



Hänel Installation Instructions Positioning sensor

Lean-Lift Multi-Space

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1. General instructions

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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 corresponding Operating Manual "MANL-LL" or "MANL-MS" and in the corresponding Installation Instructions "INST-LL-S" or "INST-LW" or "INST-MS" for the Lean-Lift or Multi-Space must be followed at all times.

In addition, the "Safety Rules & Requirements" provided in the Memorandum for Technical Field Service "SICHA" and the "Safety Rules" from the Training auxiliary personnel for technical outside sales "SICHHK" must be observed!



Intended use

Positioning sensors for vertical position detection in the Lean-Lift or Multi-Space.

Any other use shall be considered non-compliant use.



2. Installation Requirements

1. Before starting the installation, secure the extractor, or cross-member with extractor, against descending or falling.



! DANGER

The extractor or cross-member with 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 or operating manual "MANL-MS", Work inside the lift by authorised personnel - Securing the cross-member with extractor).

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



! DANGER

Risk of electrocution!

SAFETY INSTRUCTIONS



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. (Switch off external voltage source for multi-unit network and lock it using tool WZ-67)

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



SAFETY INSTRUCTIONS

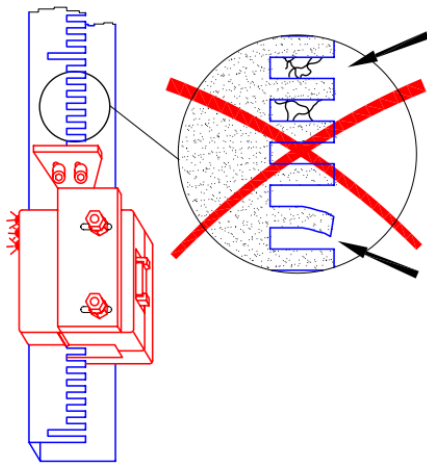
Secure the actuator latch!

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

2. Installation Requirements (continued)

Important notes:

Note	Figure
• Never reach into the opening of the positioning sensor with metallic objects in order to carry out a function test. • Ensure that the entire length of the positioning rail is undamaged and not bent at any point and that the notches are free of dirt particles. • At the joints of the positioning rails, ensure that these are installed with an air gap of no more than 0.3 mm (0.01"). • Never shorten the positioning rails at the joints, only the top positioning rail at the free end.	See Fig. 1



Caution:

Lint or other dirt particles larger than 0.3 mm (0.01"), as well as deformations in the slots greater than ± 0.3 mm (0.01") cause faults in the positioning system.

