OFFCARR

ULTRALIGHT RIGID FRAME

Instructions for Use

EOS
EOS3
FENICE
FUNKY
HEKA
IDRA 2.0
IDRA 2.E
QUASAR
QUASAR GT
QUASAR KID
RUBY
THEMIS
THEMIS PRESTIGE
VENUS
VENUS ADVENTURE
VENUS ELITE
XLR8
ZODIAC

CE

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Instructions for Use

Ultralight
Rigid frame

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Thanks for choosing an OFFCARR product.

OFFCARR listens and responds to the customers' needs by engineering highly technical, innovative solutions aimed at reducing daily mobility problems, with special attention to product style and to improving quality of life.

OFFCARR has a certified system for quality management following UNI EN ISO 9001 regulations and a Medical Device - Quality management system following UNI EN ISO 13485 regulations.

OFFCARR products comply with the european medical device regulation UE MDR 2017/745.

Before using or making adjustments on this device, read this instruction manual carefully.

Different versions of this manual, accessible for various types of visual disabilities are available on *www.offcarr.com*

Contact an authorized dealer or the manufacturer at the following address if clarification regarding the safety measures is required.

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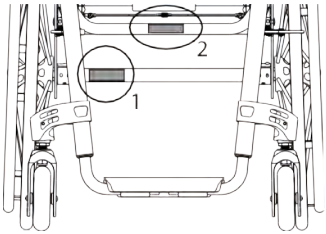
MADE IN ITALY

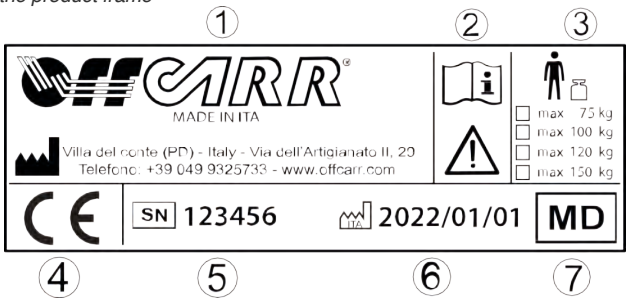
Distributor:

1. Labelling

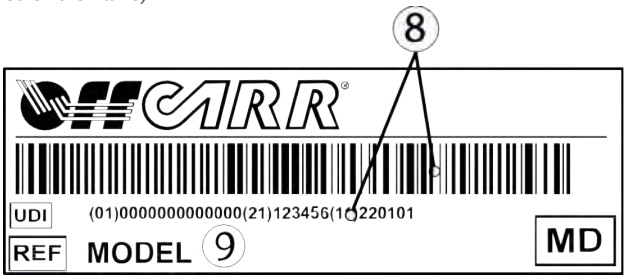
Each OFFCARR product is identified by an unique serial number. The serial number, along with other information is visible on the product stickers applied to the frame.



Stickers position on the product frame



Product sticker (applied on the frame)



UDI sticker (applied on the frame and on the instructions for use)

Information available from the product sticker:

1. Manufacturer
2. Read the instructions
3. Maximum load
4. CE symbol
5. Serial number
6. Manufacturing date
7. Medical device
8. UDI number
9. Model

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1.1. Symbols description

Please read all instructions before using the device. Read all Cautions and Warnings carefully.

European Conformity - The symbol denotes conformity to European standards.

WARNING: Read carefully and follow the indications.

NOTE: Auxiliary information.

MD **Medical Device**

UDI **UDI: Unique Device Identifier**

SN **Serial Number**

REF **Reference** - The symbol indicates the model of the product.

ITA The symbol indicates the country of origin.

The symbol indicates the distributor of the product.

The symbol indicates the manufacturer of the product.

The symbol indicates the maximum load permissible for the product.

The symbol denotes the attachment points for *crash tested* models.

The symbol denotes the importance of protecting the packaging and the product from harsh weather.

ALTO FRAGILE The symbol denotes that shipment must be performed with care and the package must always be kept and stored with the arrows pointing upwards.

2. Using the device

In order to move safely and properly use the device, it is always recommended to consult qualified personnel.

Hereafter are some suggestions for a correct use of the device, also aimed to maintain the characteristics of safety and durability over time:

- The brakes only have a parking purpose and should never be used as service brakes to slow down the device in motion.
- Do not lean too far forward, because by moving the centre of gravity, the device could tip-over.
- The device should be used only in accordance with what is proposed in this manual and not of objects in general.
- Always deal with slopes above 6° with assistance from an attendant. This limit is only approximate and it depends on the specific configuration of the device, especially on the position of the centre of gravity of the user-wheelchair combination.
- To ensure the efficiency of the brakes, maintain the tyres properly inflated and quarterly check the knurled locking pin wear.
- Never use the anti-tip devices, if available, as transit wheels.
- The armrests, if available, are not designed to lift the device.
- Avoid wheeling the device without the supervision of an attendant.
- Perform a general check of the device at least every three months, by checking tyre inflation, efficiency of the quick-release axles and brakes; lubricate the moving parts whenever necessary.
- If necessary, the upholstery can be washed with water at low temperature. Avoid wetting or submerging other parts of the device.
- Prolonged contact of the device with water or prolonged exposure to high humidity levels can cause unwanted oxidation of some metal parts and decay of the security features of the materials involved.
- Avoid contact with seawater and sand. In case of contact proceed to an immediate and accurate cleaning.
- Clean periodically the device using a damp cloth and avoid even partial immersion of the frame. Keeping the device clean enhances its efficiency.

Suspend the use of the product and notify OFFCARR in case of allergic reactions or if other similar problems are developed after contact with the device materials.

There is no apparent danger of causing injury to people during the operations of preparation and setup of the device if carried out according to the instructions provided in this manual.

Make sure the tyres are correctly inflated. Since the correct pressure differs between models, read the required pressure on the side of the tyre itself.

The pressure of the *Schwalbe Marathon Plus* tyres should always be kept from a minimum of 7 bar (700 kPa - 100 psi) to a maximum of 9 bar (900 kPa - 130 psi) to prevent damage to the covers themselves.

Keep the device away from heat sources, as not all the components are fireproof.

Upholstery materials comply with the EN 1021-2:2014 regulation.

The approximate lifespan of the device is 7 years, considering correct, normal daily use by a single user and frequent maintenance.

3. Warnings to reduce any risks associated with misuse of the device

It is forbidden to use the device or its parts in different ways from those described on this manual.

Do not use the brakes, if available, to slow down the device at any speed. They are only designed as parking devices.

Do not use the armrests, if available, to pick the device up or as clamping spots.

Never use the anti-tip devices, if available, as transit wheels. It is not their intended purpose.

It is suggested to frequently check the working order of the quick-release wheel devices, especially after each insertion.

The gap between wheels and side-guards or brakes could be lower than 25 mm. Be careful not to put your fingers between the wheels and side-guards or brakes to avoid injury.

With pneumatic tyres, it is recommended to reduce their pressure in the case of air transport, to avoid collateral effects of pressure variations due to altitude.

To maintain the device efficient and maintain its safety requirements it is recommended to uphold a regular upkeep schedule, as described by this manual.

Poor maintenance and improper use of the device can cause damage or injury to the user or assistant.

Any tampering with the components of the device, as well as voiding the warranty, could compromise its structural integrity and safety standards.

Contact OFFCARR in case the maximum user weight is exceeded at any point during the device's lifespan.

Contact OFFCARR or your reseller to check for compatibility with accessories produced by a manufacturer different from OFFCARR.

Do not install on the device mechanical or electronic devices that are not approved by OFFCARR and do not modify its structure in any way. Any combination with other medical devices must be expressly authorized by OFFCARR. In case the combination has been approved, always refer to the respective manuals.

The device and its accessories are not suitable for use in hyperbaric chambers under any circumstances.

In case of prolonged exposure to the sun, the surface of the device can reach high temperatures.

To have more information about connection points and devices needed to secure the device during transport by car (exclusively valid for crash tested models) see 7, “Attachment of the wheelchair for use within a motor vehicle”

Before transferring to or from the device, activate the parking brakes. Always perform transfers with caution.

Some openings in the device may have angles lower than 75° (e.g. space between wheel spokes) or gaps smaller than 25 mm (e.g. gaps between spokes).

For technical and aesthetic reasons the pushing handles may be placed at a height lower than 900 mm from the ground.

Headrests (optional) are not approved for use as headrests on moving vehicles.

The tip assist pedal and anti-tip devices are optional accessories that must be requested when ordering the device.

Do not exceed the weight limit of the devices even temporarily. For example, do not perform activities such as weightlifting on the devices.

Use the device and its parts exclusively for their intended purpose.

The device is suitable for use by children and teenagers; however, adult supervision is recommended.

4. Product presentation

4.1. EOS

EOS are non-invasive medical devices specifically designed to reduce and counterbalance motor impairments in the medium and long-term.

This wheelchair is manually propelled on the back wheels, it allows for many configurations and a wide range of accessories to meet the needs of users.

Only qualified operators must setup the device.

It is forbidden to use the device or its parts in different ways from those described in this manual.

The medical device EOS is available in two different variations, described by this manual:

Fixed axle EOS: the basic version, with non-adjustable centre of gravity

Adjustable axle EOS: the centre of gravity can be adjusted on the finished wheelchair. Suitable for beginners researching their preferred setup or if the agility requirements are expected to vary during the life of the product.

All EOS versions comply to the following standards:

- ISO 7176-8 with 120 kg mannequin
- ISO 7176-16

4.1.1. Description

1. Axle
2. Frame
3. Seat
4. Backrest
5. Side-guards
6. Footrest
7. Parking brakes
8. Front forks
9. Castor wheels
10. Rear wheels
11. Tyres
12. Pushrim
13. Quick-release button

4.1.2. Features

- Ultralight titanium rigid frame
- 2 Versions
  - Fixed Axle
  - Adjustable axle
- Collapsible backrest
- Single titanium footrest (open, closed or tilt-adjustable according to order form)
- Carbon fibre side-guards
- Quick extraction rear wheels
- Maximum load: 120 kg

4.1.3. Measurements table

All dimensions are in degrees (°) and millimetres (mm), the weight is expressed in kilograms (kg).

	EOS	Reference values UNI EN 12183[1]
Seat angle (from horizontal)	0° ÷ 16°	
Backrest angle (from horizontal)	89° / 91° / 93°	
Leg angle (from seat)	CUSTOM	
Total width	max 720 (L44)	700[1]
Total length	max 900 (P46 - telaio 75°)	1200[1]
Total height	max 950 (HP 48, HS 41)	1200[1]
Pivot turn width	max 1600	1300[1]
Turn width	max 1300	1000[1]
Weight[2]	da 7,5 (fixed COG) da 7,8 (adjustable COG)	

All dimensions refer to wheelchairs in standard configuration
The addition of accessories may modify the indicated dimensions and weight

[1] Some dimensions may exceed the reference values according to UNI EN 12183. In some circumstances and with certain configurations, the use of safety exits may be complicated or impossible
[2] The weight depends on the selected configuration and may vary based on accessories.

4.1.4. Rear wheel and pushrim diameter

The table indicates diameter of rear wheels and relative pushrims.

Rear wheel diameter	Pushrim outer diameter (average)
24"	535 mm
25"	550 mm

4.1.5. Front wheel diameter

Front wheel options	
80 mm	solid
100 mm	solid
125 mm	solid

ENG

4.2. EOS³

EOS3 are non-invasive medical devices specifically designed to reduce and counterbalance motor impairments in the medium and long-term.

This wheelchair is manually propelled on the back wheels, it allows for many configurations and a wide range of accessories to meet the needs of users.

Only qualified operators must setup the device.

It is forbidden to use the device or its parts in different ways from those described in this manual.

The medical device EOS³ is available in two different variations, described by this manual:

Fixed axle EOS³: the evolution of the EOS model, ideal for travelling, with foldable front frame to compact the wheelchair like a hand luggage with non-adjustable centre of gravity

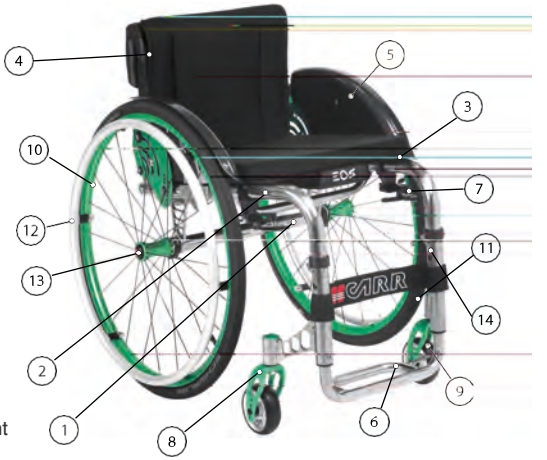
Adjustable axle EOS³: the centre of gravity can be adjusted on the finished wheelchair. Suitable for beginners researching their preferred setup or if the agility requirements are expected to vary during the life of the product.

All EOS³ versions comply to the following standards:

- ISO 7176-8 with 120 kg mannequin
- ISO 7176-16

4.2.1. Description

1. Axle
2. Frame
3. Seat
4. Backrest
5. Side-guards
6. Footrest
7. Parking brakes
8. Front forks
9. Castor wheels
10. Rear wheels
11. Tyres
12. Pushrim
13. Quick-release button
14. Hinged front frame



4.2.2. Features

- Ultralight titanium rigid frame with foldable front
- 2 Versions
  - Fixed Axle
  - Adjustable axle
- Collapsible backrest
- Single titanium footrest (open, closed or tilt-adjustable according to order form)
- Carbon fibre side-guards
- Quick extraction rear wheels
- Maximum load: 120 kg

4.2.3. Measurements table

All dimensions are in degrees (°) and millimetres (mm), the weight is expressed in kilograms (kg).

	EOS[3]	**Reference values UNI EN 12183**[1]
Seat angle (from horizontal)	0° ÷ 16°	
Backrest angle (from horizontal)	89° / 91° / 93°	
Leg angle (from seat)	CUSTOM	
Total width	max 720 (L44)	700[1]
Total length	max 900 (P46 - 75°)	1200[1]
Total height	max 950 (HP 48, HS 41)	1200[1]
Pivot turn width	max 1600	1300[1]
Turn width	max 1300	1000[1]
Weight[2]	da 8,5 (fixed COG) da 8,8 (adjustable COG)	

All dimensions refer to wheelchairs in standard configuration
The addition of accessories may modify the indicated dimensions and weight

[1] Some dimensions may exceed the reference values according to UNI EN 12183. In some circumstances and with certain configurations, the use of safety exits may be complicated or impossible
[2] The weight depends on the selected configuration and may vary based on accessories.

4.2.4. Rear wheel and pushrim diameter

The table indicates diameter of rear wheels and relative pushrims.

Rear wheel diameter	**Pushrim outer diameter (average)**
24"	535 mm
25"	550 mm

4.2.5. Front wheel diameter

Front wheel options	
80 mm	solid
100 mm	solid
125 mm	solid

ENG

4.3. FENICE

FENICE are non-invasive medical devices specifically designed to reduce and counterbalance motor impairments in the medium and long-term.

This wheelchair is manually propelled on the back wheels, it allows for many configurations and a wide range of accessories to meet the needs of users.

Only qualified operators must setup the device.

It is forbidden to use the device or its parts in different ways from those described in this manual.

4.3.1. Description

1. Axle
2. Frame
3. Seat
4. Backrest
5. Side-guards
6. Footrest
7. Parking brakes
8. Front forks
9. Castor wheels
10. Rear wheels
11. Tyres
12. Pushrim
13. Quick-release button
14. SHS plate

4.3.2. Features

- Ultralight wheelchair
- Adjustable rigid aluminium frame
- Tilt adjustable and foldable backrest
- Plastic or carbon fibre side-guards
- Quick-release rear wheels
- Tilt adjustable front fork support
- Maximum weight capacity: 120 kg

4.3.3. Measurements table

All dimensions are in degrees (°) and millimetres (mm), the weight is expressed in kilograms (kg).

	FENICE	Reference values UNI EN 12183[1]
Seat angle (from horizontal)	0° ÷ 20°	
Backrest angle (from horizontal)	80° ÷ 94° [A]	
Leg angle (from seat)	90° / 95°	
Total width	max 720 (L44 - camber 4°)	700[1]
Total length	max 1040 (P44 - COG 0)	1200[1]
Total height	max 900	1200[1]
Pivot turn width	max 1450	1300[1]
Turn width	max 1300	1000[1]
Weight[2]	10,5 (L38xP40)	

All dimensions refer to wheelchairs in standard configuration
The addition of accessories may modify the indicated dimensions and weight

[1] Some dimensions may exceed the reference values according to UNI EN 12183. In some circumstances and with certain configurations, the use of safety exits may be complicated or impossible
[2] The weight depends on the selected configuration and may vary based on accessories.

[A] To be added to seat angle

4.3.4. Rear wheel and pushrim diameter

The table indicates diameter of rear wheels and relative pushrims.

Rear wheel diameter	Pushrim outer diameter (average)
24"	535 mm
25"	550 mm

4.3.5. Front wheel diameter

Front wheel options	
80 mm	solid
100 mm	solid
125 mm	solid
150 mm	solid or pneumatic

ENG

4.4. FUNKY

FUNKY are non-invasive medical devices specifically designed to reduce and counterbalance motor impairments in the medium and long-term.

This wheelchair is manually propelled on the back wheels, it allows for many configurations and a wide range of accessories to meet the needs of users.

Only qualified operators must setup the device.

It is forbidden to use the device or its parts in different ways from those described in this manual.

4.4.1. Description

1. Axle
2. Frame
3. Seat
4. Backrest
5. Side-guards
6. Footrest
7. Parking brakes
8. Front forks
9. Castor wheels
10. Rear wheels
11. Tyres
12. Pushrim
13. Quick-release button
14. SHS plate

4.4.2. Features

- Ultralight wheelchair
- Adjustable rigid aluminium frame
- Tilt adjustable and foldable backrest
- Plastic or carbon fibre side-guards
- Quick-release rear wheels
- Tilt adjustable front fork support
- Maximum weight capacity: 120 kg

4.4.3. Measurements table

All dimensions are in degrees (°) and millimetres (mm), the weight is expressed in kilograms (kg).

	FUNKY	Reference values UNI EN 12183[1]
Seat angle (from horizontal)	0° ÷ 20°	
Backrest angle (from horizontal)	80° ÷ 94° [A]	
Leg angle (from seat)	90° / 95°	
Total width	max 720 (L44 - camber 4°)	700[1]
Total length	max 1040 (P44 - COG 0)	1200[1]
Total height	max 900	1200[1]
Pivot turn width	max 1450	1300[1]
Turn width	max 1300	1000[1]
Weight[2]	10,5 (L38xP40)	

All dimensions refer to wheelchairs in standard configuration
The addition of accessories may modify the indicated dimensions and weight

[1] Some dimensions may exceed the reference values according to UNI EN 12183. In some circumstances and with certain configurations, the use of safety exits may be complicated or impossible
[2] The weight depends on the selected configuration and may vary based on accessories.

