#900

PROFAB/ROPER WHITNEY

MODEL 900
CORNER RADIUS MACHINE

OPERATORS MANUAL

TABLE OF CONTENTS

Specifications----------1

Setup----------2

Operation----------2

Maintenance----------2

Bleeding----------3

Micro switch adjustment----------4

Troubleshooting guide----------6

Electrical schematic----------7

Hydraulic/pneumatic schematic----------8

SPECIFICATIONS

Volts:	115 AC
Amps:	1.0
Air:	80-100 PSI
Capacity:	1/4 Mild Steel
Cutting Blades:	A2 Tool Steel
Radii:	1/8, 3/16, 1/4, 5/16, 3/8, 7/16, 1/2, 5/8, 3/4, 7/8, 1
Height:	49 inches
Width:	32 inches
Shipping Weight:	370 lbs.

SETUP

After the machine has been uncrated and placed in position plug the power cord into a standard 115 volt AC outlet. Connect an air supply hose to the inlet port of the regulator on the right side of the machine. Turn on the air supply and adjust the regulator so that the gauge reads 80-100 PSI.

OPERATION

Position the on/off switch to the "on" position. Place the guide bar adjacent to the desired radius and secure with the 3/8 - 16 screw that is supplied. Place your sheetmetal part onto the work table. Slide the part against the guide bar and into the die opening. Hold in place and activate the foot switch.

MAINTENANCE

Lubricate unit weekly with Lubriplate No. 130AA. The air regulator is equipped with an automatic water draining system, however, check daily to insure that the bowl is draining properly.

BLEEDING: READ COMPLETELY BEFORE BLEEDING

Occasionally, it may be necessary to "bleed" the hydraulic system. Bleeding of the machine must be done if the top die travels down to the part but lacks the power to cut through the material. This condition is caused by air that enters into the hydraulic system. The following procedure outlines the steps necessary to "bleed" the machine. (Refer to fig. 1)

1. Loosen jam nut (item 2) on limit switch actuating rod (item 3).

2. Screw activating rod up (counter-clockwise) until flush with top of upper die shoe (item 1).

3. Turn jam nut up to bottom of upper die shoe.

CAUTION

Jam nut on activating rod must always be turned up to bottom of upper die shoe before activating hydraulic system. Failure to do so will damage unit when activated.

4. Depress foot switch and hold down to keep the cutting die in the down position.

5. See Figure 1. Loosen allen plug (item 6) two to three turns to allow entrapped air to escape. Do not remove plug completely.

CAUTION

Use of safety glasses is highly recommended. Do not remove plug at any time. Oil and plug will fly out if plug is removed.

NOTE: Place a container below the hydraulic cylinder to catch the escaping hydraulic oil.

6. Tighten plug.

7. Release your foot from the foot switch.

8. Test machine.

9. Repeat steps 4 through 8 if necessary.

10. Refill air/oil booster with hydraulic oil.

11. Check the oil level in the transparent oil reservoir. The oil level should be approx. 2/3 full when the cutting die is in the down position.

NOTE: Disconnect air when machine is not in use.

LIMIT SWITCH ADJUSTMENT (after bleeding)

1. Depress foot switch and hold down.

2. Turn activator rod (item 3) down (clockwise) until limit switch (item 5) activates and top die automatically returns to "up" position.

NOTE: When the down stroke is activated the upper blade should pass the lower blade by approximately 1/32" (.030).

3. Hold activator rod with a screwdriver and tighten jam nut (item 2) to bottom of top die shoe (item 1).

WARNING

The opening of the cutter blades on this machine have been factory set at ¼ inch.

Do not adjust the cutter blade opening greater than ¼". Improper cutter blade opening may result in personal injury.

After resharpening of blades adjust cutter blade opening to ¼" maximum and insure that finger guards are in place and functioning properly.

