

# USER MANUAL

## PICKUP EN CARGO MR

mobilitum

VERSION: H-ST-1200102-G  
DATE: SEPTEMBER 2024  
LANGUAGE: ENGLISH  
TYPE: MR



**STUYF®**



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This user manual contains the 'original instructions'.





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# 1. Introduction

## 1.1. Document storage

The user of the machine is responsible for storage of this user manual so that it is available if required.

This manual only applies to the following types of machines:

- MPAXAX
- MCAXAX

The type of the machine can be found on the type plate, see paragraph 3.3.

The version number of this manual can be found on the front cover of this manual. The most recent version can be found at [www.mobilitum.com](http://www.mobilitum.com). The manufacturer is constantly developing its products. We point out that changes are reserved and that claims based on the information in this manual will not be accepted.

## 1.2. Contact details manufacturer

### Mobilitum Factory B.V.

Smitspol 4a  
3861 RS Nijkerk  
Nederland  
KVK: 92769578  
BTW: NL866166348B01

Tel: 030 - 4100 137  
Mail: [info@mobilitum.com](mailto:info@mobilitum.com)  
Web: [www.mobilitum.com](http://www.mobilitum.com)



### 1.3. Warning boxes

This document provides instructions or explanations about the machine. If these parts contain a certain risk, this is indicated in special 'warning boxes'. The headings of these text blocks indicate the severity of the relevant risk.



***WARNING:** Indicates a potentially dangerous situation that could lead to serious injury or death if this is not avoided.*



***CAUTION:** Indicates a potentially dangerous situation that may result in light or moderate injury or damage to equipment or environment if this is not avoided. It is also used to warn for unsafe practices.*



***REMARK OR TIP:** Provides additional information to alert the user for possible problems to the machine. It also gives suggestions and advice to the user to perform tasks more easily.*

### 1.4. Maintenance, repairs and spare parts

The maintenance mentioned in chapter 5 may be carried out in-house.

Maintenance or repair must be carried out by Mobilitum Services B.V. or a service organization authorized by the manufacturer. A list of authorized service organizations is available at [www.mobilitum.com](http://www.mobilitum.com). An authorized service organization has personnel trained by the manufacturer, and has original spare parts and the tools necessary to perform maintenance and repairs. If non-original spare parts are used or if work is carried out under own management or by an unauthorized service organization, the warranty will lapse and the user will be responsible for possible accidents that may arise as a result.

## 1.5. Normative references

This machine complies with:

- 2006/42/EG - Machinery Directive
- 2014/30/EU - Electromagnetic Compatibility (EMC)
- 2014/53/EU - Radio Equipment Directive (RED)

### Harmonized standards related to Radio Equipment Directive (RED)

Health and safety according to Article 3 (1) a:

#### EN 60204-1:2018

Safety of machinery - Electrical Equipment for Machines; Part 1: General Requirements

#### EN 62311:2020

Assessment of electronic and electrical equipment related to human exposure restrictions for electromagnetic fields (0 Hz - 300GHz)

Elektromagnetische Compatibiliteit volgens Artikel 3(1)b:

#### ETSI EN 301 489-1 V2.2.3 (2019-11)

ElectroMagnetic Compatibility (EMC) standard for radio equipment and services; Part 1: Common technical requirements gehanteerd in combinatie met:

#### Draft ETSI EN 301 489-52 V1.1.2 (2020-12)

ElectroMagnetic Compatibility (EMC) standard for radio equipment and services; Part 52: Specific conditions for Cellular Communication User Equipment (UE) radio and ancillary equipment

#### ETSI EN 301 489-19 V2.1.1 (2019-04)

Part 19: Specific conditions for Receive Only Mobile Earth Stations (ROMES) operating in the 1,5 GHz band providing data communications and GNSS receivers operating in the RNSS band (ROGNSS) providing positioning, navigation, and timing data; Harmonised Standard covering the essential requirements of article 3.1(b) of Directive 2014/53/EU

#### Draft ETSI EN 301 489-19 V2.2.0 (2020-09)

Part 19: Specific conditions for Receive Only Mobile Earth Stations (ROMES) operating in the 1,5 GHz band providing data communications and GNSS receivers operating in the RNSS band providing positioning, navigation, and timing data; Harmonised Standard for ElectroMagnetic Compatibility

Efficient use of spectrum according to Article 3(2):

#### ETSI EN 301 511 V12.5.1

Global System for Mobile communications (GSM); Mobile Stations (MS) equipment; Harmonised Standard covering the essential requirements of article 3.2 of Directive 2014/53/EU

#### ETSI EN 303 413 V1.1.1

Satellite Earth Stations and Systems (SES); Global Navigation Satellite System (GNSS) receivers; Radio equipment operating in the 1 164 MHz to 1300 MHz and 1 559 MHz to 1 610 MHz frequency bands; Harmonised Standard covering the essential requirements of article 3.2 of Directive 2014/53/EU

Harmonized standards related to the Electromagnetic Compatibility Directive (EMCD) :

**EN 61000-6-1:2007**

Electromagnetic compatibility (EMC) — Part 6-1: Generic standards — Immunity for residential, commercial and light-industrial environments

**EN 61000-6-3: 2007/A1:2011**

Electromagnetic compatibility (EMC) — Part 6-3: Generic standards — Emission standard for residential, commercial and light-industrial environments

**EN 61000-3-2:2014**

Electromagnetic compatibility (EMC) — Part 3-2: Limits — Limits for harmonic current emissions (equipment input current  $\leq 16$  A per phase)

**EN 61000-3-3:2013**

Electromagnetic compatibility (EMC) — Part 3-3: Limits — Limitation of voltage changes, voltage fluctuations and flicker in public low-voltage supply systems, for equipment with rated current  $\leq 16$  A per phase and not subject to conditional connection

Other applied standards or technical specifications:

**EN 61000-6-7:2015**

Generic standards - Immunity requirements for equipment intended to perform functions in a safety-related system (functional safety) in industrial locations

Harmonized standards related to the Machinery Directive (MD):

**EN-ISO 12100:2010**

Safety of machinery — General principles for design — Risk assessment and risk reduction

**EN-ISO 13849-1:2015**

Safety of machinery — Safety-related parts of control systems — Part 1: General principles for design

**EN 60204-1:2018**

Safety of machinery - Electrical Equipment for Machines; Part 1: General Requirements

The noise emission related to the sound pressure level near the driver has been measured in accordance with the B standard:

**EN-ISO 11201:2010**

Acoustics — Noise emitted by machinery and equipment — Determination of emission sound pressure levels at a work station and at other specified positions in an essentially free field over a reflecting plane with negligible environmental corrections

The emission of vibrations has been measured in accordance with the following standards:

**ISO 2631-1:1997**

Mechanical vibration and shock — Evaluation of human exposure to whole-body vibration — Part 1: General requirements

**EN-ISO 5349-1:2001**

Mechanical vibration – Measurement and evaluation of human exposure to hand transmitted vibration – part 1: General requirements

**EN 1032:2013**

Mechanical vibration. Testing of mobile machinery in order to determine the vibration emission value



## 2. Safety

### 2.1. Use of the machine

The machine is developed exclusively for the transport of goods by one operator standing on the platform, with a maximum payload of 300 kg.

The machine is designed for a maximum speed of 25 km/h. The standard version has a speed of 17.2 km/h. A version with a maximum speed of 6 km/h is also possible.

### 2.2. Algemene veiligheidsvoorschriften

If the machine is in use, there are many hazards and/or risks present. In particular, risks may arise when:

- the machine is used for other purposes than defined in section 2.1.
- the machine is operated carelessly and/or badly maintained;
- unqualified, untrained and/or incompetent personnel operates the machine.

All operators of the machine must:

- have read chapter 2 of the user manual about the main safety risks and measures;
- be aware of the presence and functioning of the safety devices, including emergency stop functions (chapter 3);
- work according to the general safety guidelines, covered during the driver training (chapter 2.3).

If the machine shows signs of malfunction or if it breaks or shows visible wear, stop the machine in a safe place and immediately contact your service organization.

## 2.3. General safety guidelines



**WARNING:** Never use the machine when you are under the influence of substances that could affect your ability to drive.



**WARNING:** Do not use the machine if your medical condition could affect your ability to drive. Example: An arm in a sling adversely affects the ability to steer.



**WARNING:** The driver's seat has room for one person. Never drive with more than one person in the driver's seat.



**CAUTION:** Use the machine only for transporting goods. The machine is not designed to transport passengers and does not provide seats for passengers.



**CAUTION:** Never exceed the maximum load capacity of 300 kg.



**CAUTION:** Always distribute the load evenly over the loading area. Uneven distribution of the load can jeopardise the stability of the machine.



**CAUTION:** Always ensure an appropriate speed when driving on slopes or when taking bends.



**CAUTION:** In the event of malfunctions or other defects: never let the machine be towed by another machine. Stop using the broken machine and contact your service organisation immediately to solve the problem.



**CAUTION:** Never use the machine to tow another machine.



**CAUTION:** In wet or cold weather, the road can be slippery, which can affect the grip on the road. Drive carefully in these conditions.

