

Figure 1

## 1. INTRODUCTION

This document describes the installation of the PAWO SLU-N seal stations (Figure 1), used on the AMPOMATOR\* System III Leadmaker Machine. The seal station part number is 1752153-1.



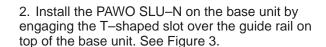
Refer to the PAWO documents shipped with the machine for descriptive information, operating instructions, adjustments and maintenance.

### 2. INSTALLATION

1. Install the base unit with the mounting screws located in the mounting slots approximately centered as shown in Figure 2.



Figure 2



3. Assemble the end stop onto the rear of the bottom plate of the SLU-N as shown in Figure 3.

End Stop Clamp Base Clamp

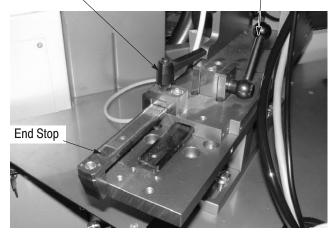


Figure 3



The end stop should be partially extended as shown in Figure 3.



The final position relative to the transfer will be described later in this document.

- 4. Make sure that the SLU-N will not interfere with the closing of the guards. Tighten the base clamp (shown in Figure 3) to prevent the SLU-N from moving.
  - The PAWO unit may be close to the guard as shown in Figure 4.
  - The PAWO unit may have an 18.5 inch X 12.5 inch guard insert that must be removed prior to installing a PAWO unit. Refer to Figure 5.



Do NOT remove the PAWO quard insert unless a PAWO unit is to be installed. Be SURE to replace the insert if the PAWO unit is removed.



TOOLING ASSISTANCE CENTER 1-800-722-1111

PRODUCT INFORMATION 1-800-522-6752

Be sure the guards do not interfere with either PAWO unit before lowering the guard! Otherwise damage to the PAWO units and guards will result.



Figure 4

5. Install the pneumatic tubing.



To avoid personal injury, be sure the main air is disconnected and turned off.

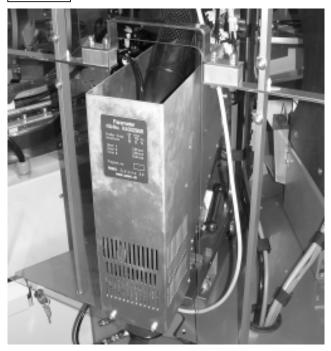


Figure 5

- a. Turn off the main air to the machine.
- b. Route the tubing as shown in Figure 6 through Figure 12.



Plumbing Prior to Installation Figure 6

Note that 8mm T-adapters are used to provide non-lubricated air to the seal stations. One T-adapter is used for each seal station being installed.

A 10mm tube supplies air to the seal station. This tube acts as a reservoir for the seal station.

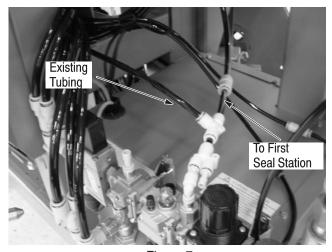


Figure 7



Do not reduce the length of this tube. There are 10mm to 8mm reducers at both ends of the tube.

c. Route the wiring along the tubing between the top plate and sheet metal frame.

Routing and connections are shown in Figures 9, 10, and 13 through 19.



Figure 8



Figure 9



Figure 10

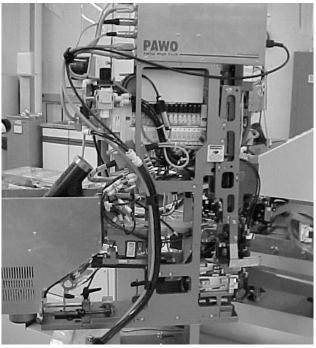


Figure 11

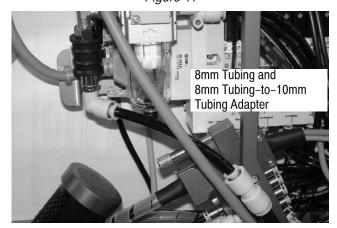
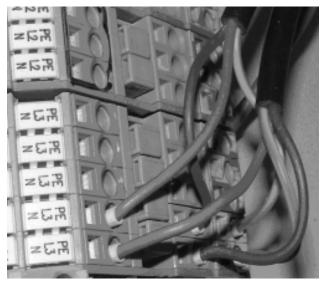


