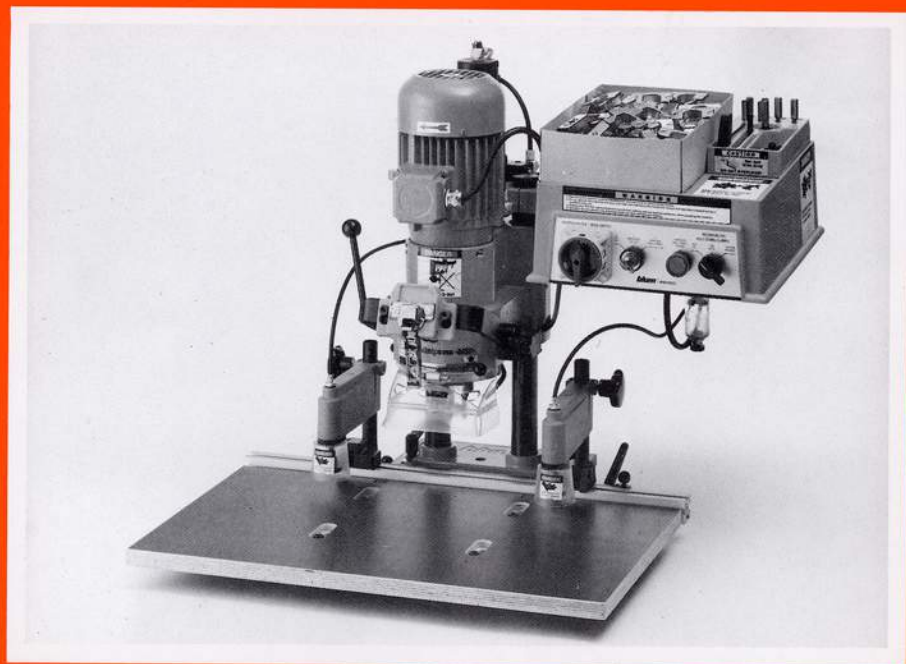
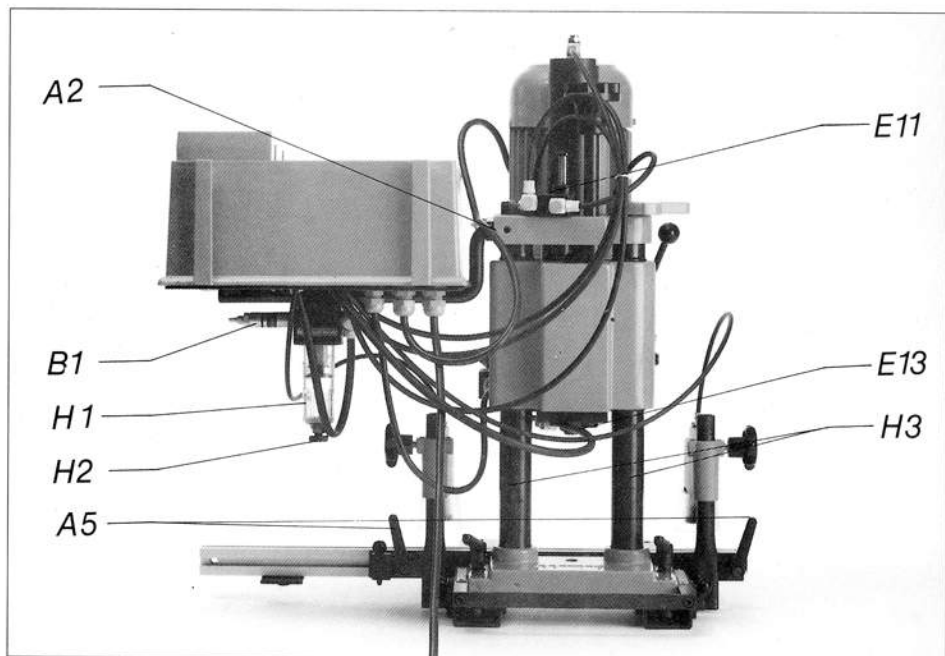
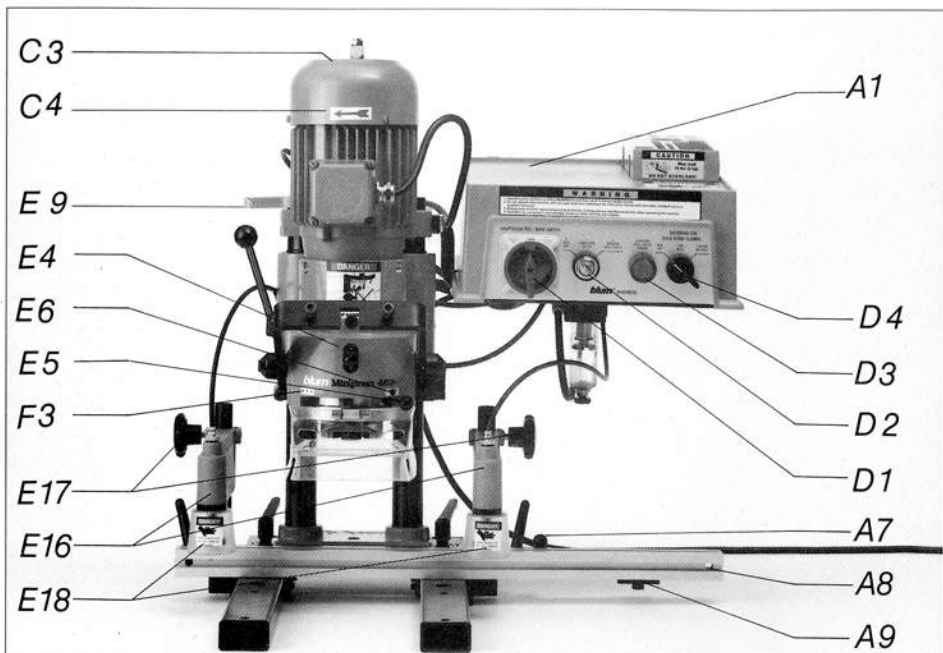
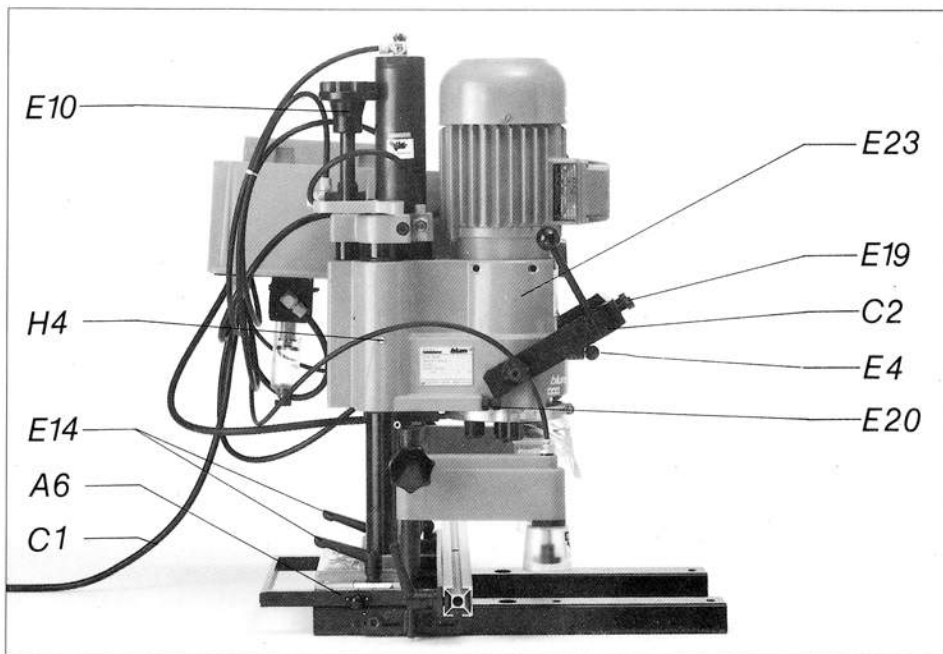


