



USER MANUAL

English



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Thank you for choosing this SoftWheel product.
Please review this manual before using the product.

Dealers: this manual must be given to the user of the product

This product complies with Directive 93/42/EEC concerning medical devices. The launch date of this product is stated in the CE declaration of conformity.

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The information in this manual may be subject to change without notice.

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1. GENERAL

1.1. Information about the User Manual

Thank you for choosing SoftWheel. The user manual contains important information about your new wheels; please review carefully and follow the safety information to ensure your safety and prevent damage to the product. This information will also help you avoid invalidating your product warranty and maintaining product quality.

1.2. Symbols

Symbols that are used in this User Manual:

 WARNING	WARNING: indicates a hazardous situation that could result in serious injury or death if it is not avoided.
 CAUTION	CAUTION: indicates a hazardous situation that could result in minor or slight injury if it is not avoided.
 IMPORTANT	IMPORTANT: indicates a situation that could result in damage to property if it is not avoided.
 TIP	TIP: Useful tips, recommendations or information for trouble-free use.
	CE: This product complies with Directive 93/42/EEC concerning medical devices.

This product is a class I 510(k) exempt products. The establishment is registered, and the device is listed according to 21 CFR820 Part 807.

1.3 Intended Use

Indications: SoftWheels are indicated for adolescents and adults who weigh 38-136 kg (85-300 lbs.) and who use a wheelchair.

Contra-indications: There are no contra-indications associated with proper use.

Suitable wheelchairs include those designed for active and semi-active use, and wheelchairs designed to be pushed by an assistant.

2. PRODUCT IDENTIFICATION

2.1. Each box comes with an identification label that includes data for wheel model, wheel dimensions, axle diameter, stage, and wheel serial numbers.

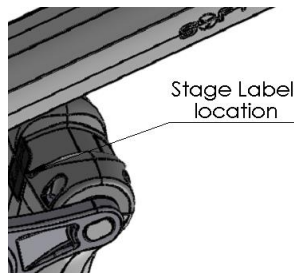
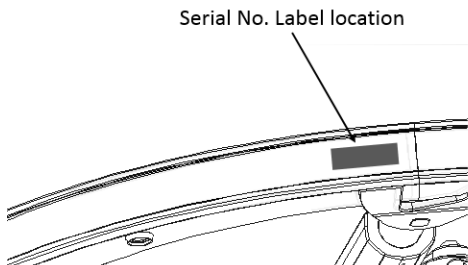
2.2. Each wheel comes with four (4) **UNREMOVEABLE** identification labels:

- One (1) Serial No. label, located inside the wheel rim (underneath the tire). The Serial No. label includes the wheel serial number, model, and rim dimension. **Under no circumstances should this unique identifier label be removed from the wheel rim.** Removal of labels will void the product warranty.
- Three (3) Stage labels, located on each cylinder. The Stage label indicates the preload of the suspension mechanisms. **Under no circumstances should any of these 3 stage labels be removed from the cylinders.**



IMPORTANT

Removal of any of these four (4) stickers will void the product warranty.



3. SAFETY

3.1. General Safety Information

General safety advice for using a wheelchair applies. We recognize that people use their wheelchairs to suite their personal needs and lifestyles, and we believe that people should continue to do what works best for them. Standard precautions should be applied for general safety. Several precautions, however, should be made for the protection of the wheelchair user or assistant. For information about product safety notices and product recalls, please see www.softwheel.technology.

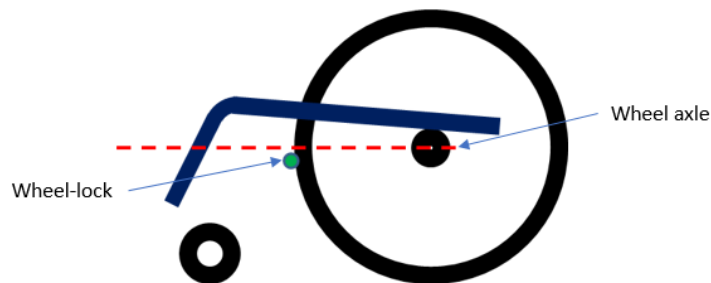
SAFETY GUIDELINES:

WARNING

- At high speeds, you could lose control of your wheelchair and tip or fall.
- When you use SoftWheels, control your speed and only ride as appropriate for the given ground conditions. By maintaining a prudent speed, you will avoid unnecessary risks that could cause a tip or fall. In order to avoid serious injury, always maintain control, safe speed, and stability while using SoftWheels.
- Maximum recommended speeds:
 - 6 km/h on the street, pavement, and pedestrian areas (approximately 3.5 mph)
 - 12 km/h in cycle lanes (approximately 7 mph)

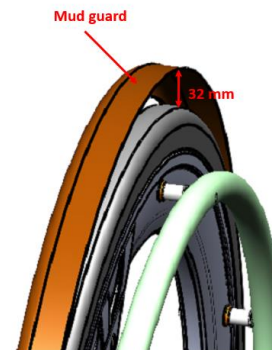
CAUTION

Wheelchairs equipped with a wheel-lock that is positioned below the wheel's axle (see figure below) might experience a momentary disengagement of the wheel from the wheel-lock, when sufficient downward force to activate the Softwheel occurs while the wheel-lock is engaged. The chair may move slightly during this disengagement. This may happen, for example, when dropping into the wheelchair during a transfer. It is recommended that the wheel lock be placed above the wheel axle whenever possible. If it is not possible, you should check that your use does not result in an unintended disengagement by performing any activities that may cause this, while someone stands behind the wheelchair holding the push handles to prevent the chair from moving.



- Adjust your riding style to suit relevant conditions: weather, surface, obstacles, individual ability, experience, etc. There is a risk of skidding on wet surfaces, gravel, or uneven terrain. Avoid collisions in general.
- To allow the SoftWheel suspension technology to function correctly and avoid unexpected wheel-braking that could cause injuries, **you must allow at least 32 mm clearance (1.2 inches) between the upper tire edge and the wheelchair mudguard.** See diagram.

