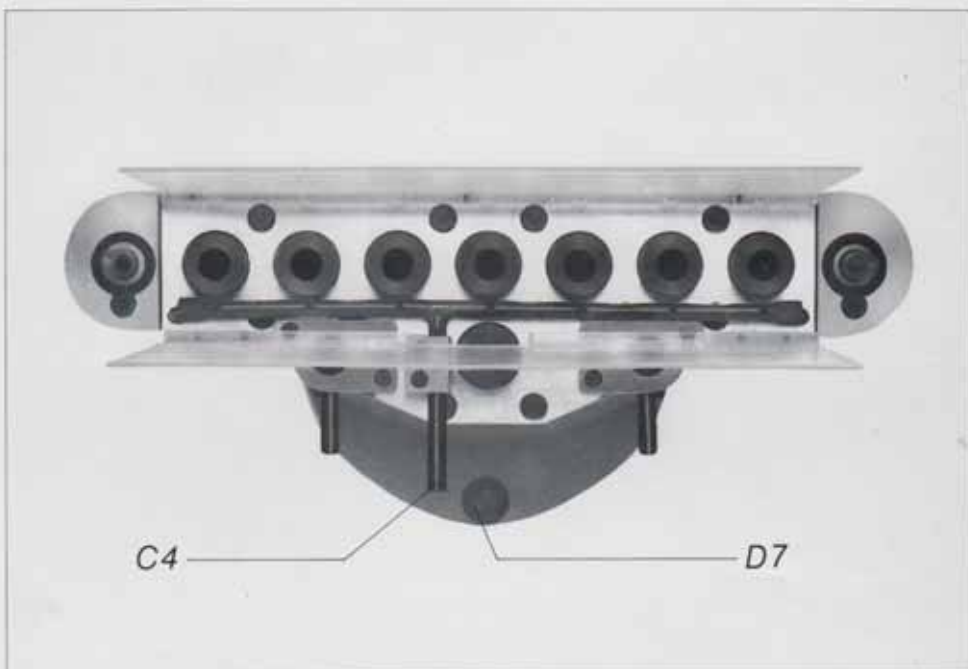
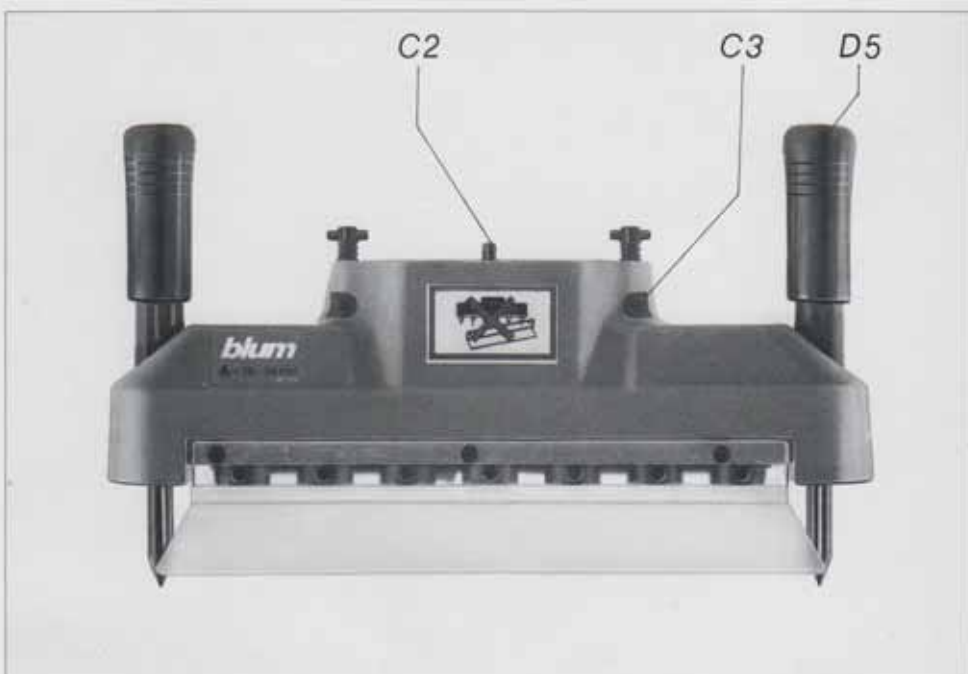
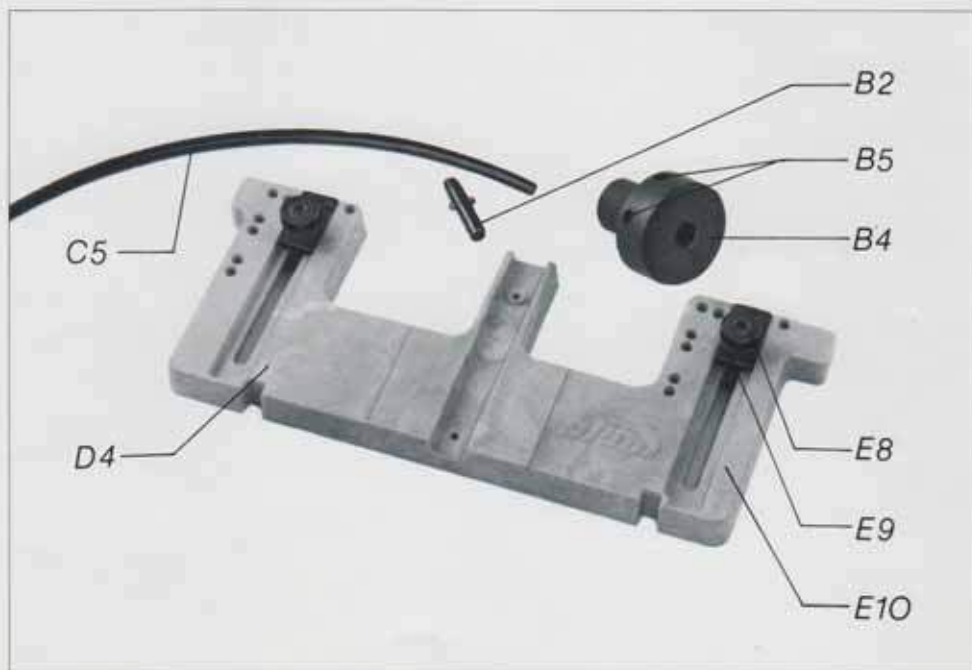
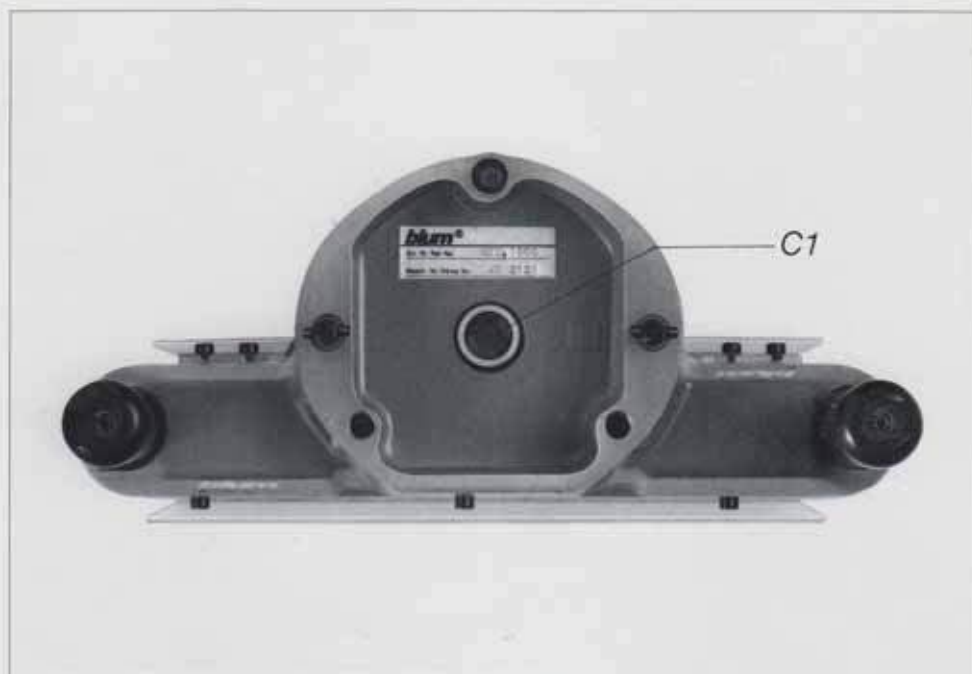