Blum MINIPRESS "MSP"



 **blum**[®]


















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DESCRIPTION OF PARTS

- A 1** ... Control Box
A 2 ... Hex Set Screw
A 5 ... Clamping Lever for Base Ruler
A 6 ... Fencing System
A 7 ... Locating Pin for Base Ruler Position
A 8 ... Base Ruler
A 9 ... Locating Plate (mounted on Base Ruler)
A10 ... Positioning Stops
A12 ... Swivel Part of Positioning Stop
A13 ... Hex Wrench 6 mm
A14 ... T-handle Hex Wrench 4 mm
- B 1** ... Check Valve
- C 1** ... Label with Motor Connecting Data
C 2 ... Swing Arm
C 3 ... Motor Fan (inside the fan shield)
C 4 ... Rotation Direction Arrow
- D 1** ... Main Switch
D 2 ... Operation Mode Switch (Key Switch)
D 3 ... Drill/Press Stroke Button
D 4 ... Hold Down Clamps Control
- E 4** ... Fixing Pin for Drill Head
E 5 ... Lever (to rotate gearbox)
E 6 ... Symbol for Hinge Drilling Pattern
E 7 ... Cover Caps
E 9 ... Drilling Depth Gauge
E10 ... Depth Adjustment Screw
E11 ... Pneumatic Brake
E13 ... Air Jet
E14 ... Clamping Lever (Fencing System)
E15 ... Locating Pin (Fencing System)
E16 ... Hold Down Clamps
E17 ... Clamp Screw (Hold Down Clamps)
E18 ... Guard for Hold Down Clamps
E19 ... Fixing Screw for Insertion Ram
E20 ... Adjusting Screw for Swing Arm
E23 ... Drill Head (with motor)
- F 3** ... Symbol for Line Boring Pattern
- G 3** ... Distance Gauge for Positioning Stops
- H 1** ... Air Filter Bowl
H 2 ... Drain Screw
H 3 ... Guide Shafts
H 4 ... Lubrication Fittings

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 it's 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 "MSP" has been manufactured using the highest quality materials to provide long lasting performance.

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

The Blum MINIPRESS "MSP" 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.

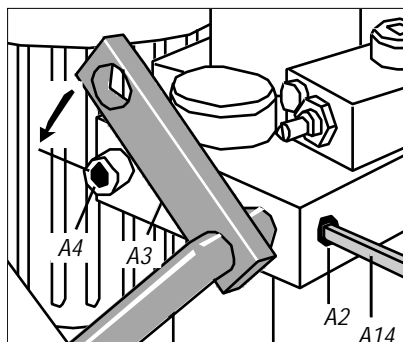
In no event shall Blum be liable for any incidental damage, damage in transportation, misuse or improper handling of machine, lost production time, parts which are subject to normal wear (such as drill bits), or for any other cause directly or indirectly arising from the sale.

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

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

Section A

INITIAL MACHINE SET-UP



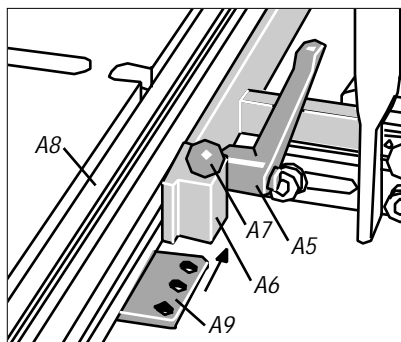
Swing out the pictured page at the front of the instruction sheet, for easier identification of the described parts.

1. FASTEN MACHINE FIRM ONTO A RIGID WORKTABLE.

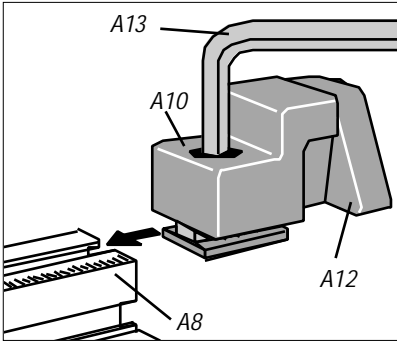
2. POSITIONING OF CONTROL BOX (A1)

- Loosen Set Screw (A2) with the T-handle Hex Wrench (A14).
- Pull Control Box away from machine about 1/2", rotate 90°, and position hole in Mounting Bracket (A3) over Cap Screw (A4).
- Push Control Box back towards machine, and tighten Set Screw.

3. INSTALLATION OF BASE RULER (A8)

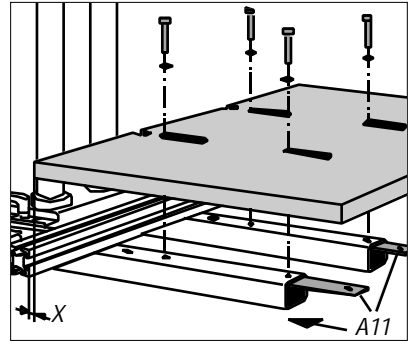


- Loosen both Clamping Levers (A5) on the Fencing System (A6).
- Lift Locating Pin (A7), and slide Base Ruler, until the Locating Pin snaps into the center hole of the Locating Plate (A9).
- Tighten Clamping Levers.



4. PLACE POSITIONING STOPS (A10)

- Slide Positioning Stops onto the Base Ruler (A8) with the Swivel Part (A12) facing away from the machine.
- Tighten at the desired position with Hex Wrench (A13).

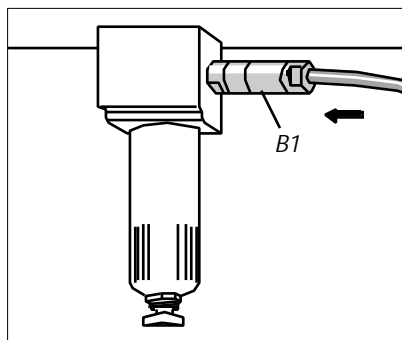


5. WORKTABLE ATTACHMENT

- Place Worktable (A15) on bottomrails of machine with cutouts facing the Fence. Position Support Brackets (A11) in bottom rails. Pass bolts with washers through table and attach to Support Brackets.

Section B

CONNECTION OF AIR SUPPLY



1. CONNECTION OF AIR SUPPLY

- Attach a 1/4" I.D. flexible hose on top of barbed hose fitting at Check Valve (B1).

CAUTION!

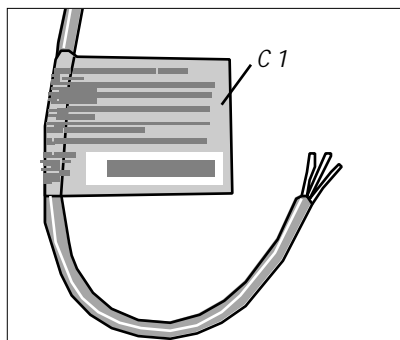
When turning on the air supply, Drill Head (E23) will move up.

- Turn on air supply.

NOTE: Air supply has to be 75 - 100 PSI at 4CFM, oil-free and dry.

