

**Pantex-Cissell B.V.**  
**Winschoten • Holland**



# **MANUAL PRESSES**

## **Service Manual**

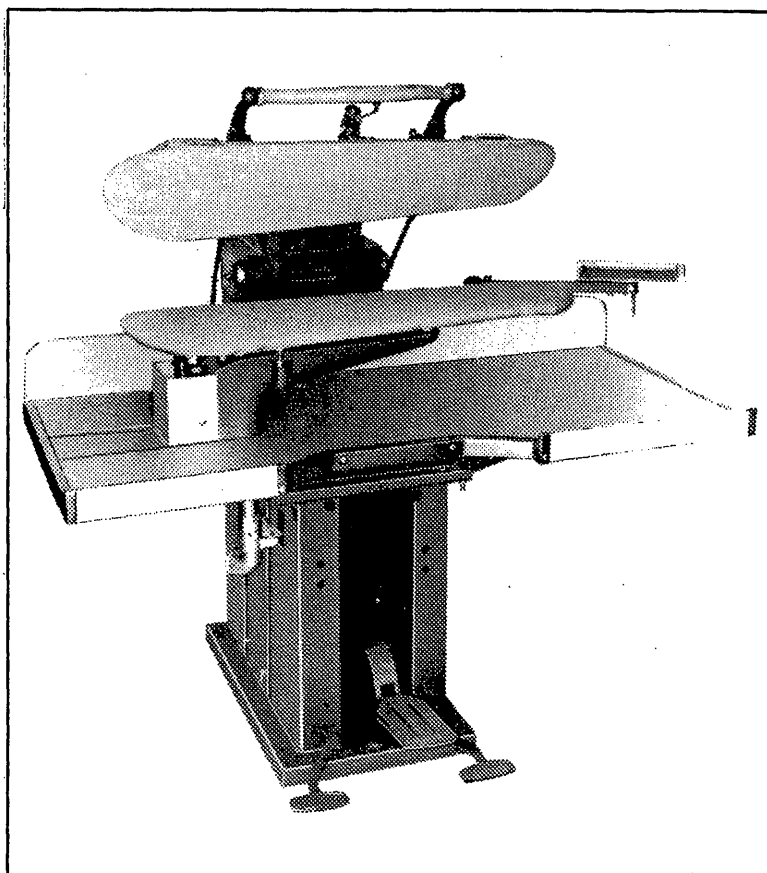
**UTILITY - MU42, MU45, MU47**

**TOPPER - MMT19**

**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.**

Pacific Coast Office:  
4823 W. Jefferson Blvd.  
Los Angeles, CA 90016



**MAN 196**  
**9/85-500-CP**

Part No. D0130

Printed in U.S.A.

## **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, transportation 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  
MU42, MU45, MU47 - UTILITY  
MMT19 - TOPPER

	PAGE
<u>Warranty</u> .....	2
<u>Testing</u> .....	5
<u>Foreword</u> .....	5
<u>Installing the Press</u> .....	6
Fig. 1. Rear Assembly.....	6
Fig. 2. Assembly of Table.....	7
Fig. 3. Iron Rest Plate Group.....	8
Fig. 4. Steam & Vacuum Connections.....	9
<u>Description of the Press</u> .....	10
Fig. 5. Description of the Press.....	11
<u>Operation of the Press</u> .....	10
<u>Part Numbers</u> .....	10
Fig. 1 Rear Assembly.....	6
Fig. 2 Assembly of Table.....	7
Fig. 3 Iron Rest Plate.....	8
Fig. 6 Frame Group.....	15
Fig. 7 Trip Lever Group.....	16
Fig. 8 Back Lever Group.....	17
Fig. 9 Head Lever Unit.....	18
Fig.10 Balance Spring Assembly.....	19
Fig.11 Connective Leverage.....	20
Fig.12 Pivot Shaft Assembly.....	21
Fig.13 Press Shoe Group.....	22
Fig.14 Oil Check Assembly.....	23
Fig.15 Steam Connections.....	24
Fig.16 Head Valve Assembly.....	25
Fig.17 Buck Valve Unit.....	26
Fig.18 Air Vacuum Valve Assembly.....	27
<u>Maintenance</u> .....	12
<u>Adjustments</u> .....	12
<u>Head Lever</u> .....	12
<u>Trip Lever</u> .....	12
<u>Head Valve</u> .....	12
<u>Buck Steam Linkage</u> .....	12
<u>Buck Valve</u> .....	12
<u>Balance Springs</u> .....	12
<u>Oil Check Assembly</u> .....	12

TABLE OF CONTENTS  
MU42, MU45, MU47 - UTILITY  
MMT19 - TOPPER

PAGE

<u>General Trouble Shooting</u> .....	13
Head Will Not Lock.....	13
Press Head is Hard to Close.....	13
Press Head Bangs When Released.....	13
No Vacuum.....	13
Vacuum Will Not Shut Off.....	13
Buck Steam Valve Releases too Much or too Little Steam.....	13
Wet Spots on Buck Pad & Covering.....	13
Defective Check Valve.....	14
Buck Valve Leaking Externally.....	14
Head Valve Leaking Externally.....	14
No Head Steam.....	14

### 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

#### Manual Foot Operated Presses

These modern presses are precision engineered to provide faster, easier operation than any other foot operated press. The head is closed by hand and by foot operation of the central pedal. The head is opened by foot operation of the front edge of the central pedal. The head steam is hand lever operated while the buck steam and vacuum are foot pedal operated. The improved leverage system, needle bearing pivot and the automatic, self-adjusting oil check assures smoother, faster head operation and a quality finish.

## INSTALLING THE PRESS

### Rear Assembly - (See Figure 1)

1. Uncrate the press and remove the 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 80178 oil in plastic bottle into the oil check assembly. Requires about one cup to fill. Never use ordinary lubricating oil. Operating the press without adding oil at this time may damage the oil check assembly.
5. Install the frame cover with two screws.
6. Secure the back panel with the back panel hanger and screw.

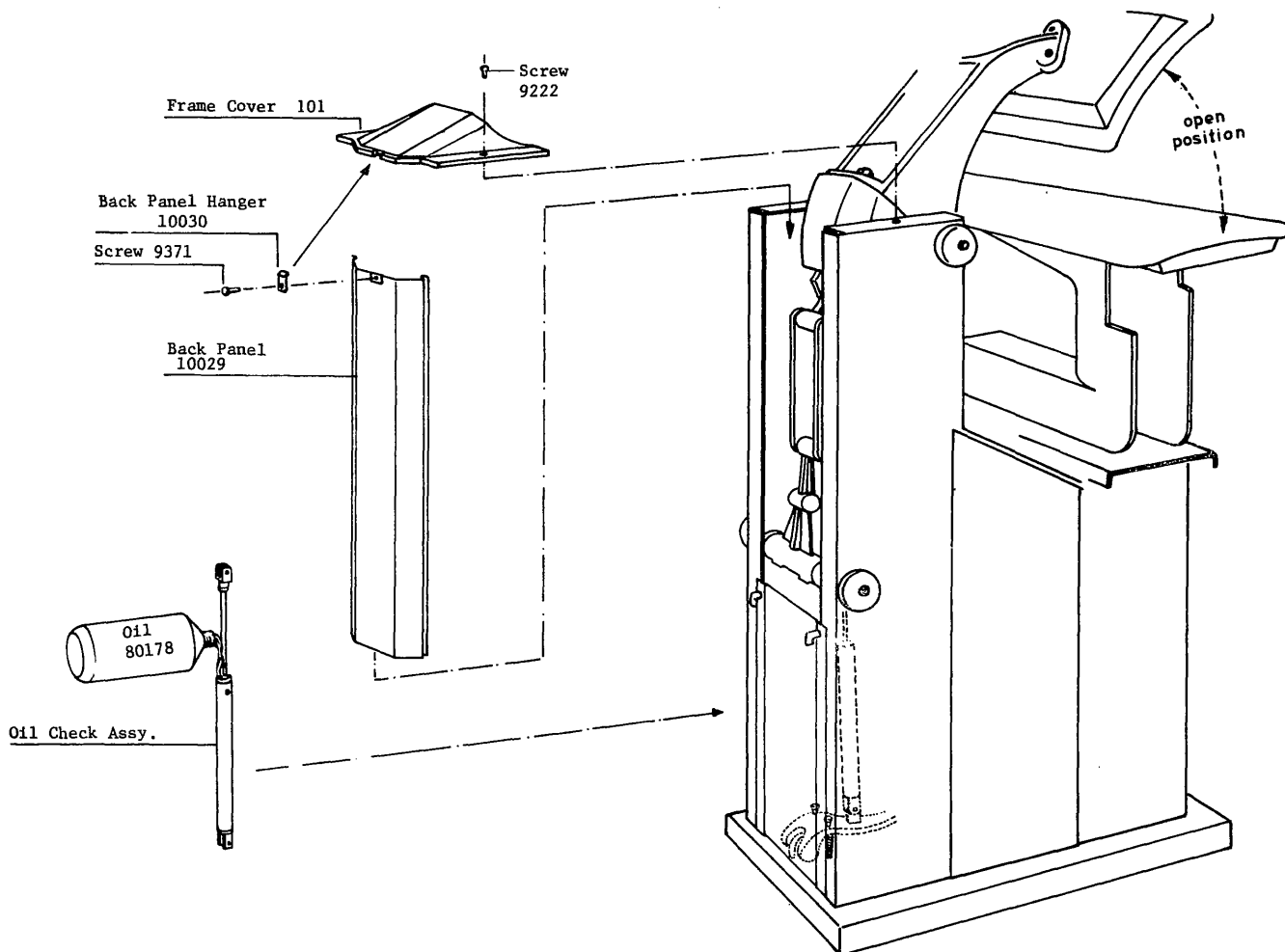


FIGURE 1 REAR ASSEMBLY

## Assembly of the Table -(See Figure 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 the mounting lugs.
9. Assemble the end cover to the buck support. Assemble the angle stay on the bottom of 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. Assemble the reinforcing support strip to the front reinforcing bar.
12. Slide the foot pedal into place making sure the tang is under the trip roll as shown. Assemble the pin and cotter pins.

