

OPERATION MANUAL

MAGNUM 1300 TB-U UNIFORM CASE SEALER



SERIAL NUMBER

Please refer to the serial number in all correspondence with Highlight or any Highlight Distributor. This identifies your machine and will help in our ability to quickly and efficiently respond to your needs.

Version 1.4 – May 2011

HIGHLIGHT
INDUSTRIES, INC.

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Chapter

1

HIGHLIGHT INDUSTRIES, INC.

Magnum® 1300 TB-U Uniform Case Sealer Operation Manual

General System Information

SYSTEM SPECIFICATIONS

Highlight Industries' Magnum® 1300 TB-U is an adjustable top and bottom belt drive case sealer designed to provide accurate, consistent tape application to uniform cases. *Highlight Industries' 200 series* tape head will accept any 2-inch case tape and provide optimum case sealing to the top and bottom of the case. The system is designed to operate at up to 30 cases per minute. Stainless steel 16-inch long entry and exit conveyors are standard. Height adjustable legs from 22 inches to 32 inches with locking casters included.

Machine Size

- 64" L x 30" W x 54" H (with 16" L Entry Conveyor and 16" L Exit Conveyor, 36" L without)
- Shipping weight – 375 lbs on a pallet
- Tape Roll Diameter: 3" inside diameter core with up to 16" outside diameter
- Tape Roll Width: 1 ½" and 2" tape standard

Operation Space

- 75" L x 45" W x 70" H

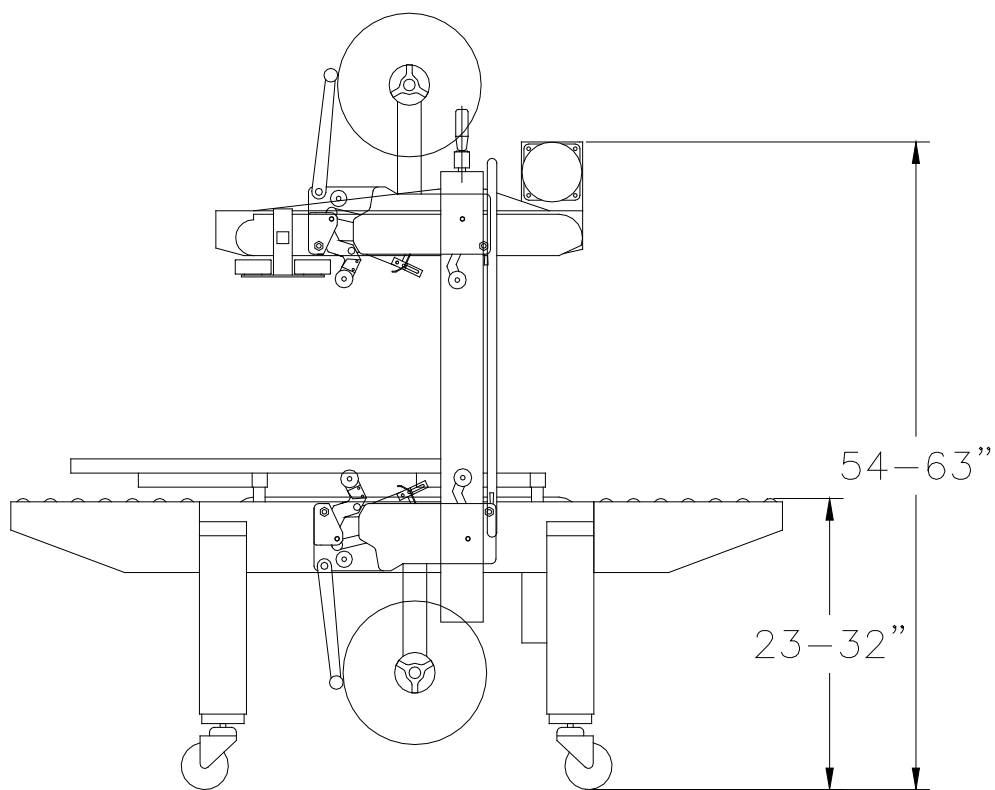
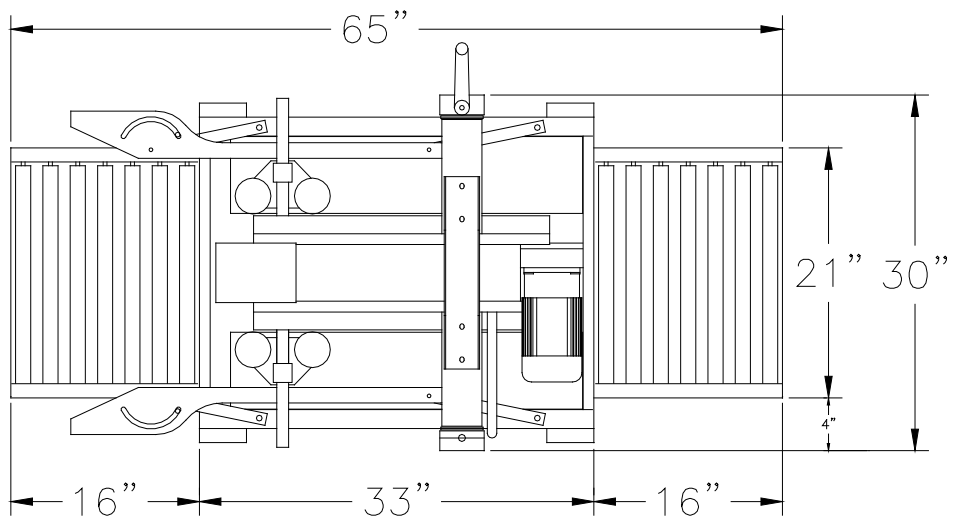
Electrical Data

- 120 VAC; Single Phase, 10 Amps, 60 Hz

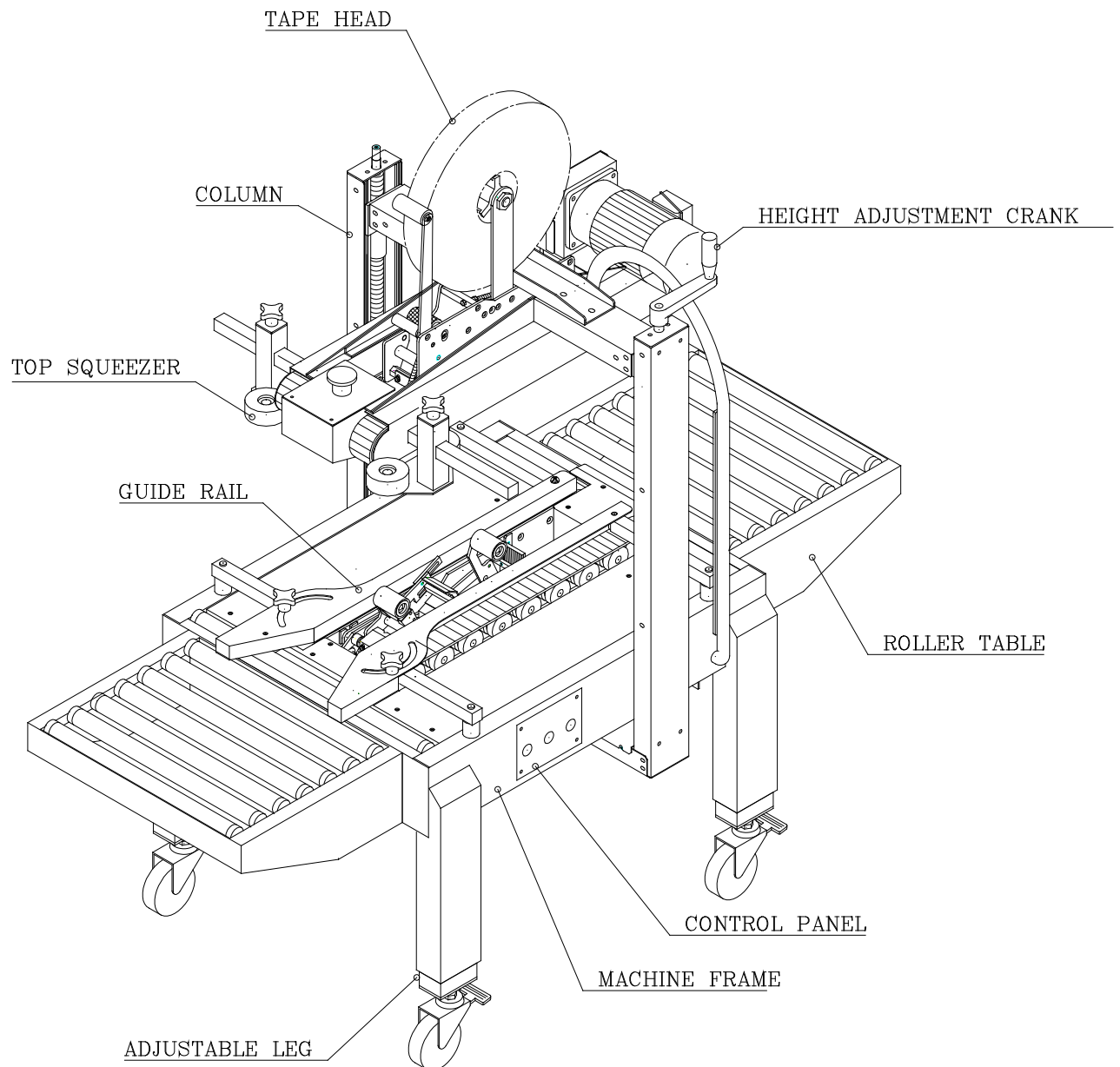
Production Capacity

- Operating Rate: Up to 30 boxes per minute depending on box length
- Case Belt Speed: 75 feet per minute
- Minimum Load Size: 5" L x 5.5" W x 5" H
- Minimum Load Weight: 4 lbs
- Maximum Load Size: 20" W x 20" H
- Maximum Load Weight: 75 lbs

SYSTEM OVERVIEW PRINTS

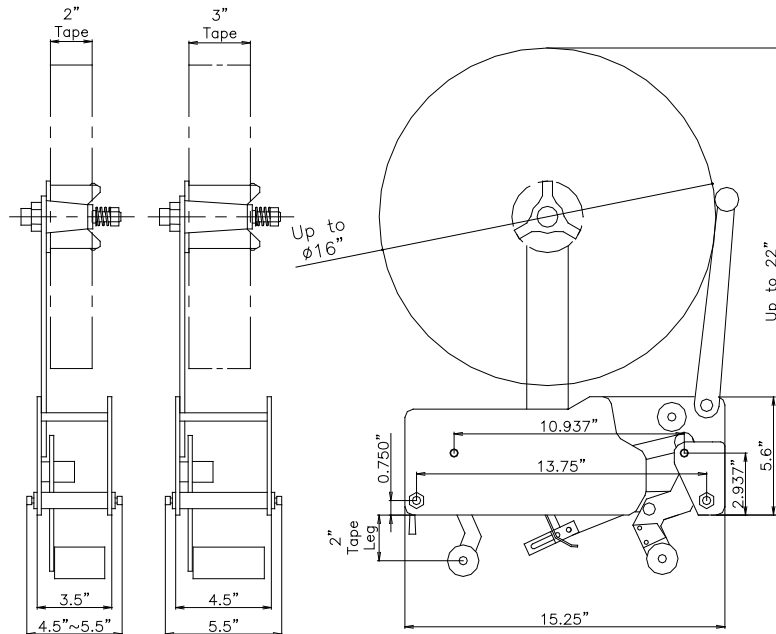


SYSTEM DESCRIPTIONS



TAPE HEAD & TAPE OVERVIEW PRINTS

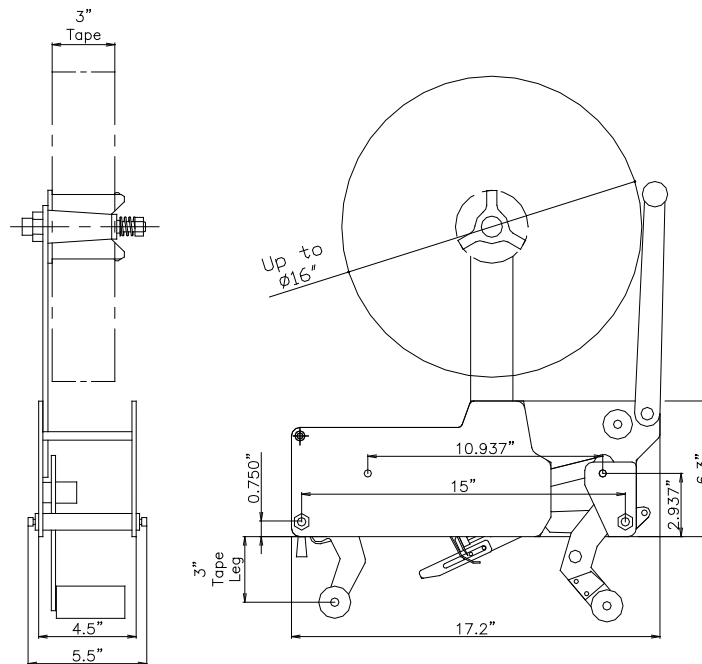
2"W Tape 3"W Tape 2" Tape Legs / 15.25"L Frame – REGULAR DUTY