[A] To be added to seat angle

4.4.4. Rear wheel and pushrim diameter

The table indicates diameter of rear wheels and relative pushrims.

Rear wheel diameter	Pushrim outer diameter (average)
24"	535 mm
25"	550 mm

4.4.5. Front wheel diameter

Front wheel options	
80 mm	solid
100 mm	solid
125 mm	solid
150 mm	solid or pneumatic

ENG

4.5. HEKA

HEKA are non-invasive medical devices specifically designed to reduce and counterbalance motor impairments in the medium and long-term.

This wheelchair is manually propelled on the back wheels, it allows for many configurations and a wide range of accessories to meet the needs of users.

Only qualified operators must setup the device.

It is forbidden to use the device or its parts in different ways from those described in this manual.

4.5.1. Description

1. Axle
2. Frame
3. Seat
4. Backrest
5. Side-guards
6. Footrest
7. Parking brakes
8. Front forks
9. Castor wheels
10. Rear wheels
11. Tyres
12. Pushrim
13. Quick-release button

4.5.2. Features

- Ultralight wheelchair
- Rigid titanium frame
- Foldable backrest
- Single footplate (open, closed, or carbon tilt-adjustable depending on the choice made on the order form)
- Carbon fibre side-guards
- Quick-release rear wheels
- Maximum weight capacity: 120 kg

4.5.3. Measurements table

All dimensions are in degrees (°) and millimetres (mm), the weight is expressed in kilograms (kg).

	HEKA	Reference values UNI EN 12183[1]
Seat angle (from horizontal)	0° ÷ 20°	
Backrest angle (from horizontal)	80° ÷ 94° [A]	
Leg angle (from seat)	90° / 95°	
Total width	max 720 (L44 - camber 4°)	700[1]
Total length	max 1040 (P44 - COG 0)	1200[1]
Total height	max 900	1200[1]
Pivot turn width	max 1450	1300[1]
Turn width	max 1300	1000[1]
Weight[2]	9 (L40xP40)	

All dimensions refer to wheelchairs in standard configuration
The addition of accessories may modify the indicated dimensions and weight

[1] Some dimensions may exceed the reference values according to UNI EN 12183. In some circumstances and with certain configurations, the use of safety exits may be complicated or impossible
[2] The weight depends on the selected configuration and may vary based on accessories.

[A] To be added to seat angle

4.5.4. Rear wheel and pushrim diameter

The table indicates diameter of rear wheels and relative pushrims.

Rear wheel diameter	Pushrim outer diameter (average)
24"	535 mm
25"	550 mm

4.5.5. Front wheel diameter

Front wheel options	
80 mm	solid
100 mm	solid
125 mm	solid

ENG

4.6. IDRA

IDRA are non-invasive medical devices specifically designed to reduce and counterbalance motor impairments in the medium and long-term.

This wheelchair is manually propelled on the back wheels, it allows for many configurations and a wide range of accessories to meet the needs of users.

Only qualified operators must setup the device.

It is forbidden to use the device or its parts in different ways from those described in this manual.

The medical device IDRA 2.0 is available in four different variations, described by this manual:

Fixed axle IDRA 2.0: the basic version, with non-adjustable centre of gravity

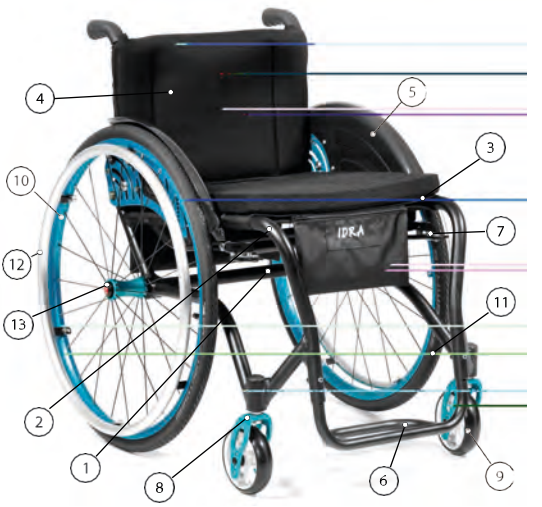
Adjustable axle IDRA 2.0: the centre of gravity can be adjusted on the finished wheelchair. Suitable for beginners researching their preferred setup or if the agility requirements are expected to vary during the life of the product.

Fixed axle IDRA 2.E with detachable footrests: non-adjustable centre of gravity with detachable footrests

Adjustable axle IDRA 2.E with detachable footrests: adjustable centre of gravity detachable footrests

4.6.1. Description

1. Axle
2. Frame
3. Seat
4. Backrest
5. Side-guards
6. Footrest
7. Parking brakes
8. Front forks
9. Castor wheels
10. Rear wheels
11. Tyres
12. Pushrim
13. Quick-release button



4.6.2. Features

- Ultralight aluminium rigid frame
- 4 Versions
  - Fixed Axle
  - Adjustable axle
  - Fixed Axle with detachable footrests
  - Adjustable axle with detachable footrests
- Collapsible backrest
- Single aluminium footrest (open, closed or tilt-adjustable according to order form) or
- Detachable separate footrests
- Carbon fibre side-guards
- Quick extraction rear wheels
- Maximum load: 120 kg

4.6.3. Measurements table

All measurements are in degrees (°) and millimetres (mm), the weight is expressed in kilograms (kg).

	IDRA 2.0	IDRA 2.E (With Detachable footrests)	Reference values UNI EN 12183[1]
Seat angle (from horizontal)	0° ÷ 16°		
Backrest angle (from horizontal)	89° ÷ 93°		
Leg angle (from seat)	CUSTOM	90°	
Total width	max. 740 (L46)		700[1]
Total length	max. 900 (P46 - 75° frame)	max. 1200 (900[2] - P46)	1200[1]
Total height	max. 950 (HP 48, HS 41)		1200[1]
Pivot turn width	max. 1600		1300[1]
Turn width	max. 1300		1000[1]
Weight[3]	from 8 (Fixed axle) from 8,4 (Adjustable axle)	from 9,8 (Fixed axle) from 10,2 (Adjustable axle)	

All measurements refer to wheelchairs in standard configuration
The addition of accessories may modify the indicated measurements and weight

[1] Some measurements may exceed the reference values according to UNI EN 12183. In some circumstances and with certain configurations, the use of safety exits may be complicated or impossible
[2] Without footrests [3] The weight depends on the selected configuration and may vary based on accessories.

4.6.4. Rear wheel and pushrim diameter

The table indicates diameter of rear wheels and relative pushrims.

Rear wheel diameter	Pushrim outer diameter (average)
24"	535 mm
25"	550 mm

4.6.5. Front wheel diameter

Front wheel options	
80 mm	solid
100 mm	solid
125 mm	solid
150 mm	solid or pneumatic

ENG

4.7. QUASAR

QUASAR are non-invasive medical devices specifically designed to reduce and counterbalance motor impairments in the medium and long-term.

This wheelchair is manually propelled on the back wheels, it allows for many configurations and a wide range of accessories to meet the needs of users.

Only qualified operators must setup the device.

It is forbidden to use the device or its parts in different ways from those described in this manual.

The medical device QUASAR is available in four different variations, described by this manual:

Fixed axle QUASAR: the basic version, with non-adjustable centre of gravity

Adjustable axle QUASAR: the centre of gravity can be adjusted on the finished wheelchair. Suitable for beginners researching their preferred setup or if the agility requirements are expected to vary during the life of the product.

Fixed axle QUASAR GT: crash-tested version of the fixed axle QUASAR **Adjustable axle QUASAR GT**: crash-tested version of the adjustable axle QUASAR All QUASAR versions comply to the following standards:

- ISO 7176-8 with 120 kg mannequin
- ISO 7176-16

4.7.1. Description

1. Axle
2. Frame
3. Seat
4. Backrest
5. Side-guards
6. Footrest
7. Parking brakes
8. Front forks
9. Castor wheels
10. Rear wheels
11. Tyres
12. Pushrim
13. Quick-release button

4.7.2. QUASAR Features

- Ultralight titanium rigid frame
- Straight, abducted, and **Y** shaped front frame
- 2 Versions
  - Fixed Axle
  - Adjustable axle
- Collapsible backrest
- Single titanium footrest (open, closed or tilt-adjustable according to order form)
- Carbon fibre side-guards
- Quick extraction rear wheels
- Maximum load: 120 kg

The model is **NOT** suitable for use on motorized vehicles

4.7.3. QUASAR GT Features

- Ultralight titanium rigid frame
- Straight, abducted, and **Y** shaped front frame
- 2 Versions
  - Fixed Axle
  - Adjustable axle
- Collapsible backrest
- Single titanium footrest (open, closed or tilt-adjustable according to order form)
- Carbon fibre side-guards
- Quick extraction rear wheels
- Maximum load: 120 kg
- **CRASH TESTED**: approved for use on motorized vehicle

4.7.4. Measurements table

All measurements are in degrees (°) and millimetres (mm), the weight is expressed in kilograms (kg).

	QUASAR	QUASAR GT	Reference values UNI EN 12183[1]
Seat angle (from horizontal)	0° ÷ 16°		
Backrest angle (from horizontal)	89° ÷ 93°		
Leg angle (from seat)	custom		
Total width	max. 740 (L46)		700[1]
Total length	max. 900 (P46 - 75° frame)		1200[1]
Total height	max. 950 (HP 48, HS 41)		1200[1]
Pivot turn width	max. 1600		1300[1]
Turn width	max. 1300		1000[1]
Weight[2]	from 7 (Fixed axle) from 7,4 (Adjustable axle)	from 8,2 (Fixed axle) from 8,6 (Adjustable axle)	

All measurements refer to wheelchairs in standard configuration
The addition of accessories may modify the indicated measurements and weight

[1] Some measurements may exceed the reference values according to UNI EN 12183. In some circumstances and with certain configurations, the use of safety exits may be complicated or impossible
[2] The weight depends on the selected configuration and may vary based on accessories.

ENG

4.7.5. Rear wheel and pushrim diameter

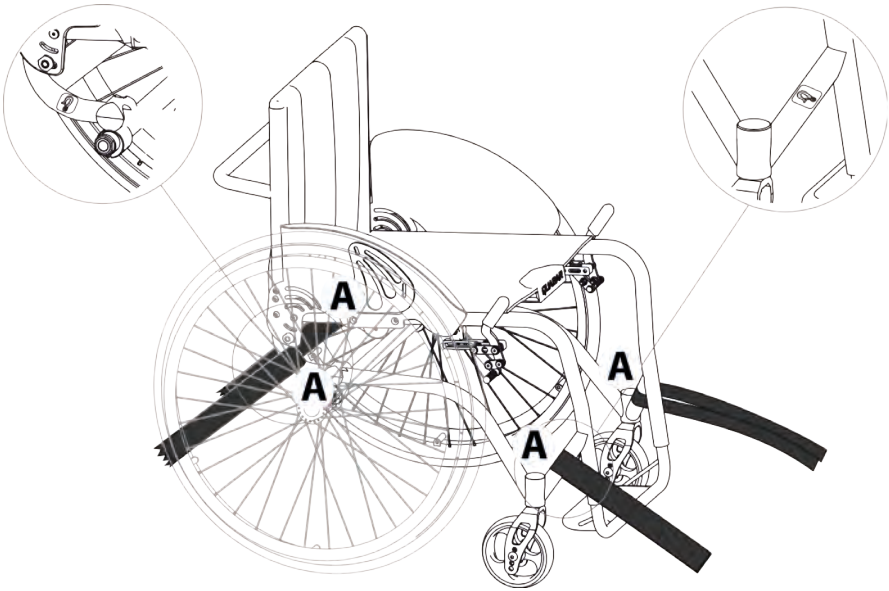
The table indicates diameter of rear wheels and relative pushrims.

Rear wheel diameter	Pushrim outer diameter (average)
24"	535 mm
25"	550 mm

4.7.6. Front wheel diameter

Front wheel options	
80 mm	solid
100 mm	solid
125 mm	solid
150 mm	solid or pneumatic

4.7.7. Attachment of the wheelchair for use within a motor vehicle: QUASAR GT



Quasar GT is provided with four (4) attachment points **A** for a standard 4-point floor tiedown system, as indicated in the figure. When connecting the wheelchair to a vehicle, connect the attachment system to the four marked connection points. These are the most solid points of contact on the wheelchair, and the only connection points certified by the crash test.

ENG

4.8. QUASAR KID

QUASAR KID are non-invasive medical devices specifically designed to reduce and counterbalance motor impairments in the medium and long-term.

This wheelchair is manually propelled on the back wheels, it allows for many configurations and a wide range of accessories to meet the needs of users.

Only qualified operators must setup the device.

It is forbidden to use the device or its parts in different ways from those described in this manual.

All QUASAR KID versions comply to the following standards:

- ISO 7176-8 with 75 kg mannequin
- ISO 7176-16

4.8.1. Description

1. Axle
2. Frame
3. Seat
4. Backrest
5. Side-guards
6. Footrest
7. Parking brakes
8. Front forks
9. Castor wheels
10. Rear wheels
11. Tyres
12. Pushrim
13. Quick-release button

4.8.2. Features

- Ultralight titanium rigid frame
- Straight, abducted, and **Y** shaped front frame
- Adjustable axle
- Collapsible backrest
- Single titanium footrest (open, closed or tilt-adjustable according to order form)
- Carbon fibre, technopolymer, or aluminium alloy side-guards with or without integrated height-adjustable elbow support
- Quick extraction rear wheels
- Maximum load: 75 kg

4.8.3. Measurements table

All dimensions are in degrees (°) and millimetres (mm), the weight is expressed in kilograms (kg).

	QUASAR KID	Reference values UNI EN 12183[1]
Seat angle (from horizontal)	0° ÷ 16°	
Backrest angle (from horizontal)	89° ÷ 93°	
Leg angle (from seat)	CUSTOM	
Total width	max 640 (L36)	700[1]
Total length	max 800 (P36 - 75°)	1200[1]
Total height	max 930 (HP 46, HS 41)	1200[1]
Pivot turn width	max 1400	1300[1]
Turn width	max 1200	1000[1]
Weight[2]	8,3 (28x30, adjustable push handles)	

All dimensions refer to wheelchairs in standard configuration
The addition of accessories may modify the indicated dimensions and weight
[1] Some dimensions may exceed the reference values according to UNI EN 12183. In some circumstances and with certain configurations, the use of safety exits may be complicated or impossible
[2] The weight depends on the selected configuration and may vary based on accessories.

4.8.4. Rear wheel and pushrim diameter

The table indicates diameter of rear wheels and relative pushrims.

Rear wheel diameter	Pushrim outer diameter (average)
20"	445 mm
22"	480 mm
24"	535 mm
25"	550 mm

4.8.5. Front wheel diameter

Front wheel options	
80 mm	solid
100 mm	solid
125 mm	solid
150 mm	solid or pneumatic

ENG

4.9. RUBY

RUBY are non-invasive medical devices specifically designed to reduce and counterbalance motor impairments in the medium and long-term.

This wheelchair is manually propelled on the back wheels, it allows for many configurations and a wide range of accessories to meet the needs of users.

Only qualified operators must setup the device.

It is forbidden to use the device or its parts in different ways from those described in this manual.

4.9.1. Description

1. Axle
2. Frame
3. Seat
4. Backrest
5. Side-guards
6. Footrest
7. Parking brakes
8. Front forks
9. Castor wheels
10. Rear wheels
11. Tyres
12. Pushrim
13. Quick-release button
14. Spokes guard
15. Pushing handles

4.9.2. Features

- Very versatile, adjustable wheelchair, only available in children's measurements.
- Lightweight wheelchair
- Adjustable rigid aluminium frame
- Tilt adjustable and foldable backrest
- Straight or abducted frame
- Depth adjustable frame up to 40 mm
- Multiple positions for rear wheels
- Tilt adjustable front fork support
- Different kind of side-guards and armrests
- Quick-release rear wheels
- Maximum load: 75kg

4.9.3. Measurements table

All dimensions are in degrees (°) and millimetres (mm), the weight is expressed in kilograms (kg).

	RUBY	Reference values UNI EN 12183[1]
Seat angle (from horizontal)	0° ÷ 16°	
Backrest angle (from horizontal)	89° ÷ 93°	
Leg angle (from seat)	CUSTOM	
Total width	max 640 (L36)	700[1]
Total length	max 800 (P36 - 75°)	1200[1]
Total height	max 930 (HP 46, HS 41)	1200[1]
Pivot turn width	max 1400	1300[1]
Turn width	max 1200	1000[1]
Weight[2]	11,2 (32x32)	

All dimensions refer to wheelchairs in standard configuration
The addition of accessories may modify the indicated dimensions and weight
[1] Some dimensions may exceed the reference values according to UNI EN 12183. In some circumstances and with certain configurations, the use of safety exits may be complicated or impossible
[2] The weight depends on the selected configuration and may vary based on accessories.

4.9.4. Rear wheel and pushrim diameter

The table indicates diameter of rear wheels and relative pushrims.

Rear wheel diameter	Pushrim outer diameter (average)
20"	445 mm
22"	480 mm
24"	535 mm

4.9.5. Front wheel diameter

Front wheel options	
80 mm	solid
100 mm	solid
125 mm	solid
150 mm	solid or pneumatic

ENG

4.10. THEMIS

THEMIS are non-invasive medical devices specifically designed to reduce and counterbalance motor impairments in the medium and long-term.

This wheelchair is manually propelled on the back wheels, it allows for many configurations and a wide range of accessories to meet the needs of users.

Only qualified operators must setup the device.

It is forbidden to use the device or its parts in different ways from those described in this manual.

4.10.1. Description

1. Axle
2. Frame
3. Seat
4. Backrest
5. Side-guards
6. Footrest
7. Parking brakes
8. Front forks
9. Castor wheels
10. Rear wheels
11. Tyres
12. Pushrim
13. Quick-release button
14. SHS plate
15. EAR front fork support

4.10.2. Features

- Ultralight wheelchair
- Adjustable rigid aluminium frame
- Foldable backrest
- Depth-adjustable frame up to +60 mm
- Tilt-adjustable single carbon footplate
- Ergonomic profile of frame tubes
- Plastic or carbon fibre side-guards
- Quick-release rear wheels
- Adjustable tilt front fork supports
- Maximum weight capacity: 120 kg

4.10.3. Measurements table

All measurements are in degrees (°) and millimetres (mm), the weight is expressed in kilograms (kg).

