

CUTTERMATEC SPECIAL

ELLISSOMATEC SPECIAL

GB INSTRUCTIONS USE MANUAL

VALIANI COSTRUZIONI MECCANICHE
DI FRANCO VALIANI & C. s.n.c.

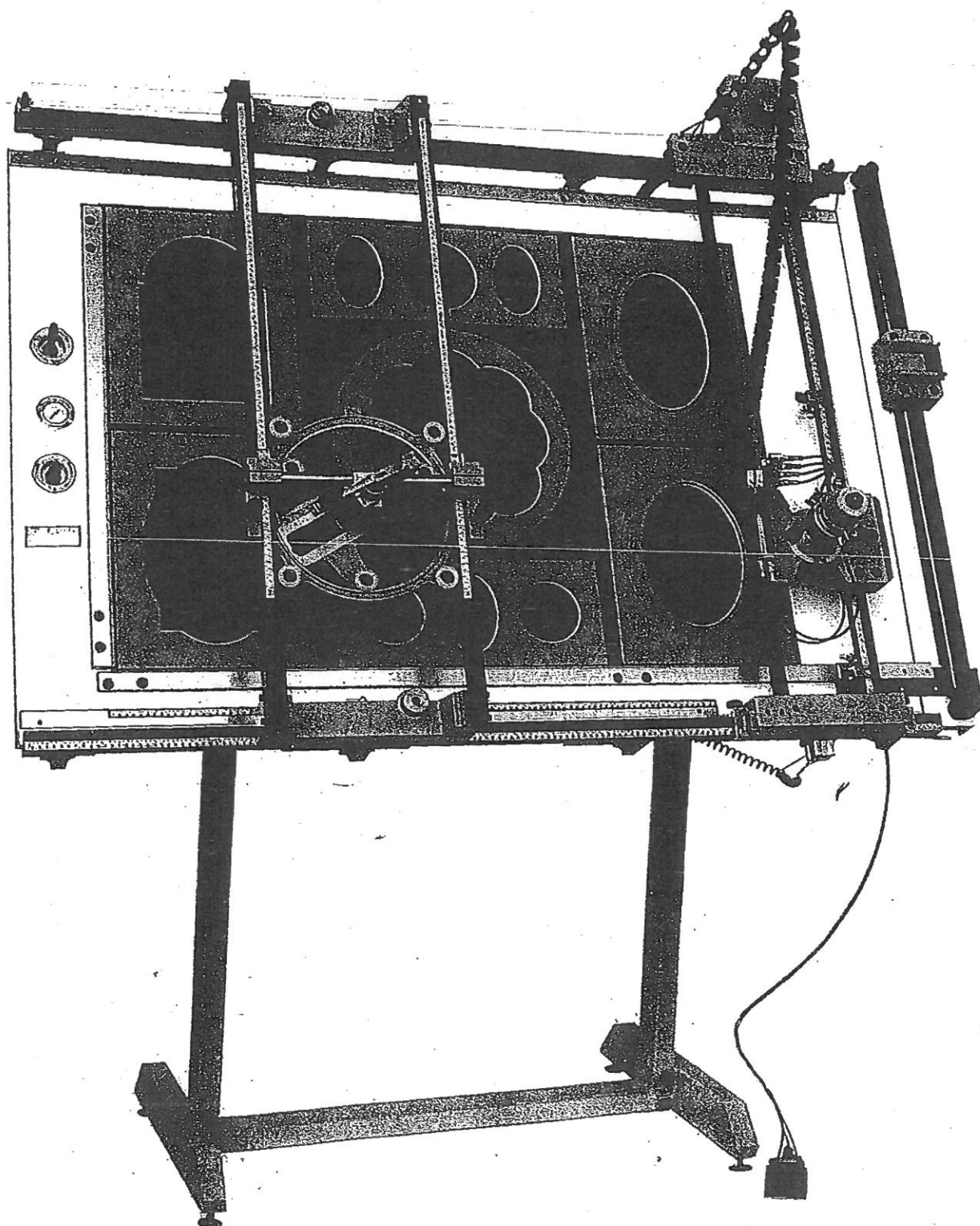
50052 CERTALDO (FI) - ITALY - Via delle Regioni, 305/307/309 - Tel. 0571/666598 - Telefax 0571/663454





VALIANI COSTRUZIONI MECCANICHE
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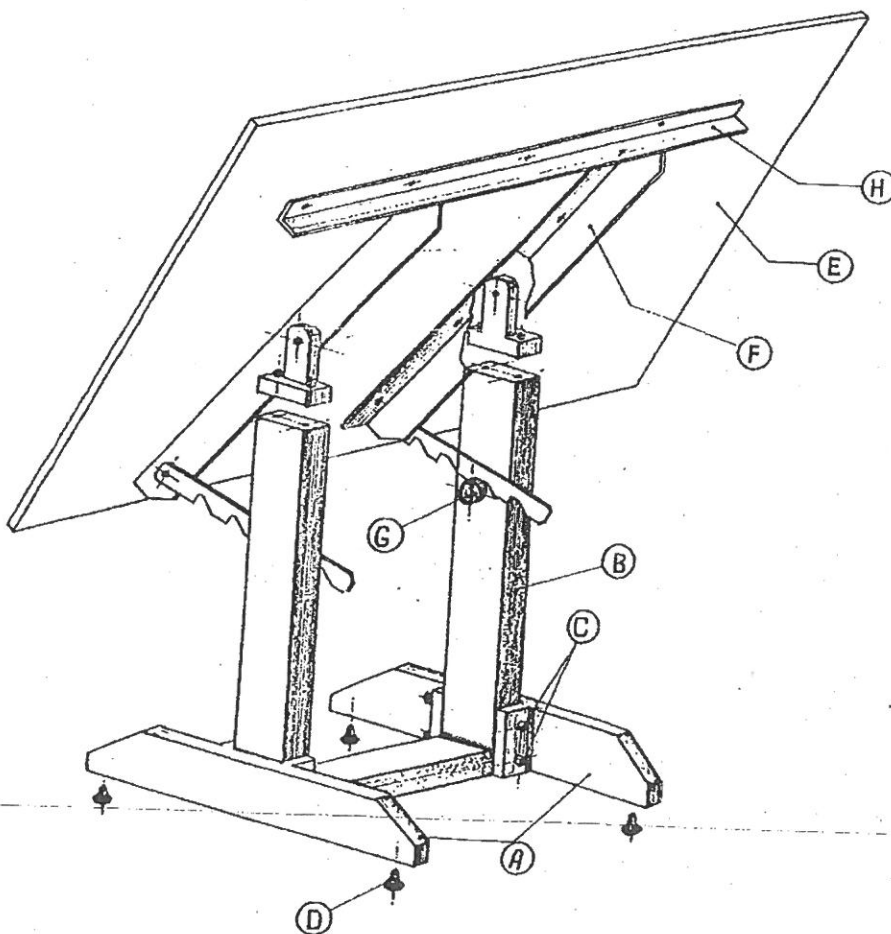
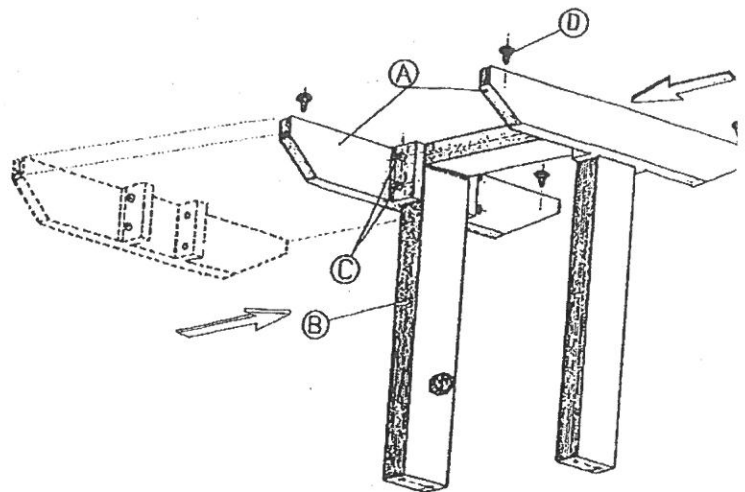
CUTTERMATEC SPECIAL



VALIANI Cutter-Matic Special

ASSEMBLE THE BASE:

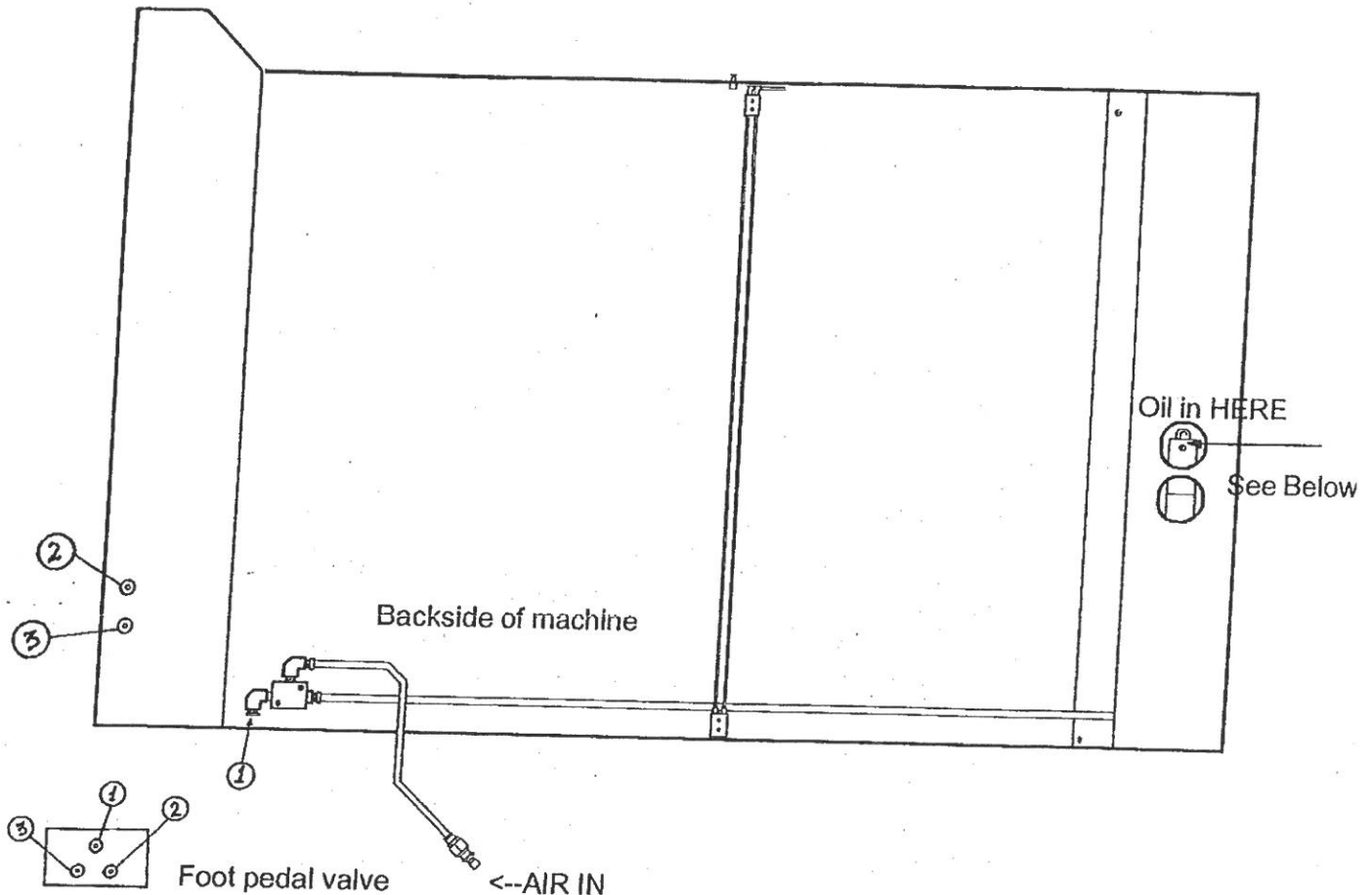
1. Locate all components for the base, and stand the central group (B) upside down.
2. Fasten both outside leg assemblies (A) to the outer edges of the vertical legs with the (4) bolts provided.
3. Screw in the levelling feet while upside down.



