Clamco

a PAC Machinery company

Operator's Manual

6800CS Side Sealer

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1.0 TABLE OF CONTENTS

2.0 INTRODUCTION

2.1 Identification:

Please confirm the Serial Number and electrical specifications from the ID plate located just above the electrical cord connection and power switch on the back of the machine.

Serial Number	ZA560161 SN: 66921
Voltage	220-240
Cycles	50-60
Amperage	10

The Model and Serial Number label for the side sealer is located just above the main power switch, on the inboard edge of the electrical enclosure on the back of the machine. See Fig. 2.1

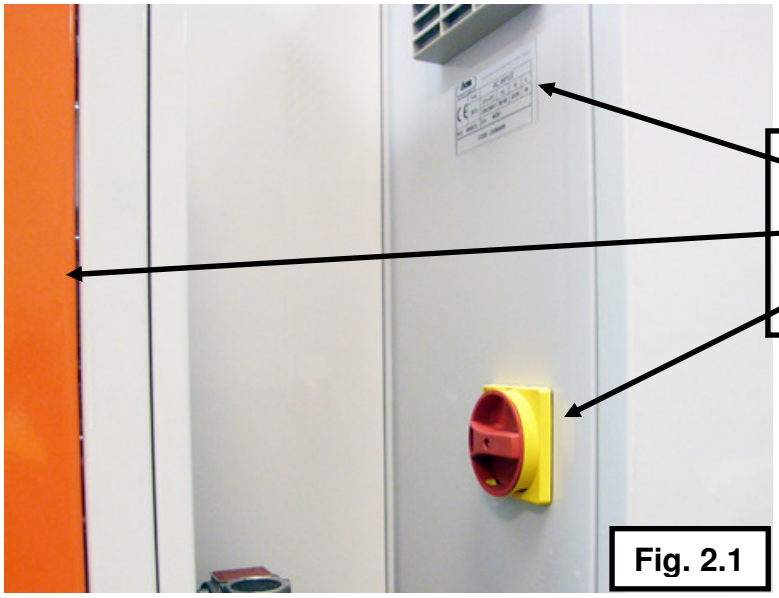


Fig. 2.1

2.2 Shipping Weights and Dimensions

Table 2.4 Sealer Weights and Dimensions				
Dimension	U.S.	Metric	U.S. W/Pallet	Metric W/Pallet
Height (adjustable)	**60"-65"**	**1,525-1,655mm**	**63"**	**1,605mm**
Width	**86"**	**2,180mm**	**87"**	**2,200mm**
Depth	**61"**	**1,545mm**	**64-1/2"**	**1,640mm**
Weight	**1576 lb.**	**715kg**	**1,797 lb.**	**815kg**

2.3 About the Manual:

The purpose of this manual is to help the operator get the most out of the 6800CS Side Sealer. To that end, it contains information on setting up, using, and performing light maintenance on the machine, including parts lists and schematics.

Please read this manual and familiarize yourself with the equipment before using it. The manual will serve as a valuable aid to understanding the equipment, its operation and the packaging material used with it.

Clamco's policy of continuous improvement and development means that although this manual is current and correct at the time of publication, the product and the manual are subject to change without notice.

This Manual contains a variety of symbols and keywords designed to draw the users' attention to important points. Those symbols and words are listed below:

NOTES: Is used to indicate information that may be helpful in understanding a component or procedure, but is not a direct part of a procedure.

SAFETY INFORMATION:

This manual also contains very important information to protect the operator, nearby personnel, the machine, and other property. Please pay special attention to the **SAFETY WARNINGS** that appear in the manual.

The **STOP** icon appearing in the margin alerts you to a safety warning on the subject it accompanies. It generally indicates that full instructions should be read, or safety measures taken before doing something described in the text.

The **DANGER** icon with the heavy red border alerts the operator or technician to imminent danger of death or severe injury if a situation is not avoided

WARNING text indicates a hazard of death or severe injury that may occur if a situation is not avoided.

The **CAUTION** icon with the thin border and the yellow field alerts the operator or technician to a hazard of minor to severe injuries or property damage that may occur if a described situation is not avoided.

The **ELECTRICAL HAZARD** icon indicates a danger that is related to electricity.

2.4 Capabilities of the 6800CS Side Sealer:

2.4.1 The CLAMCO 6800CS is a continuous band sealer with an automatic hot knife end seal bar.

It uses center-fold film.

Film feed is by an inverting head, permitting product to be delivered to the sealer by a conveyor that is in-line with the infeed conveyor of the 6800CS. See Table 2.1

Table 2.1	**Sealer Capabilities**			
Dimension	**Inch**	**Metric**		
Conveyor Width	15"	381mm		
Conveyor Speed Range	43-148 ft./min.	10-45 m/min.		
Seal Bar Width	19"	482mm		
Max. Package Height	7-7/8"	200mm	* Polyolefin or polyethylene film up to 30m may be used. Polyethylene from 15m to 80m can be used with the optional crossbar.	
Min. Film Width	14”	355mm		
Max. Film Width	24"	600mm		
Max. Film Roll Diameter	13-3/4"	350mm		
Maximum Production Rate	75 P/min.			
Maximum Film Gauge*	.0012"	30 m		
Maximum Production Rate	75 P/min.			

2.4.2 There is a range of height to width proportions that will work well in any side sealer. Those ratios are described for the 6800CS in table 2.2.

Table 2.2 **Maximum Width, for a given Height**			
Height (H)		**Width (Y)**	
2"	50mm	15-3/4"	400mm
2-3/4"	70mm	15"	380mm
3-1/5"	90mm	14-1/8"	360mm
4-3/8"	110mm	13-3/8"	340mm
5"	130mm	12-1/2"	320mm
5-7/8"	150mm	11-7/8"	300mm
6-5/8"	170mm	11"	280mm
7-7/8"	200mm	9-7/8"	250mm

2.4.3 Production Rates for the 6800/CS. See Table 2.3 and Table 2.4

Table 2.3 Packs per minute dependent on X and H										
	Height (H) in Inches									
Length (X) in Inches		3/8"	2"	2-3/4"	3-1/2"	4-3/8"	5"	5-7/8"	6-5/8"	7-7/8"
	2"	**60-65**	**53-58**	**50-55**	**47-52**	**42-47**				
	4"	**65-70**	**50-55**	**48-53**	**45-50**	**42-47**	**40-45**			
	6"	**70-75**	**60-65**	**55-65**	**50-55**	**48-53**	**44-49**	**42-47**	**40-45**	**35-40**
	9-7/8"	**60-65**	**50-55**	**45-50**	**40-45**	**39-44**	**37-42**	**36-41**	**34-39**	**33-38**
	11-3/4"	**50-55**	**45-50**	**40-45**	**37-42**	**36-41**	**35-40**	**34-39**	**32-37**	**30-35**
	13-3/4"	**45-50**	**40-45**	**36-41**	**35-40**	**34-39**	**33-38**	**32-37**	**30-35**	**29-34**
	15-3/4"	**40-45**	**35-40**	**34-39**	**33-38**	**32-37**	**31-36**	**30-35**	**29-34**	**27-32**
	17-3/4"	**35-40**	**33-38**	**32-37**	**31-36**	**30-35**	**29-34**	**28-33**	**27-32**	**26-31**
	19-5/8"	**33-38**	**31-36**	**30-35**	**29-34**	**28-33**	**27-32**	**26-31**	**25-30**	**24-29**
	21-5/8"	**31-36**	**29-34**	**28-33**	**27-32**	**26-31**	**25-30**	**24-29**	**23-28**	**23-28**
	23-5/8"	**29-34**	**28-33**	**27-32**	**26-31**	**25-30**	**25-30**	**24-29**	**23-28**	**22-27**
	31-1/2	**23-28**	**23-28**	**22-27**	**21-26**	**21-26**	**21-26**	**20-25**	**20-25**	**19-22**
	39-3/8"	**15-18**	**14-17**	**14-17**	**14-17**	**14-17**	**13-16**	**13-16**	**13-16**	**13-16**
	47-1/4"	**13-16**	**13-16**	**13-16**	**12-15**	**12-15**	**12-15**	**12-15**	**11-14**	**11-14**
	59"	**11-14**	**11-14**	**11-14**	**11-14**	**10-13**	**10-13**	**10-13**	**10-13**	**9-12**
	78-3/4"	**9-13**	**9-12**	**9-12**	**9-12**	**8-11**	**8-11**	**8-10**	**7-10**	**7-9**
	98-3/8"	**7-10**	**7-10**	**7-10**	**7-9**	**6-9**	**6-9**	**6-9**	**6-8**	**5-8**
	118"	**5-8**	**4-8**	**4-7**	**4-6**	**3-6**	**3-5**	**2-5**	**2-4**	**2-4**

Table 2.4 Packs per minute dependent on X and H										
	Height (H) in mm									
Length (X) in mm		**10**	**50**	**70**	**90**	**110**	**130**	**150**	**170**	**200**
	50	60-65	53-58	50-55	47-52	42-47				
	100	65-70	50-55	48-53	45-50	42-47	40-45			
	150	70-75	60-65	55-65	50-55	48-53	44-49	42-47	40-45	35-40
	250	60-65	50-55	45-50	40-45	39-44	37-42	36-41	34-39	33-38
	300	50-55	45-50	40-45	37-42	36-41	35-40	34-39	32-37	30-35
	350	45-50	40-45	36-41	35-40	34-39	33-38	32-37	30-35	29-34
	400	40-45	35-40	34-39	33-38	32-37	31-36	30-35	29-34	27-32
	450	35-40	33-38	32-37	31-36	30-35	29-34	28-33	27-32	26-31
	500	33-38	31-36	30-35	29-34	28-33	27-32	26-31	25-30	24-29
	550	31-36	29-34	28-33	27-32	26-31	25-30	24-29	23-28	23-28
	600	29-34	28-33	27-32	26-31	25-30	25-30	24-29	23-28	22-27
	800	23-28	23-28	22-27	21-26	21-26	21-26	20-25	20-25	19-22
	1000	15-18	14-17	14-17	14-17	14-17	13-16	13-16	13-16	13-16
	1200	13-16	13-16	13-16	12-15	12-15	12-15	12-15	11-14	11-14
	1500	11-14	11-14	11-14	11-14	10-13	10-13	10-13	10-13	9-12
	2000	9-13	9-12	9-12	9-12	8-11	8-11	8-10	7-10	7-9
	2500	7-10	7-10	7-10	7-9	6-9	6-9	6-9	6-8	5-8
	3000	5-8	4-8	4-7	4-6	3-6	3-5	2-5	2-4	2-4

2.5 Optional Accessories

2.5.1 Notch-reading photoelectric cell for printed film

This option enables the user of the 6800CS to position images on pre-printed film on the sealed product.

2.5.2 Product protection photoelectric cell

This option keeps the end seal bar from striking the product.

2.5.3 External conveyors

A variety of powered and unpowered conveyors can be fitted to supply products to and carry wrapped products away from the 6800CS.

2.5.4 Infeed flow control sensor

This option enables the 6800CS to detect the arrival of incoming products.

2.5.5 Out-feed accumulator photoelectric cell

This option enables the 6800CS to detect the passage of wrapped products onto the takeaway conveyor

2.5.6 Internal control for external conveyors

When external conveyors are used with the 6800CS, they can be coordinated with the sealer.

2.6 Before use:

2.6.1 Emergency shut-down procedure:

All users and personnel who are likely to be around the machine should be familiar with locations and use of:

- The EMERGENCY STOP button
- Air shut-off on the sealer
- Air shut-off at the shop source
- Electrical shut-off on the sealer
- Electrical shut-off at the shop source

2.6.2 CLAMCO strongly suggests making graphic aids to show the location and use of these controls. Post these aids near the place where the sealer will be used.

2.6.3 Paint stripes on the floor to indicate necessary working clearance around the sealer.

2.6.4 All users should be familiar with operating controls of the sealer. Review this manual and keep it near the sealer. Conduct training as needed.

2.6.5 All users should be familiar with the location and nature of hazardous parts of the 6800CS. Perform a Safety Review.

Lifting Hazards:

- Loading and unloading film
- Removing large components for repair or maintenance
- DO NOT try to move the sealer without material handling equipment

Electrical hazards:

- Proper connection to electrical power source
- Lock-out / tag-out before any maintenance
- Heed warning labels

Burn Hazards:

- Transverse seal blade gets hot.
- Side seal knife gets very hot.
- Heed warning labels.
- Do not remove guards

Pinch Hazards:

- Note infeed conveyor motion
- Keep fingers clear of side seal belts and rollers.
- Keep fingers clear of transversal seal bar and linkages that move it.

3.0 INSTALLING THE 6800CS

3.1 Storing and Transporting

3.1.1 Storage

For prolonged storage before unpacking, the 6800CS should be protected from the elements (store indoors).

Humidity should be between 30% and 90% without condensation.

Temperature should be between 5° and 130° F. (-15° and 55° C.).

CAUTION: Improper storage will cause damage that is not warrantable.

3.1.2 Transporting

The pallet containing the 6800CS should only be lifted from the bottom, with the forks spread wide on the long side of the pallet. Any equipment used to move the 6800CS should be capable of lifting 1,800 lbs. (815kg).

Once uncrated and removed from the pallet, the6800CS should only be lifted from the bottom, with the forks spread wide on the long side of the sealer. Any equipment used to move the 6800CS should be capable of lifting 1,800 lbs. (815kg).

3.2 Unpacking and Placement

3.2.1 Carefully uncrate the machine and all accessories. Remove all packing materials.

3.2.2 Compare the contents to the invoice and bill of lading. Make sure you have everything you ordered.

3.2.3 Locate the manual and related hardware that has been supplied with the machine.

3.2.4 Inspect all items for damage.

Shipping Damage: If there is any damage, contact the delivering carrier immediately. File a damage claim with the carrier.

- Do not discard the material until you are sure that there is no hidden damage.
- Carefully examine the machine for any indications of damage that may have occurred in transit -
- Damage claims must be resolved before putting the equipment into use.
- Remember that even minor damage on the outside of the machine can cause problems with sensitive components inside the machine.
- Retain all packing materials pending inspection of the damage and satisfaction of your claim by the carrier.
- The CLAMCO Div. of Packaging Aids Corp. will be happy to assist you in making a damage claim.

3.2.5 Unbolt the 6800CS from the pallet.

3.2.6 Lift the 6800CS off the pallet using the guidelines described in the “Transporting” section of this chapter.

- If the 6800CS will need to roll on its casters to be placed in its final location, retract the threaded pads so that they are clear of the floor when the machine is resting on the casters.
- If the 6800CS is to be placed in its final location, adjust the threaded pads to the desired level while the machine is lifted. Use a 1-1/4” or 32mm wrench to adjust.
- Adjust the threaded pads so that the infeed and takeaway conveyors are at a suitable height to work with other equipment in the system, (conveyors, benches, material handling equipment) and to make the 6800CS level and stable.
  See Fig. 3.1

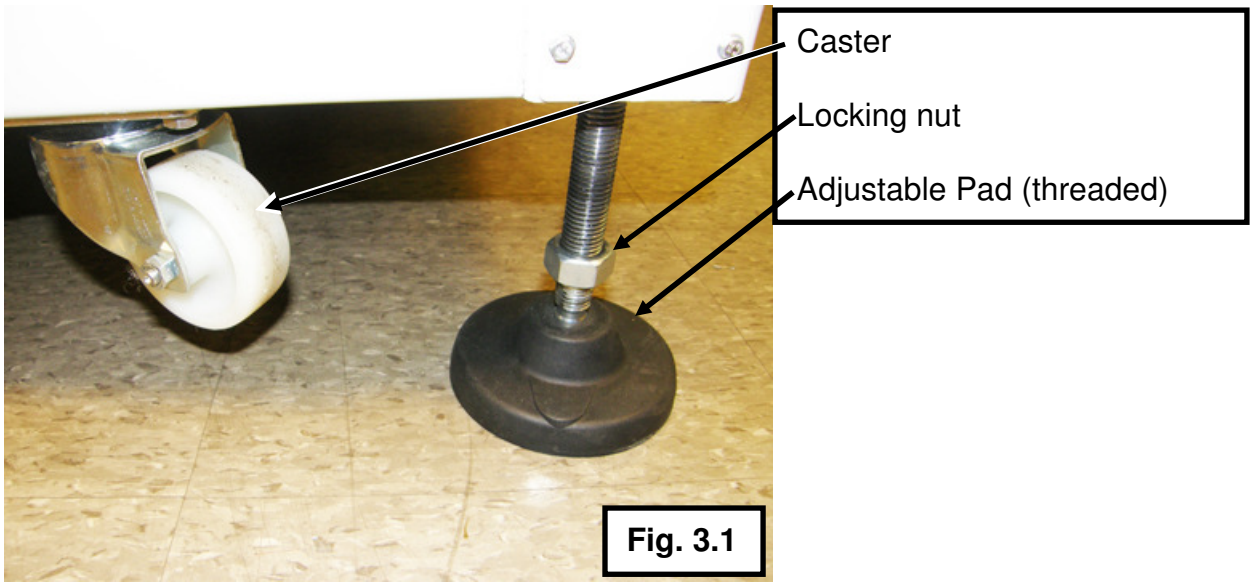


Fig. 3.1

NOTE: When used with a heat tunnel, the 6800CS should be adjusted so that the end of the takeaway conveyor is 1mm lower than the tunnel conveyor.

3.2.7 The next section of this chapter covers preparation of the site.

3.3. Location

3.3.1 Safety Considerations:

The sealer must be located indoors only.

The sealer must be in a non-explosive atmosphere.

The sealer must be in a dry location, away from caustic substances.

CAUTION: When used without a heat tunnel, a roller assembly with polycarbonate guard (MY100344) must be installed to prevent the users from hot components and moving components. When used with a heat tunnel, install the roller assembly with polycarbonate guard at the exit of the heat tunnel.

3.3.2 Workflow and Transfer Considerations:

- There should be enough room to work at the 6800-CS without being in the way of product movement.
- Select a location for the sealer that fits logically with the flow of products through the facility. It may be integrated with other systems.
- There should be enough room around the sealer for easy and safe movement of products to and from the sealer.
- When used with a heat tunnel, the two machines should be moved as close together as possible without touching. The takeaway conveyor should be .040" (1mm) lower than the belt leading into the tunnel.
- The 6800CS and the heat tunnel should be aligned so that the wrapped product is in the center of the tunnel conveyor.

3.3.3 Electric Power Requirements:

CAUTION: Use on an ungrounded circuit will void the warranty

- Follow local electrical and safety codes, as well as the National Electric Code (NEC) and Occupational Safety and Health Act (OSHA) regulations.
- The machine must be located at or near an appropriate electrical supply. Be certain that the power source conforms to the requirements of the machine and that the proper gauge and type of wire is used.
- Connections should be made using the shortest possible runs of wire. Long runs of wire can result in reduced voltage.
- The 6800CS uses 220-240 V. AC at 50-60hz. (3phase + N)
- The circuit must be rated for at least 10A. Nominal power draw is 2,330 Watts.

3.3.4 Air Supply Requirements:

- The Roll Bagger must be within reach of a supply of clean, dry compressed air of at least 80-90 PSI (6.0 BARs) at a volume of 36"^{3}/cycle (0.6L/cycle). At 20 cycles per minute, 6'^{3}/minute (12.0L/Min.) would be needed.
- The air supply may contain a maximum of 0.5 liquid ppm. Solid particles may be no bigger than 40µm.

NOTE: The pipes supplying air to the 6800CS must be large enough to not impede the flow. A minimum of 3/8" or 10mm pipe I.D. is recommended.

- A filter and water trap near the connection point are strongly recommended, even if the air supply is equipped with a drier system.

3.3.5 Surface Considerations:

- The 6800CS sealer must be stably supported on a level surface.
- The 6800CS sealer must located on a surface that is safely able to support the weight of the machine, any associated equipment, the operator, and any stock of material that is stored near, or being used in the sealer.

3.4 Installation Steps

3.4.1. Position the 6800CS in the location where it will be used, as described in section 3.2.6 of this chapter.

3.4.2. Install the outer disc on scrap wind-up spool, with the white nylon side facing the machine. Secure it with the threaded knob. See Fig. 3.2.