Fig. 1: Damaged positioning rail

3. Installation instructions:

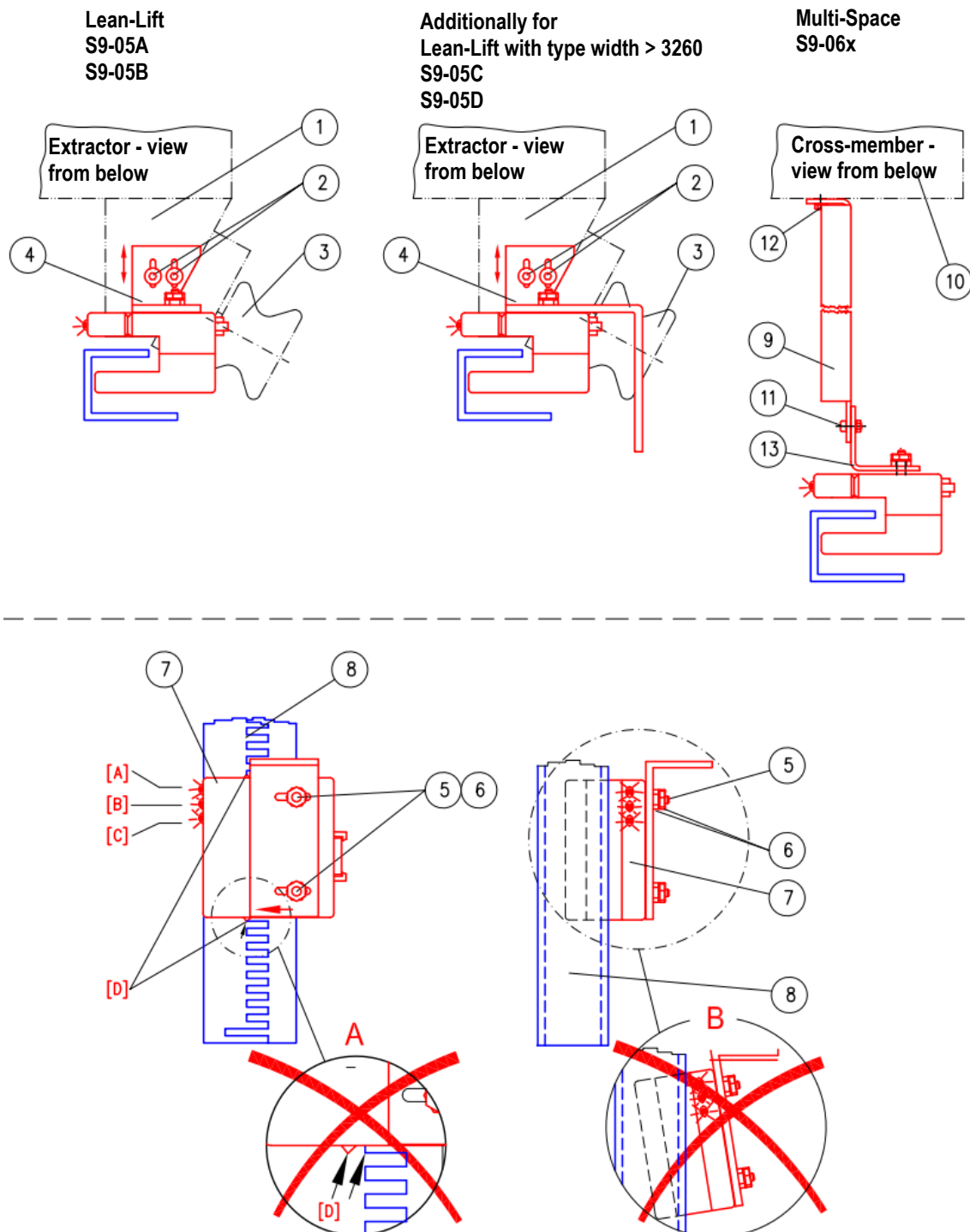


Fig. 2: Overview of positioning sensors and positioning rail

[A]	Upper light barrier
[B]	Carrier detection
[C]	Lower light barrier
[D]	Alignment marks

Hänel Installation Instructions

Positioning sensor

Lean-Lift

Multi-Space

3. Installation instructions: (continued)

Item	Description
1	Extractor (view from below)
2	Socket head cap screw DIN 912/ISO 4762 - M5x16 (2x for each sensor)
3	Guide roller of the extractor
4	Lean-Lift positioning sensor mounting bracket
5	Hex cap screw ISO 4017 - M4x45 galvanised (2x for each sensor)
6	Prevailing torque type hexagon nuts ISO 7040-4 galvanised Washer ISO 7089-4 galvanised (2x for each sensor)
7	Positioning sensor
8	Positioning rail

Item	Description
9	Mounting bracket 1, Multi-Space
10	Cross-member, Multi-Space (view from below)
11	Button head screw with hexagon socket ISO 7380-1 M4x12 galvanised Washer ISO 7089-4 galvanised Hex nut ISO 4032-M4 galvanised (2x per bracket)
12	Socket head cap screw ISO 4762-M5x25 Prevailing torque type hexagon nut ISO 10511-M5 galvanised (2x per bracket)
13	Mounting bracket 2, Multi-Space

Lean-Lift

Step	Task	Notes / illustration
1	Unscrew the screws (<i>item 2</i>) slightly.	See Fig. 2
2	Move the mounting bracket (<i>item 4</i>) so that the distance between the positioning rail (<i>item 8</i>) and the interior sides of the positioning sensor (<i>item 7</i>) is equal.	See Fig. 2, view from below
3	Securely tighten the screws (<i>item 2</i>).	

Multi-Space

Step	Task	Notes / illustration
1	Screw mounting bracket 2 (<i>item 13</i>) with preinstalled positioning sensor (<i>item 7</i>) and mounting bracket 1 (<i>item 9</i>) together using 2 screws, washers and nuts (<i>item 11</i>).	See Fig. 2
2	Fasten mounting bracket 2 (<i>item 13</i>) to the cross-member (<i>item 10</i>) using 2 screws and nuts (<i>item 12</i>) so that the distance between the positioning rail (<i>item 8</i>) and the inner sides of the positioning sensor (<i>item 7</i>) is equal.	See Fig. 2, view from below
3	Tighten the screws (<i>item 11</i>) and (<i>item 12</i>) securely.	

3. Installation instructions: (continued)

Lean-Lift and Multi-Space

Step	Task	Notes / illustration
4	Unscrew the nuts (<i>item 6</i>) and move the positioning sensor (<i>item 7</i>) so that the upper and lower alignment marks [D] of the positioning sensor are on the interior of the positioning rail notch.	See Fig. 2, Detail A
5	Tighten the nuts (<i>item 6</i>) securely and uniformly.	 Caution: Tighten the screws only securely enough so that the interior boards are not warped. Use a nut with clamping part (<i>item 6</i>) so that the positioning sensor cannot become misaligned due to vibration.
6	Check the position of the positioning sensor (<i>item 7</i>) and readjust if necessary. The positioning sensor must be installed parallel to the positioning rail (<i>item 8</i>) in all directions.	See Fig. 2, Detail B Note: The positioning sensor (<i>item 7</i>) must not touch the positioning rail (<i>item 8</i>).
7	Check all screws for secure fit.	The hex cap screws (<i>item 5</i>) are locked in the thread using microencapsulated threadlocker.
8	Carry out a test run over the entire lift height. If the control system shows "Synchronization run", acknowledge the error message using the Stop key. Check and readjust the setting of the positioning sensor.	Press CE: The control system shows the carrier that has initiated the synchronisation run.

