



# USER MANUAL

## RSA 20-B



For Serial Numbers:  
TM123 XX X XXX





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# TECHNICAL ASSISTANCE

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## **Technical Support**

This manual covers the Interpack Model RSA 20-B Random Side Belt Case Sealer. It has been set up and tested in our factory with Intertape manufactured pressure sensitive tapes. The airline and pressure conditions of the testing will differ from customer systems. The machine may require adjustments to best fit operating needs. If any problems occur when setting up or operating this equipment, please contact the authorized distributor from where you purchased this item.

If contact with the authorized distributor is not possible, **Interpack Technical Support** is available. Should the need to contact **Interpack Technical Support** arise, please have the Case Sealer **model number and serial number** on hand. This information can be found on the nameplate of the side panel of the machine. Interpack Technical Support is available during normal business hours (Eastern Time).

## **PHONE 800-474-8273 Option 3**

If you have a technical question that does not require an immediate response, you may contact Interpack by fax.

## **FAX 800-462-1293**

## **Replacement Parts**

Order parts by item number, part description and quantity required. Replacement parts are available from your Authorized Interpack Distributor exclusively.

Should you require assistance selecting the correct part, you may call:

Intertape Polymer Group  
Interpack Machinery

Tel: 1-800-474-8273 Option 3  
Fax: 1-800-462-1293

MODEL: \_\_\_\_\_

SERIAL NUMBER: \_\_\_\_\_

DISTRIBUTOR PURCHASED FROM: \_\_\_\_\_

DATE OF PURCHASE: \_\_\_\_\_

## **FIELD SERVICE ASSISTANCE**

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This machine is designed to provide years of trouble free operation. If any problems arise with this machine during the normal course of operation, your properly trained and qualified internal service personnel should be able to repair any issues after consulting the Trouble Shooting section of this manual.

Service support is available from your Authorized Interpack Distributor at additional cost if the problem cannot be remedied after consulting the Trouble Shooting section of this manual.

# WARRANTY

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**EQUIPMENT WARRANTY AND LIMITED REMEDY:** The following warranty is made in lieu of all other warranties, express or implied, including, but not limited to, the implied warranty of merchantability, the implied warranty of fitness for a particular purpose, and any implied warranty arising out of a course of dealing, a custom or usage of trade:

Intertape sells its Interpack Tape Heads, Case Tapers and Case Erectors with the following warranties:

1. The HSD® 2000 Tape Heads' knife blades, springs and wipe down rollers will be free from all defects for a period of ninety (90) days.
2. All other HSD® 2000 Tape Head parts will be free from all defects for one (1) year after delivery.
3. Water Activated Tapers' blades and brushes will be free from defects for ninety (90) days after delivery
4. Drive Belts will be free from defects for ninety (90) days after delivery
5. The Gear Motors will be free from defects for one (1) year after delivery.
6. All other components for Case Tapers and Case Erectors will be free from defects for one (1) year after delivery.

If any part is proven defective within its warranty period, then the exclusive remedy and Intertape's and the seller's sole obligation shall be, at Intertape's option, to repair or replace the part, provided the defective part is returned immediately to Intertape's factory or an authorized service station designated by Intertape.

A part will be presumed to have become defective after its warranty period unless the part is received or Intertape is notified of the problem no later than five (5) calendar days after the warranty period.

If Intertape is unable to repair or replace the part within a reasonable time, then Intertape, at its option, will replace the equipment or refund the purchase price. Intertape shall have no obligation to install the repaired or replacement part.

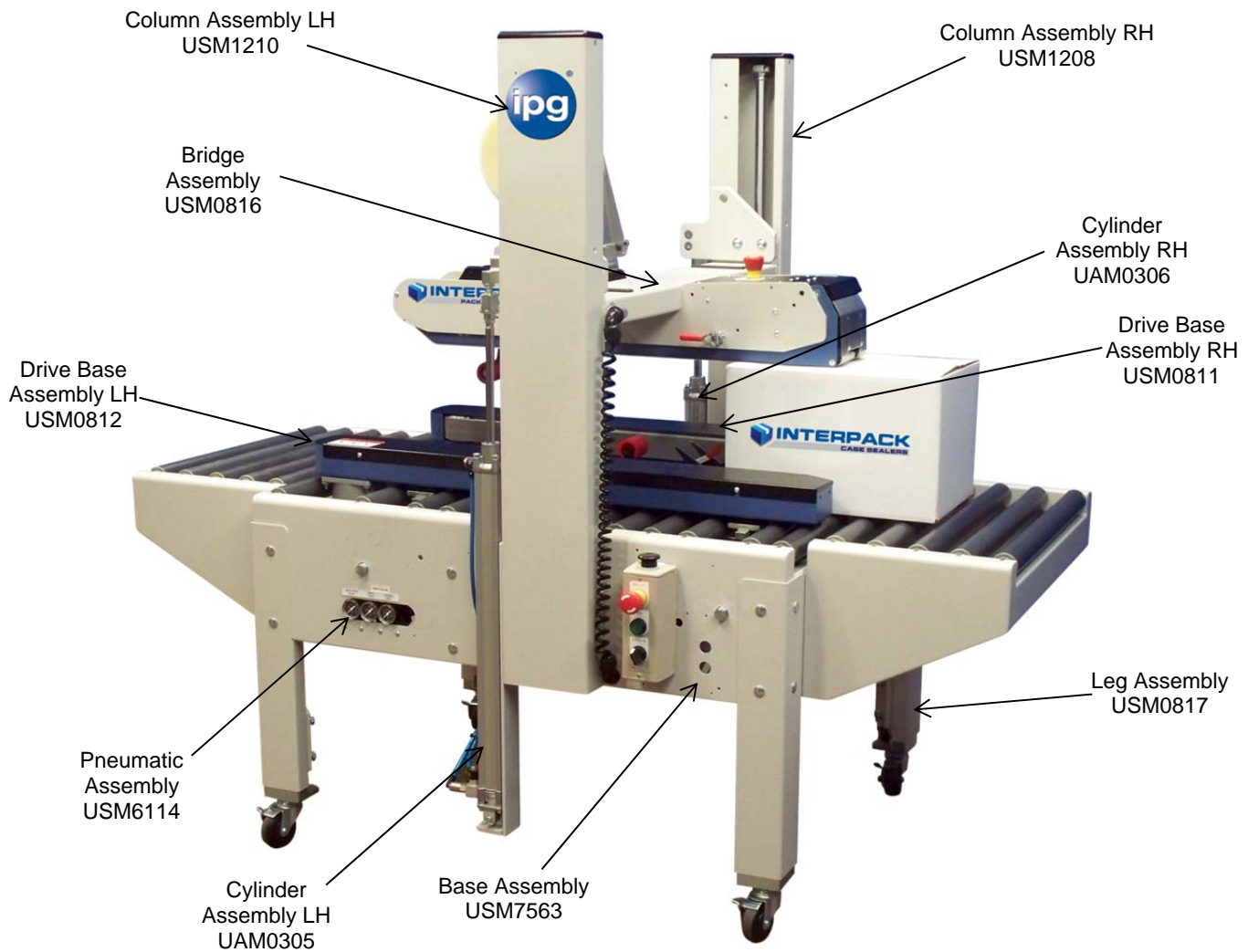
Intertape shall have no obligation to provide or pay for the labor required to install the repaired or replacement part. Intertape shall have no obligation to repair or replace (1) those parts failing due to: operator misuse, carelessness, or due to any accidental cause other than equipment failure, or (2) parts

1. Failure or damage is due to misapplication, lack of proper maintenance, abuse, improper installation or abnormal conditions such as temperature, moisture, dirt or corrosive matter, etc.
2. Failure due to inadequate cleaning, improper operating environment, improper utilities or operator error.
3. Failure due to operations above the rated capacities, or in any other improper manner, either intentional or otherwise.
4. Failure is due to equipment, which has been altered by anyone other than an authorized representative of Intertape Polymer Group.
5. Failure is due to an attempt by the purchaser to correct alleged defective equipment. In this event the purchaser is responsible for all expenses incurred.

**LIMITATION OF LIABILITY:** Intertape and seller shall not be liable for direct, indirect, special, incidental or consequential damages based upon breach of warranty, breach of contract, negligence, strict liability or any other legal theory.

The foregoing Equipment Warranty and Limited Remedy and Limitation of Liability may be changed only by written agreement signed by authorized officers of Intertape and seller.

# DESCRIPTION OF RSA 20-B CASE SEALER



**Figure-1**

The Interpack RSA 20-B Case Sealing Machine with HSD<sup>®</sup> 2000-ET II Tape Heads is designed to apply Intertape brand pressure sensitive case sealing tape to the top and bottom center seam of regular slotted corrugated cases. The RSA 20-B is auto-adjustable to a random variety of case sizes (see Case Specifications, Pg. 20)

## Important Safeguards

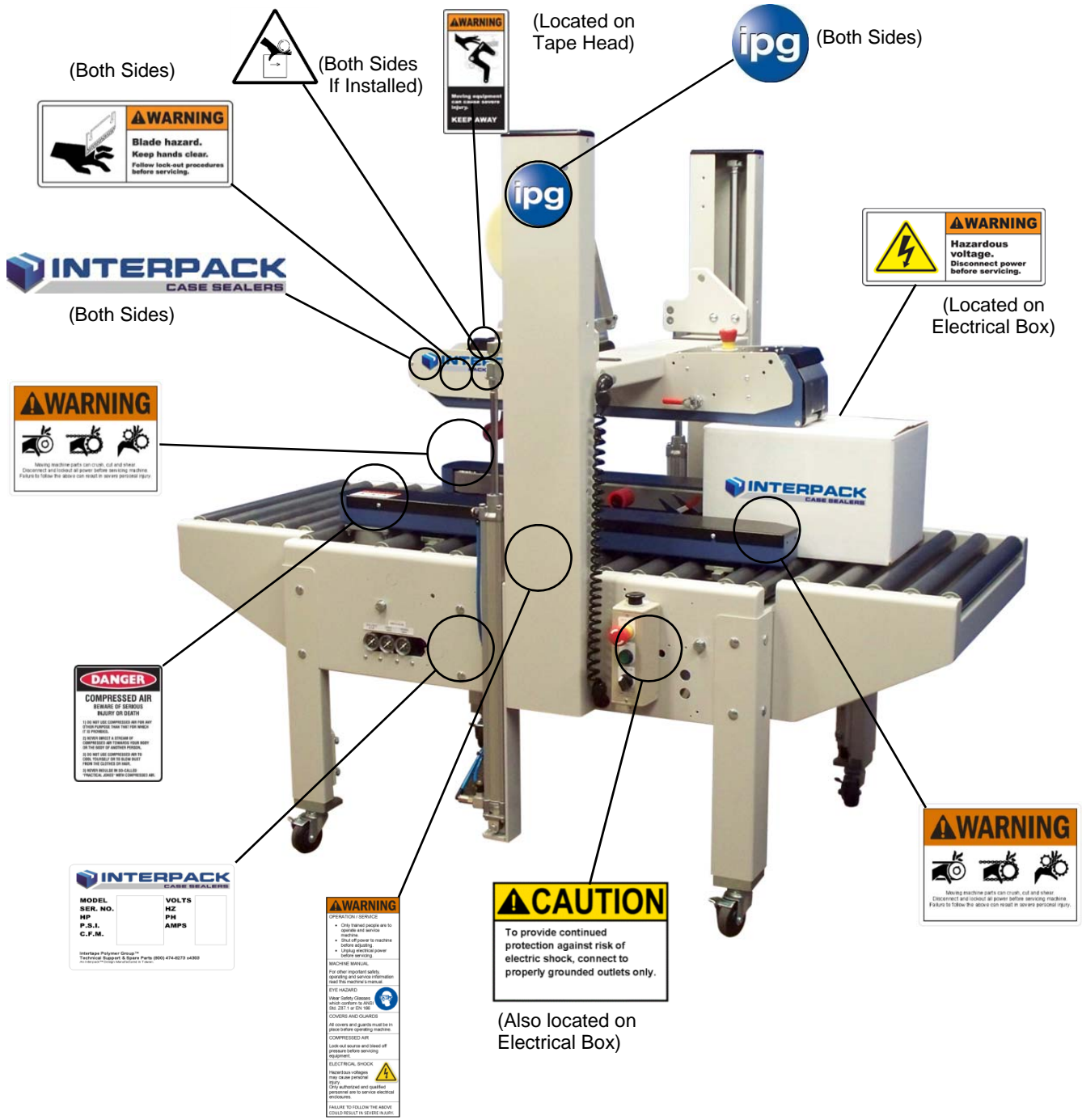
There are a number of safety labels used on Interpack Case Sealers. These labels are placed at different locations (refer to **Figure 2**) on the machine to warn operators and service personnel of possible dangers. Please read the labels on the machine and the following safety precautions before using the machine.

- ✓ **Read this manual for other important safety operating and service information.**
- ✓ **Only trained personnel are to operate machine.**
- ✓ **Only fully qualified technicians are to service this machine.**
- ✓ **Wear safety glasses.**
- ✓ **Shut off power to machine before adjusting machine or loading & threading Tape Heads.**
- ✓ **Disconnect electrical power and compressed air (where applicable) before servicing.**
- ✓ **Follow Lock Out / Tag Out Procedures BEFORE servicing any machinery.**
- ✓ **All covers and guards must be in place before operating.**
- ✓ **Stay clear of moving parts which can shear and cut.**
- ✓ **Never operate the Tape Heads with the Knife Guard removed.**

***Note: Should any of the safety labels placed on the Case Sealer be damaged or destroyed, replacements are available through your distributor.***



# Important Safeguards



**Figure-2**

## Important Safeguards

There Are A Number Of Safety Labels Used On Intertape Case Sealers.

The illustrated label as shown is attached to the Knife Guard inside the upper and lower HSD<sup>®</sup> 2000-ET II Tape Head. The label warns operators and service personnel of the very sharp blade used to cut the tape at the end of the tape application.

The HSD<sup>®</sup> 2000-ET II Tape Heads are equipped with a Knife Guard that covers the blade. **The Tape Heads should never be operated with the Knife Guards removed.**

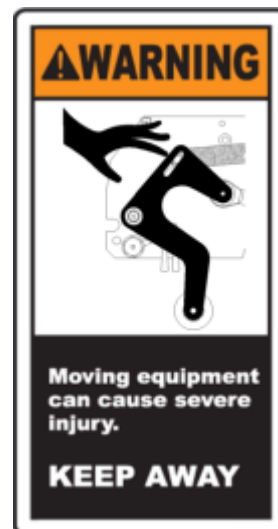
Turn air and electrical supplies off before servicing the tape heads.




The label shown is affixed to the upper tape head assembly on either side of the machine. It warns operators and service personnel of the presence of the cutting blade that may not be visible. Caution should be exercised when approaching this area.



The label shown (located on Tape Head) alerts the operator of a potential pinch point when a case processes through the machine. Caution should be exercised when approaching this area.



## Important Safeguards

<p>The label shown is affixed to the top squeezer assembly brackets on either side of the machine if installed. The squeezer assembly is optional. They warn the operator of a potential pinch point between the top of the case and the top squeezer rollers. Keep hand away from this area when processing a case.</p>	
<p>This label affixed to the electrical control box and control box advises service personnel to connect the machine to a properly grounded outlet.</p>	
<p>The label shown is attached to the electrical control box. The label warns the service personnel to unplug the power supply before attempting any service work on the case sealer.</p>	
<p>The illustrated label shown is located on the “infeed and exit” ends of the machine belt drives. The label warns the operators and service personnel of the pinch point at each end of the belt drives.</p>	

## Important Safeguards

The illustrated label shown is located on the side of the column. This label provides convenient safety instructions for the operator and service personnel in the operation of the Intertape Case Sealing Equipment.

<b>WARNING</b>	
OPERATION / SERVICE	
<ul style="list-style-type: none"> <li>• Only trained people are to operate and service machine.</li> <li>• Shut off power to machine before adjusting.</li> <li>• Unplug electrical power before servicing.</li> </ul>	
MACHINE MANUAL	
For other important safety, operating and service information read this machine's manual.	
EYE HAZARD	
Wear Safety Glasses which conform to ANSI Std. Z87.1 or EN 166	
COVERS AND GUARDS	
All covers and guards must be in place before operating machine.	
COMPRESSED AIR	
Lock-out source and bleed off pressure before servicing equipment.	
ELECTRICAL SHOCK	
Hazardous voltages may cause personal injury.	
Only authorized and qualified personnel are to service electrical enclosures.	
FAILURE TO FOLLOW THE ABOVE COULD RESULT IN SEVERE INJURY.	

This label advises personnel about the dangers of the machine due to compressed air used in the system. Be aware of warnings and proper procedures when running and/or servicing the machine.

<b>DANGER</b>	
<b>COMPRESSED AIR</b>	
<b>BEWARE OF SERIOUS INJURY OR DEATH</b>	
1) DO NOT USE COMPRESSED AIR FOR ANY OTHER PURPOSE THAN THAT FOR WHICH IT IS PROVIDED.	
2) NEVER DIRECT A STREAM OF COMPRESSED AIR TOWARDS YOUR BODY OR THE BODY OF ANOTHER PERSON.	
3) DO NOT USE COMPRESSED AIR TO COOL YOURSELF OR TO BLOW DUST FROM THE CLOTHES OR HAIR.	
3) NEVER INDULGE IN SO-CALLED "PRACTICAL JOKES" WITH COMPRESSED AIR.	

**Note:** Should any of the safety labels placed on the machine be damaged or destroyed, replacements are available.

## Important Safeguards

### Explanation of Signal Word Consequences

#### **Warning:**

Indicates a potentially hazardous situation, which if not avoided could result in death, serious injury, or property damage.

#### **Caution:**

Indicates a potentially hazardous situation, which if not avoided could result in minor or moderate injury, or property damage.

### **Warning**

- **To Reduce The Risk Associated With Mechanical And Electrical Hazards:**
  - a. Read, understand, and follow all safety and operating instructions before operating or servicing the case sealer.
  - b. Allow only properly trained and qualified personnel to operate and service this equipment.
- **To Reduce The Risk Associated With Pinches, Entanglement And Hazardous Voltage:**
  - a. Turn electrical supply off and disconnect before performing any adjustments, maintenance, or servicing the machine or tape heads.
- **To Reduce The Risk Associated With Pinches And Entanglement Hazards:**
  - a. Do not leave the machine running while unattended.
  - b. Turn the machine off when not in use.
  - c. Never attempt to work on any part of the machine, load tape, or remove jammed boxes from the machine while the machine is running.
- **To Reduce The Risk Associated With Hazardous Voltage:**
  - a. Position electrical cord away from foot and vehicle traffic.
- **To Reduce The Risk Associated With Sharp Blade Hazards:**
  - a. Keep hands and fingers away from tape cut-off blades under blade guards located on tape heads. The blades are extremely sharp.
- **To Reduce The Risk Associated With Fire And Explosion Hazards:**
  - a. Do not operate this equipment in potentially flammable/explosive environments.
- **To Reduce The Risk Associated With Muscle Strain:**
  - a. Use the appropriate rigging and material handling equipment when lifting or repositioning this equipment.
  - b. Use proper body mechanics when removing or installing taping heads that are moderately heavy or may be considered awkward to lift.

### **Caution**

- **To Reduce The Risk Associated With Pinch Hazards:**
  - a. Keep hands clear of the upper head support assembly as boxes are transported through the machine.
  - b. Keep hands, hair, loose clothing, and jewelry away from box compression rollers.
  - c. Always feed boxes into the machine by pushing only from the end of the box.
  - d. Keep hands, hair, loose clothing, and jewelry away from moving belts and taping heads.

## Important Safeguards

### Warning

- **To Reduce The Risk Associated With Mechanical And Electrical Hazards:**
  - a. Allow only properly trained and qualified personnel to operate and service this equipment.

### Operator Skill Level Descriptions

#### **Skill “A”: Machine Operator**

This operator is trained to use the machine with the machine controls, to feed cases into the machine, make adjustments for different case sizes, to change the tape, and to start, stop, and re-start production.

**Important: The area supervisor must ensure that the operator has been properly trained on all machine functions before operating the machine.**

#### **Skill “B” Mechanical Maintenance Technician**

This technician is trained to use the machine as the machine operator and in addition is able to work with the safety protection disconnected, to check and adjust mechanical components, to perform maintenance operations, and repair the machine. He is not allowed to work on live electrical components.

#### **Skill “C” Electrical Maintenance Technician**

This technician is trained to use the machine as the machine operator and in addition is able to work with the safety protection disconnected, to check and adjust mechanical components, to perform maintenance operations, and repair the machine. He is allowed to work on live electrical panels, terminal blocks, and control equipment.

#### **Skill “D” Manufacturers Technician**

Skilled technicians sent by the manufacturer or its agent to perform complex repairs and modifications, when agreed with the customer.

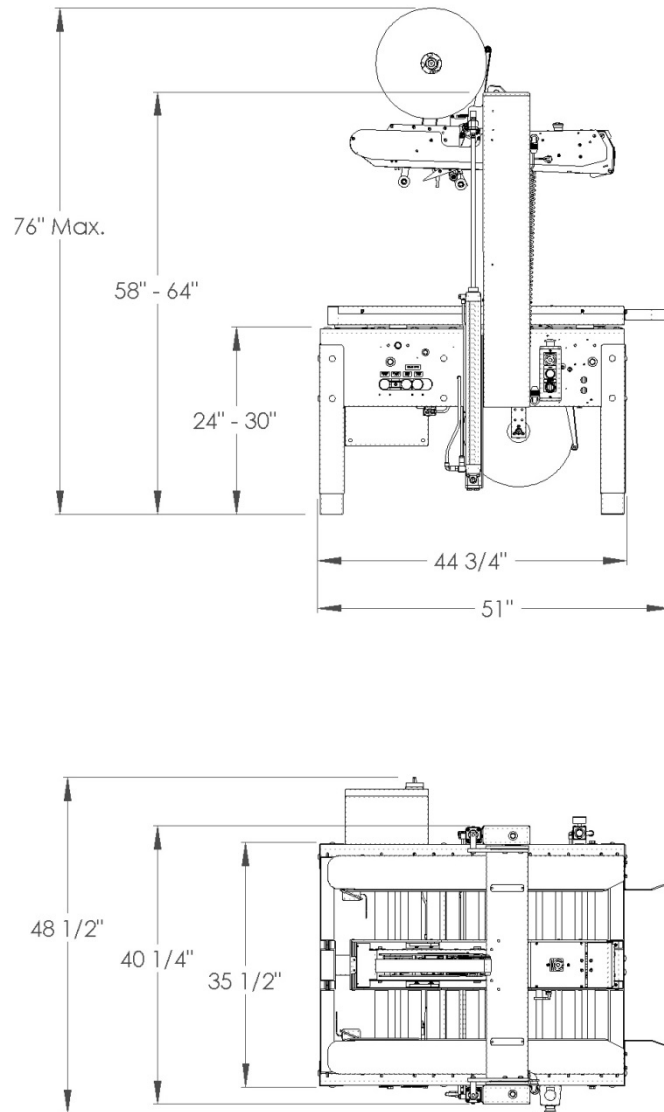
## Important Safeguards

### Operators Skill Level Required To Perform The Following Tasks On The Machine

Operation	Machine Condition	Operator Skill Level	Number Of Operators
Machine Installation & Set Up	Running With Safety Protections Disabled	B & C	2
Adjusting Case Size	Stopped By Pressing The Emergency Stop Button	A	1
Tape Roll Replacement	Stopped By Pressing The Emergency Stop Button	A	1
Blade Replacement	Electrical Power Disconnected	B	1
Drive Belt Replacement	Electrical Power Disconnected	B	1
Ordinary Maintenance	Electrical Power Disconnected	B	1
Extraordinary Mechanical Maintenance	Running With Safety Protections Disabled	D	1
Extraordinary Electrical Maintenance	Running With Safety Protections Disabled	C	1

# SPECIFICATIONS

## RSA 20-B Machine Dimensions



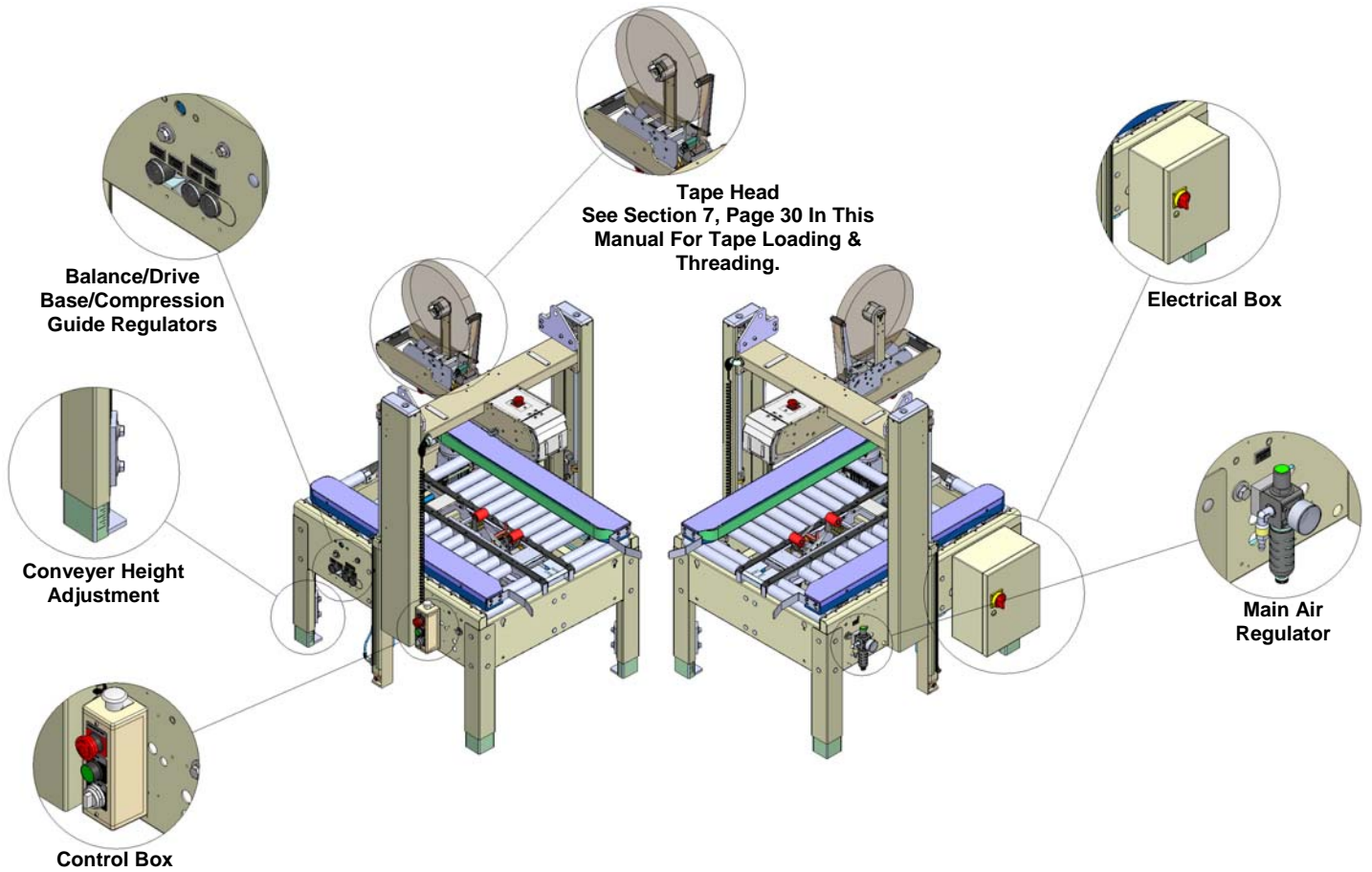
**Figure-3**

**Machine Weight:** 650 lbs. (295 kg) crated



# SPECIFICATIONS

## RSA 20-B Machine Components



**Figure-4**

# SPECIFICATIONS

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## 1. Operating Conditions

Use in a dry, relatively clean environment at 40° to 105° F (5° to 40° C) with clean dry cases.

**Note: Machine should not be washed down or subjected to conditions causing condensation on components.**

## 2. Power Requirements

Electrical - 110 VAC, 60 HZ, 6 A

Compressed Air – 9 CFM @ 90 PSI

This machine comes standard with two gear motors, one on each drive base, a control box, and an electrical box.

The control box contains a **Start** switch, an **Emergency Stop** switch, a “**Clear**” push button, an **Operation Selection** switch. A twelve foot (12') standard three conductor power cord with plug is provided for **110V, 60HZ, 15 Amp** service. The receptacle providing this service **must** be properly grounded.

## 3. Operating Speed

Actual production rate is dependent on operator's dexterity and the case size mix. Belt Speed is 82 Ft/min.

# SPECIFICATIONS

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## 4. Tape Specifications

Use Intertape Brand Pressure Sensitive Case Sealing Tape.

The machine can accommodate 2" (48mm) or 3" (72mm) wide tape, depending on tape heads supplied.

A maximum tape roll diameter of 16" (406 mm) on a 3" (76 mm) diameter core can be installed on the tape head. (Accommodates all Intertape brand film tape machine roll lengths).

The standard Tape Leg Length of 2.25 inches (57.2 mm) is factory set. The standard tape leg length may vary up to ¼" (6mm) based on tape tension and line speed.

The standard tape leg length is adjustable +/- ¼". Refer to the tape head manual for adjustment of tape leg length.

**Note: For further specifications on the tape heads, consult the tape head manual for your specific tape head.**

# SPECIFICATIONS

## 5. Case Specifications

### Type

- Regular Slotted Containers (RSC)
- Other style cases may be processed, consult factory for details.

### Material

125 To 275 PSI Bursting Test, Single Or Double Wall B Or C Flutes.

### Weight

0 to 85 lbs. (0 to 38.5 kg)

### Size

- The case sealer can accommodate most cases within the size ranges listed below.

