



Hänel Installation Instructions Cable Carrier for Unit Heights Greater Than 8.5 m (334.65")

Lean-Lift

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1. General instructions

Caution

These Installation Instructions are intended for specially trained and authorised technicians employed by the Hänel factory or by Hänel representatives.

All safety instructions and general instructions provided in the Operating Manual "MANL-LL" and in the Installation Instructions "INST-LL-S" or "INST-LW" must be observed at all times!

In addition, the "Safety Rules & Requirements" provided in the Memorandum for Technical Field Service "SICHA-__" must be observed at all times.



Intended use

The cable carrier is intended exclusively for fastening the ribbon cables that are used as connecting cables to the extractor.

Ribbon cables are used:

- By default for Lean-Lifts with a unit height greater than 8.5 m (27' 10.65")
- By customer request for Lean-Lifts with a unit height less than 8.5 m (27' 10.65")

The installation may take place only on lifts intended for this purpose. Retrofitted installation is possible only if lifts are intended for this purpose (according to the order confirmation, wider by 20mm/0.79").

Any other use shall be considered non-compliant use.



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2. Installation Requirements

0 . Lower the extractor to the lowest possible position.

1. Before starting the installation, secure the extractor against descending or falling.



DANGER

The extractor is a suspended load that can fall.

Therefore, whenever working inside the lift, you have to lower it to ground level.

If this is not possible, you have to secure them using the locking device. (See operating manual "MANL-LL", work inside the lift by authorised personnel - Securing the extractor).

2. Switch off the main switch (Q2) and secure it from being switched on again using a padlock.



DANGER

Risk of electrocution!

SAFETY INSTRUCTION



The lift must be de-energised before work begins.

- Switch off main switch (Q2).
- Secure the main switch (Q2) from being switched on again.
- Verify that the lift has been de-energised.
- Cover or block off neighbouring live parts. (External voltage source for multi-unit network)

3. Before entering the inside of the lift, lock the actuator of the safety switch on the service door (S3) with a padlock.

SAFETY INSTRUCTION



Secure the actuator latch!

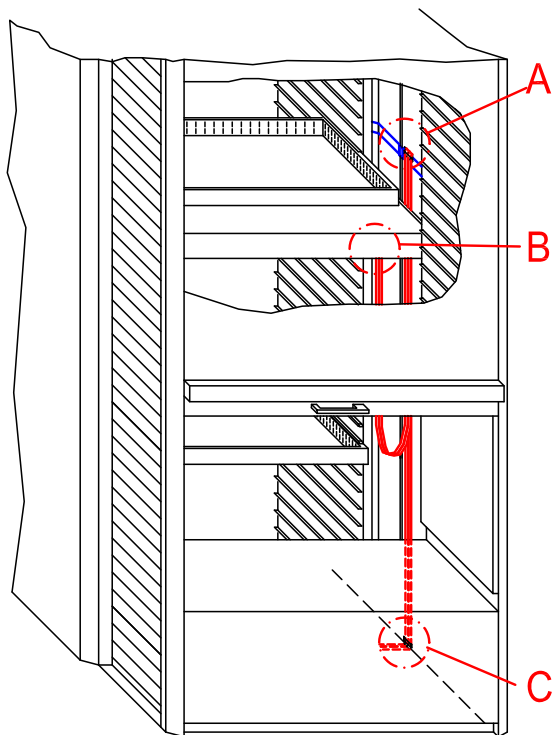
Before all work, secure the actuator latch of the service door from being switched on again using a padlock.