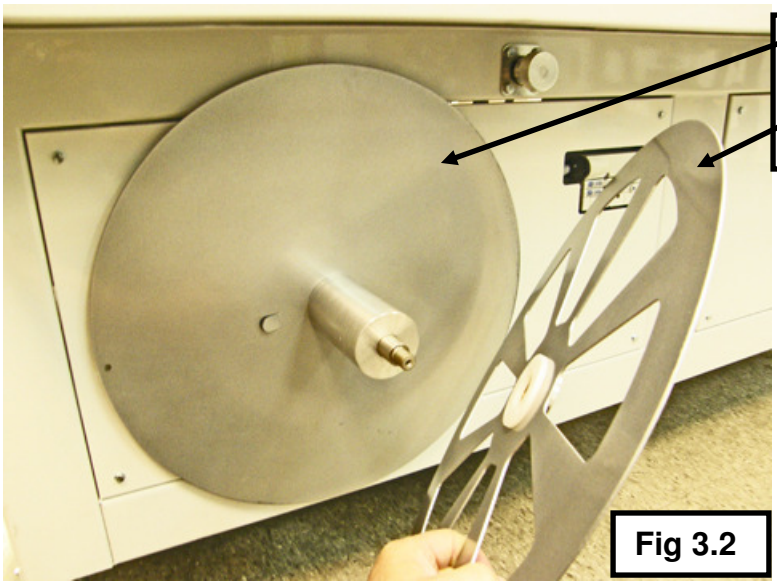
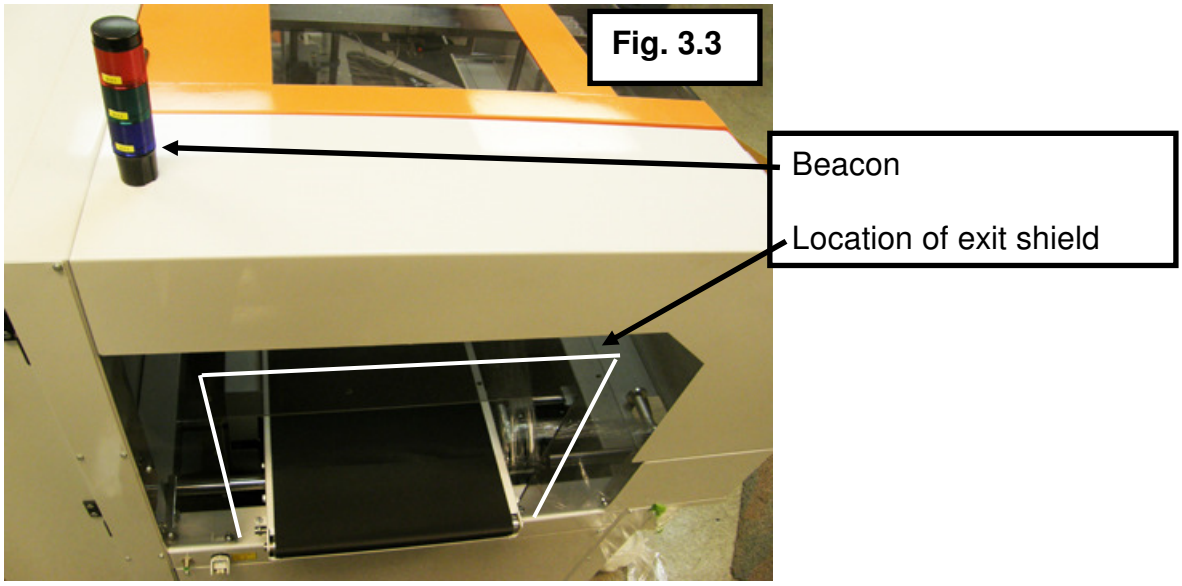


Fig 3.2

3.4.3 Mount the exit guard to the cover at the exit end of the sealer. See Fig 3.3

3.4.4 Snap the beacon into its base on top of the sealer. See Fig. 3.3.



3.4.5 Power Connection:

DANGER: Only trained and licensed electricians should work on high voltage systems such as the one that powers the 6800CS.

- Confirm that the electrical power supply matches the specifications described in the “Electrical Power Requirements” section of this chapter.
- Disconnect power from the intended circuit using OSHA recommended lockout/tagout procedures.
- Locate the main power switch on inboard surface of the electrical enclosure. Confirm that it is turned OFF. “OFF” be visible will window on the switch, the knob grip will be horizontal, and ports for lockout tags will be aligned.

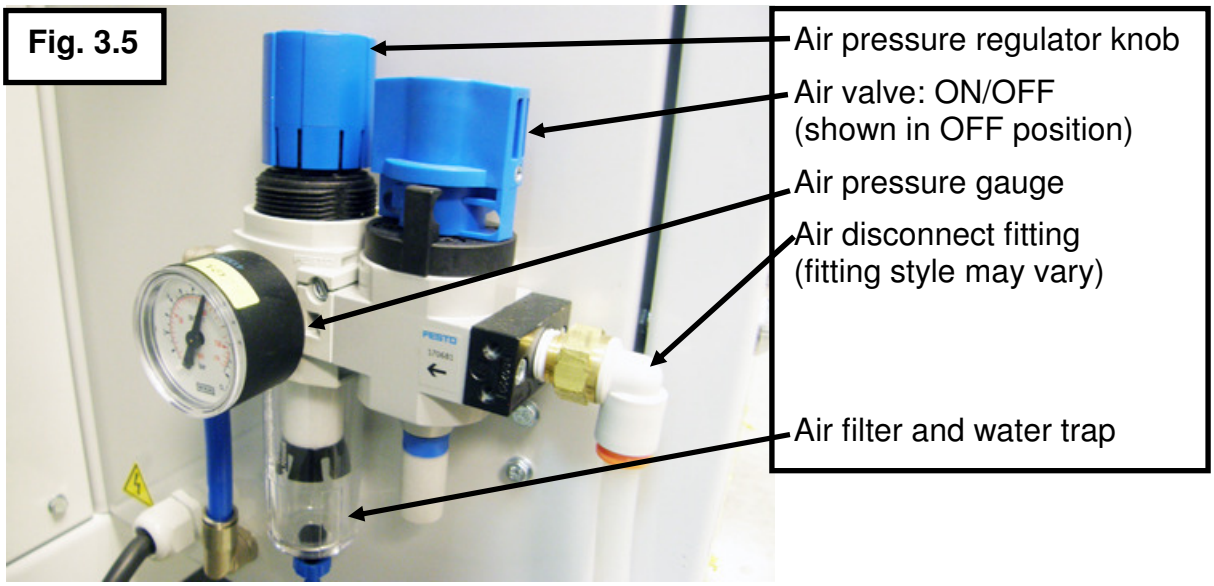
- Locate the power cable. It enters the electrical enclosure about 22” (56cm) below the main power switch.
- Strip the individual wires in the cable, and connect them to the power supply. See Fig. 3.4

3.4.6 Pneumatic Connection:

- Locate the filter-regulator assembly on the back of the 6800CS. It is mounted on the inboard edge of the electrical enclosure, just above the power cable entry. See Fig. 3.5.
- Confirm that the air valve on the filter-regulator assembly is closed (OFF). The winged knob nearest the air connection fitting should be turned counter-clockwise.
- Connect the air supply to the filter-regulator assembly using a quick-disconnect fitting.
- Turn-on the air supply: Push down on the winged knob, and turn it clockwise to turn-on air to the 6800CS.
- Check the air pressure gauge on the filter-regulator assembly. It should read 80-90 PSI (6BARs).
- To adjust air pressure, lift up on the blue knob just above the air pressure gauge. Turn it clockwise to increase pressure. Turn it counter-clockwise to decrease air pressure.
- Press the blue knob down to lock the setting.

NOTE: In use, the air pressure and water trap should be checked periodically.

Fig. 3.5



NOTE: Air fitting base is CLAMCO part number 390-000074. The elbow fitting is part number 785-64

3.4.7 Integration With Other Equipment

- The 6800CS comes with a pair of connection jacks and power plugs built-in; one at each end. See Fig. 3.6.
- They are just below conveyor level, near the back of the machine. (Near the electrical enclosure and film cradle).
- Feed conveyors and takeaway conveyors can be connected to these points, with the connection jacks coordinating the conveyor's motion with the production flow of the 6800CS.
- See the instructions that apply to the connected device for specific connection information.

4.0 LOADING of the 6800CS

4.1 Loading Film onto the Film Cradle

4.1.1 Selecting Film:

Center-fold film:

Center-fold film is folded into two layers on the roll. One side of the roll has a folded edge. The other side of the roll has an open edge.

Material and gauge:

Polyethylene film tends to be sturdier and more air-tight than polyolefin film, and is used more for protection in transport and consolidation of packages. Usually called “Poly” film.

Polyolefin film is more transparent and better suited for retail presentation.

Film gauge is dependent on expected durability of the package. New film technology is making thinner films more viable.

Film width: The 6800CS will accommodate film widths of 12” to 22” (30.5cm to 56cm).

- For package height 4” (100mm) or less:

  Film Width = Package Width (Y) + Package Height (H) + 4” (100mm) waste

- For package height greater than 4” (100mm):

  Film Width = Package Width (Y) + Package Height (H) + 6” (150mm) waste

4.1.2 Open the film cradle door and remove the previously used roll of film, if present.

4.1.3 Move the film guides to a position that will allow the film roll to fit on the rollers.

NOTE: Turn the black handles on the film guide clamps clockwise (as seen from the handle end) to clamp them in place. Turn the handles counterclockwise to loosen the clamps, allowing the film guides to move. If the handles are not in a convenient position, pushing down on the handles will allow the handles to rotate without loosening or tightening the clamps. The handles can be turned to a better position.

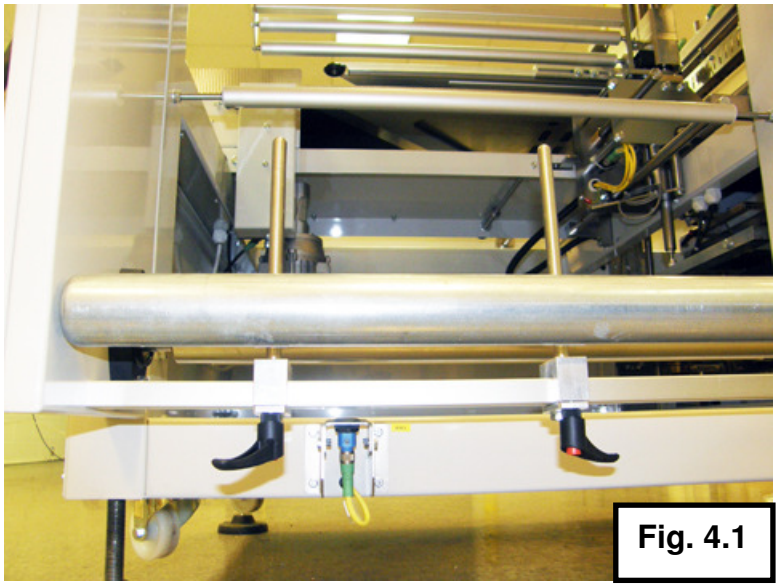


Fig. 4.1

4.1.4 Check the film roll support rollers. The one near the back of the machine should spin freely. The second film roll support roller should turn with some resistance. This is the film brake roller.

4.1.5 Place the new film roll onto the film roll support rollers.

- The fold side of the roll should be near the center of the machine.
- The open edge of the roll should be near the operator's left hand as they place the film onto the film roll support rollers.
- If the film is wound clockwise, as seen from the fold end, the end of the film should pass over the top of the film brake roller to reach the bottom idler roller.
- If the film is wound counter-clockwise, as seen from the fold end, the end of the film should pass under the film brake roller to reach the bottom idler roller.

4.1.6 Measure the height of the product to be wrapped (H). Divide that distance in half (H/2).

4.1.7 The 6800CS has two inverting plows. One each above and below the infeed conveyor. Position the film roll so that the left (fold) edge of the roll is half the product height to the left of the tips of the inverting plows.

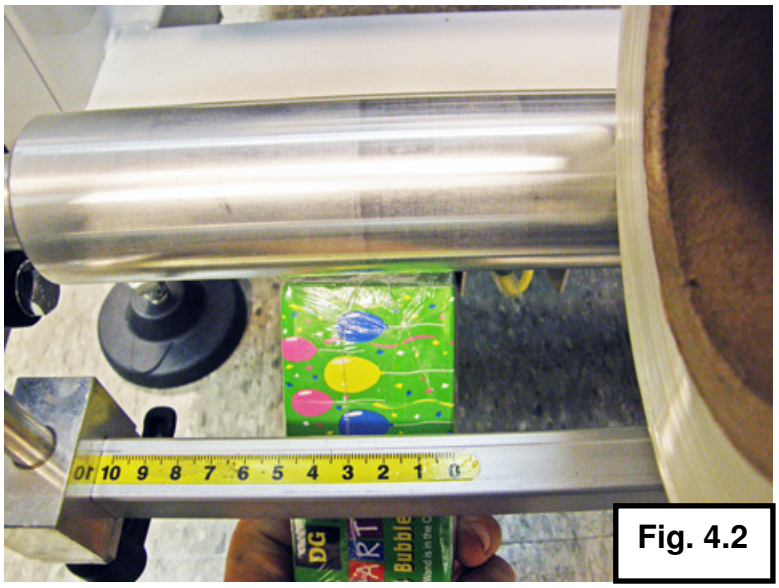


Fig. 4.2

NOTE: The square bar that supports the film guides is marked in centimeters. Zero on the measuring scale is even with the tip of the inverting plows.

4.1.8 Move the film guides in gently against each side of the film roll, and lock them in place.

4.1.9 Lift the lever that separates the black rubber nip roller from the drive roller.

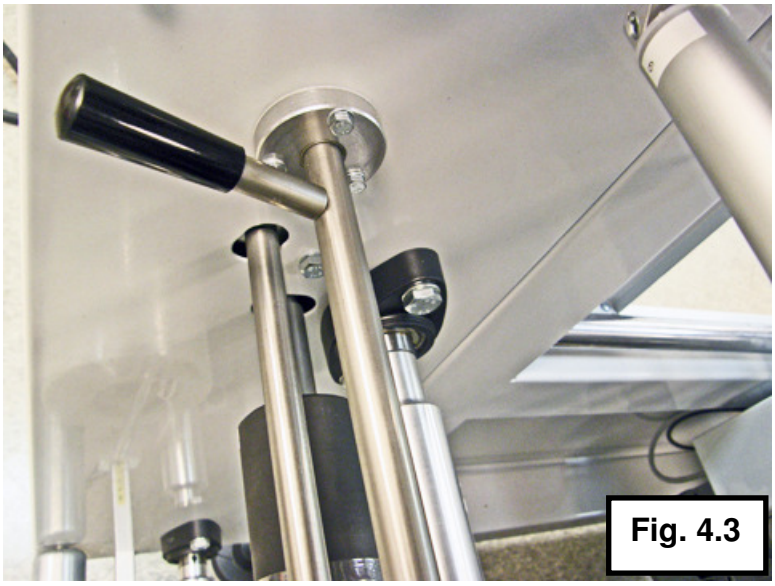


Fig. 4.3

4.1.10 Move the perforation wheels out of the way. Turn the lock levers counter-clockwise to loosen them, and clockwise to lock them in place.

4.1.11 Pass the film under the bottom idler roll, then straight up to the second idler roller. See Fig. 4.4

4.1.12 Pass the film over the second idler roller, then to the near side of the nip roller from the bottom.

4.1.13 Roll the film over the top of the nip roller, then under the drive roller.

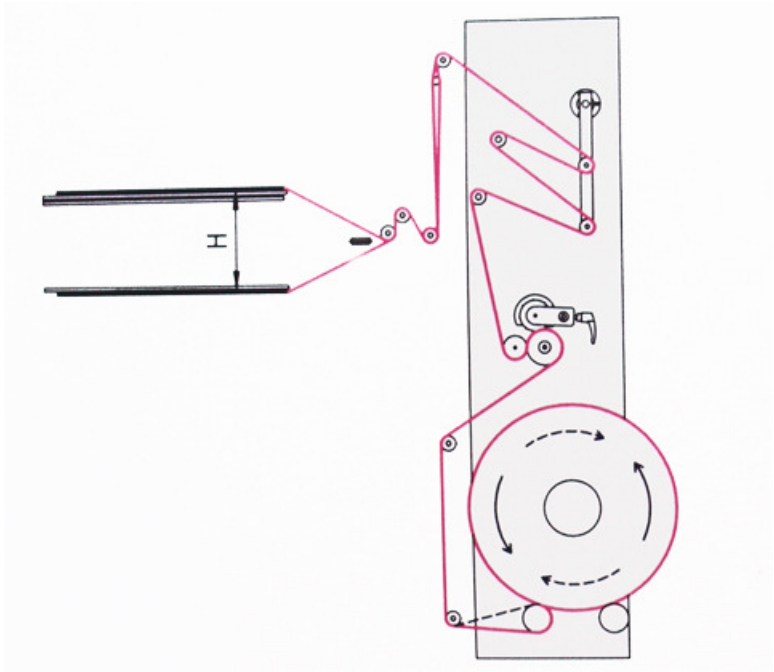


Fig. 4.4

4.1.14 Pass the film through the dancer rollers, over the top idler roller, then under the bottom idler roller. The round separator bar near the top idler roller should fit between the two layers of film.

4.1.15 Loosen the separator rod clamp. Extend the rod to reach the fold in the film. Tighten the separator rod clamp. The tip of rod should be about 3/8" (1cm) from the inside of the film fold. See Fig. 4.5

Fig. 4.5

NOTE: If the film bends the separator rod as it is pulled through the final rollers, shorten the rod.

4.1.16 Pass the film straight down to the idler roller that is slightly above the inverting plow.

4.1.17 Run the film in a "**Z**" pattern through the final idler rollers. The last set idler rollers move with the infeed conveyor carriage.

4.1.18 The separator rod with the roller on the end should fit into the fold in the film

4.1.19 Pull-out about 6' (2m) of film across the infeed conveyor.

4.1.20 Position the perforation wheels to put vent holes in the film.

- If the film is not to be heat-shrunk around the package, especially if air-tightness is desired (Poly film only), leave the perforator wheels away from the film.
- If the film is to be shrunk around the package, move one or more of the perforation wheels to ride against the film.
- The number of perforation wheels needed depends on the size of the package, the type of film, and the type of shrink tunnel to be used. Some experimentation will be necessary for each combination.
- Starting at the film fold, the wheels will usually be spaced evenly across the width of the product.

4.1.20 Lower the lever that closes the nip roller against the drive roller, then close the film cradle door. See Fig. 4.3.

4.2 Feeding film through the Inverting Plows

4.2.1 Grasp the round knob on the front of the in-feed conveyor carriage. Pull it to unlock the carriage. Pull the carriage forward. See Fig. 4.6.

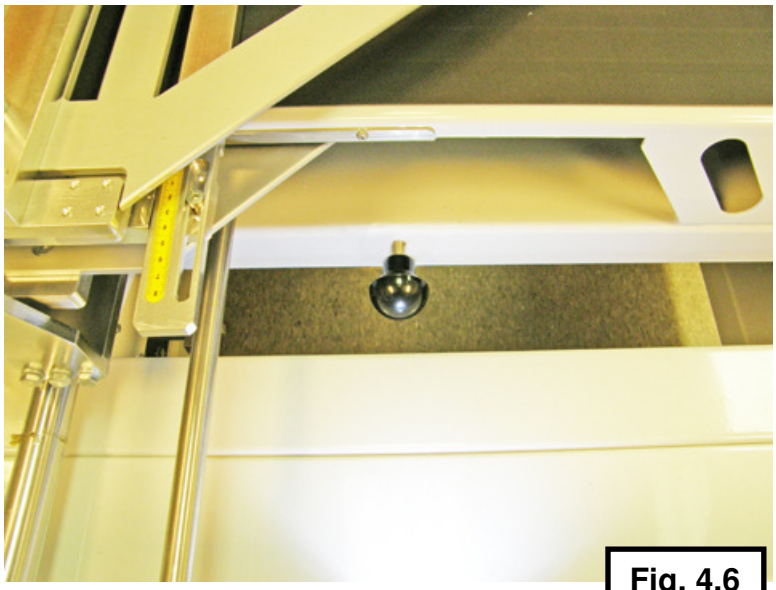


Fig. 4.6

4.2.2 Turn the film fold inside-out, and wrap the film around the rear of the in-feed conveyor. See Fig. 4.7.

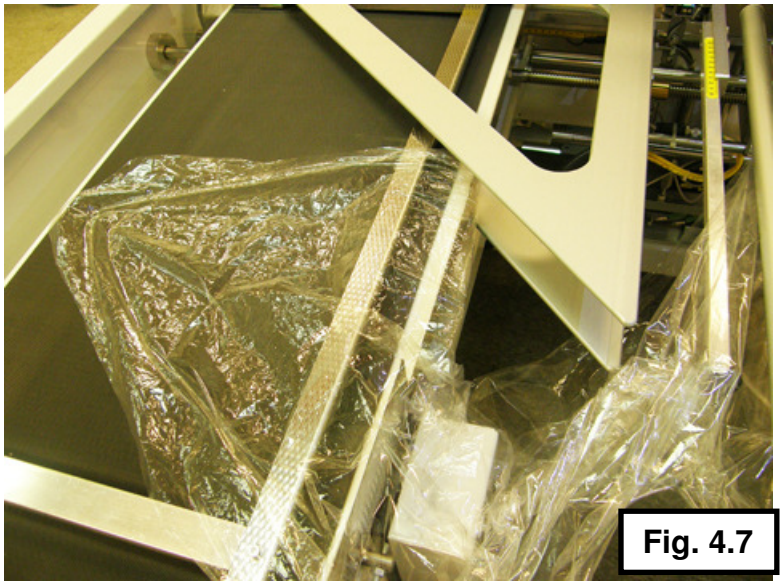


Fig. 4.7

4.2.3 Fold top corner of the film over the rear edge of the top inverting plough.

4.2.4 Fold the bottom corner of the film around the rear edge of the bottom inverting plough.

NOTE: At this point, the film should be in a sigma (**Σ**) shape as seen from the entrance end of the machine. The infeed conveyor will fit into the center of the Σ, and the inverting plows will fit into the pair of notches on the opposite side of the Σ.

4.2.5 Draw the leading edge of the film down the length of the in-feed conveyor, toward the end-seal heat bar.

- The top corner of the film should pass horizontally between the product guide bar and the inverting plow.
- The bottom corner of the film should pass between the underside of the in-feed conveyor and the bottom inverting plow.

4.2.6 Pull the knob to unlock the in-feed conveyor slide, and push the in-feed conveyor carriage all the way back. It will lock solidly into position. See Fig. 4.6.

