



Walker, Michigan, U.S.A. 49534-7564

## **USER'S OPERATION AND MAINTENANCE MANUAL**

### **MODEL 54-0500**

AUTOMATED TRAY SEALER

## 54-0500 AUTOMATED TRAY SEALER

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## **SAFETY INSTRUCTIONS**

Various safety devices and methods of guarding have been provided on this machine. It is essential however, that machine operators and maintenance personnel observe the following safety precautions. Improper installation or operation on this equipment may cause injury to personnel or equipment.

1. Read this manual before attempting to operate your machine. Never allow an untrained person to operate or service this machine.
2. Connect the machine to a properly grounded electrical supply that matches the requirements shown on the electrical specifications of local electrical code.
3. Disconnect and lockout the machine from the power supply before cleaning or servicing.
4. Check and secure all guards before starting the machine.
5. Observe all caution and warning labels affixed to the machine.
6. Use only proper replacement parts.
7. Do not wear loose fitting clothing or loose hair. Shirttails should be tucked in.
8. Wear proper personal safety equipment.
9. Keep hands away from the moving parts of this machine while it is in operation.
10. In addition to these general safety instructions, also follow the more specific safety instructions given for the different areas of the machine in the operating instructions.

**DO NOT USE THIS EQUIPMENT FOR OTHER THAN THE ORIGINALLY INTENDED PURPOSE**

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## **OLIVER MODEL 54-0500**

### **INSTRUCTION MANUAL**

The Oliver Model 54-0500 interchangeable pocket-sealing machine is designed to accommodate a variety of containers varying in length, width, height, and material. This is accomplished by changing the tray carriers and making corresponding adjustments to the discharge rails of the unit. Additional sets of tray carriers and cutter assemblies can be purchased as your packaging requirements change. In addition, accessory equipment can be purchased for this tray-sealing machine. Please feel free to consult the factory.

#### **GENERAL DESCRIPTION OF MACHINE, OPERATION AND SPECIFICATIONS**

The Oliver tray sealer is an automatic continuous motion tray-sealing machine designed to heat seal, cut the film, and then discharge the packages in a smooth continuous motion.

#### **MAJOR COMPONENTS:**

This machine is made of the following units:

Stainless steel and aluminum are the primary fabrication material. Stainless steel chains are used with plated standard steel sprockets.

#### **THE TRAY SEALER ASSEMBLY CONSISTS OF THE FOLLOWING COMPONENTS.**

##### **ASSEMBLY NAME**

- A. FRAME
- B. DRIVE
- C. FILM STAND
- D. HEAT SEAL UNIT
- E. SILICONE PRESSURE ROLLER
- F. CUTTER
- G. DISCHARGE
- H. CHANGEOVER PARTS
- I. ELECTRICAL
- J. TRAY CARRIERS
- K. TRAY CARRIER SENSOR
- L. PNEUMATIC CONTROL
- M. HEAT SEAL ROLL 12" WIDE
- N. FILM PERFORATOR UNIT (OPTION)
- O. TRAY CARRIER WASH/DRY (OPTION)



**OPERATION:**

The tray-sealer has a dependable variable speed drive.

- The customer (manually or automatically) places the containers in the tray carriers in the usable in-feed area.
- The containers are conveyed under the film material and then under the heat seal roller units where the film material and container are sealed together.
- The containers continue under the silicone pressure roller followed by the cutter unit that cuts the film material between the tray carriers.
- The containers are then conveyed up a discharge ramp onto guide rails that support the container flanges and discharged onto the customer's conveyor or table.

**SPECIFICATIONS:**

LENGTH	MX 4: 17'-11" with 9' of usable infeed MX 5: 22'-1" with 13'-2" of usable infeed MX 6: 26'-6" with 17'-7" of usable infeed
WIDTH	3'-7"
OPERATING HEIGHT	3'-0"
OVERALL HEIGHT	6'-2"
USABLE IN-FEED LENGTH	MX4: 9' of useable infeed MX5: 13'-2" of useable infeed MX6: 17'-7" of useable infeed
MACHINE VOLTAGE	1PH, 208 VOLTS, 30 AMP, 60 CYCLES
DRIVE MOTOR	1 H.P., A.C. VARIABLE SPEED, VFD
AIR SUPPLY	80 PSI (LINE PRESSURE)

**RATE OF OPERATION:**

The optimal maximum operating speed is determined by the following:

- Tray and film materials
- Environment (temperature and humidity)

Consult factory for additional information on rate of operation.

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## **PREPARATION OF OPERATION**

The following are some typical items for the operator to perform to start and run the tray sealing unit.

### **STARTING THE LINE**

At the beginning of the day, after lunch or breaks when the machine is empty you can perform the following:

1. Turn the machine on by moving the selector switch to the on position, a red light will come on. Check to make sure none of the emergence stop buttons or safety limit switches are engaged.
2. Once the machine is up to SET temperature on the display it is ready to run.
3. With the machine in **production mode**, press the start button (on the interface panel main screen) to run the machine to allow trays to be placed until they are within 1-2 tray carriers of the heat seal roll and then stop the machine.
4. Thread the film per threading diagram displayed on the operator touchscreen.
5. With the machine in **production mode**, press the start button (on the interface panel main screen) to run the machine.
6. Check the film alignment on the tray at the discharge of the heat sealer unit. Verify that the film is being kept in proper alignment. Adjust, if necessary, by moving the film roll holders in the direction desired.

### **LOADING THE FILM ON THE MANDREL**

The film should be loaded on the mandrel at the end opposite the brake drum. Two clamps hold the film in position on the mandrel. The clamp toward the brake drum end should normally stay fixed in its position once film has been centered on the machine for running trays. The other clamp should be removed to allow the film to be placed on the roll and then secured back in place. Be sure to load the film so that it unwinds in the proper direction according to the threading diagram displayed on the operator touchscreen.

**Threading Film** – Follow the threading diagram displayed on the operator touchscreen to thread the film.

### **CHANGING CONVEYOR SPEED**

See **Changing the speed example** pg. 3-7

**NOTE:** you can change the speed as you are running.

## STOPPING/ RESTARTING THE LINE

Normally you will stop the machine by pressing the stop button on the main interface panel. When the stop button is pressed, the tray carriers will stop and after a timer times out the heat seal rolls will go up. To restart the unit press the start button and the rolls will come down and a timer will time out and the tray carriers will start to move. If one of the emergency stop buttons or limit switches is tripped the heat seal rolls will go up immediately and the tray carriers will stop, this will also turn all the power off to the unit including the heat seal rolls. You will need to reset the emergency stop button or limit before you can run the unit again.

**NOTE:** When the machine is stopped using the emergency stop the tray under heat rolls may not be sealed properly when the line is restarted. Check the seals on this tray.

## SHUTTING THE LINE DOWN

When shutting down the line for lunch, breaks, or at the end of the day, allow the last filled tray to pass through the heat sealers and then stop the line. The machine will continue to pull film through the machine following the last sealed tray. Cut the film on the roll below the first and second film rolls. Pull the film out of the machine and discard.

If the machine is being shut down for cleanup, follow the procedure below:

1. Change the conveyor mode to CLEANING using the main screen
2. PRESS THE START BUTTON the conveyor will run and the heat seal rolls will stay in the up position.

**NOTE:** CLEANING mode allows the machine to run, but the heat rolls will stay in the up position. This allows the sanitation crew to run the machine for cleaning and wash down.

**Caution!** When cleaning the heat seal roll. There is a silicone rubber sleeve on the first heat seal roll and an aluminum sleeve on the second heat seal roll. **DO NOT USE ANYTHING SHARP ON THE SLEEVES.** Clean both sleeves with hot water using a damp towel to scrub it.

See **Preventative Maintenance, Cleaning and Lubrication** section for additional cleaning instructions.

## Routine Operator Checks

1. Check film alignment and film position at the heat rollers discharge periodically to assure proper alignment. Adjust, if necessary, by moving the film roll holders in the direction desired.
2. Check film seals for good seals. Temperature adjustment of the heat rolls may be required to obtain a better seal.
3. When a new roll of film is installed check the alignment of the film.
4. When making a change to the position of the film across the tray, check the alignment to make sure it is on center. (see item #1 above)
5. Check and clean heat rolls to remove food build up. Use a wet towel to remove build up particles. This should be done at each break, lunch, or whenever a sealing problem occurs.
6. Keep food particles cleaned off the tray carriers.
7. Avoid wiping the flange of the tray to remove particles.
8. Always press the "Enter" key button after changing speed or temperature.

## **MACHINE OPERATION**

### **Monitor the following during operation:**

- Make sure it is operating properly.
- Film is sealing, cutting and aligned with the tray.
- Check the speed; adjust if needed for the product you are running.
- Check temperature to make sure it is at the set temperature you need for the product you are running.
- Clean the unit if there is a build-up of food on the tray carriers or heat seal roll.

## **DISCONTINUING OPERATION**

When shutting down the line at the end of the day, allow the last filled tray to pass through the film cutter unit and then stop the line. The machine will continue to pull film through the machine following the last sealed tray. Break the film on the roll below the first and second film rolls. Pull the film out of the machine and discard.

If the machine is being shut down for the day for cleanup, the following procedure should be done:

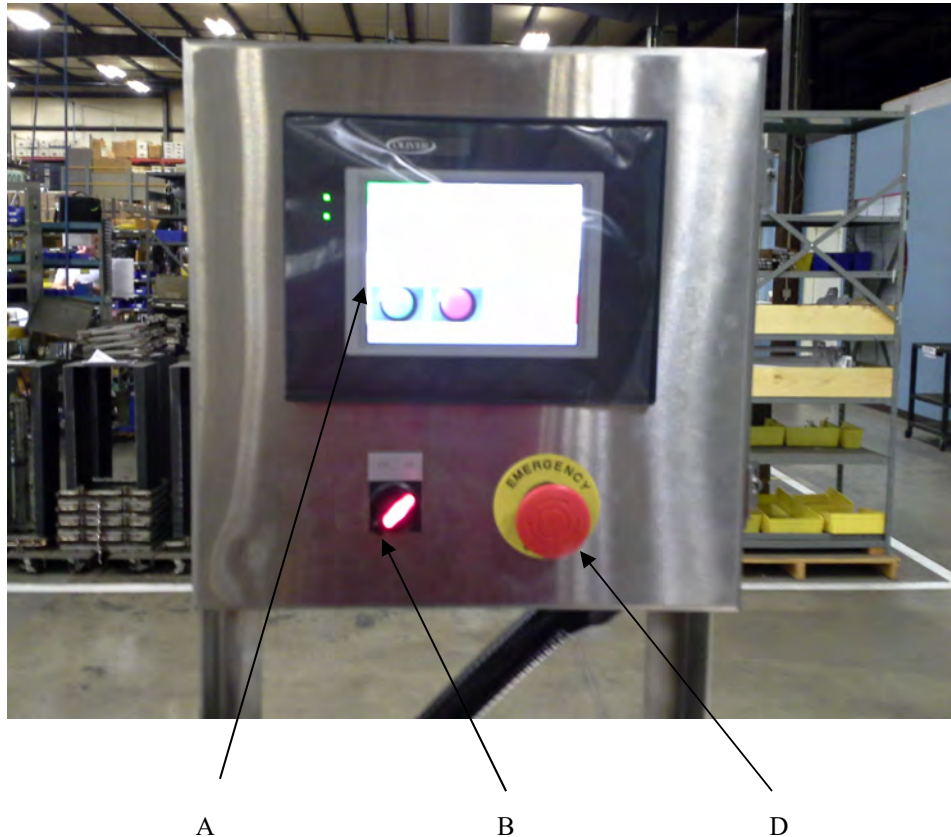
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See **Preventative Maintenance, Cleaning and Lubrication** section for additional cleaning instructions.

## **OPERATOR INTERFACE TOUCH SCREENS**



## **PUSHBUTTON CONTROL PANEL**

The pushbutton control panel consists of the following components located on the panel door.

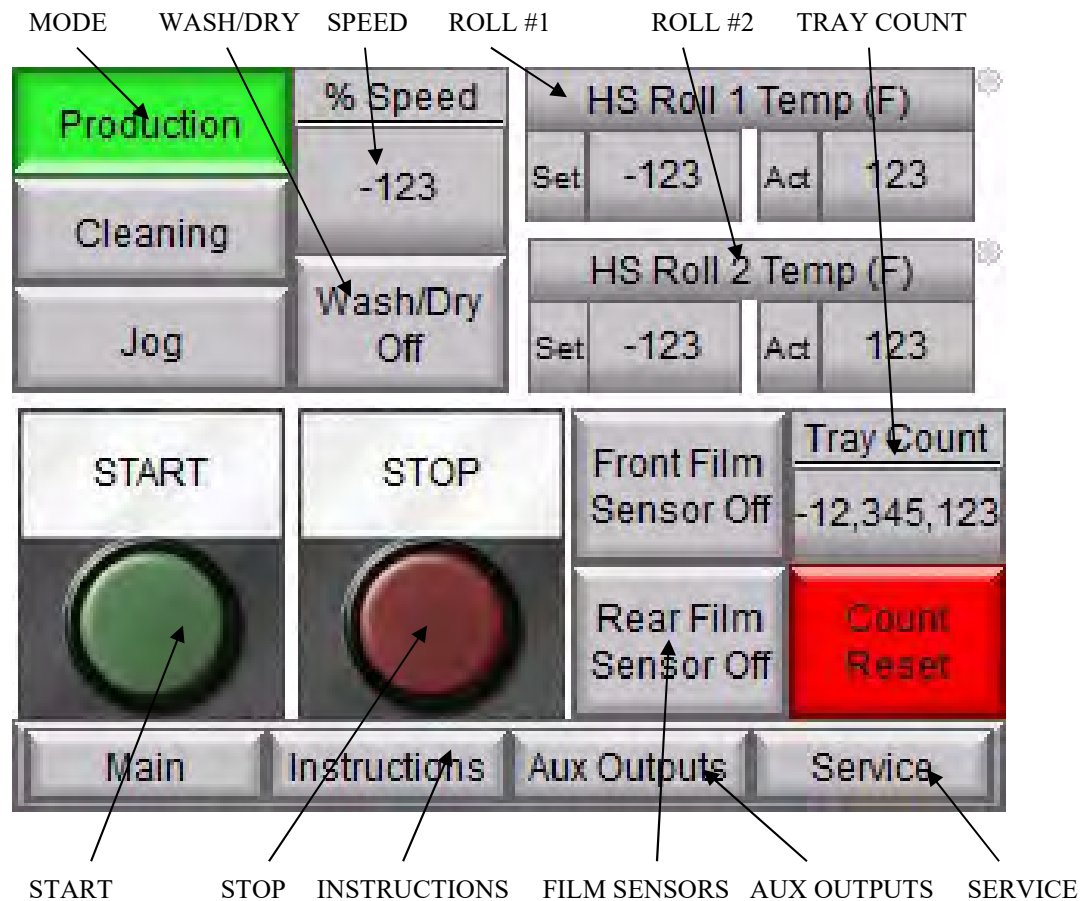
- A. INTERFACE PANEL
- B. POWER ON/OFF SELECTOR SWITCH
- C. EMERGENCY STOP BUTTON (RED)

When power ON/OFF selector switch is in the “ON” position, a red light will be on in the center of the selector switch. This indicates machine is ready.



#### **START-UP SCREEN**

- When you turn the selector switch to the “ON” position the Start-up Screen will come “ON”.
- After approx. 30 seconds, the main screen will be displayed.



### MAIN SCREEN

- Mode select (upper left hand corner, push to change modes)
  1. Production
  2. Cleaning
  3. Jog
- Aux Outputs (push to go to the auxiliary outputs setup screen)
- % Speed (push to go to the speed change screen)
- Temperature of Rolls #1 and #2
- Start Button (push to start the conveyor)
- Stop Button (push to stop the conveyor)
- Tray Count Reset (records the number of trays run, push to reset counter)
- Wash/Dry (push to turn optional wash/dry on or off)
- Film Sensors (push to turn front or rear film sensors on or off)
- Service (push to go to service screen(s))



**Changing the speed example:**

Current speed setting is 35% and you want to change it to 45%

1. Using the keypad press 4 and 5
2. If this is the number you want press the "Enter" button (or press "Cancel" it will go back to the original number, enter a different number) and it will store the new.
3. Pressing the "Enter" ↵ button will take you back to the main screen

**Note: You can change the speed with the conveyor running.**

**Changing the Temperature example:**

Current temperature setting is 315 and you want to change it to 340

1. Navigate to service screen, then press machine setup button.
2. Select the heat seal roll up wish to change.
3. Using the keypad press 340 If this is the number you want press the "Enter" ↵ button (or press "Cancel" it will go back to the original number, enter a different number) and it will store the new.
4. Pressing the "Enter" ↵ button will take you back to the main screen

**Note: You can change the temperature with the conveyor running.**

**Caution! – only authorized personnel should make changes in the service screen.  
NEVER run heat seal rolls above 400 degrees F – damage may/will occur.**

**Heat seal rolls are set at 400 degrees F (1st HS roll) and 375 degrees F (2nd HS roll) from  
factory and should not be adjusted unless instructed to do so by Oliver Packaging &  
Equipment Co.**

Heat seal roll 1 setting is limited to 400 degrees maximum to prevent damage.  
Heat seal roll 2 setting is limited to 375 degrees maximum to prevent damage.

**\*\*These temperatures are measured at the heat seal core and are set so that the surface of  
the heat seal roll is 300 to 325 degrees F.**

The two heat seal roll temperatures are set differently due to the Sleeve coverings are  
different materials and conduct heat differently.

If measuring the surface temperature of the rolls, Use an actual surface thermometer or  
thermocouple to measure. Infrared or non-contact thermometers can give inaccurate results.

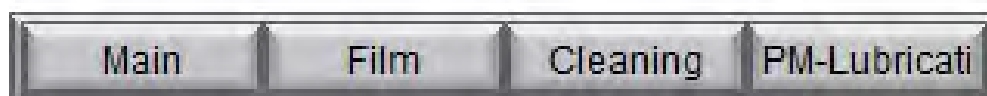


## **Instructions**

Film Threading diagram - Shows proper  
film path

Cleaning Instructions - Instructions on  
cleaning this machine

PM/Lubrication - Instructions on  
maintaining this machine.



### **INSTRUCTIONS SCREEN**

- Main (push to return to main screen)
- Film (push to display film threading diagram)
- Cleaning (push for cleaning instructions)
- PM-Lubrication (push for preventative maintenance/lubrication instructions)

Auxiliary Output Control			
On/Off	Delay Time (.01)	On Time (.01)	Tray Count
Aux 1 Off	-12	-12	-12
Aux 2 Off	-12	-12	-12
Aux 3 Off	-12	-12	-12
Aux 4 Off	-12	-12	-12
Main			

### Peripheral (aux.) Output Control

- Auxiliary Output On/Off button (push button to change from On/Off)  
(In the On Position will give a signal to your peripheral equipment that require a signal to cycle from the tray sealing unit)
- Auxiliary On-Delay (used for fine tuning)  
This is used to time in your peripheral equipment so that they will receive the signal to cycle at the correct time)(positive numbers only)
- Auxiliary On-Time  
This is the amount of time to signal is actually on in .01 Sec. increments. (positive numbers only)
- Auxiliary Cycle Tray Count  
This is used to send a signal to your peripheral equipment based on the when it needs to cycle. It may be filling two trays at one time, so then you would set it at two sending a signal every other time the proximity sensor receives a signal. If you were filling one tray at a time you would set it at one, and it would cycle every time it received a signal from the proximity sensor.

**Note: You can change the time delay with the conveyor running.**

**Note:** The proximity sensor is located on the cutter unit.

- Return to Main Screen (press Main to return to Main Screen)

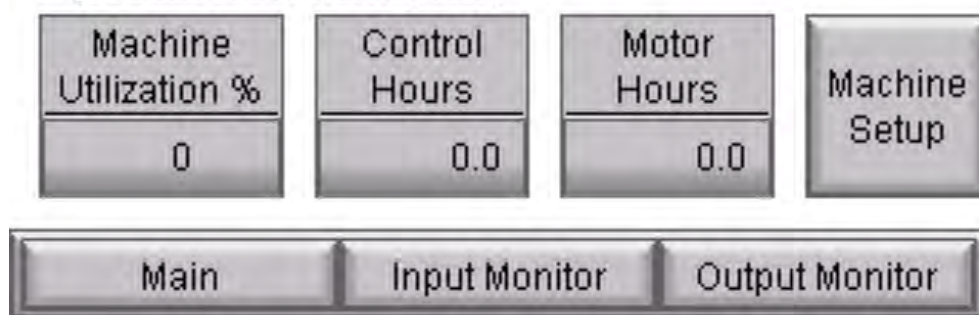


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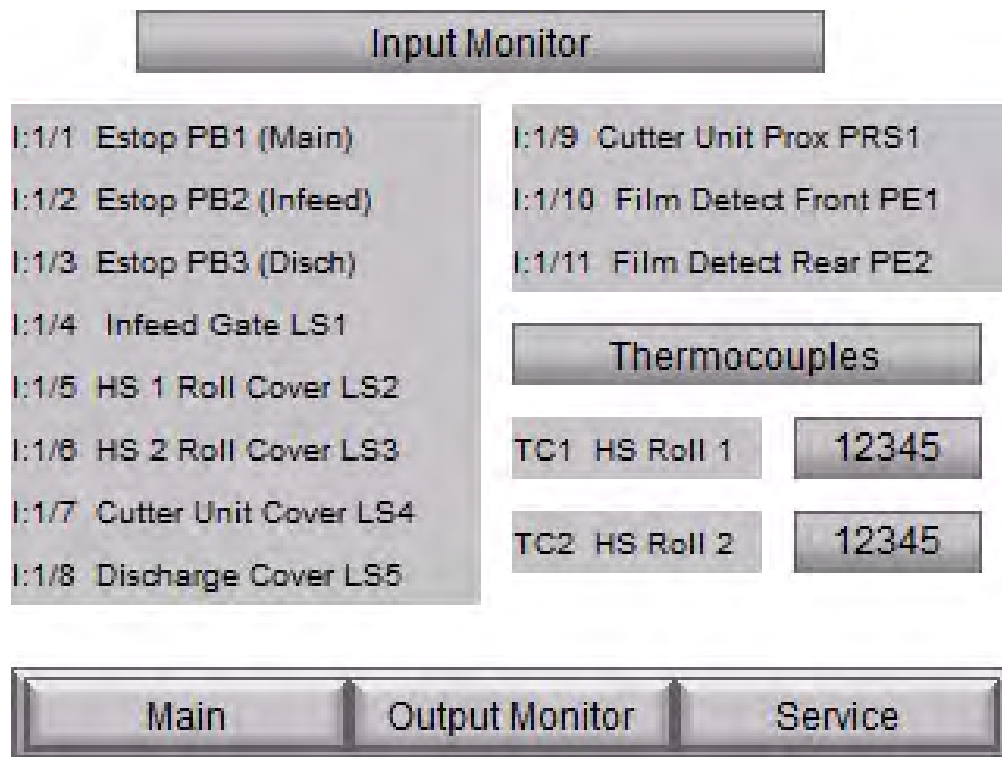
Please have model and serial numbers available.

(see machine nameplate)



#### **SERVICE SCREEN**

- Main (push to return to main screen)
- Contact information (upper screen)
- Total Control On Hours (middle left on screen, power is on)
- Total Run Hours (middle right on screen, motor run hours)
- Machine Setup (used by manufacturer to set machine options)
- Input Monitor (lower center, push to go to Input Monitor Screen)
- Output Monitor (lower center, push to go to Output Monitor Screen)

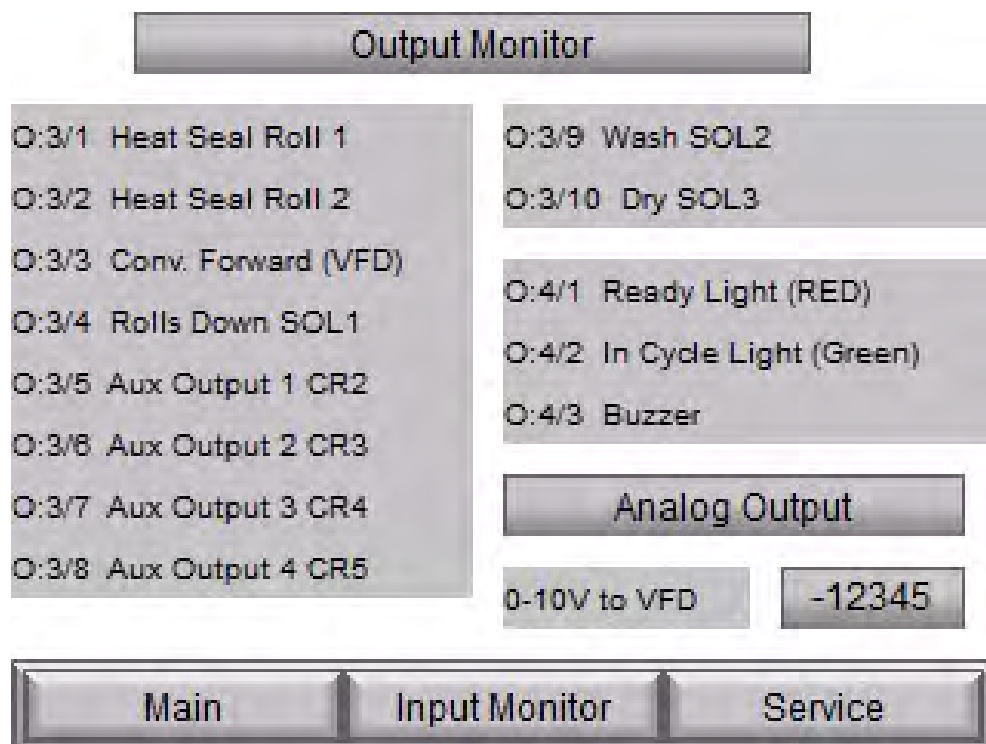


### INPUT MONITOR SCREEN

#### Monitors the following information

Monitors the real-time state of all physical inputs of the PLC control.

- Main (push to return to main screen)
- Output Monitor (lower center, push to go to Output Monitor Screen)
- Service (push to go to service screen(s))



### **OUTPUT MONITOR SCREEN**

#### Monitors the following information

Monitors the real-time state of all physical outputs of the PLC control.

- Main (push to return to main screen)
- Input Monitor (lower center, push to go to Input Monitor Screen)
- Service (push to go to service screen(s))

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**54-0500 Automated Tray Sealer****TROUBLESHOOTING****WARNING**

**ALWAYS DISCONNECT THE TRAY SEALER FROM THE POWER SUPPLY BEFORE ATTEMPTING ANY TYPE OF MAINTENANCE TASK, INCLUDING TROUBLESHOOTING.**

*The Tray Sealer Will Not Power On (no display or lights)*

- The machine is not plugged in.
- Main disconnect switch (rear of machine) in “OFF” position – Turn to “ON” position
- There is no power at the main electrical panel. Check to see if a circuit breaker has tripped. If the circuit breaker has not tripped and the circuit is still not working have a qualified electrician check the circuit.)

*The Tray Sealer Will Not Start (Motor Is Not Humming)*

- Red stack-light on top of operator panel is flashing. Check message on operator touchscreen for explanation.
- Check to be sure the tray sealer is in the desired operation mode (production, cleaning or jog).
- 
- The motor has failed. (Have it checked by a qualified electrician.)

*The Tray Sealer Will Not Start (Motor is Humming)*

- Check for any physical jams along entire Sealer. Overload clutch may be slipping. Remove any objects causing jam.
- The main drive chain may be broken or damaged

*(Continued)*

### *Tray Sealer Runs Normally But Inconsistent Seals*

- The heat seal rolls are dirty – Clean heat seal roll surfaces – See cleaning in operation manual.
- Surface of heat seal rolls are damaged – Replace heat seal roll sleeves.
- Film not threaded properly – Rethread film according to film threading diagram on operators touch screen – *Instructions, Film*.
- Heat seal rolls not up to temperature – Check actual temperature on operators screen. Heat roll circuit breakers may be tripped in main electrical enclosure. (Have it checked by a qualified electrician)
- No downward pressure on heat seal rolls – Check main air pressure gauge – should be 80 psi. Valve solenoid may not be operating – Have it checked by a qualified service technician.

### *Film not cutting all the way*

- Cutter blades dull – Replace blades in cutter unit.

### *Film overhang not even between trays*

- Cutter unit not properly installed – Be sure cutter unit is down against height adjustment stops.
- Cutter unit out of adjustment – Adjust cutter unit sprocket to shaft to center cut between tray carriers.

### *Trays jamming at discharge*

- Discharge fingers out of adjustment – Adjust fingers under discharge cover. Trays should discharge freely without pinching or binding while fingers support and guide tray flanges.
- Discharge shelf adjusted too high or too low. – Adjust discharge shelf so that is approximately 1/4" below bottom surface of tray being discharged.
- Trays could be getting stacked up at the end of discharge shelf. Product accumulators (powered lazy-susan) are recommended to help prevent this issue.

## **PREVENTATIVE MAINTENANCE, CLEANING AND LUBRICATION**

The Oliver Packaging & Equipment Co. tray sealer is a highly dependable and durable machine when properly cared for. In order to maintain its trouble-free operation, the following preventative maintenance procedure, cleaning and lubrication schedule should be conscientiously followed.

### **A. PREVENTATIVE MAINTENANCE**

Good mechanical practice should be followed by periodically checking chains, sprockets, tightening set screws and bolts, etc. The following specific points should be checked frequently:

1. Set screws on the main conveyor drive and return sprockets. If these work loose, the tray carriers could become "cocked".
2. In addition, several areas should be checked before each operation.
  - \* Product build-up on heat seal roll
  - \* Condition of cutter blades

### **B. CLEANING SCHEDULE**

1. Clean as required. Careful food placement in trays helps to minimize cleanup.
2. **Caution!** When cleaning around the heat seal roll unit and other electrical devices, **turn the power off** and moisture kept away from this area. Cover this area if necessary. Keep the tray carriers and heat seal sleeve clean
3. **Caution!** When cleaning the heat seal roll. There is a silicone rubber sleeve on the heat seal roll. **DO NOT USE ANYTHING SHARP ON THE RUBBER SLEEVE**. Clean the rubber sleeve with hot water using a damp towel to scrub it.
4. Infeed area of machine can be washed with low pressure hose. Put machine in cleaning mode, run machine and wash tray carriers as they go by. Be sure to keep all water away from heat seal rolls, heat seal area, discharge area, and all electrical enclosures.
5. **Caution!** Heat seal rolls are and should be hot while cleaning. Clean Heat seal rolls frequently by using a balled-up damp cotton rag, wipe across heat seal roll until clean, use rag to rotate roll, and repeat until clean. Best cleaning results are obtained when heat seal rolls are hot. DO NOT pour water on, or hose down this area – damage to heat seal roll assemblies will result and is will not be covered under warranty. It is easier to clean these rolls frequently, than to wait until there is build up on the rolls. Failure to keep these rolls clean will result in poor sealing results.
6. Heat seal area and discharge areas of the machine should only be cleaned using damp cloth wipe down methods.



**C. LUBRICATION**

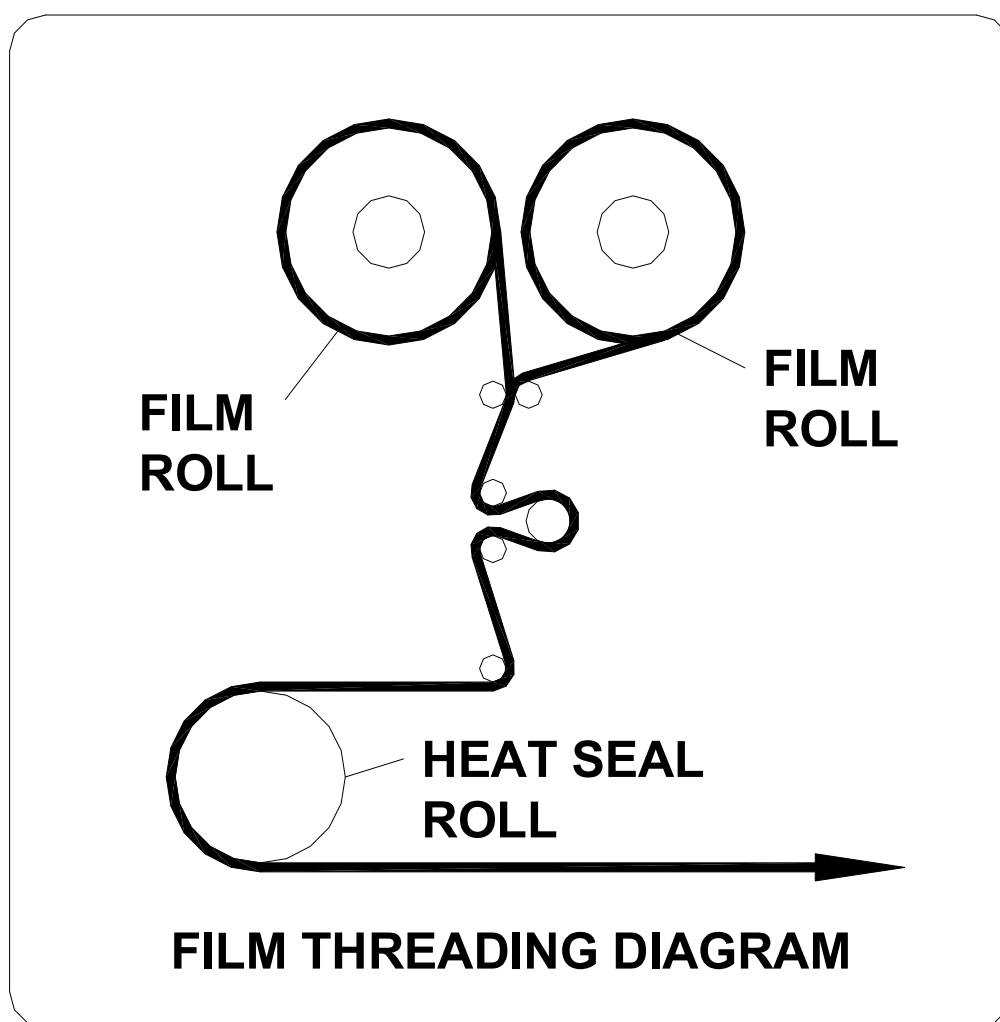
Check weekly and lubricate all bearings if necessary, use any quality grade lubricant. Also check the oil level for the drive gearbox (see photo below). Use food grade mineral oil on the main tray carrier chains if desired.



Oil should be even with bottom of this hole. Add oil as necessary.

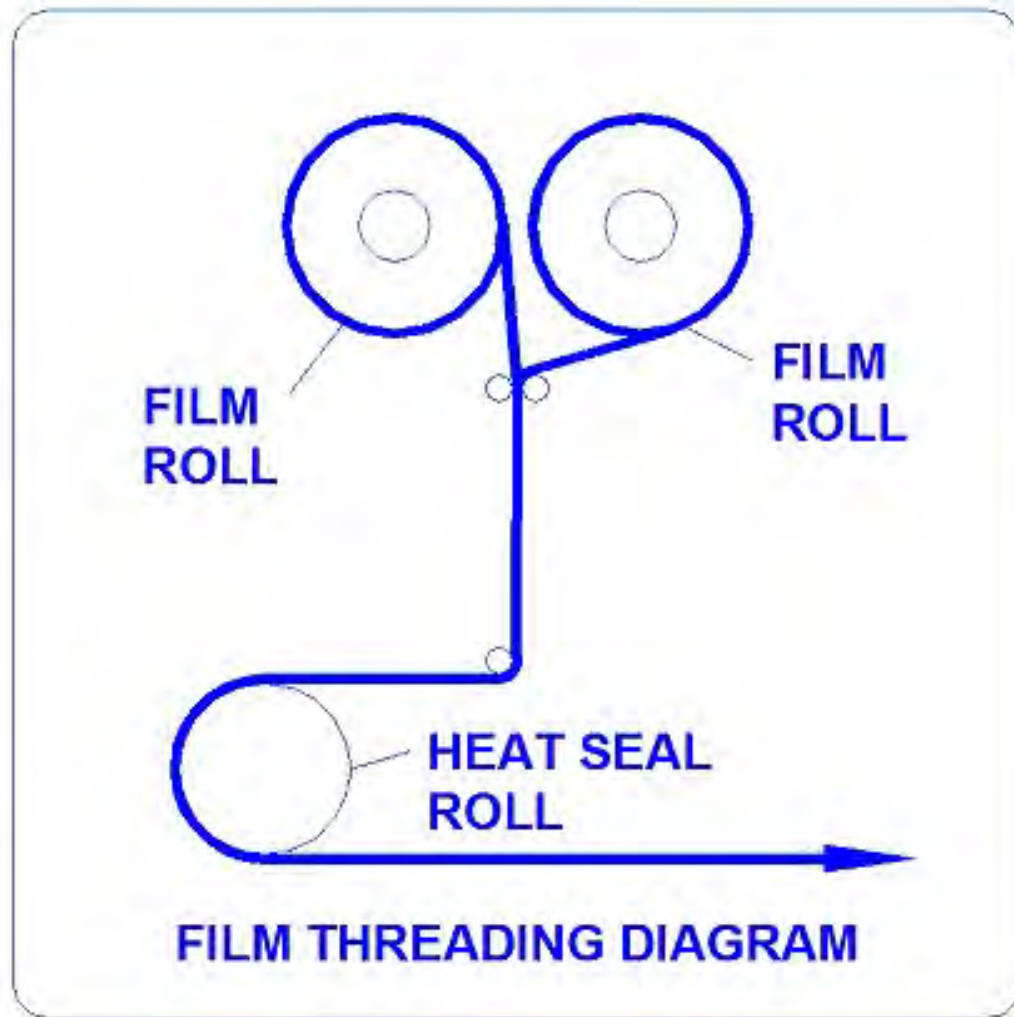
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## SECTION V:



(Shown with film perforation option)

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(Shown with without film perforation option)

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**54-0500 RECOMMENDED SPARE PARTS LIST**

<b><u>Part Number</u></b>	<b><u>Description</u></b>	<b><u>Recommended Quantity</u></b>
5108-6777	Air Cylinder	2
5220-6040	Bearing-Heat Seal	2
5752-1040	Slip Ring	1
5712-0527	Thermocouple	1
5725-9960	Fuse-5 X 20 MM 250V 1A	2
5725-9737	FUSE-600V 25 A BUSS #LPJ-25SP	2
5730-1561	Heater Cartridge	6
70830	Pressure Roller 12" Long	1
70827	Sleeve-12" long hard coat alum	1
70828	Rubber Sleeve 12" Long	1
70855	Cutter Blade 6" Long	8
714431	Spare Heat Seal Assembly W/O Heat Seal Sleeve	1

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## TRAY SIZE CHANGE



When running different size trays, the machine must be changed over to accommodate the desired tray size. This changeover consists of changing the tray carrier set and when the cutoff length will be different, the cutter assembly must also be changed. In some cases the length of the main conveyor chains (the ones that hold the tray carriers) must be changed. The changeover procedure is as follows:

- Changing to a tray carrier set with the same cutoff as the previous set

Remove the existing tray carrier set while at the same time installing the new tray carrier set. Proceeding in this manner ensures that the cutter assembly will be in time with the tray carriers and will not jam on the tray carriers.

- Changing to a tray carrier set with a different cutoff length than the previous set

**When changing to a tray carrier set with a different cutoff length it is sometimes necessary to either remove or add links to main conveyor chains so that they will have an even number of pitches for that given cutoff.**

**IMPORTANT! REMOVE THE CUTTER ASSEMBLY BEFORE ADDING TRAY CARRIERS. (SEE SECTION II, F FOR TIMING IN CUTTER.) RUN CONVEYOR AT SLOW SPEED.**

Changing without adding or subtracting links to the main conveyor chains

Step 1. Remove the cutter assembly.

Step 2. Remove four existing tray carriers.

Step 3. Start installing the new set of tray carriers as you remove the existing tray carriers.

Step 4. Remove the existing inside ramp and install the new one for the tray carriers you are using.

Step 5. Remove the existing discharge finger cover assembly and install the new one for the tray carriers you are using.

Step 6. Install the cutter assembly. **CAUTION!** You must install the cutter assembly so it is in time with the tray carriers or the blade will jam on the carriers. Run the machine slowly until a gap between tray carriers is approximately underneath the center of the shaft of the cutter. You can do this by partially inserting the cutter assembly into its bracket and making a mark on the bracket where the centerline of the shaft is. Then remove the cutter assembly. Now you can use this mark as guide for stopping the machine with the gap in that position. Install the cutter assembly with the blade pointing straight down toward the conveyor. Once you have inserted the cutter assembly fully into the bracket, make sure that the blade is in the gap between tray carriers.

#### Changing when it is necessary to add or subtract links to the main conveyor chains

Step 1. Remove the cutter assembly.

Step 2. Run the machine until you find the links on the main conveyor chains that are colored white. These links are the master links in the chain that can be removed so that the chain can either be shortened or lengthened. Stop the machine with these links approximately in the middle of the infeed area.

Step 3. Remove a tray carrier on each side of the master link(s). Do not remove all of the tray carriers because chains will fall off of the support rails.

Step 4. Loosen the chain take-ups located at the infeed end of the machine slightly.

Step 5. Locate the tray carrier that is next to the master link on the end toward the take-up units. Using two C-clamps, clamp this tray carrier to the plastic support rails underneath the tray carrier on each side. This is done so that the chains will not slide backwards and come off of the sprockets at the take-up end. If you do not want to clamp the tray carrier, someone can hold it in place.

Step 6. Remove the retaining clips on the master link and remove the master link. If you are removing a section of chain, you will be removing two master links on each chain.

Step 7. Reconnect the chain. If you are adding a section of chain you will need to adjust the take-up units back toward the end of the machine. If you are removing a section of chain, you will need to adjust the take-up units forward away from the end of the machine. It is helpful to put marks on the take-up units for each cutoff position once it has been determined. To reconnect the chain it is helpful to have two people. One person to hold tray carrier in place and one person to put the master links back in the chain. Once the chain is reconnected, tension the chains using the take-up units. Do not over-tighten the chains and make sure the take-ups are even with each other. This can be done by taking a dimension from the end of the machine.

Step 8. Install the new tray carrier set.

Step 9. Install the cutter assembly. **CAUTION!** You must install the cutter assembly so it is in time with the tray carriers or the blade will jam on the carriers. Run the machine slowly until a gap between tray carriers is approximately underneath the center of the cutter shaft. You can do this by partially inserting the cutter assembly into its bracket and making a mark on the bracket where the centerline of the shaft is. Then remove the cutter assembly. Now you can use this as guide for stopping the machine with the gap in that position. Install the cutter assembly with the blade pointing straight down toward the conveyor. Once you have inserted the cutter assembly fully into the bracket, make sure that the blade is in the gap between tray carriers.

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## **DESCRIPTION OF ASSEMBLIES**

### **A. FRAME (SEE DRAWING NUMBER BELOW)**

2-Up MX4 = C714432

2-Up MX5 = C714433

2-Up MX6 = C714434

Single Lane MX4 = C714449

Single Lane MX5 = C714450

Single Lane MX6 = C714451



The frame assembly is made up of stainless-steel side plates with aluminum bars. There are stainless steel chain rails for the main chain that conveys the tray carriers. The tray carriers are supported by UHMW strips. There are stainless steel legs that support the unit with leveling screws for adjusting the frame operator height.

### **ADJUSTING UHMW TRAY CARRIER SUPPORT STRIPS.**

The aluminum tray carriers are supported by white UHMW strips. They can be adjusted up or down by loosening the 3/8 hex bolts on the side of the frame. There are slots in the side frame plates. They should be adjusted so the weight of the tray carriers are carried on the UHMW strips, not the main chain. They must also be level with each other and parallel with the heat seal roller to obtain a good seal between the film and tray.

**B. DRIVE (SEE DRAWING NUMBER BELOW)**

2-Up MX4 = C714432  
2-Up MX5 = C714433  
2-Up MX6 = C714434  
Single Lane MX4 = C714449  
Single Lane MX5 = C714450  
Single Lane MX6 = C714451

The drive motor for the tray sealer is located just below the discharge unit. The motor is a 1 H.P., A.C., variable speed motor driving the main chain for the tray carriers.

**IMPORTANT:**

Make sure the teeth on the main chain sprockets are in line with each other or the tray carrier could become cocked, causing wear on the chain and tray carriers and/or the conveyor to jam.

**ADJUSTING THE TWO MAIN CHAIN DRIVE AND TAKE-UP SPROCKETS.**

There are two sprockets on the drive and take-up shafts. The sprockets are for the main chain that carries the tray carriers. There are two different types of sprockets used. The sprockets on the drive shaft are standard one-piece keyed sprockets. One sprocket on the take-up shaft (drive side) is keyed, the other floats on the shaft via bushing, thrust washers and set collars. **Note:** the main chain sprockets must be in line with each other and with the chain support rails. Always replace main chain sprockets in complete sets.

**MAIN CHAIN ADJUSTMENT:**

Take-up units are located on the front and back side plate at the infeed end. Both sides must be adjusted equally to prevent damaging the main chain and tray carriers.



**C. FILM STAND (SEE DRAWING NUMBER C714421)**

The film mandrel shaft is supported by two uprights mounted to the front and rear side frame plates.

To adjust the location of the film so it is on center with tray, loosen the two thumb screws in the retaining hubs, and slide the film on the shaft.

To replace the film, loosen the thumb screw in the retaining hub, opposite the retaining collars (end by the brake drum) on the mandrel shaft. Remove the retaining hub, bushing and slide the film core off the mandrel shaft. Reverse the procedure to add a new roll of film and replace the unit back between the upright supports on the four white rollers.

**NOTE! SEE THE FILM THREADING DIAGRAM IN SECTION V.**

There is a film threading diagram in the operator touchscreen under “Instructions” then “Film”.

**THREAD FILM USING THE FOLLOWING PROCEDURE:**

- Unroll several feet of film by hand.
- Thread the film per the diagram displayed on the operator touchscreen **(Caution! the roll is hot)**.
- Place the film in between the tray carrier slots (closest to the heated roll) and close the cover.
- Insert three empty containers and push the start button.
- Un-roll film by hand so that it remains slack until trays pass under the heat seal roll.
- Once the heat seal roll seals the film to the trays, let go of the film. It will get tight as the machine runs.

**CAUTION!** Do not put hands in machine or try to make **ADJUSTMENTS** while conveyor is running.

### **ADJUSTING FILM TENSION:**



Located on the film mandrel shaft is a brake drum. There are two brake shoes that ride on the drum causing resistance. You can increase or decrease the resistance by loosening the wing nut mounted on the back upright below the brake shoes. Tension should only be increased if film roll over-runs when machine is stopped.

### **D. HEAT SEAL UNIT (SEE DRAWING NUMBER C714431 AND C714429 AND C714430)**

The heat seal rolls are pneumatically operated. On the back frame side plate next to the electrical panel is the electric solenoid air valve. When the solenoid is energized the heat seal rolls will come down. In **production mode**, when the start button is pushed the heat seal rolls will come down and the conveyor (tray carriers) will start moving. In **cleaning mode**, when the start button is pushed the solenoid valve is de-energized, the roll will not come down and the conveyor (tray carriers) will start moving. In **jog mode**, when the start button is pushed in (you will need to keep the button pushed in for the tray carriers to move, if you release the start button the carriers will stop) the solenoid valve is de-energized, the roll will not come down and the conveyor (tray carriers) will start moving. There are five safety limit switches located on the in-feed gate, heat seal roll covers, cutter unit cover and discharge guard. If you open, any of these guards when the unit is running the conveyor will stop and the heat seal roll will go up. If one of the switches is tripped the unit will not run. You can look at the interface panel to see if any of the switches are open.

### **ADJUSTING PRESSURE ON HEAT SEAL ROLLS**

#### **REFER TO DRAWING C714441 FOR THE PROCEDURE.**

Mounted on the back of the frame side plate by the electrical panel are the filter/lube/regulator/gauge, air shut-off valve and solenoid valve for the heat seal rolls air cylinders. You can increase or decrease the main air supply pressure to the cylinders by using the regulator. This regulator should be set to 80 psi.

There are two pressure regulators with gauges mounted on the solenoid valve stack assembly between solenoid valve and the sub-base block. The top regulator adjusts the up pressure and should be set to 60 psi (top gauge), the lower regulator is used to adjust the down pressure and should be set to 40 psi (bottom gauge).

The pressure on the trays can be adjusted by raising or lowering the heat seal rolls. To adjust, loosen the hex nut on the piston rod at the cylinder clevis. Turning the piston rod clockwise will lower the heat seal roll (increase pressure) and counterclockwise will raise the heat seal roll (decrease pressure). This should be adjusted so that 1 thickness of paper is snug between heat seal roller and tray carrier when in the down position. If rolls are adjusted too far down, damage to UHMW wear strips will result and compromise sealing.

#### **E. SILICONE PRESSURE ROLLER**

The silicone pressure roller unit is located between the second heat seal roll and cutter unit.

This roll provides additional seal strength.

##### **ADJUSTING SILICONE PRESSURE ROLL** **(REFER TO DRAWING C714424)**

1. To increase or decrease the pressure of the roll on the container, adjust the two upper slotted screws. Loosen the hex-locking nut used for the slotted screw and make the desired adjustments.
2. There are two lower slotted screws used to adjust height.

##### **REPLACING SILICONE PRESSURE ROLL**

1. Remove cutter unit.
2. Remove front side plate.
3. Remove set collars, thrust washer and large stainless-steel washer.
4. Slide the silicone roll off the core.
5. Assemble by reversing the steps above.

#### **F. CUTTER ASSEMBLY (Reference Drawing C714427 [Note 7" cutoff assembly given as an example drawing])**

The cutter assembly on this machine is designed to be replaceable, depending on the container size cut off. The cutter assembly is driven off the front chain of the main conveyor.

The following procedure should be used to replace the cutter assembly or make necessary adjustments to the blades and time the unit in with the tray carrier.

## REPLACING THE CUTTER ASSEMBLY



1. Remove the two knob fasteners for the upright supports. (One on each side of machine – See arrow).
2. Disconnect the cable from the proximity switch.
3. Install the new tray carriers first (refer to Tray Size Change Procedure – pg. 14-1); make sure the cutter blade is in between the gap in the tray carrier. Add the new unit and replace the knob fasteners.
4. Connect the cable to the proximity switch.