Figure 12

# Power Cable at the Control Unit and X610 Connections (See Schematic 1901676)





Control Unit

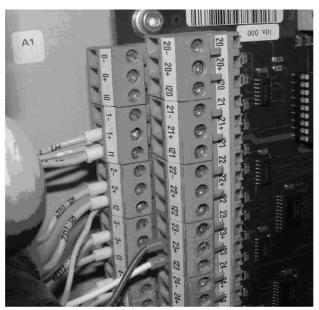
X610 Connections

Power Wiring	Power Cable	X610	X610
Side 1 at X610	Part Number 9007135	Blue Wire-Neutral	Yellow/Green PE
Power Wiring	Power Cable	X610	X610
Side 2 at X610	Part Number 9007135	Blue Wire-Neutral	Yellow/Green PE

Figure 13

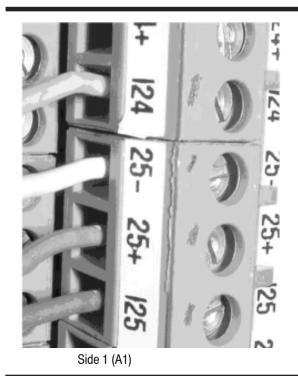


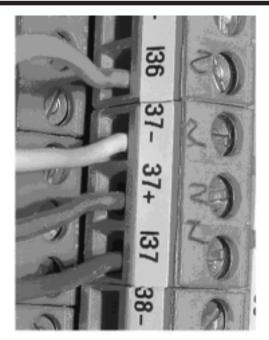
Figure 14



Side 1 -- Pink I-1 and Side 2 -- Pink I-2 (A1)

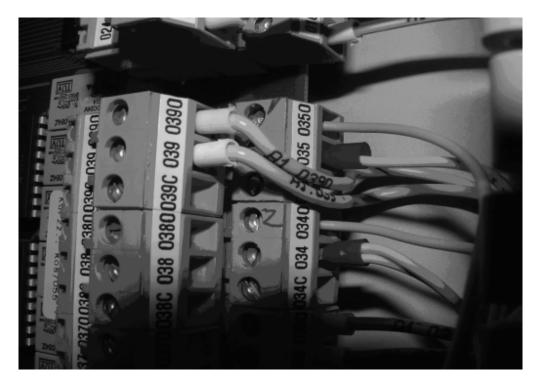
Figure 15





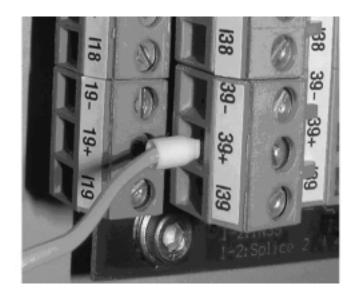
Side 2 (A1)

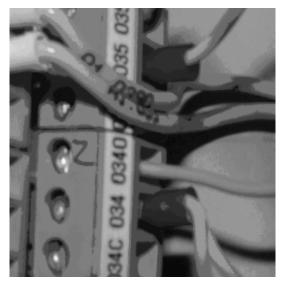
Figure 16



Side 1 -- Gray 0350 and Side 2 -- Gray 0340 (A1 -X1)

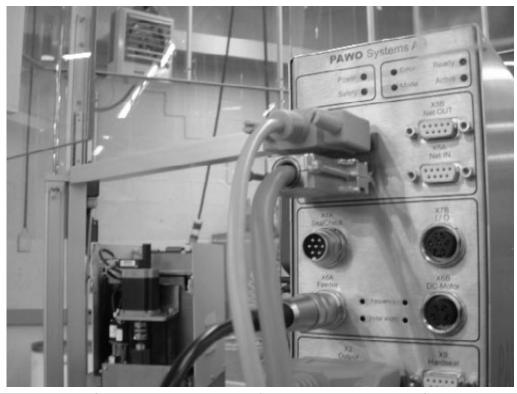
Figure 17





Jumper Wire Yellow 39+ (A1) to 034 to 035 (A1-X1)				
Jumper Wire Part Number 1901595-1	Yellow	39+ to 034 to 035		

