



RESNA AT-1 Standard

Requirements and Test Methods Related to Mobility Devices

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Beneficial Designs, Inc.

Minden, Nevada

American National Standard

for Assistive Technology for Air Travel–

Volume 1:

**Requirements and Test Methods Related to
Mobility Devices**

RESNA AT-1:2021 Volume 1

Requirements and Test Methods Related to Mobility Devices

- Section 1 Vocabulary and Definitions for Assistive Technology and Air Travel
- Section 2 Information and Instructions for preparing Wheelchairs to be Stored and Transported in Commercial Aircraft
- Section 3 Handling Procedures for PMDs to be Stored and Transported in Commercial Aircraft
- Section 4 Labeling and Design Requirements for Mobility Devices Designed for Stowage and Transport in Commercial Aircraft**

Disability experts/organizations

that participated in writing the Standard

Christopher and Dana Reeve Foundation

Muscular Dystrophy Association (MDA)

National Council on Independent Living (NCIL)

National Disability Rights Network (NDRN)

Paralyzed Veterans of America (PVA)

United Spinal Association

All Wheels Up

Don Lange (US Navy Veteran, 1967-70,
uses scooter for mobility)

Northwestern University

Open Doors Organization

Presperin Pedersen Associates

Rehabilitation Engineering and Assistive
Technology Association of North
America (RESNA)

University of Illinois at Chicago (UIC)

Air carrier experts

that participated in writing the Standard

Alaska Airlines

American Airlines

Delta Airlines

Envoy Air, Inc.

Hawaiian Airlines

JetBlue Airways

Sky West Airlines

Southwest Airlines Co.

United Airlines

Airlines for America (A4A)

International Air Transport
Association (IATA)

Wheelchair experts

that participated in writing the Standard

DEKA R&D Corporation

Hoveround

Invacare Corporation

Leisure Lift

Permobil

Pride Mobility Products
Corporation

StairMaster Wheelchair
Company

Beneficial Designs, Inc

East Penn Manufacturing/MK

Battery

Human Engineering Research

Laboratories (HERL)

Global Repair Group

Scootaround, Inc.

U.S. Rehab

Federal agencies

that participated in writing the Standard

Food & Drug Administration (FDA)

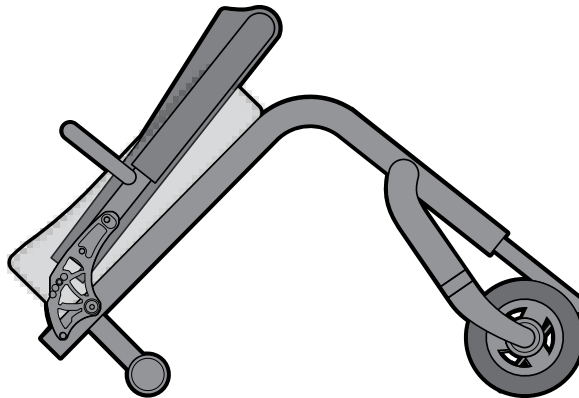
Veterans Health Administration National Center for Patient Safety

Department of Transportation (DOT)

U.S. Access Board

Mobility device

Manual wheelchairs that fold



Mobility device

Manual wheelchair
with complex seating
(not collapsible)



ORTHOS XXI Dory Manual Wheelchair

<https://www.medicalexpo.com/prod/orthos-xxi/product-76994-923245.html>

Mobility device

Manual wheelchair
with power assist
add-on devices

Powered wheelchair



Mobility device

Manual wheelchair
with power assist wheels

Powered wheelchair



Sunrise Quickie **Power-Assist Manual Wheelchair**

<https://www.sunrisemedical.eu/e-mobility/e-mpulse/power-assist-wheelchairs/wheeldrive>

Mobility device

Powered mobility device

PMDs

Powered wheelchair



Invacare AVIVA FX **Powered Wheelchair**

<https://pro.invacare.com/Mobility/Powered-Wheelchairs/Front-Wheel-Drive/Invacare-AVIVA-FX-Power-Wheelchair---Captain%27s-Seat/p/IFX-20C>

Mobility device

Powered mobility device

PMDs

Powered scooter



Vive 3-Wheel Mobility **Powered Scooter**

<https://wheelchair.mobility-scooter.biz/vive-3-wheel-mobility-scooter-electric-powered-mobile.html>

RESNA AT-1 Section 1

Mobility Device Information, Principles, and Training for Stowage and Transport in Commercial Aircraft

- 1-3 Scope, References, Terms and Definitions
- 4 Classification of assistive technologies for mobility (ATFM) used by passengers
- 5 Information to be collected by the air carrier
- 6 Information on air travel configuration card
- 7 Information provided by air carrier
- 8 Mobility device accommodation and transportation principles
- 9 Required training

RESNA AT-1 Section 2

Mobility Device Communication and Instructions Prior to Stowage and Transport in Commercial Aircraft

- 1-3 Scope, References, Terms and Definitions
- 4 Travel booking and reservation process and pre-airport preparation
- 5 Arrival at the airport
- 6 Ticket counter check-in
- 7 Passenger and service agent and/ramp consultation (departure gate agent)

RESNA AT-1 Section 3

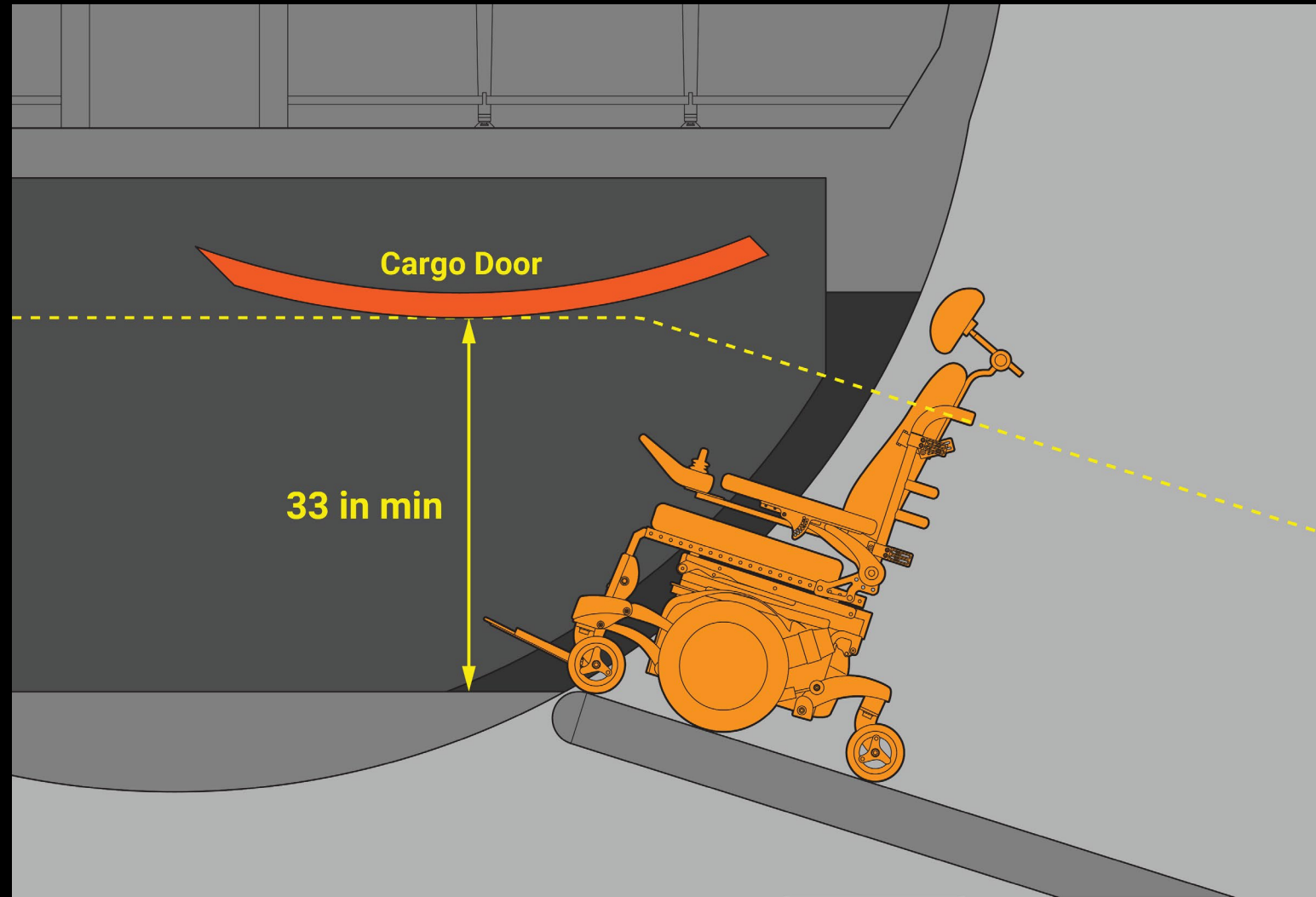
Mobility Device Handling Procedures for Stowage and Transport in Commercial Aircraft

- 1-3 Scope, References, Terms and Definitions
- 4 Verification of mobility device at the airport
- 5-6 Preparation of mobility device for air travel
- 7-8 Transfer of mobility device
- 9 Securement of mobility device
- 10 Preparation of mobility device after flight
- 11 Response to mishandling

RESNA AT-1 Section 3 Clause 4

Verification

Height



RESNA AT-1 Section 3 Clause 4

Verification

PMDs meeting the RESNA AT-1
Sec 4 Standard must have an
**air travel configuration with
reduced height**



RESNA AT-1 Section 3 Clause 4

Verification

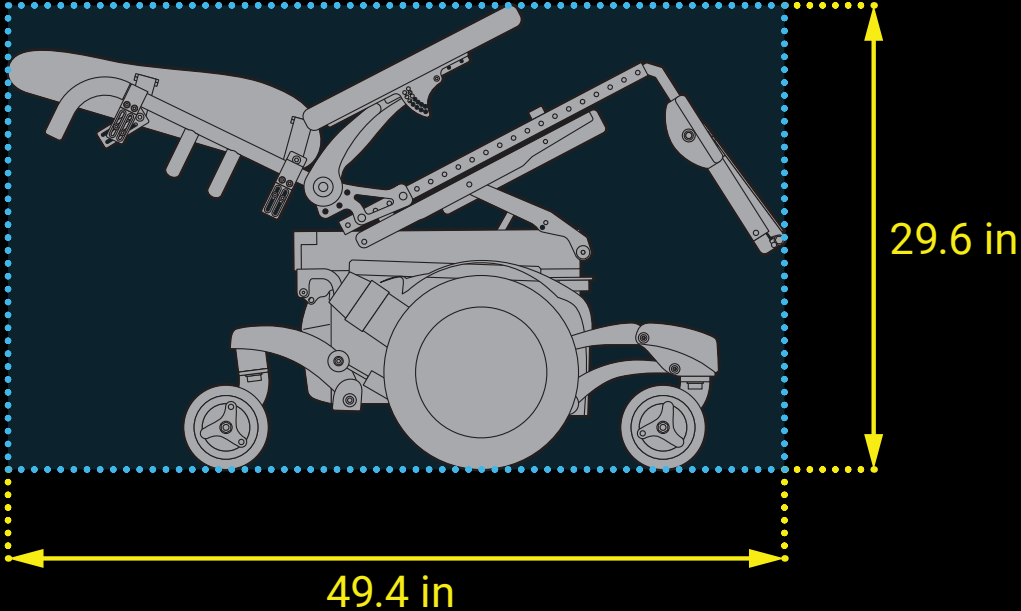
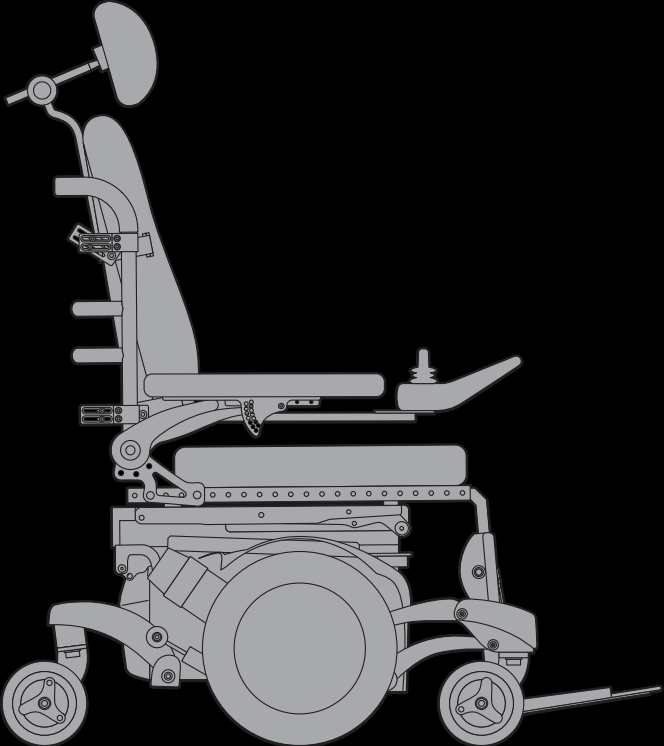
Battery type

