INSTALLATION MANUAL

FOR HANDI-LIFT 7

Table of contents

1 Introduction

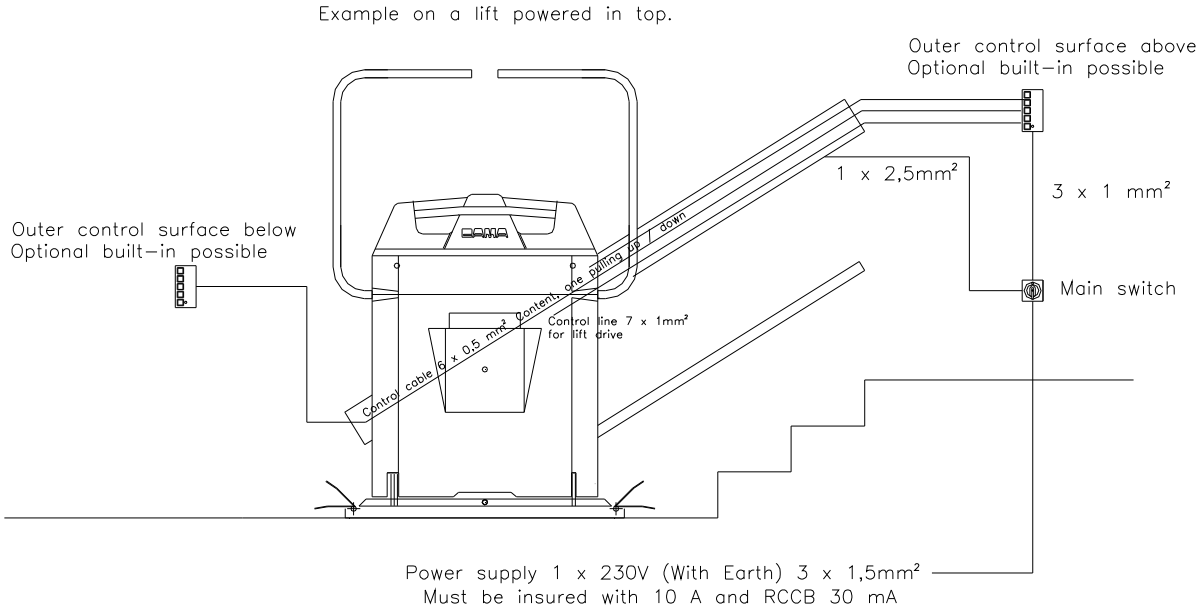
1.1 Check the parts and drawing:

Before you start installing please read this installation manual.
Check the received parts for transport damage.
Next, study carefully the installation drawing that comes with the lift to ensure that all angels and dimensions are correct and all dimensions are there.

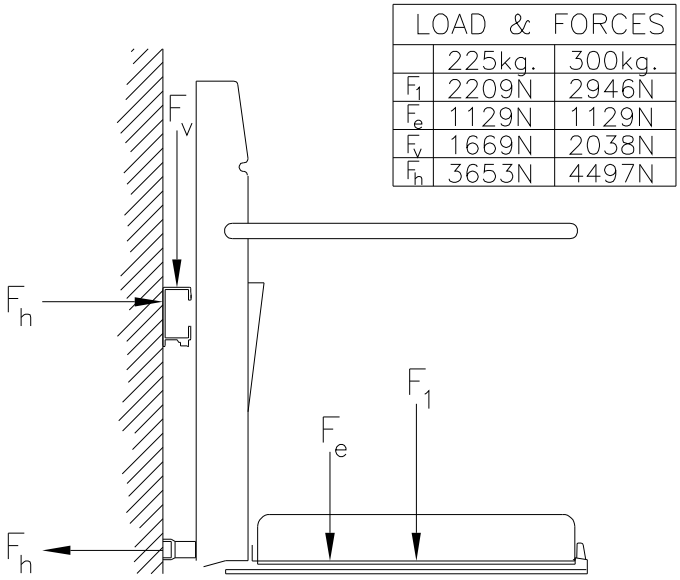
1.2 Electrical installation:

If the drawing does not show where to install the Control boxes, please sort out where they all go. And make sure that the electrical supply and electrical wiring for the Handi-Lift are there before installing the rail or columns.
You need 1x220V + earth protected by a 10 Amp fuse.

We recommend that you make a measurement of the earth connection.



