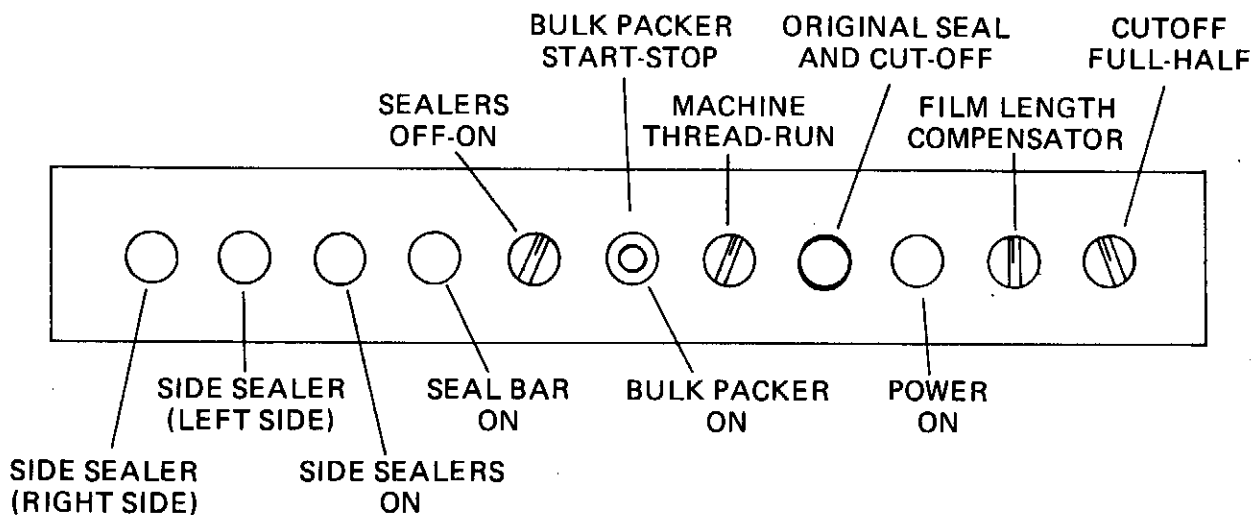


INTRODUCTION

The AMF Model H S Bulk Packer is designed to produce bulk packages of hamburger or hot dog buns over-wrapped in film at rates up to 800 hamburger buns per minute when assembled with the Model H Bun Packer. The Mobile Model H S Bulk Packer with Auxiliary Infeed Conveyor operates in conjunction with Model 600, Model 440, Model A, Model B, or with other infeed devices of similar bun discharge capability to produce wrapped bun packages. The Mobile Model H S Bulk Packer is self powered and needs to be connected to the appropriate electrical supply mains whereas the fixed base Bulk Packer is mechanically driven from the Model H Bun Packer. Both the fixed and mobile units discharge bun packages to a Take Away Table for manual removal or to a Basket Loader for automatic removal of the bulk packages. The Model H S Bulk Packer (fixed base) (Drawing 49965-078), the Mobile Model H S Bulk Packer (Drawing 49965-070), and the Auxiliary Infeed Conveyor (Drawing 44511-036) are described in this manual.