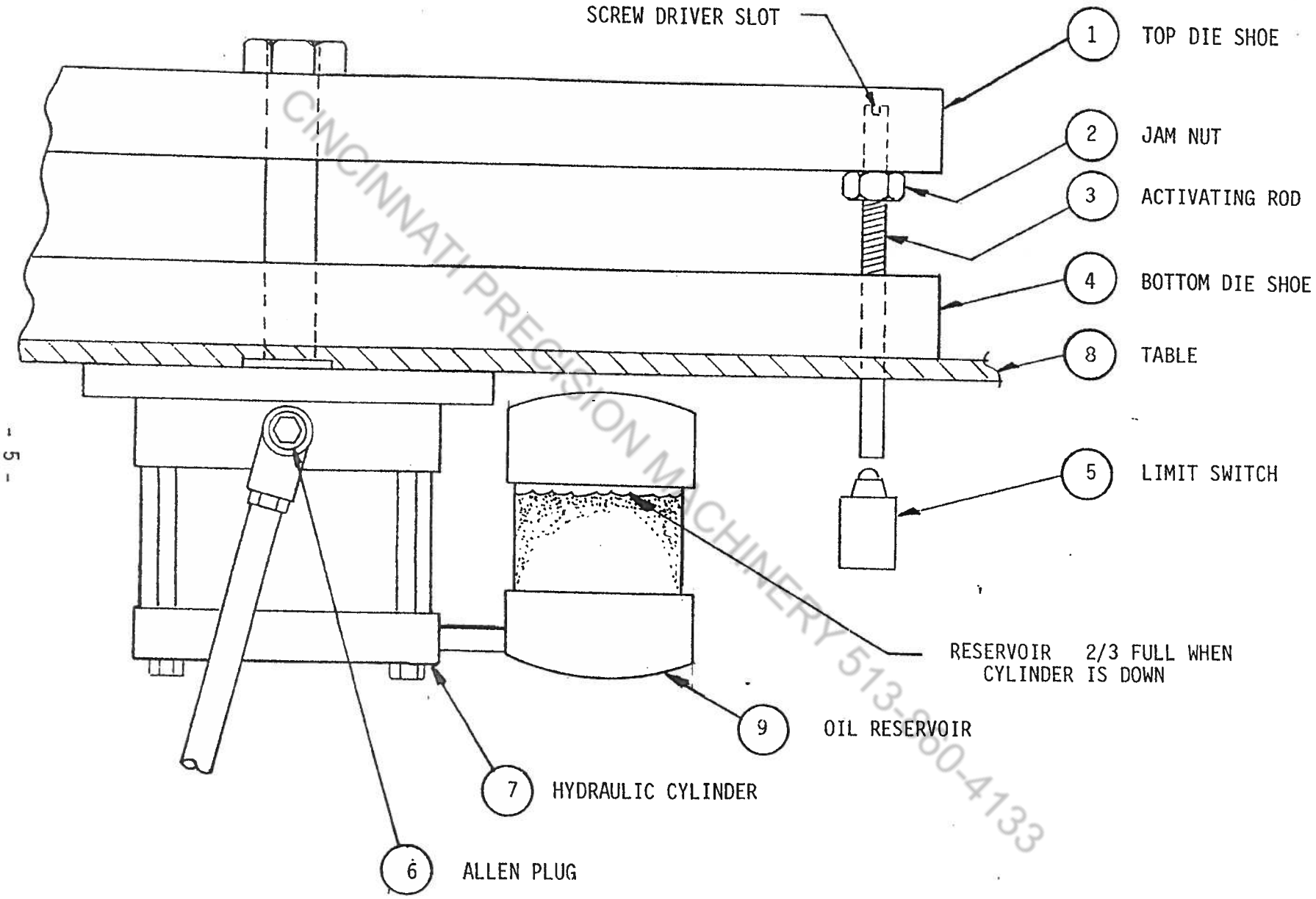
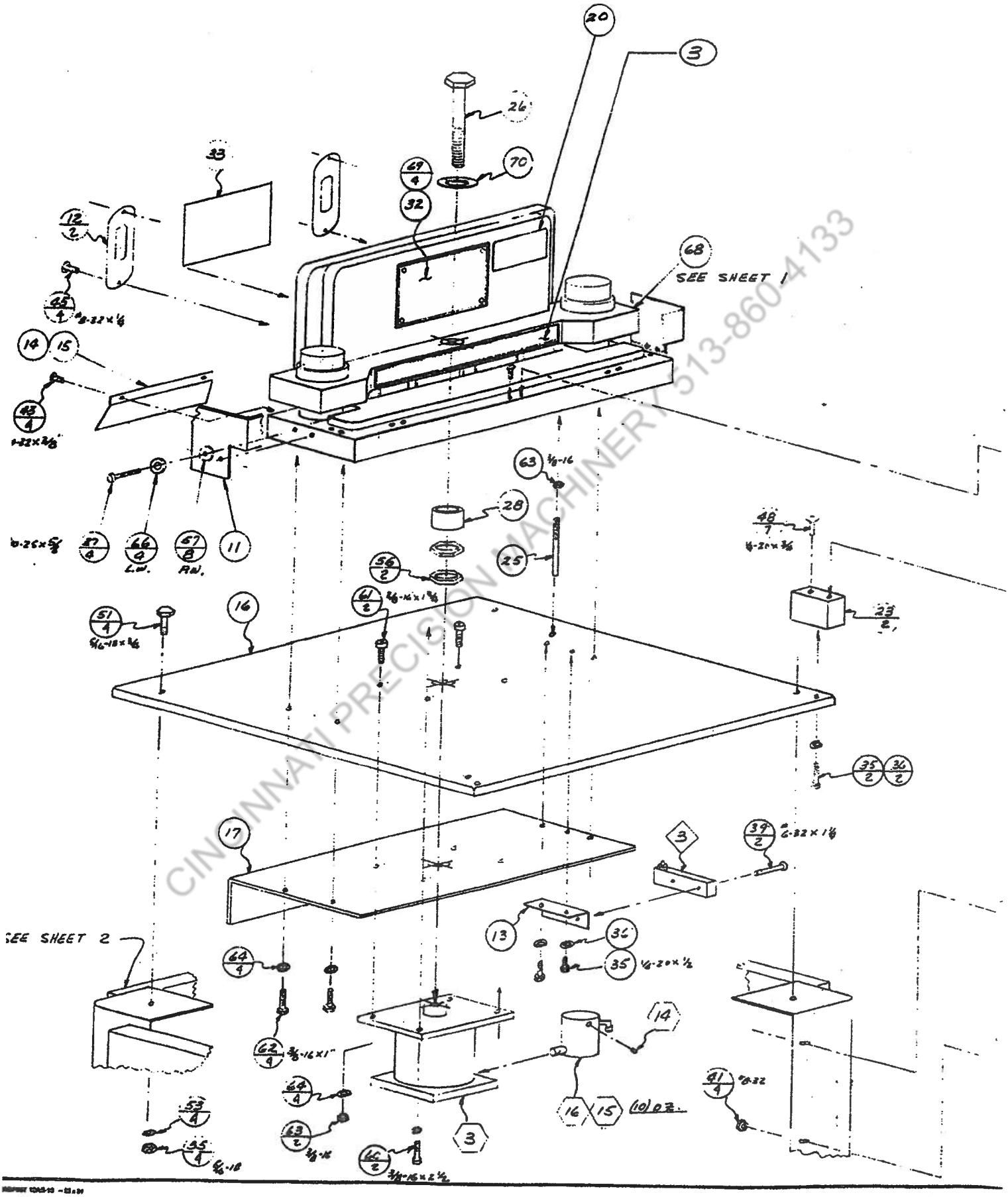
