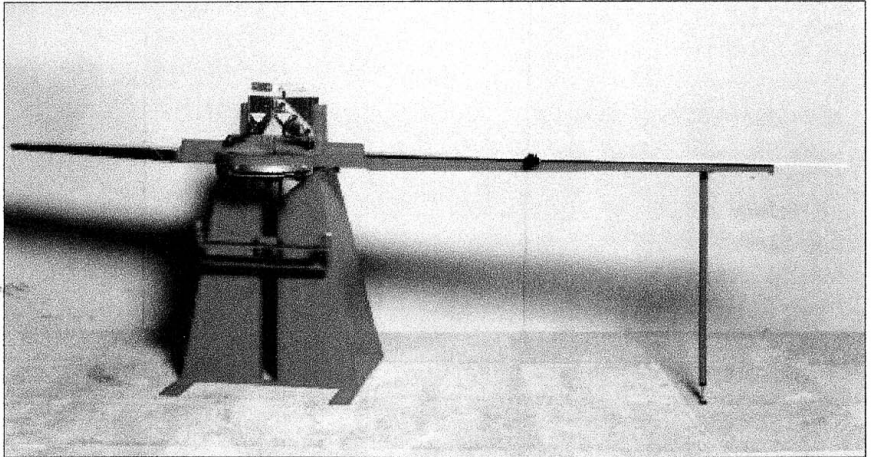


# HANSEN - DENMARK

---

## INSTRUCTION MANUAL

---



---

## SAFETY REGULATIONS

---

---

Your 1st choice in mitre machines

# CONGRATULATIONS ON THE PURCHASE OF YOUR NEW H.P.HANSEN MITRE CUTTER

BEFORE STARTING WORK WITH YOUR NEW MITRE CUTTER, PLEASE READ THIS MANUAL CAREFULLY.

PLEASE PAY PARTICULAR ATTENTION TO THE SECTION ABOUT SAFETY.

ALWAYS ENSURE THAT EVERYONE WHO IS TO WORK WITH THIS MACHINE RECEIVES THOROUGH INSTRUCTIONS ABOUT HOW TO USE THE MACHINE AND, ESPECIALLY, IS FAMILIARIZED WITH THE SAFETY REGULATIONS.

THE DOCUMENTATION FOR THIS MACHINE CONSISTS OF :

- ⇒ THIS MANUAL
- ⇒ DRAWINGS OF AVAILABLE SPARE PARTS
- ⇒ A LIST OF SPARE PARTS AVAILABLE
- ⇒ A SEPARATE LIST OF SAFETY REGULATIONS. THIS LIST MUST ALWAYS BE PLACED NEXT TO THE MACHINE IN CLEARLY VISIBLE LOCATION.

## TABLE OF CONTENTS

Safety	3
Assembly of the mitre cutter	4
Front view of the assembled machine	5
Correct use	6-9
Helpful hints and troubleshooting	10
Knives: sharpening and maintenance	10-11
Maintenance of the machine	11
Quality Certificate	12

# SAFETY REGULATIONS

---

- ⇒ NEVER let children or untrained people operate the machine. Before starting to work with the machine, the person responsible must ensure that all those who are to operate the machine have read all safety regulations carefully and thoroughly.
- ⇒ NEVER touch the knives unless they are to be replaced. Follow instructions on page 11 when removing or fitting knives.
- ⇒ As the operation of the machine entails the upper set of knives passing over and past the lower set of knives in a combined cutting/clipping action, NEVER insert any part of the body between the knives.
- ⇒ The two return springs must be checked at regular intervals for cracks and/or impending breaks. For safety reasons, the machine must always be fitted with two intact return springs.
- ⇒ When the machine is left unattended, the knife head must be moved to its innermost and lowest position. To do this, move the spring arm (page 5, part number 11) to its extreme right-hand position and press the foot pedal all the way down and lock it with the topstop (page 5, part number 12).
- ⇒ The safety shield (page 5, part number 7) MUST ALWAYS be in place and lowered to the lowest position possible, so that the element to be cut can only just pass under the shield. When the machine is left unattended, the safety shield must be moved to its lowest position.
- ⇒ The machine must always be used with the greatest possible care and attention.
- ⇒ When the machine is being used for cutting, the machine operator is the ONLY person to be allowed in the immediate vicinity of the machine.

# **ASSEMBLY**

---

To avoid damage in transit, the following parts have been dismantled:

- ⇒ The long extension table (page 5, part number 2)
- ⇒ The ruler (page 5, part number 4)
- ⇒ Two plates of the safety shield (page 5, part number 6)
- ⇒ The safety shield holder (page 5, part number 7)
- ⇒ Some models : The short extension table (page 5, part number 3)
- ⇒ Some models : The table support (page 5, part number 9)

To identify the parts, please refer to the photograph of the machine on page 5 and to the enclosed spare part drawings.

