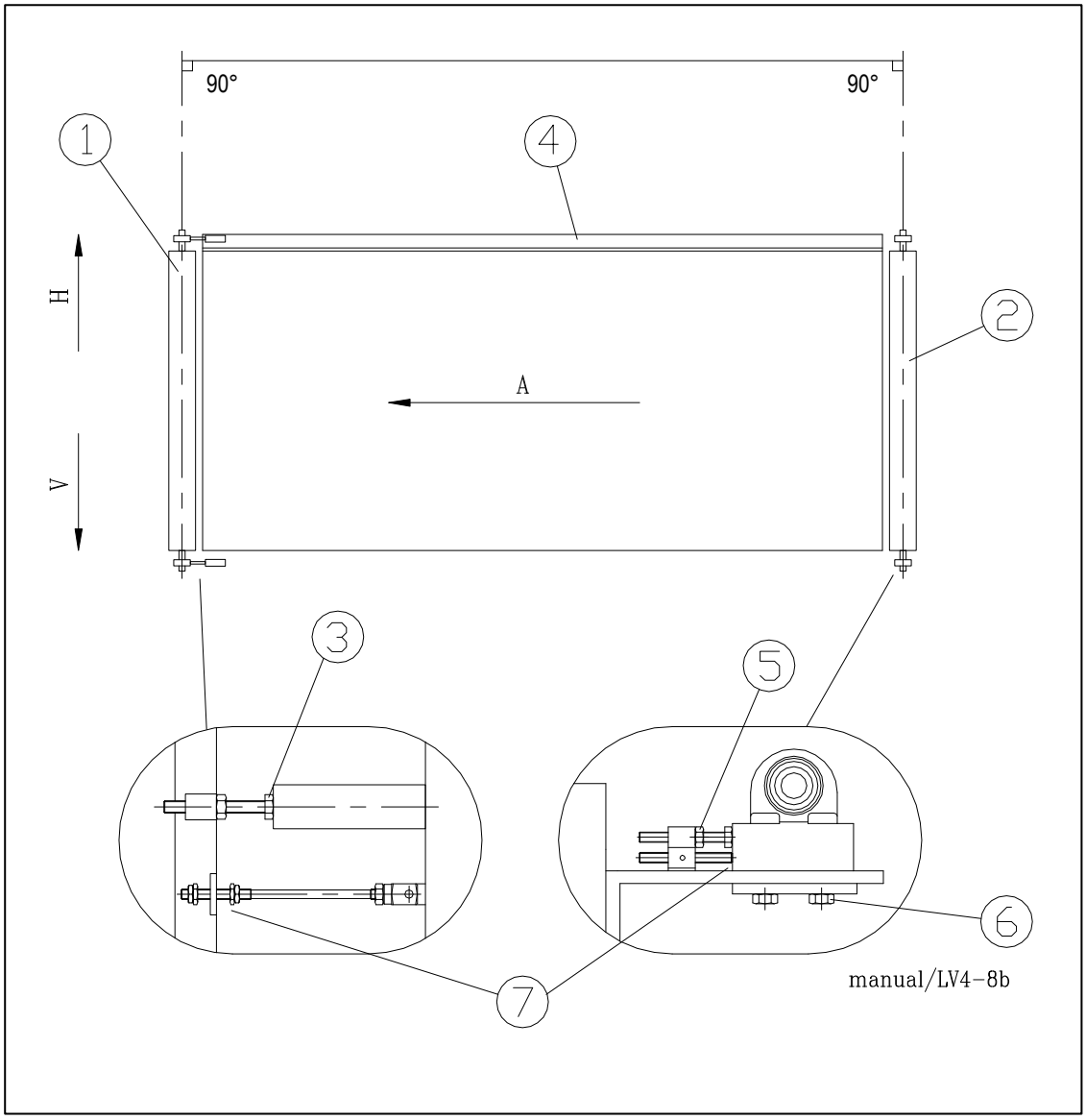
Replacing mylar belt



A = Direction of rotation
H = Right
V = Left

1 = Drive roller (roller 1)
2 = Follow roller (roller 2)
3 = Adjustment bolt for drive roller
4 = Fixed retainer
5 = Adjustment bolt for follow roller
6 = Screws for bearings fittings for follow roller
7 = Point zero for adjustment. **Not to be altered!!**

Procedure for replacement:

1. Loosen the adjustment bolt (3) as much as possible and tilt the drive roller (1) towards the press.

2. Remove the defect belt.

3. Before mounting the new belt, also loosen the follow roller (2) as much as possible.
   This is done on the adjusting bolts (5) and the screws for the bearing fittings (6).

