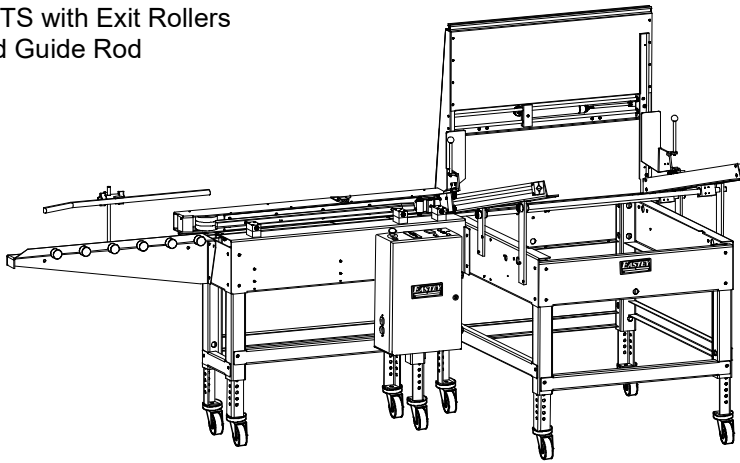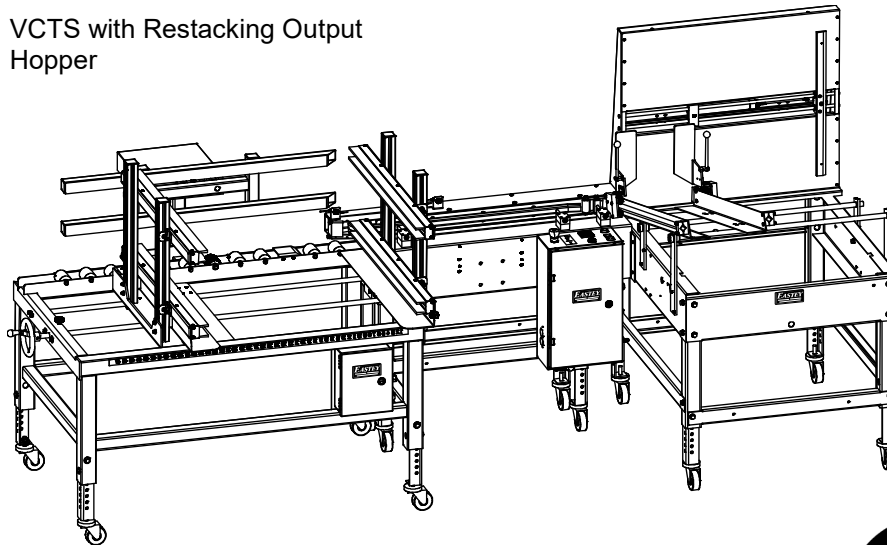# Vertical Case Transport System VCTS & Vertical Case Transport System VCTS-XL

User Guide

VCTS with Exit Rollers
and Guide Rod

VCTS with Restacking Output
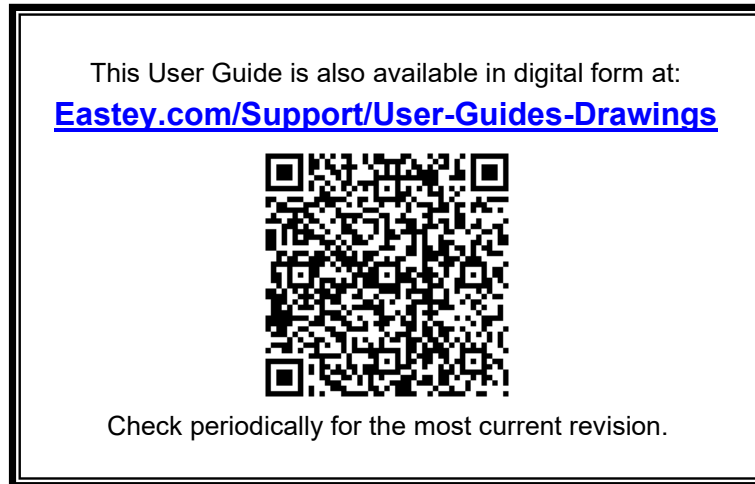Hopper

EASTEY®

Vertical Case Transport System VCTS & Vertical Case Transport System VCTS-XL

User Guide

This User Guide is also available in digital form at:
Eastey.com/Support/User-Guides-Drawings

Check periodically for the most current revision.

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PN 5001688 Rev K

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www.eastey.com

Contents

We Help Companies Deliver Products to the World

Thank you for choosing the Eastey Vertical Case Transport System for your case handling needs. Eastey is part of Engage Technologies, an ISO 9001-2015 certified company that has steadily built a solid reputation for quality since 1979. Engage is known for providing rugged, durable, reliable packaging equipment to help companies deliver their products to the world.

Each Engage Technologies company – Squid Ink, Eastey, and American Film & Machinery (AFM), focuses on a different part of the packaging section of the production line.

ENGAGE *technologies corporation*

Squid Ink (www.SquidInk.com)
Coding and marking equipment, inks, and fluids for product identification and traceability

Eastey (www.Eastey.com)
Automated shrink wrapping and bundling, automated case sealing, case erecting and product handling

AFM (www.AFMSleeves.com)
Automated shrink sleeve labeling equipment, tamper-evident banding equipment, shrink tunnels and shrink sleeve consumables

When you purchase your packaging equipment from the Engage Technologies family of companies, you can feel confident that you have a machine that is first in quality and built to last. Thank you for choosing us for your packaging needs.

This User Guide is available online

This User Guide is also available from the Eastey Support Website in electronic format for web browsers and e-readers. Go to Eastey.com/Support/User-Guides-Drawings to see available User Guides, or scan the QR Code at right using the camera app on your mobile device to go directly to the online version of this User Guide.

Safety

Read this manual carefully and make it available to everyone connected with the supervision, maintenance, or operation of this machine. Additional copies are available on request (Eastey.com/contact-us).

The development of a good safety program that is rigidly enforced is absolutely imperative when involved in the operation of industrial equipment. Our machinery is well designed and includes extremely important safety features. However, proper installation, regular maintenance, and safe operation procedures are of far greater importance for safety of the operator and others than our design. Only properly-trained individuals following rigidly enforced safety rules as recommended by ANSI and OSHA should be allowed to operate these machines.

Lockout / Tagout

Lockout/tagout procedures are safety-related practices developed, documented, and implemented by your company. Lockout/tagout procedures require safely shutting down and disabling the energy input to the machine and any connected equipment that could result in injury or equipment damage if accidental startup were to occur during inspection, maintenance, adjustment, or repairs. Part of disabling the energy input typically involves applying physical lock(s) to the energy input(s) so that the system cannot be accidentally restarted. Typical energy inputs include electrical, air, fluid, hydraulic, gravity, heat, or steam.

Your company must have lockout/tagout procedures in place for this machine before use. To prevent injury or equipment damage due to accidental startup, all inspection, maintenance, adjustments, or repairs to the machine must be governed by your company's lockout/tagout procedures and OSHA requirements and best practices.

WARNING: Failure to follow lockout/tagout practices can result in serious injury and/or equipment damage and may void the warranty.

Note: OSHA provides information on lockout/tagout best practices consistent with Title 29, Code of Federal Regulations (CFR), Part 1910.147 and 1910.333 as a basis for companies to develop their own lockout/tagout procedures.

Be careful when operating, adjusting, or servicing this equipment. If in doubt, stop and obtain qualified help before proceeding.

Lockout/Tagout on the Eastey VCTS and VCTS-XL Vertical Case Transport Systems

Eastey VCTS and VCTS-XL Vertical Case Transport Systems use electrical and air pressure for energy input. Power down the system prior to lockout/tagout. Allow the current batch run to complete or interrupt the batch run and allow the machine to stop. Push the E-Stop button and switch the Power Switch to the Off position. Disconnect (unplug) the power cord from electrical energy input and disconnect or neutralize energy

input from air pressure, and follow the lockout/tagout rules and procedures developed by your company.

Be sure to follow your company's lockout/tagout procedures for the VCTS or VCTS-XL Vertical Case Transport System and all equipment connected to it, for example printers or scanners, etc., in accordance with your company's lockout/tagout procedures.

Note: Lockout mechanism(s), padlock(s), and identification tag(s) are the responsibility of your company in accordance with your company's lockout/tagout rules and procedures and are not provided by Eastey.

Safety Precautions

Before installing, operating, or servicing this equipment, please read the following precautions carefully:

- Modules of the Vertical Case Transport System and VCTS-XL are heavy pieces of equipment and will require a forklift or several people to move safely off the shipping pallet. Always use proper lifting techniques when moving this equipment.

- This machine is equipped with moving parts and belts. Keep hands clear of moving belts and parts. Do not place you hand, finger, or any other body part or object near moving belts or machine parts. Moving parts can crush and cut.

- Always disconnect electrical power and release air pressure before attempting maintenance for any electrical or moving parts. Do not attempt to open or work on the electrical box, junction boxes or other electrical components of the unit without first disconnecting power to the machine. Electrical shock hazard exists if power is not disconnected.

- Use only the specified power-supply cable. Do not use the power cable to pull or position the machine, as this will damage or break the cable.

- Do not bypass any factory-designed safety features such as guards, interlocks, switches, etc. Do not operate the machine if such modifications have been made.

- Do not attempt to operate the machine with loads that exceed the limits of use and operation in regards to weights and sizes, or with unstable loads the present a hazard of tipping or falling.

- This equipment is designed for indoor operation in a typical clean, dry factory environment. Do not operate the machine in any extremely wet or oily environment that may exceed operating specifications.

- Do not place hands or body inside the confines of the machine unless all mechanisms are securely fastened, and the air and electrical supply is shut off.

- To minimize the potential for personal injury, always be sure that the machine operators and others working on the machinery are properly trained in the correct usage of the equipment and properly instructed regarding safe operation.

- Never provide service or clear a box jam when machine is running. Always stop the machine and shut off power before servicing.

- Do not wear loose clothing such as ties, scarves, jewelry etc. Long hair should be pulled back and/or covered while operating this machine.

- Do not stand or climb on any part of the Vertical Case Transport System.

Explanation of Symbols

Caution sign or Safety Alert symbol. Indicates caution, be alert, Your safety is involved. Knowledge of safe operation is required.
Caution indicates a hazardous situation which, if not avoided, could result in minor or moderate injury or damage to equipment or surroundings.
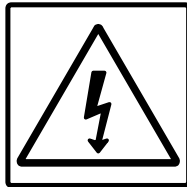
Electrical hazard. Indicates electrical danger. Allow only a trained electrician to open or perform work in the electrical panel or box.

Warning symbol. Indicates a hazardous situation which, if not avoided could result in death or serious injury.
A warning indicates a situation or condition potentially more severe than indicated by a caution message but not imminent as a danger message.
This symbol is associated with warning messages for potentially hazardous conditions.

This symbol is associated with warnings for conditions as shown below.

⚠ ¡ADVERTENCIA!	⚠	⚠WARNING!
¡Precaución mantenga sus manos alejadas! ¡Partes móviles pueden aplastar y cortar!		CRUSH AND PINCH HAZARD! KEEP HANDS CLEAR! MOVING PARTS CAN CRUSH AND CUT!
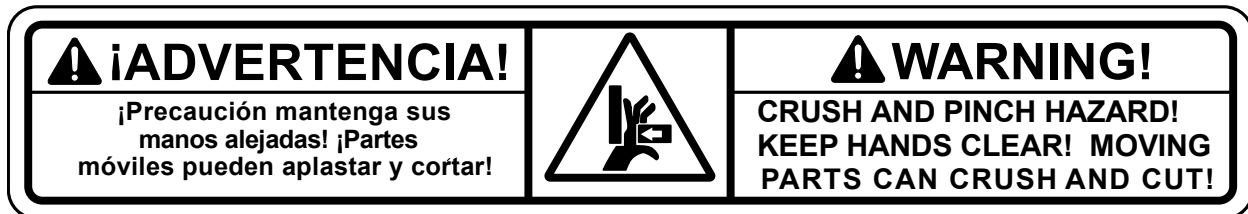
Introduction

VCTS Vertical Case Transport System Overview

Eastey's Vertical Case Transport System (VCTS) allows printing on two or four sides of single-wall RSC minimum C flute corrugated case box blanks in the flat, before the cases are erected for filling and sealing. The VCTS is available in two models: a standard model VCTS for most case blanks ranging in size from 10" × 10" up to 33" × 29", and a larger VCTS-XL that allows case sizes from 10" × 10" up to 48" × 29".

The system (VCTS or VCTS-XL) consists of three sections: the infeed module, the print station, and either an exit module or a restacking hopper collection bin.

The standard VCTS with exit module is shown below. VCTS-XL and both models with restacking hopper collection bin are shown on the following pages.

VCTS with Exit Rollers and Guide Rod Option

Print Station

Exit Guide Rod

Repositionable Photo Eye

Infeed Module

Box Push Arm

Movable Infeed Chute

End Roller Assembly

Control Box

Locking Casters (8)

**VCTS with Restacking
Output Hopper Option**

Dual Photocell
Bracket

Infeed
Module

Box
Push
Arm

Restacking Output
Hopper Module

Movable
Infeed
Chute

Locking
Casters (12)

Print Station

Control Box

**VCTS-XL with Exit Rollers
and Guide Rod Option**

XL Infeed
Module

Box Push
Arm

Repositionable
Photo Eye

Movable
Infeed
Chute

Exit Guide
Rod

XL Print Station

XL End Roller
Assembly

Locking
Casters (10)

Control Box

**VCTS-XL with Restacking
Output Hopper Option**

Restacking Output
Hopper Module

Dual Photocell
Bracket

XL Infeed
Module

Box
Push
Arm

Movable
Infeed
Chute

Control
Box

XL Print Station

Order of Operation

Loading the Infeed Module

Case blanks are placed stacked upright into the input hopper of the infeed module. The movable infeed chute allows hopper width adjustment to accommodate the width of the case blanks to be loaded and processed in the current batch. Up to 75 flat single wall RSC, up to ¾ magazine depth, can be placed in the input hopper. The input hopper can easily be reloaded by one person and case blanks can be added at any time while the system stopped or running.

Control and Programming at the Print Station

Once the case blanks have been loaded, the system is controlled from the control panel conveniently located on the print station. The number of case blanks to be processed can be set using the programmable counter, eliminating the need for manually counting cases. The programmable counter keeps track of batch quantities, rate of operation and elapsed run time, allowing the user the ability to customize case runs. The selected number of case blanks are processed, each is passed from the infeed module to the print station. Inkjet printers can be mounted on the print station for custom printing of the case blanks as they pass by the print heads. The ink dries quickly in transit and exits the print station to be handled by the end module.

Exit Hopper Collection Bin for Convenient Case Collection

The exit hopper collection bin is a convenient way to collect cases transported through the VCTS. The exit hopper is adjustable to accommodate the available box sizes in both the VCTS standard and VCTS-XL models. The collection bin conveniently collects up to 75 flat single wall RSCs and keeps them stored upright until they can be transported to another area. Vertical Case Transport Systems can be ordered with an exit hopper, one can be added at a later day, or a collection bin can be ordered as an option and integrated with previous VCTS systems.

Vertical Case Transport System and Vertical Case Transport System XL Application Videos

To view an overview application video of operation of the Eastey VCTS Vertical Case Transport System, click this link [Eastey VCTS (Vertical Case Transport System) VCTS-XL Product Overview](#) or scan the QR code at right using the camera app on your mobile device.

To view an overview video of the Eastey VCTS in operation with the Restacker Hopper, click this link [Eastey VCTS (Vertical Case Transport System) with Exit Collection Bin](#) or scan the QR code at right using the camera app on your mobile device.

Specifications

Machine Dimensions

Model / Option	Overall Dimensions			
	Width (A)	Height (B)		Length (C)
		Minimum	Maximum	
VCTS with Exit Rollers and Guide Rod	46.38 in. 117.8 cm	50.86 in. 129.2 cm	58.49 in. 148.5 cm	111.02 in. 282.0 cm
VCTS-XL with Exit Rollers and Guide Rod	46.38 in. 117.8 cm	50.86 in. 129.2 cm	58.49 in. 148.5 cm	159.29 in. 404.6 cm
VCTS with Restacking Output Hopper	55.2 in. 140.2 cm	50.86 in. 129.2 cm	58.49 in. 148.5 cm	139.97 in. 355.5 cm
VCTS-XL with Restacking Output Hopper	55.2 in. 140.2 cm	50.86 in. 129.2 cm	58.49 in. 148.5 cm	168.25 in. 173.4 cm

Note: Machine support legs are adjustable in 1-inch increments from minimum height of ¼ inch (0.64 cm) up to 7½ inches (1.90 cm). Locking casters are provided standard and can be installed to the bottom of the support legs. When installed, locking casters add 4 inches (10.16 cm) to the machine height.

Electrical and Air

Electrical Requirements	Air Requirements
110 VAC, 60 Hz, 4.0A	80 PSI, ¼ in. NPT Fitting

Case Considerations

Box Requirements – Single wall RSC only, minimum C flute; no trays or cartons; no square-base cases (e.g. 5 × 5, 10 × 10, 12 × 12, 16 × 16, etc.) – See discussion of problem cases below.

Input Hopper – Capacity of up to 75 flat single-wall RSC, up to ¾ magazine capacity.

Model	Case Blank Width		Case Blank Height	
	Minimum	**Maximum**	**Minimum**	**Maximum**
VCTS	10.0 in. 254 mm	33.0 in. 838 mm	10.0 in. 254 mm	29.0 in. 737 mm
VCTS-XL	10.0 in. 254 mm	48.0 in. 1219 mm	10.0 in. 254 mm	29.0 in. 737 mm

Case Blank

Finished Case

Overall Height 10" Min. 29" Max.

Overall Length
10" Minimum; 33" Maximum – VCTS
10" Minimum; 48" Maximum – VCTS-XL
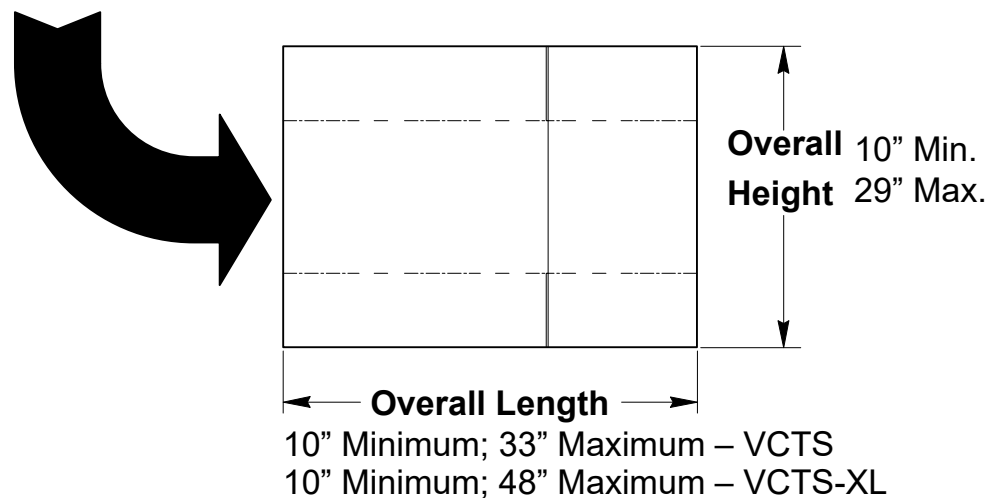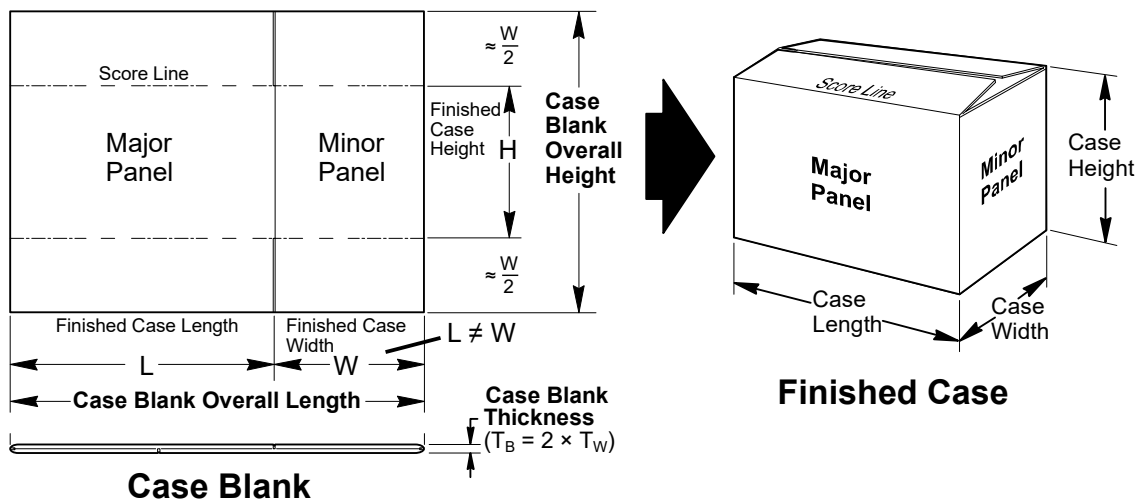
Problem Cases

Cases that pose problems for the Vertical Case Transport System are cases with a square base (case base dimensions, length = width, equal to each other) because this places both vertical fold lines to coincide at the middle of the case blank, allowing the blank to fold as it is being pushed. Other problem cases include tall cases, where height of the case is greater than the base dimensions. Consult with Eastey for your specific case dimensions.

Standard Features

- Designed for plug-in and go operation and low maintenance. Simple and rugged control interface for easy operation.

- Constructed of industrial strength 12-gauge steel, powder coated for durability.

- Industrial strength side belts move boxes consistently at maximum speed of 72 feet per minute (approximately 50 10 in. × 10 in. cases per minute).

- Input hopper capacity for up to 90 flat single-wall cases. Hopper width adjustment 10 in. (25.4 cm) to 33 in. (83.8 cm). Simple hopper width adjustments allow fast and easy box size changes.

- Programmable counter designed for batch operations, rate metering, and elapsed counting.

- Designed for ink jet printing system compatibility and simple integration with ink jet printers.

- Adjustable leg extensions for simple adjustment of case conveyance height.

- Heavy duty locking casters are provided and may be attached to each section to facilitate easy transport throughout the plant. (Casters are provided standard, but removed for shipping, and may be installed on-site.)

Options

- Ink Jet Printing System: high-resolution printing system capable of printing barcodes, graphics, and text.

- Restacking Output Hopper: Added to exit end of Vertical Case Transport System for easy case collection.

Wear Parts, Consumables and Recommended Spare Parts

As part of regularly scheduled maintenance of the VCTS and VCTS-XL Series Vertical Case Transport System, it is expected that certain parts will undergo wear under normal use and require replacement at regular intervals.

- For example, electrical fuses are designed to self-destruct to help protect users and internal electrical components of the machine to interrupt the flow of electricity in the event of an electrical overflow or short-circuit. As such, it is expected that fuses may blow at some time and require replacement.

- Belts and UHMW plastic components will see wear through daily use and require replacement at some time in the course of regular maintenance.

It is recommended to keep a supply of spare wear parts and replacement items to reduce the likelihood of long durations of machine downtime when time comes to replace them.

The following parts are recommended as spare parts for the Vertical Case Transport System.

- Infeed Rollers – Clutched Roller and 3" Wide Roller (2 each)
- Linear Bearing Block ¾" Diameter (2 each)
- Air Cylinder 2" Bore × 4" Stroke for Restacker Pusher (1)
- Stacking Brushes for Restacking Output Hopper (8)
- M6 Lever, Adjustable for Restacking Output Hopper (4)
- T-Nut Slider 10MM M6 (4)
- Flange Bearing ¾" Diameter (1)
- UHMW plates and bar stock — White plastic components to reduce friction between the case and slide surfaces or guides.

Similarly, for recommended spare electrical parts, look at the parts listing for the Vertical Case Transport System. Note the part numbers and ratings of these electrical components.

- Fuses 10A (FU01 & FU02) and 2A (FU03) (10A - 2 each; 2A - 1 each)
- Fuse Holder 1-Pole CC for Above Fuses (3)
- Photocell (1)
- Relay 24VDC Input 120VAC Switching (1)
- Relay Socket for Above Relay (1)
- Solenoid Valve 24 VDC (1)

An Eastey technician can help you to determine and order the recommended spare parts during initial consultation for ordering your Vertical Case Transport System. More complete information about specific recommended spare parts can be found in the Parts section near the back of this User Guide.

Dimensions

Dimensions shown in inches.

VCTS with Exit Rollers and Guide Rod Option Dimensions

17.52
12.00
2.96
46.38

Top View

Air & Electrical Connections
50.86 min.
58.11 max.
Overall Height (B)

26.50
26.75 min.
34.00 max.
30.75 min.
38.00 max.

22.50
22.75 min.
30.00 max.
26.75 min.
34.00 max.

35.12
40.75
35.15
111.02
Overall Length (C)

41.00
46.38
Overall Width (A)

VCTS-XL with Exit Rollers and Guide Rod Option Dimensions

12.00
47.11

Top View

Air & Electrical Connections
29.37
56.12 min.
63.37 max.
Overall Height (B)

26.50
26.75 min.
34.00 max.
30.75 min.
38.00 max.

22.50
22.75 min.
30.00 max.
26.75 min.
34.00 max.

53.09
55.75
50.46
159.15
Overall Length (C)

41.00
47.11
Overall Width (A)

VCTS with Restacking Output Hopper Option Dimensions

Top View

Restacking Hopper
62.8"

Print Station
36.7"

Infeed Hopper
38.0"

Front View

Air & Electrical
Connections

62.5"$^{+1.0}_{-6.0}$
Overall Height
B

137.97"
Combined System Overall Length
C

58.8"
Overall Depth
A

33.1 $^{+1.0}_{-6.0}$

Infeed End View

VCTS-XL with Restacking Output Hopper Option Dimensions

Top View

Restacking Hopper
63.34"

Print Station - XL
53.93"

Infeed Hopper - XL
52.60"

Front View

Air & Electrical
Connections

62.5"$^{+1.0}_{-6.0}$
Overall Height
B

169.98"
Combined System Overall Length
C

58.86"
Overall Depth
A

33.1 $^{+1.0}_{-6.0}$

Infeed End View

Machine Serial Number

The machine serial number can be found on the serial sticker on the door of the main electrical box mounted on the print station module.

The serial plate displays the Serial Number, Model Number, weight, and electrical power and air requirements. It also shows the part number for the replacement belt for the machine.

Record the serial number for future reference.

VCTS	
SERIAL #:	
MODEL #:	
SUPPLY VOLTAGE:	**EASTEY**
FULL LOAD CURRENT:	Engage Technologies
PHASE:	7041 Boone Ave. N.
REPLACEMENT BELT:	Brooklyn Park, MN 55428
AIR SUPPLY:	1-800-796-3279
	FAX: 1-763-795-8867

VCTS-XL	
SERIAL #:	
MODEL #:	
SUPPLY VOLTAGE:	**EASTEY**
FULL LOAD CURRENT:	Engage Technologies
PHASE:	7041 Boone Ave. N.
REPLACEMENT BELT:	Brooklyn Park, MN 55428
AIR SUPPLY:	1-800-796-3279
	FAX: 1-763-795-8867

Typical Applications

The Eastey VCTS and VCTS-XL are capable of transporting a wide range of case blanks within the parameters outlined in the Case Specifications section earlier in this User Guide.

Do NOT use the Eastey VCTS or VCTS-XL with the following types of products present.

- Explosive Products
- Flammable Products
- Hazardous Products
- Case blanks that are wet or have come into contact with corrosives
- Case blanks that are heavier or larger than allowed by the machine specifications.

Do not operate the Eastey VCTS or VCTS-XL in any extremely wet or oily environment that may exceed operating specifications. This equipment is designed for indoor operation in a typical clean, dry factory environment protected from rain and excessive moisture.

Set Up and Installation

Requirements

The Vertical Case Transport System (VCTS or VCTS-XL) will arrive at your facility mostly assembled and requires very little set up. There are some general recommendations and requirements for your set up area.

Air Supply

The Vertical Case Transport System requires a consistent air supply at 60-100 psi for normal operation. A ¼ inch NPT bulkhead quick-connect fitting is provided on the side of the electrical and pneumatic control box for air supply connection.

Electrical

The Vertical Case Transport System uses a standard 120VAC properly wired and grounded electrical outlet.

Environment

Make sure the mounting surface is solid and level. You will need access to the feed chute and the discharge area. You will also need access to the hinged back panel if you need to adjust the push plate travel distance.

Printer

Determine what printer you will be mounting on the transport system and refer to the Printer's User Guide for mounting instructions and location.

Unpacking

The Vertical Case Transport System is shipped boxed and mounted on shipping pallets. It is mostly assembled but modules are mounted on separate pallets. If the optional Restacking Output Hopper has been ordered, it will also arrive mounted on a shipping pallet. Remove the cardboard packaging from the machine modules. Remove the bolts that fasten each module to its pallet.

We suggest that you move the transport system as close to the installation area as possible before removing the modules from the shipping pallets. Remove the shipping bolts that connect the system to the pallet. There are four bolts, washers, and nuts through the four legs on each module.

> **Caution!**   Each module of the Vertical Case Transport System is a heavy piece of equipment and will require a forklift or several people to move safely off the shipping pallet. Always use proper lifting techniques when moving this equipment.

Note about Unpacking the Standard-Size VCTS with End Roller and Exit Guide Option

For the standard size VCTS with end roller and exit guide option, the end roller exit guide is fastened to the back of the print station for shipping. Remove the end roller assembly from the shipping position on the back of the print station. Line up the mounting holes and use the same bolts, washers, and nuts to attach the end roller assembly to the print station.

