

# User manual







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Aliano

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# 1.0 NoteGenerali

# 1.1 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. All of our models are built from carefully selected materials and provide multiple configurations allowing full personalization. We perform continuous, meticulous quality control and testing in order to offer the highest possible quality combined with fast, reliable service.

We acknowledge that we owe our success to our clients as well as to those who have believed in us and helped us over the years, providing us with the scope and inspiration to take the road less travelled. We salute all those who, like us, believe that quality is the best differentiator.

# 1.2 Guide to symbols

In this manual you will often see the following symbols which are used to highlight points which are of particular interest or importance:



This symbol indicates actions that must be avoided at all times



This symbol indicates that particular care should be paid to a procedure or note in order to avoid causing harm to people or things, or breakages and dangerous situations in general



General information to improve usage of the wheelchair by the user.



**Essential tools:** a flat screwdriver is necessary to perform this procedure



Essential tools: a pozidrive screwdriver is necessary to perform this procedure



Essential tools: a spanner is necessary to perform this procedure



Essential tools: a 6mm allen key is necessary to perform this procedure

# 1.3 General characteristics of the wheelchair

The Progeo<sup>®</sup> EXELLE featherlite wheelchair has a particularly evolved design. Ease of use and total personalization are just some of the important features of this model.

The EXELLE is a high precision **folding wheelchair with cross bar system** which ensures a very high level of rigidity and manoeuvrability.

The EXELLE model offers a comprehensive range of innovative solutions created in order to provide the greatest possible levels of personalization in a featherlite frame

The range of accessories available for this model make the wheelchair extremely versatile and ideal for **both indoor and outdoor use**.



## 1.4 Use



The EXELLE wheelchair is **self-propelled** which means that it can be moved **manually** by using the handrims on the rear wheels.

It can be used in rehab as well as more active situations and is ideal for a wide range of users with different kinds of pathologies.

It is used to guarantee either fully independant or assisted (with an attendant) movement for a person with reduced or fully impaired movement in one or more parts of the body.

As it has such a large range of accessories and configurations the wheelchair can be used in full safety both inside and out.

Where the user has particularly severe pathologies or with people who are unable to move at all on their own, the assistance of an attendant is always advisable.

We also discourage use over hilly, particularly soft, sandy or uneven ground, slopes exceeding the recommended gradient and acid environments.

Its compact size and structure makes the EXELLE wheelchair ideal for use **by both teenagers and adults.** 

### **General Advice**



Before using the wheelchair we recommend that you carefully read Chapter 2.0 "*Safety*" and Chapter 5.0 "*Using the wheelchair,*" which are essential to the safe usage of the chair.

# 2.0 Safety



The Progeo<sup>®</sup> EXELLE wheelchair is a made-to-measure medical device and therefore it should not be lent to other users even for short periods of time.

Making any unauthorised modifications or using un-approved parts may change the wheelchair structure and create unsafe condition as well as possible harm to the chair and occupant

THEMANUFACTURERWILLACCEPTNORESPONSIBILITYINCASESOFNON-COMPLIANCEWITHTHEINSTRUCTIONSORRECOMMENDATIONSASSETOUTINTHISMANUALANDANYSUCHACTIVITYWILLRESULTINTHEIMMEDIATECANCELLATIONOFTHEMANUFACTURER'SWARRANTY

# 2.1 Movements: Getting in and out of the wheelchair



While getting in or out of the wheelchair **do not place your feet on the front foot rest.** This could result in the wheelchair tipping over possibly causing harm both to the chair and the occupant.

Getting in and out of the wheelchair must always be done with extreme care and caution, even by experienced occupants, and must be performed only after receiving instruction from specialised and fully trained personnel.



If getting into and out of the wheelchair is difficult an attendant should be present. All of these actions should in any case be performed based on your particular pathology and therefore on your own level of independence.

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

- Ensure the wheelchair is parked on a solid, flat or regular surface. Do not get into or out of the wheelchair while on hills or broken ground which could render the wheelchair unstable and cause the occupant to fall and/or the wheelchair to overbalance.
- The brakes should be on (see chapter 5.6 "*Using the brakes"*)
- Move your feet off the foot rests (or raise the foot rest, see chapter 2.9 "Foot rest") in order to get out of the wheelchair.
   Move them close to the foot rest before getting into the chair.
- Lean on the wheelchair and where possible on a stable object nearby. Lean onto the armrests to raise and move your body (see fig. 1).

In cases where the occupant is not able to perform this movement alone, or if the movement is to be performed on an unstable or difficult surface, an attendant should be present (see fig. 2).







While getting into or out of the wheelchair never lean or sit on the clothes protector. It could bend or break possibly resulting in injury.



If your wheelchair is equipped with armrests, these should be removed (for desk armrests) or turned out (for movable armrests) on the side that you will get in or out of. (see chapter 7.1 *"Fully adjustable swing-out arm rest"* and chapter 7.2 *"Fully adjustable desk swing-out arm rest"* 

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# 2.2 Starting to use your wheelchair

# Finding the centre of gravity – the point at which the wheelchair will tip back

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

The EXELLE model allows you to adjust the positioning of the rear wheels (see chapter 6.4 *"Adjusting the rear wheels"*)



Remember that every adjustment to the rear wheels influences wheelchair stability and could therefore increase the possibility of it **overbalancing**.

The correct positioning of the rear wheels depends on many factors, among them: the occupant's weight, type of disability and ability to manoeuvre the wheelchair. The manufacturer will supply the wheelchair with the rear wheels positioned according to instructions given on the original order form.



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

In order to find the point at which the chair will tip back easily and consequently to find the range within which it is safe to manoeuvre the chair, proceed in the following manner (see fig. 3):

You should be seated in your chair. Slide yourself forwards in the seat while holding the handrims on the rear wheels tightly. Then, by moving the handrims slightly backwards while moving your weight backwards the front of the chair will rise. • At this point by moving your body backwards and forwards while at the same time moving the rear wheel backwards and forwards using the handrails, it will be possible to find the centre of gravity and therefore the point at which the chair will safely tip back in a controlled manner.



<u>DAILY USE, WE RECOMMEND MOUNTING THE</u> <u>ANTI-TIP WHEELS WHICH ARE SUPPLIED AS AN</u> <u>ACCESSORY TO THIS MODEL.</u> (see chapter 7.4 "Anti-tip wheels")

# 2.3 Getting over obstacles: kerbs, inclines and ramps



While getting over obstacles such as kerbs, inclines, ramps etc, approach the obstacle at a moderate speed.





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

If particularly difficult obstacles are encountered an attendant should always be present at the back of the wheelchair in order to ensure complete safety.

## Going over obstacles alone



Before attempting to go down a step or over any kind of general obstacle alone (without the presence of an attendant), you will need to have control over your wheelchair and know how to tip it while maintaining your balance over the rear wheels.



## Going down steps on your own (see fig. 4)

- Bring the wheelchair right up to the leading edge of the obstacle so that the front wheels are touching it.
- Raise the front wheels by tilting the wheelchair while maintaining balance.
- Move the rear wheels carefully up to the obstacle. During this phase hold the handrims tightly.
- Once the rear wheels have descended the obstacle and are on the ground, lean the wheelchair forward until the front wheels touch the ground again.



Going up a step alone (see fig. 5)

- Take 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 handrims, carefully move the rear wheels forwards until the wheels are touching the edge of the step.
- Tip the wheelchair forwards until the front wheels are on top of the obstacle.
- Lean forward in the chair so that the rear of the chair is lighter.
- Hold the handrims tightly and move the rear wheels forwards bringing them over the top of the obstacle.