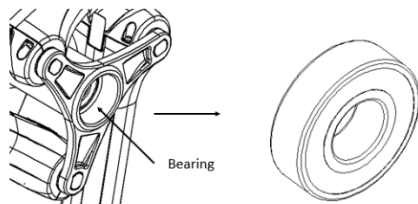
⚠ CAUTION Fingers, arms, or items of clothing may get caught in the moving wheel, between the wheel and the chair, or in the movable & removable parts of the wheel, such as the axle. When fitting and using SoftWheels, take caution to make sure that nothing gets caught.



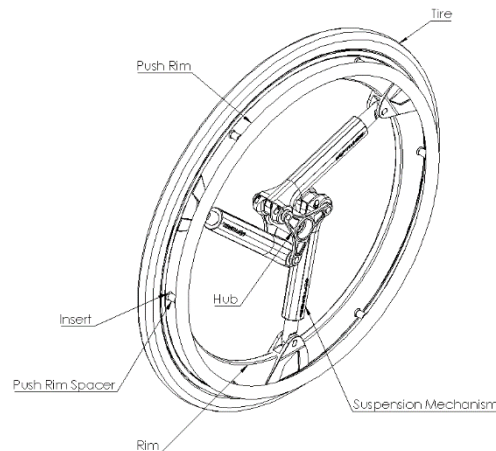
- **ⓘ IMPORTANT** Ensure that you are using the correct stage on your SoftWheel. If you don't know which stage fits for you, contact your authorized dealer, therapist or medical professional. (See section 15.4). An unsuitable stage will lead to an uncomfortable ride and could negatively impact your SoftWheel riding experience.
- Do not use a metric axle pin with an imperial SoftWheel or imperial wheelchair housing unit.

4. COMPONENTS

4.1. Overview of Components



Each SoftWheel contains two (2) bearings that are fixed into the hub.



5. ACCESSORIES

5.1. Accessories Package

Recommended accessories for the standard SoftWheel sizes (24" or 25"):

Tires: ETRTO 25-540 or 24 x 1" or ETRTO 25-559 or 25 x 1"

Inner Tubes: ETRTO 25-540 or ETRTO 25-559

Push rims: 24" or 25"

Push rim spacers

If SoftWheels are not purchased together with accessories, please see below for recommendations for accessory parts (sections 5.2 – 5.6).

5.2. Tires

24" SoftWheel: ETRTO 25-540 or 25" SoftWheel: ETRTO 25-559



TIP

- In case of a tire puncture, consult a suitable workshop (e.g. bike repair shop or a bicycle or mobility equipment dealer) to have the tube replaced by a skilled professional.
 - The size of the tire is marked on the side of the tire.
 - The tire pressure needs to be maintained at the recommended level in both wheels to avoid potential decrease in rider comfort; to keep the wheel lock working properly; and to ease wheel use & propelling.
- See section 11 for recommended maintenance schedule.

5.3. Inner Tubes

Inner tubes with **minimum 35mm valve length** are recommended for use with SoftWheels.

24" SoftWheel: inner tube size ETRTO 25-540

25" SoftWheel: inner tube size ETRTO 20/25-559

5.4. Valve Adapters

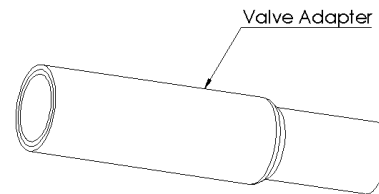
A valve adapter is needed for tire inflation.

Two (2) standard valve adapters are included with your SoftWheels.



TIP

Recommendation: for easy inflation, screw the valve adapter in by hand. Do not overtighten the valve adapter.



5.5. Push Rim Spacers



CAUTION

It is recommended to use spacers that are bigger than the width of your fingers to avoid the risk of trapping your fingers in the rim/push rim gap.

5.6. Push Rims

Use a standard, equally spaced 6-point push rim.

5.7. Axle pins

SoftWheels are fitted to a wheelchair by using a removable, quick-release axle pin designated for wheelchairs. Axle pins come in different types (diameter) and sizes (length). See below for guidance re. appropriate type and size.

Axle pin type: Wheelchair axle pins are available in two types (diameters):

Metric: D= 12mm

Imperial: D= 0.5" (12.7mm)

(D = Diameter)



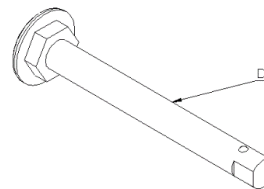
IMPORTANT

You must use the axle pin type that matches the specification of your wheelchair.



CAUTION

- You must choose the correct axle pin diameter that matches both the internal diameter of the SoftWheel bearing and the diameter of the wheelchair's axle housing unit.



- Do not use a metric axle pin with an imperial SoftWheel or an imperial wheelchair housing unit - it will cause a space of 0.7mm between the axle pin and the housing, leading to an uncomfortable ride and negative impact on your SoftWheel riding experience.
- Verify that the axle pin is inserted fully into the wheel when assembling the SoftWheel to the wheelchair.

Axle pin size:

Wheelchair axle pins are available in several sizes (lengths). The SoftWheel bearing-to-bearing length is 54mm, so you must use an axle pin that is long enough to properly connect the SoftWheel to your wheelchair's axle housing.

L1 = SoftWheel bearing-to-bearing length

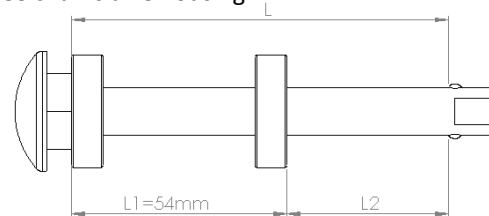
L1=54mm

L2 = Wheelchair's axle housing length

L2= specific to wheelchair

L = Axle pin length

L = specific to axle pin length

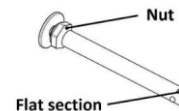


IMPORTANT

Wheelchair axles are available in several lengths. You must choose the correct length of axle pin, so it will be long enough to go through the SoftWheel hub into your wheelchair's axle housing and engage it so that the wheel is held firmly in place (see section 8).

