



TECHNICAL MANUAL

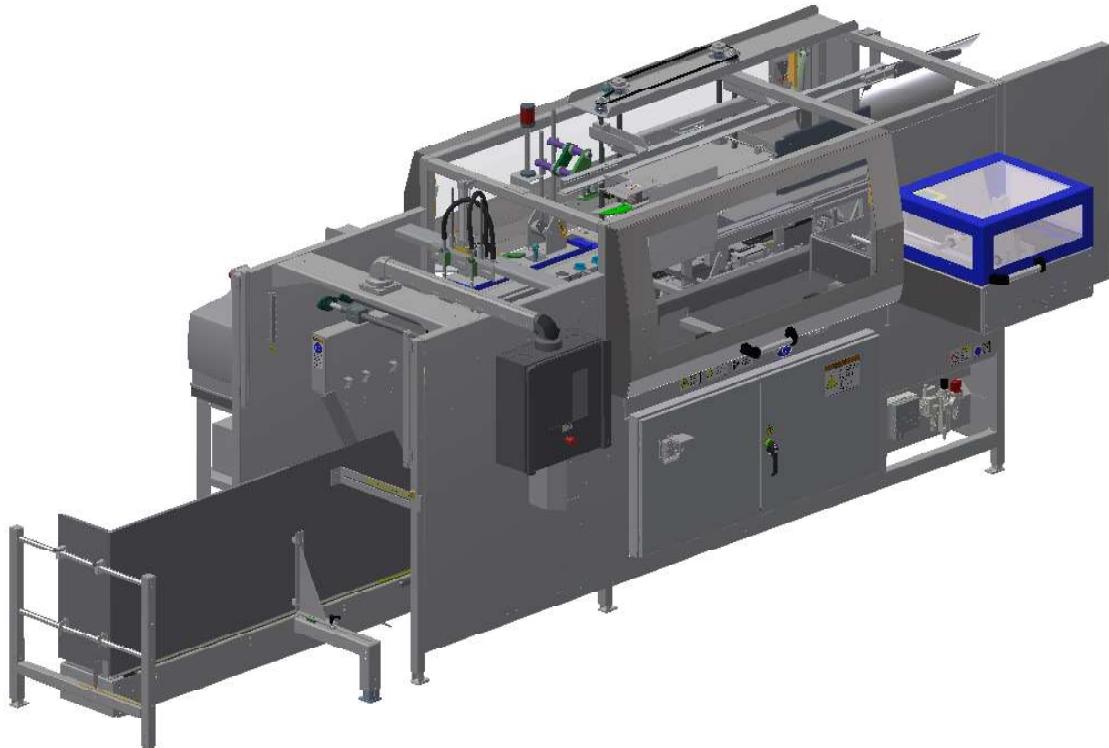
Model "400"

Case Erector-Bottom Sealer

ESPECIALLY PREPARED FOR

HOSPIRA, INC.

ABC PACKAGING MACHINE CORP.



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Case Erector-Bottom Sealer

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A-B-C would like to offer training in your facility from one of our certified PMMI trainers.

By having your employees trained by a Factory Trainer in the correct set-up and operation of your A-B-C Machine, you can reduce downtime and increase efficiency.

A brief overview of the highlights included in this training are:

- Safety, lock out / tag out, and guarding training
- Machine operation training, controls, features, etc.
- Machine change over training (Interactive)
- Machine maintenance training to include PM's, Troubleshooting, etc.

Additionally, we offer our “Train the Trainer” program. This is a program where we train your in house personnel so that they can train future operators and maintenance personnel.

For more information or to schedule your training, please contact ERIC DEDERICHES at:

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SAFETY PRECAUTIONS

This section reviews some of the basic safety precautions and instructions you should become familiar with before operating, performing maintenance on or troubleshooting your packaging machine. In addition, be sure to review your facility, shop or departmental safety manual(s) before performing any task(s) with the packaging machine.

Many dangers exist around mechanical equipment. There are electrical dangers, pneumatic dangers, and other personal safety dangers. Accordingly, anyone who operates or performs any type of repair or maintenance to the packaging machine must be knowledgeable regarding safety instructions and must be able to recognize and correct dangerous or unsafe situations.

A-B-C Packaging Machine Corporation wants you to remember that safety always comes first. Safety labels are located on your packaging machine to help remind you of areas to be especially cautious of when working with your machine. Throughout this technical manual and your machine the following safety symbols have been added to emphasize safety precautions as necessary.



This symbol is used to indicate that a hazardous situation is present that has some probability of death or serious injury.



This symbol is used to indicate that a hazardous situation is present that may result in minor to moderate injury.

There are also safety labels present on items which have been purchased, such as the blades on a tape unit or the hoses on a hot melt unit. Be aware of all warning or caution labels during operation, maintenance, or troubleshooting of your packaging machine. Be sure all safety labels are unobstructed, visible, and legible at all times.

This section will cover various aspects of safety precautions for using packaging machinery. These aspects include safety devices, general safety precautions, installation safety precautions, pressurized system safety precautions, electrical safety precautions, and lock-out / tag-out safety precautions.

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SAFETY DEVICE

- The safety devices on the packaging machine are used to protect personnel and equipment. The safety devices, therefore, must be maintained in good working order and must be operative at all times.
- Under no circumstances should any of the safety devices be altered or removed from the machine. These safety devices include, but are not limited to; safety labels, magnetic reed switches, safety guards, or stop buttons.

GENERAL SAFETY PRECAUTIONS

- Under no circumstances should anyone be allowed to operate, troubleshoot, or maintain the equipment while under the influence of any type of drug or alcohol.
- Only trained, fully qualified personnel should operate, troubleshoot, or maintain the packaging machine and its related components.
- Do not perform any maintenance or troubleshooting procedures on the packaging machine unless another person, who is certified with first aid and cardiopulmonary resuscitation (CPR) training, is present.
- Operators and maintenance personnel should wear safety glasses when working with or near the packaging machine.
- Safety shoes should be worn by operators and maintenance personnel.
- Operators and maintenance personnel should secure long hair.
- Operators and maintenance personnel should remove any jewelry, watches, rings, etc., when operating, maintaining, or troubleshooting the equipment.
- Operators and maintenance personnel should not wear neckwear, such as neckties, or bandanna's.
- Operators and maintenance personnel should not wear loose-fitting, torn, or ragged clothing.
- Operators and maintenance personnel should avoid wearing oil-soaked clothing or carrying waste material of a flammable nature in the pockets (i.e., lighters).
- The use of flammable or toxic cleaning fluids such as gasoline, benzene, or ether should not be used.
- Keep all objects, such as hands, clothing, tools, etc., away from moving parts during operation of the packaging machine.
- Never operate the packaging machine with a known problem, such as an air hose leak, or exposed wire.

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- Never make any adjustments while the machine is energized.
- Whenever any maintenance or troubleshooting is performed the electrical power should be disconnected at the facility junction box and should be tagged out. In addition, the packaging facility air supply should be disconnected and tagged out with the packaging machine air supply relieved and tagged out.
- Always use a protective rubber floor mat and rubber sheeting when performing maintenance and troubleshooting on your packaging machine.
- Do not operate or perform maintenance on the packaging machine if standing water is present underneath or near the machine.
- If applicable, be sure to read the hot melt manual thoroughly before operating the hot melt unit.

INSTALLATION SAFETY PRECAUTIONS

- For the safety of the operating, maintenance, and troubleshooting personnel the packaging machine and its related equipment must be electrically grounded.
- Wiring used in the electrical supply line must be appropriately sized and insulated to accommodate the packaging machine power and temperature requirements.

ENERGIZING THE MACHINE

- Connect the facility air supply line to the air intake on the machine.
- Ensure the disconnect switch (DISC) on the electrical enclosure is in the “off” position and that any push-pull stop buttons are pushed “in.”
- Turn the circuit breaker or switch “on” at the facility electrical junction box, remove any tag, and turn the machine disconnect switch (DISC) “on.” The fault indicator light (L1) should be lit.
- Turn the air “on” to the machine. Be certain the machine regulator is locked at between 80 to 85 p.s.i. (gauge).
- Remove all applicable tags.
- Account for all tools, parts, and materials.
- Your machine is ready for operation.

DE-ENERGIZING THE MACHINE

- Follow the lock-out / tag-out procedures of your company.
- Ensure the disconnect switch (DISC) on the electrical enclosure is in the “off” position and that any push-pull stop buttons are pushed “in.”

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- Ensure the facility air supply is “off”.
- Disconnect the facility air supply line and relieve the machine air supply (the intake regulator gauge should read 0 p.s.i.).
- De-energize the facility electrical circuit from the facility junction box.
- Place a lock-out tag on the switch at the facility junction box.
- Place a lock-out tag on the disconnect switch (DISC) on the machine.
- The machine is now de-energized and ready for maintenance or repairs.

PRESSURIZED SYSTEM SAFETY PRECAUTIONS

- Pressure gauges must be checked periodically to ensure proper readings. Replace if damaged or readings are incorrect.
- Personnel should take precautions not to damage or strike any of the flexible air lines or fittings when performing maintenance or troubleshooting procedures.
- Other than the system quick-disconnect fitting, if applicable, no fitting should be loosened or tightened while the system is pressurized.
- Pressurized systems must be regularly checked and maintained to avoid any unsafe or hazardous conditions.

ELECTRICAL SAFETY PRECAUTIONS

- For the safety and protection of maintenance personnel, when work is being performed with the electrical system, maintenance personnel should use an adequate amount of rubber floor matting and rubber sheeting.
- Electrical systems must be regularly checked and maintained to avoid any unsafe or hazardous situations.

WORKING ON ENERGIZED CIRCUITS

- Maintenance personnel should avoid working on energized circuits.
- Always have a safety observer present when working with energized circuits. The safety observer should be qualified in rendering first aid for electrical shock and should be instructed on how to de energize the circuit, if necessary.
- When working with energized circuits maintenance personnel must use tools that are insulated.

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WORKING ON DE-ENERGIZED CIRCUITS

- Safety devices, such as interlocks, overload relays, and fuses should never be altered or disconnected except for replacement.
- Fuses should only be replaced after the machine has been de-energized.

LOCK-OUT/TAG-OUT PROCEDURES

Many companies, corporations, and government entities have established lock-out/tag-out procedures for maintenance personnel and service personnel to protect them while servicing machinery. The purpose of a lock-out/tag-out procedure is to ensure the machine is isolated from any potentially hazardous facility supply lines. Check with your supervisor for your proper facility lock-out/tag-out procedures.

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MACHINE OVERVIEW

This section should supply a good understanding of the operating sequence of the Model "400" Case Erector-Bottom Sealer (hereafter Model "400") and its controls.

OPERATING SEQUENCE

Basically the layout of the Model "400" is composed of four sections: the auxiliary knock down (K.D.) magazine and elevator, the opening, and the sealing sections.

An operator loads, squares, and levels a stack of knockdown cases (K.D.'s) in the auxiliary magazine section. With all safety doors closed and electric eyes unobstructed, the operator can start the packaging machine cycle.

The knocked down cases are transported by the table top chains into the magazine elevator. In the magazine elevator section the stack of K.D.'s is elevated and staged for transfer into the opening section. One at a time, the knock-down cases are pulled up by vacuum cups from the knock-down magazine onto staging supports. A transfer beam then slides underneath the staged knock-down case, the vacuum cups release, and the knock-down case is transferred into the opening section.

When the K.D. case transfers into the opening section of the beam path the electric eye is interrupted and a timer is activated. If the knock-down case is not fully opened by the expiration of the timer, then the machine will stop thereby preventing a jam. All cases in the machine should be removed, because the glue will have set up and the cases will not seal. When the K.D. case is staged in the opening section two more set of vacuum cups "grab" the K.D. case. A set of lower vacuum cups raise upward to hold the bottom of the K.D. case while a set of upper cups lowers to hold the top of the knock-down case stationary, thereby "opening" the knock-down case. As the opened case leaves the opening section the leading minor flap is pushed closed and a flap tucker extends to close the trailing minor flap of the opened case.

GLUE ADHESIVE

Still being moved intermittently by the transfer beam the case passes and trips a limit switch that triggers the adhesive glue timer. This initiates the correct adhesive pattern (previously programmed into the timer) to be applied to the minor flaps of the case as it passes by the application heads. Stationary folding bars then fold the major flaps as the case is moved through them. With all of the flaps folded a compression ram assembly then enters the open part of the case to square the case and apply the proper amount of pressure to the major and minor flaps to allow enough time for the adhesive to "set". The ram retracts and the case is then pushed out, by the feed finger assembly on the transfer beam, onto the customer's take-way conveyor.

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TAPE ADHESIVE

Still being moved intermittently by the transfer beam the case passes through stationary folding bars which fold the major flaps as the case is moved through them. With all of the flaps folded the case then travels along the tape applicator head where the tape is applied to the case along the major flap seam. The case then drops out of the machine and onto the customer's take-away conveyor.

CONTROLS

There are two operating controls on the electrical enclosure. The disconnect switch (DISC), the stop push-pull button (PB1). There also is another stop push-pull button (PB3). The main operation of the machine is controlled by a Touchscreen. The disconnect switch (DISC) allows the operator to turn the main power "on" or "off". The power must be turned "off" to access the electrical enclosure.

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TOUCHSCREENS



START-UP SCREEN

Screen appears when machine is powered up.

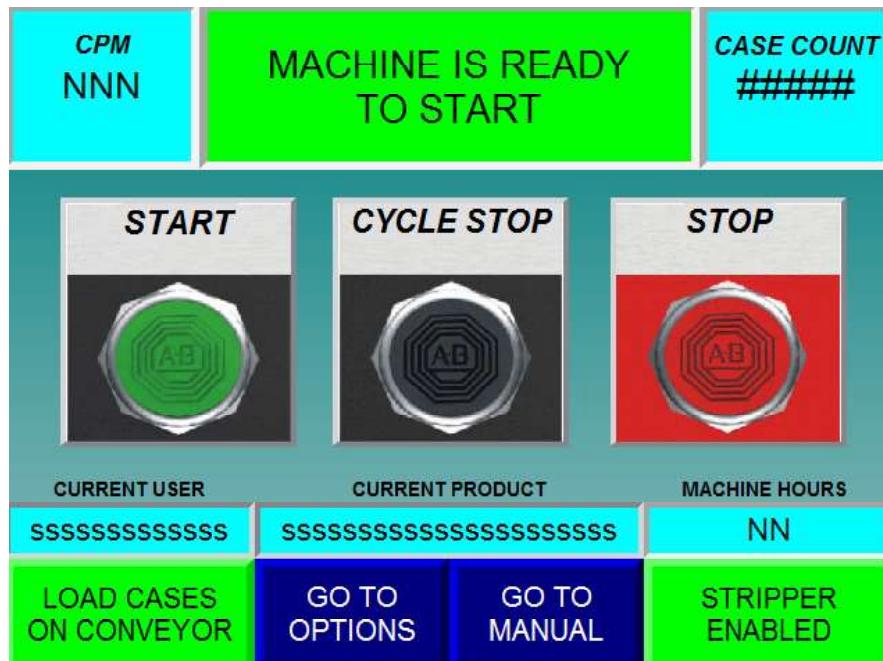
Go to Main Menu is not visible until screen access selection switch is in the ON position.

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MAIN MENU SCREEN

Button	Function
CPM	This will tell the operator the speed the machine is running in Case Per Minute
Message Display	This portion of the screen will display various messages for the Operation of the machine such as "Case Jam At Ram"
Case Count	This will display how many cases have been run since the last time the counter has been reset. The counter can be reset by pushing this button and entering zero.
Start	This will start the machine up.
Cycle Stop	Pressing this will cause the Stripper to stop feeding knock down cases and the machine will continue to cycle until the existing cases in the machine have been completed and discharged, then the machine will come to a stop at the zero position.
Stop	This will stop the machine at any time but the air will remain on unless an E-Stop is pushed or a guard is opened.
Load Cases on Conveyor	This button will stop the infeed conveyors so that knock down cases can be placed on the auxiliary magazine chains.
Stripper Is Off	This button will turn the Stripper function on and off.
Manual	This button will call up the hand function screen.
Options	This button will call up the machine options screen.

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This screen allows the operator to make any manual operations of the machine. The glue test screen will also call up another screen asking “are you sure” as a safety precaution.

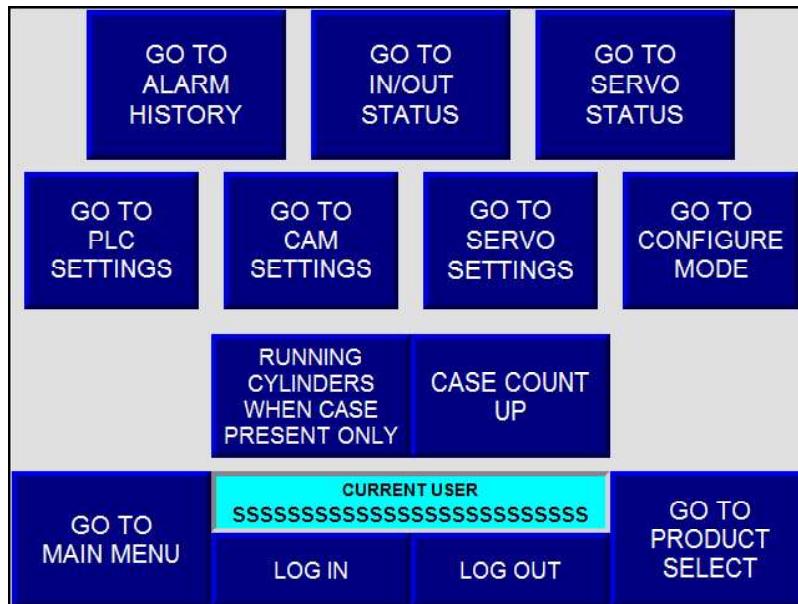
Button	Function
Magazine Conveyor	This button runs the magazine conveyor.
KD Stripper	This button cycles the KD stripper cylinder.
Elevator Raise	This button raises the elevator to upper limit.
Rear Flap Tucker	This button activates the flap tucker mechanism. The flap tucker will return to the original position when this button is released.
Compression Ram Forward	This button activates the compression ram and will return to the original position when this button is released.
Elevator Lower	This button lowers the elevator down to the lower limit.
Case Pushers	This button activates case pusher cylinder up.
Glue Test	Go to glue test screen.
Main Menu	This button returns the operator to the main screen.
Machine Position	This button tells the timing position of the machine. Total cycle is 0-1000 count.
Jog Machine	This button allows the machine to dry cycle at 10 cases per minute speed.

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MACHINE OPTIONS SCREEN

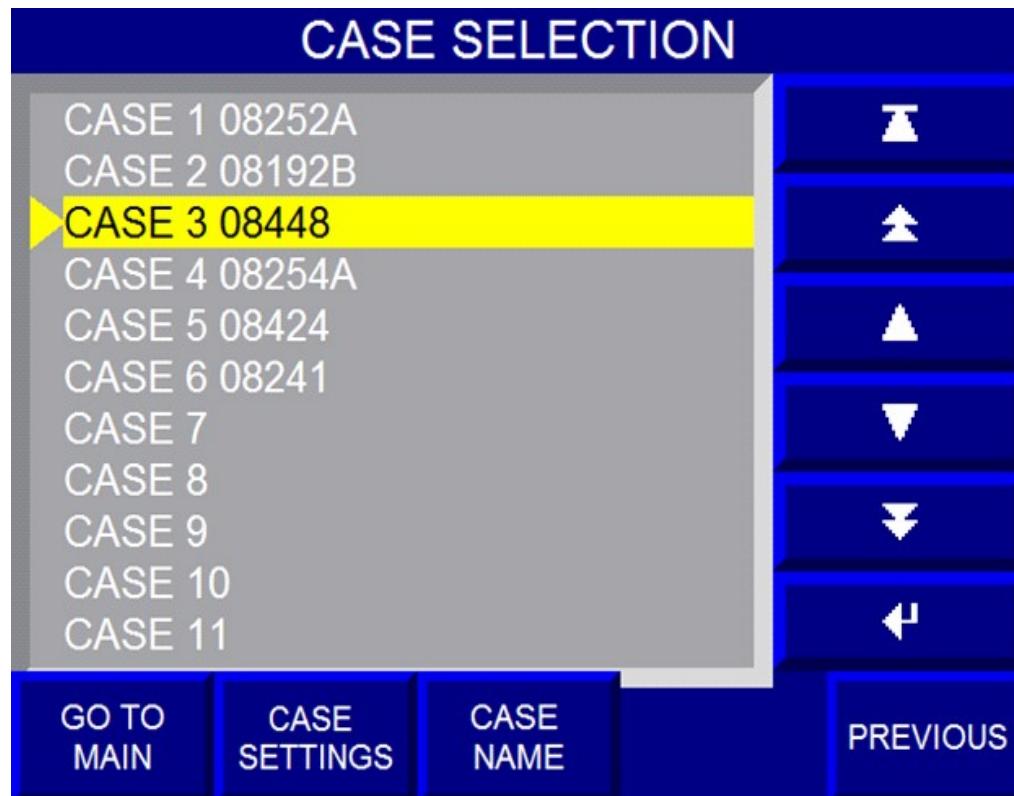
Button	Function
Alarm History	This button will call up another screen which will let the operator monitor the Alarm History.
Input/Output Status	This button will call up another screen which will let the operator monitor the status of PLC inputs and outputs.
Servo Screen	This button will call up another screen which will let the operator change settings of the Servo Ram.
PLC Settings	This button will call up another screen which will let the operator monitor the status of internal bits.
Cams Screen	This button will call up another screen which will let the operator change the cam setting of the various cylinder operations.
Servo Screen	This button will call up another screen which will let the operator change settings of the Servo Ram.
Configure Screen	This button will call up another screen which will let the operator change various machine settings
Running Cylinders when Case present Only	Toggles between actuating the air cylinders when a case is present or not.
Case Count UP/DOWN	Toggles between counting the number of cases up or down before stopping the machine.
Main Menu	This will take you back to the main menu.
Login	Allows the operator to login as different user.
Logout	Allows the operator to logout.
Product Select Screen	This button will call up another screen which will let the operator choose which case they are going to run so the glue pattern will be correct. This will also be where a new case size will be entered for a glue pattern.

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CASE SELECT SCREEN

This screen is used to select the case that is going to be run on the machine. A case is selected by choosing CASE 1 or CASE 2 etc. Choosing the case will determine the necessary Recipe needed to run a particular case.

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KD CHECK ###	OPEN CHECK ###	STRIP DOWN ###	STRIP UP ###
KD VAC ON ###	KD VAC OFF ###	OPEN VAC ON ###	OPEN VAC OFF ###
TUCKER TUCK ###	TUCKER RETURN ###	1ST PUSH UP ###	1ST PUSH DWN ###
2ND PUSH UP ###	2ND PUSH DWN ###	RAM EXTEND ###	RAM RETURN ###
CURRENT PRODUCT SSSSSSSSSSSSSSSSSSSSSSSS		Copy values from product #	
MACHINE POSITION NNNN			
GO TO MAIN MENU	JOG	GO TO SPEED COMP	GO TO PREVIOUS

ADJUST CAMS SCREEN

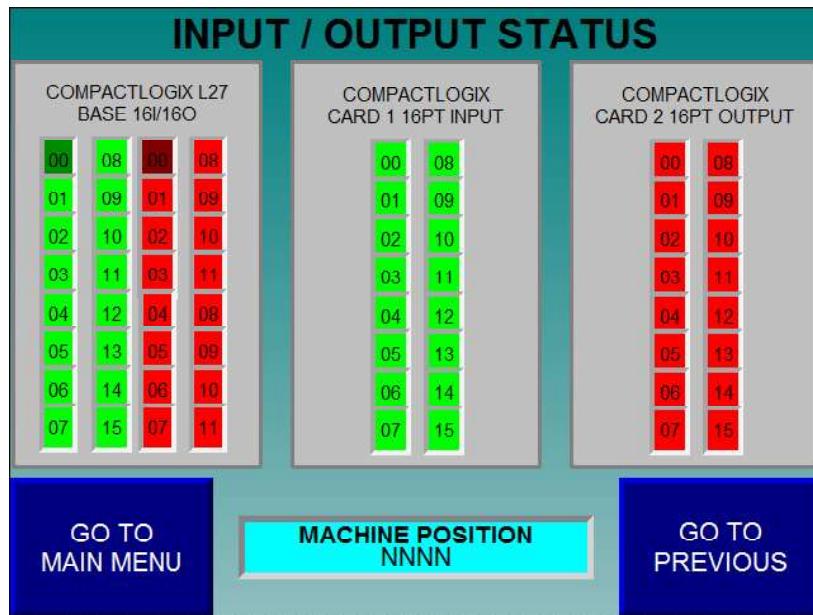
This screen will allow the operator to change the cam settings of when the various machine functions will occur. Pressing one of the buttons will call up a Numeric Data Entry screen. This will allow a new cam setting to be entered.

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INPUT/OUTPUT SCREEN

This screen will allow an operator to monitor whether an input or output is on or off. A highlighted box is on and a dark box is off.

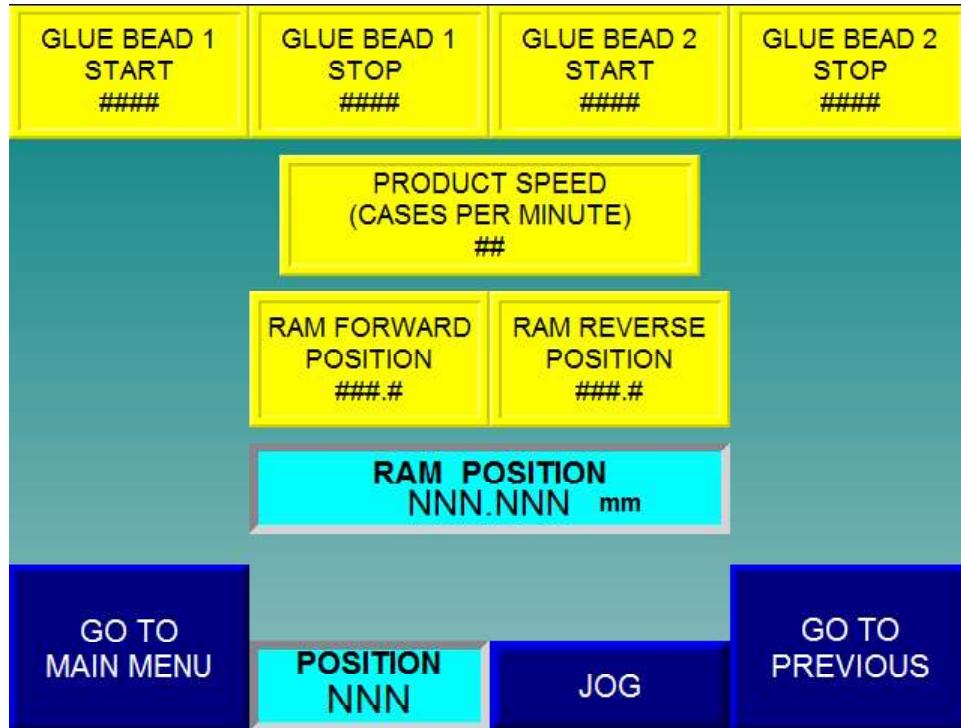
The center panel displays the safety network. Pressing a button opens a safety zone display with information on the status of the individual safety components.

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CASE SETTINGS SCREEN

This screen will let the operator choose the settings for a specific case size. Settings such as glue the pattern, Ram start position and changes the automatic adjustments for specific case sizes.

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BACKUP ADJUST ##	BYPASS O/L ON START ####	KD STACK ON ELEV ARMS ####	KD CONV. EMPTY CHECK ####
STRIP COUNT ON EMPTY ##	INACTIVITY SHUTDOWN ####	DELAY FOR AIR ON ####	STRIPPER ATTEMPS ##
LOGO TIMER ####	KD VACUUM BLOWBACK TIME ###	OPENER BLOWBACK TIME ###	DELAY DISCHARGE JAM ####
GO TO MAIN MENU			GO TO PREVIOUS

Modify Screen

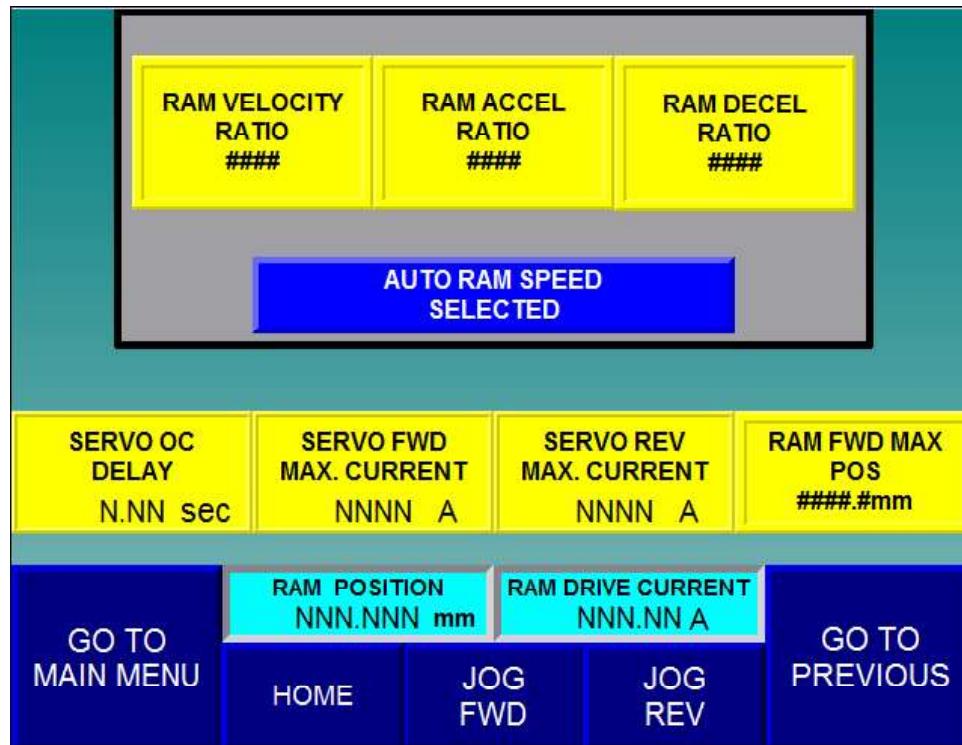
Button	Function
Back-Up Adjust	This will adjust timer for the case backup eye.
Bypass O/L on Start	Adjusts timer for bypassing drive overload when machine is changing speeds.
KD Stack on Elevator	This will adjust the timer for how long a new stack of cases will set in the magazine before raising.
KD Con. Empty Check	This will adjust the timer for how long the auxiliary magazine chains will run when empty before they stop.
KD Stripper No. Of Attempts	This will adjust the amount of times the stripper will attempt to pick cases when the magazine is near empty.
Stripper Fault Count	Allows you to set the number of attempts before the stripper arm shows a fault.
Delay For Air On	This will adjust the timer for how long the air stays on
VFD1 Jam Delay	Allows user to set the number of times the machine jams before the machine shows a fault.
Max Speed	This allows the user to set the max number of cases per minute.
KD Blowback Time	Sets the Amount of Time That the Stripper Cups Will Blow Back
Opener Blowback Time	Sets the Amount of Time That the Opener Cups Will Blow Back
VFD1 Jam Overcurrent	Lets the user set the number of Amp's the VFD can be over current before sending a fault.
Reload Default Values	This will reload the settings entered at the factory for timers, counters and cam settings. This will erase any customer entered values.

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SERVO RAM SCREEN

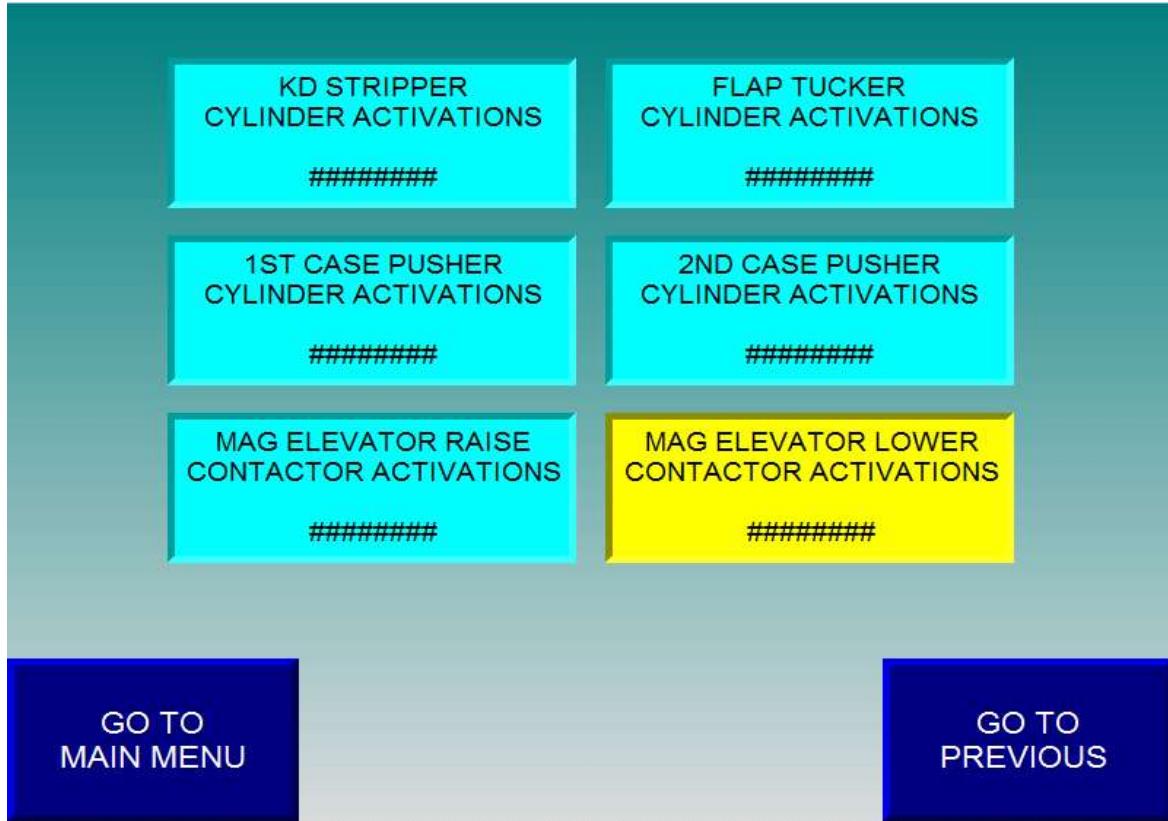
Button	Function
Ram Velocity Ratio	This button allows adjustment to velocity for ram speed compensation
Ram Accel Ratio	This button allows adjustment to acceleration for ram speed compensation
Ram Decel Ratio	This button allows adjustment to deceleration for ram speed compensation
Auto Ram Speed Selected	Toggles between manual and auto speed. Auto speed adjusts the ram speed to the actual case speed.
Servo OC Delay	This button allows the adjustment of the time delay after an over current.
Servo FWD max current	This button allows the adjustment of the maximum servo forward current.
Servo REV max current	This button allows the adjustment of the maximum servo reverse current.
Ram FWD Max. Position	This button allows adjustment of the stop point for the compression pads.
Home	This Button will home the servo.
JOG FWD (Forward)	This button will jog the Ram forward.
JOG REV (Reverse)	This button will jog the Ram in reverse.

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CYLINDER STATUS (OPERATOR SCREEN)

This screen shows the amount of activations of each cylinder.

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CYLINDER STATUS (MAINTENANCE SCREEN)

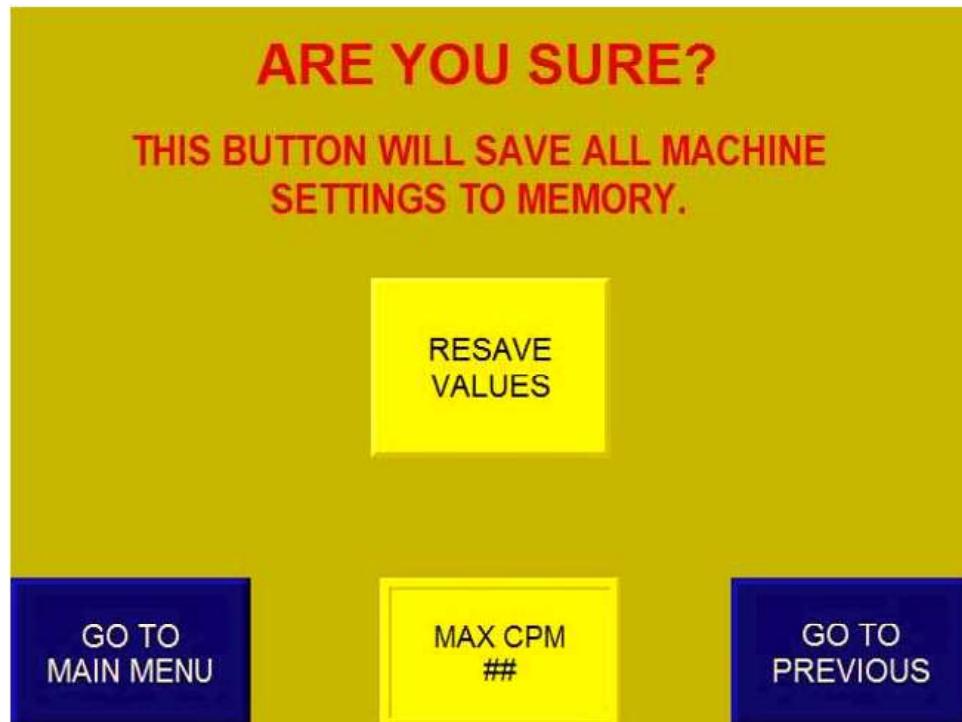
This screen shows the activations of each cylinders and allows maintenance to reset the counter on each cylinder.

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RESAVE VALUES

This screen will allow the operator to save all machine settings to memory.

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Default Screen

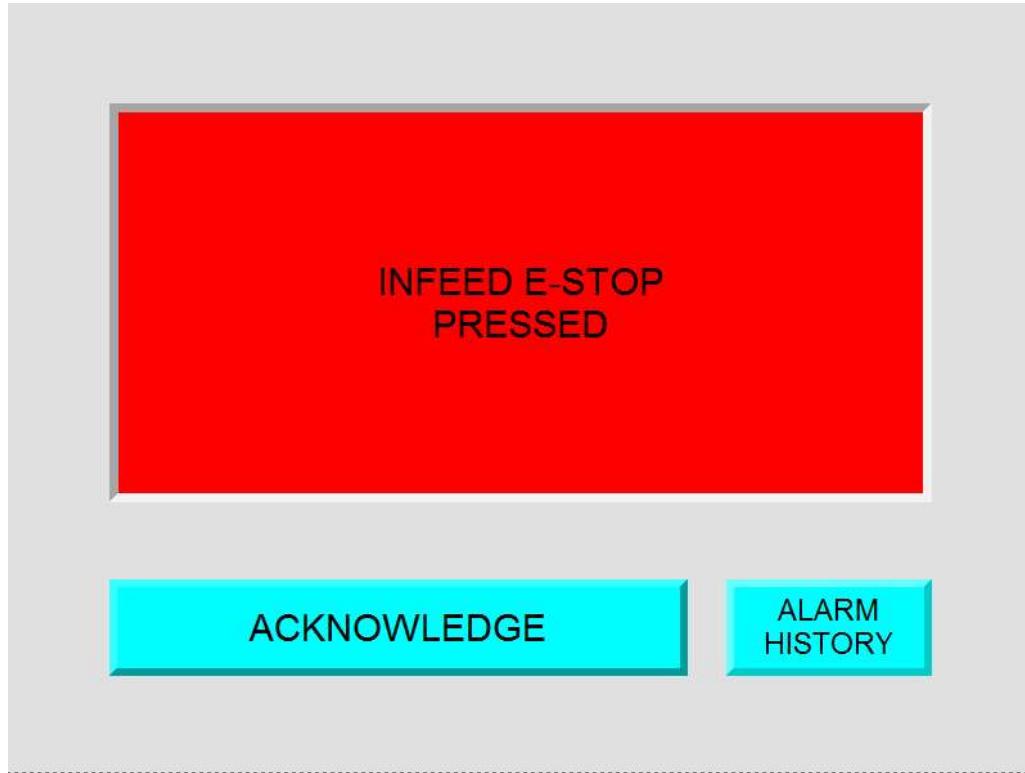
This button will load the original factory settings. Note: If selected this will erase any entries made by the operator.

