

User Manual

EXTREME



knapen-trailers.eu

User Manual EXTREME EN - v202105

KNAPEN
TRAILERS



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1 Introduction

1.1 General

Dear driver,

Congratulations on the purchase of your new EXTREME moving floor trailer. An indispensable tool in your daily work. Our greatest concern is with your safety. This manual plays an important role in this, however only in conjunction with the "General Users Manual" supplied with the trailer.



Before using the trailer for the first time, read the "General Users Manual" and then this "EXTREME Users Manual" carefully to prevent accidents and/or serious damage. If you have any questions or comments, please contact us via www.knapen-trailers.eu/contact.

Trailers of type KT01 and KT02 (see type plate) are provided with CE marking. This means that the trailers comply with the applicable European directives. The accompanying Declaration of Conformity specifies these guidelines.



Knapen Trailers B.V. excludes liability for unsafe situations, accidents and damages resulting from:

- Ignoring warnings or instructions as displayed on the trailer or described in this documentation.
- Use for other applications or under conditions other than those specified in this documentation.
- Modifications made to the trailer, including the use of replacement parts other than original replacement parts.
- Insufficient maintenance.
- Unauthorised removal of safety guards and/or safety measures.
- Inexpert or improper use of the trailer.

Knapen Trailers B.V. cannot be held liable for the consequential damage caused by malfunctions of the trailer (e.g. damage to products, business interruption).






We wish you many safe kilometres!

Kind regards,

Knapen Trailers.

1.2 Symbols in this manual

This manual uses various symbols:

Symbol	Description
	A safety instruction follows this symbol. Failure to follow this instruction correctly may result in damage to your trailer, injury, and in some cases death.
	Additional information follows this symbol. For example, a link to another document or a useful tip.
	Reference to maintenance and/or cleaning.
	Reference in case of malfunctions.
	Further instructions are described in the Knapen Trailers General Users Manual.

1.3 Using the EXTREME

The EXTREME is made of exceptionally wear-resistant steel. This makes the trailer ideal to transport heavy abrasive materials such as:

- > Scrap
- > Rubble
- > Bulky waste
- > End-of-life vehicles
- > Electro motors
- > Engine blocks

The type of load to be transported determines the choice of the right floor. The two most commonly used floors are the 15 plank XHDI and the 9 plank V-Floor steel. (See Ch 5.7).



Products that require a floor sheet (see General Users Manual) are unsuitable for the EXTREME



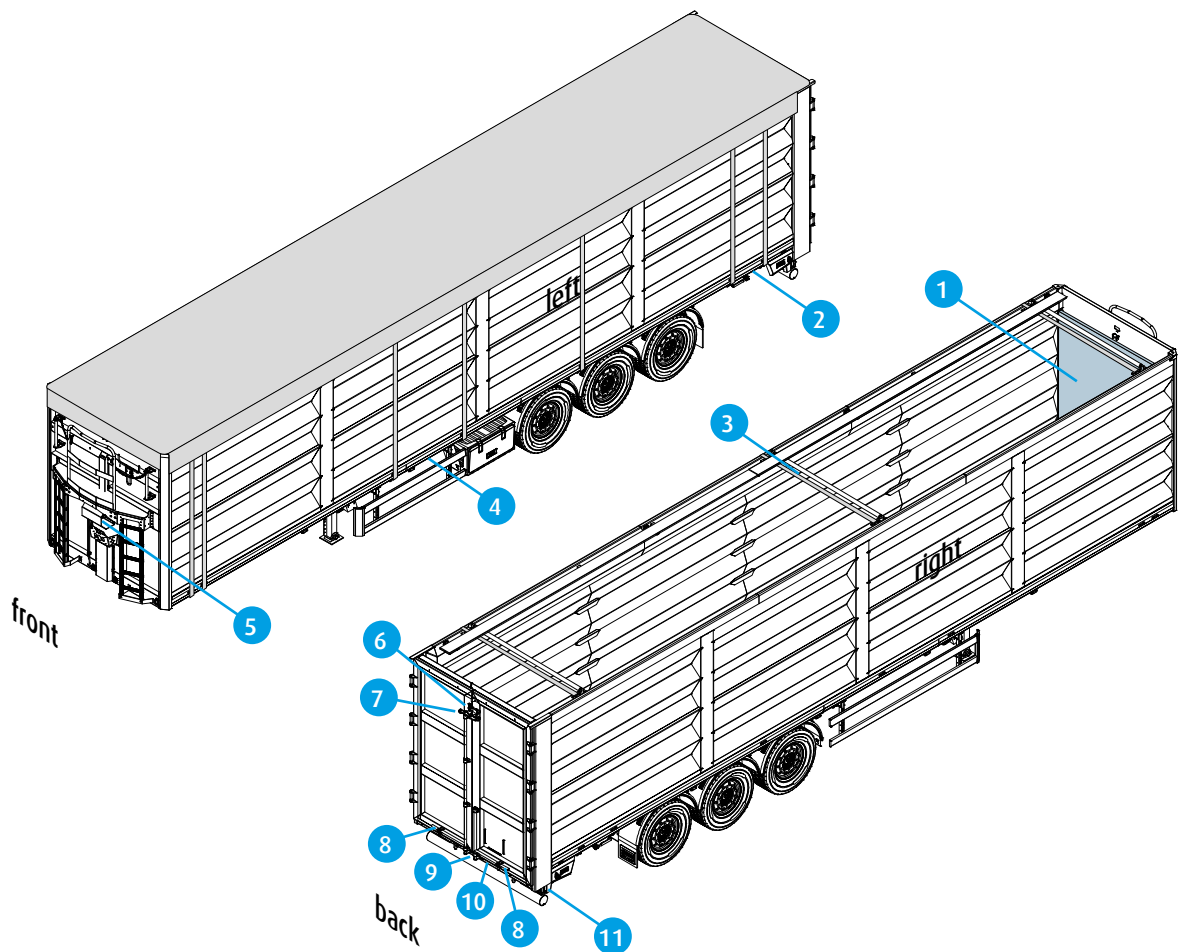
The floor is not suited for heavy point loads. A point load can damage the floor planks and guides. Point loads also have an effect on wear and tear or damage to the side wall.