3. After installing the legs, flip the assembly over and install both table supports (F) to the top of the central columns using the supplied bolts.
4. Position the toothed legs of the table supports into the locking bolt (G) so that the support arms (F) are at the angle you want, before fastening the table.
5. With enough help from other people, place the cutter table assembly (E) onto the support arms (F) so that the support angle (H) holds the table onto the support arms. Center the table with the support arms, and fasten the table to the base with the proper screws.

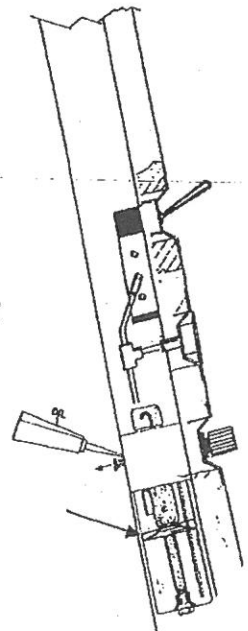
CONNECTING FOOT PEDAL TO THE CUTTER:

Insert the (3) air lines supplied directly into the fittings on the backside of the cutter table. Look for the air block to find the fittings. Simply push the air lines from the foot pedal into the color-coded fittings on the machine, then pull back to be sure they won't come out. The main air supply line has a quick-connect nipple attached. It may not fit your coupler. If necessary, replace it with a female nipple to fit your connectors.

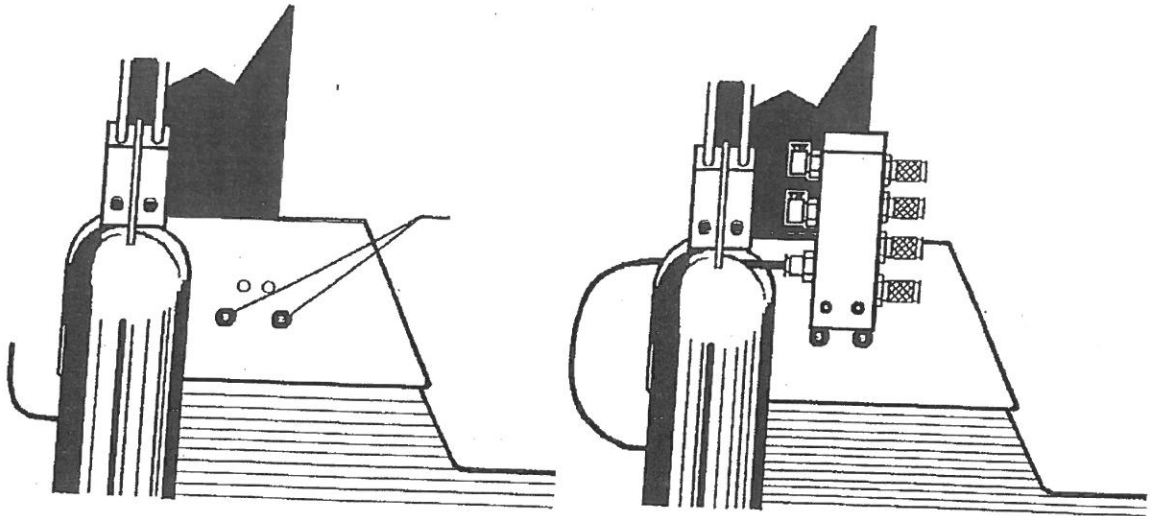


ADD OIL:

It is imperative that you fill the automatic oiler on the backside of the machine right behind the regulator and gauge. A small bottle of sewing machine oil is supplied for this purpose. Snip a small amount of the long tip off, remove the brass screw visible through the top hole in the back plate, and insert the tip into the resulting hole. Fill with oil to the red line on the plastic bowl of the oiler. There will be oil left over for future fill ups. Check the oiler bowl each month. Refill as necessary. **DO NOT OVERFILL.** This machine requires a small amount of oil to reach the o-rings and lip seals of the pneumatic head on a regular basis to ensure ease of use.

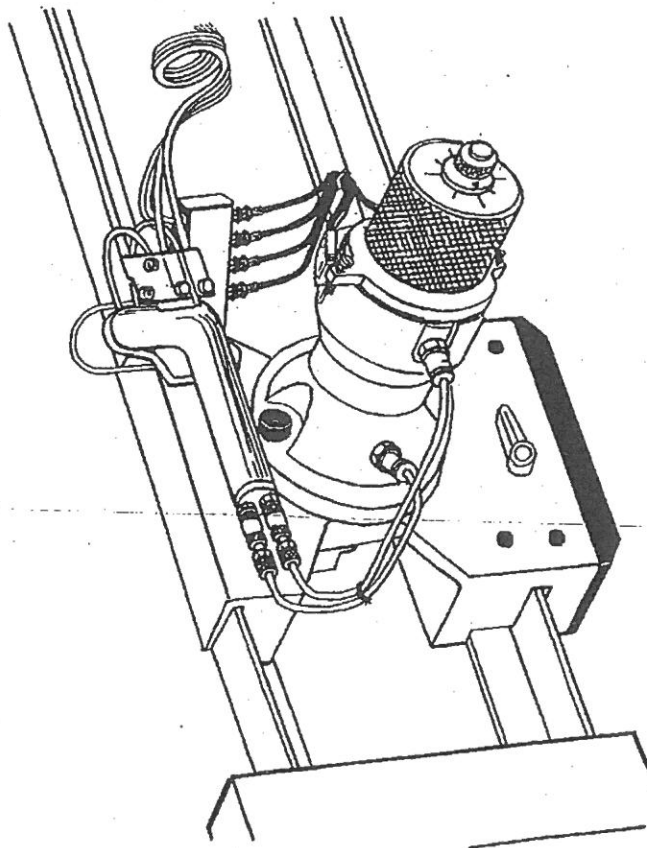


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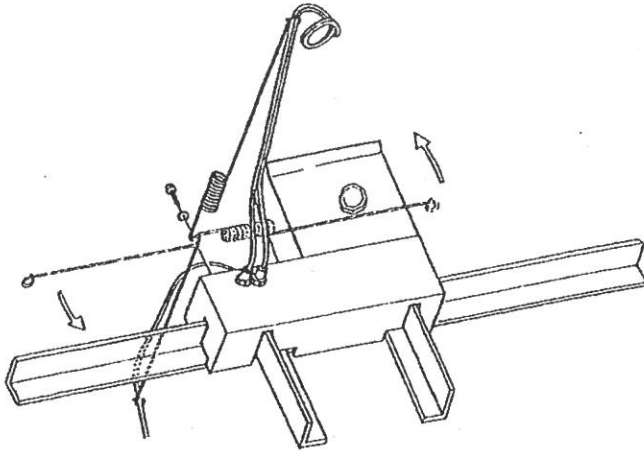


Mount the handle (inside the box with the cutter head) to the carriage with the (2) screws provided. Be sure to **TIGHTEN THEM** before mounting the air block. The air block will partially cover the handle screws. Use the (2) smaller allen screws to mount the air block, onto the handle bracket.

Connect the loose air line that is sticking out to the left of the handle to the straight air fitting on the air block left side. Connect the (2) empty air lines on the coil, to the open ports on the top of the push button block. It doesn't matter which one goes where, since they are both just air pressure supplies. The other (2) air lines on the coil go to the air block to supply air pressure to the Auto Lock components.



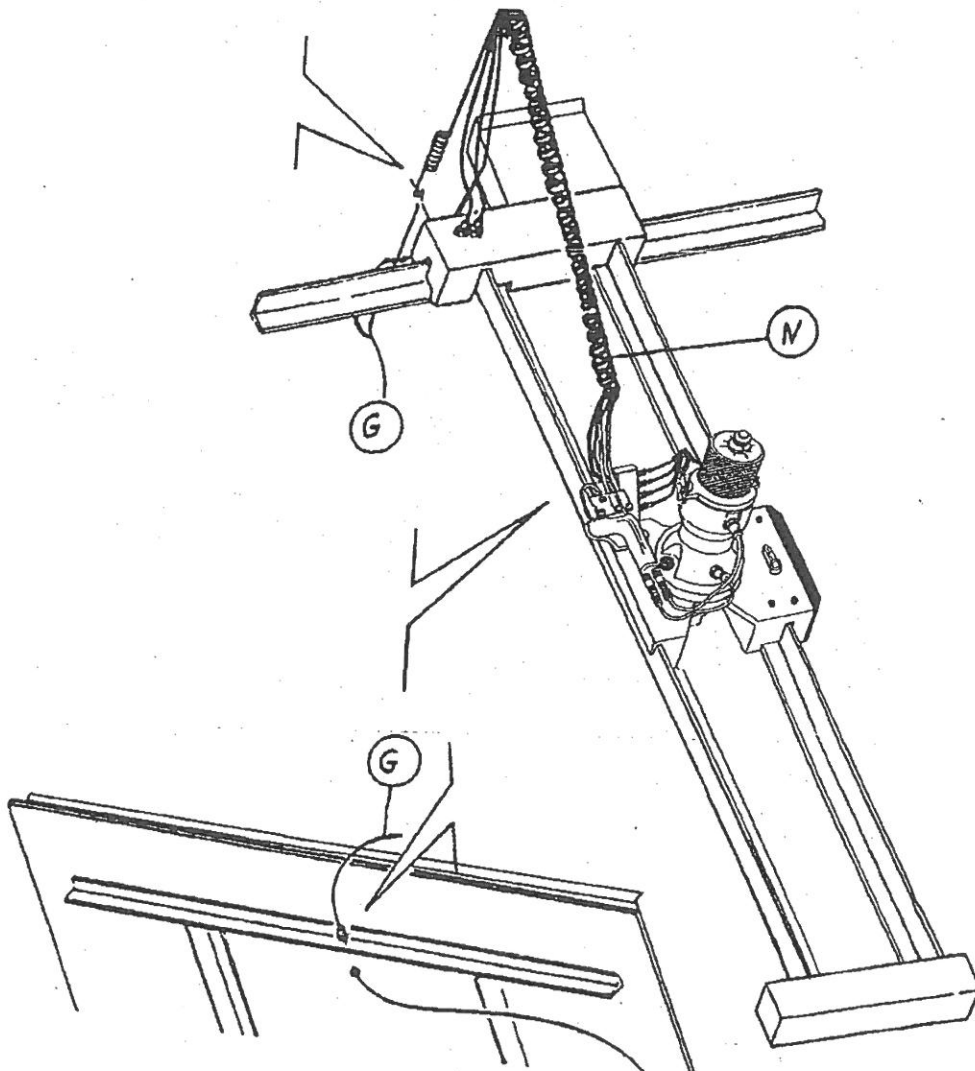
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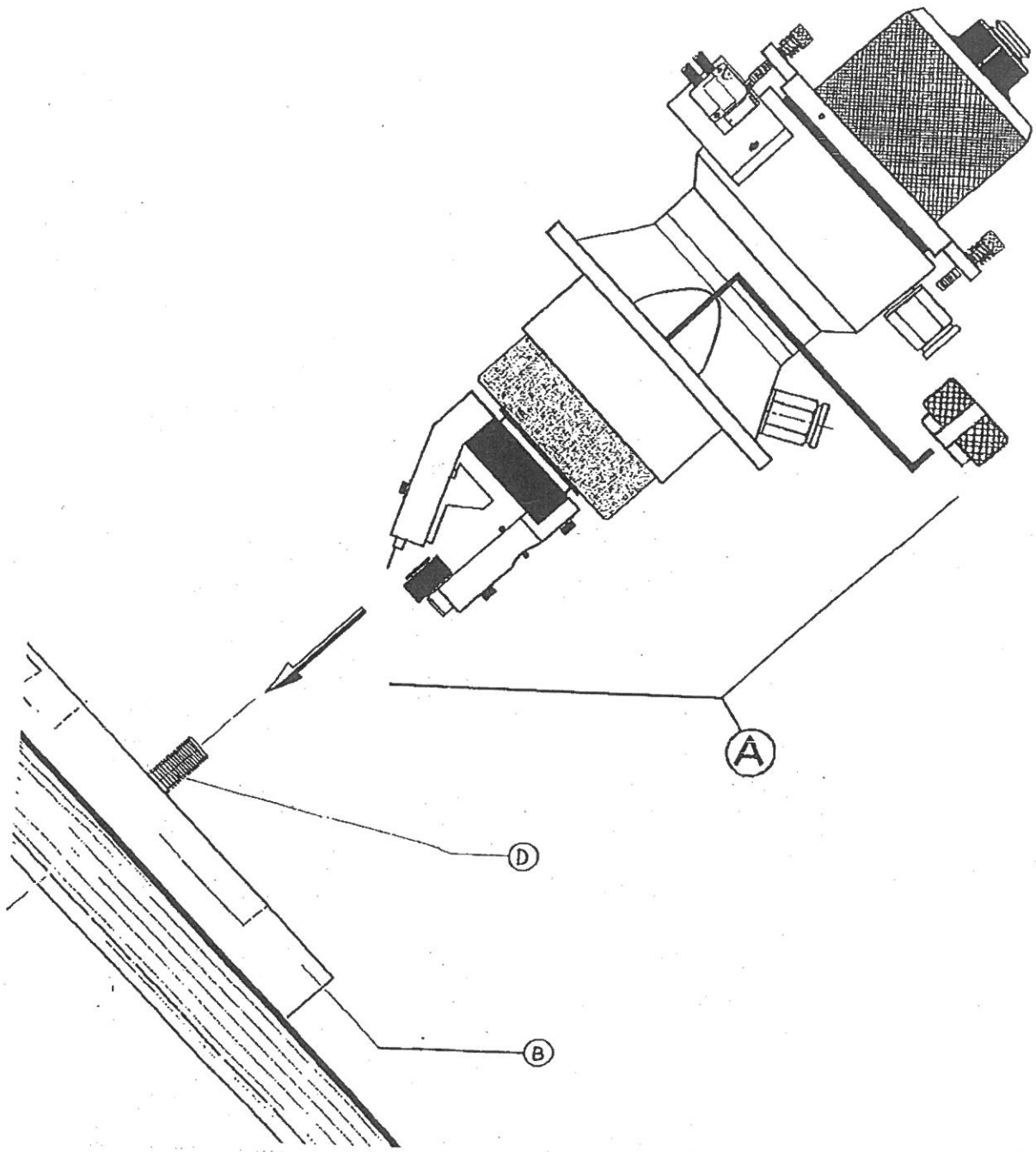
Fasten the air lines and spring holder at the top of the carriage, and lock it into place using the allen screw provided.