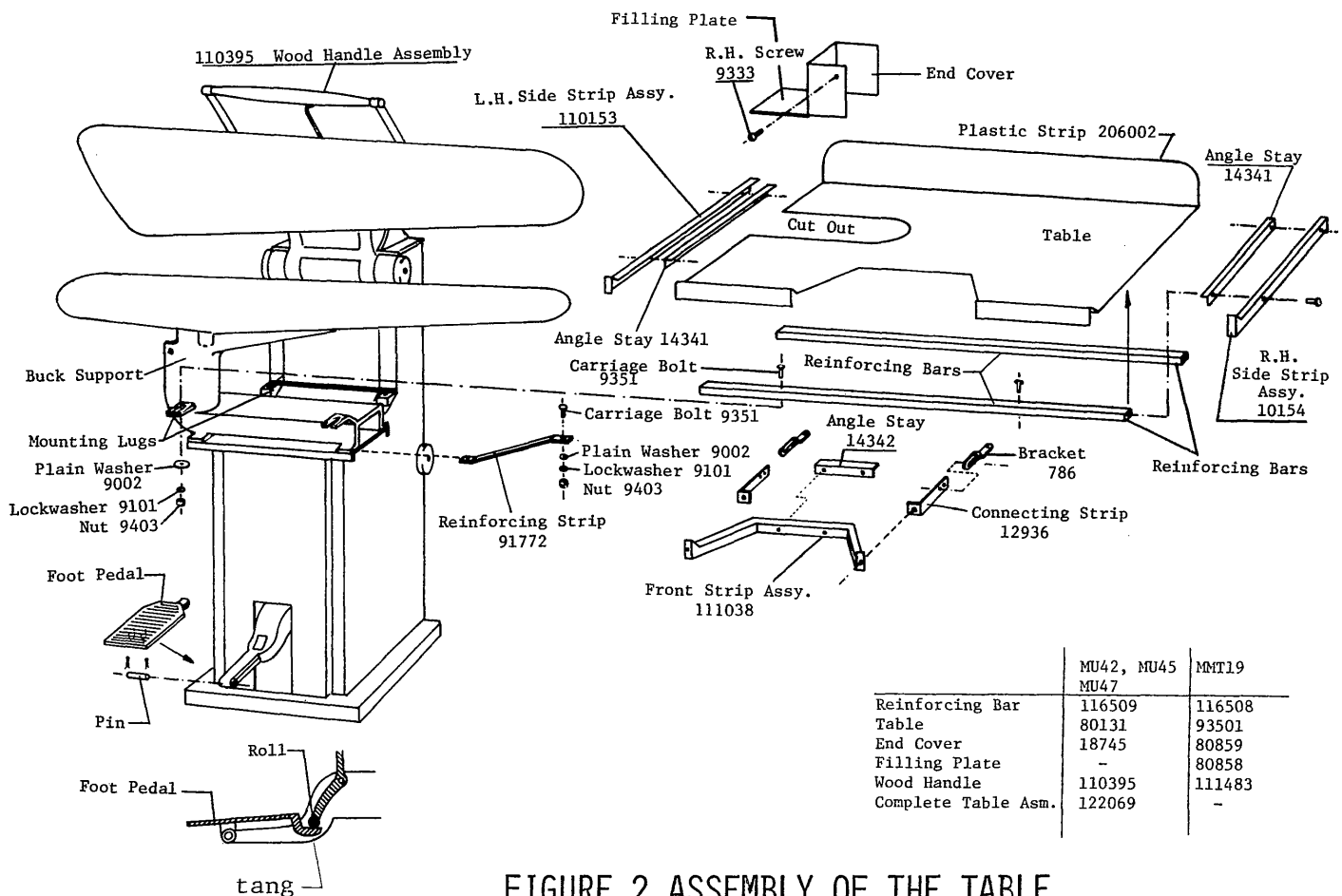


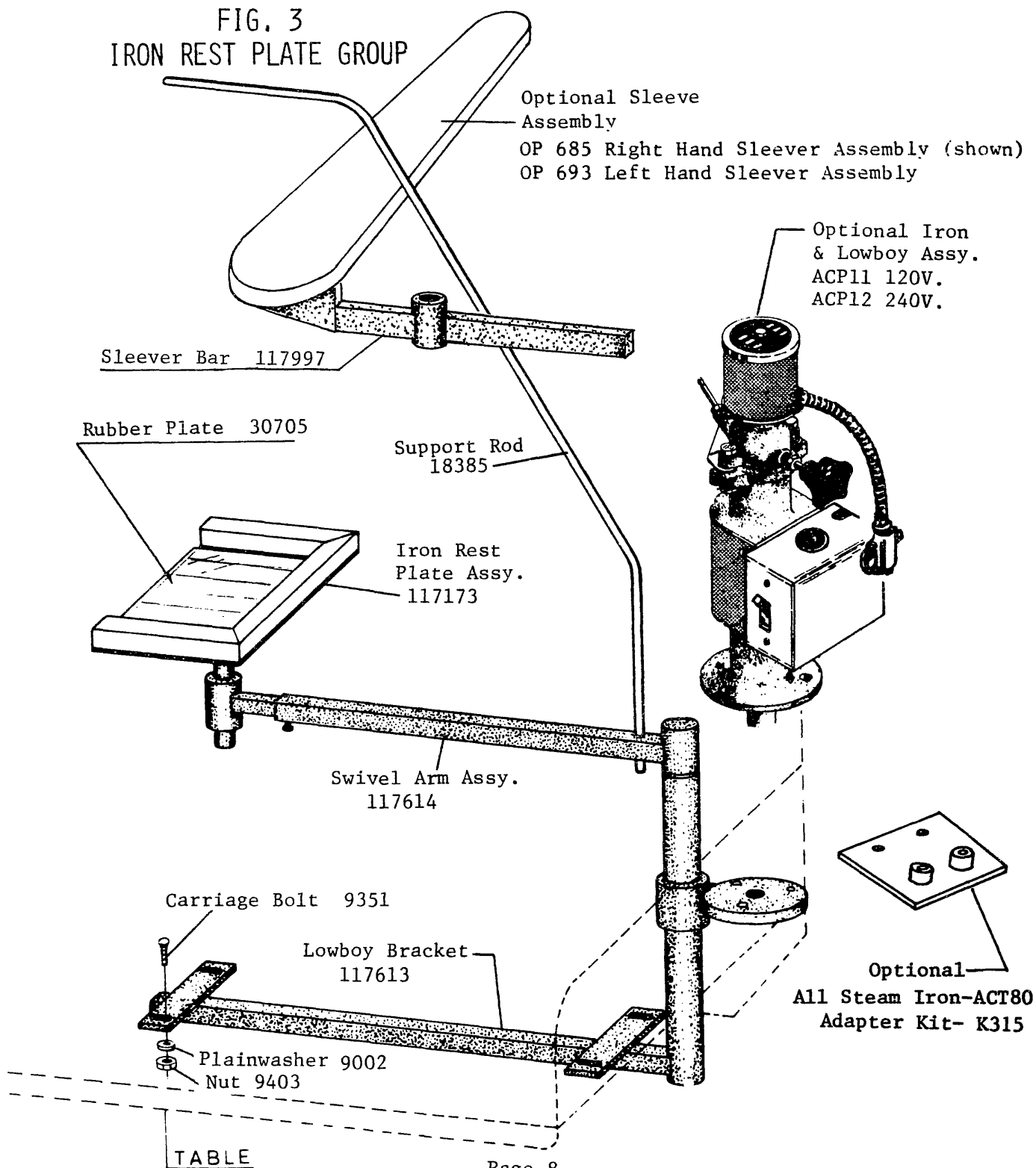
FIGURE 2 ASSEMBLY OF THE TABLE

## Installing the Press (Continued)

### Assemble the Iron Rest Plate Group -(See Figure 3)

13. Assemble the Lowboy bracket to the reinforcing bars using the bolts already in the bars. Then assemble the swivel and support rod to bracket, arm assembly, iron rest plate assembly.
14. Assemble any optional Cissell equipment such as the iron and Lowboy or the sleever assembly. These will be packed in separate containers and are not shipped in the press crate.

FIG. 3  
IRON REST PLATE GROUP



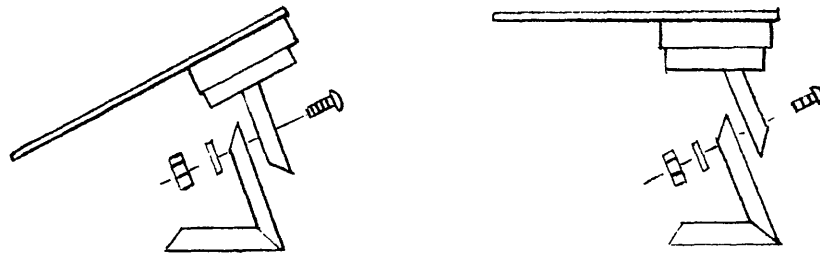




MOD705 INSTALLATION INSTRUCTIONS FOR MU42/45 UTILITY PRESS Tail Board  
(OPTIONAL)

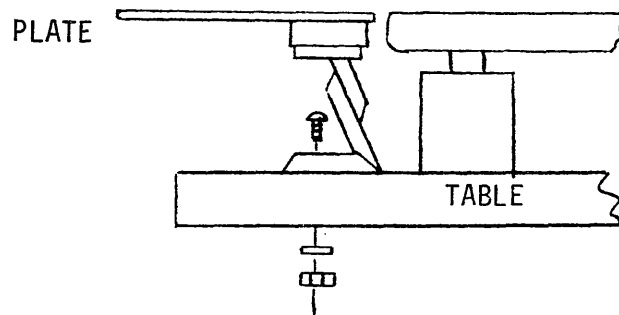
THE PLATE MAY BE MOUNTED IN TWO POSITIONS: PARALLEL TO THE TABLE OR IN A SLOPED POSITION AS ILLUSTRATED BELOW IN FIGURE 1.

FIGURE 1



- STEP 1 : BOLT THE PLATE AND BRACKETS TOGETHER FOR THE DESIRED POSITION (PARALLEL OR SLOPED) SEE FIGURE 1.
- STEP 2 : SET THE PLATE AND BRACKET ASSEMBLY ON THE TABLE WITH THE PLATE ABOUT 1/4" FROM THE BUCK (SEE FIGURE 2). MARK THE POSITION OF THE BRACKET'S SLOTS WITH A PENCIL ON THE TABLE.
- STEP 3 : DRILL TWO HOLES 9/32" IN THE CENTER OF THE SLOTS POSITION ON THE TABLE.
- STEP 4 : BOLT THE PLATE AND BRACKET ASSEMBLY ONTO THE TABLE THRU THE DRILLED HOLES AND TIGHTEN THE NUTS SECURELY.