**Caution:** Make sure to check blade is between tray carriers before running conveyor.

## ADJUSTING THE TIMING OF THE CUTTER

1. Open the cutter unit cover.
2. Loosen two set screws in sprocket until shaft rotates freely in the sprocket.
3. Remove the blades from the mounting bar.
4. Advance conveyor until gap between the tray carriers is directly under the cutter shafts.
5. Rotate mounting bar so that blade mounting slot is straight down and centered between the tray carriers. Make sure mounting bar is in proper lateral alignment over conveyor.
6. Tighten sprocket set screws.

### **TO ADJUST BLADE HEIGHT OR CHANGE BLADES**

1. Run conveyor in Jog mode until flat side of mounting bar is parallel to conveyor and set screws are up. (Note: jog conveyor to get to the other set of blades)
2. Loosen set screws, for adjusting height of blade remove blade and stainless-steel backer strip. Inside of grooved slot for the blades are 1/4-20 set screws, you can adjust the height of the blades by screwing the set screws in or out for proper height. Replace blades and stainless-steel backer strip, make sure that the stainless-steel strip is mounted between blades and set screws. (Note: it is unnecessary to adjust the set screws for blade replacements.)
3. Jog conveyor, check that blades do not hit tray carriers during rotation.
4. Close the cutter unit cover.

**NOTE!** The hex head cap screws in the bottom of the upright supports (one in each support) are used to adjust the height of the sprocket in the main chain for proper engagement. Once the hex head screw is adjusted properly it should not need future adjustments.

### **G. DISCHARGE PARTS COMMON (SEE DRAWING NUMBER C714436)**

The parts on this assembly are common for this sealer (not container specific). They are the discharge shelf and the adjustable mounting bar inside the frame used for the inside tray ramp. There is a hex bolt on the front side of the frame side plate used to raise and lower the bar for the containers. The discharge table located on the end can be raised or lowered and moved in or out by loosening four wing nuts.

### **H. CHANGEOVER PARTS (SEE DRAWING NUMBER – Contact Oliver Packaging & Equipment)**

The parts of this assembly are container specific. They are the tray carrier set, film cutter unit, top discharge cover, support fingers and lower inside lift ramp.

With the desired set of tray carriers installed on the machine, place one empty container in the conveyor. The following steps are for to adjusting the discharge end of the unit for properly discharging the containers. Do not seal film on the containers at this time. The containers are discharged on the long support fingers. There is an adjustable lift bar located in between the side plates that can be adjusted move up or down. The discharge table located on the end can be raised or lowered and moved in or out by loosening four wing nuts.

1. Loosen the fastener located on the front at the discharge end to raise and lower inside lift ramp to the correct position. Ramp should be just below lowest point of tray carriers.
2. Run the conveyor until the container previously placed in the conveyor is about 1/4" from the set of long support fingers and stop the conveyor.
3. Loosen the adjustable lift bar fastener and raise the inside ramp so the container lifts out of the carriers sufficiently to guide it onto the long support fingers.

4. Lower the discharge table to its lowest position by loosening two wing nuts. Run the conveyor to check that the containers are properly discharged. The discharge table can now be raised so that the package just clears the table as it comes off the end of the machine. You may need to move the table in or out by loosening the two wing nuts under the table. **Caution: make sure you do not move the table in to far that you hit the tray carriers.**
5. Some minor adjustment of the table may be necessary to compensate for the weight in the container.

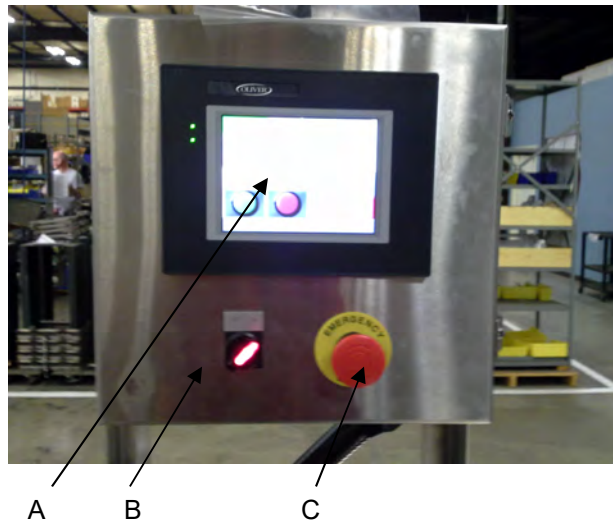
I. **ELECTRICAL ASSEMBLY (SEE ELECTRICAL WIRING DIAGRAM C714438 AND DRAWINGS BELOW)**  
**714439**  
**714440**

**MAIN CONTROL PANEL:** the main control panel is located on the rear side plate of the frame by the film mandrel uprights. It consists of the components and the main disconnect is located on the panel door.





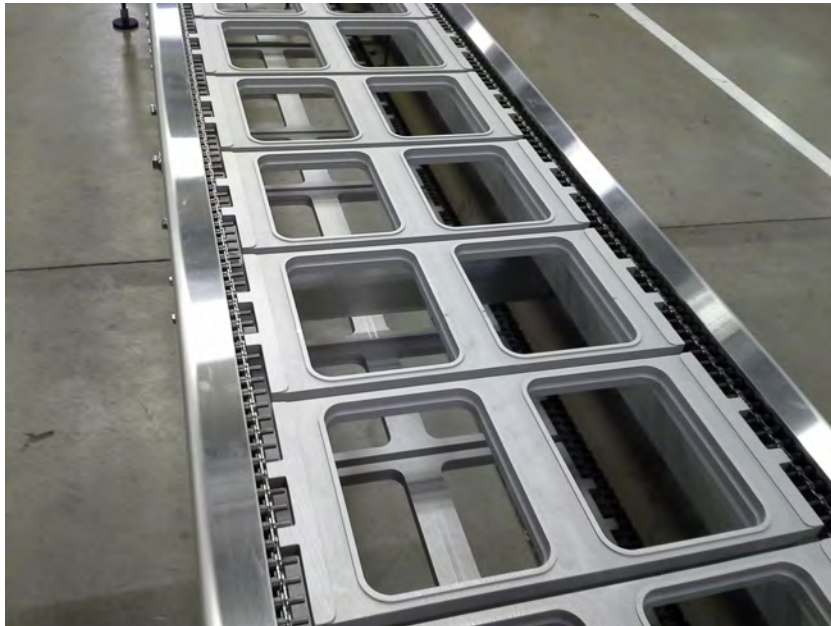
**PUSHBUTTON CONTROL PANEL LOCATED NEXT TO THE FILM STAND**



- A. INTERFACE PANEL
- B. POWER ON/OFF SELECTOR SWITCH (LIGHTED WHEN ON)
- C. EMERGENCY STOP BUTTON (RED)

See operator interface unit instructions.

**J. TRAY CARRIERS**



Installing the desired set of tray carriers as follows:

**IMPORTANT! REMOVE THE CUTTER ASSEMBLY BEFORE ADDING TRAY CARRIERS. (SEE SECTION II, F FOR TIMING IN CUTTER.) RUN CONVEYOR AT SLOW SPEED.**

Install or remove tray carriers only in the infeed area. (Between: the film stand and take-up end.)

**NOTE: THE TRAY CARRIERS MUST BE INSTALLED, WITH THE FLAT SURFACE OF THE TRAY CARRIER IN THE UP POSITION, 1/4" FROM TOP TO CENTERLINE OF CHAIN PIN HOLES.**

- Start by placing one tray carrier in the designated area toward the film mandrel, with any two pins on the conveyor chain and pushing the carrier into the chains pins until the chain moves over far enough to allow the carrier to fit between the two sets of chains.
- At this point, align the two holes in the other end of the carrier with the chain and pins on the opposite side and release the carrier.
- Make certain that the chain pins are fully engaged in the holes of the carrier. If not, juggle the carrier until the pins fully engage.
- Keep inserting tray carriers until you have filled up the infeed area.
- Check to make certain that all of the pins on the chain are fully engaged in the carriers. If this is not properly checked and remedied, a jam will occur, which will eventually ruin the blades and may stall the motor.
- Run the conveyor until the infeed area is clear of carriers. Install more carriers and repeat this process until you have installed the complete set of carriers.

#### **K. TRAY CARRIER SENSOR**

The tray carrier sensor is located on the cutter unit (back of the machine side where the main control panel is). The sensor is used to count the number containers you have run and is also used to calculate the speed of the tray carriers.

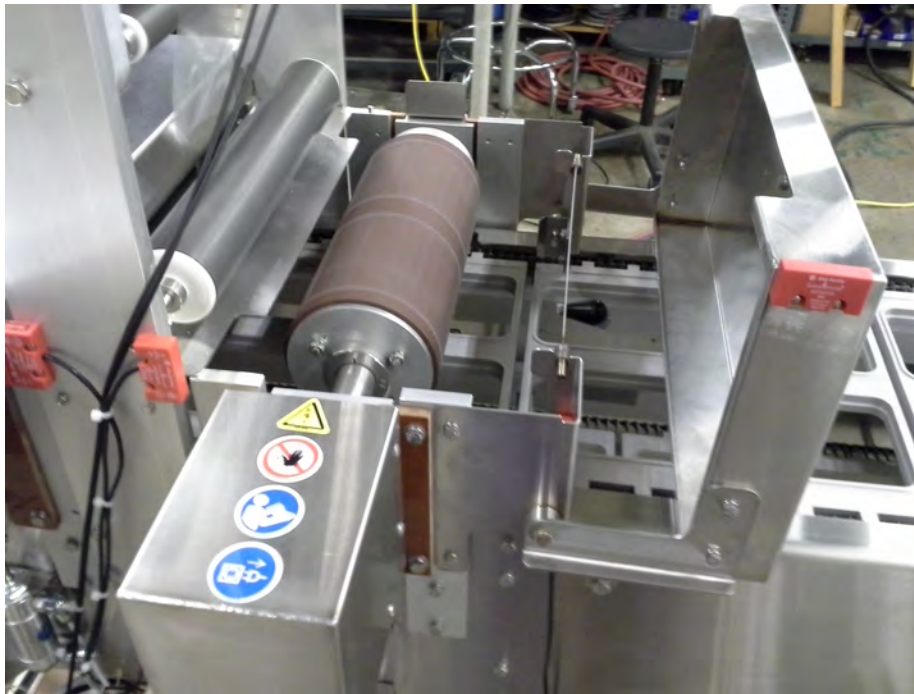
When you change cutter units you will need to unscrew the cable for the sensor and reattach it after you install the new cutter unit.

#### **L. PNEUMATIC CONTROL (SEE PNEUMATIC DIAGRAM C714441)**

Mounted on the back of the frame side plate by the main electrical panel are the filter/lube/regulator/gauge, air shut-off valve and solenoid valve for the heat seal rolls air cylinders. You can increase or decrease the air pressure to the cylinders by using the regulator. This regulator controls the air pressure for raising the heat seal rolls to up position.

There is a second pressure regulator with gauge mounted on the solenoid valve stack assembly. It is between solenoid valve and the sub-base block. This regulator is, used to adjust the down pressure for the heat seal rolls.



**M. HEAT SEAL ROLL 12" WIDE****HEAT ROLL SLEEVE REMOVAL (SEE DRAWING NUMBER C714431, 714429 AND C714430)**

**CAUTION! TURN POWER OFF AND TURN THE AIR PRESSURE OFF BY USING THE SHUTOFF VALVE LOCATED ON THE FILTER, REGULATOR, AND LUBRICATOR UNIT. BEFORE ATTEMPTING ANY MAINTENANCE ON THE HEAT SEAL UNITS, MAKE SURE ROLL IS AT AMBIENT TEMPERATURE.**

The heat seal unit is equipped with a sleeve. This sleeve can be easily removed for replacement as follows:

**REFER TO DRAWING C714431 AND C714429 AND 714430 FOR THIS PROCEDURE.**

1. Remove air cylinder clevis pins (one in front and one in rear)
2. Disconnect the connector from the slip ring assembly unit.
3. Lift the heat roll assembly out of the machine.
4. Slide the bearing block off the end of shaft (opposite end of the slip ring assembly).
5. Loosen the clamp collar and remove hex nut for the end cap, slide clamp collar and end cap off the shaft.
6. Remove the old sleeve. If the sleeve appears to stick to the heater core as you try to remove it, use wd-40 or silicone release agent may be sprayed between the two.
7. Install the new sleeve by reversing the above procedure.

### **REPLACING HEATER CARTRIDGES OR THERMOCOUPLE WIRE**

**CAUTION!** TURN POWER OFF, BEFORE ATTEMPTING ANY MAINTENANCE OF HEAT SEAL ROLL. MAKE SURE ROLL IS AT AMBIENT TEMPERATURE.

If it becomes necessary to replace the heater cartridges or thermocouple wire, use the following procedure.

**REFER TO DRAWINGS C714431, C714429, 714430 AND WIRING DIAGRAM C714438.**

1. Use the same procedure for removing the sleeve. Ref items M1 thru M7

### **N. FILM PERFORATOR UNIT (OPTIONAL)**



The film perforator unit is an option and is mounted to the film stand if so equipped. Operation of the film perforator unit is as follows:

**REFER TO DRAWING C714422 FOR THIS PROCEDURE.**

1. To engage film perforator(s) - pull ring pin and allow perforator arm to rest on perforator unit roll.
2. To disengage film perforator(s) – raise perforator arms until the pull pin snaps into groove and holds perforator off perforator roll.
3. To adjust film perforator(s) to new side-to-side location – loosen set collars each side of arm, move perforator so it lines up with desired groove, retighten set collars, and check for proper operation.

**O. TRAY CARRIER WASH/DRY UNIT (OPTIONAL)**

An optional tray carrier wash/dry unit is available and will be mounted to the underside of the drive end frame if equipped. This option will require the machine to be installed over a floor drain and will require additional utility (water and compressed air) connections. This option should not be used when sealing paper-based trays. Operation of the tray carrier wash/dry unit is as follows:

**REFER TO DRAWING C714435 FOR THIS PROCEDURE.**

1. Turn Wash/Dry on using the operator touchscreen.  
This will spray water to rinse off, and compressed air to dry the tray carriers as they return to the infeed area.
2. To discontinue use of tray carrier wash/dry unit, turn Wash/Dry off using operator touchscreen.

FOR SERVICE PARTS CALL OLIVER PRODUCTS @ 800-253-3893

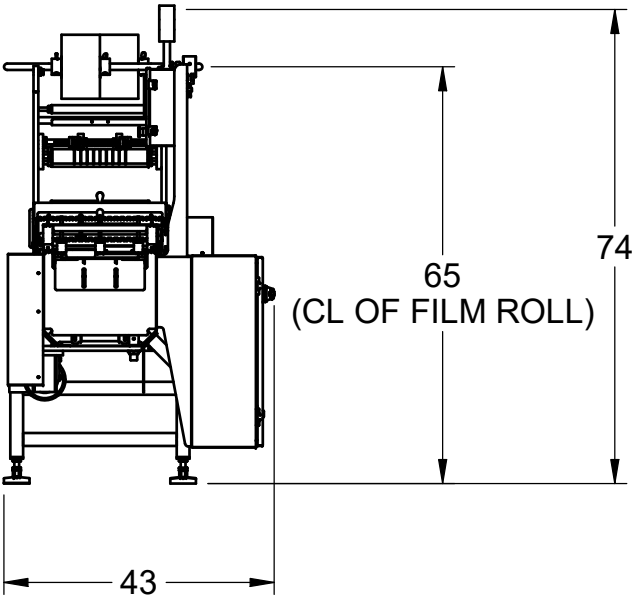
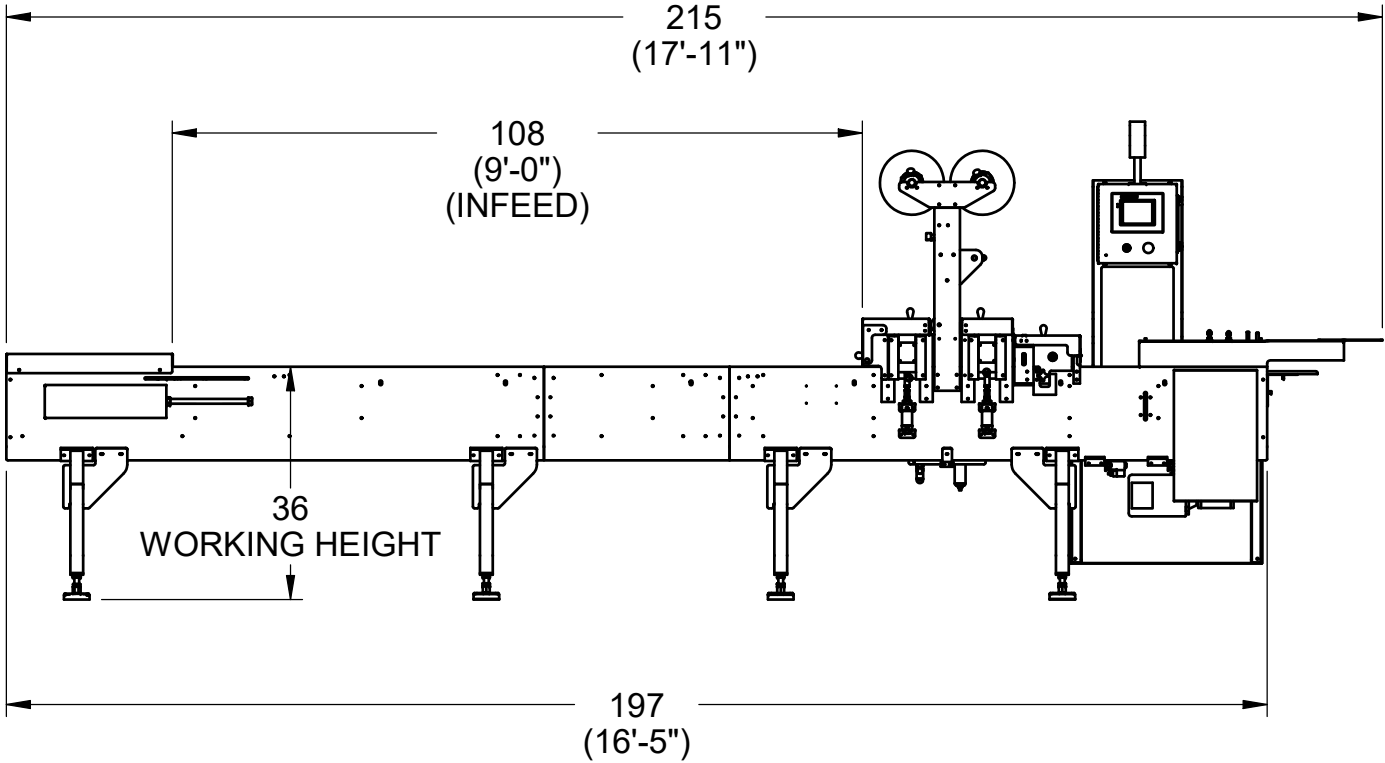
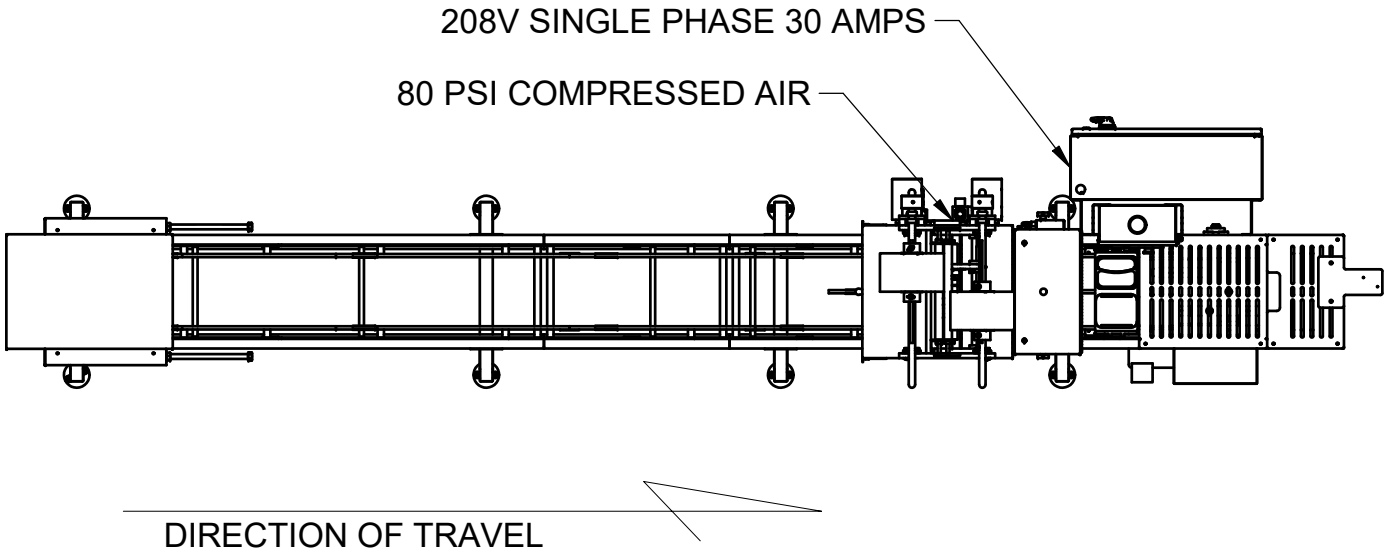
CHANGE

C

C714418

0	TOOL NAME	NUMBER

ITEM	PART NUMBER	DESCRIPTION	QUAN.



LTR	CHANGE	DATE	BY	EC NO.	LTR	CHANGE	DATE	BY	EC NO.



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NAME

MAIN ASSEMBLY

MAT'L

MAT'L NO.

FINISH

DRAWN BY

V. MATZ

DATE

8-19-15

SCALE

1/30

REMOVE BURRS & SHARP EDGES

DO NOT SCALE THIS DRAWING

DIMENSIONAL TOLERANCES UNLESS SPECIFIED: FRACTIONAL ± 1/64; DECIMAL ± .005; ANGULAR ± 1°

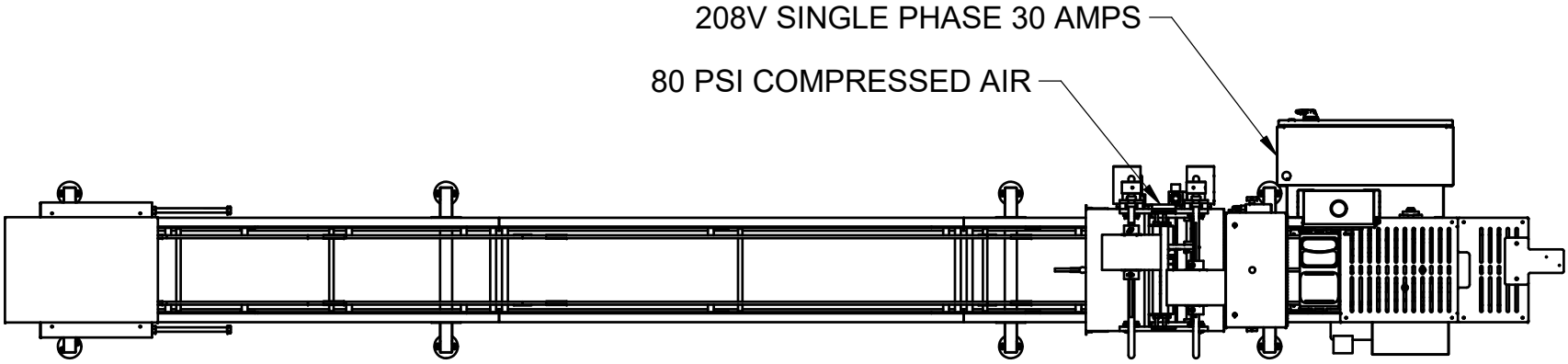
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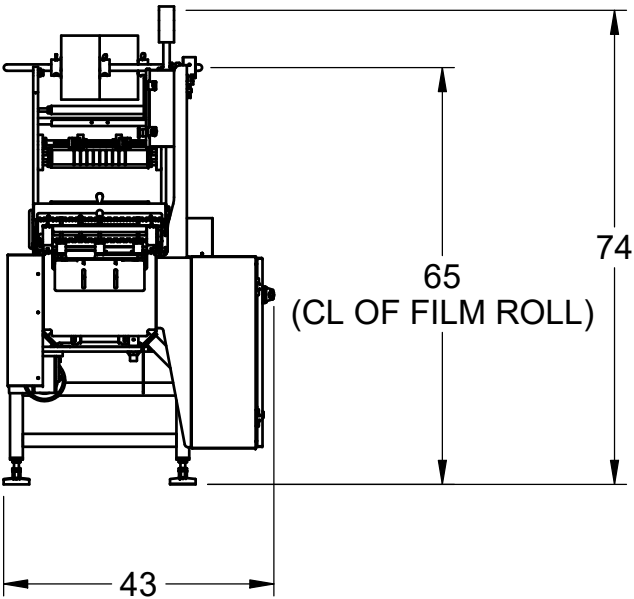
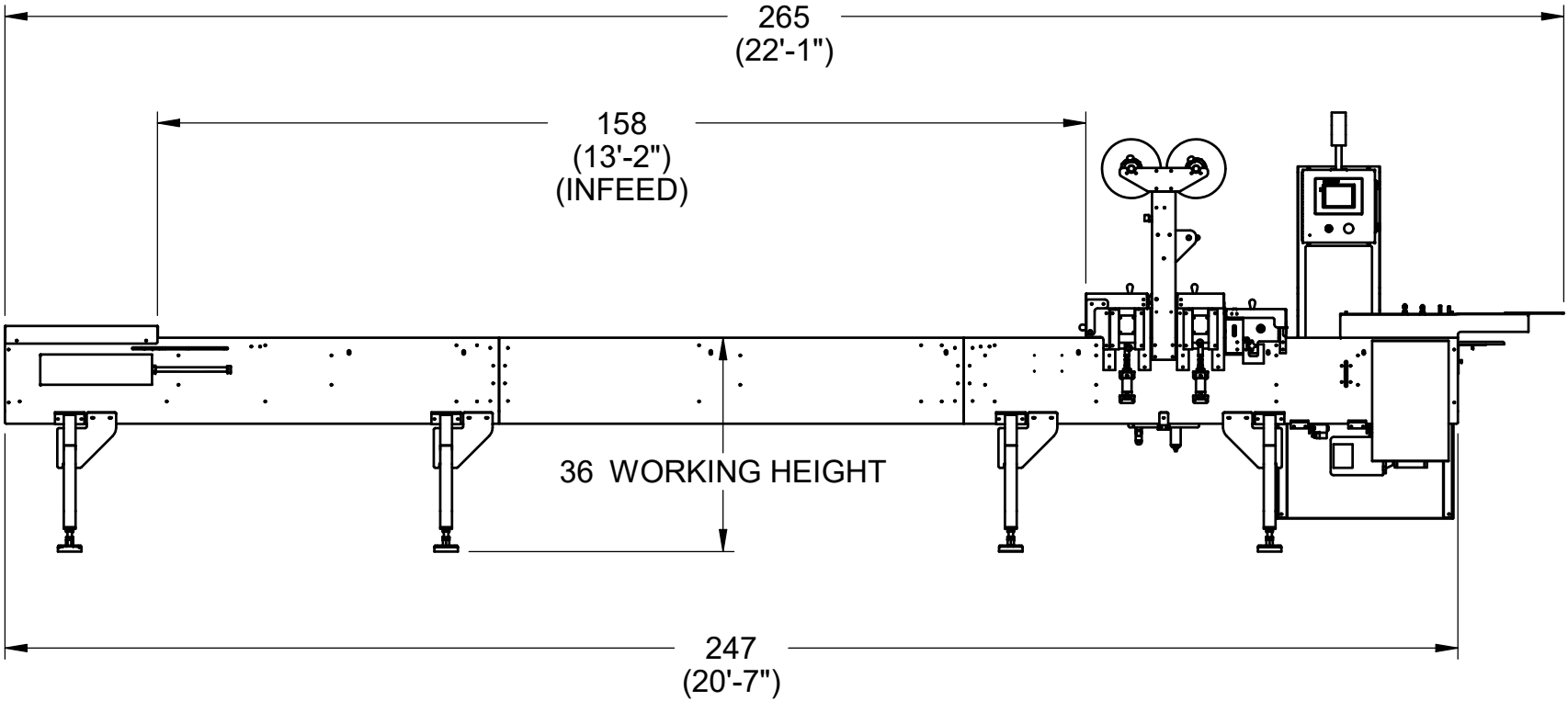
C714419

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ITEM	PART NUMBER	DESCRIPTION	QUAN.



DIRECTION OF TRAVEL



LTR	CHANGE	DATE	BY	EC NO.	LTR	CHANGE	DATE	BY	EC NO.



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NAME MAIN ASSEMBLY

MAT'L \_\_\_\_\_

MAT'L NO. \_\_\_\_\_ FINISH \_\_\_\_\_

DRAWN BY V. MATZ DATE 8-19-15 SCALE 1/30

REMOVE BURRS & SHARP EDGES  
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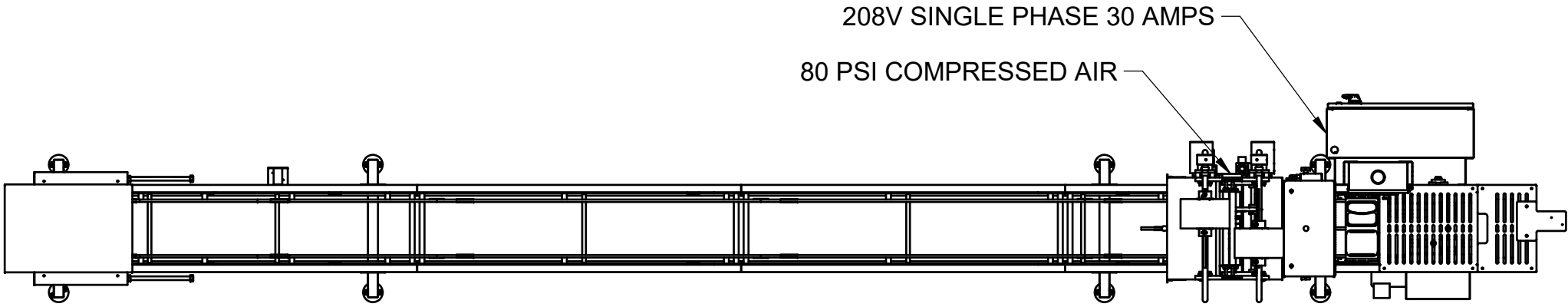
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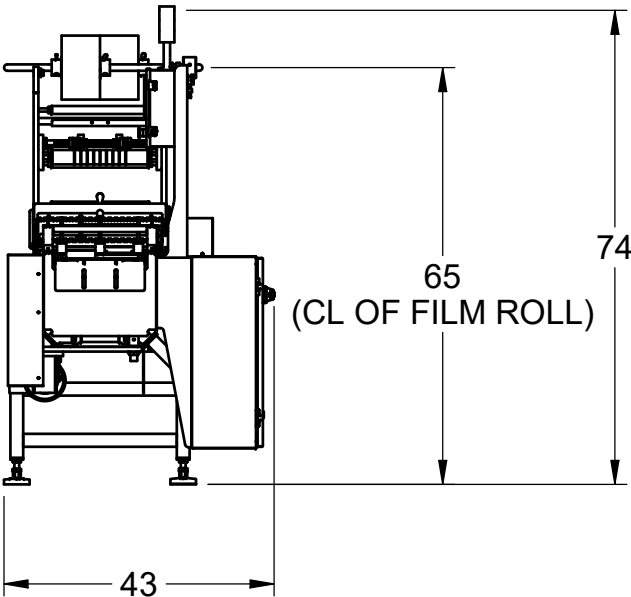
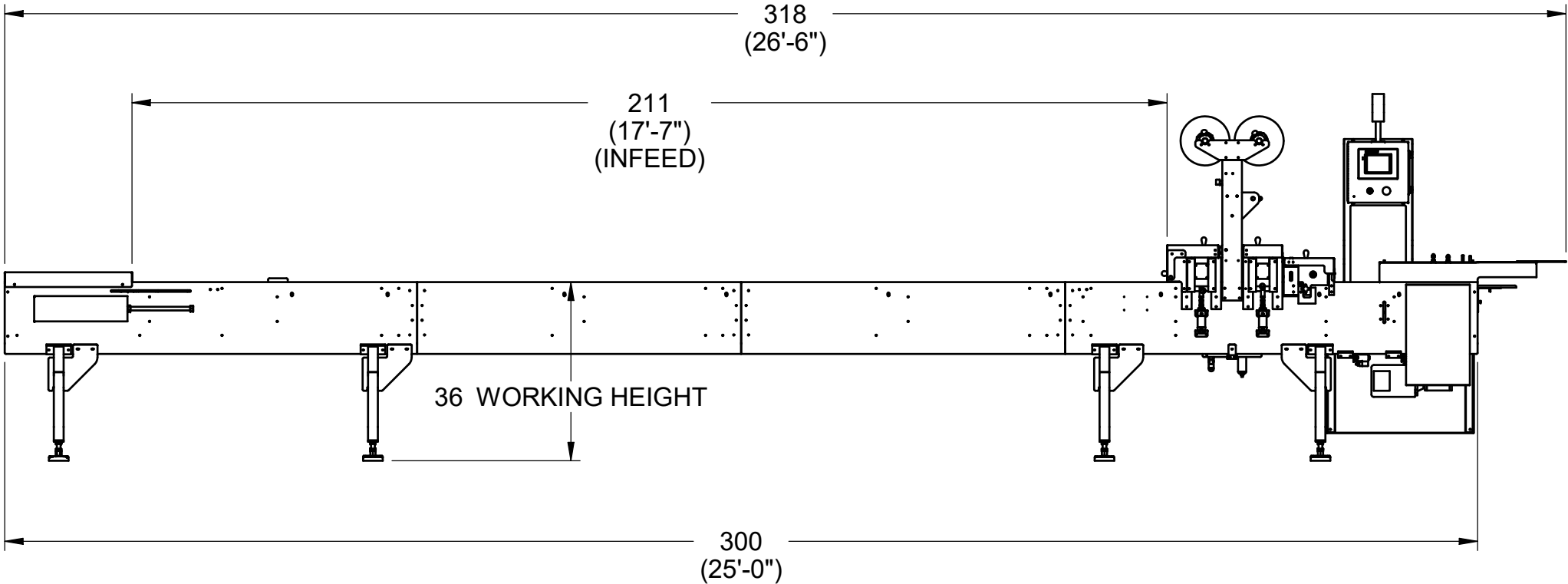
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0	TOOL NAME	NUMBER		ITEM	PART NUMBER	DESCRIPTION	QUAN.



DIRECTION OF TRAVEL



LTR	CHANGE	DATE	BY	EC NO.	LTR	CHANGE	DATE	BY	EC NO.



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NAME

MAIN ASSEMBLY

MAT'L

MAT'L NO.

FINISH

DRAWN BY

V. MATZ

DATE

8-19-15

SCALE

1/30

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CHANGE

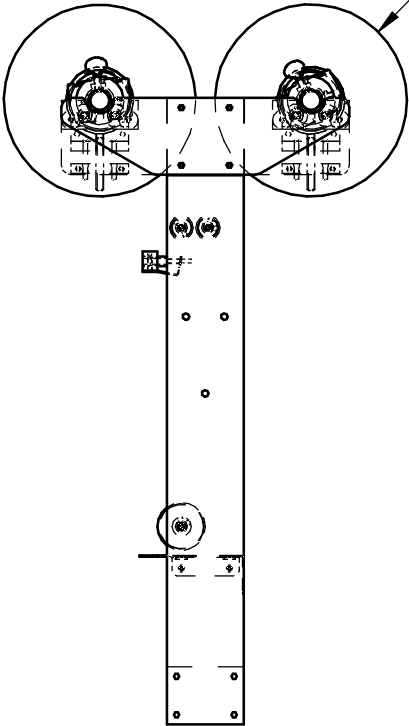
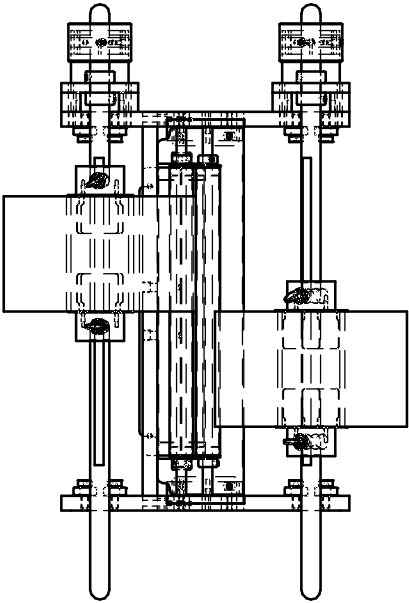
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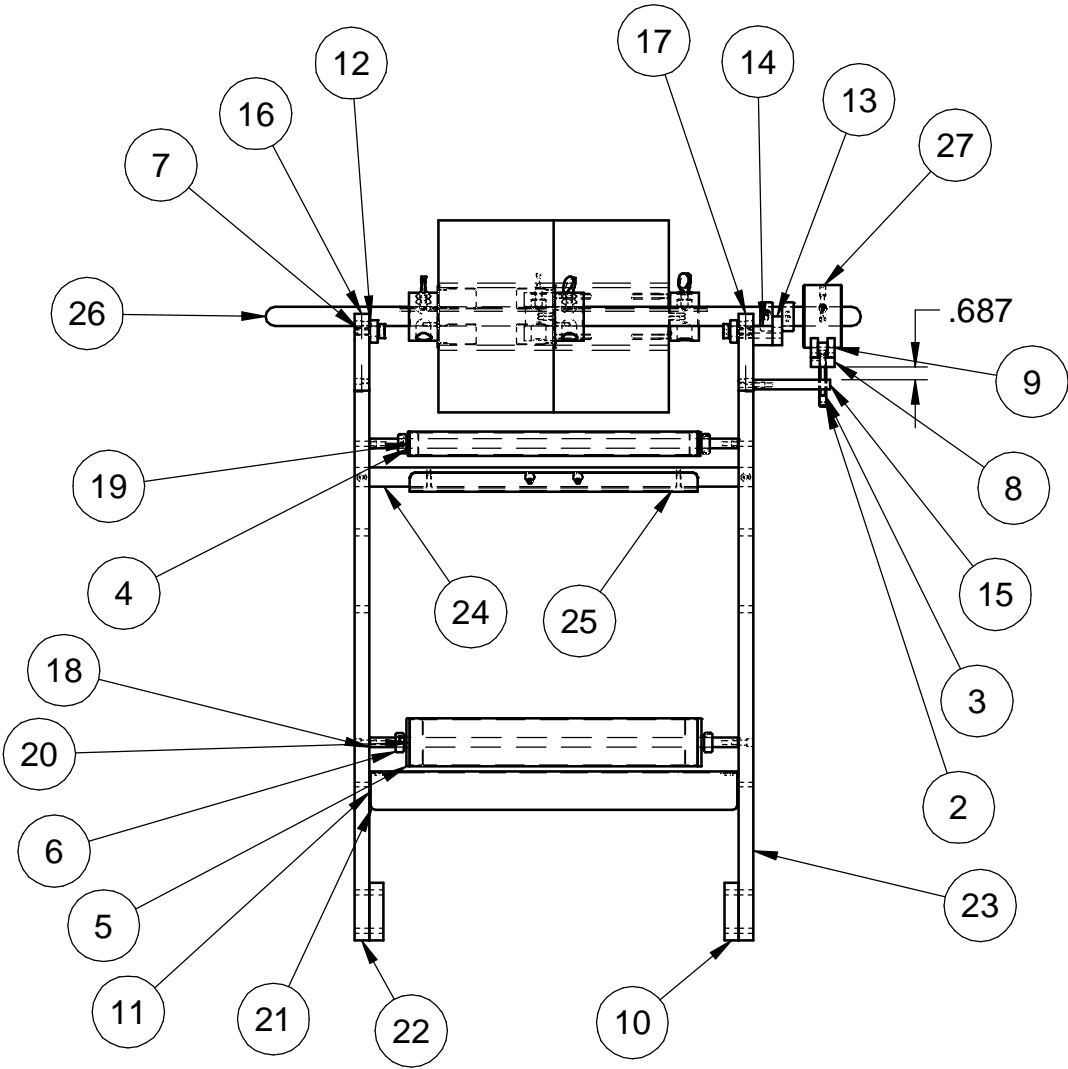
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0	TOOL NAME	NUMBER

ITEM	PART NUMBER	DESCRIPTION	QUAN.



Ø 10 MAX



REF. 714248

LTR	CHANGE	DATE	BY	EC NO.	LTR	CHANGE	DATE	BY	EC NO.



GRAND RAPIDS, MICHIGAN, U.S.A. 49504-5298

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NAME

FILM STAND ASSEMBLY

MAT'L

SEE LIST

MAT'L NO.

SEE LIST

FINISH

DRAWN BY

V. MATZ

DATE

6-2-15

SCALE

1:10

REMOVE BURRS & SHARP EDGES

DO NOT SCALE THIS DRAWING

DIMENSIONAL TOLERANCES UNLESS SPECIFIED: FRACTIONAL ± 1/64; DECIMAL ± .005; ANGULAR ± 1°

0	TOOL NAME	NUMBER

ITEM	PART NUMBER	DESCRIPTION	QUAN.

Item Number	Part Number	Description	Qty
1*	1908-0010	SPACER-CHAIN RAIL	2
2	42315	STUD BRAKE 3/8-16 UNC X 2-3/4 LONG	2
3	4475-0516-2	PIN-1/4 DIA X 2	4
4	5252-3011	BEARING-ROLL END BSTN 1016D1/2	4
5	5252-3071	BEARING-ROLL END BSTN 2016D1/2	2
6	5806-7055	COLLAR-SET 1/2 BORE STST	6
7	5842-8950	SCREW - SHOULDER 1/2 X 1/2	8
8	64796	DRAG SHOE BRACKET	2
9	64797	DRAG SHOE PAD	4
10	69182	SPACER UPRIGHT FILM STAND	2
11	69295	ANGLE SUPPORT	2
12	69958	ROLLER FILM ROLL SHAFT	8
13	70561	SHAFT GUIDE	2
14	70562	SPACER SHAFT GUIDE	4
15	70564	PLATE DRAG SHOE MOUNTING	2

Item Number	Part Number	Description	Qty
16	70883	SUPPORT MANDREL FRONT WIDE UNIT	1
17	70884	SUPPORT MANDREL REAR WIDE UNIT	1
18	70887	SHAFT TUBE ROLL 19-1/4 LONG	3
19	70888	TUBE-ALUM 1-1/4" OD X 15" LONG	2
20	70889	TUBE-ALUM 2-1/2OD X 15" LONG HARDCOAT	1
21	70890	DEFLECTOR HEAT ROLL WIDE UNIT	1
22	71832	UPRIGHT-FILM STAND FRONT	1
23	71833	UPRIGHT-FILM STAND REAR	1
24	71834	BAR-SENSOR	1
25	71835	BRACKET-SENSOR	1
26	C714266	FILM MANDREL ASSEMBLY	1
27	C714266	FILM MANDREL ASSEMBLY	1

LTR	CHANGE	DATE	BY	EC NO.	LTR	CHANGE	DATE	BY	EC NO.



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NAME

FILM STAND ASSEMBLY

MAT'L

MAT'L NO.

FINISH

DRAWN BY

V. MATZ

DATE

6-2-15

SCALE

REMOVE BURRS & SHARP EDGES

DO NOT SCALE THIS DRAWING

DIMENSIONAL TOLERANCES UNLESS SPECIFIED: FRACTIONAL ± 1/64; DECIMAL ± .005; ANGULAR ± 1°



CHANGE

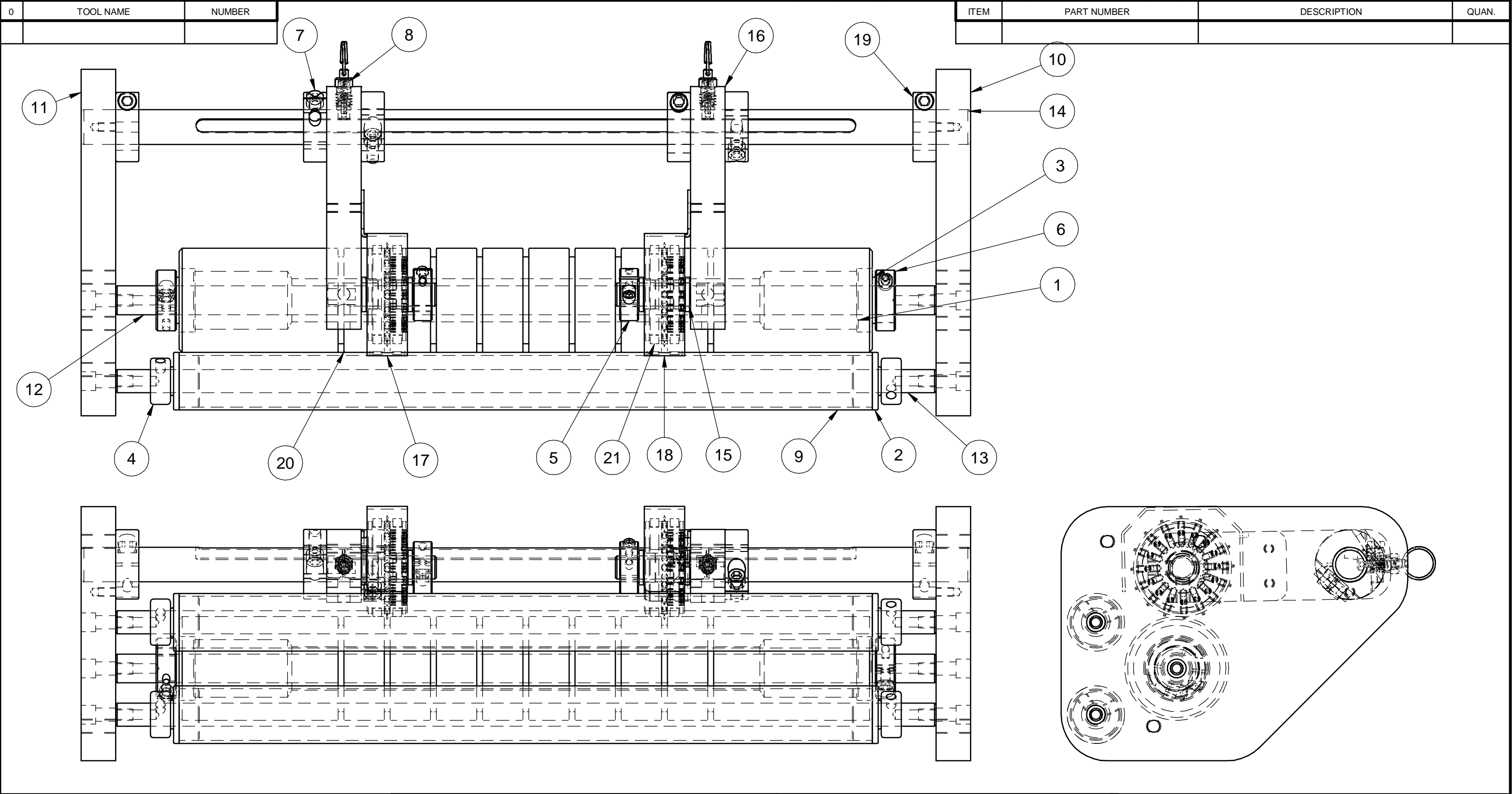
C

C714422

SHT 1 OF 2

0	TOOL NAME	NUMBER

ITEM	PART NUMBER	DESCRIPTION	QUAN.



LTR	CHANGE	DATE	BY	EC NO.	LTR	CHANGE	DATE	BY	EC NO.