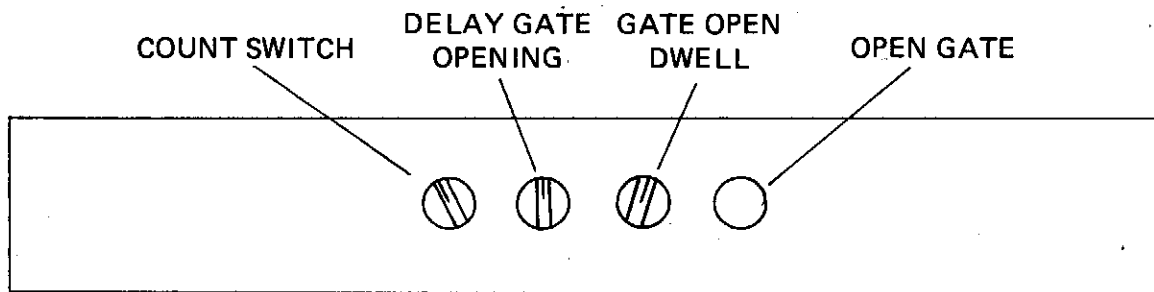
CONTROLS AND INDICATORS

BULK PACKER



CONTROLS	FUNCTION
SEALERS	Switch ON to energize seal bar and side sealers.
BULK PACKER	Pull to START Bulk Packer operation; depress for STOP.
MACHINE	Switch to RUN in normal operation, THREAD for film threading.
ORIGINAL SEAL AND CUTOFF	Depress to seal film for first bun-package.
FILM LENGTH COMPENSATOR	Rotate for increased or decreased package tightness.
CUTOFF	Switch to FULL for single pack; HALF for dual half pack.
INDICATORS	
SIDE SEALER (Left)	Lighted dim for left side sealer in normal operation.
SIDE SEALER (Right)	Lighted dim for right side sealer in normal operation.
SIDE SEALERS	Lighted for SEALERS in the ON position.
SEAL BAR	Cycle ON-OFF for seal bar in normal operation.
POWER	Lighted for main power ON to the Bulk Packer.

AUXILIARY INFEEED CONVEYOR (Used with Mobile Bulk Packer Only)



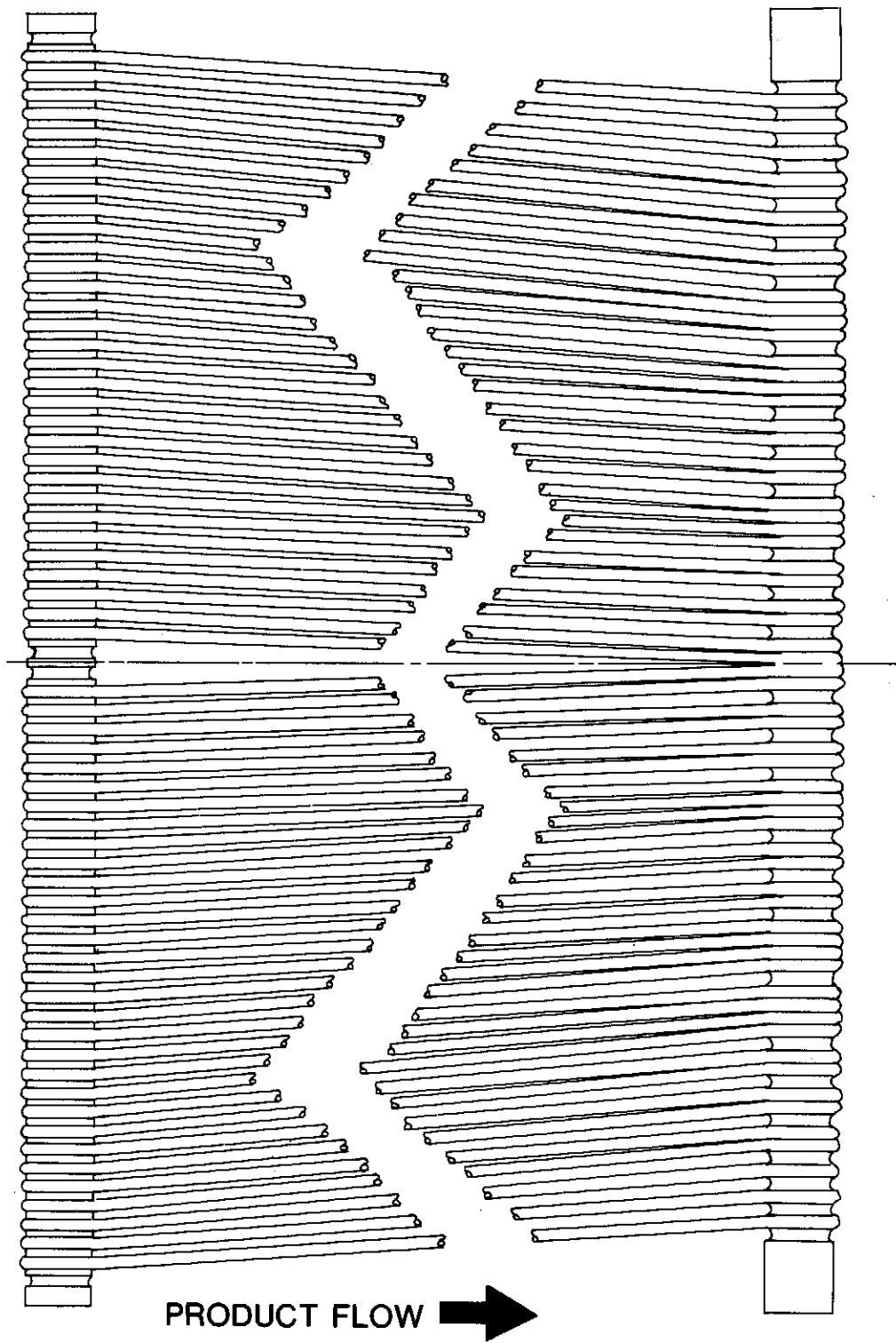
CONTROLS	FUNCTION
COUNT SWITCH	Set for number of bun groups collected at the infeed gate.
DELAY GATE OPENING	Rotate to vary time of infeed gate opening.
GATE OPEN DWELL	Rotate to vary time of infeed gate closing.
OPEN GATE	Push to open the infeed gate.