Then fasten the air lines in back of the board and on the front of the carriage top as shown.

Finish attaching the air lines at the handle, by matching colors on the fittings and hoses.



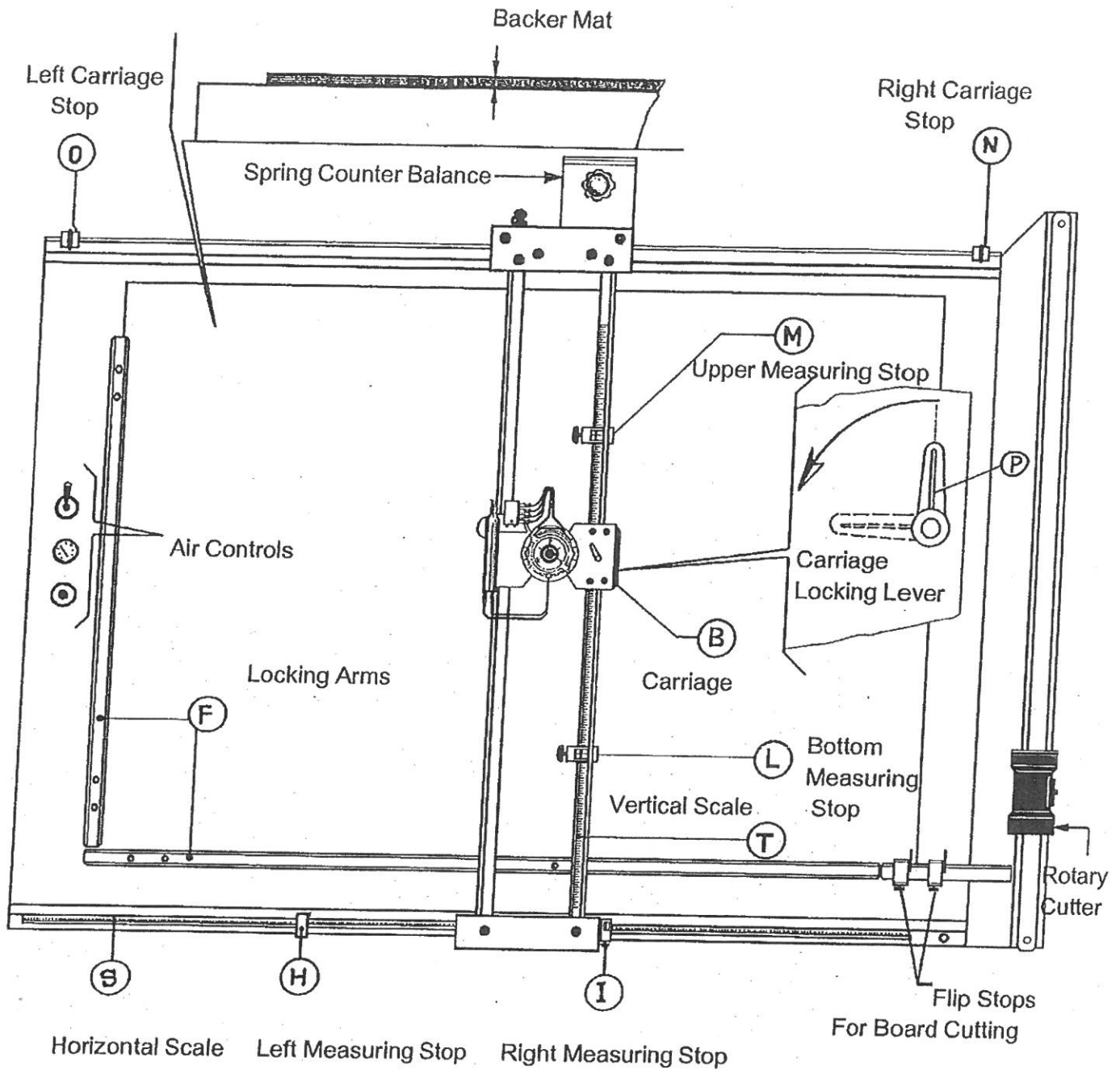
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INSTALL HEAD INTO CARRIAGE:

To insert the blade holder group A in its seat of the carriage, remove the locking thumbwheels, and position the pneumatic head with the two air switches at the top, over the two retaining pins. Slip the head assembly into the carriage, and secure with the two thumbwheels. Connect all air lines by simply pushing them into the color coded connectors. To release the air lines, pull back on the connector sleeves.

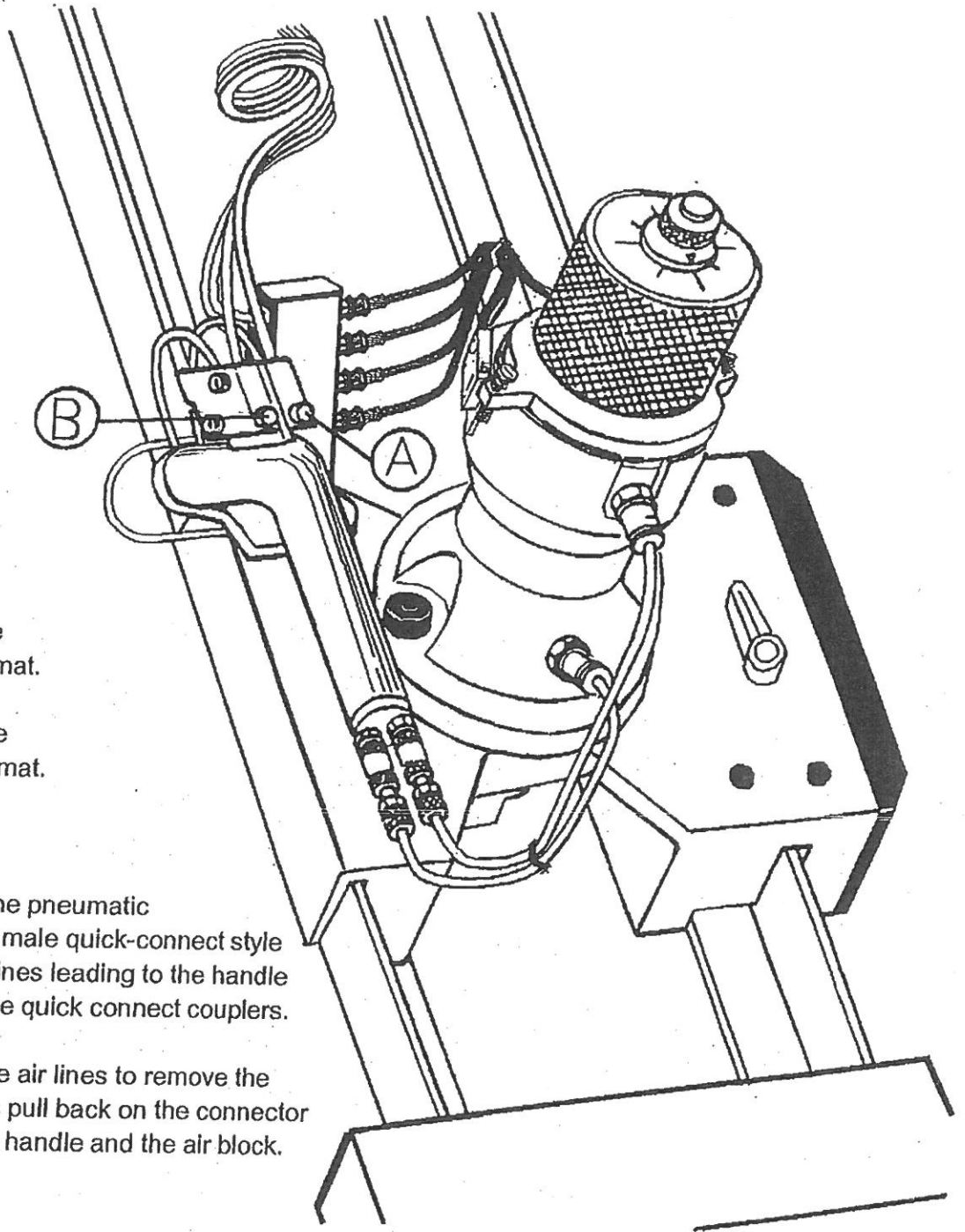
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NOTE: Before removing the head from the carriage, always lock the carriage from moving vertically, by using the Carriage Locking Lever. The weight of the head is balanced with the spring counter weight and the sudden removal of the head's weight will allow the carriage to move very quickly upward!

The board is equipped with (2) carriage stops. Shown as 'O' and 'N' above. These are used to keep the carriage and rails from sliding off either end of the board. When cutting very large mat openings, they can also be used as outward top stops for the carriage travel.

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Button "A" inserts the
cutter blade into the mat.