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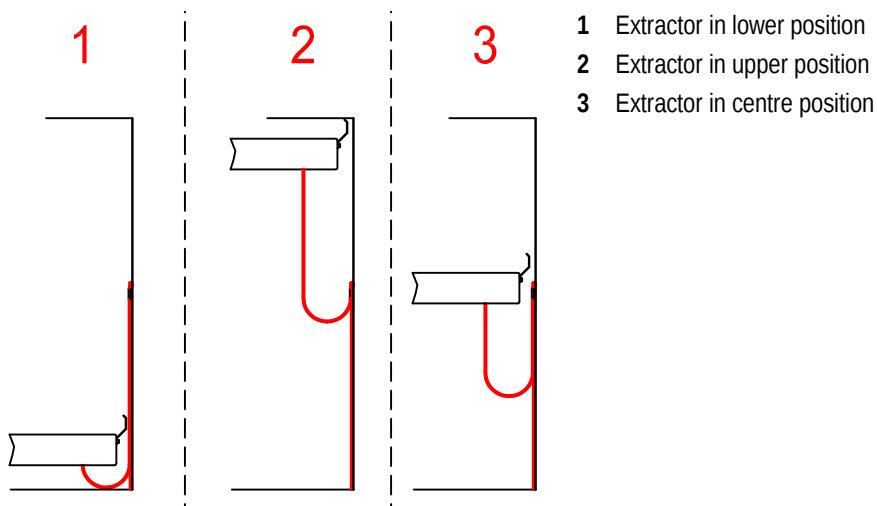
3. Installation instructions:



- A Fastening cable carrier to cable carrier side bracket, see Chapter 3.5
- B Fastening cable carrier to extractor, see Chapter 3.4
- C Fastening cable carrier to the base, see Chapter 3.6

Fig. 1 Overview of the cable carrier

3.1 Function



- 1 Extractor in lower position
- 2 Extractor in upper position
- 3 Extractor in centre position

Fig. 2 Function of the cable carrier

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3. Installation instructions: (continued)

