



USER MANUAL

CE10



For Serial Numbers:
TS XX X XXX



For all other serial numbers, contact Customer Service @ 800-474-8273 (Menu #3)
This manual also available at www.Intertapepolymer.com

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Chapter 1 **GENERAL INFORMATION**

1.1 REVISION CONTROL

REV00Initial Release
REV01 Second Release

1.2 TECHNICAL SUPPORT

This is the Interpack Model CE-10P-WAT Case Erector Sealing Machine you ordered. It has been set up and tested in our factory with Intertape manufactured water activated tapes. 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**

Technical support may also be contacted via email at the address below:

- **EMAIL: Machsupp@itape.com**

1.3 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: _____

1.4 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 Chapter 6, [Troubleshooting](#).

Service support is available from your authorized Interpack distributor at additional cost if the problem cannot be remedied after consulting the Troubleshooting chapter of this manual.

1.5 WARRANTY

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 ET II 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 ET II Tape Head parts will be free from all defects for one (1) year after delivery.
3. Water Activated Tape Head blades 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.

1.6 DESCRIPTION OF CE-10P-WAT CASE ERECTOR SEALING MACHINE

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 [Troubleshooting](#) section of this manual.



Figure 1-1 CE-10P-WAT Case Erector Sealing Machine

The CE-10P-WAT Case Erector Sealing Machine with powered hopper is suitable for processing a wide range of RSC (Regular Slotted Container) style case sizes without intervention of an operator to form and bottom seal cases. Its use of pneumatics allows the machine to extract a single case, fold all four bottom flaps and seal the bottom center seam with pressure sensitive case sealing tape.

Notes

Chapter 2

IMPORTANT SAFEGUARDS

2.1 SAFETY LABELS

There are a number of safety labels used on the CE-10P-WAT Case Erector Sealing Machine. These labels are placed at different locations on the machine to warn operators and service personnel of possible dangers (refer to [Figure 2-1](#)). Please read the labels on the machine and the following safety precautions before using the machine.

- ✓ **Read and understand the entire instruction manual before operating the machine. Know its limitations, as well as the specific potential hazards particular to it.**
- ✓ **Only trained personnel are to operate and service machine.**
- ✓ **Before operating the machine, remove ties, rings, watches other jewelry, and roll up sleeves above the elbows. Remove all loose clothing and confine long hair. Do not wear gloves.**
- ✓ **Keep the floor around the machine clean**
- ✓ **Keep machine guards in place at all times when the machine is in use.**
- ✓ **Do not overreach. Maintain a balanced stance at all times so that you do not fall or lean against blades or other moving parts.**
- ✓ **Make all machine adjustments or maintenance with the machine unplugged from the power source.**
- ✓ **Replace warning labels if they become obscured or removed.**
- ✓ **Made sure the power source switch is in the OFF position before connecting the machine to the power source.**
- ✓ **Make a habit of checking to see that the keys and adjusting wrenches are removed before turning on the machine.**
- ✓ **Keep belt guard and blade guards in place and in working order.**
- ✓ **Failure to comply with all of these warnings could lead to serious injury.**
- ✓ **Follow Lock-out Tag-Out procedure before servicing the equipment.**
- ✓ **Stay clear of moving parts which can shear and cut.**

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

2.2 SAFETY LABEL PLACEMENT

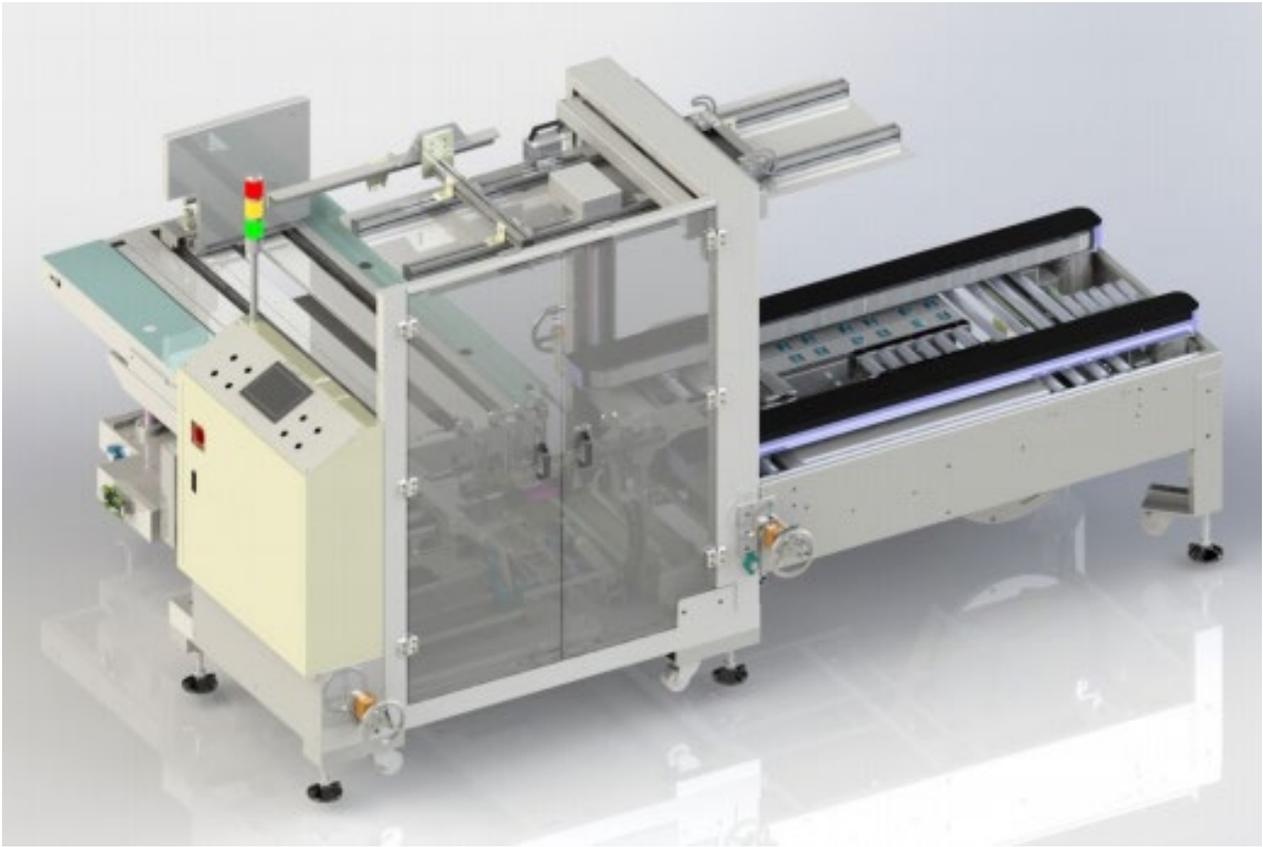
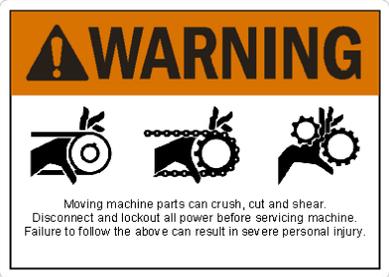


Figure 2-1 Safety Label Placement

2.3 SAFETY LABEL DESCRIPTIONS

<p>The label shown is affixed to the upper tape head assembly on both sides 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.</p>	 <p>WARNING Blade hazard. Keep hands clear. Follow lock-out procedures before servicing.</p>
<p>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.</p>	
<p>The label shown is affixed to the bridge above the vertical intake. It warns the operator of potential pinch points between the top and bottom of the case. Keep hands away from this area when processing a case.</p>	
<p>The label shown is located on the in-feed and exit ends of the machine belt drives. The label warns the operators and service personnel of the pinch points at each end of the belt drives.</p>	 <p>WARNING Moving machine parts can crush, cut and shear. Disconnect and lockout all power before servicing machine. Failure to follow the above can result in severe personal injury.</p>
<p>The label shown is affixed 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>WARNING Hazardous voltage. Disconnect power before servicing.</p>
<p>The label shown is affixed to the electrical control box. The label advises service personnel to connect the machine to a properly grounded outlet.</p>	 <p>CAUTION To provide continued protection against risk of electric shock, connect to properly grounded outlets only.</p>

The 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.

⚠ WARNING	
OPERATION / SERVICE	
<ul style="list-style-type: none"> • Only trained people are to operate and service machine. • Shut off power to machine before adjusting. • Unplug electrical power before servicing. 	
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.	

The label shown is located on the in-feed end of the machine. The 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.

DANGER

COMPRESSED AIR
BEWARE OF SERIOUS INJURY OR DEATH

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 JOKE" WITH COMPRESSED AIR.

The label shown is located on the gear side of the machine. The label warns the operators and service personnel of the pinch points.



<p>The label shown is located on the chain side of the machine. The label warns the operators and service personnel of the pinch points.</p>	
<p>The label shown is located on the side of the outfeed table. The label warns the operators and service personnel to keep fingers clear of lower tape mandrel.</p>	
<p>Note: Should any of the safety labels placed on the Case Sealer be damaged or destroyed, replacements are available through your distributor.</p>	

2.4 EXPLANATION OF SIGNAL WORD CONSEQUENCES

 **WARNING:** Indicates a potentially hazardous situation that, if not avoided, could result in death or serious injury or property damage.

 **CAUTION:** Indicates a potentially hazardous situation that, if not avoided, could result in minor or moderate injury or property damage.

WARNING

- **To reduce the risk associated with mechanical, pneumatic, 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:**

Turn electrical supply off and disconnect before performing any adjustments, maintenance, or servicing of the machine or taping 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:**

Position electrical cord away from foot and vehicle traffic.
- **To reduce the risk associated with sharp blade hazards:**

Keep hands and fingers away from tape cutoff blades. Blades are extremely sharp.
- **To reduce the risk associated with fire and explosion hazards:**

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.

2.5 OPERATOR SKILL LEVEL DESCRIPTIONS

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

2.5.1 Skill “A” Machine Operator

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

2.5.2 Skill “B” Mechanical Maintenance Technician

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

2.5.3 Skill “C” Electrical Maintenance Technician

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

2.5.4 Skill “D” Manufacturer’s Technician

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

Operation	Machine Condition	Operator Skill Level	Number of Operators
Machine Installation & Set-Up	Running with Safety Protections Disabled	B & C	2
Tape Roll Replacement	Stopped by Pressing the Emergency Stop (E-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

Table 2-1 Operator’s Skill Level

Notes

Chapter 3 **SPECIFICATIONS**

3.1 MACHINE DIMENSIONS

Machine Weight: 1675 lbs (759.8kg) crated

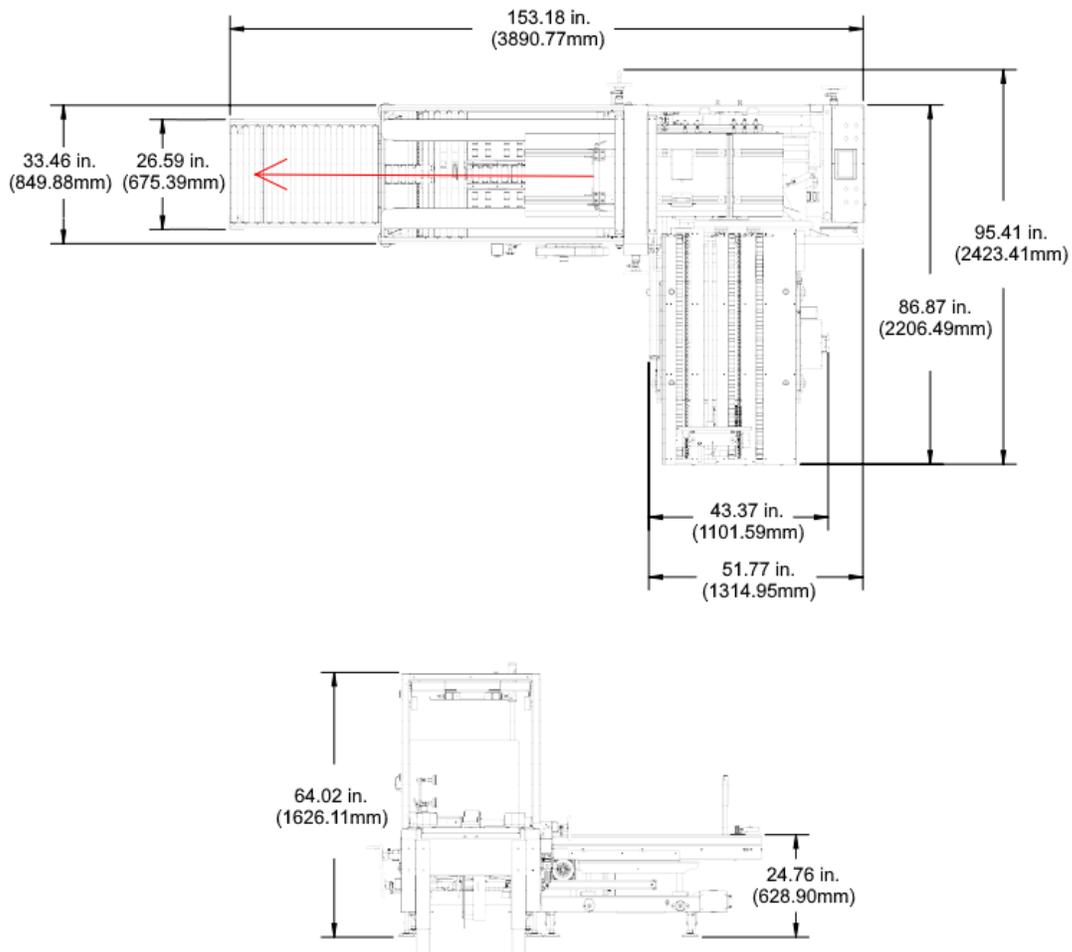


Figure 3-1 Machine Dimensions

3.2 MACHINE COMPONENTS

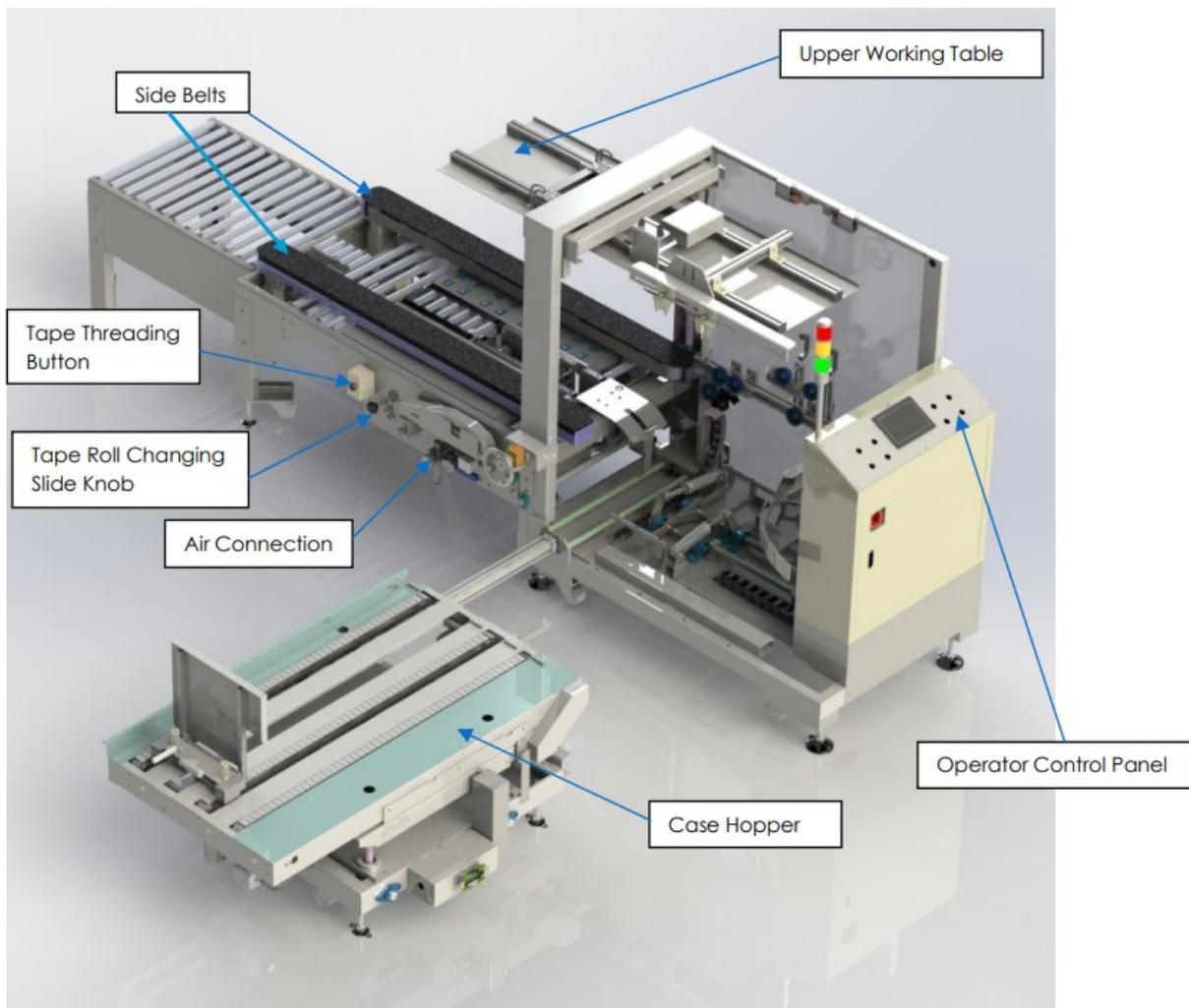


Figure 3-2 Machine Components

3.3 MACHINE SPECIFICATIONS

Always operate the machine in a dry, relatively clean environment at 7 to 40 °C (45 to 105 °F) with clean, dry cases. Machine must be set on a level surface or adjusted to operate on a level plane.

3.3.1 Power Specifications

1. Electrical:
 - 115V, 60HZ, 1ph, 5A
 - Two (2) 1/4 HP gear motors.
 - One ½ HP motor
 - A neoprene power cord.
 - A grounded plug.
2. Pneumatic:
 - 10 CFM @ 90 PSI

Contact your distributor for power requirements or other information not listed above.

3.3.2 Operating Speed

The throughput speed is up to 10 CPM. The hopper capacity is up to 75 cases (2000 lb. test). Change over information - 7 operations (5 - 10 minutes max). No tools required and no parts to change.

3.3.3 Tape Specifications

Use **IPG Water-Activated Tape**. The machine can accommodate tape widths of 2 - 3 in. (48 - 75mm).

A maximum tape roll length of 4500 ft. (1371.6m) can be installed on the tape heads. This machine can accommodate all Intertape brand, water-activated tape within listed specifications.

The standard tape leg length of 3 in. (75mm) is factory set. The standard tape leg length may vary up to ¼ in. (6mm) based on tape tension and line speed.

The standard tape leg length is adjustable via the HMI on the electrical box. The minimum tape leg length recommended is 2 in. (48mm) and the maximum recommended is 3 in. (75mm).

3.3.4 Case Specifications

Type

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

Material

125 - 275 PSI Bursting Test, Single or Double Wall B or C Flutes.

Weight

85 lbs (39kg) maximum

Size

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

Case Size			
Case Size	Length	Width	Height
Minimum	10 in. (254mm)	7 in. (177.8mm)	5 in. (127mm)
Maximum	22 in. (558.8mm)	16 in. (406.4mm)	22 in. (558.8mm)

Table 3-1 Case Sizes

3.3.5 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. Discharge height is 24 - 28 in. (609.6 – 711.2mm).

Notes

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Chapter 4

SET-UP PROCEDURES

4.1 MACHINE INSTALLATION

Open the package and unpack the machine carefully for the installation. Please check if the machine has any visible damage occurred during shipping, if any damages have occurred during shipping, be sure to advise the shipping carrier and your distributor. The sequence below is step by step instructions to remove all packing materials.

1. Remove shipping related items from inside of the machine (Ex: wooden block, plastic band).
2. Install the CE10P-WAT Case Erector Sealing Machine in the desired location where 115V power and compressed air is available within reach of the machine.
3. Connect power, compressed air and adjust the pressure to 80 psi.
4. Open the manual valve located near the exit of the CE10P-WAT Case Erector Sealing Machine (refer to Figure 4-1).



Figure 4-1 Receiving and Handling

5. After installation, adjust the height of working table to be parallel with the height of your production line or conveyor.
6. To test the machine for proper function, switch on the main breaker switch located below the Control Panel.
7. On the selector switch, select manual mode and clear any fault conditions.
8. Press the “Function ON” button located on the control panel to activate each manual function step (refer to [Table 4-1](#) for manual function codes; also located on the machine control panel).
9. As you go through the manual function codes you should experience some activity associated with each manual cycle step.
 - When fault message display’s “01”, side belts should turn on.
 - Manual code “02” activates vacuum, code “03” moves the vacuum cups forward, code “04” moves vacuum cups back to the original home position, and code “05” turns on the guide cylinder.

- Code “06” moves the front minor flap folding up, code “07” moves rear minor flap folding up, code “08” left major flap folding as code “09” right major flap folding move up.
 - Code “10” releases vacuum and last code “11” pushing cylinder activates.
10. The “Back” button will turn off each function in the reverse order. Alternatively, you can turn on/off the function you are interested in. Once the machine functions properly in manual mode follow [Operating Instructions](#) for the proper operation and set-up of your CE10P-WAT Case Erector Sealing Machine.