Section C

CONNECTION OF POWER SUPPLY

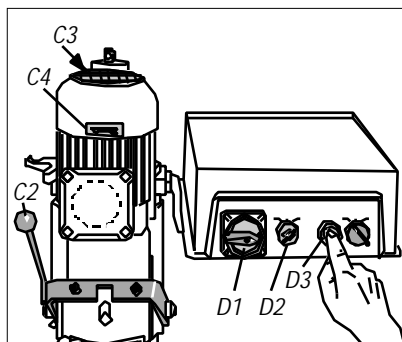


1. THE ELECTRICAL CONNECTION MUST BE PERFORMED BY A QUALIFIED ELECTRICIAN.

- Set all switches to 0-position.

NOTE:

- Connect power to appropriate supply indicated on Label (C1) attached to the power cord.
- Installation must comply with local laws.



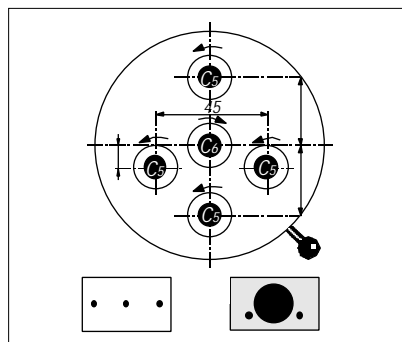
2. CHECK MOTOR DIRECTION

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

- Remove all tools and objects from worktable
- Set Main Switch (D1) to pos. 1.
- Set Key Switch (D2) to pos. 2. Drill/Press Stroke Button (D3) illuminates.
- Move Swing Arm (C2) into upper position.
- Press and hold Stroke Button. Compare rotation direction of Motor Fan (C3) with Arrow (C4)

NOTE: When pressing the Stroke Button, Drill Head will move down and chucks are rotating!

- If the motor direction is not correct, see page 27, point 1.

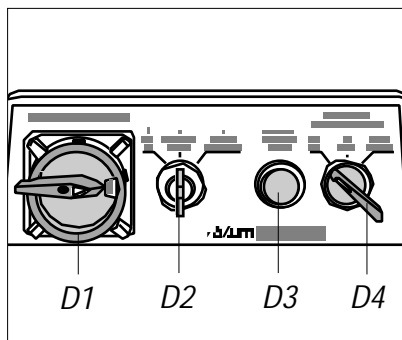


3. CHUCK ROTATION DIRECTION

If the motor rotation direction is correct:

- the orange marked Chucks (C5) rotate counter-clockwise.
- the black marked Chuck (C6) in the center rotates clockwise.

MACHINE FUNCTIONS

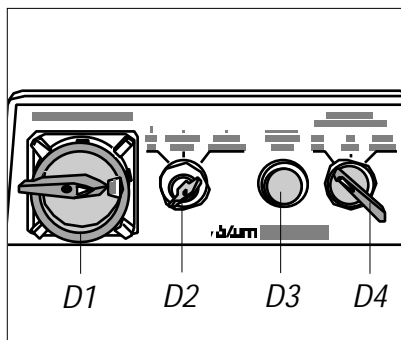


WARNING: To avoid serious injury stay clear of drilling area and all pinch points!

NOTE: Machine functions should be tested without drill bits and work piece.

1. SET-UP MODE

- Set Main Switch (D 1) to pos. 1. Motor does not run in this mode.
- Set Key Switch (D 2) to pos. 1. Stroke Button illuminates. Pneumatics ONLY are active. Key cannot be removed. Drill bit change and depth adjustments must be performed ONLY in this mode.
- Set Hold Down Clamps Control (D4) to pos. "OFF".
- Press Stroke Button (D3).
- Drill Head moves down and retracts when Button is released.

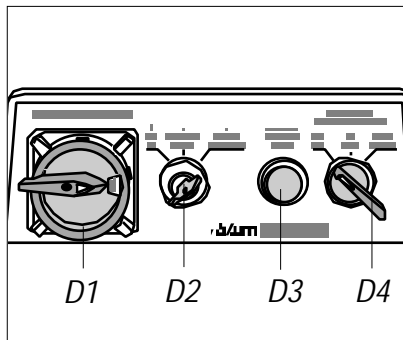


2. DRILL/PRESS MODE - DRILLING

- Set Key Switch to pos. 2.
- Stroke Button illuminates. Electric and Pneumatics are active and Key cannot be removed.

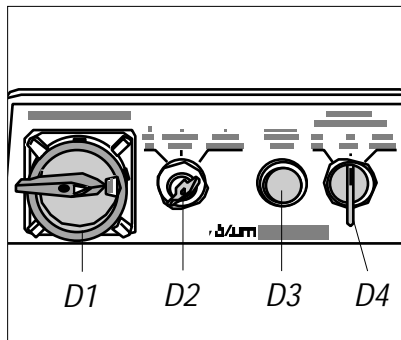
NOTE: Motor will only run when Swing Arm is in the upper position.

- Press Stroke Button
- Motor starts simultaneously with drill head stroke. When Button is released, Drill Head retracts and motor stops.



3. DRILL/PRESS-MODE - INSERTING

- Key Switch (D2) must be in pos.2.
- Move Swing Arm (C2) down to Stop (E20).
- Press Stroke Button (D3). Motor does not run, Drill Head moves down, and retracts with releasing the Stroke Button.



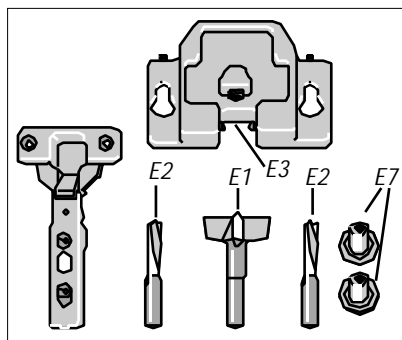
4. HOLD DOWN CLAMPS

WARNING: Keep hands and fingers clear of Hold Down Clamps!

- Key Switch must be in either pos. 1 or 2.
- Set Clamps Control (D4) to pos. "AUTO".
- By pressing the Stroke Button momentarily, the Clamps move into position.
- Clamps remain extended.
- Release the Hold Down Clamps by turning the Clamps Control to "Release".

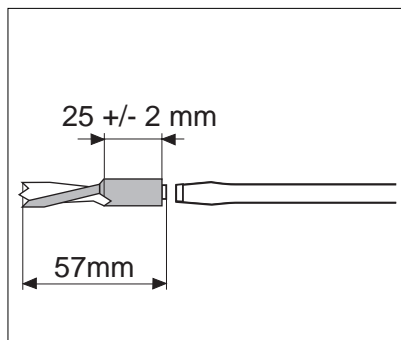
NOTE: Main Switch (D1) must be in pos. 1, and Key Switch must be in either pos. 1 or 2 to release Clamps!

HINGE INSERTION



1. NECESSARY PARTS

- Drill bits: -one 35 mm dia. rotating clockwise (E1) (marked black)
-two 8 mm dia. rotating counter-clockwise (E2) (marked orange).
- Two Cover Caps (E7)
- Insertion Ram MZM.XXXX (E3).
See Blum catalog for correct Ram.
- Door panel
- Hinge

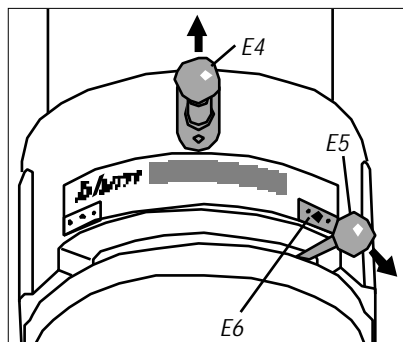


2. DRILL-BIT LENGTH

The total length of the drill bits (from bit-tip to Adjustment Screw) should be 2 1/4 " (57 mm).

To correct drill-bit length, adjust screw accordingly.