Figure 18



#### PAWO X3 Interface Cable Connection Table

FUNCTION (See Figures 35, 36, and 37)	COLOR	SIDE 1 PAWO X-3 Interface Cable Part Number 3211987 Connection TO BIO-A1/AI-X1 (See Figure 28).	SIDE 2 PAWO X-3 Interface Cable Part Number 3211987 Connection to BIO-A1/A1-X1 (See Figures 35,36, and 37)
Ready Signal (End Working)	Yellow	I-24	I-36
O Volts	White	25-	37-
24 Volts	Green	25+	37+
Quality Signal (Seal Process Successfully)	Blue	I-25	I-37
Start Signal (Start Working)	Gray	0350	0340
Input 4 Signal (Guards Up)	Pink	I-1	I-2

Figure 19

NOTE: Be sure to cut off wire ends and protect the wires from shorting

d. Adjust the height of the seal station jaws to match the wire height.



This is accomplished with the seal station "homed" (jaws closed and retracted). Refer to the PAWO documentation for operating instructions.

- Check the height of the seal station jaws with respect to the centerline of wire as shown in Figure 20.
- Remove/install the shims, located on the top of the two uprights in the base unit (shown in Figure 21) as needed to achieve proper jaw to wire height.



Figure 20

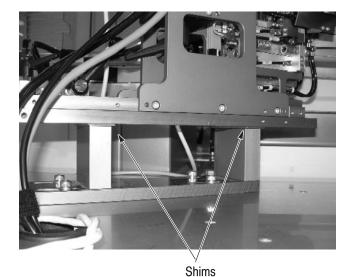


Figure 21

- 6. Set and properly "learn" the location of each seal station in TopWin.
  - a. E-Stop the lead-maker.
  - b. "Power up" the lead-maker.
  - c. In the Configuration Tab of TopWin, click on the top plate area of the machine. See Figure 22.
  - d. Select the seal icon tab on the left side of the window. See Figure 23.
  - e. Select PAWO SLU and press the next arrow icon.

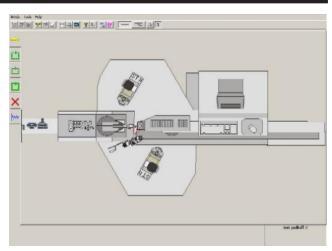


Figure 22



Figure 23

f. If the optional SEALCHECK is installed on the PAWO, select the tool icon button. See Figure 24.

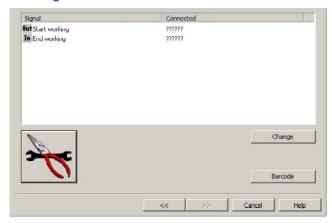


Figure 24

g. Select the checkbox for Quality Control Assembled and select OK. See Figure 25. The "Seal Process Successfully" is now displayed.

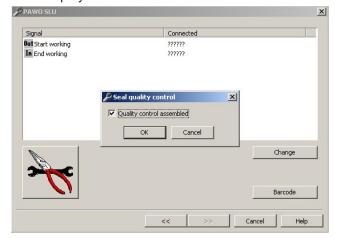


Figure 25

h. Select the "Change" button as shown in Figure 26.