CODE	MANUAL FUNCTION
01	Side Belt On
02	Vacuum Activated
03	Vacuum Cup Forward
04	Vacuum Cup Backward
05	Guide Cylinder
06	Front Minor Flap Folding Up
07	Rear Minor Flap Folding Up
08	Left Major Flap Folding Up
09	Right Major Flap Folding Up
10	Vacuum Released
11	Pushing Cylinder

Table 4-1 Manual Function Codes

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

- CE-10P-WAT Case Erector Sealing Machine
- Operation Manual & Parts List
- Plastic bag containing tape head spare parts

Note: After unpacking the CE-10P-WAT Case Erector Sealing Machine, 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.

4.2 FAULT CODES

4.2.1 HMI Display Fault Codes

The following are fault codes (refer to Table 4-2) will display on the HMI display on the control panel (refer to [Figure 4-14](#)). Refer to [Troubleshooting](#) for possible remedies to Fault Codes.

CODE	FAULT
01	Low Air Pressure
02	Not in Initial Position
03	Vacuum not Detected
04	Hopper Empty
05	Case Withdraw Failure
06	Case Jam
07	Tape Application Problem
08	Motor Problem
09	Safety Door Open
10	Emergency Stop Not Reset
11	Front Flap Folder Cylinder Not in Position
12	Rear Flap Folder Cylinder Not in Position

Table 4-2 Fault Codes

4.3 MACHINE SETUP

4.3.1 Electrical Utilities

A 12 ft. (3657.6mm) standard three-conductor power cord with plug is provided for 115V, 60HZ, 1ph, 5A electric 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 box is located on one side of the CE-10P-WAT Case Erector Sealing Machine . It contains an HMI that can be used to adjust machine operation settings as needed.

The control box contains a **Power Lamp Indicator**, the **Power ON** button, a **HMI Display**, a **Start** button, a **Manual Reset** button, an Alarm buzzer, a **Stop** button, an **Auto/Manual** switch, an **EMERGENCY Stop** button, a **Function ON/OFF** button, a **Fault Message** Display, a **Buzzer OFF** button, a **HMI Single Cycle** button, a **Cycle Stop** button and a **Continuous Cycle** button (refer to [Figure 4-14](#)).

For electrical isolation, an external means is required. This may be an external disconnect or by unplugging. If unplugging, turn off power first.

4.3.2 Pneumatic Utilities

Note: The pressure setting for the main air regulator (Figure 4-2) is factory set. The values will need to be adjusted as needed by customer supplied pressure and volume.

The main air regulator has a male quick disconnect adaptor (refer to Figure 4-2). Connect clean dry compressed air to this adaptor. The CE-10P-WAT Case Erector Sealing Machine 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 (refer to Figure 4-2). Turn the knob clockwise for more pressure and counterclockwise for less. When the air pressure is at 75 PSI, push back down on the button until a "click" is felt to lock it in position. The thread size is 3/8 NPT.

Note: Should the supplied airline or pressure be unplugged or cut for any reason, tape will not feed and rollers will not be activated if box is processed.

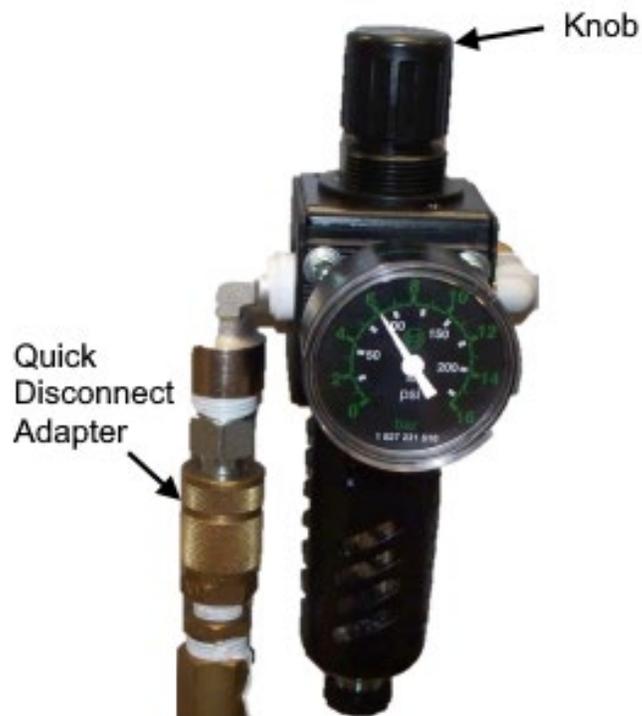


Figure 4-2 Main Air Regulator

4.3.3 Setup

The set-up process for your CE10P-WAT Case Erector Sealing Machine is simple and does not require any tools or changeover parts to accomplish. The Case Erector is equipped with hand wheels for ease of moving side belts and upper table to conform to your desired case size. It also has a powered hopper with an Up-Down touch screen control to adjust effortlessly.

For the initial set-up of your CE10P-WAT Case Erector Sealing Machine the Case Erector should be in manual mode with a tape roll loaded. Follow the steps below to set-up your CE10P-WAT Case Erector Sealing Machine.

1. Obtain a box or case sample you need to process and fold the bottom minor and major flaps of the selected case to set-up the machine. For an example of a bottom folded case (refer to Figure 4-3).
2. Put the box (with bottom flaps folded) into the exit side of the machine. Make sure the side belts are wide enough and the upper table high enough to fit the case (refer to Figure 4-4).
3. Lower the upper table until approximately $\frac{1}{4}$ in. (6.4mm) of space is between the top of the case and the upper table (refer to Figure 4-4).
4. Adjust the side belts to fit the width of the case using rotary handle near conveyors. Make note of indicator numbers in orange enclosure.
5. Place an unfolded case vertically and in the proper orientation (RH facing Vacuum Cups) onto the hopper and adjust the table up to the upper stopper mechanism or retaining fingers approximately $\frac{1}{4}$ in. (6.4mm) of the case separating plate on the case (refer to [Figures 4-5](#), [4-6](#), [4-7](#), [4-11](#) and [4-12](#)).
6. Move the stopper with the pin to the center of the slot of the case (refer to [Figure 4-8](#)).
7. While CE10P-WAT Case Erector Sealing Machine is ready to operate in manual mode, press the "Next" button under "Manual Mode steps" until the vacuum cup mechanism moves forward (Manual function code 03).
8. Press the "E-Stop" button and adjust the vacuum cups so that all five are place within the length side of the case if the size permits it ([Figure 4-6](#) and [4-10](#)). Any vacuum cups not able to reach the length side of the box may be disabled with the blue cut-off valve adjacent to the vacuum head.
9. Move Case Pushing Mechanism far enough back for case to enter without jamming ([Figure 4-9](#)).



Figure 4-3 Bottom Folded Case

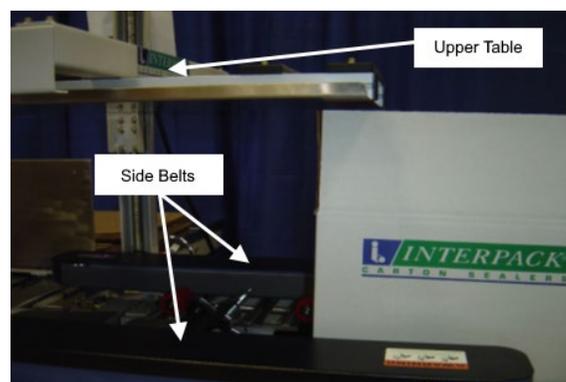


Figure 4-4 Upper Table and Side Belts

10. Reset machine, again make sure is in manual mode; continue pressing “Function On” button until case is in the folding section of the machine; manual code 05 ([Figure 4-9](#)).
11. Adjust the Case Pushing Mechanism until it squares the case (refer to [Figure 4-9](#)).
12. Continue pressing “Function On” button until case is pushed into the side belts - Fault Message

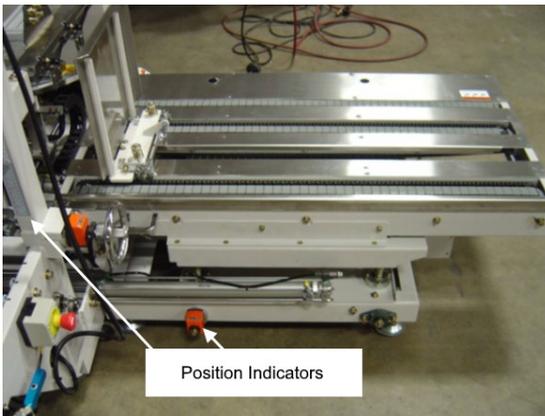


Figure 4-5 Upper Stopper

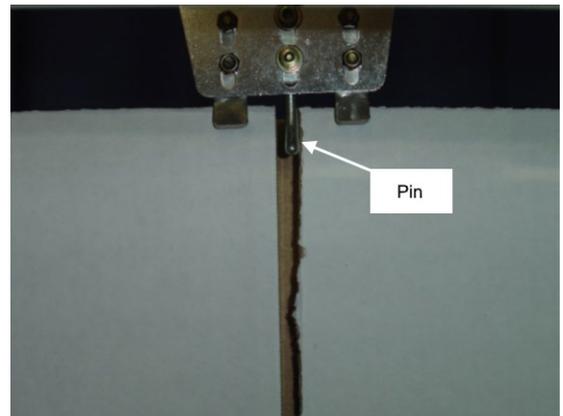


Figure 4-6 Vacuum Cups

13. The case should travel through the side belts without any hesitation, being sealed on the bottom.



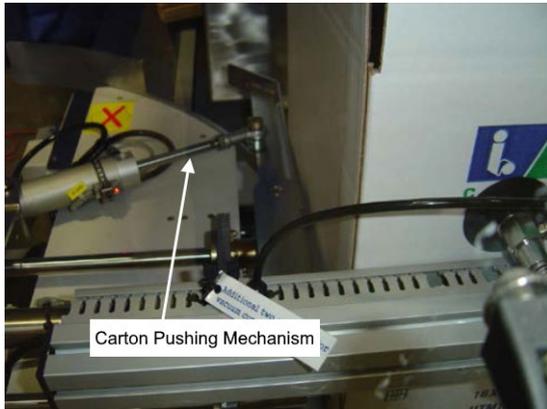
Position Indicators



Pin

Once the CE10P-WAT Case Erector Sealing Machine is set-up to the desired case size, the operator can proceed to process cases automatically in automatic mode by switching the selector to “Auto.” The operator has the choice to single cycle a case through to confirm set-up or to run the machine automatically by pressing “Continuous Cycle”, forming bottom sealed cases continuously.

The upper



stopper process: **Figure 4-9 Case Pushing Mechanism**



the separation of blank cases from each other to **Figure 4-10 Vacuum Cup Mechanism**

The Case Pushing and squaring mechanism with an already formed case ready for folding (refer to Figure 4-9).

The vacuum cup mechanism; it secures the blank case to be pulled away from the hopper and into the folding section (refer to Figure 4-10).

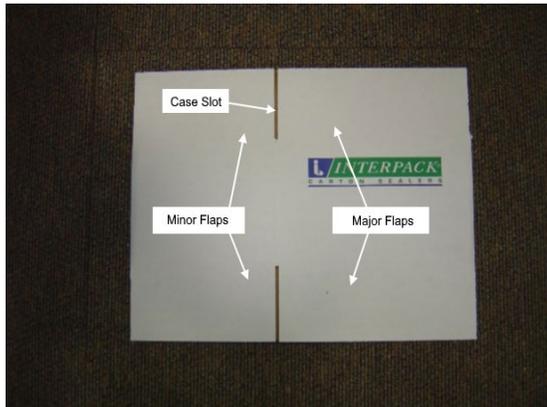
Figure 4-7 Case Hopper

Figure 4-8 Upper Stopper Mechanism



Figure 4-13 Position Indicator

Note: After each set-up of a different case size, it is recommended to write down or create a reference sheet of all four settings of the position indicators. This will reduce the set-up time when going back to an alternate case size that has been used before, eliminating the set-up exercise (refer to [Figure 4-13](#)).



There are a total of three hand wheels and fo

Figure 4-11 Blank RSC RH 4-13).



Figure 4-12 Blank RSC LH

4.4 OPERATOR CONTROL BOX

Below shows all the buttons and switch functionality of your CE10P-WAT Case Erector Sealing Machine control panel (refer to [Figures 4-14](#) and [4-15](#)):

1. Power Lamp Indicator - Machine is energized when lamp is on.
2. Power ON button - Reset machine to the state of operation.
3. HMI Display – Displays other controls and fault codes.
4. Start button – Starts machine.
5. Manual Reset button - Reset machine position.
6. Alarm buzzer - Audible alarm for fault conditions.
7. Stop button – Stops machine.
8. Auto/Manual switch - Selector switch for operating modes.
9. EMERGENCY Stop button - Immediate stop machine operation.
10. Function ON/OFF button - Turns ON/OFF each of the manual functions.
11. Fault Message Display – Displays fault messages and manual function codes.
12. Buzzer Off - Resets fault and mute Alarm Buzzer.
13. HMI Single Cycle button - Cycles one case when in Automatic mode.
14. Cycle Stop button - Stop machine on cycle and reset fault.
15. Continuous Cycle button - Continuously Run when in Automatic mode.

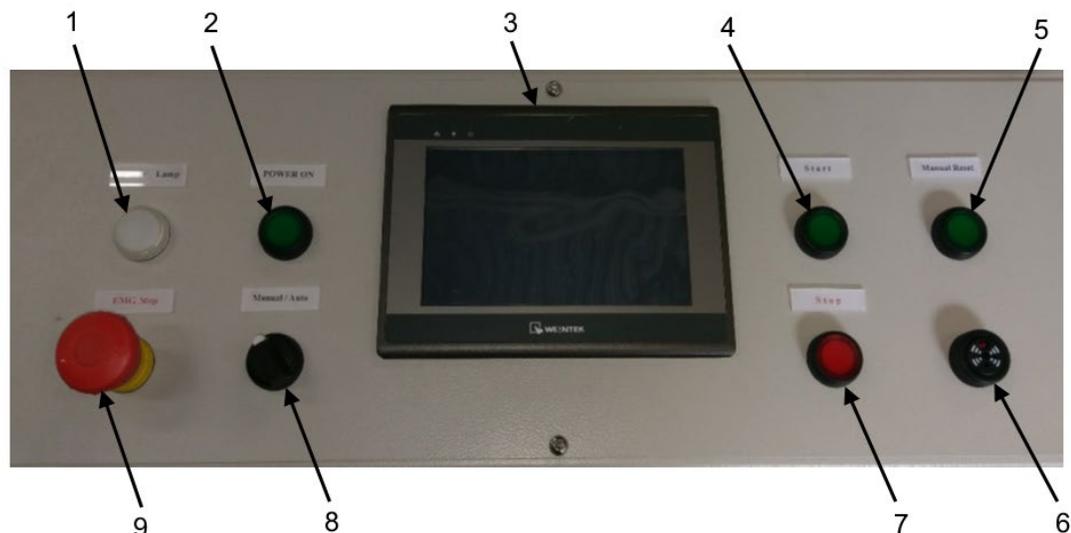


Figure 4-14 Control Box

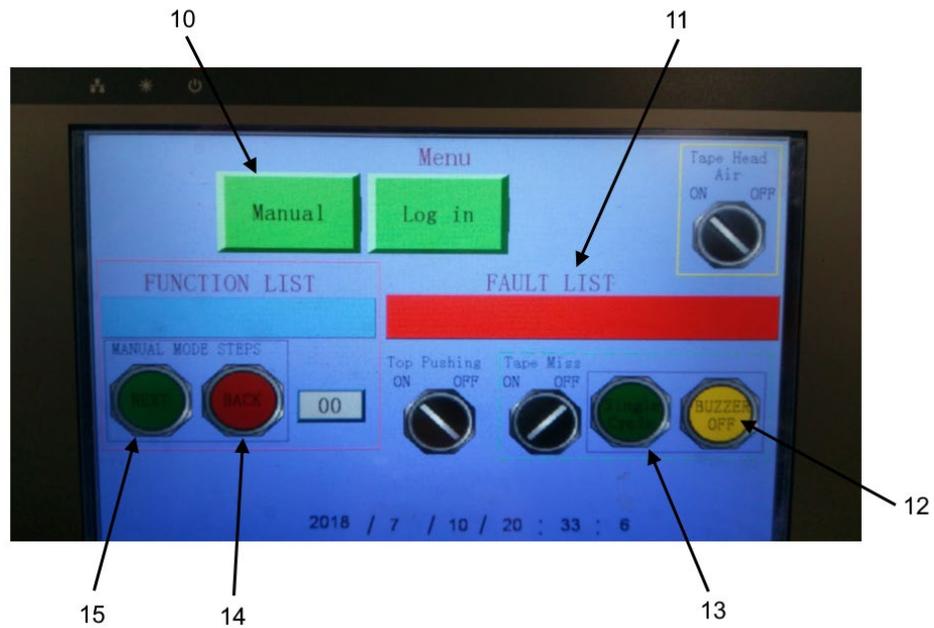


Figure 4-15 HMI Main Menu



Figure 4-16 Manual Sub Menu



Figure 4-17 Bottom Tape Head Sub Menu

4.5 STACK LIGHT STATUS

Your CE10P-WAT Case Erector Sealing Machine is supplied with a status indicator stack light. Table 4-3 shows the legend of each light color machine status. CE10P-WAT Case Erector Sealing Machine will flash **RED** as an indication of a fault. The **AMBER** light without the Red-light flashing is an indication of “Low Tape” or “No Tape.” The **GREEN** light shows the operating status of processing boxes in Automatic Mode.

1. Solid Amber – exit sensor is blocked.
2. Flashing Amber – Low Tape

Stack Light Status Legend	
RED	Fault
AMBER	Warning
GREEN	Ready

Table 4-3 Stack Light Status

Notes: Breaker CP3 if tripped “No Tape” and “Low Tape” warning will not work. Machine will continue to run as normal.
Amber light, Red light and “Cycle Stop” button will flash due to a fault condition, once the fault is cleared press and hold “Cycle Stop” button for 3 seconds to clear fault.

4.6 BOTTOM TAPE HEAD LOADING/THREADING

4.6.1 Direction of Bottom Tape Unwind

As shown in the Bottom Tape Threading diagram, tape should be mounted with a clockwise, unwind direction. The adhesive side of tape will be facing down as it goes around the peel-off roller (refer to [Figure 4-18](#)).

4.6.2 Bottom Tape Path

The Bottom Tape Threading diagram shows the threaded tape path using the red line/arrow as the tape. For proper threading of tape (refer to [Figure 4-18](#)) and images below. The order in which the tape passes the rollers starts at the peel-off roller, travels through two guide rollers, as labeled below, then over powered roller, and under a third guide roller.

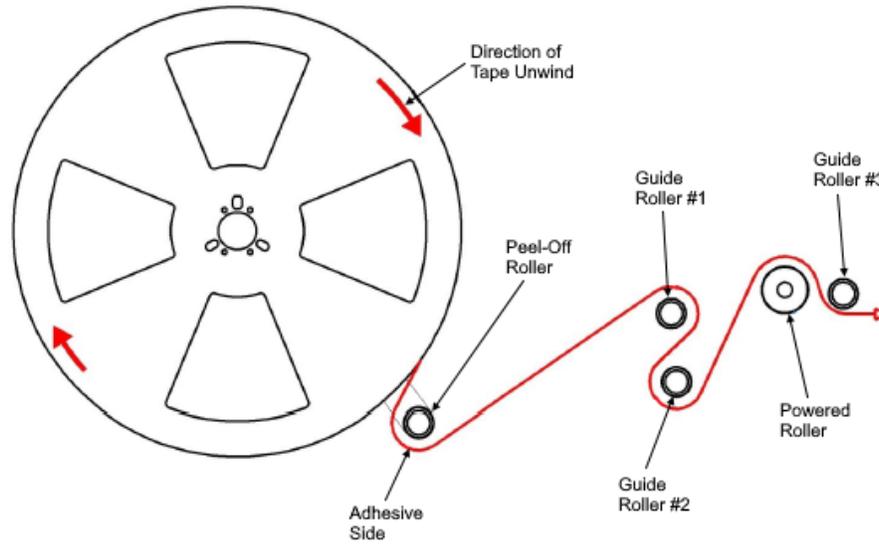


Figure 4-18 Bottom Tape Threading Diagram

4.7 ADDING WATER TO THE SYSTEM

1. Remove the water bottles by pulling them straight up from support brackets (refer to Figure 4-19).
2. Turn the bottles over so the water will not spill.
3. Unscrew the valve assembly and remove.
4. Fill the bottle with warm water.
5. Replace the valve assembly.
6. Install the water bottle by inserting it over the water pot post and into the support brackets located on the machine.

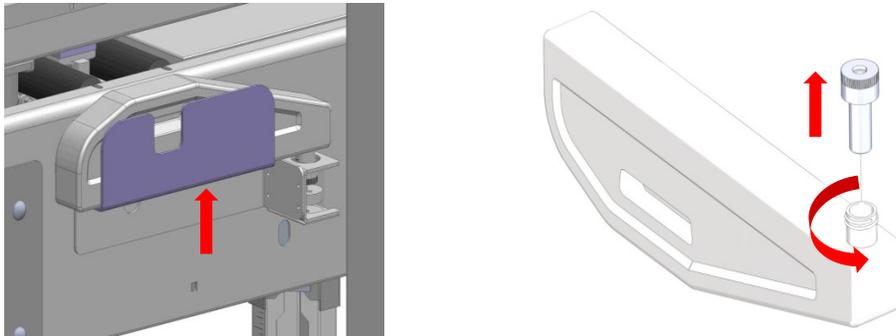


Figure 4-19 Adding Water to the System

Once the tape has been loaded and threaded (refer to the appropriate tape loading and threading instructions), allow up to 10 minutes of being powered on for the machine to be completely ready to process regular slotted cases. The following instructions are presented in the order recommended for processing cases successfully through the CE10P-WAT Case Erector Sealing Machine.

