

# ESD 120K/120L

01.05 -

Operating instructions

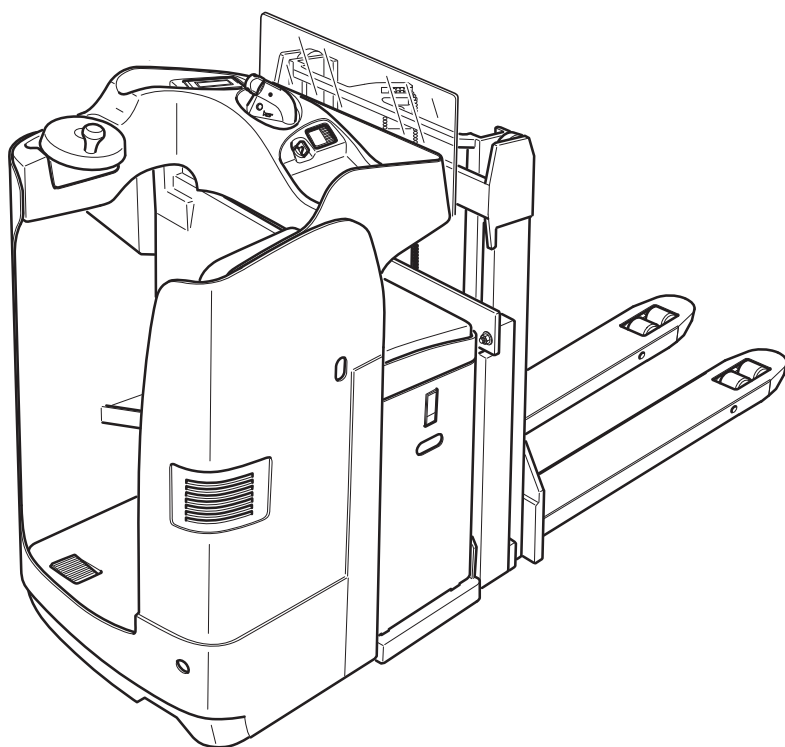


50453646

12.14

ESD 120K

ESD 120L



CLICK HERE TO **DOWNLOAD** THE COMPLETE MANUAL

- Thank you very much for reading the preview of the manual.
- You can download the complete manual from: [www.heydownloads.com](http://www.heydownloads.com) by clicking the link below



- Please note: If there is no response to CLICKING the link, please download this PDF first and then click on it.

CLICK HERE TO **DOWNLOAD** THE COMPLETE MANUAL

## 2.2 Functional Description

### Safety Mechanisms

- The wheels are surrounded by a solid skirt.
- Pressing the Emergency Disconnect switch rapidly cuts out all electrical functions in hazardous situations.

### Emergency Stop safety feature

- The emergency stop is activated by the traction controller.
- The steering controller sends a system status signal which is monitored by the traction controller. If the signal fails to appear or a fault is identified the truck automatically brakes to a halt. Control displays on the driver's display indicate the emergency stop.
- Each time the truck is switched on the system performed an automatic diagnosis.

### Operator Position

- Sturdy travel handle ensures steady stance while standing.
- Fold-up seat acts as back rest in operator position.

### Deadman button

- The deadman button ensures that the driver's feet do not extend beyond the geometry of the truck during travel.
- Lifting and/or travel operations are only enabled when the deadman button is applied.

### Hydraulic system

- Buttons for lift functions can be operated without having to reach around.

### Drive system

- Powerful 2.0 kW shunt motors powers the drive wheel.

### Steering

- The driver steers with an ergonomically inclined steering wheel.
- The steering motion is transmitted directly from the steering controller via a steer motor directly to the ring gear of the pivoted drive system.

### Electrical system

- 24 volt system.
- Standard electronic traction, lift and steering control are standard.

### Controls and Displays

- Ergonomic controls ensure fatigue-free operation for sensitive application of the travel and hydraulic operations.
- The charge indicator shows the available battery capacity.
- The optional display shows key driver information such as battery capacity, operating hour and event messages.

