

# USER MANUAL

## HG E1000 HIGH TIP

### SUPER SKUB



# HG E1000



## 100% ELECTRIC

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## Introduction

The HG E1000 High Tip is an electrical, high-quality dumper with an added benefit – the ability to unload directly over the rim and into containers and trailers. It is user-friendly and provides the same outstanding performance as the combustion engine alternatives. The high-tip function is particularly popular for work sites in tight spaces, such as cities, among rental companies, landscapers, contractors, and demolition companies. The HG dumper has total safety measures that ensure the highest safety standards for users while being able to load up to 1000 kg.

**Find out more at:**

**[www.hg-machines.com](http://www.hg-machines.com)**

- Very low noise level
- Minimal maintenance - built to last
- Particle free working environment • Lithium battery technology
- 12 hour run time, more than a full day work
- Fast charging - 20 to 80% battery charge in 90 min.

### **Manufacturer:**

#### **HG Poland Sp. Z. O. O.**

+48 91 885 23 04  
Prosta 34  
72-100 Łozienica  
Poland  
CVR-nr.: PL7010040430

#### **HG Machines ApS**

+45 75 89 12 44  
hello@hg-machines.com  
www.hg-machines.com  
Vejlevej 15  
8722 Hedensted  
Denmark

**HG** Bulk movement  
made easy.

# 1. Safety instructions

## 1.1 Read the manual

Read the manual carefully and make sure that other potential users of the machine read it as well. If the user is unaware of certain details about the machine, this could lead to hazards.

If one of the warning labels is loose, worn or damaged so that the symbol is illegible, the label must be replaced.

### **WARNING!**

Next to a text in the manual highlights a risk of injury if users do not follow the instructions

### **WARNING!**

#### **Hot parts**

Do not touch the electric motor during operation or when the motor has just stopped. Hot parts can cause severe burns.

### **WARNING!**

#### **Electric shock**

We recommend the use of qualified service staff/workshop for servicing or troubleshooting, as there is a risk of electric shock. Electric shock can cause fire damage, death and/or long-term injuries.

Manuals, parts lists and instructional videos can be found at [www.hg-machines.com](http://www.hg-machines.com).

### **WARNING!**

#### **Danger of crushing**

Avoid contact with moving machine parts. This applies to both fingers and clothing, as this can lead to mutilation.

### **WARNING!**

#### **Danger**

When servicing and parking the machine, the motor must be switched off, the ignition key removed and the main switch turned off.

At HG, we always recommend qualified staff/workshops for servicing and troubleshooting.

At HG, we always recommend authorized personnel/workshop for servicing and troubleshooting.

## 1.2 Education

Read the instructions carefully. You should be familiar with all controls, switches, etc. and how to use the equipment correctly.

To use the motor barrow, the operator must be over 18 years of age and have normal mental condition and mobility. Relevant legislation may mandate a different age limit for operators of the motor barrow in specific situations.

Remember that the operator is responsible for any accidents or hazardous situations that may occur involving other people or their property.

The operator should be given adequate instructions for using the motor barrow. These instructions should focus on:

1. The need to be careful and focused when working with self-propelled machines.
2. The fact that the operator must have a good overview of what is happening in front of/behind the vehicle - especially where other people may be present.

## 1.3 The most common causes of accidents are

1. Lack of overview
2. The operator's knowledge of the vehicle is insufficient.
3. Overly steep terrain conditions.
4. Insufficiently stable terrain.
5. The vehicle being used in conditions with insufficient space.

## 1.4 Preparation

- Be sure not to wear loose clothing when driving.
- Ensure that the machine is adequately charged. HG does not recommend driving with less than 15% battery capacity.
- Ensure that the machine holds sufficient hydraulic oil for the tipping function.
- Top up hydraulic oil if required, before activating the main switch and ignition key to ON position. Never remove the hydraulic tank cap or top up the hydraulic oil while the motor is running or hot.
- In case of spilling hydraulic oil, do not attempt to turn on the machine until the hydraulic oil spilled on the machine has been removed. Hydraulic oil can create very

slippery surfaces and can thus increase the risk of accidents while driving.

- If you get hydraulic oil on your skin, you should wash your skin thoroughly with soap. If irritation persists, consult a physician.
- Ingestion of hydraulic oil is potentially fatal.

According to ISO 1032, the maximum weighted arm/hand vibration level at the operator's seat under simulated driving and tipping operating conditions is measured as: **ahv = 3.0 m/s<sup>2</sup>**.

The uncertainty of the above measurements is  $\pm 25\%$

## 1.5 Noise and vibration level

### Noise level

According to ISO 6396, the max. energy equivalent sound pressure level is **71 dB (A)** at the operator location, measured during tipping with an empty skip and at maximum motor speed.