4.2.7 The film edge guide rollers at the end of the in-feed conveyor are spring loaded. Spread them apart and tuck the edge of the top layer of film between the wheels. See Fig. 4.8

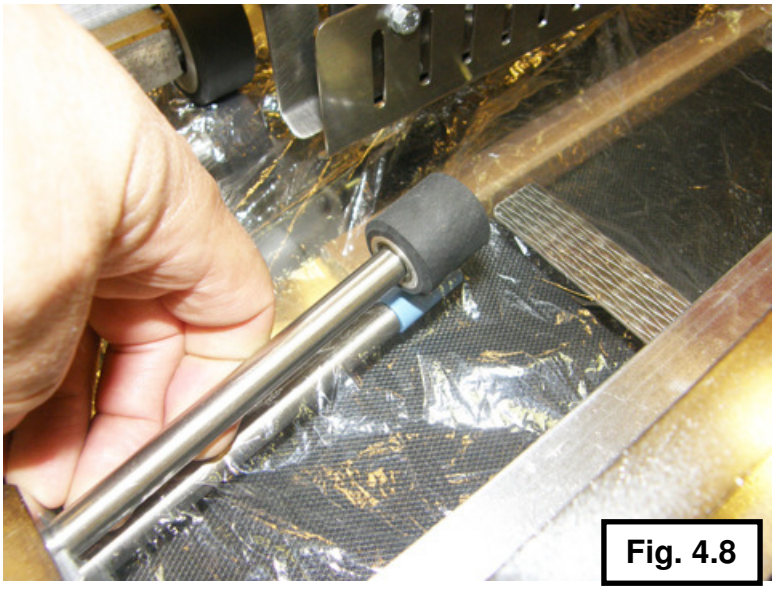


Fig. 4.8

4.2.8 Pull the film through the end seal jaw, toward the film advance mechanism.

4.3 Insert the Film into the Film Advance Mechanism.

4.3.1 Push down on the lever that separates the pull wheels. Tuck the top and bottom corners of the film between the wheels, and release the lever. See Fig. 4.9

4.3.2 Guide the corners of the film into the metal film guides at the entrance to the film advance mechanism.

4.3.3 Tuck the corners of the film into the smaller set of drive wheels next to the film guides.

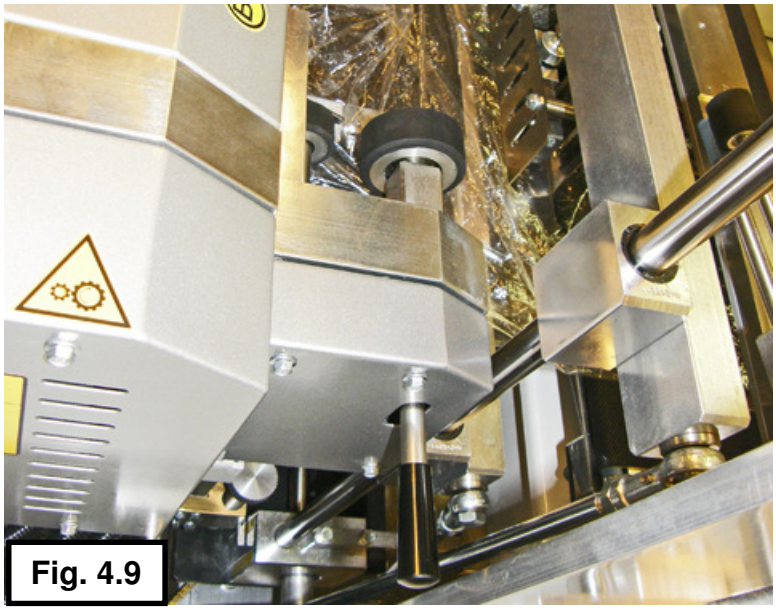


Fig. 4.9

NOTE: The top wheel is spring loaded. Lift it slightly to tuck in the film.

4.3.4 Close any open doors, and make a visual check to confirm that no unsafe conditions will arise from turning-on the machine.

4.3.5 Turn the main power switch ON. See Fig. 4.10.

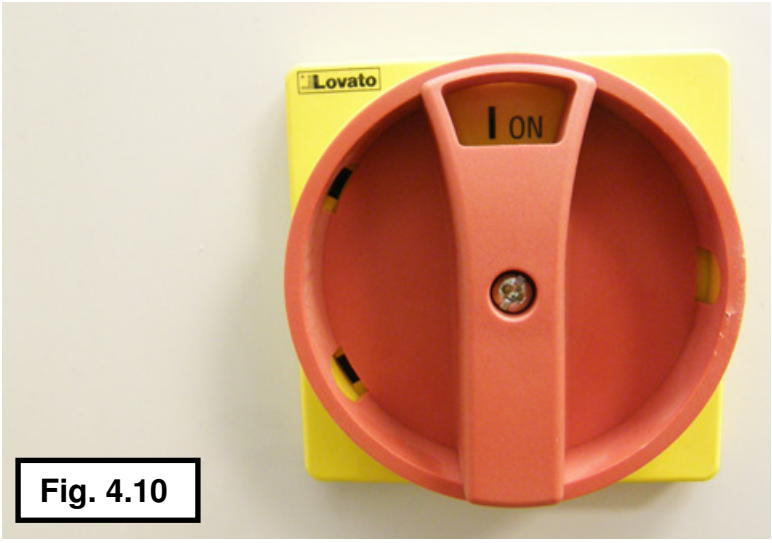


Fig. 4.10

ON/OFF Switch is located on the inboard edge of the electrical enclosure on the back of the 6800CS sealer.

The status will be indicated in the window of the knob.

Knob grip vertical = ON.

Knob grip horizontal = OFF.

The blue (bottom) lamp in the beacon on top of the 6800CS sealer will light.

If any alarm conditions are present, the red (top) lamp in the beacon on top of the 6800CS will

4.3.6 Turn the compressed air supply ON. See Section 3.

4.3.7 Check the information screen on the control panel for any alarm conditions. Correct those conditions as needed. See Fig. 4.11.

4.3.8 Touch the STOP button  to clear any alarm messages.

Fig. 4.11

4.3.9 Touch the Activation button  on the control panel to turn the 6800CS on.

4.3.10 The program in the control panel will not allow any motion of the sealer until the automatic bar adjustment has been done.

CAUTION: When the automatic bar adjustment is happening, the safety devices on the seal bar are disabled. Confirm that there are no obstacles in the seal jaw path, get clear of the seal jaw, and close the seal area cover before making the automatic seal bar adjustment.

4.3.11 Press and hold the Start button  and the Enter button  at the same time. The seal jaw will cycle, stopping in the open position, and a "Heating Bars" message will appear on the display. Wait for the message to appear before releasing the buttons

4.3.12 Touch the "**MANUAL**" button to put the sealer into manual operating mode.

4.3.13 Press and hold the "**F2**" button to trigger the film advance mechanism to feed film through the film advance/side-seal mechanism.

NOTE: "**F2**" is only enabled when the sealer is in MANUAL mode.

4.3.14 Press the "**F1**" button on the control panel to make a seal and cut the film.

4.3.15 Press and hold the "**F2**" button to advance the film about 18" (46cm), until the fresh seal nears the end of the film advance/side-seal mechanism.

4.3.16 Repeat the seal and advance (**F1** then **F2**) cycle until roughly 6' (2m) of film waste

extends from the film advance/side-seal mechanism.

4.3.17 Route the film scrap over the guide bar at the exit of the film advance/side-seal mechanism, and down about 15º to pass over the large roller. See fig 4.12.

4.3.18 Route the film scrap down to the scrap dancer. See Fig. 4.13

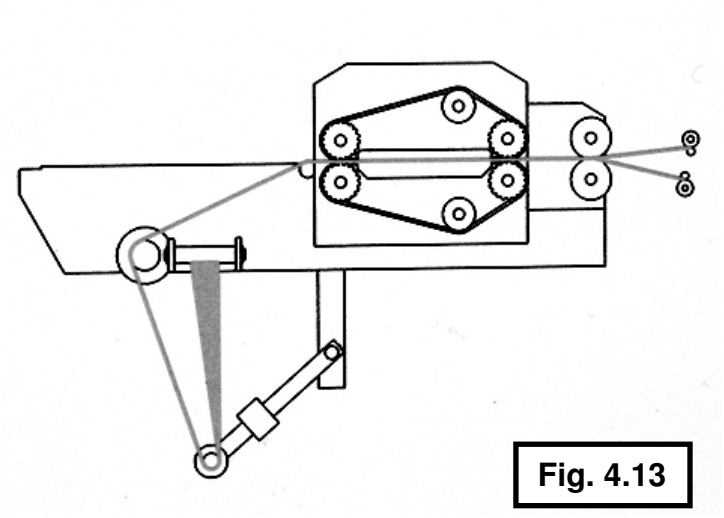


Fig. 4.13

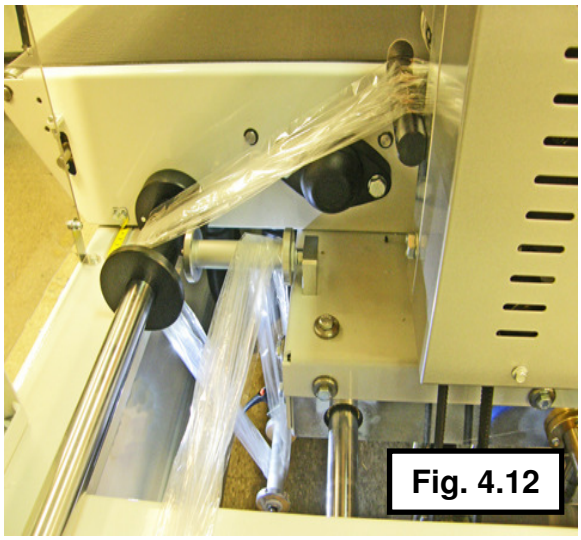


Fig. 4.12

NOTE: There is an adjustable weight on the scrap dancer bar.

If more force is needed to keep the film scrap under tension, move the weight closer to the end of the scrap dancer bar.

If there is too much tension on the film scrap, move the weight closer to the pivot point.

4.3.19 Bring the film up to pass over the fixed roller, turning 90º to reach the fixed roller at the front of the 6800CS.

4.3.20 Route the film scrap over the final fixed roller, and down to the scrap wind-up spool.

4.3.21 Route the film scrap around the left side of the scrap wind up spool, and tuck it into the lock tab on the spool. See fig. 4.14.

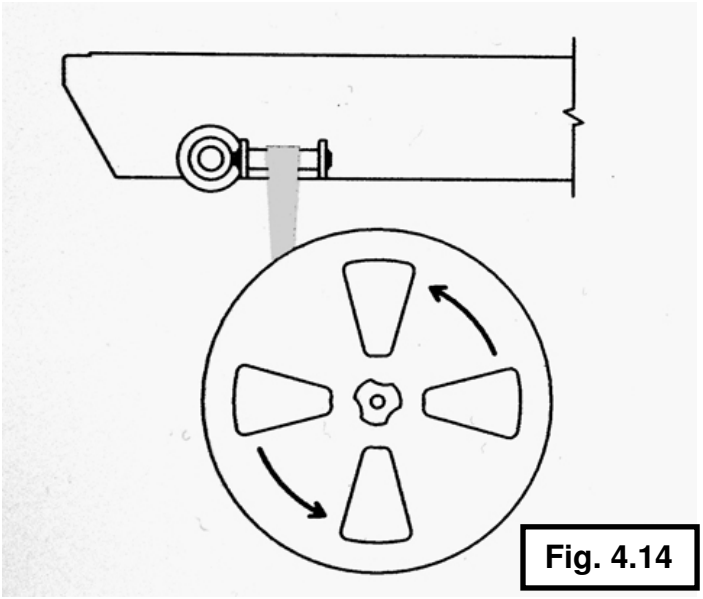


Fig. 4.14

NOTE: the spool turns counter-clockwise when the film advances.

5.0 ADJUSTING the 6800CS to SUIT PRODUCTS BEING WRAPPED

5.1 Film Inverting Plow Height

5.1.1 In MANUAL mode on the control panel, touch the up or down arrow on the control circle to move the inverting plow up or down. (Squares Height)

5.1.2 Usually, 3/16”-3/8” (5mm-10mm) is proper distance between the upper inverter plow and the product being wrapped. See Fig. 5.1.

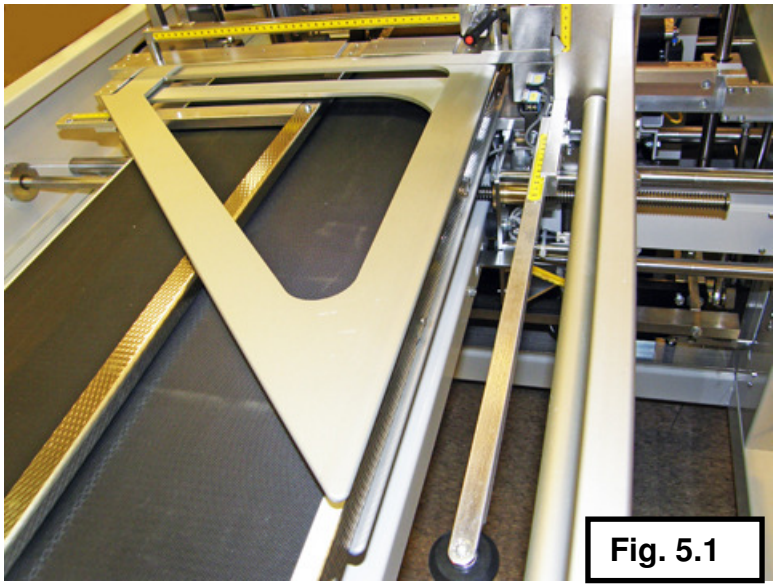


Fig. 5.1

5.2 Product Guide Bar

5.2.1 Adjust the guide bar to position the product relative to the side seal. See Fig. 5.2.

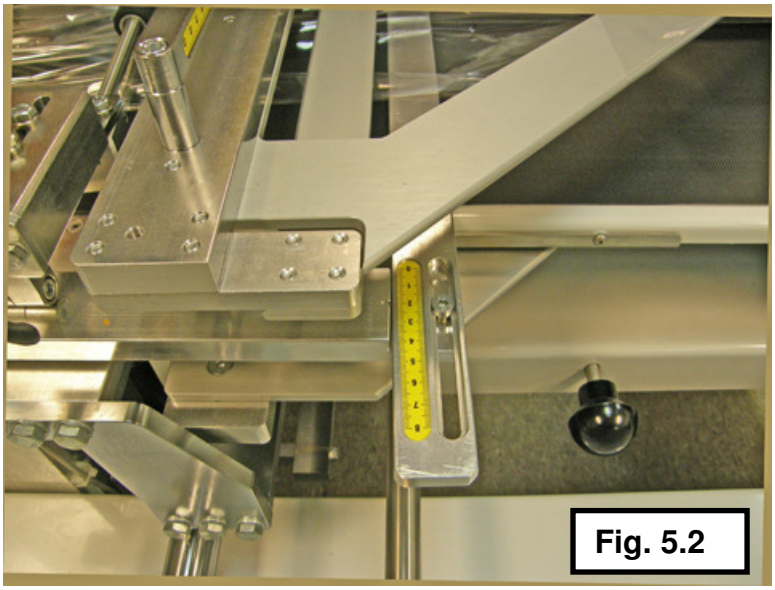


Fig. 5.2

Guidelines:
The taller the product, the further it needs to be from the side seal. This allows for the film to reach around the product.

If the side seal is stressed when the package is sealed, extend the product guide bar further from the side seal mechanism.

If the film wraps too loosely around width the product, move the guide bar closer to the side seal mechanism.

5.2.2 To move the product guide bar, loosen both socket head cap screws that hold the product guide bar arms using a 4mm hex key.

5.2.3 Use the scale at each arm to set the distance of the bar from the side seal, and to keep the bar straight.

5.3 In-feed Conveyor Position

5.3.1 Use the hand crank on the front of the sealer to move the in-feed conveyor assembly. See Fig. 5.3

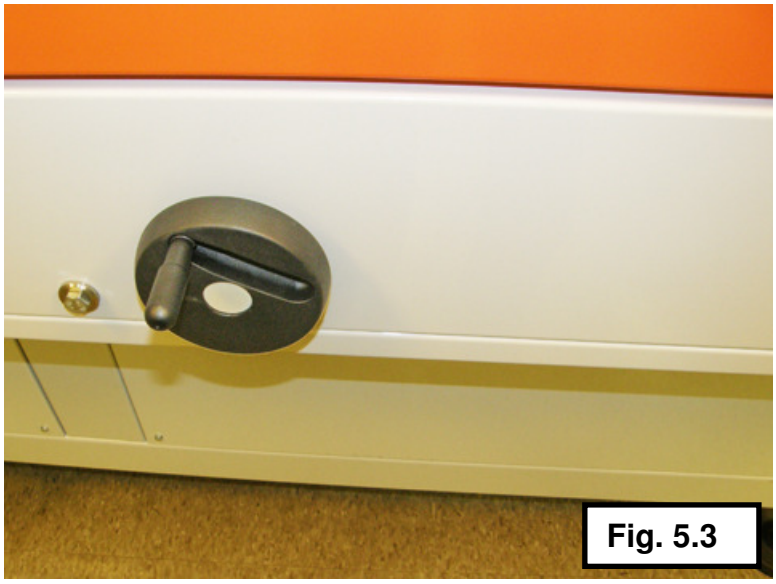


Fig. 5.3

A crank handle folds out of a recess in the knob. Pull out on the handle to release fold it back into the knob.

Turning the crank clockwise will move the conveyor toward the front of the machine.

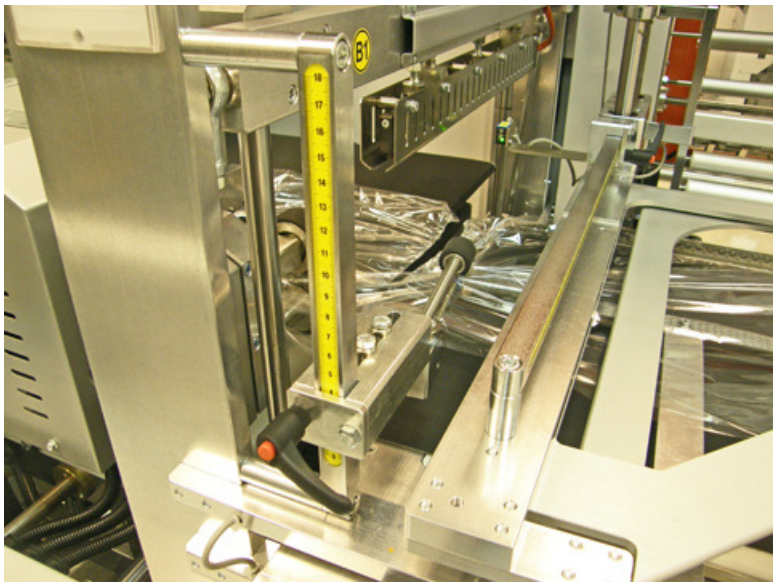
Turning the conveyor counter-clockwise will move the conveyor toward the back of the machine.

5.3.2 Move the conveyor to set the distance between the fixed product guide at the back edge of the conveyor and the product guide bar.

5.3.3 The product guides should be close enough to the products to keep them in position as they enter the film, without being so close that they cause a bind.

5.4 Film Guide Rollers

5.4.1 The film guide rollers act on the top layer of film only, and they move independent of the inverting plows. See Fig 5.4



Raising film guides can be used to help open the pocket of film that the product is pushed into by the infeed conveyor.

Raising the film guides also adjusts the width of the film scrap. Lifting the edge of the top layer of film reduces the width of the top layer film scrap.

Fig. 5.4

5.4.2 Turn the lock handle counter-clockwise to loosen the film guide rollers. Turn it clockwise to lock them in position.

5.5 Takeaway Conveyor Lateral Adjustment

5.5.1 Use the knurled knob just above the scrap rewind spool to move the takeaway conveyor and the film advance/side-seal assembly toward or away from the front of the machine. See Fig. 5.5.

Lateral Adjustment Knob

If there is an unsealed gap between the front end of the transverse seal bar and the side seal knife, bring the side sealer toward the rear of the machine for more over-lap.

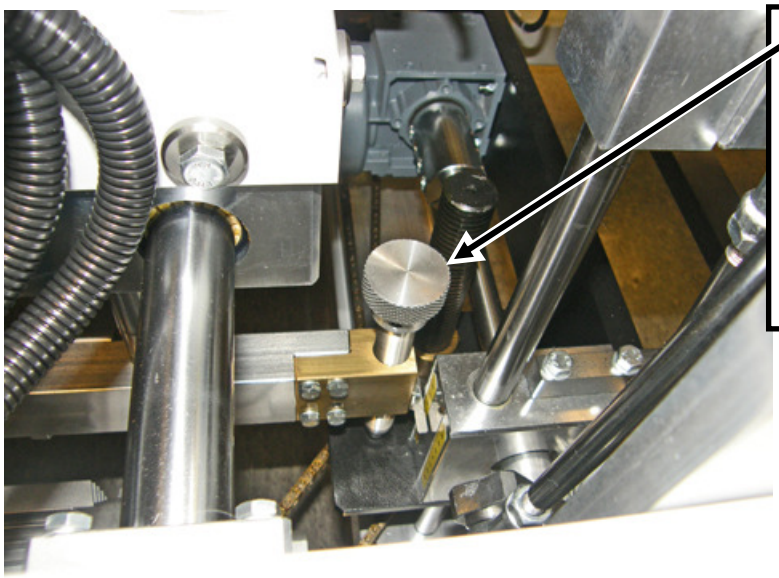
If there is too much transvers seal and cut into the scrap, bring the side seal toward the front of the machine.

Fig. 5.5

5.6 Side Seal Height Adjustment

5.6.1 The knurled knob directly below the film advance pull wheels adjusts the height of the side seal knife relative to the conveyor. See Fig. 5.6.

5.6.2 Adjust the side seal knife to make a seam half-way up the height of the package unless this location is undesirable for reasons of appearance.



Side seal height adjustment knob

Generally, set side seal height to half the product height.

Raising the side seal height may also help to contain some products that tend to spread-out.

Fig. 5.6

6.0 FILM and PRODUCT SENSORSS

6.1 Over-view:

There are two standard film sensors (#1 & #2), two standard product sensors (#3 & #4), and three optional product sensors (#5, #6, & #7) on the 6800CS Side Sealer.