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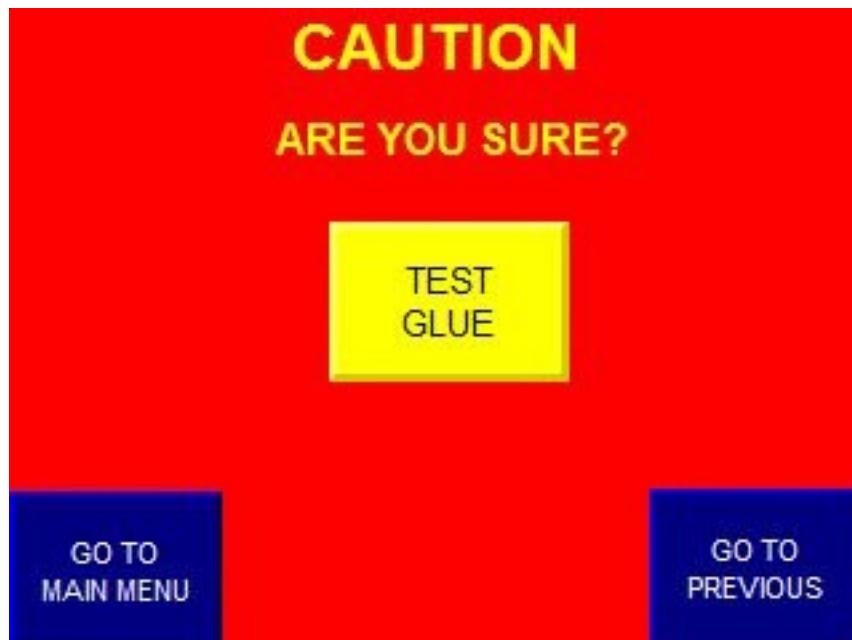


Fault Screen

Screen will show up when a fault occurs. Fault must be acknowledged before continuing.

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Glue Screen

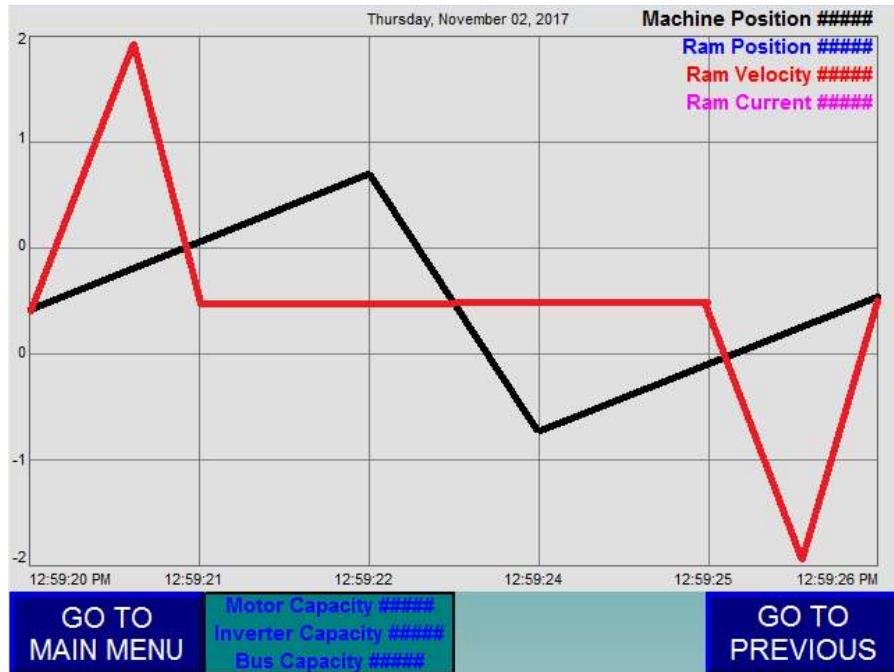
This screen will ask if you are sure as a safety precaution before spraying for glue test.

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SERVO STATUS SCREEN

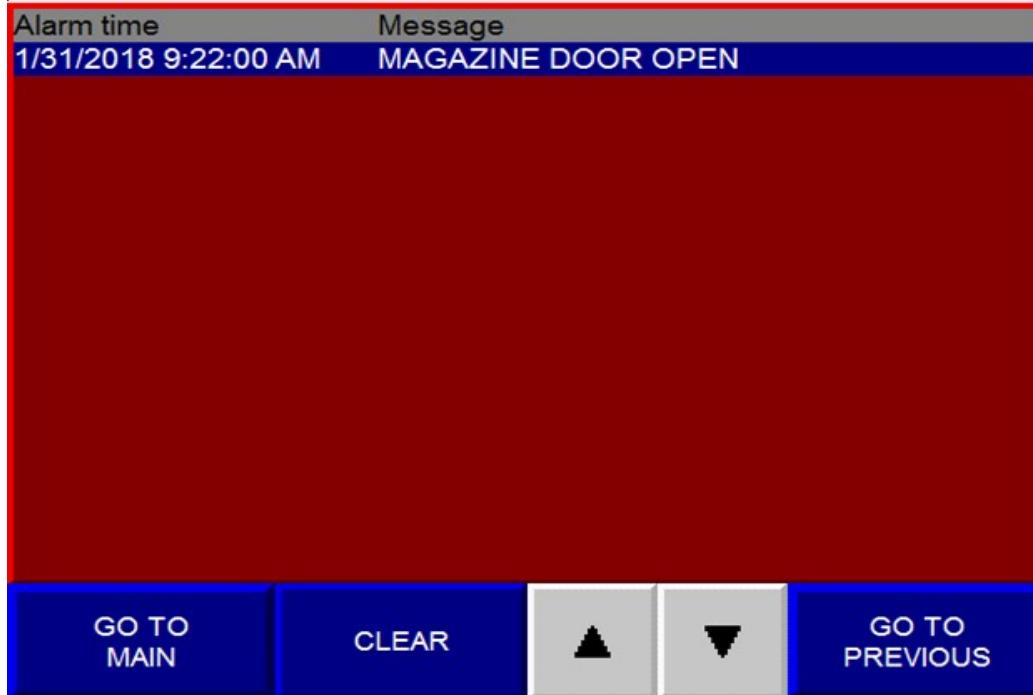
This screen shows various servo ram graphs in real time.

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Alarm History

Screen will show the time and type of alarms.

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Fault or Message	Description or Corrective Action
# 1	"Machine Ready To Start" This means there are no faults and the machine is waiting for the operator to push the start button.
# 2	"Machine Is Running" This means there are no faults and the machine is in automatic running normally.
# 3	"No Air Pressure" This means that the air pressure switch is not detecting sufficient air pressure.
Corrective Action	Check the air pressure gauge at the incoming air regulator on the machine the gauge must have an indication of approximately 80 to 90 PSI. Check the incoming air supply, check the regulator, if the air is correct troubleshoot the air pressure switch, the soft start valve, any valve stuck and leaking.
# 4	"Magazine Conveyer Is Empty" This means the magazine conveyor has run for a selectable amount of time and no KD blanks have run into the magazine elevator.
Corrective Action	You can cycle stop the machine and refill the magazine conveyor or leave the machine running and select "Load Cases On Conveyor" and reload the machine.
# 5	"Machine Is Cycle Stopping" This means that someone has pushed the "Cycle Stop" button or that the back up eye has been blocked for time and issued the cycle stop command.
# 6	"Emergency Stop" This means that an emergency stop has been activated by someone pushing one of the "E-Stop" Buttons
# 7	"Right Guard Door Open" This means that the right guard has been opened or that the PLC / Controller has seen a loss of signal from the right guard door switch.
# 8	"Left Guard Door Open" This means that the left guard door has been opened or that the PLC / Controller has seen a loss of signal from the left guard door switch.
# 9	"Drive Motor Overload" This means that the current overload detector for the main drive has "Tripped Out"
Corrective Action	1) Determine why this drive has tripped out . Was there a jam? Is there something wrong with the motor? Are the wires for the motor or from the variable frequency drive (VFD) loose? 2) Reset the overload by pushing the reset button on the front of this device.
# 10	"Elevator Motor Overload" This means that the elevator motor overload has "Tripped Out" due to an over-current condition.
Corrective Action	1) Determine the cause of the over-current condition: Is there a jam? Are the elevator arms stuck under the conveyors? Is there something in the chains or jammed in one of the sprockets? Troubleshoot the motor: Are the electric load wires tight at the motor and at the overload or at the motor starter? 2) Reset the overload by pushing the reset button on the front of the overload.
# 11	"Check Encoder Coupling" This means that the PLC controller has detected a fault with the encoder count input. The most likely source of this problem is the encoder coupling located on the shaft that drives the walking beam crank and the opener arm cam. You must remove the large sheet metal guard directly below the opener arm to inspect this coupling.
Corrective Action	1) Inspect the encoder coupling: Is it broken? Is it slipping? 2) If coupling is ok, check to see if the encoder cable is ok. Are the cable wires connected to the PLC? Are the wires tight? Are the wires going to the correct place? (Check electric wiring for wire numbers and colors) replace encoder if necessary. 3) Check main drive chain (chain must be tight)
# 12	"PR1 (zero) Was Not Made" This means that the maximum encoder count was exceeded without the controller "seeing" an input from the proximity PR-1, which is mounted on this support for the Opener cam and main crank assembly. The PR-1 switch is activated by the bolt on the end of the main crank arm.
Corrective Action	1) Check the switch for proper function (use any metal object) and check at the processor to make sure that an input can be received. 2) Make sure that the bolt is not loose, the switch and /or its wires are not loose. 3) The main drive chain must be tight.

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Fault or Message	Description or Corrective Action
# 13	"Reverse Rotation" The PLC / Controller has determined (via the encoder) that the machine is running backwards.
Corrective Action	1) (With the power off) Swap two leads of the incoming power. This will reverse the phasing on the entire machine. If you have just replaced a motor, swap two of the motor leads only.
# 14	"Minimum Speed Fault / Jam" The machine processor has determined that the machine is running below the recommended speed or that there is a restricting jam.
Corrective Action	1) If replacing a VFD (variable frequency drive) you must set the drive presets to match the presets on your electrical print. 2) Check the mechanical movements on the machine for a bind or restriction. 3) Troubleshoot the motor: Is the motor bad? 4) Check the main drive chain, this may be loose. This is the cause of any "jerking." 5) KD check set too high or too low. Adjust in "cam settings" on the touch screen. 6) "Minimum Speed Limit" set too high. Adjust down in "Adjust Misc." on touch screen.
# 15	"VFD Overload Machine Jam" This means that the variable frequency drive has detected an overload condition on the main drive train. This fault has stopped the machine. You must clear the jam before doing anything.
Corrective Action	1) Turn off main power and leave it off for about 6 seconds minimum. This allows the capacitors to discharge all power off the VFD and then turn the power back on. This will reset the drive now you can restart the machine. 2) Find out why the machine jammed
# 16	"Case Not Opened Fault" This is caused by the eye after the magazine seeing a KD (knock down case) traveling to the opener section and the eye at the opener section not seeing that case erected. This could be caused by glued together cases, backwards cases, un-glued cases, improper set-up etc.
Corrective Action	1) Find out why a case was not erected, if it was erected and this is a false trip then the "case erected eye" will need to be adjusted. (see literature supplied with the machine for how to adjust eye.) 2) To clear the fault: Remove un-erected case and "acknowledge" fault. Then re-start machine.
# 17	"Check / Clean" EE1 through EE5 this message appears when one of the electric eyes senses a partial blocking of its beam."
Corrective Action	1) Clean / blow off lens of affected eye (find locations on electrical diagram if needed.) 2) Acknowledge message. If message persists adjust sensitivity of the eye, if necessary replace the sensor. (See literature supplied with the machine for how to adjust sensor.)
# 18	"Case Discharge Backed Up" The downstream sensor / photo eye that detect the amount of cases on "Take-a-way" conveyor has been blocked for time and has cycle stopped the machine. When the cases move away from and unblock the discharge eye the machine will restart.
# 19 (hot melt only)	"No Case Glue Pattern Select" A glue pattern has not been selected for the machine to run from the multiple preset patterns.
Corrective Action	1) Select "machine options" on main menu 2) Select "select case" 3) Select a corresponding case and glue pattern from the case select screens. Return to the main menu after selection and start machine.
# 20 (tape only)	"No Tape / Low Tape" This message means that the tape has run out or broken. This fault will not clear until the tape is replaced or re-threaded.
# 21	"Access Denied" This mean you can not change a certain preset without the access key in the "On" position.

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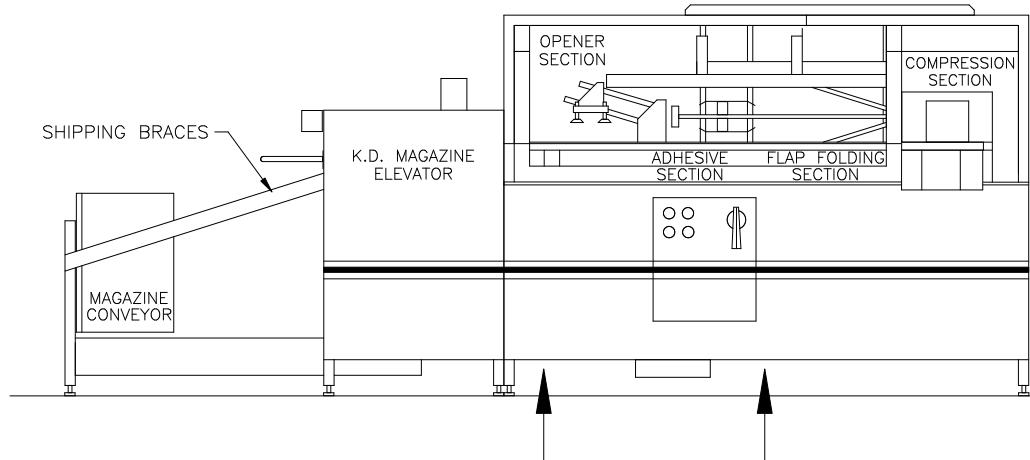
Case Erector-Bottom Sealer

INSTALLATION INSTRUCTIONS

This section will cover machine placement, pre-operating procedures, and installation testing procedures. In addition to these instructions there also may be additional or replacement instructions in the pocket of this technical manual.

MACHINE PLACEMENT

- When the machine arrives at your facility be sure to move the skid(s) as close as possible to the final operating location.
- Remove any shipping materials (visqueen, skid mounting bolts, etc.,) from all parts except air cylinders (strings, banding, or tie materials may hold the cylinder rods in place).
- Remove the machine parts from their skids using a fork lift at the designated lift points. Do not twist or handle the machine roughly. Discard the skid materials.

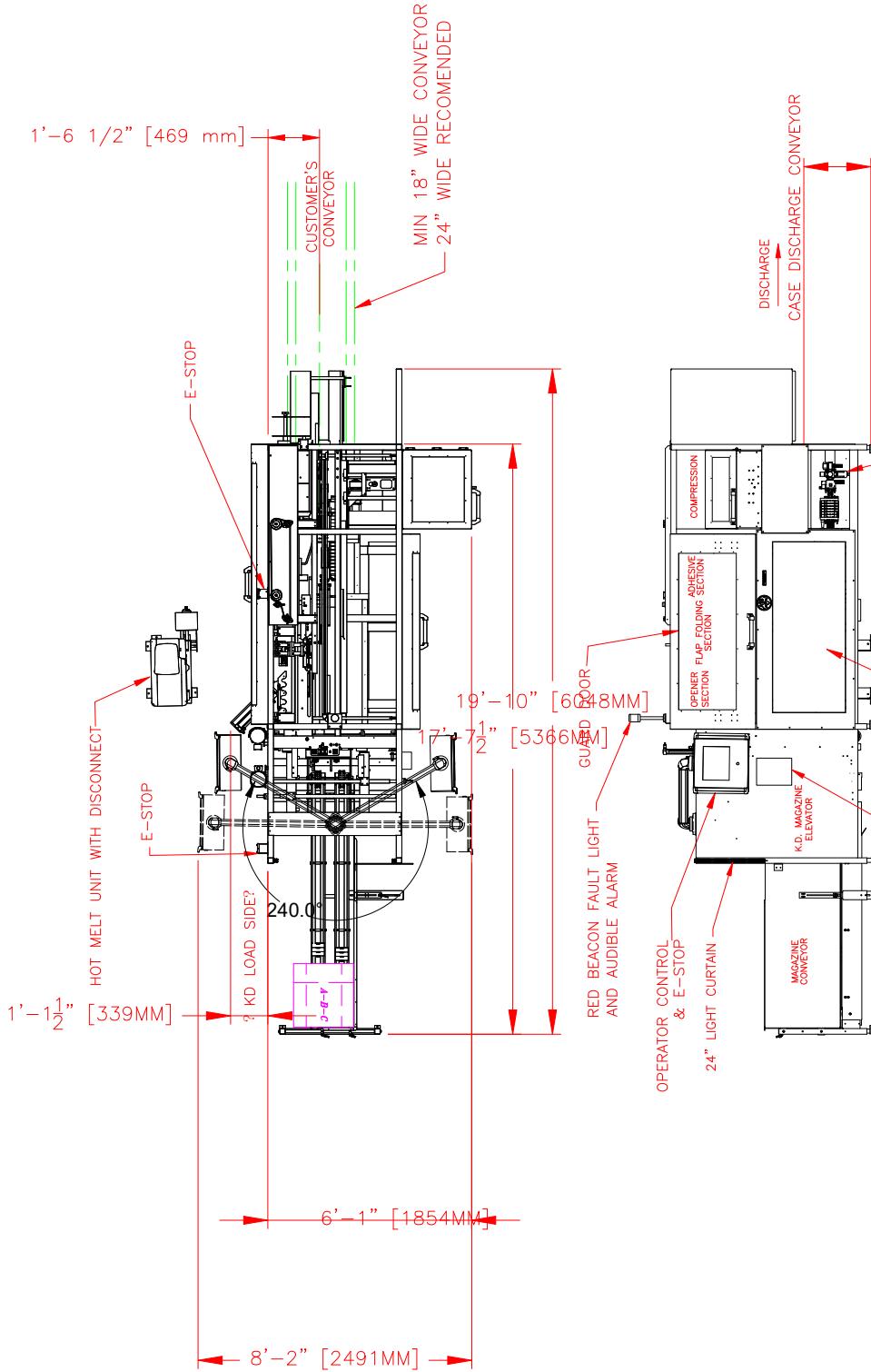


DESIGNATED LIFT POINTS

- Using the fork lift gently lower the machine into its final operating location. Machines that require assembly of machine sections may give additional instructions on separate pages in the pocket of this technical manual or sections may be tagged.
- Match the heights of all facility infeed and discharge conveyors to the packaging machine. Where applicable, adjust the packaging machine conveyor heights.
- Level the machine.
- Remove and discard all strings, banding, or tie materials.

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MACHINE ASSEMBLY WITH CUSTOMER CONVEYOR

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PRE-OPERATING PROCEDURES

- Check and tighten all loose nuts, bolts, and set screws. Motion during shipping may have loosened these parts.
- Check all moving parts for free motion. This would include all air cylinders and their related devices.
- Lubricate the machine according to the maintenance pages included with this manual.
- Once again, be sure the machine is level.
- Connect the facility air supply hose to the machine. Your facility air supply hose should provide 80 to 85 p.s.i. and be a minimum of 1/2" diameter.
- Wire the facility electrical supply line into the machine electrical enclosure. See the wiring diagram for this machine located in the pocket of this technical manual to verify the electrical requirements.

INSTALLATION TESTING PROCEDURES

- Ensure that the push-pull button (PB1) is pushed in.
- Turn the disconnect switch (DISC) to the "on" position.
- Pull out the push-pull buttons (PB1 & PB3).
- Verify the motors for correct rotation.
- Check to see if all of the air cylinders and their components function properly. Should a problem occur, call an A-B-C service representative immediately (1-727-937-5144).

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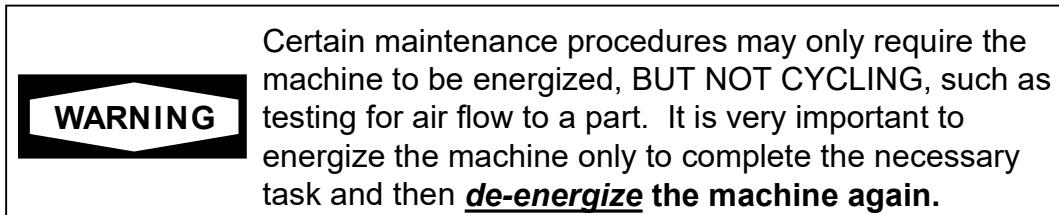
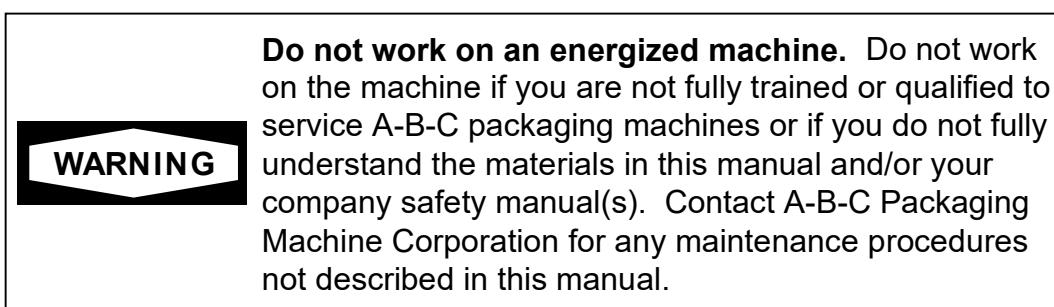
Model “400”

Case Erector-Bottom Sealer

SETTING UP OR CHANGING SIZES

The final step towards operation of the packaging machine is setting up the machine or changing the machine for different size cases. For the most part, your machine should be set up for a specific case size when it comes to you. If you have more than one case size, you will need to make adjustments.

If your machine uses glue adhesive, please be aware that the adhesive system may require up to an hour to be preheated prior to operation. See your adhesive systems manual for proper instruction.



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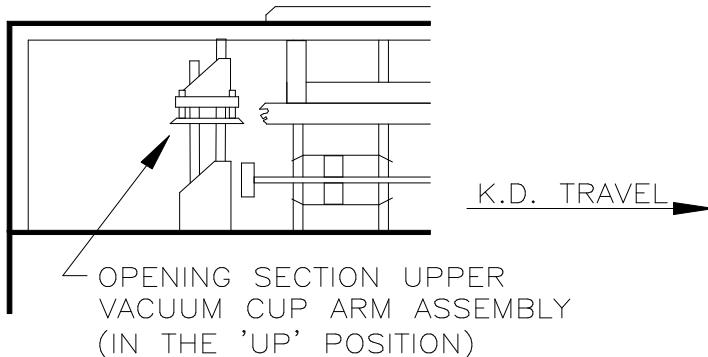


FIGURE 4.1 - OPENING SECTION UPPER VACUUM CUP IN "UP" POSITION

Stop the Model "400" with the opener section upper vacuum cup arm assembly in its upward position (see figure 4.1). Before making any adjustments de-energize both the electrical and pneumatic systems (relieve the system air supply).

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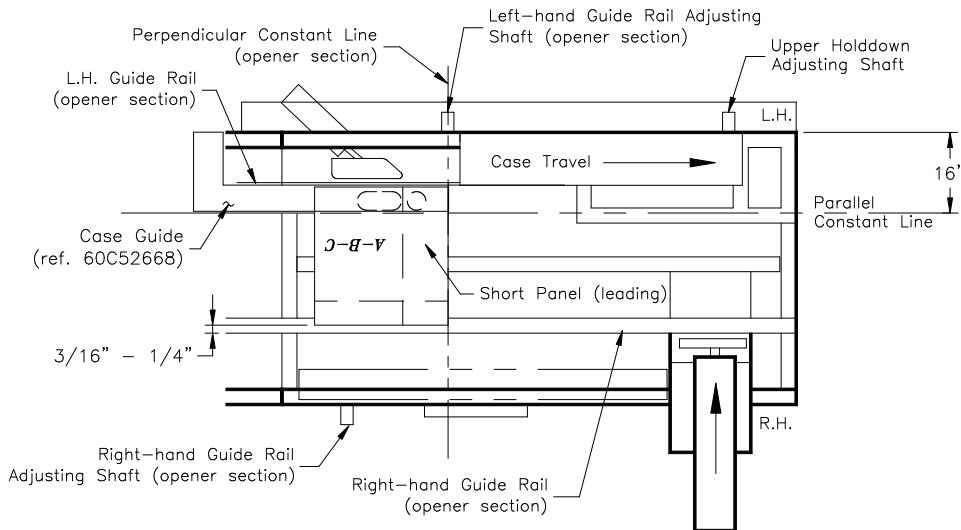


FIGURE 4.2 - ADJUSTING FOR DIFFERENT CASE SIZES

- Starting in the opening section, place one K.D. (with the short panel of the K.D. leading) in between the guide rails so that the bottom score line is laying along the parallel constant line of the machine (16" parallel to the left-hand side of the machine). See figure 4.2.
- Adjust the left hand guide rail in this section by using the adjusting crank handle to turn the adjusting shaft (on left hand side of the machine to the rear of the opener section) until the left hand guide rail is just up against the bottom flap. See figure 4.2.
- Now go to the right hand side of the machine and use the adjusting crank handle to turn the adjusting shaft (on the right-hand side of the machine directly across from the opener section) until the right hand guide rail is $3/16" - 1/4"$ away from the top flap of the K.D. See figure 4.3.
- Go back to the left hand side of the machine and move the K.D. so that the leading edge is on the perpendicular constant line of the opener section (a scribe line located $3/16"$ past the clearance hole for last lower vacuum cup). See figure 4.2.

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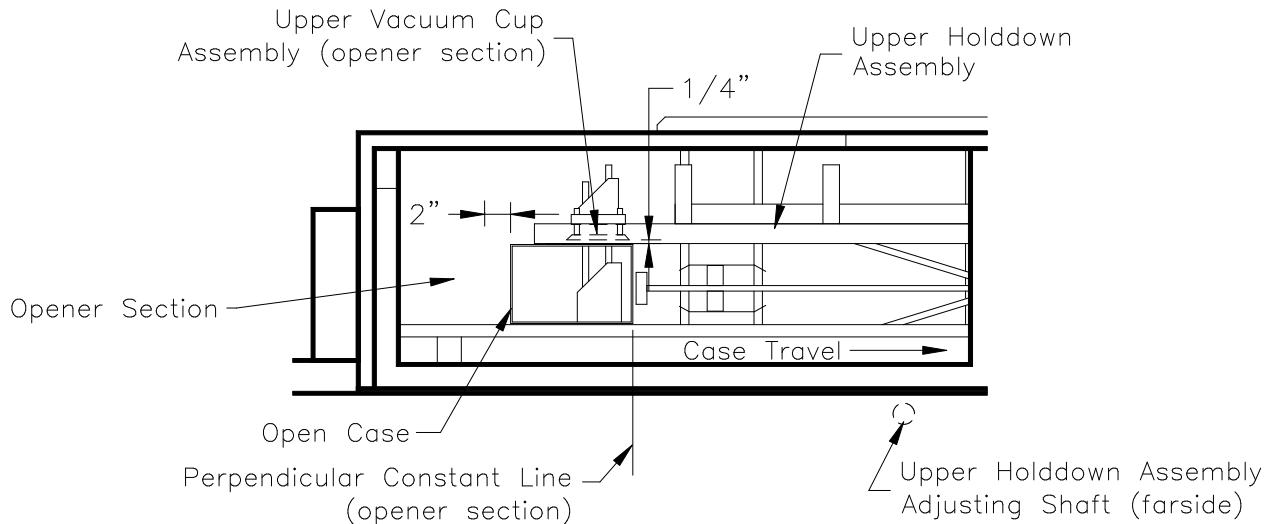


FIGURE 4.3 - ADJUSTING FOR K.D. IN ERECT POSITION

- While maintaining the position of the K.D. in relation to the previously mentioned constant lines (references figure 4.2), erect the K.D. so that it is a fully opened case. Adjust the upper hold-down assembly by using the adjusting crank handle to turn the adjusting shaft (on left hand side closest to the discharge end of the machine) until the hold-down assembly is resting on top of the case. There should be just enough pressure to stabilize the case as it is pushed through the machine. See figure 4.3.
- Use the adjusting handles on the opening upper vacuum cup assembly to set the vacuum cup so that it is $1/4"$ above the upper hold-down assembly. Ensure also that the vacuum cup is set toward the leading portion of the upper major flap rather than the rear portion of that flap. The upper vacuum cup must also be level and parallel to the travel machine. See figure 4.3.

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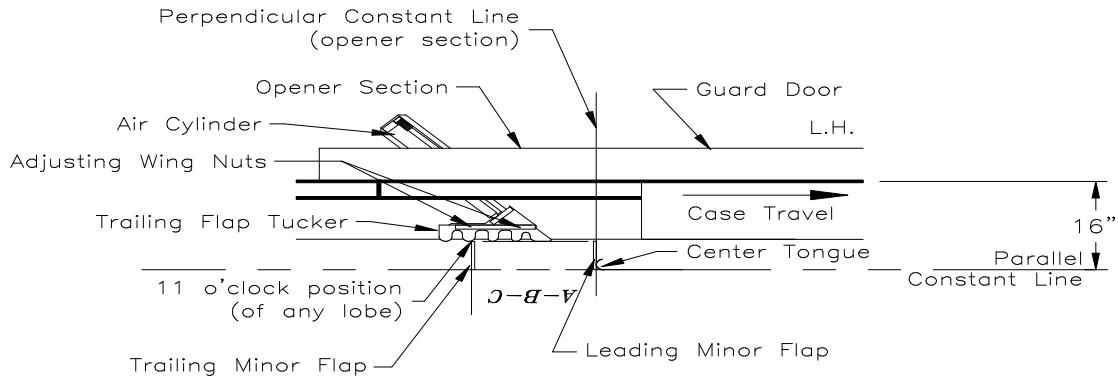


FIGURE 4.4 - ADJUSTING TRAILING FLAP TUCKER ARM

- If the trailing flap tucker arm assembly is not withdrawn (with the power turned off) gently pull back the trailing flap tucker arm into the air cylinder. Loosen the two wing nuts and adjust the trailing flap tucker so the rear minor flap of the case is hit by the front of one of the curves (about 11 o'clock on a lobe). See figure 4.4

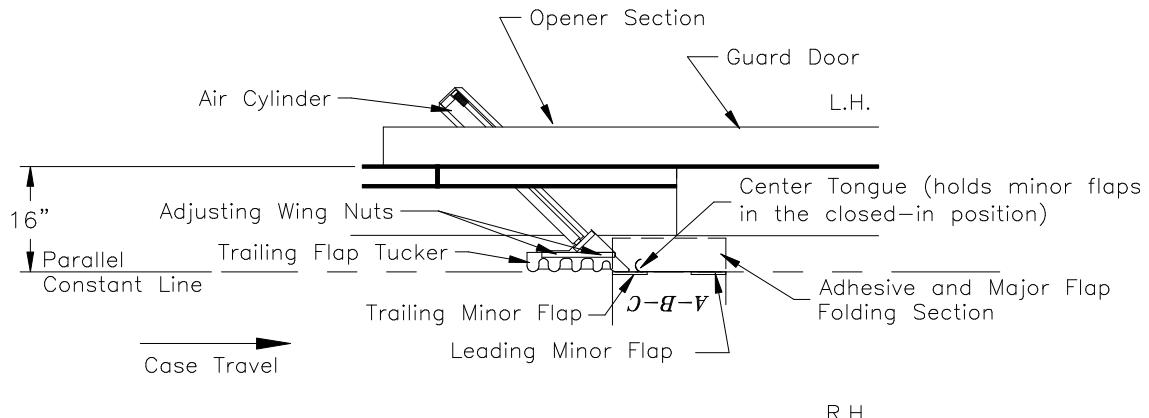


FIGURE 4.5 - ADJUSTING TRAILING FLAP TUCKER (CONT.)

- Next, fully extend the air cylinder until the front of the lobes are parallel with the parallel constant line of the machine (16" from the left hand side). Move the case along until the leading minor flap is folding, but ensure that this flap does not hit the flap tucker and form a pinch point as it is closing (readjust if necessary). Continue to move the case forward, now make sure that the flap tucker can hold the trailing minor flap in until it reaches the center tongue (to avoid the trailing minor flap from springing back out before it gets to the glue head or folding bars). See figure 4.5.
- Retract the air cylinder again to reconfirm the point of contact at the beginning of the fold (about o'clock on a lobe) See figure 4.4.

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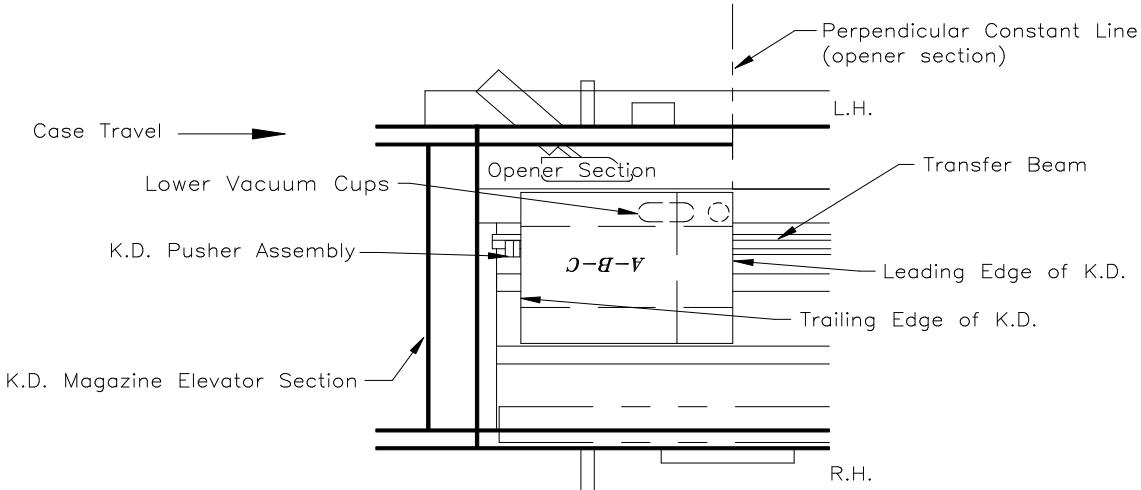


FIGURE 4.6 - ADJUSTING K.D. PUSHER ASSEMBLY

- Now go back to the opener section and loosen the bolts on the K.D. pusher assembly (green hook) at the end of the transfer beam and pull it, with the transfer beam held still, towards the K.D. magazine elevator. See figure 4.6.
- Place a K.D. in the opener section so that the leading edge of the flap (not the body) is on the perpendicular constant line of the opener section (a scribe line located 3/16" past the last clearance hole for the lower vacuum cup - reference figure 4.2) Loosen the bolts on the opener K.D. stop (green hook located on the transfer beam) and move it up against the trailing edge of the K.D. and retighten the K.D. pusher. See figure 4.6.

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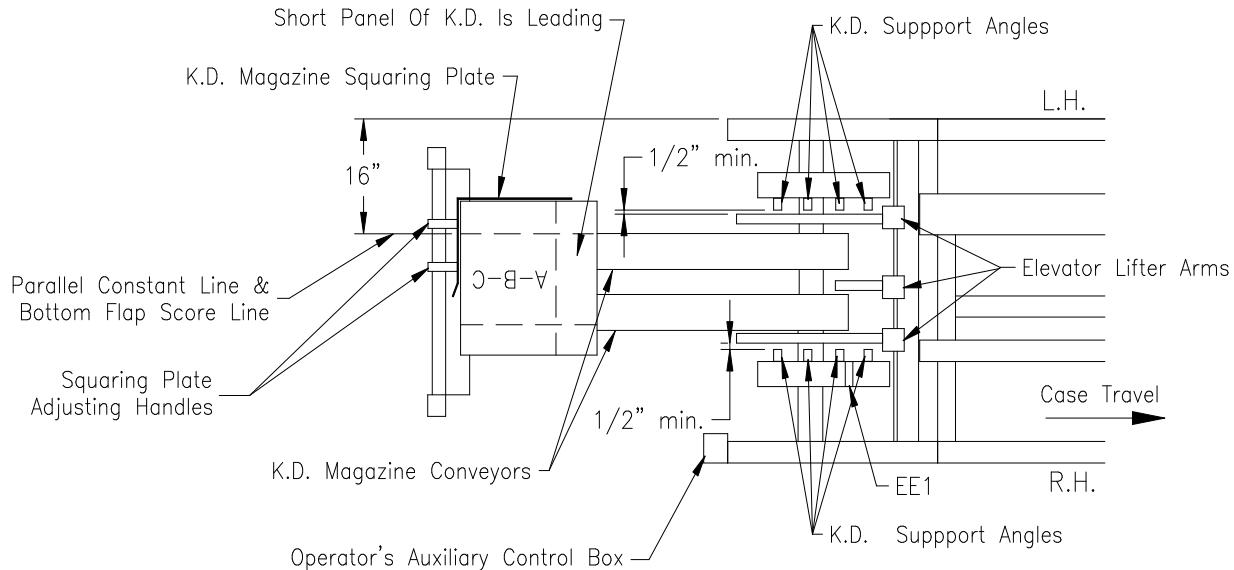


FIGURE 4.7 - ADJUSTING ELEVATOR LIFTER ARMS

- Remove the K.D. previously placed into the opener section. Use the operator's controls to energize the machine, then carefully trip EE1 (located at the bottom of the elevator) to raise the elevator lift arms [three (3) total]. Push the stop button when the elevator lifter arms are level with the K.D. support angles [eight (8) total]. De-energize the machine and arrange the elevator lifter arms in between the K.D. conveyors and the side K.D. support angles (maintain a minimum of 1/2" from the edge of the K.D. support angles) See figure 4.7.
- Starting at the auxiliary magazine, place a K.D. (with the short panel of the K.D. leading) on the end of the table top chain conveyors against the squaring plate. Loosen the adjustment handles to align the squaring plate so that the bottom flap score line of the K.D. is even with parallel constant line of the machine (16" from the left hand side of the machine). Tighten the adjusting handles and load the auxiliary magazine (do not stack the K.D.'s higher than the top of the squaring plate). See figure 4.7.

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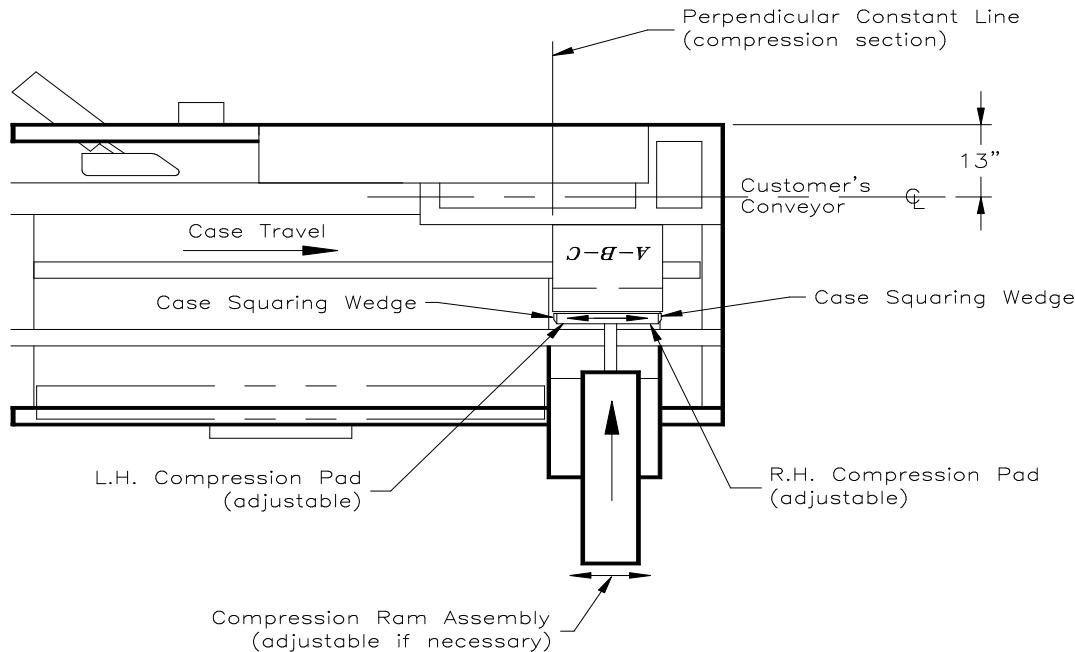


FIGURE 4.8 - RUNNING ONE CASE AS A TEST

- Energize the machine and run one case through to check adjustments and proper operation. When the case gets to the end of the machine and the compression ram starts to extend toward the case and is just about to hit it, stop the machine. The trailing edge of the case at this position is the perpendicular constant line of the compression section. De-energize the machine. See figure 4.8.
- The squaring wedge of the left hand compression pad should just graze the inside of the case as it enters it. Note, it may be necessary to identify the correct set of compression pads if this machine is to run more than one case size. See figure 4.8.
- Adjust the right hand compression pad so that the squaring wedge fits just inside the case for proper squaring of the case. See figure 4.8.