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NAME	FILM PERFORATOR UNIT DUAL LANE		
MAT'L	SEE LIST		
MAT'L NO.	SEE LIST	FINISH	
DRAWN BY	V. MATZ	DATE	6-2-15
		SCALE	1/2
REMOVE BURRS & SHARP EDGES		DO NOT SCALE THIS DRAWING	
DIMENSIONAL TOLERANCES UNLESS SPECIFIED: FRACTIONAL ± 1/64; DECIMAL ± .005; ANGULAR ± 1°			

0	TOOL NAME	NUMBER	ITEM	PART NUMBER	DESCRIPTION	QUAN.

Item Number	Part Number	Description	Qty
1	5250-0387	BEARING BALL 5/8 X 1-3/8 X 11/32 (2 SEALS)	2
2	5252-3011	BEARING-ROLL END BSTN 1016D1/2	4
3	5254-3548	BEARING THRUST 5/8ID X1" OD X 1/16T	2
4	5806-7055	COLLAR-SET 1/2 BORE STST	4
5	5806-7112	COLLAR-SPLIT 1/2 BORE STST	2
6	5806-7114	COLLAR-SPLIT 5/8 BORE STST	2
7	5806-7115	COLLAR-SPLIT 1 PC 3/4 BORE	4
8	5915-9898	HAND-RETRACTABLE PLUNGER	2
9	70888	TUBE-ALUM 1-1/4" OD X 15" LONG	2
10	70906	PLATE-FRONT SIDE MOUNTING PERF	1

Item Number	Part Number	Description	Qty
11	70907	PLATE-REAR SIDE MOUNTING PERF	1
12	70908	SHAFT BACKER ROLLER 17-3/4" LONG	1
13	70909	SHAFT-FILM IDLER 17-3/4" LONG	2
14	70911	SHAFT-WHEEL ARM	1
15	70912	SHAFT-PERT. WHEEL	2
16	70913	ARM PERF. WHEEL	2
17	70917	GUARD PERF WHEEL	1
18	70918	GUARD PERF WHEEL LH	1
19	70919	COLLAR SHAFT CLAMP	2
20	71831	ROLLER-FILM PERF BACKER	1
21	C714267	PERF WHEEL ASSEMBLY	2

										 <p>GRAND RAPIDS, MICHIGAN, U.S.A. 49504-5298</p> <p>THIS DRAWING AND ALL PROPRIETARY RIGHTS AND CONCEPTS HEREIN ARE THE EXCLUSIVE PROPERTY OF OLIVER PACKAGING &amp; EQUIPMENT COMPANY AND ARE NOT TO BE USED, DUPLICATED OR TREATED IN ANY WAY INCONSISTANT WITH SUCH RIGHTS WITHOUT PERMISSION OF OLIVER PACKAGING &amp; EQUIPMENT COMPANY.</p>	NAME <u>FILM PERFORATOR UNIT DUAL LANE</u>
											MAT'L <u>SEE LIST</u>
											MAT'L NO. <u>SEE LIST</u> FINISH _____
											DRAWN BY <u>V. MATZ</u> DATE <u>6-2-15</u> SCALE _____
LTR	CHANGE	DATE	BY	EC NO.	LTR	CHANGE	DATE	BY	EC NO.		REMOVE BURRS & SHARP EDGES DIMENSIONAL TOLERANCES UNLESS SPECIFIED: FRACTIONAL $\pm 1/64$ ; DECIMAL $\pm .005$ ; ANGULAR $\pm 1^\circ$

CHANGE

C

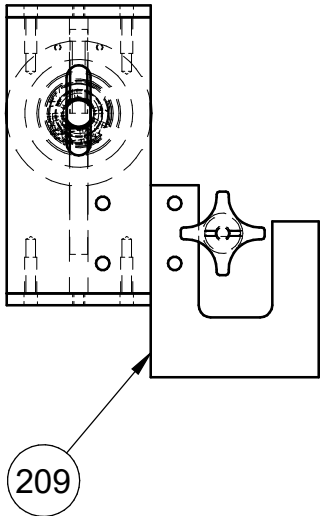
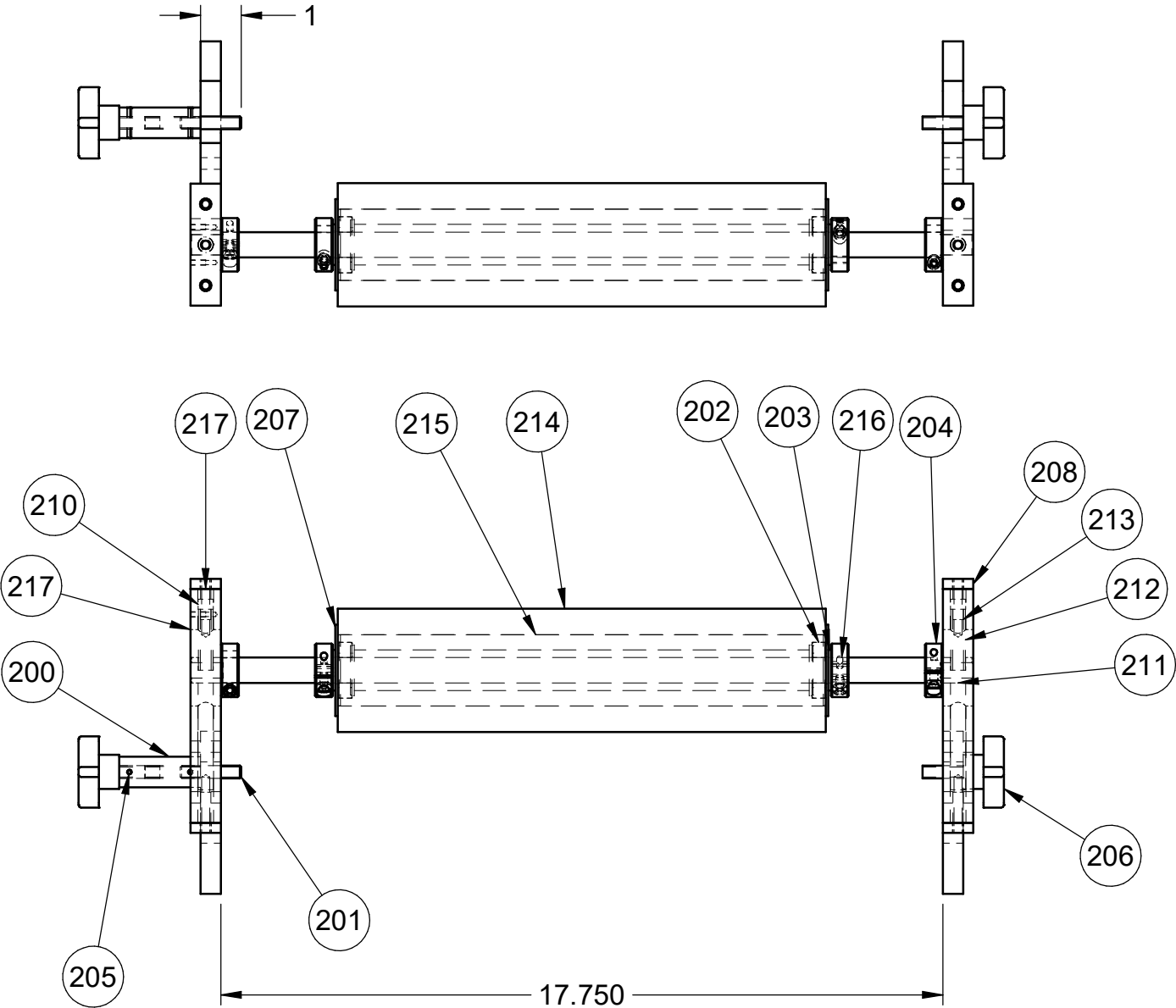
C714424

0	TOOL NAME	NUMBER

ITEM	PART NUMBER	DESCRIPTION	QUAN.

Item Number	Part Number	Description	Qty
200	2108-0030	SPACER KNOB	1
201	4625-3610-015	STUD 5/16-18 UNC X 1-1/2 LONG	1
202	5250-0387	BEARING BALL 5/8 X 1-3/8 X 11/32 (2 SEALS)	2
203	5254-3548	BEARING THRUST 5/8ID X1" OD X 1/16T	2
204	5806-7114	COLLAR-SPLIT 5/8 BORE STST	4
205	5835-6785	PIN - SPRING 1/8 X 3/4" STST	2
206	5911-7114	KNOB BLACK W/STUD	2
207	67532	WASHER	2
208	67544	SPACER NUT	4
209	69091	GUIDE CUTTER	2
210	69990	SPRING RETAINER PLUG	2
211	69991	RETAINER SHAFT SPRING	2
212	7012-3007	SPRING-CMPRESSION .360ODX .047WX 1-3/4"	2
213	70430	RETAINER SHAFT W/SPRING	1
214	70830	PRESSURE SILICONE ROLL 12" LONG	1
215	70831	GUIDE ROLLER 12" LONG	1
216	70836	SHAFT PRESSURE ROLLER	1
217	71945	RETAINER SHAFT W/SPRING REAR	1

REF. C714249



LTR	CHANGE	DATE	BY	EC NO.	LTR	CHANGE	DATE	BY	EC NO.

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NAME

ROLLER SILICONE PRESSURE 12' LONG

MAT'L

SEE LIST

MAT'L NO.

SEE LIST

FINISH

DRAWN BY

V. MATZ

DATE

6-3-15

SCALE

1/4

REMOVE BURRS & SHARP EDGES

DO NOT SCALE THIS DRAWING

DIMENSIONAL TOLERANCES UNLESS SPECIFIED: FRACTIONAL ± 1/64; DECIMAL ± .005; ANGULAR ± 1°

CHANGE

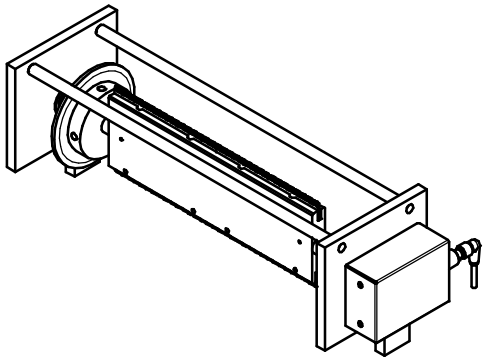
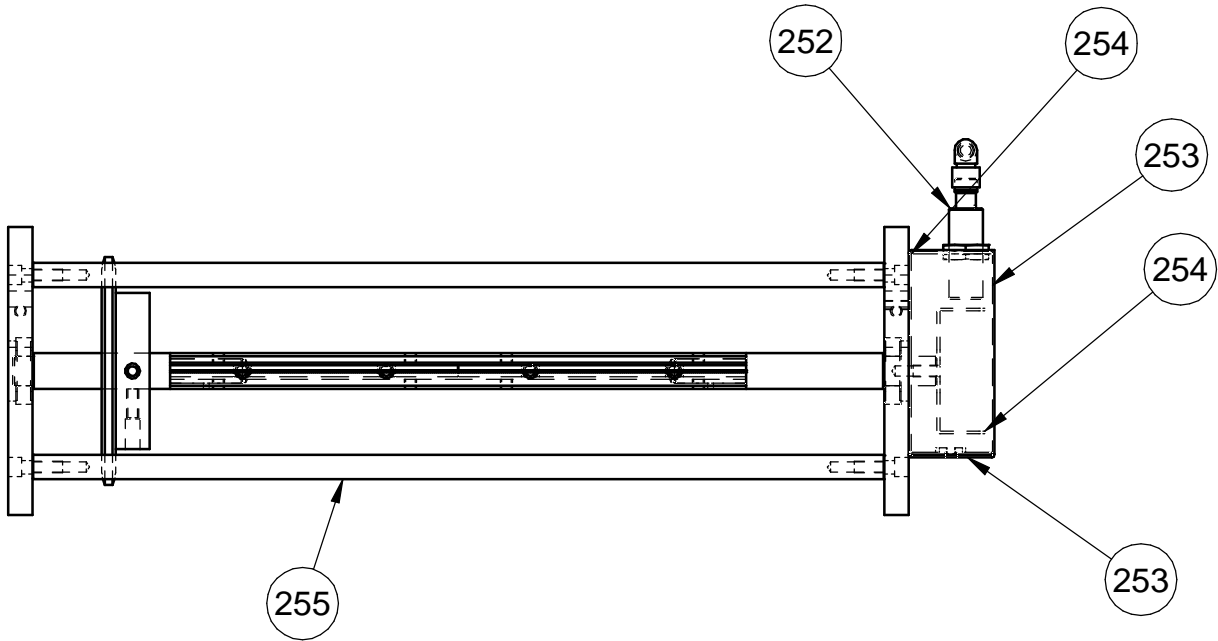
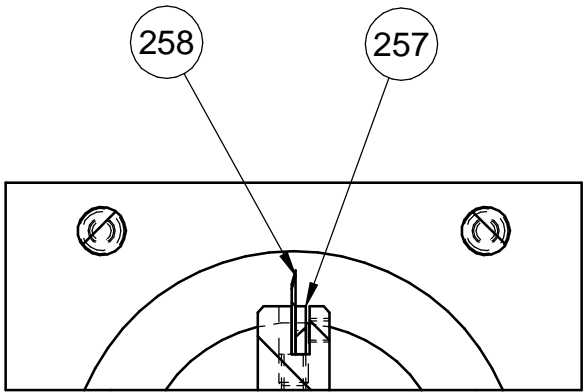
C

C714427

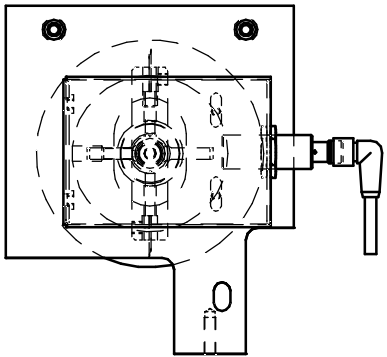
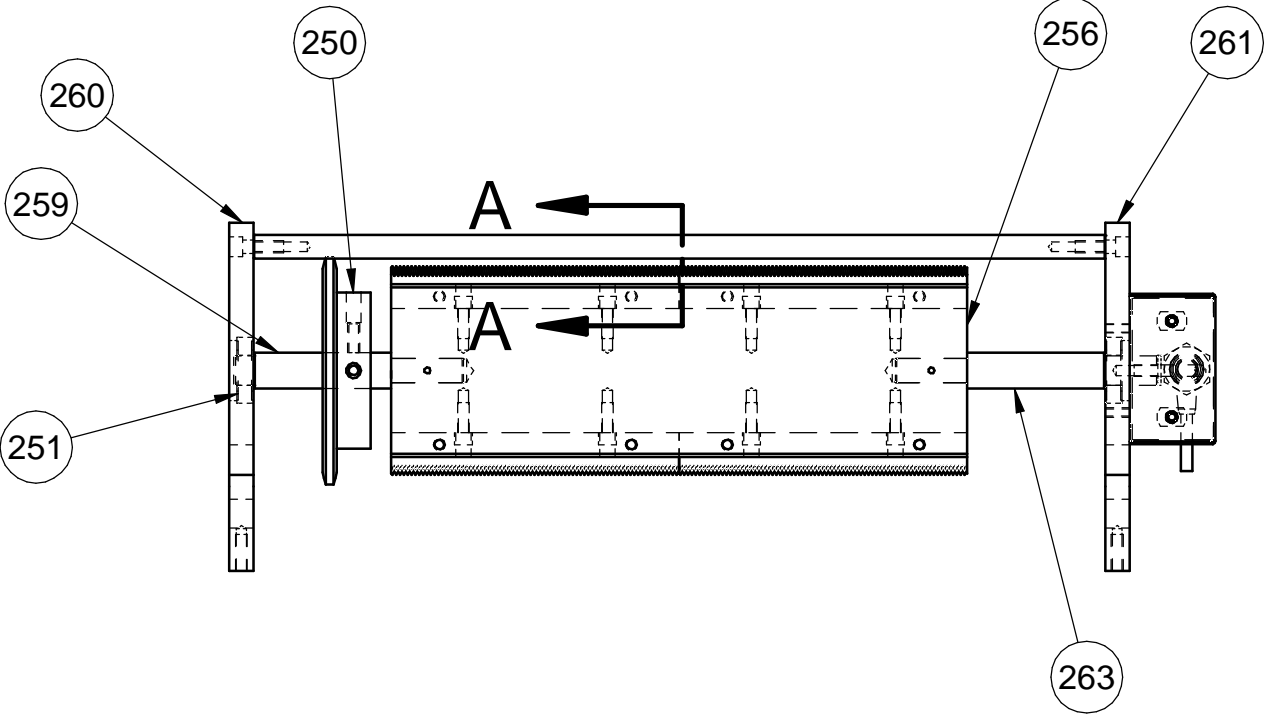
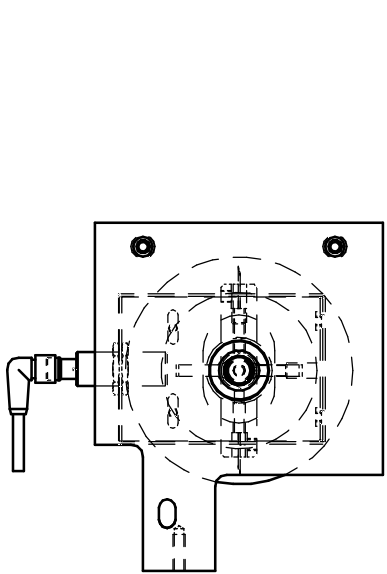
SHT 1 OF 2

0	TOOL NAME	NUMBER

ITEM	PART NUMBER	DESCRIPTION	QUAN.



1:8



REF. C714407

LTR	CHANGE	DATE	BY	EC NO.	LTR	CHANGE	DATE	BY	EC NO.



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NAME	CUTTER UNIT W/SENSOR 7" CO		
MAT'L	SEE LIST		
MAT'L NO.	SEE LIST	FINISH	
DRAWN BY	V. MATZ	DATE	6-4-15
		SCALE	1/4
REMOVE BURRS & SHARP EDGES		DO NOT SCALE THIS DRAWING	
DIMENSIONAL TOLERANCES UNLESS SPECIFIED: FRACTIONAL $\pm 1/64$ ; DECIMAL $\pm .005$ ; ANGULAR $\pm 1^\circ$			

0	TOOL NAME	NUMBER

ITEM	PART NUMBER	DESCRIPTION	QUAN.

Item Number	Part Number	Description	Qty
250	4617-4028-2431	SPROCKET-40B28 3/4 MPB (PLATED)	1
251	5250-0387	BEARING BALL 5/8 X 1-3/8 X 11/32 (2 SEALS)	2
252	5711-8585	SENSOR-INDUCTIVE PROXIMITY	1
253	70009	COVER SENSOR	1
254	70454	CAM SENSOR DOUBLE	1
255	70852	BAR-CUTTER SPACER 17-3/4" LONG	2
256	70853	HOLDER-BLADE 7" CO DUAL LANE	1
257	70854	STRIP BACKER BLADE 6" LONG	4
258	70855	BLADE CUTTER 6" LONG	4
259	71778	CUTTER SHAFT SPROCKET	1
260	71780	SUPPORT UPRIGHT FRONT	1
261	71781	SUPPORT UPRIGHT REAR	1
262	71841	BRACKET-SENSOR	1
263	71842	SHAFT-BLADE HOLDER SENSOR	1

LTR	CHANGE	DATE	BY	EC NO.	LTR	CHANGE	DATE	BY	EC NO.



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NAME

CUTTER UNIT W/SENSOR 7" CO

MAT'L

SEE LIST

MAT'L NO.

SEE LIST

FINISH

DRAWN BY

V. MATZ

DATE

6-4-15

SCALE

1/4

REMOVE BURRS & SHARP EDGES

DO NOT SCALE THIS DRAWING

DIMENSIONAL TOLERANCES UNLESS SPECIFIED: FRACTIONAL ± 1/64; DECIMAL ± .005; ANGULAR ± 1°

CHANGE

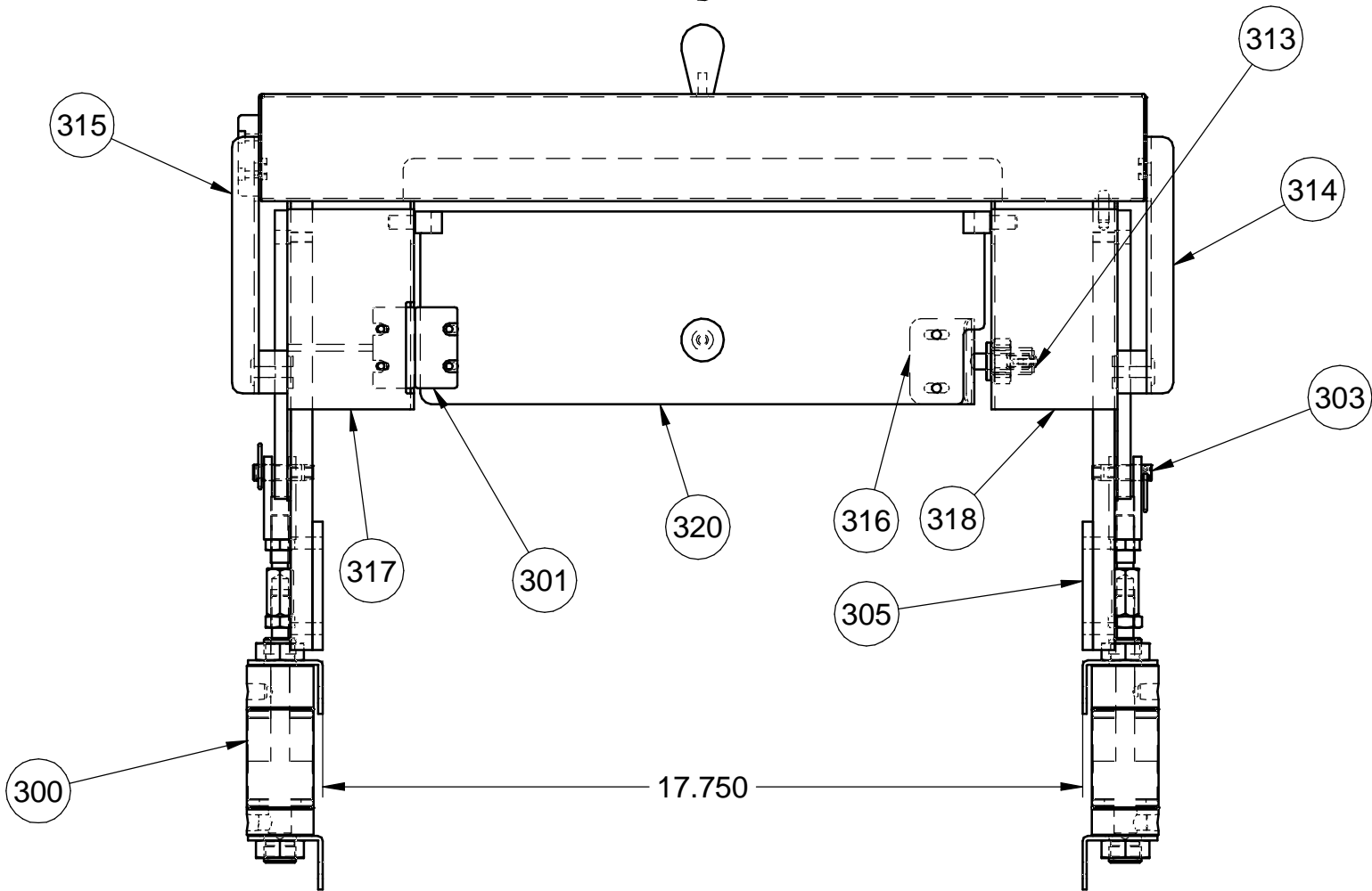
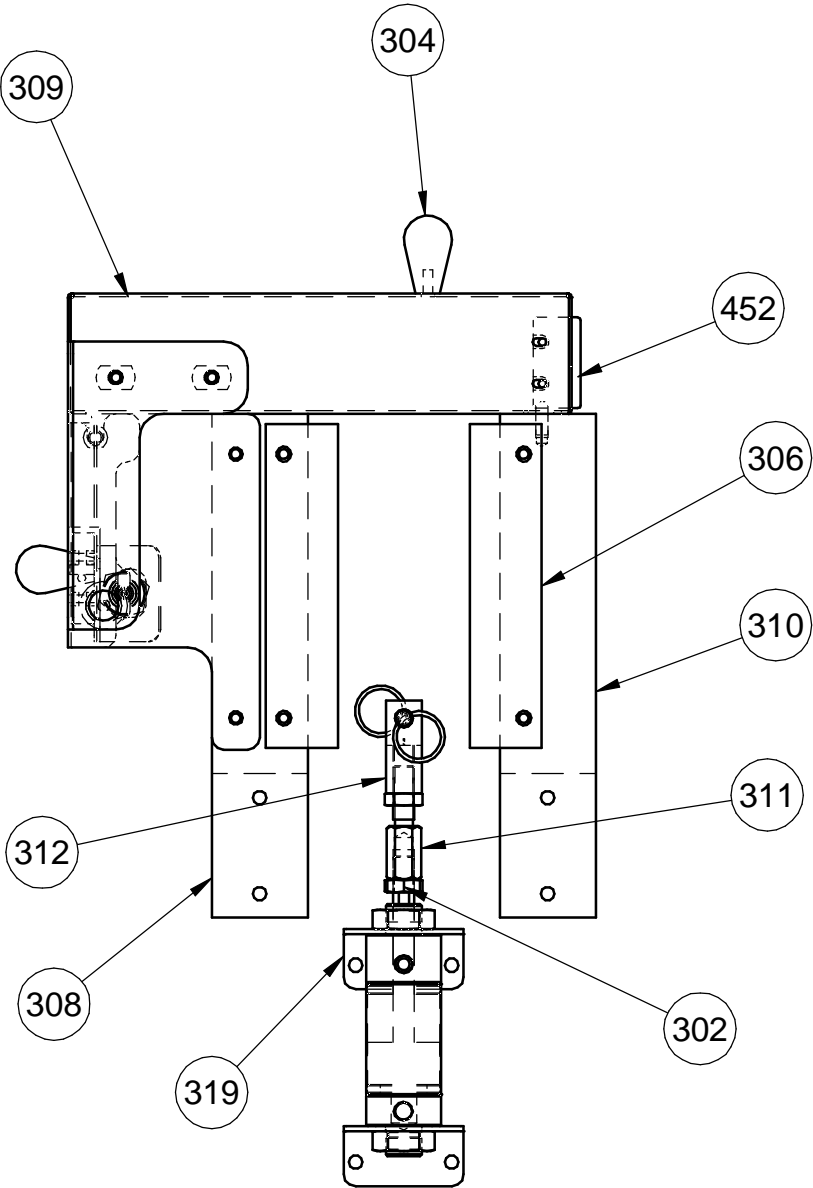
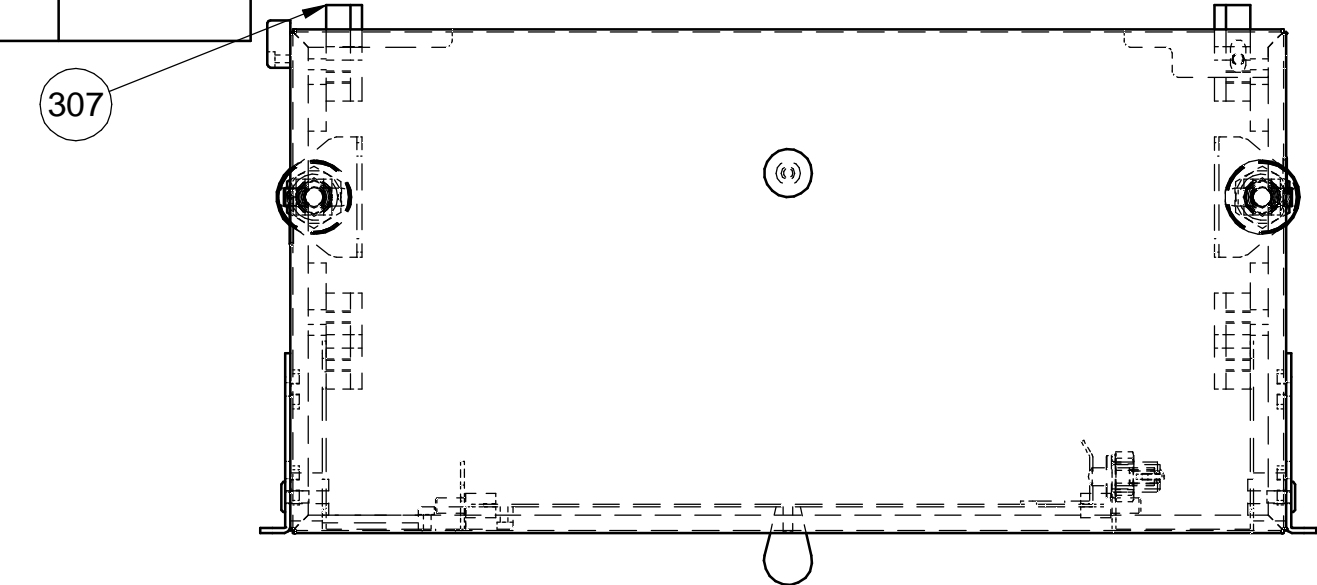
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C714429

SHT 1 OF 2

0	TOOL NAME	NUMBER

ITEM	PART NUMBER	DESCRIPTION	QUAN.



REF. C71392

LTR	CHANGE	DATE	BY	EC NO.	LTR	CHANGE	DATE	BY	EC NO.



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NAME HEAT SEAL FRAME FIRST ROLL 12" WIDE

MAT'L SEE LIST


MAT'L NO. SEE LIST FINISH \_\_\_\_\_

DRAWN BY V. MATZ DATE 6-3-15 SCALE 1/4

REMOVE BURRS & SHARP EDGES DO NOT SCALE THIS DRAWING  
DIMENSIONAL TOLERANCES UNLESS SPECIFIED: FRACTIONAL  $\pm 1/64$ ; DECIMAL  $\pm .005$ ; ANGULAR  $\pm 1^\circ$

0	TOOL NAME	NUMBER	ITEM	PART NUMBER	DESCRIPTION	QUAN.

Item Number	Part Number	Description	Qty	Item Number	Part Number	Description	Qty
300	5108-6777	CYLINDER-AIR 1-1/2"B X 1" S DX	2	316	71727	GATE CATCH	1
301	5757-9385	SWITCH-SAFETY	2	317	71767	REAR SIDE GUARD ASSEMBLY	1
302	5832-0553	NUT-HEX JAM 7/16-20NF FIN STST	4	318	71769	FRONT SIDE GUARD ASSEMBLY	1
303	5835-7905	PIN-DETENT 3/8 DIA. X 3/4 LONG STST	2	319	71800	BRACKET- AIR CYLINDER	4
304	5911-7115	KNOB-OVAL/TAPERED BD-6	2	320	71837	GATE ASSEMBLY 17-3/4" WIDE FRAME	1
305	69248	SPACER SIDE GUIDE BRACKET	4				
306	70545	BLOCK SIDE GUIDE	4				
307	70549	BRACKET END SIDE GUIDE	1				
308	70664	BRACKET CENTER SIDE GUIDE	2				
309	70892	COVER FIRST ROLLER WIDE UNIT	1				
310	70900	BRACKET END SIDE GUIDE WITH PIN	1				
311	71701	POST-ADJUSTER	2				
312	71702	CLEVIS-ADJUSTER	2				
313	71713	ASSY-CATCH	1				
314	71719	COVER FRONT PIVOT BAR	1				
315	71720	COVER REAR PIVOT BAR	1				

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											MAT'L <u>SEE LIST</u>
											MAT'L NO. <u>SEE LIST</u> FINISH _____
											DRAWN BY <u>V. MATZ</u> DATE <u>6-3-15</u> SCALE _____
LTR	CHANGE	DATE	BY	EC NO.	LTR	CHANGE	DATE	BY	EC NO.		REMOVE BURRS & SHARP EDGES DIMENSIONAL TOLERANCES UNLESS SPECIFIED: FRACTIONAL $\pm 1/64$ ; DECIMAL $\pm .005$ ; ANGULAR $\pm 1^\circ$



CHANGE

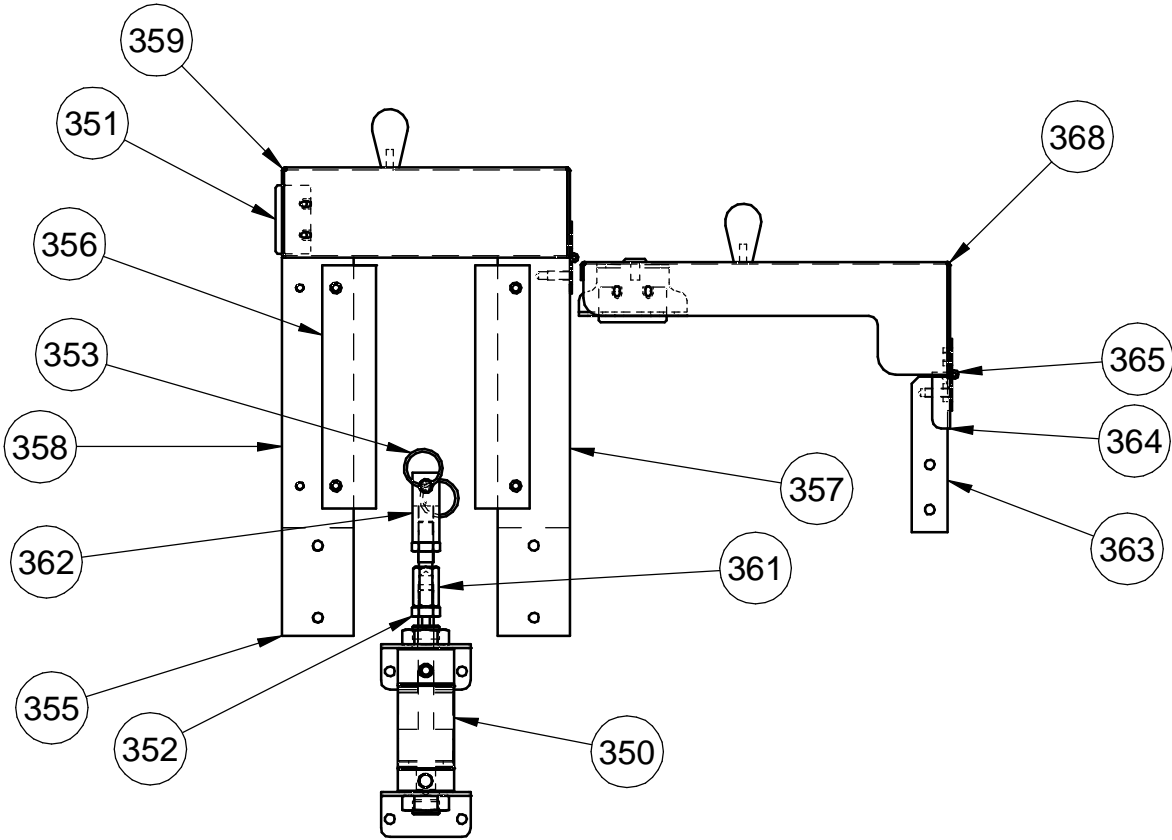
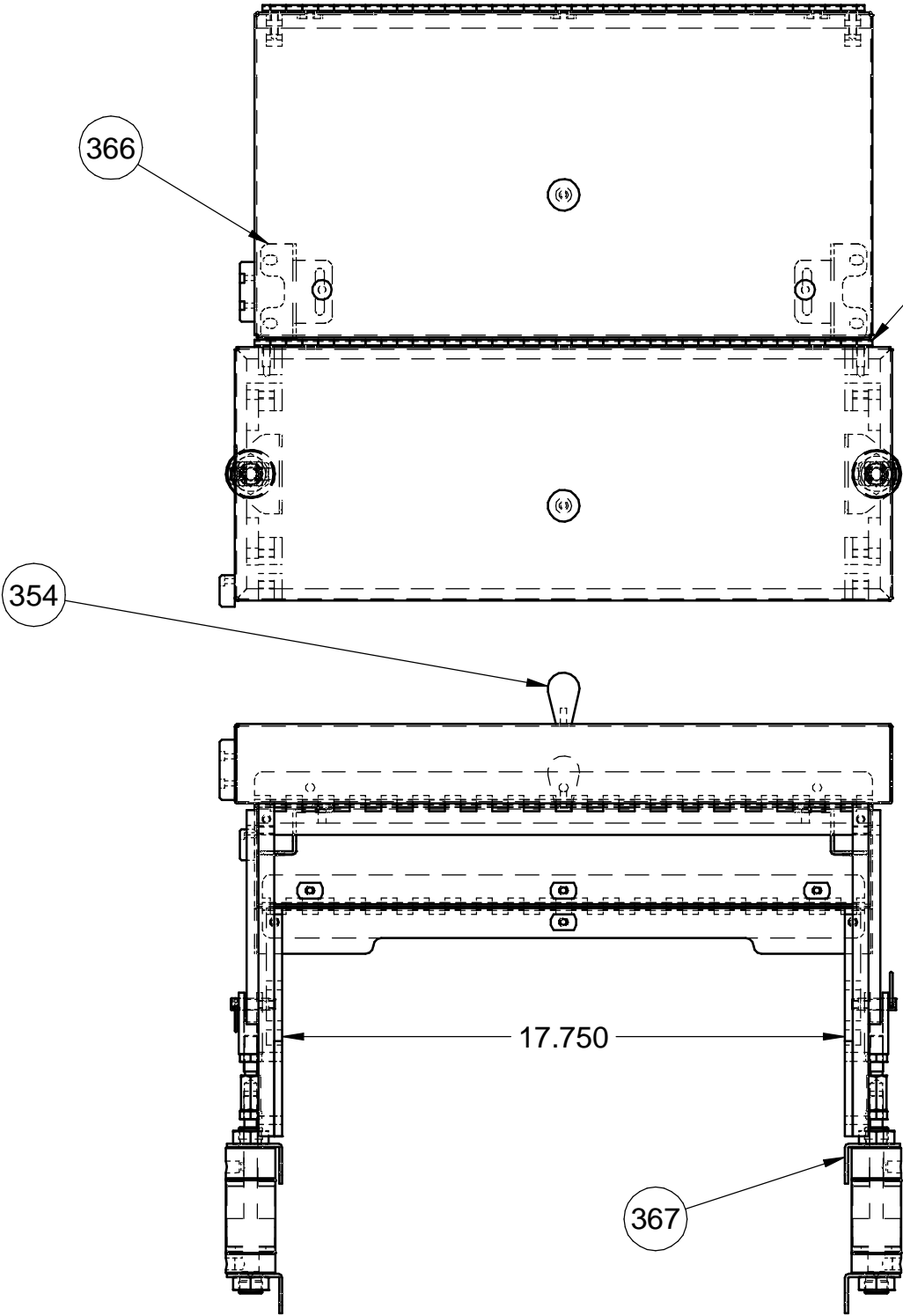
C

C714430

SHT 1 OF 2

0	TOOL NAME	NUMBER

ITEM	PART NUMBER	DESCRIPTION	QUAN.



REF. C714393

LTR	CHANGE	DATE	BY	EC NO.	LTR	CHANGE	DATE	BY	EC NO.



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NAME

HEAT SEAL FRAME SECOND ROLL 12"

MAT'L

SEE LIST

MAT'L NO.

SEE LIST

FINISH

DRAWN BY

V. MATZ

DATE

6-3-15

SCALE

3/16

REMOVE BURRS & SHARP EDGES

DO NOT SCALE THIS DRAWING

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0	TOOL NAME	NUMBER	ITEM	PART NUMBER	DESCRIPTION	QUAN.

Item Number	Part Number	Description	Qty	Item Number	Part Number	Description	Qty
350	5108-6777	CYLINDER-AIR 1-1/2"B X 1" S DX	2	366	71741	BRACKET-COVER STOP	2
351	5757-9385	SWITCH-SAFETY	2	367	71800	BRACKET- AIR CYLINDER	4
352	5832-0553	NUT-HEX JAM 7/16-20NF FIN STST	4	368	71838	GUARD-CUTTER	1
353	5835-7905	PIN-DETENT 3/8 DIA. X 3/4 LONG STST	2				
354	5911-7115	KNOB-OVAL/TAPERED BD-6	2				
355	69248	SPACER SIDE GUIDE BRACKET	4				
356	70545	BLOCK SIDE GUIDE	4				
357	70661	BRACKET END HINGE SIDE GUIDE	2				
358	70664	BRACKET CENTER SIDE GUIDE	2				
359	70879	COVER-SECOND ROLL WIDE UNIT	1				
360	70880	HINGE COVER SECOND ROLLER WIDE UNIT	1				
361	71701	POST-ADJUSTER	2				
362	71702	CLEVIS-ADJUSTER	2				
363	71737	BRACKET PIVOT GUARD	2				
364	71738	BRACKET CROSS GUARD	1				
365	71739	HINGE GUARD	1				

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CHANGE

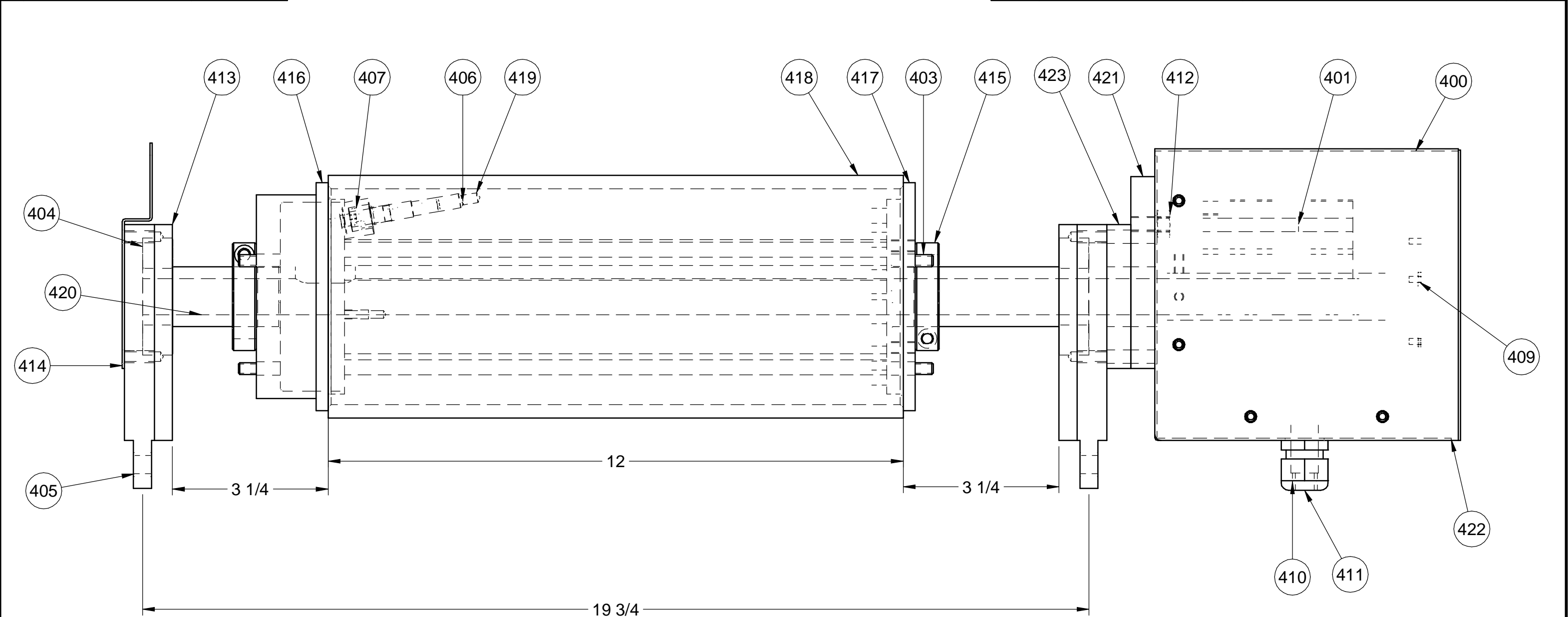
C

C714431

SHT 1 OF 2

0	TOOL NAME	NUMBER

ITEM	PART NUMBER	DESCRIPTION	QUAN.



NOTE:  
ITEM 14 SLEEVE  
70828 RUBBER COVERED  
70827 ALUMINUM HARD COAT

LTR	CHANGE	DATE	BY	EC NO.	LTR	CHANGE	DATE	BY	EC NO.

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NAME	HEAT SEAL ROLL ASSEMBLY		
MAT'L	SEE LIST		
MAT'L NO.	SEE LIST	FINISH	
DRAWN BY	V. MATZ	DATE	6-2-15
		SCALE	1/2
REMOVE BURRS & SHARP EDGES		DO NOT SCALE THIS DRAWING	
DIMENSIONAL TOLERANCES UNLESS SPECIFIED: FRACTIONAL ± 1/64; DECIMAL ± .005; ANGULAR ± 1°			

CHANGE

C

C714431

SHT 2 OF 2

0	TOOL NAME	NUMBER

ITEM	PART NUMBER	DESCRIPTION	QUAN.

Item Number	Part Number	Description	Qty
400	1808-0017-002	GUARD SLIP RING COVER	1
401	1808-0120	RETAINER SLIP RING ROD	1
402*	4475-0516-1	PIN-1/4 DIA X 1"	2
403	4625-3608-145	STUD-THREADED 1/4-20 X 14-1/2 LONG	3
404	5220-6040	BEARING-MET BALL 30X62X16 2 SEALS	2
405	5254-0102	BEARING-SINT BRZ SLV AA507-11	2
406	5712-0527	THERMOCOUPLE	1
407	5712-0597	ADAPTER BAYONET	1
408*	5730-1561	HEATER CARTRIDGE 1/2"D X 11"L	6
409	5752-1040	SLIP RING BODY WAMPFLER ES45	1
410	5765-1120	STRAIN RELIEF M20 X 1.5	1
411	5765-1121	STRAIN RELIEF M20 X 1.5	1
412	5832-0521	NUT- HEX FULL 5/16-18NC FIN STST	1
413	70536	BLOCK GUIDE BEARING	2
414	70537	COVER GUARD BEARING	1
415	70541	COLLAR-CLAMP TYPE 1-1/4" BORE	2
416	70542	CAP-RETAINER POWER WIRE	1

Item Number	Part Number	Description	Qty
417	70543	CAP-RETAINER	1
418*	70828	SLEEVE 12" WIDE HEAT SEAL RUBBER COVERED	1
419	70838	CORE-HEAT SEAL (6 HEATERS) 12 LONG SLEEVE	1
420	71828	SHAFT-HEAT SEAL ROLL	1
421	71829	SPACER-HOLDER SLIP RING	1
422	71830	GUARD-SLIP RING REAR	1
423	71875	SPACER-BLOCK GUIDE	1

LTR	CHANGE	DATE	BY	EC NO.	LTR	CHANGE	DATE	BY	EC NO.



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NAME

HEAT SEAL ROLL ASSEMBLY

MAT'L

SEE LIST

MAT'L NO.

SEE LIST

FINISH

DRAWN BY

V. MATZ

DATE

6-2-15

SCALE

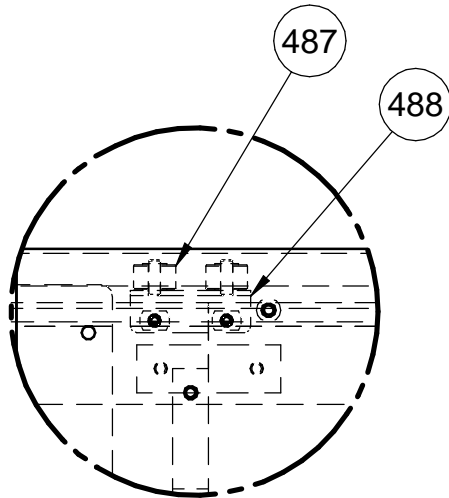
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DO NOT SCALE THIS DRAWING

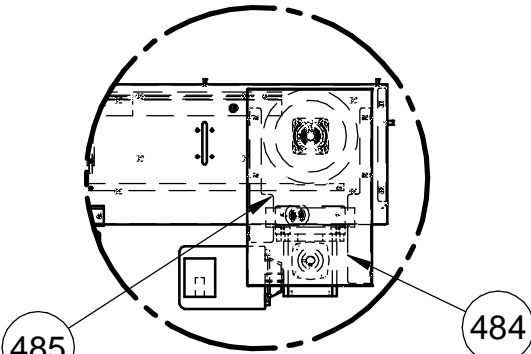
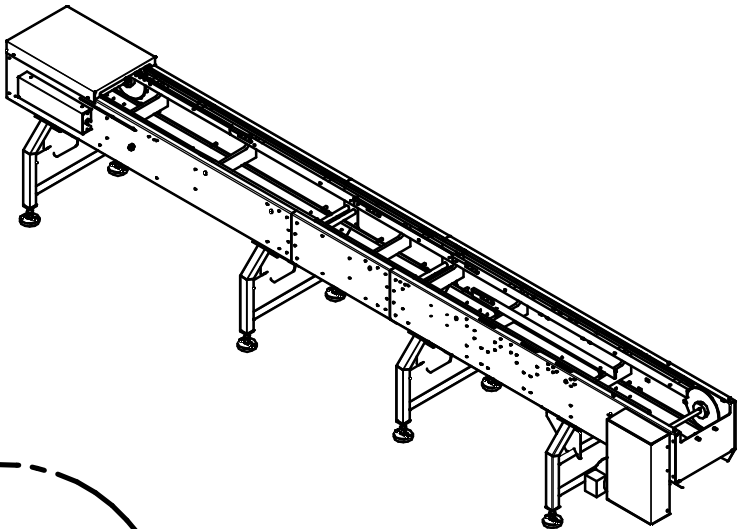
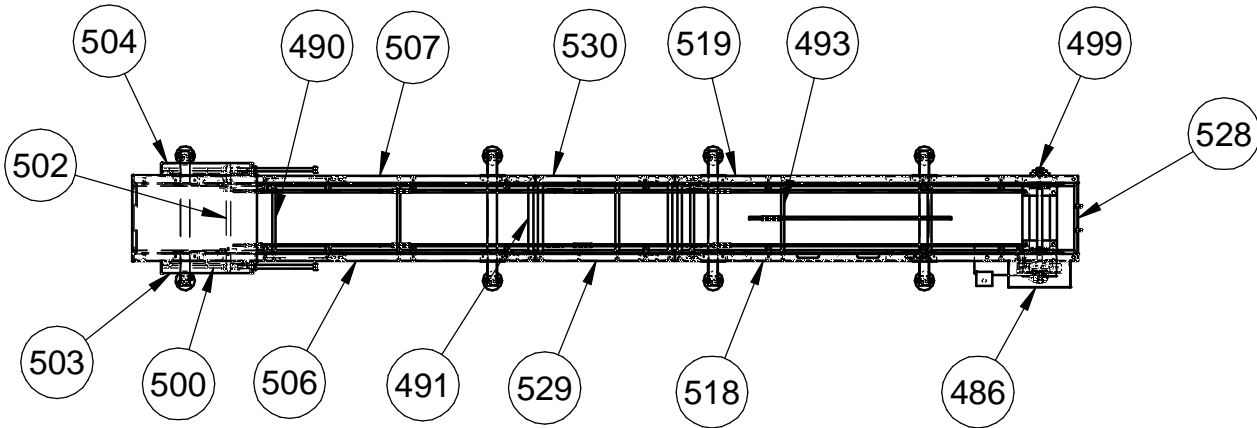
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0	TOOL NAME	NUMBER

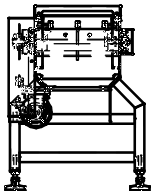
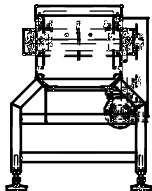
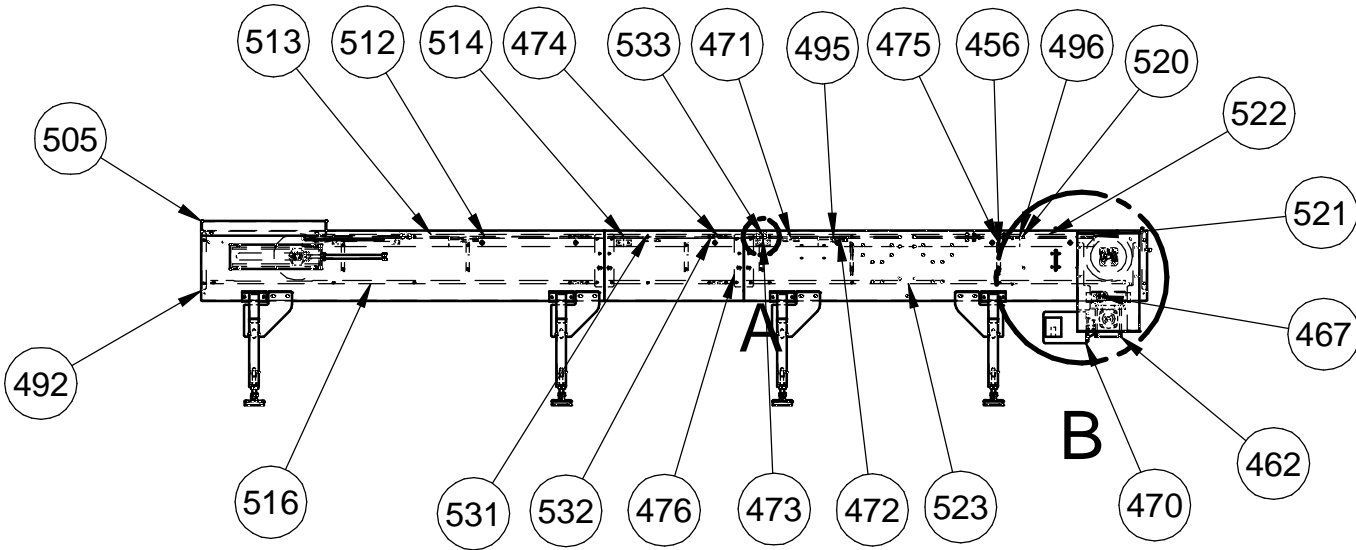
ITEM	PART NUMBER	DESCRIPTION	QUAN.