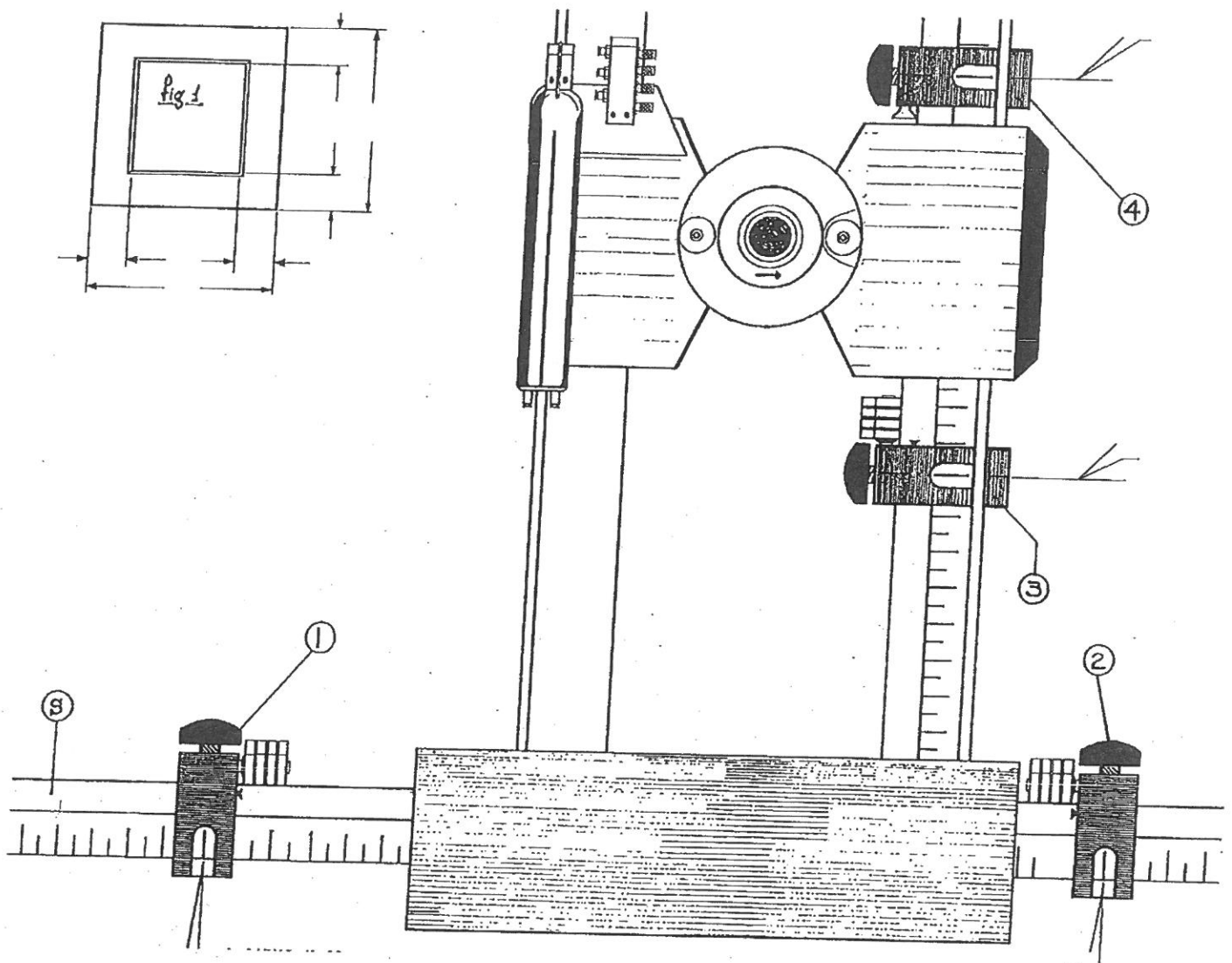
Button "B" retracts the
cutter blade from the mat.

NOTE: All fittings on the pneumatic
head assembly will be male quick-connect style
while the pressurized lines leading to the handle
and air block are female quick connect couplers.

When disconnecting the air lines to remove the
head assembly, always pull back on the connector
sleeves attached to the handle and the air block.

NOTE:
Since these are quick-connect couplers, no air will leak
when disconnecting these lines.

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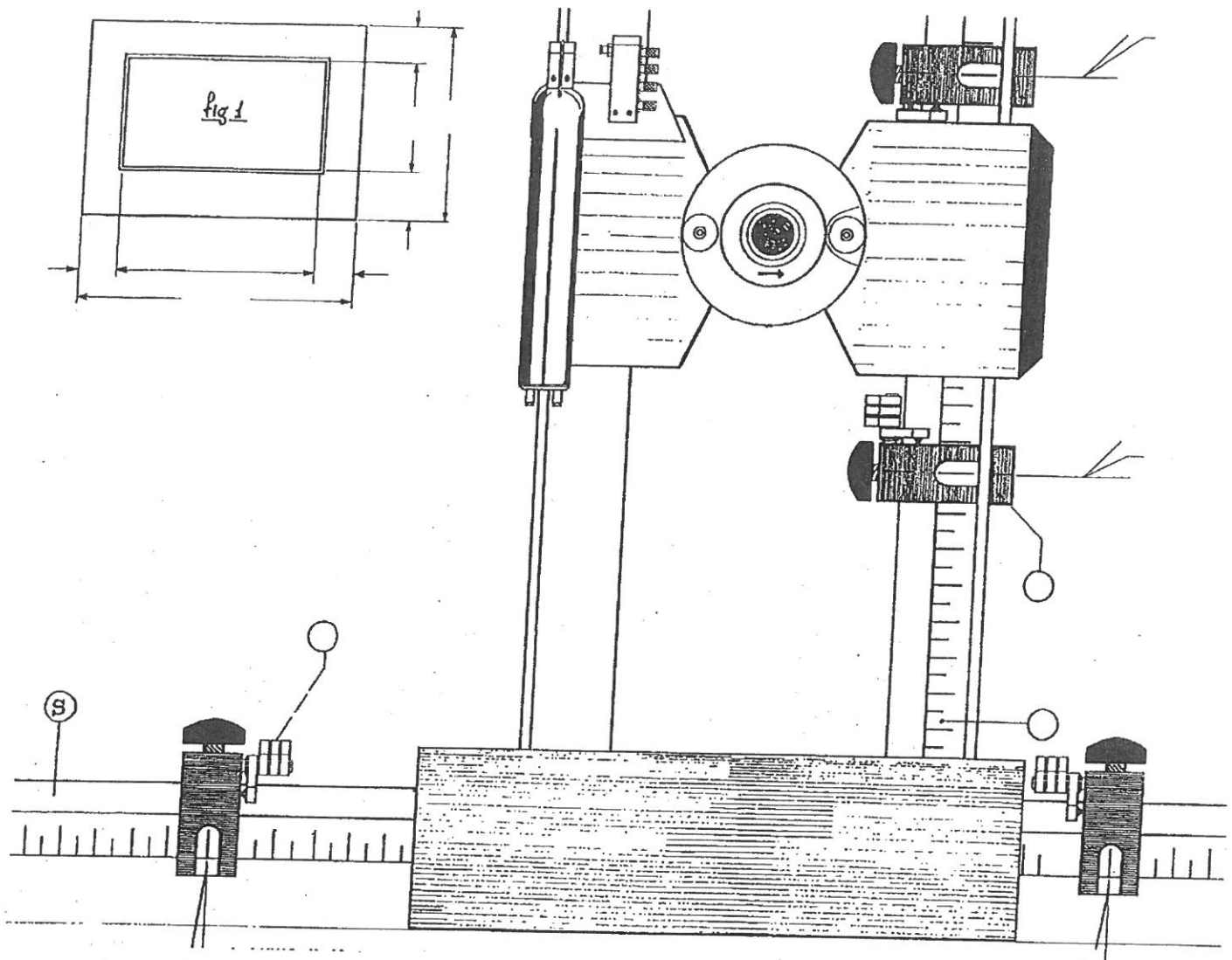


When cutting a mat with even borders, as shown in fig. 1 above, set the stops as follows:
The mat outside dimension is 20" x 20" and the borders are 3" on all sides.

- | | |
|-----------------------------|---|
| 1) Left Horizontal Stop ... | Set at 3" |
| 2) Right Horizontal Stop .. | Set at 17" (20" - 3" = 17") Horizontal Dimension (-) border |
| 3) Bottom Vertical Stop ... | Set at 3" |
| 4) Top Vertical Stop | Set at 17" (20" - 3" = 17") Vertical Dimension (-) border |

All flip stops should be pushed back out of the way when cutting the first mat opening or v-groove.
Each successive opening can be accomplished by flipping one or more of the stops forward to intersect with the carriage.

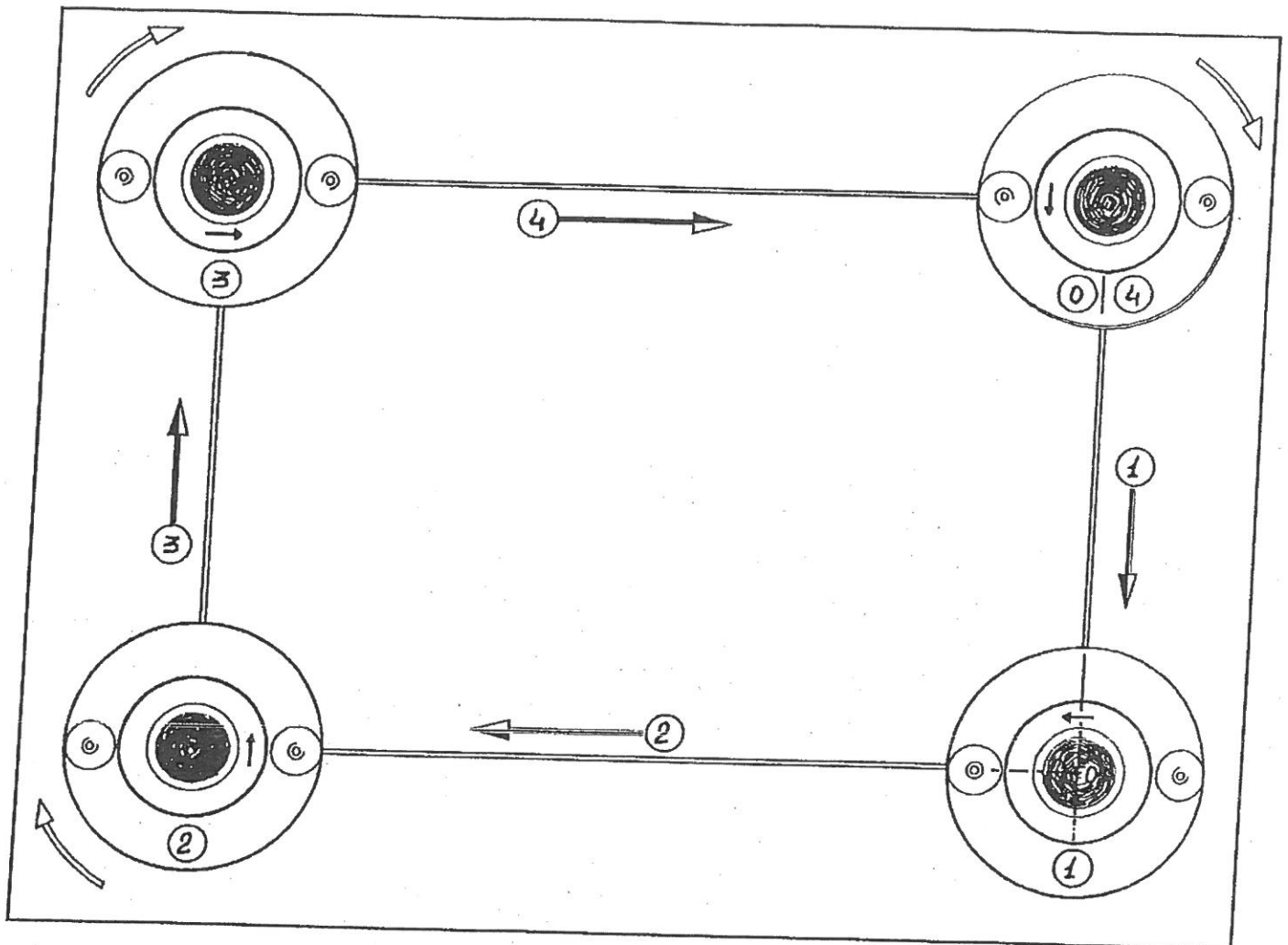
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When cutting a mat with uneven borders, as shown in fig. 1 above, set the stops as follows:
The mat outside dimension is 16" x 20" and the borders are 3" on top and sides, and 3.5" on the bottom.

