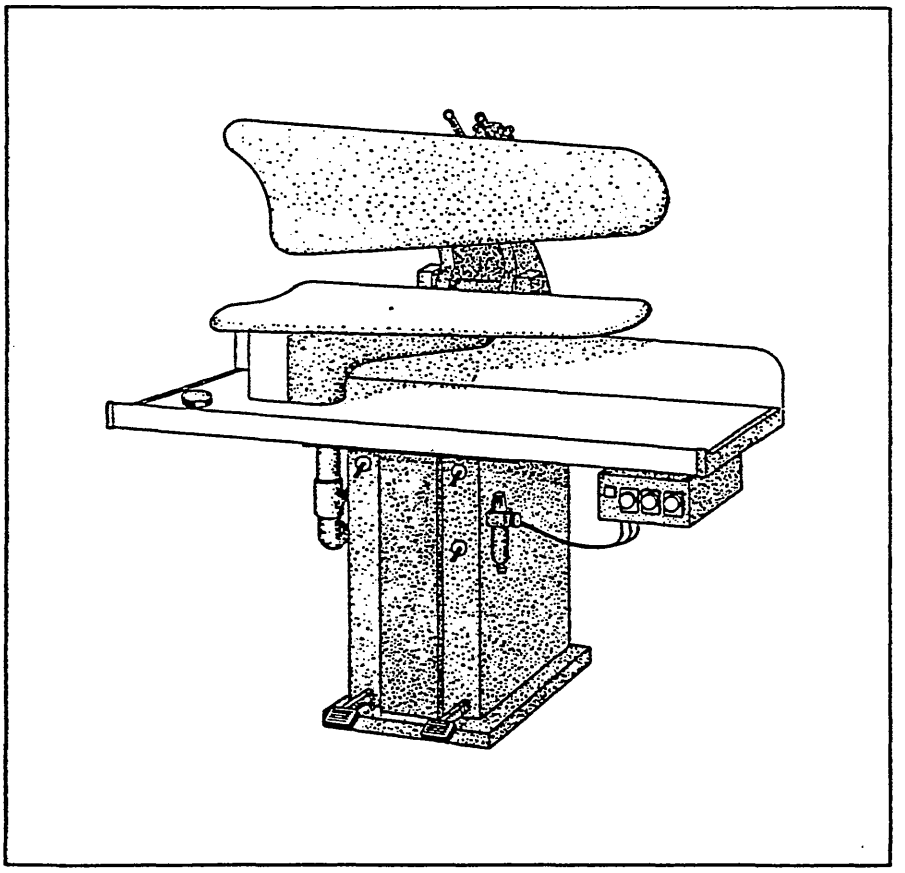
Pantex-Cissell B.V.
Winschoten · Holland

AUTOMATIC PRESSES



Service Manual

PANTEX-CISSELL B.V.
P.O. BOX 53, 9679 AB
WINSCHOTEN, HOLLAND
TELEX 53535

CISSELL MANUFACTURING COMPANY
831 S. FIRST STREET
LOUISVILLE, KENTUCKY 40203 U.S.A.

UTILITY
LEGGER
RECTANGULAR LEGGER

Part No. D0124

MANUAL 150139
12/95

WARRANTY

Cissell Manufacturing Company (Cissell) warrants all new equipment (and the original parts thereof) to be free from defects in material or workmanship for a period of one (1) year from the date of sale thereof to an original purchaser for use, except as hereinafter provided. With respect to non-durable parts normally requiring replacement in less than one (1) year due to normal wear and tear, including, but not limited to, cloth goods, valve discs, hoses and iron cords, and with respect to all new repair or replacement parts for Cissell equipment for which the one (1) year warranty period has expired or for all new repair or replacement parts for equipment other than Cissell equipment, the warranty period is limited to ninety (90) days from date of sale. The warranty period on each new replacement part furnished by Cissell in fulfillment of the warranty on new equipment or parts shall be for the unexpired portion of the original warranty period on the part replaced.

With respect to electric motors, coin meters and other accessories furnished with the new equipment, but not manufactured by Cissell, the warranty is limited to that provided by the respective manufacturer.

Cissell's total liability arising out of the manufacture and sale of new equipment and parts, whether under the warranty or caused by Cissell's negligence or otherwise, shall be limited to Cissell repairing or replacing, at its option, any defective equipment or part returned f.o.b. Cissell's factory, tranportation prepaid, within the applicable warranty period and found by Cissell to have been defective, and in no event shall Cissell be liable for damages of any kind, whether for any injury to persons or property or for any special or consequential damages. The liability of Cissell does not include furnishing (or paying for) any labor such as that required to service, remove or install; to diagnose troubles; to adjust, remove or replace defective equipment or a part; nor does it include any responsibility for transportation expense which is involved therein.

The warranty of Cissell is contingent upon installation and use of its equipment under normal operating conditions. The warranty is void on equipment or parts: that have been subjected to misuse, accident, or negligent damage; operated under loads, pressures, speeds, electrical connections, plumbing, or conditions other than those specified by Cissell; operated or repaired with other than genuine Cissell replacement parts; damaged by fire, flood, vandalism, or such other causes beyond the control of Cissell; altered or repaired in any way that effects the reliability or detracts from its performance, or; which have had the identification plate, or serial number, altered, effaced, or removed.

No defective equipment or part may be returned to Cissell for repair or replacement without prior written authorization from Cissell. Charges for unauthorized repairs will not be accepted or paid by Cissell.

CISSELL MAKES NO OTHER EXPRESS OR IMPLIED WARRANTY, STATUTORY OR OTHERWISE, CONCERNING THE EQUIPMENT OR PARTS INCLUDING, WITHOUT LIMITATION, A WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE, OR A WARRANTY OF MERCHANTABILITY. THE WARRANTIES GIVEN ABOVE ARE EXPRESSLY IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED. CISSELL NEITHER ASSUMES, NOR AUTHORIZES ANY PERSON TO ASSUME FOR IT, ANY OTHER WARRANTY OR LIABILITY IN CONNECTION WITH THE MANUFACTURE, USE OR SALE OF ITS EQUIPMENT OR PARTS.

For warranty service, contact the Distributor from whom the Cissell equipment or part was purchased. If the Distributor cannot be reached, contact Cissell.

TABLE OF CONTENTS

TESTING

This press has been tested in the Pantex-Cissell factory to determine that it is safe and in working order. Final adjustments must be made to obtain the best results for your garments. using your steam and vacuum in your environment.

The Pantex-Cissell presses are manufactured and tested to the highest standards. The steam pressure vessels have been tested with liquid to a pressure of 250 psi (17 bars). They have been tested for leaks with live steam at a pressure 88 psi (6 bars).

On request, we can supply pressure certification and information regarding sizes and wall thickness of the vessel(s).

FOREWORD

Automatically controlled presses.

Provides maximum production, a minimum of operator fatigue and does a repeatable quality pressing job.

These fully automatic presses are equipped with three timers which allows programming for steam, vacuum, pressing and length of cycle. The presses have a fabric feel control to assure the best pressing for garments of different materials.

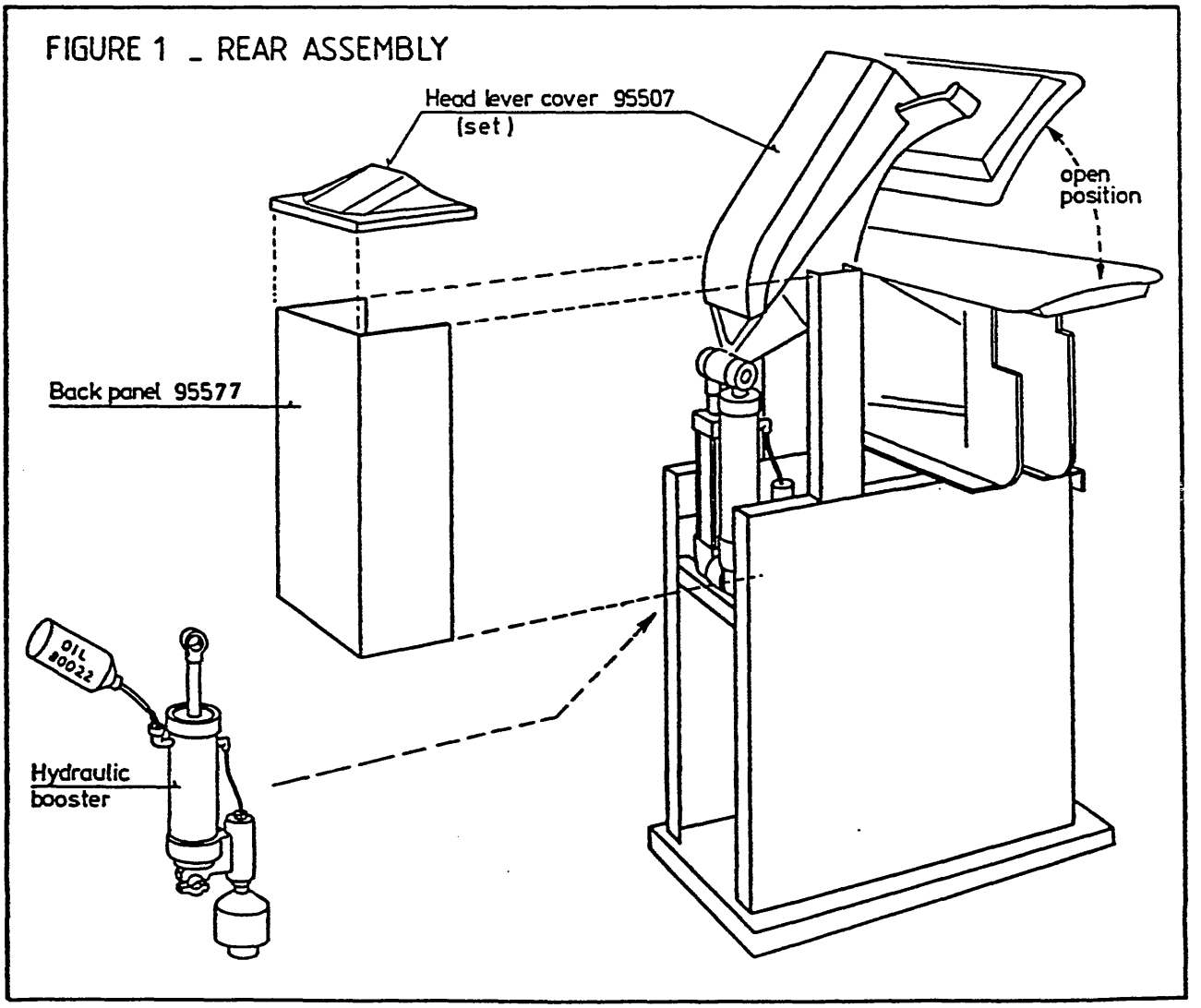
Electrical timers and solenoids are combined with air controls to provide the most modern heavy duty automatic press available.

The press may be operated without the electrical controls as a semi-automatic press if so desired, or during temporary power failures.

INSTALLING THE PRESS

Rear assembly – see fig. 1

1. Uncrate the press and remove skid. Move the press into position.
2. Hold the head down and cut the twine that holds the head closed. Allow the head to rise slowly to the open position.
3. Slowly pour 80022 oil in (can or bottle) into the hydraulic booster. It will require about 90% of container for filling. Wipe up any spilled oil. Operating the press **without** adding oil at this time may **damage** the booster.
4. Mount the back panel to the frame.
5. Secure the back panel with screws.
6. Install the frame cover with screws.



Assemble of the table and timer box – see fig. 2

7. Remove the left hand side strip and angle stay from the table.

8. Slide the table into place and **finger tight** assemble the bolts in the reinforcing bars to mounting lugs.

9. Assemble the end cover to the buck support. Assembly the angle stay on the bottom of the table and the left hand side strip on top of the table such that the end cover is sandwiched between. Move the reinforcing bars to line up with the holes in the angle stay.