DETAIL A



DETAIL B



LTR	CHANGE	DATE	BY	EC NO.	LTR	CHANGE	DATE	BY	EC NO.



WALKER, MICHIGAN, U.S.A. 49534-7564

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NAME	FRAME AND DRIVE ASSEMBLY 16' 2-UP		
MAT'L	SEE CHART		
MAT'L NO.	SEE CHART	FINISH	
DRAWN BY	V. MATZ	DATE	6-18-15
		SCALE	1:40
REMOVE BURRS & SHARP EDGES		DO NOT SCALE THIS DRAWING	
DIMENSIONAL TOLERANCES UNLESS SPECIFIED: FRACTIONAL ± 1/64; DECIMAL ± .005; ANGULAR ± 1°			

CHANGE

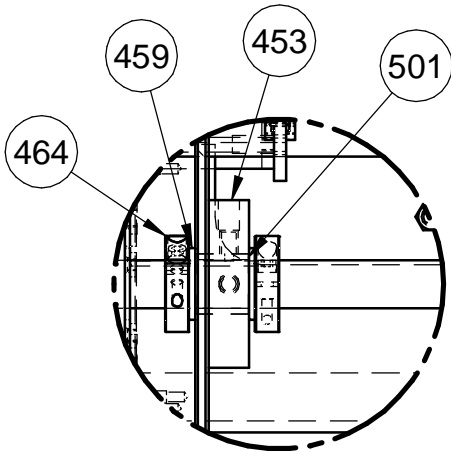
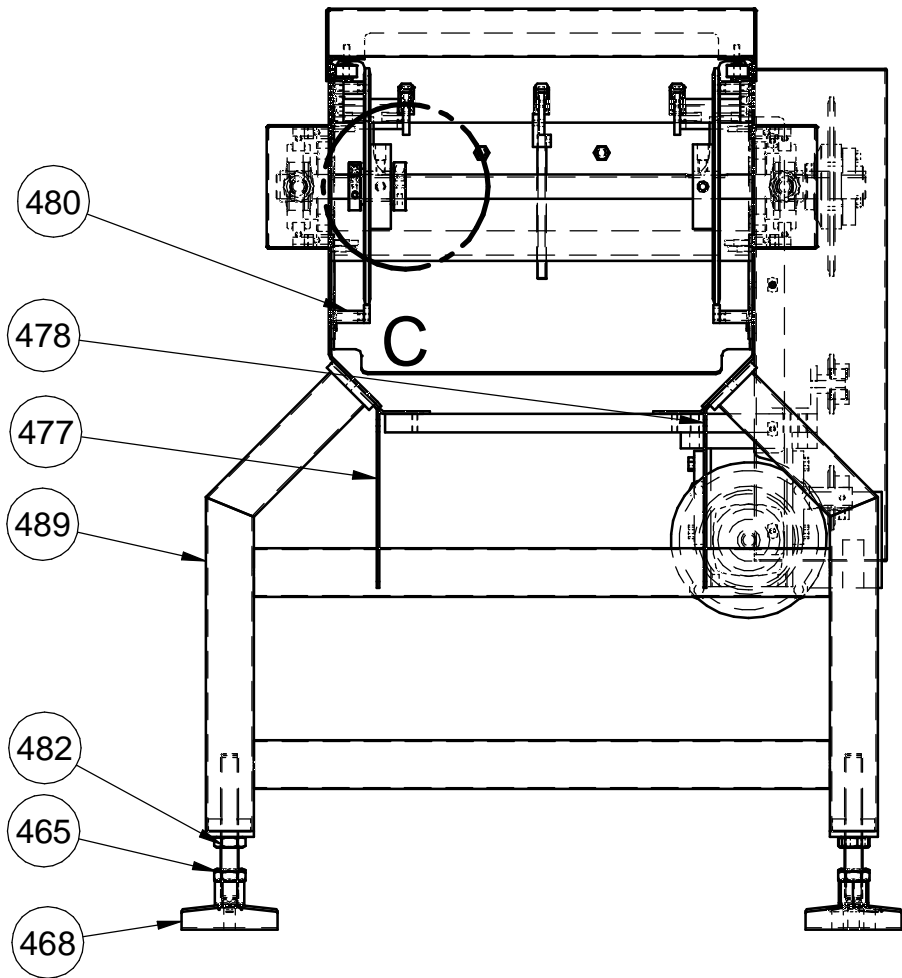
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SHEET 2 OF 5

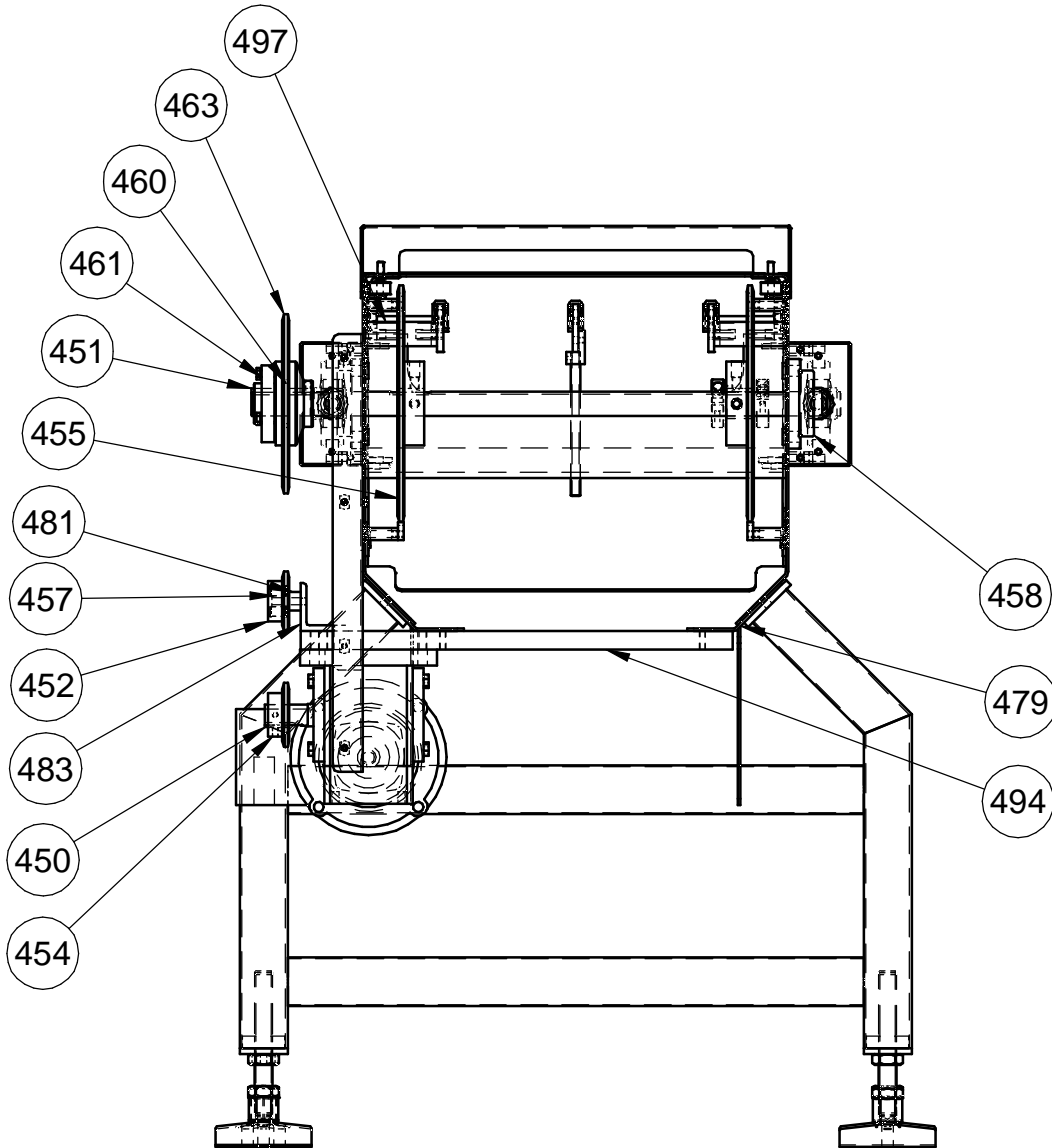
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0	TOOL NAME	NUMBER

ITEM	PART NUMBER	DESCRIPTION	QUAN.



DETAIL C



LTR	CHANGE	DATE	BY	EC NO.	LTR	CHANGE	DATE	BY	EC NO.



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NAME

FRAME AND DRIVE ASSEMBLY 16' 2-UP

MAT'L

SEE CHART

MAT'L NO.

SEE CHART

FINISH

DRAWN BY

V. MATZ

DATE

6-18-15

SCALE

1:40

REMOVE BURRS & SHARP EDGES

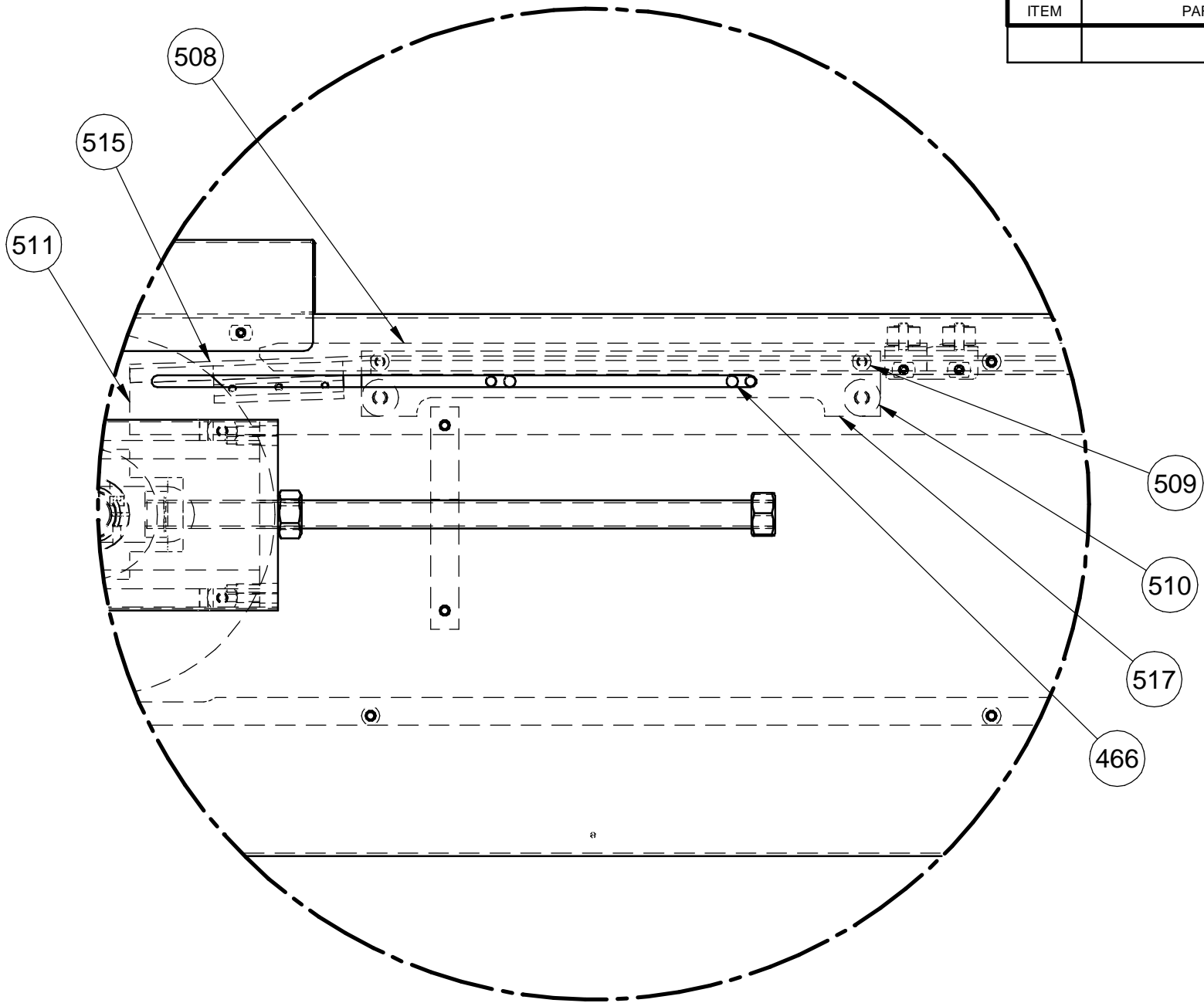
DO NOT SCALE THIS DRAWING

DIMENSIONAL TOLERANCES UNLESS SPECIFIED: FRACTIONAL ± 1/64; DECIMAL ± .005; ANGULAR ± 1°

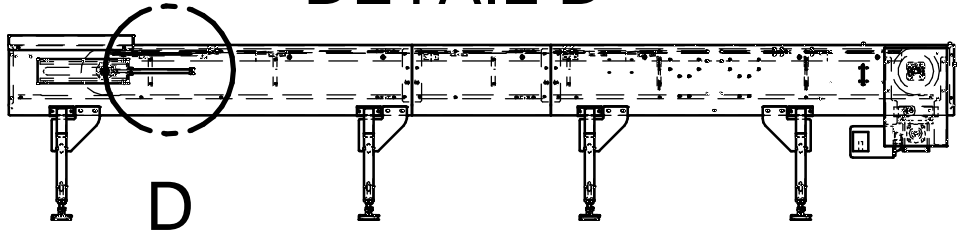
CHANGE

0	TOOL NAME	NUMBER

ITEM	PART NUMBER	DESCRIPTION	QUAN.



DETAIL D



LTR	CHANGE	DATE	BY	EC NO.	LTR	CHANGE	DATE	BY	EC NO.



WALKER, MICHIGAN, U.S.A. 49534-7564

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NAME

FRAME AND DRIVE ASSEMBLY 16' 2-UP

MAT'L

SEE CHART

MAT'L NO.

SEE CHART

FINISH

DRAWN BY

V. MATZ

DATE

6-18-15

SCALE

1:40

REMOVE BURRS & SHARP EDGES

DO NOT SCALE THIS DRAWING


DIMENSIONAL TOLERANCES UNLESS SPECIFIED: FRACTIONAL ± 1/64; DECIMAL ± .005; ANGULAR ± 1°



Item Number	Part Number	Description	Qty
450	4384-0606-0875	KEY 3/16" SQ X 7/8" LG STST	1
451	4384-0608-225	KEY 1/4"SQ X 2 1/4" STST	1
452	4616-4014-4031	SPROCKET IDLER 40B14 PLATED	1
453	4617-4060-4031	SPROCKET 40B60 1-1/4" PB	1
454	4618-4015-2831	SPROCKET TYPE B HUB F.B. 7/8"	1
455	4618-4060-3232	SPROCKET 40B60 1"FB	3
456	4625-3612-06	STUD 3/8-16 UNC X 6" LONG	2
457	5220-1221	BEARING-BALL DBL ROW 12X32X5/8 2-SEALS	1
458	5251-3763	BEARING FLANGE 4-BOLT 1" BORE	2
459	5254-3525	BEARING THRUST 1" ID X 1-1/2 OD X 1/8T	2
460	5604-5461	BUSHING-FOR CLUTCH SPROCKET #35	1
461	5604-5463	TORQUE TAMER #35, 1" BORE	1
462	5607-3983	GEAR-REDUCER-30:1 LFT.PAINTED	1

Item Number	Part Number	Description	Qty
463	5617-5830	SPROCKET-40A45 FOR CLUTCH #35	1
464	5806-7148	COLLAR-CLAMP 1PC 1"BORE STST	2
465	5832-0507	NUT - HEX JAM 3/4-10NC FIN STST	16
466	5835-6481	PIN-DOWEL 5/16" DIA X 5/8" STST	4
467	5840-1519	RING-RETAINING SPIROLOX #RR-125	2
468	5915-3013	PAD LEVELING SOCKET STYLE 3/4-10 THREAD	8
470	6301-7813	MOTOR AC, 1HP, 56C FRAME STST	1
471	67311	RETAINER CLAMP REAR	9
472	67312	RETAINER CLAMP FRONT	9
473	69126	CARRIER SUPPORT STRIP TIE BAR	4
474	69127	CHAIN RAIL TIE BAR	8
475	70059	BRACKET CENTER SUPPORT	2
476	70503	PLATE FRAME TIE	4
477	70517	GUSSET LEG RH	4

Item Number	Part Number	Description	Qty
478	70518	GUSSET LEG LH	4
479	70531	BRACKET GEARBOX	2
480	70533	SPACER-CHAIN SUPPORT 1.359 LONG	44
481	70552	SPACER BEARING ADAPTER	1
482	70667	SCREW LEVELING PAD	8
483	70742	BRACKET ANGLE IDLER SPROCKET	1
484	70743	MOUNTING ANGLE COVER RH	1
485	70745	MOUNTING ANGLE COVER LH	1
486	70747	COVER DRIVE SPROCKET	1
487	70834	WHEEL-GUIDE	8
488	70835	GUIDE-CHAIN	4
489	70850	LEG ASSEMBLY 3/4-10 THREAD WIDE UNIT	4
490	70856	SPACER FRAME 17.540	4
491	70857	SPACER FRAME TIE PLATE 17.27 LONG	4
492	70858	END PLATE TAKE UP 17.540 WIDE	1

										<div></div> <div>WALKER, MICHIGAN, U.S.A. 49534-7564</div> <div>THIS DRAWING AND ALL PROPRIETARY RIGHTS AND CONCEPTS HEREIN ARE THE EXCLUSIVE PROPERTY OF OLIVER PACKAGING AND EQUIPMENT COMPANY AND ARE NOT TO BE USED, DUPLICATED OR TREATED IN ANY WAY INCONSISTANT WITH SUCH RIGHTS WITHOUT PERMISSION OF OLIVER PACKAGING &amp; EQUIPMENT COMPANY.</div>	NAME <u>FRAME AND DRIVE ASSEMBLY 16' 2-UP</u>			
											MAT'L <u>SEE CHART</u>			
											MAT'L NO. <u>SEE CHART</u> FINISH _____			
											DRAWN BY <u>V. MATZ</u> DATE <u>6-18-15</u> SCALE <u>1:40</u>			
											REMOVE BURRS & SHARP EDGES DO NOT SCALE THIS DRAWING DIMENSIONAL TOLERANCES UNLESS SPECIFIED: FRACTIONAL ± 1/64; DECIMAL ± .005; ANGULAR ± 1°			
LTR	CHANGE	DATE	BY	EC NO.	LTR	CHANGE	DATE	BY	EC NO.					

0	TOOL NAME	NUMBER		ITEM	PART NUMBER	DESCRIPTION	QUAN.

Item Number	Part Number	Description	Qty
493	70859	SPACER FRAME 17.540 CENTER SUPPORT	2
494	70862	STRAP GEARBOX SUPPORT WIDE UNIT	2
495	70863	STRIP CARRIER SUPPORT CENTER	1
496	70864	STRIP-WEAR UHMW X 42" LONG	1
497	70869	SPACER CARRIER SUPPORT 3" LONG	12
499	71312	DRIVE SHAFT	1
500	714417	TAKE-UP CHAIN UNIT 10"	2
501	71729	BUSHING-IDLER	1
502	71730	TAKEUP SHAFT WIDE UNIT	1
503	71797	COVER TAKEUP UNIT RH	1
504	71798	COVER TAKEUP UNIT LH	1
505	71799	COVER-INFEED END	1
506	71801	FRAME TAKEUP END FRONT 84"	1
507	71802	FRAME TAKEUP END REAR 84" LONG	1

Item Number	Part Number	Description	Qty
508	71803	SUPPORT CHAIN ADJUSTABLE	2
509	71804	SPACER-CHAIN SUPPORT .859 LONG	4
510	71805	SPACER CARRIER SUPPORT 2.5" LONG	4
511	71806	STRIP CARRIER SUPPORT ADJUSTABLE	2
512	71807	STRIP CARRIER SUPPORT TAKEUP END	2
513	71808	SUPPORT TAKE UP END CHAIN UPPER	2
514	71809	STRIP-WEAR UHMW X 36-1/2" LONG	2
515	71810	STRIP-WEAR UHMW X 30-1/2" LONG	2
516	71843	SUPPORT TAKEUP END CHAIN LOWER	2
517	71844	BRACKET-ADJUSTABLE SUPPORT	2
518	71845	FRAME DRIVE END FRONT 84"	1
519	71846	FRAME DRIVE END REAR 84"	1
520	71847	STRIP CARRIER SUPPORT DRIVE END	2

Item Number	Part Number	Description	Qty
521	71848	STRIP-WEAR UHMW X 69" LONG	2
522	71849	SUPPORT DRIVE END CHAIN RAIL UPPER	2
523	71850-001	SUPPORT DRIVE END CHAIN RAIL LOWER	2
528	71864	PLATE-END DISCHARGE	1
529	71855	FRAME CENTER SECTION FRONT 29"	1
530	71856-001	FRAME CENTER SECTION REAR 29"	1
531	71859	SUPPORT CENTER SECTION CHAIN 29"	4
532	71861	STRIP-CARRIER SUPPORT 29"	2
533	71863	STRIP-WEAR UHMW X 29" LONG	2

LTR	CHANGE	DATE	BY	EC NO.	LTR	CHANGE	DATE	BY	EC NO.



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NAME

FRAME AND DRIVE ASSEMBLY 16' 2-UP

MAT'L

SEE CHART

MAT'L NO.

SEE CHART

FINISH

DRAWN BY

V. MATZ

DATE

6-18-15

SCALE

1:40

REMOVE BURRS & SHARP EDGES

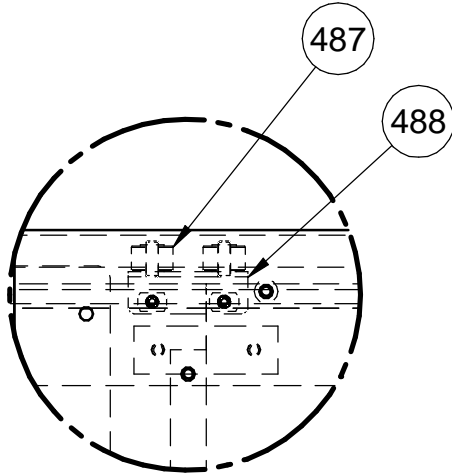
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DIMENSIONAL TOLERANCES UNLESS SPECIFIED: FRACTIONAL ± 1/64; DECIMAL ± .005; ANGULAR ± 1°

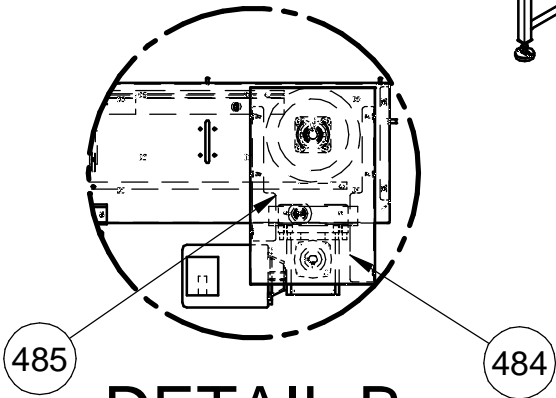
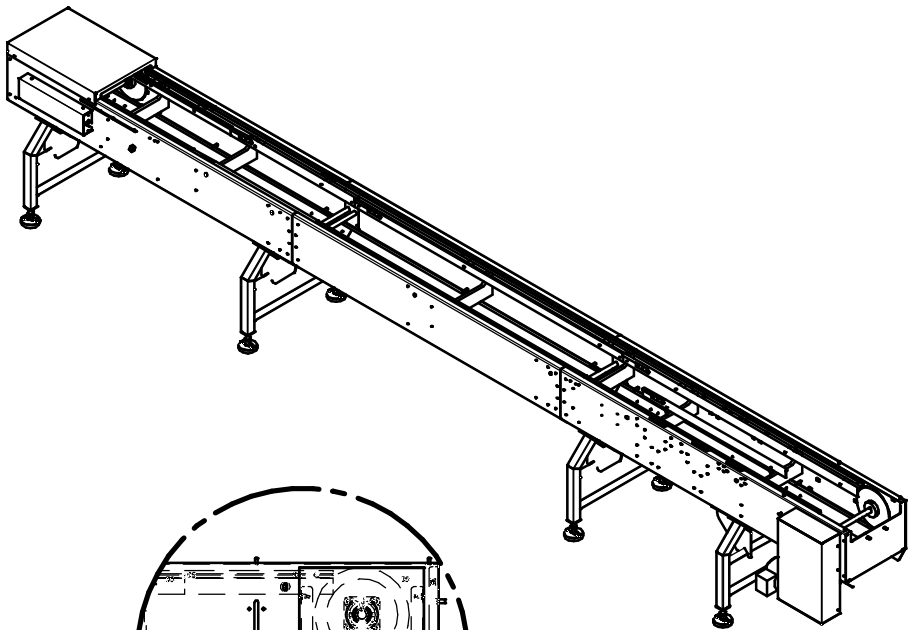
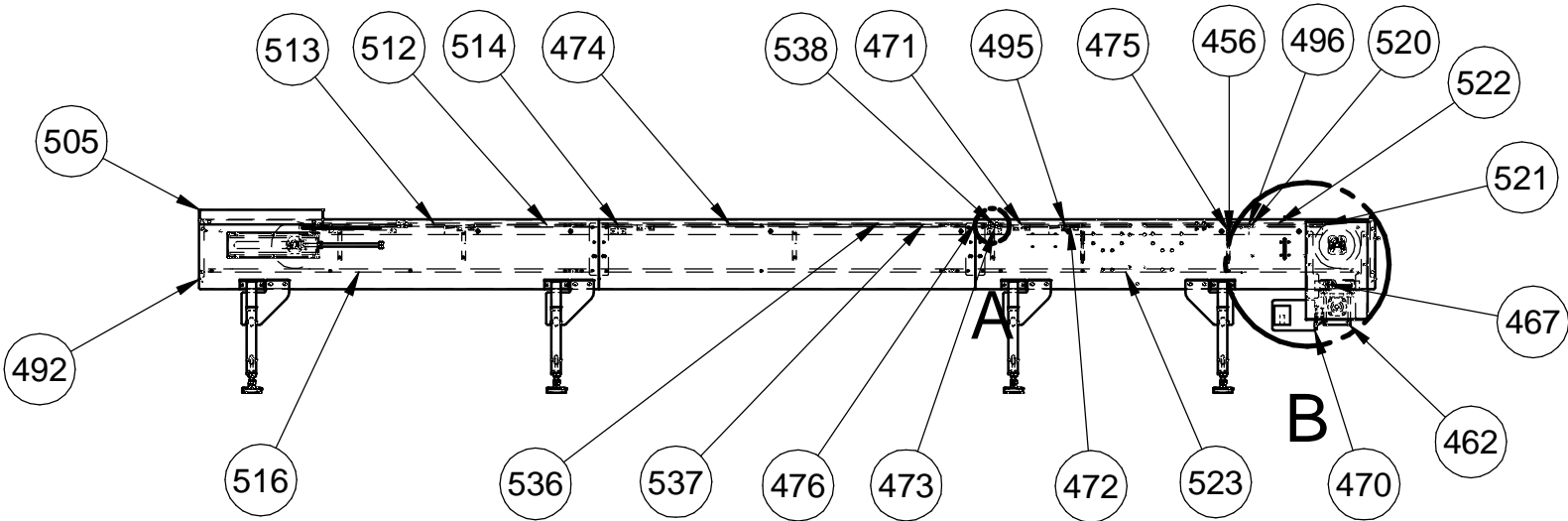
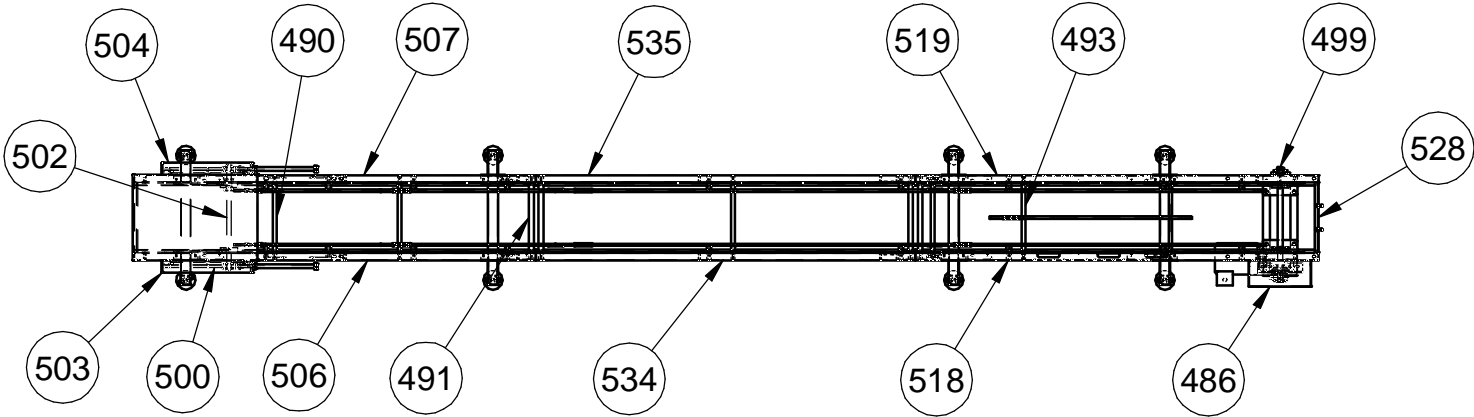
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0	TOOL NAME	NUMBER

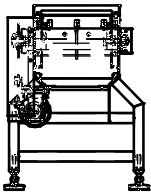
ITEM	PART NUMBER	DESCRIPTION	QUAN.



DETAIL A



DETAIL B



LTR	CHANGE	DATE	BY	EC NO.	LTR	CHANGE	DATE	BY	EC NO.



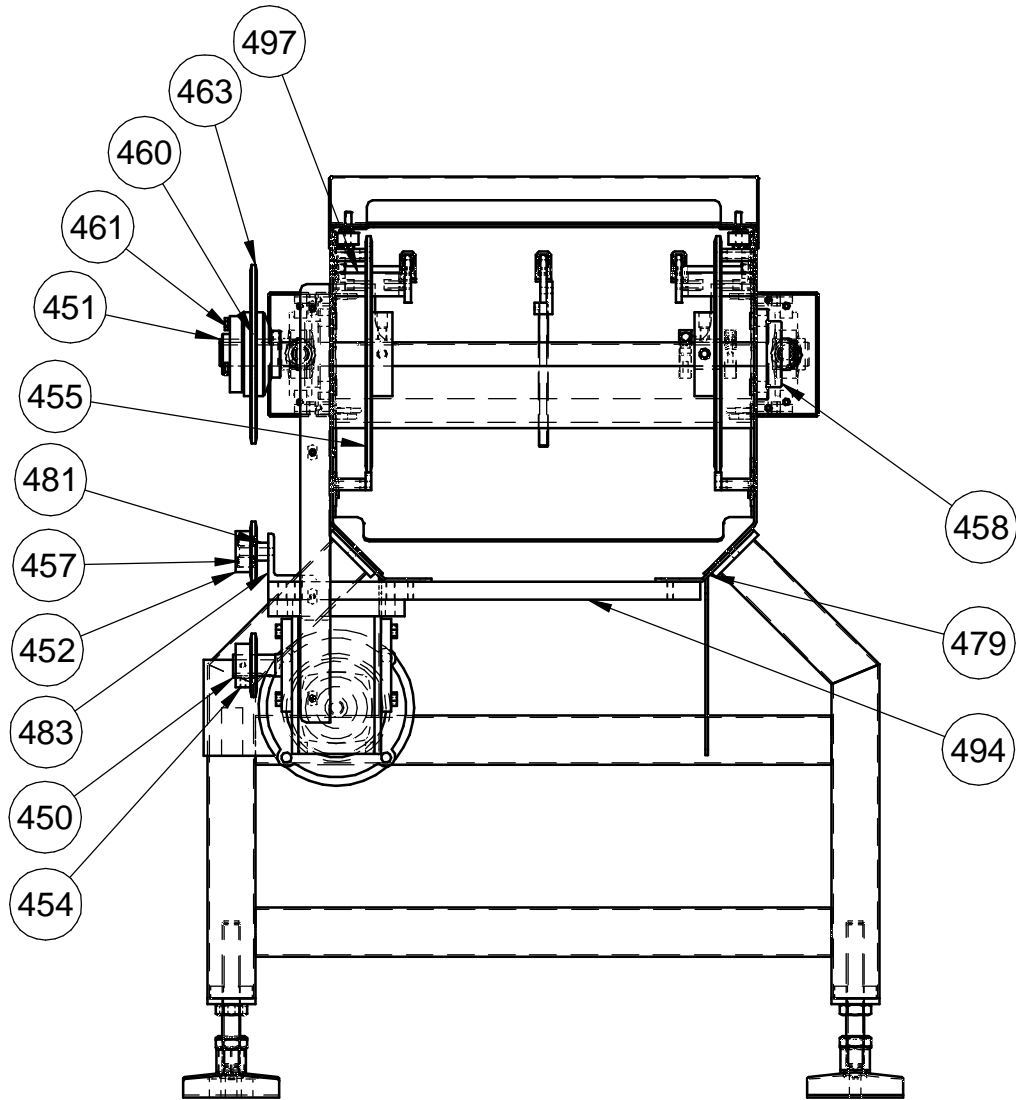
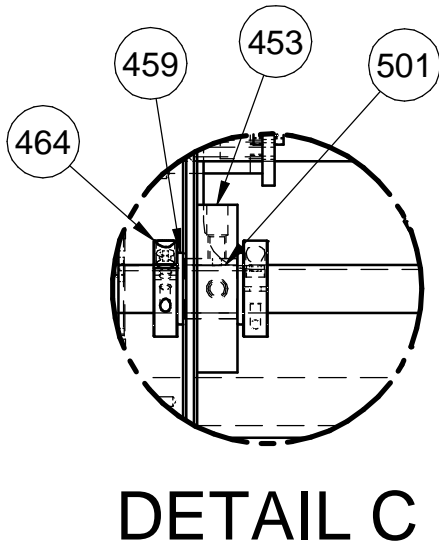
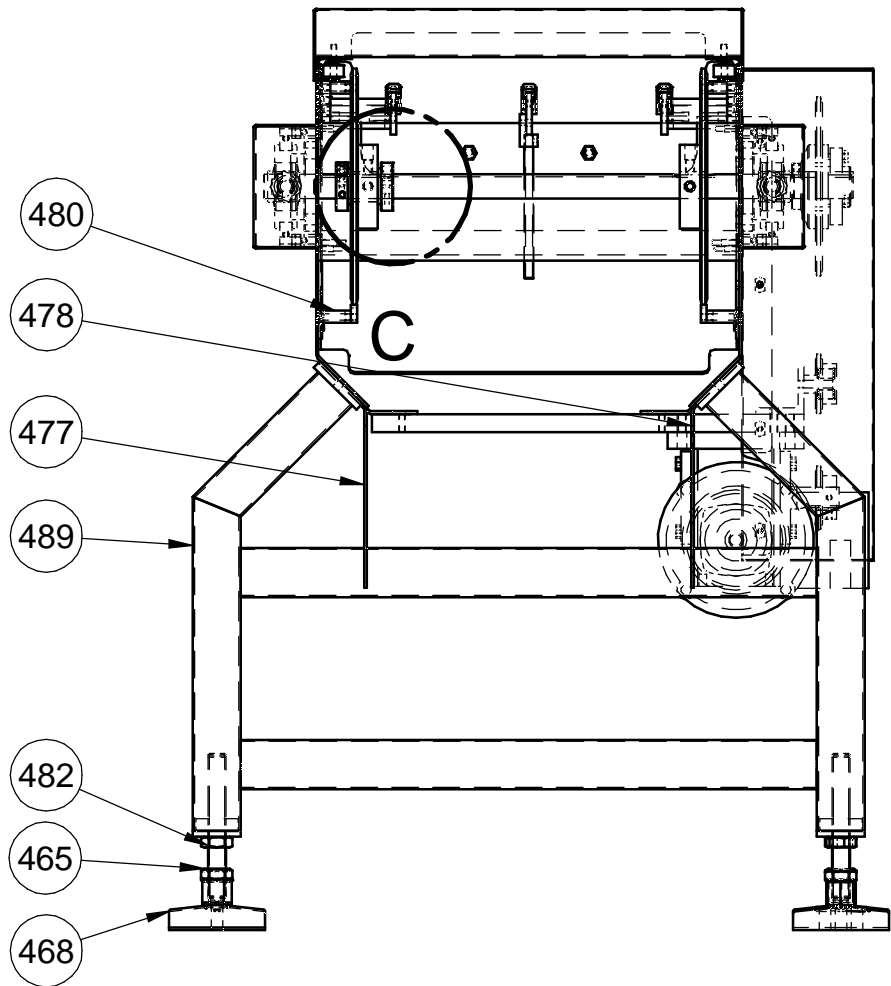
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MAT'L NO.	SEE CHART	FINISH	
DRAWN BY	V. MATZ	DATE	6-18-15
		SCALE	1:40
REMOVE BURRS & SHARP EDGES		DO NOT SCALE THIS DRAWING	
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0	TOOL NAME	NUMBER

ITEM	PART NUMBER	DESCRIPTION	QUAN.



LTR	CHANGE	DATE	BY	EC NO.	LTR	CHANGE	DATE	BY	EC NO.



WALKER, MICHIGAN, U.S.A. 49534-7564

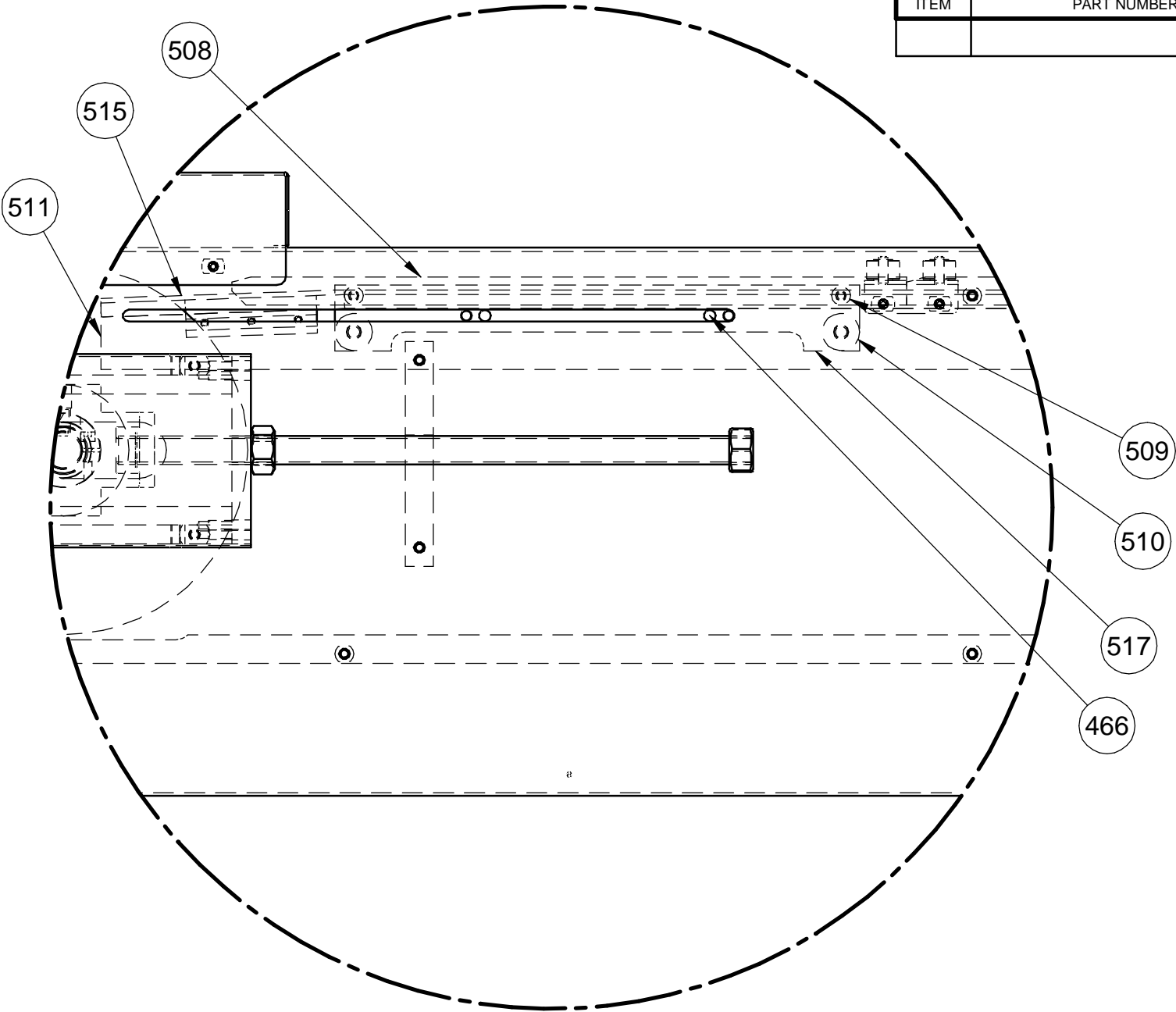
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DIMENSIONAL TOLERANCES UNLESS SPECIFIED: FRACTIONAL ± 1/64; DECIMAL ± .005; ANGULAR ± 1°			

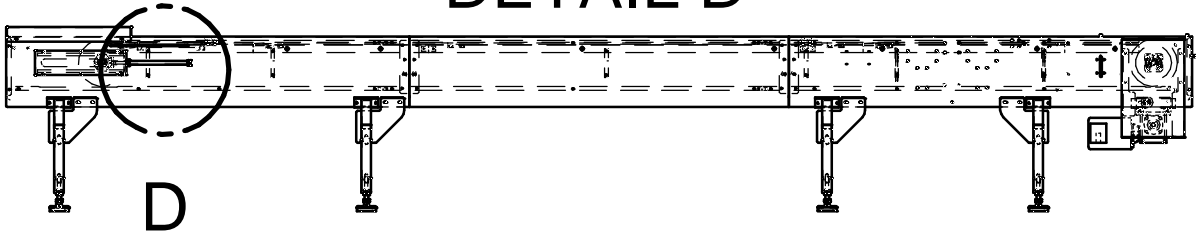
CHANGE

0	TOOL NAME	NUMBER

ITEM	PART NUMBER	DESCRIPTION	QUAN.



DETAIL D



LTR	CHANGE	DATE	BY	EC NO.	LTR	CHANGE	DATE	BY	EC NO.



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MAT'L

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MAT'L NO.