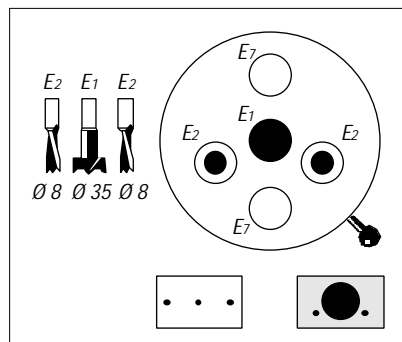
NOTE: All drill bits have to be the same length !



3. SELECT DRILL PATTERN

- Pull out Fixing Pin (E4) on Drill Head.
- At the same time, move Lever (E5) to Symbol for Hinge Drilling Pattern (E6).

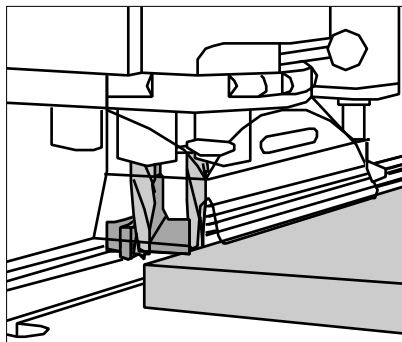
NOTE: Make sure, Fixing Pin snaps back to lock gearbox position!



4. INSTALL DRILL BITS

- Set Main-Switch to pos. 0.
- Push drill bits all the way in to the chucks. Tighten Set Screw on flat spot of drill-bit shank only.
- Insert Cover Caps (E7) into the empty chucks. This keeps Set Screws in place, and prevents wood chips from accumulating in chucks.

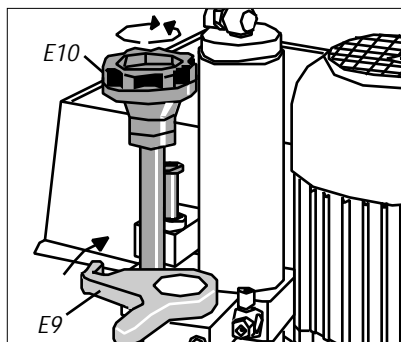
NOTE: Use only original replacement set screws. Use of other set screws can cause major gearbox damage.



5. CHECK DRILLING DEPTH ADJUSTMENT

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

- Set Main Switch pos. 1.
- Set Clamps Control to pos. "OFF".
- Set Key Switch to pos. 1.
- Place door on the worktable clear of drill-head path.
- Move Drilling Depth Gauge (E9) against Adjustment Screw (E10).
- Push and hold Stroke Button (D3) to move Drill Head down.
- Slide door towards drill bits, and check if the cutting edges of the bits are even with top surface of the door panel.
- Release Stroke Button.

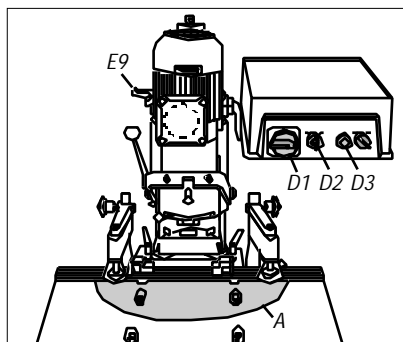


6. CORRECTING DRILL DEPTH ADJUSTMENT

- If the Cutting edges do not touch the door panel top, correct adjustment.

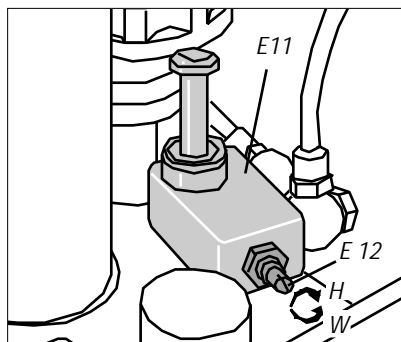
NOTE: One turn on the Depth Adjustment Screw (E10) equals 2 mm adjustment.

- Cycle drill stroke again, and check adjustment.
- A 1/2" (12.7 mm) drilling depth is preset by moving out Drilling Depth Gauge.



7. PNEUMATIC BRAKE

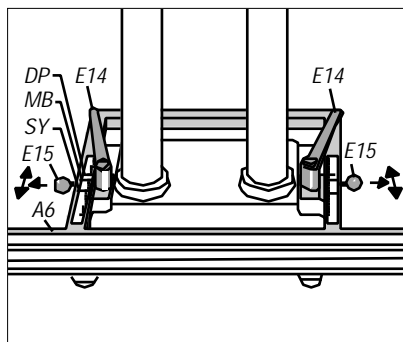
The Pneumatic Brake causes the Drill Head to slow down before the drill bits contact the board. This assures chip-free holes and longer bit life.



8. ADJUSTMENT OF BRAKE

Adjustment Screw (E12) 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.



9. FENCING SYSTEM (A6)

ADJUSTMENTS:

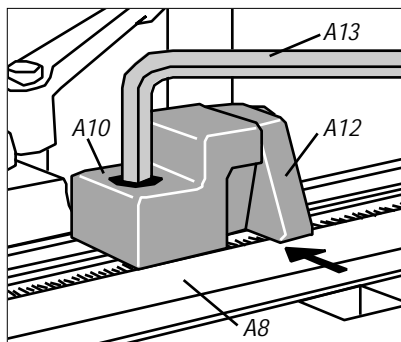
- Release Clamping Levers (E14)
- Pull out Locating Pins (E15), and adjust Fencing System to pos. **MB**.
- Tighten Clamping Levers.

The Fencing System has three fixed presetable adjustment stops.

SY: Line boring (37 mm)

MB: Hinge insertion (23.5 mm)

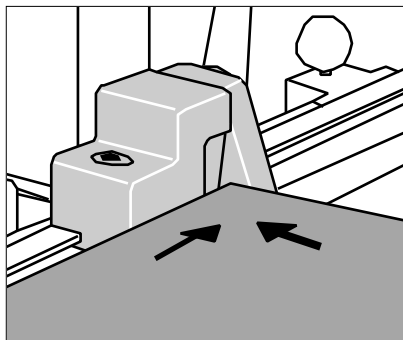
DP: Mounting Plate (20 mm)



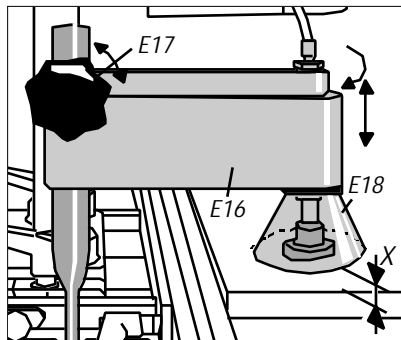
10. ADJUST POSITIONING STOPS (A10)

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

NOTE: The reference edge can be on either side of the Swivel Part (A12).

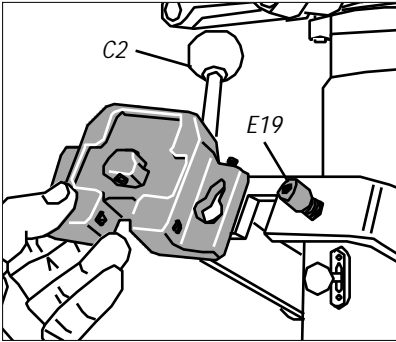


11. PUSH DOOR AGAINST THE FENCE AND SLIDE UNTIL IT IS POSITIONED AGAINST THE STOP.



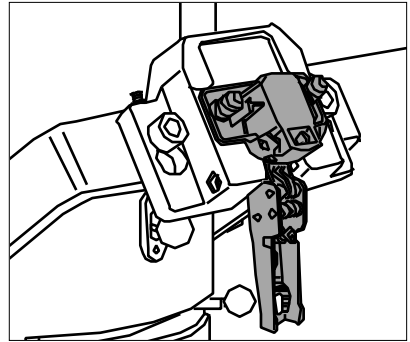
12. ADJUST HOLD DOWN CLAMPS (E16)

- Loosen Clamp Screw (E17).
- Position Clamp over panel surface.
- Adjust Clamps, so that the distance x between door and Guard (E18) is not more than 1/8" (3mm).
- Tighten Clamp Screws.



