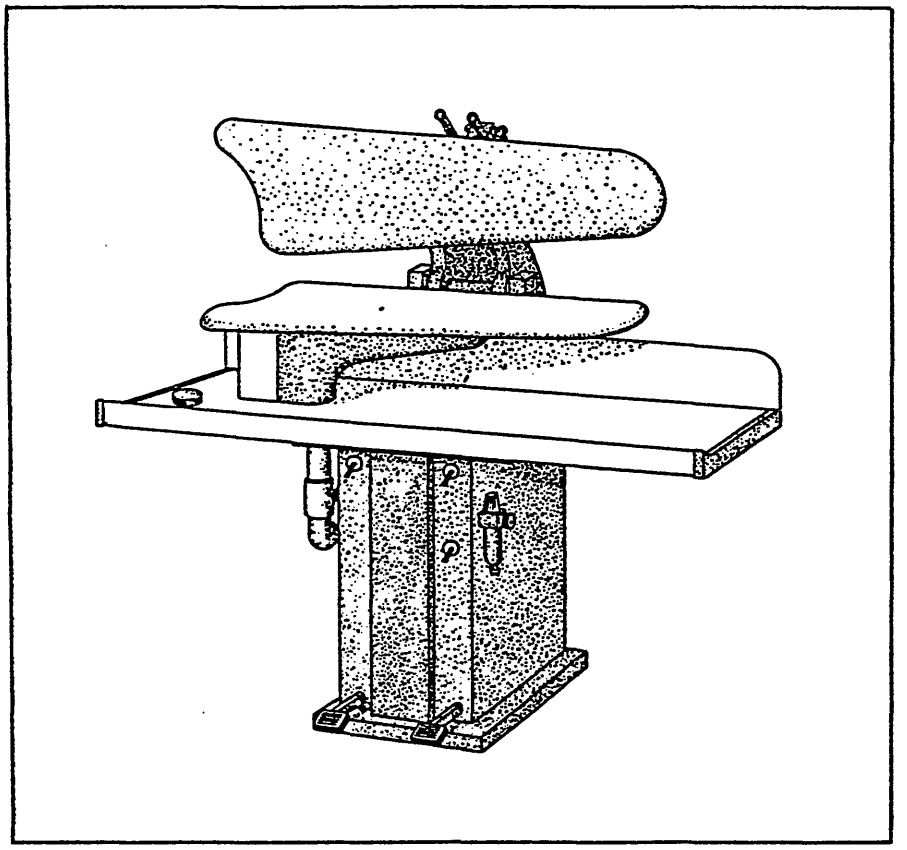
Pantex-Cissell B.V.
Winschoten · Holland

AIR OPERATED PRESSES
Service Manual



Service Manual

PANTEX-CISSELL B.V.
P.O. BOX 53, 9670 AB
WINSCHOTEN, HOLLAND
TELEX 53535

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

UTILITY
REVERSE UTILITY
LEGGER
TOPPER
TOPPER (PROTECTED)

MANUAL 150140
12/95
Part No. D0125

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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.

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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

PART NUMBERS

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

Air operated presses.

These presses are engineered to provide quality finishing with minimum exertion. The press comes equipped with an air cylinder (sometimes referred to as an air motor) to close the head, an automatic head steam cycle and more important an adjustable booster for controlling the head pressure. The buck steam and air vacuum are foot pedal operated. Further depression of the vacuum pedal causes the head to open. The locking booster cylinder acts as a hydraulic snubber and as a means to exert variable additional head pressure. bearings are used in the main pivot points. Operator fatigue is reduced and a quality finish is assured.

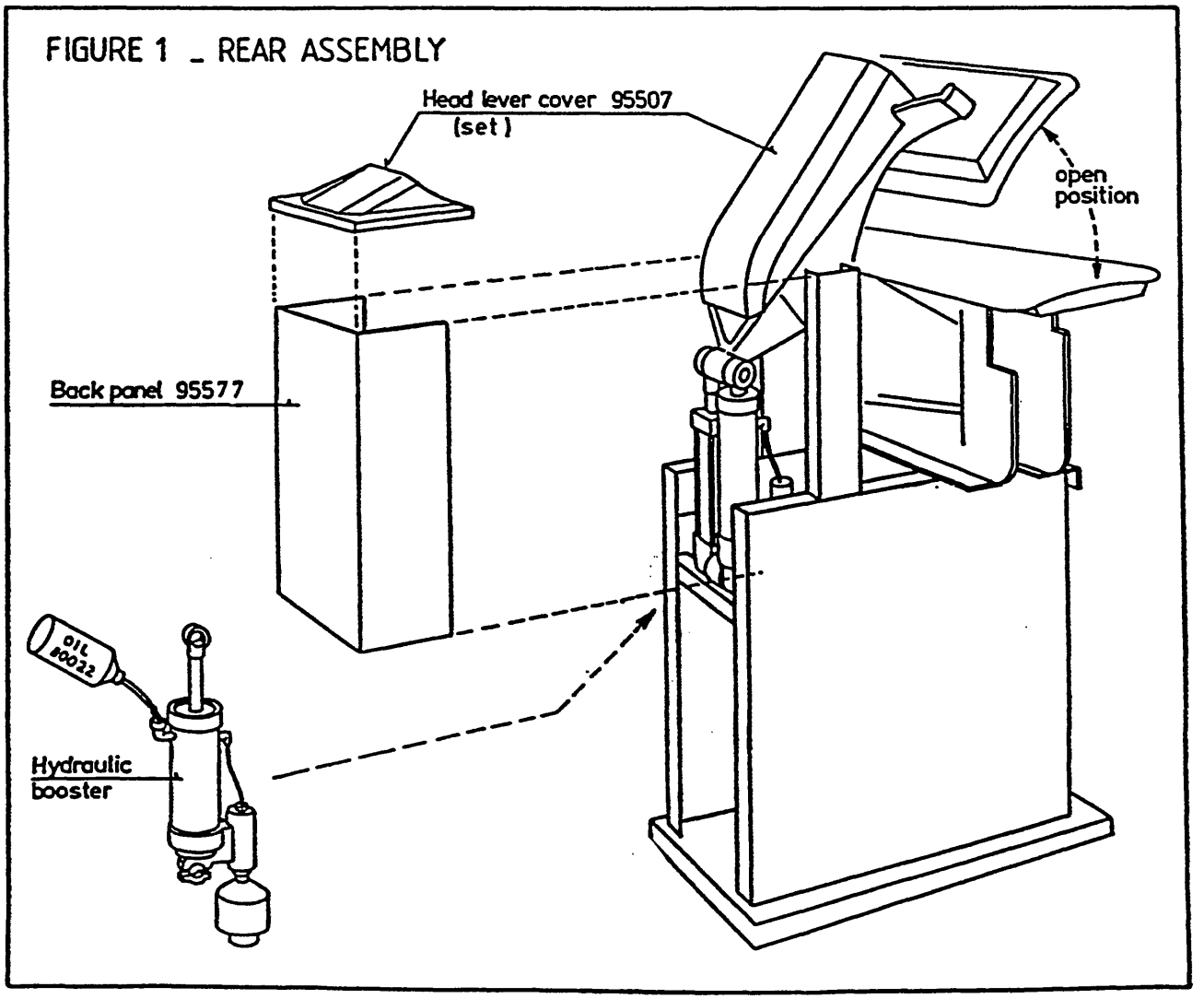
Reverse buck models are used extensively with silk units for pressing dresses and other lightweight fabric. The regular press is used with "wool" units for suits and other heavy fabrics.

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.

FIGURE 1 _ REAR ASSEMBLY



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.

Assembly of the AUR models is similar to that required for the AU models except that one must remember that the "R" (reverse buck) models are opposite handed.

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

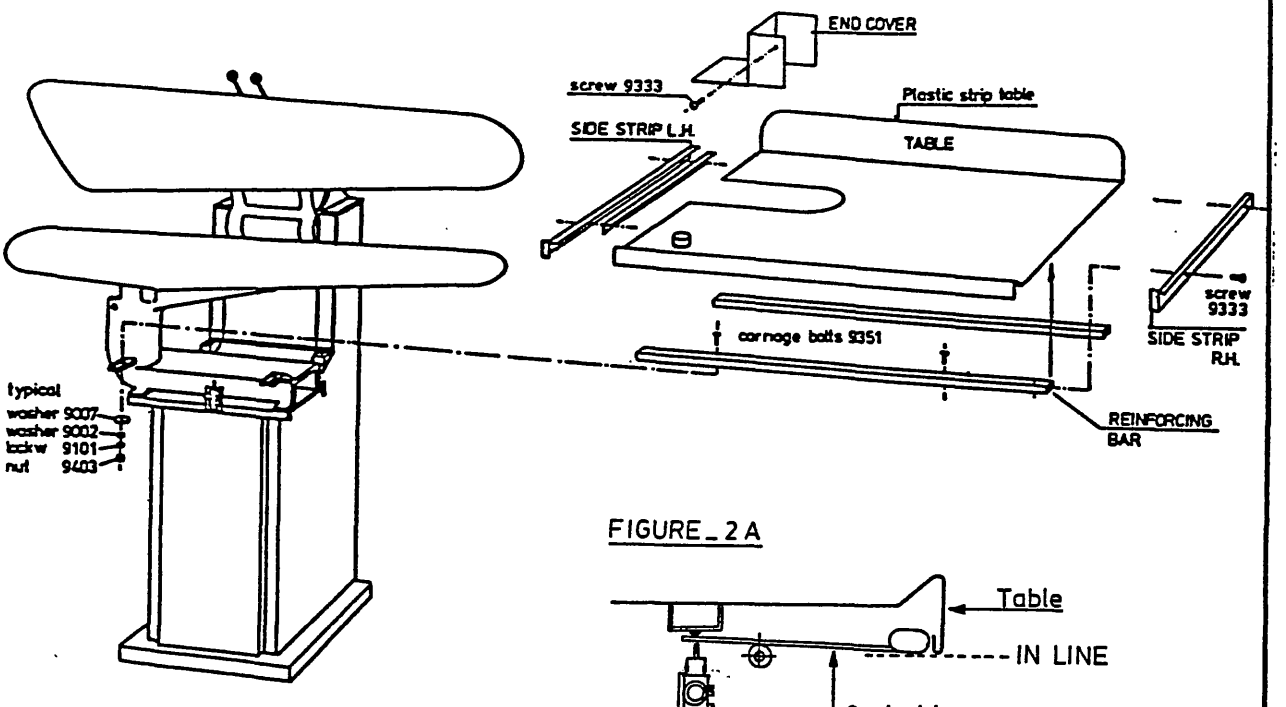
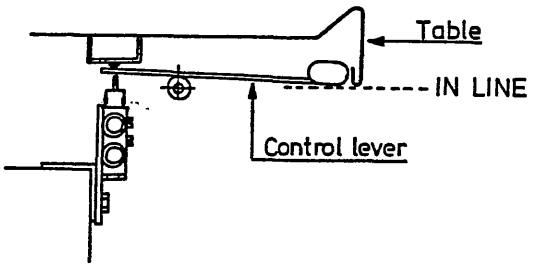