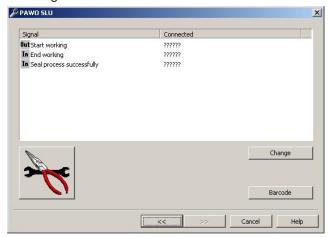


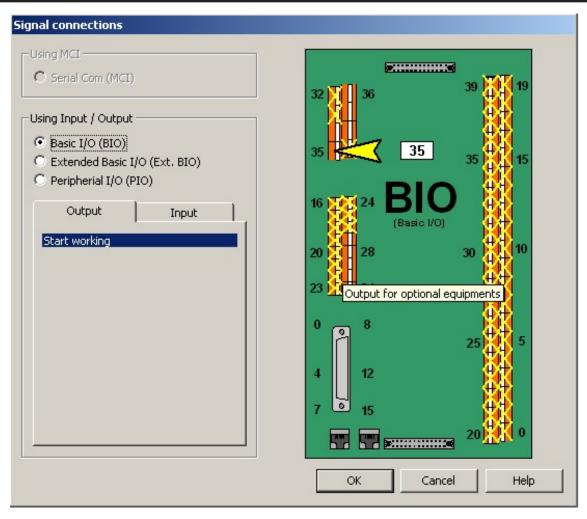
Figure 26

- 7. Define the I/O channels by selecting the appropriate input and output connections. (The selections shown are for Side One.)
  - a. For Side 1, begin with the highlighted "Start Working" and the "35" box. Refer to Figure 27.

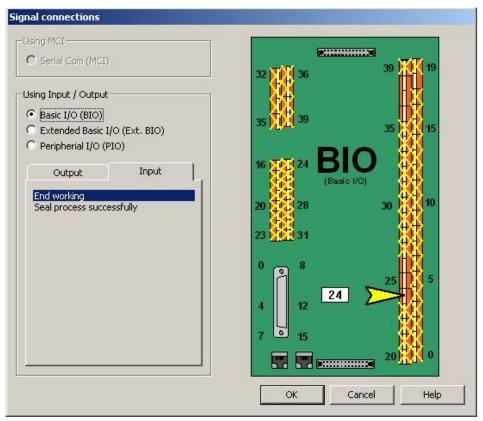


The boxes do not switch to an "X" when chosen. There is actually no indication which box has been chosen until after leaving the BIO screen. Also, you are not prevented from picking an input or output that is already defined for something else. For these reasons, please use caution when choosing I/O in the BIO screen.

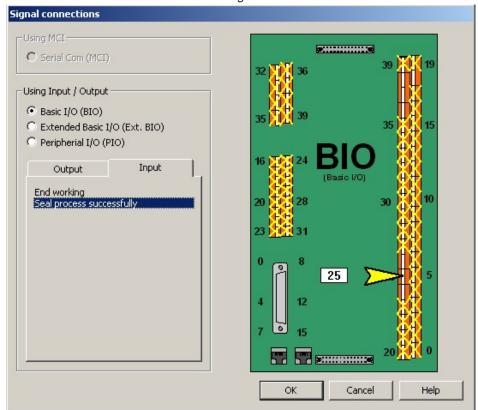
- b. Next, select the Input Tab & highlight "End Working". Select the 24 box (as shown in Figure 28).
- c. Highlight the "Seal process successfully" (provided seal check is installed) and choose box "25." See Figure 29.



Start Working Output (Start Signal) -- Side 1 Figure 27



End Working Input (Ready Signal) -- Side 1 Figure 28



Seal Process Successfully Input (Quality Signal) -- Side1 Figure 29

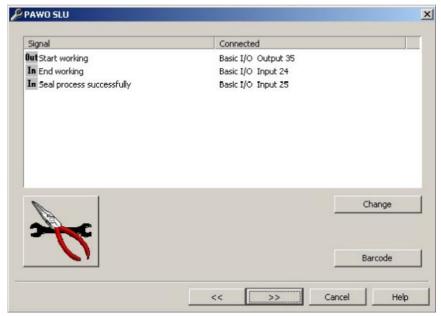
d. Choose the side two seal station and repeat with the side two values as shown in the table in Figure 19.