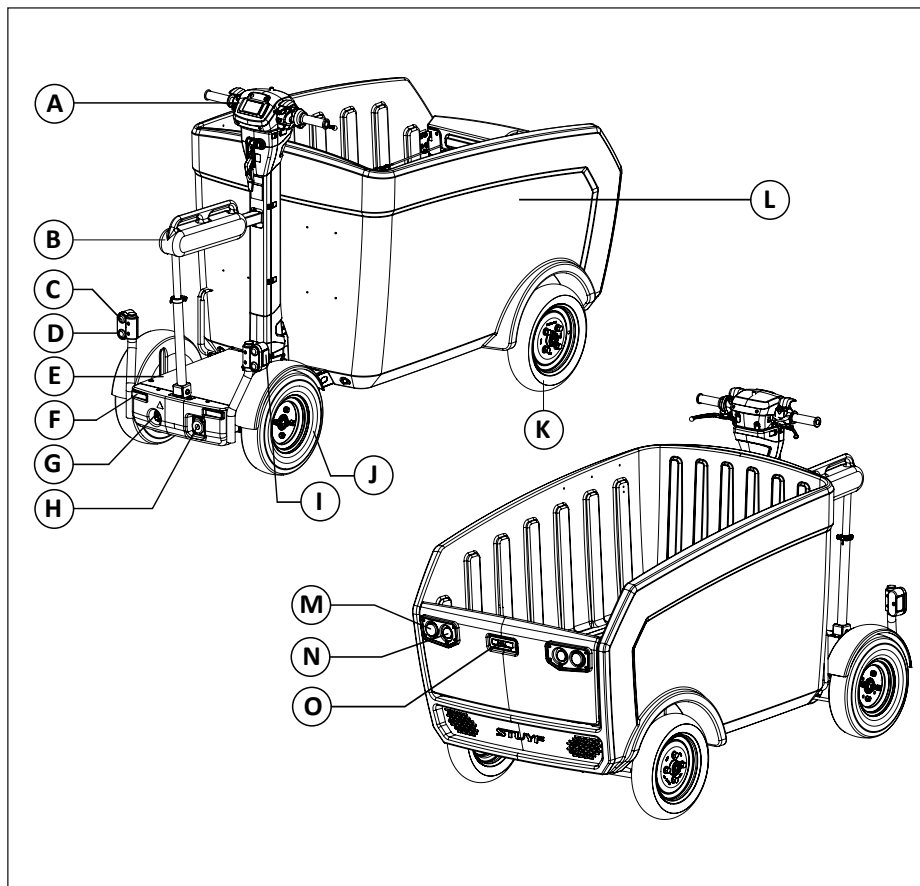


**CAUTION:** Do not use the machine on the beach or other sandy surfaces. The sand and salt water can cause severe wear.



**CAUTION:** Avoid driving through deep puddles. Water can damage electrical components.

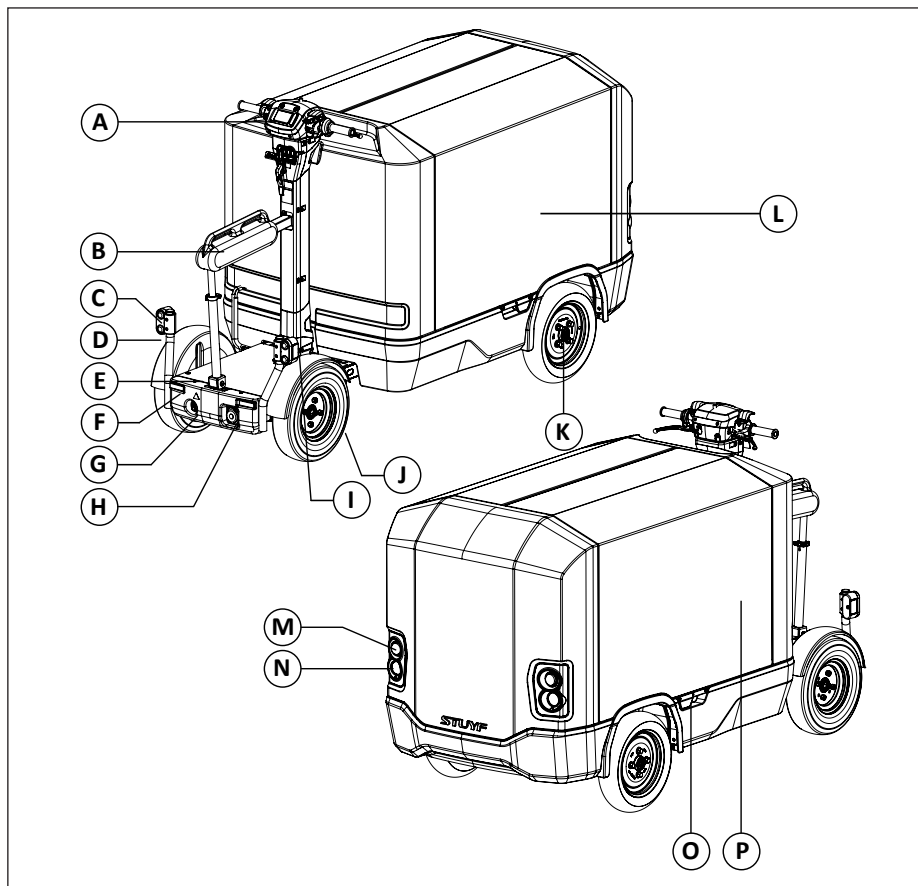
### 3. General description



#### 3.1. Main components Pickup

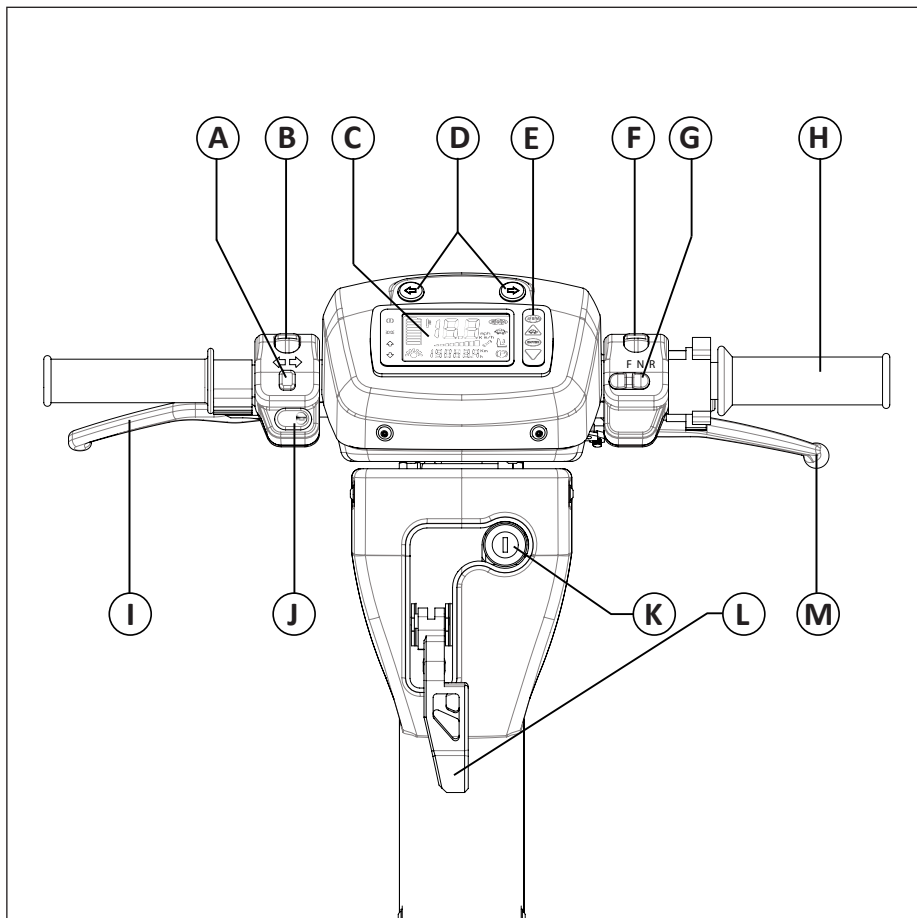
- A. Handlebar
- B. Driver support
- C. Rear indicator lights
- D. Rear position lights and brake lights
- E. Rear reflectors
- F. Battery disconnect switch
- G. Charger connection socket
- H. Platform (with driver detection)
- I. Side reflectors
- J. Rear wheels
- K. Front wheels
- L. Cargo box
- M. Front position lights and indicator lights
- N. Front reflectors
- O. Tailgate handle





### 3.2. Main components Cargo

- A. Handlebar
- B. Driver support
- C. Rear indicator lights
- D. Rear position lights and brake lights
- E. Platform (with driver detection)
- F. Rear reflectors
- G. Battery disconnect switch
- H. Charger connection socket
- I. Side reflectors
- J. Rear wheels
- K. Front wheels
- L. Loading door right
- M. Width lights and turn signals
- N. Front reflectors
- O. Loading door handle
- P. Loading door left

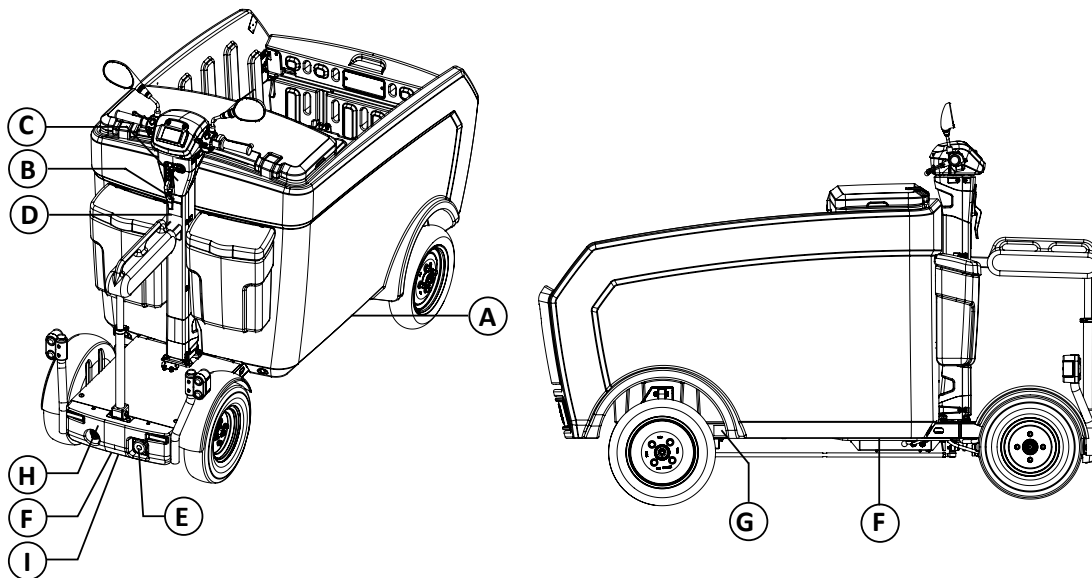


### 3.3. Control functions steering column

- A. Indicator switch
- B. Hazard light switch
- C. Information display
- D. Tell-tales for indicator lights
- E. Speed button / Turtle button
- F. Emergency stop switch
- G. Driving direction switch
- H. Throttle
- I. Brake lever rear wheels
- J. Horn switch
- K. Key ignition with steering lock
- L. Parking brake lever
- M. Brake lever front wheels

### 3.4. Labels


- A. Identification label
- B. Max. transportation load
- C. Parking brake label
- D. Warning transportation load
- E. Warning live parts
- F. Warning live parts
- G. Type plate
- H. Warning non-ionizing radiation
- I. Warning non-ionizing radiation

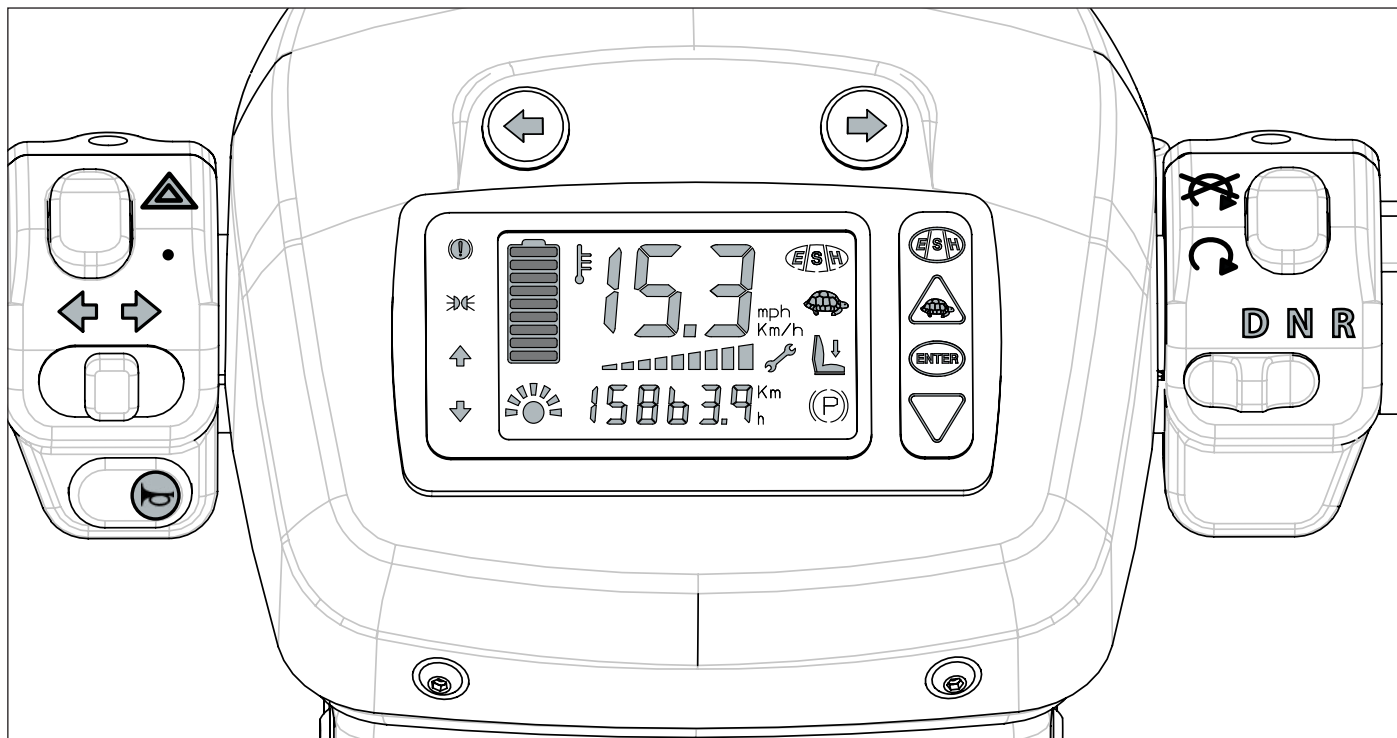




### 3.5. Controls symbols

The following two pages explain the symbols visible on the information display and on the control units.