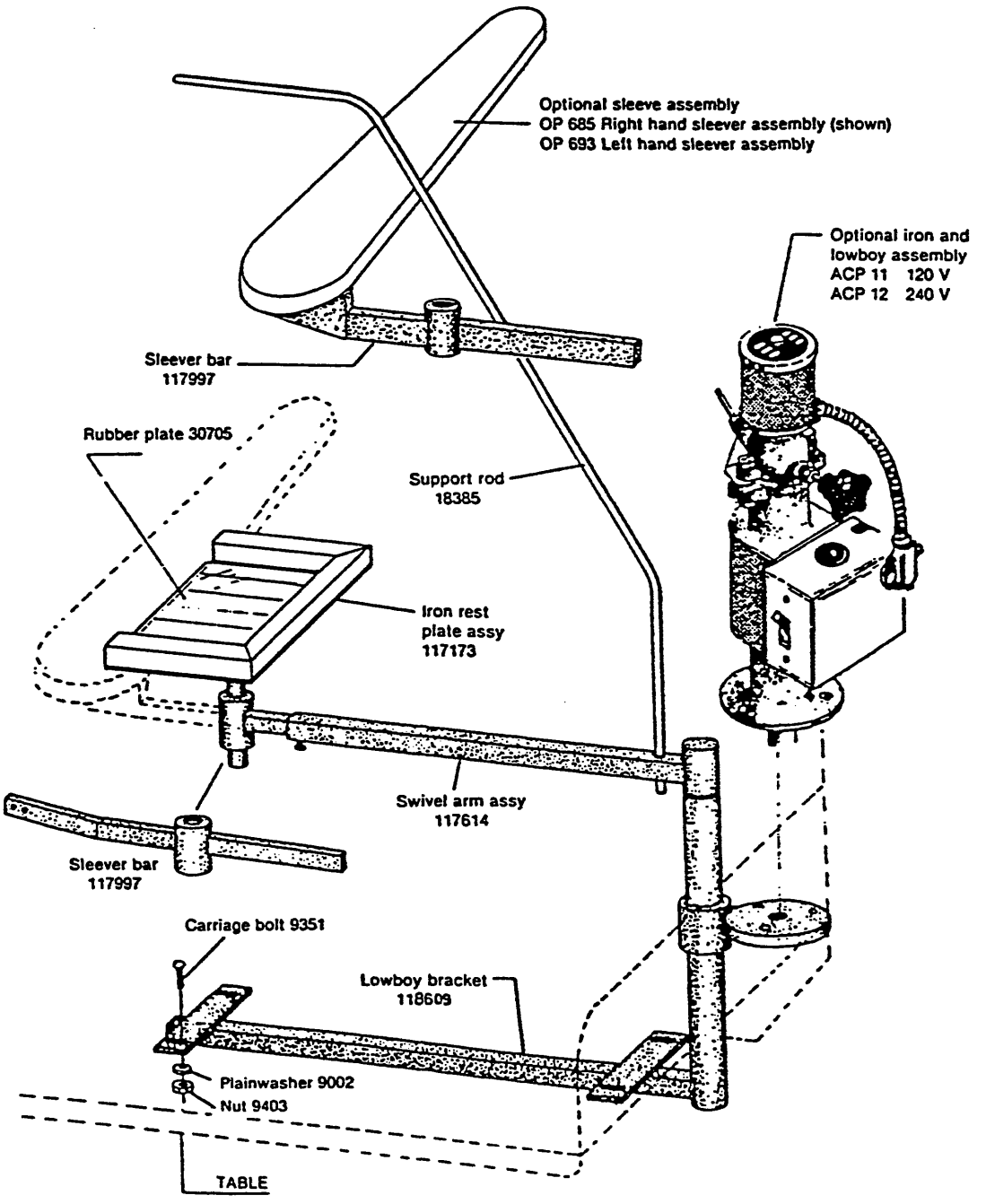
FIGURE_2A



12 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.

13 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, and air connections – see fig. 4

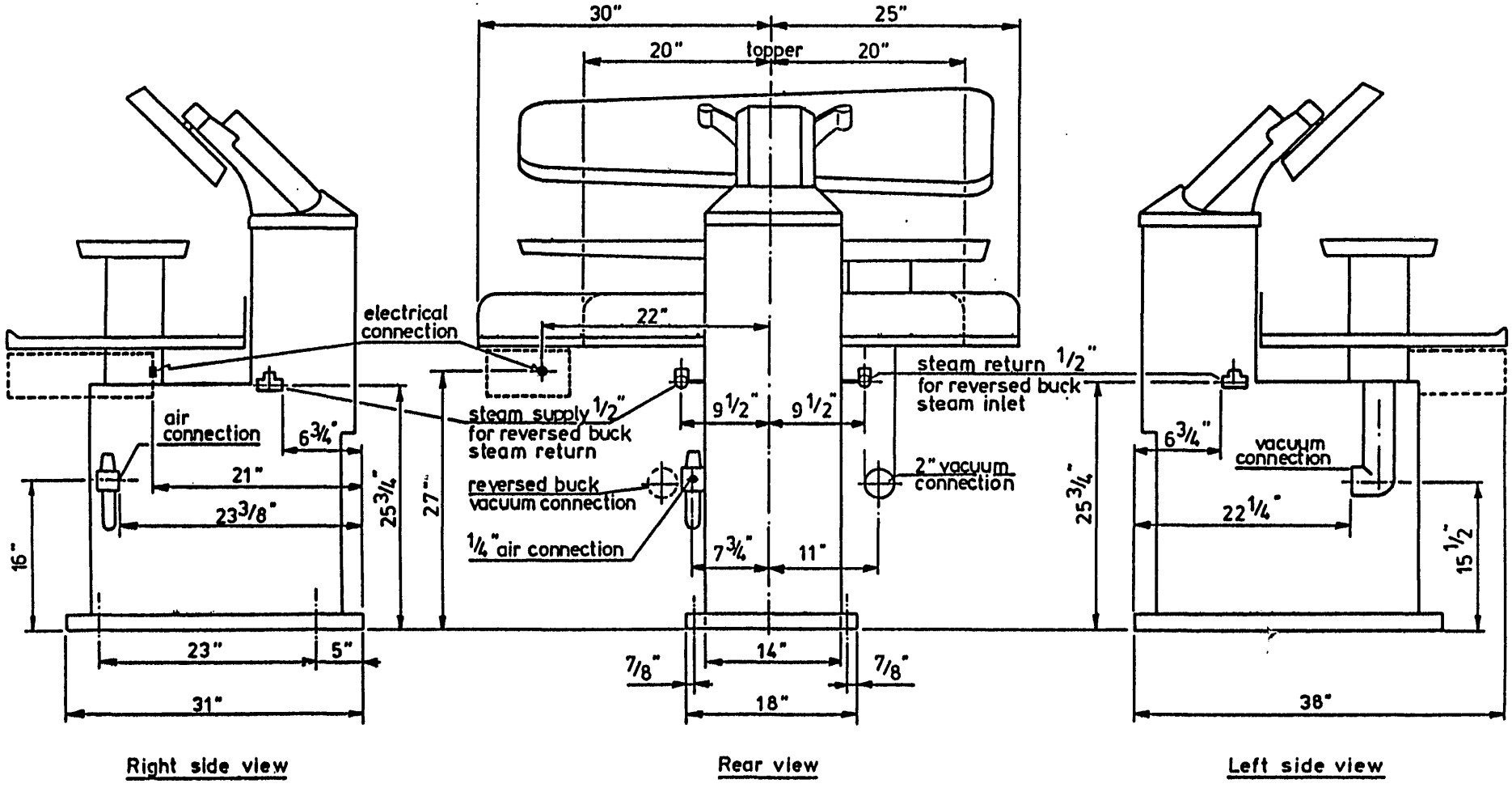
14 Connect a ½ inch steam supply line to the press at a pressure of 88 psi (about 6 bars). Use a reducing valve if needed to obtain the correct pressure. The press uses one boiler horsepower (34.5 lbs. per hour) of steam.

15 Connect a ½ inch steam return line to the press. Install a ½ inch trap good for 88 psi in the line.

16 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.)

17 Connect the air using a ½ inch line at 88 psi (about 6 bars). The press is equipped with an air pressure regulator and gauge. Read the gauge 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.

FIGURE 4 _STEAM, VACUUM, AIR AND ELECTRICAL CONNECTIONS



DESCRIPTION OF THE AIR OPERATED 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 and 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.

Two black knobbed levers are located on the head. The left lever 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 operated 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 upstream to the buck.