BULK PACKER OPERATION

The Model H.S. Bulk Packer receives buns for arrangement in rows of 20 to 28 inches wide for film packaging in arrays up to 26 inches along the product flow. Bun arrays delivered to the Bulk Packer are picked up by the Bulk Packer Infeed Conveyor which moves the bun array through a photoelectric sensor and into the Seal Bar and cut-off knife position. Photoelectric sensing of the leading and the trailing edges of the bun array initiates the Film Feed cycle for the film overwrap of the bun array and initiates the Seal and Cut-off cycle to seal across the bun package and separate it from the continuous film supply. Simultaneous seal is made for the front edge of the next bun array. Once cut off, the bun package is moved by the take away conveyor belts through hot air side sealers on the two sides to complete the bun package. The completed bun packages are discharged from the take away conveyor to a Take Away Table for manual unloading or to an accessory Basket Loader for automatic unloading.

AUXILIARY INFEED CONVEYOR (Reference Drawing 44511-036). For installations using the mobile bulk packer with auxiliary infeed conveyor attached, groups of buns are received on the left and right Infeed Belts and are routed along adjustable Bun Guides set for two or three bun widths according to four, five, or six bun width rows desired in the final package. Bun groups of one or more rows are counted by a photoelectric sensor as they pass the Control Box and are held up at the Gate Assembly until the number of bun groups is equal to the number set on the COUNT SWITCH at which time the Gate is programmed to open and pass the proper array of buns for bulk packaging. The Gate Assembly is movable along the conveyor using the Handwheel to locate the Gate such that the bun array held at the gate is clear of the photoelectric sensor beam by a few inches and allow the sensor to program the gate opening. A DELAY GATE OPENING control is adjusted to open the gate at the instant the last bun group arrives at the gate. A GATE OPEN DWELL control is adjusted to close the gate immediately after the end of the array clears the gate. An OPEN GATE Switch is provided for manual open and close of the gate independent of the sensor and counter action.

BULK PACKER INFEED (Reference Drawing 44551-013) Infeed bun arrays are picked up on the Spring Belts which move buns to the center of the machine as they travel towards the seal bar area. The Spring Belts should be arranged on the Spring Belt Pulleys as shown in the Spring Belt Diagram to properly bunch the buns in the center of the machine. Improper arrangement of the Spring Belts may cause buns to squeeze out of line in the bun array and, consequently, cause an improper package to be formed. The bun array in transit along the Spring Belt Conveyor passes through a light beam aimed at the photoelectric eye (PE2) which senses the leading edge (first row) and the trailing edge (last row) of the bun array. The photo eye sensor sets up the sequence for package seal and cut-off.