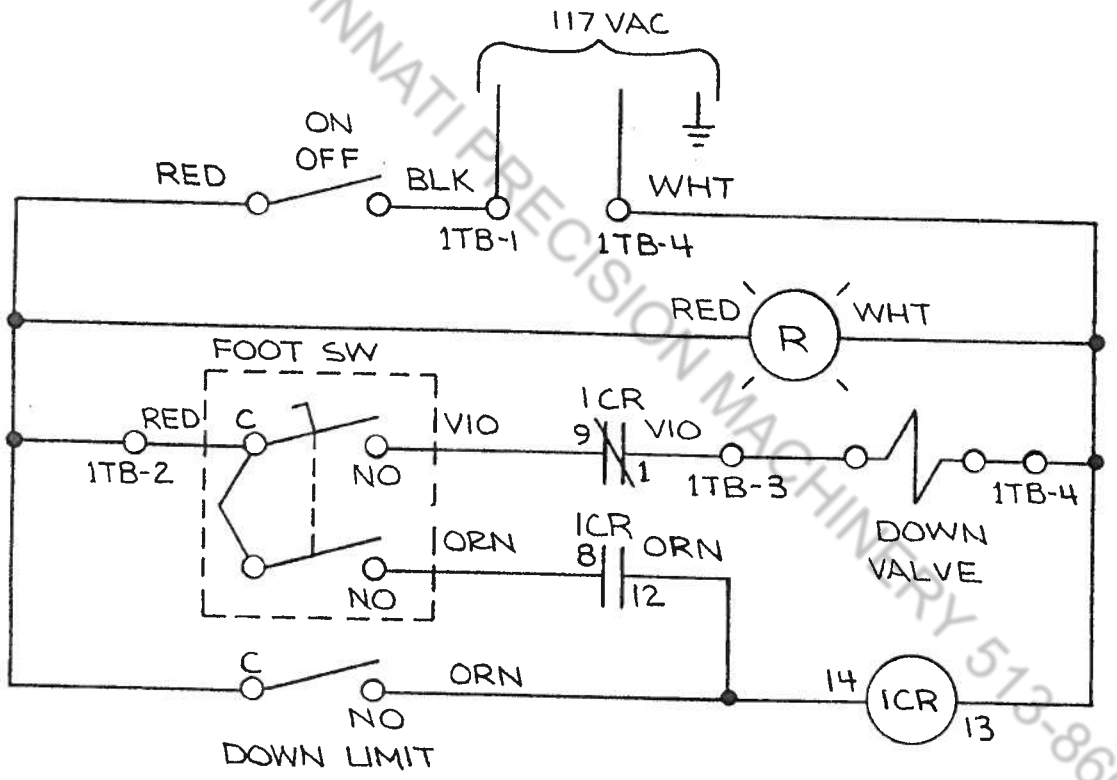


