommended max air pressure is written on the tyre.</li> <li>If the castors are solid, check the tyres for cracks. If the tyres are dry and filled with cracks, they need to be replaced.</li> </ul>			
All fasteners for wear and tightness	<ul> <li>Bolts and other fasteners can come loose due to constant use:</li> <li>1. Check that the fasteners are tight on the castor forks, footrest, seat, side rests, backrest, handles etc.</li> <li>2. Tighten any loose bolts or screws.</li> </ul>			

Options					
$ { m l}$ Lubricate all removable parts with a dry Teflon $^{ m e}$ based spray, e.g. "Viso 900–B5".					
All fasteners for wear and	Bolts and other fasteners can come loose due to constant use:				
tightness	<ol> <li>Check that the fasteners are tight on the castor forks, footrest, seat, side rests, backrest, handles etc.</li> <li>Tighten any loose bolts or screws.</li> </ol>				
Headrest       • Check that the side- and angle adjustment for the "wings" works prope         • Check that the angle adjustment works and that there is a memory fur					
Neckrest	Check that the angle adjustment works and that there is a memory function.				
Trunk support "Multi functional"	• Check that the angle adjustment works properly and that there is a memory function.				
Abduction cushion         • Check that the depth adjustment works.					
Table tray	• When re-mounting the table tray, try to find the thread manually before fastening the screws with tools. This spare the threading.				

# 4.7.1 Checklist for reconditioning

	ОК	NOTE	SIGN
WASHING			
RECONDITIONING:			
Chassis			
Backrest angle			
Push handles / Push bar			
Backrest cover			
Seat cover			
Seat angle			
Carer-operated brake			
Armrests / Side rests			
Legrests			
Footrests			
Anti-tip device			
Rear wheels			
Rear wheel attachment			
Brakes			
Castors			
Fasteners for wear and tightness			
Headrest			
Neckrest			
Trunk support			
Abduction cushion			
Table tray			
TEST:			
Chair rolls in straight line			
Easy to propel			
DELIVERY CHECK:			
Include a user manual			

# 5 After Use

# 5.1 Recycling

The wheelchair can be divided into the following main components:

- Chassis
- Plastic parts
- Upholstery
- Wheels, tires and tube
- Packing

# 5.2 Waste disposal

Please be environmentally responsible and recycle this product through your recycling facility at its end of life.

Waste disposal must comply with the laws and regulations pertaining waste handling in each country.

Invacare<sup>®</sup> is continuously working towards ensuring that the company's impact on environment, locally and globally, is reduced to a minimum.

We comply with the current environment legislation (e.g. WEEE and RoHS directive).

We only use REACH compliant materials and components.

The wheelchair can be divided into the following main components:

### Chassis

- The chassis is produced in steel and is fully recyclable.
- Recycling of steel requires only 20-25% of the energy compared to new produced steel.
- The wheelchair has two gas pistons and they contain oil and must be disposed according to national requirements.
- Be aware of that the gas pistons contains high pressure and must be handled with care during destruction.

### **Plastic parts**

- The plastic parts in the chairs are produced of "Thermoplastic" and are marked with recycling symbols (where it is possible due to part size).
- The main plastic material is polyamide.
- The plastic materials for the table are ABS and polyamide.
- This material can be recycled or burned in approved facilities.

### Upholstery

- Upholstery is produced of polyester fibres (PUR) and Dartex<sup>®</sup>.
- The efficient way to recycle the parts is to burn them in approved facilities.

### Wheels, tires and tubes

- The handrim, rim, spokes and hub are made of steel, stainless steel or aluminium and can be recycled according to above.
- Tires and tubes are made of rubber and can be recycled according to above.

### Packing

- All packing material is developed to fit the products in an optimal way to reduce unnecessary material waste.
- All boxes are recyclable.

### **Electrical and Electronic equipment**

This product has been supplied from an environmentally aware manufacturer that complies with the Waste Electrical and Electronic Equipment (WEEE) Directive 2012/19/EU. This product may contain substances that could be harmful to the environment if disposed of in places (landfills) that are not appropriate according to legislation.

### End of life

At the end of this products life, it should be recycled according to laws and regulations for waste handling in each country.

 $\underbrace{\overset{\circ}{\fbox}}_{\text{mentioned}} \quad \begin{array}{l} \text{Contact your local recycling agent to obtain the} \\ \text{correct information on how to handle the above} \\ \text{mentioned materials.} \end{array}$ 

# 6 Troubleshooting

# 6.1 Troubleshooting electrical system



# WARNING!

Risk of personal injury and damage to the product.