Adjusting axle pin length to SoftWheels and the wheelchair:

1. Insert the axle pin to the wheelchair without the SoftWheels and measure the distance. It should be 54mm.
2. Adjust the length of the axle pin so that it is 54mm in the wheelchair without SoftWheels.
3. To adjust the length of the axle pin, turn the top nut of the axle pin while holding the axle pin by the flat section (see illustration).
4. After adjusting the axle pin to the correct length, assemble the SoftWheels to the wheelchair and make sure that the connection is complete. Verify there is no loose movement by the axle pin – it should be completely secure and fully engaged.
5. If there is movement by the axle pin, adjust the axle pin again to make sure it is the correct length (see step 3 above). Adjust the axle pin until there is no loose movement once it's inserted into the SoftWheel and wheelchair.





WARNING

There is a risk of serious injury from a tip or fall if the axle pin is not securely engaged.

Always ensure that the axle pins are fully engaged whenever you fit a wheel. It is recommended that you consult with your authorized wheelchair supplier, therapist or medical professional to perform this activity.

6. SOFTWHEEL SIZES: WHEELS AND BEARINGS

6.1. Wheels

SoftWheels are available in two (2) wheel sizes:

24" (ETRTO- 540mm) or 25" (ETRTO- 559mm)

Check that you have the correct wheel size for your wheelchair.

! IMPORTANT

If you do not know the wheel size that is suitable for your wheelchair, please consult your wheelchair dealer, healthcare provider, therapist, or medical professional.

6.2. Bearings

SoftWheels are available in two (2) bearing sizes:

Metric: $d = 12\text{mm}$

Imperial: $d = 0.5''$ (12.7mm)

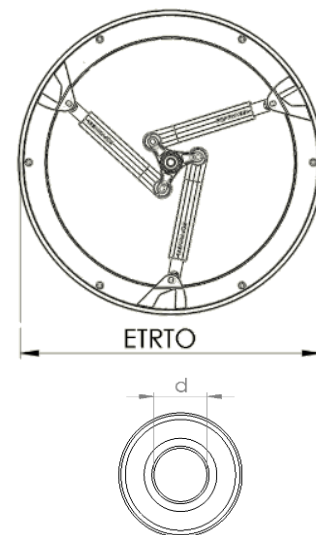
(d = internal diameter of the bearing)

! CAUTION

- You must choose the correct bearing diameter that will match the diameter of your wheelchair's axle housing unit.
 - The axle pin must match both the SoftWheel bearing diameter and the diameter of your wheelchair's axle housing unit.
- See section 5.7 for advice on axle diameters and lengths.

! IMPORTANT

If you do not know the diameter of the axle housing unit of your wheelchair, please consult your wheelchair dealer, healthcare provider, therapist or medical professional.



7. ASSEMBLING ACCESSORIES FOR YOUR SOFTWHEEL

If you purchased SoftWheels with accessories, you will receive your SoftWheels ready for use with the accessories already assembled (you will only need to inflate your tires).

If you purchased SoftWheels without accessories, you must follow these instructions to assemble your accessories onto your SoftWheels.

! IMPORTANT If you haven't assembled accessories to your wheelchair by yourself or if you don't feel 100% comfortable with this assembly, contact your authorized dealer, therapist or medical professional.

Assembly Instructions:

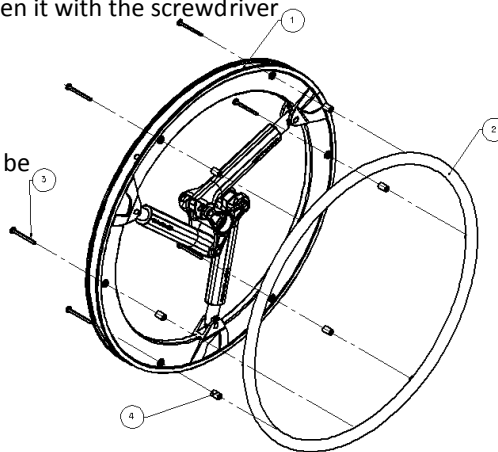
7.1. Push Rim Assembly

- Apply a drop of LOCTITE 243 on the pin threads (part #3 in diagram below).
- Insert the push rim screw using an appropriate screwdriver; do not tighten it with the screwdriver
- To tighten the push rim screw, use a torque-meter to 1[Nm] torque

! IMPORTANT Use 55mm length screws.

! IMPORTANT **Do not over-tighten the push rims!** Push rims should be tightened with a torque meter to 1[Nm]

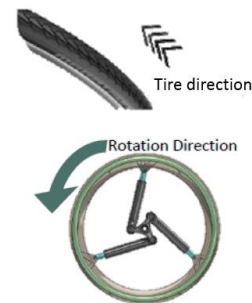
#	Part	QTY (per wheel)
1	SoftWheel	1
2	Push Rim	1
3	Screw	6
4	Spacer	6



7.2. Tire Assembly

1. Inflate the inner tube slightly until it becomes round
2. Insert the inner tube into the tire
3. Screw the Valve Adapter into the valve
4. Put the tire onto the SoftWheel - the direction of the tire treads should be aligned with the rotation direction of the wheel (see figure)
5. Inflate the tire to the recommended pressure of the tire manufacture


Parts	QTY (per wheel)
SoftWheel	1
Inner tube	1
Tire	1
Valve Adapter	1




CAUTION

The tire pressure needs to be maintained at the recommended level in both wheels to maintain driving comfort, to keep the wheel locks on your chair working properly, and to ease propelling of the wheels and your wheelchair.

