

ULTRA-LIGHT WHEELCHAIR WITH RIGID FRAME



DUKE

CE

User's manual

CONTENTS

Some of the images in this manual may show a wheelchair model different from the reference one.
However, all instructions are applicable, regardless of the model differences.
Total or partial reproduction of this manual is forbidden without written authorisation from Reheatam s.r.l.

INTRODUCTION	4
FLAMMABILITY	5
SYMBOLS USED	5
PRODUCT LABELS	5
1 INTENDED PURPOSES AND CONDITIONS OF USE.....	6
2 PUTTING THE WHEELCHAIR INTO SERVICE AND REGULAR USE	7
2.1 Tyre pressure.....	8
2.2 Brakes	8
2.3 Quick release rear wheels	10
2.4 Unfolding and folding the backrest.....	11
2.5 Footrest	12
2.6 Calf strap	13
2.7 Adjustable backrest upholstery	13
2.8 Armrests	14
2.9 Fasteners.....	16
2.10 Wheelchair lifetime	16
3 SAFETY	17
3.1 Accident prevention	17
3.2 Transfers: getting in and out of the wheelchair	18
3.3 Starting to drive your wheelchair.....	19
3.4 Negotiating obstacles: steps and stairs	20
3.5 Negotiating slopes or inclines	22
3.6 Ensuring stability.....	23
4 TRASPORT OF THE WHEELCHAIR.....	24
5 GENERAL DESCRIPTION OF PARTS.....	25
6 ADJUSTMENTS.....	26
7 ACCESSORIES	27

7.1 Narrow passage transit wheels	27
7.2 Anti-tip wheel	28
7.3 Push handles for assistant.....	29
7.4 Folding push handles.....	29
7.5 Tetraclip	30
7.6 Tray.....	30
7.7 Pelvic belt and harness.....	31
7.8 Lumbar support.....	32
7.9 Lateral support.....	32
7.10 Rear wheels.....	33
7.11 Hand rims	34
7.12 Tyres.....	34
7.13 Spoke guards.....	34
7.14 Castors	35
7.15 Clothing guards.....	35
7.16 Vanity flap (seat/backrest bonding canvas)	36
7.17 Removable utility bag.....	36
7.18 Frame protection pad.....	37
7.19 Seat with Velcro straps	37
7.20 Rigid seat.....	37
8 MAINTENANCE	38
8.1 Replacement of worn parts	39
8.2 Inspection of components	39
8.3 Disinfection and reuse of the wheelchair	40
8.4 Storage	40
8.5 Disposal/recycling of materials	40
8.6 Troubleshooting guide	41
9 TECHNICAL SPECIFICATIONS	42
10 WARRANTY	43

INTRODUCTION

At Rehateam, constant research into quality and creativity are the cornerstone of our business.

After many years in the industry, we remain genuinely focused on providing total customer satisfaction while bringing innovative style and design to every one of our high-quality wheelchairs.

We have become industry leaders by making excellence and service our top priorities, building all our models from carefully selected materials and providing multiple configurations to enable the utmost personalisation according to specific user needs.

We perform continuous, meticulous quality control and our testing procedures offer the highest possible quality combined with fast, reliable service.

We acknowledge that we owe our success to our customers and all who have believed in us and helped us establish that quality is the supreme differentiator.

FOR THE DEALER

This manual **MUST** be provided to the occupant of this wheelchair.

BEFORE giving the wheelchair to the occupant, the dealer **MUST** carry out a general check of all its fittings and check its functionality.

After this check, the dealer should complete the warranty certificate on the last page by applying the stamp of the company or represented organisation together with name, signature, and date.

This certificate must be retained by the occupant.

If the company's stamp and signature on the warranty certificate is missing, the product warranty is void.

This product is intended for disabled occupants with intact visual, cognitive and reading abilities.

If some or all of these abilities are limited or impaired, the presence of an assistant person with appropriate abilities is always required.

This document is also available in PDF format for the visually impaired at www.rehateamprogeo.com.

FOR THE OCCUPANT and/or CARER

BEFORE using this wheelchair, please **READ** all parts of this manual and keep it for future reference.

Check that the warranty certificate has been fully compiled by the dealer and keep it with care.

This document is also available in PDF format for the visually impaired at www.rehateamprogeo.com.













FLAMMABILITY


This product has been tested in accordance with the standard EN12183. This standard also includes a flammability test.

SYMBOLS USED

	This symbol indicates a potentially hazardous situation, which, if not avoided, can result in death or serious personal injury.		This symbol indicates a forbidden action.
	This symbol indicates a potentially hazardous situation, which, if not avoided, may cause minor personal injuries or property damage.		This symbol indicates important instructions or special information.

PRODUCT LABELS

	Year/month of production		UDI code (Unique Device Identification)
	Serial number		Read the user's manual
	Ambient usage temperature		Crash-test approved
	Maximum weight load		Not crash tested
	Manufacturer data		CE mark
	Maximum slope in use		MD mark (Medical Device)

	Progeo brand logo
XXXXXXXX	Product name



1 INTENDED PURPOSES AND CONDITIONS OF USE

This model is a **self-propelled wheelchair** which means that it can be moved manually by driving the hand rims on the rear wheels or by an assistant using the push handles.

It may be used for both rehabilitative and active purposes and is therefore suitable for daily use by both occupants with severe disabilities (with limited movement of the legs, arms or torso) and "active" occupants (capable of carrying out activities independently). It is used to assure the independent mobility or assisted movement of an occupant with reduced or no use of one or more parts of the body.

Given the ample range of possible accessories and configurations, the wheelchair can be used safely both indoors (flat, gym, school, library, etc.) and outdoors (street, pavement, yard, etc.) with ambient temperatures between -30 and +60 °C.

If the occupant is affected by particularly severe disabilities or unable to move autonomously, the help of an assistant is always advisable. We also discourage use over hilly, particularly soft, sandy or uneven ground, on slopes exceeding the recommended gradient and in acidic environments.



During daily use of the wheelchair, the occupant may come across situations such as rough or irregular terrains (gravel, cobblestones, holes on the ground, etc.) or slippery terrain (wet, sandy, dusty, oily hard surfaces, etc.). In all such situations and, in general, in all cases where use of the wheelchair may be difficult or risky (for the wheelchair and its occupant), it is always advisable to move carefully and smoothly without sudden acceleration or hard braking.

When the difficulty or risk is high, the help of an assistant is always advisable.

The maximum slope that can be negotiated to prevent the wheelchair from tipping over backwards is 3° (6%).

All footrests require the occupant to wear socks or shoes, so do not rest bare feet on them.

The seating surface, in cloth or other material if available for this model, is not designed to be directly sat on by the occupant; it is therefore necessary to provide a cushion for the occupant to sit on and which must be ordered separately according to the occupant's specific needs.

Maximum weight load for the model DUKE: 125 kg.

In certain configurations, the wheelchair may exceed 700 mm in width. In such cases, under certain circumstances, it may not be possible to use some or all of the available escape routes from a building. If the wheelchair configuration causes the wheelchair width to exceed 700 mm, it may be difficult or impossible to travel on public transport.

DUKE Given its dimensional and structural characteristics, the wheelchair model is ideal for use by **both teenagers and adults**.

2 PUTTING THE WHEELCHAIR INTO SERVICE AND REGULAR USE



It is important that all the wheelchair's functional parts are CHECKED ONLY BY QUALIFIED AND AUTHORISED PERSONNEL, both to assess its suitability and to provide the correct instructions for use to occupant and assistant where applicable.

If any part of the wheelchair is found to be defective, the occupant or assistant must consult the dealer to solve the problem.

Non-observance of the indications/instructions in this manual may lead to malfunctions and/or damage to the wheelchair and/or the occupant and/or third parties. Rehateam is not liable for any damage to the wheelchair and/or the occupant and/or third parties caused by or resulting from the non-observance of the indications/instructions.

Use of the wheelchair requires some of its parts to be handled. Instructions for the correct handling of the wheelchair's components are provided in the corresponding sections of this document. Please follow these instructions to avoid injuries.

The installation and use of electrification, mechanical and/or electrical drive devices or any other accessory not provided by Rehateam s.r.l. at the time of delivery may result in stresses that were not foreseen during product testing and therefore the integrity and complete safety of the product is not guaranteed. In case of installation of any additional accessory to the product delivered by Rehateam s.r.l., the latter must be guaranteed by your dealer, the accessory device manufacturer, and approved by Rehateam s.r.l.

2.1 Tyre pressure

The tyres must always be well inflated to ensure that the wheelchair brakes and rolls properly.

Use your fingers to remove the plastic cap which covers the inflation valve on the rim of the rear wheels.

Use a compressor or pump equipped with a pressure gauge to bring the pressure up to the correct level. Screw the plastic cap back on.



Check for correct tyre pressure on a weekly basis as indicated on the tyre (an intermediate value between min. and max. is recommended).

Proper tyre pressure makes the wheelchair considerably smoother and more controllable to manoeuvre.

Inadequate tyre pressure (especially if lower than prescribed) degrades the effectiveness of the parking brakes (the wheelchair may not remain stationary).



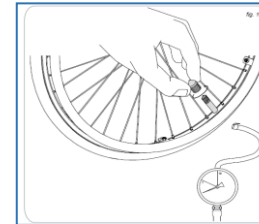
Do not exceed the pressure indicated on the tyre because you may damage the tyre and the inner tube.

Always respect what indicated on the tyre.



The front castors may also be of the "pneumatic" type; in this case, follow the same instructions.

Solid tyres do not require any inflation. This type of tyre requires less maintenance and reduces puncture repair or replacement costs. Compared to tubed or tubular tyres, they are not as smooth during normal use and absorb less vibration when rolling on uneven ground.



2.2 Brakes

The parking brakes are a safety device and their efficiency must be checked daily.



The pressure brake acts directly on the tyre by means of a lever, which is why braking efficiency depends on correct tyre inflation pressure.

We recommend that you check your tyre pressure regularly to ensure that it is always correct.

The maximum safe gradient for the parking brakes to work properly is 3° (6%).



The parking brake is a safety device, and you must not use it while the wheelchair is moving as this could cause the wheelchair to overturn with possible injury to the occupant.

To check the effectiveness of the brakes, apply them as described below depending on the type of brake, and, with the person sitting in the wheelchair, try to gently push the wheelchair.

If the rear wheels do not turn or if they turn with great difficulty and still prevent unintentional movement of the wheelchair, the parking brakes are acting as required.

Check both brakes. Applying and releasing the parking brake may require more or less force depending on the type of brake chosen.