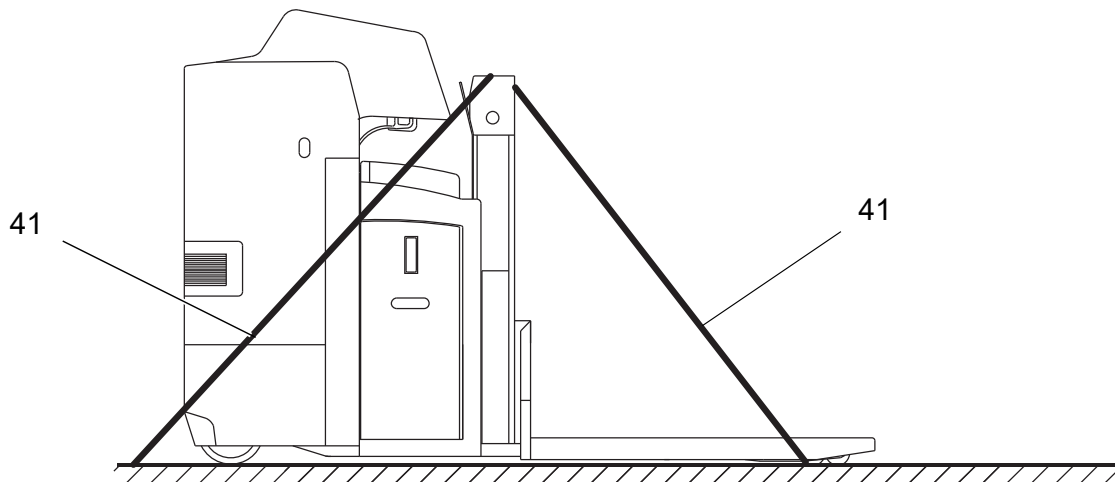
## 2 Transport

### **WARNING!**

#### **Accidental movement during transport**

Improper fastening of the truck and mast during transport can result in serious accidents.

- ▶ Loading must be carried out by specially trained staff in accordance with recommendations contained in Guidelines VDI 2700 and VDI 2703. In each case correct measurements must be made and appropriate safety measures adopted.
  - ▶ The truck must be securely fastened when transported on a lorry or a trailer.
  - ▶ The lorry / trailer must have fastening rings.
  - ▶ Use wedges to prevent the truck from moving.
  - ▶ Use only tensioning belts or tie-down straps or with sufficient strength.
- 



#### **Securing the truck for transport**

##### *Tools and Material Required*

- Tension belts/tie down straps

##### *Procedure*

- Move the truck onto the transporting truck.
- Park the truck securely, see "Parking the truck securely" on page 42.
- Strap the belts (41) around the truck and tension them sufficiently.

*The truck can now be transported.*

# E Operation

## 1 Safety regulations for the operation of forklift trucks

### Driver authorisation

The truck may only be used by suitably trained personnel, who have demonstrated to the proprietor or his representative that they can drive and handle loads and have been authorised to operate the truck by the proprietor or his representative.

### Driver's rights, obligations and responsibilities

The driver must be informed of his duties and responsibilities and be instructed in the operation of the truck and shall be familiar with the operating instructions. The driver shall be afforded all due rights. Safety shoes must be worn for pedestrian operated trucks.

### Unauthorised use of truck

The driver is responsible for the truck during the time it is in use. The driver must prevent unauthorised persons from driving or operating the truck. Do not carry passengers or lift other people.

### Damage and faults

The supervisor must be immediately informed of any damage or faults to the truck or attachment. Trucks which are unsafe for operation (e.g. wheel or brake problems) must not be used until they have been rectified.

### Repairs

The driver must not carry out any repairs or alterations to the truck without the necessary training and authorisation to do so. The driver must never disable or adjust safety mechanisms or switches.