3.2 Installing cable carrier for stand-alone lifts and multiple adjacent lifts with type width > 840

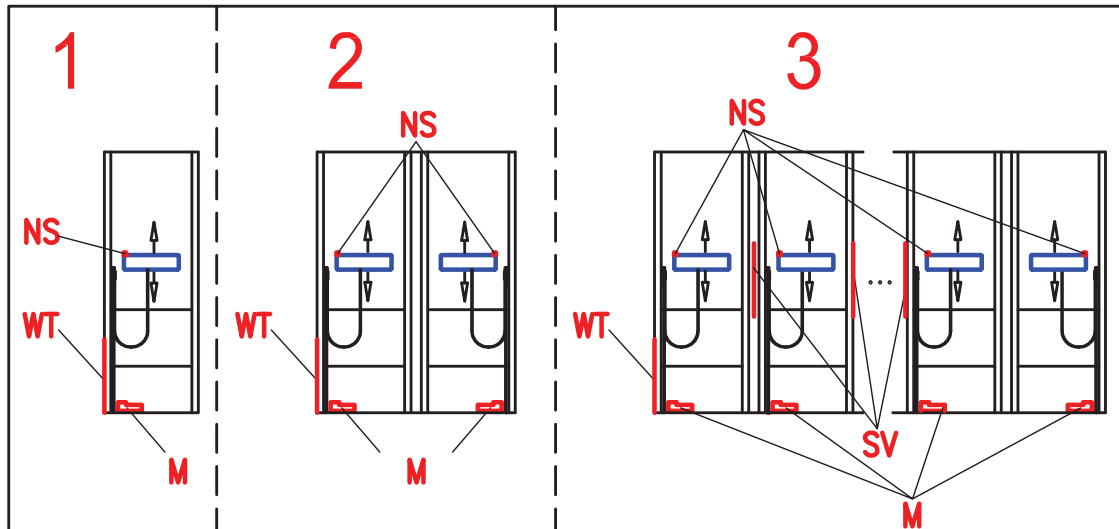


Fig. 3 Cable carrier diagram for the left side or both sides of the service door

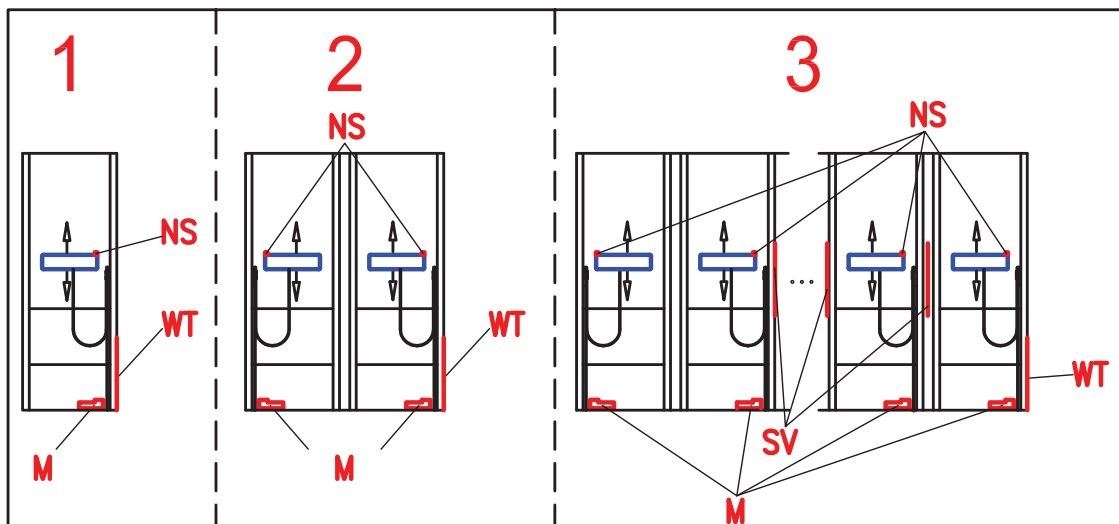


Fig. 4 Cable carrier diagram for the right side of the service door

Item	Description
M	Motor
WT	Service door
NS	Proximity switches (B10, B11) and limit switch (S1) on the extractor
SV	Additional side panel

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3. Installation instructions: (continued)

3.2 Installing cable carrier for stand-alone lifts and multiple adjacent lifts with type width > 840 (continued)

Cable carrier fastening

Structure of the lifts	Cable carrier installation	Note / illustration
Individual lift	Always on the motor side	See Fig. 3 and 4 [1]
Two immediately adjacent lifts (multi-unit network)	Always on the respective outer side	See Fig. 3 and 4 [2]  Note: Observe the corresponding order confirmations with regard to setting up and arranging lifts immediately next to each other!
Multiple immediately adjacent lifts (multi-unit network)	- For the two outside lifts, on the opposite outer sides of the lifts - For the centre lifts, install the cable carrier so that each points in the direction of the service door. - For the centre lifts, install additional side panel up to one-half the height of the lift. The bottom passage up to a height of 1875 mm (73.819") remains clear.	See Fig. 3 and 4 [3]  Note: Observe the corresponding order confirmations with regard to setting up and arranging lifts immediately next to each other!

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3. Installation instructions: (continued)