SEE CHART

FINISH

DRAWN BY

V. MATZ

DATE

6-18-15

SCALE


1:40

REMOVE BURRS & SHARP EDGES

DO NOT SCALE THIS DRAWING

DIMENSIONAL TOLERANCES UNLESS SPECIFIED: FRACTIONAL  $\pm 1/64$ ; DECIMAL  $\pm .005$ ; ANGULAR  $\pm 1^\circ$


Item Number	Part Number	Description	Qty	Item Number	Part Number	Description	Qty	Item Number	Part Number	Description	Qty
450	4384-0606-0875	KEY 3/16" SQ X 7/8" LG STST	1	463	5617-5830	SPROCKET-40A45 FOR CLUTCH #35	1	478	70518	GUSSET LEG LH	4
451	4384-0608-225	KEY 1/4"SQ X 2 1/4" STST	1	464	5806-7148	COLLAR-CLAMP 1PC 1"BORE STST	2	479	70531	BRACKET GEARBOX	2
452	4616-4014-4031	SPROCKET IDLER 40B14 PLATED	1	465	5832-0507	NUT - HEX JAM 3/4-10NC FIN STST	16	480	70533	SPACER-CHAIN SUPPORT 1.359 LONG	44
453	4617-4060-4031	SPROCKET 40B60 1-1/4" PB	1	466	5835-6481	PIN-DOWEL 5/16" DIA X 5/8" STST	4	481	70552	SPACER BEARING ADAPTER	1
454	4618-4015-2831	SPROCKET TYPE B HUB F.B. 7/8"	1	467	5840-1519	RING-RETAINING SPIROLOX #RR-125	2	482	70667	SCREW LEVELING PAD	8
455	4618-4060-3232	SPROCKET 40B60 1"FB	3	468	5915-3013	PAD LEVELING SOCKET STYLE 3/4-10 THREAD	8	483	70742	BRACKET ANGLE IDLER SPROCKET	1
456	4625-3612-06	STUD 3/8-16 UNC X 6" LONG	2	470	6301-7813	MOTOR AC, 1HP, 56C FRAME STST	1	484	70743	MOUNTING ANGLE COVER RH	1
457	5220-1221	BEARING-BALL DBL ROW 12X32X5/8 2-SEALS	1	471	67311	RETAINER CLAMP REAR	9	485	70745	MOUNTING ANGLE COVER LH	1
458	5251-3763	BEARING FLANGE 4-BOLT 1" BORE	2	472	67312	RETAINER CLAMP FRONT	9	486	70747	COVER DRIVE SPROCKET	1
459	5254-3525	BEARING THRUST 1" ID X 1-1/2 OD X 1/8T	2	473	69126	CARRIER SUPPORT STRIP TIE BAR	4	487	70834	WHEEL-GUIDE	8
460	5604-5461	BUSHING-FOR CLUTCH SPROCKET #35	1	474	69127	CHAIN RAIL TIE BAR	8	488	70835	GUIDE-CHAIN	4
461	5604-5463	TORQUE TAMER #35, 1" BORE	1	475	70059	BRACKET CENTER SUPPORT	2	489	70850	LEG ASSEMBLY 3/4-10 THREAD WIDE UNIT	4
462	5607-3983	GEAR-REDUCER-30:1 LFT.PAINTED	1	476	70503	PLATE FRAME TIE	4	490	70856	SPACER FRAME 17.540	4
				477	70517	GUSSET LEG RH	4	491	70857	SPACER FRAME TIE PLATE 17.27 LONG	4
								492	70858	END PLATE TAKE UP 17.540 WIDE	1

										<div></div> <div>WALKER, MICHIGAN, U.S.A. 49534-7564</div> <div>THIS DRAWING AND ALL PROPRIETARY RIGHTS AND CONCEPTS HEREIN ARE THE EXCLUSIVE PROPERTY OF OLIVER PACKAGING AND EQUIPMENT COMPANY AND ARE NOT TO BE USED, DUPLICATED OR TREATED IN ANY WAY INCONSISTANT WITH SUCH RIGHTS WITHOUT PERMISSION OF OLIVER PACKAGING &amp; EQUIPMENT COMPANY.</div>	NAME <u>FRAME AND DRIVE ASSEMBLY 20' 2-UP</u>		
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											DRAWN BY <u>V. MATZ</u> DATE <u>6-18-15</u> SCALE <u>1:40</u>		
											REMOVE BURRS & SHARP EDGES DIMENSIONAL TOLERANCES UNLESS SPECIFIED: FRACTIONAL ± 1/64; DECIMAL ± .005; ANGULAR ± 1°		
LTR	CHANGE	DATE	BY	EC NO.	LTR	CHANGE	DATE	BY	EC NO.	DO NOT SCALE THIS DRAWING			

Item Number	Part Number	Description	Qty
493	70859	SPACER FRAME 17.540 CENTER SUPPORT	2
494	70862	STRAP GEARBOX SUPPORT WIDE UNIT	2
495	70863	STRIP CARRIER SUPPORT CENTER	1
496	70864	STRIP-WEAR UHMW X 42" LONG	1
497	70869	SPACER CARRIER SUPPORT 3" LONG	14
499	71312	DRIVE SHAFT	1
500	714417	TAKE-UP CHAIN UNIT 10"	2
501	71729	BUSHING-IDLER	1
502	71730	TAKEUP SHAFT WIDE UNIT	1
503	71797	COVER TAKEUP UNIT RH	1
504	71798	COVER TAKEUP UNIT LH	1
505	71799	COVER-INFEED END	1
506	71801	FRAME TAKEUP END FRONT 84"	1
507	71802	FRAME TAKEUP END REAR 84" LONG	1

Item Number	Part Number	Description	Qty
508	71803	SUPPORT CHAIN ADJUSTABLE	2
509	71804	SPACER-CHAIN SUPPORT .859 LONG	4
510	71805	SPACER CARRIER SUPPORT 2.5" LONG	4
511	71806	STRIP CARRIER SUPPORT ADJUSTABLE	2
512	71807	STRIP CARRIER SUPPORT TAKEUP END	2
513	71808	SUPPORT TAKE UP END CHAIN UPPER	2
514	71809	STRIP-WEAR UHMW X 36-1/2" LONG	2
515	71810	STRIP-WEAR UHMW X 30-1/2" LONG	2
516	71843	SUPPORT TAKEUP END CHAIN LOWER	2
517	71844	BRACKET-ADJUSTABLE SUPPORT	2
518	71845	FRAME DRIVE END FRONT 84"	1
519	71846	FRAME DRIVE END REAR 84"	1
520	71847	STRIP CARRIER SUPPORT DRIVE END	2

Item Number	Part Number	Description	Qty
521	71848	STRIP-WEAR UHMW X 69" LONG	2
522	71849	SUPPORT DRIVE END CHAIN RAIL UPPER	2
523	71850-001	SUPPORT DRIVE END CHAIN RAIL LOWER	2
528	71864	PLATE-END DISCHARGE	1
534	71857	FRAME CENTER SECTION FRONT 79"	1
535	71858	FRAME CENTER SECTION REAR 79"	1
536	71860	SUPPORT CENTER SECTION CHAIN 79"	4
537	71862	STRIP-CARRIER SUPPORT 79"	2
538	71867	STRIP-WEAR UHMW X 79" LONG	2

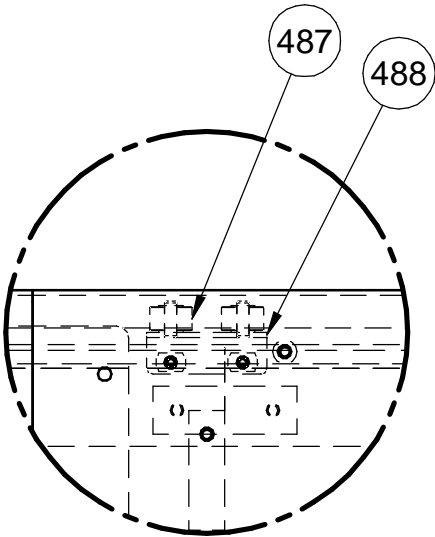
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											DRAWN BY	V. MATZ	DATE	6-18-15	SCALE	1:40
LTR	CHANGE	DATE	BY	EC NO.	LTR	CHANGE	DATE	BY	EC NO.		REMOVE BURRS & SHARP EDGES DIMENSIONAL TOLERANCES UNLESS SPECIFIED: FRACTIONAL ± 1/64; DECIMAL ± .005; ANGULAR ± 1°					



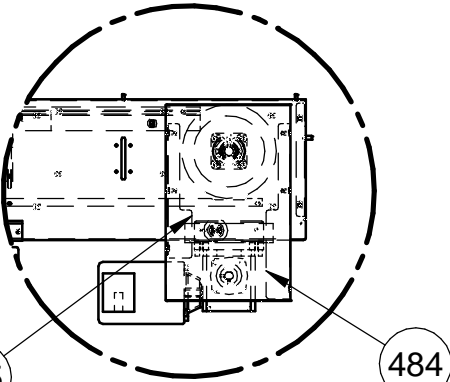
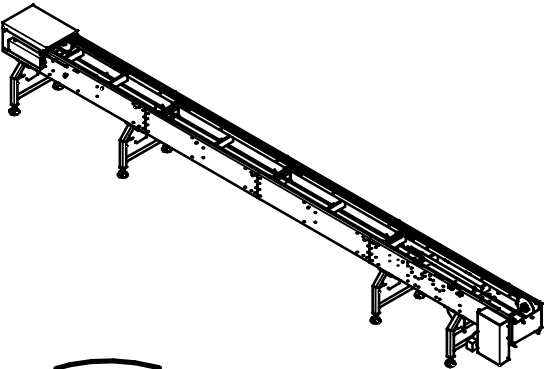
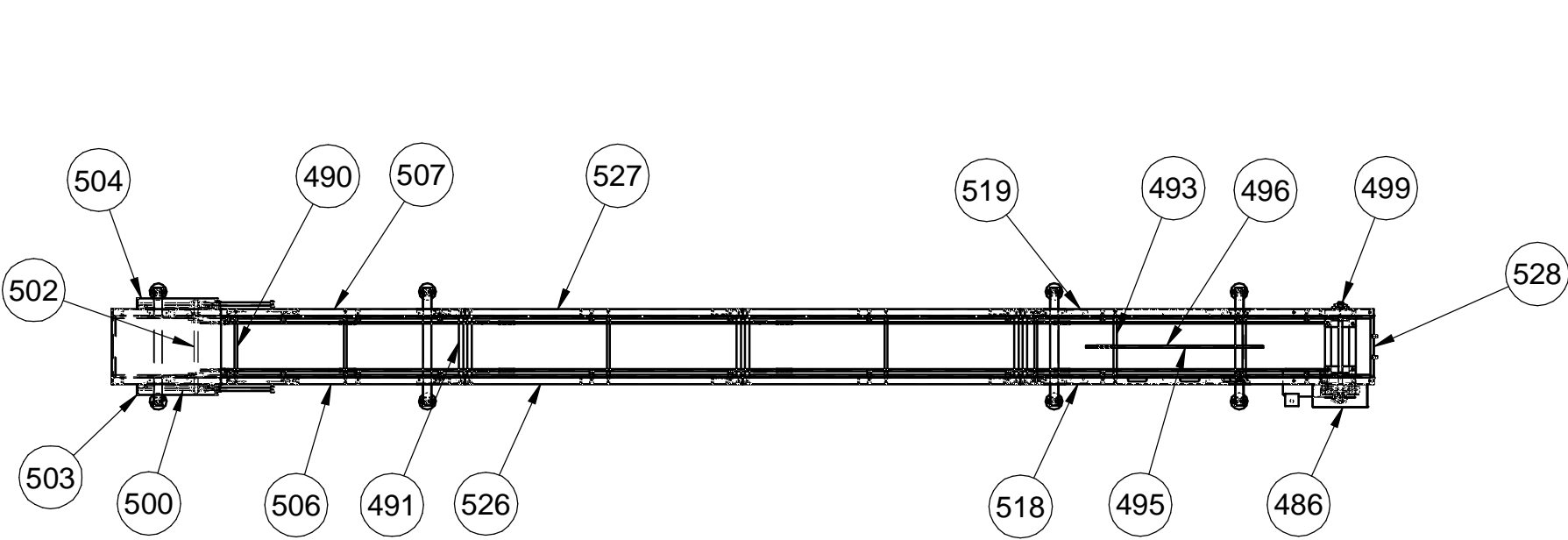
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0	TOOL NAME	NUMBER

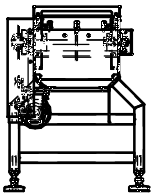
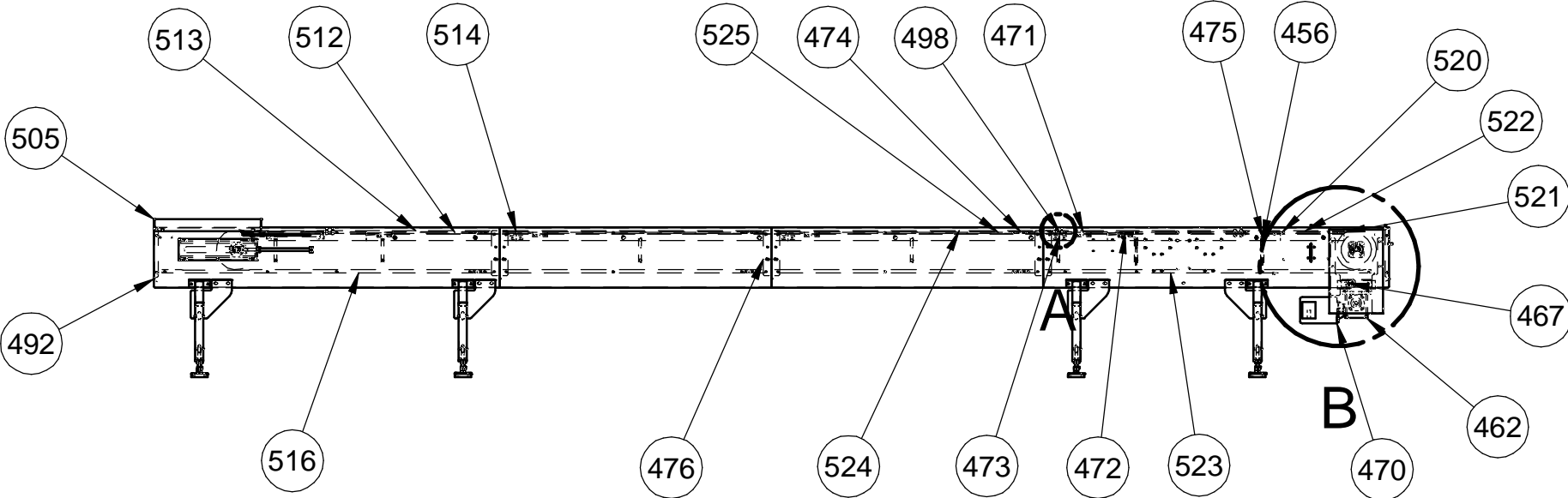
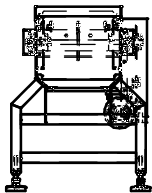
ITEM	PART NUMBER	DESCRIPTION	QUAN.



DETAIL A



DETAIL B



LTR	CHANGE	DATE	BY	EC NO.	LTR	CHANGE	DATE	BY	EC NO.



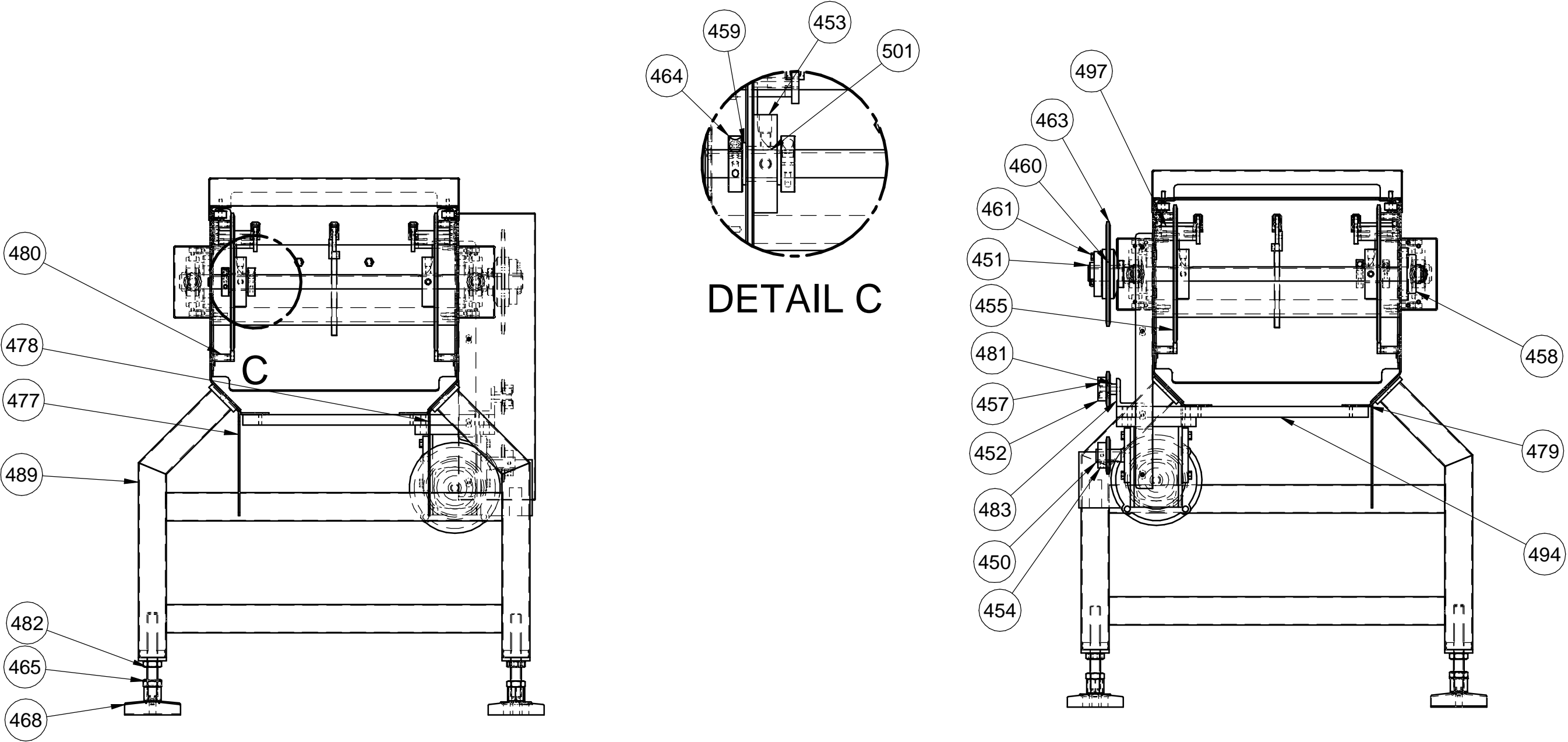
WALKER, MICHIGAN, U.S.A. 49534-7564

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NAME	FRAME AND DRIVE ASSEMBLY 25' 2-UP		
MAT'L	SEE CHART		
MAT'L NO.	SEE CHART	FINISH	
DRAWN BY	V. MATZ	DATE	6-17-15
		SCALE	1:40
REMOVE BURRS & SHARP EDGES		DO NOT SCALE THIS DRAWING	
DIMENSIONAL TOLERANCES UNLESS SPECIFIED: FRACTIONAL ± 1/64; DECIMAL ± .005; ANGULAR ± 1°			

0	TOOL NAME	NUMBER

ITEM	PART NUMBER	DESCRIPTION	QUAN.



LTR	CHANGE	DATE	BY	EC NO.	LTR	CHANGE	DATE	BY	EC NO.



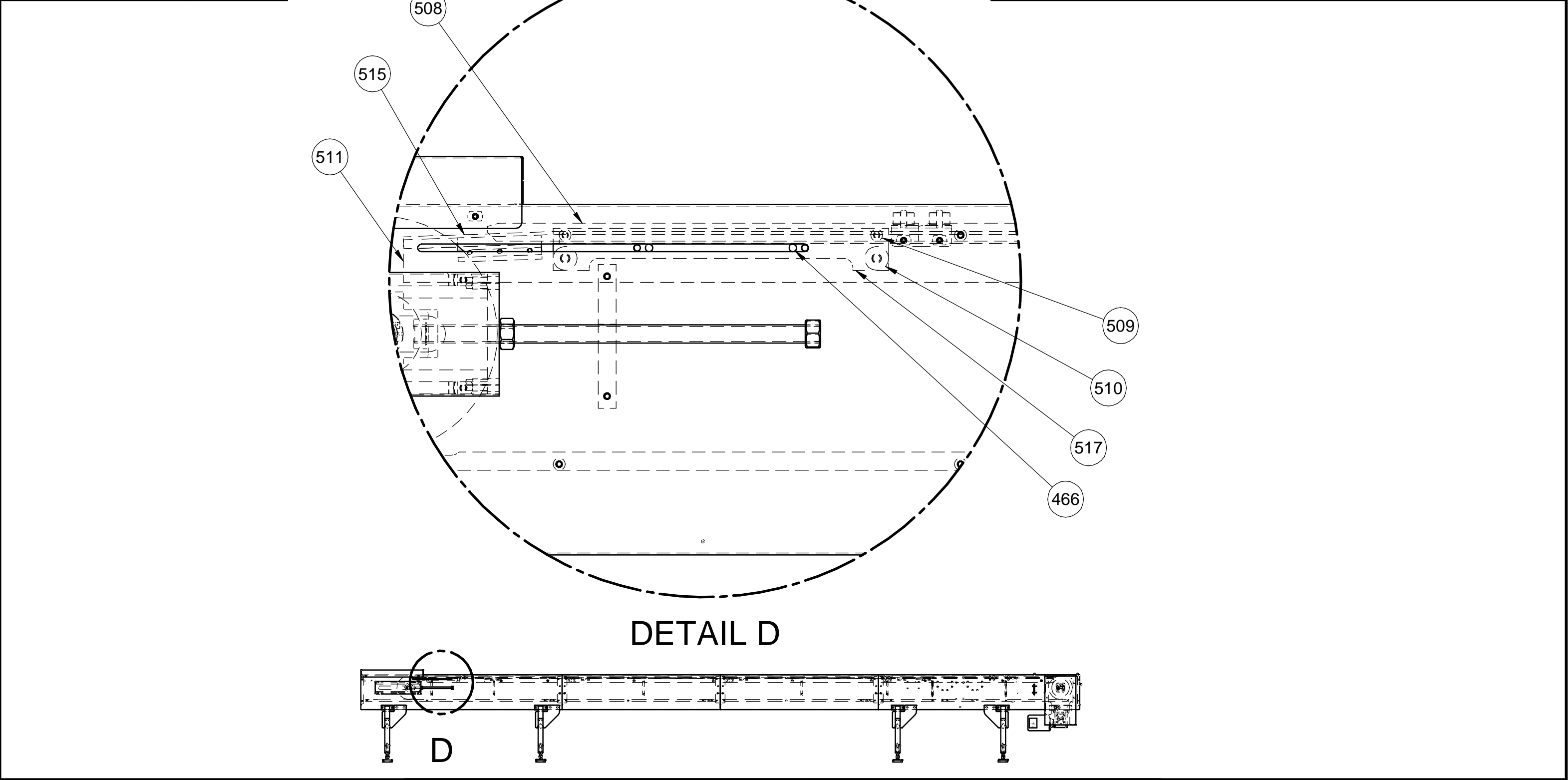
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NAME	FRAME AND DRIVE ASSEMBLY 25' 2-UP		
MAT'L	SEE CHART		
MAT'L NO.	SEE CHART	FINISH	
DRAWN BY	V. MATZ	DATE	6-17-15
		SCALE	1:40
REMOVE BURRS & SHARP EDGES			
DO NOT SCALE THIS DRAWING			
DIMENSIONAL TOLERANCES UNLESS SPECIFIED: FRACTIONAL $\pm 1/64$ ; DECIMAL $\pm .005$ ; ANGULAR $\pm 1^\circ$			

0	TOOL NAME	NUMBER

ITEM	PART NUMBER	DESCRIPTION	QUAN.



LTR	CHANGE	DATE	BY	EC NO.	LTR	CHANGE	DATE	BY	EC NO.



WALKER, MICHIGAN, U.S.A. 49534-7564

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NAME FRAME AND DRIVE ASSEMBLY 25' 2-UP

MAT'L SEE CHART

MAT'L NO. SEE CHART FINISH \_\_\_\_\_

DRAWN BY V. MATZ DATE 6-17-15 SCALE 1:40


REMOVE BURRS & SHARP EDGES  
DIMENSIONAL TOLERANCES UNLESS SPECIFIED: FRACTIONAL ± 1/64; DECIMAL ± .005; ANGULAR ± 1°

DO NOT SCALE THIS DRAWING

Item Number	Part Number	Description	Qty
450	4384-0606-0875	KEY 3/16" SQ X 7/8" LG STST	1
451	4384-0608-225	KEY 1/4"SQ X 2 1/4" STST	1
452	4616-4014-4031	SPROCKET IDLER 40B14 PLATED	1
453	4617-4060-4031	SPROCKET 40B60 1-1/4" PB	1
454	4618-4015-2831	SPROCKET TYPE B HUB F.B. 7/8"	1
455	4618-4060-3232	SPROCKET 40B60 1"FB	3
456	4625-3612-06	STUD 3/8-16 UNC X 6" LONG	2
457	5220-1221	BEARING-BALL DBL ROW 12X32X5/8 2-SEALS	1
458	5251-3763	BEARING FLANGE 4-BOLT 1" BORE	2
459	5254-3525	BEARING THRUST 1" ID X 1-1/2 OD X 1/8T	2
460	5604-5461	BUSHING-FOR CLUTCH SPROCKET #35	1
461	5604-5463	TORQUE TAPER #35, 1" BORE	1
462	5607-3983	GEAR-REDUCER-30:1 LFT.PAINTED	1

Item Number	Part Number	Description	Qty
463	5617-5830	SPROCKET-40A45 FOR CLUTCH #35	1
464	5806-7148	COLLAR-CLAMP 1PC 1"BORE STST	2
465	5832-0507	NUT - HEX JAM 3/4-10NC FIN STST	16
466	5835-6481	PIN-DOWEL 5/16" DIA X 5/8" STST	4
467	5840-1519	RING-RETAINING SPIROLOX #RR-125	2
468	5915-3013	PAD LEVELING SOCKET STYLE 3/4-10 THREAD	8
470	6301-7813	MOTOR AC, 1HP, 56C FRAME STST	1
471	67311	RETAINER CLAMP REAR	11
472	67312	RETAINER CLAMP FRONT	11
473	69126	CARRIER SUPPORT STRIP TIE BAR	6
474	69127	CHAIN RAIL TIE BAR	12
475	70059	BRACKET CENTER SUPPORT	2
476	70503	PLATE FRAME TIE	6
477	70517	GUSSET LEG RH	4


Item Number	Part Number	Description	Qty
478	70518	GUSSET LEG LH	4
479	70531	BRACKET GEARBOX	2
480	70533	SPACER-CHAIN SUPPORT 1.359 LONG	56
481	70552	SPACER BEARING ADAPTER	1
482	70667	SCREW LEVELING PAD	8
483	70742	BRACKET ANGLE IDLER SPROCKET	1
484	70743	MOUNTING ANGLE COVER RH	1
485	70745	MOUNTING ANGLE COVER LH	1
486	70747	COVER DRIVE SPROCKET	1
487	70834	WHEEL-GUIDE	8
488	70835	GUIDE-CHAIN	4
489	70850	LEG ASSEMBLY 3/4-10 THREAD WIDE UNIT	4
490	70856	SPACER FRAME 17.540	5
491	70857	SPACER FRAME TIE PLATE 17.27 LONG	6
492	70858	END PLATE TAKE UP 17.540 WIDE	1

										<div></div> <div>WALKER, MICHIGAN, U.S.A. 49534-7564</div> <div>THIS DRAWING AND ALL PROPRIETARY RIGHTS AND CONCEPTS HEREIN ARE THE EXCLUSIVE PROPERTY OF OLIVER PACKAGING AND EQUIPMENT COMPANY AND ARE NOT TO BE USED, DUPLICATED OR TREATED IN ANY WAY INCONSISTANT WITH SUCH RIGHTS WITHOUT PERMISSION OF OLIVER PACKAGING &amp; EQUIPMENT COMPANY.</div>	NAME _____
											MAT'L <u>SEE CHART</u>
											MAT'L NO. <u>SEE CHART</u> FINISH _____
											DRAWN BY <u>V. MATZ</u> DATE <u>6-17-15</u> SCALE <u>1:40</u>
											REMOVE BURRS & SHARP EDGES DIMENSIONAL TOLERANCES UNLESS SPECIFIED: FRACTIONAL ± 1/64; DECIMAL ± .005; ANGULAR ± 1°
LTR	CHANGE	DATE	BY	EC NO.	LTR	CHANGE	DATE	BY	EC NO.	DO NOT SCALE THIS DRAWING	

Item Number	Part Number	Description	Qty
493	70859	SPACER FRAME 17.540 CENTER SUPPORT	2
494	70862	STRAP GEARBOX SUPPORT WIDE UNIT	2
495	70863	STRIP CARRIER SUPPORT CENTER	1
496	70864	STRIP-WEAR UHMW X 42" LONG	1
497	70869	SPACER CARRIER SUPPORT 3" LONG	18
498	71201	STRIP-WEAR UHMW X 66" LONG	4
499	71312	DRIVE SHAFT	1
500	714417	TAKE-UP CHAIN UNIT 10"	2
501	71729	BUSHING-IDLER	1
502	71730	TAKEUP SHAFT WIDE UNIT	1
503	71797	COVER TAKEUP UNIT RH	1
504	71798	COVER TAKEUP UNIT LH	1
505	71799	COVER-INFEED END	1
506	71801	FRAME TAKEUP END FRONT 84"	1

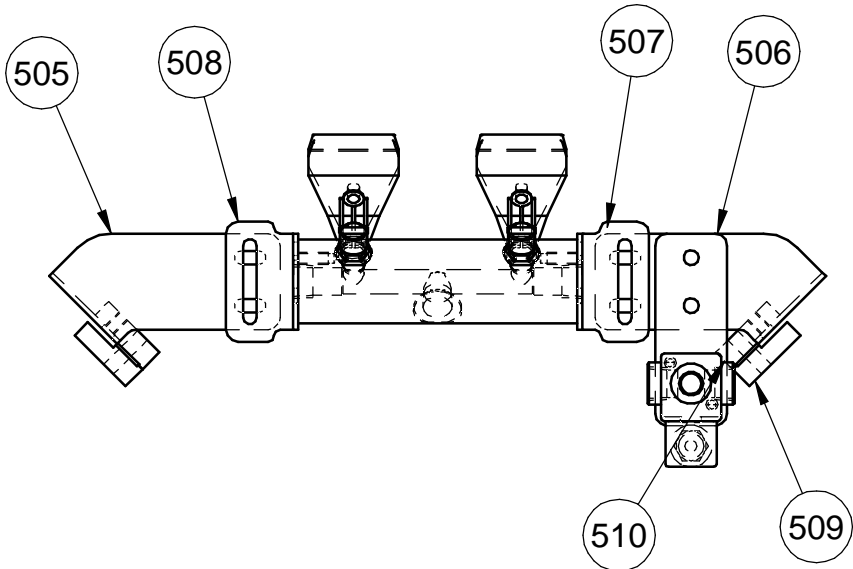
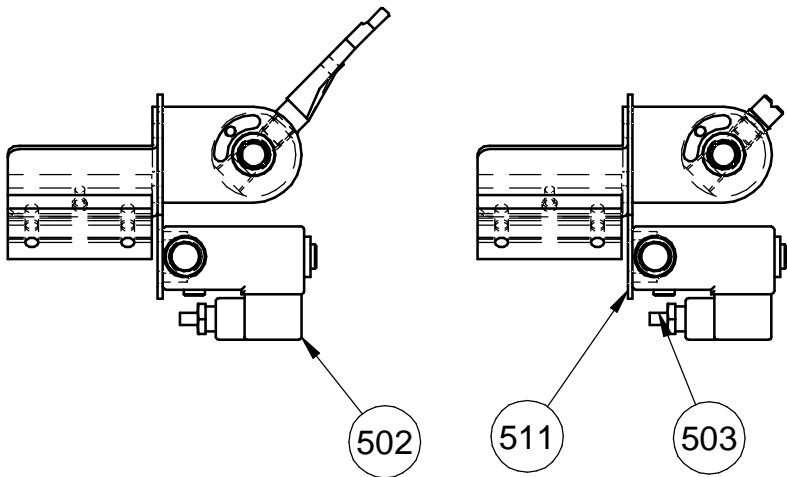
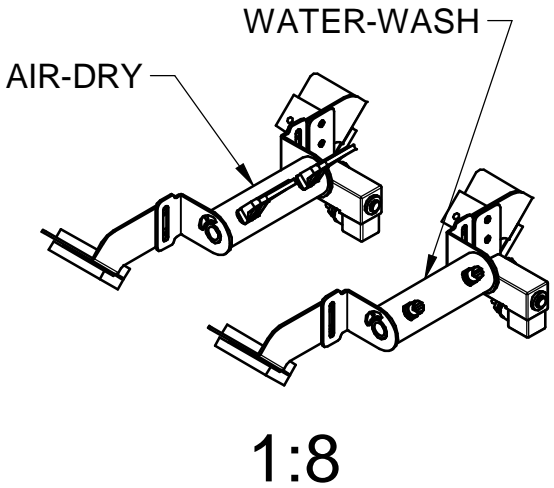
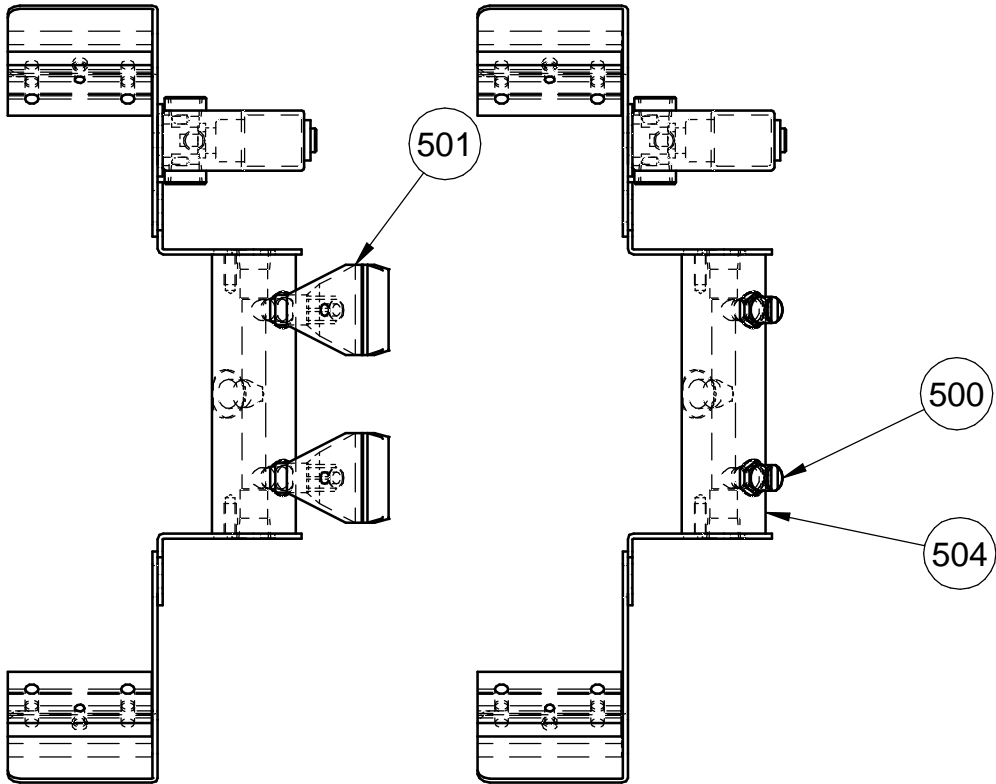
Item Number	Part Number	Description	Qty
507	71802	FRAME TAKEUP END REAR 84" LONG	1
508	71803	SUPPORT CHAIN ADJUSTABLE	2
509	71804	SPACER-CHAIN SUPPORT .859 LONG	4
510	71805	SPACER CARRIER SUPPORT 2.5" LONG	4
511	71806	STRIP CARRIER SUPPORT ADJUSTABLE	2
512	71807	STRIP CARRIER SUPPORT TAKEUP END	2
513	71808	SUPPORT TAKE UP END CHAIN UPPER	2
514	71809	STRIP-WEAR UHMW X 36-1/2" LONG	2
515	71810	STRIP-WEAR UHMW X 30-1/2" LONG	2
516	71843	SUPPORT TAKEUP END CHAIN LOWER	2
517	71844	BRACKET-ADJUSTABLE SUPPORT	2
518	71845	FRAME DRIVE END FRONT 84"	1
519	71846	FRAME DRIVE END REAR 84"	1

Item Number	Part Number	Description	Qty
520	71847	STRIP CARRIER SUPPORT DRIVE END	2
521	71848	STRIP-WEAR UHMW X 69" LONG	2
522	71849	SUPPORT DRIVE END CHAIN RAIL UPPER	2
523	71850-001	SUPPORT DRIVE END CHAIN RAIL LOWER	2
524	71851	SUPPORT CENTER SECTION CHAIN 66"	8
525	71852	STRIP-CARRIER SUPPORT 66"	4
526	71853	FRAME CENTER SECTION FRONT 66"	2
527	71854	FRAME CENTER SECTION REAR 66"	2
528	71864	PLATE-END DISCHARGE	1

										<div></div> <div>WALKER, MICHIGAN, U.S.A. 49534-7564</div> <div>THIS DRAWING AND ALL PROPRIETARY RIGHTS AND CONCEPTS HEREIN ARE THE EXCLUSIVE PROPERTY OF OLIVER PACKAGING AND EQUIPMENT COMPANY AND ARE NOT TO BE USED, DUPLICATED OR TREATED IN ANY WAY INCONSISTANT WITH SUCH RIGHTS WITHOUT PERMISSION OF OLIVER PACKAGING &amp; EQUIPMENT COMPANY.</div>	NAME <u>FRAME AND DRIVE ASSEMBLY 25' 2-UP</u>		
											MAT'L <u>SEE CHART</u>		
											MAT'L NO. <u>SEE CHART</u> FINISH _____		
											DRAWN BY <u>V. MATZ</u> DATE <u>6-17-15</u> SCALE <u>1:40</u>		
											REMOVE BURRS & SHARP EDGES DO NOT SCALE THIS DRAWING DIMENSIONAL TOLERANCES UNLESS SPECIFIED: FRACTIONAL ± 1/64; DECIMAL ± .005; ANGULAR ± 1°		
LTR	CHANGE	DATE	BY	EC NO.	LTR	CHANGE	DATE	BY	EC NO.				

0	TOOL NAME	NUMBER

ITEM	PART NUMBER	DESCRIPTION	QUAN.



Item Number	Part Number	Description	Qty
500	5132-2001	NOZZLE-SPRAY 1/4" MALE BRASS	2
501	5132-2049	NOZZLE-AIR FLAT 1/4 NPT MALE	2
502	5148-6707	VALVE-SOLENOID 2-WAY, 24VDC	2
503	5148-7705	CORD-24V 18 MM DIN W/LED 5M	2
504	71753	MANIFOLD NOZZLE	2
505	71754	MANIFOLD BRACKET RH	2
506	71755	MANIFOLD-BRACKET LH	2
507	71756-001	MANIFOLD SIDE BRACKET RH	2
508	71757	MANIFOLD SIDE BRACKET LH	2
509	71758	MANIFOLD BRACKET LOWER CLAMP	4
510	71759	MANIFOLD BRACKET UPPER CLAMP	4
511	71760	BRACKET VALVE	2

LTR	CHANGE	DATE	BY	EC NO.	LTR	CHANGE	DATE	BY	EC NO.



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NAME

TRAY CARRIER WASH/DRY UNIT

MAT'L

SEE CHART

MAT'L NO.

ASSEMBLY

FINISH

DRAWN BY

V. MATZ

DATE

6-3-15

SCALE

1/4

REMOVE BURRS & SHARP EDGES

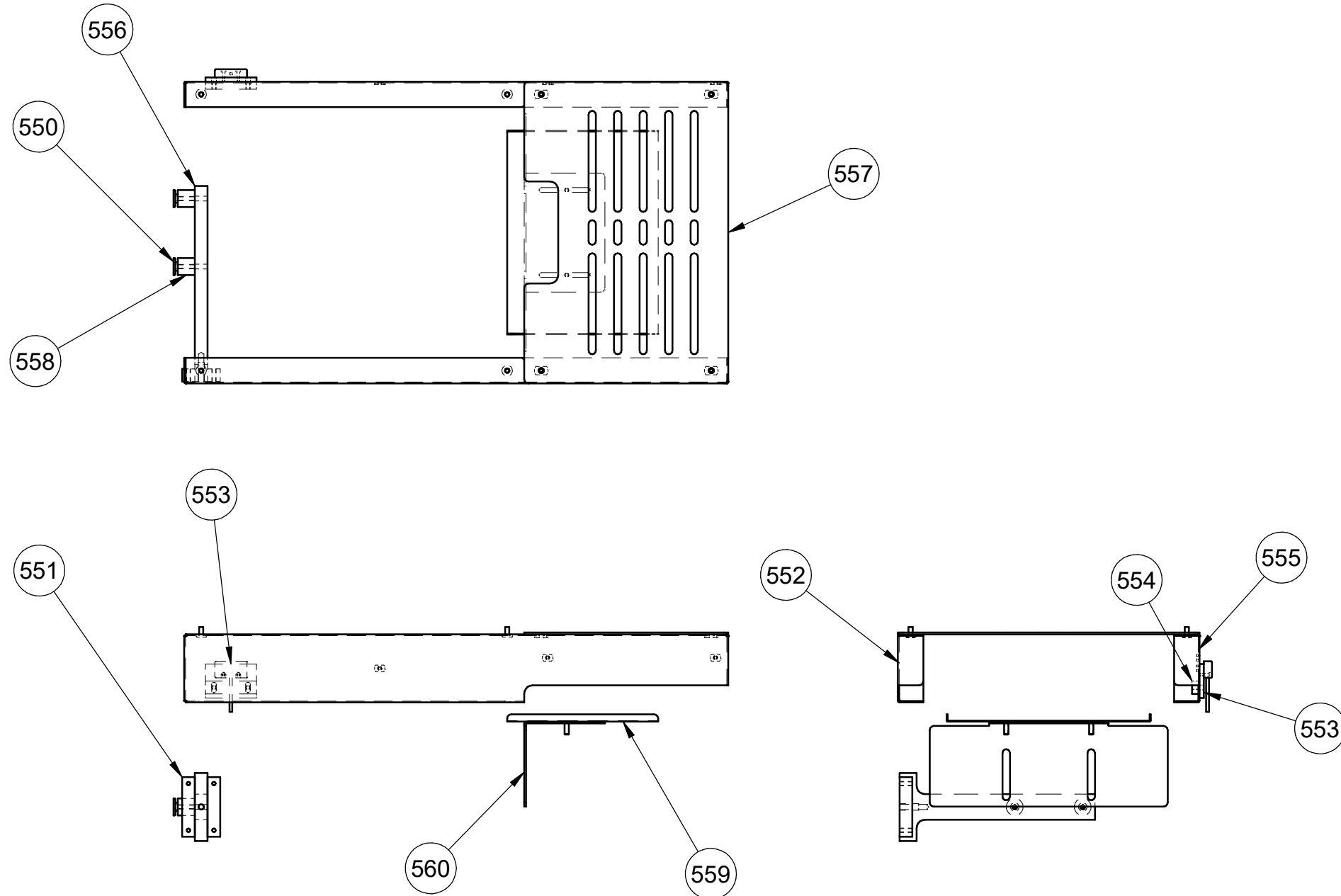
DO NOT SCALE THIS DRAWING

DIMENSIONAL TOLERANCES UNLESS SPECIFIED: FRACTIONAL ± 1/64; DECIMAL ± .005; ANGULAR ± 1°

C


1373  
CHANGE

0	TOOL NAME	NUMBER		ITEM	PART NUMBER	DESCRIPTION	QUAN.



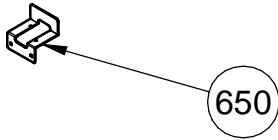
Item Number	Part Number	Description	Qty
550	1908-0084	RETAINER-LIFT RAMP INSIDE	2
551	52524	BLOCK-GUIDE	2
552	70588	CHANNEL DISCHARGE FRONT	1
553	70794-001	PLATE-SWITCH MOUNTING	1
554	70795	NUTBAR-SWITCH	1
555	70796-001	CHANNEL-DISCHARGE REAR	1
556	70871	BAR-MOUNTING LIFT WIDE UNIT	1
557	70877	COVER-DISCHARGE END WIDE UNIT	1
558	70971	SPACER BAR MOUNTING LIFT	2
559	71865	SHELF-ADJUSTABLE GUIDE	1
560	71866	SUPPORT-SHELF	1

REF. 714250

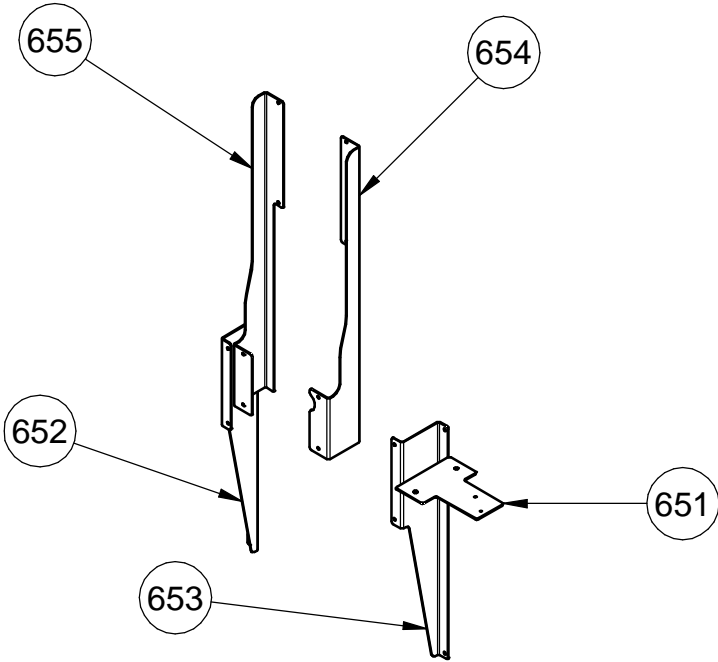
										 <p>GRAND RAPIDS, MICHIGAN, U.S.A. 49504-5298</p> <p>THIS DRAWING AND ALL PROPRIETARY RIGHTS AND CONCEPTS HEREIN ARE THE EXCLUSIVE PROPERTY OF OLIVER PACKAGING &amp; EQUIPMENT COMPANY AND ARE NOT TO BE USED, DUPLICATED OR TREATED IN ANY WAY INCONSISTANT WITH SUCH RIGHTS WITHOUT PERMISSION OF OLIVER PACKAGING &amp; EQUIPMENT COMPANY.</p>	NAME <u>DISCHARGE PARTS-COMMON WIDE</u>
											MAT'L <u>SEE LIST</u>
											MAT'L NO. <u>SEE LIST</u> FINISH _____
											DRAWN BY <u>V. MATZ</u> DATE <u>6-9-15</u> SCALE <u>1:20</u>
											REMOVE BURRS & SHARP EDGES DIMENSIONAL TOLERANCES UNLESS SPECIFIED: FRACTIONAL $\pm 1/64$ ; DECIMAL $\pm .005$ ; ANGULAR $\pm 1^\circ$
						ADDED (2) 70971 SPACERS	8-26-21	VJM	1373		DO NOT SCALE THIS DRAWING
LTR	CHANGE	DATE	BY	EC NO.	LTR	CHANGE	DATE	BY	EC NO.		

0	TOOL NAME	NUMBER

ITEM	PART NUMBER	DESCRIPTION	QUAN.



Item Number	Part Number	Description	Qty
650	70628	BRACKET PUSHBUTTON ENCLOSURE	1
651	70724	BRACKET-ESTOP OUTFEED	1
652	70749	SUPPORT-CONTROL PANEL LH	1
653	70750	SUPPORT-CONTROL PANEL RH	1
654	71011	UPRIGHT-SUPPORT P/B PANEL RH WIDE UNIT	1
655	71012	UPRIGHT-SUPPORT P/B PANEL LH W/UNIT	1



LTR	CHANGE	DATE	BY	EC NO.	LTR	CHANGE	DATE	BY	EC NO.



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NAME ELECTRICAL ENCLOSURE BRACKETS

MAT'L \_\_\_\_\_

MAT'L NO. \_\_\_\_\_ FINISH \_\_\_\_\_

DRAWN BY V. MATZ DATE 6-3-15 SCALE \_\_\_\_\_

REMOVE BURRS & SHARP EDGES  
DIMENSIONAL TOLERANCES UNLESS SPECIFIED: FRACTIONAL ± 1/64; DECIMAL ± .005; ANGULAR ± 1°

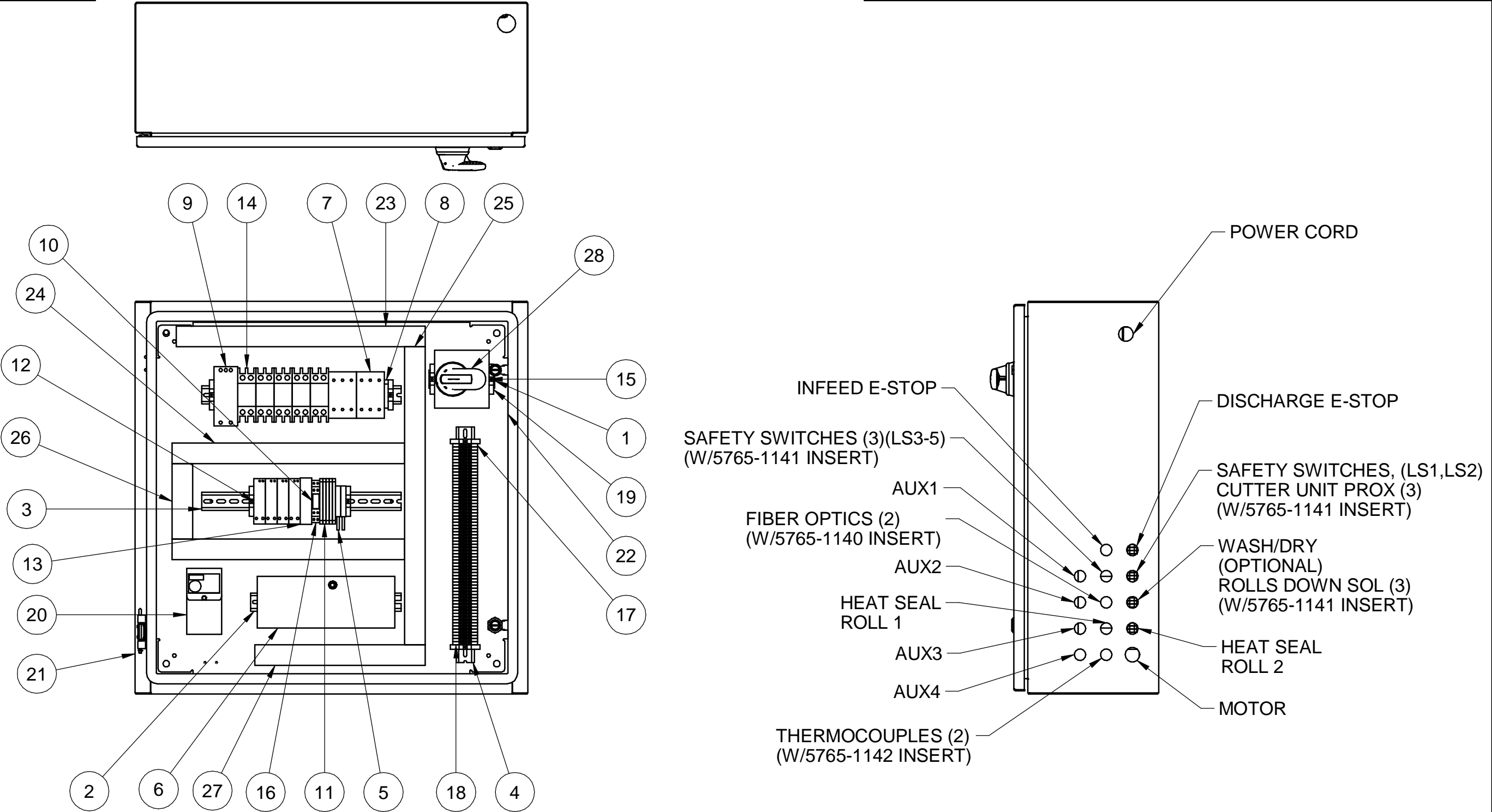
DO NOT SCALE THIS DRAWING

REF. 714412



0	TOOL NAME	NUMBER

ITEM	PART NUMBER	DESCRIPTION	QUAN.



LTR	CHANGE	DATE	BY	EC NO.	LTR	CHANGE	DATE	BY	EC NO.