### Hazardous area

#### **WARNING!**

#### **Risk of accidents / injury in the hazardous area of the truck**

The hazardous area is defined as the area in which a person is at risk due to truck movement, lifting operations, the load handler (e.g. forks or attachments) or the load itself. This also includes areas which can be reached by falling loads or lowering operating equipment.

- ▶ Instruct unauthorised people to leave the hazardous area.
  - ▶ Give a warning signal with plenty of time for people to leave.
  - ▶ If unauthorised personnel are still within the hazardous area stop the truck immediately.
- 

#### **DANGER!**

#### **Accident risk**

- ▶ The driver must remain within the protected area while the industrial truck is being operated.
-

## 4 Industrial Truck Operation

### 4.1 Safety regulations for truck operation

#### Travel routes and work areas

Only use lanes and routes specifically designated for truck traffic. Unauthorised third parties must stay away from work areas. Loads must only be stored in places specially designated for this purpose.

The truck must only be operated in work areas with sufficient lighting to avoid danger to personnel and materials. Additional equipment is necessary to operate the truck in areas of insufficient lighting.

#### **DANGER!**

Do not exceed the permissible surface and spot load limits on the travel routes.

At blind spots get a second person to assist.

The driver must ensure that the loading ramp / bridge cannot move or come loose during loading / unloading.

---

#### Travel conduct

The driver must adapt the travel speed to local conditions. The truck must be driven at slow speed when negotiating bends or narrow passageways, when passing through swing doors and at blind spots. The driver must always observe an adequate braking distance between the forklift truck and the vehicle in front and must be in control of the truck at all times. Abrupt stopping (except in emergencies), rapid U turns and overtaking at dangerous or blind spots are not permitted. Do not lean out or reach beyond the working and operating area.

#### Travel visibility

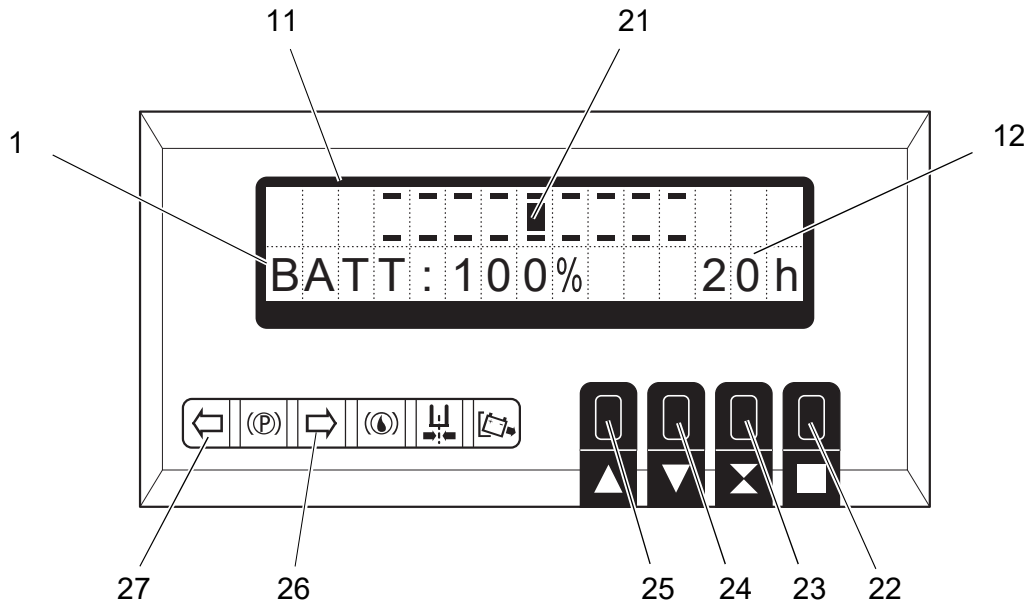
The driver must look in the direction of travel and must always have a clear view of the route ahead. Loads that affect visibility must be positioned at the rear of the truck. If this is not possible, a second person must walk in front of the truck as a lookout.