3.3 Installing cable carrier for stand-alone lifts and multiple adjacent lifts with type width 840

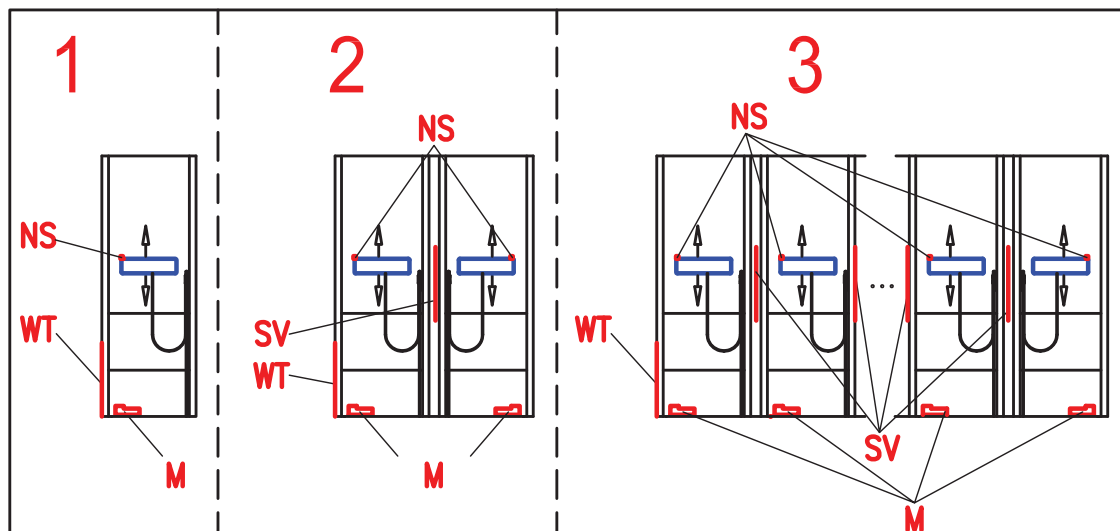


Fig. 5 Cable carrier diagram for the left side or both sides of the service door

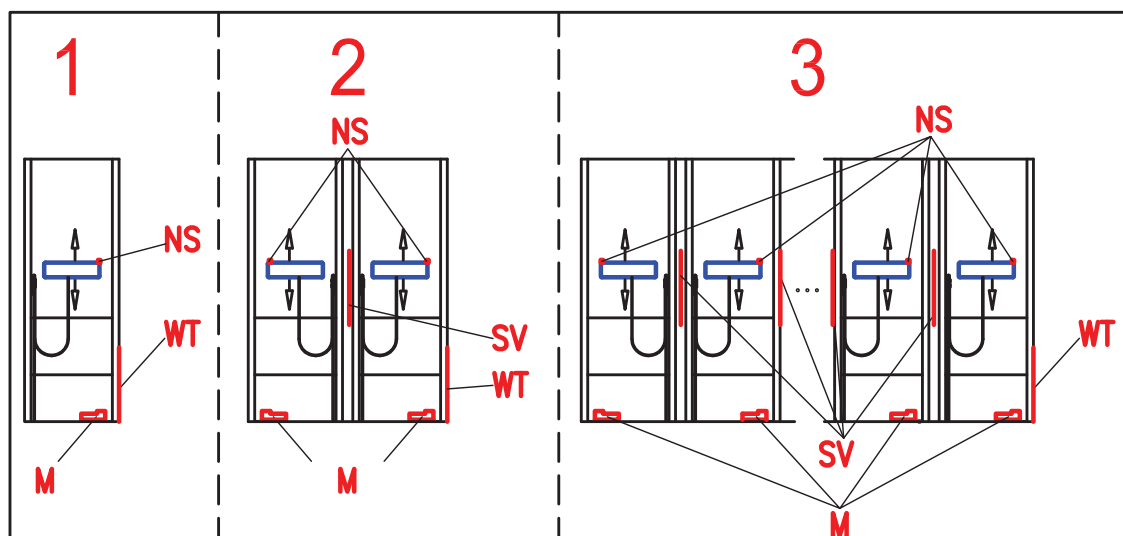


Fig. 6 Cable carrier diagram for the right side of the service door

Item	Description
M	Motor
WT	Service door
NS	Proximity switches (B10, B11) and limit switch (S1) on the extractor
SV	Additional side panel

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3. Installation instructions: (continued)

3.3 Installing cable carrier for stand-alone lifts and multiple adjacent lifts with type width 840 (continued)

Cable carrier fastening

Structure of the lifts	Cable carrier installation	Note / illustration
Individual lift	always on the side without motor	See Fig. 5 and 6 [1]
Two immediately adjacent lifts (multi-unit network)	- always on the side without motor - Install additional side panel up to one-half the height of the lift. The bottom passage up to a height of 1875 mm (73.819") remains clear.	See Fig. 5 and 6 [2]  Note: Observe the corresponding order confirmations with regard to setting up and arranging lifts immediately next to each other!
Multiple immediately adjacent lifts (multi-unit network)	- always on the side without motor - For the centre lifts, install additional side panel up to one-half the height of the lift. The bottom passage up to a height of 1875 mm (73.819") remains clear.	See Fig. 5 and 6 [3]  Note: Observe the corresponding order confirmations with regard to setting up and arranging lifts immediately next to each other!