# Going down steps with an attendant

(see fig. 6)

- 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 in order to raise the front of the wheelchair.
- Keep the wheelchair in this position and accompany it down the stairs one step at a time. The occupant seated in the chair can assist the attendant by using the handrims.
  - At the end of the descent, tip the chair forward so that the front wheels are once again touching the ground.



In order to facilitate the raising of the chair by an attendant we advise the use of the tip-back assistance device which is supplied as an accessory to this model (see chapter 7.5 *"Tipping aid"*)

# Going up steps with an attendant

(See fig. 6)

- Move backwards towards the step so that the rear wheels of the chair are touching it.
- Grip the rear handles of the chair tightly and pull hard while keeping the wheelchair tilted (with the front wheels raised in order to prevent the occupant from slipping out of the chair), and pull the back wheels up over the step.
- Keeping the chair in the tilted back position, move away from the steps before tipping the chair forwards until the front wheels are touching the ground.

# **2.4 Going up slopes or inclines** (See fig. 7)

Moving 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.



We recommend that occupants who have not yet completely mastered safe use of the chair should mount the anti-tip system which is supplied as an accessory to this model and which is useful in preventing the chair from tipping over backwards (see chapter 7.4 *"anti-tip wheels"*).



- Lean forwards and keep your weight forward in the chair in order to prevent the wheelchair from tipping over backwards.
- Hold the rear handrims tightly.
- Move the wheelchair up the slope energetically whilst ensuring that you move smoothly and fluidly. Do not move your upper body backwards and forwards in the chair.



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

### Going downhill (see fig. 8)



In order to go downhill safely, the occupant must maintain constant, controlled speed and direction over the entire slope.

Approach the slope at a moderate speed

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

- Hold on to the handrims 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 handrails.

# 2.5 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 the possible overbalancing of the chair.

In order to gain the maximum control over your wheelchair the following list of situations is given. We ask that you pay particular attention to these guidelines so as to maintain balance and stability.

Leaning forward (See fig. 9)

Ensure that the front wheels of the chair are pointing forwards. In order to do this, move the chair backwards and forwards.

Put on the brakes in order 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 wheels 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 harm both to the chair and the occupant.



In order 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 chair.

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

Leaning back (See fig. 10)

Ensure that the front wheels of the chair are pointing forwards. In order to do this, move the chair backwards and forwards



## Do not use the brakes

Lean back without changing your seating position





Do not lean too far back over the back support as the wheelchair could overbalance.

Leaning out to the side (see fig. 11)

- Do not move your upper body beyond the rear wheel as the wheelchair could overbalance.
- With your free hand, for greater safety and stability, hold on to the wheelchair.



# 2.6 Tyre pressures

In order to guarantee consistent, precise running and braking it is necessary to ensure that the tyres are correctly inflated.

Remove the plastic valve cover on the valve which is found on the rim of the rear wheel.

Use a compressor to bring the pressure to the correct level

(see table 1).

Replace the plastic valve cover



#### Replace the plastic valve cover





Check the tyre pressures weekly using table 1 as a guide.

Incorrect inflation of the tyres (above all if the pressure is too low) causes incorrect functioning of the brakes and the chair may not stop (see chapter 6.9 "Adjusting the brakes").

Ensuring correct tyre pressure makes the

wheelchair noticeably easier to move and gives greater control during manoeuvres.

To inflate the tyres always use a compressor with a gauge. Do not use hand pumps or other systems.

Do not exceed the pressure indicated in the pressure table as the inner tube or the tyre itself may be damaged. Pay particular attention to type of tyre fitted, as shown in table 1.

Table 1 : Rear tyre pressures

Tyre type	Pressur	9
High pressure, smooth tyre	7 bar	700 kPa
High pressure, treaded tyre	7 bar	700 kPa
Tubeless tyre	10 bar	1000 kPa
Puncture-proof tyre does not require inflation		equire inflation

Puncture-proof tyres do not require inflation. They require less maintenance and reduce costs associated with replacing tyres after puncture. However, compared to standard pneumatic or tubeless tyres the puncture-proof tyres will feel slightly less smooth during normal use.

### 2.7 Quick release axels

After each procedure carried out on the rear wheels, ensure that



the quick-release axels are correctly replaced and fastened (see fig. 13) (see chapter 5.5 *"Quick-release rear wheels"*)



Perform the quick-release axels check up only while the wheelchair is not in use.

Release the brakes

Raise the rear wheel by lifting the wheelchair slightly off the ground using the rear handles.

Take hold of the wheel bush in one hand with the fingers laced through one or two spokes and pull and push firmly (as indicated by the arrow) in order to ensure that the wheel is properly fastened.



Checking that the rear axels are correctly positioned is one of the regular maintenance procedures that should be carried out by the occupant.

If the axels are not correctly replaced and fastened they may work loose during normal use resulting in the wheelchair overbalancing and possibly causing injury.

# 2.8 Checking the seat support tubes

Once you have opened the wheelchair (see chapter 5.2 *"Opening system"*) carefully check that the under-seat cross tubes are correctly positioned in their brackets **"A"** (see fig. 14).



gura14

# 2.9 Footrest

After every kind of procedure always ensure that the foot rest is in the correct position (completely open).

If the wheelchair has split foot rests (see fig. 15) ensure that both are fully lowered before using the chair.



figura15

With the single flip-up foot rest (fig. 16) ensure that the locking pin "**A**" is correctly inserted into it's fixing mount "**B**".



ligura16

### 2.10 Calf restraints

In some cases, depending on the diameter of the front wheel and the overall length of the wheelchair, the front wheel, as it rotates for turns etc may come into contact with the occupant's heel. In order to avoid any such contact (which could result in the chair overbalancing), the chair is supplied with a calf restraining belt which should be adjusted so that the occupant's feet do not come into contact with the wheels of the chair at any time (see fig. 18).



2.11 Tubular and desk armrests

The Exelle model can be supplied either with tubular (fig 19) or desk (fig 20) armrests.



As this is a self-propelled model, the armrests are considered an accessory and must therefore be ordered separately. They are particularly useful for people with reduced mobility in their hands or arms and for those with limited upper body movement who require increased stability once seated in the wheelchair.





figura 19



figura 18

# The armrests must not be used to carry the wheelchair or as a support.

The tubular armrests are only locked when they are in their standard position for use (facing forwards and parallel with the sides of the wheelchair) (see fig. 19). In all other positions they can turn and for this reason always ensure that they are correctly positioned before use (see chapter 7.1 *"Height adjustable, quick-release, swingaway armrests"*). If this instruction is ignored the wheelchair and the occupant could overbalance.

Fig 20

Do not use the armrest as a hand hold when moving the wheelchair as this could result in them becoming loose which could in turn lead to possible injury to the occupant and the wheelchair

**Do not use the armrest as a support during transportation.** We recommend removal of the armrests during transportation.



# 2.12 Tightening hardware - nuts, bolts, screws etc



After each maintenance cycle ensure that all nuts, bolts and screws are correctly tightened as they may loosen during normal daily use.

We recommend checking that all hardware is correctly tightened at least once a month. If necessary consult an authorized PROGEO dealer or mechanic.

## 2.13 Wheelchair lifetime

Under normal daily use the PROGEO wheelchair has a lifetime of 5 years provided that it receives careful maintenance at the correct intervals.

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

# 2.14 Avoiding accidents

### **Movements**

- Avoid sudden, jerky movements during use of the wheelchair to avoid overbalancing
- If obstacles are encountered, avoid sudden movements (such as abrupt braking).
- The possibility of skidding increases when the terrain is damp or uneven.
- Approach obstacles such as steps or entry ways with care (get help from an attendant).
- For greater security it is recommended that any movements on slopes or other dangerous terrain should be performed in the presence of an attendant.

# Speed

Always adjust your speed based on the type of terrain and conditions. Generally we advise a constant, regular speed, avoiding sudden acceleration or changes in direction.