Weight



RESNA AT-1 Section 3 Clause 5

Preparation for air travel



RESNA AT-1 Section 3 Clause 6

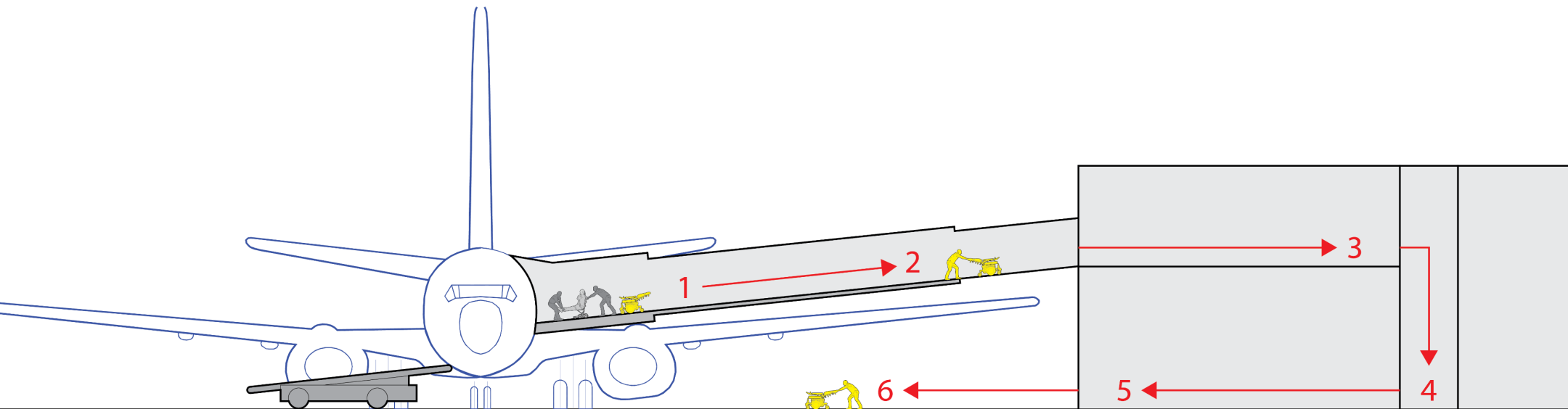
Preparation for transfer to belt loader

Will the mobility device fit through the cargo door while positioned upright?



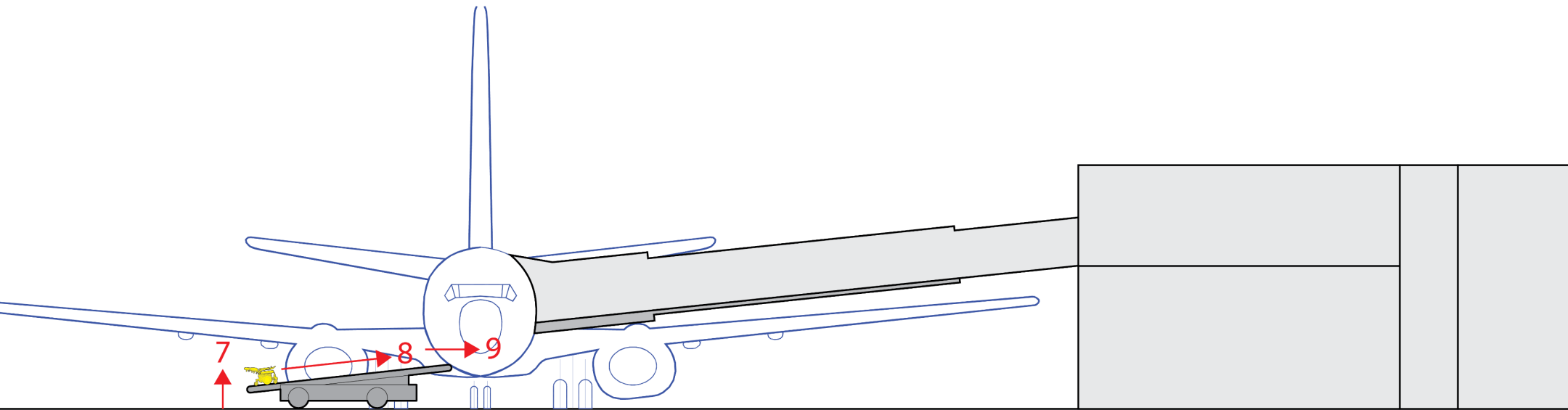
RESNA AT-1 Section 3 Clause 7

Transfer between jetway & tarmac



RESNA AT-1 Section 3 Clause 8

Transfer between tarmac & cargo area



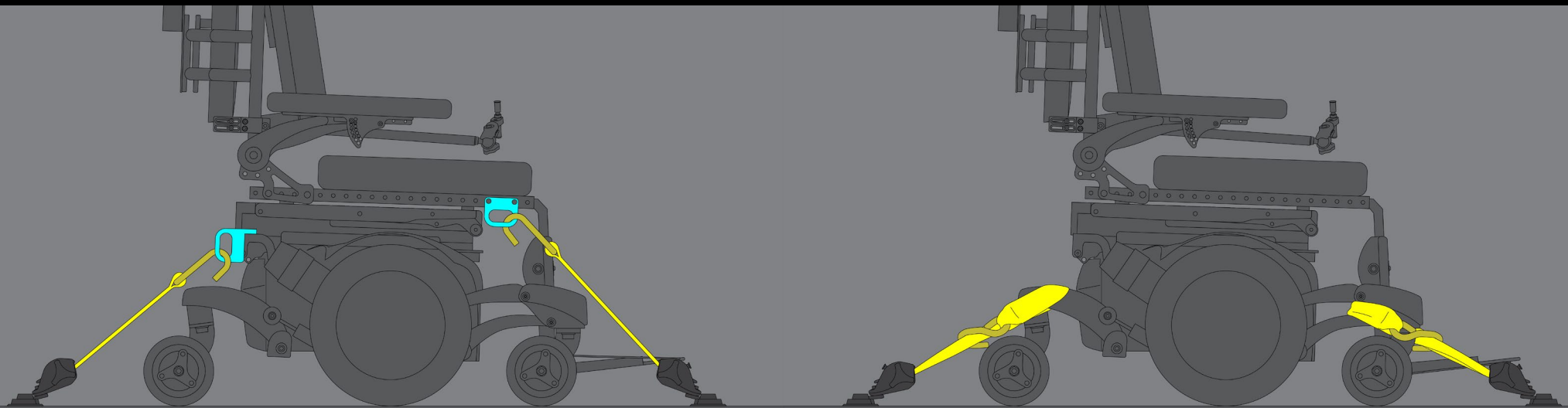
RESNA AT-1 Section 3 Clause 8

Transfer between tarmac & cargo area



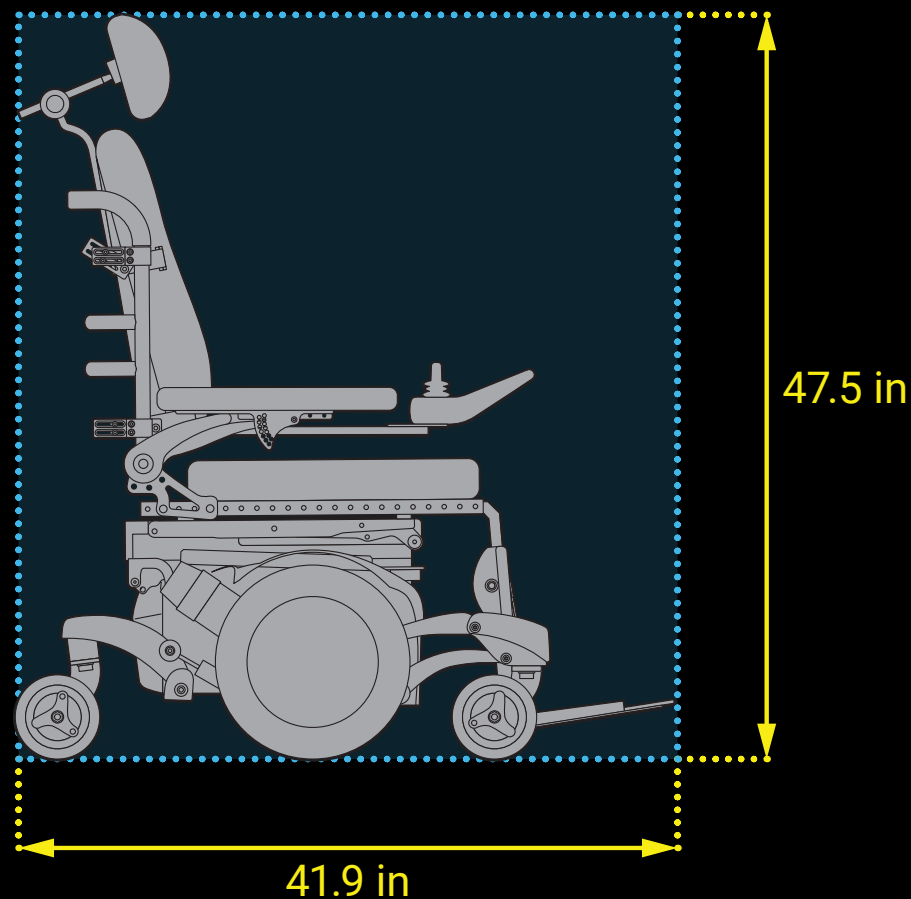
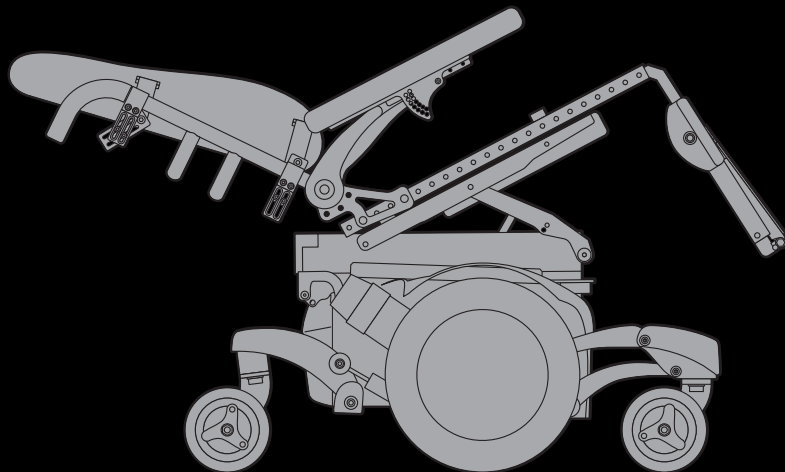
RESNA AT-1 Section 3 Clause 9

Securement of mobility device



RESNA AT-1 Section 3 Clause 10

Preparation for driving use



RESNA AT-1 Section 3 Clause 11

Response to mishandling



RESNA AT-1 Section 4

Labeling and Design Requirements for Mobility Devices Designed for Stowage and Transport in Commercial Aircraft

1-3 Scope, References, Terms and Definitions

4 Design specifications

5 Design specifications
for manual wheelchairs

6 Design specifications
for powered wheelchairs and scooters

7 Labeling guidelines

8 Air travel configuration card

RESNA AT-1 Section 4

Manual wheelchair design

Requirements in the RESNA AT-1 Standard

Reduce in size for stowage

Components removed for air travel

Can be strapped or latched in a folded position

Manual wheelchair storage

The Air Carrier Access Act (ACAA) requires

Air carriers to provide a “**priority space**” in the cabin of any aircraft with 100 or more passenger seats, which is “of sufficient size to stow at least one typical adult-sized folding, collapsible, or break-down manual passenger wheelchair, the dimensions of which are 13 inches by 36 inches by 42 inches or less without having to remove the wheels or otherwise disassemble it.”