Standard			
Case Size	Length	Width	Height
Minimum	152mm 6"	101mm 4"	88mm 3.5"
Maximum	Infinite	508mm 20"	609mm 24"

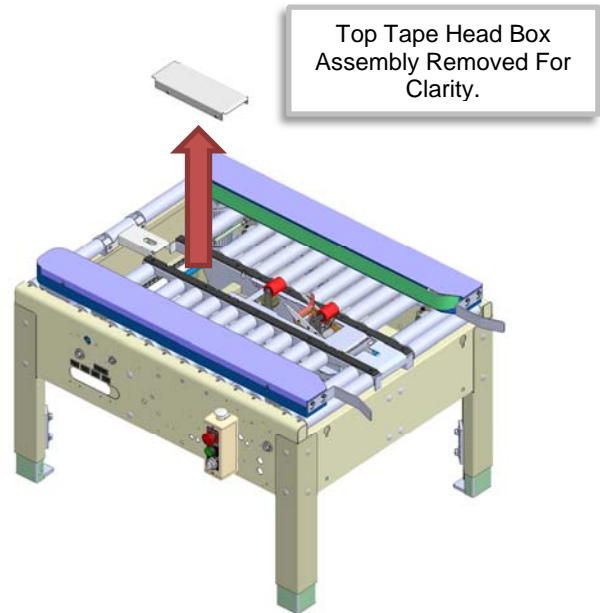
Optional			
Case Size	Length	Width	Height
Minimum	203mm 8"	203mm 8"	50mm 2"
Maximum	Infinite	508mm 20"	609mm 24"

**Note:** See Page 21 for set up procedure for running cases in the "Optional" size.

# SPECIFICATIONS

## “Optional” Case Size

To run cases with sizes that fall within the parameters set in the “Optional” Case Size chart in **Page 20**, remove the rear bottom gap filler as shown in **Figure-5**.



**Figure-5**

## Case Processing Stability

For optimal performance, the cases should be stable when processing through the machine. Unstable cases may tilt backwards upon contact with the upper tape head causing the machine to jam.

If the box length (in direction of seal) to box height ratio is .75 or less, then several boxes should be test run to assure proper machine performance. The formula is as follows;

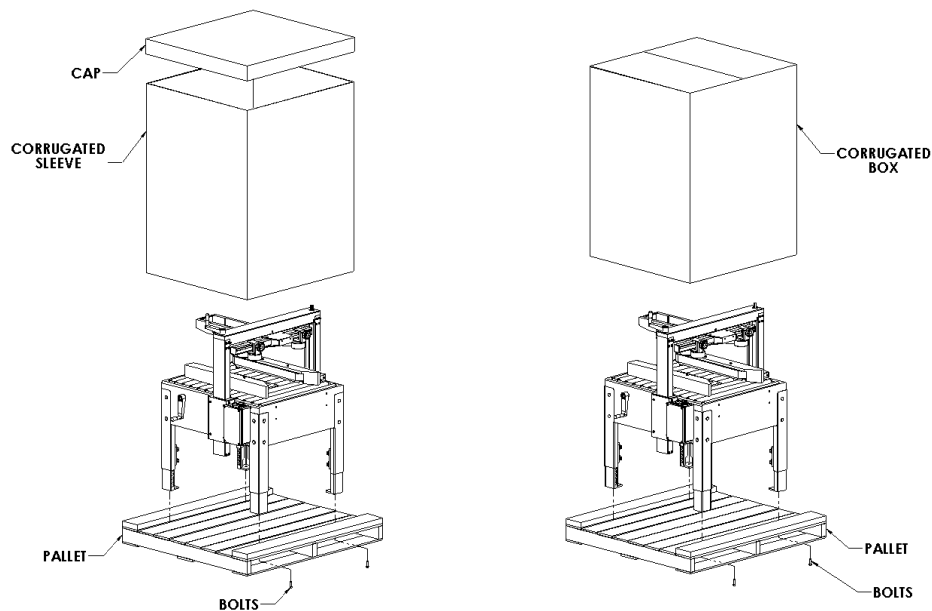
$$\frac{\text{CASE LENGTH IN DIRECTION OF SEAL}}{\text{CASE HEIGHT}} > .75$$

# SET-UP PROCEDURES

## 1. Receiving and Handling

The machine is shipped to the customer fixed to a pallet. The machine is enclosed with either a corrugated sleeve and cap or an HSC corrugated box. The sequence below is step by step instructions to remove all packing materials.

- Remove the strapping securing the corrugated sleeve and cap or HSC corrugated box to the pallet.
- Lift off the cap and corrugated sleeve or HSC corrugated box.
- Remove protective wrapping from machine.
- Remove or relocate all securing devices such as tie wraps or locking collars.
- Remove the mounting bolts, which secure the machine to the shipping pallet.
- Remove machine from the pallet and re-locate to an area to prepare for final installation.



**Figure-6**

All contents must be verified upon reception. The following items are included with each machine.

- **RSA 20-B**
- **Operators Manual Machine**
- **Operators Manual Tape Head**
- **Plastic bag containing tape head spare parts.**

**Note:** *After unpacking the case sealer, look for any damage that may have occurred during shipping. Should the case sealer be damaged, file a claim with the transport company and notify your authorized Intertape distributor.*

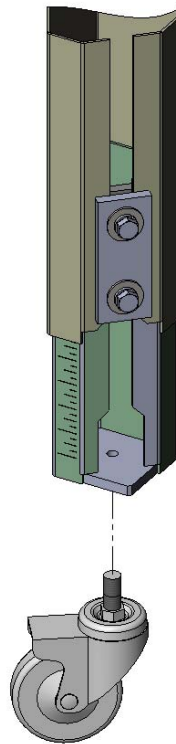
## SET-UP PROCEDURES

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### 2. Caster Installation (If Purchased)

**Caster installation requires raising the machine to access the bottom of each leg. Please follow all possible safety procedures prior to and during this process.**

- A. With a fork lift, raise the machine to allow access to the bottom of each leg.
- B. Screw in a caster into a leg until it is firmly seated to the bottom of the leg.
- C. Tighten each caster.
- D. Do not adjust the conveyor height by adjusting the caster. Proper conveyor height must be achieved by adjusting the leg extension of each leg. **(See Figure-8)**



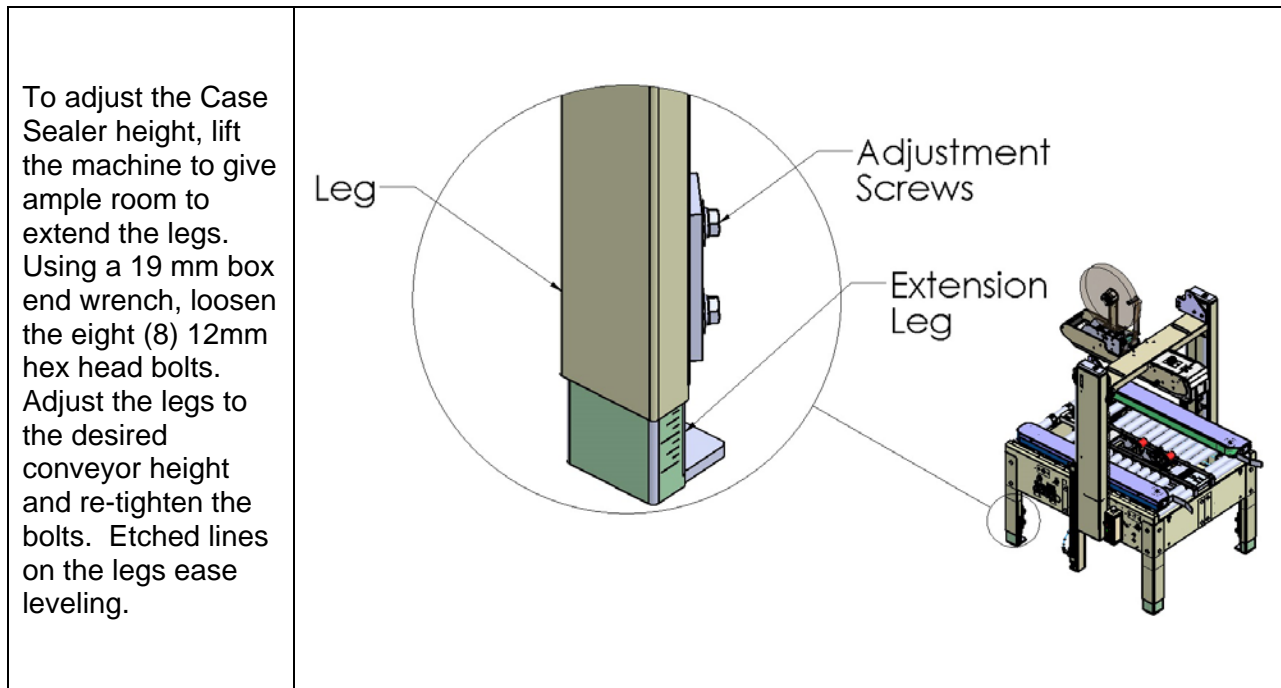
**Figure-7**

# SET-UP PROCEDURES

## 3. Machine Height Adjustment

**Machine height adjustment requires raising the machine to adjust each leg. Please follow all possible safety procedures prior to and during this process.**

The Case Sealer must be level when installed. Use the adjustable legs to ensure that the machine is level and firmly on the ground (no rocking). Adjust the leg height with the four (4) telescopic extension legs to accommodate conveyor heights from 24 to 30 inches.

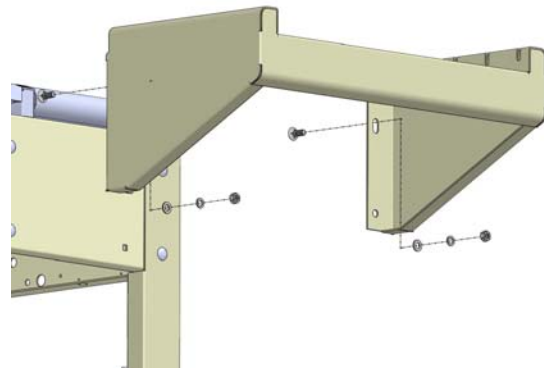
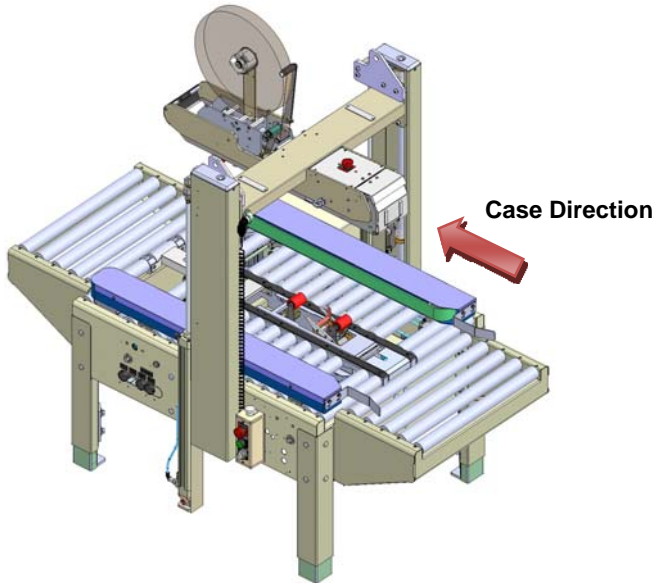


**Figure-8**

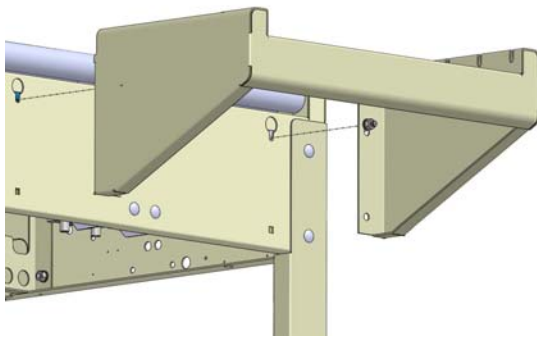


# SET-UP PROCEDURES

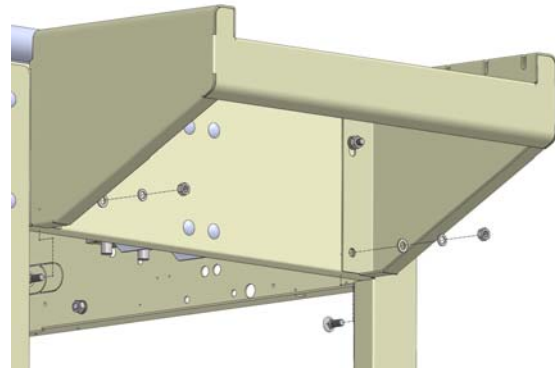
## 4. Installation of Interpack Brand In-Feed and Exit Roller Tables (If Purchased)



**Figure-9A**



**Figure-9B**



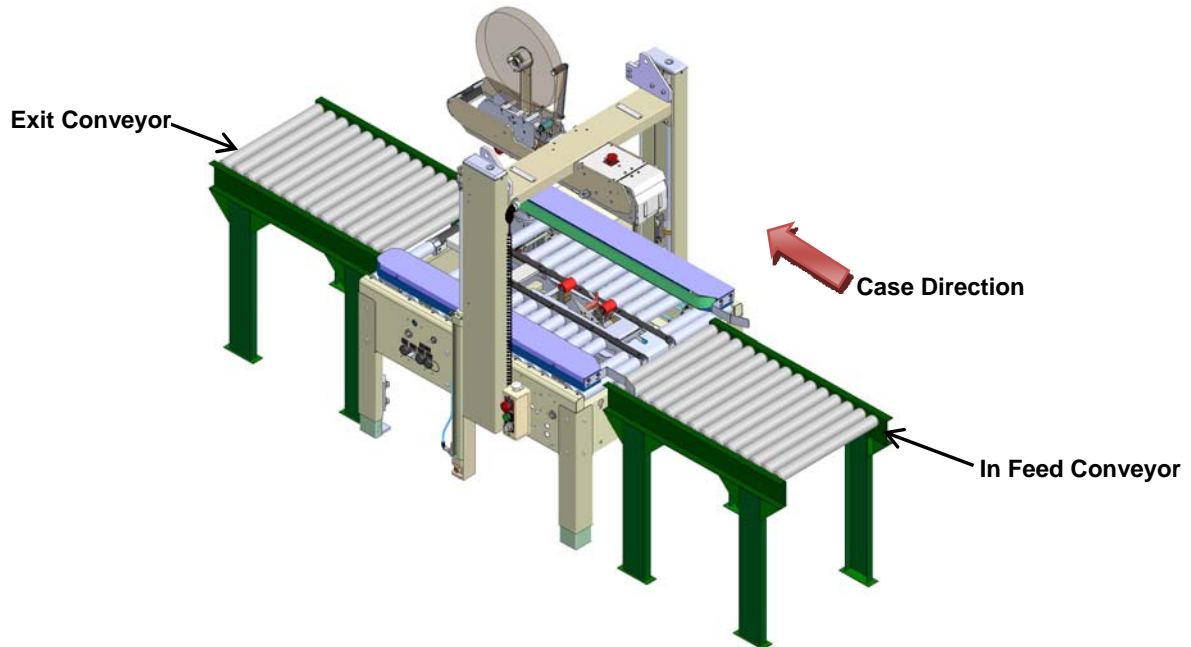
**Figure-9C**

- Install two (2) mounting studs into roller table with hardware included. Per **Figure-9A**.
- Utilizing the slots on the machine base, attach roller table to machine base by locating mounting studs in slots on machine base and push down to lock in place. Per **Figure-9B**.
- Once roller table is attached to the machine base using the two mounting studs, install remaining two (2) mounting studs with hardware included through the bottom two holes on the machine base and roller table. Per **Figure-9C**.
- After all four (4) mounting studs and included hardware have been installed, tighten all hardware to avoid roller table instability then install rollers on to table.

# SET-UP PROCEDURES

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## 5. Installation of External In-Feed and Exit Conveyors



**Figure-10**

1. Customer supplied in-feed conveyor (if used) should provide straight (not curved) and level entry into the case sealer.
2. Customer supplied gravity exit conveyor (if used) should be straight (not curved) and a downward pitch of at least  $\frac{1}{4}$  inch per foot away from the machine to convey the sealed cases away from the machine.
3. Customer supplied powered exit conveyor should be straight (not curved) and level to convey the sealed cases away from the machine.

# SET-UP PROCEDURES

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## 6. Connecting Utilities

### a. Electrical



**Figure-11**



**Figure-12**

A twelve foot (12') standard three conductor power cord with plug is provided for 110V, 60 Hz, 15 amp electrical service. The receptacle must be properly grounded. Before the machine is plugged into the receptacle, ensure that all materials are removed from the machine. The electrical control is protected with an automatic circuit breaker with resettable overload.

The electrical control box (**Figure-11**) is located on the side of the Case Sealer for customer convenience. The Electric Box contains a Power Switch Disconnect to prevent the use of the machine during maintenance. The machine will not start unless the Power Switch Disconnect is turned to "ON". To open the electric Box, turn the Power Switch to the "OFF" position, and use a slotted screwdriver and turn it clockwise to open the door.

When opening the door of the electrical box, the door handle should stay in the electrical box disconnect switch (**Figure-12**). In order to close the electrical box door again, align the switch arm with the handle in the door.

## SET-UP PROCEDURES

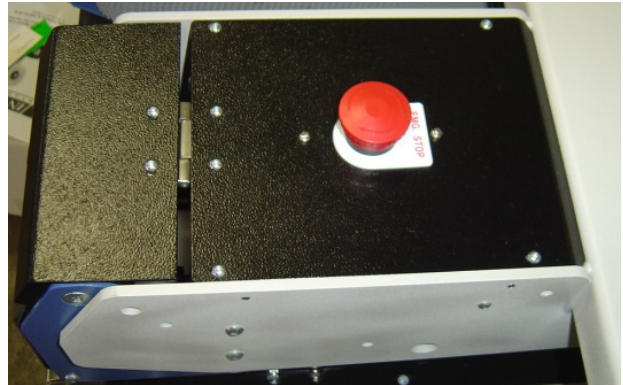
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### 6. Connecting Utilities, cont'd.

#### a. Electrical, cont'd.



**Figure-13**



**Figure-14**

The electric motors are protected with an automatic re-settable overload (**Figure-13**). This reset is located in the electrical box in the lower left quadrant. Push on the top blue button to reset. The current setting should be set at 110% of the FLA (Full Load Amps) of a single motor.

There is an E-Stop button for the case sealer located on the Top Tape Head Box (**Figure-14**). The other E-Stop button is located on the control box of the case sealer (Refer to **Page 35, Figure 26**).

## SET-UP PROCEDURES

### 7. Connecting Utilities, cont'd.

#### b. Pneumatic

**Note: The pressure setting for the air regulators (Figure-15 & Figure-16) are factory set. These values will need to be adjusted as needed by customer supplied pressure and volume.**



**Figure-15**



**Figure-16**

The main air regulator (**Figure-15**) has a male "quick disconnect" adaptor. Connect clean dry compressed air to this adaptor. The RSA2024-SB requires a minimum of **9 CFM at 90 PSI**.

To regulate the main air pressure, pull on the knob located on the top of the main air regulator (**Figure-15**). Turn the knob clockwise for more pressure and counterclockwise for less. When the air pressure is at **90 PSI**, push back down on the button until a "click" is felt to lock it in position. The thread size is 3/8 NPT.

The pressure regulators in **Figure-16** control various operations of the machine. The regulator on the left side labeled "**BALANCE**" controls the balance pressure for the top tape head box. The recommended pressure setting for the "**BALANCE**" regulator is **60PSI**. The regulators on the center labeled "**OPEN**" and "**CLOSE**" control the pressure for the drive bases. The recommended pressure settings for the "**OPEN**" and "**CLOSE**" regulators is **30PSI**. The regulator on the right side labeled "**GUIDE**" controls the pressure for the compression guides. The compression guides are optional and the "**GUIDE**" regulator will be included if the machine option is installed. The recommended pressure setting for the "**GUIDE**" regulator is **30PSI**.

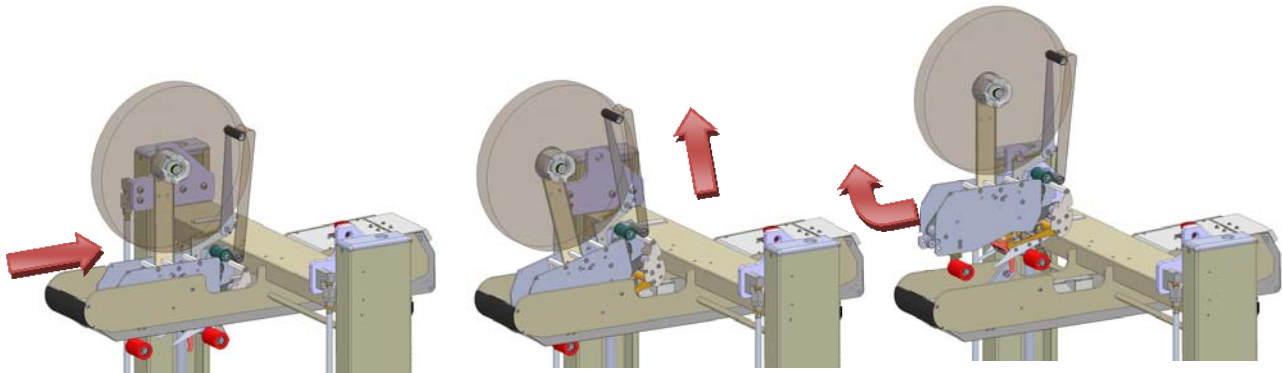
**Note: Should the supplied airline or pressure be unplugged or cut for any reason, the Top Tape Head Box will retain its current position until the compressed air is restored.**

## SET-UP PROCEDURES

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### 8. Removing Tape Heads Prior to Tape Loading

#### Removing Upper Tape Head



**Figure-17**

1. Slide Tape Head Toward The Infeed End Of Machine And Rotate Up.
2. Slide Tape Head Toward The Exit End Of Machine And Lift Out Of Rear Slot.

#### Removing Lower Tape Head



**Figure-18**

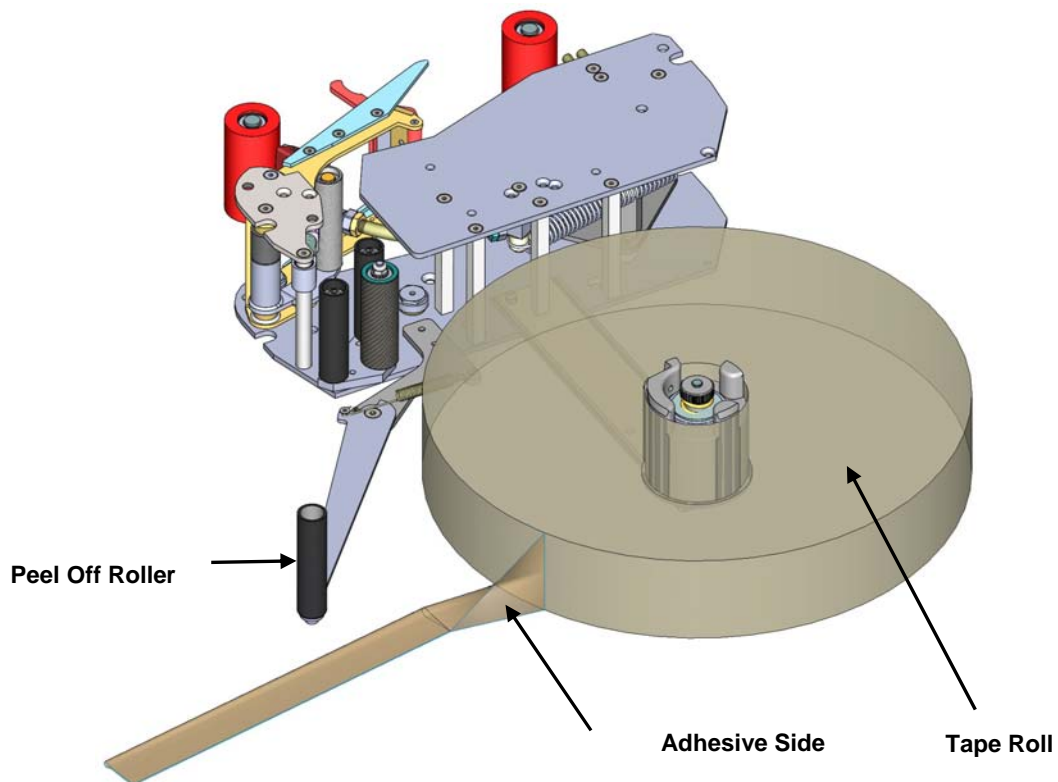
1. Remove Gap Filler (included in 2" model only) by Lifting Straight Up.
2. Gripping the Stationary Cross Shafts, Lift the Tape Head Straight Up and Out of The Slots.

# SET-UP PROCEDURES

## 9. Tape Loading

The HSD<sup>®</sup> 2000-ET II Tape Heads accommodate 2-inch (48mm) wide tape rolls, while the HSD<sup>®</sup> 2000-ET II /3" Tape Heads accommodate 3-inch (72mm) wide rolls.

1. Place the tape head onto a sturdy, flat surface.
2. Move the peel off roller away from the mandrel.
3. Push the roll of tape onto the mandrel with the adhesive side up (refer to **Threading Diagram** under Tape Threading section in this manual) until the core seats against the mandrel flange. This ensures the tape will be aligned when feeding into the tape head.
4. Replace the peel roller against the tape roll.



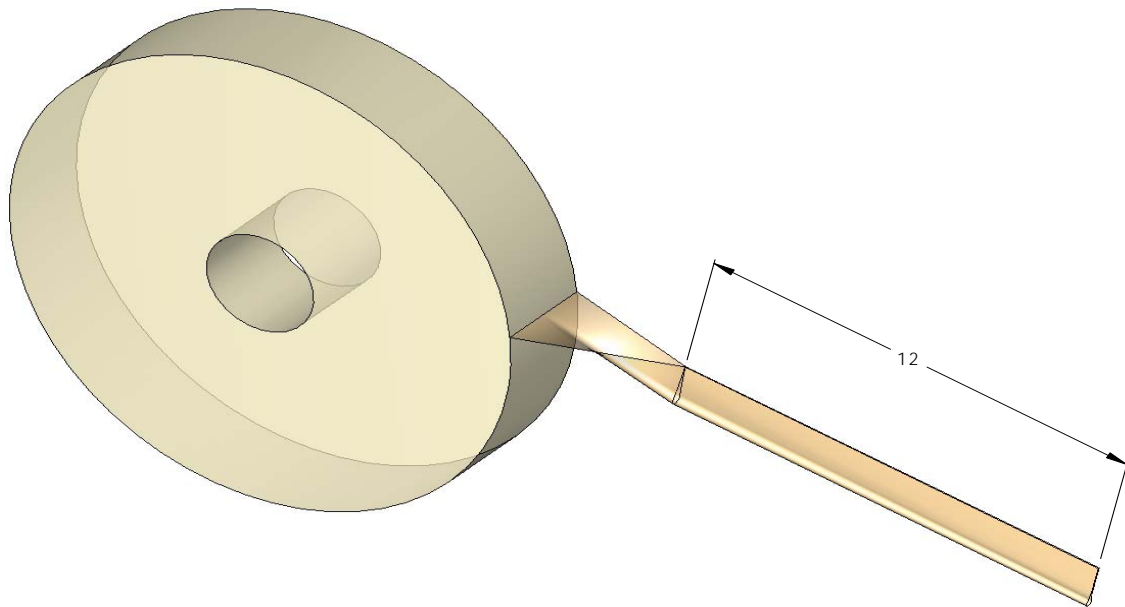
**Figure-19**

## SET-UP PROCEDURES

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**WARNING! THE KNIFE CONTAINED IN THE TAPE HEAD IS EXTREMELY SHARP. USE CAUTION WHEN THREADING THE TAPE TO AVOID PERSONAL INJURY.**

### 10. Tape Threading Preparation



**Figure-20**

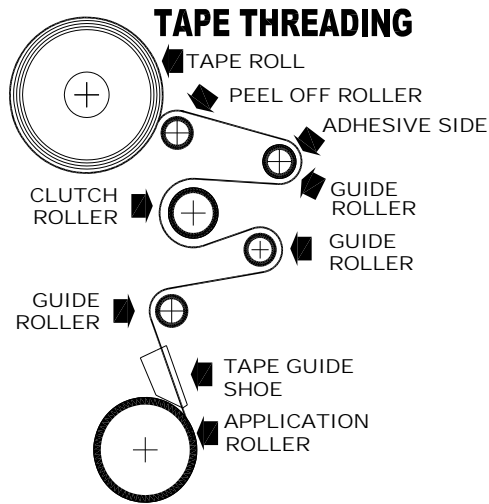
Threading the tape in the Tape Head does not require any special tools.

Pull approximately twelve (12) inches of tape from the roll and fold in half lengthwise, adhesive side to adhesive side. This allows you to thread the tape without it adhering to the guide and clutch rollers inside the Tape Head

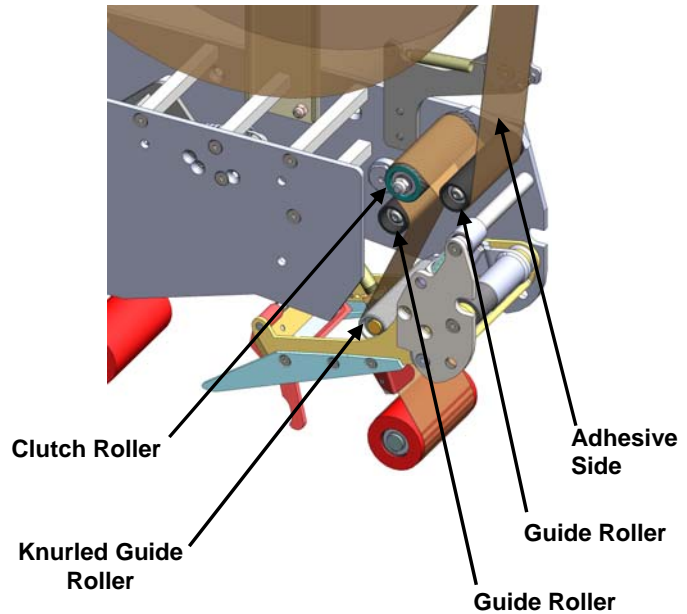


# SET-UP PROCEDURES

## 11. Tape Threading



**Figure-21**



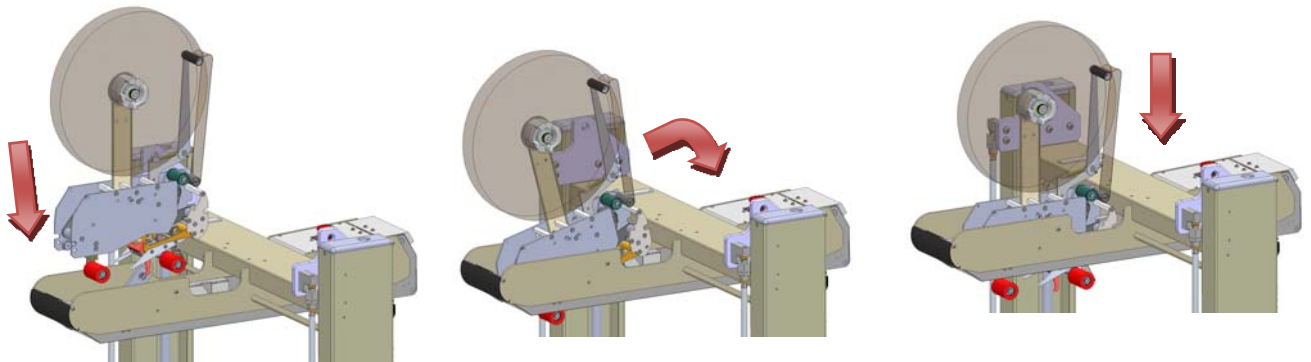
**Figure-22**

1. As Illustrated In **Figure-21**, First Thread The Tape Tail Over The **Peel Off Roller**.
2. As Illustrated In **Figure-21 And Figure-22**, Thread The Tape Over And Around The First "Smooth" **Guide Roller**.
3. Continue To Thread The Tape Over And Around The "Knurled" **Clutch Roller**.
4. Then Pass The Tape Up And Over The Second "Smooth" **Guide Roller**.
5. Continue Threading The Tape Over And Behind The Final "Knurled" **Guide Roller**.
6. Thread The Tape Through The Cut-Out Provided In The **Tape Guide Shoe** And Pull The Tape Through The Front **Application Roller**, Ensuring That The Tape Is Retained In The Tape Guide Shoe
7. Cut Off The Folded Tape.
8. Replace The Tape Head To Its Initial Position In The Machine.