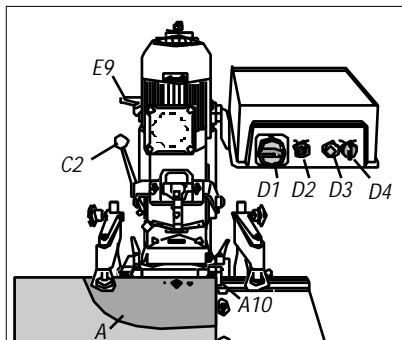
13. MOUNT INSERTION RAM (E3) ONTO SWING ARM (C2)

- Place Ram over Fixing Screws (E19) on Swing Arm and tighten.
- Make sure that Ram Adjustment Screws (E21) seat on Fixing Screw.



14. POSITION HINGE ON INSERTION RAM

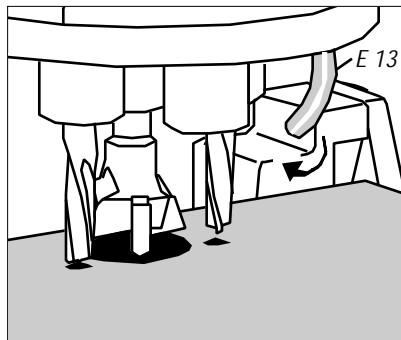
- Snap hinge cup onto front of Insertion Ram, and swing hinge arm into slot until it locks in place.
- Ball Plunger (E22) should apply slight pressure to hold hinge cup in place. Adjust if required.



15. DRILLING

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

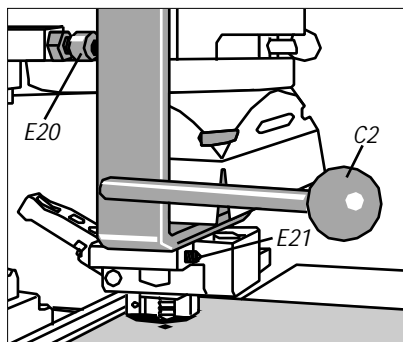
- Make sure that no objects are on the worktable, except panel to be drilled!
- Set Main Switch to pos. 1
- Set Key Switch to pos. 2
- Set Clamps Control to pos. "AUTO"
- Swing Arm must be in upper position.
- Position panel against Fence and Positioning Stop.
- Hold panel outside of the Drill Head Zone (A).
- Press Stroke Button (D3) until drill bits penetrate the panel and depth is reached.
- Release Stroke Button.



16. AIR JET (E13) ADJUSTMENT

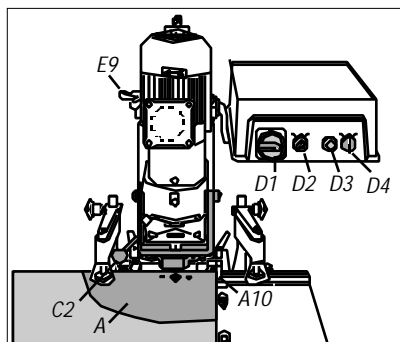
WARNING: To avoid serious injury the machine must be off when adjusting the Air Jet.

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



17. CHECK ALIGNMENT OF SWING ARM (C2)

- Move Swing Arm down to Stop (E20)
- Make sure the hinge is aligned with the drilled hole.
- There are two possibilities which could cause misalignment:
 - a) **Swing Arm** is not vertical:
adjust Screw (E20).
 - b) **Insertion Ram** is off center:
adjust Ram Adjustment Screws (E21).

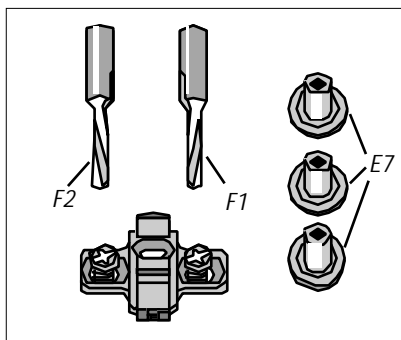


18. HINGE INSERTION

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

- Press Stroke Button until the hinge is totally pressed in.
- Release Stroke Button.
- Move Swing Arm up.
- Turn Clamps Control to "RELEASE".

DRILLING FOR MOUNTING PLATES WITH SYSTEM SCREWS

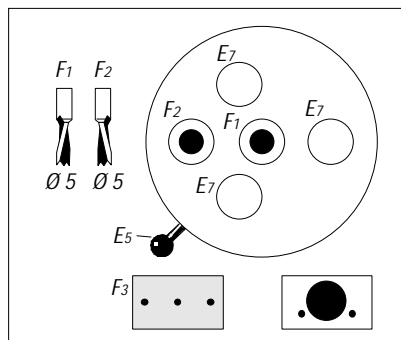


1. NECESSARY PARTS

- Drill bits: - one 5 mm dia. rotating clockwise (F1) (marked black)
- one 5 mm dia. rotating counter-clockwise (F2) (marked orange)
- Three Cover Caps (E7)

2. DRILL-BIT LENGTH

(see page 12, point 2)



3. CHANGE DRILL PATTERN

- Pull out Fixing Pin (E4) on Drill Head.
- At the same time, move Lever (E5) to Symbol for Line Boring Pattern (F3)

NOTE: Make sure, Fixing Pin snaps back to lock gearbox position!

4. INSTALL DRILL BITS

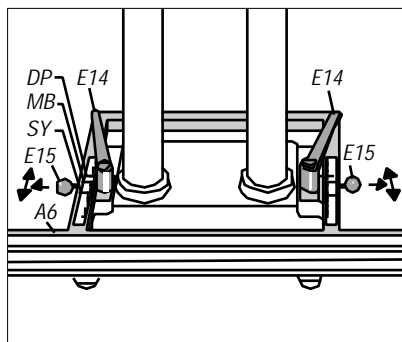
(see page 13, point 4)

5. CHECK DRILLING DEPTH ADJUSTMENT

(see page 14, points 5/6)

6. CHECK PNEUMATIC BRAKE SETTING

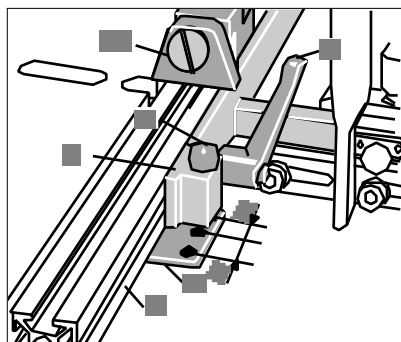
(see page 15, point 7/8)



7. ADJUST FENCING SYSTEM (A6)

- Release Clamping Levers (E14)
- Pull out Locating Pins (E15) and adjust Fencing System to pos. SY.
- Tighten Clamping Levers.

With this adjustment, the distance between Fence and the centerline of the drill bits is 37 mm.