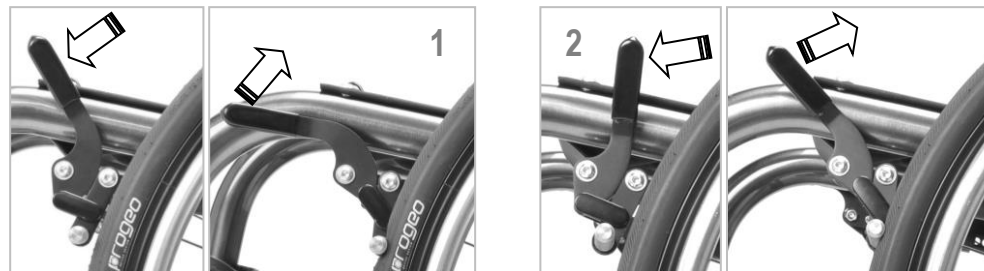
Occupants with reduced upper limb strength should use the extended lever.



Take care not to pinch/crush your fingers when applying and releasing the brakes, but also in any other situation where your hands come close to the brakes.

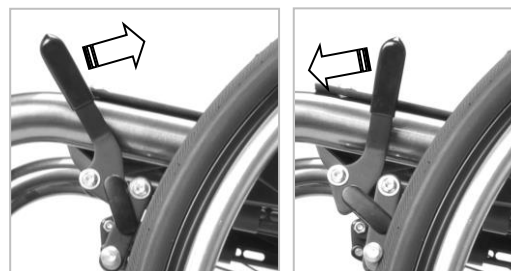
PUSH-TO-LOCK BRAKE

The brake lever can be either “right-angled” (1) or “straight” (2).
To engage the brake, push the lever forward until it locks.
To release the brake, pull the lever backward.
The brake automatically returns to its resting position.



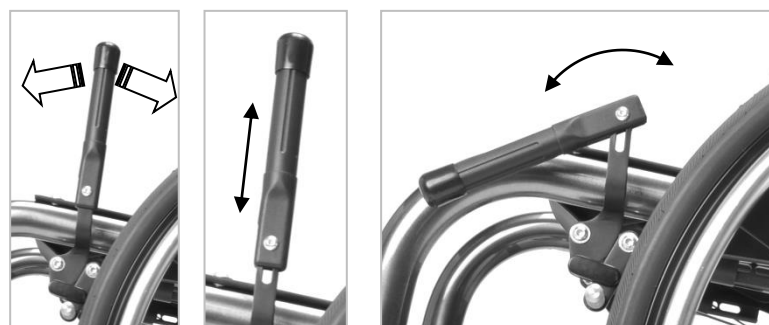
PULL-TO-LOCK BRAKE

To engage the brake, pull the lever backward until it locks.
To release the brake, push the lever forward.
The brake automatically returns to its resting position.



BRAKE WITH EXTENDED LEVER

The push-to-lock and pull-to-lock brakes with extended lever work in the same manner but are easier to engage and release.
The lever may be folded to prevent the extended lever from obstructing the occupant's wheelchair transfer manoeuvre.
To do so, pull the lever first up and then push it forward.
To return it to the normal using position, turn the lever up and then push it down.



SPORT BRAKE

To engage the brake, turn the lever until it locks.
To release the brake, push the knob **A** forward.
The brake returns to its resting position.
This type of brake reduces the encumbrance of the wheelchair when you remove the rear wheels.
It prevents interference with your hand when pushing on the hand rims even with long pushes.
On the other hand, in comparison with traditional brakes, its lever is located a lower position and it is more challenging to operate.
For these reasons, it is not suitable for occupants with reduced control/movement of the torso and/or upper limbs and hands.



2.3 Quick release rear wheels

The rear quick release wheels enable you to reduce the wheelchair's bulk and save space, thus facilitating storage in the car or, if the wheelchair is equipped with the "narrow passage wheels" accessory, to reduce its width and length in order to access narrow spaces.

Check that the quick release pins on the rear wheels are correctly engaged without anyone sitting on the wheelchair.

The parking brakes must be released.

Raise the rear wheel by lifting the wheelchair slightly off the ground and grasping the backrest post handle.

Grasp the rear wheel hub with your hand (without pressing down on the release pin), taking care to avoid inserting your fingers between the spokes.

Push and pull the wheel (as indicated by the arrow) to check that it fits properly: the wheel must not come off.

If the wheel comes off during this check, the axle must be adjusted.

Adjustment should only be carried out by qualified and authorised personnel.



Checking the rear wheel pins is one of the procedures that the occupant should perform periodically.

If the pins are not properly fitted, the rear wheel may come off during use, resulting in the wheelchair tipping over and possible injury to the occupant.

To remove the wheel, first release the parking brakes.

Lift the wheelchair wheel slightly off the ground, using one hand to grasp the backrest knob to facilitate the operation.

Grasp the wheel by the spokes around the hub, press the release pin button with your thumb and, without releasing, extract the wheel fully.

To fit the wheel, first release the brake.

Slightly lift the wheelchair from the ground on one side by the backrest knob.

With your hand, take hold of the rear wheel's hub and, with your thumb, press the button of the quick release pin, keep it pressed and push the pin fully into its seat.

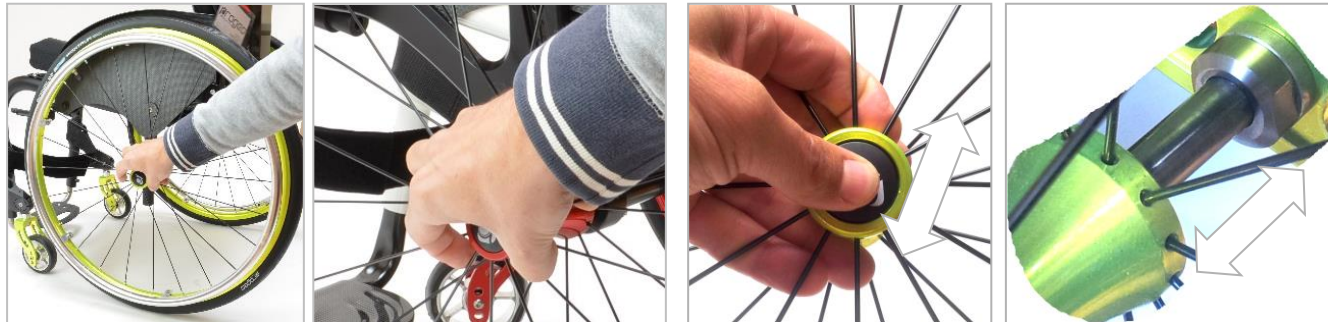
Release the axle quick release pin button (a click indicates correct engagement).



Always release the brake before removing and inserting the rear wheel.

Always check the correct engagement of the quick release axles.

The holes for the rear wheel positioning may pinch or crush your fingers. Take care whenever your hands are close to such holes.



2.4 Unfolding and folding the backrest

Only the backrest can be folded in this model.



While folding the backrest down, take care not to crush your fingers between the backrest post and the side guard.

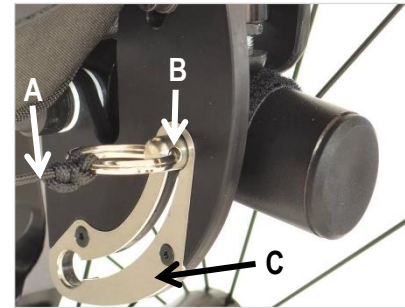
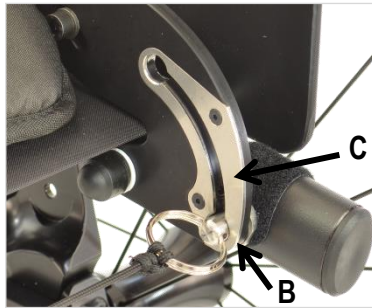
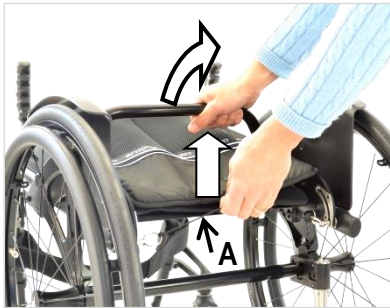
UNFOLDING

With one hand, take hold of the cord **A** located at the lower side of the backrest and pull it up to unlock pin **B** from the support **C** (this operation is not necessary if the backrest is not provided with double lock plate).

With your other hand, grasp the backrest post handle or the backrest rigidizer bar.

Turn the backrest to its upright position (hold cord **A** at the beginning of the movement, then release it).

A click will indicate the backrest is locked; the pin **B** is locked to the hole of the plate **C**.



Before using the wheelchair, always check the backrest is locked in its upright position by moving the backrest post back and forth. When correctly locked, the backrest post will allow just a little play.

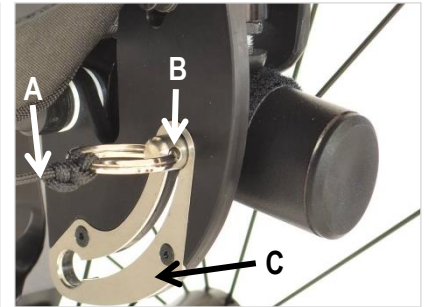
FOLDING THE BACKREST

Grasp cord **A** on the back of the backrest with one hand and pull it upwards to release pin **B** from support **C**.

Grasp the backrest with one hand by its handle or horizontal post.

Turn the backrest towards the seat (for the first short distance, hold cord **A** taut towards the top) until a click indicates that locking is secure (locking is not provided if you have requested a backrest with double locking mechanism).

A click indicates that pin **B** has been inserted into the hole in plate **C**.



When the backrest lock is closed, you can lift the wheelchair by grasping its rigidizer bar.

With tubular armrests, it may be necessary to rotate them slightly in order to fold down the backrest.

2.5 Footrest



When transferring to and from the wheelchair, never keep your feet on the footrest; excessive weight on the footrest may result in it breaking with harm to the occupant.



In the order form, according to the type of footrest, you can choose its position (internal, external or intermediate).

Five types of footrests are available.

(1) (1a) Aluminium (with or without) plastic footrest – not angle-adjustable

(2) Aluminium – angle and height-adjustable.

(3) With carbon fibre footrest – angle and height-adjustable.

(4) Aluminium with “U” posts for short footrests, angle and height-adjustable.

(5) Aluminium flip-back, angle and depth adjustable. Flipping up the footrest is a very easy operation you can perform with one hand by raising the footrest. To return the footrest to the using position, just push it down.