***Tape heads w/ 2" tape legs are suited for general duty applications ***

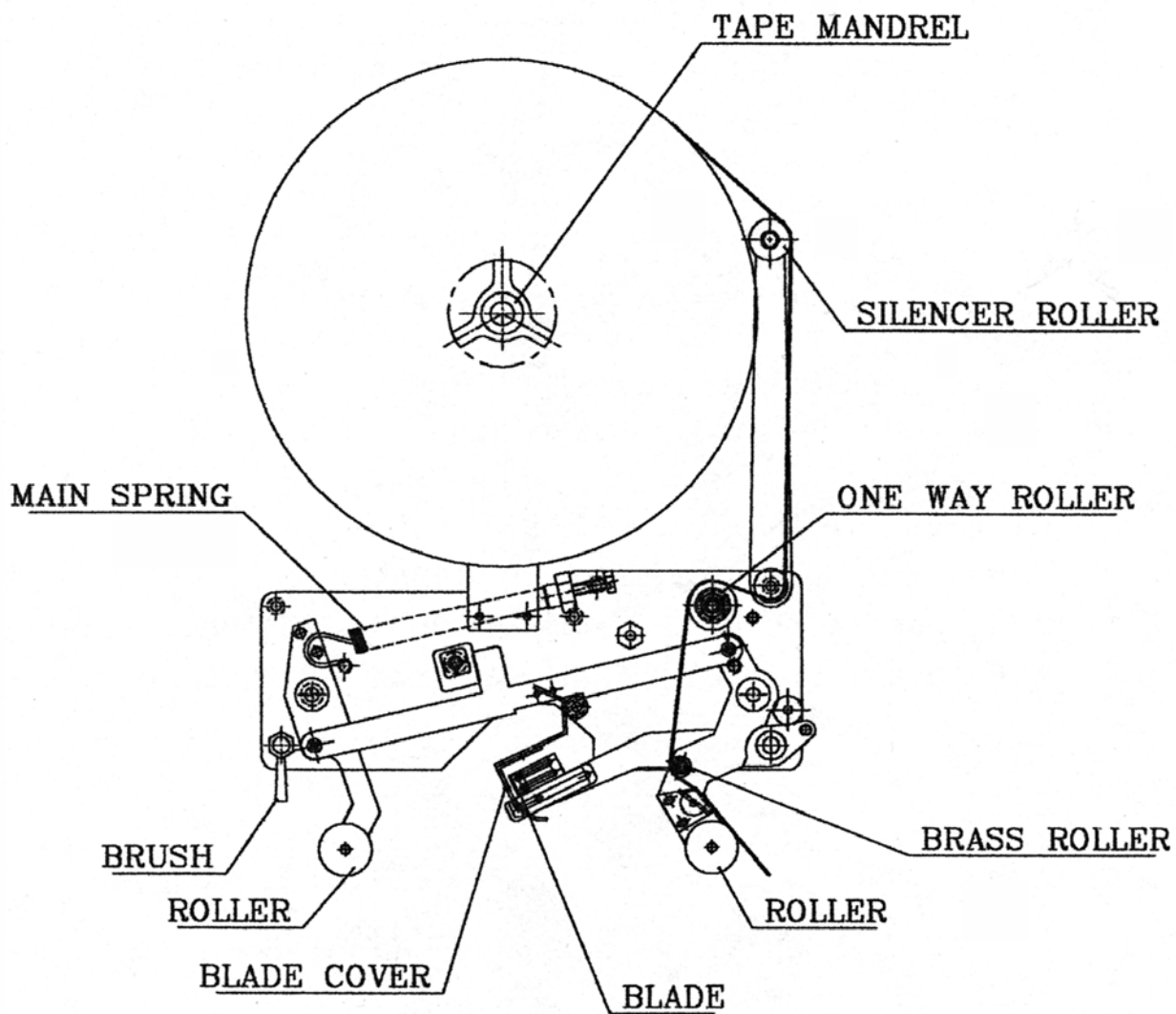
3"W Tape

3" Tape Legs / 17.2"L Frame – HEAVY DUTY BOXES



This head w/ 3" tape legs is for heavy-duty, double wall, or firm-packed cartons only

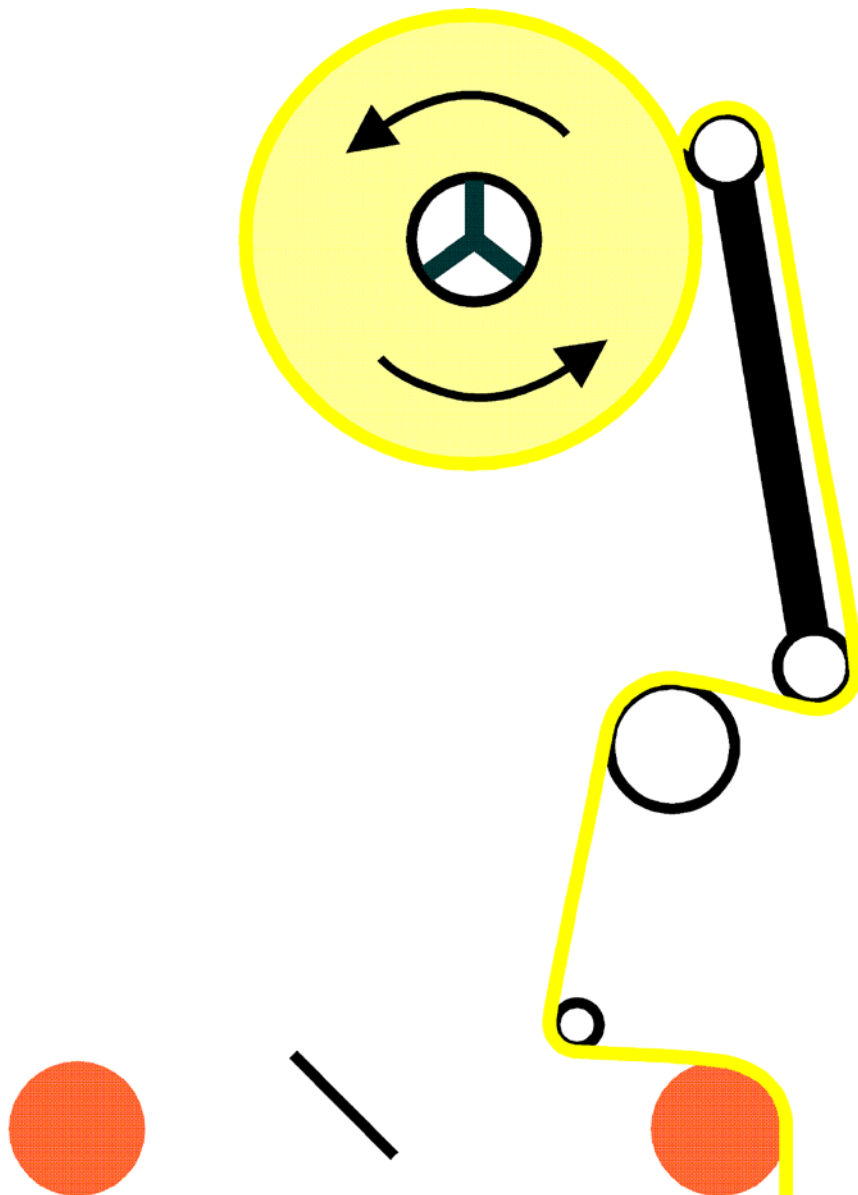
TAPE HEAD DESCRIPTIONS



TAPE THREADING DIAGRAM

NOTE:

Be sure **EMERGENCY STOP** button is pushed in before threading the tape and pulled out when tape is threaded.



LIMITED WARRANTY

Highlight Industries, Inc. warrants that its case sealers will be of merchantable quality, free from defects in material and workmanship as determined at the date of shipment, by generally recognized, applicable and accepted practices and procedures in the industry, for a period of:

1. The taping head knife blades, springs and rollers are warranted for ninety (90) days
2. All other taping head parts are warranted for three (3) years
3. All other parts of the Highlight case tapers are warranted for two (2) years

from the Highlight invoice date, under normal use and service.

When the Purchaser gives Highlight written notice of any alleged defect within the applicable warranty period, Highlight will, at its option, repair or replace the same free of charge F.O.B. its manufacturing plant, installation not included. Equipment replaced under the warranty shall have the same warranty as new equipment but does not extend the warranty of the original equipment.

Satisfaction of this warranty, consistent with other provisions herein, will be limited to the replacement or repair or modification of, or issuance of a credit for, the equipment involved, at Highlight's option.

Highlight neither assumes nor authorizes any person to assume for it any other obligation in connection with the sale of Highlight's equipment.

This warranty shall not apply to any equipment which has been repaired or altered by unauthorized personnel in any way so as to, in the judgment of Highlight, affect serviceability, or which has been subjected to misuse, negligence, accident, or to equipment made by Highlight which has been operated in a manner contrary to Highlight's instructions.

In no event regardless of the cause, shall Highlight be liable for penalties or penalty clauses of any description or any damages resulting from loss of profits, use of products or for any incidental indirect or consequential damages, even if advised of the possibility of such damages. This limitation of Highlight's liability will apply regardless of the form of action, whether in contract or tort, including negligence. Any action against Highlight must be brought within twelve (12) months after cause of action accrues.

"THIS WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES WHETHER EXPRESSED, IMPLIED OR STATUTORY INCLUDING IMPLIED WARRANTIES OF MERCHANTABILITY OF FITNESS AND EXTENDS ONLY TO THE BUYER OR CUSTOMER PURCHASING FROM HIGHLIGHT OR AN AUTHORIZED HIGHLIGHT DISTRIBUTOR."

HIGHLIGHT INDUSTRIES, INC.

Magnum® 1300 TB-U Uniform Case Sealer Operation Manual

Installation Instructions

SAFETY PRECAUTIONS

- Read the *Operation Manual* before operating the machine.
- Do NOT attempt to service the machinery unless you are qualified and understand the Operations Manual.
- Do NOT use extension cords to operate the system.
- Make sure nothing is on the power cable.
- Make sure nothing is on the upper tape head unit.
- Loose clothing must NOT be worn while the machine is in operation.
- Stay clear of moving parts while the machine is in operation.
- Do NOT allow dampness or water to enter the electrical units.
- Turn OFF power to the machine when it is not in use.
- NEVER try to remove jammed boxes from the machine while it is running.
- When feeding boxes manually, push boxes into drive belts using the end of the box, not with your hands on any corner of the box.
- Both tape heads use **EXTREMELY SHARP** knives! The orange guard is labeled. Know the knife's location BEFORE attempting to load and thread tape, or to make any tape head adjustments.

SEVERE PERSONAL INJURY AND/OR EQUIPMENT DAMAGE could result from failure to comply with the above.

MACHINE PLACEMENT

Inspections

Before installation, inspect the entire machine for visual damage. If found, please report this damage to the truck line. *Highlight Industries* has taken every precaution during the packaging and loading of this equipment. However, it is **YOUR RESPONSIBILITY** to inspect for damage before installation.

Positioning of the Machine

Place your Magnum® Case Sealer close to an area where you will be sealing your loads. Make sure that there is sufficient room to load/unload the machine and that you do not stretch the wiring cable. Remember, you will need to provide electrical service to a 120 VAC, 10 Amp-outlet. **DO NOT USE EXTENSION CORDS!!**

Floor Weight Bearing/Stress Tolerance

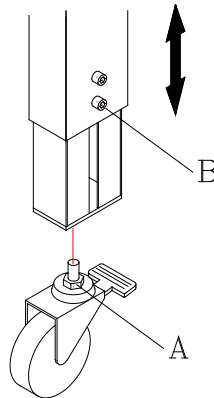
The floor must be able to bear the weight of the machine, plus the weight of the maximum load, which is 75 lbs, plus a safety factor. The floor must also be able to tolerate the stress of the machine's operation.