# SET-UP PROCEDURES

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## 12. Re-Installing Tape Heads

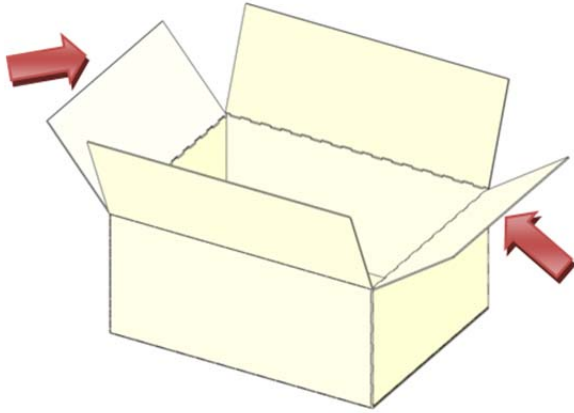


**Figure-23**

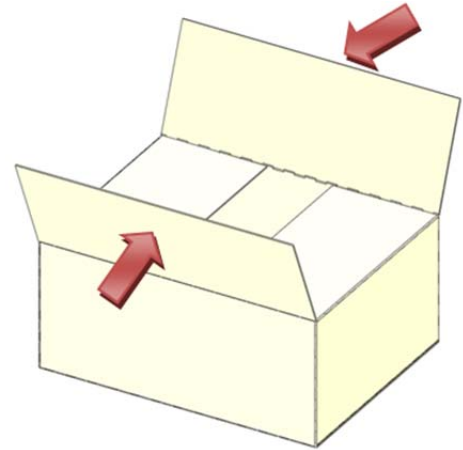
1. Insert Exit End of Tape Head into Rear Slots.
2. Rotate Front of Tape Head Down Into Front Slots
3. Push Front of Tape Head Down to Seat in Bottom of Slot.

# SET-UP PROCEDURES

## 13. Preparation Of Case To Be Processed



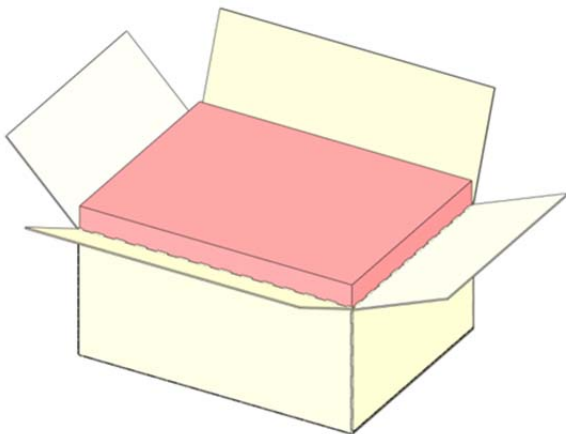
**Figure-24**



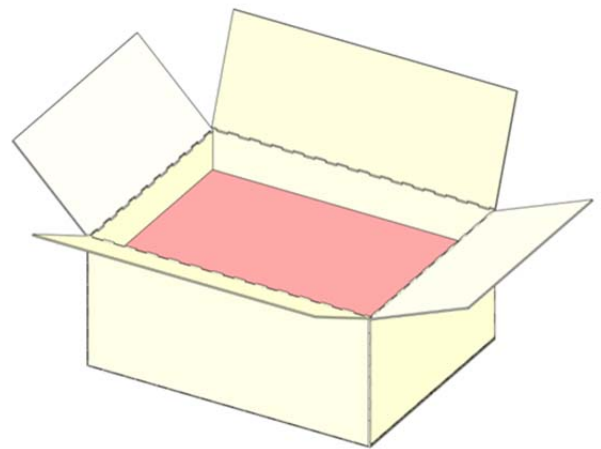
**Figure-25**

### a. Flap Folding

- i. Fold Minor Flaps In As Shown In **Figure-24**
- ii. Fold Major Flaps In As Shown In **Figure-25**



**Figure-26**



**Figure-27**

### b. Over Fills And Void Fills.

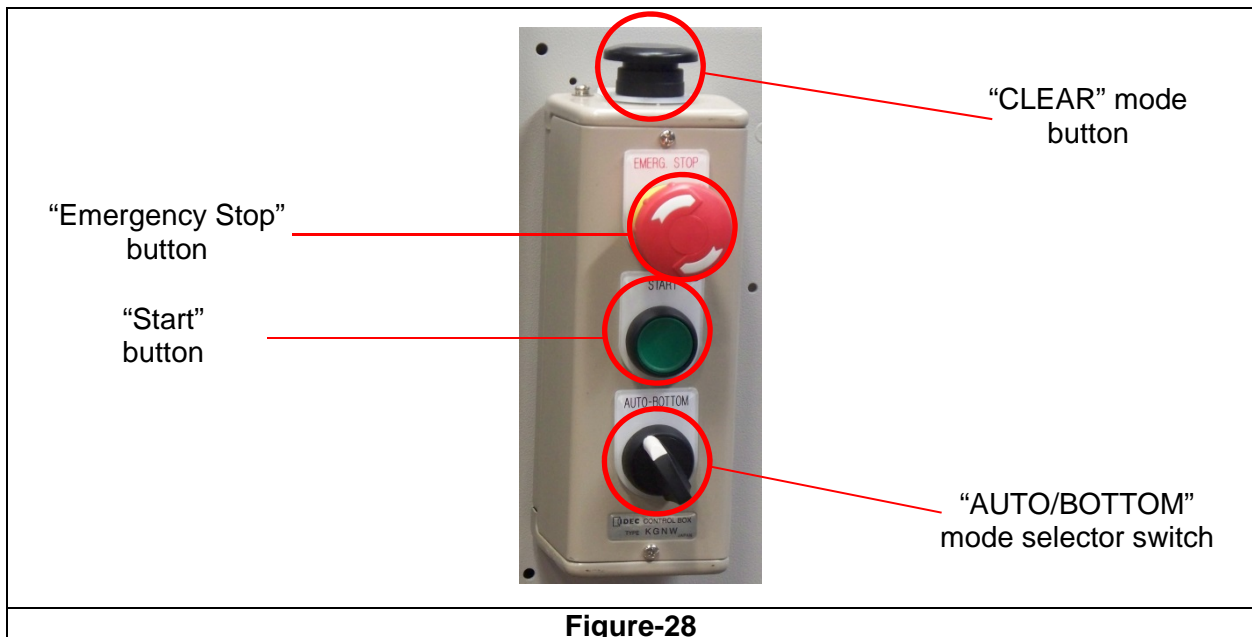
**Over Fills** As Shown In **Figure-26** And **Void Fills** As Shown In **Figure-27** Should Be Avoided To Assure Proper Processing Of The Corrugated Case. Each Of These Scenarios Put Stress On The Pressure Sensitive Tape Seal Which Could Be Detrimental To The Integrity Of The Closure.

## OPERATING INSTRUCTIONS

Once the Tape Heads (both bottom and top) have been loaded with tape and threaded (refer to the appropriate Tape Head manual for loading and threading instructions) the machine is ready to process regular slotted cases. The following instructions are presented in the order recommended for processing cases successfully through the RSA 20-B Case Sealing machine.

The RSA 20-B Case Sealer has three operating modes. The operator selects these modes, using the 2-position switch and push button located on the Control Box. Refer to **Figure-28**.

When the case sealer is turned on, the top tape head box will rise to uppermost position and side belt drives will come out to their outermost position. These positions are referred to as their "home" positions.



### **Automatic Mode:**

This is the standard operating mode of the machine. In this mode, the Top Tape Head Box will retain its previous height, helping increase throughput speed, and the side belt drives will travel to "home" position until case arrives. When a case is being processed, the top tape head box will match case size; side belt drives will move in towards the box and carry case through the exit of the machine.

1. Ensure that the compressed air is plugged and at 90 PSI.
2. Turn the selector switch on the control box (**Figure-28**) to "AUTO" (Automatic).
3. Press the start button, the drive belts will return to "home" position.
4. Introduce a case with the flaps held in the closed position and advance to the indexing gate so the proper sensor is activated. Do not place hands in front of case.
5. The Top Tape Head Box will descend to set itself at the height of the case.
6. When the bottom paddle is depressed and the bottom switch is covered, the side drives will close.
7. The case will be processed and tape applied to top and bottom center seams.
8. Once the case is processed and exits the machine, the exit sensor is cleared and the side belt drives will return to "home" position.

# OPERATING INSTRUCTIONS

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## **Bottom Only Mode:**

This mode is used for sealing the bottom seam of a random sized cases. In this mode, the top tape head box remains in the "home" position at all times.

1. Ensure that the compressed air is plugged in and at 90 PSI.
2. Turn the control selector placed under the start button to "BOTTOM" (Bottom Only).
3. Press the start button, the drive belts will start.
4. The Top Tape Head Box will move to its highest position and remain there.
5. Present the case over the front sensor, up to the steel gate.
6. The drive bases will then close on the case to carry it over the bottom tape head.
7. The machine resets when the case clears the exit sensor.

## **Clear Mode:**

This mode is used to clear a jammed case without the need for the e-stop.

**Note:** While in "Clear" mode, the top tape head box and the side belt drives will return to their "home" position. The belts will cease operation but the machine will continue to be powered throughout. If electricity needs to be cut off throughout the machine, use the e-stop buttons located on the control box and on the top tape head box.

1. Ensure that the compressed air is plugged in and at 90 PSI.
2. Press down on the control mushroom button located on the top of the Control Box to set machine to "Clear" mode.
3. Remove jammed case.
4. Pressing the "Clear" mushroom button a second time will return the machine to chosen operational mode.

**Warning!** Ensure that the operator's hands are away from the moving belts of the side drive base assembly. Do not place hand on the front edge of the case while it is entering the machine.

**Note:** Should any problem occur during processing that requires halting the machine, press the red "E-Stop" mushroom button.

**Note:** The machine should never be washed down or subjected to conditions causing condensation on components.

# OPERATING INSTRUCTIONS

The RSA 20-B comes fully adjusted from the factory for most processing conditions. Certain conditions may require adjustments or fine turning of the machine and air pressure to provide optimal performance.

## 1. Balancing the Top Tape Head Box (After Case Exits Machine)

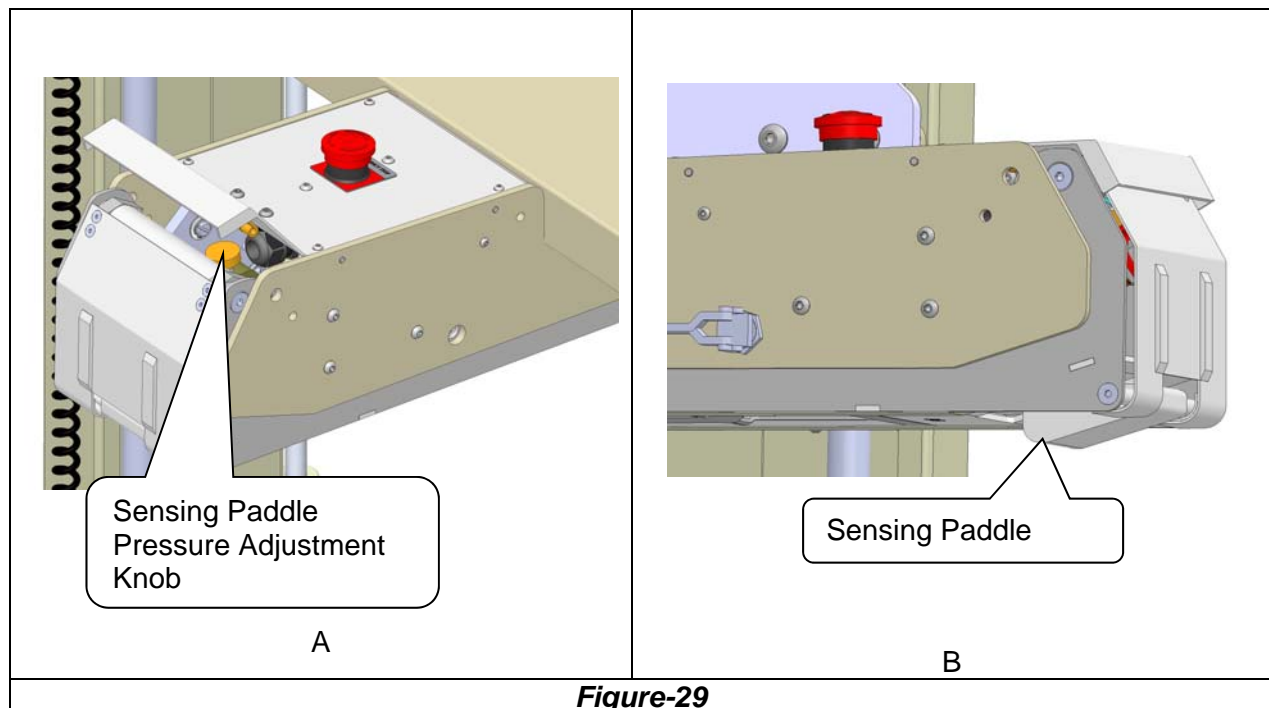
When the machine is in Automatic mode and running with no case introduced, the Top Tape Head Box should remain stationary. If it floats up or down, the balance gauge needs to be adjusted (**Refer to Page 28**). Increase the pressure to stop the **ascent** of the Top Tape Head Box. Reduce the pressure to stop the **descent** of the Top Tape Head Box. After balance adjustment, process case and verify that the Top Tape Head Box remains stationary. If it still floats up or down, continue adjusting and processing until the balance reaches a stationary state.

## 2. Void/Overfilled/Fragile Cases

### For overfilled cases:

The RSA 20-B comes with a box overfilled feature to compensate for overfilled boxes to seal properly. To suit your case sealing need, this feature requires adjustments (See Below).

To adjust the overfilled case device locate the knob underneath the E-Stop button on the Top Tape Head Box (Refer to **Figure-14** for E-Stop location). Adjust counterclockwise to exert pressure on the lower detect flag (**Fig. 29B**) conforming overfilled cases fully close when processing, see **Figure 29A** for knob location.



## OPERATING INSTRUCTIONS

### 2. Void and Overfilled Cases, cont'd.

#### For void cases:

For void cases reduce pressure on the Sensing Paddle (**Fig.29B**) by turning knob (**Fig.29A**) clockwise.

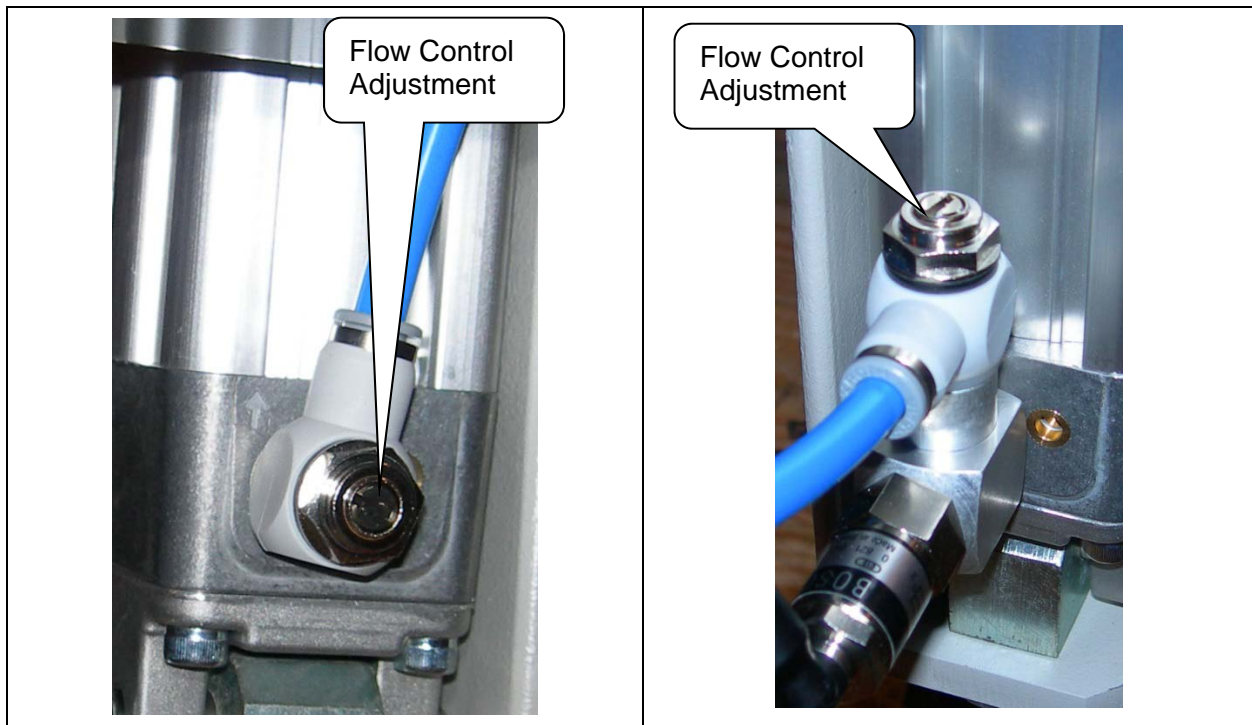
#### For fragile cases:

Adjust the speed of descent of the Top Tape Head Box with the use of the Flow Control Valves (refer to "Speed of Descent of Top Tape Head Box" on the next page) so the Top Tape Head Box moves slower. To prevent the Top Tape Head Box from overloading the top of the box, the operator can adjust the air pressure on the BALANCE regulator as necessary.

**Note:** Always have a minimum amount of pressure applied to the Sensing Paddle for cases either void, overfilled, or fragile. Excessive spring force on Sensing Paddle may cause cases to rip or damage. Likewise under pressured Sensing Paddle will cause erratic Top Tape Head Box movement when head rises.

### 3. Speed of Descent of Top Tape Head Box

If the Top Tape Head Box lowers on the boxes too quickly, the flow controls at the bottom of the side cylinders need adjustment (**Figure-30**). Using a flat head screwdriver, turn clockwise to slow the descent and counter-clockwise for a faster descent. Both cylinders should be adjusted the same amount and should be done 1/8 of a turn at the time.

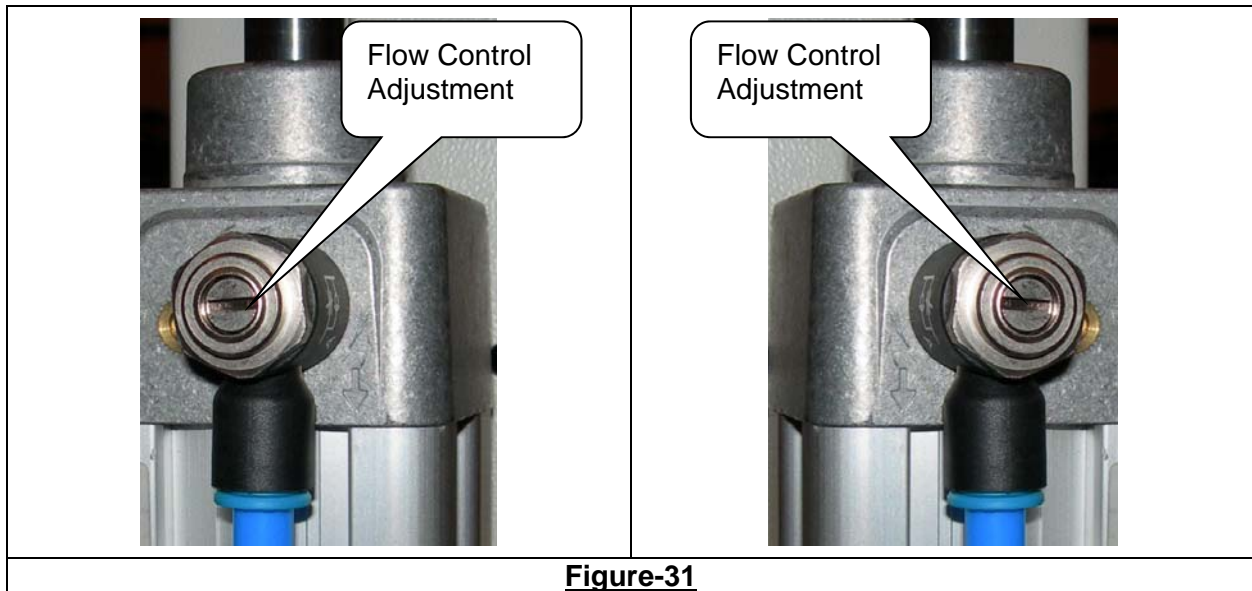


**Figure-30**

## OPERATING INSTRUCTIONS

### 4. Speed of Raising of Top Tape Head Box

If the Top Tape Head box slams when it reaches its apex or ascends to quickly the flow controls at the top of the side cylinders need to be adjusted (**Figure-31**). Using a flat head screwdriver, turn clockwise to slow the ascent and counter-clockwise for a faster ascent. Both cylinders should be adjusted the same amount and should be done 1/8 of a turn at the time.



### 5. Drive Base Adjustment

#### **Speed of closing and opening:**

The Flow Control Valves at each end of the drive base cylinder under the machine controls the speed of closing and opening of the drive base. Using a flathead screwdriver, turn clockwise to slow the movement of the drive bases and counter-clockwise for a faster movement. This adjustment is to be done 1/8 of a turn at a time. The flow controls regulate the flow of the air exiting the cylinder.

#### **For Heavy cases:**

If drive bases do not close completely to power the case during processing, increase air pressure on the “Drive Base – Closed” regulator (**Refer to Page 29**). The air pressure should be increased by 5 PSI at a time by turning the knob clockwise until the box can be centered by the drive bases. Different types of boxes may require slightly different adjustments than those that are factory-preset.

#### **For fragile cases:**

To prevent the drive bases from closing too quickly and too hard on fragile boxes, the air pressure regulator and flow controls can be adjusted as necessary.



## TROUBLESHOOTING

The **RSA 20-B** is fabricated with high quality components that provide trouble-free operation for a long period of time. However, should a problem occur, we recommend that you consult the following table. If the problem you encounter is not discussed in this table, call Interpack Technical Support (see **Page 4** of this document).

Trouble	Possible Causes	Solutions
Green start button depressed but belts do not turn.	<p>E-Stop not Re-Set</p> <p>Machine Not Plugged In</p> <p>“Clear” mode still active</p>	<p>Rotate E-Stop 1/4 Turn Clockwise.</p> <p>Plug Machine Into 110 V, 60 Hz, 15 Amp Electrical Service.</p> <p>Press down on the “Clear” button to take machine off “Clear” mode</p>
Air is supplied. Main power is turned “on” and nothing happens.	<p>Overload protection by circuit breaker</p> <p>E-Stop not Re-Set</p>	<p>Check that all circuits are “on”.</p> <p>Rotate E-Stop 1/4 Turn Clockwise.</p>
Drive belts do not process cases.	<p>Belt tension Too Low</p> <p>Collapsed Leading End Panel On Case.</p> <p>Case Size Is Out Of Specification.</p>	<p>Re-Tension Drive Belts, (<b>See Page 52</b>)</p> <p>-Install Lighter Gauge Tape Head Main Spring</p> <p>-Reduce Unwind Tension On Tape Roll</p> <p>    a. Mandrel Tension</p> <p>    b. Clutch Roller Tension</p> <p>Compare Case Sizes With Machine Specifications, (<b>See Page 20</b>)</p>
Top tape head box has no action, either at down, up, or half-way position. Drive bases stay closed onto a box.	When machine has been activated without a box.	Reset machine operation using the “Clear” button then set the operation selection switch to AUTO to resume operation.

## TROUBLESHOOTING CONTINUED

Trouble	Possible Causes	Solutions
Case processes but leading end panel is crushed.	<p>Product does not support the end panel of the case.</p> <p>Main spring tension on tape head too strong.</p>	<p>Insert proper dunnage material to provide support.</p> <p>Reduce main spring tension. See tape head manual provided with tape head.</p>
Drive belts start, and then stop.	Motor starter trips.	Call maintenance.
Void fill cases do not process properly.	<p>Upper tape head wipe down rollers collapse inside case.</p> <p>Top Tape Head Box is not adjusted properly.</p>	<p>-Install lighter gauge tape head main spring.</p> <p>-Reduce unwind tension for tape roll on:</p> <ul style="list-style-type: none"> <li>a. Mandrel Tension</li> <li>b. Clutch Roller Tension</li> </ul> <p>Adjust regulator pressure (<b>See Page 39</b>)</p>
Overfilled cases do not process properly.	<p>Product height exceeds case height.</p> <p>Excessive void fill dunnage.</p> <p>Top Tape Head Box is not adjusted properly.</p>	<p>-Reduce product in case to match case height.</p> <p>-Increase case height to match product height.</p> <p>Reduce void fill dunnage to match case height.</p> <p>Re-adjust top tape head box to proper case height.</p> <p>Adjust regulator pressure (<b>See Page 38</b>)</p>
Unstable cases do not process properly.	Case height exceeds 1 ½ times the case length.	<p>-Re-configure case dimensions so that case is not unstable.</p> <p>-Process case on top and bottom belt drive machine.</p>

## TROUBLESHOOTING CONTINUED

Trouble	Possible Causes	Solutions
Tape not centered on case.	<p>Tape roll mandrel not center.</p> <p>Tape roll not fully pushed on tape mandrel.</p>	<p>Center tape roll mandrel, see Tape Head manual.</p> <p>Push tape roll completely onto tape mandrel.</p>
Tape does not cut.	<p>Dull blade.</p> <p>Insufficient tension at the clutch roller.</p> <p>Insufficient knife arm spring tension</p>	<p>Replace blade.</p> <p>Increase clutch roller tension slightly. See tape head manual provided with tape head.</p> <p>Increase knife arm spring tension. See tape head manual provided with tape head.</p>
Rear tape leg is folded or wrinkled.	<p>Tape threaded incorrectly.</p> <p>Adhesive build up in tape path.</p> <p>Dull blade.</p> <p>Excessive unwind tension from tape roll.</p>	<p>Review tape threading. <b>(See Page 32)</b></p> <p>Clean tape guide rollers to provide a free rotation.</p> <p>Clean tape path, blade.</p> <p>Replace blade.</p> <p>Adjust mandrel tension and clutch roller tension. See tape head manual provided with tape head.</p>
Tape leg is too short or too long.	<p>Tape leg adjustment not correct.</p> <p>Tape head is not threaded correctly.</p> <p>Tape roll unwind tension is too strong or too weak.</p>	<p>Adjust tape leg, see tape head manual.</p> <p>Thread tape head correctly. <b>(See Page 32)</b></p> <p>Adjust unwind tension, see tape head manual.</p>

## RECOMMENDED SPARE PARTS

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This machine is designed to provide years of trouble free operation. However, maintaining a small inventory of spare parts assures minimum downtime in the event of a problem. We recommend that you stock the following spare parts.

Part Description	Item Number	Recommended Quantity
BEARING PULLEY	UPM0324	2
BUMPER	UPM0576	8
BELT ENDL. SAG12E, 2" X 83"	UPM0663	2
LINEAR BEARING 25MM SHAFT	LM25UU	2
SPRING BLADE	UPM0011	2
PRESSURE GAUGE 40MM 6 BAR	UPM3273	1
CHAIN THREADED LINK L.H.	UPM3259EV	1
CHAIN THREADED LINK R.H.	UPM3260EV	1
MAIN AIR REGULATOR FILTER	UPM3274	1

### Replacement Parts

Order parts by item number, part description and quantity required. Replacement parts are available from your Authorized Interpack Distributor exclusively.

Should you require assistance selecting the correct part, you may call:

Intertape Polymer Group  
Interpack Machinery

Tel: 1-800-474-8273 Option 3  
Fax: 1-800-462-1293

### Field Service Assistance

This machine is designed to provide years of trouble free operation. If any problems arise with this machine during the normal course of operation, your properly trained and qualified internal service personnel should be able to repair any issues after consulting the Trouble Shooting section of this manual.

Service support is available from your Authorized Interpack Distributor at additional cost if the problem cannot be remedied after consulting the Trouble Shooting section of this manual.

# PREVENTATIVE MAINTENANCE

The RSA 20-B has been designed and manufactured with the finest components to provide long, trouble free performance. General preventive maintenance will improve performance and prolong the life of the case sealer

Please review the illustrations and chart below for information regarding machine And Tape Head maintenance

## Machine Preventative Maintenance Chart

**Warning!** Ensure that the case sealer has been disconnected from the power source and the airline before conducting any maintenance procedures.

