RIMAS TRUCK

ELECTRIC TRUCK
WITH 48 VOLTS
BATTERIES

User Guide for Truck-Truck & Mini-Dumper

Machine No.: _____

Balle Innovation ApS
Cedervej 2c, 7400 Herning
Tel. +45 72 16 17 55
sg@rgteknik.dk . www.rimas.dk

Content

1.0 Introduction

1.1 Preface

We thank you for the purchase of a RIMAS truck and hope that it will meet your needs and expectations.

With the purchase of this truck, they have acquired a product that has undergone a development process carried out on the basis of experience from users such as cemeteries, housing associations and stonemasonries, etc.

This instruction manual has been prepared with the aim of helping them to achieve the optimal return on their investment.

Important!!! *Read the instructions carefully and always have them at hand so that you can quickly refer to them if in doubt. Be particularly careful when reviewing the safety requirements that must be read before use. If you need any advice regarding your truck (referred to as the machine), please contact the factory.*

The factory provides a 1-year warranty against manufacturing defects. However, this warranty does not apply to wear and tear or if the machine is exposed to overload. Please note that the warranty will be void if the design is changed or if additional equipment is added without this being approved by the factory.

1.2 Description of Truck

The RIMAS truck truck is a compact all-round machine designed for demanding transport tasks on construction sites, cemeteries or parks, among other places. As standard, the truck is equipped with continuously variable propulsion, articulated steering and 2 or 4-wheel drive.

With its solid construction, wide tyres and ergonomic driver's seat, the truck is suitable for driving on grass, uneven/hilly terrain and in general in confined spaces. The truck is equipped with a powerful tippable bed, which can tip almost completely vertically via hydraulics.

The load capacity of the truck is approx. 1500 kg, depending on the optional equipment fitted.

2.0 Transport and Handling Guide

If the truck is transported on e.g. a flatbed truck, swap truck container or car trailer, this must be done by driving the truck onto the bed. This means that (the truck may not be lifted up with a forklift or crane) it is forbidden to lift the truck onto the truck bed with a forklift or crane. Please note that the weight of the machine is approx. 850 kg, depending on how much extra equipment is attached. The truck must be securely fastened to the bed and with fasteners that can hold the truck to the bed in all conceivable situations. Under normal transport conditions, transport packaging will not be necessary. In that case, waste must be delivered to an approved receiving station if the packaging cannot be recycled in a responsible manner

3.0 Assembly instructions

The machine is tested and ready to run when delivered from the factory.

4.0 User Manual

4.1 Safety requirements and description of use

Acceleration.

The machine starts in a smooth motion, which also results in a reasonable and smooth acceleration.

Application.

The truck is designed for transporting material on a platform or fixed implements.

If the machine is registered, max. load is indicated on the side of the machine's bed.

When working with the machine, a safe distance must be maintained.

If the machine is loaded high, it may have reduced stability. It must be carefully assessed how high the machine's center of gravity has become after loading and driving, then proceed with caution.

The machine's maximum load is 1500kg and it must not be overloaded as the articulated steering and other parts can be damaged with a subsequent risk of breakdown if continued driving.

Normal use.

Normal use of the machine is by the operator sitting on the seat while driving, i.e. not standing up while driving the machine.

Only one ***person may be*** on the machine while driving.

Warning
The machine's hydraulic tipper must **only** be tipped up if this can be done **without a side slope.** Otherwise, there is a risk that the machine will tip over. Never tip in places where the soil is soft and unstable, as this can often cause one of the wheels to sink in during tipping, with a high risk of the machine tipping over.

Important: *When leaving the driver's seat, the ignition must be switched off. Parking brake will be deducted automatically.*

Important: *In the event of a fire in the machine, activate the emergency stop and leave the machine. If possible, enable the main switch.*

Driving on incline/incline.

Warning

Driving on sloping terrain may result in rollover/steeping. Therefore, you must never drive with an inclination greater than 20°. In addition, reference is made to the user manual for the individual tools, as certain tools can reduce the permissible slope further.
On higher than permitted inclines, there is a risk that the machine will stall on the incline and start rolling back.

The speed is adapted to the conditions. That is, low speed when cornering and in tight passages.

Danger around the articulated joint and moving parts.

Warning

Never enter the area around the articulated joint unless the machine has stopped. Never climb under suspended tools. Attachments must be lowered before leaving the machine. If the machine is left with a raised tool, it will gradually sink down.

Hazard during maintenance and inspection.