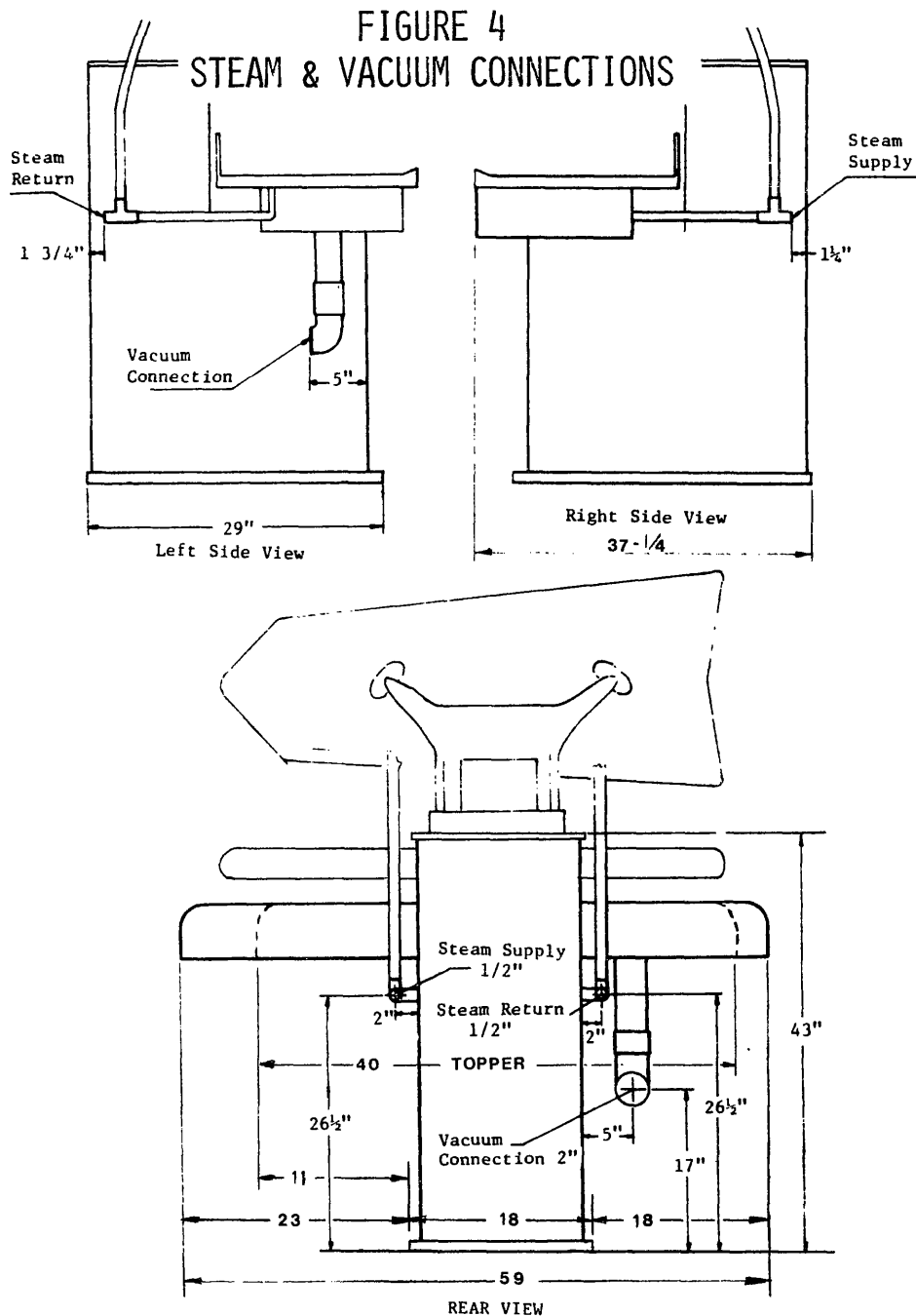
FIGURE 2

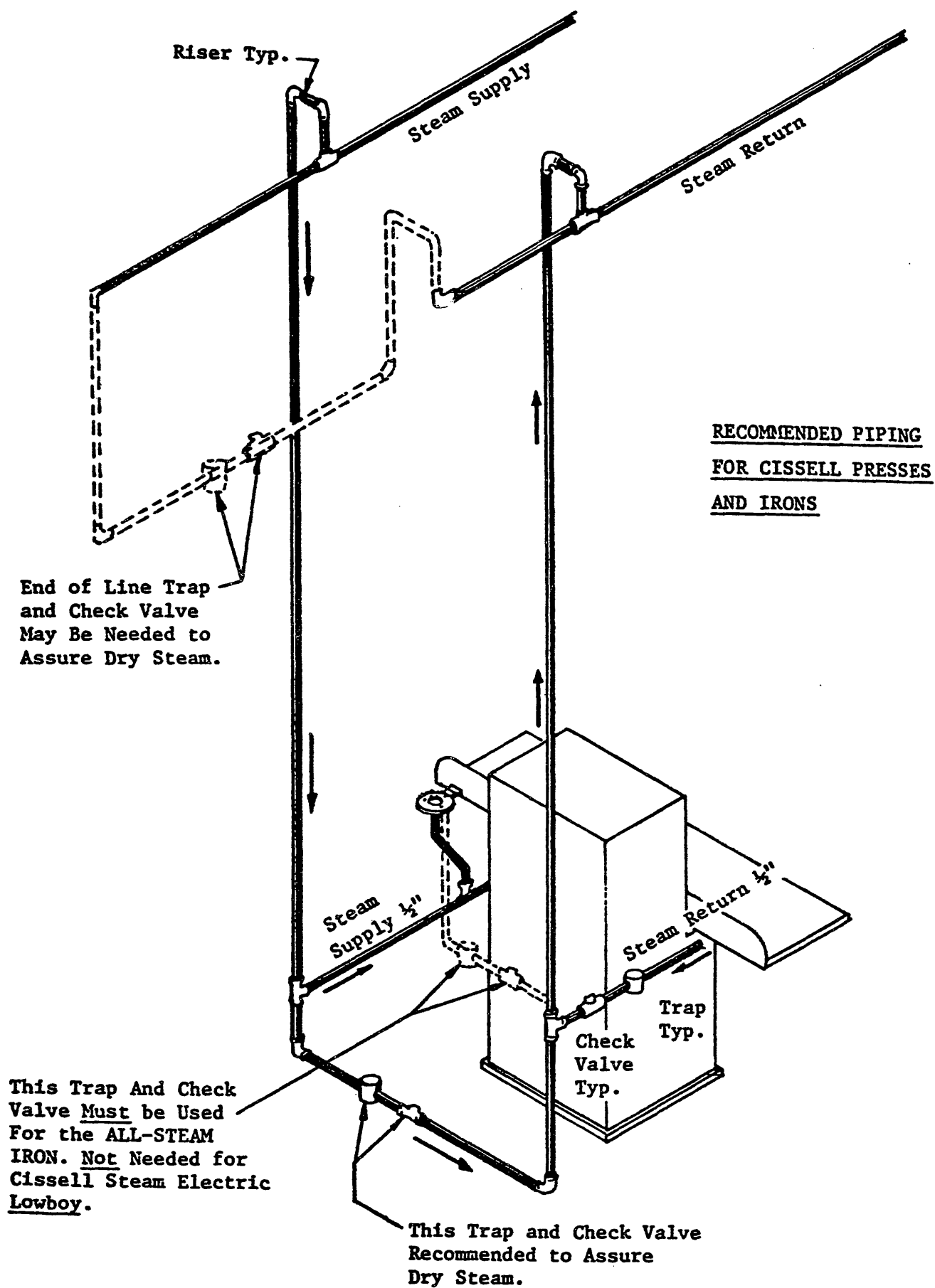


## INSTALLING THE PRESS (Continued)

### Steam and Vacuum Connections (See Figure 4)

15. Connect a 1/2 inch steam supply line to the press at a recommended 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.
16. Connect a 1/2 inch steam return line to the press. Install a 1/2 inch steam trap good for 88 psi in the line.
17. 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).





## Description of the Manual Press - (See Fig. 5)

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 has a wooden handle used for closing.

Three foot pedals (Fig.7 & Fig.11) are located near the floor at the front of the press. The center pedal is the head locking and release pedal. The left hand pedal is the vacuum pedal. The right hand pedal activates the buck valve Fig. 17 which ports upsteam to the buck.

One black knobbed lever is located on the head. This lever operates a head valve (Fig. 16) for porting steam to the head.

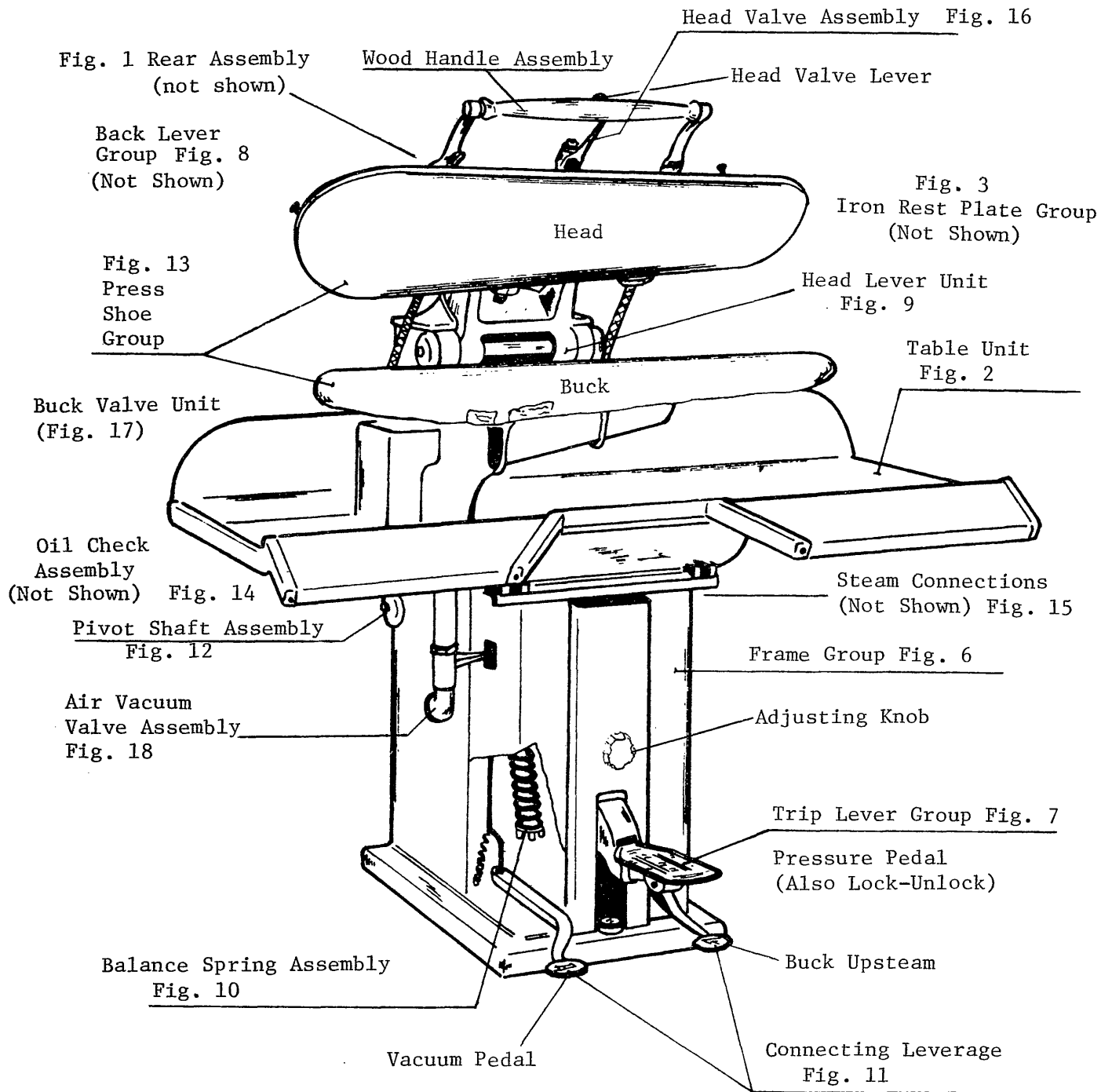
## Operation of the Manual Press (Allow the press to warm up).