According to ISO 6396, the highest energy equivalent sound pressure level is **70 dB (A)** at the operator location, measured during simulated operating conditions between driving and tipping.

The uncertainty of the above measurements is  $\pm 2$  dB.

HG recommends the use of hearing protection, even if the noise is below the statutory limit.

### Vibration level

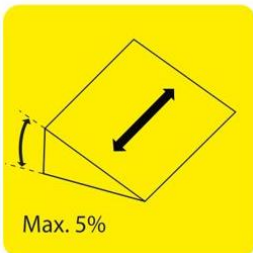
According to ISO 1032, the maximum weighted arm/hand vibration level at the operator location, measured at empty skip tipping and maximum motor speed, is: **ahv = 5.0 m/s<sup>2</sup>**.

### 1.6 Operation

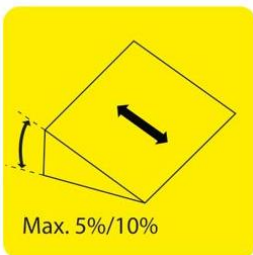
#### WARNING!

Failure to observe the following operating instructions may result in injury:

- When driving indoors, make sure you observe the rules and instructions in force on site.
- Do not use the machine in places with flammable dust or explosive gases.
- As far as possible, only use the motor barrow in daylight or in good artificial lighting.



Do not drive on slopes exceeding **5% (4,5 degrees)**.



Do not drive across slopes exceeding: **10° (10 degrees)** on hard surfaces such as concrete and asphalt. **5° (4,5 degrees)** on compacted ground such as gravel and grass.

- In case of overturning, let go of the machine and keep your distance. Never try to hold onto the machine.
- Be aware that the driving characteristics of the motor barrow change significantly between an empty and a full skip, as the

center of gravity of the motor barrow is higher when the skip is full.



Do not use the motor barrow with insufficient ceiling height.



NEVER drive on slopes with an empty or full container when HIGH TIP is activated.



Only drive on horizontal and stable ground when the HIGH TIP has been driven out.



Do not drive and unload close to excavations and unstable edges.

- Unloading of frozen loads or highly adhesive materials such as clay must not be performed by tipping, as the machine may tip over.
- Driving on soft, loose and uneven surfaces is prohibited, as the operator may be exposed to inappropriate loads on the body when operating the machine.

- When leaving the motor barrow, remove the ignition key and turn off the main switch.
- Always turn off the ignition and main switch before carrying out any service or repair works.
- Always turn off the ignition and main switch before charging the machine.
- Do not touch the motor or other electrical parts when the machine is on and/or running.
- The machine may only be used for transporting materials.



When reversing, the operator must pay special attention to uneven surfaces and objects that the operator may fall over or drive into.



The operator must be aware of persons in the area so that they are not crushed under the truck bed when it is being lowered.

- The area around the machine must be kept tidy to avoid accidents caused by falling.

## 1.7 Maintenance

Each time the machine is used, visual inspection and inspection must be performed to ensure:

- That there are no leaks in the hydraulic system by hoses, tank etc.
- That there are no worn or damaged cables.
- That bolts, nuts, etc. are properly tightened.
- That the radiator grille and radiator fins on the motor are free of dirt.
- That no hydraulic oil has been spilled on or around the machine.
- That the motor barrow is stationary when the propulsion lever is not activated.
- That the safety plate activates forward movement when activated.
- That the tires have the correct pressure and are lubricated.
- That the battery pack is not defective or has loose plug connections.



**WARNING!** Always fit the safety bracket of the tipping cylinder before starting the inspection work.



**NOTE: The release handle must always be pushed up during normal operation, as the brake is otherwise disengaged**

When lifting the machine, the three attachment points on the front and on the instrument panel must be used. Attachment must be sufficiently stable and executed in such a way that detachment cannot take place.



## 1.8 Transport & Towing

In order for the machine to be towed without the motor being started, the release button on the right side below the control panel must be activated. The traction wheels are released and the machine can be moved. See pos. 10



Lifting of the machine may **ONLY** be done with an empty container.

**NEVER** use the control handle, safety plates or anything else around the instrument panel to clamp the machine.

The image may differ depending on the model type.



The machine may only be transported with means of transport with sufficient ground clearance, as there is a risk of serious injury to the operator/damage to the machine and means of transport

During transportation, the machine must be attached to the load surface or cargo hold in accordance with relevant regulations.

## 1.9 Disposal & Dismantling

When, many years from now, the motor barrow is worn out and has to be disposed of, Hedensted Gruppen will perform the dismantling by agreement, as this should take place in an environmentally sound manner. During dismantling, the machine parts are sorted according to type of material: in other words, steel separately, rubber seals separately etc. The various types of material are then disposed of in accordance with relevant current legislation.

# 2. Charging and Storage

## 2.1 Charging

1) Switch off the machine at the main switch, see figure pos. 11.