2 Vehicle identification

2.1 Trailer position indications

NO	Description	Chapter
1	Sheet Clean Sweep	CH 5.1
2	Operation pneumatic locking device rear doors	CH 5.2
3	Bars / straps	CH 5.5
4	Receiver remote control	
5	Mechanism Clean Sweep	CH 5.1
6	Spacer	CH 5.2
7	Locking hook	CH 5.2
8	Operating handle	CH 5.2
9	Door lock	CH 5.2
10	Pneumatic locking device rear doors	CH 5.2
11	Folding rear light plate	CH 5.10

Positions may be different, depending on type and configuration



3 Safety



Read this chapter carefully prior to using the trailer.
Always apply the following points of attention in the daily use of the trailer.

3.1 Standard visual inspection before driving off

The visual inspection before driving off is very important for the safety of the driver, bystanders, and fellow road users.

Points for attention are:

Are the doors closed and is the pneumatic door locking device switched on?

Is the lighting visible and is the number plate visible and legible? (rear light plate lowered)

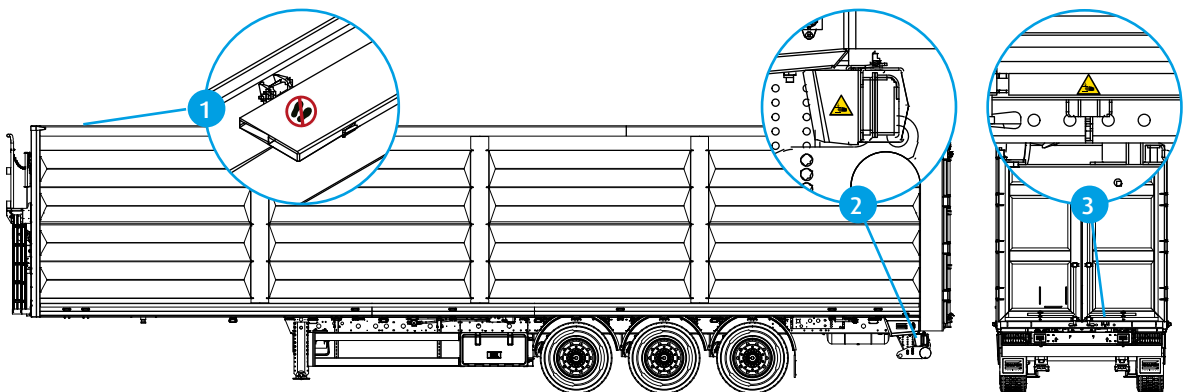
Is the lighting working properly?

Is the outside of the trailer free of cargo residues and/or protruding cargo?

3.2 Safety markings

Explanation of stickers used.

