

# **USER DOCUMENTATION ELECTRIC HOIST**

AJA HOIST

# CE

WAGENBOUW HAPERT BV

HAPERT

THE NETHERLANDS

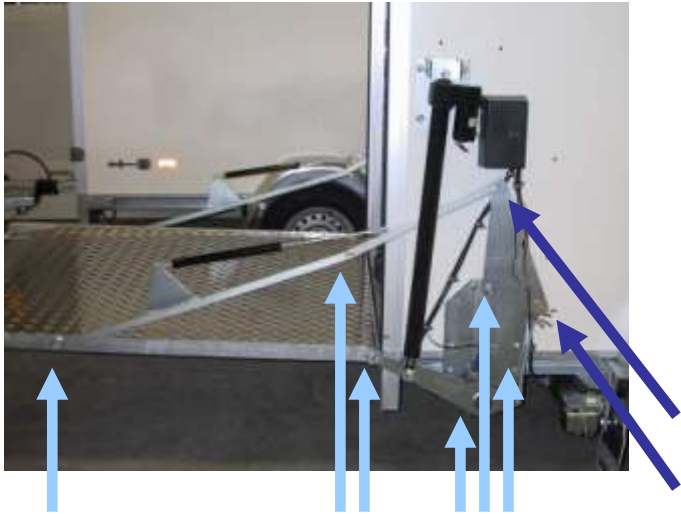


## WARNING

**NEVER LIFT UP THE REAR  
OF THE TRAILER WITH THE  
HOIST**



**ALL HINGE POINTS MUST BE CHECKED AND LUBRICATED EVERY WEEK.**



## About this documentation

This documentation was originally drafted in Dutch by:

Wagenbouw Hapert BV

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Except for those sections that are intended to be copied for use in conjunction with this documentation, such as summarised instructions and markings placed on the hoist, no part of this documentation may be reproduced in any form whatsoever without the permission of Wagenbouw Hapert BV.

## Machine identification

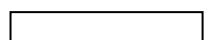
This user documentation is for the hoist models specified on the cover sheet.

For the respective serial numbers: see the data on the model plate (page 23)  
and/or the Declaration of Conformity (page 24)

The hoist was produced by:

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Dealer:



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## Foreword

This documentation is a user manual that describes the working and operation of the AJA hoist.

It does not include details of (maintenance) work that has to be carried out by the personnel of Wagenbouw Hapert BV.

**This documentation should be considered an integral part of the hoist!**

**You should therefore store it in a safe place. It contains information that will be useful or necessary in the future, for example for repairs and maintenance. It is recommended that you keep a copy with the hoist and a copy, for example, in the files of your technical department. Wagenbouw HAPERT BV can, if necessary, provide an extra copy. The documentation must be supplied with the trailer when it is sold.**

## Using this documentation

The instructions in this documentation are categorised according to the type of user. Section 2 contains details of the necessary requirements that different users have to meet.

In this documentation, the following definitions are used:

User:	The collective name for anyone who works with or on the hoist.
Operator:	The daily user of the hoist. <b>Section: Introduction, Safety and Operating Instructions.</b>
Service personnel:	People with the training, experience and tools required to carry out the described work. <b>Section: All</b>
Safety officer:	The person who is responsible for safety in the company that owns the hoist. If nobody has been specially assigned for safety, this is the employer. <b>Section: Safety and Specifications</b>

Work that is not included in this documentation must be carried out by the personnel of or in consultation with Wagenbouw Hapert BV.

In this documentation, the term “product” refers to the goods and materials to be lifted/lowered, not the actual hoist.

The figures included in the text of this documentation are purely illustrative. They are only intended to clarify the respective text sections, for example, to indicate the location and function of operating mechanisms or components. The actual design and dimensions can deviate. If necessary, construction drawings are supplied separately or as a supplement.

### Text conventions

Except for the sections that actually deal with safety issues, text segments that are important for personal safety and health are printed in **bold type**. The following warnings could be placed on the hoist:



**Warning!**

**This pictogram is a warning for the risk of personal injury.**

### Service and information

If you wish to receive further information about different (technical) aspects of the OEM hoist system or information that, in your opinion, has been omitted or is not clearly explained in this user documentation, please contact Wagenbouw Hapert BV

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## Guarantee and liability

### Guarantee

Unless it has been agreed otherwise in writing, the following guarantee stipulations shall apply.