## Using the brakes



The parking brakes have been designed to hold the wheelchair stable when it is stationary. For safety reasons we do not recommend using the parking brakes while the wheelchair is in

motion (see chapter 6.9 "Adjusting the brakes").

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

# 3.0 Transportation of the wheelchair

There is no single best way to transport the wheelchair in a vehicle. The kind and level of disability the patient has, his or her ability to control upper body, arm and hand movements, strength and the kind of vehicle that will be used are all factors. For an elderly or very young occupant, moving the wheelchair without assistance will be difficult.

Taking all of these variables into consideration, we cannot provide valid instructions for every possible scenario so here we supply some general information.





Perform all car transportation activities with extreme care and only after receiving instruction from specialised service personnel.

If these procedures seem to be unsafe or difficult we recommend requesting the help of an attendant.



<u>Never transport an occupant in a vehicle while</u> <u>seated in the wheelchair</u> as these wheelchairs are not designed for this kind of use.

If the occupant must be transported while seated in the chair <u>you are reminded that the wheelchair</u> <u>in its standard configuration is not supplied with</u> <u>seatbelts.</u> Any safety belts for vehicle transport must be installed by specialised personnel.

## Transport with an attendant

(see figs. 21-22-23-24)

In cases where the physical limitations of the occupant prevent him or her from moving and loading the wheelchair into the car on their own, the help of an attendant will be required. This fully folding wheelchair has been specifically designed to be lightweight and manageable in order to guarantee ease of movement even by those of limited strength and mobility. Release the brakes and pull out the rear wheels (see Chapter 5.5 "Quick release rear wheels") (see fig. 21). Fold the wheelchair (see chapter 5.3 "Closing system").

Take hold of the chair with one hand on the front frame and the other hand on the back handles so as to balance the

weight and make lifting easier. Load the wheelchair into the car along with the rear wheels (see fig. 22).

The reduced size of the folded chair allows it to be loaded into the boot of the car (fig. 23) or between the front and rear seats (see fig. 24).



figura21





figura 23

figura 24

# Loading the wheelchair without assistance (see figs 25-26-27)

The following actions have been designed for people with good control of their upper body, arms and hands as well as sufficient strength to perform the movements in complete safety.

- Move up to the door where you will get into the car (E.g the driver's door). Once you have opened the door move the chair as close as possible to the seat.
- Put on the brakes and get into the car (see chapter 2.1 *"Movements: getting into and out of the wheelchair"*) (see fig. 25).
- Once you are inside the car, put on the wheelchair brakes and pull out the rear wheels (see chapter 5.5 "Quick release rear wheels").
- Fold the wheelchair (see chapter 5.3 *"Closing system"*) (see fig. 26).
- Take hold of the chair with one hand on the front frame and the other hand on the back handles so as to balance the weight and make lifting easier. Load the chair and the rear wheels into the car. (See fig. 27)

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figura22



figura25



figura26



# 4.0 General Description of the wheelchair parts



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### General description of the Wheelchair parts (see fig. 28)

**1** Padded, breathable back support, fully adjustable via the Velcro straps.

- 2 Titanium back support tube adjustable in 1.5 cm increments:
  - Short tube adjustable from 30 to 42 cm
  - Long tube adjustable from 42 to 54 cm
- 3 Clothing protector:
  - ABS, Straight
  - ABS, curved
  - Carbon fibre, curved
  - Pull-out, curved
- 4 Aluminium pins for locking and adjusting the clothing protectors
- 5 Seat base with Velcro straps for securing the seat cushion, supplied with a handy pocket for personal belongings.
- 6 Front of the frame.
- 7 Fully adjustable Velcro calf support /restraint.

**8** Front footrest support tubes, long and short, with height adjustment holes every 1.5 cm, with an external protecting sleeve.

- 9 Rear wheels:
  - Smooth high pressure pneumatic tyres
  - Gripped high pressure pneumatic tyres
  - Tubeless tyre
  - Puncture-proof tyre
- 10 Hand rail:
  - anodized aluminium

- Titanium
- Rubber "Ultra grepp"
- PU "Max grepp"
- Rubber and aluminium "Ergo-Para"
- Aluminium with rubber inserts "Dual grepp" rudder
- Silicone anti-slip ring for use on the wheel hub

Quick release axel.

1 1

1

-

1

4

1

Rear wheel adjusting plate.

- Rear frame.
- Cross system tubing.
- 1

#### Front wheel:

- 3" sport hard solid rubber
- 4" PU soft, solid rubber
- 4" active with aluminium alloy wheels
- 5" softroll soft, solid rubber
- 6" pneumatic
- 7" PU with soft, solid rubber
- Front forks.
- <sup>1</sup> Fork supports.
- 1 Brakes:
  - Curved lever
    - Straight lever
    - Extended removable lever
    - Under-seat sport brake
  - Disc brake for use by attendant



19 Foot rests:

- Single, fibre, height adjustable

- Split, fibre

# 5.0 Using the wheelchair

# <u>5.1</u> Use

The featherlite Exelle wheelchair is a high-precision cross system folding wheelchair.

Because of it's characteristics of reduced weight, adaptability (configuration) and smoothness this wheelchair is ideal for daily use both by occupants with severe pathologies (with limited movement in the legs, arms and upper body) as well as more active occupants (able to perform activities without assistance). The wheelchair has been designed for **indoor** (flats, gyms, schools, libraries, etc...) as well as **outdoor** (roadways, pavements, courtyards, etc...) use.



During day-to-day use of the wheelchair the occupant could encounter broken or irregular ground (such as gravel, holes etc) or slippery terrain (wet ground, sandy, dusty or oily round etc). In these cases and all other cases where the use of the chair could be difficult or even dangerous (both for the occupant and for the wheelchair itself), we recommend using maximum care and attention combined with smooth motion avoiding sudden braking or acceleration (see chapter 2.0 "Safety").



In cases of extreme difficulty or danger it is always advisable to have the assistance of an attendant.

In order to prevent overbalancing, the maximum gradient recommended for this wheelchair is 3° (6%). (See chapter 2.4 "Dealing with ramps and slopes").

The maximum weight that the Exelle model is able to carry safely is 125kg.

5.2 Opening the wheelchair (fig 29)





Always use great care that your fingers are not caught in the cross-system of the chair during folding and unfolding. (fig. 31).

- Remove the seat cushion or other soft support from the seat.
- Place the palms of your hands on the 2 seat tubes in positions "A" & "B" (fig. 29), and push down hard.
- In order to make this operation easier it is a good idea to
- raise one of the rear wheels slightly. In order to do this hold onto one of the rear handles of the chair and raise it.
   With your other hand push down hard on the seat support tubes (fig. 30).



figura30

figure31

Ensure that the tubes on the seat are correctly positioned in their brackets (see chapter 2.8 "Seat support tubes").
 Lower the footrest (This will not be necessary if a flip-up
 footrest is fitted).

#### 5.3 Closing the wheelchair (fig 32)



figura32

- Remove the seat cushion or other soft supports from the seat and /or seat back
- Raise the footrest/s (This will not be necessary if a flip-up footrest is fitted).
- Pull the seat upwards using both hands in positions "**A**" & "**B**" (fig. 32).

# 5.4 Lifting the Wheelchair (fig. 33)





The wheelchair can be lifted and transported in many different ways. However it is advisable to fold the wheelchair down to facilitate these actions. In order to reduce weight, remove the rear wheels (see chapter 5.5 *"Quick release rear wheels"*) and close the wheelchair. In order to have greater balance while lifting (see chapter 5.3 *"Closing system"*) take hold of the wheelchair using one of the rear handles and the front frame of the wheelchair (see fig. 33).