1. The **film-out sensor** on the film cradle. This is a self-contained reflective sensor mounted under the film path, directly down-stream of the film cradle. It is not adjustable.
2. The **scrap full sensor** near the film scrap windup spool. This is a self-contained reflective sensor that is pointed at the film scrap rewind spool. It is not adjustable.
3. The **horizontal product leading edge sensor** is a photo-optic sensor that is mounted just below the 90º corner of the upper film inverter plow. It is not adjustable.
4. The **vertical product leading edge sensor** is a photo-optic sensor that is mounted near the back edge of the upper film inverting plow.
5. The **product trailing edge sensor** is a photo-optic sensor that is mounted near the back edge of the end seal jaw.
6. The **product entry sensor** is a photo-optic sensor that is mounted at the entry end of the infeed conveyor, triggering the sealer when a product crosses the beam.
7. The **welder safety sensor** Checks for an obstruction in the side seal welder.

6.2 Film-out Sensor:

This is a self-contained reflective sensor mounted under the film path, directly down-stream of the film cradle. It is not adjustable. It does shine a red trace beam on the edge of the film roll. When the sensor does not see film, the error message “FILM FINISHING” appears on the HMI display. See Fig.6.1.

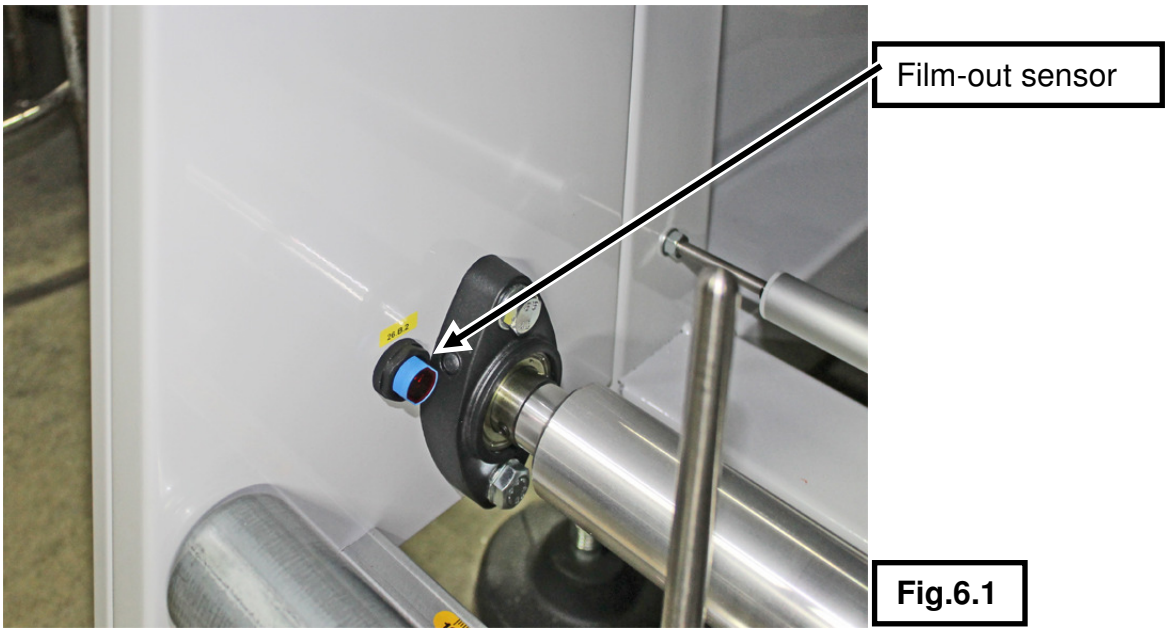


Fig.6.1

6.3 Scrap Full Sensor:

The scrap full sensor is a self-contained reflective sensor mounted to shine near the scrap take-up spool. It is not adjustable. It does shine a red trace beam. When the spool is full enough that the accumulated film is in front of the sensor, a “SCRAP FULL” message appears on the HMI display. See Fig.6.2.

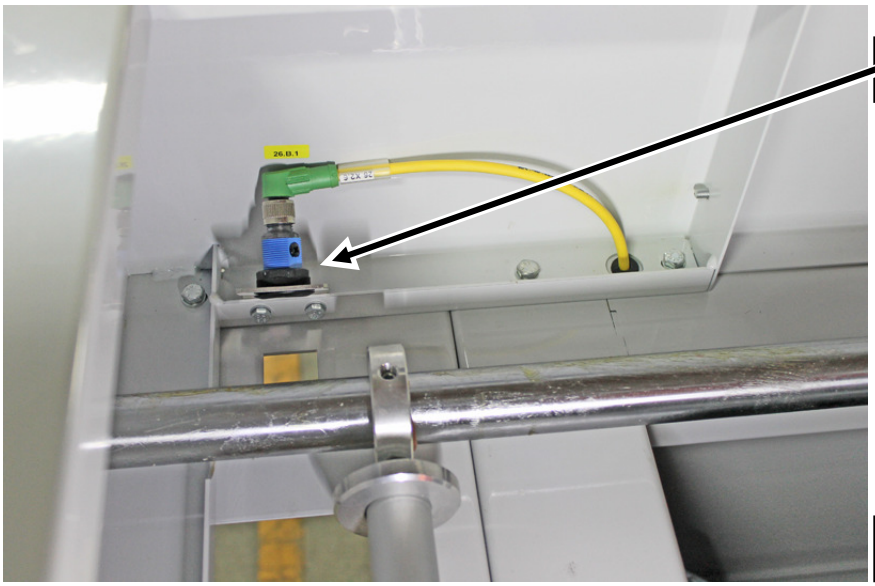


Fig.6.2

6.4 Horizontal Product Leading Edge Sensor

6.4.1 Purpose: The horizontal product leading edge sensor tells the sealer when the front of the product enters the seal jaw threshold, and when the back of the product enters the seal jaw threshold. This tells the sealer where the product is relative to the entry side of the seal jaw threshold, and enables the sealer to measure the length of the product, factoring-in conveyor speed. If the length does not fall within the programmed product length window, an “ANAMOLOUS PACK” error message will be displayed on the HMI screen.

6.4.2 This is a two-part photo-optic switch, with a transmitter and receiver that look across the width of the infeed conveyor. See Fig.6.3.

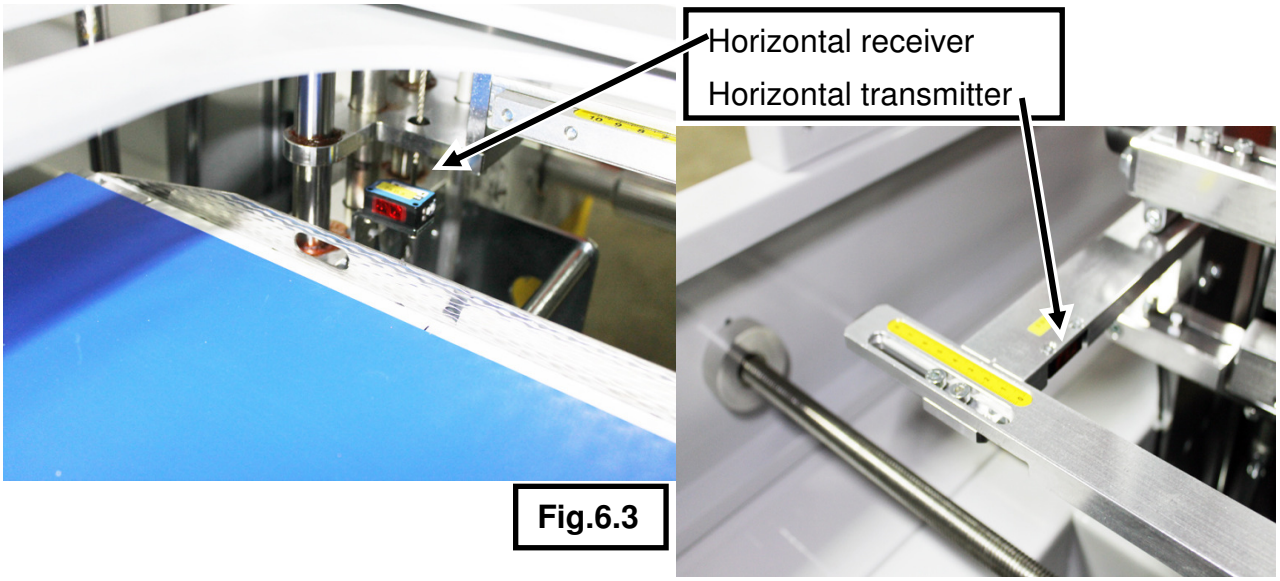


Fig.6.3

6.4.3 When programming the sealer, select between the horizontal sensor and the vertical sensor, depending on the shape of the product. Bear in mind that some products have curves or gaps that may allow one sensor to see through them, sending a false signal.

6.4.4 There are two screwdriver adjustments on the receiver. One is marked “D-L”, the other is marked “Min-Max”.

- The D-L adjustment is a setting for Dark on or Light on. Dark-on sends a signal when the light beam is broken. Light-on sends a signal when the light beam connection is complete. It should be set for D.
- The Min-Max adjustment is a gain setting to set the sensitivity range of the sensor. It may need adjustment for films with different levels of transparency, but it is not a common adjustment to make.

6.5 Vertical Product Leading Edge Sensor

6.5.1 Purpose: The Vertical product leading edge sensor tells the sealer when the front of the product enters the seal jaw threshold, and when the back of the product enters the seal jaw threshold. This tells the sealer where the product is relative to the entry side of the seal jaw threshold, and enables the sealer to measure the length of the product, factoring-in conveyor speed. If the length does not fall within the programmed product length window, an “ANAMOLOUS PACK” error message will be displayed on the HMI screen.

6.5.2 This is a two-part photo-optic switch, with a transmitter and receiver that look across the seal jaw threshold in a vertical orientation. See Fig.6.4

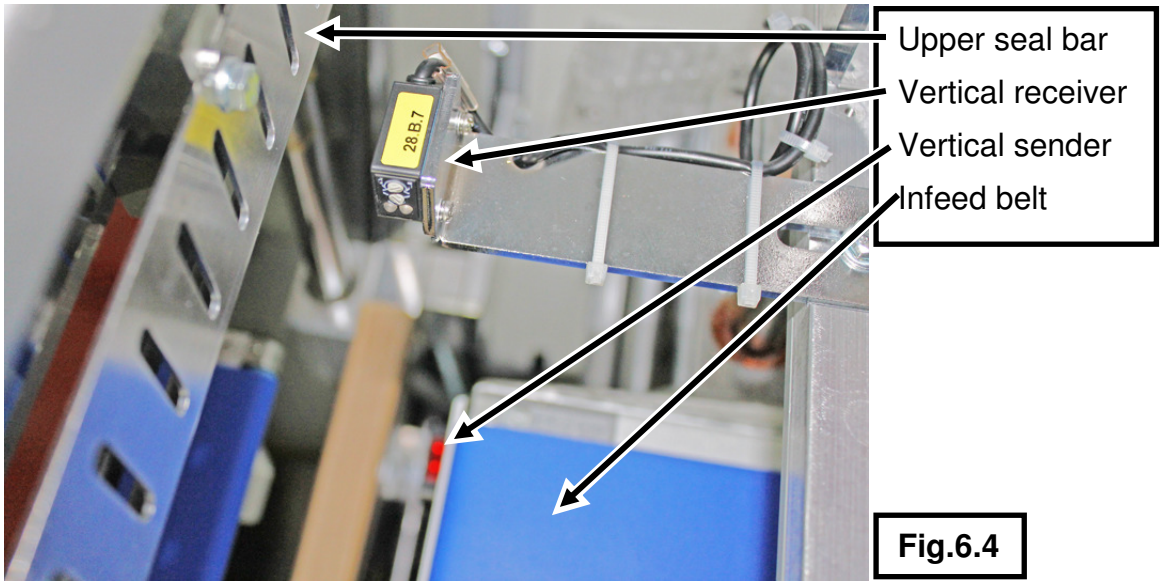


Fig.6.4

6.5.3 There are two screwdriver adjustments on the receiver. One is marked “D-L”, the other is marked “Min-Max”.

- The D-L adjustment is a setting for Dark on or Light on. Dark-on sends a signal when the light beam is broken. Light-on sends a signal when the light beam connection is complete. It should be set for D.
- The Min-Max adjustment is a gain setting to set the sensitivity range of the sensor. It may need adjustment for films with different levels of transparency, but it is not a common adjustment to make.

6.6 Product Trailing Edge Sensor

6.6.1 Purpose: The product trailing edge sensor tells the sealer when the back of the product is clear of the seal jaw threshold. This provides greater seal bar safety than is afforded by the film clamp alone. If a product is delicate enough to be damaged by contact with the film clamp, this will prevent contact.

6.6.2 The sensor is turned OFF or ON using the “PHOTOCELL SAVE PRODUCT” feature in the “OPTIONS” section of the programming. See Section 8.

6.6.3 This is a two-part photo-optic switch, with a transmitter and receiver that look across the product path in a vertical orientation, down-stream of the seal jaw. See Fig. 6.5.

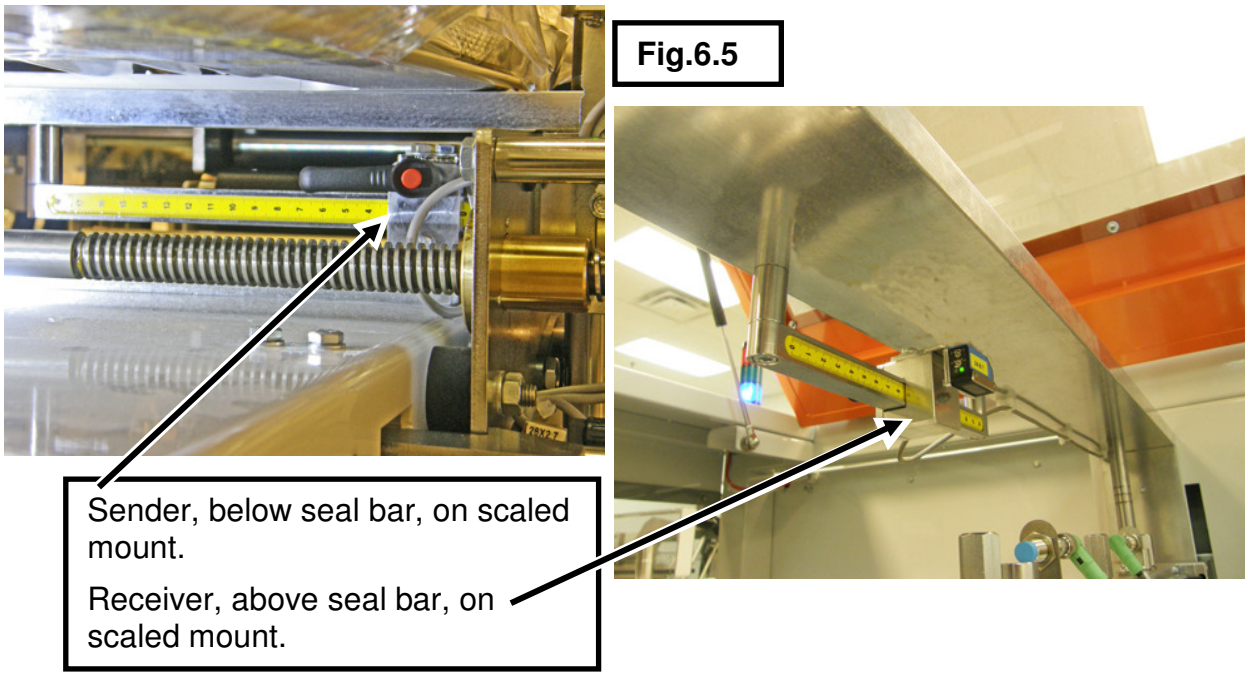


Fig.6.5

6.6.4 There are two screwdriver adjustments on the receiver. One is marked “D-L”, the other is marked “Min-Max”.

- The D-L adjustment is a setting for Dark on or Light on. Dark-on sends a signal when the light beam is broken. Light-on sends a signal when the light beam connection is complete. It should be set for D.
- The Min-Max adjustment is a gain setting to set the sensitivity range of the sensor. It may need adjustment for films with different levels of transparency, but it is not a common adjustment to make.

6.6.5 The mounting bars for both parts of the sensor are scaled in centimeters. The measured positions of the two sensors on the bars should match. If the two parts of the sensor are seeing each other, only the green light on the top sensor should light. When the light path between the sensors is broken, an amber light will glow next to the green light.

6.7 Side Seal (Welder) Safety Sensor

6.7.1 The Welder Safety sensor confirms that there is film passing through the side seal section of the sealer. If a beam across the path of the film is broken, the sealer knows that there is film in the welder. If the beam is not broken, an error message is displayed on the HMI screen. See Fig. 6.6.

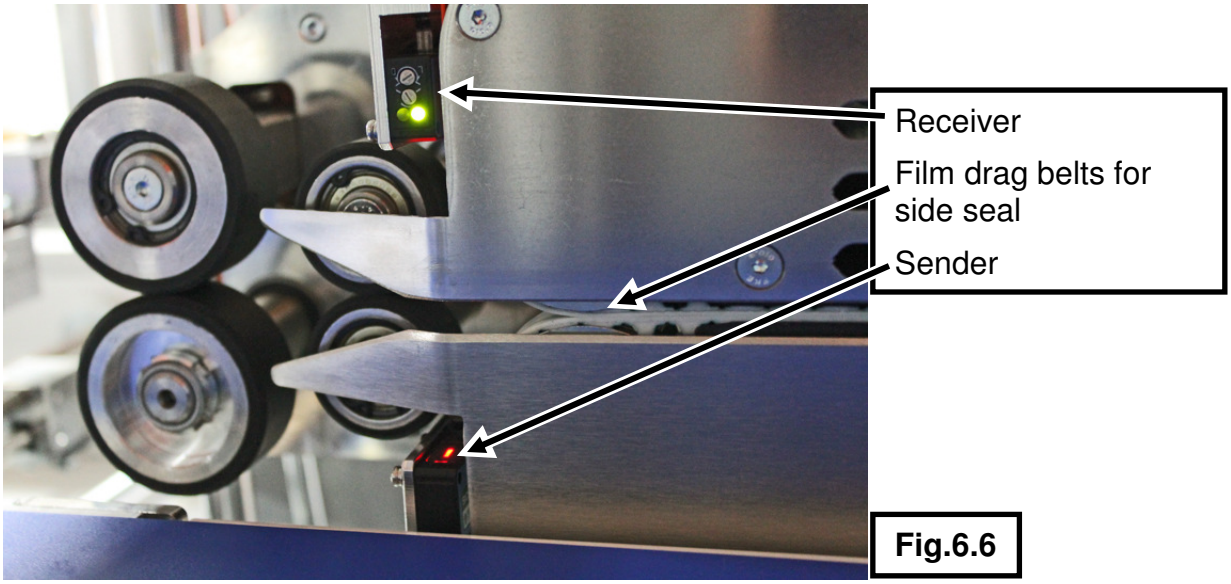


Fig.6.6

6.7.4 There are two screwdriver adjustments on the receiver. One is marked “D-L”, the other is marked “Min-Max”.

- The D-L adjustment is a setting for Dark on or Light on. Dark-on sends a signal when the light beam is broken. Light-on sends a signal when the light beam connection is complete. It should be set for D.
- The Min-Max adjustment is a gain setting to set the sensitivity range of the sensor. It may need adjustment for films with different levels of transparency, but it is not a common adjustment to make.

6.8 Problem / Solution Guide to Film Adjustment

6.8.1 Film folds near the drive roller: Film roll is not correctly aligned with inverting ploughs.

6.8.2 Film breaks at tips of inverting ploughs: Move the film roll closer to the in-feed side of the sealer (to the left as seen from film roll loading position) to reduce the force against the tip of the inverting plough. An accessory is available to reduce the tension on the film.

6.8.3 Film slips off the tips of the inverting ploughs: This may be a more persistent problem with narrower film rolls. Move the film roll away from the in-feed side of the sealer (to the right as seen from the film roll loading position).

6.8.4 Film edges come out of film advance wheels: Adjust the guide wheels for better tracking.

6.8.5 Film breaks at the end seal bar: Leave more room between the product and the seal bar, or increase cooling time.

6.8.6 Film breaks near the film advance/side seal mechanism: To reduce film tension at this point, move the product further from the side seal.

6.8.7 Film scrap breaks in the sealing zone: Adjust the film guide rollers, or reduce the tension on the reel holder tensioning bar (See section 5.4)

6.8.8 Waste not winding correctly: Some films are more susceptible to scrap winding problems. The weight on the reel holder tensioning bar it the most effective adjustment.

6.8.9 Problems with alignment of film to film advance/side seal mechanism: Adjust takeaway conveyor position. See sections 5.5 and 5.6.

7.0 CONTROL PANEL ORIENTATION

7.1 Description

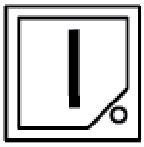
7.1.1 The control panel is at the top front corner of the exit end of the sealer. It contains 8 action buttons, a text screen, and a navigation/enter quadrant.

7.1.2 **Energize Button**: With power connected and the main switch ON, the Energize button turn the sealer on.

When turned-on:

- The blue light on the beacon will light-up.
- The screen text will change from “Waiting for CPU Link” and software version data to read: “Automatic Bar Adjustment Start + Enter”.

7.1.3 **Start Button**: Starts the sealer in the required work mode:



- Automatic:
- Semi-automatic
- Free Passage
- Automatic bar adjustment when pressed along with Enter button.

7.1.4 **Stop Button**: Stops the sealer. When an error message appears on the text screen, the Stop button is used to clear the message, after the error has been eliminated.

7.1.5 **Function 1 Button**: Starts One seal cycle.

- Active only in MANUAL mode.

7.1.6 **Function 2 Button**: Advances film at a pre-set moderate speed.

- Active only in MANUAL mode.

7.1.7 **Function 3 Button**: Advances the film at a speed set in the active program.