14 CFR §382.67(a)



WheelchairTravel.org

<https://wheelchairtravel.org/air-travel/flying-with-manual-wheelchair/>

Folding cross-frame style wheelchair for stowage

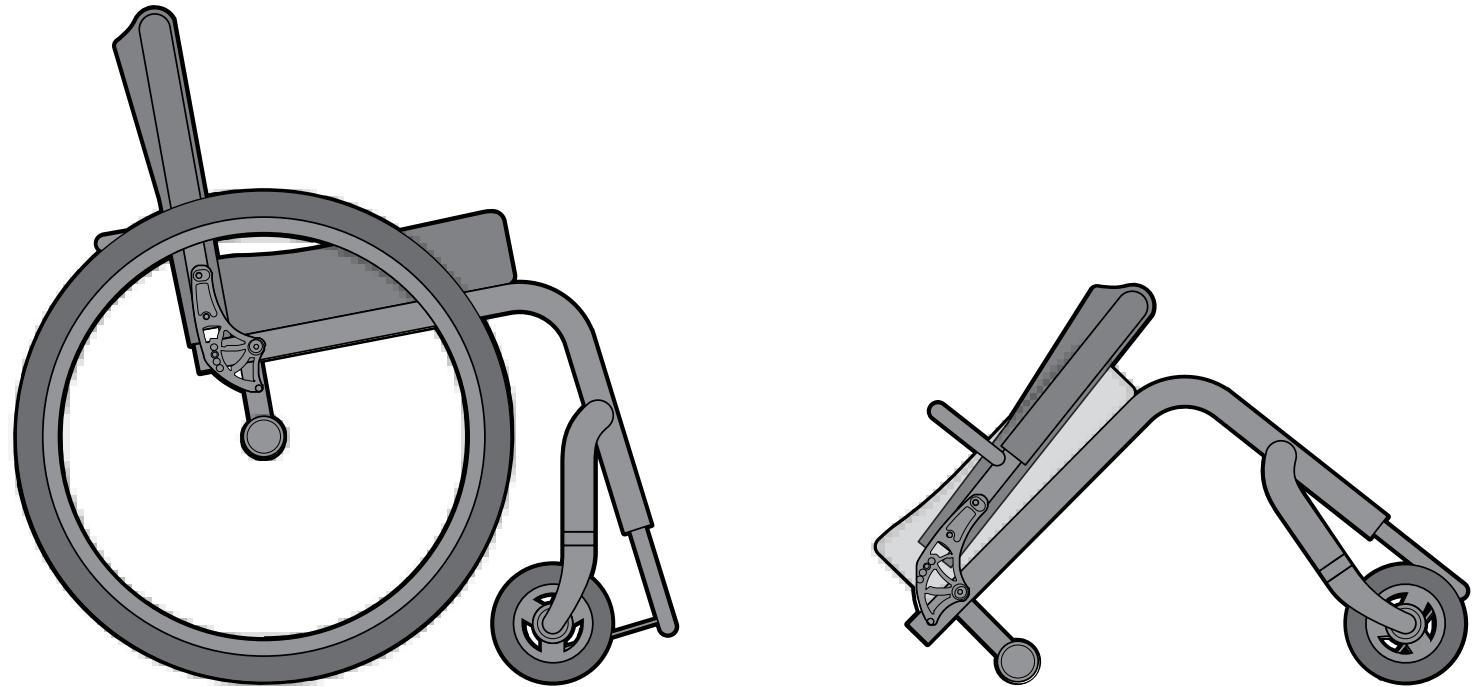


Sunrise Medical **Quickie**® **Xenon**²

<https://www.sunrisemedical.eu/wheelchairs/quickie/lightweight-wheelchairs/xenon2>

Rigid-frame wheelchair with folding back support

Standard quick-release main wheels are removed



Use a strap or latch mechanism to hold a wheelchair in a folded position

To prevent damage

To make the
wheelchair easier
to handle



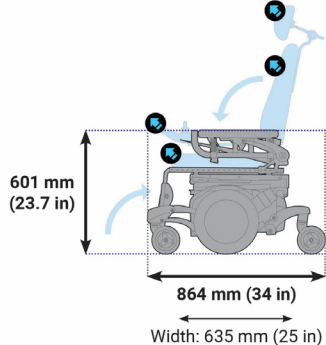
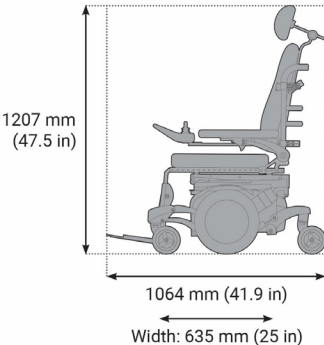





RESNA AT-1 Section 4 Clause 8

Air travel configuration card

Communicating
essential information
to air carrier staff for
handling the mobility
device

Highly recommended
for existing powered
mobility devices

 air travel information		Manufacturer Model  COMPLIANT with RESNA AT-1
owner: John Doe	phone: 123 456 7890	email: john.doe@email.com
		chair serial number: 7200003
air travel preparation The owner of this device, or a designated assistant, is encouraged to participate in the following process. <ol style="list-style-type: none"> remove seat cushion Remove seat cushion; store in aircraft cabin. remove head support Remove head support; store in aircraft cabin. lower back support to fit into aircraft Remove back support cushion; store in aircraft cabin. Cushion is fixed in place by means of velcro on the rear. Disconnect quick release pin on back support actuator at the attachment point behind back support. Fold back support forward. remove joystick Remove electrical connection to joystick. Remove joystick controller; store in aircraft cabin. raise foot supports Move foot supports to upright position. isolate battery power Switch breaker to off to fully disconnect power. disengage drive system Rotate lever on each motor to manually push the mobility device. 	air travel configuration 	driving configuration 
	unoccupied product weight  150 kg (330 lb) WARNING: This product should be lifted using a mechanical lift to avoid injury.	battery information  WARNING: Only non-spillable lead acid group 34 batteries may be installed on this product. This wheelchair was manufactured with 2 lead acid sealed gel cell non-spillable batteries conforming to DOT 49 CFR 173.159 (d) and IATA Provision A67.
	weight of additional components (if greater than 10 kg)  _____ kg (_____ lb) 12 kg (26.5 lb)	



owner: John Doe

phone: 123 456 7890

email: john.doe@email.com

chair serial number: 7200003

air travel preparation

The owner of this device, or a designated assistant, is encouraged to participate in the following process.

1 **remove seat cushion**

Remove seat cushion; store in aircraft cabin.

2 **remove head support**

Remove head support; store in aircraft cabin.

3 **lower back support to fit into aircraft**

Remove back support cushion; store in aircraft cabin. Cushion is fixed in place by means of velcro on the rear. Disconnect quick release pin on back support actuator at the attachment point behind back support. Fold back support forward.

4 **remove joystick**

Remove electrical connection to joystick.
Remove joystick controller; store in aircraft cabin.

5 **raise foot supports**

Move foot supports to upright position.

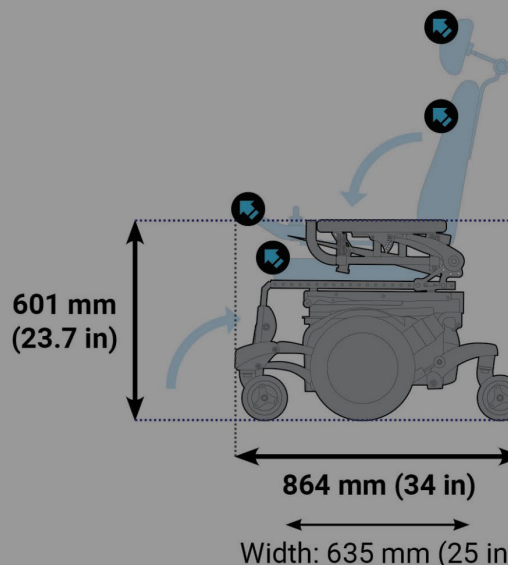
6 **isolate battery power**

Switch breaker to off to fully disconnect power.

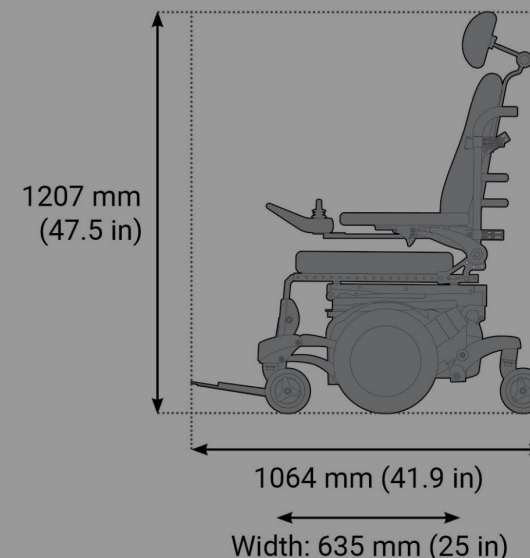
7 **disengage drive system**

Rotate lever on each motor to manually push the mobility device.

air travel configuration



driving configuration



unoccupied product weight

150 kg (330 lb)

WARNING: This product should be lifted using a mechanical lift to avoid injury.



weight of additional components

(if greater than 10 kg)

12 kg (26.5 lb)



battery information

WARNING: Only non-spillable lead acid group 34 batteries may be installed on this product.

This wheelchair was manufactured with **2 lead acid sealed gel cell non-spillable batteries** conforming to DOT 49 CFR 173.159 (d) and IATA Provision A67.



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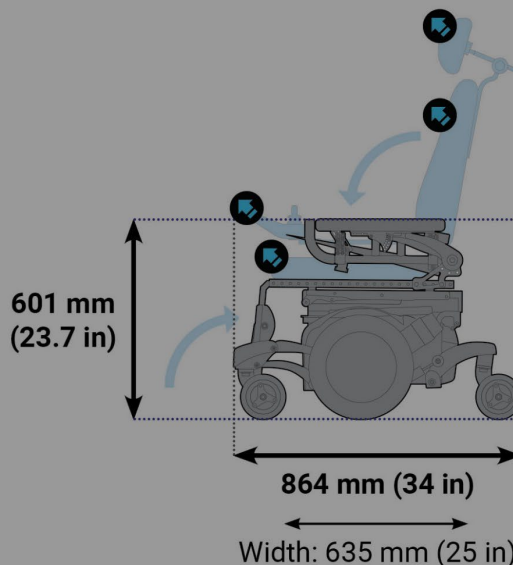
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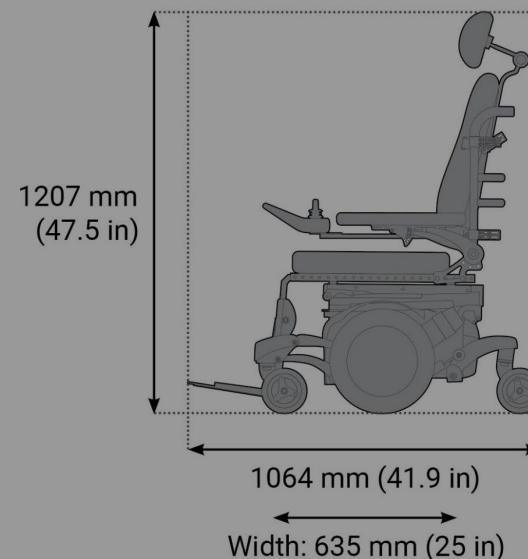
7 disengage drive system

Rotate lever on each motor to manually push the mobility device.

air travel configuration



driving configuration



unoccupied product weight

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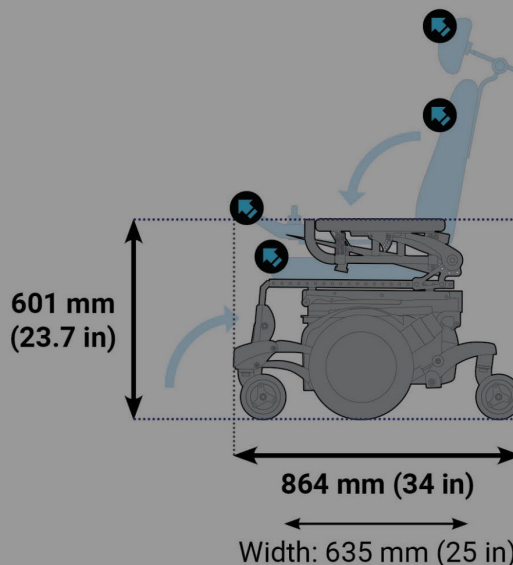
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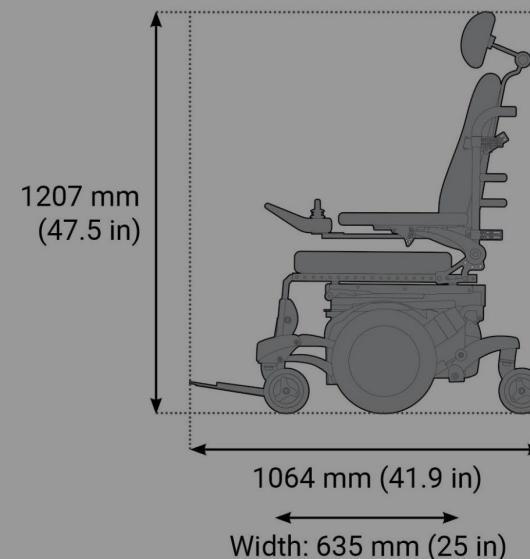
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Remove electrical connection to joystick.
Remove joystick controller; store in aircraft cabin.
- raise foot supports**
Move foot supports to upright position.
- isolate battery power**
Switch breaker to off to fully disconnect power.
- disengage drive system**
Rotate lever on each motor to manually push the mobility device.

air travel configuration



driving configuration



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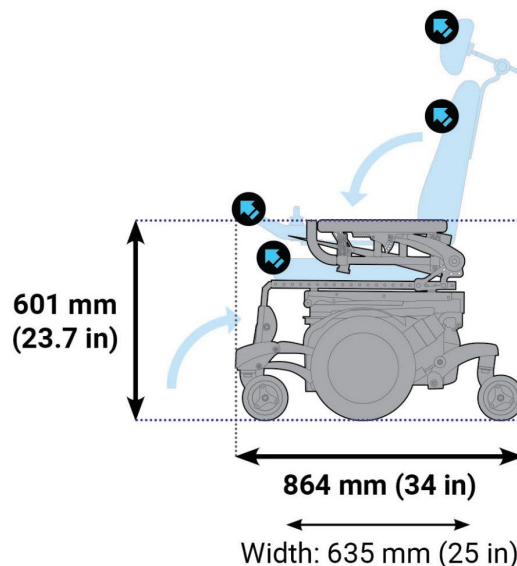
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air travel preparation