	THEMIS	Reference values UNI EN 12183[1]
Seat angle (from horizontal)	0° ÷ 20°	
Backrest angle (from horizontal)[2]	80° ÷ 94°	
Leg angle (from seat)	90° / 95°	
Total width	max. 740 (L46 - Camber 4°)	700[1]
Total length	max. 1100 (P50 - COG 0)	1200[1]
Total height[3]	max. 900	1200[1]
Pivot turn width	max. 1450	1300[1]
Turn width	max. 1300	1000[1]
Weight[2]	10,5 (38x40)	

All measurements refer to wheelchairs in standard configuration
The addition of accessories may modify the indicated measurements and weight

[1] Some measurements may exceed the reference values according to UNI EN 12183. In some circumstances and with certain configurations, the use of safety exits may be complicated or impossible
[2] The weight depends on the selected configuration and may vary based on accessories.

4.10.4. Rear wheel and pushrim diameter

The table indicates diameter of rear wheels and relative pushrims.

Rear wheel diameter	Pushrim outer diameter (average)
24"	535 mm
25"	550 mm

4.10.5. Front wheel diameter

Front wheel options	
80 mm	solid
100 mm	solid
125 mm	solid
150 mm	solid or pneumatic

ENG

4.11. THEMIS PRESTIGE

THEMIS PRESTIGE are non-invasive medical devices specifically designed to reduce and counterbalance motor impairments in the medium and long-term.

This wheelchair is manually propelled on the back wheels, it allows for many configurations and a wide range of accessories to meet the needs of users.

Only qualified operators must setup the device.

It is forbidden to use the device or its parts in different ways from those described in this manual.

4.11.1. Description

1. Axle
2. Frame
3. Seat
4. Backrest
5. Side-guards
6. Footrest
7. Parking brakes
8. Front forks
9. Castor wheels
10. Rear wheels
11. Tyres
12. Pushrim
13. Quick-release button

4.11.2. Features

- Ultralight wheelchair
- Rigid aluminium frame
- Foldable backrest
- Single footplate (open, closed, or carbon tilt-adjustable depending on the choice made on the order form)
- Ergonomic profile of frame tubes
- Carbon fibre side-guards
- Quick-release rear wheels
- Maximum weight capacity: 120 kg

4.11.3. Measurements table

All measurements are in degrees (°) and millimetres (mm), the weight is expressed in kilograms (kg).

	THEMIS PRESTIGE	Reference values UNI EN 12183[1]
Seat angle (from horizontal)	0° ÷ 20°	
Backrest angle (from horizontal)[2]	80° ÷ 94°	
Leg angle (from seat)	90° / 95°	
Total width	max. 740 (L46 - Camber 4°)	700[1]
Total length	max. 1100 (P50 - COG 0)	1200[1]
Total height[3]	max. 900	1200[1]
Pivot turn width	max. 1450	1300[1]
Turn width	max. 1300	1000[1]
Weight [4]	6,4 (L40xP40 - Without wheels)	

All measurements refer to wheelchairs in standard configuration
The addition of accessories may modify the indicated measurements and weight
[1] Some measurements may exceed the reference values according to UNI EN 12183. In some circumstances and with certain configurations, the use of safety exits may be complicated or impossible
[2] To be added to seat angle
[3] Without any optional headrest (if present, the headrest is always easily removable)
[4] The weight depends on the selected configuration and may vary based on accessories.

4.11.4. Rear wheel and pushrim diameter

The table indicates diameter of rear wheels and relative pushrims.

Rear wheel diameter	Pushrim outer diameter (average)
24"	535 mm
25"	550 mm

4.11.5. Front wheel diameter

Front wheel options	
80 mm	solid
100 mm	solid
125 mm	solid

ENG

4.12. VENUS

Venus are non-invasive medical devices specifically designed to reduce and counterbalance motor impairments in the medium and long-term.

This wheelchair is manually propelled on the back wheels, it allows for many configurations and a wide range of accessories to meet the needs of users.

Only qualified operators must setup the device.

It is forbidden to use the device or its parts in different ways from those described in this manual.

4.12.1. Description

1. Axle
2. Frame
3. Seat
4. Backrest
5. Side-guards
6. Footrest
7. Parking brakes
8. Front forks
9. Castor wheels
10. Rear wheels
11. Tyres
12. Pushrim
13. Quick-release button

4.12.2. Features

- Titanium rigid frame
- Aluminium seat and backrest frame
- Adjustable front and back seat height
- Adjustable centre of gravity
- Foldable backrest
- Carbon fibre side-guards
- Single footrest (open or close according to the order form)
- Quick extraction rear wheels
- Maximum load: 120 Kg

4.12.3. Measurements table

All dimensions are in degrees (°) and millimetres (mm), the weight is expressed in kilograms (kg).

	VENUS	Reference values UNI EN 12183[1]
Seat angle (from horizontal)	0° ÷ 16°	
Backrest angle (from horizontal)	89° ÷ 93°	
Leg angle (from seat)	CUSTOM	
Total width	max 740 (L46)	700[1]
Total length	max 900 (P44)	1200[1]
Total height	max 950 (HP 47, HS 39)	1200[1]
Pivot turn width	max 1600	1300[1]
Turn width	max 1300	1000[1]
Weight[2]	10,4 (40x40) 10,7 (with shock absorber)	

All dimensions refer to wheelchairs in standard configuration
The addition of accessories may modify the indicated dimensions and weight

[1] Some dimensions may exceed the reference values according to UNI EN 12183. In some circumstances and with certain configurations, the use of safety exits may be complicated or impossible
[2] The weight depends on the selected configuration and may vary based on accessories.

4.12.4. Rear wheel and pushrim diameter

The table indicates diameter of rear wheels and relative pushrims.

Rear wheel diameter	Pushrim outer diameter (average)
24"	535 mm
25"	550 mm

4.12.5. Front wheel diameter

Front wheel options	
80 mm	solid
100 mm	solid
125 mm	solid
150 mm	solid or pneumatic

ENG

4.13. VENUS ADVENTURE

Venus Adventure are non-invasive medical devices specifically designed to reduce and counterbalance motor impairments in the medium and long-term.

This wheelchair is manually propelled on the back wheels, it allows for many configurations and a wide range of accessories to meet the needs of users.

Only qualified operators must setup the device.

It is forbidden to use the device or its parts in different ways from those described in this manual.

4.13.1. Description

1. Axle
2. Frame
3. Seat
4. Backrest
5. Side-guards
6. Footrest
7. Parking brakes
8. Front forks
9. Castor wheels
10. Rear wheels
11. Tyres
12. Pushrim
13. Quick-release button

4.13.2. Features

- Titanium rigid frame
- Titanium seat and backrest frame
- *Frog Legs™* front forks
- Adjustable shock absorber
- Off-road or city-bike tyres profile
- Custom frame depth
- Adjustable front and back seat height
- Adjustable centre of gravity
- Foldable backrest
- Carbon fibre side-guards
- Single footrest (open or close according to the order form)
- Quick extraction rear wheels
- Maximum load: 120 Kg

4.13.3. Measurements table

All dimensions are in degrees (°) and millimetres (mm), the weight is expressed in kilograms (kg).

	VENUS ADVENTURE	Reference values UNI EN 12183[1]
Seat angle (from horizontal)	0° ÷ 16°	
Backrest angle (from horizontal)	89° ÷ 93°	
Leg angle (from seat)	CUSTOM	
Total width	max 740 (L46)	700[1]
Total length	max 900 (P44)	1200[1]
Total height	max 950 (HP 47, HS 39)	1200[1]
Pivot turn width	max 1600	1300[1]
Turn width	max 1300	1000[1]
Weight[2]	11,3 (40x40)	

All dimensions refer to wheelchairs in standard configuration
The addition of accessories may modify the indicated dimensions and weight

[1] Some dimensions may exceed the reference values according to UNI EN 12183. In some circumstances and with certain configurations, the use of safety exits may be complicated or impossible
[2] The weight depends on the selected configuration and may vary based on accessories.

4.13.4. Rear wheel and pushrim diameter

The table indicates diameter of rear wheels and relative pushrims.

Rear wheel diameter	Pushrim outer diameter (average)
24"	535 mm
25"	550 mm

4.13.5. Front wheel diameter

Front wheel options	
80 mm	solid
100 mm	solid
125 mm	solid
150 mm	solid or pneumatic

ENG

4.14. VENUS ELITE

The lightweight wheelchair VENUS ELITE is a non invasive medical device, specifically designed to reduce and counterbalance a physical handicap. This wheelchair is manually propelled on the back wheels, it has many setups and a wide range of accessories that meet any customer need.

Venus Elite are non-invasive medical devices specifically designed to reduce and counterbalance motor impairments in the medium and long-term.

This wheelchair is manually propelled on the back wheels, it allows for many configurations and a wide range of accessories to meet the needs of users.

Only qualified operators must setup the device.

It is forbidden to use the device or its parts in different ways from those described in this manual.

4.14.1. Description

1. Axle
2. Frame
3. Seat
4. Backrest
5. Side-guards
6. Footrest
7. Parking brakes
8. Front forks
9. Castor wheels
10. Rear wheels
11. Tyres
12. Pushrim
13. Quick-release button

4.14.2. Features

- Titanium rigid frame
- Titanium seat and backrest frame
- Custom frame depth
- Shock absorbers under the seat (optional)
- Adjustable front and back seat height
- Adjustable centre of gravity
- Foldable backrest
- Carbon fibre side-guards
- Single footrest (open or close according to the order form)
- Quick extraction rear wheels
- Maximum load: 120 Kg

4.14.3. Measurements table

All dimensions are in degrees (°) and millimetres (mm), the weight is expressed in kilograms (kg).

	VENUS ELITE	Reference values UNI EN 12183[1]
Seat angle (from horizontal)	0° ÷ 16°	
Backrest angle (from horizontal)	89° ÷ 93°	
Leg angle (from seat)	CUSTOM	
Total width	max 740 (L46)	700[1]
Total length	max 900 (P44)	1200[1]
Total height	max 950 (HP 47, HS 39)	1200[1]
Pivot turn width	max 1600	1300[1]
Turn width	max 1300	1000[1]
Weight[2]	8,9 (40x40) 9,2 (with shock absorber)	

All dimensions refer to wheelchairs in standard configuration
The addition of accessories may modify the indicated dimensions and weight

[1] Some dimensions may exceed the reference values according to UNI EN 12183. In some circumstances and with certain configurations, the use of safety exits may be complicated or impossible
[2] The weight depends on the selected configuration and may vary based on accessories.

4.14.4. Rear wheel and pushrim diameter

The table indicates diameter of rear wheels and relative pushrims.

Rear wheel diameter	Pushrim outer diameter (average)
24"	535 mm
25"	550 mm

4.14.5. Front wheel diameter

Front wheel options	
80 mm	solid
100 mm	solid
125 mm	solid
150 mm	solid or pneumatic

ENG

4.15. XLR8

XLR8 are non-invasive medical devices specifically designed to reduce and counterbalance motor impairments in the medium and long-term.

This wheelchair is manually propelled on the back wheels, it allows for many configurations and a wide range of accessories to meet the needs of users.

Only qualified operators must setup the device.

It is forbidden to use the device or its parts in different ways from those described in this manual.

The medical device XLR8 is available in two different variations, described by this manual:

Fixed axle XLR8 (XLR8F): the basic version, with non-adjustable centre of gravity

Adjustable axle XLR8 (XLR8R): the centre of gravity can be adjusted on the finished wheelchair. Suitable for beginners researching their preferred setup or if the agility requirements are expected to vary during the life of the product.

4.15.1. Description

1. Axle
2. Frame
3. Seat
4. Backrest
5. Side-guards
6. Footrest
7. Parking brakes
8. Front forks
9. Castor wheels
10. Rear wheels
11. Tyres
12. Pushrim
13. Quick-release button

4.15.2. Features

- Ultralight aluminium rigid frame
- 2 Versions
  - Fixed Axle
  - Adjustable axle
- Collapsible backrest
- Single aluminium footrest (open, closed or tilt-adjustable according to order form)
- Carbon fibre side-guards
- Quick extraction rear wheels
- Maximum load: 120 kg

4.15.3. Measurements table

All measurements are in degrees (°) and millimetres (mm), the weight is expressed in kilograms (kg).

	XLR8	Reference values UNI EN 12183[1]
Seat angle (from horizontal)	0° ÷ 16°	
Backrest angle (from horizontal)	89° / 91° / 93°	
Leg angle (from seat)	CUSTOM	
Total width	max. 720 (L44)	700[1]
Total length	max. 900 (P46 - 75° frame)	1200[1]
Total height	max. 950 (HP 48, HS 41)	1200[1]
Pivot turn width	max. 1600	1300[1]
Turn width	max. 1300	1000[1]
Weight[2]	9,8 (Fixed axle) 10,2 (Adjustable axle)	

All measurements refer to wheelchairs in standard configuration
The addition of accessories may modify the indicated measurements and weight

[1] Some measurements may exceed the reference values according to UNI EN 12183. In some circumstances and with certain configurations, the use of safety exits may be complicated or impossible
[2] Seat 40x42. The weight depends on the selected configuration and may vary based on accessories.

4.15.4. Rear wheel and pushrim diameter

The table indicates diameter of rear wheels and relative pushrims.

Rear wheel diameter	Pushrim outer diameter (average)
24"	535 mm
25"	550 mm

4.15.5. Front wheel diameter

Front wheel options	
80 mm	solid
100 mm	solid
125 mm	solid
150 mm	solid or pneumatic

ENG

4.16. ZODIAC

Zodiac are non-invasive medical devices specifically designed to reduce and counterbalance motor impairments in the medium and long-term.

This wheelchair is manually propelled on the back wheels, it allows for many configurations and a wide range of accessories to meet the needs of users.

Only qualified operators must setup the device.

It is forbidden to use the device or its parts in different ways from those described in this manual.

4.16.1. Description

1. Axle
2. Frame
3. Seat
4. Backrest
5. Side-guards
6. Footrest
7. Parking brakes
8. Front forks
9. Castor wheels
10. Rear wheels
11. Tyres
12. Pushrim
13. Quick-release button

4.16.2. Features

- Ultralight aluminium rigid frame
- **V** shaped front frame
- Collapsible backrest
- Single aluminium tubular footrest (open or closed)
- Carbon fibre side-guards
- Quick extraction rear wheels
- Maximum load: 120 kg

4.16.3. Measurements table

All measurements are in degrees (°) and millimetres (mm), the weight is expressed in kilograms (kg).

	ZODIAC	Reference values UNI EN 12183[1]
Seat angle (from horizontal)	0° ÷ 16°	
Backrest angle (from horizontal)	89° ÷ 93°	
Leg angle (from seat)	custom	
Total width	max. 740 (L46)	700[1]
Total length	max. 900 (P46 - 75° frame)	1200[1]
Total height	max. 950 (HP 48, HS 41)	1200[1]
Pivot turn width	max. 1600	1300[1]
Turn width	max. 1300	1000[1]
Weight[2]	9,8	

All measurements refer to wheelchairs in standard configuration
The addition of accessories may modify the indicated measurements and weight

[1] Some measurements may exceed the reference values according to UNI EN 12183. In some circumstances and with certain configurations, the use of safety exits may be complicated or impossible
[2] Seat 38x38. The weight depends on the selected configuration and may vary based on accessories.

4.16.4. Rear wheel and pushrim diameter

The table indicates diameter of rear wheels and relative pushrims.

Rear wheel diameter	Pushrim outer diameter (average)
24"	535 mm
25"	550 mm

4.16.5. Front wheel diameter

Front wheel options	
80 mm	solid
100 mm	solid
125 mm	solid
150 mm	solid or pneumatic

ENG

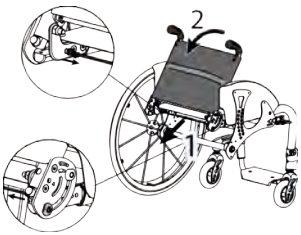
5. Preparation for use

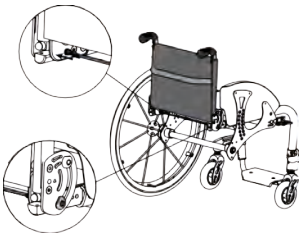
The preparation for use of these devices must be performed by qualified personnel to ensure the specific suitability of the product for the user and the correct working order of all parts and accessories, as well as to provide clear instructions to the user.

5.1. Opening/folding the backrest

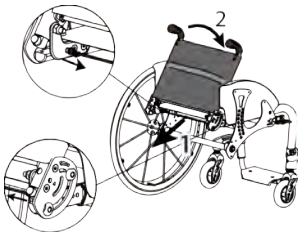
OFFCARR wheelchairs are equipped with a foldable backrest, with a mechanism that locks both in the opened and closed position, to facilitate transport and reduce space when not in use.

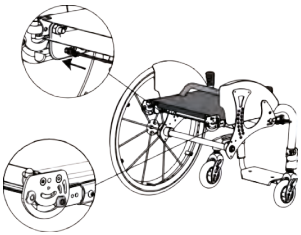
OPENING: Pull the cord to unlock the backrest and rotate it upwards until it reaches the locking position. You should hear an audible **click**.





CLOSING: Pull the cord to unlock the backrest and rotate it downwards until it reaches the locking position. You should hear an audible **click**.



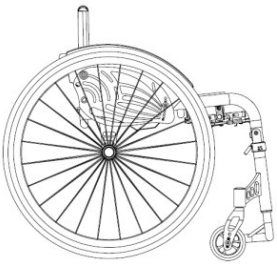


If necessary, it is possible to adjust both the open and the closed angle of the reclining backrest (for example, to accommodate for a postural system).

5.2. Hinged front frame (EOS³)

The warranty expires in case of use of the EOS³ wheelchair together with:

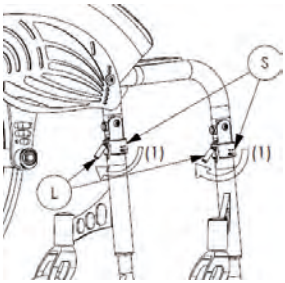
- Any electrical propulsion system, back installed or in front (except of one single central fastening)
- Any third single front wheel

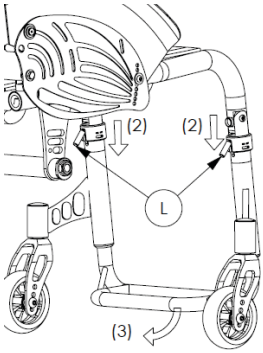


5.2.1. Folding procedure

Always fold the wheelchair when empty.

