XE15/18/20
USE AND MAINTEANCE

DESIGNED TO WORK

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XE15 • XE18 • XE20

USE AND MAINTENANCE

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Thank you for choosing a forklift truck

We have prepared this manual so that you can fully appreciate the technical features and stylish design of your new truck.

The following pages contain instructions for using and maintaining the truck properly, as well as recommendations and directions for operating the truck efficiently and safely. We recommend that you read this manual and the attachment "Safety instructions for industrial forklift trucks".

Sincerely

The OM company began manufacturing forklift trucks in 1951 in Milan. Ten years later in 1961, the "Piccola Industria Meccanica sul Po" (PIMESPO) was established in Luzzara.
Currently, OM PIMESPO operates from three locations:

The corporate headquarters at Lainate (MI), the Modugno (BA) plant, and the Luzzara (RE) plant.

Modugno (BA) plant

Luzzara (RE) plant

Today, OM PIMESPO offers a complete range of forklift trucks and indoor materials handling systems. Customers can choose from the following list of products:

- *DIESEL, ELECTRIC, AND LPG FRONT LOADING FORKLIFT TRUCKS RANGING FROM 0.8 TO 8 t.*
- *ELECTRIC FORKLIFTS AND TRUCKS WITH TILLER STEERING OR DRIVER ON BOARD*
- *ELEVATED OR GROUND ORDER PICKERS*
- *THREE-SIDED AND RETRACTABLE ELECTRIC FORKLIFT TRUCKS WITH DRIVER ON BOARD*

CUSTOMER SERVICE DEPARTMENT / SUMMARY INFORMATION

- Contact your local dealer for any problems encountered with your forklift truck or spare parts needs.
- Use only genuine spare parts for repair of your truck, thus keeping its technical features intact.

intact.

- Refer to the spare parts catalog, available from your local dealer, for ordering spare parts.

- We recommend that you copy the truck information in the table below so that you can provide it to the dealer when necessary.

Truck model .....

Serial N .....

Delivery date .....

EC Conformity Mark n° .....

0.5

TABLE OF CONTENTS

Chapter 1

INTRODUCTION - GENERAL INSTRUCTIONS

CONTENTS

1.1 - INTRODUCTION

1.1.a - General description

IMPORTANT: Carefully read the warnings below before operating the truck.

- Many accidents result from insufficient knowledge or because safety instructions were not observed while operating or maintaining the truck.

- The truck may only be operated by properly trained personnel. Contact your local dealer for personnel training needs.
- To operate the truck properly and avoid accidents, the user must read, understand, and observe all the precautions and warnings contained in this manual and in the attachment “Safety instructions for industrial forklift trucks”, and on the plates attached to the truck.

- The truck may only be used in accordance with the regulations specified in its operating

- The truck may only be used in accordance with the regulations specified in its operating instructions.

- The manufacturer declines any responsibility for accidents or injuries caused to people or damage caused to objects resulting from users not observing the safety instructions described in this manual and in the attachment “Safety instructions for industrial forklift trucks”.

- This manual and the attachment “Safety instructions for industrial forklift trucks” must be kept carefully on board the truck so that they can be quickly accessed.

- Some of the illustrations in this manual show the truck without its protective devices (guards, panels, etc.) in order to present the information more clearly.
  Do not use the truck without these protective devices. Maintenance operations must be performed by qualified technicians ONLY.

1.1.b - Customer service department

- For certain types of repair and maintenance work, contact your local dealer for a qualified technician with the appropriate equipment and genuine spare parts.

1.1.c - Spare parts

- Use only genuine spare parts supplied by the manufacturer. Using unauthorized spare parts will void the warranty and the user will assume full responsibility for any accidents caused by the inadequacy of unauthorized parts.

1.1.d - Warranty card

- Each truck comes with a Warranty Card containing a description of the standards that govern the services under warranty.

1.1.e - How to use the manual

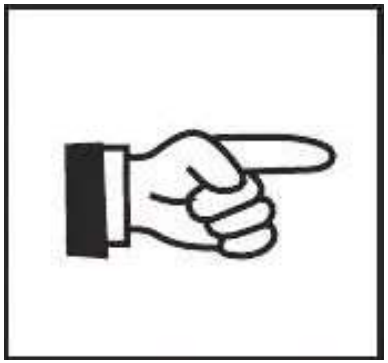
- This manual is divided into chapters covering different topics. There is a table of contents at the beginning of each chapter to facilitate consultation, and the chapter number is repeated in the lower left or right corner of each page. The upper part of the page contains the title of the topic covered in the chapter.
- The following symbols are used to indicate the safety messages contained in the manual:

DANGER TO PEOPLE

Not observing some or all of the instructions indicated by this symbol might seriously compromise the safety of the driver or maintenance personnel.

DANGER TO THE TRUCK

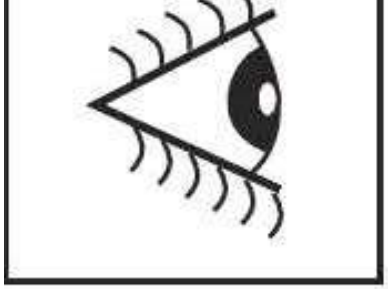
Not observing some or all of the instructions indicated by this symbol might cause serious damage to the truck, and in some cases void the warranty.



IMPORTANT INFORMATION

This symbol indicates important information for the driver.

SEE PARAGRAPH



This symbol indicates that the topic is covered in another paragraph.

1.2 - STANDARDS REFERENCES

This truck complies with 98/37/EEC Machine Directive for forklift trucks, together with standards EN 1726-1 (for trucks with a carrying capacity less than or equal to 10,000 kg and tractors with a carrying capacity less than or equal to 20,000 N). It also complies with 89/336/EEC Electromagnetic Compatibility Directive and subsequent amendments for forklift trucks, together with standard EN 12895.
It also complies with standard EN12053 regarding noise.

1.3 - POTENTIAL EXPLOSION AREAS

1.3 - POTENTIAL EXPLOSION AREAS

 **DANGER: Never use the truck in areas where there is a risk of explosion from gases, vapors, or inflammable and explosive powders. Trucks operating in potential explosion areas must be specially equipped and accompanied by a special EC Conformity Mark and the appropriate use and maintenance manual.**

1.4 - NORMAL USE AND AREAS OF APPLICATION

The forklift truck is intended for handling relatively stable loads only. Its forks can lift and carry any type of load whose weight and load center fall within the specific parameters (see the technical data).
The truck must be used for these operations only.

The following are considered normal operating conditions:

- Operating the truck (moving and/or lifting) on surfaces that are relatively firm, smooth, flat, and adequately prepared.
- Operating the truck with the load center more or less in the median longitudinal plane of the truck.
- Driving the truck with the mast tilted backward whenever possible, and the load lowered.

If the above conditions are not observed, the user assumes full responsibility for injuries caused to people and/or damage caused to objects, and the warranty will be voided.

The following examples are not considered normal operating conditions because they

may cause the truck to accidentally overturn:

- Driving too quickly in bends.
- Making sudden turns at a high rate of speed.
- Driving with an elevated load.
- Turning and driving at an incline on sharp slopes and gradients.
- Transporting swinging loads or where the load center has shifted considerably from the median longitudinal plane of the truck.
- Carrying the load in the direction of the hill/slope on sharp slopes and gradients.
- A forward inclination of the mast with an elevated load.

1.4

- Driving on irregular routes (uneven surfaces, slopes, or soft ground).
- Overloading the truck.
- Bumping into fixed and/or moving installations.
- Misjudging the load center.

1.5 - USAGE PROHIBITIONS

- Do not operate the truck in dusty or powdery environments where there is a potential risk of explosion.
- Do not operate the truck in salty environments, which may, over time, cause the electrical or electronic components to malfunction due to corrosion.
- Do not operate the truck in difficult conditions (extreme climates, cold stores, strong magnetic fields, etc.), which may require special precautions, in which case contact your local dealer.
- Do not operate the truck without using the “protective wire screen” or “additional screen” whenever necessary, to prevent small objects from falling through the roof.
- Do not operate the truck outside the following climatic limits:

  - Maximum ambient temperature: ..... +40°C
  - Minimum ambient temperature for trucks operating in normal conditions inside: ..... +5°C
  - Minimum ambient temperature for trucks operating in normal conditions outside: ..... -20°C
  - Altitude: ..... up to 2000 m
  - Relative humidity: ..... Between 30-95% (without condensation)

1.6 - TRUCK DESCRIPTION

This forklift truck model features a driver’s seat and overhanging fork arms.
This model can also be equipped with the following attachments:

- Side shift devices
- Fork arm shift devices
- Pincers or pliers
- Tilting devices
- Load arms

IMPORTANT: To use an attachment, contact your local dealer who will install and test it, and update the carrying capacity plates. Mounting an attachment requires an additional carrying capacity plate. The attachment must also be equipped with an identification plate.

IMPORTANT: The "crane arm" modifies the original intended use of the truck, which cannot handle suspended loads that swing freely. Equipping the truck with a crane arm requires special authorization and EC conformity certification. Contact your local dealer.

1.6.a - Fastening attachments

- Fasten attachments in accordance with the instructions provided.

1.6.b - Modifying the truck

- Contact the dealer if the truck needs to be modified for non-standard uses.

IMPORTANT: NEVER modify the truck without prior authorization from the manufacturer, in which case contact the dealer.

1.7 - TRUCK DELIVERY

- The truck is tested and inspected by the manufacturer before it leaves the plant. The dealer must perform additional inspections before delivering the truck.
- Upon delivery, check that all the accessories ordered have been delivered together with the following documentation:

A. 1 Use and maintenance manual;
B. 1 “Safety instructions for industrial forklift trucks” manual;
C. 1 EC Conformity Mark;
D. 1 Warranty handbook.

 **IMPORTANT:** If the truck is delivered with additional attachments and fittings, they must also be accompanied by the relative use and maintenance manuals.

 **IMPORTANT:** Manuals **A-B-C-D** must be kept carefully so that they can accompany the truck throughout its lifetime.

After checking these requirements, confirm to the dealer that they have been delivered.

Chapter 2

SAFETY

CONTENTS

2.1 - SAFETY INSTRUCTIONS

IMPORTANT

Below is a partial list of safety instructions that must be observed. These rules form part of, and do not replace, the standards described in the **"Safety instructions for industrial forklift trucks"** manual that is provided with the truck.

2.1.a - General safety instructions

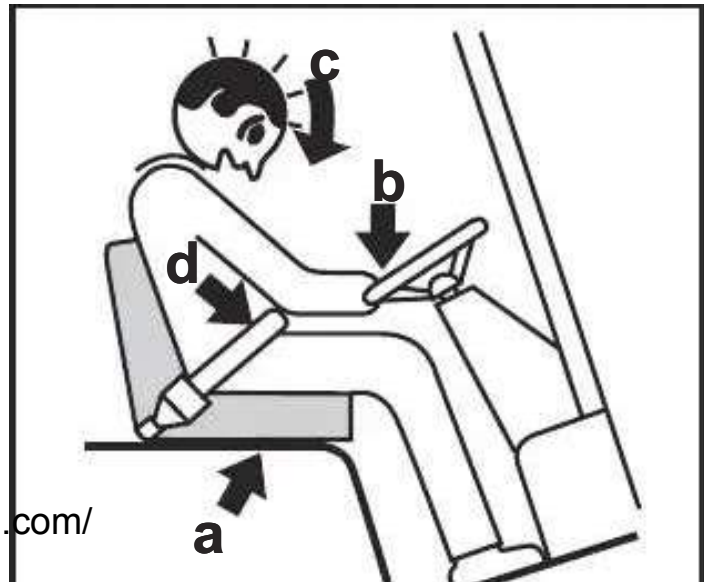
- Do not allow the truck to be used by unqualified, untrained, or unauthorized persons.
- Do not install any attachment on the truck unless it has been supplied or approved by the manufacturer.
- Always maintain the truck in good condition, a prerequisite for minimizing risks.
- Keep the warning notices on the truck in good condition, and replace them if they are damaged.
- Carefully read and observe all the instructions on the truck.
- Make sure that there is enough free space available above the truck.

- Do not park the truck in front of fire extinguishers, emergency exit stairs, or anywhere where it can block traffic.
- Do not use the truck if it shows signs of damage or breakage and cannot be used safely, in which case stop the vehicle, park it, and notify the maintenance supervisor.
- Pay attention to the height of aerial high-tension wires. Observe the safe distances established by the responsible authorities.
- Never lift the load using one fork only.
- Place the load next to the fork carriage assembly, or so that its load center is as close as possible to the fork carriage assembly.
- Position the load so that its load center falls on the center line between the forks.
- Do not drive with off-center loads with respect to the median axis of the truck. Doing so might jeopardize the stability of the truck. Doing so might jeopardize the stability of the truck.
- Make sure that the surface on which the load is deposited is able to support the weight.
- Always wear protective clothing in accordance with current regulations.
- Do not drive over uneven or obstructed terrain or steps.
- Do not drive with loads elevated more than 300 mm from the ground and with the mast NOT tilted backward.
- Do not turn around or stack on slopes.
- Do not exceed the carrying capacity limits indicated on the appropriate plates.
- Always use the operator safety devices (for example, safety belt, etc.).

2.1.b - Safety instructions if the truck overturns

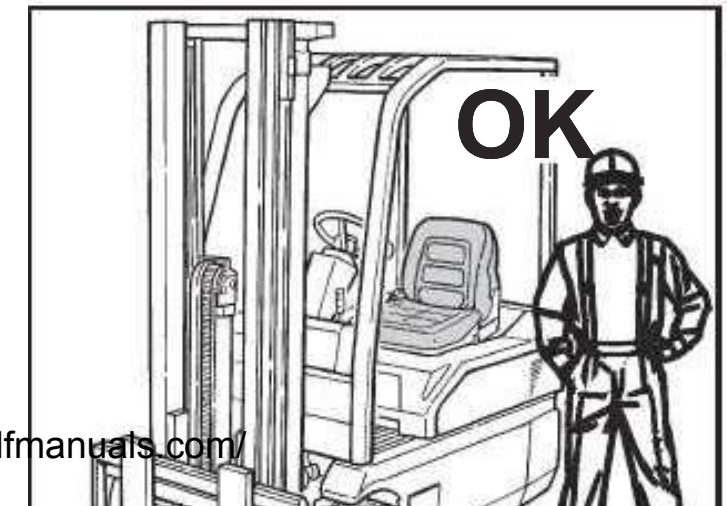
Carefully follow the instructions below if the truck starts to overturn due to incorrect maneuvers:

a) Do not abandon the truck.
b) Remain securely in the seat, grasp the steering wheel, and keep your feet firmly on the floor.
c) Bend your head forward and move your body in the opposite direction to which the truck is tilting.
d) If the truck overturns, wait until it has reached a stable position before climbing out.



2.1.c - Safety instructions for operating the truck

- Be confident that the truck is safe and reliable.
- The operator must get used to the truck so that you can accurately describe malfunctions and thus be of assistance to the maintenance technicians.Trained and authorized drivers must be familiar with the controls and functions of the truck.
- Report any malfunctions (unusual noises, leaks, etc.) immediately because they could

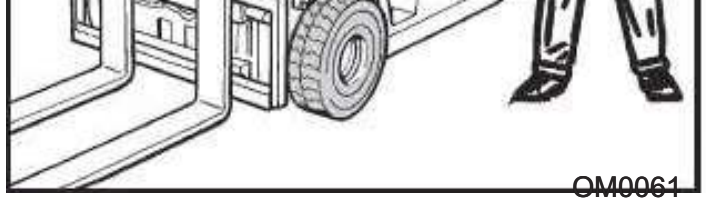


result in damage of a much larger scale if ignored.

- Perform the inspections described in the chapter “Daily inspections”.

IMPORTANT:
Report any oil and/or battery liquid leaks because they are dangerous and highly polluting substances.

ATTENTION:
If there is a smell of burning, stop the truck, switch off the engine, and unplug the battery.



2.1.d - Safety instructions for supplies

Hydraulic oil

- Avoid contact with the skin.
- Do not inhale oil vapors.
- NEVER dispose of oils in the environment because they will pollute water. Collect them and take them in legally approved containers to a collection center.
- Always wear protective clothing when performing maintenance operations on the truck

(gloves, glasses, etc.), to prevent oil from coming into contact with the skin.

 **DANGER:**

It is extremely dangerous if hydraulic oil leaks under pressure and penetrates the skin. Consult a doctor immediately if this occurs.

 **DANGER:**

Oil squirting at high pressure can penetrate the skin.
Use a piece of cardboard to locate any leaks.

Battery acid

- Do not inhale the vapor because it is toxic.
- Use appropriate protection to avoid contact with the skin.
- Rinse with plenty of water if contact with battery acid occurs because it is corrosive.
- Make sure that battery-charging areas meet all legal regulations due to the risk of mixing explosive gases.
- Do not smoke or use an open flame or light within a 2-meter radius of the battery while it is being charged, or in the battery-charging area.

 **IMPORTANT:**

See the battery manual equipped with the battery for further information.