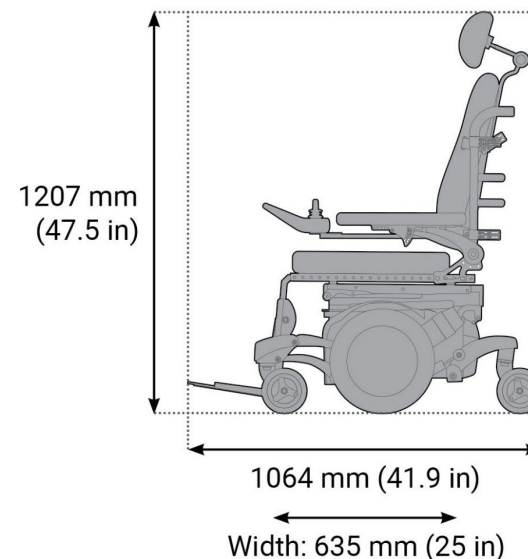
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- 6  **isolate battery power**
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- 7  **disengage drive system**
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air travel configuration



driving configuration



unoccupied product weight
150 kg (330 lb)

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weight of additional components
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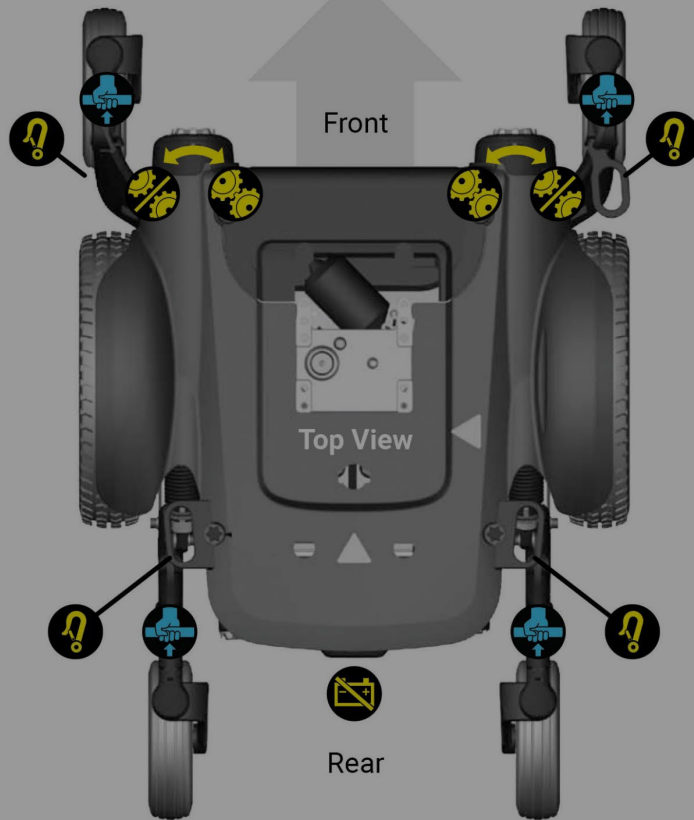
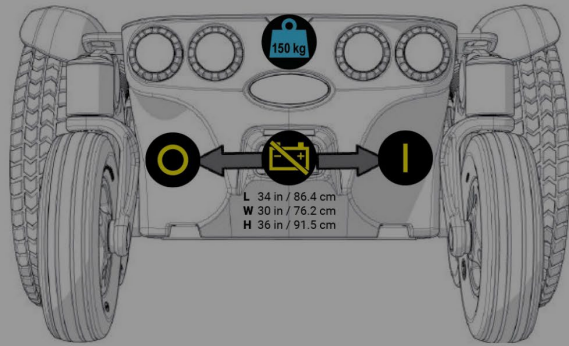
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isolate battery power SWITCH

Switch breaker to off to disconnect power from the battery.
The circuit breaker is located in the rear beneath the tail lights.



disengage drive system

Move levers outwards to release the brakes.
Disengage drive motors with brake release levers to move product manually. The brake release levers are located at the front of the mobility device.



manual lift points

Manual lift points are located on all four caster arms.
WARNING! This product should be lifted using a mechanical lift to avoid injury. Unoccupied product weight is 150 kg (330 lb).



chair securement

RESNA WC19 securement points can be used to secure the mobility device.
After positioning and securing the mobility device, re-engage the drive system to lock the drive wheels.

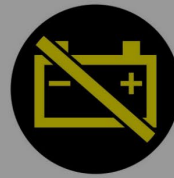
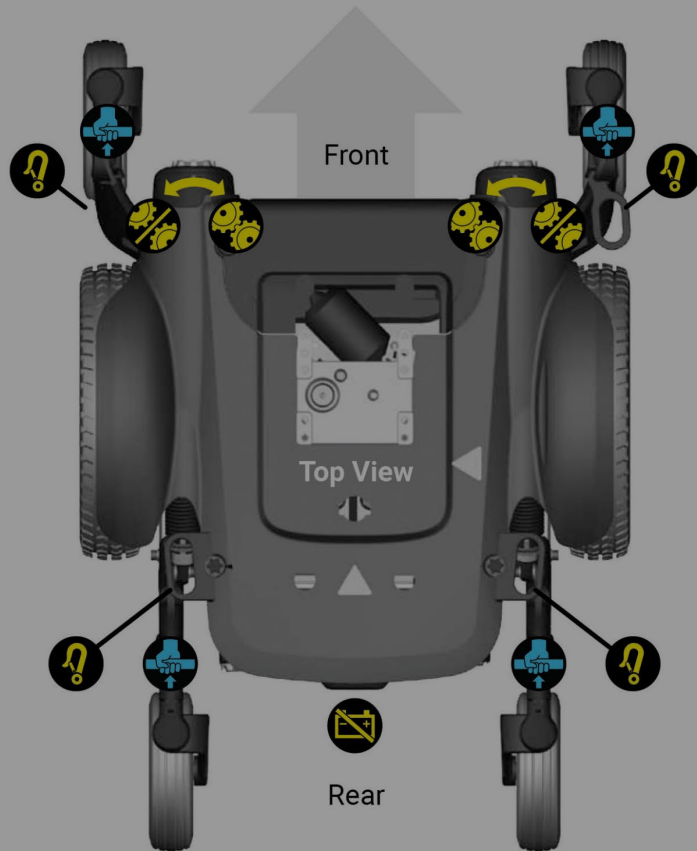
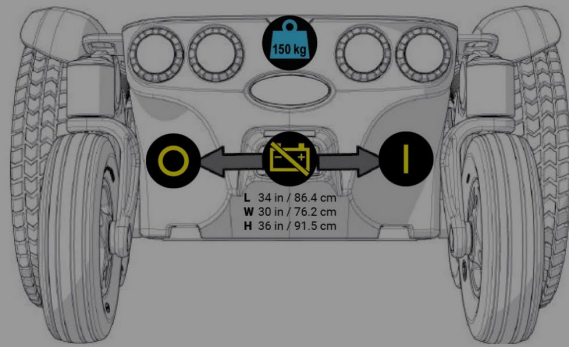


user operator manual online

Scan the QR code to visit the RESNA ATAT webpage. Configuration card prototype was created based on the product having a built-in electrical isolation switch to isolate the batteries. Some data was obtained from user operator manuals available online. All values are estimated and may not represent actual product data. The manufacturers of the products on this card have not reviewed or approved this information.

14 CFR §382.129(a)
states the following:

"As a carrier, you must permit passengers with a disability to provide written directions concerning the disassembly and reassembly of their wheelchairs, other mobility aids, and other assistive devices. **You must carry out these instructions to the greatest extent feasible...**"



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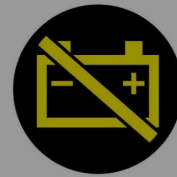
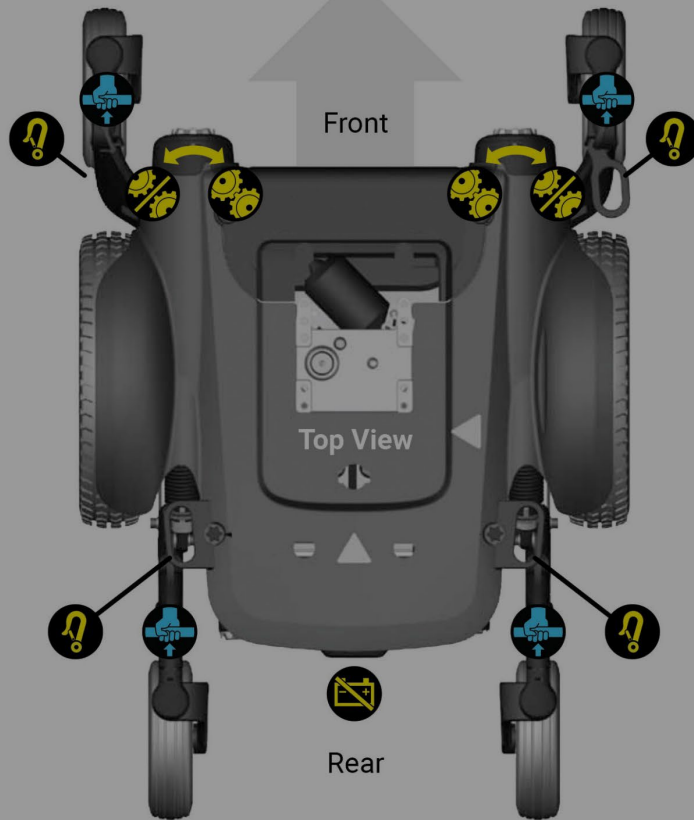
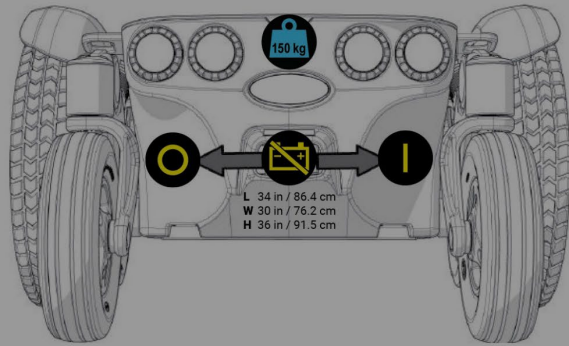


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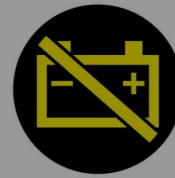
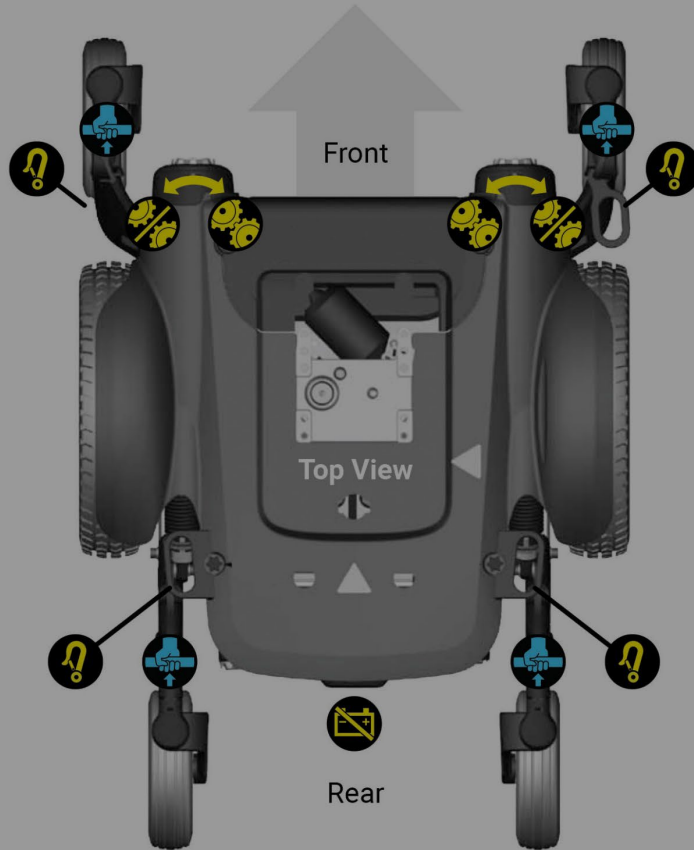
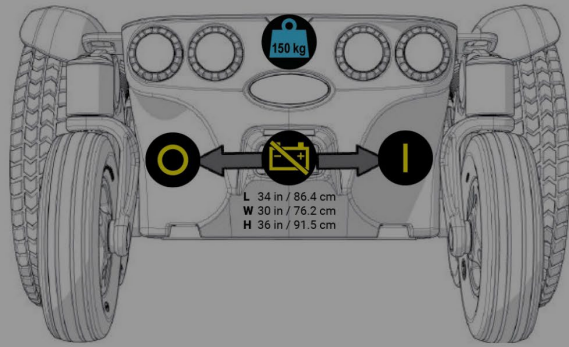