### 5.5 Quick-release rear wheels (figs 34 & 35)



figura34

figure35



On this model it is possible to remove the rear wheels quickly and easily, thereby reducing the size of the wheelchair. This can be particularly useful when the wheelchair needs to be loaded into a car or put into a narrow passageway for storage. The transit wheels are used to facilitate movement when the wheelchair has been folded. (see chapter 7.3 *"Transit wheels"*).

### Removing the wheel

- Release the brakes
- Raising the wheel slightly using the handles on the back of the chair makes this procedure easier.
  - Take hold of the wheel by the spokes close to the axel bush,
- gush the release button in and, without letting go, pull the entire wheel outwards (fig. 34).

### Replacing the wheel

- Release the brakes
- Raising the wheel slightly using the handles on the back of the chair makes this action easier.
  - Take hold of the wheel by the spokes close to the axel bush,
- push the release button in and, without letting go, replace the axel (fig. 35).
  - In order to lock the wheel let go of the release button. A
- single audible click indicates that the wheel has been replaced correctly.



Removal and replacing of the wheel must always be carried out with the brakes released.

Ensure that the quick-release axels are completely locked into place. Check this by taking hold of the wheel at the spokes close to the axel bush and pulling firmly outwards. (see chapter 2.7 "quick release axels").

# 5.6 Engaging and releasing the brakes (fig. 36)





#### To engage the brakes

Push the lever forwards (with "push-on brakes" fig. 36/b. Pull the level backwards if "pull-on brakes" are fitted fig. 36/a).

### To release the brakes

Pull the lever backwards (with "push-on brakes" fig. 36/b. Push the lever forwards if "pull-on brakes" are fitted fig. 36/a).



Take care not to injure hands and fingers while operating the brakes

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The optimum position for the brake on the tyre is about 0.5 cm between the tyre and the brake bar (0.6 cm if puncture-proof tyres are fitted) (see chapter 6.9 *"adjusting the brakes"*).

The brake works via a lever which acts directly on the tyre. For this reason the effectiveness of the braking system depends on the tyre being correctly inflated. We highly recommend checking tyre pressures at regular intervals. (see chapter 2.6 "Tyre pressures").

The brake is a safety feature and <u>must not be</u> <u>used while the wheelchair is moving</u> as this could cause the wheelchair to overturn with possible injury to the occupant.

### 5.7 Waist belt and harness (figs. 37-38)

Both the waist belt (fig. 37) and the harness (fig. 38) are accessories to this model and must therefore be ordered separately.

Both of these belt systems are designed to offer greater security and stability to the occupant while seated in the chair.



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

<u>The waist belt</u> (fig. 37) holds the occupant in the chair around the waist and leaves the upper body free for movement.

The waist belt is fastened to the wheelchair via two anchorage points at the back of the frame (fig. 37).



<u>The harness system</u> (fig. 38) holds the occupant in the seat at his or her waist and shoulder. The entire upper body of the occupant is secured. It is intended for use by occupants with particularly limited mobility in the upper body.

The harness system is fastened to the wheelchair via four anchorage points on the rear of the frame (fig. 38).



figura38

### Use of belt and harness

Using the waist belt (figs 37-39) and harness system (figs 38-40) is fairly simple.

Before sitting in the wheelchair the occupant should open the buckles by pressing on both sides of each buckle while pulling the two parts open (fig. 41).

Once seated in the chair with the belt or harness in place the occupant can close the buckles (figs 39-40) by fitting the two parts together (fig. 42).



figwra41



figura42



figure 39

figure40

# 6.0 Adjustments

6.1 General



The PROGEO Exelle wheelchair is a made-to-measure medical product based on the specifications detailed on the original order form for the patient by qualified personnel. <u>We strongly advise users against lending the wheelchair to other users even for brief periods.</u>

The wheelchair measurements have been set after a careful study of the requirements of the user who originally purchased it and the features of maneuverability, stability and durability are guaranteed only for that user.



Lending your wheelchair to others could cause it to function unsafely and tip over with potentially serious consequences.

The wheelchair supplied by RehaTEAM® has been tested and set up to ensure optimum performance. It is forbidden to carry out any modifications (even when possible) different to the original design. All modifications which can be made by the user are detailed in this chapter but <u>must only be carried</u> <u>out as "maintenance", in order to return it to its</u> <u>original condition (the condition in which it was</u> originally supplied).

Always contact RehaTEAM® and its technicians for any non-standard requirements or modifications to allow them to evaluate such modifications and verify that they will not compromise the normal use and safety of the wheelchair.

Any modification of the original parameters and set up could seriously compromise the safe operation of the wheelchair causing harm both to the user and the wheelchair itself.



After each 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.

Have the adjustment of your wheelchair checked at least every 3 months by personnel qualified and authorized to carry out maintenance on PROGEO® products.

### 6.2 List of parts for standard set up





# **Description of parts for standard set up (**fig 43)

Pos.	Quantity	
1	Rear frame left and right	1l+1r
2	Washer	8
3-4	Frame connecting tube	2+2
5	Screws TCEI DIN 912 steel 6x25	4
6	Self-locking nut. Bottom DIN 985 steel M6	6
7	Screw TCEI DIN 912 steel 6x30	4
8	Flat washer DIN 125 steel 6x12x1.5	10
9	Self-locking nut. Top DIN 982 steel M6	4
10	Washer in black plastic 16x25x1	16
11	Cross bar	1
12	Front frame left and right	1l+1r
13	Seat fabric	1
14	Fabric fixing rail	2
15	Screw TSPEI DIN 7991 steel 5x35	6
16	Screw TSPEI DIN 7991 steel 5x18	2
17	Screw washer conical aluminium 5x16x3	14
18	Self-locking nut. Bottom DIN 985 steel M5	12
19	Cross tube sideguard support	4
20	Aluminium side guard	2
21	Screw TSPEI DIN 7991 steel 5x50	4
22	Flat washer DIN 125 steel 5x10x1	10
23	Self-locking nut. Top DIN 982 steel M5	6
24	Titanium back support tube	2
25	Screw TCEI bottom DIN 7984 8.8 6x30 Z.B.	2
26	Top back support strap	2 2 1 1
27	Back support tube	1
28	Back support padding	1
29	Round tube plug dim.20	2 2
30	Grip in rubber	2
31	Screw TSC+Autofil.DIN 7983 steel 4.8x16	-
32	Rear wheel fixing plate left and right	1l+1r
33	Front wheel and fork unit left and right	1l+1r

34 35	Parking brake left and right Rear wheel unit complete	1l+1r 2
36	Side guards left and right	1l+1r
37	Screw TSPEI DIN 7991 steel 5x14	4
38	One-piece footrest	1
39	Screw TCEI bottom DIN 7984 8.8 5x30 Z.B.	2
40	Calf support strap	1

# 6.3 Adjustment of the back height (fig 44)



It is possible to adjust the back height in 1.5cm intervals. Remove the rear wheel (see chapter 5.5 *"Removal of rear wheels"*) to carry out the adjustment.

Using a 4mm Allen key and a 10 mm spanner, remove screws "A" and corresponding nuts and washers " $A_1$ ".

Next, using a 5mm Allen key and a 10mm spanner, remove screw "B" and corresponding nut and washer " $B_1$ ".

Repeat the procedure for both sides of the wheelchair.

Raise or lower the back to the desired height.

Replace the screws into the nearest pre-drilled holes in the frame and tighten.



When adjusting the back height make sure that the height on the left is the same as the height on the right.

After carrying out adjustment make sure that the screws and nuts are securely tightened.

# 6.4 Adjustment of rear wheel (fig 45)

This adjustment is very important to ensure the correct stability of the wheelchair.

It is possible to adjust both the height and depth.