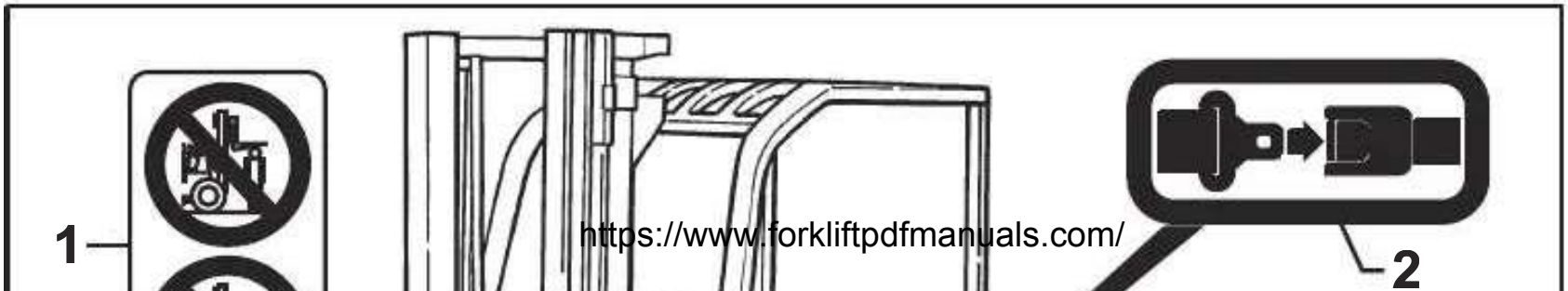
2.1.e - Safety instructions for inflating tires

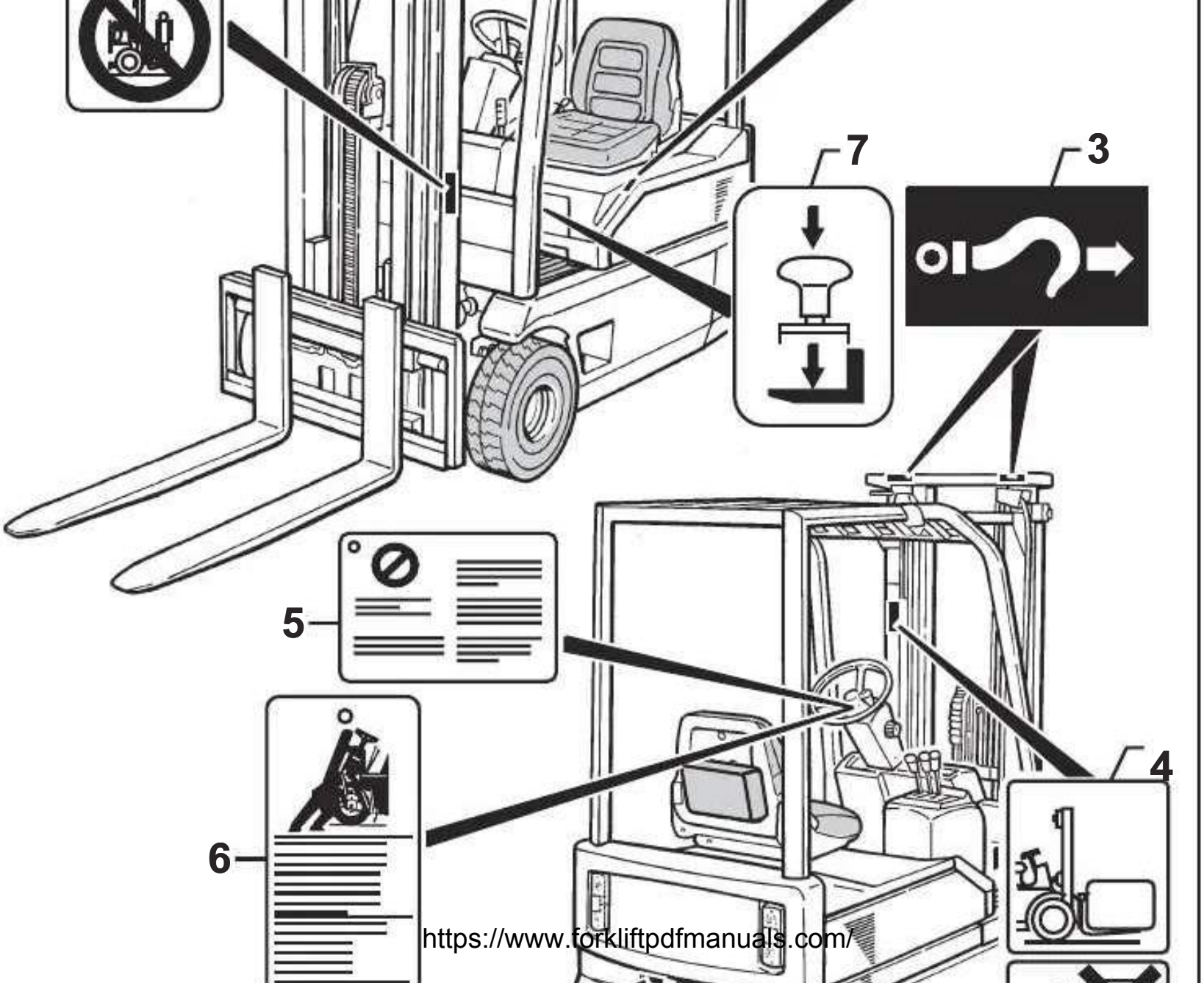
2.1.e - Safety instructions for inflating tires

- Inspect tires in accordance with the scheduled maintenance operations chart provided by the manufacturer.

  Check the pressure and wear and tear of the tires. Never exceed the pressure indicated. Always stand to the side, never in front, while tires are being inflated due to the risk of explosion.

2.2 - LOCATION OF THE WARNING PLATES





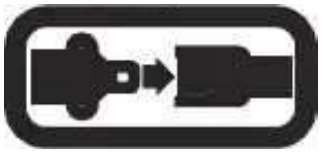
Legend

1 Fork safety
2 Fasten the seat belt
3 Point for lifting the truck
4 Driving with load
5 Prohibited use
6 Warning to check the wheel nuts
7 Hydraulic emergency knob (Joystick version only)

2.2.a - Description of the plates

This symbol indicates that it is not permitted to remain or step under

This symbol indicates that it is not permitted to remain or step under elevated forks or carry passengers.
Plate with white background, red prohibition symbol, black graphic.



This symbol indicates that the seat belt must be fastened while driving.
Plate with yellow background, black graphic.

This symbol indicates the fixing point for the ringbolt to lift the truck.
Plate with yellow background, black graphic.

This symbol indicates that it is not permitted to drive with an elevated load.
Plate with white background, black border and graphic, red x-sign.

This label is removed by the technician after putting the truck into operation.
It warns the user not to operate the truck until it has been put into operation by a technician from the manufacturer.
Plate with red background, black wording.

This label is removed by the technician after putting the truck into operation, and contains the following information:
The wheel nuts must be tightened in accordance with the following schedule:
Before the truck is put into operation
Every 10 operating hours until the first tune-up
Every 100 operating hours after the tune-up
(See the service instructions for the torque values.)
Plate with white background, red wording.

This plate indicates that the forks must not be overloaded.
Refer to the carrying capacity table.
Plate with black background, white border and wording.

This plate indicates that the hydraulic emergency knob must be pushed to lower the forks in case of a malfunction in the hydraulic system.
Plate with yellow background and black graphic.

2.3 - TRUCK SAFETY

The truck has been designed to provide maximum safety to the driver and minimum risk of damage to the truck.
The truck includes the following safety devices:

2.3.a - Driver sensor

- The sensor is located on the seat and is activated when the driver sits in the driver's

seat.
Activation of this sensor allows the truck to function.

2.3.b - Hand brake microswitch

- The microswitch prevents the truck from functioning by cutting off power to the motors when the hand brake is applied.

2.3.c - Operation sequence control

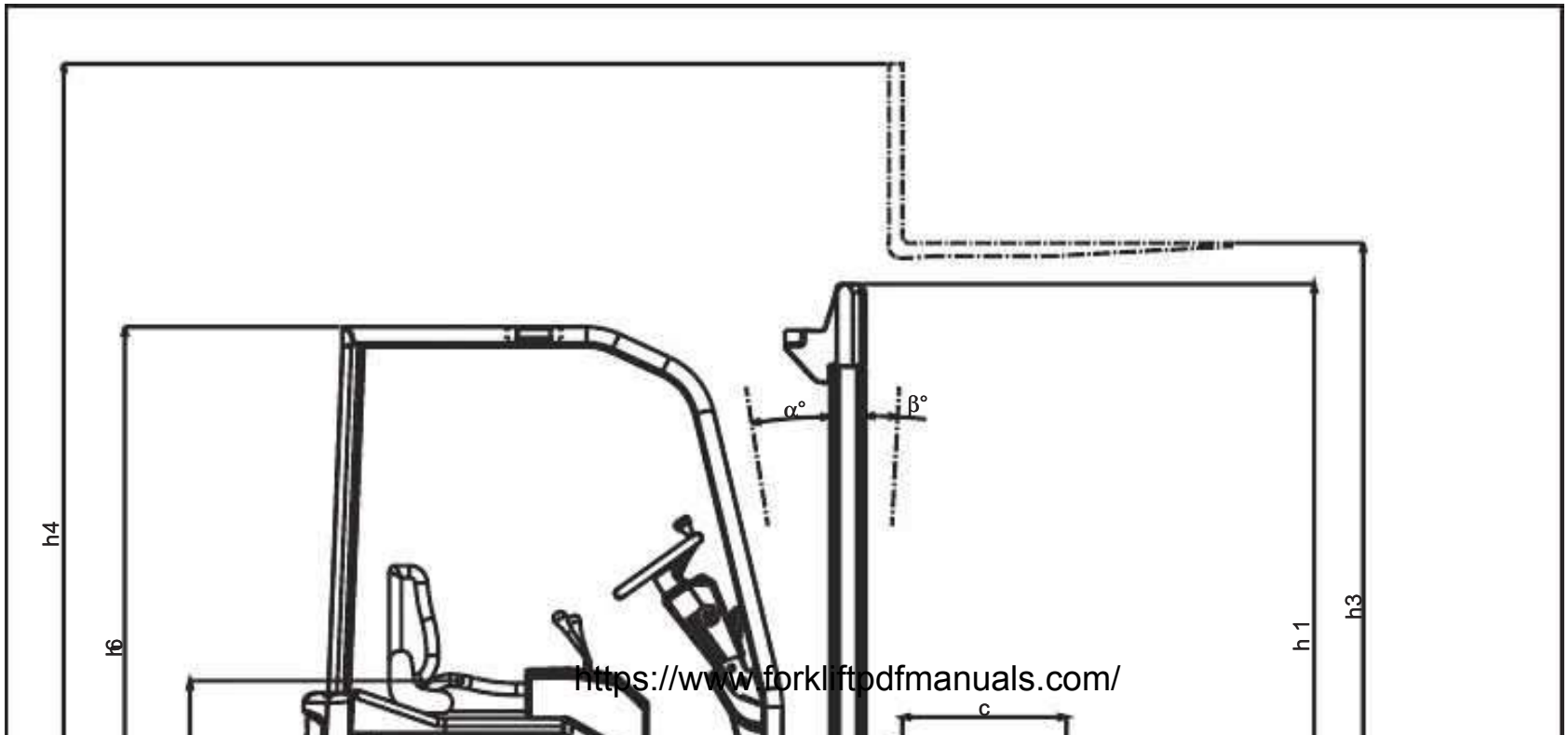
- The electronic system checks the sequence of operations. It sends an alarm signal if the truck is started with the accelerator pedal depressed and the lift lever activated.

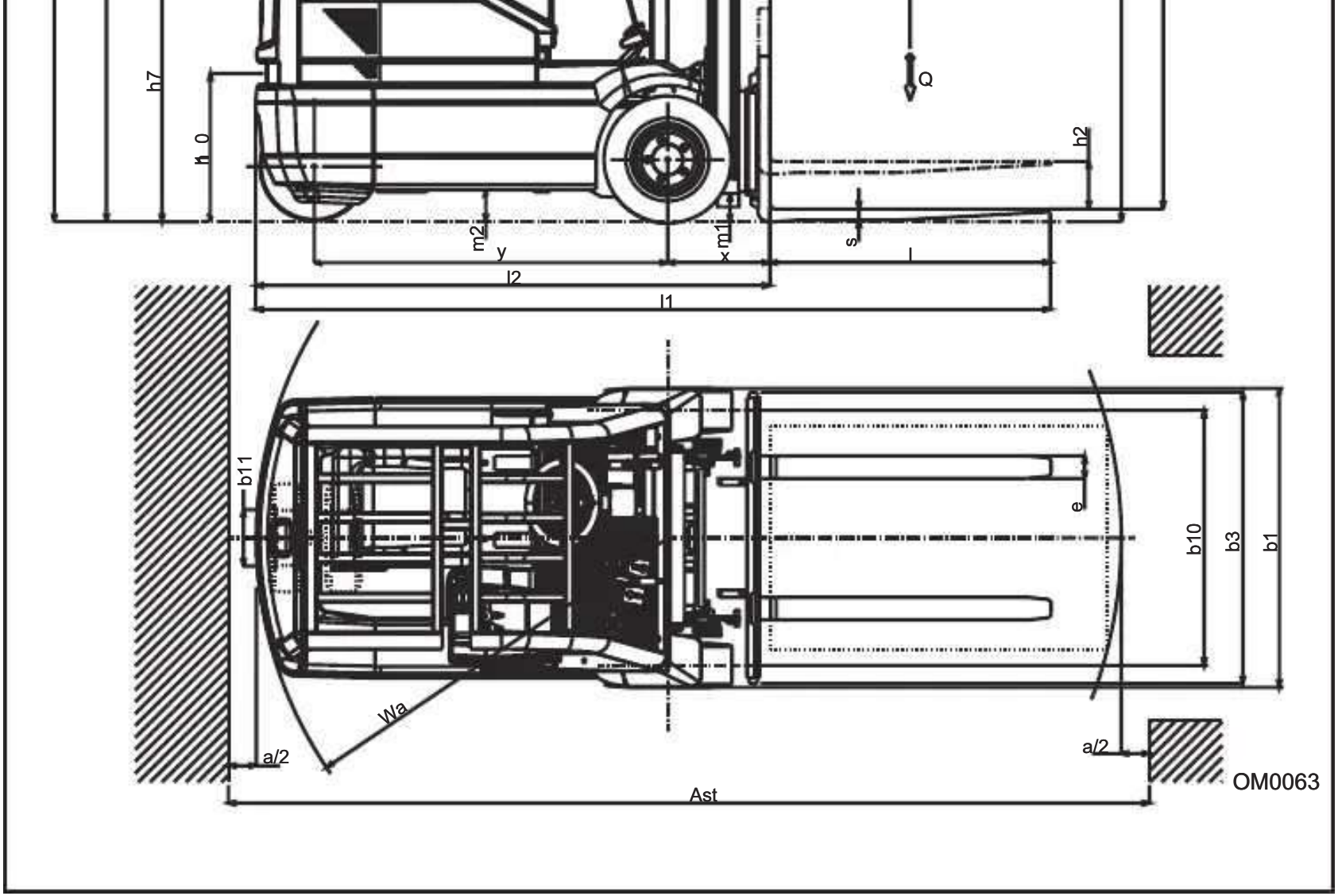
Chapter 3

TECHNICAL DATA
TRUCK IDENTIFICATION

CONTENTS

3.1 - OVERALL DIMENSIONS OF 3/12 - 3/15 - 3/15 H - 3/18 - 3/20 TRUCKS





3.2 - TECHNICAL DATA FOR 3-WHEELED TRUCK WITH A CARRYING CAPACITY OF 1200kg

Specification	1.3	Type of drive: Electric - Diesel - Petrol - GPL - Network Power (Electric)			Electric
	1.4	Operation Type:Tow by Hand - Walk-by - Stand-on - Ride-on			Ride-On
	1.5	Load Capacity		Q (t)	1.2
	1.6	Load Barycenter Distance		c (mm)	500
	1.8	Distance of the Fork Arms Plane from the Front Axle		x (mm)	365 [3) 4)]
	1.9	Wheel Base		y (mm)	1152
Weights	2.1	Service Weight		kg	2620
	2.2	Axle Weight with Rated Load	front / rear	kg	3323 / 497
	2.3	Axle Weight Unladen		kg	1222 / 1398
Wheels and Tyres	3.1	Tyres: SE = Superelastic PN = Pneus			SE / SE [1)]
	3.2	Front Tyres Size			18x7-8 [1)]
	3.3	Rear Tyres Size			15x4.5-8 [1)]
	3.5	Tyres: Number of Front / Rear Tyres (x = drive)			2x / 2
	3.6	Front Track Width		b10 (mm)	910 [4)]
	3.7	Rear track Width		b11 (mm)	202
Sizes	4.1	Lifting Assembly Tilting	forward / barckward	Grad	3° / 9° [2)]
	4.2	Mast Minimum Overall Height		h1 (mm)	2210 [5)]
	4.3	Free Height		h2 (mm)	150
	4.4	Lift Height		h3 (mm)	3350
	4.5	Mast Maximum Overall Height		h4 (mm)	3905
	4.7	Overhead Guard Height		h6 (mm)	2024
	4.8	Seat Height		h7 (mm)	939

Dimensions and Overall	4.12	Drawbar Height		h_{10} (mm)	523
	4.19	Overall Length		l_1 (mm)	2726 [3) 4)]
	4.20	Overall Length Including Fork Arms		l_2 (mm)	1726 [3) 4)]
	4.21	Overall Width		b_1/b_2 (mm)	1067 [9)]
	4.22	Fork Arms Dimensions		s/e/l (mm)	40/80/1000
	4.23	Fork Carriage in Compliance with DIN 15173 Class / Form A, B			2A
	4.24	Fork Carriage Width		b_3 (mm)	1040 [10)]
	4.31	Mast Ground Clearance (laden)		m_1 (mm)	95 [6)]
	4.32	Chassis Ground Clearance (laden) [middle of the chassis]		m_2 (mm)	104
	4.33	Aisle Width with Pallet 1000x1200 and Fork Arms Pitch 1200		A_{st} (mm)	3052 [3) 4)]
	4.34	Aisle Width with Pallet 800x1200 and Fork Arms Pitch 800		A_{st} (mm)	3176 [3) 4)]
	4.35	Turning Radius		W_a (mm)	1361
	4.36	Turning Point Minimum Distance from the Truck Center Line		b_{13} (mm)	-
Performance	5.1	Drive Speed	laden / unladen	km/h	14 / 14
	5.2	Lifting speed	laden / unladen	m/s	0.41 / 0.58
	5.3	Lowering speed	laden / unladen	m/s	0.55 / 0.50
	5.5	Drawbar Pull Tractive Effort (S2 60 min)	laden / unladen	N	2390 / 2320
	5.6	Maximum Drawbar Pull Tractive Effort (S2 5 min)	laden / unladen	N	6060 / 5860
	5.7	Gradeability (S2 30 min)	laden / unladen	%	7.2 / 10.1
	5.8	Maximum Gradeability (S2 5 min)	laden / unladen	%	16 / 22.5
	5.9	Acceleration Time (10 m)	laden / unladen	s	4.5 / 4.2
	5.10	Service Brake			Electric/Mechanic.
Electric Motor	6.1	Drive Motor, Power S2 60 min		kW	4 x 2
	6.2	Lifting Motor, Power S3 15%		kW	9
	6.3	Battery in Compliance with DIN 43531/35/36 A,B,C, NO			43531A
	6.4	Voltage, Battery Capacity K_5		V / Ah	48 / 360 [11)]
	6.5	Battery Weight		kg	590 [11)]
	6.6	Power Consumption According to VDI - Cycle		kWh/h	-
Miscellaneous	8.1	Drive Control Type			Chopper
	8.2	Service Pressure for Attachments		bar	154 [7)]
	8.3	Oil Flow rate for Attachments (max. available)		l/min	25
	8.4	Noise at Operator's Ear		dB (A)	69
	8.5	Drawbar, Model / Type DIN			-

1) For alternative tyres see relevant table
2) Standard-masts with $h_3 \geq 4530$ mm 3° / 5°
All Duplex and Triplex masts 3° / 5°
3) With Side Shift + 25 mm
4) With Triplex masts + 20 mm
5) With free lift 150 mm
6) For all configurations
7) 183 bar (DX) - 174 bar (TX)
8) 945 mm with tyres 200/50-10 and 875mm with 18x5x12 1/8" (vulkollan)
9) 1150.5 mm with tyres 200/50-10 and 1002mm with 18x5x12 1/8" (vulkollan)
10) with integraded side shift = 980 mm

11) Optional batteries (capacity/weight):300Ah/549±5%Kg; 345Ah / 580±5% Kg; 375Ah / 590±5% Kg.
12) Optional batteries (capacity/weight):400Ah/709±5%Kg; 460Ah / 765±5% Kg; 500Ah / 780±5% Kg.
13) Optional batteries (capacity/weight):575Ah/915±5%Kg; 625Ah / 930±5% Kg.