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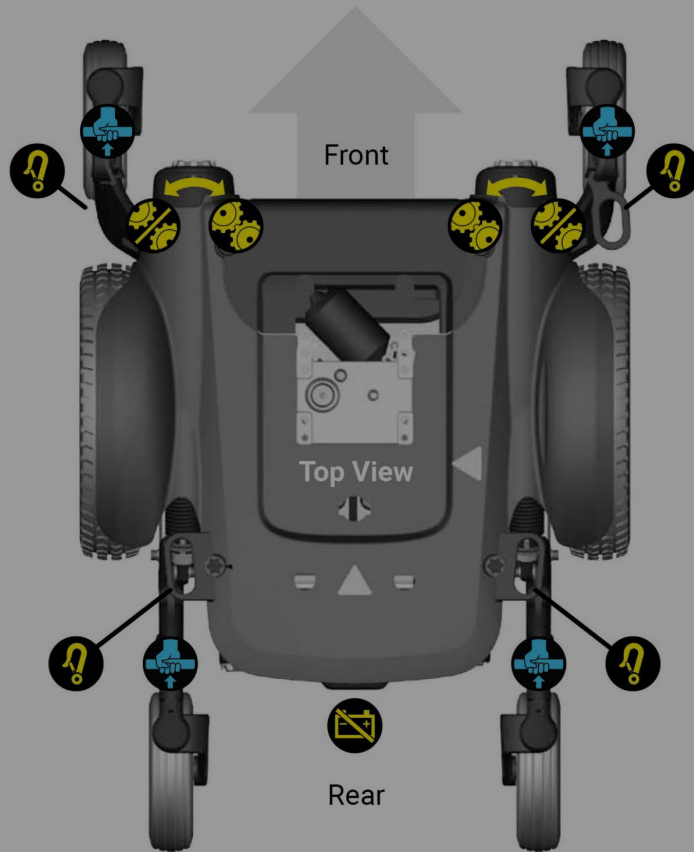
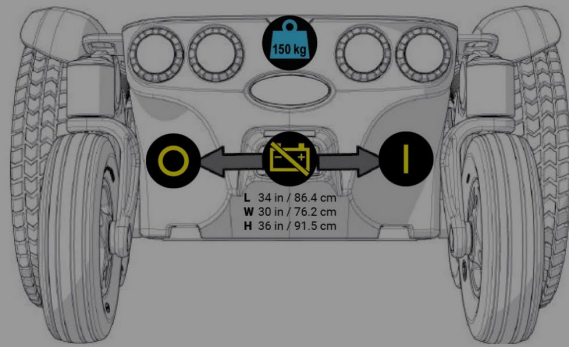


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RESNA WC19 securement points can be used to secure the mobility device.
After positioning and securing the mobility device, re-engage the drive system to lock the drive wheels.



user operator manual online

Scan the QR code to visit the RESNA ATAT webpage. Configuration card prototype was created based on the product having a built-in electrical isolation switch to isolate the batteries. Some data was obtained from user operator manuals available online. All values are estimated and may not represent actual product data. The manufacturers of the products on this card have not reviewed or approved this information.

14 CFR §382.129(a)
states the following:

"As a carrier, you must permit passengers with a disability to provide written directions concerning the disassembly and reassembly of their wheelchairs, other mobility aids, and other assistive devices. *You must carry out these instructions to the greatest extent feasible...*"

QR codes

Air Travel Configuration Card



Mobility Device Operator Manual



Powered Scooter Air Travel Configuration Card



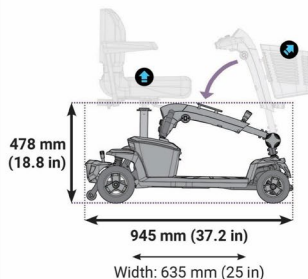
Manufacturer Model COMPLIANT with RESNA AT-1

owner: John Doe phone: 123 456 7890 email: john.doe@email.com chair serial number: 7801034

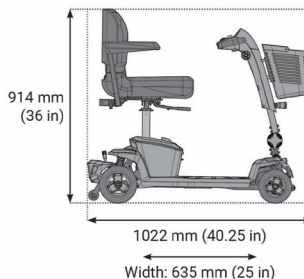
The owner of this device, or a designated assistant, is encouraged to participate in the following process.

- remove key**
Store key in bag attached to tiller.
- remove front basket**
Store in aircraft cabin.
- fold and remove seat**
(if required for height clearance)
- lock tiller in straight position**
Push tiller lock knob in and turn it clockwise 90 degrees. The front wheel must face forward in order to lock the tiller.
- fold tiller down**
Fold tiller down to folded position resting on seat.
- secure tiller in place**
- isolate battery power**
Switch breaker to off to fully disconnect power.
- disengage drive system**
Push lever on each motor forward to release the brakes, enabling the chair to be manually pushed.

air travel configuration



driving configuration



unoccupied product weight
52.7 kg (116 lb)

WARNING: This product should be lifted using a mechanical lift to avoid injury.

weight of additional components
(if greater than 10 kg)
11 kg (24.3 lb)

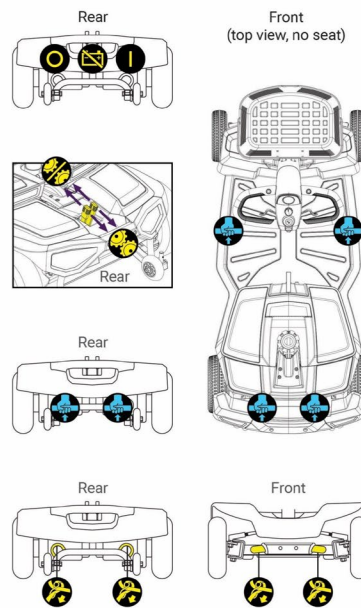
battery information

WARNING: Only sealed AGM or Gel-Cell type lead acid batteries may be installed on this product.

This wheelchair was manufactured with **2 lead acid sealed gel cell non-spillable batteries** conforming to DOT CFR 173.159 (d) and IATA Provision A67.

rev: 2022-11-30

important air travel feature locations



isolate battery power

The circuit breaker is located on the top of the battery pack. It also acts as a battery isolator and is controlled via the lever located inside the hole at the top of the battery pack.
Switch breaker to off to disconnect power from the battery.



disengage drive system

Disengage drive wheels with brake release levers to move product manually. The brake release levers are located at the rear of the scooter.
Move levers forward to release the brakes.



manual lift points

WARNING! This product should be lifted using a mechanical lift to avoid injury. Unoccupied product weight is 52.7 kg (116 lb).
Side lifting points are located at the middle edges of the foot plate. Rear lifting points are located near the motors and the anti-tip wheels. Use securement points when lifting mechanically.



chair securement

Re-engage the drive system to lock the device. Use cargo straps with or without the use of securement straps attached to the designated transit eye locations at the front and rear of the chair. The rear anchor points should be placed directly behind the rear securement points. The front anchor points should be placed wider than the scooter to provide increased lateral stability.
Attach fastening straps to marked securement points ONLY.



user operator manual online

Scan the QR code to visit the RESNA ATAT webpage. The make and model of wheelchair selected to draft this prototype of an air travel configuration card was modified for illustration purposes and does not represent a specific device. Some data was obtained from a sample user operator manual and specification sheet that was available online. Other values are estimated. The manufacturer of the product illustrated has not reviewed or approved this information.

14 CFR §382.129(a): "As a carrier, you must permit passengers with a disability to provide written directions concerning the disassembly and reassembly of their wheelchairs, other mobility aids, and other assistive devices. **You must carry out these instructions to the greatest extent feasible...**"

front

back

Manual Wheelchair Air Travel Configuration Card



air travel information

Manufacturer Model



COMPLIANT with RESNA AT-1

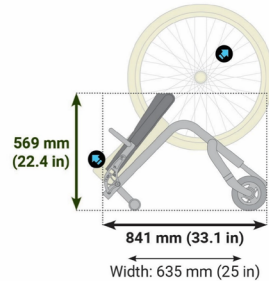
owner: John Doe phone: 123 456 7890 email: john.doe@email.com chair serial number: 8760005

The owner of this device, or a designated assistant, is encouraged to participate in the following process.

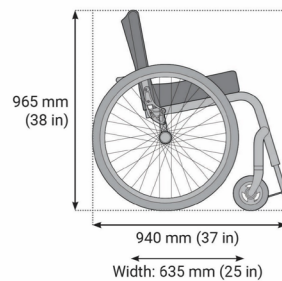
- remove seat cushion**
Remove seat cushion; store in aircraft overhead bin.
- fold and secure back support forward**
Pull the release cord beneath the back support to rotate the back support forward until the back support locks in the folded position. Store in aircraft cabin overhead bin or closet.
WARNING! When reconfiguring the chair in the driving configuration, ensure that the back support is fully locked in the proper position to prevent release of the back support and rearward tipping, which can result in injury or death.
- remove rear wheels**
Remove rear wheels; store in aircraft overhead bin. Remove the rear wheels by carefully performing the following steps:
 - Depress the quick-release button fully.
 - Remove wheel by sliding axle completely out of camber plug.
 - Repeat steps for opposite wheel.

NOTE: When reattaching wheels, the axle is not locked until the quick-release button pops out fully. Always check to ensure that each axle is locked and secure by pulling on the wheel in the direction of the axle.

air travel configuration



driving configuration



unoccupied product weight
6.4 kg (14 lb)

weight of additional components
(if greater than 10 kg)
11 kg (24.3 lb)

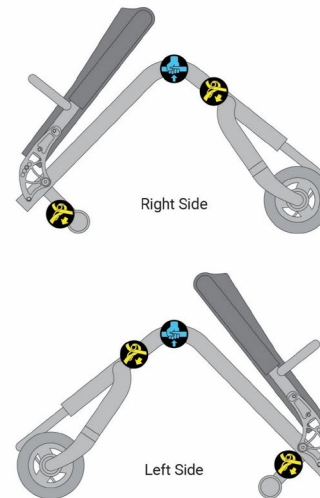
important information
Ensure all detachable components (highlighted yellow) are properly secured before use.

WARNING! This chair is not to be used unless all detachable components have been checked for securement. Failure to check detachable parts could lead to failure of the device during use, causing a fall and resulting in injury or death.

rev: 2022-11-30

important air travel feature locations

model side views



Both sides of the wheelchair in the Air Travel Configuration have been shown to illustrate the manual lifting points and the securement points along the non-detachable parts of the frame.



manual lift points

WARNING! Do not lift the wheelchair while occupied. Lifting the wheelchair while the user is seated in the chair could lead to back injury or imbalance and tipping, resulting in injury or death.

WARNING! Do not lift this wheelchair by grasping the Back Support Release Cord or footrest or any other detachable element of the device. Detachable elements may not bear the weight of the device and may detach, leading to unexpected swinging or dropping, which could result in damage or injury to others.

Proper lifting technique should be maintained by keeping knees slightly bent and back upright.

Designated manual lifting points are located on non-detachable areas of the main frame. Failure to lift the device using the designated manual lift points may lead to dropping and accidental damage to the device or injury to others.

Manual lift points are located in front of seat above front caster arms and on the main frame adjacent to seat cushion, near back support pivot point.



chair securement

WARNING! This chair is not designed to be occupied during transit. Move rider to an approved vehicle seat. Occupying the seat while in transit could cause the rider to be thrown from the chair in the event of a sudden stop, resulting in injury or death.

Attach the cargo straps (with or without the use of securement straps) to the designated securement points marked on the chair.



user operator manual online

Scan the QR code to visit the RESNA ATAT webpage. The make and model of wheelchair selected to draft this prototype of an air travel configuration card is provided as an example only and does not represent a specific device. The QR code shall ideally link to the user operator manual and more online information. Scan the current QR code to learn more about RESNA Assistive Technology for Air Travel (ATAT) Standards.

14 CFR §382.129(a): "As a carrier, you must permit passengers with a disability to provide written directions concerning the disassembly and reassembly of their wheelchairs, other mobility aids, and other assistive devices. *You must carry out these instructions to the greatest extent feasible...*"