4. Move both rollers towards the press, so that the fittings touch the points zero (7).
   The points zero are set by Kallesoe Machinery A/S and guarantee that the two rollers run as they should, i.e. at right angle to the fixed retainer (4) and parallel to each other.
   Do NOT alter this setting!!

5. Also the two guide rollers under the press are set by Kallesoe Machinery, and their position is NOT to be altered.

6. Slip the new belt into place and check bonding by running it through the press and by checking the edge against the fixed retainer (4).
   See gluing of mylar belts on next pages.

   BE AWARE: Remember metal plate in splice.

7. Tighten belt by means of the adjustment bolts (3).

8. Start the conveyor and check that the belt runs correctly on the rollers.
   About correct adjustment of mylar belt, see below.
   Remember to tighten lock nuts of bolts (3) and (5) and tighten bolts (6).

Preparations for splicing of mylar belt.

Splicing of the mylar belt is done from the inlet side of the press:

1. Place the belt in the press so that it is aligned with the bottom plane.

2. Keep belt in place by placing blocks over it and lower the top plane. (See drawing below). If the press is hot, place a strip of cardboard under the belt to insulate the tape from heat.

3. Tighten the unfastened end of the belt and place it on top of the other one, so that the ends are aligned. Then place wedges down between the roller on the feeding table and the roller on the press. (See drawing).

4. The end of the belt that is placed on top can be flipped unto the feeding table during the preparations in order to make the taped side face upwards.

5. Mark a spacing of 200mm on both sides of the belt with a marker pen. Later, use these marks for assembling the belt.

Splicing of mylar belt with tape.

1 set for the splicing of mylar belt consists of following parts:

- Cleaning tissues, 12 pcs.
- Grinding cloth, 150 x 230mm
- Primer, 188ml, + 4 pcs. brushes
- SCOTCH^{TM} VHB^{TM} 9469 tape, width 100mm
- Hand roller (plastic)

The belt is taped together according to following guidelines:

1. Clean the two surfaces that are to be joined together later (at least 200mm width). Use a cleaning tissue.

2. Grind the two surfaces using a grinding cloth – and clean the two surfaces once again.

3. Apply primer on both surfaces. Let the primer rest for 2 minutes.

4. **Remember to place a piece of sheet metal in joint. (See drawing below)**.

5. Place the VHB-tape (2 x 100mm strips) on the prepared surface (the one in the press). Leave the protective paper on.
   Press the tape firmly with a roller (plastic/rubber).

6. Remove cardboard under the belt and remove protective paper from tape.

7. Place ends of the belt on top of each other (easier if two people do this). Use the 200mm markings on the belt.
   Press the joint tightly together with a roller (plastic/rubber).

8. Remove wooden blocks and wedges which were holding belt during splicing.

9. (optional)
   At this point, the joint can be sealed/taped with a single adhesive tape . This is carried out following the same guidelines that apply for the VHB-tape:
   Clean the surface, grind the surface, clean again and wipe. Apply primer.

10. (optional)
    Place the single adhesive tape (1 x 50mm strip) over the joint.
    Press the tape firmly with a roller (plastic/rubber).

11. **Hardening times**:
    At room temperature, approx. 50% of final binding strength is reached after 20 min., 90% after 24 hours, and 100% after 72 hours.
    Heating to 60^0 C will give full binding strength after one hour. Therefore it is recommended that the joint remains in the press between hot planes for up to an hour.