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GLUE ADHESIVE OPTIONAL

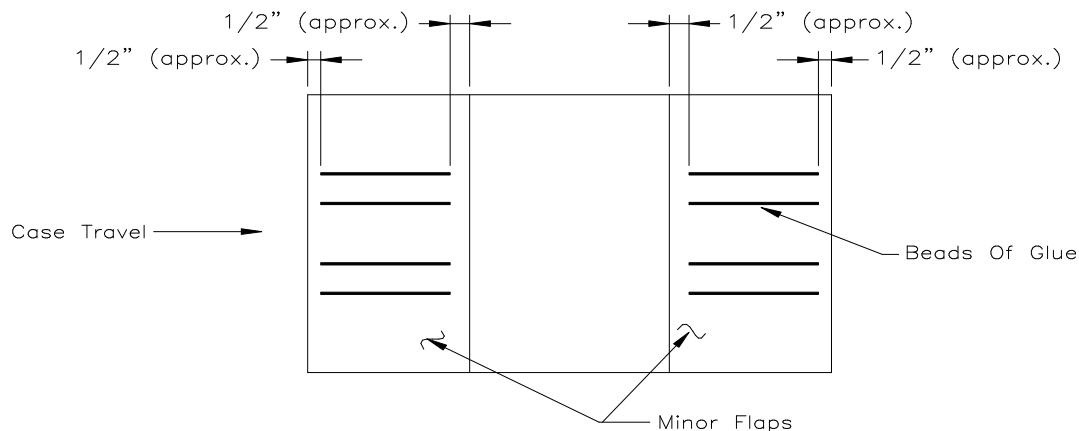


FIGURE 4.9 - CHECKING GLUE PATTERN ON FLAPS

Open the sealed flaps of the case and check the glue pattern on the flaps. Adjust glue pattern if necessary to leave approximately 1/2" in between the edges of the minor flap and the edge of glue bead. See figure 4.9.

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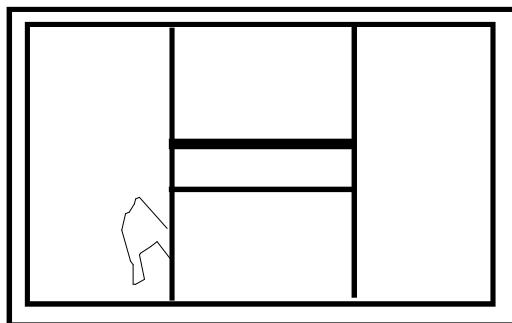
Case Erector-Bottom Sealer

COMMON CASE SETUP PROBLEMS

Sometimes the adjustment process will need a little bit of fine-tuning. Here are some examples of common case set up problems and their causes.

Problem: Rear minor case flap is damaged.

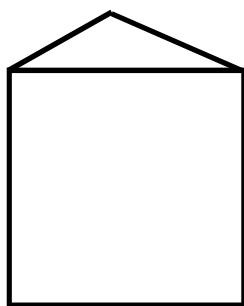
Cause: Trailing flap tucker is not properly adjusted (see figures 4.4 and 4.5)



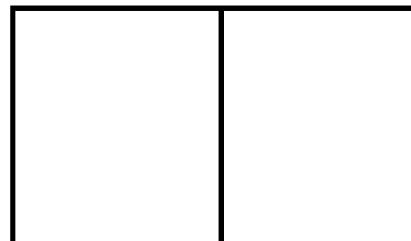
Top View (Looking Inside The Knock-Down Case)

Problem: Major flaps not properly sealed.

Cause: Support channel guide angle (an upper hold down bar assembly that supports the upper side of the case while being sealed) is not properly adjusted (too loose).



End View of Case



Bottom View of Case

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MAINTENANCE OVERVIEW

The maintenance schedule, for a basic machine, is only a **GUIDELINE** for normal operation. Normal operation may be defined as operating the machine for eight hours a day, five days a week under the designed operating parameters of the machine. If your machine will be used unusually lightly or heavily, then you should adjust your maintenance schedule accordingly. All items listed do not apply to all machines. Please disregard those items that do not apply to your machine.



Do not work on an energized machine. Do not work on the machine if you are not fully trained or qualified to service A-B-C packaging machines or if you do not fully understand the materials in this manual and/or your company safety manual(s). Contact A-B-C Packaging Machine Corporation for any maintenance procedure not described in this manual.



Certain maintenance procedures may only require the machine to be energized BUT NO CYCLING, such as testing for airflow to a part. It is very important to energize the machine only to complete the necessary task and then **de-energize the machine again.**

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MAINTENANCE SCHEDULE

Actions to be performed Daily:

SECTION	ACTION
Electric Eyes & Reflectors	Clean lenses and reflective surfaces
Entire Machine	Blow off dust, clear out product accumulation, wipe off excessive grease
Filters - Air & Vacuum	Clean or replace
Glue System	Remove excess glue. CAUTION, may be extremely hot
Lubricators - Air & Vacuum	Check oil level (if applicable)
Running Shafts	Grease (if required)
Slide Bars	Grease (if required)

Actions to be performed Weekly:

SECTION	ACTION
Air Cylinders	Check for leakage
Air Lines	Check for leaks and loose connections
Bearings	Grease (if applicable)
Belts	Check tension, tracking, and laces
Cam Follower bearings	Grease
Chains	Check tension
Chain slides	Grease
Control Valves	Check for leakage
Rear-End Gear Boxes	Check oil level and refill as required
Proximity Switches	Check operation and mountings
Speed Reducers	Check oil level and refill as required
Vacuum Control Valves	Clean
Vacuum Cups	Check for wear and replace as required
Vacuum Hoses	Check for leaks and loose connections

Actions to be performed Monthly

SECTION	ACTION
Adjusting Shafts	Grease threads
Casters	Grease
Chains	Check for loose, broken or missing cotter pins. Tighten as required.
Entire Machine	Check for worn belts, loose and worn parts and clean thoroughly
Roller Chains	Grease
Sprockets	Check alignment, keys and tighten set screws

Actions to be performed Bi-Monthly

SECTION	ACTION
Collars	Tighten set screws
Entire Machine	Tighten all fasteners. Clean all rust spots and repaint if applicable.
Flow Controls	Adjust as required and tighten set screws

Actions to be performed Semi-Annually

SECTION	ACTION
Air Cylinders	Rebuild or replace
Air Valves	Rebuild or replace
Rear-End Gear boxes	Replace oil
Speed Reducers	Replace oil

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RECOMMENDED LUBRICANT LIST

The following list contains the lubricants that are used at the A-B-C Packaging Machine Corporation factory in assembling your machine(s). We suggest these lubricants continue to be used with your machine(s).

Recommended Lubricant List Table

Item	Manufacturer	Description
Adjusting Shafts, Bearings, Cam Followers, Chain Tracks, Flight Chain Clutch Assemblies, Slide Bars, Slide Shafts and Zerk Fittings	MobilGrease FM101	* Anti-Wear NLGI#1
Enclosed Rear-End Drive	MobilGrease FM101	* Anti-Wear NLGI#1
(ABC Manufactured)	MobilGrease FM101	* Anti-Wear NLGI#1
Open Bevel Gear	MobilGrease FM101	* Anti-Wear NLGI#1
Worm Gear Reducers	Exxon - Mobil	** Mobilgear 636
Rear End Drive – Purchased Part No. P102-043	Exxon - Mobil	** Mobilgear 636

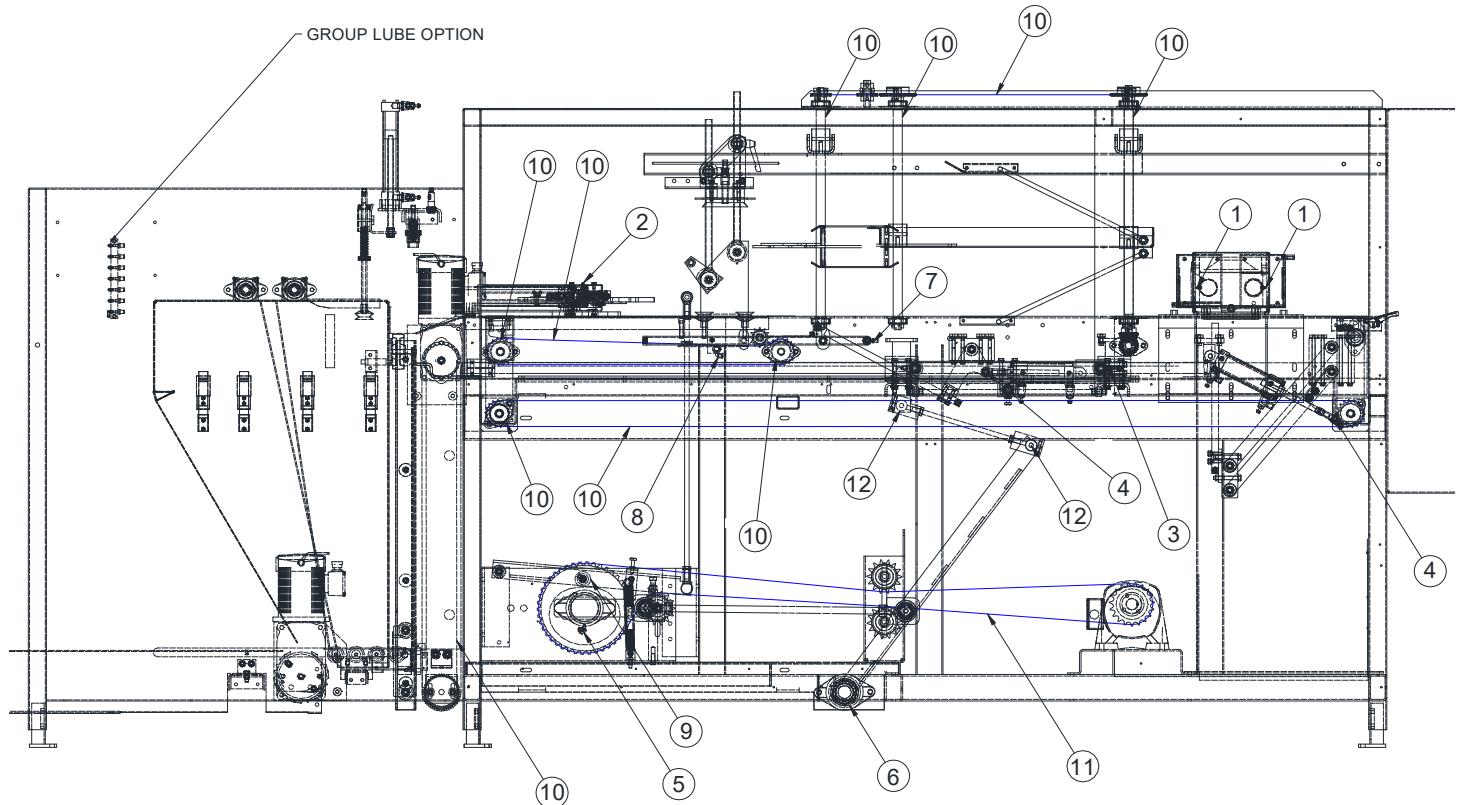
* Rated USDA H-1 ** Rated USDA H-2

Alternate Lubricant List

Item	Manufacturer	Description
Adjusting Shafts, Bearings, Cam Followers, Chain Tracks, Flight Chain Clutch Assemblies, Slide Bars, Slide Shafts and Zerk Fittings	Keystone Lubriplate Mobile McMaster-Carr	* Nevastane 2 plus * SFL - 2 * Mobilith AW2 / Gainer # 42F46 * Teflon food grade anti-sieze Mc # 1404K12 Cartrige
Enclosed Rear - End Drive	Keystone Lubriplate Exxon Mobile McMaster-Carr McMaster-Carr	Nevastane 2 plus * SFL - 2 Polyrex EM Mobil 1 Synthetic / Grainger # 6Y777 * Synthetic Teflon Grease PN # 1378K33 * Open Gear Grease PN # 1403K21
Open Bevel Gear	McMaster-Carr Keystone Lubriplate Mobile	* Open Gear Grease PN # 1403K21 * Nevastane 2 plus * SFL - 2 * Mobilith SHCPM Synthetic Bearing Grease Grainger # 42F48
Float - A - Shaft (Tol - O - Matic)	Keystone Lubriplate Mobil McMaster-Carr McMaster-Carr Exxon	* Nevastane 2 plus * SFL - 2 Mobile 1 Synthetic Grainger # 6Y777 * Synthetic Teflon Grease PN # 1378K33 * Open Gear Grease PN # 1403K21 Polyrex EM
Worm Gear Reducers	Mobil McMaster-Carr	Mobil Synthetic Gear Oil 75W90 Synthetic Gear Oil PN # 13665K51
Rear End Drive - Purchased Part No. P102-043	McMaster-Carr	Synthetic Gear Oil PN # 13665K51

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Case Erector-Bottom Sealer



LUBE POINT SCHEDULE - GLUE OPTION

REF	INTERVAL	LOCATION	QUANTITY
1	WEEKLY	COMPRESSION RAM	2 POINTS
2	WEEKLY	TRAILING FLAP TUCKER	1 POINT
3	WEEKLY	CARRIAGE SHAFT LINEAR BEARINGS	2 POINTS
4	WEEKLY	CASE PUSHER BAR ROD ENDS	2 POINTS
5	WEEKLY	CRANK SHAFT	2 POINTS
6	WEEKLY	PIVOT SHAFT	2 POINTS
7	BIWEEKLY	LOWER VACUUM CUP LIFTER ARM	1 POINT
8	BIWEEKLY	LIFTER ARM PIVOT BLOCK	1 POINT
9	WEEKLY	LIFTER ARM CAM BEARING	1 POINT
10	BIWEEKLY	ADJUSTING SHAFTS AND ROLLER CHAIN	10 POINTS
11	WEEKLY	DRIVE CHAIN	1 POINT
12	WEEKLY	LINKAGE ROD BEARINGS	2 POINTS

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TROUBLESHOOTING OVERVIEW

The information in this section should help you solve many of the problems and probable causes that may happen with your machine. This manual is intended to describe only the basic machine.

WARNING

Do not work on an energized machine. Do not work on the machine if you are not fully trained or qualified to service A-B-C packaging machines or if you do not fully understand the materials in this manual and/or your company safety manual(s). Contact A-B-C Packaging Machine Corporation for any troubleshooting procedure not described in this manual.

WARNING

Certain troubleshooting procedures may only require the machine to be energized but BUT NOT CYCLING, such as testing for air flow to a part. It is very important to energize the machine only to complete the necessary task and then **de-energize the machine again.**

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TROUBLESHOOTING GUIDELINES

Problem	Probable Cause	Solution
Machine will not start	There is not enough air pressure to the machine and the air pressure switch is not being activated.	Increase air pressure to the machine.
	The stop button(s) is pushed in.	Pull out PB1 and PB3 stop buttons.
	The disconnect is not in the "on" position.	Check the disconnect and turn to "on"
	The main or control fuse(s) is blown.	Check and replace fuse(s) if necessary
	The motor protector(s) has been tripped.	Reset or replace the motor protector(s) if necessary.
	The guard door magnetic switch(es) is not contacting or is defective.	Check, align, or replace MS1 or MS2 if necessary.
	The control relay is defective.	Check and replace
Air supply valve is not energizing.	Disconnect is not on, main or control fuse is blown.	Check disconnect or fuses. (PB1 or PB3)
Fault light is on.	Magnetic door switch is not made.	Check doors or switches (MS1 or MS2)
	Stop button(s) is pushed in.	Pull stop button out (PB1 or PB3).
Fault light does not come on when a door is open.	Magnetic switch is defective.	Replace magnetic switch(s) (MS1 or MS2)
K.D. Magazine conveyor does not run	The selector switch (SSW) is not in the "run" position.	Turn the selector switch (SSW) to the "run" position
	The K.D. Magazine elevator is not in the "down" position activating PR2.	Check and lower, if necessary, the elevator to the "down" position activating PR2.
The K.D. magazine stripper does not go down.	The limit valve does not work.	Check and replace if necessary.
K.D. Magazine elevator does not raise up from the conveyor	EE1 is not made by the new stack of K.D. cases	Check EE1 for contact with K.D.'s
K.D. Magazine elevator does not raise	EE2 is not seeing the target or is defective	Check the setting on EE2, clean the eye lens and target or replace
K.D. Magazine elevator raises K.D.'s higher than EE3 (does not stop)	EE2 is knocked out of alignment or is defective	Reset position of sight or replace
Case does not open.	The vacuum cups are not compressing on the case.	Make sure the arms that hold the opener head are level when the head is down.
	The knock-down pusher is not set correctly.	See set up instructions

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Troubleshooting Guidelines Continued

Problem	Probable Cause	Solution
Rear flap does not tuck properly.	The tucker is not set properly.	See set up instruction.
Major flaps do not fold properly.	The case is not centered going through the folders.	Adjust the upper section to the center of the case with the middle guide.
	The opposite guide rail is not adjusted correctly.	Adjust the opposite rail.
No glue adhesive (optional).	EE4 is not made or is defective.	Check EE4 for contact or replace.
	Adhesive pattern is not working.	See timer manual.
	Adhesive system problem.	See adhesive system manual.
No tape (optional)	Tape spool ran out of tape.	Replace with new roll. See case set-up instructions and the tape applicator manual for threading the tape.
	Tape is threaded improperly	Re-thread the tape. See case set-up instructions and the tape applicator manual.
	Tape applicator problem	See tape applicator manual.
Case is not square	The top hold down bar is not set correctly.	See set up instruction.
	The compression ram plate is not set properly.	Check adjustment of compression pads and squaring wedges so they fit snugly to square the case as the ram enters it.

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***TECHNICAL REFERENCE DRAWINGS AND
PARTS LISTS -***

BASIC MACHINE ASSEMBLIES SECTION

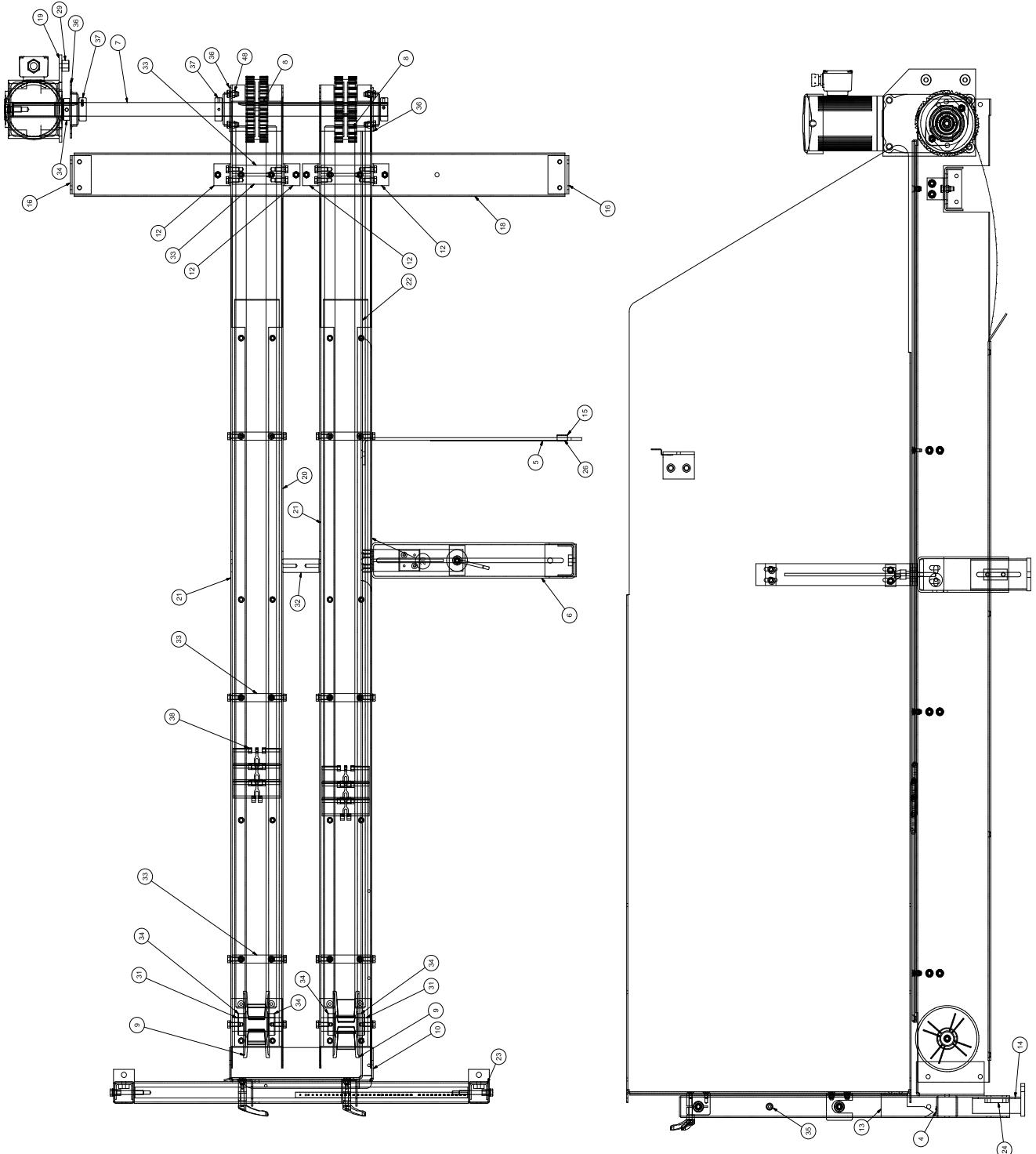
This section does not apply to the adhesive sections.
See the Glue or Tape Option Assembly Sections.

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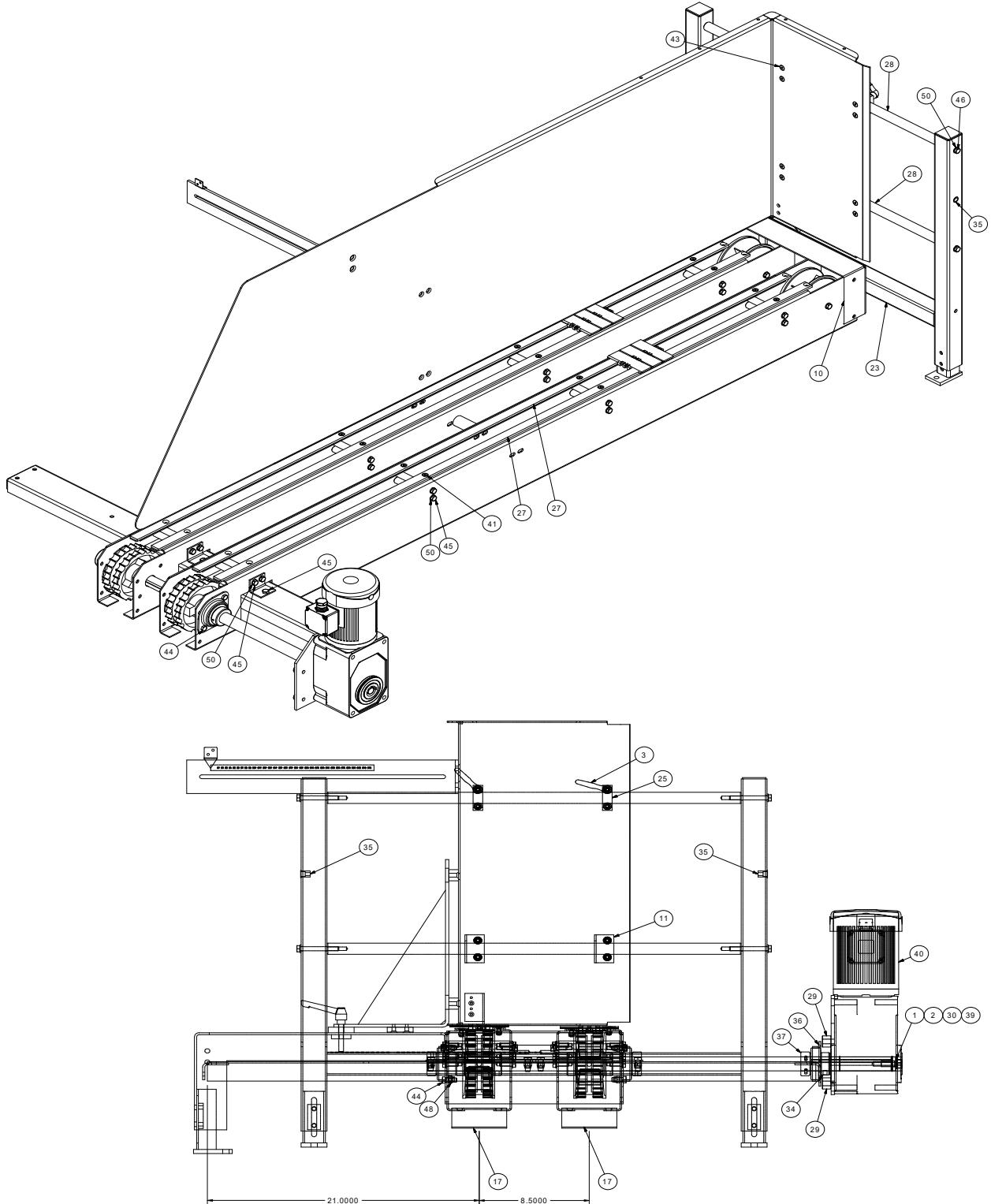
Parts List for model "400"
MAGAZINE CONVEYOR ASSEMBLY

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Parts List for model "400"

MAGAZINE CONVEYOR ASSEMBLY

Assembly #15E12925

ITEM	QTY	PART NUMBER	DESCRIPTION
1	1		1/2 LOCK WASHER
2	1		1/2-13 X 1.25 LG. HEX BOLT
3	2	112A123	HANDLE, P112-044, 5/16-18 ADJ
4	1	118A121	STOP BAR SCALE
5	1	118A139	METAL SCALE, METRIC RH
6	1	15B12926	K.D. BACK STOP SUPPORT ASSEMBLY
7	1	47A6565	MAG. CONVEYOR DRIVE SHAFT
8	2	4A9255-2057	SPROCKET, REX, 25T, 1-1/4B
9	2	4A9255-5105	REGINA IDLER PULLEY
10	1	60A43518	END CAP BRACKET
11	2	60A43525	SLIDE BRACKET
12	4	60A44298	AUX. MAG. CLIP ANGLE
13	1	60A46855	KD POINTER
14	2	60A47821	FOOT
15	1	60A65060	POINTER, KD-STIFFENER ANGLE
16	2	60A74306	CONVEYOR MOUNTING CHANNEL
17	2	60B71738	CHAIN RETURN WAY, 2 FT. EXT.
18	1	60B74305	WIDTH MOUNTING CHANNEL
19	1	60B74447	CONVEYOR MOTOR MOUNT
20	2	60C71737	SIDE CHANNEL, CONVEYOR, 2' EXT.
21	2	60C71737 LH	SIDE CHANNEL, CONVEYOR, 2' EXT.
22	1	60D77530	MAGAZINE BACKSTOP, 2 FT EXT. LH LOAD
23	1	61C2779	END FRAME
24	2	62A21216	LEG NUT PLATE
25	2	62A25309	CLAMP BLOCK

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Parts List for model "400"
MAGAZINE CONVEYOR ASSEMBLY
Assembly #15E12925

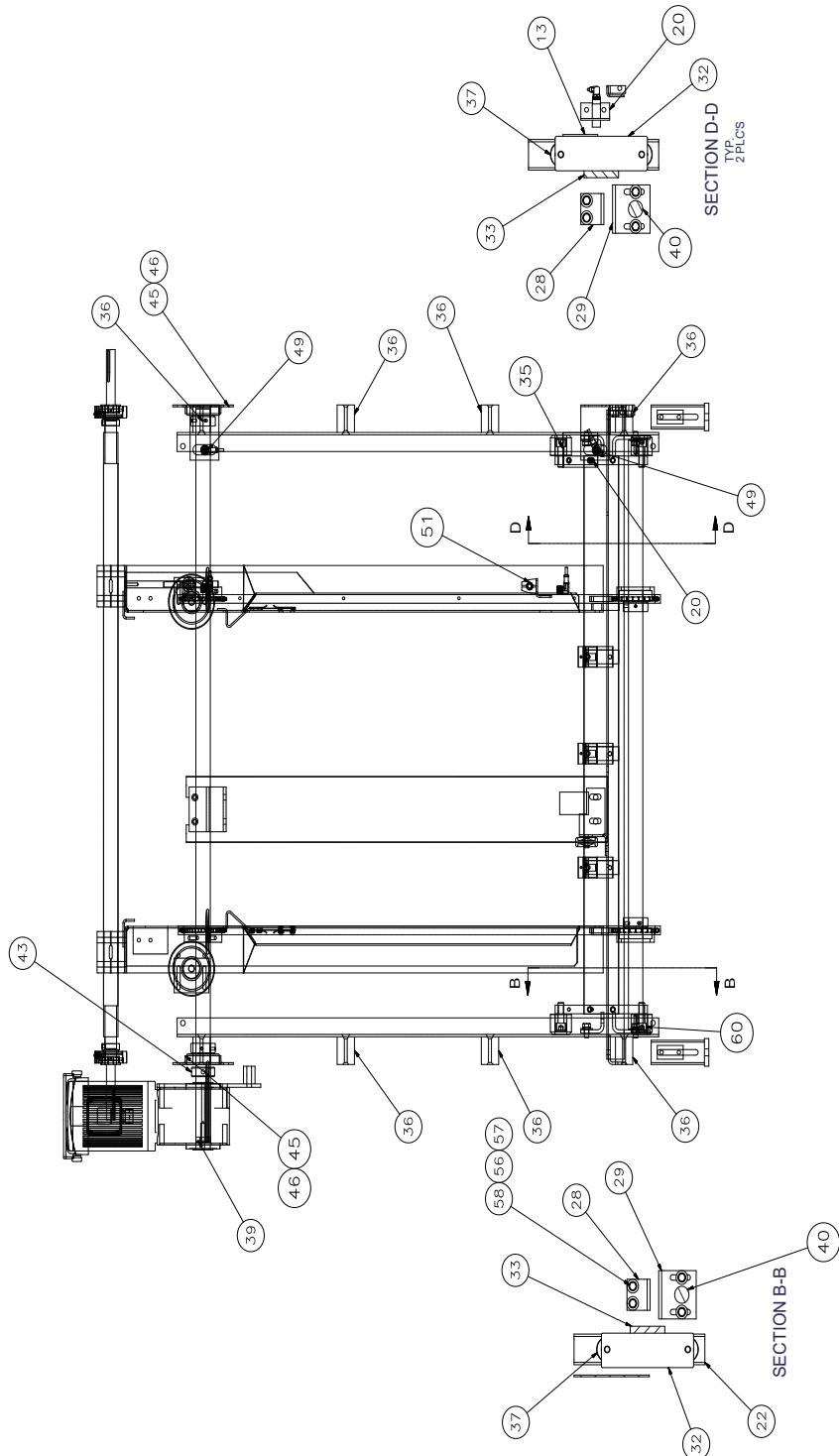
ITEM	QTY	PART NUMBER	DESCRIPTION
26	1	62A27666	KD BACKSTOP STIFFENER ANGLE
27	4	62B36011	CHAIN WAY, CONVEYOR, 2 FT EXT.
28	2	63A11028	TIE SHAFT-END FRAME
29	2	63A11120	SPACER, FLAP TUCKER MOUNTING
30	1	63A2500	VACUUM CUP SPACER
31	2	63A8861	IDLER SHAFT
32	1	63A9367	AUX. MAG. TIE BAR SPACER
33	16	63A9462	TIE ROD
34	5	P110-009	1 1/4" SET COLLAR
35	2	P114-016	ITR FASTENER 3/8-16
36	3	P43-040	2 HOLE BEARING ADAPTER
37	3	P44-016	BALL BEARING 1-1/4 ID
38		P48-111	TABLE TOP, 4-1/2W, PLASTIC
39	1	P55-072	RETAINING RING 1.25 INTERNAL
40	1	P71-1371	BROTHER 1/2HP GEAR MOTOR
41	12	WFHCS-1/4-20x0.75	FLAT HEAD CAP SCREW
42	4	WFHCS-5/16-18x0.75	FLAT HEAD CAP SCREW
43	4	WFHCS-5/16-24x0.625	FLAT HEAD CAP SCREW
44	4	WHHCS-3/8-16x0.875	HEX HEAD CAP SCREW
45	40	WHHCS-3/8-16x1	HEX HEAD CAP SCREW
46	4	WHHCS-3/8-16x3	HEX HEAD CAP SCREW
47	12	WHLKN-1/4-20	HEX LOCK NUT
48	8	WHLKN-3/8-16	HEX LOCK NUT
49	4	WHLKN-5/16-18	HEX LOCK NUT
50	40	WRGLW-3/8	REGULAR SPRING LOCK WASHER

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Case Erector-Bottom Sealer



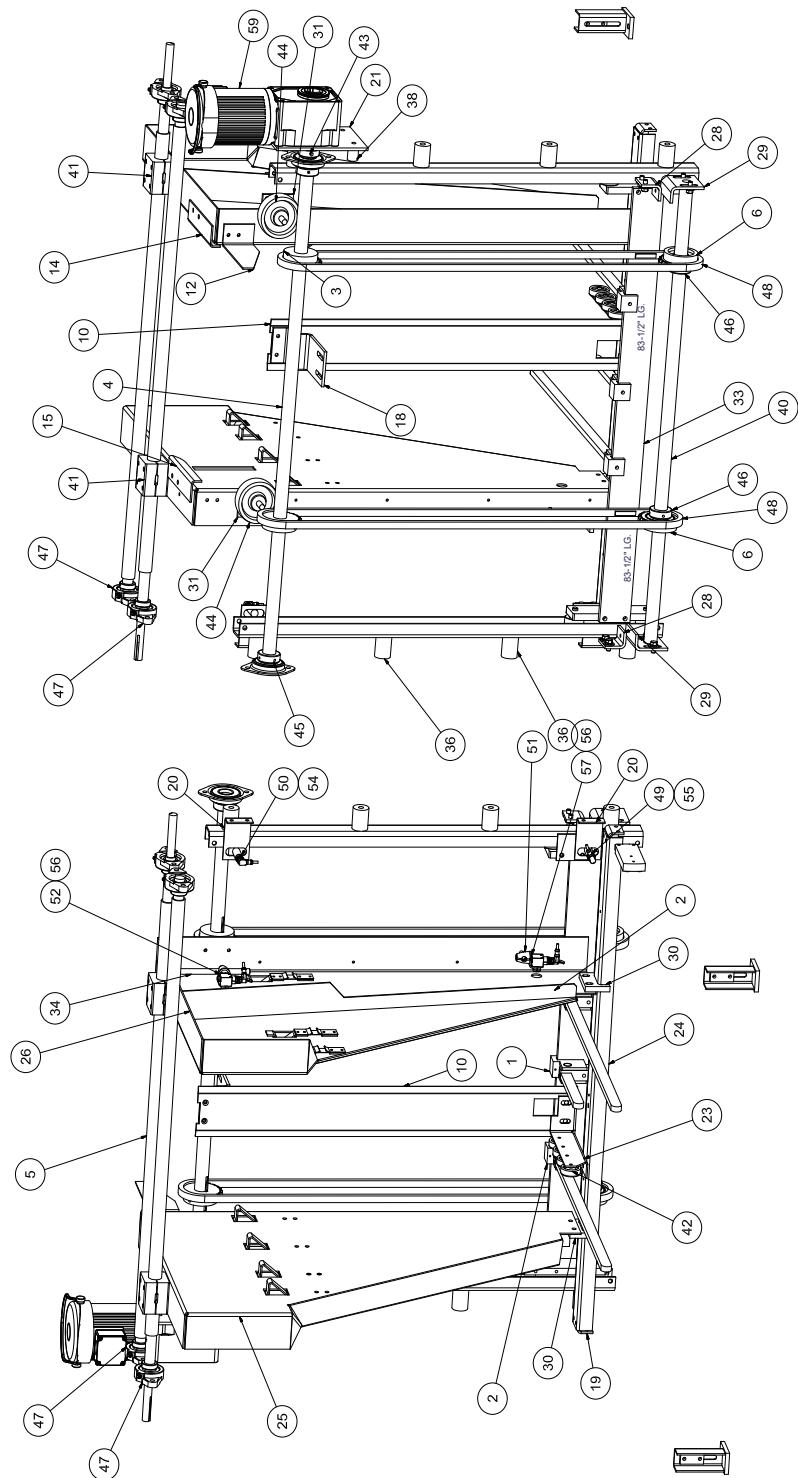
Parts List for model “400” ELEVATOR ASSEMBLY

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Model "400"

Case Erector-Bottom Sealer



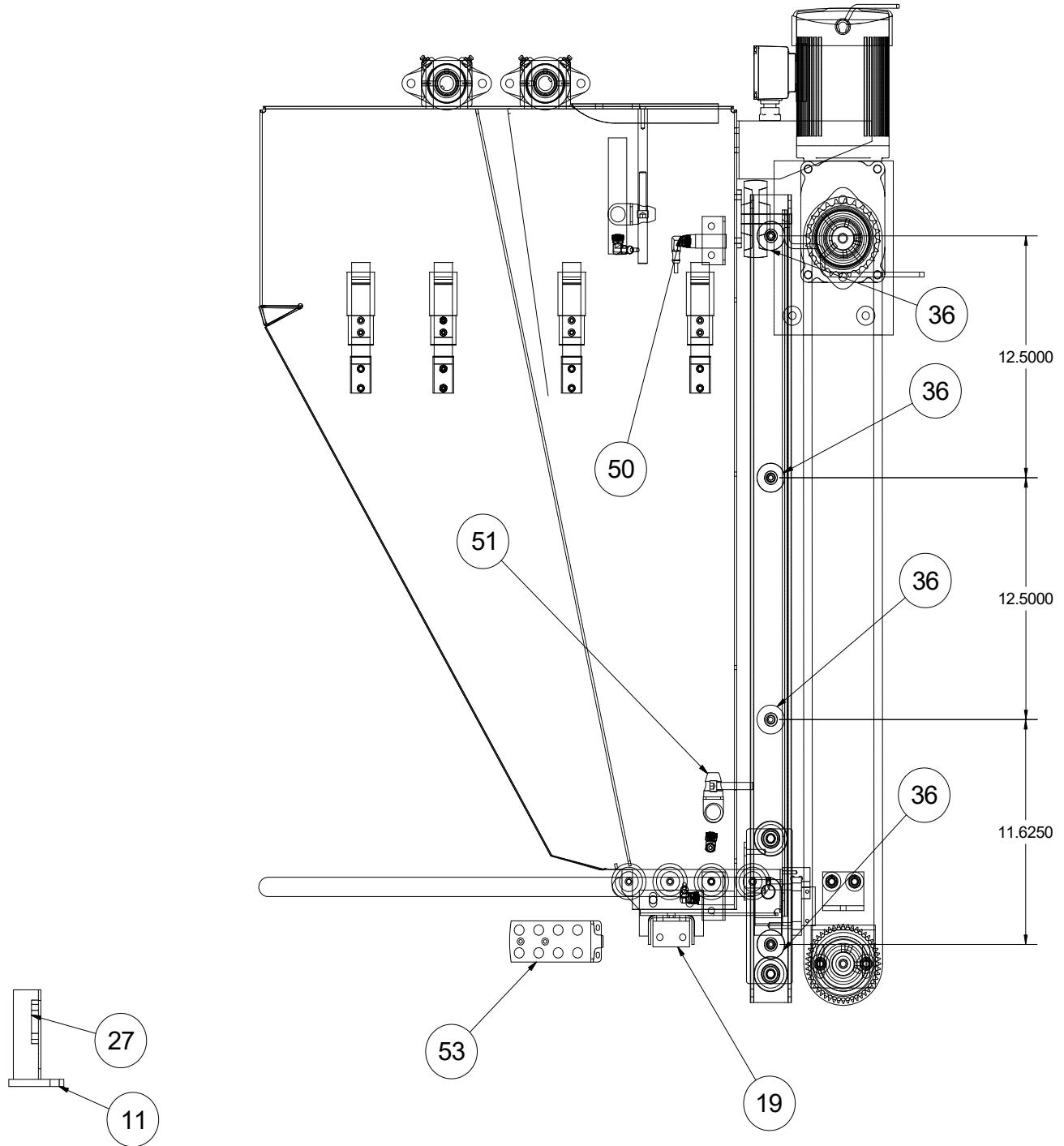
Parts List for model "400"
ELEVATOR ASSEMBLY

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TECHNICAL MANUAL

Model "400"