Unpack all the parts, clean the anti-rust substances (if any) from them, and place them on a clean surface. NB! Remove the sliding stop from the extension table and place it together with the other loose parts.

Remove the transport safety bolt from between the top stop and the foot pedal.

## **ASSEMBLY INSTRUCTIONS**

---

Move the knife head to its lowest, innermost position.

Clean any anti-rust substances and/or dust from the machine.

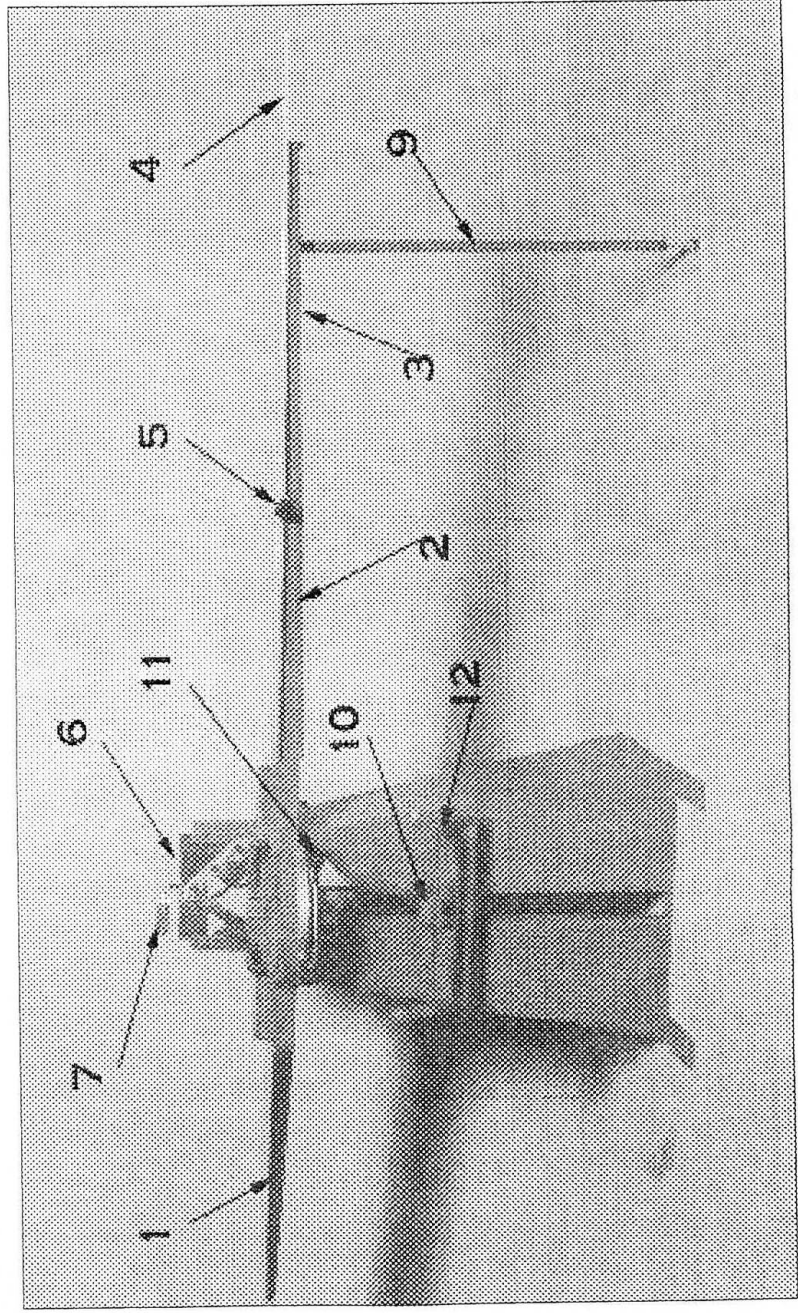
Mount the shield plates on the shield holder using 4 screws, and fit the assembled unit to the machine (see photograph of the assembled machine on page 5).

Fit the long extension table to the right-hand side of the machine. To fit the table, you will need 2 nuts/bolts and 2 pins. Before fully tightening the nuts/bolts, ensure that the pins are in place in their respective sockets.

On some models the short table with support is fitted in the same way.

Attach the ruler using 2 countersunk screws.(3 screws are used for some models)

Run the sliding stop over the ruler. The pointed side must point in towards the knives.



The assembled cutter. The left-hand extension table and the right-hand extension table with support are optional extras.