10. Tighten the mounting lug bolts.

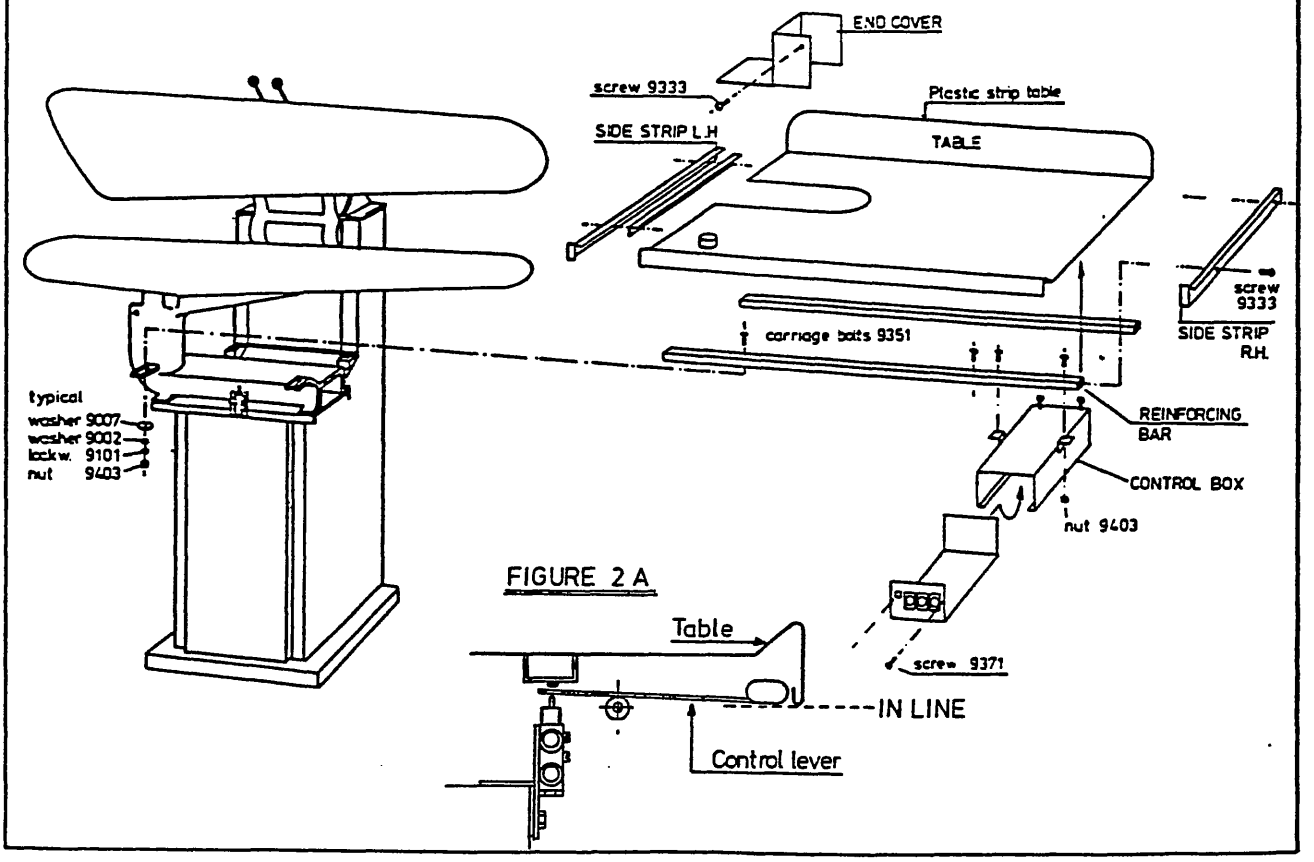
11. The hidden actuating control lever under the table is already assembled and should be checked for free movement.

WARNING !!!

The control lever mounting should be adjusted in such way that the control lever is in line with the lower edge of the table. (see figure 2A).

THIS IS ABSOLUTELY OBLIGATORY FOR SAFETY !!!

FIGURE 2 – ASSEMBLY OF THE TABLE

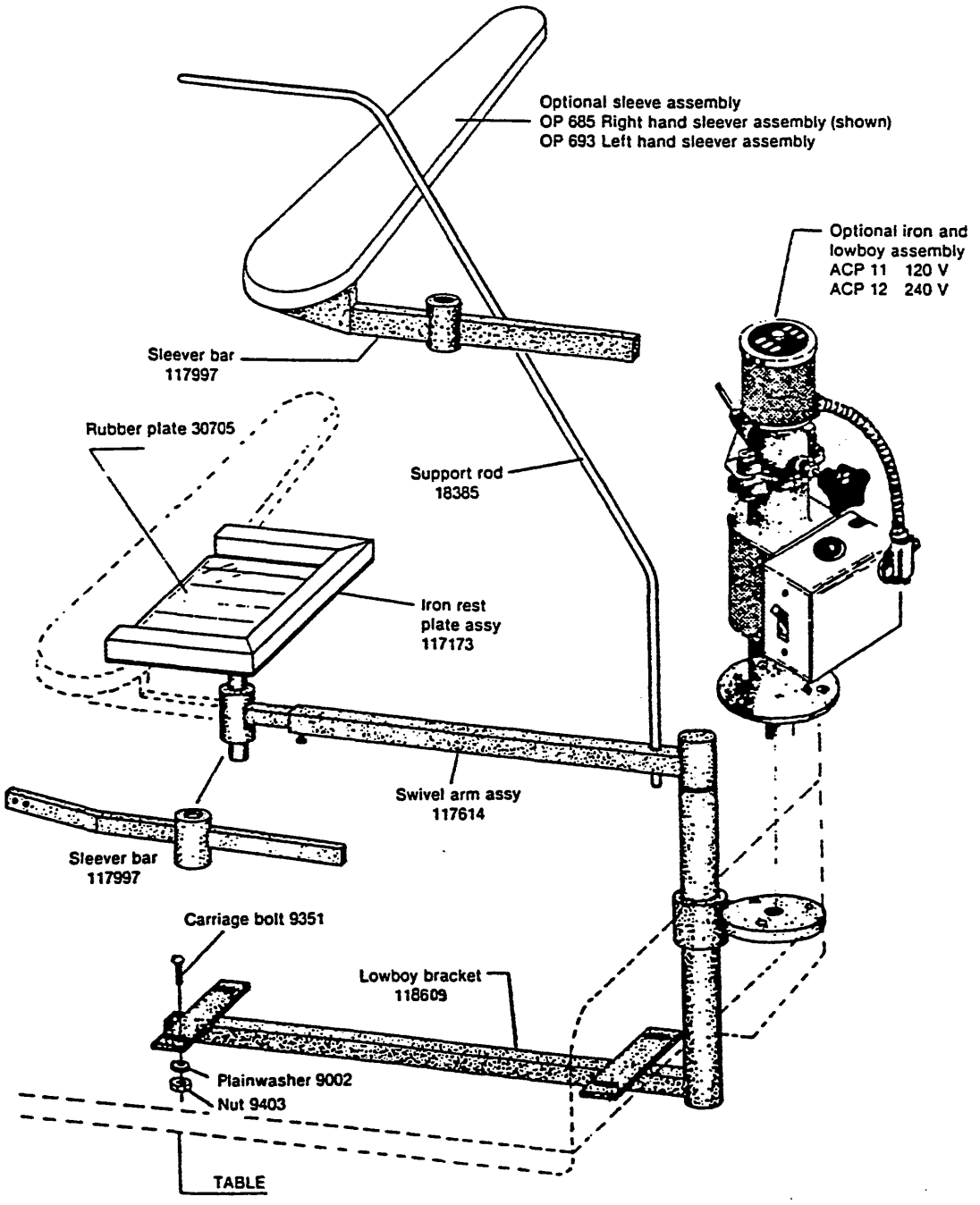


Assemble the iron rest plate group – see fig. 3

14. Assemble the lowboy bracket to the reinforcing bars using the bolts already in the bars. Assemble swivel arm assembly, iron rest plate and support rod to the bracket.

15. Assemble any optional Cissell equipment such as the iron and lowboy or the sleever assembly. These will be packed in seperate containers and are not shipped in the press crate.

FIG. 3 – IRON REST PLATE GROUP



Steam, vacuum, air and electrical connections – see fig. 4

16. Connect a ½ inch **steam supply** line to the press at a pressure of 88 psi (about 6 bars). Use a reducing valve if needed to obtain the correct pressure. The press uses one boiler horsepower (34.5 lbs. per hour) of steam.

17. Connect a ½ inch **steam return** line to the press. Install a ½ inch trap good foor 88 psi in the line.

18. Connect the vacuum using a 2 inch pipe to the vacuum supply. The vacuum supply should be rated two presses or more. (Example Cissell Dryset model 2D or larger.)

19. Connect the air using a ½ inch line at 88 psi (about 6 bars). The press is equipped with an air pressure regulator and gage. Read the gage for correct pressure. The average amount of air required is 0.5 S.C.F.M.
A ½ horsepower compressor will operate one to five presses. Important! The press controls are air operated and extreme care should be taken to keep dirt, metal shavings and other foreign substances out of the press to assure proper operation of the valves.

20. See fig. 4a – Connect the plastic tubing under the table to the bottom of the fabric selector which is mounted to the table. An arrow on the selector indicates the direction of air flow from in to out. The two black plastic tubes are labeled.

21. Mount the control box to the U channels with the front of the box about even with the front of the table.

22. Connect the black plastic tubes as shown in fig. 4a.

23. Connect the electrical wiring as shown in fig. 4a. The electrical power required is 120 volts single phase at ½ ampere.
All of the controls are 24 volts, the 120 volt machine uses a transformer to obtain the 24 volts for controls. The machine must be properly grounded to the earth ground connection located near the electrical connection block. The wiring connection is in the electrical control box located on the right front of the machine.
Fig. 4b is a line wiring schematic for reference.
Bring electrical power through the wire inlet nipple on the rear side of the box in accordance with local electric codes requirement or in the absence of local codes, with the National Electrical Code ANSI/NFPA No. 70-1981. Make wiring connections as shown in fig. 4a.

FIGURE 4 _STEAM, VACUUM, AIR AND ELECTRICAL CONNECTIONS

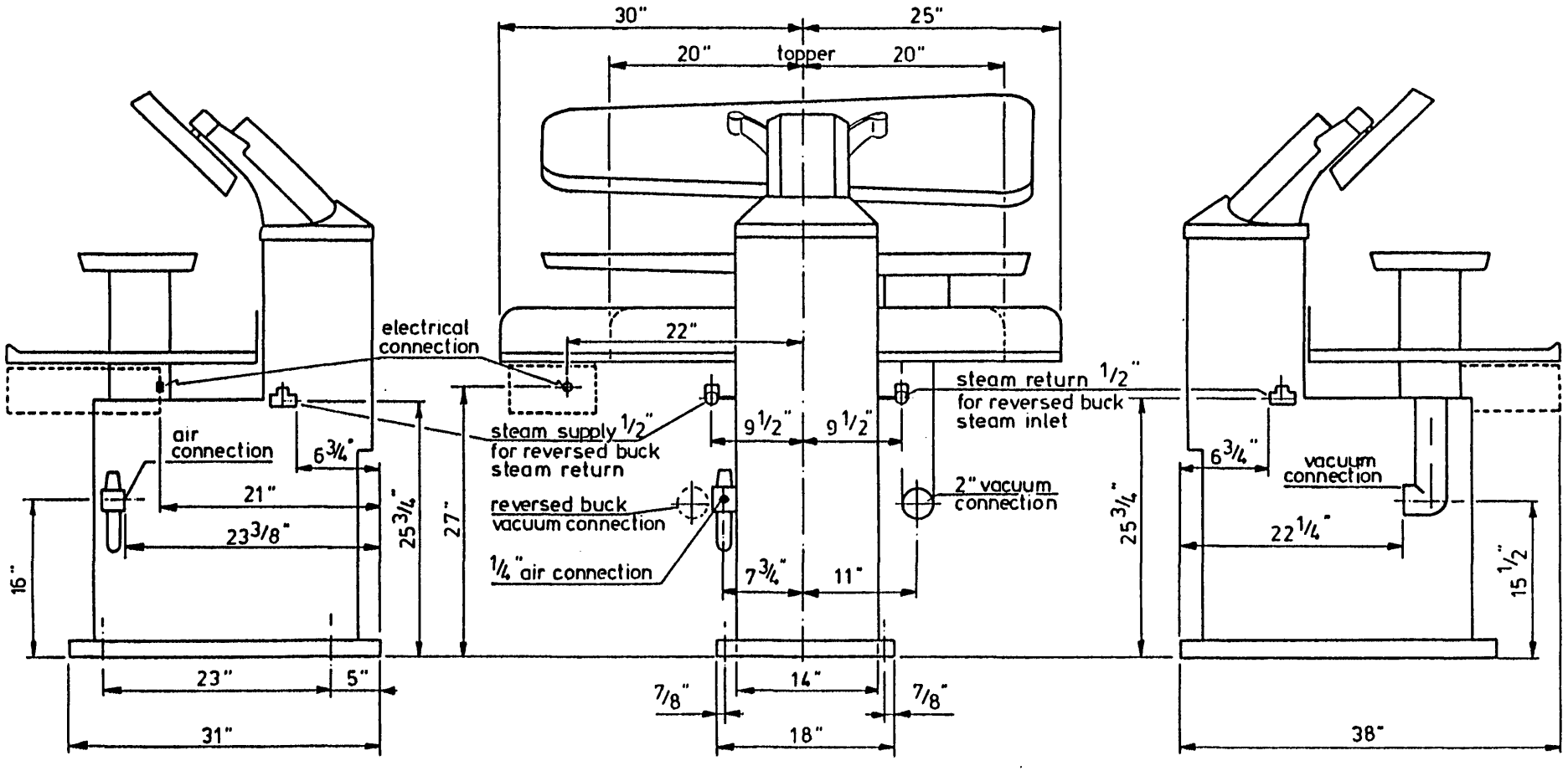
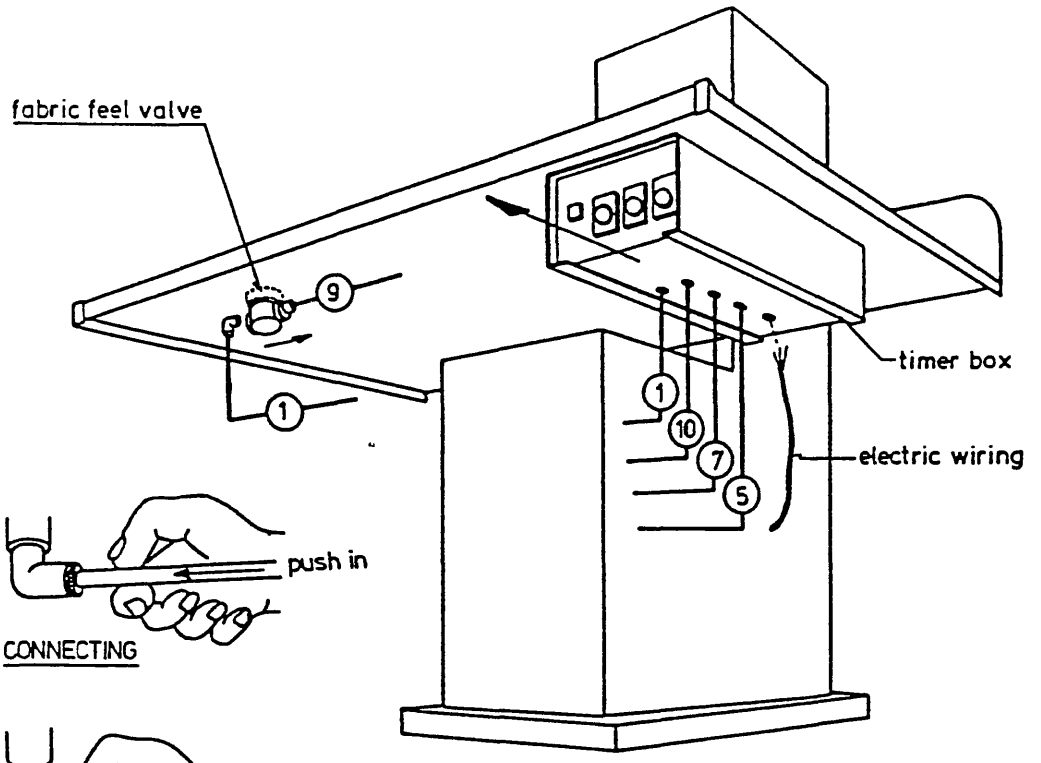
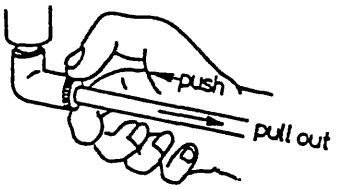