2) The charging plug is found behind the door on the left side of the machine seen from the direction of travel see figure pos.13



3) Connect the plug to the mains, see figure pos. 15



4) ) Check that the machine is charging the battery. On the right side of the machine, seen from the direction of travel, a pictogram is mounted which describes the charger's various indicator lamp states. At the bottom of the pictogram there is an arrow, below the arrow and through the ventilation holes on the side of

the machine you can see the indicator lights on the charger. During charging, the yellow lamp on the charger will flash. See figure item 16.



5) When the machine is fully charged, the green lamp on the charger will light up steadily. Then remove the plug from the mains and roll the charging cable around the hangers on the battery door. Then close the door, see pos. 13.



6) When the machine has been inspected as described under "safety" and "precautions before start-up", it is ready for operation.

### 2.2 Storage

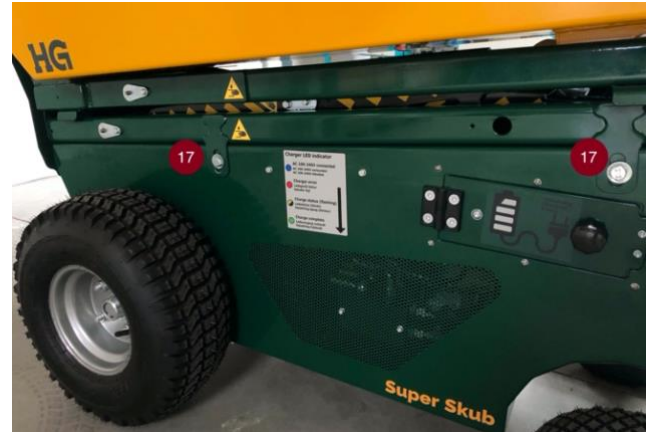
In conditions where a machine is to be stored without operation for a longer period, HG recommends that the machine's battery pack be placed in "storage mode" and with a minimum of 40% power on the battery pack.

If the machine does not have at least 40% power on the battery pack at the time of the recommendation, it must be charged to this or above. The current power level can be read on the battery indicator mounted in the instrument panel. See figure item 6.



When the machine's battery pack has reached a current level of at least 40% or more, the entire container is tipped to the side, this is done by loosening the two bolts on the left side and rotating around the hinges on the right side seen from the direction of travel. See figure pos 17 and 18.

**WARNING!** The rotation of the container must be carried out by two people. The container must be so long that there is no possibility of tipping back accidentally.



The top plate for the battery compartment is then removed by lifting into the elongated hole. The plate is held in place by magnets. See figure pos. 19



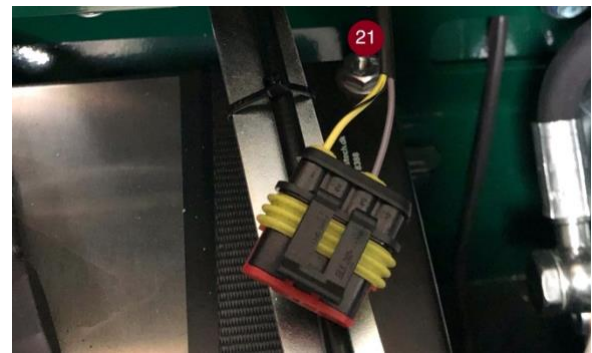
The blue connector on the battery, which consists of two counterparts, is pulled apart. The gray COM connector must also be removed. See figure pos. 20. When the two blue counterparts and the COM connector are separated, the top plate for the battery compartment can be fitted again and the container can be rotated into place.



The machine is now ready for storage and will automatically go into "storage mode" as it will not register any discharge. In "storage mode" the battery pack will only consume 1-2% of

operation ready level mode. However, the battery must be inspected every 2.5 months and recharged to a minimum of 40%. If the machine in use or the battery pack is to be recharged, follow the same procedure as above, where the blue connector consisting of two halves and the COM connector, instead of being separated, are instead assembled.

This is a programming plug. See pos. 21.



### 3. Functions

#### 3.1 Instrument panel



- 1) Operating push buttons for HIGH TIP function. If the left button is pressed and held, the container will lift. If the right button is pressed and held, the container will lower.
- 2) Operating push buttons for tipping the container. Press and hold the left button to tilt the container. Press and hold the right button to lower the container.
- 3) Emergency stop. If the emergency stop is pressed, the machine and all its functions will stop immediately. To activate the machine again after pressing the emergency stop, the emergency stop must be rotated ¼ clockwise, then the machine can be activated again.
- 4) Signal horn. When the horn is pressed, it emits a loud noise. The horn is used, for example, to prevent or avert hazardous situations.
- 5) Emergency stop/safety plate. Activating the plate activates forward movement so the operator does not risk getting trapped.
- 6) Control handle for driving backwards. The handle is clamped up against the handlebar. The more the lever is squeezed, the higher the speed.
- 7) Battery indicator. Shows a snapshot of the power level of the machine battery pack.
- 8) Control lever for forward travel. The handle is pulled up towards the handlebar. The

higher up the lever is pulled, the higher the speed.