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NAME	MAIN PANEL ASSEMBLY		
MAT'L	SEE LIST		
MAT'L NO.	SEE LIST	FINISH	
DRAWN BY	V. MATZ	DATE	6-2-15
SCALE			
REMOVE BURRS & SHARP EDGES			
DO NOT SCALE THIS DRAWING			
DIMENSIONAL TOLERANCES UNLESS SPECIFIED: FRACTIONAL ± 1/64; DECIMAL ± .005; ANGULAR ± 1°			

0	TOOL NAME	NUMBER		ITEM	PART NUMBER	DESCRIPTION	QUAN.

Item Number	Part Number	Description	Qty	Item Number	Part Number	Description	Qty
1	4516-3507-2040	STEEL DIN RAIL 35MM X 5"	1	17	5770-7472	TERMINAL BLOCK, 10 GA.	60
2	4516-3507-2092	STEEL DIN RAIL 35MM X 11-1/2"	1	18	5770-7473	TERMINAL BLOCK, 10 GA., GROUNDING	4
3	4516-3507-2122	STEEL DIN RAIL 35MM X 15-1/4"	2	19	5770-7475	END BLOCK	8
4	4516-3507-2144	STEEL DIN RAIL 35MM X 18"	1	20	6309-1466	DRIVE-1HP VFD 230 1PH	1
5	5711-8597	SENSOR-FIBER OPTIC	2	21	71876	ENCLOSURE-ELECTRICAL 30X30X10	1
6	5712-8011	BASE-7 SLOT	1	22	71813	PANEL-SUB MAIN	1
7	5713-0302	CONTACTOR-3 POLE 32A, 24VDC	2	23	71816	DUCT-WIRING 19" LONG W/COVER	1
8	5726-1251	HOLDER-FUSE DIN MOUNT	1	24	71817	DUCT-WIRING 17-3/4" LONG W/COVER	2
9	5746-5306	DC POWER SUPPLY, IDEC 90W, 24V	1	25	71818	DUCT-WIRING 22-3/4" LONG W/COVER	1
10	5749-5674	RELAY, DPDT, FINDER	1	26	71819	DUCT-WIRING 5-3/4" LONG W/COVER	1
11	5749-5682	RELAY-INTERFACE 6MM SPDT 24VDC	5	27	71820	DUCT-WIRING 13" LONG W/COVER	1
12	5749-7029	RELAY-SOLID STATE 20A DC CONT.	4	28	5757-5224	HANDLE-DISCONNECT RED	1
13	5749-7518	RELAY-SAFETY, 2N.O., 24VDC	1				
14	5757-4346	CIRC. CBRKR, 2 POLE 10 AMP	5				
15	5757-5223	DISCONNECT-30 AMP CLASS J	1				
16	5770-2832	SOCKET-8 PIN FINDER# 95.85.3	1				

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											MAT'L <u>SEE LIST</u>
											MAT'L NO. <u>SEE LIST</u> FINISH _____
											DRAWN BY <u>V. MATZ</u> DATE <u>6-2-15</u> SCALE _____
LTR	CHANGE	DATE	BY	EC NO.	LTR	CHANGE	DATE	BY	EC NO.		REMOVE BURRS & SHARP EDGES DO NOT SCALE THIS DRAWING DIMENSIONAL TOLERANCES UNLESS SPECIFIED: FRACTIONAL ± 1/64; DECIMAL ± .005; ANGULAR ± 1°

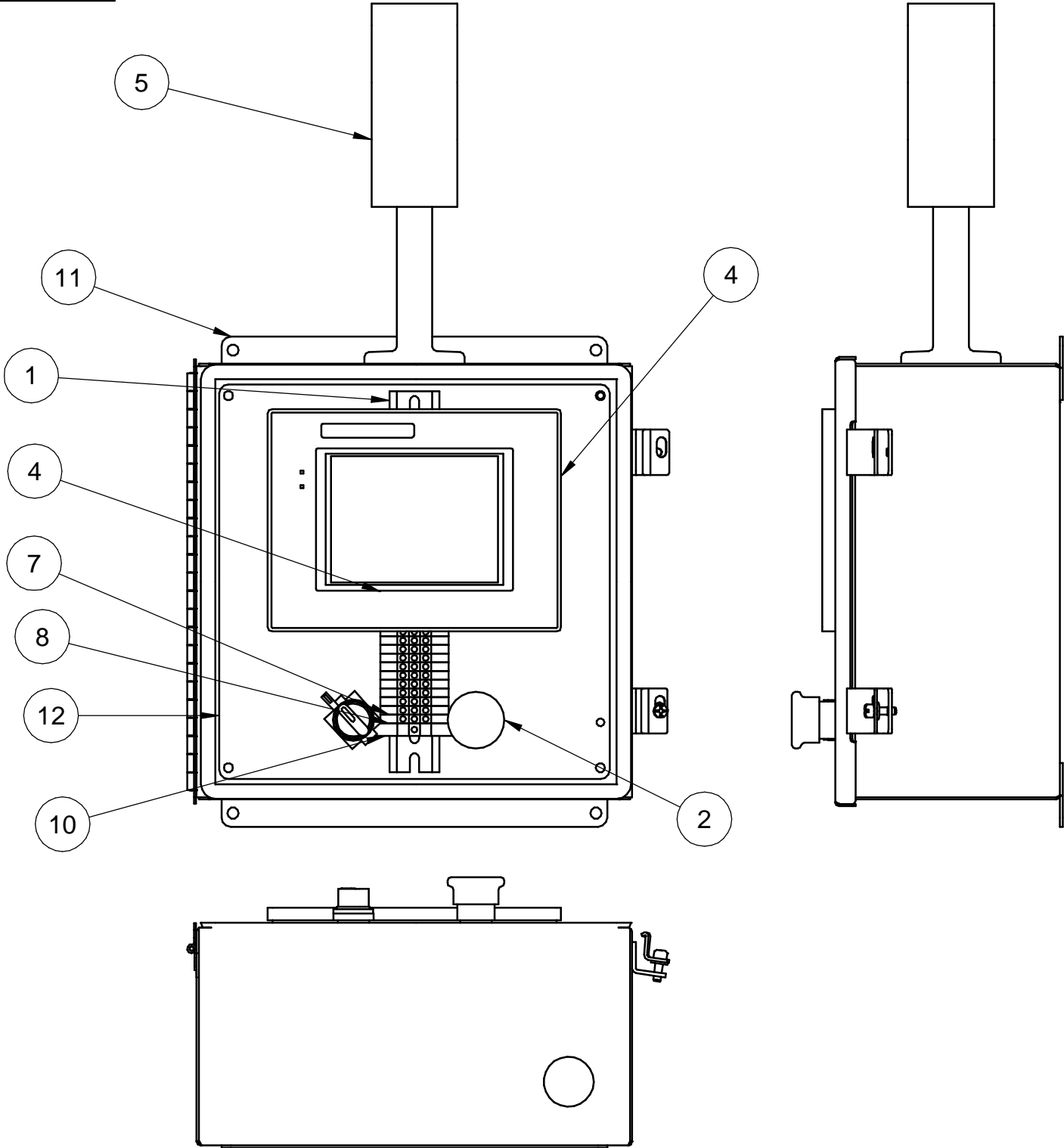
CHANGE

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C714440

0	TOOL NAME	NUMBER

ITEM	PART NUMBER	DESCRIPTION	QUAN.



Item Number	Part Number	Description	Qty
1	4516-3507-2084	STEEL DIN RAIL - 10.5"	1
2	5708-7920	OPERATOR-P.B. MUSHROOM HD RED	1
3*	5708-7935	OPERATOR-SELECTOR 3 POSITION	1
4	5744-1005	OPERATOR INTERFACE 6" TOUCH	1
5	5756-6154	STACKLIGHT-LED GRN/RED/BUZ 24V	1
6*	5756-6155	BASE-STACKLIGHT MOUNTING	1
7	5770-7472	TERMINAL BLOCK, 10 GA.	14
8	5770-7473	TERMINAL BLOCK, 10 GA., GROUNDING	1
9*	5770-7474	BARRIER	1
10	5770-7475	END BLOCK	2
11	71814	ENCLOSURE-ELECTRICAL OPERATOR	1
12	71815	PANEL-SUB OPERATOR	1

LTR	CHANGE	DATE	BY	EC NO.	LTR	CHANGE	DATE	BY	EC NO.



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NAME

OPERATOR PANEL ASSEMBLY

MAT'L

SEE LIST

MAT'L NO.

SEE LIST

FINISH

DRAWN BY

V. MATZ

DATE

6-2-15

SCALE

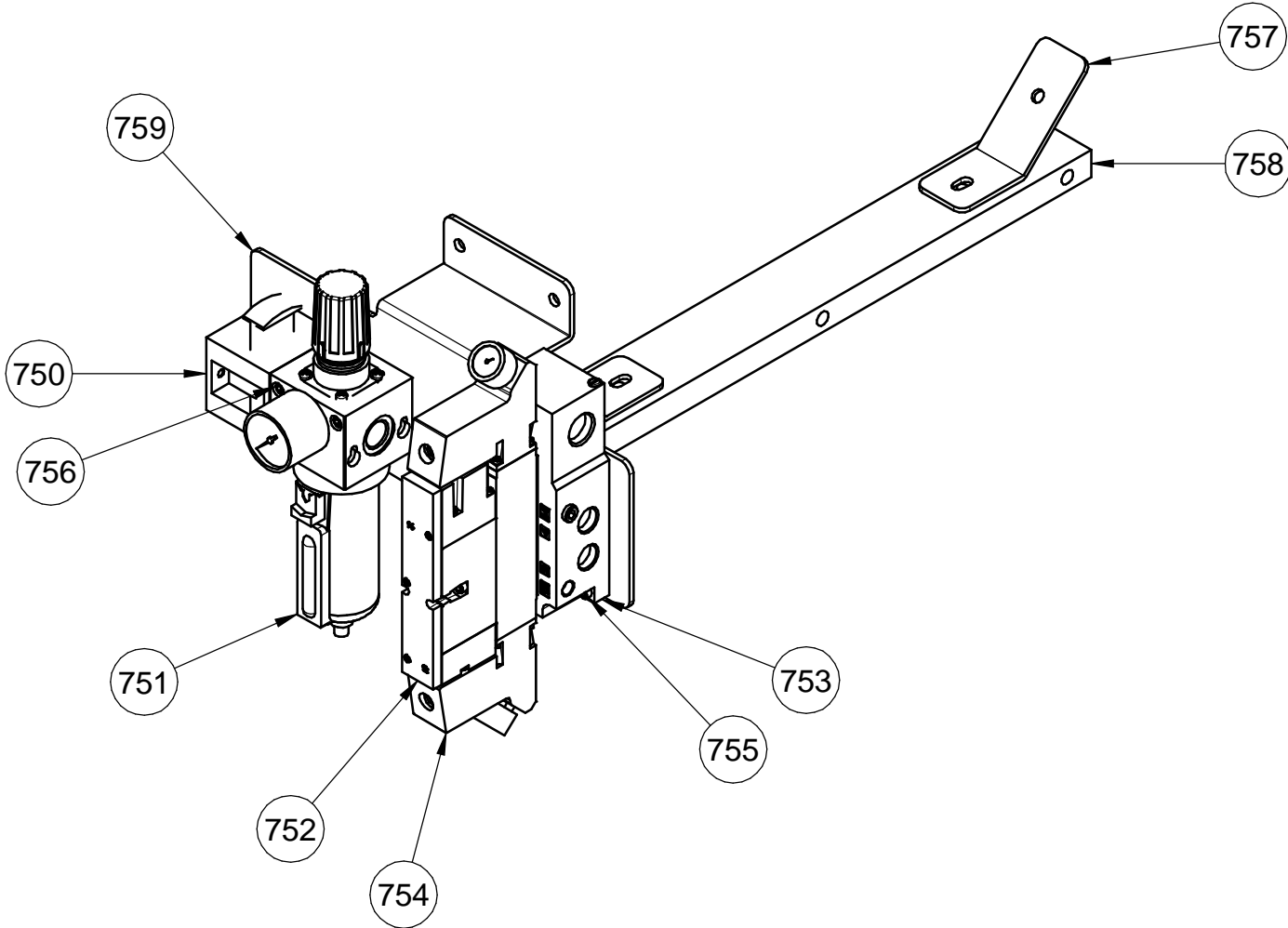
REMOVE BURRS & SHARP EDGES

DO NOT SCALE THIS DRAWING

DIMENSIONAL TOLERANCES UNLESS SPECIFIED: FRACTIONAL ± 1/64; DECIMAL ± .005; ANGULAR ± 1°

0	TOOL NAME	NUMBER

ITEM	PART NUMBER	DESCRIPTION	QUAN.



Item Number	Part Number	Description	Qty
750	5114-9738	SHUT-OFF VALVE 3/8 NPT	1
751	5114-9739	FILTER/REGULATOR 3/8" NPT	1
752	5148-7800	VALVE-SIGNLE SOLENOID NUMATICS	1
753	5148-7802	BASE 3/8" PORT NUMATICS	1
754	5148-7803	REGULATOR DOUBLE	1
755	5843-1524	SCREW-SOCKET CAP 8-32 X 3/4 STST	2
756	5843-1709	SCREW-SOCKET CAP 8-32 X 2-1/4 STST	2
757	70626	BRACKET MANIFOLD	2
758	70837	MANIFOLD AIR CYLINDER FOR 17-3/4" WIDE FRAME	1
759	71704	BRACKET-PNEUMATIC CONTROL	1

LTR	CHANGE	DATE	BY	EC NO.	LTR	CHANGE	DATE	BY	EC NO.



WALKER, MICHIGAN, U.S.A. 49534-7564

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NAME

PNEUMATIC CONTROL DUAL HEAD

MAT'L

ASSEMBLY

MAT'L NO.

SEE LIST

FINISH

DRAWN BY

V. MATZ

DATE

6-2-15

SCALE

1/4

REMOVE BURRS & SHARP EDGES

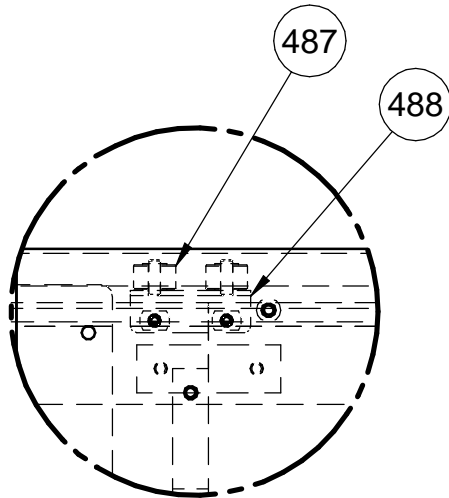
DO NOT SCALE THIS DRAWING

DIMENSIONAL TOLERANCES UNLESS SPECIFIED: FRACTIONAL ± 1/64; DECIMAL ± .005; ANGULAR ± 1°

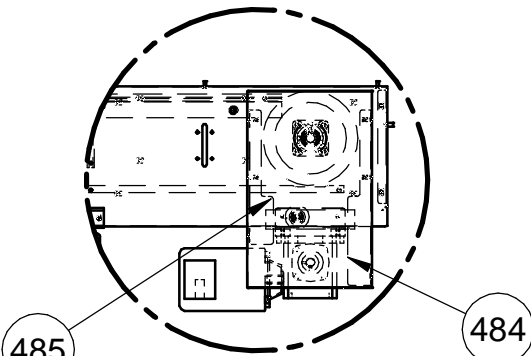
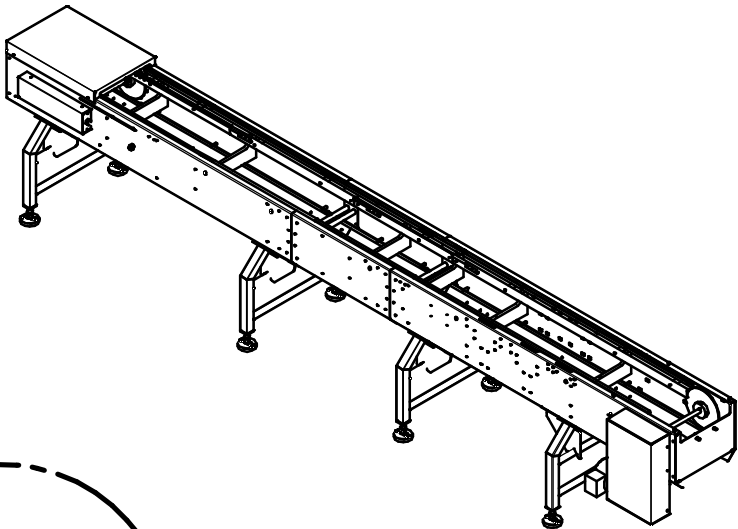
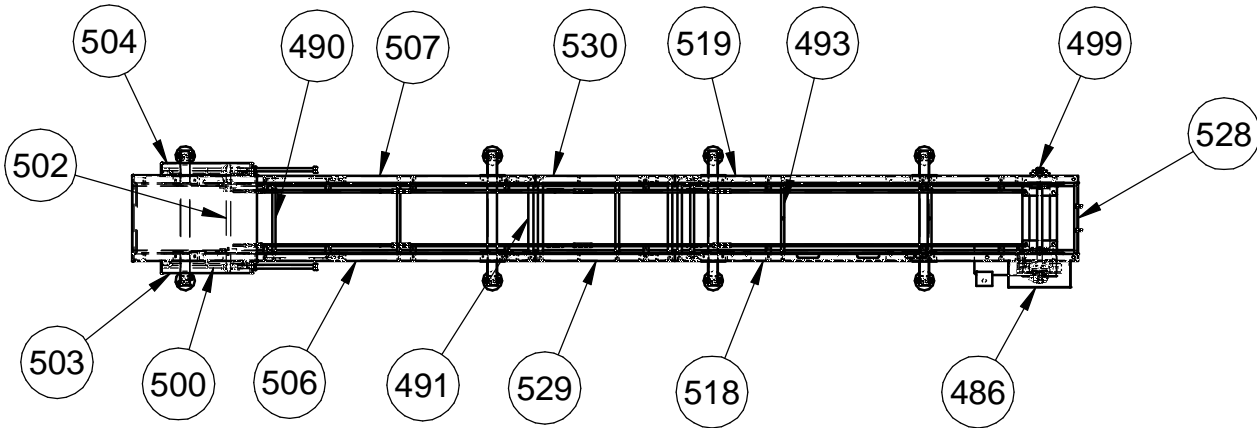
CHANGE

0	TOOL NAME	NUMBER

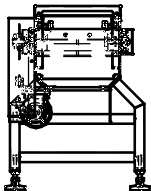
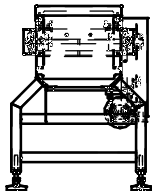
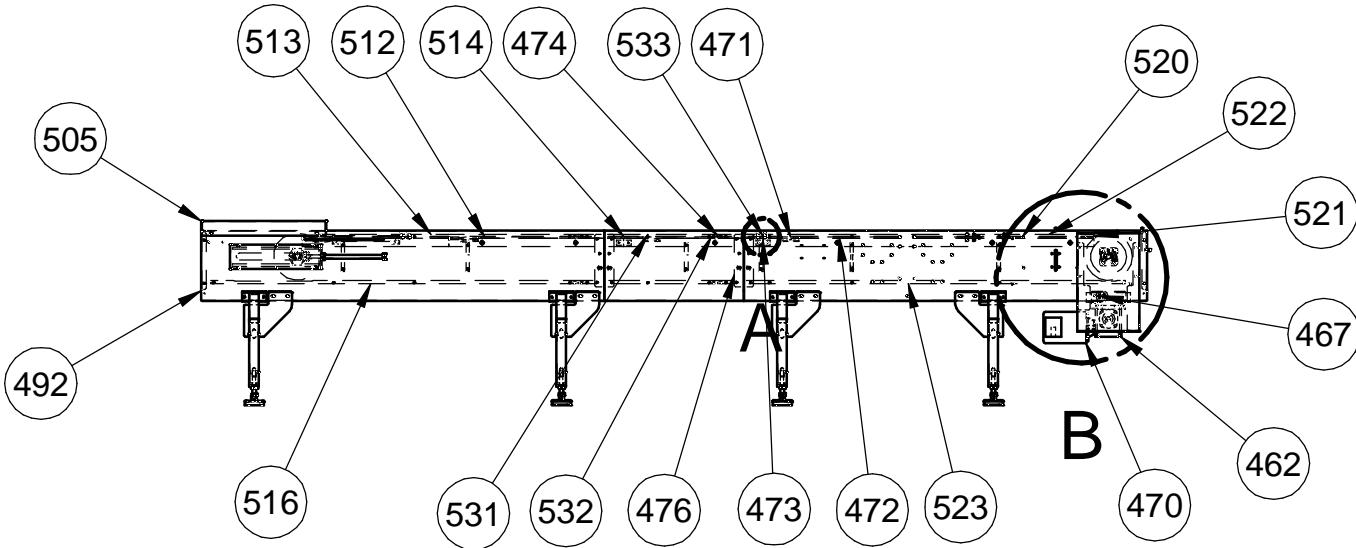
ITEM	PART NUMBER	DESCRIPTION	QUAN.



DETAIL A



DETAIL B



LTR	CHANGE	DATE	BY	EC NO.	LTR	CHANGE	DATE	BY	EC NO.



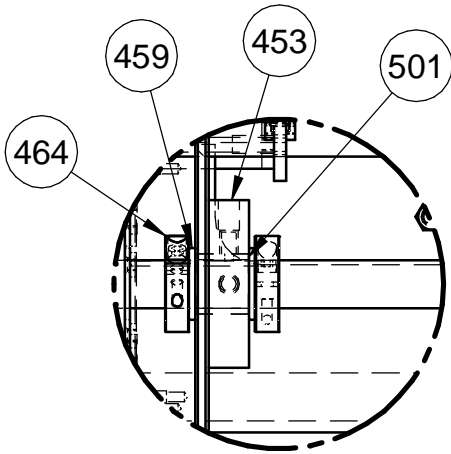
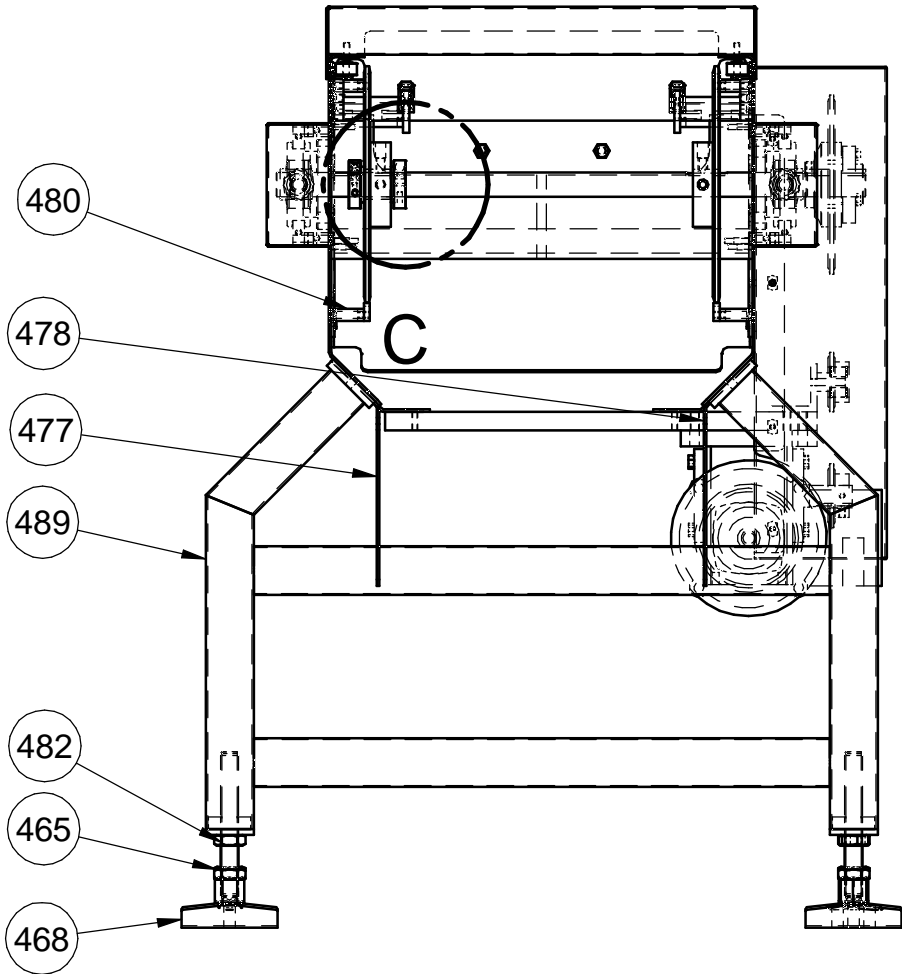
WALKER, MICHIGAN, U.S.A. 49534-7564

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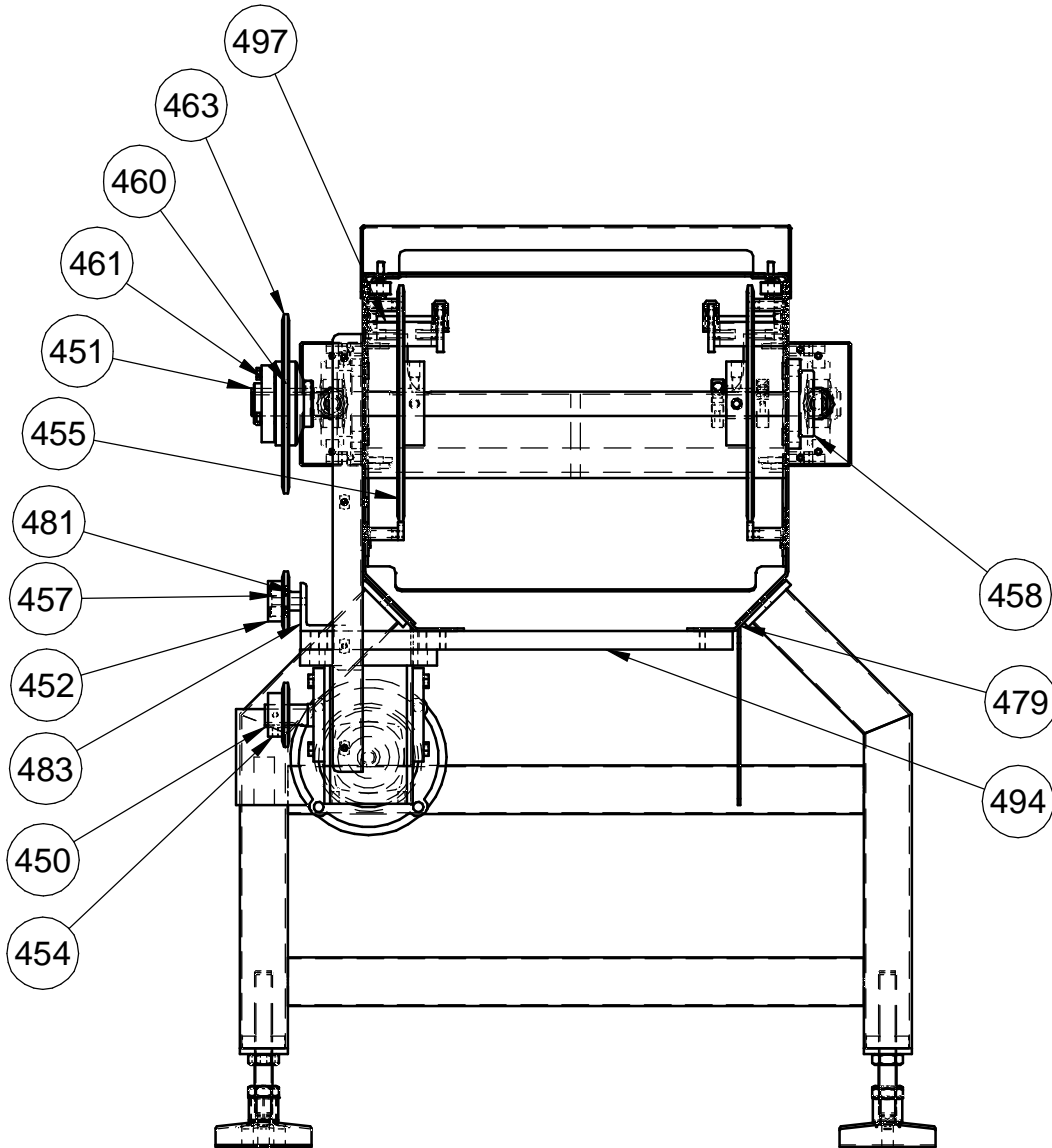
NAME	FRAME AND DRIVE ASSEMBLY 16'		
MAT'L	SEE CHART		
MAT'L NO.	SEE CHART	FINISH	
DRAWN BY	V. MATZ	DATE	6-19-15
		SCALE	1:40
REMOVE BURRS & SHARP EDGES		DO NOT SCALE THIS DRAWING	
DIMENSIONAL TOLERANCES UNLESS SPECIFIED: FRACTIONAL ± 1/64; DECIMAL ± .005; ANGULAR ± 1°			

0	TOOL NAME	NUMBER

ITEM	PART NUMBER	DESCRIPTION	QUAN.



DETAIL C



LTR	CHANGE	DATE	BY	EC NO.	LTR	CHANGE	DATE	BY	EC NO.



WALKER, MICHIGAN, U.S.A. 49534-7564

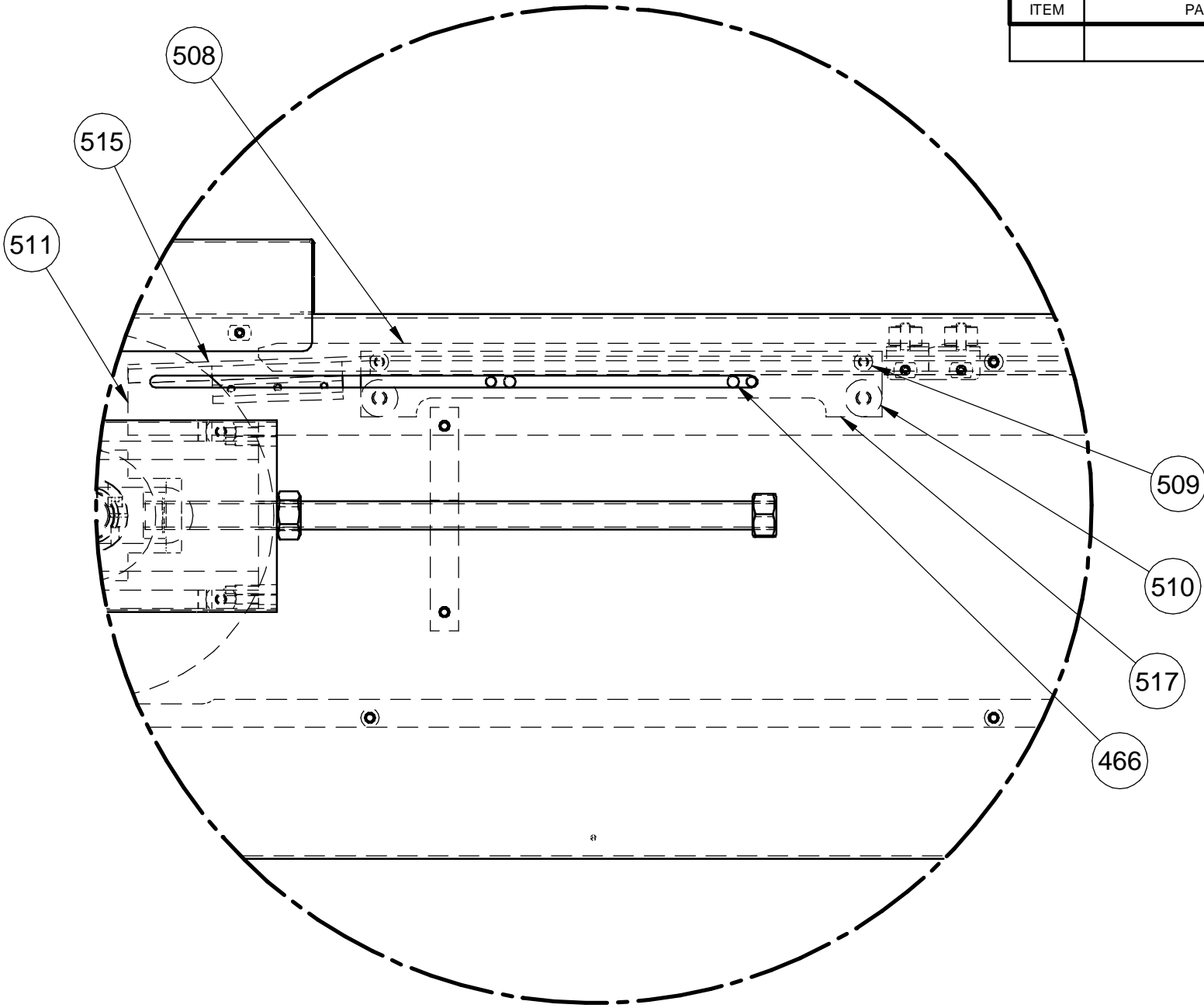
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NAME	FRAME AND DRIVE ASSEMBLY 16'		
MAT'L	SEE CHART		
MAT'L NO.	SEE CHART	FINISH	
DRAWN BY	V. MATZ	DATE	6-19-15
		SCALE	1:40
REMOVE BURRS & SHARP EDGES		DO NOT SCALE THIS DRAWING	
DIMENSIONAL TOLERANCES UNLESS SPECIFIED: FRACTIONAL $\pm 1/64$ ; DECIMAL $\pm .005$ ; ANGULAR $\pm 1^\circ$			

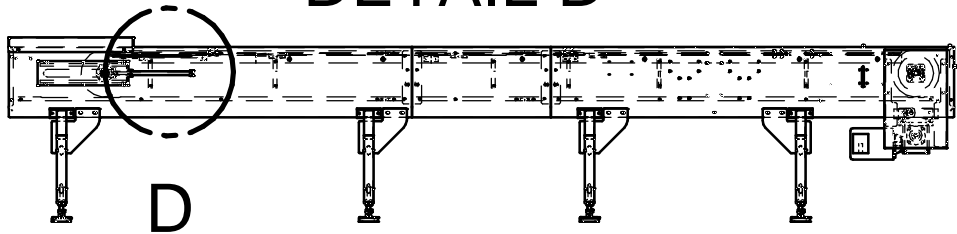
CHANGE

0	TOOL NAME	NUMBER

ITEM	PART NUMBER	DESCRIPTION	QUAN.



DETAIL D



LTR	CHANGE	DATE	BY	EC NO.	LTR	CHANGE	DATE	BY	EC NO.



WALKER, MICHIGAN, U.S.A. 49534-7564


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NAME	FRAME AND DRIVE ASSEMBLY 16'		
MAT'L	SEE CHART		
MAT'L NO.	SEE CHART	FINISH	
DRAWN BY	V. MATZ	DATE	6-19-15
		SCALE	1:40
REMOVE BURRS & SHARP EDGES		DO NOT SCALE THIS DRAWING	
DIMENSIONAL TOLERANCES UNLESS SPECIFIED: FRACTIONAL ± 1/64; DECIMAL ± .005; ANGULAR ± 1°			

Item Number	Part Number	Description	Qty
450	4384-0606-0875	KEY 3/16" SQ X 7/8" LG STST	1
451	4384-0608-225	KEY 1/4"SQ X 2 1/4" STST	1
452	4616-4014-4031	SPROCKET IDLER 40B14 PLATED	1
453	4617-4060-4031	SPROCKET 40B60 1-1/4" PB	1
454	4618-4015-2831	SPROCKET TYPE B HUB F.B. 7/8"	1
455	4618-4060-3232	SPROCKET 40B60 1"FB	3
457	5220-1221	BEARING-BALL DBL ROW 12X32X5/8 2-SEALS	1
458	5251-3763	BEARING FLANGE 4-BOLT 1" BORE	2
459	5254-3525	BEARING THRUST 1" ID X 1-1/2 OD X 1/8T	2
460	5604-5461	BUSHING-FOR CLUTCH SPROCKET #35	1
461	5604-5463	TORQUE TAMER #35, 1" BORE	1
462	5607-3983	GEAR-REDUCER-30:1 LFT.PAINTED	1
463	5617-5830	SPROCKET-40A45 FOR CLUTCH #35	1

Item Number	Part Number	Description	Qty
464	5806-7148	COLLAR-CLAMP 1PC 1"BORE STST	2
465	5832-0507	NUT - HEX JAM 3/4-10NC FIN STST	16
466	5835-6481	PIN-DOWEL 5/16" DIA X 5/8" STST	4
467	5840-1519	RING-RETAINING SPIROLOX #RR-125	2
468	5915-3013	PAD LEVELING SOCKET STYLE 3/4-10 THREAD	8
470	6301-7813	MOTOR AC, 1HP, 56C FRAME STST	1
471	67311	RETAINER CLAMP REAR	8
472*	67312	RETAINER CLAMP FRONT	8
473	69126	CARRIER SUPPORT STRIP TIE BAR	4
474	69127	CHAIN RAIL TIE BAR	8
476	70503	PLATE FRAME TIE	4
477	70517	GUSSET LEG RH	4
478	70518	GUSSET LEG LH	4
479	70531	BRACKET GEARBOX	2
480	70533	SPACER-CHAIN SUPPORT 1.359 LONG	44

Item Number	Part Number	Description	Qty
481	70552	SPACER BEARING ADAPTER	1
482	70667	SCREW LEVELING PAD	8
483	70742	BRACKET ANGLE IDLER SPROCKET	1
484	70743	MOUNTING ANGLE COVER RH	1
485	70745	MOUNTING ANGLE COVER LH	1
486	70747	COVER DRIVE SPROCKET	1
487	70834	WHEEL-GUIDE	8
488	70835	GUIDE-CHAIN	4
489	70850	LEG ASSEMBLY 3/4-10 THREAD WIDE UNIT	4
490	70856	SPACER FRAME 17.540	4
491	70857	SPACER FRAME TIE PLATE 17.27 LONG	4
492	70858	END PLATE TAKE UP 17.540 WIDE	1
493	70859	SPACER FRAME 17.540 CENTER SUPPORT	2
494	70862	STRAP GEARBOX SUPPORT WIDE UNIT	2

										<div></div> <div>WALKER, MICHIGAN, U.S.A. 49534-7564</div> <div>THIS DRAWING AND ALL PROPRIETARY RIGHTS AND CONCEPTS HEREIN ARE THE EXCLUSIVE PROPERTY OF OLIVER PACKAGING AND EQUIPMENT COMPANY AND ARE NOT TO BE USED, DUPLICATED OR TREATED IN ANY WAY INCONSISTANT WITH SUCH RIGHTS WITHOUT PERMISSION OF OLIVER PACKAGING &amp; EQUIPMENT COMPANY.</div>	NAME <u>FRAME AND DRIVE ASSEMBLY 16'</u>			
											MAT'L <u>SEE CHART</u>			
											MAT'L NO. <u>SEE CHART</u> FINISH _____			
											DRAWN BY <u>V. MATZ</u> DATE <u>6-19-15</u> SCALE <u>1:40</u>			
											REMOVE BURRS & SHARP EDGES DIMENSIONAL TOLERANCES UNLESS SPECIFIED: FRACTIONAL ± 1/64; DECIMAL ± .005; ANGULAR ± 1°			
LTR	CHANGE	DATE	BY	EC NO.	LTR	CHANGE	DATE	BY	EC NO.	DO NOT SCALE THIS DRAWING				



0	TOOL NAME	NUMBER		ITEM	PART NUMBER	DESCRIPTION	QUAN.

Item Number	Part Number	Description	Qty
497	70869	SPACER CARRIER SUPPORT 3" LONG	12
499	71312	DRIVE SHAFT	1
500	714417	TAKE-UP CHAIN UNIT 10"	2
501	71729	BUSHING-IDLER	1
502	71730	TAKEUP SHAFT WIDE UNIT	1
503	71797	COVER TAKEUP UNIT RH	1
504	71798	COVER TAKEUP UNIT LH	1
505	71799	COVER-INFEED END	1
506	71801	FRAME TAKEUP END FRONT 84"	1
507	71802	FRAME TAKEUP END REAR 84" LONG	1
508	71803	SUPPORT CHAIN ADJUSTABLE	2
509	71804	SPACER-CHAIN SUPPORT .859 LONG	4
510	71805	SPACER CARRIER SUPPORT 2.5" LONG	4
511	71806	STRIP CARRIER SUPPORT ADJUSTABLE	2

Item Number	Part Number	Description	Qty
512	71807	STRIP CARRIER SUPPORT TAKEUP END	2
513	71808	SUPPORT TAKE UP END CHAIN UPPER	2
514	71809	STRIP-WEAR UHMW X 36-1/2" LONG	2
515	71810	STRIP-WEAR UHMW X 30-1/2" LONG	2
516	71843	SUPPORT TAKEUP END CHAIN LOWER	2
517	71844	BRACKET-ADJUSTABLE SUPPORT	2
518	71845	FRAME DRIVE END FRONT 84"	1
519	71846	FRAME DRIVE END REAR 84"	1
520	71847	STRIP CARRIER SUPPORT DRIVE END	2
521	71848	STRIP-WEAR UHMW X 69" LONG	2
522	71849	SUPPORT DRIVE END CHAIN RAIL UPPER	2
523	71850-001	SUPPORT DRIVE END CHAIN RAIL LOWER	2
528	71864	PLATE-END DISCHARGE	1

Item Number	Part Number	Description	Qty
529	71855	FRAME CENTER SECTION FRONT 29"	1
530	71856-001	FRAME CENTER SECTION REAR 29"	1
531	71859	SUPPORT CENTER SECTION CHAIN 29"	4
532	71861	STRIP-CARRIER SUPPORT 29"	2
533	71863	STRIP-WEAR UHMW X 29" LONG	2

LTR	CHANGE	DATE	BY	EC NO.	LTR	CHANGE	DATE	BY	EC NO.



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NAME

FRAME AND DRIVE ASSEMBLY 16'

MAT'L

SEE CHART

MAT'L NO.

SEE CHART

FINISH

DRAWN BY

V. MATZ

DATE

6-19-15

SCALE

1:40

REMOVE BURRS & SHARP EDGES

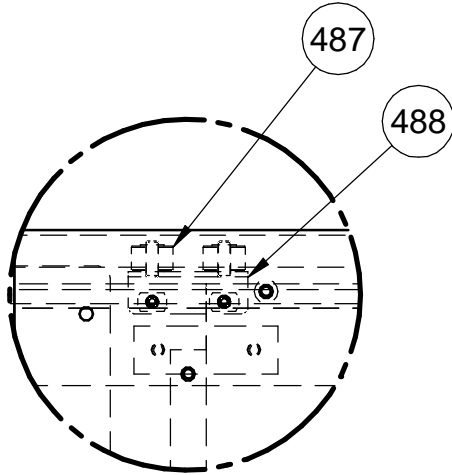
DO NOT SCALE THIS DRAWING

DIMENSIONAL TOLERANCES UNLESS SPECIFIED: FRACTIONAL ± 1/64; DECIMAL ± .005; ANGULAR ± 1°

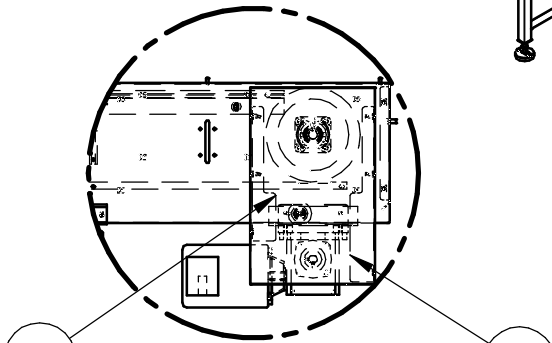
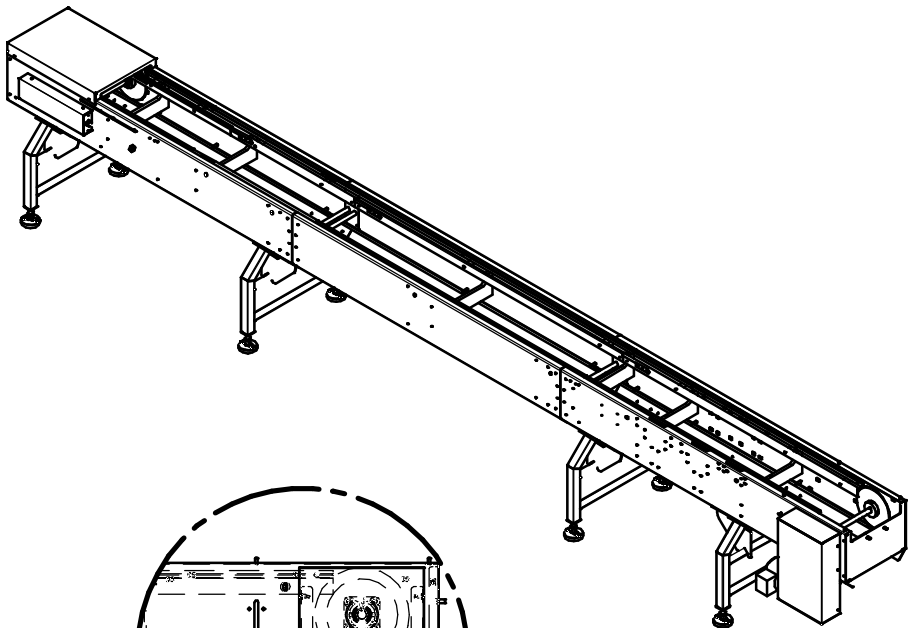
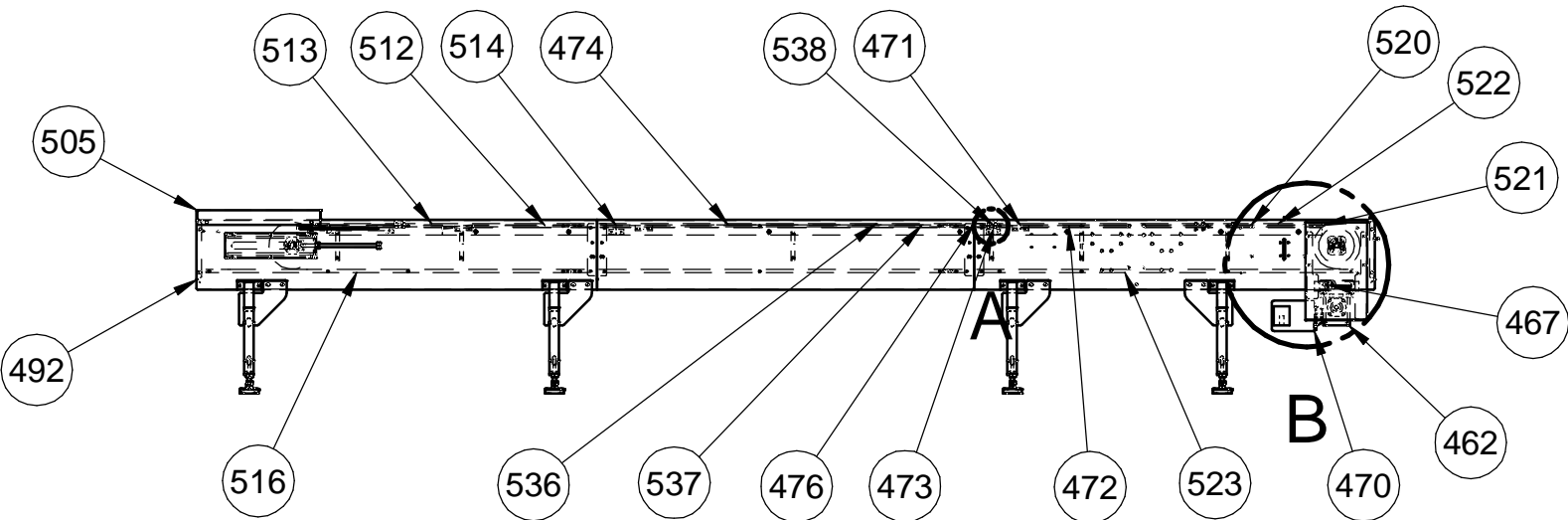
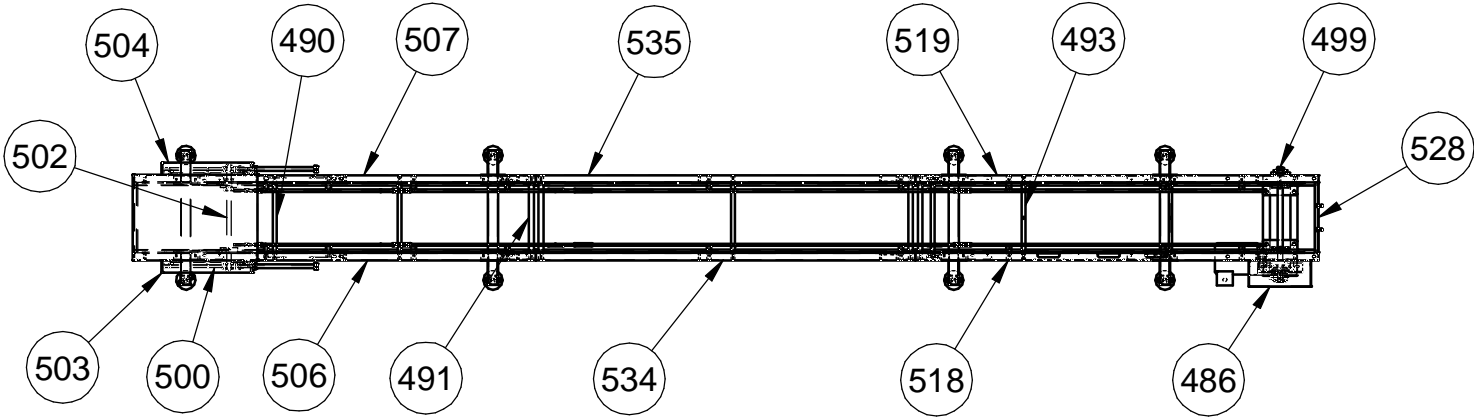
CHANGE

0	TOOL NAME	NUMBER

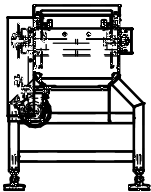
ITEM	PART NUMBER	DESCRIPTION	QUAN.



DETAIL A



DETAIL B



LTR	CHANGE	DATE	BY	EC NO.	LTR	CHANGE	DATE	BY	EC NO.