 **CAUTION:** When driving, make sure that the information on the information display is legible. If the information display is difficult to read due to dirt, snow or ice, clean it.

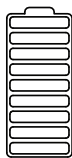


### Tell-tales for indicator lights



Green LEDs light up in the same frequency as the front and rear indicator lights. When using the hazard light, both tell-tale lights flash. If the flashing frequency of a tell-tale light increases, this indicates a defect in one of the turn signals. Please contact your service organization.

### Battery indicator



The bars in the battery symbol show the 'state of charge' of the battery pack. When the battery pack is low, the symbol will flash. Connect the machine to the battery charger as soon as possible.

### Overheating



When this symbol is visible, the engine and/or motor controller has become too hot. Switch off the machine and allow it to cool down before using it.

### Turtle mode



When this symbol is visible, turtle mode is enabled.

### Driver detection



When this symbol is visible, no driver has been detected.

### Speedometer



The current speed of the machine is displayed here.

### Throttle indicator



Ascending bars visualize the input of the throttle lever.

### Parking brake indicator



When this symbol is visible, the parking brake is activated.

### Driving detection



The set driving direction is indicated here.



### Mileage



Depending on the mode, the following information can be displayed here:

- System time: total time the system has been active since production.
- Mileage: total distance travelled since production.
- Key-on time: total time the system has been active since restart.
- Trip distance: total distance travelled since the reset. It can be reset at any time.

### Error indicator



This symbol becomes visible when an error occurs in the system. An error code also appears in the display. Depending on the type of fault, the motor controller can reduce speed or power or switch off completely. Always write down the error code and contact your service organization immediately.

### **Tell-tale width light**



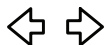
When this symbol is visible, the lighting is turned on.

### **Hazard light symbol**



The symbol indicates the location of the hazard light switch on the handlebar.

### **Symbol indicator lights**



The symbol indicates the location of the indicator lights on the handlebar.

### **Horn symbol**



The symbol indicates the location of the horn on the handlebar.

### **Circuit breaker symbol**



Switch to interrupt or activate the power supply.

### **Symbol driver direction**

**D N R**

The letters indicate the location of the driving direction switch on the handlebar:

- F / D - Forward / Drive
- N - Neutral
- R - Reverse

### 3.6. Controls display

#### Diagnostic mode: Browse system information.



By pressing the ENTER and DOWN button at the same time for 2 seconds, the 'diagnostic mode' is switched on. The UP and DOWN button allows you to browse the information. By pressing the ENTER button, diagnostic mode is switched off.

#### ENTER button



When the display is in diagnostic mode, by pressing the ENTER button you will return to the previous mode.

#### Switching between 3 different operating modes (optional)



Press and hold the ESH button for 1 second to switch between the different modes.

The display shows which mode is active. Note: the machine has no different modes. Modes E, S and H contain identical driving characteristics.

#### UP / turtle button



1. Press and hold the UP/turtle button for 1 second to turn on turtle mode. The turtle symbol is now visible. The maximum speed of the machine is limited to 5 km/h. Press and hold the UP/turtle button for another 1 second to turn off turtle mode again. The turtle symbol is no longer visible.

2. When the display is in diagnostic mode, this button is used to scroll through the list of variables.



## DOWN button



1. When the display is in diagnostic mode, the DOWN button is used to scroll through the list of variables.

2. When the display is not in diagnostic mode, the DOWN button is used to activate scroll mode. In scroll mode, the UP and DOWN button can be used to see the following information:

1. System time: total time the system has been active since production.
2. Mileage: total distance travelled from the system since production.
3. Key-on time: total time the system has been active since restart.
4. Trip distance: total distance travelled from the system since the reset. It can be reset at any time.

On the next page you can see examples of the information in scroll mode.

3. When the display shows the

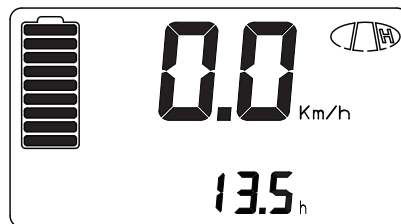
trip distance while in scroll mode, it can be reset by holding down the DOWN button for 5 seconds.

### Scroll mode

The table below provides examples of the information in scroll mode.

### System time

Total time the system has been active since production. See here an example of 13.5 hours.



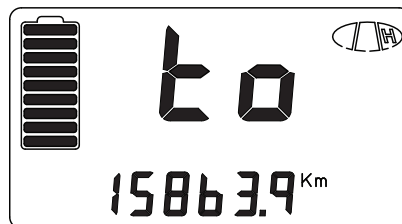
### Key-on time

Total time that the system has been active since restarting the machine with the ignition key. See here an example of 3 minutes.



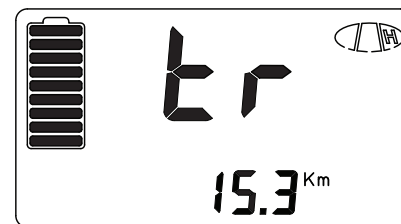
### Mileage

Total distance that the machine has travelled since production. This screen can be recognized by the large letters 'to'. See here an example of 15863.9 km.



### Trip distance

Total distance that the machine has travelled since the reset. This screen can be recognized by the large letters 'tr'. See here an example of 15.3 km.



### 3.7. Auditory signaling

The machine is equipped with a reminder alarm to prevent forgetting to activate the parking brake. The alarm is activated when:

1. The machine is turned on, no driver is detected and the parking brake is not activated.
2. The machine is turned off and the parking brake is not activated.

### Communication box (optional)

This machine has an integrated wireless RF receiver with an antenna located in the rear bumper as shown in image A.3.14.

The transmission frequencies and transmission power of the wireless RF receiver are listed in Chapter 6.

During use, the machine will transmit a short message every minute for a few seconds to log the data below.

When stationary, the machine sends out a similar message only every two minutes.

When the machine is parked and turned off, the communication box goes into sleep mode and will not transmit any data.

### GPS-coordinates

By logging the GPS coordinates, the routes are recorded. Routes covered can be reviewed and analyzed at a later date.

### Acceleration

Extreme changes in speed or shock are recorded.

### Temperature

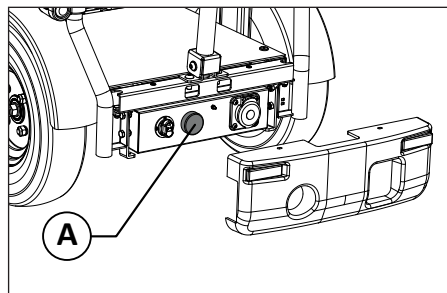
Extreme temperatures are recorded, because they can affect the condition of the battery pack.

### Power consumption

All input and output currents of the battery pack are recorded. This data can be analyzed and maintenance or replacement can be scheduled in time.

### Privacy / GDPR (General Data protection Regulation)

Part of the data recorded by the communication box is sent via GPRS messages to an online system. With this system, the machine can be monitored by the manufacturer (GDPR-proof).



Data (2GB memory) is stored in the communication box, in which the oldest data is always overwritten. Depending on the use, you can look back up to one year (GDPR-proof).



*The battery charger has no influence on the functioning of the integrated wireless RF receiver.*

## 4. Using the machine

### 4.1. Checks before driving

Before each use of the machine, the driver must check the following points. If one of the points below is not OK, the machine must not be used. In this case, contact your service organization immediately.

#### General check

1. Visually check if the tires are not soft or flat. If necessary, inflate the tires.
2. Visually check if the information display is visible. Clean the information display if necessary.
3. Visually check if the platform is free of frost, snow, leaves or other things that can make the platform slippery. Clean the platform if necessary.
4. Make sure there are no obstacles on the platform.
5. Make sure the driver support is tightly clamped to prevent it from sliding down unexpectedly. See chapter 4.5.
6. Make sure the battery indicator on the display indicates at least 4 bars. See chapter 3.5.

### Brakes

Before driving off, check if the left and the right brake levers are properly tensioned. When pulling a lever firmly, it should not be possible to touch the rubber grips on the handlebar.



*WARNING: If it is possible to pull a brake lever to the point where it can touch the rubber grip on the handlebar, the brake needs to be serviced. Do not use the machine and contact your service organisation immediately.*

### Lightning

Check the operation of all the lights and indicators by switching on the machine.

## 4.2. Switching on the machine

To switch on the machine safely:

1. Before getting on, make sure the key is removed from the ignition and the parking brake is activated (lever up, see section 4.4).
2. Adjust the driver's seat to the desired height by clamping the tube (see section 4.5).
3. Step onto the step platform. The driver detection is now activated.
4. Switch the direction switch back to neutral (N) with your right thumb.
5. Turn the key in the ignition clockwise. The machine is now switched on and the information screen is illuminated.
6. Check that the battery indicator on the information screen shows at least 4 bars.
7. If the battery indicator shows 3 bars or less charge: charge the battery.
8. Switch the direction switch to the desired direction of travel with your right thumb.
9. Release the parking brake by pulling the lever down.
10. You are now ready to drive the machine.



*WARNING: Never drive when the batteries are low. You could unexpectedly come to a standstill in a dangerous situation while driving.*



*CAUTION: With low ambient temperatures, the capacity of the batteries can decrease more quickly, resulting in a smaller operating range. Please keep in mind this reduction of the operating range.*



*CAUTION: When the machine has not been used for more than 6 months, it is advised to have the machine checked by your service organization before taking it into use again.*

## 4.3. Sleep mode

When the machine is not switched on for more than a week and no charger is connected, the battery switches to sleep mode. The sleep mode of the battery is necessary to prevent deep discharge of the battery. The battery can be reactivated by connecting the charger to the vehicle.



#### 4.4. Using the parking brake

The machine is equipped with a mechanical parking brake, which can be operated with the parking brake lever on the steering column. The parking brake lever has two positions.

##### **Parking brake activated**

The parking brake lever is activated by pulling the lever on the steering column upwards.

The machine's drive is blocked in this position and the machine cannot roll away. When the parking brake is activated, this is registered by the engine controller and the parking brake indicator appears in the information display when the key switch is on.

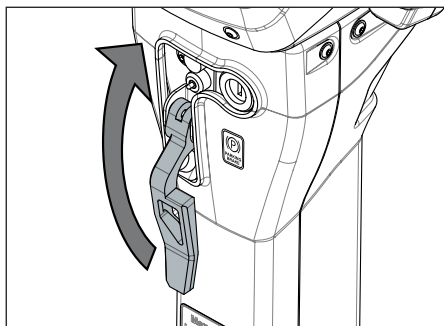
##### **Parking brake deactivated**

The parking brake lever is deactivated by pulling the lever downwards. When the parking brake is deactivated, the machine can roll freely.