End Roller Assembly in the Shipping Position

End Roller Assembly in the Operating Position
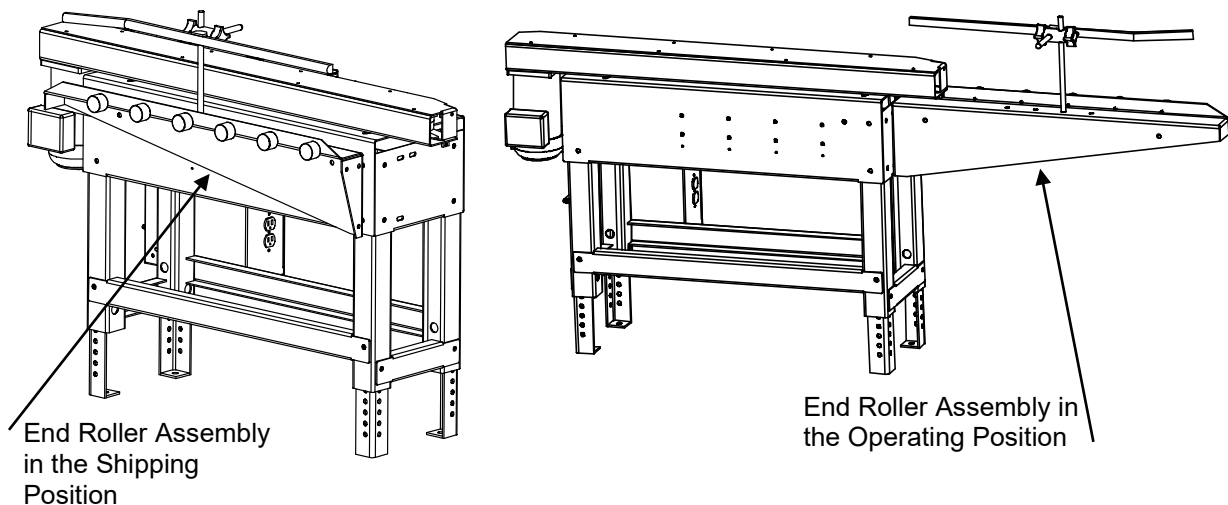
Assembly

Use the following instructions to assemble the Vertical Case Transport System.

Connect the Infeed Module and Print Station

Place the Pneumatic infeed module that contains the feed chute on a flat surface. Place the belt drive print station downstream and in line with the infeed module. Locate the connecting holes on the infeed module and print station and use the supplied bolts, washers, and nuts to attach the two modules as shown.
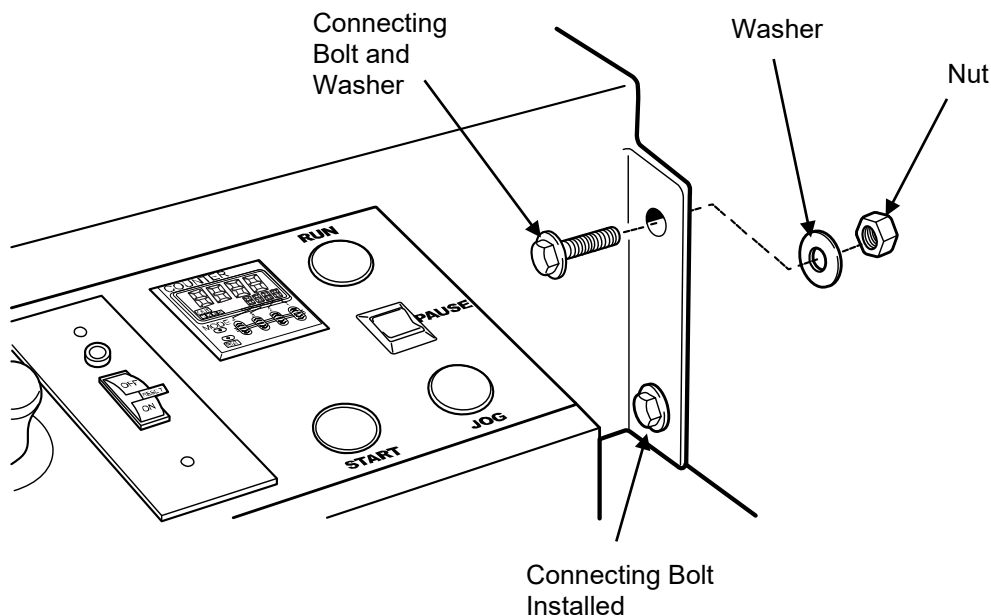
There is also a connecting strap connected to the back of the infeed module. Attach the connecting strap to the infeed module and print station with supplied $5/16$-18 × 1-¼ hex head cap screws, $5/16$ lock washers, $5/16$ flat washers, and $5/16$ hex nuts. For illustration, the standard VCTS with Exit Rollers and Guide Rod option is shown but the connecting strap location is typical for all VCTS or VCTS-XL options.

VCTS (Standard Size)
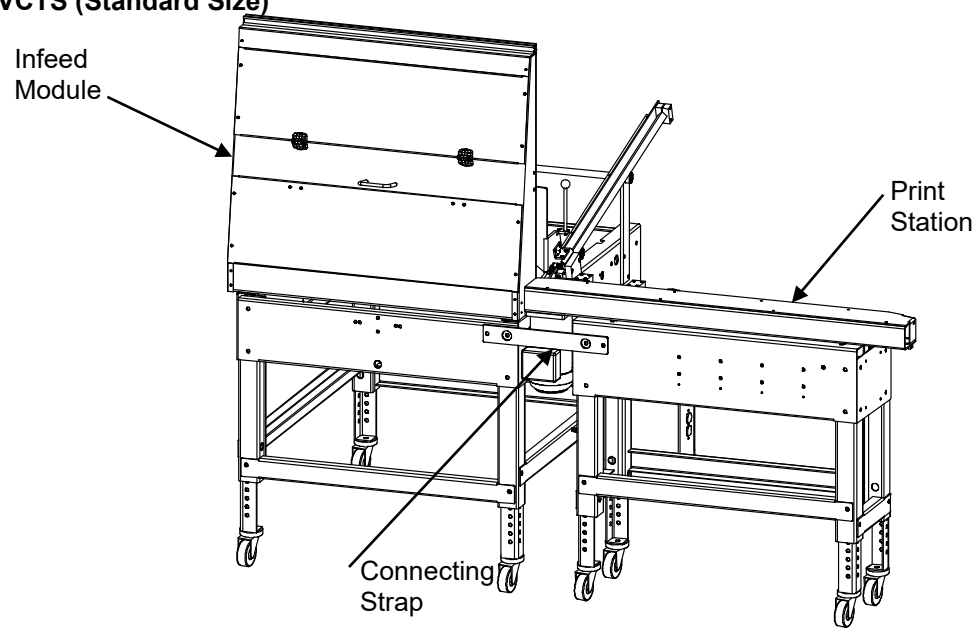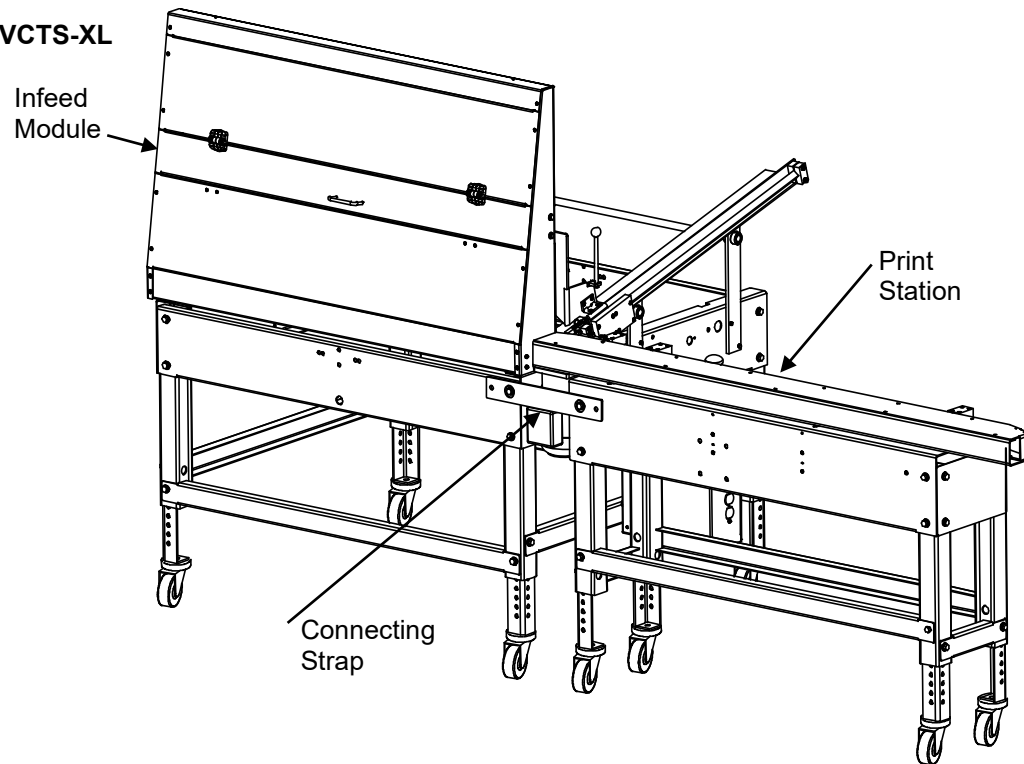
Infeed
Module

Print
Station

Connecting
Strap

VCTS-XL

Infeed
Module

Print
Station

Connecting
Strap

Fasten the Restacking Hopper to the Print Station

If the Vertical Case Transport System is equipped with the Restacking Hopper, fasten the Restacking Hopper to the Print Station as shown in the following illustrations and make required electrical and pneumatic connections as follows.

1. Set the Restacking Hopper height to match the Print Station. (Adjust the leg height of the Restacking Hopper if necessary.) If necessary, enlarge the existing holes in the Print Station end plate to the size of the holes in the Print Station that will be used to fasten the Restacking Hopper to the Print Station.

Set Restacking Hopper Height to Match Print Station. The Three Holes Circled Will be Used to Fasten the Restacking Hopper to the Print Station. Enlarge These Holes if Necessary for the Three 5/16-18 Bolts that will be used to Attach the Restacking Hopper.

NOTE: For the longer VCTS-XL, install the spacer block kit, which includes a spacer block, three threaded rods, and flat washers, lock washers and nuts between the Print Station and Restacking Hopper. (Shown on next page.)
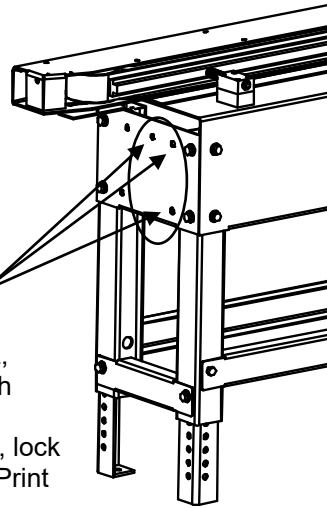
2. Install the box guide tab on to the guide rail of the Print Station using a #8 × ¾" self-drill Phillips screw as shown in the following illustration.

#8 × ¾" Self-Drill Phillips Cap Screw

Box Tab
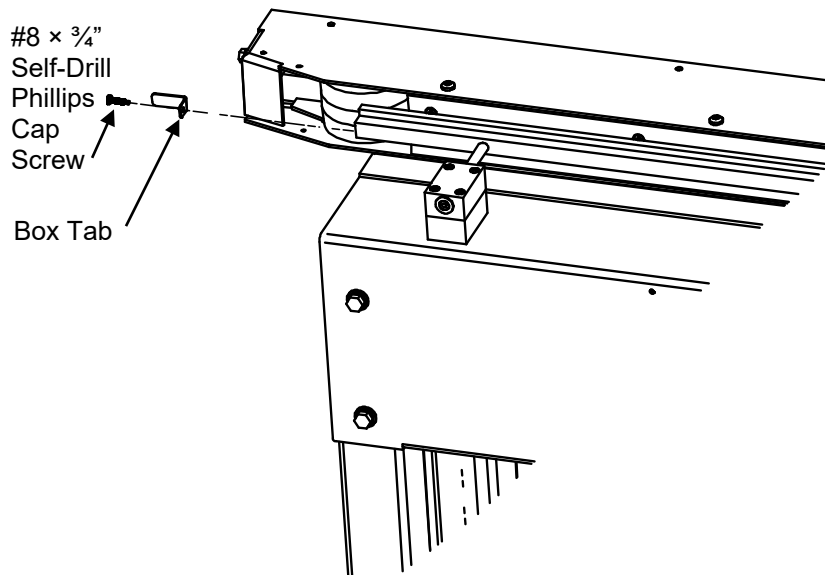
3. Align corresponding mounting holes in the end plate of the Print Station with the attaching flange of the Restacking Hopper and fasten the Restacking Hopper to the Print Station using the attaching hardware provided (includes three 5/16-18 bolts for attaching the standard-size print station).

Use Spacer Block Kit with VCTS-XL Only.

Connection Detail VCTS

Connection Detail VCTS-XL

Threaded Rods

Spacer Block

Flat Washers, Lock Washers, and Hex Nuts
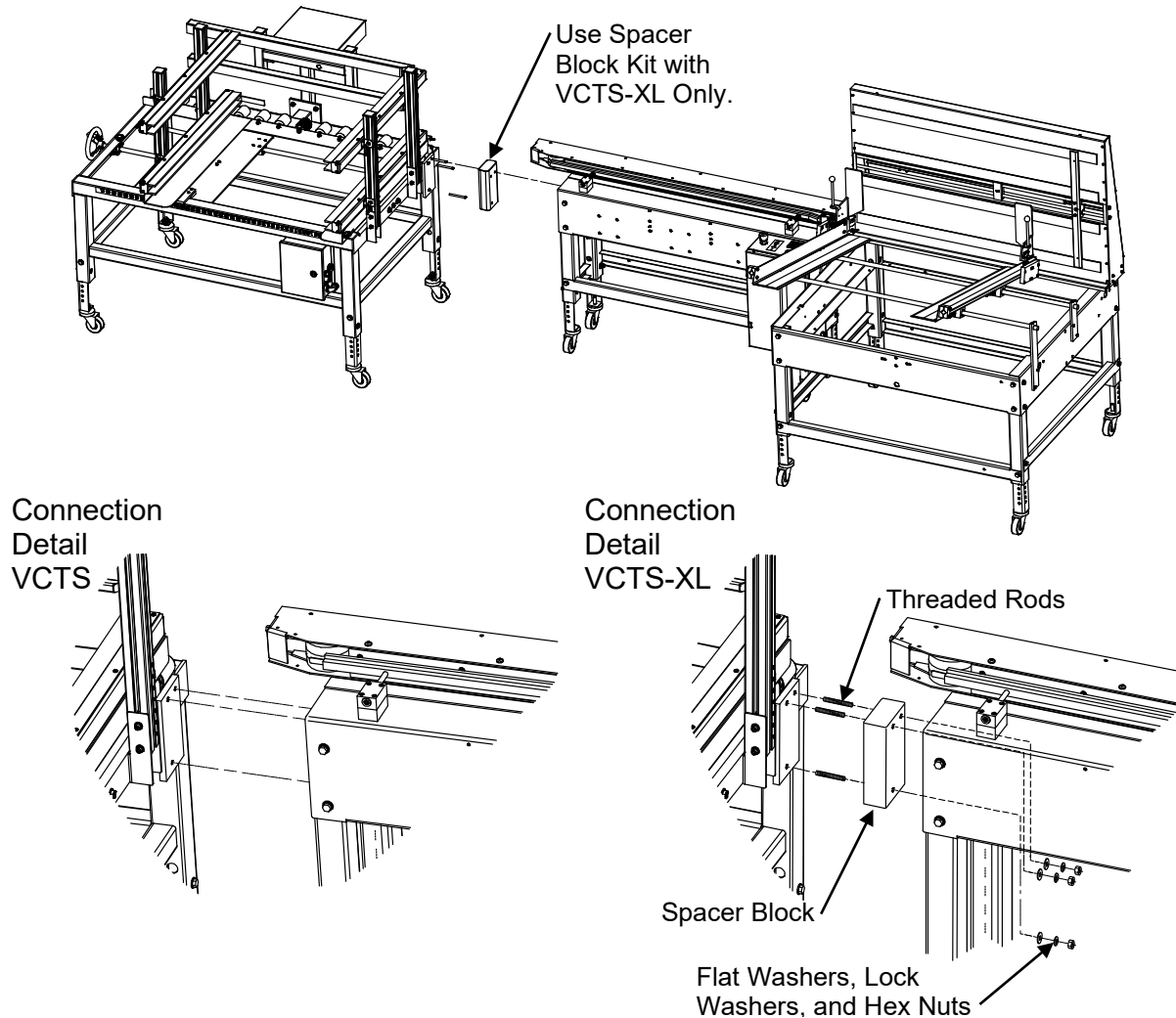
Note: For the VCTS-XL, use the spacer block between the Print Station and Restacking Hopper as shown using the three $5/16$-18 × 3" long threaded rods, flat washers, lock washers, and hex nuts provided in the spacer kit.

4. Temporarily remove the two PH #10-32 × 0.5 Pan Head SEMS screws at the locations shown in the following illustration. Retain these screws, as these will be used to attach the dual photocell bracket to the Print Station belt drive cover. Align the holes in the dual photocell bracket with the holes in the belt drive cover and re-use the PH #10-32 × 0.5 Pan Head SEMS screws to fasten the dual photocell bracket to the belt drive cover.
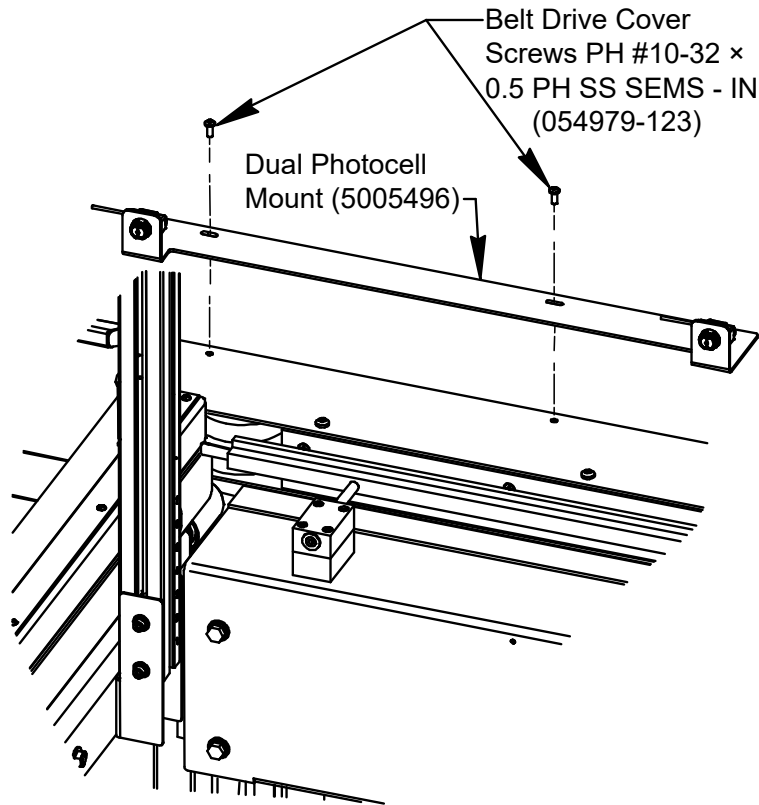
5. The Electrical / Pneumatic enclosure for the VCTS or VCTS-XL, attached to the Print Station, requires modification of adding two Ø 0.875 thru holes in the bottom of the enclosure. These holes are for the addition of a Romex grip fitting and a conduit elbow through the bottom of the box. Dimensions for locating where these holes should be made and where fittings should be installed are shown in the following illustration.
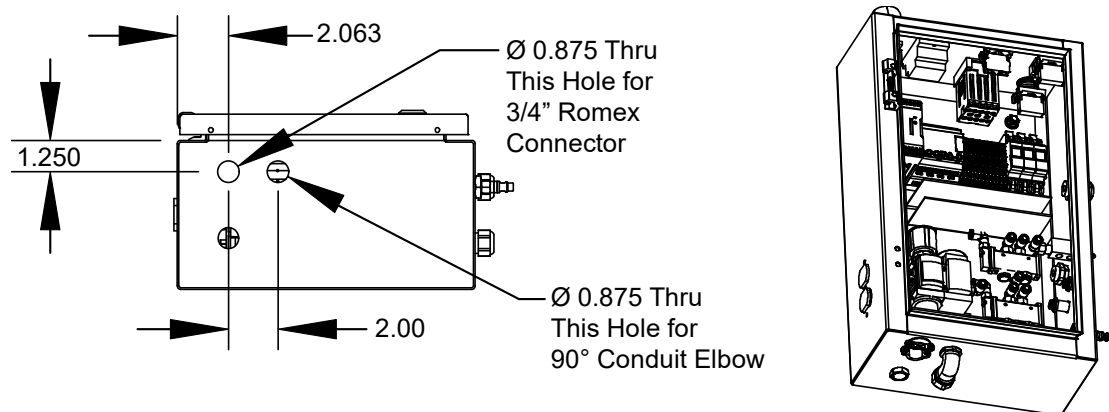
6. Mark all connections of the existing Programmable Logic Controller (PLC), labeling all wires for where they are connected, then remove the existing PLC and replace it with the new pre-programmed PLC provided.
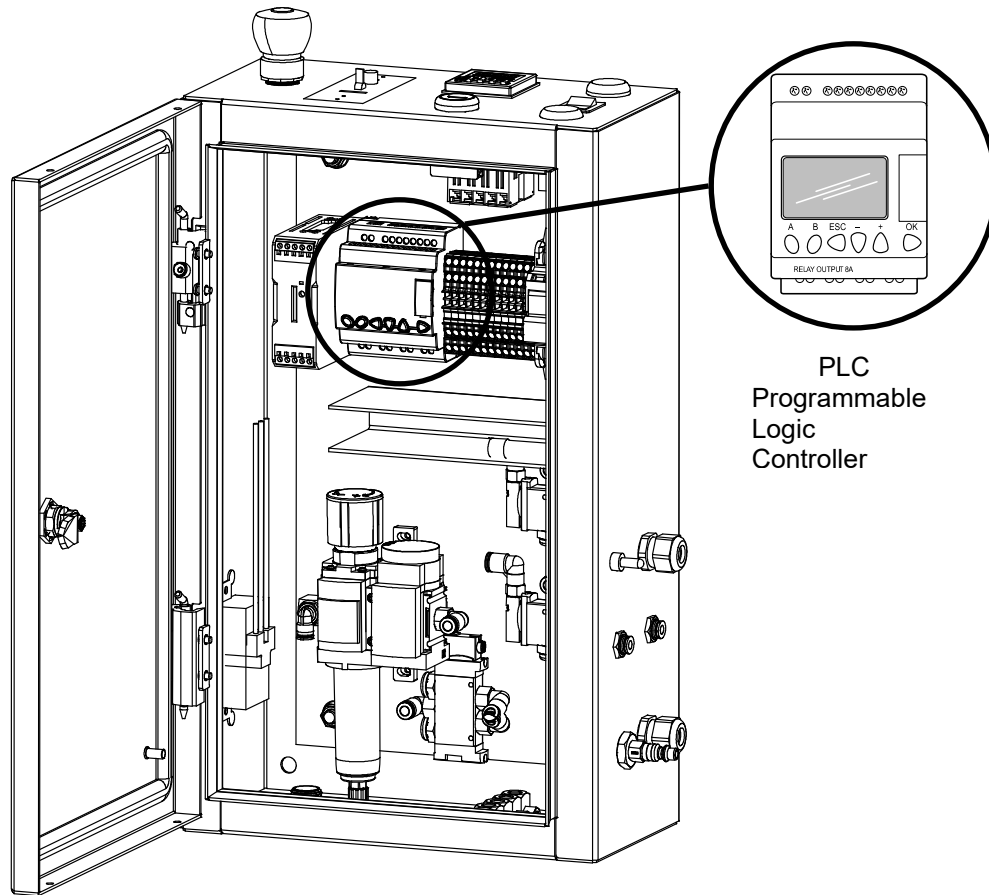
PLC
Programmable
Logic
Controller

7. Connect all wires to the PLC using the schematics in the Schematics section near the end of this User Guide and instructions that follow to make the connections required for the restacking hopper.

8. Wire 18-8 cable into correct locations. (See schematic, wires marked 18-8.)
   - Existing motor leads (1T1, N) may require being pulled from their current location and tied onto Red with Black stripe (1T1) and White with Black stripe (N).

   NOTE: When connecting Photo Eye leads, use the ferrules provided (part number 4501851) to reinforce the end of each wire from the Photo Eye as it is connected into the terminal block.

9. Hook 22-4 wire (Red, Green, Yellow) into the input side of the PLC (I4, IB, IC, respectively). See schematic.

10. Hook the Black 22-4 wire (#10) into output side of the PLC (O3). See schematic.

11. Hook the Black 18-8 wire (COM) into COMMON on the terminal block.

12. Use the T fitting provided to tie the air line from the conduit into the main air supply.

13. Add a jumper wire to connect from (24V) on the terminal block to outputs (O3 and O4) on the PLC.

14. Use 4501851 wire ferrules on all photo eye connections.

Fasten the End Roller and Exit Guide to the Print Station

If the Vertical Case Transport System is equipped with the End Roller and Exit Guide option, fasten the Roller End Assembly to the Print Station as shown in the following illustration.

Attaching Flange

Roller End Assembly
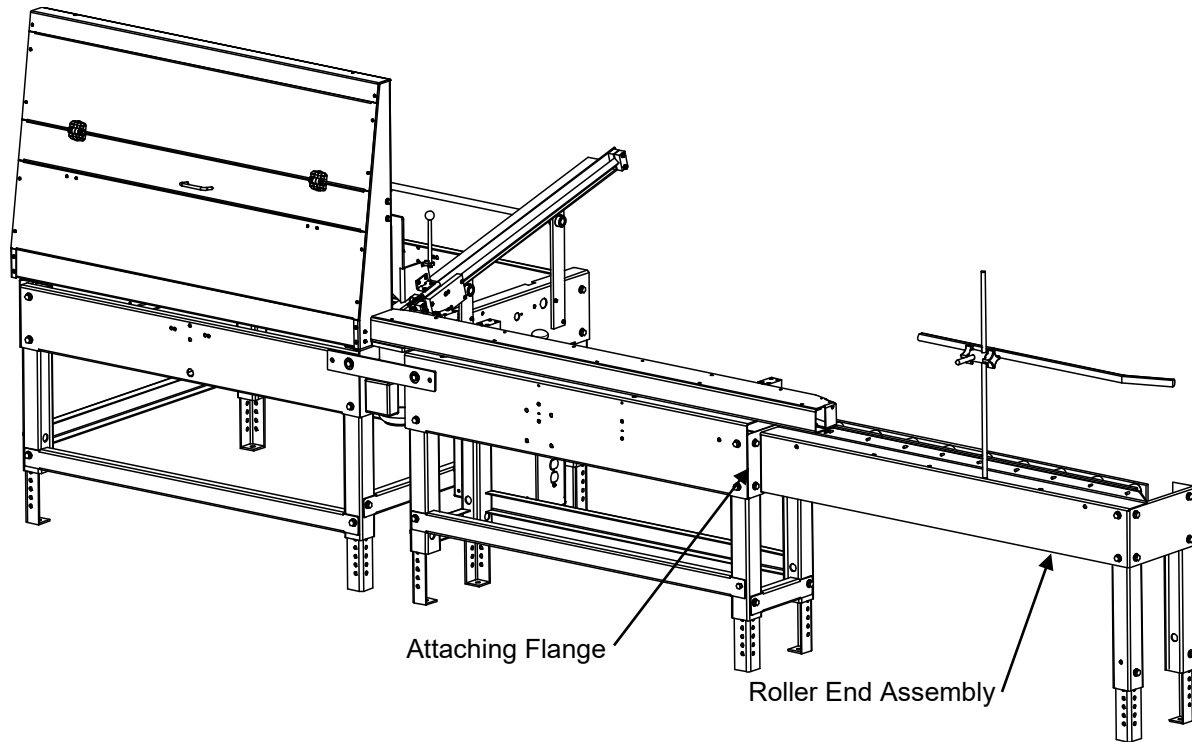
Connections

Air

Connect the two air lines from the cylinder to the two connections located on the side of the controller box. There is a hinged panel on the back of the infeed module that allows access to the cylinder. The connections are labeled "1" and "2". Connect the lines to the corresponding connectors.

Connect the line from your air supply to the quick connect air line fitting located on the side of the controller box.
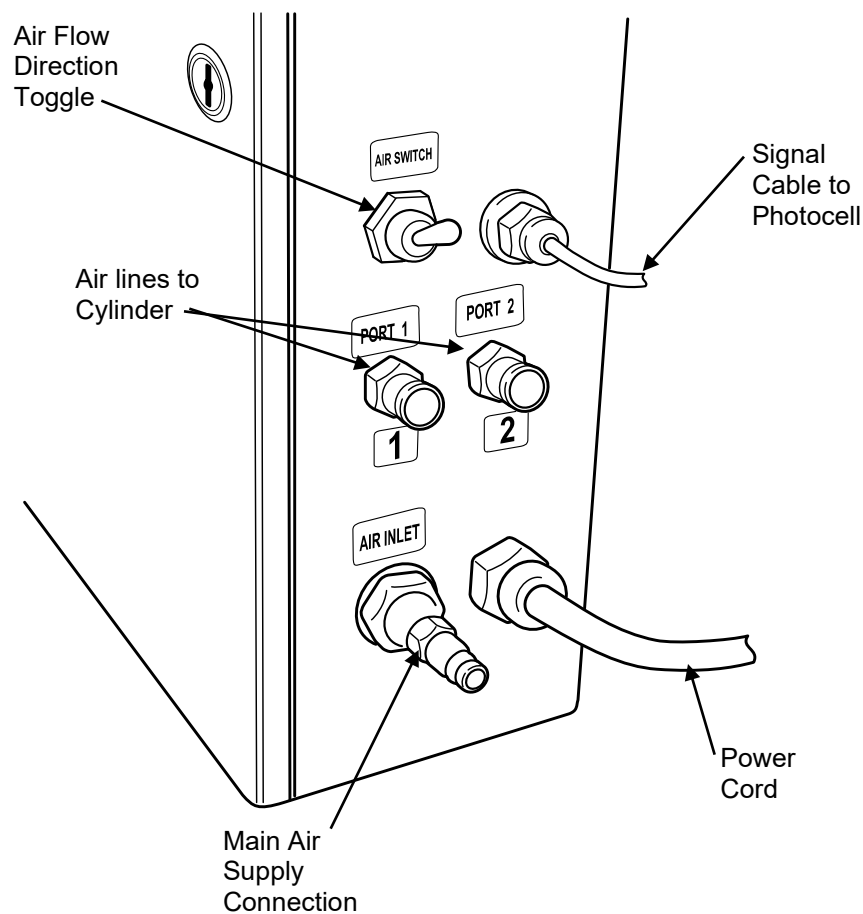
Electrical

Plug the power cord into a properly wired and grounded electrical outlet.

Adjustments

Before operation there are a few size adjustments required.

Feed Chute Width

This is a very simple adjustment. Lift up both of the red lever stops located beneath the movable feed chute. Slide the movable feed chute to accommodate the box size. Make sure there is a small $^1/_8$" gap between the box and the movable feed chute. This is to ensure proper movement down along the chutes while running the machine. If there is not enough clearance, boxes will jam and not feed smoothly. Close the red lever stops to lock the chute in place. Maximum box width for the standard VCTS is 33 inches (83.8 cm); maximum box width for the VCTS-XL is 48 inches (121.9 cm).

> **WARNING!**   Minimum box size is 10 inches (25.4 cm). Boxes smaller than this may cause damage to moving parts on the machine.