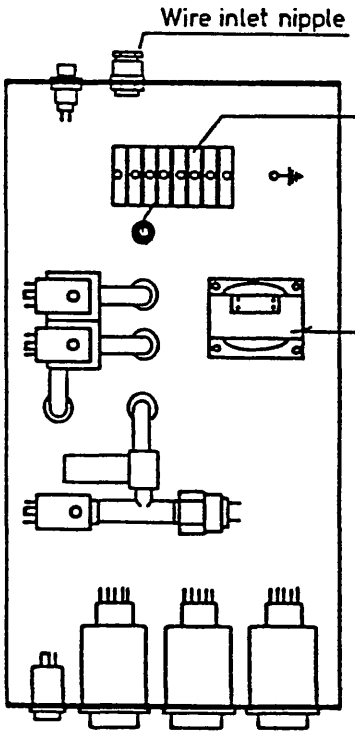
FIGURE 4a – AIR TUBING AND ELECTRICAL CONNECTIONS



CONNECTING

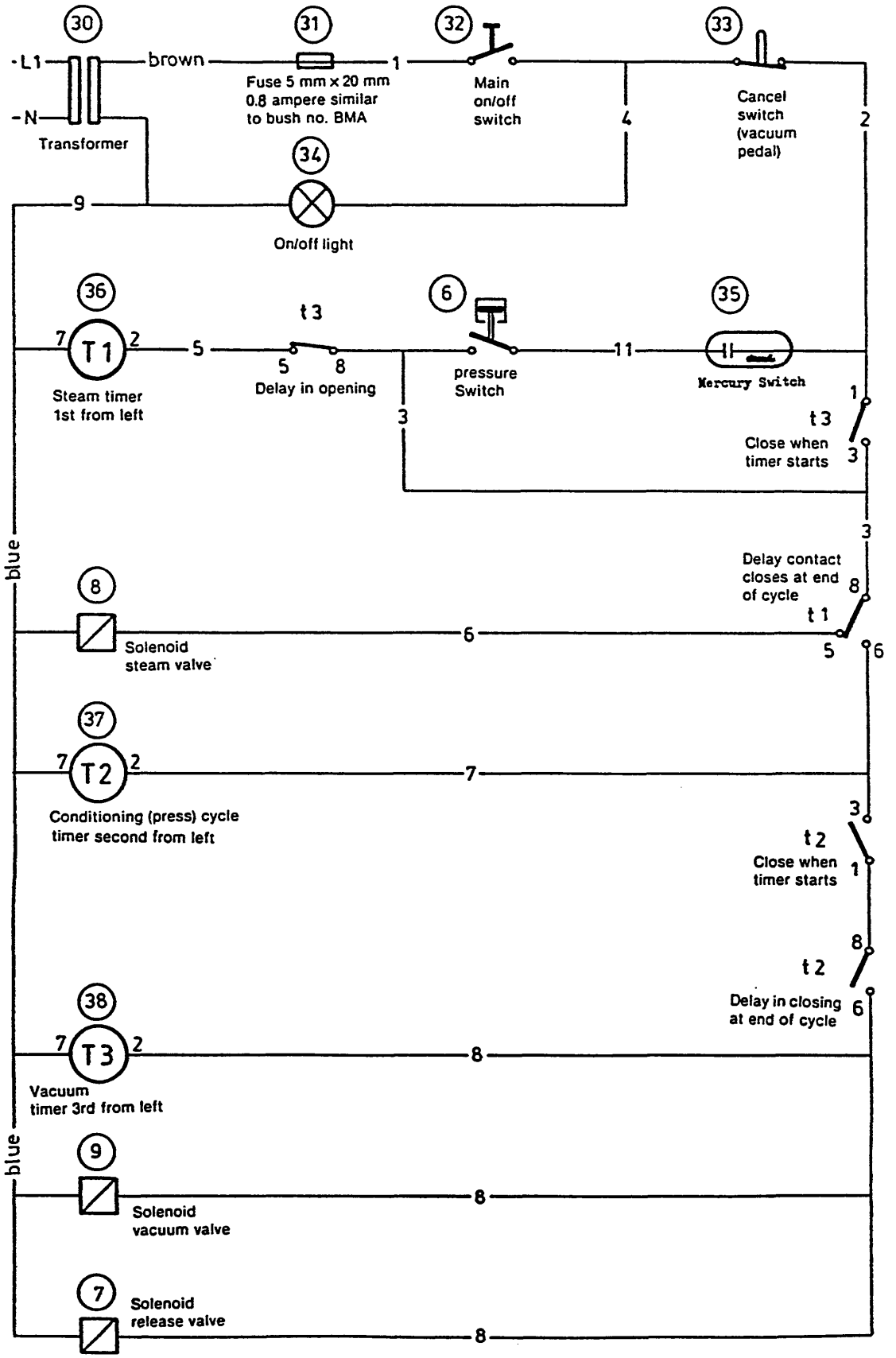


DISCONNECTING



SCHEMATIC WIRING DIAGRAM

FIGURE 4b



DESCRIPTION OF THE AUTOMATIC PRESS

The buck of the press is the bottom padded part of the press upon which the garment to be pressed is placed. The head is the upper part of the press. the head is closed with an air cylinder (air motor) and has a hydraulic booster assembly for applying pressure and locking the press in the closed position. the fabric feel control located on the table is used to vary the locking pressure for different materials. There is a booster pressure gage mounted on the head which can be easily viewed by the operator.

Two black knobbed levers are located on the head. The left lever actuates the locking valve which actuates the high pressure booster and locks the head down. The right lever on the head is used for manually operating the head valve which ports steam to the head.

There is also an air operated cylinder which operates the head valve during normal automatic operation.

A hidden, long actuating bar is located under the front edge of the table. When the bar is pressed upward with one hand, the head closes but does not lock. To lock the press, the left black knobbed lever located on the head must be actuated with the other hand.

Two foot pedals are located near the floor at the front of the press. The left hand pedal is the vacuum and release pedal. Depressing the left pedal part way actuates the release valve and the head opens. Completely depressing the pedal ports vacuum through the buck. The right hand pedal actuates the buck valve which ports upsteam to the buck.

The press is equipped with electrical timers which control solenoid air valves which in turn control the steam and vacuum air cylinders, air operated valves and other air components to provide automatic steaming, vacuuming, pressing and length of cycle.

The press can be operated as a semi-automatic air operated press when the electrical control controls are turned off or during temporary power shortages.

MAINTENANCE

1. Once per month check oil level in the booster assembly. Use only 80022 oil Never use ordinary lubricating oil.

2. The main pivot of the press head lever is fitted with bearings that are factory lubricated for the life of the machine.

3. The water and dirt should be checked in the bowl of the air cleaner daily and cleaned and/or drained when needed.

4. Other lubricating points when needed (use motor oil).
   a. Pivot points of control lever assembly.
   b. Vacuum valve pin and damper shaft.

MECHANICAL ADJUSTMENTS

Balance spring - The balance spring is adjusted at the factory. The setting of the spring is a compromise between the closing speed and the opening speed of the head. to speed the buck opening, extend the spring more by adjusting the balance spring, which will require more closing force thus increasing the time required to close the press. Conversely compressing the spring more allows faster closing and slower opening.

The spring can be adjusted by unscrewing the locknut at the lower spring head and turning the balance spring clockwise for more tension or counter clockwise for lower tension. Then secure locknut again.

GENERAL TROUBLE SHOOTING LIST
Automatic presses

1. **Press does not close**

	POSSIBLE CAUSE	SOLUTION
a.	Insufficient or no air pressure at all.	Check compressor pressure.
b.	Air control assembly has either been wrongly adjusted or is blocked by dirt.	Adjust air control assembly # 2 at 88 psi (6 bar) and clean, if necessary.
c.	Closing valve #19 under the table (AOL) or center foot pedal (ATT) does not work.	Adjust valve in such a manner, that it has a clearance of 1/32 to 1/16 with regard to the operating lever or foot pedal.
d.	Air line to closing air cylinder leaks or is blocked.	Screw off air line to closing air cylinder and check passage.
e.	Exhaust valve of air cylinder is defective.	Check exhaust valve #23 and replace diaphragm if necessary.
f.	Closing air cylinder cup is faulty.	Check closing air cylinder; if too much air blows out of upper cover, replace the U-packing.

2. **Press closes too slowly**

a.	Air pressure too low.	Increase reducing valve to 88 psi (6 bar).
b.	Tension of balance spring set high.	Reduce spring tension by unscrewing balance spring
c.	Supply line to air cylinder is too small.	Enlarge supply. (½ inch dia.).

3. **Press opens too slowly**

a.	Defective exhaust valve either from booster or air cylinder.	Close press without high pressure. If press opens correctly when releasing the operating lever, exhaust valve of air cylinder is o.k. In this case the exhaust valve of booster is defective
b.	Defective booster.	See description of booster.
c.	Spring tension is insufficient.	Tighten springs by turning the balance spring clockwise.

4. **Press close, but gives no high pressure**

a.	Foot pedal release valve on left foot pedal leaks or remains open.	1. Adjustment of the valve not correct. Clearance 1/32 to 1/16 inch. 2. Defective O-ring.
b.	Defective booster.	See description of booster.
c.	Hand lever locking valve leaks.	Disassemble hand lever locking valve 5 and replace O-ring or valve.
d.	Line to booster leaks.	Check air hose for leakages.
e.	Exhaust valve of booster leaks.	Disassemble exhaust valve and check diaphram.
f.	Defective fabric feel valve.	Check to see if there is any air pressure from fabric feel valve. If no air pressure or very little adjustment of air pressure, replace or repair the fabric feel valve.
g	Defective solenoid head release valve # 7.	Repair or replace valve. Check to make sure spring is attached to plunger.

5. Press closes, but does not open by foot pedal

a. Exhaust valve, either on booster or of air cylinder does not work correctly.	Close press with high pressure. If press opens correctly when releasing operating lever, exhaust valve of air cylinder is in order. In this case exhaust valve of booster causes the trouble and must be repaired.
b. Booster is defective.	See description of booster.
c. Foot pedal release valve #10 on left foot pedal does not work.	Re-adjust valve. Clearance between pedal and valve should be 1/32 to 1/16 inch.

6. Automatic cycle will not start after head is locked down with high pressure

a. No power (indicator light is off).	1. Check to make sure power is turned on to the press. 2. Check fuse. 3. Check to make sure main switch #32 is turned on. 4. Check transformer #30 repair or replace.
b. pressure sensing switch is defective.	The pressure switch may be adjusted by means of a slotted screw located top center of switch.
c. Defective timer #T36.	Replace.
d. Cancel switch #33.	Cancel switch out of adjustment or defective.

7. Head will not release automatically but will release with foot pedal

a. Timer #37 defective.	Replace timer.
b. Solenoid head release valve # 7 defective.	Repair or replace. Check to make sure spring is attached to plunger.

8. Head will not go to zero pressure during automatic cycle (legger only)

a. Timer # 37 defective.	Replace timer.
b. Solenoid head release valve # 7 is defective.	Repair or replace. Check to make sure spring is attached to plunger.

9. No steam om automatic cycle (check open/close automatic steam valve)

a. Defective steam timer # 36.	Replace timer.
b. Defective steam valve solenoid # 8	Repair or replace valve. Check to make sure spring is attached to plunger.
c. Defective shuttle valves 22_17.	Repair or replace.

10. No vacuum on automatic cycle

a.	
b. Timer #38 defective.	Replace timer.
c. Timer # 37 defective.	Replace timer.
d. Solenoid vacuum valve # 8 defective.	Repair or replace valve . Check to make sure spring is attached to plunger.
e. Vacuum delay flow control #26 defective.	Adjust flow control or replace.

f.	Vacuum valve actuating air cylinder # 25 is defective.	Replace air cylinder.
g.	Defective vacuum valve # 111788.	Repair or replace (kit # 117782).