For an explanation about the difference between Right and Left wheels, see section 8.2

 **TIP** To assemble the tire onto the SoftWheel, use a bicycle tire lever.

 **IMPORTANT** Do not use a metal tire lever - it can cause damage to your SoftWheels.

 **TIP** The size of the tire and the size of the inner tube must fit the size of your SoftWheel (see section 13).
Recommendation: Remove the Valve Adapter after inflation (connect it only when you need to inflate the tire).

8. CONNECTING SOFTWHEELS TO YOUR WHEELCHAIR

8.1. Safety Information



- Before using SoftWheels, check their general condition (see section 10)
- Ensure that you are using the correct SoftWheel size that matches your wheelchair specifications! (see section 6.1)
- Ensure that you are using the correct stage on your SoftWheel. If you don't know which stage is the correct fit for you, contact your authorized dealer, therapist or medical professional. (see section 12.4). An unsuitable stage will lead to an uncomfortable ride and could negatively impact your SoftWheel riding experience.
- Do not use a metric axle pin with an imperial SoftWheel or imperial wheelchair housing unit.
- Ensure there is a clearance of at least 32 mm (1.2 inches) between the upper tire edge and the chair's mudguard (see section 3.1). If this clearance is not maintained, there is a risk of sudden braking that can cause a tip or fall.



Once assembly is complete, ensure that the removable axle pins are fully engaged and check that your SoftWheels are locked to the wheelchair's housing unit. If the pins aren't fully engaged or the SoftWheels aren't locked to your wheelchair housing unit, there is a risk of a tip or fall that could potentially lead to risk of injury.



SoftWheels must not be mounted at a camber angle that exceeds 12 degrees.

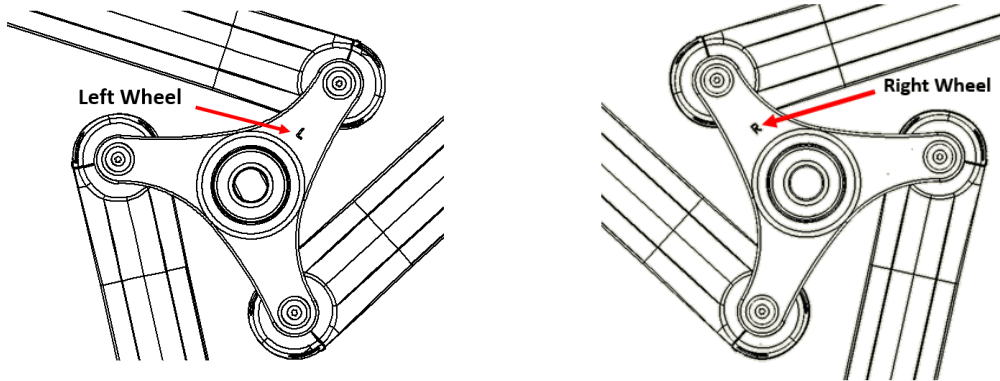
8.1. ASSEMBLING SOFTWHEELS TO YOUR WHEELCHAIR FOR THE FIRST TIME

If you purchased SoftWheels ready for use, your dealer will explain the main functions of the wheel and will assemble and fit the SoftWheels to your wheelchair.

If you purchased SoftWheels without the wheels being fitted to your chair, and you are assembling SoftWheels to your wheelchair independently, you must follow the instructions below.

The difference between LEFT / RIGHT wheels:

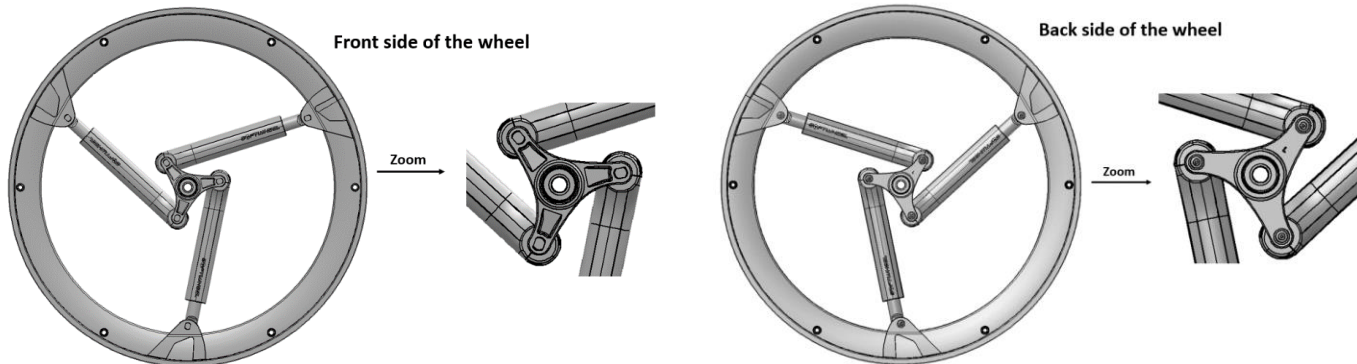
Each wheel is marked with an “L” or “R” to indicate whether it is a LEFT wheel or a RIGHT wheel. This is indicated with a letter on the hub, on the back side of the wheel.



The difference between the FRONT / BACK of the wheel:

The FRONT of the wheel is the side of the wheel that faces out from your wheelchair.

The BACK of the wheel is the side of the wheel that faces towards your wheelchair.



CAUTION

You must sit somewhere other than in your wheelchair to remove your old wheels and to assemble your SoftWheels!

1. Release the wheel lock. If your wheel lock is engaged, you won't be able to remove your old wheel.
2. Hold your wheelchair upright with one hand. Ensure that you are holding your wheelchair properly.
3. With your second hand, remove your old wheel from the wheelchair by pressing on the quick release axle pin and pulling the wheel out.
4. Remove the axle pin from your old wheel.
5. Insert the axle pin into your new SoftWheel by pushing the axle pin into the SoftWheel hub.