The values indicated are for informational purpose only and non-binding, and refer to standard equipment.

3.3 - TECHNICAL DATA FOR 3-WHEELED TRUCK WITH A CARRYING CAPACITY OF 1500kg

Specification	1.3	Type of drive: Electric - Diesel - Petrol - GPL - Network Power (Electric)		Electric
	1.4	~~Operation Type:Tow by Hand - Walk by - Stand on - Ride on~~		~~Ride On~~
	1.5	Load Capacity	Q (t)	1.5
	1.6	Load Barycenter Distance	c (mm)	500
	1.8	Distance of the Fork Arms Plane from the Front Axle	x (mm)	365 [3) 4)]
	1.9	Wheel Base	y (mm)	1260
Weights	2.1	Service Weight	kg	2875
	2.2	Axle Weight with Rated Load front / rear	kg	3842 / 533
	2.3	Axle Weight Unladen	kg	1313 / 1562
Wheels and Tyres	3.1	Tyres: SE = Superelastic PN = Pneus		SE / SE [1)]
	3.2	Front Tyres Size		18x7-8 [1)]
	3.3	Rear Tyres Size		15x4.5-8 [1)]
	3.5	Tyres: Number of Front / Rear Tyres (x = drive)		2x / 2
	3.6	Front Track Width	b10 (mm)	910 [8)]
	3.7	Rear track Width	b11 (mm)	202
	4.1	Lifting Assembly Tilting forward / barckward	Grad	3° / 9° [2)]

Dimensions and Overall Sizes	4.2	Mast Minimum Overall Height		h_1 (mm)	2210 [5]
	4.3	Free Height		h_2 (mm)	150
	4.4	Lift Height		h_3 (mm)	3350
	4.5	Mast Maximum Overall Height		h_4 (mm)	3905
	4.7	Overhead Guard Height		h_6 (mm)	2024
	4.8	Seat Height		h_7 (mm)	939
	4.12	Drawbar Height		h_{10} (mm)	523
	4.19	Overall Length		l_1 (mm)	2834 [3) 4)]
	4.20	Overall Length Including Fork Arms		l_2 (mm)	1834 [3) 4)]
	4.21	Overall Width		b_1/b_2 (mm)	1067 [9)]
	4.22	Fork Arms Dimensions		s/e/l (mm)	40/80/1000
	4.23	Fork Carriage in Compliance with DIN 15173 Class / Form A, B			2A
	4.24	Fork Carriage Width		b_3 (mm)	1040 [10)]
	4.31	Mast Ground Clearance (laden)		m_1 (mm)	95 [6)]
	4.32	Chassis Ground Clearance (laden) [middle of the chassis]		m_2 (mm)	104
	4.33	Aisle Width with Pallet 1000x1200 and Fork Arms Pitch 1200		A_{st} (mm)	3160 [3) 4)]
	4.34	Aisle Width with Pallet 800x1200 and Fork Arms Pitch 800		A_{st} (mm)	3284 [3) 4)]
	4.35	Turning Radius		W_a (mm)	1469
	4.36	Turning Point Minimum Distance from the Truck Center Line		b_{13} (mm)	-
Performance	5.1	Drive Speed	laden / unladen	km/h	14 / 14
	5.2	Lifting speed	laden / unladen	m/s	0.38 / 0.58
	5.3	Lowering speed	laden / unladen	m/s	0.55 / 0.50
	5.5	Drawbar Pull Tractive Effort (S2 60 min)	laden / unladen	N	2320 / 2270
	5.6	Maximum Drawbar Pull Tractive Effort (S2 5 min)	laden / unladen	N	6020 / 5810
	5.7	Gradeability (S2 30 min)	laden / unladen	%	6.1 / 9.0
	5.8	Maximum Gradeability (S2 5 min)	laden / unladen	%	13.8 / 20.3
	5.9	Acceleration Time (10 m)	laden / unladen	s	4.6 / 4.2
	5.10	Service Brake			Electric/Mechanic.
Electric Motor	6.1	Drive Motor, Power S2 60 min		kW	4 x 2
	6.2	Lifting Motor, Power S3 15%		kW	9
	6.3	Battery in Compliance with DIN 43531/35/36 A,B,C, NO			43531A
	6.4	Voltage, Battery Capacity K_5		V / Ah	48 / 480 [12)]
	6.5	Battery Weight		kg	780 [12)]
	6.6	Power Consumption According to VDI - Cycle		kWh/h	-
Miscellaneous	8.1	Drive Control Type			Chopper
	8.2	Service Pressure for Attachments		bar	180 [7)]
	8.3	Oil Flow rate for Attachments (max. available)		l/min	25
	8.4	Noise at Operator's Ear		dB (A)	69
	8.5	Drawbar, Modell / Type DIN			-

1) For alternative tyres see relevant table
2) Standard-masts with $h_3 \geq 4530$ mm 3° / 5°
All Duplex and Triplex masts 3° / 5°
3) With Side Shift +25 mm
4) With Triplex masts + 20 mm

5) With free lift 150 mm
6) For all configurations
7) 210 bar (DX) - 200 bar (TX)
8) 945 mm with tyres 200/50-10 and 875mm with 18x5x12 $^{1}/_{8}$" (vulkollan)
9) 1150.5 mm with tyres 200/50-10 and 1002mm with 18x5x12 $^{1}/_{8}$" (vulkollan)
10) with integraded side shift = 980 mm
11) Optional batteries (capacity/weight):300Ah/549±5%Kg; 345Ah / 580±5% Kg; 375Ah / 590±5% Kg.
12) Optional batteries (capacity/weight):400Ah/709±5%Kg; 460Ah / 765±5% Kg; 500Ah / 780±5% Kg.
13) Optional batteries (capacity/weight):575Ah/915±5%Kg; 625Ah / 930±5% Kg.

The values indicated are for informational purpose only and non-binding, and refer to standard equipment.

3.4 - TECHNICAL DATA FOR 3-WHEELED TRUCK WITH A CARRYING CAPACITY OF 1500kg H

Specification	1.3	Type of drive: Electric - Diesel - Petrol - GPL - Network Power (Electric)		Electric
	1.4	Operation Type:Tow by Hand - Walk-by - Stand-on - Ride-on		Ride-On
	1.5	Load Capacity	Q (t)	1.5
	1.6	Load Barycenter Distance	c (mm)	500
	1.8	Distance of the Fork Arms Plane from the Front Axle	x (mm)	365 [3) 4)]
	1.9	Wheel Base	y (mm)	1260
Weights	2.1	Service Weight	kg	2875
	2.2	Axle Weight with Rated Load front / rear	kg	3842 / 533
	2.3	Axle Weight Unladen	kg	1313 / 1562
Wheel	3.1	Tyres: SE = Superelastic PN = Pneus		SE / SE [1)]
	3.2	Front Tyres Size		18x7-8 [1)]

Wheels and Tyres	3.3	Rear Tyres Size			15x4.5-8 [1]
	3.5	Tyres: Number of Front / Rear Tyres (x = drive)			2x / 2
	3.6	Front Track Width		b_{10} (mm)	910 [8]
	3.7	Rear track Width		b_{11} (mm)	202
Dimensions and Overall Sizes	4.1	Lifting Assembly Tilting	forward / barckward	Grad	3° / 9° [2]
	4.2	Mast Minimum Overall Height		h_1 (mm)	2210 [5]
	4.3	Free Height		h_2 (mm)	150
	4.4	Lift Height		h_3 (mm)	3350
	4.5	Mast Maximum Overall Height		h_4 (mm)	3905
	4.7	Overhead Guard Height		h_6 (mm)	2024
	4.8	Seat Height		h_7 (mm)	939
	4.12	Drawbar Height		h_{10} (mm)	523
	4.19	Overall Length		l_1 (mm)	2834 [3] [4]
	4.20	Overall Length Including Fork Arms		l_2 (mm)	1834 [3] [4]
	4.21	Overall Width		b_1/b_2 (mm)	1067 [9]
	4.22	Fork Arms Dimensions		s/e/l (mm)	40/80/1000
	4.23	Fork Carriage in Compliance with DIN 15173 Class / Form A, B			2A
	4.24	Fork Carriage Width		b_3 (mm)	1040 [10]
	4.31	Mast Ground Clearance (laden)		m_1 (mm)	95 [6]
	4.32	Chassis Ground Clearance (laden) [middle of the chassis]		m_2 (mm)	104
	4.33	Aisle Width with Pallet 1000x1200 and Fork Arms Pitch 1200		A_{st} (mm)	3160 [3] [4]
	4.34	Aisle Width with Pallet 800x1200 and Fork Arms Pitch 800		A_{st} (mm)	3284 [3] [4]
	4.35	Turning Radius		W_a (mm)	1469
	4.36	Turning Point Minimum Distance from the Truck Center Line		b_{13} (mm)	-
Performance	5.1	Drive Speed	laden / unladen	km/h	14 / 14
	5.2	Lifting speed	laden / unladen	m/s	0.38 / 0.58
	5.3	Lowering speed	laden / unladen	m/s	0.55 / 0.50
	5.5	Drawbar Pull Tractive Effort (S2 60 min)	laden / unladen	N	2320 / 2270
	5.6	Maximum Drawbar Pull Tractive Effort (S2 5 min)	laden / unladen	N	6020 / 5810
	5.7	Gradeability (S2 30 min)	laden / unladen	%	6.1 / 9.0
	5.8	Maximum Gradeability (S2 5 min)	laden / unladen	%	13.8 / 20.3
	5.9	Acceleration Time (10 m)	laden / unladen	s	4.6 / 4.2
	5.10	Service Brake			Electric/Mechanic.
Electric Motor	6.1	Drive Motor, Power S2 60 min		kW	4 x 2
	6.2	Lifting Motor, Power S3 15%		kW	9
	6.3	Battery in Compliance with DIN 43531/35/36 A,B,C, NO			43531A
	6.4	Voltage, Battery Capacity K_5		V / Ah	48 / 480 [12]
	6.5	Battery Weight		kg	780 [12]
	6.6	Power Consumption According to VDI - Cycle		kWh/h	-
Miscellaneous	8.1	Drive Control Type			Chopper
	8.2	Service Pressure for Attachments		bar	180 [7]
	8.3	Oil Flow rate for Attachments (max. available)		l/min	25
	8.4	Noise at Operator's Ear		dB (A)	69
	8.5	Drawbar, Model / Type DIN			-

1) For alternative tyres see relevant table
2) Standard-masts with $h_3 \geq 4530$ mm 3° / 5°
All Duplex and Triplex masts 3° / 5°
3) With Side Shift + 25 mm
4) With Triplex masts + 20 mm
5) With free lift 150 mm
6) For all configurations
7) 210 bar (DX) - 200 bar (TX)
8) 945 mm with tyres 200/50-10 and 875mm with 18x5x12 $^1/_8$" (vulkollan)
9) 1150.5 mm with tyres 200/50-10 and 1002mm with 18x5x12 $^1/_8$" (vulkollan)
10) with integraded side shift = 980 mm
11) Optional batteries (capacity/weight):300Ah/549±5%Kg; 345Ah / 580±5% Kg; 375Ah / 590±5% Kg.
12) Optional batteries (capacity/weight):400Ah/709±5%Kg; 460Ah / 765±5% Kg; 500Ah / 780±5% Kg.
13) Optional batteries (capacity/weight):575Ah/915±5%Kg; 625Ah / 930±5% Kg.

The values indicated are for informational purpose only and non-binding, and refer to standard equipment.

3.5 - TECHNICAL DATA FOR 3-WHEELED TRUCK WITH A CARRYING CAPACITY OF 1800kg

Specification	1.3	Type of drive: Electric - Diesel - Petrol - GPL - Network Power (Electric)		Electric
	1.4	Operation Type:Tow by Hand - Walk-by - Stand-on - Ride-on		Ride-On
	1.5	Load Capacity	Q (t)	1.8
	1.6	Load Barycenter Distance	c (mm)	500
	1.8	Distance of the Fork Arms Plane from the Front Axle	x (mm)	365 3) 4)
	1.9	Wheel Base	y (mm)	1368

Weights	2.1	Service Weight		kg	3067
	2.2	Axle Weight with Rated Load	front / rear	kg	4369 / 498
	2.3	Axle Weight Unladen	front / rear	kg	1431 / 1636
Wheels and Tyres	3.1	Tyres: SE = Superelastic PN = Pneus			SE / SE [1)]
	3.2	Front Tyres Size			18x7-8 [1)]
	3.3	Rear Tyres Size			15x4.5-8 [1)]
	3.5	Tyres: Number of Front / Rear Tyres (x = drive)			2x / 2
	3.6	Front Track Width		b_{10} (mm)	910 [8)]
	3.7	Rear track Width		b_{11} (mm)	202
Dimensions and Overall Sizes	4.1	Lifting Assembly Tilting	forward / barckward	Grad	3° / 9° [2)]
	4.2	Mast Minimum Overall Height		h_1 (mm)	2210 [5)]
	4.3	Free Height		h_2 (mm)	150
	4.4	Lift Height		h_3 (mm)	3350
	4.5	Mast Maximum Overall Height		h_4 (mm)	3973
	4.7	Overhead Guard Height		h_6 (mm)	2024
	4.8	Seat Height		h_7 (mm)	939
	4.12	Drawbar Height		h_{10} (mm)	523
	4.19	Overall Length		l_1 (mm)	2942 [3) 4)]
	4.20	Overall Length Including Fork Arms		l_2 (mm)	1942 [3) 4)]
	4.21	Overall Width		b_1/b_2 (mm)	1067 [9)]
	4.22	Fork Arms Dimensions		s/e/l (mm)	40/100/1000
	4.23	Fork Carriage in Compliance with DIN 15173 Class / Form A, B			2A
	4.24	Fork Carriage Width		b_3 (mm)	1040 [10)]
	4.31	Mast Ground Clearance (laden)		m_1 (mm)	95 [6)]
	4.32	Chassis Ground Clearance (laden) [middle of the chassis]		m_2 (mm)	104
	4.33	Aisle Width with Pallet 1000x1200 and Fork Arms Pitch 1200		A_{st} (mm)	3268 [3) 4)]
	4.34	Aisle Width with Pallet 800x1200 and Fork Arms Pitch 800		A_{st} (mm)	3392 [3) 4)]
	4.35	Turning Radius		W_a (mm)	1577
	4.36	Turning Point Minimum Distance from the Truck Center Line		b_{13} (mm)	-
Performance	5.1	Drive Speed	laden / unladen	km/h	14 / 14
	5.2	Lifting speed	laden / unladen	m/s	0.35 / 0.58
	5.3	Lowering speed	laden / unladen	m/s	0.55 / 0.50
	5.5	Drawbar Pull Tractive Effort (S2 60 min)	laden / unladen	N	2280 / 2240
	5.6	Maximum Drawbar Pull Tractive Effort (S2 5 min)	laden / unladen	N	6020 / 5780
	5.7	Gradeability (S2 30 min)	laden / unladen	%	5.4 / 8.3
	5.8	Maximum Gradeability (S2 5 min)	laden / unladen	%	12.4 / 18.9
	5.9	Acceleration Time (10 m)	laden / unladen	s	4.6 / 4.2
	5.10	Service Brake			Electric/Mechanic.
Electric Motor	6.1	Drive Motor, Power S2 60 min		kW	4 x 2
	6.2	Lifting Motor, Power S3 15%		kW	9
	6.3	Battery in Compliance with DIN 43531/35/36 A,B,C, NO			43531A
	6.4	Voltage, Battery Capacity K_5		V / Ah	48 / 600 [13)]
	6.5	Battery Weight		kg	930 [13)]
	6.6	Power Consumption According to VDI - Cycle		kWh/h	-

Miscellaneous	8.1	Drive Control Type		Chopper
	8.2	Service Pressure for Attachments	bar	213 [7]
	8.3	Oil Flow rate for Attachments (max. available)	l/min	25
	8.4	Noise at Operator's Ear	dB (A)	69
	8.5	Drawbar, Modell / Type DIN		-

1) For alternative tyres see relevant table
2) Standard-masts with $h_3 \geq 4530$ mm 3° / 5°
All Duplex and Triplex masts 3° / 5°
3) With Side Shift + 25 mm
4) With Triplex masts + 20 mm
5) With free lift 150 mm
6) For all configurations
7) 235 bar (DX) -230 bar (TX)
8) 945 mm with tyres 200/50-10 and 875mm with 18x5x12 $^1/_8$" (vulkollan)
9) 1150.5 mm with tyres 200/50-10 and 1002mm with 18x5x12 $^1/_8$" (vulkollan)
10) with integraded side shift = 980 mm
11) Optional batteries (capacity/weight):300Ah/549±5%Kg; 345Ah / 580±5% Kg; 375Ah / 590±5% Kg.
12) Optional batteries (capacity/weight):400Ah/709±5%Kg; 460Ah / 765±5% Kg; 500Ah / 780±5% Kg.
13) Optional batteries (capacity/weight):575Ah/915±5%Kg; 625Ah / 930±5% Kg.

