EXCEL
VAN OS

User Manual

Excel G7

'Smart mobility solutions'

Read instructions before use

YOU AND / OR YOUR ATTENDANT MUST READ AND FULLY UNDERSTAND THIS MANUAL BEFORE USE

General information

You have just purchased a Van Os Medical UK Ltd wheelchair and we want to thank you for the confidence in our EXCEL® products. The EXCEL® wheelchair is a quality product. It is adjustable in many different ways and it can also be easily upgraded.

The policy of Van Os Medical UK Ltd is to continually improve the quality and reliability of our products. We reserve the right, therefore, without prior notification, to alter this guide.

It is important that your guide for the use of the wheelchair is read carefully. The manual contains important information about the safe use and maintenance of your wheelchair. We recommend that you keep this guide, it's also your proof of warranty and you will find it useful for referring to at a later date.

The safety instructions in this guide are general guidelines that must be seen as broad guidelines. It is possible that you develop your own ways for many common actions. However, we advise you to consult a professional for assistance in developing safe and effective techniques with regards to your daily activities and your physical capabilities.

Your new wheelchair requires frequent maintenance, much of which you can do yourself. We want you to take your wheelchair once a year to be inspected by a professional. You will find a maintenance schedule later in this manual.

You'll also find that this manual includes a detailed description of all the available settings of your wheelchair. Many of these options require, as well as repairs to your wheelchair, the knowledge of a professional. We therefore advise you to consult a professional if your wheelchair requires repairs or a modification.

Caution!

In this guide you will find informative comments, recommendations and warnings. These are clearly identified by the below symbols and the appearance of the text: -

	Tip	Informative information
	Recommendation	**Damage to equipment is possible if recommendations are not followed**
ⓘ	***Warning***	***To avoid personal injury, warnings must be followed***

Fill out the information of your authorized dealer below:	
Company:	……
Address:	……
	……
Telephone number:	……
Fax number:	……
Email adress:	……
Website:	……

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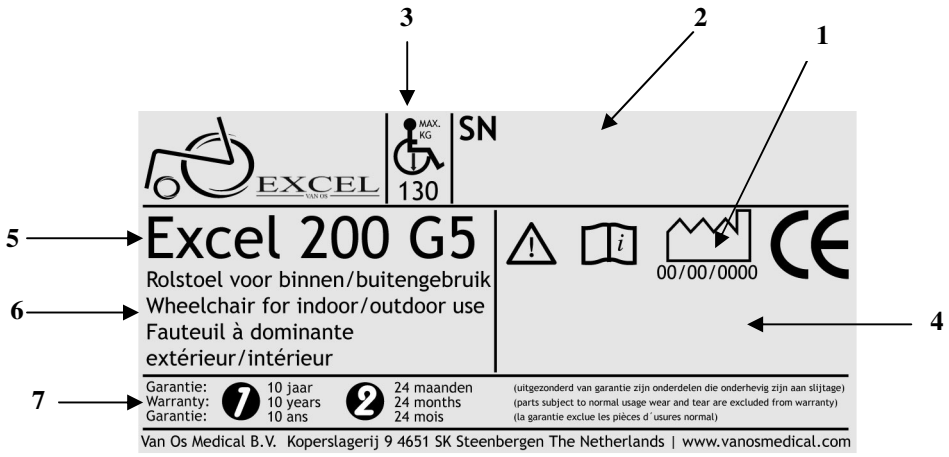
1. IDENTIFICATION

Your wheelchair is equipped with a unique identification number. You can find this number on the cross frame of your wheelchair. Below is an example of the frame label on which you can find the identification number. Furthermore you will find the explanation of the various data stored on the frame label listed below.



1. Production date The date on which your wheelchair was manufactured.

2. Serial number Every wheelchair has its own unique identification number. YOU must have this number when making technical requests or if warranty parts are required.

3. Maximum user weight The largest occupant weight allowed for protection of both the wheelchair and the user.

4. Type number This number indicates which model of wheelchair you have, again this is always required when making technical calls.

5. Model name The model name of your wheelchair starts with the brand name Excel. The brand name Excel is followed by an additional model description that forms the model name of your wheelchair.

6. Usage application Where you can use your wheelchair.

7. Warranty Here the guarantee period of your wheelchair is reflected. Chapter 9 describes your warranty terms and conditions in more detail.

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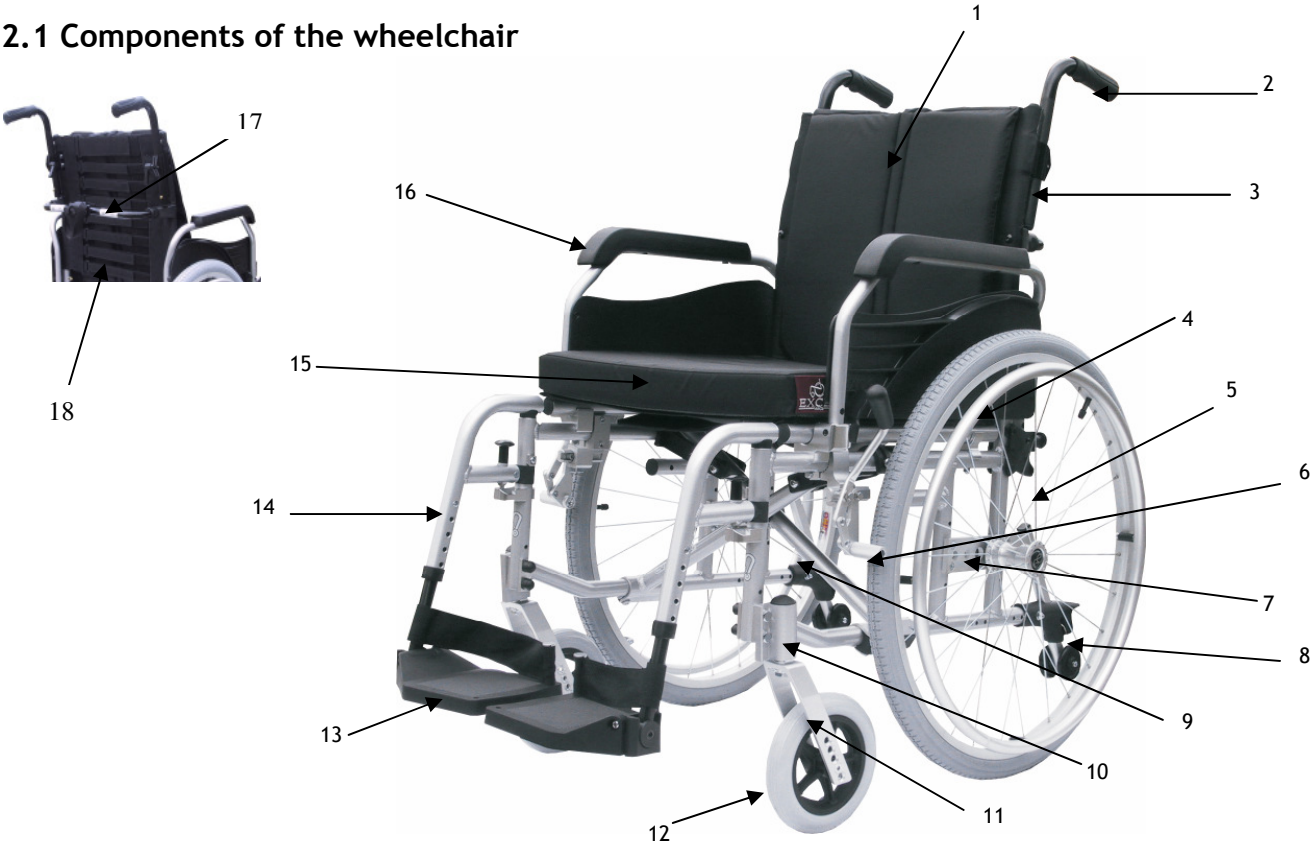
2. GENERAL EXPLANATION CONCERNING YOUR WHEELCHAIR