NO	Icon	Description
1		Do not stand on the protective plank
2, 3		Risk of crushing hands



4 General use of trailer



General use of the trailer is described in the "General User Manual".

5 Using the EXTREME



For maintenance and/or cleaning of the moving floor, see Ch 6.
In case of malfunctions of the moving floor, see Ch 7.

5.1 Clean Sweep

As the side walls and floor of the EXTREME have an irregular shape, the trailer is equipped with a Clean Sweep system as standard. The flexible sheet ensures the contours of the trailer are followed as accurately as possible. Depending on the type of cargo loaded, residues may be left behind after unloading.



The functioning and operation of the Clean Sweep is identical to on a standard Knapen Trailer. (see General Users Manual)



5.2 Operating the rear doors



Depending on the type of load, (high) pressure may develop against the rear doors of the moving floor trailer. When releasing the door lock, the rear doors may be pushed open with great force.

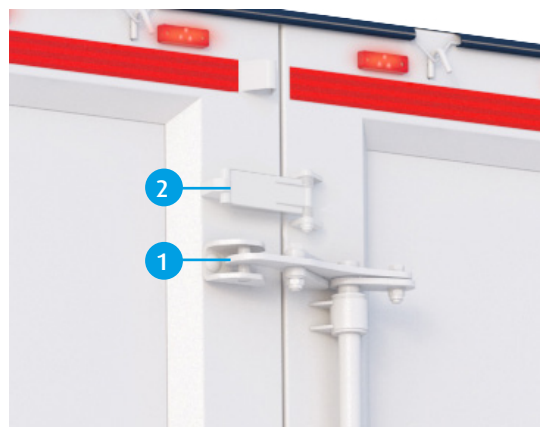


For maintenance and/or cleaning of the pneumatic door locking device see Ch 6.

Closing the rear door

To compensate for the absence of the upper beam, the EXTREME is equipped with a special locking hook (1) on the right-hand door. This hooks onto the left-hand door. The bottom operating handle operates the upper and lower locking hooks simultaneously. Always check and ensure that both hooks are closed properly.

To enable the doors to close when the walls are leaning slightly inwards, the right-hand door is fitted with a spacer (2). This spacer pushes the left door to create space to close the right door. Ensure the spacer is firmly attached in the latch.



See Ch 2 for position indications

5.2.1 Locking the rear doors



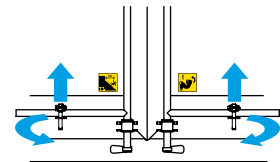
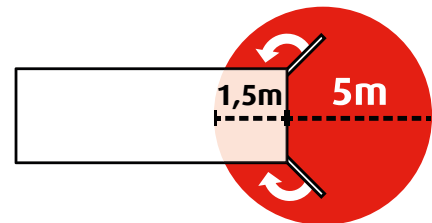
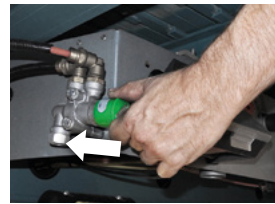
Using the pneumatic locking device for the rear doors is strongly recommended.

After opening the door lock, the pneumatic rear door locking device ensures that the doors of the loaded trailer remain closed until the trailer has been positioned above a pit and/or the driver has taken sufficient distance to unlock the doors.

Given the nature of the cargo (large, heavy often indivisible loads):

- it may be difficult to determine from the outside whether the cargo is exerting pressure on the rear doors.
- there may be a risk of falling cargo when the doors are opened.

Step	
1	Put the pneumatic rear door locking device in the locked position by pressing the green button on the control panel.
2	Check there is no-one in the (red) danger zone.
3	Open the door locks of the rear doors carefully. Open the right door first.
4	Pull out the green button on the control panel to release the pneumatic door locking device.
5	Secure the doors against the side of the trailer using the retractable door retainer.

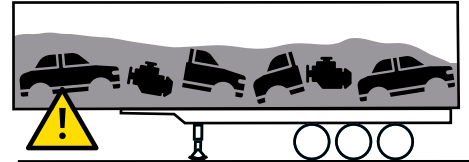


5.3 Loading of bulk goods

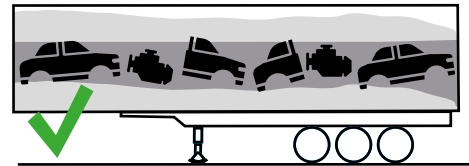


Heavy objects falling from great height into the trailer may damage the floor. Incorrectly loading the trailer will cause permanent damage to the trailer.