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3. Installation instructions: (continued)

3.4 Fastening cable carrier to extractor



Caution:

Note

- For type 635 or 825 lifts and HS version lifts, 2 clamping angles are installed.

Figure

See Fig. 7

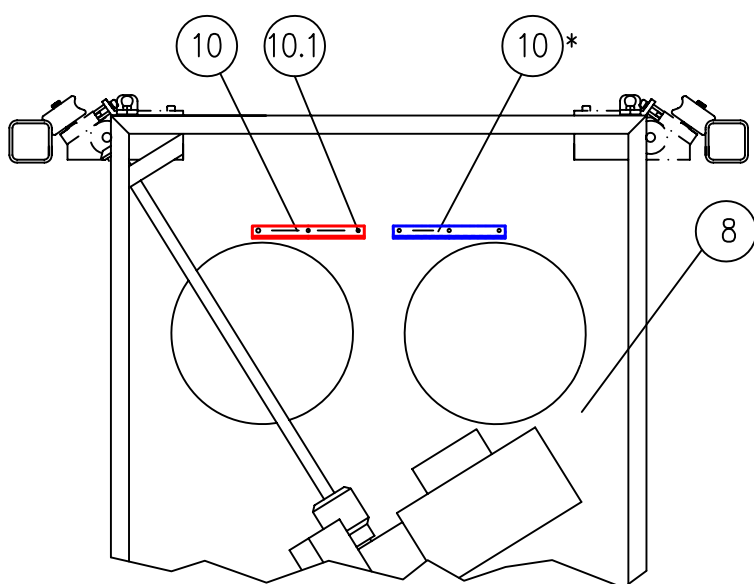
Step

Task

Note / illustration

- 1 Route the motor and control cable under the clamping angle (item 10). Ensure that the cables are **not** under tension or twisted.
- 2 Fasten the clamping angle (item 10) to the bottom extractor (item 8) using 3 screws, spring washers and nuts (item 10.1).
- 3 Connect the cables according to the circuit diagram.

See Pages 2 and 10 of the circuit diagram and terminal plan X1.0



Item	Description
8	Extractor
10	Clamping angle
10*	2nd clamping angle only with type 635 or 825 lifts and HS version
10.1	Countersunk screw DIN 965 /ISO 7046 - M5x16 (3x per clamping angle) + Spring washer DIN 127-A5 (3x per clamping angle) + Hex nut DIN 934 /ISO 4032-M5 (3x per clamping angle)

Fig. 7 Cable fastening to extractor (view from below), Detail B from Fig. 1

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3. Installation instructions: (continued)