SPRING BELT DIAGRAM

SEAL AND CUT-OFF (Reference Drawing 44651-019) Upon arrival of the bun array at the Seal Bar area, film feed is initiated to draw film for overwrap of the bun array; a seal and cut-off is made to enclose and separate the bun array. Overwrap film feeds to the bun package through upper and lower pinch rollers which are synchronized to start and stop film feed as the leading and the trailing edges of the bun package pass through the seal bar. At the trailing edge, the seal bar closes to form the package seal and the cut-off knife raises to cut the package free from the continuous film rolls. A front seal for the next bun package is made at the same time with the result that the upper and lower feed roll films are always joined together. In proper operation, the SEAL BAR indicator light should cycle on and off to indicate that the seal bar is at the correct temperature for sealing the film. A FILM LENGTH COMPENSATOR control is provided for the operator to adjust the package tightness. If the bun package is too tight, clockwise adjustment of the COMPENSATOR will loosen the package; counterclockwise adjustment will tighten the package. When half-package seals are being made, the CUTOFF Switch should be placed in the HALF position and the infeed device should be delivering half package bun arrays. For full package seals, the CUTOFF Switch should be in the FULL position.

SIDE SEAL (Reference Drawing 45244-022) The cut off bun package traveling on the take away conveyor passes through left and right side sealers which seal the two sides to complete the bun package. In normal operation, the SIDE SEALERS indicator light should be on and the two SIDE SEALER indicators should be on and dim. If either SIDE SEALER indicator is off or is on-and-bright, the machine should be shut down for a heater replacement. The side seals are formed by hot air jets striking the film from above and below. Improper seals may result from heater controls set too high or too low, from improperly aligned heater nozzels, or from too much or too little air flow. DO NOT place hands in the hot air jet to check the operation.

FILM ROLL CHANGEOVER (Reference Drawing 42631-009) When either the upper or lower film roll nears the end of the film on the roll, the pole mounted FILM LOW indicator will light. The indicator will blink on and off to warn the operator that the changeover to a new roll of film is required. When the indicator lights continuously, the operator must be in position to make the changeover.

WARNING Moving machinery hazards may be present. The operator should not step on the machine and should not have on loose fitting clothing.

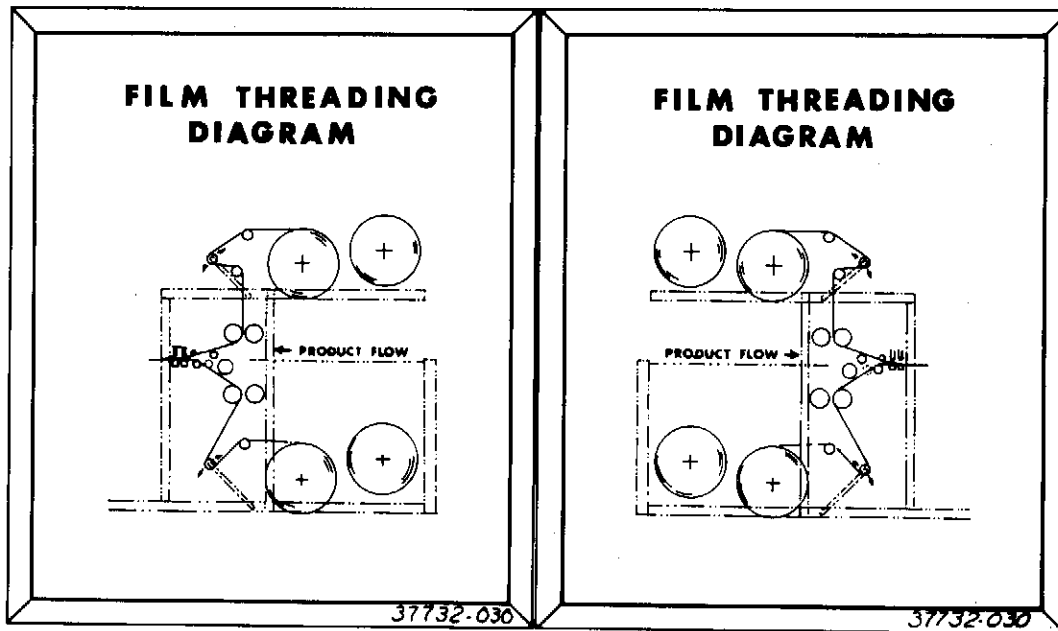
To make the changeover, a new film roll of the proper width must be in position on the Back Up Film Roll Supports. Pieces of sticky tape are placed at several places along the edge of the film such that the tape pieces hang over the film edge for sticking to the film on the depleted roll. At the proper moment when only a few feet of film is left on the depleted roll and the feed roll is stopped during the seal and cut-off cycle, the film edge of the new roll is laid onto the feed roll film. The tape should stick to the feed roll film and film should be drawn from the new roll in the film feed cycle. Once the film is feeding properly from the new roll, the