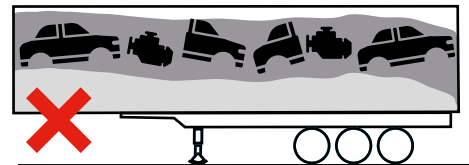
When heavy objects are loaded from above, the first layer of cargo must be loaded carefully to prevent damage to the floor.



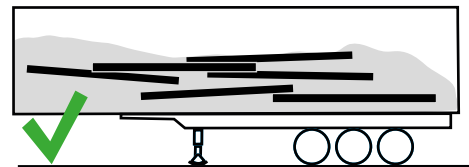
If possible, load a layer of lighter material first. This can act as a buffer for the other heavy objects to be loaded.



During loading avoid the centre of gravity becoming too high, due to a possible risk of tipping. To prevent tipping and ensure stability, load heavy cargo as much as possible at the bottom of the load.



Cargo that is long (length >2200 mm) should be placed lengthwise in the trailer. If this is not done, long cargo can push up against both side walls. The entire load will become stuck and may cause serious, permanent damage.

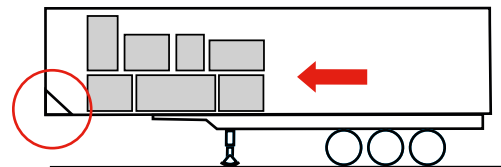


5.4 Loading using the moving floor



When transporting general cargo, the load must be secured in accordance with the applicable regulations. Lashing hooks cannot be mounted in an EXTREME.

When loading using the moving floor it is important that the load does not move too far forward to prevent damage to the head board, the wedge or the floor at the front.

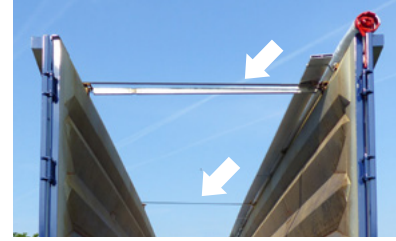


5.5 Using the bars



Depending on how much the load compresses, the side walls may curve outwards. Extreme compression can cause permanent damage to the trailer.

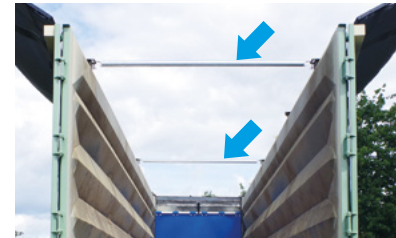
The EXTREME is equipped as standard with straps that act as bars. These straps are easy to operate from the outside and can be used to quickly create an unobstructed passage for the cargo to be unloaded.



If the walls of the trailer have curved slightly outwards after loading, the straps can also be used to pull the walls back together so that the rear doors can be closed.



Additional steel bars can be mounted in the EXTREME as an option.



The EXTREME can be used without bars. In this case, the side walls may curve outwards to a great extent. Loading must be done carefully to avoid permanently distorting the side walls.



5.6 Floor systems



If the trailer is equipped with an XHDI floor, a CargoFloor system is mounted. For operation, maintenance and malfunctions, see the "General Users Manual".

If the trailer is equipped with a V-Floor steel, a Keith system is mounted. For operation, maintenance and malfunctions, see the Keith Users Manual.

5.7 Floor profiles



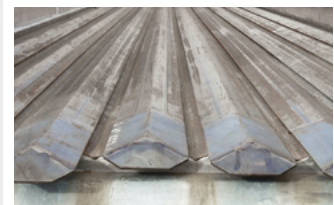
When transporting fine scrap, there is a risk of particles becoming stuck between or under the floor planks. In this case, the moving floor must be completely dismantled. This is not covered by the warranty.



The floor is not suited for heavy point loads. A point load can damage the floor planks and guides. Point loads also have an effect on wear and tear or damage to the side wall.

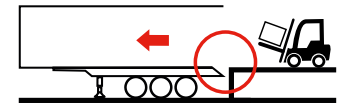
5.7.1 Standard floors

The type of load to be transported determines the choice of the right floor (see Ch 1.3).



Floor	XHDI 22/10	V-Floor steel
Number of planks	15	9
Wear resistant	● ● ● ○ ○ ○	● ● ● ● ● ● ● ●
Impact resistant	● ● ● ● ○ ○	● ● ● ● ● ● ● ●
Own weight		
Pallets	X	X
Forklift*	✓	X

* The slanted shape of the rear of an EXTREME trailer means that driving a forklift into the trailer with an XHDI floor requires extra attention and caution.