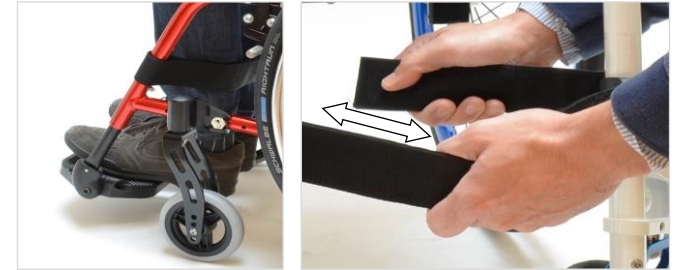
2.6 Calf strap

In some cases, according to the castor's size and to the wheelchair's width, the castor, while turning on the fork's axle, may touch the occupant's heel.

To prevent such contact that may lead to overbalancing, the wheelchair is provided with a calf strap. The calf strap should be adjusted in such a way that the occupant's feet never touch the castors.



You can easily adjust the calf strap using the provided Velcro straps.



2.7 Adjustable backrest upholstery

The backrest can be adjusted to the occupant requirements by tensioning or slackening the two special Velcro straps fitted inside the backrest itself. To carry out the adjustment, lift or remove the upholstery, tighten, or slacken the Velcro straps as required and replace the upholstery.



If the wheelchair is provided with a postural backrest, follow the instructions of the postural system.



The combination of the inclination of the seat with the inclination of the backrest posts and the inclination of a postural backrest with respect to the posts, could result in an angle greater than 25° with respect to the vertical. In that case, the wheelchair must have a headrest or arrangement to secure it as intended for this model.

2.8 Armrests

This model can be equipped with armrests.

The armrests are considered as an accessory and they should be ordered separately.

They are particularly useful for people with reduced hand or arm mobility and for occupants with limited upper body movement who require better stability once seated in the wheelchair.



Do not use the armrest as a hand hold to raise the wheelchair; this may cause the armrests to come off from their supports, damaging the wheelchair and harming the occupant.
Do not use the armrest for support when transferring to or from the wheelchair.
On the contrary, we recommend removing the armrest on the transfer side to facilitate the manoeuvre.



Armrest pads may contain phthalates that are potentially hazardous to health if ingested. Avoid scratching the padding and putting any residue on your fingers into your mouth or, worse still, nibbling or sucking on the padding itself (as may occur with children).

REMOVABLE ARMRESTS

This type of armrest is very practical and can be removed completely, making it much easier to move the wheelchair and transport it.

In addition, the removable armrests also comprise a straight clothing guard.

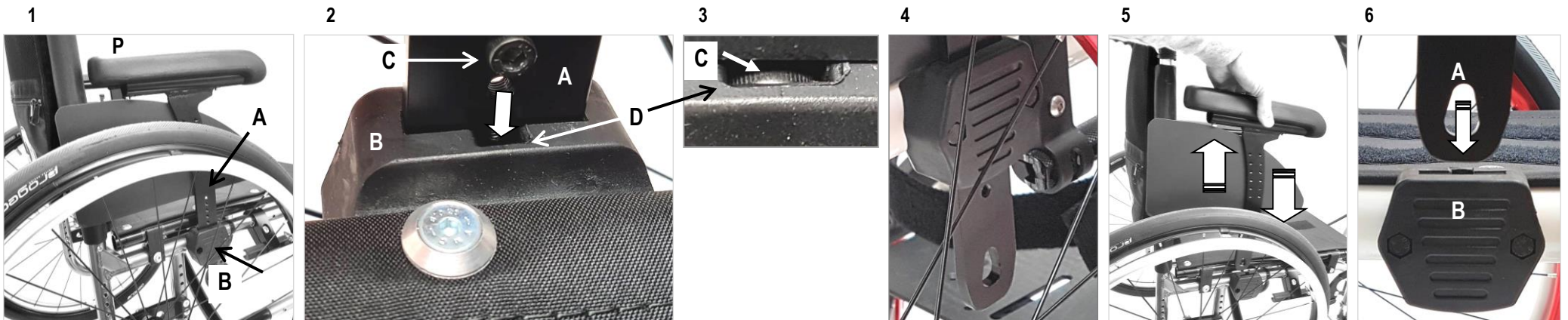


This type of armrest can always be vertically extracted from its support.

(1) The correct position of use is shown as **P** and is attained when the shaft **A** is inserted into the support **B** and is secured by bolt **C** driven into the cavity **D** (2) (3) (4).

(5) To remove the armrest, just pull it up.

(5) (6) To fit the armrest, insert the shaft **A** into the support **B** and let it slide down to its correct position as previously indicated.



TUBULAR ARMRESTS WITH STANDARD SUPPORT

You can swing this type of armrest laterally and remove it to facilitate transfer to and from the wheelchair. Clothing guards are with this type of armrest.



This type of armrest can always be vertically extracted from its support.

Always check that the armrests are secured when they are in their operating position shown as P (facing forwards and parallel with the sides of the wheelchair). In all other positions (except when locked in their rear-facing position), they are free to turn and for this reason, you should always ensure that they are correctly positioned before using the wheelchair. Failure to follow this instruction may cause the wheelchair or the occupant to overbalance.

(1) (2) To check that the armrest is in the correct operating position shown as **P**, take hold of the armrest with one hand **(2)** and try to move it left and right.

If it is properly secured, the armrest will not turn but will have just a little play.

(3) To facilitate wheelchair transfers, you can swing the armrest away to the side by raising it by approximately 2 cm and swinging it away. If you wish, you can swing the armrest away until it locks in its opposite position.

(4) To put it back to the using position, swing it in until it locks (if it was locked in its opposite position, raise it by approximately 2 cm first).

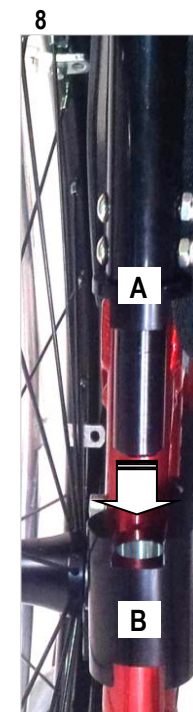
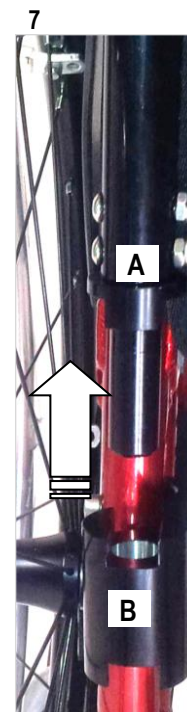
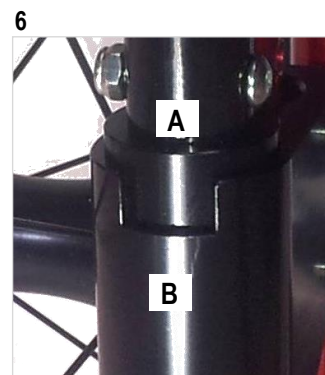
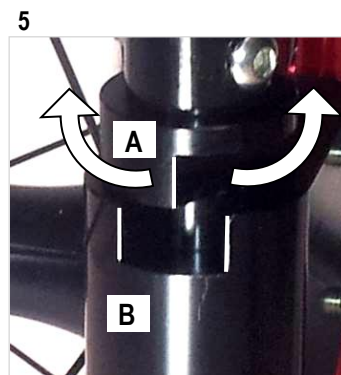
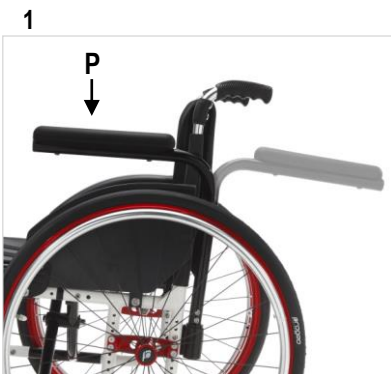
(5) (6) The armrest is correctly secured when the two flat faces of the support **A** locate between the two walls of the support **B**.

(7) To remove the armrest, just pull it upward.

(8) To insert the armrest; insert the pin of the support **A** into the hole of the support **B** and turn the armrest until it locks as above-mentioned.



The supports **A** and **B** are precisely machined so that inserting and removing the armrest is possible only if the movement is perfectly vertical.



2.9 Fasteners

When delivered to the occupant, the wheelchair is checked by the retailer who thus ensures it is in perfect condition. However, daily use of the wheelchair may cause bolts and nuts to loosen.



**We recommend checking that all hardware is correctly tightened at least once a month.
If necessary, consult an authorised PROGEO dealer or technician for maintenance assistance.**

At each maintenance cycle, ensure that all nuts, bolts, and screws are correctly tightened.

Failure to observe this warning could result in damage to the occupant, third parties or the vehicle, for which Rehateam s.r.l. shall not be liable.

2.10 Wheelchair lifetime

PROGEO wheelchairs are used on a daily basis and they are consequently subject to continuous stress that causes inevitable wear and tear of the parts.

With this in mind, PROGEO wheelchairs have a lifetime of 5 years provided they receive thorough periodic maintenance.

The lifetime will be considerably extended if the wheelchair is used only indoors or not on daily basis.

3 SAFETY



The Progeo wheelchair is a medical device and therefore it **MUST NOT BE LENT NOR GIVEN TO OTHER USERS**, even for short period. It is forbidden to make any unauthorised modifications or use un-approved parts that may change the wheelchair structure and create an unsafe condition or possible harm to the wheelchair and occupant.



Rehateam s.r.l. will not be liable for failure to comply with the instructions or recommendations set out in this manual and any such activity will result in the immediate cancellation of the manufacturer's warranty.

BURN HAZARD! Wheelchair components may heat up if they are exposed to strong sunlight.



Notify the manufacturer in the event of serious accidents in relation to the device.

Manufacturer: Rehateam s.r.l., Vicolo Negrelli 5, 31038 Castagnole di Paese TV, Italy, tel. 0039 0422 484657, mail: info@rehateamprogeo.com

3.1 Accident prevention

MOVEMENTS

Avoid sudden, jerky movements when using the wheelchair as this could cause it to overbalance. If your path is obstructed by obstacles, avoid sudden movements (such as abrupt braking).

There is increased risk of skidding on irregular or damp ground.

Passing over obstacles as steps and ramps should be done carefully (ask an assistant for help). For greater safety, an assistant should help to push the wheelchair when moving across inclined or potentially dangerous terrain.

WHEELCHAIR SPEED

Always adjust your speed in relation to the type of terrain and conditions.

As general rule, we advise a constant, regular speed avoiding sudden accelerations or changes in direction.