Case Erector-Bottom Sealer



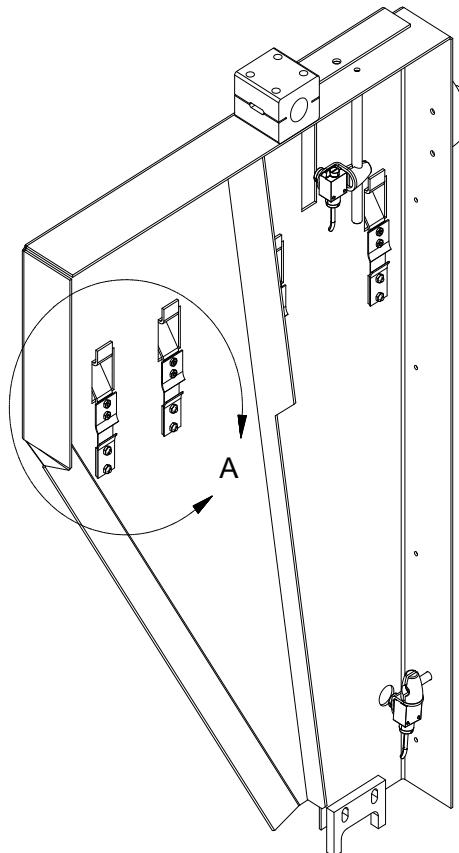
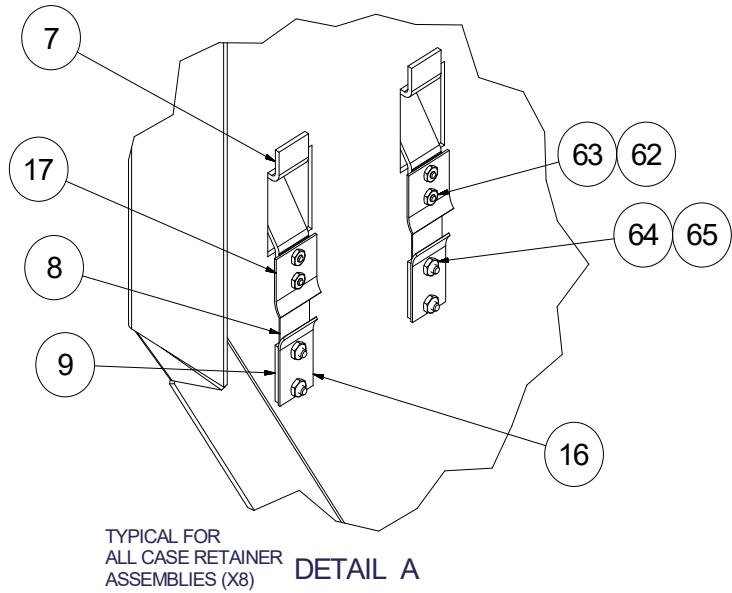
Parts List for model "400"
ELEVATOR ASSEMBLY

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Model "400"

Case Erector-Bottom Sealer



Parts List for model "400"
ELEVATOR ASSEMBLY

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Parts List for model "400"

ELEVATOR ASSEMBLY

Assembly #15E13241

ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	15A6311	ELEVATOR LIFTER ARM, SHORT
2	2	15A9326	ELEVATOR LIFTER ARM, LONG
3	2	40BS24-1.25	SPROCKET 1/2P, 24T, 1.25B, 1/4KW
4	1	47A6566	ELEVATOR DRIVE SHAFT
5	2	47A6567	MAGAZINE ADJUSTING SHAFT
6	2	4A2242-1743	SPROCKET 24T, 1.25 B, C'BORED FOR BALL BRG.
7	8	60A43029	K.D. LEDGE
8	8	60A43030	MAG. CLIP SPRING PLATE - LEDGE
9	8	60A43032	BOLTING PLATE - COUNTERSUNK
10	1	60A46357	BACK STOP MAG. ELEVATOR
11	2	60A47821	FOOT
12	1	60A49978	MAG CASE GUIDE
13	1	60A53245	PROX FLAG
14	1	60A54935	K.D. RETAINER
15	1	60A54935-RH	K.D. RETAINER
16	8	60A56147	SPRING PLATE, BOTTOM
17	8	60A56148	SPRING PLATE, TOP
18	1	60A74343	UPPER BACKSTOP MOUNTING BRACKET
19	2	60A74347	WIDTH CHANNEL MOUNTING BRACKET
20	2	60A74382	PROX MOUNTING BRACKET
21	1	60A74438	ELEVATOR MOTOR MOUNT
22	2	60B44291	VERTICAL TRACK
23	1	60B47464	SKATE WHEEL MOUNTING BRACKET
24	1	60B74340	MAG ELEVATOR LOWER CROSS CHANNEL
25	1	60C53249	LH MAG SIDE GUIDE
26	1	60C53250	RH MAG SIDE GUIDE
27	2	62A21216	LEG NUT PLATE
28	2	62A25405	BRACKET - TAKE UP SCREW
29	2	62A25406	BRACKET - TAKE UP SHAFT
30	2	62A25409	GUIDE BLOCK - LOWER (MAG. SIDE GUIDE)
31	2	62A33324	KNOCK DOWN RETAINER BRACKET
32	2	62A36979	ELEVATOR ROLLER MOUNT BRACKET
33	1	62B36984	ELEVATOR CARRIAGE, WELDMENT

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Model "400"

Case Erector-Bottom Sealer

Parts List for model "400"

ELEVATOR ASSEMBLY

Assembly #15E13241

ITEM	QTY	PART NUMBER	DESCRIPTION
34	1	63A10375	PROX MOUNTING POST
35	4	63A11128	ROLLER SHAFT
36	8	63A13482	MAG. VERTICAL TRACK SPACER
37	4	63A13486	ELEVATOR ROLLER
38	2	63A13492	MOTOR MOUNT SPACER, (BROTHER MOTOR)
39	1	63A2500	VACUUM CUP SPACER
40	1	63A8913	SHAFT - LOWER TAKE UP
41	2	64B495	ADJUSTING NUT
42	4	P109-001	SKATE WHEEL
43	1	P110-009	1 1/4" SET COLLAR
44	2	P42-1002	POLYPROPYLENE WHEEL
45	2	P43-040	2 HOLE BEARING ADAPTER
46	4	P44-016	BALL BEARING 1-1/4 ID
47	4	P44-980	2-BOLT FLANGE BEARING, 1"
48	2	P48-103	CHAIN (83.500" LONG)
49	1	P66-27090 (PR2)	SENSOR, PROX 18mm-10mm RANGE IO LINK
50	1	P66-27090 (PR3)	SENSOR, PROX 18mm-10mm RANGE IO LINK
51	1	P66-6932	PHOTO-EYE BRACKET
52	1	P66-6932 ROTATED 90	PHOTO-EYE BRACKET
53	1	P66-6970	QUICK DISCONNECT WIRING BLOCK 8-PORT
54	1	P66-6972	CABLE
55	1	P66-6984 ELBOW	CABLE
56	2	P66-6989 ELBOW	3M CABLE
57	1	P66-7230 (EE1)	PHOTOELECTRIC SENSOR
58	1	P66-7230 (EE2)	PHOTOELECTRIC SENSOR
59	1	P71-1370	BROTHER 1/2HP GEARMOTOR
61	8	Z	3/8 LOCK WASHER
60	4	Z	1/2-13X1.5 SOCKET HEAD CAP SCREW
62	15	Z	8-32 X 3/8 LG. FHMS
63	16	Z	8-32 NYLOCK HEX NUT
64	16	Z	10-32 NYLOCK HEX NUT
65	16	Z	10-32 X 5/8 LG. FHMS
66	8	Z	3/8-16 X 3/4 LG. HHMS
67	8	Z	3/8 FLAT WASHER

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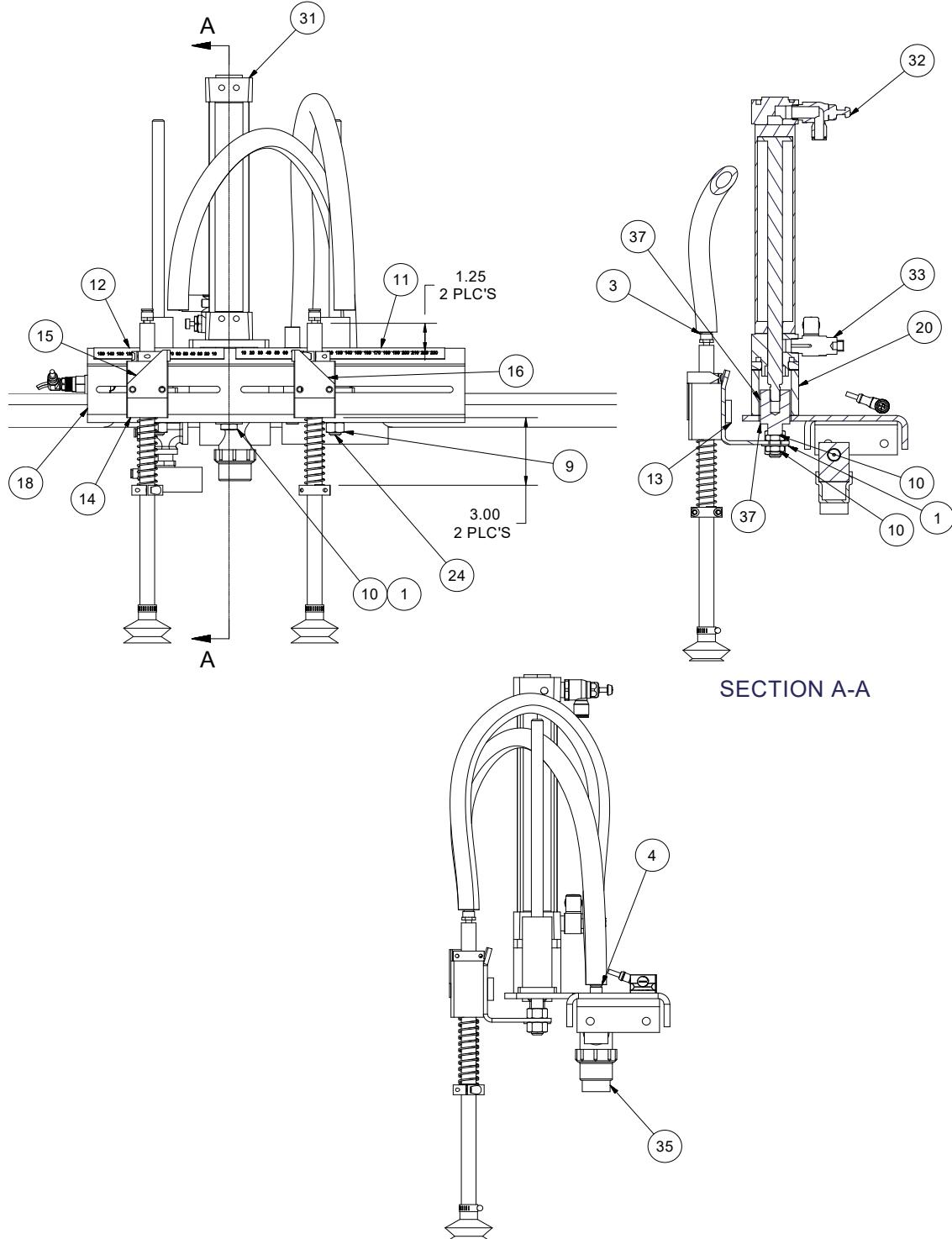
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Model "400"

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Parts List for model "400"

MAGAZINE VACUUM STRIPPER ASSEMBLY



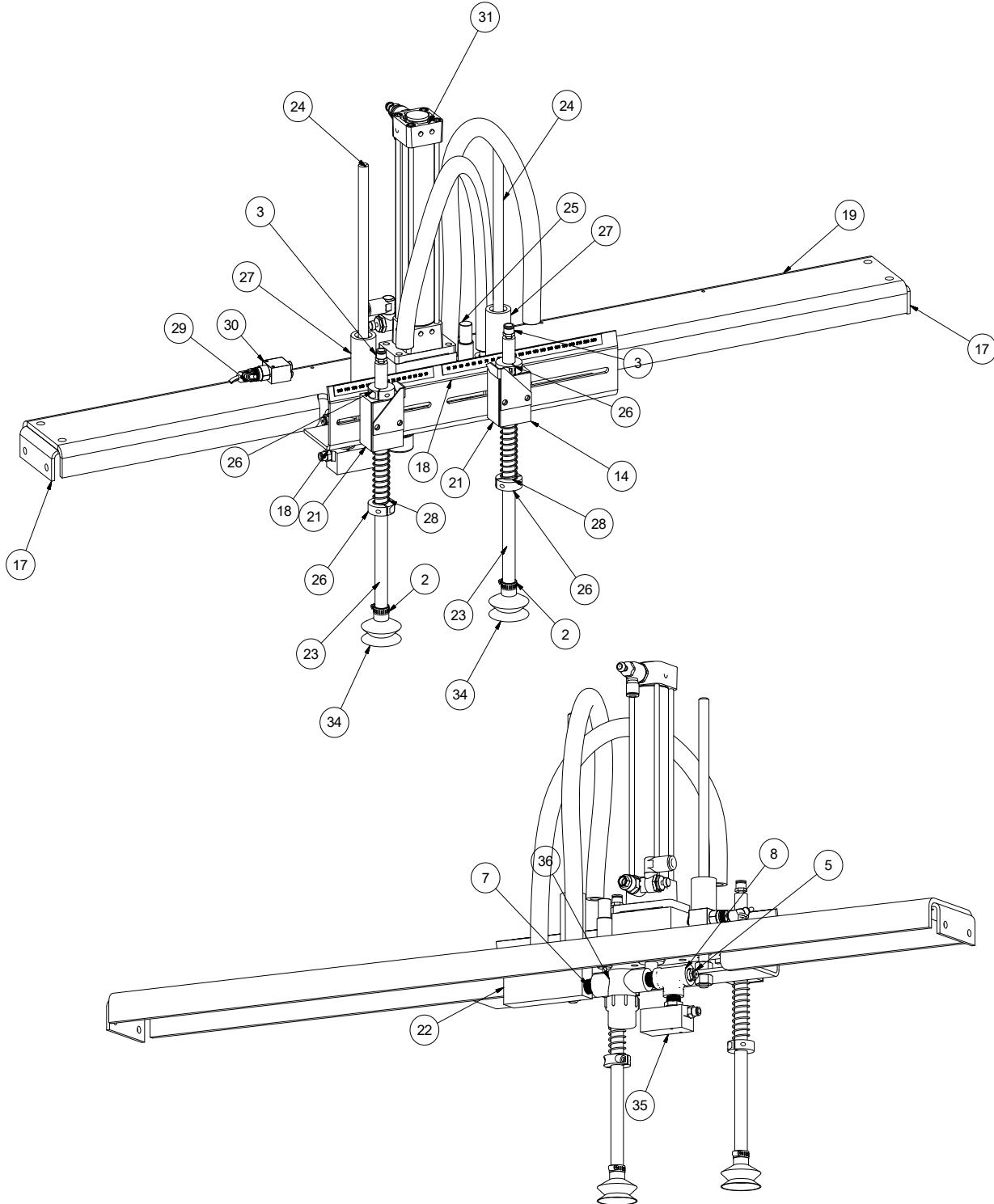
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**Parts List for model "400"
MAGAZINE VACUUM STRIPPER ASSEMBLY**



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Parts List for model "400"

MAGAZINE VACUUM STRIPPER ASSEMBLY

Assembly #15D13241

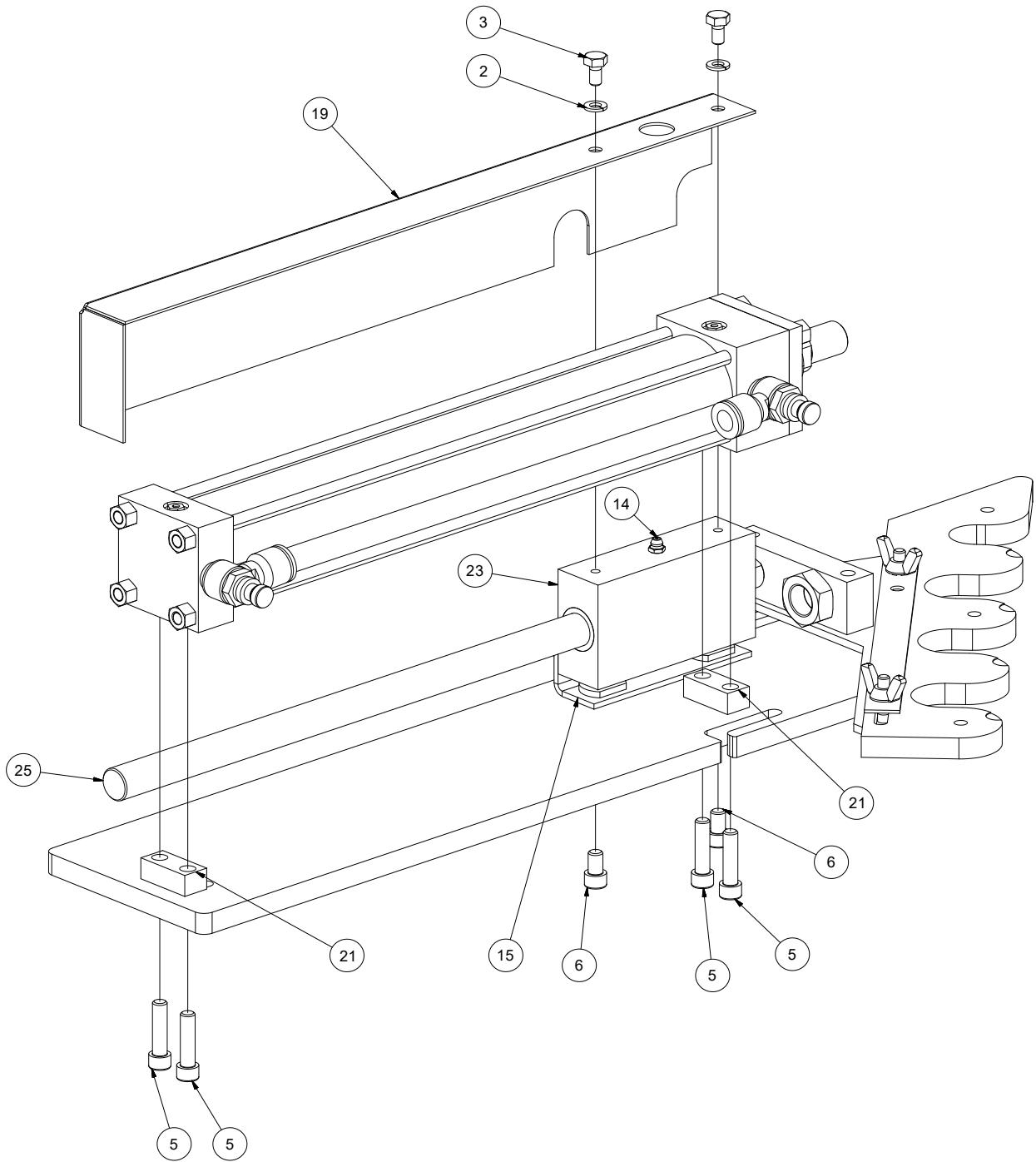
ITEM	QTY	PART NUMBER	DESCRIPTION
1	1		7/16 FLAT WASHER
2	2		HOSE CLAMP 7/8" TO 1" ID
3	2		1/8 NPT TO 3/8 TUBE COMPRESSION FITTING
4	2		1/4 NPT TO 3/8 TUBE COMPRESSION FITTING
5	1		3/8 NPT TO 1/4 TUBE COMPRESSION FITTING
6	49.00"		CLEAR TUBE 1/2" (23.5") (25.50")
7	3		CLOSE NIPPLE, .375
8	1		TEE, NPT, FEMALE, ,375
9	4		1/2-13 HEX NUT
10	2		7/16-20 HEX JAM NUT
11	1	118A129	METAL SCALE, METRIC LH
12	1	118A130	METAL SCALE, METRIC RH
13	2	60A52756	STRIPPER CUP NUT PLATE
14	2	60A73466	STUD GUIDE ROD CLAMP PLATE
15	1	60A73485	STRIPPER POINTER
16	1	60A73485 LH	STRIPPER POINTER
17	2	60A74306	CONVEYOR MOUNTING CHANNEL
18	1	60B74589	STRIPPER GUIDE MOUNTING ANGLE
19	1	60C74588	STRIPPER MOUNTING FRAME HIGH SPEED
20	1	62A32884	STIPPER CYLINDER SPACER BLOCK
21	2	62A36663	STUD GUIDE BLOCK
22	1	62B28611	VACUUM MANIFOLD
23	2	63A10283	VACUUM CUP STUD
24	2	63A11966	STRIPPER GUIDE ROD
25	1	P108-021	SHOCK ABSORBER
26	4	P110-115	SPLIT COLLAR
27	2	P44-1082	PACIFIC LINEAR BEARING, 1/2" ID
28	2	P59-247	SPRING
29	1	P66-6989 ELBOW	3M CABLE
30	1	P66-7230 (EE3)	PHOTOELECTRIC SENSOR
31	1	P67-1993	SMC NFPA CYL 1-1/2 B X 8 S
32	1	P69-732	FLOW CONTROL 3/8P X 3/8T
33	1	P69-748	SPEED CONTROLLER, W / PILOT CHECK VALVE
34	2	P70-208	VACUUM CUP
35	1	P70-223	VACUUM PUMP
36	1	P70-668	VACUUM FILTER ASSEMBLY
37	1	P82-001	ALIGNMENT COUPLING

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Parts List for Model "400"

TRAILING MINOR FLAP TUCKER ASSEMBLY

Assembly #15D12979

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TECHNICAL MANUAL

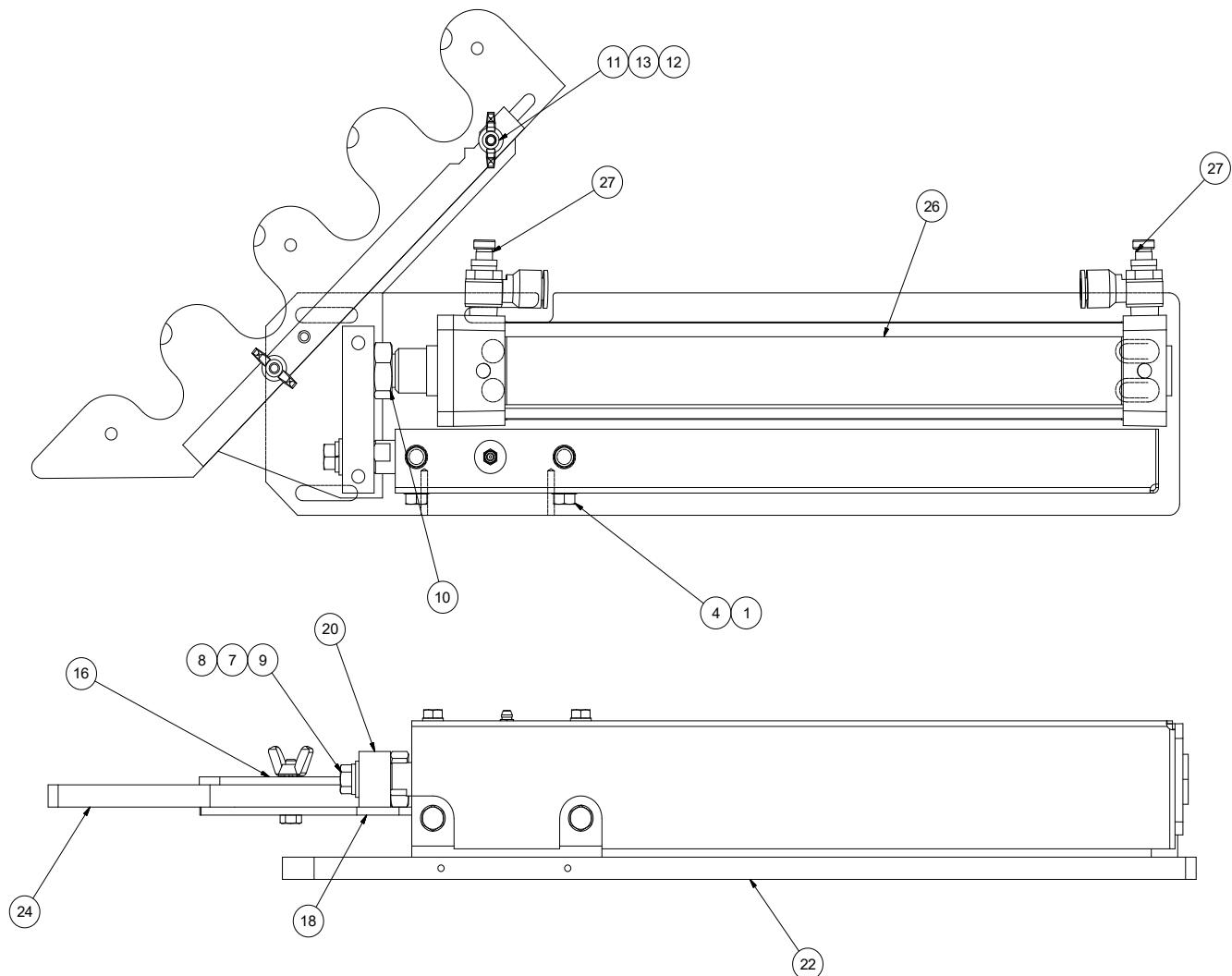
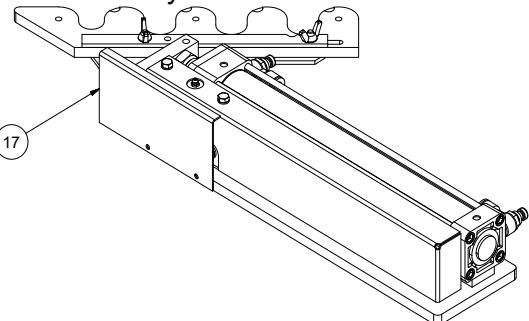
Model "400"

Case Erector-Bottom Sealer

Parts List for Model "400"

TRAILING MINOR FLAP TUCKER ASSEMBLY

Assembly #15D12979



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Case Erector-Bottom Sealer

Parts List for Model "400"

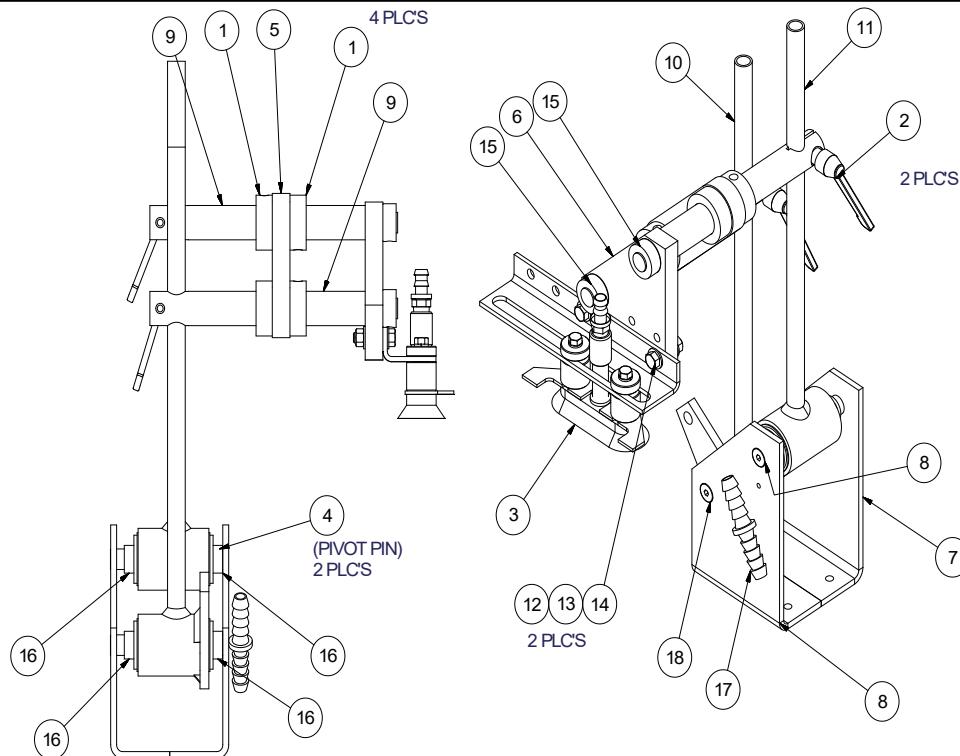
TRAILING MINOR FLAP TUCKER ASSEMBLY

Assembly #15D12979

ITEM	QTY	PART NUMBER	DESCRIPTION
1	2		LOCK WASHER, 5/16
2	2		LOCK WASHER, 1/4
3	2		1/4-20 HHMS, X .5 LG.
4	2		5/16-18 HHMS, X .75 LG.
5	4		5/16-18 SHCS, X 1.25 LG.
6	2		5/16-18 SHCS, X .5 LG
7	1		LOCK WASHER, 3/8
8	1		FLAT WASHER, 3/8
9	1		3/8-16 HHMS, X 1.5 LG
10	1		JAM NUT, 3/4-16
11	2		1/4-20 Wing Nut
12	2		EXTERNAL TOOTH LOCK WASHER
13	2		1/4-20 HHCS X 1.25 LG.
14	1		STRAIGHT ZERK GREASE FITTING
15	1	60A55824	BRACKET, GUIDE ROD BLOCK
16	1	60A65040	FLAP TUCKER CLAMP BAR
17	1	60A75780	PINCH GUARD
18	1	60B51145	FLAP TUCKER MOUNTING PLATE
19	1	60B55825	FLAP TUCKER GUIDE ROD COVER
20	1	62A30494	TUCKER MOUNTING BLOCK
21	2	62A30495	CYLINDER SPACER
22	1	62B30493	FLAP TUCKER MOUNT PLATE
23	1	62B30591	FLAP TUCKER GUIDE ROD BLOCK
24	1	62B33774	TUCKER WITH SCALE MM
25	1	63A11396	TUCKER GUIDE ROD
26	1	P67-2116	SMC CYLINDER 2" B X 13" S
27	2	P69-737	FLOW CONTROL; 3/8" PIPE TO 1/2" TUBE

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Parts List for model "400"
OPENER SECTION UPPER VACUUM CUP ASSEMBLY

Assembly #15C13243

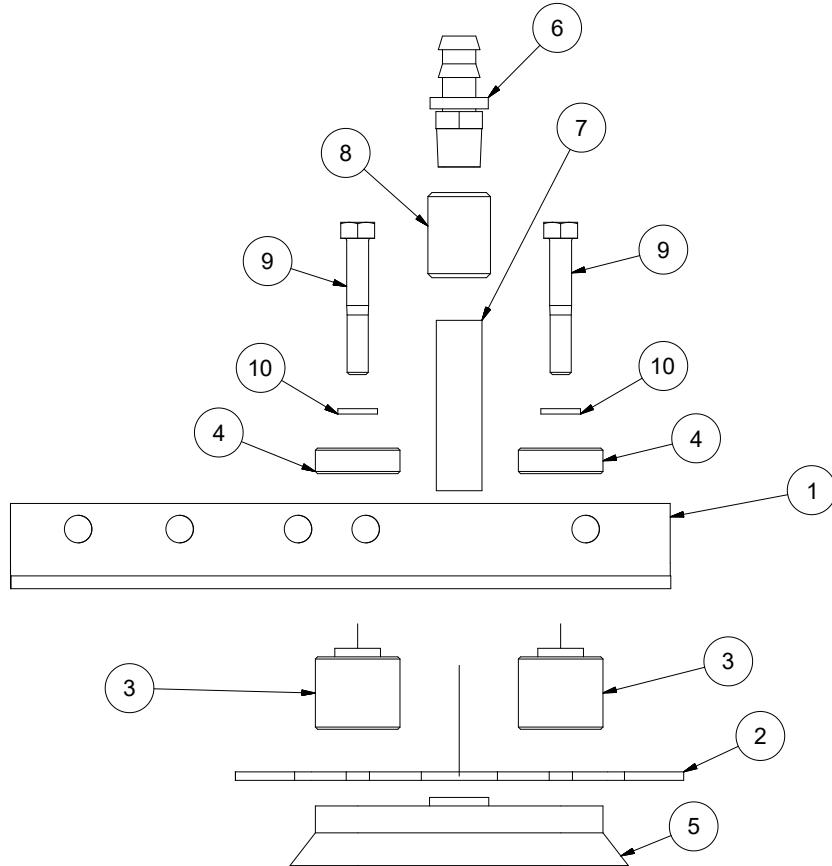
ITEM	QTY	PART NUMBER	DESCRIPTION
1	4	110A121	COLLAR, SET, OPENER ARM
2	2	112A166	HANDLE, ADJUSTING; 3/8" - 16
3	1	15B13161	OPENER CUP ASSEMBLY WITH POINTER
4	2	47A4383	PIVOT PIN, VACUUM LIFTER
5	1	62A26130	LINK, PIVOT ARM
6	1	62B25383	HOLDER, VACUUM CUP
7	1	62B37113 LH	MAIN PIVOT BRACKET, OPENER, LH
8	1	62B37113 RH	MAIN PIVOT BRACKET
9	2	63B8903	PIVOT ARM
10	1	63C11616	LOWER OPENER ARM HOLDER
11	1	63C11617	UPPER OPENER ARM HOLDER
12	2	ANSI 3/8 - 16	3/8-16 NYLOCK HEX NUT
13	4	ANSI 3/8 - narrow - Type A	3/8 FLAT WASHER
14	2	ANSI/ASME 3/8-16 UNC - 1.5	3/8-16 X 1.5" HHMS
15	2	P110-005	3/4" STD. COLLAR
16	4	P44-377	BEARING, 3/4" BORE, W / SNAP RING, NICE
17	1	P56-130	DUNHAM #BM-4 HOSE COUPLING
18	4	W38FHSC125-16	3/8-16 HEX SOCKET FHCS

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TECHNICAL MANUAL

Model "400"

Case Erector-Bottom Sealer



Parts List for model "400"
OPENER CUP ASSEMBLY

Assembly #15B13161

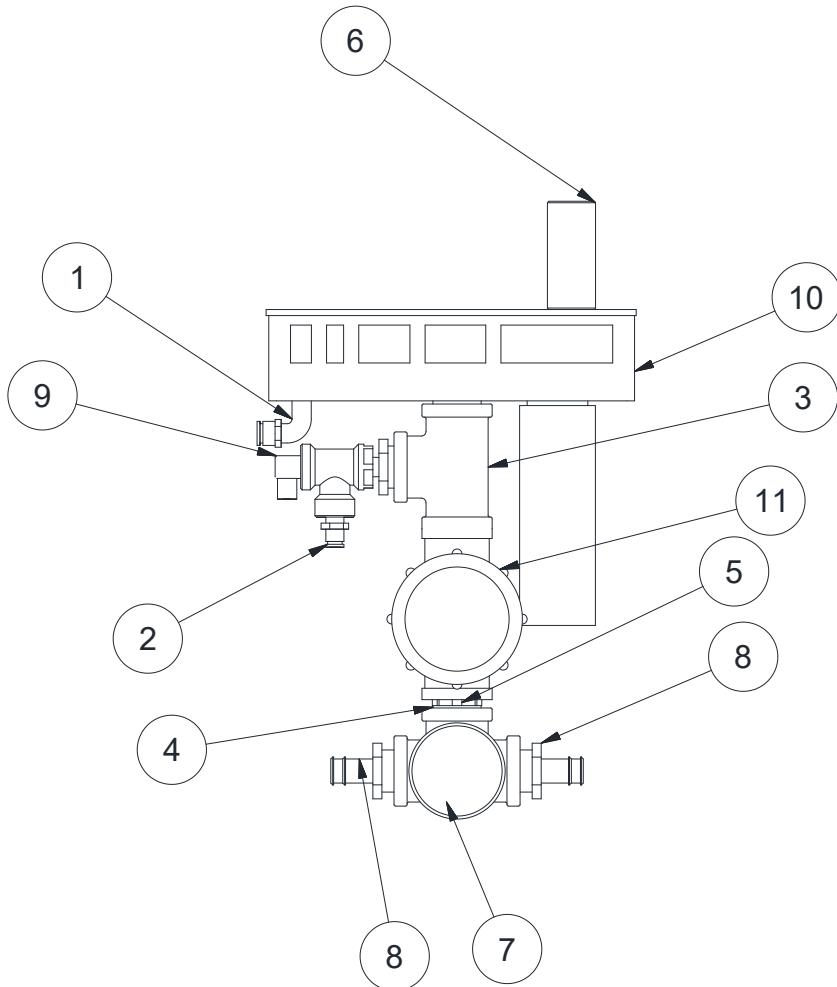
ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	60A49951	SUPPORT, VACUUM CUP
2	1	60A65216	OPENER CUP POINTER
3	2	63A9883	SPACER, VACUUM CUP
4	2	63A9884	VACUUM CUP RETAINING WASHER
5	1	P70-673	VACUUM CUP
6	1	P56-004	AERO QUIP #4738-6-8B SOCKETLESS FITTING
7	1		PIPENIPPLE, 3/8 NPT X 2.5 LG
8	1		COUPLING, 3/8 NPT
9	2		5/16-18UNC X 2" HEX HEAD CAP SCREW
10	2		5/16 MED. LOCKWASHER

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Model "400"

Case Erector-Bottom Sealer



Parts List for Model "400"
OPENER VACUUM GENERATOR ASSEMBLY

Assembly # 14C1245

ITEM	QTY	PART NUMBER	DESCRIPTION
1	1		COMPRESSION FITTING ELBOW, 125 NPT TO,375 TUBE
2	1		1/4 NPT TO 1/4 TUBE COMPRESSION FITTING
3	1		TEE, NPT, FEMALE, 3/4
4	3		3/4 NPT CLOSE NIPPLE
5	2		3/4 CONDUIT LOCKNUT
6	1	60A50015	VACUUM GENERATOR MOUNT
7	1	95A188	3/4" NPT TEE W/ 1/4-18 NPT TAP
8	2	P56-119	AEROQUIP HOSE FITTING, 3/4 NPT, 1/2 BARB
9	1	P69-764	PILOT OPERATOR CHECK VALVE, 1/8NPT
10	1	P70-221-M50	
11	1	P70-665	3/4" VACUUM FILTER

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TECHNICAL MANUAL

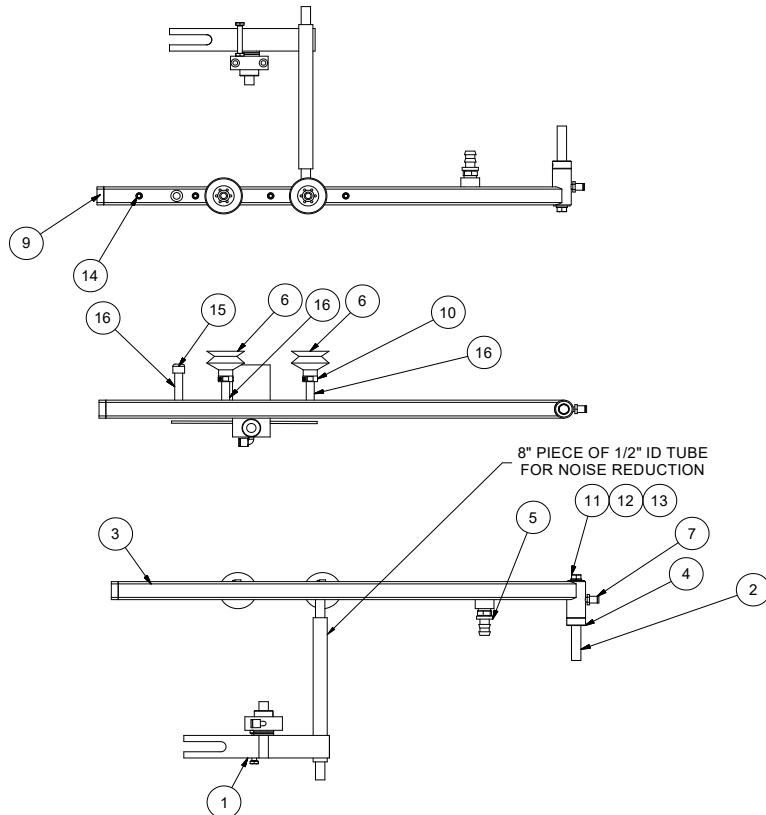
Model "400"

Case Erector-Bottom Sealer

Parts List for Model "400"