MACHINE SET-UP

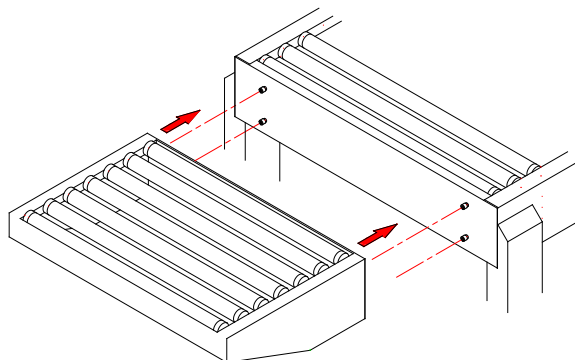
It is very important to read all instructions before undertaking any of these steps. The following steps should help achieving a safe and quick machine set-up.

1. Your Magnum® Case Sealer comes pre-assembled and ready for operation. Set up the machine where it will not be subject to moisture or damage to its power cord.
2. Although the Magnum® Case Sealer is pre-assembled, the casters allow for some height adjustment. To adjust height, loosen “B” screw on all four casters (see figure below), lift machine to desired height and retighten “B” screw.

NOTE: Nut “A” fixes the caster in place.



3. The rollers are detachable. They are held to the machine by four holding screws attached to the machine body. To detach the roller tables, loosen (complete removal is not necessary) all four holding screws, then lift the table straight up and pull out. The table has four slots fitting over the screws (see figure below).



Chapter

3

HIGHLIGHT INDUSTRIES, INC.

Magnum® 1300 TB-U Uniform Case Sealer Operation Manual

Operation Instructions

SAFETY PRECAUTIONS

- Read the *Operation Manual* before operating the machine.
- Do NOT attempt to service the machinery unless you are qualified and understand the Operations Manual.
- Do NOT use extension cords to operate the system.
- Make sure nothing is on the power cable.
- Make sure nothing is on the upper tape head unit.
- Loose clothing must NOT be worn while the machine is in operation.
- Stay clear of moving parts while the machine is in operation.
- Do NOT allow dampness or water to enter the electrical units.
- Turn OFF power to the machine when it is not in use.
- NEVER try to remove jammed boxes from the machine while it is running.
- When feeding boxes manually, push boxes into drive belts using the end of the box, not with your hands on any corner of the box.
- Both tape heads use **EXTREMELY SHARP** knives! The orange guard is labeled. Know the knife's location BEFORE attempting to load and thread tape, or to make any tape head adjustments.

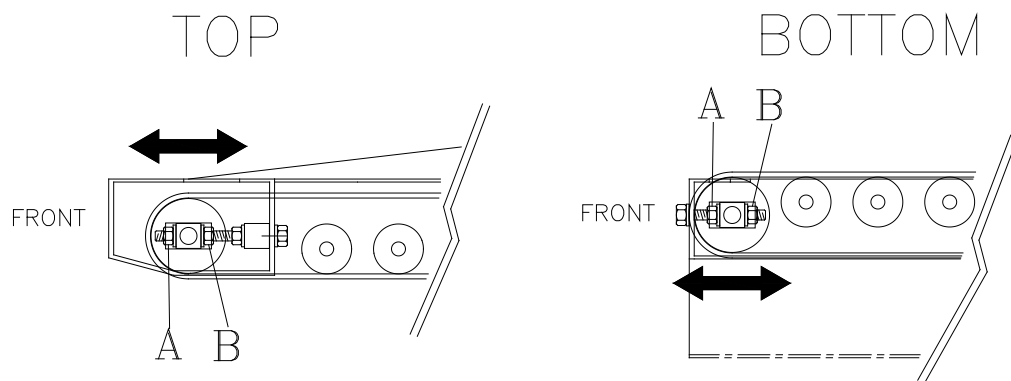
SEVERE PERSONAL INJURY AND/OR EQUIPMENT DAMAGE could result from failure to comply with the above.

PRE-OPERATION ADJUSTMENTS

BELT ADJUSTMENT AND REPLACEMENT

Adjustment

Press the Emergency Stop switch and unplug the machine electrical cord. For upper belts, remove E-Stop cover plate. For lower belts, remove small cover plate (#8 on VII-4) in front of bottom tape head. Loosen jam nuts (A) & (B) and adjust the belts to a suitable tension using jam nuts (B). Be sure to adjust both jam nuts (B) equal amounts so both belts are under the same amount of tension. See figure below. Proper tension is reached when the belts can be pulled by hand and the rear driven pulley rotates with the belt movement and does not slip. Tighten jam nuts (A) to lock in the tension setting.



Replacement

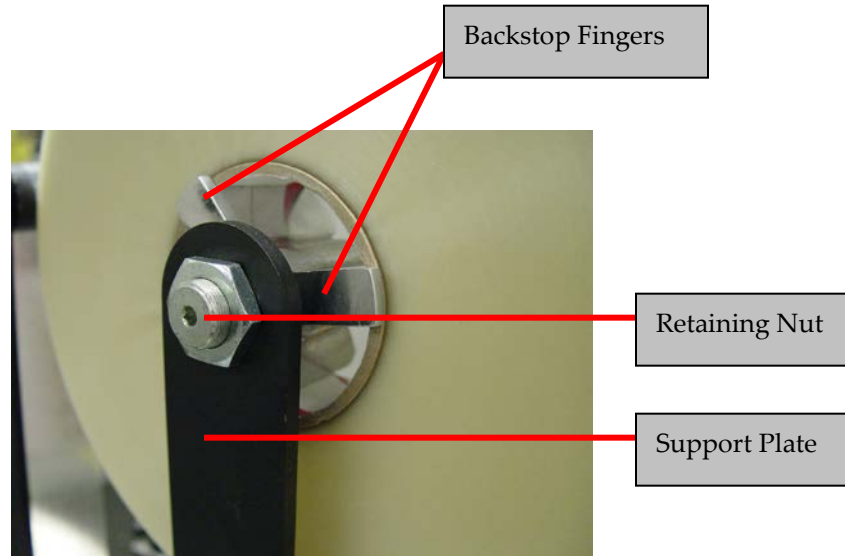
Read through above procedure first. For upper belt replacement, also remove the side squeezer rollers and belt side guards. For lower belt replacement, remove the lower filler panels adjacent to each belt. Loosen jam nuts (B) until the belt has enough slack to be removed from the pulleys. Install the new belt ensuring v-guide is seated completely in the pulley grooves. Tension belt as described above and reinstall the removed components.

Tape Head Adjustment

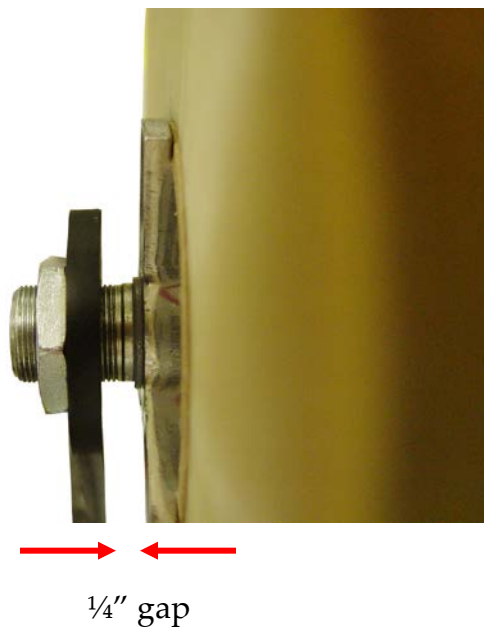
The tape knife in the tape head is **EXTREMELY SHARP!** The orange guard is labeled with a warning. **KEEP ALL BODY PARTS AWAY FROM THE TAPE KNIFE AT ALL TIMES!** Failure to comply could result in **SERIOUS PERSONAL INJURY!**

A. Centering the tape on rollers:

1. Make sure the tape is pushed fully against the backstop fingers (see figure below).



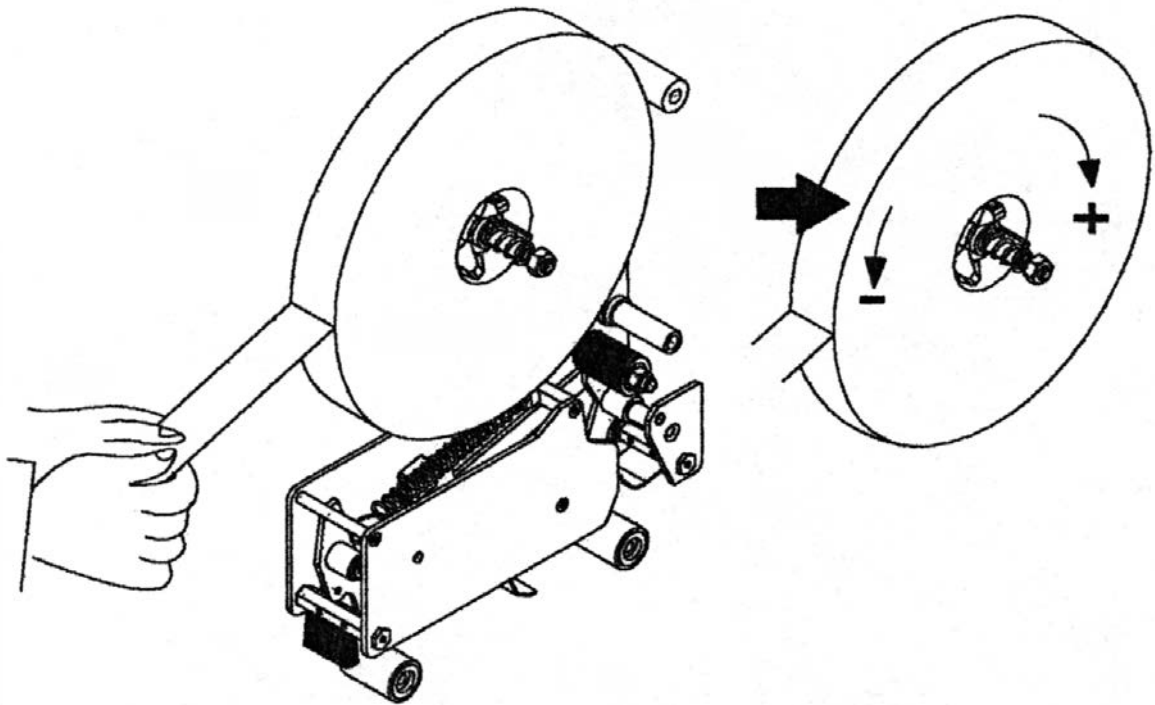
2. Loosen the retaining nut several turns, but do not remove it altogether.
3. Standing on the tape loading side (side opposite from the controls), turn the roll of tape (which will also turn the spindle) clockwise or counter-clockwise until there is about $\frac{1}{4}$ " gap between the support plate and the backstop fingers (see figure below).



4. Tighten the retaining nuts.
5. From the opposite side of the control panel, thread the tape through the rollers according to the tape-threading diagram.
6. If the tape is not quite centered on the bass knurled roller as you pull the tape through, loosen the retaining nut a few turns again. Turning the roll of tape and the spindle clockwise will move the tape toward the controls side; turning it counter-clockwise will move the tape toward the opposite of the control panel.
7. When finished adjusting, tighten the retaining nut and check how the tape moves through the rollers.

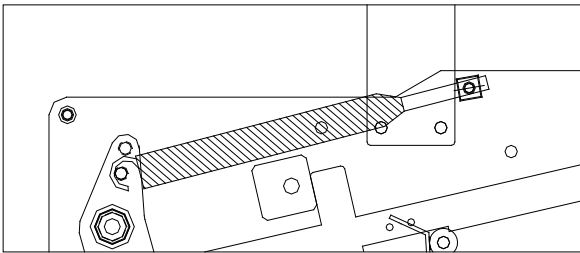
B. Checking the tape tension

The tape friction is preset to normal operation. Tape tension can be increased or decreased as desired. Increase tension by turning the locking nut on the shaft clockwise; decrease tension by turning counter-clockwise. Too much braking force applied to the tape will cause poor tape application and may lead to tape tabbing on the trailing tape leg.