Blum MINIPRESS "MZK 1000"



 **blum**





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Subject to change without notice!














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DESCRIPTION OF PARTS

- A4** ... Gearbox Retainer with Hinged Guard
- A5** ... Hold Down Clamp Shafts
- A6** ... Mounting Plate for Hold Down Clamp Shafts
- A8** ... Support Brackets for Worktable

- B2** ... Clutch Pin for Standard Drill Chuck
- B3** ... Clutch Pin for Quick Disconnect or Chuck
- B4** ... Depth Spacer
- B5** ... Hex Cap Socket Screws

- C1** ... Drive Shaft
- C2** ... Fastening Pins
- C3** ... Hex Set Screws of Fastening Pins
- C4** ... Air Jet
- C5** ... Air Hose

- D4** ... Set-up Gauge
- D5** ... Adjusting Pins for Drill Head
- D7** ... Adjusting Cam

- E8** ... Thumb Screws
- E9** ... Adjustable Gauge Plates
- E10** ... Gauge Ruler

READ BEFORE YOU START OPERATING!

SAFETY RULES:

This machine is designed for commercial and industrial applications only, and should be used by professionals, fully trained in its operation. It is not intended for use by consumers.

Before connecting your machine to a Power Source, be sure to read ALL Safety Rules and the Instruction Manual!

- 1. Keep Work Area Clean. Cluttered areas and work stations increase the chance of accidents.*
- 2. Protect yourself from electric shock. Do not use power tools in damp or wet locations, or expose them to rain.*
- 3. The machine must be connected by a qualified electrician. An electrical diagram is included in the instructions.*
- 4. Consider environmental factors and local laws when setting-up and operating the machine.*
- 5. Keep unauthorized people away from the machine. Only one person at a time must operate the machine.*
- 6. Remove the key after finishing work (key can only be removed in the 0-position). This will assure that unauthorized people cannot start the machine.*
- 7. Do not operate devices and tools beyond their capacity. They work more effectively and safer at reasonable power ranges and speeds.*
- 8. Keep hands out of path of drill bits.*
- 9. Never attempt to operate machine without the guards in place.*
- 10. Wear proper eye and face protection when operating the machine.*
- 11. Observe the location of the control switches and become familiar with their operation.*
- 12. Wear proper clothing. Do not wear shirts with bulky sleeves that could be caught in moving parts.*

13. Do not wear jewelry when operating the unit. Individuals with long hair should wear a hairnet or protect the hair from moving parts.

