

Operating Instructions
Hand pallet trucks
HU Profi
Issue 08.2000



Index

- 1 **Introduction**
 - 1.1 Product description
 - 1.2 General information on service and maintenance
 - 1.3 Spare parts
 - 1.4 Dimensions
 - 2 **Correct operation**
 - 2.1 Maximal lifting capacity
 - 2.2 Danger zones
 - 2.3 Service and maintenance
 - 2.4 Incorrect operation
 - 3 **Assembly of the handle**
 - 4 **Adjust of lowering action**
 - 5 **Functions and operation**
 - 6 **Oil level**
- Spare parts lists**

All the information contained in this handbook is valid as of 08.98. We reserve the right to make changes and modifications to the product at any time. Should this lead to differences and/or discrepancies please contact your service centre.

Introduction

All users must read these operating instructions carefully prior to the initial operation. These instructions are intended to acquaint the user with the truck and enable him to use it to the full extent of its intended capabilities. The operating instructions contain important information on how to handle the truck in a safe, correct and economic way. Acting in accordance with these instructions helps to avoid dangers, reduce repair costs and down time and to increase the reliability and lifetime of the truck. Anyone involved in doing any of the following work with the truck must read the operation instructions and act accordingly:

- operation, including preparation, trouble shooting during operation and cleaning
- maintenance, inspection, repair
- transport

Apart from the operating instructions and the accident prevention act valid for the respective country and area where the truck is used, also the commonly accepted regulations for safe and professional work must be adhered to.

1.1 Product description

This electric forklift truck has been designed to lift, lower and transport loads over completely level ground. A nameplate on the frame shows the maximal lifting capacity of the truck. For the safety of personnel and to prevent damage to the truck this maximum lifting capacity must never be exceeded. The manufacturer is to be consulted before any attachments or modifications are made to the truck.

1.2 General information on service and maintenance

The working life span, operational reliability and safety of the truck depend greatly on the quality of service. For this reason the recommended inspections, service and maintenance are to be carried out on time and with great care.

1.3 Spare parts

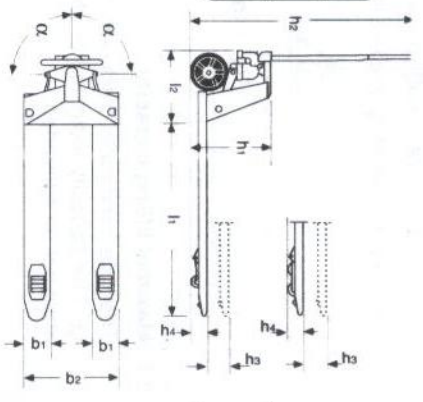
To eliminate delays, mistakes and to save time and reduce costs always make following information available when ordering spare parts:

- Truck model
 - Model code
 - Part-number
 - Part designation
 - Number of parts required
 - Exact delivery address and means of transport.
- We cannot accept any responsibility for the faulty supply of spare parts resulting from insufficient or incorrect data in the spare part order.

Use only original Yale spare parts

1.4 Dimensions in mm

Model	h ₁	h ₂	h ₃	h ₄	h	l	b ₁	b ₂	α	Wght.
										kg
Hu Profi 20S	410	1230	120	80	1150	373	150	520	95°	74
Hu Profi 20T	410	1230	120	80	1150	373	150	520	95°	76
Hu Profi 25S	410	1230	120	80	1150	373	150	520	95°	75
Hu Profi 25T	410	1230	120	80	1150	373	150	520	95°	77



2 Correct operation

The hand pallet truck has been constructed to transport pallets/skeleton boxes, containers or similar over even, level ground. The lifting and lowering hydraulic unit and the steering assembly are protectively incorporated within the robustly welded steel frame. The bearings for the steering and the lifting linkage are also situated here. This construction facilitates access for inspection and service. When required the valves are easily removed and replaced. The hydraulic and steering assemblies form a single compact unit. Steering and the lift and lower operations are controlled from the handle. The load should be positioned equally on both forks and load centre must be between the load and steering wheels. The load is to be positioned so that there is no danger of it overturning. The steering has a lock of more than 90° in both directions