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NAME	FRAME AND DRIVE ASSEMBLY 20'		
MAT'L	SEE CHART		
MAT'L NO.	SEE CHART	FINISH	
DRAWN BY	V. MATZ	DATE	6-19-15
		SCALE	1:40
REMOVE BURRS & SHARP EDGES		DO NOT SCALE THIS DRAWING	
DIMENSIONAL TOLERANCES UNLESS SPECIFIED: FRACTIONAL $\pm 1/64$ ; DECIMAL $\pm .005$ ; ANGULAR $\pm 1^\circ$			

CHANGE

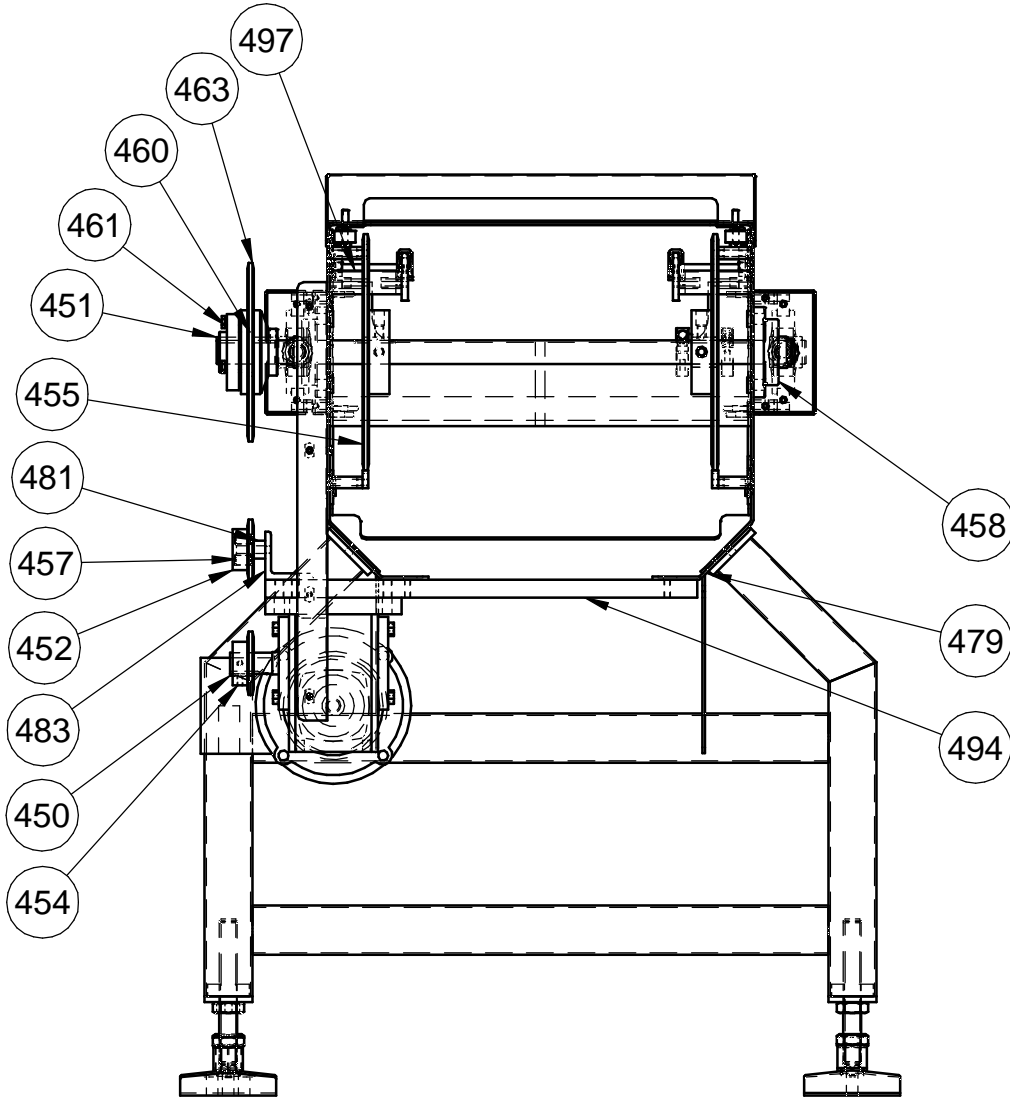
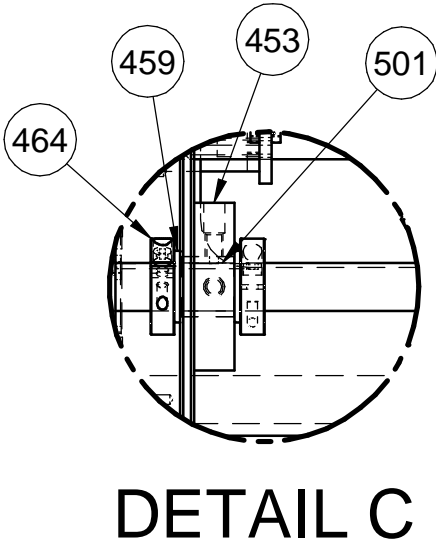
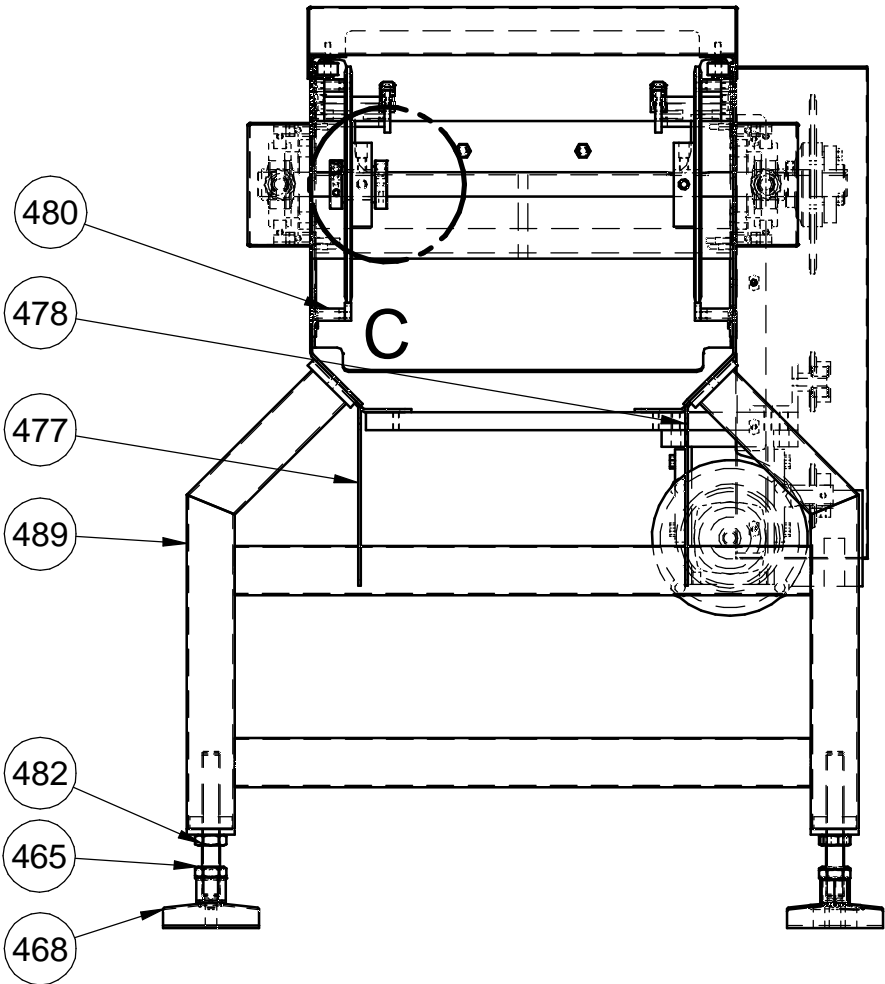
C

SHEET 2 OF 5

C714450

0	TOOL NAME	NUMBER

ITEM	PART NUMBER	DESCRIPTION	QUAN.



LTR	CHANGE	DATE	BY	EC NO.	LTR	CHANGE	DATE	BY	EC NO.



WALKER, MICHIGAN, U.S.A. 49534-7564

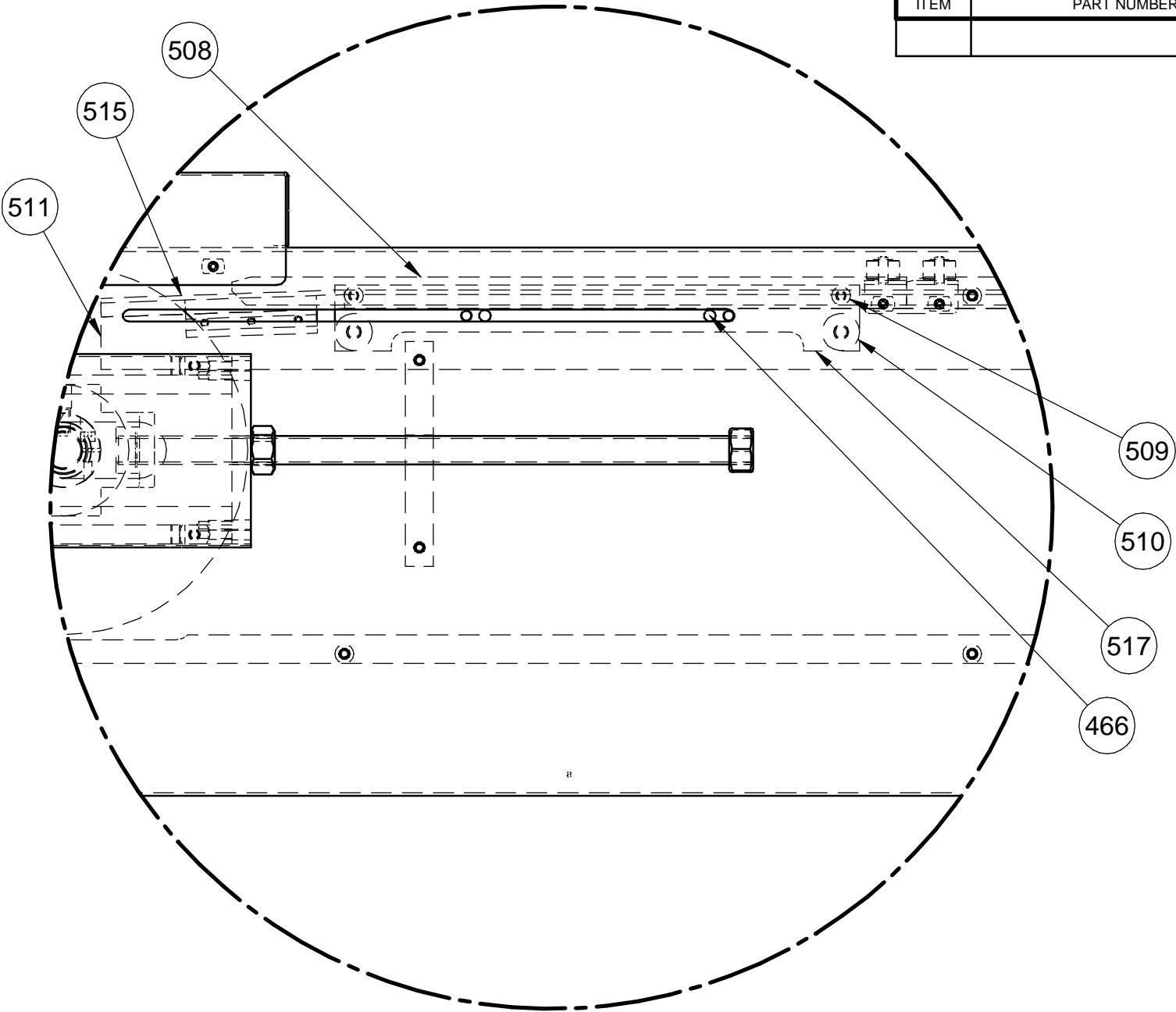
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NAME	FRAME AND DRIVE ASSEMBLY 20'		
MAT'L	SEE CHART		
MAT'L NO.	SEE CHART	FINISH	
DRAWN BY	V. MATZ	DATE	6-19-15
		SCALE	1:40
REMOVE BURRS & SHARP EDGES		DO NOT SCALE THIS DRAWING	
DIMENSIONAL TOLERANCES UNLESS SPECIFIED: FRACTIONAL $\pm 1/64$ ; DECIMAL $\pm .005$ ; ANGULAR $\pm 1^\circ$			

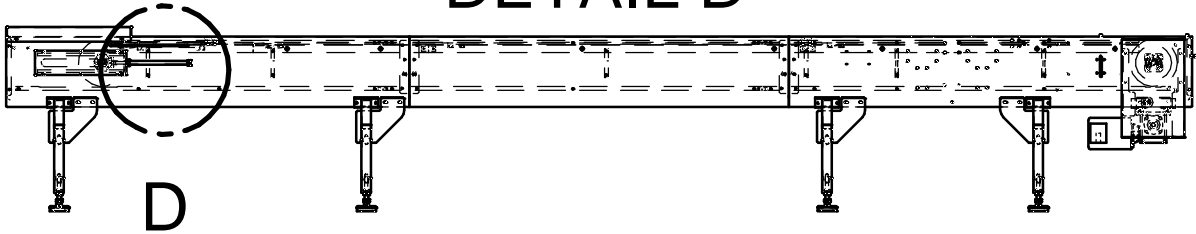
CHANGE

0	TOOL NAME	NUMBER

ITEM	PART NUMBER	DESCRIPTION	QUAN.



DETAIL D



LTR	CHANGE	DATE	BY	EC NO.	LTR	CHANGE	DATE	BY	EC NO.




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NAME	FRAME AND DRIVE ASSEMBLY 20'		
MAT'L	SEE CHART		
MAT'L NO.	SEE CHART	FINISH	
DRAWN BY	V. MATZ	DATE	6-19-15
		SCALE	1:40
REMOVE BURRS & SHARP EDGES		DO NOT SCALE THIS DRAWING	
DIMENSIONAL TOLERANCES UNLESS SPECIFIED: FRACTIONAL ± 1/64; DECIMAL ± .005; ANGULAR ± 1°			


Item Number	Part Number	Description	Qty	Item Number	Part Number	Description	Qty	Item Number	Part Number	Description	Qty
450	4384-0606-0875	KEY 3/16" SQ X 7/8" LG STST	1	464	5806-7148	COLLAR-CLAMP 1PC 1"BORE STST	2	481	70552	SPACER BEARING ADAPTER	1
451	4384-0608-225	KEY 1/4"SQ X 2 1/4" STST	1	465	5832-0507	NUT - HEX JAM 3/4-10NC FIN STST	16	482	70667	SCREW LEVELING PAD	8
452	4616-4014-4031	SPROCKET IDLER 40B14 PLATED	1	466	5835-6481	PIN-DOWEL 5/16" DIA X 5/8" STST	4	483	70742	BRACKET ANGLE IDLER SPROCKET	1
453	4617-4060-4031	SPROCKET 40B60 1-1/4" PB	1	467	5840-1519	RING-RETAINING SPIROLOX #RR-125	2	484	70743	MOUNTING ANGLE COVER RH	1
454	4618-4015-2831	SPROCKET TYPE B HUB F.B. 7/8"	1	468	5915-3013	PAD LEVELING SOCKET STYLE 3/4-10 THREAD	8	485	70745	MOUNTING ANGLE COVER LH	1
455	4618-4060-3232	SPROCKET 40B60 1"FB	3	470	6301-7813	MOTOR AC, 1HP, 56C FRAME STST	1	486	70747	COVER DRIVE SPROCKET	1
457	5220-1221	BEARING-BALL DBL ROW 12X32X5/8 2-SEALS	1	471	67311	RETAINER CLAMP REAR	8	487	70834	WHEEL-GUIDE	8
458	5251-3763	BEARING FLANGE 4-BOLT 1" BORE	2	472*	67312	RETAINER CLAMP FRONT	8	488	70835	GUIDE-CHAIN	4
459	5254-3525	BEARING THRUST 1" ID X 1-1/2 OD X 1/8T	2	473	69126	CARRIER SUPPORT STRIP TIE BAR	4	489	70850	LEG ASSEMBLY 3/4-10 THREAD WIDE UNIT	4
460	5604-5461	BUSHING-FOR CLUTCH SPROCKET #35	1	474	69127	CHAIN RAIL TIE BAR	8	490	70856	SPACER FRAME 17.540	4
461	5604-5463	TORQUE TAMER #35, 1" BORE	1	476	70503	PLATE FRAME TIE	4	491	70857	SPACER FRAME TIE PLATE 17.27 LONG	4
462	5607-3983	GEAR-REDUCER-30:1 LFT.PAINTED	1	477	70517	GUSSET LEG RH	4	492	70858	END PLATE TAKE UP 17.540 WIDE	1
463	5617-5830	SPROCKET-40A45 FOR CLUTCH #35	1	478	70518	GUSSET LEG LH	4	493	70859	SPACER FRAME 17.540 CENTER SUPPORT	2
				479	70531	BRACKET GEARBOX	2	494	70862	STRAP GEARBOX SUPPORT WIDE UNIT	2
				480	70533	SPACER-CHAIN SUPPORT 1.359 LONG	44				

										<div></div> <div>WALKER, MICHIGAN, U.S.A. 49534-7564</div> <div>THIS DRAWING AND ALL PROPRIETARY RIGHTS AND CONCEPTS HEREIN ARE THE EXCLUSIVE PROPERTY OF OLIVER PACKAGING AND EQUIPMENT COMPANY AND ARE NOT TO BE USED, DUPLICATED OR TREATED IN ANY WAY INCONSISTANT WITH SUCH RIGHTS WITHOUT PERMISSION OF OLIVER PACKAGING &amp; EQUIPMENT COMPANY.</div>	NAME <u>FRAME AND DRIVE ASSEMBLY 20'</u>		
											MAT'L <u>SEE CHART</u>		
											MAT'L NO. <u>SEE CHART</u> FINISH _____		
											DRAWN BY <u>V. MATZ</u> DATE <u>6-19-15</u> SCALE <u>1:40</u>		
											REMOVE BURRS & SHARP EDGES DIMENSIONAL TOLERANCES UNLESS SPECIFIED: FRACTIONAL ± 1/64; DECIMAL ± .005; ANGULAR ± 1°		
LTR	CHANGE	DATE	BY	EC NO.	LTR	CHANGE	DATE	BY	EC NO.	DO NOT SCALE THIS DRAWING			

Item Number	Part Number	Description	Qty
497	70869	SPACER CARRIER SUPPORT 3" LONG	14
499	71312	DRIVE SHAFT	1
500	714417	TAKE-UP CHAIN UNIT 10"	2
501	71729	BUSHING-IDLER	1
502	71730	TAKEUP SHAFT WIDE UNIT	1
503	71797	COVER TAKEUP UNIT RH	1
504	71798	COVER TAKEUP UNIT LH	1
505	71799	COVER-INFEED END	1
506	71801	FRAME TAKEUP END FRONT 84"	1
507	71802	FRAME TAKEUP END REAR 84" LONG	1
508	71803	SUPPORT CHAIN ADJUSTABLE	2
509	71804	SPACER-CHAIN SUPPORT .859 LONG	4
510	71805	SPACER CARRIER SUPPORT 2.5" LONG	4
511	71806	STRIP CARRIER SUPPORT ADJUSTABLE	2

Item Number	Part Number	Description	Qty
512	71807	STRIP CARRIER SUPPORT TAKEUP END	2
513	71808	SUPPORT TAKE UP END CHAIN UPPER	2
514	71809	STRIP-WEAR UHMW X 36-1/2" LONG	2
515	71810	STRIP-WEAR UHMW X 30-1/2" LONG	2
516	71843	SUPPORT TAKEUP END CHAIN LOWER	2
517	71844	BRACKET-ADJUSTABLE SUPPORT	2
518	71845	FRAME DRIVE END FRONT 84"	1
519	71846	FRAME DRIVE END REAR 84"	1
520	71847	STRIP CARRIER SUPPORT DRIVE END	2
521	71848	STRIP-WEAR UHMW X 69" LONG	2
522	71849	SUPPORT DRIVE END CHAIN RAIL UPPER	2
523	71850-001	SUPPORT DRIVE END CHAIN RAIL LOWER	2
528	71864	PLATE-END DISCHARGE	1

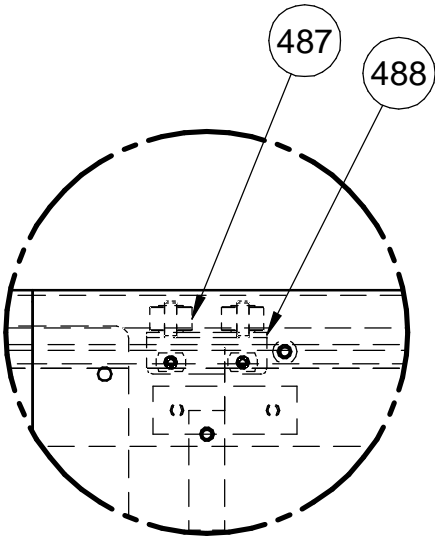
Item Number	Part Number	Description	Qty
534	71857	FRAME CENTER SECTION FRONT 79"	1
535	71858	FRAME CENTER SECTION REAR 79"	1
536	71860	SUPPORT CENTER SECTION CHAIN 79"	4
537	71862	STRIP-CARRIER SUPPORT 79"	2
538	71867	STRIP-WEAR UHMW X 79" LONG	2

										<div></div> <div>WALKER, MICHIGAN, U.S.A. 49534-7564</div> <div>THIS DRAWING AND ALL PROPRIETARY RIGHTS AND CONCEPTS HEREIN ARE THE EXCLUSIVE PROPERTY OF OLIVER PACKAGING AND EQUIPMENT COMPANY AND ARE NOT TO BE USED, DUPLICATED OR TREATED IN ANY WAY INCONSISTANT WITH SUCH RIGHTS WITHOUT PERMISSION OF OLIVER PACKAGING &amp; EQUIPMENT COMPANY.</div>	NAME <u>FRAME AND DRIVE ASSEMBLY 20'</u>		
											MAT'L <u>SEE CHART</u>		
											MAT'L NO. <u>SEE CHART</u> FINISH _____		
											DRAWN BY <u>V. MATZ</u> DATE <u>6-19-15</u> SCALE <u>1:40</u>		
											REMOVE BURRS & SHARP EDGES DIMENSIONAL TOLERANCES UNLESS SPECIFIED: FRACTIONAL $\pm 1/64$ ; DECIMAL $\pm .005$ ; ANGULAR $\pm 1^\circ$		
LTR	CHANGE	DATE	BY	EC NO.	LTR	CHANGE	DATE	BY	EC NO.				

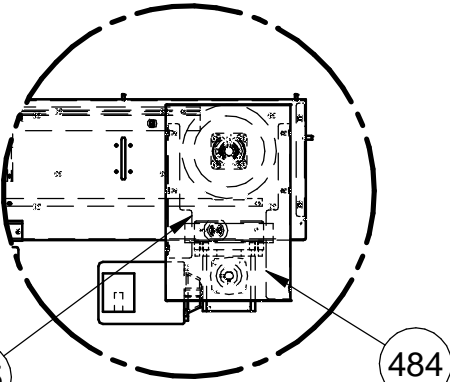
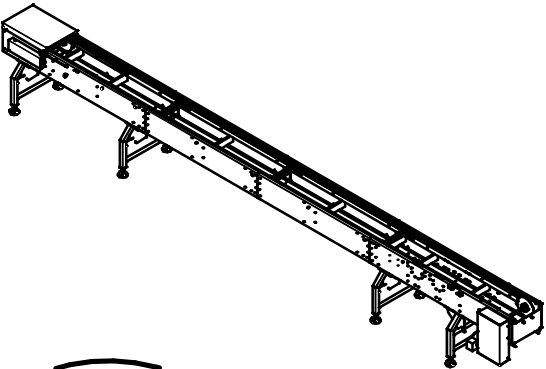
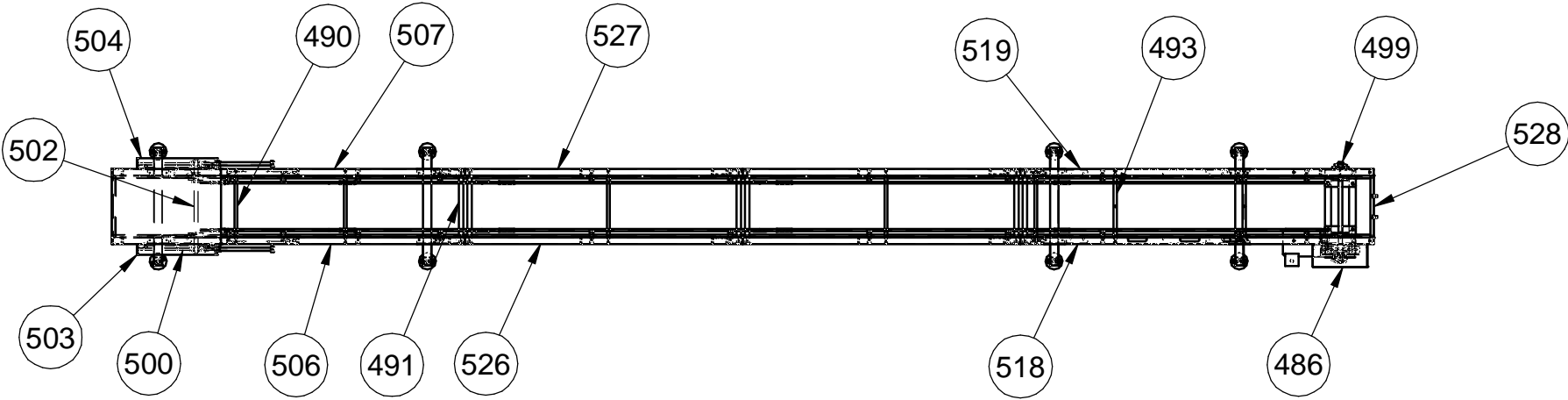
CHANGE

0	TOOL NAME	NUMBER

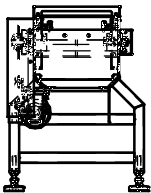
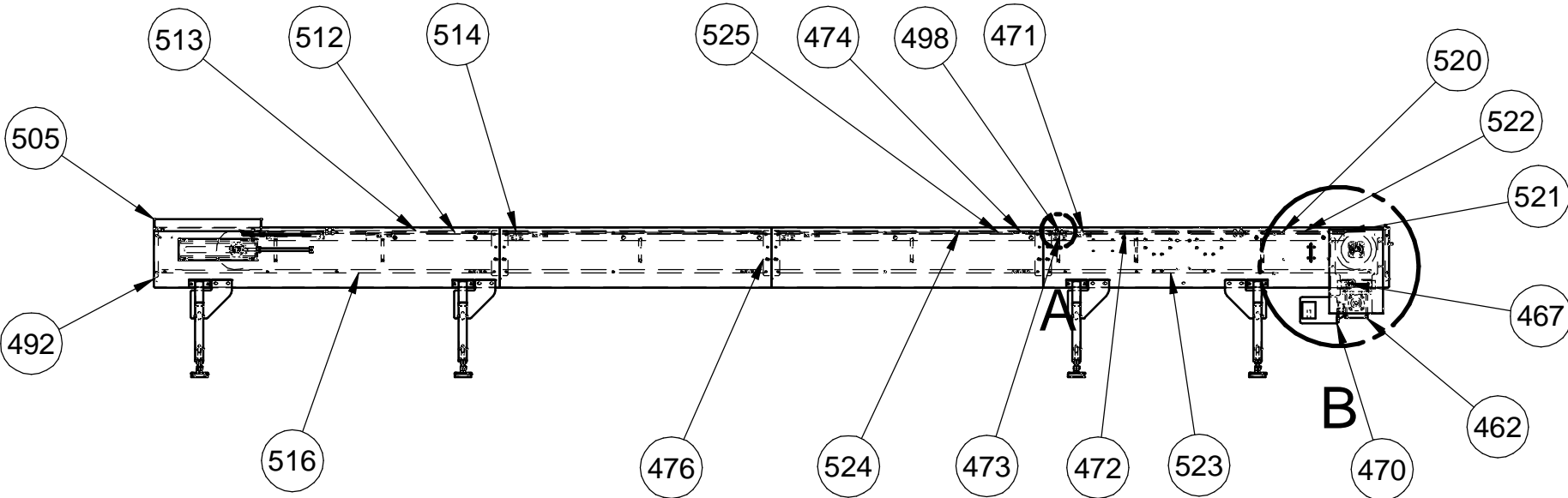
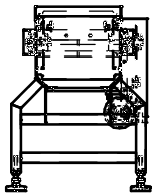
ITEM	PART NUMBER	DESCRIPTION	QUAN.



DETAIL A



DETAIL B



LTR	CHANGE	DATE	BY	EC NO.	LTR	CHANGE	DATE	BY	EC NO.



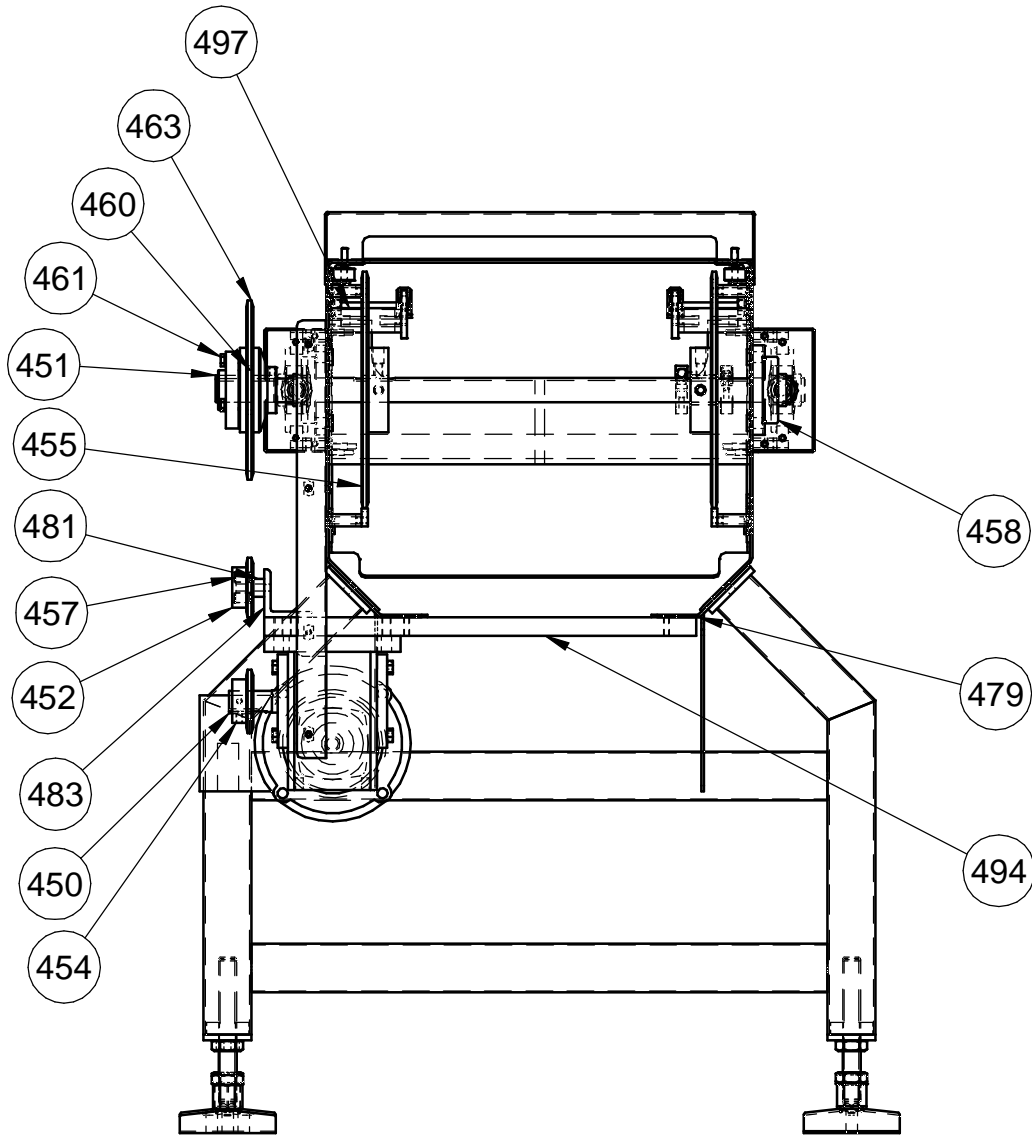
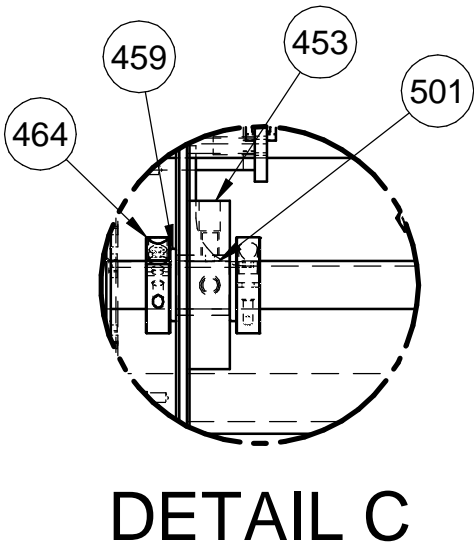
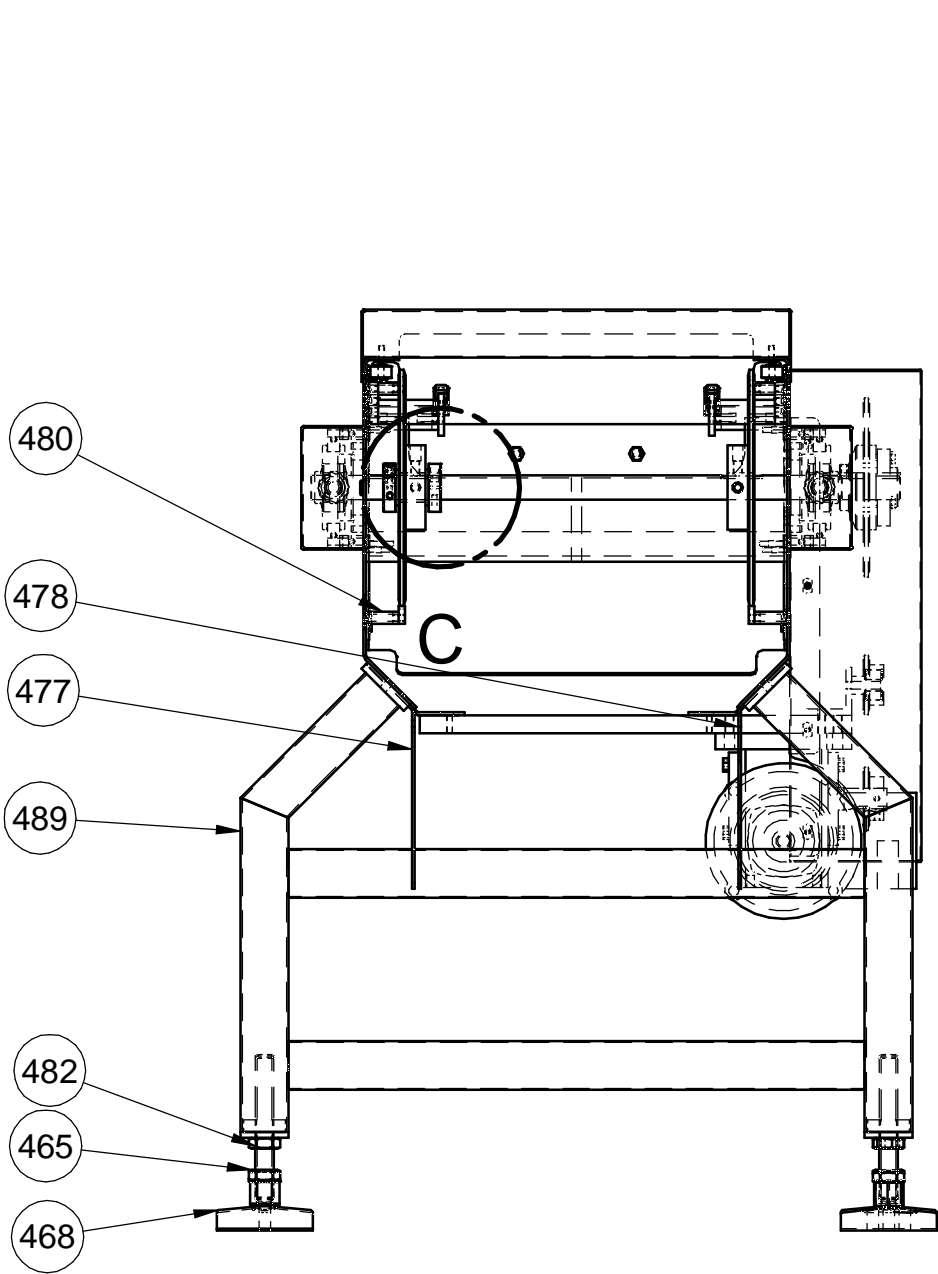
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NAME	FRAME AND DRIVE ASSEMBLY 25'		
MAT'L	SEE CHART		
MAT'L NO.	SEE CHART	FINISH	
DRAWN BY	V. MATZ	DATE	6-19-15
		SCALE	1:40
REMOVE BURRS & SHARP EDGES		DO NOT SCALE THIS DRAWING	
DIMENSIONAL TOLERANCES UNLESS SPECIFIED: FRACTIONAL ± 1/64; DECIMAL ± .005; ANGULAR ± 1°			

0	TOOL NAME	NUMBER

ITEM	PART NUMBER	DESCRIPTION	QUAN.



LTR	CHANGE	DATE	BY	EC NO.	LTR	CHANGE	DATE	BY	EC NO.



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NAME FRAME AND DRIVE ASSEMBLY 25'

MAT'L SEE CHART

MAT'L NO. SEE CHART FINISH \_\_\_\_\_

DRAWN BY V. MATZ DATE 6-19-15 SCALE 1:40

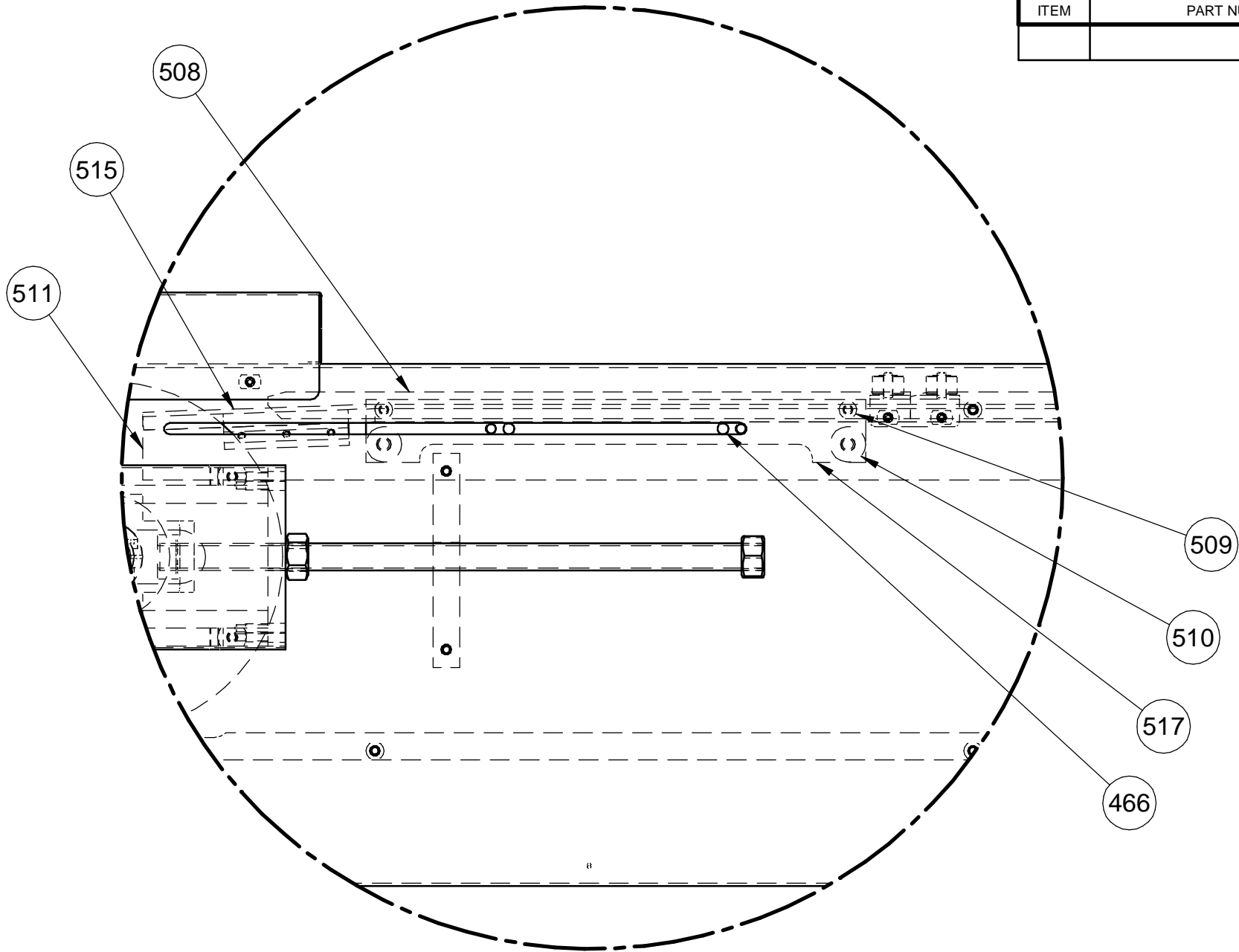
REMOVE BURRS & SHARP EDGES  
DIMENSIONAL TOLERANCES UNLESS SPECIFIED: FRACTIONAL  $\pm 1/64$ ; DECIMAL  $\pm .005$ ; ANGULAR  $\pm 1^\circ$   
DO NOT SCALE THIS DRAWING



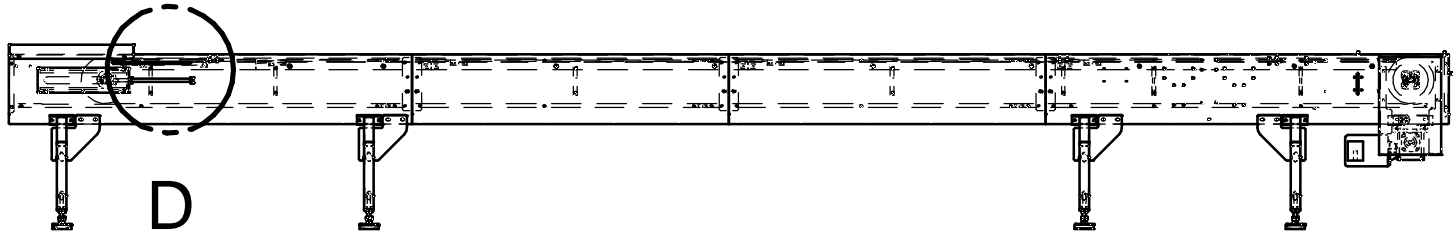
CHANGE

0	TOOL NAME	NUMBER

ITEM	PART NUMBER	DESCRIPTION	QUAN.



DETAIL D



LTR	CHANGE	DATE	BY	EC NO.	LTR	CHANGE	DATE	BY	EC NO.



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NAME

FRAME AND DRIVE ASSEMBLY 25'

MAT'L

SEE CHART

MAT'L NO.

SEE CHART

FINISH

DRAWN BY

V. MATZ

DATE

6-19-15

SCALE

1:40

REMOVE BURRS & SHARP EDGES

DO NOT SCALE THIS DRAWING

DIMENSIONAL TOLERANCES UNLESS SPECIFIED: FRACTIONAL ± 1/64; DECIMAL ± .005; ANGULAR ± 1°

0	TOOL NAME	NUMBER		ITEM	PART NUMBER	DESCRIPTION	QUAN.

Item Number	Part Number	Description	Qty
450	4384-0606-0875	KEY 3/16" SQ X 7/8" LG STST	1
451	4384-0608-225	KEY 1/4"SQ X 2 1/4" STST	1
452	4616-4014-4031	SPROCKET IDLER 40B14 PLATED	1
453	4617-4060-4031	SPROCKET 40B60 1-1/4" PB	1
454	4618-4015-2831	SPROCKET TYPE B HUB F.B. 7/8"	1
455	4618-4060-3232	SPROCKET 40B60 1"FB	3
457	5220-1221	BEARING-BALL DBL ROW 12X32X5/8 2-SEALS	1
458	5251-3763	BEARING FLANGE 4-BOLT 1" BORE	2
459	5254-3525	BEARING THRUST 1" ID X 1-1/2 OD X 1/8T	2
460	5604-5461	BUSHING-FOR CLUTCH SPROCKET #35	1
461	5604-5463	TORQUE TAMER #35, 1" BORE	1
462	5607-3983	GEAR-REDUCER-30:1 LFT.PAINTED	1
463	5617-5830	SPROCKET-40A45 FOR CLUTCH #35	1

Item Number	Part Number	Description	Qty
464	5806-7148	COLLAR-CLAMP 1PC 1"BORE STST	2
465	5832-0507	NUT - HEX JAM 3/4-10NC FIN STST	16
466	5835-6481	PIN-DOWEL 5/16" DIA X 5/8" STST	4
467	5840-1519	RING-RETAINING SPIROLOX #RR-125	2
468	5915-3013	PAD LEVELING SOCKET STYLE 3/4-10 THREAD	8
470	6301-7813	MOTOR AC, 1HP, 56C FRAME STST	1
471	67311	RETAINER CLAMP REAR	10
472*	67312	RETAINER CLAMP FRONT	10
473	69126	CARRIER SUPPORT STRIP TIE BAR	6
474	69127	CHAIN RAIL TIE BAR	12
476	70503	PLATE FRAME TIE	6
477	70517	GUSSET LEG RH	4
478	70518	GUSSET LEG LH	4
479	70531	BRACKET GEARBOX	2
480	70533	SPACER-CHAIN SUPPORT 1.359 LONG	56

Item Number	Part Number	Description	Qty
481	70552	SPACER BEARING ADAPTER	1
482	70667	SCREW LEVELING PAD	8
483	70742	BRACKET ANGLE IDLER SPROCKET	1
484	70743	MOUNTING ANGLE COVER RH	1
485	70745	MOUNTING ANGLE COVER LH	1
486	70747	COVER DRIVE SPROCKET	1
487	70834	WHEEL-GUIDE	8
488	70835	GUIDE-CHAIN	4
489	70850	LEG ASSEMBLY 3/4-10 THREAD WIDE UNIT	4
490	70856	SPACER FRAME 17.540	5
491	70857	SPACER FRAME TIE PLATE 17.27 LONG	6
492	70858	END PLATE TAKE UP 17.540 WIDE	1
493	70859	SPACER FRAME 17.540 CENTER SUPPORT	2
494	70862	STRAP GEARBOX SUPPORT WIDE UNIT	2

LTR	CHANGE	DATE	BY	EC NO.	LTR	CHANGE	DATE	BY	EC NO.



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NAME

FRAME AND DRIVE ASSEMBLY 25'

MAT'L

SEE CHART

MAT'L NO.

SEE CHART

FINISH

DRAWN BY

V. MATZ

DATE

6-19-15

SCALE

1:40

REMOVE BURRS & SHARP EDGES

DO NOT SCALE THIS DRAWING

DIMENSIONAL TOLERANCES UNLESS SPECIFIED: FRACTIONAL ± 1/64; DECIMAL ± .005; ANGULAR ± 1°

0	TOOL NAME	NUMBER		ITEM	PART NUMBER	DESCRIPTION	QUAN.

Item Number	Part Number	Description	Qty
497	70869	SPACER CARRIER SUPPORT 3" LONG	18
498	71201	STRIP-WEAR UHMW X 66" LONG	4
499	71312	DRIVE SHAFT	1
500	714417	TAKE-UP CHAIN UNIT 10"	2
501	71729	BUSHING-IDLER	1
502	71730	TAKEUP SHAFT WIDE UNIT	1
503	71797	COVER TAKEUP UNIT RH	1
504	71798	COVER TAKEUP UNIT LH	1
505	71799	COVER-INFEED END	1
506	71801	FRAME TAKEUP END FRONT 84"	1
507	71802	FRAME TAKEUP END REAR 84" LONG	1
508	71803	SUPPORT CHAIN ADJUSTABLE	2
509	71804	SPACER-CHAIN SUPPORT .859 LONG	4
510	71805	SPACER CARRIER SUPPORT 2.5" LONG	4

Item Number	Part Number	Description	Qty
511	71806	STRIP CARRIER SUPPORT ADJUSTABLE	2
512	71807	STRIP CARRIER SUPPORT TAKEUP END	2
513	71808	SUPPORT TAKE UP END CHAIN UPPER	2
514	71809	STRIP-WEAR UHMW X 36-1/2" LONG	2
515	71810	STRIP-WEAR UHMW X 30-1/2" LONG	2
516	71843	SUPPORT TAKEUP END CHAIN LOWER	2
517	71844	BRACKET-ADJUSTABLE SUPPORT	2
518	71845	FRAME DRIVE END FRONT 84"	1
519	71846	FRAME DRIVE END REAR 84"	1
520	71847	STRIP CARRIER SUPPORT DRIVE END	2
521	71848	STRIP-WEAR UHMW X 69" LONG	2
522	71849	SUPPORT DRIVE END CHAIN RAIL UPPER	2
523	71850-001	SUPPORT DRIVE END CHAIN RAIL LOWER	2

Item Number	Part Number	Description	Qty
524	71851	SUPPORT CENTER SECTION CHAIN 66"	8
525	71852	STRIP-CARRIER SUPPORT 66"	4
526	71853	FRAME CENTER SECTION FRONT 66"	2
527	71854	FRAME CENTER SECTION REAR 66"	2
528	71864	PLATE-END DISCHARGE	1

LTR	CHANGE	DATE	BY	EC NO.	LTR	CHANGE	DATE	BY	EC NO.



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NAME

FRAME AND DRIVE ASSEMBLY 25'

MAT'L

SEE CHART

MAT'L NO.

SEE CHART

FINISH

DRAWN BY

V. MATZ

DATE

6-19-15

SCALE

1:40

REMOVE BURRS & SHARP EDGES

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DIMENSIONAL TOLERANCES UNLESS SPECIFIED: FRACTIONAL ± 1/64; DECIMAL ± .005; ANGULAR ± 1°

CHANGE

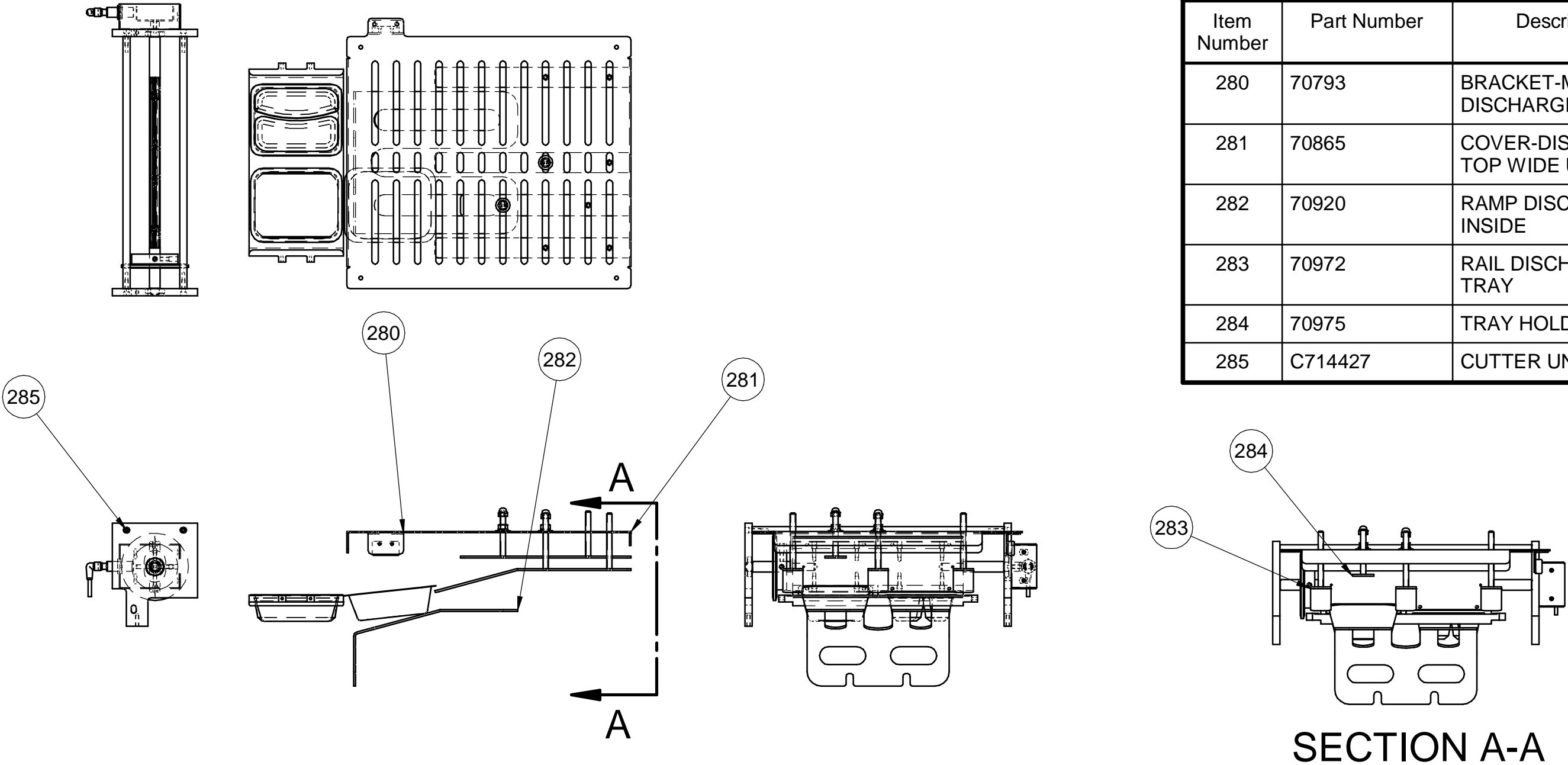
C

C714452

0	TOOL NAME	NUMBER

ITEM	PART NUMBER	DESCRIPTION	QUAN.