14. Do not use electrical cables and pneumatic lines for purposes other than those originally intended.

15. Protect electrical cables and pneumatic lines from heat, oil, traffic, sharp edges, etc.

16. Maintain tools with care. Keep tools sharp, clean, and organized for best and safest performance. Follow instructions for lubricating and changing accessories.

17. Do not overreach. Keep proper footing and balance at all times.

18. Before every use of the machine, make sure that all safety devices and parts of the machine function properly.

19. All accessories and attachments must be installed as described in the manual to assure a proper and safe operation of the machine.

20. Any defective safety devices and accessories have to be repaired or exchanged by a qualified service technician only.

21. CAUTION! For your own safety, use only those accessories which are recommended or indicated in the instruction sheets or by Blum (catalog).

WARRANTY CONDITIONS

Limited warranty:

The Blum MINIPRESS "MZK. 1000" has been manufactured using the highest quality materials to provide long lasting performance.

Rigorous quality controls and a final inspection ensure that each drilling head is delivered in good working condition. These quality control measures enable Blum to offer a one year limited warranty on the drilling head, starting with the date of delivery. Please return the enclosed "WARRANTY REPLY" to our U.S. address in Stanley, N.C.

The Blum MINIPRESS "MZK. 1000" is warranted to be free of defects in materials and workmanship for a period of one year from the date of purchase. This warranty is in lieu of any other warranties expressed or implied.

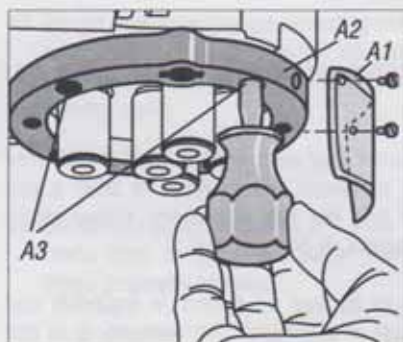
This warranty does not include any implied warranties of fitness or merchantability, such warranties are specifically excluded.

In no event shall Blum be liable for any incidental damage, damage in transportation, misuse or improper handling of drilling head, lost production time, or for any other cause directly or indirectly arising from the sale.

Any damages under this warranty shall be limited to a maximum of the purchase price of the drilling head.

Should any defect be found in the drilling head, please submit to Blum, in writing, the drilling head reference number, the serial number, and the name of the distributor from whom the drilling head was purchased. Replacement parts included under this warranty will be furnished, free-of-charge.

Section A

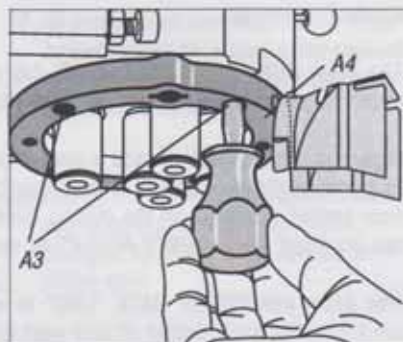
SET-UP KIT FOR MACHINES WITH THE NUMBERS "AA/AB/AC/AD"

Swing out the pictured page at the front of the instruction sheet, for easier identification of the described parts.

For the machine numbers mentioned above, the following parts have to be exchanged (set-up kit MZK.1001)

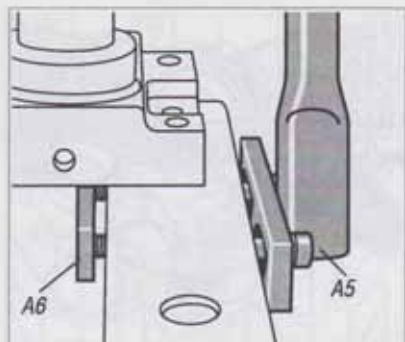
1. REMOVE PLEXIGLAS SHIELD (A1) AND GEARBOX RETAINER (A2)

- Disconnect machine from power supply.
- Remove all drill bits.
- Take-off Plexiglas Shield.
- Remove Gearbox Retainer (take-out the four Slotted Screws (A3) with a stubby screwdriver)



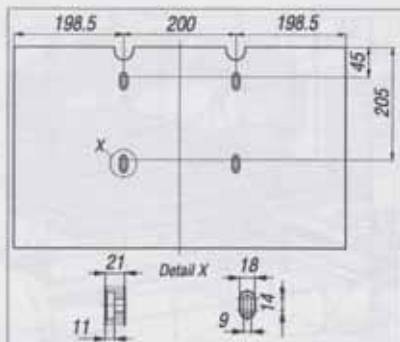
2. MOUNT GEARBOX RETAINER WITH HINGED GUARD (A4)

- Mount Gearbox Retainer with Hinged Guard onto gearbox with Slotted Screws (A3).



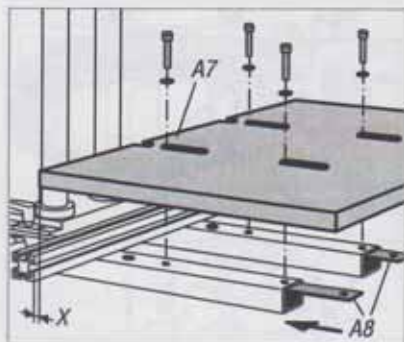
3. EXCHANGE SHAFTS FOR HOLD DOWN CLAMPS (A5)

- Remove the old Hold Down Clamp Shafts.
- Mount Shaft with Mounting Plates (A6).
- Adjust position of Shafts so that the screws are in the center of the elongated holes.
- Tighten screws.