IMPORTANT

Make sure that the axle pin is the correct size & type for your new SoftWheel (See section 5.7). You may need to use a new axle pin for your SoftWheel.

- Make sure that you insert the axle pin into the front of the SoftWheel.

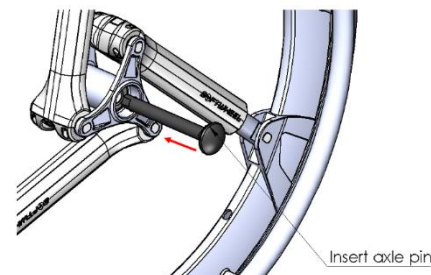
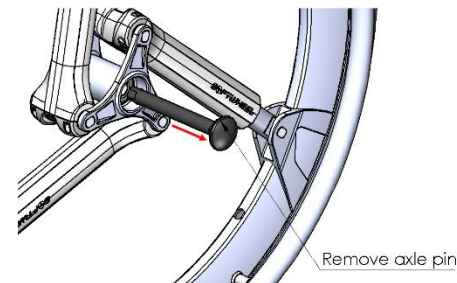
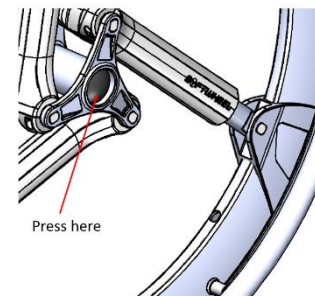
(The front of the wheel is the side of the wheel that faces out from your wheelchair; the back of the wheel is the side of the wheel that faces into your wheelchair)

6. Assemble the left or right SoftWheel(with the inserted axle pin) into the axle housing unit on your wheelchair.

IMPORTANT

Make sure that the LEFT SoftWheels connected to the LEFT side of the wheelchair and the RIGHT SoftWheels connected to the RIGHT side of the wheelchair.

7. Ensure that the axle pin is fully engaged in the axle housing unit of the wheelchair.





IMPORTANT

To check whether the SoftWheel is fully engaged, it's recommended that you try to pull it out with moderate force. The SoftWheel should not move out at all, if it's properly engaged.

8. Rotate the wheel slowly and ensure that there are no 'touches' or 'rubs' between the SoftWheel and the wheelchair frame or wheel lock. A minimum clearance of 10mm is recommended.

If you have a mudguard on your wheelchair, there must be a clearance of at least 32mm between the tire and the mudguard.

9. Repeat steps 1-8 with the second wheel.
10. Check that the wheel locks are functioning properly with your new SoftWheels.



CAUTION

You might need to adjust the wheel locks to the wheel. It is recommended that you consult with your authorized wheelchair dealer, therapist or medical professional to perform this activity and to avoid potential injury.

In case the wheel lock needs to be adjusted:

1. Loosen the screws on the track of the wheel lock
2. Adjust the wheel lock's position so that it applies moderate pressure on the tire when it is engaged
3. Tighten the screws on the track of the wheel lock
4. Verify the appropriate pressure of the wheel lock on the tire by sitting on the wheelchair and locking both locks.



CAUTION

If the wheel locks do not function properly, consult your authorized wheelchair supplier, therapist or medical professional on re-positioning the wheel locks and to avoid potential injury. You can also refer to the user manual for your wheelchair as a reference for setting up the wheel locks properly.

8.1. ASSEMBLING & REMOVING SOFTWHEELS IN EVERYDAY USE

In the course of everyday use, you may assemble and remove your SoftWheels, as needed. See below for directions for assembling and removing your SoftWheels in daily use.

⚠ CAUTION You must sit somewhere other than in your wheelchair to assemble or remove your SoftWheels, to avoid risk of injury.

Assembling SoftWheels to your wheelchair:

1. Release the wheel locks.

⚠ IMPORTANT If your wheel locks are engaged, you won't be able to remove your wheels.

2. Hold your wheelchair upright with one hand.
3. Ensure that you are holding your wheelchair properly.
4. Insert the axle pin into your left or right SoftWheel by pushing the axle pin into the SoftWheel hub.

⚠ IMPORTANT Make sure that the front side of the wheel is directed to you.

5. Assemble the left or right SoftWheel (with the inserted axle pin) into the axle housing unit on your wheelchair.

⚠ IMPORTANT Make sure that the LEFT SoftWheels connected to the LEFT side of the wheelchair and the RIGHT SoftWheels connected to the RIGHT side of the wheelchair.

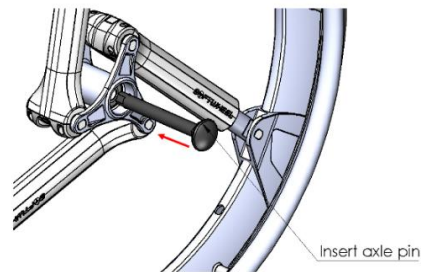
6. Ensure that the axle pin is fully engaged in the axle housing unit of the wheelchair.

⚠ CAUTION To check whether the SoftWheel is fully engaged, it's recommended that you try to pull it out with moderate force. The SoftWheel should not move out at all if it's properly engaged.

7. Rotate the wheel slowly and ensure that there are no 'touches' or 'rubs' between the SoftWheel and the wheelchair frame or wheel lock; improper positioning could lead to potential injuries. A minimum clearance of **10mm** is recommended.

If you have a mudguard on your wheelchair, there must be a clearance of at least **32mm** between the tire and the mudguard.

8. Repeat steps 1-6 with the second wheel.
9. Check that the wheel locks are functioning properly with your SoftWheels.



⚠ CAUTION If the wheel locks do not function properly, consult with your wheelchair supplier, therapist or medical professional on re-positioning the wheel locks. Improper positioning of the wheel locks could lead to potential injuries.