- Wagenbouw Hapert BV's guarantee shall be issued to the first user and shall be valid for 12 months after delivery.
- Defects must be reported to Wagenbouw Hapert BV before the end of the guarantee period.
- The guarantee applies to defects that occur:
  - During normal use of the hoist and that
  - Are caused by defective construction or materials or
  - Due to poor workmanship on the part of Wagenbouw Hapert BV.
- The guarantee shall not cover defects caused by:
  - Normal wear and tear.
  - Incompetent or injudicious use.
  - The use of non-recommended spare parts or other consumables.
- In the event that a defect covered by the guarantee occurs, Wagenbouw Hapert BV shall:
  - Replace the respective parts; in which case the Wagenbouw Hapert BV shall become the owner of the replaced parts.
  - Repair the defects.
  - Opt for another solution, if repair is, in fairness, not possible or impractical.
- In this respect, the customer must give Wagenbouw Hapert BV the opportunity to rectify any defects.
- The guarantee conditions of the respective third parties shall apply to any built-in components supplied by them. The length of the guarantee period for these components may differ from the period specified above.
- Wagenbouw Hapert BV shall retain the right to modify its hoists without any obligation to notify customers in advance.

### Liability:

Wagenbouw Hapert BV cannot be held liable for unsafe situations, accidents or damage caused by ignoring warnings or (statutory) regulations placed on the hoist or included in this documentation, such as, for example:

- Incompetent or injudicious use, or poor maintenance;
- The use of the hoist for purposes or under conditions other than those specified in this documentation;
- The use of components other than those prescribed in this documentation;
- Repairs carried out without the permission of Wagenbouw Hapert BV.
- Modifications to the hoist, including:
  - Modifications to the controls.
  - Welding, mechanical alterations, etc.
  - Extensions to the hoist or its control system.

Wagenbouw Hapert BV **cannot be held liable:**

- if the buyer of the hoist has not fulfilled all his obligations (financial or otherwise) to Wagenbouw Hapert BV;
- for consequential damage caused by defects or the malfunctioning of the hoist (for example damage to products (to be processed), interruption of work in progress, delays, etc.).

## **1. Introduction**

### **1.1 The purpose and function of the hoist**

The AJA hoist is designed specifically to fit on HAPERT trailers. Its function is to lift/lower goods and materials to facilitate loading/unloading them on/off the trailer. The hoist's load platform also serves as a tailgate for the trailer.

### **1.2 Explanation of the parts of the machine**

See Section 3 (page 15) for an explanation of the parts of the machine

### **1.3 Model and accessories**

#### **1.3.1 Standard hoist and accessories**

The standard model consists of:

- Electric hoist, lifting capacity 350 kg, motor and mechanical sections mounted on the side panel of the trailer, battery on the shaft, key-operated main switch, extendible supports.

The following separately supplied components, parts and tools belong with the hoist. Make sure that everything is present.

- This user documentation
- Remote control unit with connection cable
- Key for the main switch.

#### **1.3.2 Options**

The following accessories and special models are available and described in this documentation. Underline the model that has been supplied to you:

- 550 kg lifting capacity instead of 350 kg.
- Mechanical hoist (with a winch) instead of an electrically powered hoist.

## 2. Safety

### 2.1 Introduction

The hoist is designed in such a way to be safe to use and maintain. This applies to the uses, circumstances and guidelines described in this documentation. Everybody who works with or on the hoist **must** therefore read this documentation and follow the instructions it contains.

Additional safety measures mainly related to working conditions may apply in the company or country in which the hoist is used. This documentation does **not** describe how these measures must be complied with. It does, however, contain all the information about the hoist you need. If you have any doubts, ask the respective government official or your safety officer.

In this documentation, a distinction is made between **normal use** (see Section 3: Operating Instructions) and **other work** (see Section 4) carried out on the hoist. The reason for this is that - especially with regard to safety - service and maintenance personnel have to meet different requirements than operators.