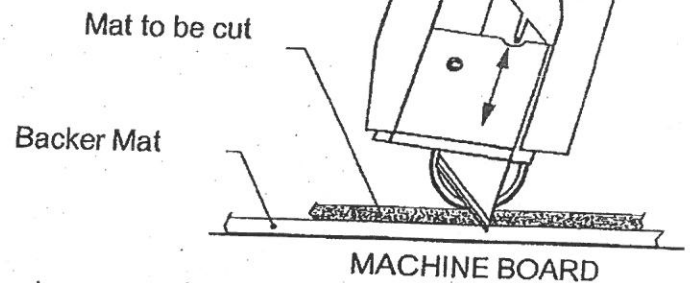
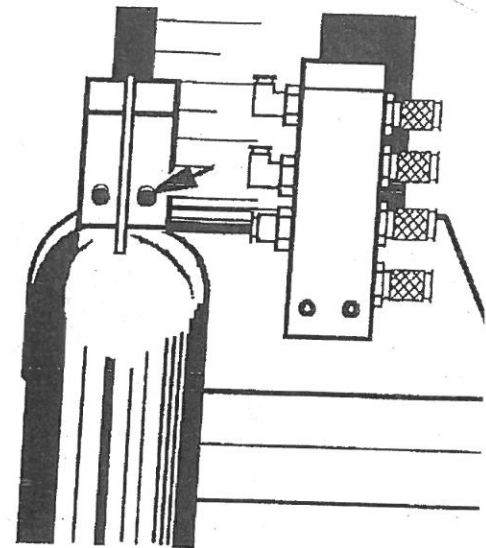
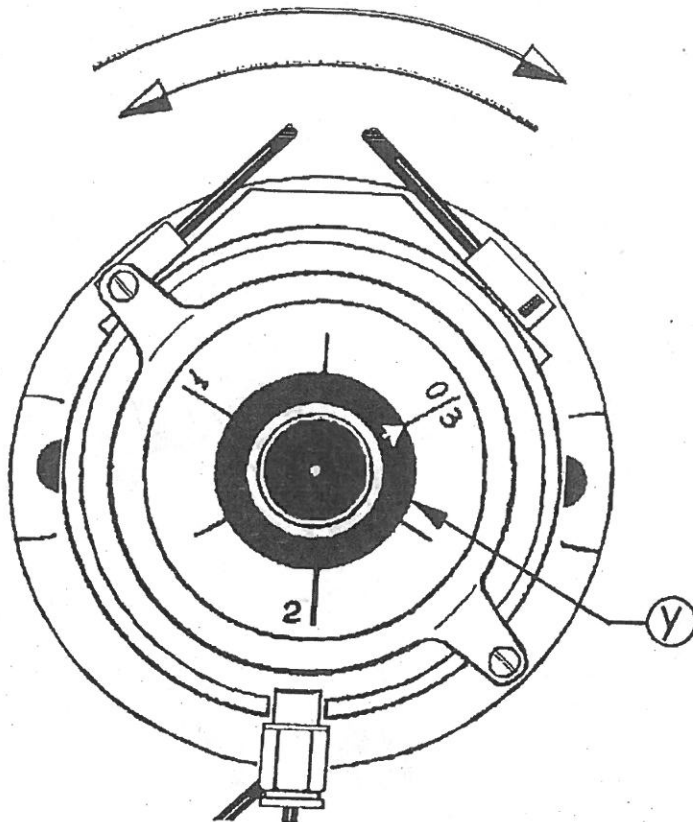
- | | |
|-----------------------------|---|
| 1) Left Horizontal Stop ... | Set at 3" |
| 2) Right Horizontal Stop .. | Set at 17" (20" - 3" = 17") Horizontal Dimension (-) border |
| 3) Bottom Vertical Stop ... | Set at 3.5" |
| 4) Top Vertical Stop | Set at 13" (16" - 3" = 13") Vertical Dimension (-) border |

All flip stops should be pushed back out of the way when cutting the first mat opening or v-groove.
Each successive opening can be accomplished by flipping one or more of the stops forward to intersect with the carriage.



SEQUENCE FOR CUTTING:

It is recommended (but not necessary) to start in the upper right corner of the mat to be cut. This is especially helpful on large mats, since the full board is stronger in that corner, than after it is cut. Following the above illustrated sequence, working clockwise for mat openings, and counter-clockwise for v-grooves or when cutting from the backside of the mat.

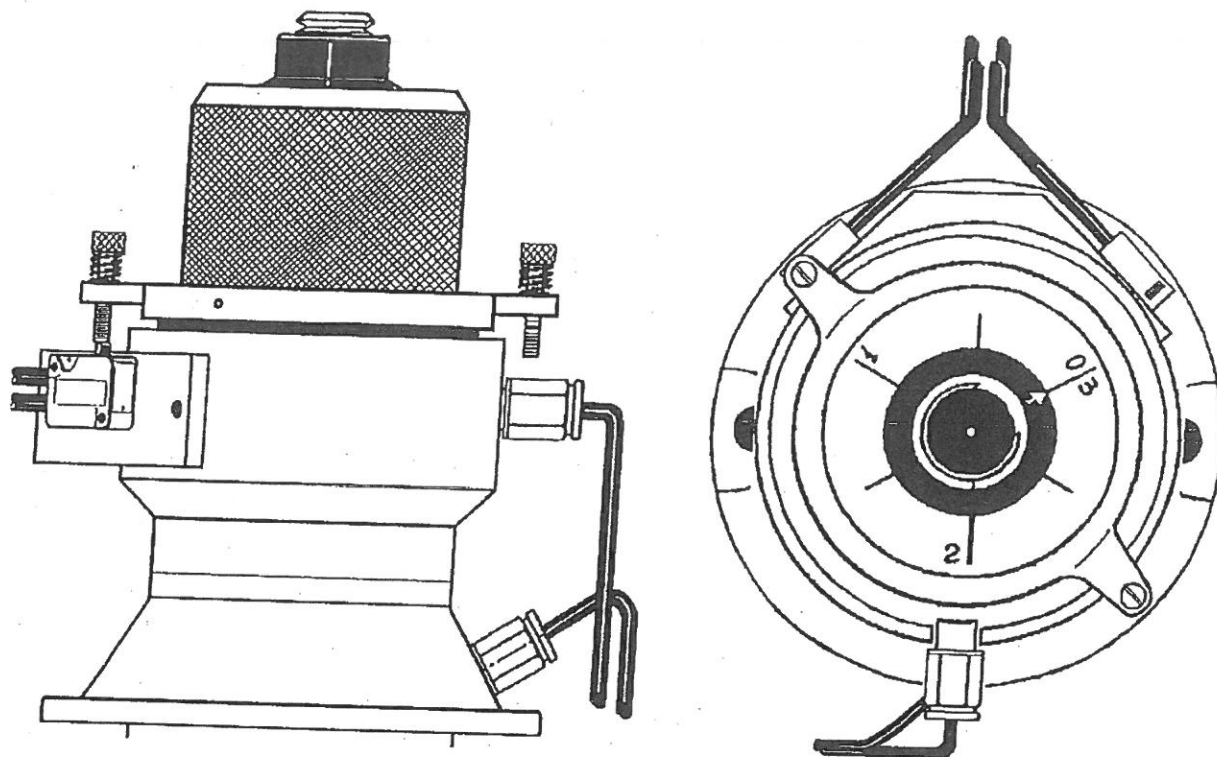


SETTING BLADE DEPTH:

To set the blade depth for the thickness of mat being used, follow these steps:

1. Place a piece of the matboard, on top of the backer mat in the machine and lock it down.
2. Loosen the bottom right stop to allow the carriage to move to the right... enough so that the blade can completely miss the matboard on top, but the wheel will not.
3. Rotate the head so the red cutting arrow is pointing down.
4. Position the head so that the wheel will ride on the edge of the top mat, while the cutter blade can touch the bottom protective board.
5. Press the right air button (A) and move the head down the carriage...checking to see if the blade cuts into the bottom board.
6. If the blade does *not* touch the bottom board, turn the adjusting knob (Y) to the left a quarter turn at a time while repeating the step #5, until the blade cuts into the bottom board slightly.
7. If the blade cuts into the bottom board *too much*, then turn the adjusting knob (Y) to the right a half turn and recheck by repeating step #5.

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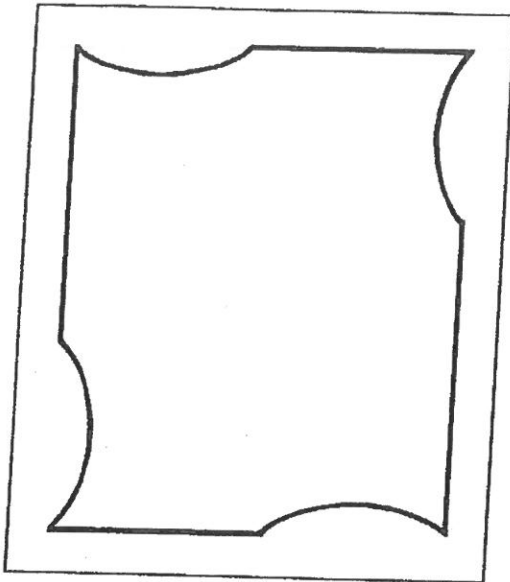
ADJUSTING AUTO-LOCK SWITCH-SCREWS:

The (2) spring-loaded knurled screws mounted to the rotating head, are used to indicate the direction of the cutter knife. When the head is positioned to move left or right, one of the screws will engage a micro air switch mounted on the fixed base of the head, to lock the *vertical* movement of the carriage. When the head is positioned to move up or down, one of the screws will engage the other micro air switch and lock the *horizontal* movement of the carriage.

To adjust the proper height of *both* screws, insert a piece of matboard into the machine, on top of the backer mat sheet. Move the carriage so that the head is in the center of the top mat piece. Rotate the head from the neutral position to either cutting position. Observe the adjusting screw as it pushes down on the button of the micro switch. Turn the screw counter-clockwise to raise the button or clockwise to lower the button position in the switch.

The correct position is for the button to be lowered slightly less than full down. It should not be bottomed out, but it should still have a little travel left. Rotate the head again and adjust the other screw to this depth as well. If the screw is adjusted too far down and the button is bottomed out, it will create a false position for the knife head, and can cause strange cuts. One clue will be hooks or over/under cuts that do not show up at each corner. When a problem cut is seen in one or two locations on the mat, but not consistent in each direction, check these screws. Likewise, if the buttons are not depressed, the switch is not activated, and you will have no auto-lock feature. The carriage will drift while cutting if the operator doesn't hold the head against the stops.

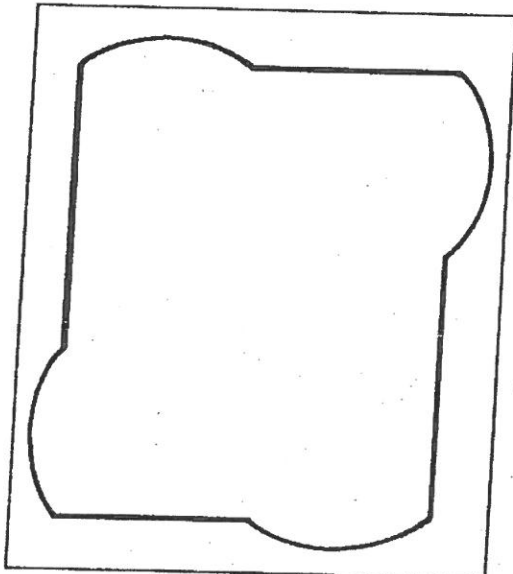
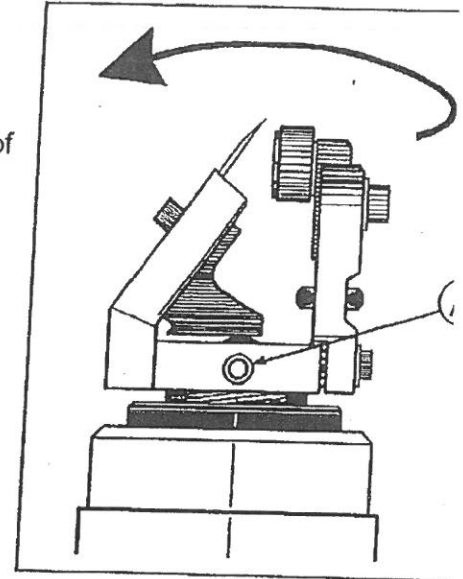
MOST COMMON CUTTER ADJUSTMENTS AN OPERATOR WILL MAKE



1. HOOKS INWARD

Loosen set screw (A) at bottom of the head and turn the lower section to the LEFT a very small amount.

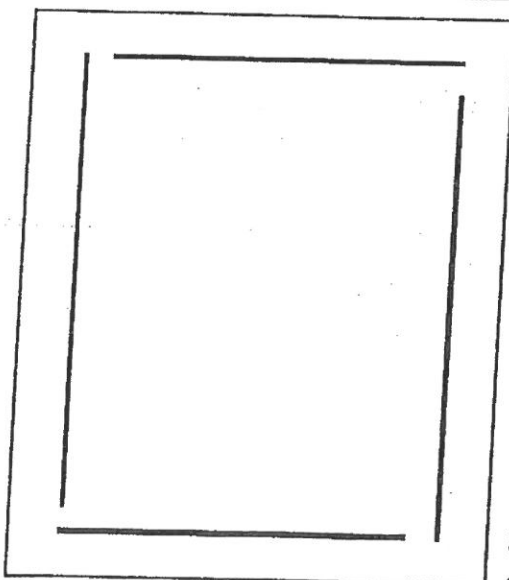
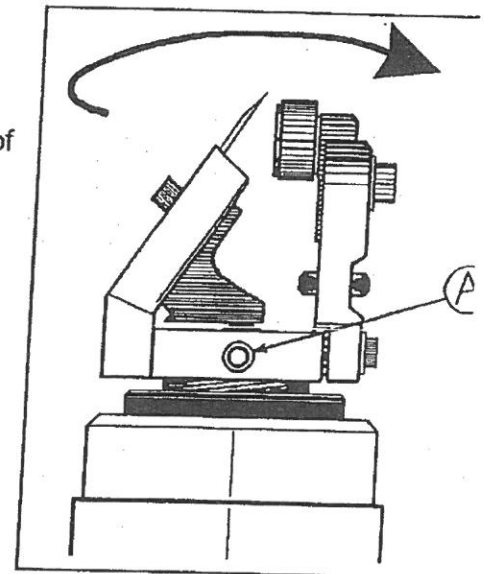
Retighten screw (A) and try cutting again.