**VCTS / VCTS-XL
Infeed Module**

Box Push Arm

Stationary
Feed Chute

Movable
Feed Chute

Red Lever
Stops
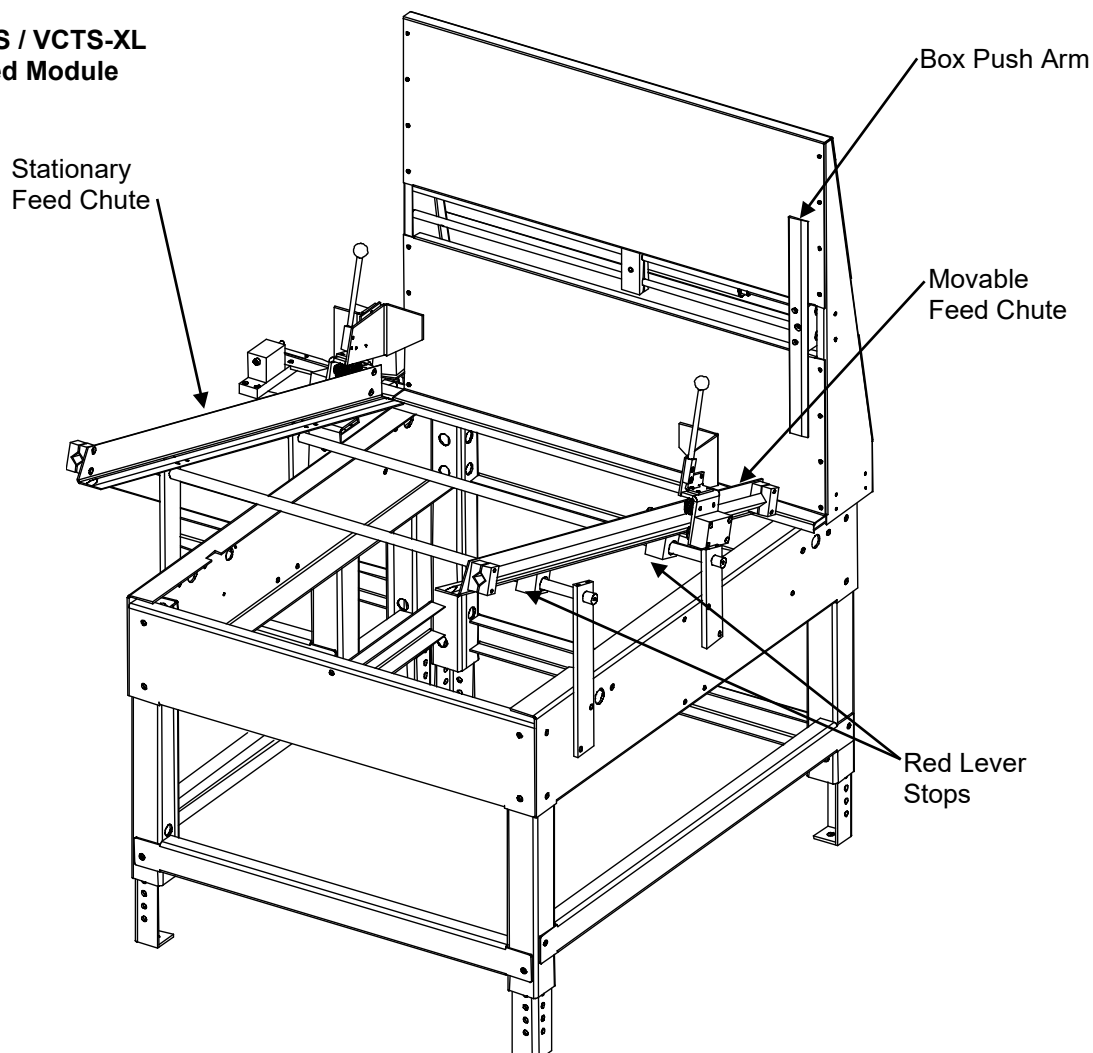
Push Plate Control Arm Travel Distance

If it is necessary to make adjustment to the push plate control arm travel distance, open the hinged panel on the back of the infeed module to access the push plate actuating air cylinder. A $^5/_{16}$-inch Allen wrench is required to loosen the socket head cap screw and guide rail brackets to allow adjustment of the air cylinder travel distance, or to reverse the cylinder position if necessary.

Lift Up Rear
Access Panel

Air
Cylinder

Socket Head
Cap Screw

$^5/_{16}$-inch Allen
Wrench

Guide Rail
Brackets
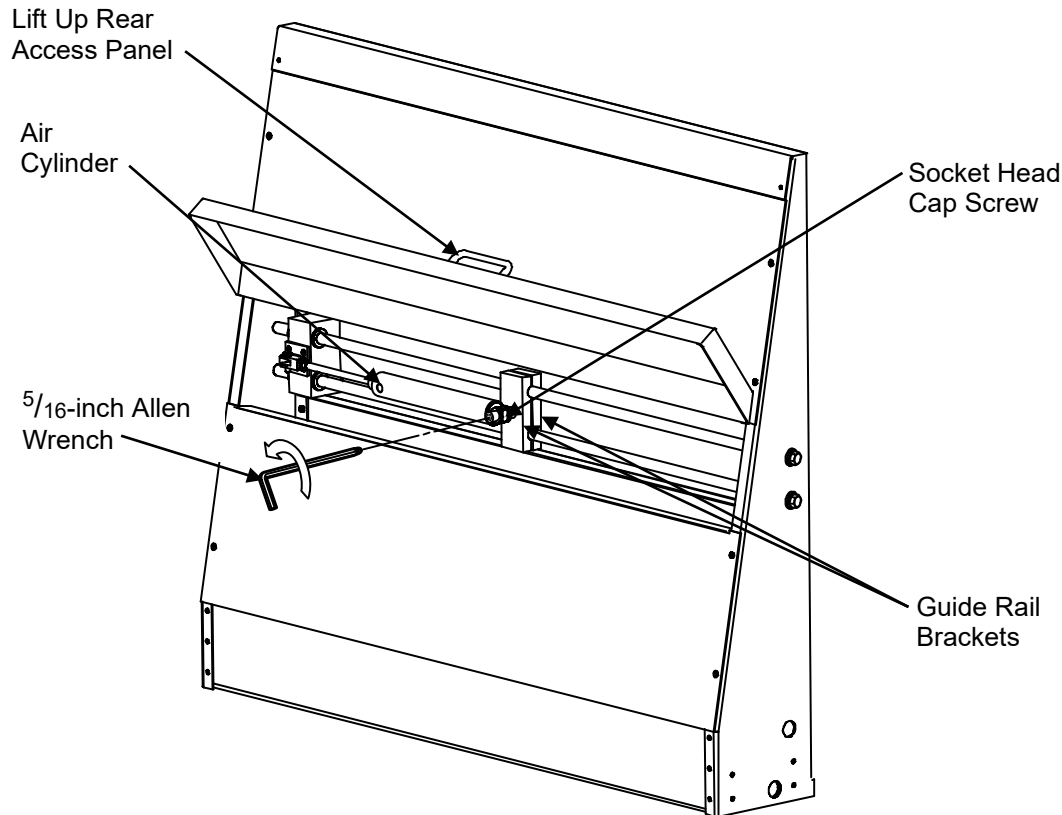
Coarse Adjustment (Large or Small Boxes)

The air cylinder may be reversed for different box size ranges. If you are loading boxes that are greater than 21-½ inches you will want the air cylinder to be on the right side as you face the back of the machine. If you will be loading boxes that are smaller than 21-½ inches you will want the air cylinder positioned on the left end of the control arm as you face the machine.

Note: You may need to disconnect the main air supply line to the machine if repositioning the cylinder is too difficult.

Toggle switch position for coarse adjustment

There is a toggle switch located on the side of the control box. This toggle switch is used to control the direction of air flow to the air cylinder. For boxes longer than 21-½" move the toggle to the up position. For boxes shorter than 21-½" move the toggle switch to the down position.

If you need to reverse the air cylinder position, use a $^5/_{16}$-inch Allen wrench to loosen the socket head cap screw securing the air cylinder and guide rail brackets just enough so the brackets can be rotated and pass between the guide rails. Reverse the cylinder direction and re-secure the brackets to the guide rails. **Tighten the socket head cap screw** to secure the air cylinder and guide rail brackets when you have finished moving them to the required position.

Guide Rail Brackets

Guide Rails

Socket Head Cap Screw

Spacer

Cylinder

Flat Washer

Lock Washer

$^5/_{16}$-Inch Allen Wrench

Guide Rails

Guide Rail Brackets Rotated to Pass Between the Guide Rails

Control Arm Left
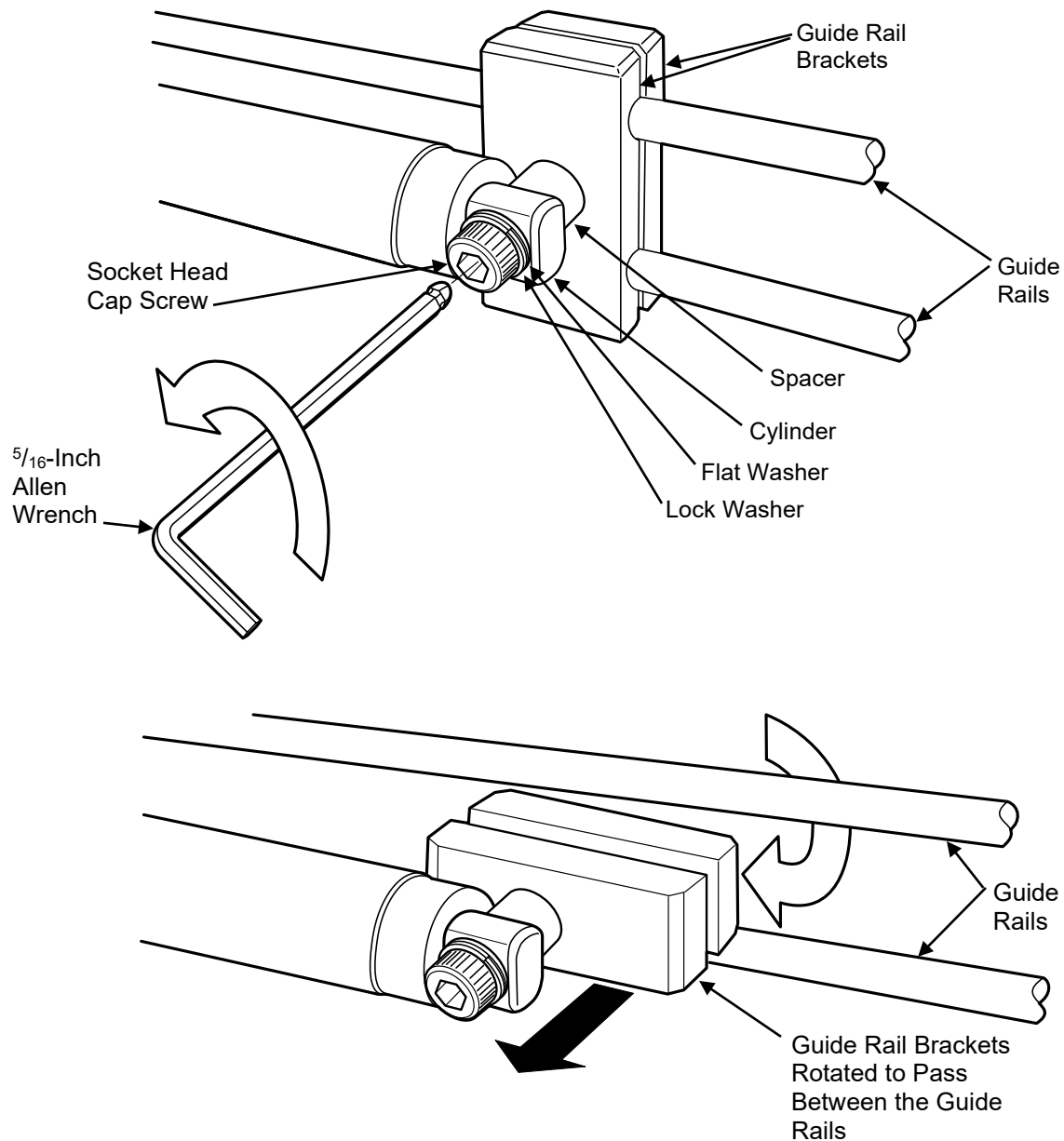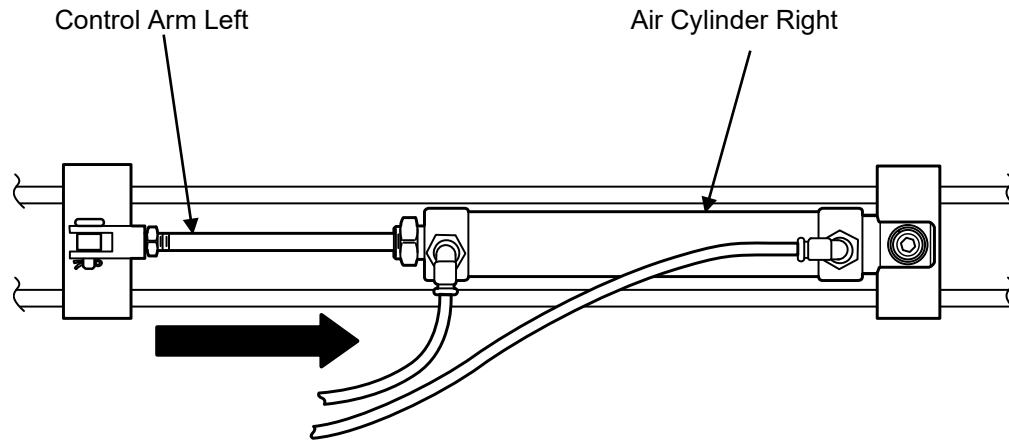
Air Cylinder Right

Orientation for Boxes Larger Than 21-½"

Air Cylinder Left

Control Arm Right
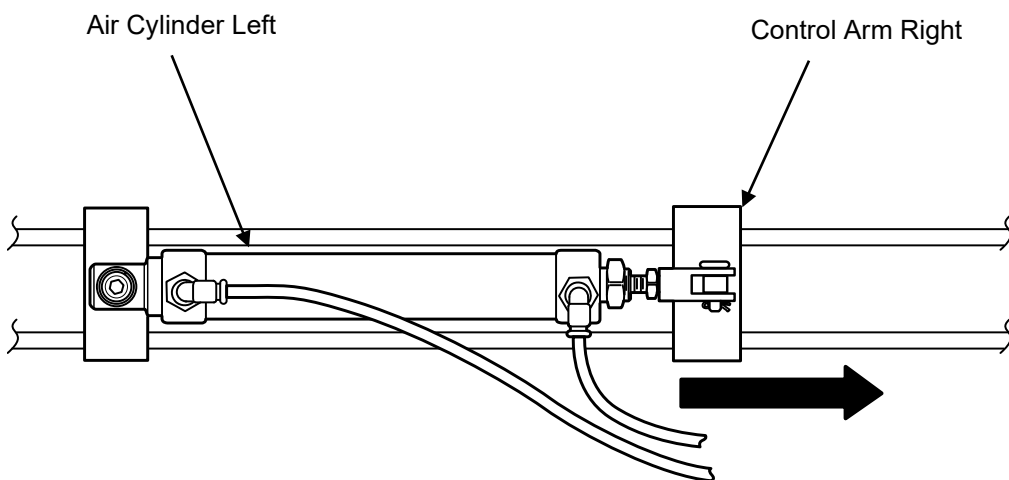
Orientation for Boxes Smaller Than 21-½"

Fine Adjustment

When the air cylinder and control rod are in the proper orientation for box size you will have to move the air cylinder along the guide rails. Loosen the socket head cap screw and move the air cylinder on the guide rails so the box push arm will travel ⅜" to ½" past the edge of the box when the cylinder rod is completely extended. When adjusting for smaller boxes do not adjust the box push arm closer to 8" from the edge of the infeed module back panel.

> **Note:**   The cylinder control rod will naturally be in the fully extended position if the machine is hooked up to air pressure.

Box Push Arm
⅜" to ½" Beyond
Box Edge

Box Edge

BOX
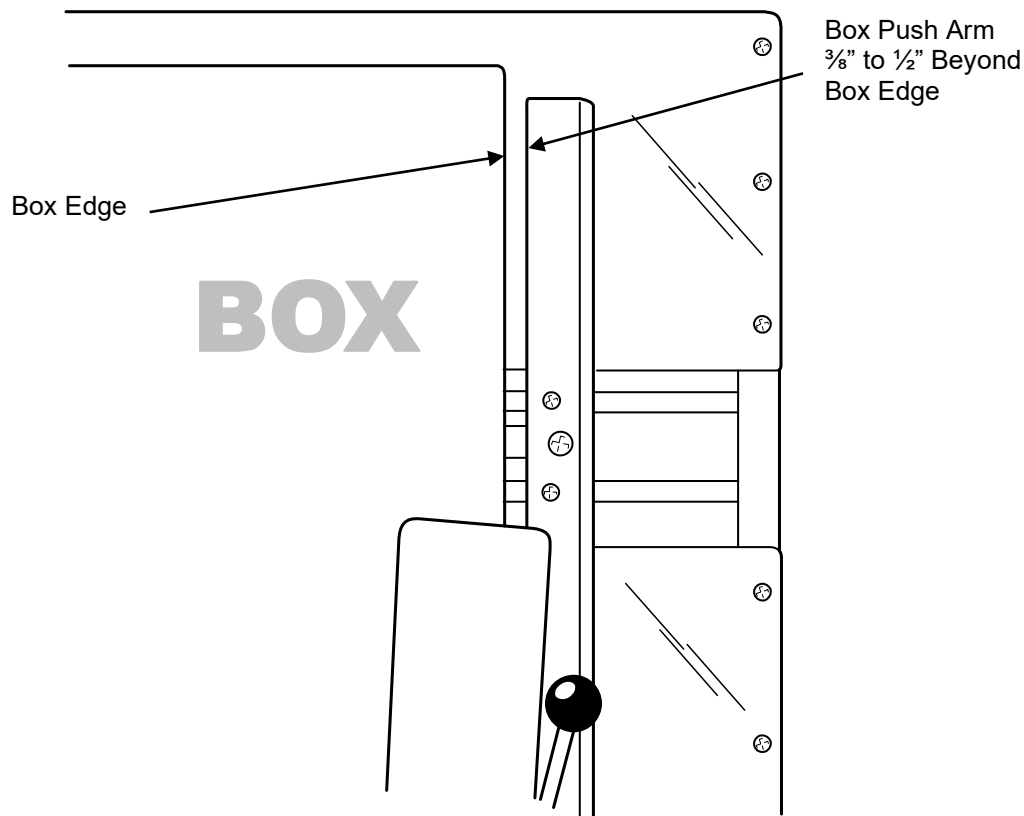
Restacker Adjustment for Case Blank Width and Brush Height Adjustment

If the VCTS or VCTS-XL is equipped with the Restacking Hopper, the hopper dimensions where the case blanks will be accumulated and stacked requires adjustment to the case blank dimensions.

Case Blank Width Adjustment

A handwheel at the end of the Restacking Hopper allows for horizontal adjustment to dial in the Restacking Hopper width for the width of the case blanks being processed. A metal ruler at the front of the module serves as a guide when making horizontal adjustments. Set the width so that the case blanks will catch firmly in the brushes as the case blanks are pressed into the restacking area.
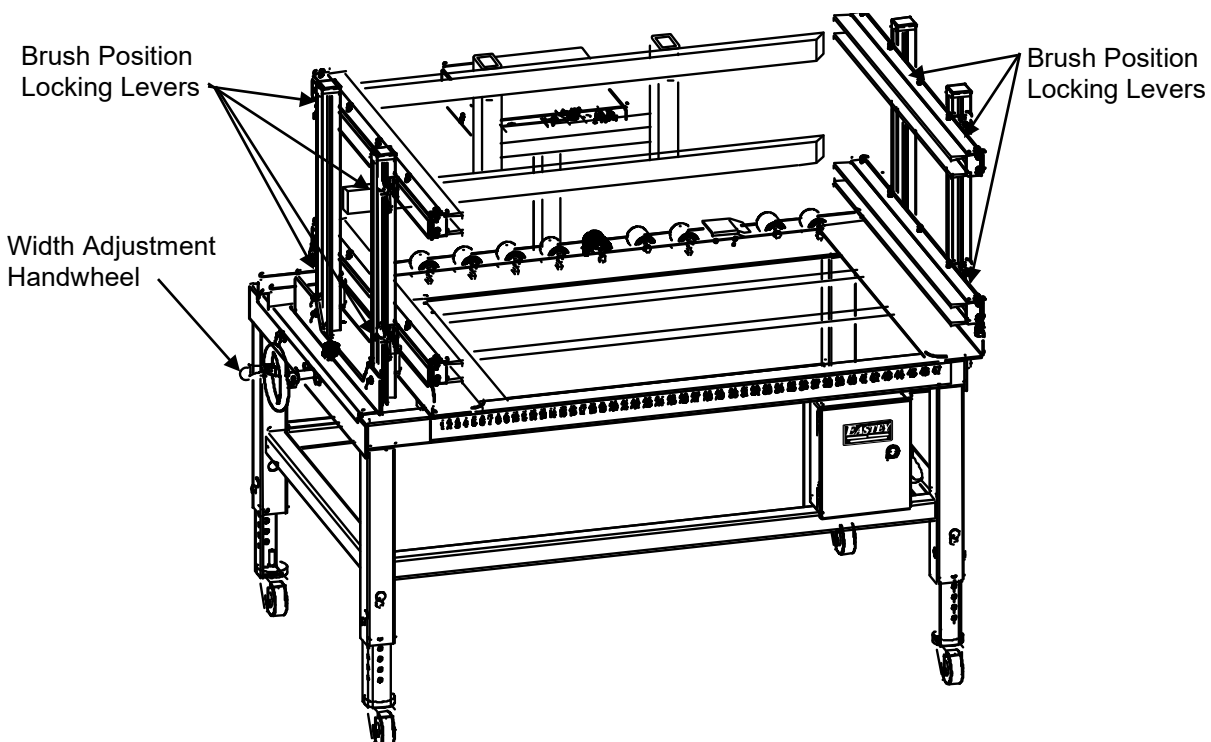
Adjusting Brush Height for Case Blank Height

Brush positions are adjustable vertically to accommodate a range of case blank heights. The brush vertical position is adjusted manually by temporarily releasing the locking levers, repositioning the brush, and then using the lever to lock the brush in place. There are two locking levers on each brush. Support the brush while repositioning it. See the information about Exclusion zones below and on the two following pages.

Caution: When adjusting the brush locations, note the location of the push bars, keeping in mind that the stacking mechanism assembly moves the push bars horizontally into the volume bounded by the brushes as the printed case blanks are stacked. **It is important to check clearances so that the push bars do not crash into the brush assemblies or brackets and brushes.** See the following diagram.
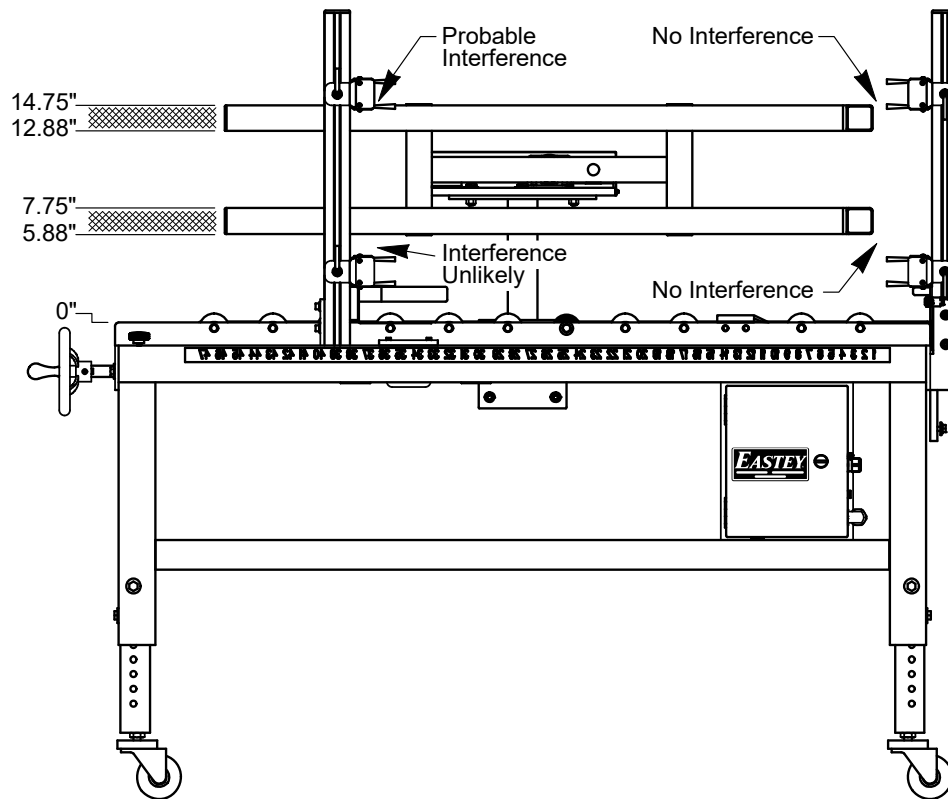
In the above diagram, there will be no interference for the brushes at the right, where cases enter the restacking module, but there may be interference toward the end of the line. The bottom brush is placed far enough away from the path of the bottom push bar to avoid interference. The brush at the top however, is shown just slightly overlapping within the zone that the top push bar will be moving in. This means there will be interference, and the top push bar will crash into the brush or brush mounting brackets and cause damage. To solve this problem in this case, move the top brush upward as necessary so that it is out of range of the top push bar and the push bar will not run into it.

With longer case blanks that require positioning the brushes beyond the push bar, this becomes less of an issue as interference becomes less likely. With moderate- and shorter-length case blanks that require placement of the brushes before the ends of the pusher bars, it is important to position them and move them up or down as required to keep them out of the path of the push bars.

Exit Guide Rod Adjustment

If the VCTS or VCTS-XL is equipped with the Exit Rollers and Guide Rod option, Adjust the end bar to correspond to the box size. You want the end bar to be positioned so it drops the box correctly onto your rolling stock or cart. There are adjustments to move the end bar horizontally, vertically and in and out.

**VCTS Exit Rollers and
Guide Rod Option**

Exit Guide
Rod

VCTS Exit Roller
Assembly

**VCTS-XL Exit Rollers and
Guide Rod Option**

Exit Guide
Rod
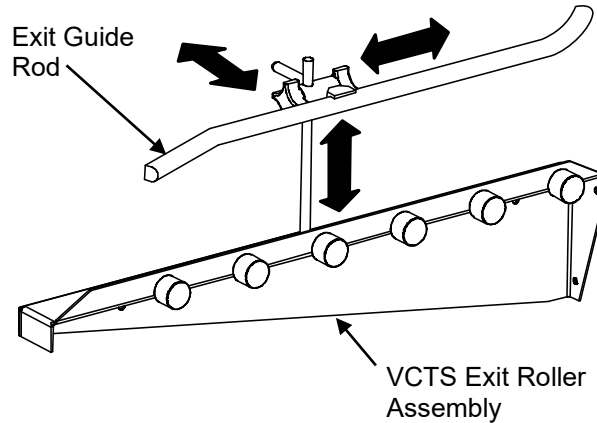
VCTS-XL Exit
Roller Assembly
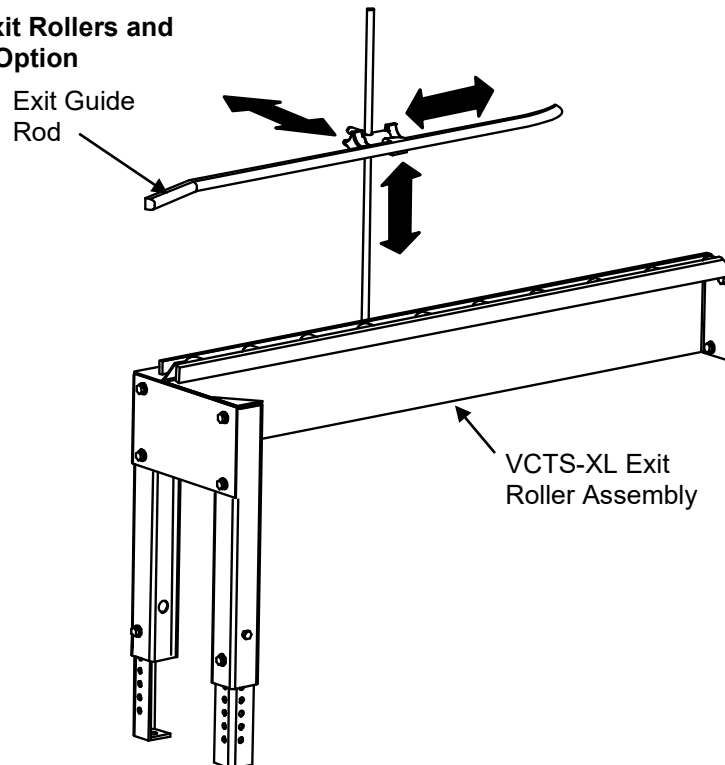
Kick Delay Adjustment

The Kick Delay time adjustment is located on the PLC located inside the control box. Remove the control box cover to gain access to the PLC

Kick delay may need to be adjusted for small boxes.
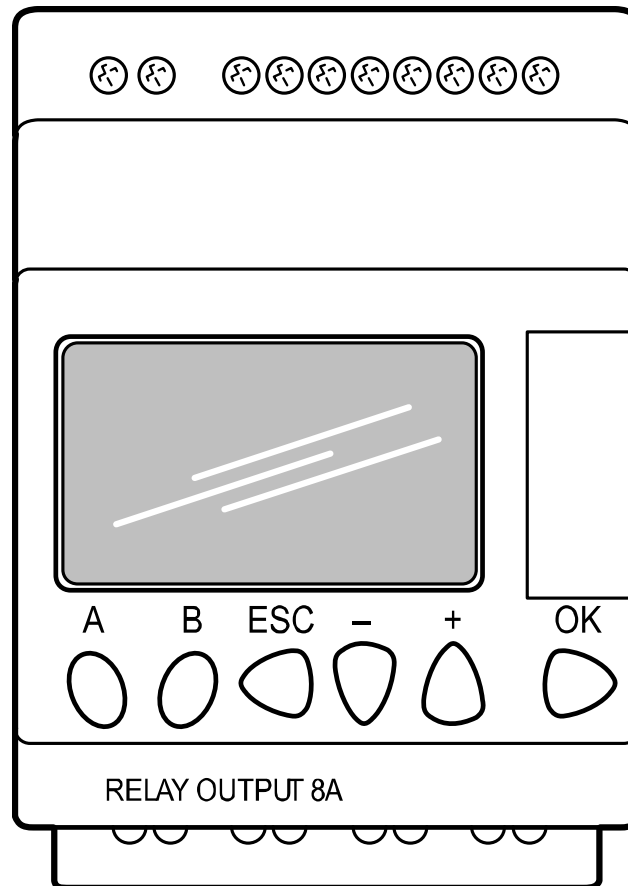
Kick delay programming steps

- Press button "A" or "B" to toggle between kick delay and photo eye delay.