The values indicated are for informational purpose only and non-binding, and refer to standard equipment.

3.6

3.6 - TECHNICAL DATA FOR 3-WHEELED TRUCK WITH A CARRYING CAPACITY OF 2000kg

	1.3	Type of drive: Electric - Diesel - Petrol - GPL - Network Power (Electric)		Electric

Specification	1.4	Operation Type:Tow by Hand - Walk-by - Stand-on - Ride-on			Ride-On
	1.5	Load Capacity		Q (t)	2.0
	1.6	Load Barycenter Distance		c (mm)	500
	1.8	Distance of the Fork Arms Plane from the Front Axle		x (mm)	380 [3) 4)]
	1.9	Wheel Base		y (mm)	1513
Weights	2.1	Service Weight		kg	3184
	2.2	Axle Weight with Rated Load	front / rear	kg	4793 / 494
	2.3	Axle Weight Unladen	front / rear	kg	1579 / 1658
Wheels and Tyres	3.1	Tyres: SE = Superelastic PN = Pneus			SE / SE [1)]
	3.2	Front Tyres Size			200/50-10
	3.3	Rear Tyres Size			140/55-9
	3.5	Tyres: Number of Front / Rear Tyres (x = drive)			2x / 2
	3.6	Front Track Width		b_{10} (mm)	945
	3.7	Rear track Width		b_{11} (mm)	176
Dimensions and Overall Sizes	4.1	Lifting Assembly Tilting	forward / barckward	Grad	3° / 9° [2)]
	4.2	Mast Minimum Overall Height		h_1 (mm)	2260 [5)]
	4.3	Free Height		h_2 (mm)	150
	4.4	Lift Height		h_3 (mm)	3350
	4.5	Mast Maximum Overall Height		h_4 (mm)	3925 [15)]
	4.7	Overhead Guard Height		h_6 (mm)	2024
	4.8	Seat Height		h_7 (mm)	939
	4.12	Drawbar Height		h_{10} (mm)	523
	4.19	Overall Length		l_1 (mm)	3102 [3) 4)]
	4.20	Overall Length Including Fork Arms		l_2 (mm)	2102 [3) 4)]
	4.21	Overall Width		b_1/b_2 (mm)	1150 [9)]
	4.22	Fork Arms Dimensions		s/e/l (mm)	45/100/1000
	4.23	Fork Carriage in Compliance with DIN 15173 Class / Form A, B			2A
	4.24	Fork Carriage Width		b_3 (mm)	1040 [10)]
	4.31	Mast Ground Clearance (laden)		m_1 (mm)	95 [6)]
	4.32	Chassis Ground Clearance (laden) [middle of the chassis]		m_2 (mm)	104
	4.33	Aisle Width with Pallet 1000x1200 and Fork Arms Pitch 1200		A_{st} (mm)	3427 [3) 4)]
	4.34	Aisle Width with Pallet 800x1200 and Fork Arms Pitch 800		A_{st} (mm)	3552 [3) 4)]
	4.35	Turning Radius		W_a (mm)	1722
	4.36	Turning Point Minimum Distance from the Truck Center Line		b_{13} (mm)	-
Performance	5.1	Drive Speed	laden / unladen	km/h	14 / 14
	5.2	Lifting speed	laden / unladen	m/s	0.38 / 0.54
	5.3	Lowering speed	laden / unladen	m/s	0.50 / 0.43
	5.5	Drawbar Pull Tractive Effort (S2 60 min)	laden / unladen	N	2240 / 2215
	5.6	Maximum Drawbar Pull Tractive Effort (S2 5 min)	laden / unladen	N	5990 / 5776
	5.7	Gradeability (S2 30 min)	laden / unladen	%	5.0 / 7.8
	5.8	Maximum Gradeability (S2 5 min)	laden / unladen	%	11.5 / 17.8
	5.9	Acceleration Time (10 m)	laden / unladen	s	4.8 / 4.4
	5.10	Service Brake			Electric/Mechanic.
Motor	6.1	Drive Motor, Power S2 60 min		kW	4 x 2
	6.2	Lifting Motor, Power S3 15%		kW	9

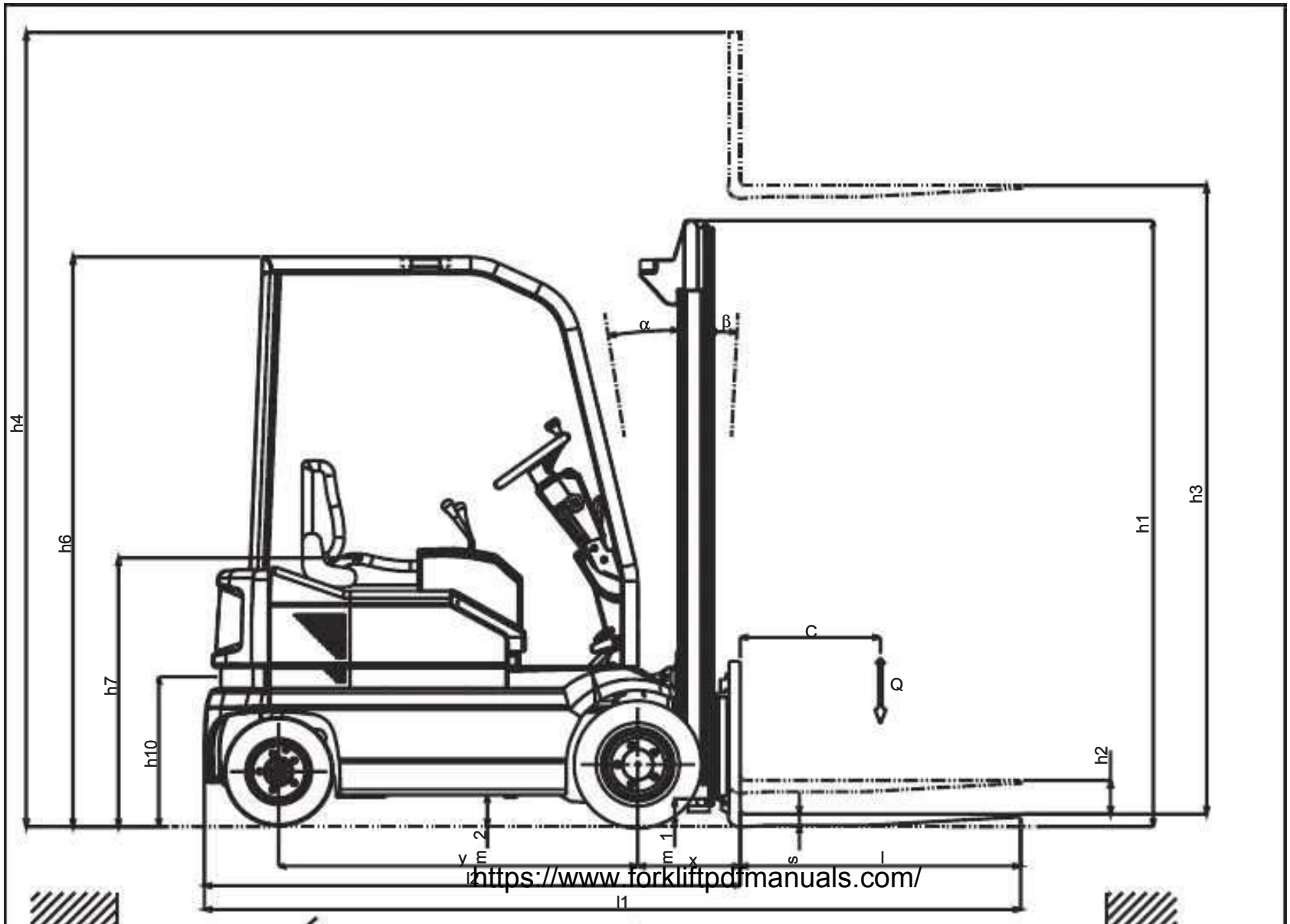
Electric Motor	6.2	Lifting Motor, Power S3 15%	kW	9
	6.3	Battery in Compliance with DIN 43531/35/36 A,B,C, NO		43531A
	6.4	Voltage, Battery Capacity K_5	V / Ah	48 / 750
	6.5	Battery Weight	kg	1055
	6.6	Power Consumption According to VDI - Cycle	kWh/h	-
Miscellaneous	8.1	Drive Control Type		Chopper
	8.2	Service Pressure for Attachments	bar	200
	8.3	Oil Flow rate for Attachments (max. available)	l/min	25
	8.4	Noise at Operator's Ear	dB (A)	69
	8.5	Drawbar, Model / Type DIN		-

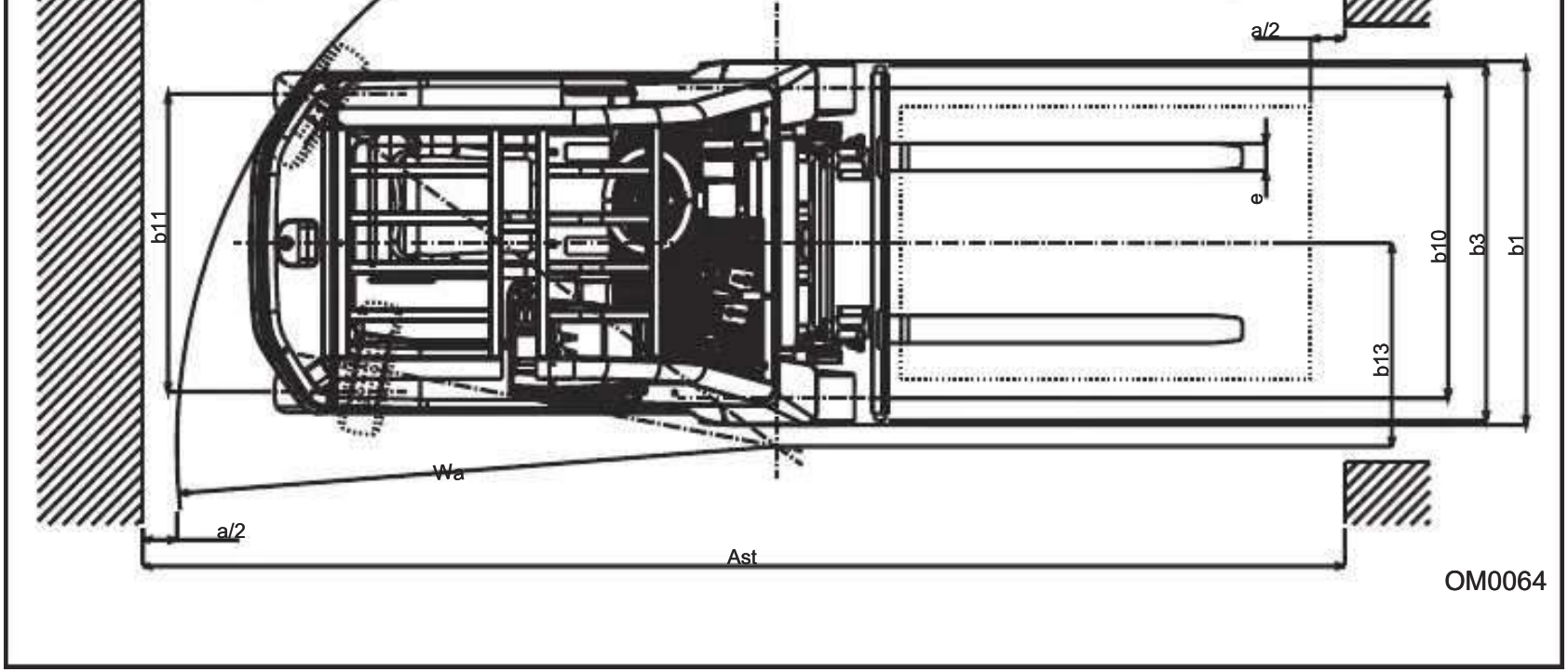
1) For alternative tyres see relevant table
2) Standard-masts with $h_3 \geq 4530$ mm 3° / 5°
All Duplex and Triplex masts 3° / 5°
3) With Side Shift + 25 mm
4) With Triplex masts + 22 mm
5) With free lift 150 mm
6) For all configurations
7) 235 bar (DX) - 230 bar (TX)
8) 945 mm with tyres 200/50-10 and 875mm with 18x5x12 $^1/_8$" (vulkollan)
9) 1150.5 mm with tyres 200/50-10 and 1002mm with 18x5x12 $^1/_8$" (vulkollan)
10) with integraded side shift = 980 mm
11) Optional batteries (capacity/weight):300Ah/549±5%Kg; 345Ah / 580±5% Kg; 375Ah / 590±5% Kg.
12) Optional batteries (capacity/weight):400Ah/709±5%Kg; 460Ah / 765±5% Kg; 500Ah / 780±5% Kg.
13) Optional batteries (capacity/weight):575Ah/915±5%Kg; 625Ah / 930±5% Kg.
14) Fork carriage assembly with 4 rollers:3905 mm - piastra a 6 rulli:3973 mm
15) Fork carriage assembly with 4 rollers:3925 mm - Fork carriage assembly with 6 rollers:4046 mm

The values indicated are for informational purpose only and non-binding, and refer to standard equipment.

3.7 - OVERALL DIMENSIONS

OT 4/15 - 4/15 H - 4/18 - 4/20 TRUCKS





3.8 - TECHNICAL DATA FOR 4-WHEELED TRUCK WITH A CARRYING CAPACITY OF 1500kg

Specification	1.3	Type of drive: Electric - Diesel - Petrol - GPL - Network Power (Electric)			Electric
	1.4	Operation Type:Tow by Hand - Walk-by - Stand-on - Ride-on			Ride-On
	1.5	Load Capacity		Q (t)	1.5
	1.6	Load Barycenter Distance		c (mm)	500
	1.8	Distance of the Fork Arms Plane from the Front Axle		x (mm)	365 [3) 4)]
	1.9	Wheel Base		y (mm)	1280
Weights	2.1	Service Weight		kg	2852
	2.2	Axle Weight with Rated Load	front / rear	kg	3809 / 543
	2.3	Axle Weight Unladen	front / rear	kg	1295 / 1557
Wheels and Tyres	3.1	Tyres: SE = Superelastic PN = Pneus			SE / SE [1)]
	3.2	Front Tyres Size			18x7-8 [1)]
	3.3	Rear Tyres Size			15x4.5-8 [1)]
	3.5	Tyres: Number of Front / Rear Tyres (x = drive)			2x / 2
	3.6	Front Track Width		b10 (mm)	910 [8)]
	3.7	Rear track Width		b11 (mm)	874
Dimensions and Overall Sizes	4.1	Lifting Assembly Tilting	forward / barckward	Grad	3° / 9° [2)]
	4.2	Mast Minimum Overall Height		h1 (mm)	2210 [5)]
	4.3	Free Height		h2 (mm)	150
	4.4	Lift Height		h3 (mm)	3350
	4.5	Mast Maximum Overall Height		h4 (mm)	3905
	4.7	Overhead Guard Height		h6 (mm)	2024
	4.8	Seat Height		h7 (mm)	939
	4.12	Drawbar Height		h10 (mm)	523
	4.19	Overall Length		l1 (mm)	2910 [3) 4)]
	4.20	Overall Length Including Fork Arms		l2 (mm)	1910 [3) 4)]
	4.21	Overall Width		b1/b2 (mm)	1067 [9)]
	4.22	Fork Arms Dimensions		s/e/l (mm)	40/80/1000
	4.23	Fork Carriage in Compliance with DIN 15173 Class / Form A, B			2A
	4.24	Fork Carriage Width		b3 (mm)	1040 [10)]
	4.31	Mast Ground Clearance (laden)		m1 (mm)	95 [6)]
	4.32	Chassis Ground Clearance (laden) [middle of the chassis]		m2 (mm)	104
	4.33	Aisle Width with Pallet 1000x1200 and Fork Arms Pitch 1200		Ast (mm)	3325 [3) 4)]
	4.34	Aisle Width with Pallet 800x1200 and Fork Arms Pitch 800		Ast (mm)	3525 [3) 4)]
	4.35	Turning Radius		Wa (mm)	1760

	4.35	Turning Radius		Wa (mm)	1780
	4.36	Turning Point Minimum Distance from the Truck Center Line		b13 (mm)	506
Performance	5.1	Drive Speed	laden / unladen	km/h	14 / 14
	5.2	Lifting speed	laden / unladen	m/s	0.38 / 0.58
	5.3	Lowering speed	laden / unladen	m/s	0.55 / 0.50
	5.5	Drawbar Pull Tractive Effort (S2 60 min)	laden / unladen	N	2330 / 2280
	5.6	Maximum Drawbar Pull Tractive Effort (S2 5 min)	laden / unladen	N	6030 / 5810
	5.7	Gradeability (S2 30 min)	laden / unladen	%	6.2 / 9.1
	5.8	Maximum Gradeability (S2 5 min)	laden / unladen	%	13.9 / 20.5
	5.9	Acceleration Time (10 m)	laden / unladen	s	4.6 / 4.2
	5.10	Service Brake			Electric/Mechanic.
Electric Motor	6.1	Drive Motor, Power S2 60 min		kW	4 x 2
	6.2	Lifting Motor, Power S3 15%		kW	9
	6.3	Battery in Compliance with DIN 43531/35/36 A,B,C, NO			43531A
	6.4	Voltage, Battery Capacity K_5		V / Ah	48 / 480 [11]
	6.5	Battery Weight		kg	780 [11]
	6.6	Power Consumption According to VDI - Cycle		kWh/h	-
Miscellaneous	8.1	Drive Control Type			Chopper
	8.2	Service Pressure for Attachments		bar	180 [7]
	8.3	Oil Flow rate for Attachments (max. available)		l/min	25
	8.4	Noise at Operator's Ear		dB (A)	69
	8.5	Drawbar, Model / Type DIN			-

1) For alternative tyres see relevant table
2) Standard-masts with $h_3 \geq 4530$ mm 3° / 5°
All Duplex and Triplex masts 3° / 5°
3) With Side Shift + 25 mm
4) With Triplex masts + 20 mm
5) With free lift 150 mm
6) For all configurations
7) 210 bar (DX) -200 bar (TX)
8) 945 mm with tyres 200/50-10 and 875mm with 18x5x12 $^1/_8$" (vulkollan)
9) 1150.5 mm with tyres 200/50-10 and 1002mm with 18x5x12 $^1/_8$" (vulkollan)
10) with integraded side shift = 980 mm
11) Optional batteries (capacity/weight):300Ah/549±5%Kg; 345Ah / 580±5% Kg; 375Ah / 590±5% Kg.
12) Optional batteries (capacity/weight):400Ah/709±5%Kg; 460Ah / 765±5% Kg; 500Ah / 780±5% Kg.
13) Optional batteries (capacity/weight):575Ah/915±5%Kg; 625Ah / 930±5% Kg.