Item	Action Required	Material	Frequency		
			Weekly	Monthly	Quarterly
Carton Dust In/On Machine	Blow Off Machine Externally and Internally	Air hose	X		
	Pay Attention To Drive Base Centering Chain				
Hardware	Re-Tighten any Loose Hardware			X	
	Replace any Missing Hardware				
Column Shafts	Lubricate	Silicone Lubricant		X	
Cross Shafts	Lubricate	Silicone Lubricant		X	
Centering Chain	Lubricate	Chain Lubricant		X	
Air Regulator Filter	Clean Filter	Water, Mild Detergent		X	

# PREVENTIVE MAINTENANCE

## Tape Head Preventative Maintenance Chart

Item	Action Required	Material	Frequency		
			Weekly	Monthly	Quarterly
Blade Guard Oiler Pad	Lubricate	Lightweight oil	X		
Hardware	Re-tighten any loose hardware				X
	Replace any missing hardware				X
Cutter Blade	Inspect for wear		X		
	Clean	Solvent Cleaner	X		
Mandrel Assembly	Disassemble & Observe				X
Mandrel Spring	Check for weakness	None			X
Mandrel Friction Washer	Clean	Solvent Cleaner			X
Mandrel Metal Washer	None	None			X
Mandrel Shaft	Remove any dust and adhesive build up	Solvent Cleaner			X
Mandrel Bearing	Check for wear	None			X
Peel Roller					X
Delrin Roller	Check for free spinning. Disassemble and remove any adhesive build up.	Solvent Cleaner			X
Pivot Shaft	Check for any restriction	Solvent Cleaner			X
Peel Roller Spring	Check for weakness				X
Plastic Guide Rollers	Check for free spinning. Disassemble and remove any adhesive build up.	Solvent Cleaner		X	
Knurled PTFE Coated One Direction Clutch Roller	Back off tension. Check for free spinning. Disassemble and remove any adhesive build up.	Solvent Cleaner		X	
Knurled PTFE Coated Guide Roller	Rotation should be slightly restricted by Belville washer. Disassemble and remove any adhesive build up if excessive restriction is detected	Solvent Cleaner		X	
Front Red Wipe Down Roller	Rotation should be slightly restricted by Belville washer. Disassemble and remove any adhesive build up if excessive restriction is detected	Solvent Cleaner		X	
Rear Red Wipe Down Roller	Check for free spinning. Disassemble and remove any adhesive build up.	Solvent Cleaner		X	
Main Spring	Remove and inspect for any wear or weakness. Replace as necessary.			X	
Knife Spring	Remove and inspect for any wear or weakness. Replace as necessary.			X	
Tape Shoe Guide Flat Spring	Inspect for any wear or weakness. Replace as necessary.			X	
Wipe Down Brush	Inspect for any wear or weakness. Replace as necessary.			X	
Main Applying And Wipe Down Assembly	Remove <i>Main Spring</i> and check for any restrictions when assembly is in motion	Worn bearings, bent shafts, bent roller arms			X
Knife Arm Assembly	Remove <i>Knife Spring</i> and check for any restrictions when assembly is in motion	Worn bearings, bent shafts, bent roller arms			X

Refer To Assembly Drawings For Part Numbers Of Replacement Parts If Required

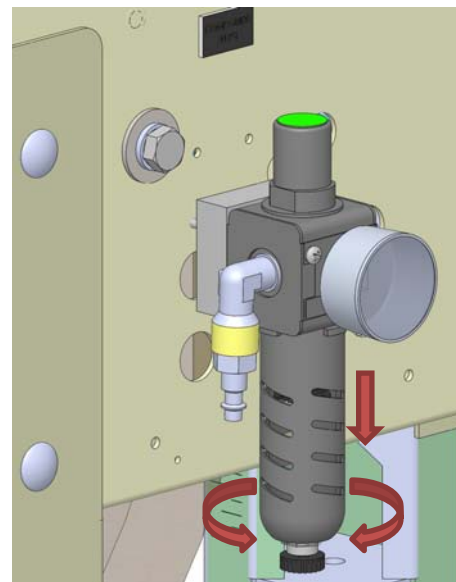
# PREVENTIVE MAINTENANCE

## Changing air regulator filter

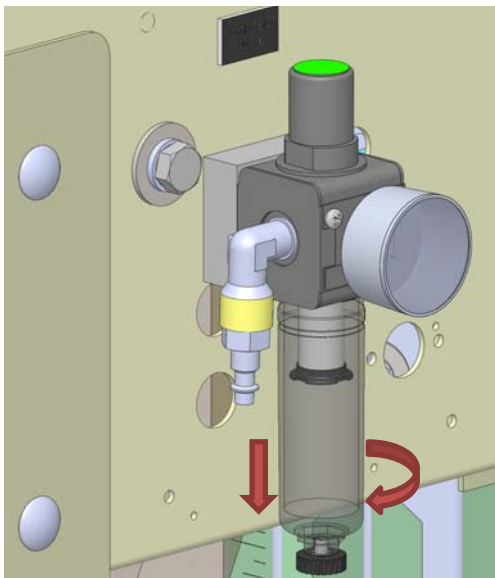
**Warning!** Ensure that the case sealer has been disconnected from the power source and the airline before conducting any maintenance procedures.

The filter on the air regulator removes dirt and moisture from air plant before it enters the carton sealer.

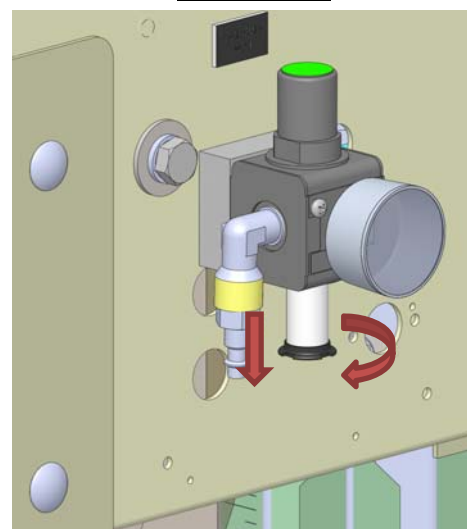
1. To remove metal protective guard, rotate and pull down (**Figure-32A**).
2. The clear reservoir (**Figure-32B**) has a threaded top which is used to attach it to the main regulator assembly. To remove the reservoir, rotate it until unfastened.
3. The air regulator filter (**Figure-32C**) is held in place using a threaded cap fastened on to the main assembly. To remove the filter, unfasten the cap and pull down on filter.



**Figure-32A**



**Figure-32B**

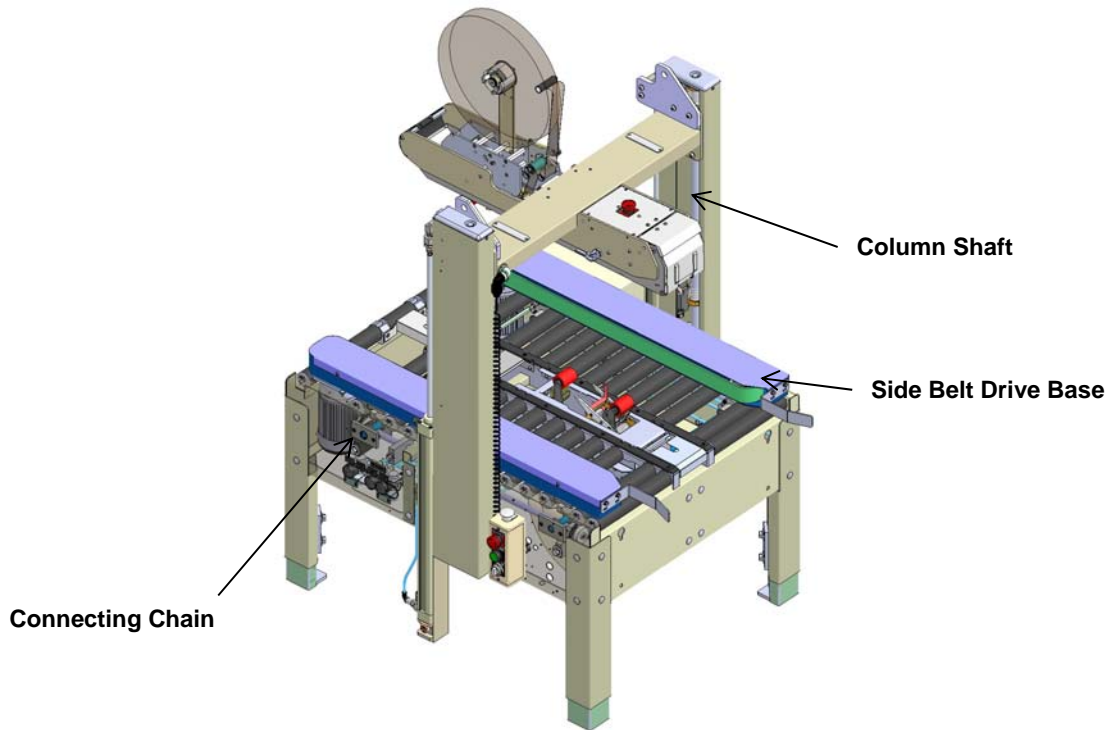


**Figure-32C**

# PREVENTIVE MAINTENANCE

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## Cleaning The Machine



**Figure-33**

**Warning! Please Exercise All Safety Precautions Prior To Starting This Procedure. Disconnect Electrical Power And Wear Approved Safety Glasses**

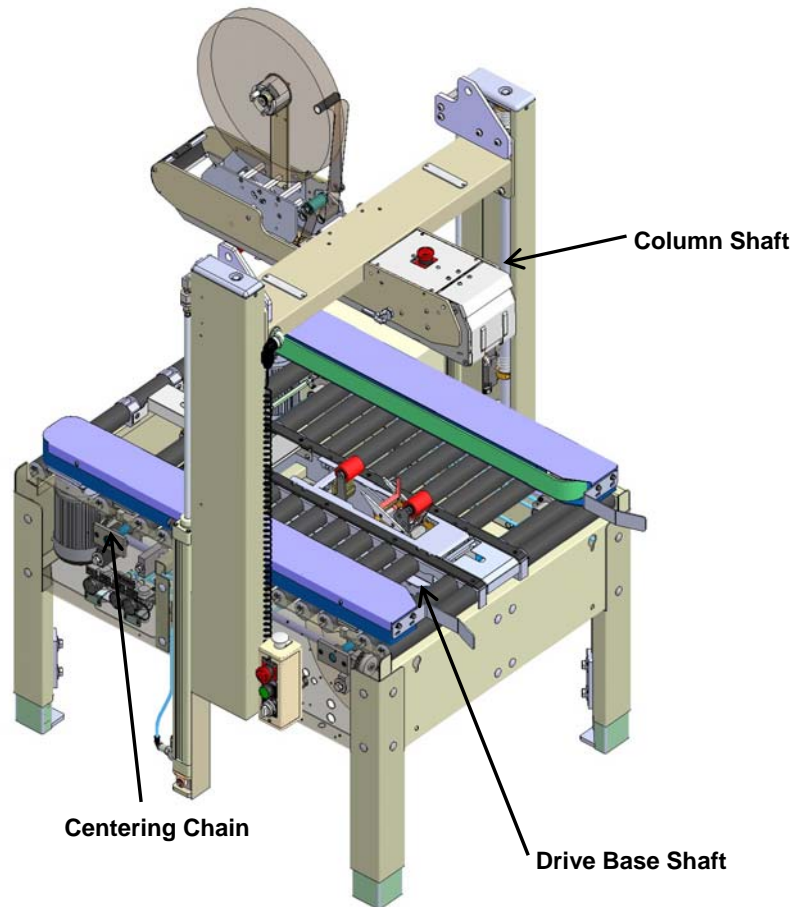
- a. Side Belt Drive Base**
  - i. Insert An Air Nozzle Along The Top Edge Of The Belt Into The Opening Of The Drive Base And Clean Out Any Dust And Dirt
- b. Column Shaft**
  - i. With A Cloth, Wipe Down Any Accumulation Of Dust And Dirt.
  - ii. Be Sure To Wipe Down Both Columns.
- c. Connecting Chain For Centering Assembly**
  - i. Blow Off Any Accumulation Of Dust And Dirt From The Connecting Chain



# PREVENTIVE MAINTENANCE

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## Lubricating the Machine

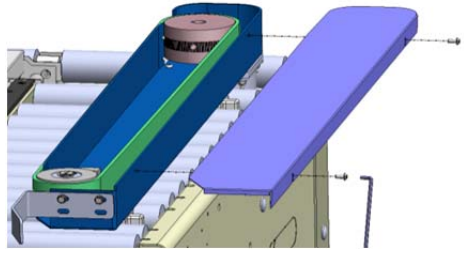
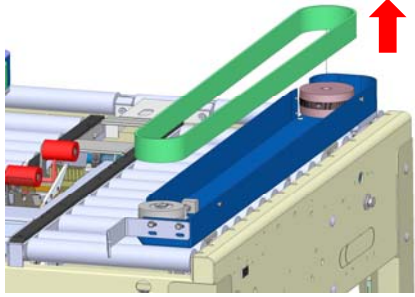
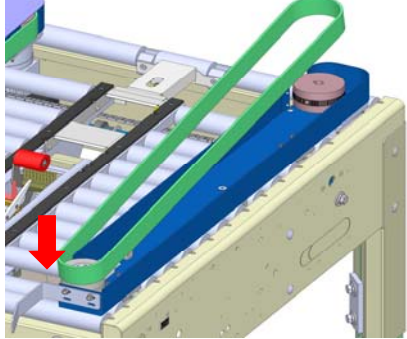
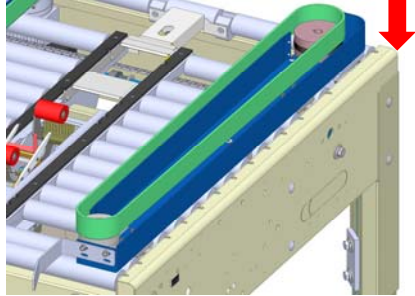


**Figure-34**

- a. Column Shaft.**
  - i. Lubricate Both Shafts With Silicone Lubricant.
- b. Drive Base Shafts.**
  - i. Lubricate Both Shafts With Silicone Lubricant.
- c. Centering Chain.**
  - i. Lubricate Chain With Chain Lubricant.

# MACHINE MAINTENANCE & ADJUSTMENT

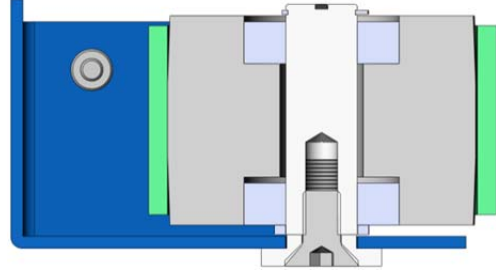
## Drive Belt Replacement

<p>Using a 4mm Allen key, remove screws (2) and remove drive base cover.</p>	
<p>Rotate off the worn belt from the idler pulley.</p>	
<p>Wrap the new belt around the top of the idler pulley.</p>	
<p>Pull on the belt to compress the die spring and wrap the other end around the top of the drive pulley. Turn the machine on to start belt movement.</p>	

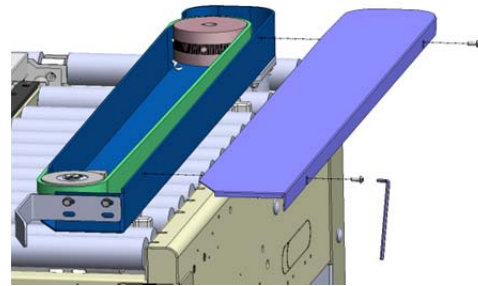
## MACHINE MAINTENANCE & ADJUSTMENT

Intertape side belt drive idler pulleys are engineered to self-track to center.

After placing new belts on pulleys and turning machine on, if the belts do not track on center, contact maintenance or your IPG Distributor.

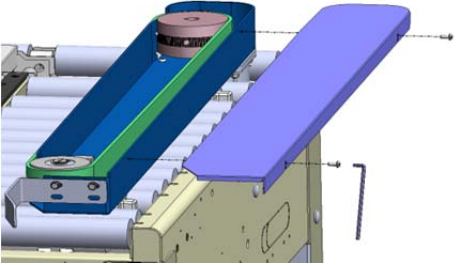
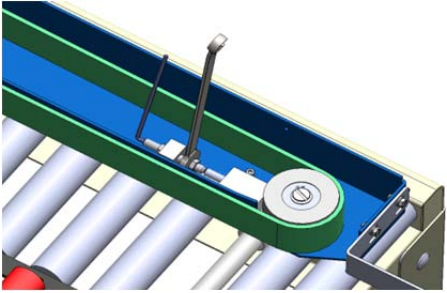
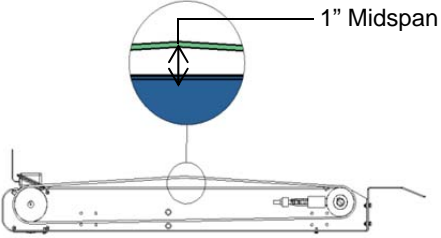
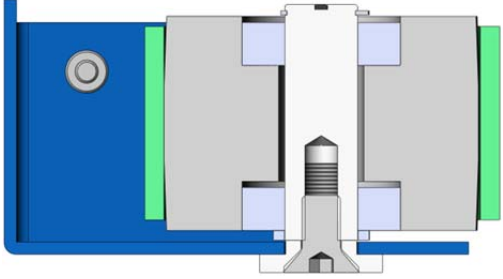
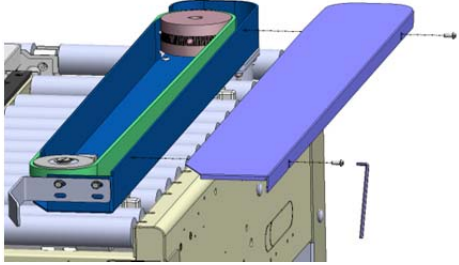


Using a 4mm Allen key, replace drive base cover as shown.

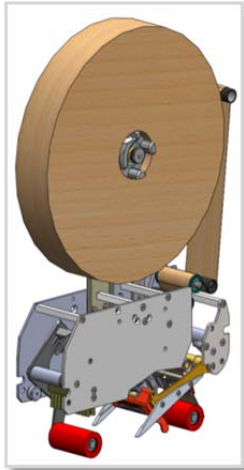


# MACHINE MAINTENANCE & ADJUSTMENT

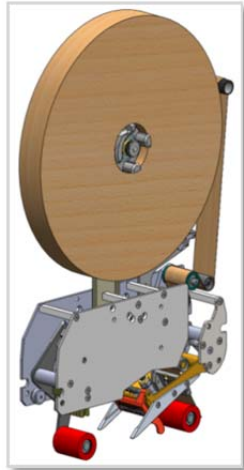
## Drive Belt Adjustment

<p>Using a 4mm Allen key, remove screws (2) and remove drive base cover.</p>	
<p>Using 5mm Allen key and 17mm wrench, tighten belt tensioning bolts.</p> <p>Be sure to adjust upper and lower tensioning bolts equally.</p>	
<p>Proper belt tension is achieved when a 5 pound pull force is used to create a 1" gap as shown in the Middle of the drive base.</p>	
<p>Intertape side belt drive idler pulleys are engineered to self-track to center.</p> <p>After tensioning, if the belts do not track on center, contact maintenance or your IPG Distributor.</p>	
<p>Using a 4mm Allen key, replace drive base cover as shown.</p>	