1. Install and thread tape roll on the machine (refer to [Figure 4-18](#)).
2. Fill water bottles and place them into the machine.
3. Open water pot valve on the tape heads - make sure water line is connected to the water pot.
4. Be sure hose is connected securely and not leaking.
5. Supply or connect machine to the air line, verify that the machine is set to 80 PSI.
6. Supply or connect machine to 115V electrical supply.
7. Turn on main power disconnect switch located on machine electrical box.
8. Twist both E-stop buttons clockwise to release and allow machine operation. Buttons are located on the control box and on the top tape head box.
9. Set machine to “manual” mode by using the selector switch located on the control box.

10. Press "Tape Feed" button to feed a predetermined length of tape through path. Tape will be cut once length of tape has been fed.
11. Inspect dispensed tape to ensure water is being properly applied to adhesive side. If water is not being properly applied, refer to troubleshooting in (refer to Troubleshooting).
12. Switch machine to "auto" using the selector switch located on the control box.
13. Press "Start" button on the control box to begin machine operation.
14. Introduce a case to the machine indexing gate. Once the box has been processed, machine is ready for production.

Notes

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[Chapter 5](#)

OPERATING INSTRUCTIONS

5.1 INTRODUCTION TO OPERATING INSTRUCTIONS

The automated vertical CE10P-WAT Case Erector Sealing Machine with powered hopper is suitable for processing a wide range of RSC (Regular Slotted Container) style case sizes without intervention of an operator to form and bottom seal cases. Its use of pneumatics allows the machine to extract a single case, fold all four bottom flaps and seal the bottom center seam with pressure sensitive case sealing tape. This section will describe the various components and features of your Case Erector.

Once the CE10P-WAT Case Erector Sealing Machine is properly installed with the hopper attached and loaded with boxes, the machine is ready for operation (refer to [4.3 Setup](#) procedure). The CE10P-WAT Case Erector Sealing Machine has two operating modes: automatic and manual. The operator can select either mode by using the 2-position selector switch located on the main control panel of the machine (refer to [Figure 4-14](#)). The CE10P-WAT Case Erector Sealing Machine has two emergency stops standardly installed and a control box for the rise and descent of the powered hopper table.

5.2 AUTOMATIC MODE

This is the standard operating mode of this machine. In the automatic mode, the machine will dispense formed and bottom sealed cases when there are no detected cases on the exit side of the machine. In this mode, your CE10P-WAT Case Erector Sealing Machine will also operate without operator assistance as well as warn you if it is out of cases, tape or if it is low of tape. The CE10P-WAT Case Erector Sealing Machine has two options when automatic mode is selected: single cycle and continuous cycle.

Note: When “Power ON”, “Manual Reset” buttons are lit solid, and “Single Cycle”, “Continuous Cycle”, “Stop Cycle” buttons are flashing the machine is in automatic mode and is an indication that is ready to operate either single cycle or continuous cycle motion.

5.3 MANUAL MODE

The manual mode can be used as a troubleshooting tool or for setting up the machine when changing over to a different case size; (refer to [4.3 Setup](#)) for properly setting up your CE10P-WAT Case Erector Sealing Machine.

In this mode, your CE10P-WAT Case Erector Sealing Machine is capable of single stepping through to complete one cycle for easy and fast set-up when changing over to different case sizes.

5.4 SEQUENCE OF OPERATIONS

1. Vacuum cups approach the hopper and secure to the case.
2. Vacuum cups withdraw a case from the hopper while the top finger retains the trailing major panel thereby breaking the vertical score lines.
3. As the case is withdrawn, a pneumatic squaring arm activates to form the case into a sleeve.
4. With the case in the stationary position, pneumatic tuckers activate to close the minor flaps followed by pneumatic tuckers to fold the major flaps.

5. Upon a signal from the PLC, a pneumatic pushing assembly squares the case and diverts it into the side belt drives.
6. The side drives transport the case over a bottom taping head for bottom sealing and discharge onto a take-away conveyor supplied by the customer.

Note: When “Continuous Cycle” is pressed machine will run continuously. If for some reason the exit sensor is blocked, the machine will form a case and then stops until the blockage is cleared.

5.5 OPERATION

1. Connect 110V power source, engage magnetic breaker.
2. Using quick connect fitting provide air supply at 75 PSI (MAX).
3. Switch on Manual Air Valve.
4. Partially construct box folding up bottom minor and major flaps (refer to [Figure 4-3](#)) and use as a guide to set the location of the left/right conveyor belts (refer to [Figure 4-4](#)).
5. Using partially constructed box (refer to [Figure 4-3](#)) adjust the location of the upper working table using wheel handle as shown. Care must be taken to adjust suction cup plungers out of the way when the partial constructed box (refer to [Figure 4-3](#)) is less than 12 in. (300mm) (refer to [Figure 4-4](#)).
6. Use touchscreen button (rectangular green) to adjust hopper height up or down to hold boxes in magazine enough to be pulled easily out by suction cups.

Notes

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Chapter 6

TROUBLESHOOTING

The CE-10P-WAT Case Erector Sealing Machine 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](#).

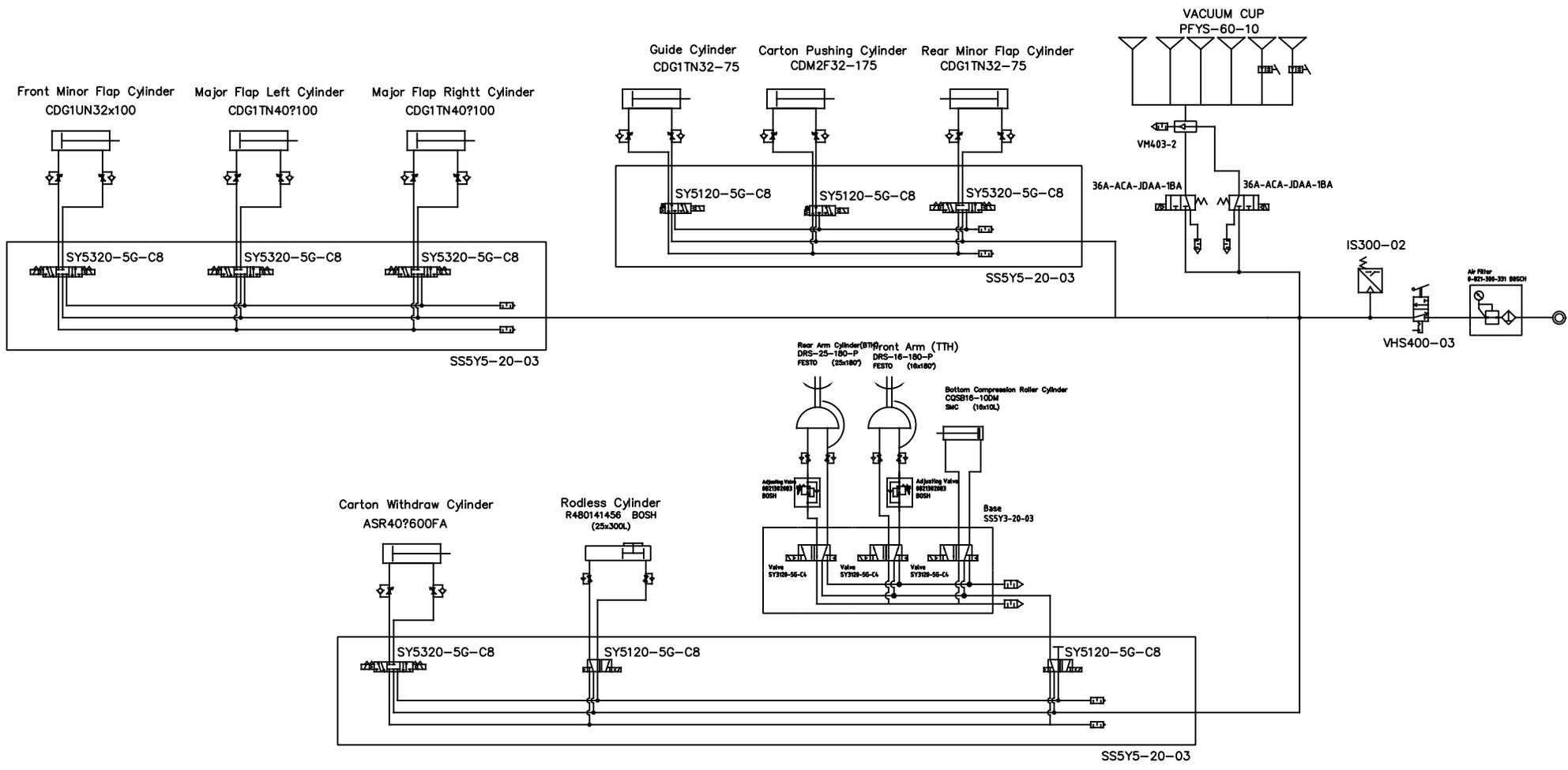
Fault	Trouble	Possible Causes	Solutions
01	Low air pressure.	The air is not connected. Air pressure is not sufficient. Manual valve is not open.	Connect to compressed air. Set air to 80 psi minimum. Open air valve.
02	Not in initial position.	Door was opened during machine cycle or emergency stop button was depressed.	Close doors or clear emergency stop buttons, press "Cycle On" button and "Manual Reset" button.
03	Vacuum not detected.	The inner filter of Vacuum Inspection needs to be clean. Vacuum Cup is sucking on the folding line.	Clean vacuum assembly. Adjust vacuum cup positions.
04	Hopper empty.	No case.	Stop and supply case.
05	Case withdraw failure.	Wrong vacuum cup position. The motion of front / rear / left / right flap folding is not precise.	Adjust vacuum cup and Up/down stopper to adequate position. Adjust front / rear / left / right flap folding mechanism.
06	Case jam.	Left / right belt is too wide or too narrow. Upper working table is too low. Case Pushing Arm jammed.	Adjust Left / right belt. Adjust upper table. Clear jam.

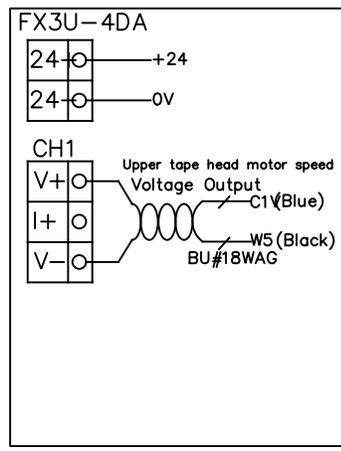
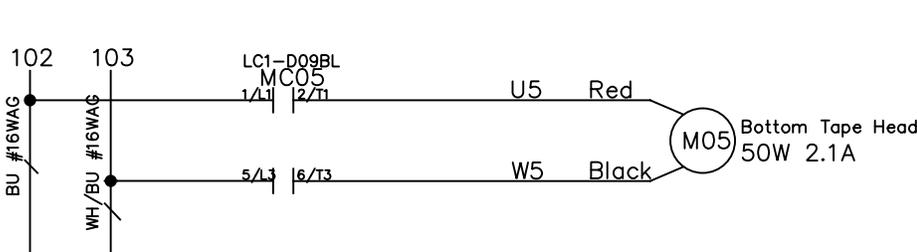
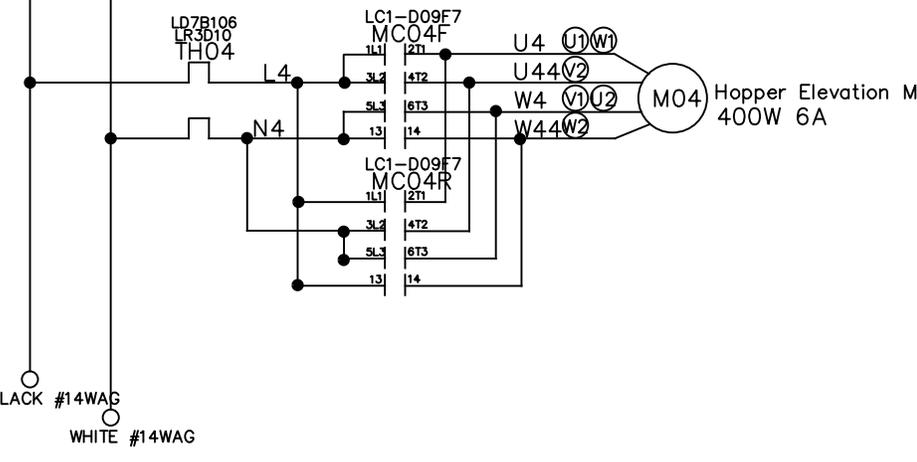
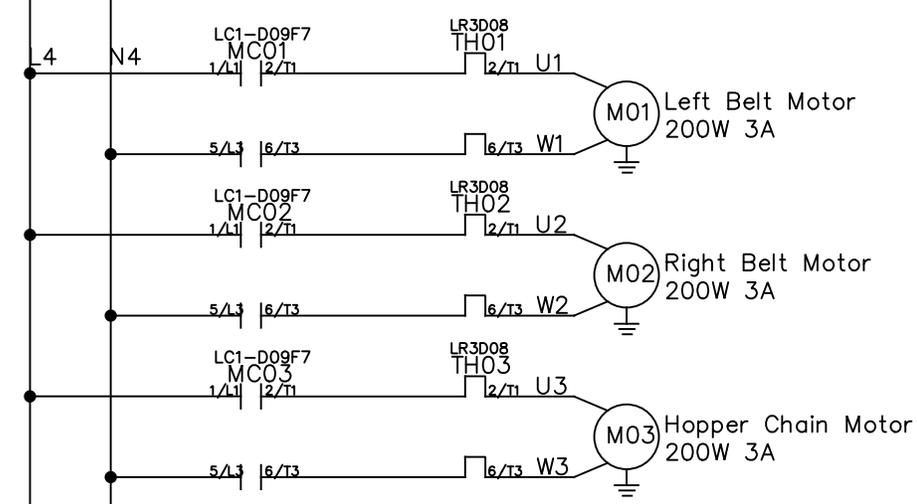
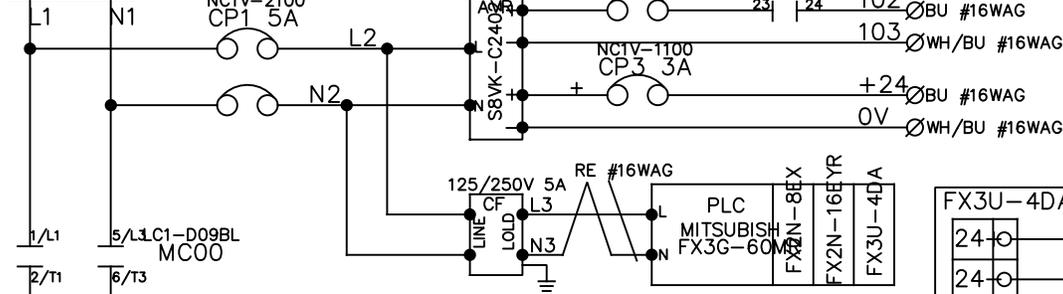
Fault	Trouble	Possible Causes	Solutions
07	Tape application problem.	No tape. Low tape.	Replenish roll of tape. Roll of tape jam or stuck.
08	Motor problem.	Motor has no power or motor is out of order.	Reset motor overload.
09	Safety door open.	Active safety door has not been closed.	Close doors.
10	Emergency Stop not reset.	Emergency Stop button is depressed.	Release emergency stop buttons.
11	Front flap folder cylinder not in position.	Jam occurred.	Clear jam.
12	Rear flap folder cylinder not in position.	Jam occurred.	Clear jam.
13	Box will not feed through taping section.	Case on demand switch activated.	Wait for downstream conveyor to clear.

Note: When Alarm sounds; press “Alarm Reset” to stop alarm, and press and hold “Cycle Stop” button for 3 seconds to clear Troubleshoot Fault Code.

Notes

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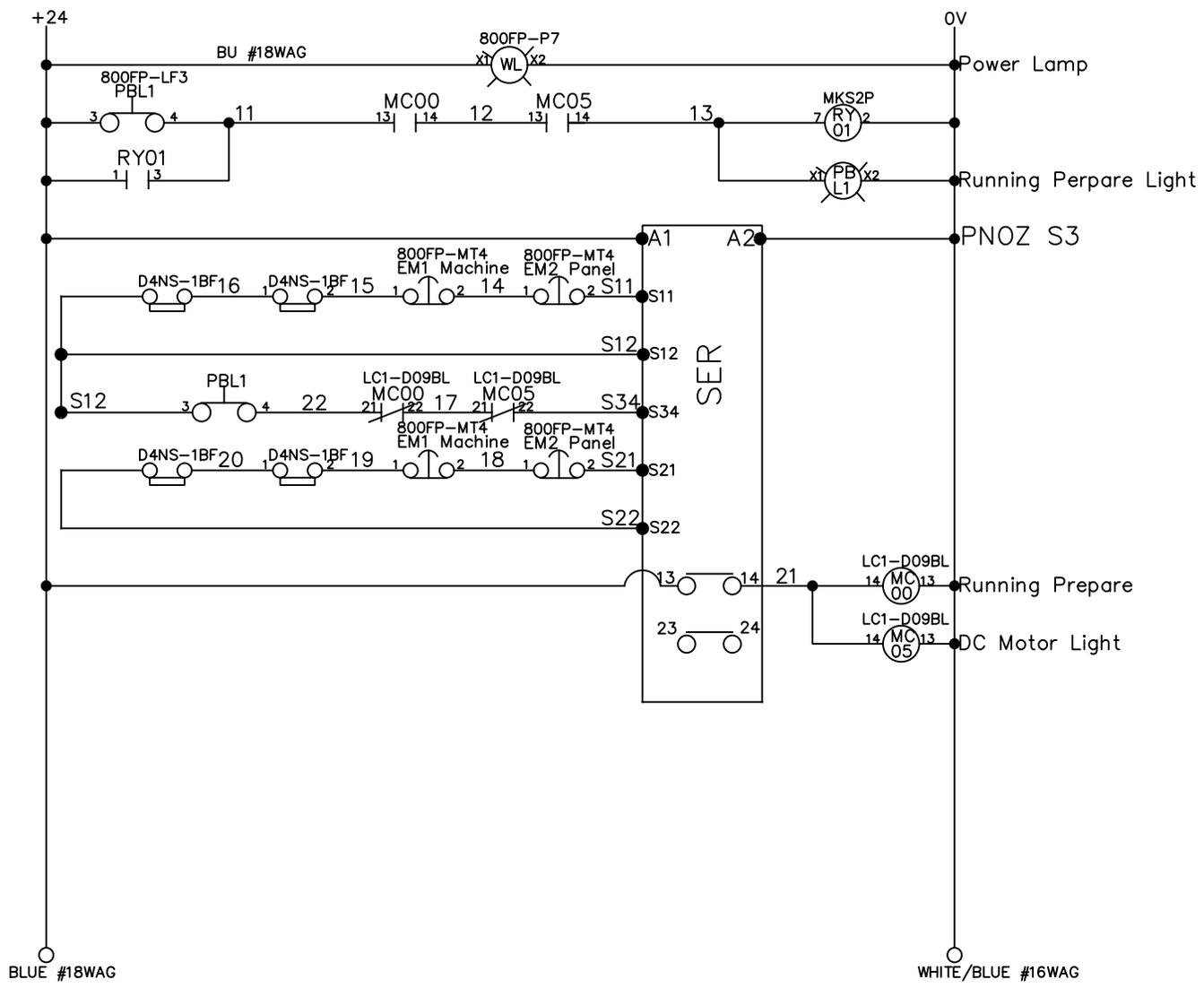
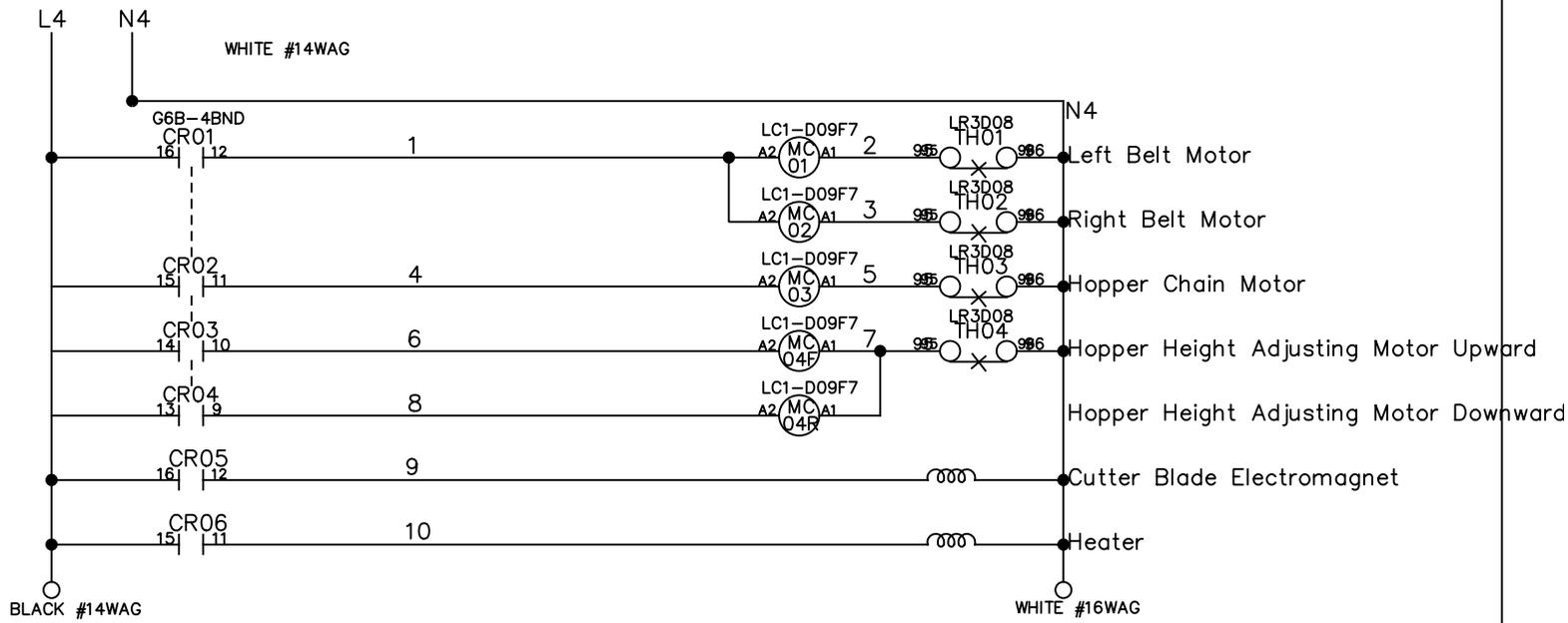


