

Labelling Systems

Packaging Systems

Victorian Epicure Manual

35673

Delta Shrink Labeler



Note: Depending on options purchased model may differ.



NOTICE REGARDING OSHA REGULATIONS

Seller shall not be responsible for any failure of compliance which results from the location, operation, use or maintenance of the equipment or for alterations of the equipment by persons other than the Seller, or from an option or accessory to the equipment which was available to the Buyer but omitted at the Buyer's direction. Seller shall not be responsible for design or instructions furnished by the Buyer or his Agents. Seller makes no warranties with respect to noise and will not be responsible for any fines or penalties, or consequential damages.

Aesus Packaging Systems, Inc.
Pointe-Claire (Montréal) Québec
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Warranty, Terms and Conditions of Sale

The following Terms and Conditions are in addition to and form an integral part of our quotation.

GUARDING provided by Aesus Packaging Systems, Inc. may not suit your local requirements. Additional guarding available at extra cost can be provided to meet your requirements.

RECOMMENDED SPARE PARTS KITS (for new machines only) are available for two years normal operation. Upon request, detailed lists are usually prepared immediately before shipment to suit all machinery parts and accessories. Please allow an approximate additional 5% charge on the total Ex-Works value.

ESTIMATED SPEEDS are subject to testing of Buyer's bulk samples. In those cases where bulk samples are not supplied, equipment will be tested for normal functioning only. Performance on products not submitted to Aesus Packaging Systems, Inc. whether expressed or implied cannot be guaranteed.

GUARANTEE: All new machines sold by Aesus Packaging Systems, Inc. are guaranteed for defective workmanship for a period of 1 year from date of delivery. Aesus Packaging Systems, Inc. reserves the right to repair or replace faulty parts as it deems suitable on FOB Aesus Packaging Systems, Inc. Works basis. Parts replaced on warranty basis must be returned to Aesus Packaging Systems, Inc., freight prepaid.

Aesus Packaging Systems, Inc. covers labor to replace items under warranty for 30 days from the date of installation, however travel time and travel expenses are to the account of the Buyer.

Aesus Packaging Systems, Inc. will neither assume, nor authorize any person to assume for it, any obligation or liability in connection with its merchandise or any part thereof, which have been subjected to repairs by any unauthorized individuals or entities or that have been subjected to accidents, alterations, abuses or any negligence or misuse regardless of how same occurred. Machines and equipment manufactured by independent suppliers are warranted by the suppliers according to their standard warranty.

Aesus Packaging Systems, Inc. makes no warranties, express, implied or statutory (including but not limited to any implied warranties of merchantability or fitness for a particular purpose) other than the express warranty immediately set forth on this warranty and in the attached quotation.

This contract and all matters relating to the interpretation of the same, any claim for consequential or incidental damages and any claims, rights of action and demands, regardless of how same are described, whether in law or equity, shall be interpreted according to the laws of the Province of Quebec, Canada and they shall be pursued solely in the Province of Quebec, Canada.

PERMITS AND INSPECTIONS required for the installation and/or use of the equipment furnished must be applied for by the Buyer at their own expense.

DAMAGE CLAIMS: Great care is taken in packing all machines, parts and accessories. After Aesus Packaging Systems, Inc. has been given a "Received in Good Order" receipt by the transportation company, we cannot be held responsible for damage that occurs in transit. All claims for breakage or damage whether concealed or obvious must be made to the carrier as soon as possible after receipt of the shipment. Aesus Packaging Systems, Inc. will render all possible assistance to secure satisfactory adjustment of such damage claims.

INSTALLATIONS: Aesus Packaging Systems, Inc. prices for equipment, parts and accessories do not include an allowance for installation or final on-site adjustment. Installation and start up service performed by Aesus Packaging Systems, Inc. is chargeable as a separate item and can be included in our quotation if required.

RETURNED MATERIAL: In no case are materials or equipment to be returned without Aesus Packaging Systems, Inc.'s written permission. All such returned materials must be in "as new" condition. Materials and/or equipment



accepted by us for credit are subject to a minimum service charge of 20% plus all transportation charges. Any materials or equipment authorized for return must be securely packed to reach us without damage.

REMEDIES AND LIMITATIONS OF LIABILITY: Aesus Packaging Systems, Inc.'s liability for any claims arising out of any contract formed between Aesus Packaging System, Inc. and any Buyer including any warranty claims and claims based on the alleged negligence of Aesus Packaging System, Inc., its officers, agents or employees shall be limited to the replacement of any products or parts thereof sold to the customer, and shall not include any special, consequential, incidental or penal damages including loss of profit or revenues, loss of use of the goods, or any associated equipment or system in which a product is installed, damage to associated equipment or systems, cost of capital, cost of substitute products, facilities, services or replacements, downtime costs or claims of Buyer's customer for any such damages.

In case of goods manufactured to Buyer's designs or instructions, the Buyer guarantees that such goods or the process of manufacture do not infringe any patent, registered designs or other property rights and agrees to absolve Aesus Packaging System, Inc. from all liabilities, costs, claims and demands which may be brought against Aesus Packaging System, Inc.

WAIVER: Aesus Packaging System, Inc.'s failure to insist upon a strict performance of any of the terms and conditions herein shall not be deemed a waiver of any rights that Aesus Packaging System, Inc. may have and shall not be deemed a waiver of any subsequent breach or default in these terms and conditions.



Disclaimer and Limitation of Liability

Seller warrants that the Products created by Seller will substantially conform to the specifications set forth in Paragraph (1) herein for the duration set forth in Paragraph (2) herein. In the event of any breach of the foregoing Year 2000 warranty during the warranty term, Seller shall, as Buyer's sole and exclusive remedy, correct any Year 2000 problems specifically identified by Buyer in writing and/or replace any defective Products created by Seller at Seller's discretion.

THE FOREGOING IS THE ONLY WARRANTY MADE BY SELLER AND SELLER SPECIFICALLY DISCLAIMS ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.

IT IS UNDERSTOOD AND AGREED THAT SELLER'S LIABILITY FOR ANY DAMAGES SUFFERED BY BUYER OR ITS CUSTOMERS, WHETHER IN CONTRACT, IN TORT, UNDER ANY WARRANTY THEORY, IN NEGLIGENCE OR OTHERWISE, SHALL BE LIMITED TO THE AMOUNT PAID TO SELLER BY BUYER PURSUANT TO THE CONTRACT. UNDER NO CIRCUMSTANCES SHALL SELLER BE LIABLE FOR ANY SPECIAL, INDIRECT OR CONSEQUENTIAL DAMAGES (INCLUDING LOST PROFITS) OF BUYER, ANY CUSTOMER, OR ANY OTHER THIRD PARTY, EVEN IF SELLER HAS BEEN PREVIOUSLY ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

Quick Setup

*Note: Actual Pictures and displays may not be exactly the same as portrayed in figures below.

(Always engage E-Stop or Turn Off Main Power when working on Shrink Sleeve Labeller)



Figure Q.1 Place Mandrel through guide and insert both pieces into machine.