3.5 Fastening cable carrier to cable carrier side bracket

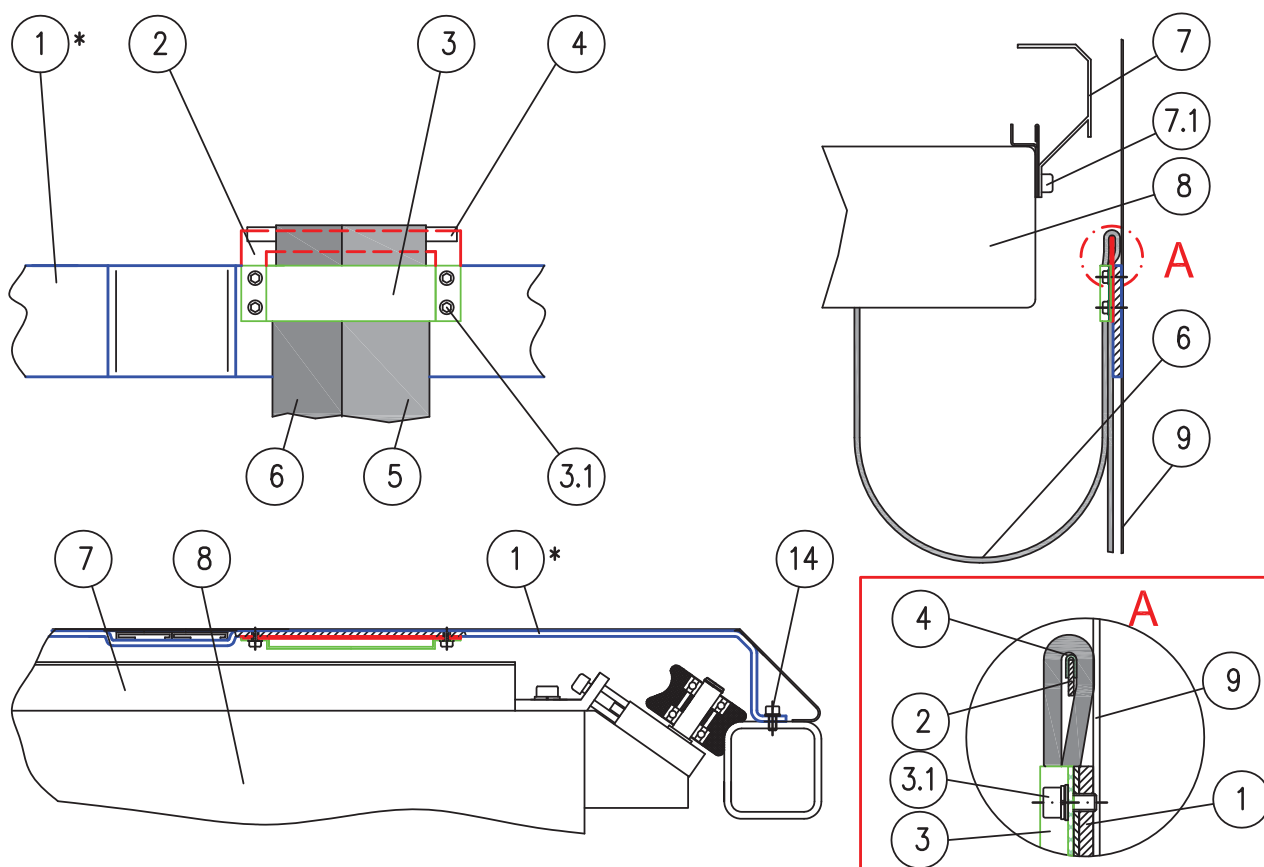


Fig. 8 Standard method of fastening cables to cable carrier side bracket, Detail A from Fig.1

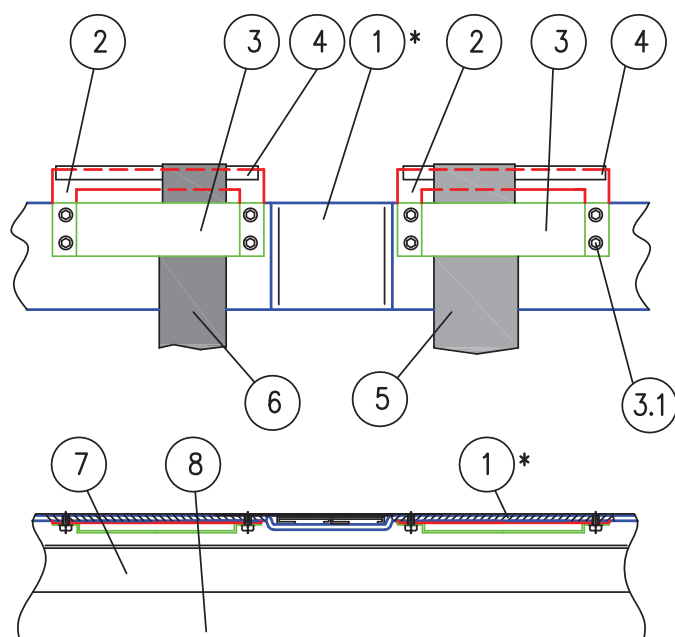


Fig. 9 Cable fastening to cable carrier side bracket for type 635 or 825 and HS version lifts



* Caution:

Check the straightness of the cable carrier side brackets (item 1) across the entire length. Correct them, if necessary. Otherwise, there is the risk that the extractor (item 8) on the cable carrier side brackets (item 1) will get caught.