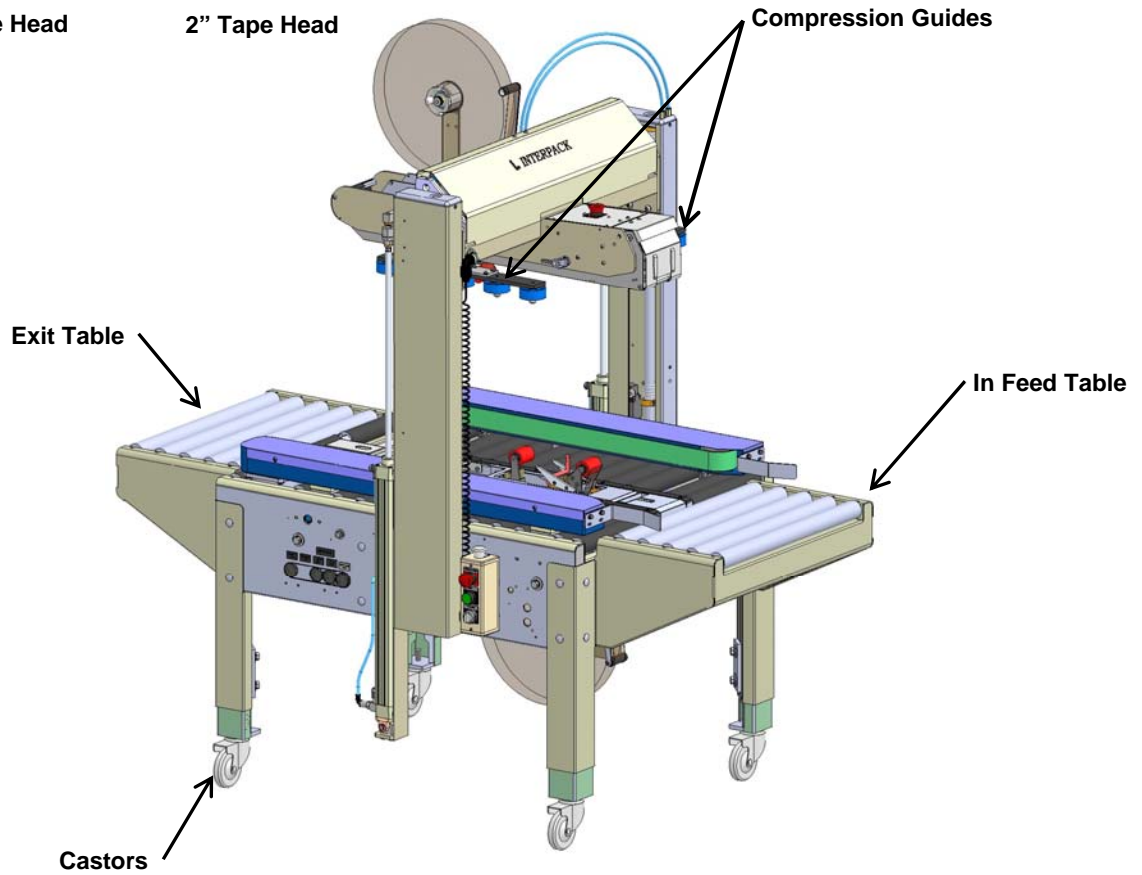
# OPTIONAL EQUIPMENT



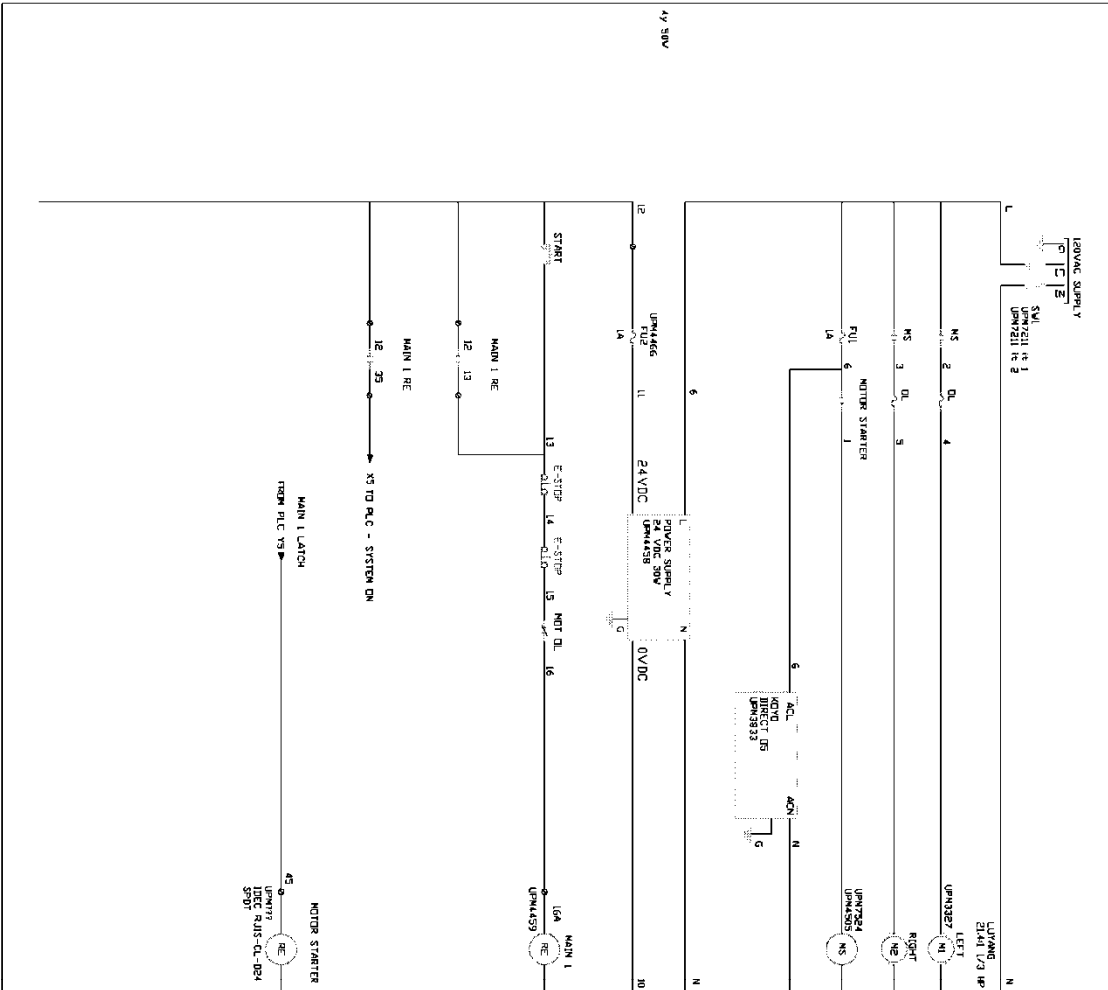
3" Tape Head




2" Tape Head

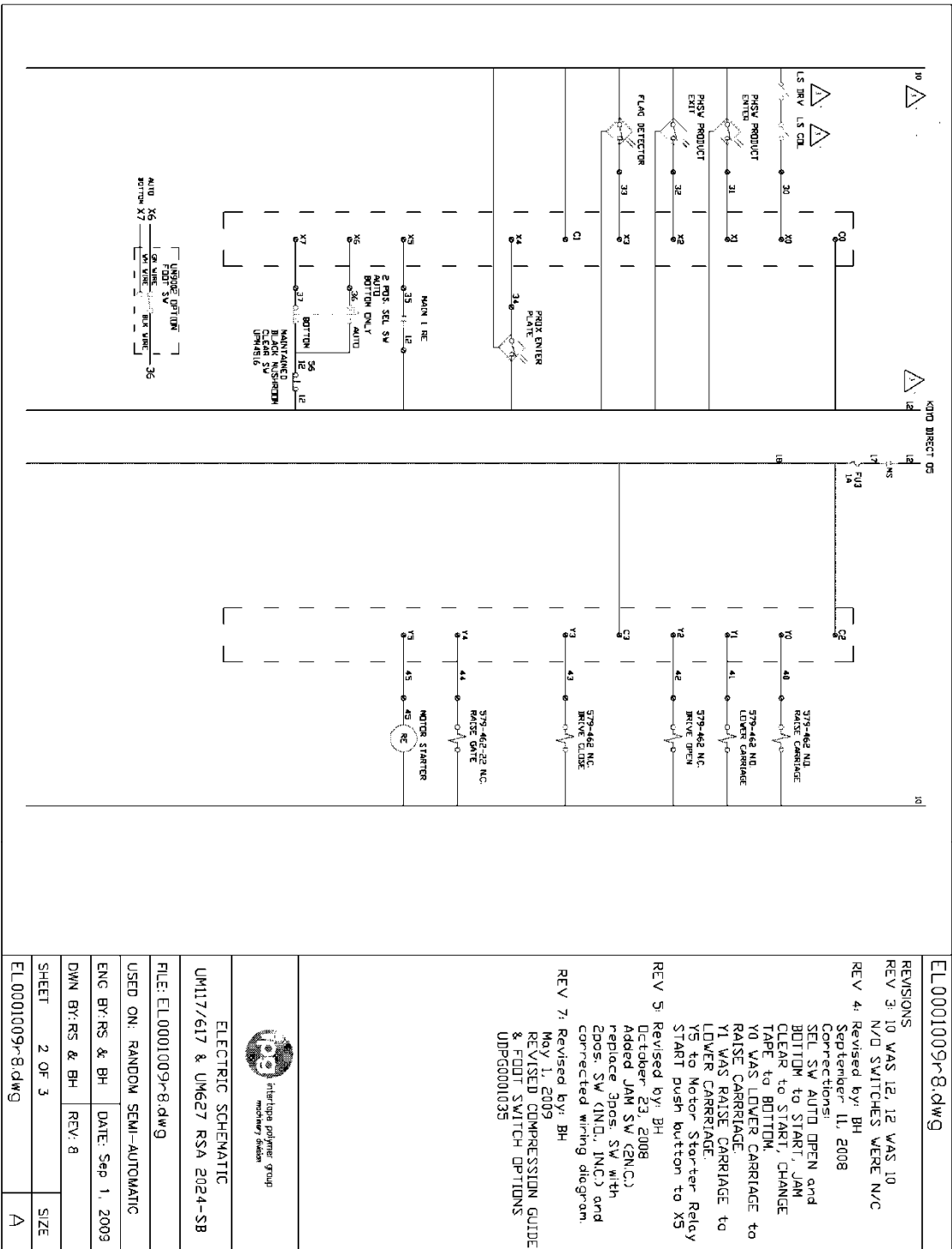


# ELECTRICAL SCHEMATIC DIAGRAM

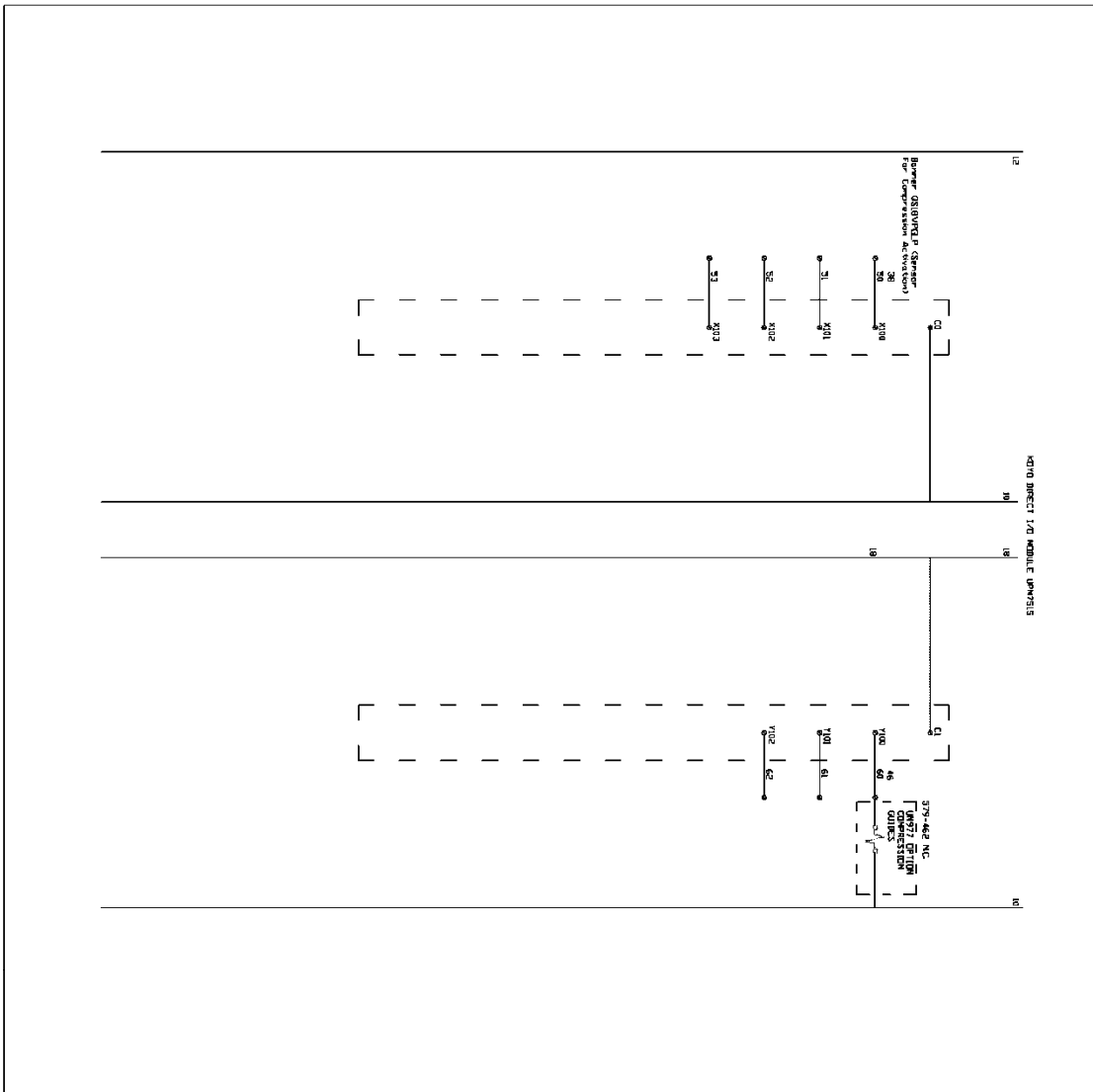



ELECTRIC SCHEMATIC	
UM117/617 & UM627 RSA 2024-SB	
FILE: EL0001009r-8.dwg	
USED ON: RANDOM SEMI-AUTOMATIC	
ENG BY: RS & BH	DATE: Sep 1, 2009
DWN BY: RS & BH	REV: 8
SHEET 1 OF 3	SIZE A
<p>REVISIONS</p> <p>REV 1: ADD OPTIONS UM9001, UM9002, UM9777.</p> <p>REV 3: SEE SHEET 2</p> <p>REV 4: Revised by: BH September 11, 2008 Corrections: Added MAIN 1 LATCH Y5 MOTOR STARTER MAIN 1 RE and X5 SYSTEM ON rungs Updated wiring Identification</p> <p>REV 5: Revised by: BH October 23, 2008 Added JAM SW</p> <p>REV 7: Revised by: BH May 1, 2009 REVISED COMPRESSION GUIDE &amp; FODT SWITCH OPTIONS UDPG0001035</p> <p>REV 8: SEE SHEET 3</p>	
<p>NOTE: THIS MACHINE IS AN UPGRADE FOR A UM21 OR UM621 TO REPAIR CONTROL PROBLEMS WITH PNEUMATICS AND RESOLVE PROBLEMS WITH MANUAL</p> <p>UDPG0001035 UDPG0001040 - Compression Sensor PNC001005r-3</p>	
 <p>Knowledge Partner Group Industry Experts</p>	

# ELECTRICAL SCHEMATIC DIAGRAM, CONT'D



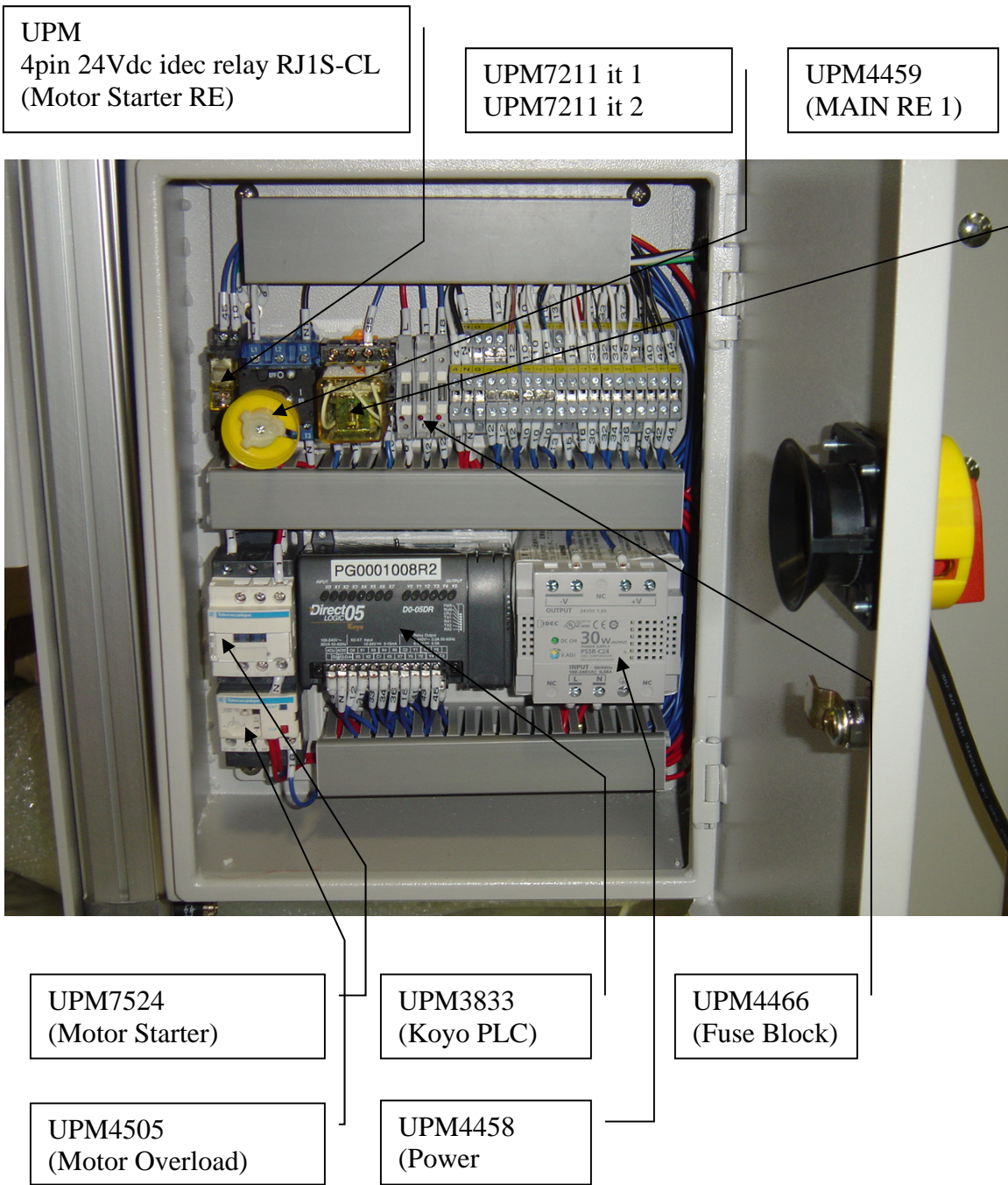
# ELECTRICAL SCHEMATIC DIAGRAM, CONT'D



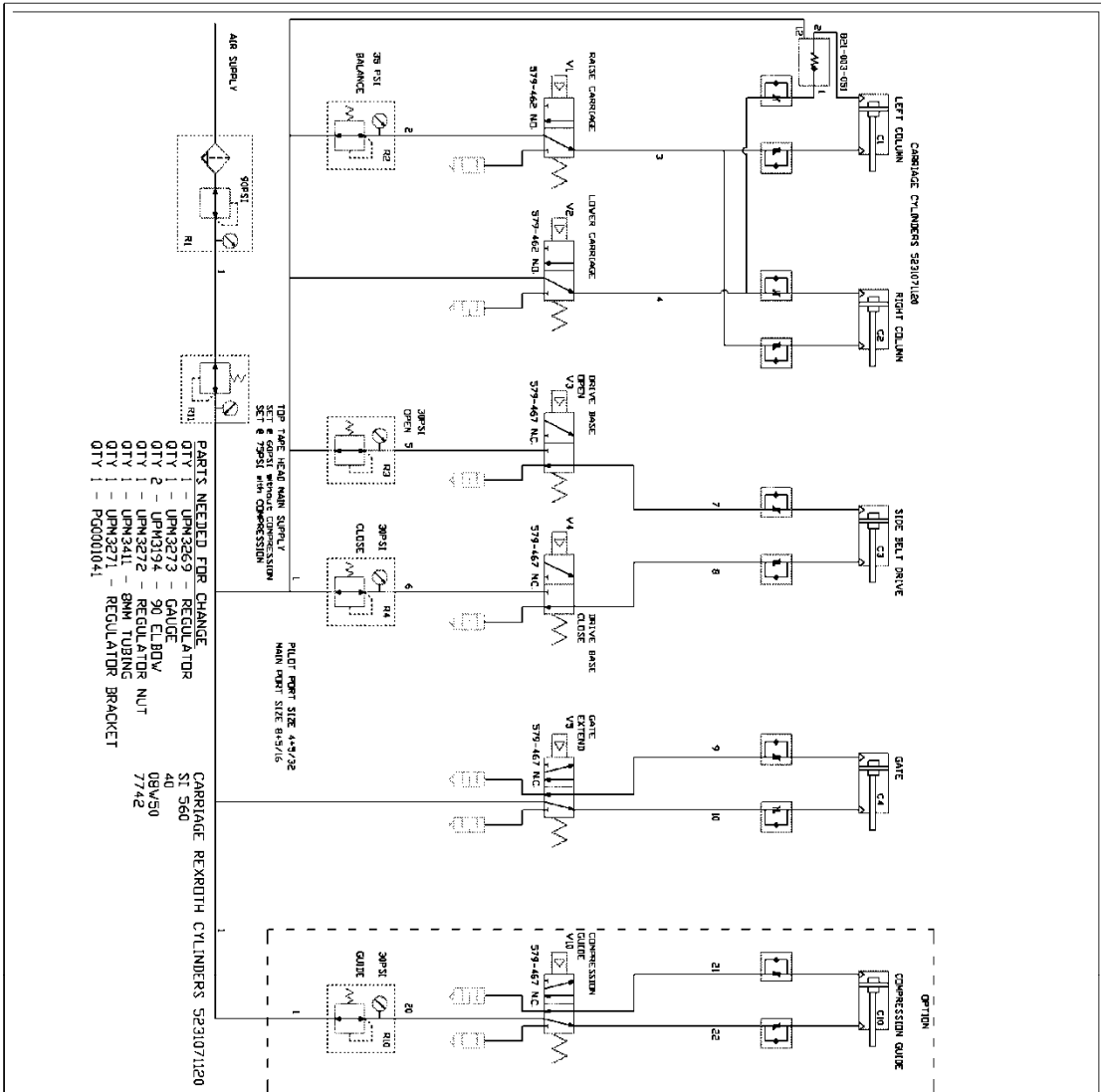
EL0001009r8.dwg	
REVISIONS	
REV 3: SEE SHEET 2	
REV 7: Revised by: BH May 1, 2009 REVISED COMPRESSION GUIDE & FIDU SWITCH OPTIONS UDP00001035	
REV 8: Revised by: BH September 22, 2009 REVISED COMPRESSION GUIDE for RSA 2024SBSI (UM190TW) UDP00001040	
 Interlogix Software Group multimedia division	
ELECTRIC SCHEMATIC	
UM117/617 & UM627 RSA 2024-SB	
FILE: EL0001009r8.dwg	
USED ON: RANDOM SEMI-AUTOMATIC	
ENG BY: RS & BH	DATE: Sep 1, 2009
DWN BY: RS & BH	REV: 8
SHEET 3 OF 3	SIZE
EL0001009r8.dwg	A



# ELECTRICAL CABINET



# PNEUMATIC SCHEMATIC DIAGRAM



- PARTS NEEDED FOR CHANGE**
- QTY 1 - UPN3269 - REGULATOR
  - QTY 1 - UPN3273 - GAUGE
  - QTY 2 - UPN3194 - 90 EL.BOW
  - QTY 1 - UPN3272 - REGULATOR
  - QTY 1 - UPN3271 - SHL. VALVE
  - QTY 1 - UPN3271 - REGULATOR BRACKET
  - QTY 1 - PG0001041

CARRIAGE REKROTH CYLINDERS 523107120  
SI 560  
40  
09V50  
7742

PNEUMATIC SCHEMATIC STANDARD UM117/617 RSA2024SB UML6TW	
Intergraph software group modeling division	
NOTE: EL0001009-8 PG0001035 - Compression Sensor PG0001041 - LOWER CARRIAGE DELAY	
FILE: PN0001005-4.dwg	USED ON: RSA 40 ENG BY: RS & BH   DATE: OCT 7, 2009 DWN BY: RS & BH   REV: 4
SHEET 1 OF 1	SIZE A

PN0001005-4.dwg
REVISIONS: REV 1: ADD GATE REV 2: REV CONTROL JS JULY 17, 2008 REV 3: CORRECTIONS. MAY 11, 2009. BH REV 4: ADDED PRESSURE REGULATOR RIL - SET AT 60 PSI - SEP 29, 2009. BH

# LADDER LOGIC

---

11/16/2009

05 PG0001041

Path: w:\equipment programs\pg0001000-pg0001999\pg0001041\pg0001041.prj  
Save Date: 10/05/09 09:12:13  
Creation Date: 10/05/09 09:02:00  
PLC Type: 05  
Class ID: DirectLogic 05 Series  
Description: Program modified from Model: RSA-2024-SB, S/N: TM12208M034 for Compression Guide Option (UM627)  
Version: 1.0  
Company: Intertape Polymer Group  
Department: Engineering  
Programmer: Brian Hernandez

Date: October 5, 2009  
Reviewed by: Brian Hernandez

BOM: UM627 (Compression Guide Option Code)  
Model: RSA 2024-SB  
S/N: TM122 08 M 034

\*\*\*\*\*

PLC File name: PG0001041 (UM627)

Added to original program Model: RSA 2024-SB, S/N: TM122 08 M 034

-May 1, 2009 - 'Compression Guide' option by Brian Hernandez

Note: Compression Guide program code does not have Column Limit Switch  
X100 per EL0001016. See drawing EL000109r7 for updated version.  
-October 1, 2009 - Added delay on Lower Carriage - eliminate carriage bounce when  
(height) after a smaller case (BH).

Protection assigned to  
processing a large box

\*\*\*\*\*

# LADDER LOGIC, CONT'D

11/16/2009

05

PG0001041

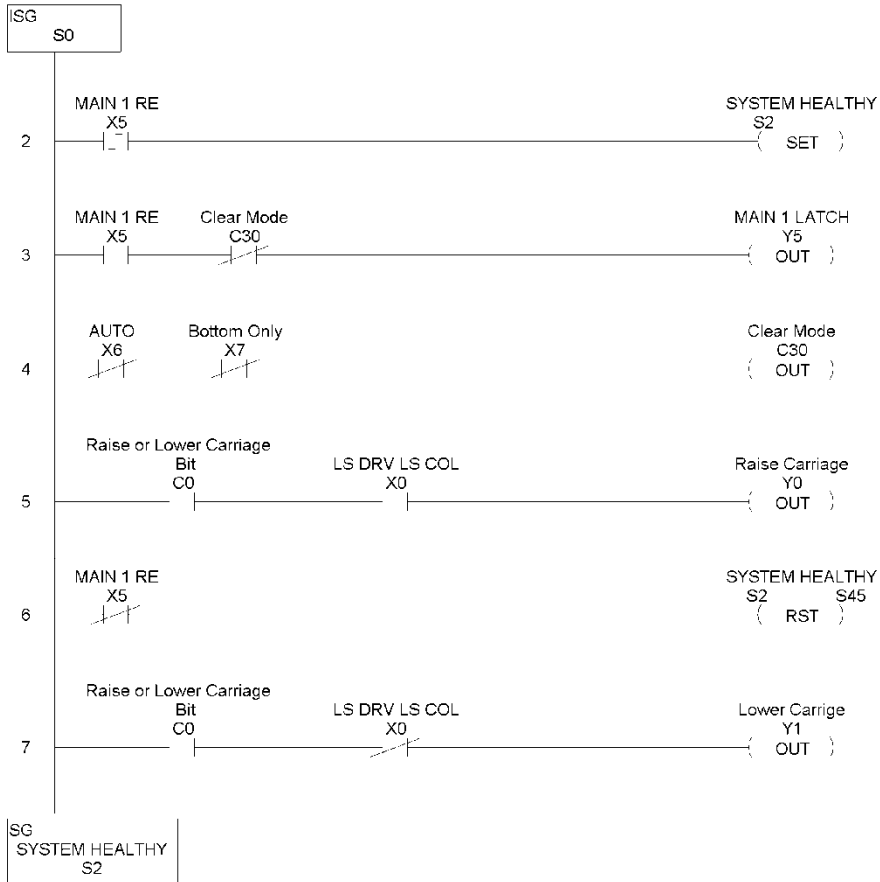
PLC File name: PG0001041 (UM627)

Added to original program Model: RSA 2024-SB, S/N: TM122 08 M 034

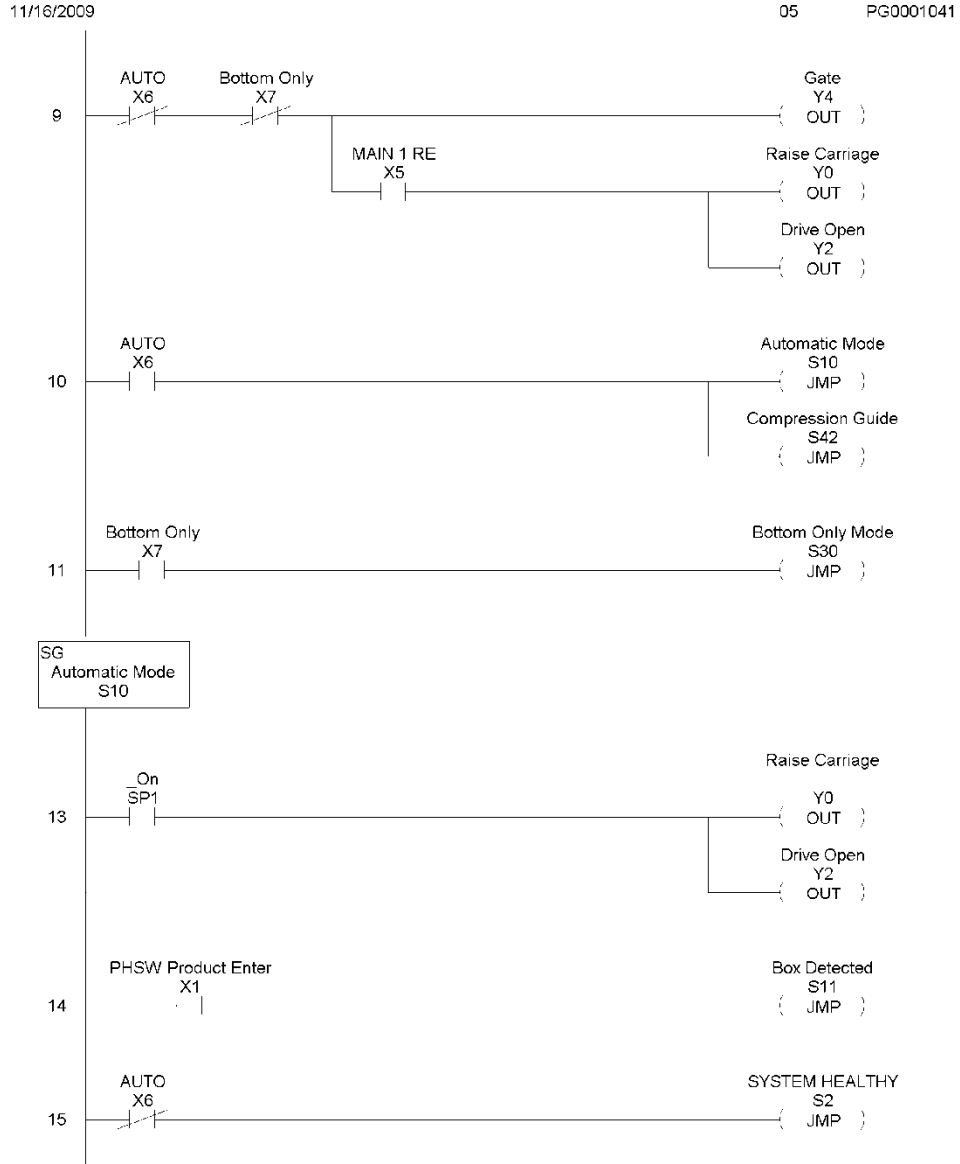
-May 1, 2009 - 'Compression Guide' option by Brian Hernandez

Note: Compression Guide program code does not have Column Limit Switch Protection assigned to X100 per EL0001016. See drawing EL000109r7 for updated version.

-October 1, 2009 - Added delay on Lower Carriage - eliminate carriage bounce when processing a large box (height) after a smaller case (BH).