- The wheelchair must be unplugged from the main power source before opening or repairing electrical parts.

Symptom	Possible cause	Remedy	
	Mains are not connected	Connect mains	
Mains indicator does not light up	Fuse in the control unit is blown	Replace the control unit	
	Control unit is defective	Replace the control unit	
Mains indicator lights up, but the	Motor plug is not fully inserted into the control unit	Insert the motor plug properly into the control unit	
Mains indicator lights up, but the motor is not running. The relay in the	The motor is defective	Replace the motor	
control unit makes a clicking noise	Motor cable is damaged	Replace the cable	
	Control unit is defective	Replace the control unit	
Mains indicator lights up, but the	Control unit is defective	Replace the control unit	
motor is not running. No relay sound is heard from the control unit	Hand control is defective	Replace the hand control	
Control unit is in order except for one	Control unit is defective	Replace the control unit	
direction on one channel	Hand control is defective	Replace the hand control	
Motor is running, but the piston rod does not move			
The motor cannot lift full load			
Motor noise, but no movement of piston rod	Motor is damaged	Replace the motor	
Piston rod operates inwards and not outwards			

# 7 Technical Data

# 7.1 Dimensions and weights

All dimension an weight specifications refer to a wide range of the wheelchair in a standard configuration. Dimension and weight (based on ISO 7176–1/5/7) may alter according to different configurations.

### IMPORTANT!

- In some configurations, the overall dimensions of the wheelchair when it is ready for use exceeds the authorised limits and the access to emergency escape routes is not possible.
  - In some configurations, the wheelchair exceeds the size recommended for travelling by train in the EU.

180 kg 1160–1180 mm SW +250 mm **** 845 mm 762 mm 765 mm
SW +250 mm **** 845 mm 762 mm 765 mm
**** 845 mm 762 mm 765 mm
762 mm 765 mm
765 mm
54 kg
36 kg
17°
14°
21°
-1° - +20°
500–570 mm
** 550–710 mm
400/450 mm
0° - +30°
*** 620–700 mm

	AZALEA	AZALEA ASSIST	AZALEA TALL	AZALEA BASE	AZALEA MINOR	AZALEA MAX
Footrest- to-seat distance	330–627 mm	330–627 mm	330–627 mm	330–627 mm	330–627 mm	330–627 mm
Leg-to- seat- surface angle	105° – 180°	105° – 180°	105° – 180°	105° – 180°	105° – 180°	105° – 180°
Armrest- to-seat height	240–360 mm	240–360 mm	240–360 mm	240–360 mm	240–360 mm	320–420 mm
Front location of armrest structure	343 – 571 mm	343 – 571 mm	343 – 571 mm	343 – 571 mm	343 – 571 mm	400 – 470 mm
Hand rim diameter	450 – 540 mm	450 – 540 mm	450 – 540 mm	450 – 540 mm	450 – 540 mm	450 – 540 mm
Horizontal location of axle	–35 – 35 mm	0 – 40 mm	–35 – 35 mm	–35 – 35 mm	+0 – –35 mm	–35 – 35 mm
Minimum turning radius	870 mm	870 mm	920 mm	870 mm	820 mm	870 mm
Overall length without leg rests	830 – 960 mm	830 – 960 mm	830 – 1000 mm	830 – 980 mm	830 – 980 mm	830 – 980 mm
Overall height	950–1020 mm	950–1020 mm	1000–1300 mm	900–1300 mm	900–1250 mm	1020–1240 mm
Pivot width	1480 mm	1380 mm	1530 mm	1380 mm	1380 mm	1500 mm
Maximum slope angle brake	7°	7°	7°	7°	7°	7°

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\* If equipped with electrical system, the weight increase is 4,2 kg. \*\* A smaller seat width can be obtained by using the side rest pad. \*\*\* A lower backrest height can be obtained by using another backrest. \*\*\*\* Overall width + 10 mm (when equipped with hub brake 22" or 24") •

	515 mm (20")	560 mm (22")	600 mm (24")	405 mm (16")
Width of the wheels	35 mm (1 3/8")	25 mm (1") - 35 mm (1 3/8")	25 mm (1") - 35 mm (1 3/8")	45 mm (1 3/4")
Wheel inclination		0° +/- 1° (Wheelc	hair without load)	

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# 7.2 Materials

Chassis, backrest tubes	Steel, powder coated
Plastic parts like push handles, brake handles, foot plates and parts of most options	Thermoplastic (e.g. PA, PE, PP, ABS and TPE) according to marking on the parts
Upholstery (seat and backrest)	Foam PUR and polyether, polyurethane-coated fabric and plush
Table	ABS
Seat plate	Coated Birch plywood
Other metal parts	Zinc alloys, aluminum alloys and steel
Screws, washers and nuts	Steel, corrosion free

vert All materials used are protected against corrosion. We use only REACH compliant materials and components.