- Press "OK" on value needed to be changed.

- To increase or decrease the values press the (+) or (-) buttons. Each 1/10 equals 1/10 of a second.

Air Pressure

The air pressure is pre-set at the factory and should not have to be changed. If you do have a need to adjust the air pressure to the cylinder there is a pressure regulator located inside the control box. Once again, the air pressure is pre-set and, in most circumstances, should not have to be changed.

Mounting the Ink Jet Printer

There are mounting holes predrilled that allow you to mount a variety of printing systems on the Vertical Case Transport System. **Refer to the User Guide that came with your printer for mounting instructions.** There are also two 110-120VAC 15 Amp electrical outlets on the side of the control box that can be used to provide service to the mounted printers.

Caution: Electrical outlets are hot whenever the machine is powered up!

The illustrations that follow in this section show examples of possible locations for attaching mounting brackets for some common printer configurations. Your printer configuration may be different.

Attention: Do not use electrical outlets for high amperage equipment. This may cause damage to the electrical components. The installed outlets are low amperage output, specifically for printers only!

Example of VCTS Print Station with Squid Ink CoPilot Mounting Bracket

CoPilot Mounting Bracket

Place Bracket Support Plate to inner wall of Print Station base, as shown, to provide added stiffness in mounting area.

Note: The Bracket Support Plate is pre-drilled and tapped for installation of four (4) ¼-20 × 1" hex-head bolts, flat washers, and lock washers to fasten the Baseplate Connector Clamp through the side of the Print Station to the Bracket Support Plate.

Detail View

Base Side Plate

Baseplate Connector Clamp

Printer Mounting Bracket

Bracket Support Plate

For CoPilot printer bracket mounting, place the reinforcement plate to the inner wall of the side plate of the print station base frame as shown in the illustration above.

Video: VCTS Operation with a Squid Ink Printer

To view an overview application video of operation of the Eastey VCTS Vertical Case Transport System with a Squid Ink printer mounted, click this link Eastey VCTS Operation with a Squid Ink Printer or scan the QR code at right using the camera app on your mobile device.

Operation

Loading the Input Hopper

Load the Input Hopper

Tilt the handles to the outside and slide them up the rails until behind the last box. Maximum load capacity is approximately ¾ the length of the feed chutes.

Movable
Feed Chute

Red Lever
Stop

Move Paddles
to the Side
Position

Stationary
Feed Chute
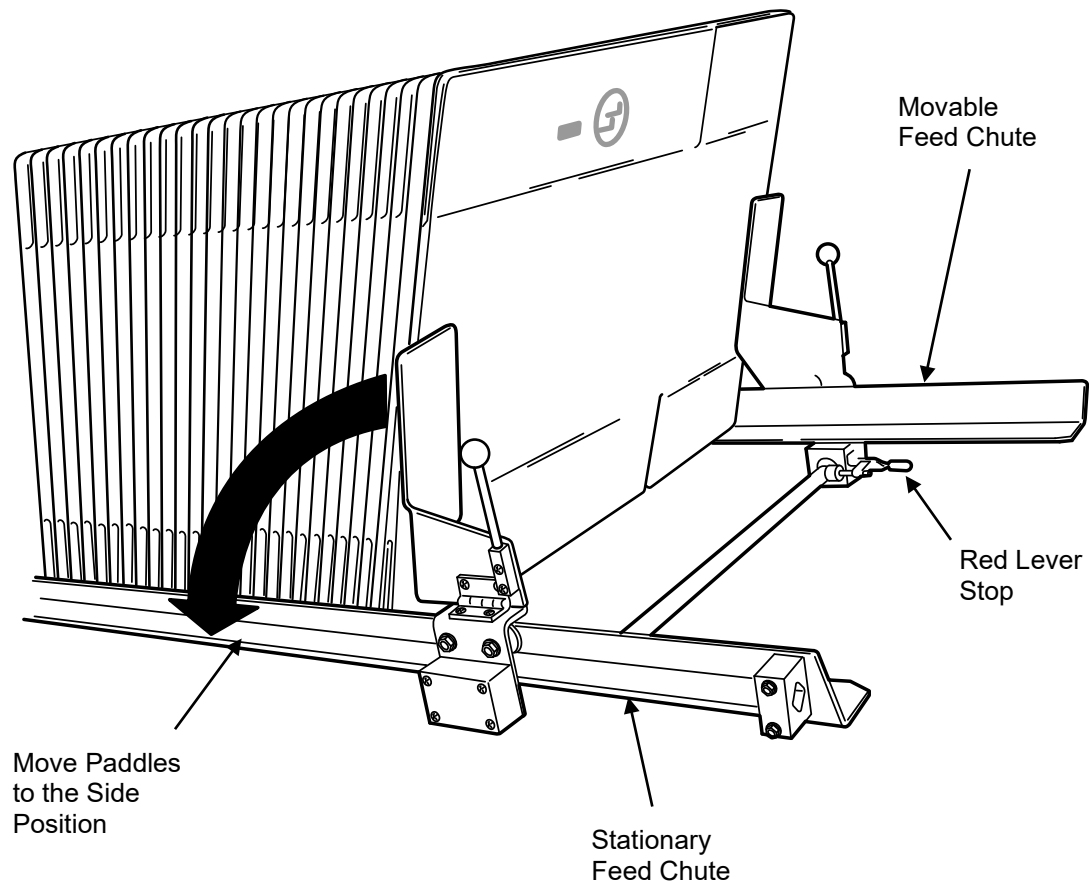
Loading During Operation

It is easy to load the feed chute hopper while the machine is running. Simply load boxes onto the feed chutes behind the paddles. Tilt the handles to the side and move them up the rails behind the last box. Make sure the paddles are behind the last box and tilt them back up to the run position. Make sure the paddles are returned to the upright run position.

Loading Tips

- The boxes need the weight of the paddles behind them to feed in correctly.

- Do not overload the feed chute.

- Do not squeeze or push the boxes in tightly.

Paddles in "Run" Position

Movable Feed Chute

Stationary Feed Chute
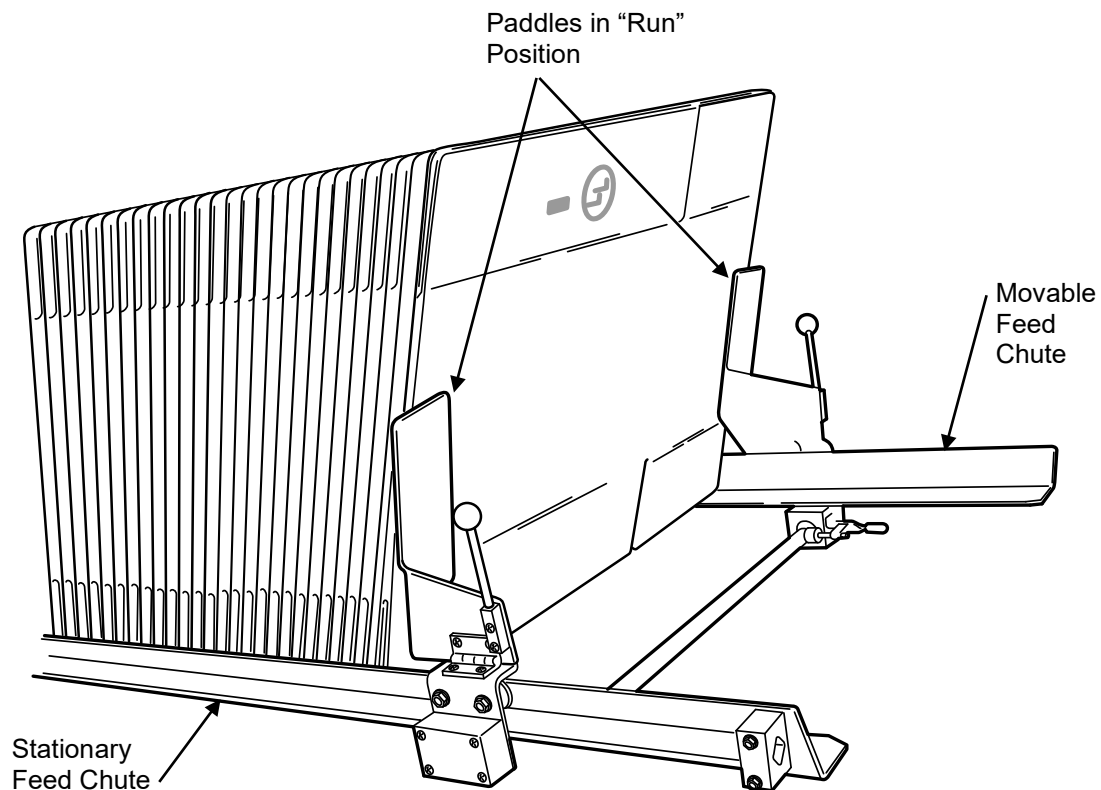
Attention: Boxes must be folded flat and in relatively good condition when loaded into the feed chute. Ripped, torn or otherwise mangled boxes will not feed or transport properly and can cause damage to the Vertical Case Transport.

Box Through Catch

The "Box Through Catch" is a small bracket that when adjusted correctly allows only one box at a time to be captured by the belt. Loosen the locking screw on the bracket and adjust it to the current box width. Add an additional 1/8" – 1/4" clearance between the box through catch and the box. Retighten the locking screw to secure the bracket at the required distance.

Box Through
Catch Bracket

Locking Screw (Socket
Head Cap Screw —
Requires a $3/16$" Allen
Wrench)

1/8" to 1.4"
Clearance
Between the
Box and Catch
Bracket Edge

Box Direction

Box

Drive Belt
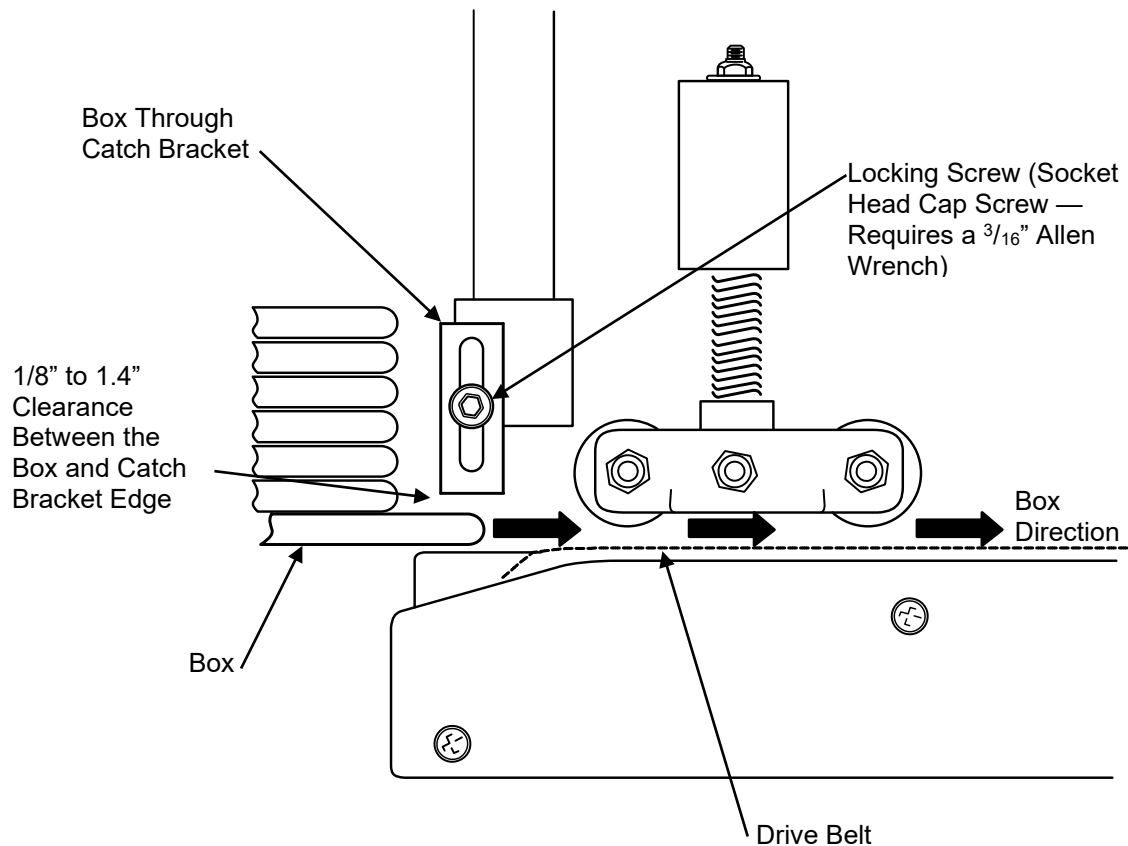
Note: The box through catch is a very important adjustment. You may want to recheck and fine tune this adjustment as you begin operation.

There is also a box through catch located on the opposite end of the boxes on the movable feed chute.

Box Push Bar Spacer for Double Wall Boxes

If you will be transporting double wall boxes you will want to install the plastic spacer behind the box push bar. To install the plastic spacer simply remove the 3 screws on the push bar. Position the plastic spacer under the metal push bar and replace the screws.

Note: The spacer is not needed for single wall boxes. If installed while transporting single wall boxes it may feed multiple boxes and cause the machine to jam.

Box Push
Arm

Plastic
Spacer

Double
Wall
BOX

3 Mounting
Screws
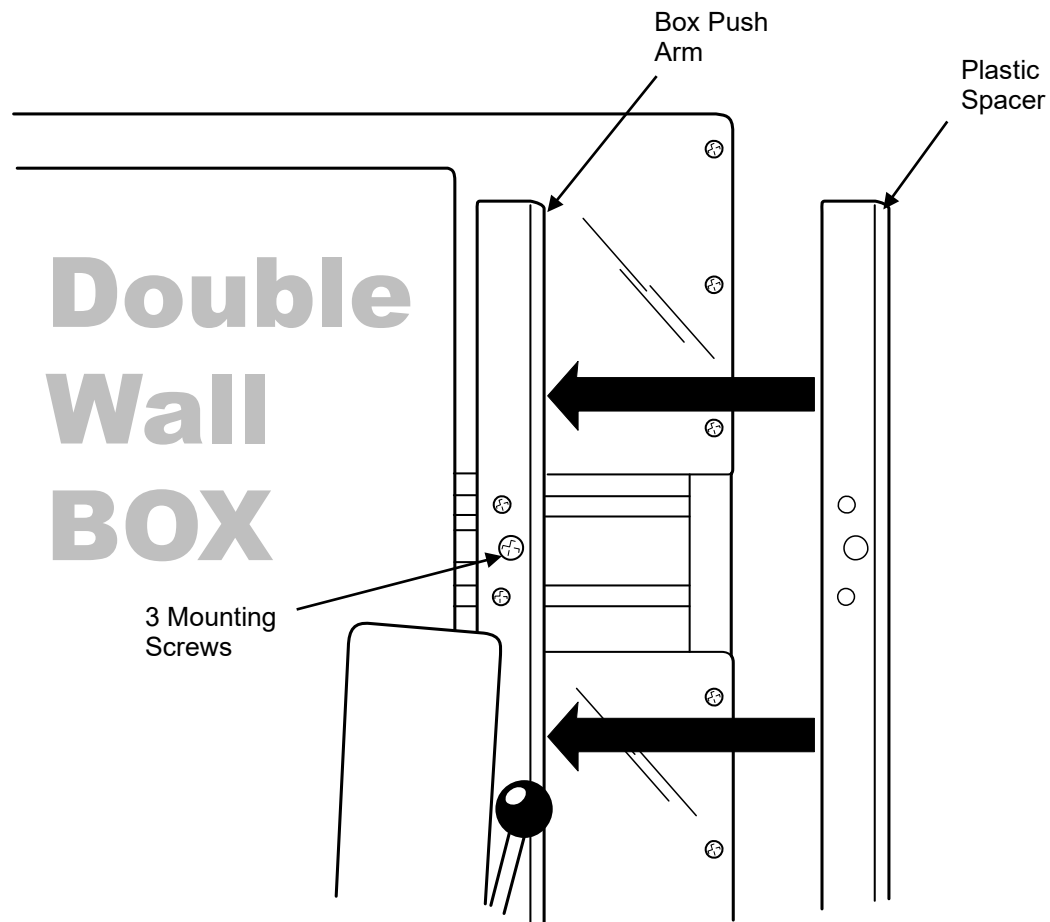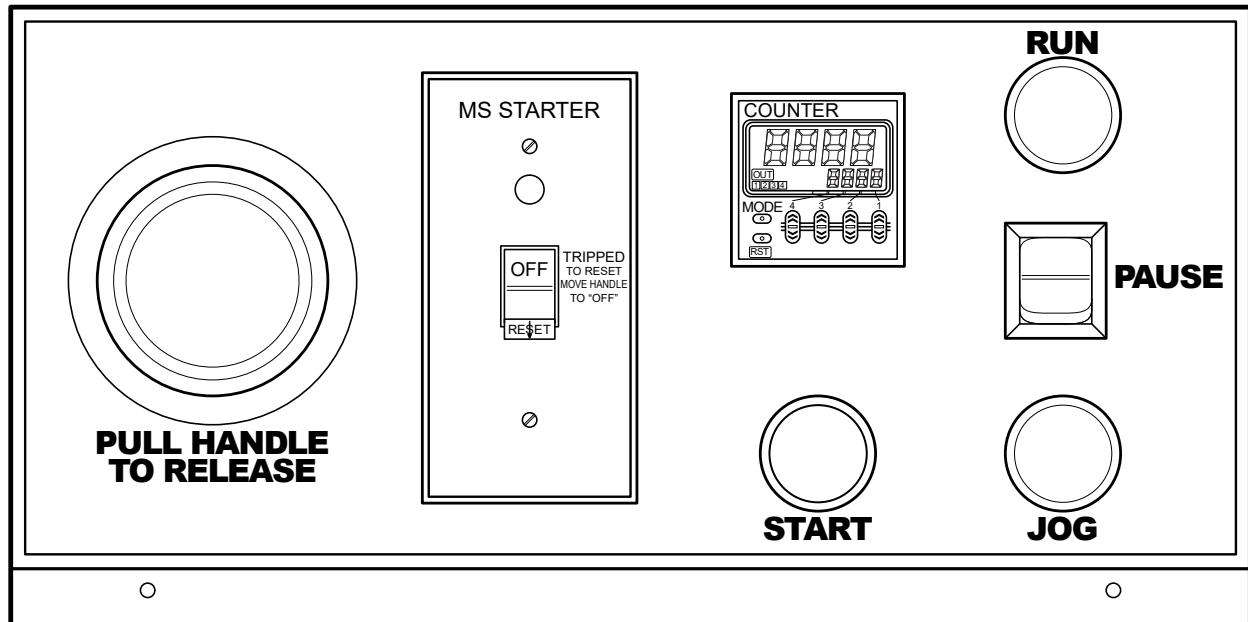
Control Panel

Power Up

On the control panel switch the power switch to the "ON" position. Make sure the "Emergency Stop" is not depressed. If so, pull the E-Stop knob to release it.

Counter

A programmable counter is located on the control panel.
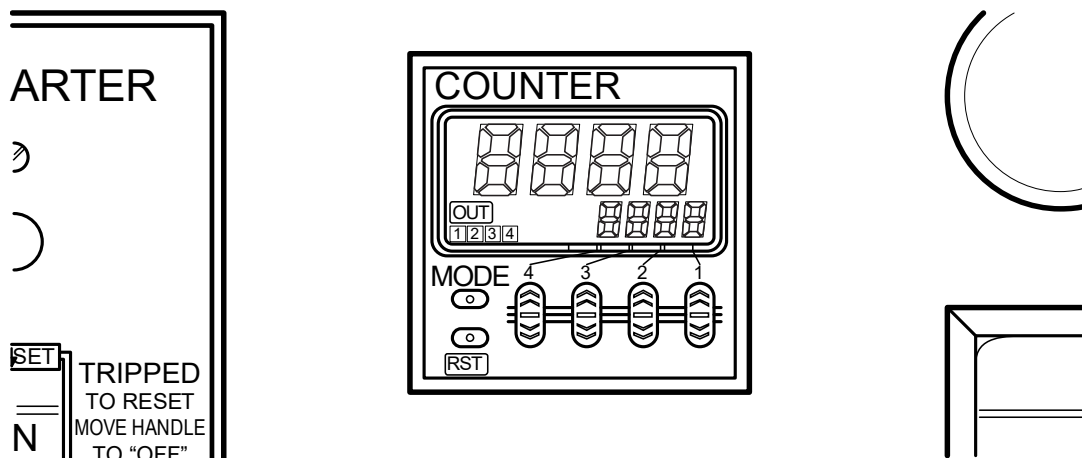
The counter will record the number of boxes that have been advanced through the transport system. You can also program the counter to stop after a set number of boxes.

Programming the Counter

You can set the number of boxes you want to transport.

To begin programming the counter, press the up or down arrow key located on the counter for the digit you want to change. Change the value with the up or down arrow keys. To reset the counter, press the "RST" key.

ARTER

SET TRIPPED
TO RESET
MOVE HANDLE
N TO "OFF"

COUNTER

OUT
1 2 3 4

MODE 4   3   2   1

RST

RST
(Reset)
Key

Thousands   Hundreds   Tens   Ones
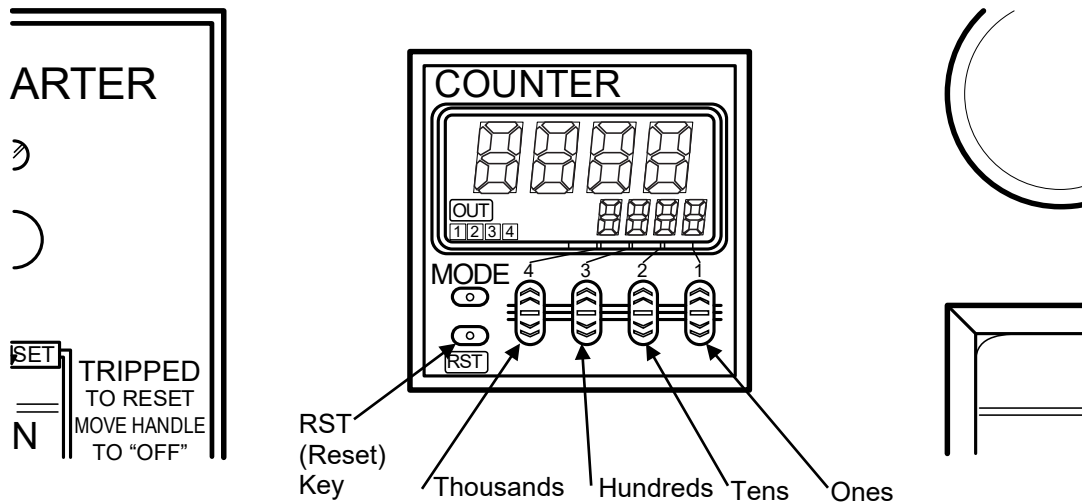
Rocker Switch

There is a three-position rocker switch located between the lights labeled "RUN" or "JOG".
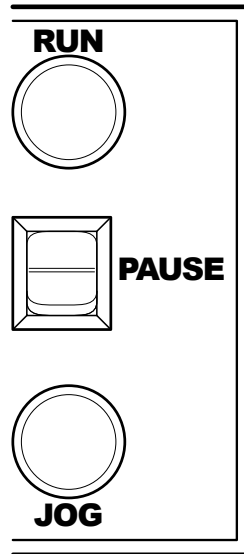
Run

If the rocker switch is set to the "RUN" position the transport will begin moving boxes and continue when the "START" button is pressed.

Jog

If the rocker switch is set to the "JOG" position only one box at a time will be advanced each time the "START" button is pressed.

Pause

If the rocker switch is in the neutral or "Pause" position no boxes will be advanced when the "START" button is pressed.

> **Note:**   While in the "PAUSE" position the belt will continue to run.

Maintenance

Cleaning

Clean the system daily or on a scheduled basis: When running the VCTS, cardboard box dust will accumulate on the system. It is recommended that the dust be blown/wiped off regularly so that it does not interfere with the photo eye, bearings, slides surfaces, and bushings.

Belt Tracking and Wear

Periodically check the belt drive system. Look for wear on the belt surface as well as the belt tracking. The belt surface should have a rough top and the belt should not be rubbing on the top or bottom of the drive housing.

a) Loosen the ½-13 UNC nut on the bottom side of the idler wheel using a ¾" wrench.

b) Using a $^7/_{16}$" wrench, adjust bottom screw for tension and top screw for tracking.

c) Do not overtighten the belt, as this could cause motor failure.

d) Track the belt slightly towards the top of the idler wheel.

e) Use a ¾" wrench to tighten the ½" nut below idler wheel.

Lubrication

Lubricate shafts and bushings periodically, depending on usage and cardboard dust accumulation. Shafts for chute and box pusher should be lightly oiled with silicone spray or other lubricant.

Air filter

Check internal air filter in the control cabinet periodically.

Fasteners

Check all nuts and bolts to ensure that they are tight.

If Cartons Do Not Feed Correctly

Check to ensure proper alignment of carton on chutes.

Check that the pusher bar is coming completely past the edge of the box before stroke.

Ensure socket head cap screw securing the cylinder and guide rail brackets is tightened.

Check chute spacing: leave $1/8$" space between the end of the box and the inside wall of the chute. This will allow the boxes to move freely.

Check that the box weight arms are moving freely on the box chute rails. If they need to be adjusted do the following:

1. Remove the counter weights (4 screws)
2. Using a ½" wrench adjust the bottom V-guide wheel nut. This is an eccentric nut (offset-hole center).
3. Turn the nut slightly to tighten or loosen the V-guide wheels on the rail.
4. Reassemble the counter weight on the bracket.

Check the air pressure.

Ensure the photo eye is properly mounted and "seeing" the box.

Check that the box stop spacers are properly adjusted to the box size.

Check the in-feed roller assembly for position on belt.

- Replace the spring as needed.
- Replace the idle wheels as needed.
- Move the assembly in the slotted holes to adjust spacing.

Replacing the Drive Belt

Belt Cover
Screws

Belt Cover

Belt
Tracking
Bolt

Belt
Tension
Bolt

Loosen
Large Nut Located
Under Bottom Plate
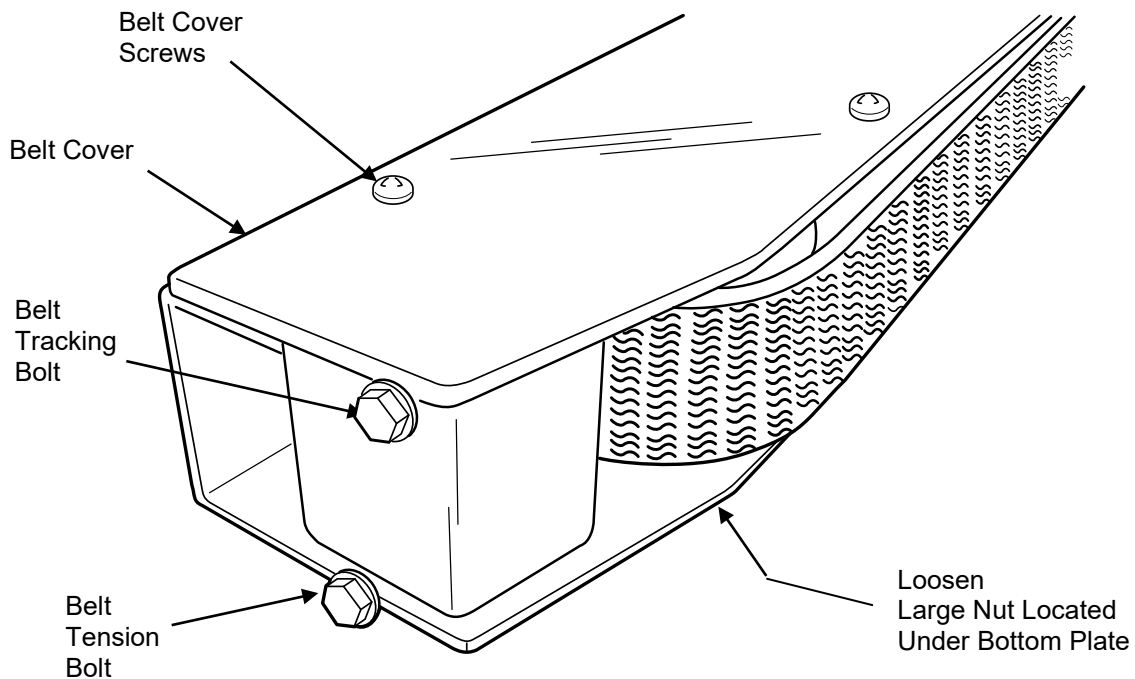
Remove all the belt cover screws completely.

Remove the belt tracking bolt.

To allow the tension pulley to move loosen the large nut located under the belt tension pulley.

Loosen the tension adjustment bolts so tension on the drive belt is relaxed.

Remove the belt from the pulleys.

Install the new belt around the pulleys.

Using the belt tension adjustment bolt put tension back on the belt.

Replace the belt tracking bolt.

Replace the drive belt cover and drive belt cover screws.

Parts

Spare Parts

Wear Parts and Consumables

As part of regularly scheduled maintenance of the Vertical Case Transport System, it is expected that certain parts will undergo wear under normal use and require replacement at regular intervals. For example, electrical fuses are designed to self-destruct to help protect users and internal electrical components of the machine to interrupt the flow of electricity in the event of an electrical overflow or short-circuit. As such, it is expected that fuses may blow at some time and require replacement. Belts and UHMW plastic components will see wear through daily use and require replacement at some time in the course of regular maintenance. It is recommended to keep a supply of spare wear parts and replacement items to reduce the likelihood of long durations of machine downtime when time comes to replace them.

Recommended Spare Parts

The following parts are recommended as spare parts for the Vertical Case Transport System.

- Infeed Rollers – Clutched Roller and 3" Wide Roller (2 each)
- Linear Bearing Block ¾" Diameter (2 each)
- Air Cylinder 2" Bore × 4" Stroke (1)
- Stacking Brushes (8)
- M6 Lever, Adjustable (4)
- T-Nut Slider 10MM M6 (4)
- Flange Bearing ¾" Diameter (1)
- UHMW plates and bar stock — White plastic components to reduce friction between the case and slide surfaces or guides.

Similarly, for recommended spare electrical parts, look at the parts listing for the Vertical Case Transport System. Note the part numbers and ratings of these electrical components.