Adjustment of height: the plate "K" of the rear wheel support can be positioned at six different heights. Proceed by removing the rear wheel (see chapter 5.5 "*Removal of rear wheels*"). Remove fixing screws "A" (4 mm Allen key) and corresponding nuts and washers "A1" (10mm spanner). Move the mounting plate up or down in line with the corresponding holes on the frame, pre-drilled at 1.5cm intervals. Replace the screws and tighten. **Adjustment of depth:** six different positions are possible for the wheel alignment axle "**B**". The plate "**K**" permits axle "**B**" to be positioned in three positions corresponding to the three holes "**F**". By rotating the plate 180° (see fig 45) it is possible to obtain a further three positions. Remove the rear wheel (see chapter 5.5 *"Quick release rear wheels"*).

To adjust the depth, remove the axle "**B**" (24 mm spanner) and the corresponding nut and washer.

If it is necessary to rotate the plate, remove screws "**A**" (4 mm Allen key) and corresponding nuts and washers (10 mm spanner).

Once the components are in the required position replace the screws and tighten all parts.



figura45



Adjustment of the rear wheels can cause a change to the angle of the seat. If this occurs it is extremely important to adjust the front wheel support by following the instructions in chapter 6.5 "Adjustment of front wheels".

In general terms adjustment of the axle position will cause a variation to the stability of the wheelchair. If the axle is moved forward the stability will become "Active" and the wheel chair will tip back more easily. Moving the axle further back will give the wheelchair a more "Cautious" stability and the wheelchair will be more difficult to tip back. With stability set in the "Active" position the wheelchair will tip over more easily. When used in this setting we therefore recommend that an appropriate anti-tip system is fitted (see chapter 7.4 "Anti-tip wheels")

Carry out the same adjustment for the left and right wheels.

After adjustment, carefully replace all screws and nuts and tighten.

### 6.5 Adjustment of the height of the front wheels and fork angle (figure 46-47)

The front wheels can be adjusted in a number of different ways as follows:

Horizontal adjustment (figure 46): This adjustment is strictly related to the relationship between the front wheels and the position of the footrests. It is possible that certain combinations (e.g. a front wheel of 7" dimension and a one-piece footrest adjusted fully internally) may cause the front wheels to touch the footrest when turning the wheelchair.

In order to avoid this problem, the front frame has four pre-drilled holes "F" which allows the adjustment to be made, to increase or decrease the distance between the front wheels and the footrest.



flaura46

#### Table 2: Comparison between front wheels, fork type and front height

	Tipo di Forcella				
		Corta	Media	Lunga	+ distanziale
Ruota Anteriore	3"	39/40	44/45	47/49	Alterno ont. + 2,5 cm
	4"	40/41	A4/A5/A6	47/48/49/50	Alazio ort. + 2,6 om
	5"	42	44/45/46/47	47/48/49/50/51	Atezzo ant. + 2,6 am
	6"		44/45/46/47/48	47/48/49/50/51/52	Alexa ant. + 2,5 am
	7"		46/47/48/49	48/49/50/51/52/53	Alezza ani. + 2,5 am



To adjust the position remove the two screws "**A**" and "**B**" (using a 5 mm Allen key). Position the fork support correctly ensuring that during the rotation of the forks around their vertical axis there is no contact between the front wheels and the footrests. Once in the desired position, replace the screws correctly, aligning them with the pre-drilled holes in the frame. Tighten firmly.

<u>Adjustment of the angle</u> (figure 46): It is necessary to ensure that the axis of the forks is at 90° to the ground.

This operation is carried out by removing the fixing screw "**A**" (using a 5 mm Allen key) and changing the position of the eccentric hexagon "**A**<sub>1</sub>" which is situated on the inside edge of the fork support. Once the correct position has been located re-insert the hexagon in the support and tighten firmly.



Adjustment of the angle of the front wheels needs to be checked periodically in order to ensure that the axis of the fork <u>always remains at</u> <u>90° to the ground</u>.

Adjustment or at least checking will in any case be necessary any time the rear wheels are moved (see chapter 6.4 *"Adjustment of rear wheels"*).

<u>Adjustment of the height of the front wheels</u> (fig 47): This adjustment is necessary in order to maintain the correct height of the front of the wheelchair.

The height of the front of the wheelchair depends on the dimensions of the front wheel and the type of fork used (e.g. with a wheel of 5" and a medium fork it will be possible to obtain front heights of 44/45/46/47 cm) (see table 2).

To adjust the height remove screws "**C**" (using a 4 mm Allen key) and adjust the wheel in line with the pre-drilled holes on the forks

(hole  $n^{\circ}2$  for short forks, hole  $n^{\circ}4$  for medium forks, hole  $n^{\circ}5$  for long forks).

Replace screws and tighten firmly.



Adjustment of the front height becomes necessary after the front wheels have been replaced with wheels of different dimensions or simply because the user wishes to modify the height of the front of the wheelchair.

Every time the height is adjusted it is also necessary to check and adjust the angle.



figura47

# 6.6 Adjustment of back support angle (fig 48)

To obtain correct positioning of the upper body it is possible to adjust the backrest to 5 different angles.



The rear frame with backrest adjustable for angle is an accessory for this wheelchair. It must therefore be requested at the time of ordering and selected on the order form.

It may be mounted at a later date but this would require the replacement of the entire rear unit of the wheelchair. In view of the complexity of this procedure, the operation should only be carried out by gualified personnel.

To adjust the angle of the backrest, remove screws "D", "D1", "E" and "E<sub>1</sub>" (use a 5 mm Allen key).

Ad just the backrest to the desired angle (see figure 49), replace the screws through one of the pre-drilled holes in the backrest tube and tighten firmly.







If the backrest is adjusted to the rear (open angle), the wheelchair will tip over more easily. When used in this position we recommend that an appropriate anti-tip system is fitted (see chapter 7.4 "Anti-tip wheels").

Always check the stability of the wheelchair in the presence of an assistant.

# 6.7 Adjustment of footrest height (fig 50)

This adjustment serves to vary the distance of the footrest from the seat to enable the correct sitting position of the user based on the height of the user and leg length.

This adjustment is valid for both the double-piece and one-piece footrests and one-piece automatic folding footrest (see chapter 6.8 "Adjustment of footrests").

The support tube for the footrest has five pre-drilled holes, and the frame has a further two holes drilled, giving a total of ten positions of height adjustment.



Remove screws "**A**" and corresponding nuts and washers (use a 3 mm Allen key and an 8 mm spanner). Slide the footrest support tube up or down to the desired position. Replace the screws in the nearest available holes and tighten firmly.



figura50



In order to avoid hitting objects which could cause the wheelchair to tip over, we recommend maintaining a minimum distance between the base of the footrests and the ground of <u>not less than</u> <u>2cm.</u>

After adjustment tighten all screws firmly.

### 6.8 Adjustment of the footrest

The Exelle model can be equipped with three different types of footrest: **double footrests** (figure 52), **one-piece footrest** (figure 53) and **one-piece automatic folding footrest** (figure 54).

Any one of the three types of footrest can be mounted based on the specific requirements of the user.

When raised, the one-piece footrest and the double footrest enable the user to place their feet on the ground. The one-piece automatic closing footrest does not offer this facility.

The one-piece footrests are more rigid and durable than the double footrests. For this reason they are recommended for those users who experience strong contractions of the lower limbs and who tend to apply frequent sustained pressure on the footrests.

#### **Double footrests**

These can be raised very easily by pulling up with one hand on the individual footrests themselves (figure 51).

The double footrests can be adjusted for angle to ensure the best foot contact for the user.

To adjust the angle remove screw "**A**" (use a 5 mm Allen key), rotate the footrest as indicated by the arrow up or down to the required position (figure 52). Replace and tighten the screw firmly.





figura51

figura52

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To comply with Norm UNI EN 12183 paragraph 6.1, when double footrests are fitted it is necessary to maintain the correct distance between the two footrests when lowered:

1) The footrest distance (DIST) must not exceed 35 mm for wheelchairs used by adults.