operator should cut away any film remaining on the depleted roll and should remove the core of the depleted film roll from the Active Film Roll Supports. The operator moves the new roll into the active film position by lifting the handle on the Back Up Film Roll Support to move the roll on the Ramp Plate until the arbor seats in the Roll Support Bracket. The operator should check that the Film Roll Guide is properly located.

FILM THREADING. When required, film threading is performed with the BULK PACKER control in the STOP (depressed) position, with MACHINE in the THREAD position, and with the plastic cover Knife Guard open.

WARNING High heat and sharp edges are present in the seal bar and knife area. Operators should be particularly careful not to touch the seal bar or knife.

Film is pulled off the Feed Rolls, around the Slack Stick, through the opened Pinch Rolls, and through the seal bar area as shown in the Film Thread Diagram. A Film Thread Diagram is located on each side of the H S Bulk Packer. Pull a few feet of upper and lower feed film through the seal bar and pull the film wrinkle free across the width of the pinch rolls and seal bar. Switch MACHINE to RUN which closes the pinch rolls. Then perform an initial Seal and Cut-Off (described below) to set up the machine for product packaging. Close the Knife Guard and pull BULK PACKER to START.



INITIAL SEAL AND CUT-OFF. In normal operation with the Bulk Packer ready to receive product flow, film from the upper feed roll and from the lower feed roll is joined in a seal at the seal bar. In the event a new seal is required, depress BULK PACKER to STOP, switch MACHINE to THREAD, and open the plastic cover Knife Guard. Pull a few feet of upper and lower feed film through the seal bar, and return MACHINE to RUN. Observe the warning for the hot seal bar and sharp knife; be particularly careful not to touch the seal bar or knife. With one hand, hold the upper and lower film ends flat against the take away conveyor. Check that hand is clear of the seal bar, then depress ORIGINAL SEAL AND CUTOFF. Discard scrap film; close the Knife Guard; and pull BULK PACKER to START for normal packaging operation.

BULK PACKER SET-UP AND CHECKOUT

The following tables present a procedure for the set-up and checkout of the Model HS Bulk Packer as may be required for start-up or for a product changeover. Instructions for the Auxiliary Infeed Conveyor pertain only to the mobile bulk packer with auxiliary conveyor attached.

AUXILIARY INFEEED CONVEYOR		
OPERATION	CONDITION	REFERENCE
BUN GUIDE SET	Left and right and center Bun Guides are set for two or three bun widths per side according to bun infeed.	44511-036
GATE POSITION	Positioned by the Handwheel, the Gate Assembly is located for the bun array to clear the sensor beam	44511-036
COUNT SWITCH	Set at number of bun groups required per bulk package.	46551-231
GATE OPEN DELAY	Operating with product flow, adjust DELAY GATE OPENING for gate to open simultaneous with arrival of last bun group.	46551-231
GATE CLOSE DELAY	Operating with product flow, adjust GATE OPEN DWELL for gate to close immediately after the bun array clears the gate.	46551-231