2.1 Components of the wheelchair



1	Back coating	10	Ball head
2	Push handle	11	Front fork
3	Backrest	12	Front wheel (swing castor)
4	Hand rim	13	Foot plate
5	Rear wheel	14	Foot rest
6	Parking brake	15	Seat
7	Axle bracket	16	Armrest
8	Anti-tip wheels	17	Tension bar
9	Frame	18	Tension straps back

Your wheelchair is equipped with a number of elements and parts. You should know these before continue reading this manual. Your wheelchair can be equipped with options and accessories not pictured. You will see this yourself whilst reading this manual. Designs and specifications may change without prior notice.

2.2 General explanation of the function and possibilities of your wheelchair

Your wheelchair is a foldable one, which is designed to be easy to transport in a car. Mainly, we divide the wheelchairs into two categories: self propel version with large rear wheels, and the transit version with small rear wheels. You can look at the rear wheel to see which type of wheelchair you have. If you wheelchair has big 24" rear wheels and you can move it yourself it is a self propel version. If you wheelchair has small 12" rear wheels and you need a supervisor to push the wheelchair it is a transit version.
Your wheelchair is a product falling into the medical equipment and is not a standard consumer product. You must follow this manual completely to ensure good, optimal and safe use of your wheelchair.

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3. SAFETY REGULATIONS

VAN OS MEDICAL UK Ltd specifically disclaims responsibility for any body injury or property damage which may occur during any use which does not comply with laws or ordinances. If used correctly, the Excel wheelchair is an utmost safe and stable product, if the instructions for use as described in this manual are followed. However, it is possible when the Excel wheelchair is not used correctly, dangerous situations may occur.

3.1 General safety regulations

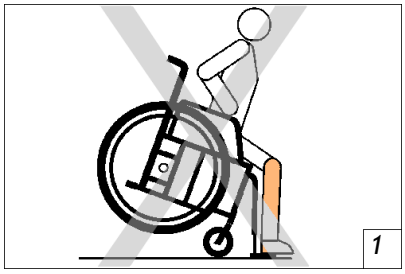
Protect your Excel wheelchair by checking it regularly. When a part of your Excel wheelchair is not functioning properly, a dangerous situating could occur. **YOU MUST KEEP YOUR WHEELCHAIR IN A GOOD CONDITION TO ENSURE SAFETY IN USE.**
Periodical inspection, correct adjustment of your wheelchair and timely replacement of damaged and worn parts will result in use for years without any problems. A qualified Van Os Medical UK Ltd dealer, who will use only Van Os Medical UK Ltd replacement parts, will take care of your wheelchair to ensure a long lifetime.

ⓘ ***Warning:***
YOU must your keep wheelchair in a good state to be able guarantee use and ambulatory the security in.

3.2 Warnings for safe use

ⓘ ***Warnings:***

- ***do not use your wheelchair on streets or roads, only on the pavements;***
- ***do not use your wheelchair in sand, rough area, wet and glade surfaces or surfaces with little grip;***
- ***the transport of your wheelchair is in all vehicles, including vehicles which are adapted developed especially and/or for the transport of your wheelchair, is at your own risk. We accept absolutely no liability for this. We recommend you, if you want nevertheless to transport your wheelchair, to contact a recognised manufacturer of taxi fixations to take with the carrier, your supplier and/or systems to choose an appropriate system for your wheelchair and situation;***
- ***do not try to ascend ramps without installed anti tippers, never ascend a hill without anti tippers;***
- ***do not lean concerning the back of the wheelchair. This can result in rolling over the wheelchair;***
- ***before leaning or reaching forward, sit back into the chair and face the castors forward:***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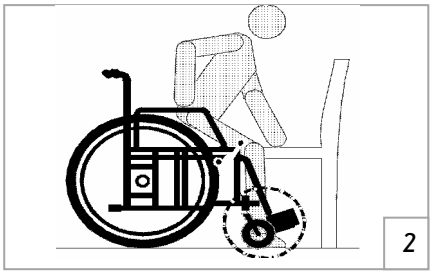
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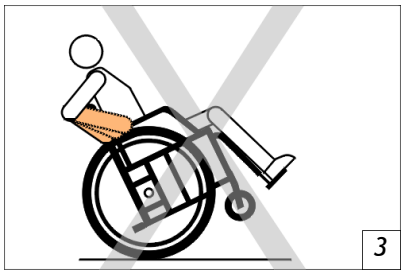
- *A 'wheelie' is extremely dangerous to the user and will cause serious damage to the wheelchair*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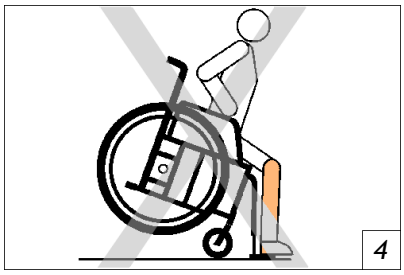
- *Never connect anything to the wheels, this may cause damage to the chair and also effect the balance of the chair and may injure the user;*
- *Do not stand on the footrest this will cause the chair to tip and injure the user (figure 4);*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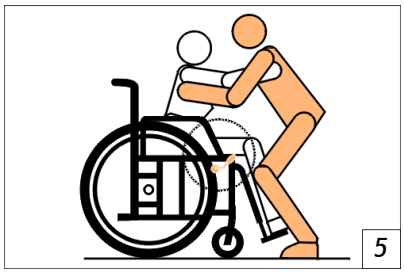
- *For suitable protection of potential obstruction the lowest point of the footrests serves minimum 7 cm free of the ground;*
- *Place the wheelchair on a stable, flat surface and attach the brakes before you get off or.*
- *Attach the brakes when you use the wheelchair in a lift or on a wheelchair lift and when you want to get off;*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- *The standard weight capacity has been indicated on your frame label;*
- *Unauthorized modification and or use of no Van Os Medical parts will void the warranty of this chair and may lead to injury to the user and damage to the chair.*

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4 INSTRUCTIONS FOR USE

You will have to learn the characteristics of your wheelchair. It is most important to learn the safest methods to develop the daily activities in accordance to your life style. Consult your medical advisor or therapist for assistance by developing safe and effective techniques for your daily activities and your physical possibilities.

