

## **RolloGuard**

## **Instant Fall Protection**

## **User Manual**





#### 1. Introduction

This manual describes the RolloGuard unit. The manual does not describe warnings, cautions, or the like related to the Rollator itself. Please refer to the Rollator user guide. This user manual contains a description of the medical device and important guidance to ensure a correct and safe usage of the product. It is important prior to use to read this manual carefully. It is especially important to read the safety requirements and follow these.

We continuously develop our products and we reserve the right without further notice to change the specifications and functions of products.

If you have any questions, please contact your dealer or Mobilex A/S.

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## 2. Safety requirements

To ensure safe use of the RolloGuard unit, we ask that you kindly to read this User's Manual and use this product properly with a full understanding of the warnings and cautions related to product handling, product features, and the like.

Requirements related to proper handling are marked with the symbols below.



**Warning** Indicates that incorrect handling may cause **death** or **severe injury**.



Caution

Indicates that incorrect handling may cause **injury** and/or **property damage**.

#### **Prior to use**



## Warning

- Do not remove and install the RolloGuard unit onto another Rollator or device. Doing so may lead to an accident.
- In the event the RolloGuard unit operates abnormally or produces an abnormal sound, do not use the Rollator. If repair is required, be sure to contact the dealer.



## Caution

• Check if string or the like is coiled around a tire or wheel. If so, prior to product use, slowly remove the obstruction while being careful not to pinch your fingers.

## **During use**



## Warning

- Use only the Rollator in accordance with Approved Use (see section 2.2). Other uses may result in serious accidents.
- Be sure to use the RolloGuard unit with the cover installed. If debris or water enters the interior, the predetermined brake configuration will not be achieved, resulting in the risk of falling. If the cover comes off, contact the dealer and stop using the Rollator.
- Refrain from using the Rollator on a wet surface. Doing so may lead to slipping and poor friction between tire and surface, resulting in an accident.
- Do not use the Rollator on steep sloping surfaces.
- Use both hands when pushing the Rollator forward. Using just one hand might result in only one wheel braking and doing so may lead to an accident.





### Caution

- Moving the Rollator backwards and then immediately forwards can cause the RolloGuard unit to activate unintentionally. After deactivation, wait a short moment before start walking again.
- Be careful of bumpy and uneven surfaces as the RolloGuard unit may activate bringing the wheels to an instant halt.
- Always pay attention to the wheels and if they are in a locked position. This may
  cause accidents and excessive tire wear. If a wheel is locked, please stop the Rollator,
  move it in reverse, wait for a short time and then move forwards pushing with both
  hands.

## **During repair and inspection**



## **Warning**

 Do not loosen, disassemble, or modify parts connected by bolts and nuts. When disassembly or repair is required, always request an authorized dealer to perform the task.



#### **Caution**

- Do not remove the RolloGuard unit cover. If debris or water enters the interior, the brake may not activate or apply proper brake force, resulting in the risk of falling or ability to protect against fall.
- Never apply grease or oil to the RolloGuard unit. Doing so may lead to an inadequate brake activation or brake force, resulting in falling or ability to protect against fall.

## **During storage**



#### Warning

- Do not store the Rollator in a location exposed to water, wind, or rain. Doing so may lead to poor operation and/or device failure, resulting in an accident.
- If water enters the brake device, apply the brake at minimum five times prior to use to verify that the brake works. If the brake still does not work, apply the brake several additional times, verify brake force recovery, and then use the product. In case the brake does not work after several brake attempts, do not use the Rollator and contact the dealer.
- Do not store the Rollator in the trunk of a car or any location that reaches high temperatures. Doing so may lead to poor operation and/or device failure, resulting in an accident.



#### **Caution**

 Do not carry the Rollator itself by holding the tires. Doing so results in the risk of fingers getting pinched between the tire and frame.

# 3. Description / Approved use and device functionality Device functionality

The RolloGuard Fall Protection is a technology used to protect against fall accidents and minimize injuries using walking aids such as a rollator and wheeled walker. RolloGuard reacts to increase in rollator speed and brings the rear wheels to a halt. RolloGuard is the only current product on the market that reacts to sudden accelerations.



The RolloGuard unit, mounted inside rim, is designed to easily replace existing wheels on a Rollator (wheeled walker) without changing the Rollator design, purpose or intended use.

RolloGuard is configured to operate as follows;

- Reacts to unintentional forwards acceleration (speed increase)
- Activates when the Rollator acceleration is larger than a predefined threshold (m/s2)
- Prevents the wheel from rotating forwards once activated
- Wheel stays in locked position as long as there is forwards torque
- Deactivation of the RolloGuard unit is performed by moving the Rollator in reverse

## NOTE! The RolloGuard unit does NOT provide protection when moving the Rollator in reverse.

#### Approved use

Use both hands when pushing the Rollator forward. Pushing the Rollator forwards with only one hand might result in just one RolloGuard unit activating. This is expected behavior and depends on several factors such as the rollator weight and the individual pushing force of each hand. As the RolloGuard unit reacts to change in speed (acceleration), moving the rollator backwards and then immediately forwards, can cause the brake to activate unintentionally. After deactivation, wait a short moment before moving forwards again.

Moving quickly over uneven surfaces such as bumpy roads or sidewalks, or quickly over a door step might activate the RolloGuard unit. Make sure to walk slowly and with caution on and over uneven surfaces.