The values indicated are for informational purpose only and non-binding, and refer to standard equipment.

3.9 - TECHNICAL DATA FOR 4-WHEELED TRUCK WITH A CARRYING CAPACITY OF 1500kg H

Specification	1.3	Type of drive: Electric - Diesel - Petrol - GPL - Network Power (Electric)			Electric
	1.4	Operation Type:Tow by Hand - Walk-by - Stand-on - Ride-on			Ride-On
	1.5	Load Capacity		Q (t)	1.5
	1.6	~~Load Barycenter Distance~~		c (mm)	500
	1.8	Distance of the Fork Arms Plane from the Front Axle		x (mm)	365 [3) 4)]
	1.9	Wheel Base		y (mm)	1280
Weights	2.1	Service Weight		kg	3065
	2.2	Axle Weight with Rated Load	front / rear	kg	3903 / 662
	2.3	Axle Weight Unladen	front / rear	kg	1389 / 1676
Wheels and Tyres	3.1	Tyres: SE = Superelastic PN = Pneus			SE / SE [1)]
	3.2	Front Tyres Size			18x7-8 [1)]
	3.3	Rear Tyres Size			15x4.5-8 [1)]
	3.5	Tyres: Number of Front / Rear Tyres (x = drive)			2x / 2
	3.6	Front Track Width		b10 (mm)	910 [8)]
	3.7	Rear track Width		b11 (mm)	874
Dimensions and Overall Sizes	4.1	Lifting Assembly Tilting	forward / barckward	Grad	3° / 9° [2)]
	4.2	Mast Minimum Overall Height		h1 (mm)	2210 [5)]
	4.3	Free Height		h2 (mm)	150
	4.4	Lift Height		h3 (mm)	3350
	4.5	Mast Maximum Overall Height		h4 (mm)	3905
	4.7	Overhead Guard Height		h6 (mm)	2139
	4.8	Seat Height		h7 (mm)	1054
	4.12	Drawbar Height		h10 (mm)	523
	4.19	Overall Length		l1 (mm)	2910 [3) 4)]
	4.20	Overall Length Including Fork Arms		l2 (mm)	1910 [3) 4)]
	4.21	Overall Width		b1/b2 (mm)	1067 [9)]
	4.22	Fork Arms Dimensions		s/e/l (mm)	40/80/1000
	4.23	Fork Carriage in Compliance with DIN 15173 Class / Form A, B			2A

Dimensions	4.23	Fork Carriage in Compliance with DIN 15173 Class / Form A, B			2A
	4.24	Fork Carriage Width		b_3 (mm)	1040 [10]
	4.31	Mast Ground Clearance (laden)		m_1 (mm)	95 [6]
	4.32	Chassis Ground Clearance (laden) [middle of the chassis]		m_2 (mm)	104
	4.33	Aisle Width with Pallet 1000x1200 and Fork Arms Pitch 1200		A_{st} (mm)	3325 [3] [4]
	4.34	Aisle Width with Pallet 800x1200 and Fork Arms Pitch 800		A_{st} (mm)	3525 [3] [4]
	4.35	Turning Radius		W_a (mm)	1760
	4.36	Turning Point Minimum Distance from the Truck Center Line		b_{13} (mm)	596
Performance	5.1	Drive Speed	laden / unladen	km/h	14 / 14
	5.2	Lifting speed	laden / unladen	m/s	0.38 / 0.58
	5.3	Lowering speed	laden / unladen	m/s	0.55 / 0.50
	5.5	Drawbar Pull Tractive Effort (S2 60 min)	laden / unladen	N	2300 / 2240
	5.6	Maximum Drawbar Pull Tractive Effort (S2 5 min)	laden / unladen	N	6000 / 5780
	5.7	Gradeability (S2 30 min)	laden / unladen	%	5.8 / 8.4
	5.8	Maximum Gradeability (S2 5 min)	laden / unladen	%	13.2 / 19.0
	5.9	Acceleration Time (10 m)	laden / unladen	s	4.6 / 4.2
	5.10	Service Brake			Electric/Mechanic.
Electric Motor	6.1	Drive Motor, Power S2 60 min		kW	4 x 2
	6.2	Lifting Motor, Power S3 15%		kW	9
	6.3	Battery in Compliance with DIN 43531/35/36 A,B,C, NO			43531A
	6.4	Voltage, Battery Capacity K_5		V / Ah	48 / 640
	6.5	Battery Weight		kg	970
	6.6	Power Consumption According to VDI - Cycle		kWh/h	-
Miscellaneous	8.1	Drive Control Type			Chopper
	8.2	Service Pressure for Attachments		bar	180 [7]
	8.3	Oil Flow rate for Attachments (max. available)		l/min	25
	8.4	Noise at Operator's Ear		dB (A)	69
	8.5	Drawbar, Modell / Type DIN			-

1) For alternative tyres see relevant table
2) Standard-masts with $h_3 \geq 4530$ mm 3° / 5°
All Duplex and Triplex masts 3° / 5°
3) With Side Shift + 25 mm
4) With Triplex masts + 20 mm
5) With free lift 150 mm
6) For all configurations
7) 210 bar (DX) -200 bar (TX)
8) 945 mm with tyres 200/50-10 and 875mm with 18x5x12 $^1/_8$" (vulkollan)
9) 1150.5 mm with tyres 200/50-10 and 1002mm with 18x5x12 $^1/_8$" (vulkollan)
10) with integraded side shift = 980 mm
11) Optional batteries (capacity/weight):300Ah/549±5%Kg; 345Ah / 580±5% Kg; 375Ah / 590±5% Kg.
12) Optional batteries (capacity/weight):400Ah/709±5%Kg; 460Ah / 765±5% Kg; 500Ah / 780±5% Kg.
13) Optional batteries (capacity/weight):575Ah/915±5%Kg; 625Ah / 930±5% Kg.

The values indicated are for informational purpose only and non-binding, and refer to standard equipment.

3.10 - TECHNICAL DATA FOR 4-WHEELED TRUCK WITH A CARRYING CAPACITY OF 1800kg

Specification	1.3	Type of drive: Electric - Diesel - Petrol - GPL - Network Power (Electric)			Electric
	1.4	Operation Type:Tow by Hand - Walk-by - Stand-on - Ride-on			Ride-On
	1.5	Load Capacity		Q (t)	1.8
	1.6	Load Barycenter Distance		c (mm)	500
	1.8	Distance of the Fork Arms Plane from the Front Axle		x (mm)	365 [3) 4)]
	1.9	Wheel Base		y (mm)	1388
Weights	2.1	Service Weight		kg	3045
	2.2	Axle Weight with Rated Load	front / rear	kg	4337 / 508
	2.3	Axle Weight Unladen	front / rear	kg	1416 / 1629
Wheels and tyres	3.1	Tyres: SE = Superelastic PN = Pneus			SE / SE [1)]
	3.2	Front Tyres Size			18x7-8 [1)]
	3.3	Rear Tyres Size			15x4.5-8 [1)]
	3.5	Tyres: Number of Front / Rear Tyres (x = drive)			2x / 2
	3.6	Front Track Width		b10 (mm)	910 [8)]
	3.7	Rear track Width		b11 (mm)	874
Sizes	4.1	Lifting Assembly Tilting	forward / barckward	Grad	3° / 9° [2)]
	4.2	Mast Minimum Overall Height		h1 (mm)	2210 [5)]
	4.3	Free Height		h2 (mm)	150
	4.4	Lift Height		h3 (mm)	3350
	4.5	Mast Maximum Overall Height		h4 (mm)	3973
	4.7	Overhead Guard Height		h6 (mm)	2024
	4.8	Seat Height		h7 (mm)	939
	4.12	Drawbar Height		h10 (mm)	523

Dimensions and Overall	4.12	Drawbar Height		h_{10} (mm)	523
	4.19	Overall Length		l_1 (mm)	3018 [3) 4)]
	4.20	Overall Length Including Fork Arms		l_2 (mm)	2018 [3) 4)]
	4.21	Overall Width		b_1/b_2 (mm)	1067 [9)]
	4.22	Fork Arms Dimensions		s/e/l (mm)	45/100/1000
	4.23	Fork Carriage in Compliance with DIN 15173 Class / Form A, B			2A
	4.24	Fork Carriage Width		b_3 (mm)	1040 [10)]
	4.31	Mast Ground Clearance (laden)		m_1 (mm)	95 [6)]
	4.32	Chassis Ground Clearance (laden) [middle of the chassis]		m_2 (mm)	104
	4.33	Aisle Width with Pallet 1000x1200 and Fork Arms Pitch 1200		A_{st} (mm)	3443 [3) 4)]
	4.34	Aisle Width with Pallet 800x1200 and Fork Arms Pitch 800		A_{st} (mm)	3643 [3) 4)]
	4.35	Turning Radius		W_a (mm)	1878
	4.36	Turning Point Minimum Distance from the Truck Center Line		b_{13} (mm)	646
Performance	5.1	Drive Speed	laden / unladen	km/h	14 / 14
	5.2	Lifting speed	laden / unladen	m/s	0.35 / 0.58
	5.3	Lowering speed	laden / unladen	m/s	0.55 / 0.50
	5.5	Drawbar Pull Tractive Effort (S2 60 min)	laden / unladen	N	2290 / 2240
	5.6	Maximum Drawbar Pull Tractive Effort (S2 5 min)	laden / unladen	N	6020 / 5790
	5.7	Gradeability (S2 30 min)	laden / unladen	%	5.5 / 8.4
	5.8	Maximum Gradeability (S2 5 min)	laden / unladen	%	12.5 / 19.0
	5.9	Acceleration Time (10 m)	laden / unladen	s	4.6 / 4.2
	5.10	Service Brake			Electric/Mechanic.
Electric Motor	6.1	Drive Motor, Power S2 60 min		kW	4 x 2
	6.2	Lifting Motor, Power S3 15%		kW	9
	6.3	Battery in Compliance with DIN 43531/35/36 A,B,C, NO			43531A
	6.4	Voltage, Battery Capacity K_5		V / Ah	48 / 600 [12)]
	6.5	Battery Weight		kg	930 [12)]
	6.6	Power Consumption According to VDI - Cycle		kWh/h	-
Miscellaneous	8.1	Drive Control Type			Chopper
	8.2	Service Pressure for Attachments		bar	213 [7)]
	8.3	Oil Flow rate for Attachments (max. available)		l/min	25
	8.4	Noise at Operator's Ear		dB (A)	69
	8.5	Drawbar, Modell / Type DIN			-

1) For alternative tyres see relevant table
2) Standard-masts with $h_3 \geq 4530$ mm 3° / 5°
All Duplex and Triplex masts 3° / 5°
3) With Side Shift + 25 mm
4) With Triplex masts + 20 mm
5) With free lift 150 mm
6) For all configurations
7) 235 bar (DX) -230 bar (TX)
8) 945 mm with tyres 200/50-10 and 875mm with 18x5x12 $^1/_8$" (vulkollan)
9) 1150.5 mm with tyres 200/50-10 and 1080mm with 18x5x12 $^1/_8$" (vulkollan)
10) with integraded side shift = 980 mm
11) Optional batteries (capacity/weight):300Ah/549+5%Kg; 345Ah / 580+5% Kg; 375Ah / 590+5% Kg

12) Optional batteries (capacity/weight):400Ah/709±5%Kg; 460Ah / 765±5% Kg; 500Ah / 780±5% Kg.
13) Optional batteries (capacity/weight):575Ah/915±5%Kg; 625Ah / 930±5% Kg.

The values indicated are for informational purpose only and non-binding, and refer to standard equipment.

3.11 - TECHNICAL DATA FOR 4-WHEELED TRUCK WITH A CARRYING CAPACITY OF 2000kg

Specification	1.3	Type of drive: Electric - Diesel - Petrol - GPL - Network Power (Electric)			Electric
	1.4	Operation Type:Tow by Hand - Walk-by - Stand-on - Ride-on			Ride-On
	1.5	Load Capacity		Q (t)	2.0
	1.6	Load Barycenter Distance		c (mm)	500
	1.8	Distance of the Fork Arms Plane from the Front Axle		x (mm)	380 [3) 4)]
	1.9	Wheel Base		y (mm)	1498
Weights	2.1	Service Weight		kg	3250
	2.2	Axle Weight with Rated Load	front / rear	kg	4727 / 523
	2.3	Axle Weight Unladen	front / rear	kg	1552 / 1698
Wheels and Tyres	3.1	Tyres: SE = Superelastic PN = Pneus			SE / SE [1)]
	3.2	Front Tyres Size			200/50-10
	3.3	Rear Tyres Size			140/55-9
	3.5	Tyres: Number of Front / Rear Tyres (x = drive)			2x / 2
	3.6	Front Track Width		b10 (mm)	945
	3.7	Rear track Width		b11 (mm)	873
	4.1	Lifting Assembly Tilting	forward / backward	Grad	3° / 9° [2)]
	4.2	Mast Minimum Overall Height		h1 (mm)	2260 [5)]
	4.3	Free Height		h2 (mm)	150

Dimensions and Overall Sizes	4.4	Lift Height		h_3 (mm)	3350
	4.5	Mast Maximum Overall Height		h_4 (mm)	3925 [14)]
	4.7	Overhead Guard Height		h_6 (mm)	2024
	4.8	Seat Height		h_7 (mm)	939
	4.12	Drawbar Height		h_{10} (mm)	523
	4.19	Overall Length		l_1 (mm)	3143 [3) 4)]
	4.20	Overall Length Including Fork Arms		l_2 (mm)	2143 [3) 4)]
	4.21	Overall Width		b_1/b_2 (mm)	1150
	4.22	Fork Arms Dimensions		s/e/l (mm)	45/100/1000
	4.23	Fork Carriage in Compliance with DIN 15173 Class / Form A, B			2A
	4.24	Fork Carriage Width		b_3 (mm)	1040 [10)]
	4.31	Mast Ground Clearance (laden)		m_1 (mm)	95 [6)]
	4.32	Chassis Ground Clearance (laden) [middle of the chassis]		m_2 (mm)	104
	4.33	Aisle Width with Pallet 1000x1200 and Fork Arms Pitch 1200		A_{st} (mm)	3578 [3) 4)]
	4.34	Aisle Width with Pallet 800x1200 and Fork Arms Pitch 800		A_{st} (mm)	3778 [3) 4)]
	4.35	Turning Radius		W_a (mm)	1998
	4.36	Turning Point Minimum Distance from the Truck Center Line		b_{13} (mm)	696
Performance	5.1	Drive Speed	laden / unladen	km/h	14 / 14
	5.2	Lifting speed	laden / unladen	m/s	0.38 / 0.54
	5.3	Lowering speed	laden / unladen	m/s	0.50 / 0.48
	5.5	Drawbar Pull Tractive Effort (S2 60 min)	laden / unladen	N	2240 / 2215
	5.6	Maximum Drawbar Pull Tractive Effort (S2 5 min)	laden / unladen	N	5990 / 5776
	5.7	Gradeability (S2 30 min)	laden / unladen	%	5.0 / 7.8
	5.8	Maximum Gradeability (S2 5 min)	laden / unladen	%	11.5 / 17.8
	5.9	Acceleration Time (10 m)	laden / unladen	s	4.8 / 4.4
	5.10	Service Brake			Electric/Mechanic.
Electric Motor	6.1	Drive Motor, Power S2 60 min		kW	4 x 2
	6.2	Lifting Motor, Power S3 15%		kW	9
	6.3	Battery in Compliance with DIN 43531/35/36 A,B,C, NO			43531A
	6.4	Voltage, Battery Capacity K_5		V / Ah	48 / 750
	6.5	Battery Weight		kg	1055
	6.6	Power Consumption According to VDI - Cycle		kWh/h	-
Miscellaneous	8.1	Drive Control Type			Chopper
	8.2	Service Pressure for Attachments		bar	200
	8.3	Oil Flow rate for Attachments (max. available)		l/min	25
	8.4	Noise at Operator's Ear		dB (A)	69
	8.5	Drawbar, Modell / Type DIN			-

1) For alternative tyres see relevant table

2) Standard-masts with $h_3 \geq 4530$ mm 3° / 5°

All Duplex and Triplex masts 3° / 5°

3) With Side Shift + 25 mm

4) With Triplex masts + 22 mm

5) With free lift 150 mm

6) For all configurations

7) 235 bar (DX) -230 bar (TX)
8) 945 mm with tyres 200/50-10 and 875mm with 18x5x12 $^{1}/_{8}$" (vulkollan)
9) 1150.5 mm with tyres 200/50-10 and 1002mm with 18x5x12 $^{1}/_{8}$" (vulkollan)
10) with integraded side shift = 980 mm
12) Optional batteries (capacity/weight):400Ah/709±5%Kg; 460Ah / 765±5% Kg; 500Ah / 780±5% Kg.
13) Optional batteries (capacity/weight):575Ah/915±5%Kg; 625Ah / 930±5% Kg.
14) Optional batteries (capacity/weight):400Ah/709±5%Kg; 460Ah / 765±5% Kg; 500Ah / 780±5% Kg.
15) Optional batteries (capacity/weight):575Ah/915±5%Kg; 625Ah / 930±5% Kg.