BRAKES

The parking brakes have been designed to hold the wheelchair stable when it is stationary.



In the interest of safety, you should not use the parking brakes while the wheelchair is in motion.



When using the brakes, great care should be taken to avoid injury to the hands or fingers.

3.2 Transfers: getting in and out of the wheelchair



Do not place your feet on the footrest while transferring to or from the wheelchair.

This could cause the wheelchair to tip up, possibly causing damage to the wheelchair and harm to the occupant.

Wheelchair transfers must always be performed with extreme care and caution, even by experienced occupants, and only after receiving instruction from fully trained specialists. If wheelchair transfers are difficult, an assistant should be lend help.

All these actions should in any case be performed taking account of the degree of your disability and your consequent level of autonomy.

The general rules to respect while getting in or out of the wheelchair safely are:

Ensure the wheelchair is parked on a solid, flat, or regular surface. Do not get in or out of the wheelchair while on hills or uneven ground which could render the wheelchair unstable and cause the occupant to fall and/or the wheelchair to overbalance.

The parking brakes should be engaged. Remove your feet from the footrest when leaving the wheelchair, and bring them close to the footrest when getting in.

If the wheelchair is equipped with flip-up footrest (single or dual), raise it to facilitate the transfer.

(1) Lean on the wheelchair and, where possible, on a stable object nearby. Use the force of your arms to raise and move your body.

(2) If the occupant is not able to perform this movement alone, or if the movement is to be performed on an uneven surface, an assistant should lend help.

Assistants who help with wheelchair transfers must always observe the upmost care. Such operations must be performed only after receiving instruction from fully trained specialists.



A second assistant should be on hand if particularly risky wheelchair transfers are performed.

In such cases, all the actions should be performed taking account of the occupant's level of disability.

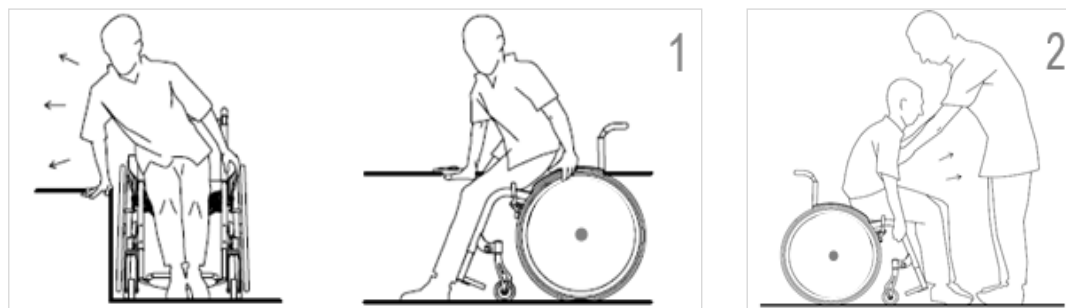


During wheelchair transfers, never lean or sit on the clothing guard or armrest. These elements could bend or break, possibly resulting in injury.



If your wheelchair is equipped with armrests, remove or swivel the transfer-side armrest outwards or back to facilitate the manoeuvre.

If your wheelchair is a tilting seat type, you should set it flat.



3.3 Starting to drive your wheelchair

FINDING THE CENTRE OF GRAVITY

Your ability to control and safely tip the wheelchair mainly depends on your seating position and the location of the centre of gravity with respect to the rear wheels.

The correct position of the rear wheels depends on different factors such as the occupant's weight, type of disability and the occupant's driving skills.

The manufacturer delivers the wheelchair and the position of the rear wheels (configuration) as requested in the order form.



Finding the point at which the chair will tip back safely requires the presence of an assistant who must stand behind the wheelchair ready to prevent it from overbalancing.



To find the point at which the chair will tip back easily and, consequently, to find the safe manoeuvring range, proceed as described below.

Starting from your seated wheelchair position:

- firmly grasp the rear wheel rims
- then move the hand rims slightly backwards and, while moving your weight backwards, push the hand rims forward with a jerk to make the front of the wheelchair rise
- at this point, by moving your body gently backwards and forwards, while moving the rear wheel backwards and forwards using the hand rims, you will be able to locate the centre of gravity and the different points at which you can achieve controlled tipping and risk dangerous overbalance of the wheelchair.



If you hang a backpack, a bag or any other object on the push handlebars or any rear area of the wheelchair, the resulting uneven weight distribution can significantly affect the risk of overbalancing.

TO PREVENT THE WHEELCHAIR FROM OVERBALANCING DURING NORMAL USE, WE RECOMMEND FITTING AN ANTITIPPING SYSTEM.

3.4 Negotiating obstacles: steps and stairs



Always take the utmost care when dealing with the situations described below.

GOING UP AND DOWN A STEP BY YOURSELF



Never attempt to negotiate steps or other obstacles that are over 20 cm (6 inches) in height.

When faced with particularly challenging obstacles, always seek assistance to ensure that such manoeuvres are performed with ease and safely.



Before negotiating a step, or overcoming an obstacle in general, on your own (i.e. without the presence of an assistant), you must have good control of your wheelchair and know how to perform controlled tipping (wheelies), keeping your balance on the rear wheels.

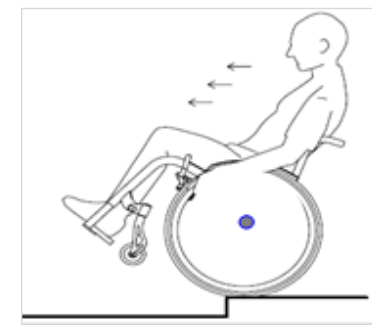
Going down

Bring the wheelchair right up to the leading edge of the obstacle.

Raise the front castors by tilting the wheelchair while maintaining balance.

Move the rear wheels carefully down to the obstacle; during this phase hold the handrails to control the descent.

Once the rear wheels have descended the obstacle, tilt the wheelchair forward until the front castors touch the ground again.



Going up

Bring the wheelchair right up to the leading edge of the obstacle.

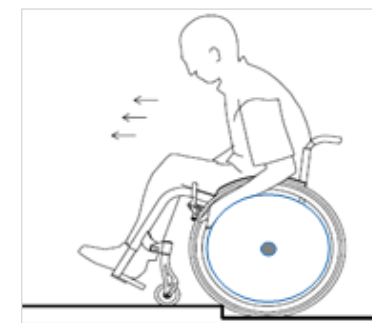
Raise the front wheels and tip the chair back while maintaining balance.

Using the hand rims, carefully move the rear wheels forwards until they touch the edge of the step.

Tip the wheelchair forward until the front castors rest on the upper surface of the obstacle.

Lean forward in the chair so that the rear of the chair is lighter.

Grasp the hand rims tightly and move the rear wheels forwards to push them on top of the obstacle.



NEGOTIATING A STEP WITH AN ASSISTANT



To make raising the front of wheelchair easier for the assistant, the wheelchair should be fitted with the “tipping aid” accessory.

Going down

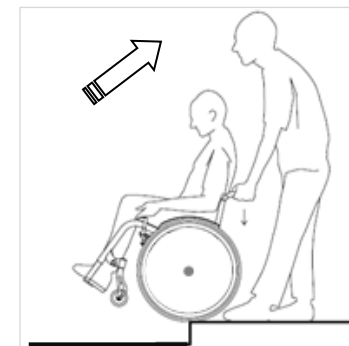
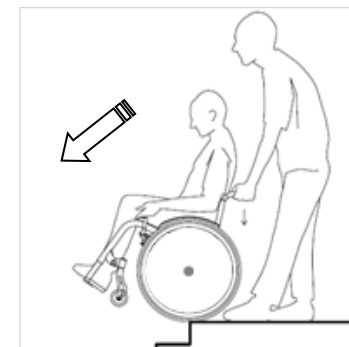
Take the wheelchair right up to the obstacle so that the front wheels are as close as possible to it.

Grip the rear handles tightly and push down to raise the front of the wheelchair.

Keep the wheelchair in this position and accompany it down the step.

The occupant seated in the chair can help the assistant by using the hand rims.

At the end of the descent, tip the wheelchair forward so that the front castors touch the ground again.

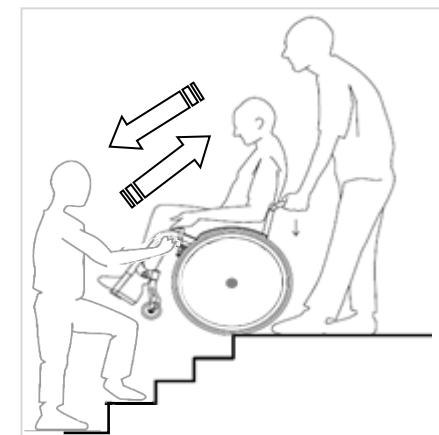


Going up

Move backwards towards the step so that the rear wheels of the wheelchair touch it.

Firmly grasp the rear handles of the wheelchair tightly and pull hard while keeping the wheelchair tilted (with the front wheels raised to prevent the occupant from slipping out of the chair) until the rear wheels are over the step.

Keeping the wheelchair tilted, move it away from the step enough to enable the front castors to touch the same level ground.



Going up and down a series of steps



In the case of stairs with more than one step, two assistants are always required.

The first assistant stands behind the wheelchair and holds the push handles.

The second assistant grasps a fixed part of the front frame, guiding the wheelchair manoeuvre from the front.

3.5 Negotiating slopes or inclines



The maximum gradient that can be attempted in complete safety is 6% (3°).

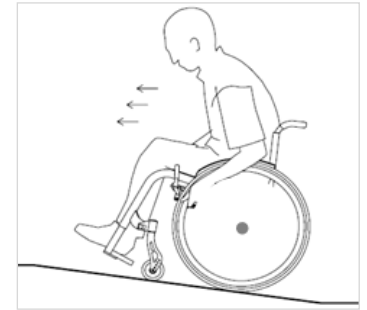
GOING UPHILL

Driving up any kind of slope should be done with extreme care. The occupant must move at speed by generating force on the rear wheel while at the same time maintaining control over the wheelchair.

Lean forwards and keep your weight forward in the chair to prevent the wheelchair from tipping over backwards.

Grasp the hand rims tightly.

Drive up the ramp by pushing the wheelchair quickly and forcefully on both hand rims. Do not jerk, but move steadily and as smoothly as possible. Do not swing your upper body.



We recommend that occupants who have not yet completely mastered safe use of the wheelchair should have the anti-tip system fitted, which is useful for preventing the wheelchair from tipping over backwards.

GOING DOWNHILL

To go downhill safely, the occupant should keep constant, controlled speed, and direction over the entire slope.

