

# and Handling

Version 2.5

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# 1. Unloading, unpacking, handling

## 1.1 For your safety

Only appropriately trained personnel are to be entrusted with handling the machine. Ensure compliance with the relevant safety regulations for operating handling equipment.

In particular, make sure that no-one is standing in the danger area near the machine before each lifting operation.

Do not allow anyone to walk under the suspended load while it is being moved.

# 1.2 Unloading from a truck with box body

1.2.1 Using a crane and fork-lift truck

Figure 1.1: Unloading by crane and fork-lift truck

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#### 1.2.2 Using a fork-lift truck

Make sure that the stand used to support the crate has an adequate load carrying capacity.





CAUTION

Figure 1.2: Correct way of unloading by fork-lift truck





# 1.3 Unpacking

#### 1.3.1 Consignments delivered in a transport crate

CAUTION

Figure 1.4: Transport crate Unloading instructions

Lid Arrows indicating where lid is divided

#### Front of crate

Arrows indicating top of crate Symbol indicating approximate position of center of gravity Securing points for handling chains and cables-

Insert locations for lifting forks

Unloading and handling instructions are attached to the crate at the illustrated places *(Fig. 1.4)*. Begin by opening and removing the crate lid.



- Remove the front panel and then (if necessary) the sides.
- Remove the packing material and the desiccant sachets attached to the machine.
- Remove all individually packed components situated on and underneath the work table.



Figure 1.5: Machine mounted on wooden transit blocks

Fixing bolts

Transit block

Floor of pallet/crate



• Slacken off the bolts securing the wooden transit blocks to the bottom of the crate See *Fig. 1.5*.

#### 1.3.2 If delivered on a pallet

#### CAUTION

Unloading and handling instructions are attached to the foil packaging.

Proceed as follows to unpack a machine delivered on a pallet:

- Remove the foil packaging
- Remove the desiccant sachets.
- Remove all individually packed components situated on and underneath the work table.
- Slacken off the fixing bolts securing the wooden transit blocks to the pallet. See *Fig. 1.5*.

Do not detach the machine from the transit blocks until you install it in the working position. They are not replaced by the machine shoes until the machine is finally installed.

Do not detach the machine from the transit blocks until you in-

stall it in the working position. They are not replaced by the ma-

Machines without casters

CAUTION

CAUTION

CAUTION

chine shoes until the machine is finally installed.





# 1.4 Moving to the installation location

DANGER

## CAUTION



able to tip because the center of gravity is not always in the middle. Personal injury or damage to property can result from the machine tipping over.

Prevent the machine from tipping to one side. The machine is li-

Do <u>not</u> lift the machine at the places indicated *(Fig. 1.6)* with a fork-lift truck – the forks could damage the control cabinet(s).

The machine is to be moved only by appropriately trained personnel familiar with the relevant safety regulations. Also observe the following points **before moving the machine:** 

- Prevent the machine from tipping to one side.
- Commence lifting movements with care.



CAUTION

#### 1.4.1 Handling by crane

Attach the handling chains or cables only at the eye bolts. The eyes of the eye bolts *must* be positioned *parallel to the long side of the machine*. See *Fig. 1.7*.

Two eye bolts are provided on the machine for handling by crane.

Figure 1.7: Eye bolts

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The handling chains or cables should be as close to vertical as possible and must **not exceed** an angle from the vertical of 26° when the load is being lifted. For this reason, a cross-bar is generally necessary for handling purposes.

The dimensions refer to Fig. 1.8:



The permitted value of 26° will not be exceeded if the dimensions shown in the tables in *Fig. 1.9* are observed.

| A<br>[CM] | B<br>[CM] | С<br>[СМ] |
|-----------|-----------|-----------|
| 50        | 24        | 56        |
| 75        | 37        | 83        |
| 100       | 49        | 111       |
| 125       | 61        | 139       |
| 150       | 73        | 167       |
| 175       | 85        | 195       |
| 200       | 98        | 223       |
| 225       | 110       | 250       |
| 250       | 122       | 278       |

| A<br>[CM] | В<br>[СМ] | С<br>[СМ] |
|-----------|-----------|-----------|
| 21        | 10        | 23        |
| 41        | 20        | 46        |
| 62        | 30        | 68        |
| 82        | 40        | 91        |
| 103       | 50        | 114       |
| 123       | 60        | 137       |
| 144       | 70        | 160       |
| 164       | 80        | 182       |
| 185       | 90        | 205       |
| 205       | 100       | 228       |
| 226       | 110       | 251       |

Figure 1.8: Moving by crane with cross-bar



### NOTE

Figure 1.9: Table of dimensions for handling by crane, see *Fig. 1.8* 





1.4.2 Moving by fork-lift truck (only if the use of a crane is ruled out)

DANGER



Take action to prevent the machine from tipping to one side before carefully commencing lifting movements. The machine is liable to tip because the center of gravity is not always in the middle.

Two people at least (the fork-lift operator and an observer) are always required when the machine is being moved in order to avoid personal injury and property damage.

In ideal circumstances the embroidery machine is to be moved by a crane. Use a fork-lift truck **only** in the absence of a crane. The fork-lift truck must have sufficient lifting capacity to accommodate the weight of the machine, and a fork length that allows the bottom cross beam(s) of the embroidery machine to make full contact with the fork when the machine is raised.



When introducing and raising the forks, make certain that they do not contact any part of the machine (cables, stepping motor etc.) except for the bottom cross girder. See prohibited areas for fork-lift trucks *Fig. 1.6.* 

- Introduce the forks underneath the machine frame at the center from the back.
- Raise the forks carefully until they make contact with the bottom cross beams of the machine. See *Fig. 1.10*.









- Install the casters in the envisaged positions with the four bolts (1.11-1) supplied for each caster.
- Carefully lower the machine to the ground.
  - The machine can now  $\Rightarrow$ be pushed to its installation location.

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#### 1.4.4 Relocating machine on casters

NOTE

Figure 1.13:

Each time you wish to move the machine again on casters, you must detach the machine shoes before installing the casters.

#### **Detaching machine shoes**

Detaching machine shoe 1.13-1 1.13-2 1.13-3 1.13-4 00694009

- Remove frame side wall panels. •
- Lift the machine with a fork-lift ٠ truck.
- Remove machine shoe (1.13-4). •
- Slacken off nut (1.13-3). •
- ٠ Remove nut and washer (1.13-2).
- Unscrew and remove adjusting screw (1.13-1).



NOTE

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# 1.5 Disposal of packaging materials

Dispose of the packaging materials in compliance with national and local law.





- The crate and pallets are made almost entirely from natural, non-toxic materials and can be disposed of accordingly. Other treatment guidelines apply in a small number of specific countries. Advice about these can be obtained locally from the relevant authorities.
- Packaging paper, board and foil can be recycled for reuse.
- The desiccant bags contain a natural salt that can be disposed of together with domestic refuse.