OPERATION OF THE AIR PRESS

Allow the press to warm-up

Lay the garment to be pressed on the buck, close the head by pressing upward on the long hidden actuating bar located under the front edge of the table. When the head is fully closed and while continuing to press upward on the bar, use the other hand to depress the left hand black knobbed lever which applies pressure to the head and locks it in the closed position. In the automatic (automatic steam valve open) operation the head steam should commence just as the head touches the buck. With the automatic steam valve closed, head steam is controlled by the right hand black knobbed lever. The commencing of the head steam can be controlled by adjusting the steam delay valve.

Upsteam to the buck is controlled by stepping on the right hand foot pedal if desired. Vacuum to the buck is controlled by partial depression of the left hand foot pedal and full depression releases the head which is pushed open by the balance spring. The garment is dried as air is drawn through the garment by the vacuum.

The fabric feel control sets the pressure which is exerted on the garment. the actual pressure may be observed by looking at the gage dial mounted on the press head. The left hand black knobbed lever used to apply pressure should be held until the gage needle stops. The settings of the fabric

feel control have been determined to be correct and the control should be set for each different material. The least pressure is used on silk for instance whereas the maximum pressure is used on linen.

Lay the Garment to a new position and repeat the above procedure as needed.

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 # 1 at 88 psi (6 bar) and clean, if necessary.
c.	Closing valve # 2 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 # 8 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 13 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.

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 # 11 on left foot pedal does not work.	Re-adjust valve. Clearance between pedal and valve should be 1/32 to 1/16 inch.

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 mounting a ring behind the spring.
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. (Check on/off automatic steam valve)	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.

HOW THE AIR CONTROL SYSTEM WORKS (UTILITY AND TOPPER)

See page 16 and page 19. Plant air enters the air control (1) where it is cleaned of water and dirt. The controls should be adjusted to give a reading of 88 psi (6 bars) on the system air gage. The air flows to the hand actuated closing valve (2). and to the fabric feel valve (12). The fabric feel valve is really a pressure reducer and the reduced pressure is connected to the hand lever locking valve (13).

When automatic operation of the head steam is desired, the open-close automatic steam valve (4(,) is open. When the hand actuated closing valve (2) is operated, air flows to the quick exhaust valve (8) which moves a diaphragm in the quick exhaust valve (8) such that air is ported to the closing air cylinder (9) and the head closes.

At the same time air flows through an adjustable orifice in the steam delay valve (3), through the open automatic steam valve (4) to the head steam valve operating cylinder (5). The adjustable orifice in the steam delay valve (3) should be adjusted so that the steam commences as soon as the head is closed.

When manual operation of the head steam is desired or when no head steam is wanted the open-close automatic steam valve (4) should be closed. If the head actuated closing valve (2) is released at this time the head will open.

To keep the head down, the hand lever locking valve (13) must be depressed with the other hand while continuing to hold the closing valve (2).
WARNING! The head must be fully closed when the hand locking lever (13) is depressed or poor pressing pressure will result and the booster could be damaged. Air flows from the locking valve (13) which ports air to the quick exhaust valve assembly (14) which move a diaphragm in the quick exhaust valve (14) such that air is ported to the hydraulic booster assembly (15). this applies pressure to the closed head. The same air is piped to the boost pressure gage (10) and to the foot pedal unlocking release valve (11). Now both hand controls (2) and (13) can be released and the head is in the closed and locked position.

When the foot pedal release valve (11) is actuated, the quick exhaust valve (14) diaphragm moves and the air in the hydraulic booster assembly (15) is exhausted to atmosphere through the quick exhaust valve (14) The balance spring push the head to the open position.

Reverse buck vacuum valve is actuated by means of the vacuum valve cylinder (20) when left foot pedal is depressed. Depressing the left foot pedal allows air to flow through the vacuum air valve (18), control flow through the vacuum delay valve (19) to the vacuum cylinder (20). The vacuum delay valve (19) can be adjusted closed for more delay

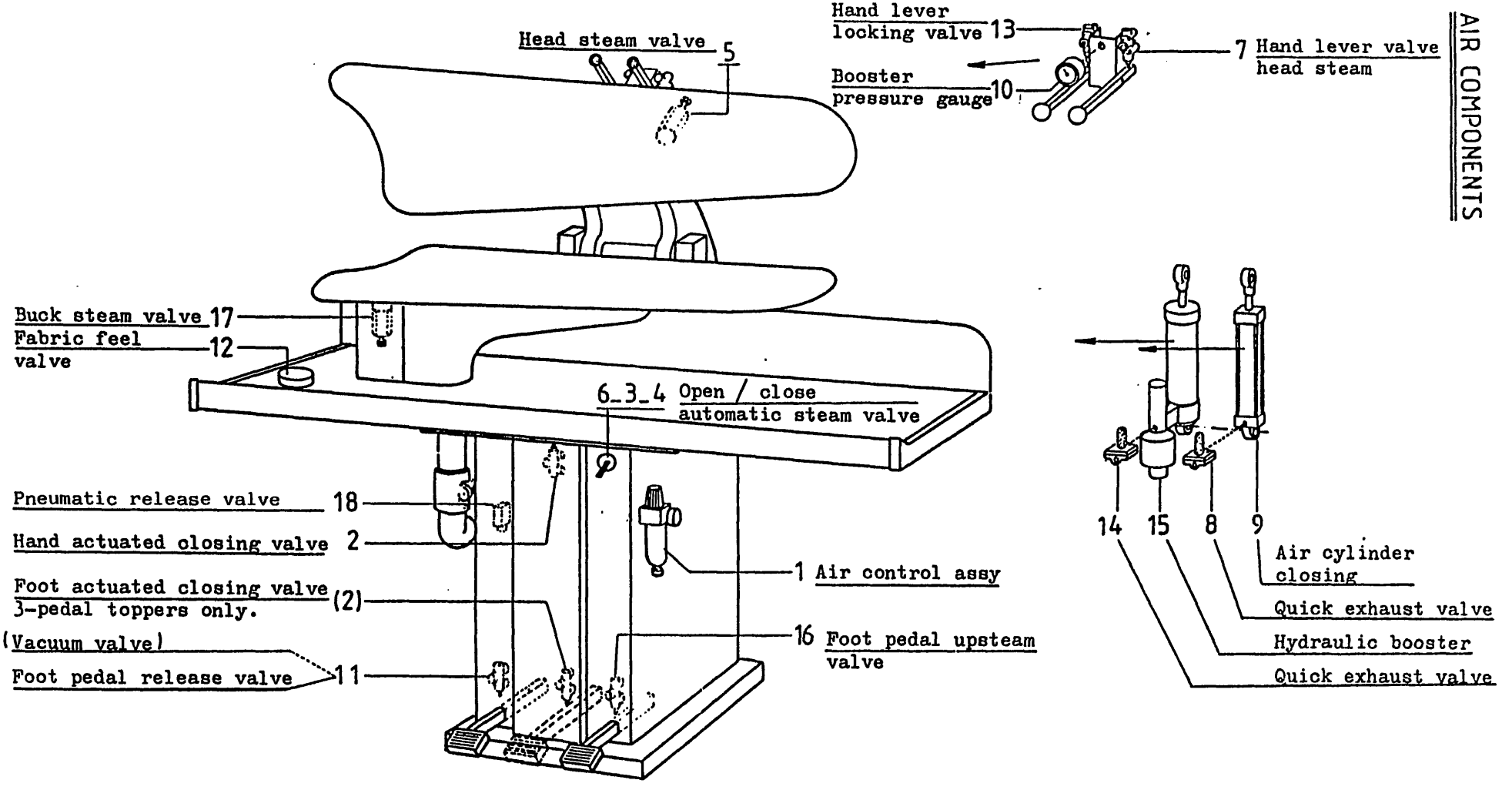

Head steam valve 5
Hand lever locking valve 13
Booster pressure gauge 10
7 Hand lever valve head steam
Buck steam valve 17
Fabric feel valve 12
6_3_4 Open / close automatic steam valve
Pneumatic release valve 18
Hand actuated closing valve 2
Foot actuated closing valve 3-pedal toppers only. (2)
(Vacuum valve)
Foot pedal release valve 11
1 Air control assy
16 Foot pedal upsteam valve
14 15 8 9
Air cylinder closing
Quick exhaust valve
Hydraulic booster
Quick exhaust valve

CHART FOR AIR CONTROLS PART NUMBERS

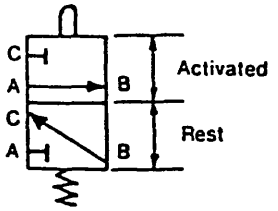
1	Air control assy	118593
2	Hand actuated closing valve	118795
3	Steam delay valve	80846
4	Open close automatic steam valve	118587
5	Head steam valve	115609
6	Shuttle valve	118592
7	Hand lever valve head steam	118795
8	Quick exhaust valve	110025
9	Air cylinder closing	118595
10	Boost pressure gauge	80949
11	Foot pedal release valve (Vacuum valve)	118795
12	Fabric feel valve	118601
13	Hand lever locking valve	118795
14	Quick exhaust valve	110025
15	Hydraulic booster	118505
16	Foot pedal upsteam valve	118795
17	Buck staem valve	115609
18	Pneumatic release valve	118542
19	Vacuum delay valve	80846
20	Vacuum valve operating cylinder	116972

NOTE: 18 - 19 - 20 used only on reversed buck model to operate the vacuum valve with air rather than with mechanical linkage.

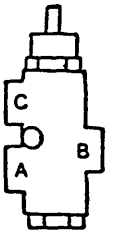
SCHEMATIC SYMBOLS

Manually operated

(Schematic drawing)

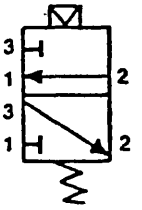


Actual valve
113788

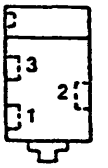


The above schematic is for manually operated air valves showing the function of the valve at rest (bottom section) and at the activated position (top section).
Although the valve has only 3 ports (A, B and C), this is a schematic way of showing how the valve works internally.