- Fuses 10A (FU01 & FU02) and 2A (FU03) (10A - 2 each; 2A - 1 each)
- Fuse Holder 1-Pole CC For Above Fuses (3)
- Photocell (1)
- Relay 24VDC Input 120VAC Switching (1)
- Relay Socket For Above Relay (1)
- Solenoid Valve 24 VDC (1)

An Eastey technician can help you to determine and order the recommended spare parts during initial consultation for ordering your Vertical Case Transport System. Part numbers for ordering these parts are on the following page.

Vertical Case Transport System Spare Parts Description and Part Number

The following table provides part numbers and recommended quantities of spare parts.

Part Number	Description	Quantity
SUBR5466	Assy - Clutched Infeed Roller	2
SUBR5741	Infeed Roller 3" Wide	2
5005479	Air Cylinder, 2" Bore × 4" Stroke	1
5005478	Stacking Brush	8
5005446	LINEAR BEARING BLOCK ¾" DIA.	2
2006123	Lever Adjustable, M6	4
2006063	T-Nut Slider, 10MM M6	4
5005445	Flange Bearing ¾" Diameter	1
4500783	Fuse 10A UL Class CC MID. TD 600 VAC 10AMPS TYPES LP-CC AT	2
VSCP0013	Fuse 2A Time Delay CC 600V 2A	1
5005191	1-Pole CC Fuse Holder	3
5005487	Photocell	1
5005484	Relay 24VDC Input 120VAC Switching	1
5005483	Relay Socket	1
5005187	Solenoid Valve 24VDC	1
4501851	Wire Ferrule White	9

SUBK0100-VCTS, VCTS Spare Parts Kit

Following are contents of an available spare parts kit, SUBK0100-VCTS.

5000540	FAB Belt Strip	1
5000604	Bearing-SB Idler Roller	4
5000816	Bushing-Flange ½" ID, 5/8" OD	4
5000853	Belt (Set-Pair) Side EZ SB	1 pair
5000868	Bushing-Flanged 3/8" ID ½" OD	6
5002036	V-Bearing-Dual-Vee	6
5002040	Air Cylinder 7" Stroke, 1-1/2" Bore	1
5003015	Spring Compression	3
5003017	Mod-Box Guide 5' Length SST/UMHW	1
5005188	Valve Pneumatic VUWG-L14-M52-M-G18	1
5005479	Air Cylinder, 2" Bore × 4" Stroke	1
SUBR5741	Assembly UHMW Idler Roller (Restacker)	4
SUBR5466	Assembly Clutched Infeed Roller (Restacker)	1
5005487	Photocell, Banner QS18VP6CV45	1

Vertical Case Transport System — Standard VCTS

Front View

1.09 1.10 1.11 1.12 1

1.08
1.07
1.04
1.03

3 2 2.05 2.06

1.06
1.05
1.02
1.01

2.02
2.03
2.01

4

Rear View

1

1.04(Left)/1.06(Right)

1.03(Left)/1.05(Right)
1.02

1.08
1.11
1.08

2.05 2 3

1.01

2.01

Rear Connecting Strap

4
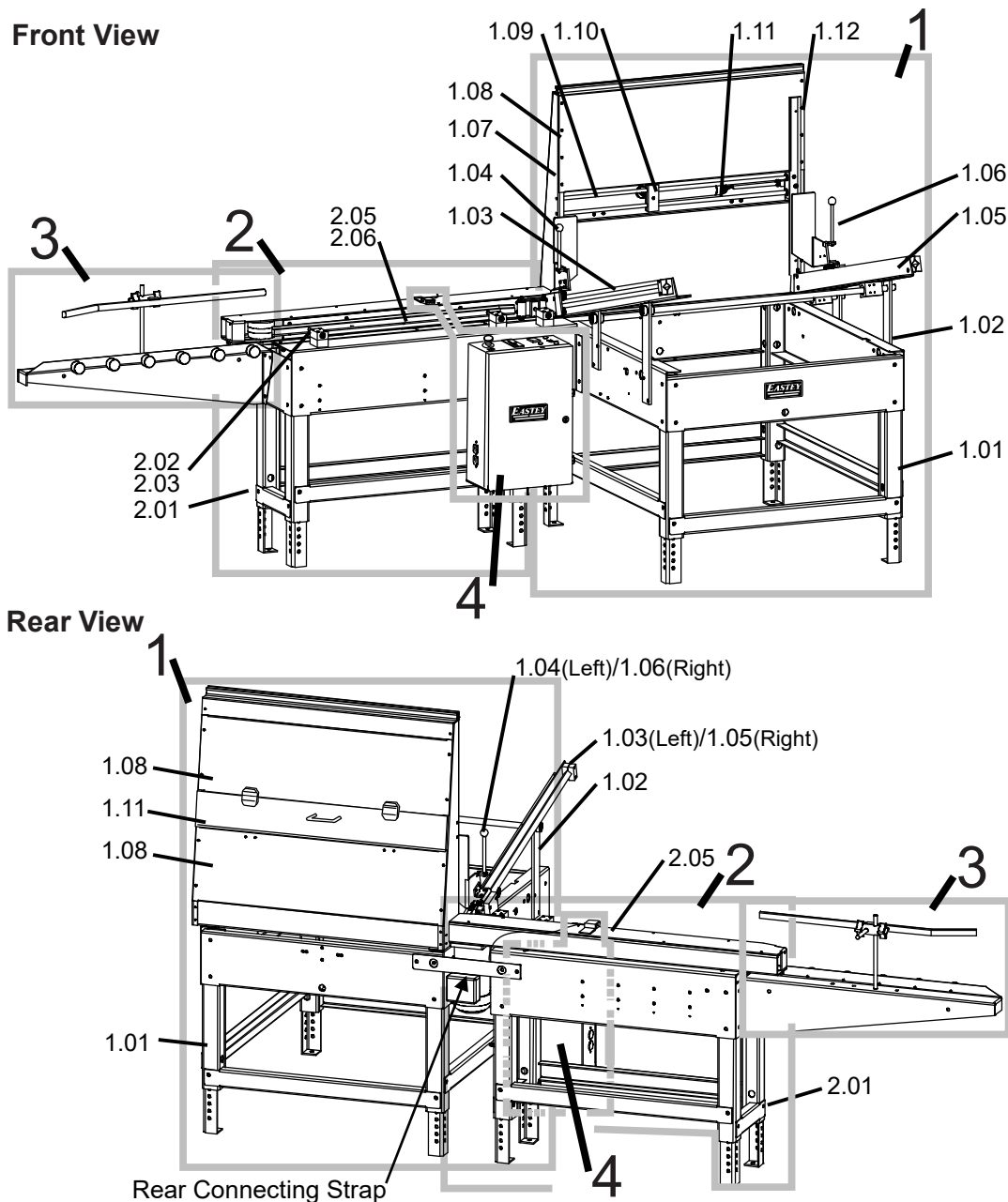
Item	Part Number	Description	Page
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2	5010002	Print Station (Includes items 2.01 through 2.09.)	69-75
3	5010003	End Exit Roller & Guide Rail Assembly Option	76
3	5010020 SUBR5475	Restacking Output Hopper (Restacker) Option Restacker Electrical Components and Enclosure Assembly	77-84, 86
4	5003022-UL	Electrical / Pneumatic Enclosure Control Panel & External Connections Electrical / Pneumatic Enclosure Internal Components	109 110-112

Item	Part Number	Description	Page
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	5003027	FAB – Rear Support Bracket – Secures Print Station to Infeed Module	68
2	5010002	Print Station (Includes items 2.01 through 2.09 below.)	69-75
2.01	5010002	Print Station Base Frame	69
2.02	5010002	Print Station Slide Contact Spring Support Blocks	70
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2.04	5003047	Print Station Roller Pivots Assembly	72
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2.06	5010002	Print Station Side Belt Attaching Hardware	75
3	5010003	End Exit Roller & Guide Rail Assembly Option	76
3	5000402	Restacking Output Hopper (Restacker) Option	77-84, 86
3.01	5000402	Restacker Base Frame and Leg Extensions	80
3.02	5000402	Restacker Infeed Vertical Brush Rails and Shelf Assembly	81
3.03	5000402	Restacker Sliding Shelf and Movable Vertical Brush Rail Assembly	82-83
3.04	5000402	Restacker Pushing Mechanism with Mounting Post and Transport Rollers	84
3.05	SUBR5475	Restacker Electrical Enclosure Assembly	86
4	5003022-UL	Electrical / Pneumatic Enclosure Control Panel & External Connections Electrical / Pneumatic Enclosure Internal Components	109 111-112

Infeed Module Base Frame (1.01)
5010001
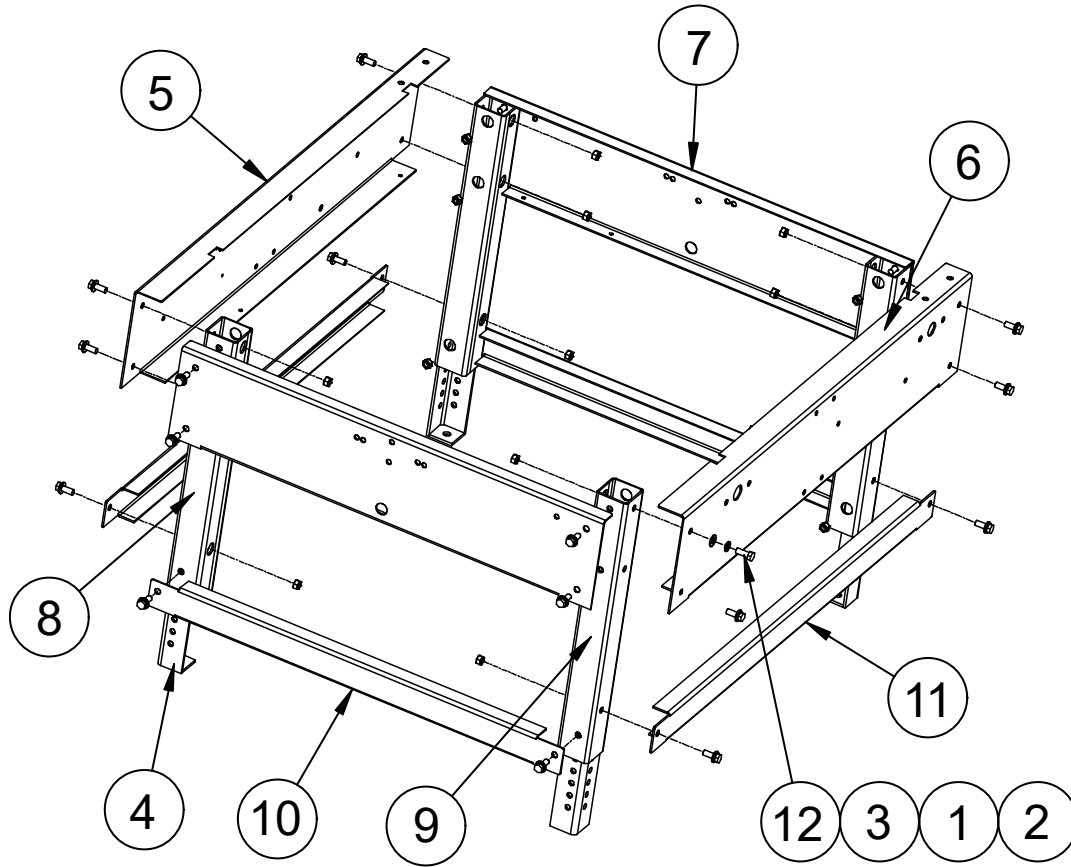
Item	Part Number	Description	Quantity
1	055029-022	Washer – Flat ⅜ Zinc	24
2	055307-062	Nut – Hex ⅜ – 16 NI	24
3	055310-042	Washer – Split ⅜ NI	24
4	5000195	Fab / Weld – Leg Extension	4
5	5000548	Fab – Side Frame, Left, SB	1
6	5000549	Fab – Side Frame, Right, SB	1
7	5000551	Fab – Rear Frame	2
8	5000552	Fab – Leg (R/L)	2
9	5000553	Fab – Leg, Left Rear	2
10	5000554	Fab – Brace, Front	2
11	5000555	Fab – Brace, Side	2
12	5000791	Screw – HH ⅜ – 16 × 1 NI	24

Infeed Module Chute Support Straps and Shafts (1.02)
5010001
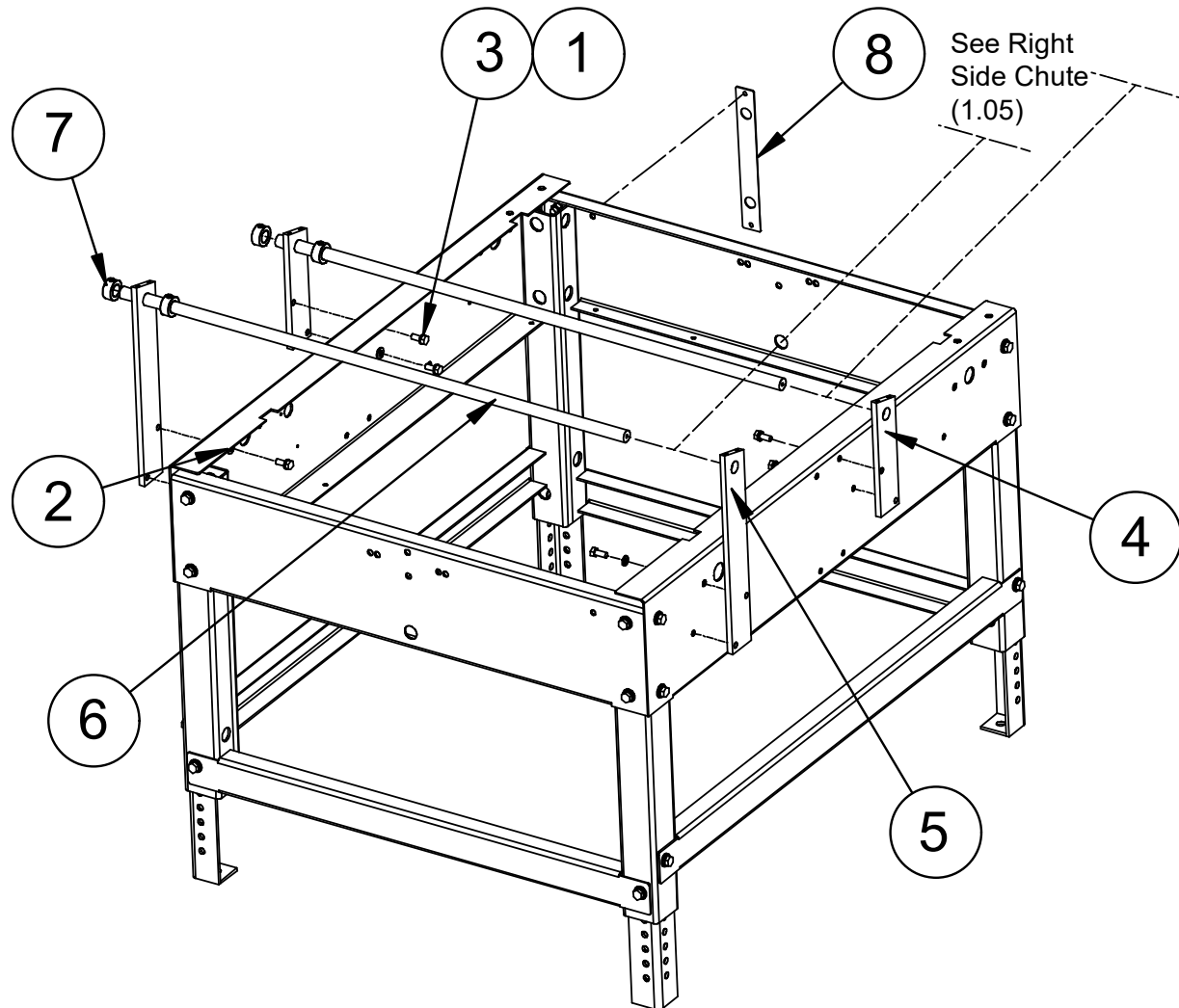
See Right Side Chute (1.05)

Item	Part Number	Description	Quantity
1	055293-056	Screw – HH 5/16 - 18 × ¾ Zinc	8
2	5000333	Washer – Flat 5/16, Zinc	8
3	5000339	Washer – 5/16 SPLIT, Zinc	8
4	5002027	Mach – Front Slide Brace	2
5	5002028	Mach – Rear Slide Brace	2
6	5002029	Linear Shaft ¾" O.D.	2
7	5002034	Collar Clamp Set Screw ¾" I.D.	4
8	5003027	Fab – Rear Support Bracket	1

Infeed Module Left Side Chute (1.03)
5010001
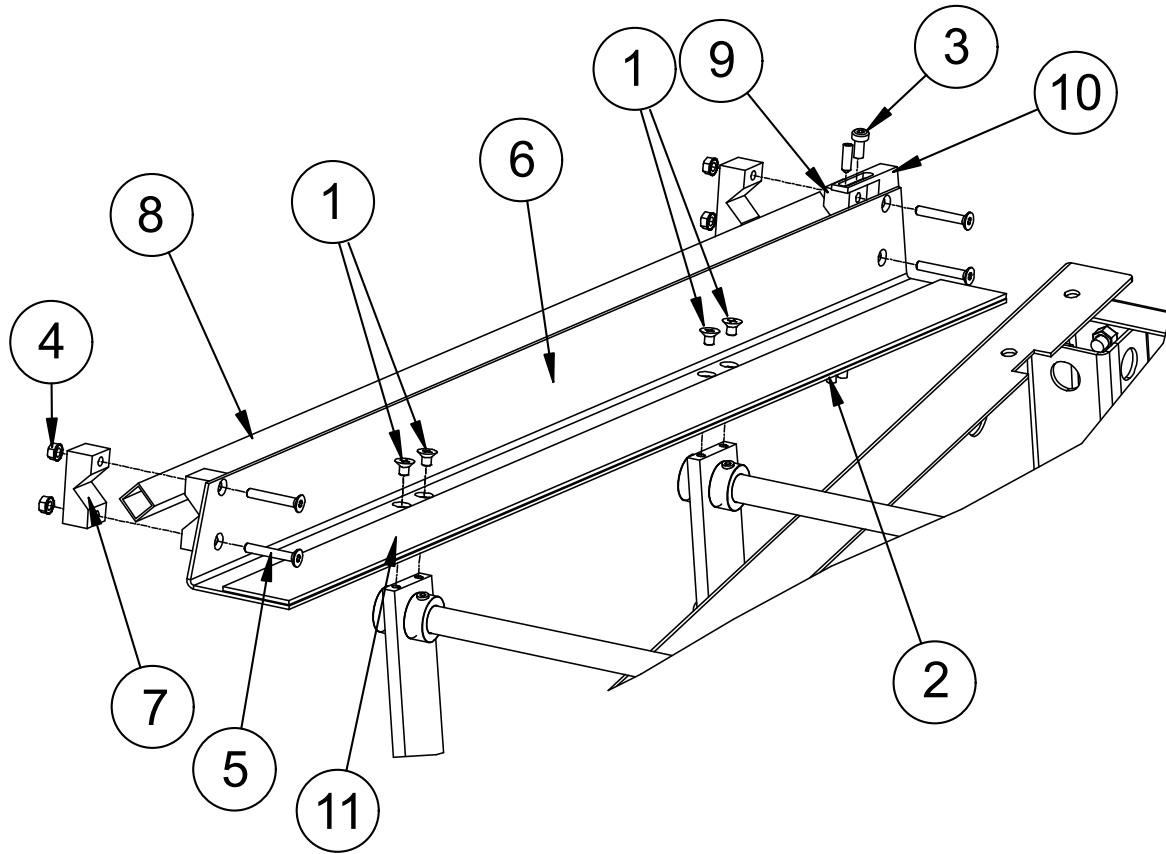
ITEM	PART NO.	DESCRIPTION	Q'TY
1	055020-098	Screw – FH ¼-20 × ⅜ (100) ZN	4
2	055298-081	Screw – Set 10-32 × 5/16 Aln Blk	3
3	089676-001	Screw –Socket ¼-20 × ½ SST	1
4	102448-004	Nut – Kep, M6, Zinc	4
5	5000786	Screw – FH, M6×20, DIN 7991, Skt-Blk	4
6	5002001	Fab – Carton Feed Chute	1
7	5002004	MACH – SIDE SLIDE BLOCK	3
8	5002005	Fab – Side Guide Tube 0.75" × 0.75"	1
9	5002007	Mach – Side Slide Block, Mod	1
10	5002053	Mach – Box Stop	1
11	5003021	Fab – Bottom Carton Slide	1

Infeed Module Left Slide Guide (1.04)
5010001

Item	Part Number	Description	Quantity
1	054982-006	Nut – Kep ¼-20 NC Zinc	3
2	055020-085	Screw – FH 10-32 × ⅜ SST PH(82)	4
3	055020-094	Screw – FH 10-32 × 1 SST PH	4
4	055293-044	Screw – HHC, ¼-20 × 1", SS	3
5	5002003	Fab – Side Slide Guide Plate	1
6	5002015	Fab – Left Box Support	1
7	5002030	Mach – Side Rail Weight	1
8	5002036	V-Bearing – Dua-L-Vee	3
9	5002037	Bushing – Eccentric Dua-L-Vee	1
10	2006017	Washer – ¼" Flat SS	3
11	5002038	Bushing – Concentric Dua-L-Vee	2
12	5002039	Door Hinge SST, Surface Mount	1
13	5002041	Fab – Bottom Carton Slide	1

Infeed Module Right Side Chute (1.05)
5010001
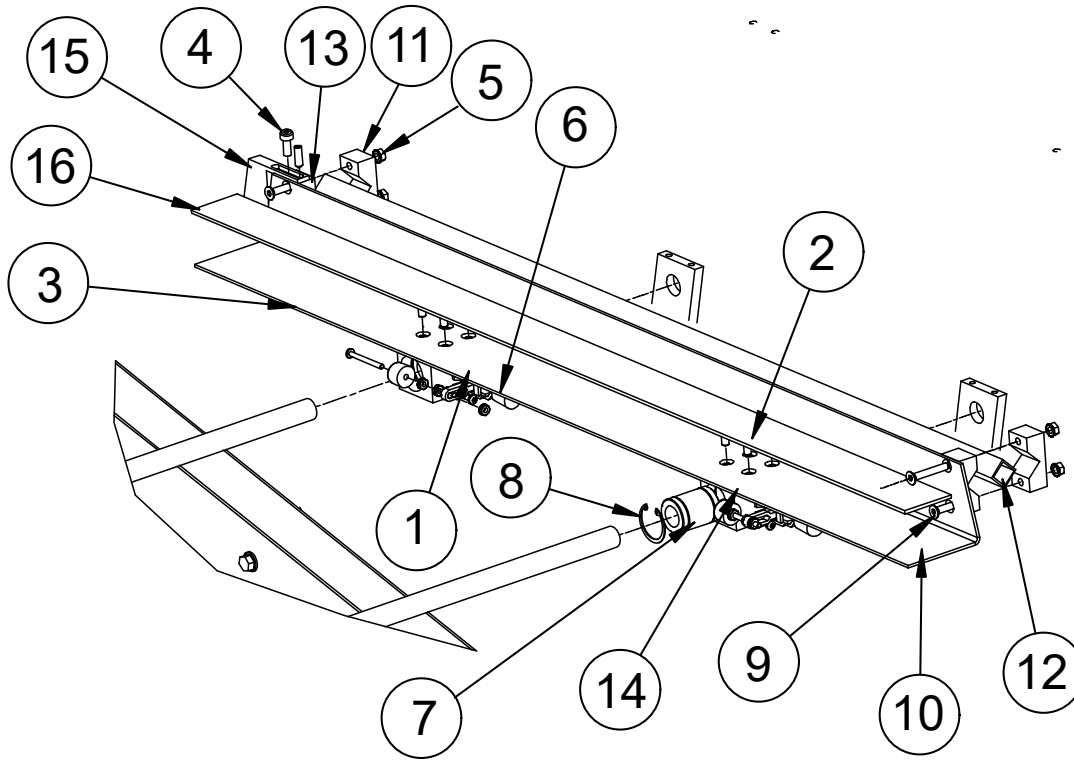
Item	Part Number	Description	Quantity
1	054979-097	Screw – PH 8-32 × ⅜ PH SEMS INT	8
2	055020-099	Screw – FH ¼-20 × ⅜ (100) ZN	8
3	055298-081	Screw – Set 10-32 × 5/16 Allen Black	3
4	089676-001	Screw – Socket ¼-20 × ½ SST	1
5	102448-004	Nut – Kep, M6, Zinc	4
6	113825-002	Mod – Toggle Hold Down Clamp	2
7	5000520	Bearing – Linear Ball ¾" I.D.	2
8	5000521	Retaining Ring	4
9	5000786	Screw – FH, M6×20, DIN 7991, Socket - Black	4
10	5002001	Fab – Carton Feed Chute	1
11	5002004	Mach – Side Slide Block	3
12	5002005	Fab –Side Guide Tube 0.75" × 0.75"	1
13	5002007	Mach – Side Slide Block, Mod	1
14	5002026	Mach – Bushing Block, Slide Rail	2
15	5002053	Mach – Box Stop	1
16	5003021	Fab – Bottom Carton Slide	1

Infeed Module Right Slide Guide (1.06)
50010001

Item	Part Number	Description	Quantity
1	054982-006	Nut – Kep ¼-20 NC Zinc	3
2	055020-085	Screw – FH 10-32 × ⅜" SST PH(82)	4
3	055020-094	Screw – FH 10-32 × 1" SST PH	4
4	055293-044	Screw – HHC, ¼-20 × 1", SS	3
5	5002003	Fab – Side Slide Guide Plate	1
6	5002016	Fab – Right Box Support	1
7	5002030	Mach – Block, Side Rail Weight	1
8	5002036	V-Bearing – Dua-L-Vee	3
9	2006017	Washer – ¼" Flat SS	3
10	5002037	Bushing – Eccentric Dua-L-Vee	1
11	5002038	Bushing – Concentric Dua-L-Vee	2
12	5002039	Door Hinge Sst, Surface Mount	1
13	5002041	Handle –Knob, 4" Long, $5/_{16}$-18 Thread	1

Infeed Module Upper Frame End Triangles (1.07)
5010001
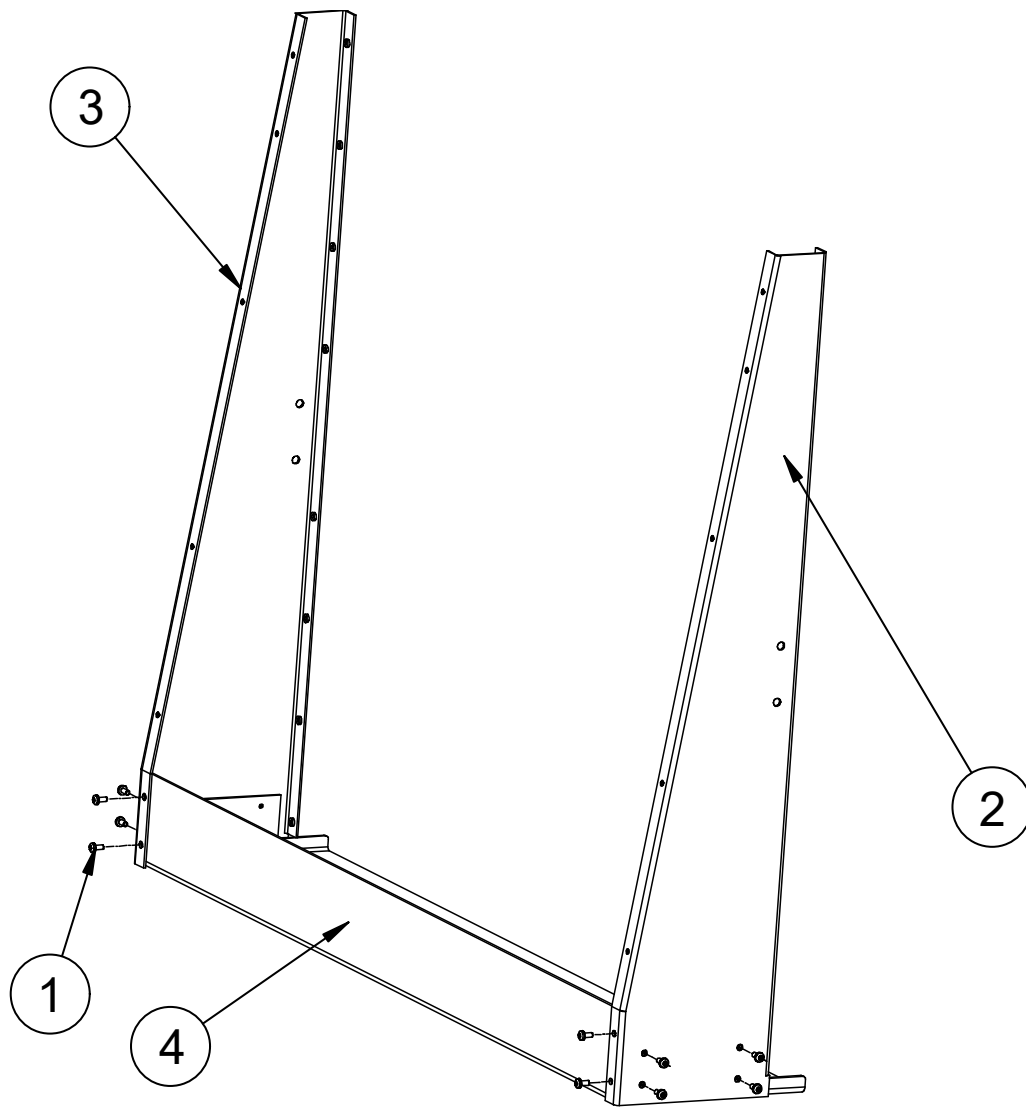
Item	Part Number	Description	Quantity
1	054979-097	Screw – PH 8-32 × ⅜ PH Sems Int	12
2	5002010	Fab – Left Side Brace, Infeed	1
3	5002011	Fab – Right Side Brace, Infeed	1
4	5002014	Fab – Box Brace, Infeed	1