4.1 Safety Tips

Daily operations such as getting off the wheelchair, reaching and bending in wheelchair will cause change the weight distribution and the centre of gravity of you and your wheelchair. You will need to perform these movements and techniques as shown below.

Transferring

Transferring in a wheelchair is a difficult manoeuvre. Consult your physical therapist for assistance in developing your individual technique. The possibilities you have for making a transfer are depending on your physical characteristics. We advise to discuss this first with your physical therapist.

However if you have sufficient body strength and you want to transfer to and from the wheelchair can you best do this in the following manner:

To get out of the wheelchair:

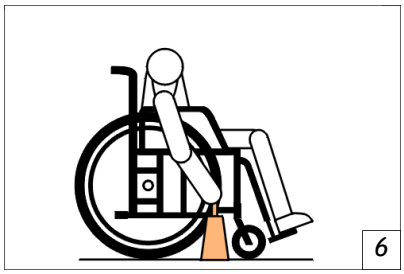
First of all you must make sure that your wheelchair stand as closely as possible to the place of where you want sit. Put the castors forward and attach the brakes. Swing away the footplates and place your feet on the ground. You are now in position to carry out the operation. Shift your weight to the front of the chair, you can use the armrests as a support and move yourself to the place where you want sit. If necessary you can use a transfer board.

To get in:

To get in your wheelchair you need to do the same things as when you want to get out of the wheelchair, only in reversed order.

Reaching / bending forward

1. Make sure that you are as close as possible to the object;
2. Make sure the front wheels are turned forward. If not, go forwards and then backwards to turn the wheels fully to the front;
3. Engage the wheel brakes;
4. You can now move towards the target with caution to keep the wheelchair from falling.



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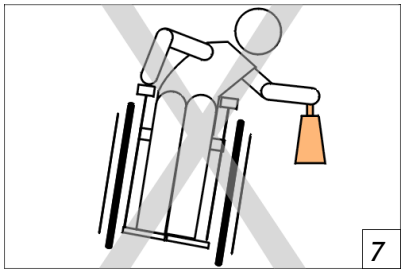
Reaching / bending sideward

1. Manoeuvre the chair as closely as possible to the object you want to reach. You can use your rear wheels;
2. Make sure the front wheels are fully turned to the front. If not, go forwards and then backwards to turn the wheels fully to the front;
3. You can now pick up the object. While you pick up the object you need to make sure you keep it as close as possible to the wheelchair (picture 7 and picture 8).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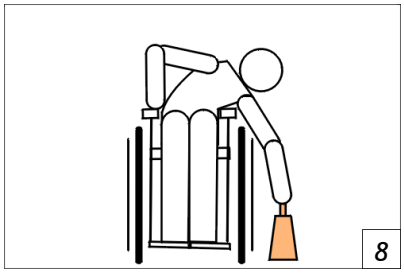
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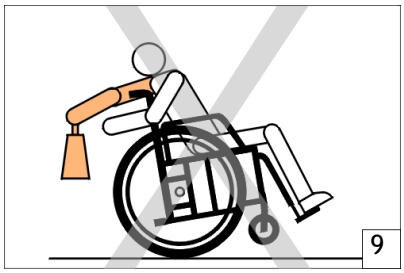
Reaching / bending backward

1. Manoeuvre the chair as closely as possible to the object. You can use the rear wheels. For example they will indicate how close you can come to object;
2. Do not engage the wheel locks. If your weight moves while reaching, it is better to drive in that direction than tipping the wheelchair.
3. Do not reach further than your arm can reach. If you are in doubt, you reposition the chair (picture 9);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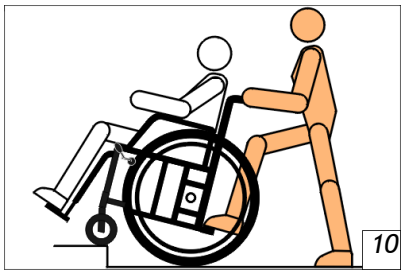
4.2 Negotiating pavements and unequal surfaces

Going up the pavement:

If you ascend a pavement, we advise to do this together with an attendant. The attendant can help you in two different ways, however we advise you to do it the first way.

- You and the attendant reach to pavement facing forward. The attendant must pull the push handles towards him and place his foot on the stepper on the rear side of the wheelchair. Because of this there is a lever effect that tips the wheelchair (see picture 10).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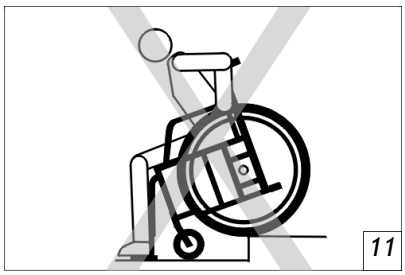
- The attendant is already standing on the pavement and makes sure that the wheelchair stands with the rear wheels as closely to the pavement as possible. The user of the wheelchair needs to lean backwards. This way the wheelchair will tip backwards and the attendant can pull the chair on the pavement. The attendant needs to make sure that the front wheels are on the pavement before he lets the wheelchair down.

If you want to go up a pavement alone, you should move your weight as far forward as possible by bending forward. Then you must provide a so-called 'Wheelie', to get the front wheels on to the pavement (see figure 3, under the heading “Warnings for safe use”). You can only perform this action if you have practiced it with a trained expert.

Going down the pavement:

If you want to go down the pavement, we advise you to do this with an attendant. The attendant should move the wheelchair forward to the curb. Then the user should lean back so the attendant can tilt the wheelchair to find a balance point. When the wheelchair is balanced the attendant can move the wheelchair slowly off the curb. When the wheelchair is off the pavement, the attendant can let the front wheels back onto the ground.

If you want to independently go off the pavement, you should do this in reverse (Figure 11 shows what not to do). You can do this only if you've practiced with a trained expert.



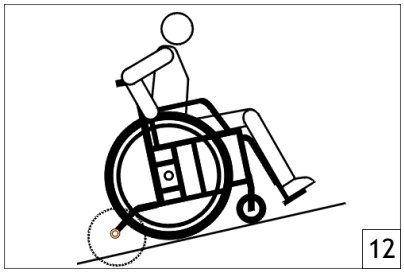
4.3 Going up and down ramps

Most people can climb short slopes by themselves. This of course depends on your body strength, stamina and the gradation of the slope. Inspect the slope always for risks, such as holes or slippery and uneven surfaces before you drive off. If you can not see the slope, ask someone to inspect it for you.

ⓘ ***Warning:***

A slope of more than 5 degrees can be dangerous to descending or climbing. Remember that the friction of your hands to grab the hand rim is the only way to brake while driving.

Most people develop their own methods to drive up slopes through practice. Sit with your upper body slightly forward as you climb the slope. Should it be necessary to stop on the slope, you must try to avoid unexpected movements which may cause tilting when climb further (Figure 12).



If you want to climb a relatively steep slope, we advise you to use the assistance of a supervisor, figure 13.