The values indicated are for informational purpose only and non-binding, and refer to standard equipment.

3.12

~~Technical data - Truck identification~~

3.12 - TIRE PROPERTIES FOR 3/12 - 3/15 - 3/15 H - 3/18 - 3/20 TRUCKS

	WHEELS					
Type	Superelastic		Pneumatic		Vulkolan/Superelastic	
	Front	Rear	Front	Rear	Front (Vulkolan)	Rear (SE)
3/12 3/15 3/15 H	18x7-8 (SX-DX-TX)	15x4.5-8	18x7-8/16p.r. (SX-DX)	15x4.5-8/12p.r.	18x5x12 $^{1}/_{8}$"(SX-DX-TX)	15x4.5-8 (S.E white)
3/18	18x7-8 (SX-DX) 200/50-10 (TX)	15x4.5-8 15x4.5-8	18x7-8/16p.r. (SX-DX)	15x4.5-8/12p.r.	18x5x12 $^{1}/_{8}$"	15x4.5-8 (S.E white)
3/20	200/50-10	140/55-9				

5/20						

3.13 - TIRE PROPERTIES FOR 4/15 - 4/15 H - 4/18 - 4/20 TRUCKS

WHEELS						
Type	Superelastic		Pneumatic		Vulkolan/Superelastic	
	Front	Rear	Front	Rear	Front (Vulkolan)	Rear (SE)
4/15 4/15 H	18x7-8 (SX-DX-TX)	15x4.5-8	18x7-8/16p.r. (SX-DX)	15x4.5-8/12p.r.	18x5x12 1/8"(SX-DX-TX)	15x4.5-8
						(S.E white)
4/18	18x7-8 (SX-DX)	15x4.5-8	18x7-8/16p.r. (SX-DX)	15x4.5-8/12p.r.	18x5x12 1/8"(SX-DX-TX)	15x4.5-8
	200/50-10 (TX)	15x4.5-8				(S.E white)
4/20	200/50-10	140/55-9				

3.14 - FEATURES OF ALTERNATIVE MASTS

				Standard (Simplex)				
3/12 - 3/15 3/15 H 4/15 - 4/15 H fork	Lift Height	h3	mm	3330	3630	4030	4530	5030
	Minimum Overall Height	h1	mm	2210	2360	2560	2810	3060

carriage 4 ROLLERS (*)	Maximum Overall Height	h4	mm	3905	4205	4605	5105	5605
	Free Lift	h2	mm	150	150	150	150	150
3/18 - 4/18 fork carriage 6 ROLLERS	Lift Height	h3	mm	3350	3650	4050	4550	5050
	Minimum Overall Height	h1	mm	2210	2360	2560	2810	3060
	Maximum Overall Height	h4	mm	3973	4273	4673	5173	5673
	Free Lift	h2	mm	150	150	150	150	150
3/20 - 4/20 fork carriage 4 ROLLERS (°)	Lift Height	h3	mm	3370	3670	4070	4570	5070
	Minimum Overall Height	h1	mm	2260	2410	2610	2860	3110
	Maximum Overall Height	h4	mm	3925	4225	4625	5125	5625
	Free Lift	h2	mm	150	150	150	150	150

(*) with optional fork carriage (6 rollers) h4 = h4 + 68 mm (SX)
(°) with optional fork carriage (6 rollers) h4 = h4 + 121 mm (SX)

				Duplex			
3/12 - 3/15 3/15 H 4/15 - 4/15 H fork carriage 4 ROLLERS (*)	Lift Height	h3	mm	2975	3275	3575	3975
	Minimum Overall Height	h1	mm	1960	2110	2260	2460
	Maximum Overall Height	h4	mm	3350	3850	4150	4550
	Free Lift	h2	mm	1362	1512	1662	1862
3/18 - 4/18	Lift Height	h3	mm	2995	3295	3595	3995
	Minimum Overall Height	h1	mm	2010	2160	2310	2510

fork carriage 6 ROLLERS	Minimum Overall Height	h1	mm	2010	2160	2310	2510
	Maximum Overall Height	h4	mm	3643	3943	4243	4643
	Free Lift	h2	mm	1362	1512	1662	1862
3/20 - 4/20 fork carriage 4 ROLLERS (°)	Lift Height	h3	mm	2990	3290	3590	3990
	Minimum Overall Height	h1	mm	2010	2160	2310	2510
	Maximum Overall Height	h4	mm	3545	3845	4145	4545
	Free Lift	h2	mm	1455	1605	1755	1955

(*) with optional fork carriage (6 rollers) h4 = h4 + 43 mm (DX-TX)
h2 = h2 + 43 mm (DX-TX)

(°) with optional fork carriage (6 rollers) h4 = h4 + 101 mm (DX-TX)
h2 = h2 + 10 mm (DX-TX)

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3/12 - 3/15 3/15 H 4/15 - 4/15 H fork carriage 4 ROLLERS (*)	Lift Height	h3	mm	4470	4770	5220	5770	6370	6970
	Minimum Overall Height	h1	mm	2010	2110	2260	2510	2710	2910
	Maximum Overall Height	h4	mm	5045	5345	5795	6345	6945	7545
	Free Lift	h2	mm	1412	1512	1662	1912	2112	2312
3/18 - 4/18 fork carriage 6 ROLLERS	Lift Height	h3	mm	4490	4790	5240	5770	6390	6990
	Minimum Overall Height	h1	mm	2060	2160	2310	2560	2760	2960
	Maximum Overall Height	h4	mm	5138	5438	5888	6438	7038	7638
	Free Lift	h2	mm	1412	1512	1662	1912	2112	2312
3/20 - 4/20 fork carriage 4 ROLLERS (°)	Lift Height	h3	mm	4500	4800	5250	5700	6330	6900
	Minimum Overall Height	h1	mm	2060	2160	2310	2460	2660	2860
	Maximum Overall Height	h4	mm	5055	5355	5805	6255	6855	7455
	Free Lift	h2	mm	1505	1605	1755	1905	2105	2305

(*) with optional fork carriage (6 rollers) h4 = h4 + 43 mm (DX-TX)
h2 = h2 + 43 mm (DX-TX)

(°) with optional fork carriage (6 rollers) h4 = h4 + 101 mm (DX-TX)
h2 = h2 + 10 mm (DX-TX)

3.15 - SLOPES

CLIMBABLE SLOPE

		Climbable slope (1 volta / 20')		
	Wheels	Length of ramp (m)	Forward drive loaded (%)	Reverse drive unloaded (%)
3/12	S.E.S. / PNS	135	16.0	22.5
		360	10.0	14.0
3/15 - 3/15 H 4/15 - 4/15 H	S.E.S. / PNS	135	14.0	20.5
		360	8.5	13.0
3/18 - 4/18	S.E.S. / PNS	135	12.5	19.0
		360	7.5	12
3/20 - 4/20	S.E.S. / PNS	135	11.5	18.0
		360	7.0	11

3.16 - TIRE INFLATION PRESSURE

AXLE	MEASUREMENT	PRESSURE

Front	18x7 - 8/16 p.r.	10 bar
Rear	15x4 ½ - 8/12 p.r.	10 bar

3.17 - LIGHTS

Indicators and brake lights	24V - 5W / 21W 2-filament bulb
Reversing lights	24V -21W bulb

3.18 - NOISE

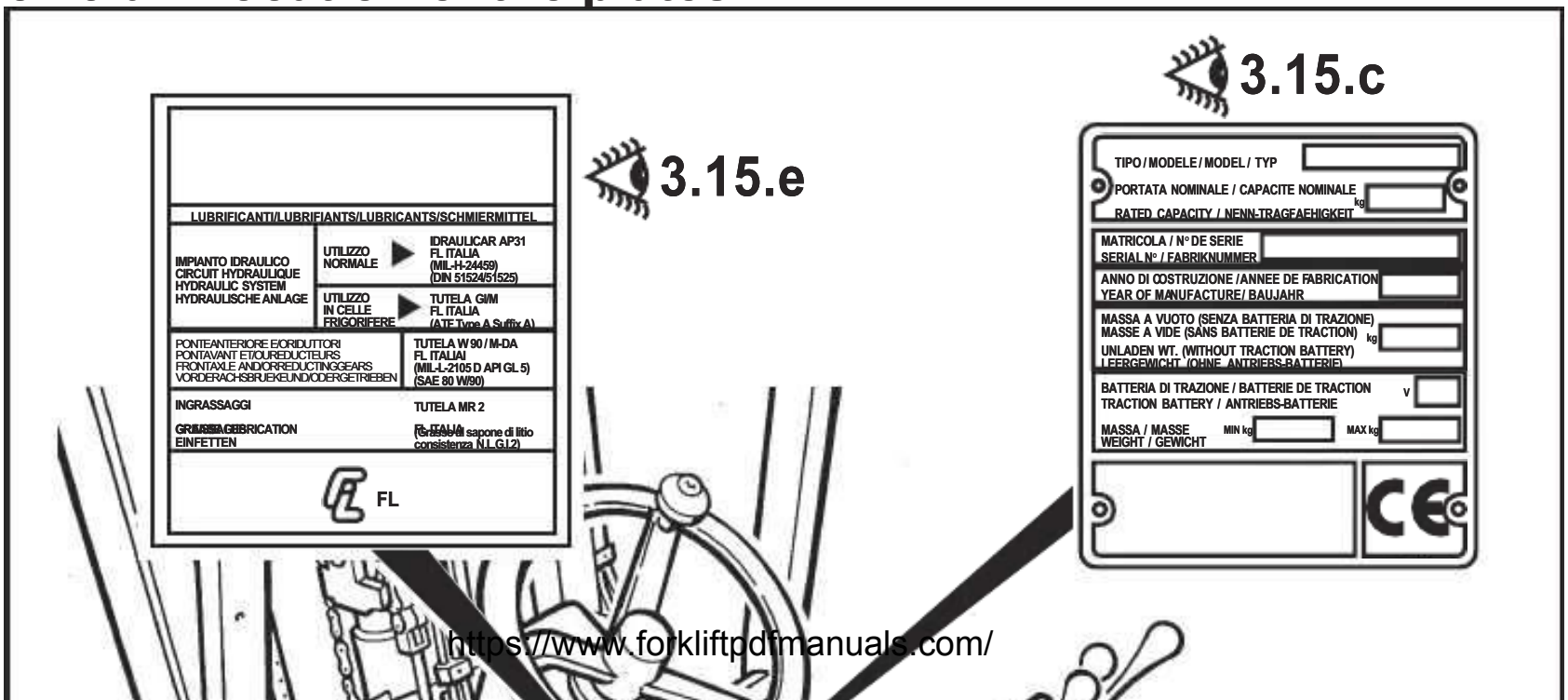
Noise level at the operator's seat	L_{paz} = 69.8 db (A)
Uncertainty factor	k_{pa} = 4 db(A)

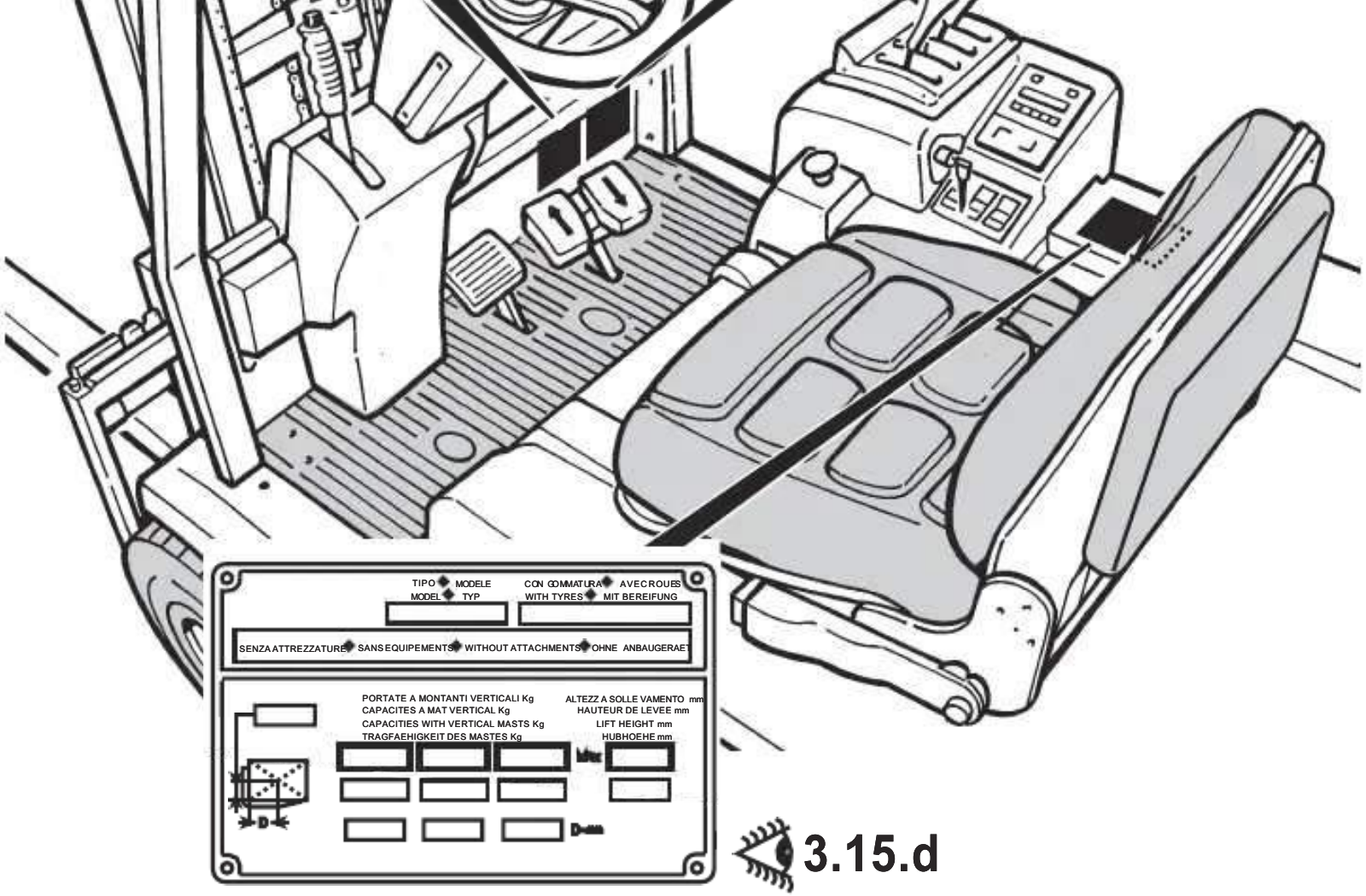
The above value has been measured according to the testing cycles of EN12053 ("Measurements of forklift truck noise") and is based on the weighted values of the "driving", "lifting" and "idling" operations.

3.19 - TRUCK IDENTIFICATION

- The forklift truck and its main components all have serial numbers so they can be identified.
- The serial numbers must be provided to the dealer for maintenance or spare parts needs.