Warning

Always stop the machine before starting maintenance/inspection of tools or machine.

The machine has the following warning labels:

Warning

Crushing hazard.

Keep your distance from people.

Fixed screens.

Fixed guards and guards in general,
must be buckled while driving.

Important:

For first-time users, the owner of the machine must provide the user with thorough instruction in the use of the truck, including a review of the entire user manual. The review of the safety regulations is particularly important. Finally, the owner must make sure that the user ***do not use*** *The truck in places where there is limited space, slopes, sharp curves, unstable ground conditions, on terrain where it is greasy or slippery, etc. The ban applies until the user has achieved sufficient experience in the use of the truck.*

Light.

During normal use , the driver must ensure that there is sufficient light where to drive so that an obstacle is not hidden in the dark.

Management.

The control is hydraulic and is activated when the machine is ready and there is a person in the seat. Should the hydraulic pump fail, it can still be steered, but the steering wheel will be tougher to turn. Hydraulic components are shielded and there is only access for service personnel.

Fixed attachments.

If the machine is used with fixed work tools from other manufacturers, the operating instructions supplied must be strictly observed. This may result in a risk to the operator and persons in the vicinity of the work area.

Speed and slope/incline.

The speed is adapted to the conditions. That is, low speed when cornering and in tight passages.
Driving on sloping surfaces can result in the truck tipping over. Therefore, you must ***not*** drive on surfaces with a slope greater than 15% across the direction of travel.

When driving on a sloping floor, make sure that the floor is sufficiently cleaned so that the trucks do not slip on any greasy floor.

Max. gradient in the direction of travel:	**Approx. 30% for a distance of 0.5 m.** **Approx. 20% for a distance of 1-2 m.** **Approx. 15% for a distance of 3-5 m.**

On larger inclines and a full load, there is a risk that the truck will stall on the incline and start rolling back.

Do not drive unloaded on inclines of more than 30%, neither up nor down.
If the incline is steeper and the truck fully loaded, there is a risk that the truck will stall on the incline and (worst case) may roll backwards.
The truck must not be unloaded when the vehicle is on a slope

Moving parts.

Around the breaking point and in connection with tipping the bed, you must be very careful not to risk someone or something getting stuck.

Battery cover/attachment.

Cover plates/attachment brackets on batteries ***must*** remain on while driving, so that a possible ejection of electrolyte in the event of an overturned truck is avoided in the event of an accident.
Battery cases and electronics compartments should only be opened by service personnel and only when the main switch is activated.

Fixed screens.

Fixed guards and guards in general ***must*** be clamped while driving.

Maintenance.

During maintenance of the truck, e.g. lubrication, ***the machine must*** be stopped so that no moving parts are at risk.

Vibration.

Vibrations from the engine are considered insignificant and without danger to the operator of the machine, as the seat absorbs the majority of these.

4.2 Initiation

Dashboard.

The instrument displays the following:
Battery level
Speed
Hour meter
Button turtle (reduced speed)

.

Multi Instrument.
Position in front of the steering wheel.

Directional control.
Push button located to the left of the steering wheel.

Button pressed forward: Drive forward.

Button pressed back: Driving backwards.

Operation of tips.
Joystick mounted to the right of the steering wheel.

Joystick is moved forward: The bed is lifted.

Joystick moves back:
The bed is lowered.

Starting up a forklift:

Before driving the machine, check the tyre pressure.
Start-up of the truck is done by turning the ignition key to the first stage. Here, relays for electric motors are activated. Two clicks are heard and the machine is ready for use.
Before driving, check that the battery is fully charged and there are no active alarms on the display.

4.3 Driving Operation

Propulsion.

To drive the truck, the procedure for starting up the truck must be met.

The foot pedal is for forward and rear.
When the accelerator pedal is released, the machine decelerates to stops of about 3 meters to stops.

Drift brake is the electric motors that charge batteries during braking. When the machine has come to a complete stop, a holding brake is automatically activated. This releases when the accelerator pedal is activated again.

Stopping.
When the foot pedal is released, the machine brakes as described above.

When the machine is stationary, the P-brake is automatically activated. See above regarding foot pedal.

Reading.
The permissible total weight of the truck must not be exceeded.
The load must be distributed evenly over the entire load.
Loading must be done so that there is no danger of the load falling off while driving or braking.
Protruding parts of the load must be marked so that they can always be seen.
If the clay is transported moist soil, it can be advantageous to sprinkle a thin layer of gravel at the bottom to prevent sticking of loads when unloading.