Lay the garment to be pressed on the buck. Close the head by pulling down on the wood handle of the head. Apply pressure and lock the head by stepping on the middle foot pedal and applying toe pressure. If head steam is desired press down on the head steam valve lever. If buck upsteam is desired step on the right hand foot pedal. Both may be operated at the same time. The buck can be opened by stepping on the front edge of the middle foot pedal. Depressing the left hand foot pedal causes the vacuum valve to open and air is drawn through the garment for proper drying. Lay the garment to a new position and repeat the above procedure as needed.

Part Numbers - Figure 5 shows the assembled press as being made up of different groups of parts. See the corresponding figure number referenced below for service part numbers.

	Page
Fig 1. Rear Assembly.....	6
Fig. 2 Assembly of Table.....	7
Fig. 3 Iron Rest Plate Group.....	8
Fig. 6 Frame Group.....	15
Fig. 7 Trip Lever Group.....	16
Fig. 8 Back Lever Group.....	17
Fig. 9 Head Lever Unit.....	18
Fig. 10 Balance Spring Assembly.....	19
Fig. 11 Connecting Leverage.....	20
Fig. 12 Pivot Shaft Assembly.....	21
Fig. 13 Press Shoe Group.....	22
Fig. 14 Oil Check Assembly.....	23
Fig. 15 Steam Connections.....	24
Fig. 16 Head Valve Assembly.....	25
Fig. 17 Buck Valve Unit.....	26
Fig. 18 Air Vacuum Valve Assembly.....	27

# FIGURE 5 DESCRIPTION OF THE PRESS



For further detail see Figures referenced above.

## Maintenance

1. Once per month check oil level in oil check assembly. Use only #8017<sup>2</sup> oil. Never use ordinary lubricating oil.
2. Once per month add ordinary lubricating oil into the oil holes of the foot pedals. See Fig. 11.
3. The main pivot of the press head lever is fitted with needle bearings that are factory lubricated for the life of the machine.
4. Lubricate linkage as needed with ordinary oil.

## Adjustments

Head Lever - (See Fig. 9). As the pads on the press wear, the pressure on the head may decrease which may be indicated by a poor finish of the garment. This pressure can be easily adjusted by turning the pressure adjusting screw clockwise for more pressure or counter clockwise for less pressure.

Trip Lever - The adjusting knob located on the front of the machine just above the middle foot pedal is used to set the locking point. See Fig. 5 and Fig. 7. Turning the knob clockwise increases the downward foot force required to cause the pedal to lock, this increases the head pressure.

Head Valve - This valve is equipped with an adjusting screw to meter the flow of head steam. Turning the screw counter clockwise increases the flow of steam See Fig. 16.

Buck Steam Linkage - Figure 11 shows the linkage needed for buck steam operation. The valve lever rod visible under the table can be rotated by hand. With no pressure on the foot pedal turn this rod counter clockwise as viewed from the top so that no steam flows into the buck. Depression of the right hand pedal should then give a good flow of steam. If there is a poor flow of steam because the pedal doesn't have enough travel, then turn the valve lever rod clockwise. If a good adjustment cannot be made adjust the buck valve, see below.

Buck Valve - This valve is set at the factory and normally would not be adjusted. In order to increase the buck steam, loosen the jam nut and turn the hex stem box counter clockwise. See Fig. 17.

Balance Springs - See Fig. 10. The balance springs are adjusted at the factory. The setting of the springs is a compromise between the head closing force required and the opening speed of the buck. To speed the buck opening, compress the springs more by adjusting the balance spring head which will require more manual closing force. If the closing of the head requires too much work, loosen the balance spring head nut which will in turn slow the head opening.

Oil Check - The oil check assembly is adjusted at the factory such that no metal parts touch either at the top or bottom of the stroke. Observe externally and look to see that the jam nut does not touch the spindle guide. Observe internally, by listening for the plunger bottoming on the top or bottom. Adjustment is made by loosening the clevis jam nut and rotating the clevis. If bottoming occurs on the upstroke, turn clevis counter clockwise. If bottoming occurs on the down stroke turn clevis clockwise.

1. Head Will Not Lock

<u>Cause</u>	<u>Remedy</u>
A. Trip lever is out of adjustment	See Table of Contents - Adjustment of trip lever.
B. Changed to thicker pads & coverings	See Table of Contents - Adjustment of Head Lever.

2. Press Head Is Hard To Close

<u>Cause</u>	<u>Remedy</u>
A. Too high of tension of balance springs	Reduce tension of balance springs by unscrewing balance spring head

3. Press Head Bangs When Released

<u>Cause</u>	<u>Remedy</u>
A. Oil Check Assy. is low of oil.	Fill oil check with 80178 oil.
B. Oil Check Assy. is out of adjustment.	See Table of Contents Adjustment of Oil Check

4. No Vacuum

<u>Cause</u>	<u>Remedy</u>
A. No vacuum supply	Check to make sure central vacuum system is working properly.
B. The set collar on the vacuum valve connecting rod not adjusted properly.	Adjust set collar (17858) for a clearance of $\pm 1/16$ inch between collar and operating valve lever.

5. Vacuum Will Not Shut Off

<u>Cause</u>	<u>Remedy</u>
A. Valve spring broken.	Replace #50009 spring.
B. Foot pedal spring loose or broken.	Attach or replace foot pedal spring #50066.
C. Defective vacuum valve	Repair or replace #11788 vacuum valve

6. Buck Steam Valve Releases Too Much Or Too Little Steam

<u>Cause</u>	<u>Remedy</u>
A. Buck steam valve not adjusted properly.	Adjust buck steam valve. See Table of Contents - Adjustments - Buck Valve and Buck Steam Linkage

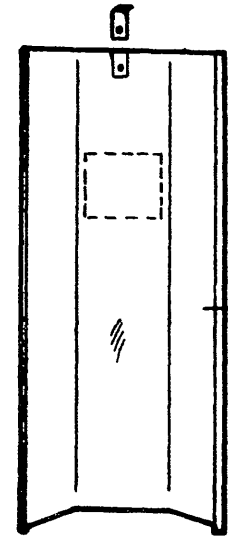
7. Wet Spots On Buck Pad & Covering

<u>Cause</u>	<u>Remedy</u>
A. Steam trap not working properly	Check steam trap on press.
B. Improper installation	Check - 1. Steam input has a 6 inch riser off of supply header. 2. An end of line by-pass trap has been installed on headers and is working. 3. A 1/2 inch supply and return line has been used.

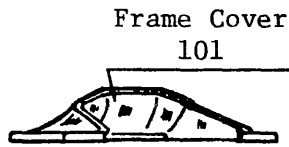
<u>Cause</u>		<u>Remedy</u>
C.	Buck valve leaking.	1. Check to see if foreign matter may be between valve (30594) and seat. 2. Worn valve (#30594) - replace 3. Worn seat (#15081) - replace 4. Out of adjustment - See table of contents - Buck Valve and Buck Steam Linkage
D.	Defective check valve	Clean or replace check valve 80021
8.	Wet Spots On Head Pad And Covering	
<u>Cause</u>		<u>Remedy</u>
A.	Steam trap not working properly.	Check steam trap on press.
B.	Improper Installation	Check - 1 Steam input has a 6 inch riser off of supply header. 2 An end of line by-pass trap has been installed on headers and is working. 3 A 1/2 inch supply and return line has been used.
9.	Buck Valve Leaking Externally	
<u>Cause</u>		<u>Remedy</u>
	Worn gasket or "O" ring.	A. Replace "O" ring (#30023) if leaking at stem. B. Replace teflon gasket (#30049) if leaking between buck valve and buck.
10.	Head Valve Leaking Externally	
<u>Cause</u>		<u>Remedy</u>
	Worn gasket or "O" ring	A. Replace "O" ring (#30023) if leaking at valve stem or at adjusting screw. B. Replace teflon gasket (#30049) if leaking at base of valve.
11.	No Head Steam	
<u>Cause</u>		<u>Remedy</u>
A.	External Linkage.	Check - 1 Stem lever (#119) 2 Lever fork (#117)
B.	Out of adjustment	See Table of Contents - Head Valve Adjustments