When you leave the driver's seat, the key switch is still on and the parking brake has not yet been activated, a reminder alarm will sound.



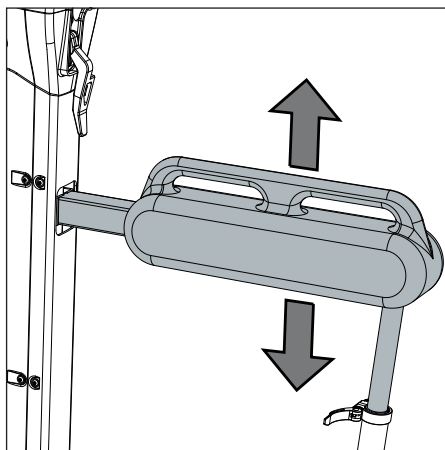
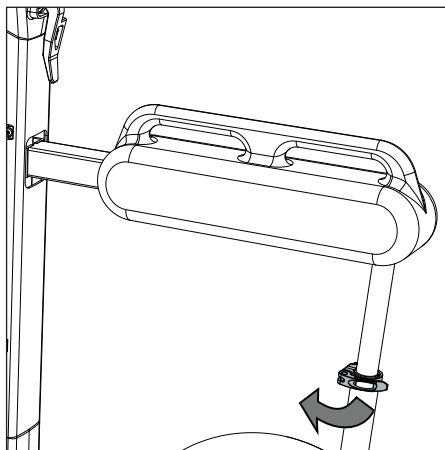
*WARNING: Always apply the parking brake before leaving the operator's seat.*



#### 4.5. Adjusting the driver support

The driver can lean against the driver support with the inside of the thighs while driving to gain more stability.

1. Open the clamp of the driver support.
2. The tube can now be adjusted in height.
3. Close the clamp again at the desired height (at the height of the thighs).



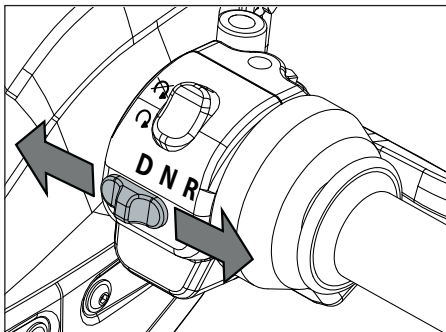
#### 4.6. Driving the machine

When you have checked the machine as indicated in the previous chapter you are ready to drive. Go through the following steps:

##### 1. Select the driving direction

To select a driving direction, slide the driving direction switch to the left or right with your right thumb:

- F / D** - Forward / Drive  
**N** - Neutral  
**R** - Reverse



*WARNING: Before driving, first check that there are no people or objects around the machine. Also use the rear-view mirrors. The area directly in front of the machine is only visible to a limited extent from the driver's seat. Take this into account during use.*

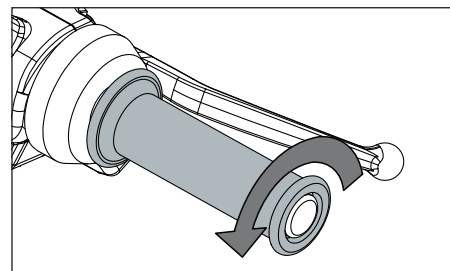


*WARNING: If the machine is used in traffic:*

- Always observe the applicable traffic regulations.
- You are exposed to exhaust fumes.
- Only use footpaths.

##### 2. Accelerate

Turn the throttle lever gently towards you. The machine will start moving. The further you turn the lever towards you, the faster the machine will go.



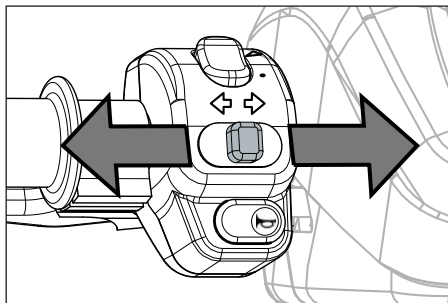
*WARNING: Never lock the throttle (as a cruise control) and make sure that there are no obstacles nearby that could block the throttle. If the throttle is locked, it may not be possible to return it to neutral.*



*WARNING: Always check the set direction of travel before accelerating and do not be surprised by an unexpected direction of travel of the machine.*

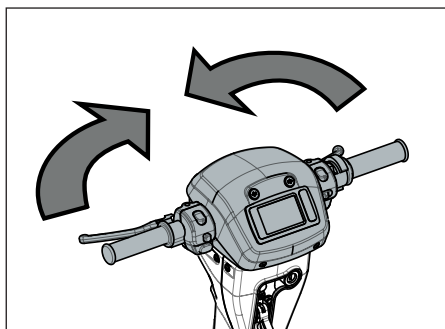
### 3. Indicate direction

1. Using your left thumb, push the turn signal switch to the left (to indicate left) or to the right (to indicate right). The indicator lights above the information display will indicate when a turn signal is activated.
2. The turn signal will continue to flash until the switch is returned to the neutral position.
3. Press the turn signal switch once to return the switch to the neutral position.



### 4. Turning

1. If direction needs to be indicated for taking a turn, push the indicator switch to the desired side. See no. 3.
2. Gently squeeze the left and right brake levers. The machine will slow down.
3. To steer the machine to the right: turn the handlebars to the right.
4. To steer the machine to the left: turn the handlebars to the left.
5. If the direction has been indicated: press the indicator switch once. The switch returns to the neutral position.



**WARNING:** Turning at full speed can be dangerous.



**TIP:** Reduce speed when turning. If necessary, switch to turtle mode to make turns in a controlled manner. When switching to another driving mode, always do so when the machine is stationary.



**TIP:** Avoid steering movements when the machine is stationary. Apply a small amount of throttle when you want to steer from a standstill. This makes steering easier.

## 5. Letting the machine roll out

Turn the throttle lever back to neutral. The machine will roll out, slow down slightly on the engine and gradually come to a stop.



*TIP: When you release the throttle, it will automatically return to the neutral position.*

## 6. Remmen

Squeeze the left and right brake levers simultaneously.



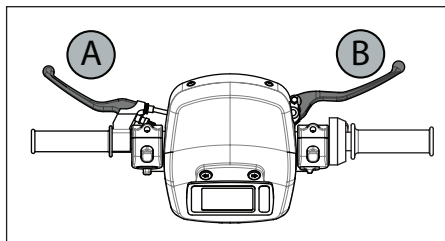
*TIP: It is not possible to brake and accelerate at the same time. It is recommended to always return the throttle to the neutral position when braking. This prevents the machine from unexpectedly starting up again when you release the brake lever.*

## 7. Pushing the machine by hand

Deactivate the parking brake and turn off the key switch to push the machine manually.



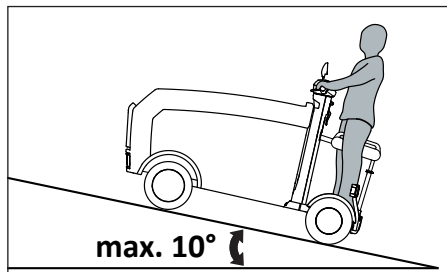
*CAUTION: When pushing the machine manually, hold the handles so that you can brake if necessary. If you cannot reach them easily, always make sure that you can quickly step onto the platform to brake or steer.*




## 4.7. Special manoeuvres

### Inclines

The machine can drive on inclines of up to 10 degrees without any problem in laden condition. Try to drive up an incline in one go without stopping.

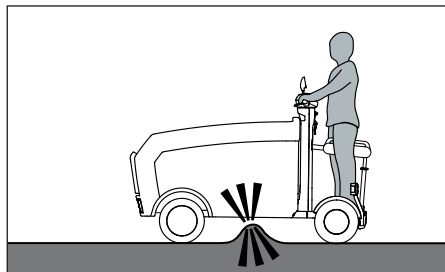



 **CAUTION:** When driving on a steep slope for too long, the control system may reduce the maximum speed to prevent the engine from overheating.


### Curbs and thresholds

Try to avoid driving into curbs at all times. If this is necessary, do so at walking pace and with two wheels at the same time.

The ground clearance between the wheels is 15.5 cm. Take this into account when driving over thresholds. The machine can touch the ground between the front and rear wheels and damage the steering mechanism.

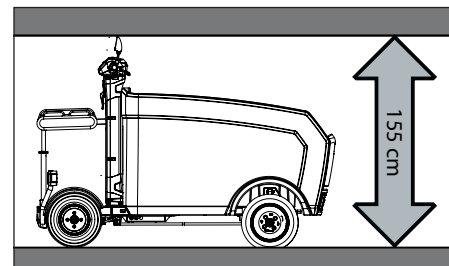
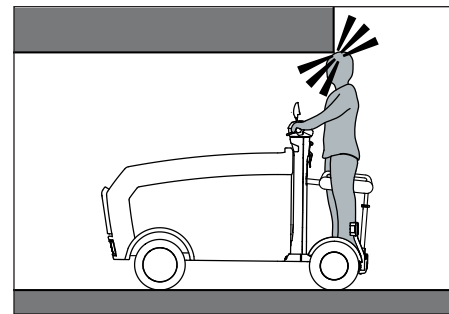


 **CAUTION:** Never drive diagonally over a threshold with only three wheels touching the ground. This reduces the stability of the machine.

 **CAUTION:** Do not simply drive the machine over unpaved or uneven terrain. This can lead to damage to the machine.

### Drive-through height

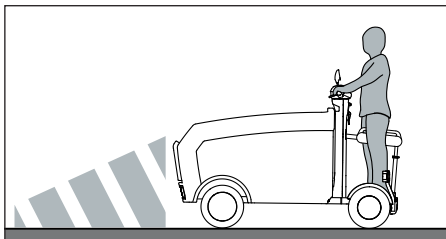
Be careful not to bump your head when driving under something, especially when driving backwards. The storage height of the machine is 155 cm.





## Visibility

The area directly in front of the machine may not be fully visible to the operator. Keep this in mind when operating. If you are wearing a hood, make sure it is tightly



fitted around your head so that it does not obstruct your vision when looking to the left or right.



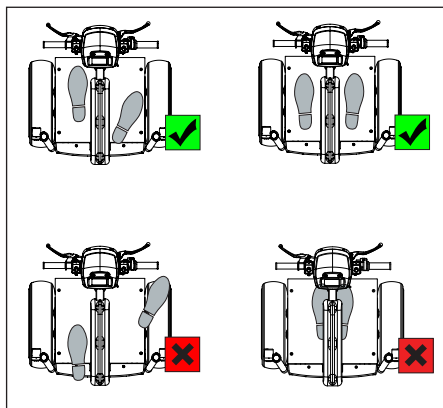
*WARNING: Before driving off, check that there are no people or objects around the machine.*

## 4.8. Driving tips

### Standing position

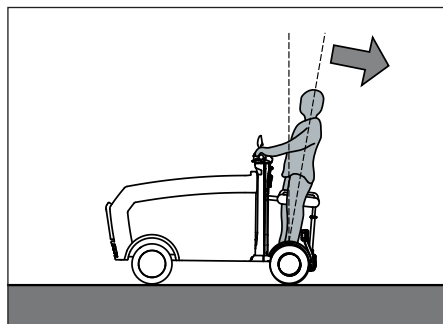
You operate the machine from a standing position. It is therefore very important that you adopt the correct position so that you can absorb the forces that occur while driving. Take the following points into account:

1. Make sure that your feet are apart and fully placed on the platform.
2. By placing one foot diagonally behind the other, a stable standing position can be achieved.
3. When accelerating and braking, great forces can act on your body.
4. Therefore, hold on firmly to the handlebars and lean your upper legs against the driver's support.
5. By leaning slightly forward when accelerating and slightly backward when braking, you can absorb these forces better.