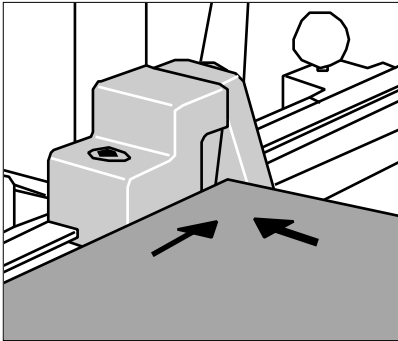


8. ADJUST POSITIONING STOPS (A10)

- The "0"-pos. on the Base Ruler (A8) scale can be centered between the line boring spindles by shifting the Base Ruler either to the left or right.

Steps:

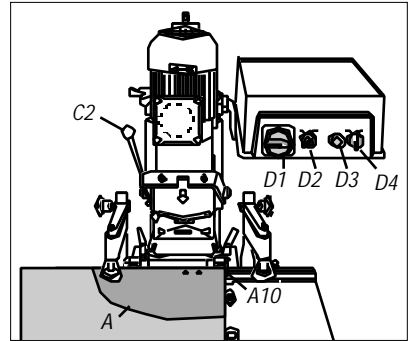
- Release both Clamping Levers (A5) at the Fencing System(A6).
- Lift Locating Pin (A7), and shift Base Ruler to the right or left.
- Locating Pin should snap into the outer hole of the Locating Plate (A9).
- Tighten Clamping Levers.



9. SLIDE CABINET SIDE PANEL AGAINST THE FENCE UNTIL POSITIONED AT THE STOP

10. ADJUST HOLD DOWN CLAMPS (E16)

(see page 17, point 12)



11. DRILLING

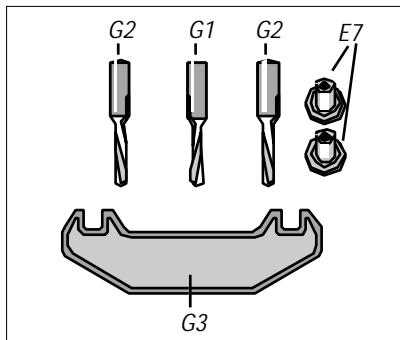
(see page 19, point 15)

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

12. RELEASING HOLD DOWN CLAMPS

- Turn Clamps Control to "RELEASE".
- Position cabinet side panel to the next stop.

LINE BORING PATTERN



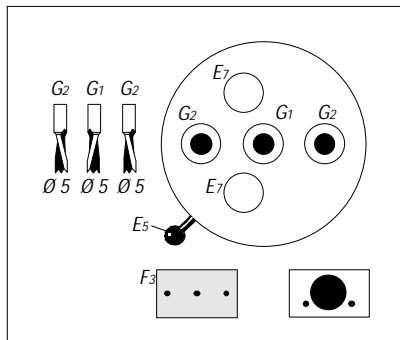
1. NECESSARY PARTS

- Drill bits: - one 5 mm dia. rotating clockwise (G1) (marked black)
- two 5 mm dia. rotating counter-clockwise (G2) (marked orange)
- Two Cover Caps (E7)
- Distance Gauge for Positioning Stops (G3).
- Cabinet side panel

NOTE: Base Ruler must be in its center position.

2. DRILL BIT LENGTH

(see page 12, point 2)



3. CHANGE DRILL PATTERN

- Pull out Fixing Pin (E4) on Drill Head.
- At the same time, move Lever (E5) to Symbol for Line Boring Pattern (F3).

NOTE: Make sure, Fixing Pin snaps back to lock gearbox position!

4. INSTALL DRILL BITS

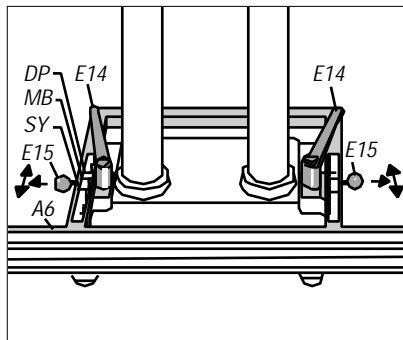
(see page 13, point 4)

5. CHECK DRILLING DEPTH ADJUSTMENT

(see page 14, point 5/6)

6. CHECK PNEUMATIC BRAKE SETTING

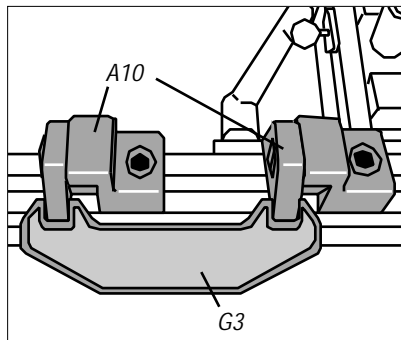
(see page 15, point 7/8)



7. ADJUST FENCING SYSTEM (A6)

- Release Clamping Levers (E14).
- Pull out Locating Pin (E15), and adjust Fencing System to pos. SY.
- Tighten Clamping Levers.

With this adjustment, the distance between Fence and the centerline of the drill bits is 37 mm.

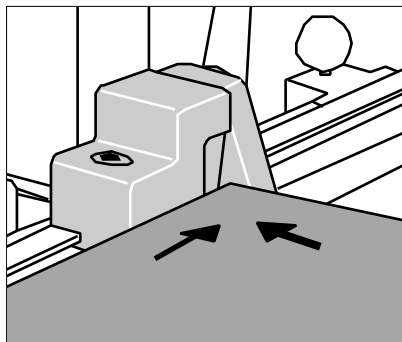


8. ADJUST POSITIONING STOPS (A10)

- Adjust one Stop at the correct measurement for the first set of holes, and tighten.

LINE BORING:

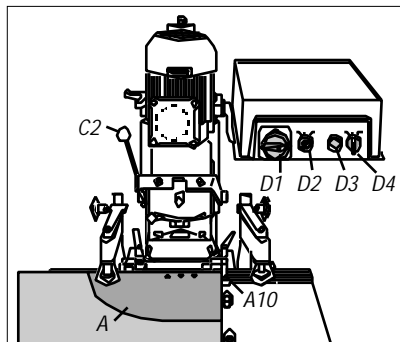
- Use Distance Gauge (G3) to set additional Positioning Stops.
- This will set a 96 mm distance between the Stops and provide a consecutive 32 mm Line Boring Pattern.



9. SLIDE CABINET SIDE PANEL AGAINST THE FENCE UNTIL POSITIONED AT THE STOP.

10. ADJUST HOLD DOWN CLAMPS (E16)

(see page 17, point 12)



11. DRILLING

(see page 19, point 15)

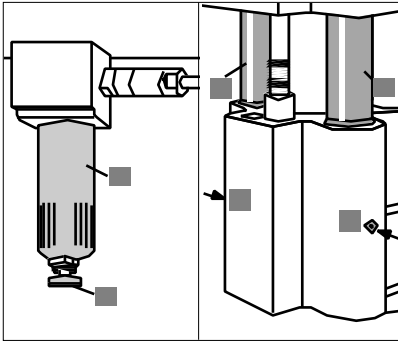
WARNING: To avoid serious injury stay clear of drilling area and all pinch points!

12. RELEASING HOLD DOWN CLAMPS

- Turn Clamps Control to "RELEASE".
- Position cabinet side panel to the next stop.

Section H

MAINTENANCE AND CARE

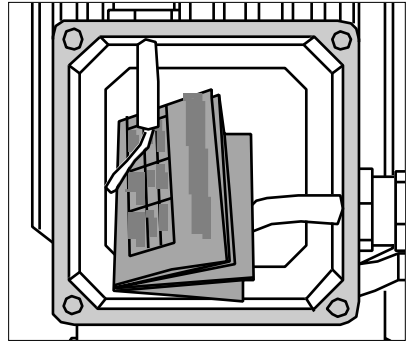
**MAINTENANCE:**

- Clean machine periodically to assure proper performance.
- Check Air Filter (H1) weekly (approx. 40 hrs. of operation).
Drain Filter by opening Screw (H2).
- Lubricate Guide Shafts (H3) weekly (approx. 40 hrs. of operation) through the Lubrication Fittings (H4) (use Shell T68 or standard duty machine oil).