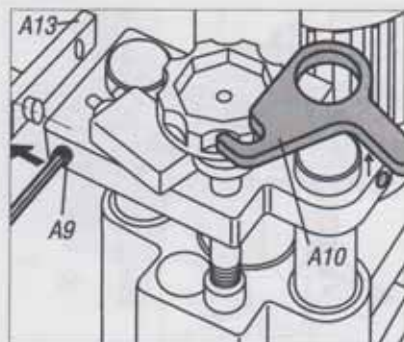
4. REMOVE AND REWORK WORKTABLE (A7)

- Remove Worktable
- Mill elongated holes into Worktable (for measurements see picture above)



5. MOUNT REWORKED WORKTABLE

- Place Worktable onto machine legs with cut-outs facing the ruler.
- Position Support Brackets (A8) into machine legs. Pass bolts with washers through table, and attach to Support Brackets.

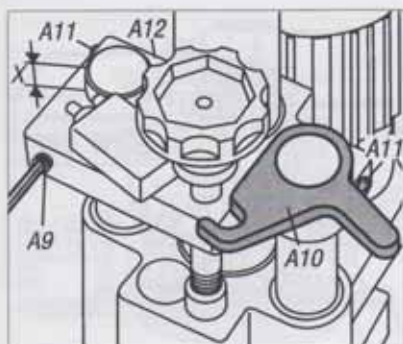


6. INCREASE OPERATING HEIGHT

To increase operating height, the pneumatic cylinder has to be in upper position. This allows an easier installation of the 7-spindle head.

- Remove Insertion Ram from Swing Arm.
- Move Swing Arm down to Stop.
- Disconnect machine from air supply. Then press yellow Stroke Button until Swing Arm touches the Worktable.
- Loosen Screw (A9) with hex wrench and remove control box. Carefully lower the box (A13). Caution: the box is supported by air hoses only.
- Remove Drilling Depth Gauge (A10) from Guide Shaft.

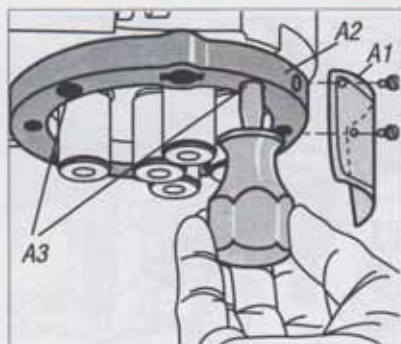
SET-UP KIT FOR MACHINES WITH THE NO. BA/BB/BC/CC



- Loosen both Screws (A11) at Yoke and (A12).
- Position Yoke until the distance X is about $5/8"$ (15 mm).
- Tighten Screws again.
- Replace Drilling Depth Gauge onto Guide Shaft.
- Remount Control Box to the Yoke and tighten Screw (A9).

WARNING: With the following step, the Drill Head will move up!

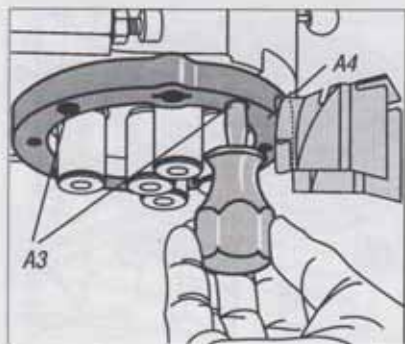
- Connect machine to air supply.



For the machine numbers mentioned above, the following part has to be exchanged:

1. REMOVE PLEXIGLAS SHIELD (A1) AND GEARBOX RETAINER (A2):

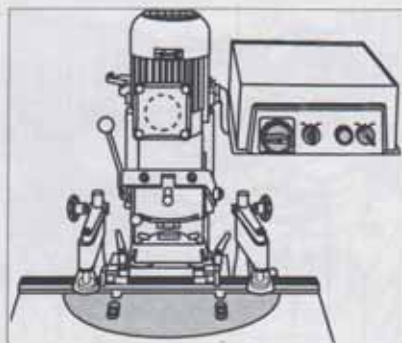
- Disconnect machine from power supply.
- Remove all drill bits.
- Take-off Plexiglas Shield.
- Remove Gearbox Retainer (take-out the four Slotted Screws (A3) with a stubby screwdriver)



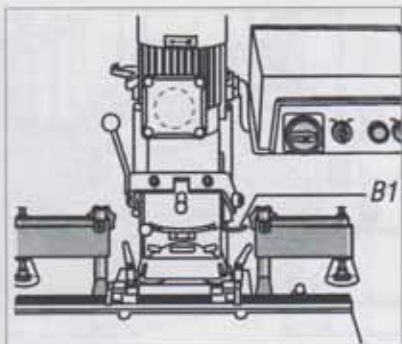
2. MOUNT GEARBOX RETAINER WITH HINGED GUARD

- Mount Gearbox Retainer with Hinged Guard onto gearbox with Slotted Screws (A3).