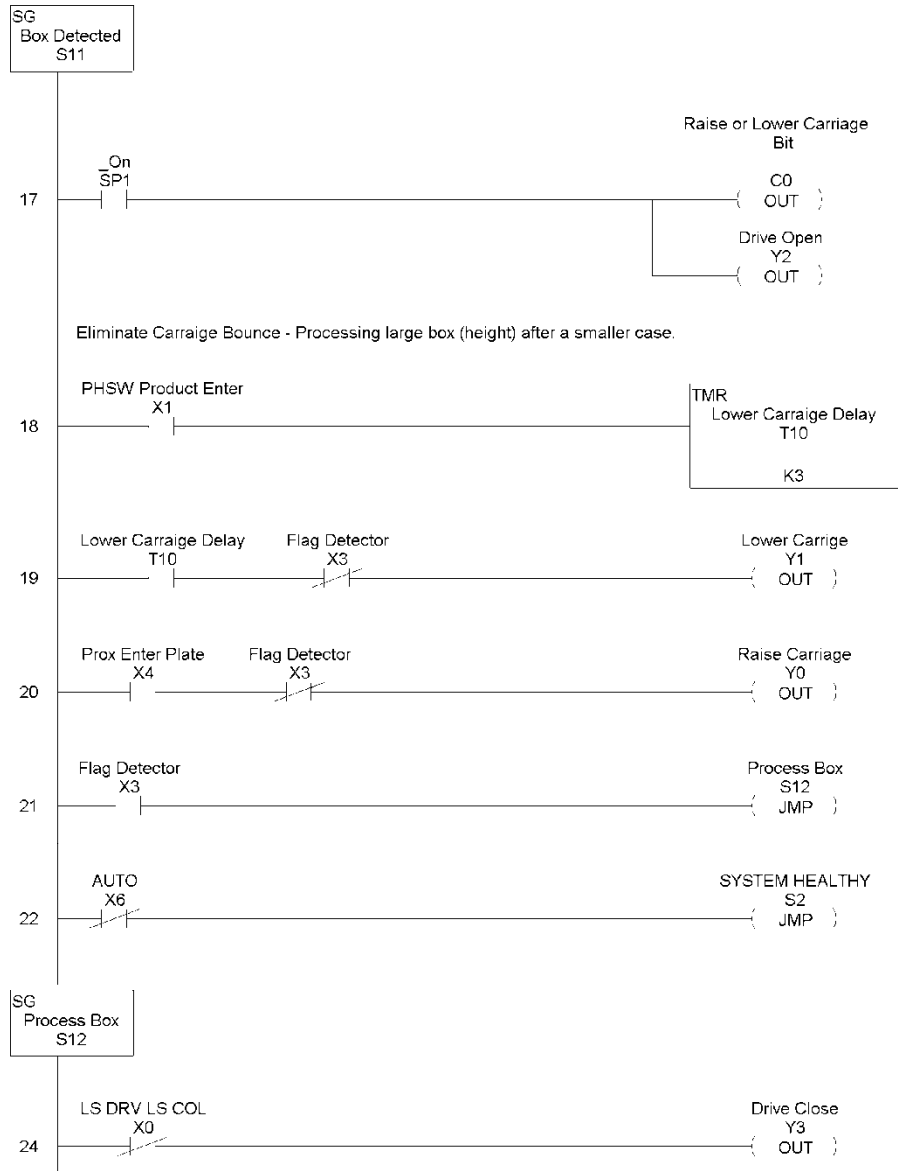
# LADDER LOGIC, CONT'D



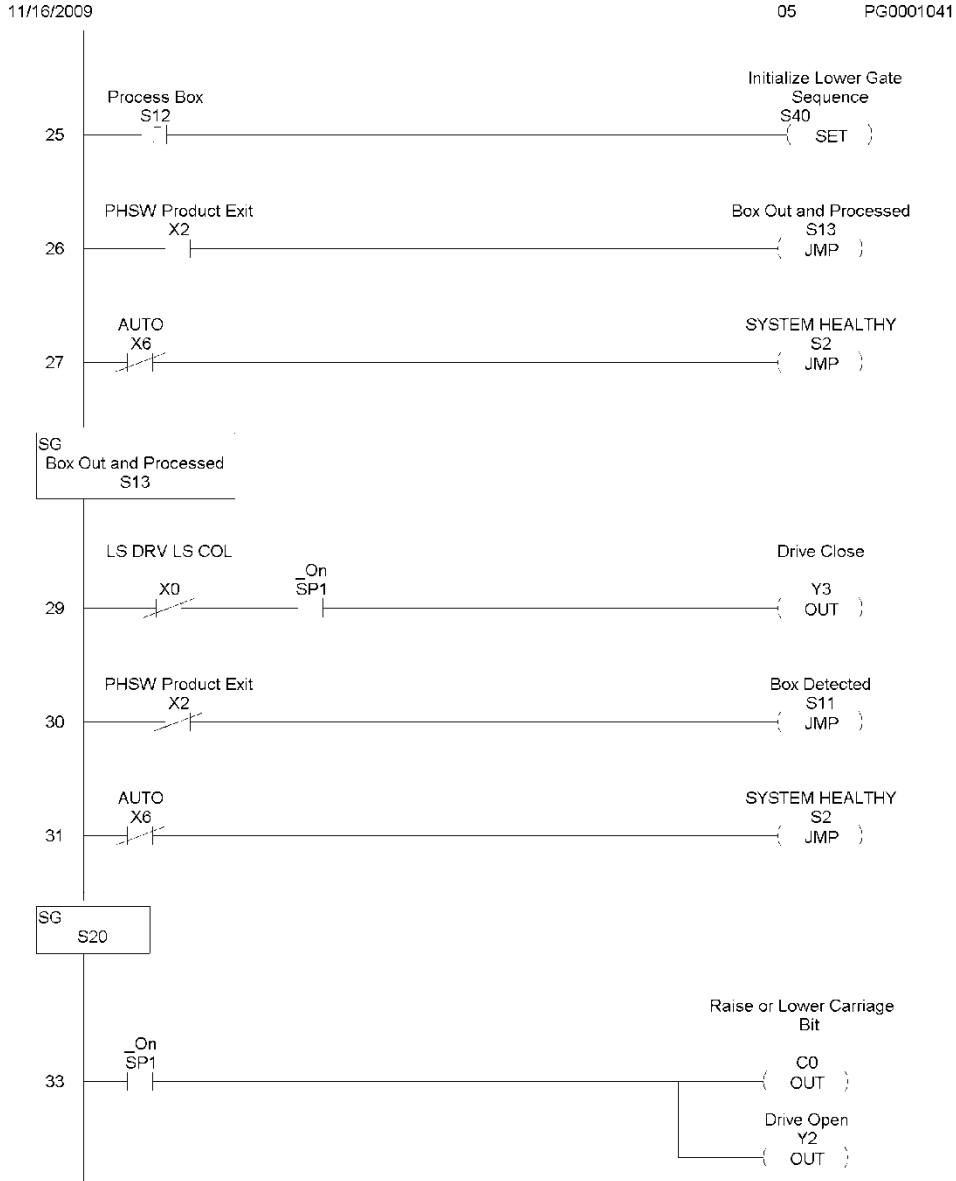
# LADDER LOGIC, CONT'D

11/16/2009

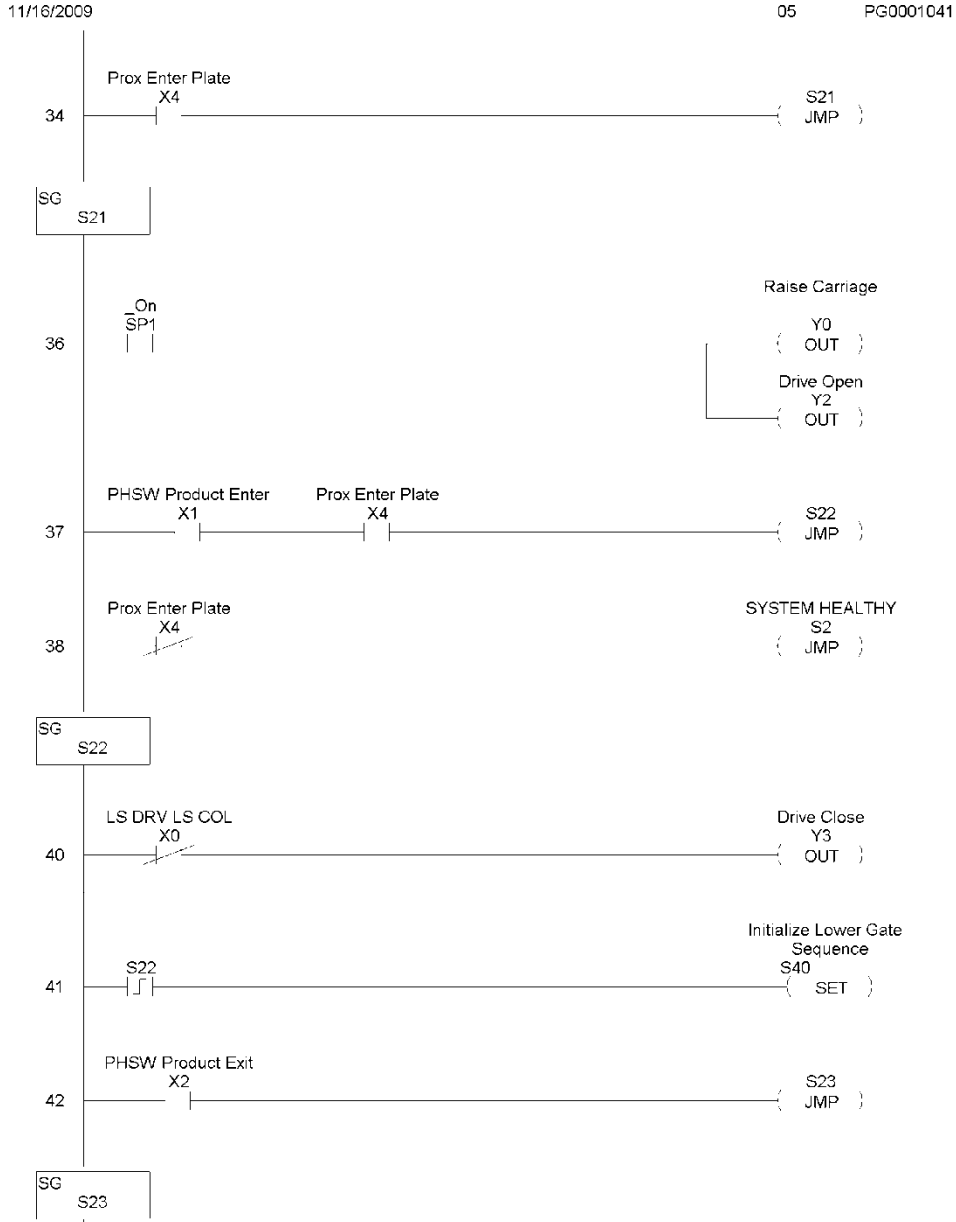
05 PG0001041



# LADDER LOGIC, CONT'D

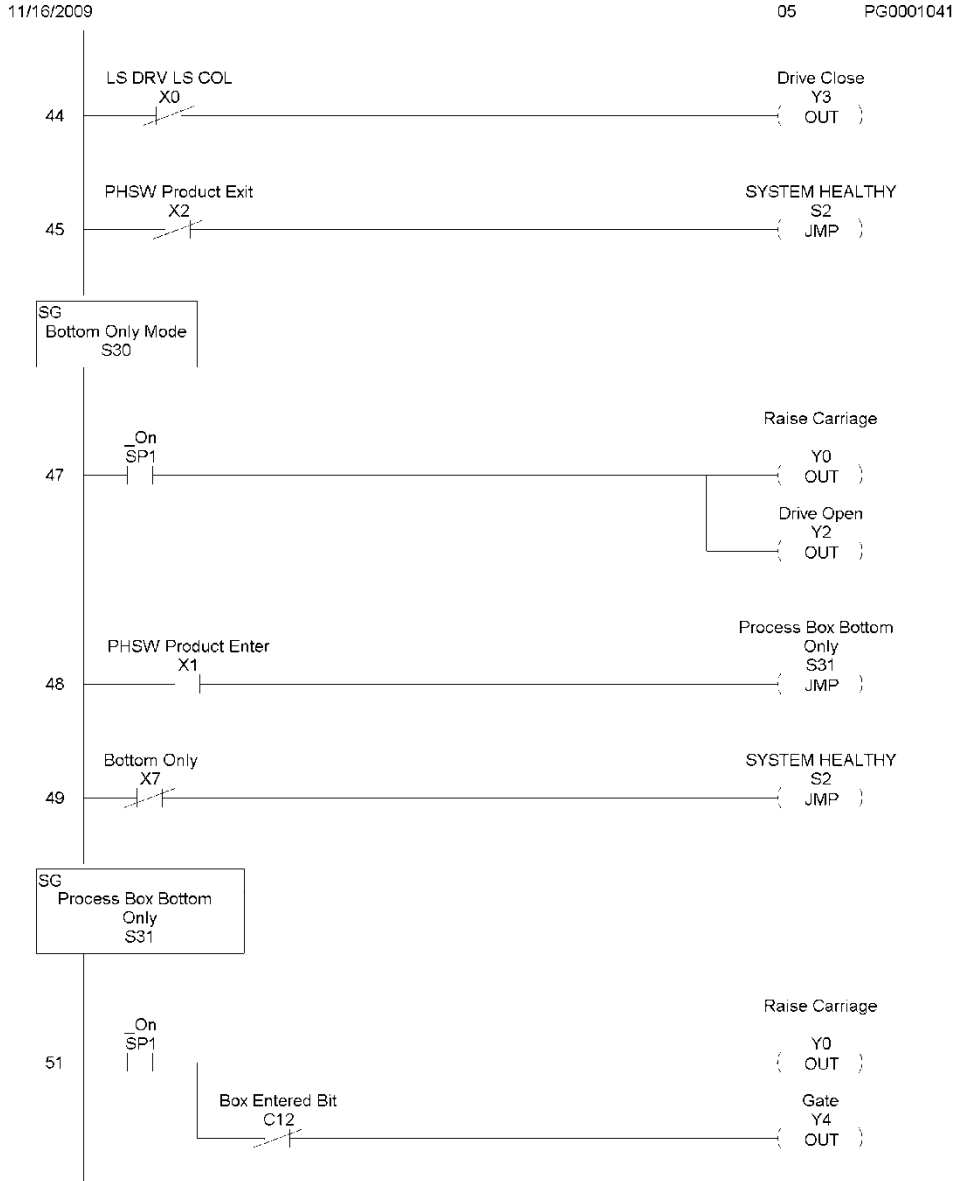


# LADDER LOGIC, CONT'D





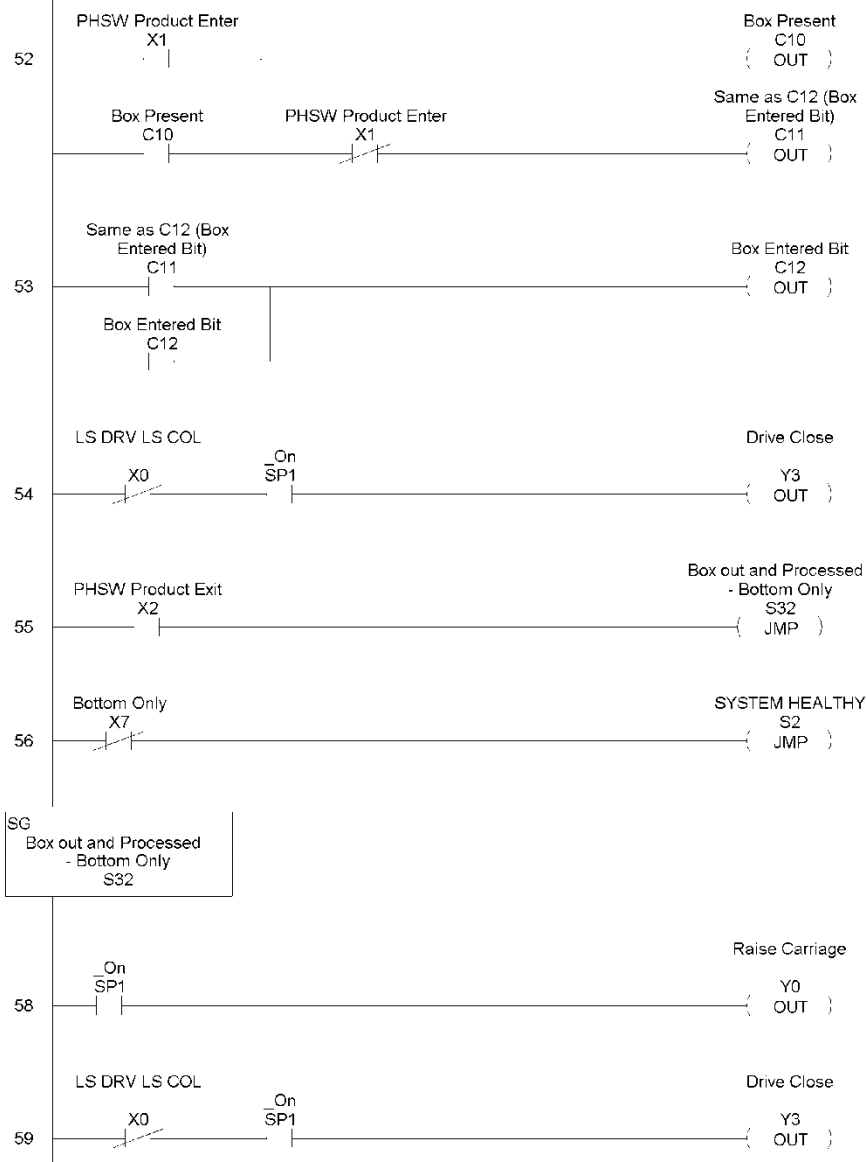
# LADDER LOGIC, CONT'D



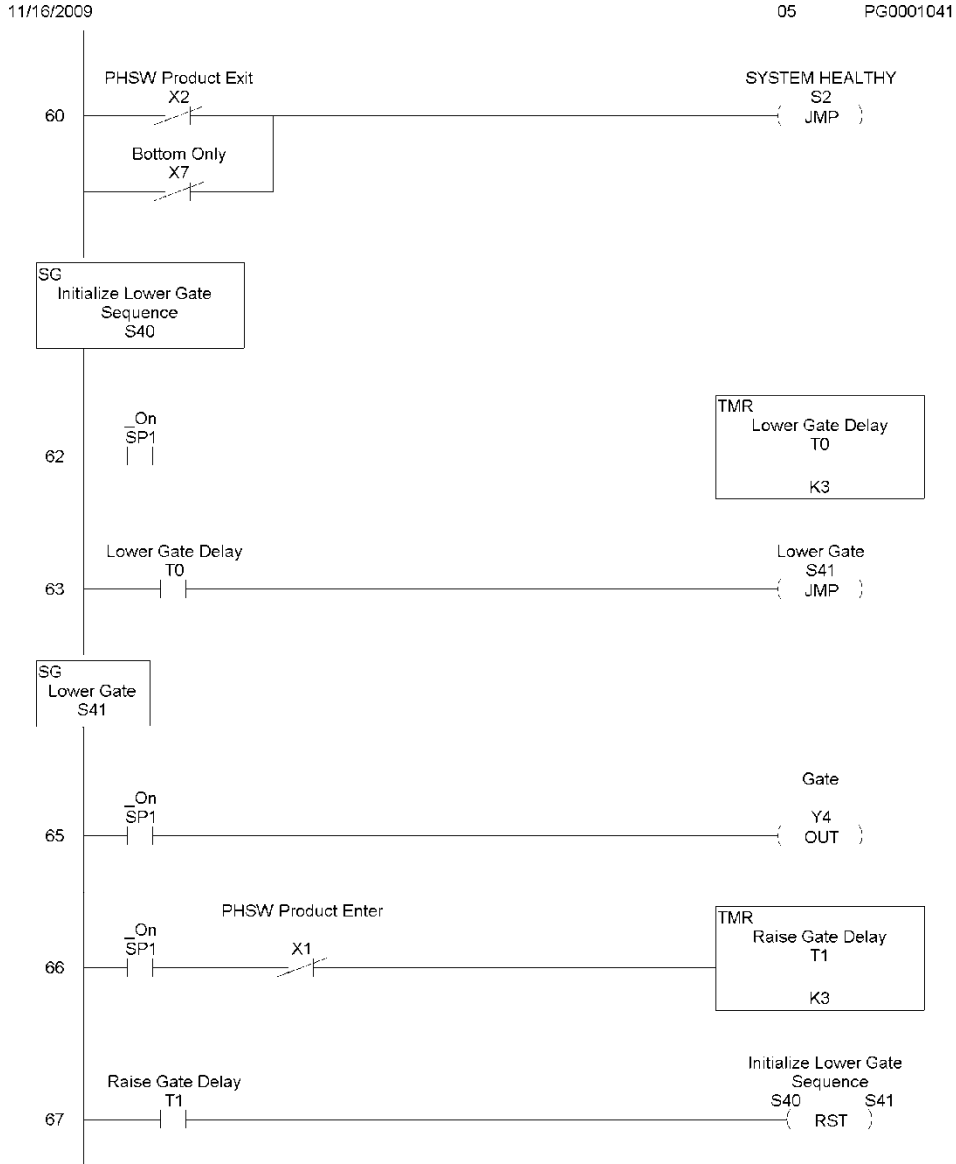
# LADDER LOGIC, CONT'D

11/16/2009

05 PG0001041



# LADDER LOGIC, CONT'D



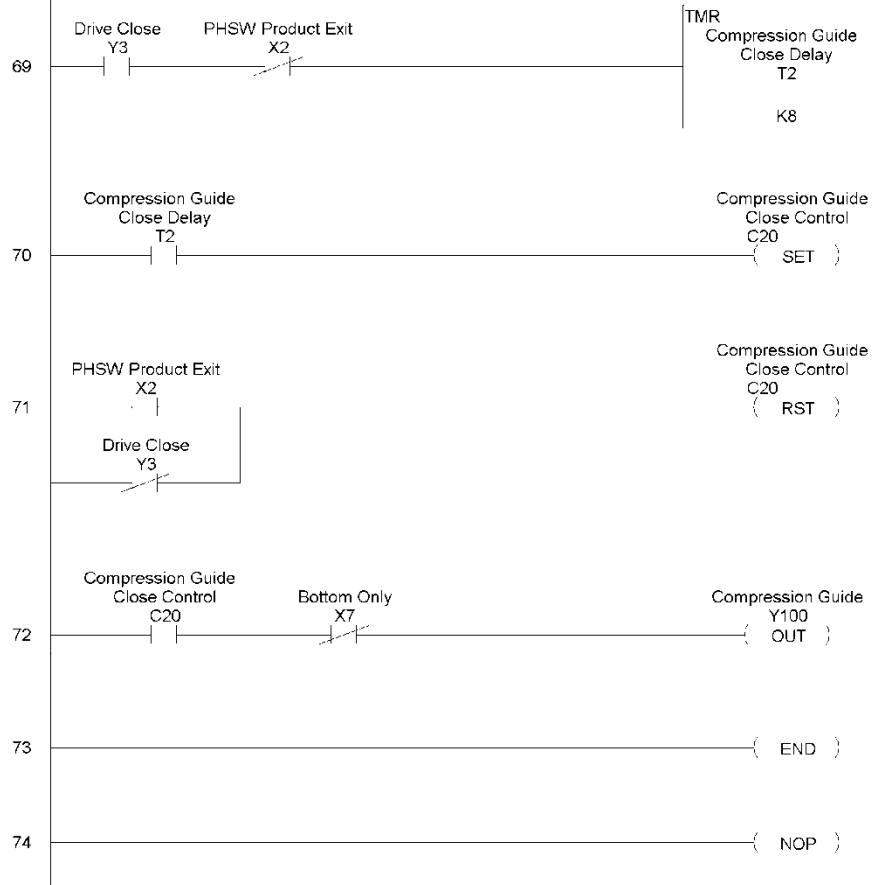
# LADDER LOGIC, CONT'D

11/16/2009

05 PG0001041

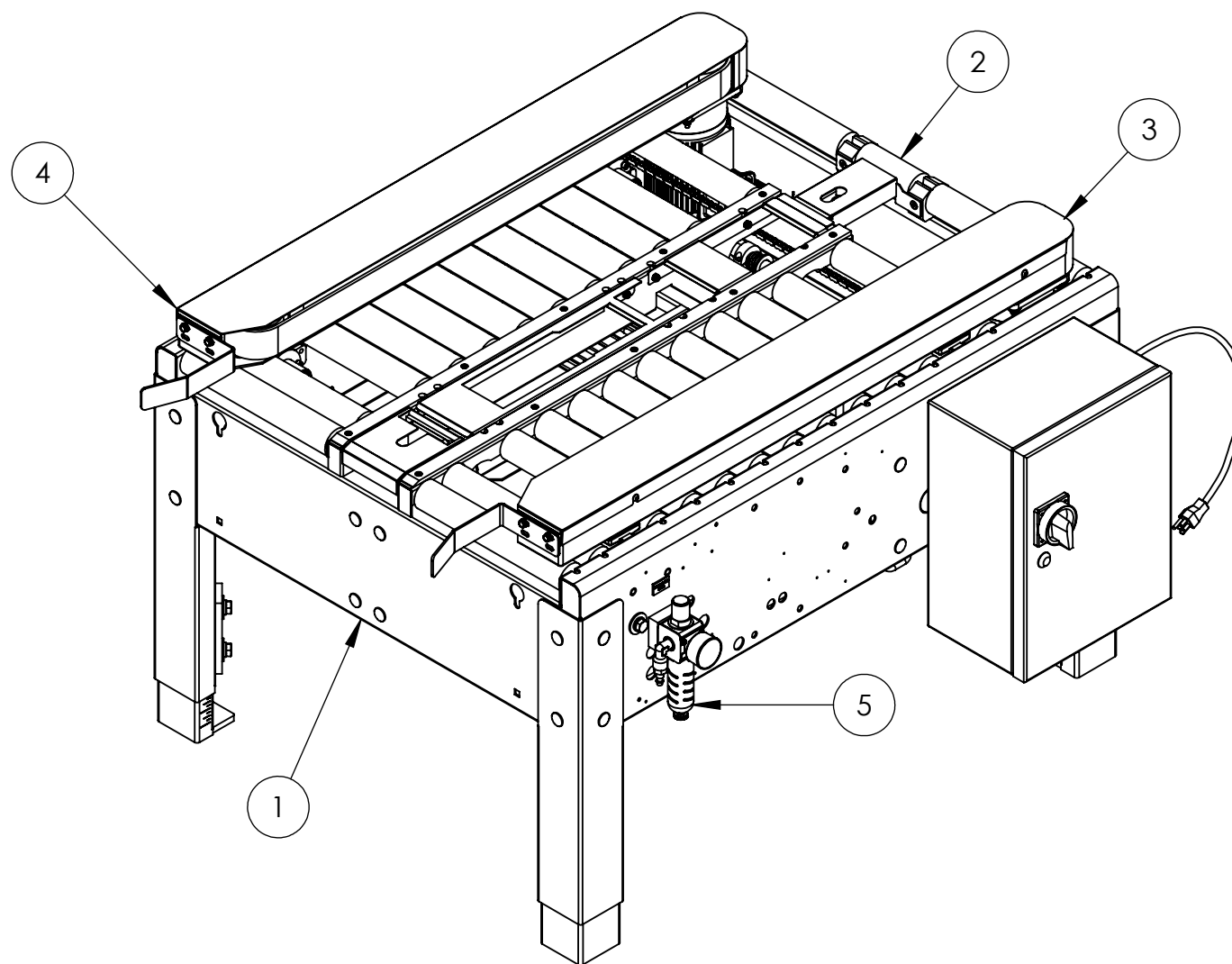
\*\*\*\*\*Added Compression Guide Option Code May 1, 2009\*\*\*\*\*

SG  
Compression Guide  
S42



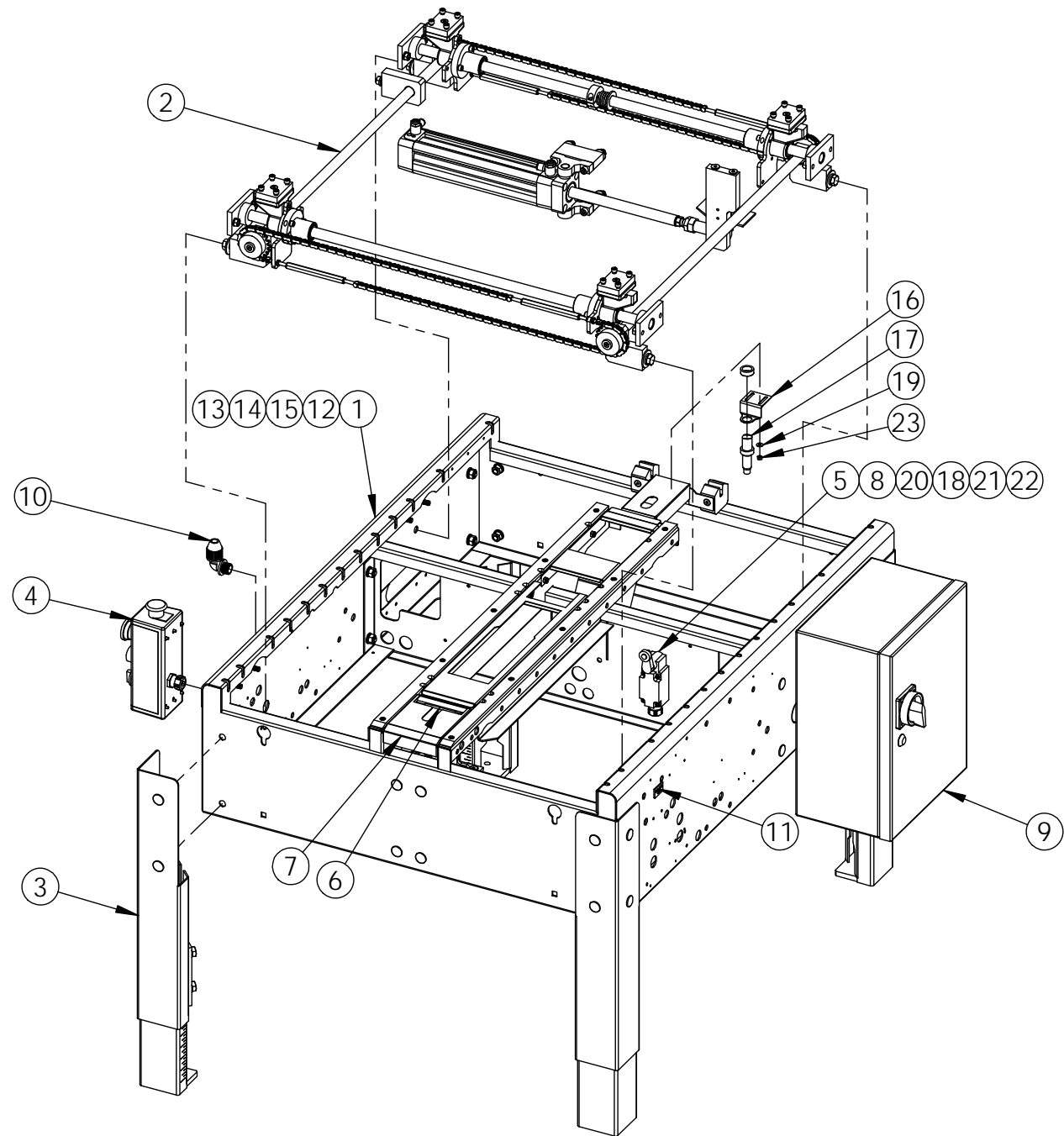
**APPENDIX A – PARTS LISTS – UM122T/UM622T**

UM123T



ITEM	PART #	DESCRIPTION	QTY.
1	USM7563	BASE ASS'Y RSA2024 SB RELEASE 2	1
2	USM0678	SET OF ROLLERS	1
3	USM0811	DRIVE BASE ASS'Y RH	1
4	USM0812	DRIVE BASE ASSY LH	1
5	USM6114	PNEUMATIC RELEASE 2	1

USM7563

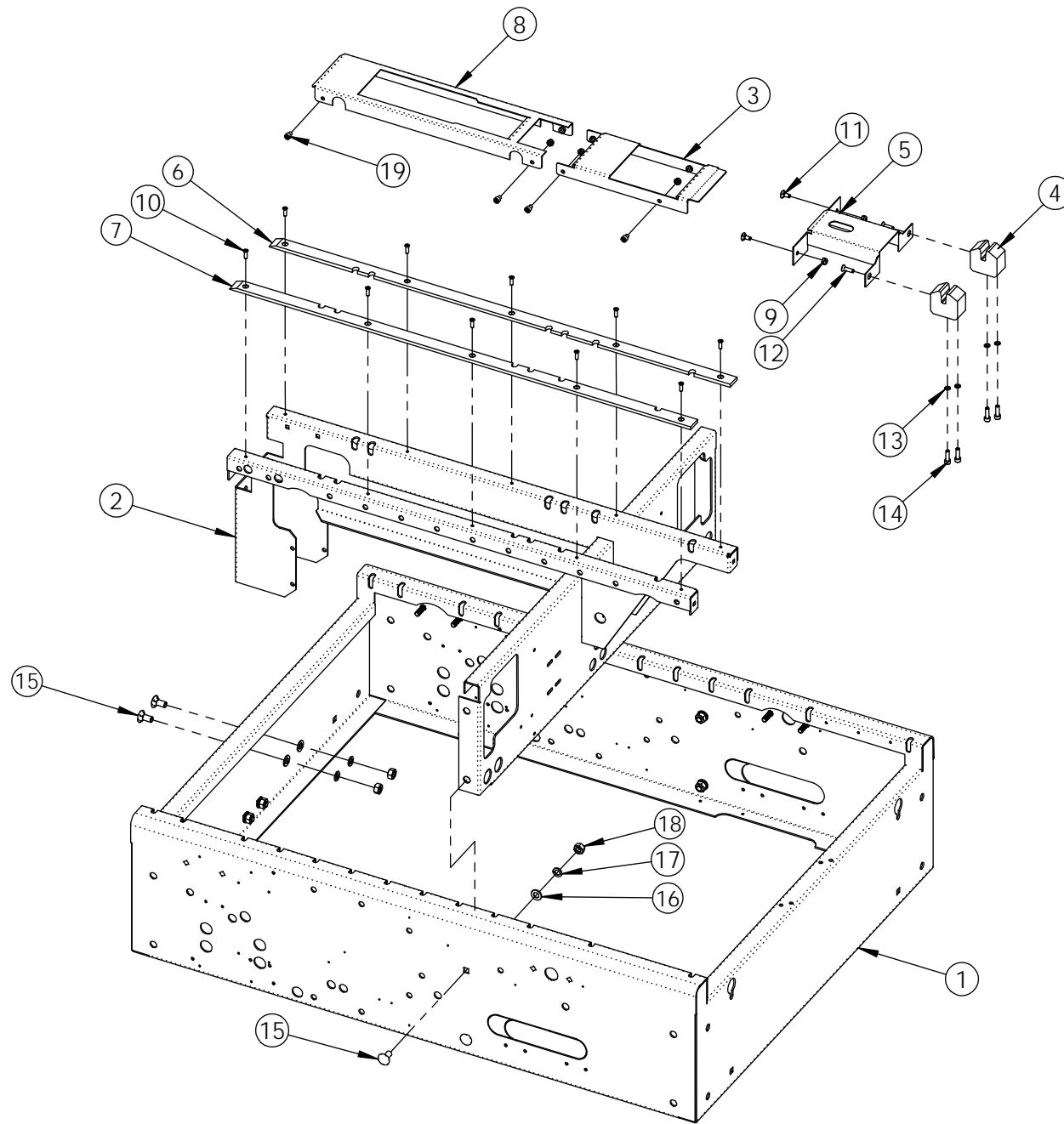




**USM7563**

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	UAM0298	BASE SUB-ASS'Y	1
2	USM1212	CENTRING MECHANISM	1
3	UAM0275	LEG ASSEMBLY METRIC	4
4	UAM0322	STOP START SWITCH ASS'Y	1
5	UPM3416	LIMIT SWITCH	1
6	USM8090	STOP GATE	1
7	UAM0318	INLET COVER ASSEMBLY	1
8	UPM0196	STRAIN RELIEF	1
9	USM0808	ELECTRIC ASSEMBLY	1
10	UPM0202	STR.RE3LIEF, NON-MET.LIQUIDTIGHT	1
11	UPM3579	DECAL COMPR. GUIDE 20 PSI	1
12	UPM4476	BALANCE 35 PSI	2
13	UPM4477	DECAL, LOWER 20 PSI	1
14	UPM4479	DECAL, OPENED 25 PSI	1
15	UPM4478	DECAL, DRIVE BASE	1
16	UPM3248EV	SENSOR SUPPORT	1
17	UPM0317	PHOTOELECTRIC SENSOR	1
18	UF6307	HEX NUT M5-0.8	4
19	UF6340	SS FW M5	2
20	UF5605	SHCS M5-0.8 x 45mm	4
21	UF1827	FW M5	4
22	UF7023	LW M5	4
23	UF7007	SS HEX NUT M5-0.8	2