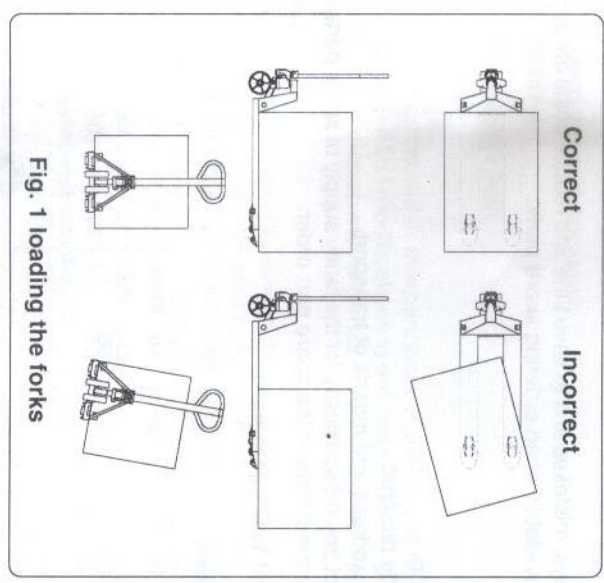


Fig. 1 Loading the forks

2.1 Maximal lifting capacity

The Yale hand pallet truck was designed to transport loads up to the rated capacity. The capacity indicated on the truck is the maximum safe working load which must not be exceeded.

2.2 Danger zones

Do not lift or transport loads while personnel are in the danger zone. Do not place hands or feet under the raised forks. Raised loads are not to be left unattended for a longer period of time. The operator may only start to move the load when he is sure the load will not overturn and that all personnel have left the danger zone.

2.3 Service and maintenance

Adhering to the inspection and maintenance instructions is as much a part of the "defined intended use" of the truck as acting in accordance with the operating instructions. If faults are detected the truck must be put out of service immediately. To ensure that the truck remains in safe working order it is to be subjected to regular inspections by a competent person. Inspections are to be annual unless adverse working conditions dictate shorter periods. The components of the truck are to be inspected for damage, wear, corrosion or other irregularities and all safety devices are to be checked for completeness and effectiveness. Repairs may only be carried out by a specialist workshop that uses original Yale spare parts.

The bearings of pins, axles and linkage are to be cleaned and greased (e.g. Shell FD 2 or similar). Check the hydraulic system for leaks and top-up the hydraulic reservoir (max. oil level = bottom edge of filler bore) with forks lowered.

2.4 Incorrect operation

- Do not exceed the maximum lifting capacity of the hand pallet truck.
- It is forbidden to carry personnel on the hand pallet truck.
- Space the load evenly on the forks.
- It is forbidden to use the hand pallet truck (without brakes) on gradients.
- It is forbidden to lift loads with the tips of the forks (e.g. to raise a machine).

3 Assembly of the handle (see Fig. 2)

Threading the link connection through the bore of the actuating block. Place the handle onto the actuating block and secure with three screws. Connect the link connection to the lever.

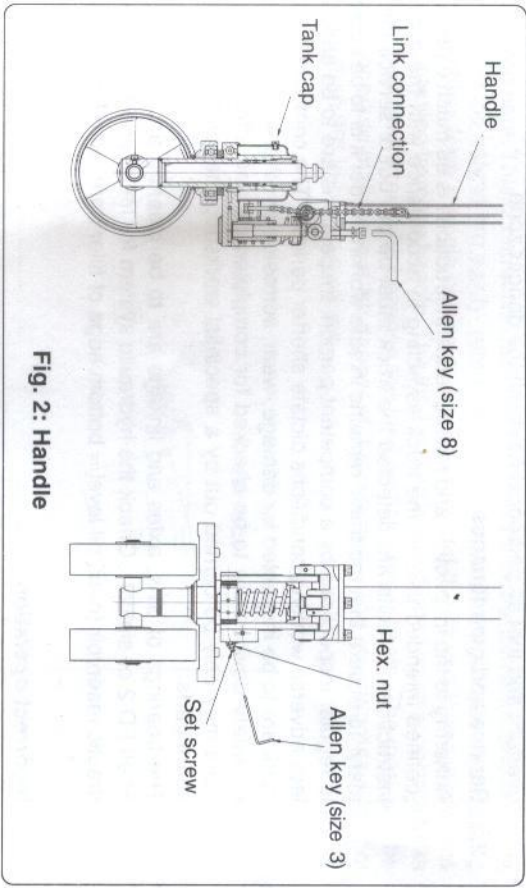


Fig. 2: Handle

4 Adjust lowering action (see Fig. 2)

Switch the control lever to the lower "Down" position (Fig. 4 y2) and make several pumping actions with the handle until the forks are fully raised. Switch the control lever to the "Neutral" middle position (Fig. 4 y1). Loosen the hex. nut. Slowly turn the setscrew in a clockwise direction until the forks just start to lower. Now turn the setscrew 1 1/2 turns anticlockwise.