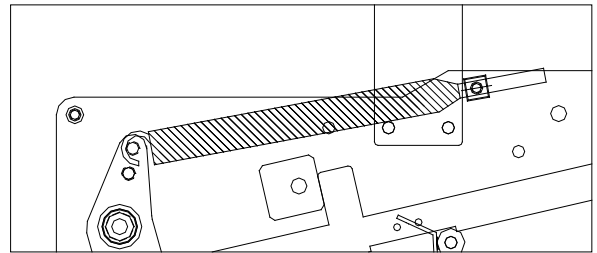
Spring Adjustment

The main spring adjusts the amount of tape wipe down on the front and rear tape legs and their respective edges. For lightweight, unstable boxes, or weak corrugated, decrease the spring tension to prevent the cases from stalling, tilting/jamming, or deforming from high roller force. For the heavier boxes and strong corrugated, increase the spring tension to ensure maximum tape wipe down. Use the inner screw position on the rear roller arm for the low tension range and the outer screw position on the rear roller arm for high tension. The threaded rod can be tightened or loosened for fine tuning each of the tension ranges. See below.



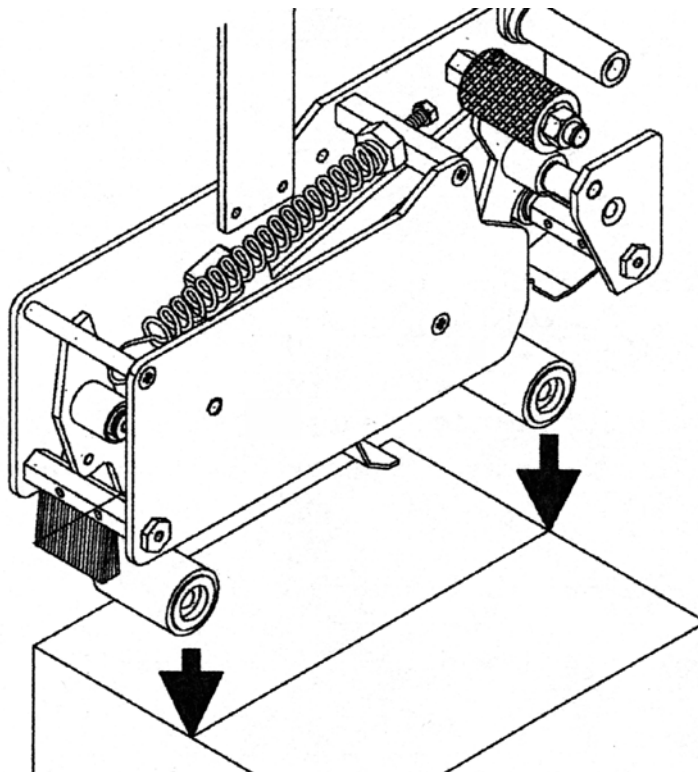
Lowest possible tension setting shown above.

- Inner screw position on rear roller arm
- Loosened threaded rod position



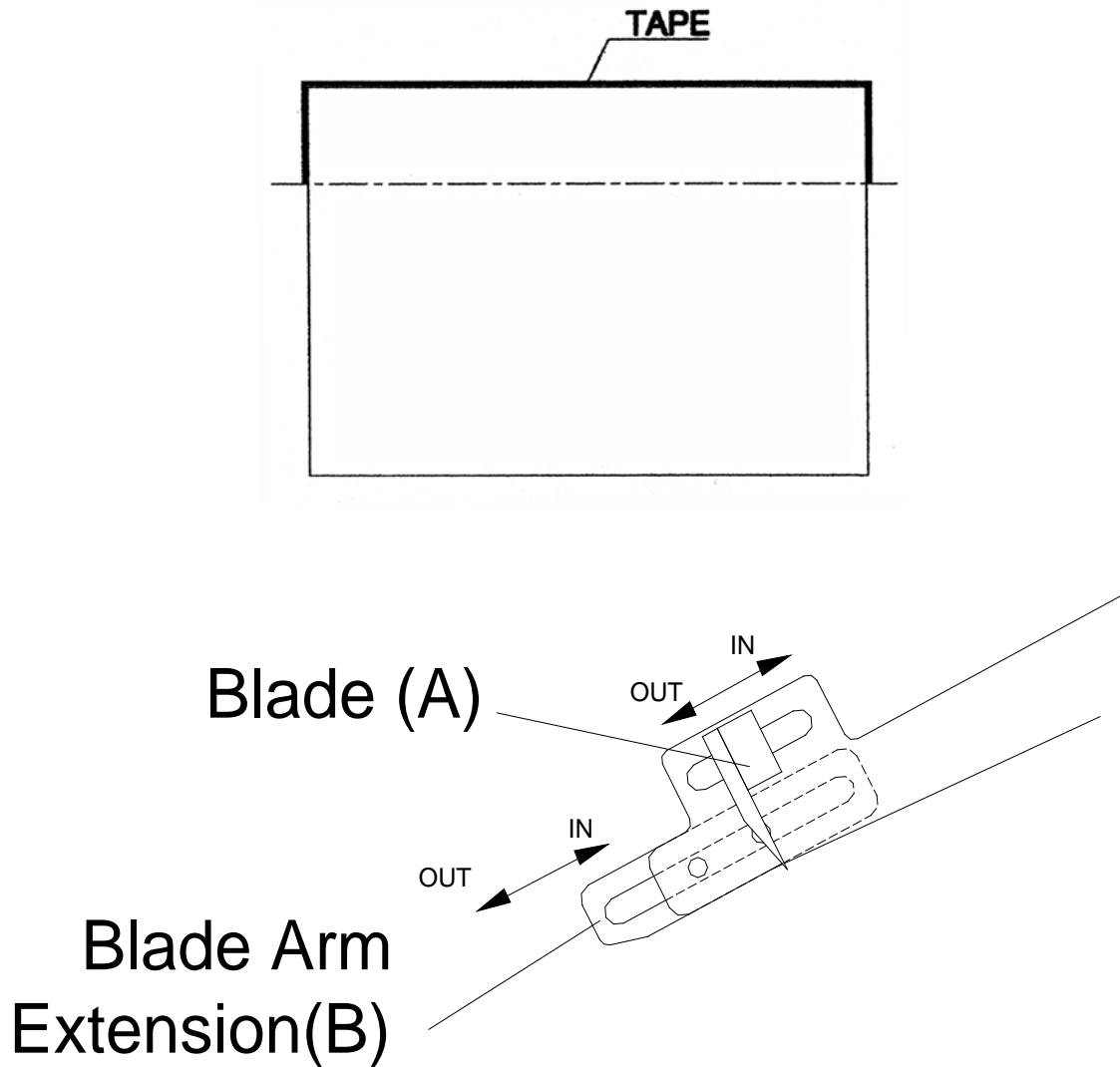
Highest possible tension setting shown

- Outer screw position on rear roller arm
- Tightened threaded rod position



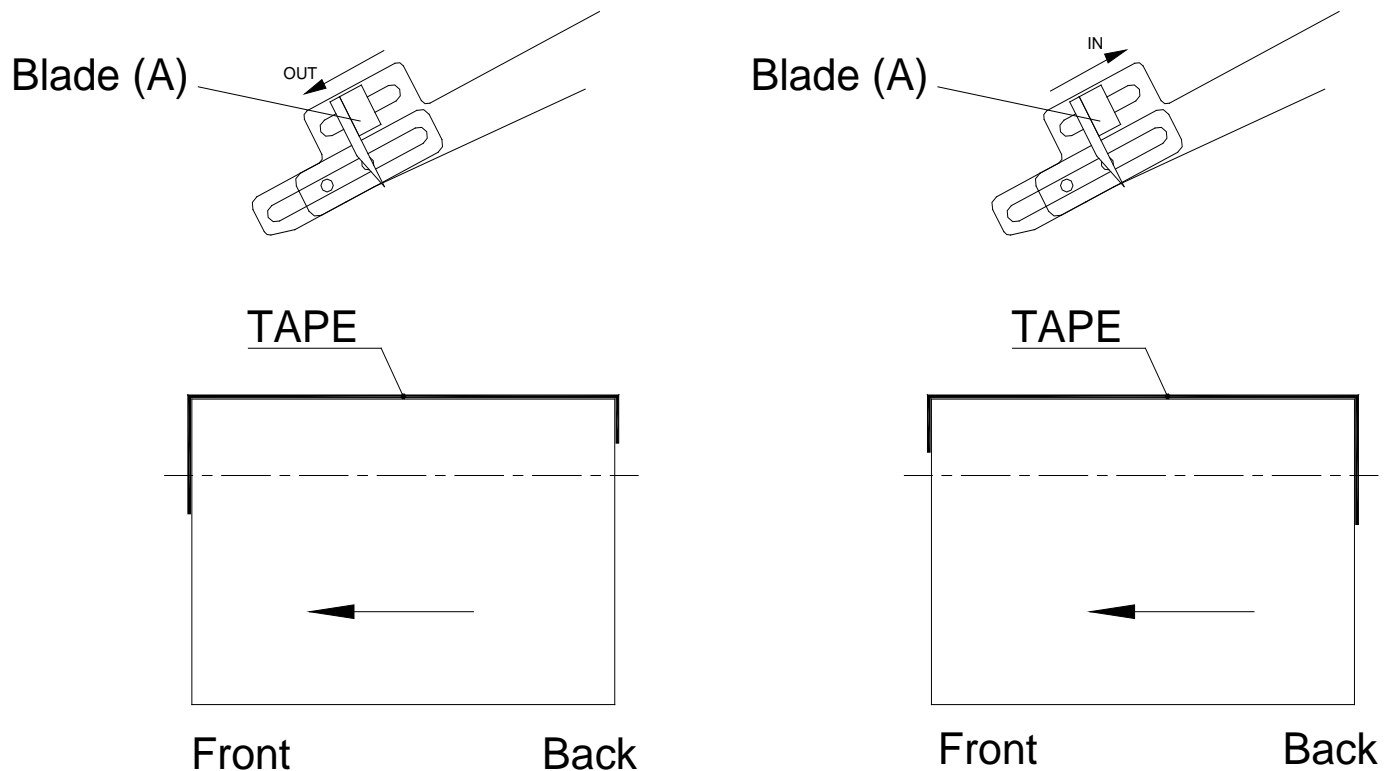
Tape Leg Adjustment

The tape “legs” refer to the amount of tape applied to the ends of the boxes. The following figure shows equal legs on both ends.



A. Adjusting Length of Front Tape Leg

Adjust the blade position "A" inward or outward to change the length of the front tape leg to the desired length. Inward shortens the front tape leg and rearward lengthens the front tape leg. **Adjusting the blade position "A" also results in an opposite change of the rear tape leg. Example: moving the blade position $\frac{1}{4}$ " inward shortens the front tape leg by $\frac{1}{4}$ " but lengthens the rear tape leg by $\frac{1}{4}$ ".