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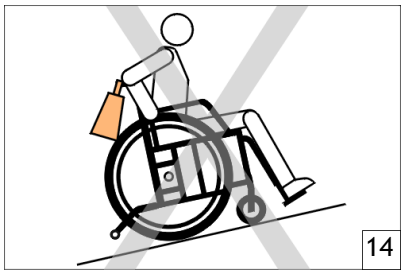
We recommend you to use anti-tip wheels. They prevent you from tipping the wheelchair over backwards (figure 12). Depending on the model of your Excel wheelchair sometimes these are a standard item and sometimes they are an optional extra.

Do not carry any weight on the back of the wheelchair whilst ascending (figure 13). This changes the balance and increases the chances of tipping backwards.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Make sure the footrest is minimum 7 cm from the ground when you are descending a slope. This is in order to ensure your safety at the end of the slope. Always look forward when you descend and do not lean forward as this can cause overturning. Lean slightly backward in order to increase stability.

Make sure you have your wheelchair under control at all times. Do not hurry down the slope, but move slowly and safely. The speed of descent is controlled by the amount of grip strength that you exercise on the hand rims. In an effort to prevent friction burns to your hands, it is recommended that you use gloves. To reduce the risk that you burn your hands or lose control over the wheelchair, you need to slowly descend a slope.

Do not use the wheel brakes during the descent. The wheel brakes are designed for static braking of the rear wheels whilst stationary.

Avoid changing direction as you descend. Despite that your EXCEL® wheelchair is designed for balance and control, a change of direction on the slope can change the balance which will cause instability.

If you are using an attendant they should be aware that even with a slight slope already considerable traction should be exercised (figure 15).


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ⓘ ***Warning:***

Using the wheel brakes to slow down the wheelchair whilst driving can cause a sudden stoppage. The result of this can be that the chair rotates to one side and tilts, or abrupt stops so that the seat tilts forward.

If your wheelchair is used in an environment where there are many slopes, it is advisable to fit a drum braking system for the attendant to use.

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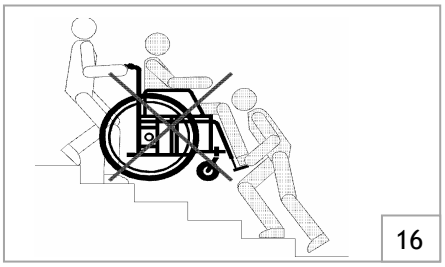
4.4 Going up and down stairs

Stairs are one of the largest obstacles for wheelchair users. However, with a little help from others it is possible to climb up and down the stairs when a wheelchair elevator is not available. Only you and your attendants must be aware of the rather heavy weight to be replaced.

Going up the stairs
You need to go up the stairs backwards. We advise if you want to climb the stairs with a wheelchair you will do this with the help of a minimum of two attendants. One attendant on the front of the wheelchair and one attendant on the back of wheelchair. The attendant at the back of the wheelchair grabs the push handles and let the wheelchair tip backwards until it in balance. When the wheel is in balance the attendant at the front of the wheelchair needs to grab the side frames. You are now in position to climb the stairs. The attendant on the front pushes the side frames up until they are above the first step and the attendant on the back makes the first step on the stairs. Repeat this technique until the last step of the stair, see figure 17. You can let the front castors down when the attendant on the front has taken the last step.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Going down stairs
To go down the stairs you need to do the same things as when you where going down the stairs, only in reversed order and you needs to go down the stairs forwards.

Warning:
Never lift a wheelchair by the push handles, armrests or footrests (picture 16). Always hold a part of the main frame.

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MAKING ADJUSTMENTS TO YOUR WHEELCHAIR CAN CAUSE BIG RISKS FOR YOUR SAFETY AND THE FUNCTION OF YOUR WHEELCHAIR. ADJUSTMENTS MADE BY YOURSELF ARE STRONGLY ADVISED AGAINST AND CARRIED OUT AT YOUR OWN RISK. ALWAYS SEEK ADVICE FROM AN APPROVED DEALER BEFORE MAKING ADJUSTMENTS.

5. INSTRUCTIONS FOR USE AND MOUNTING OPTIONS

In this chapter we will explore all the possibilities that you have with your wheelchair. All setting and user instructions, such as the removal of the footrest, will be discussed.

Your wheelchair is an Excel® G7

The wheelchair is available in self propel and transit versions, see section 2.2 for further explanation on this. On the cross-frame of your wheelchair you will find a label on which you can find which wheelchair you own. Further on in this chapter we can refer to a specific version.

Warning:
We advise you, if you want to make changes where tools are needed, to consult with your dealer.

5.1 Tools and technical information

For the maintenance of your wheelchair you will, in some cases, need tools. For your wheelchair you will need the following tools:

Phillips screwdriver	PH2
Allen keys	4, 5 and 6 mm
Cross-ring or keys	8, 10, 13 and 26 mm
Spanners	19 and 22 mm
Socket wrench	19 mm

Excel® G7

Seat width	40-45, 45-50 and 50-55 cm
Seat depth	40 adjustable to 50 cm in one frame
Seat height	47½, 50 and 52½ cm
Backrest height	48 - 58 cm (adjustable)
Total width	68 cm
Total length	> 100 cm
Total height	> 95 cm
Folded width	31 cm
Armrest height	20 – 28 cm (adjustable)
Weight (complete)	29 kg (depending on the model)
Transport weight	16½ kg
Maximum user weight	150 kg

5.2 Using the elevating legrests

Adjusting the heel straps:
- You can adjust the heel straps, which you will find on the footplate, with the Velcro;
- Check if the Velcro of the heel straps is tighten properly.

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Folding the footplate away
- Go to the front of the wheelchair and get a hold of the front of the foot plate, see figure 1;
- Fold the footplate in the direction of the footrest, see figure 4. Make sure the heel strap does not get stuck between the footplate and footrest, see figure 2.

Figure 1

Figure 2

Swinging the elevating legrest towards and away from the wheelchair
- Go to the front of the wheelchair;
- Pull the black button upwards, see figure 3;
- You can now swing your elevating legrest inwards and outwards.

Removing the elevating legrest from the wheelchair
- Go to the front of the wheelchair;
- Pull the black button upwards, see figure 3;
- You can now swing your elevating legrest inwards and outwards;
- Swing the elevating legrest 90 ° to the outside of the wheelchair and pull it straight up from the receiving tube.

Replacing the elevating legrest back on the wheelchair
- Go to the front of the wheelchair;
- Attach your elevating legrest back to the frame at an angle of 90° swung outwards, figure 4;
- Turn the legrest so that it is parallel with your frame;
- You should hear a click. This click confirmed that the legrest is in position.

Setting height of the elevating legrest
- Turn the black lever on the elevating legrest, see figure 5;
- Select the desired height, make sure the screw of the lever comes in one of the pre-drilled holes and turn the black lever down;
- Make sure the comfort leg support is in the desired position.