Secure the setscrew with the locking nut.

The lowering function must be available in all handle positions.

5 Functions and operation (Up/Down/Neutral, see Fig. 4)

UP: Switch the control lever to the lower "Down" position (Fig. 4 y2) and make several pumping actions with the handle.

Down: Switch the control lever to the raised "Up" position (Fig. 4 - y3), until the forks have lowered to the desired position.

Neutral: To transport a load the control lever must be in the centre "Neutral" position (Fig. 4 - y1).

6 Oil level (See Fig. 2)

Check the oil level every six months (oil viscosity 30 Cst at 40 °C / total volume 0.3 ltr.)

Check the oil level as follows:

Lower the forks completely. Remove the cap (screw, seal washer and O-Ring).

Remove seal and rubber cover.

Add oil until it is level with the lower edge of the opening.

Replace cap.

A few pumping actions with the handle will bleed the hydraulic system.

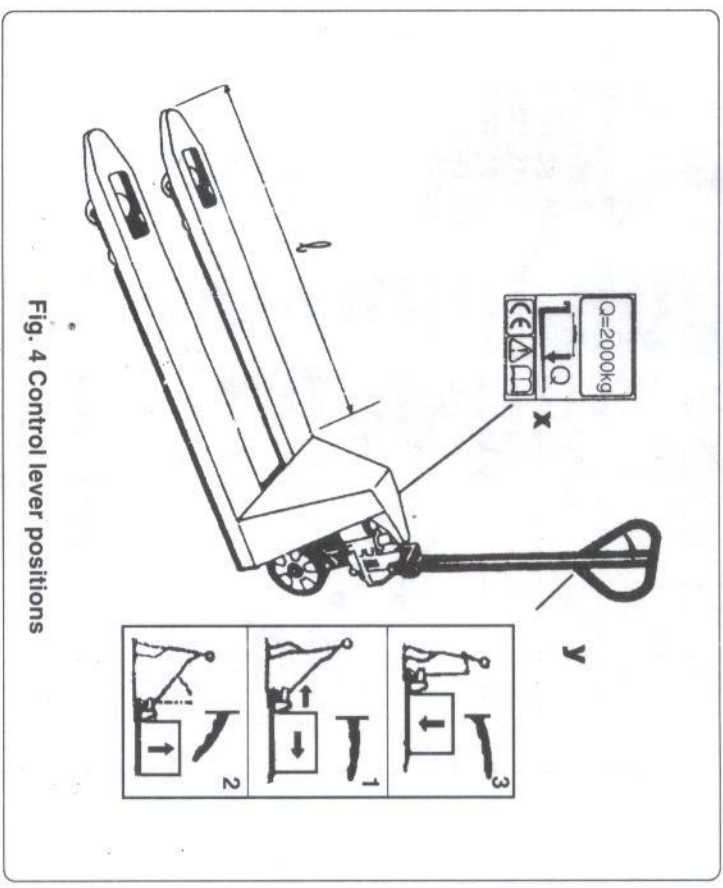
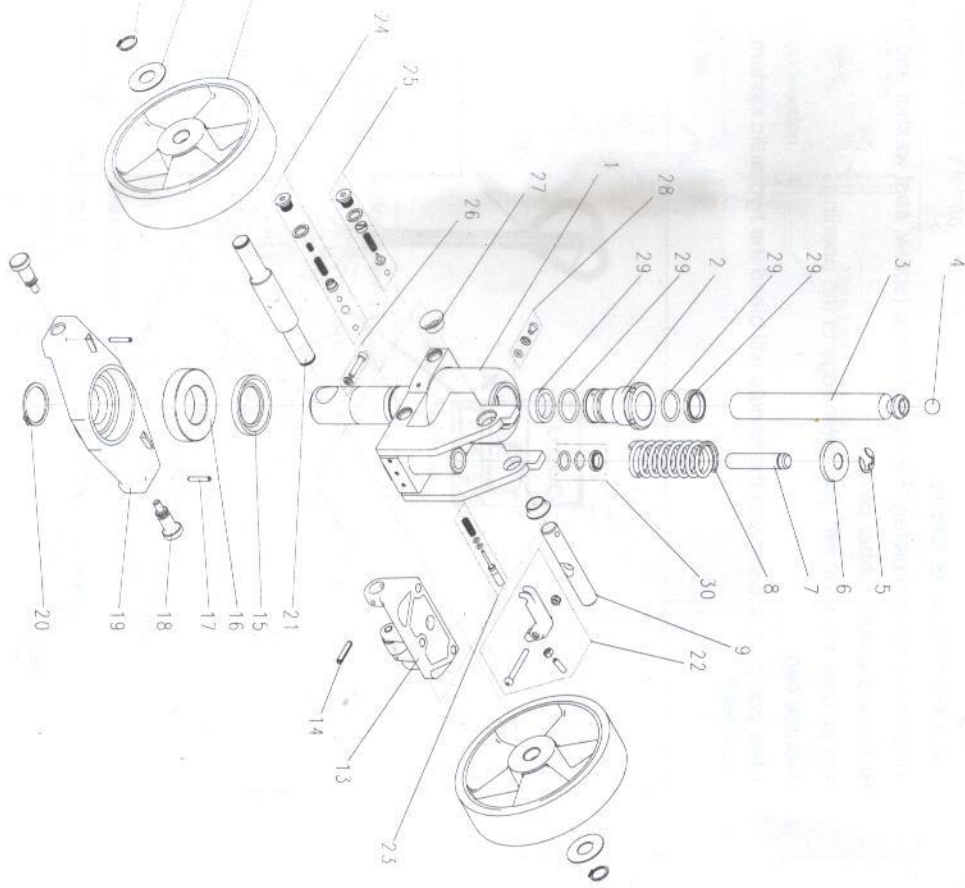