Infeed Module Upper Frame Cover Panels (1.08)
5010001
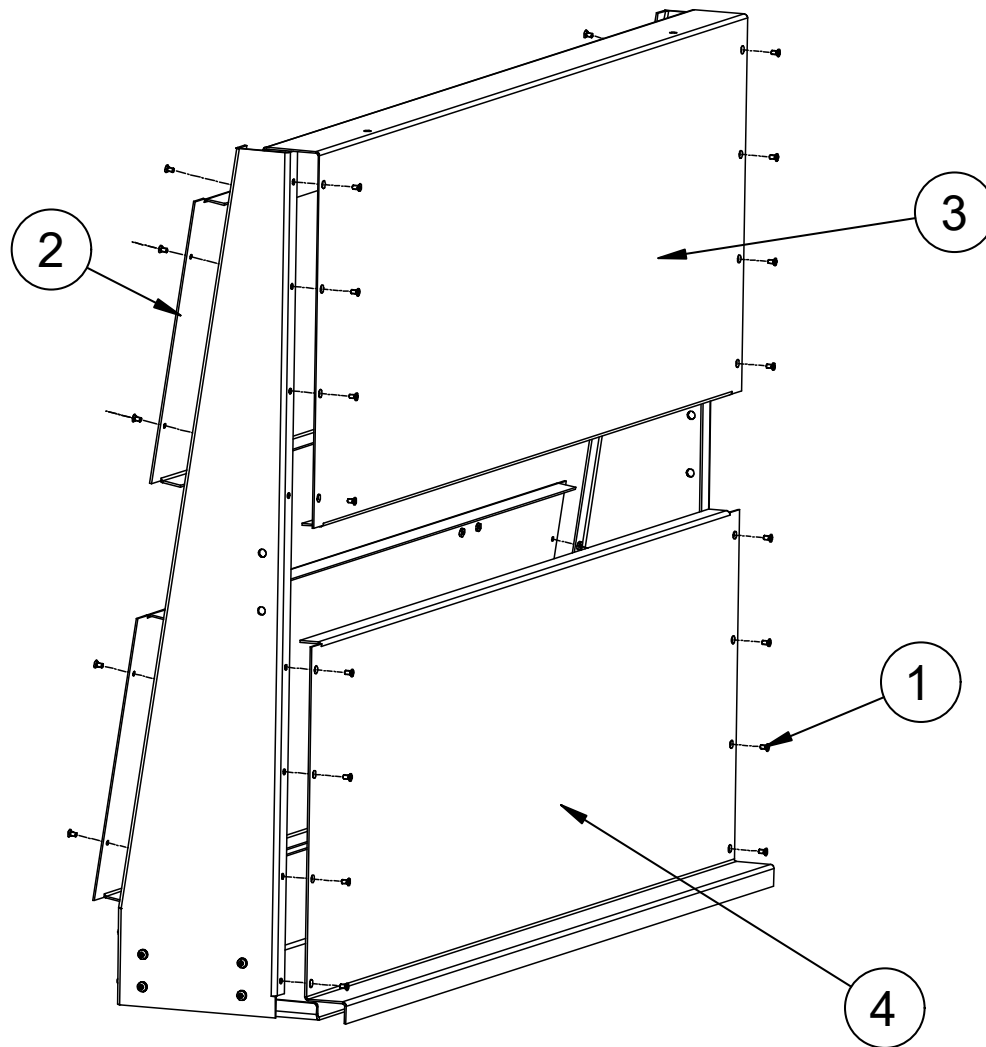
Item	Part Number	Description	Quantity
1	055020-052	Screw – FH 6-32 × ¼ SST PH (100)	26
2	5002008	Fab – Back Upper Cover	2
3	5002012	Fab – Top Front Frame, Infeed	1
4	5002013	Fab – Bottom Front Frame, Infeed	1

Infeed Module Guide Shafts and Bushing Block (1.09)
5010001
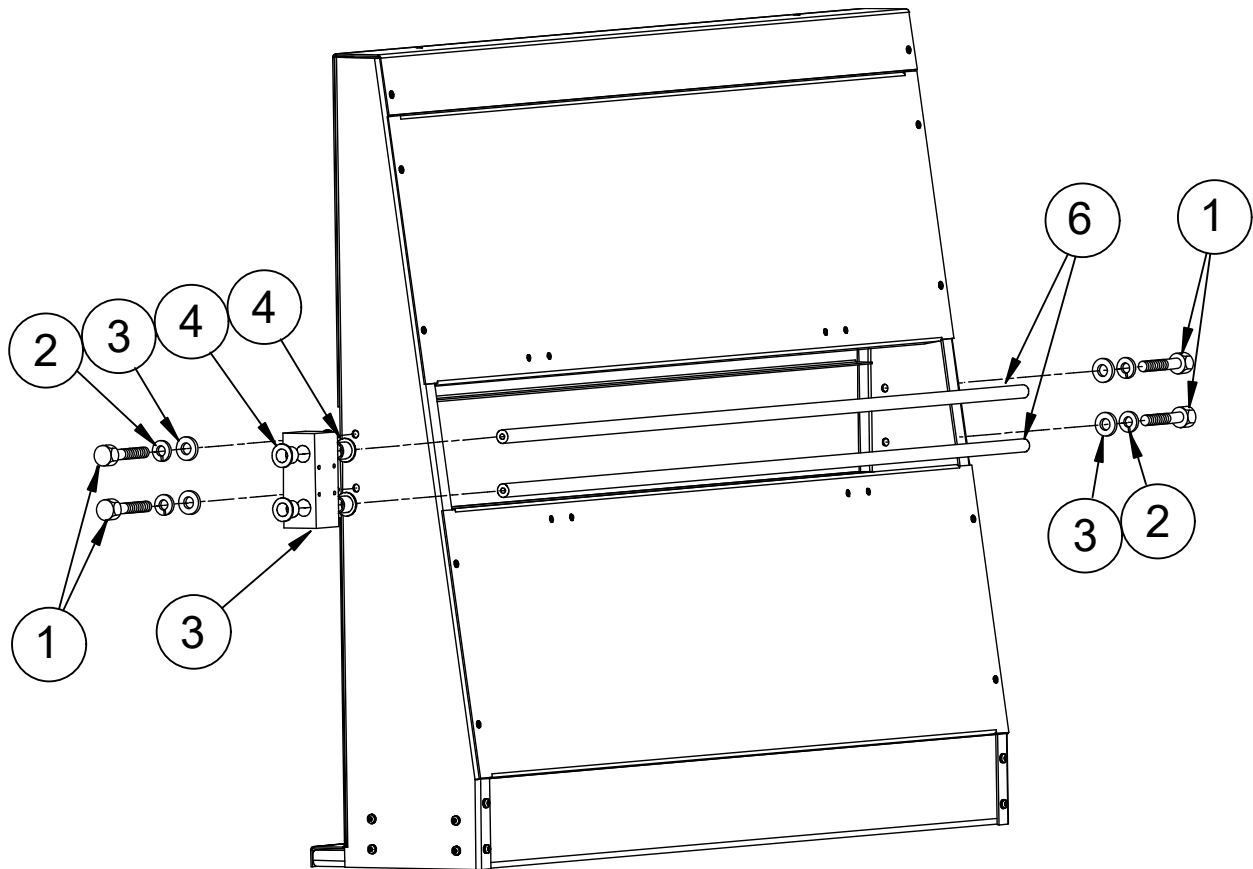
Item	Part Number	Description	Quantity
1	055293-040	Screw – ¼-20 × ¾ SST	4
2	055310-033	Washer – Split ¼ SST	4
3	055029-018	Washer – Flat ¼ SST	4
4	5000816	Bushing – Flange	4
5	5002021	Mach – Block, Push Bar	1
6	5002024	Mach – Shaft Guide	2

Infeed Module Air Cylinder and Locking Bracket (1.10)
5010001
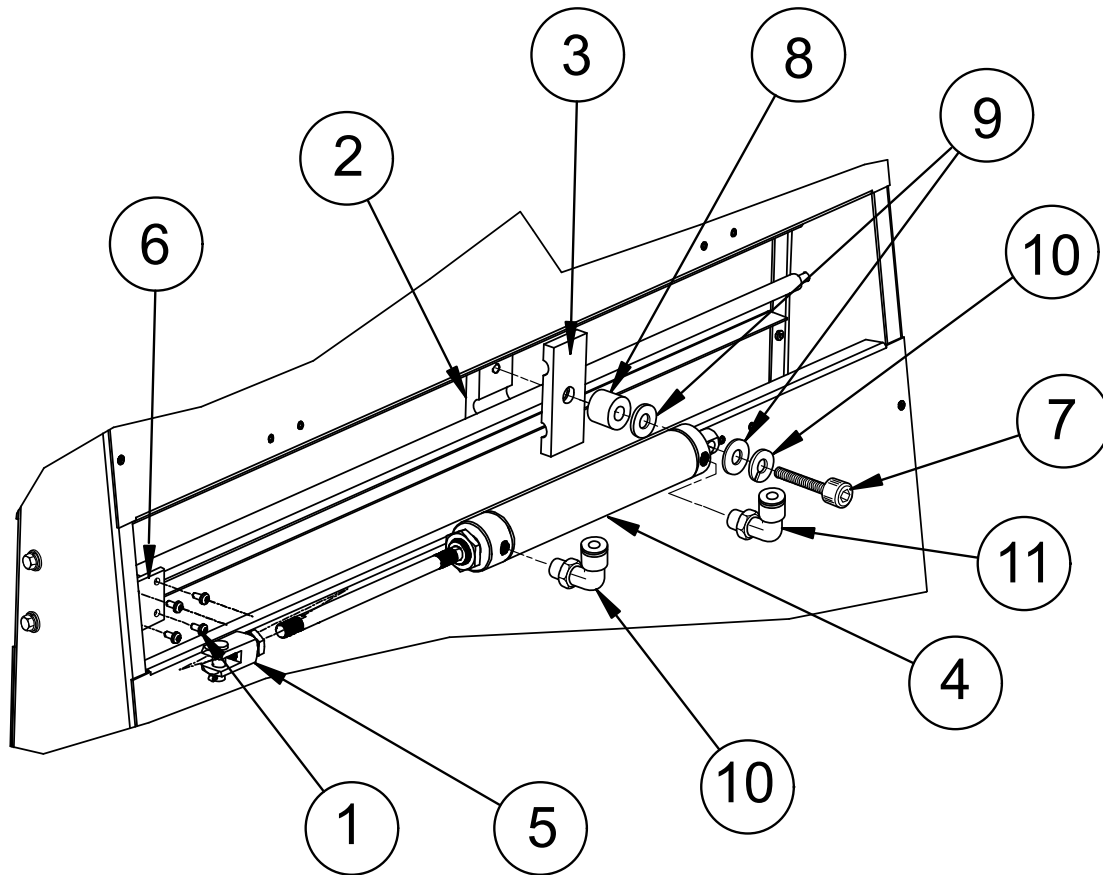
Item	Part No.	Description	Quantity
1	054979-097	Screw – PH 8 - 32 × ⅜ PH Sems Int	4
2	5002022	Mach – Air Cylinder Bracket Front	1
3	5002023	Mach – Air Cylinder Locking Bracket Rear	1
4	5002040	Air Cylinder, 7" Stroke, 1-½" Bore	1
5	5002043	Rod Clevis For 1-½" Bore Cylinder	1
6	5002025	Fab / Weld Clevis Bracket	1
7	5000970	⅜"-16 × 2-½" SST Socket Head Cap Screw	1
8	5000971	Spacer – ¾" O.D. × ¾" Long	1
9	055029-022	⅜" Flat Washer Zinc	2
10	055310-042	⅜" Lock Washer	1
11	5003037	Fitting Elbow	2

Infeed Module Air Cylinder Cover Door Assembly (1.11)
5010001
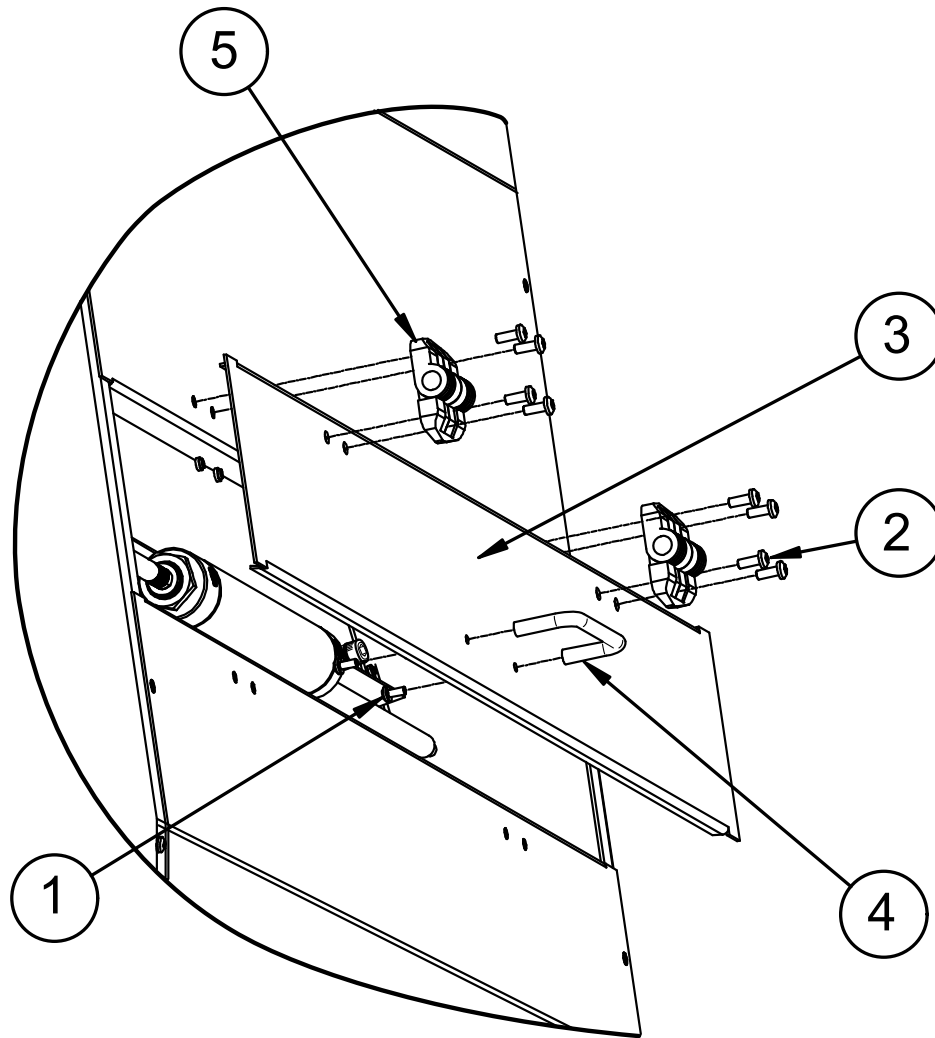
Item	Part No.	Description	Quantity
1	054979-097	Screw – PH 8-32 × ⅜ PH Sems Int	2
2	054979-123	Screw – PH 10-32 × 0.5 PH SS Sems - IN	8
3	5002018	Fab – Back Middle Cover	1
4	5002035	Pull Handle – Round, Threaded	1
5	5002049	Friction Hinge Surface Mount	2

Infeed Module Upper to Lower Frame & Attach Push Bar (1.12)
5010001

NOTE: Item number (7) is provided with every VCTS.

NOTE: Screws (1) must be installed with thread locking compound applied
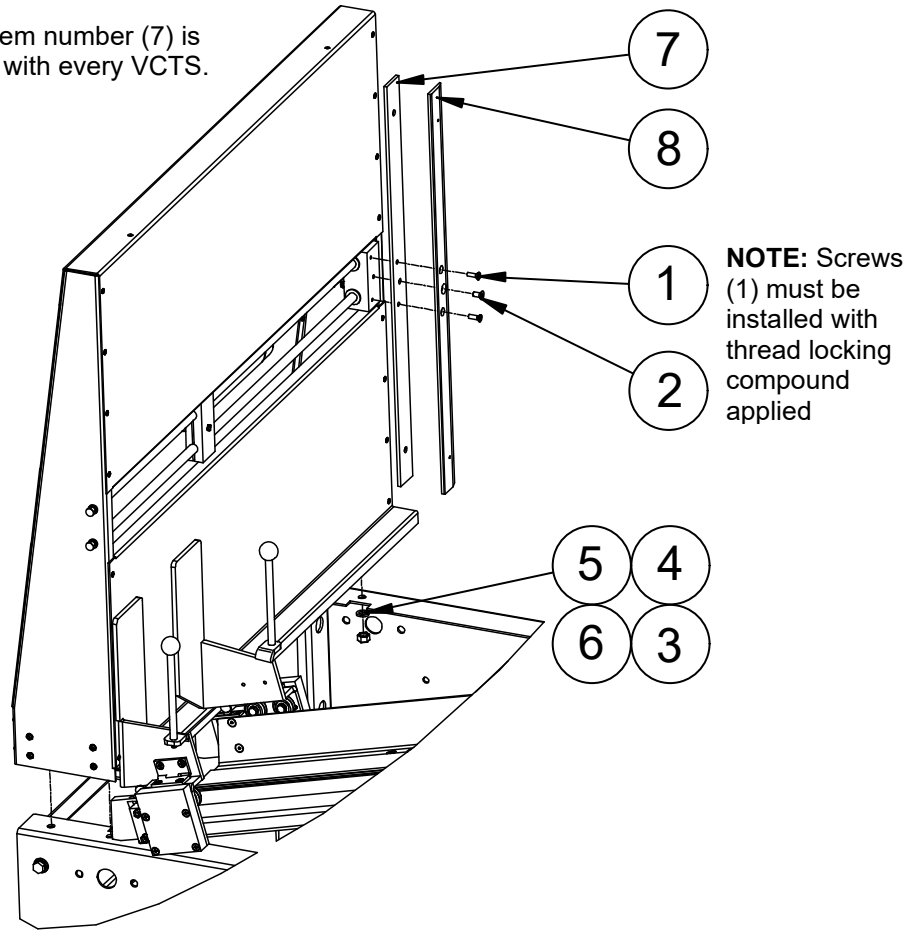
Item	Part Number	Description	Quantity
1	054979-123	Screw – FH, 10-32 × ½, SST, PH(82)	2
2	055020-098	Screw – FH, ¼-20 × ¾" SST PH	1
3	055029-022	Washer – Flat ⅜ Zinc	4
4	055307-062	Nut – Hex ⅜-16 NI	4
5	055310-042	Washer – Split ⅜ NI	4
6	5000791	Screw – HH ⅜-16 × 1 NI	4
7	5002019	Fab – Box Pusher Filler	1
8	5002020	Mach – Bar, Box Pusher	1

Rear Connecting Strap 5003027 and Attaching Hardware
Attaches Print Station Base to Infeed Module Base
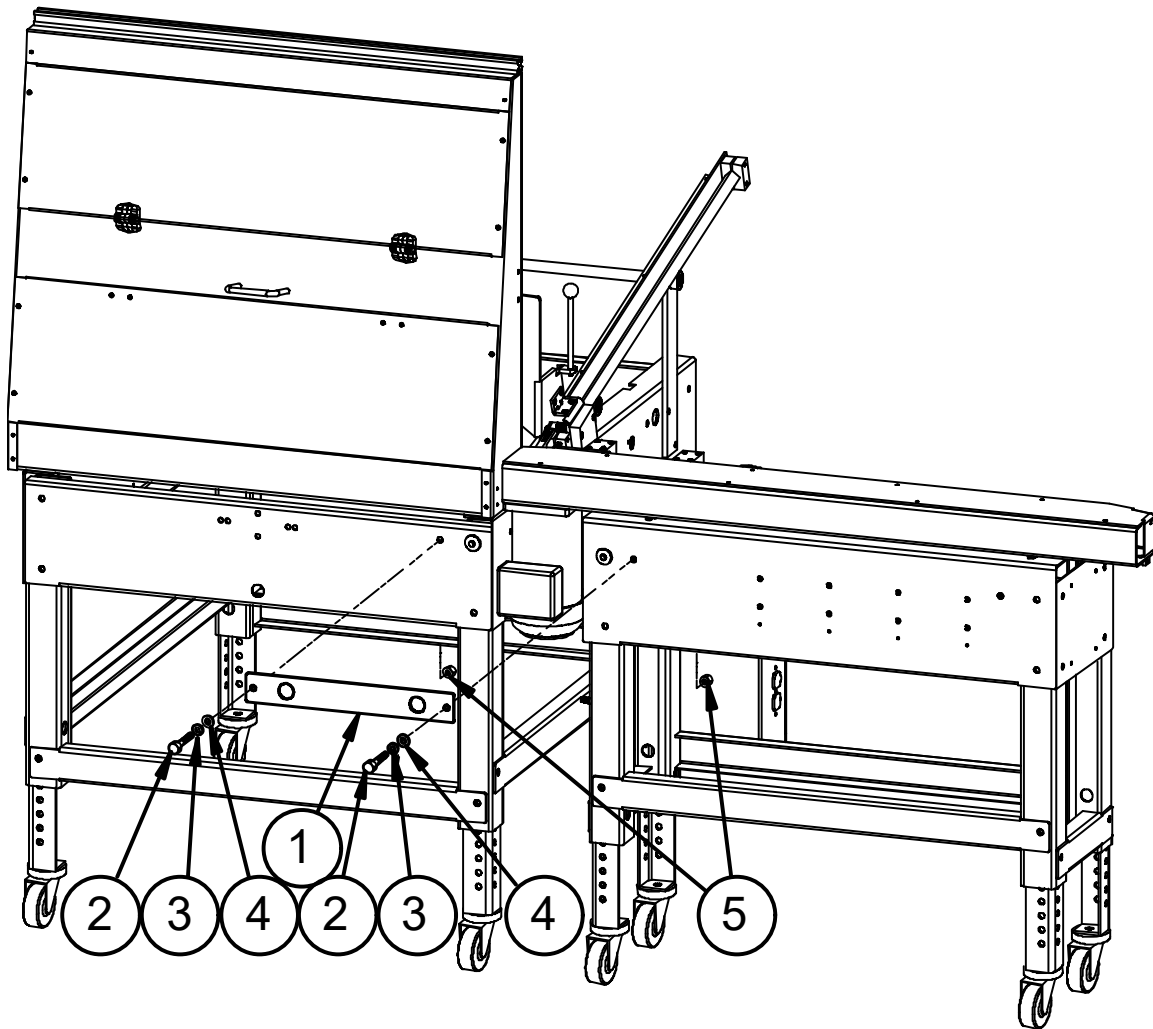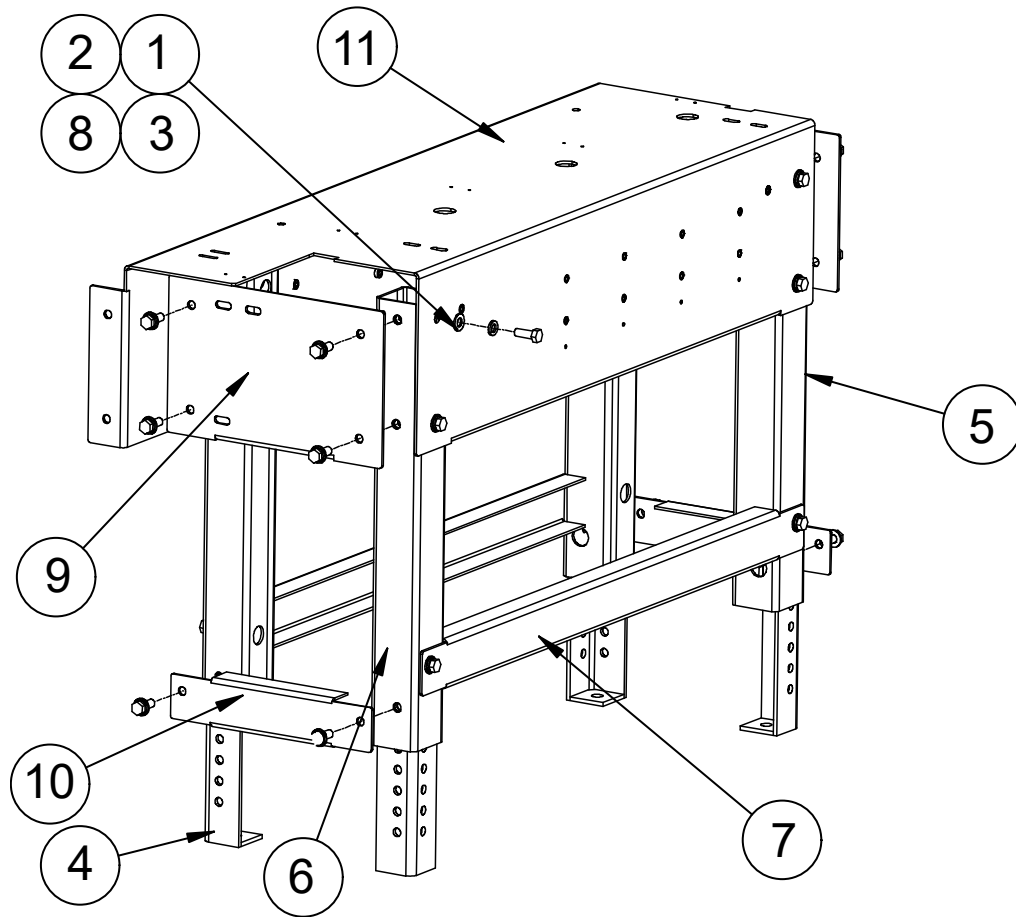
Item	Part No.	Description	Quantity
1	5003027	Fab – Rear Support Bracket (Connecting Strap)	1
2	5000803	Screw – HHC, $5/16$-18 × 1-¼" SS	2
3	5000339	Washer – $5/16$ Split ZN	2
4	5000333	Washer – Flat $5/16$ ZN	2
5	055307-055	Nut – Hex 5/16-18 ZN	2

Print Station Base Frame (2.01)
5010002

Item	Part Number	Description	Quantiy
1	055029-022	Washer – Flat, ⅜ Zinc	24
2	055307-062	Nut – Hex, ⅜-16 NI	24
3	055310-042	Washer – Split ⅜ NI	24
4	5000195	Fab/Weld – Leg Extension	4
5	5000552	Fab – Leg (R/L)	2
6	5000553	Fab – Leg, Left Rear	2
7	5000554	Fab – Brace, Front	2
8	5000791	Screw – HH ⅜-16 × 1 NI	24
9	5003003	Fab – Frame, Brace, End, VCTS	2
10	5003004	Brace – Front	2
11	5003012	Fab – Frame, Print Station	1

Print Station Side Contact Spring Support Blocks (2.02)
5010002
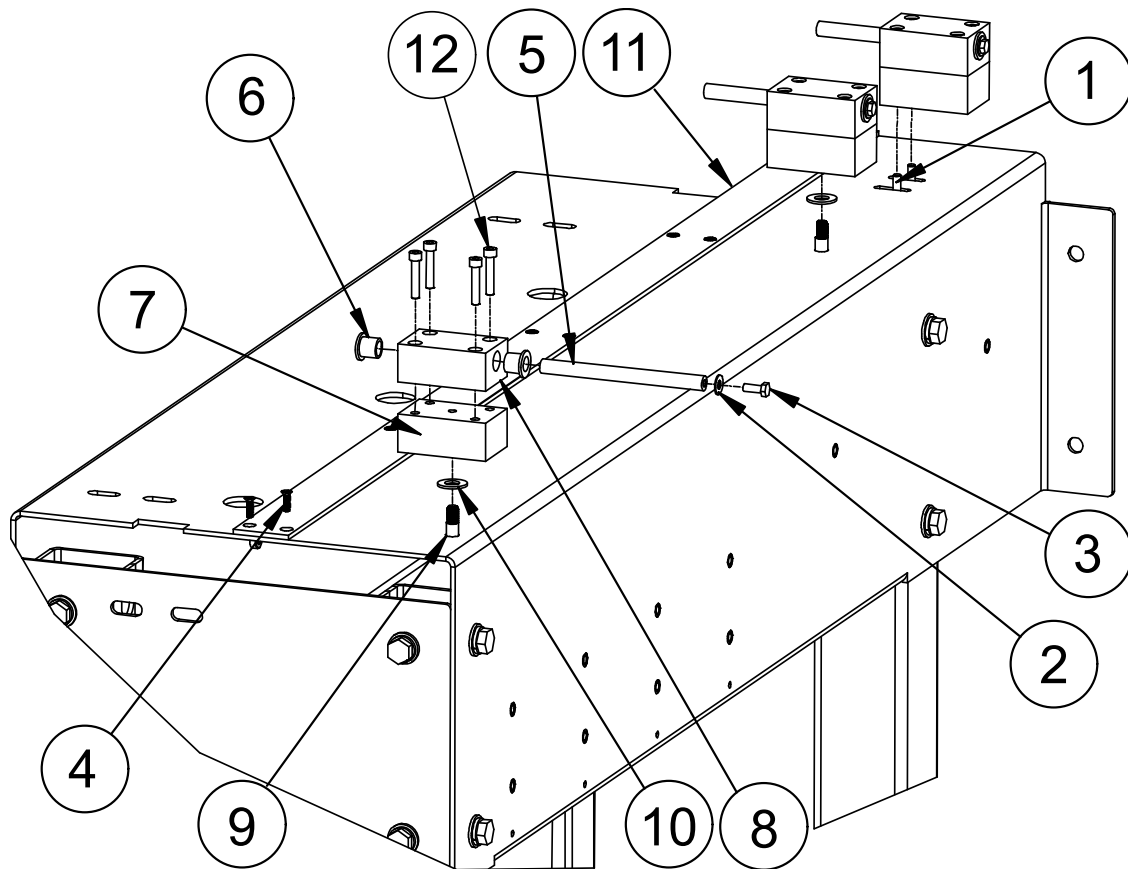
Item	Part Number	Description	Quantity
1	054979-123	Screw – PH, #10-32 × 0.5 PH SS Sems - IN	2
2	055029-011	Washer – Flat, #10 SST 0.031 Thick	3
3	055293-025	Screw – HH #10-32 × ½ Zinc	3
4	1600072	Screw – PHP SS, 6-32 × ½ Black	10
5	5000129	⅜" × 4.375" SS Linear Motion Rod	3
6	5000868	Bushing – Flanged ⅜" I.D., ½" O.D.	6
7	5003000	Mach – Drive, Support Block	3
8	5003001	Mach – Block, Side Drive	3
9	5000353	Screw – Shoulder ⅜-16 × ½ Shoulder	2
10	5000333	Washer – Flat ⁵/₁₆ ZN	2
11	5003026	Fab – Print Station Box Slide	1
12	5003028	Screw – SHC 10-32 × 1" Black	12