Figure 3

Figure 4

Figure 5

Setting angle of the footplate

To adjust the angle of this footplate, you have to use the supplied wrench number 5.
- You need to loosen the bolt completely, see figure 6;
- The footplate can now be removed from the footrest. Select the desired angle of the plate and turn the screw well. Note there are help dashes at the footplate for choosing the desired angle;
- Make sure the footplate is in place.

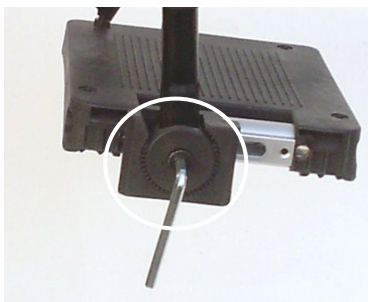

Figure 6

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Setting the footplate depth

To adjust the depth of the footplate you need to use the enclosed wrench number 5.

- You loosen the screw with the wrench number 5, figure 7;
- You can now move the footplate forwards and backwards. Set the desired depth and tighten the foot plate;
- Make sure the footplate is in place and the depth in both plates are equal.

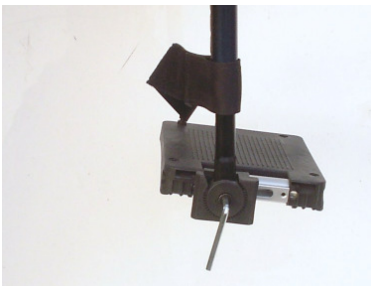

Figure 7

Setting the angle of the elevating legrest

- Move the control lever with the black button toward the wheelchair. The gas spring in the comfort legrest moves up automatically, see figure 8;
- If you want the comfort legrest to move downwards, you control the lever toward the wheelchair to maintain and support the leg while gently pushing down, see figure 8.

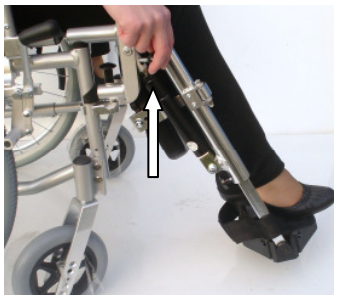

Figure 8

5.3 Using the calf plate

Swing away the calf plate

- Go to the front of the wheelchair;
- Get a hold of the middle of calf plate and swing it away by moving the calf plate upwards and sideward's, see figure 9.

Figure 9

Setting angle of the calf plate

- Hold the calf plate at the top and bottom and by moving it up and down, find the correct angle, see figure 10;
- When the calf plate moves to easily you can tighten it by using the supplied wrench (No. 6), figure 11.

Figure 10

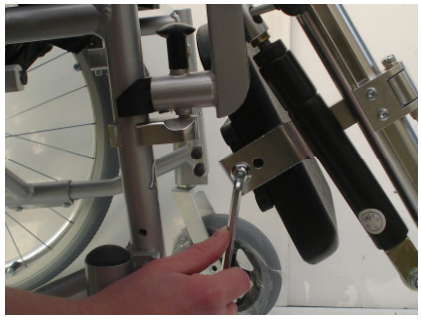

Figure 11

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Setting the height of the calf plate
In order to set the height of the calf plate, you have to use the number 4 supplied wrench.
- Use the wrench to loosen the two screws, see figure 12;
- Move the calf plate to the desired height and retighten the screws;
- Make sure the calf plate in place.

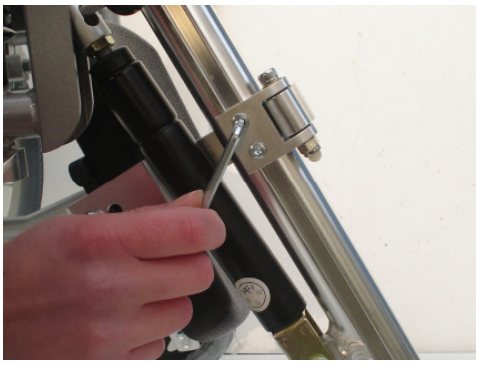

Figure 12

5.4 Using an amputee support (Optional)

You have the possibility to place an amputee support on your wheelchair in stead of a standard legrest.. In this section you can read how to use an amputee support.

Swinging the amputee support away
- Go to the front of the wheelchair;
- Pull the black control lever up, see figure 13;
- You can now swing the amputee support inwards and outwards.

Removing the amputee support from the wheelchair
- Go to the front of the wheelchair;
- Pull the black control lever up, see figure 13. You can now swing the amputee support inwards and outwards;
- Swing the amputee support 90˚ away from the wheelchair and pull it straight up from the receiving tube.

Replacing the amputee support back on your wheelchair
- Attach your amputee support back to the frame at an angle of 90˚ swung outwards, figure 14;
- Turn the amputee support so that it is parallel with your frame;
- You should hear a click. This click confirmed that the amputee support is in position.

Figure 13

Figure 14

Setting the angle of the amputee support
- Hold the amputee support at the top and bottom and by moving up and down, find the correct angle, see figure 15;
- When the amputee support moves to easily you can tighten it by using the supplied wrench (No. 6), figure 16.

Figure 15

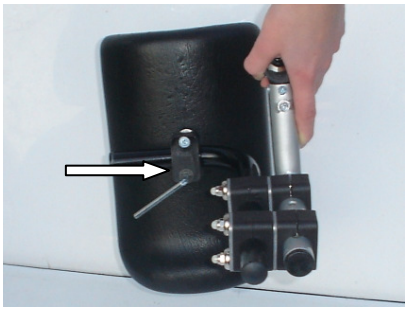

Figure 16

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Setting the height of the amputee support
In order to set the height of the amputee support, you have to use the number 4 supplied wrench.

- Use the wrench to loosen the two screws, see figure 17;
- Move the amputee support to the desired height and position and retighten the screws;
- Make sure the amputee support in place.

Figure 17

Figure 18

Setting the length of the amputation support
In order to set the length of the amputation support, you require the supplied wrench number 5.

- Loosen the four screws with the wrench, see figure 17. You can now move the black tube around the silver tube;
- Turn the black tube with the block 90° around the silver tube, to the desired position, see figure 18;
- You can also move the amputee support left and right over the black tube by using the supplied wrench number 5;
- Make sure all screws are securely tightened.

5.5 Using the wheelchair brake

Putting the wheelchair on the parking brake and the folding the brake away (optional)

If you are in the wheelchair

- Take the black handle of the brake, see figure 19;
- Push the lever forward until you hear the click, this confirms that the wheelchair has put on the parking brake;
- You can now hide the black lever away, by drawing it upwards and push backwards.

If you are next to the wheelchair

- Go to the side of the wheelchair and face towards the front of the wheelchair;
- Take the black lever of the brake;
- Push the lever forward until you hear the click, this confirms that the wheelchair has been put on the parking brake;
- You can now hide the black lever away, draw upwards and push backwards, see figure 20.

Figure 19

Figure 20

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Using drum brakes

Sometimes a wheelchair will be fitted with drum brakes which can be found on the push handles of the wheelchair

- Squeeze the lever toward the black push handle to brake, see figure 21.