front

back

General requirement

Unoccupied weight



F5

General requirement

Lifting points

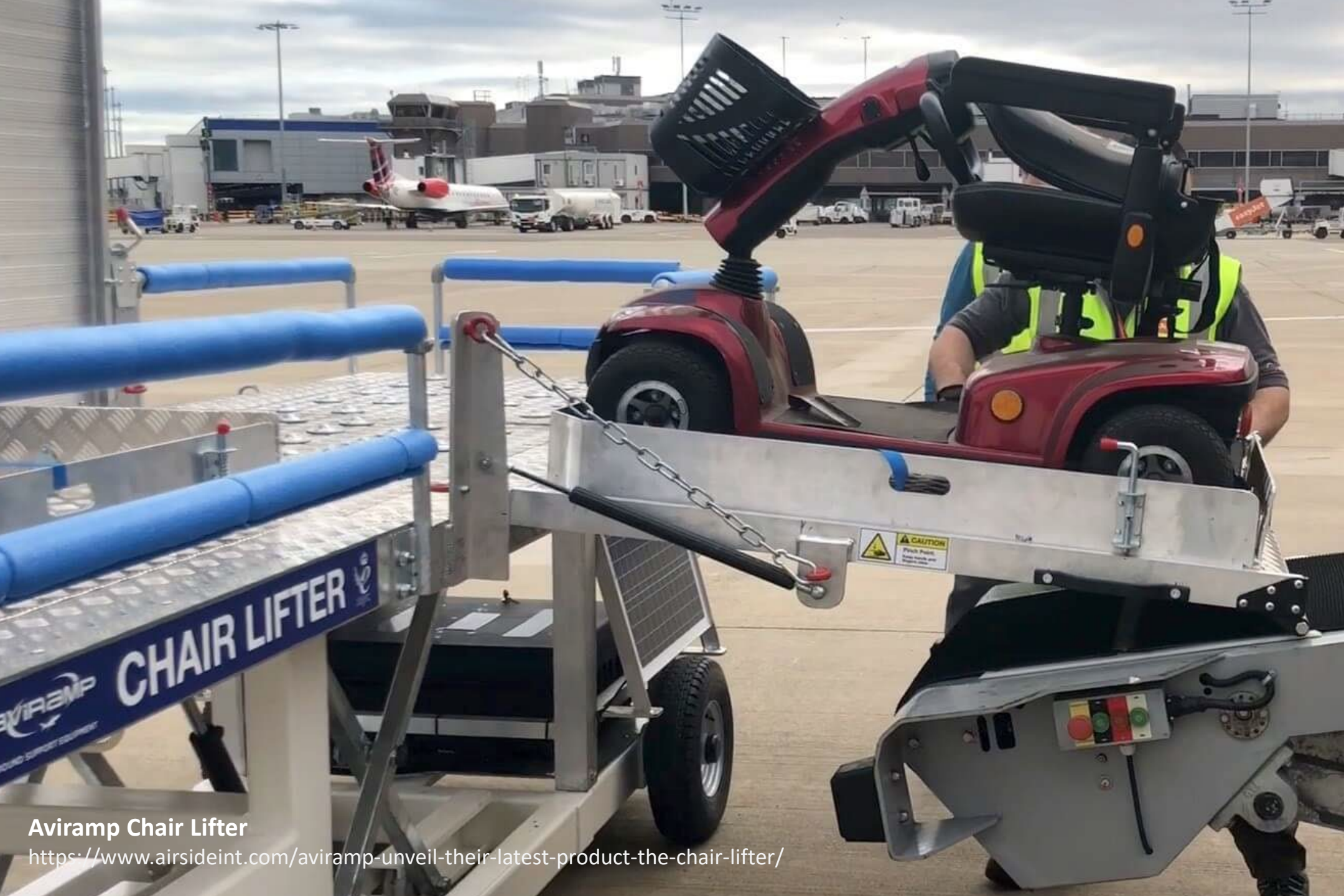




WheelchairTravel.org

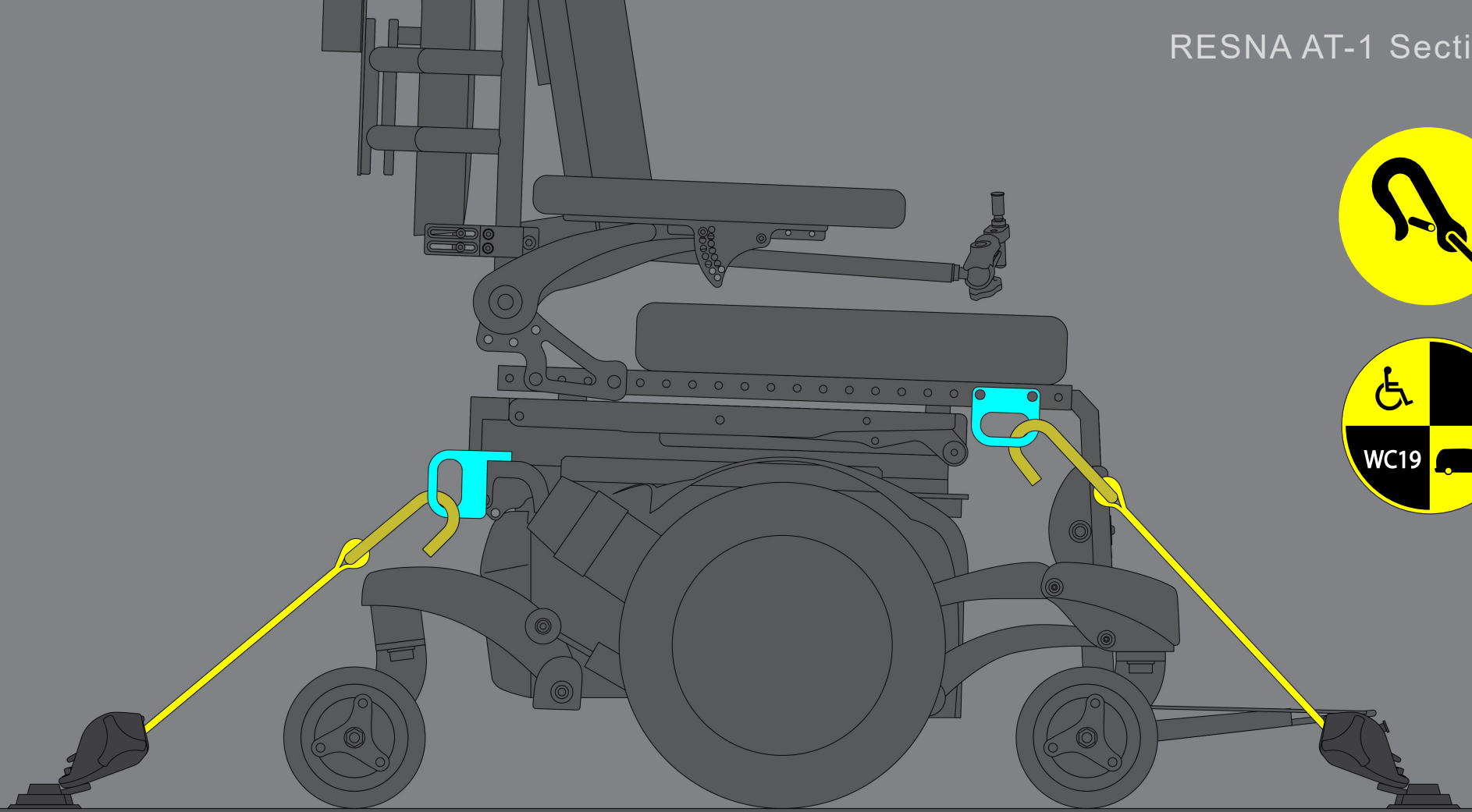
<https://wheelchairtravel.org/air-travel/reduce-risk-wheelchair-damage/>



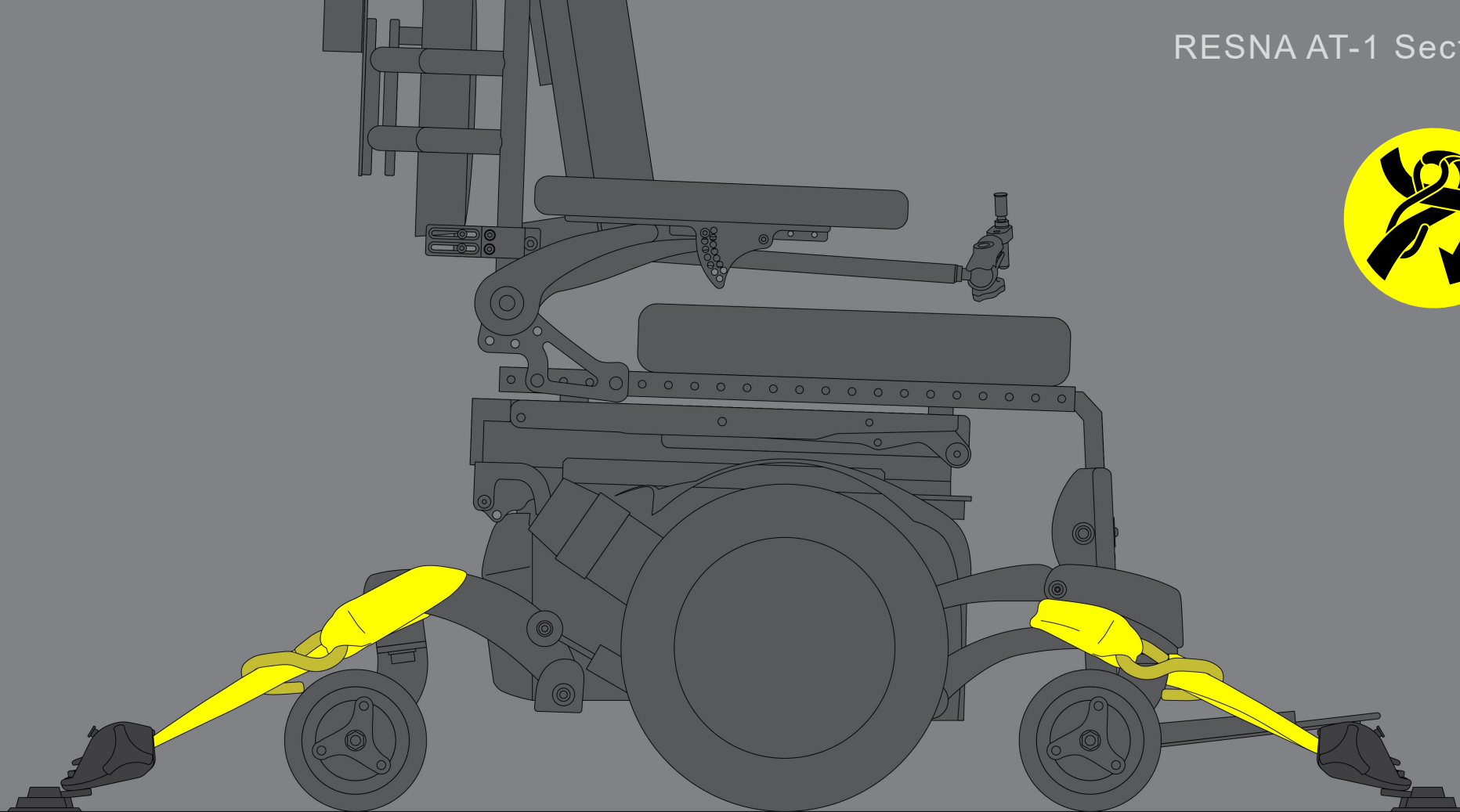


Aviramp Chair Lifter

<https://www.airsideint.com/aviramp-unveil-their-latest-product-the-chair-lifter/>



General requirement: WC19 Securement locations



General requirement: Cargo strap locations

RESNA AT-1 Section 4 Annex G

Mobility device securement points



Securement slings

and/or



Cargo straps



RESNA AT-1 Section 4 Annex G

Mobility device securement points



Securement slings

and/or



Cargo straps



Vive 3-Wheel Mobility Powered Scooter
<https://wheelchair.mobility-scooter.biz/vive-3-wheel-mobility-scooter-electric-powered-mobile.html>

RESNA AT-1 Section 4 Annex G

Mobility device securement points



Securement slings

and/or



Cargo straps



Air Travel Information

 **Size** – length, width, height

 **Weight** – total unoccupied mass

 **Battery type** – non-spillable

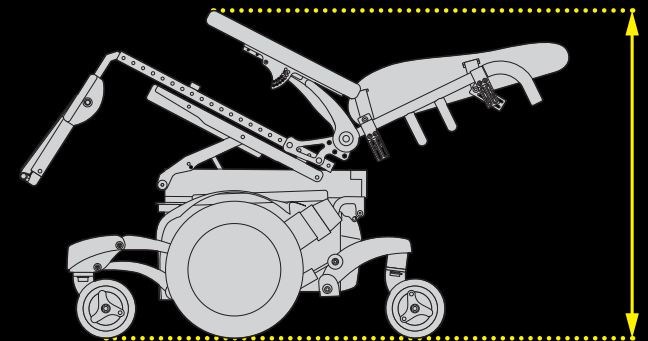




Required information

Size of the mobility device

The **height of the mobility device** in its air travel configuration must be able to fit through the baggage door and inside the cargo area where it may be secured

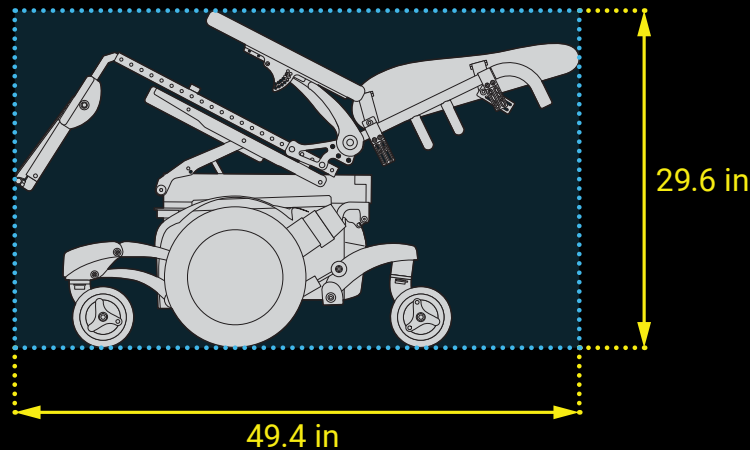




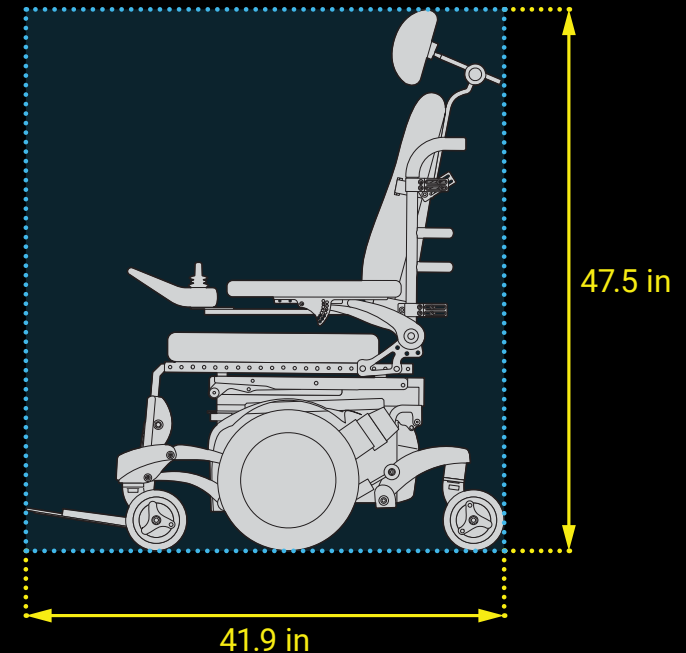
Dimensions of the mobility device

The following overall dimensions are needed by the air carriers for both the **Air Travel Configuration** and the **Driving Configuration**...