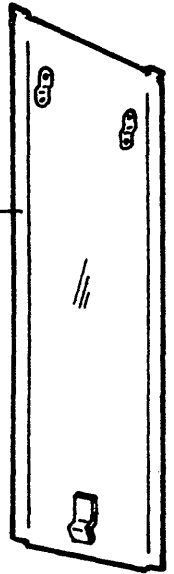
FIG. 6 FRAME GROUP



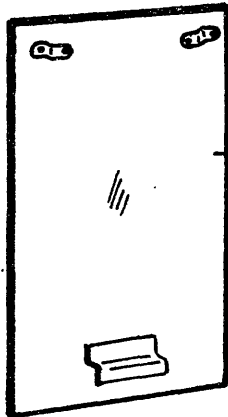
Back Panel  
10029



Frame Cover  
101



Side Panel  
Assy R.H.  
10024

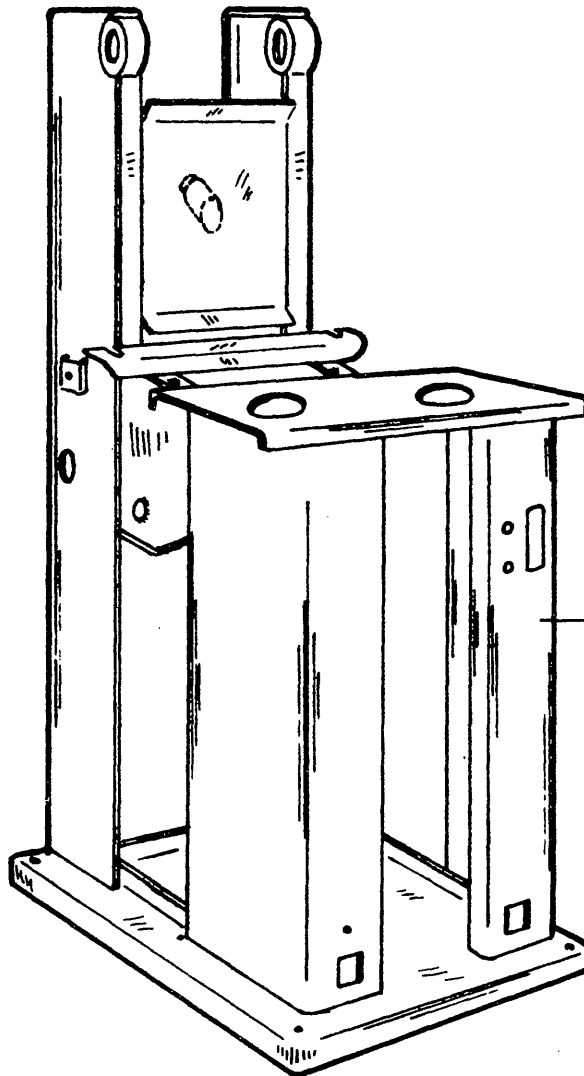


Back Cover  
10025

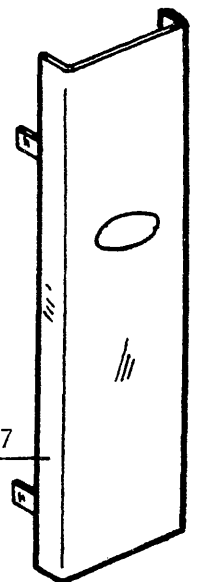


Southco  
Fastener  
CA 80 001

Side Panel  
Assy L.H.  
10022



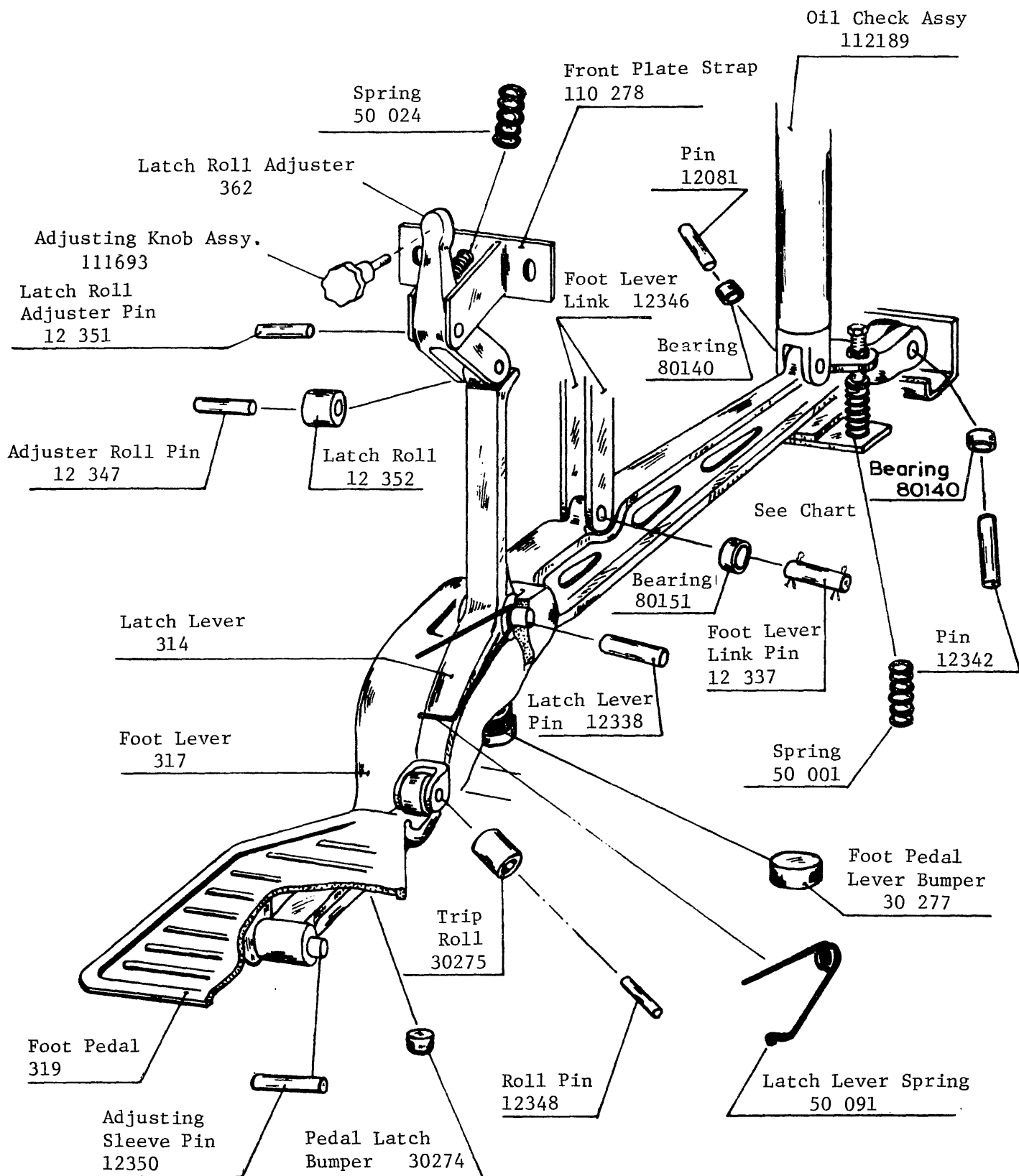
Frame Assy  
110257



Front  
Plate  
Assy  
110347

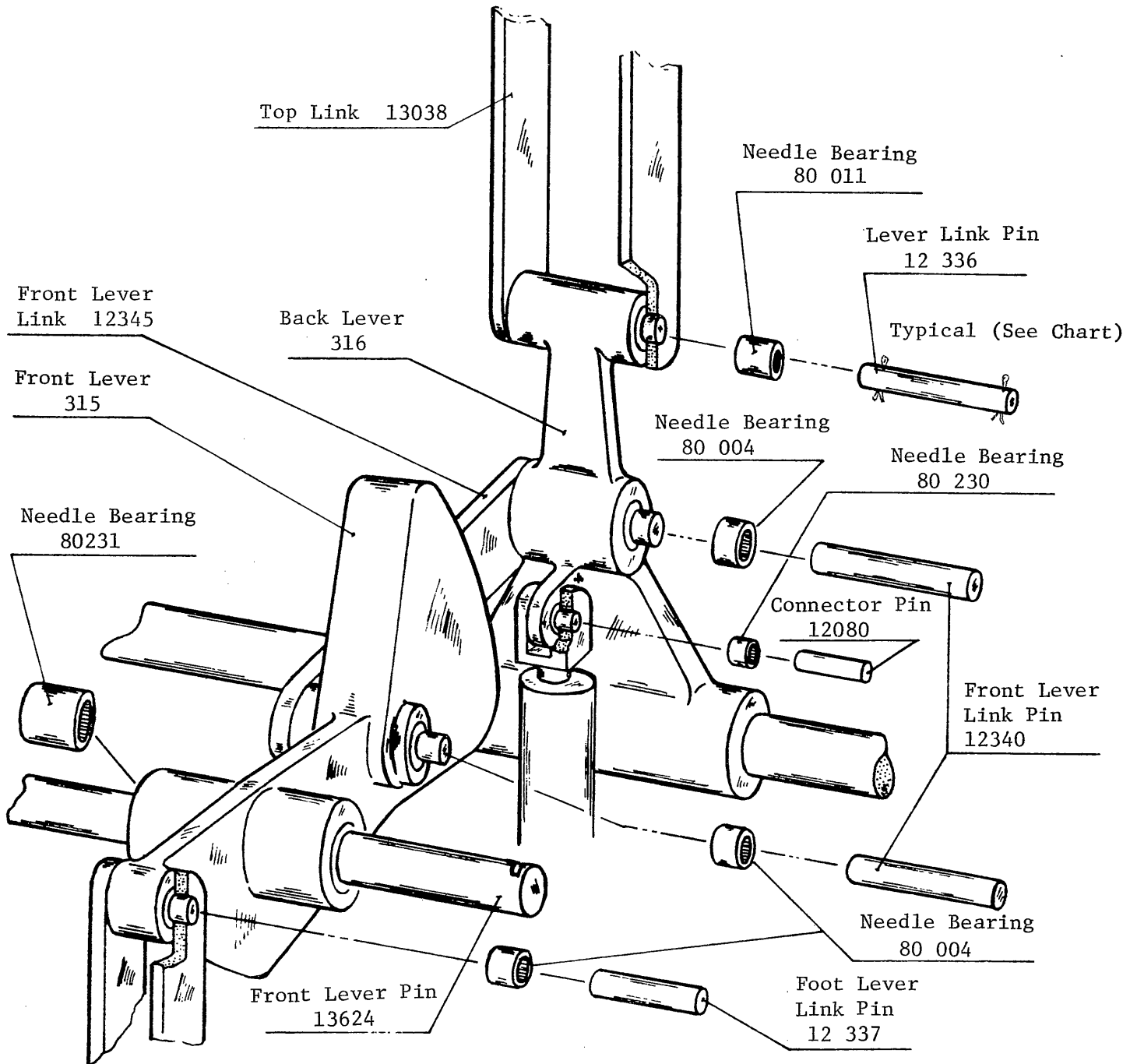
Pin	Cotter	Lock Pin
12337	9604	12394
12081	9604 (2 Req'd)	
12348	9604	
12350	9604 (2 req'd)	
12342	9604	12394

FIGURE 7  
TRIP LEVER GROUP



# FIGURE 8 BACK LEVER GROUP

Pin	Cotter	Lock Pin
12336	9603	12395
12340	9604	12394
12080	9604	12394
12337	9604	12394



# FIG. 9 HEAD LEVER UNIT

## CHART

Pin	Cotter	Lock Pin
10050	9604 (2 Req'd.)	
10047	9603 (2 Req'd.)	
12336	9603	12395