OPENER SECTION LOWER VACUUM CUP

Assembly #15C12909



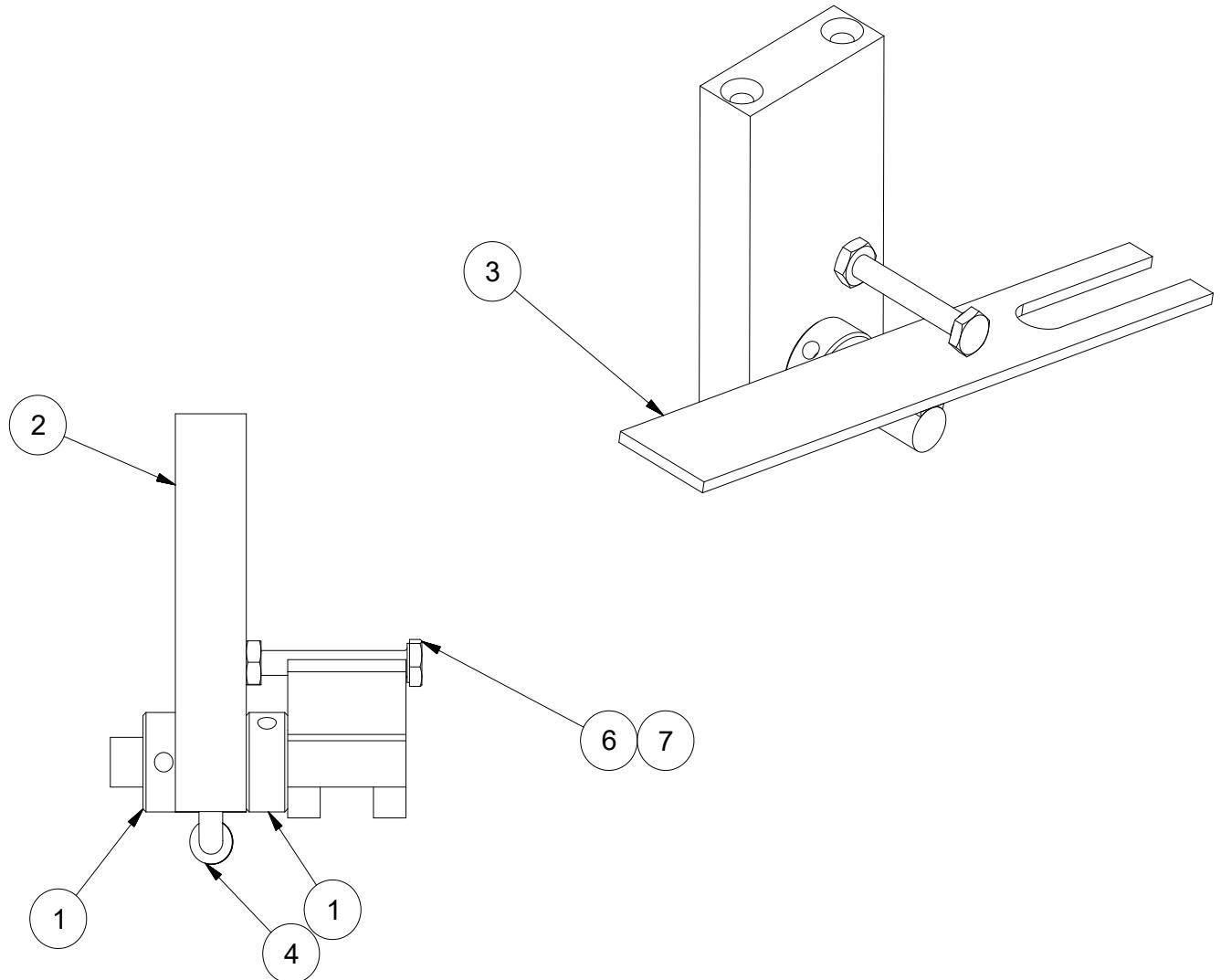
ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	15A9361	LIFTER PIVOT ASSEMBLY
2	1	47A4399	CUP LIFTER ARM PIVOT SHAFT
3	1	61B3412	LOWER CUP LIFTER ARM
4	1	P110-004	SET COLLAR
5	1	P56-004	AERO QUIP #4738-6-8B SOCKETLESS FITTING
6	2	P70-208	VACUUM CUP
7	1	P94-248	QUICKLINC FITTING 1/4 TUBE 1/4-28 MALE STR
9	1		3/8 NPT PLUG
10	2		HOSE CLAMP 7/8" TO 1" ID
11	1		5/16-18 X .75 LG. HHMS
12	1		5/16 FLAT WASHER
13	1		5/16 LOCK WASHER
14	4		1/8 NPT PLUG
15	1		CAP, 1-8 NPT
16	3		PIPE NIPPLE, 1-8NPT X 2

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Model "400"

Case Erector-Bottom Sealer



Parts List for Model "400"
OPENER SECTION LOWER VACUUM CUP LIFTER PIVOT

Assembly #15C9361

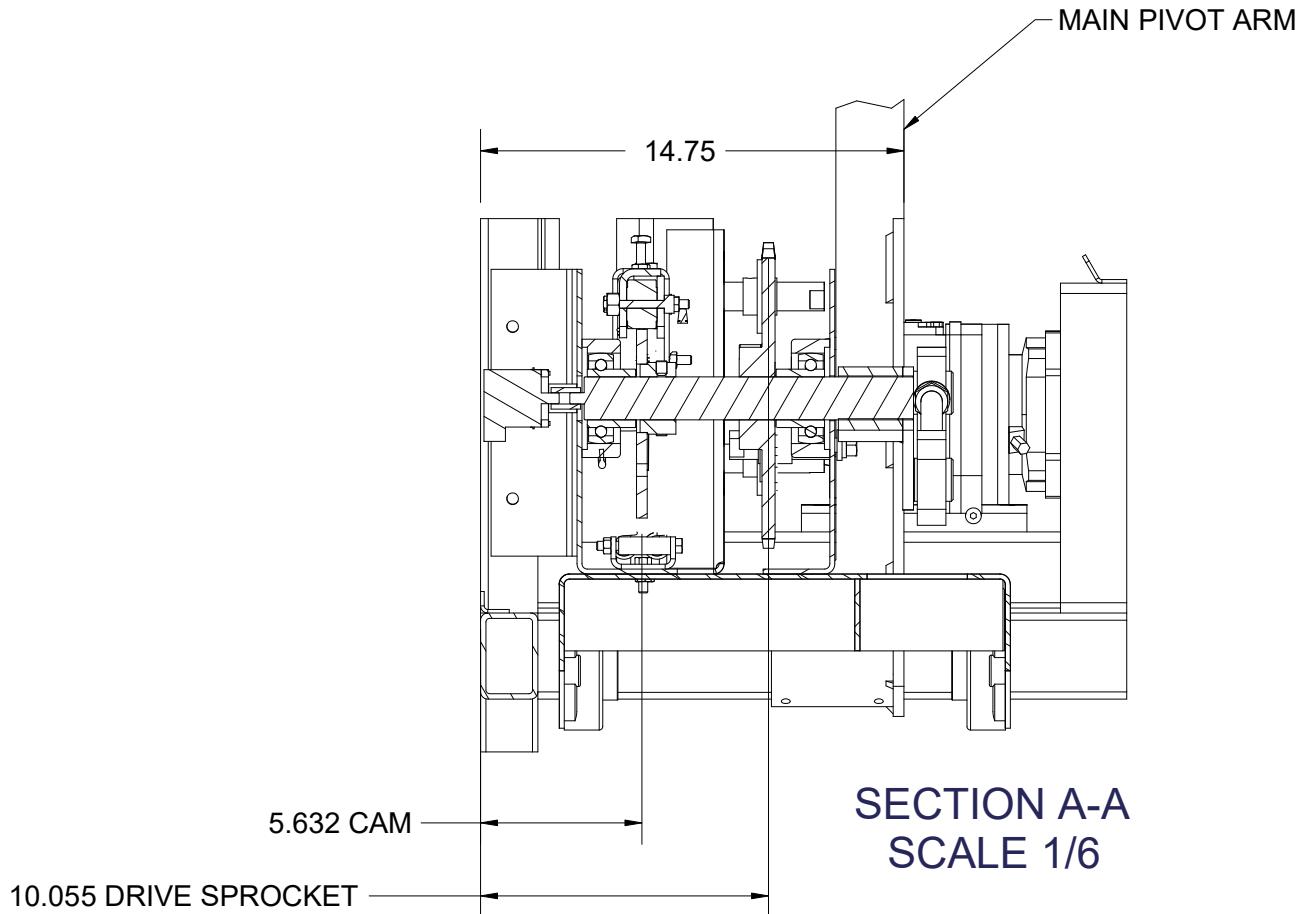
ITEM	QTY	PART NUMBER	DESCRIPTION
1	2	P110-004	SET COLLAR
2	1	62A25423	PIVOT PLATE, LOWER VACUUM LIFT
3	1	60A43878	LOWER VACUUM CUP LIFTER PLATE
4	1	P94-247	QUICKLINE FITTING 1/4 TUBE 1/4-28
6	1	W H H C S - 1/4 - 20 x 2.25	HEX HEAD CAP SCREW
7	1	W H J M N - 1/4 - 20	HEX JAM NUT

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Model "400"

Case Erector-Bottom Sealer



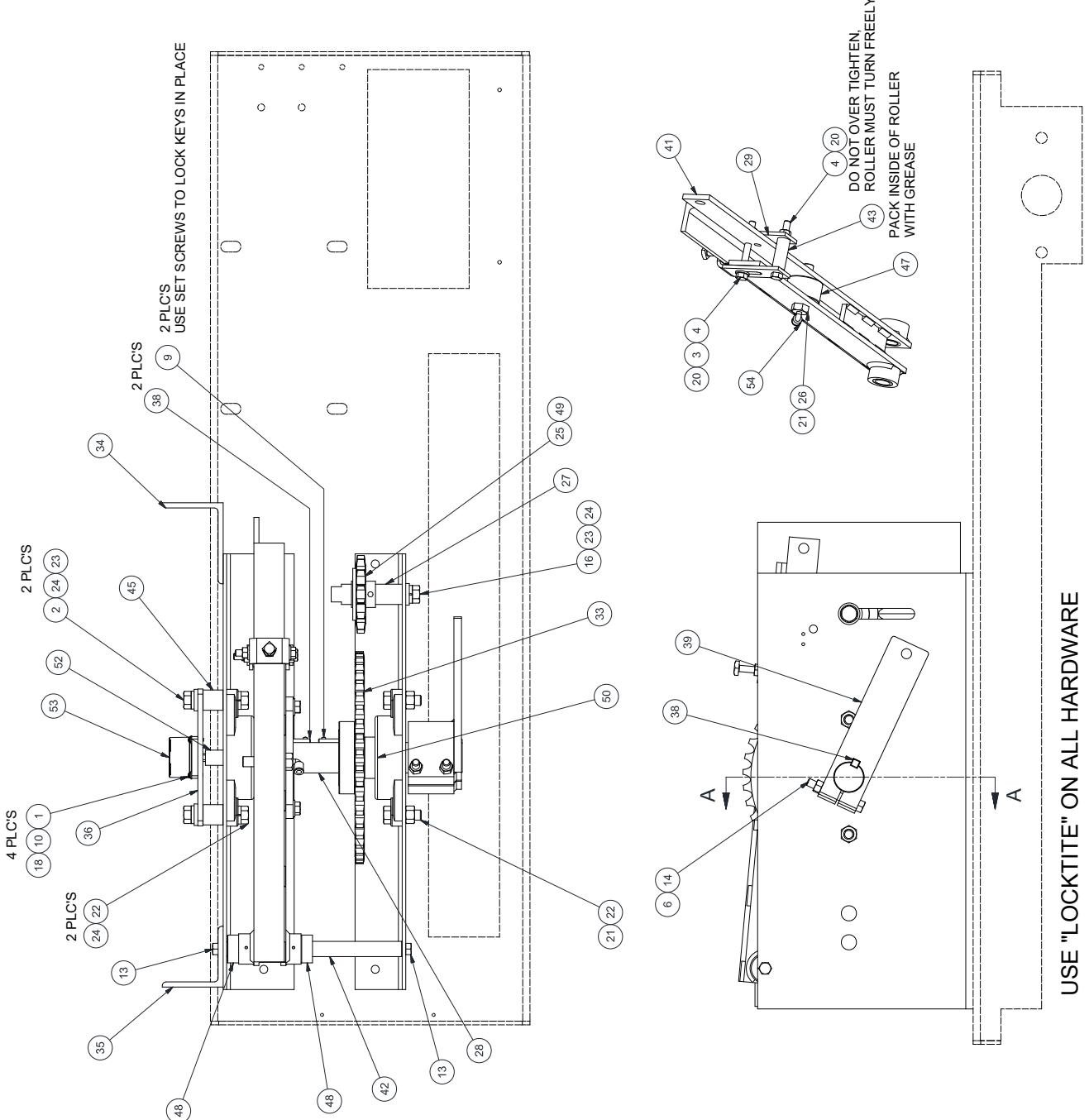
MAIN DRIVE AND OPENER SETUP DIAGRAM
See following pages for assemblies and parts lists

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TECHNICAL MANUAL

Model "400"

Case Erector-Bottom Sealer



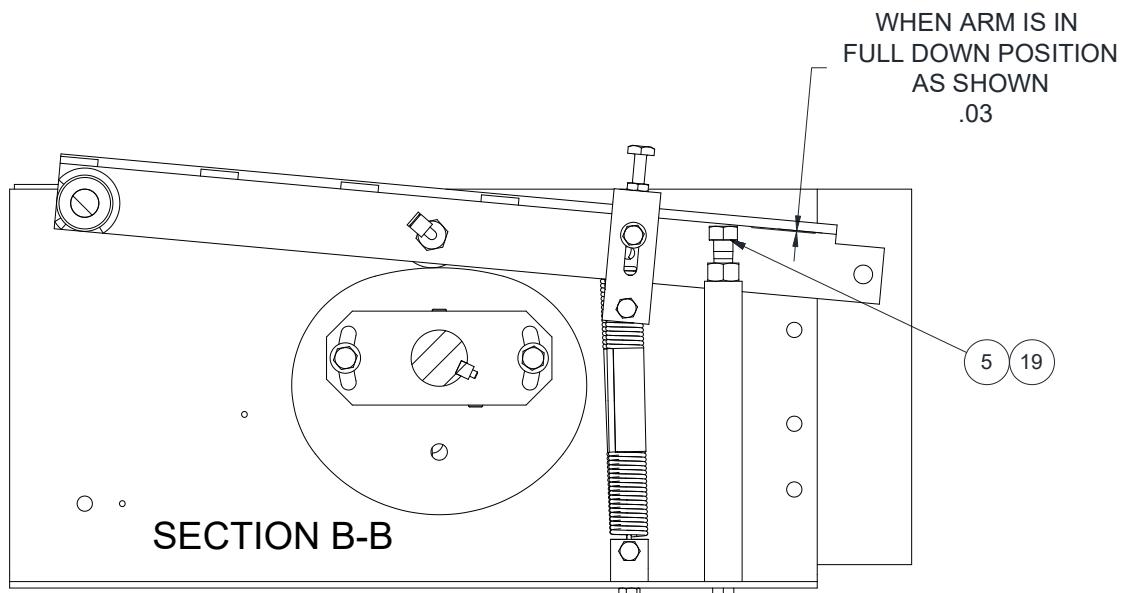
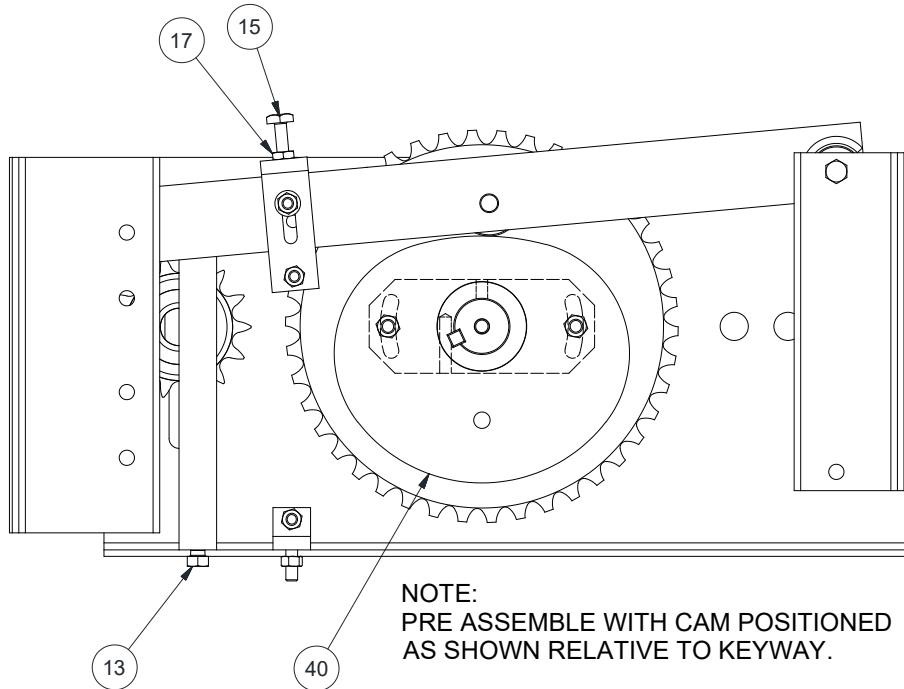
Parts List for Model "400"
OPENER SECTION LINKAGE DRIVE ASSEMBLY

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TECHNICAL MANUAL

Model "400"

Case Erector-Bottom Sealer



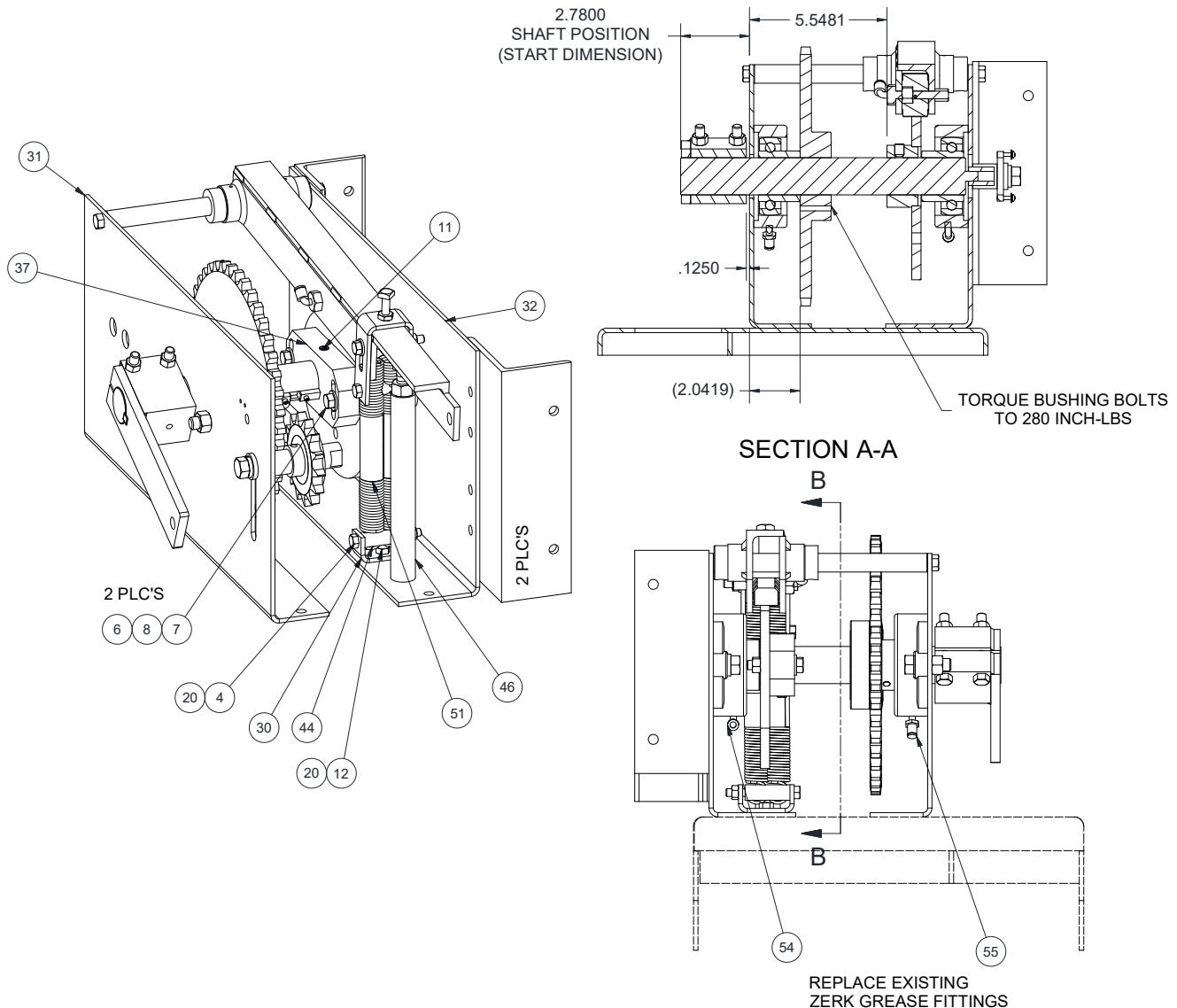
Parts List for Model "400"
OPENER SECTION LINKAGE DRIVE ASSEMBLY

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TECHNICAL MANUAL

Model "400"

Case Erector-Bottom Sealer



Parts List for Model "400" OPENER SECTION LINKAGE DRIVE ASSEMBLY

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TECHNICAL MANUAL

Model "400"

Case Erector-Bottom Sealer

Parts List for Model "400"

OPENER SECTION LINKAGE DRIVE ASSEMBLY

Assembly #15D12849

ITEM	QTY	PART NUMBER	DESCRIPTION
1	4	No. 6 - 40 - 5/8	Cross Recessed Pan Head Machine Screw - Type I
2	2	1/2-13 UNC - 0.75	Hex Bolt - UNC (Regular Thread - Inch)
3	2	5/16	Washer A
4	3	5/16-18 UNC - 2.75	Hex Bolt - UNC (Regular Thread - Inch)
5	1	1/2-13 UNC - 1.75	Hex Bolt - UNC (Regular Thread - Inch)
6	4	3/8 - 16	Hex Nuts (Inch Series) Hex Nut
7	2	3/8-16 UNC - 2	Hex Bolt - UNC (Regular Thread - Inch)
8	2	3/8	Washer A
9	2	10-32 UNF x 0.45	Hexagon Socket Set Screw - Cup Point
10	4	0.138	Helical Spring Lock Washers
11	2	3/8-24 UNF x 0.51	Hexagon Socket Set Screw - Cup Point
12	1	5/16-18 UNC - 1	Hex Bolt - UNC (Regular Thread - Inch)
13	3	3/8-16 UNC - 1	Hex Bolt - UNC (Regular Thread - Inch)
14	2	3/8-16 UNC - 2.75	Hex Bolt - UNC (Regular Thread - Inch)
15	1	5/16-18x1.5	Unified Standard Square Bolts
16	1	1/2-13 UNC - 1.25	Hex Bolt - UNC (Regular Thread - Inch)
17	1	5/16 - 18	Hex Machine Screw Nut
18	4	No. 8 - narrow - Type B	Plain Washer (Inch)Type A and B
19	1	M12 x 1.75	Heavy Hex Nut <= M16
20	4	5/16 - 18	Hex Nuts (Inch Series) Hex Nut
21	3	1/2 - 13	Hex Nuts (Inch Series) Hex Nut
22	4	1/2-13 UNC - 1.5	Hex Bolt - UNC (Regular Thread - Inch)
23	3	1/2	Washer A
24	5	1/2	Heavy Helical Spring Lock Washers(Inch Series)
25	1	40A4142-828	60B14 IDLER SPROCKET 2" BORE
26	1	46A1332	STUD
27	1	46A1443	STUD, CHAIN TIGHTNER
28	1	47A5315	CRANK SHAFT
29	1	60A17825	SPRING ADJUSTING BRACKET
30	1	60A67186	SPRING MOUNTING BRACKET
31	1	60B53201	SUPPORT BRACKET,JACK SHAFT,RH
32	1	60B53202	SUPPORT BRACKET,JACK SHAFT,LH
33	1	60BTB42-1.5	TAPER LOCK SPROCKET, 3/4P, 42T, 1-1/2" BORE, 3/8 KEY
34	1	61B5341	OPENER CAM STIFFENER ANGLE
35	1	61B5342	OPENER CAM STIFFENER ANGLE
36	1	62A29734	ENCODER MOUNTING PLATE
37	1	62A29753	VACUUM LIFTER CAM MOUNTING HUB
38	3	62A31654	3/8 KEY
39	1	62B25529	CRANK

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TECHNICAL MANUAL

Model "400"

Case Erector-Bottom Sealer

Parts List for Model "400"

OPENER SECTION LINKAGE DRIVE ASSEMBLY

Assembly #15D12849

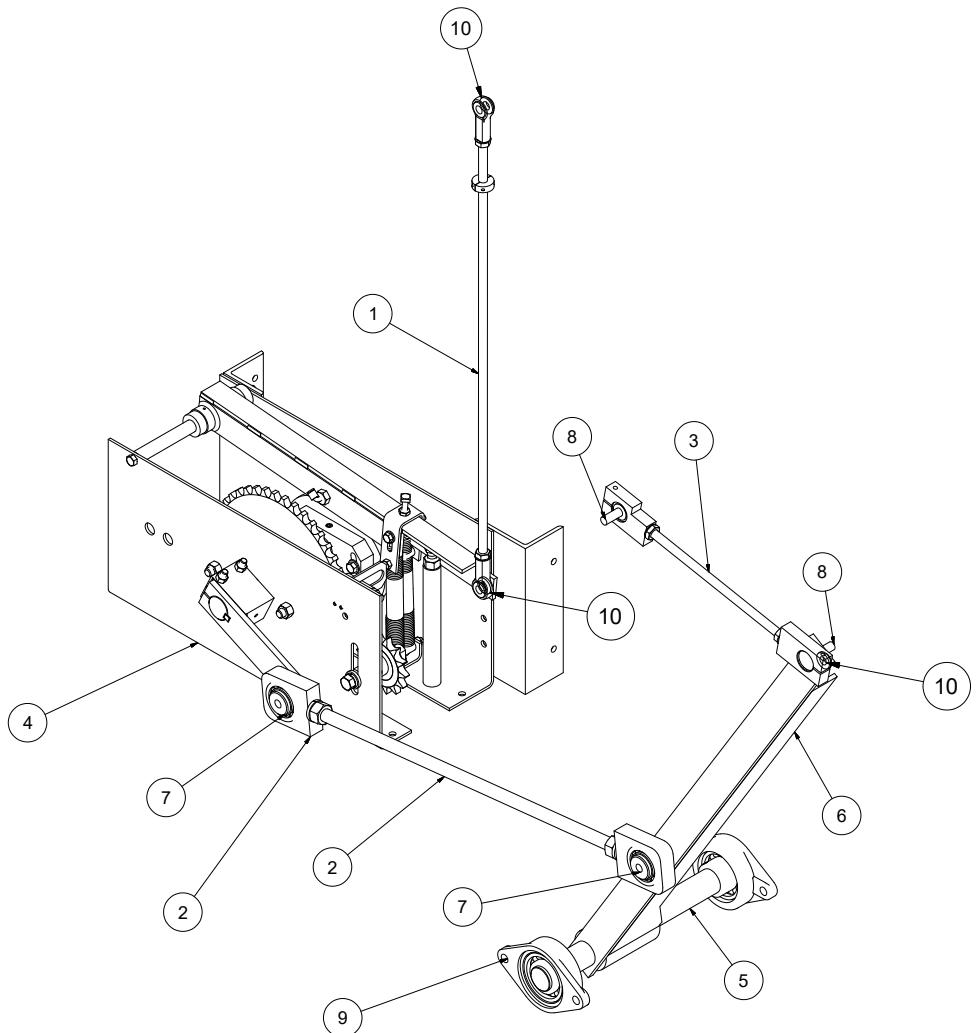
ITEM	QTY	PART NUMBER	DESCRIPTION
40	1	62B31698	VACUUM LIFTER CAM
41	1	62B32805	CAM ARM LH
42	1	63A10362	PIVOT SHAFT, ERECTOR
43	1	63A11107	SPRING ROLLER, ADJUSTING BRACKET
44	1	63A11108	SPRING ROLLER, MOUNTING BRACKET
45	2	63A11306	ENCODER MOUNTING PLATE SPACER
46	1	63A9922	OPENER ARM STOP
47	1	P106-032	CAM YOKE BEARING CYR1-3/4S
48	2	P110-005	3/4" STD. COLLAR
49	1	P44-059	1" BEARING NICE 7616-DL 1"
50	2	P44B254	1-1/2", 2-HOLE FLANGE BEARING, DODGE #124268-SC
51	2	P59-076	LIFT SPRING LEE SRGS LE-115J-8
52	1	P66-4326	COUPLING
53	1	P66-4347	ENCODER 10MM SHAFT
54	2	P94-247	QUICKLINC FITTING 1/4 TUBE 1/4-28
55	1	P94-248	QUICKLINC FITTING 1/4 TUBE 1/4-28 MALE STR

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Model "400"

Case Erector-Bottom Sealer



Parts List for Model "400"
MAIN DRIVE LINKAGE

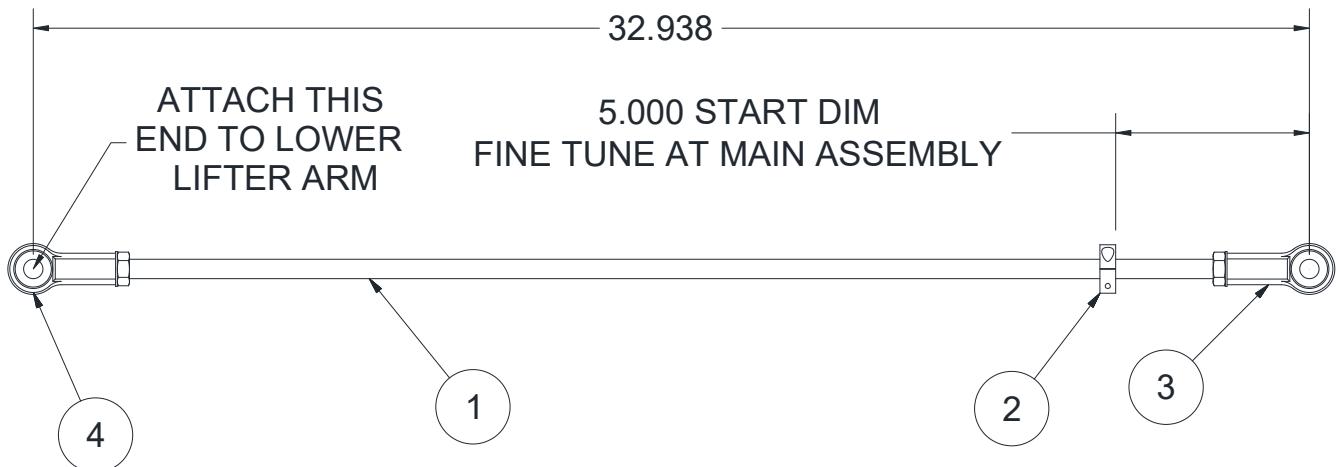
ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	15A10309	UPPER OPENER LINKAGE ROD
2	1	15A8981	MAIN DRIVE LINKAGE, 330
3	1	15A9023	DRIVE LINK, SWINGARM TO CARRIAGE
4	1	15D12585	MAIN DRIVE ASSEMBLY
5	1	47A4423	PIVOT SHAFT
6	1	62B25366	PIVOT LINKAGE, ERECTOR
7	2	63A9946	CRANK ARM BEARING SLEEVE
8	2	P106-017	CAM FOLLOWER 1.25 DIA
9	2	P44B254	1-1/2", 2-HOLE FLANGE BEARING
10	3	63A2161	WASHER, ROD END BEARING

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Model "400"

Case Erector-Bottom Sealer



Parts List for Model "400"

UPPER OPENER LINKAGE ROD ASSEMBLY

Assembly #15A10309

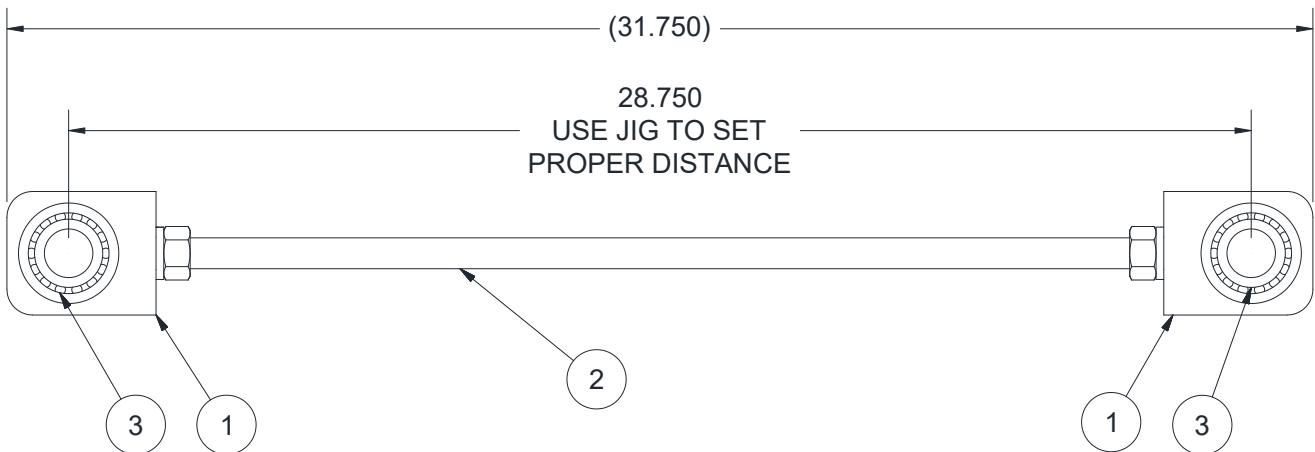
ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	63A8892	LINKAGE ROD-LIFTER
2	1	P110-078	1/2" SPLIT SHAFT COLLAR
3	1	P115-097	ROD END, RH NONLUBE
4	1	P115-098	ROD END, LH NON LUBE

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Model "400"

Case Erector-Bottom Sealer



Parts List for Model "400"
MAIN DRIVE LINKAGE ROD ASSEMBLY
Assembly #15A8981

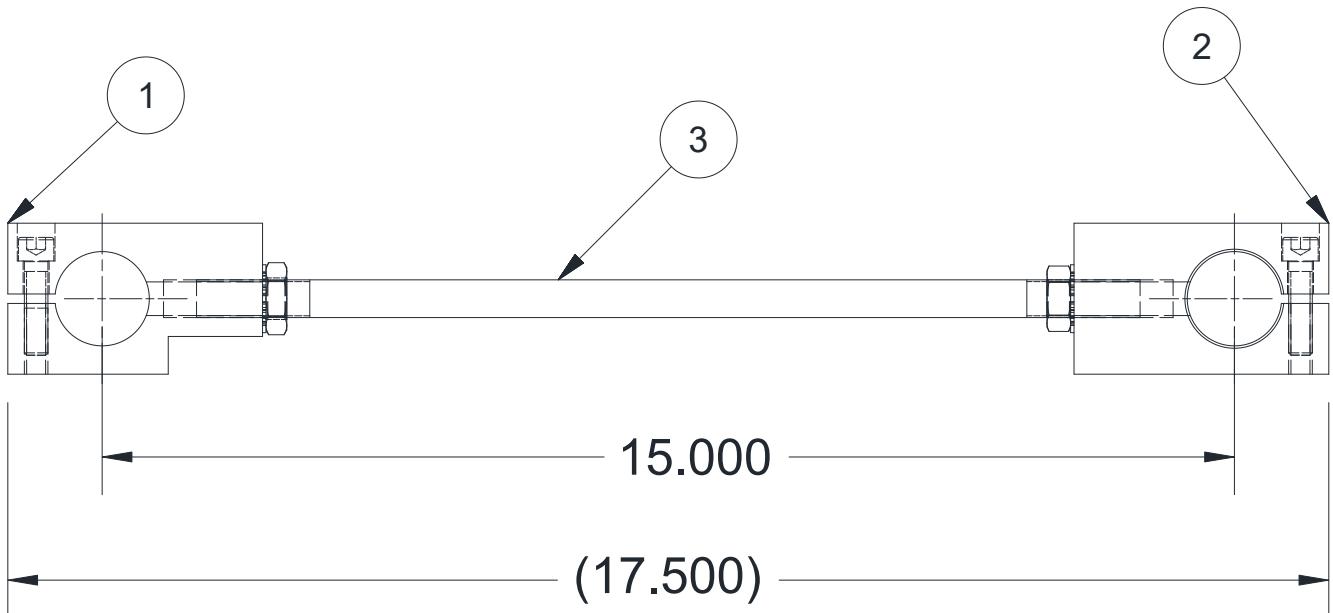
ITEM	QTY	PART NUMBER	DESCRIPTION
1	2	62A28436	ROD END BUSHING
2	1	63A10361	LOWER LINKAGE ROD
3	2	P44-900	DBL. ROW ANG. CONT. SEAL, 52ARS, MM

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Parts List for Model "400"
DRIVE LINKAGE SWINGARM TO CARRIAGE ASSEMBLY
Assembly #15A9023

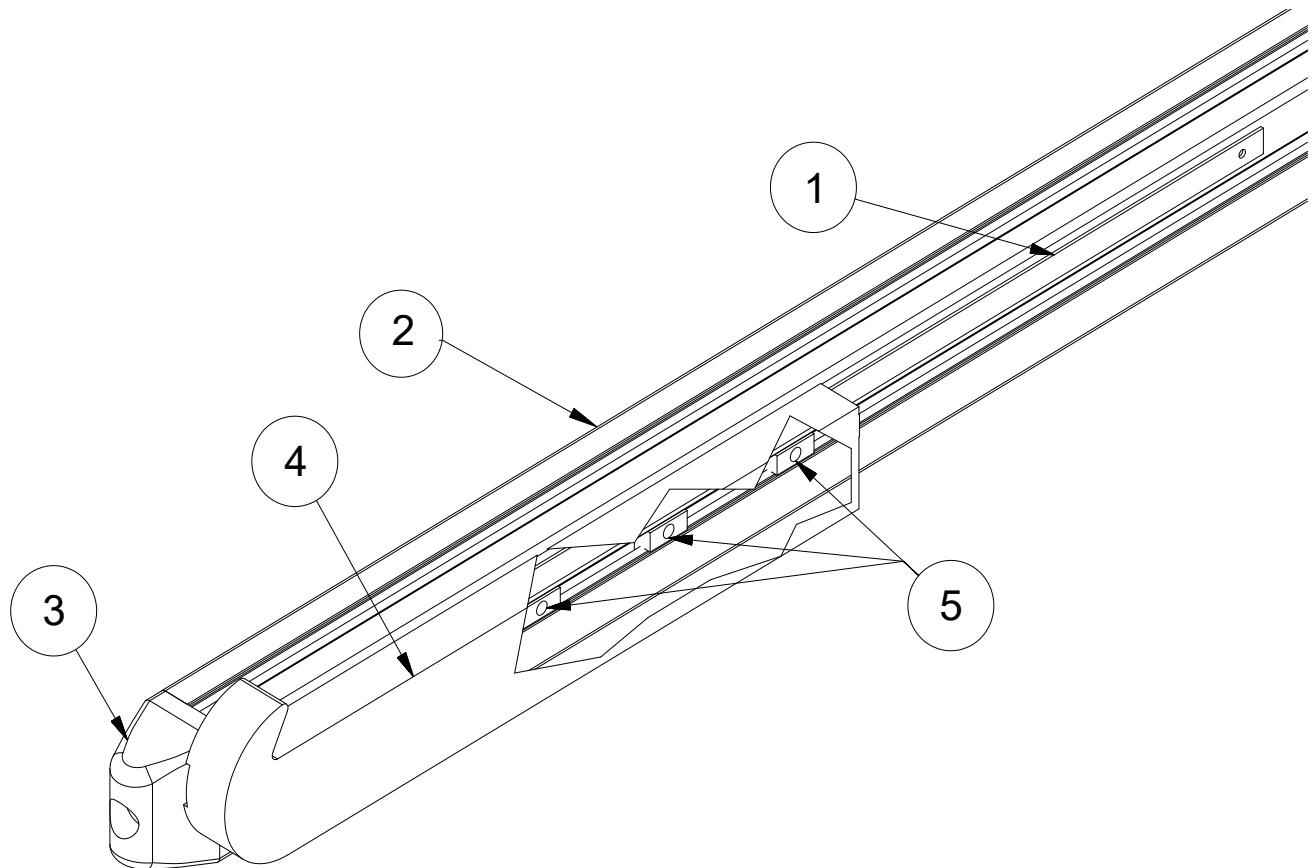
ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	62A25485	ROD END HOUSING, LH THREADS
2	1	62A26780	ROD END HOUSING
3	1	63A8827	LINKAGE ROD, UPPER

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Model "400"