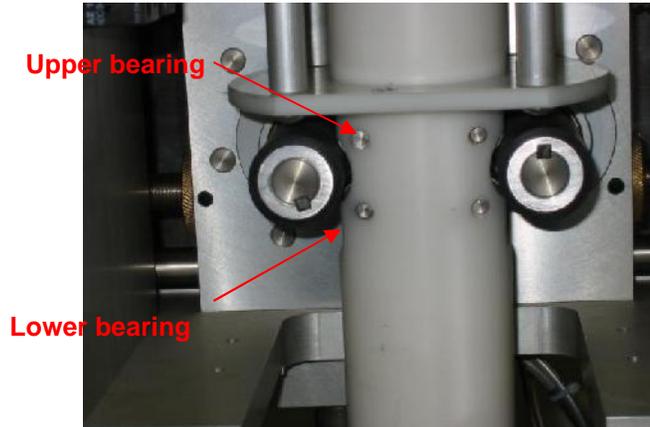


Figure Q.3 Lower Mandrel to align rubber drive rollers to mandrel bearings. Rubber drive rollers should sit between upper and lower mandrel bearings

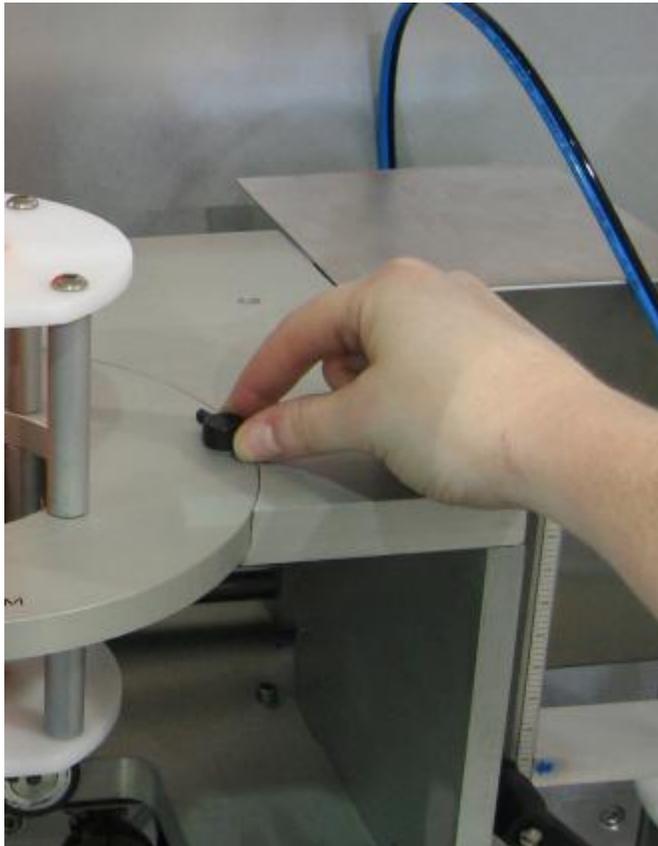
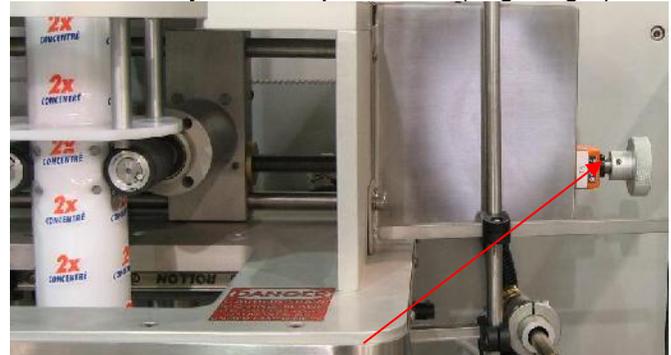


Figure Q.2. Seat and secure the centre of the guide into its machined slot



Figure Q.4 Hold mandrel while tightening to ensure it is centered. Tighten Drive Rollers till Mandrel barely moves up or down (finger tight)



There is a reference number that you can write down on a setup sheet. and



Figure Q.5 Place Film and Film Roll cover. Note direction of the Film



Figure Q.7 Tighten Slip clutch so that if you give the Film a tug the roll will rotate a **quarter to half** a turn.



Figure Q.6 Place the outer film cover firmly against the roll and tighten ratchet handle (Film must be snug between covers)



Figure Q.9 A quick Tug checks that the slip clutch is correctly set.

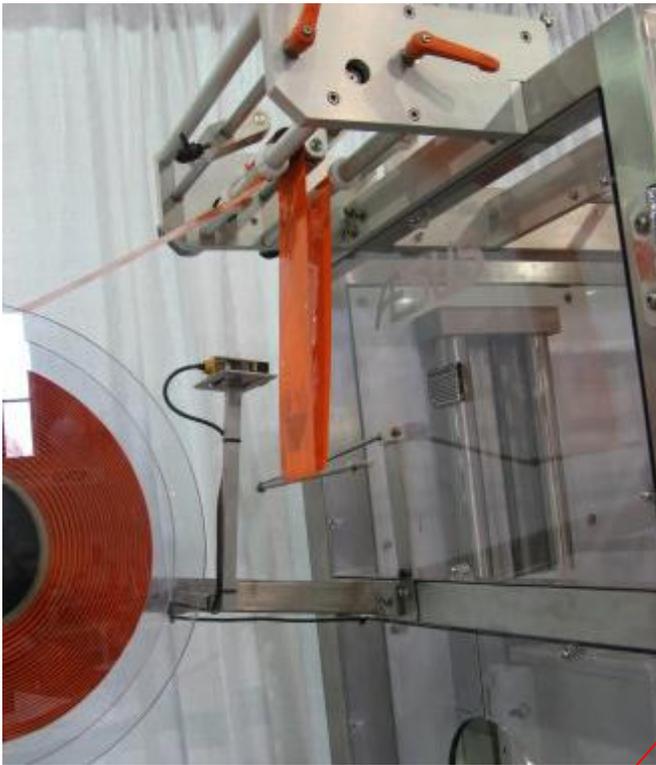


Figure Q.10 Thread the Film between the outer guide roller and up over the perforation roller if fitted.

Make sure the white plastic guides are set to the Film width.



Figure Q.12 Top View of the film properly threaded.



Figure Q.11 Thread film down around perforation roller and in between knurled roller.



Figure Q.13 Check Dancing Bar is in a loop so that the film can block the Photo Cell. As the film is used up, the power feed will feed more film when the photocell calls for it.

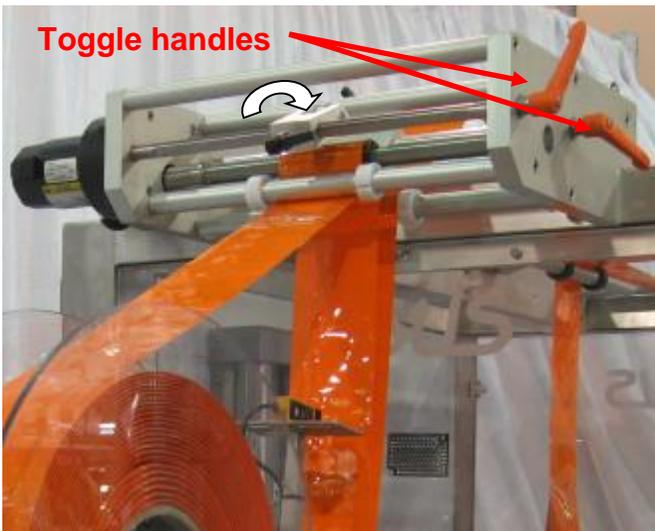


Figure Q.14 Push down on perf Wheel (if fitted) and tighten with toggle handle. If perf is too deep it may tear/pop open after shrinking; adjust as needed.

Drive Roller

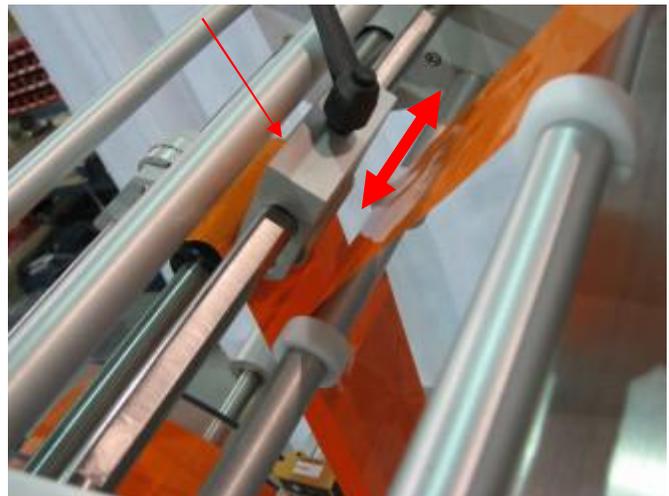


Figure Q.15 Push Up on Drive Roller and tighten with its toggle handle.