Approach the slope at a moderate speed.

Keep your weight backwards in the chair to avoid slipping out.

Hold on to the hand rims on the rear wheels and allow them to slide slowly through your hands.

The occupant should be able to stop the wheelchair at any time simply by blocking the motion of the hand rims.



3.6 Ensuring stability

You will encounter situations which will require you to lean out of the wheelchair.

These apparently simple movements could, if not performed with care, result in a loss of stability and possible overbalancing of the wheelchair.

To achieve maximum occupant control of the wheelchair, we illustrate some situations which may emerge during normal daily use of the wheelchair. Please pay particular attention to the following to maintain balance and stability at all times.

Leaning forwards

Ensure that the front castors are pointing forwards. To do this, move the chair forwards and then backwards.

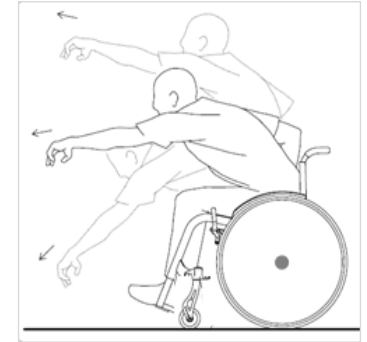
Apply the parking brakes to prevent the chair from moving suddenly during the movement. Lean forward in such a way that your upper body does not move beyond the front castors at any time. Moving the weight of the body excessively forward may cause the wheelchair to tip up onto the front wheels and overbalance possibly causing damage to the chair and harming the occupant.

To ensure greater stability, the occupant should hold on to the wheelchair with his or her free hand.



Do not lean too far forward; you may fall out of the wheelchair.

Do not move forward by sliding your pelvis across the seat cushion to reach objects that are too far away. The wheelchair could overbalance.



Leaning backwards

Ensure that the front castors are pointing forwards. To do this, move the wheelchair forwards and then backwards.

Do not apply the parking brakes. Lean backwards without changing your sitting position.



Do not lean too far back over the backrest, the wheelchair could overbalance.



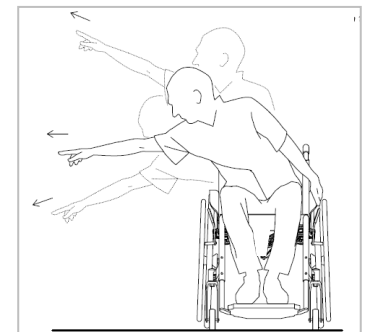
Leaning out to the side

Do not move your upper body beyond the rear wheel as the wheelchair could overbalance.

For greater safety and stability, hold on to the wheelchair with your free hand.



Do not lean too far out to the side, the wheelchair could overbalance.



4 TRASPORT OF THE WHEELCHAIR

There is no single best way to load the wheelchair into a vehicle. Factors include the type and degree of the occupant's disability (his/her ability to control his/her upper body, arm, and hand movements), physical strength (the operation may be too difficult for an older person or a child) and the type of vehicle that will be used. It should be clear that all these factors are too many to indicate a single precise procedure to fit all cases, therefore this information should be taken as general advice.



Perform all car loading activities with extreme care and only after receiving instruction from specialist service personnel at our authorised dealers. If these procedures seem to be unsafe or difficult, we recommend asking an assistant for help.



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

If the occupant must be transported while seated on the wheelchair, remember that the wheelchairs are not supplied with seatbelts. Any safety belts for vehicle transport must be installed only by companies that are specialised in vehicle transformations.

TRASPORT OF THE OCCUPIED WHEELCHAIR

Always make sure the wheelchair is suitable to transporting the user in a vehicle. The symbols on the product label indicate if the wheelchair is or not crash tested and, accordingly, if it can be used for the transport of the user on a motor vehicle.



Crash test approved



Not crash tested

TRANSPORT WITH AN ASSITANT

In cases where the physical limitations of the occupant prevent him/her from moving and loading the wheelchair into the car on his/her own, the help of an assistant will be required.

The lightness and foldability of this model are very important because they enable the wheelchair to be moved easily even by persons with limited physical strength. Remove all removable parts.

Release the brakes and remove the rear wheels. Fold the wheelchair (seat and/or backrest).

Take hold of the chair with two hands on the two fixed parts of the frame to balance the weight of the wheelchair and make it easier to lift.

Load the wheelchair into the car and then the rear wheels.

Thanks to its reduced encumbrance, the wheelchair can be loaded in the boot of the car or between the front and rear seats.

In larger means of transport, you can load the wheelchair without reducing its encumbrance.

LOADING THE WHEELCHAIR WITHOUT ASSISTANCE

The following actions are intended for people with good control of their upper body, arms, and hands as well as sufficient strength to perform the movements in complete safety. Remove all removable parts.

Open the door on the side where you will get into the car from (e.g. the driver's door), then move the chair as close as possible to the seat.

Engage the brakes and get into the car.

Once you are inside the car, release the wheelchair brakes and pull out the rear wheels.

Fold the wheelchair (seat and/or backrest).

Take hold of the chair with two hands on the two fixed parts of the frame to balance the wheelchair's weight and make it easier to lift.

Load the wheelchair into the car and then the rear wheels.



5 GENERAL DESCRIPTION OF PARTS

1	Frame
2	Backrest upholstery + Velcro straps for adjustment
3	Backrest post with handle
4	Carbon fibre Clothing side guard
5	Rear height adjustment post (integrated into the frame)
6	Rear height adjustment clamp
7	Seat canvas
8	Hand rim
9	Rear wheel
10	Quick release axle
11	Tyre
12	Fork support (integrated into the frame)
13	Fork adjustment support
14	Fork
15	Castor
16	Brakes
17	Front axle
18	Backrest plate
19	Rear axle
20	Footrest
21	Calf strap



6 ADJUSTMENTS

The PROGEO wheelchair is a medical device manufactured according to a patient-specific data sheet compiled by qualified personnel. Rehateam s.r.l. manufactures, tests and delivers the wheelchair to the dealer with the measurements and characteristics required in the order data sheet.



We strongly advise occupants against lending the wheelchair to other users even for brief periods. Lending your wheelchair to others could cause it to function unsafely and tip over with potentially serious consequences both for the wheelchair and its occupant.

The wheelchair has a configuration and dimensions that are specially designed for the occupant who purchases it, and the characteristics of stability, manoeuvrability and resistance are guaranteed only for that occupant.

It is forbidden to carry out any modifications to the original design, even if they are possible.



ADJUSTMENTS MAY BE CARRIED OUT EXCLUSIVELY BY QUALIFIED AND AUTHORISED BY REHATEAM S.R.L. PERSONNEL.

Any adjustments and/or modifications carried out by non-authorised persons will immediately void the product's warranty and relieve Rehateam s.r.l. from any any liability concerning any malfunction and/or damage due to such adjustments/modifications.

Always contact Rehateam s.r.l. and its technicians for any non-standard requirements or modifications to enable them to assess such modifications and verify that they will not compromise the normal and safe use of the wheelchair.

Any modification of the original parameters and configuration could seriously compromise the safe operation of the wheelchair causing damage the wheelchair itself and harm to its occupant.

After every adjustment made to the wheelchair, check carefully that all parts are correctly fixed. Check that all screws and nuts are tightened and that all moving parts are functioning correctly.

After any adjustment, always test the wheelchair before normal use, possibly assisted by an assistant or a technician.



The possible adjustments for this model are listed below.

The instructions to properly carry out the adjustments are included in the corresponding SERVICE MANUAL that is available on the web site www.rehateamprogeo.com

POSSIBLE ADJUSTMENTS

✓ = possible ✗ = NOT possible

✓	Rear height	✓	Footrest distance
✓	Front height	✓	Footrest position
✓	Trim (centre of gravity) (1.5 cm)	✓	Footrest inclination
✓	Fork angle	✓	Brakes
✓	Backrest height	✓	Convergence
✓	Backrest angle	✓	Seat depth (1.5 cm)

7 ACCESSORIES

Each model can be equipped with various accessories that should be evaluated according to the needs of the occupant and assistant.

Some of the images in this manual may show a wheelchair model different from the one under discussion.
However, all instructions are relevant, regardless of model differences.

7.1 Narrow passage transit wheels

This accessory becomes necessary when the dimensions of the wheelchair impede getting into or passing through narrow rooms such as a door or a lift.

To use this accessory, you should remove the rear wheels.

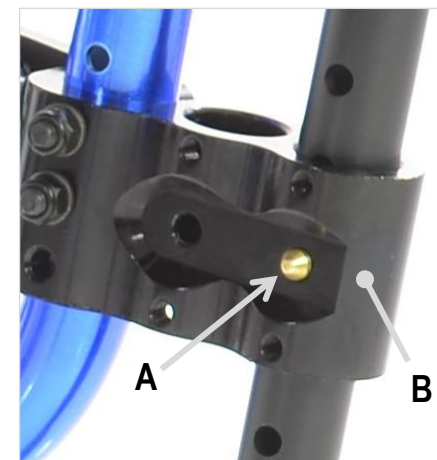
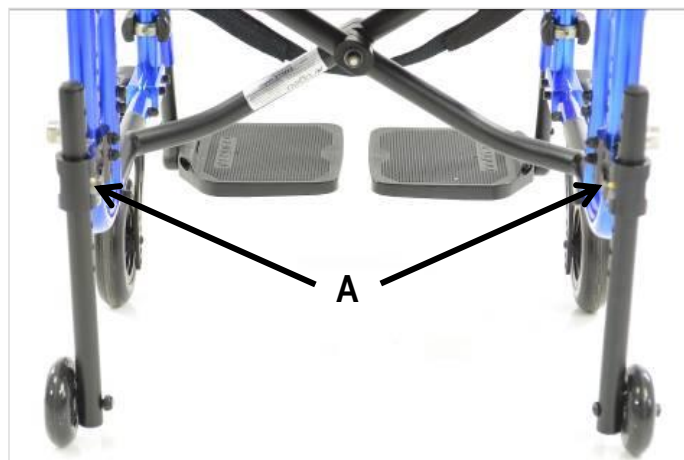
This makes the wheelchair narrower and shorter.

You can remove the transit wheel from its support.

Press the pin **A** that holds it and slide the post off the support **B**.

To put on the transit wheel, insert the post in the support **B** until the pin **A** touches the support itself.

Then, press the pin and slide the post in until the pin locks in the hole in the support.



For a correct assembly of the transit wheel, remember that when inserting it into the support, the pin **A** should always face toward the inside of the wheelchair.
Remember that while using the transit wheels (with the rear wheels removed), the parking brakes will not work at all.
The stability of the wheelchair resting on the wheels for narrow passages is reduced, therefore pay great attention and seek help from an assistant.