Case Erector-Bottom Sealer



Parts List for Model "400"
CASE TRANSFER ASSEMBLY

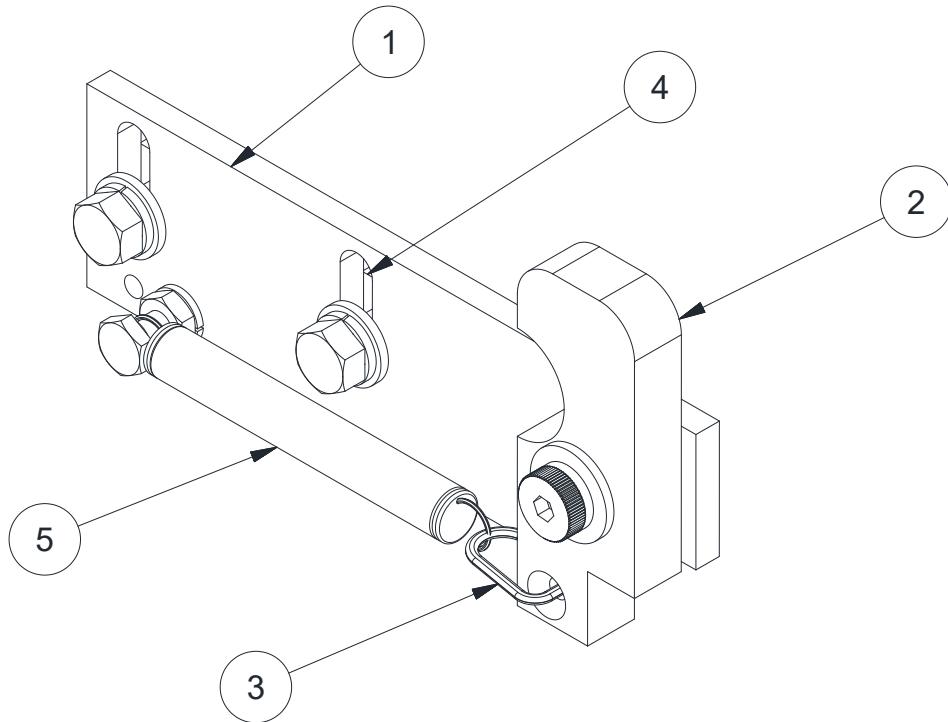
ITEM	Q T Y	P A R T N U M B E R	D E S C R I P T I O N
1	1	118A127	KD PUSHER SCALE (m m)
2	1	61A3730-2	PROFILE EXTRUSION 70-3/16" LG
3	1	62A26091	RAM TIP
4	1	62A28834	KD PUSHER, SCALES
5	3	P114-014	T NUT 5/16-18

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Model "400"

Case Erector-Bottom Sealer



Parts List for Model "400"

CASE TRANSFER ASSEMBLY

Assembly #15A9056

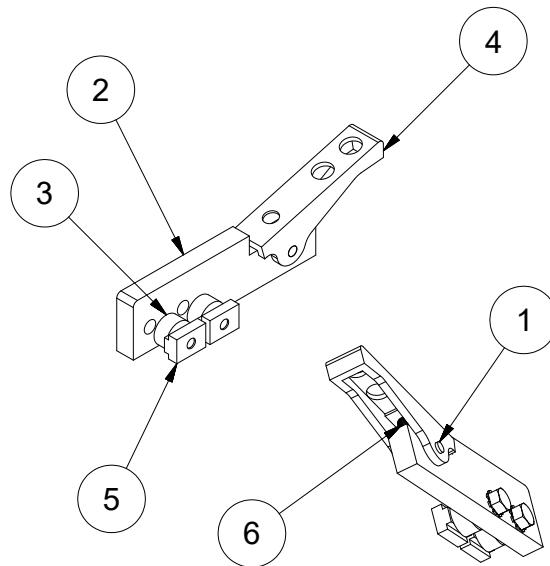
ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	62A25411	BLANK STOP SUPPORT PLATE
2	1	62A25412	BLANK STOP ARM
3	1	63A8917	SPRING CLIP - WELDING ROD
4	2	P114-014	T-NUT 5/16-18
5	1	P59-023	FLAP OPENER SPRING

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Model "400"

Case Erector-Bottom Sealer



Parts List for Model "400"

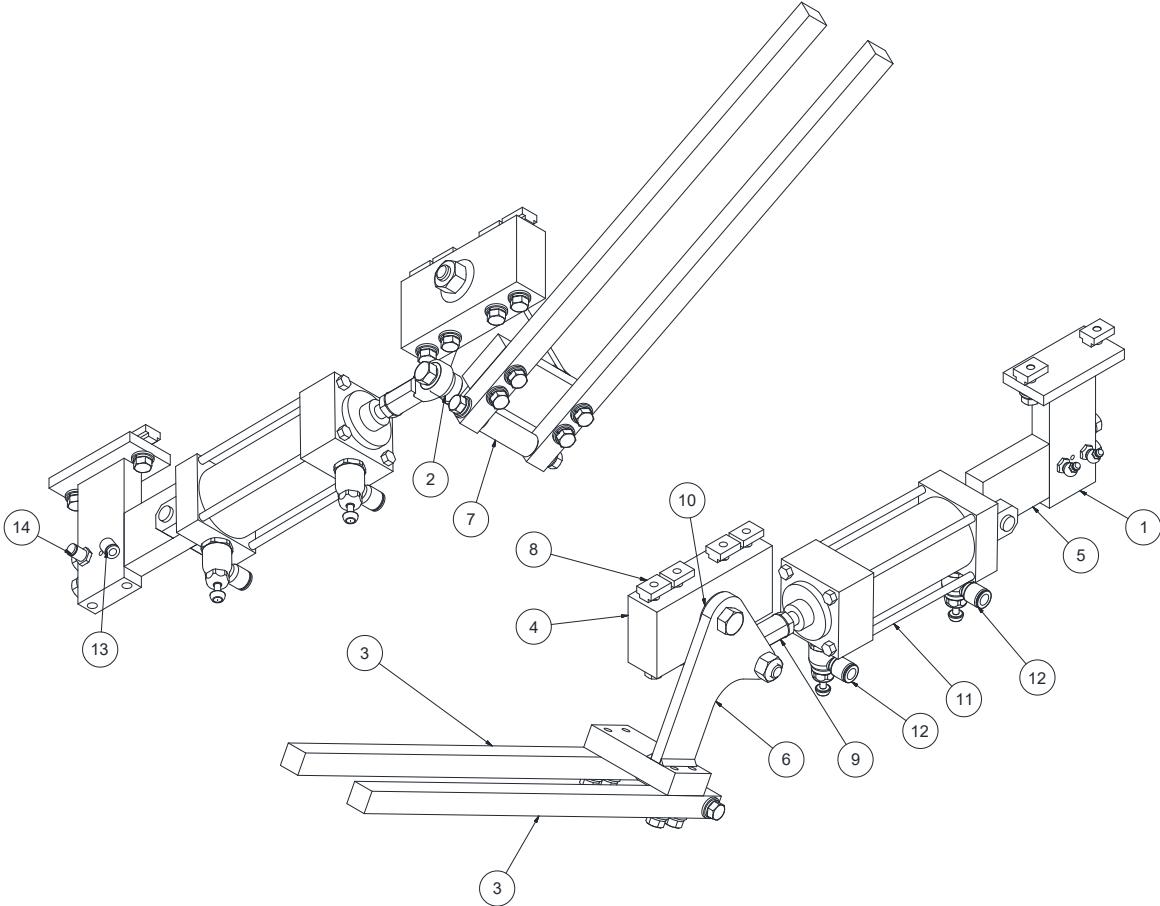
Blank Feed Finger Assembly

Assembly #15A6323

ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	46A632	FEED FINGER PIVOT PIN
2	1	62A27481	CASE PUSHER MOUNT
3	2	63A9610	CASE FEED ASSY SPACER
4	1	64B844	BLANK FEED FINGER
5	2	P114-014	T-NUT 5/16-18
6	1	P59-010	BLANK FEED FINGER SPRING

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Model "400"
Case Erector-Bottom Sealer



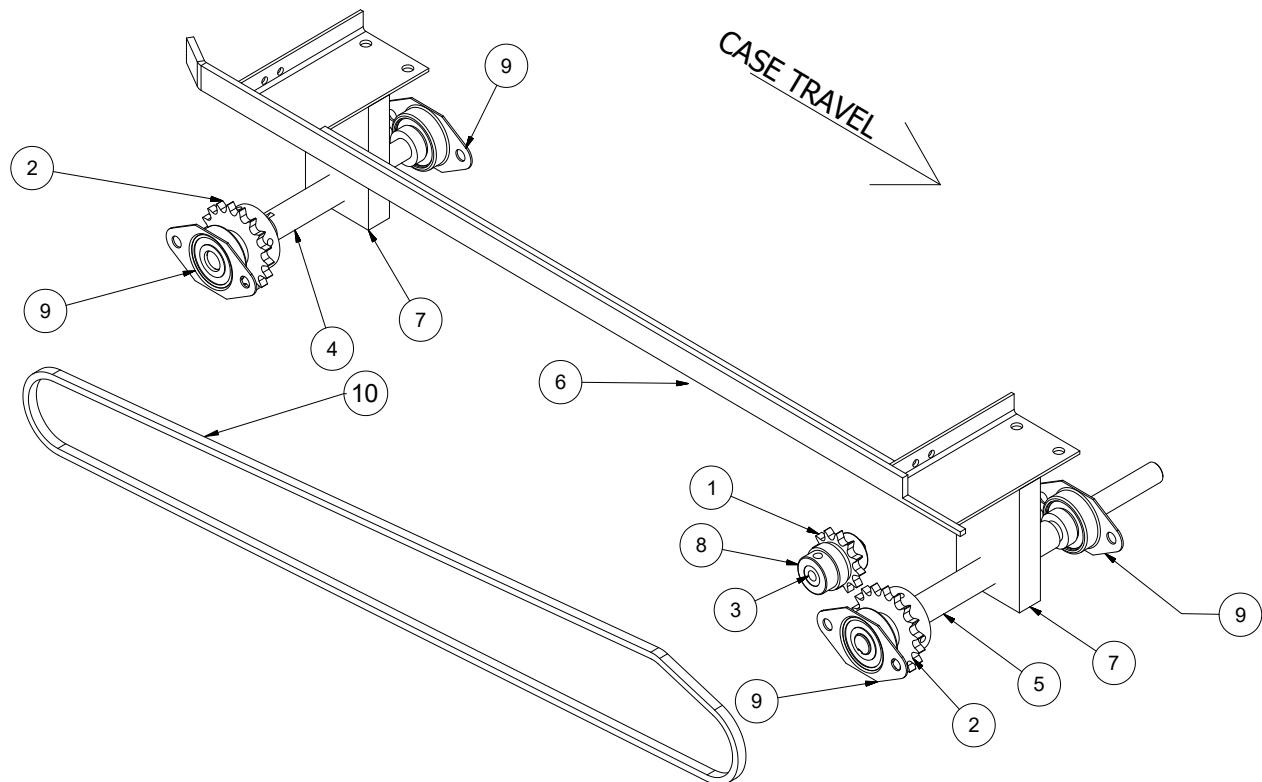
Parts List for Model "400"
FRONT PUSHER ARM ASSEMBLY

Assembly #15C12910

ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	62A27172	VERTICAL SUPPORT
2	1	62A28425	ROD END BEARING SPACER
3	2	62A30830	CASE PUSHER BARS
4	1	62A31457	BELL CRANK, BEARING BLOCK
5	1	62A35582	ROD EYE-AIR CYLINDER (SMC)
6	1	62B29160	BELL CRANK - FRONT PUSHER
7	1	63A10995	SUPPORT SPACER, FRONT PUSHER BARS
8	6	P114-014	T-NUT 5/16-18
9	1	P115-096	ROD END
10	1	P44-907	BEARING, 1.437 DIA.
11	1	P67-2190	SMC AIR CYLINDER, 2" BORE, X 3" STROKE
	1	P79-139	REPAIR KIT FOR P67-2191
12	2	P69-732	FLOW CONTROL 3/8P X 3/8T
13	1	P94-247	QUICKLINC FITTING 1/4 TUBE 1/4-28
14	1	P94-248	QUICKLINC FITTING 1/4 TUBE 1/4-28 MALE STR

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Model "400"
Case Erector-Bottom Sealer

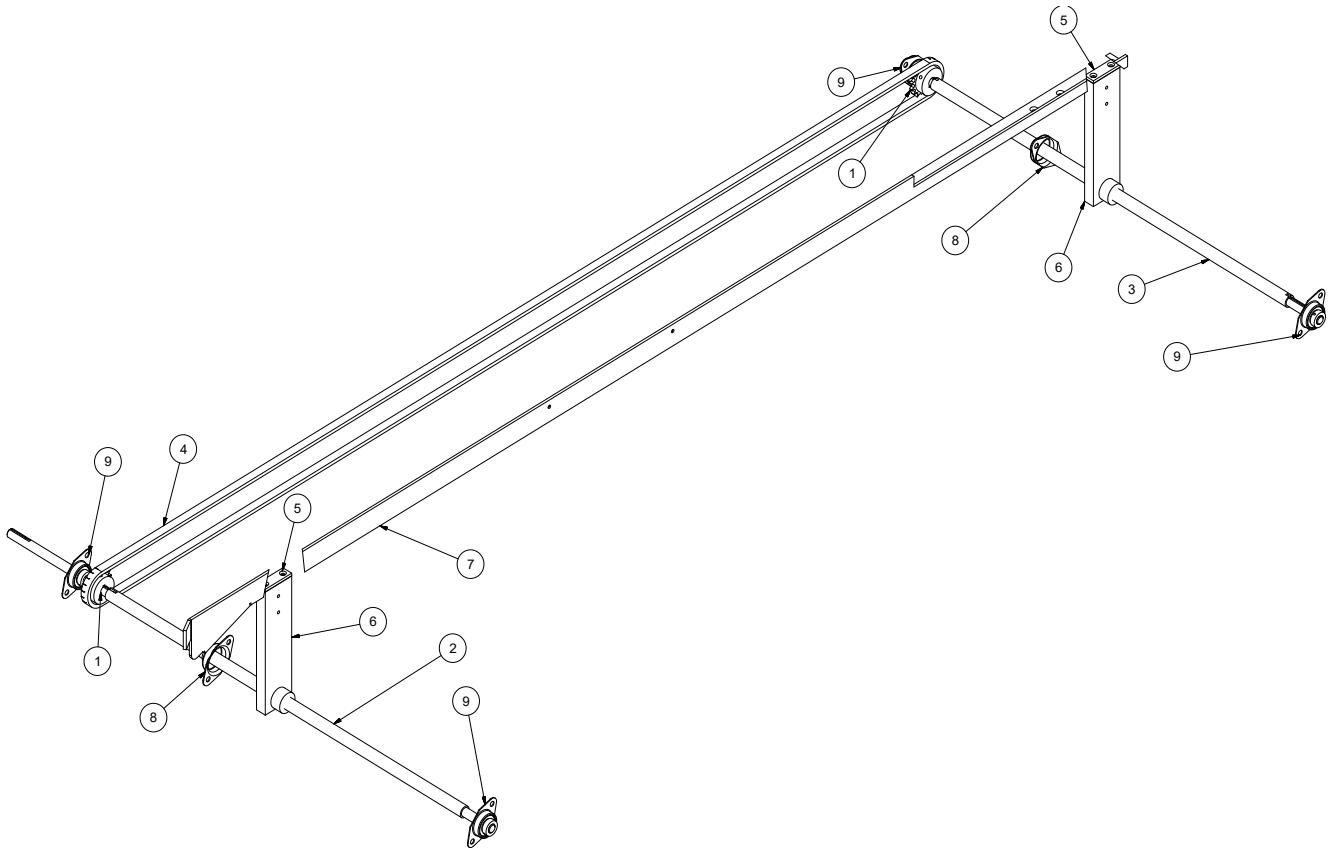


Parts list for Model "400"
LEFT HAND SIDE GUIDE ADJUSTMENT ASSEMBLY

ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	40A2122-223	SPROCKET 12T, 1/2P, 3/4 BUSHING
2	2	40BS18-.75	SPROCKET, 1/2P, 18T
3	1	46A1265	CHAIN TIGHTNER STUD
4	1	47A4406	ADJ. SHAFT-LH SIDE GUIDE RAIL
5	1	47A4532	SHAFT-LH SIDE GUIDE RAIL
6	1	60B50439	LH SIDE GUIDE RAIL
7	2	62A25497	LH GUIDE RAIL ADJUSTING NUT
8	2	P110-005	3/4" STD. COLLAR
9	4	P44-554	NICE #6912 3/4" FLANGED BEARING
10	1	48A440	LH ADJ. CHAIN

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Parts List for Model "400"
RIGHT HAND SIDE GUIDE ADJUSTMENT ASSEMBLY

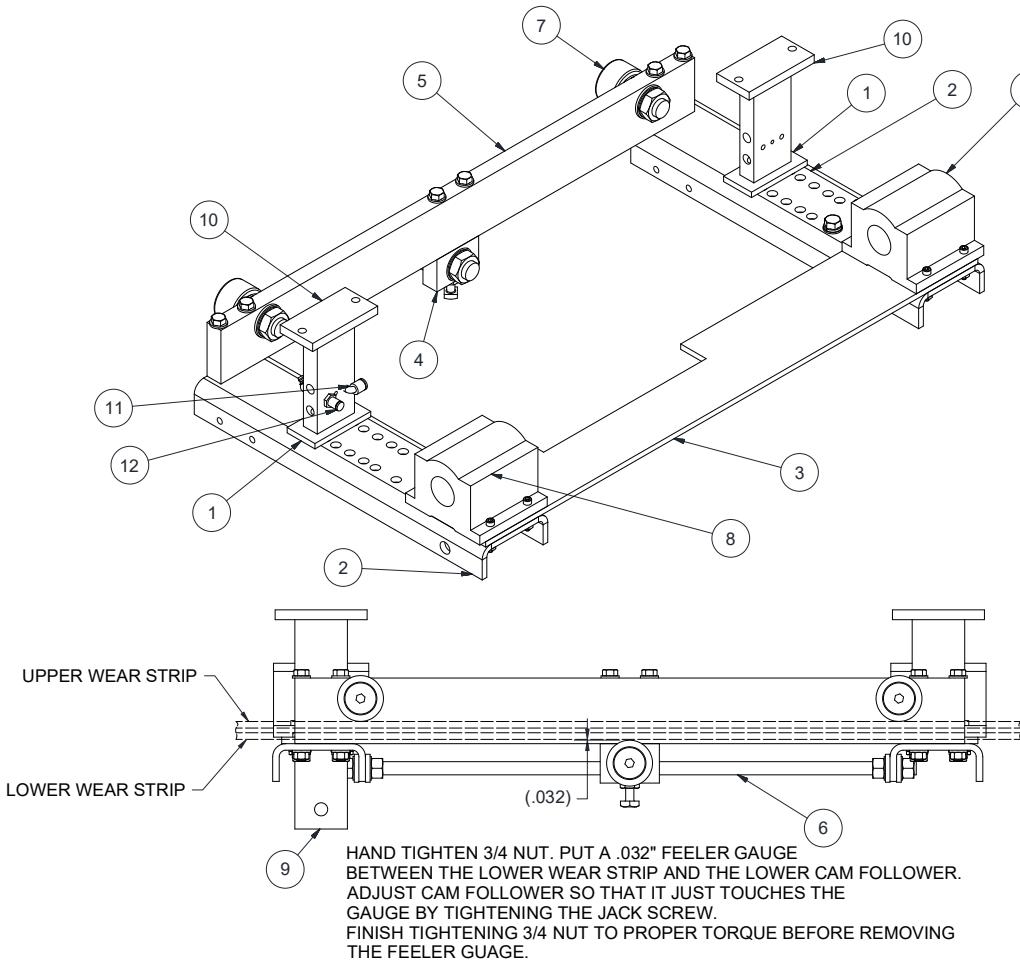
ITEM	QTY	PART NUMBER	DESCRIPTION
1	2	40BS18-.75	SPROCKET, 1/2P, 18T
2	1	47A6568	R.H. GUIDE RAIL ADJ. SHAFT
3	1	47B5964	R.H. GUIDE ADJUSTING SHAFT-REAR
4	1	48A422	RH ADJUSTMENT CHAIN
5	2	60A53986	RH GUIDE RAIL SPACER
6	2	62A26853	ADJ. NUT RH SIDE GUIDES
7	1	62B28446	RH SIDE GUIDE RAIL
8	2	P44-358	NICE,#6916 1"FLANGE BRG.
9	4	P44-554	NICE #6912 3/4" FLANGED BEARING

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Case Erector-Bottom Sealer



Parts List for Model "400"

CASE TRANSFER BEARING ASSEMBLY

Assembly #15C10099

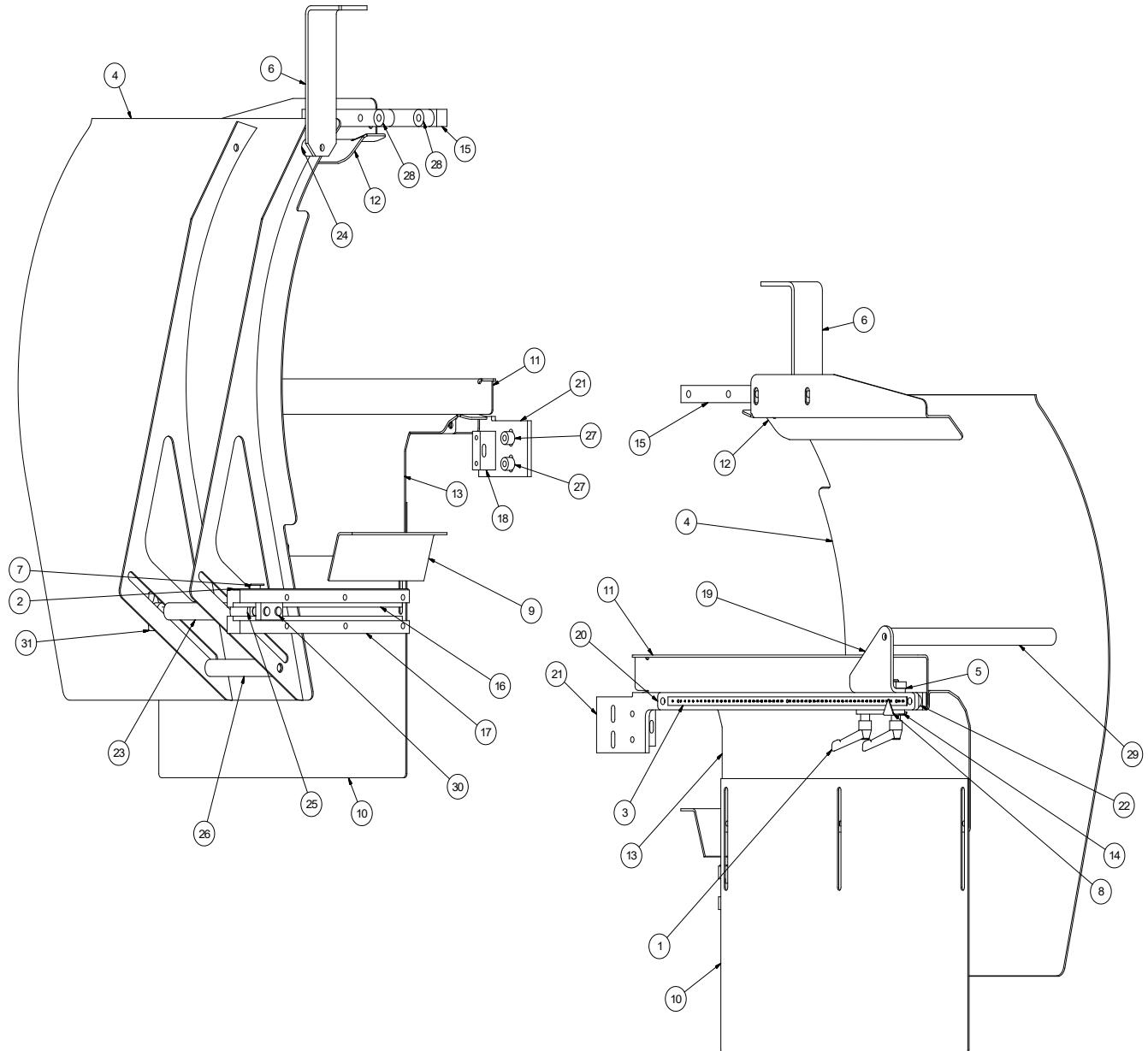
ITEM	QTY	PART NUMBER	DESCRIPTION
1	2	60A52751	VERTICAL SUPPORT SPACER
2	2	62C28004	FRAME CARRIAGE
3	1	62A28002	LINEAR BEARING TIE PLATE
4	1	62A36685	CAM FOLLOWER MOUNTING BLOCK
5	1	62A36558	SUPPORT CAM FOLLOWER
6	1	63A8925	SPACER BAR
7	3	P106-099	CAM FOLLOWER
8	2	P44-1035	LINEAR 1-1/4" PILLOW BLK BEARING
9	1	62A27169	ROD END SUPPORT
10	2	62A27172	VERTICAL SUPPORT
11	3	P94-247	QUICKLINC FITTING 1/4 TUBE 1/4-28
12	1	P94-248	QUICKLINC FITTING 1/4 TUBE 1/4-28 MALE STR

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TECHNICAL MANUAL

Model "400"

Case Erector-Bottom Sealer



**Parts List for Model "400"
CASE TIP OFF ASSEMBLY**

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TECHNICAL MANUAL

Model "400"

Case Erector-Bottom Sealer

Parts List for Model "400"

CASE TIP OFF ASSEMBLY

Assembly #15D9991

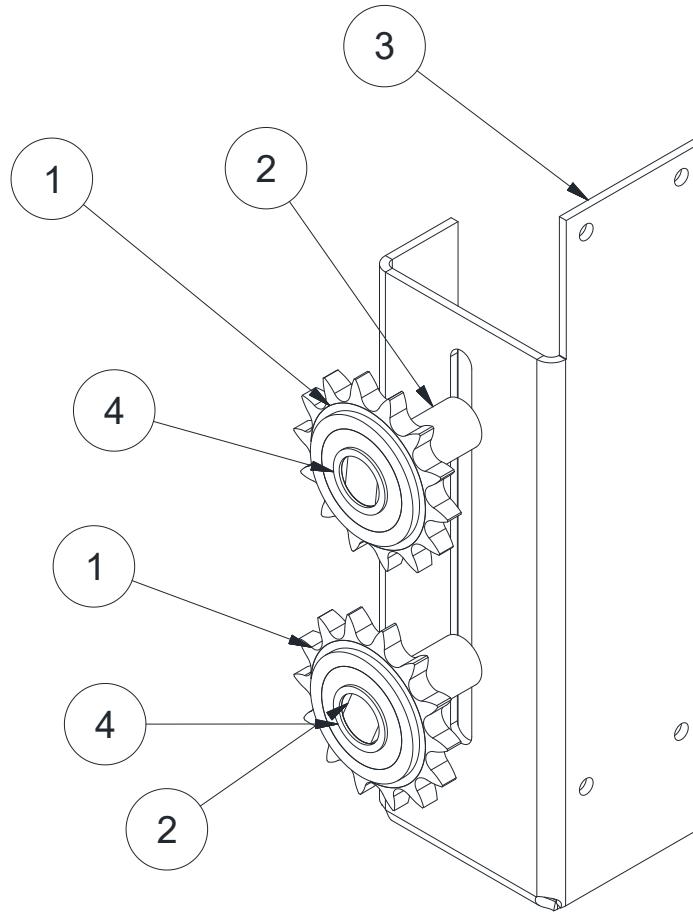
ITEM	QTY	PART NUMBER	DESCRIPTION
1	2	112A231	HANDLE, ADJUSTING; 3/8" - 16
2	1	118A121	STOP BAR SCALE
3	1	118a118	STOP BAR SCALE
4	1	20C0941	CASE CHUTE GUIDE WELDMENT
5	1	60A60072	NUT PLATE, STOP BAR, TIP OFF
6	1	60A61411	CASE GUIDE SUPPORT
7	1	60A65050	POINTER
8	1	60A65056	POINTER, STOP BAR
9	1	60A66438	TIP OFF DEFLECTOR
10	1	60B59438	DROP PLATE
11	1	60B61405	TIP OFF RAIL, SMALL
12	1	60B61407	UPPER TIP OFF GUIDE
13	1	60B76316	TIP OFF RAIL, BIG
14	1	62A31294	MOUNTING BAR SPACER
15	1	62A32627	UPPER TIP OFF GUIDE MOUNT
16	1	62A32628	UPPER SLIDE BAR
17	1	62A32629	LOWER SLIDE BAR
18	1	62A34524	ANTI-ROTATION BLOCK
19	1	62B31295	PIVOT BLOCK
20	1	62B32631	TIP OFF SLIDE BAR SUPPORT
21	1	62B33219	TIP OFF MOUNTING BAR
22	2	63A11218	SPACER SMALL
23	1	63A11535	TIP OFF SPACER LONG
24	1	63A11660	UPPER TIP OFF PIVOT SPACER
25	1	63A11661	LOWER TIP OFF SLIDE SPACER
26	1	63A11674	TIP OFF HANDLE
27	2	63A12050	SPACER LWR TIP OFF MOUNTING
28	2	63A5882	RACK SPACER
29	1	63B11216	TIP OFF BAR EXTENSION
30	1	63B11537	PIVOT PIN
31	1	P112-109	DK-89 KNOB

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Model "400"

Case Erector-Bottom Sealer



Parts List for Model "400"
CHAIN TENSIONER ASSEMBLY

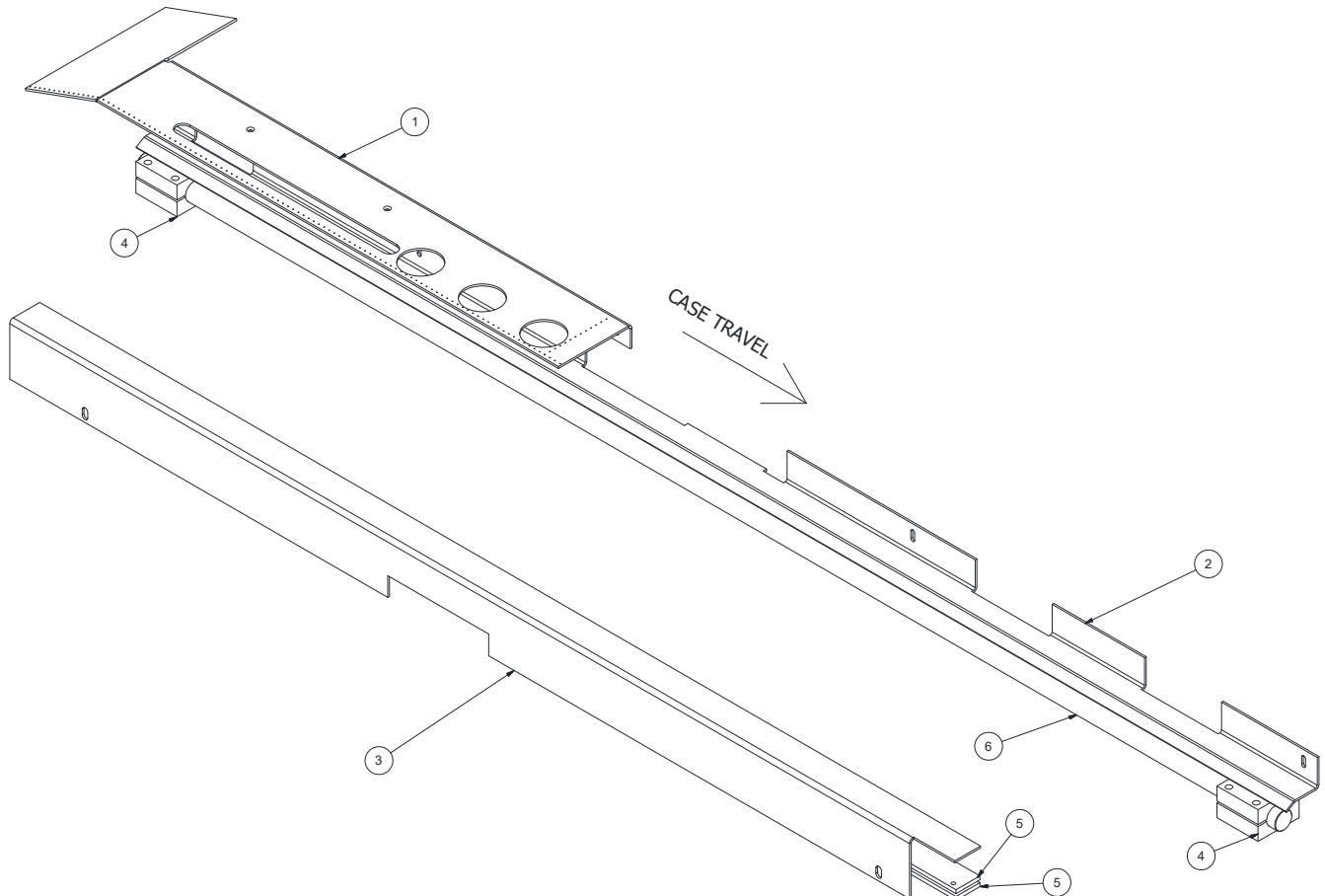
ITEM	QTY	PART NUMBER	DESCRIPTION
1	2	40A4142-828	60B14 IDLER SPROCKET 2" BORE
2	2	46A1212	CHAIN TIGHTNER STUD
3	1	60B54035	CHAIN TENSION BRACKET
4	2	P44-059	1" BEARING NICE 7616-DL 1"

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Model "400"

Case Erector-Bottom Sealer



Parts List for Model "400"

TRANSFER BEARING GUIDE ASSEMBLY

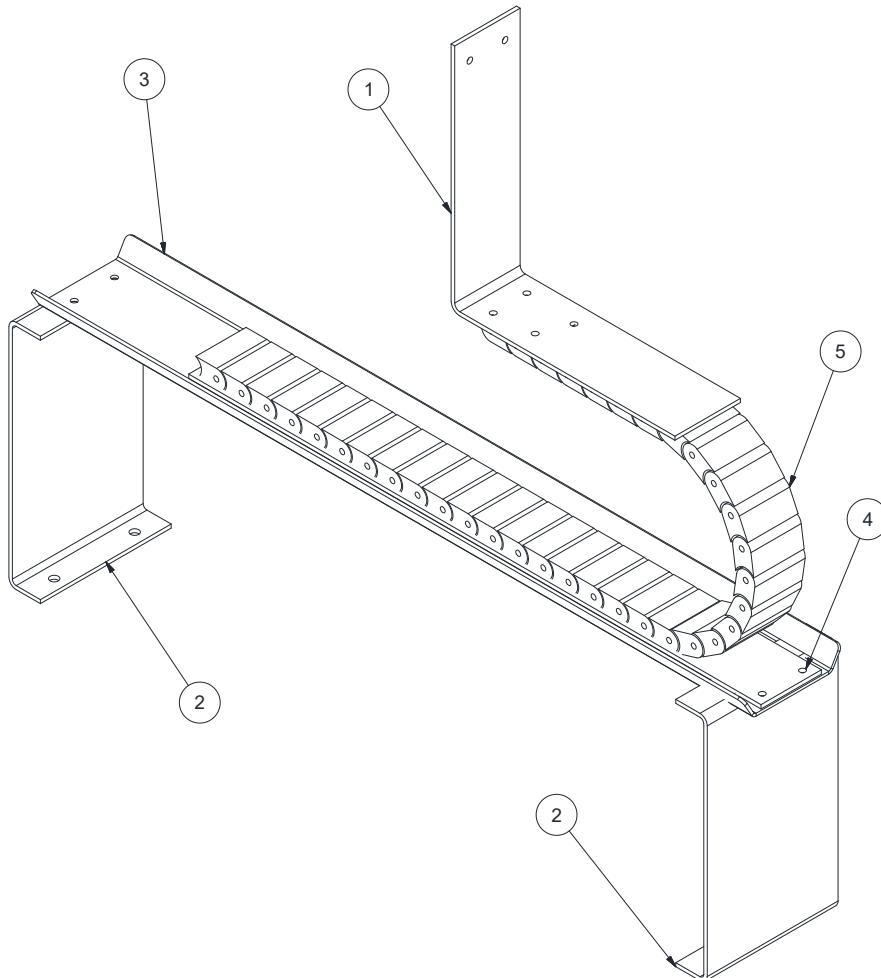
ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	60B43731	CASE GUIDE & SUPPORT
2	1	60B73300	GUIDE ROD DUST COVER
3	1	60B74603	CAM FOLLOWER DUST COVER
4	2	62A25550	CLAMP BLOCK
5	2	62A30593	CAM FOLLOWER WEAR STRIP
6	1	P47-4690	THOMSON SHAFT 1 1/4Ø X 83 1/4

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TECHNICAL MANUAL

Model "400"

Case Erector-Bottom Sealer



Parts List for Model "400"
CABLE CARRIER TRACK ASSEMBLY

ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	60B60350	BRACKET, SHUTTLE CARRIAGE
2	2	60B73264	BRACKET, FRAME CARRIAGE
3	1	60B73299	CABLE CARRIER TRACK
4	1	74A292	BELT, GUIDE CHAIN
5	1	P75-739	IGUS ENERGY CHAIN

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TECHNICAL MANUAL
Model "400"
Case Erector-Bottom Sealer

***TECHNICAL REFERENCE DRAWINGS AND
PARTS LIST***

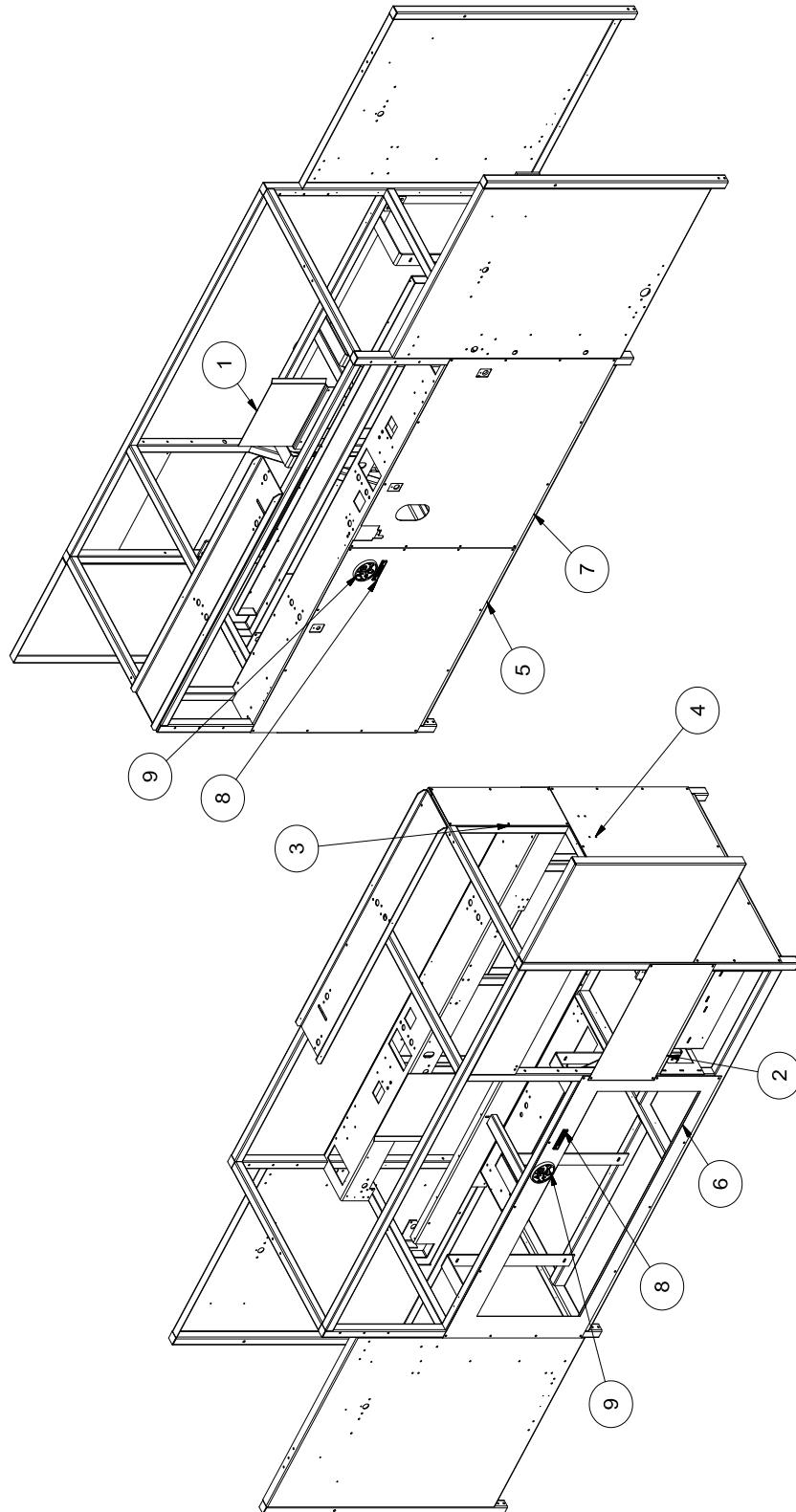
MACHINE GUARDING ASSEMBLIES SECTION

Serial Number 24182

TECHNICAL MANUAL

Model "400"

Case Erector-Bottom Sealer



Parts List for Model "400"
BASIC MACHINE GUARDING ASSEMBLY

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TECHNICAL MANUAL

Model “400”

Case Erector-Bottom Sealer

Parts List for Model “400”

BASIC MACHINE GUARDING ASSEMBLY

ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	60A44993	GLUE GUN SHIELD
2	1	60A76231	LOWER RH GUARD,YASKAWA SERVO
3	1	60B54314	UPPER REAR GUARD
4	1	60B75924	DISCHARGE END GUARD
5	1	60C71669	REAR L.H. GUARD
6	1	60C76230	ENCLOSURE GUARD, 61"
7	1	60C77536	REAR R.H. GUARD
8	2	P83-003	ABC NAMEPLATE
9	2	P83B004	A-B-C LOGO PLATE