To adjust horizontal position of drive roller loosen the black toggle handle and move roller.

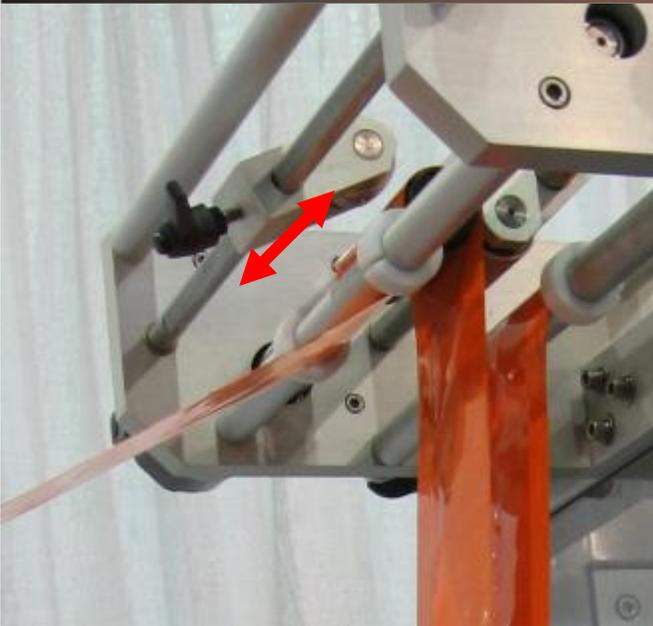


Figure Q.16 Position of perf. can be changed using its toggle handle.

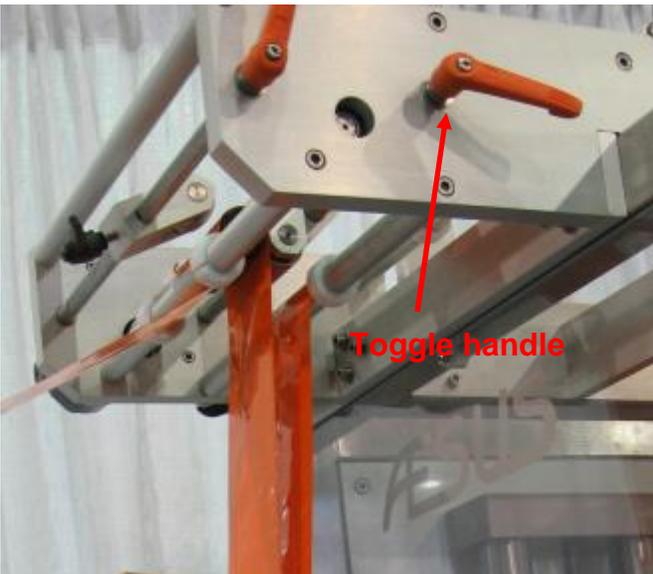


Figure Q.17 This figure shows the drive roller toggle handle used to tighten the drive roller.



Figure Q.18 View of film threaded over top rollers and then down to mandrel

Photoregistration Sensor (Optional) – Pass film through sensor if present.

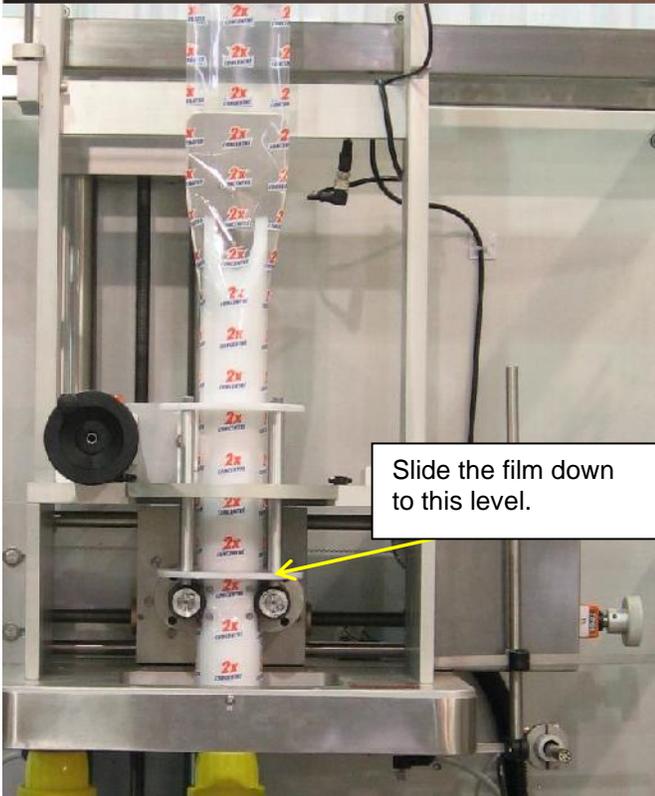


Figure Q.19 Feed film over mandrel slide down to rollers

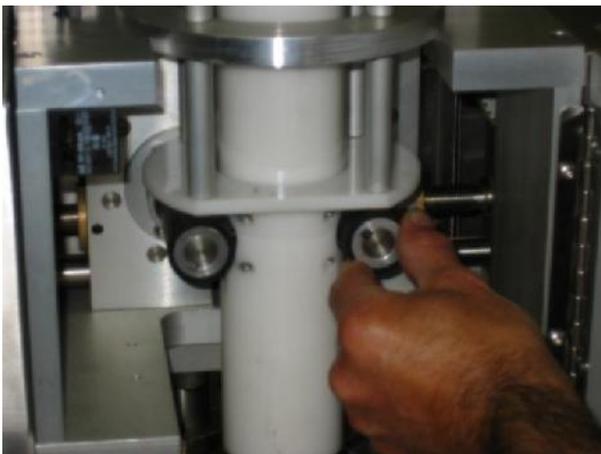


Figure Q.20 Wind the Film forward by turning the rollers manually. The film may need some help to get it started feeding past the rollers.



AESUS



Recipe #: ## #### Menu

Figure Q.21 You can feed (spool) extra loose film by pressing and holding the Stop Button in the Run Screen, so that the dancer bar has enough film.

Servo Setup

Servo Frequency (1000 Hz) :	###
Band Length (mm) :	###
Feed Band :	FEED
Cut Band :	CUT
Index Starwheel :	INDEX
Jog Machine :	JOG

Return

Figure Q.22

- **Feed Band:** This button allows the operator to trigger one feed, when the machine is not in automatic operation.
- **Cut Band:** This button allows the operator to cut the band when the machine is not in automatic operation.
- **Jog Machine:** This button jogs the machine for as long as the operator holds the button pressed.
- **Index Starwheel:** This button allows the operator to index the starwheel when the machine is not in automatic operation.



Figure Q.25 Set conveyor to bottle size. Use 2 levels of guides if possible for taller bottles. Always OPEN the door before removing any debris or adjusting containers. This puts the machine in a SAFE mode. When you close the door Press RESET



Figure Q.26 Infeed and Backup Photo beams should not see in between necks Adjust back rail so the bottles are center of the mandrel then adjust the front infeed rails so the containers move freely when The starwheel is adjusted it will hold the bottles against the rear rail. (Always make sure the bottle is not too tight in the starwheel.