## **CORRECT USE**

---

The machine is now ready for use. To simplify the start-up, follow these steps:

- ⇒ Move the knife head to its lowest position.
- ⇒ Move the knife head to its most extended position. Please note that the spring arm must be moved to its extreme left position.
- ⇒ Adjust the height of the safety shield so that the gap between the bottom of the safety shield and the top of the machine's work surface is just wide enough to permit the element to pass freely. Please note that the safety shield can be lowered no further than to the rabbit supports.

After doing this, follow these guidelines:

To cut moulding pieces to correct length:

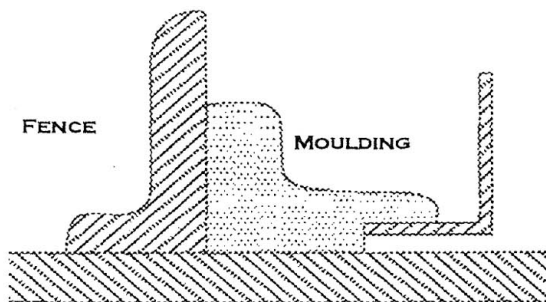
Firstly, clean cut the end of the moulding (step 1 - 11).

When the moulding has been cut cleanly, continue on page 8 if your machine is fitted with a measuring system on the work surface itself. If your machine is fitted with a measuring system mounted on the sliding stop / ruler, continue on page 9.

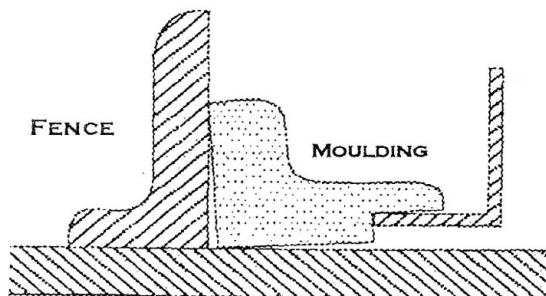
- 1 Push the rabbit supports back as far as possible. Using the adjusting screws on the top of the rabbit supports, lower the L-pieces until they almost touch the top of the work surface.
- 2 Hold the foot pedal down with your foot and position the top stop approximately 55 cm above floor level and tighten it. Carefully lift your foot until the upward movement of knife head ceases.
- 3 Insert the moulding to be cut from the left-hand side of the machine so that the rabbit -if any- faces the L-pieces. Keep the rear edge of the moulding tight to the fences. Insert the moulding until the end is approximately half way along the right-hand fence. If you are working with particularly long mouldings, a left hand extension table (see page 5, part number 1) can be a great help. (These extension tables are available from your local dealer)
- 4 Run the sliding stop along until it meets the end of the profile, and tighten it there.
- 5 Use the spring arm to move the knife head forward until the lower knives are just under the profile.

- 6 With the greatest care, move the rabbet supports in to the rabbet until the L-pieces just touch the moulding.
- 7 Using the adjusting screws, lift the L-pieces.

Correctly positioned L-piece. Note that the moulding is still in contact with the table surface.



Incorrectly positioned L-piece. The moulding has been lifted from the table surface. The cutting will NOT be correct.



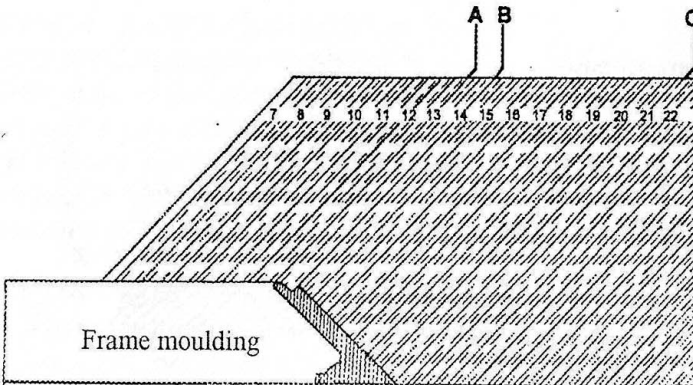
- 8 Using the spring arm, move the knife head forward slightly. The distance the knife head is moved forward determines how large a "bite" is to be cut. The size of the "bite" to be cut depends on the size, shape and hardness of the moulding.
- 9 Press the foot pedal down gently but firmly and a "bite" of the moulding will be cut. Continue until the moulding is completely cut.
- 10 The last "bite" should always be a plane cut corresponding to the final notch of the tooth arc.
- 11 Return the knife head to its start position

## CUTTING CORRECT LENGTH USING THE MEASURING SYSTEM ON THE WORK SURFACE.

---

- ⇒ Insert the required length of the moulding.
- ⇒ Run the sliding stop along until it meets the moulding, and tighten it there.
- ⇒ Cut the moulding as described above.