12. Check belt and adjust it so that it runs evenly in the press.
    After this the belt is ready for use.

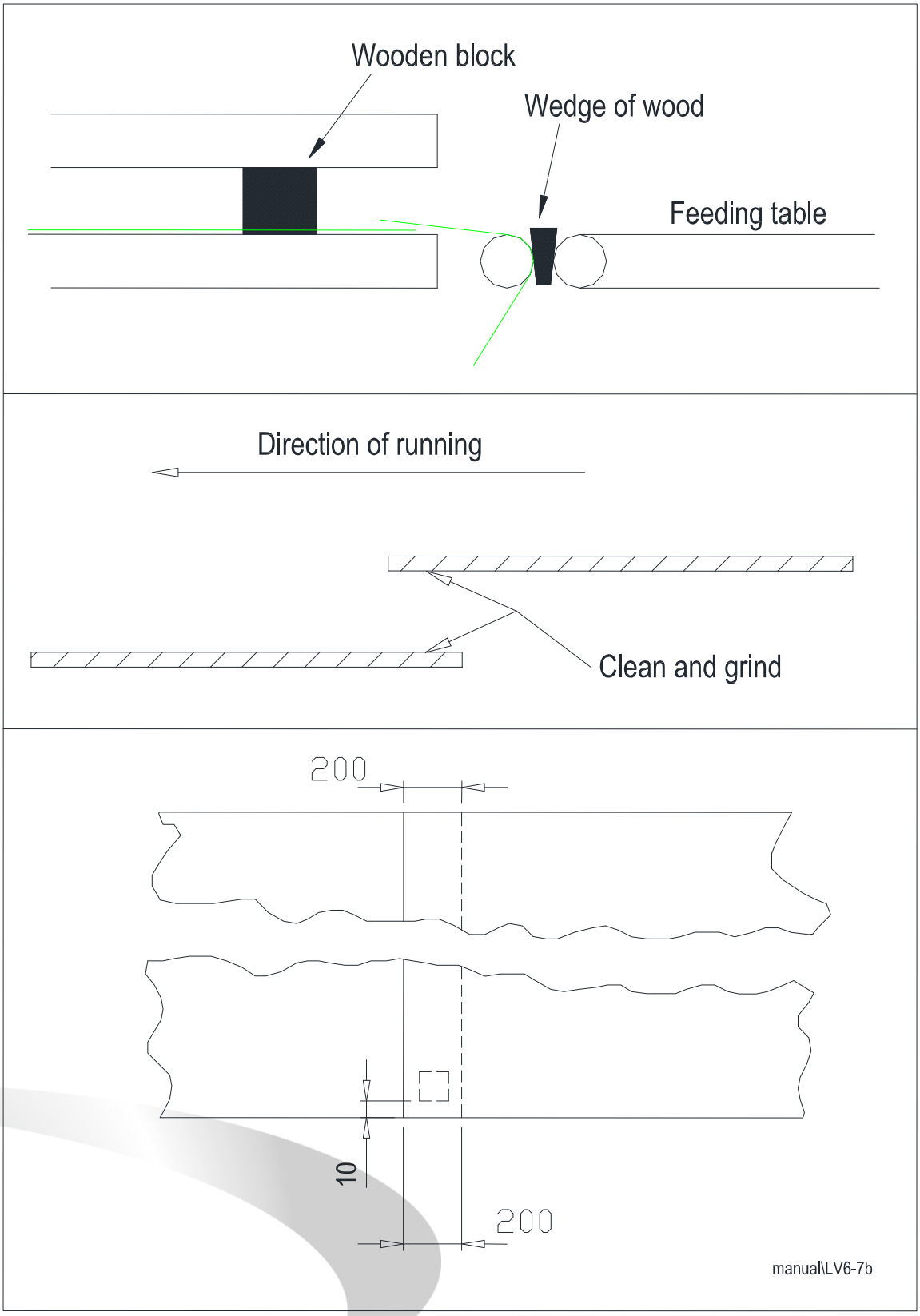
Splicing of mylar belt with adhesive and hardener.

Using contact adhesive “DANA 281” with hardener “DANA 924” for gluing mylar belt

1. Use sand paper/belt sander to rough up approx. 200mm from both ends of the belt (see drawing below).
2. Place belt in the press so that it is aligned with the bottom plate of the press.
3. Keep the belt in place by placing blocks over it and lower the top pressure plate (see drawing below).
4. Tighten unfastened end of the belt and place it on top of the other one, so that the ends are aligned. Then place wedges down between the roller on the feeding table and the roller on the press (see drawing below).
5. Tip one belt end backwards, so that both belt ends are free.
6. Mix glue and hardener. One bottle of hardener to one box of glue.

   Notice: Glue and hardener can only be used for approx. 2 hours after mixing.
7. Apply a thin coat of glue on the ground off surface.
8. Now the glue must dry for 15-25 min.
9. Put the two ends loosely on top of each other. Check again that the contact surfaces are placed correctly.
10. **Remember to place a piece of sheet metal in joint.** (See drawing below).
11. Press the joint tightly together with a hard object (not sharp-edged), e.g. a piece of wood.
12. Check belt and adjust it so that it runs evenly in the press.
    Belt is now ready for use.

Fixating the mylar belt during the operation.



Tools for splicing of the mylar belt with tape.