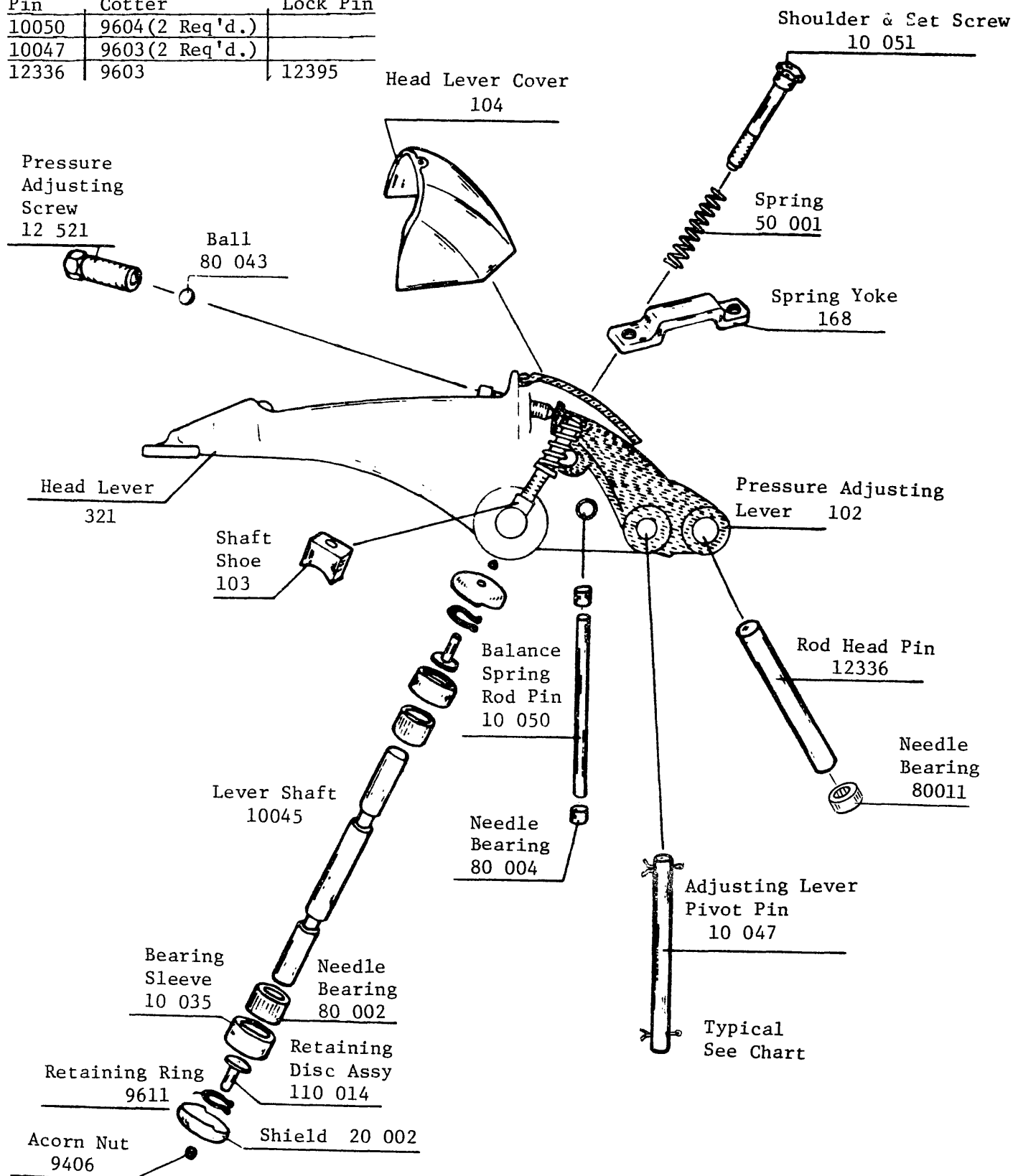
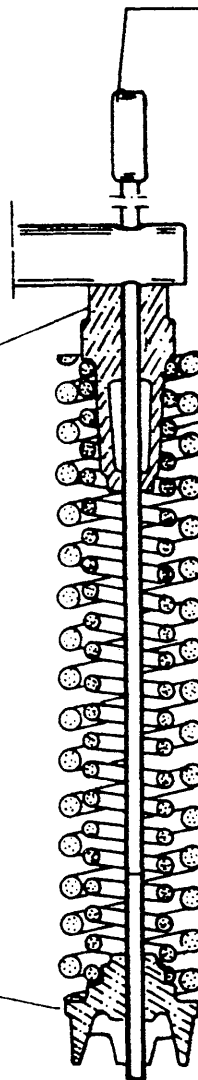
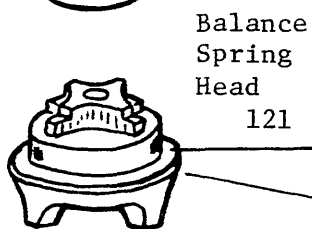
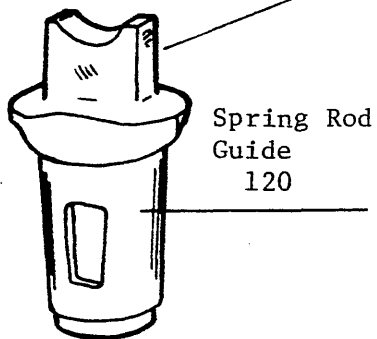


FIG. 10 BALANCE SPRING ASSY.

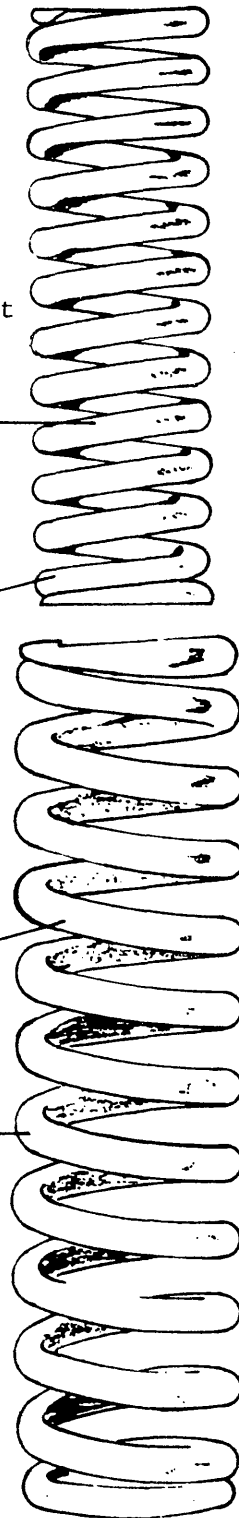
Model	Inner Spring	Outer Spring
MU42	50011	50012
MU42	50011	50012
MU45	50011	50012
MU47	50011	50012
MMT19	50011	50012

Spring Rod Assy.  
110 058

See Chart  
Balance  
Spring  
(Inner)