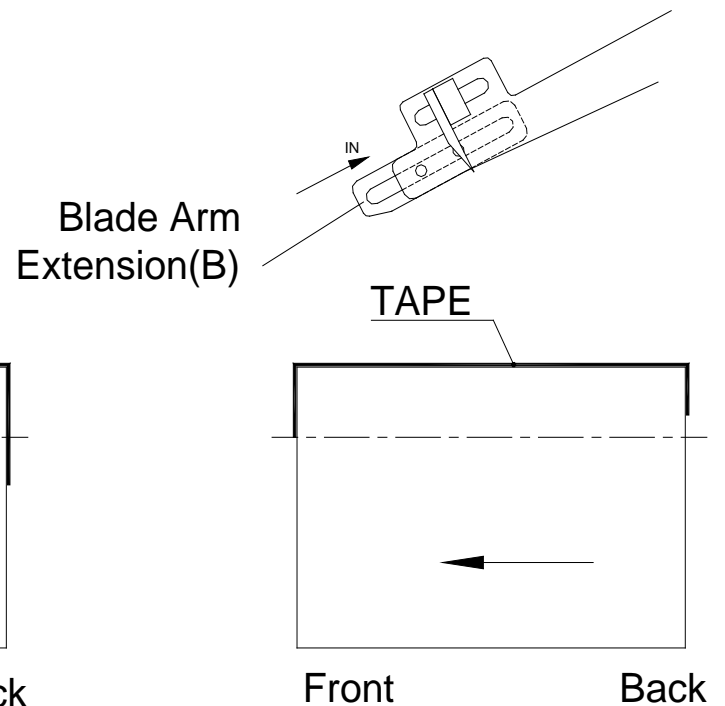
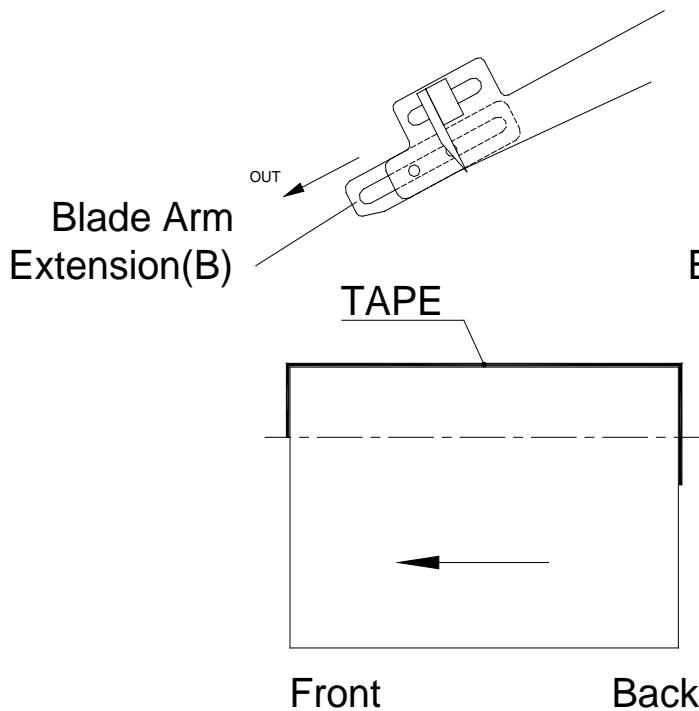


IMPORTANT NOTE:

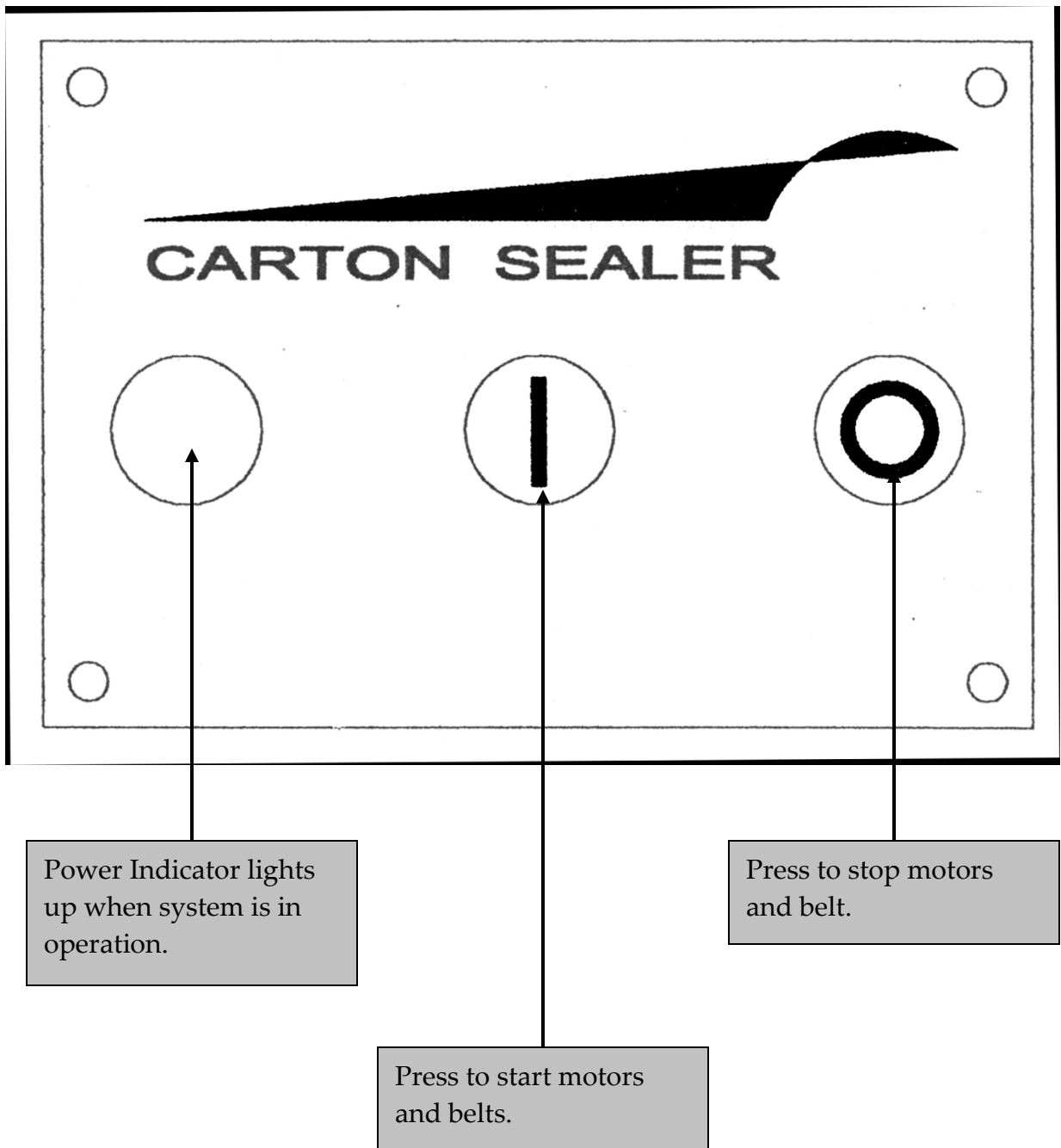
****ALWAYS REPOSITION THE BLADE GUARD ACCORDINGLY AFTER ADJUSTING THE BLADE. FAILURE TO REPOSITION THE BLADE GUARD CAN CAUSE DAMAGE TO THE TAPE HEAD IF THE BLADE CONTACTS THE GUARD, OR A BLADE LEFT EXPOSED FROM THE GUARD CAN CAUSE INJURY. BEFORE PUTTING THE TAPE HEAD BACK INTO SERVICE, ALWAYS CHECK THAT THE BLADE GUARD PROTECTS THE BLADE AND ALSO ALLOWS THE BLADE GUARD TO RETRACT WITHOUT INTERFERENCE ****

B. Adjusting Length of Rear Tape Leg

To balance out the length of tape legs on both ends, move blade arm extension “B” inward or outward until the rear tape leg length matches the front tape leg length. Move blade arm extension “B” outward to increase the rear tape leg length and move “B” inward to shorten the rear tape leg length.



OPERATOR PANEL



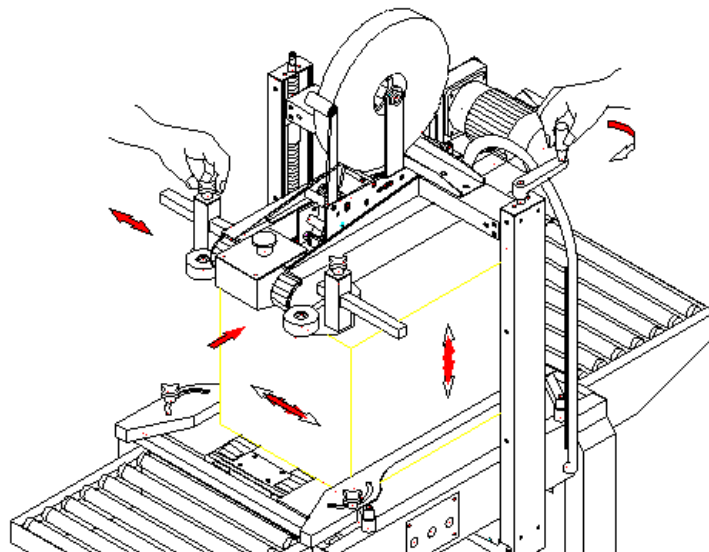
MACHINE OPERATIONS

After the machine has been positioned to provide easy access to a power source, you will be ready to begin operation. Read thoroughly and follow these steps to operate your system.

1. Before connecting power to the system, load the tape head with tape. Refer to the Tape-Threading Diagram located on each head.

WARNING: The blade in the tape head assembly is very SHARP! If the head has to be removed from the machine to be loaded, be extremely careful not to put your hands near the blade assembly. This assembly has an orange metal covering with a warning label on it. The tape head assembly is held in place in slotted metal holders. The assembly must be moved horizontally in the slots before it can be lifted out of the holders. The top head holders may have a retaining screw that will have to be loosened before removal can be accomplished. If the head does not easily slide horizontally in the holding slots, check for this retaining screw and loosen as necessary.

2. After loading the tape head with tape and replacing the head(s), place a box filled with product on the in-feed conveyor table. Position the top drive belts and side section to accommodate the box width and height using the appropriate crank handles. Adjust the two handle knobs against the side of the carton to center of the carton (See figure below).



3. Plug in the power cord to a 110 VAC, 10 Amp, 60 Hz, single-phase grounded outlet. **DO NOT USE EXTENSION CORDS!** A dedicated circuit is highly recommended.
4. Empty all loads on the table.
5. Press **START** button to test.

Chapter

4

HIGHLIGHT INDUSTRIES, INC.

Magnum® 1300 TB-U Uniform Case Sealer Operation Manual

Maintenance

PREVENTIVE MAINTENANCE

Highlight Industries' Magnum® Case Sealer is designed to provide long, trouble-free service. However, as with all machinery, proper attention and maintenance is the key to long component life, maximum performance, and safe operation. By spending a few minutes reading and following these preventive measures, you should reduce the downtime and prolong the life of your system.

It is important to understand that these maintenance schedules are minimum recommendations. *Highlight Industries* cannot possibly know, evaluate or advise the various trades in all schedules of periodic maintenance. Because of this, *Highlight Industries* has not undertaken such tasks. Accordingly, anyone who maintains or services a case sealer machine must first satisfy himself/herself as to the schedules of preventive maintenance based on cycling operation and environmental locations.

Machine components that wear or fail should be repaired or replaced as soon as possible to prevent damage to other machine components or to your product.

NOTE:

Always turn machine OFF and disconnect from its power source before doing any cleaning or maintenance work on your system. Failure to do so will result in severe personal injury and/or machine damage.

Cleaning

Dust and paper chips are normal debris from cartons. If the debris is allowed to accumulate on machine components, wear of the components and/or overheating of the motor may occur. A shop vacuum best removes dust build-up. NEVER use compressed air to blow the dust or chips away -- this could result in the dust/chips getting inside the motor and/or sliding surfaces and cause premature equipment failure. NEVER subject your Case Taper to water or other liquids used to wash down machinery. Moisture condensation could cause serious damage to components.

Cleaning should be done approximately once every month, more often if the environment is dusty. A damp (not wet) cloth may be used to remove build-up that a vacuum will not remove.

Lubrication

The drive motor(s) and machine bearings are permanently lubricated and do not require additional lubricant.

NOTE:

Excess oil and grease attract dust, which can cause premature mechanical jamming and/or failure. Make sure oil and grease are not left on roller surfaces around which the tape is threaded, as adhesive contamination will result.

Drive Belt Replacement

It is recommended replacing both drive belts when one is sufficiently worn to impair proper production. After replacement, adjust belt tension by referring to instructions in *Chapter 3*.

HIGHLIGHT INDUSTRIES, INC.

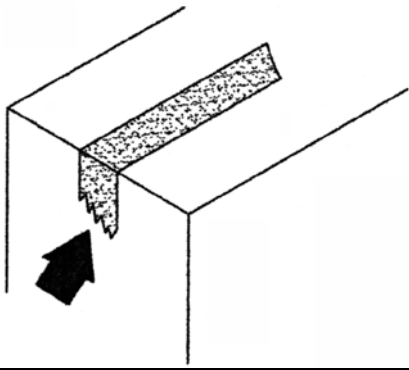
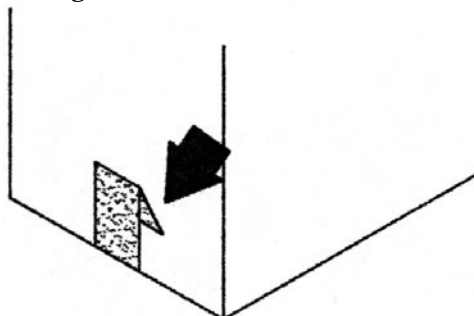
Magnum® 1300 TB-U Uniform Case Sealer Operation Manual

Troubleshooting

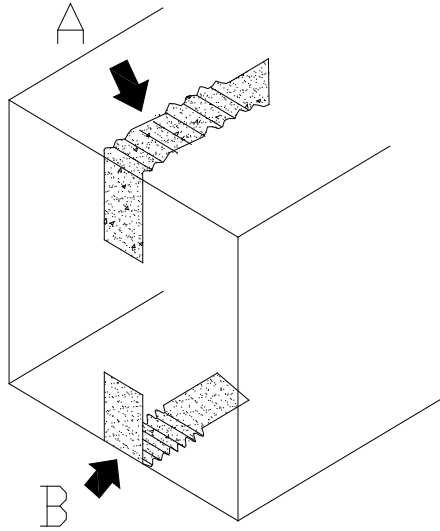
TROUBLESHOOTING GUIDE

This troubleshooting guide is not designed to solve all system problems. Rather, it is designed to give you, the customer, a few quick checks and adjustments of the obvious, but often overlooked items to keep your downtime to a minimum. Further help is always available from *Highlight Industries'* experienced Mechanical/Electrical Service Department.