"CD" - MACHINES DO NOT REQUIRE A SET-UP KIT

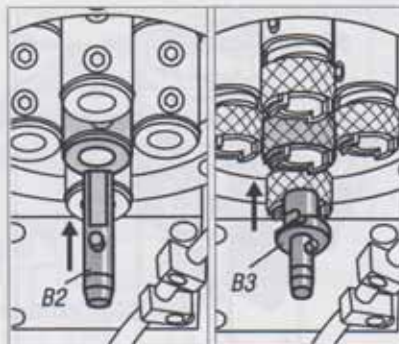


Section B
**INSTALLATION OF ACCESSORIES
 FOR 7-SPINDLE HEAD**



1. PREPARATION OF MINIPRESS

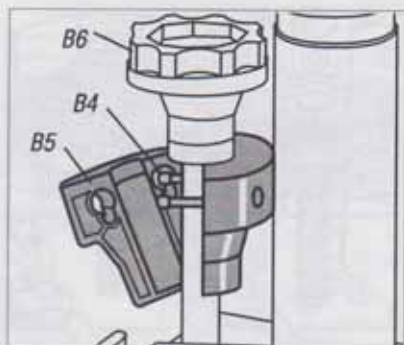
- Disconnect machines with numbers "AA" to "BC" from power supply.
 For machines with numbers "CC/CD":
- set main switch to pos. 1
- set operation-mode switch to pos. 1
- Swing Hold Down Clamps out.
- Remove all drill bits.
- Turn Air Jet (B1) out.



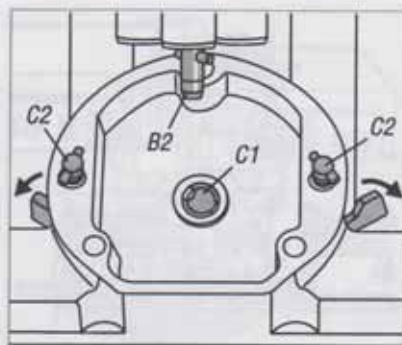
2. INSERT CLUTCH PIN (B2/B3)

- There are 2 types of Clutch Pins:
 - a) Clutch Pin for Standard Drill Chuck (B2) (enclosed)
 - b) Clutch Pin for Quick Disconnecter Chuck (B3) (has to be ordered - MZK.1130)
- The appropriate Clutch Pin will be mounted into the center spindle like a drill bit.

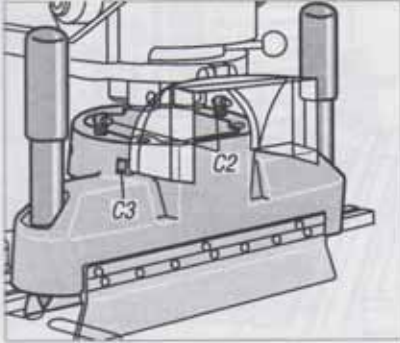
Section C

MOUNTING OF 7-SPINDLE HEAD**3. DEPTH SPACER (B4) FOR DEPTH ADJUSTMENT SCREW**

- The two-piece depth spacer is used to make-up the height for the 7-spindle head. That means, the drilling depth remains at the prior setting.
- Hold one piece of the depth spacer onto the Depth Adjustment Screw.
- Then set the second piece in the key-hole with Hex Cap Socket Screws (B5), move the spacer all the way against the knob of the Adjustment Screw, and tighten.

**1. PREPOSITION DRIVE SHAFT (C1) AND CLUTCH PIN (B2/B3)**

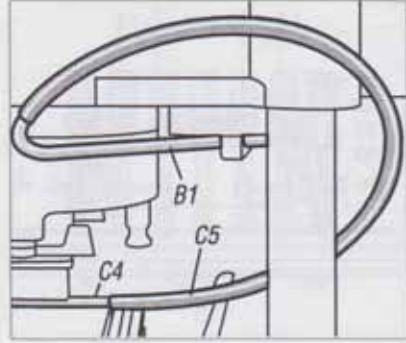
- Turn Drive Shaft and Clutch Pin so that the slot of the Shaft is lined-up with the bolt of the Clutch Pin.
- Swing Fastening Pins (C2) out.



2. ATTACH 7-SPINDLE HEAD

The 7-spindle head can be mounted two different ways:

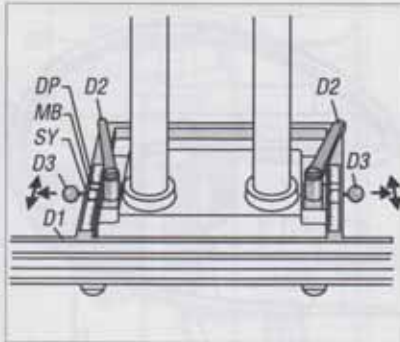
- a) Drilling range 28 - 94 mm drill bits in front
 - b) Drilling range 0 - 28 mm drill bits in the back
- Place 7-spindle head in position so that Clutch Pin fits into the Drive Shaft.
 - Insert 7-spindle head with the Fastening Pins (C2) into key-holes of the Gearbox Retainer.
 - Release Fastening Pins, so you can hear them snap-in.
 - Slightly tighten Set Screws (C3) with hex wrench.



3. CONNECT AIR JET (C4) TO 7-SPINDLE HEAD

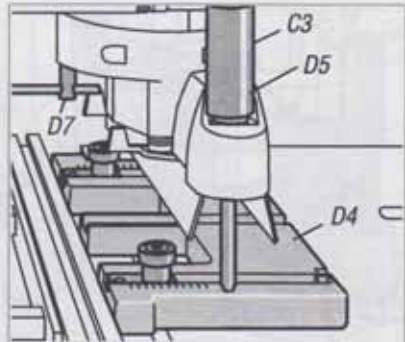
- Slide Air Hose (C5) onto the Air Jet (B1).
- Slide the other end of the Hose onto the Air Jet of the 7-spindle head.