Simple maintenance work described in the operating instructions may also be carried out by the operators. Work that is not described in the operating instructions may only be carried out by people who are qualified to do so. The accessories that are supplied with the trailer to give access to specific sections or functions (such as the key to the main switch) may not be stored on or near the trailer. These accessories may only be entrusted to people with the required qualifications.

### 2.2 Safety regulations

- Make sure that unauthorised persons, children or animals for example, cannot access the hoist! If the trailer is not under supervision, the key must be removed from the main switch.
- People may only use the hoist if they have read and understood the operating instructions.
- Make sure that people or goods cannot come under the load platform. When working with the hoist, maintain a safe distance from the load platform of at least 0.5 metres.
- Safety devices may not be removed or deactivated.
- Keep the workplace neat & tidy and free of obstacles.
- Make sure the surroundings are adequately illuminated.
- Do not exceed the maximum load (see model plate)

### 2.3 Non-permitted use

The hoist is **especially not** suitable for:


- Lifting (disabled) persons.
- Being used to pull objects out of the ground.
- The load platform is not suitable for use as a bridging platform.

## 2.4 Users

### 2.4.1 Operators

The hoist may be used by any adult person, who is familiar with and adheres to the section on safety and the operating instructions. Special training is not required.

The general tasks of the operator are:

- Operating the hoist.
- Daily maintenance, including regularly checking the pins in the hinge points outside the hood (see the photo on page 3, the points indicated with an ).

### 2.4.2 Service personnel

Special knowledge/experience and/or training is required.

The general tasks of service personnel are:

- Annual maintenance/service

## 2.5 Operating space

A surrounding space of **60 cm** is required to operate the hoist. All operations can be performed from within this area.

## 2.6 Personal protection equipment

Personal protection equipment is not required for operating the hoist. Wearing safety shoes is, however, recommended.

For some products, mandatory requirements may apply: see the respective product documentation.

## 2.7 Warning signs on the machine

The warning signs placed on the machine must be clearly legible. If this is not the case, they must be replaced.

The texts of the warning signs placed on the trailer are listed in the section "**markings on the machine**".

The respective hazards are described in further detail in the operating and maintenance instructions.

## 2.8 **Hazardous substances for people and the environment**

### 2.8.1 **General**

The following substances that are used when working with the hoist require special attention:

- Battery acid

### 2.8.2 **Environment protection**

Risks of environmental pollution are present in the form of:

- The battery (can contain lead)
- Battery acid

Dispose of these substances in accordance with locally applicable regulations and environmental legislation.

### 2.8.3 **Disposal of the hoist**

If the hoist is dismantled, the local waste disposal regulations applicable at the time dismantlement takes place must be followed.

The hoist only contains fairly standard, non-hazardous materials. At the time of construction, these materials could be disposed of safely without exposing people carrying out dismantlement work to any special or undue risks.

The battery unit fitted on the hoist must be treated as chemical waste and disposed of accordingly.

See paragraph 2.8.2 “Environment protection”.

### 3. Operating instructions

Anyone who wishes to use the hoist must first be familiar with the information in the “Safety” section.

As specified in paragraph 2.4.1, this section is intended for operators.

Work that is not specified in this section may only be carried out by service personnel (see Section 4).

**Warning!**

The first time the hoist is used, it must be put into operation by service personnel.

Before the hoist is used for the first time, the horizontal level of the load platform must be set with the adjustment bolt (see point 3, page 16). See the “Repairs and maintenance” paragraph on page 20 for details on how to check the horizontal setting.

#### 3.1 Construction and operating devices

The construction of the hoist is shown in the photos on pages 16/17.

The housing of the motor and mechanical sections is mounted on the side panel of the trailer. The connection socket for the remote control unit is located in the housing. The remote control unit has a slide switch with two settings (“up” and “down”) for raising and lowering the load platform. The battery is mounted on the shaft. With a mechanical hoist, the remote control unit is replaced with a crank.

The adjustment bolt is used to set the load platform in position so that it always remains horizontal.

The hoist's load platform also serves as the tailgate for the trailer. The draw bolt on the platform prevents it from accidentally falling open.

The supports must be extended to provide additional stability for the load platform when using the hoist. A crank for the supports is supplied with the hoist.