- 9) Key start ON/OFF - when OFF the machine is turned off; when the key is turned to ON, the machine is turned on.
- 10) Activation button. Pressing the button activates the machine. A green light indicates that the machine is activated and the timer function has started. If the machine is not operated for 5 minutes, the machine will shut down and the button must be activated again for driving to take place (the timer is not active when driving the machine).

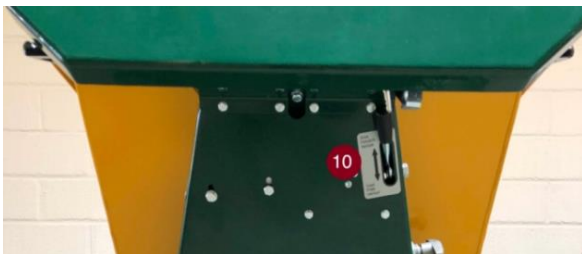
longer period, e.g. at the end of the working day. See figure pos. 11



### 3.2 The machine's functional units

Release. If the release lever is pushed down, the electric motor is disengaged and the machine can be pushed. If the lever is pushed up, the electric motor is engaged and the machine can be operated via the control levers. See figure pos. 10.

**Filling the hydraulics.** Remove the plate using the two screws and add hydraulic oil to the plastic tank. See figure pos. 29, 30 and 31.



Main switch seen in switched off position. When using the machine the main switch is rotated 90° clockwise. HG recommends using the turned-off position when the machine is not used for a





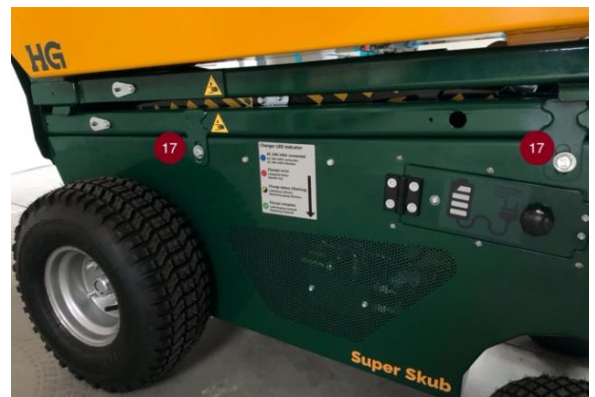
For charging, the charging connection is located behind the door. The charger can be connected to 16-30A group 220V . The plug is of the type is of the type 16A 2P+E Male type F. See figure pos. 13.



Tip protection for the container's hydraulic cylinder. The tipping protection is mounted on the cylinder's stick during service or other inspection where the container must be tipped up. See figure pos. 14.



**Side tipping of container.** To facilitate accessibility of the machine's internal parts, the container can be advantageously tipped to the side by loosening the two bolts on the left side of the machine. See figure pos. 17.



**NOTE: This operation must be performed by two people, as heavy lifting will occur.**

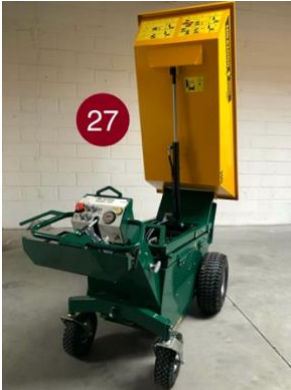
With the help of two people, the container can be tipped to the side. HIGH TIP does not need to be raised as shown in figure pos. 24.



Alternatively, the machine's container can also be tipped without HIGH TIP is raised figure pos. 27 and 28. The advantage of a



raised HIGH TIP or only tipped container is that the container can thereby be placed directly on the surface on which the machine stands. See figure pos. 28.



If the HIGH TIP is not raised, the container, when it is tipped to the side, must be supported by a suitable stable object such as support frame with approved carrying capacity of at least 200kg. See figure pos. 25.



**NOTE: In this case, it must always be ensured that the container is tipped at least 125\* degrees above the horizontal surface where the container has its normal position, precisely to avoid the container falling back.**

### 4. Precautions before starting

Visual inspection of the machine. Make sure the machine and all warning pictograms are intact.

Make sure the control panel buttons and handles are intact.

Tip the container up and install the tip protection on the cylinder block.



Remove the top plate for the battery compartment and visually inspect the battery pack, make sure that the battery pack is fastened so that it cannot move while driving, tighten if necessary the battery stoppers. After inspection, the top plate is fitted, the tip protection is removed and the container is closed.