11. Head or Buck steam valve is leaking

a.	Valve disc is damaged.	Replace valve disc (#35232).
b.	Seat is damaged.	Replace seat (# 15081).
c.	Spring is broken or out of adjustment.	Replace spring (#55002) or increase spring tension by screwing the top part clockwise.
d.	Operating cylinder jams.	Check operating cylinder, cleans and grease it.

15. During closing of press no head steam is released automatically

a.	Steam delay valve of automatic head steam is blocked.	Open steam delay valve entirely and re-adjust it.
b.	Head steam valve cylinder is jamming or cup packing leaks.	If cup packing leaks, air will pass through the front cover. Replace cup (#35119). Otherwise supply hose has to be loosened and checked for allowing air to pass through during closing. If so, check cylinder and operate it.

16. Head steam releases automatically but continuously

a.	Head steam valve cylinder does not come back, is jammig.	Clean operating cylinder and/or replace spring # 55002

17. Head steam valve releases too much or too little steam

a.	Passage of head steam valve is either too big or too small.	Opening of valve can be adjusted by means of a set screw on top of the valve.

18. Buck steam valve releases too much or too little steam

a.	Passage of buck steam valve is either too big or too small.	See head steam adjustment.

19. No release of vacuum when depressing left pedal

a.	Set collar on vacuum valve connecting rod not adjusted properly.	Take off front panel and adjust set collar # 17858. Clearance between operating lever – valve and set collar has to be ± 1/16.

20. Vacuum continuous, after pedal has been released

a.	Spring of the valve is defective.	Replace spring # 50009.
b.	Vacuum valve connecting rod is not lined up with valve lever # 113794.	Adjust valve accordingly.

21. Press makes a loud banging noise when head is released

a.	Operator error. High pressure was applied before the head was completely closed.	Head must be in contact with the buck before high pressure is applied.

22. Trouble shooting list of the hydraulic booster # 118505

What to do if: 1. Press opens too slowly.
2. Booster gives no pressure.
3. Press looses pressure during cycle.
4. Loss of oil/loss of pressure.

When disassembling the booster, all packings and O-rings should be replaced.

At least once a year the hydraulic oil in the booster should be replaced, because oil reduces its viscosity.

TROUBLE SHOOTING LIST OF THE HYDRAULIC BOOSTER

1. **Press opens slowly**
   a. Booster nut 893 has been driven in, hindering back flow of oil. If the booster nut is slightly driven in, it might be possible to adjust booster valve 10306 somewhat higher Otherwise a new booster nut has to be installed.

   b. Air booster spring 50092 is broken or does not have sufficient tension any more. Requires replacement.

2. **Booster gives no pressure**
   Check to make sure that the booster is getting air pressure. Remove air line to booster and operate the hand lever locking valve. Check to make sure booster is full of hydraulic oil (80022).

3. **Press looses pressure during cycle**
   a. Check, if air supply is leaking.

   b. It may be that there is a leakage between check valve stem 30595 and seat. If necessary, replace valve and adjust seat.
   Former presses have been equipped with a metallic valve instead of a plastic one. Such metallic valve may be fixed by installing an O-ring. Old parts can simply be replaced by 30595.

   c. Back up ring 30847 and O-ring 30029 require replacement. Damages of back up ring can be hardly located, because of small cracks. Check also O-ring 30032; after longer use this O-ring can be damaged.

   d. Check if seat between plunger 10520 and booster valve 10306 is damaged (always to be replaced at the same time).

   e. Check O-ring 30081 (damages do not occur very often).

   f. Check O-ring 30841

4. **Loss of oil and eventual loss of pressure**
   a. Check valve stem 30595 does not work, not allowing the oil to flow back. Oil will then accumulate in the top of the booster at piston rod guide 894.
   b. Back up ring 30084 and O-ring 30082 let oil pass through so that it can enter into the exhaust valve. In most cases this is indicated to be located by a greasy oil vapour, which blows out of the exhaust valve during opening of the press. (The exhaust valve is mounted in front of air inlet of booster.) Check also, if piston rod 18847 has been damaged. Sometimes this rod can be repaired by rubbing with very fine sandpaper in longitudinal direction (only slight damages).

5. **Press slows down badly at closing**
   a. Refill oil on booster (use only oil with Pantex no. 80022).

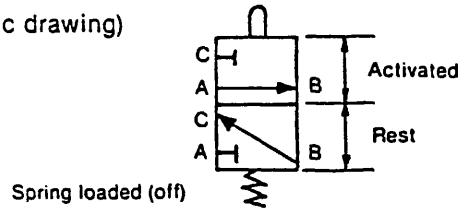
   b. In case of loss of oil see point 4.

Please note, when mounting the booster between the shafts, that upper and lower fastening points must be lined up absolutely vertically.

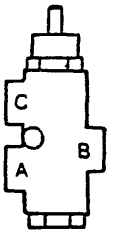
SCHEMATIC SYMBOLS

Manually operated

(Schematic drawing)

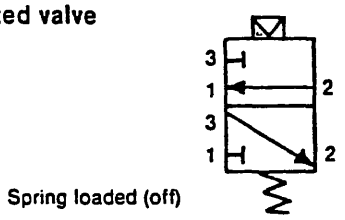


Actual valve
113788

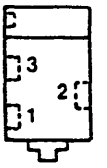


The above schematic is for manually operated air valves showing the function of the valve at rest (bottom section) and at the activated position (top section).
Although the valve has only 3 ports (A, B and C), this is a schematic way of showing how the valve works internally.

Air operated valve



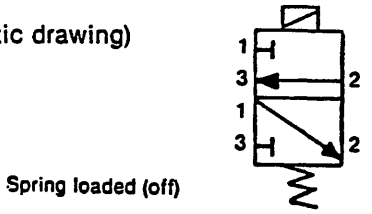
Actual valve



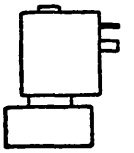
The above schematic is for an air operated air valve showing the function of the valve at rest (bottom section) and in the activated position (top section).
Although the valve has only 3 ports (1, 2 and 3), this is a schematic way of showing how the valve works internally.

Electrical operated valve

(Schematic drawing)



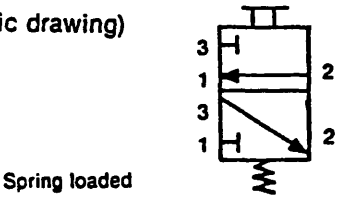
Actual valve



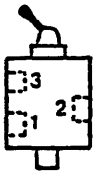
The above schematic is for an electrically operated air valve showing the function of the valve at rest (bottom section) and in the activated position (top section).
Although the valve has only 3 ports (1, 2 and 3), this is a schematic way of showing how the valve works internally.

Manually operated with tumbler switch

(Schematic drawing)



Actual valve



The above schematic is for manually operated (with tumbler switch) air valve showing the function of the valve at rest (bottom section) and in the activated position (top section).
Although the valve has only 3 ports (1, 2 and 3), this is a schematic way of showing how the valve works internally.

OPERATION OF THE AUTOMATIC PRESS

First set the electrical controls on the press for automatic operation. Three timers and one other control are located on the face of the control box to which the electrical connections were made.

Set the left steaming timer (36) to two seconds. this determines the amount of time which both the buck steam and the head steam will flow into the garment. Buck steam only with selector switch 15 (open-close automatic head steam) in "UP" position.

The next timer (37) controls the length of cycle which includes the time set on the steaming timer plus the press time.
Now set the cycle timer (37) to two seconds. This will give us two seconds of steaming plus two seconds of press time for a total time of four seconds.

The last timer (38) controls the vacuum cycle. Set this timer (38) to 5 seconds.

The last control (32) in the upper left of panel is the electrical power on-of switch. Push this switch on and the indicator "on" light will glow, to indicate automatic mode of operation.

Push this switch on zero (o) for semi-automatic mode of operation.

Select a garment to be pressed and set the fabric feel gage to the type of fabric. Lay the garment on the buck of the press.

Press upwards on the actuating bar with one hand which will cause the head to close. Depress the left hand locking lever on the head with the other hand and the press will lock and the automatic cycle will commence. WARNING!! The head must be closed when the locking lever is depressed or poor pressing will result and the booster may be damaged.

With the press set as described above, there will be two seconds of steam, two seconds of press time, five seconds of vacuum drying with the head up.

An additional feature of this press is a slow head release control located on the right front of the main press frame. The slow head release is when the control is set in the (1) up position. In the (1) up position and the press set as above there will be two seconds of steam,two seconds of conditioning, five seconds of vacuum drying, with the head partially open. (Adjustable with Pressure regulator 40)
The head will release finally after 9 seconds.

If the on/off head release control is set on off position after two seconds of steam and two seconds of conditioning the head opens, with five seconds of vacuum drying with the head open.

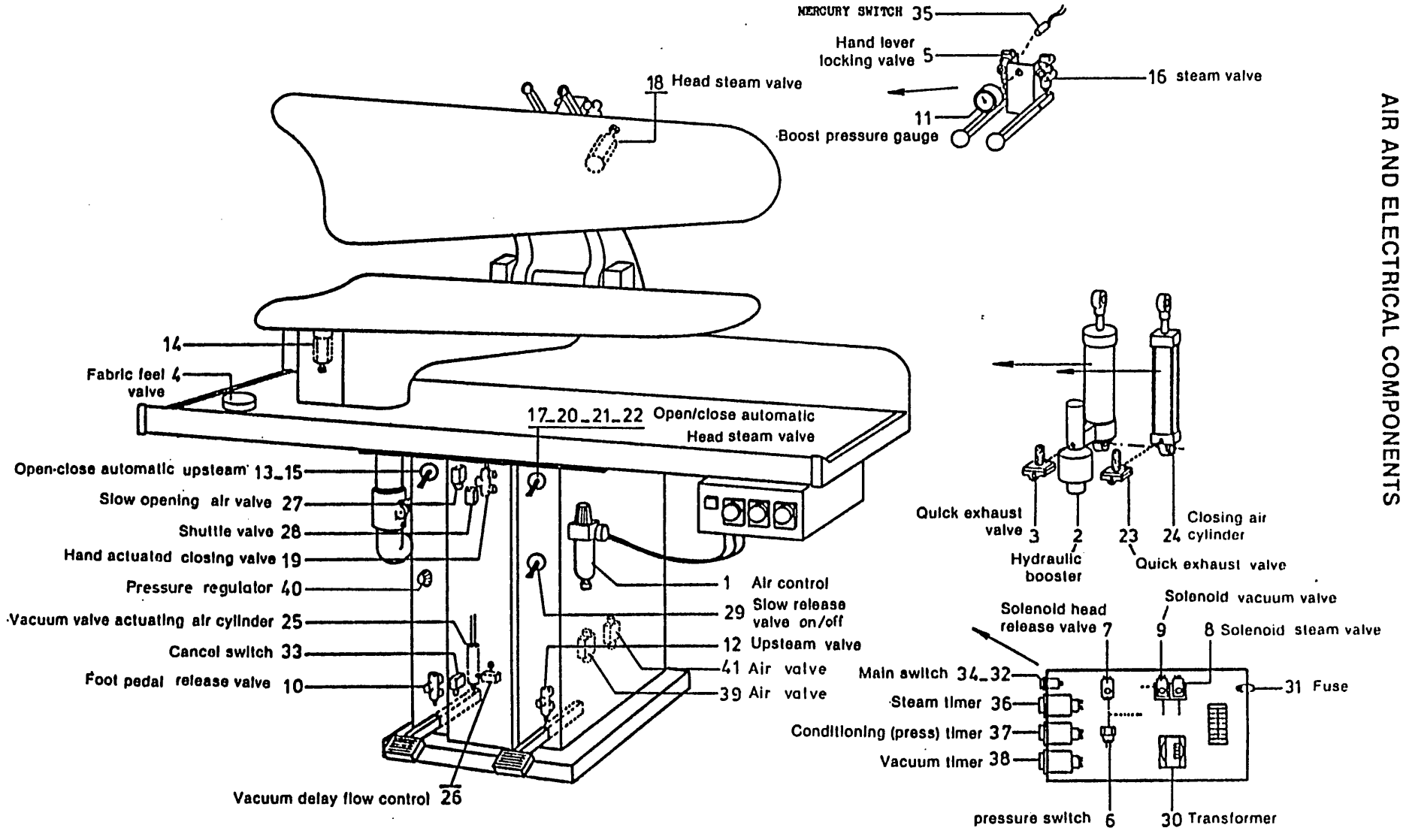
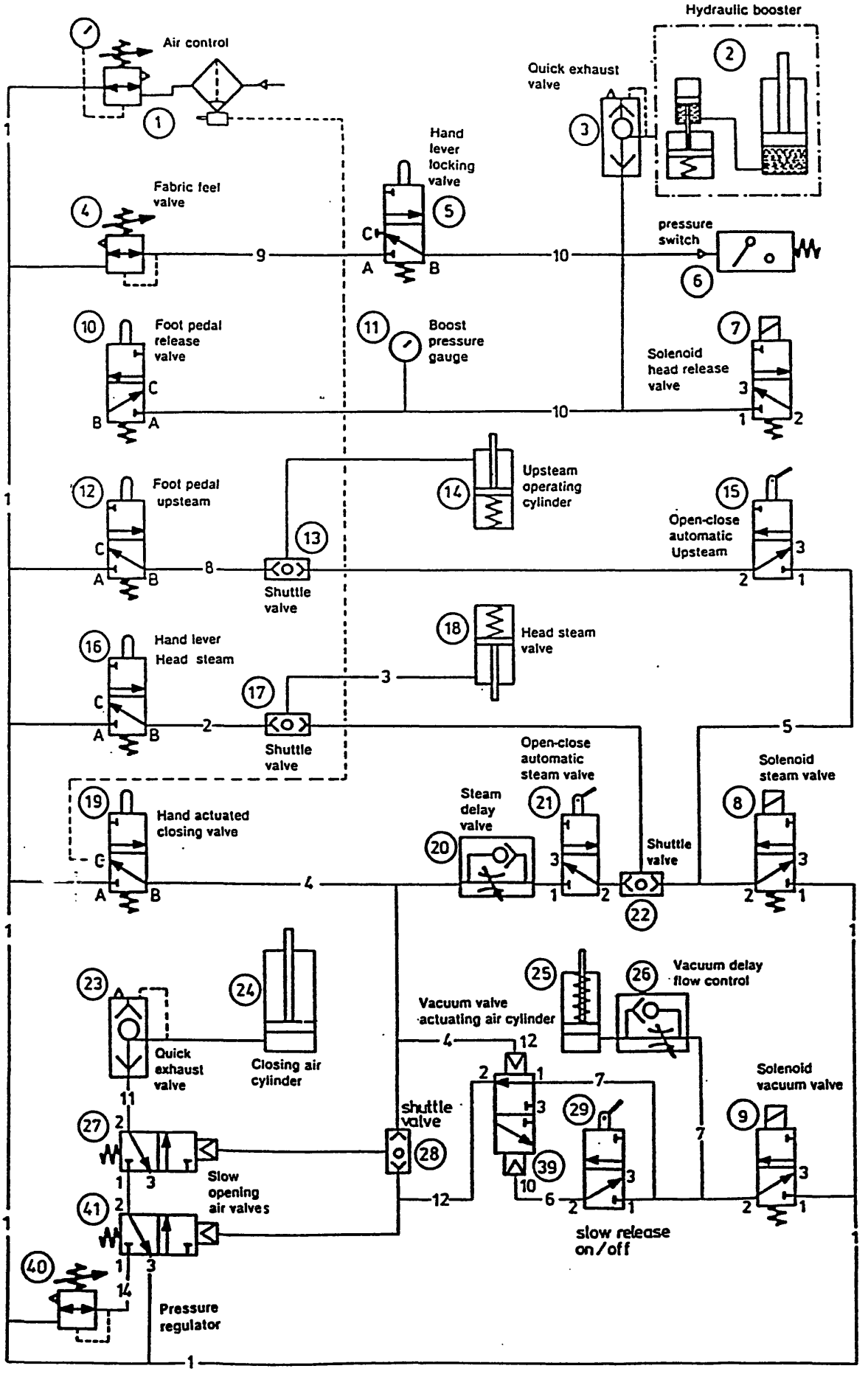