1. load platform 2. draw bolt locking mechanism 3. adjustment bolt 4. support



5. connection socket for remote control unit 6. remote control



7. main switch on the battery box

### 3.2 Working with the hoist

**Warning!**

Only start using the hoist after you have made absolutely sure that nobody is in the surrounding danger zones.

Before using the hoist the (towing) vehicle must be stationary (with the handbrake on).

**Warning!**

Make sure that the load cannot be displaced when using the hoist.

#### 3.2.1 Electric hoist

1. Unscrew and pull the supports downwards. Slide-out the supports.
2. Release the draw bolts on the load platform so that it can open.
3. Activate the main switch on the front of the trailer at the battery box (see point 7, page 17).
4. Plug the cable for the hoist's remote control unit into the socket in the housing (see point 5, page 16)

##### 5a. Lowering the load platform:

- Keep the button pressed in until the load platform is lowered to the required height. When the load platform reaches its lowest position, the hoist will stop automatically.

##### 5b. Raising the load platform:

- Keep the button pressed in until the load platform reaches the required height. When the load platform reaches the trailer floor height, it will stop automatically.

6. Swing the load platform up to close the back of the trailer and secure it in position with the draw bolt mechanism.
7. Slide in the supports. Push them up under the trailer.
8. Disconnect the remote control unit and store it in a safe place.
9. Deactivate the main switch.

#### 3.2.2. Manually operated hoist

1. Unscrew and pull the supports downwards. Slide-out the supports.
2. Release the draw bolts on the load platform so that it can open.
3. Insert the crank in the winch.


#### 4a. Lowering the load platform:

- Turn the crank anti-clockwise until the load platform is lowered to the required height.

#### 4b. Raising the load platform:

- Turn the crank clockwise until the load platform reaches the required height. The winch is fitted with a limiter that stops the load platform when it reaches the (trailer) floor height.
5. Swing the load platform up to close the back of the trailer and secure it in position with the draw bolt mechanism.
  6. Slide in the supports and push them up under the trailer.
  7. Remove the crank and store it in a safe place.

### 3.3 Maintenance

Regularly check the pins in the hinge points outside the hood (see the photo on page 3, the points indicated with an ). Lubricate the hinge points every week.

### 3.4 Cleaning



#### **Warning!**

- **The hoist must be deactivated while it is being cleaned.**
- **Electrical components may not come into contact with water or other liquids.**
- **Do not spray water or other liquids into the housing!**

If cleaning work is carried out by people other than the hoist operators (for example, a cleaning department or an external contracted cleaning company), they must receive proper instructions so that they can clean the hoist safely.

#### 4. Other maintenance work

The jobs specified in this Section may only be carried out by service personnel as described in paragraph 2.4.2.

##### 4.1 Repairs and maintenance

###### 4.1.1 Maintenance instructions

The hoist must be lubricated at least once every six months, or if used intensively, every two months (see the photo on page 3, the points indicated with an ↑ ).

The hoist must be inspected at least once per year. The following points are especially important in this respect:

- Inject grease into all the lubrication points (see the photo on page 3, the points indicated with an ↑ ).
- Visual inspection of hoist to ensure it is completely in proper working order. With manual models, the winch cable must also be inspected and replaced if necessary.
- Check the electrical connections; for example, the battery terminals and the operating system (see the electrical circuit diagram on page 25).
- Check the horizontal adjustment of the hoist:  
Use a spirit level to align the hoist. If necessary, change the horizontal position of the hoist with the adjustment bolts (see point 3 on page 16)

###### 4.1.2 Repairs / replacing parts

During the guarantee period, repairs may only be carried out under the supervision of Wagenbouw HAPERT BV.

All replacement parts must always have the same tolerances and specifications as the originals.

All parts can be ordered via Wagenbouw Hapert BV.

The hoist is built from standard parts (generally available on the market) and specific components (especially made for the hoist).

Standard parts:

It is advisable to use OEM parts.

If you have any doubts about the specifications, contact Wagenbouw Hapert BV.

Specific components:

Only replacement components supplied by Wagenbouw Hapert BV may be used.

**Warning!**

Deviating from the above instructions can damage the hoist. Wagenbouw Hapert BV cannot accept any liability in this respect.

#### **4.2 Disposal**

See paragraph 2.8.2 “Environment protection” and paragraph 2.8.3 for handling hazardous substances.