Removing SoftWheels:

1. Release the wheel locks.

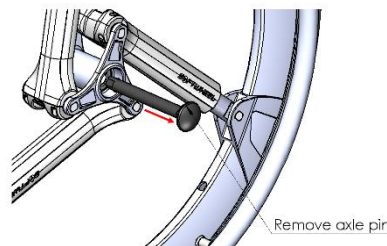
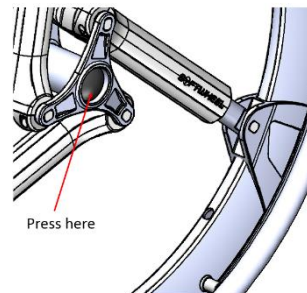
⚠ IMPORTANT If your wheel locks are engaged, you won't be able to remove your wheels.

2. Hold your wheelchair upright with one hand.

⚠ IMPORTANT

Ensure that you are holding your wheelchair properly.

3. With your second hand, remove your left or right SoftWheel from the wheelchair by pressing on the quick release axle pin and pulling the wheel out (see diagram below).
4. Repeat steps 1-3 with the second wheel.



9. SAFETY INFORMATION BEFORE USE

⚠ IMPORTANT Every time you assemble SoftWheels to your wheelchair, check their general condition (see section 11).

⚠ CAUTION

- Ensure there is a clearance of at least 32 mm (1.2 inches) between the upper tire edge and the chair's mudguard (see section 3.1). **If this clearance is not maintained, there is a risk of sudden braking that can cause a tip or fall.**
- Ensure that the wheel locks are functioning properly with your SoftWheels. If the wheel locks do not function properly, consult with your wheelchair supplier, therapist or medical professional on re-positioning the wheel locks. Improper functioning of the wheel locks could lead to potential risk of injury.

- Before using SoftWheels, ensure that you do not have a tire puncture in one of your SoftWheels. Improper air pressure could lead to potential risk of injury.

WARNING

When using SoftWheels with small front wheels, the wheelchair could possibly get stuck at curbs or on floor grooves. If your front wheels are unsuitable for the surface you're driving on, it can cause a tip or fall and lead to potential injury. Make sure that the front wheels are suitable for the surfaces that you're driving on.

9.1. Safety Information During Use


CAUTION

- At high speeds, you could lose control of your wheelchair and overturn, leading to potential risk of injury.
- Adjust your riding style to suit relevant conditions, e.g. weather, surface, obstacles, individual ability, experience, etc.
 - There is a risk of skidding on wet surfaces, gravel, or uneven terrain, leading to potential risk of injury.
 - Avoid collisions in general
- Ensure that you use spacers that are bigger than the width of your fingers to prevent the risk of trapping your fingers in the rim/ push rim gap.
- Though there may be a small gap between the SoftWheels and your mudguards, to prevent the risk of trapping your fingers, ensure that you always propel your wheelchair by using the push rims only.
- Though there may be a small gap between the SoftWheels and your wheel locks, to prevent the risk of trapping your fingers, ensure that you always propel your wheelchair by using the push rims only.
- When using SoftWheels for the first time, you must acclimatize yourself to your wheelchair with your new SoftWheels before using it without assistance.
- If you are using a manual wheelchair, you should brake by applying force on the push rims against the rolling direction. While braking, friction will be produced between the push rims and your hands; make sure to hold both push rims and to apply force evenly until the wheelchairs comes to a stop. If necessary, use specialized gloves to avoid hand burning.
- When transporting your wheelchair in a vehicle, it is recommended that you remove your SoftWheels from the wheelchair and **ensure that your wheelchair, SoftWheels, and accessories are securely stored in the vehicle** (see section 7.3), to prevent injury or damage if there is a sudden stop or collision.

9.2. Storage

IMPORTANT

- Do not store your SoftWheels in a wet or humid environment! Store your SoftWheels in a dry environment, only indoor.
- Do not store your SoftWheels near a source of heat!
- Do not store other items on top of your SoftWheels!

 **CAUTION** Do not store your SoftWheels in unstable or broken storage units, this could lead to a risk of injury and/or damage to the product!

10. MAINTENANCE AND GENERAL CONDITIONS

Ongoing maintenance is very important to ensure safe, reliable and enjoyable use of your SoftWheels. To maintain your SoftWheels correctly, perform these following checks & maintenance:

Test Type	Frequency		
	Immediately	Weekly	Monthly
Tire pressure		✓	
Visual check		✓	
Push rims		✓	
Check the SoftWheels connection to the chair		✓	
Cleanliness		✓	
Tire wear			✓
SoftWheels checked after a collision or accident	✓		

Test descriptions:

1. Tire pressure:

It is highly recommended that you check the tire pressure at least on a weekly basis.

- Test the tire pressure of your SoftWheels and ensure sufficient air pressure in both tires (not less than the minimum required according to the tire specifications)
- If there is insufficient air pressure, inflate the tires to the required pressure.
If necessary, go to a suitable supplier or workshop to inflate your tires.
- In case of a tire puncture, contact a suitable supplier or workshop

2. Visual check:

- Check your SoftWheels and ensure that there are no broken parts, cracks, loose or missing screws, or other defects
- In case you find any of the above, immediately contact your authorized supplier, therapist or medical professional
- Check cleanliness of suspension mechanisms. Clean your suspension mechanisms with a dry cloth if needed.



CAUTION If you find any defects, do not use your SoftWheels before consulting your authorized supplier, therapist or medical professional to fix the problem. Do not try to fix the problem yourself - this could void the product warranty. If you find any defects, discontinue use immediately until the issue is fixed by an authorized supplier, therapist or medical professional.

3. Push Rims:

Check your Push rims and the parts that connect the Push rims to your SoftWheels (6 screws; 6 spacers) and ensure that there are no loose or missing screws, broken or missing parts, cracks, or other defects.



CAUTION In case you find any of the defects listed above, immediately contact your authorized supplier, therapist or medical professional and discontinue use.