A rollator equipped with RolloGuard will be marked with a sticker placed on the RolloGuard unit brake drum (component no. 7 in section 3) of the rear wheels. RolloGuard is delivered with the green sticker (low protection level) as standard, the other two magnets for adjustment are supplied and can be installed by the authorized dealer. This sticker is referenced below with a specific color, description and intended use;

Sticker	Protection Level	Description	
	High	The fall protection has maximum sensitivity. It will be activated and stop the Rollator at very small changes in speed (accelerations). This level is only suitable for a user who moves slowly and needs a fall protection that reacts instantly. This sensitivity setting can cause the RolloGuard unit to activate when moving over door thresholds and on uneven surfaces and is most suitable for indoor use.	
	Medium	The fall protection has medium sensitivity. It will be activated and stop the Rollator at small changes in speed (accelerations). This level is suitable for a user who moves with a slow to medium pace but still needs fall protection that reacts instantly. This sensitivity setting is less prone to cause the RolloGuard unit to activate when moving over door thresholds and on uneven surfaces and is most suitable for indoor use.	
	Low	The fall protection has low sensitivity. It will be activated and stop the Rollator at larger changes in speed (accelerations). This level is suitable for a user who moves with a normal to high pace and need fall protection that reacts quick but not instantly. This sensitivity setting is less prone to cause the RolloGuard unit to activate when moving over door thresholds and on uneven surfaces, and is suitable for both indoor and outdoor use.	

NOTE! If the Rollator is used in any way other than as described above, this may result in an accident.



## **Device component names**





Nu.	Name	Remarks
1	Cover	
2	Rim	
3	Tire	
4	Brake drum	
5	Main body installation nut	M8 Nylock
6	Rollator frame adaptor	
7	Approved usage sticker	See section "Approved usage"

## 4. Technical data RolloGuard unit specification

Dimensions	Outer wheel diameter: 200 mm. Wheel width: 35 mm	
Weight	Approximately 1.1 kg including wheel rim and tire	
Maximum user weight	150 kg (including loaded objects, such as bags)	
Activation adjustment 3 levels – Indicated by colored sticker. Note that changing adjustment only be performed by an authorized dealer		
Brake force	30 Nm (forwards direction)	
Brake activations 10 000 brake activations and wheel stops without excessive wear		

# 5. Care & Maintenance Daily inspections



## **Warning**

 In the event an abnormality is found during the inspections below, stop using the Rollator and contact the dealer.



#### Caution

- Do not loosen, disassemble, or modify parts connected by bolts and nuts. When disassembly or repair is required, always request the dealer to perform the task.
- When taking care of the RolloGuard unit, do not pour water on the unit. Wipe down the unit with a damp cloth using fresh water.
- Do not apply grease or oil to the RolloGuard unit. Doing so may lead to an inadequate brake force or prevent the brake to activate properly, resulting in falling or reduced ability to protect against fall.
- Do not use soapy water or oil-based cleaners. Doing so may lead to liquid entering the interior and, as a result, failure to exhibit an adequate brake force or prevent the brake to activate properly, resulting in falling or reduced ability to protect against fall.



Performing regular inspections ensures increased safety during product use.

## **Basic inspection details**

- Are there any cracks or deformations in the tires or wheels?
- Does the brake work well?
- During use, does the RolloGuard unit produce any abnormal noise?
- During use, do the wheels shake significantly?
- Are any wheel installation nuts or main body installation bolts loose?
- Is the cover loose or does it come off easily?

#### Care



### Caution

- When taking care of the Rollator, do not pour water on the RolloGuard unit. Wipe down the unit with a damp cloth using only fresh water.
- If water enters the RolloGuard unit, apply the brake at minimum five times prior to
  use to verify that the brake function properly. If the brake does not work, apply the
  brake several times, verify brake force recovery, and then use the Rollator. In case
  the brake does not work after several brake attempts, do not use the Rollator, and
  promptly contact the dealer.
- Do not apply grease or oil to the RolloGuard unit. Doing so results in the risk of an inadequate brake activation or brake force, resulting in falling or reduced ability to protect against fall.
- Do not use soapy water or oil-based cleaners. Doing so may lead to liquid entering the interior and, as a result, failure to produce adequate brake activation or brake force, resulting in falling or reduced ability to protect against fall.
- Wipe down the tires, wheels, etc., with a damp cloth using only fresh water.

## 6. Most common problems and solutions

If you think something is wrong during use



## Warning

- If an abnormality exists, do not use the Rollator.
- If you sense that something is abnormal during use, immediately stop using the Rollator and promptly contact the dealer.
- Do not disassemble or modify the RolloGuard unit. When disassembly or repair is required, always request the dealer to perform the task.
- Do not apply grease or oil to the RolloGuard unit. Doing so may lead to an inadequate brake activation or brake force, resulting in falling or reduced ability to protect against fall.



Conduct investigations according to each condition, following the descriptions below. If the abnormality still exists, contact the dealer.

Condition	Investigation	Action
The wheels remain locked	<ul> <li>Did a foreign object obstruct the wheel?</li> <li>Is the Rollator parking brake activated?</li> </ul>	<ul> <li>Remove any foreign object.</li> <li>Release the Rollator parking brake.</li> </ul>
The brake is not working well	Do you have correct brake adjustment level?	If you need a higher or lower brake adjustment level, contact the dealer.
The product produces an	s an Is something caught in the wheel?	Remove any caught objects.
abnormal sound		If the problem remains, contact the dealer.
The wheel shake significantly	Is a bolt or nut loose?	Check the bolt and nut connections. If the problem remains, contact the dealer.