Length
Width
Height



Air Travel Configuration



Driving Configuration





Required information

Weight of the mobility device

The weight of the mobility device will determine how to load the PMD into the aircraft

Mechanical lift vs manual lifting





Required information

Battery requirements

Must be non-spillable

The following information is required

Number of batteries

Battery chemistry

Access location

Nominal voltage

Watt-hour rating if Lithium



Non-spillable Lead-acid battery



Spillable batteries prohibited!

Maintenance-free batteries are spillable

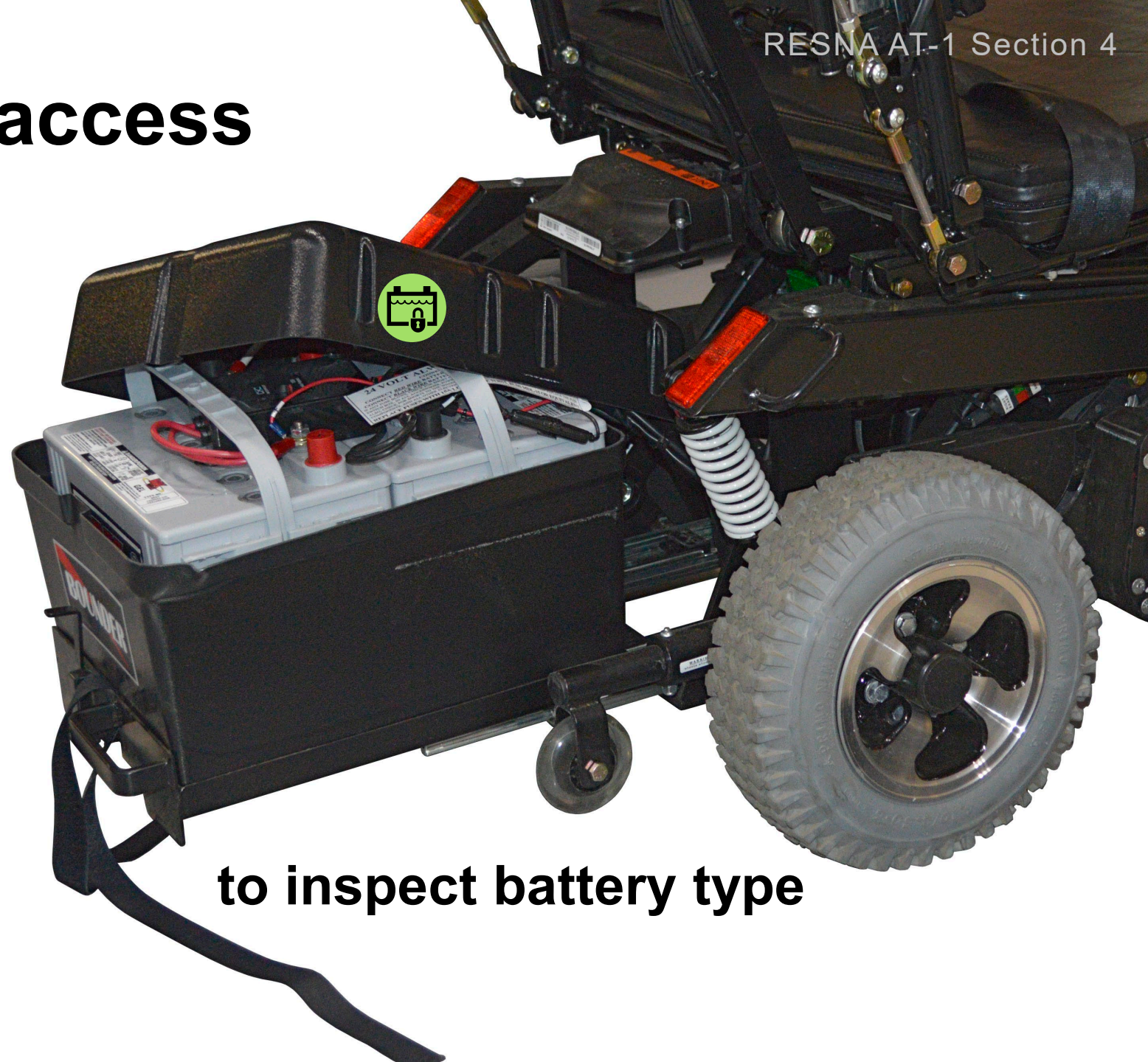


Tool-free access

To inspect battery type



Tool-free access



to inspect battery type

Preparation for Air Travel

for powered mobility devices

- 1 Reduce the height
- 2 Remove components
- 3 Isolate battery power
- 4 Disengage drive system



Aircraft cargo door heights vary greatly



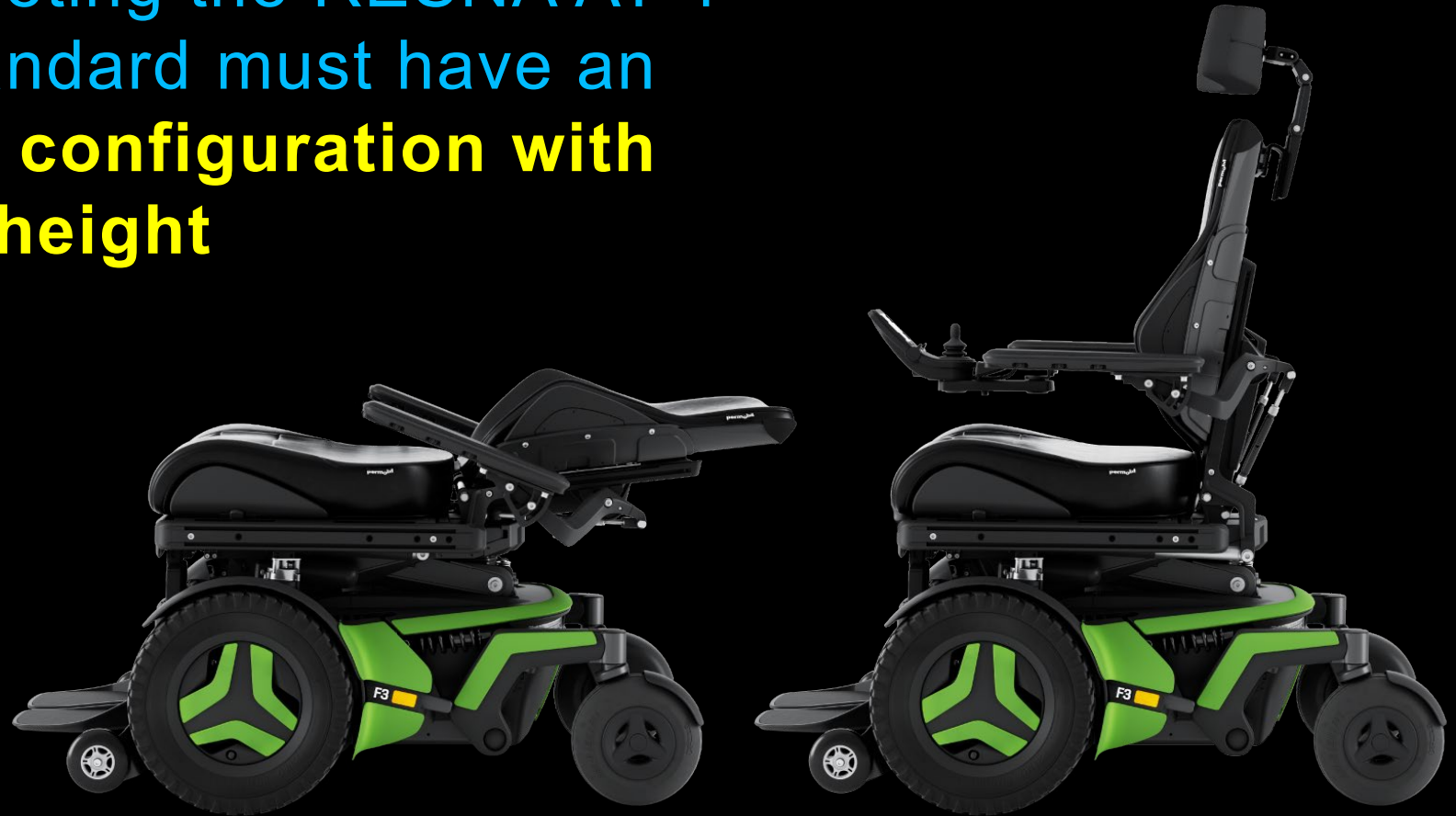
Short height baggage door



Preparation for Air Travel

1 Reduce the height

PMDs meeting the RESNA AT-1 Sec 4 Standard must have an **air travel configuration with reduced height**



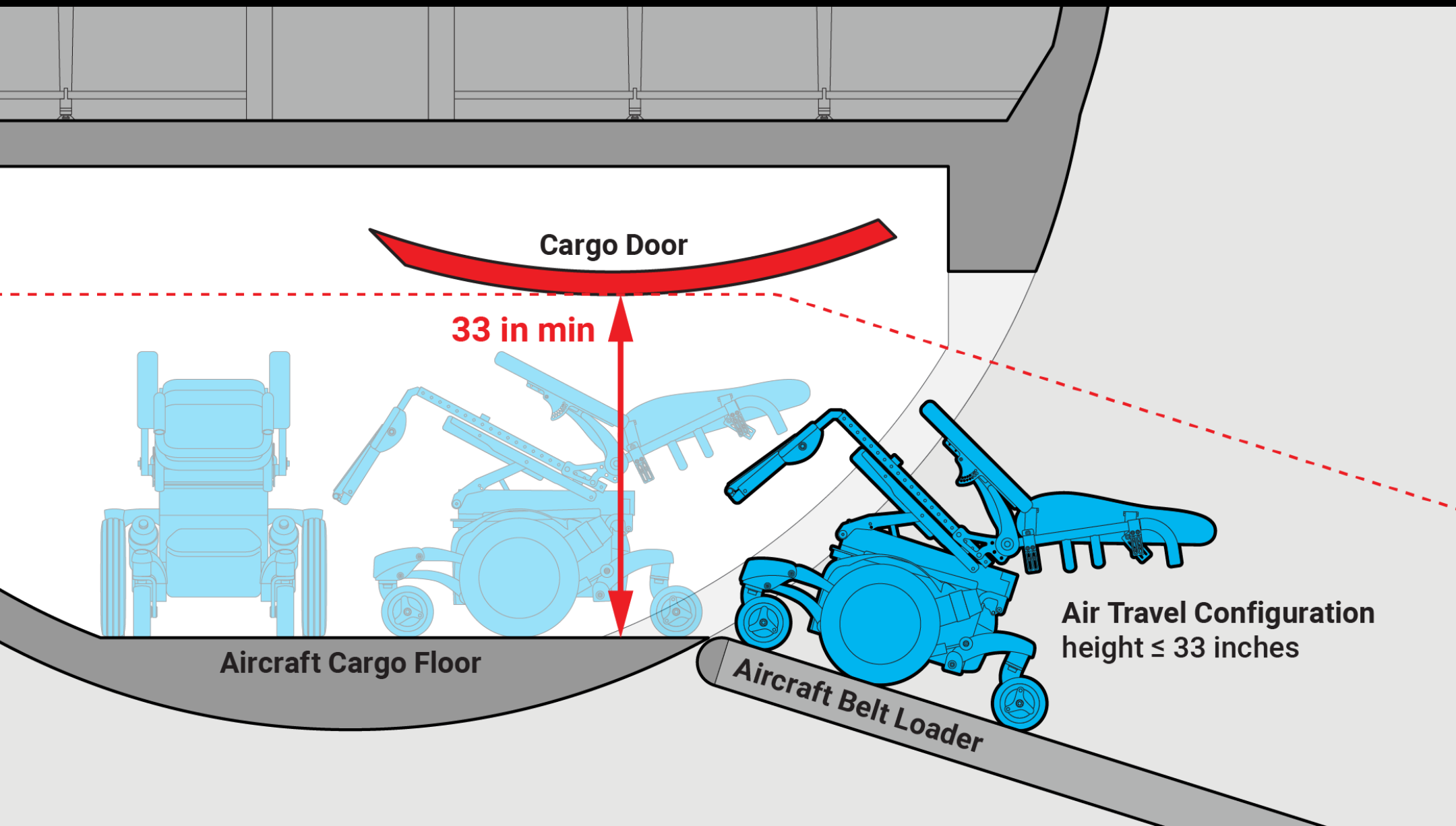
Permobil F5 Corpus

<https://www.permobil.com/en-us/products/power-wheelchairs/permobil-f5-corpus>

The RESNA AT-1 Standard requires...

An adjustable, removable or folding frame solution with a latch mechanism to reduce the height of the PMD

**Adjust, fold or remove
the back support**



Cargo Door

33 in min

Aircraft Cargo Floor

Aircraft Belt Loader

**Air Travel Configuration
height ≤ 33 inches**

The RESNA AT-1 requires the height of the PMD to reduce in height for air travel...