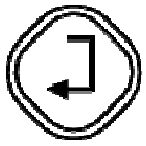
- Active only in MANUAL mode

7.1.8 **MANUAL Button**: Activates manual mode.

- Manual mode is used to position and adjust the film.

7.1.9 **Automatic Button**: After job set-up, the Automatic button is sued to start production sealing.

7.1.10 **ENTER Button**: Used to modify or confirm a setting.



- Press and release the **ENTER** Button to reset a value.
- Press and hold the **ENTER** Button for 1 second to save the new value.

7.1.11 **Left** and **Right Direction Buttons**: On each side of the ENTER Button

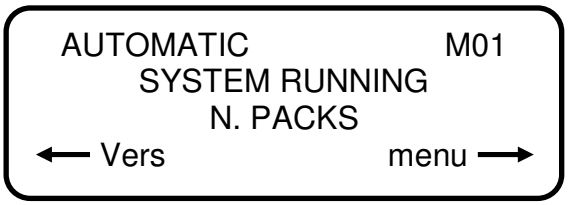
- Used to navigate the menu on the text screen.
- **Left button**:
    - Exit a menu or go back to a previous menu item.
    - Press and release the Left button to update the values set in a program after changing them and setting them using the ENTER button.
    - Press and hold the Left button for 3 seconds to exit a field without changing the value.
- **Right button**: Enter a menu.

7.1.12 **Up and Down Direction Buttons**: Above and below the ENTER Button

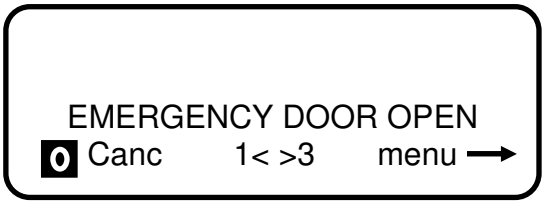
- Used to change settings within menus.
- Change value Up or Down
- Navigate within a menu
- In MANUAL Mode: Adjust the height of the film inverter ploughs.

7.2 Information Display

7.2.1 Screen Format



- Top Line: Active Operating Mode
  - AUTOMATIC: When the Start button is pressed, continuous packaging of products placed on the infeed belt commences.
  - SEMI AUTOMATIC: When the Start button is pressed, an individual package will be wrapped.
  - FREE PASSAGE: Runs the conveyors at a steady speed, but does not seal them. End seal bar and side-seal mechanism do not heat-up.
  - MANUAL: Sealer operated using F1, F2, and F3 buttons. Inverting Plow height set using Up and Down arrow buttons above and below the ENTER Button.
- Second Line: Machine Status
- Third Line:
  - Number of Packages = N
  - Error messages: Name of error
  - Number and sequence of errors. Press and release the Up and Down Arrow buttons to navigate the error messages. "1< >3" indicates the 1st of 3 error messages. "2< >3" indicates the second.



  - Cancellation: "Canc" indicates that the Stop button has been used to cancel an error code.
- Bottom Line: Menu Navigation
  - "Vers" : Use the Left arrow button to return to the software version screen.
  - "esc" : Use the Left arrow button to return to the previous screen.
  - "menu" : Use the Right arrow button to enter a selected menu.
  - "mod" : Press and release the Enter button to enter a menu field that is to be changed. Press and hold the Enter button for 1 second to set that value after the change has been made.

7.3 Beacon

7.3.1 Steady Blue Light: Sealer is stopped or paused.

7.3.2 Flashing Blue Light: Sealer is warming-up.

- If equipped with optional accumulation and end-flow sensors, the flashing blue light can also indicate the absence of incoming products or the accumulation of outgoing packages.

7.3.3 Steady Green Light: Sealer is ready for packaging.

7.3.4 Steady Red Light: The sealer has stopped running. Check the text screen for error messages.

8.0 PROGRAMMING the SEALER

8.1 Format Parameters Menu:

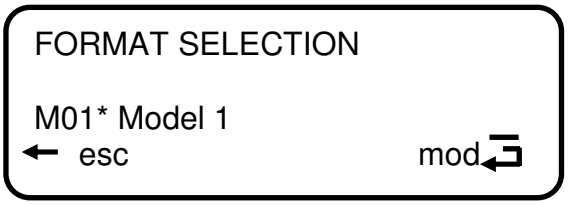
8.1.1 To reach the Format parameters Menu:

1. From the Home screen (See Fig. 7.X) Press and release the Right arrow button to enter “menu”.
2. This will display the first level menu screen.
3. Use the Up △ and Down ▽ arrow button to navigate the first level menu screen. Select “FORMAT PARAMETERS”. The chevron next to the selected line will flash.
4. Enter “FORMAT PARAMETERS” by pressing and releasing the Right arrow ▷ button.

8.1.2 To select a Format to program:

NOTE: The 6800CS has capacity to store 20 different programs (formats).

1. Press and release the **Enter** button.
2. This will cause a line to appear over the **Enter** symbol on the screen.
3. When the line is present, use the Up △ and Down ▽ buttons to navigate through the different programs.



4. When the desired program is reached, press and hold the **Enter** button for 1 second to select the program.

   NOTE: The screen text will indicate the program selected: “M01*Model 1”, “M02* Model 2”, “M03* Model 3”.

8.1.3 To change or build a program:

1. Select a program to change using the Up △ and Down ▽ arrows.
2. Enter the program by pressing and holding the **Enter** button for 1 second.
3. Use the Down ▽ arrow to advance through the menu.
4. Use the Up △ arrow to scroll back through the previous menu selections.
5. The Selections are:

   > SEALING BAR

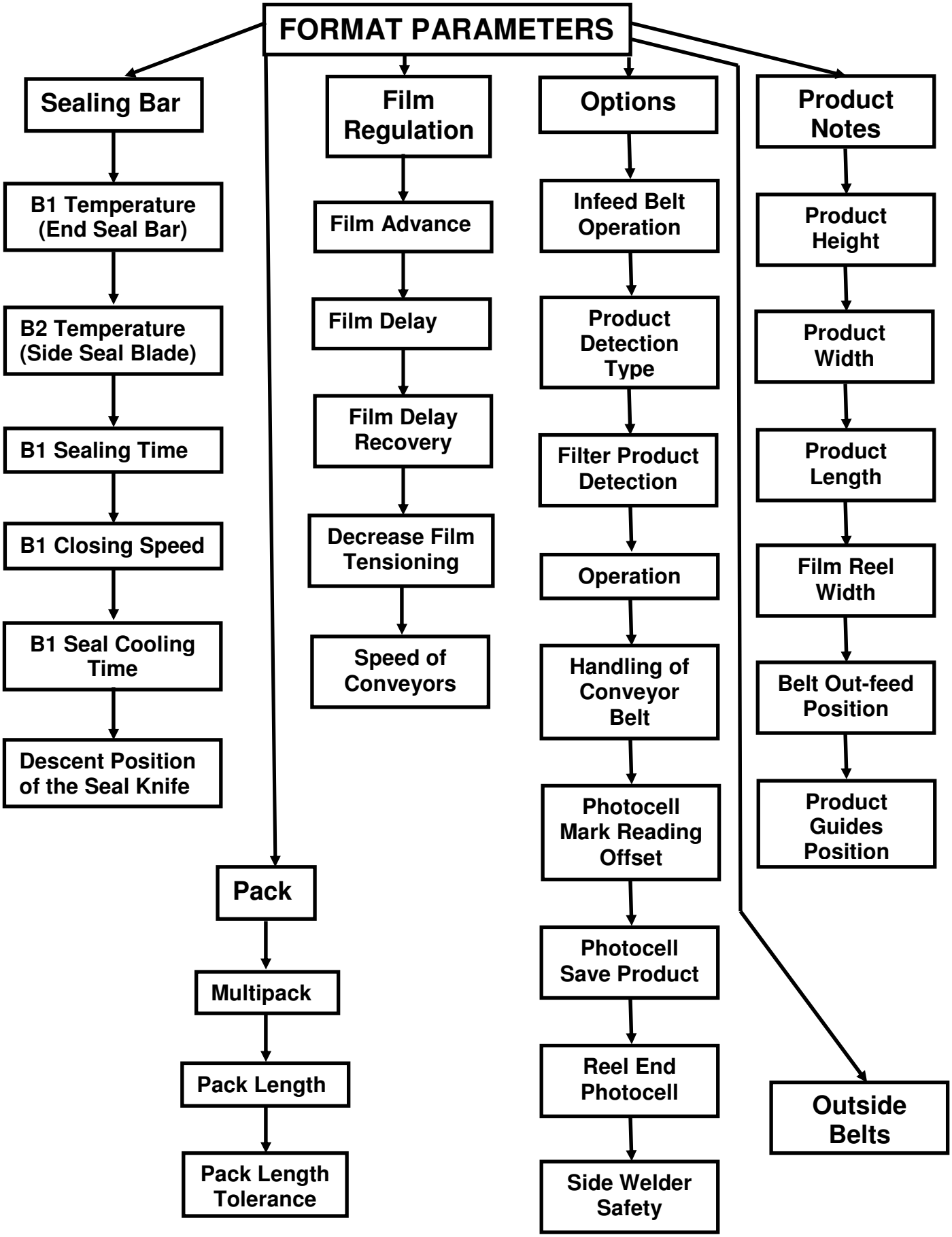
   > PACK

   > FILM REGULATION

   > OPTIONS

   > PRODUCT NOTES

   > OUTSIDE BELTS


FORMAT PARAMETERS
Sealing Bar
B1 Temperature (End Seal Bar)
B2 Temperature (Side Seal Blade)
B1 Sealing Time
B1 Closing Speed
B1 Seal Cooling Time
Descent Position of the Seal Knife
Film Regulation
Film Advance
Film Delay
Film Delay Recovery
Decrease Film Tensioning
Speed of Conveyors
Options
Infeed Belt Operation
Product Detection Type
Filter Product Detection
Operation
Handling of Conveyor Belt
Photocell Mark Reading Offset
Photocell Save Product
Reel End Photocell
Side Welder Safety
Product Notes
Product Height
Product Width
Product Length
Film Reel Width
Belt Out-feed Position
Product Guides Position
Pack
Multipack
Pack Length
Pack Length Tolerance
Outside Belts

8.1.4 To change or build the SEALING BAR part of the program, proceed through the menu.

B1 Temperature (end seal bar):

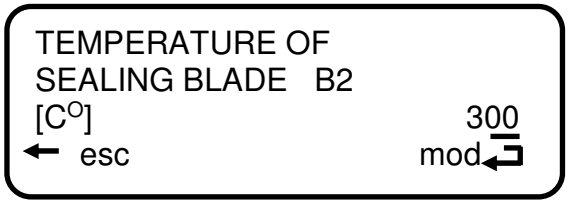
1. Press and release the **Enter** button.
2. This will cause a line to appear over the **Enter** symbol on the screen.
3. When the line is present, use the Up △ and Down ▽ buttons to increase or decrease temperature in deg. Celsius.

4. When the desired temperature is reached for the end seal bar (B1), press and hold the **Enter** button for 1 second to set the value.

NOTE: Available range is 50°C to 300°C. Recommended starting point is 200°C.

B2 Temperature (side seal blade)

1. Use the Down ▽ button to advance to the Seal Blade Temperature screen.
2. Press and release the **Enter** button.
3. This will cause a line to appear over the **Enter** symbol on the screen.
4. When the line is present, use the Up △ and Down ▽ buttons to increase or decrease the temperature in degrees Celsius.

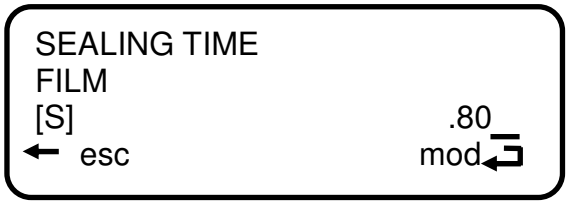


5. When the desired temperature is reached for the side seal blade (B2), press and hold the **Enter** button for 1 second to set the value.

NOTE: Available range is 50°C to 300°C. Recommended starting point is 200°C.

Sealing Time (heat time for B1 end seal bar)

1. Use the Down ▽ button to advance to the Sealing Time screen.
2. Press and release the **Enter** button.
3. This will cause a line to appear over the **Enter** symbol on the screen.
4. When the line is present, use the Up △ and Down ▽ buttons to increase or decrease the time the jaw is closed in decimal seconds.



5. When the desired time setting is reached for the end seal dwell, press and hold the **Enter** button for 1 second to set the value.

NOTE: Available range is from 0 to 6 seconds. Recommended starting point is 0.8 sec.

NOTE: Sealing time and temperature are interrelated. The hotter the bar, the less dwell time is needed. The minimum dwell setting that seals well will produce the highest production rate. Some experimentation will be needed for each film and product.

Sealing Bar Speed (closing speed for B1 end seal bar)

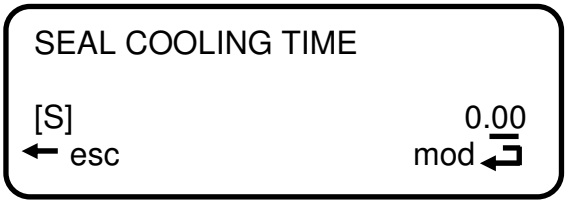
1. Use the Down ▽ button to advance to the Sealing Bar Speed.
2. Press and release the **Enter** button.
3. This will cause a line to appear over the **Enter** symbol on the screen.
4. When the line is present, use the Up △ and Down ▽ buttons to increase or decrease the jaw is closing speed in percentage of maximum speed.

5. When the speed setting is reached for the end seal dwell, press and hold the **Enter** button for 1 second to set the value.

NOTE: Available range from 40% to 160%. Recommended starting point is 80%.

Seal Cooling Time

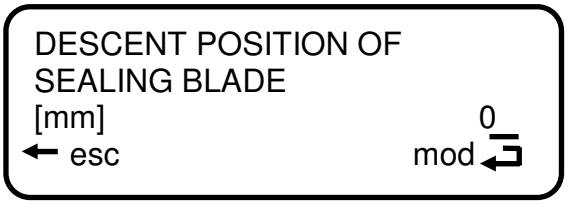
1. Use the Down ▽ button to advance to the Seal Cooling Time
2. Press and release the **Enter** button.
3. This is a display screen only at level 1. Seal cooling time is the product of an algorithm based on the other settings.
4. In rare cases, some film will break open at the corner between the side seal and the end seal. Extra cooling time may help this situation.



5. When the speed setting is reached for the end seal dwell, press and hold the **Enter** button for 1 second to set the value.

Descent Position of the End Seal Bar

1. Use the Down ▽ button to advance to the Descent Position of the Seal Bar.
2. Press and release the **Enter** button.
3. This will cause a line to appear over the **Enter** symbol on the screen.
4. When the line is present, use the Up △ and Down ▽ buttons to increase or decrease the distance that the product travels past the seal bar before the bar begins closing.



5. When the speed setting is reached for the end seal dwell, press and hold the **Enter** button for 1 second to set the value.

NOTE: Available range from 0 to 200mm. Recommended starting point is 0.

Escape

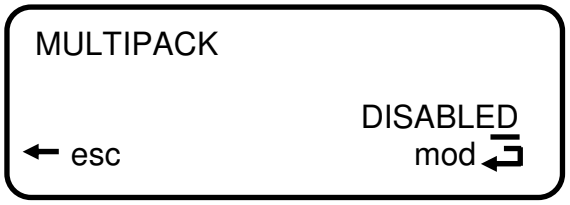
Use the Left ◁ arrow button to escape tor the previous menu level at any point in the process.

8.1.5 To change or build product package data in the program

To enter the **Pack** menu, use the Down arrow ▽ to select ">PACK". The Chevron will flash to indicate the selection.

Multipack

1. Use the Down ▽ button to advance to the Multipack screen.
2. Press and release the **Enter** button.
3. This will cause a line to appear over the **Enter** symbol on the screen.
4. When the line is present, use the Up △ and Down ▽ buttons to toggle between ENABLED and DISABLED



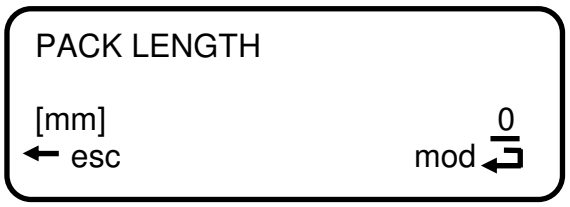
5. When the desired setting is reached, press and hold the **Enter** button for 1 second to set the value.

NOTE: Enabling the multipack feature allows specific product size data to be entered into the PLC. This may be necessary when unusual package shapes do not register properly in the photoelectric cells.

Disabling the multipack feature sets the 6800CS to detect packages using the photoelectric cells near the end seal jaw.

Pack Length

1. Use the Down ▽ button to advance to the Pack Length screen.
2. Press and release the **Enter** button.
3. This will cause a line to appear over the **Enter** symbol on the screen.
4. When the line is present, use the Up △ and Down ▽ buttons to increase or decrease the anticipated length of the package in millimeters.



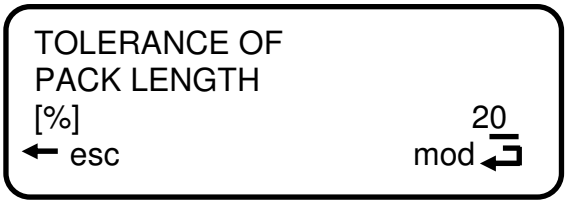
5. When the desired setting is reached, press and hold the **Enter** button for 1 second to set the value.

NOTE: If a package length is specified in this field, but the Multipack feature is disabled, the length entry will be used as a maximum limit for the photoelectric package detection. If a package is detected that exceeds this length, an "ANOMOLOUS PACK" error will be displayed on the screen.

If a value of "0" is left in this field, the sealer will continue to drag film without stopping if it misses the trailing end of a package.

Pack Length Tolerance

1. Use the Down ▽ button to advance to the Pack Length Tolerance screen.
2. Press and release the **Enter** button.
3. This will cause a line to appear over the **Enter** symbol on the screen.
4. When the line is present, use the Up △ and Down ▽ buttons to increase or decrease the allowable variation of the package by percentage.



5. When the desired setting is reached, press and hold the **Enter** button for 1 second to set the value.

Escape

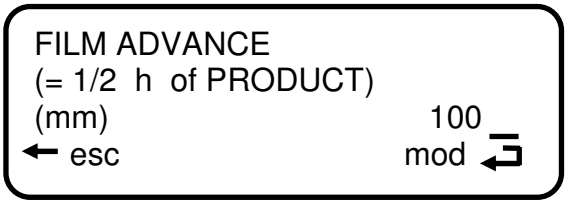
Use the Left ◁ arrow button to escape tor the previous menu level at any point in the process.

8.1.6 To change or set the motion of the film

To enter the **FILM REGULATION** menu, use the Down arrow ▽ to select ">FILM REGULATION". The Chevron will flash to indicate the selection.

Film Advance

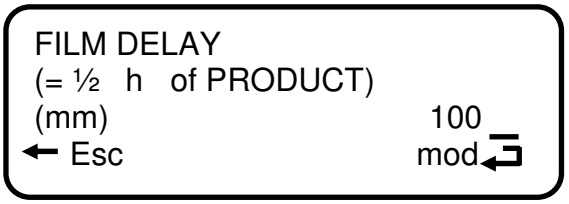
1. Use the Down ▽ button to advance to the Film Advance screen.
2. Press and release the **Enter** button.
3. This will cause a line to appear over the **Enter** symbol on the screen.
4. When the line is present, use the Up △ and Down ▽ buttons to increase or decrease the film advance distance in millimeters.



5. Maximum value is 300mm. Minimum recommended value is 30mm.
6. This setting governs the amount of film leading the product. If there is not enough film leading the product, the film may pull out of the film advance wheels.
7. This setting along with the Film Delay setting centers the product in the film.
8. Half the height of the product is a good starting point. Some adjustment may be necessary from there.
9. When the desired setting is reached, press and hold the **Enter** button for 1 second to set the value.

Film Delay

1. Use the Down ▽ button to advance to the Film Delay screen.
2. Press and release the **Enter** button.
3. This will cause a line to appear over the **Enter** symbol on the screen.
4. When the line is present, use the Up △ and Down ▽ buttons to increase or decrease the film delay distance in millimeters.



5. Maximum value is 300mm.
6. This setting governs the amount of film that is unwound after the trailing edge of the product is detected. If there is not enough film trailing the product, the film may pull out of the film advance wheels.
7. This setting along with the Film Advance setting centers the product in the film.
8. Half the height of the product is a good starting point. Some upward adjustment may be needed from there. Increase the setting if the trailing edge seam is splitting.
9. When the desired setting is reached, press and hold the **Enter** button for 1 second to set the value.

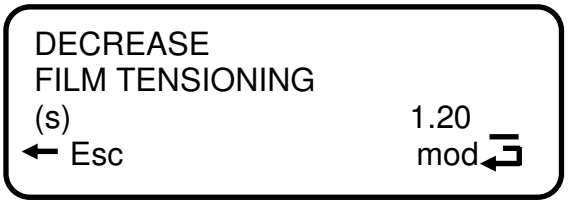
Film Delay Recovery

1. Use the Down ▽ button to advance to the Film Advance screen.
2. Press and release the **Enter** button.
3. This will cause a line to appear over the **Enter** symbol on the screen.
4. When the line is present, use the Up △ and Down ▽ buttons to increase or decrease the film delay recovery distance in millimeters.

5. Maximum value is 300mm.
6. This settings can tell the sealer to draw-back a small amount of film after it has been paid-out in the film delay setting. It enables the operator to make a slightly tighter film envelope around the product.
7. When the desired setting is reached, press and hold the **Enter** button for 1 second to set the value.