tape head motor metal joint position

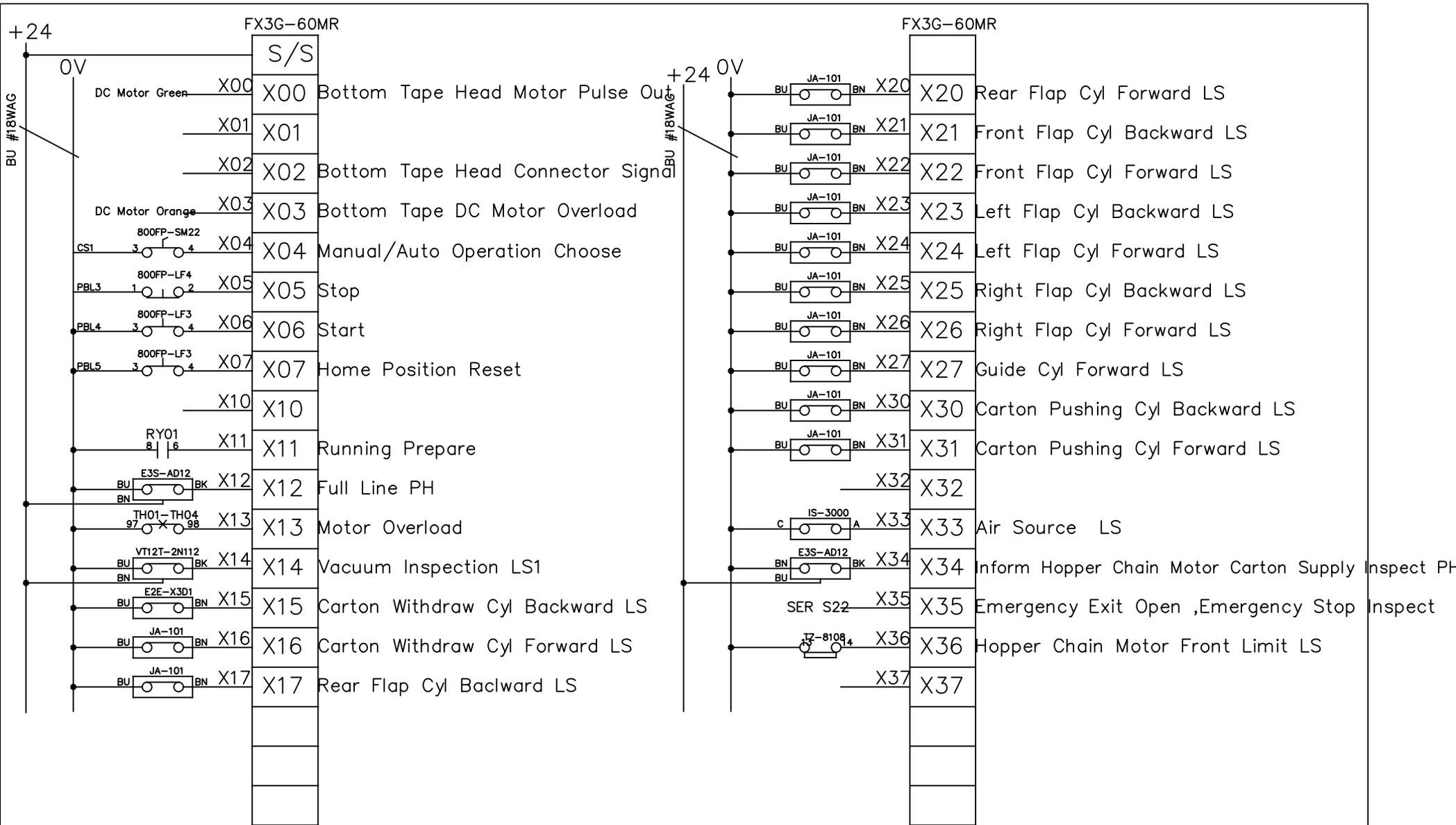
1	Red(U5)
2	Black(W5)
3	Yellow(111)
4	White(112)
5	Green(X00)
6	Blue(C1V)
7	9(cutter blade)
8	10(heater)
9	N4
10	Y32
11	Y33
12	Y34
13	103
14	Orange(X04)
15	103
16	

Control Box Metal Joint Female Position

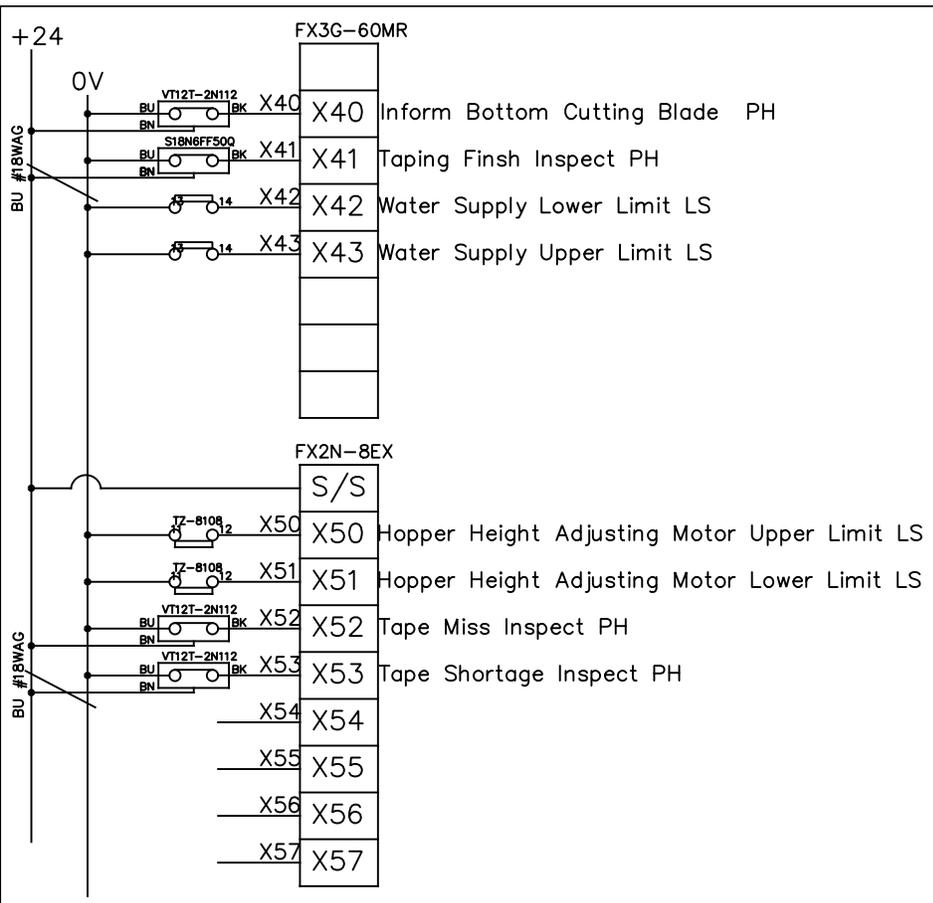
1	U5
2	W5
3	111
4	112
5	X00
6	C1V
7	9
8	10
9	N4
10	Y32
11	Y33
12	Y34
13	103
14	(X04)
15	(X02)
16	



Model	B25 CE-12P-WAT
Title	MAIN CIRCUIT
DWG	CE-12P-WAT-2



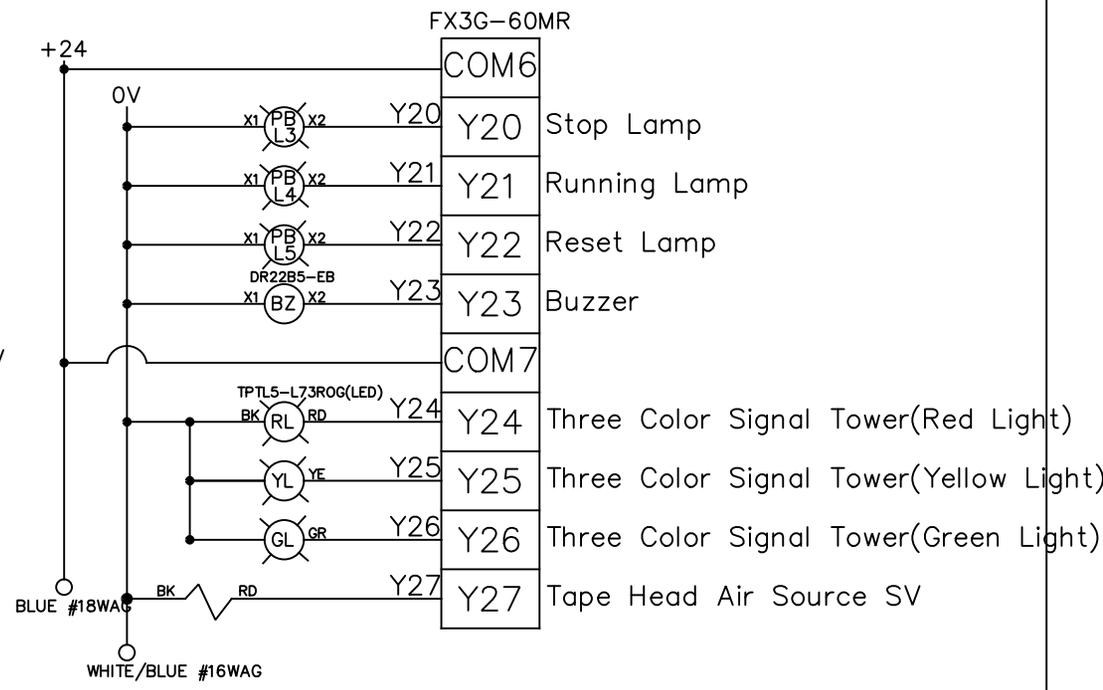
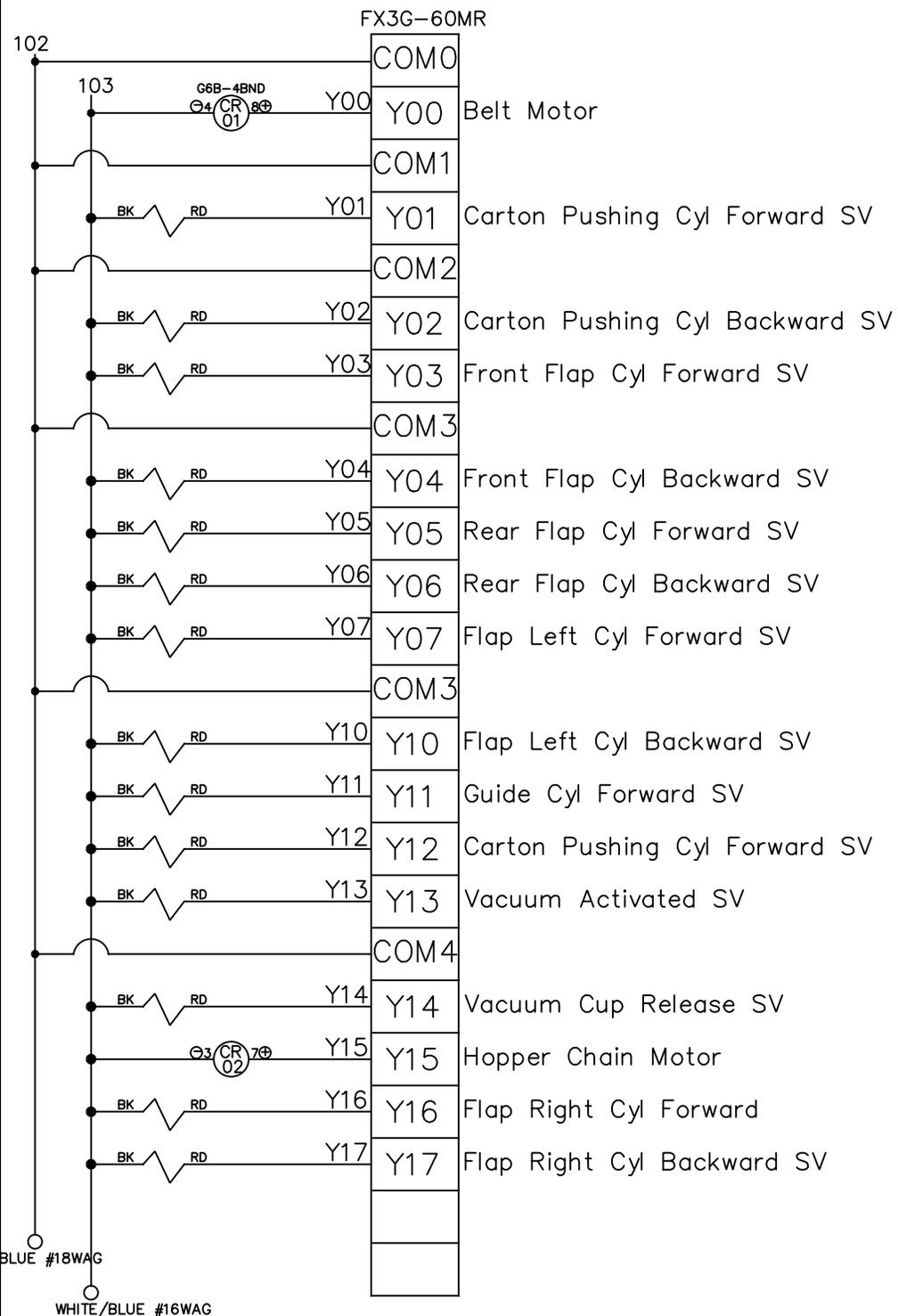
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Title	PLC INPUT CIRCUIT
DWG	CE-12P-WAT-3