Trouble	Solution
Machine does not start	Check that the power cord functioning. Release the EMERGENCY STOP button. Press START button to release load. Check if fuse is in good condition. If faulty, replace with a new fuse as shown in figure below. Confirm the steps above and restart the machine.

Taping Defects	Remedy
Indented Cut: 	Clean the blade using heavy rag & WD-40 or replace it if damaged. **BE VERY CAREFUL, BLADE IS SHARP!!!**
Tape folding: 	Check that all rollers turn freely. Tape may also be too thin or elastic and causing the rear tape leg to “snap back” to box surface before the rear roller wipes it down.

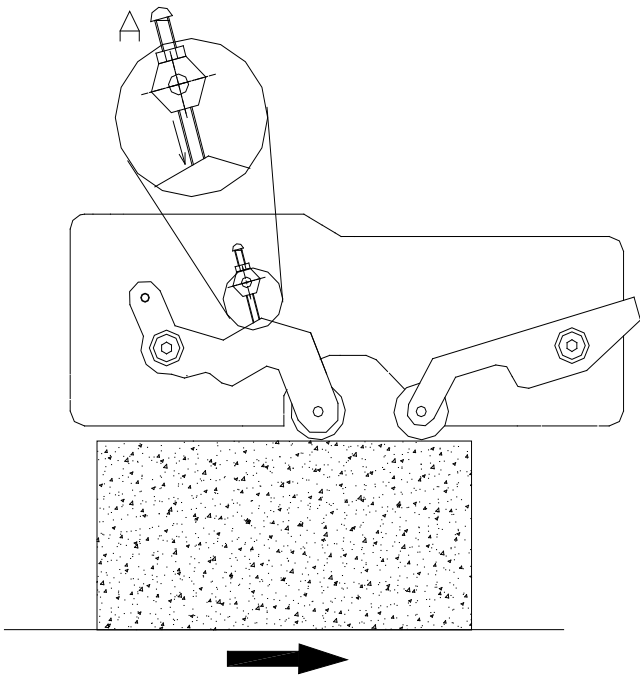
Tape curling:



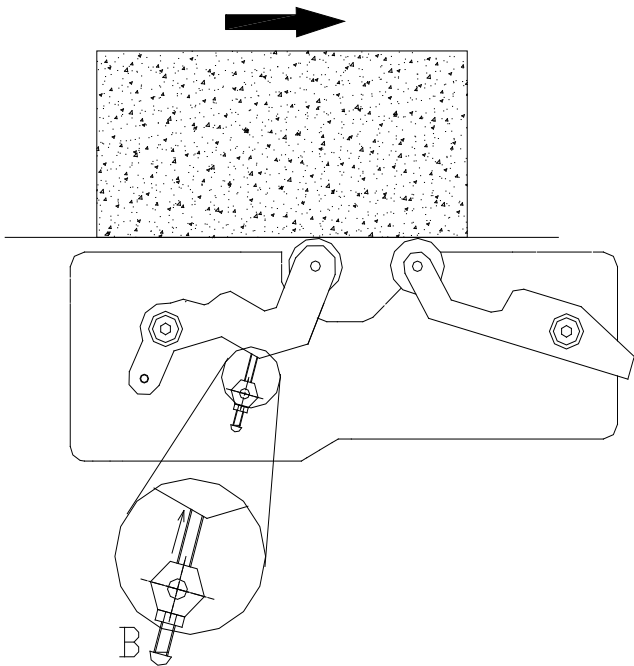
Adjust the tape head roller limit stops to ensure the rollers remain in contact with the top & bottom of the box during taping. See next page.

Roller Limit Stop Adjustment

TOP TAPE HEAD



BOTTOM TAPE HEAD



Chapter

6

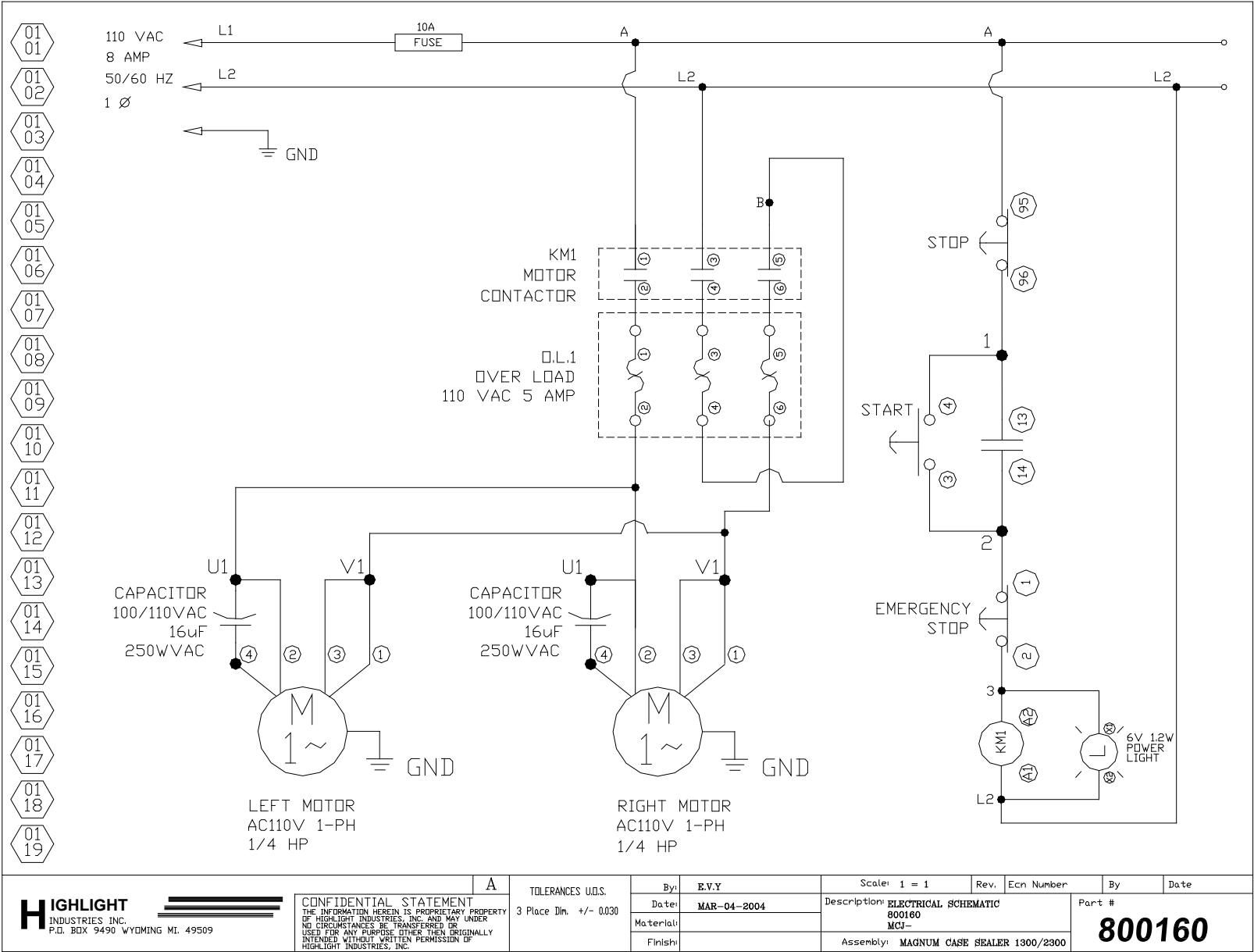
HIGHLIGHT INDUSTRIES, INC.

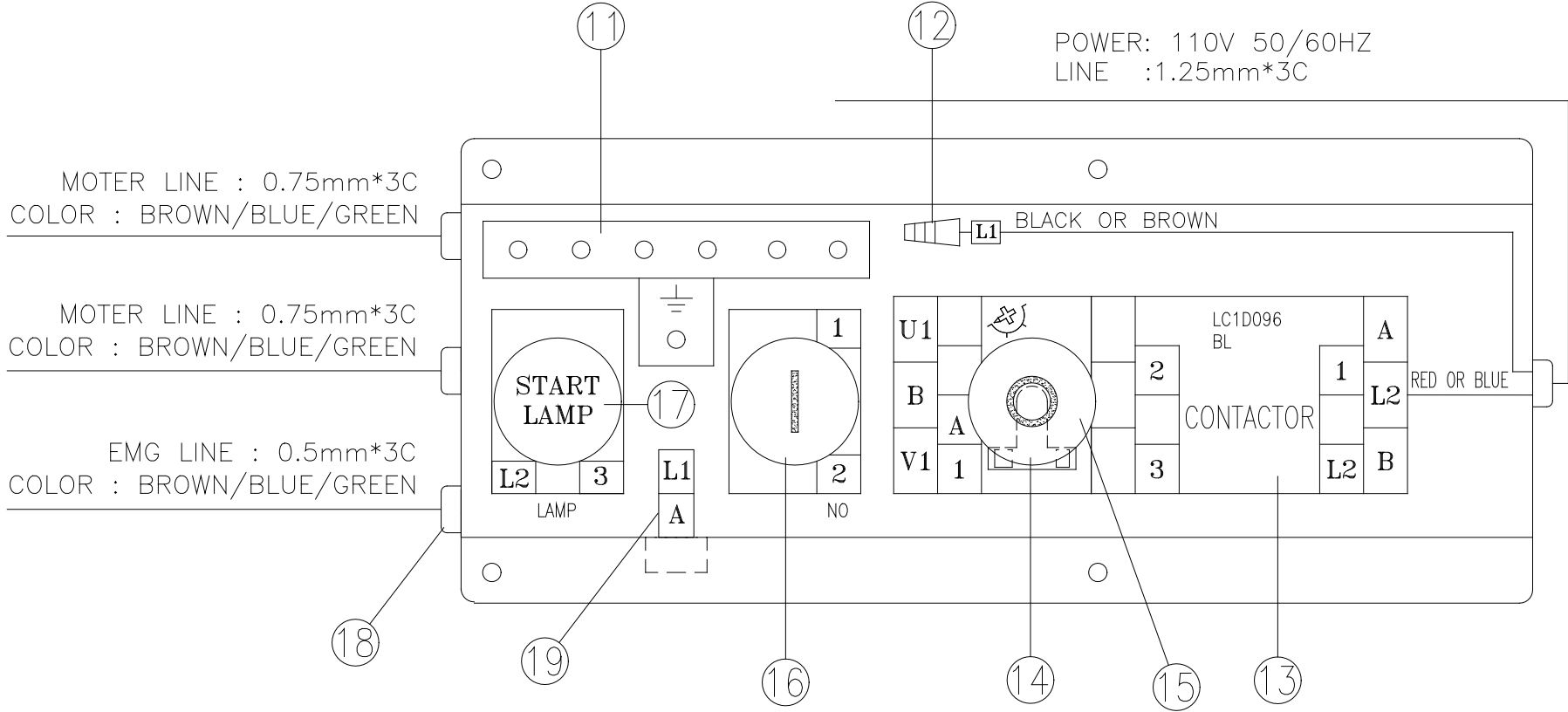
Magnum® 1300 TB-U Uniform Case Sealer Operation Manual