Multi-Space

Step	Task	Notes / illustration
1	For the function, adjustment and zero calibration of the vertical positioning, refer also to the Setting Instructions "MS-POSSYS"	 Note Refer to Setting Instructions "MS-POSSYS"

3. Installation instructions: (continued)

Overview of installation positions for positioning sensors:

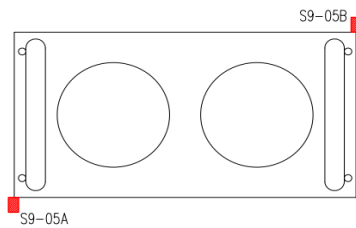


Fig. 3: Lean-Lift, Type width ≤ 3260

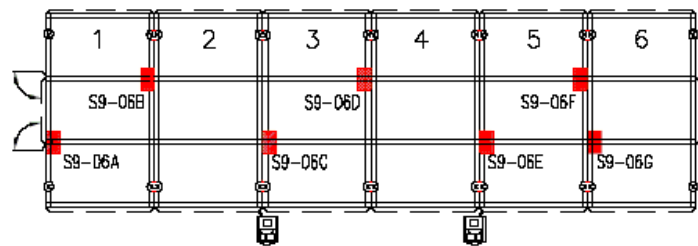


Fig. 4: Multi-Space with 6 lift units

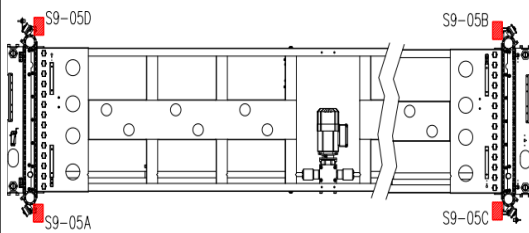


Fig. 5: Lean-Lift, Type width > 3260

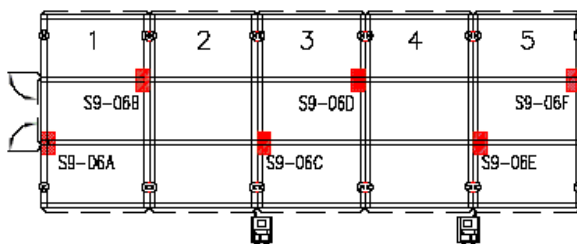


Fig. 6: Multi-Space with 5 lift units

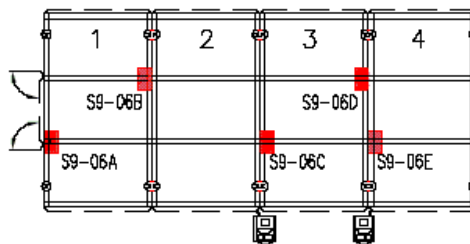


Fig. 7: Multi-Space with 4 lift units

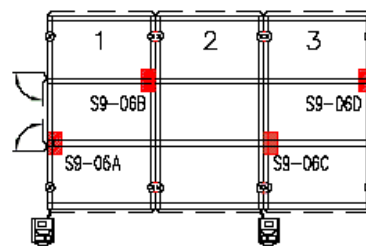


Fig. 8: Multi-Space with 3 lift units

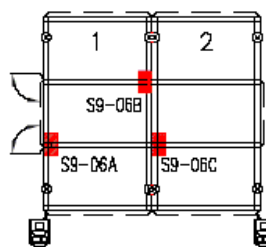


Fig. 9: Multi-Space with 2 lift units

4. Removal

1. Before starting the removal, secure the extractor, or cross-member with extractor, against descending or falling.



! DANGER

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Risk of electrocution!

SAFETY INSTRUCTIONS



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



SAFETY INSTRUCTIONS

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 positioning sensors, correctly follow the reverse order of steps as 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" or "INST-MS", Disposal instructions).



5. Annex

Revision notes

- | | |
|--|------------|
| Last issue dated: | 2006-11-05 |
| • Added intended use and disposal, note on threadlocker | 2007-08-20 |
| • New Multi-Space mounting bracket, added information symbol | 2007-11-27 |
| • Fastening screws with washers, changed screws | 2008-05-07 |
| • Fastening screws note | 2009-06-17 |
| • Note regarding "MS-POSSYS" added | 2011-01-19 |
| • Locknut replaced by prevailing torque type hexagon nut | 2011-04-19 |
| • Type width > 3260 added | 2015-07-15 |
| • Screws updated | 2023-03-20 |
| • Screws updated | |

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