MERCURY SWITCH 35
Hand lever locking valve 5
16 steam valve
11 Boost pressure gauge
18 Head steam valve
14
Fabric feel 4 valve
17_20_21_22 Open/close automatic Head steam valve
Open-close automatic upsteam 13_15
Slow opening air valve 27
Shuttle valve 28
Hand actuated closing valve 19
Pressure regulator 40
Vacuum valve actuating air cylinder 25
Cancel switch 33
Foot pedal release valve 10
1 Air control
29 Slow release valve on/off
12 Upsteam valve
41 Air valve
39 Air valve
Vacuum delay flow control 26
Quick exhaust valve
3
2
23
24 Closing air cylinder
Hydraulic booster
Quick exhaust valve
Solenoid vacuum valve
Solenoid head release valve 7
9
8 Solenoid steam valve
Main switch 34_32
Steam timer 36
Conditioning (press) timer 37
Vacuum timer 38
31 Fuse
pressure switch 6
30 Transformer

CHART FOR AIR AND ELECTRICAL CONTROLS AND PART NUMBERS

1	Air control assy	118593
2	Hydraulic booster	118505
3	Quick exhaust valve	110025
4	Fabric feel valve	118601
5	Hand lever locking valve	118795
6	Pressure switch	70749
7	Solenoid valve head release	118544
8	Solenoid valve steam	118602
9	Solenoid valve vacuum	
10	Foot pedal release valve	118795
11	Booster pressure gauge	80949
12	Foot pedal valve buck steam	118795
13	Shuttle valve	118592
14	Buck steam valve	115609
15	Buck steam control valve	118587
16	Hand lever valve head steam	118795
17	Shuttle valve	118592
18	Head steam valve	115609
19	Hand operated closing valve	118795
20	Steam delay valve	80846
21	Head steam control valve	118587
22	Shuttle valve	118592
23	Quick exhaust valve	110025
24	Air cylinder closing	118595
25	Vacuum valve cylinder	118606
26	Vacuum delay control	80846
27	Slow opening air valve	118542
28	Shuttle valve	118592
29	Slow release valve	118587
30	Transformer 120 – 24 v.	70750
31	Fuse	70603
32	Main switch on / off	70636
33	Cancel switch	70001
34	Lamp	
35	Mercury switch	70371
36	Steam timer	70637
37	Press cycle timer	70637
38	Vacuum timer	70637
39	Air valve	118541
40	Pressure regulator	118552
41	Air valve	118541

AIR AND ELECTRICAL COMPONENTS SCHEMATIC



Plant air enters the air control(1)where it is cleaned of dirt and water.The control should be adjusted to give a reading of 88psi (6 bars) onthe system air gauge.The control air flows to the hand operated closing valve (19) and to the fabric feel valve (4). The fabric feel valve is really a pressure reducer and the reduced pressure is connected to the air operated booster control valve (5).

Control air pressure also flows to the solenoid steam valve (8),to the solenoid vacuum valve (9),to the air operated slow opening valve (27),to the hand lever head steam valve and to the foot pedal upsteam valve.

When automatic operation of the head steam is desired,the open-close automatic steam valve (21) is in "UP" position.When the hand actuated closing valve (19) is operated,air flows to the shuttle valve (28),to the slow opening air valve (27) and to the quick exhaust valve (23) then to the closing air cylinder (24) and the head closes.

Also air flows trough an adjustable orifice in the steam delay valve (20), through the OPEN automatic steam valve (21),trough shuttle valves 22 and 17 to the head steam valve (18). Steam delay valve (20) should be adjusted so that steam commences as soon as the head is closed.

Now the hand lever locking valve (5) must be depressed with the other hand while continuing to hold the closing valve (19).
WARNING!! The head must be fully closed when the hand lever locking valve is depressed or poor pressing will result and the booster could be damaged.
Air flows from the locking valve (5) to the boost pressure gauge (11) ,to the quick exhaust valve (3) then to the hydraulic booster and the head is locked down with the boost pressure set with the fabric feel valve.
At the same time the hand locking lever (5) causes air pressure to flow to and close the contacts in the pressure switch (6),to the solenoid head release valve (7) and to a closed foot pedal release valve(10).

Both hand levers can now be released and the head stays closed and locked.

It is now that the electric timers start the automatic cycle. The control circuit is energized when both,pressure switch and mercury switch are closed.

Set the steam timer (36) to say two seconds and this energizes the solenoid steam valve (8) by porting air pressure through valve (8) through the shuttle valves 22-17 to the upsteam operating cylinder (18).At the same time air flows to shuttle valve (13),through the open automatic steam valve (15) to the head steam valve cylinder (14).This times two seconds of head steam and buck steam.The electrical power flows to the solenoid steam valve through contacts in the steam timer (36),one set of contacts opens at the end of two seconds.

Set the cycle timer (37) to two seconds.This will give us two seconds of conditioning time for a total time of four seconds.

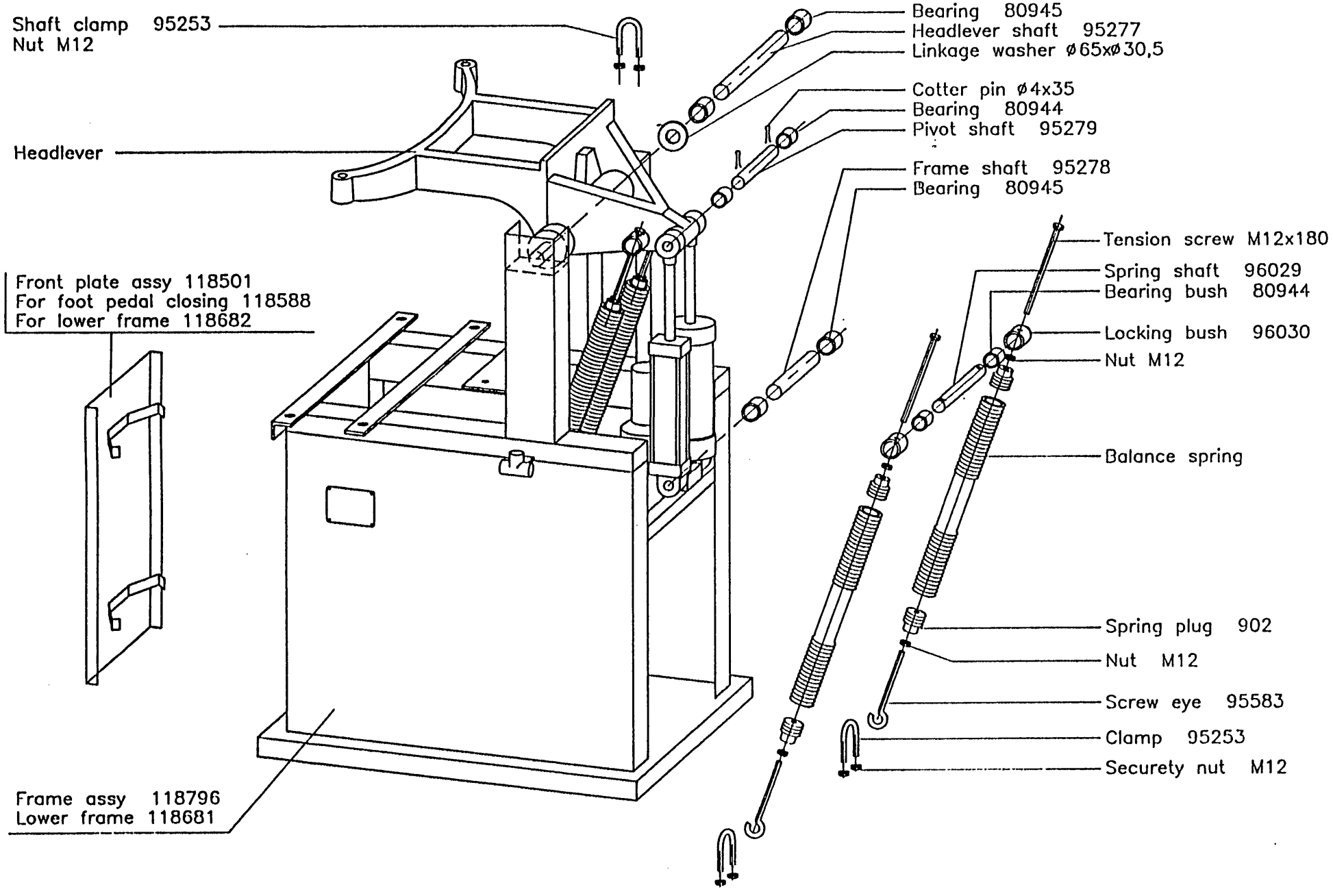
The last timer (38) controls the vacuum cycle.Set this timer to five seconds.

As soon as the steam timer stops,control is shifted to the conditioning (press) cycle timer (37) whose one set of contacts are open preventing the vacuum timer (38) from running and from energizing the solenoid unlocking booster valve (7). The garment in the press conditions for two seconds after steaming stops at which time the contacts in cycle timer (37) close and starts the vacuum timer (38) which in our case has been set for vacuum of five seconds.
When the contacts in cycle timer (37) close they also energize the solenoid booster unlock valve (7).When this happens the boost pressure is ported to atmosphere through the quick exhaust valve (3) and the head is unlocked.