## 5. Specifications

### 5.1 Machine specifications

#### Load platform dimensions

Width	1.34 metres 1.54 metres 1.84 metres
Height	max. 1.50 metres Trailers higher than 1.50 metres are fitted with a top flap
Lifting height	approx. 0.53 metres (types R & K)
Mass	max. 75 kg

#### Lifting capacity

Single motor	350 kg
Twin motor	550 kg

#### Battery

Type	12 V semi-traction
Capacity	90 Ah

Electromotor approx. 25 A

Noise level < 70 dB

#### Materials used

Mechanical construction	steel
Finishing	full immersion / electro-zincing
Load platform	aluminium bulb plate
Housing	reinforced polyester

Winch (only with a mechanically operated hoist): self-braking

### 5.2 Physical conditions of use

Ambient (operating) temperature	-5 to +40 degrees Celsius
During transport / storage	-25 to +55 degrees Celsius

The hoist is not suitable for use in an explosion-hazardous environment.

A CE marking has been placed on the hoist, which means that it complies with the applicable European directives on safety and health. The "Declaration of Conformity" (see page 24) specifies the respective directives.

**6. Markings on the hoist**

Model plate

The model plate contains the following specifications:

Type:	E1 4500
	E1 6800
	E2 4500
	E2 6800
	M1
Lifting capacity:	350 kg
	550 kg
Year of construction:	2...



**EU Declaration of conformity**

With respect to the Machinery Directive.

We     Wagenbouw Hapert BV  
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          5527 ZG Hapert  
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          E-mail: [info@hapert.com](mailto:info@hapert.com)

Hereby declare completely of our own volition:

1.     We are the producer of the machine:

          Hoist  
Make:    AJA Lifting  
Type:    See the model plate specifications (page 23), which form part of this  
          declaration

that this declaration concerns.

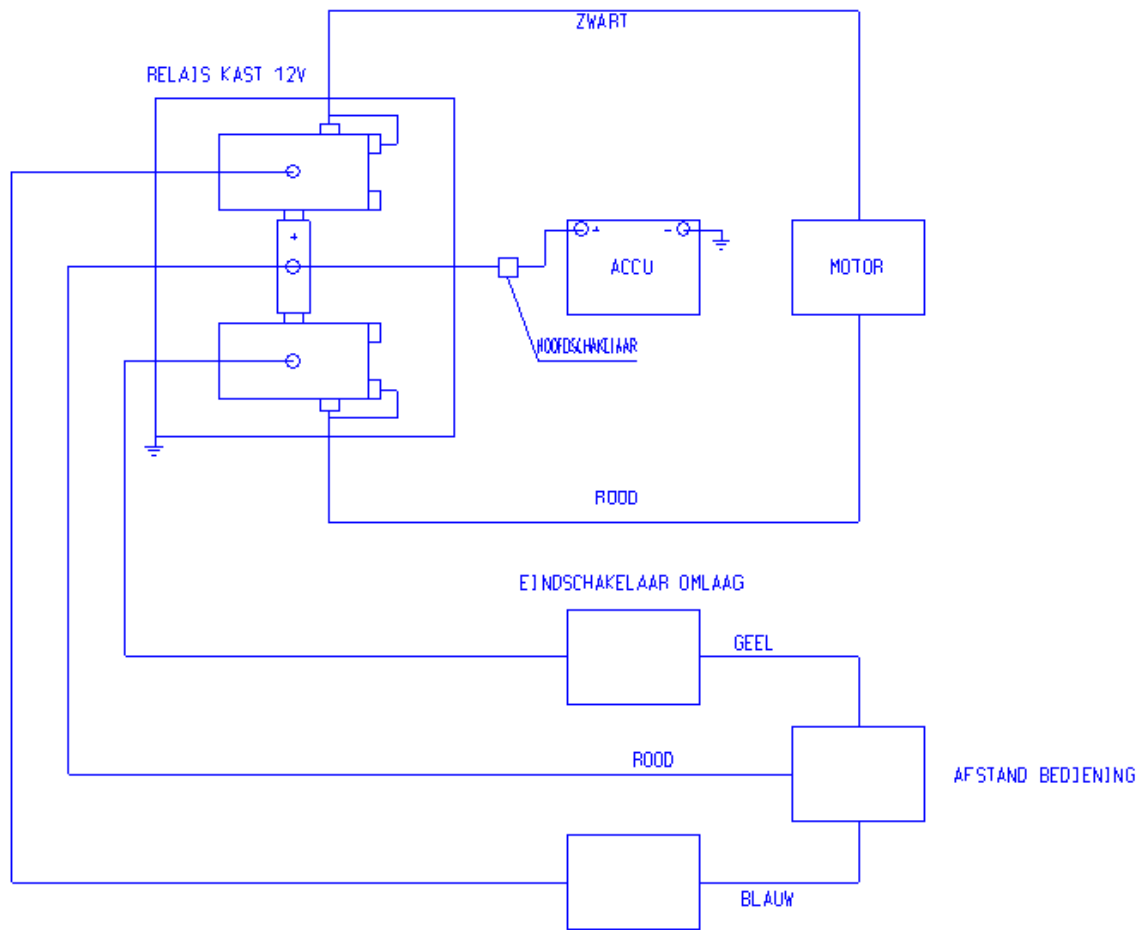
2.     The machine has been designed and built in accordance with the requirements of the Machinery Directive 89/392/EEC (as recently amended).
3.     The machine also complies with the requirements of the following EU directives:  
          The EMC directive 89/336/EEC (as recently amended).