### 4.1 Tire pressure and tension

To achieve optimal ergonomic conditions, all tires must have the correct air pressure.

- Driving wheels: 53 psi/3,7 bar
- Steering wheels: 67 psi/4,6 bar.



Tighten wheels once a week.  
Tightening torque: 100 Nm



### Safety plate test

The safety plate must activate forward travel upon impact, so that the operator is not pinched in connection with reversing/reversing.

**NOTE: Before the test is started, a free space of at least 15 meters must be ensured all the way around the machine.**

Start the machine and test the plate. In order to simulate a possible pinching during reverse/reversing, the safety plate is pressed in quietly, the machine must start moving forward, the more the plate is pressed in, the faster it runs.



**The machine must not be used if it does not move forward when pressed on the plate**

The system must be undamaged and able to be moved without difficulty.

### 5. Driving

Turn the main switch to the closed position. The battery pack is now connected to the machine's components.



Turn the ignition key to the ON position, the battery status indicator should now light up.



Press the activation button (now lights up green) and the machine is now active.



Check via the battery status that the machine is sufficiently charged. HG does not recommend driving with current below 10%, as this can damage and shorten the life of the batteries.



Both hands are placed on the handlebars so that the fingers can reach the propulsion handle. The machine moves forward by pulling up on the right side of the handle and stops by letting go. If the left side of the handle is pulled up, the machine moves backwards.



**NOTE: Backing/reversing requires thorough orientation to the rear before starting the movement.**

The direction is controlled by pulling the steering handle to the right or left during propulsion. Do not try to control the direction while the machine is stationary, as this will be hard on the body.

**WARNING!** If the forward and reverse handles are released, the machine must stop on the spot and stand completely still. If the machine creeps easily, **it must be taken out of service immediately** and the fault must be rectified.

### 5.1 Operation of HIGH TIP

The container is operated by pressing and holding one of the four function buttons. At the same time as the right hand is still held on the steering handle. Before activating the functions, the operator must inform and ensure that no one is within the machine's range of motion.

When activating the function buttons, the right hand must remain on the control handle. Wait until the container is completely down and place both hands on the control handle before activating propulsion.

**HIGH TIP up:** Press and hold the button at the top left, the entire container will now rise up, when the container cannot rise right, release the switch again. See figure item 32

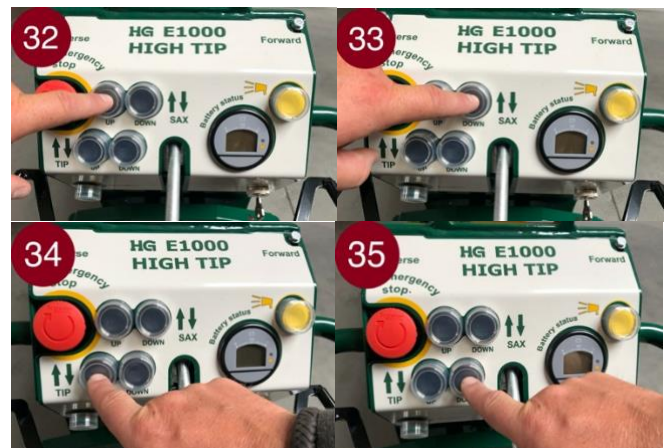
**HIGH TIP down:**

Press and hold the button at the top right, the entire container will now lower to its normal

position, when the container cannot be lowered any further, release the contact again. See figure pos. 33.

Tip container up: Press and hold the button at the bottom left, the entire container will now tip, when the container cannot be tipped right up, release the switch again. See figure pos. 34.

Tip container down: Press and hold the button at the bottom right, the entire container will now tip down, when the container cannot be tipped down any further, release the switch again. See figure item 35.



Before the operator leaves the machine, the container must be down and the machine switched off at the key switch. If the machine is left completely, the key must be removed from the machine and the main switch placed in the broken state.

**WARNING!**

In case of overturning, release the machine and take a distance. **Never try to hold the machine.**

## 6. Maintenance

Activity		Every xx hours of operation					
		Daily	3 months	20 hours	50 hours	100 hours	300 hours
Contrôle	Hydraulic oil level	•					
	Hydraulic leaks	•					
	Battery capacity	•					
	Air in the wheels	•					
	Operation of the security plate	•					
	Leaks	•					
	Wires	•					
	Emergency stop	•					
	Machine functions	•					
	Warning signs	•					
	Freewheel handle		•				
	Tightening bolts and nuts	•					
	Adjustment	Release	•				
Safety plate		•					
Lubrication	Interior and exterior of the High tip	•					
	Steering wheel		•				
Retightening	Wheel		•				
Cleaning	Cooling and air intake grilles	•					
	Dirt and other materials under the dumper	•				•	
Replacement	Hydraulic filter			Firsts		•	
	Hydraulic oil			Firsts		•	
	Warning signs as needed	•					

**First** = To be replaced when the machine has run for 20 hours.

Components must be inspected according to the supplier's recommendations. Hedensted Gruppen prescribes a major service inspection of the machine at least once per year, performed by a qualified service technician. Safety features such as the release and safety plate must be inspected every

three months. All maintenance must be performed by a qualified mechanic, service technician or similar.