FX3G-60MR

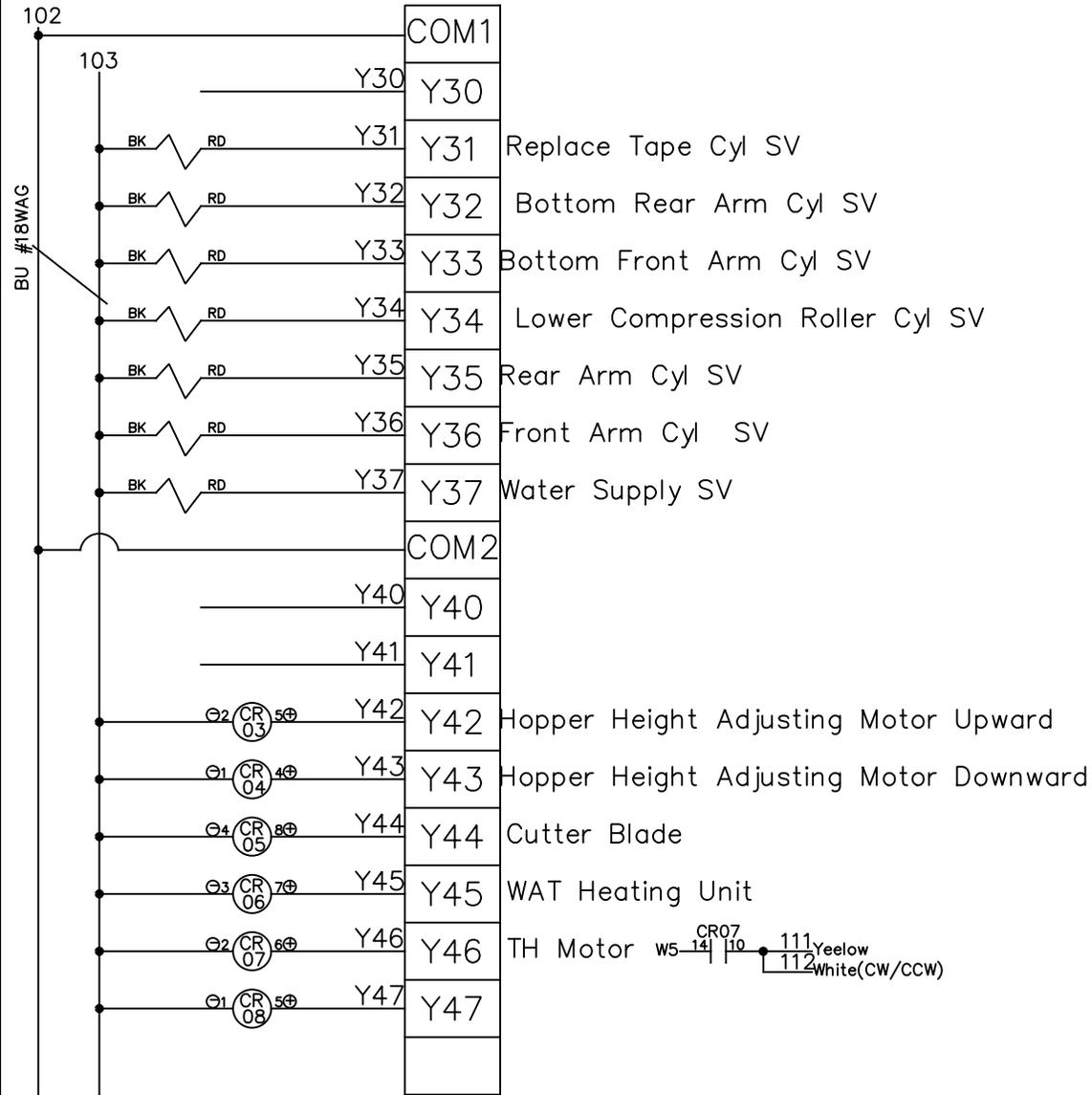
FX2N-8EX

Model	B25 CE-12P-WAT
Title	PLC INPUT CIRCUIT
DWG	CE-12P-WAT-4



Model	B25 CE-12P-WAT
Title	PLC OUT PUT CIRCUIT
DWG	CE-12P-WAT-5

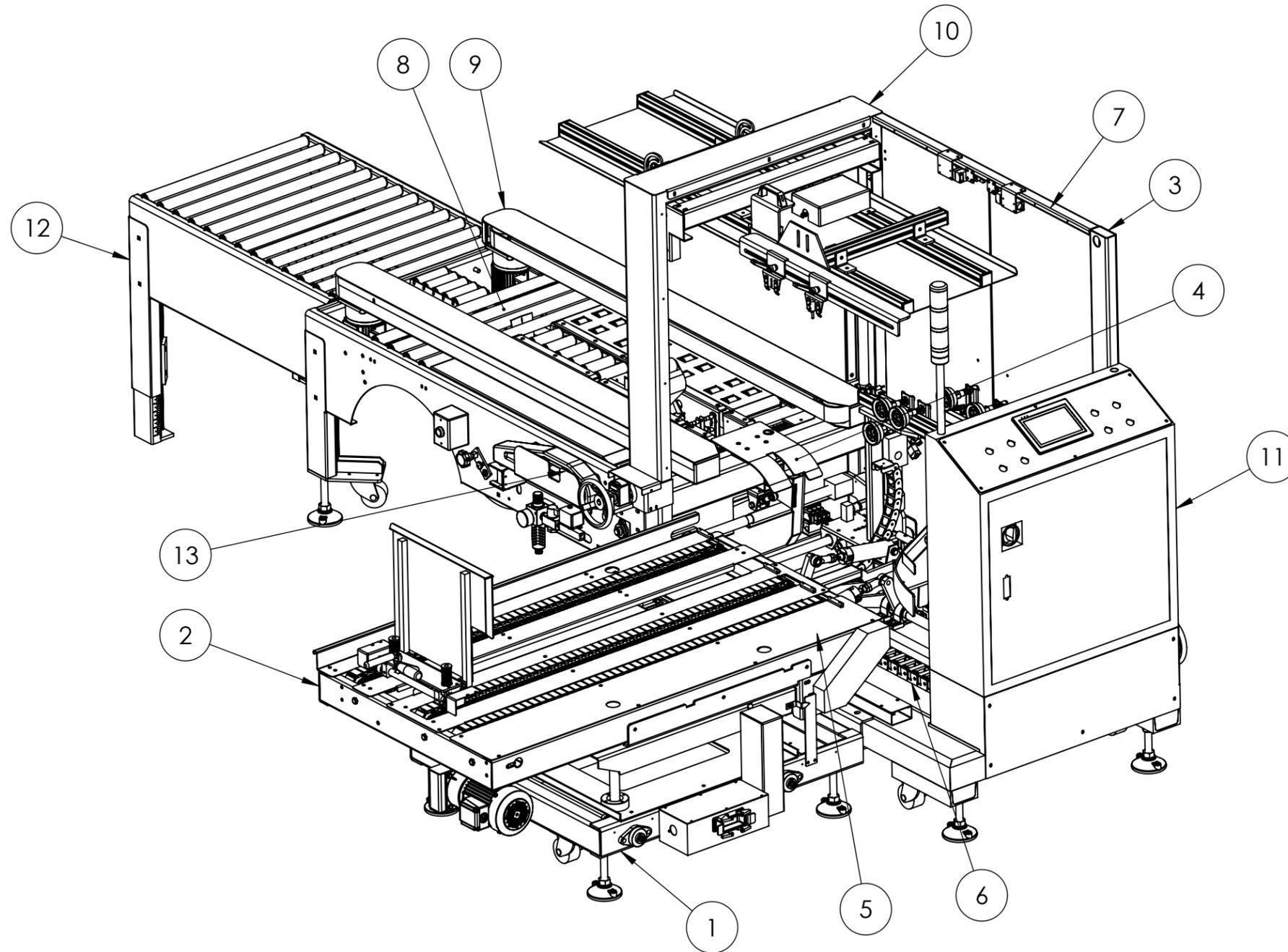
FX2N-16EYR



Model	B25 CE-12P-WAT
Title	PLC OUT PUT CIRCUIT
DWG	CE-12P-WAT-6

C1098 PART# UM088

REV.	DESCRIPTION	ECO	DATE	APP.
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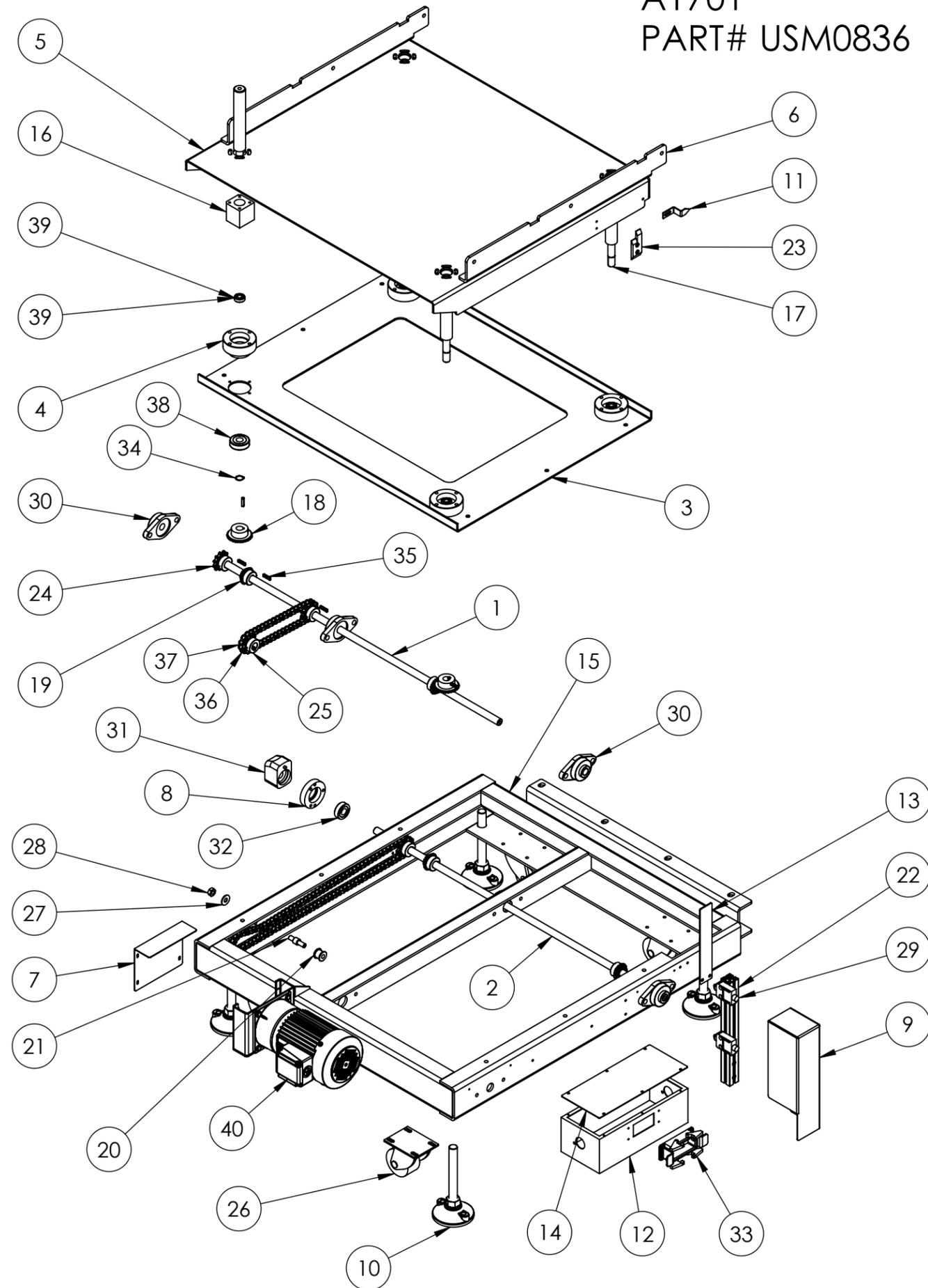


ITEM NO.	PART#	DESCRIPTION	QTY.
1	USM0836	TANK SLOT	1
2	USM0837	TANK HOLDER	1
3	USM0838	BOX PICKING MECHANISM	1
4	USM0839	FOLDING FRONT COVER MECHANISM	1
5	USM0840	LEFT AND RIGHT FOLDING MECHANISM	1
6	USM0841	FOLDING BACK COVER MECHANISM	1
7	USM0842	SAFETY DOOR	1
8	USM0843	WATER SEALING MECHANISM	1
9	USM0844	LEFT AND RIGHT BELT DRIVE MECHANISM	1
10	USM0845	UPPER COLUMN LIFTING MECHANISM	1
11	USM0846	ELECTRONIC CONTROL BOX	1
12	USM0847	FEED TABLE	1
13	USM1520	BOTTOM TAPE HEAD	1

PROPRIETARY AND CONFIDENTIAL

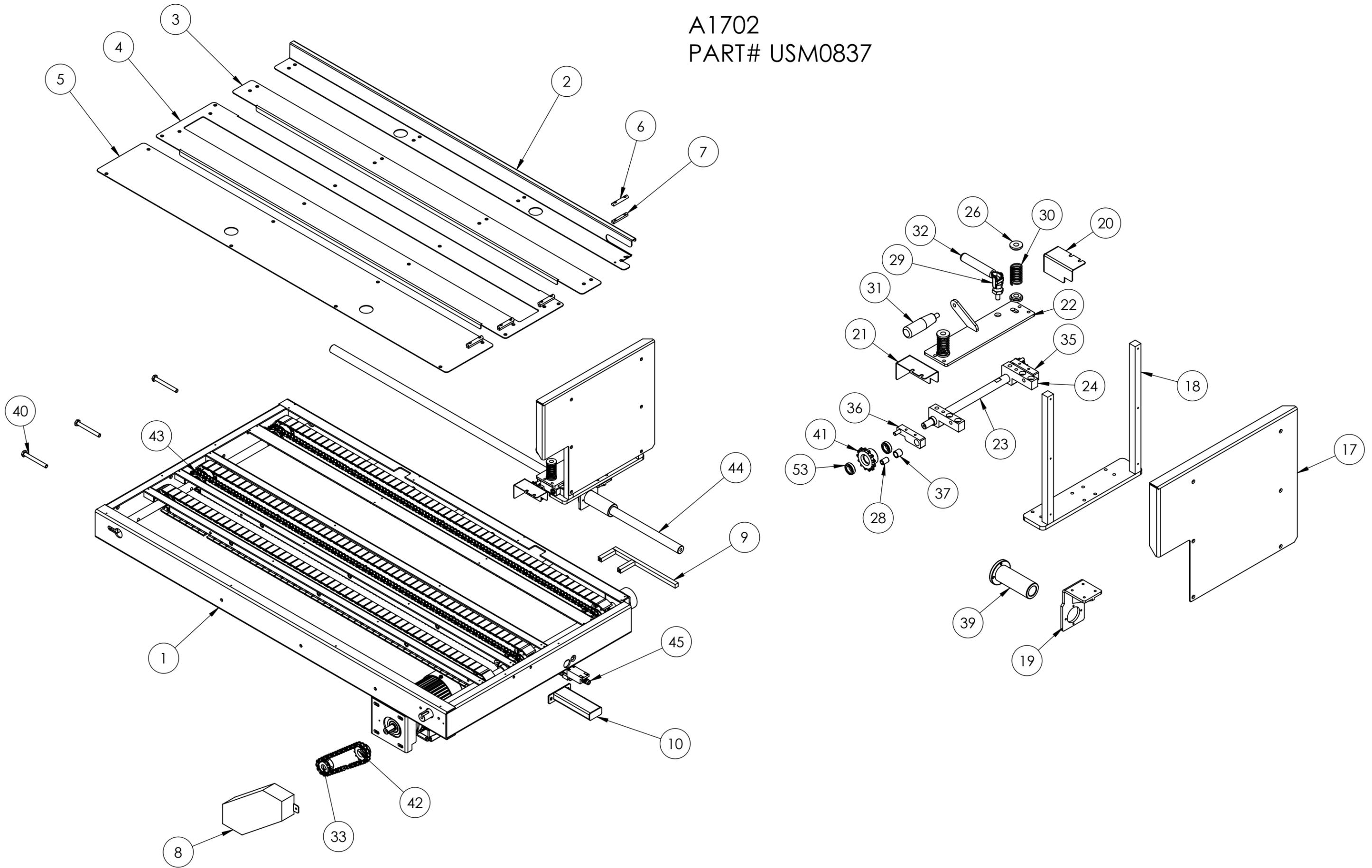
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A1701
PART# USM0836

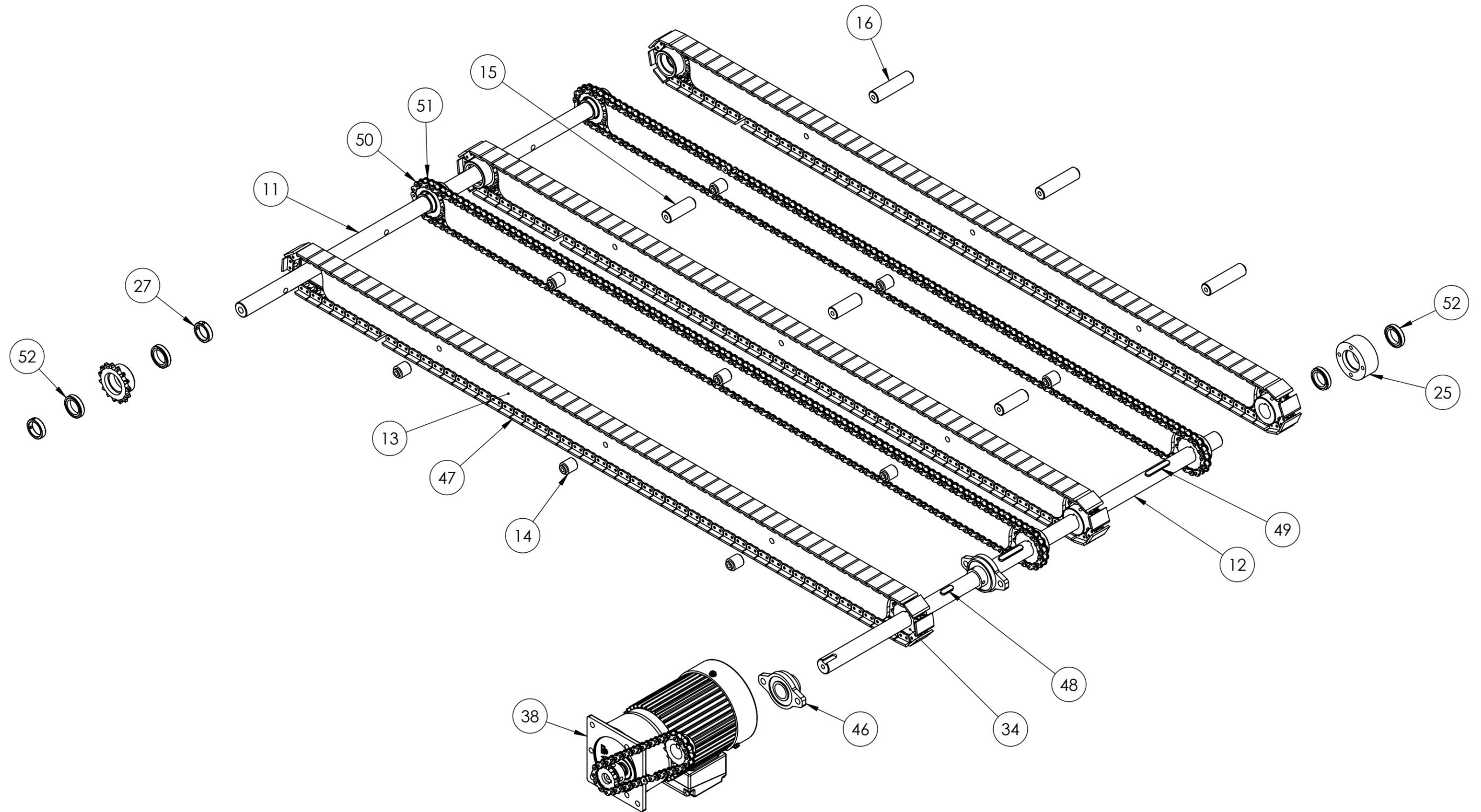


ITEM NO.	PART#	DESCRIPTION	QTY.
1	UPM4671	DRIVEN SHAFT	1
2	UPM4669	DRIVEN SHAFT	1
3	UPM4672	ELEVATING FIX PLATE	1
4	UPM4673	ELEVATING COLLAR	4
5	UPM4675	ELEVATING UNIT	1
6	UPM4676	TABLE BRACKET	2
7	UPM5836	MOTOR CHAIN COVER	1
8	UPM4670	BEARING BASE	1
9	UPM5674	PROXIMATE SWITCH COVER	1
10	UPM4668	M0034	4
11	UPM4678	FINGER A	1
12	UPM5675	WIRING BOX	1
13	UPM5676	SCALE PLATE	1
14	UPM5677	WIRING BOX COVER	1
15	UPM5673	HOPPER BASE	1
16	UPM4674	NUT	4
17	UPM4677	ELEVATING SCREW	4
18	UPM4687	GEAR	4
19	UPM5034	GEAR	4
20	UPM5035	40# IDLE PULLEY	1
21	UPM5036	IDLER SHAFT	1
22	UPM5037	PROXIMITY SWITCH FIX BASE	1
23	UPM4679	POSITIONING TOUCH PLATE	1
24	UPM8018	SPROCKET	3
25	UPM2524	SPROCKET	1
26	UPM2537	Plate Caster	4
27	UPM5595	WASHER, 10MM X .2MM THK.	1
28	UPM5316	M10 NUT	1
29	UPM5317	SENSOR	2
30	UPM5596	BEARING	5
31	UPM5597	END CAP	1
32	UPM5598	17ID 40OD 12T	1
33	UPM5599	PLUG CONNECTOR	1
34	UPM5611	SNAP RING Ø17	4
35	UPM5612	5X5X25 HEX KEY	12
36	UPM5607	CHAIN LINK, INNER	70
37	UPM5608	CHAIN LINK, OUTER	70
38	UPM5615	BEARING, 6303ZZ	4
39	UPM5616	BEARING, 6902ZZ	4
40	UPM5340	ELECTRIC PUMP	1

A1702
PART# USM0837



A1702
PART# USM0837



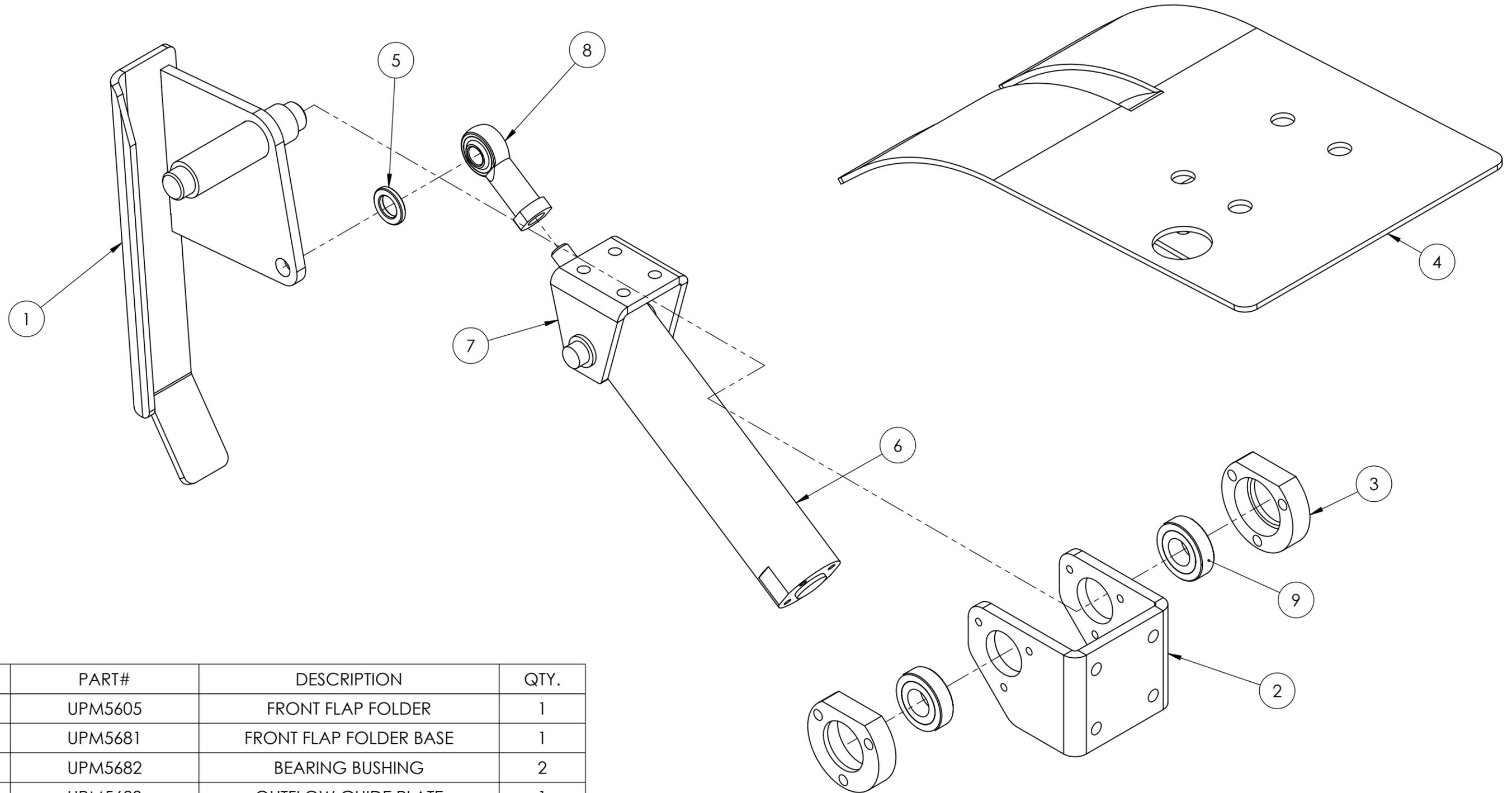
A1702
PART# USM0837

ITEM NO.	PART#	DESCRIPTION	QTY.
1	UPM5511	HOPPER TOP UNIT	1
2	UPM5512	HOPPER TABLE PLATE 1	1
3	UPM5513	HOPPER TABLE PLATE 2	1
4	UPM5514	HOPPER TABLE PLATE 3	1
5	UPM5515	HOPPER TABLE PLATE 4	1
6	UPM5516	CASE STOPPING STICK	4
7	UPM5517	CARTON STOPPING SPACER	4
8	UPM5518	CHAIN GUARD	1
9	UPM5519	SENSOR SLIDING BASE	1
10	UPM5520	SUPPORT BRACKET	1
11	UPM5521	DRIVEN SHAFT	1
12	UPM5522	DRIVING SHAFT	1
13	UPM5523	CHAIN GUIDE RAIL	5
14	UPM5524	HOLDING SHAFT	9
15	UPM5525	HOLDING SHAFT	3
16	UPM5526	HOLDING SHAFT	3
17	UPM5528	CASE PUSHING PLATE	1
18	UPM5529	CASE PUSHING PLATE	1
19	UPM5530	CASE PUSHING BASE	1
20	UPM5531	CHAIN SPROCKET COVER RIGHT	1
21	UPM5532	CHAIN SPROCKET COVER LEFT	1
22	UPM5533	BRACKET PLATE	1
23	UPM5534	PUSHER BASE SHAFT	1
24	UPM5678	SHAFT BRACKET	2
25	UPM4680	BEARING BUSHING	1
26	UPM4681	SPRING CAP	4
27	UPM4682	COLLAR	6
28	UPM4683	TURNING SHAFT	2
29	UPM4684	QUICK CLAMP	1
30	UPM2809	SPRING	2
31	UPM2854	HANDLE	1
32	UPM3414	HANDLE	1
33	UPM2527	SPROCKET	1
34	UPM2531	SPROCKET	5
35	UPM5679	PUSHER BASE LEFT	1
36	UPM5590	ARM	1
37	UPM2828	TAPE BUSHING	2
38	UPM5591	MOTOR	1
39	UPM3148	FLANGED LINEAR BEARING	1
40	UF9186	HEX HEAD M10 X 90MM SCREW	3
41	UPM5592	CHAIN SPROCKET	2
42	UPM2529	CHAIN SPROCKET	1
43	UPM2530	CHAIN SPROCKET	5
44	UPM5527	LINEAR SHAFT	1
45	UPM5593	SWITCH	1
46	UFL005	FLAP FOLDER BEARING	2
47	UPM5594	CHAIN LINK	330
48	UPM4685	DOUBLE ROUND FLAT KEY 8X7X25L	2
49	UPM4686	DOUBE ROUND FLAT KEY 8X7X50L	2
50	UPM5607	CHAIN LINK, INNER	241
51	UPM5608	CHAIN LINK, OUTER	241
52	UPM5189	BEARING, 6805ZZ	12
53	UPM5616	BEARING, 6902ZZ	4