Decrease Film Tensioning

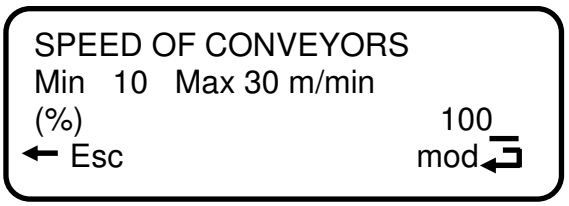
1. Use the Down ▽ button to advance to the Film Advance screen.
2. Press and release the **Enter** button.
3. This will cause a line to appear over the **Enter** symbol on the screen.
4. When the line is present, use the Up △ and Down ▽ buttons to increase or decrease the decrease film tensioning value in decimal seconds.



5. Maximum value is 2 seconds.
6. This setting governs the tension on the scrap rewind. If the scrap is breaking, reduce the tension. If the scrap is winding back into the side seal mechanism, increase the tension.
7. When the desired setting is reached, press and hold the **Enter** button for 1 second to set the value.

Belts Speed

1. Use the Down ▽ button to advance to the Film Advance screen.
2. Press and release the **Enter** button.
3. This will cause a line to appear over the **Enter** symbol on the screen.
4. When the line is present, use the Up △ and Down ▽ buttons to increase or decrease the decrease the conveyor speed as a percentage variation from a base-line speed.



5. Minimum value of 50% is 10 meters/minute (33'/minute).
6. Maximum value of 150% is 30 meters/minute (98'/minute).
7. This setting governs the tension on the scrap rewind. If the scrap is breaking, reduce the tension. If the scrap is winding back into the side seal mechanism, increase the tension.
8. When the desired setting is reached, press and hold the **Enter** button for 1 second to set the value.

Escape

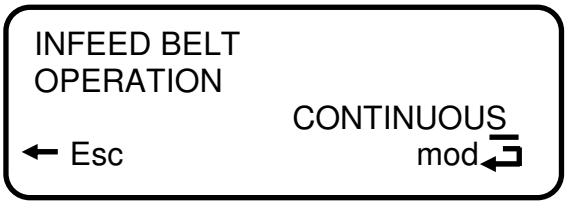
Use the Left ◁ arrow button to escape tor the previous menu level at any point in the process.

8.1.6 To change or build Options settings in the program

To enter the **OPTIONS** menu, use the Down arrow ▽ to select ">OPTIONS". The Chevron will flash to indicate the selection.

Infeed Belts Operation

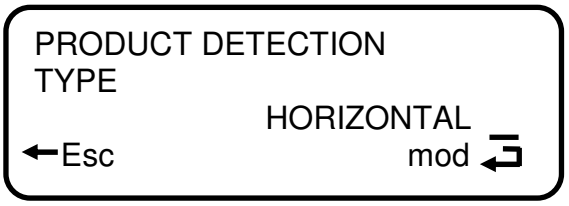
1. Use the Down ▽ button to advance to the Infeed Belt Operation screen.
2. Press and release the **Enter** button.
3. This will cause a line to appear over the **Enter** symbol on the screen.
4. When the line is present, use the Up △ and Down ▽ buttons to cycle through three belt operation options:



5. Continuous- The infeed belt runs until the product detection photo cells sense that the product has passed the seal jaws.
6. Intermittent- The infeed belt runs intermittently. This mode is recommended for packages that are less than 2cm (3/4") tall. The vertical photocell wil be best suited to these products.
7. Soft Start- The infeed belt accelerates and decelerates at a gentler rate than normal. This is useful for stacked products. Soft Start significantly slows production, so it is best not used unless it is needed.
8. When the desired setting is reached, press and hold the **Enter** button for 1 second to set the value.

Product Detection Type

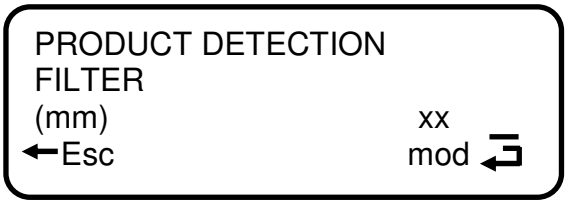
1. Use the Down ▽ button to advance to the Product Detection Type screen.
2. Press and release the **Enter** button.
3. This will cause a line to appear over the **Enter** symbol on the screen.
4. When the line is present, use the Up △ and Down ▽ buttons to toggle back and forth between Horizontal and Vertical product sensor options:



5. Horizontal- Use the horizontal photo cells to detect packages that are more than 2cm (3/4") tall.
6. Vertical- Use the vertical photo cells to detect packages that are less than 2cm (3/4") tall.
7. When the desired setting is reached, press and hold the **Enter** button for 1 second to set the value.

Product Detection Filter

1. Use the Down ▽ button to advance to the Product Detection Type screen.
2. Press and release the **Enter** button.
3. This will cause a line to appear over the **Enter** symbol on the screen.
4. When the line is present, use the Up △ and Down ▽ buttons to adjust the size of a gap that the product sensor will ignore. Left ◁ and Right ▷ arrows move the cursor between the two digits.



5. This feature is mostly used to make the sealer ignore small gaps in the product. A typical situation is a doughnut-shaped product where you do not want the seal bar to come down every time the product sensor sees the hole in the middle of the doughnut.
6. When the desired setting is reached, press and hold the **Enter** button for 1 second to set the value.

Escape

Use the Left ◁ arrow button to escape tor the previous menu level at any point in the process.

Photocell Save Product

1. Use the Down ▽ button to advance to the “PHOTOCELL SAVE PRODUCT” screen.
2. Press and release the **Enter** button.
3. Use the Up △ or Down ▽ arrows to toggle between “ENABLED” or “DISABLED”.

4. If the feature will not enable, it must be turned-on using the password:
5. Use the Left ◁ arrow to Escape, then use the Down ▽ arrow to navigate to the “INSERT PASSWORD” screen.
6. The password is “PS” followed by the “Rel” number on the Version screen with no decimal.

7. Press and hold the Enter button for 1 second to confirm the password. The HMI display will display “CODE VALID” if the pass word is correctly entered.

8. To find the “Rel” number use the left ◁ arrow button to enter the “VERSIONS”

screen in the HMI from the initial start-up screen.

8.1.7 For each job program, it is good practice to build a record of notes on package size and machine settings in the program:

To enter the **Product Notes** menu, use the Down arrow ▽ to select ">PRODUCT NOTES". The Chevron will flash to indicate the selection.

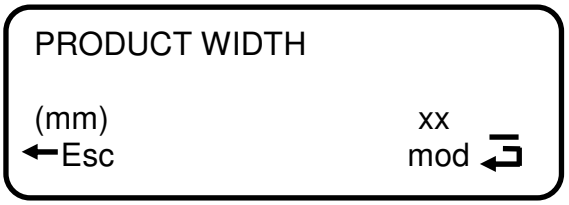
Product Height

1. Use the Down ▽ button to advance to the Product Height screen.
2. Press and release the **Enter** button.
3. This will cause a line to appear over the **Enter** symbol on the screen.
4. When the line is present, use the Up △ and Down ▽ buttons to increase or decrease the value for the height of the product in Millimeters.

5. When the desired setting is reached, press and hold the **Enter** button for 1 second to set the value.

Product Width

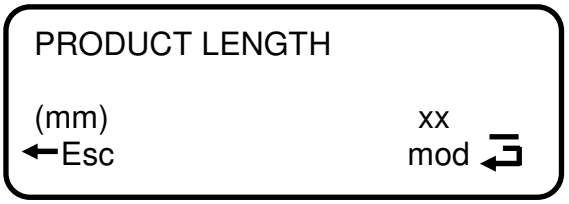
1. Use the Down ▽ button to advance to the Product Width screen.
2. Press and release the **Enter** button.
3. This will cause a line to appear over the **Enter** symbol on the screen.
4. When the line is present, use the Up △ and Down ▽ buttons to increase or decrease the value for the width of the product in millimeters.



5. When the desired setting is reached, press and hold the **Enter** button for 1 second to set the value.

Product Length

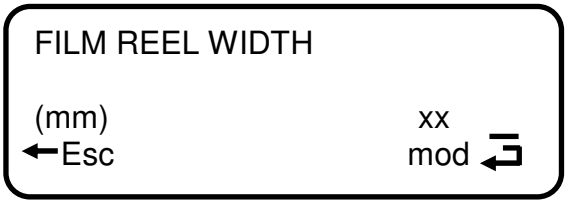
1. Use the Down ▽ button to advance to the Product Length screen.
2. Press and release the **Enter** button.
3. This will cause a line to appear over the **Enter** symbol on the screen.
4. When the line is present, use the Up △ and Down ▽ buttons to increase or decrease the value for the length of the product in millimeters.



5. When the desired setting is reached, press and hold the **Enter** button for 1 second to set the value.

Width of the Film

1. Use the Down ▽ button to advance to the Film Reel Width screen.
2. Press and release the **Enter** button.
3. This will cause a line to appear over the **Enter** symbol on the screen.
4. When the line is present, use the Up △ and Down ▽ buttons to increase or decrease the value for the width of the film that is used for the job, measured in millimeters.



5. When the desired setting is reached, press and hold the **Enter** button for 1 second to set the value.

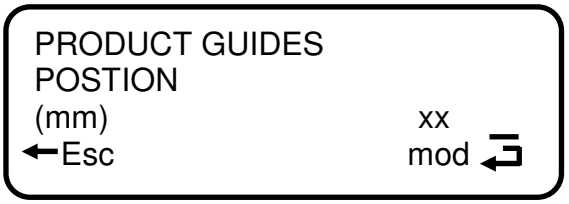
Position of the Outfeed Belt

1. Use the Down ▽ button to advance to the Belt Outfeed Position screen.
2. Press and release the **Enter** button.
3. This will cause a line to appear over the **Enter** symbol on the screen.
4. When the line is present, use the Up △ and Down ▽ buttons to increase or decrease the value for the outfeed conveyor position. Read the scale used in step 5.5 to find this measurement in millimeters.

5. When the desired setting is reached, press and hold the **Enter** button for 1 second to set the value.

Position of the Product Guides

1. Use the Down ▽ button to advance to the Product Guides Position screen.
2. Press and release the **Enter** button.
3. This will cause a line to appear over the **Enter** symbol on the screen.
4. When the line is present, use the Up △ and Down ▽ buttons to increase or decrease the value for the product guide position. Read the scale used in step 5.2 to find this measurement in millimeters.



5. When the desired setting is reached, press and hold the **Enter** button for 1 second to set the value.

Escape

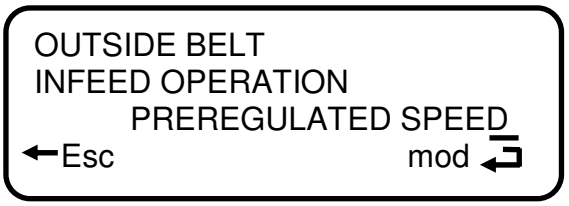
Use the Left ◁ arrow button to escape tor the previous menu level at any point in the process.

8.1.8 To coordinate the 6800CS with external conveyors: The 6800CS has power plugs and communication ports to control infeed and takeaway conveyors.

To enter the **Outside Belts** menu, use the Down arrow ▽ to select ">OUTSIDE BELTS". The Chevron will flash to indicate the selection.

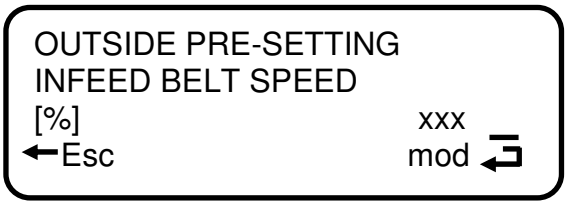
Outside Infeed Belt Operation

1. Use the Down ▽ button to advance to the Outside infeed belt screen.
2. Press and release the **Enter** button.
3. This will cause a line to appear over the **Enter** symbol on the screen.
4. When the line is present, use the Up △ and Down ▽ buttons to rotate between the three available options:
   - Preregulated Speed- Operates the external infeed conveyor at a pre-set speed.
   - Synchronized Speed- Operates the external infeed conveyor at a speed that matches the speed of the 6800CS infeed conveyor.
   - Timed Speed- The external infeed conveyor stops and starts in coordination with the 6800CS.
5. When the desired setting is reached, press and hold the **Enter** button for 1 second to set the value.



Pre-set the infeed belt speed

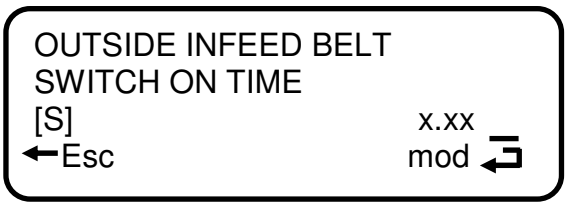
1. Use the Down ▽ button to advance to the Outside Pre-Setting Infeed Belt Speed screen.
2. Press and release the **Enter** button.
3. This will cause a line to appear over the **Enter** symbol on the screen.
4. When the line is present, use the Up △ and Down ▽ buttons to increase or decrease the belt speed as a percentage around a baseline speed.



5. When the desired setting is reached, press and hold the **Enter** button for 1 second to set the value.

Turn on time for the outside infeed belt

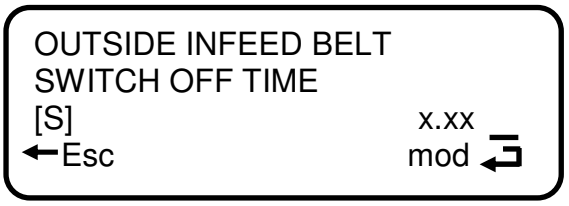
1. Use the Down ▽ button to advance to the Outside Infeed Belt Switch-on time screen.
2. Press and release the **Enter** button.
3. This will cause a line to appear over the **Enter** symbol on the screen.
4. When the line is present, use the Up △ and Down ▽ buttons to increase or decrease the duration of the belt movement in decimal seconds.



5. When the desired setting is reached, press and hold the **Enter** button for 1 second to set the value.

Turn off time for the outside infeed belt

1. Use the Down ▽ button to advance to the Outside Infeed Belt Switch-on time screen.
2. Press and release the **Enter** button.
3. This will cause a line to appear over the **Enter** symbol on the screen.
4. When the line is present, use the Up △ and Down ▽ buttons to increase or decrease the time that the belt is still, in decimal seconds.



5. When the desired setting is reached, press and hold the **Enter** button for 1 second to set the value.

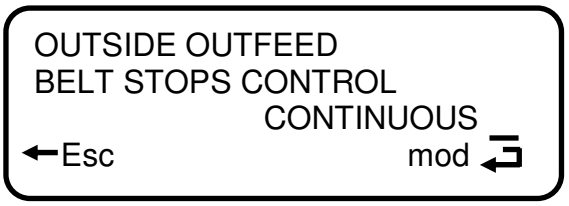
Outside Outfeed Belt Operation

1. Use the Down ▽ button to advance to the Outside outfeed belt screen.
2. Press and release the **Enter** button.
3. This will cause a line to appear over the **Enter** symbol on the screen.
4. When the line is present, use the Up △ and Down ▽ buttons to toggle between the available options:

   - Preregulated Speed- Operates the external infeed conveyor at a pre-set speed.
   - Synchronized Speed- Operates the external infeed conveyor at a speed that matches the speed of the 6800CS infeed conveyor.
5. When the desired setting is reached, press and hold the **Enter** button for 1 second to set the value.

Outside Outfeed Belt Stops

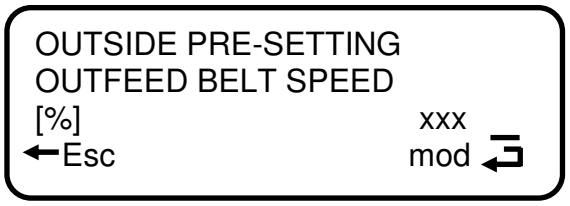
1. Use the Down ▽ button to advance to the Outside outfeed belt screen.
2. Press and release the **Enter** button.
3. This will cause a line to appear over the **Enter** symbol on the screen.
4. When the line is present, use the Up △ and Down ▽ buttons to rotate through the available options:



   - Continuous- The outside outfeed conveyor runs whenever a job is active.
   - With Sealing Bar- The outside outfeed conveyor runs whenever a job is active, but stops when the end seal bar is active.
   - With Welder- The external outfeed conveyor runs only when the side seal mechanism is running (dragging film toward the conveyor).
5. When the desired setting is reached, press and hold the **Enter** button for 1 second to set the value.

Pre-set the outside outfeed belt speed

1. Use the Down ▽ button to advance to the Outside Pre-Setting Outfeed Belt Speed screen.
2. Press and release the **Enter** button.
3. This will cause a line to appear over the **Enter** symbol on the screen.
4. When the line is present, use the Up △ and Down ▽ buttons to increase or decrease the belt speed as a percentage around a baseline speed.

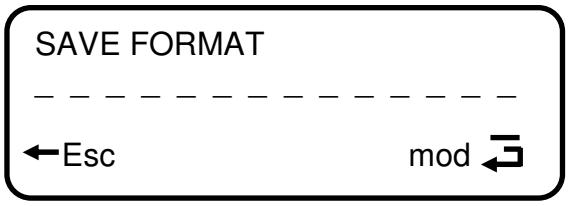


5. When the desired setting is reached, press and hold the **Enter** button for 1 second to set the value.

8.1.9 Save the Format Feature:

Use “SAVE FORAMAT” to speed-up programming. If a new job format will be similar to one previously developed, this feature enables the user to copy and rename the existing format, then change only what is necessary for the new job format

1. Use the Down ▽ button to advance to the Save Format screen.
2. Press and release the **Enter** button.
3. This will cause a line to appear over the **Enter** symbol on the screen.



4. This will enable the user to navigate to the format they want to duplicate using the Up △ and Down ▽ buttons to scroll up or down through the list of saved formats.
5. When the desired format is reached, press and hold the **Enter** button for 1 second to select that format.
6. Rename the format to distinguish it from the original format.
   - Use the Left ◁ and Right ▷ arrow buttons to move around the alphanumeric field.
   - Use the Up △ and Down ▽ buttons to select characters.
   - To escape without saving the format, press and hold the Left button ◁ for 3 seconds.
   - To save the format, press and hold the **Enter** button for 1 second.

9.0 OPERATING the SEALER

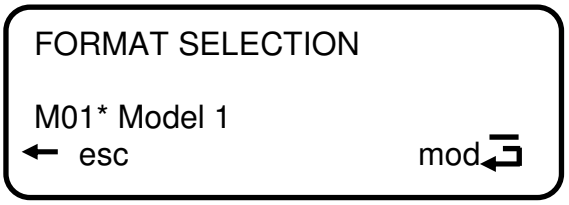
9.1 **To Run a job using a programmed format select a format**:

1. To reach the Format parameters Menu:
2. From the Home screen (See Fig. 7.X) Press and release the Right arrow button to enter “menu”.
3. This will display the first level menu screen.

4. Use the Up △ and Down ▽ arrow button to navigate the first level menu screen. Select “FORMAT PARAMETERS”. The chevron next to the selected line will flash.
5. Enter “FORMAT PARAMETERS” by pressing and releasing the Right arrow ▷ button.
6. Select a Format to program:

   NOTE: The 6800CS has capacity to store 20 different programs (formats).

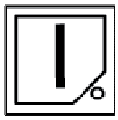
7. Press and release the **Enter** button.
8. This will cause a line to appear over the **Enter** symbol on the screen.
9. When the line is present, use the Up △ and Down ▽ buttons to navigate through the different programs.



10. When the desired program is reached, press and hold the **Enter** button for 1 second to select the program.

    NOTE: The screen text will indicate the program selected: “M01*Model 1”, “M02* Model 2”, “M03* Model 3”.

11. Press the AUTO button on the control panel to put the 6800CS in Automatic mode.
12. Press the **Start** button, and deliver packages to be wrapped to the infeed conveyor.



13. Press the **Stop** button to stop packaging at any time.

14. The 6800CS has a pack counter that can count down from a target quantity to zero (0). If the feature is used, the machine will stop when the counter reaches zero.

9.2 Pack Counter

The Pack Counter is in the Operator Menu

9.2.1 To reach the OPERATOR MENU:

1. From the Home screen (See Fig. 7.X) Press and release the Right arrow button to enter “menu”.
2. This will display the first level menu screen.
3. Use the Up △ and Down ▽ arrow buttons to navigate the first level menu screen. Select “OPERATOR MENU”. The chevron next to the selected line will flash.
4. Enter “OPERATOR MENU” by pressing and releasing the Right ▷ arrow button.

9.3 Data Display

1. Press and release the **Enter** button ⏎

10.0 DIAGNOSING PROBLEMS

10.1 Encoder Error

Explanation: There is facility for 5 encoders on the 6800CS side sealer. 3 Encoders are used on this machine. Each encoder registers the rotation of the motor it is attached to, and sends that information as a signal back to the inverter that drives the motor. This is a feed-back to confirm that each motor is responding to the signal it is getting. See Fig. 10.1.

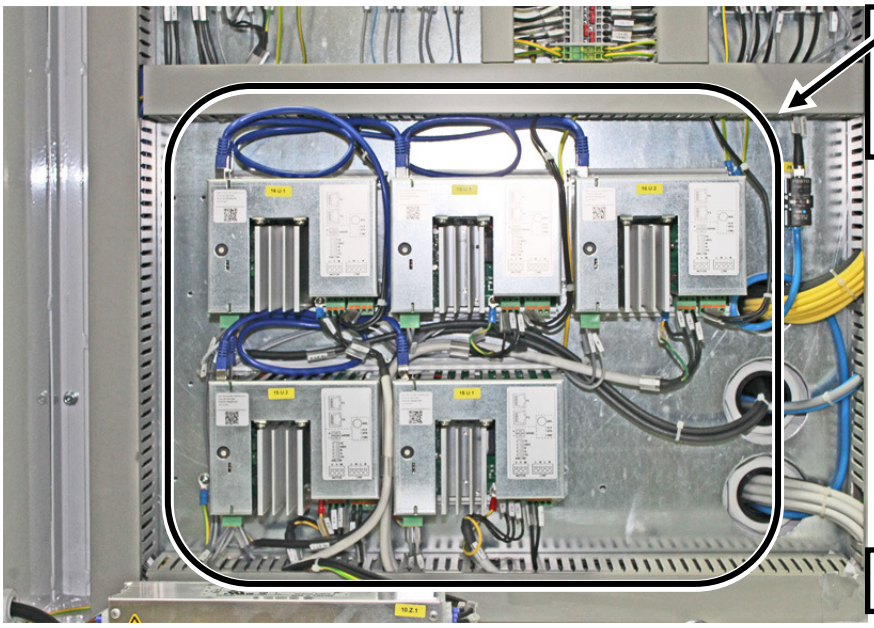


Fig. 10.1

Identification: The first step to resolving an encoder error is to identify the encoder that is causing the error message.