BULK PACKER		
OPERATION	CONDITION	REFERENCE
FILM ROLLS READY	Film feed rolls centered, if not adjust Film Roll Guide. Film roll sensors resting on rolls.	42631-009
MANIFOLD AIR PRESSURE	Manifold pressure regulator set at 60 psi (414 kPa)	49930-112
SIDE SEAL AIR PRESSURE	Right end pressure regulator set at 40 psi (276 kPa)	49930-112
BUN-PACKAGE CUTOFF	FULL for full package seal HALF for dual half package seal	Controls & Indicators
FILM LENGTH COMPENSATOR	Set at midposition	Controls & Indicators
<p>WARNING Electrical hazards are present in the Panel Assembly. Operations in the panel must be performed only by qualified personnel.</p>		
FILM FEED DELAY	Set TR4 at midrange	46551-232
FEED/SEAL CYCLE	Set TR7 at midrange	
FAR SIDE SEAL HEAT	Set POWERSTAT No. 1 at 80	
THIS SIDE SEAL HEAT	Set POWERSTAT No. 2 at 80	
SEAL BAR HEAT	Set POT1 to 230	
SIDE SEAL LOW PRESSURE DROPOUT	SEALERS in ON position SIDE SEALERS lighted (after delay) Reduce right end pressure regulator to not less than 30 psi (207 kPa); SIDE SEALERS should go OFF; if not, Refer to REPLACEMENT AND ADJUSTMENT Section of this Manual. Return the right end pressure regulator setting to 40 psi (276 kPa)	43351-031

OPERATION	CONDITION	REFERENCE
<p>WARNING High heat and sharp edge hazards are present at the seal bar and cut-off knife.</p>		
<p>FILM THREADING</p>	<p>MACHINE in THREAD position, pinch rolls open, feed brake released. Thread upper and lower films per instructions shown on machine.</p>	<p>Film Threading Diagram</p>
<p>FILM SEAL & CUTOFF</p>	<p>MACHINE in RUN position SEALERS in On position SEAL BAR is cycling on-off Knife Guard plastic cover raised, Hold film flat to conveyor and depress ORIGINAL SEAL & CUTOFF. Remove scrap film from machine and close Knife Guard.</p>	<p>Controls & Indicators</p>
<p>PACKAGE WIDTH</p>	<p>Pull BULK PACKER to START, switch is lighted (red). CAUTION: Conveyor belts must be running while adjusting width to avoid belt damage. Side Sealers are spaced to proper package width (loosen thumb screws; position each side sealer at package edge and retighten screws.</p>	<p>45244-022 Sheet 2</p>
<p>TRIAL BUN PACK</p>	<p>Typical product flow bun feed from infeed machine. Auxiliary Infeed Conveyor (as applicable) delivering closely packed bun array. Check for bun array centering, front to rear package tightness, side to side package tightness and proper seals.</p>	
<p>WARNING Electric hazards are present in the Panel Assembly. The following operations must be performed only by qualified personnel.</p>		
<p>ADJUST SEAL BAR HEAT</p>	<p>Rotate POT1 for best SEAL BAR heat seal, (Clockwise for higher heat).</p>	<p>46551-232</p>
<p>ADJUST SIDE SEALER HEAT</p>	<p>Rotate POWERSTAT No. 1 for proper far-side heat seal (clockwise for increased heat). Rotate POWER-STAT No. 2 for proper this-side heat seal (clockwise for increased heat).</p>	<p>46551-232</p>

**BAKERY SYSTEMS
DIVISION****OPERATION****CLASS 77 DIVISION 62**

OPERATION	CONDITION	REFERENCE
ADJUST FRONT SEAL	As required, to increase package front tightness- with FILM LENGTH COMPENSATOR centered- rotate TR-4 counterclockwise.	46551-232
ADJUST REAR SEAL	As required, to increase package rear tightness, rotate TR-7 counterclockwise.	46551-232
ADJUST FOR BUN HEIGHT	As required, rotate FILM LENGTH COMPENSATOR for fine adjustment of front to rear package tightness.	Controls & Indicators