IMPORTANT Spacers are loose if hand can rotate them. This is an indication of loose screws. If you need to tighten or replace the push rim screws, use:

- Loctite 243 on screw threads
- A **torque-meter**: max. tightening torque is 1[Nm]
Do not over-tighten the push rims!

4. Check the connection of the SoftWheels to the chair:

To check that the SoftWheels are fully engaged, try to pull them out by using moderate force. The SoftWheels should not move out at all if they are properly engaged.



WARNING If the SoftWheels are not engaged properly, remove the SoftWheel and remove the axle pin. Check if there is any dirt or materials in the hub bearing or axle housing unit of your wheelchair. Check to ensure that the axle is adjusted to the correct length (see section 5.7). If the problem persists, immediately contact your authorized supplier, therapist or medical professional.

Do not use your SoftWheels before fixing the problem! There is a risk of a tip or fall if your SoftWheels are not properly connected to the wheelchair.

5. Cleaning SoftWheels

It is highly recommended that you clean your SoftWheels on a regular basis. Ensure that your SoftWheels are clean. If the wheels are dirty, clean them



IMPORTANT

- Dirt or other material on your SoftWheel can cause damage and effect your riding experience.
- Assure suspension mechanisms are always clean! Clean your suspension mechanisms with a dry cloth if needed.
- To clean your SoftWheels, use water and a wet cloth only! Cleaning should be done with care.
- Do not use chemicals, caustic cleaning agents, or coarse abrasives products.
- Sand and salt can damage the SoftWheels and cause corrosion! After exposure to sand or saltwater, for example when visiting the beach, clean your SoftWheels with water and a wet cloth as soon as possible.

6. Tire wear

- Examine your tires for signs of wear

- If there is evidence of abnormal wear, contact a suitable workshop or your therapist or medical professional. Consult the tire specifications for more information re. tire wear.

**CAUTION**

If abnormal wear is found, do not use your SoftWheels before fixing the problem! Improper tire usage could lead to a potential risk of injury.

7. SoftWheels checked after a collision or accident

After a heavy collision or accident, your SoftWheels must be checked immediately by an authorized supplier! Contact your authorized supplier, therapist or medical professional immediately after a collision or accident.

**CAUTION**

After a serious collision or an accident, do not use your SoftWheels until they've been checked by an authorized supplier!

**IMPORTANT**

It is recommended that you have your SoftWheels checked once a year by an authorized supplier to ensure proper operation.

11. AFTER USE (DISPOSAL)

To properly dispose of a SoftWheel, contact your local waste service provider for disposal guidelines. Be environmentally responsible; disposal and recycling methods are subject to local and national regulations.

12. TECHNICAL INFORMATION

12.1. SoftWheel Types:

SoftWheel A

Wheel size: 24" / 540mm (ETRTO 25-540mm) or 25" / 559mm (ETRTO 25-559mm)

Suspension: Adaptive in-wheel suspension system

Weight (without accessories): 2200 gr

Load limit: 136 kg

Materials:

Part	Material
Rim	AL 6061 T6
Hub	AL 6061 T6
Suspension mechanism	AL 6061 T6
Suspension mechanism cover	PC-ABS
Bearings	Stainless steel
Inserts	Nylon 6,6
Screws	Stainless steel

SoftWheel M

Wheel size: 24" / 540mm (ETRTO 25-540mm) or 25" / 559mm (ETRTO 25-559mm)

Suspension: Adaptive in-wheel suspension system

Weight (without accessories): 1850 gr

Load limit: 120 kg

Materials:

Part	Material
Rim	Pure magnesium (97.5%)
Hub	AL 6061 T6
Suspension mechanism	AL 6061 T6
Suspension mechanism cover	PC-ABS
Bearings	Stainless steel
Inserts	Nylon 6,6
Screws	Stainless steel

12.1. Accessories:

Technical information for accessories, if purchased together with SoftWheels:

Part	Description	Size
Push Rim 24"	WC AL- Push Rim- Black 24"	24"
Push Rim 25"	WC AL- Push Rim- Black 25"	25"
Tire 24"		ETRTO: 25 - 540
Tire 25"		ETRTO: 25 - 559
Inner tube 24"	Inner tube	ETRTO: 25 - 540
Inner tube 25"	Inner tube	ETRTO: 20/25 - 559
Push Rim screws	M5 X 50 PHILLIPS PAN DIN 7985 A2 ST/ST	
Push Rim spacers		Length: 15mm
Valve Adapter	included with SoftWheels	

12.2. Environmental Conditions:



CAUTION

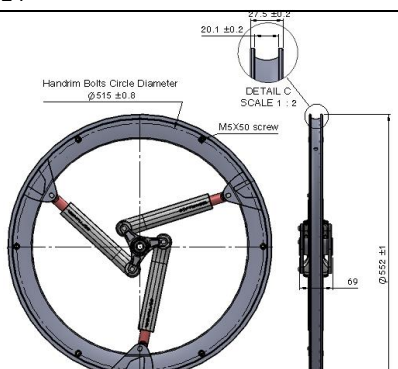
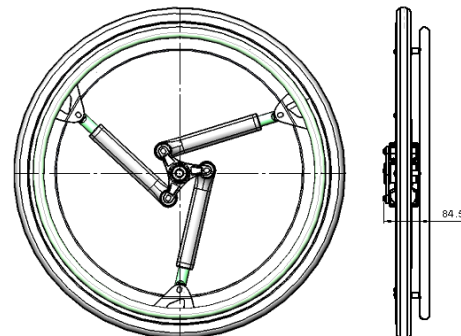
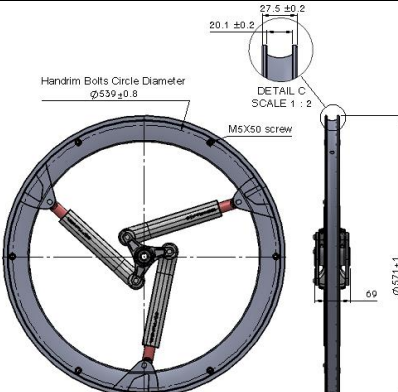
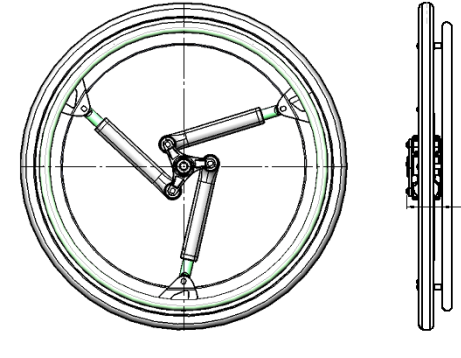
Do not expose SoftWheels to temperatures above 60°C or below -20°C (above 140°F or below -4°F). Surface temperatures can increase when the wheelchair is exposed to external sources of heat, e.g. sunlight.