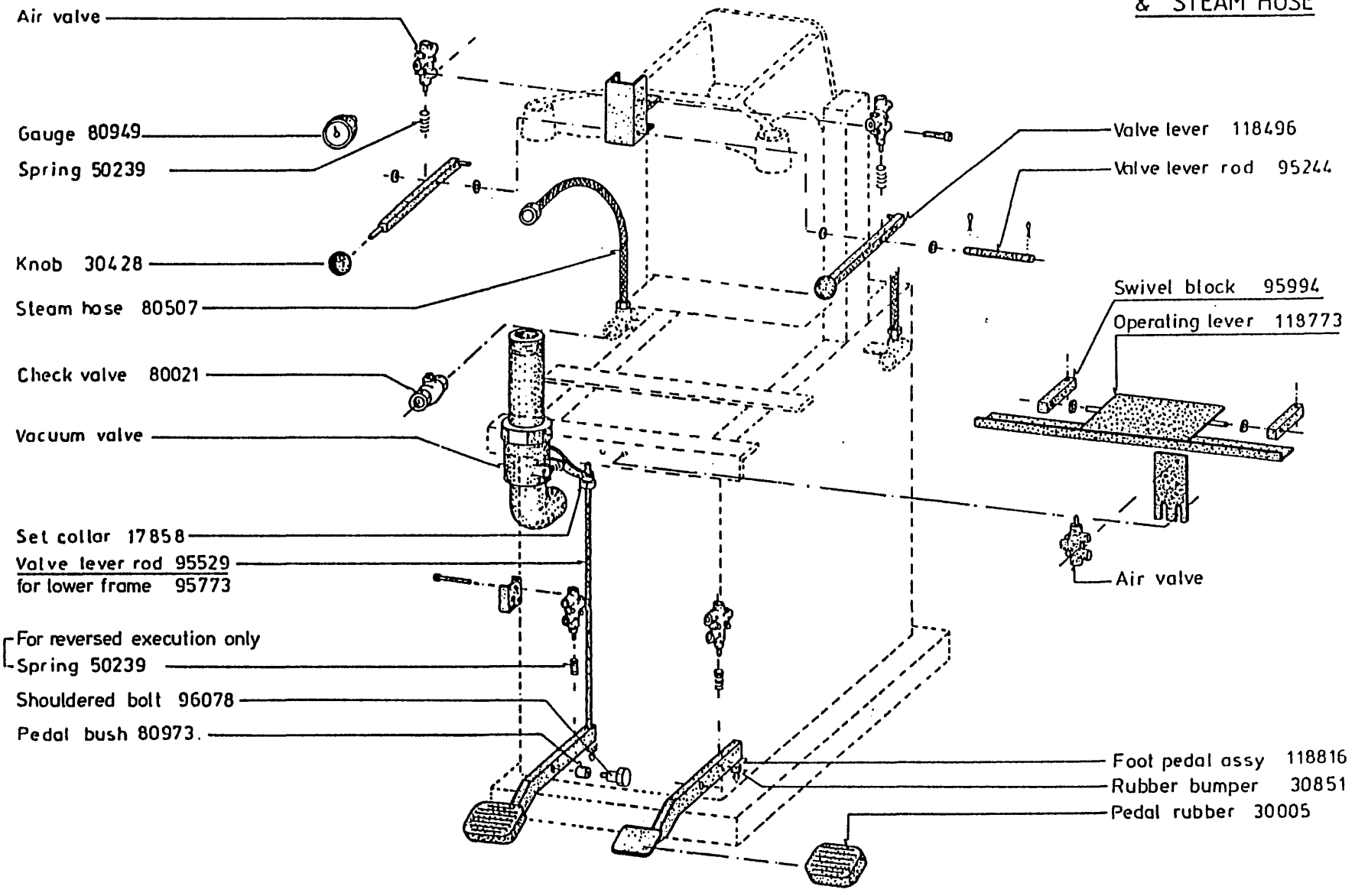
NOTE: When the on/off head release valve is in "UP" position at this moment,the head stays down and opens after the cycle time of the vacuum timer (38).

When the vacuum timer starts,power to the solenoid vacuum valve (9) is fed through two sets of contacts in the conditioning timer (37). Energizing the solenoid vacuum valve (9) causes air pressure to flow to the vacuum delay flow control valve (26) and then to the vacuum valve actuating air cylinder which opens the vacuum valve. Vacuum will be on for five seconds.

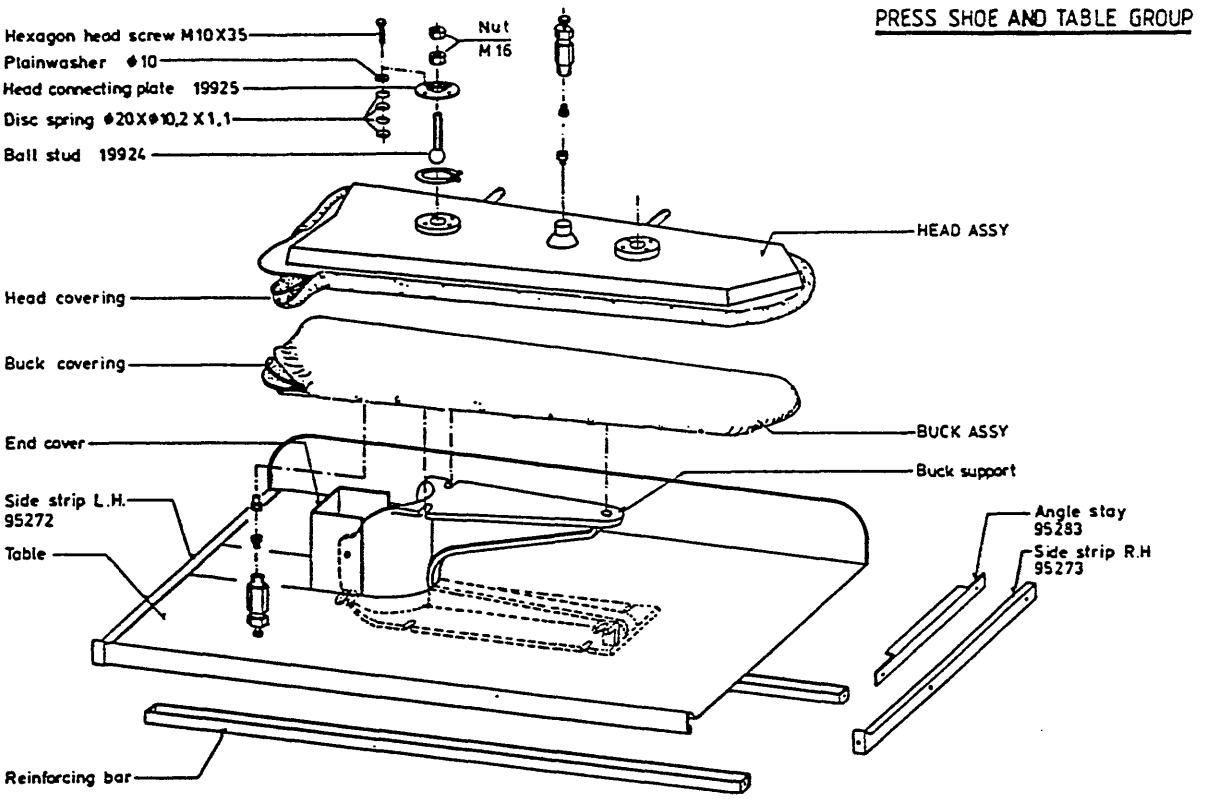
The terminationof the vacuum timer (38) and the momentary opening of one set of contacts in the timer (38) opens the selflocking circuit,the end of the press cycle.


Shaft clamp 95253
Nut M12
Headlever
Front plate assy 118501
For foot pedal closing 118588
For lower frame 118682
Frame assy 118796
Lower frame 118681
Bearing 80945
Headlever shaft 95277
Linkage washer ø65xø30,5
Cotter pin ø4x35
Bearing 80944
Pivot shaft 95279
Frame shaft 95278
Bearing 80945
Tension screw M12x180
Spring shaft 96029
Bearing bush 80944
Locking bush 96030
Nut M12
Balance spring
Spring plug 902
Nut M12
Screw eye 95583
Clamp 95253
Securety nut M12

VALVE LEVER CONNECTIONS & STEAM HOSE

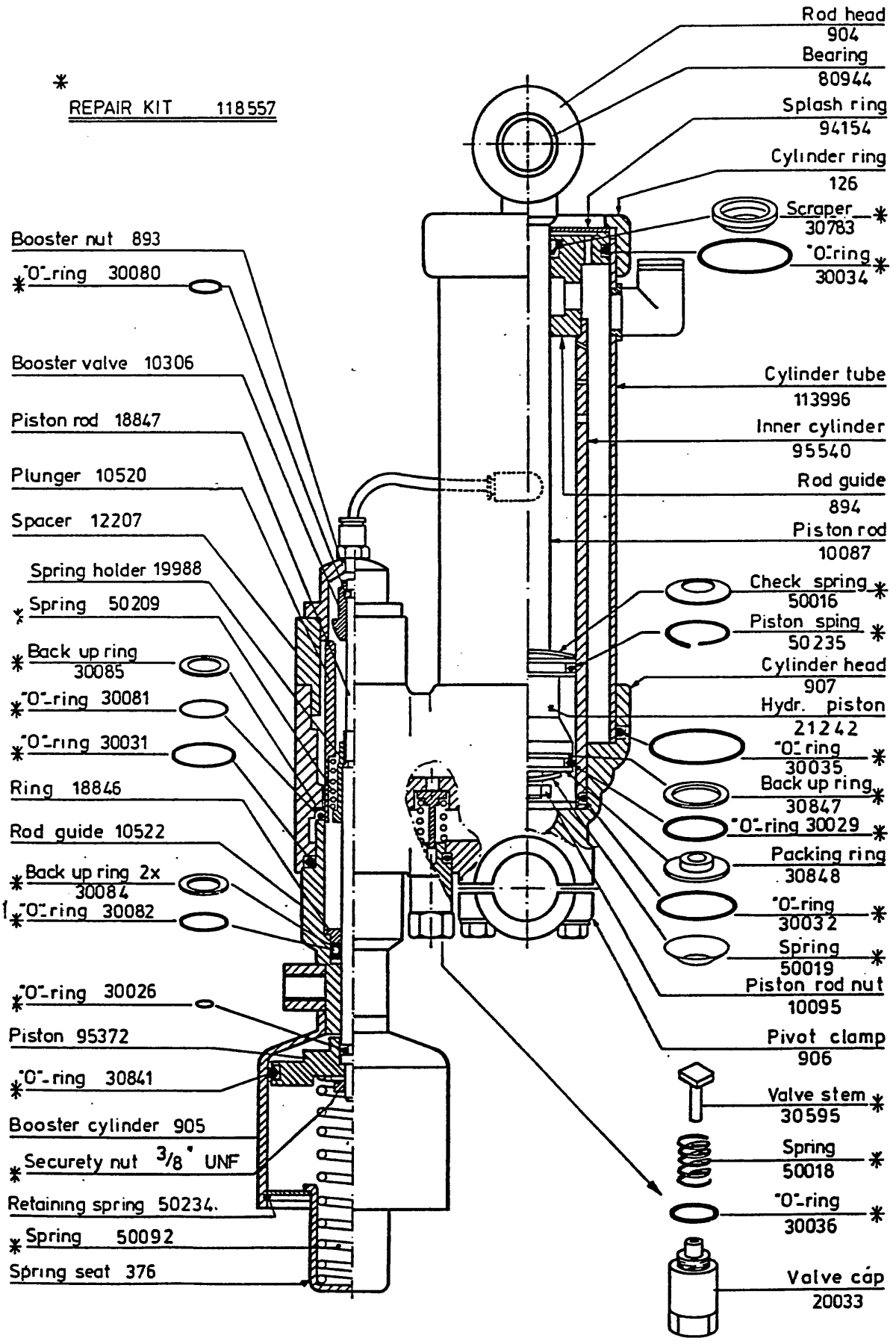


PRESS SHOE AND TABLE GROUP

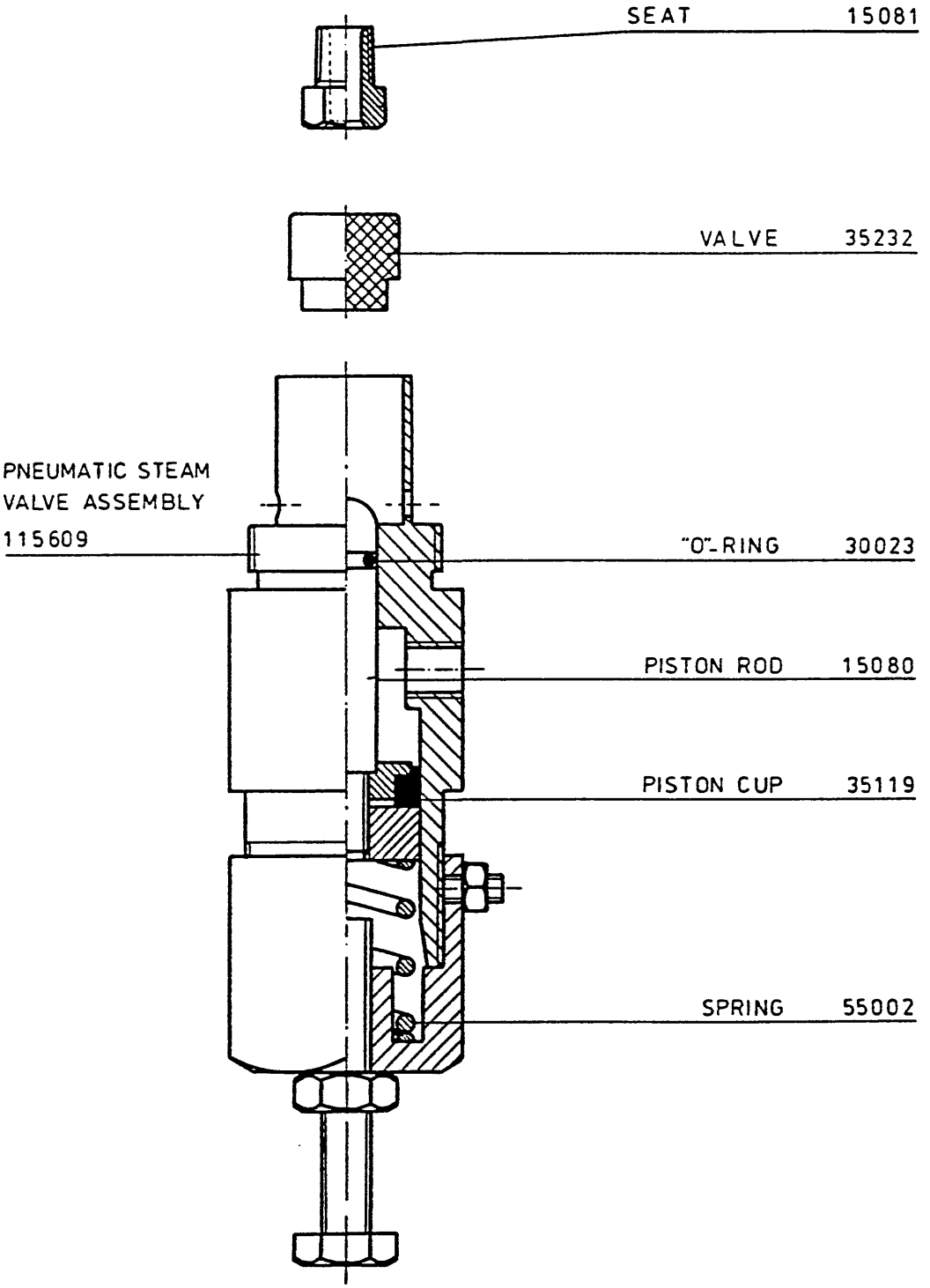


MODEL	HEAD ASSY	BUCK ASSY	HEAD COVERING	BUCK COVERING	BUCK SUPPORT	TABLE	END COVER
AOL-45	102231	102232	117752	117751	895	95490	95440
AOL-48	102248	102249	118270	118269	"	"	"
ABP-439	102227	102228	118263	118262	"	"	"
AOL-445	102243	102242	118267	118268	"	"	"
AOL-446	102245	102244	118600	118599	"	"	"