7.2 Anti-tip wheel

This accessory is designed to prevent the wheelchair from tipping backwards.

To be efficient, it is fixed at approximately 2-3 cm from the ground.

The anti-tip wheel can be fitted on one or, for greater safety, on both sides of the wheelchair.



After this check, verify the efficiency of the system with an assistant. The front of the wheelchair must be raised until the anti-tip wheel touches the ground and prevents the wheelchair from tipping. Take great care when performing this operation.

(1) To check for the correct operating position, take hold of the post with one hand and try to move it right and left: the post should not turn (there may be a little play). Then, push the post downward: the post goes down by approximately 1 cm, but it must not come off.

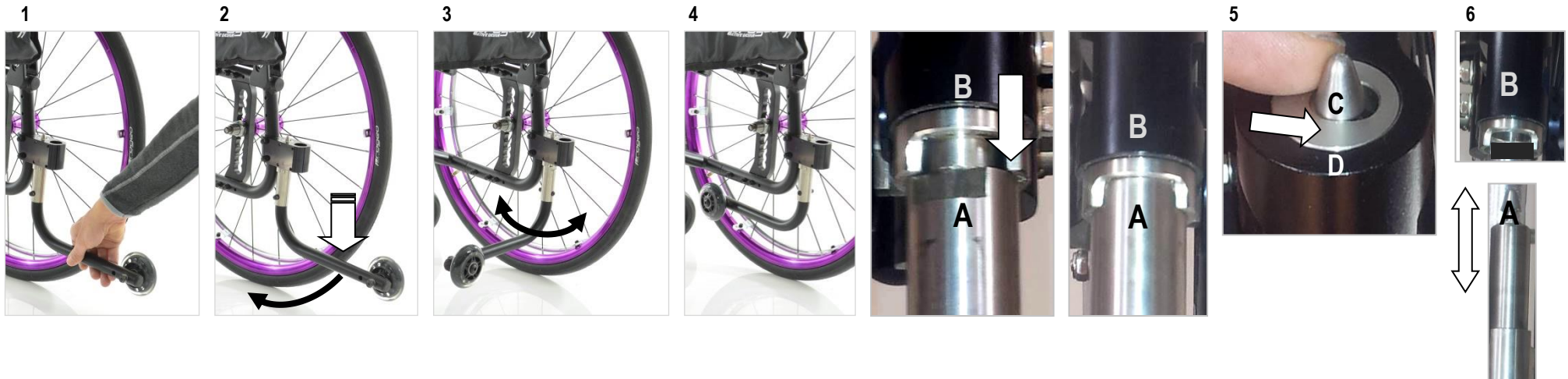
You can remove or swing in the anti-tip wheel when, for instance, you need to go over a step.

(2) (3) (4) To swing the anti-tip wheel, push it down by approximately 1 cm (the part **A** of the support moves away from the part **B** without coming off) and turn it sideward.

When you turn the anti-tip wheel by 180° (opposite position), the support automatically locks (the part **A** locks in the part **B**).

(5) (6) To remove the anti-tip wheel, push the pin **P** that you find in the upper side of the support and push the post down.

(6) To put the anti-tip wheel on, insert the part **A** of the support in the hole of the part **B** and turn the post until the two parts locks together.



The supports **A** and **B** are precisely machined; thus the anti-tip wheel may be inserted only with a vertical movement.

7.3 Push handles for assistant

You can assemble these push handles only on “sport” backrest posts that originally come without handles.

You can adjust their height to offer the assistant a better handhold and pushing position.

The assistant or the occupant can easily adjust and remove them.

To adjust their height, unscrew the lever **L**, slide the post up or down to the desired height, position the handle backwards and finally screw the lever **L** tightly.

To remove the push handle, unscrew the lever **L** and slide the post off the support.

To fit the push handle on the wheelchair, insert the post into the support and adjust its height as described above.



Important warning for the assistant: the push handle posts are safe to use only when the two levers **L are tightly screwed, in fact, this condition prevents the posts from sliding up or down or even coming off accidentally.**

Before pushing the wheelchair, make sure the two posts are safely locked.

Rehateam s.r.l. shall not be liable for any damage or injury caused by failure to observe this warning.

7.4 Folding push handles

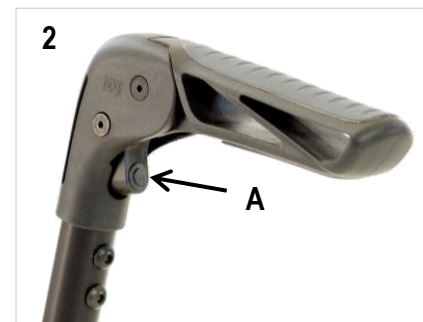
When folded down (1), these push handles reduce the wheelchair's overall volume and reduce possible interference with the occupant's arms when self-propelling the wheelchair.

When in the operating position (2), they act just like normal handles.

To fold the handle down (1), press pin **A** (2), just beneath the handle and swing the handle down.

The pin remains pressed down (3).

To swing the handle up to the operating position (2), just swing it up until the pin **A** automatically locks.



When the assistant moves the wheelchair with the occupant sitting on it, make sure the push handles are safely locked in their operating position.

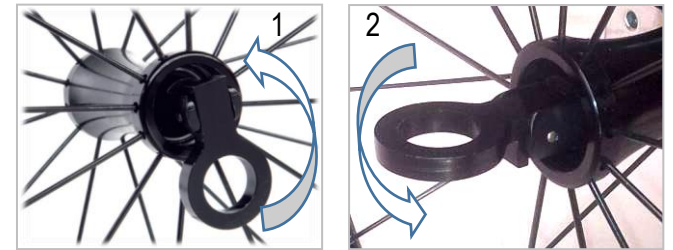
7.5 Tetraclip

This is a special quick release axle with a ring lever. It simplifies wheel removal for occupants with particular problems affecting their hands and fingers. The quick release works by turning the ring lever 90°.

When the wheel is seated, the ring lever must be set as in figure 1, i.e. turned by 90° with respect to the axle.

To remove the wheel, turn the ring lever so that it aligns with the axle as shown in figure 2.

To engage the wheel, the ring lever must be aligned as in figure 2. Insert the wheel and turn the ring lever by 90° as in figure 1.



Checking the quick release axles of the rear wheels is one of the procedures that the occupant should perform periodically.

If the quick release axles are not correctly positioned and fastened, they may work loose during normal operation and the wheel could accidentally come off, causing the wheelchair to overbalance with possibly injury to the occupant.

See also chapter “Quick release rear wheels”.

7.6 Tray

This accessory can be assembled only if the wheelchair is equipped with armrests.

To install the tray, loosen bolt **A** of the support **S** on each side of the wheelchair until the hole is free to let the post go through.

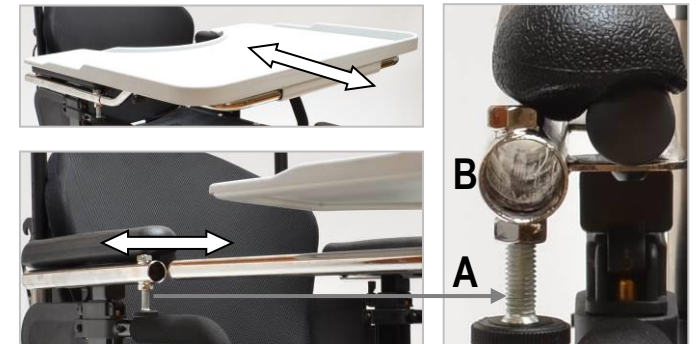
Insert the posts parallel into the supports and slide the tray in to the desired depth.

Finally, tighten the bolt **A** of both support **S**.



Before using the tray, make sure it is firmly fixed. Try to move it to-and-fro: if it does not move, it is ready for use.

To remove the tray, loosen the bolt **A** of the support **S** on each side of the wheelchair and slide it off.



7.7 Pelvic belt and harness

Both the pelvic belt and the harness are accessories to this model and must therefore be ordered separately. Both these belt systems are designed to assure the occupant greater safety and stability while seated in the chair.



Both the pelvic belt and harness system are of particular use for occupants with little control of their upper body and who require extra support to be held securely in the seat during use.



Danger of serious injury or strangulation. A loose belt can allow the occupant to slide downward and pose a strangulation hazard. The posture belt must be fitted by an experienced technician and the person responsible for prescribing its use must ensure its suitability.

PELVIC BELT

This accessory holds the occupant in the chair around the waist and leaves the upper body freedom of movement. The pelvic belt is fastened to the wheelchair via two anchorage points at the rear of the frame.

HARNESS

This accessory holds the occupant in the seat at shoulder height. The occupant's entire upper body is secured to the seat. It is intended for use by occupants with particularly limited upper body mobility.

The harness system is fastened to the wheelchair with four anchorage points: two at the rear of the frame and two on the backrest posts.

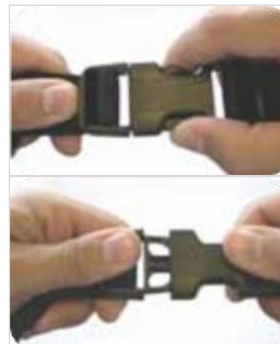
USE

Using the pelvic belt and harness system is fairly simple.

Before sitting in the wheelchair, the occupant or assistant should open the buckles by pressing on both sides of the locking buckle and pulling the two parts open.

Once seated in the chair with the belt or harness in place, the occupant can close the buckles by fastening the two parts together.

Both belts can be easily adjusted by pulling the extremities of their bands.

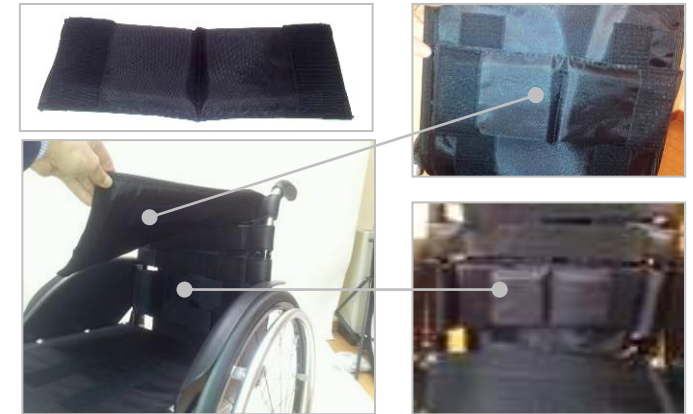


7.8 Lumbar support

This is a pad that offers extra support to the lumbar area.