 $\mathring{l}$  Theft and metal detection systems: in seldom cases the materials used in the wheelchair may activate theft and metal detection systems.

# 7.3 Environmental conditions

	Storage and transportation	Operation		
Temperature	-20 °C to 40 °C	-5 °C to 40 °C		
Relative humidity	20 % to 90 % at 30 °C, not condensing			
Atmospheric pressure	800 hPa to 1060 hPa			

 $\mathring{\mathbb{I}}$  Be aware that when a wheelchair has been stored under low temperatures, it must be adjusted to operating conditions before use.

# 7.4 Electrical system — Models equipped with electric tilt and backrest

Voltage supply	U in 100–240 Voltage, AC, 50/60 Hz (AC = Alternating current), DC 24 V (DC = Direct current)		
Maximum current input	I in max. 5 Ampere (battery = max 1,3 Ampere)		
Intermittent (periodic motor operation)	10 % 2 min ON / 18 min OFF		
Protection class	CLASS II equipment		
*	Applied Part complying with the specified requirements for protection against electrical shock according to IEC60601-1.		
Degree of protection	The control unit, external power supply, motors and hand controls are protected according to IPx6. See label and label on each electric device for correct IP class. The lowest IP-classification decides the overall classification of the system.		
	IPx6- The system is protected against water projected from any direction (not high pressure).		

 $\hat{j}$  For full details contact your Invacare authorized provider.

# 7.5 Electromagnetic compliance (EMC)

### **General information**

Products with electronic equipment needs to be installed and used according to the EMC information in this user manual.



WARNING!

Portable and mobile communications equipment can affect the operation of this product.
 This product must not move unintentionally while being submitted to Electromagnetic interference

 If this should happen; the product must immediately be taken out of use and checked by a qualified technician.

This product has been tested and complies with the EMC limits specified by IEC 60601-1-2 for Class B equipment.

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This product has a very low emission and should not interfere with other equipment.

However, if other devices nearby should react inexplicably, run and stop this product and observe the devices.

- If nothing happens with the other devices, then this product is not causing the error.
- If other devices are behaving in an inexplicable manner, then this product is causing the error. Solve the problem by moving or increasing the distance between them.

Test	Basic Standard	Compliance Level / Frequency Range	
Mains PortConducted Emissions	EN 55011	Group 1 Class B	
Radiated Emissions	EN 55011	Group 1 Class B	
Mains Harmonics	EN 61000-3-2 +A1 + A2	Class A	
Voltage Fluctuations	EN 61000-3-3	dc%/dmax/d(t)/Pst	
Electrostratic Discharge	EN 61000-4-2	±2/4/6kV Contact, ±2/4/8kV Air	
Radiated Field Immunity	EN 61000-4-3	3V/m, 80% 1kHz AM, 80MHz - 2.5 GHz	
EFT/Bursts	EN 61000-4-4	±2kV L/N/E/LNE	
Surge Immunity	EN 61000-4-5	±0.5/1kV L-N, ±0.5/1/2kV L-E/N-E	
Conducted RF Immunity	EN 61000-4-6	3V, 80% 1kHz AM, 0.15MHz - 80MHz	
Magnetic Field Immunity	EN 61000-4-8	3A/m, 50Hz-80Hz	
Dips & Interruptions	EN 61000-4-11	-95%/-60%/-30%	

#### EMC - Manufacturer's declaration 7.6

#### 7.7 Seat height tables

# 7.7.1 Rea Azalea & Rea Azalea Assist

		$\frac{1}{2}$		110 4 32 1	150 4 3 2 1	
450	600 (24")	2		1		200
450	600 (24")	2			2	150
450	600 (24")	2			2	140
400	560 (22")	1		3		150
400	560 (22")	1		3		140
400	405 (16")		4	3		150
400	405 (16")		4	3		140
450	405 (16")	3		1		200
450	405 (16")	3			2	150
450	405 (16")	3			2	140

# 7.7.2 Rea Azalea max

		$\frac{1}{2}$	110 4 32 1	150 4 3 2 1	
450	600 (24")	2	1		200
400	560 (22")	1	3		140
450	405 (16")	3	1		200

7.7.3 Rea Azalea equipped with Tall-kit

			150 4 3 2 1	
500	600 (24")	4	2	200
500	405 (16")	5	3	200



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