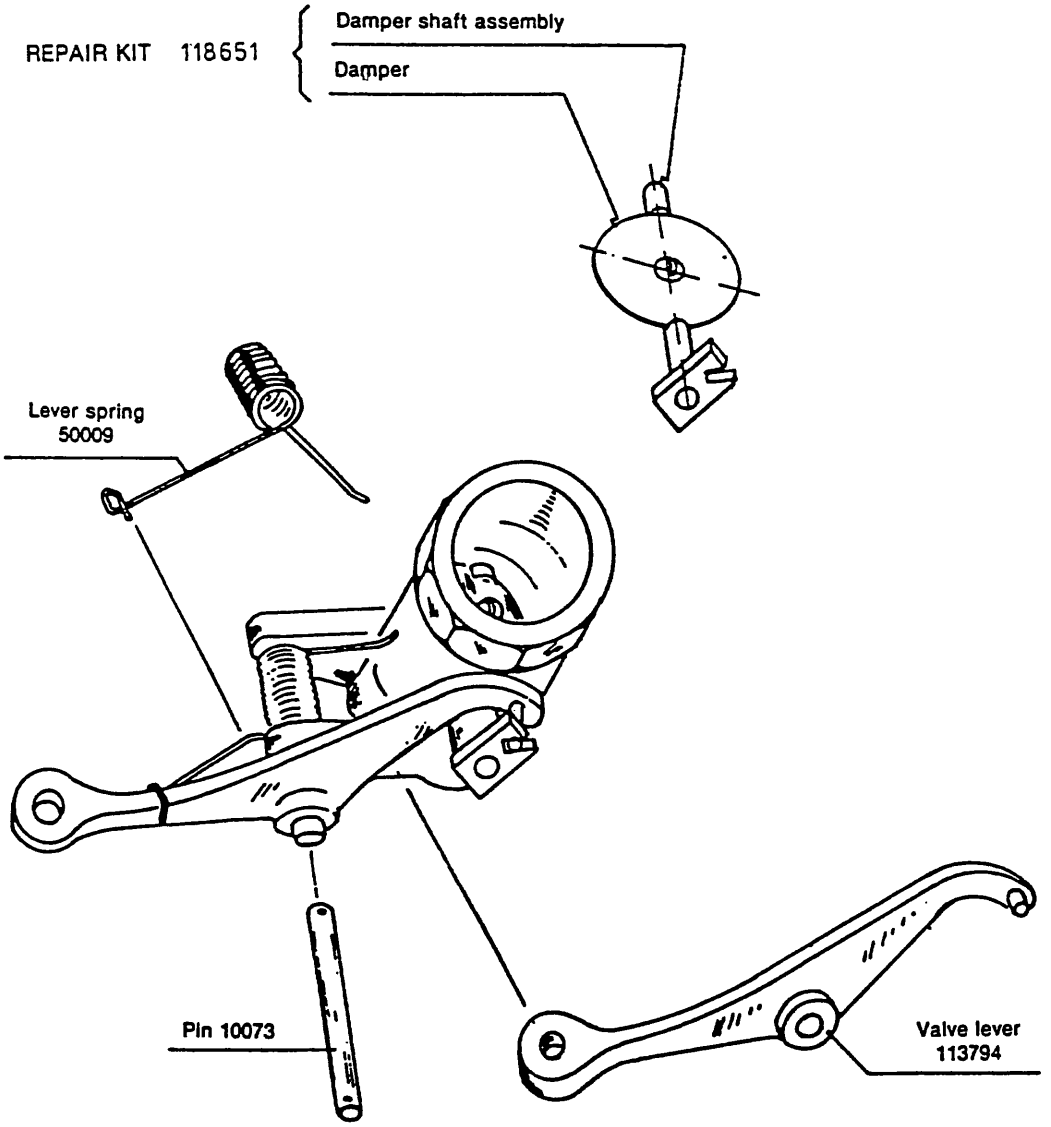
HYDRAULIC BOOSTER ASSY 118505



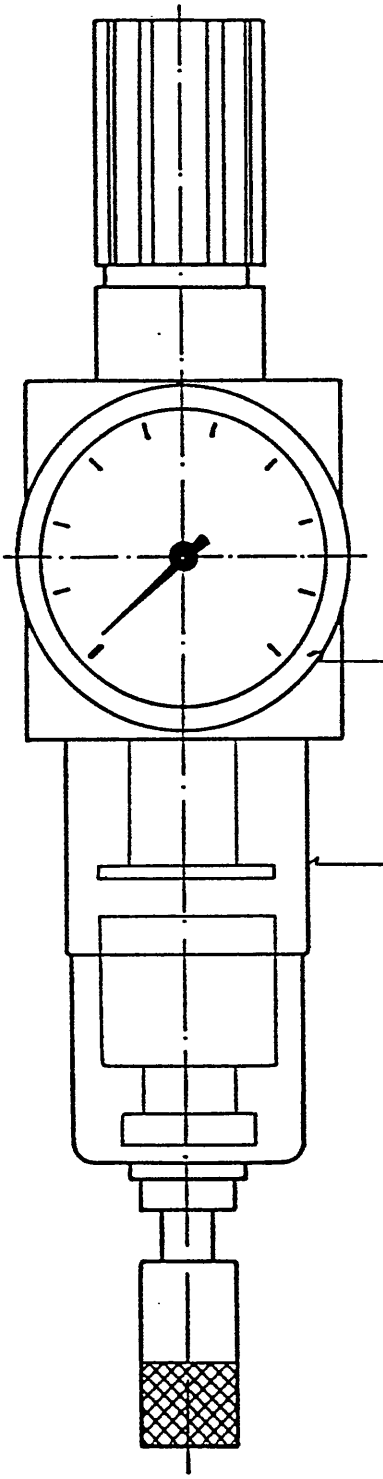
PNEUMATIC STEAM VALVE



AIR VACUUM VALVE ASSEMBLY , 2" 118 652

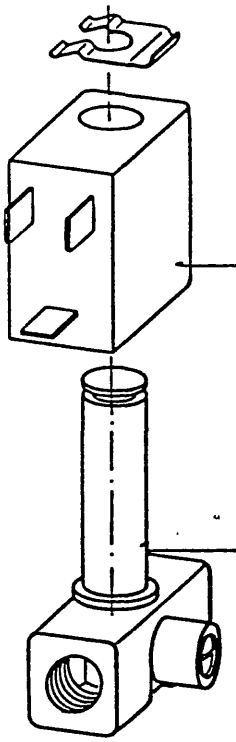


AIR CONTROL ASSY 118593 (including automatic drain)