Section D
**ADJUSTMENT OF 7-SPINDLE
 HEAD**



1. ADJUST FENCING SYSTEM (D1)

- Release Clamping Levers (D2).
- Pull out Locating Pin (D3), and adjust Fencing System to SY.
- Tighten Clamping Levers.



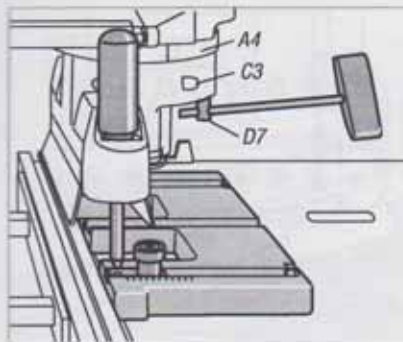
**2. ADJUST 7-SPINDLE HEAD WITH SET-
 UP GAUGE (D4)**

- Place Gauge on Worktable with its open side facing the Ruler.
- a) Adjusting 7-spindle head in drilling range 28 - 94 mm:
- Let Line-up Pins (D5) engage into the 69 mm hole position on the Setup Gauge.
- b) Adjusting 7-spindle head in drilling range 0 - 28 mm:

Let Line-up Pins (D5) engage into the 5 mm hole position on the Setup Gauge.

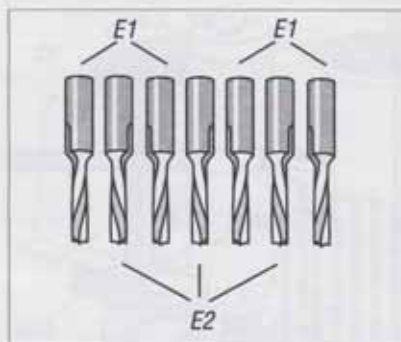
Section E

WORKING WITH THE 7-SPINDLE HEAD



3. ANGLE ALIGNMENT BY TURNING THE ADJUSTING CAM (D7)

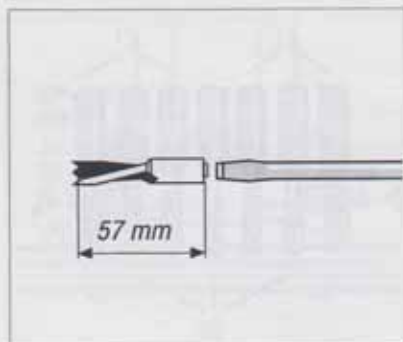
- If the gap between Ruler and Gauge is not parallel, the 7-spindle head has to be adjusted as following:
- Loosen Set Screws (C3) so that the spindle head has no axial play at the Gearbox Retainer (A4), but also is not too tight.
- Then turn Adjusting Cam, until the gap between Ruler and Gauge is exactly parallel.
- Tighten Set Screws slightly, and check again if adjustment is correct.
- If necessary, adjust again.



1. NECESSARY PARTS

- Drill bits: four XX mm dia. rotating clockwise (E1) (marked black)

three XX mm dia. rotating counter-clockwise (E2) (marked orange)
- Cover Caps (E3) (only for unused chucks).
- Cabinet panel

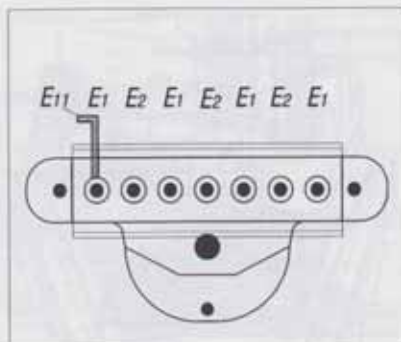


2. ADJUST DRILL-BIT LENGTH

The total length of the drill bits (from bit-tip to Adjustment Screw) should be 57 mm.

To correct drill-bit length, adjust screw accordingly.

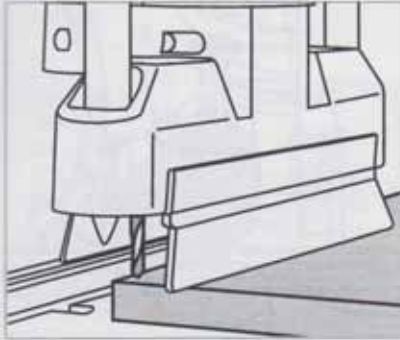
NOTE: All drill bits have to be the same length!



3. INSTALL DRILL BITS

- Machines with numbers "AA through BC" - set main switch to pos. 0.
- Machines with the numbers "CC and CD" - set main switch to pos. 1
- set key switch to pos. 1.
- Push drill bits all the way into the chucks. Tighten Set Screws on flat spot of drill bit shank only.
- Insert Cover Caps (E3) into the empty chucks. This keeps Set Screws in place, and prevents wood chips from accumulating in chucks.

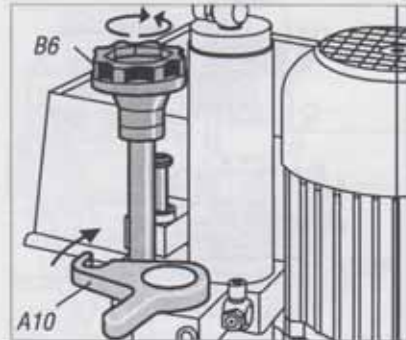
NOTE: Set Screws have a back-out stop. Use only original replacement Set Screws. Use of other Set Screws can cause major gearbox damage



4. CHECK DRILLING DEPTH ADJUSTMENT

WARNING: To avoid serious injury stay clear of drilling area and all pinch points!