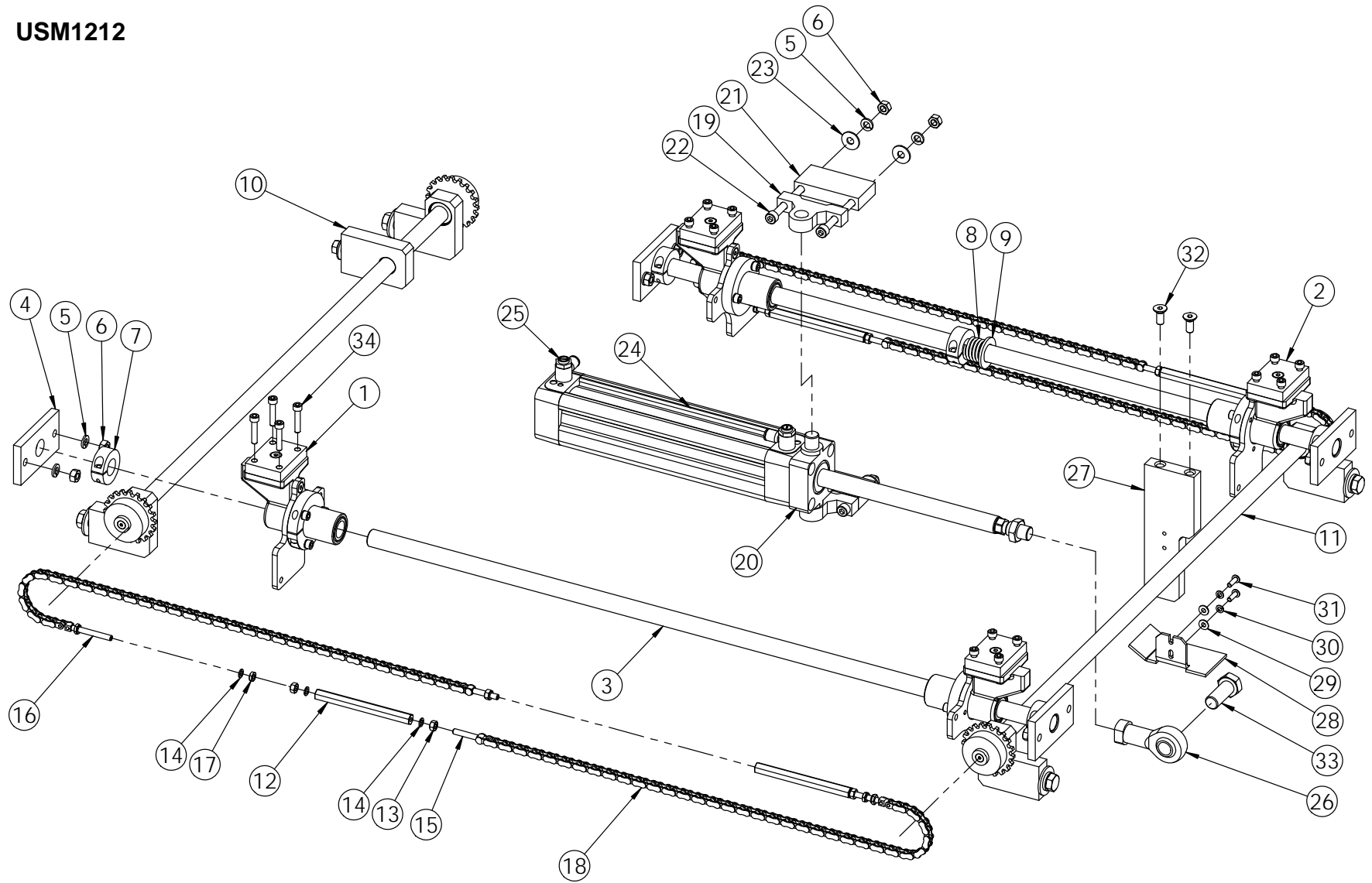
UAM0298



**UAM0298**

ITEM	PART #	DESCRIPTION	QTY.
1	UPM3287EV	OUTSIDE FRAME 2024 SB	1
2	UPM2522EV	TRANSVERSE BRACING	1
3	UPM3228	REAR GAP FILLER	1
4	UPM3234EV	OUTLET ROLLER BLOCK	2
5	UPM3233EV	OUTLET COVER	1
6	UPM0609EV	SLIDING PAD L.H.	1
7	UPM0606EV	SLIDING PAD R.H.	1
8	UPM3815	T.H. INSERT 2"	1
9	UF3391	SS NYLON LOCK NUT M6-1.0	10
10	UF4114	SELF TAPPING SCREW M5 X 16mm	10
11	UF 3713	CARRIAGE BOLT M6 - 1 x 12	2
12	UF5402	FHCS M6 - 1 x 20	2
13	UF6411	SS LW M6	4
14	UF3179	SS SHCS M6-1 X 20mm	4
15	UF4229	CARRIAGE BOLT M10-1.5 x 20	8
16	UF3680	FW M10	8
17	UF6371	L.W. M10	8
18	UF6314	HNR M10 x 1.5	8
19	UF3170	SS SHCS M6-1 x 8	8

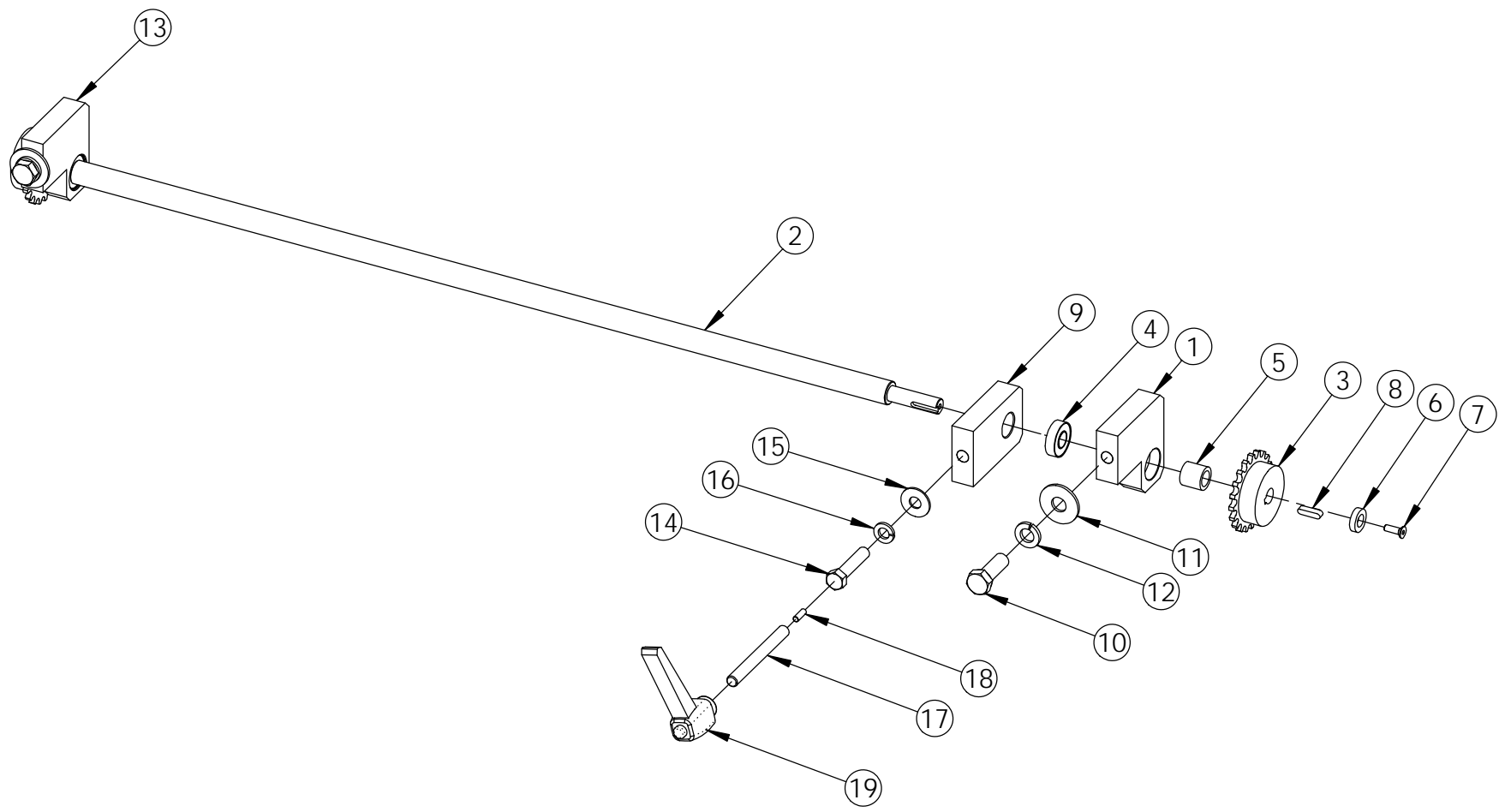
# USM1212



**USM1212**

ITEM	PART #	DESCRIPTION	QTY.
1	UAM0301	DRIVE SUPPORT REAR SIDE RSA	2
2	UAM0302	DRIVE SUPPORT FRONT SIDE RSA	2
3	UPM3251	SHAFT 20mm	2
4	UPM3250	SHAFT ANCHOR PLATE	4
5	UF0867	LW M8	12
6	UF0866	HNR M8-1.25	12
7	UPM3330	COLLAR 20mm	5
8	UPM3401	SPRING FOR 20mm SHAFT, LC 112 M0	1
9	UF1824	FW ZINC 20mm	1
10	UAM0312	SPROCKET SHAFT	1
11	UAM0300	SPROCKET SHAFT	1
12	UPM3255EV	TURNBUCKLE	4
13	UF3638	SS HNR M6-1.0	8
14	UF6363	LW M6	16
15	UPM3259EV	CHAIN THREADED LINK L.H.	4
16	UPM3260EV	CHAIN THREADED LINK R.H.	4
17	UF3361	SS HEX JAM NUT 6mm	8
18	UPM3377	CHAIN 35 FOR RSA	4
19	UPM3299	BEARING BRACKET CR=16	2
20	UPM3295	PIVOT MOUNTING MT5/MT6	1
21	UPM3341	TRUNNION SPACER	2
22	UF6406	SHCS M8-1 X 75mm	4
23	UF1821	FW M8	4
24	UPM3298	CYLINDER 50 BORE x 220	1
25	UPM3132	FLOW CONTROL G 1/4 MALE X 8mm TUBE	2
26	UPM2884	BALL EYE ROD END M16	1
27	UPM3265EV	DRIVE BASE ANCHOR PLATE	1
28	UPM3249	LIMIT SWITCH BRACKET	1
29	UF1827	FW M5	2
30	UF7021	SS LW M5	2
31	UF3277	BHCS M5-0.8 X 16mm	2
32	UF1190	M8 - 1.25 x 20 FHCS	2
33	UF4305	HHCS M16-2.0 x 40mm	1
34	UF4236	SHCS M6-1 X 30mm	16

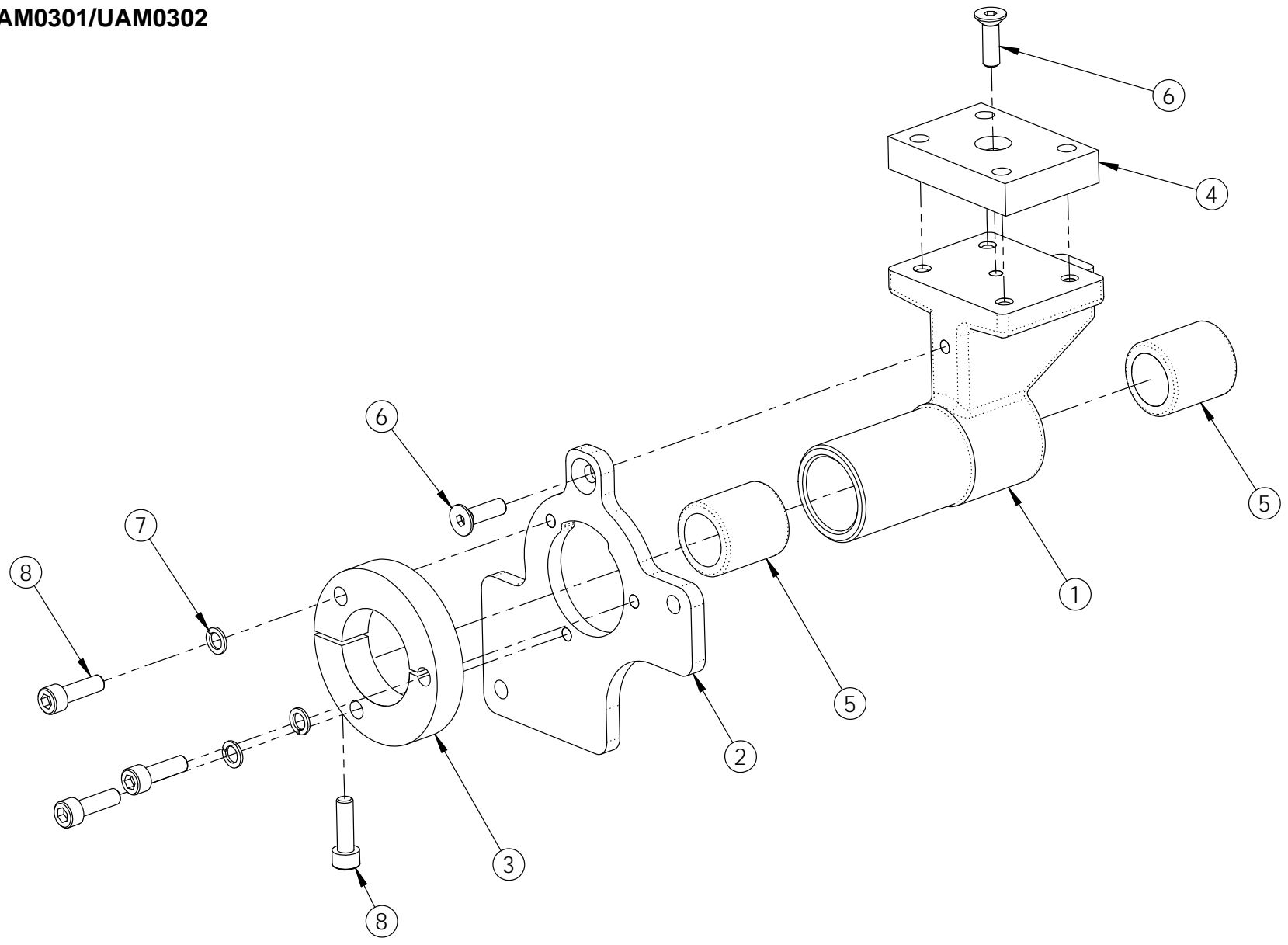
UAM0312/UAM0300



**UAM0312/UAM0300**

ITEM	PART #	DESCRIPTION	UAM0299/QTY.	UAM0300/QTY.	UAM0312/QTY.
1	UPM3275EV	SPROCKET SHAFT BEARING HOUSING L.H.	1	1	1
2	UPM3263EV	SPROCKET SHAFT	1	1	1
3	UPM0028	SPROCKET 35B20 1/2 KW 3/16 X 3/32	2	2	2
4	UPM1637	BEARING R8-2RS	2	2	2
5	UPM1646	SPROCKET SPACER (LONG)	2	2	2
6	UPM0150	SPROCKET SHAFT WASHER	2	2	2
7	UF5404	FHCS M5 - 0.8 x 16 mm	2	2	2
8	UF2210EV	SQUARE KEY ROUND ENDS 5 X 5 X 20	2	2	2
9	UPM3264	LOCKING DEVICE PLATE	1	-	1
10	UF3062	HHCS M12-1.75 x 25	2	2	2
11	UF4231	FW M12	2	2	2
12	UF4230	L.W. ZINC M12	2	2	2
13	UPM3262EV	SPROCKET SHAFT BEARING HOUSING R.H.	1	1	1
14	UF0240	HHCS 3/8-16 x 1.75	-	-	1
15	UF1720	REG F.W. ZINC 3/8	-	-	1
16	UF1770	L.W. ZINC 3/8	-	-	1
17	UF2142	THD ROD 3/8-16 X 3.5 LG W.HOLE	1	-	-
18	UPM0131	PIN STOP	1	-	-
19	UPM0037	HANDLE ADJUSTABLE (COLUMN)	1	-	-

UAM0301/UAM0302

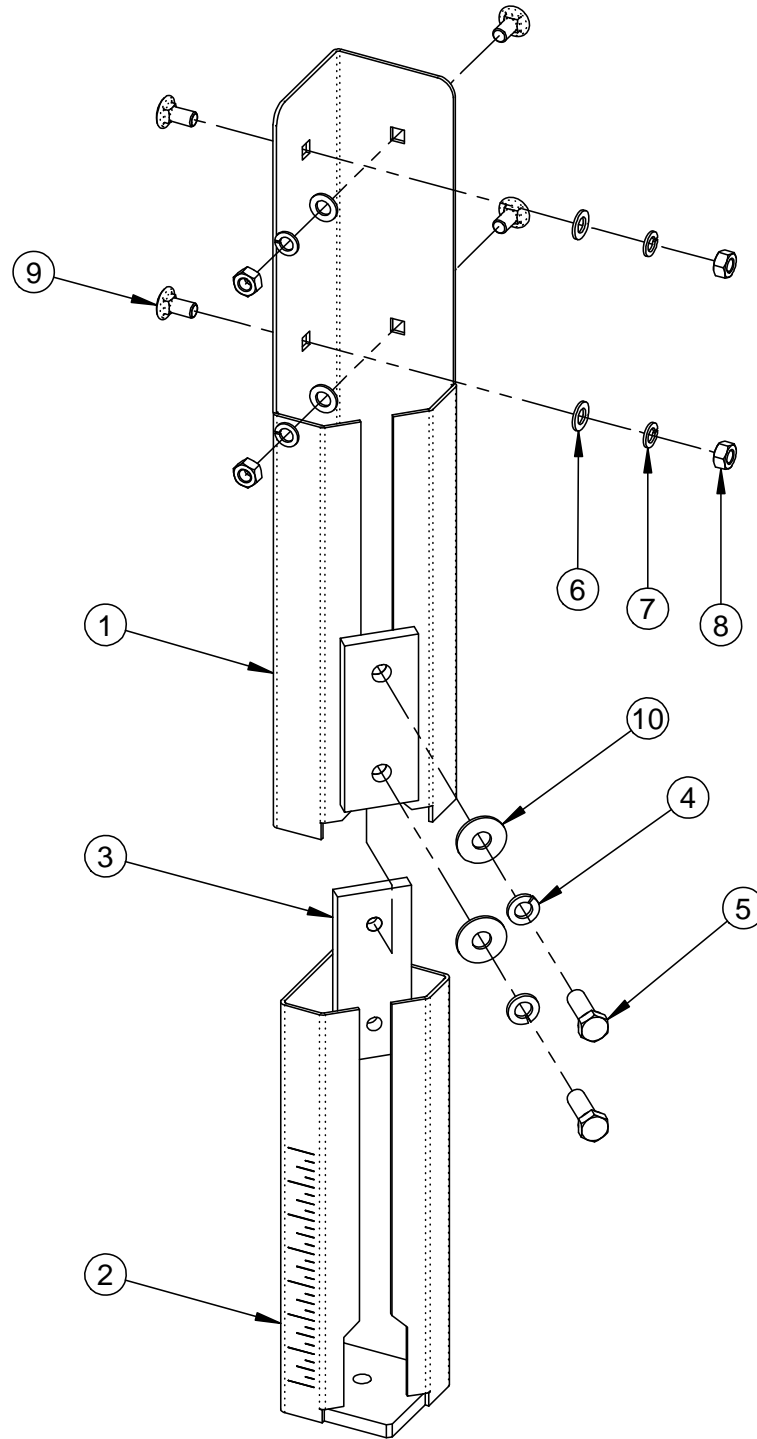




**UAM0301/UAM0302**

ITEM	PART #	DESCRIPTION	UAM0301/QTY.	UAM0302/QTY.
1	UPM3243EV	CASTING FOR DRIVE SUPPORT RSA LH	1	1
2	UPM3237EV	ANCHOR PLATE REAR SIDE	1	-
2	UPM3244EV	ANCHOR PLATE FRONT SIDE	-	1
3	UPM3266EV	SPLIT COLLAR FOR DRV SUPT RSA	1	1
4	UPM3242EV	DRIVE SUPPORT SPACER	1	1
5	UPM3303	LINEAR BEARING 20mm	2	2
6	UF5402	FHCS M6 - 1 x 20	2	2
7	UF6363	LW M6	3	3
8	UF0835	SHCS M6-1 X 20mm	4	4

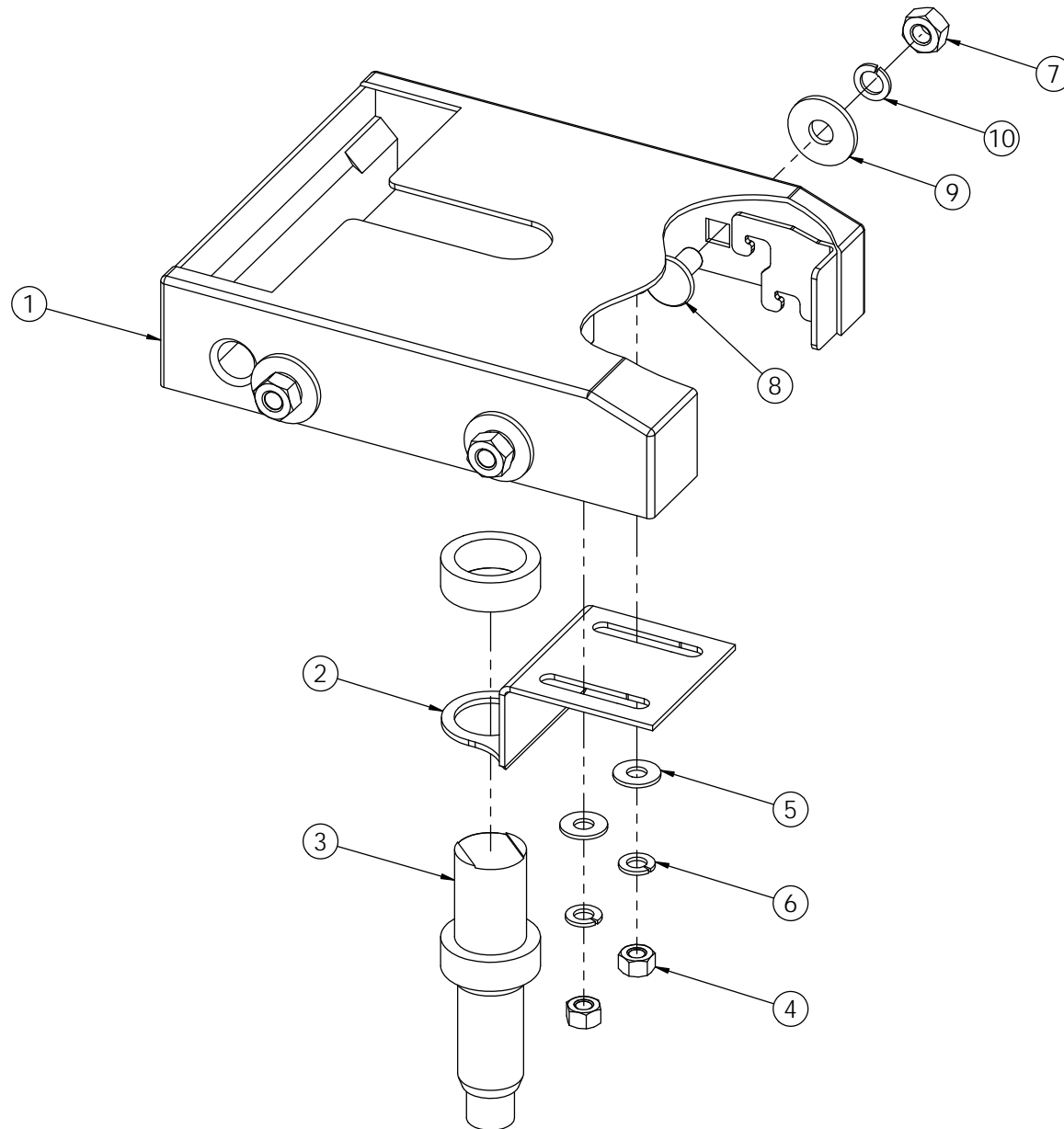
UAM0275



**UAM0275**

ITEM	PART #	DESCRIPTION	QTY.
1	UPM7640	LEG WELDMENT	1
2	UPM7641	LEG ADJUSTMENT	1
3	UPM7642	LEG FRICTION PLATE	1
4	UF4230	L.W. ZINC M12	2
5	UF6393	HHCSM12-1.75 x 35	2
6	UF3680	FW M10	4
7	UF6371	L.W. M10	4
8	UF6314	HNR M10 x 1.5	4
9	UF4229	CARRIAGE BOLT M10-1.5 x 20	4
10	UF4231	FW M12	2

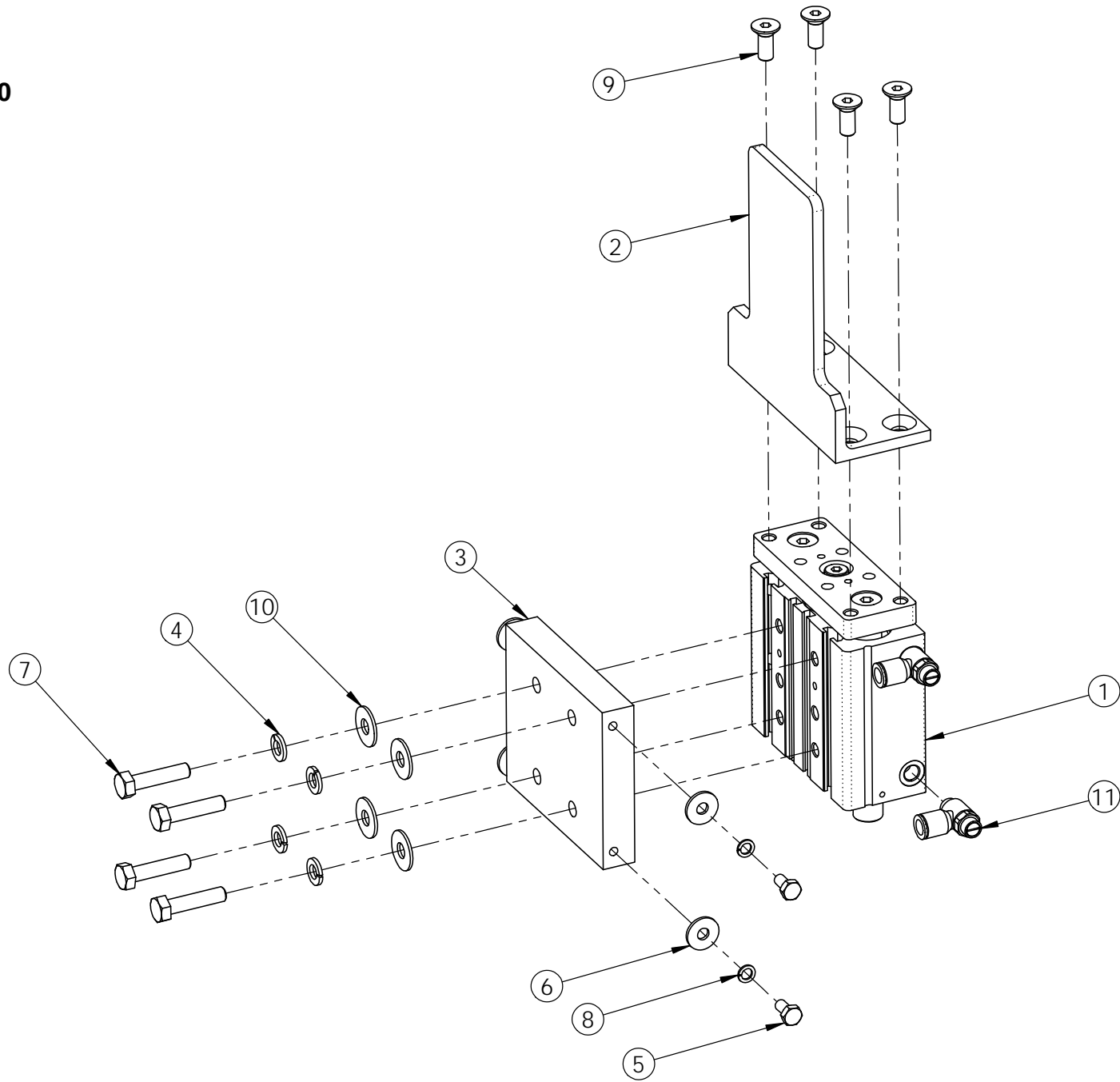
UAM0318



**UAM0318**

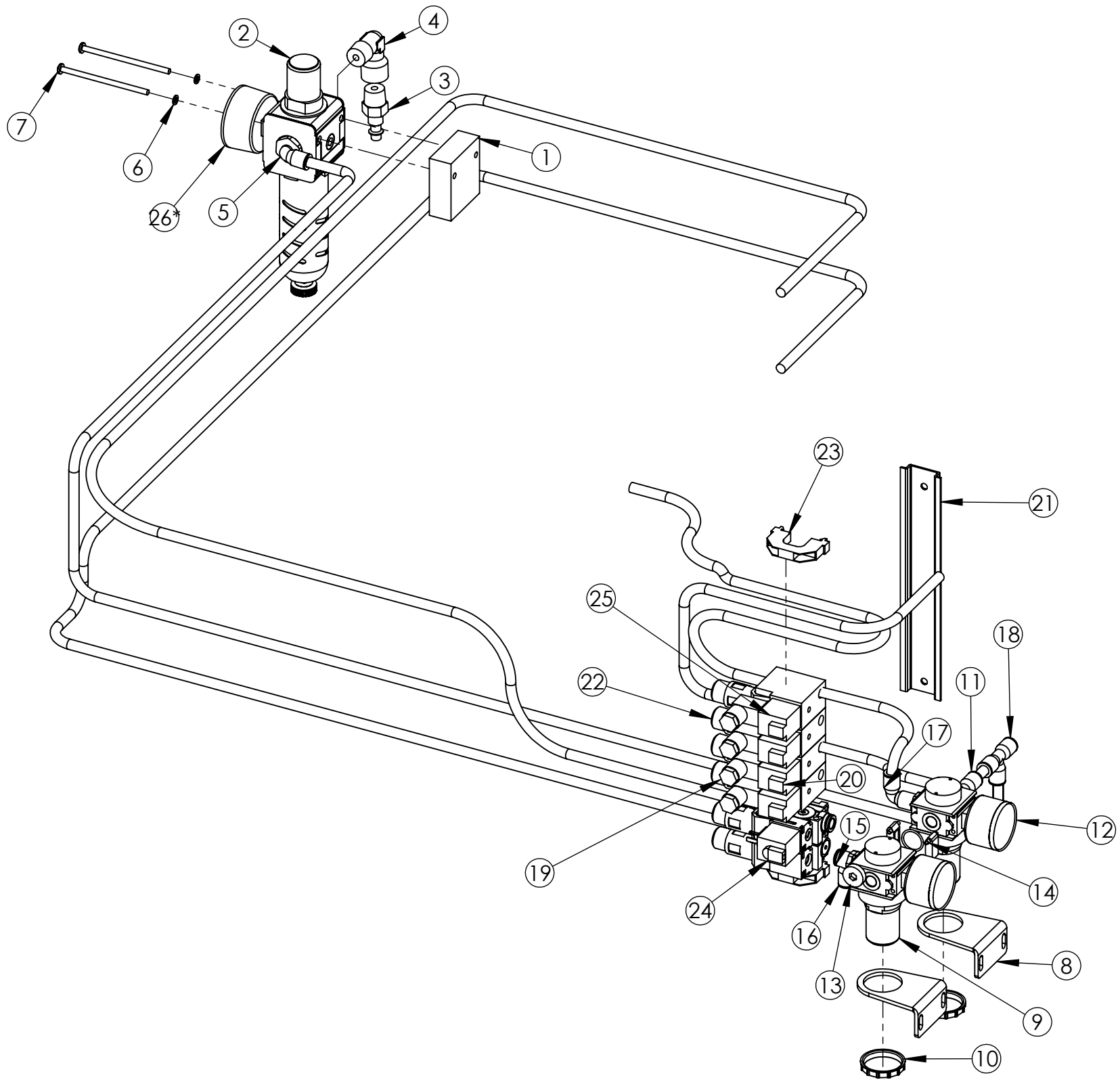
ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	UPM3231EV	INLET COVER WELDMENT	1
2	UPM3248EV	SENSOR SUPPORT	1
3	UPM0317	PHOTOELECTRIC SENSOR	1
4	UF7007	SS HEX NUT M5-0.8	2
5	UF6340	SS FW M5	2
6	UF7021	SS LW M5	2
7	UF3638	SS HNR M6-1.0	4
8	UF3745	SS CARRIAGE BOLT M6-1 x 12mm	4
9	UF6341	SS FW M6	4
10	UF6411	SS LW M6	4