Number	Location	Location
1	Unwinder or Trim Rewind	Unused
2	Unwinder or Trim Rewind	Unused
3	Infeed Conveyor	Reachable from infeed end, remove end panel
4	Exit Conveyor	Reachable from exit end, remove end panel
5	Transversal Seal Bar (B1)	Reachable from exit end, remove end panel

After identifying the encoder that is causing the error message, check for physical damage, loose terminal connection at encoder end, and loosed electrical connections at the inverter end, before condemning the encoder.

The output of each encoder can be viewed on the HMI screen in the “DATA DISPLAY” Screen.

NOTE: Use the schematic in the electrical enclosure to identify circuit numbers.

To reach the “DATA DISPLAY” screen-

>FORMAT PARAMETERS
>OPERATOR MENU
>DATA DISPLAY
← esc menu →

1. From the Home screen, Press and release the Right arrow button to enter “menu”.
2. This will display the first level menu screen.
3. Use the Up △ and Down ▽ arrow button to navigate the first level menu screen.
   Select “DATA DISPLAY”. The chevron next to the selected line will flash.
4. Enter “DATA DISPLAY” by pressing and releasing the ▷ Right arrow button. See Fig. 10.2.

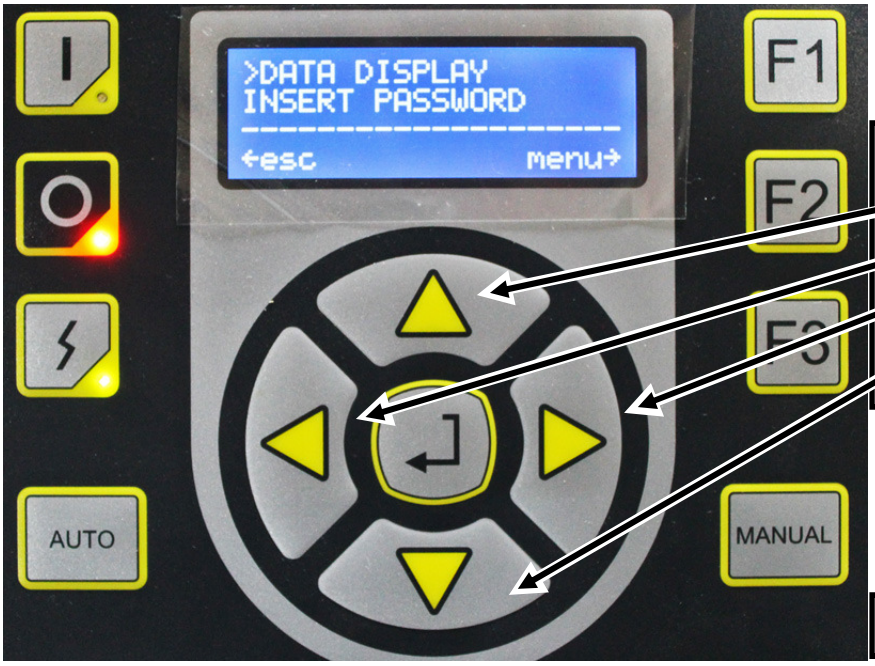


Fig. 10.2

5. Use the Down Arrow button ▽ to scroll through the “DATA DISPLAY” menu, to reach “INVERTER MEASURES”. This is a lengthy menu containing:

   “BARS TEMPERATURE”
   “SNAP PRODUCTION”
   “PROCESSED PACKS”
   “PACK LENGTH MEASURE”
   “AVERAGE PACK LENGTH”
   “FILM MARK OFFSET”
   “AVERAGE PRODUCTION”
   “SNAPSHOT EFFICIENCY”
   “AVERAGE EFFICIENCY”
   “NUMBER OF ANOMOLOUS PACKS”
   “POWER BOARD INSIDE TEMPERATURE”
   “MACHINE TOTAL PACKS NUMBER”
   “LOCAL BUSES CPU”
   “DI016 INPUT / OUTPUT”
   “INVERTER MEASURES”, and more. We need to reach “INVERTER MEASURES”

6. Use the Right Arrow button ▷ to enter “INVERTER MEASURES”. See Fig. 10.3.

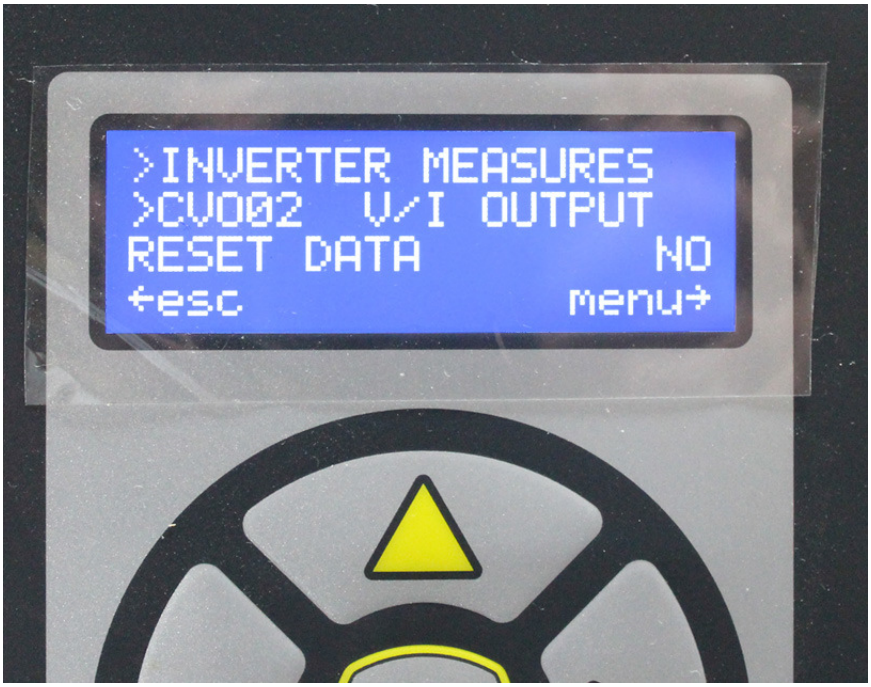


Fig. 10.3

7. Use the Up and Down Arrow buttons ▽△ to maneuver between the inverters to be checked. See Fig. 10.4.

Fig. 10.4

8. Use the Right Arrow button ▷ to enter the “INVERTER STATUS” menu for the inverter to be checked.
9. From the “INVERTER STATUS” screen, use the Down Arrow ▽ button to scroll through “CLASS 1 DIAGNOSTIC” and “INVERTER ABSORBED POWER” screens to reach the “ENCODER VALUE” screen.

10. With the “ENCODER VALUE” displayed on the screen, physically move the item associated with the encoder being checked. See Fig. 10.5.

Fig. 10.5

11. The value should change as the part is moved. It does not need to be a large movement, just enough to budge the encoder.
12. Encoder 3 is attached to the motor that drives the infeed conveyor. See Fig. 10.6.

Fig. 10.6

13. Encoder 4 is attached to the motor that drives the exit conveyor and film drag belts. See Fig. 10.7.

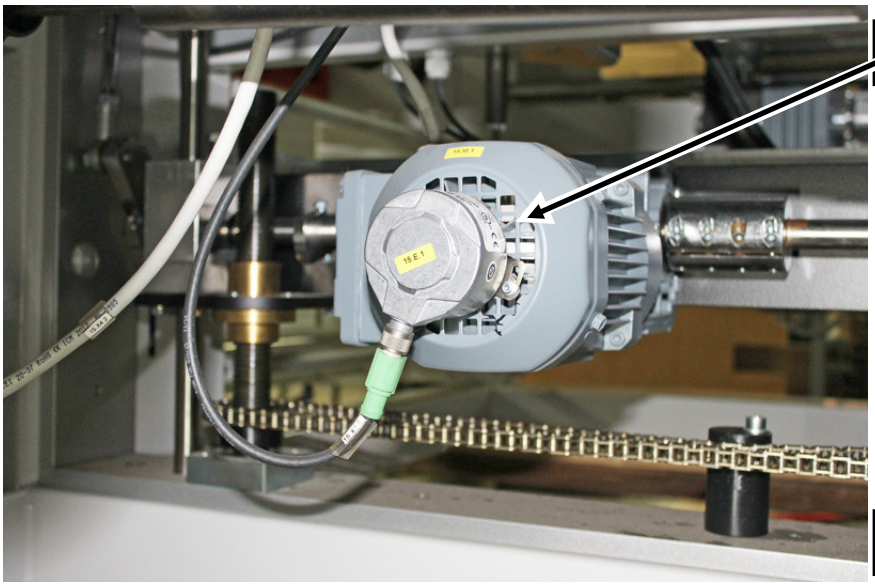


Fig. 10.7

14. Encoder 5 is attached to the motor that drives the seal bar. See Fig. 10.8.

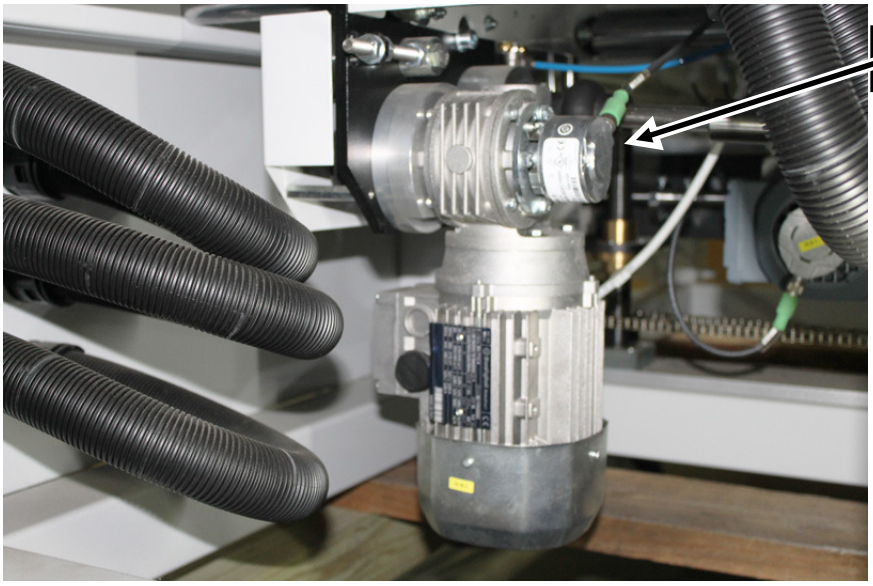


Fig. 10.8

15. Encoder replacement tips:
    a. Unthread the collar on the electrical connector to disconnect it. Align the key and key way in the electrical connector on installation.
    b. The mounting brackets that hold the encoder to the motor are secured with socket head cap screws. Use a hex key to remove them.
    c. The drive collars that connect each encoder to the motor shaft are secured with Torx-head screws.
    d. On installation, attach the brackets loosely, tighten the drive collar, then tighten the bracket screws.

11.0 MAINTENANCE and REPAIR

11.1 Scheduled Maintenance

Daily Maintenance		**End of shift**
Item	**Care Needed**	**Specifics**
Infeed belt	Clean	Wipe-off debris with moist cotton cloth
PTFE cover	Clean, inspect	Wipe-off with moist cotton cloth Check for wear
Seal bar	Clean	Wipe-off with moist cotton cloth while warm
Side seal knife	clean, inspect	Remove guards to check- Wipe-off with moist cotton cloth while warm
Film drag belts	Clean, inspect	While guards are off- Clean any debris from film drag belts and the tracks they fit in using compressed air.

Daily Maintenance		**Start of shift**
Item	**Care Needed**	**Specifics**
Heat shields	Inspect	Make sure guards are in-place around transverse seal bar and side seal knife.
Safety swtiches Hoods	Check function	Sealer should display and error code and abort cycle if either hood, or the film load door are open
Safety switches Seal bar	Check function	Sealer should display and error code and abort cycle if seal bar hits an obstruction. (Use 759-00001 No-Go gauge)
E-STOP switch	Check function	Sealer should display and error code and abort cycle if Emergency Stop is pressed
Seal quality	Check	Examine seals at start of production to verify that wear is not affecting quality.

CAUTION: Do NOT use a machine with any inoperative safety features

Monthly Maintenance

Item	Care Needed	Specifics
Drive belts	Check	Adjust or replace if needed
Film drag belts	Check	Replace if needed
Infeed belt Outfeed belt	Check	Adjust tension and check tracking
Inverting plow lift mechanism	Lubricate	Lube with T08010 Lubri-slip
Gearmotors	Clean	Wipe of blow dust off motors and drives
Photocells	Clean	Wipe off photocells and sensors with a moist cotton cloth
Safety labels	Check	Check for any missing safety labels. Replace as needed.

CAUTION: Do NOT operate a machine with any inoperative safety features

Cycle Determined Maintenance

Item	Care Needed	Specifics
PTFE cover 300,000 cycles	Replace, check	Replace top layer of PTFE seal pad cover Inspect second layer. Replace as needed
Seal pad 800,000 cycles	Replace	Replace silicone seal pad profile and second layer of PTFE seal pad cover.
Seal bar guides 500,000 cycles	Clean and lubricate	Wipe-off with a soft cloth. Apply a sparing amount of 800-1 white grease
Rod ends 500,000 cycles	Clean and Lubricate	Wipe-off with a soft cloth. Apply a sparing amount of 800-1 white grease
Film guide roller 500,000 cycles	Lubricate	Lube bearings with T08010 Lubri-slip
Sealing bar 2,000,000 cycles	Replace	Replace Transverse seal bar
Welder Blade 500,000 M of film	Replace	Replace the side sealer blade
Drive belts 250,000 M. of film	Replace	Replace drive belts. Infeed conveyor drive Exit conveyor and side seal drive

11.2 Side Sealer Film Drag Belts

1. Open the exit-end hood and remove any film and residue from the side seal area.
2. Turn-off the sealer, and allow it to cool completely.
3. Remove both orange covers using a 7mm wrench. See Fig. 11.1.

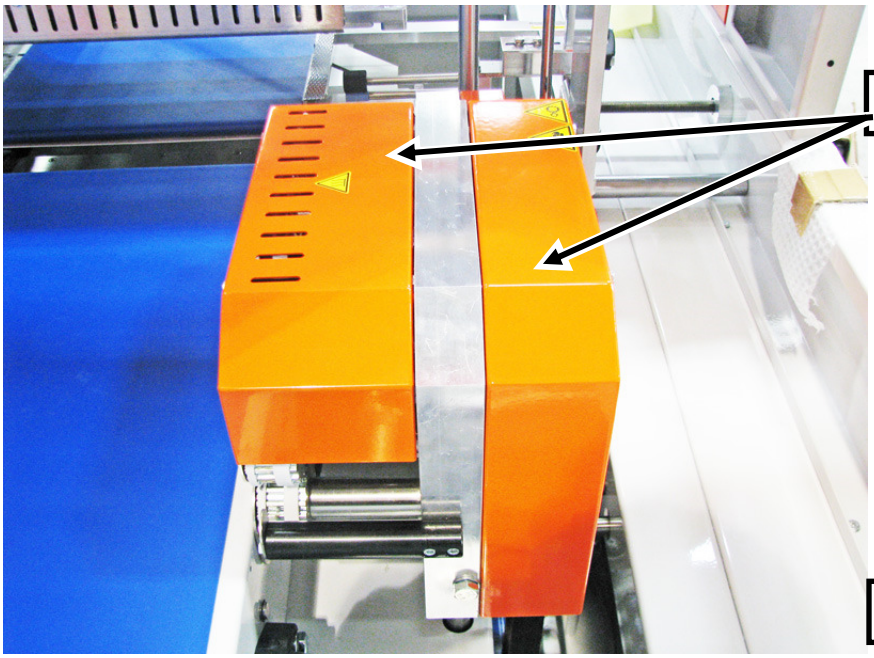


Fig. 11.1

4. Remove the upper Stainless steel film guide using a 3mm hex key.
5. Remove and inspect the side seal knife using a 10mm wrench. See Fig. 11.2.

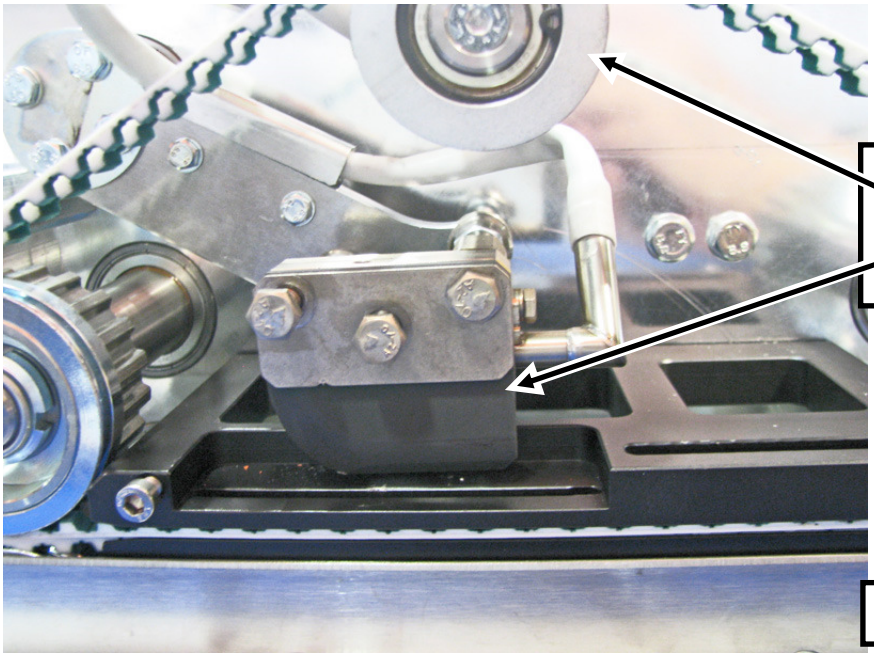


Fig. 11.2

6. Remove the upper film drag belt tension pulley using a 13mm wrench. A crescent wrench may be needed for the hex shaft.

NOTE: There is a washer between the side sealer frame and the hex shaft.

7. Slip the upper film drag belts off of the drive-end pulley. See fig. 11.3.

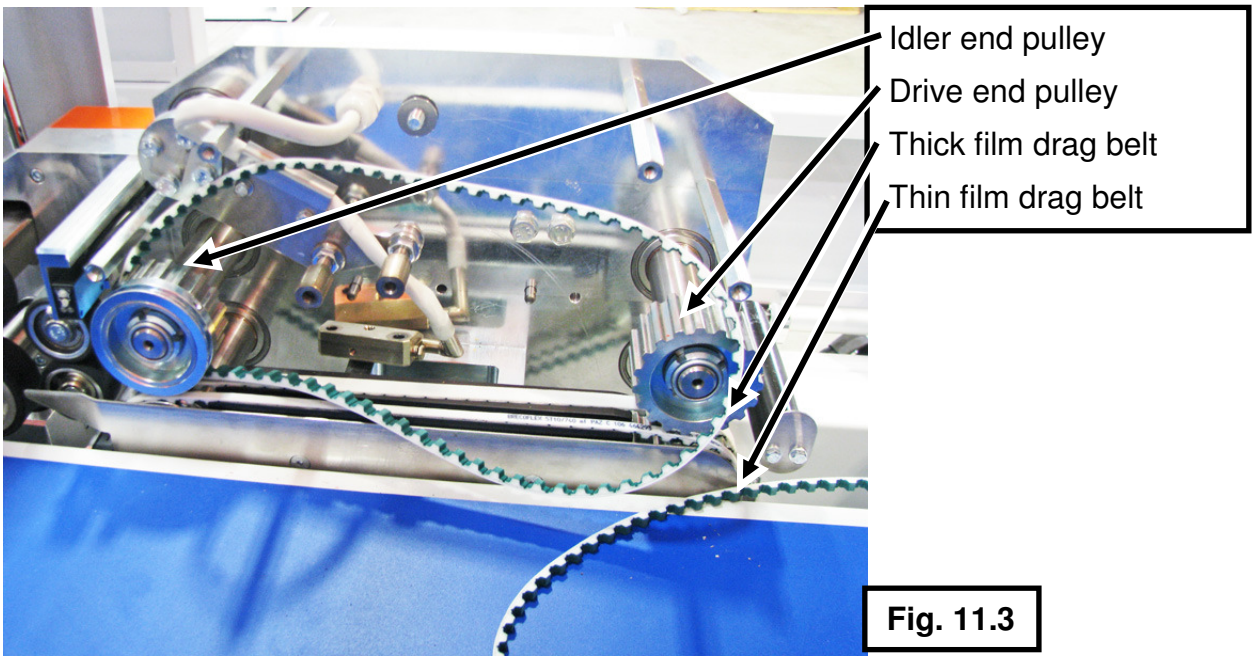


Fig. 11.3

8. The wide upper film drag belt will be trapped on the idler pulley by a collar. Remove the collar using a 2mm hex key. See Fig. 11.4.