- Machines with numbers "AA through BC" - set main switch to pos. 0.
- Machines with the numbers "CC and CD" - set main switch to pos. 1 - set key switch to pos. 1.
- Set Clamps Control to pos. "OFF".
- Place cabinet panel on the worktable clear of drill-head path.
- Move Gauge against Adjustment Screw.
- Push and hold Stroke Button (D3) to move Drill Head down. Slide cabinet panel towards drill bits, and check if its top surface is even with the cutting edges of the bits.
- Release Stroke Button.

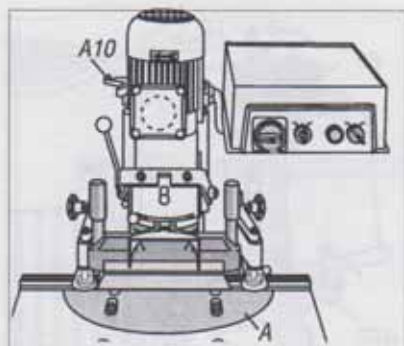


5. CORRECT DRILLING DEPTH ADJUSTMENT

- If the cutting edges do not touch the cabinet panel top, correct adjustment.

NOTE: One turn on the Depth Adjustment Screw (B6) equals 2 mm adjustment.

- Cycle drill stroke again, and check adjustment.
- A 1/2" (2.7 mm) drilling depth is preset by moving out Drilling Depth Gauge.

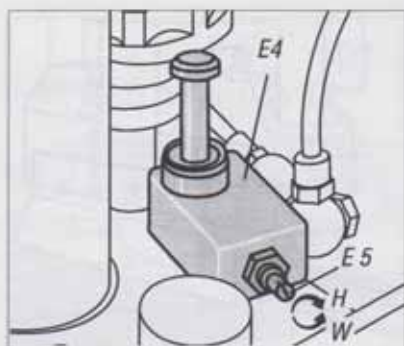


6. PNEUMATIC BRAKE

- Setting for machines with numbers "AD through CD"

On machines with the numbers "AA/AB/AC/CC" and single phase motors, the stroke speed has to be changed at the pneumatic cylinder!

The pneumatic brake causes the drill head to slow down before the drill bits contact the board. This assures chip-free holes and longer bit life.

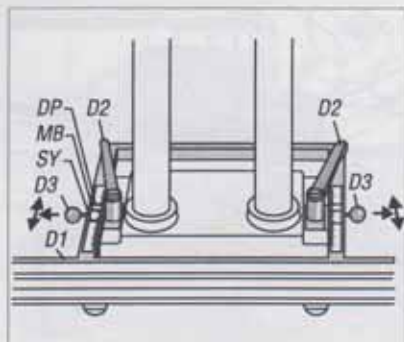


7. ADJUSTMENT OF BRAKE

Adjustment Screw (E5) allows variable stroke speeds for different materials.

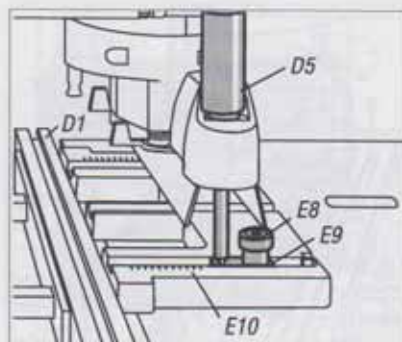
Hardwood: Stroke speed should be slowed down. Turn Adjustment Screw clockwise.

Softwood: Stroke speed can be sped up. Turn Adjustment Screw counter-clockwise.



8. ADJUST FENCING SYSTEM (D1)

- Release Clamping Levers (D2).
- Pull out Locating Pin (D3), and slide Fencing System all the way back.

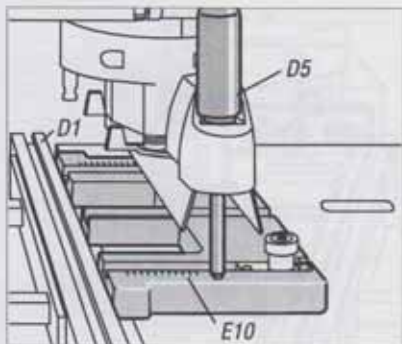


a) Measurements between 0 - 94 mm

- Loosen Thumb Screws (E8) of Adjustable Gauge Plates (E9).
- Adjust to desired measurement of Gauge Ruler (E10).
- Tighten Thumb Screws.
- Let Line-up Pins (D5) engage into holes of the Gauge Plates.
- Slide Fencing System (D1) towards Set-up Gauge until its lined-up.

If Worktable interferes, adjust it with elongated holes.

- Tighten Clamping Levers (D2)

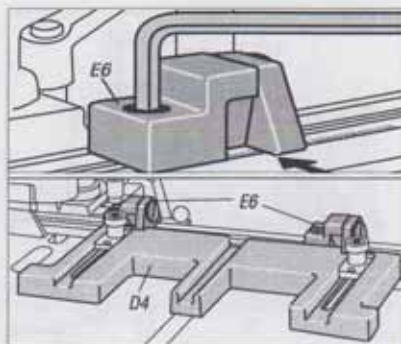


b) Adjustment of fixed positions (5, 8, 9.5, 28, 37, 60 and 69 mm)

- Let Line-up Pins (D5) engage into holes of the Gauge Plates.
- Slide Fencing System (D1) towards the Gauge until its lined-up.

If Worktable interferes, adjust it with elongated holes.