Figure 21

Figure 22

You can also put a parking brake on

- Squeeze the lever toward the black push handle;
- Keep the lever there and push the button on the black lever forward to brake, see figure 22;
- Reverse this to remove the parking brake.

5.6 Using the armrest

Adjusting the armrest height and removing the armrest (with push button)

- Press the button with one hand and move with your other hand the arm pad up or down, see figure 33;
- You can now remove the armrest or select the desired height;
- When the armrest is on the desired height you can release the button. You will hear a click and the armrest will remain at the desired height.

Figure 23

Adjusting the armrest depth

- Untight the knob below the arm pad, see figure 24;
- Move the armrest to the desired depth and fasten the knob;
- Check if the armrest is securely tightened.

Figure 24

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5.7 Using push handles

Adjust the height of the push handle

- Loosen both black buttons until you can move the push handle up or down. See figure 25;
- Move the push handle to the desired height and tighten the black buttons back on;
- Make sure the handles are fastened securely.

Figure 25

5.8 Potential uses and functions of the seat amd back of the wheelchair

Remove the seat and back coating

On your wheelchair there is the possibility to remove the seat and back coating. You can release the seat and back coating by pulling it loose from the Velgro, see figure 26.

Figure 26

Setting the height of the backrest

On your wheelchair you can adjust the height of you backrest:

- On the back of your wheelchair you can find 4 black buttons, see figure 27;
- Turn all 4 buttons until you can move the backrest up and down;
- When the backrest is in the desired position you can turn the black buttons back down;
- Make sure the backrest is securely tighten.

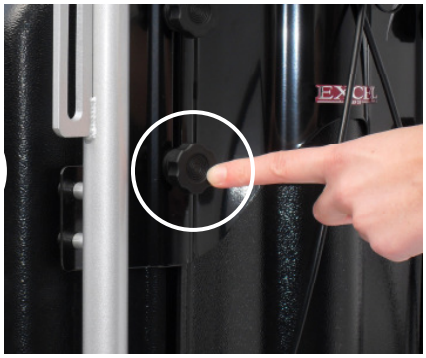

Figure 27

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Adjusting the back and seat of the wheelchair

You attendant can adjust the angle of the back and seat by doing the following:

- Press the black levers which you will near the push handle, see figure 28;
- When you are behind the wheelchair you need to press the right control lever to adjust the angle of the back. When you press the left control lever you can adjust the angle of the seat. When the back and/or seat are in the desired position you can let go of the black lever;
- Check if the backrest and seat are securely tighten.

Figure 28

5.9 Using the rear wheels (tire table) and anti-tip wheels

Removal of the rear wheel

You can remove the rear wheels using the quick release system in the following way:

- Stand next to the wheelchair;
- Tilt your wheelchair slightly so the wheel you wish to remove is slightly off the ground;
- Press the black button in the centre of the wheel (figure 29) and remove the axle and wheel from the frame. Make sure the black button is completely pressed in otherwise the ball bearing safety system that stops the wheel from being removed at the opposite side of the axle will do exactly that;

To put the rear wheel back in place you must reverse the above steps. In order to ensure your safety please make sure the axle is fully in place and the ball bearing system is engaged so the wheel does not come loose during use.

Figure 29

Tire table

Type Designation	Type wheelchair	Tire size front	Maximum pressure front tires	Tire size rear	Maximum pressure rear tires
EXCEL® 'G7'	Self propel	5"X 1 ¼" 6" X 1 ¼" 7½"X1 ¼" 8" X 1 ¼"	2,5 bar / 36 psi 2,5 bar / 36 psi 2,5 bar / 36 psi 2,5 bar / 36 psi	24" x 1" 22" x 1 3/8"	7,5 bar / 110 psi 4,5 bar / 65 psi
EXCEL® 'G7'	Transit	5"X 1 ¼" 6" X 1 ¼" 8" X 1 ¼" 7½"X1 ¼"	2,5 bar / 36 psi 2,5 bar / 36 psi 2,5 bar / 36 psi	12" x 2 1/4"	2,8 bar / 40 psi

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Using the anti-tip wheels

- Go to the back of the wheelchair;
- When you get down to your knees you will see the operating system of the anti-tip wheels, see figure 30;
- Retracting the silver round (figure 31) will cause the anti-tip wheel to slide;
- Let go of the silver round when the anti-tip wheel touches the ground;
- Make sure the anti-tip wheel is fastened correctly and does not move anymore;
- When you do not want to use the anti-tip, retract the silver round with one hand, while pushing up the anti-tip wheel, by sliding it up the holder.

Figure 30

Figure 31

5.10 Using accessories and other options on your wheelchair

Adjusting the debt of the abduction bobbin

- Turn the black button until you can move the abduction bobbin forward and backwards, see figure 32;
- Place the abduction bobbin in the desired position and turn the button back down.

Figure 32

Side support

You can adjust the dept of the side support by loosening the black button on the side. When the side support is in the desired position you need to turn the button back on, figure 33.

The height of the side support is adjustable by loosening the black lever on the back of the wheelchair. Place the side support in the desired height and turn the lever back on, figure 34

Figure 33

Figure 34

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Seat Belt (optional)
Your wheelchair is equipped with a seat belt which you can use the following way:
- When in the wheelchair, you can fasten the belt by clicking the two loose ends together, see figure 35;
- If the belt too loose or too tight you can make it more secure or looser, see figure 36;
- To release the seat belt, you press the red button with 'press' printed on.

Figure 35

Figure 36

Work tray removable (optional)
Your wheelchair is equipped with a removable work tray. The work tray is locked in the tubes which you can find under the armrest. You can remove the work tray by loosening the black button, see figure 37. When you want to place the work tray back on the wheelchair you will have to do the above steps in reverse order.

Figure 37

5.11 Use of the headrest

Removing and adjusting the height of the headrest
You can remove the headrest by pulling the black button on the back of the wheelchair, figure 38:
- Pul the black button with one hand and move with the other hand the headrest up or down;
- You can now remove the headrest or place it in the desired position;
- When the headrest is in the desired height release the button and make sure the headrest is secure before use.

Adjusting the headrest
On the headrest there are three levers (figure 39) that allows you to adjust the headrest into the desired position. These levers work in the following way:
- Turn the levers separately, never simultaneously;
- Move the headrest to the desired position;
- Turn the lever back until they are tight and possibly do the same with the other levers (if an adjustment is required);
- Make sure the head is secure in place and that the three levers are not obstacles. Please note that you can move the levers without loosening of fastening them;
- You can also adjust the headrest by pulling the sides of the headrest in or outwards with your hands, see figure 40.