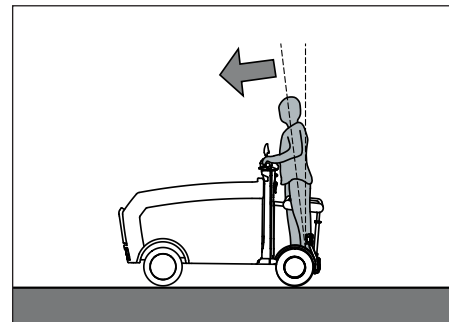


*The driver can lean against the driver support with the inside of his legs while driving, to gain more stability.*

### Remmen



### Optrekken



*Always hold the handlebars with both hands. This way you always have a good grip and you maintain maximum control over the machine.*



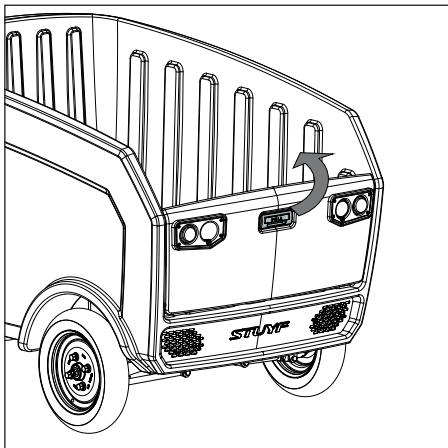
*Make sure you wear suitable footwear when you are going to operate the machine. Preferably wear footwear with flat soles to prevent you from sliding off the platform.*

## 4.9. Pickup: Loading area

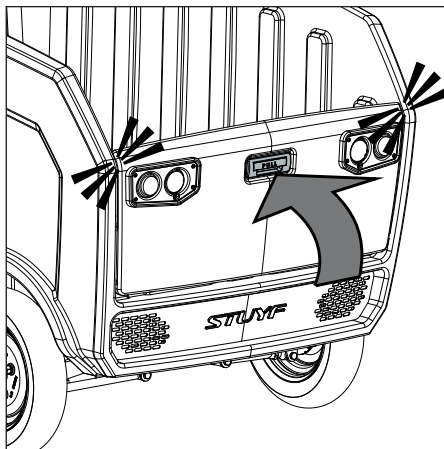
### Tailgate

To facilitate the loading and unloading of large objects, the tailgate on the front side can be opened.

Pull up the handle in order to unlock the tailgate.



When you close the tailgate, make sure the locks on both sides click firmly into place.



**WARNING:** When loading the machine, make sure that the load:

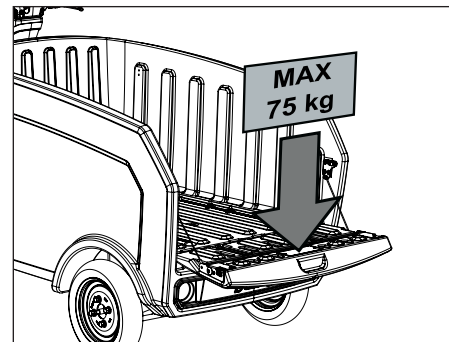
- is securely fastened
- does not obstruct the driver's view
- does not obstruct the movement of the steering wheel
- is not placed outside the loading area



**WARNING:** Before driving away, always check that the tailgate is properly closed.

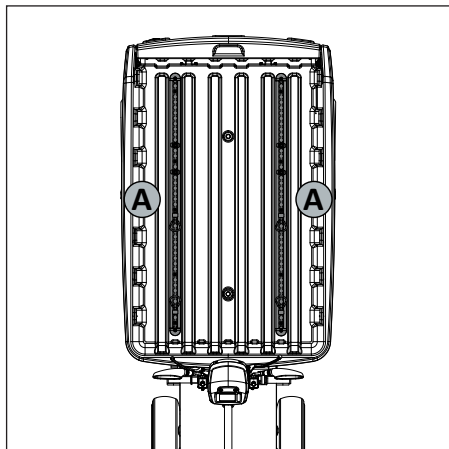


**WARNING:** The maximum weight that may rest on the tailgate is 75 kg.



### Airline track

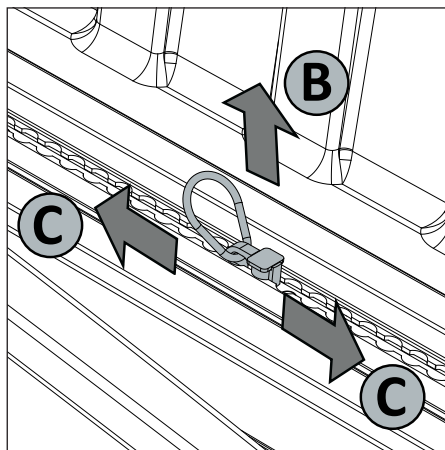
The cargo box is equipped with airline tracks (A) to secure cargo.



The track fitting with eyelets can be clicked into place at any point on the binding rail.

An eyelet can be released or changed position as follows:

- Pull the lever up (B).
- The tensioning eye can now slide freely through the binding rail or be released from the rail (C).
- By lowering the lever (B) again, the tensioning eye can be secured again.

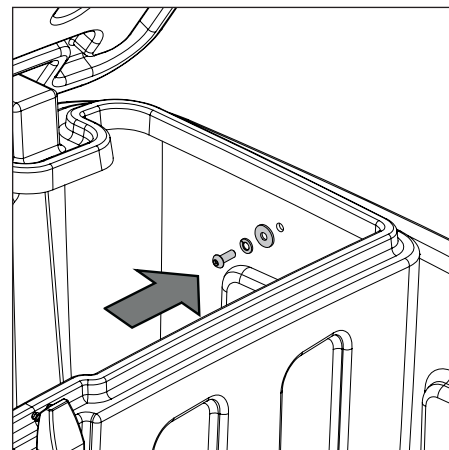
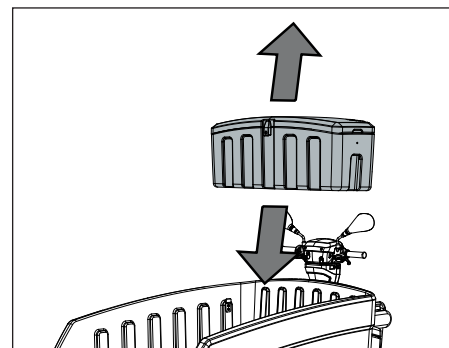


### Storage boxes (optional)

The machine can be equipped with a large storage box (lockable) that can be hung in the back of the loading area and two small storage boxes (not lockable) near the steering column.

The large storage box can be hung loosely in the loading area, so that it can be quickly lifted out if necessary.

The large storage box can also be permanently attached to the loading area. This is possible by means of two screw connections on the inside of the storage box.



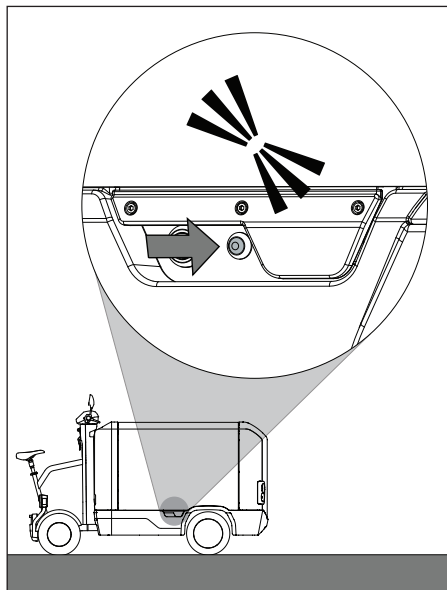
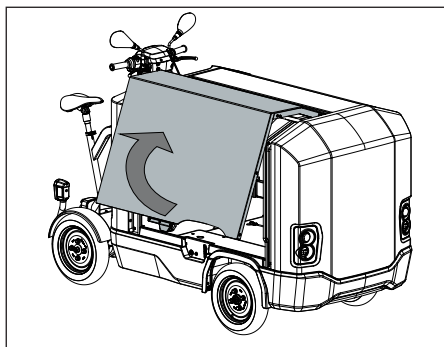
## 4.10. Cargo: Loading area

### Loading door

The loading area is equipped with two loading doors.

To open a loading door:

- Switch on the machine (paragraph 4.2)
- Press the button in the recess of the handle.
- Immediately after pressing the button, pull the loading door upwards.



To close the cargo door:

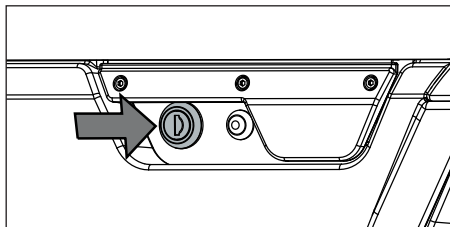
- Pull the cargo door down
- When the cargo door is almost closed, with about 12 inches (30 cm) of space left, you can release the cargo door and let it lock into place.



**CAUTION:** *Never open both doors at the same time. This can damage the door panels.*

### Emergency opening of loading door

If the machine cannot be switched on or there is a fault in the electric door locks, the loading door on the right side can be opened using a mechanical lock.

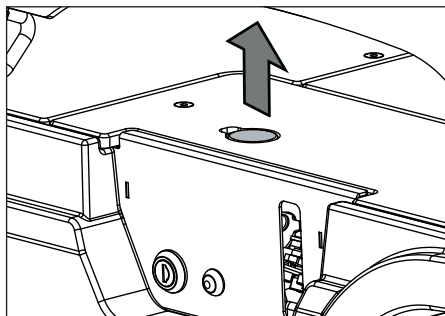


To open the loading door using the mechanical lock:

- Insert the supplied key into the lock that is located in the recess of the handle.
- Turn the key counterclockwise and at the same time pull the loading door upwards with light force.

To open the loading door from the inside:

- Remove the cap from the loading floor.
- Push the lever to the side to unlock the loading door.



## 4.11. Switching off the machine

When you have finished driving:

1. Switch off the machine by turning the key to the left. The lights and information display will turn off.
2. Activate the parking brake lever by pulling it up.
3. Activate the steering lock. First, move the steering wheel to one of the extreme steering positions. Briefly press the key in the ignition once and then turn the key counterclockwise. If necessary, move the steering wheel until the steering lock engages and the key can be removed.
4. Activate the parking brake lever by pulling it up.
5. Activate the steering lock. First, move the steering wheel to one of the extreme steering positions. Briefly press the key in the ignition once and then turn the key counterclockwise. If necessary, move the steering wheel until the steering lock engages and the key can be removed.