2. HOOKS OUTWARD

Loosen set screw (A) at bottom of the head and turn the lower section to the RIGHT a very small amount.

Retighten screw (A) and try cutting again.

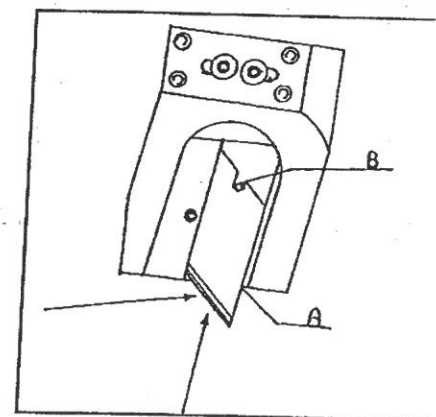


3. UNDERCUTS AT START

1) Blade has been installed wrong, or head has been run in reverse direction.

2) Check blade position in the holder or install a new blade correctly. Be sure the slot of the blade is in the "B" pin, and be sure that the blade is tight against point "A" shoulder as shown on the right.

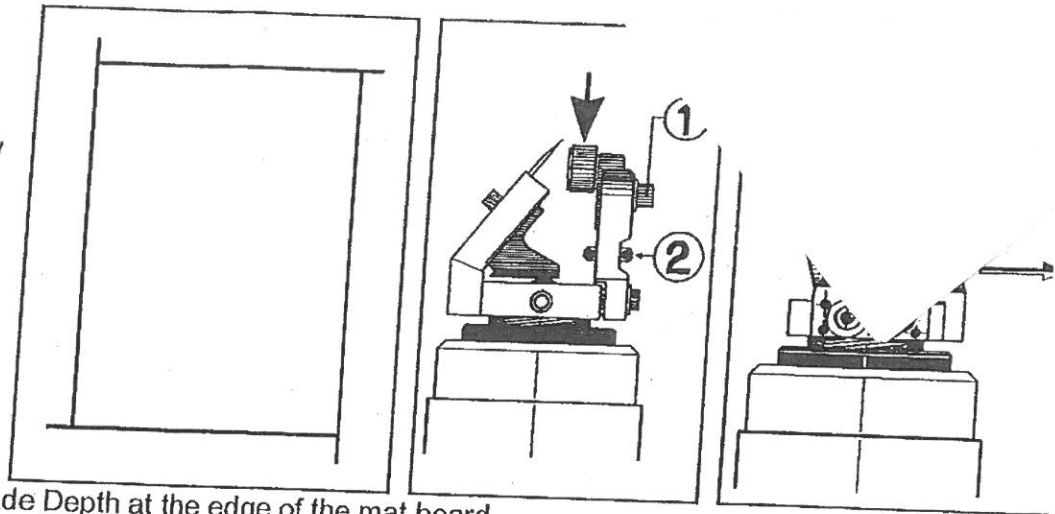
3) *OVER ADJUSTMENT* to correct hooks as shown in items 1 & 2 above, can *sometimes* cause this problem. Look **CLOSELY** at the complete cuts. Going **TOO** far can make the starting point change.



4. OVERCUTS AT THE END

- (1) Loosen the set screw that holds the wheel height adjustment.
- (2) Turn the thumbwheel to **RAISE** the rubber wheel slightly..
...**TOWARDS** the head.
(See Arrow direction)
Retighten the screw.

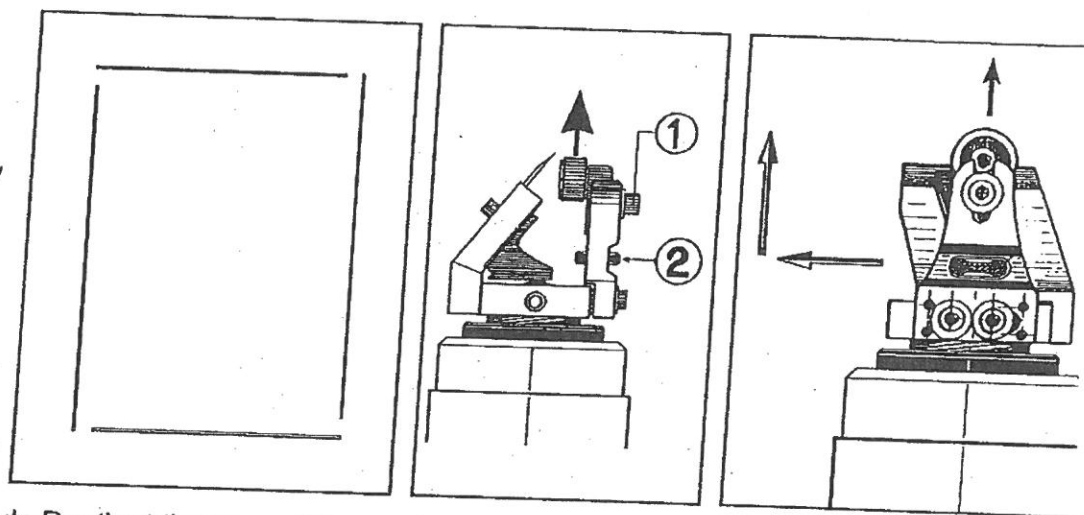
Remember to **RESET** Blade Depth at the edge of the mat board.



5. UNDERCUTS AT THE END

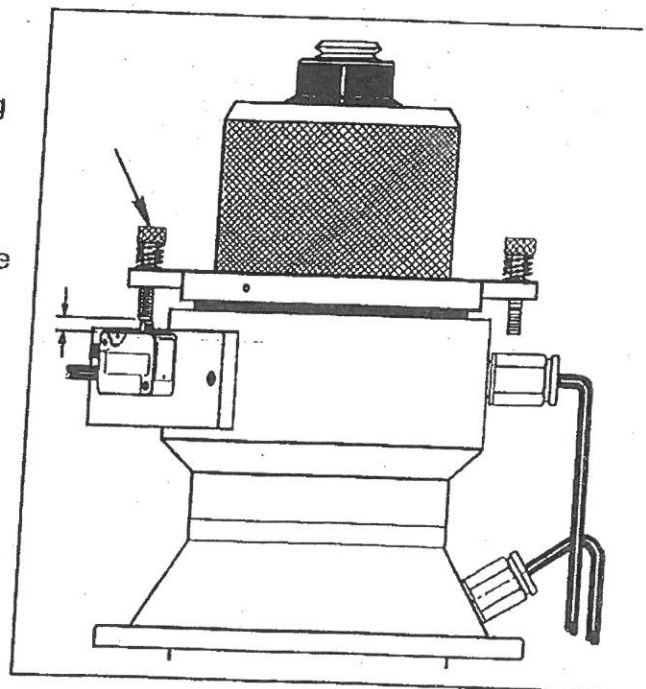
- (1) Loosen the set screw that holds the wheel height adjustment.
- (2) Turn the thumbwheel to **LOWER** the rubber wheel slightly...**AWAY** from the head.
(See Arrow Direction)
Retighten the screw.

Remember to **RESET** Blade Depth at the edge of the mat board.

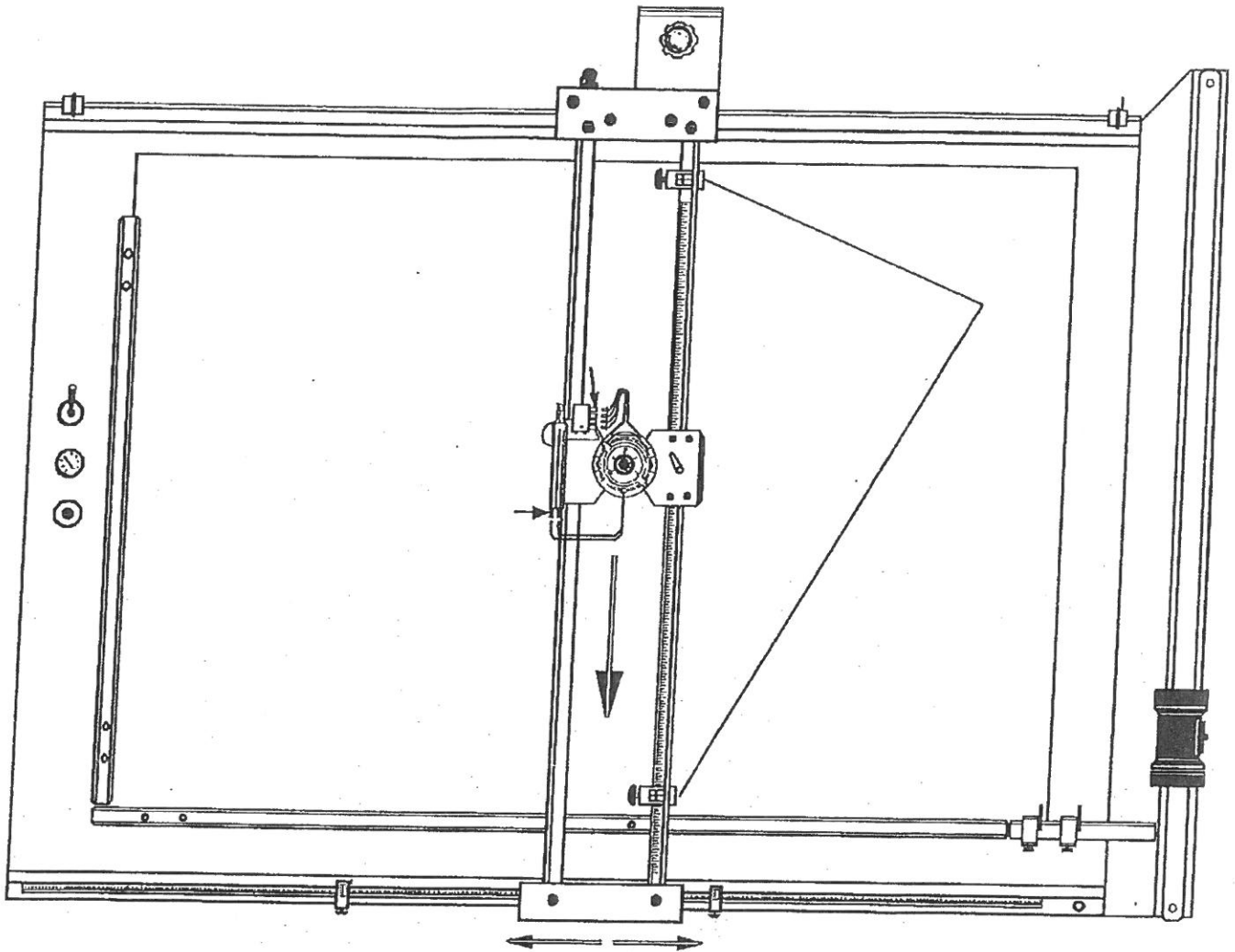


6. NON UNIFORM CUTS

The (2) spring-loaded knurled screws mounted to the rotating head, can be out of adjustment. To adjust the proper height of *both* screws, insert a piece of matboard into the machine, on top of the backer mat. Move the carriage so that the head is in the center of the top mat piece. Rotate the head from the neutral position to either cutting position. Observe the adjusting screw as it pushes down on the button of the air micro switch. Turn the screw counter-clockwise to raise the button or clockwise to lower the button position in the switch. **The correct position is for the button to be lowered slightly less than full down.** It should not be bottomed out. Rotate the head again and adjust the other screw to this depth as well. Check these screws when changing from single to double mats.