Item Number	Part Number	Description	Qty
280	70793	BRACKET-MAGNET DISCHARGE	1
281	70865	COVER-DISCHARGE TOP WIDE UNIT	1
282	70920	RAMP DISCHARGE INSIDE	1
283	70972	RAIL DISCHARGE TRAY	3
284	70975	TRAY HOLD DOWN	1
285	C714427	CUTTER UNIT 7" CO	1



REF. C714251

LTR	CHANGE	DATE	BY	EC NO.	LTR	CHANGE	DATE	BY	EC NO.



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NAME

CHANGEOVER PARTS 7" CO SLT 16'

MAT'L

SEE LIST

MAT'L NO.

SEE LIST

FINISH

DRAWN BY

V. MATZ

DATE

6-19-15

SCALE

1/8

REMOVE BURRS & SHARP EDGES

DO NOT SCALE THIS DRAWING

DIMENSIONAL TOLERANCES UNLESS SPECIFIED: FRACTIONAL ± 1/64; DECIMAL ± .005; ANGULAR ± 1°

CHANGE

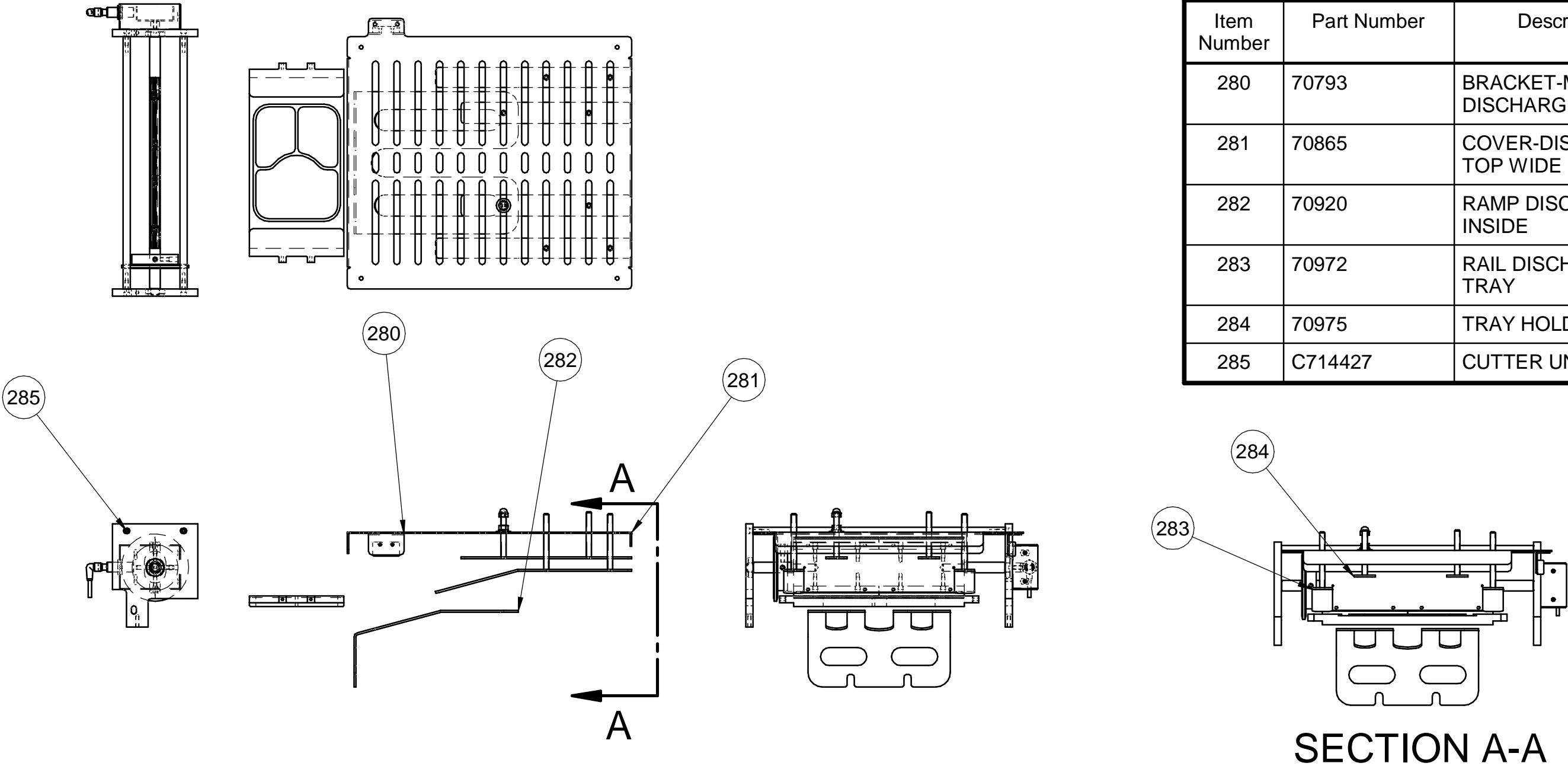
C

C714454

0	TOOL NAME	NUMBER

ITEM	PART NUMBER	DESCRIPTION	QUAN.

Item Number	Part Number	Description	Qty
280	70793	BRACKET-MAGNET DISCHARGE	1
281	70865	COVER-DISCHARGE TOP WIDE UNIT	1
282	70920	RAMP DISCHARGE INSIDE	1
283	70972	RAIL DISCHARGE TRAY	2
284	70975	TRAY HOLD DOWN	2
285	C714427	CUTTER UNIT 7" CO	1



SECTION A-A

REF. C714251

LTR	CHANGE	DATE	BY	EC NO.	LTR	CHANGE	DATE	BY	EC NO.



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NAME

CHANGEOVER PARTS 7" CO 3-COMP 16'

MAT'L

SEE LIST

MAT'L NO.

SEE LIST

FINISH

DRAWN BY

V. MATZ

DATE

6-19-15

SCALE

1/8

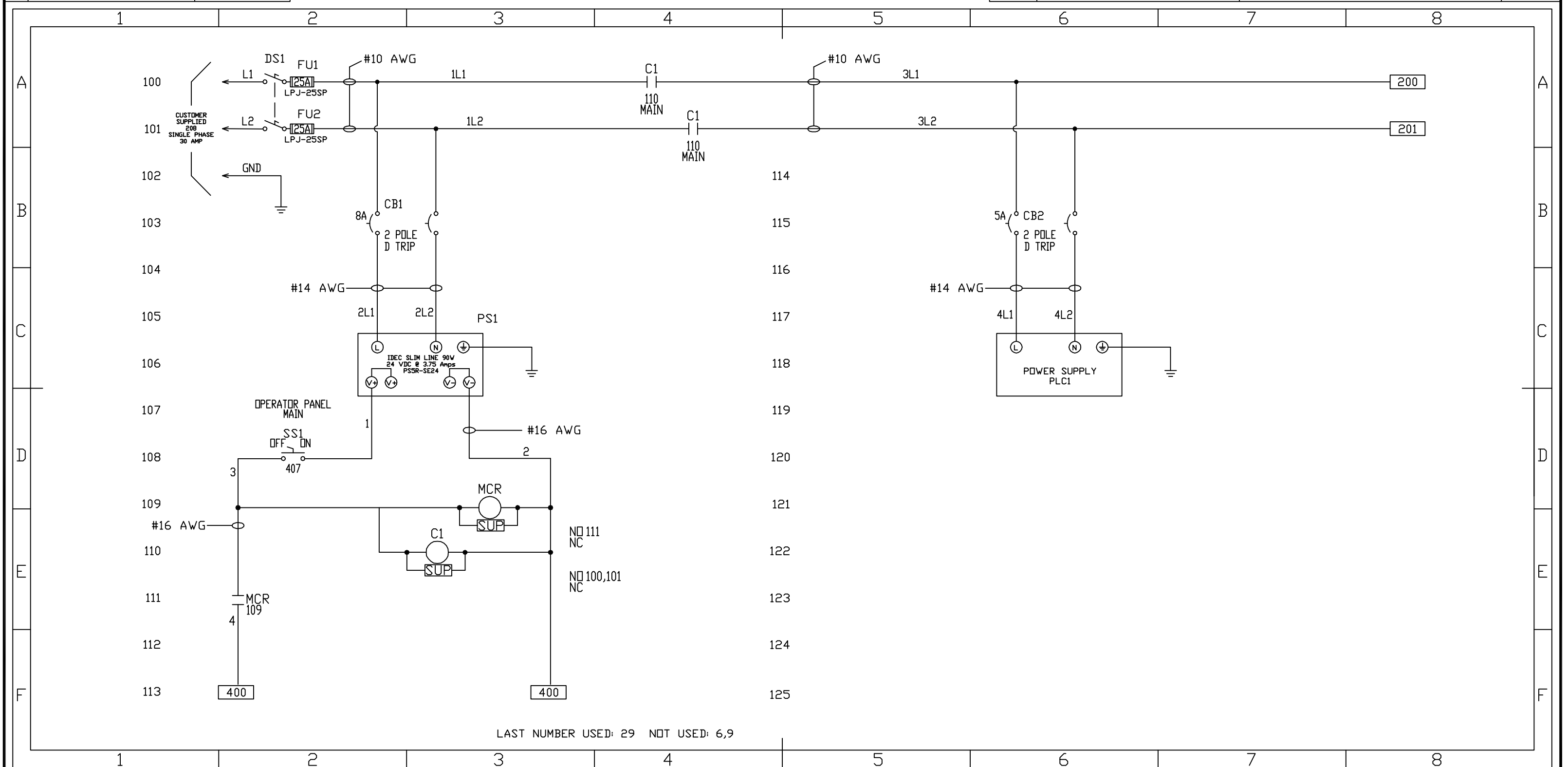
REMOVE BURRS & SHARP EDGES

DO NOT SCALE THIS DRAWING

DIMENSIONAL TOLERANCES UNLESS SPECIFIED: FRACTIONAL ± 1/64; DECIMAL ± .005; ANGULAR ± 1°

CHANGE C C 7 1 4 4 3 8 - 1

0	TOOL NAME	NUMBER		ITEM	PART NUMBER	DESCRIPTION	QUAN.



LTR	CHANGE	DATE	BY	EC NO.	LTR	CHANGE	DATE	BY	EC NO.	



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NAME ELECTRICAL CONTROLS 1/50-60/208-240

MAT'L SEE LIST

MAT'L NO. SEE LIST FINISH \_\_\_\_\_

DRAWN BY V. MATZ DATE 5-7-15 SCALE NONE

REMOVE BURRS & SHARP EDGES  
DIMENSIONAL TOLERANCES UNLESS SPECIFIED: FRACTIONAL  $\pm 1/64$ ; DECIMAL  $\pm .005$ ; ANGULAR  $\pm 1^\circ$

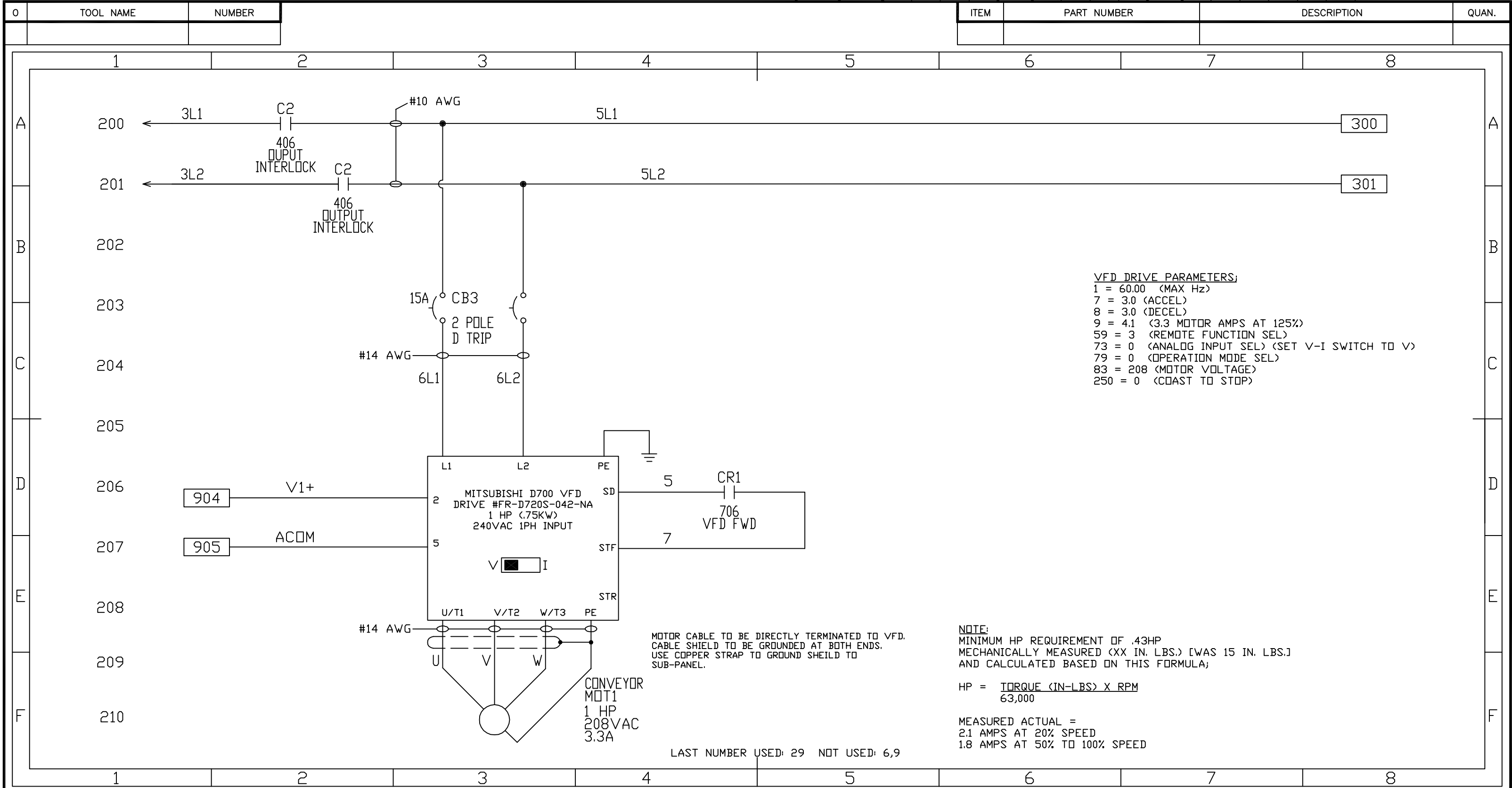


Diagram illustrating the electrical wiring for a heatseal roll system, divided into two identical sections (left and right).


**Left Section (Columns 1-4):**

- Power Supply:** 5L1, 5L2 (Main supply lines).
- Protection:** 10A CB4 (2 POLE C TRIP) protecting the 5L2 line.
- Control:** 7L1, 7L2 (Control lines).
- Relays:** SSR1, SSR2 (SOLID STATE RELAY 20A).
- Heaters:** HEATSEAL ROLL 1 (QTY 6, 300 WATT@240V CARTRIDGE HEATERS ( 226 WATTS EA. @208V ) 6.5 AMPS AT 208V).
- Temperature Sensing:** TYPE J T/C (Thermocouple) connected to the heaters.
- Slip Ring:** SLR1 (SLIP RING) connected to the heaters.
- Wiring:** #14 AWG, #10 AWG, and #14 AWG are used for various connections.
- Labels:** 7L11, 7L12, 7L1, 7L2, 7L1, 7L2, 7L1, 7L2, 7L1, 7L2, 7L1, 7L2.

**Right Section (Columns 5-8):**

- Power Supply:** 5L1, 5L2 (Main supply lines).
- Protection:** 10A CB5 (2 POLE C TRIP) protecting the 5L2 line.
- Control:** 8L1, 8L2 (Control lines).
- Relays:** SSR3, SSR4 (SOLID STATE RELAY 20A).
- Heaters:** HEATSEAL ROLL 2 (QTY 6, 300 WATT@240V CARTRIDGE HEATERS ( 226 WATTS EA. @208V ) 6.5 AMPS AT 208V).
- Temperature Sensing:** TYPE J T/C (Thermocouple) connected to the heaters.
- Slip Ring:** SLR2 (SLIP RING) connected to the heaters.
- Wiring:** #14 AWG, #10 AWG, and #14 AWG are used for various connections.
- Labels:** 8L11, 8L12, 8L1, 8L2, 8L1, 8L2, 8L1, 8L2, 8L1, 8L2, 8L1, 8L2.

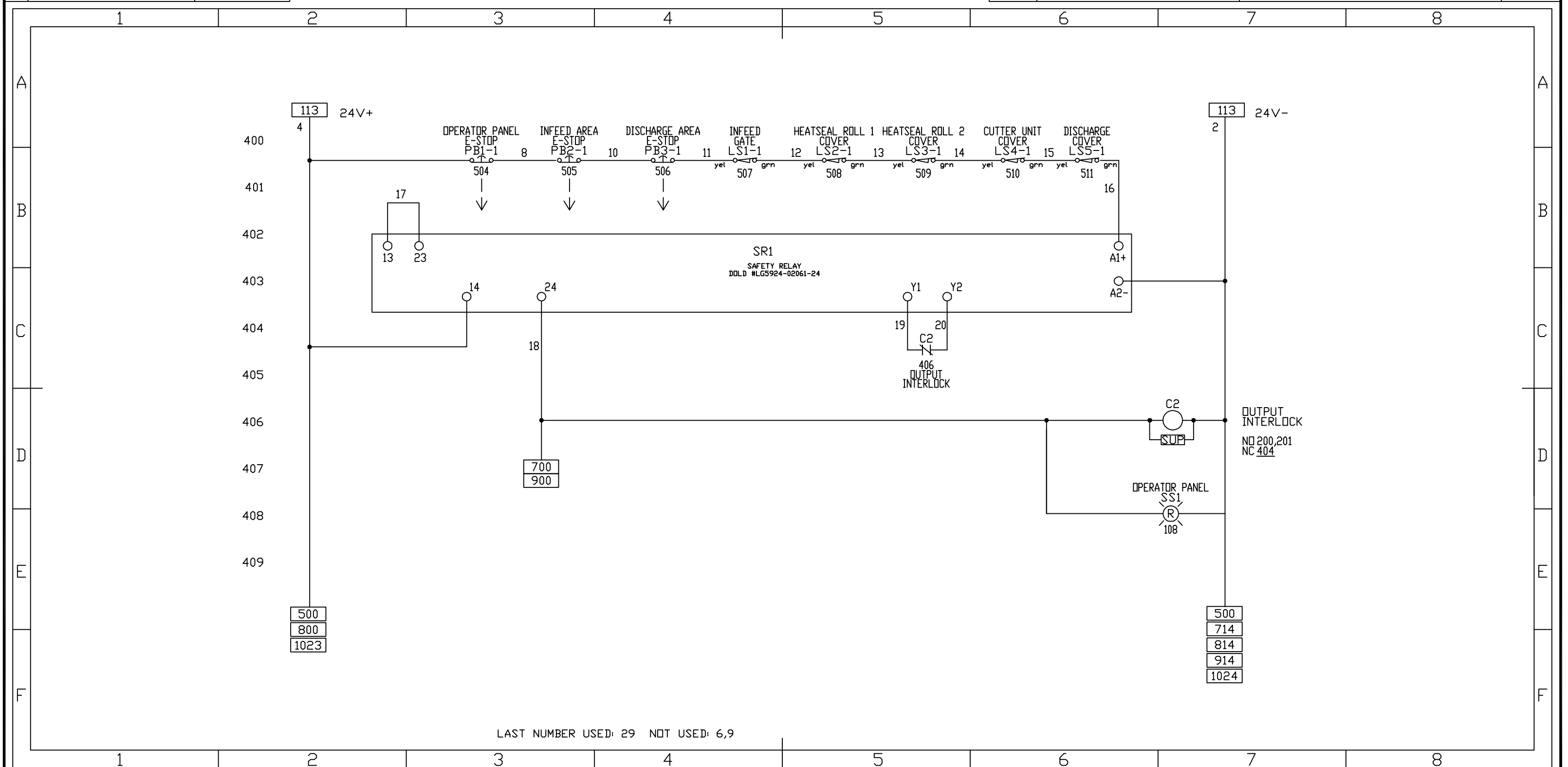
**Legend:** LAST NUMBER USED: 29 NOT USED: 6,9

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											MAT'L <u>SEE LIST</u>
											MAT'L NO. <u>SEE LIST</u> FINISH _____
											DRAWN BY <u>V. MATZ</u> DATE <u>5-7-15</u> SCALE <u>NONE</u>
LTR	CHANGE	DATE	BY	EC NO.	LTR	CHANGE	DATE	BY	EC NO.		REMOVE BURRS & SHARP EDGES DIMENSIONAL TOLERANCES UNLESS SPECIFIED: FRACTIONAL $\pm 1/64$ ; DECIMAL $\pm .005$ ; ANGULAR $\pm 1'$



CHANGE C C 7 1 4 4 3 8 - 4

0	TOOL NAME	NUMBER	ITEM	PART NUMBER	DESCRIPTION	QUAN.



LTR	CHANGE	DATE	BY	EC NO.	LTR	CHANGE	DATE	BY	EC NO.	



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NAME ELECTRICAL CONTROLS 1/50-60/208-240  
MAT'L SEE LIST  
MAT'L NO. SEE LIST FINISH \_\_\_\_\_  
DRAWN BY V. MATZ DATE 5-7-15 SCALE \_\_\_\_\_

REMOVE BURRS & SHARP EDGES  
DIMENSIONAL TOLERANCES UNLESS SPECIFIED: FRACTIONAL  $\pm 1/64$ ; DECIMAL  $\pm .005$ ; ANGULAR  $\pm 1^\circ$

CC714438-5

Diagram illustrating the wiring connections for a PLC1 16PT DC INPUT module, showing connections to various sensors and switches.

**PLC1 16PT DC INPUT**

**Wiring Connections:**

- Terminal 409 (24V+):** Connected to the positive supply.
- Terminal 514 (24V-):** Connected to the negative supply.
- Terminal 513 (24V+):** Connected to the positive supply.
- Terminal 514 (24V-):** Connected to the negative supply.

**Sensors and Switches:**

- DI-1/1:** OPERATOR PANEL E-STOP PB1-2 (400)
- DI-1/2:** INFEEED AREA E-STOP PB2-2 (400)
- DI-1/3:** DISCHARGE AREA E-STOP PB3-2 (400)
- DI-1/4:** INFEEED GATE LS1-2 (400)
- DI-1/5:** HS ROLL 1 COVER LS2-2 (400)
- DI-1/6:** HS ROLL 2 COVER LS3-2 (400)
- DI-1/7:** CUTTER UNIT COVER LS4-2 (400)
- DI-1/8:** DISCHARGE COVER LS5-2 (400)
- DI-1/9:** CUTTER UNIT PRS1 (brn)
- DI-1/10:** FILM DETECT FRONT PE1 (blk)
- DI-1/11:** FILM DETECT REAR PE2 (brn)
- DI-1/12:** SPARE
- DI-1/13:** SPARE
- DI-1/14:** SPARE
- DI-1/15:** SPARE
- DI-1/16:** SPARE

**Wiring Details:**


- Wires are color-coded: brn (brown), blk (black), blu (blue), red (red).
- Wires are labeled with terminal numbers (409, 513, 514) and sensor/switch identifiers.

**Legend:**

- DI-1/1 to DI-1/16: Digital Input channels.
- SPARE: Unused input channels.


**Notes:**

- LAST NUMBER USED: 29
- NOT USED: 6,9

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											MAT'L <u>SEE LIST</u>
											MAT'L NO. <u>SEE LIST</u> FINISH _____
											DRAWN BY <u>V. MATZ</u> DATE <u>5-7-15</u> SCALE _____
											REMOVE BURRS & SHARP EDGES DO NOT SCALE THIS DRAWING DIMENSIONAL TOLERANCES UNLESS SPECIFIED: FRACTIONAL $\pm 1/64$ ; DECIMAL $\pm .005$ ; ANGULAR $\pm 1^\circ$
LTR	CHANGE	DATE	BY	EC NO.	LTR	CHANGE	DATE	BY	EC NO.		

CHANGE C C 7 1 4 4 3 8 - 6

	1	2	3	4	5	6	7	8
A	600		PLC1 SLOT2 8PT THERMOCOUPLE INPUT		614			A
	601				615			
B	602				616			B
	603	HEATSEAL ROLL 1 TYPE J T/C	307 WHT	1 TC1+ AI2.1	617	SPARE	10 TC5+ AI2.5	
	604		308 RED	2 TC1- AI2.2	618		11 TC5- AI2.6	
C	605	HEATSEAL ROLL 2 TYPE J T/C	319 WHT	3 TC2+ AI2.3	619	SPARE	12 TC6+ AI2.7	C
	606		320 RED	4 TC2- AI2.4	620		13 TC6- AI2.8	
	607			5 NC	621		14 NC	
D	608		SPARE	6 TC3+ AI2.3	622	SPARE	15 TC7+ AI2.7	D
	609			7 TC3- AI2.4	623		16 TC7- AI2.8	
E	610		SPARE	8 TC4+ AI2.4	624	SPARE	17 TC8+ AI2.8	E
	611			9 TC4- AI2.4	625		18 TC8- AI2.8	
F	612				626			F
	613				627			
			LAST NUMBER USED: 29 NOT USED: 6,9					

										 <p>GRAND RAPIDS, MICHIGAN, U.S.A. 49504-5298</p> <p>THIS DRAWING AND ALL PROPRIETARY RIGHTS AND CONCEPTS HEREIN ARE THE EXCLUSIVE PROPERTY OF OLIVER PRODUCTS COMPANY AND ARE NOT TO BE USED, DUPLICATED OR TREATED IN ANY WAY INCONSISTANT WITH SUCH RIGHTS WITHOUT PERMISSION OF OLIVER PRODUCTS COMPANY.</p>	NAME <u>ELECTRICAL CONTROLS 1/50-60/208-240</u>
											MAT'L <u>SEE LIST</u>
											MAT'L NO. <u>SEE LIST</u> FINISH _____
											DRAWN BY <u>V. MATZ</u> DATE <u>5-7-15</u> SCALE _____
LTR	CHANGE	DATE	BY	EC NO.	LTR	CHANGE	DATE	BY	EC NO.		REMOVE BURRS & SHARP EDGES DIMENSIONAL TOLERANCES UNLESS SPECIFIED: FRACTIONAL $\pm 1/64$ ; DECIMAL $\pm .005$ ; ANGULAR $\pm 1^\circ$

CHANGE C C 7 1 4 4 3 8 - 7

[illegible]

GRAND RAPIDS, MICHIGAN, U.S.A. 49504-5298

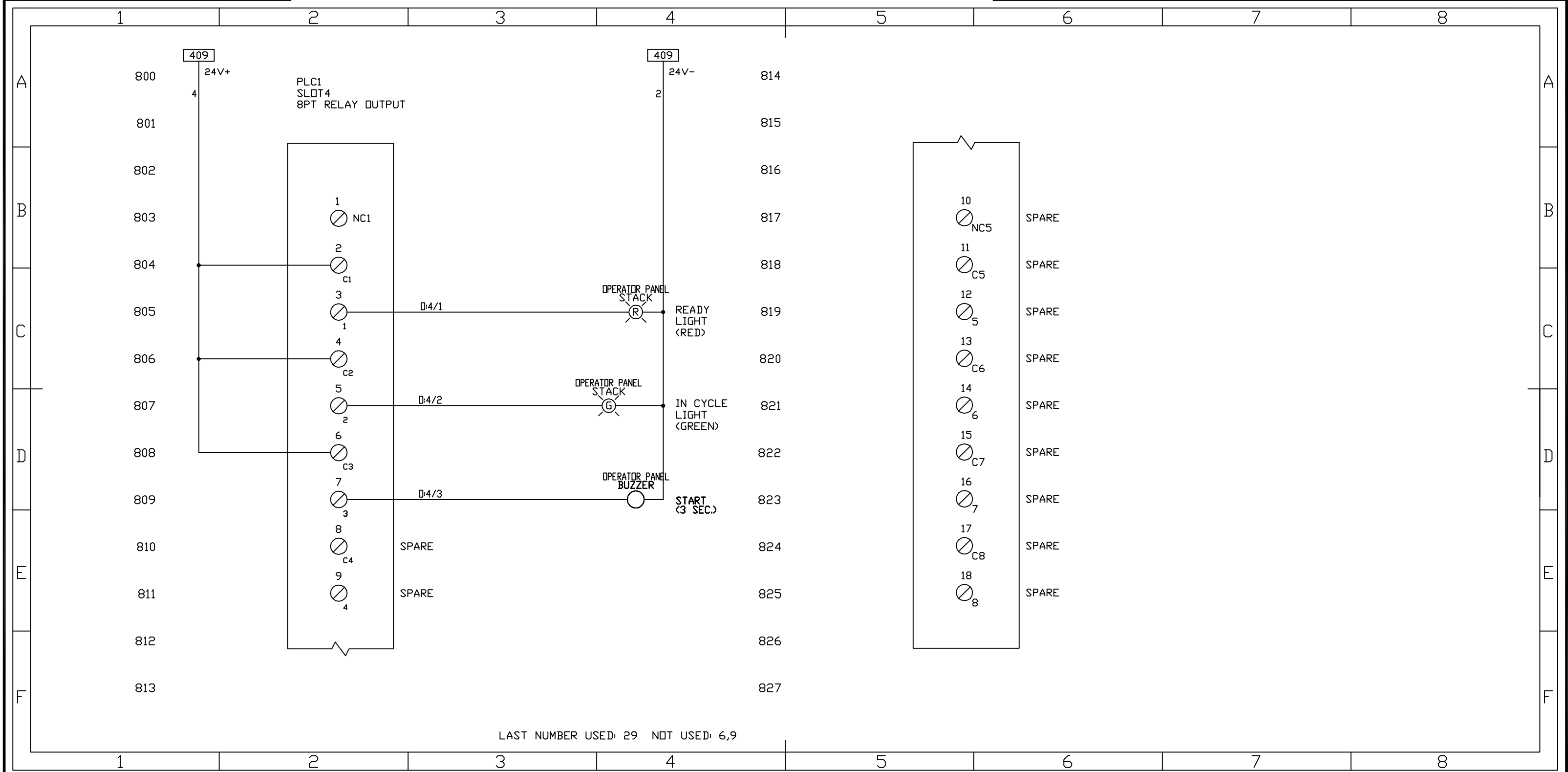
THIS DRAWING AND ALL PROPRIETARY RIGHTS AND CONCEPTS HEREIN ARE THE EXCLUSIVE PROPERTY OF OLIVER PRODUCTS COMPANY AND ARE NOT TO BE USED, DUPLICATED OR TREATED IN ANY WAY INCONSISTANT WITH SUCH RIGHTS WITHOUT PERMISSION OF OLIVER PRODUCTS COMPANY.




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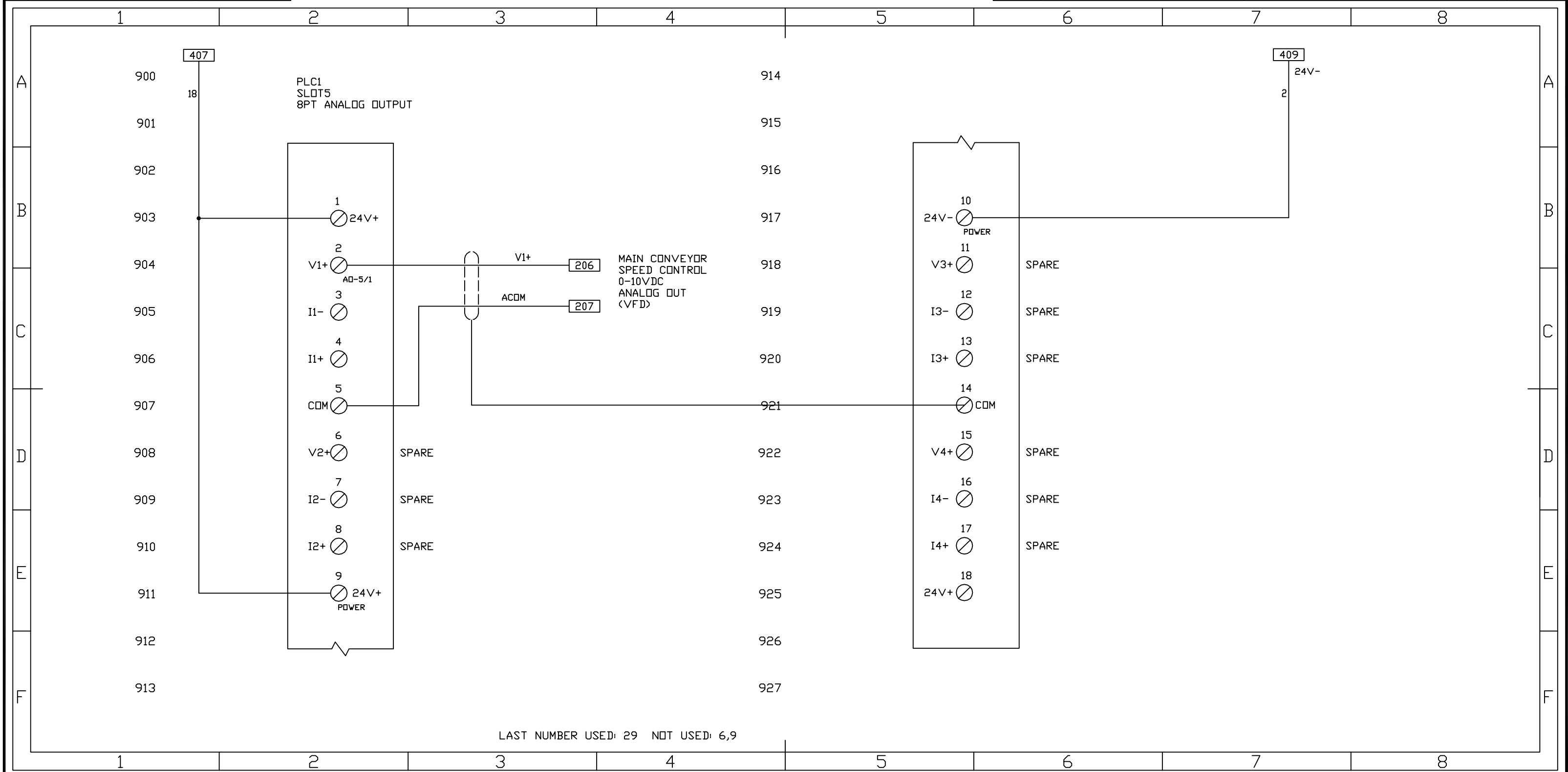
REMOVE BURRS & SHARP EDGES  
DIMENSIONAL TOLERANCES UNLESS SPECIFIED: FRACTIONAL  $\pm 1/64$ ; DECIMAL  $\pm .005$ ; ANGULAR  $\pm 1^\circ$


0	TOOL NAME	NUMBER	ITEM	PART NUMBER	DESCRIPTION	QUAN.



										<div></div> <div>GRAND RAPIDS, MICHIGAN, U.S.A. 49504-5298</div> <div>THIS DRAWING AND ALL PROPRIETARY RIGHTS AND CONCEPTS HEREIN ARE THE EXCLUSIVE PROPERTY OF OLIVER PRODUCTS COMPANY AND ARE NOT TO BE USED, DUPLICATED OR TREATED IN ANY WAY INCONSISTANT WITH SUCH RIGHTS WITHOUT PERMISSION OF OLIVER PRODUCTS COMPANY.</div>	NAME <u>ELECTRICAL CONTROLS 1/50-60/208-240</u>
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LTR	CHANGE	DATE	BY	EC NO.	LTR	CHANGE	DATE	BY	EC NO.	DO NOT SCALE THIS DRAWING	

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LTR	CHANGE	DATE	BY	EC NO.	LTR	CHANGE	DATE	BY	EC NO.	DO NOT SCALE THIS DRAWING

CC714438-10

**OPERATOR TOUCH SCREEN**  
AUTOMATIONDIRECT  
EA9-T6CL-R

**COMMUNICATIONS CABLE:**  
AUTOMATIONDIRECT  
EA-2CBL

**15-PIN D-SUB (MALE)**

**RJ12 6-PIN PHONE PLUG**

**FOR PROGRAMMING ONLY;**  
PLC ETHERNET ADDRESS - 192.168.210.1  
PLC SUBNET MASK - 255.255.255.0

**LAST NUMBER USED: 29 NOT USED: 6,9**

GRAND RAPIDS, MICHIGAN, U.S.A. 49504-5298

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NAME ELECTRICAL CONTROLS 1/50-60/208-240

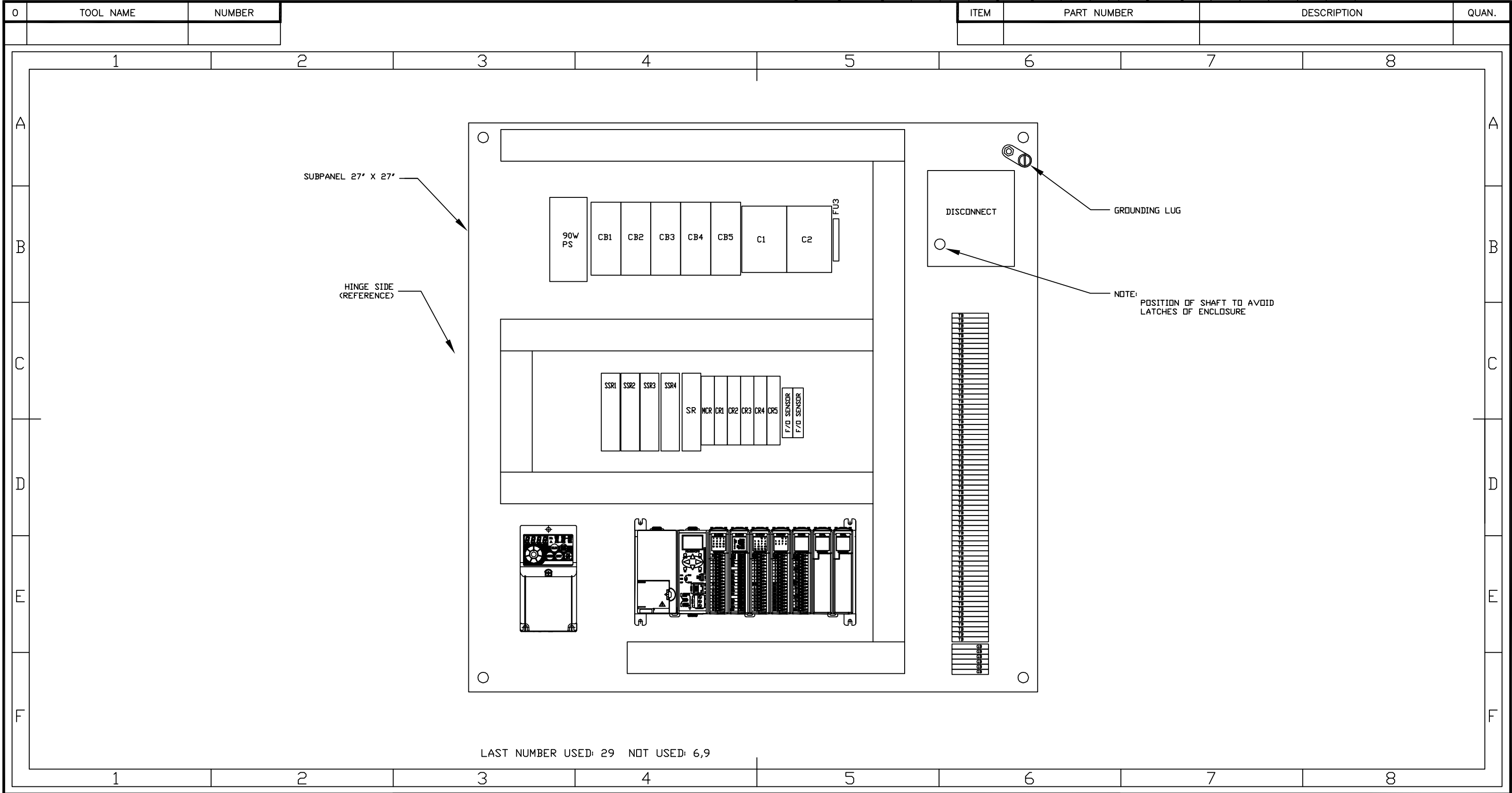
MAT'L SEE LIST


MAT'L NO. SEE LIST FINISH \_\_\_\_\_

DRAWN BY V. MATZ DATE 5-7-15 SCALE \_\_\_\_\_

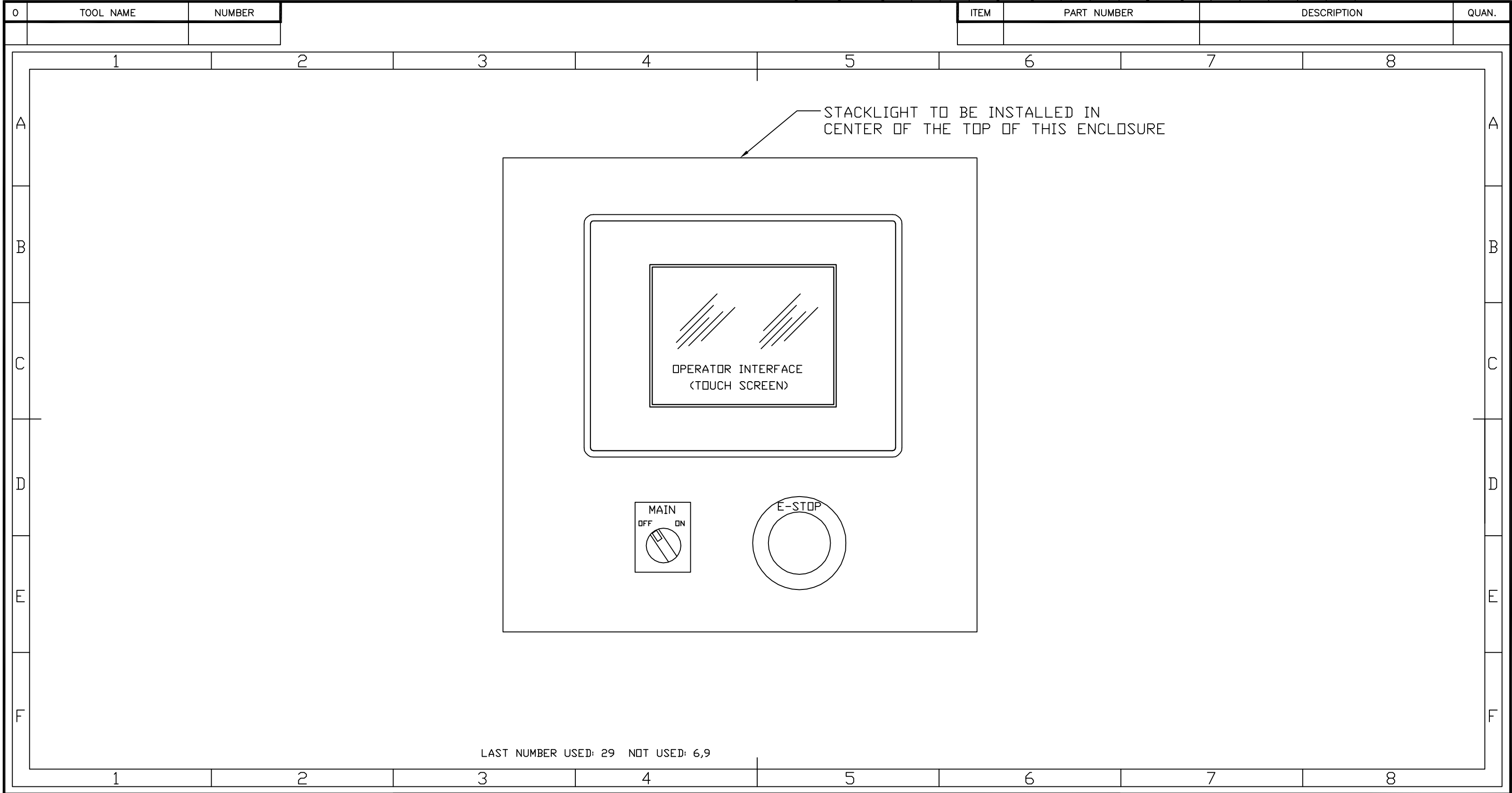
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LTR	CHANGE	DATE	BY	EC NO.	LTR	CHANGE	DATE	BY	EC NO.	DO NOT SCALE THIS DRAWING	

## WARRANTY

### PARTS

Oliver Packaging & Equipment Company warrants that if any part of the equipment (other than a part not manufactured by Oliver) proves to be defective (as defined below) within one year after shipment, and if Buyer returns the defective part to Oliver Packaging & Equipment within one year, Freight Prepaid to Oliver Packaging & Equipment's plant in Grand Rapids, MI, then Oliver Packaging & Equipment, shall, at Oliver Packaging & Equipment's option, either repair or replace the defective part, at Oliver Packaging & Equipment's expense.

### LABOR

Oliver Packaging & Equipment further warrants that equipment properly installed in accordance with our special instructions, which proves to be defective in material or workmanship under normal use within one year from installation or one year and three (3) months from actual shipment date, whichever date comes first, will be repaired by Oliver Packaging & Equipment or an Oliver Packaging & Equipment Authorized Service Dealer, in accordance with Oliver Packaging & Equipment's published Service Schedule.

For purposes of this warranty, a defective part or defective equipment is a part or equipment which is found by Oliver Packaging & Equipment to have been defective in materials workmanship, if the defect materially impairs the value of the equipment to Buyer. Oliver Packaging & Equipment has no obligation as to parts or components not manufactured by Oliver Packaging & Equipment, but Oliver Packaging & Equipment assigns to Buyer any warranties made to Oliver Packaging & Equipment by the manufacturer thereof.

This warranty **does not** apply to:

1. Damage caused by shipping or accident.
2. Damage resulting from improper installation or alteration.
3. Equipment misused, abused, altered, not maintained on a regular basis, operated carelessly, or used in abnormal conditions.
4. Equipment used in conjunction with products of other manufacturers unless such use is approved by Oliver Packaging & Equipment in writing.
5. Periodic maintenance of equipment, including but not limited to lubrication, replacement of wear items, and other adjustments required due to installation, set up, or normal wear.
6. Losses or damage resulting from malfunction.

The foregoing warranty is in lieu of all other warranties expressed or implied AND OLIVER PACKAGING & EQUIPMENT MAKES NO WARRANTY OF MERCHANTABILITY OR FITNESS FOR PURPOSE REGARDING THE EQUIPMENT COVERED BY THIS WARRANTY. Oliver Packaging & Equipment neither assumes nor authorizes any person to assume for it any other obligations or liability in connection with said equipment. OLIVER PACKAGING & EQUIPMENT SHALL NOT BE LIABLE FOR LOSS OF TIME, INCONVENIENCE, COMMERCIAL LOSS, INCIDENTAL OR CONSEQUENTIAL DAMAGES.



Oliver Packaging & Equipment Company  
3236 Wilson Drive NW, Walker, MI 49534  
(800) 253-3893

## **WARRANTY PROCEDURE**

1. If a problem should occur, either the dealer or the end user must contact the Parts and Service Department and explain the problem.
2. The Parts and Service Manager will determine if the warranty will apply to this particular problem.
3. If the Parts and Service Manager approves, a Work Authorization Number will be generated, and the appropriate service agency will perform the service.
4. The service dealer will then complete an invoice and send it to the Parts and Service Department at Oliver Packaging & Equipment Company.
5. The Parts and Service Manager of Oliver Packaging and Equipment Company will review the invoice and returned parts, if applicable, and approve for payment.



Oliver Packaging & Equipment Company  
3236 Wilson Drive NW, Walker, MI 49534  
(800) 253-3893

## RETURNED PARTS POLICY

This policy applies to all parts returned to the factory whether for warranted credit, replacement, repair or re-stocking.

Oliver Packaging and Equipment Company requires that the customer obtain a Return Material Authorization (RMA) number before returning any part. This number should appear on the shipping label and inside the shipping carton as well. All parts are to be returned prepaid. Following this procedure will insure prompt handling of all returned parts.

To obtain an RMA number contact the Repair Parts Department toll free at (800) 253-3893.

Parts returned for re-stocking are subject to a **RE-STOCKING CHARGE**.

Thank you for your cooperation,

Repair Parts Manager  
Oliver Packaging and Equipment Company