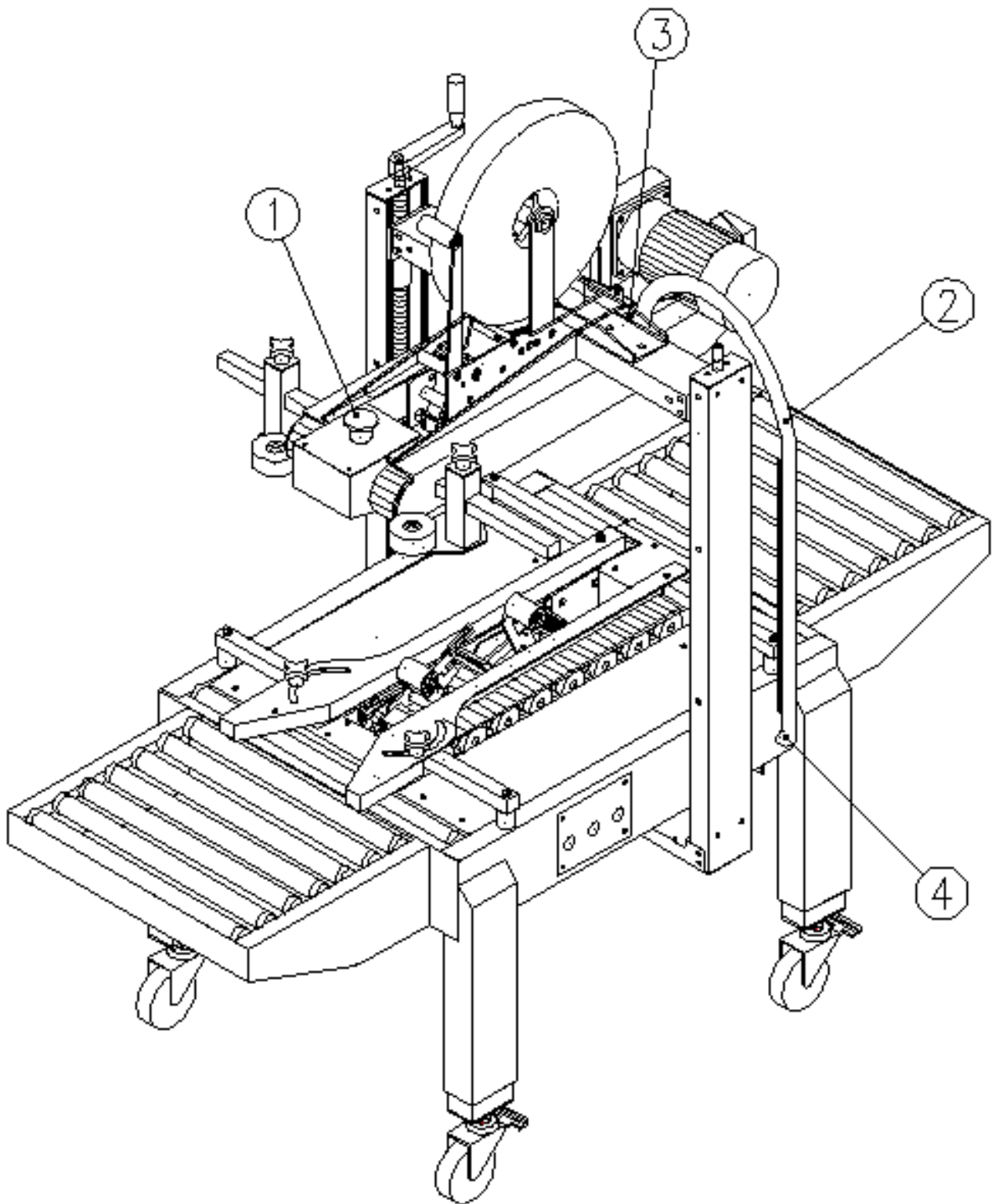
Electrical References

ELECTRICAL PARTS LIST AND PRINTS

Ref. No.	HLI Part No.	Description	Qty
1	404475	EMERGENCY STOP Switch	1
	401582.5	Button Seat Contactor NCx1	1
2	401521	1/2" Connector	1
3	401522	1/2" Protect Tube	1
4	401523	1/2" 90° Connector	1
11	400607	Terminal Blocks TB6P	1
12	401524	Connector	1
13	401525	Contactor, 120VAC Coil	1
14	404285	Overload, 6A	1
15	401527	STOP Button	1
	404605	CONTACT, for Stop Button	1
16	401528	START Button	1
	401368	Contactor N0X1	1
17	401529	Power Light 110 volt	1
18	401531	Fixed Seat	4
19	403261	10 AMP Main Fuse	1
	403870	Fuse Holder	1







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Mechanical Reference

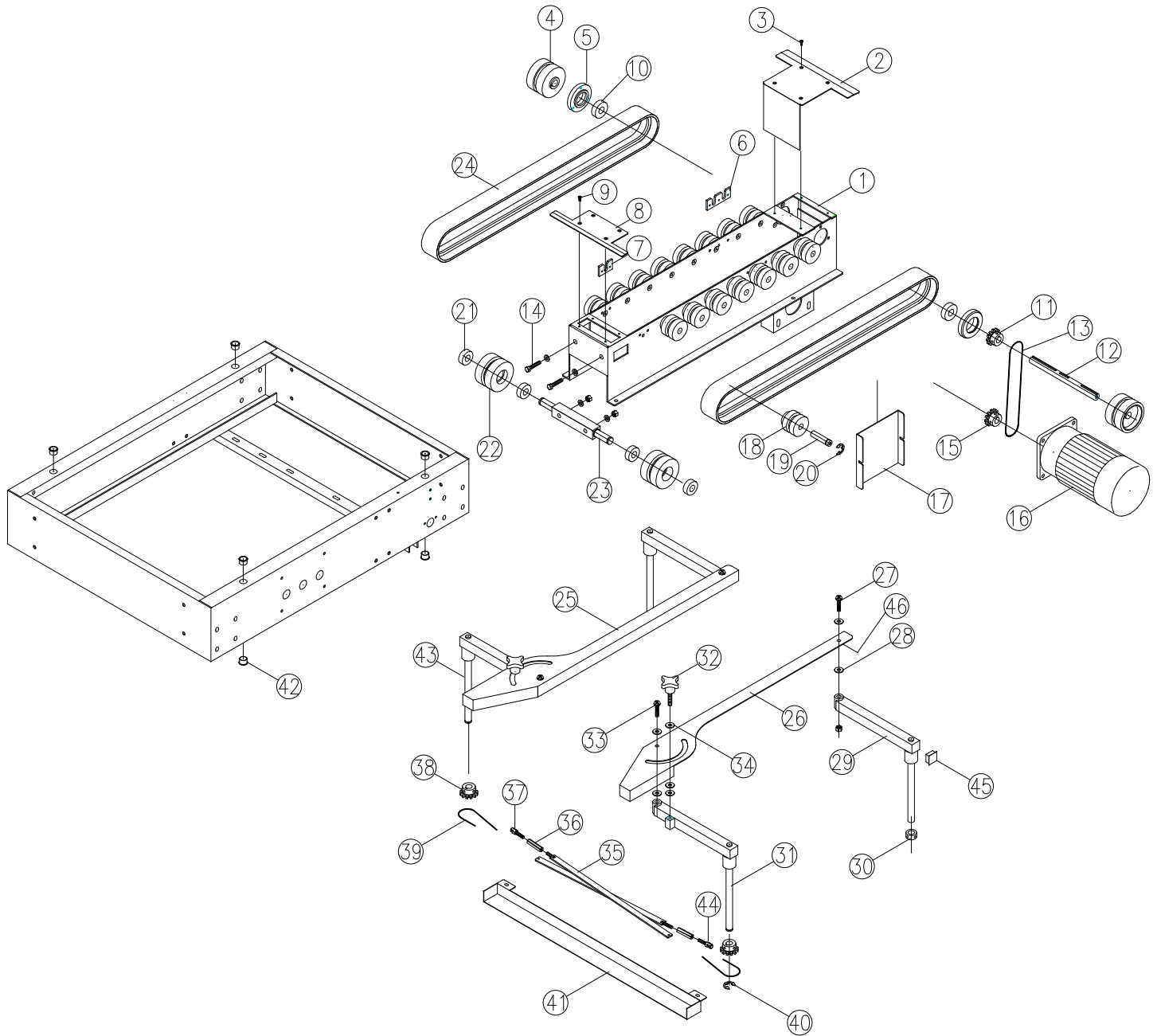
MECHANICAL PARTS LIST AND PRINTS

BOTTOM BELT DRIVE ASSEMBLY

Ref. No.	HLI Part No.	Description	Qty.
1	600120	BOTTOM TAPING FRAME (2" TAPE)	1
	600288	BOTTOM TAPING FRAME (3" TAPE)	1
2	500353	COVER, REAR (2" TAPE)	1
	501274	COVER, REAR (3" TAPE)	1
3	200807	FLAT HEAD SCREW, M4 x 6L, PHILLIPS	4
4	300801	DRIVE PULLEY	2
5	500354	BEARING SEAT	2
6	500325	A-PLATE	2
7	500326	B-PLATE	2
8	500357	COVER, FRONT (2" TAPE)	1
	501275	COVER, FRONT (3" TAPE)	1
9	200807	FLAT HEAD SCREW, M4 x 6L, PHILLIPS	4
10	305300	BEARING, 6203	2
11	300845	DRIVEN SPROCKET	1
12	500358	DRIVER SHAFT (2" TAPE)	1
	501276	DRIVER SHAFT (3" TAPE)	1
13	300846	CHAIN	1
14	204892	HHCS, M8 x 70L	2
	200130	NUT, HEX, M8	2
15	300847	MOTOR SPROCKET	1
16	401801	MOTOR, 110V/60HZ, T18:1	1
17	500359	MOTOR COVER	1
18	300803	PLASTIC PULLEY	16
19	500295	PULLEY SHAFT, IDLER	16
20	300007	SNAP RING, STW-12, 12mm Ext.	16
21	300807	BEARING, 6003ZZ	4
22	300805	PULLEY FOLLOWER	2
23	500360	ADJUSTABLE SHAFT (2" TAPE)	1
	501277	ADJUSTABLE SHAFT (3" TAPE)	1
24	300838	BELT	2

25	600121	GUIDE RAIL, LEFT	1
26	600122	GUIDE RAIL, RIGHT	1
27	200824	BHCS, M8 x 40L, ZINC	2
	200130	NUT, HEX, M8	2
28	200825	WASHER, PLASTIC	8
29	600123	GUIDE RAIL CRANK ARM, REAR	2
30	500361	CLAMP COLLAR, CRANK FITTING RING	2
31	500362	GUIDE RAIL CRANK ARM, FRONT	1
32	300814	HANDLE KNOB	2
33	200824	BHCS, M8 x 40L, ZINC	2
	200130	NUT, HEX, M8	2
34	200827	HANDLDE KNOB WASHER	6
35	500363	CHAIN ADJUSTMENT PLATE	2
36	500364	CHAIN ADJUSTMENT BAR	2
37	200828	CHAIN ADJUSTMENT SCREW	1
38	300817	SPROCKET	2
39	300853	CHAIN	2
40	300008	SNAP RING, STW-15, 15mm Ext.	2
41	600124	CHAIN COVER	1
42	300855	BUSHING, ALFF-1510	8
43	600125	GUIDE RAIL CRANK ARM, LEFT FRONT	1
44	200831	CHAIN ADJUSTMENT SCREW, OPPOSITE	1
45	300824	RUBBER PLUG	4
46	501273	SUPPORT PLATE	2

BOTTOM BELT DRIVE ASSEMBLY



TOP BELT DRIVE ASSEMBLY

Ref. No.	HLI Part No.	Description	Qty.
1	401802	MOTOR 110V/60HZ, T18:1	1
2	300847	MOTOR SPROCKET	1
3	300834	CHAIN	1
4	500338	COVER PLATE (2" TAPE)	1
	501271	COVER PLATE (3" TAPE)	1
5	500354	BEARING SEAT	2
6	500359	MOTOR COVER	1
7	500402	A-PLATE	2
8	500403	B-PLATE	2
9	500341	COVER PLATE, E-STOP (2" TAPE)	1
	501272	COVER PLATE, E-STOP (3" TAPE)	1
10	600114	SUPPORT WELDMENT (2" TAPE)	2
	600286	SUPPORT WELDMENT (3" TAPE)	2
11	300803	PLASTIC PULLEY	10
12	500295	PULLEY SHAFT	6
13	300007	SNAP RING, STW-12, 12mm Ext.	10
14	500342	PULLEY SHAFT	4
15	500293	KEY, 5MM x 5MM	1
16	200804	SHCS, M8 x 20L & S.W & W	4
17	200819	SNAP RING, RTW-40, 40mm INT.	2
18	500358	DRIVER SHAFT (2" TAPE)	1
	501276	DRIVER SHAFT (3" TAPE)	1
19	300801	PULLEY DRIVER	2
20	600115	BELT COVER, RIGHT	1
21	207387	SHCS, M6 x 12L & S.W & W	4
22	300838	BELT	2
23	600116	BELT COVER, LEFT	1
24	600117	UPPER TAPING FRAME (2" TAPE)	1
	600287	UPPER TAPING FRAME (3" TAPE)	1
25	500360	ADJUSTABLE SHAFT (2" TAPE)	1
	501277	ADJUSTABLE SHAFT (3" TAPE)	1
26	300807	BEARING, 6003ZZ	4
27	300805	PULLEY FOLLOWER	2
28	500315	SUPPORT BAR	1