Fig. 4 Control lever positions

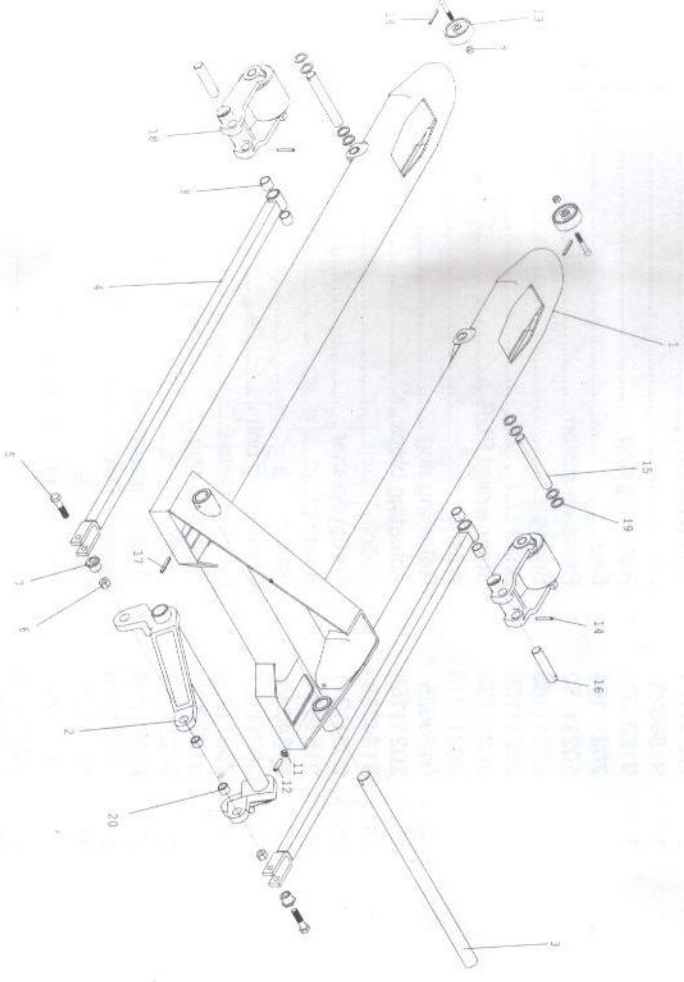
Hydraulic

Hydraulic



Pos.	Part-No.	Description	Quantity
1	20211161	Body	1
2	20211170	Piston guide	1
3	20211171	Lifting piston	1
4	9159025	Ball	1
5	9123027	Retaining ring	1
6	20211164	Cap	1
7	20211162	Pressure piston	1
8	20211163	Spring	1
9	20211166	Shaft	1
10	20211132	Steer wheel PUR	2
11	20211213	Washer	2
12	9129025	Retaining ring	2
13	20211165	Actuating block	1
14	9134058	Rollpin	1
15	20211211	Thrust washer	1
16	9151815	Bearing	1
17	9134098	Rollpin	2
18	20211127	Connecting bolt	2
19	20211210	Bearing plate	1
20	9129009	Retaining ring	1
21	20211212	Shaft	1
22	20211214	Operating lever, assy.	1
23	20211215	Lowering valve, assy.	1
24	20211216	Main valve, assy.	1
25	20211217	Pressure control valve, assy.	1
26	20211218	Fitting	1
27	9153088	bush	2
28	20211219	Cap (tank)	1
29	20211220	Seal kit (lifting piston)	1
30	20211221	Seal kit (pressure piston)	1