Air operated valve



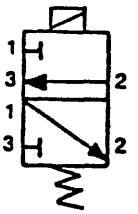
Actual valve



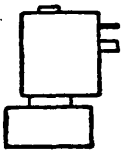
The above schematic is for an air operated air valve showing the function of the valve at rest (bottom section) and in the activated position (top section).
Although the valve has only 3 ports (1, 2 and 3), this is a schematic way of showing how the valve works internally.

Electrical operated valve

(Schematic drawing)



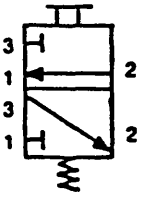
Actual valve



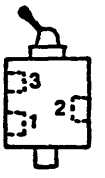
The above schematic is for an electrically operated air valve showing the function of the valve at rest (bottom section) and in the activated position (top section).
Although the valve has only 3 ports (1, 2 and 3), this is a schematic way of showing how the valve works internally.

Manually operated with tumbler switch

(Schematic drawing)

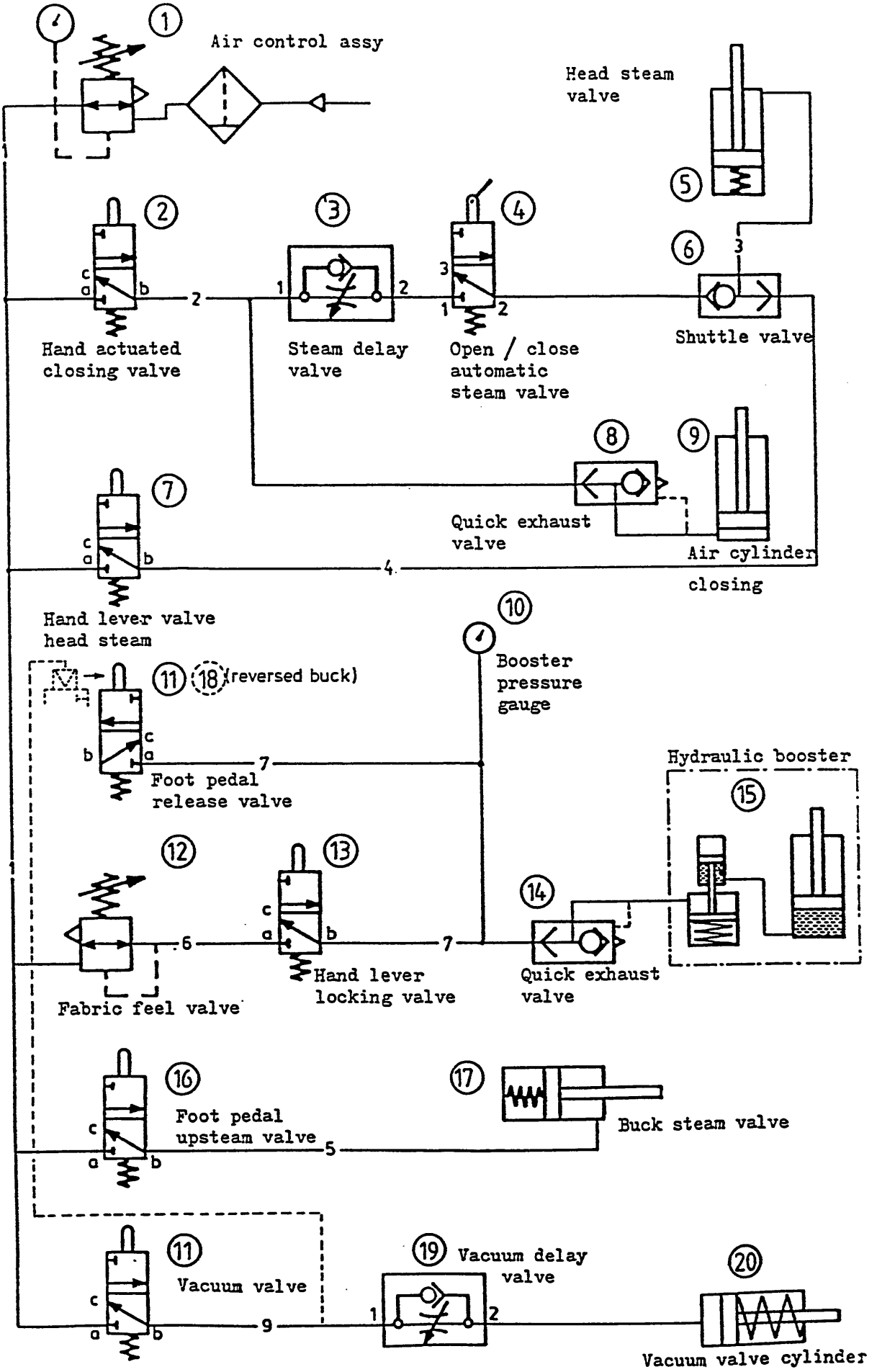


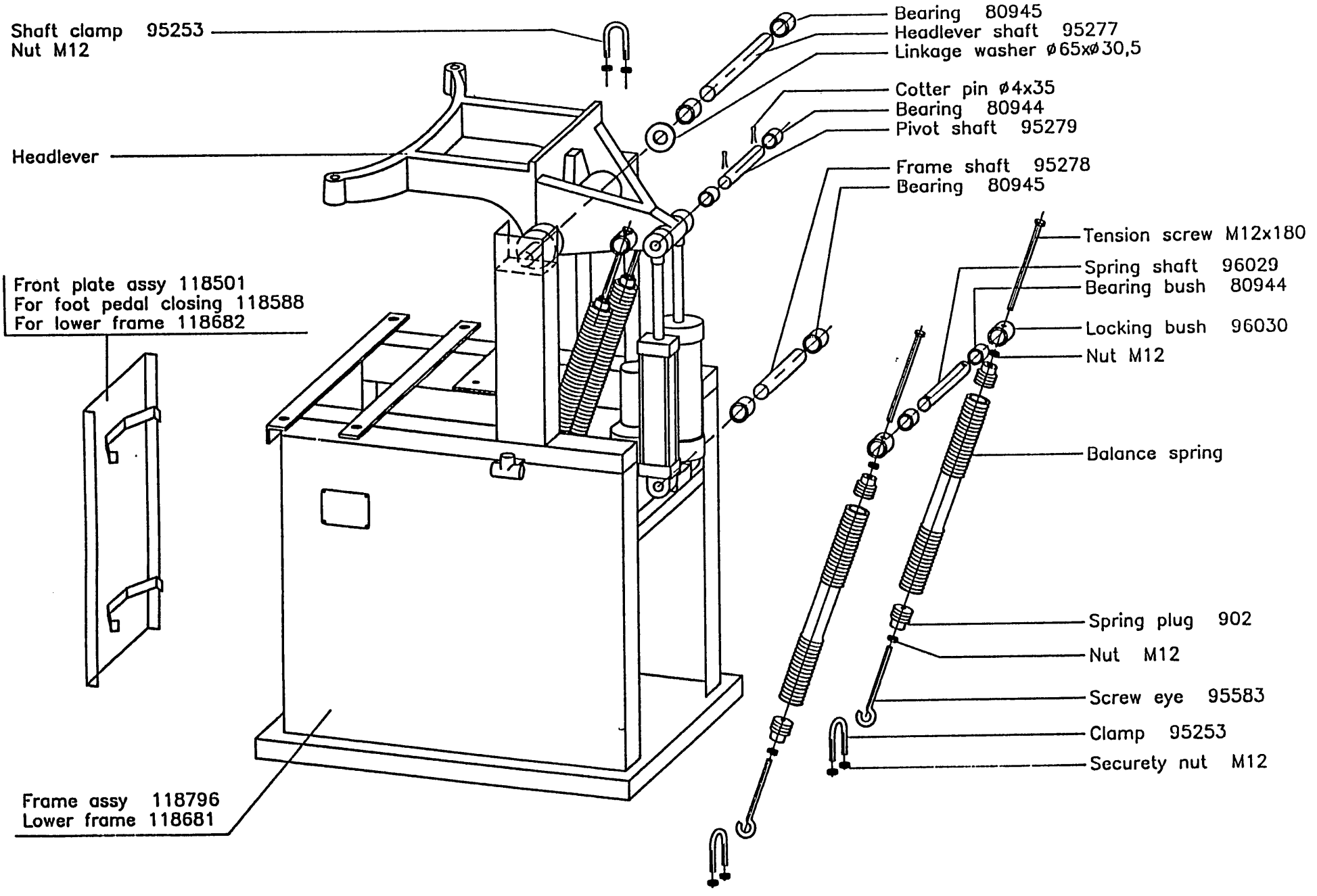
Actual valve



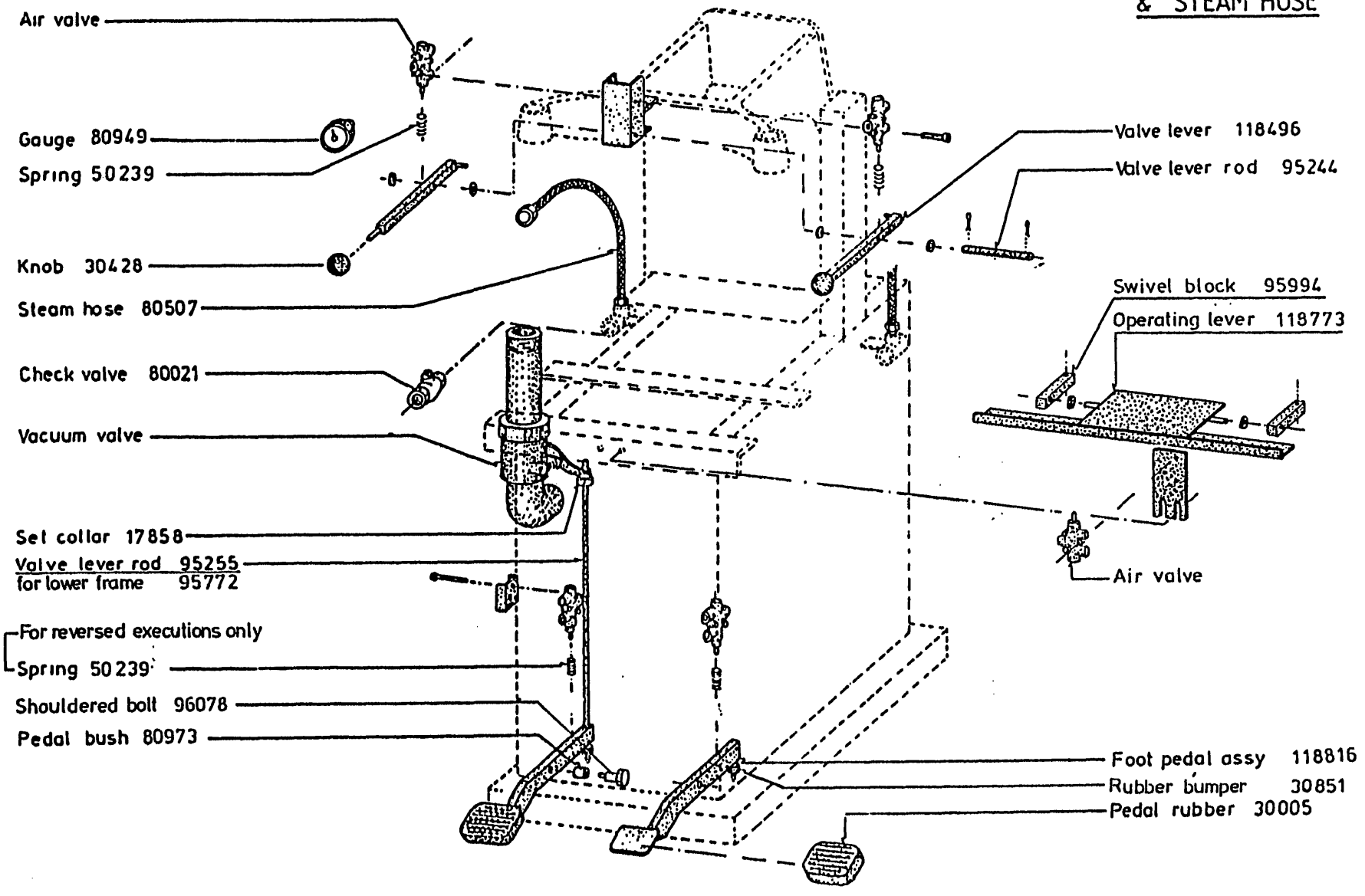
The above schematic is for manually operated (with tumbler switch) air valve showing the function of the valve at rest (bottom section) and in the activated position (top section).
Although the valve has only 3 ports (1, 2 and 3), this is a schematic way of showing how the valve works internally.

AIR COMPONENTS SCHEMATIC

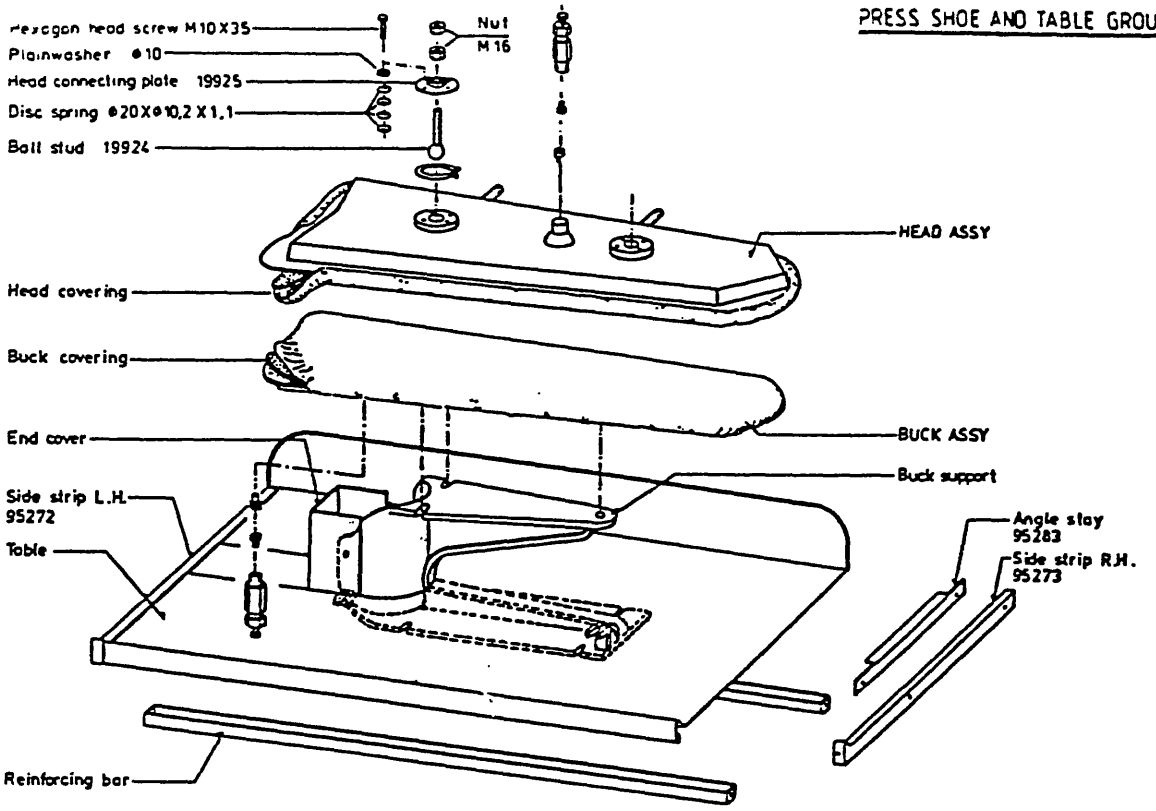



Shaft clamp 95253
Nut M12
Headlever
Front plate assy 118501
For foot pedal closing 118588
For lower frame 118682
Frame assy 118796
Lower frame 118681
Bearing 80945
Headlever shaft 95277
Linkage washer ø65xø30,5
Cotter pin ø4x35
Bearing 80944
Pivot shaft 95279
Frame shaft 95278
Bearing 80945
Tension screw 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