Fig. 1

TROUBLESHOOTING GUIDE

PROBLEM	PROBABLE CAUSE	TEST-REMEDY
Top die does not go down	No power to machine No air pressure Lack of grease Defective solenoid valve	Check power Check air pressure Grease machine Replace valve
Top die goes down but does not cut material	Air in hydraulic system	Bleed machine per instructions on page 3
Top die goes down but reverses before cutting	Micro switch out of adjustment	Adjust micro switch per instructions on page 3
Top die goes down, cuts material but does not return automatically	Micro switch out of adjustment	Adjust micro switch per instructions on page 3
Machine requires Frequent bleeding	Oil reservoir has no oil	Fill reservoir 2/3 full with hydraulic oil when die is in down position, then bleed machine per instructions on page 3

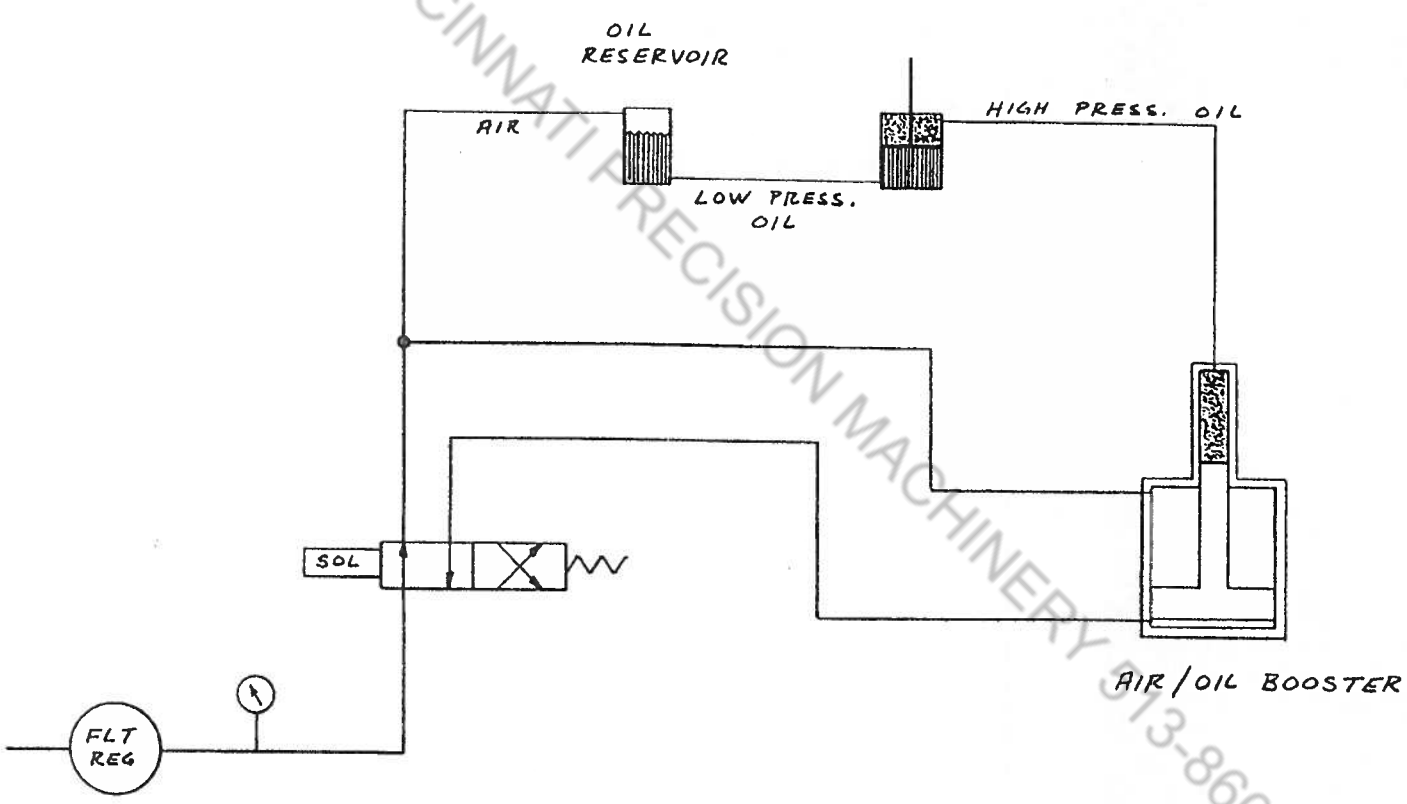




ROPER WHITNEY ROCKFORD, IL

TOLERANCES (EXCEPT AS NOTED)	REVISIONS			"MODEL 900" CORNER RADIUS MACHINE		
	NO	DATE	BY	SCHEMATIC– ELECTRICAL		
DECIMAL ±	1	1-10-86	[illegible]			
FRACTIONAL ±	2					
	3			DRAWN BY KOLP1	SCALE NONE	MATERIAL
ANGULAR ±	4			CHK'D	DATE 12-14-83	DRAWING NO R-800025
	5			TRACED	APP'D	

TELEDYNE POST 18AE-08 -11 X17



TOLERANCES (EXCEPT AS NOTED)	REVISIONS			MODEL 900 CORNER RADIUS MACHINE		
DECIMAL ±	NO.	DATE	BY	ROPER WHITNEY ROCKFORD, ILL		