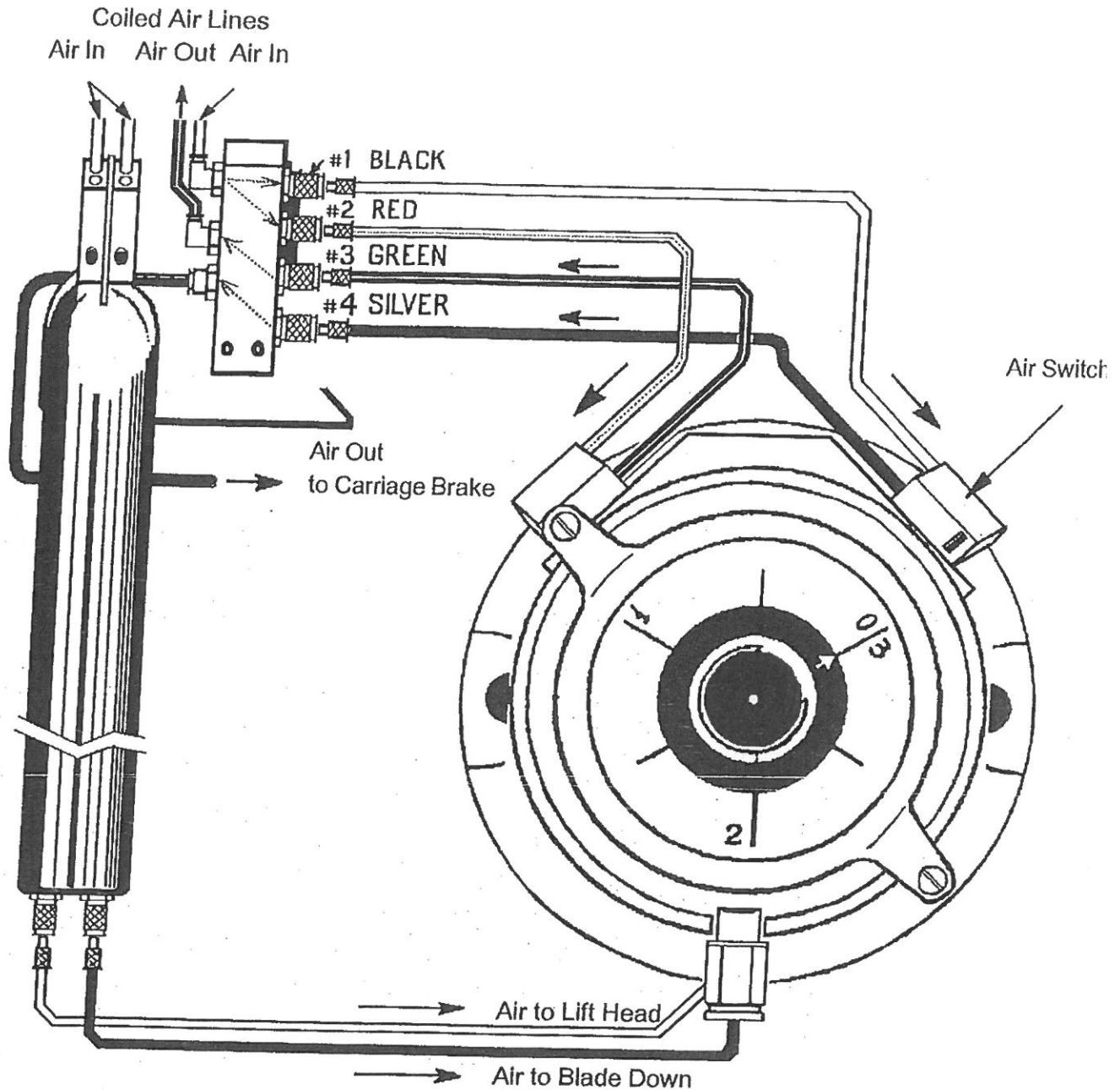
CHECKING FOR THE GUIDE WHEEL ANGLE



NOTE: The adjustment for the wheel angle, should only be made as a last resort, if other adjustments to the cutter head do not produce perfect results. First make sure all rotational adjustments of the lower head have been made to eliminate hooks at each corner. Once these adjustments are made, do the following to check the guide wheel angle.....

- 1) Disconnect the (4) air lines from the top side air manifold, and the (2) air fittings on the handle.
- 2) Raise the upper production stop, and lower the bottom production stop to allow carriage movement.
- 3) Position the head in the down cut mode with the red arrow pointing down, and the wheel resting on the backer mat with spring tension. Be sure the backer mat is clamped onto the back board.
- 4) Raise the head and carriage to the top, and slowly allow the carriage to move down the board. The wheel should be pressing against the backer mat, but the blade is not engaged.
- 5) While the carriage is moving down (with no side stops to hold it) look at the lower scale and check to see if the carriage rails move left or right during the descent.
- 6) If the carriage assembly moves to the right a slight amount this is okay. No adjustment is needed.
- 7) If the carriage assembly moves to the left even a small amount, make the adjustments shown on the next page.

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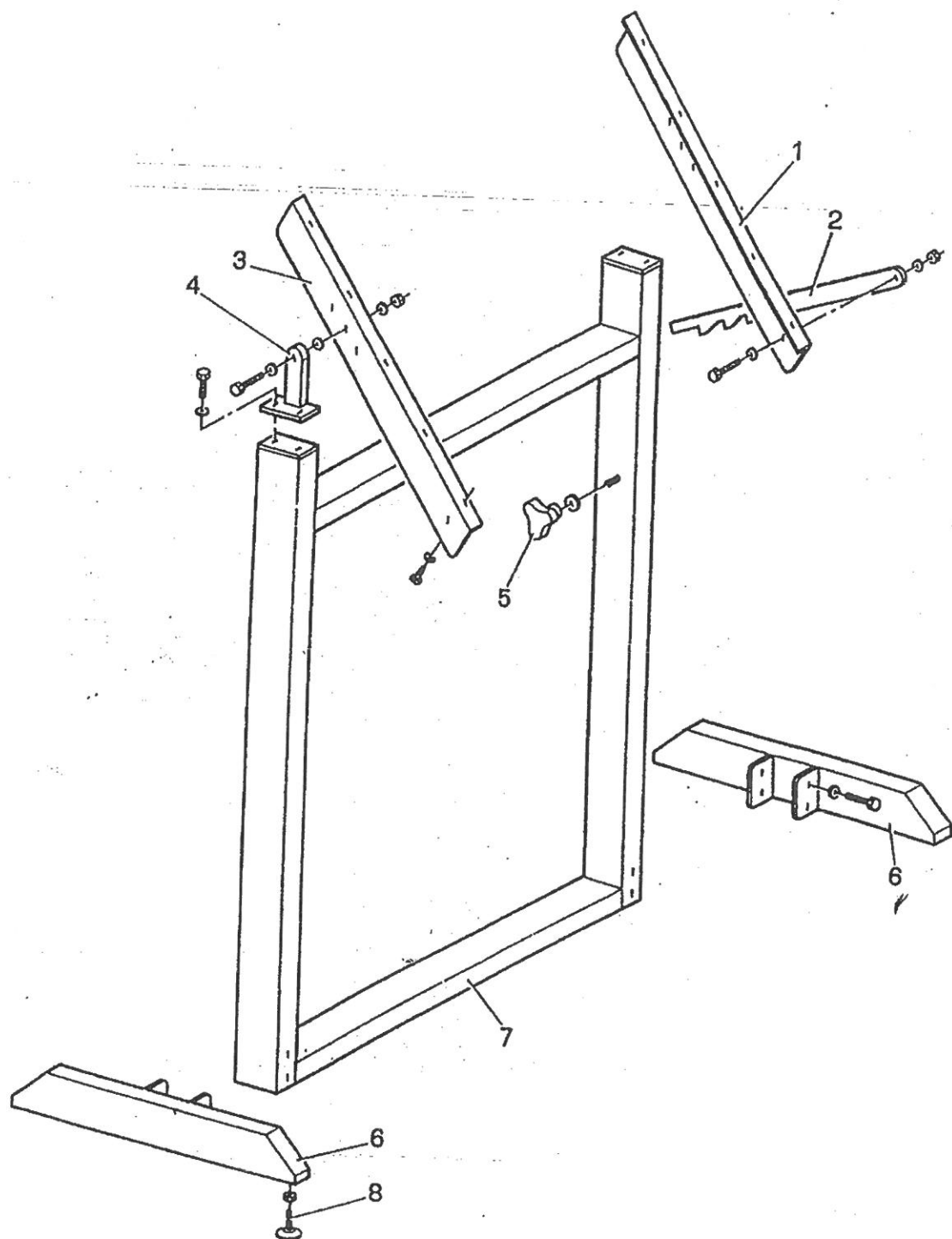


AIR PIPING DIAGRAM TO THE AUTO LOCK SWITCHES.

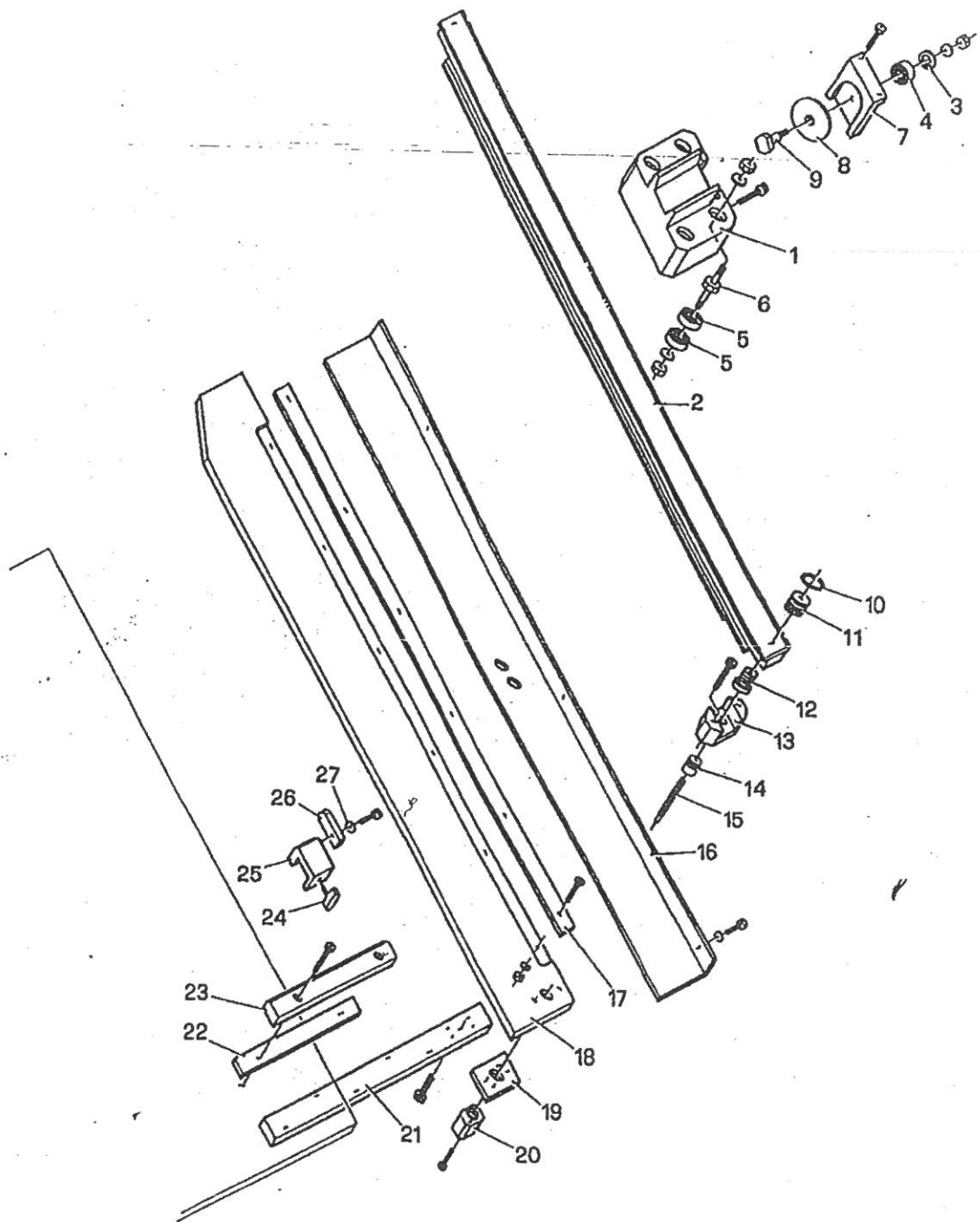
In the event that someone in your company has switched air lines on the auto-lock pneumatic head in an attempt to correct a condition, this diagram shows the correct position for all the small control lines. Also check to see that all color coded air lines on the back side of the board are in the correct fittings.