### 6.1 Towing and side tipping of the container during maintenance, service, engine failure, hydraulic failure or power failure.

The freewheel handle is used to disconnect the drive wheels so that the dumper can be moved with the engine switched off. The handle is pushed down to disengage. See figure pos. 10. Push the handle up the engine is switched on again.



#### **WARNING!**

The machine's parking brake does not function when the machine is switched off and in disconnected mode. Place a suitable object on both sides of the wheels if the machine is left.

**HG does not recommend leaving the machine in disconnected mode.**

In the event of an engine failure, the container can be tipped over side manually by loosening the two bolts on the left side of the machine. See figure pos.17.



**NOTE: This operation must be performed by two people, as heavy lifting will occur.**

With the help of two people, the container can be tipped to the side. HIGH TIP does not need to be raised as shown in figure pos. 24.



Alternatively, the machine's container can also be tipped without the HIGH TIP being raised, however it is recommended that the HIGH TIP is raised.

The advantage of a raised HIGH TIP or only tipped container is that the container can thereby be placed directly on the surface on which the machine stands. See figure pos. 28. If the HIGH TIP is not raised, the container, when it is tipped to the side, must be supported by a suitable stable object such as support frame with approved bearing capacity on minimum 200kg. See figure pos. 25.



**NOTE: In this case, it must always be ensured that the container is tipped at least 125\* degrees above the horizontal surface where the container has its normal position, precisely to avoid the container falling back.**

## 6.2 Maintenance Points

### Safety bracket

Before starting maintenance work, the safety bracket must be installed on the tipping cylinder. Loosen the two thumb screws and remove the bracket from the inside of the machine. Remove the large thumb screw and unfold the bracket. Place it over the piston rod of the cylinder and screw in the thumb screw as a lock.



### Turn off the machine

Turn the ignition key to OFF



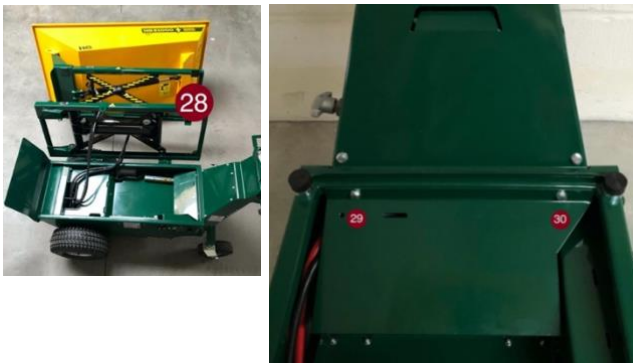
The main switch is turned to the position shown to cut off the power from the battery pack to the other electrical components of the machine.





### Filling hydraulic oil

When filling with hydraulic oil, the container must be tipped to the side figure pos. 28, follow the instructions under the machine **FUNCTIONS** description and figure pos. 29. Remove the plate via the two screws figure pos. 29 and 30.