5.8 Sheeting systems



For use of the roof sheet, see "General Users Manual". Because it has no top bar, the EXTREME cannot be equipped with a PowerSheet®



If the EXTREME is equipped with a standard roll-over sheet, the open sheet can be protected using a protective plank. Standing on the protective plank is not permitted.

Step	
1	Use the key for the roof sheet to raise the plank.
2	Use the key for the roof sheet to lower the plank after loading.



5.9 Folding rear light plate



Taking part in traffic without clearly visible lighting is prohibited. Only operate the folding rear light plate when there are no objects or persons in the range of movement.



For maintenance and/or cleaning of the rear light plate, see Ch 6.

The EXTREME is equipped with a folding rear light plate. When unloading, raise the rear light plate to avoid damage.

Step	
1	<p>Press button 4 'lights 2' on the Knapen remote control to raise the rear light plate.</p> <div style="display: flex; justify-content: space-around; align-items: center;">   </div>
2	<p>Press button 4 'lights 2' on the Knapen remote control again to lower the rear light plate to its original position.</p> <div style="display: flex; justify-content: space-around; align-items: center;">   </div>

Before taking part in traffic, always check that the folding rear light plate is in its original, lowered position. Any cargo residues, for example, may prevent the rear light plate from lowering completely.

The rear light plate will automatically lower at a driving speed faster than 5 km/h after unloading or while moving the trailer.

6 Maintenance and cleaning

6.1 Trailer maintenance instructions

	daily	weekly	monthly	annually
Ease of movement folding rear light plate (see Ch 6.3)		x		
Operation/condition pneumatic locking device (see Ch 6.4)	x			
Closing doors		x		

6.2 Maintenance door locking device

The pneumatic rear door locking device works optimally if the lock is parallel to the rear doors. If this is not the case, it is possible that the doors may not open even after unlocking. Underneath your trailer you can adjust the position of the pneumatic rear door locking device by means of the threaded rod, so that the pneumatic door locking device is parallel to the rear doors.

Make sure the pneumatic rear door locking device is always parallel to the rear doors.

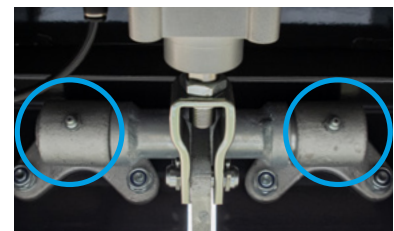


Loosen the lock nut (key 24), adjust the position of the pneumatic rear door locking device by turning the threaded rod.



Due to frequent use and pollution, the pneumatic rear door locking device may no longer function optimally. In this case, clean the locking mechanism and immediately lubricate the pneumatic rear door locking device. This to prevent unsafe situations. There are two lubrication points at the bottom of your trailer. Clean the lubrication points and then lubricate them with a grease gun.

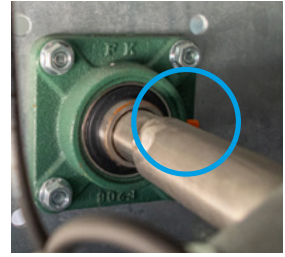
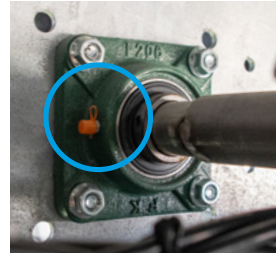
Lubricate both lubrication points using a grease gun. Optionally, the lubrication points can be mounted at the outside.



6.3 Folding rear light plate

Lubricate the lubrication points on both sides using a grease gun.

Optionally, the lubrication points can be mounted at the outside.



7 Troubleshooting

System malfunction	Cause	Solution
Clean Sweep lowers	Brake not adjusted properly	Adjust Clean Sweep brake
Door locking device does not work	Incorrect setting	Reset, see Ch 6.2
Moving floor does not move	Material stuck between or under floor profiles	Remove any obstacles, possibly remove floor profile
	Other	See General User Manual and/or Keith manual
Rear light plate does not raise	EBS plug not connected	Connect plug
	Remote control does not work	See General User Manual Ch 7.5 Troubleshooting Knapen Trailers remote control
	Mechanical blockage	Unblock
Rear light plate does not lower	Trailer not above set speed	Increase speed
	Mechanical blockage	Unblock
	Remote control does not work	See General User Manual Ch 7.5 Troubleshooting Knapen Trailers remote control
	Electric valve does not switch	Switch off power to the valve



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