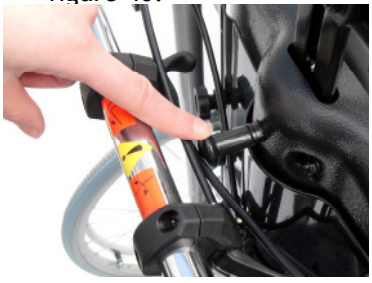

Figure 38

Figure 39

Figure 40

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Certificate

CE

QXL

EN 12183
EN 1041

ISO 7176-15
ISO 7176

CRASH tested
MILLBROOK
testing ground

Product identification

Product	: ***Physically propelled wheelchair***
Brand	: ***Excel***
Model/type	: ***G7***
Version	:

Manufacturer:

Name	***Van Os Medical B.V.***
Address	***Koperslagerij 9***
Country	***The Netherlands***

EU Representative:

Name	***W. van Os***
Address	***Koperslagerij 9***
Country	***The Netherlands***
Function	***Director***

Technical constructed file

Prepared by:	*Name* ***J.M.J. Brouwer BBA***
Function:	***Research and Development***
Issue date:	***01 - 02 - 2009***
TCF:	***01 - 02 - 2009***
Recertification date:	

Certificate/report no.:
Crash test report no. according to ISO 7176/19:

Means of conformity

The product is in conformity with Directive 93/42/EEG based on the use of a Technical construction file in accordance with Article 9 (Class I products) of the Directive

Signature of EU representative:

Place : Steenbergen

Date : 01 - 02 - 2009

Number: VOS.TCF.G7.0730

6. TRANSPORT AND TRANSIT IN CAR

Your Excel® wheelchair is designed to be easily transported by car. Your wheelchair is foldable so the total width is limited to an average measure of 20 cm. Further your wheelchair is equipped with swing away and detachable footrests. At the same time some wheelchairs can be equipped with a couple of size decreasing accessories, like quick release (detachable) rear wheels and a foldable backrest.

6.1 De-assembly

Take away the foot rests on the front side of your wheelchair (see chapter 5 'Instructions for use and mounting options').

1. Remove the seat cushion if your wheelchair is equipped with one;
2. Fold the wheelchair:
   Stand next to the wheelchair. Get a hold of the seat in the middle of the rear and front and pull is straight up. To fold the chair completely, tilt the chair sideward (so the wheels can not drag) and push the sides towards each other.

✹ **Attention! A number of Excel® wheelchairs have lengthened backrest upholstery on the lower side. This lower side is equipped with a Velcro strap, which is folded under the seat. You will have to loosen this first before folding the chair.**

3. If it is necessary to, due to a small space, remove the rear wheels or use the foldable backrest, than see chapter 5, 'Instructions for use and mounting options'.

6.2 Assembly

If the rear wheels are removed, you will have to place them back first (see chapter 5, 'Instructions for use and mounting options').

1. Go stand next to the wheelchair, tilt the wheelchair a bit towards you and push the seat tube down. The wheelchair will un-fold. Go stand before the wheelchair and push again on the two seat tubes to ensure that they are directly on the frame. This is confirmed by flat seat upholstery.

ⓘ ***Warning:***

If you de-assemble/assemble the wheelchair, ensure yourself that both tubes are on their places in the holders on the front of the frame. If not, the chair is unsafe for use.

7. MAINTAINENCE

Protect your Excel® wheelchair by having it serviced regularly.

We strongly advise you to let your wheelchair check at lease once a year by a qualified Excel® dealer, who will only use Excel® spare parts. This periodic inspection will ensure you that the wheelchair will function perfectly for years.

There are a lot of things you can do yourself to keep your wheelchair in optimum condition. If you regularly check the wheelchair and perform (small) maintenance, this will extend the lifetime and increase the ease of use.

7.1 Tyres

Examine tyres periodically for wear and replace them as needed.

Air tyres: These tyres should be checked weekly for correct tyre pressure. You will find the recommended tyre pressure on the rear wheels and you can check it with a standard car or bicycle tyre pressure gauge. If the tyres of the wheelchair not have the correct pressure it will lean to the side where the minimum pressure is. It will also influence the driving comfort and it will mean you have to exert more effort to move the wheelchair.

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PU tyres: More and more we use PU tyres (polyurethane or puncture-free tyres) on the wheelchair. You can recognise these tyres because they do not have a valve. These tyres have the advantage that they do not need to be pumped up and can not be punctured. This PU tyre can just as an air tyre wear out. Check periodically to see if the tread is still deep enough.

> *For the maximum tyre pressure we direct you to chapter 5, ' Instructions for use and mounting options'.*

Warning:

When tyres are not fully inflated this may cause bad functioning of the brakes and make the chair move when not intended.

7.2 Brakes

Before you can check the brakes, you need to make sure the tyre pressure is correct, see chapter 7.1.
Inspect both brakes for sharp rims. If there are sharp rims on the brakes we advise you to replace them. Ensure that all the parts of the brake are in the right position and fastened secure;

- Make sure that the mechanism is functioning smoothly. If it is not functioning smoothly put some oil at turning points with one or two drips of WD40 oil or Teflon. Remove surplus oil and dirt;
- Make sure the brakes do not come into contact with the wheels as you are moving.

7.3 Cross brace

The cross-frame of the wheelchair has to be in a good condition. The cross brace is the basic of your wheelchair.

- Make sure the wheelchair can easily be fold and unfold;
- Make sure the wheelchair travels in a straight line while moving;
- Make sure the cross frame is not bent and shows no wear signs;

When one of the exceptions, noted above, occurs, please contact a qualified Excel® dealer to inspect your wheelchair.

7.4 Rear wheel

A good adjustment of the rear wheels improves the stability of the wheelchair. Also it will allow you to use less energy to move the wheelchair.

- Make sure that the wheels can move freely without touching anything;
- Make sure there is no margin on the rear wheels.

When one of the exceptions, noted above, occurs or if an adjustment is necessary it is recommended to do this through a qualified Excel® dealer.

7.5 Front castor and front castor fork

The front fork must move and turn freely to ensure a smooth ride.

- Make sure the nut of the front fork is nor to loose or to tight. When the nut is too loose, the wheels will rotate but the ride will be uncomfortable. If the nut is too tight, the chair will be difficult to steer because of the bearings getting pushed so the balls can not move freely. When the nut is correct in place the front wheel will stop slowly;
- Make sure the front castor shows no wear signs.

When one of the exceptions, noted above, occurs or if an adjustment is necessary it is recommended to do this through a qualified Excel® dealer.

7.6 Upholstery

It is important to check the lining of your wheelchair regularly. Torn or worn upholstery can no longer support human weight and this can create dangerous situations.

- Check the textile coating for holes, cracks and worn spots;
- Check the upholstery-mounting grommets to make sure that they are all correctly aligned and secure.

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7.7 Cleaning

It is important to clean your wheelchair regularly.

- Clean the upholstery, chassis and plastic components on the wheelchair regularly with a mild soap and water. Never use abrasive cleaners, they can damage the varnish. Also never use steam or high pressure cleaners;
- Wax the varnish of the chassis regularly. Never use solvents, abrasive waxes, caustic chemicals or spray silicone;
- Dry the wheelchair after cleaning. Also dry you wheelchair after you have been, for example, in a rainstorm.

> You can also use a car shampoo; this cleans, protect and gives a beautiful gloss to your wheelchair.

8. PROBLEM ANALYSIS AND SOLUTIONS

Your Excel® wheelchair is inspected and adjusted so that you can use it immediately. Continual use necessitates maintenance, especially if the factory set adjustments have been altered.