REPAIR KIT 118634

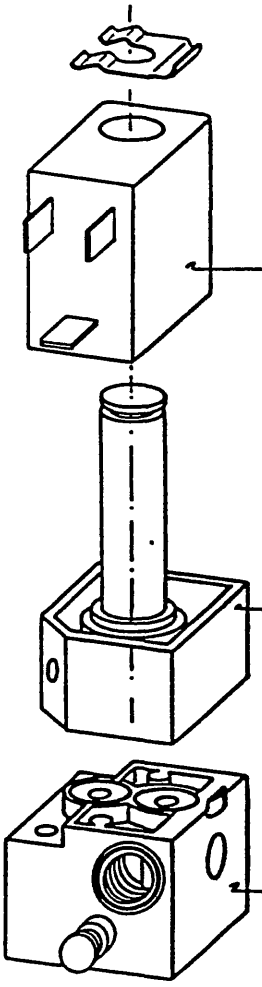
SOLENOID VALVES



Solenoid valve complete 118544

coil 24v.50/60 Hz.118628

valve body 118629



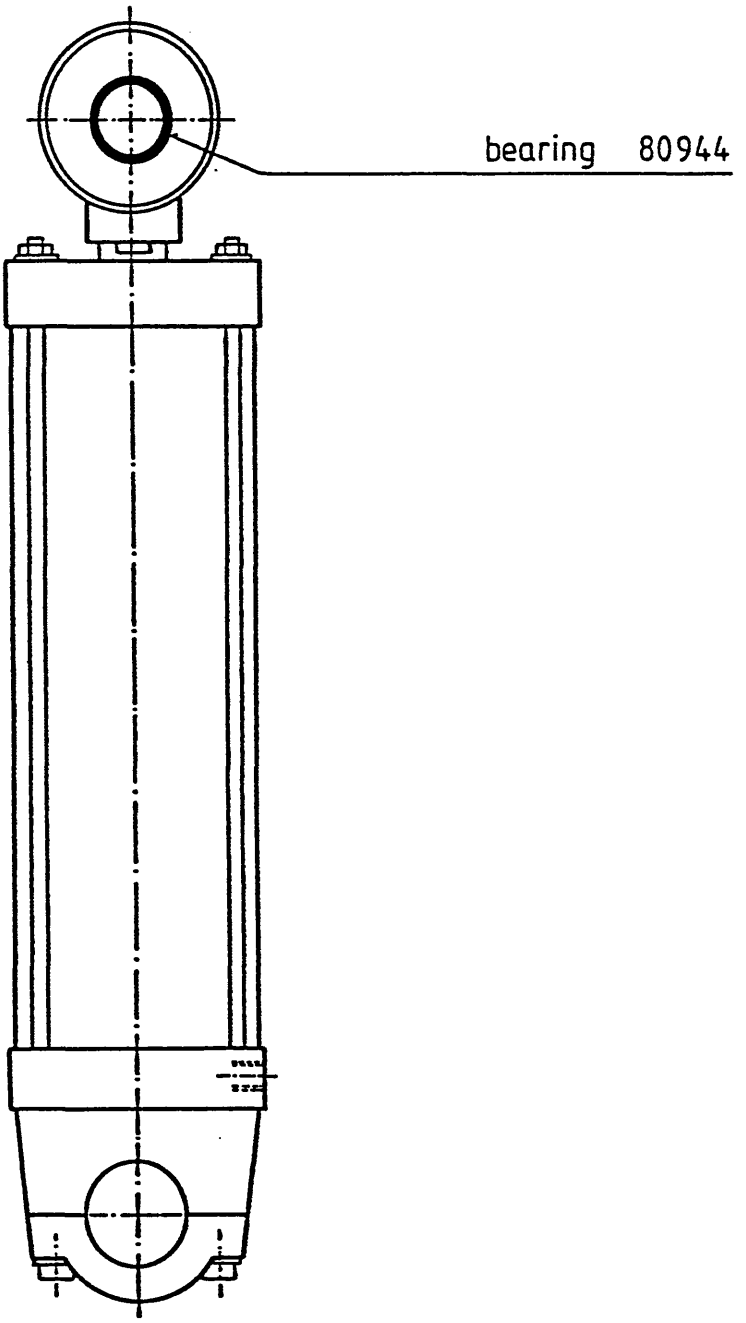
Solenoid valve complete 118602

coil 24v.50/60 Hz. 118630

valve body 118631

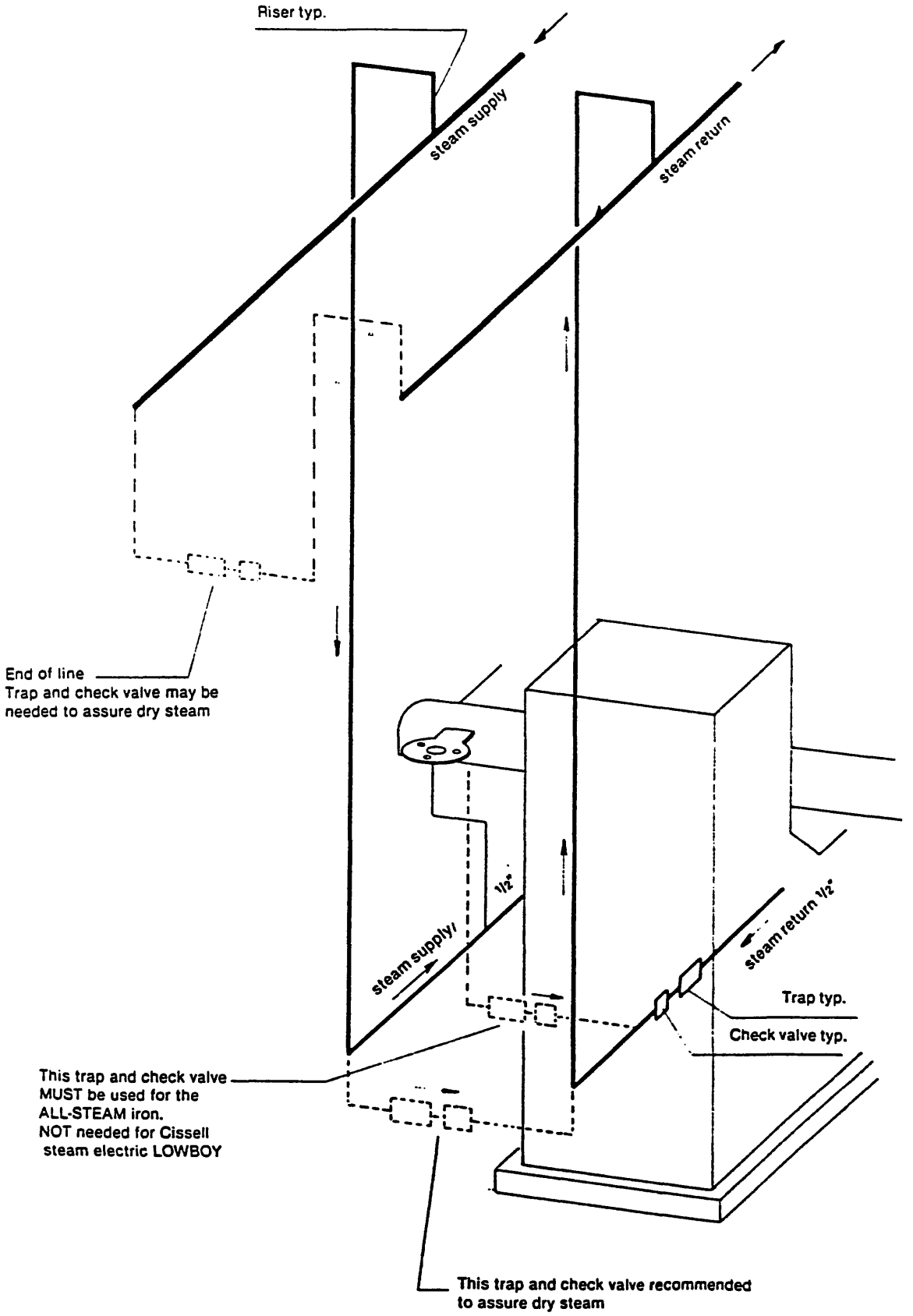
valve base 118632
(including seal rings)

CLOSING AIR CYLINDER 118595

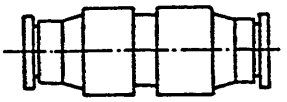


REPAIR KIT 118633

RECOMMENDED PIPING FOR CISSELL PRESSES AND IRONS

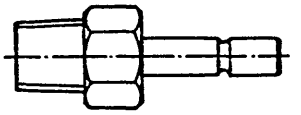


METRIC PUSH-IN TUBE FITTINGS



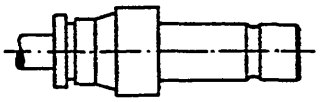
STRAIGHT CONN.

45208 _ Φ4



STRAIGHT STEM ADAPTOR

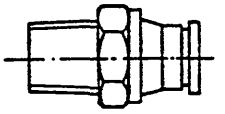
45225 _ Φ10 x 1/4" bsp



REDUCING CONN.

45207 _ Φ4 x Φ6

45219 _ Φ4 x Φ8



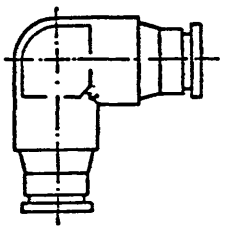
STRAIGHT ADAPTOR

45205 _ Φ4 x 1/8" bsp.

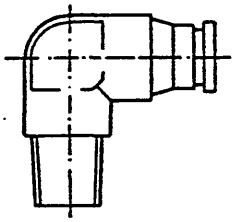
45206 _ Φ6 x 1/4" ..

45222 _ Φ4 x 1/4" ..

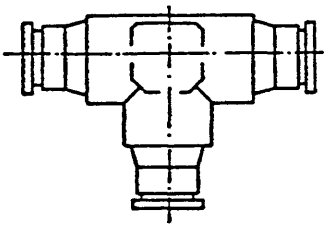
45224 _ Φ8 x 1/4" ..



ELBOW CONN.



ELBOW ADAPTOR

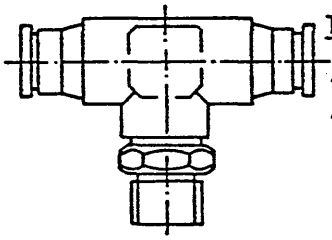


TEE CONNECTOR

45216 _ Φ 4

45217 _ Φ 6

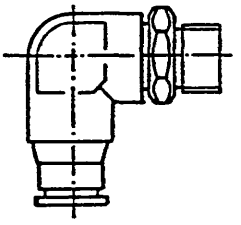
45220 _ Φ 8



TEE ADAPTOR

45214 _ Φ4 x 1/8" bsp.

45215 _ Φ6 x 1/8" ..



SWIVEL ELBOW AD.

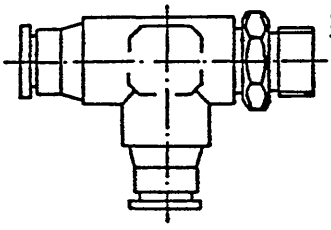
45209 - Φ 4 x 1/8" bsp.

45211 _ Φ 4 x 1/4" ..

45210 _ Φ 6 x 1/8" ..

45212 _ Φ 6 x 1/4" ..

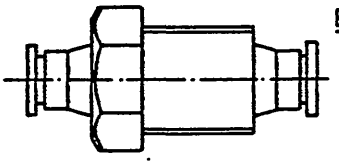
45221 _ Φ 8 x 1/4" ..



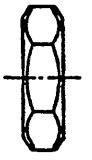
SWIVEL TEE ADAPTOR

45213 _ Φ4 x 1/8" bsp

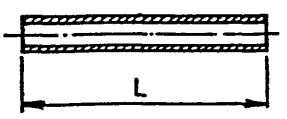
45223 _ Φ8 x 1/4" ..



BULKHEAD CONN.



BULKHEAD LOCKNUT

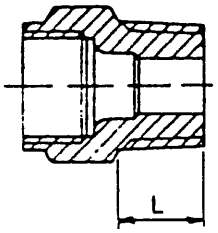


NYLON TUBE

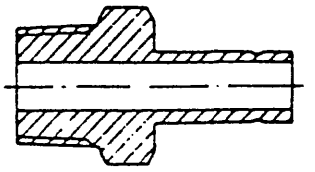
Φ4 x L

Φ6 x L

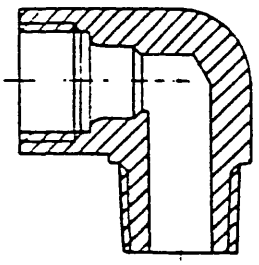
Φ8 x L



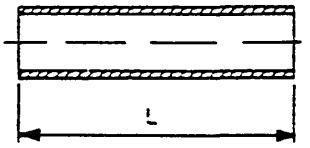
Male adaptor
45110 - ϕ 12 × 1/2" bsp
45111 - ϕ 12 × 3/8" bsp
45139 - ϕ 12 × 1/4" bsp
45144 - ϕ 10 × 3/8" bsp
45145 - ϕ 10 × 1/4" bsp
45150 - ϕ 10 × 1/2" bsp
45151 - ϕ 5 × 1/8" bsp
45152 - ϕ 5 × 1/4" bsp
45174 - ϕ 10 × 1/2" bsp (L = 10)



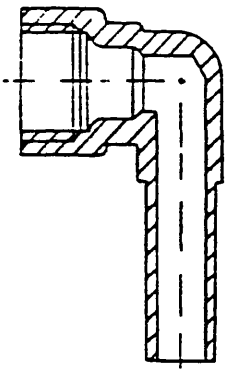
Straight stem adaptor
45138 - ϕ 10 × 3/8" bsp



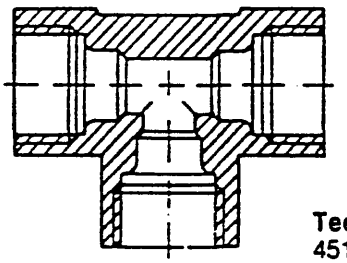
Male elbow adaptor
45112 - ϕ 12 × 3/8" bsp
45113 - ϕ 12 × 1/2" bsp
45137 - ϕ 10 × 3/8" bsp
45153 - ϕ 5 × 1/8" bsp
45154 - ϕ 5 × 1/4" bsp
45158 - ϕ 10 × 1/4" bsp
45176 - ϕ 10 × 1/2" bsp
45226 - ϕ 4 × 1/8" bsp



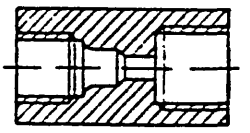
Copper tube
ϕ 10 × L
ϕ 12 × L
ϕ 5 × L



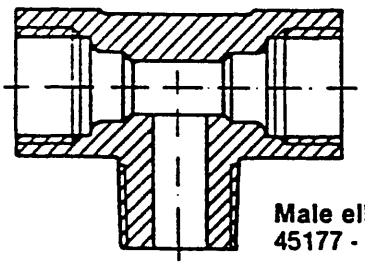
Stem elbow connector
45156 - ϕ 12
45170 - ϕ 10



Tee connector
45159 - ϕ 10
45171 - ϕ 5
45178 - ϕ 12

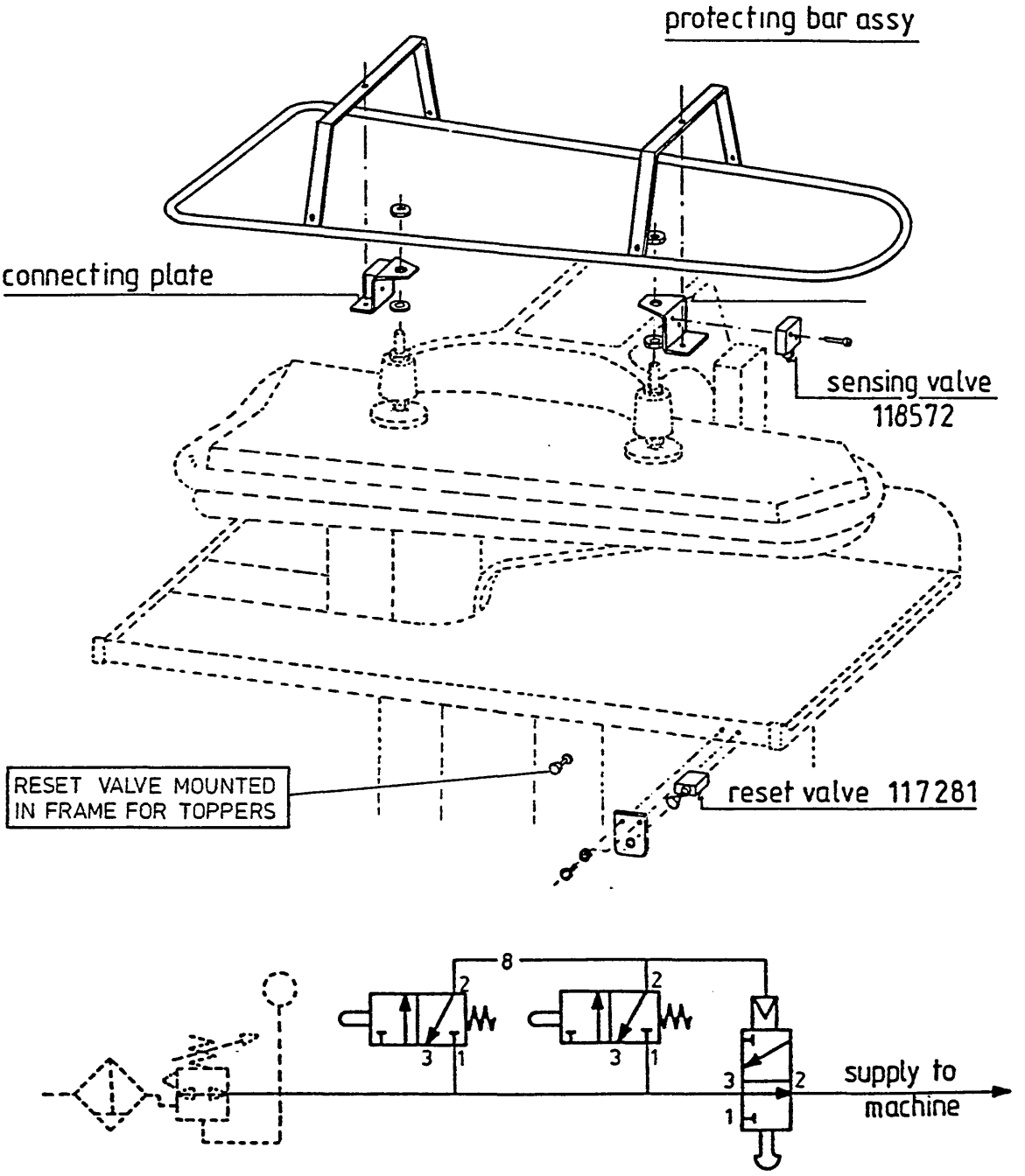


Straight adaptor
45160 - ϕ 5 × 1/8" bsp



Male elbow adaptor
45177 - ϕ 12 × ϕ 12 × 3/8" bsp

PROTECTING BAR GROUP



Topping of pants requires the use of both hands to hold the garment on the buck. In order to close the head,a center foot pedal is used.When ever the center foot pedal is used,a safety protecting bar surrounds the head such that the press had closing is cancelled should an object(such as a hand)get in the closing pad of the head.Tripping of the protecting bar causes the head to open by shutting off the air supply.The machine is reactivated by pushing the manual reset button.