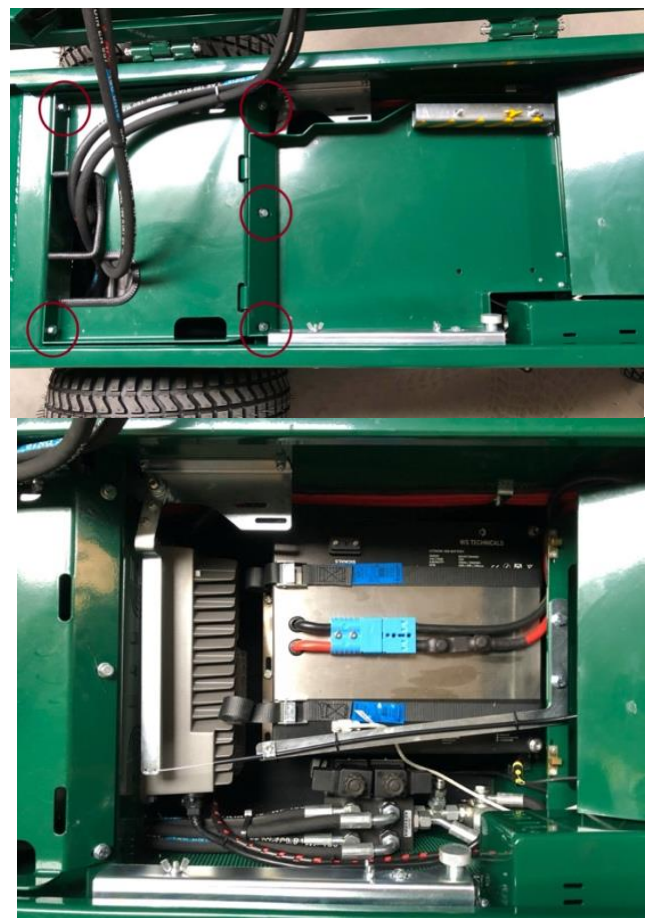


Remove the lid from the plastic container and fill with oil type Q8 Handel 46 with a clean oil can until the container is  $\frac{3}{4}$  full. See figure pos. 31. Screw the lid onto the plastic can and fit the plate with the screws again.



### Cleaning the battery compartment

Remove the top plate for the battery compartment and empty the compartment of foreign bodies such as sand, soil etc. If necessary, use an industrial vacuum with a plastic suction attachment (**NOT METAL or other conductive material**). Avoid contact with the battery terminals.



### Cleaning the engine compartment

Remove the top plate for the battery compartment, then remove the top plate for the motor compartment using the 5 screws shown as above, then clean the motor compartment in the same way as the battery compartment.

### Lubrication

Ordinary high-pressure grease can be used for lubrication. There are grease nipples on:

- Steering wheels 2 pcs. Total. Pivot axis on both sides of the machine figure pos. 35.
- HIGH TIP part outside 4th piece. in total, both sides of the machine figure pos. 36
- HIGH TIP part inside 4 pcs. Total. Marked with circles below.



### Air pressure in wheels

To achieve optimal ergonomic conditions, all tyres must have the correct air pressure:

Driving wheels: 53 psi/3.7 bar

Steering wheels: 67 psi/4.6 bar.



### Retensioning of wheels

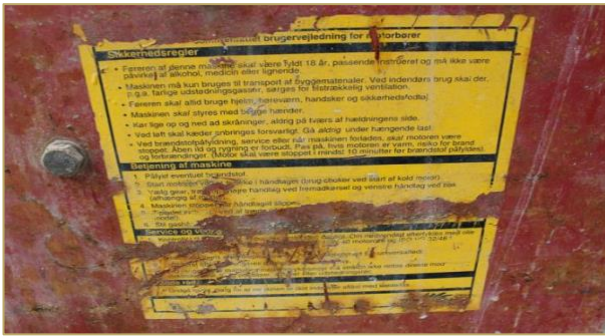
Tighten wheels once a week.

Tightening torque: 100 Nm.



### Replacement of signs

Warning and control signs must be replaced if they are difficult to read. Warning signs and pictograms must be fully intact and legible.



### Safety plate

In the event of an impact, the safety plate must activate forward travel so that the operator is not crushed in connection with reversing. When the machine has moved away from the operator, it must stop again. In addition to the mechanical safety, the machine has an electronic switch installed under the safety plate to ensure that the machine moves forward for 3 seconds.

### Safety plate adjustment

Loosen the two lock nuts with a 13 mm wrench. Remove the locking pin from one of the angle joints and remove the head from the ball. Now turn the angle head in or out as required.

Fit the angle head and split pin, and tighten the locknut. Check that plate, pipe pins, bolts and nuts holding shafts and connections are undamaged.

Adjust the electronic switch under the safety plate so that the arm on the switch clicks/is activated just before the safety plate reaches vertical.

Test with your thigh that the machine moves forward when the plate is activated. The machine must run before your thigh touches the round handlebar.



## 7. FAQ

Error	Possible cause	Possible cause
The machine will not start	The machine is not turned on or lacks power.	Check main switch, ignition key, activation button is lit green and battery indicator.
The machine will not pull	Release is activated.	Push the release lever up.
The machine is heavy to control	The air pressure in the steering wheel tires is too low.	Inflate tires to maximum pressure.
The container does not tip up	Function push button	Check the cables and the contact point
The container does not tip down	The hose valve activates when the platform is lowered.	Hose valve defective.
The container does not tip down	Function push button	Check the cables and the contact point
The container does not tip up to 'High Tip'	Function push button	Check the cables and the contact point
The container does not tip up to 'High Tip'	The hose valve activates when the platform is lowered.	Hose valve defective
The hydraulic system is not working	The centrifugal clutch is worn.	Change the blades in the centrifugal clutch.
The machine does not drive straight.	The steering wheel or suspension is damaged and steers unevenly.	Replace the wheel or suspension.
The machine can tip when it is switched on, but the green activation button does not light up when pressed.	The main relay may be broken or full of debris	Replace the relay (Item No. M104609)
The machine stops when moving forward at full speed, and the green activation button turns off	The red safety plate touches the roller contact point behind the clamping plate	Adjust the contact point so that there is a distance of 2 mm from the red plate at full speed
If the green activation button is pressed with the ignition on and the machine moves forward 3 meters, and needs to be activated again	The roller contact point is jammed. The Safety Plate is curved, which continuously activates the contact point. Defective roller contact point Water in the large multi-plug at the bottom of the motor controller.	Adjust the contact point Orient the plate so that the contact point is clear, but be aware that if the tool is stationary with any plate parts bent, the butterfly handle will be difficult to operate. Change the roller contact (item no.: M15873) Clean the connector and insert the pins into the motor controller.