Print Station Side Contact Springs and Slide Bar (2.03)
5010002
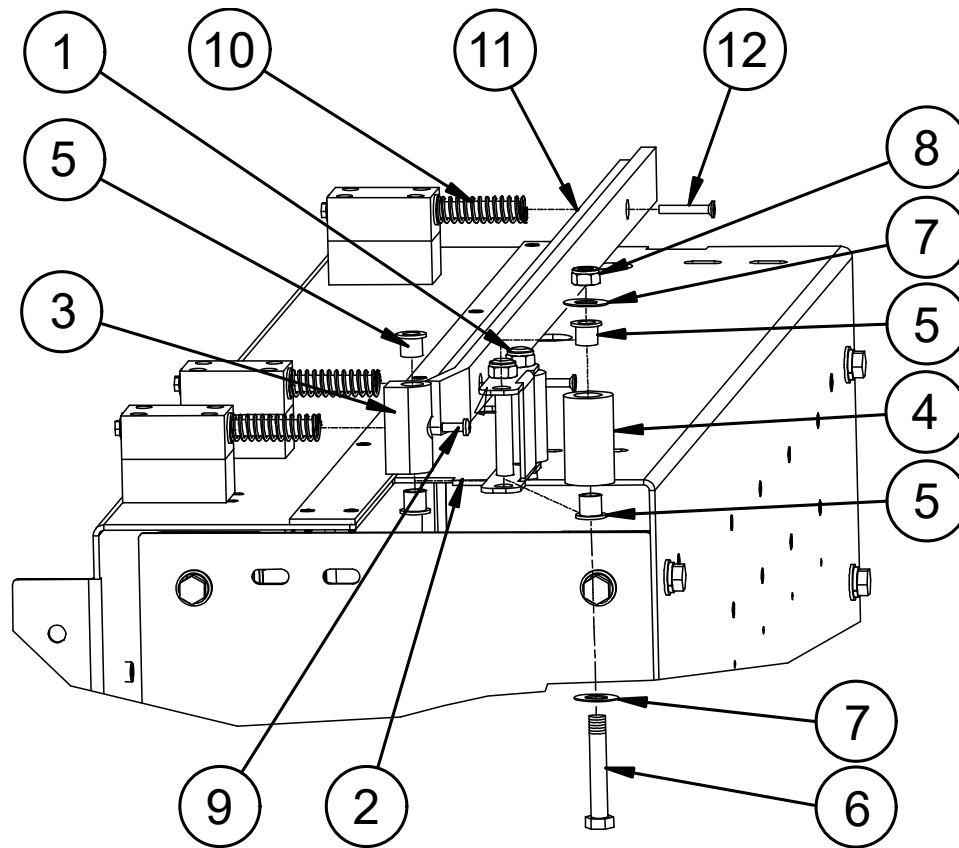
Item	Part Number	Description	Quantity
1	5002047	Assembly – Roller Pivots	1
2	5002047	Assembly – Roller Bracket	1
3	5002046	Fab – Pivot Block	1
4	5003014	Idle Roller, Rubber	2
5	5000868	Bushing – Flanged $3/8$" I.D., $1/2$" O.D.	6
6	055293-073	Screw – HH $3/8$-16 × 2-$3/4$ Zinc	3
7	1605065	Washer – Flat, $3/8$" SS	6
8	1605029	Nut – Hex Lock $3/8$-16	3
9	054979-123	Screw – PH 10-32 × 0.5 PH SS Sems - IN	1
10	5003015	Spring – Comp, 2" × 0.072WD × 0.6" O.D.	3
11	5003017	Mod – Box Guide – 5" Long SST/UHMW	1
12	5003023	Screw – FH, #10-32 × $1/2$, SST, PH(82)	2

Print Station Roller Pivots Assembly (2.04)
5002047
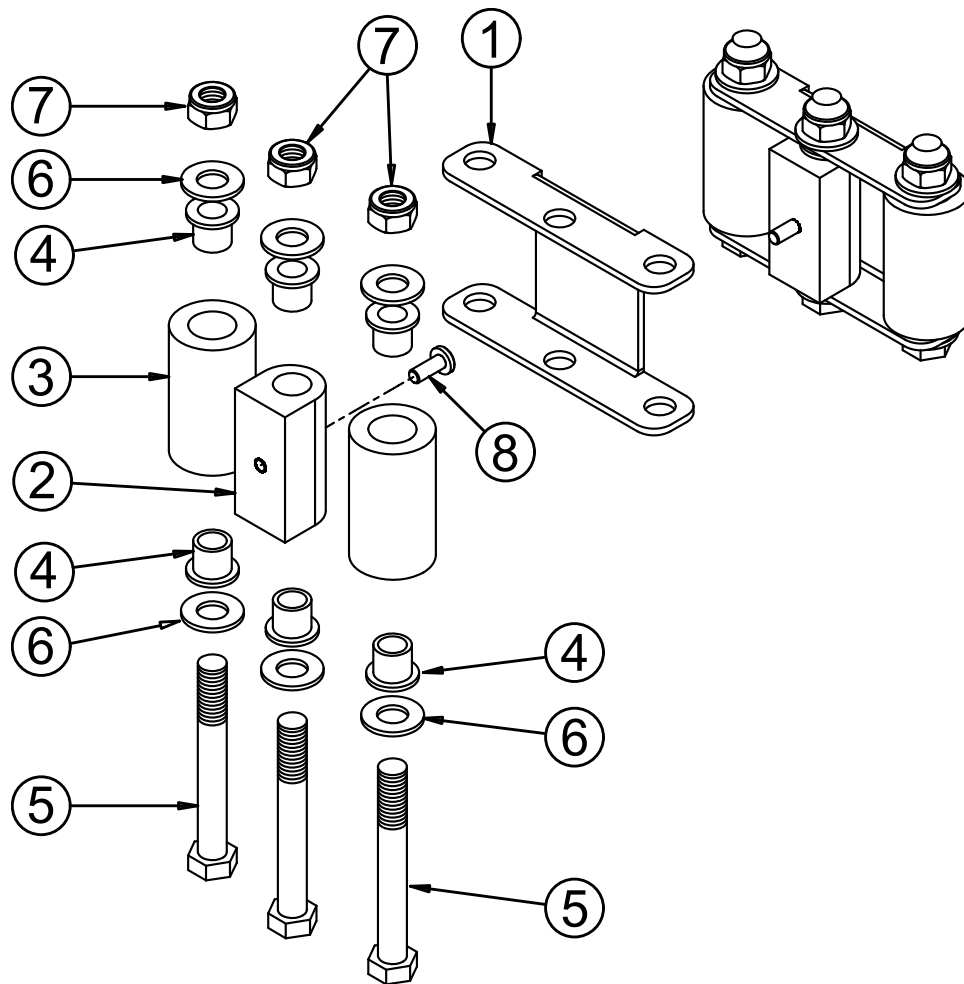
Item	Part Number	Description	Quantity
1	5002045	Fab – Roller Bracket	1
2	5002046	Fab – Pivot Block	1
3	5003014	Idle Roller, Rubber	2
4	5000868	Bushing – Flanged ⅜" I.D., ½ O.D.	6
5	055293-073	Screw – HH ⅜-16 × 2-¾ Zinc	3
6	1605065	Washer, Flat ⅜", SST	6
7	1605029	Nut, Lock, ⅜-16, Zinc	3
8	054979-123	Screw – PH 10-32 × 0.5" PH SS Sems - IN	1

Print Station Side Belt Assembly (2.05)
5000402
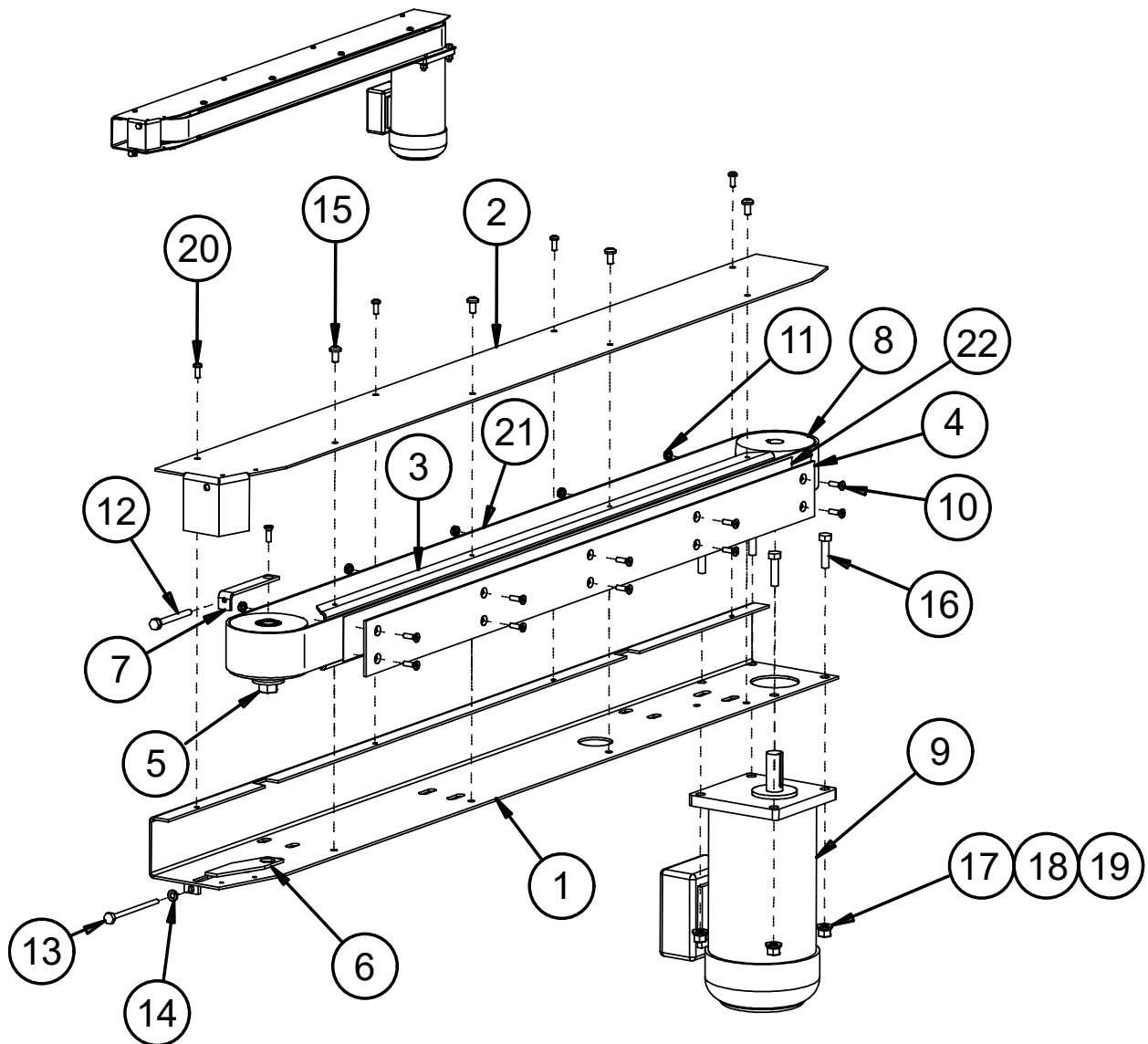
Item	Part No.	Description	Quantity
1	5000527	Drive Frame Left	1
2	5000529	Drive Cover LR	1
3	5000541	Strip Bracket	1
4	5000540	Belt Strip	1
5	5000819	Assembly – Sb Idler Roller with Shaft	1
6	5000702	Fab/Weld – Belt Tension Bracket, L	1
7	5000928	Fab/Weld – Belt Tracking Bracket	1
8	5000807	Assembly – SB Idler Roller	1

Item	Part No.	Description	Quantity
9	5000311	Side Belt Gear Motor	1
10	055020-088	Screw – FH, #10-32 × ½, SST, PH (82)	11
11	054982-005	Nut – Kep 10-32 NC ZINC	10
12	5000804	Screw – HH ¼-20 × 2-½ ZINC	1
13	055293-049	Screw – HH ¼-20 × 3-½ TAP BOLT	1
14	100694-001	Washer – Flat, M6 DIN 125 A	2
15	054979-141	Screw – PH ¼-20 × ½ NI PH EXT	4
16	5000803	Screw – HHC, $5/16$-18 × 1-¼, SS	4
17	5000333	Washer – FLAT $5/16$, Zinc	4
18	5000339	Washer - $5/16$, Split, Zinc	4
19	055307-055	Nut Hex, $5/16$-18 Zinc	4
20	054979-123	Screw – PH 10-32 × .5 PH SS Sems – IN	8
21	5000853	Belt (Set) – Side, EZ SB	1
22	5002069_34	Adhesive Transfer Tape – 2"	1

Print Station Side Belt Attaching Hardware (2.06)
5010002
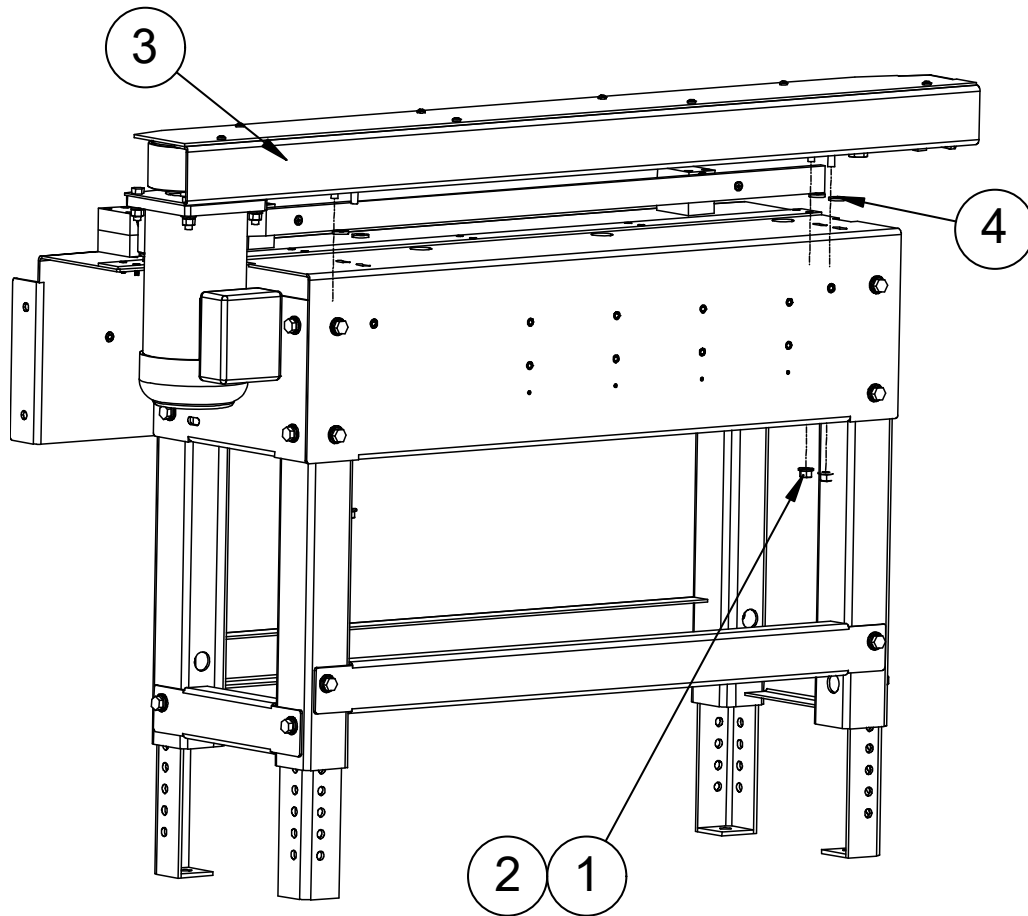
Item	Part Number	Description	Quantity
1	055307-055	Nut – Hex, 5/16-18 Zinc	4
2	5000333	Washer – Flat 5/16 Zinc	4
3	5000402	Assembly – Side Belt Drive Left	1
4	5003025	Washer – Fender 5/16" Flat	4

Exit Rollers and Guide Rod Assembly Option (3) for VCTS
5010003
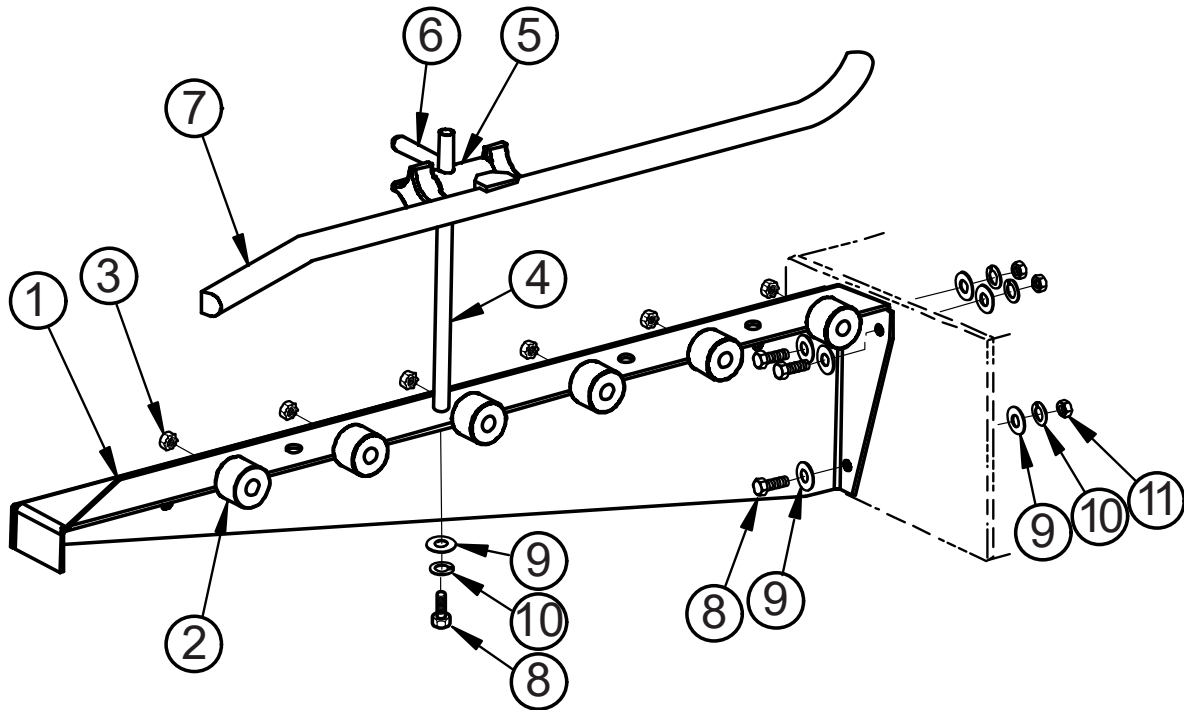
Item	Part Number	Description	Quantity
1	5004010	Fab / Weld – Frame, Roller Section	1
2	5000043	Rollers, Belt Guide	6
3	054982-006	Nut – Keps ¼-20 NC Zinc	6
4	5004011	Shaft – ½" O.D. × 16" Long, Thread End	1
5	5004014	Block – Dual Shaft Mount ½" O.D.	1
6	5004012	Clamp – With Shaft Guide Rail Mount	1
7	5004013	Plastic Guide Rail with SST Core	1
8	055293-056	Screw–HH 5/16-18 × ¾ Zinc	4
9	5000333	Washer–Flat 5/16 Zinc	7
10	5000339	Washer–5/16 SPLIT, Zinc	7
11	055307-055	Nut–Hex 5/16-18 Zinc	3

Restacking Output Hopper for VCTS or VCTS-XL (3 Option)
Restacker Top-Level Assembly
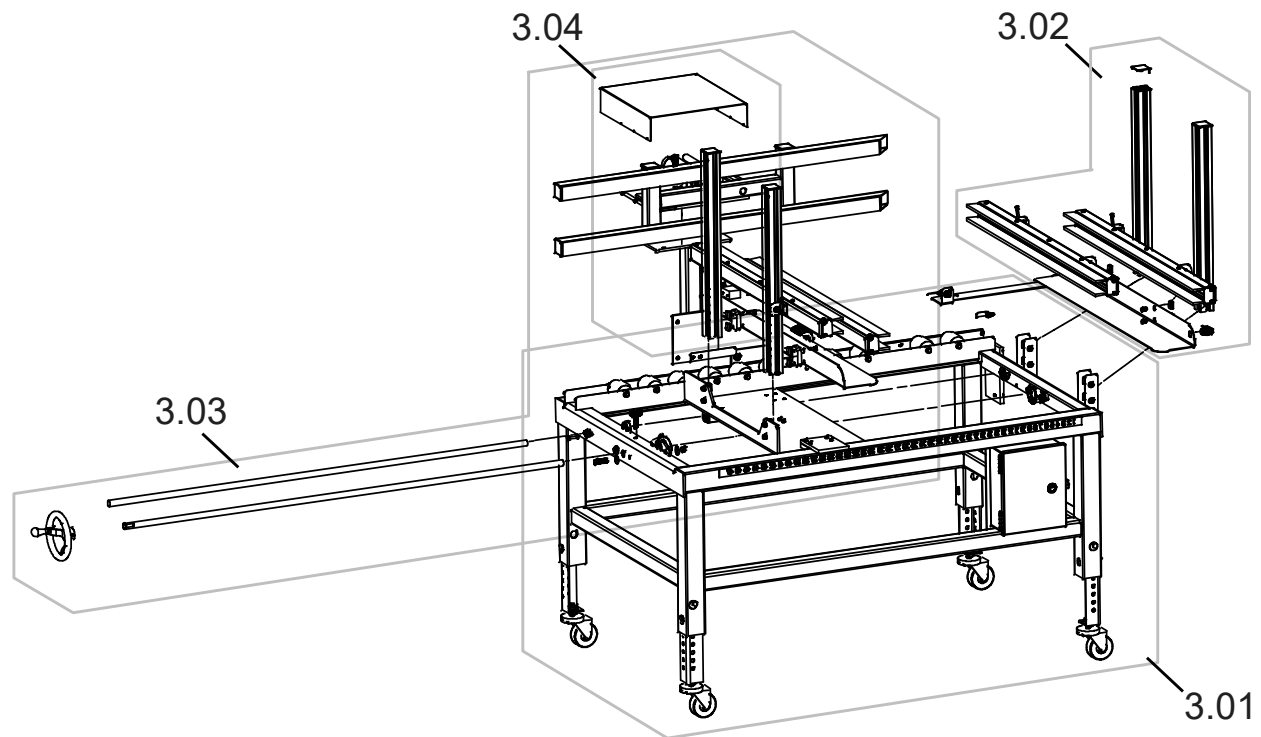
Item	Part Number	Description	Quantity
1	055296-030	Screw-Socket #10-32 × ½ SST	2
2	055310-027	Washer-Split, #10, SST	2
3	106886-001-48	Tape – VHB × 48" Long	48
4	2006035	Screw, SHC, M6 × 16, SS	8
5	2006044	End Cap for HD 80/20 Rail 45 X 45 MM	4
6	2006063	T-Nut Slider 10MM M6	16
7	2006105	Screw, FHC, M6 × 25, SS	4
8	5000195	Leg Extension	4
9	5001207	Caster – Heavy Duty Locking Std	4
10	5002163	M6×1.0 × 12MM FHCS ZN	4
11	5005435	Restacker Frame Weldment	1
12	5005439	Carton Tray, Left	1
13	5005440	Carton Tray, Right	1
14	5005441	Guide Rod, Carton Shelf	1
15	5005442	¾-5 Acme Threaded Rod	1

Item	Part Number	Description	Quantity
16	5005445	Bearing, Flange for ¾" Dia. Shaft	2
17	5005447	Mountable Shaft Collar, ¾" Dia.	2
18	5005448	Handwheel	1
19	5005467	Carton Shelf Spacer	2
20	5005471	Carton Stop Block	1
21	5005477	Ruler 48"	1
22	5005482	Knob, Hand Brake	1
23	5005487	Banner Photocell	3
24	5005496	Dual Photocell Mount	1
25	5005680	Pusher Post Weldment	1
26	5005684	Box Guide Tab, Restacker	1
27	5005699	Roller Retainer	2
28	5005713	Nut Hex, X-Thin ½-13NC	8
29	5005752	Box Back Stop	1
30	5005800	Filler Plate	
31	5005801	Double Nut, ¼-20 NC	
32	SUBR5458	Sliding Base Assembly	1
33	SUBR5463	Assembly – Upper Brush Mount	2
34	SUBR5464	Assembly – Lower Brush	2
35	SUBR5466	Assembly – One Way Roller Restacker	1
36	SUBR5469	Pusher Assembly - Restacker	1
37	SUBR5475	Enclosure Assembly	1
38	SUBR5499	Upright Rail with Ruler	2
39	SUBR5741	Assembly – UHMW Idle Roller	10
40	SXH036	Washer-Split ¼ SST	16
41	XEAST0188	Washer Flat ½	4
42	XH018	Washer Lock $5/16$	3
43	XH020	Bolt ⅜-16 × 1	8
44	XH021	Bolt ⅜-16 × 1 ¼ Hex	11
45	XH022	Washer Flat 5/16 USS	3
46	XH035	Bolt $5/16$-18 × ¾, Hex	3
47	XH036	Bolt ¼-20 × 1, Hex	8
48	XH054	Screw, ¼-20 × ⅜ S.S.	2

Item	Part Number	Description	Quantity
49	XH129	Nut ¼-20 Hex	4
50	XH131	Nut, ⅜-16 Hex	19
51	XH183	Screw, 8 × ¾ Tek Self Drill	1
52	XH240	Washer, Flat ¼" SST	16
53	XH242	Washer Flat ⅜ USS	23
52	XH248	Washer Lock ½"	4
55	XH265	Screw-PHP, 8-32 X 1/4", Zinc	8
56	XH344	Washer Lock ⅜	19

Restacker Base Frame and Leg Extensions (3.01)

5010020 Page 2 of 5

Caster
Attachment Detail
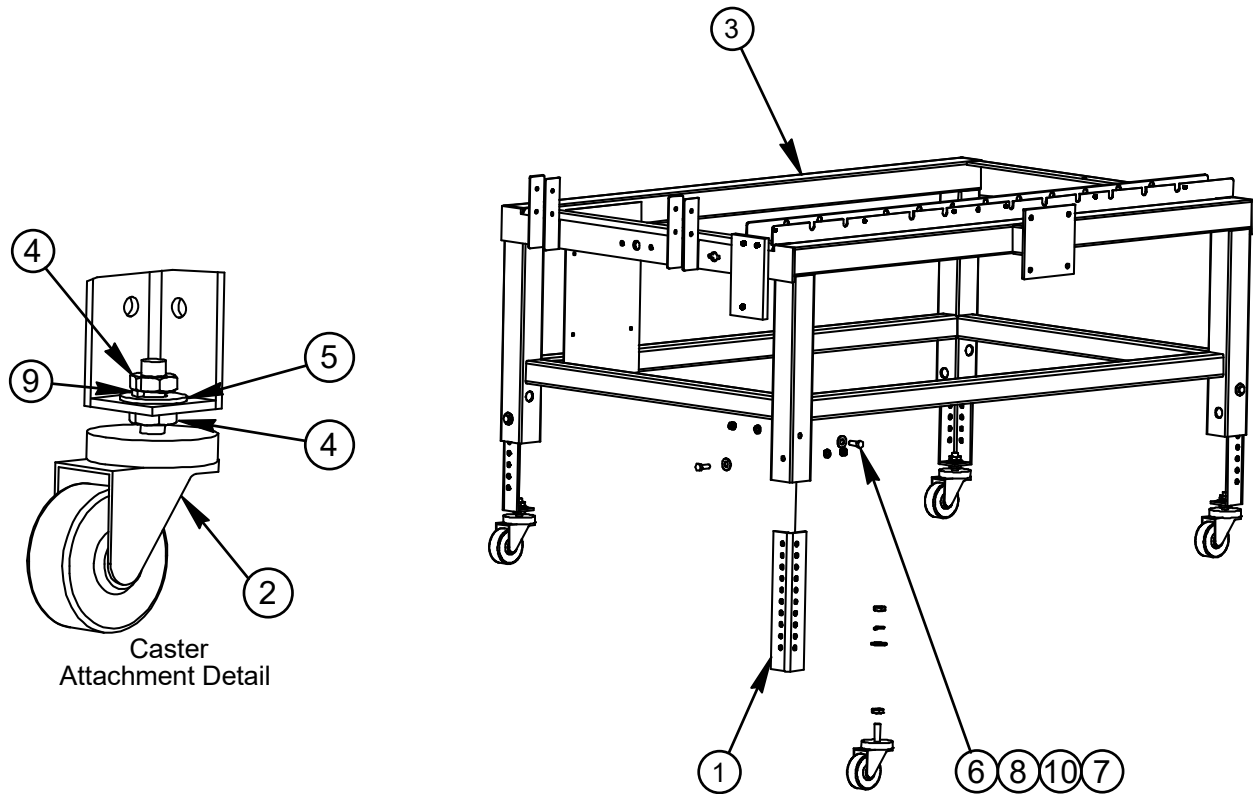
Item	Part Number	Description	Quantity
1	5000195	Leg Extension	4
2	5001207	Caster Heavy Duty	4
3	5005435	Restacker Frame Weldment	1
4	5005713	Nut Hex X-Thin ½-13NC	8
5	XEAST0188	Washer-Flat ½	4
6	XH020	Bolt ⅜-16 × 1	8
7	XH131	Nut- ⅜-16 Hex	8
8	XH242	Washer-Flat ⅜ USS	8
9	XH248	Washer Lock ½"	4
10	XH344	Washer Lock ⅜	8

Restacker Infeed Vertical Brush Rails and Shelf Assembly (3.02)
5010020 Page 3 of 5

Ruler faces out
on both uprights.
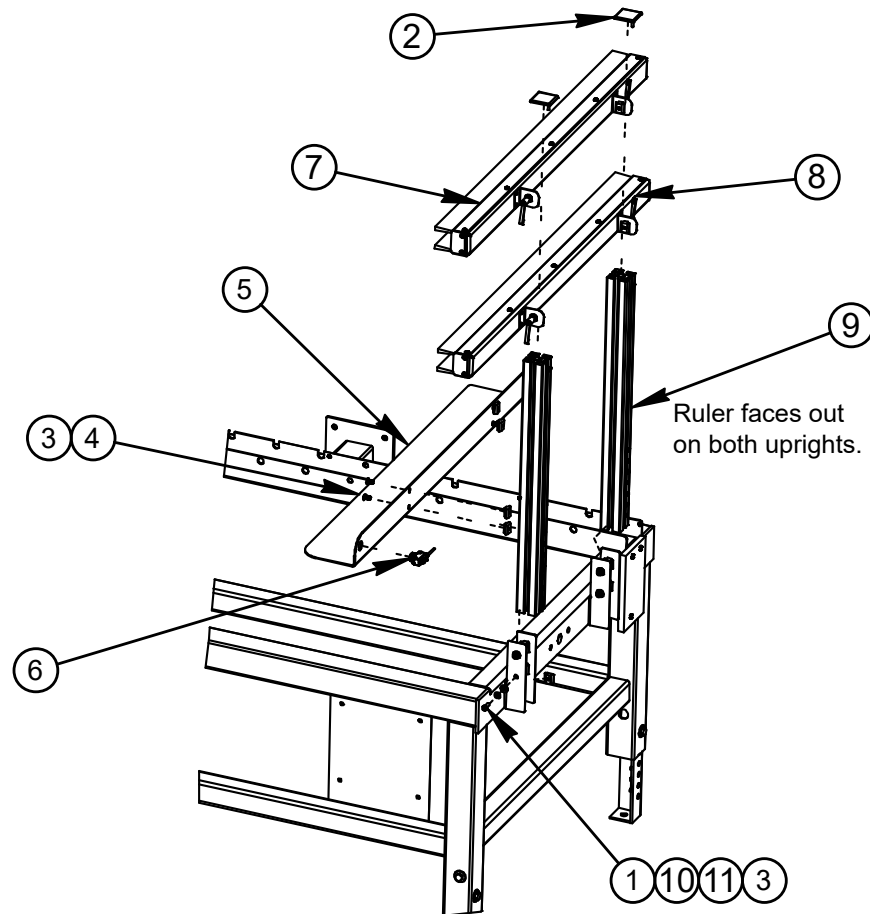
Item	Part Number	Description	Quantity
1	2006035	Screw SHC M6 X 16 SS	8
2	2006044	End Cap – 45 × 45 MM	2
3	2006063	T-Nut Slider 10MM M6	12
4	5002163	M6×1.0 × 12MM FHCS ZN	4
5	5005440	Carton Tray Right	1
6	5005487	Banner Photocell	1
7	SUBR5463	Assembly – Upper Brush Mount	1
8	SUBR5464	Assembly – Lower Brush	1
9	SUBR5499	Upright Rail with Ruler	2
10	SHX036	Washer-Split ¼ SST	8
11	XH240	Washer-Flat ¼ SST	8