#### Negotiating slopes and inclines

Negotiating slopes or inclines is only permitted if they are specifically designed as travel routes, are clean and have a non-slip surface and providing they can be safely travelled along in accordance with the truck's technical specifications. The truck must always be driven with the load unit facing uphill. The industrial truck must not be turned, operated at an angle or parked on inclines or slopes. Inclines must only be negotiated at slow speed, with the driver ready to brake at any moment.

## 7 Optional equipment

### 7.1 Information and Service Display Unit (LISA) ○





The display (11) of the LCD information and service display unit (LISA) shows the battery charge (1), the operating hours (12) and the position of the steered wheel (21). Operating data is displayed in service and diagnostic mode (see Chapter 7.1.3 "Displays o"). There are two LEDs ((26) - (27)) below the display. The keypad (four keys (22) - (25)) is used to select, read and change truck parameters.

#### **⚠ CAUTION!**

**Changes to the service mode may only be made by the manufacturer's service department.**

#### 7.1.1 LED displays ○

Two LEDs indicate the following conditions:

Item	Function
26	 Reverse travel (load direction) (green LED)
27	 Forward travel (drive direction) (green LED)

## Lifting and jacking up

### **WARNING!**

#### **Lifting and jacking up the truck safely**

In order to raise the truck, the lifting gear must only be secured to the points specially provided for this purpose.

You may only work under a raised load handler / raised cab if they have been secured with a sufficiently strong chain or the fastening bolt.

In order to raise and jack up the truck safely, proceed as follows:

- ▶ Jack up the truck only on a level surface and prevent it from moving accidentally.
  - ▶ Always use a jack with sufficient capacity. When jacking up the truck, take appropriate measures to prevent it from slipping or tipping over (e.g. wedges, wooden blocks).
  - ▶ In order to raise the truck, the lifting gear must only be secured to the points specially provided for this purpose, see "Transport and Commissioning" on page 21.
  - ▶ When jacking up the truck, take appropriate measures to prevent it from slipping or tipping over (e.g. wedges, wooden blocks).
- 

## Cleaning

### **CAUTION!**

#### **Fire hazard**

Do not use flammable liquids to clean the industrial truck.

- ▶ Always disconnect the battery before starting cleaning work.
  - ▶ Carry out all necessary safety measures to prevent sparking before cleaning (e.g. by short-circuiting).
- 

### **CAUTION!**

#### **Risk of electrical system damage**

The electrical system can be damaged if it is cleaned with water. Do not wet-clean the electrical system.

- ▶ Do not clean the electrical system with water.
  - ▶ Clean the electrical system with weak suction or compressed air (use a compressor with a water trap) and not a conductive, anti-static brush.
- 