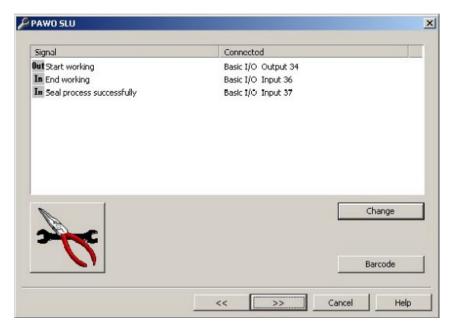
These connections are tabulated in the "X-3 Interface Cable Connection" table in Figure 19.

e. Verify the I/O has been correctly defined as shown in Figure 30 and Figure 31.

The summary screen for side one will be displayed as shown in Figure 30. (Side two is shown in Figure 31.)



Side One Inputs and Outputs Figure 30



Side Two Inputs and Outputs Figure 31

- 8. Select the "next" arrow."
- 9. If not already done, the SLU will need to be reset. This will place the jaws in the retracted (closed) position.
- 10. Reset the wire cutter. Refer to Figure 32.

- 11. Press the "Positioning" icon in the "Commands" section of the screen.
- 12. Select the "Feed in Wire" icon.
- 13. Select the "Cut" icon.
- 14. Select "Turn to Station."



The distance from the transfer centerline will be positioned first.

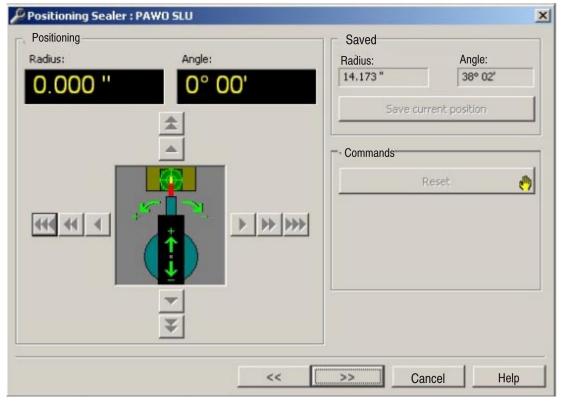


Figure 32

- 15. Adjust the radius to 400mm (15.75 ln.) by clicking on the arrows to extend the wire.
- 16. Move the angular position off-center so it is in-line with the flat surface of the jaws. See Figure 33.
- 17. Release the hold clamp and move the SLU until the flat surface of the jaws contacts the tip of the wire. If there is not enough travel, reposition the unit by loosening the base screws and moving them as needed.
- 18. Re-tighten the screw.
- 19. Re-tighten the hold clamp.
- 20. Move the end stop until it touches the end of the base and tighten the clamp. This stop position is used to reposition the SLU if the unit is removed for service.
- 21. Without changing the depth, rotate the transfer until the wire is centered in the jaws. Refer to Figure 34. Select "Save Current Position" when properly aligned. Select the next arrow icon. Refer to Figure 35.



Figure 33

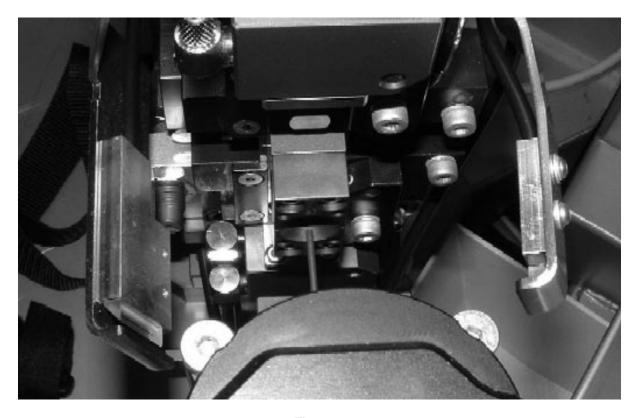


Figure 34

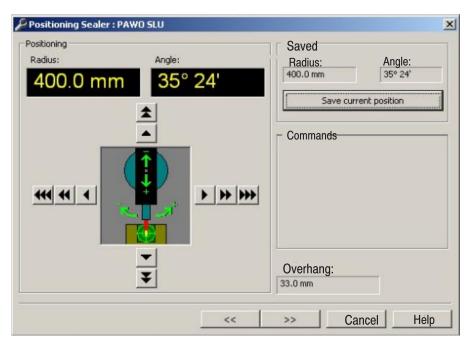


Figure 35

a. Select "Positioning" see Figure 36.