IMPORTANT NOTICE

PLEASE POST THE NEXT PAGE BESIDE THE MACHINE

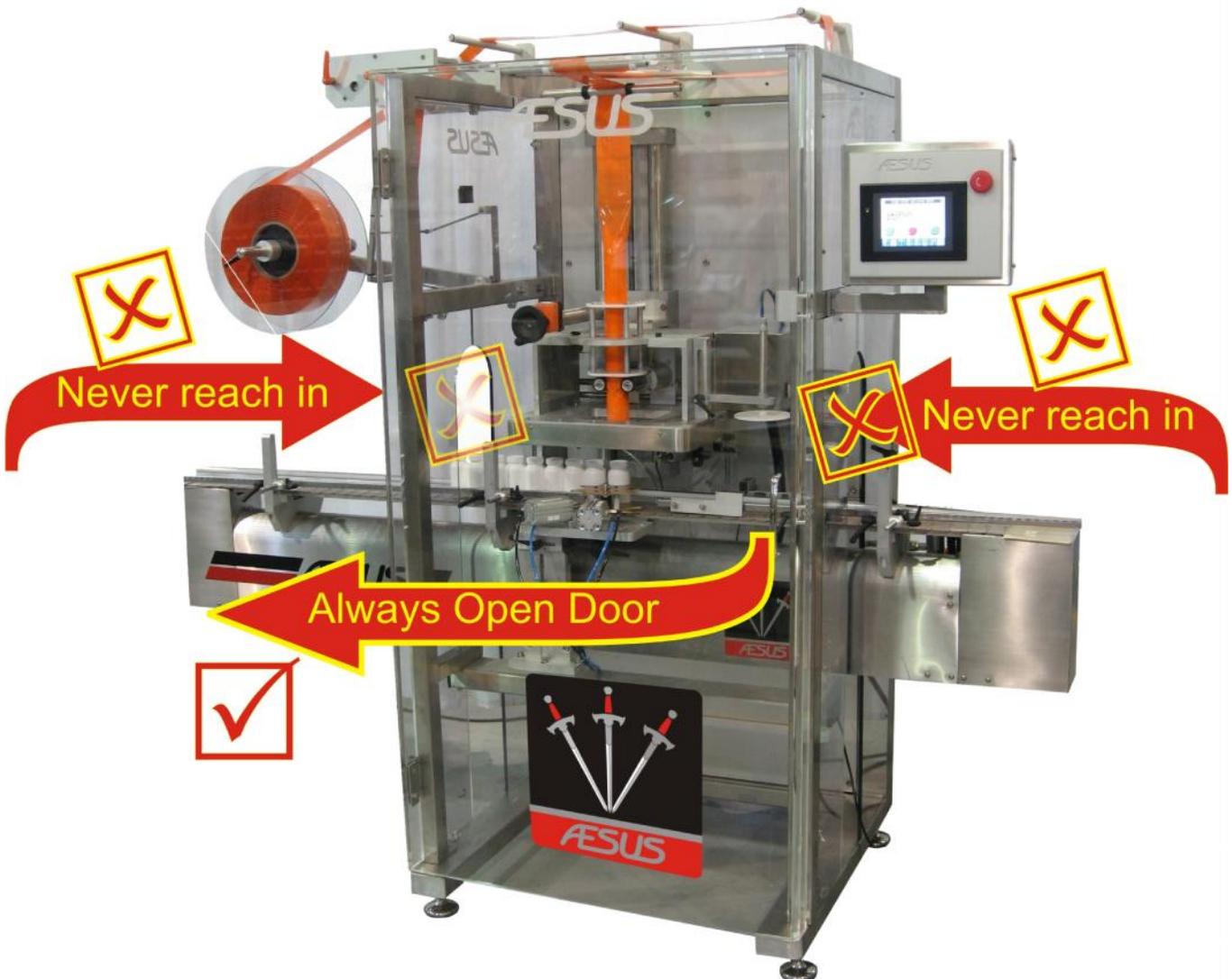
**THIS DISABLES THE KNIFE
POST THIS NOTICE CLEARLY BESIDE MACHINE**

DANGER

There is a sharp knife that can cause you damage

Do not put your hands and or fingers in the working area
This Machine can start Automatically

OPEN THE DOOR BEFORE ACCESSING



Servo Setup	
Servo Frequency (1000 Hz) :	###
Band Length (mm) :	###
Feed Band :	FEED
Cut Band :	CUT
Index Starwheel :	INDEX
Jog Machine :	JOG
Return	

Figure Q.27 The Setup screen will allow you to jog through the cycle, movement by movement.



Figure Q.28 The index Starwheel button allows you to index the containers. This is used to set up star wheel. The cylinder rod stops the wheel from rotating.



Figure Q.29 Align the bottle centrally to the mandrel by adjusting the cylinder position.



Figure Q.30 Swing the cylinder to align the bottle to Mandrel by loosening the ratchet handle.



You can record the settings for each bottle on the setup sheet.



Figure Q.31 Press Index Starwheel and align the second cylinder.



Figure Q.32 Again align the bottle centrally to the mandrel by adjusting the second cylinder position.

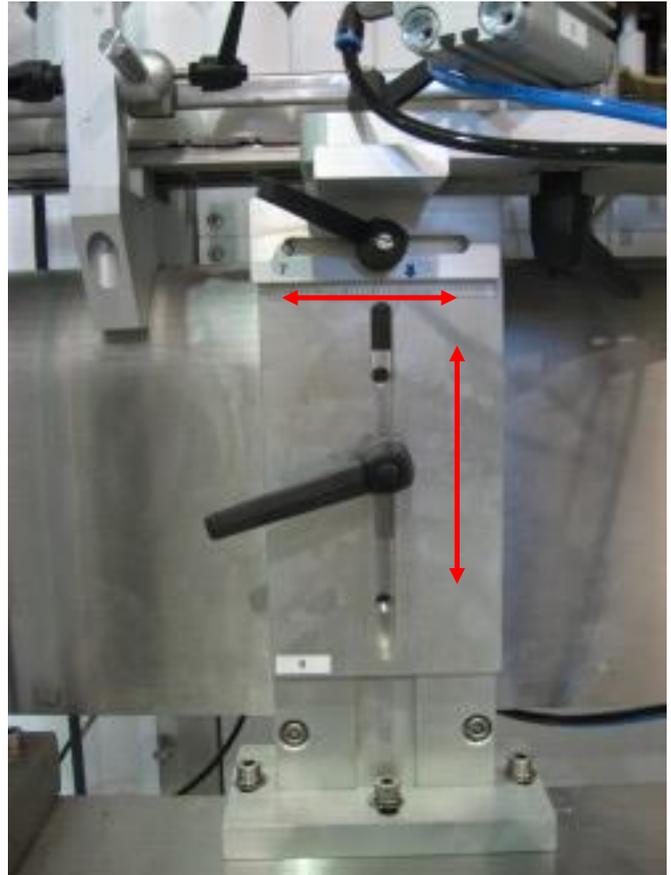


Figure Q.33 The starwheel can be adjusted Up and down or left and right.

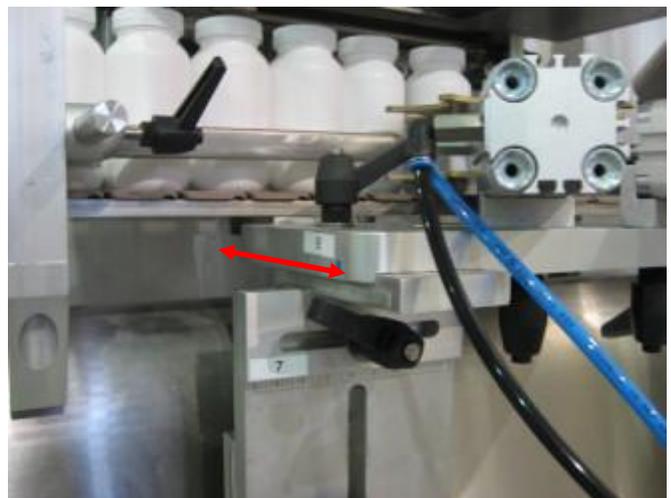


Figure Q.34 The adjustments can also move the star wheel assembly in or out from the container. The wheel must not be restricted by the rails.