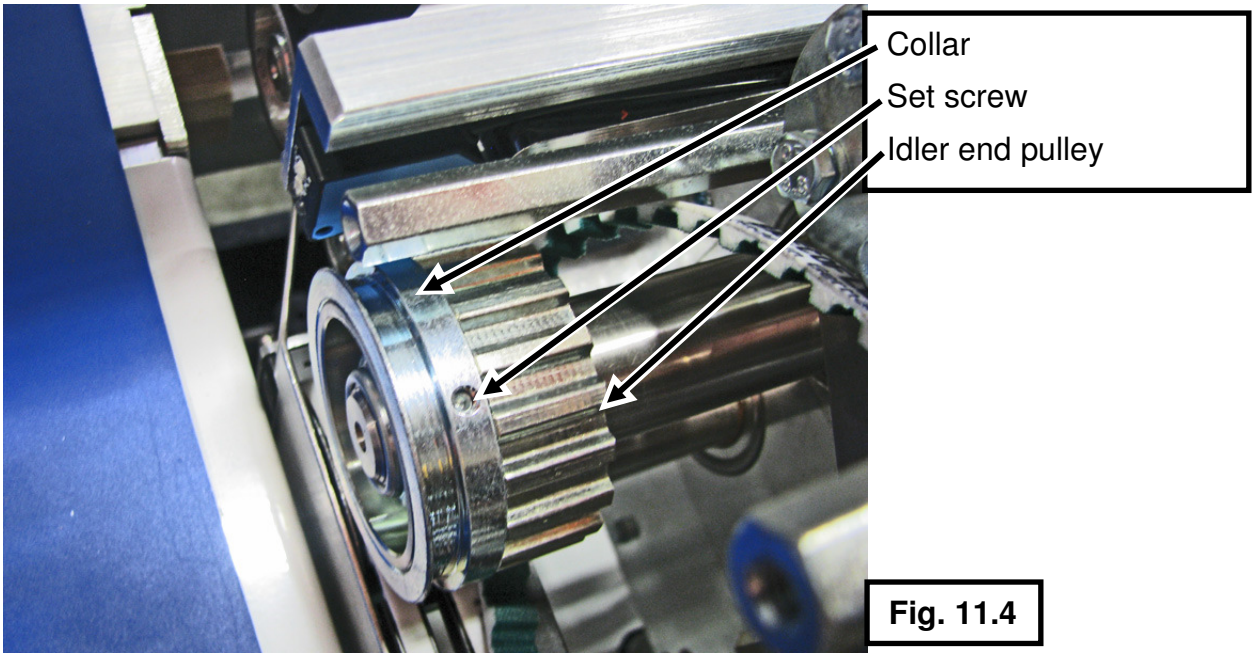


Fig. 11.4

9. Use a 5mm hex key to remove the screws that hold the upper drag belt guide to the side seal frame. See Fig. 11.5.

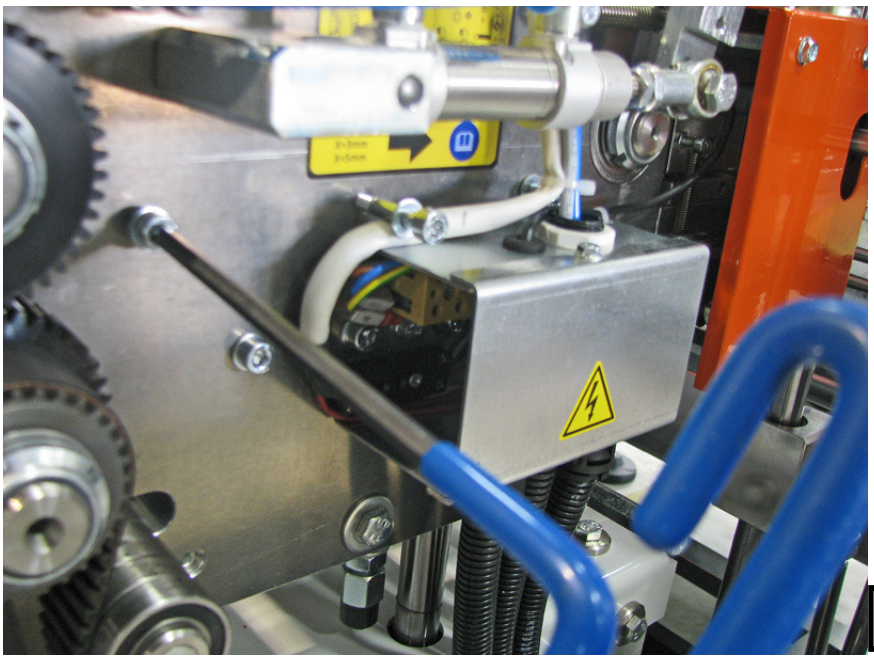


Fig. 11.5

IMPORTANT: A ball drive hex key generally will not have enough contact area to turn these screws. Use a regular profile, straight hex key to avoid stripping the screw heads.

10. Install two M4 socket head cap screws into the holes used for attaching the upper stainless steel film guide. See fig. 11.6.

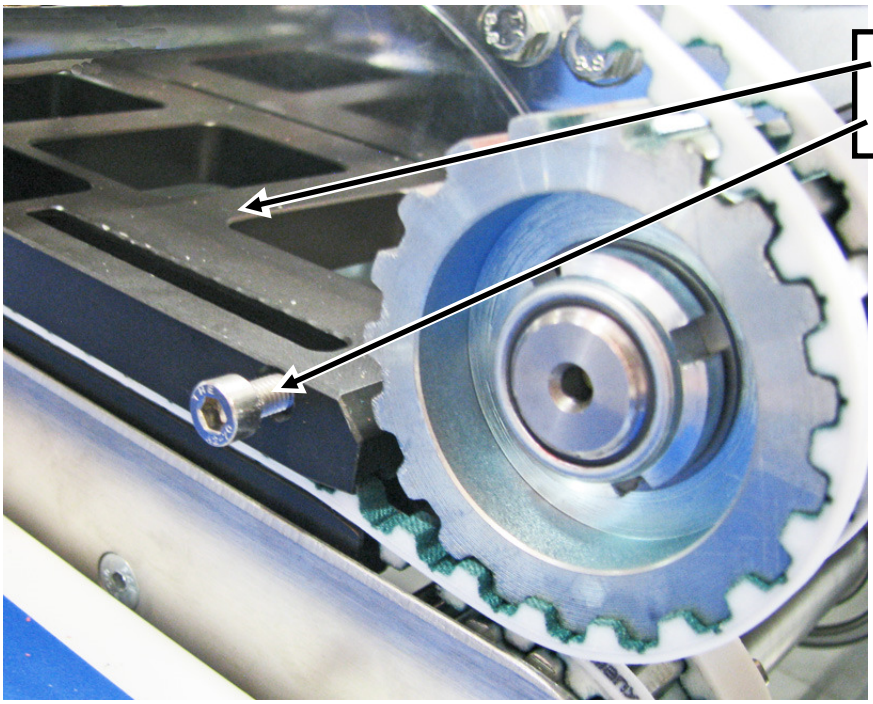


Fig. 11.6

11. Use the heads of the cap screws to pry on, pulling the upper belt guide off of the dowel pins that locate it on the side sealer frame. The wide upper film drag belt will come off with the upper belt guide.

12. Using the knurled knob, adjust the take-away conveyor height all the way down to expose the screws to remove the lower stainless steel cover. See Section 5.6
13. Remove the two screws that hold the top of the lower film guide using a 3mm hex key. See fig. 11.7.

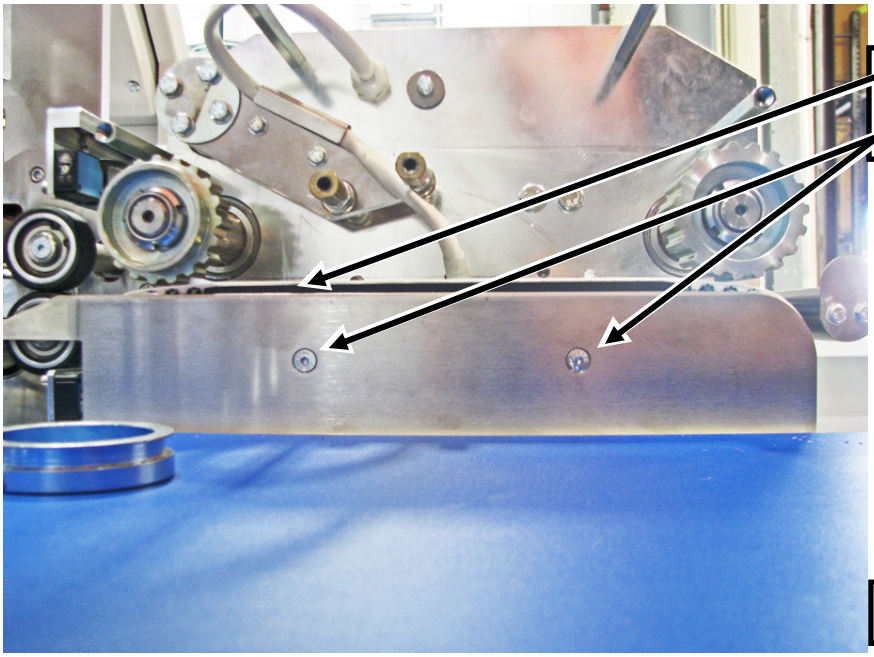
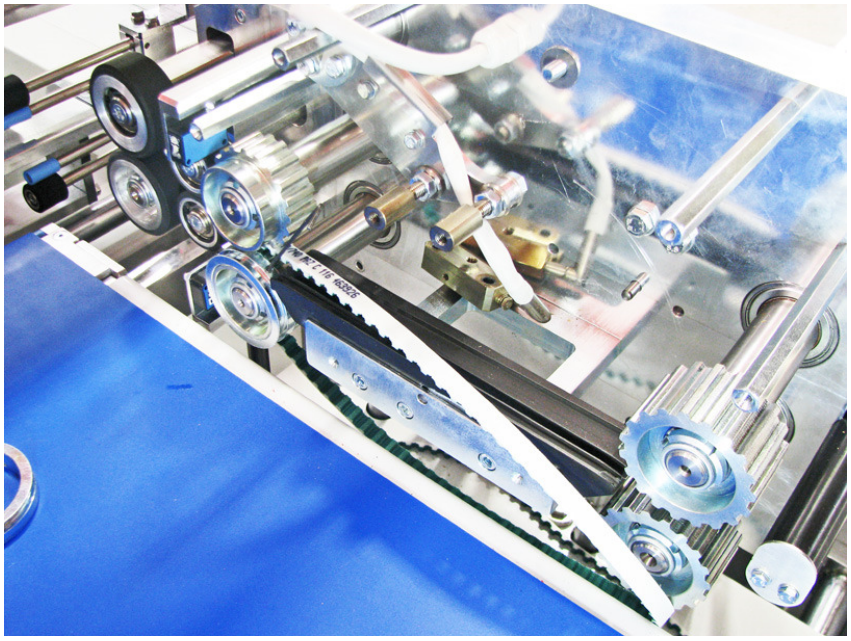


Fig. 11.7

14. Cap screws fasten the hexagonal mounting posts for the lower film guide to the side sealer frame. Remove the cap screws holding the two lower hexagonal mounting posts to the side seal frame using a 7mm socket.
15. Carefully lower the bottom film guide with the lower mounting posts still attached to it, and maneuver it out of the machine.
16. Remove the lower film drag belts in a similar sequence to the removal of the upper film drag belts:
    a. Remove the lower film drag belt tension pulley.
    b. Move the thin lower film drag belt as needed to reach the set screw that holds the collar on the idler pulley.
    c. Remove the collar.
    d. Remove the belts.



17. Inspect the lower film guide:
    a. There are two separate spring-loaded guide tracks.
    b. The guide tracks should each pivot like a see-saw on the central locating pin.
    c. The guide tracks should each push down in their entirety, and spring back up.
    d. There should be no binding in either motion.
    e. If there is binding, remove the lower film guide assembly and clean or repair it as needed to get smooth, consistent motion.
18. Reinstall the lower film drag belts, reversing the removal process.
19. Place a semi-rigid shield on top of the lower film drag belts. The back cover of this manual is about the right thickness and rigidity. The shield should run the full length of the contact area between the upper and lower film drag belts.
20. Position the wide upper film drag belt in the wide groove of the upper belt guide, and start the belt as far as possible onto the drive and idler pulleys while slipping the upper belt guide into place. See Fig. 11.9.

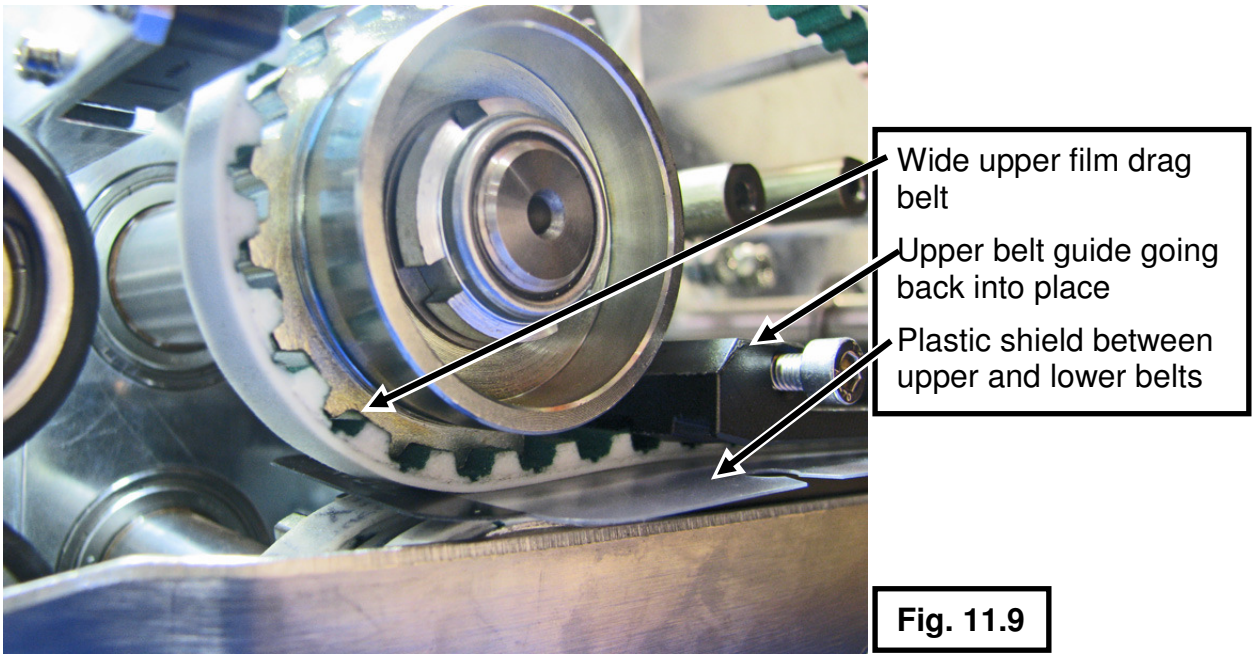


Fig. 11.9

21. Once the upper belt guide is started over the dowel pins, start and tighten the socket head caps screws to draw it into place. As the groove for the thin film drag belt moves in, start the thin film drag belt through the groove and around the pulleys and collar.
22. Complete reassembly, installing film guides, tension pulleys, seal knife, and covers.

11.3 Infeed Belt Idler Roller

1. Use the infeed assembly release knob to slide the infeed assembly toward the front of the sealer.
2. Remove the end panel from the infeed end of the base of the machine.
3. Note the positions of the belt tension adjustment screws, bearing in mind that they may have been adjusted to compensate for a bearing that is loose. See Fig. 11.10.

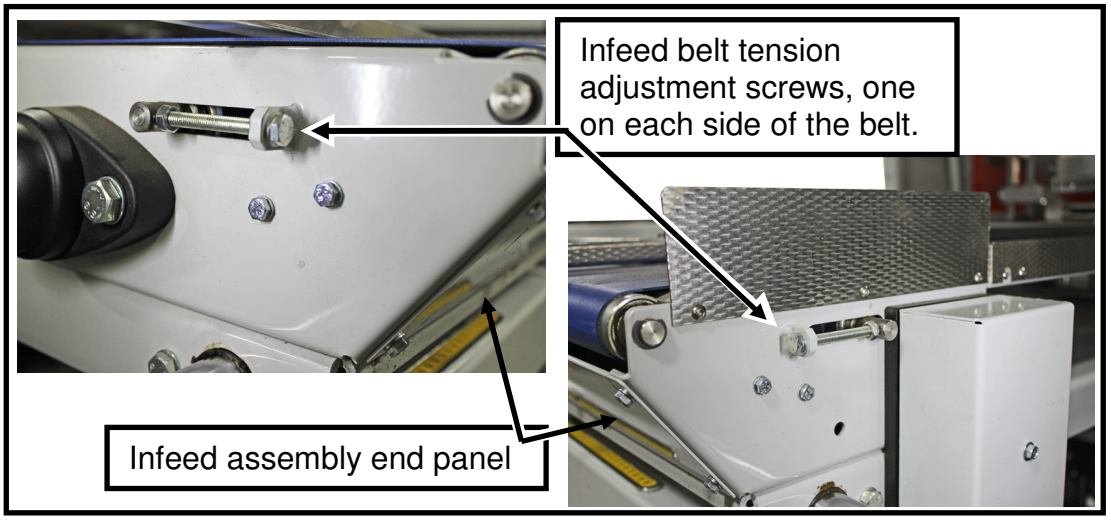


Fig. 11.10

4. Loosen the jam nuts and turn the adjuster screw to relieve as much tension from the belt as possible.
5. Remove the infeed assembly end panel.
6. Attempt to slide the tension roller out of the slot that holds it. If it will not come out, remove the retaining rings from the ends of the infeed end roller shaft, and maneuver it to remove it from the infeed assembly. This will provide more slack in the belt.

NOTE: There are spacer sleeves on the ends of the idler roller shaft and the infeed roller shaft.

7. Working from interior side of the infeed belt, withdraw the idler roller. See Fig. 11.11.

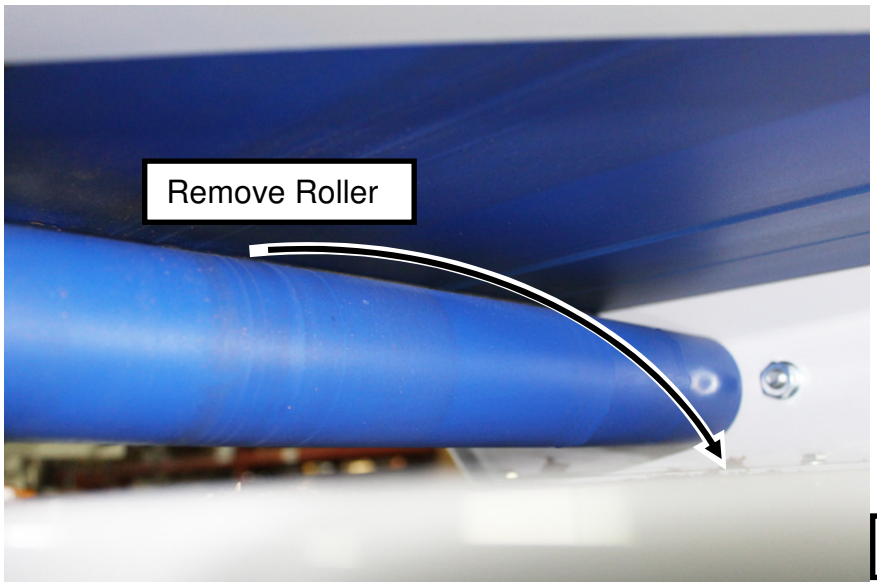


Fig 11.11

12.0 LIMITED WARRANTY

Clamco warrants this product, to the original retail purchaser, against defects in material and/or workmanship, for a period of one (1) year from the date of the original installation for use, and agrees to repair and/or replace any parts found defective by us, without charge, provided unit or parts are returned to us with transportation charges prepaid. Replacement parts supplied during the product warranty period are warranted for the balance of that period.

This warranty does not cover damage resulting from accident, misuse or abuse, lack of reasonable care, the affixing of any attachment not provided by us, improper handling and/or maintenance. Neither shall this warranty cover normally replaced expendable parts. This warranty is VOID unless the repair is made by Clamco or by one of its authorized distributors.

The obligation of Clamco under this warranty is limited to repair or replacement in accordance with the terms of this warranty. There are no warranties offered by Clamco other than those herein described. Coverage under this warranty does not include incidental consequential damages other then the coverage described above. This warranty gives you specific legal rights, and you may also have other rights that vary from state to state.

Freight Loss or Damages

Freight loss or damage is NOT covered by any Clamco warranties. If merchandise is damaged or lost during shipment it becomes a matter between the carrier and the consignee. Clamco will work with customers as well as the carrier to get the matter resolved in as little time as possible.

The customer should refuse obviously damaged or smashed shipments. The carrier will notify Clamco of the refused shipment. Clamco will then sort out the details with the carrier, contact the customer and attempt to provide the customer with replacement or repaired merchandise as soon as possible.

Minor damages should be noted on the Bill of Lading at the time of delivery. It is the customer's responsibility to immediately open the shipping container and inspect for hidden damage. If there is hidden damage the customer must call the carrier and report the damage. The customer must save the carton and all of the packing materials until after the carrier makes their inspection, which is generally 7 to 10 days."

13.0 SERVICE AND REPLACEMENT PARTS

To order parts, get technical advice, or find qualified repair service for Clamco equipment, please call:

1-234-222-1000

or visit our website: www.pacmachinery.com

To help us provide you with the fastest and most efficient service, please be ready to provide us with the **model and serial number** of your machine when you contact us. Our policy of continuous improvement means that we do update the equipment we make, and there are production differences defined by serial number breaks. If you provide is with the full model and serial number, we can get you the right parts and information.