To position the lumbar support, raise the backrest upholstery on its front side.

Using the Velcro fastener, attach the lumbar support either to the backrest upholstery or to the backrest bands at the required height. Finally, return the backrest upholstery back to its normal position.



7.9 Lateral support

This accessory is designed support the occupant's torso.

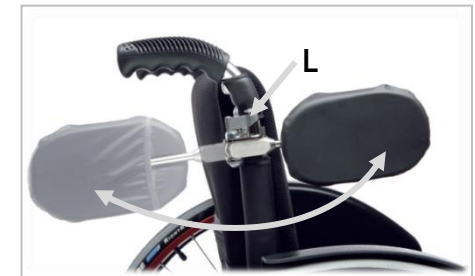
This lateral support is of the "swing-away" type so it can be swung it back.

Turn the lever **A** by 90° and swing the lateral support to the opposite position where it will automatically lock.



Make sure the system is stable.

Always check the adjustment; in fact, if the system is unstable, it may pose a risk to the occupant.



7.10 Rear wheels

Depending on your functional and/or aesthetical needs, you can choose one of the different rear wheels available for this model **(1) (2) (3)**. Different types of hand rim can be fitted to these rear wheels.

Special wheels

(4) SPINERGY FLEX RIM: this type of wheel has an aluminium and flexible rubber hand rim that significantly increases hand grip.

(5) OFF-ROAD WHEELS*: these wheels provide superior smoothness and comfort on rough or unpaved terrain. They are supplied only with the off-road tyre and an aluminium hand rim.

(6) FAT WHEEL*: these wheels enable the wheelchair to be used on more difficult terrain. They are only supplied with their matching tyre and an aluminium hand rim.



*You can choose this type of wheel as an additional kit to the main rear wheels you choose for your wheelchair. In this case, the wheels are interchangeable and, thus, you simply remove one pair and fit the other. See also the chapter "*Quick release rear wheels*".

7.11 Hand rims

Special hand rims are available for this PROGEO wheelchair model. Their special features ensure improved grip and therefore a more efficient pushing motion, especially for occupants with limited strength or mobility of the hands and fingers.



When assembling these hand rims, there is a risk of pinching or crushing the fingers between the hand rim itself and the wheel rim. Always perform this operation with great care.

7.12 Tyres

Different types of tyres are available. Compatibility with the rear wheel depends on the size of the wheel itself.

(1) High pressure tyre

Light and reliable, suitable for most environments.

(2) Marathon Plus

With anti-puncture protection, suitable for most environments.

(3) High pressure profile tyre

Light and reliable, more suitable for rough surfaces.

(4) Solid tyre

Suitable for most environments, it does not need inflation but its ride is less smooth. It has a little less grip, especially over smooth and wet surfaces and it absorbs less vibration when rolling on rough surfaces.



7.13 Spoke guards

Their function is mainly cosmetic but they also prevent occupants from accidentally inserting their fingers into the rear wheel spokes.



7.14 Castors

Various types and sizes of castors are available for this model, depending on the occupant's functional needs and/or aesthetic preferences.

In general, the larger the diameter and width of the wheel, the easier it will be to negotiate rough terrain and small obstacles such as stones, small height differences of the order of 1 cm. Soft castors offer a more comfortable drive than hard ones.

The pneumatic castor is the most comfortable but must be inflated regularly.

Hard casters absorb less vibration when driving on rough surfaces.



7.15 Clothing guards

The lateral clothing guards provided with this model are in carbon fibre. They can either be of the type “mudguard” or “straight”.

If the clothing guard is of the “mudguard” type, it is originally fixed with its edge approximately 5 mm above the tyre to prevent occupants from inserting their fingers between tyre and mudguard itself.

Removable “blade system” clothing guards (1) of the mudguard or straight type are removable in the same way as removable armrests. See the chapter “Armrests”.



**Do not lift the wheelchair by grabbing it by the removable lateral clothing guards as these are not locked.
Be careful not to squeeze your fingers when mounting the removable lateral clothing guards.**



7.16 Vanity flap (seat/backrest bonding canvas)

With this accessory you can affix the backrest upholstery to the seat canvas; it is useful for avoiding a possible backward sliding of a cushion that is not properly fixed to the seat.

The application of this vanity flap is quite simple; by means of the male Velcro straps present, simply attach it to the inside of the backrest upholstery and to the female Velcro seat canvas straps.



7.17 Removable utility bag

This accessory is very useful for stowing items to carry with you, both when using the wheelchair and in other situations.

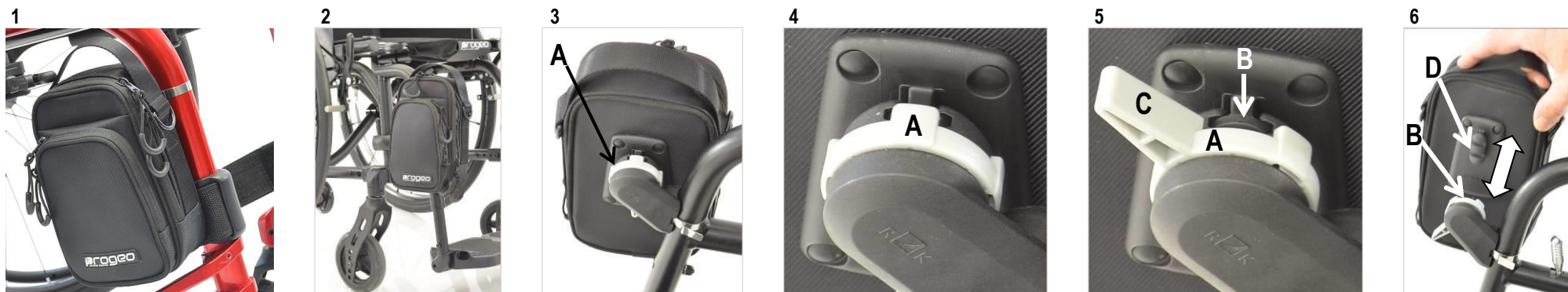
In fact, the bag is easily removable thanks to the support fixed to the wheelchair.

Depending on the space available, the bag may face backwards (1) or forwards (2) and is normally fixed in the front part of the wheelchair.

To remove the bag, turn the knob **A** (3) from the locking position (4) until the slotted guide **B** (5) comes free.

(5) The knob's lever **C** can be in different positions, in fact there are various locking positions.

(6) Once slotted guide **B** is free, pull the bag upwards to remove it. To attach the bag, insert the support **D** along the slotted guide **B** and finally turn the knob to a locking position as indicated above.



7.18 Frame protection pad

This accessory is very useful for protecting the frame from possible impact.

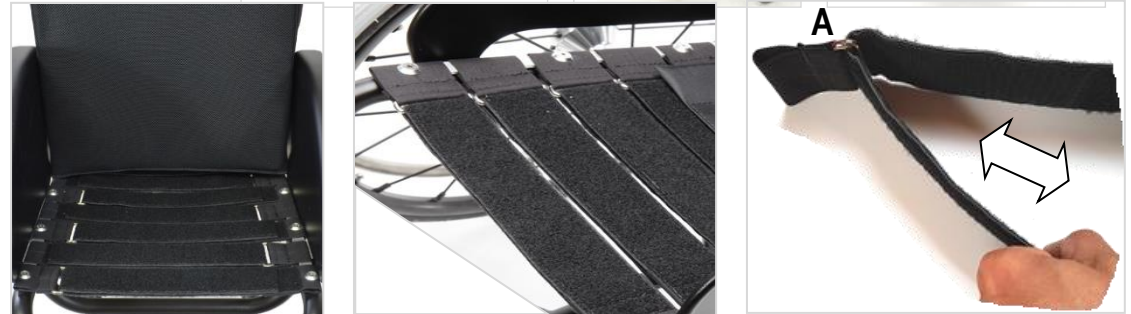
The application of this padding is quite simple, in fact it is sufficient to wrap it around the frame and fasten it with the Velcro strips.



7.19 Seat with Velcro straps

This type of seat allows for adjusting the tension of each individual band that composes it.

The operation is rather easy, in fact just detach the Velcro strap from itself and stretch it or slacken it as needed by letting it run through the buckle **A**. Finally, fasten the Velcro strap.



7.20 Rigid seat


This is a non-deformable carbon fibre rigid seat board that provides greater stability.





8 MAINTENANCE


Periodic inspection of the wheelchair is essential to guarantee maximum performance and a long life. Regular, thorough checks and proper use of the wheelchair will extend its life by many years. To clean the aluminium or carbon fibre parts (frame, hand rims, brakes etc.), the backrest and the seat, we recommend using only a **soft, damp cloth**.


 Within 6 months from purchase, we recommend going to an authorised PROGEO dealer for a complete check-up of your wheelchair. Failure to check the wheelchair will immediately invalidate the warranty and release the manufacturer from any liability for possible damage.

 We recommend paying particular attention to the cleaning of the hand rims of the rear wheels, which become dirty very easily because of their constant use and nearness to the ground. Careful cleaning the hand rims ensures a firm grip and thus safer operation.

 When cleaning the wheelchair, do not use abrasive cleaning agents or degreasing substances which could cause damage.

 Sand, sea water, water containing chlorine or other aggressive environments, may damage bearings, bolts, nuts or any parts subject to movement. We recommend avoiding contact with the above-mentioned aggressive agents and, in case of exposure, performing a careful washing and cleaning. The warranty does not cover oxidized parts and damage caused by careless use.

 Firmly tighten all screws and replace lock nuts that are used frequently. In fact, with frequent loosening and tightening they tend to lose their effectiveness.

 Have a complete check of the wheelchair carried out (at least every three months) by qualified personnel authorised for maintenance on PROGEO products.

For any questions relating to the adjustment and maintenance of your PROGEO wheelchair, the experienced technical staff at Rehateam s.r.l. are at the complete disposal of all our clients. You can contact us directly at the address below:

Rehateam s.r.l. vicolo Negrelli, 5 - 31038 Castagnole di Paese (TV) Italy
Tel. +39.0422.484657 - Fax +39.0422.484661 <http://www.rehateamprogeo.com>
email: info@rehateamprogeo.com

8.1 Replacement of worn parts

With its use, any wheelchair will require, in addition to the routine maintenance, further “unscheduled” intervention due to the normal wear and tear of components. Such servicing is closely linked to the amount of time for which it is used and how it is handled (e.g. use on uneven and rough terrain, in salty environments, etc.).

Repairing a puncture

In the event of a puncture, remove the wheel and Remove the tyre using bicycle tyre levers.