- Remove the rear wheels by pressing the quick-release button (see 5.1, “Opening/folding the backrest”).
- Remove the side-guards, if they are removable ones.
- Fold down the backrest
- Rotate the safety rings **S** clockwise as shown by arrows **1**, so that the locking levers **L** will be free to move downwards
- Push down the locking levers **L** as shown by arrow **2** in order to make the hinges free. Keep pushing down the levers while beginning the folding of the frame and guide the folding movement.
- Turn the footrest backwards **3** until the frame hitches in the folded position making a metallic click.

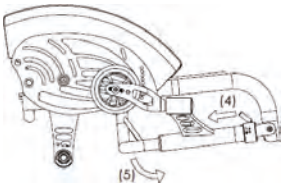


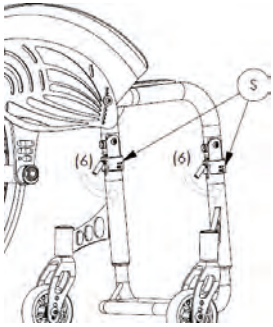


5.2.2. Opening procedure

Pay attention how to manage the hinged area during the opening operation to avoid hand injury due to the rotation of the hinge

- Unfasten the frame from the folded position by pushing down the two locking levers towards the footrest **4**.
- Rotate forward the lower frame **5** until the operating position. Pay attention that both right and left junctions are locked by a click sound.
- Rotate counter-clockwise the safety rings **S** as shown by arrow **6** so that they are restored into safety position. In this position the locking levers are prevented from being unintentionally pushed down.
- Re-insert the rear wheels by acting on the quick-release button.
- Lift up the folded backrest.
- Re-insert the side-guards and other parts eventually removed
- The wheelchair is now ready to be used.





ENG

Check carefully the correct locking of the frame before any use.

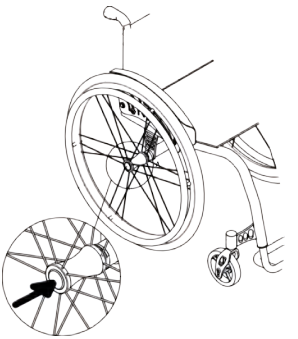
SAFETY RINGS **G** IN OPERATING POSITION
In this configuration It is allowed to ride the wheelchair

SAFETY RINGS **G** OUT OF OPERATING POSITION
In this configuration It is possible to push down the locking levers and to fold the frame. Do not ride the wheelchair

5.3. Rear wheels release and re-engagement check

Verify proper operation of the quick-release axle devices before using the wheelchair.

The wheelchair is usually shipped with the rear wheels disassembled.



- Make sure the brakes are released
- Holding down the quick-release button (in the centre of the hub), slide the wheel out of the bush
- Still holding down the button, reinsert the wheel into its seat and release the button, making sure it has returned to its home position. It should click audibly when in seat
- Check the working order of the engagement by trying to pull the wheel outward without pressing the button, making sure the wheel is correctly locked

For safety reasons it is important to repeat this test every time that for transport or maintenance reasons, the rear wheels are removed and reassembled to the frame.

5.4. Tyre pressure check

A periodical check of the tyre pressure helps to keep the device efficient and more comfortable

Verify the tyre pressure value according to the value marked on the tyre. Indicatively the maximum pressure for the most common wheels is:

- *7 to 9 bar (700÷900 kPa - 100÷130 psi)* for *Schwalbe Marathon Plus* wheels
- *7.5 bar (750 kPa - 110 psi)* for high pressure wheels
- *4.5 bar (450 kPa - 65 psi)* for 20", 22", 24" x 1.3/8" wheels
- *2.5 bar (250 kPa - 30 psi)* for pneumatic castor wheels

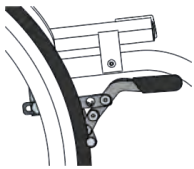
The pressure for the model Schwalbe Marathon Plus should always be kept from a minimum of ***7 bar (700 kPa - 100 psi)*** to a maximum of ***9 bar (900 kPa - 130 psi)*** to prevent damage to the lateral surface of the tyre itself.

With pneumatic tyres, it is recommended to reduce their pressure in the case of air transport, to avoid collateral effects of pressure variations due to altitude.

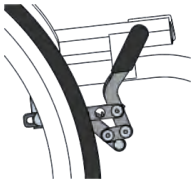
5.5. Brakes check

To check the correct functioning and the efficiency of the parking brakes:

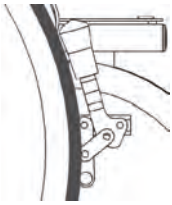
- activate the brakes (**ON** position)
- check if the wheels are locked in place



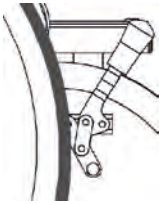
Standard (push) brakes
***ON** position*



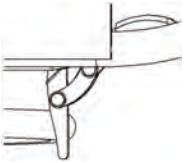
Standard (push) brakes
***OFF** position*



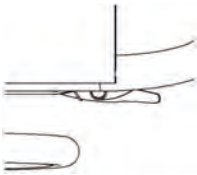
Pull brakes
***ON** position*



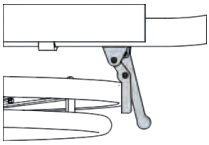
Pull brakes
***OFF** position*



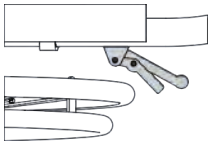
Scissor brakes
***ON** position*



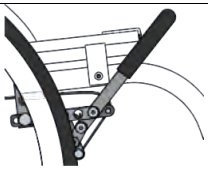
Scissor brakes
***OFF** position*



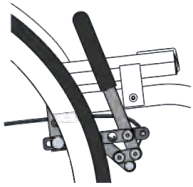
Composite brakes
***ON** position*



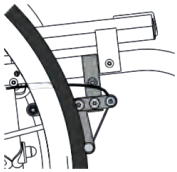
Composite brakes
***OFF** position*



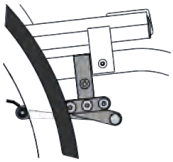
Single side brakes
lever side
***ON** position*



Single side brakes
lever side
***OFF** position*



Single side brakes
non-lever side
***ON** position*



Single side brakes
non-lever side
***OFF** position*

Clothes-guards brakes
***ON** position*

Clothes-guards brakes
***OFF** position*

Brake type availability is limited depending on the chosen configuration. Not all brake types are available for every setup.

The included brakes, except for the assistant-activated brakes (drum), must be used exclusively as parking brakes and never as service brakes.

To ensure the efficiency of the brakes it is necessary to maintain the proper tyre pressure and check the wear of the clamping elements frequently.

ENG

5.6. Check and adjust the pressure of the shock absorber (VENUS ADVENTURE, VENUS ELIT

- The pressure of the shock absorber should be checked periodically to ensure the comfort of use of the device. The piston is equipped with a locking lever **B** (check that it is in the unlocked position when travelling offroad, while it can be locked in other situations) and a ring **C** to adjust the stiffness of the response.

The maximum piston charge pressure is 275 psi (19 bar / 1900 kPa)

The pressure of the shock absorber must be chosen based on the weight of the user and the type of route

The device leaves the factory with the piston set at 100/120psi - an adjustment indicatively suitable for a user of about 70/80kg in weight. To check that the piston has been loaded correctly, after a test the red o- ring must have moved between 20 and 30% . The o-ring is just a marker.

Indicative values of the shock absorber charge based on the weight of the user:

- 100 kg = 160-170 psi / 12-13 bar
- 80 kg = 120psi / 9 bar
- 70 kg = 100psi / 7 bar
- 50 kg = 80-90psi / 5-6 bar

Use only the provided pump to charge the shock absorber trough the **A** valve

For further information, read the provided shock absorber instructions for use.

5.7. Footrest positioning (IDRA 2.E)

According to the limits of setup, the footplate can be single or double (separate footplates). The footplates can be folded down once the wheelchair is open

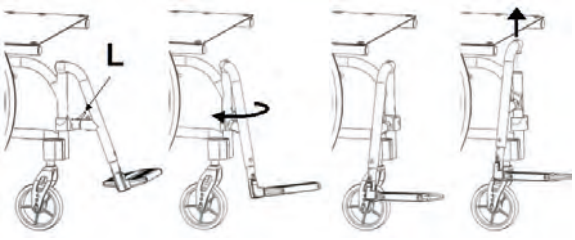
In case of removable footrests frame, the footrests are packed separately. They must be assembled before use.

To insert the footrest:

- open the wheelchair
- insert the footrests in their correct housing and rotate them starting from a 90° angle position from the frame (as shown) and rotate it inwards until the hooking mechanism snaps

To extract the footrest:

- Press the lever **L** and rotate the footrest outwards (while maintaining the lever pressed)
- Remove the footrest from the hinge pin by pulling it upwards



The detachable footrest can be rotated both inwards and outwards, by using the same mechanism

5.8. Accessories check

Some accessories required when setting up the wheelchair may be supplied separately. You must assemble them and check their operation before you start using the wheelchair.

ENG

6. Accessories

OFFCARR products can be configured with different accessories, described in the following paragraphs.

6.1. Armrests

OFFCARR wheelchairs can be equipped (with some limitations) with:

- tip-up height adjustable **L** armrest (to be used with side-guards fixed to the frame)

***L** Type, tip-up and height adjustable armrest*

Conflicts caused by particular configurations may affect the choice of armrests. It is anyways always possible to disable armrest tilting.

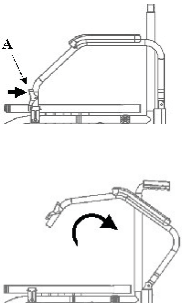
The armrests are not designed to lift the wheelchair, either with or without a user.

6.1.1. Tip-up armrest

According to configuration limitations, Desk, Sport and **U** model armrests can all be folded down.

To flip the armrests over:

- Unlock the armrest rotation by pressing lever **A** and rotate it backwards.
- The armrest can be rotated fully behind the backrest.

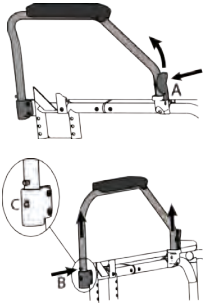


6.1.2. Detachable armrest

Desk, Sport and **U** armrests are always detachable.

To remove the armrests:

- Press lever **A** to unlock the rotation and move them backwards.
- Once the front is unlocked, press and hold button **B** on the rear block to pull the armrest out of its housing.

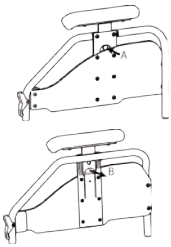


When reinserting the armrest on the rear support, make sure that the pin **C** is fully inserted on its guide. This guide prevents the armrest once opened from rotating sideways when it is not locked at the front.

6.1.3. Height adjustable armrest

Desk, Sport and **U** armrests are also available with height adjustable elbow-rest. To raise/lower the elbow-rest:

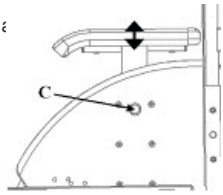
- While holding down button **A**, inside the armrest, move the armrest to the desired height.
- Release the button to lock the adjustment.
- Alternatively, you can pull out the hooking tab **B** slightly to unlock the movement of the elbow-rest.
- In either case, make sure the armrest is in a stable position before use. Apply light pressure until it clicks into place.



6.1.4. Armrest Integrated in the side-guard

Depending on the selected configuration, the side-guard can incorporate the a
raise/lower the armrest:

- While holding down button **C** located inside the side-guard, adjust the armrest to the desired height
- Release the button to lock the adjustment
- Ensure the armrest is in a stable position before use. Apply slight pressure until it clicks into place

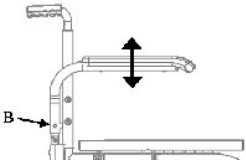


6.1.5. L type armrest, tip-up and height adjustable

Unless specifically requested, the standard height of the armrest from the seat is 220 mm. However, it is also possible to increase or decrease it by 20 or 40 mm after the order has been placed.

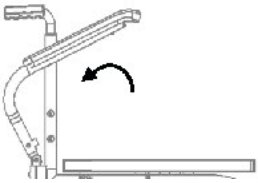
To adjust the height of an **L** type armrest:

- Remove screw **B**.
- Select the desired height (the support insert is pre-drilled in 20 mm steps) and reinsert the previously removed screw **B**.
- Tighten screw **B** appropriately.



If provided by the selected configuration, it is possible to tilt the armrest backwards and extract it.

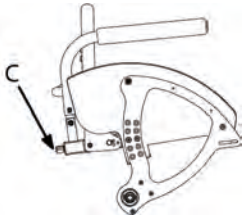
Remove the armrest (FENICE, FUNKY, RUBY, EOS, THEMIS)



6.1.6. Remove the armrest

The armrest can be detached as follows

- Unscrew without removing the **C** wing screws
- Detach the armrest by pulling it up



⚠ Remember to fix the **C** wing screw when the armrest is positioned on the wheelchair

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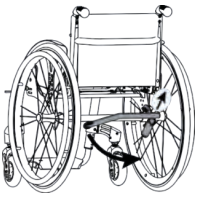
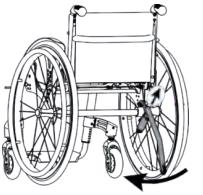
6.2. Anti-tip device

OFFCARR wheelchairs can be equipped with left and/or right anti-tip devices.



ACTIVATION



DEACTIVATION

Never use the anti-tip devices as transit wheels. It is not their intended purpose.

6.2.1. Use of the revolving anti-tip device

When not in use the anti-tip device is positioned horizontally under the frame:

To activate the anti-tip device, pull it upwards to unlock it and rotate it to the operating position. Always make sure that the locking position is reached after each activation or deactivation operation.

6.3. Table

The choice of a table requires the presence of armrests in the wheelchair configuration. The tables, which all have cutouts, are available in different materials and sizes:

Plastic (grey):	one size, 600 mm width
Soft padded:	S size, 500 mm width M size, 600 mm width L size, 700 mm width
Transparent polycarbonate table:	S size, 500 mm width M size, 600 mm width L size, 700 mm width

The connections between table and armrest vary depending on the model of the table itself, and the type of armrests.

For each type of table, both central single and double attachments are available.
The single attachment is not recommended in the presence of height-adjustable armrests.

When ordering any spare parts, it is necessary to specify the serial number of the wheelchair you wish to work on, or provide the wheelchair model, and the type of armrests, elbow-rest and table used.

Table support

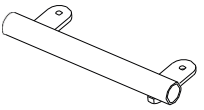
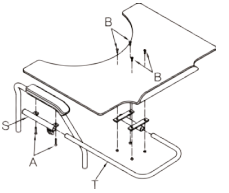
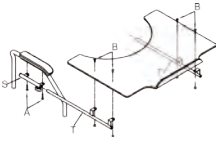


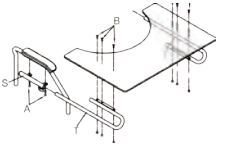
Table support with single centre attachment



Polycarbonate table with double attachment



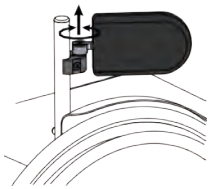
Polycarbonate or plastic table with double attachment



6.4. Swing away lateral supports

OFFCARR wheelchairs can be equipped with swing-away lateral supports.

The clamp that attaches to the backrest tube can be rotated to adjust lateral position and angle of containment. The padded support can also be independently adjusted in depth.



The padded supports are available in 4 sizes.

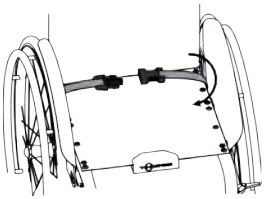
To unlock and open the support, simply lift it vertically by 10mm and rotate it outwards.

To activate, turn the holder towards the user until it snaps into the lock when the preset position is reached.

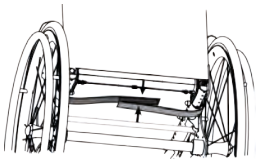
6.5. Pelvic band installation

OFFCARR wheelchairs are designed to accommodate the installation of a pelvic band when necessary. The 45° pelvic strap is an accessory that can be selected at the time of ordering or added later.

To install a pelvic band, wrap it around the frame passing between the backrest and the side-guard as shown in the picture 1, and connect its two flaps inferiorly through the provided velcroed areas highlighted in picture 2.



Picture 1: View of the installed pelvic band



Picture 2: Wrap the pelvic band around the tube as in the picture

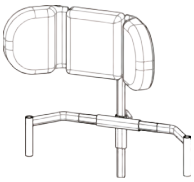
6.6. Headrest

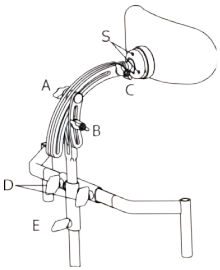
Different kind of headrest are available:

Shaped foam headrest

Form-fitting headrest

Lateral supports headrest





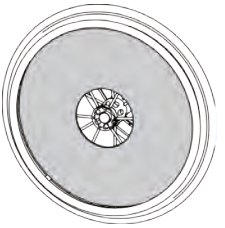
Adjustment of universal headrest attachment:

- The headrest attachment rails on the back tubes of the wheelchair can be adjusted in width by adjusting the wing screws **D**. Unless a certain asymmetry is expressly required, the vertical support must be centred in relation to the width of the wheelchair
- Adjust the height of the headrest by turning the wing screw **E**
- Adjust the position of the headrest depth by adjusting the wing screws **A** and **B**
- Adjust the inclination of the headrest by turning wing screw **C**
- Loosen the screws **S** to rotate the orbital joint for precise positioning of the headrest
- Once the desired position has been reached, fasten all screws of the device appropriately

All headrests can be removed from the wheelchair by pulling them upwards.
It is possible to equip the support with a locking mechanism, this works exactly like the quick-release axle. To release it, press the button (or buttons in case of a double lock) before pulling the whole support upwards.

6.7. Spokes guards

Spokes guards on the rear wheels serve as an esthetic feature as well as protection against accidental insertion of the user's fingers or hands between the spokes of the wheels. They can be attached to the spokes with velcro or clips depending on the specific model.



7. Attachment of the wheelchair for use within a motor vehicle

Where clearly indicated, the wheelchair models successfully passed the crash test according to the specifications of ISO 7176-19:2008 and can therefore be used safely in motor vehicles.

Some configurations, while available on order form, can prevent the wheelchair from being vehicle-compatible. Contact OFFCARR for further information.

It is mandatory that all of the approved wheelchair components are installed by authorized personnel following the correct technical specifications.

Whenever feasible, it is recommended to use the vehicle seat and its manufacturer- installed restraint systems, storing the wheelchair in the vehicle's cargo area or securing it in the passenger area.

When transporting an occupant the wheelchair must always face forward and be securely anchored to the vehicle.

The wheelchair has been tested only in a forward-facing orientation with the anthropomorphic test device (ATD) restrained by both pelvic and shoulder belts.