NOTE: Do not use grease!

- Make sure cables, pneumatic lines, and pneumatic connections are free of defects.

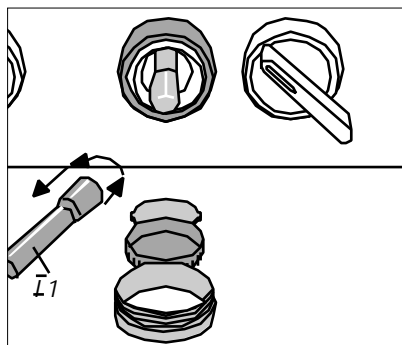
Section I

TROUBLE-SHOOTING
WHAT TO DO WHEN?**1. WRONG MOTOR DIRECTION**

This correction must only be done by a qualified electrician!

NOTE: *On single-phase models the wiring must be checked and changed at the motor. (Diagram is inside the motor terminal.)*

On three-phase models, the wires must be switched on the power cord, not inside the machine!



2. LIGHT INSIDE STROKE BUTTON DOES NOT WORK

Check light bulb inside Button, and change if necessary (24V DC 3W):

- Disconnect machine from power supply.
- Unscrew clear ring around Button.
- Unscrew green cover.
- Remove white inside cover.
- Replace lightbulb and reverse above steps

3. OTHER PROBLEMS

Contact your Blum distributor or the Blum Customer Service Department immediately.

Please give them the serial and model number of your machine and as much information as possible, so they can be of best assistance to you.

Section J

TECHNICAL DATA

1. TECHNICAL DATA

Voltage: see label (C1) attached to power cord

Connection power:

3-phase 1,2kW,
either 220V/60Hz, 3.3A or
440V/60Hz, 1.65A

Single-phase 1.2kW,
220V/60Hz, 6.2A

RPM: see motor tag

Weight: 99 lbs (without table)

Measurements:

height - 650 mm (26")
width - 800 mm (32")
depth - 800 mm (32")

Pressure requirements:

75 - 100 psi at 4 cfm

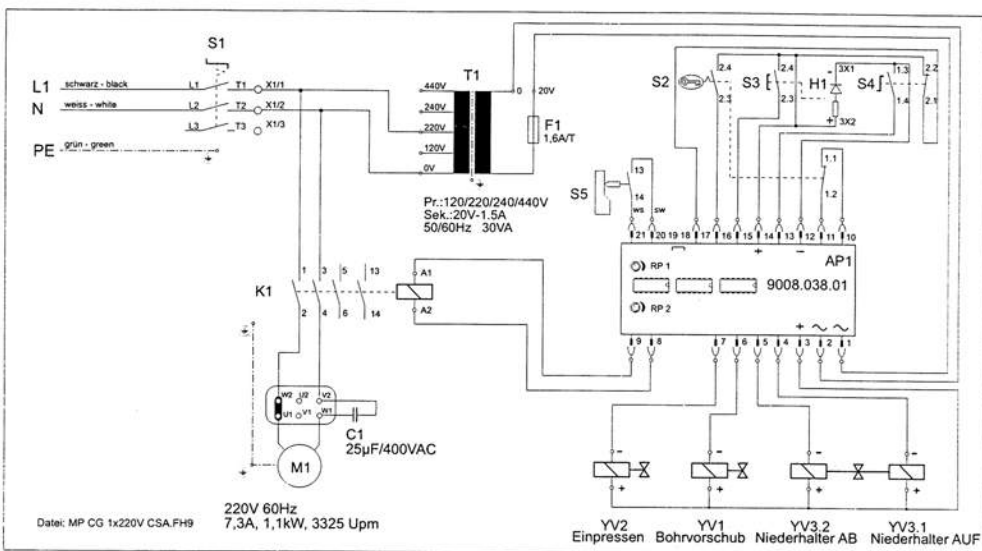
2. PNEUMATIC DIAGRAM
(see addendum)

3. ELECTRICAL DIAGRAM
(see addendum)

NOTES:

NOTES:

NOTES:



| Deutsch | Benennung | Techn. Daten: |
|---------|-----------------------------|---------------------------------|
| AP1 | Steuerprint 9008 038.01 | Fa Sigmatek |
| F1 | Sicherung | 1,5AT - träge integ. in S3 |
| H1 | Signalleuchte (LED) | 3G + 1C |
| K1 | Schutz 24VAC | 3S + 1S |
| M1 | Motor 1,1kW | 1x220V-60Hz |
| RP1 | Verzögerung Bohrzylinder | Potentiometer |
| RP2 | Abschaltverzögerung Motor | Potentiometer nach VDE0113 |
| S1 | Haupt- und Not-Aus-Schalter | 1S + 10e |
| S2 | Schlüsselschalter | 1S + 10e |
| S3 | Leuchtdrucktaster | 1S + 10e |
| S4 | Knebelschalter | 1S + 10e |
| S5 | Endschalter | 1S + 10e |
| T1 | Steuertransformator | 120-440V/60Hz 20V/30VA, 1,5A |
| YV1 | Elektromagnetventil | 24 VDC |
| YV2 | Elektromagnetventil | 24 VDC |
| YV3.1 | Elektromagnetventil | 24 VDC |
| YV3.2 | Elektromagnetventil | 24 VDC |