*CAUTION: Never leave the machine unattended with the key in the ignition.*



*CAUTION: Always park the machine on a level surface and make sure all wheels are touching the ground.*



*CAUTION: When the machine is parked and left unattended, always use the steering lock function.*



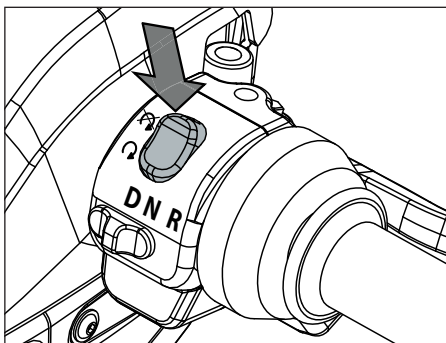
*TIP: Whenever possible, park the machine in a location that offers protection from the elements. This will increase the life of the machine.*



## 4.12. What to do in case of emergency

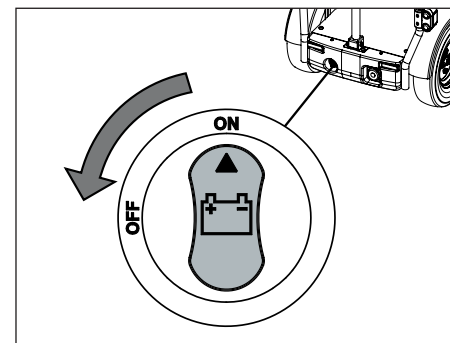
### Emergency stop switch

If a dangerous situation occurs in which it is necessary to permanently interrupt the power supply to the engine controller, the emergency stop button can be pressed.



If you need to use the emergency stop switch while driving, follow the procedure below:

1. Press the red emergency stop switch on the handlebars. The power supply to the engine controller is interrupted and the machine rolls out in a controlled manner. Error code AL44 appears on the information screen.
2. Try to manoeuvre the machine to a safe place.
3. Squeeze the brake levers to bring the machine to a stop in a controlled manner.
4. If the machine has not come to a stop in a safe place, push the machine manually to a safe place. See also section 4.5 point 7: pushing the machine.
5. Switch on the hazard lights by activating the hazard lights switch on the handlebars. See chapter 3.2.
6. Activate the parking brake by moving the parking brake lever upwards.
7. Switch off the machine by removing the key from the ignition.
8. Turn off the main power switch by switching it from ON to OFF.



**WARNING:** If the machine has been involved in a collision with another machine or object, the battery pack may be damaged. Push the machine to a safe place with sufficient distance from other objects or buildings and stop using the machine. Contact your authorized service organization to check and/or repair the machine.

### Fire

Is there a fire or do you suspect that a fire is about to start? Contact the emergency services as soon as possible.

#### 4.13. Parking and charging

When parking and charging the machine, the following must be taken into account:

- Only park and charge the machine in an area that is specifically designed for these functions. This could be a canopy, shed or parking garage, for example. Spaces such as an entrance or office are not designed for these functions and using the machine in these spaces entails unnecessary risks.
- Preferably park or charge the machine in a place that offers protection against the elements, such as a canopy, shed or parking garage.
- It is possible to park and charge the machine outside. In this case, ensure that the machine can be placed in a fixed location, where there is a mains power supply.
- In many cases, it may be advisable to have a battery charger cabinet installed by an electrician. This enables a safe power supply, with the battery charger in the cabinet protected against the elements.

Make sure that the place where the machine is stored or charged is fireproof:

- Do not store flammable materials near the machine or in the same room.
- Keep sufficient space around the machine.
- If it is a closed space; provide the room with a fire alarm.
- If it is a closed space; make sure that the door can be easily opened from the inside without a key.

#### Lithium batteries

The machine is equipped with a lithium battery pack. This entails a number of specific instructions for use.

Lithium batteries are best charged at room temperature. Because a storage space is usually not heated, it is advisable to recharge the machine immediately after use. The batteries are still warm from use and can best be charged then.

Interim charging, without completing the charging cycle, is possible with lithium batteries. However, the charging cycle must be fully completed regularly, for example once every two weeks.



*WARNING: Never use\* the machine in a building, except in areas specifically designed for this function.*

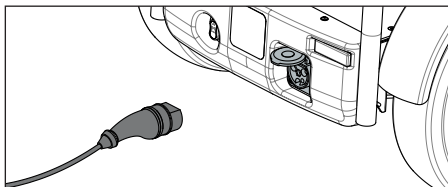
*\* Use can include, for example: Driving, parking or charging.*



*WARNING: Never charge the machine when the ambient temperature is below -10 °C.*

## Charging the battery

1. Check that the main power switch is in the "ON" position.
2. Flip up the cover of the charging socket.
3. Insert the charging plug into the charging socket. A red LED on top of the charging plug will light up to indicate that the connection has been made.
4. Connect the battery charger to the wall socket (230V). If the battery charger detects that the battery pack needs to be charged, the charging cycle will be started.
5. Check the information screen of the battery charger to see if the charging cycle has started. This is indicated on the information screen.
6. If the charging cycle has not started: check that the charging plug is properly inserted into the charging socket of the machine and that the mains plug is properly inserted into the wall socket.
7. The battery charger will indicate when the charging cycle is complete.
8. Disconnect the battery charger by removing the charging plug from the machine.



*WARNING: The charging outputs and connection cables may not be modified, extended or connected to each other in any way. The use of an extension cord is also prohibited.*



*WARNING: Never use a battery charger other than the one supplied. Using a different battery charger may result in fire.*



*CAUTION: Never move the machine when it is connected to the battery charger. Disconnect it first.*



*CAUTION: Keep the ventilation openings of the battery charger clean and free of dust. If necessary, blow away the dust and clean the housing of the battery charger with a slightly damp cloth.*



*CAUTION: The battery charger must be protected from direct sunlight, dust, moisture and rain. Preferably attach the battery charger to a fixed location on the wall, and do not let the plugs hang loosely on the ground.*



*CAUTION: It is not possible to charge the vehicle when the main power switch is in the OFF position.*



*CAUTION: The charging connection and charging plug have a matching pin connection. This prevents the wrong battery charger from being connected to a machine. If the charging plug does not connect to the machine, do not use force but check whether the pin connection matches.*



*CAUTION: Never cover the ventilation openings in the battery charger housing. A covered battery charger can overheat and break.*



*TIP: If you have multiple machines, always use the same battery charger for each machine (for example, provide the battery charger and machine with a marking). This way, any malfunctions will be limited to one machine.*

## 5. Maintenance

### 5.1. Maintenance schedule

To keep your machine in good condition, you should have an annual maintenance service and periodic inspection carried out by a service organisation authorised by the manufacturer.

The schedule below shows the frequency of the maintenance that you should carry out yourself.

| Component    | Maintenance   | Frequency                |
|--------------|---|--------------------------|
| Battery pack | Charging  | Daily                    |
| Battery pack | Complete a full charge cycle  | Weekly                   |
| Tyres        | Check tire pressure (see section 5.4)   | Monthly                  |
| Tyres        | Check for wear (see section 5.4)  | Semi-Annual              |
| Loading area | Pickup: Check the two bolt connections on the bottom of the loading platform and check the closure of the loading flap. | Monthly                  |
| Loading area | Cargo: Check the loading doors and closures for function and wear.  | Monthly                  |
| Brake system | Check for function  | Daily                    |
| Brake system | Check brake fluid level (see section 5.5)   | Monthly                  |
| Lightning    | Check for function  | Daily                    |
| Machine      | Cleaning  | Monthly                  |
| Machine      | Maintenance and periodic inspection carried out by a service organization   | Annual / every 10.000 km |

## 5.2. Tyre pressure and tread

You can check the tyre pressure using the supplied pump with pressure gauge.

1. Unscrew the valve cap.
2. Connect the pump to the valve.
3. The pressure gauge now indicates the current tyre pressure.
4. If necessary, inflate the tyres until the correct tyre pressure is reached:  
front wheels: 2.7 bar  
rear wheels: 2.3 bar
5. Screw the valve cap back onto the valve.

### Thread

The tyre tread must be at least 2 mm. If this is not the case, contact your service organisation to replace the tyre.



*WARNING: Never exceed the specified tyre pressure. Too high a tyre pressure can lead to a risk of explosion. Therefore, check the tyre pressure monthly to ensure that the machine always has the correct tyre pressure.*



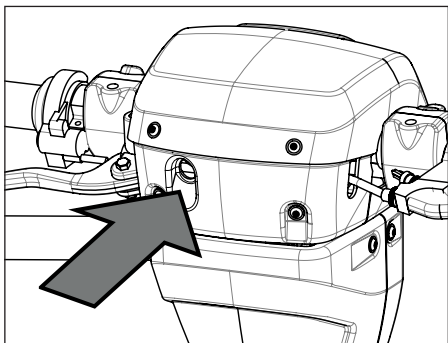
*CAUTION: Driving with too low tyre pressure causes:*

- the range to decrease;
- the road holding to deteriorate;
- the machine uses more energy;
- the steering becomes heavy

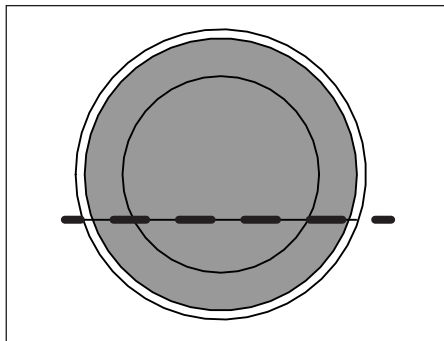
*That is why it is important to regularly check the tyre pressure and ensure that the tyres always have the correct pressure. Check the tyre pressure monthly.*

### 5.3. Checking the brake fluid level

Check the brake fluid level every month. The master cylinder has two viewing windows through which the brake fluid level can be seen. These are located on the back of the steering housing.



When the brake fluid level has dropped below half of the viewing window as shown in the image below, the brake fluid must be topped up. Contact your service organization for this.



## 5.4. Cleaning

### Frame

The frame is best cleaned with a wrung-out wet cloth.

### Loading area

The loading area can be cleaned with a brush and suds. Cleaning with a high-pressure cleaner is also possible, but is not recommended when a loading area has stickers. The stickers may come loose.



*CAUTION: Do not use abrasive or aggressive agents to clean the machine. Preferably do not use a garden hose or high-pressure cleaner to clean the frame. This may cause moisture to reach the electronic components.*



*TIP: Clean your machine monthly. This keeps your machine in good condition and ensures a neat appearance.*