A1703
PART# USM0838

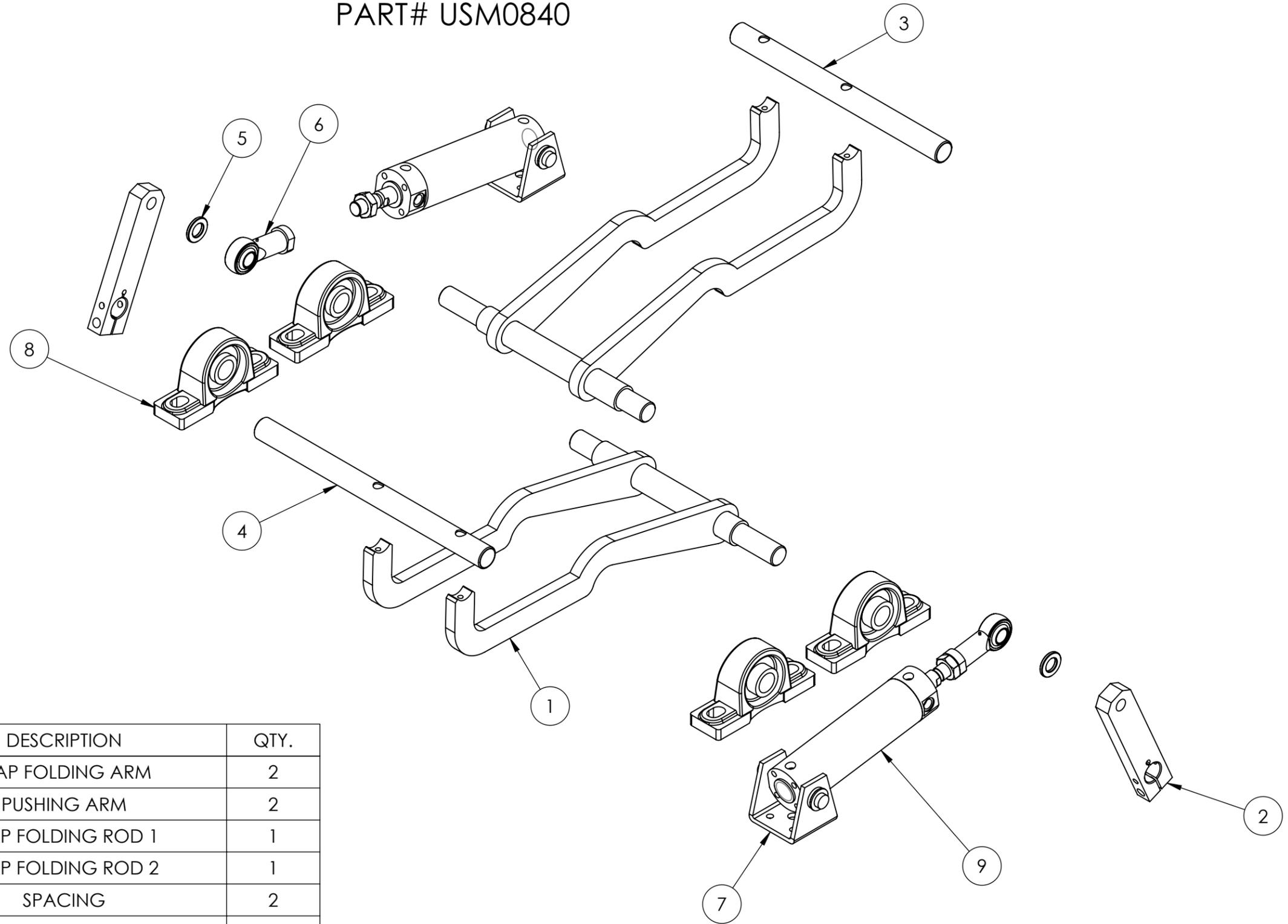
ITEM NO.	PART#	DESCRIPTION	QTY.
1	UPM2202	BASE FRAME	1
2	UPM2278	CASE DRAWING CYLINDER STOPPER	1
3	UPM2354	Case Inspecting Bracket	1
4	UPM2472	Linear Shaft	1
5	UPM5580	GUARD FOR ALUMINUM EXTRUSION	2
6	UPM2473	Chain Moving Base (FR)	1
7	UPM2495	SPROCKET	1
8	UPM4531	CONNECTING BEARING	1
9	UPM4499	FLANGED LINEAR BEARING	2
10	UPM4535	VACUUM CUP HOLDER	2
11	UPM4536	VACUUM CUP HOLDER	4
12	UPM2538	FOOT	4
13	UPM4397	HANDLE	3
14	UPM2536	ALUM. EXTRUSION	1
15	UPM2515	FLEXIBLE CHAIN	22
16	UPM2537	Plate Caster	4
17	UPM4534	VACUUM CUP	6
18	UPM4537	VACUUM CUP SHAFT	6
19	UPM4646	FLOATING JOINT	1
20	UPM4639	SHOCK ABSORBER	1
21	UPM4638	CYLINDER, 32X100	1
22	UPM3248	SENSOR SUPPORT	1
23	UPM5226	CONNECTING BEARING	1
24	UPM5046	CYLINDER PUSHING BASE	1
25	UPM5196	ANCHOR BRACKET, CHAIN	1
26	UPM5197	BRACKET, SWITCH	1
27	UPM5198	THREAD BLOCK, ADJ. SCREW	1
28	UPM2472	LINEAR SHAFT	2
29	UPM4401	Linear Connector	2
30	UPM5199	BRACKET, SENSOR BASE	1
31	UF6423	HEX KEY 5X5X25	1
32	UPM5227	CHAIN, OUTER, END	1
33	UPM5507	CHAIN, INNER, END	1
34	UPM5508	SENSOR, BASE	2
35	UPM0317	PHOTOELECTRIC SENSOR	1
36	UPM5509	MANIFOLD	1
37	UPM5535	AIR BLOCK	1
38	UF9181	Adapter, Male/Female 21MM	1
39	UF9182	Adapter, Male/Female 16MM	2
40	UPM5897	FLOW CONTROL G 1/4 MALE X 8mm TUBE	1
41	UPM5898	FLOW CONTROL G 1/4 MALE X 8mm TUBE	4
42	UPM5538	3-WAY VALVE	2
43	UPM5539	ELBOW	2
44	UPM5540	FLOW CONTROL G 1/4 MALE X 8mm TUBE	2
45	UPM5541	SCREW, M8X20L	3
46	UPM5542	AIR BLOCK FIXING PLATE	1

A1704
PART# USM0839



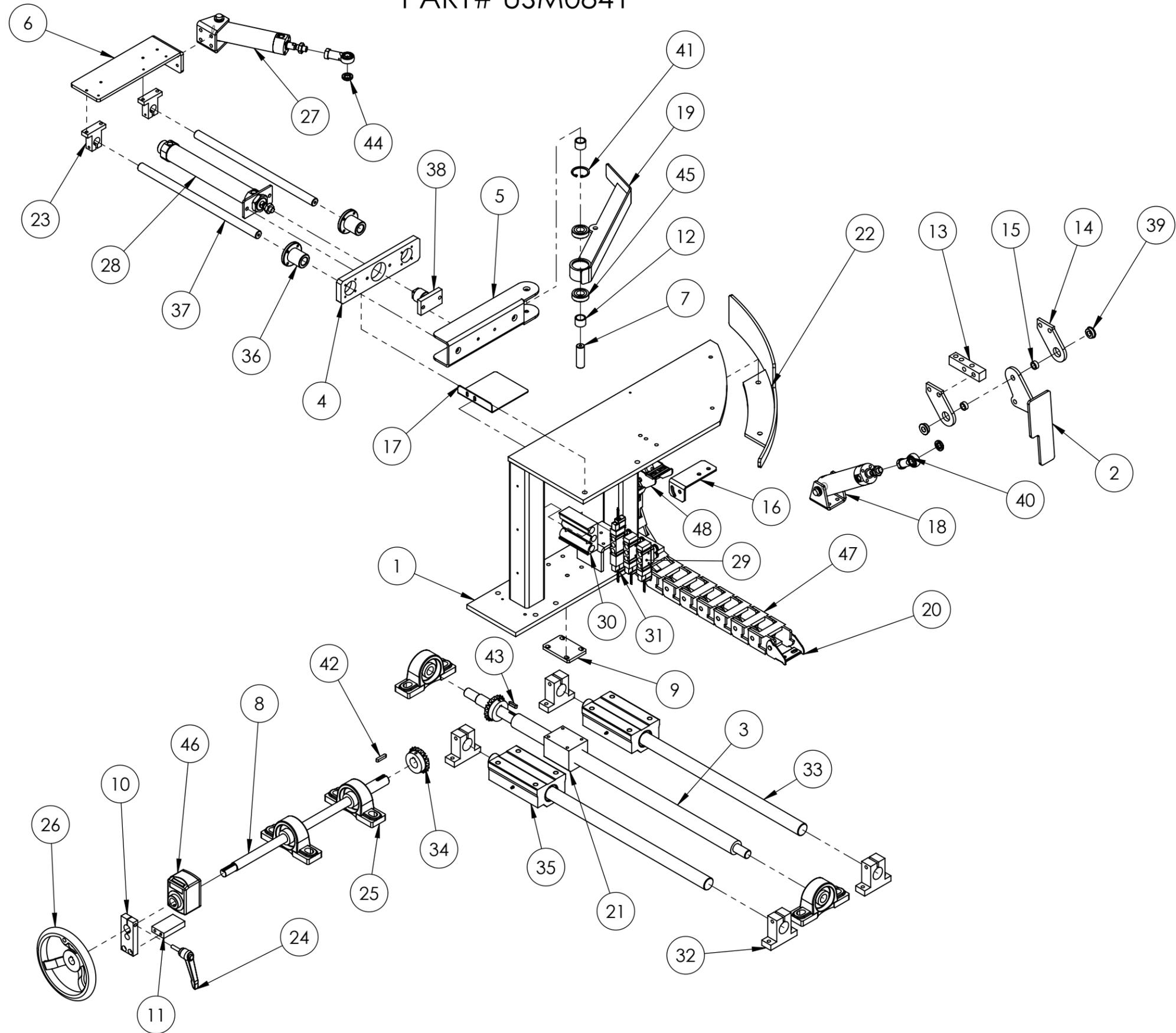
ITEM NO.	PART#	DESCRIPTION	QTY.
1	UPM5605	FRONT FLAP FOLDER	1
2	UPM5681	FRONT FLAP FOLDER BASE	1
3	UPM5682	BEARING BUSHING	2
4	UPM5683	OUTFLOW GUIDE PLATE	1
5	UPM3835	SPACER	1
6	UPM4640	Cylinder 32x100	1
7	UPM4641	CYLINDER BASE	1
8	UPM4202	ROD END BEARING	1
9	UPM5606	BEARING 6002ZZ	2

A1705
PART# USM0840



ITEM NO.	PART#	DESCRIPTION	QTY.
1	UPM5322	FLAP FOLDING ARM	2
2	UPM5323	PUSHING ARM	2
3	UPM5324	FLAP FOLDING ROD 1	1
4	UPM5601	FLAP FOLDING ROD 2	1
5	UPM5326	SPACING	2
6	UPM5602	ROD EYE BEARING	2
7	UPM4643	CYLINDER BASE	2
8	UPM5603	PILLOW BLOCK BEARING	4
9	UPM5604	HYDRAULIC CYLINDER	2

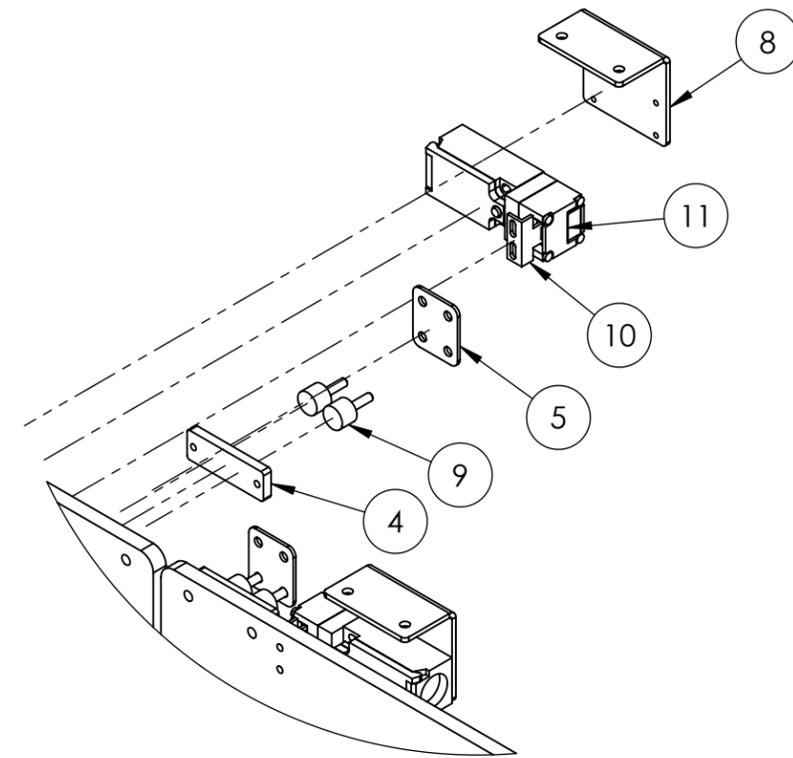
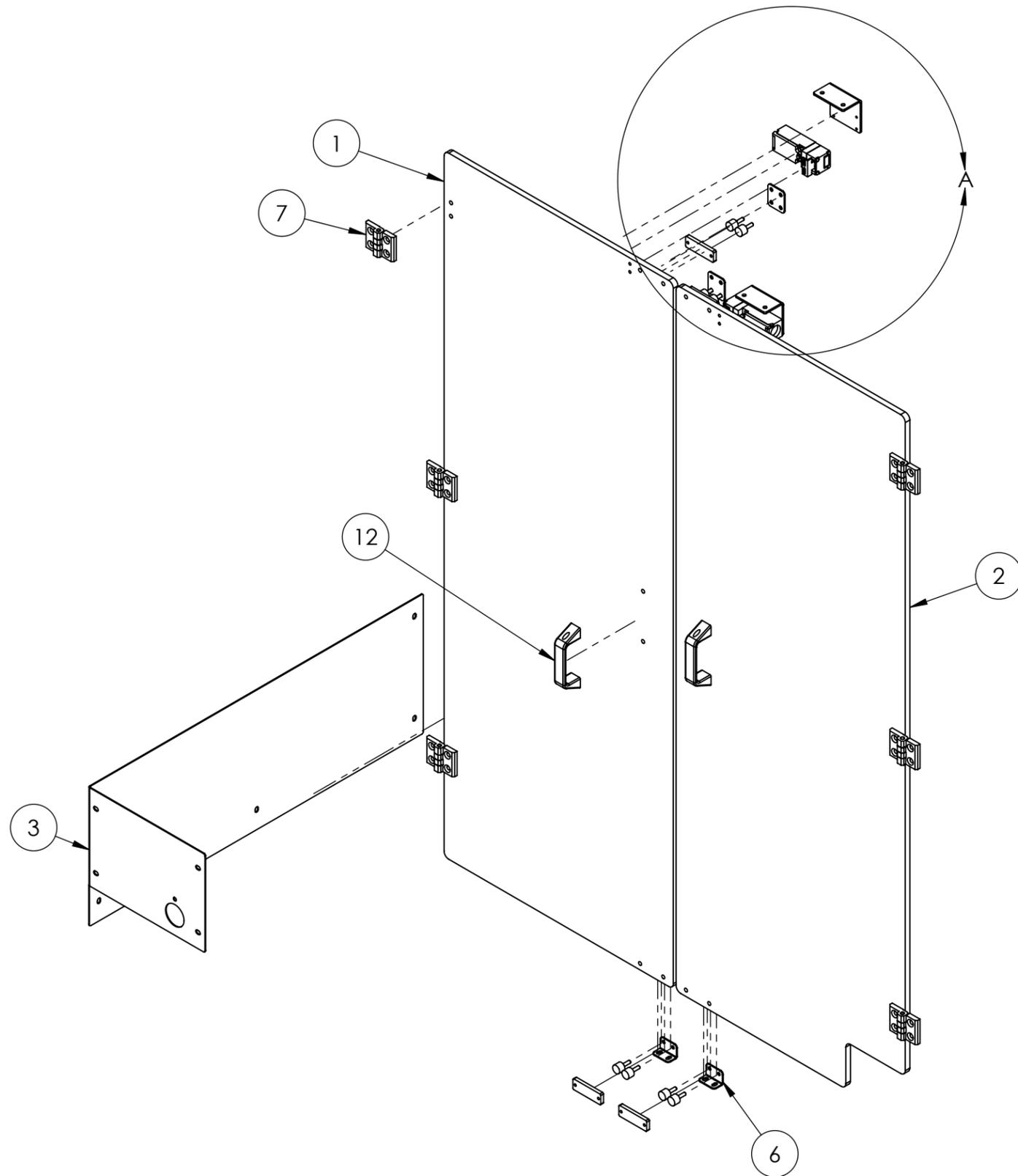
A1706
PART# USM0841



A1706
PART# USM0841

ITEM NO.	PART#	DESCRIPTION	QTY.
1	UPM5255	CASE PUSHING BRACKET	1
2	UPM5256	REAR FLAP FOLDER	1
3	UPM5257	CASE PUSHING GUIDE	1
4	UPM5557	CASE PUSHING CYLINDER BASE	1
5	UPM5558	CASE PUSHING CYLINDER BASE	1
6	UPM5559	SHAFT BRACKET	1
7	UPM5560	PUSHER SHAFT	1
8	UPM5262	ADJUSTING SHAFT	1
9	UPM5561	CASE PUSHING WASHER	1
10	UPM5562	LOCK BLOCK, ADJUSTING ROD	1
11	UPM5265	LOCK BLOCK BASE, ADJUSTING ROD	1
12	UPM5266	PUSHING SPACER	2
13	UPM5563	REAR FLAP FOLDING BRACKET	1
14	UPM5564	REAR FLAP FOLDING BRACKET	2
15	UPM5565	REAR FLAP FOLDING BUSHING	2
16	UPM5272	SUPPORTER	1
17	UPM5566	VALVE COVER	1
18	UPM5567	CYLINDER BRACKET	2
19	UPM5568	CASE PUSHING CYLINDER ARM	1
20	UPM5569	FLEXIBLE COVER	1
21	UPM5570	NUT	1
22	UPM5571	ERECTING GUIDE	1
23	UPM5545	SHAFT BRACKET	2
24	UPM5684	HANDLE	1
25	UPM4403	CONNECTING BEARING	4
26	UPM4400	HANDLE HAND WHEEL	1
27	UPM4645	CYLINDER	2
28	UPM4644	CYLINDER	1
29	UPM5423	VALVE	2
30	UPM5543	MANIFOLD	1
31	UPM5544	SOLENOID VALVE	1
32	UPM5545	SHAFT BRACKET	4
33	UPM5546	LINEAR SHAFT	2
34	UPM5547	JIS STRAIGHT MITER GEAR 2.5M25T 20 PA 15FW	2
35	UPM4401	Linear Connector	2
36	UPM4402	FLANGED LINEAR BEARING	2
37	UPM5548	LINEAR SHAFT	2
38	UPM5549	CYLINDER BRACKET	1
39	UPM5551	REAR FLAP FOLDING BUSHING	2
40	UPM4202	ROD END BEARING	2
41	UPM5552	RETAINING RING	1
42	UF6423	HEX KEY 5X5X25	1
43	UF6420	HEX KEY 5X5X20	1
44	UPM5553	WASHER	2
45	UPM5554	BEARING 6002ZZ	2
46	UPM5555	COUNTER	1
47	UPM5556	FLEXIBLE CHAIN	13
48	UPM5254	FLEXIBLE CHAIN END	1