Unloading/tipping.

Important! *Charged must **not** tipped up if the truck is parked with a side slope or if the load ties to the bed. Truck **shell** keep completely still when tipping, and you may only drive when the bed is lowered all the way down again. If you do not comply with the* The above *circumstances, there will be a high risk that the truck may tip over.*

Unloading can be started when the machine is in position and safe. This is done by:
Move the joystick arm forward. During unloading, be aware that the charged deflated during the upward movement as "sticky" loads can cause poor stability of the vehicle.

Emergency.

To stop the machine completely, turn **the ignition switch to "O".** This stops the truck's hydraulic pump and all functions are interrupted.

The truck is equipped with an emergency stop located on the front plate under the steering wheel. Furthermore, there is a main switch mounted on the seat box that switches off batteries.

Charging batteries.
The battery charger is a processor-controlled charger built into the machine. Charging takes place when the included charging cable is connected and 220V AC with earth is connected.

Charging should take place in a ventilated area.

4.4 Technical data

Engine	2 x 5,5 kw
Transmission	2 or 4-wheel drive drive with infinitely variable adjustment
Speed	Forward: 0 – 12 km/h Backwards : 0 – 12km/h

Brakes	Operation brake is through the charging of batteries by the operating motors Automatic P brake with hill hold
Operating system	Hydraulic with 90 degree steering angle
Electrical system	Voltage 48V Current 180A
Hydraulic system	Tank capacity 10ltr. Hydraulic oil Panolin HLP Synth E 32 48v 2,2kw hydraulic station
Wheel dimension	20 x 10.00 – 10" – 4 ply grass deck 22 x 10.00 – 12" – 6 ply construction deck (optional)
Tire pressure	Normal driving 20 x 10.00 – 10" . . 30 lbt/in 23 x 8.50 – 12" . . . 50 lbt/in
Weight	approx. 850 kg

5.0 Maintenance Guide

5.1 General

A prerequisite for the machine to function satisfactorily is that the daily and periodic inspections are carried out. The service life of both the machine and, above all, the engine is directly dependent on maintenance.
The service life of the machine and downtime are dependent on maintenance.
As this is an electric vehicle, there is minimal maintenance.
The following is a summary of checks, inspections and lubrication intervals. However, keep in mind that it is the operating conditions that determine the intervals and not just the recommendations below.

If in doubt, you should always contact the factory.

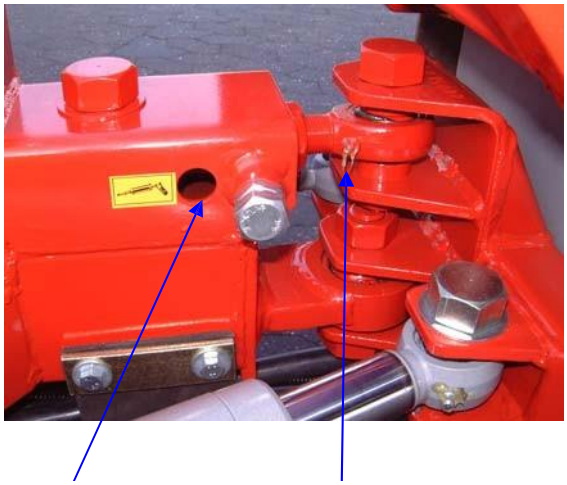
To avoid unnecessary downtime, the truck must be regularly maintained and checked. When using a high-pressure washer for cleaning, do not spray directly against electrical components.

5.2 Engine Connection and Maintenance

As the RIMAS truck is an electric machine, there is no access and minimal maintenance.

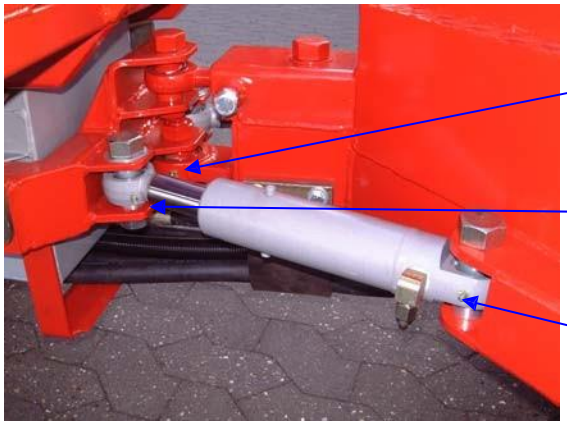
5.3 Maintenance

Weekly checkpoints:



All grease nipples in the kink are lubricated with universal grease.