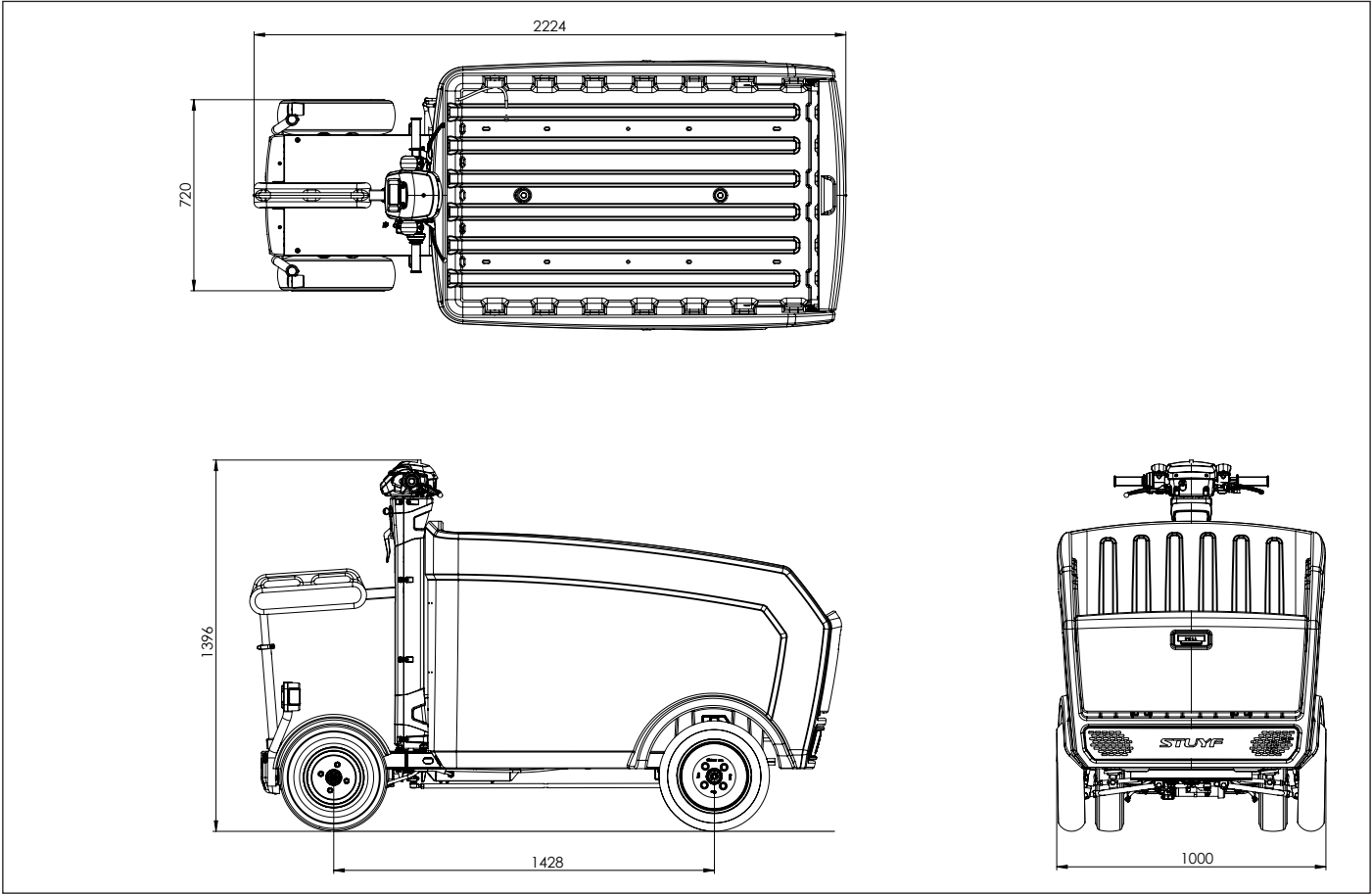


## 6. Technical specifications

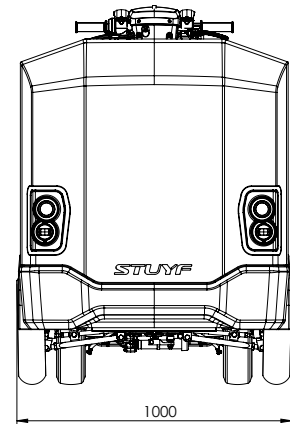
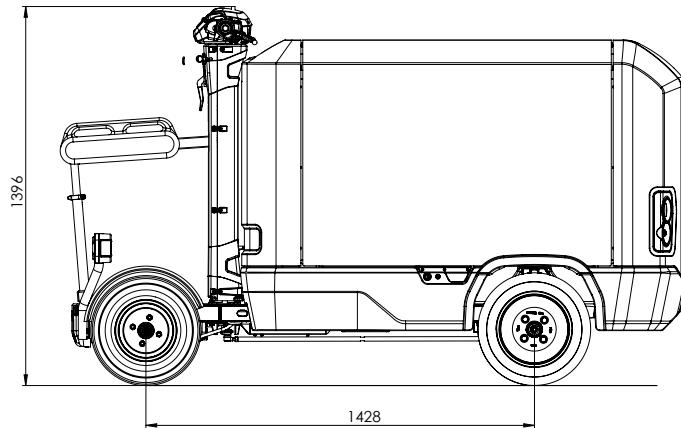
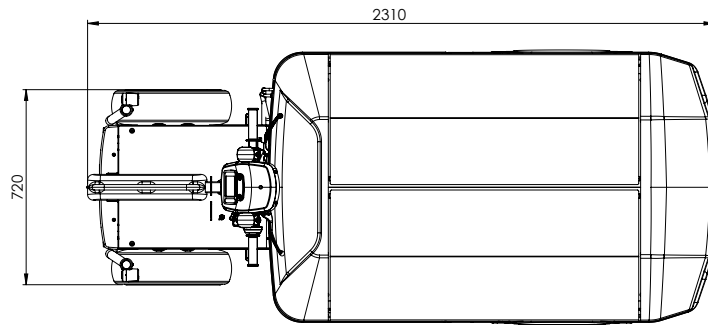
### 6.1. Specifications

|   | MPAXAX                                   |        | MCAXAX |        |
|---|--|--------|--------|--------|
| Maximum battery capacity                                | 105 Ah                                   | 210 Ah | 105 Ah | 210 Ah |
| Unladen mass  | 215 kg                                   | 235 kg | 240 kg | 260 kg |
| Range*  | 40 km                                    | 80 km  | 40 km  | 80 km  |
| Battery pack weight                                     | 25 kg                                    | 45 kg  | 25 kg  | 45 kg  |
| Maximum speed   | 17,2 km/h (6 km/h** en 25 km/u optional) |        |        |        |
| Engine power  | 1200 W                                   |        |        |        |
| Battery type  | LiFePo4                                  |        |        |        |
| Voltage   | 25,6 V                                   |        |        |        |
| Engine type   | AC                                       |        |        |        |
| Front tire size   | 100/80-10                                |        |        |        |
| Rear tire size  | 4.80/4.00-8                              |        |        |        |
| Tire pressure   | front: 2,7 bar / rear: 2,3 bar           |        |        |        |
| Maximum load capacity                                   | 300 kg                                   |        |        |        |
| Maximum gradient  | 10°                                      |        |        |        |
| Braking deceleration                                    | ≥ 4 m/s <sup>2</sup>                     |        |        |        |
| Ground clearance  | 15,5 cm                                  |        |        |        |
| Length  | 222 cm                                   |        | 231 cm |        |
| Width   | 100 cm                                   |        |        |        |
| Height  | 139 cm                                   |        |        |        |
| * Depending on conditions (temperature, load and speed) |  |        |        |        |
| ** The speed is electronically limited.                 |  |        |        |        |

6.2. Main dimensions Pickup



### 6.3. Main dimensions Cargo



## 6.4. Noise emission

| Machine at maximum speed on a leveled floor (concrete) | LpA (dB) | Onzekeerheid KpA (dB) |
|--|----------|-----------------------|
| A-weighted emission pressure driver                    | 73       | 3                     |

Declaration in accordance with NEN-EN-ISO 4871: 2009

Measurement in accordance with NEN-EN-ISO 11201: 2010

The noise level is expressed in decibels (dB) compared to 2.0  $\mu$ Pa.

## 6.5. Vibrations

| Hand-arm vibrations ahv (m/s <sup>2</sup> ) | a <sub>hv</sub> (m/s <sup>2</sup> ) |            |
|---|-------------------------------------|------------|
|   | Left hand                           | Right hand |
| Paved road surface                          | 4,3                                 | 4,6        |
| Asphalt road surface                        | 1,2                                 | 1,2        |

| Body vibrations      | k a <sub>w</sub> (m/s <sup>2</sup> ) |
|----------------------|--------------------------------------|
|                      | Driver (average weight)              |
| Paved road surface   | 1,7                                  |
| Asphalt road surface | 0,4                                  |

The measurements were carried out in accordance with:

- NEN-ISO 2631-1 Assessment of the effects of vibration on the human body - Part 1: General requirements
- NEN-EN-ISO 5349-1 Measurement and assessment of human exposure to hand-arm vibration - Part 1: General guidelines
- NEN-EN 1032 Testing of mobile machinery to determine vibration emission value

## 6.6. Wireless RF receiver transmission frequencies and transmission power

| Mode                   | Frequency Band (MHz) | Maximum Output Power (dBm) | Average EIRP (dBm) | Limit of Power Density S (W/m <sup>2</sup> ) | Safety Distance (cm) |
|------------------------|----------------------|----------------------------|--------------------|--|----------------------|
| GSM 900                | 880~915              | 35                         | 28.5               | 4.4  | 11,32                |
| GPRS 900<br>1 Tx Slot  | 880~915              | 35                         | 28.5               | 4.4  | 11,32                |
| DCS 1800               | 1710~1785            | 32                         | 25.5               | 8.55   | 5,75                 |
| GPRS 1800<br>1 Tx Slot | 1710~1785            | 32                         | 25.5               | 8.55   | 5,75                 |

## 7. Troubleshooting

### 7.1. Problems

| PROBLEM: Machine will not turn on. |   |  |
|------------------------------------|---|--|
| Check                              |   | Action   |
| 1.                                 | PROBLEM: The machine will not turn on.  | If yes: Go to point 2.   |
|                                    |   | If no: Switch to ON and try to turn on the machine. If the machine still does not turn on, go to point 2.  |
| 2.                                 | Check that the battery is not in sleep mode.  | If yes: Connect the battery charger to the vehicle and the power outlet. Wait 10 seconds and disconnect the battery charger again. Now try to turn on the machine again. |
|                                    |   | If no: Consult your service organization.  |
| PROBLEM: Machine will not drive.   |   |  |
| Check                              |   | Action   |
| 1.                                 | Check that the LED lights and the information screen are on.                            | If yes: Go to point 2.   |
|                                    |   | If no: Go to "PROBLEM: The machine will not turn on."  |
| 2.                                 | Check that the battery charger is disconnected.   | If yes: Go to point 3.   |
|                                    |   | If no: If the battery charger is still connected, the machine will not drive away. Disconnect the battery charger.   |
| 3.                                 | Check that the machine indicates on the information screen that the batteries are full. | If yes: Go to point 4.   |
|                                    |   | If no: Charge the battery.   |
| 4.                                 | Check that a "Bloc" code is displayed on the information screen (see section 7.2).      | If yes: Try to fix the fault. If this is not possible, consult your service organization.  |
|                                    |   | If no: Go to point 5.  |
| 5.                                 | Check that the "no driver detected" symbol is displayed on the information screen.      | If yes: Stand on the platform and try to drive. If the machine still will not drive, go to point 6. (see next page)  |
|                                    |   | If no: Go to point 6. (see next page)  |

|    |   |   |
|----|---|---|
| 6. | Check that the emergency switch on the steering wheel is activated. | If yes: Deactivate the emergency stop button, turn the machine back on, and try to drive.   |
|    |   | If no: Go to point 7.   |
| 7. | Check that the direction switch is properly activated (D or R).     | If yes: Consult your service organization.  |
|    |   | If no: Turn the machine off and on again and wait at least 5 seconds. Shift to neutral, then select a direction of travel and try to drive. |

**PROBLEM: The machine only runs at half speed.**

| Check |   | Action  |
|-------|---|---|
| 1.    | Check the charge level of the battery pack. When the batteries are almost empty (up to 3 bars), the machine automatically switches to half speed. | If yes: In this case, charge the batteries.   |
|       |   | If no: Go to step 2   |
| 2.    | Check if the battery indicator is flashing.   | If yes: An error has occurred in the communication between the battery and the engine controller. Switch the machine on again. If the battery indicator continues to flash: Consult your service organization.            |
|       |   | If no: Go to step 3   |
| 3.    | Check if the overheating symbol is lit on the information screen.   | If yes: Let the machine cool down and try driving again later. Have you not put a heavy load on the machine (heavy load or long steep slope), but is the overheating symbol still lit? Consult your service organization. |
|       |   | If no: Consult your service organization.   |