2 Forces on the building



Wall Mounted Rail

1. The top (Main) rail fixings are M10x160mm studs & 'Rawl' R-KF2 Kemfast Resin into the wall.
2. The Lower rail fixings must be made using No.12x75mm csk screws & rawlplugs.

There are 250mm between the fixing bolts in the rail.
The bending strength in the rail will spread the force to 3 bolts
and the load in each bolt is therefore 1/3 x Fh

Stanchion Mounted Rail

1. Support stanchions must be fixed to concrete landing and treads, concrete strength assumed to be 30N/mm2
2. Fixings used are M8 ramset 'Dynabolt'.
3. Pull out forces is 3.3kn and push in forces is 4.2kn

3 Install the rails

3.1 Column installation:

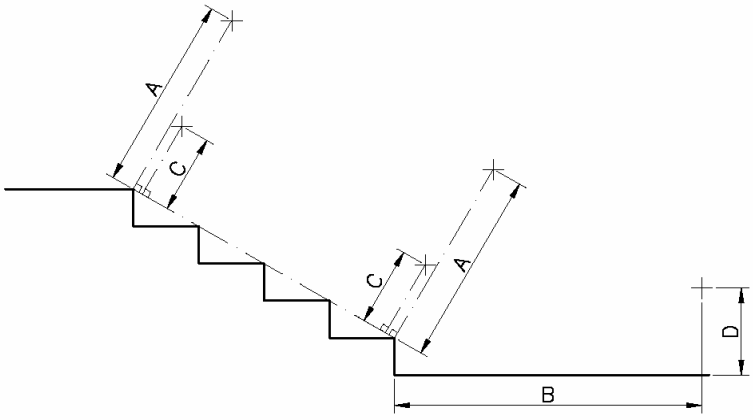
If the Handi-Lift is installed on columns you have to start with them.

Place the columns after the measurements on the drawing they are usually numbered with the lowest number at the foot of the stairs.

When installing the columns be accurate that the columns are plum.

3.2 Upper and lower rail installation:

The rail system contains two types of rail, one for the lower rail and one for the upper rail. If the upper rail is divided start to assemble the rail by using the assembly fittings for rail. The lower rail does not need to be assembled before it is installed.



Mark measurement A from the first and last raise parallel with the staircase.

(See fig 2 on next page).

Note!

Some lifts has a different angel than the staircase.

fig. 2

Mark measurement B

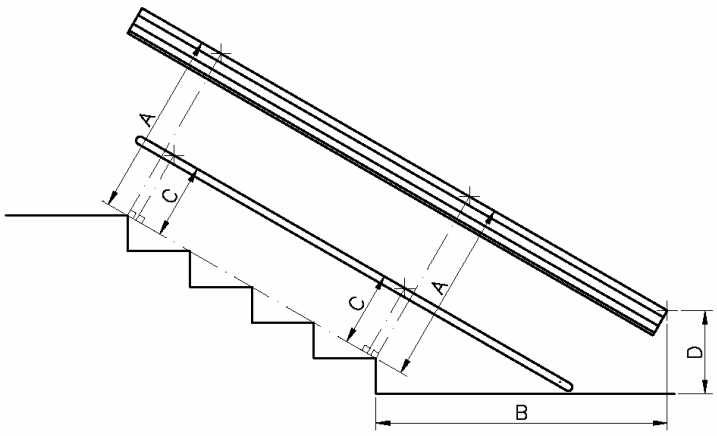
Mark measurement C from the first and last raise parallel with the staircase.

Note! Measurement C is the upper edge of the inner profile.

Make a line through mark A-A and D.
And make a line through mark C-C.

fig. 1

fig. 2



Place the upper rail on the wall or columns and fasten it in each end, on a wall installation drill ø12-14mm holes in the wall for glue bolts. Minimum 90mm into the wall.

On an installation on columns drill ø8,5mm holes and make a M10 threads.

Be careful not to hit the rail.

Do the same with the support rail for the lower rail. Using a ø10mm drill bit for ø10 raw plugs.

Note! For wall installation we recommend that you use M10 glue bolts for the upper rail when mounted on a wall with the threaded rod minimum 90mm into the wall. And for the lower rail, we minimum recommend ø10 raw plugs with M8x70mm screws.
For installation on columns we recommend that you fasten the rail with M10x25 8.8 bolts with a nut on the inside of the column.

fig. 6

fig. 7

fig. 8

Make sure that the holes are nice and clean, you might need to remove the rail to get all the dust out.