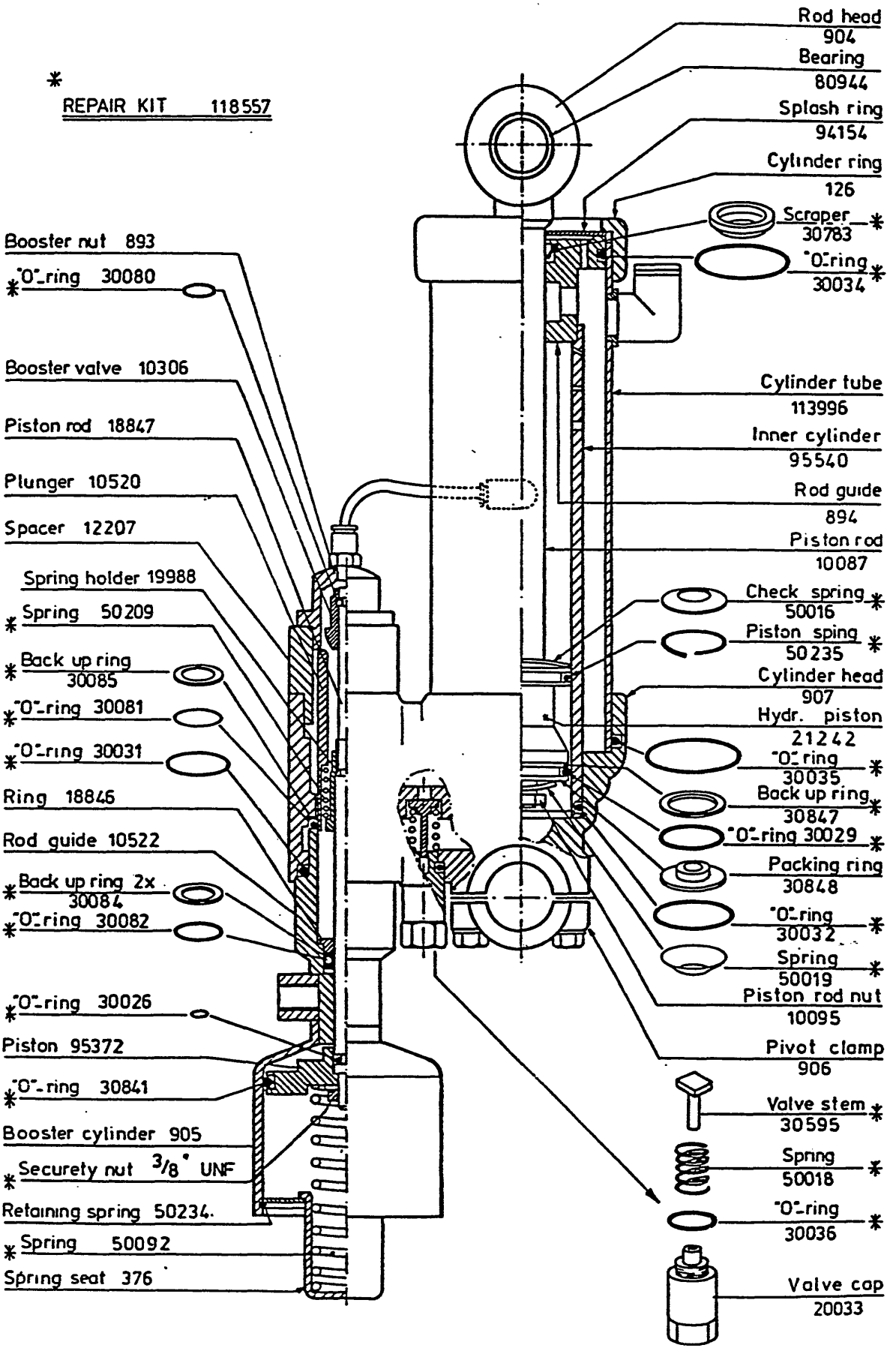
PRESS SHOE AND TABLE GROUP



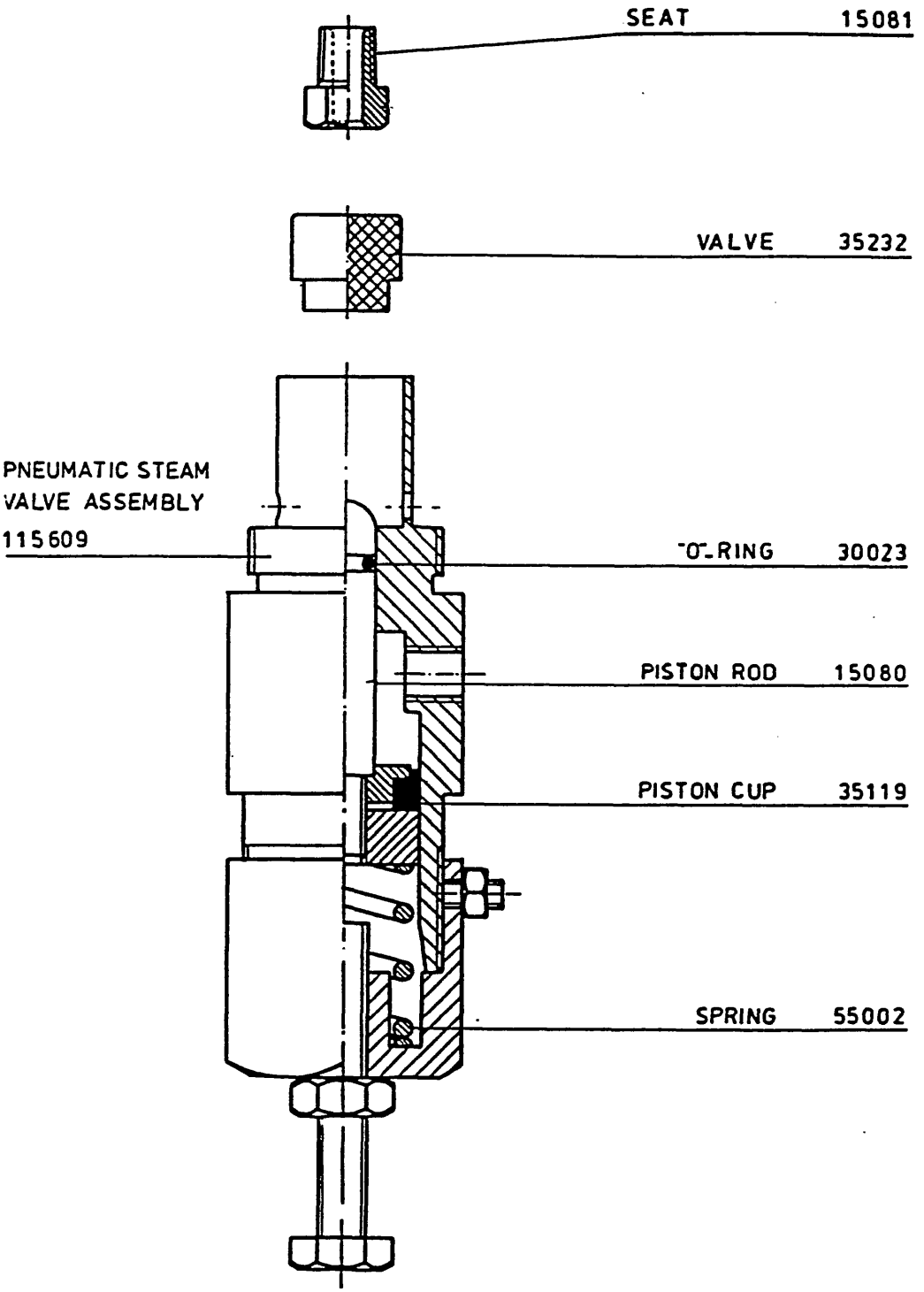
MODEL	HEAD ASSY	BUCK ASSY	HEAD COVERING	BUCK COVERING	BUCK SUPPORT	TABLE	END COVER
AMT-19(3)C	102241	102239	117760	117759	Base plat	95508	80903& 80904
AU-42-C	102218	102219	117758	117757	895	95490	95440
AUH-42-C	102177	102219	—	118513	"	"	"
AUR-42-C	102235	102219	117758	117757	"	95505	"
AURH-42-C	102179	102219	—	118513	"	"	"
AU-45-C	102194	102220	117756	117755	"	95490	"
AUH-45-C	102176	102220	—	118514	"	"	"
AUR-45-C	102236	102220	117756	117755	"	95505	"
AURH-45-C	102178	102220	—	118514	"	"	"
AU-47-C	102221	102222	117754	117753	"	95490	"
AUR-47-C	102237	102222	117754	117753	"	95505	"
AL-45-C	102231	102232	117752	117751	"	95490	"
AL-446-C	102245	102244	118600	118599	"	"	"

NOTE:. PLEASE REMEMBER THAT " R " (reversed buck) MODELS ARE OPPOSITE HANDED.