In order to safely transport a wheelchair user in a vehicle, the vehicle must be provided with a Wheelchair Tie-down and Occupant Restraint System (WTORS) conforming to ISO 10542 or SAE J2249 standards, appropriately installed according to the manufacturer specifications.

Both diagonal and lap belts must be used during transport to reduce the possibility, in the event of an accident, of impacts with other components inside the vehicle.

Anchor the wheelchair with extreme care and follow the instructions given by the manufacturer or authorized installer of the anchoring system closely. When in doubt, consult the instructions for use or contact the installer of such system.

Never transport an occupant sitting on a wheelchair unless the device is certified according to the requirements in ISO 7176-19:2008.

Wheelchair-mounted trays, if installed, should be removed and secured separately in the vehicle.

When possible, other auxiliary equipment must be either secured to the wheelchair or removed and secured in the vehicle.

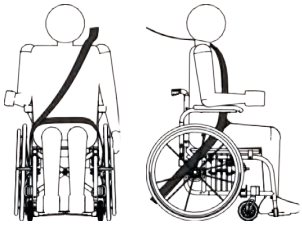
Postural systems, if installed, should not be relied on for occupant restraint in a motor vehicle, unless labelled as being compliant with ISO 7176-19:2008.

In order to securely connext the wheelchair to a vehicle, all the anchoring points must be used.

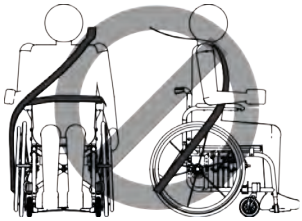
The anchoring points are indicated by the following label (according to ISO 7176-19 specifications)

If the user is transported while sitting on the wheelchair, they must be wearing a seat belt. Any safety belts for vehicle transport must be installed by authorized vehicle conversion companies and must be serviced.

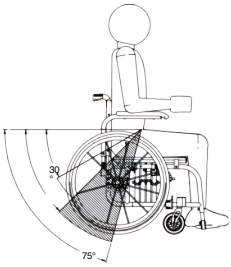
Belt restraints should make full contact with the shoulder, chest and pelvis, and pelvic belts should be positioned low on the pelvis near the thigh-abdominal junction (as shown on the drawing).



Belt restraints must not be held away from the body by wheelchair components such as armrests or wheels (as shown on the drawing).



The pelvic belt restraint should be worn low across the front of the pelvis, so that the angle of the pelvic belt restraint is within the preferred zone of 30° to 75° to the horizontal (as shown on the drawing).



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If possible, it is recommended to use the restraints with a steeper angle of 45° to 75° from the horizontal (as shown on the drawing).

Belt restraints should be as tight as possible, consistently with user comfort, and should not be twisted during use.

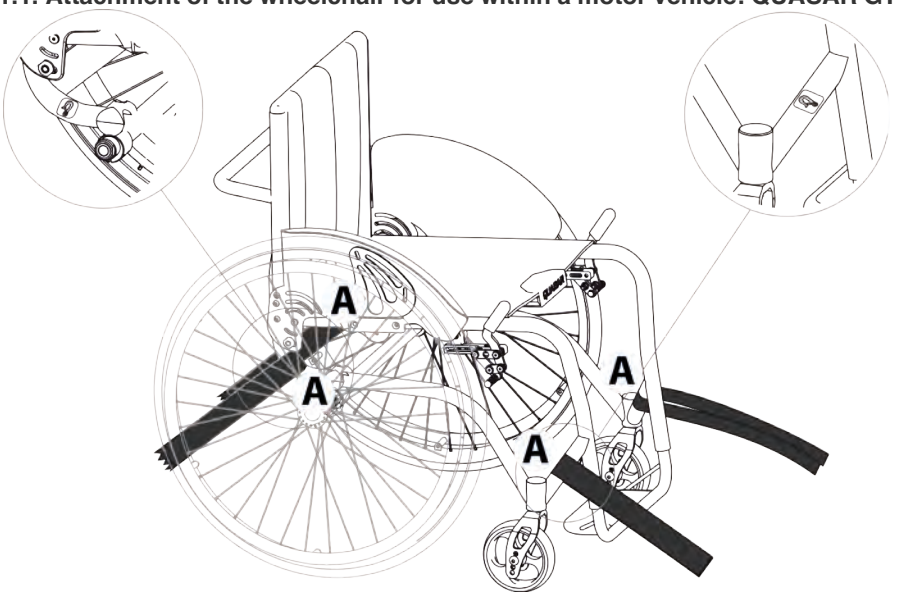
Following involvement in any type of collision, the wheelchair must be inspected by an OFFCARR representative before any further use.

No alterations or substitutions can be made to the wheelchair securement points or to structural and frame parts or components without consulting OFFCARR.

When applying the occupant restraint, make sure to position the seatbelt buckle so that the release button is not in contact with the wheelchair components during transport or in case of a crash.

7.1. Vehicle attachment points

7.1.1. Attachment of the wheelchair for use within a motor vehicle: QUASAR GT



Quasar GT is provided with four (4) attachment points **A** for a standard 4-point floor tiedown system, as indicated in the figure. When connecting the wheelchair to a vehicle, connect the attachment system to the four marked connection points. These are the most solid points of contact on the wheelchair, and the only connection points certified by the crash test.

8. Maintenance, inspections and controls

Weekly:

- Check the tyre pressure. Each tyre shows on the lateral bands the maximum pressure for which they are designed. A flat tyre affects the efficiency of brakes and the agility of the wheelchair.
- Check the efficiency of the quick-release axle (see 5.3, “Rear wheels release and re-engagement check”) and if necessary proceed with the lubrication of axle and bushes.
- Check the tension of the backrest upholstery to maintain a comfortable position.

Quarterly:

- Check the tightness of all the devices' screws.
- Check the perpendicularity of the front fork support screws.
- Check the wear of the front wheels. Solid wheels might be worn to the point of affecting the overall wheelchair front setup. In this case adjust the front fork assembly or replace the wheels (see 8.2, “Replacing front wheels”).
- Check the efficiency of the bearings. Replace any stuck bearings if necessary (see 8.3, “Replacing rear wheel bearings”, 8.4, “Replacing front wheel bearings” and 8.5, “Replacing front fork holder bearings”).
- Check the efficiency of the brakes and, in case, adjust them. If the knurled pin has to be replaced, consult authorised personnel.
- Lubricate moving parts such as hinges, bearings and quick-release axles. It is suggested to use silicon oil, which is efficient and doesn’t smear.

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Only choose original parts when purchasing accessories or spare parts.
Contact OFFCARR if you can’t find original spare parts on the market elsewhere.

It is recommended to refer only to authorized and qualified personnel to perform maintenance programs, adjustments, and to replace components or accessories.

8.1. Replacement of tyre and inner tub

8.1.1. Removing the tyre and inner tube

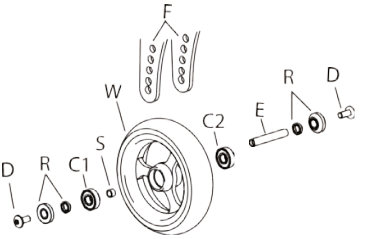
- Deflate the wheel
- Insert a special lever between the rim and the shoulder of the tyre so that when the lever is overturned, the side of the tyre comes out (fig. 1 and 2).
- Insert another lever 100mm away from the previous point and repeat the operation (fig.3).
- Slide the two levers along the circle to free the entire shoulder of the tyre.

- Extract the inner tube, starting from the side opposite the inflation valve (fig. 4).
- Once the inner tube has been extracted, it is easy to remove the tyre to replace one or both of them.

8.1.2. Assembling the inner tube and tyre

- Insert the (partially deflated) bladder into the tyre (fig. 5)
- Insert the chamber inflation valve into the hole on the rim.
- Insert one side of the tire entirely on the rim, paying attention to the direction of the tire tread pattern depending on whether the push wheel is right or left.
- Insert the opposite shoulder on the rim as well, starting from the point where the valve is positioned and continuing in both directions.
- Insert the last part of the shoulder with the help of the special levers by following the instructions represented in Fig. 3, Fig. 2 and Fig. 1 backwards.
- Inflate the wheel to the pressure indicated on the side of the tyre.

8.2. Replacing front wheels

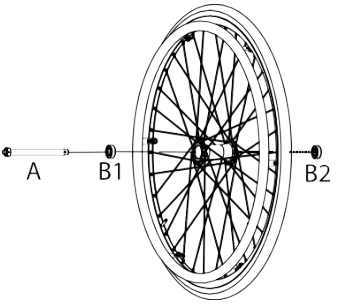


If necessary, the front wheels can be replaced:

- Unscrew one of the screws **D** and remove the pin **E**, paying attention to the positioning of the spacers **R**
- Replace the wheel **W**
- Position the wheel hole in line with the selected hole on the fork **F**
- Insert the axle **E** respecting the original position of the spacers **R**
- Tighten the screw **D**

It is important to select the same position for both wheels. Asymmetrical positions produce instability.

8.3. Replacing rear wheel bearings



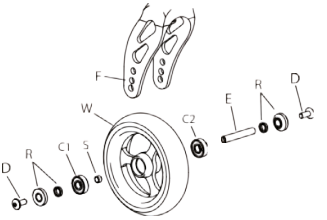
Disassembly

- The bearings in the push wheels (**B1** and **B2**) are press-fit. To extract them it is necessary to push them from the inside with the aid of an extractor or a pin punch and a hammer.

Assembly

- Position the new bearing **B1** on the inside of the hub so that it is coaxial with the hub and apply pressure to seat it.
- Before positioning the second bearing **B2** insert the axle **A** to use it as a guide for the second bearing and to ensure coaxiality of the system.

8.4. Replacing front wheel bearings



Disassembly

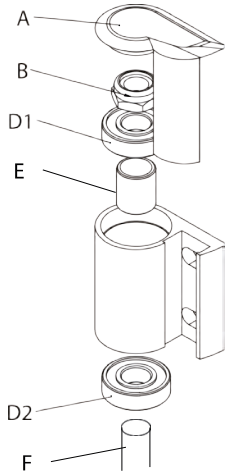
- The bearings in the front wheels (**C1** and **C2**) are press-fit. To extract them it is first necessary to remove the wheel **W** from the fork **F**, by unscrewing the screw **D** and removing the pin **E**, taking care of not losing the spacers **R**.
- Push the bearings from the inside out with the aid of an extractor or a pin punch and a hammer, making sure not to lose the spacer **S** placed inside the wheel.

Assembly

- Repeat the steps in the inverse order, making sure to put all spacers back where they were initially and ensuring bush coaxiality.

8.5. Replacing front fork holder bearings

8.5.1. FENICE, FUNKY, RUBY



Disassembly

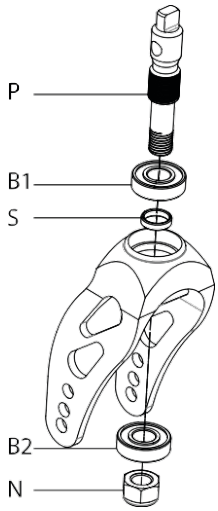
- The bearings in the front fork holder (**D1** and **D2**) are press-fit. To extract them remove the press-fit cover **A** by sliding it upwards
- Remove the fork **F** by loosening the **B** nut.
- Remove the bearings from the inside with the aid of an extractor or a pin punch and a hammer, paying attention no to loose the spacer **E** placed between the two bearings.

Assembly

- Place the new bearing **D2** on the lower side of the plate, applying pressure and making sure that it is evenly inserted (it must be coaxial with the hub otherwise it will not enter).
- Before positioning the bearing **D1** on the opposite side, it is necessary to insert the spacer **E** and the fork pin **F** on the already inserted bearing so that the pin itself becomes the guide for the bearing. In this way the coaxiality of the hub and the two bearings is ensured.
- Reposition and tighten the nut **B**, making sure that the fork is free to rotate.
- Replace the cover **A** and tighten it appropriately.

8.6. Replacing front fork bearings

8.6.1. HEKA, THEMIS, THEMIS PRESTIGE



Disassembly

- Remove the front wheel (see 8.2, “Replacing front wheels”)
- Unscrew the nut **N** and remove the assembled fork from the axle **P**
- The bearings in the front fork pin (**B1** and **B2**) are press-fit. To extract them it is necessary to push them from the inside with the aid of a pin punch and a hammer,taking care of not losing the spacer **S** placed between the two bearings.

Assembly

- Place the bearing **B2** on the lower side of the fork so that it is precisely coaxial to the hub and apply slight pressure to put it in place
- Place spacer **S** and bearing **B1** on the upper side of the fork so that they are coaxial to the hub and apply slight pressure to put the bearing in place
- Insert the assembled fork onto the axle **P**
- Reinstall the front wheel

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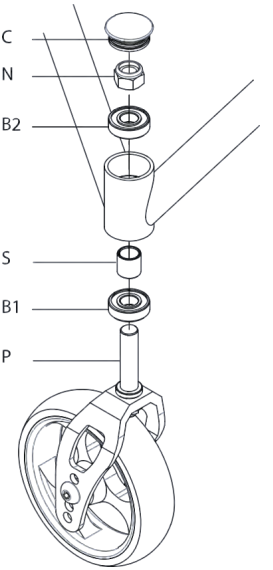
8.6.2. EOS, FIXED, IDRA, QUASAR, VENUS, XLR8



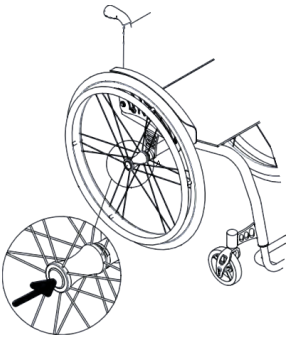
Disassembly

- Remove the press-fit cap **C**, using a small flathead screwdriver as a lever
- Remove the **N** nut
- The bearings in the front fork pin (**B1** and **B2**) are press-fit. To extract them it is necessary to push them from the inside with the aid of a pin punch and a hammer, paying attention not to lose spacer **S** placed between the two bearings

Assembly

- Place a new bearing on the lower side of the fork, making sure that it is evenly inserted (it must be coaxial with the hub otherwise it will not enter).
- Before positioning the bearing on the opposite side, it is necessary to insert the spacer **S** on the fork pin **P** using the pin as a guide for the bearing. In this way the coaxiality of the hub and the two bearings is ensured.
- Insert and fasten nut **N**
- Put the cap **C** back in place paying attention to the O-rings. Use a rubber mallet to seat it correctly and tightly.
-

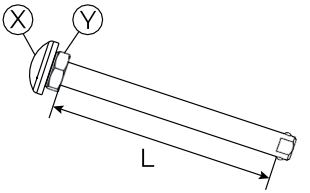
8.7. Quick extraction devices



8.7.1. Check

The quick extraction axles are shipped already checked and adjusted. However, it is recommended to periodically verify the effectiveness of their operation.

- Make sure that the **X** button is fully released once the wheel is correctly mounted.
- Check the effectiveness of the latch by trying to pull the wheel outward without pressing the button and make sure it does not slip off.



8.7.2. Adjustment

If necessary, it is possible to adjust the axle to eliminate any play between the wheel and the frame or to complete the release of the button once the wheel is inserted.

- If the quick-release button is not completely relaxed when the wheel is inserted in the frame, it is necessary to extend the useful length of the **L** axle by partially unscrewing the **Y** nut.
- If once the wheel has been inserted into the frame, there is play between the frame and the wheel itself, it is necessary to reduce the useful length of the **L** axis by partially tightening the **Y** nut.

The **Y** nut thread has a pitch of 1 mm, therefore the unscrewing or screwing of one turn involves the elongation or reduction of 1 mm. In case of adjustment, it is advisable to proceed with successive adjustments of ¼ of a turn at a time.

9. Cleaning instruction

Cleaning and disinfection procedure have to be performed exclusively by qualified personnel.

Use appropriate eye/facial protection and protective gloves, during cleaning and disinfection procedure.

In case of contamination with blood or other body fluids, the device has to be cleaned first and then disinfected as follows:

Most of the time is convenient and more effective to remove the upholstery from the frame before to proceed with the cleaning and disinfection of either frame or upholstery.

FRAME

- Wash the device with lukewarm water and neutral detergent using a damp cloth to remove gross soiling
- Remove eventual detergent residuals only with lukewarm water
- Dry the device prior to further processing
- Visually inspect the cleanliness of the complete device
- Disinfect the device using 70-90% alcohol
- Be sure it is completely dry before proceeding with use

UPHOLSTERY

In case of the user remaining the same before and after the cleaning treatment:

- Wash, rinse, dry and disinfect the upholstery using the same process used for the frame
- Be sure the upholstery parts are completely dry before reassembling them

In case of different user after the cleaning treatment:

- The best course of action is to change the upholsteries with a new set

During the cleaning process the device should be also carefully inspected for damage, oxidation and faults in function. If any damage or faults are found, the involved components should be removed for service, repair or replacement.

All waste materials related to this process must be disposed in compliance with specific local applicable law.

10. Technical service

For any service request, please contact OFFCARR supplying the following indications:

1. Model
2. Serial number
3. Fault description
4. Any reference or order number, if available, recorded on the order form.
5. Dealer

Every component of the device is available as spare part.

11. Warranty terms

It is strongly advised to register the product on the website www.offcarr.com after delivery.

1. The device's frame is guaranteed for 3 (three) years from the delivery date.
2. The label showing the serial number, the manufacturer address and the CE symbol cannot be removed for any reason to preserve the warranty validity.
3. Parts subject to normal wear and tear are not covered by the warranty, unless specific wear is caused by evident manufacturing fault.
4. During the warranty period OFFCARR may proceed at its own discretion to change or to repair the faulty parts.
5. The warranty does not cover damage due to negligence, carelessness, misuse or by incorrect maintenance performed by non authorized personnel.
6. If any damage occurred during transport, the forwarder company is the only responsible. It is important to inform immediately both the forwarder company and, for information, OFFCARR.
7. The warranty does not cover injury or any other damage to people or goods connected to the device's malfunctioning.

12. Packaging, shipment and delivery

All OFFCARR products are shipped in closed cardboard cases to protect them from bumps and dust.
The package includes the device configured according with the order form, this Instruction manual and a tool kit.

The device must be transported in trucks that protect it from atmospheric agents, as shown on the packaging box.
Upon receipt, check the box integrity: open the package, remove the device and check it for damages. In case of problems, note your remark on the waybill and immediately notify both the forwarder and, for information, OFFCARR.

Once these checks, mandatory to ensure the validity of the warranty, have been carried out, place again the device in its packing until it is used and store in a cool and dry place (between - 15 and + 50 °C and with a relative humidity lower than 80 %).

Do not place any objects over the packaging box.

The packaging materials follow the European directive 94/62/EC[13].