3.19.a - Location of the plates

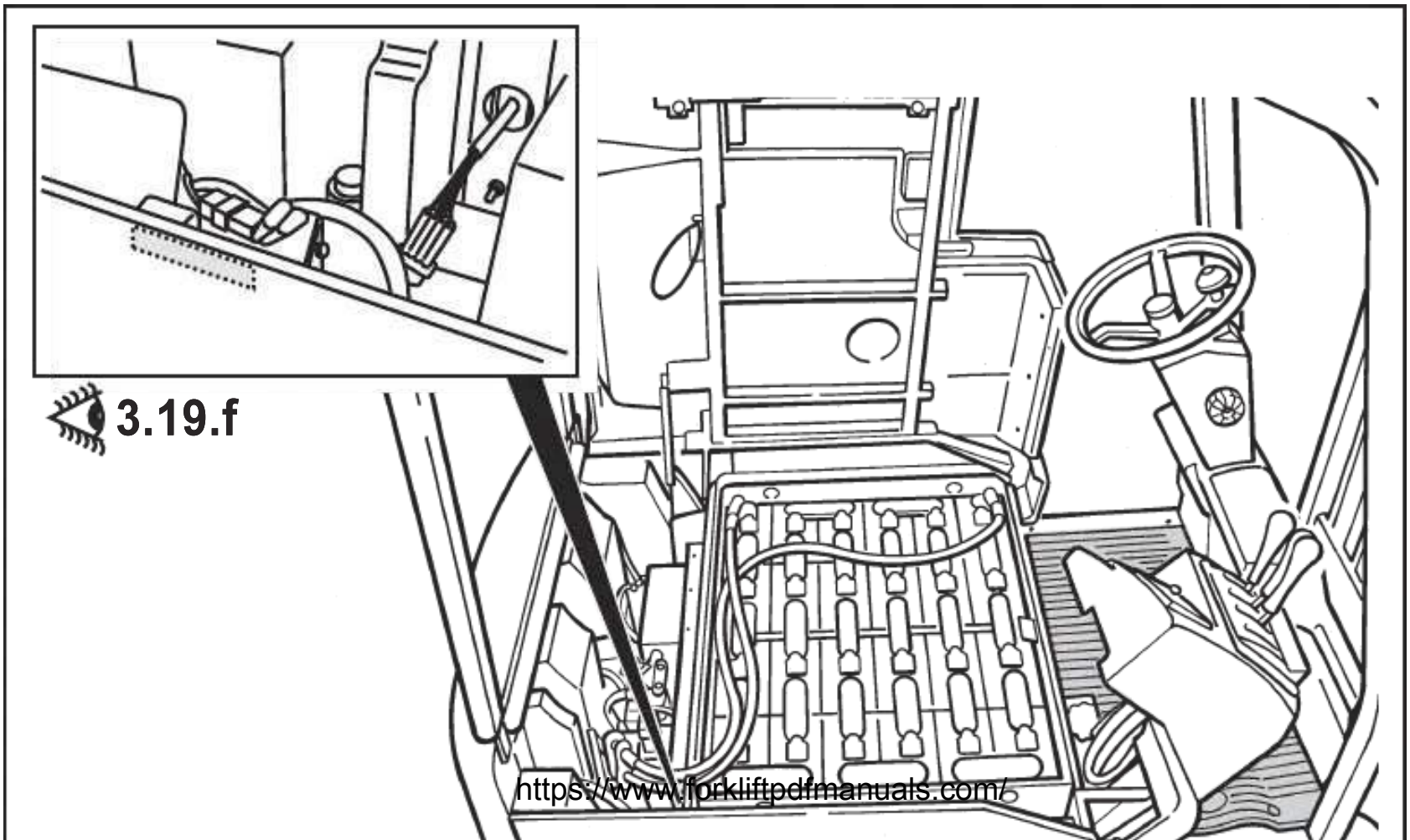




3.15.d

OM0519

3.19.b - Chassis marking

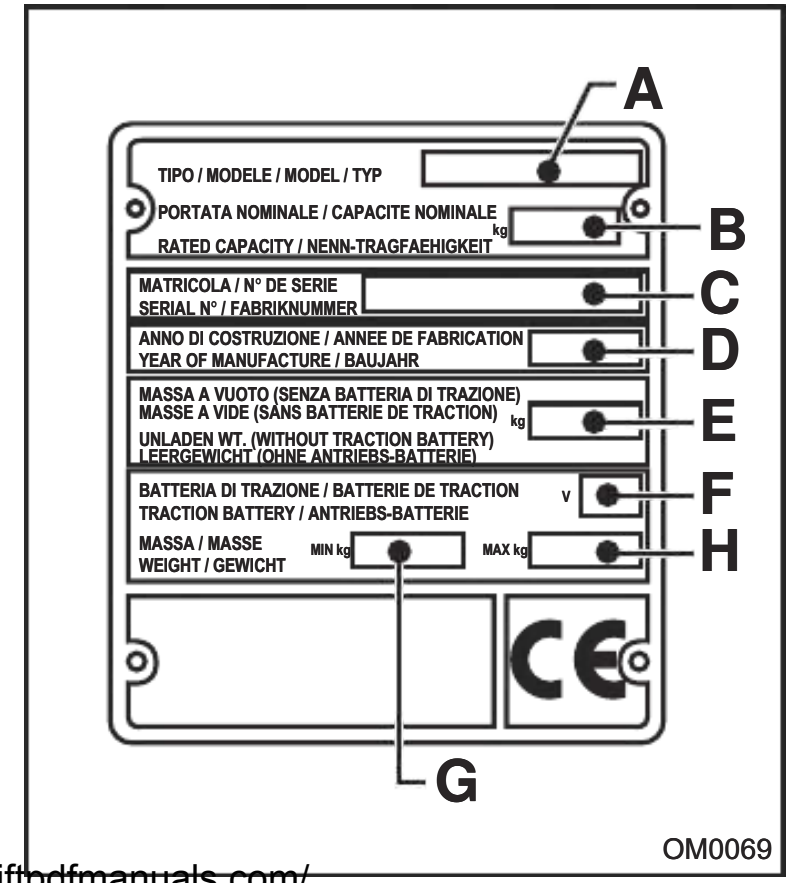


3.19.c - Truck identification plate

The following information is contained on the identification plate:

A = Truck model
B = Rated capacity (1200 Kg.-1500 kg etc.)
C = Serial number
D = Year of manufacture

E = Unladen weight without traction battery
F = Traction battery voltage
G = Minimum weight of traction battery
H = Maximum weight of traction battery



3.19.d - Carrying capacity plate

The following information is contained on the mast plate:

A = Type of truck

B= Type of tires (pneumatic, superelastic, vulkolan)

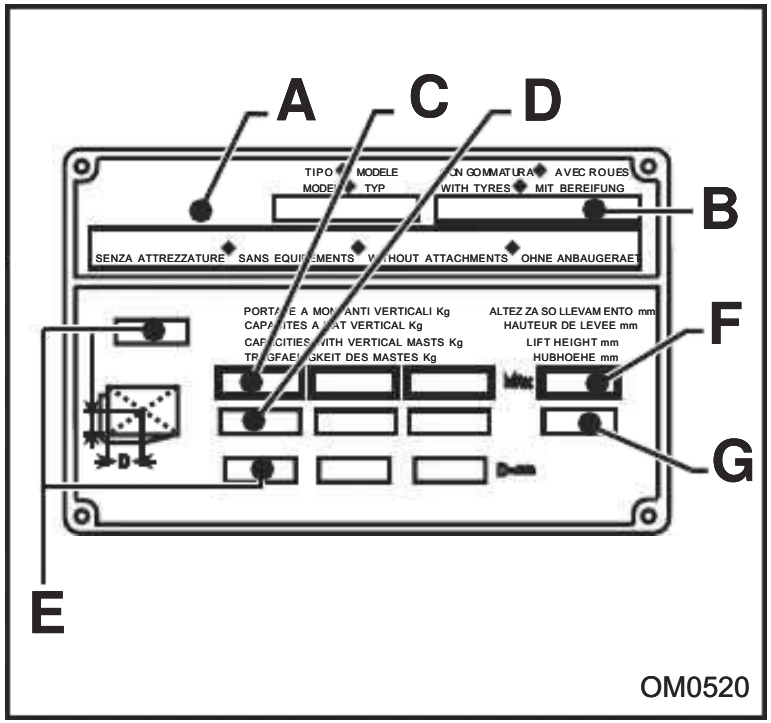
C = Carrying capacity in kg with respect to the maximum lift height

D = Carrying capacity in kg with respect to the nominal lift height

E = Load center

F = Maximum lift height

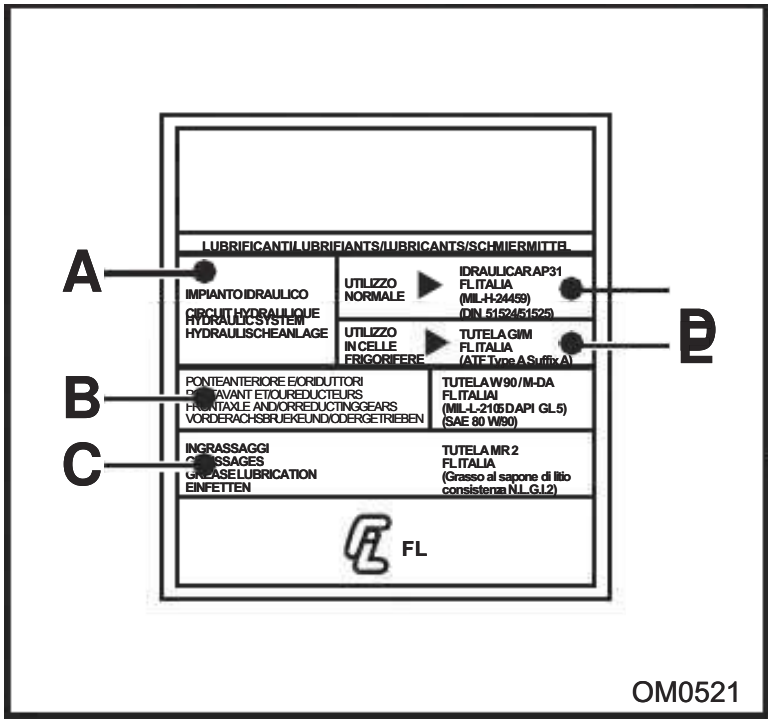
G = Nominal lift height



3.19.e - Lubricants plate

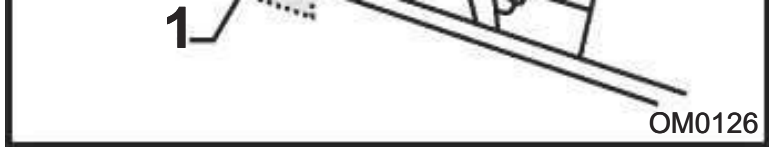
The following information is contained on the mast plate:

A = Hydraulic system
B = Front axles and/or reducing gears
C = Brake system
D = Lubricants
E = Use in normal operating conditions



3.19.f - Chassis marking

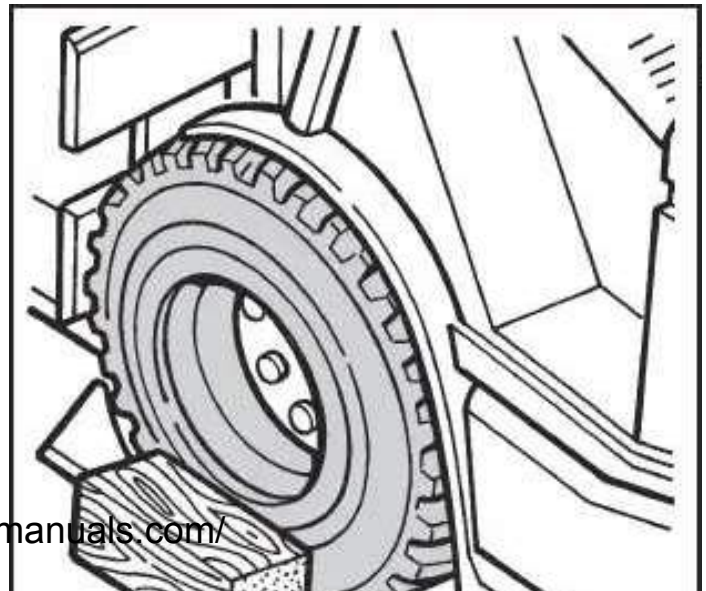
The chassis number (1) is stamped onto the chassis of the truck on the bulkhead between the electric panels and the battery.



3.20 - TRANSPORTING AND LIFTING THE TRUCK

3.20.a - Transporting the truck

The truck is usually transported by road or rail complete with mast. If the truck is bigger than the permissible limits, it must be disassembled and reassembled by the dealer. Make sure that the truck is adequately secured during transport, with blocks placed under the wheels to prevent any chance movements.



3.20.b - Environmental conditions for transporting and storing the truck

Transport and store the truck protected from the weather, and make sure that it is adequately protected in salty environments.

3.20.c - Loading and unloading the truck

Load and unload the truck by means of a ramp or mobile platform. If the truck is not operational or not equipped with a battery, follow the instructions below to lift the truck.

DANGER:

Use a crane that is big enough to handle the weight of the truck, indicated on the information plate.

Include the weight of the battery if it has been mounted onto the truck, which is indicated on the identification plate. Make sure that the truck is lifted by qualified personnel only.

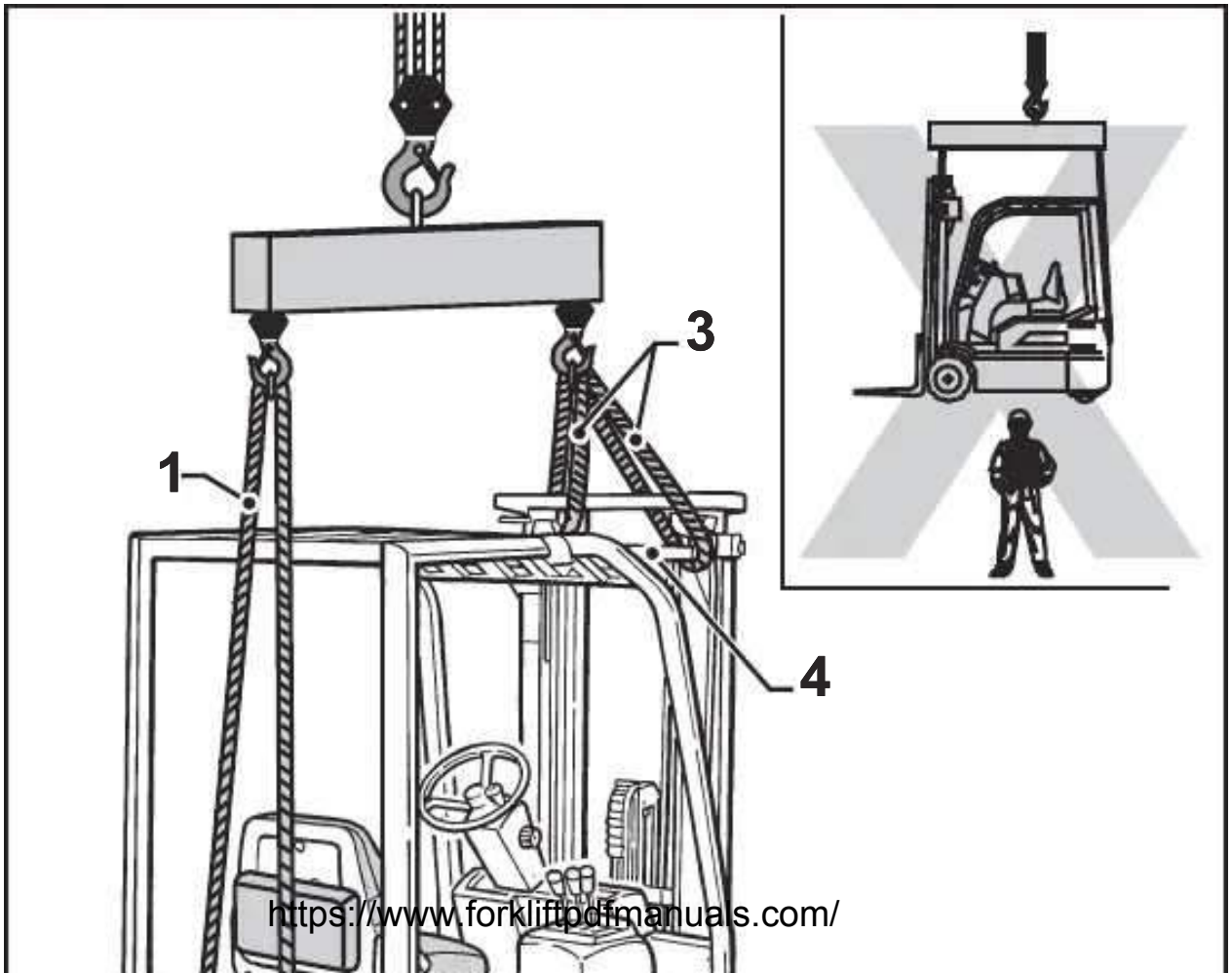
Do NOT stand within the radius of action of the crane or under the raised truck.

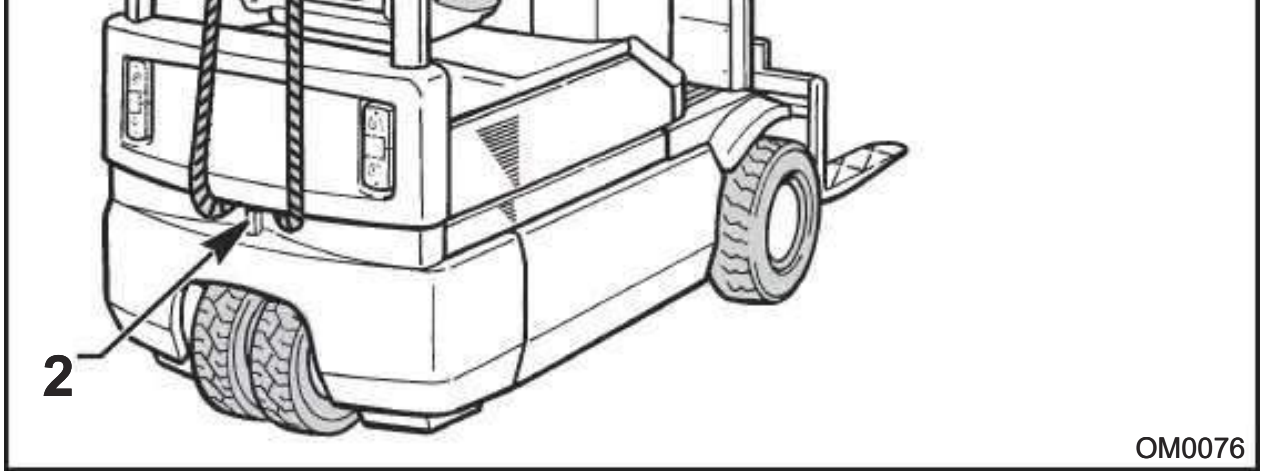
Use NON-METALLIC cables. Make sure the cables can support the weight of the truck.

Lift the truck as follows:

- Insert a non-metallic cable (1) through the rear tow hook (2) of the truck. Make sure that the cable lies in the upper portion of the hollow in the ballast.
- Insert two cables (3), one for each side, through the upper crossbar (4) of the fixed upright of the mast.
- Attach the ends of the cables to the crane hook and lift the truck without jolting it.

ATTENTION: The cables should be long enough that they do not touch the roof or other equipment while the truck is being lifted. Use a swinging bar if necessary. Pull the cables vertically.