Until such chairs exist...

determine how to reduce the height of powered mobility devices

Consider using tools if this enables the ability to reduce the height of a PMD to fit into the cargo area upright on its tires

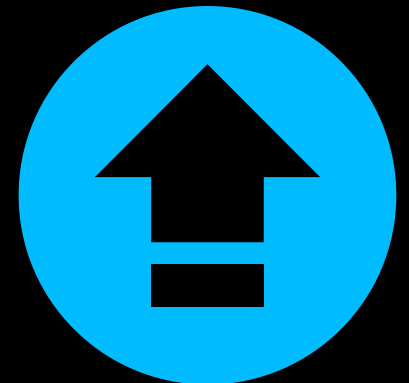


Preparation for Air Travel

2 Remove components

Store components inside the aircraft that could otherwise be lost or damaged (without the use of tools)

Other components that could be lost or damaged during air travel should be removed and stowed in a travel bag inside the aircraft cabin



Latch mechanisms are required to remove components that may be lost or damaged

Removable components should be stored in the aircraft cabin to prevent loss or damage



Invacare AVIVA STORM RX **Powered Wheelchair**

<https://pro.invacare.com/Mobility/Powered-Wheelchairs/Rear-Wheel-Drive/Invacare-AVIVA-STORM-RX-Power-Wheelchair---Ultra-Low-Maxx-Multi-Actuator-Power-Positioning-System/p/SRX-20MP>

Removable joystick or control input device is required



The RESNA AT-1 requires accessories to remove without tools...

Until such chairs exist...

Consider use of tools to remove accessories that might otherwise be damaged or lost

The RESNA AT-1 requires the joystick to be able to be removable...

Until joysticks are removable...

Consider protecting the joystick

If not removable



The RESNA AT-1 requires the joystick to be able to be removable...

Until joysticks are removable...

**Consider protecting
the control input device**

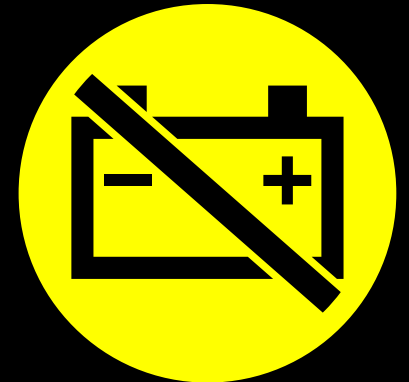
If not removable



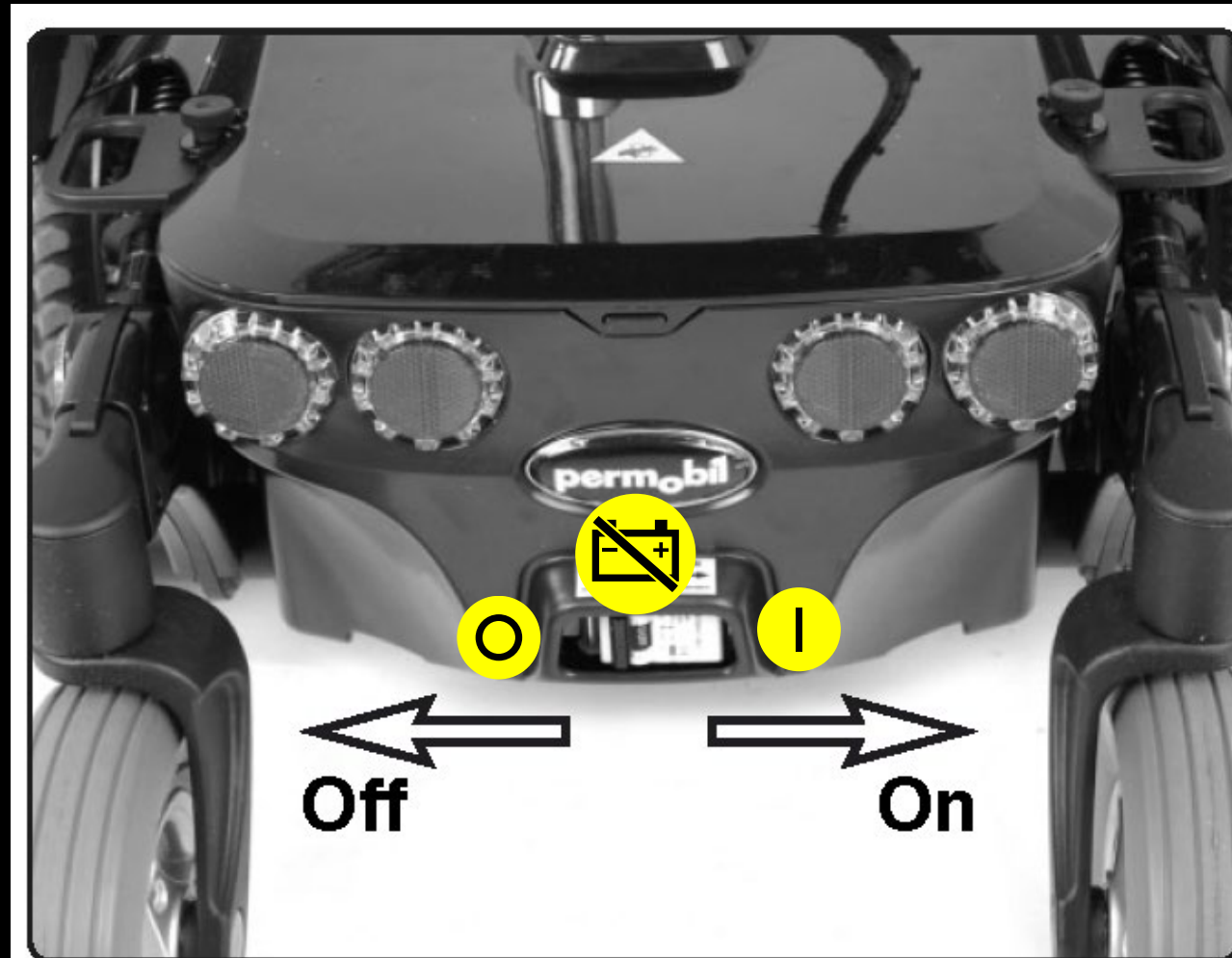
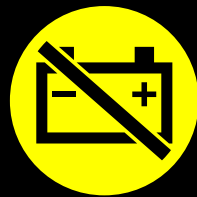
Preparation for Air Travel

3 Isolate battery power

Disconnect the battery power using the switch on a PMD meeting the RESNA AT-1 standard



Battery Isolation Switch

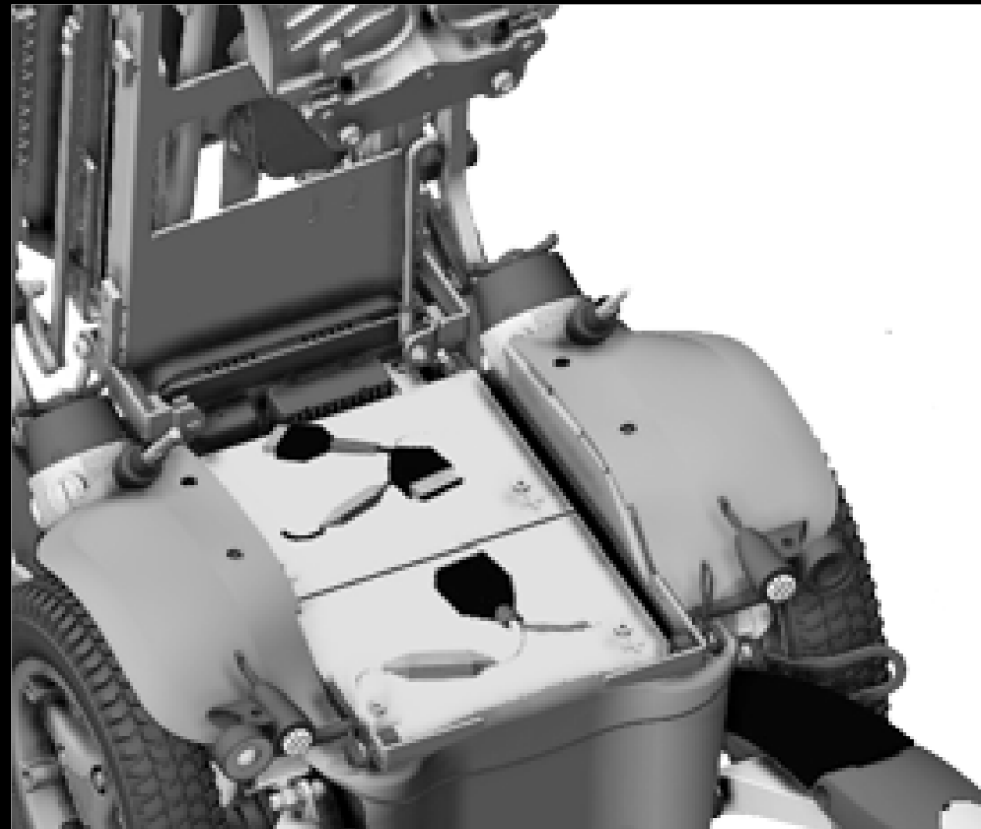
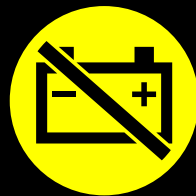


The RESNA AT-1 requires the joystick to be able to be removable...

Until joysticks are removable...

Separate the power connection

When there is no
battery isolation
switch



Preparation for Air Travel

4 Disengage the drive system

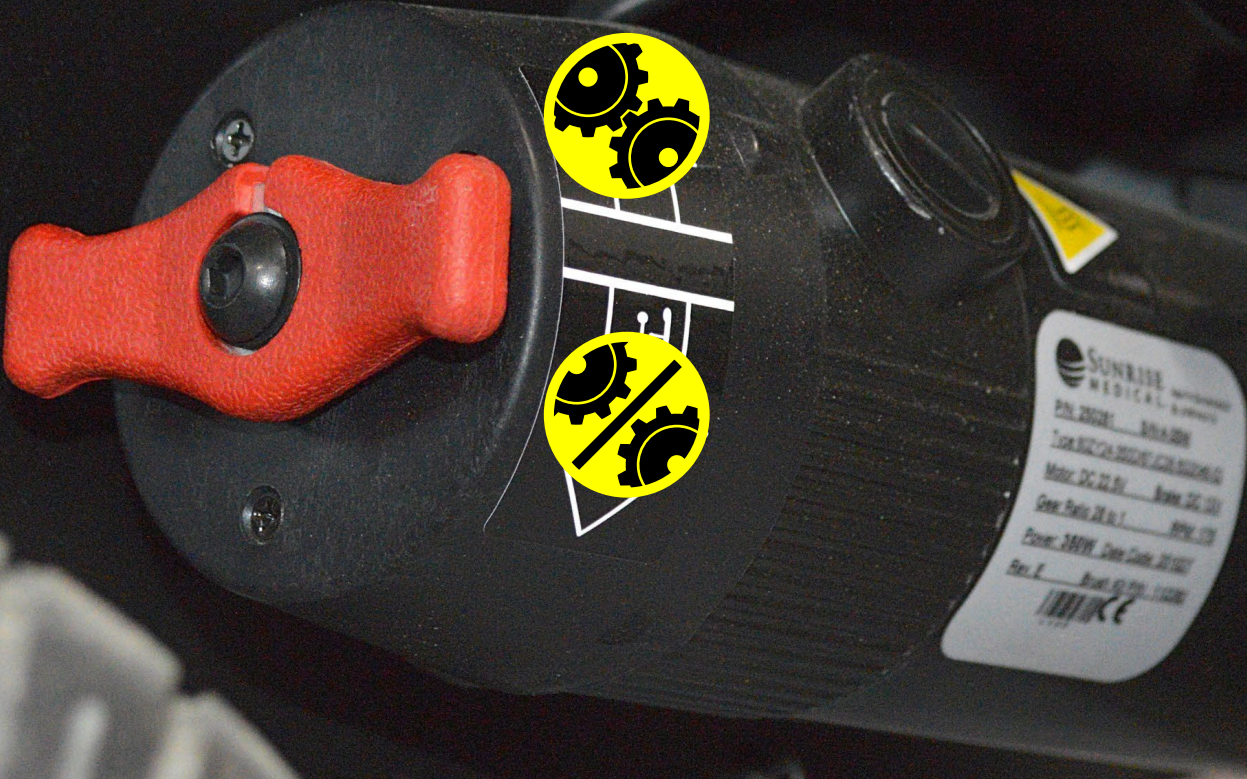
Disengage the drive system to enable the mobility device to be manually pushed



R

N

M-D



A vertical safety label on a red machine. The label is yellow with black text and icons. At the top, there is a yellow triangle pointing up containing a black gear icon. Below this is a red circle with a diagonal slash over a black silhouette of a person on a roller coaster. In the center is a black triangle with a white exclamation mark. Below that is another red circle with a diagonal slash over a black silhouette of a person on a roller coaster. At the bottom, there is a yellow triangle pointing down containing a black gear icon with a diagonal slash over it. The text 'DWR1235L798 REV C' is printed vertically in the center of the label.

DWR1235L798 REV C



When?

When will powered mobility devices be available that meet the **RESNA AT-1 Standard**?

Some manufacturers already have powered wheelchairs that have many of the design features of the AT-1 Standard



beneficial designs

designing beyond the norm to meet the needs of all people

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775 783 8823 fax