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3. Installation instructions: (continued)

3.5 Fastening cable carrier to cable carrier side bracket (continued)

Item	Description	Item	Description
1	Cable carrier side bracket	6	Motor cable
2	Clamping bracket (1x) (2x with type 635 or type 825/HS)	7	Deflector plate on the extractor (1x) (2x with lifts in multi-unit network)
3	Clamping plate (1x) (2x with type 635 or type 825/HS)	7.1	Socket head cap screw DIN 912 /ISO 4762 - M8x16 (2x per deflection plate) + Washer DIN 125 /ISO 7089 - 8 (2x per deflection plate) + Hex nut DIN 934 /ISO 4032 - M8 (2x per deflection plate)
3.1	Thread forming screw DIN 7500 E - M5x10 (4x per clamping bracket) + Washer DIN 125 /ISO 7089 - 5 (4x per clamping bracket) + Spring washer DIN 127-A5 (4x per clamping bracket)	8	Extractor
4	Cable guard (1x) (2x with type 635 or type 825/HS)	9	Side panel
5	Control cable	14	Socket head cap screw ISO 4762 - M8x16 (4x)



Caution:

Note

Figure

- The deflector plate on the extractor (*item 7*) must be installed at the factory.
- Ensure that cables are not twisted when installed.
- For type 635 or 825 and HS version lifts, 2 clamping brackets (*item 2*) and clamping plates (*item 3*) are installed. See Fig. 7
- For lifts in a multi-unit network, the deflector plate on the extractor (*item 7*) is attached on both sides (factory-installed) in order to protect the ribbon cable of the neighbouring lifts from damage.
- Retrofitted installation is possible only if lifts are intended for this purpose (according to the order confirmation, wider by 20mm/0.79").

Step	Task	Note / illustration
1	Drive the extractor to the lowest position (if possible).	
2	Fasten side bracket (<i>item 1</i>) with 2 screws each (<i>item 14</i>) to the two rectangular tubes.	See Fig. 8
3	Place the cable guard (<i>item 4</i>), motor cables (<i>item 6</i>) and control cables (<i>item 5</i>) over the clamping bracket (<i>item 2</i>).	See Fig. 8 and 9
4	Fasten the clamping bracket (<i>item 2</i>) and clamping plate (<i>item 3</i>) to the side bracket (<i>item 1</i>) using screws, spring washers and washers (<i>item 3.1</i>). Ensure that the cables are not under tension or twisted, and that they do not touch the floor or vertical motor.	See Fig. 2, 8 and 9

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3. Installation instructions: (continued)

3.6 Fastening the cable carrier to the base



Caution:

Note

- For type 635 or 825 lifts and HS version lifts, 2 clamping angles are installed.
- For lifts with type width 840, the cable carrier is fastened on the side without the motor. On this side, therefore, a chain protection plate is also installed.

Figure

See Fig. 10

Step	Task	Note / illustration
1	Route the motor and control cable under the clamping angle (item 11). Ensure the cables are under slight tension and are not twisted.	See Fig. 10
2	Fasten the clamping angle (item 11) to the base using 3 screws (item 11.1).	See Fig. 10 See installation instructions "INST-LL-S"
3	Fasten the cable guard for the vertical motor (item 13) to the base using 2 screws (item 15).	See Fig. 10
4	Connect the cables according to the circuit diagram.	See Pages 2 and 10 of the circuit diagram and terminal plan X1.0