Figure Q.35 The Starwheel should be set for sleeving so there is a small gap between the bottles so that the band falls down and sits neatly on the **starwheel** centrally on the bottle.

Options Setup

Band Tapper :	OFF
Manual Setup:	LOWER RAISE
Band Tap Travel Delay:	###
Band Tap On Time:	###

Return

Figure Q.36 Band Tapper Screen (Option)
In order to assist setting up the Tapper, you can lower it to the down position by pressing lower, and then raise it back up again by pressing raise.

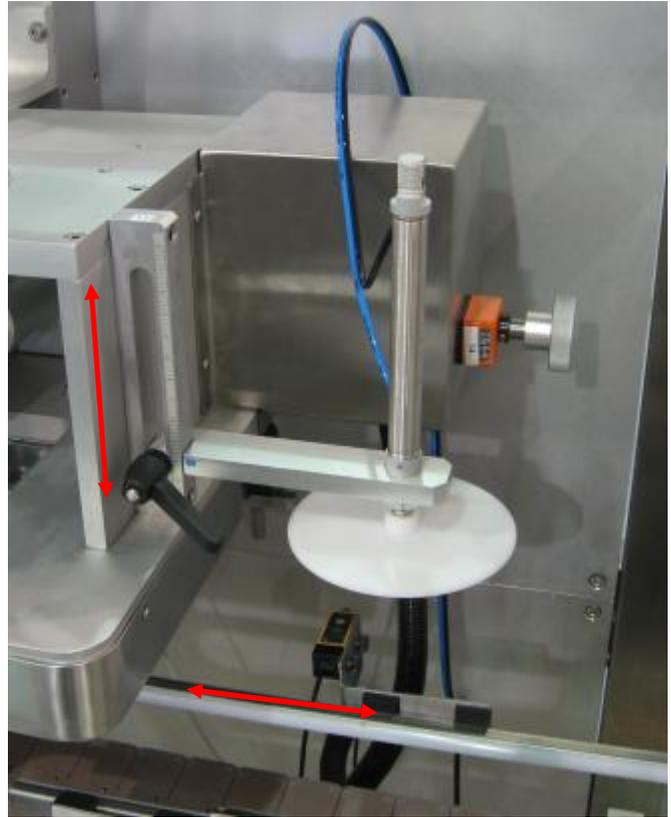


Figure Q.37 Adjust the height of the Tapper and adjust the position of the photocell so that the band Tapper works exactly at the right time.

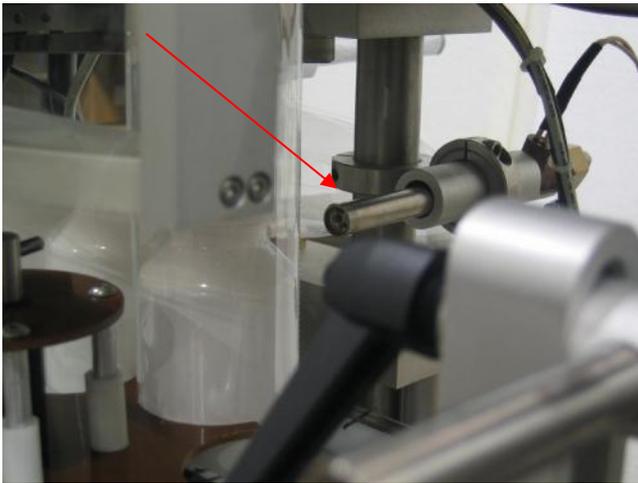


Figure Q.38 Band Tacker (Option) - If you are using just neck bands and have caps the same size or larger than the container you need to enable the Band Tacker and adjust it to just tack the band on to the neck.

This is not necessary if you are using a full body sleeve... you need the sleeve to fall down! Neither is it necessary if your container has a shoulder, as the neck band will rest on the shoulder.

Figure Q.39 If the band Tacker is left on with the machine idle for over 5 minutes the tacker will switch off, and if stack lights option was purchased the red light will flash and the screen will display "Tacker on with machine stopped". Press Reset to switch it back on and let it heat up before pressing start.

Figure Q.40 If there is a lack of air pressure the machine will trigger an alarm. If there are beacon lights, the red light will flash and the screen will display "Air pressure too low". To reset the alarm, the air must be placed at the correct pressure and then press the reset button.



Figure Q.41 Rotate the orange dial / crank to the correct position based on the size of your container. The machine needs to be high enough so that the full band length can go onto the container and pass under the machine. On the dial there is a number. Mark down the number for future reference.



Figure Q.43 Vertical & Horizontal Perforation Setup (Option)

The perf. position can be adjusted by loosening the two hex bolts with a 1/2" wrench. This will allow you to raise or lower the position. More adjustment can be acquired by loosening the two hex bolts on the opposite side with a 9/16" wrench. Cycle the shrink sleeve labeller a few times and verify if the perf. is in the correct position



Figure Q.44 The vertical perf. on this unit is fixed in the center of the band and is not adjustable along the horizontal axis; the length of the vertical perf. can be changed for longer bottle necks. The horizontal perf. can be removed with a 0.050 Allen key, loosen the six setscrews (4/40) bottom of the assembly, gently push in the peel off plate and slide perf forward.

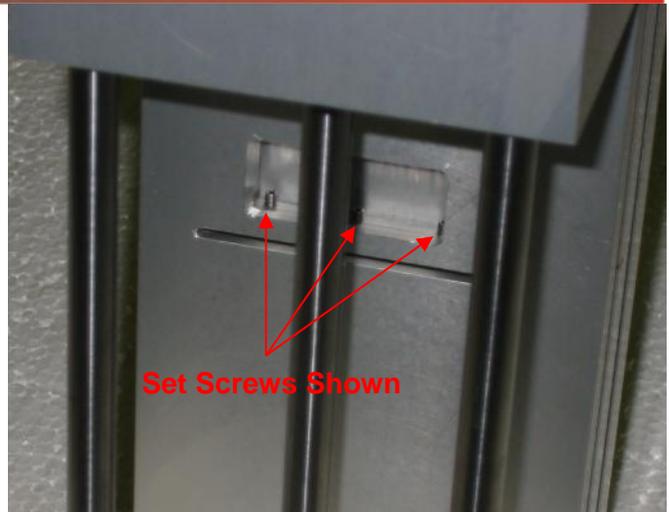


Figure Q.45 This figure shows the cut out to remove or adjust vertical perf. Three set screws must be loosened. Removal is same as the horizontal perf.

Film is threaded in front of the peel off plate. The pressure of the rubber roller, rolling along the perf. creates the two perfs. The peel off plate prevents the film from sticking to the rule.



Figure Q.46 On the back view of perf assembly you will find 10 adjustment screws (for clarity the upper and lower six hex nuts were removed).

To increase perf pressure, loosen the 4 inner hex nuts with a 7/16" wrench one or two turns. Use a 1/8" allen key to hold set screw from turning. Use the same procedure for the outer set screws with no hex nut. Loosen only, do not back off the hex nut. Now slowly turn the outer 6 set screws a quarter turn clockwise to increase pressure.

Now you can check by cycling the perf. When adjustment is correct hold the allen key on the outer 6 set screws and tighten the nut with 7/16" wrench.

Next tighten the inner hex nuts only. It is not necessary to turn the set screws.

The inner screws only hold the plate against the outer screws. The outer screws pushes the perf. forward against the roller.