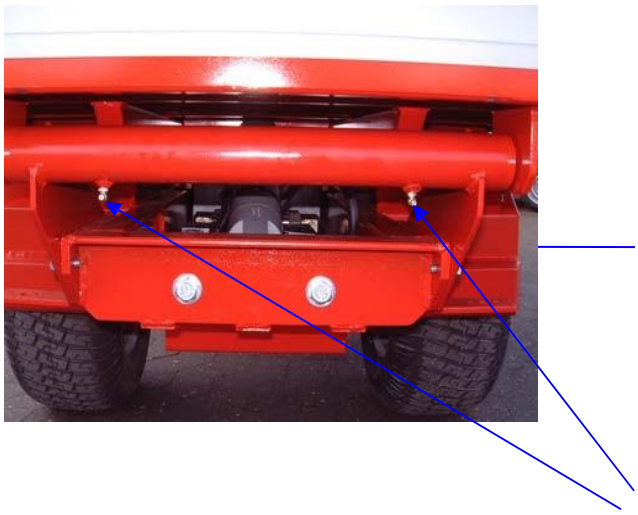
Grease nipple Grease nipple



Grease nipple

Grease nipple

Grease nipple



The grease nipples at the tipping point of the tipper are lubricated with universal grease.

Check whether the bolts (M16) inserted on both sides are sufficiently tightened.

Annual Check:

The machine is electronically controlled and energy is supplied from batteries. It is recommended that annual checks of the drive line are carried out by the manufacturer.

Faults and towing:

In the event of a fault with the machine, a fault code can be read on the display and the manufacturer can be contacted for advice.
If the machine stops unintentionally, it may shut down the machine, wait a moment, and reconnect the switch. This will reboot the controller.
If that doesn't work, contact the manufacturer.

If it becomes necessary to move the machine during a fault condition, the brake(s) must be released. This is done by pulling the bracket on the brake towards the center and fixing in this position. The machine can now be pushed or pulled at low speed.

Please note Always use original spare parts, otherwise the warranty will be voided.

It is too late to claim warranty after the repair has been carried out

Spare parts Contact your nearest dealer or importer directly.
Make sure you can state ***the Model, Year and Part No.***

6.0 Warranty, service and complaints.

The factory provides a 1-year warranty from the date of purchase against manufacturing defects.

- However, this warranty does not apply to wear and tear or if the machine is exposed to overload.

- The warranty does not cover damage caused by causes beyond RIMAS aps' control – including falling objects, lightning, water, fire, smoke or other force majeure.

- The warranty is void if the design is changed or if equipment or tools that are not approved by the factory are used.

- The warranty will be void if non-original spare parts are fitted.

- The warranty will be void if the service intervals are not met.

- It is a prerequisite for meeting warranty claims that maintenance has been carried out in accordance with the guidelines in this booklet. This maintenance is not covered by the warranty.

- It is a prerequisite for meeting warranty claims that direct contact is made to RIMAS ApS. or one of its authorized dealers.

- If the repair has been carried out by another repairer without our approval, the claim will not be honoured.

- RIMAS Aps. may, at its own discretion, repair or replace defective components covered by the warranty. The warranty on parts thus replaced or repaired is not extended beyond the original 1 year.

- RIMAS aps. E.S. is constantly developing its products, which is why specifications, equipment, etc. are subject to change without notice. This does not entitle you to update the machine during the warranty period.

- The warranty covers material and labor

Scrapping the machine:

When the machine is to be scrapped, batteries must be handed in for approved recycling.
The rest of the machine can be handed in normal scrap.

EC Declaration of conformity

Balle Innovation.
Cedervej 2c, 7400 Herning
Tel. +45 72 16 17 55
www.rimas.dk

EC Declaration of Conformity

The undersigned, representing
Hereby declares that:

Machine	Rimas
Type:	Rimas BS dumper truck
Varenr.:	BS-000-002

Er i overensstemmelse med:

Direktiv 2006/42/EF	Machine direktivet bilag B.
DS 116.2.1:2011	Machinery safety - danger areas, safety distances
DS 116.2.2:2017	Safety of machinery - safety devices
DS 116.2.3:2017	Machinery safety - ergonomics
DS 116.1:2018	Machinery safety - Basic concepts and principles

Herning.
Dato: 1.12-2023