A= Inner Measurement    B= Rabbet Measurement  
C= Outer Measurement



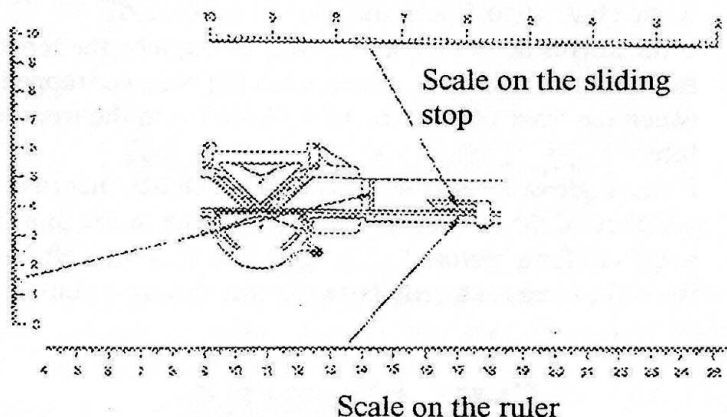


## CUTTING CORRECT LENGTHS USING THE MEASURING SYSTEM ON THE RULER

---

- ⇒ Using the rabbet width measuring scale, determine the rabbet width, e.g. 2 cm.
- ⇒ Now position the number 2 on the sliding stop opposite the number on the ruler indicating the required rabbet opening of the finished frame, e.g. 20 cm.
- ⇒ Tighten the sliding stop.
- ⇒ Insert the moulding until it meets the sliding stop.
- ⇒ Cut the moulding as described above.

Rabbet width scale



## HELPFUL HINTS

- \* The top stop should be positioned so that the moulding can pass under the knives without touching them.
- \* With wear, the knives become blunt. Inconsistencies in cutting angle can be rectified by adjusting the left-hand fence.
- \* Remember that the final cut should always be a plane cut to ensure a perfect cut surface and to make the subsequent join perfect.

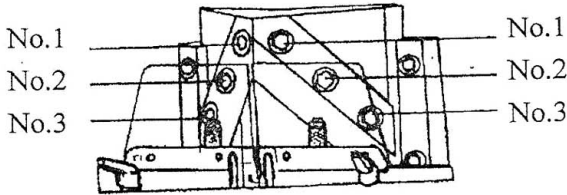
## TROUBLESHOOTING

- \* If the machine does not cut all the way through, this could be due to the fact that the upper knives have been sharpened so much that they do not pass the lower knives. This problem can be solved by adjusting the tie rod under the waste chute (two 12mm nuts must be adjusted).
- \* If the knives do not cut all the way through by the fences, this could be due to wood chips having become trapped between the front edge of the lower knives and the work surface.
- \* If the angle of a cut is incorrect, this is due to incorrect adjustment of the fences. If, for example, the inside of a right angle cut for a picture frame “gapes”, adjust the left-hand fence, moving it slightly outwards (i.e. towards yourself).

## THE KNIVES

- \* The knives may ONLY be sharpened / ground from the angled side.
- \* From the factory, the blades are sharpened using 30° hollow grinding. This should be maintained.

## REPLACING THE KNIVES



Please take extra care when changing the knives, as they are very sharp.

It is best to insert new knives by replacing one knife at a time so that the new knife can be adjusted in relation to the old knife on the opposite side.

The safest way to dismantle the knives is :

Remove screws No. 1 and 3 completely. Loosen screw No. 2 approximately half a turn, and turn the knife to a vertical position using a finger in screw-hole No. 1. While using two fingers to hold the top of the knife (where it is not sharp), remove screw No. 2 completely. To replace the knife, reverse the above procedure.

## MAINTENANCE

The machine has been thoroughly lubricated and checked at the factory. However, to ensure that the machine will provide many years of trouble-free operation it is necessary to oil all moving parts regularly with light machine oil. For example, use Shell oil type Tellus 36, or acide-free sewing-machine oil. Depending on how often the machine is used and on moisture content of the air in the room in which it stands, it can be necessary to oil the machine as often as once a week.

To clean the machine, use a clean, dry brush. NEVER use water or solvents.

# QUALITY CERTIFICATE

The following have been tested on Your mitre cutter:

	APPROVED
⇒ The fences are adjusted to 45 degree angles	<input checked="" type="checkbox"/>
⇒ The fences and rouler alined	<input checked="" type="checkbox"/>
⇒ The knives are sharp and without jags	<input checked="" type="checkbox"/>
⇒ All moveable parts of the machine are lubricated	<input checked="" type="checkbox"/>
⇒ All moveable parts of the machine are workable	<input checked="" type="checkbox"/>
⇒ Test cutting result	<input checked="" type="checkbox"/>

Model number: ' \_\_\_\_\_

Machine number: \_\_\_\_\_

Date of test: \_\_\_\_\_

Inspected by: \_\_\_\_\_

[www.hphansen.com](http://www.hphansen.com)