Lights up in the display, but only when the activation button is pressed. Then the lamp immediately goes out again	Main relay broken or full of dirt	Possible cause
The device's charger takes twice as long to charge the battery	Often occurs when using a cord reel or long extension cord	The device should be closer to the power source (prefer not to use a long extension cord)
The unit can run at full speed, but has no traction on an incline	The device is in neutral (the handle is pushed in to the end)	Push the handle up as indicated on the sticker
The device switches off automatically after a short time or when driving unevenly, or tips down if it hits something	The main relay of the device is worn or full of dust	Replace the main relay (item no.: M104609)

## 8 Hydraulic diagram and electrical diagram

Contact HG for diagram.

## 9. Technical specifications

<b>Specifications</b>	
Width	850 mm
Length	2050 mm
Height	1080 mm
Net weight	455 kg
Content in liters	400 L
Contents in kg	1000 kg
Chute height	125 cm
Driving speed, forward	0-6 km/t
Driving speed, reverse	0-3 km/t
<b>Battery</b>	
Litium	120 Ah
Tension	24V
Driving time	12 hours
<b>Lader</b>	
Plug	230V plug standard EU
0-100% charging time	3.5 hours
20-80% charging time	90 minutes
Integrated charger	22 kW
<b>Motor</b>	
Electric	Asynchronous three-phase electric motor 24V – 96V
Performance	2000 W
Moment	14 Nm
<b>Other things</b>	
Leave function	Hydraulic tip with three-way manual valve. Tip cylinder, double acting
Hydraulic tank :	2.5 liters Handel 46
Driving wheels	TR360 18 x 7 - 8
Fork wheels	4.00-4
Sound pressure:	$L_{pa, eq} = 71 \text{ dB(A) max}$ $L_{pa, eq} = 70 \text{ dB(A) simulated operation.}$
Vibrations	Weighted arm/hand level - 5 m/s <sup>2</sup> max. Weighted arm/hand level 3 m/s <sup>2</sup> simulated operation.

## 10. Warranty

### Warranty period

HG Machines provides a guarantee for 12 months. The warranty period begins on the date of delivery.

### The warranty includes

Components that must be replaced or repaired due to material or manufacturing defects.

The warranty does not cover wear and consumable parts such as:

Tires and hydraulic oil

### The manufacturer's warranty expires if

The machine is used incorrectly.

The machine is used without following the instruction manual and the safety regulations.

The machine is not maintained according to the instructions or outdated spare parts are used.

The machine is used after a fault has been detected, so this results in a more expensive repair than the original fault.

When converting or connecting other electrical parts.

### The owner's own insurance should cover

Fire, burglary, theft and vandalism.

Water and frost damage.

Damage caused by wind and weather.

### The manufacturer's warranty does not apply in these cases

The manufacturer's approval of a claim for compensation requires that the defective part is shown to the manufacturer or its representative within two weeks after the damage has occurred. Owner rights to the damaged part(s) are transferred to the supplier of the new parts.

### According to the warranty only replaces components. It therefore does not cover

Shipping costs.

Costs related to waiting time, machine owner working time and travel costs.

Operating losses and other subsequent costs.

### Other things

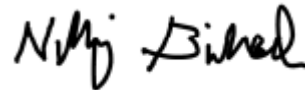
Prior to repair under warranty, the manufacturer must be contacted to agree the procedure. If the repair has been initiated or completed, it is too late to claim the warranty.

### These warranty provisions can only be changed through a separate agreement.

## 11. EU declaration of conformity

HG Machines ApS  
Vejlevej 15  
DK-8722 Hedensted  
Tel. (+45) 75 89 12 44  
www.hg-machines.com

Hedensted, 15. Februar 2023



Nikolaj Birkerod  
Adm. Direktør

### Erklærer hermed, at:

Super Skub model E1000 Typenummer 280200  
Super Skub model E1000 Typenummer 280205  
Super Skub model E1000 Typenummer 280210

### Complies with:

Machinery Directive 2006/42/EC  
EMC Directive 2014/30/EU  
Directive on machines for outdoor use -  
2000/14/EC

### Using the following harmonized standards:

DS EN ISO 12100:2011  
DS EN ISO 13857:2019