Options Setup

Feed Type :	P.REG
Perforation :	OFF
Trigger Perforation :	TRIG
Band Tacker :	OFF

Return

Page 2

Figure Q.47 The Perforation Screen
Trigger Perforation will index the perforation attachment each time it is pressed.

General Description

The Aesus Packaging Systems, tamper evident neck banding and full body Sleeving machine along with its' shrink tunnel, provides an automatic system for automatically placing, cutting and shrinking sleeve material on conveyed containers. (raised bed sanitary stainless steel conveyor is also offered by Aesus Packaging Systems, Inc.).

This is performed by pulling down the flat plastic from a roll over a mandrel. The mandrel then automatically opens up the plastic into a cylindrical shape (which is sized to the inside diameter of the tubing). The plastic is then driven directly down onto the awaiting bottle which was previously aligned under the mandrel. A knife then slides below the mandrel and above the cap of the container and automatically cuts the shrink material. (the blade runs parallel to and in the same direction of the conveyor). The material is automatically cut to the desired length after it has already been brought down over the container to its' desired length. The method of cutting the band material once applied to the bottle allows for better control of the plastic versus other methods that cut the material prior to their application to the containers. Our method offers a lower risk for problems with static and application.

Bottles are indexed using a positive bottle handling system referred to as a 'Starkit'. (Note: an inline pneumatic gating version of the indexing system is available however will lower the speeds at which the containers are indexed.



Installation

Unpacking the Machine

The machine is packed in a single crate, together with a shrink tunnel (if ordered) and the necessary change parts kit required for the band sizes you desire running.

Remove the top and sides of the crate and immediately check the machine for any damage and if damage is found, immediately notify your carrier / transport company.

Remove the shrink tunnel and packages of change parts and put them in a safe place.

Installing the Machine

- 1 Remove the machine from the skid and place it at the desired height and position beside the conveyor. Bolt the machine in place to the conveyor.
- 2 Install the guide rails on your conveyor so that they permit free travel without allowing the bottles to jam.
- 3 Supply power to the machine: 120 volts 50 or 60 hertz, 1 phase or 240 volts, as applicable. Check the rating plate. Supply dry compressed air with a minimum of 80 psi, 3/8" NPT pipe connection is required.
- 4 Mount heat tunnel at least 12" downstream using the hardware included. Clearance holes must be drilled. See shrink tunnel manual supplied.
- 5 Bolt the Starkit assembly (bottle indexing system) onto the base of the Shrink Sleeve Labeller. In certain cases the starkit may mount to the conveyor. Connect sensors and air lines according to labels.
- 6 Special attachments can be mounted according to the special instructions provided.

***Note:** For Quick Setup instructions please see the Quick Setup section above.

StarKit (Or Optional Inline Gating)

- Aesus Packaging Systems, Long Shrink Sleeve Labeller and/or Tamper evident banding machines can use two different systems for transporting / indexing bottles through the machines; Starkit and an inline gating system. The indexer of choice by Aesus Packaging Systems. is the Starkit system due to the ease of set up, repeatability and little if any adjustments during production.
- The inline-gating version requires a different set-up. A set of two (optional 3) gates is used to index containers underneath the mandrel. These gates adjust sideways along a guide rail mounted at 45°. To properly position the bottles, the gate with the flat finger (Gate#2) must be approximately 1-1/2 container widths downstream from the mandrel. The gate with the pointed finger (Gate#1) should be positioned ½ width downstream from the center of the mandrel. Thus when the first gates are activated it will hold the container to be banded directly underneath the mandrel and while the second gate is activated it will cross the conveyor and block the flow.
- Position the containers for the correct front to back location by adjusting the guide rail to position the bottles directly beneath the machine.
- As with the Starkit version, the start sensor should be positioned slightly upstream of the machine to ensure an accumulation (approx. 3 ft) of containers (the machine should be loaded with bottles before being placed in Automatic mode). This will permit proper function of the gating system. Should there be any problem, do not hesitate to consult the Troubleshooting Section.
- Aesus Packaging Systems, manufactures a variety of heat tunnels. All models are positioned a short distance downstream of the Aesus bander (approx. 12 – 18 inches / 30 – 45 cm). All serve the same function: seal the heat sensitive band material onto the container. (See 'Shrink Tunnel' operator manual for further details).
- Each model is designed with inner slots that begin at the bottom near the tunnel entrance, and slowly rise upwards toward the tunnel exit. Due to this, each tunnel should be positioned such that the bottle enters the tunnel with the slots at the lowest point.

- The height of the tunnel is positioned so that the slots present a flow of hot air slightly below the bottom of the band material resting on the container. Two or more knobs that slide up and down in standard slot bars that have long vertical slots adjust this height. The amount of heat can be controlled either through direct electrical adjustment on the heat gun or by mechanically adjusting the position of the tunnel components.
- On smaller One Gun versions, metal baffles along the bottom and two vertical end baffles can be moved inward (closed) to increase the amount of heat or moved outward (opened) to lower the concentration of heat.
- Large Two gun versions have the added advantage of a split shell design that allows the sideways adjustment of both halves in order to further adjust hot air. Tightening the thumbscrews located at each mounting point can then lock the position.
- The exact positioning of the tunnel relative to the container depends on several important and related dynamic factors. An untested container/band combination will require a period of trial and error in order to find the best combination of conveyor speed, physical position, temperature, etc. However you may consult the Troubleshooting Section for information on systems and solutions. If your combination has been previously tested please refer to your Set-Up Data Sheets.

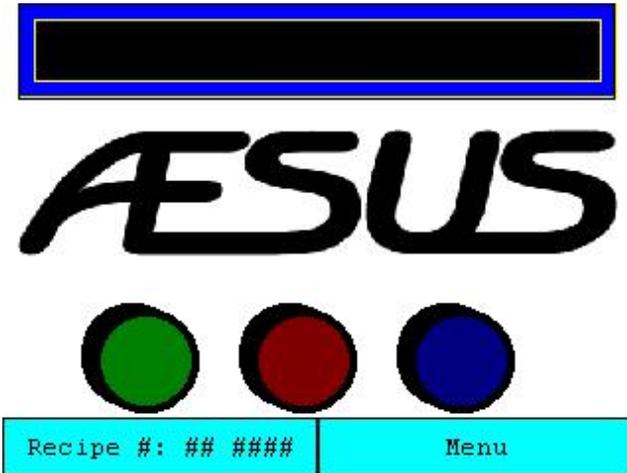
These sheets will provide the set-up information required to properly adjust the tunnel for each container.

WARNING: Heat tunnels are capable of generating a temperature in excess of 700°F. Please approach any adjustment with caution, as all metal components will be extremely hot.

IMPORTANT: Always let the heat guns cool gradually before removing power. Abruptly removing the power may result in premature gun failure.

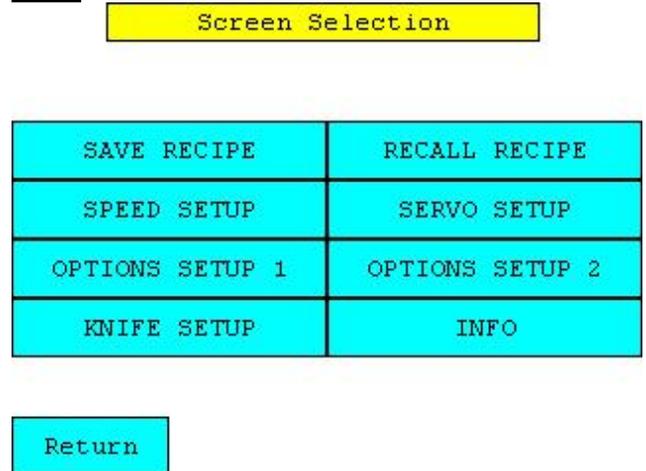
Screen Descriptions

Main Screen



1. **Display** - The display at the top shows the status of the machine and the alarm messages.
 - **Status:**
 - ✓ Machine Ready - Press Start
 - ✓ Machine Running;
 - ✓ Completing Cycle;
 - ✓ Outlet Accumulation: backup eye is blocked by product;
 - ✓ Waiting for product: not enough upstream accumulation;
 - ✓ Press Reset.
 - **Alarms:**
 - ✓ Tacker on with machine stopped : band tacker stays too long while the machine is not operating;
 - ✓ No Band: the band takes too long to be fed
 - ✓ Air Pressure Too Low;
 - ✓ Door Open;
 - ✓ Clear Estop and Press Reset.
2. **Pushbutton** - The green pushbutton starts the machine, the red pushbutton stops the machine and the blue pushbuttons resets alarms when the cause of the alarm has been removed or reset.