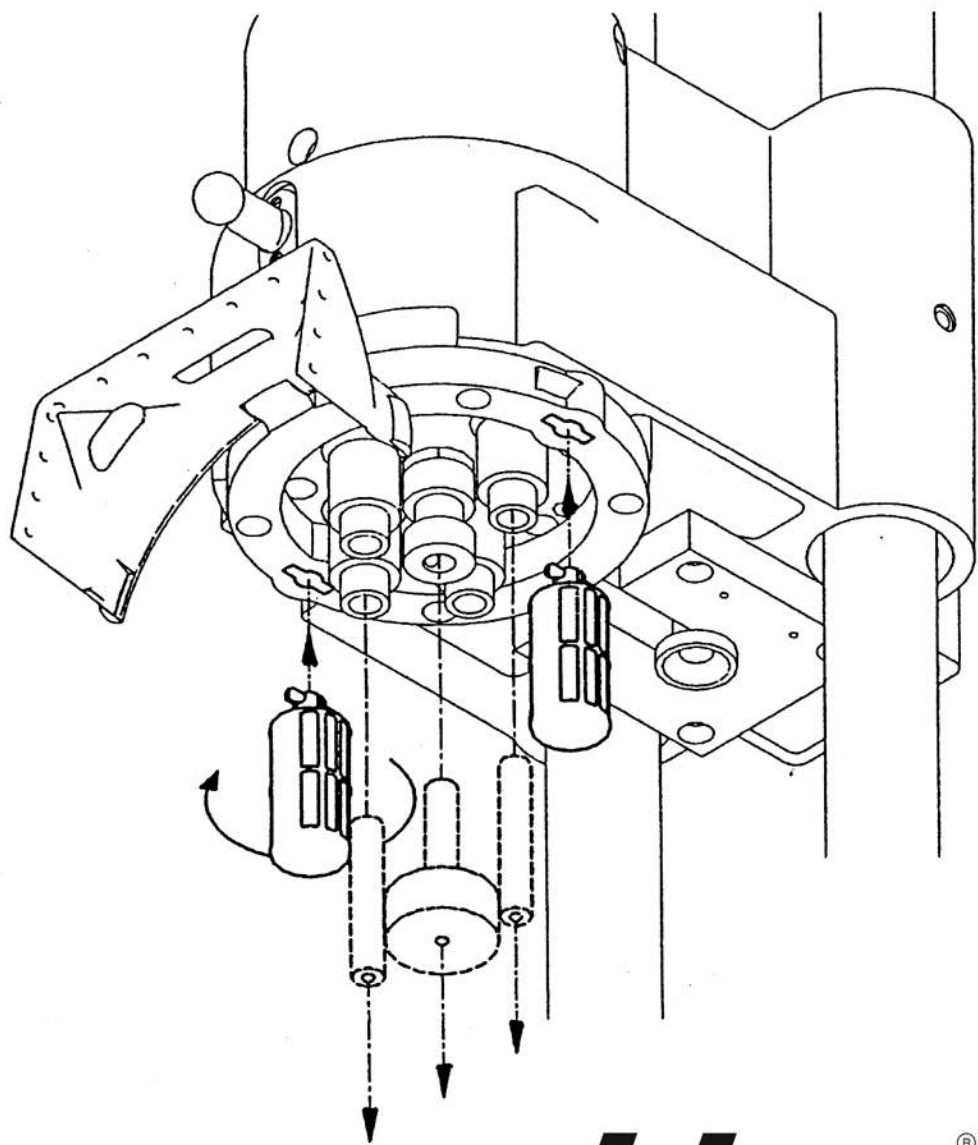
| English | Description: | Technical data: |
|---------|-----------------------------|---------------------------------|
| AP1 | Circuit board 9008 038 01 | Fa Sigmatek |
| F1 | Fuse | 1,5AT - slowblow inside S3 |
| H1 | Power control light (LED) | 3G + 1C |
| K1 | Motor contactor 24VAC | 3S + 1S |
| M1 | Motor 1,1kW | 1x220V-60Hz |
| RP1 | Drill-stroke cylinder delay | Potentiometer |
| RP2 | Motor off delay | Potentiometer by VDE0113 |
| S1 | Emergency stop | 1C + 10 |
| S2 | Key switch | 1C - white |
| S3 | Drill/press stroke button | 1C + 10 |
| S4 | Lever switch | 1C + 10 |
| S5 | Limit switch | 1C + 10 |
| T1 | Control transformer | 120-440V/60Hz 20V/30VA, 1,5A |
| YV1 | Solenoid valve (DRILL) | 24 VDC |
| YV2 | Solenoid valve (STROKE) | 24 VDC |
| YV3.1 | Solenoid valve (CLAMP UP) | 24 VDC |
| YV3.2 | Solenoid valve (CLAMP DOWN) | 24 VDC |

| Français | Désignation: | Caractéristiques |
|----------|---------------------------------------------|---------------------------------|
| AP1 | Circuit de commande 9008 038 01 | Fa Sigmatek |
| F1 | Fusible | 1,5AT - retardé intégré dans S3 |
| H1 | Lampe de signalisation | 3S + 1S |
| K1 | Contacteur | 3S + 1S |
| M1 | Moteur | 1x220V-60Hz |
| RP1 | Temporisation vérin perçage | Potentiometer |
| RP2 | Temporisation arrêt moteur | Potentiometer selon VDE0113 |
| S1 | Interrupteur principal et d'arrêt d'urgence | 1C + 10 |
| S2 | Interrupteur à clé | 1S + 10e |
| S3 | Touche lumineuse | 1S - blanc |
| S4 | Interrupteur à levier | 1S + 10 |
| S5 | Interrupteur de fin de course | 1S - 10 |
| T1 | Transformateur de commande | 120-440V/60Hz 20V/30VA, 1,5A |
| YV1 | Distributeur électromagnétique | 24 VDC |
| YV2 | Distributeur électromagnétique | 24 VDC |
| YV3.1 | Distributeur électromagnétique | 24 VDC |
| YV3.2 | Distributeur électromagnétique | 24 VDC |

| Español | Designación: | Características |
|---------|------------------------------------------------------|---------------------------------|
| AP1 | Tarjeta de mando 9008 038.01 | Fa Sigmatek |
| F1 | Fusible | 1,5AT - lento integr. en S3 |
| H1 | Lámpara piloto | 3S + 1S |
| K1 | Contacto 24 v. a. c. | 3S + 1S |
| M1 | Motor 1,1kW | 1x220V-60Hz |
| RP1 | Temporización cilindro de taladrado | Potentiometer |
| RP2 | Temporización desenganche motor | Potentiometer según VDE0113 |
| S1 | Interruptor principal y de desenganche de emergencia | 1S + 10e |
| S2 | Interruptor de garrote | 1S - blanco |
| S3 | Tecla luminosa | 1S + 10e |
| S4 | Comandador de palanca | 1S + 10e |
| S5 | Interruptor de fin de carrera | 1S + 10e |
| T1 | Transformador de mando | 120-440V/60Hz 20V/30VA, 1,5A |
| YV1 | Válvula electromagnética | 24 VDC |
| YV2 | Válvula electromagnética | 24 VDC |
| YV3.1 | Válvula electromagnética | 24 VDC |
| YV3.2 | Válvula electromagnética | 24 VDC |

| Italiano | Denominazione: | Specifiche tecniche: |
|----------|---------------------------------------|---------------------------------|
| AP1 | Scheda 9008 038 01 | Fa Sigmatek |
| F1 | Fusibile | 1,5AT - ritardo integ. in S3 |
| H1 | Spia luminosa | 3S + 1S |
| K1 | Relèuttore 24VAC | 3S + 1S |
| M1 | Motore 1,1kW | 1x220V-60Hz |
| RP1 | Ritardo cilindro foratura | Potentiometer |
| RP2 | Ritardo disengancamento motore | Potentiometer secondo VDE0113 |
| S1 | Interruttore principale e d'emergenza | 1C + 10 |
| S2 | Interruttore a chiave | 1S + 10e |
| S3 | Pulsante luminoso | 1S - bianco |
| S4 | Interruttore a leva | 1S + 10e |
| S5 | Finescorsa | 1S + 10e |
| T1 | Transformatore di comando | 120-440V/60Hz 20V/30VA, 1,5A |
| YV1 | Elettrovalvola | 24V |
| YV2 | Elettrovalvola | 24V |
| YV3.1 | Elettrovalvola | 24V |
| YV3.2 | Elettrovalvola | 24V |

| Suomi | Nimike: | Tekniset tiedot: |
|-------|---------------------------|---------------------------------------------|
| AP1 | Kytkentätaulu 9008 038 01 | Fa Sigmatek |
| F1 | sulje | 1,5AT - hidastettu painokytkentäsuojissa S3 |
| H1 | merkkivalo | 3S + 1S |
| K1 | kontakti 24VAC | 3S + 1S |
| M1 | sähkömoottori 1,1kW | 1x220V-60Hz |
| RP1 | porausylinterin viive | Potentiometer |
| RP2 | moottorin kalkausviive | Potentiometer VDE0113 mukaan |
| S1 | pää- ja hätäkytkentä | 1C + 10 |
| S2 | avainkytkentä | 1S + 10e |
| S3 | painokytkin (merkkivalo) | 1S - white |
| S4 | vipuakajassa | 1S + 10e |
| S5 | päätekytkentä | 1S + 10e |
| T1 | ohjauksenmuuntaja | 120-440V/60Hz 20V/30VA, 1,5A |
| YV1 | sähkömagneettiventtiili | 5/2 24VDC |
| YV2 | sähkömagneettiventtiili | 5/2 24VDC |
| YV3.1 | sähkömagneettiventtiili | 5/2 24VDC |
| YV3.2 | sähkömagneettiventtiili | 5/2 24VDC |



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