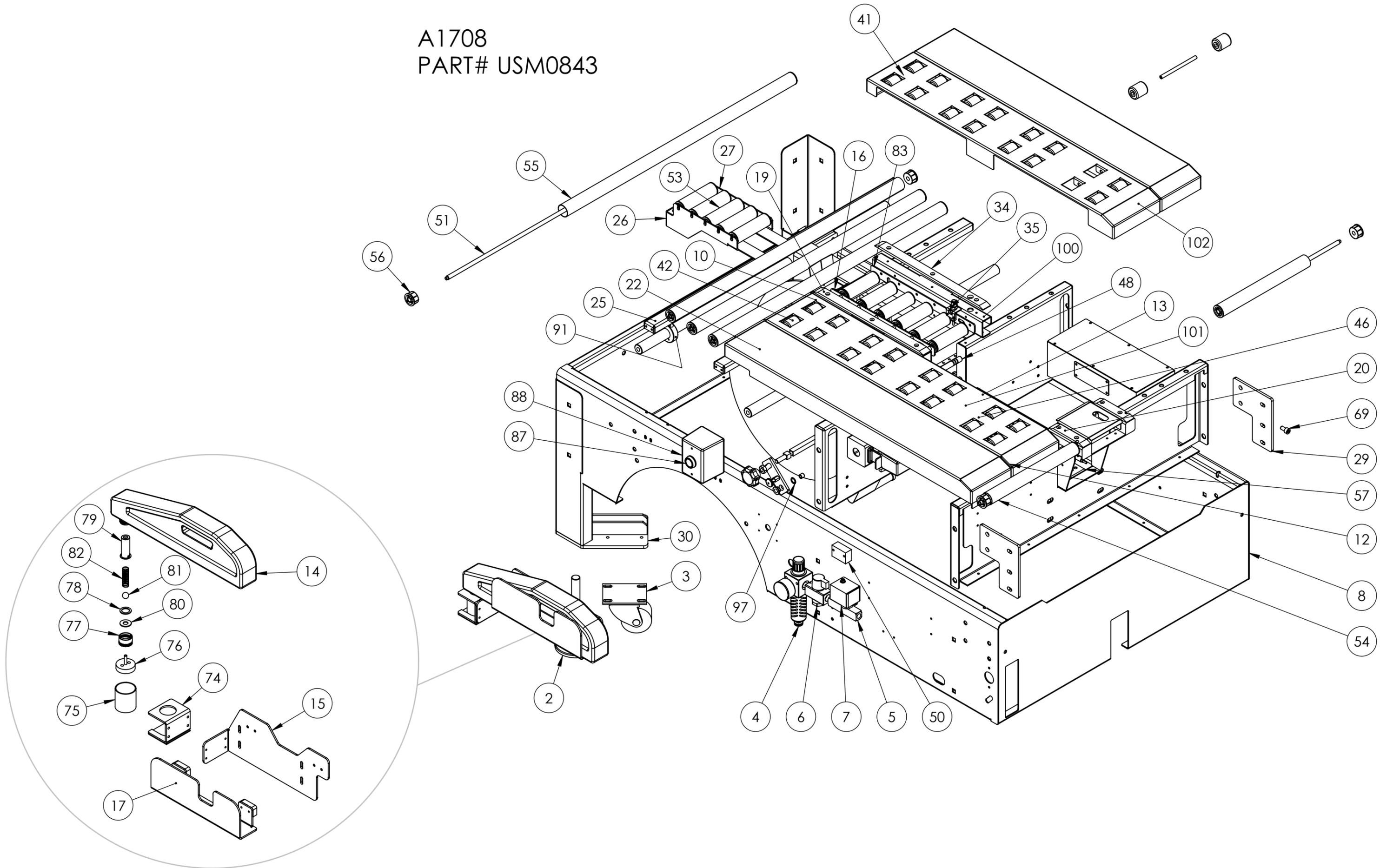
A1707
PART# USM0842



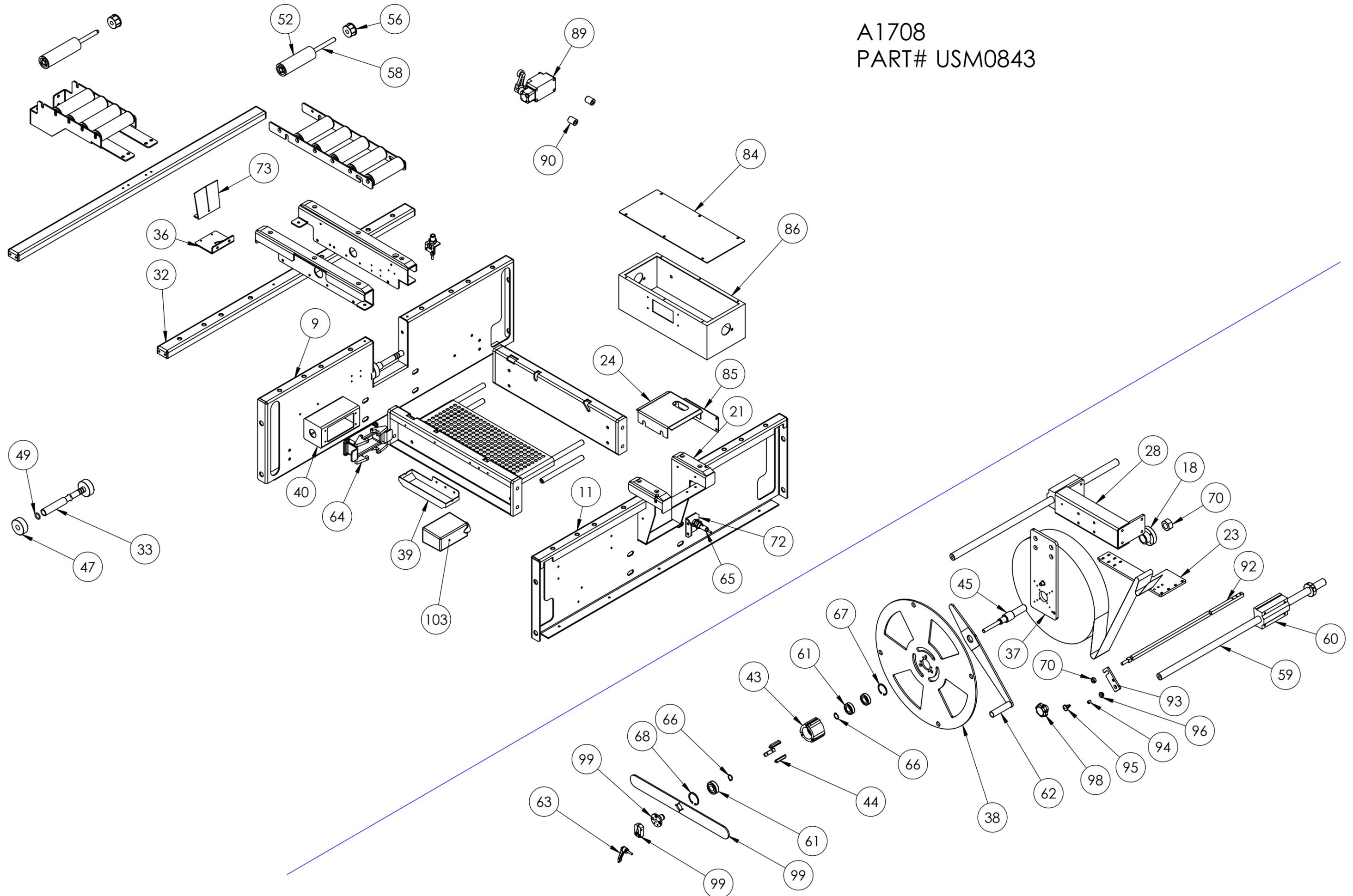
DETAIL A
SCALE 1 : 4

ITEM NO.	PART#	DESCRIPTION	QTY.
1	UPM5574	LEFT DOOR	1
2	UPM5575	RIGHT DOOR	1
3	UPM5576	ELECTRICAL BOX COVER	1
4	UPM5577	MAGNETIC PLATE	4
5	UPM5578	MAGNETIC BASE UP	2
6	UPM5289	MAGNETIC BASE DOWN	2
7	UPM5290	HINGE	6
8	UPM5291	SAFETY SWITCH FIXED BASE	2
9	UPM5460	LOCKING BOLT	8
10	UPM5461	MAGNET BRACKET	2
11	UPM5459	SAFE DOOR SWITCH	2
12	UPM2804	HANDLE	2

A1708
PART# USM0843



A1708
PART# USM0843



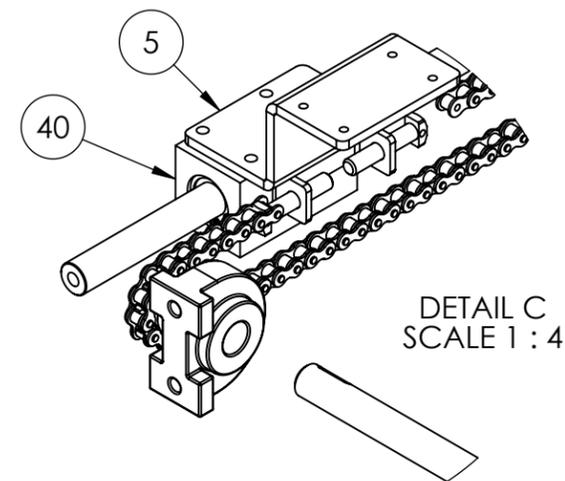
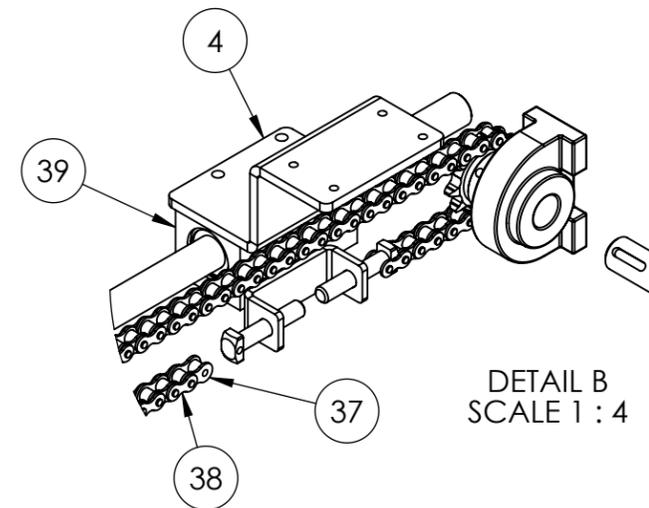
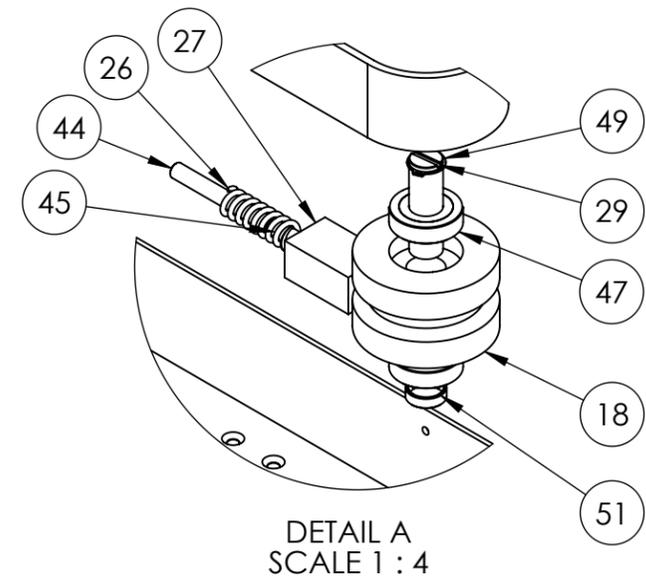
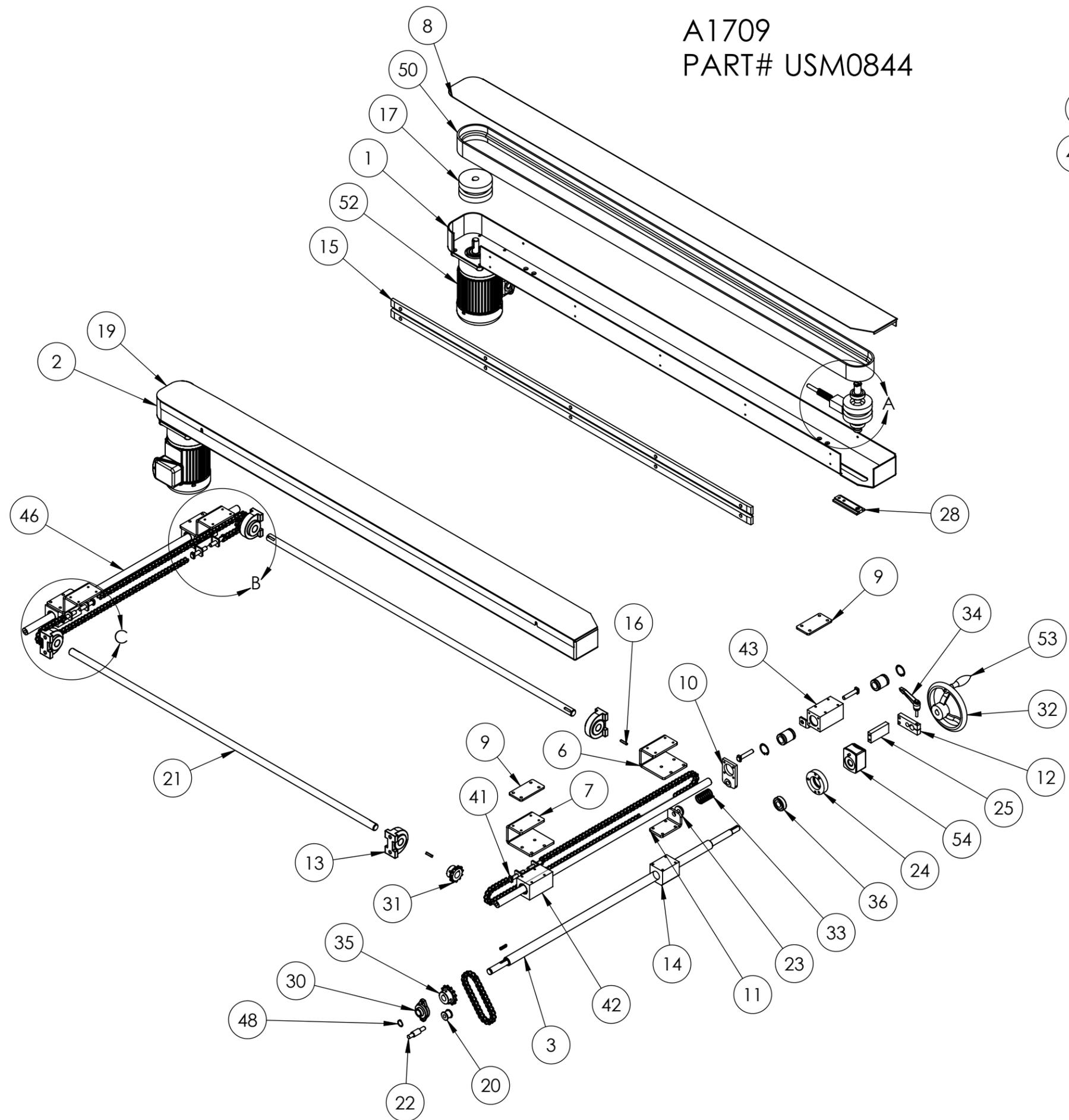
A1708
PART# USM0843

ITEM NO.	PART#	DESCRIPTION	QTY.
2	UPM2538	FOOT	3
3	UPM2537	Plate Caster	3
4	UPM4880	PRESSURE REGULATOR	1
5	UPM5838	MANIFOLD	1
6	UPM1734	BALL VALVE 3/8 NPT F	1
7	UPM5502	PRESSURE SWITCH	1
8	UPM0003	CONVEYING BASE	1
9	UPM1813	BACK FIXING BOX FRAME	1
10	UPM1946	ROLLER BRACKET SIDE PLATE RIGHT	1
11	UPM1814	FRONT FIXED BASE	1
12	UPM5686	TAPEHEAD MOUNTING BAR	1
13	UPM5687	TAPEHEAD MOUNTING BAR	1
14	UPM5688	WATER RESERVOIR	1
15	UPM0105	WATER POT FIX PLATE	1
16	UPM5689	ROLLER BRACKET SHIM PLATE	1
17	UPM0429	WATER POT FIX BASE	1
18	UPM4533	MANDREL BASE	1
19	UPM2474	BACK SLIDING PAD L.H.	1
20	UPM2475	FRONT SLIDING PAD LEFT	1
21	UPM2476	FRONT SLIDING PAD RIGHT	1
22	UPM0007	COVER	2
23	UPM2477	RODLESS CYLINDER CONNECTING PLATE	1
24	UPM2478	FRONT COVER	1
25	UPM1000	EXIT ROLLER BEAM	1
26	UPM5690	ROLLER HOUSING LEFT	1
27	UPM5691	ROLLER HOUSING RIGHT	1
28	UPM2494	TAPE BASE	1
29	UPM0004	BASE CONNECTING PLATE	2
30	UPM0001	LEG WELDMENT	2
32	UPM1064	REAR FIX BASE BEAM	1
33	UPM4667	IDLER ROLLER	2
34	UPM2479	BACK SLIDING PAD RH	1
35	UPM2480	PH FIX BASE	1
36	UPM1803	BRUSH FIXING PLATE	1
37	UPM5692	DOWN TAPE WHEEL BASE	1
38	UPM5693	PANCAKE	1
39	UPM2481	WATER BASKET	1
40	UPM2482	CONNECTOR FIXING BASE	1
41	UPM2483	WHEEL SHAFT	16
42	UPM2484	ROLLER	32
43	UPM5073	MANDREL HUB	1
44	UPM5074	SPRAG, MANDREL	3
45	UPM5109	STEPPED SHAFT/LEFT THREAD	1
46	UPM5033	BOTTOM ACCESS COVER	1
47	UPM2485	ADJUSTMENT RING	4
48	UPM2486	ADJUSTING RING SHAFT	2
49	UPM2492	O RING	4
50	UPM2487	BLOCK	1
51	UPM0713	ROLLER SHAFT	11
52	UPM2488	ROLLER	6
53	UPM2489	ROLLER	5
54	UPM2490	ROLLER	2
55	UPM2491	ROLLER	4

A1708
PART# USM0843

ITEM NO.	PART#	DESCRIPTION	QTY.
56	UPM1718	PLASTIC BUSH	34
57	UPM2493	SUPPORT ROLLER SHAFT	4
58	UPM5694	SUPPORT ROLLER SHAFT	6
59	UPM2355	LINEAR SHAFT	2
60	UPM5140	SHUTTLE BLOCK	2
61	UPM5696	BEARING 6204ZZ	3
62	UPM5697	DANCER ARM ASSEMBLY	1
63	UPM4889	ADJUSTABLE HANDLE	1
64	UPM5599	PLUG CONNECTOR	1
65	UPM5508	SENSOR, BASE	3
66	UPM5586	Ø12MM SNAP RING	2
67	UPM5698	R42 SNAP RING	1
68	UPM5699	R47 SNAP RING	1
69	UPM5700	M8 SHCS	2
70	UPM5316	M10 NUT	2
72	UPM5701	BRACKET, SHORT, SENSOR BASE	1
73	UPH4895	POLY WIPER 3"	1
74	UPM4945	CUP HOLDER	1
75	UPM4946	RESERVOIR CUP	1
76	UPM4947	PLUNGER	1
77	UPM5703	WAT BOTTLE CAP	1
78	UPM5704	WAT VALVE WASHER	1
79	UPM5705	WAT VALVE TUBE	1
80	UPM5706	WAT VALVE WASHER	1
81	UPM5707	SS 15mm BALL	1
82	UPM5708	WAT VALVE SPRING	1
83	UPM5839	ROLLER BRACKET SHIM PLATE MIRROR	1
84	UPM5677	WIRING BOX COVER	1
85	UPM5671	WIRING BOX BLOCKOFF PLATE	1
86	UPM5675	WIRING BOX	1
87	UPM5709	PUSH BUTTON	1
88	UPM5710	CONTROL STATION BOX	1
89	UPM5711	SWITCH SNAP ACTION SPDT 10A 125V	1
90	UPM5712	STANDOFF, SWITCH SNAP ACTION SPDT 10A 125V	2
91	UPM5713	SHAFT COLLAR	2
92	UPM2470	TAPE POSITIONING ROD	1
93	UPM2471	DRAG LINK	1
94	UPM2803	ROTARY SLEEVE	1
95	UPM2792	Divide Positioning Pillar	1
96	UPM2539	BUSHING	1
97	UPM5714	WASHER, Ø10.5XØ16X0.5T	1
98	UPM2784	HANDLE	1
99	UPM5715	CROSS BAR ASSEMBLY	1
100	UPM1942	Roller Bracket Side Plate Left	1
101	UPM0845	EXIT INLET ROLLER TABLE EXTENSION RIGHT	1
102	UPM0745	EXIT INLET ROLLER TABLE EXTENSION LEFT	1
103	UPM5847	CONN HOOD SIDE ENTRY SZ16B PG21	1