3. Menu -



Information Screen



This screen displays the settings of the parameters that must be set on the servo drive module, in case it is lost.

This screen also displays the Aesus contact details.

Recall Recipe Screen

Recall Recipe

####

1	2	3	4	5	6	7	8
9	10	11	12	13	14	15	16
17	18	19	20	21	22	23	24

Return

This displays the current recipe in use. The text field at the top of the screen displays the name of the recipe up to four alphanumeric. A new name can be entered there by touching this area.

To recall a recipe, the operator must press one of the keys numbered "1" to "25".

Save Recipe Screen

Save Recipe

Select Recipe Slot ###

Save Recipe ## ?

Return

To save a recipe the operator must press the "Save Recipe" button. When this button is pressed, the current settings will be saved to the recipe identified by the number in this box. To save in a different location than the currently displayed one, the operator must enter the desired recipe number in the "Select Recipe Slot" and entering the desired number.

Speed Setting And Product Counter

Speed Setting

Speed Setting (%)						###
30	50	60	70	80	90	100
Product Count				RESET	#####	
Start Eye On Time:						###
Start Eye Off Time:						###

Return

PAGE 2

The product counter counts product cuts in automatic operation and during jog operation. The counter counts from 0 to 99,999.

Reset Counter resets the count to zero.

The speed setting can be set from 30 to 100. This does not set the actual bottles per minute of the machine, but approximates it on very short sleeves. The actual speed obtained is a combination of band length and this setting.

The start Eye on time is a time delay before the machine will restart after containers have been absent. This is usually set to 10 (one second).

Start eye off time is a time delay before the machine will stop when the containers are absent. This is usually set to zero.

Servo and Set Up Screen.

Servo Setup	
Servo Frequency (1000 Hz) :	###
Band Length (mm) :	###
Feed Band :	FEED
Cut Band :	CUT
Index Starwheel :	INDEX
Jog Machine :	JOG
Return	

- **Servo Frequency:** This sets the speed at which the servo dispenses the band. Typically set to 125.
- **Band Length:** This parameter sets the length of band that will be fed. In photo registration mode, this must be set a bit **longer** than the actual desired length.
- **Feed Band:** This button allows the operator to trigger one feed, when the machine is not in automatic operation.
- **Cut Band:** This button allows the operator to cut the band when the machine is not in automatic operation.
- **Jog Machine:** This button jogs the machine for as long as the operator holds the button pressed.
- **Index Starwheel:** This button allows the operator to index the starwheel when the machine is not in automatic operation. Useful for Set ups.

Knife Set Up Screen

Knife Setup	
Knife Mode : (1-Shot/Alternate)	ALT
One-Shot On Time :	###
Trigger Knife :	CUT
Index Starwheel :	INDEX
Jog Machine :	JOG

- | | |
|--------|--------|
| Return | PAGE 1 |
|--------|--------|
- **Knife Mode:** This allows the user to change knife mode depending on the operating speed. The choices are alternating and one-shot mode; this is usually set to one shot mode; alternating being when the knife is cutting in both directions.
 - **Knife On Time:** When in alternating mode, this parameter sets the time the knife will stay on thus affecting the duration of the stroke in multiples of (0.1s).
 - **Cut Band:** This button allows the operator to cut the band when the machine is not in automatic operation to help in setting up the knife.
 - **Jog Machine:** This button jogs the machine for as long as the operator holds the button pressed.
 - **Index Starwheel:** This button allows the operator to index the starwheel when the machine is not in automatic operation. Useful for set-ups.

Options Setup Page 1

Options Setup

Feed Type :	P.REG
Perforation :	OFF
Trigger Perforation :	TRIG
Band Tacker :	OFF

Return

Page 2

- **Feed Type:** This allows the user to choose between Photo Registration(Optional Extra), and Clear band (no Photo registration).
- **Perforation:** Optional Extra for horizontal **and** vertical perforation. This allows the operator to turn the perforation on or off.
- **Trigger Perforation:** This allows the operator to trigger one perforation (horizontal, if fitted) when the machine is not in automatic operation.
- **Band Tacker:** This allows the user to turn the band tacker on or off.

Options Setup Page 2

Options Setup

Band Tapper :	OFF
Manual Setup:	LOWER RAISE
Band Tap Travel Delay:	###
Band Tap On Time:	###

Return

- **Band Tap:** This allows the user to turn the band tapper on or off.
- **Manual Setup (Lower – Raise):** This allows the operator to set the tapper down or up to allow the operator to adjust the band tapper to the correct height. This feature is available only when the machine is not in automatic operation.
- **Band Tap Travel Delay:** This sets the time the bottle must travel between the photocell and the band tapper.
- **Band Tap On Time:** This sets the time the band tapper will stay down.

Troubleshooting

Problem / Symptom	Solution
Band bunches up on container (starkit)	Reposition the starwheel under the mandrel
Band bunches up on container (in-line gating)	Reposition gates left to right, and guide rails front to back.
Band falls down the container before shrinking	Select smaller band layflat and/or Use a band tacker to hold the band.
Band twists on mandrel between guides	Long Shrink Sleeve Labeller, verify proper layflat of band material. Check Roller Tension
Band tears on mandrel when using perforation option	Reduce pressure of perforation assembly
Band not far enough onto container (neck bands)	Lower bander. Use band tapper (option)
Band not to the bottom of container (body bands)	Use band tapper (option)
Band goes over bottle but still bunches up before cut	Raise bander
Bottles jam entering the starwheel in starkit	Increase conveyor speed Decrease machine speed Verify position of starwheel
Gating fingers (option) pierce container	Increase conveyor speed Decrease machine speed Verify gate positions
Knife fails to cut/daisy chains sleeves together	Verify air pressure Remove air/verify condition of cutting edge Remove air/verify for smooth cylinder action Sharpen Knife
Large "V" cut on sleeve	Verify air pressures Verify for tight band on mandrel Remove air/verify for smooth cylinder action Depending on machine speed. Open flow control Verify tension on reel assembly Reduce bladder pressure Verify for unusual tension through rollers or options Sharpen Knife
Poor quality cut	Remove air/verify condition of cutting edge
Material splits open on fishtail or mandrel	Compare layflat size to change parts Verify for tight fit of material on mandrel Verify for a smooth radius on the corners of the fishtail Check the band is of a consistent size throughout the roll Inspect material for excessive perfs or tears