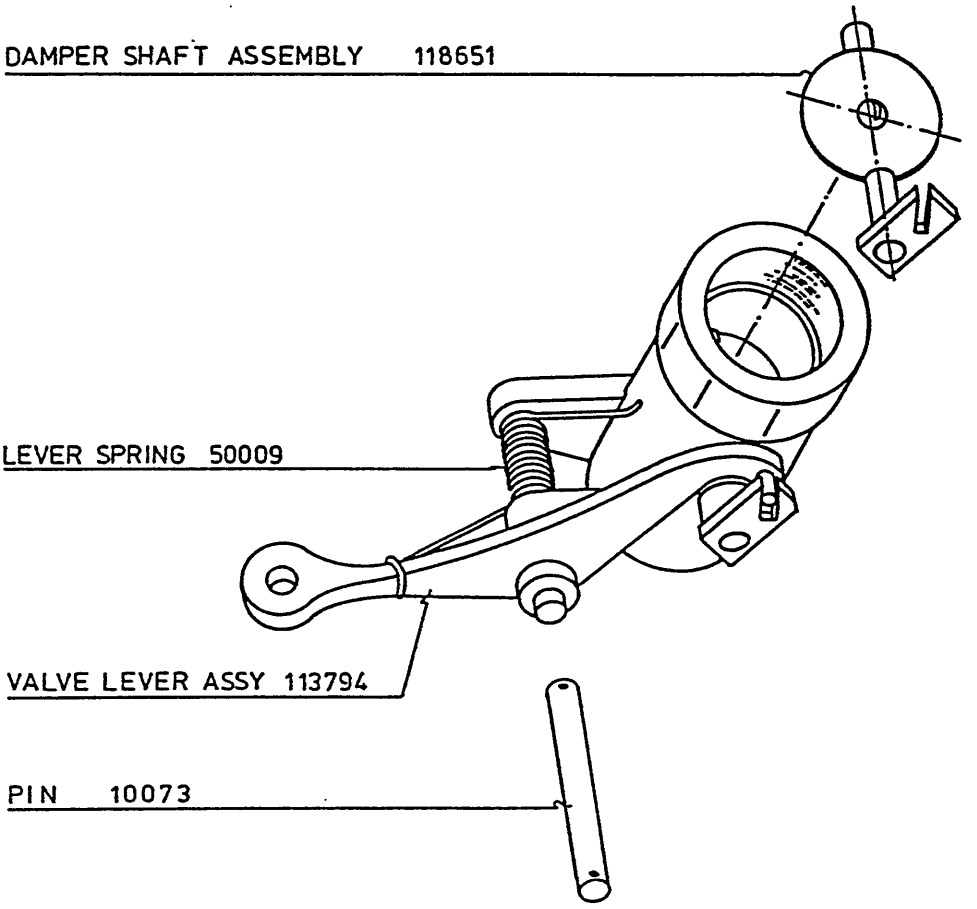
HYDRAULIC BOOSTER ASSY 118505



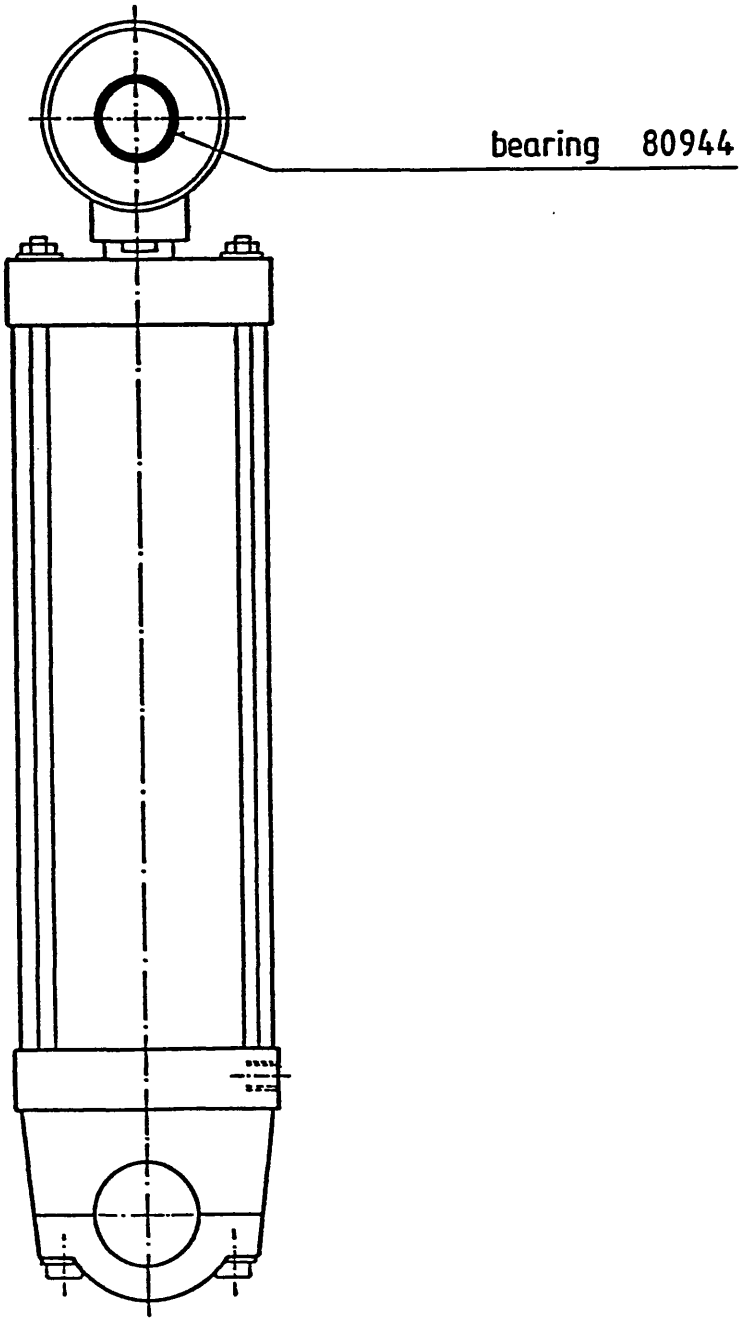
PNEUMATIC STEAM VALVE



AIR VACUUM VALVE ASSEMBLY , 2" 118652

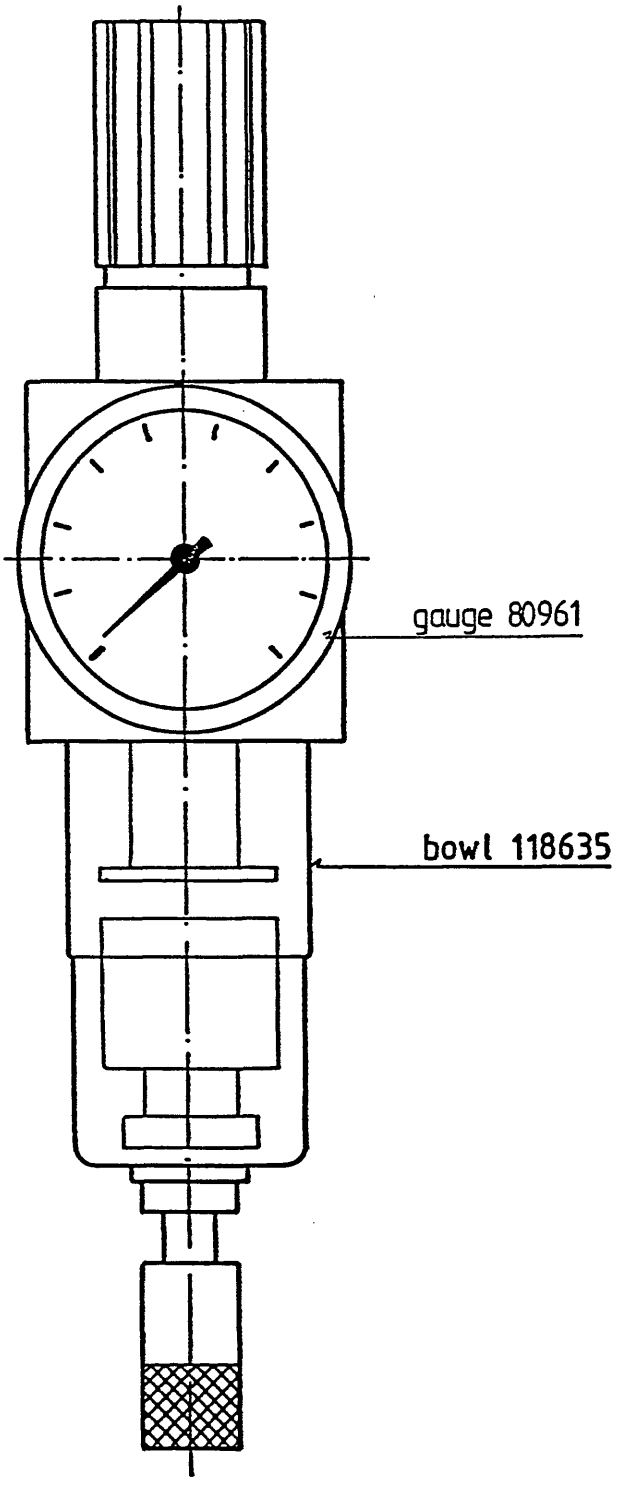


CLOSING AIR CYLINDER 118595



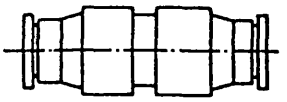
REPAIR KIT 118633

AIR CONTROL ASSY 118593 (including automatic drain)

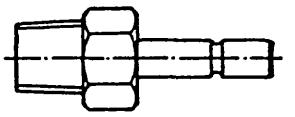


REPAIR KIT 118634

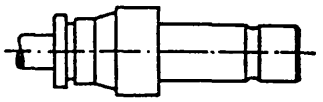
METRIC PUSH IN TUBE FITTINGS



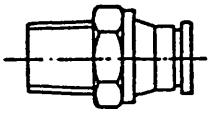
STRAIGHT CONN.
45208 _ ϕ4



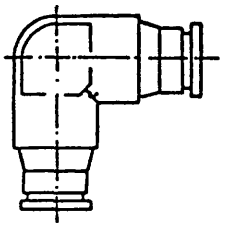
STRAIGHT STEM ADAPTOR
45225 _ ϕ10 x 1/4" bsp



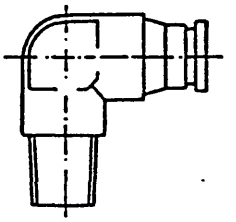
REDUCING CONN.
45207 _ ϕ4 x ϕ6
45219 _ ϕ4 x ϕ8



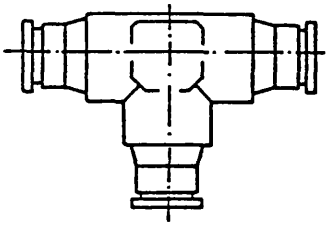
STRAIGHT ADAPTOR
45205 _ ϕ4 x 1/8" bsp.
45206 _ ϕ6 x 1/4" ..
45222 _ ϕ4 x 1/4" ..
45224 _ ϕ8 x 1/4" ..



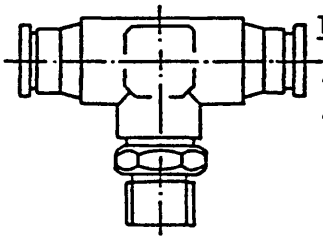
ELBOW CONN.



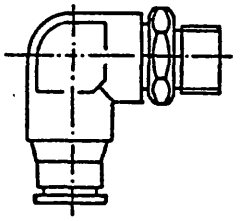
ELBOW ADAPTOR



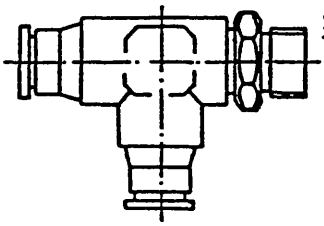
TEE CONNECTOR
45216 _ ϕ 4
45217 _ ϕ 6
45220 _ ϕ 8



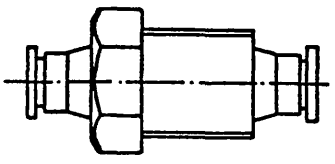
TEE ADAPTOR
45214 _ ϕ4 x 1/8" bsp.
45215 _ ϕ6 x 1/8" ..



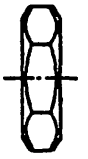
SWIVEL ELBOW AD.
45209 - ϕ 4 x 1/8" bsp.
45211 _ ϕ4 x 1/4" ..
45210 _ ϕ6 x 1/8" ..
45212 _ ϕ6 x 1/4" ..
45221 _ ϕ8 x 1/4" ..



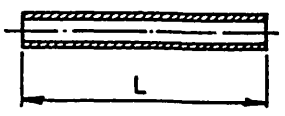
SWIVEL TEE ADAPTOR
45213 _ ϕ4 x 1/8" bsp
45223 _ ϕ8 x 1/4" ..



BULKHEAD CONN.