13. Correct disposal and recycling

OFFCARR products are made of aluminium alloy (Al 7020, Al 6082, Al 2017, Al 6061, Al 5754), titanium, steel, stainless steel, carbon fibre, polyurethane, epoxy resins, other composite materials.

Recycle or disposal of all materials must be in compliance with the local applicable laws. Contact your dealer in case of doubt or for help when disposing the device.

14. Adjustments

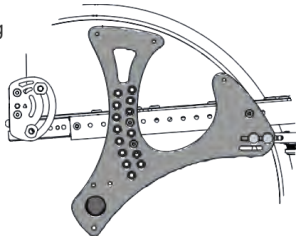
The wheelchair is shipped to the customer in the setup chosen on the order form.

Please refer to authorized and qualified personnel to perform the adjustments described in this manual.

14.1. The SHS adjustment plate (FENICE, FUNKY, RUBY, THEMIS)

The following adjustments involve moving the SHS plate in various ways.

The SHS (*Smart Holding System*) plate is the heart of all ultralight_rigid adjustments: it controls how the seat is connected to the wheels, so the position of the seat and the centre of gravity can be finely adjusted by acting on its positioning.



The SHS plate maintains the position of the side-guard and the brake unchanged with respect to the wheel, greatly simplifying the readjustment operations of the wheelchair, focused exclusively on the positioning of the seat.

Every time you intervene on the seat's balance, it is advisable to check and eventually correct the perpendicularity of the front fork with respect to the ground (see 14.7, "Front fork alignment (THEMIS)").

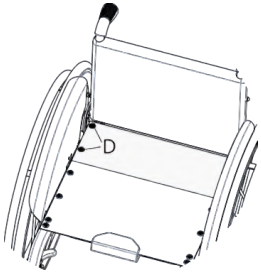
Pay specific attention to the symmetry of these adjustments, always double checking both sides are tightened and the screws are placed on the same holes on both plates and tubes.

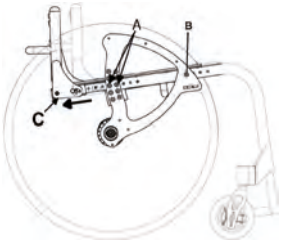
14.2. Seat depth adjustment

14.2.1. FENICE, FUNKY, RUBY

If necessary, it is possible to increase the depth of the seat by 20, 40, or 60 mm by following these steps:

- Completely unscrew and remove on both sides the **D** seat screws and the **A** and **B** frame screws.
- Move the telescopic inserts **C** until the desired depth is reached (the extension insert is already pre- drilled with a 20 mm pitch)
- Insert and tighten the frame screws **A** and seat screws **D** screws.





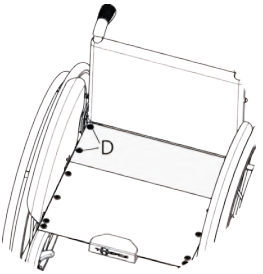
The operations must always be carried out symmetrically (on both the right and left sides).

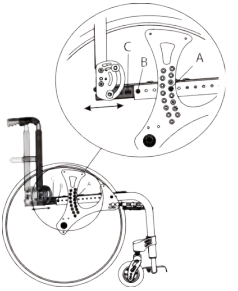
ENG

14.2.2. THEMIS

If necessary, it is possible to increase the depth of the seat by 20, 40, or 60 mm by following these steps:

- Completely unscrew and remove on both sides the **D** seat screws and the **A** and **B** frame screws.
- Move the telescopic inserts **C** until the desired depth is reached (the extension insert is already pre- drilled with a 20 mm pitch)
- Insert and tighten the frame screws **A** and seat screws **D** screws.





Maintain position of screw **B** in relation to SHS plate to maintain the configuration

The operations must always be carried out symmetrically (on both the right and left sides).

14.2.3. EOS, EOS3, HEKA, IDRA, QUASAR, QUASAR GT, QUASAR KID, THEMIS PRESTIGE, VENUS, VENUS ADVENTURE, VENUS ELITE, ZODIAC

It is not possible to increase the depth of the seat for these wheelchairs.

14.3. Gravity centre (COG) adjustment

The choice of the centre of gravity is always a compromise between agility and safety. With a very active configuration, the wheelchair is very agile in pushing but requires greater skill in control. A more cautious centre of gravity increases the stability of the device at the expense of its agility.

It is an individual choice linked to the general configuration of the device, the anatomy and disability of the user, and the usage environment; a choice that determines the experience of pushing and inevitably influences daily activities.

The opportunity to vary this parameter over time allows the device to accompany the user's motor development, optimizing their potential.

Consider that the further forward the hub is mounted, the more agile the wheelchair, while the further rearward the hub is mounted, the less active the set-up is to the benefit of safety; advancing the rear wheel with respect to the backrest axis, minimises the pushing effort and gives greater agility and smoothness to the wheelchair but reduces its safety margins against backward imbalance.

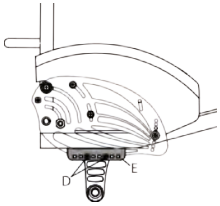
The advancement of the rear wheel in relation to the axis of the backrest minimises the pushing effort and gives the wheelchair greater agility and smoothness, but reduces its safety margins against backward imbalance, particularly on climbs.

If the distance between the hub centre and the projection of the backrest is reduced, the wheelchair is less active but assumes a more cautious stance.

Make sure you have chosen the same position for the wheel bushes on both sides of the frame. Asymmetrical combinations produce instability.

14.3.1. EOS, EOS³

Adjustable axle EOS, EOS³ allow adjusting the centre of gravity (COG). To change the centre of gravity:



- Remove the back wheels by pushing the shaft button
- Remove the **D** screws
- Chose the most suitable position for the axle between the **E** holes
- Fix the **D** screws back
- Reinsert the wheel, checking that it is correctly engaged and locked (see 5.3, "Rear wheels release and re-engagement check")
- Once that the COG axle position is changed it is necessary to perform again the side-guards and brake adjustments

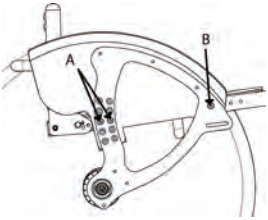
The adjustments must always be made symmetrically.

Once the position of the rear wheels has been changed, it is essential to adjust the position of the parking brakes (see 14.10, "Brakes adjustment") and, if necessary, the position of the side-guards (see 14.8, "side-guard adjustment").

14.3.2. FENICE, FUNKY, RUBY

FENICE, FUNKY and RUBY all allow adjusting the centre of gravity (COG). To change the centre of gravity:

To proceed with the adjustment:



- Remove the screws **A** and **B** that fix the adjustment plate to the frame tube
- Move the seat forward or backward to the desired position, aligning the holes
- Insert and tighten screws **A** and **B** again

The adjustments must always be made symmetrically.

The centre of gravity adjustment always requires checking and possible adjustment of the perpendicularity of the front forks. It is not necessary to adjust the position of the armrests and brakes.

14.3.3. QUASAR, IDRA

Adjustable axle QUASAR – IDRA allow adjusting the centre of gravity (COG). To change the centre of gravity:

- Remove the back wheels by pushing the shaft button
- Unscrew without removing the **D** screws
- Chose the most suitable position for the axle (there are some appropriate signs on the frame that make the axle align correctly with the frame)
- Fix the **D** screws back
- Reinsert the wheel, checking that it is correctly engaged and locked (see 5.3, "Rear wheels release and re-engagement check")
- Once that the COG axle position is changed it is necessary to perform again the side-guards and brake adjustments

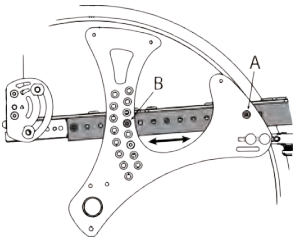
The adjustments must always be made symmetrically.

Once the position of the rear wheels has been changed, it is essential to adjust the position of the parking brakes (see 14.10, "Brakes adjustment") and, if necessary, the position of the side-guards (see 14.8, "side-guard adjustment").

14.3.4. THEMIS

THEMIS allow adjusting the centre of gravity (COG). To change the centre of gravity:

To proceed with the adjustment:



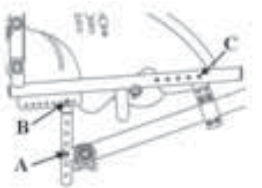
- Remove the screws **A** and **B** that fix the adjustment plate to the frame tube
- Move the seat forward or backward to the desired position, aligning the holes
- Insert and tighten screws **A** and **B** again

The adjustments must always be made symmetrically.

The centre of gravity adjustment always requires checking and possible adjustment of the perpendicularity of the front forks. It is not necessary to adjust the position of the armrests and brakes.

14.3.5. VENUS, VENUS ELITE, VENUS ADVENTURE

VENUS, VENUS ELITE, VENUS ADVENTURE all allow adjusting the centre of gravity (COG). To change the centre of gravity:



- Remove the **B** and **C** screws;
- Choose the best position of the seat;
- Put back and screw the **B** and **C** screws and tighten them properly

In case of rigid setup the rear seat support should be perpendicular to the floor.

In presence of shock absorbers they should be assembled perpendicular to the seat.

The adjustments must always be made symmetrically.

The centre of gravity adjustment doesn't require adjustment of the perpendicularity of the front forks. It may be necessary to adjust the position of the side-guards.

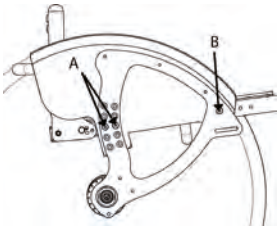
14.4. Rear seat height adjustment

14.4.1. EOS, EOS3, HEKA, IDRA, QUASAR, QUASAR GT, QUASAR KID, THEMIS PRESTIGE, ZODIAC

For these models, the rear height cannot be adjusted after the configuration.

14.4.2. FENICE, FUNKY, RUBY

The rear height can be adjusted by changing the position of the seat on the SHS adjustment plate at intervals of 10 mm.

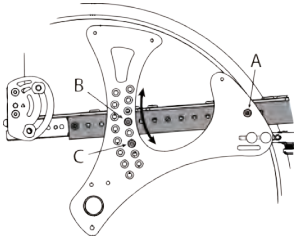


- Remove completely the two screws **A** and loosen screw **B**, which acts as a pivot for rotation
- Raise or lower the back of the seat to the desired position, ensuring that the final position is aligned with the existing holes
- Replace the screws and tighten all 3 screws carefully

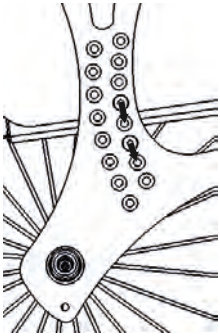
Perform the adjustment on both sides and double check the screws connect to the same holes.

14.4.3. THEMIS

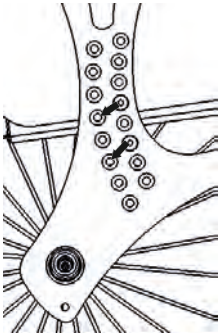
The rear height can be adjusted by changing the position of the seat on the SHS adjustment plate at intervals of 10 mm.



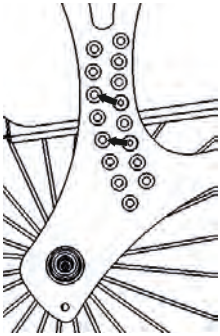
- Remove completely the two screws **B** and **C** and loosen screw **A**, which acts as a pivot for rotation
- Raise or lower the back of the seat to the desired position, ensuring that the final position is aligned with the existing holes
- Replace the screws and tighten all 3 screws carefully



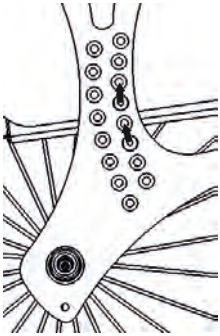
Rear height decrease (2 cm)



Rear height decrease (1 cm)



Rear height increase (1 cm)



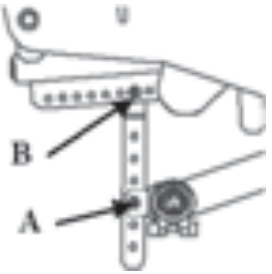
Rear height increase (2 cm)

Perform the adjustment on both sides and double check the screws connect to the same holes.

ENG

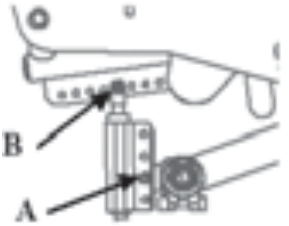
14.4.4. VENUS, VENUS ELITE, VENUS ADVENTURE

The rear height can be adjusted by changing the position of the rear frame supports.



- Remove the **A** screw connecting the frame to one of the rear seat supports (or to the shock absorber)
- Choose the most suitable seat height
- Insert and fix the **A** screws
- The rear seat support should be perpendicular to the floor

In case the wheelchair is equipped with shock absorber its assembly should be perpendicular to the seat



If not, proceed as follows:

- Remove the **B** screws connecting the shock absorber to the seat
- Set the shock absorber in the appropriate position
- Put back and fix tightly the **B** screw
- Operations have to be performed equally on both left and right sides

Perform the adjustment on both sides and double check the screws connect to the same holes.

For EOS, EOS3, QUASAR, QUASAR GT, QUASAR KID, IDRA, VENUS, VENUS ELITE, VENUS ADVENTURE, ZODIAC, be careful not to change the front seat height whilereplacing the front wheels.

For FENICE, FUNKY, RUBY, THEMIS, once changed the front wheels it is essential to adjust the front fork perpendicularity (see 14.6, “Front fork support plate perpendicularity adjustment (FENICE, FUNKY, RUBY)”).

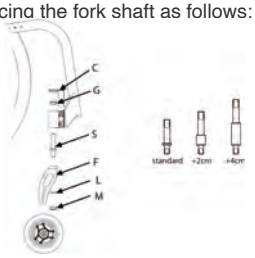
14.5. Front seat height adjustment

14.5.1. EOS, EOS3, HEKA, QUASAR, QUASAR GT, QUASAR KID, THEMIS PRESTIGE, ZODIAC

For these models, the front height cannot be adjusted after the configuration.

14.5.2. FENICE, FUNKY, RUBY, Adjustment of front height by replacing the fork shaft

The front height selected during the initial configuration can be subsequently modified by acting on the front wheels as described in 14.5, “Front seat height adjustment” or by replacing the fork shaft as follows:



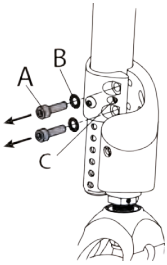
- Remove the protection cap
- Unscrew the **G** nut
- Unscrew the **M** nut and the **L** washer
- Replace the shaft
- Insert the new shaft and fix the **G** and **M** nuts, being careful to the correct positioning of the **L** washer

After modifying the front height of the frame, it is necessary to verify and possibly adjust the perpendicularity of the front forks with respect to the ground (see 14.6, “Front fork support plate perpendicularity adjustment (FENICE, FUNKY, RUBY)”).

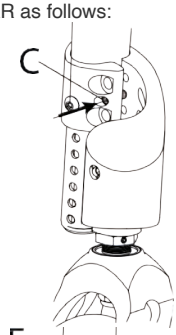
14.5.3. THEMIS, Adjustment of front height by acting on the positioning of the EARs on the frame

The front height selected during the initial configuration can be subsequently modified by acting on the front wheels as described in 14.5, “Front seat height adjustment” or by acting on the position of the EAR as follows:

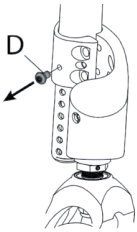
1
Loosen the grub screw **C** and remove the two screws **A** from both EAR plates. Be careful not to lose the serrated washers **B** between the screws and the EAR plates



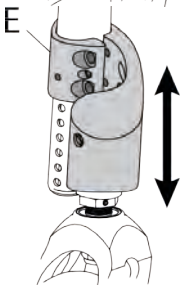
2
Tighten the grub screw **C** to release the clamping pressure from the frame.



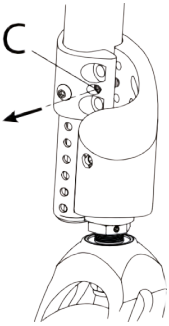
3
Remove the locking screw **D**, reference for the height adjustment



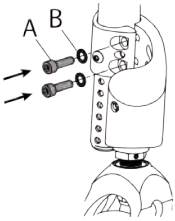
4
Raise or lower the EAR to the desired position. The reference holes on the frame have intervals of 10 mm.



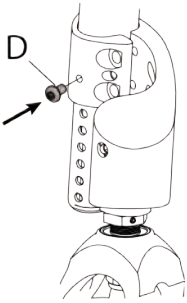
5
To determine the new position, insert the reference screw D without tightening it Loosen the grub screw C to restore the pressure of the EAR on the frame



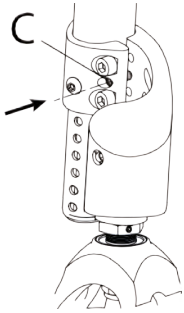
6
Tighten the **D** screw properly



7
Reinsert the two screws **A** paying attention to the insertion of the serrated washers **B**



8
Tighten the grub screw **C**



After modifying the front height of the frame, it is necessary to verify and possibly adjust the perpendicularity of the front forks with respect to the ground (see 14.7, “Front fork alignment (THEMIS)”).

ENG

14.5.4. VENUS, VENUS ELITE, VENUS ADVENTURE, Adjustment of front height

The front height selected during the initial configuration can be subsequently modified by acting on the front wheels as described in 14.5, “Front seat height adjustment” or by adjusting the front seat support as follows:

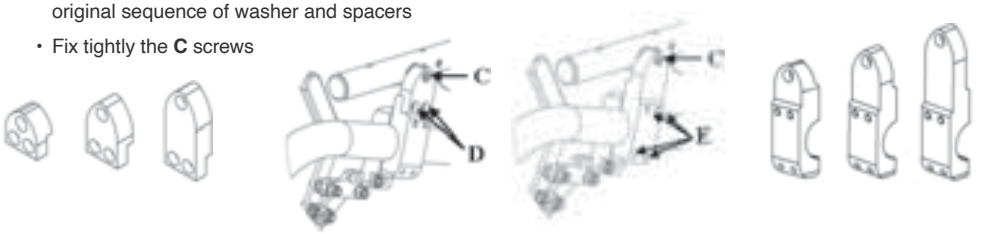
The front seat support is divided into two sections: the lower one is held on the lower frame and it also supports the brake and it should never be moved from its position; the upper one is interchangeable to adjust the front seat height from the floor.

According with the desired seat front height, three different upper support are available.