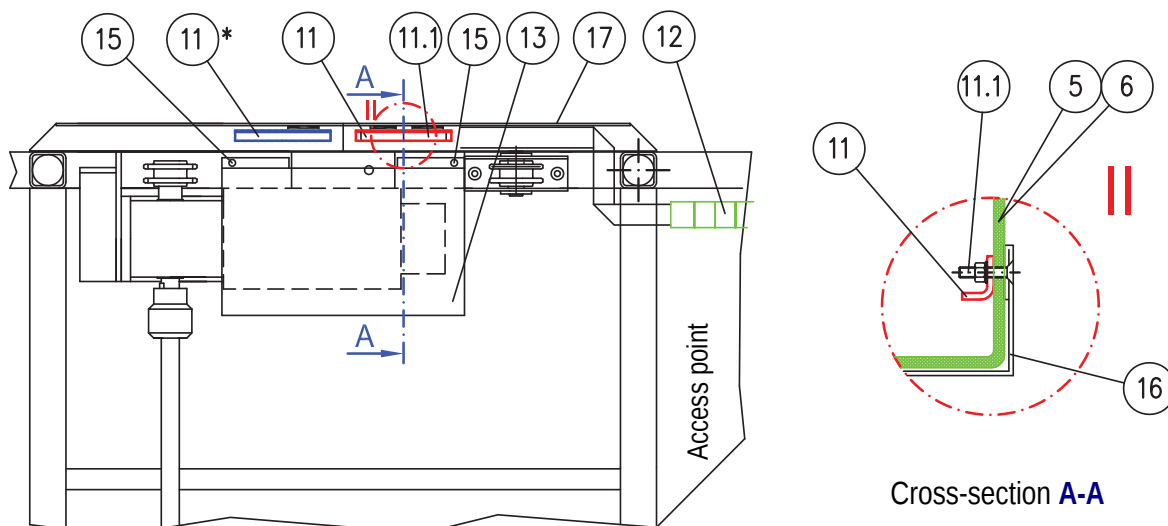


Fig. 10 Fastening cables to the base, Detail C from Fig.1

Item	Description	Item	Description
11	Clamping angle	12	Cable duct (arrangement reversed for left service door)
11*	2nd clamping angle only with type 635 or 825 lifts and HS version	13	Cable protection for vertical motor
11.1	Countersunk screw DIN 965 /ISO 7046 - M5x16 + Spring washer DIN 127-A5 + Hex nut DIN 934 /ISO 4032-M5 (3x of each per clamping angle)	15	Socket head cap screw ISO 4762 - M10x20 (2x)
		16	Base
		17	Service door

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4. Check before start-up

Step	Task	Note / illustration
1	Check for proper cable routing and fastening: • Cables must not be twisted • Cable must be installed between the base and the bracket under slight tension. • Cable between the bracket and the extractor must not be installed under tension in the top and bottom extractor position.	

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5. Removal

1. Before starting the removal, secure the extractor against descending or falling.



DANGER

The extractor is a suspended load that can fall.

Therefore, whenever working inside the lift, you have to lower it to ground level.

If this is not possible, you have to secure them using the locking device. (See operating manual "MANL-LL", work inside the lift by authorised personnel - Securing the extractor).

2. Switch off the main switch (Q2) and secure it from being switched on again using a padlock.



DANGER

Risk of electrocution!

SAFETY INSTRUCTION



The lift must be de-energised before work begins.

- Switch off main switch (Q2).
- Secure the main switch (Q2) from being switched on again.
- Verify that the lift has been de-energised.
- Cover or block off neighbouring live parts. (External voltage source for multi-unit network)

3. Before entering the inside of the lift, lock the actuator of the safety switch on the service door (S3) with a padlock.

SAFETY INSTRUCTION



Secure the actuator latch!

Before all work, secure the actuator latch of the service door from being switched on again using a padlock.

4. To remove the cable carrier, correctly follow the reverse order of steps as that described previously in Chapter 3.
5. After removal, dispose of the structural components in an environmentally responsible manner (see installation instructions "INST-LL-S" or "INST-LW", Disposal instructions).



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6. Annex

Revision notes

- Last issue dated: 2007-08-20
- Added information symbols
2007-11-14
 - New clamping plate
2008-06-10
 - Screws revised, note on multi-unit network added
2012-11-14
 - Figure of type width 840 added
2013-04-26
 - Note on chain protection plate for type width 840 added
2013-05-23
 - Notes on multi-unit network added
2013-07-22
 - Notes on the service door and cable guard position added
2015-03-23
 - Check added, numbering corrected
2015-02-02
 - Note on straightness of the side bracket

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