**PROBLEM: The machine no longer charges.**

| Check |   | Action   |
|-------|---|--|
| 1.    | Check that the main power switch is in the 'ON' position.                                 | If yes: Go to point 2.   |
|       |   | If no: Switch it to ON and try to switch on the machine.   |
| 2.    | Check that the battery charger is properly connected.                                     | If yes: Go to point 3.   |
|       |   | If no: Connect the charger correctly (see chapter 4).  |
| 3.    | Check that there is mains power. Try a different socket if necessary.                     | If yes: Go to point 4.   |
|       |   | If no: First solve problems with the mains and continue with point 3.  |
| 4.    | Check the LED lights or the information screen on the battery charger for error messages. | If yes: Check chapter 4 to see what the error message means. If the battery charger gives error messages that you cannot solve: Consult your service organisation. |
|       |   | If no: Consult your service organisation.  |



**PROBLEM: The machine's operating range is smaller than usual.**

| Check |  | Action  |
|-------|--|---|
| 1.    | Check that the outside temperature is below 5 degrees Celsius.   | If yes: Below 5 degrees the range may be slightly lower.  |
|       |  | If no: Go to step 2   |
| 2.    | Check that the tire pressure is at the correct pressure (see chapter 5).   | If yes: Go to step 3  |
|       |  | If no: Adjust the tire pressure to the correct values. Low tire pressure may result in a shorter range.                         |
| 3.    | Check that the battery charger is functioning properly. At the end of each charge, the battery charger should indicate that the charge cycle is complete. (See chapter 4.) | If yes: Consult your service organization.  |
|       |  | If no: Connect the charger correctly and make sure the battery charger is connected long enough to complete the charging cycle. |

**PROBLEM: Turn signal indicator light flashes faster than normal.**

| Check |  | Action   |
|-------|--|--|
| 1.    | Check that each turn signal is working properly. | If yes: A fault in the flasher relay. Consult your service organization. |
|       |  | If no: Consult your service organization to rectify the fault.           |

**PROBLEM: The machine may roll away when stationary.**

| Check |  | Action   |
|-------|--|--|
| 1.    | Check that the parking brake is activated. | If yes: Consult your service organization.                 |
|       |  | If no: Activate the parking brake by pulling the lever up. |

**PROBLEM: The machine suddenly stops moving.**

| Check |   | Action  |
|-------|---|---|
| 1.    | Check whether the information screen shows a "Bloc" code (see section 7.2). | If yes: Note this code and Consult your service organization.   |
|       |   | If no: Switch the machine off and on again and wait at least 5 seconds. Shift to neutral, then select a direction and try to drive. If the problem persists, consult your service organization. |

## 7.2. Error codes

Error codes are displayed on the information screen. Always make a note of this code so that you can refer to it when communicating with your service organization.

| ERROR CODE: AL1 - Overvoltage                         |  |  |
|---|--|--|
| Check   |  | Action   |
| 1.  | Check if the code returns when you turn the machine off and on again.    | If yes: Consult your service organization.   |
|   |  | If no: You can continue driving. If the problem occurs more often, consult your service organization |
| ERROR CODE: AL2 - Undervoltage                        |  |  |
| Check   |  | Action   |
| 1.  | Check if the code comes back when you turn the machine off and on again. | If yes: Consult your service organization  |
|   |  | If no: Go to step 2  |
| 2.  | Check if the machine can still charge                                    | If yes: Go to "PROBLEM: The machine no longer charges."  |
|   |  | If no: Consult your service organization.  |
| ERROR CODE: AL5 – inverter 1 Overcurrent              |  |  |
| Check   |  | Action   |
| 1.  | Check if the code returns when you turn the machine off and on again.    | If yes: Consult your service organization.   |
|   |  | If no: You can continue driving. If the problem occurs more often, consult your service organization |
| ERROR CODE: AL19 + AL21 – Motor high/over temperature |  |  |
| Check   |  | Action   |
| 1.  | Check that the machine is not overloaded.                                | If yes: Remove the load from the machine and let the machine cool down. Continue to step 2.          |
|   |  | If no: Consult your service organization.  |
| 2.  | Check if the code comes back when you turn the machine off and on again. | If yes: Consult your service organization.   |
|   |  | If no: You can continue driving. If the problem occurs more often, consult your service organization |

**ERROR CODE: AL29 - 12V Supply failure**

| Check |   | Action   |
|-------|---|--|
| 1.    | Check if the code returns when you turn the machine off and on again. | If yes: Consult your service organization.   |
|       |   | If no: You can continue driving. If the problem occurs more often, consult your service organization |

**ERROR CODE: AL40/AL42**

| Check |   | Action   |
|-------|---|--|
| 1.    | Check if the code returns when you turn the machine off and on again. | If yes: Consult your service organization.   |
|       |   | If no: You can continue driving. If the problem occurs more often, consult your service organization |

**ERROR CODE: AL44 – Emergency stop**

| Check |  | Action   |
|-------|--|--|
| 1.    | Check that the emergency stop switch is turned on. | If yes: Turn it off and turn the machine on again. |
|       |  | If no: Consult your service organization.          |

**ERROR CODE: AL47- Throttle traction fault**

| Check |   | Action   |
|-------|---|--|
| 1.    | Check if the code returns when you turn the machine off and on again. | If yes: Consult your service organization.   |
|       |   | If no: You can continue driving. If the problem occurs more often, consult your service organization |

## 8. Terms of warranty

In these warranty provisions, the following terms are understood to mean:

Purchaser:

any natural or legal person who purchases products and/or services from Stuyf or enters into negotiations or consultations with Stuyf regarding products and/or services to be delivered.

Stuyf:

the private limited liability company Mobilitem Factory B.V. trading under the name Stuyf (registered with the Chamber of Commerce and Industry under number 92769578) and its legal successors.

Agreement:

the agreements between Stuyf and Purchaser, whether or not agreed in writing, as well as any written amendments and/or additions to these agreements, on the basis of which Stuyf supplies products and/or services to Purchaser.

Conditions:

the present general terms and conditions.

Stuyf is deemed to have fully met its obligations if the delivered products meet the requirements of normal commercial

quality. Stricter quality requirements only apply if they have been agreed in writing. The Purchaser may only invoke the warranty in the event of use that corresponds to the intended purpose of the delivered product. In any case, use that corresponds to the intended purpose is understood to mean: use in accordance with the product information relating to the product delivered by Stuyf and exclusively in accordance with the properties promised by Stuyf or the manufacturer thereof.

The warranty does not extend to and/or is not valid if:

- (a) Defects have arisen as a result of not (strictly) observing the installation, operating and maintenance instructions;
- (b) Defects have arisen as a result of exposing the products to abnormal, unforeseeable circumstances or as a result of otherwise careless and/or unskilled handling of the products;
- (c) Defects result from the usual wear and tear process that the product undergoes;
- (d) Defects have arisen as a result of the application of any government regulation regarding the nature or quality of the materials used;
- (e) Defects have arisen as a result of the use of products, materials, items, works and/or constructions that have been used or applied at the express request/instruction

of the Purchaser;

- (f) Defects have arisen as a result of the use of parts obtained from third parties;
- (g) The Purchaser is in default towards Stuyf;
- (h) The Purchaser has not given Stuyf the opportunity to investigate the defect within 10 working days after discovering the defect;
- (i) One year has passed since the delivery date.

Stuyf does not provide any guarantee regarding the functioning and/or the application possibilities of products that have been (re) supplied by the Purchaser to third parties or of products that have been processed by the Purchaser and then (re)supplied to third parties.

# EC DECLARATION OF CONFORMITY

(original declaration)

**mobilitum**

## Manufacturer

Mobilitum Factory B.V.  
Smitspol 4a  
3861 RS Nijkerk  
Netherlands

## declares that the product

Brand name

Stuyf

Model

Pickup

Type

MPAXAX

Image

Stuyf

Cargo

MCAXAX



## with the intended use

of the transport of goods by one operator standing on the platform

**complies with all applicable provisions of the following Directives and the following harmonised standards have been applied:**

### Directives:

2006/42/EG

Machinery Directive (MD)

2014/30/EU

Electromagnetic Compatibility Directive (EMCD)

2014/53/EU

Radio Equipment Directive (RED)

### Intended use:

Radio transmitter used for vehicle tracking and transmits relevant information about the reliability of the vehicles.

### Harmonized standards related to Radio Equipment Directive (RED):

Health and safety according to Article 3 (1) a:

EN 60204-1:2018

Safety of machinery - Electrical Equipment for Machines; Part 1: General Requirements

EN 62311:2020

Assessment of electronic and electrical equipment related to human exposure restrictions for electromagnetic fields (0 Hz - 300GHz)

### Electromagnetic compatibility according to Article 3(1)b:

ETSI EN 301 489-1 V2.2.3 (2019-11) used in combination with:

Draft ETSI EN 301 489-52 V1.1.2 (2020-12);

ETSI EN 301 489-19 V2.1.1 (2019-04);

Draft ETSI EN 301 489-19 V2.2.0 (2020-09)

Efficient use of spectrum according to Article 3(2):

ETSI EN 301 511 V12.5.1 Global System for Mobile communications (GSM); Mobile Stations (MS) equipment.  
ETSI EN 303 413 V1.1.1 Satellite Earth Stations and Systems (SES); Global Navigation Satellite System (GNSS) receivers; Radio equipment operating in the 1 164 MHz to 1300 MHz and 1 559 MHz to 1 610 MHz frequency bands

Harmonized standards related to the Electromagnetic Compatibility (EMCD) Directive:

EN 61000-6-1:2007 Electromagnetic compatibility (EMC) — Part 6-1: Generic standards — Immunity for residential, commercial and light-industrial environments.  
EN 61000-6-3: 2007/A1:2011 Electromagnetic compatibility (EMC) — Part 6-3: Generic standards — Emission standard for residential, commercial and light-industrial environments.  
EN 61000-3-2:2014 Electromagnetic compatibility (EMC) — Part 3-2: Limits — Limits for harmonic current emissions (equipment input current  $\leq 16$  A per phase)  
EN 61000-3-3:2013 Electromagnetic compatibility (EMC) — Part 3-3: Limits — Limitation of voltage changes, voltage fluctuations and flicker in public low-voltage supply systems, for equipment with rated current  $\leq 16$  A per phase and not subject to conditional connection

Other applied standards or technical specifications:

EN 61000-6-7:2015 Generic standards - Immunity requirements for equipment intended to perform functions in a safety-related system (functional safety) in industrial locations

Harmonized standards related to the Machinery Directive (MD):

EN ISO 12100:2010 Safety of machinery - General principles for design - Risk assessment and risk reduction  
EN ISO 13849-1:2015 Safety of machinery – Safety Related parts of control systems – Part 1: General principles for design  
EN 60204-1:2018 Safety of machinery - Electrical Equipment for Machines; Part 1: General Requirements

Other applied standards or technical specifications related to the Machinery Directive (MD):

ISO 2631-1:1997 Mechanical vibration and shock — Evaluation of human exposure to whole-body vibration — Part 1: General requirements  
EN-ISO 11201:2010 Acoustics — Noise emitted by machinery and equipment — Determination of emission sound pressure levels at a work station and at other specified positions in an essentially free field over a reflecting plane with negligible environmental corrections  
EN 1032:2013 Mechanical vibration. Testing of mobile machinery in order to determine the vibration emission value  
EN-ISO 5349-1:2001 Mechanical vibration – Measurement and evaluation of human exposure to hand transmitted vibration – part 1: General requirements

The technical construction file (TCD) is managed by the undersigned and is available at the above address.

City: Nijkerk  
Date: 16-09-2024  
Name: Erik Nieuwpoort  
Function: Director