Signed in    Hapert  
Date:        June 2008

(Ad Saris)

Signed by:   A. Saris  
Position:     Director

Appendix 1.



Appendix 2.

<p><b>WAARSCHUWING</b> <b>WARNING</b></p>  <p><b>WARNING</b> <b>ATTENTION</b></p>	
<p>GEBRUIKSAANWIJZING VAN DEZE LIFT</p> <ul style="list-style-type: none"> <li>* NOOIT de achterkant van de wagen omhoog drukken met de lift</li> <li>* Hefvermogen van deze laadlift: ZIE DE GEGEVENS OP HET TYPEPLAATJE</li> <li>*Niet geschikt als overbruggingsplatform</li> <li>*Niet geschikt voor heffen personen/gehandicapten met uitzondering van de bediener</li> </ul> <p>DEZE GEGEVENS MOGEN NIET OVERSCHREDEEN WORDEN.</p>	<p>INSTRUCTIONS FOR THE USE OF THIS LIFT</p> <ul style="list-style-type: none"> <li>* NEVER lift the back of a vehicle using this lift.</li> <li>* Lifting capacity of this loading lift: SEE THE AMOUNTS STATED ON THE TYPE PLATE</li> <li>*Not suitable for use as a bridging platform</li> <li>*Not suitable for lifting (disabled) persons, with the exception of the operator</li> </ul> <p>DO NOT EXCEED THE MAXIMUM LOAD LIMIT</p>
<p>GEBRAUCHSANWEISUNG FÜR DIESEN AUFZUG</p> <ul style="list-style-type: none"> <li>* NIEMALS die Wagenrückseite mit dem Aufzug nach oben drücken!</li> <li>* Tragfähigkeit dieses Lastenaufzugs: SIEHE DIE ANGABEN AUF DEM TYPENSCHILD</li> <li>*Nicht geeignet als Überbrückungsplatte</li> <li>*Nicht geeignet zum Heben von Personen/Behinderten außer dem Bediener</li> </ul> <p>DIESE WERTE DÜRFEN NICHT ÜBERSCHRITTEN WERDEN</p>	<p>MODE D'EMPLOI DE CET ELEVATEUR</p> <ul style="list-style-type: none"> <li>* NE JAMAIS soulever l'arrière du véhicule avec l'élevateur</li> <li>* Capacité de levage maximale de cet élévateur: VOIR DONNEES TECHNIQUES SUR LA PLAQUE DU CHASSIS</li> <li>*Ne pas utiliser comme passerelle</li> <li>*Ne pas utiliser pour le levage de personnes/handicapés à l'exception de l'opérateur</li> </ul> <p>CES DONNEES NE PEUVENT JAMAIS ETRE DEPASSEES</p>
<p>AJA Lifting ®      Wagenbouw "HAPERT" BV</p> 	