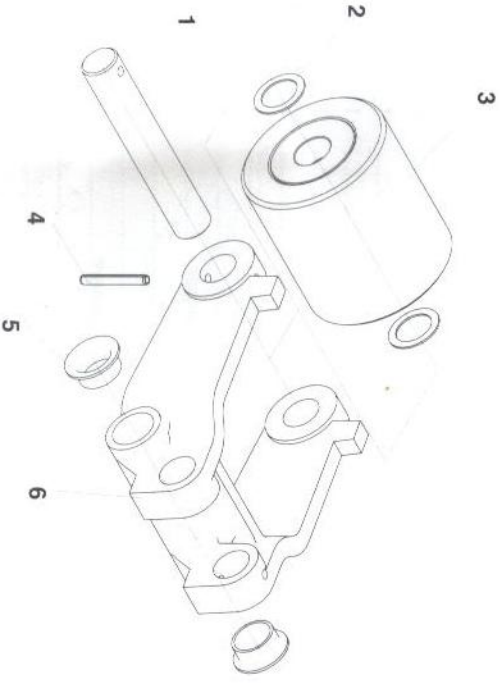
Frame



Frame

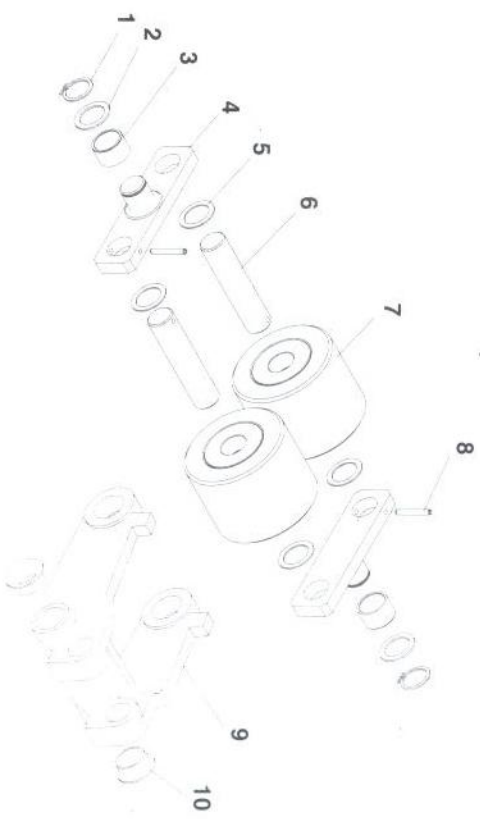
Pos.	Part-No.	Description	Quantity
1.1	20211122	Frame (1150 x 520)	1
1.2	20212122	Frame (1220 x 686)	1
2.1	20211100	Crank (520)	1
2.2	20212100	Crank (686)	1
3.1	20211126	Shaft (520)	1
3.2	20212126	Shaft (686)	1
4.1	20211106	Link (1150)	2
4.2	20212106	Link (1220)	2
5	9101049	Screw	2
6	9115118	Screw with clamping element	2
7	20211104	Eccentric	2
8	20211105	Bush	4
9	9115805	Screw with clamping element	2
10	9101052	Screw	2
11	09122032	Lockwasher	1
12	09102029	Screw	1
13	20210317	Entry roller	2
14	9134050	Rollpin	4
15	20210324	Shaft (frame/LRG)	2
16	20210326	Shaft (link/LRG)	2
17	9134001	Rollpin	1
18.1	20211123	Load roller, tandem PUR	2
18.2	20211312	Load roller, tandem PA	2
18.3	20211205	Load roller, single PUR	2
18.4	20211313	Load roller, single PA	2
19	9121220	Shim washer	8
20	20211206	Bush	2

Load roller, single



Pos.	Part-No.	Description	Quantity
1	20211204	Shaft (load roller S)	1
2	9121177	Shim washer	2
3.1	20211200	Load roller single Pa	1
3.2	20211201	Load roller single PUR	1
4	9134050	Rollpin	1
5	9153088	Bush	2
6	20211203	Load roller fork single	1