VENUS ELITE, VENUS ADVENTURE

Remove the **C** screw to uncouple the seat frame from the lower frame, keeping track of the sequence of washer and spacers

- Remove the **D** screws to disassemble completely the upper support
- Choose the most suitable support within the three available ones
- Put back the **D** screws to assembly the new support and fix them tightly
- Join the support to the seat by inserting the **C** screws keeping the original sequence of washer and spacers
- Fix tightly the **C** screws

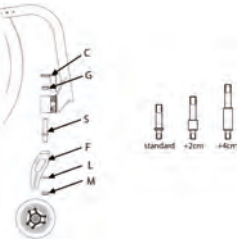


In the presence of shock absorbers the C screws must be fixed enough to allow rotation of the frame on the support and at the same time it is necessary to avoid any shaking of the parts. It is necessary to change the self-locking nuts that fix the C screws every time you remove them to prevent the junction from becoming loose over time.

VENUS

On VENUS the process is exactly the same only the **E** screws have to be removed instead of the **D** screws and the plates are slightly different.

- Remove the protection cap
- Unscrew the **G** nut
- Unscrew the **M** nut and the **L** washer
- Replace the shaft
- Insert the new shaft and fix the **G** and **M** nuts, being careful to the correct positioning of the **L** washer

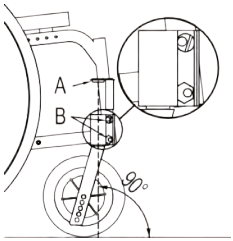


After modifying the front height of the frame, it is necessary to verify and possibly adjust the perpendicularity of the front forks with respect to the ground (see 14.6, “Front fork support plate perpendicularity adjustment (FENICE, FUNKY, RUBY)”).

14.6. Front fork support plate perpendicularity adjustment (FENICE, FUNKY, RUBY)

After making adjustments to the front height or replacing or repositioning the front wheels, the perpendicularity of the front fork plate, i.e. the perpendicularity of the fork pivot axis, must be checked and adjusted if necessary. This adjustment is necessary to achieve maximum steering feel and stability of the wheelchair.

- Remove the protective cover **A**
- Loosen the screws **B** that secure the plate
- Choose the most convenient position of the eccentric nuts until the plate is at right angles to the ground. (to reposition an eccentric nut it is necessary to completely remove the bolt).
- Tighten the screws **B** appropriately.
- Replace the protective cover **A**.

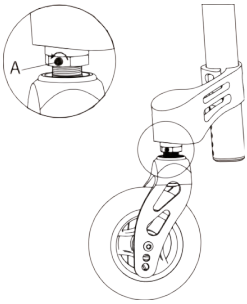


Should it prove impossible to achieve perpendicularity, it is advisable to choose the position that generates an angle immediately above 90° (as shown in the figure) in order to keep the wheelchair agile when running and changing direction.

The adjustment must be carried out symmetrically on both forks. It is important to check the symmetry carefully after each adjustment.

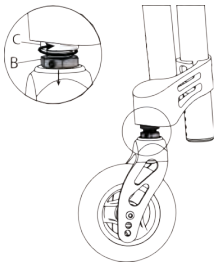
14.7. Front fork alignment (THEMIS)

After making any important setup adjustment, it is very important to verify that the front forks are correctly aligned and perfectly perpendicular to the ground. This assures smooth pushing and cornering.



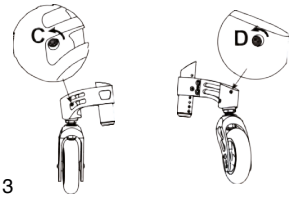
1

Loosen the small grub screw **A** that locks the nut **B** on the lower part of the EAR, right above the fork



2

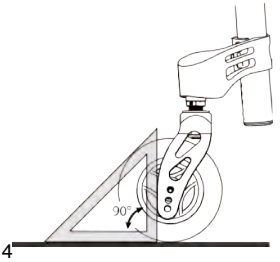
Loosen the **B** nut lowering it from the previous locked position and and verify that the molded spacer **C** is not obstructing the fork



3

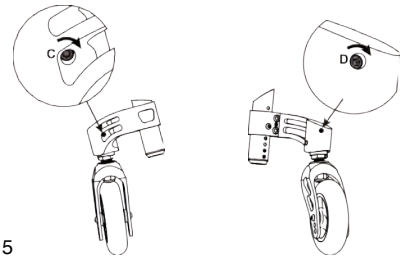
Loosen the grubs **C** and **D** in order to enable the free rotation of the fork

ENG



4

Carefully set the fork perpendicular to the ground



5

Maintaining the fork in perpendicular position, tighten the grub screws **C** and **D**, stopping when they both are in contact with the fork axis. Once both are in contact with the axle, tighten them appropriately to ensure stability of the adjustment over time Secure the nut **B** and then the grub screw **A** appropriately

Perform the adjustment on both sides and double check the fork perpendicularity to the ground

14.8. Side-guard adjustment

Sideguards, if fitted, are attached to the wheelchair frame by means of screws which act on special slots that also allow for gradual adjustment.

In case of plastic side-guards, there is an aluminium reinforcement panel.

14.8.1. EOS, EOS3, QUASAR

See 14.13, “Backrest tilt adjustment”

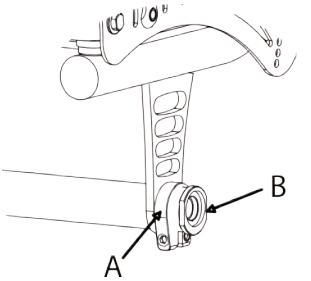
14.8.2. VENUS, VENUS ELITE, VENUS ADVENTURE, ZODIAC

See 14.13, “Backrest tilt adjustment”

14.9. Rear wheels camber adjustment

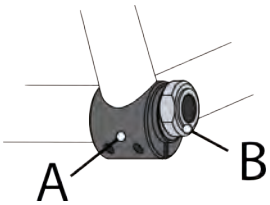
14.9.1. EOS

- Remove the wheels (see 5.3, “Rear wheels release and re-engagement check”)
- Loosen the clamp **A** while holding the bush in position
- Remove the bush **B** and replace it with the desired one
- Position the bush with its sides perpendicular to the ground; before tightening it, verify the correct positioning of the wheel (see the next paragraph)



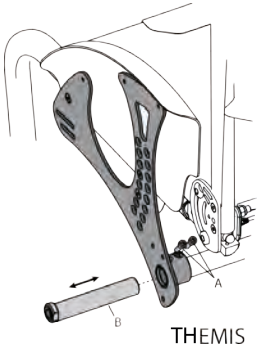
14.9.2. QUASAR, QUASAR KID, IDRA, ZODIAC

- Remove the wheels (see 5.3, “Rear wheels release and re-engagement check”)
- Loosen the clamp **A** while holding the bush in position
- Remove the bush **B** and replace it with the desired one
- Position the bush with its sides perpendicular to the ground; before tightening it, verify the correct positioning of the wheel (see the next paragraph)



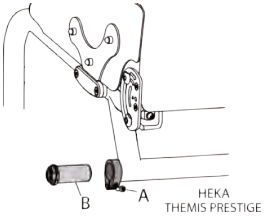
14.9.3. FENICE, FUNKY, RUBY, THEMIS

- Remove the wheels (see 5.3, “Rear wheels release and re-engagement check”)
- Loosen the screws **A** on the axle clamp
- Remove the bush **B** and replace it with the desired one
- After having performed the camber adjustment (see 14.9, “Rear wheels camber adjustment”), tighten appropriately the screws **A** on the axle clamp



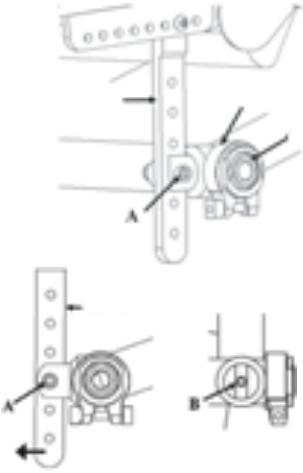
14.9.4. HEKA, THEMIS PRESTIGE

- Remove the wheels (see 5.3, “Rear wheels release and re-engagement check”)
- Loosen the screws **A** on the axle clamp
- Remove the bush **B** and replace it with the desired one
- After having performed the camber adjustment (see 14.9, “Rear wheels camber adjustment”), tighten appropriately the screws **A** on the axle clamp



14.9.5. VENUS, VENUS ELITE, VENUS ADVENTURE

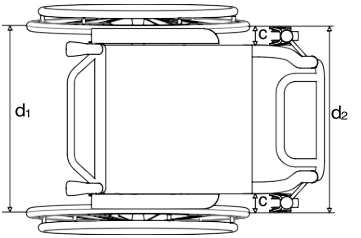
- Remove the wheels (see 5.3, “Rear wheels release and re-engagement check”)
- Loosen the screws on the axle clamp
- Remove the **A** screw and move out the rear seat support to have accessibility to the **B** blocking dowel
- Loose the **B** blocking dowel that appears under the seat support
- Remove the bush and replace it with a suitable one
- Place the bush with the sides perpendicular to the floor but, before fastening the **B** dowel and the clamp, check the correct alignment of the wheels
- After having performed the camber adjustment (see 14.9, “Rear wheels camber adjustment”), tighten appropriately the screws on the axle clamp



ENG

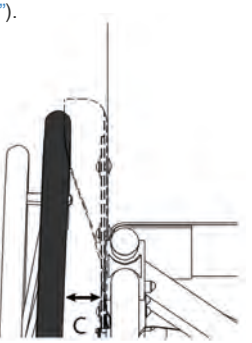
14.9.6. Adjusting for Non-0° Camber.

- Loosen screws **A** on the axle clamps.
- Insert the rear wheels and measure the distances between them (**d1** and **d2**) at the hub height, both front and rear, as shown in figure 1.
- The two distances should be such that **d2** is smaller than **d1** by a value between 5 and 10 mm.
- Verify the distances **C** between the frame and the wheels and ensure they are symmetrical and equivalent.
- If necessary, adjust the position of one or both wheels until satisfactory results are achieved, properly rotating the bush **B**.



After making adjustments, tighten screws **A** appropriately and ensure the correct insertion, removal, and locking of the quick-release axles (see 5.3, “Rear wheels release and re-engagement check”).

- Loosen screws **A** on the axle clamps.
- Insert the rear wheels and measure the distances between them (**d1** and **d2**) at the hub height, both front and rear, as shown in figure 1.
- The two distances should be such that **d2** is smaller than **d1** by a value between 5 and 10 mm.
- Verify the distances **C** between the frame and the wheels and ensure they are symmetrical and equivalent.
- If necessary, adjust the position of one or both wheels until satisfactory results are achieved, properly rotating the bush **B**.



After making adjustments, tighten screws **A** appropriately and ensure the correct insertion, removal, and locking of the quick-release axles (see 5.3, “Rear wheels release and re-engagement check”).

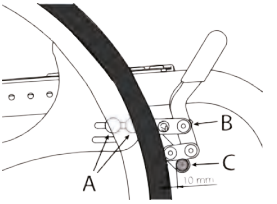
14.10. Brakes adjustment

With the exception of drum brakes, the brakes provided are only suitable for parking of the aid and not for reducing the running speed.

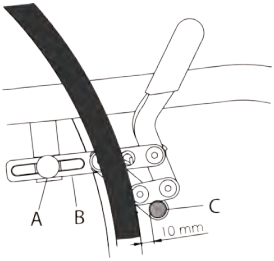
If the position of the rear wheel has been changed, the position of the brakes must be adjusted accordingly. Wheelchairs can be equipped with pull, push, scissor or composite brakes.

To adjust the position of the brakes:
CLASSIC BRAKES (pull or push) (FENICE, FUNKY, RUBY, THEMIS)

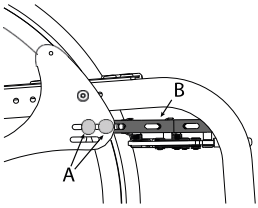
- Loosen screws **A** that secure the brake support to the SHS plate
- Move the brake along the support **B** until the knurled pin **C** is about 10 mm away from the tyre
- While maintaining the pin **C** parallel to the axle tube, tighten screws **A**
- If the pin **C** appears worn on the contact area with the wheel, it can be rotated to achieve a better position or replaced
- **Check the effectiveness of the brakes** (see 5.5, “Brakes check”) and if necessary, repeat the adjustment procedure



CLASSIC BRAKES (pull or push) (EOS, HEKA, QUASAR, THEMIS PRESTIGE, VENUS, VENUS ADVENTURE, VENUS ELITE)

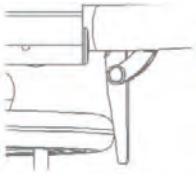


- Loosen screw **A** that secures the brake support to the frame
- Move the brake along the support **B** until the knurled pin **C** is about 10 mm away from the tyre
- While maintaining the pin **C** parallel to the axle tube, tighten screws **A**
- If the pin **C** appears worn on the contact area with the wheel, it can be rotated to achieve a better position or replaced
- **Check the effectiveness of the brakes** (see 5.5, “Brakes check”) and if necessary, repeat the adjustment procedure



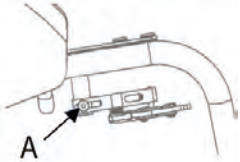
COMPOSITE AND SCISSOR BRAKES (FENICE, FUNKY, RUBY, THEMIS)

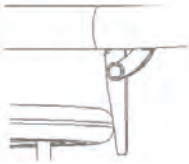
- Put the brake in the ON position
- Loosen screws **A**
- Move the brake along the support until it touches the tyre
- Return the brake to the OFF position, move it towards the wheel by 3-4 mm, and then tighten screws **A**
- **Check the effectiveness of the brakes** (see 5.5, “Brakes check”) and if necessary, repeat the adjustment procedure



COMPOSITE AND SCISSOR BRAKES (EOS, HEKA, QUASAR, THEMIS PRESTIGE, VENUS, VENUS ADVENTURE, VENUS ELITE)

- Put the brake in the ON position
- Loosen screw **A**
- Move the brake along the support until it touches the tyre
- Return the brake to the OFF position, move it towards the wheel by 3-4 mm, and then tighten screws **A**
- **Check the effectiveness of the brakes** (see 5.5, “Brakes check”) and if necessary, repeat the adjustment procedure

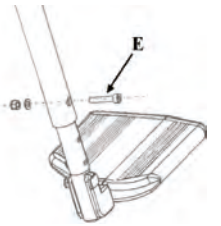




ENG

14.11. Footrest height adjustment

The telescopic footrest support is inserted into the front of the frame and secured through a screw and nut couple **E** for each side of the frame.

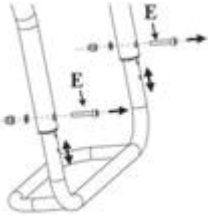


Example of adjustment for a single separate footrest

- Loosen and remove screw **E** that secures the telescopic support to the frame
- Slide the step up to the desired height, aligning the holes of the outer tube and the inner tube (20mm pitch)
- Reinsert screw **E** and tighten it appropriately

14.11.1. EOS, EOS3, HEKA, QUASAR, QUASAR GT, QUASAR KID, IDRA, THEMIS, THEMIS PRESTIGE, VENUS ELITE, VENUS ADVENTURE

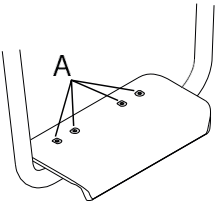
- Loosen and remove screw **E** that secures the telescopic support to the frame
- Slide the step up to the desired height, aligning the holes of the outer tube and the inner tube (20mm pitch)
- Reinsert screw **E** and tighten it appropriately
- Loosen the **E** screws that secure the footrest support to the front frame
- Slide the footrest to the preferred height
- Tighten the **E** screws back appropriately

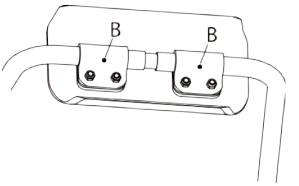


14.11.2. V-Frame HEKA, THEMIS, THEMIS PRESTIGE

The telescopic footrest support is inserted into the front of the frame and secured through a couple of screws **E** for each side.

The height can be adjusted continuously as follows:



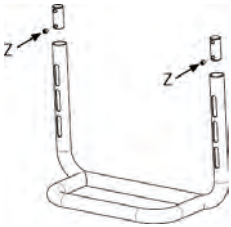


- Loosen the screws **A** and the grub screws **B** locking supports and inclination of the footrest
- Loosen the **E** screws that secure the footrest support to the front frame
- Slide the footrest to the preferred height
- Tighten the **E** screws back appropriately
- Restore the desired inclination of the footrest (if available) and properly secure the screws **A** and the grub screws **B**

14.11.3. FENICE, FUNKY, RUBY, VENUS

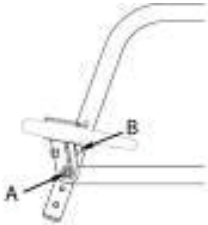
The telescopic footrest support is inserted into the front of the frame and secured through the **U** screw. The height can be adjusted as follows:

- Unscrew and remove the **U** screws
- Remove the footrest from the frame
- Unscrew the **Z** screws that fix the inserts to the footrest
- Position the inserts at the correct height
- Fix the **Z** screws
- Insert again and tighten properly the **U** screws



14.11.4. Seat-to-Footrest Distance Less Than 35cm (ALL)

For a seat-to-footrest distance less than 35cm, the footrest is directly fixed to the frame tube. It's possible to adjust the footrest height using the provided holes on the frame or to move the footrest closer to or farther from the seat by rotating it around the support.

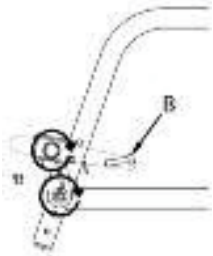


Changing Footrest Height Using Frame Holes

- Remove screw A that secures the footrest to the frame.
- Adjust the footrest height by choosing another hole available on the frame.
- Ensure that the threaded insert is properly inserted into the frame tube.
- Reinsert and tighten the previously removed screw A.

Moving the Footrest Closer to or Farther from the Seat

- Loosen screw **B** that secures the clamp, allowing the footrest to rotate.
- Adjust the distance between the seat and the footrest and the orientation of the footplate by rotating it around its support.
- Properly tighten screw B.