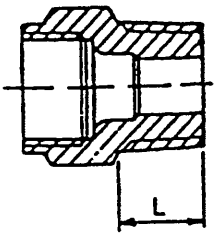


BULKHEAD LOCKNUT

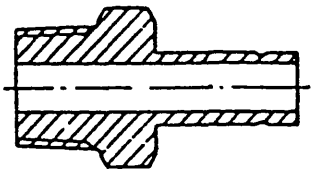


NYLON TUBE
ϕ4 x L
ϕ6 x L
ϕ8 x L

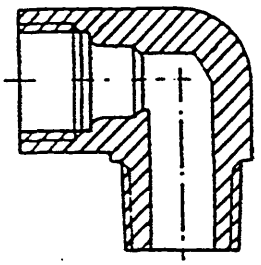
FIGURE 28 – METRIC TUBE FITTINGS



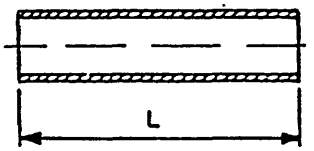
Male adaptor
45110 - ϕ 12 × 1/2" bsp
45111 - ϕ 12 × 3/8" bsp
45139 - ϕ 12 × 1/4" bsp
45144 - ϕ 10 × 3/8" bsp
45145 - ϕ 10 × 1/4" bsp
45150 - ϕ 10 × 1/2" bsp
45151 - ϕ 5 × 1/8" bsp
45152 - ϕ 5 × 1/4" bsp
45174 - ϕ 10 × 1/2" bsp (L = 10)



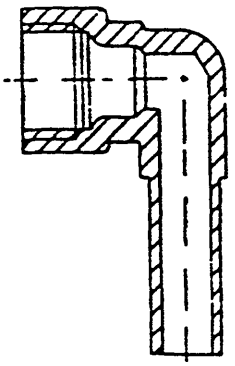
Straight stem adaptor
45138 - ϕ 10 × 3/8" bsp



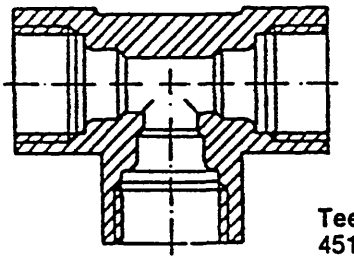
Male elbow adaptor
45112 - ϕ 12 × 3/8" bsp
45113 - ϕ 12 × 1/2" bsp
45137 - ϕ 10 × 3/8" bsp
45153 - ϕ 5 × 1/8" bsp
45154 - ϕ 5 × 1/4" bsp
45158 - ϕ 10 × 1/4" bsp
45176 - ϕ 10 × 1/2" bsp
45226 - ϕ 4 × 1/8" bsp



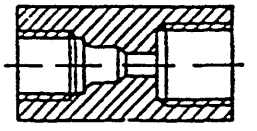
Copper tube
ϕ 10 × L
ϕ 12 × L
ϕ 5 × L



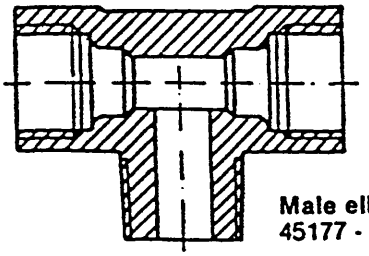
Stem elbow connector
45156 - ϕ 12
45170 - ϕ 10



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

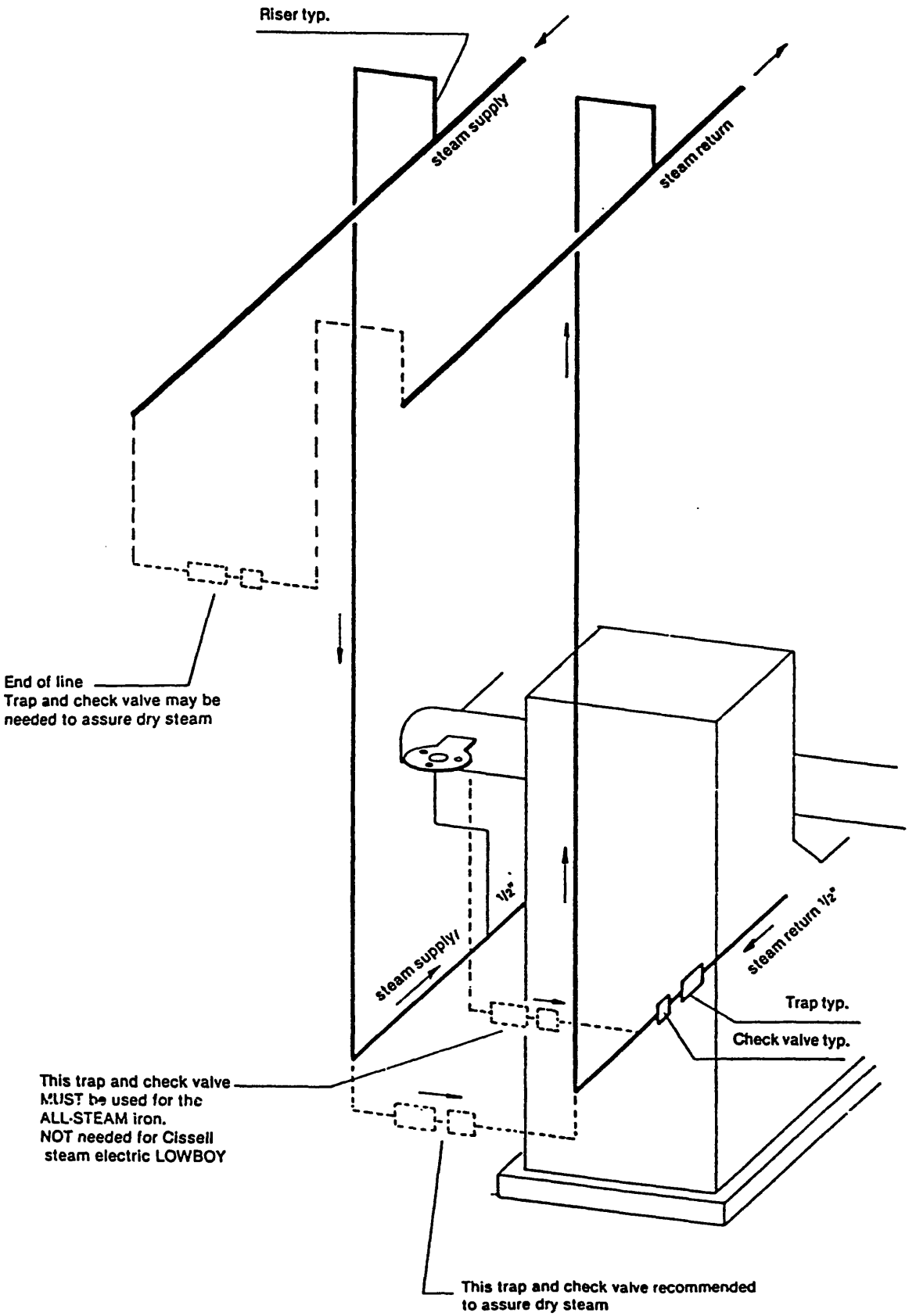


Straight adaptor
45160 - ϕ 5 × 1/8" bsp

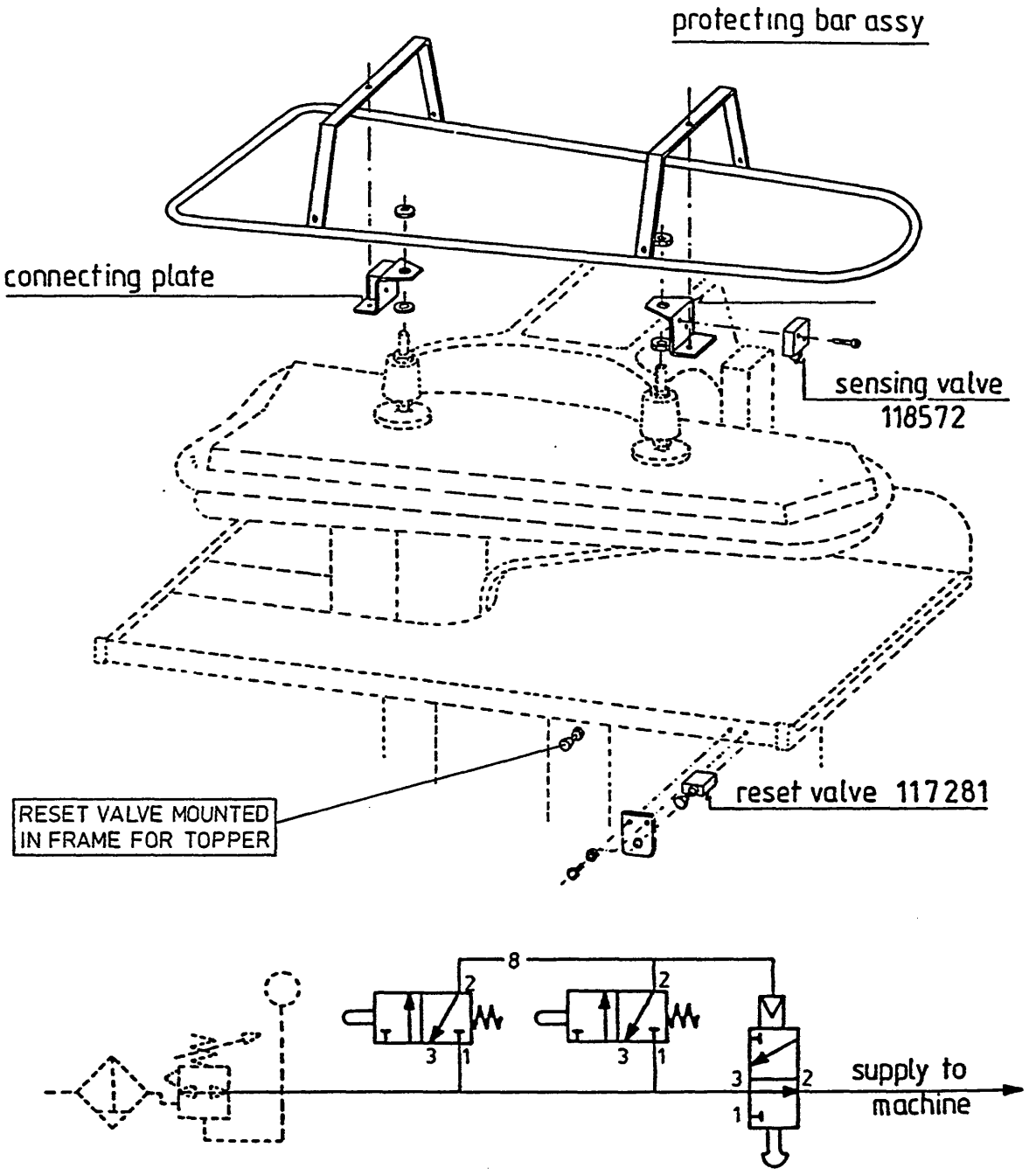


Male elbow adaptor
45177 - ϕ 12 × ϕ 12 × 3/8" bsp

RECOMMENDED PIPING FOR CISSELL PRESSES AND IRONS



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.