2) The footrest distance (DIST) must not exceed 25 mm for wheelchairs used by children.

Below are detailed the correct footrest sizes based on seat width:

#### EXELLE Model

Seat width	Footrest type
33	140 x 160
36	150 x 160
39	170 x 160
42	NO
45	200 x 160
48	NO

Schememontagglopedanesdopplate

### **One-piece footrest**

This model can be raised by pulling up the footbed with one hand (figure 53). When the footrest is lowered, be careful to ensure that the securing bracket is correctly inserted into the locating lug.

To adjust the angle of the one-piece footrest it is sufficient to loosen the four headless screws, (use a 3 mm Allen key) "L" and "**M**" (two for each tube). Rotate the footrest, as indicated by the arrow, until the desired position is reached and re-tighten the four screws (fig 54).



figura53



#### figura64

### **One-piece automatic closing footrest**

This type of footrest does not require closing by hand.



The footrest closes automatically as the wheelchair is closed and re-opens as the wheelchair is opened. (See chapters 5.2 and 5.3 "Opening and closing system") (fig 55)

(figure 55)

The angle of the one-piece automatic closing footrest can be adjusted. For detailed instructions see the preceding chapter "One-piece footrest".

### Position of the one-piece footrests

If requested on the order form, the one-piece footrests can be mounted in three different positions: 2/3 internal (figure 56-59), completely internal (figure 57-60) or completely external (figure 58-61).

These configurations depend exclusively on how the parts are assembled (two Allen keys of 3 mm and 4 mm are required).

#### Pedana unica chiudibile





figura55

figura57



When the position of the footrest is moved, check carefully that, when rotated, the front wheels do not touch the footrest (see chapter 6.5 "Adjustment of the height of the front wheels and fork angle").

### 6.9 Adjustment of brakes

The parking brake is a very important piece of equipment that requires careful adjustment to ensure it functions correctly. There are a total of 4 parameters to be checked during adjustment: position of the brake and of the support on the frame, the angle of the support and the angle and position of the brake bar.
### Position of the brake and support





figura 60

figura 61

The position of the brake depends principally on the arrangement of the rear wheel (see chapter 6.4 *"Adjustment of the rear wheel"*) and must be the correct compromise between the position of support **"S"** along the tube of the frame and the rod **"T"** in respect to the support itself.

That position must allow adjustment of the brake (see *"adjustment of the angle and position of the brake bar"*) in the best way.

Usually the support "**S**" is kept as central as possible with respect to the rod "**T**" (see figure 62-63).

To carry out the positioning of the brake, remove the rear wheel (see chapter 5.5 "Quick removal of rear wheel"), loosen the screw on the support "S" (use a 6 mm Allen key), move the brake to the desired position and readjust the screw but without tightening fully. The screw is only fully tightened after adjusting the position of the brake bar.

### Angle and position of the brake bar



figura62

figura63

The rotation of the support "**S**" and therefore the angle "**A**" does not have a definite position but must be adjusted so that the brake bar "**P**" is maintained parallel with the ground and projects sideways enough to cover the entire width of the rear tyre (see figure 64).

Carry out this adjustment with the rear wheel in place and the brakes in position but not blocked (non-braking).

To position the brake bar correctly rotate both the support "**S**" and the rod "**T**" until the correct position is reached (see figure 62). During this operation the screw on the support must be slackened or the parts cannot be rotated.

Next, position the brake bar "P" with respect to the rear tyre

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so that the distance "**D**" is about 0.5 cm (0.6 cm with the anti-puncture tyre) (see figure 65).

Once the correct position has been reached, remove the rear wheel to facilitate re-tightening of the screw on support **"S"**. Fully tighten this screw and replace the rear wheel.



Check the correct functioning of the brakes by conducting specific brake tests.

Check that all parts are secure by pushing hard on the brake lever (while braking). If the brake support or the rod should move or slip during this test, check that the screws are tightened fully.

If the setup of the rear wheel is changed, the brakes will need re-adjusting.

<u>The correct functioning of the brakes also depends</u> <u>on correct rear tyre pressure being maintained.</u> (see chapter 2.6 *"Tyre pressure"*).



The parking brakes are designed to keep the wheelchair in position when stationary. For safety reasons we do not recommend using the parking brakes for braking while the wheelchair is in motion.

### 6.10 Adjustment of the backrest (figure 66-67)

The backrest can be adjusted to user requirements by tensioning or slackening the two special Velcro straps hidden

within the backrest itself (figure 67). To carry out adjustment, lift or remove the padding (figure 66), tighten or slacken the Velcro straps as required (figure 67) and re-close the padding.



### 6.11 Adjustment of the side rails (figure 68-69)

It is possible to adjust the side guards; both mud guard and straight models, both for height and depth. The side guard is fixed using two screws to aluminium supports equipped with slots.

It is therefore sufficient to remove the screws "**C**" (use a 3 mm Allen key) and the corresponding nuts and washers "**C**<sub>1</sub>" (8 mm spanner) and re-insert them in the desired position. If it proves necessary (for example when the position of the rear wheel is changed or the wheel itself is changed), slacken the screw "**A**" and rotate the support until the desired position is reached (fig. 68).

After adjustment, the side rail must be within 5mm of the wheel to ensure that the user does not accidentally insert his or her fingers between the cover and the side guard itself (fig. 69).



figura66



figure67

### 7.0 Accessories

#### **Accessory supports**



#### figura68

Some accessories require two supports in order to be mounted to the wheelchair (fig. 70) and may be requested on the order form when purchasing the wheelchair, or may can be purchased later and installed by qualified personnel. The supports, mounted on the left and right rear sides of the wheelchair, enable the use of *removable swingaway armrests, transit wheels and anti-tip wheels, tipping aids and crutch supports.* For possible combinations see table 3.



### Table 3 : Complete list of possible combinations

	Supportodestro		Supportosinistro	
	Hole B right	Foro Adx	ForoB sx	Foro Asx
	Swingaway armrests	Transit wheels	Swingaway armrests	Transit wheels
2	Swingaway armrests	Anti-tipper wheels	Swingaway armrests	Tipping aid
3	Swingaway armrests	Anti-tipper wheels	Swingaway armrests	Crutch support
	Swingaway armrests	Porta stampelle	Swingaway armrests	Tipping aid
5	Tipping aid	Transit wheels	Anti-tip wheels	Transit wheels
6	Crutch support	Transit wheels	Anti-tip wheels	Transit wheels
7	Crutch support	Transit wheels	Tipping aid	Transit wheels

# 7.1 Height adjustable swingaway armrests (figure 73)

The removable swingaway and height adjustable armrests are inserted into the accessory support (see table 3), which is shaped in order to accept and block (in rotation) the screw "**A**" fixed to the tube of the armrest itself.

To adjust the height of the armrest, remove (using a 4mm Allen key) the fixing screws "**A**".

Raise or lower the armrest by sliding it up or down the support "**S**" (as indicated by the arrow in figure 71), until the desired height is reached.

After adjusting the height, re-tighten the screws "**A**" in the nearest pre-drilled holes.

To facilitate adjustment, it is possible to rotate the armrest by 180° (figure 72) or simply remove it completely.

To rotate the armrest, lift it enough to free the blocking screw "**A**" from the groove on the support "**S**" and rotate it outward by  $180^{\circ}$  (see figure 72).



In order to rotate or remove the armrest, first remove the fixing pin "**P**". After every adjustment or rotation of the armrest and before using the wheelchair, insert the fixing pin in the hole present on the support "**S**" turned towards the interior of the wheelchair in order to avoid contact with the spokes of the rear wheel.



figura69



Do not use the armrest as a hand hold for lifting purposes. If the armrest is not fixed using the fixing pin it is possible that, during normal use, the armrest will come out completely causing possible injury to the user.