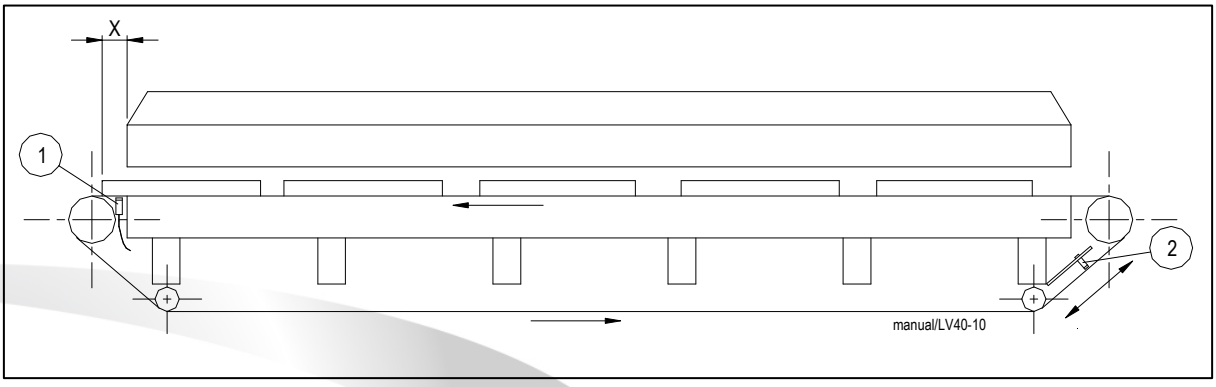
Cleaning tissues, grinding cloth, primer, brushes, tape and roller.

Adjusting of sensors for mylar belt.

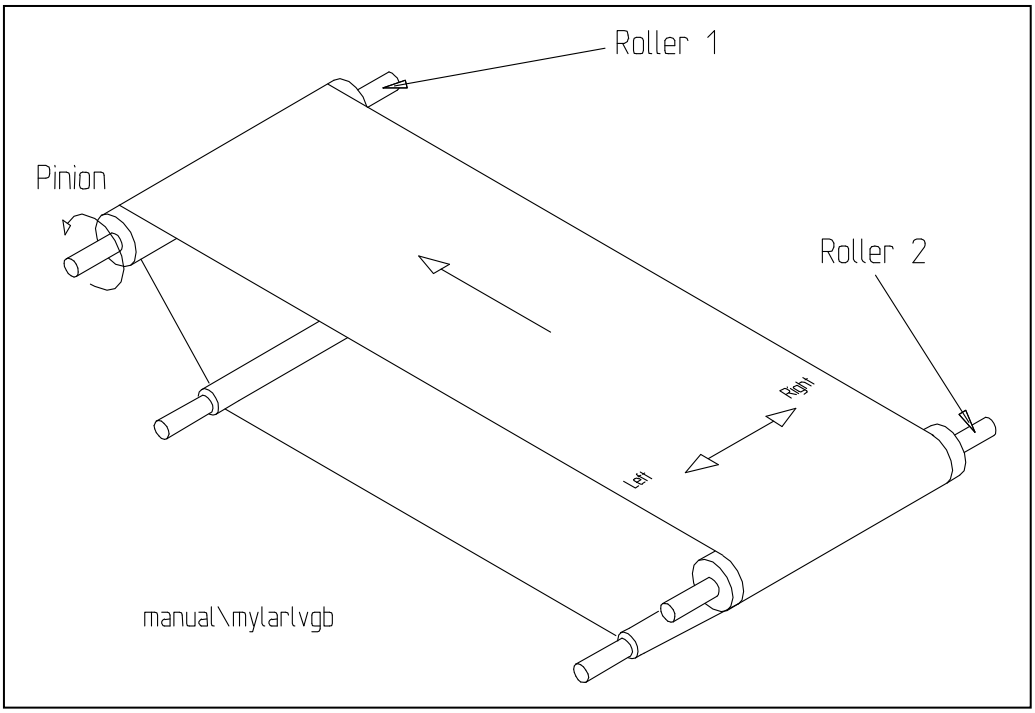
If problems arise after replacing belt in the press concerning the placement of the lamellas/ the work pieces lengthwise, the sensors for the mylar belt must be adjusted:

1. If the work pieces move too far forward (x) each time the metal plate in the belt runs to the **sensor pos. 1**: move this sensor **down** by half the distance the work pieces run too far.

2. If the work pieces move too far forward (x) each time the metal plate in the belt runs to the **sensor pos 2**: move this sensor **up** by half the distance the work pieces run too far.



Setting and adjusting of mylar belt.



The press is equipped with an automatic belt guard, placed on the guide roller under the follow roller (roller 2).

If the belt, despite the automatic belt controller, moves towards one side, it has to be adjusted:

On **roller 1** (the drive roller) this adjustment is done by tightening the adjusting screw ¼ turn at the **same side** towards which the belt moves.
That is: if the belt is constantly moving to the right it has to be tightened at the right side of roller 1.

The belt on **roller 2** on the other hand is adjusted by tightening belt at the **opposite side**.
That is: if the belt is moving towards the right side the adjusting screw has to be tightened at the left side of roller 2.