Remove the inner tube and repair it using a standard puncture repair kit and the same procedure used for repairing a normal bicycle inner tube.

If repair is not possible then you will need to replace the inner tube.

The rear wheel tyres should be replaced whenever excessive or irregular wear is noticed since this degrades the wheelchair’s performance.

To re-fit an inner tube and tyre onto the wheel rim, it is necessary to partially inflate the inner tube.

Next, insert the valve into the hole on the rim and, using both hands and bicycle tyre levers, insert the inner tube into the tyre and work the edge of the tyre over the wheel rim. While re-fitting the tyre, be careful not to pinch the inner tube and make sure the tyre is evenly distributed all around the wheel rim. Finally, inflate to the correct pressure.

In case of solid tyres, when worn out, they should be replaced with new ones.

Spare parts

For the replacement of parts due to wear and tear or breakage (or simply for the purchase of accessories) all the necessary spare parts to keep your wheelchair in perfect working order will remain readily available.



All spare parts can be ordered through our authorised dealers.

8.2 Inspection of components

As a daily check, we recommend the following operations:

- Check the tyre pressure.
- Check the quick release axles.
- Check the folding system (seat and/or backrest).
- Check the footplate.
- Check the parking brakes.
- General check of all screws.
- The condition of all parts subjected to wear and tear.

8.3 Disinfection and reuse of the wheelchair

When the wheelchair is used regularly, all surfaces that come into contact with the occupant should be treated frequently, or whenever the need arises, with a spray disinfectant.

It is not normally possible to guarantee the thorough disinfection of stitched seams.

We therefore recommend that the seat and backrest covers be changed and appropriately discarded in the event of bacterial contamination, in compliance with current regulations.

If the wheelchair is reused, the same type of treatment must be carried out very carefully before using the wheelchair again.



The first thing you should know is that **cleaning is not the same as disinfecting**. By cleaning we remove germs and dirt from surfaces, but we do not kill germs, although removing them decreases the amount and risk of spreading infections. On the other hand, with a disinfection, what we do is kill microorganisms such as bacteria through using chemicals.

This process does not necessarily clean dirty surfaces, but by killing germs on the surface, it can further reduce the risk of spreading the infection.

Keeping that in mind, the correct process to follow with the wheelchair is to first perform **routine cleaning and then disinfect it** using a sanitary surface disinfectant.

These products are bactericidal and virucidal. You can find more information about these products on the website of the Ministry of Health or other reliable sources. We also recommend that you carefully read the manufacturer's instructions for correct use and disinfection as well as to avoid possible contraindications.

8.4 Storage

If the wheelchair is not used for a medium-long period (over 4 months), it should be cleaned and stored in a dry and covered place and inside a box (preferably that of the original packaging). At the time of re-use, it is necessary to carry out a general check of the wheelchair following the same points of paragraph 8.2. Before the occupant can use the wheelchair, carry out driving tests of the wheelchair to check for defects. In case of malfunctions, faults or broken parts, consult an authorised dealer for the necessary repair.

8.5 Disposal/recycling of materials

When the wheelchair is to be disposed of (end of life of the product), it is necessary to consider any prevailing local regulations for waste disposal or recycling.

This includes cleaning or disinfecting the wheelchair before disposal.

A description of the materials used is provided below.




- Aluminium: frame, forks, wheels, backrest tubes, footplate tubes
- Titanium: frame, backrest tubes
- Steel: bolts and nuts, quick release axle
- Plastic: footplates, side guards
- Rubber/PU: grips, tyres, wheels
- Carbon fibre: frame, side guards, footplates
- Upholstery: textile with expanded foam
- Packaging: plastic bags made of soft polyethylene, cardboard

Alternatively, you can return the backrest to your dealer for disposal









In the event of disposal, be aware of any broken or damaged parts which could create a situation of potential danger with cutting or pinching injuries. The use of suitable protection is recommended.

8.6 Troubleshooting guide

With constant and prolonged use of the wheelchair, or after the adjustment of certain parts, some “defects” may emerge which can easily be eliminated by qualified personnel, or, where indicated by the  symbol, also by the occupant or assistant.

In any case, we suggest you should consult a Rehateam s.r.l. authorised dealer.

Problem	Cause of the problem	Solution
The wheelchair does not go straight.	The front forks are not perpendicular to the ground.	Check front fork angle.
	The castors are not set to the same height.	Check castor height.
	Incorrect or unbalanced tyre pressure.	Inflate the tyres at the same and correct pressure. 
	The spokes are broken or loose.	Change the damaged spokes or tighten the loose ones.
	The castor bearings are dirty or damaged.	Clean the bearings.  Change the bearings.
The wheelchair tips up easily.	The rear wheel trim is set too far forward.	Change the rear wheel plate with one set to a more rearward position (if possible).
	The wheelchair is excessively inclined.	Increase the rear height or decrease the front height.
The parking brakes do not work properly.	Incorrect tyre pressure.	Check tyre pressure. 
	Bad adjustment of brake position	Check brake adjustment.
The wheelchair fails to roll smoothly.	Incorrect tyre pressure.	Check tyre pressure. 
	Worn out tyres.	Change tyres. 
The backrest does not lock.	Friction on the locking pin.	Clean and lubricate the parts. 
	The travel-limit screw is too long and it touches the frame before locking occurs.	Tighten the travel-limit screw.

9 TECHNICAL SPECIFICATIONS

Keys: \Rightarrow = from to; \Leftrightarrow = adjustable; \square = frame; **1** = conservative; **2** = standard; **3** = active; **4** = extreme; **SW** = seat width; \approx = approximately; \vdash = starting from; \diamond = according to model; \wedge = with camber

	DUKE		
SEAT WIDTH	330 360 390 420 450 480 mm		
SEAT DEPTH	350 375 400 425 450 475 500 mm		
FOOTREST DISTANCE	345 \Rightarrow 490 mm \Leftrightarrow		
BACKREST HEIGHT	245 \Rightarrow 470 mm \Leftrightarrow		
BACKREST ANGLE	74° \Rightarrow 94° \Leftrightarrow		
CAMBER	0° 2° 4°		
FRONT HEIGHT	445 \Rightarrow 530 mm \Leftrightarrow		
REAR HEIGHT	380 \Rightarrow 460 mm \Leftrightarrow		
TRIM (centre of gravity)	1 2 3		
FRONT FRAME ANGLE	90°		
TOTAL WIDTH	LS + 170 mm (\wedge 0°)		
TOTAL LENGTH (lightest configuration)	820 mm \approx		
WHEELCHAIR WEIGHT (lightest configuration)	\vdash 7.8 kg \approx		
WEIGHT WITHOUT REAR WHEELS (lightest configuration)	\vdash 5.2 kg \approx		
WEIGHT OF REAR WHEELS (pair)	3.2 kg		
WEIGHT OF REMOVABLE FOOTRESTS	---		
WEIGHT OF ARMRESTS (pair)	1.0 – 2.0 kg \diamond		
MAXIMUM LOAD	125 kg		
OVERALL FOOTPRINT (folded wheelchair)	---		
TILT-IN-SPACE	---		

10 WARRANTY

The warranty agreement exists only between Rehateam s.r.l. and its authorised dealers. For this reason the customer may not make warranty claims directly to Rehateam s.r.l. The following warranty conditions are therefore presented solely for information purposes.

General conditions of the warranty: Rehateam s.r.l. provides assistance on its products provided they have been used correctly and that adequate maintenance has been carried out on all parts of the wheelchair. The warranty covers all material and production defects provided that such defects can be shown to have been caused prior to delivery of the product to the authorised dealer.

How to avail of your rights under the warranty: To benefit from all warranty rights on all our products, the authorised distributor/retailer must carry out an inspection, within 7 days from the date of delivery, on the products received, in order to ascertain any manufacturing defects, and secondly, if a manufacturing defect is found, the authorised distributor/retailer must immediately report it in writing to Rehateam s.r.l.

All defects which, in spite of scrupulous control, have been identified only after the expiry of the period indicated above, must also be reported in writing to Rehateam s.r.l.

Warranty period: on this model of wheelchair Rehateam s.r.l. provides a guarantee of 5 years on the frame, and 2 years on all other components and accessories, starting from the date of delivery, excluding those components that are subject to normal wear and tear during everyday use.

Repair of defects and replacement: the warranty on defects on contact parts is at the complete discretion of Rehateam s.r.l. either for the repair of the defect or for the replacement of the part itself. The authorised distributor in cases of simple repairs may take action independently to eliminate the defect or bring the defect to the attention of Rehateam s.r.l. in specific cases.

With reference to our production line that is labelled with the trademarks PROGEO and PHYSIO, since these products are manufactured to occupant specifications and with artisanal and not industrial procedures, minor imperfections, minor colour and carbon fibre weave discrepancies are not to be considered as defects.

Limits of the warranty: the Rehateam s.r.l. warranty does not cover additional costs (e.g. repair, packing, labour costs, incidental costs).

The following are not covered by the warranty:

- Damage caused during shipment and not notified to the carrier at the moment of delivery.
- Repairs carried out by unauthorised dealers or personnel.
- Parts subject to wear and tear.
- Damage to property or injury to persons caused during use of our products.
- Damage caused maliciously or where the buyer is at fault or resulting from incorrect or improper use of the product.
- Damage caused to the wheelchair, to objects and to persons resulting from any device or object, which is mounted on or added to the wheelchair without written authorisation from Rehateam s.r.l.

All claims for compensation are excluded from the warranty except for those specifically mentioned in the preceding paragraphs of this chapter.

Rehateam s.r.l. accepts no responsibility for failure to respect or execute the indications established in the individual contracts, if the following events have prevented and/or made it impossible to respect the terms of the contract itself: embargoes, import and export bans on contracted products, legal regulations, strikes and lock-outs, shortages of raw materials, accidents or other force majeure circumstances.

Rehateam s.r.l. is not obliged to disclose any technical variations made to its products, which may be subject to modifications and updates as deemed necessary.

WARRANTY CERTIFICATE



Rehateam s.r.l.

Vicolo Negrelli,5 - 31038 Castagnole di Paese (TV) Italy

Tel. +39 0422 484657 ra -Fax +39 0422 484661

<http://www.rehateamprogeo.com>

info@rehateamprogeo.com

Certified company TÜV Rheinland
in compliance with directive UNI CEI EN 13485 : 2016

Place of production: Castagnole di Paese (TV) ITALY

DISTRIBUTOR / DEALER

Date of delivery to user: _____

Stamp of distributor / dealer

Medical device Class I



PRODUCT LABEL