See Chart  
Balance  
Spring



# FIG. 11 CONNECTING LEVERAGE

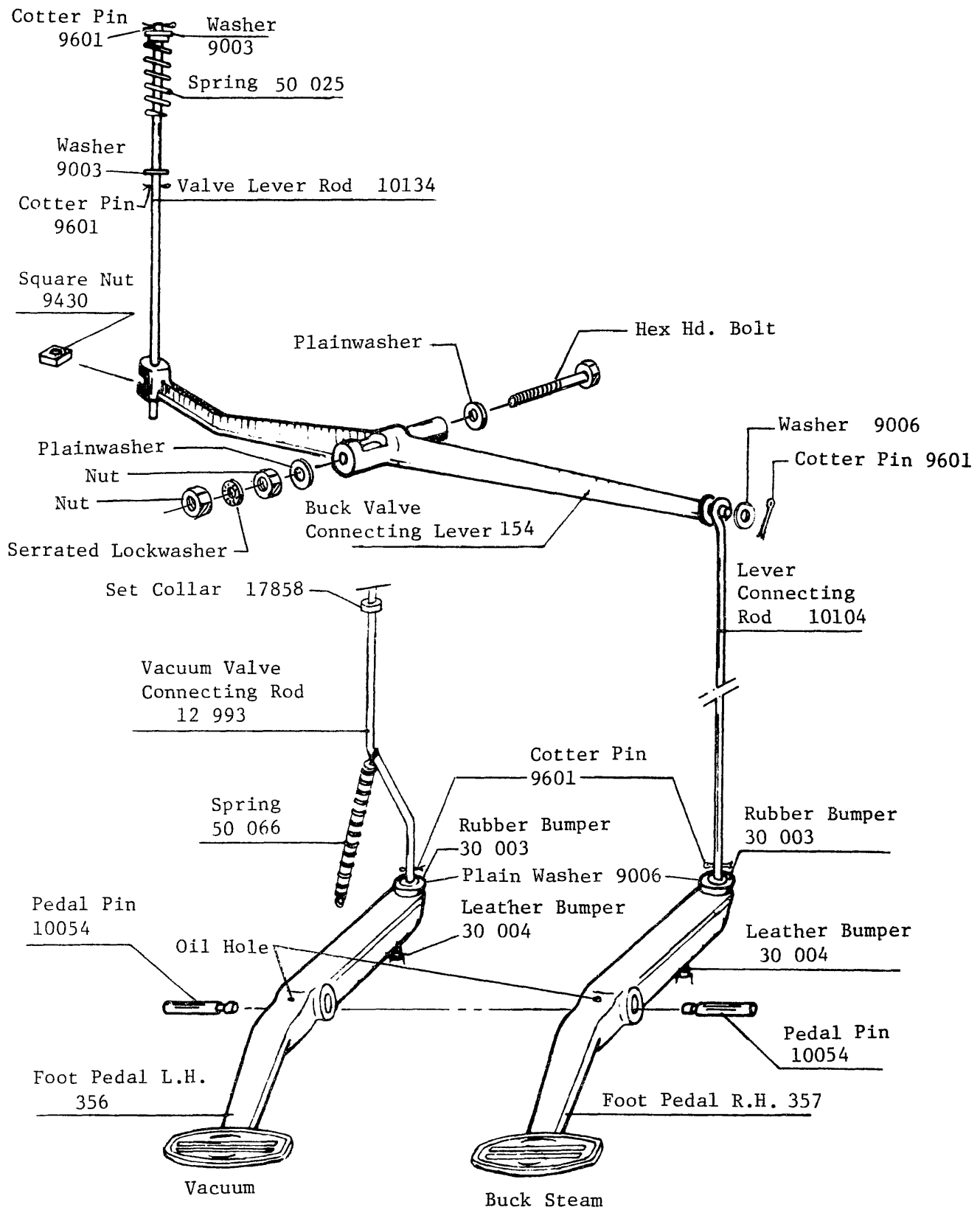
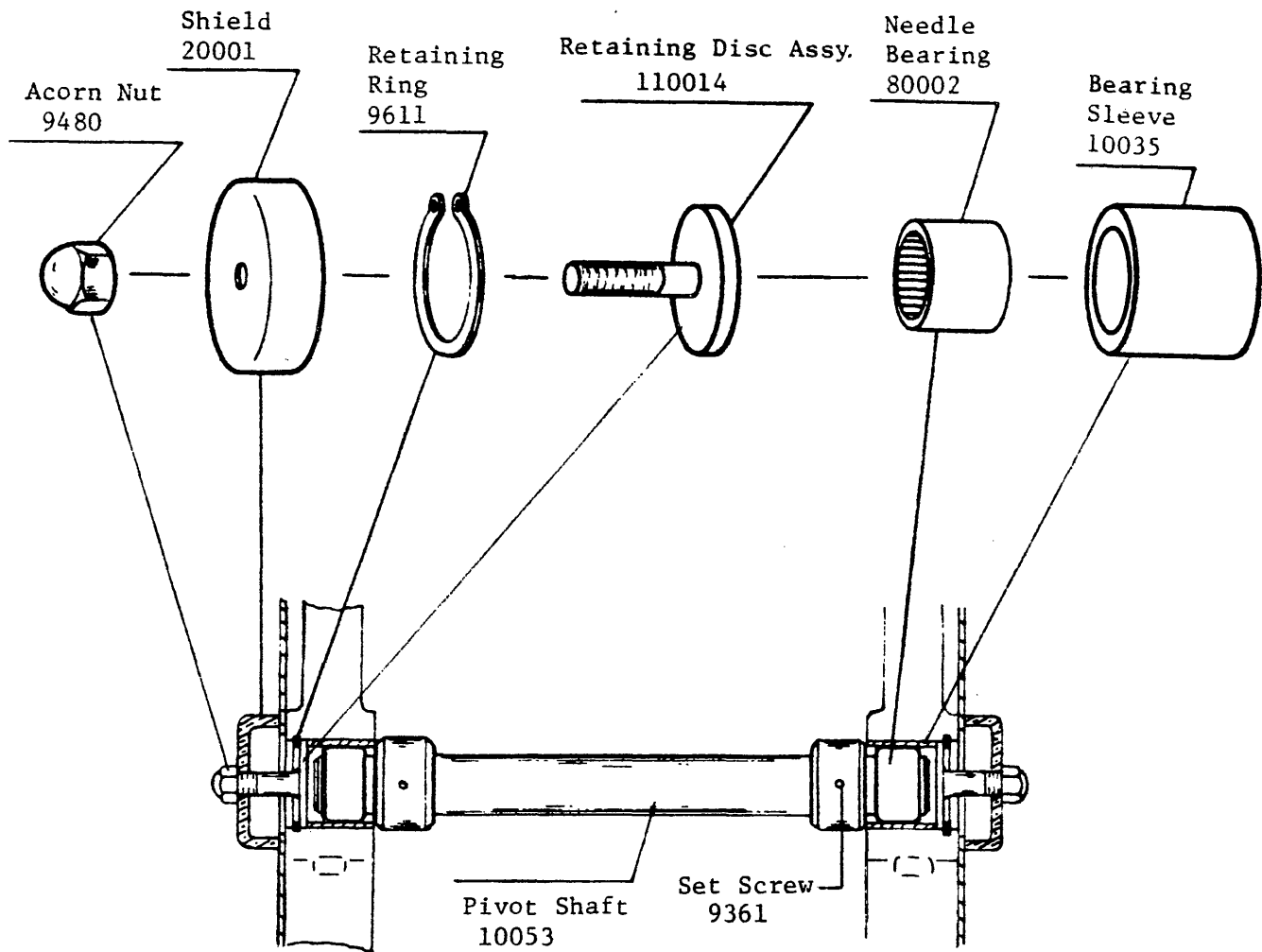
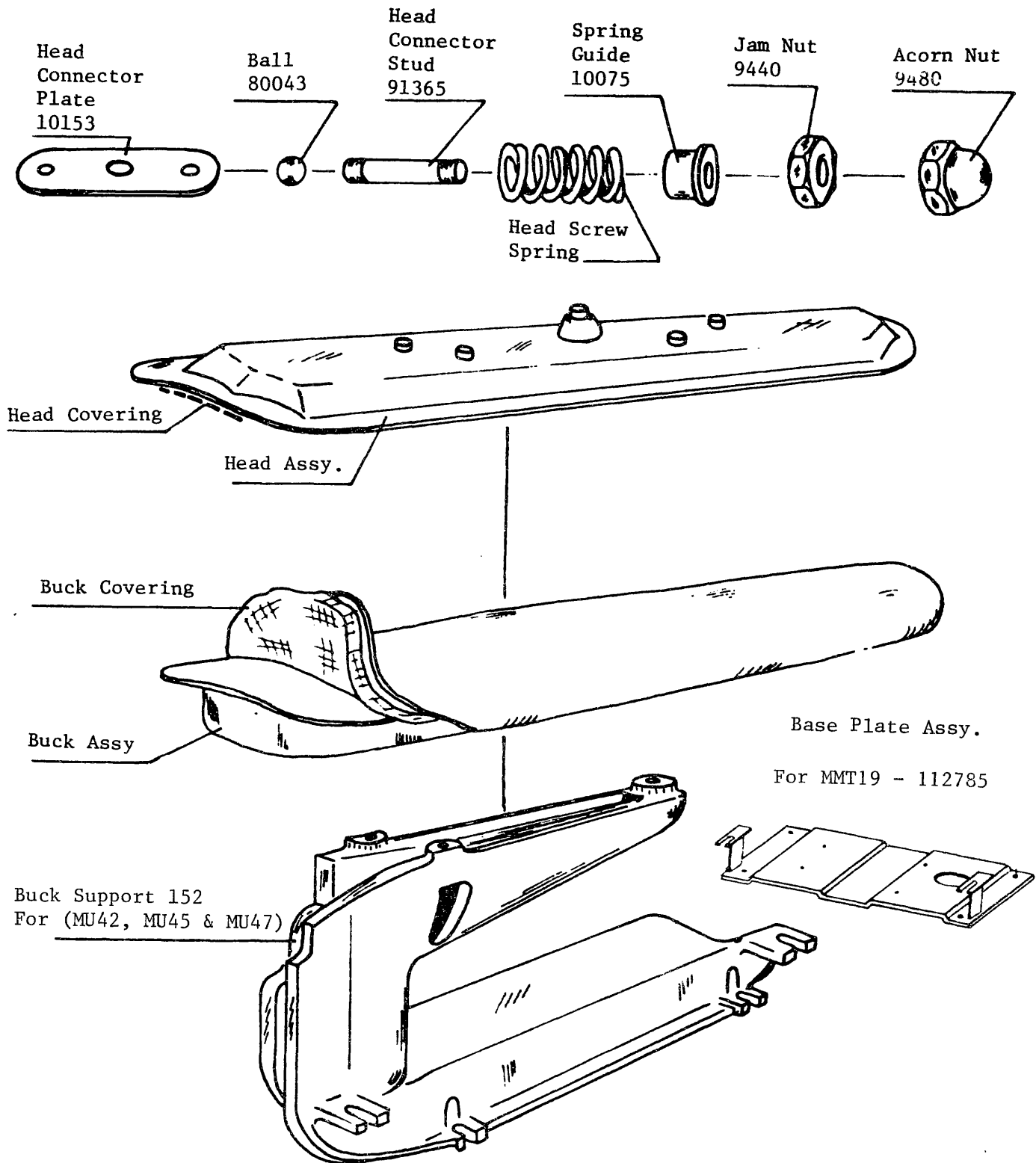


FIG. 12 PIVOT SHAFT ASSY.



# FIG. 13 PRESS SHOE GROUP



Model	Head Assy.	Buck Assy.	Head Covering	Buck Covering	Head Screw Spring
MU42	114126	102019	116534	116533	50043
MU45	114145	102020	116524	116523	50043
MU47	114151	102022	116526	116525	50043
MMT19	114542	102004	116865	116864	50029