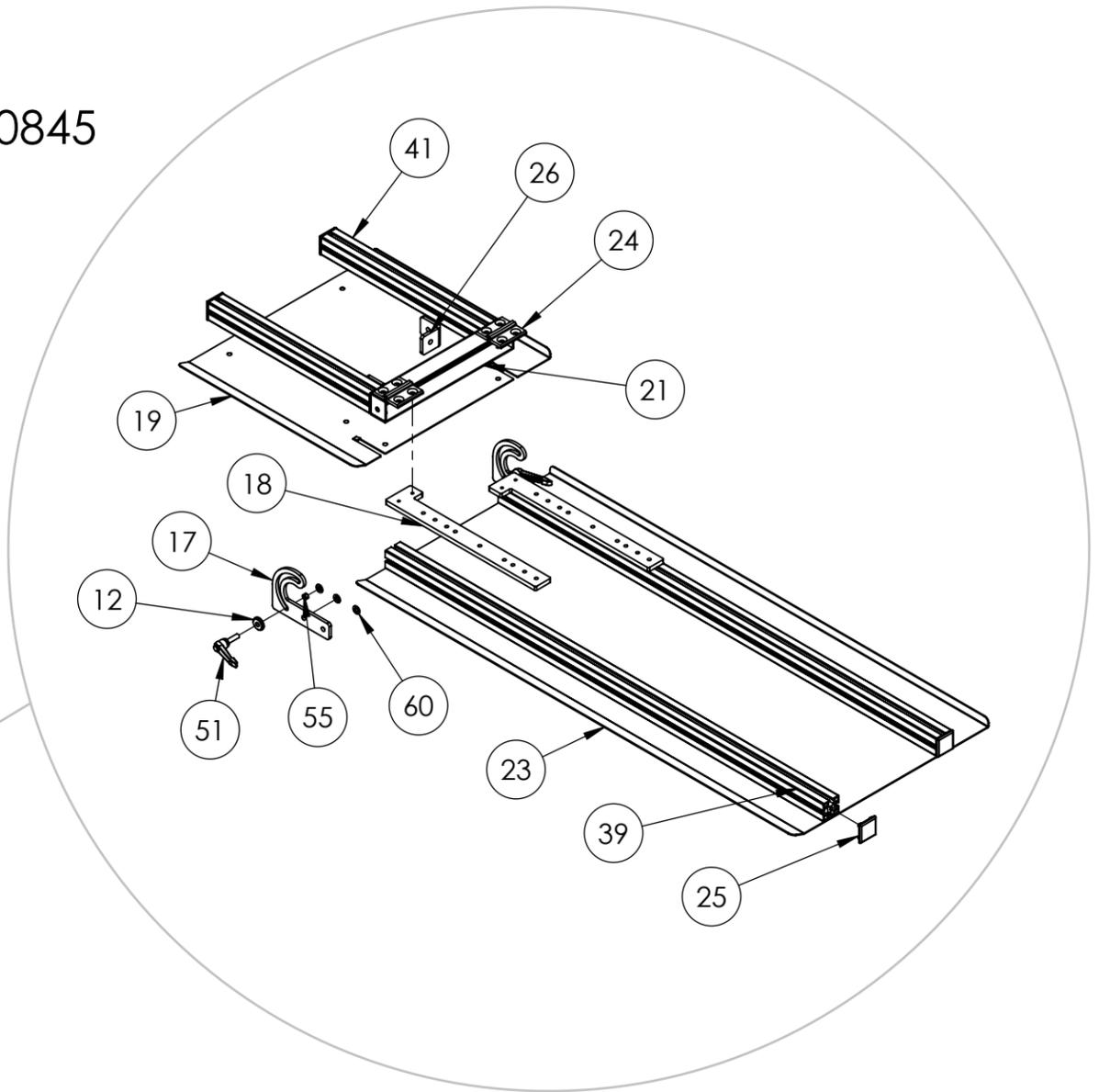
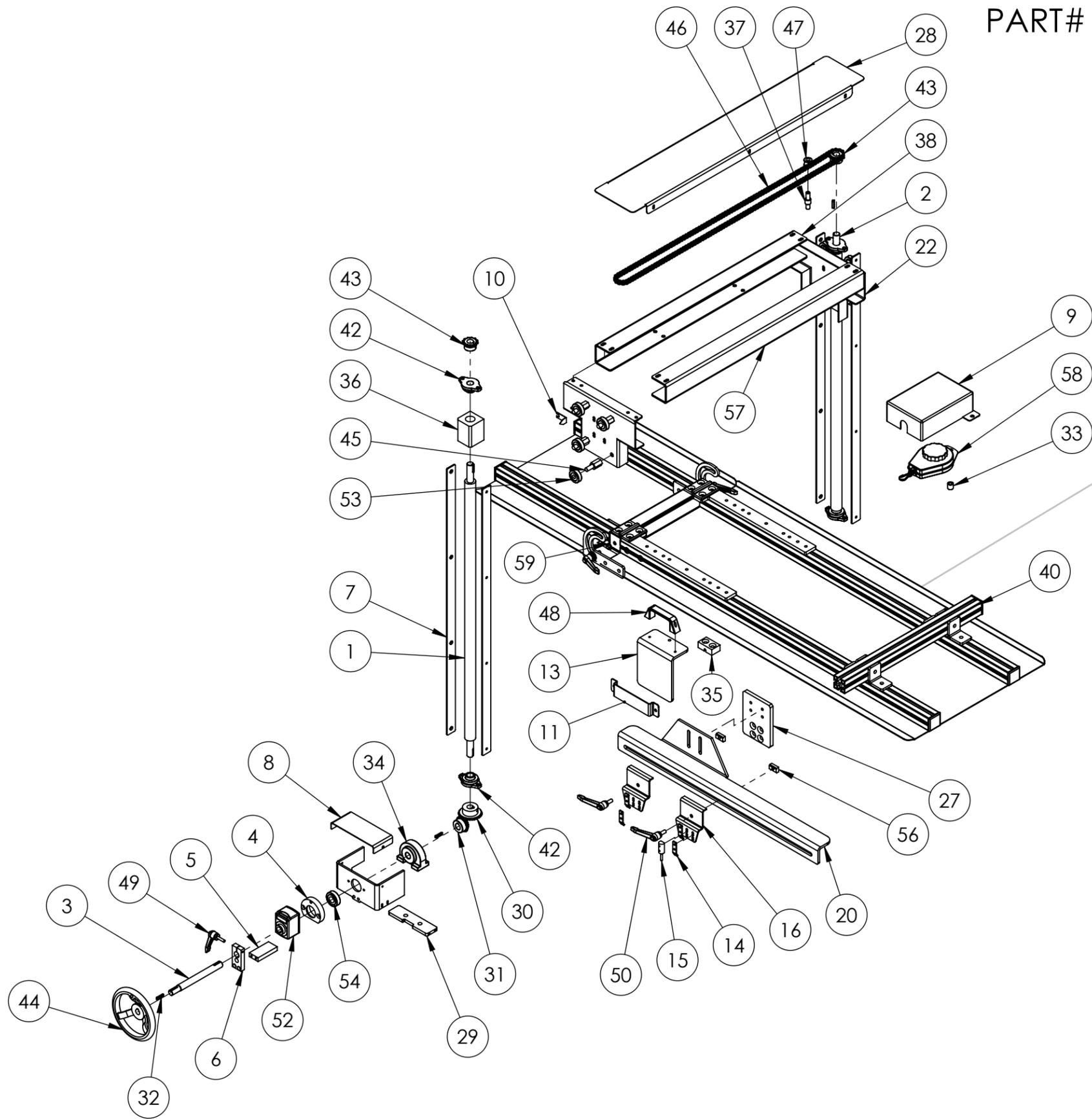
A1709
PART# USM0844



A1709
PART# USM0844

ITEM NO.	PART#	DESCRIPTION	QTY.
1	UPM4649	Belt Base, Left	1
2	UPM4650	Belt Base, Right	1
3	UPM4660	L & R ADJUSTING ROD	1
4	UPM4656	SUPPORTING BASE LEFT	1
5	UPM4657	Supporting Base Front Right	1
6	UPM4658	SUPPORTING BASE REAR LEFT	1
7	UPM4659	SUPPORTING BASE REAR RIGHT	1
8	UPM4647	BELT GUARD LEFT	1
9	UPM4655	BELT SPACER	2
10	UPM4664	SPRING FIXING BASE	1
11	UPM4665	SPRING BRACKET	1
12	UPM5562	LOCK BLOCK, ADJUSTING ROD	1
13	UPM5278	BEARING BRACKET	4
14	UPM4661	NUT (RIGHT THREAD)	1
15	UPM4651	SLIDING PAD	4
16	UPM5045	Double Round Flat Key 5x5x25L	5
17	UPM4654	DRIVING PULLEY	2
18	UPM4885	IDLER PULLEY	2
19	UPM4648	Belt Guard Right	1
20	UPM5035	40# IDLE PULLEY	1
21	UPM4662	DRIVING SHAFT	2
22	UPM4663	IDLE SHAFT	1
23	UPM4681	SPRING CAP	2
24	UPM4670	BEARING BASE	1
25	UPM5716	LOCK BLOCK BASE ADJUSTING ROD	1
26	UPM0038	DIE SPRING (DRIVE BASE)	2
27	UPM1234	SS TENSION SPRING HOLDER	2
28	UPM4653	TENSION SLIDING PLATE	2
29	UPM1233	IDLER PULLEY SHAFT 2"	2
30	UPM4531	CONNECTING BEARING	1
31	UPM5279	CHAIN SPROCKET	4
32	UPM4400	HANDLE HAND WHEEL	1
33	UPM2809	SPRING	1
34	UPM5684	HANDLE	1
35	UPM2495	SPROCKET	1
36	UPM5609	BALL BEARING 6203ZZ	1
37	UPM5607	CHAIN LINK, INNER	126
38	UPM5608	CHAIN LINK, OUTER	126
39	UPM5298	CHAIN ADJUSTER	1
40	UPM5582	CHAIN ADJUSTER, END	1
41	UPM5717	ADJUSTABLE CHAIN SCREW	8
42	UPM5300	CHAIN ADJUSTER, END	1
43	UPM5301	CHAIN ADJUSTER	1
44	UPM5302	3/8 X 3IN SCREW	2
45	UPM5583	3/8 x 1.5in DOWEL PIN	2
46	UPM5584	CHAIN ADJUSTMENT ROD	2
47	UPM4532	BEARING R-12ZZ	4
48	UPM5585	Ø17MM SNAP RING	1
49	UPM5586	Ø12MM SNAP RING	2
50	UPM5587	DRIVE BELT	2
51	UPM4666	SPACER	2
52	UPM5588	MOTOR	2
53	UPM5589	HANDLE	1
54	UPM5610	COUNTER	1

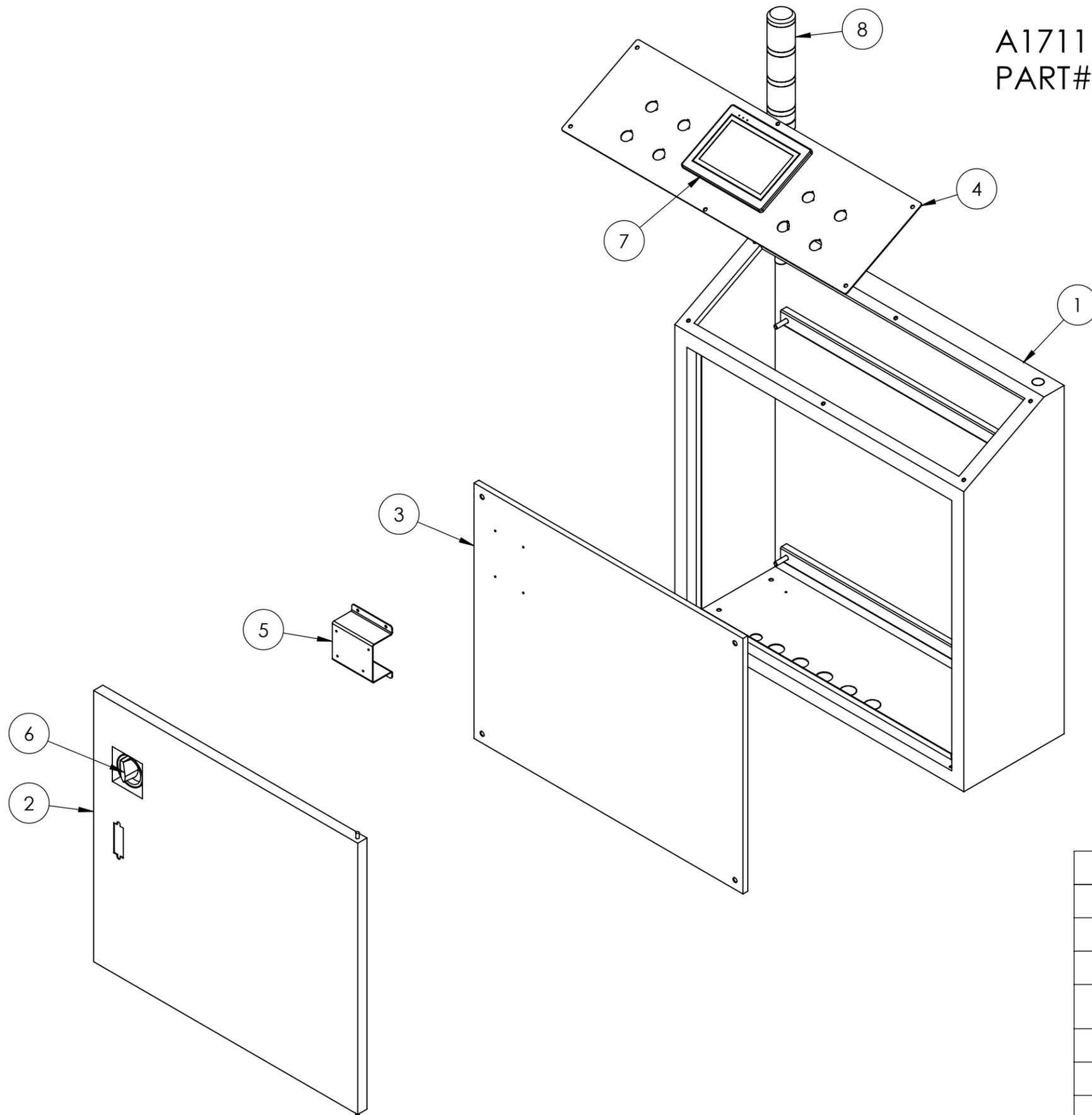
A1710
PART# USM0845



A1710
PART# USM0845

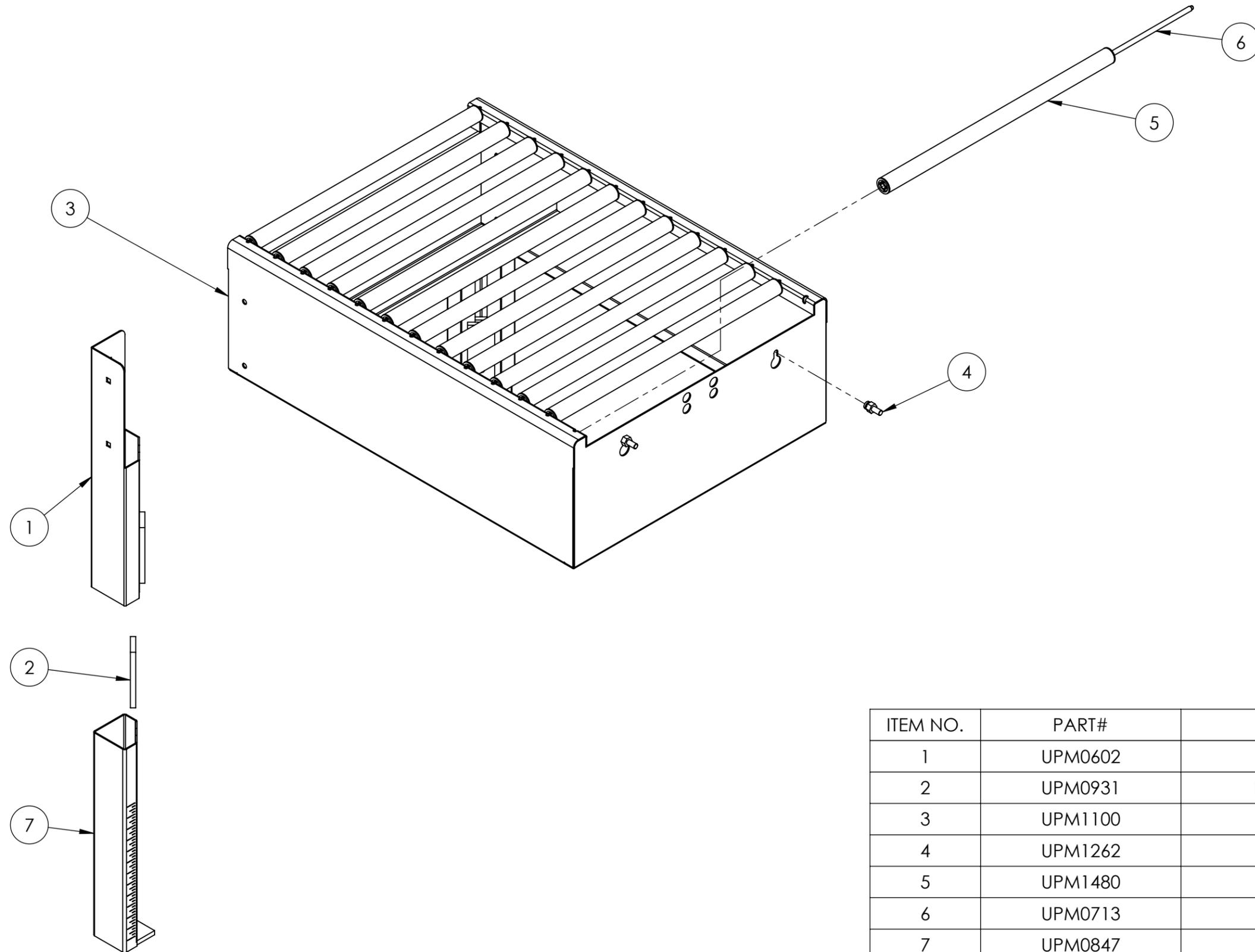
ITEM NO.	UPM #	DESCRIPTION	QTY.
1	UPM5629	ACTIVE ELEVATING GUIDE ROD	1
2	UPM5634	ELEVATING GUIDE ROD	1
3	UPM5635	HEIGHT ADJUSTING SHAFT	1
4	UPM5636	BEARING BUSHING	1
5	UPM5716	LOCK BLOCK BASE ADJUSTING ROD	1
6	UPM5637	LOCK BLOCK, ADJUSTING ROD	1
7	UPM5638	ELEVATION RAILS	4
8	UPM5639	ADJUSTING ROD GUARD	1
9	UPM5641	GUARD	1
10	UPM5642	INDICATOR	1
11	UPM5643	BRACKET	1
12	UPM5644	LOCK PIECE	2
13	UPM5645	PLATE	1
14	UPM5646	CASE SEPERATING PLATE	4
15	UPM5647	CASE SEPERATING FINGER	1
16	UPM5648	TOP STOPPING PLATE	2
17	UPM5649	COMPRESSED PLATE SWIVEL	2
18	UPM5650	TOP UNIT ADJUSTMENT PLATE	2
19	UPM5651	TOP PLATE	1
20	UPM5652	TOP STOPPING BASE	1
21	UPM5653	COMPRESSED PLATE SWIVEL BASE	1
22	UPM5654	TOP UNIT SIDE PLATE	2
23	UPM5655	TOP TABLE	1
24	UPM5656	LOOSE LEAF	2
25	UPM5580	GUARD FOR ALUMINUM EXTRUSION	5
26	UPM5657	BRACKET	6
27	UPM5658	TOP STOPPING CYLINDER BASE	1
28	UPM5659	TOP BEAM COVER	1
29	UPM5660	CONNECTING BLOCK	1
30	UPM4687	GEAR	1
31	UPM5034	GEAR	1
32	UPM5045	Double Round Flat Key 5x5x25L	5
33	UPM5661	SPACER SLEEVE	1
34	UPM7906	PILLOW BLOCK	1
35	UPM5663	GUIDE BASE	1
36	UPM4661	NUT (RIGHT THREAD)	2
37	UPM5036	IDLER SHAFT	1
38	UPM5664	TOP BEAM	1
39	UPM5662	40x40x1125L	2
40	UPM5662	40x40x500L	1
41	UPM5662	40x40x415L	2
42	UPM5226	CONNECTING BEARING	4
43	UPM5665	DRIVEN CHAIN SPROCKET	2
44	UPM4400	HANDLE HAND WHEEL	1
45	UPM4395	Male-Female Hex Standoff	8
46	UPM2535	CHAIN, 175 LINKS	1
47	UPM2534	IDLER ROLLER	1
48	UPM5458	HANDLE	1
49	UPM5684	HANDLE	1
50	UPM4397	HANDLE	2
51	UPM4398	HANDLE	2
52	UPM5555	COUNTER	1
53	UPM5609	BALL BEARING, 6203ZZ	8
54	UPM5194	BALL BEARING	1
55	UPM5666	DRYMET DU BUSHING	2
56	UPM5667	SLIDE NUT	2
57	UPM5668	TOP RIGHT BEAM COVER	1
58	UPM5669	SPRING HOIST	1
59	UPM5670	DRYMET FLW	2
60	UPM5718	M8X16X1.5T WASHER	4

A1711
PART# USM0846



ITEM NO.	PART#	DESCRIPTION	QTY.
1	UPM0450	ELECTRICAL CONTROL BOX	1
2	UPM0454	ELECTRICAL CONTROL BOX COVER	1
3	UPM0467	WIRING PLATE	1
4	UPM0468	ELECTRICAL CONTROL BOX NAME PLATE	1
5	UPM0612	SWITCH BASE	1
6	UPM5281	SWITCH	1
7	UPM5572	DISPLAY SCREEN	1
8	UPM5573	STATUS BAR	1

A1712
PART# USM0847



ITEM NO.	PART#	DESCRIPTION	QTY.
1	UPM0602	LEG BASE ASSY	2
2	UPM0931	LEG FRICTION PLATE	2
3	UPM1100	ROLLER FRAME	1
4	UPM1262	TABLE HOOK	2
5	UPM1480	ROLLER	13
6	UPM0713	ROLLER SHAFT	13
7	UPM0847	LEG ADJUSTMENT	2