USM8090



**USM8090**

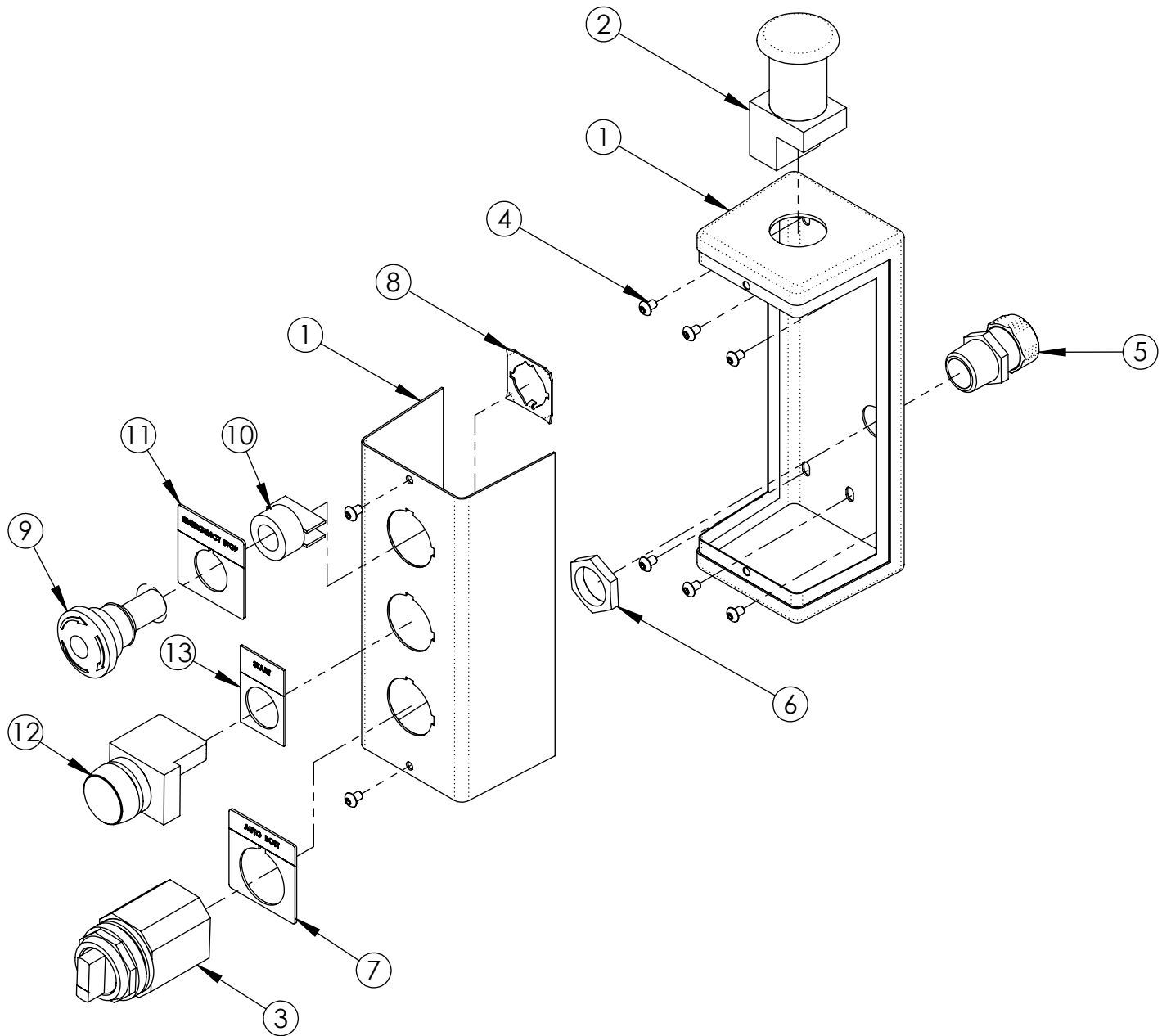
ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	UPM3804	GPC GUIDE CYLINDER 32mm X 50mm	1
2	UPM7513	GATE FOR BOSCH GUIDED CYL	1
3	UPM7511	CYLINDER MNT PLT	1
4	UF0867	LW M8	4
5	UF6313	HHCS M6-1.0 X 12mm	4
6	UF1828	REG F.W. M6	4
7	UF3642	HHCS M8-1.25 X 35mm	4
8	UF6363	LW M6	4
9	UF1190	M8 - 1.25 x 20 FHCS	4
10	UF1821	FW M8	4
11	UPM3787	FLOW CONTROL VALVE G 1/8 male 8mm tube	2





ITEM	PART #	DESCRIPTION	QTY.
1	UPM3755	FILTER REG. MOUNTING BRKT.	1
2	UPM3267	FILTER REGULATOR G3/8	1
3	UPM0436	FTG Q.D. 3/8	1
4	UPM3175	BRASS ELBOW	1
5	UPM3179	ELBOW 3/8	1
6	UF1755	L.W. ZINC #8	2
7	UF2025	RH PH 8-32 X 3	2
8	UPM3271	MOUNTING BRACKET NL1	2
9	UPM3268	PRESSURE REGULATOR MANIFOLD	2
10	UPM3272	CONTROL PANEL NUT	2
11	UPM3139	FTG "T" 8mm TUBE G1/4	1
12	UPM3273	PRESSURE GAUGE G1/8	2
13	UPM3133	PLUG G1/4	1
14	UPM3270	BLOCK ASSEMBLY KIT	1
15	UPM3125	FTG. STR G1/4	1
16	UPM3124	ELBOW FTG.SWVL G1/4	1
17	UPM3194	ELBOW LVTH 1/4 MALE X 8mm TUBE	1
18	UPM3138	"T" FTG	1
19	UPM3392	ELECT. CONN WITH LED VALVE	4
20	UPM7782	3/2-NO INTERNAL PILOT VALVE	2
21	UPM0407	DIN RAIL	1
22	UPM3391	SILENCER VALVE	6
23	UPM0420	END ANCHOR	2
24	UPM7780	5/2 NC INTERNAL PILOT VALVE	1
25	UPM7781	3/2-NC INTERNAL PILOT VALVE	2
26*	UPM3654	Gauge (ONLY)	

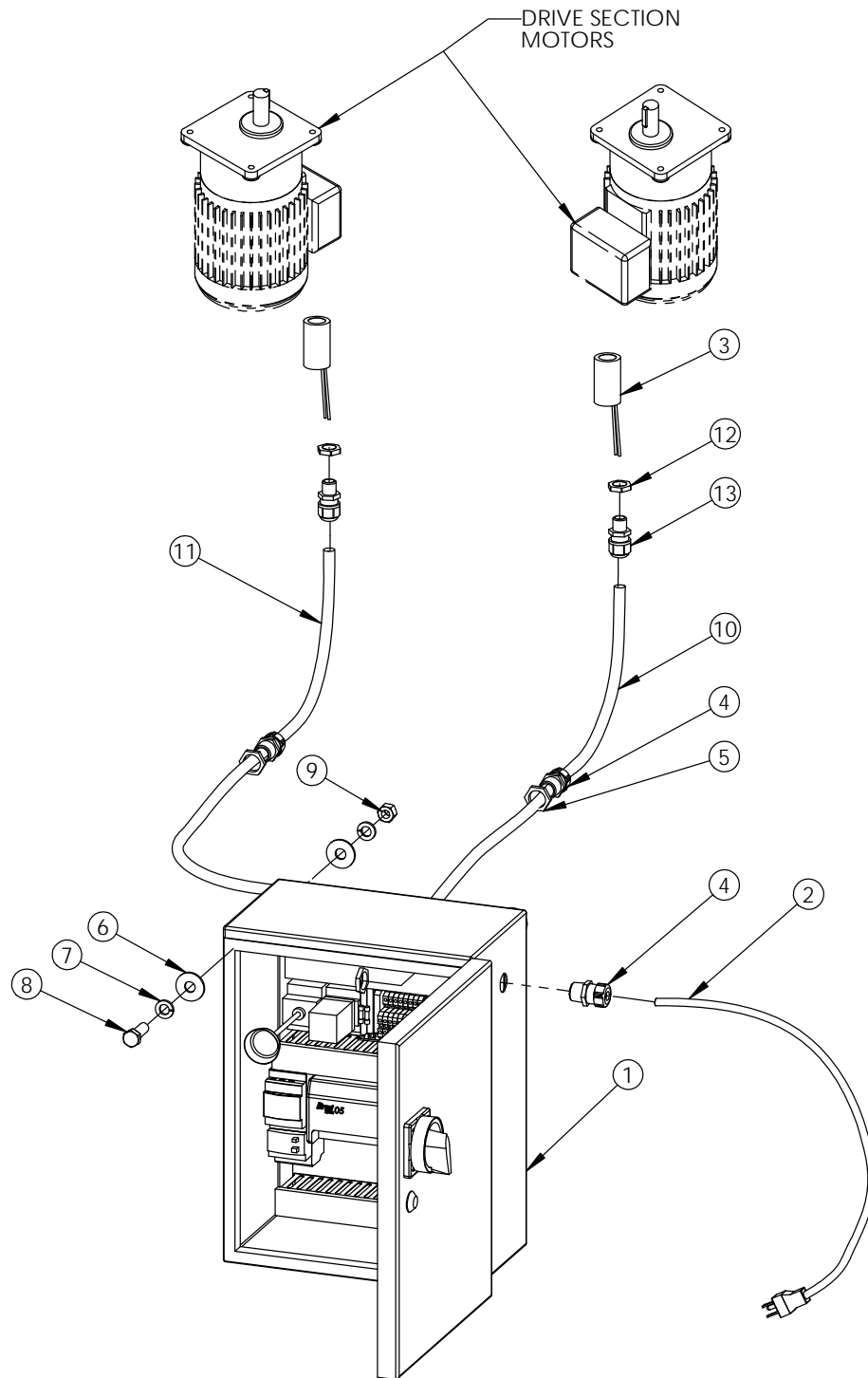
UAM0322



**UAM0322**

ITEM	PART #	DESCRIPTION	QTY
1	UPM1504EV	ELECTRIC SWITCH BOX	1
2	UPM4516	MUSHROOM BOTTOM SWITCH	1
3	UPM4517	SELECTOR SWITCH	1
4	UF7008	SS BHCS M4-07 x 6mm	6
5	UPM0197EV	STR.RELF METL.LIQDTGHT M20X1.5 (8-10mm)	1
6	UPM0341EV	LOCKNUT M20 X 1.5(FOR STRAIN RELF)	1
7	UPM4518	LEGEND PLATE "AUTO BOTT"	1
8	UPM6076	ANTI ROTATION WASHER	1
9	UPM4816	E-STOP BUTTON	1
10	UPM7630	LATCH	1
11	UPM4695	LEGEND PLATE "EMERG.STOP"	1
12	UPM4821	BUTTON GREEN 22mm 1 N.O.	1
13	UPM2210	LEGEND PLATE "START"	1

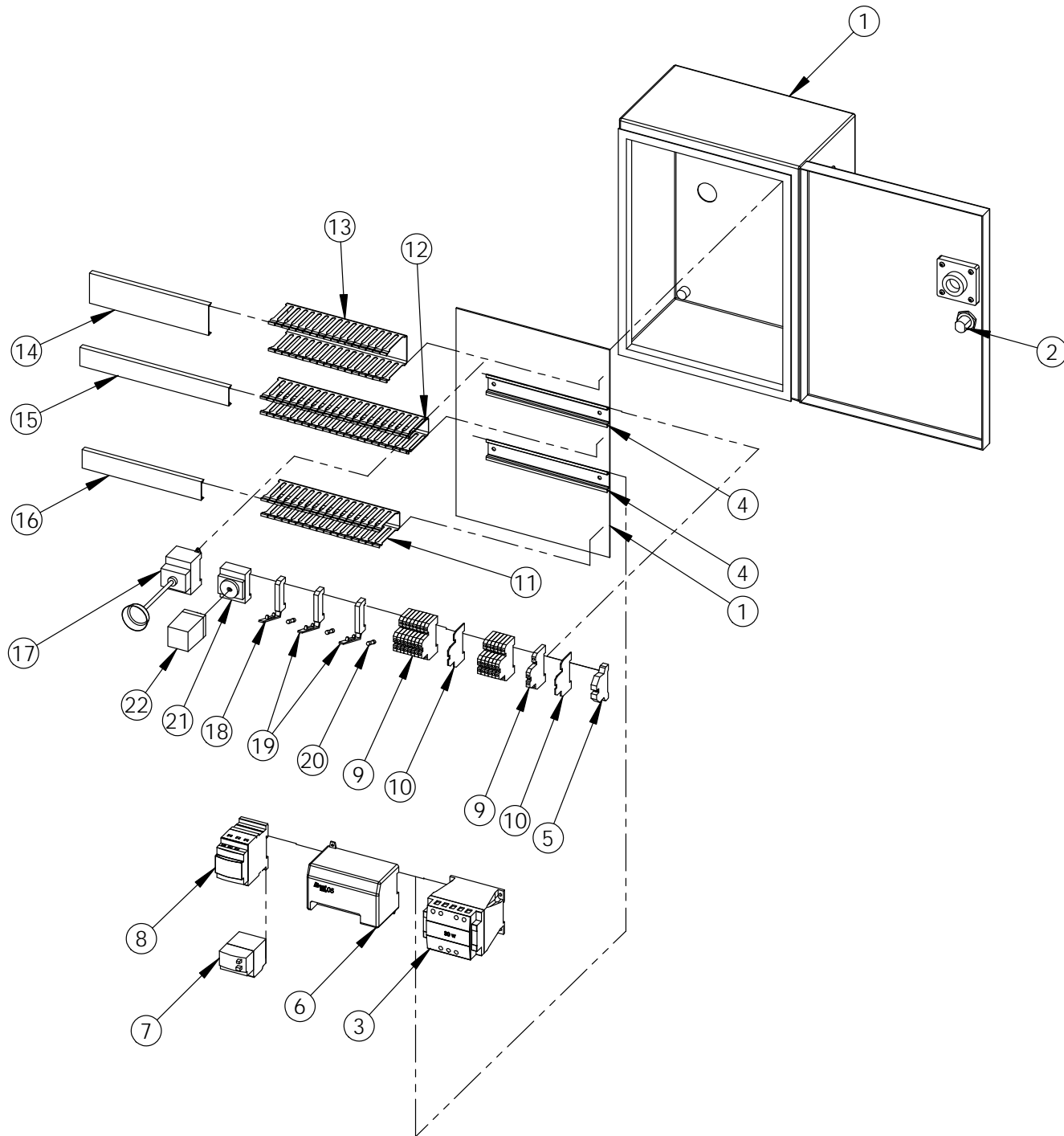
USM0808



**USM0808**

ITEM	PART #	DESCRIPTION	QTY.
1	UAM0295	ELECTRIC CONTROL BOX UA262024SB TW	1
2	UPM0209	POWER CORD, 14/3	1
3	UPM9719	CAPACITOR 16uF	2
4	UPM0197EV	STR.RELF METL.LIQDTGHT M20X1.5 (8-10mm)	3
5	UPM0341EV	LOCKNUT M20 X 1.5(FOR STRAIN RELF)	3
6	UF4231	FW M12	4
7	UF4230	L.W. ZINC M12	4
8	UF3062	HHCS M12-1.75 x 25	2
9	UF4234	HNR M12 x 1.75	2
10	UPM0225	CABLE 18/3 TYPE SJ	1
11	UPM0225	CABLE 18/3 TYPE SJ	1
12	UPM9728	LOCKNUT M16 X 1.5(FOR STRAIN RELF)	2
13	UPM9727	STR.RELF METL.LIQDTGHT M16X1.5 (8-10mm )	2

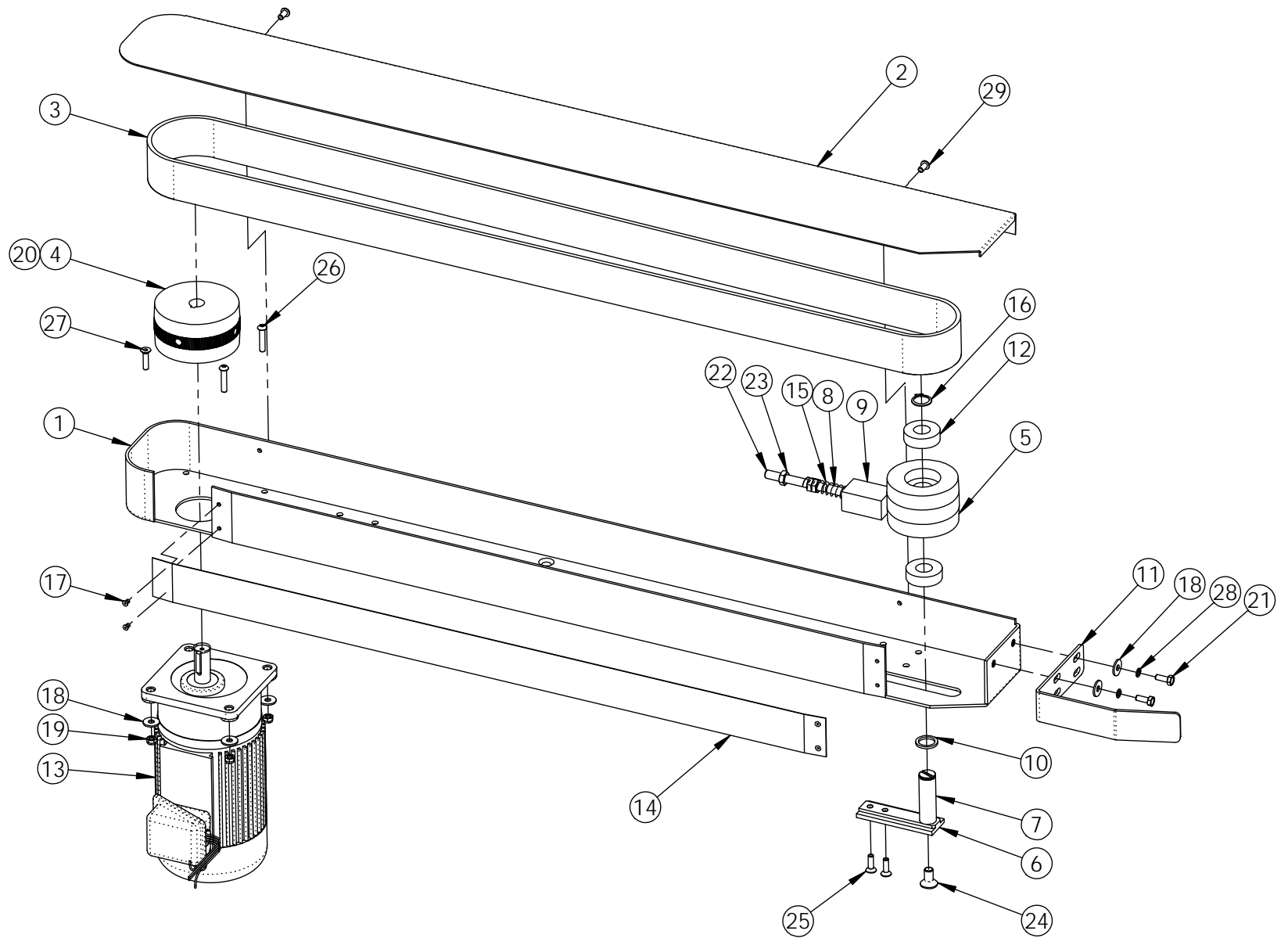
UAM0295



**UAM0295**

ITEM	PART #	DESCRIPTION	QTY.
1	UPM3418EV	BOX ELECT. 400mm X 305mm X 150mm	1
2	UPM4465	CAM LOCK	1
3	UPM4458	POWER SUPPLY IDEC 1.3 A	1
4	UPM0407	DIN RAIL	2
5	UPM7440	TB END ANCHOR FOR DN SER	1
6	UPM3833	PLC KOYO 8IN VDC 6 OUT RELAY	1
7	UPM4505	MOTOR O/L TELEMEC 7-10A	1
8	UPM7524	MOTOR STARTER TELEMEC 110VAC	1
9	UPM2880	TERMINAL BLOCK DOUBLE TW	15
10	UPM2881	TERMINAL BLOCK DOUBLE END CAP	2
11	UPM0226	WIRE WAY 30mm	1
12	UPM0226	WIRE WAY 30mm	1
13	UPM0254	WIRE WAY 50mm	1
14	UPM0255	COVER 50mm	1
15	UPM0177	COVER 30mm	1
16	UPM0177	COVER 30mm	1
17	UPM7211	ON / OFF SAF SWITCH CONT PANEL	1
18	UPM7428EV	FUSE TERMINAL BLOCK 5mm, WHITE LED	1
19	UPM4466	FUSE TERMINAL BLOCK 5mm, RED LED	2
20	UPM7120	FUSE 5mm X 20mm 1AMP/250V IEC	3
21	UPM9726	RELAY SOCKET	1
22	UPM4459	RELAY IDEC 24V 11 PINS	1

USM0811

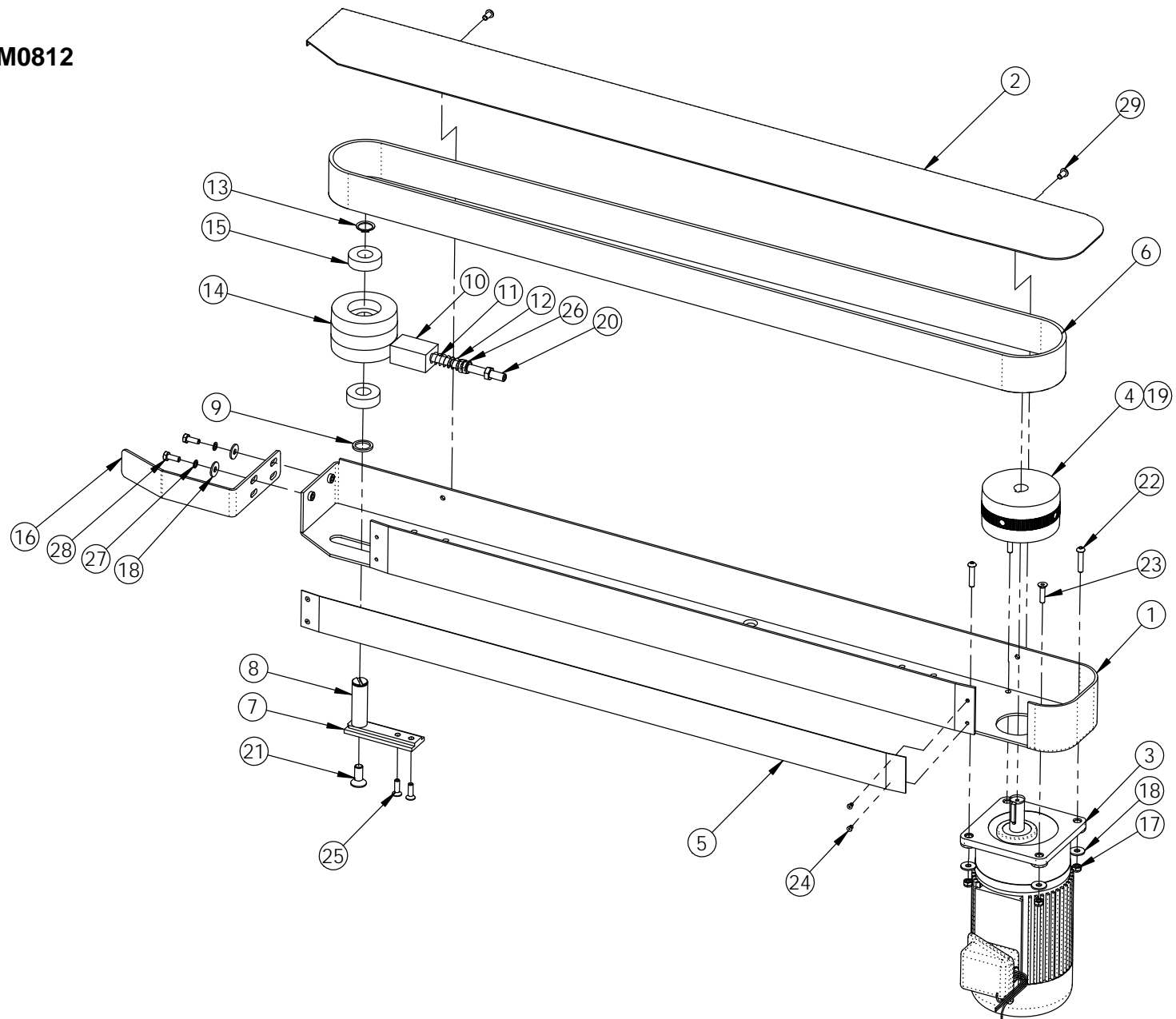




**USM0811**

ITEM	PART #	DESCRIPTION	QTY.
1	UPM3282EV	DRIVE SECTION, RIGHT SIDE	1
2	UPM3280EV	DRIVE BASE COVER RIGHT SIDE	1
3	UPM0663	BELT ENDLESS 50 mm x 2120 mm	1
4	UPM0129EV	DRIVE PULLEY 50mm	1
5	SEE TABLE	IDLER PULLEY	1
6	UPM1879EV	TENSIONNER SLIDE	1
7	UPM1233EV	IDLER PULLEY SHAFT 50mm	1
8	UPM0112	SPRING LOCATOR PIN	1
9	UPM0101EV	TENSIONNER SPRING HOLDER	1
10	UPM0109	IDLER PULLEY SPACER	1
11	UPM0647	CARTON RETAINER	1
12	UPM0324	BEARING, PULLEY	2
13	UPM7116	MOTOR T 1/3HP 21.4 : 1	1
14	UPM0029	STRIP UHMW 2" X .03"THK	1
15	UPM0038	DIE SPRING (DRIVE BASE)	1
16	UF2220	EXT RET'G RING 3/4 SHAFT	1
17	UF2080	POP RIVET S-44	4
18	UF1828	REG F.W. M6	6
19	UF5900	NYLON LOCK NUT M6-1.0	4
20	UF3683	SSS M6 X 10mm	2
21	UF0454	M6-1.0 X 16mm HHCS	2
22	UF1400	SSS HK 3/8-16 X 3	1
23	UF1610	HNJ 3/8-16	3
24	UF6397	FHCS M10-1.5 x 20	1
25	UF5402	FHCS M6 - 1 x 20	2
26	UF3711	BHCS M6-1 x 30	3
27	UF1194	FHCS M6 - 1 x 25 mm	1
28	UF6411	SS LW M6	2
29	UF3278	SS BHCS M6-1 x 12 mm	2

USM0812



**USM0812**

ITEM	PART #	DESCRIPTION	QTY.
1	UPM3283EV	DRIVE BASE LEFT SIDE	1
2	UPM3281EV	DRIVE BASE COVER LH	1
3	UPM7116	MOTOR T 1/3HP 21.4 : 1	1
4	UPM0129EV	DRIVE PULLEY 50mm	1
5	UPM0029	STRIP UHMW 2" X .03"THK	1
6	UPM0663	BELT ENDLESS 50 mm x 2120 mm	1
7	UPM1879EV	TENSIONNER SLIDE	1
8	UPM1233EV	IDLER PULLEY SHAFT 50mm	1
9	UPM0109	IDLER PULLEY SPACER	1
10	UPM0101EV	TENSIONNER SPRING HOLDER	1
11	UPM0112	SPRING LOCATOR PIN	1
12	UPM0038	DIE SPRING (DRIVE BASE)	1
13	UF2220	EXT RET'G RING 3/4 SHAFT	1
14	UPM0259	IDLER PULLEY	1
15	UPM0324	BEARING, PULLEY	2
16	UPM0647	CARTON RETAINER	1
17	UF5900	NYLON LOCK NUT M6-1.0	4
18	UF1828	REG F.W. M6	6
19	UF3683	SSS M6 X 10mm	2
20	UF1400	SSS HK 3/8-16 X 3	1
21	UF1191	FHCS M10-1.5 x 25	1
22	UF3711	BHCS M6-1 x 30	3
23	UF1194	FHCS M6 - 1 x 25 mm	1
24	UF2080	POP RIVET S-44	4
25	UF5402	FHCS M6 - 1 x 20	2
26	UF1610	HNJ 3/8-16	3
27	UF6411	SS LW M6	2
28	UF0454	M6-1.0 X 16mm HHCS	2
29	UF3278	SS BHCS M6-1 x 12 mm	2