- Tighten Clamping Lever (D2)



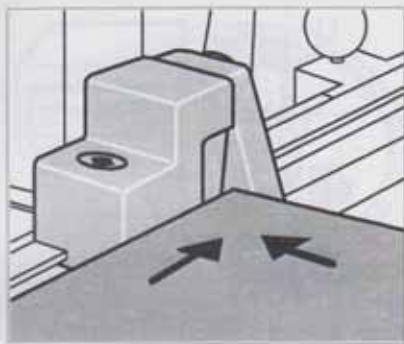
9. ADJUST POSITIONING STOPS (E6)

Adjust Positioning Stops to the desired position on the Base Ruler.

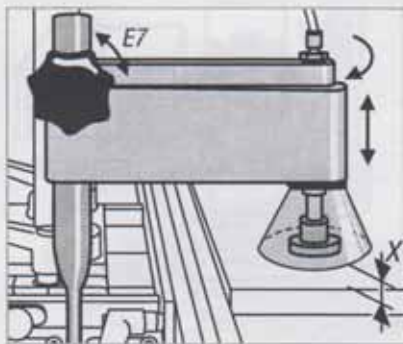
Reference edge is at the inner side of the swivel part.

NOTE: *When drilling longer hole lines, use more stops to get an exact drilling distance.*

To adjust more stops, the Set-up Gauge (D4) also can be used.

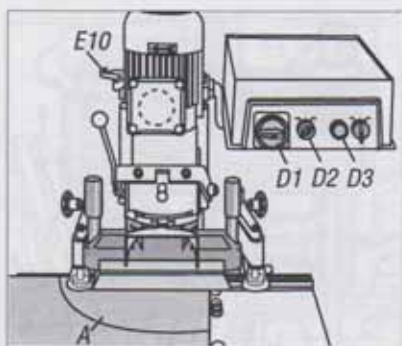


10. PUSH CABINET PANEL AGAINST THE FENCE AND SLIDE UNTIL IT IS POSITIONED AGAINST THE STOP.



11. ADJUST HOLD DOWN CLAMPS

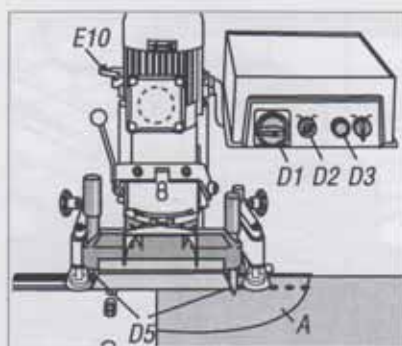
- Loosen Clamp Screws (E7).
- Position Clamps over panel surface.
- Adjust Clamps, so that the distance between panel and guard is not more than 1/8" (3 mm).
- Tighten Clamp Screws.



12. DRILLING

WARNING: To avoid serious injury stay clear of drilling area and all pinch points!

- Make sure that no objects are on the worktable, except panel to be drilled!
- Machines with numbers "AA through BC" - set main switch to pos. 1.
- Machines with the numbers "CC and CD" - set main switch to pos. 1 set key switch to pos. 2.
- Set Clamps Control to pos. "AUTO".
- Position panel against Fence and Positioning Stop.
- Hold panel outside of the Drill Head Zone (X).
- Press Stroke Button until drill bits penetrate the panel and depth is reached.
- Release Stroke Button.
- Release Clamps Control.



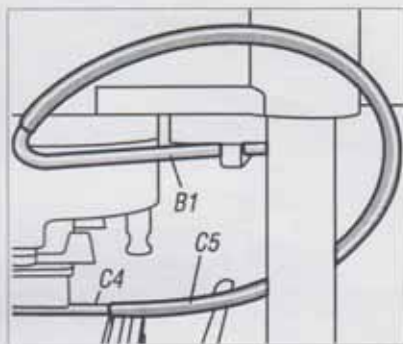
13. CONTINUE CYCLING WITH LINE-UP PINS (D5)

NOTE: Only use Line-up Pins for short line-boring patterns.

When drilling longer boring-patterns, use more stops to get an exact drilling distance.

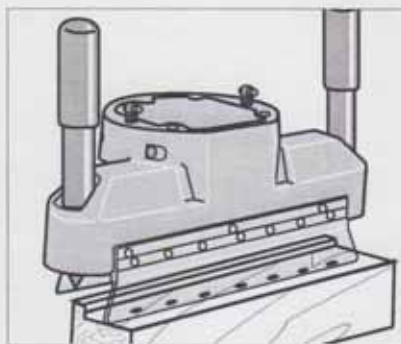
- Release Line-up Pin by turning to move it down, and engage in the last hole of the previously drilled line.
- Drilling
- During the drilling-cycle, the Line-up Pin moves automatically back into 0-position.

Section F

MAINTENANCE AND CARE**14. AIR JET ADJUSTMENT**

WARNING: To avoid serious injury the machine must be off when adjusting the Air Jet.

- The Air Jet ensures that holes are free of chips prior to insertion.
- Air Jet can be adjusted by turning.

**MAINTENANCE:**

- Clean machine periodically to assure proper performance.
- When removing 7-spindle head from machine, always place head into enclosed wooden block. This prevents damage of the guard.
- Replace broken or damaged parts immediately.
- Use only original BLUM-parts.

TECHNICAL SPECIFICATIONS



Technical drawing 1



Technical drawing 2

Technical specifications for window frame 1, detailing dimensions and materials.

Technical specifications for window frame 2, detailing dimensions and materials.