Serial Number 24182

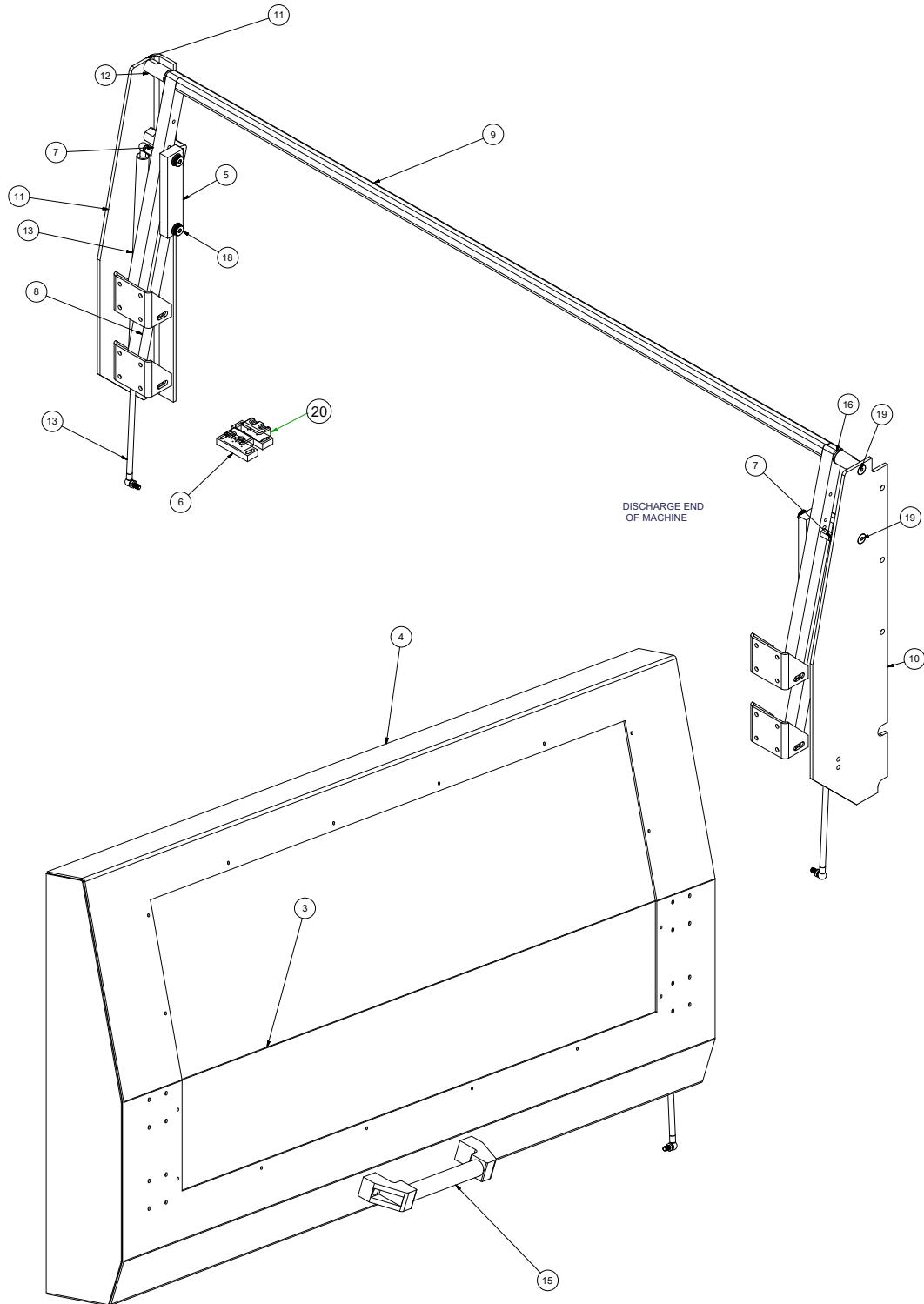
TECHNICAL MANUAL

Model "400"

Case Erector-Bottom Sealer

Parts List for Model "400"

BASIC MACHINE FRONT DOOR



Serial Number 24182

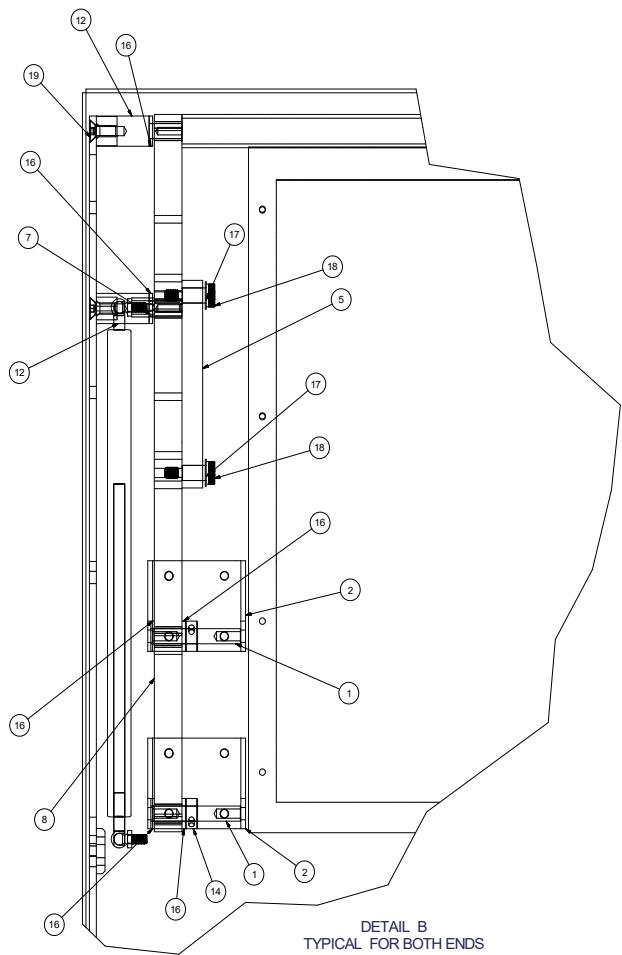
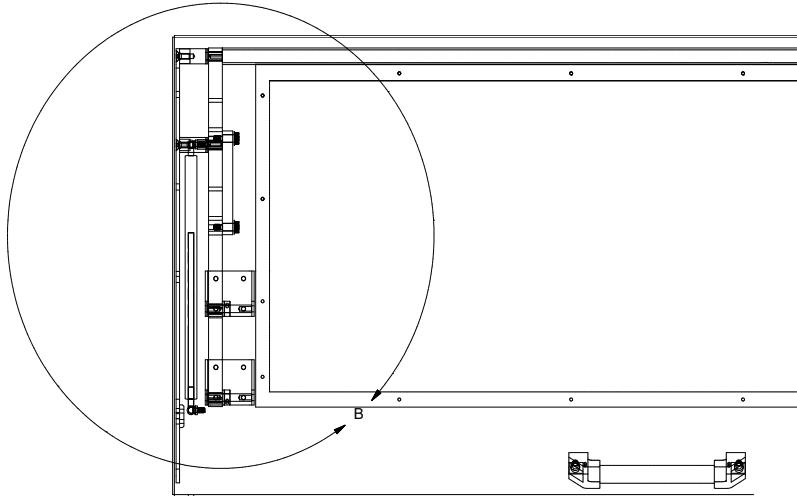
TECHNICAL MANUAL

Model "400"

Case Erector-Bottom Sealer

Parts List for Model "400"

BASIC MACHINE FRONT DOOR



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TECHNICAL MANUAL

Model "400"

Case Erector-Bottom Sealer

Parts List for Model "400"
BASIC MACHINE FRONT DOOR

ITEM	QTY	PART NUMBER	DESCRIPTION
1	4	47A4542	DOOR ARM PIVOT SHAFT
2	4	60A57395	DOOR PIVOT BRACKET
3	1	60A75381	LH GUARD DOOR WINDOW , HM
4	1	60E77535	RH GULLWING DOOR FRAME SS
5	2	62A31214	TIE BAR
6	1	62A37053	DOOR SWITCH SPACER
7	2	62A37627	GAS SPRING SPACER
8	2	62B37190	GUARD DOOR ARM
9	1	62B37192	PIVOT ARM, RH GULL WING DOOR, HM
10	1	62B37875	RH GULLWING DOOR BRACKET, DISCHARGE
11	1	62B37939	FRONT GUARD BRACKET
12	4	63A9824	PIVOT PIN
13	2	P108-036	DOOR GAS SPRING
14	4	P110-004	SET COLLAR
15	1	P112-285	DOOR HANDLE
16	12	P44-228	THRUST #T1001-1 OILITE BRG.
17	4	P44-806	THRUST WASHER
18	4	W	1/2 X 7/8 LG. SHOULDER BOLT
19	4	W	3/8-16 X 1.00 LG. FHMS
20	1	P66-27053	SAFETY SWITCH

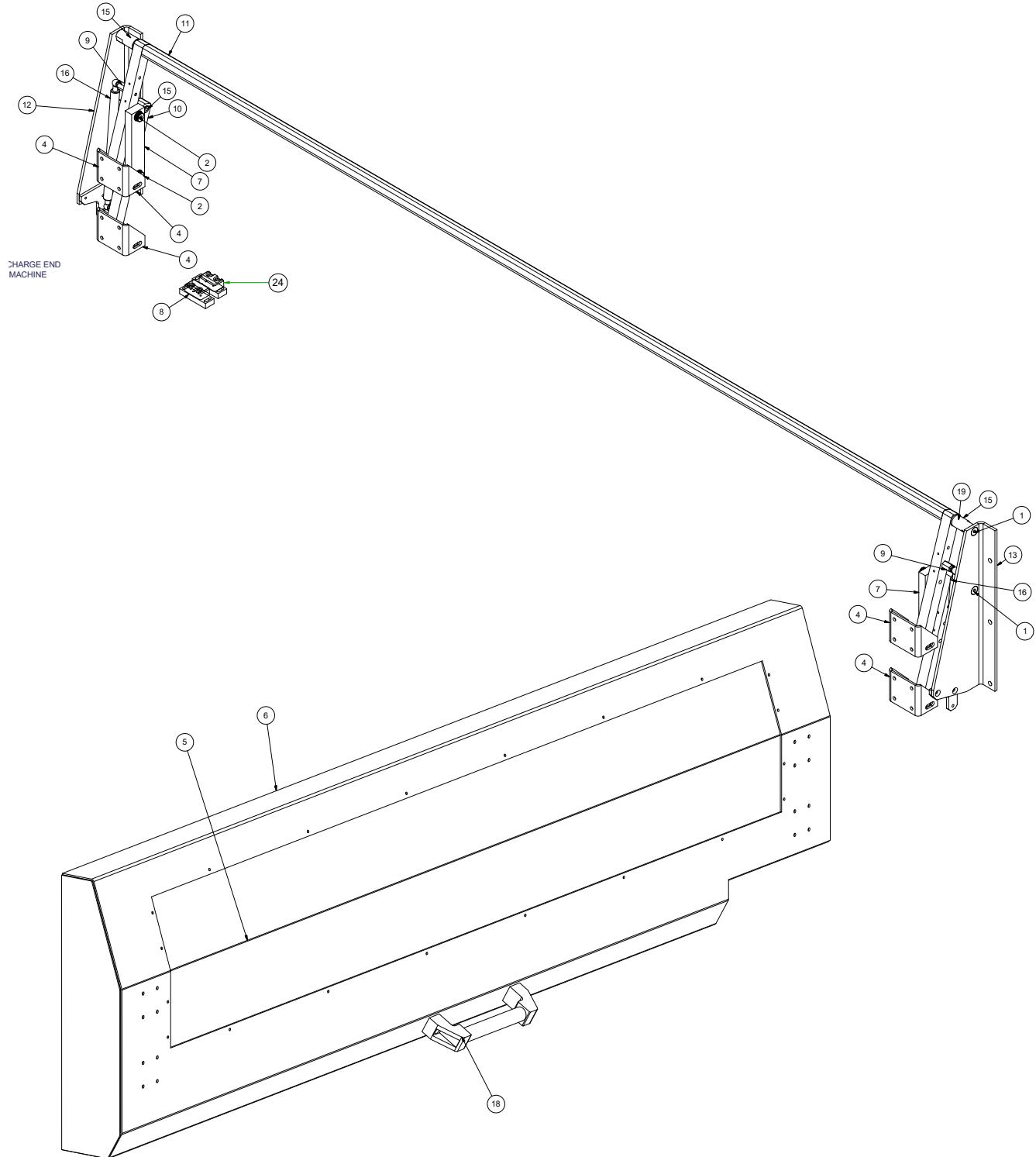
Serial Number 24182

TECHNICAL MANUAL

Model “400”

Case Erector-Bottom Sealer

**Parts List for Model "400"
BASIC MACHINE REAR DOOR**



Serial Number 24182

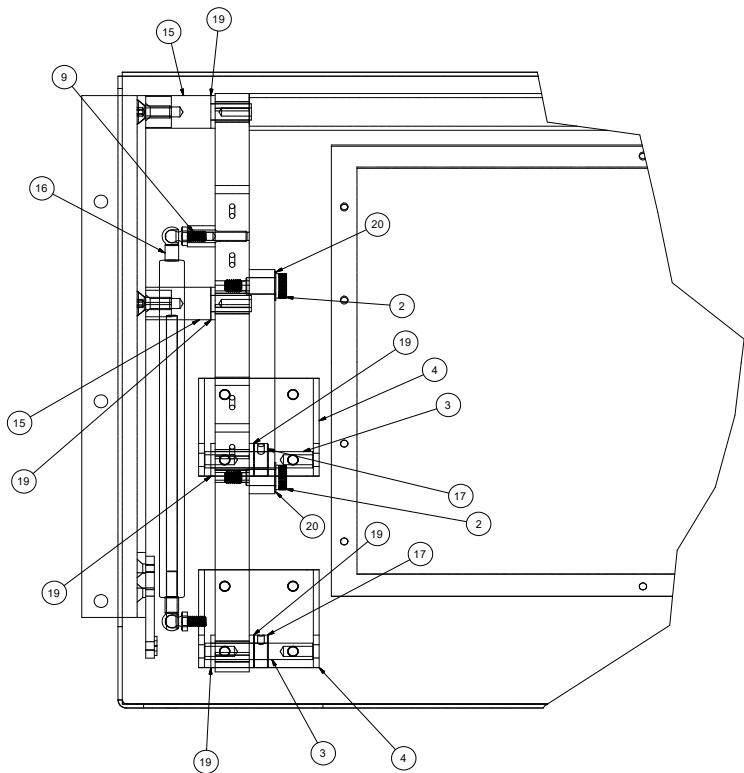
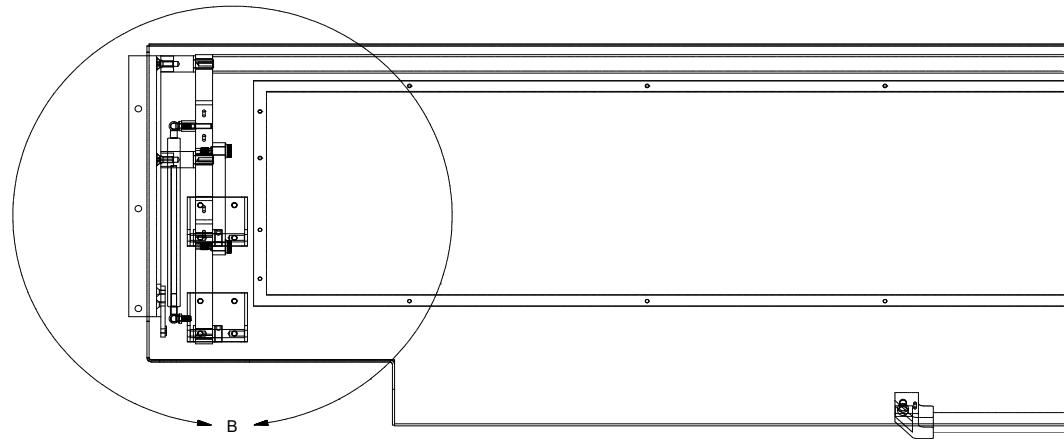
TECHNICAL MANUAL

Model "400"

Case Erector-Bottom Sealer

Parts List for Model "400"

BASIC MACHINE REAR DOOR



Serial Number 24182

TECHNICAL MANUAL

Model "400"

Case Erector-Bottom Sealer

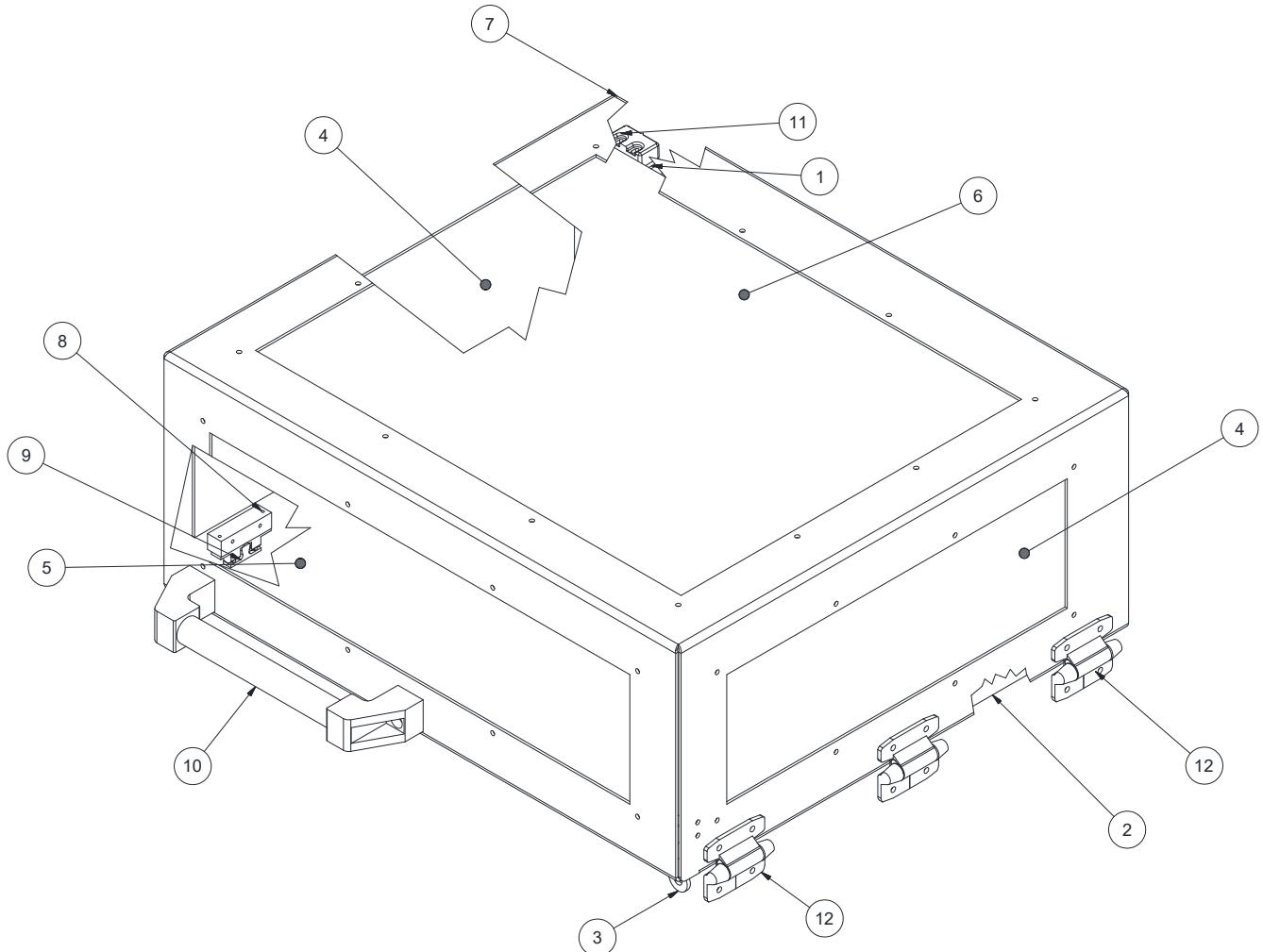
Parts List for Model "400"

BASIC MACHINE REAR DOOR

ITEM	Q T Y	P A R T N U M B E R	D E S C R I P T I O N
1	2		3/8-16 X 1.00 LG. FHMS
2	4		1/2 X 7/8 LG. SHOULDER BOLT
3	4	47A4542	DOOR ARM PIVOT SHAFT
4	4	60A57395	DOOR PIVOT BRACKET
5	1	60A75374	LH GUARD DOOR WINDOW
6	1	60E77531	LH GULLWING DOOR FRAME, SS
7	2	62A31214	TIE BAR
8	1	62A37053	DOOR SWITCH SPACER
9	2	62A37627	GAS SPRING SPACER
10	2	62B27917	GUARD DOOR ARM
11	1	62B37188	PIVOT ARM, LH GULL WING DOOR
12	1	62B37878	FRONT GUARD BRACKET
13	1	62B37880	LH GUARD DOOR BRACKET
15	4	63A9824	PIVOT PIN
16	2	P 108-033	DOOR GAS SPRING
17	4	P 110-004	SET COLLAR
18	1	P 112-285	DOOR HANDLE
19	12	P 44-228	THRUST #T1001-1 OILITE BRG.
20	4	P 44-806	THRUST WASHER
22	2	60A77798	SHOCK MOUNT EXTENSION
23	2	WRGLW -5/16	REGULAR SPRING LOCK WASHER
24	1	P 66-27053	SAFETY SWITCH

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TECHNICAL MANUAL
Model "400"
Case Erector-Bottom Sealer



Parts List for Model "400"
SERVO RAM GUARD DOORASSEMBLY

Assembly #15C10862

ITEM	QTY	PART NUMBER	DESCRIPTION
1	2	60A68602	DOOR SW BRKT NON-CONTACT
2	1	60A74598	RAM DOOR STIFFENER PLATE
3	1	60A74599	RAM DOOR STOP
4	2	60A74600	RAM DOOR SIDE WINDOW
5	1	60A74601	RAM DOOR FRONT WINDOW
6	1	60A74602	RAM DOOR TOP WINDOW
7	1	60D74817	RAM GUARD DOOR
8	1	62A37049	DOOR CATCH BLOCK
9	1	P112-242-B	BALL GRAB CATCH
10	1	P112-285	DOOR HANDLE
11	1	P66-27053.	SAFETY SWITCH MAGNET
12	3	P84-228	FRiction HINGE, SOUTHCO

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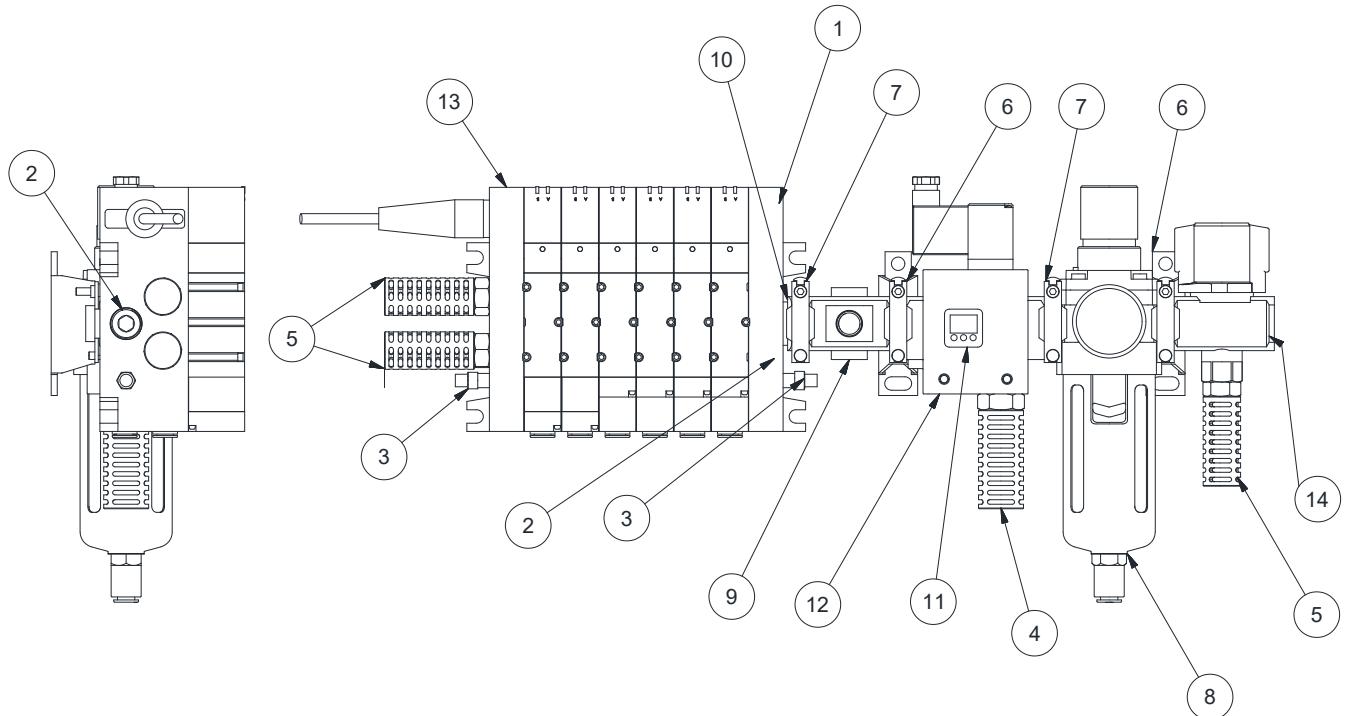
TECHNICAL MANUAL
Model "400"
Case Erector-Bottom Sealer

***TECHNICAL REFERENCE DRAWINGS AND
PARTS LIST***

GLUE OPTION ASSEMBLIES SECTION

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TECHNICAL MANUAL
Model "400"
Case Erector-Bottom Sealer



Parts List for Model "400"
MAIN AIR SUPPLY ASSEMBLY

Assembly #P147B001

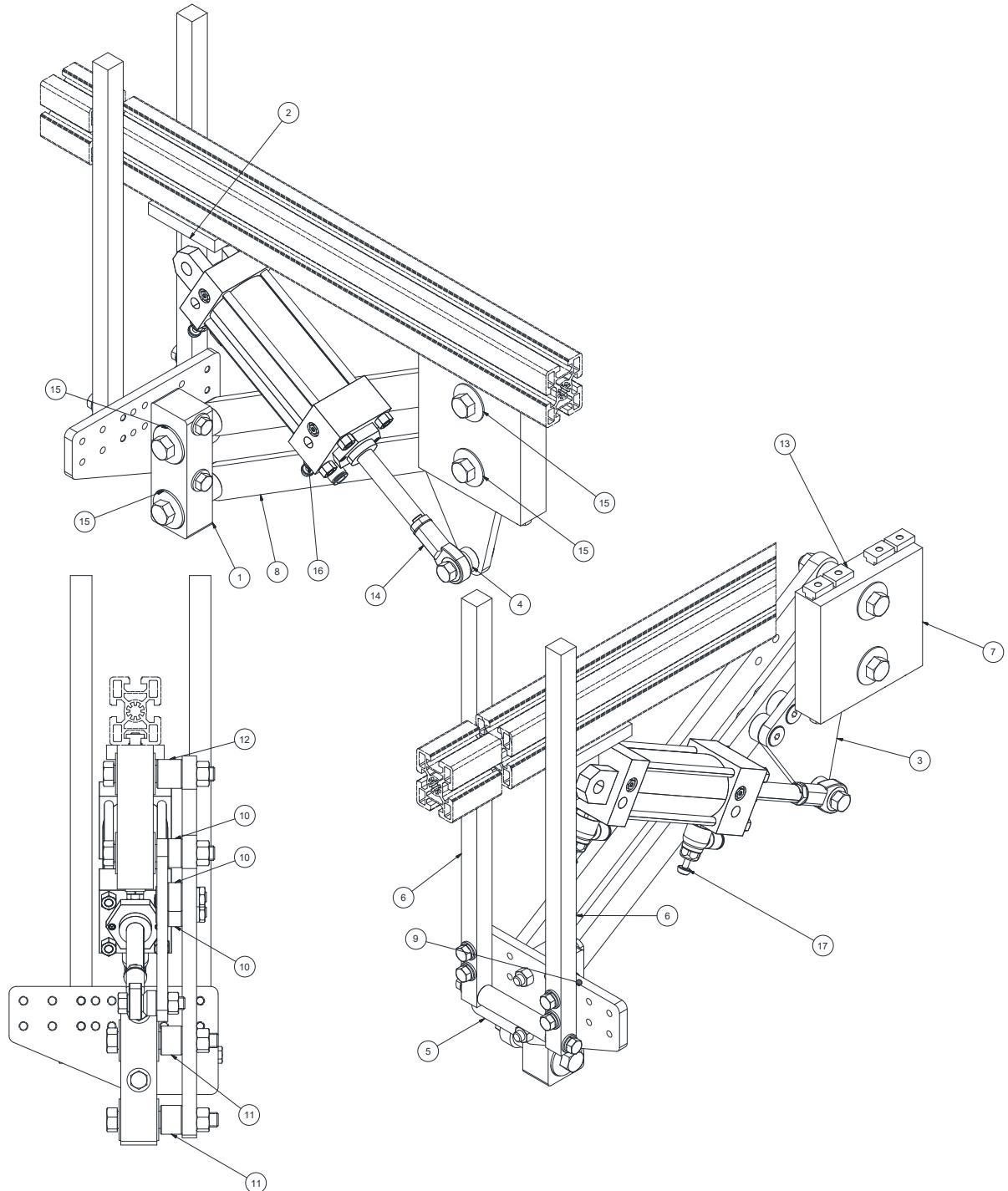
ITEM	QTY	PART NUMBER	DESCRIPTION
1	1		3/4 NPT PLUG
2	3		1/2 NPT PLUG
3	2	P128-019	.125 B.S.P. SINTERED BRZ MUFFLER
4	1	P128-031	SMC SILENCER 1/2NPT PLASTIC
5	3	P128-032	SILENCER
6	2	P129-311	SPACER W/ BRACKET
7	2	P129-312	SPACER
8	1	P129-315	FILTER REGULATOR & GAUGE
9	1	P129-316	CROSS INTERFACE (4) 3/8, (2) 1/2 PORTS
10	1	P129-339	SMC MODULAR ADAPTER
11	1	P66-3121	DIGITAL PRESSURE SWITCH
12	1	P69-4071	SOFT START UP VALVE
13	1	P69-4104	6 STATION VALVE BANK, (SMC)
14	1	P69-926	3PORT SHUT-OFF VALVE

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Model "400"

Case Erector-Bottom Sealer



Parts List for Model "400"
REAR PUSHER ARM ASSEMBLY

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TECHNICAL MANUAL

Model "400"

Case Erector-Bottom Sealer

Parts List for Model "400"

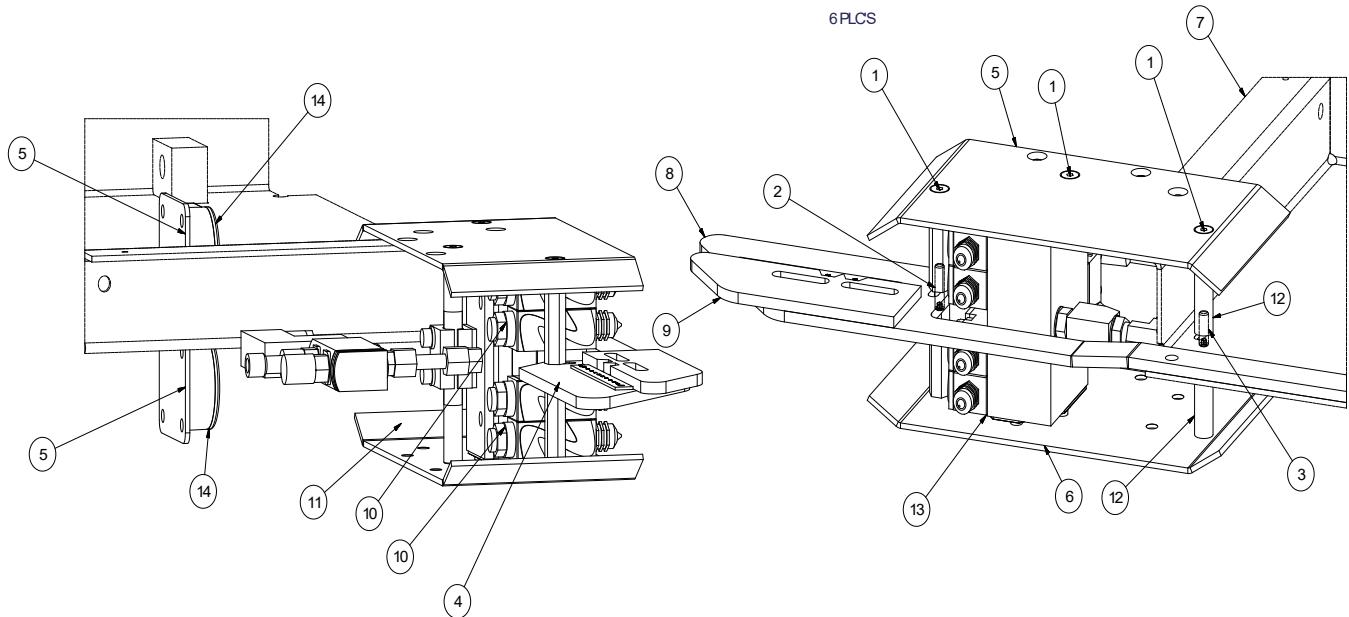
REAR PUSHER ARM ASSEMBLY

Assembly #15D11615

ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	62A28412	PUSHER PIVOT - SECOND
2	1	62A28421	CYLINDER MOUNT - SECOND
3	1	62A28422	SWING ARM SPACER PLATE - SECOND
4	1	62A28425	ROD END BEARING SPACER
5	1	62A30168	PUSHER MOUNT PLATE - SECOND
6	2	62A30830	CASE PUSHER BARS
7	1	62A31456	SECOND PIVOT MOUNT BASE
8	2	62B28420	SWING ARMS, UPPER AND LOWER
9	1	63A10992	SUPPORT SPACER, CASE PUSHER BARS
10	3	63A12944	SWING ARM SPACER
11	2	63A12945	SWING ARM SPACER
12	1	63A12946	SWING ARM SPACER
13	6	P114-014	T-NUT 5/16-18
14	1	P115-096	ROD END
15	4	P44-907	BEARING, 1.437 DIA.
16	1	P67-2191	SMC AIR CYLINDER
	1	P79-139	REPAIR KIT FOR P67-2192
17	2	P69-732	FLOW CONTROL 3/8P X 3/8T

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TECHNICAL MANUAL
Model "400"
Case Erector-Bottom Sealer



Part List for Model "400"
ADHESIVE APPLICATOR ASSEMBLY

Assembly #15C12984

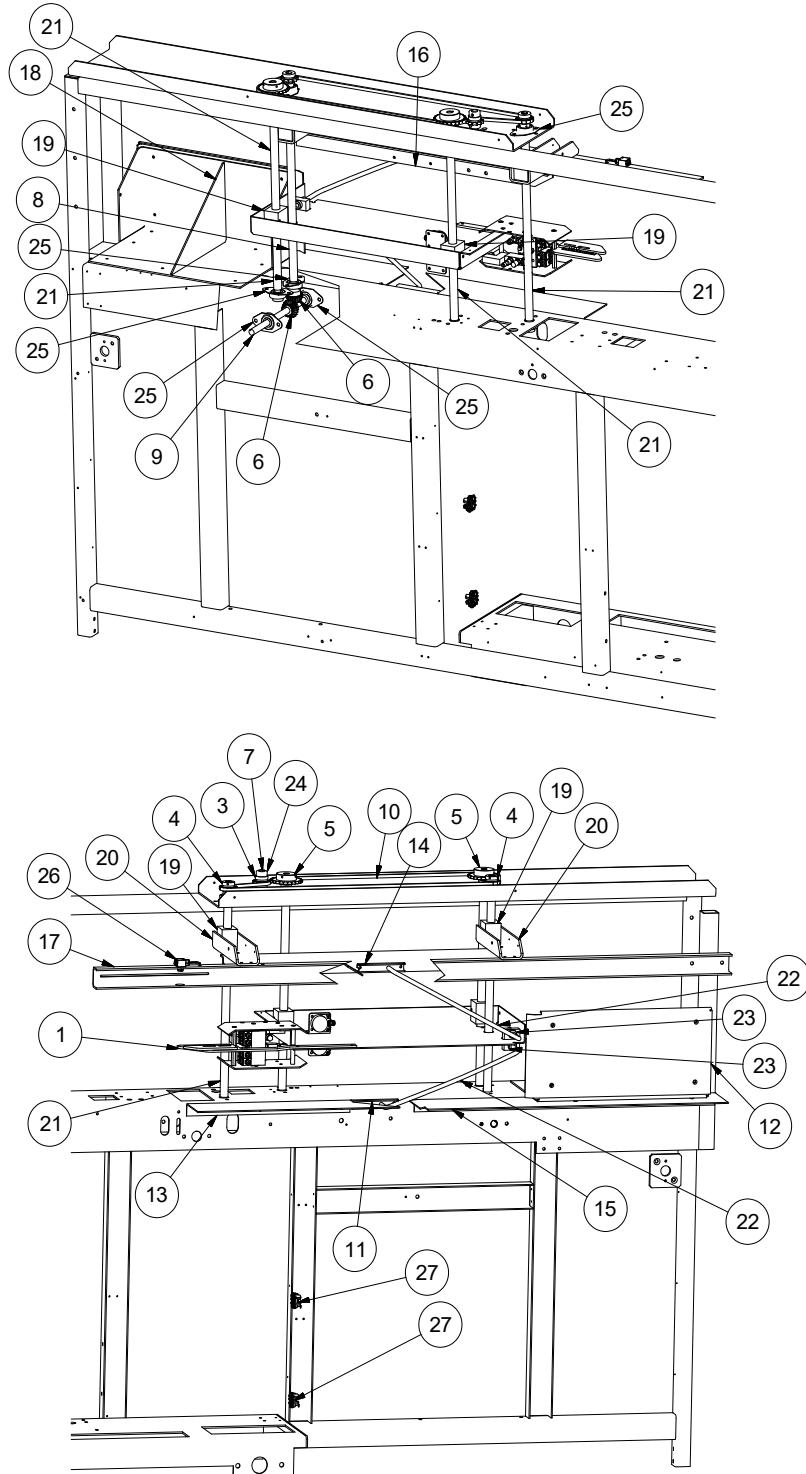
ITEM	QTY	PART NUMBER	DESCRIPTION
1	6		1/4-20 X .75" FHMS
2	1		1/4-20 X 1.00" LG SET SCREW
3	1		1/4-20 X .75" LG SET SCREW
4	1	118A104	TONGUE ADAPTER SCALE
5	2	60A77853	LED WORKING LIGHT MTG BRKT
6	1	60B70839	UPPER GLUE HEAD GUARD
7	1	60B70840	LOWER GLUE HEAD GUARD
8	1	60C46053	SUPPORT PLATFORM
9	1	60C77575	TONGUE
10	1	62B33711	TONGUE ADAPTER, SHORT FLAPS
11	2	63A10250	SPACER, 2-1/16" LG.
12	1	63A12152	GLUE HEAD MOUNTING SPACER
13	2	63A8975	GLUE HEAD SPACER
14	2	P66-7513	BANNER LED WORK LIGHT
15	1	P92-293	SURE BEAD GLUE HEAD
16	1	P92-1008	NORDSON IN-LINE FILTER JACKET (NOT SHOWN)

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TECHNICAL MANUAL

Model "400"

Case Erector-Bottom Sealer



Part List for Model "400"
VERTICAL ADJUSTMENT ASSEMBLY

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TECHNICAL MANUAL

Model "400"