Problem / Symptom	Solution
Length of cut shorter than set	Long Shrink Labeller – Verify tension of drive rollers Verify for dirty or worn drive rollers Verify for tight material on mandrel Verify for excessive reel tension Verify for binding in optional attachments
Material reel unwinds excessively	Set reel tension by turning knurled knob (rear) clockwise See Figure Q.7
Material winds off the roll off-center	Center roll by eye to center of fishtail Re-adjust roller guides
Material seems tight on the roll	Set reel tension by turning knurled knob (rear) counter clockwise See Figure Q.7
Machine fails to stop when material runs out	Verify function of photocell Red LED should be lit. If no band present adjust sensitivity or clean reflector.
Machine will not start on automatic	Verify that power is on Set machine speed to required rate Set appropriate switch to Automatic Enable machine action via switch if fitted Properly close safety guards Verify band material detect photocell Verify bottles detected by start eye Verify safety backup Verify condition stops, i.e. E-stop
Machine action seems to stop and go	Verify poorly positioned safety backup sensor Verify for poorly positioned start sensor
Machine speed seems too high	Reduce machine speed setting
Machine speed seems too low	Increase machine speed setting
A particular machine action seems disabled, i.e. knife does not move	Verify air pressure Remove air/verify the smooth action of cylinders Verify individual solenoid function by flashing of LED when machine is cycling Verify source of 24V. Verify LED flash of output on the PLC
Excessive wear on gripper	Verify for tight band material on mandrel Verify for excessive tension on reel or dancing rollers Verify for excessive air pressure – see Data Setup Sheets Verify for dirty or worn gripper
Excessive wear on knife	Inspect for poor quality finish on cutting edge Return knife to factory for re-sharpening
Little or no shrinking inside heat tunnel	Verify power source Verify heat and air flow for each gun (if applicable) Allow proper warm up time – application specific Inspect for closed slots due to possible warping Reduce conveyor speed Close tunnel baffles and / or reduce opening width Check for Drafts, Open Doors, or Fans

Problem / Symptom	Solution
Poor quality (wrinkles) shrink	Verify heat and air flow for each gun Allow proper warm up time – application specific Inspect for closed slots caused by possible warping Reduce conveyor speed Close tunnel baffles Reduce opening width Adjust height of tunnel
Perforation splits in heat tunnel	Increase conveyor speed slightly Open tunnel baffles Increase opening width Reduce depth of perforation on the machine
Sleeve pulls down from top on container	Increase cut length of band Reduce concentration of heat Use Band Tacker Raise Heat Tunnel
Sleeve pulls up and waves from bottom of container	Increase conveyor speed slightly Open tunnel baffles Increase opening width Ensure downward placement of band Lower tunnel position Use Band Tacker
Band burns holes during shrinking	Increase conveyor speed slightly Open tunnel baffles Increase opening width Lower Heat Tunnel temperature
Bottles jam inside heat tunnel	Increase opening width

General Maintenance

Daily Maintenance

- Always ensure a clean dry source of compressed air with a minimum 80 psi.
 - Clean the grippers with rubbing alcohol after each changeover.
 - Clean any excess pieces of band material off the machine.
 - Tie change part components together to avoid any loss (storage in machine base will help prevent parts loss).
 - Tighten all thumbscrews used for adjustments or changeovers.
-
-

Weekly Maintenance

- Verify knife for any nicks or a dull cutting edge. Replace or re-sharpen if required.
-
-

Monthly Maintenance

- Empty any moisture that may accumulate in the filter bowl.
 - Clean completely all machine surfaces using only a mild detergent. Avoid solvents especially on plastic surfaces.
 - Verify and tighten any loose cylinder mounts (if required)
 - Verify BPM (Bottles Per Minute) settings and adjust if required.
 - Repeat weekly maintenance.
 - Verify drive belts servo model.
-
-

Yearly Maintenance

- Replace worn fingers on the gating system (if applicable)
- Verify tightness of gating / indexing assembly
- Repeat weekly and monthly maintenance



Machine Specifications & Options

LS200 General Machine Specifications

Description	Specification	Comments
Speed Range	0 – 180 bpm	Depends on individual applications
Layflat Range	Up to 212 mm	Roll stock only – seamed or seamless
Layflat Tolerance	+1 mm, -0	
Band Thickness Range	20 – 80 microns (1.0-3.0 mil)	
Cut Length	Up to 280 mm	Other models available
Material Roll	Core: 125mm –255mm (5"-10") Roll: Up to 560mm OD (22")	
Container Height Range	Up to 300 mm (12")	Depends on individual applications
Power Requirements	120 or 220 v, 1 phase, 60 hertz for Bander	15 AMP
Air Supply Requirements	80 - 90 psi	Clean Dry Air – A prefilter can be supplied on request.
Lubricants	Not required	
Software	Not required	
Machine Components	Stainless steel, anodized aluminum, high density polyethylene If this machine ever requires service or spare parts, please consult either the Recommended Spare Parts List for the various components/descriptions.	

Optional Mechanical Systems

1. An (Optional) upstream-motorized bottle pusher can provide assistance to the Starkit rotation mechanically. The desired bottle backup should be approximately 3 ft prior to entering the bander. The container's back pressure will automatically place each bottle individually into the starwheel indexer (weight of the container plays a role. This may vary per product). If the weight is not adequate then you may need this optional pusher.
2. Optional powered starwheel. Occasionally it may be necessary to power the indexing starwheel as well as supplying a pusher.
3. Air supply: If for any reason, your air supply is not free of water, oil and / or particles, you need install a filter accordingly. Pneumatic cylinders do not require oil lubrication as they are factory lubricated. Under no circumstance should the air inlet to the machine contain oil. Lubrication can only be used on the knife slider bearing. (LPS multi purpose grease maybe added every 5,000,000 bottles).
4. The timing of the machine, as well as any optional attachments, is controlled through an Allen Bradley programmable PLC. (Other PLCs "Programmable Logic Controllers" are available upon request at extra cost)
5. Start sensor photocell
6. Safety backup photocell
7. Band tacker
8. Band tapper (pneumatic)
9. Remote E-stop
10. Horizontal Perforation
11. Vertical Perforation
12. T-Perforation: Used on containers where you want to simply remove the top portion of the film from the container.
13. Photoregistration: This allows you to run printed band material that has a break in the film. Where there is this break or registration mark, the film will be cut so that there is the same sleeve on each container.



Recommended & Critical Spare Parts Lists

Recommended Spare Parts

Part Number	Description	Qty
EDT-86001	Air dump Solenoid	1
EDT-86003	Solenoid ¼	1
EDT-77111	Air cylinder	1
EDT-86002	Solenoid	1
EDT-88005	Heater 400W	1
GEN9510	Additional Starwheel	1
TUN015	Hotwind S blower 220V, 3700W w/ temp. Control	1
33511	Relay	1
31056	Fuse 15 amp 1 ¼ Bussman	1
31051	Fuse 2 amp 1 ¼ Bussman	1
31058S	Fuse 4 amp	1
31053	Fuse 6 amp	1

Critical Spare Parts

Part Number	Description	Qty
646557	Spindle for take up (for backing paper unit)	1
646560	Strap disk (goes with # 646557)	1
93602	Thrust bearing (goes with # 646557)	1
93603	Washer (goes with # 646557)	2
646940	Transport Roller Compl. H400 (Drive rubber roller)	1
600134	Black plastic roller (on basic unit "head")	1
680290	Label detector FS/01	1
32025	Dc Drive Dart	1
SLV61880	Double knife	1
SLV60255	Dual sided timing belt	1
EDT-79107	Timing belt (short)	1
EDT-40005	Sensor PNP	1



Electrical Drawings

Electrical Drawings for your particular machine(s) are inserted inside the electrical cabinet(s).
It is advisable to locate them and make a copy.
If you can not locate them please call our spare parts department.



Labelling Systems

Packaging Systems

Contact Information

For Spare Parts or Technical Help please contact us with the following information:

Aesus Packaging Systems, Inc.

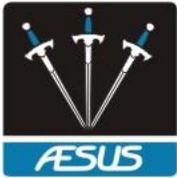
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Tamper Evident Neck Bander



High Speed Shrink Labeller



1 to 12 Head Liquid Fillers



Twin Head Auger Filler



Bottle Unscrambler



Inline High Speed Capper



Inline Re-torquer



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