3.21 - BATTERIES

MODEL	Voltage	Capacity	Weight

	[V]	[Ah]	[kg] ± 5%
load capacity 1200 kg	48	300 (315)	549
		345	580
		360	590
		375	590
load capacity 1500 kg	48	400 (420)	709
		460	765
		480	780
		500	780
load capacity 1800 kg	48	500 (525)	853
		575	915

load capacity 1500 kg	45	600	930
		625	930

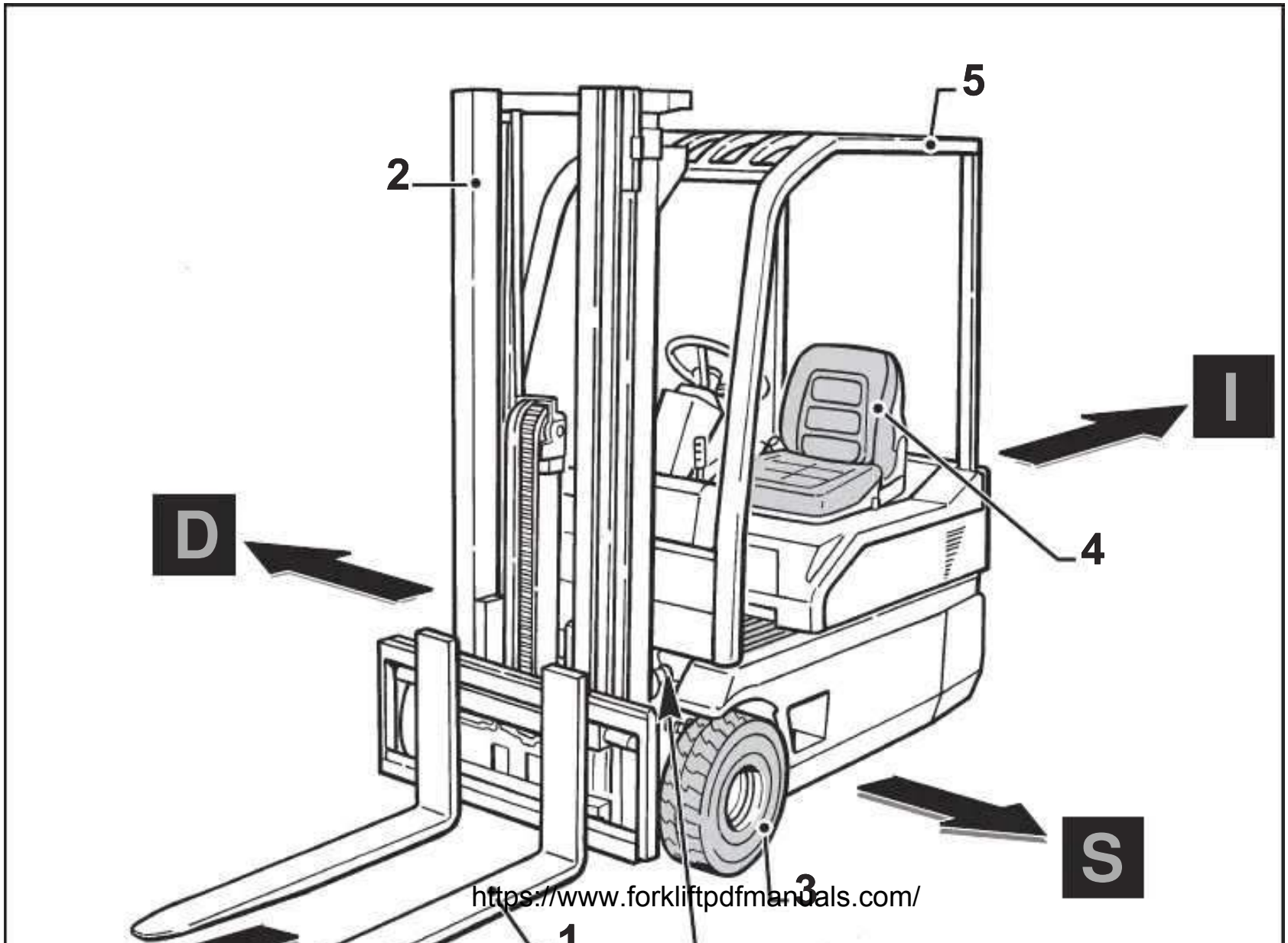
ATTENTION
THE BATTERY MINIMUM WEIGHT SHALL BE ENSURED.

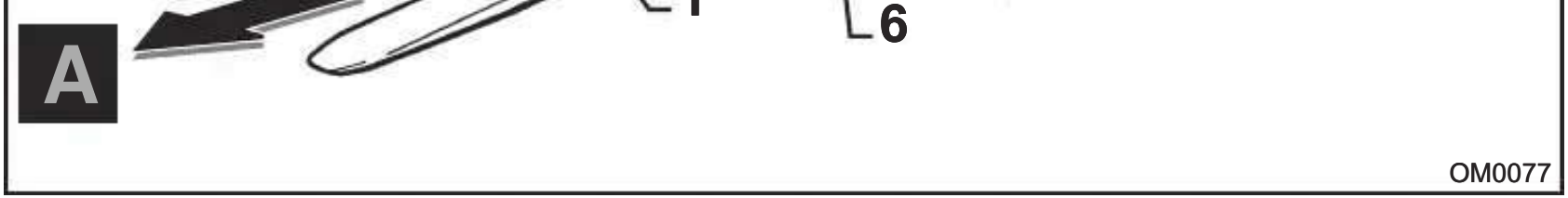
TRUCK INFORMATION

CONTENTS

4.1 - OVERALL VIEWS

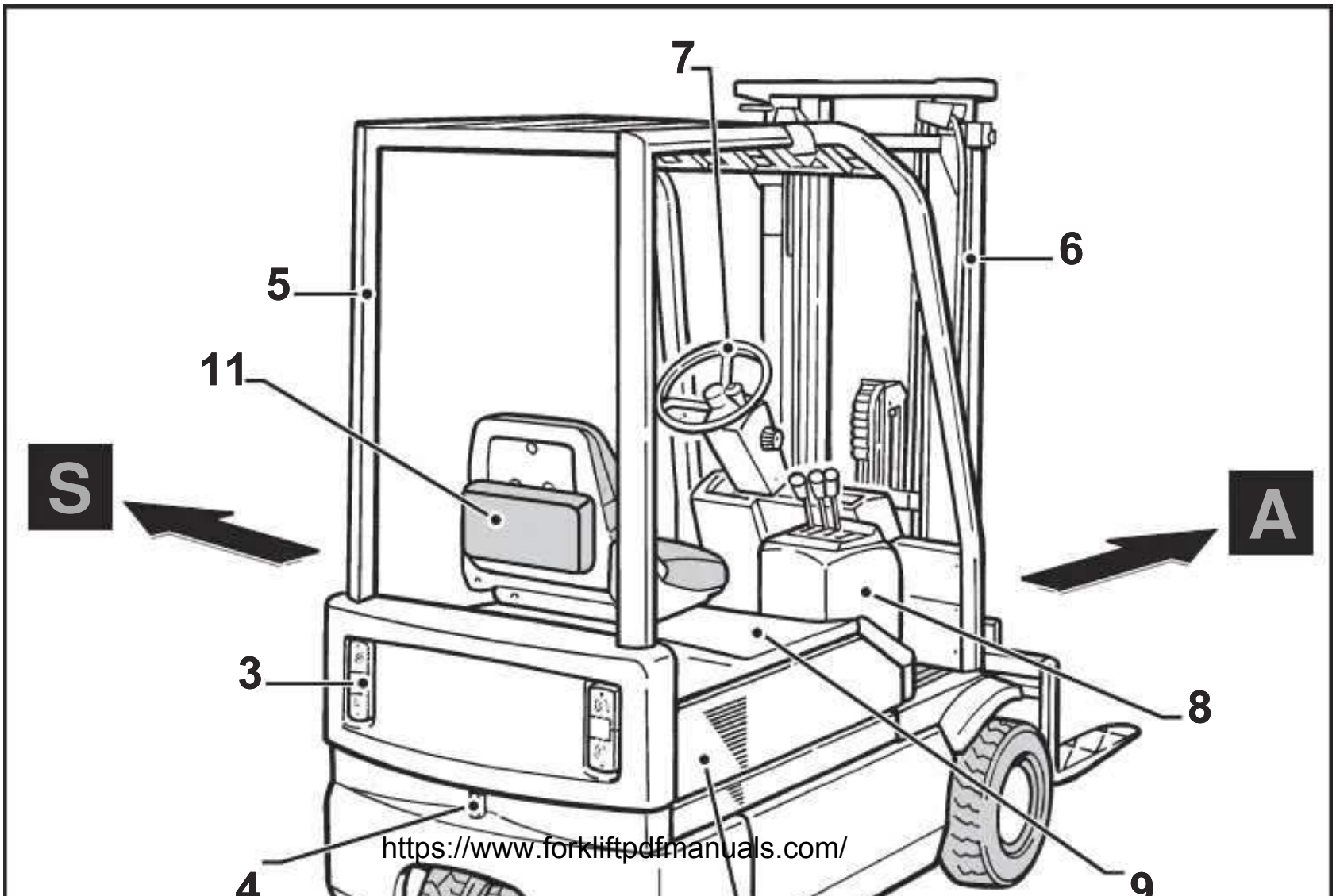
4.1.a - Overall front view

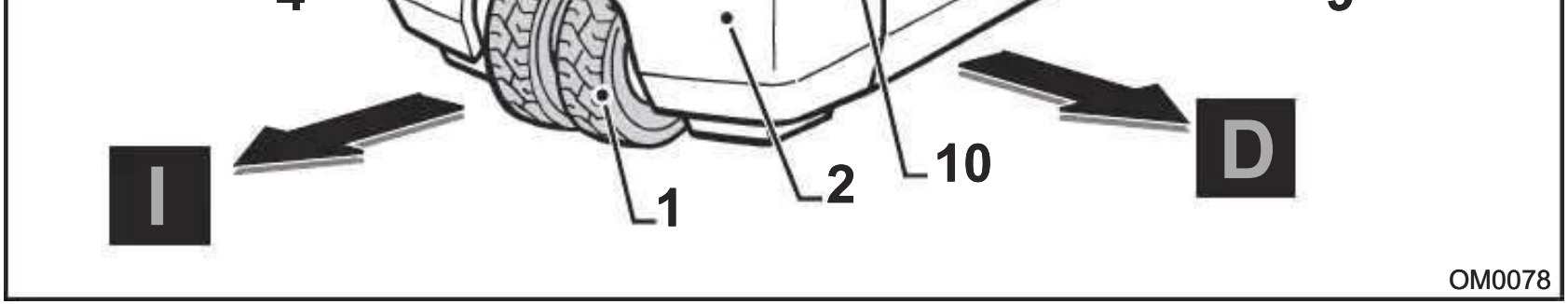




1 - Forks
2 - Mast
3 - Front wheels
4 - Seat
5 - Protective roof
6 - Tilting cylinders
A - Front
D - Right
I - Back
S - Left

4.1.b - Overall rear view

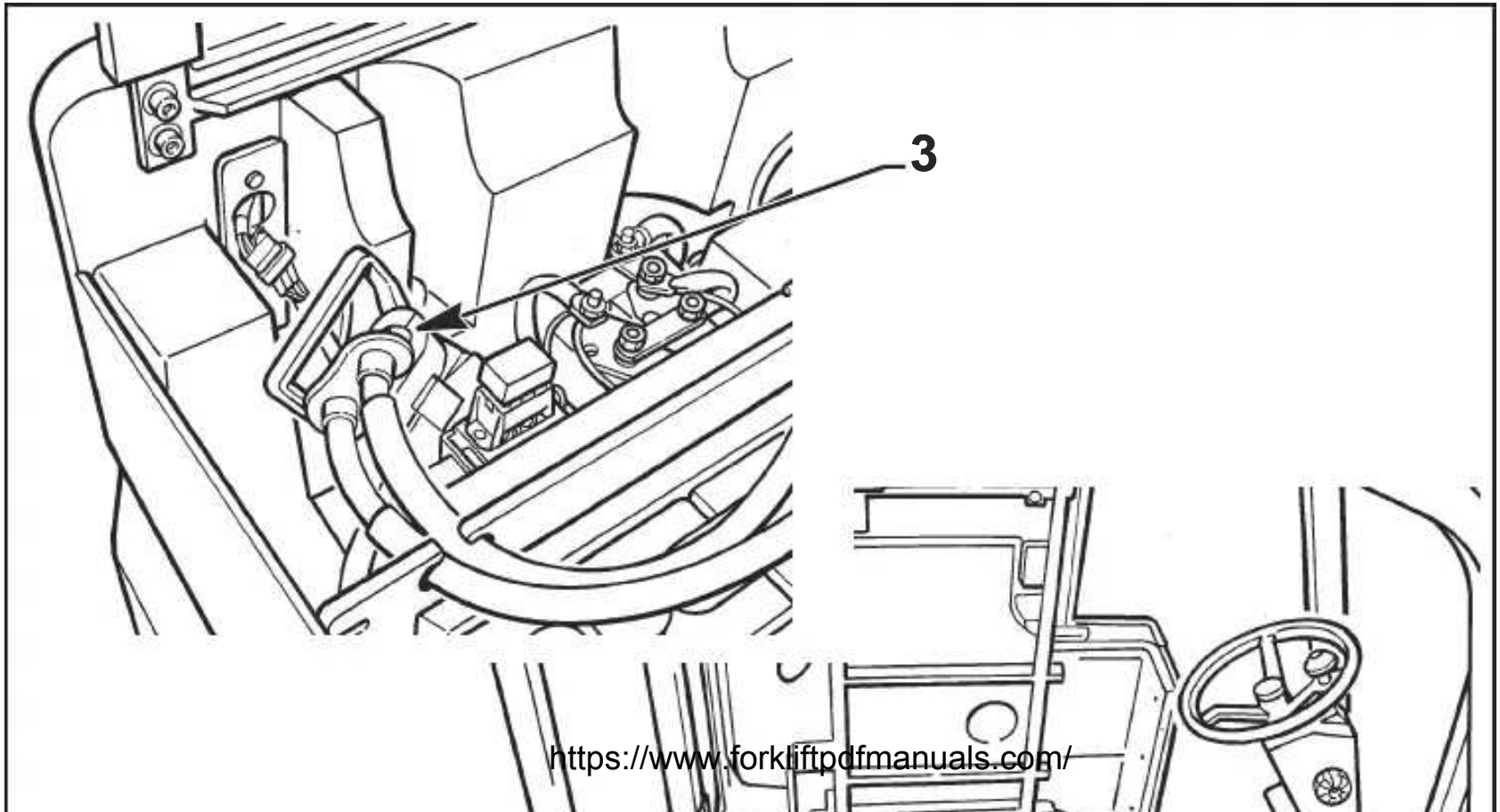


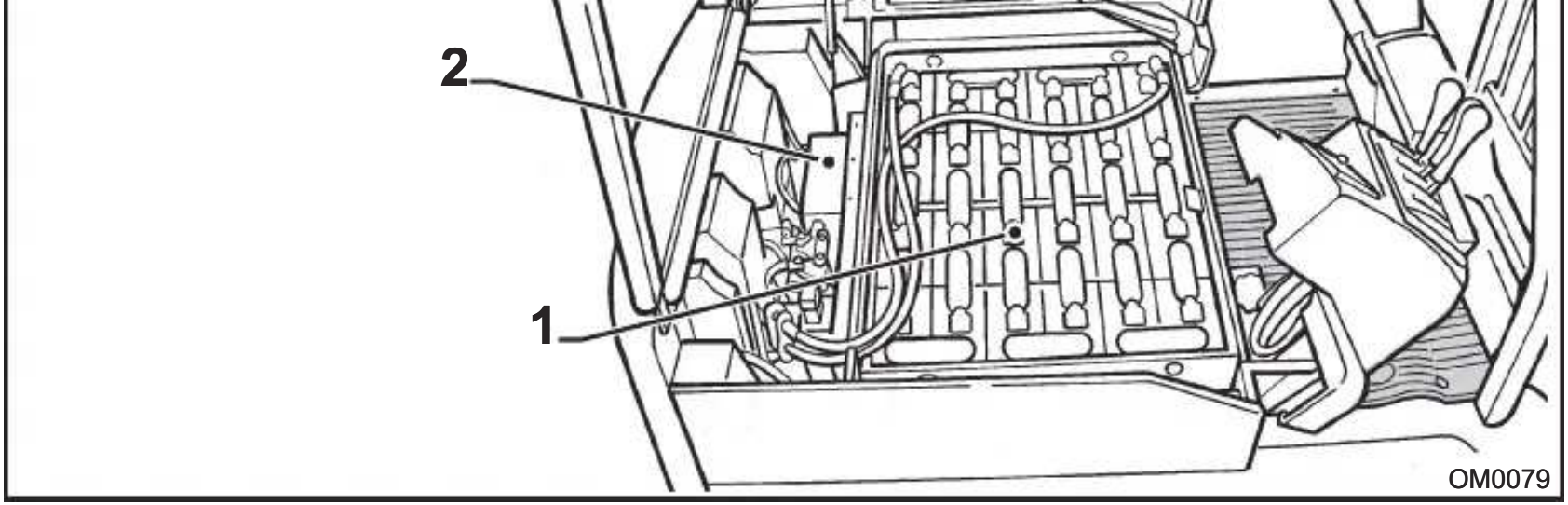


1 - Rear wheel
2 - Ballast
3 - Rear lights
4 - Tow hook
5 - Protective roof
6 - Mast
7 - Steering wheel
8 - Control panel
9 - Battery compartment

10 - Detachable side panel
11 - Glove compartment
A - Front
D - Right
I - Back
S - Left

4.1.c - Internal view





1 - Battery
2 - Electronic system
3 - Battery plug and socket

4.1.d - Overall view of the control panel