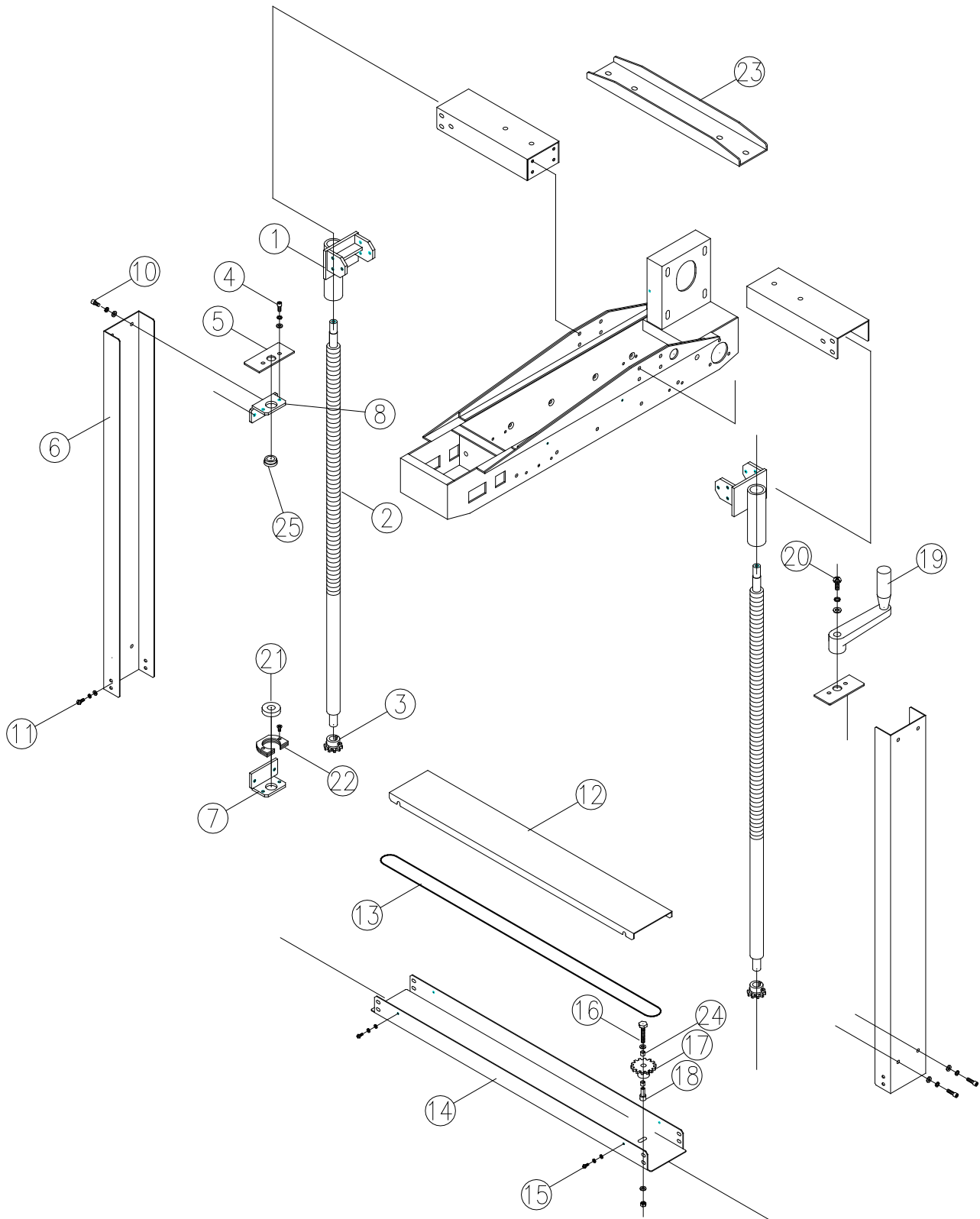
29	300814	HANDLE KNOB	2
30	500312	LOCKING BRACKET	2
31	503729	SCREW KNOB	2
32	600118	COMPRESSION ROLLER SEAT	2
33	300824	RUBBER PLUG	2
34	300009	SNAP RING, STW-17, 17mm Ext.	4
35	300816	COMPRESSION ROLLER	4
36	500316	COMPRESSION ROLLER SHAFT	4
37	200634	FHCS, M6 x 10L	4
38	300845	DRIVEN SPROCKET	1
39	305300	BEARING, 6203	2

This exploded view diagram illustrates the assembly of a mechanical device, likely a conveyor or transport system. The components are numbered 1 through 40. The main assembly consists of a central frame (24) with a motor (1) mounted on top. The motor is connected to a drive shaft (12) which passes through a series of rollers (11, 14, 15, 19, 26, 27) and is driven by a gear (39). A long, curved track (23) is mounted on the frame, and a long, straight track (20) is shown at the bottom. Various other components like brackets (4, 10), plates (6, 9), and fasteners (screws, nuts, washers) are shown in their relative positions for assembly.

LIFT COLUMN ASSEMBLY

Ref. No.	HLI Part No.	Description	Qty.
1	600113	SPINDLE SUPPORT	2
2	500345	HEIGHT ADJUSTMENT SPINDLE	2
3	300817	SPROCKET	2
4	207844	BHCS, M6 x 10L, S.W & W	4
5	500319	COVER PLATE	2
6	500346	COLUMN	2
7	300818	BRACKET, LOWER	2
8	500320	BRACKET, UPPER	2
9			
10	207387	SHCS, M6 x 12L & S.W & W	8
11	207387	SHCS, M6 x 12L & S.W & W	8
12	500349	CHAIN COVER PLATE	1
13	300843	CHAIN	1
14	500350	CHAIN BOTTOM COVER	1
15	200154	PAN HEAD MACHINE SCREW, M4 x 6L	4
16	207842	HHCS, M6 x 40L	1
	200144	WASHER, FLAT, M6	2
	200431	NUT, NYLOC, M6	1
17	500884	SPROCKET, SPECIAL BORE	1
18	500885	SPROCKET SHAFT	1
19	300823	HANDLE CRANK ARM	1
20	200804	SHCS, M8 x 20L & S.W & W	1
21	300825	BEARING, 6202ZZ	2
22	500327	BEARING SEAT	6
23	500351	FIXED BRACKET (2" TAPE)	1
	501278	FIXED BRACKET (3" TAPE)	1
24	301701	BUSHING Ø10 x Ø12 x 10L	2
25	301893	BUSHING	2

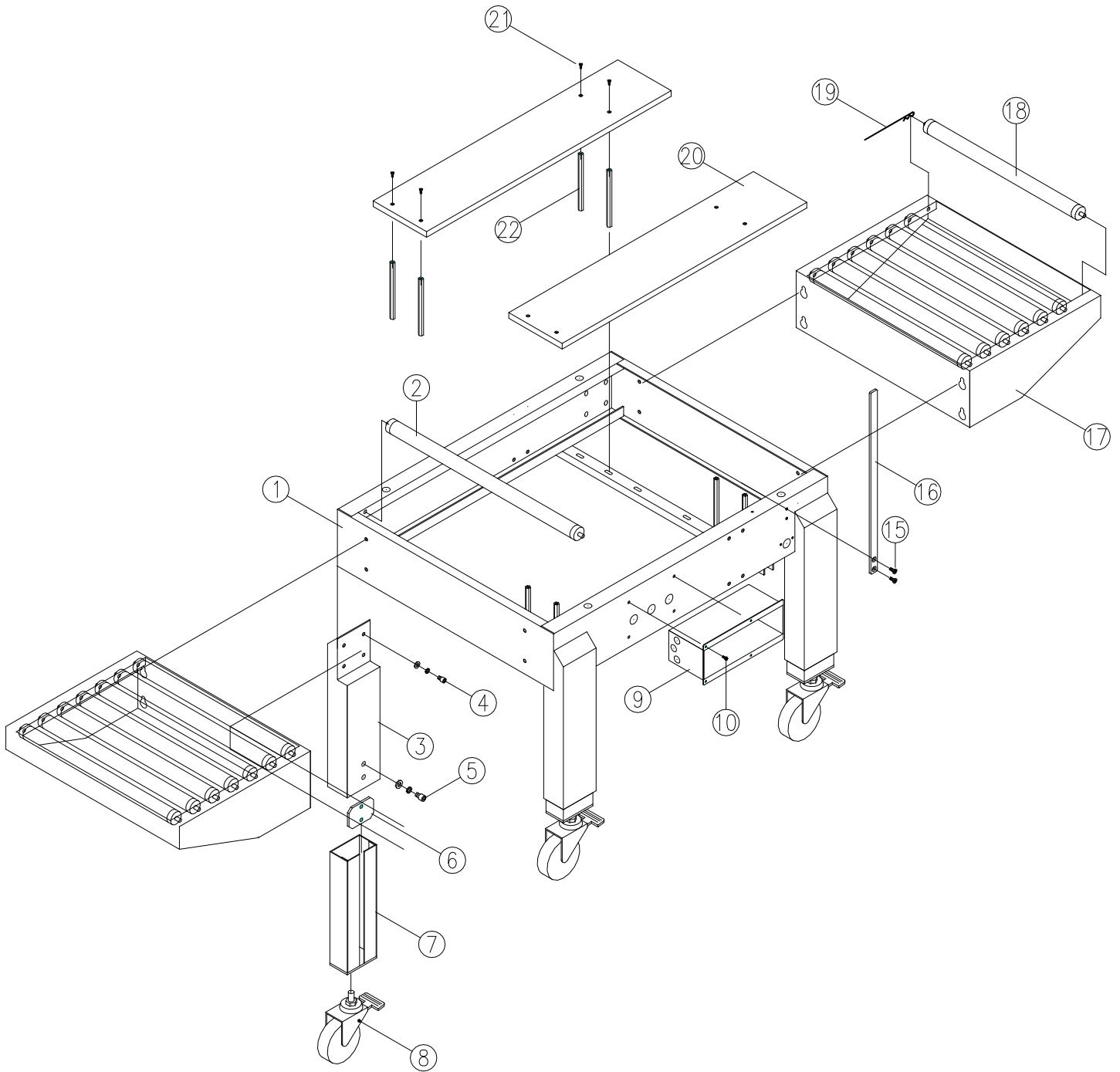
LIFT COLUMN ASSEMBLY



MACHINE FRAME ASSEMBLY

Ref. No.	HLI Part No.	Description	Qty.
1	600289	MACHINE FRAME	1
2	300856	ROLLER, IDLER	1
3	600106	MACHINE LEG, UPPER	4
4	200804	SHCS, M8 x 20L & S.W & W	16
5	207388	SHCS, M10 x 25L & S.W & W	8
6	500330	CLAMP, LEG	4
7	600107	ADJUSTABLE LEG	4
8	300857	CASTER	4
8a	304559	WHEEL ONLY, SOLID RUBBER, SPECIAL OPTION	4
9	600109	ELECTRICAL ENCLOSURE	1
10	207978	BHCS, M5 x 10L	4
15	200833	FHCS, M6 x 12L	2
16	500336	WIREWAY REINFORCEMENT	1
17	600127	ROLLER CONVEYOR SEAT	2
18	300858	ROLLER, CONVEYOR	14
19	300828	PIN	7
20	600128	MACHINE FRAME COVER (2" TAPE)	1
	600290	MACHINE FRAME COVER (3" TAPE)	1
21	200829	FLAT HEAD SCREW, M4 x 10L, PHILLIPS	8
22	500365	SHAFT	8

MACHINE FRAME ASSEMBLY





Chapter

8

HIGHLIGHT INDUSTRIES, INC.

Magnum® 1300 TB-U Uniform Case Sealer Operation Manual

Notes