Case Erector-Bottom Sealer

Part List for Model "400"
VERTICAL ADJUSTMENT ASSEMBLY

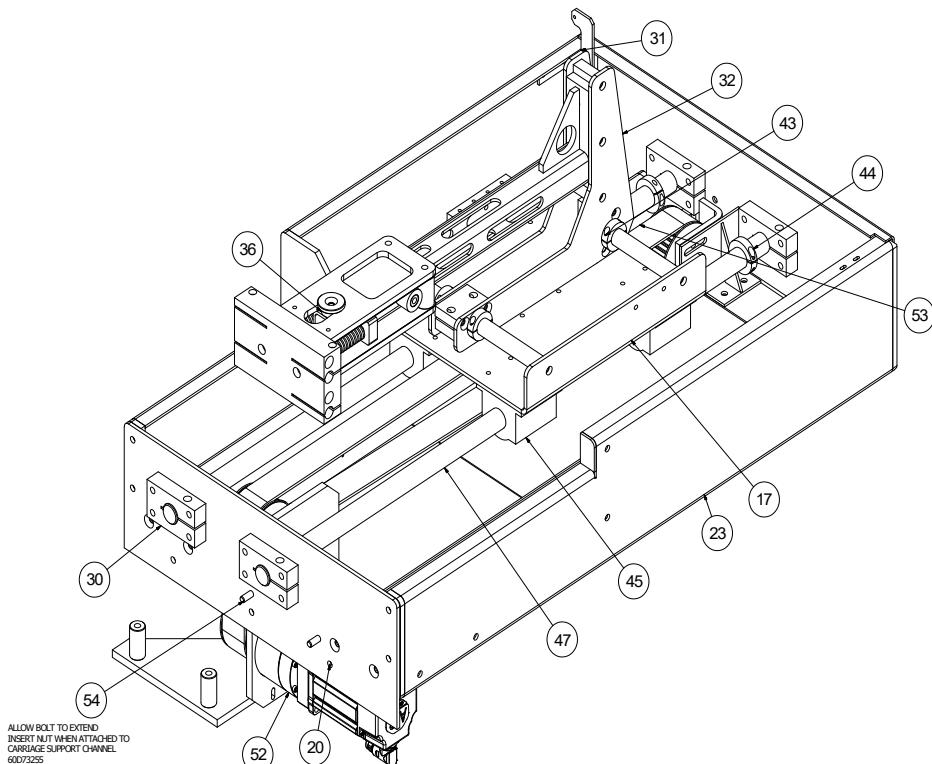
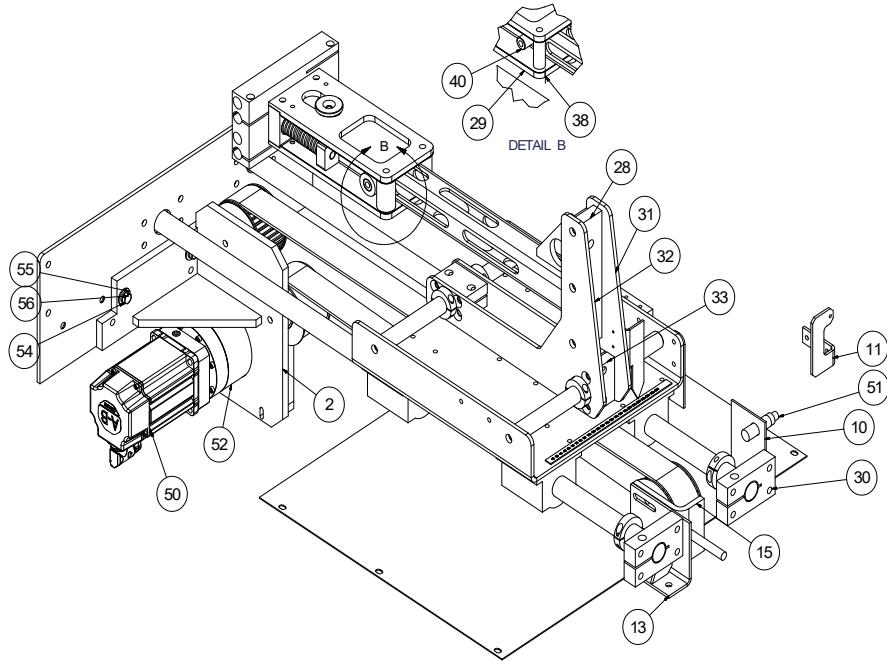
ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	15C12984	GLUE HEAD ASSEMBLY, SURE BEAD
3	1	40A2122-223	SPROCKET, 12T, 1/2 P, 3/4 BUSH
4	2	40BS12-.75	SPROCKET 1/2P 12T 3/4B 3/16 KW
5	2	40BS24-.75	SPROCKET, 1/2P 24T 3/4B 3/16KW
6	2	41A3204-237	Bevel Gear, Pitch: 10 Teeth: 20
7	1	46A1197	COMPRESSION AND UPPER DRIVE TIGHTENER STUD
8	1	47A4523	VERTICAL ADJ. SHAFT
9	1	47A4536	SLIDE CRANK SHAFT
10	1	48A441	HM TOP ADJUSTMENT CHAIN
11	1	60A43882	FOLDER ROD GUIDE
12	1	60A44339	GLUE PAD
13	1	60A44544	GUIDE ANGLE
14	1	60A44742	GUIDE, UPPER FOLDER ROD GUIDE RH
15	1	60A48491	CASE SUPPORT
16	1	60B46052	MOUNTING BRACKET
17	1	60B53206	UPPER CASE GUIDE
18	1	60C44343	PAD SUPPORT
19	4	62A26188	ADJUSTING NUT
20	2	62B26193	UPPER CASE GUIDE SUPPORT CHANNEL
21	3	63A13499	VERTICAL ADJUSTING ROD
22	2	63C8922	BOTTOM FLAP FOLDER ROD
23	4	P110-004	SET COLLAR
24	2	P110-005	3/4" STD. COLLAR
25	10	P44-554	NICE #6912 3/4" FLANGED BEARING
26	1	P66-7230	PHOTOELECTRIC SENSOR
27	2	P92-640	NORDSON HOSE HANGER

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TECHNICAL MANUAL

Model "400"

Case Erector-Bottom Sealer



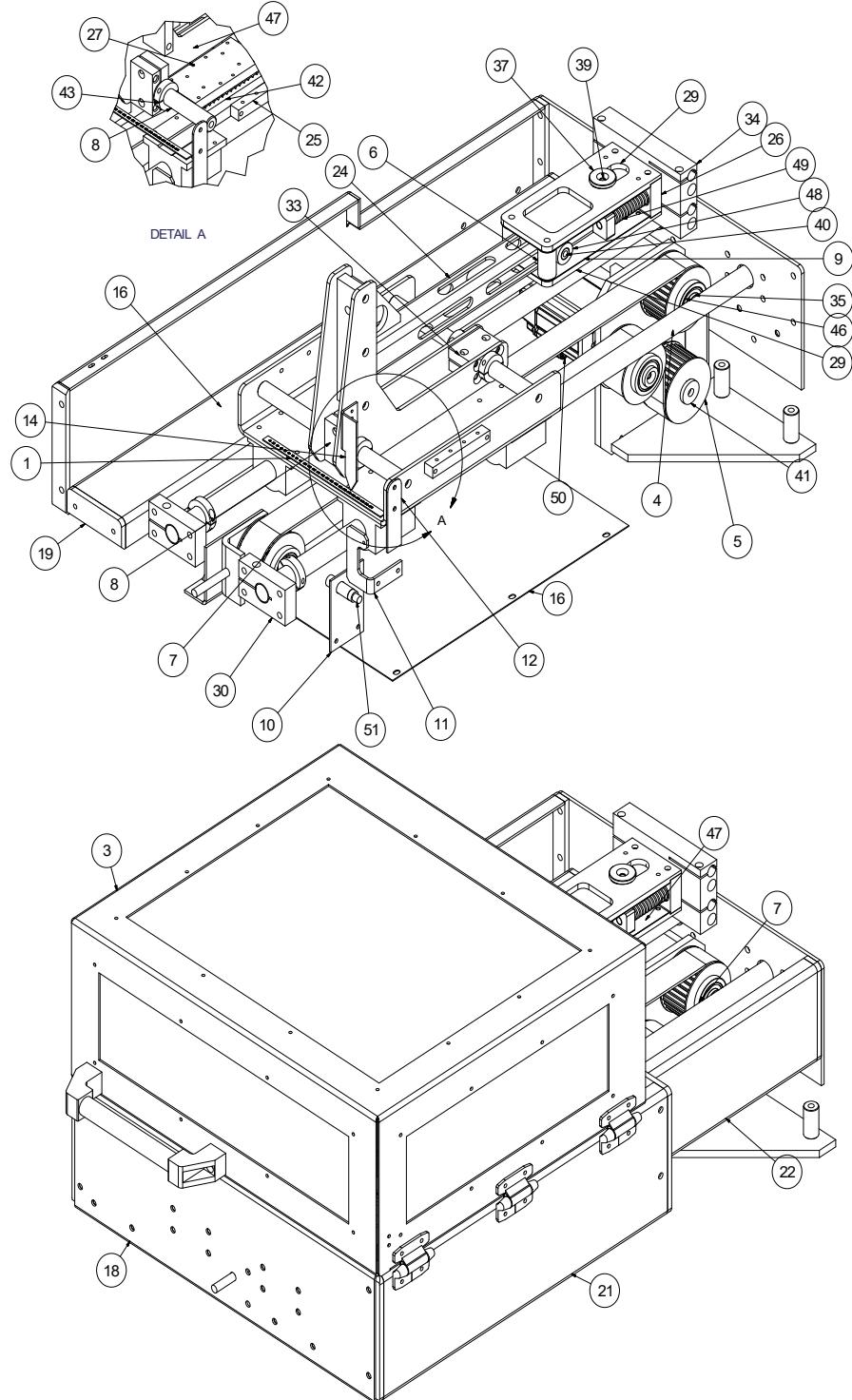
Part List for Model "400" SERVO RAM ASSEMBLY

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TECHNICAL MANUAL

Model "400"

Case Erector-Bottom Sealer



Part List for Model "400"
SERVO RAM ASSEMBLY

Serial Number 24182

TECHNICAL MANUAL

Model "400"

Case Erector-Bottom Sealer

Part List for Model "400"

SERVO RAM ASSEMBLY

Assembly #15E12941

ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	118A132	SCALE SERVO RAM
2	1	15B12307	SERVO MOUNT ASSY, YASKAWA
3	1	15C10862	RAM GUARD DOOR ASSEMBLY
4	2	42A1253	IDLER PULLEY
5	1	42A1254	DRIVE PULLEY, 32mm BORE
6	2	42A933	ROLLER SLEEVE
7	2	42B922	IDLER PULLEY
8	2	47A6676	RAM ADJUSTING SHAFT
9	2	60A59298	SLIDE PLATE SHIM
10	1	60A69281	SERVO RAM HOME EYE BRACKET
11	1	60A74891	OPEN STOP BRACKET
12	1	60A76188	SERVO RAM HOME FLAG
13	1	60A76189	TENSIONER MOUNT
14	1	60A77067	KD POINTER SHORT
15	1	60B58711	CHAIN TENSIONER
16	1	60B65467	LOWER RAM GUARD
17	1	60B76193	RAM MOUNTING CHANNEL
18	1	60B76194	RAM FRAME END CAP
19	2	60B76195	RAM CROSS MEMBER
20	1	60B76234	GUIDE SHAFT TIE PLATE
21	1	60C76227	RAM RH SIDE CHANNEL
22	1	60C76228	RAM INSIDE RH CHANNEL
23	1	60C76229	RAM LH SIDE CHANNEL
24	1	61D4776	COMPRESSION RAM MANDREL
25	1	62A32318	4 POINT LUBE BLOCK

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Model "400"

Case Erector-Bottom Sealer

Part List for Model "400"

SERVO RAM ASSEMBLY

Assembly #15E12941

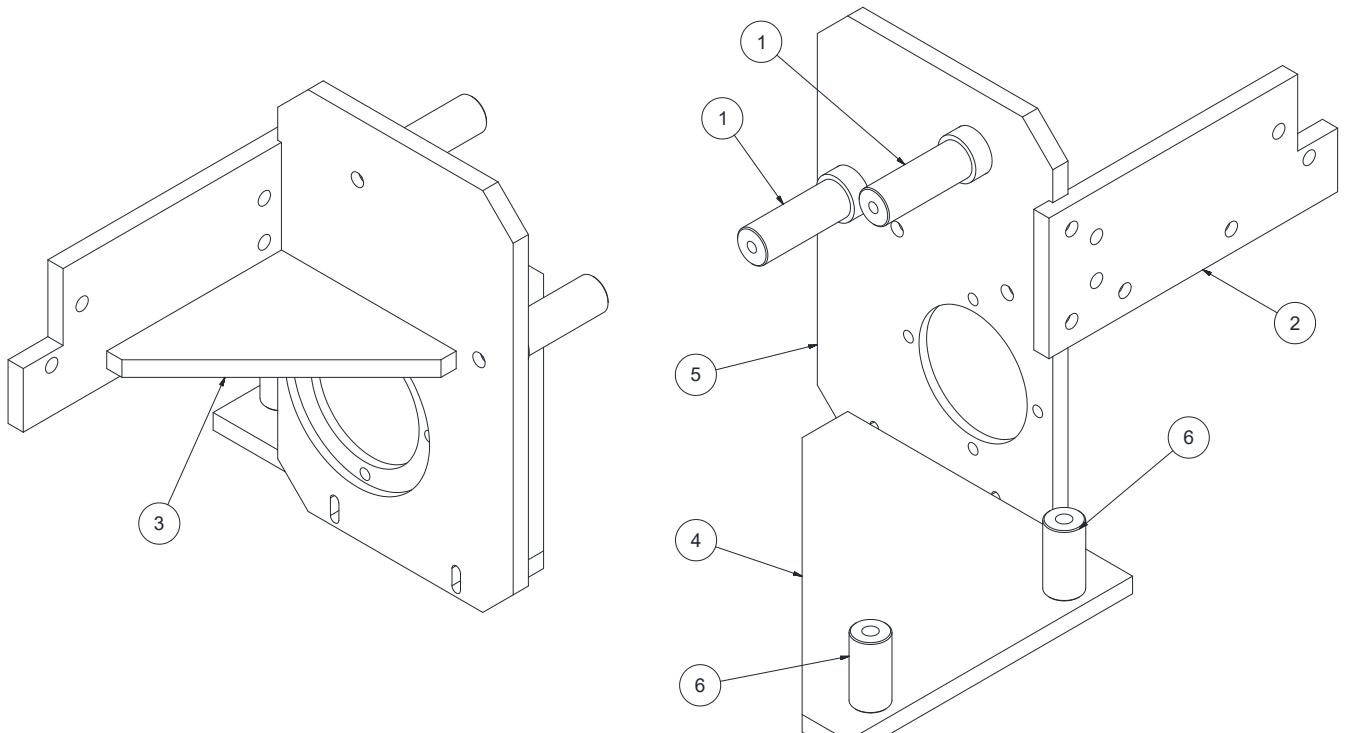
ITEM	QTY	PART NUMBER	DESCRIPTION
26	1	62A32749	RAM PAD MOUNTING BLOCK
27	1	62A37457	CLAMP MOUNT
28	1	62A37591	RAM SPACER BAR
29	2	62B31820	PLATE, MANDREL SLIDE
30	4	62B32752	RAM SHAFT MOUNTING BLOCK
31	1	62B32755	RAM RH MOUNTING PLATE
32	1	62B32756	RAM LH MOUNTING PLATE
33	2	62B36030	RAM CLAMP BLOCK
34	1	62C37381	RAM BLOCK, 8"
35	4	63A11434	SPUR GEAR END CAP
36	2	63A11515	CENTER BUSHING
37	2	63A11516	CENTER BUSHING CAP
38	2	63A11517	ROLLER PIN
39	1	63A11518	CENTER BUSHING PIN
40	1	63A11519	BUMPER PIN
41	1	63A13726	KEEPER WASHER
42	1	74A278	TIMING BELT CLAMP
43	4	P110-008	1" SPLIT COLLAR, SP16-F
44	2	P110-010	1 1/4" SPLIT COLLAR #SP20F
45	4	P44-1035	LINEAR 1-1/4" PILLOW BLK BEARING
46	8	P44-319	BALL BEARING, 1"
47	2	P47-5959	RAM GUIDE SHAFT
48	2	P59-276	SPRING, EXTENSION
49	2	P59-287	COMPRESSION SPRING
50	1	P66-24464	SERVO MOTOR VPL
51	1	P66-2797	SENSOR, PROX 18mm-8mm RANGE
52	1	P72-409	SHIMPO GEAR REDUCER 10:1 (MPLB430P)
53	1	P74-208	TIMING BELT 98" LG.
54	2	W HHCS-3/8-16x1.75	HEX HEAD CAP SCREW
55	2	WRGFW -0.406x1-B	REGULAR FLAT WASHER
56	2	WRGLW -3/8	REGULAR SPRING LOCK WASHER

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TECHNICAL MANUAL

Model "400"

Case Erector-Bottom Sealer



Part List for Model "400"
SERVO MOUNT ASSEMBLY

Assembly #15B12307

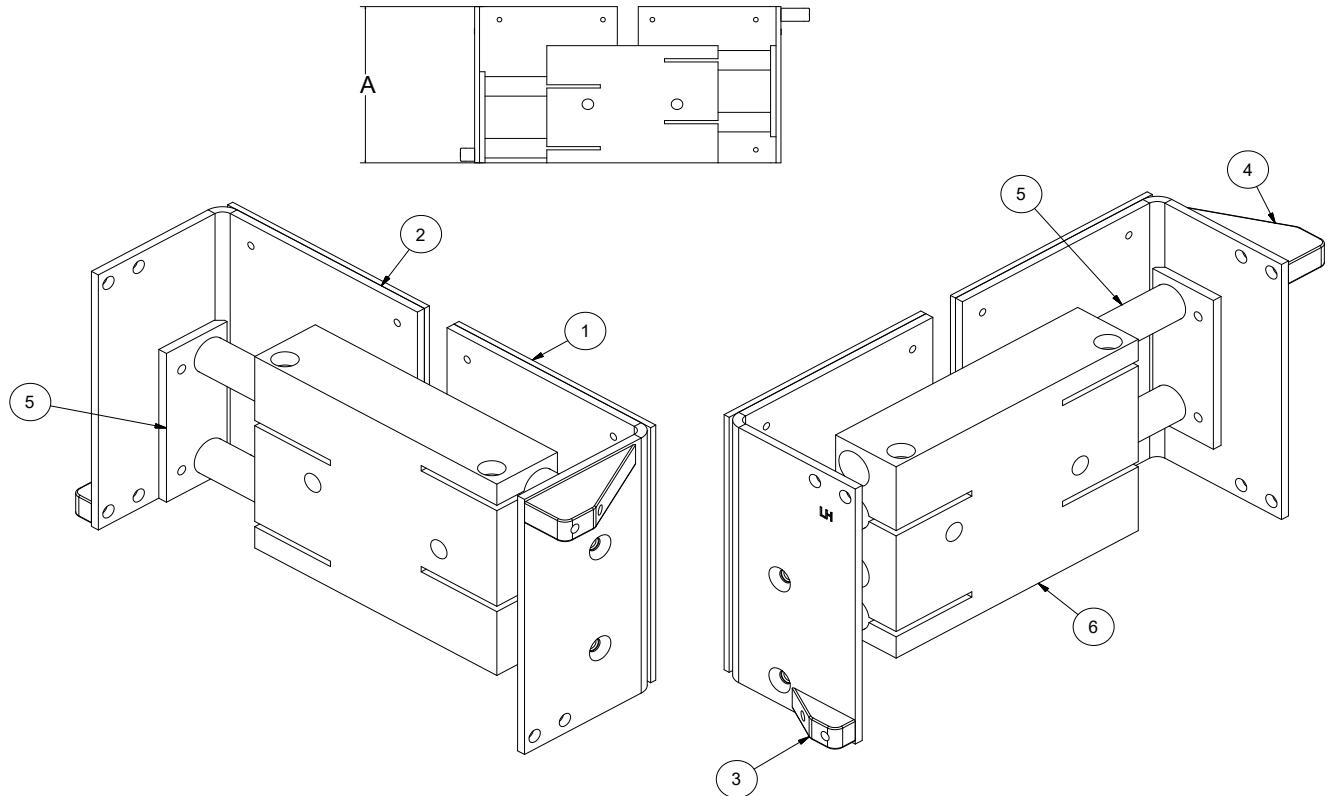
ITEM	QTY	PART NUMBER	DESCRIPTION
1	2	47A6700	PULLEY BEARING SHAFT
2	1	62A37608	SERVO MOUNT SIDE PLATE
3	1	62A37609	SERVO MOUNT GUSSET
4	1	62A37626	SERVO MOUNT GUSSET
5	1	62B37607	SERVO MOUNT, YASKAWA
6	2	63A9795	INSERT GUIDE STOP SPACER

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TECHNICAL MANUAL

Model "400"

Case Erector-Bottom Sealer



Part List for Model "400"

SERVO RAM COMPRESSION PAD

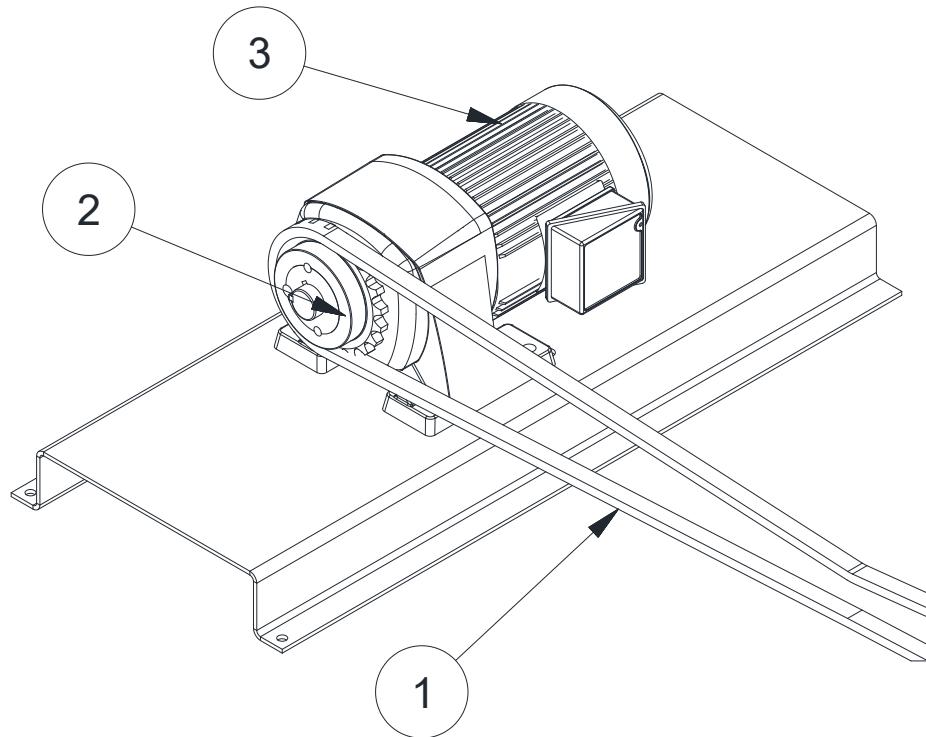
I T E M	Q T Y	P A R T N U M B E R	D E S C R I P T I O N
1	1	60A 48467	R H P R E S S U R E P A D , A = 8.00 "
2	1	60A 48468	L H P R E S S U R E P A D , A = 8.00 "
3	1	62A 26352	C A S E S Q . B L O C K
4	1	62A 27310	R H S Q U A R I N G B L O C K
5	2	62A 28283	C O M P R E S I O N P A D A D J . P L A T E
6	1	62C 37381	I N F E E D R A M

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TECHNICAL MANUAL

Model "400"

Case Erector-Bottom Sealer



Parts List for Model "400"

MAIN DRIVE ASSEMBLY (GLUE OPTION)

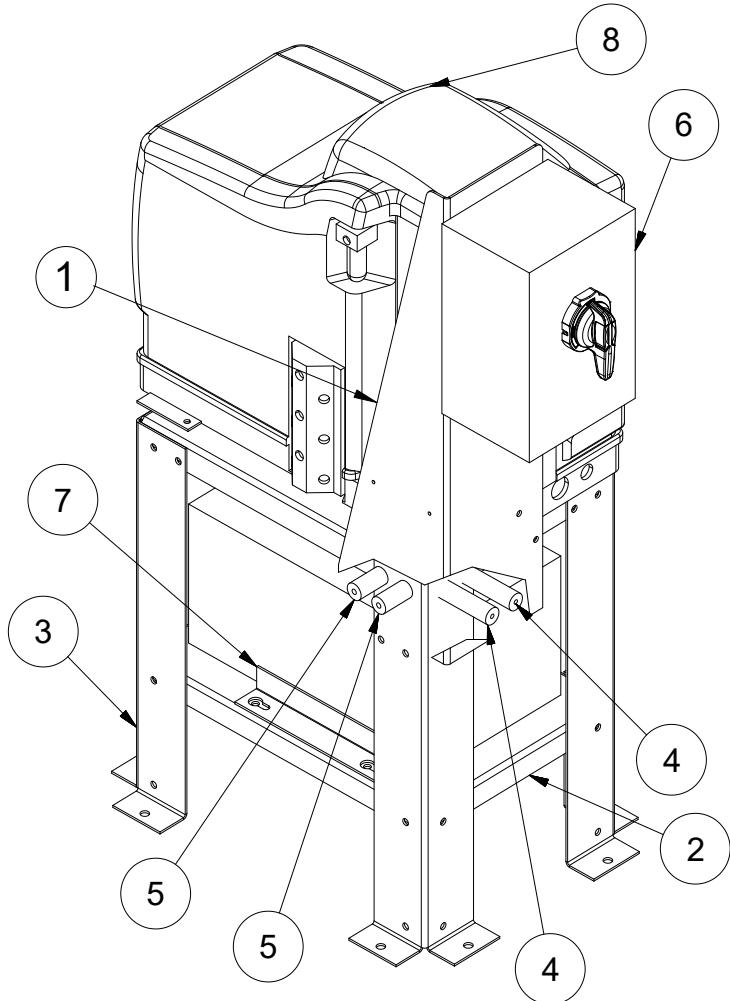
ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	48A439	400 MAIN DRIVE #60 ROLLER CHAIN
2	1	60BTB21-1.25	T.L. SPROCKET, 60P, 21T W/ BUSH., 1-1/4" BORE, 1/4" KEY
3	1	P71-2157	BROTHER GEAR MOTOR, 1.25HP

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TECHNICAL MANUAL

Model "400"

Case Erector-Bottom Sealer



Parts List for Model "400"
NORDSON HOTMELT UNIT ASSEMBLY

ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	60B77568	HOT MELT DISCONNECT BRKT.
2	1	60C76928	TRANSFORMER MOUNT ON GLUE STAND
3	1	60D76926	GLUE STAND, WITH 5KVA TRANSFORMER
4	2	63A13099	GLUE STAND SPACER
5	2	63A6560	UPPER CONVEYOR SPACER
6	1	P66-25036	ENCLOSURE DISCONNECT SWITCH
7	1	P66-3772	TRANSFORMER-5KVA
8	1	P92-048	PRO BLUE 10 HOT MELT UNIT
9	1	P92-623	8' NORDSON HOSE (NOT SHOWN)

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TECHNICAL MANUAL
Model "400"
Case Erector-Bottom Sealer

***TECHNICAL REFERENCE DRAWINGS AND
PARTS LIST***

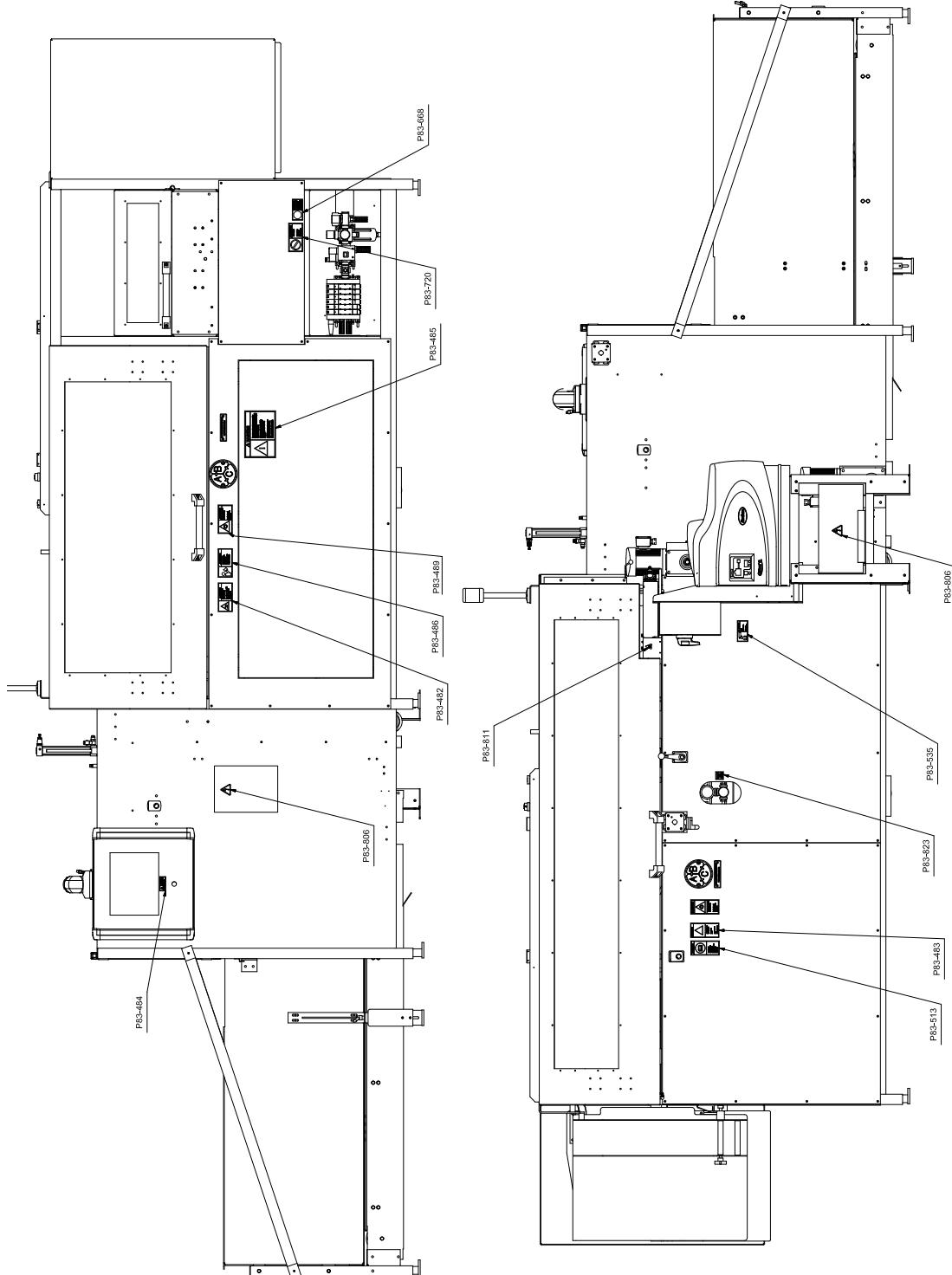
SAFETY LABEL SECTION

Serial Number 24182

TECHNICAL MANUAL

Model “400”

Case Erector-Bottom Sealer



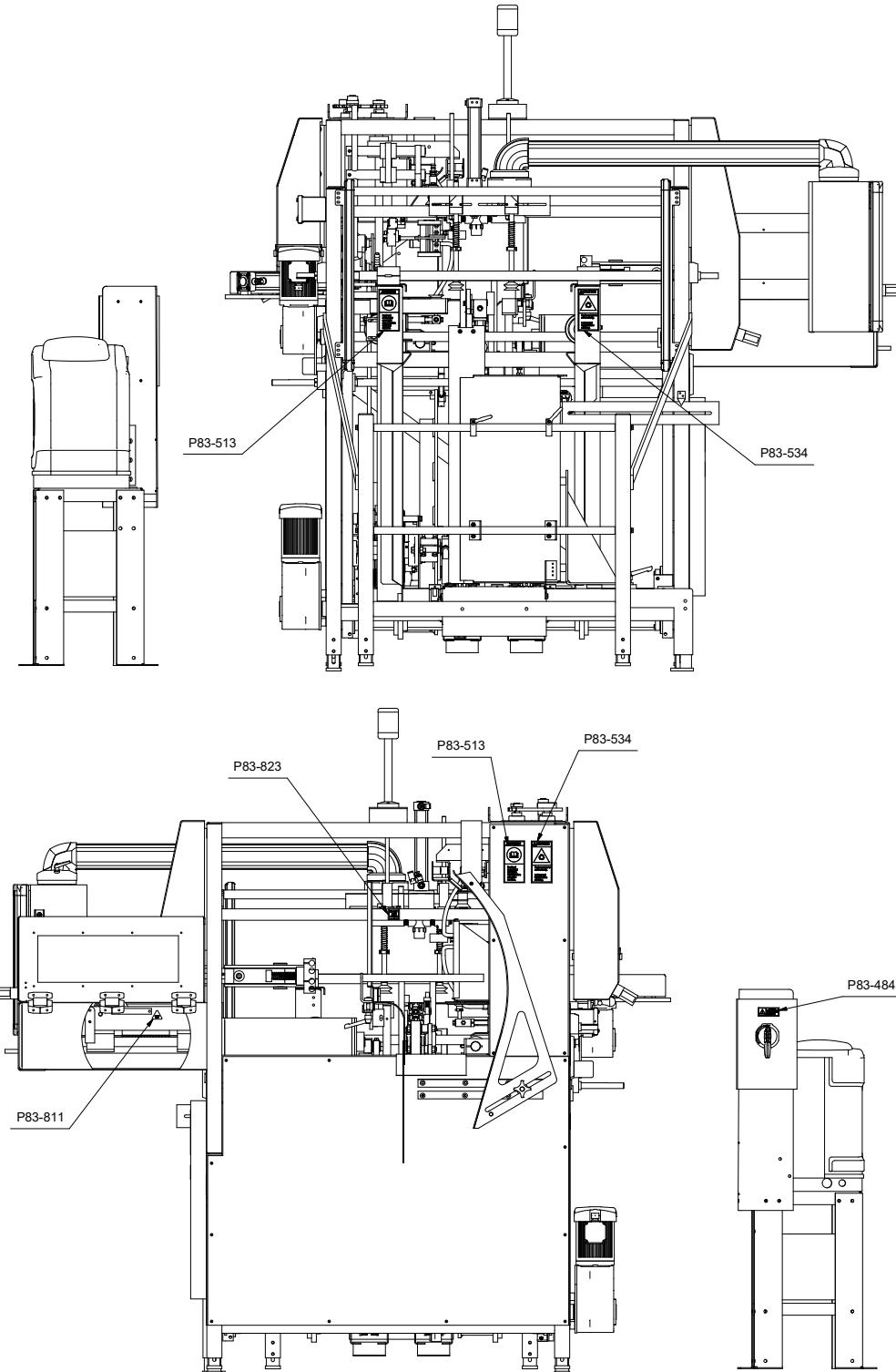
Parts List for Model "400" SAFETY STICKER LOCATIONS

Serial Number 24182

TECHNICAL MANUAL

Model "400"

Case Erector-Bottom Sealer



Parts List for Model "400"

SAFETY STICKER LOCATIONS

Serial Number 24182

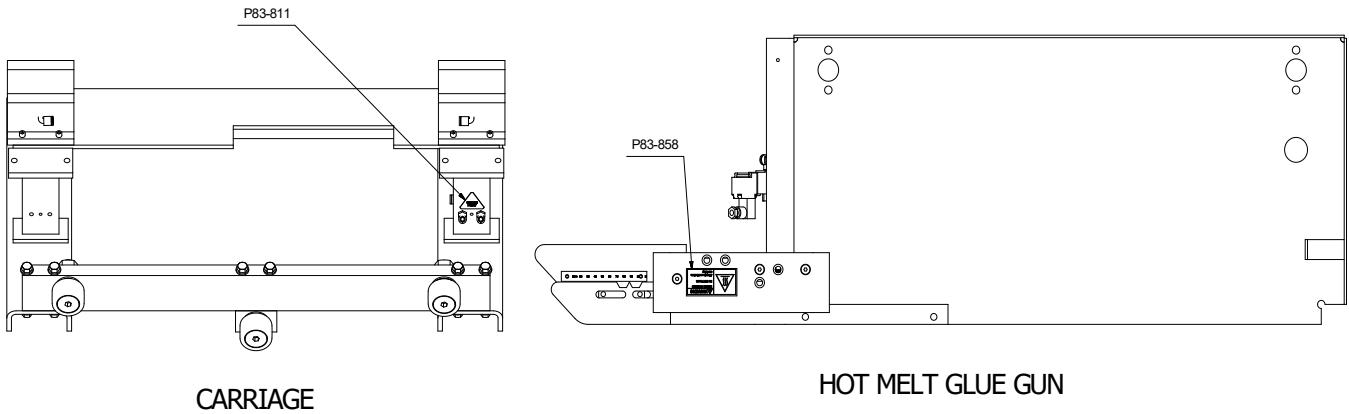
TECHNICAL MANUAL

Model "400"

Case Erector-Bottom Sealer

Parts List for Model "400"

SAFETY STICKER LOCATIONS



CARRIAGE

HOT MELT GLUE GUN

ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	P83-482	WARNING LABEL, MOVING PARTS, HORIZ.
2	1	P83-483	WARNING LABEL, MOVING PARTS, VERT.
3	2	P83-484	WARNING LABEL, AUTHORIZED PERSONNEL
4	1	P83-485	WARNING LABEL, NEVER LIST
5	1	P83-486	WARNING LABEL, READ MANUAL
6	1	P83-489	CAUTION LABEL, EQUIPMENT STARTS
7	3	P83-513	WARNING LABEL, READ MANUAL
8	3	P83-534	CAUTION LABEL, EQUIPMENT STARTS
9	1	P83-535	CAUTION LABEL, LOW CLEARANCE
10	1	P83-668	SAFETY LABEL, AIR SHUT OFF LOCKOUT
11	1	P83-720	NO LUBE WARNING LABEL
12	2	P83-806	LABEL, ELECTRICAL SHOCK
13	4	P83-811	GREASE POINT LABEL
14	2	P83-823	"DO NOT LOSE O-RING" LABEL
15	1	P83-858	SAFETY LABEL, BURN HAZARD

Serial Number 24182

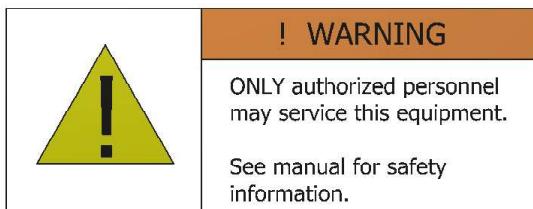
TECHNICAL MANUAL

Model "400"

Case Erector-Bottom Sealer

Parts List for Model "400"

SAFETY STICKER EXAMPLES



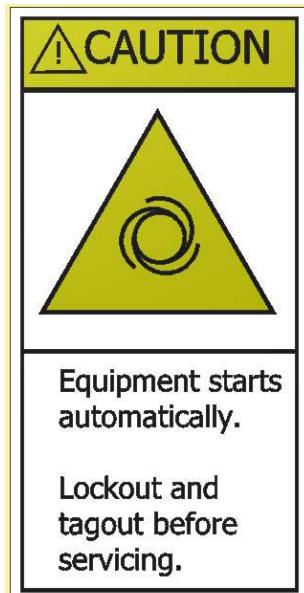
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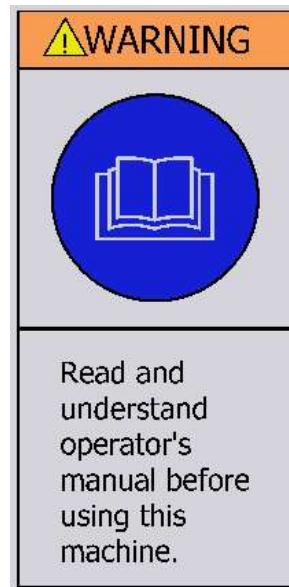
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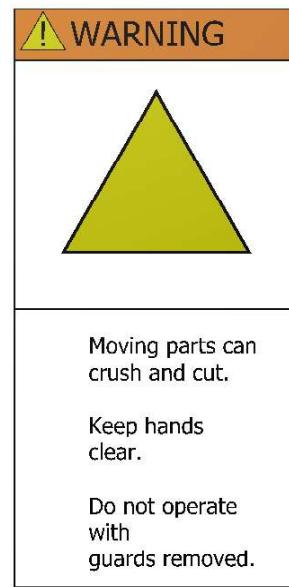
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P83-534



P83-513



P83-483

Serial Number 24182

TECHNICAL MANUAL

Model "400"

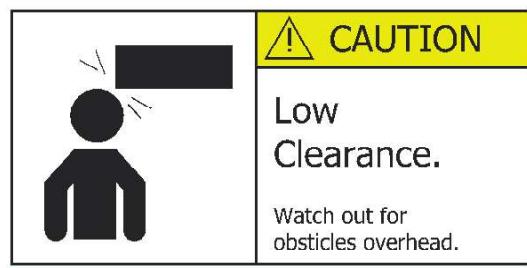
Case Erector-Bottom Sealer

Parts List for Model "400"

SAFETY STICKER EXAMPLES



P83-486



P83-535



P83-668



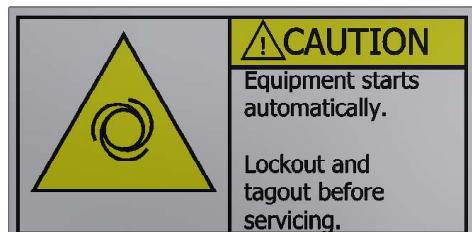
P83-858



P83-720



P83-806



P83-489



P83-811



P83-823

Serial Number 24182