



JEM INTERNATIONAL, INC.

BAG FLATTENER CONVEYOR

INSTALLATION & REPAIR MANUAL



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DESCRIPTION OF EQUIPMENT

JEM bag flattening conveyors are designed to flatten bags so that they can be palletized with more precision. Bags that have been flattened tend to make pallets more symmetrical, hold together better and have less freight damage than pallets with unflattened bags.

The unit consists of two 24" (60 cm) wide rough top belts. These belts are independent of one another and driven by separate gear motors. Both belts are running at this same speed.

The distance between the belts determines the thickness of the bags and is extremely critical. If the distance is too close, the bags will tend to burst due to this pressure. If the distance is too great, then the flattener will not properly do its job.

Setting the distance is by trial and error. Once the minimum distance is determined for the smallest bag, then set the stop bolts on the side arms to this spacing. These bolts will prevent the belts from coming closer together in the event of a loss of pneumatic pressure.

Setting the distance is done through pneumatic pressure on the filter regulator system. Connect incoming air pressure to the filter regulator. Increase pressure will inflate the two balloons and increase the distance between the belts. Decreasing the pressure will decrease the distance between the belts.

Air pressure is only necessary to change distance between belts.

OPERATION

Bags must enter flattening system bottom end first in order to be properly flattened.

Typically product settles in the bottom of the bag and it levels into the top of the bag by flattening systems. Conversely, if the bag enters top first, then the product in the bottom has nowhere to go when flattener operates and bursting can occur.

On setting system, it is advisable to set the belts too far apart and decrease this distance rather than burst bags in the trial and error process.

Installing Electrical Supply

The units have been supplied for 110 volt/single phase, 220 volt/single phase, 220 volt/3 phase, or 440 volt/3 phase power. The power for which the unit has been wired is marked on the motors. Be sure that the voltage supplied matches the voltage of the equipment.

OPERATION SET-UP

Pre-operation Checks

- Apply electrical power to unit
- Turn the on/off switch located on the control box to the “on” position
- The conveyors should now be running
- Check the alignment of the conveyor belts closely when first installed, as belt mis-tracking can occur during transportation. Conveyor belt tracking adjustments are located at the tail pulley of the conveyors. If the belts are running too far to the right of center, screw the take up arm out as to push it away until belts come back to center. One- quarter to one-half turn is all that is required at a time to prevent over-tracking.
- Belt tension should be so the belting on the return side has approximately 3/8” to 1/4” drop between return rollers. Over tightness of the belt will reduce the splice life.

MAINTENANCE

- Inject general purpose grease every 200 hours of operation, into the grease fittings on the head pulley and tail pulley bearings. 1 to 2 pumps with a grease gun is all that is needed. DO NOT OVER GREASE. This will cause premature bearing failure.

TROUBLE SHOOTING

<u>PROBLEM</u>	<u>PROBABLE CAUSE</u>	<u>REMEDY</u>
Conveyor suddenly shuts down	Overload of material Circuit overload	Check switches Unload conveyor Check circuit breaker
Conveyor belt is off center, or not tracking properly	Belt adjustment needed	Adjustment arms are located at each end of the conveyor. Adjust by pushing or pulling arm in and out. This is to be done while belt is running, and ONLY by authorized personnel. ¼ to ½ turn is normal adjustment.
Upper frame not sitting squarely over bottom frame	Leak in air system causing one air spring to not totally inflate.	The air springs may need to be replaced. Check parts list and order new air springs
Unit is turned on, doesn't run	E-stop depressed Wall disconnect power switch not on.	Check fuses, make sure unit is plugged in. Check circuit breaker.

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BAG FLATTENING CONVEYOR PARTS LIST				
	PART #	DESCRIPTION	CODE	QTY.
11	0005000016	Gravity roller for flattener	R	5
9.1	0012003546	Motor, 1 HP 3PH 56C		
9.2	0012110125	Motor, 1-1/2 HP 3PH 56C		
	175034824	Support arm exit end		
	175034825	Support arm intake end		
	175034826	Support arm intake end		
	175034827	Support fixed air springs		
	175034831	Center support intake support		
12	17L2153	Type L Safety Switch		
	1740262310	Tail pulley flattener PZ		
	1760262311	Head pulley ACC.CNV.PALZ		
	3400200000	Shaft, head pulley flattener 1 1/4"		
	3400220000	Shaft, tail pulley flattener 1"		
	3600350000	8" x 10" enclosure		
	3700010003	Plate, reinforcement		
	3700010100	Side rail 10" slider bed		
	3700090001	Bracket, incline control box		
	3700170024	Pulley tail 24, 6"		
10.1	3700600007	Gear box 1 HP 30:1		
10.2	3700600008	Gear box 1 1/2 HP		
8	3770330040	Filter regulator		
	3800110011	Belting, upper	R	1
	3800110012	Belting, lower	R	1
	5022750004	Belt lacing 36" SS		
3	7623160020	Frame bearing narrow slot 1"		
2	7623160021	Bearing, narrow slot take-up 1"	R	2
5	7623180000	Pulley bearing	R	2
6	8331000000	Shock	R	2
	17SDS114	Bushing SDS 1-1/4"		
7	17EFS6910	Air spring PZ	R	2
	17GV2ME07	Starter, MTR protect amp 1.6-2		
	17GV2ME08	Motor protector 2.5-4		
	17LC1D09F7	Contactactor 110 volt coil		
1	17SC112	Bearing, PB 1 1/2" flattener		
	17SDS1	Bushing SDS x 1"		
4	17IDKK6	Safety stop cable		

R=RECOMMENDED SPART PARTS