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Do not use the armrests as seats or bodyweight resting points while transferring in or out of the wheelchair.

Always check that the armrest screws "A" are in the correct position for use (rotated forward, see fig. 71) and are correctly located in the groove on the support. This is to avoid accidental rotation of the armrest which could cause the user to slip out of the wheelchair.



figura 70

## 7.2 Height adjustable desk armrests (figure 73)

These are traditional armrests which do not need any support



figura 71

accessory. The detachable armrests, in addition to the armrest itself, include an integral clothing protector bar. Other types of mudguard cannot be mounted when using this model of armrest. The detachable armrests are practical accessories which can be removed to facilitate getting in and out of the wheelchair.

Push lever "**A**" downward to unblock the armrest and lift upward to extract it (as indicated by the arrows in figure 71).

To replace the armrest, re-insert it in the support **"S**" and lock it into position again by lifting lever **"A**".

It is also possible to adjust the height of the armrest by rotating and lifting the pin " $\mathbf{B}$ " and re-inserting it into one of the pre-drilled holes on the armrest tube after adjusting the armrest to the desired height.





Do not sit on the armrest while getting in and out of the wheelchair. This could cause it to break and result in the user falling out.

### 7.3 Transit wheels (fig 74)





This accessory is necessary when the width of the wheelchair makes it impossible to pass through narrow gaps (see chapter 5.5 *"Rapid removal of rear wheels"*).

By using this accessory the wheelchair is rendered both narrower and shorter.

The transit wheels can also be removed from their support by pressing the release button "**A**" which locks them into position and by sliding the tube out from the support.

For correct mounting of the transit wheels in their support, release button "**A**" must always be facing toward the inside of the frame.



It must be remembered that while using the transit wheels with the rear wheels removed, the parking brakes will not work.

### 7.4 Anti-tip wheels (figure 75)

This accessory has been designed to **prevent the wheelchair from tipping back.** In order to ensure that it functions correctly it should be adjusted to a distance of 2-3 cm from the ground. The adjustment of the height is carried out by pressing the release button "**D**" and moving the tube up or down to the desired position.

For correct mounting of the anti-tip wheels it must be remembered that when inserting them into the support, the release button "**D**" must always face toward the inside of the frame. The anti-tip wheels can be removed completely or simply rotated inwards depending on requirements, for example, when ascending steps.

To rotate the anti-tip wheel inwards depress the release button "**D**" and rotate the tube inward by 180° until the release button engages and locks into place on the outside of the tube (fig. 75).



figura73

7.5 Tipping aid (fig 76)

This accessory has been designed to enable the assistant pushing to tip back the wheelchair with greater ease, making it easier to overcome small steps. Using one foot, press down on the plastic support (figure 76) while at the same time applying downward force onto the push handles.



figura74

7.6 Crutch holder (figure 77)

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This accessory enables the user to transport crutches ensuring that they don't interfere with the normal operation of the wheelchair.

Place the foot of the crutches into the support "**A**" and attach the upper part to the back support tube using the straps "**B**".





### 7.7 Other accessories

Other accessories available for the Exelle:



figura 76



#### - Spoke Guards

These have principally a cosmetic function and also prevent the user from accidentally inserting their fingers in the rear wheel spokes.



figura77



figura78

figura79





figura80

#### Assistant push handles

These can usually be mounted onto a "sport" model back support that does not have push handles as standard. They are useful in situations when a pusher is required and are fully adjustable, guaranteeing good grip and posture for the pusher (Figure 79).

### - Quick-release front forks

This accessory enables the front forks to be removed rapidly, to facilitate, for example, cleaning of the casters (figure 80).

#### - Tetraclip

This is a special clip which attaches to a rear wheel fitted with a quick release axle which simplifies the removal operation for users who have particular problems with their hands (figure 81)

### - Rear wheel plate extension

This accessory enables the rear wheels to be mounted much further back, thus increasing the stability of the wheelchair and reducing the likelihood of it tipping over backwards (figure 82).



Seat belts / Harness

Two accessories which serve to ensure increased stability when the user is seated (fig. 83) (see chapter 5.7 *"Safety belt"*)

Figura81



- Table

A detachable polycarbonate table which must be used in conjunction with armrests (figure 84)

figura82



### Special handrims

These are available for all PROGEO® wheelchair models, "*Special handrims*" with special features which ensure improved grip and therefore a more energy efficient pushing motion, especially for users with limited strength or mobility of the hands and fingers.

Detailed below is a list of the range of handrims available, excluding detailed explanation of the features of each type. More detailed information is available from RehaTEAM s.r.l. on request.

2) Handrim in *Titanium*3) Handrim *Ultra grepp*4) Handrim *Max grepp*5) Handrim *Ergo-para*6) Handrim *Dual grepp*7) Handrim *Captain's wheel*

### 8.0 Maintenance

Periodic inspection of the wheelchair is essential to guaranteeing maximum performance and long life. Careful inspection, repeated at regular intervals, together with appropriate use of the wheelchair (see chapters 2.0 *"Safety" and* 5.0 *"Use of the wheelchair"*) will together ensure that your wheelchair will last for many years.

To clean the aluminium parts (frame, handrim, brakes etc..), the backrest and the seat, we recommend using only a <u>soft</u>, <u>damp cloth</u>.



We recommend paying particular attention to the cleaning of the handrims of the rear wheels, which become dirty very easily because of their constant use and nearness to the ground. Careful cleaning of the handrims will ensure optimum grip and therefore safer operation.



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



Sand and sea water may damage the wheel bearings. Check the bearings carefully if contact is suspected. Lubricate with a non-resin based light bicycle oil.

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With daily use screws and nuts may loosen. Make sure that periodic inspections are performed.

Firmly tighten all screws and replace self-locking nuts which are used frequently. With constant loosening and tightening they may lose their effectiveness.

Have a complete inspection of the wheelchair carried out at least once every three months by personnel qualified and authorized to conduct maintenance on PROGEO® products.

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

**RehaTEAM** s.r.l vicolo Negrelli, 4 - 31040 Castagnole di Paese (TV Tel. +39.0422.484657 - Fax +39.0422.48466 <u>http://www.rehateam progeo.com</u> <u>email: progeo@rehateamprogeo.com</u>

### 8.1 Replacement of worn parts

With use, any wheelchair will require, in addition to the routine

maintenance indicated in chapter 8.0 "*Maintenance*", further "unscheduled" intervention due to the normal wear of components. This maintenance is closely linked to the amount and type of use the wheelchair receives (e.g. use over rough terrain or in coastal areas with more airborne salt etc..)

#### **Repairing a puncture**

Remove the wheel (front or rear) and deflate fully by pressing the valve (this procedure is not required for full anti-puncture wheels). 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 the inner tube will need replacing.



Anti-puncture rear tyres can be replaced whenever excessive or irregular wear is noticed which could reduce the performance of the wheelchair.

For replacement of solid front tyres an entire new front wheel will need to be purchased.

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. Do this all the way round the wheel, checking carefully that the inner tube does not get pinched between the rim and the tyre.

Inflate the tyre to the correct pressure (see chapter 2.6 "*Tyre pressure*")

### Spare parts

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

All spare parts can be ordered through our authorized dealers.

### 8.2 Inspection of components

We recommend that the following be checked daily:

- 1) Check tyre pressure (chapter 2.6)
- 2) Check quick release axle (chapter 2.7)
- 3) Check insertion of seat tube (chapter 2.8)
- 4) Check footrests (chapter 2.9)
- 5) Check parking brakes (chapter 6.9)
- 6) General check of all screws (chapter 2.12)

### 8.3 Troubleshooting guide

With constant and prolonged use of the wheelchair, or after the adjustment of any part, a number of "*defects*" which can be eliminated easily might be encountered (see table opposite). We recommend that you always have your wheelchair adjusted by qualified personnel.