FIGURE 14 OIL CHECK ASSY.  
112189

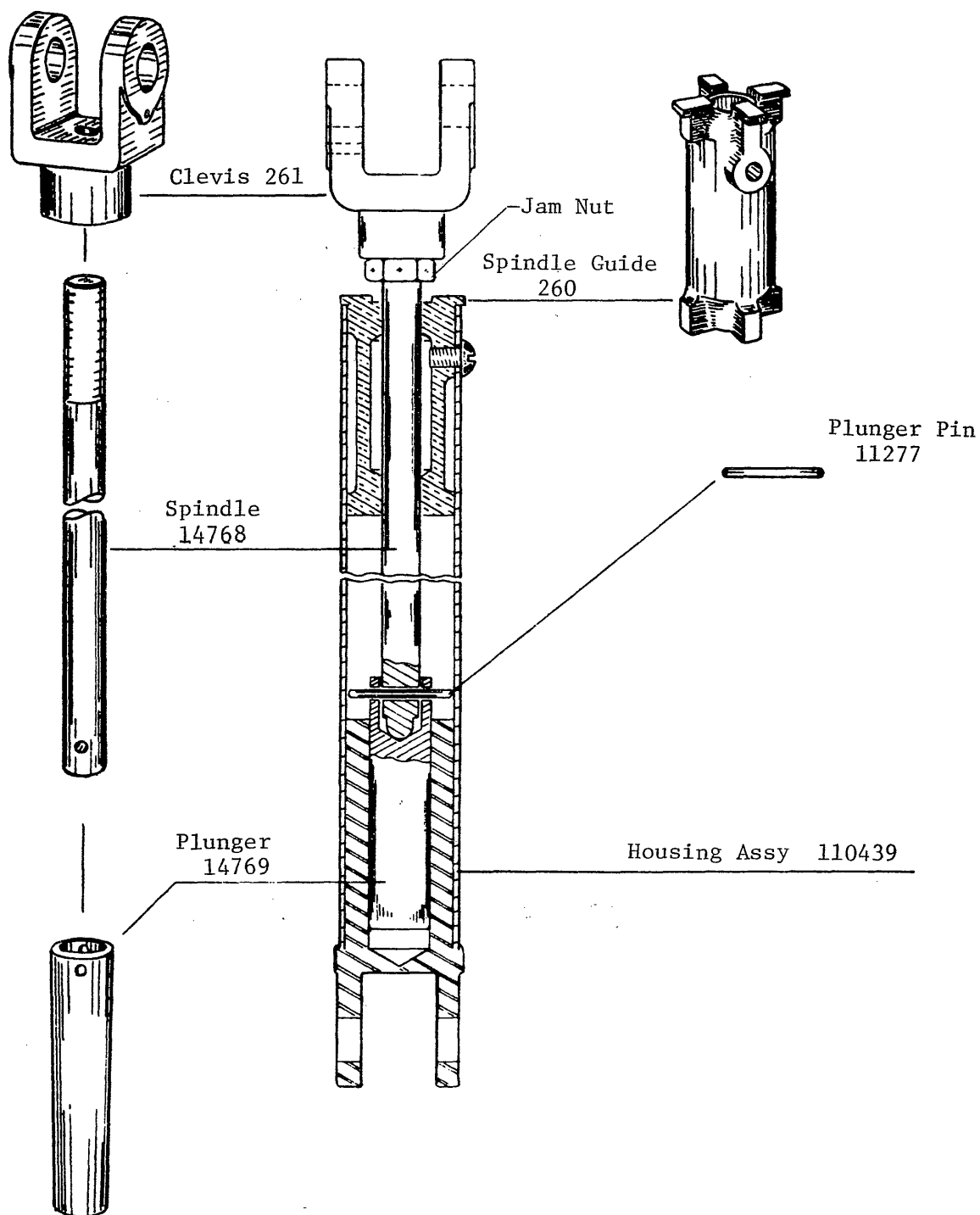


FIG. 15 STEAM CONNECTIONS

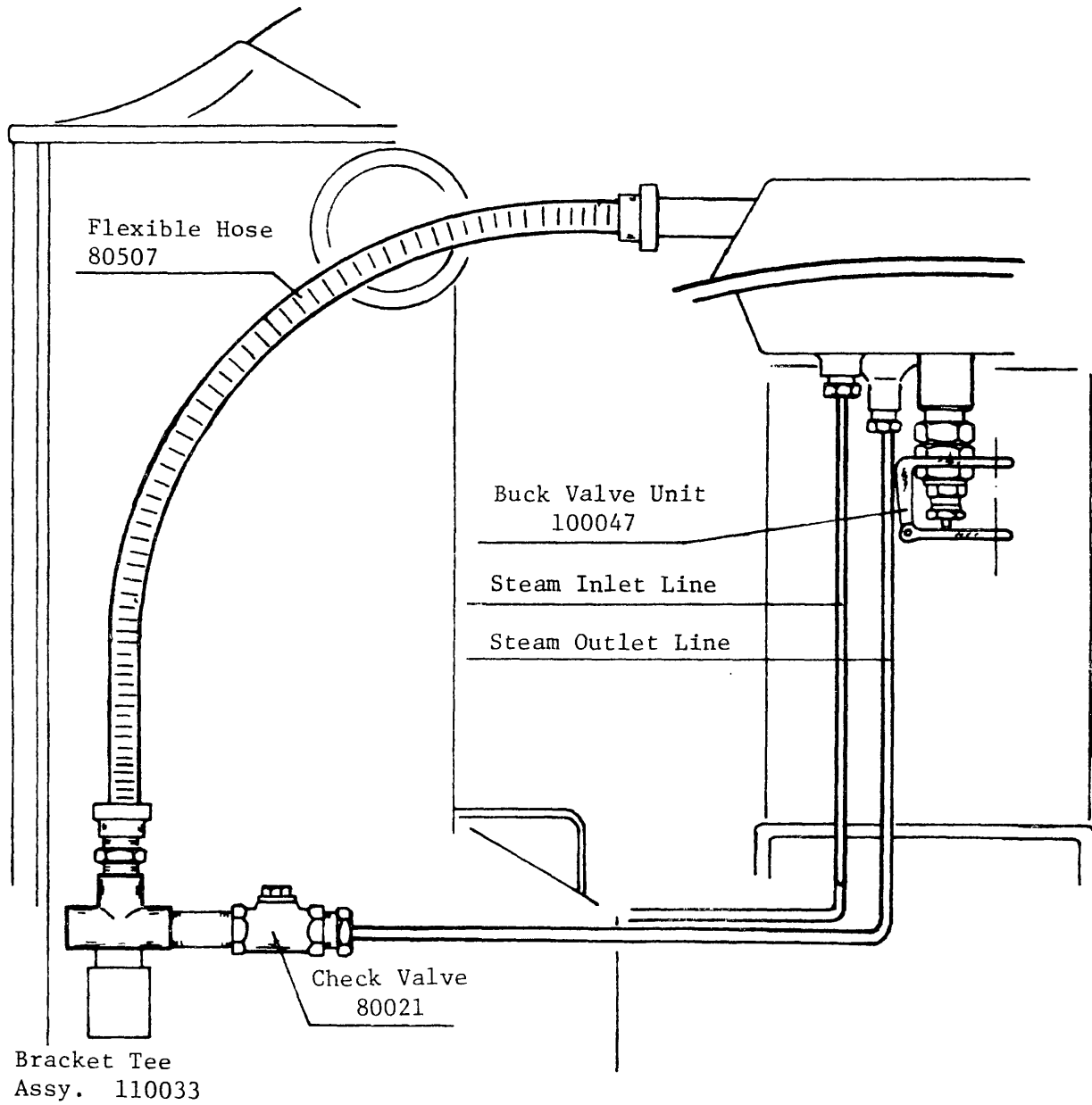
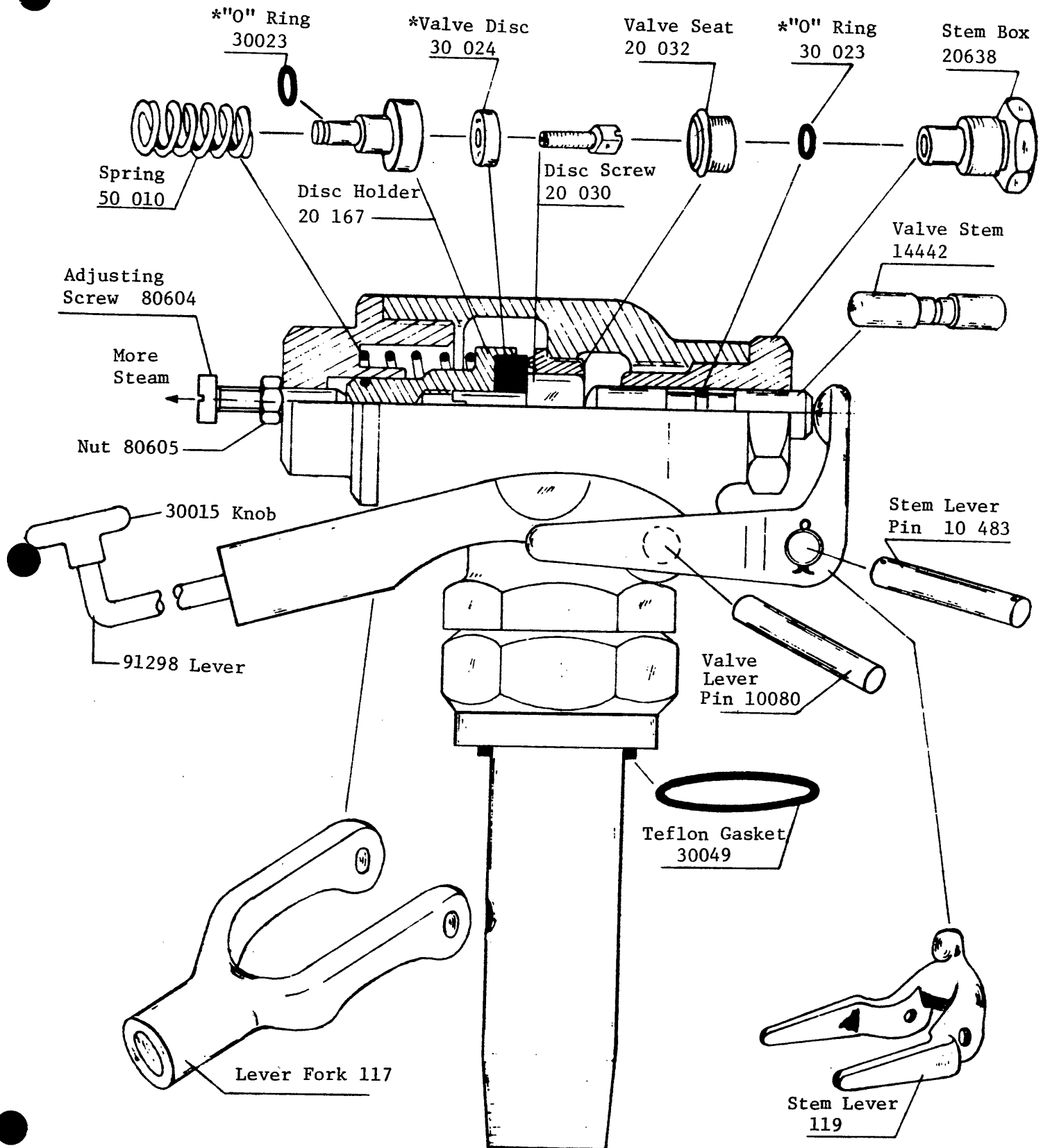
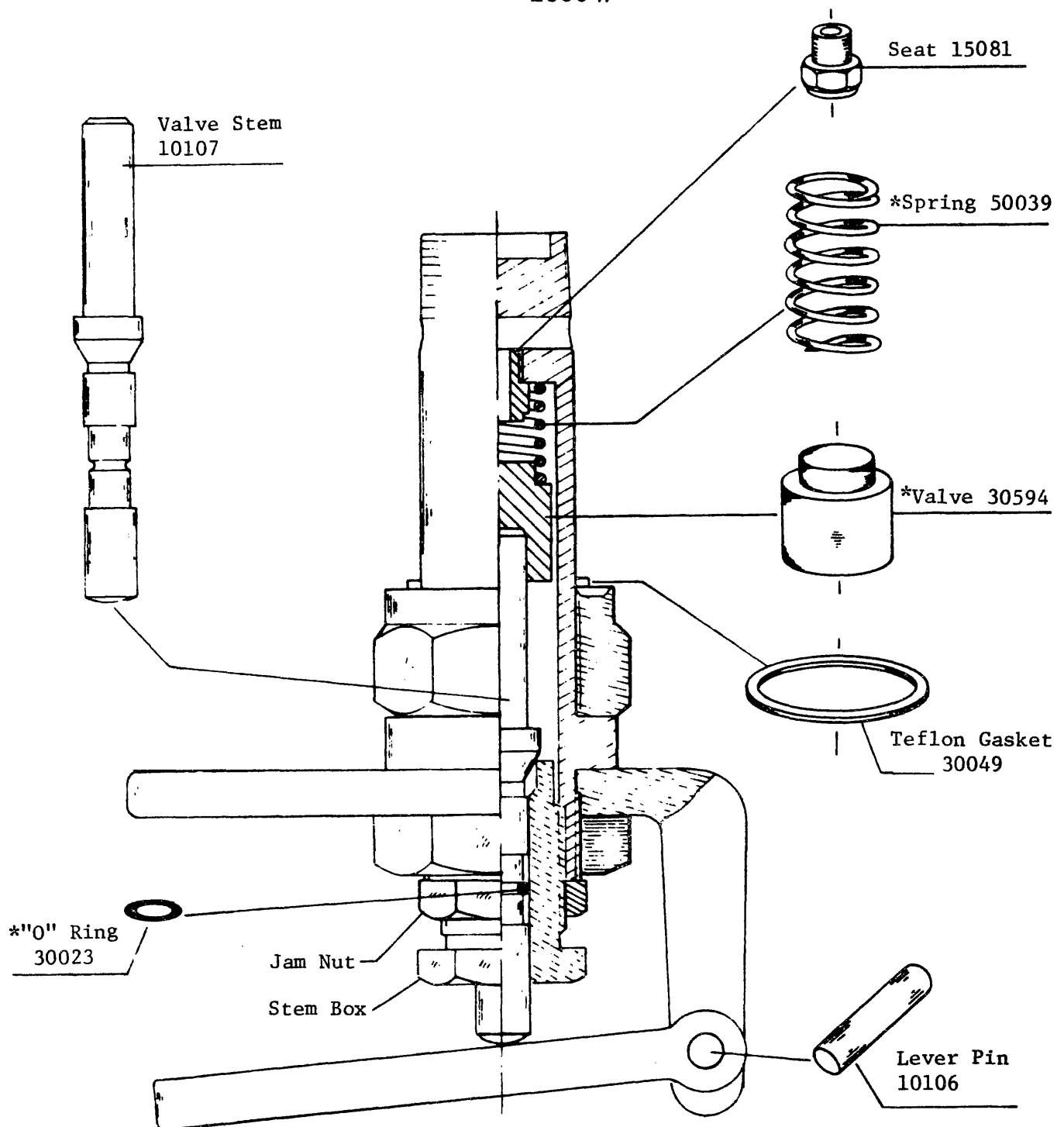


FIG. 16 HEAD VALVE ASSY  
110 241



\*Spare Parts

FIGURE 17 BUCK VALVE UNIT  
100047



\*Recommended Spare Parts

FIGURE 18  
AIR VACUUM VALVE ASSY. 2"  
111788