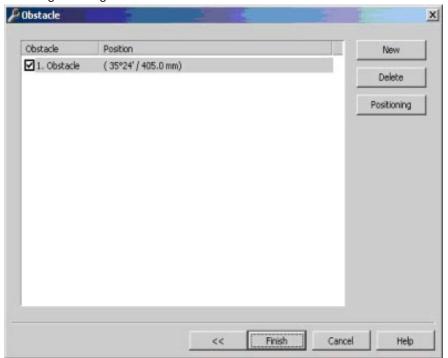


Figure 36

b. Select "Positioning" again. See Figure 37.

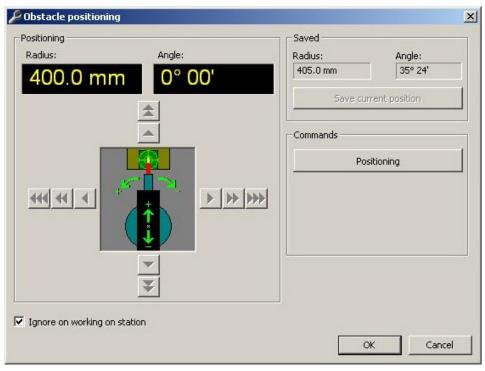


Figure 37

c. Feed in and cut the wire.

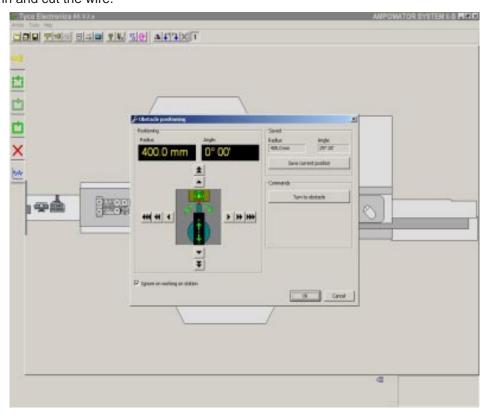


Figure 38

- d. Turn to the obstacle.
- e. Adjust the default 360mm radius to 394mm radius (Figure 39). Be sure angle value is set to previous value (as it was in Step 21). Save the current position and select "O.K."

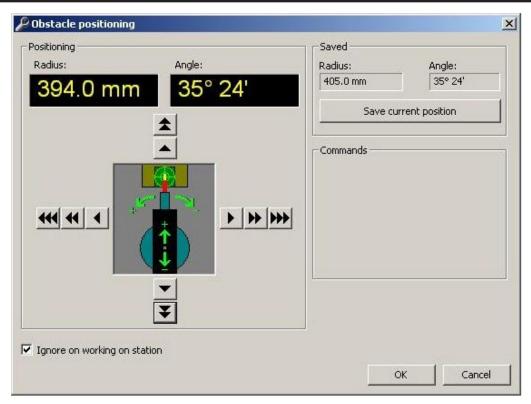


Figure 39

22. Select Finish to complete the installation. See Figure 40.

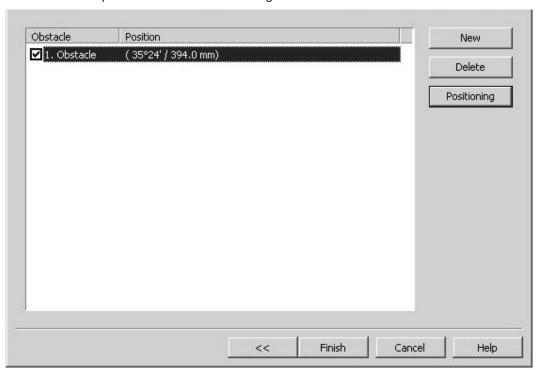


Figure 40

### 3. REVISION SUMMARY

- Updated format to current corporate requirements
- · Changed screens and text to reflect the

AMOPOMATOR System III Leadmaker and AMP-O-LECTRIC Servo Terminator III Machine