Problema riscontrato	Motivo del problema	Soluzione
Le carrozzina non procede in modo diritto.	Le forcella anteriore non è perpendicolare al terreno.	controliare l'inclinazione delle ruote anteriori (capitolo 6.5).
	Le due ruote anteriori sono regolate diversamente in altezza.	Controllare l'altezza delle ruote anteriori (capitolo 6.5).
	La pressione delle gomme non è corretta.	Controllare la pressione delle gomme (capitolo 2.6).
	Alcuni raggi della ruota posteriore sono rottio allentati.	Sostituire i raggi danneggiati d stringere i raggi troppo allentati.
	I cuscinetti della ruota anteriore sono sporchi odanneggiati.	Pulire i cuscinetti della ruota anteriore.
La carrozzina si impenna con troppa facilità.	Le ruote posteriori sono state regolate per ottenere un assetto troppo attivo.	Montare le ruote posteriori in posizione più ametrata (capitolo 6.4).
	La carrozzina è troppo inclinata.	Montare la piastra della ruota posteriore più in basso (capitolo 6.4).
I freni di stazionamento non funzionano correttamente.	La pressione delle gomme non è corretta. Ifreni sono stati regolati male.	Controllare la pressione delle gomme (capitolo 2.6) e la regolazione del freno (capitolo 6.9).
Eccessiva resistenza al rotolamento	La pressione delle gomme non è corretta.	Controllare la pressione dei pneumatici (capitolo 2.6).
	Le coperture sono molto consumate.	Sostituire le coperture (capitolo 8.1).
La sedia a rotelle si apre con Lateia sedie è troppotesa. eccessiva difficoltà.	La tela sedile é troppo tesa.	Allentare le fasce dello schienale (capitolo6.10).

### 9.0 Technical Data

LS PS	Seat width Seat depth	33 - 36 - 39 - 42 - 45 - 48 cm 35 - 37.5 - 40 (std ) - 42.5 - 45 cm
H Post	Rear height	44 (std) cm adjustable
IT	Total length	90 cm approx.
LT	Total width	LS + 19 cm
DR	Distance between	
	wheels	LS + 10 cm
TS	Backrest height	36 (std) cm adjustable from 30 to 54 cm
H Ant	Front height	49 (std) cm adjustable
IC	Collapsed width	26 cm approx

Weight (standard setup)

12 kg approx

### Type:

Featherlite wheelchair with cross-closure system.

#### Use:

For use indoors and outdoors.



## 10.0 Warranty

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

#### General conditions of the warranty

RehaTEAM® s.r.l. provides assistance on its products on the condition that they have been used correctly and that adequate maintenance has been carried out on all parts of the wheelchair (see instruction manual).

The warranty covers all defects in material and production provided that such defects can be shown to have been caused prior to distribution of the product to the authorised dealer.

#### How to validate your rights under the warranty

In order to validate all rights covered under the warranty (on all our products) the authorised dealer must carry out an inspection, within 7 days of the date of delivery, on all products received, in order to identify eventual production defects, and secondly, that if any such production defects are noticed, that they confirm the same to RehaTEAM® s.r.l. in writing immediately.

RehaTEAM® s.r.l. should also be notified in writing of any defect which, despite careful inspection, is identified only after the expiry of the abovementioned period.

#### Warranty period

On all its wheelchairs RehaTEAM® s.r.l. provides a guarantee of 5 years on the frame, and 1 year on all other components and accessories, starting from the date of delivery, excluding those components that are subjected to normal wear and tear during everyday use.

#### **Repair of defects and replacement**

The guarantee on defects on contact parts is at the complete discretion of RehaTEAM® s.r.l., either by repair of the defect or by 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.

#### Limits of the warranty

The RehaTEAM® s.r.l. warranty does not cover additional costs (e.g. repair, packing, labour costs, incidental costs etc..) The following are not covered by the warranty:

- damage caused during transportation, not communicated to the transport company 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.

Excluded from the warranty is any pretext for indemnity except those expressly mentioned in the preceding paragraphs (see chapter 9.0 "*Warranty*").

RehaTEAM® s.r.l. does not accept any responsibility for failure to respect or carry out the conditions agreed in individual contracts, if the following circumstances have impeded and/or have made it impossible to respect the terms of the contract itself: embargos, import and export bans imposed on contract products, legal rulings, strikes, lack of raw materials, accidents, force majeure or other forces beyond our control.

RehaTEAM® s.r.l. reserves the right to carry out technical modifications to its products which it deems necessary without prior notification.



### **11.0 Certification**

**Declaration of Conformity No. 004** 

The manufacturer **REHATEAM S.r.I.** with

premises in Vicolo Negrelli, 4, 31040

Castagnole di Paese (TV) Italy here declares

that the product defined as a WHEELCHAIR FOR

DISABLED PERSONS, PROGEO series,

EXELLE model

to which this declaration refers, conforms to the

guidelines as laid down by

European Union Directive 93/42 EU

applied in Italy as D. Lgs. 46/97.

The manufacturer has classified the above mentioned

product as a CLASS 1 Medical Device based on the

provisions as set out in the addendum to EU

Directive 93/42

Castagnole di Paese (TV)

Rehateam S.r.I. General Mangagement Mr Gianfranco Pivato

## CERTIFICATE

The TÜV CERT certification organization of the TÜV Anlagentechnik GmbH Unternehmensgruppe TÜV Rheinland Berlin Brandenburg

certifies in accordance with TÜV CERT procedures, that the company

## Rehateam S.r.l

Vicolo Negrelli, 4 31040 Castagnole di Paese (TV) Italy

Has employed and is using a quality control management system in the following field

### Design, manufacture and sales of rehabilitation and personal mobility equipment

Via an audit, report no. 037501, it has been verified that the following guidelines

### DIN EN ISO 9001:2000

have been correctly followed.

This certificate is valid until **21/01/2007** Certificate registration No. **01 100 037501** 

Cologne 22/01/2004

### Notes

### Information form

Send this form to:

RehaTEAM s.r.l. Vicolo Negrelli, 4 31040 Castagnole di Paese (TV) It

Surname First name Date of birth Place of birth Adress Town Province Post code Nationality Phone Fax Email

Wheelchair model Serial number

Bought from Date of purchase

In compliance with Italian law 675/96 on the data protection act, we inform you that your personal details will be collected and used by us with the exclusive aim of sending out advertising and news on products offered by our company. Such information will be held on an electronic archive and every effort will be made to ensure security and privacy. In compliance with article 13 of Italian law 675/96, at any moment you have the right to access, modify, delete or simply oppose the use of such information held by sending an email to the following address: <a href="mailto:proge@cehateamprogeo.com">proge@cehateamprogeo.com</a>







Medical equipment **class 1** directive 93/42 Product certificate **TÜV GM** and **CE 0035** 

F

EXEL	LE model
Place of produc	tion
Date of product	ion
Date of delivery	
Serial number	
	Distributor
6	
	Manufacturer
2.	Manufacturer REHATEAM s.r.l.

Partita IVA: 03182520266

RehaTEAM s.r.l. reserves the right to carry out modifications and improvements to its products without prior notice..

Vicolo Negrelli, 4 - 31040 Castagnole di Paese (TV) Italy Tel . +39.0422.484657 Fax +39.0422.484661

Certified company TÜV normative DIN EN ISO 9001:2000

by **RehaTEAM** s.r.l.

http://www. rehateam progeo.com email: progeo@rehateamprogeo.com

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