Fittings on the air manifold labeled #1 (Black) & #2 (Red) are air supplies to the micro air switches. Fitting #3 (Green) is the return signal to the top and bottom brake cylinders of the carriage assembly. Fitting #4 (Silver) is the return signal to the brake cylinder on the right side of the carriage.

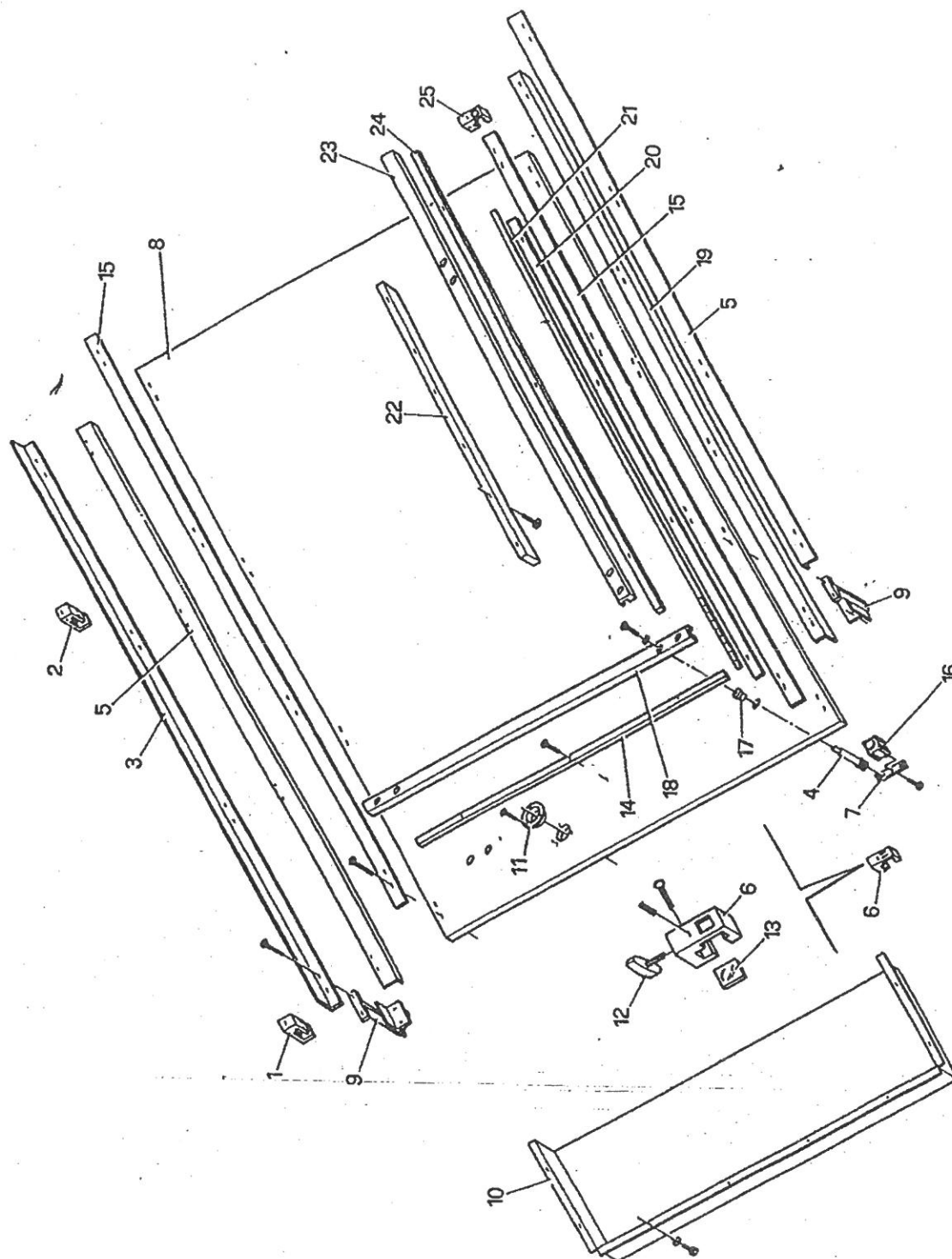
PARTI DI RICAMBIO: BASE



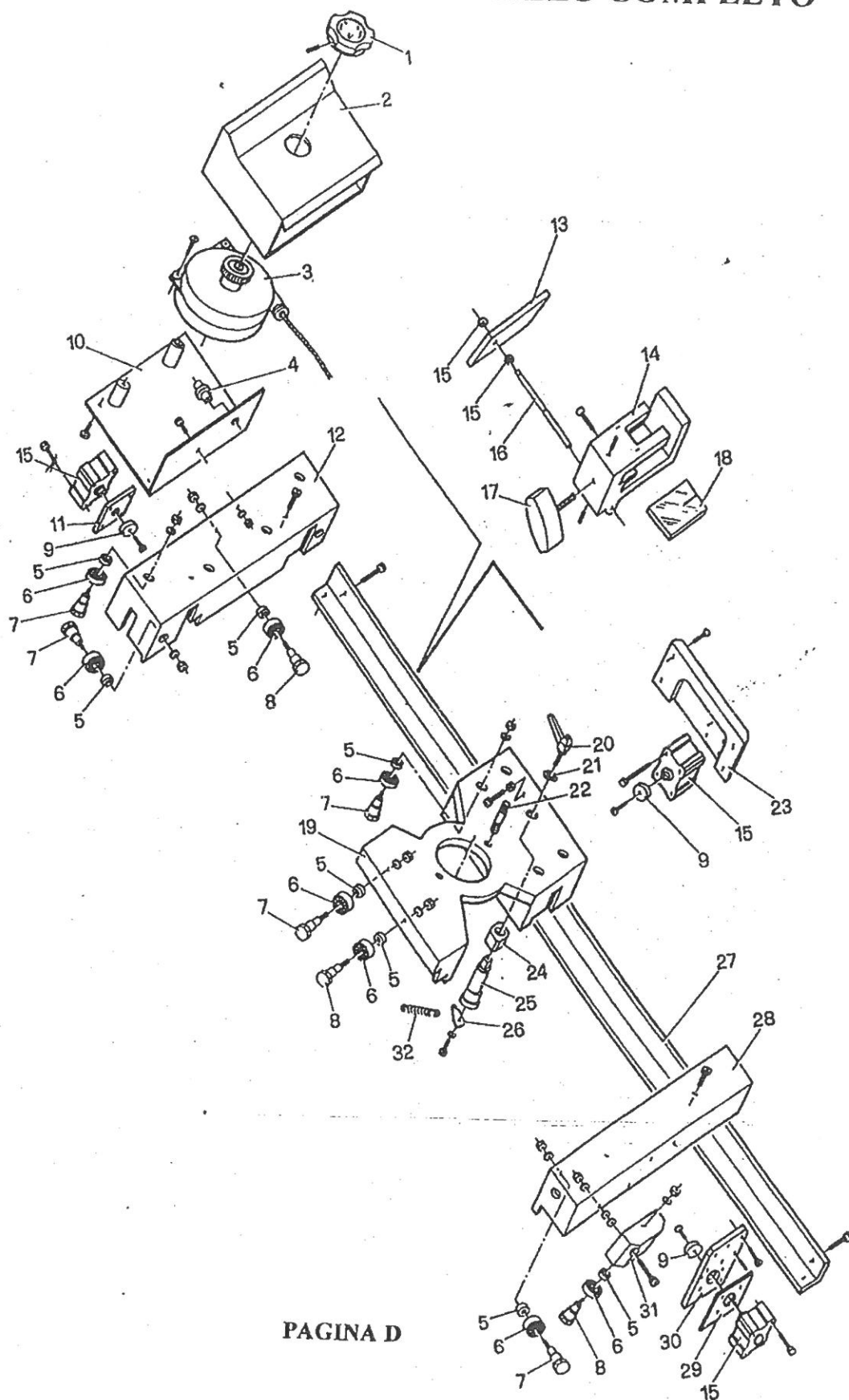
PARTI DI RICAMBIO: SQUADRATRICE



PARTI DI RICAMBIO: TAVOLO



PARTI DI RICAMBIO: CARRELLO COMPLETO



PAGINA D

TESTA AL SCHEMA PN

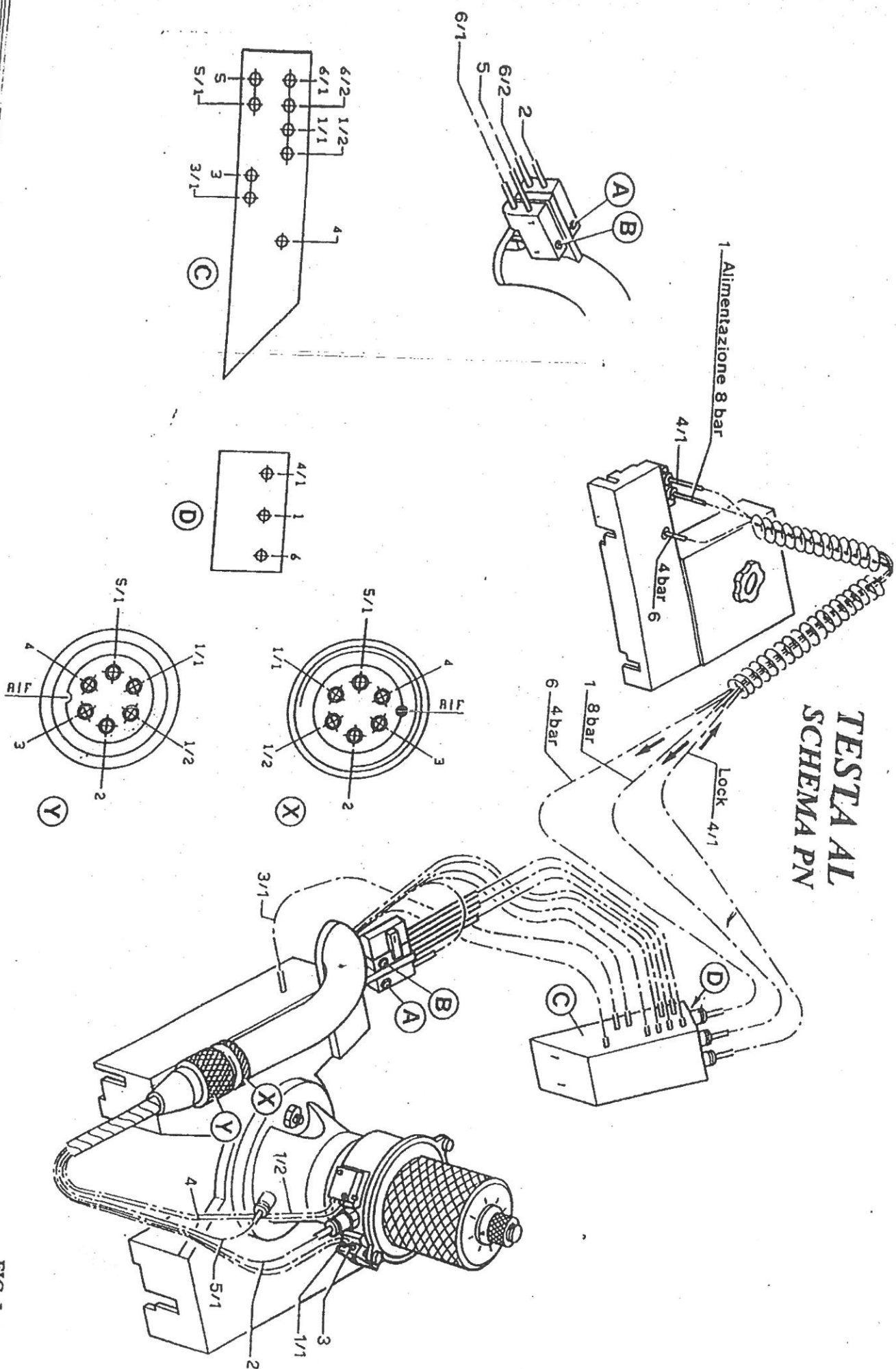


FIG. 1

TESTA AL-AR SCHEMA PN