FRACTIONAL ±	1			DRAWN BY R.W. KORPI	SCALE ~	MATERIAL
ANGULAR ±	2			CHK'D	DATE 11-17-83	DRAWING NO. B800035
	3			TRACED	APP'D	
	4					
	5					

ITEM	QTY.	PART NO.	PART NAME	DRG SIZE
1	1	688000305	WATTS #B65-02NJC6R FILTER/REGULATOR-AIR	A
2	2	669000022	MUFFLER - POREX #N250	A
3	1	669011011	HYDR. CYL. - CUNNINGHAM MFG. 4AONFIN4-14-5-1200	C
4	1	669122943	VALVE-AIR JOUCOMATIC 55100013	A
5	1	669000023	BOOSTER- PNEU-OIL JERGENS-61709-909050	A
6	1	669041743	HOSE ASS'Y-HYDR.	C
7	1	669021154	TEE-MALE RUN PARKER-1/2-MRO-S	
8	1	669021155	PLUG-HEX. HD. PARKER 1/2 HHP-S	
9	1	669021156	ELBOW-STR. THR'D. PARKER 6-8-C50X-S	
10	3	669021157	CONNECTOR-MALE, POLY-TITE PARKER 68P-6-4	
11	4	669021158	ELBOW-MALE, POLY-TITE PARKER 164P6-4	
12	1	669021159	TEE-UNION POLY-TITE PARKER 164P-6	
13	66"	669041744	TUBE-POLY FLOW, BLK, 3/8 IMP. EASTMAN 66-P3/8	—
13-1	1	17.5"	"	
13-2	1	5.25"	"	
13-3	1	8.5"	"	
13-4	1	9.5"	"	
13-5	1	17.5"	"	
14	1	669021160	PLUG-HEX. HD. PARKER 1/4 HHP-S	
15	.41 GAL	669072302	OIL-MOBIL DTE-25	
16	1	288760001	RESERVOIR-AIR OIL	13/IK C
17	2	669021161	ADAPTOR-FEMALE PIPE PARKER 6-1/4-F5Q4-S	
18	1	669021162	REDUCER-STR. THR'D PARKER 8-6F5Q4S	

UNLESS OTH
ALL DIMENSIONS ARE
BREAK ALL SHARP EDG
MICRO-FINISH. DO NOT SC
TOLERANCE VARIATIONS A

Sometimes clear
sometime Black

269