The following troubleshooting guide, lists several common problems that may occur and offers corrective actions for each.

> *We recommend the use of only Excel® replacement parts. If you do not use original Excel® parts the warranty will be expired.*

Symptom							
Looseness in chair	Squeaks / rattles	Castor flutter	The wheelchair moves too heavy	Sluggish turning	Chair veers left	Chair veers right	POSSIBLE CAUSE AND CORRECT SOLUTION
✔			✔	✔	✔	✔	Check if the tyre pressure is correct and equal in both wheels. See chapter 7.1.
✔	✔	✔		✔			Check if all nuts and bolts are tightly stuck.
		✔		✔	✔	✔	Rear wheels and/or castors may be adjusted improperly. Make sure that both rear wheels and castor are mounted in identical positions.
			✔				Check if the bearings are not worn.
		✔		✔	✔	✔	Castor forks may be adjusted improperly. Make sure they are adjusted properly.

If you have problems that cannot be solved with the troubleshooting table, we advise you to contact a qualified Excel® dealer.

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9. WARRANTY

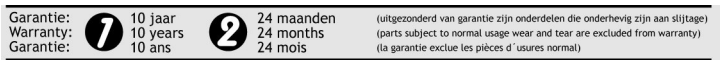
9.1 Warranty application

Together with your wheelchair you get the factory warranty. However, it is possible that your dealer offers a supplementary warranty. This manual only handles the factory warranty as given by Van Os Medical.

This warranty is only granted to you as the consumer. It is not intended to be used commercially (like hiring or institutional use). The warranty is limited to defects to materials and possible hidden shortages. VAN OS MEDICAL guarantees the following components on your EXCEL® wheelchair:

COMPONENT	None	2 years	10 years
A) Side frames, cross bar			✔
B) Wheels, hand brakes, front forks, arm rests, foot rests and all components not stated here under:		✔	
C) Upholstered components like seat and back upholstery and rigid arms, plastic parts as foot plates, coating and rubber parts. Tyres and inner tubes.	✔		

Also you can find the warranty periods label on the frame of your wheelchair. See also chapter 1.



9.2 Warranty definition

Your manual is also the warranty form, fill in the relevant details in and store it carefully.

Warranty conditions
The warranty period commences upon the date of purchase. If within the warranty period, your wheelchair will be defect, it will be repaired or replaced.
However you do need to provide to Van Os Medical a complete filled in warranty registration form or a copy of the bill with date of purchase. Without a warranty registration form or a proof of the purchase date the warranty will start at the date when VAN OS MEDICAL sent the invoice to the dealer.

Repairs and replacement must be performed by an authorized Van Os Medical service agent. To qualify for the warranty, your wheelchair must require the care standards. Furthermore, if a problem occurs, you need to fully inform the Van Os Medical service agent immediately. If you use the wheelchair outside the designated area of the Van Os Medical service agent, you can repair your wheelchair by any other, by the factory approved, service agent.

When parts of the wheelchair, within 24 months after the commence date, needs reparation or replacement, as a result of a manufactory or material error and the wheelchair is with its first owner, the part or parts will be repaired or replaced free of charge.

> *This warranty is not transferrable.*

This warranty does not include any labour charges incurred by replacements.

Replaced or repaired parts fall under the same warranty conditions as the original wheelchair. Worn parts are normally not guaranteed, unless these parts are worn as a direct result of an original manufacturer defect. These parts are for example upholstery, tyres, inner tubes and similar kinds of parts.

The warranty conditions above describe all wheelchair parts, and are applied for the models bought at the normal end-user price.

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With normal circumstances no responsibility is accepted when the wheelchair needs replacement or repairs as a direct result from:

1. Not maintaining the wheelchair and parts according to the recommendations of the manufacturer, or not using the specific original parts;
2. Damaging the wheelchair or parts by inattentive use, accident or wrong use;
3. Adjusting the wheelchair or parts, different from the specifications of the manufacturer, or reparations done before the service agent is warned.
4. If the product is not equipped with an original factory frame number and identification label as described in the manual, see chapter 1.

The wheelchair that is described and showed in this manual can differ from your own model in details. However, all instructions are relevant, independent of slightly different details. We reserve the right to change the product in this manual without further notice. All drawings, measures and capacities showed in this manual, are approximations and may be slightly different to your wheelchairs specifications.

ⓘ ***Warning:***

Van Os Medical can not be liable for any consequent or individual damage whatsoever. While this manual is created with care it is not exclusive. If you are going to use the wheelchair not in accordance with the guidelines in this manual you need to consult with an authorized Van Os Medical dealer. The warranty is only valid during the indicated period. If adjustments are made to the wheelchair, who have structural impact on the product, the warranty will expire completely. U can contact Van Os Medical for an enlarged warranty and supply conditions and a address list of authorized dealers.

For warranty service, contact your authorised dealer from where you bought your wheelchair. If it occurs that you are not helped to your satisfaction concerning the warranty service, please contact VAN OS MEDICAL in writing. You can find the address on front page of this manual.

10. SERVICE AND MAINTENANCE

10.1 General maintenance instructions

Your wheelchair needs periodical maintenance. This is necessary for a long lifetime and an optimal users comfort of your wheelchair. A badly maintained wheelchair will give more technical problems, turn less flexible and fall out the warranty terms.

Preventive maintenance is most important and many of these things you can easily do yourself or a friend or family member can help you. We highlight below the maintenance you can do yourself.

Every week	Check tyre pressure;
Every month	Check the fold ability of the wheelchair and the quick release rear wheels;
	Check upholstery for wear;
	Check wheel movement front and rear and check turn ability of the wheels;
	Check if the brakes are working correct;
Every three months	Check all bolts, screws and nuts and tighten if necessary;
	Check all spokes for tension;
	Check tyre tread for wear.

In chapter 7, you will also find extensive information on the maintenance of your wheelchair.

Furthermore we advise you let you wheelchair check by an authorised dealer every year. Make sure you dealer checks the point mentioned by paragraph 10.2.

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10.2 Service checklist

For optimal life your wheelchair should be periodically maintained by an authorized dealer.

Service interval:	**Service Schedule**								
Service number	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**
Wheels: for example margin, wear bearings, adjust quick-release									
Tyres									
Hand rims: for example wear and burrs									
Front forks: for example control margin, adjustment ball head axle									
Brakes: for example adjustment, re-adjust, control for margins									
Foot rests: for example adjustment, line out									
Frame: for example fracture, welding seams, plastic component									
Arm rests: for example fixation, rigid arms									
Sealing-wax / coating / chrome									
Seat cushion									
Upholstery: for example adjust straps, control									
Connection material on all components									
Teflon treatment of all moving parts									
Checked by (initials)									
Inspection date									

Service stamp dealer

1	2	3	4	5
6	7	8	9	10

In practice the usage intensity varies greatly from person to person. It may therefore be that in your case, the wheelchair requires servicing more or less often than once a year.

✹ Maintenance is not warranty. Your dealer may deviate from the maintenance interval.

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EXCEL

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