Load roller, tandem

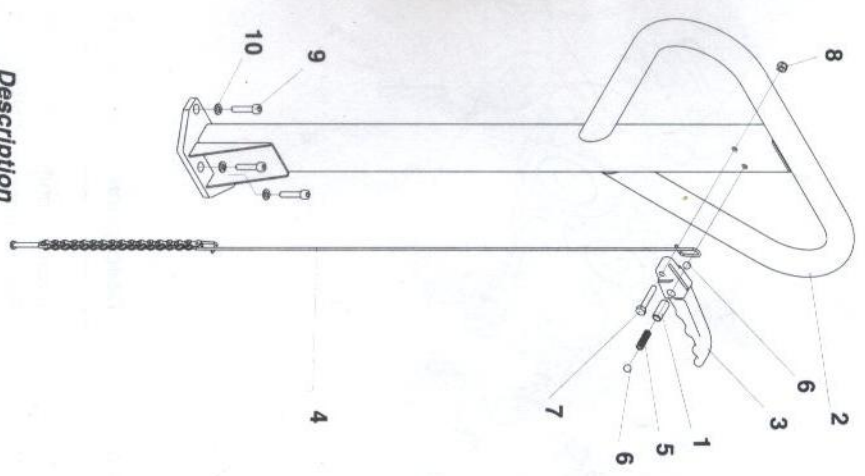


Pos.	Part-No.	Description	Quantity
1	9129025	Retaining ring	2
2	91211220	Shim washer	2
3	20211110	Bush	2
4	20210320	Link	2
5	9121177	Shim washer	4
6	20210323	Shaft (load roller T)	2
7.1	20211263	Tandem load roller PUR	2
7.2	20211202	Tandem load roller Pa	2
8	9134085	Rollpin	2
9	20211264	Load roller fork, tandem	1
10	9153088	Bush	2

Hand Pallet Trucks

part: 113/0898E

Handle



Pos.	Part-No.	Description	Quantity
1	20211135	Sleeve	1
2	20211138	Handle	1
3	20211140	Lever	1
4	20211142	Link connection	1
5	20211145	Spring	1
6	9159008	Ball, 8 mm	2
7	9101056	Screw	1
8	9115135	Screw with clamping element	1
9	09102024	Screw	3
10	9122033	Lockwasher	3

indent-Nr.: 09900113/0898E

Hand Pallet Trucks

EC DECLARATION OF CONFORMITY
in accordance with Machinery Directive 89/392/EEC, Appendix II A.

We,
Yale Industrial Products GmbH
D-42549 Velbert, Am Lindenkamp 31

hereby declare, that the design, construction and commercialized execution of the below mentioned machine complies with the essential health and safety requirements of the EC Machinery Directive. The validity of this declaration will cease in case of any modification or supplement not being agreed with us previously. Furthermore, validity of this declaration will cease in case that the machine will not be operated correctly and in accordance to the operating instructions and/or not be inspected regularly.

Machine description:

- HU-Series - Hand Pallet Trucks
- HU PF 12 - Electric Pallet Trucks, manual lift
- HU HS 10, HU ES 10 - Scissor Pallet Trucks, manual/power lift
- EGU EL - Electric Pallet Trucks, power lift and traction
- EGU ES - Electric Pallet Trucks, power lift and traction
- HV TM - Manual Drive Stackers, electro-hydraulic lift
- EGV TE - Electro-hydraulic Stackers
- EGV TG - Electro-hydraulic Stackers
- EGV LE - Electro-hydraulic Stackers
- EGV LE F - Electro-hydraulic Stackers

Machine type:

Industrial trucks

Serial number:

from manufacturing year 01/98
(serial numbers for the individual capacities/models are registered in the production book with the remark CE-sign)

Relevant EC Directives:

EC Machinery Directive 89/392/EEC, edition 91/368/EEC and 94/44/EEC, revised in 98/37/EEC with effect from 12 August, 1998

Transposed harmonised standards in particular:

- EN 292, part 1 (safety of machines)
- EN 292, part 2 (safety of machines)
- EN 394 (safety of machines)

Transposed (either complete or in extracts) national standards and technical specifications in particular:

VBG 36 (Flurförderzeuge)

Quality assurance:

DIN/ISO 9001 resp. DIN/EN 29001, module H
acc. to EC-Directive 90/683 EEC

Date / Manufacturer's authorized signature: 01.01.1998

A. Hark

Identification of the signee:

Dipl.-Ing. Manager Quality Control

indent-Nr.: 09900113/0898E