Make sure that all measurements are correct.

fig. 9

Fill the holes with glue and insert the M10 threaded rod in the hole.

Install and tighten the support rail for the lower rail

fig. 10

Install the aluminium rail on the support rail using the M5x10mm countersunk screws.

fig. 11

After letting the glue set for a half-hour in 20°C you can tighten the nuts on the glue bolts.
Or follow the instructions on the glue.

fig. 12

4 Installing the lift unit

4.1 Place the lift unit on the rail:

Hand wind platform in it's down position and remove the front cover from the lift unit.

Install the loose carrying arms

fig. 13

Please use tape to protect the rail.

Optional: To make the lift easier to handle you can disassemble the platform, if necessary.
We recommend you install the lift with the platform assembled.

Before inserting the lift to the rail make sure that the upper limit switch is removed.

fig. 14

fig. 15

Insert the lift to the rail from the top.

fig. 16

fig. 16

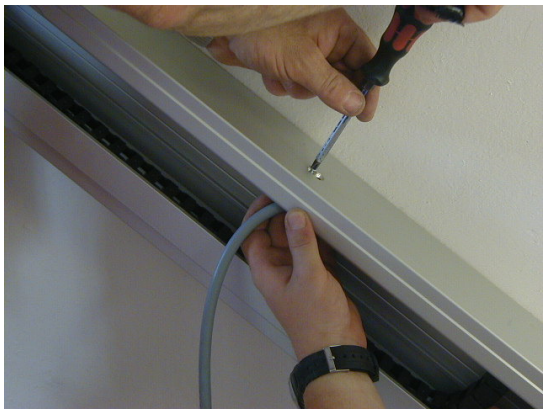


fig. 17

fig. 18

Plug the remote lead into the control board.

Drive the lift to the lowest part of the rail and commence the programming operation.
Dismount the carrying arms and install the barrier arms to the unit.
And lightly lubricate the drive chain mechanism.
You can now install the rail endings at the bottom and the safety-stop at the top of the rail.

4.2 Connect the electrical:

Wire all required charging points to the upper rail section ensuring that all cables are free from any damage. Charging points are placed at all the lifts stops and wires are connected. Wire back to charging unit and electrical test operation.

Install all control boxes.

4.3 Load cell adjustment:

Test the lift with max. load. (Ex. 225kg.) + 50kg. Remove the small PCB for the upper safety arm. Adjust the potentiometer (R63) until the light change from Red to Green.

4.4 Handicap symbol

In public places you need to install the international Handicap Symbol (ISO 7000) with a minimum size of 50 mm (see picture below) next to each control box.

5 Installation Test Certificate Cama Lifts

Description of installation

Location:

_____

Rated load: _____ kg

Stairlift serial no: _____

Rated speed: _____ m/s

Type and year of manufacturer: _____

Manufacturer: CAMA Lift ApS, Ellehammervej 6, DK 9900 Frederikshavn

Contract electrical supply:

_____ V _____ Phase _____ Hz

Mains supply fuse rating: _____ A

Verification test on each machine before first use √

a.	All control devices function correctly	
b.	All barriers, ramps, locks, hinged platforms and similar devices operate correctly	
c.	Stopping distance of the stairlift is within specified limits	
d.	All electrical safety devices function correctly	
e.	The suspension elements and their attachments are in order	
f.	The correct clearance dimensions and from the surrounding structure are maintained throughout the full travel of the stairlift	
g.	The stairlift shall be subjected to insulation tests	

h.	Verify that the polarity of the mains supply connection is correct	
i.	Test to verify the functional operation of the overspeed detection device and safety gear	
j.	Verify that the mechanism for emergency/manual operates correctly	
k.	The alarm device when activated operates correctly	
l.	All notices, etc. are correctly displayed	
m.	Undergo without failure a dynamic test to check the forces imposed by the maximum working load	
n.	Undergo the testing of the overload detection device for wheelchair platforms only	

Declaration A

I/We certify that on _____/_____/_____ this stairlift was installed to the latest installation instructions and thoroughly examined and found to be free from obvious defects and to comply with the requirements of EN 81-40 and that the foregoing is a correct report of the examination.

Signed: _____Qualifications: Authorised Installer

Address: _____ Date: _____

Certificate of acceptance by purchaser/user

I/We being the purchaser/user of the stairlift (serial no. _____) have received and fully understood, verbal and written instructions, in association with a demonstration, from _____ on its correct and safe use.

Signed: _____ Date: _____