12.3. Stages:

Stage	Weight (kg)	Weight (lbs.)
1	38-45	85-99
2	46-59	101-130
3	60-72	131-158
4	73-84	159-185
5	85-99	186-218
6	100-136	219-230

Disclaimer: For recommendation only. Please consult with your authorized supplier, therapist, or medical professional to determine the correct stage for you.

12.4. General Dimensions:

SoftWheel 24"	SoftWheel 24" (with accessories)
	
SoftWheel 25"	SoftWheel 25" (with accessories)
	

12.5. WARRANTY

SoftWheels Limited Warranty Terms & Conditions

SoftWheel Ltd. ("SoftWheel") wheelchair wheel products known as "SoftWheels" (the "Wheels") are warranted against manufacturing defects in materials or workmanship, for the shorter period of: (i) twenty-four (24) months commencing on the supply date of the Wheels to the customer, or (ii) forty-eight (48) months from date of the Wheels manufacture ("Warranty Period"), provided that the Wheels are operated under manufacturer's instructions & under normal conditions and reasonable use. In this respect, proof of supply date of the Wheels and performance of an inspection by SoftWheels required. Warranty claims must be processed through the Distributor that the wheels were purchased from.

Warranty claims will be subject to filling out Maintenance Claim Form and forwarding it to the Distributor that the Wheels were purchased from. This Limited Warranty is made only to the original purchaser of the new Wheels, and it shall remain in force during the Warranty Period, only as long as the original purchaser retains ownership of the Wheels. his Limited Warranty is not transferable.

During the Warranty Period, in the event of manufacturing defects in materials or workmanship in the Wheels, SoftWheel shall repair or replace, at its sole option, all parts that are found, at SoftWheels discretion, to be defective and subject to this Limited Warranty. Notwithstanding the above, for Wheels which are no longer in production and/or became obsolete during the Warranty Period, SoftWheel will (through the original purchaser's distributor/ supplier) offer the original purchaser of the Wheels replacement parts or NFR pricing.

The distributor shall pay all shipping charges or loss connected with the return of the Wheels to SoftWheel for repair or replacement. If a defect will be found in the Wheels, SoftWheels hall return the repaired or replaced Wheel(s) to the distributor at its expense. This Limited Warranty shall not apply to:

1. Normal wear and tear (e.g. bearings), nor to defects, malfunctions or failures that result from the abuse, neglect, shocks or crashes, improper maintenance, alteration, modification, accident, or misuse.
2. Wheels used for sporting activities, including & without limitation, basketball, quad rugby, skate parks, tennis or any similar sporting activities.
3. The Wheels are not to be used for descending stairs, curbs or any similar obstacles that are higher than 20CM (~7.8").
4. Damage occurring during shipment or handling, improper assembly or assembly with non- compatible products.
5. Wheels NOT purchased from a SoftWheel authorized dealer.
6. Any damage or defect caused by racing or off-road use or by road hazard impact.

7. Wheels that have been altered repaired or modified.
8. Wheels used with excessive loads, above 136 kg (300 lbs.) + 15Kg (33 lbs.) wheelchair
9. Wheel corrosion or cosmetic flaws occurring after purchase due to chemicals, caustic cleaning agents, salt exposure, climate conditions or neglect. Material pitting or discoloration due to lack of maintenance. Cleaning should be done using a water-wet cloth only and with care.
10. Wheel that are used above the authorized speed limit, 30 KPH
11. Wheels that were stored and/or used in un-dry environments and/or exposed to a temperature higher than 60°C and below -30°C (-22°F to 140°F). Occasional exposure to rain and/or snow is permitted.
12. Pumping the tires on the wheels over 100PSI.
13. Soaking or submerging the wheels in water or any other liquid.
14. Removal of any sticker from wheel including stage indicator sticker, serial number sticker and/or wheel manufacturing details is forbidden and would void warranty.
15. Removal of the plastic pistons covers, any screws or bolts in the suspension system. Note: any alteration of the bolts and/or screws on the Wheels can be later detected in the lab.
16. Replacement of bearings should only be done following SoftWheels approval and through an authorized dealer only.

This Limited Warranty is the only express or Limited Warranty applicable to the SoftWheel Wheels. Any implied warranties, including warrants of merchantability and fitness for a particular purpose, shall be limited in scope and duration in accordance with this Limited Warranty. SoftWheel shall not be responsible for any direct, incidental, consequential or exemplary damages. This Limited Warranty gives you specific legal rights; you may also have other legal rights which vary from state to state/country to country. Some states/countries do not allow limitations on the duration of implied warranties, or the limitations or exclusion of incidental or consequential damages; therefore, in such case, the limitations and exclusions set forth in this Limited Warranty may not apply to you. This Limited Warranty set forth herein may not be extended, enlarged or otherwise modified by any SoftWheel dealer, distributor, agent, or employee, and SoftWheel does not assume any liability or make any warranty except as stated in this Limited Warranty. This warranty does not cover SoftWheel Wheels or parts whose serial number or identification has been erased, damaged, or modified.