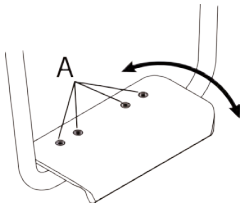


ENG

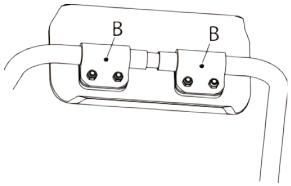
14.12. Footplate tilt adjustment

14.12.1. Tilt-adjustable carbon footrest

In case the wheelchair is equipped with tilt-adjustable carbon footrest, the footrest can be adjusted continuously as follows:



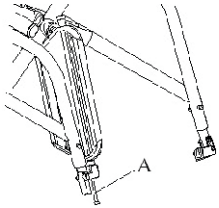
- Loosen the screws **A** and the grub screws **B** locking supports and inclination of the footrest
- Adjust the inclination of the footrest until the desired value is reached
- Tighten the screws **A** and the grub screws **B** appropriately



14.12.2. Single aluminium profile footplate

If the wheelchair is fitted with an aluminium profile single footplate, the orientation of the footplate can be adjusted as follows:

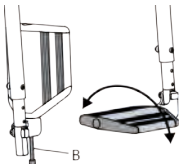
- Release screw **A**
- Select the desired footplate angle
- Fasten screws **A**



14.12.3. Separate aluminium footplates

If the wheelchair is fitted with separate aluminium profile footplates, the orientation of the footplates can be adjusted as follows:

- Release the screws **B**
- Select desired footplate angle
- Fasten screws **B**

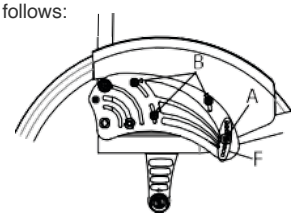


14.13. Backrest tilt adjustment

14.13.1. EOS, QUASAR, IDRA 2.0, ZODIAC - Backrest and side-guards tilt adjustment

Fixed side-guards

The backrest tilt angle and side-guards position are linked and adjustable as follows:



- Unscrew, without removing, the **B** screws, which fix the carbon fibre side-guard to the aluminium support
- Remove the **A** screw by unscrewing the nut which can be found under the seat
- Change the backrest angle by choosing the most suitable of the **F** holes. Note that the **A** hole on the carbon fibre side-guard doesn't change
- Put back and fix the **A** screw properly

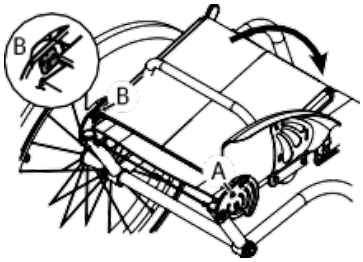
Once selected the backrest tilt, the position of the carbon fibre side-guard has to be adjusted:

- adjust the side-guards position, making sure that the distance between the side-guards and the wheels stay around 6mm
- fix the **A** and **B** screws firmly

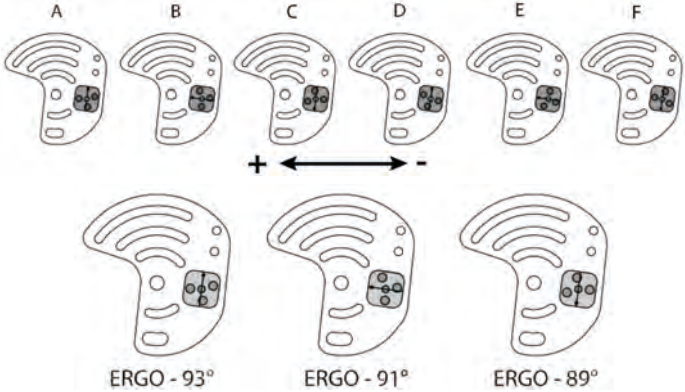
Removable side-guards (not for ZODIAC)

The backrest angle (relative to ground) is linked to the seat angle (relative to ground), take note of the seat type (Straight/Ergo), seat depth (DP) and difference of seat height values (Front height (HA), Rear height (HP)) to choose the correct position.

The backrest tilt angle and side-guards position are independently adjustable as follows:

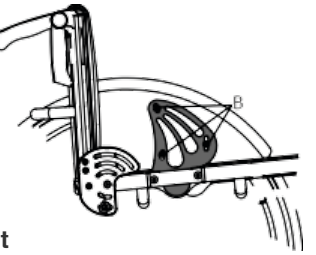


- Close the backrest (5.1, "Opening/folding the backrest")
- Remove on both sides the **A** screws, which fix the adjustment insert to the aluminium support
- Change the backrest angle by rotating the adjustment insert, following the pictures below, take note that to extend the adjustment the insert can also be flipped.
- Once reached the desired backrest tilt, fix properly the **A** screws



ENG

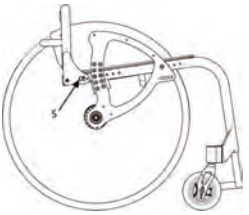
Once selected the backrest tilt, the position of the carbon fibre side-guard has to be adjusted:

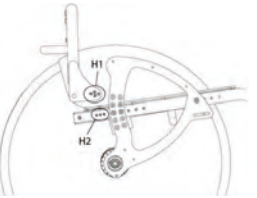


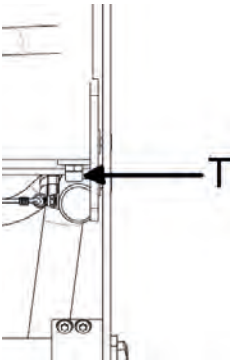
- Unscrew, without removing, the **B** screws, which fix the carbon fibre side-guard to the aluminium support
- Change the backrest angle by choosing the desired position, making sure that the distance between the side- guards and the wheels stay around 6mm
- Fix the **B** screws properly

14.13.2. FENICE, FUNKY, RUBY backrest angle adjustment

After adjusting the position of the seat, or simply to find a more suitable or comfortable position, it is possible to adjust also the angle of the backrest. FUNKY, FENICE, RUBY wheelchair allow 4 backrest tilt positions; they can be set as follows:







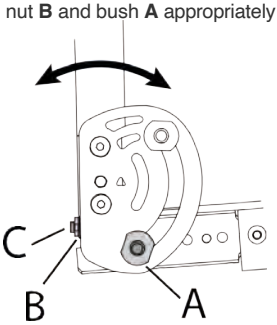
- Unscrew completely and remove the **S** screws
- Position the backrest choosing between the holes **H1** and **H2**
- Fix the **S** screw
- Adjust the rear **T** nut and screw to make sure that, when the backrest is opened (see 5.1, “Opening/folding the backrest”) the screw strikes on the frame.

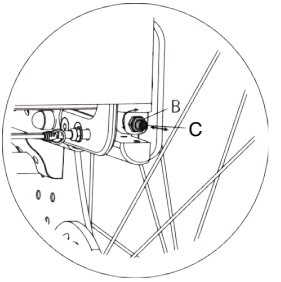
14.13.3. HEKA, THEMIS, THEMIS PRESTIGE - Backrest tilt adjustment

After adjusting the position of the seat, or simply to find a more suitable or comfortable position, it is possible to adjust also the angle of the backrest.

This adjustment can also be performed with the user seated on the wheelchair.

- Loosen, without removing, the bush **A** of the backrest block seat so that it can slide along the loop of the backrest plate
- Loosen the nut **B** of the backrest support block
- Adjust the backrest support using the knob **C** until the desired angle is obtained
- Tighten the nut **B** and bush **A** appropriately



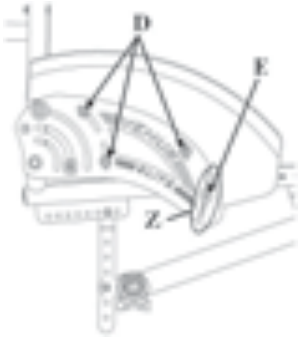


14.13.4. VENUS, VENUS ELITE, VENUS ADVENTURE backrest and side-guards tilt adjustment

With detachable side-guards

After adjusting the position of the seat, or simply to find a more suitable or comfortable position, it is possible to adjust also the angle of the backrest and the side-guards.

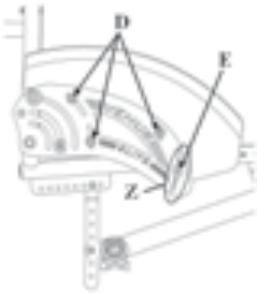
BACKREST TILT ADJUSTMENT



- Loosen, without removing, the **D** screws to avoid interference between the carbon fibre side-guard and the tyre during the backrest tilt adjustment
- Remove the **E** screw. The corresponding lock nut placed under the seat must be unscrewed first
- Choose the most suitable backrest position (normally 91° angle from the floor) by selecting the most appropriate hole from the **Z** series
- Insert and fix properly the **E** screw and its previously removed nut

Only for Venus with detachable side-guards it is possible to remove and set back the carbon fibre side-guard before and after the backrest tilt adjustment operation.

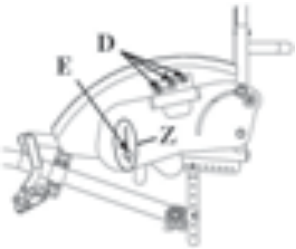
side-guard ADJUSTMENT



- Loosen the **D** screws without removing them
- Loosen the **E** screw without removing it (the corresponding lock nut placed under the seat must be unscrewed first)
- Position the side-guard at a distance of about 6 millimeters from the rear tyre (20 millimeters if the wheelchair is equipped with shock absorbers)
- Tightly fix the **D** and **E** screws

With detachable side-guards

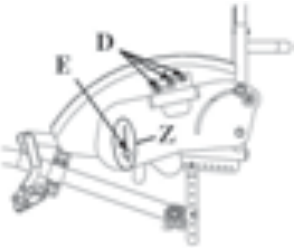
BACKREST TILT ADJUSTMENT



- Loosen, without removing, the **D** screws to avoid interference between the carbon fibre side-guard and the tyre during the backrest tilt adjustment
- Remove the **E** screw. The corresponding lock nut placed under the seat must be unscrewed first
- Choose the most suitable backrest position (normally 91° angle from the floor) by selecting the most appropriate hole from the **Z** series
- Insert and fix the **E** screw and its nut properly

Only for Venus with detachable side-guards it is possible to remove and set back the carbon fibre side-guard before and after the backrest tilt adjustment operation.

side-guard ADJUSTMENT



- Loosen the **D** screws without removing them
- Loosen the **E** screw without removing it (the corresponding lock nut placed under the seat must be unscrewed first)
- Position the side-guard at a distance of about 6 millimeters from the rear tyre (20 millimeters if the wheelchair is equipped with shock absorbers)
- Tightly fix the D and E screws

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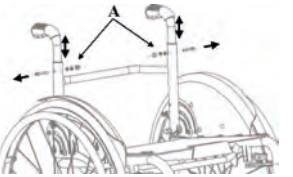
14.14. Backrest height adjustment, pushing handles adjustment

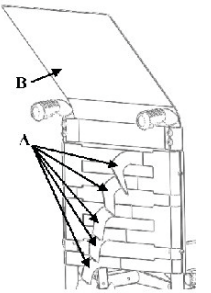
The height of the backrest is chosen when ordering, but further adjustments are possible. The backrest has a telescopic section, regardless from the chosen pushing handles model.

- Lift up the backrest upholstery and open the tensioning straps to gain access to the screws **A** that secure the extensions to the frame
- Remove screws **A**
- Raise or lower the tubes to the desired height (tubes are pre-drilled every 20 mm)
- Re-insert and secure the screws **A** previously removed
- Reset the tensioning of the backrest and fold down the cover (see 14.15, “Backrest tension adjustment”)



The same procedure can also be followed if the wheelchair has no pushing handles or is configured with height adjustable handles.

14.15. Backrest tension adjustment



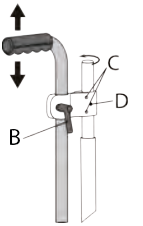
The backrest tension can be easily adjusted by acting on the velcro straps:

- Raise the flap **B** of the backrest cover. It is normally closed at the back but can be found closed at the front if the configuration requires it
- Adjust the tension of the straps **A** by increasing or decreasing the overlap of the two flaps
- Reseat in place the backrest fabric **B**

14.16. Height adjustable pushing handles adjustment

If the wheelchair is equipped with height adjustable pushing handles it is possible to adjust them:

- Turn the lever **B** so as to loosen the clamp attachment
- Raise or lower the push handle to the desired position
- Tighten the lever **B** correctly
- Position the lever **B** in a convenient position



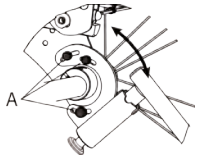
To change the rest position of the lever B, pull it slightly outwards to release its engagement and rotate it to the new position.

The clamp that connects the pushing handle to the wheelchair frame can be rotated around the backrest tube. If necessary, unscrew the safety screw D before turning the screws C to loosen the clamp and allow it to rotate. Once the bracket is secured in its new position, tighten the C screws and then the D safety screw appropriately.

14.17. Adjustment of the anti-tip device

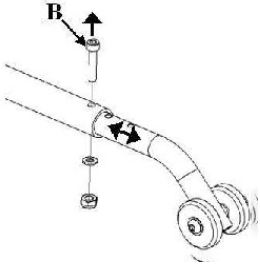
The activation height of the anti-tip device is defined during assembly. However, if necessary, it is possible to modify its distance from the ground and/or change the position of the end piece, thus varying the activation threshold.

14.17.1. Height adjustment



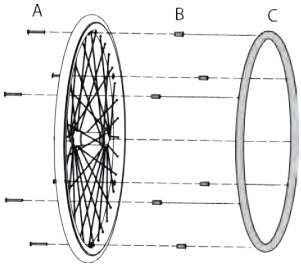
- Loosen, without removing, the screws **A** that attach the anti-tip device to the frame of the wheelchair
- With the anti-tip device activated (see 6.2, “Anti-tip device”), rotate the fastening plate to obtain the desired distance of the castor wheel from the ground
- Tighten screws **A** properly

14.17.2. End piece adjustment



- Remove screw **B**
- With the anti-tip device activated, slide the end piece to the desired position, more or less protruding
- Reinsert screw **B** and tighten it properly

14.18. Pushrim with rivets



Replacement

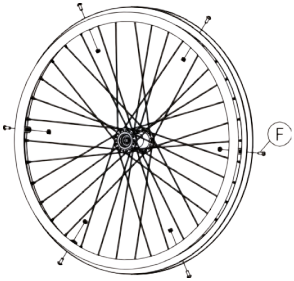
Remove the wheels from the wheelchair

- Completely unscrew the screws using a 4 mm hex key and remove the pushrim
- A new pushrim can be attached if the spacer sequence is maintained

Adjust the distance between pushrim and rim

- Remove the wheels from the wheelchair
- Completely unscrew the screws using a 4 mm hex key and remove the pushrim
- Replace the screws with ones of the desired length and increase or decrease the height of the spacers accordingly
- Tighten the screws appropriately, possibly in a criss-cross sequence

14.19. Pushrim with splices



Replacement

- Remove wheels from wheelchair
- Remove the cover, inner tube (see 8.1, “Replacement of tyre and inner tube”) and inner protective tape to access the screws
- Completely unscrew the screws **F** and remove the pushrim
- Position the new pushrim and replace the screws, taking care to tighten them in a criss-cross sequence if possible
- Refit inner protective tape, inner tube and cover (see 8.1, “Replacement of tyre and inner tube”)

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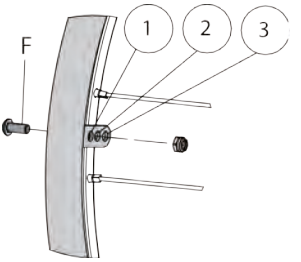
Adjust distance between pushrim and rim

- To give the possibility of choosing the Pushrim mounting distance from the wheel rim, some pushrim offer more than one fastening hole (**1**, **2**, **3**) on the connecting splices
- In this case, you can choose the preferred distance when joining the pushrim to the wheel rim
- Proceed as described above with the fastening of the screws, making sure that the pushrims are positioned equivalently in the two wheels



14.20. Table installation

To install the table on a wheelchair:

- Loosen and remove the **A** screws that connect the elbow-rest to the armrest;
- Mount the table support paying attention to its direction (right or left) and fix it using two new screws 5 mm longer than the ones removed
- Put the table supporting tubes in place and fix them to the preferred depth with the **B** wing screw;
- Fix the supports to the table with the **C** screws.

Table support

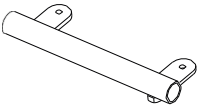
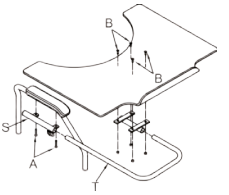
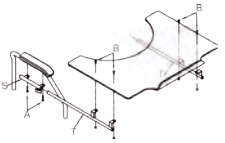


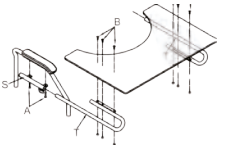
Table support with single centre attachment



Polycarbonate table with double attachment



Polycarbonate or plastic table with double attachment



14.21. Abductor assembly

On OFFCARR wheelchairs, a pull-out abductor can be fitted. Follow the instructions below for fitting:

- Mount the supplied blocks **H** on the side tubes of the frame
- Loosen the screws **A** on the support bar without removing them
- Assemble the support bar by inserting the lateral ends into the guides of the brackets **H**, paying attention to the knobs **M**, and fix the screws **A** to lock the width
- Insert the sliding support of the abductor into its guide and secure it with the wing screw **N**.

To adjust the depth of the abductor, or remove it to facilitate transfers or other manoeuvres of the user in the wheelchair, act as follows:

- Loosen the wing screw **N**
- Position the dock to the desired depth and tighten the wing screw **N** or completely remove the abductor knob from the seat.

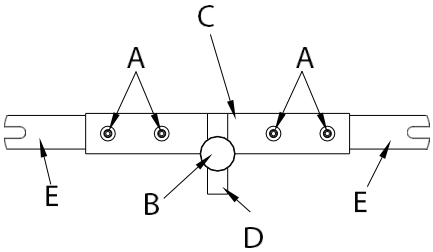
In this case of only removing the abductor knob, the support bar remains mounted on the wheelchair and does not allow it to be closed for transport.

To fold the wheelchair it is essential to remove the abductor knob with the support bar:

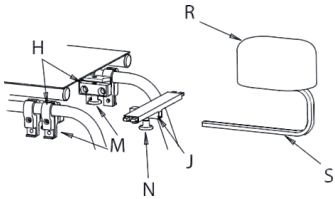
- Pull one of the two knobs **M** to release the support bar;
- Remove the support bar by pulling it out of its slots in an arching motion.

The bar can be removed with or without the knob inserted. With the user sitting in the wheelchair, it is recommended to remove the abductor knob separately and then the support bar if necessary.

Support bar



Scheme of the abductor parts



- The distance between the seat and the abductor can be reduced by 20 mm by turning the support bar upside down.
- The sliding support bar is available in various heights, depending on the required distance between the seat canvas and the base of the abductor knob, to suit different cushion options.

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OFFCARR s.r.l. reserves the right to make improvements and/or changes on its products, at any time without prior notice, with respect of the device features, suitability, certifications, warranty contract and availability of spare parts according to the terms of law.

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