### **CAUTION!**

#### **Risk of component damage when cleaning the truck**

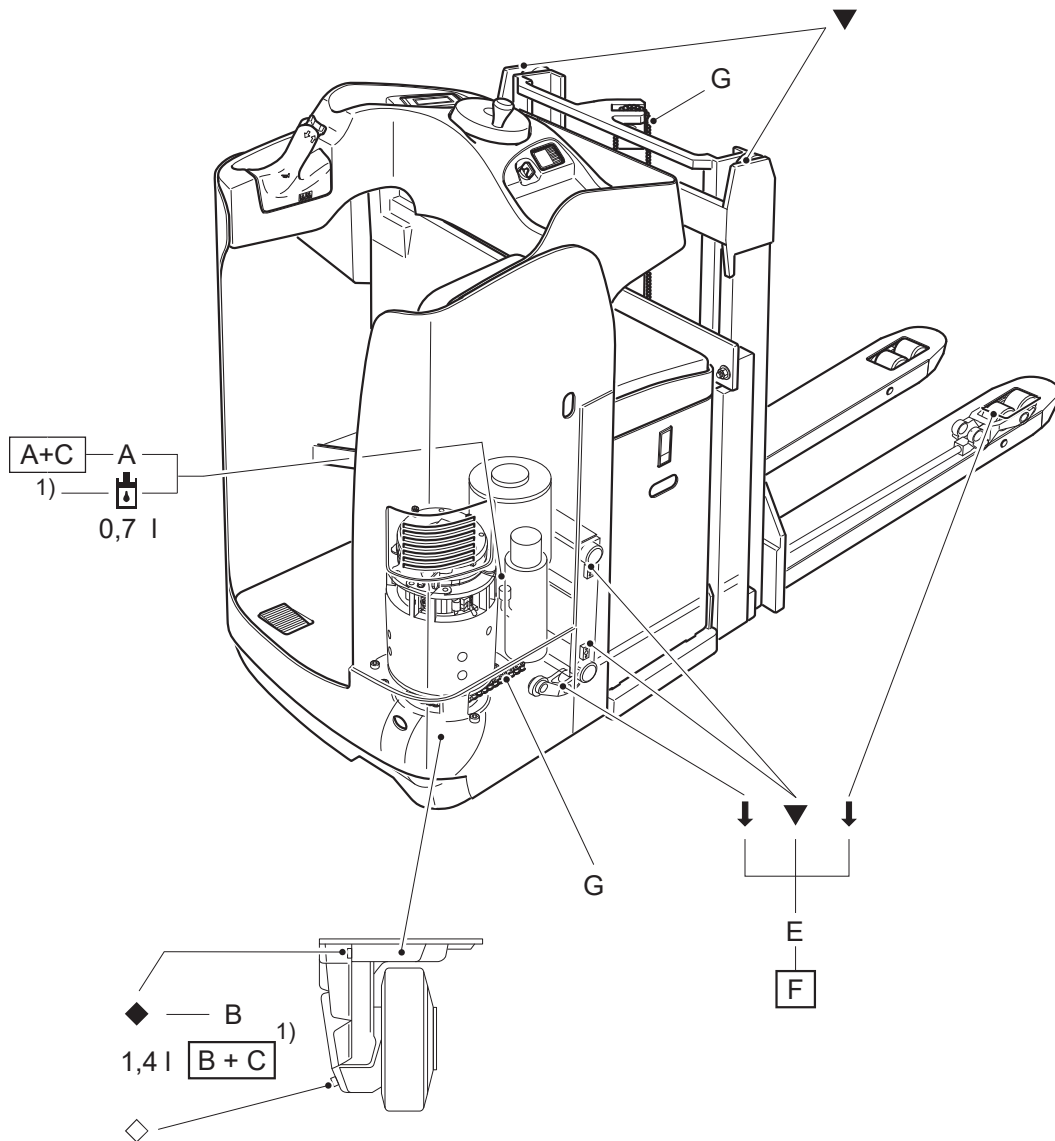
If the truck is to be cleaned with a water jet or a high-pressure cleaner, all electrical and electronic components must be carefully covered beforehand as moisture can cause malfunctions. Do not clean with pressurised water.

---



After cleaning the truck, carry out the operations detailed in the "Restoring the truck to service after maintenance and repairs" section (see "Restoring the truck to service after maintenance and repairs" on page 83).

## 5.2 Lubrication Schedule



▼	Contact surfaces	◇	Transmission oil drain plug
↓	Grease nipple	⊕	Hydraulic oil filler neck
◆	Transmission oil filler neck	*	Cold Store Application

1) Compound for cold store usage 1:1

2) 1.25 - 1.3 litres depending on the type of gear unit (always up to the lower mark on the filler neck).

CLICK HERE TO **DOWNLOAD** THE COMPLETE MANUAL

- Thank you very much for reading the preview of the manual.
- You can download the complete manual from: [www.heydownloads.com](http://www.heydownloads.com) by clicking the link below



- Please note: If there is no response to CLICKING the link, please download this PDF first and then click on it.

CLICK HERE TO **DOWNLOAD** THE COMPLETE MANUAL