Restacker Sliding Shelf and Movable Vertical Brush Rails Assembly (3.03)

5010020 Page 4 of 5

Detail F

Detail D

Detail E
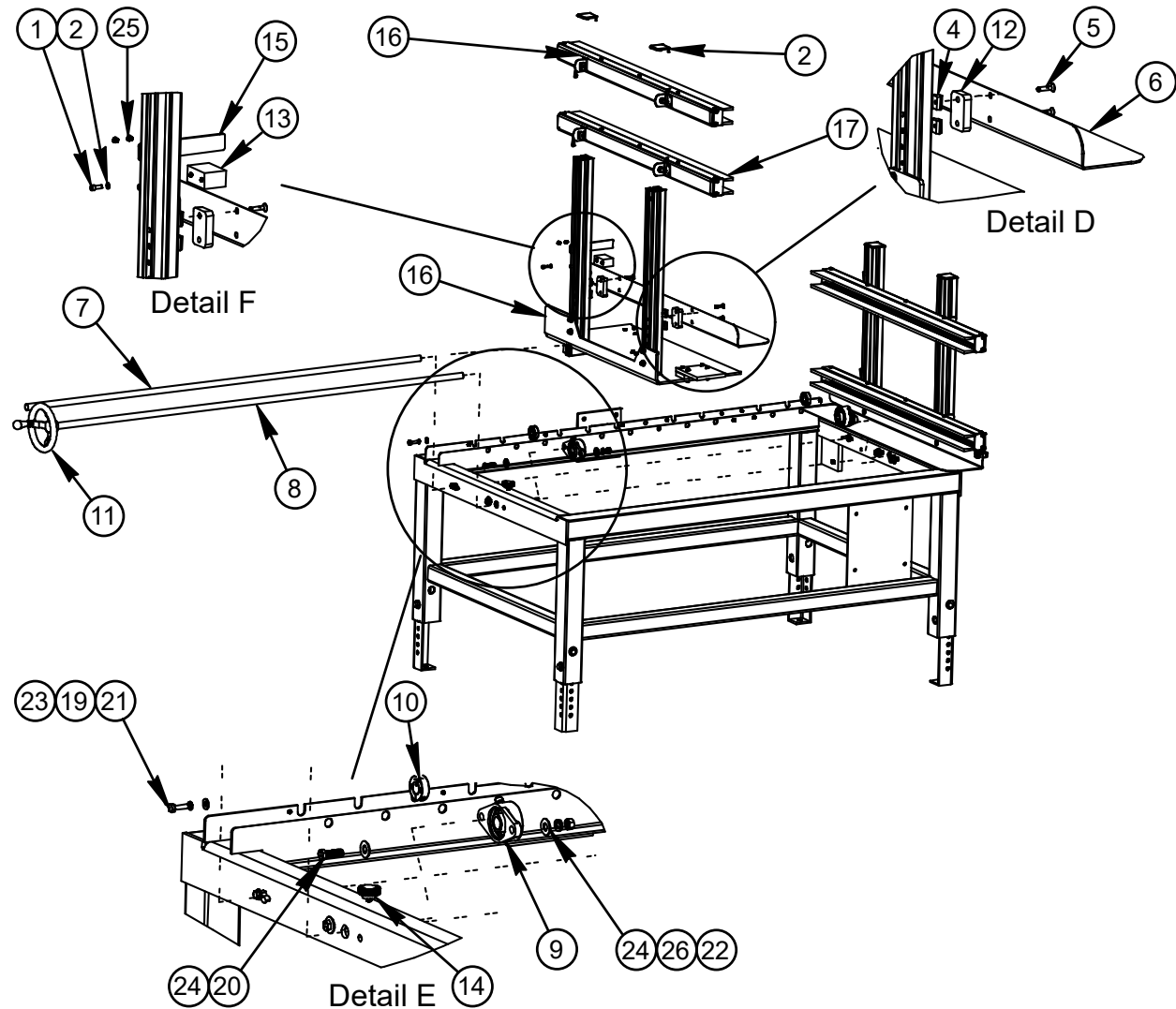
Item	Part Number	Description	Quantity
1	066296-030	Screw-Socket 10-32 × ½ SST	2
2	055310-027	Washer-Split #10	2
3	2006044	End Cap – 45 × 45 MM	4
4	2006063	T-Nut Slider 10MM M6	16
5	2006105	Screw FHC M6 X 25 SS	4
6	5005439	Carton Tray Left	1
7	5005441	Guide Rod Carton Shelf	1
8	5005442	¾-5 Acme Threaded Rod	1
9	5005445	Bearing Flange for ¾" Diameter Shaft	1

Item	Part Number	Description	Quantity
10	5005447	Mountable Shaft Collar ¾" Diameter	2
11	5005448	Handwheel	1
12	5005467	Carton Shelf Spacer	2
13	5005471	Carton Stop Block	1
14	5005482	Knob Hand Brake	1
15	5005752	Box Back Stop	1
16	SUBR5458	Sliding Base Assembly	1
17	SUBR5463	Assembly – Upper Brush Mount	2
18	SUBR5464	Assembly – Lower Brush	2
19	SXH036	Washer-Split ¼ SST	12
20	XH021	Bolt ⅜-16 × 1-¼ Hex	4
21	XH036	Bolt ¼-20 × 1" Hex	4
22	XH131	Nut ⅜-16 Hex	12
23	XH240	Washer Flat ¼" SST	12
24	XH242	Washer-Flat ⅜ USS	16
25	XH265	Screw – PHP #8-32 × ¼" Zinc	2
26	XH344	Washer Lock ⅜	12

Restacker Pushing Mechanism with Mounting Post, and Transport Rollers (3.04)

5010020 Page 5 of 5
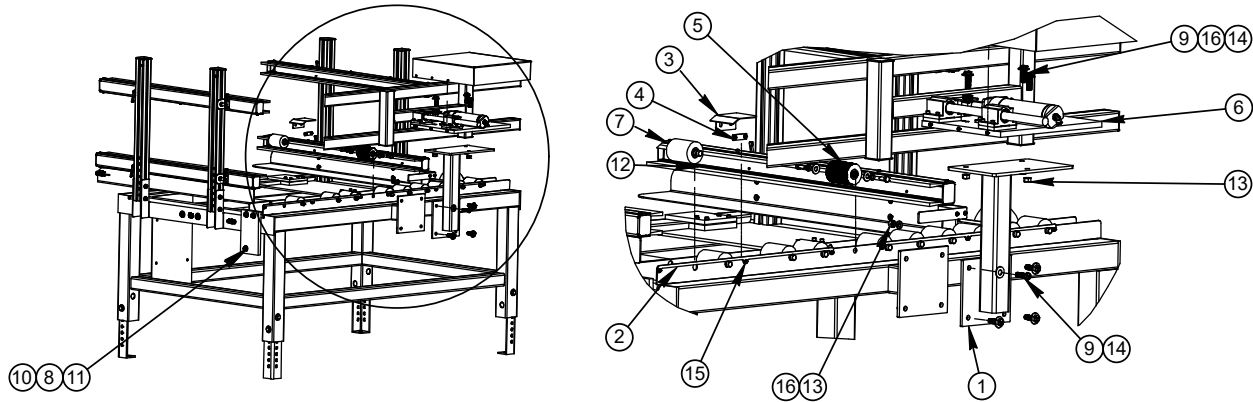
Item	Part Number	Description	Quantity
1	5005680	Pusher Post Weldment	1
2	5005699	Roller Retainer	2
3	5005800	Filler Plate	1
4	5005801	Double Nut, ¼-20NC	1
5	SUBR5466	Assembly-One Way Roller Restacker	1
6	SUBR5469	Pusher Assembly - Restacker	1
7	SUBR5741	Assembly – UHMW Idle Roller	10
8	XH018	Washer Lock $^5/_{16}$"	3
9	XH021	Bolt ⅜-16 X 1 ¼ Hex	11
10	XH022	Washer-Flat $^5/_{16}$" USS	3
11	XH035	Bolt $^5/_{16}$-18 × 1-¼" Hex	3
12	XH054	Screw ¼-20 ×3/8 S.S.	2
13	XH131	Nut- ⅜-16 Hex	19
14	XH242	Washer Flat ⅜ USS	23
15	XH265	Screw – PHP, #8-32 × ¼" Zinc	8
16	XH344	Washer Lock ⅜"	19

Restacker Spacer Kit — For use with VCTS-XL and Restacker only.
5005717
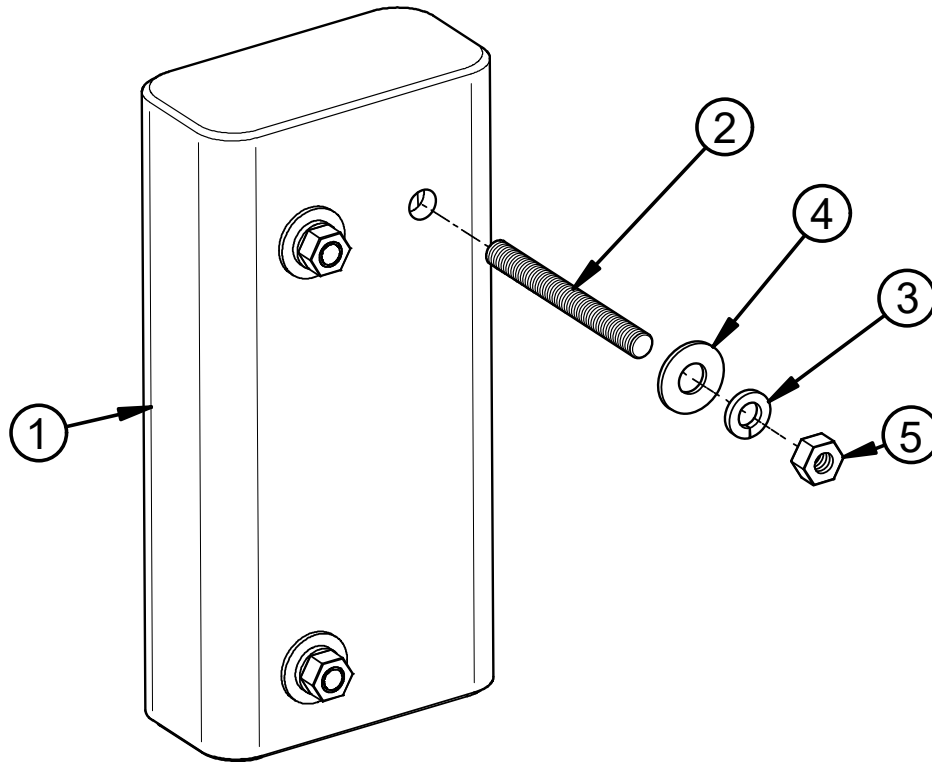
Item	Part Number	Description	Quantity
1	5005712	Spacer, 2" Offset, Restacker VCTS-XL	1
2	5005716	Rod, Fully Threaded, 5/16-18 × 3"	3
3	XH018	Washer-Lock 5/16	3
4	XH022	Washer-Flat 5/16 USS	3
5	XH132	Nut 5/16-18 Hex	3

Restacker Electrical Enclosure Assembly (3.05)
SUBR5475

Shown with
door removed
to show
internal detail.
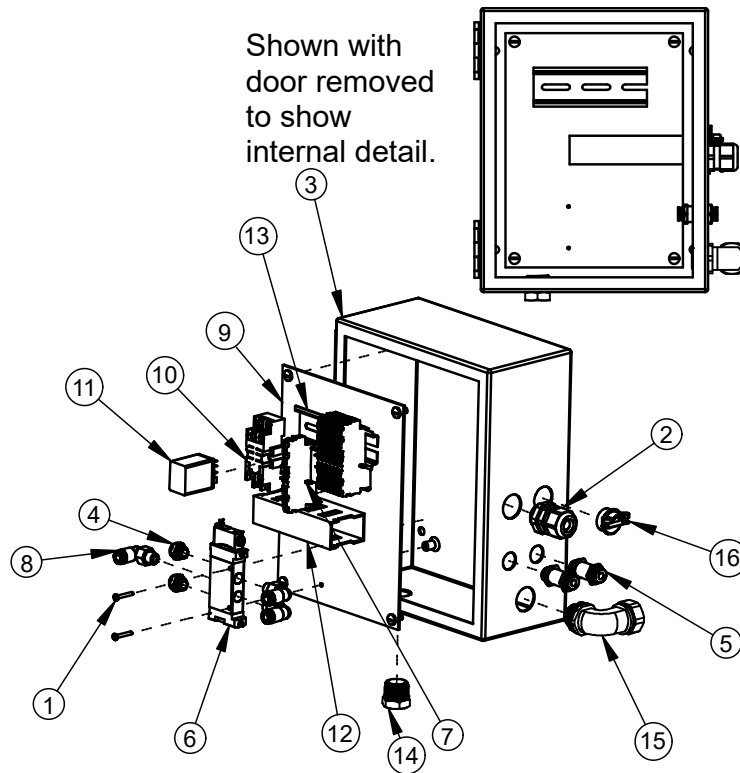
Item	Part Number	Description	Quantity
1	054979-026	Screw, PHP 4-40 × ¾ SST	2
2	1602253	Cord Grip - ½ NPT Knock Out, .20"-.35" Grip	1
3	4501141	Enclosure, 10×8×4	1
4	5003046-1	Muffler G ⅛" Thread	2
5	5003047	Fitting -Bulkhead ¼"OD Quick	2
6	5005187	VUVG-LK14-M52-AT-G18-1H2L-S, Solenoid Valve	1
7	5005190	4 Conn. 22-12 AWG Terminal Block	8
8	5005193	⅛-¼ Push-In L Fitting	3
9	5005476	Panel - Elecrical Restacker	1
10	5005483	Relay Socket, Restacker	1
11	5005484	Relay, 24VDC Input, 110AC Switching	1
12	5005682	Wireway Duct & Cover	1
13	5005685	DIN Rail	1
14	EA000528	Breather Vent, ½ NPT	1
15	EAST0101	90 Deg. Elbow, ½" Conduit	1
16	ECOS0091	Romex Connector ⅜"	1
17	4501851	Wire Ferrule White	9

NOTE: When connecting Photo Eye leads, use the ferrules provided to reinforce the end of each wire from the Photo Eye as it is connected into the terminal block.

Vertical Case Transport System – XL — VCTS-XL

Front View
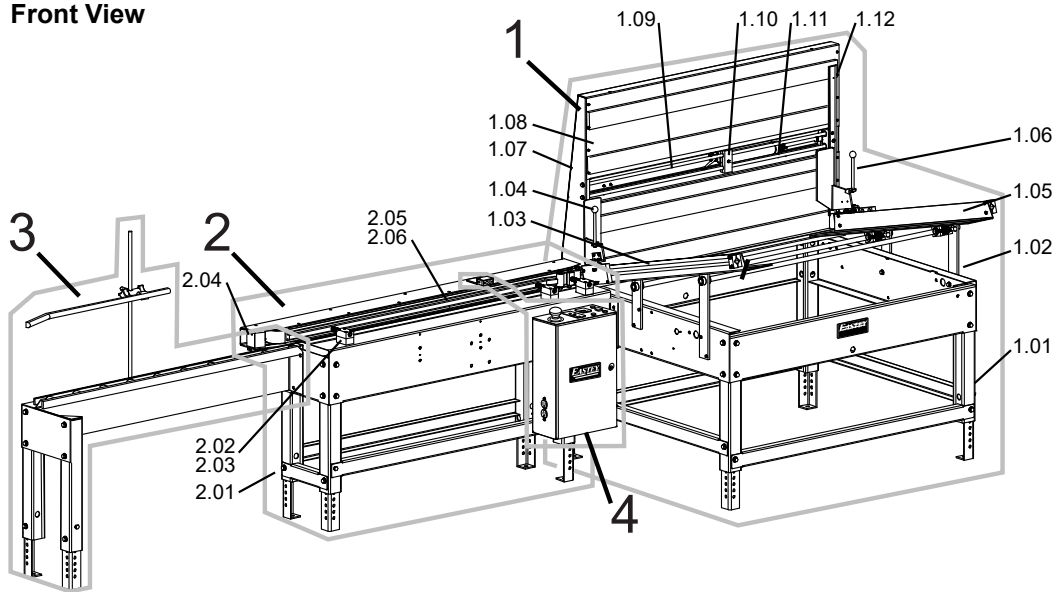
Rear View
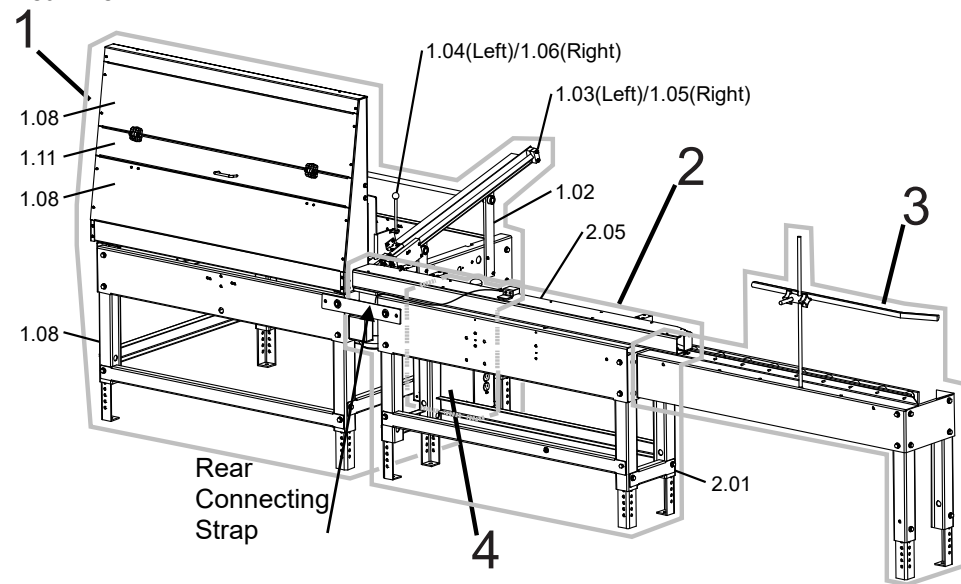
Item	Part Number	Description	Page
1	5010001-48	Infeed Module -XL (Includes items 1.01 through 1.12.)	89-100
	5003027	Connecting Strap and Hardware – Secures Print Station to Infeed Module	68
2	5010002-48	Print Station -XL (Includes items 2.01 through 2.09.)	101-106
3	5010003-48	Exit Roller & Guide Rail Assembly Option -XL	107-108
3	5010020 SUBR5475	Restacking Output Hopper (Restacker) Option Restacker Electrical Components and Enclosure Assembly	77-84, 86
	5005717	Spacer Kit – Required Only with -XL Model and Restacker	85
4	5003022-UL	Electrical / Pneumatic Enclosure Control Panel & External Connections Electrical / Pneumatic Enclosure Internal Components	109 110-112

Item	Part Number	Description	Page
1	5010001-48	Infeed Module -XL (Includes items 1.01 through 1.12 listed below.)	89-100
1.01	5010001-48	Infeed Module Base Frame -XL	89
1.02	5010001-48	Infeed Module Chute Support Straps and Shafts -XL	90
1.03	5010001-48	Infeed Module Left Side Chute -XL	91
1.04	5010001-48	Infeed Module Left Slide Guide -XL	92
1.05	5010001-48	Infeed Module Right Side Chute -XL	93
1.06	5010001-48	Infeed Module Right Slide Guide -XL	94
1.07	5001001-48	Infeed Module Upper Frame End Triangles -XL	95
1.08	5001001-48	Infeed Module Upper Frame Cover Panels -XL	96
1.09	5001001-48	Infeed Module Guide Shafts and Bushing Block -XL	97
1.10	5001001-48	Infeed Module Air Cylinder and Locking Bracket -XL	98
1.11	5001001-48	Infeed Module Air Cylinder Cover Door Assembly -XL	99
1.12	5001001-48	Infeed Module Upper to Lower Frame & Attach Push Bar -XL	100
	5003027	FAB – Rear Support Bracket – Secures Print Station to Infeed Module	68
2	5010002-48	Print Station -XL (Includes items 2.01 through 2.09 below.)	101-106
2.01	5010002-48	Print Station Base Frame -XL	101
2.02	5010002-48	Print Station Slide Contact Spring Support Blocks -XL	102
2.03	5010002-48	Print Station Side Contact Springs and Slide Bar -XL	103
2.04	5003047	Print Station Roller Pivots Assembly	72
2.05	5010002-48	Print Station Side Belt Assembly -XL	104-105
2.06	5010002-48	Print Station Side Belt Attaching Hardware -XL	106
3	5010003-48	End Roller & Guide Rail Assembly Option for VCTS-XL	107-108
3	5000402	Restacking Output Hopper (Restacker) Option	77-84, 86
3.01	5000402	Restacker Base Frame and Leg Extensions	80
3.02	5000402	Restacker Infeed Vertical Brush Rails and Shelf Assembly	81
3.03	5000402	Restacker Sliding Shelf and Movable Vertical Brush Rail Assembly	82-83
3.04	5000402	Restacker Pushing Mechanism with Mounting Post and Transport Rollers	84
3.05	SUBR5475	Restacker Electrical Enclosure Assembly	86
	5005717	Spacer Kit – Required Only with -XL Model and Restacker	85
4	5003022-UL	Electrical / Pneumatic Enclosure Control Panel & External Connections Electrical / Pneumatic Enclosure Internal Components	109 110-112

Infeed Module Base Frame – XL (1.01 – XL)
5010001-48
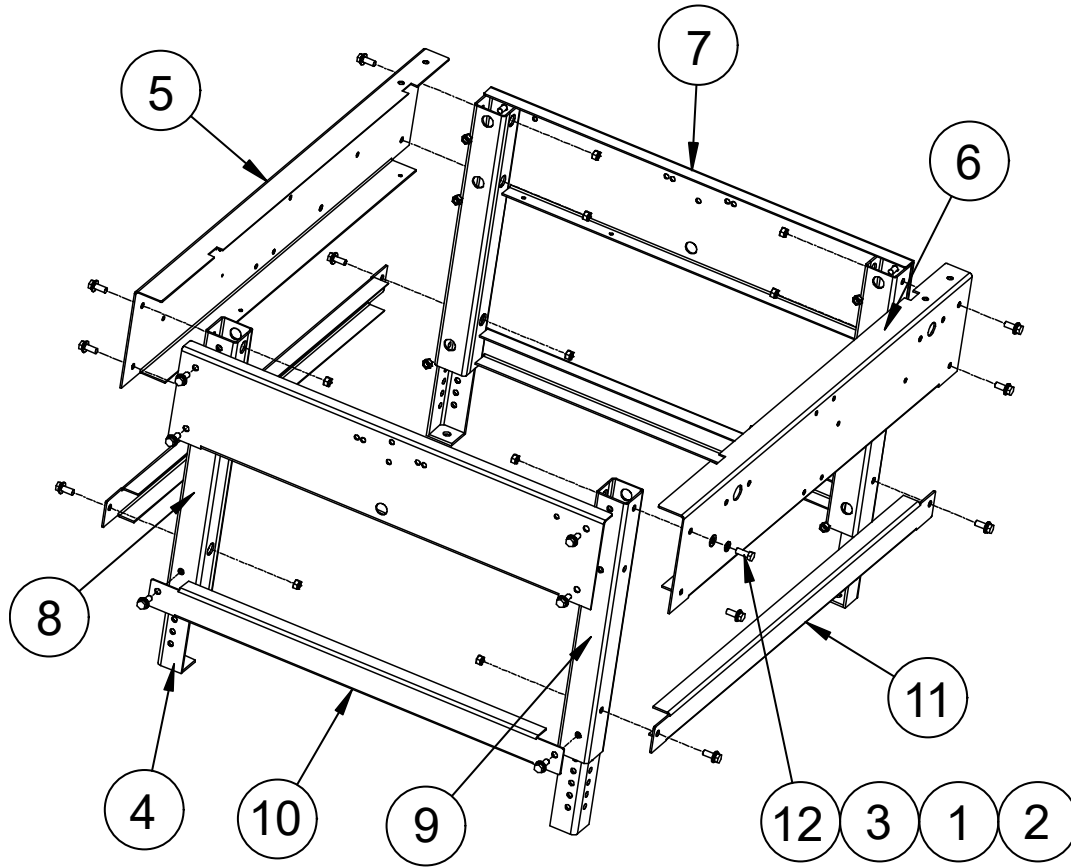
Item	Part Number	Description	Quantity
1	055029-022	Washer – Flat ⅜ Zinc	24
2	055307-062	Nut – Hex ⅜ – 16 NI	24
3	055310-042	Washer – Split 2/8 NI	24
4	5000195	Fab / Weld – Leg Extension	4
5	5000548	Fab – Side Frame, Left, SB	1
6	5000549	Fab – Side Frame, Right, SB	1
7	5000551-48	Fab – Rear Frame	2
8	5000552	Fab – Leg (R/L)	2
9	5000553	Fab – Leg, Left Rear	2
10	5000554-48	Fab – Brace, Front	2
11	5000555	Fab – Brace, Side	2
12	5000791	Screw – HH ⅜ – 16 × 1 NI	24

Infeed Module Chute Support Straps and Shafts – XL (1.02 – XL)
5010001-48
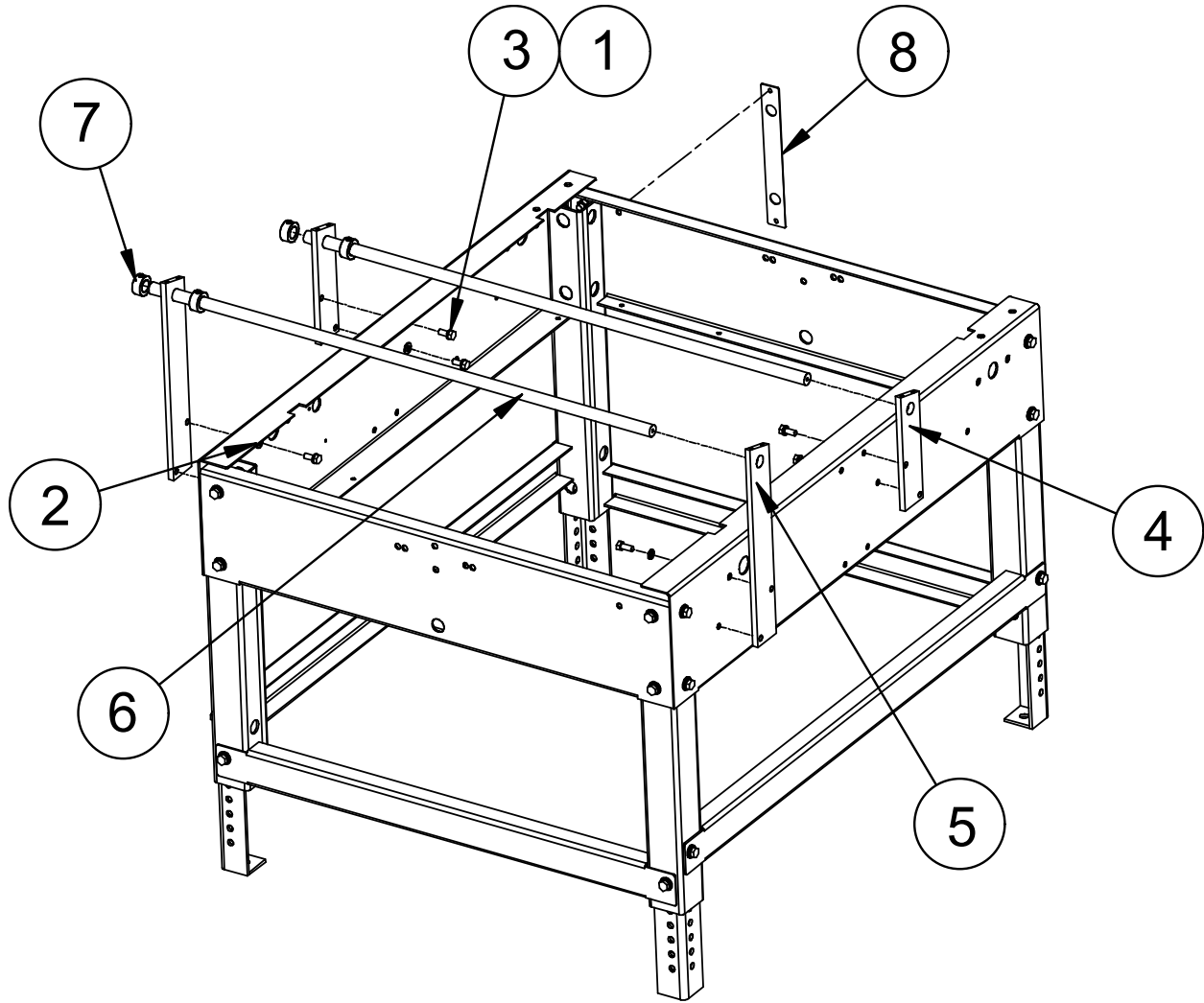
Item	Part Number	Description	Quantity
1	055293-056	Screw – HH 5/16 - 18 × ¾ Zinc	8
2	5000333	Washer – Flat 5/16, Zinc	8
3	5000339	Washer – 5/16 Split, Zinc	8
4	5002027	Mach – Front Slide Brace	2
5	5002028	Mach – Rear Slide Brace	2
6	5002029-48	Linear Shaft ¾" O.D.	2
7	5002034	Collar Clamp Set Screw ¾" I.D.	4
8	5003027	Fab – Rear Support Bracket	1

Infeed Module Left Side Chute – XL (1.03 – XL)

5010001-48
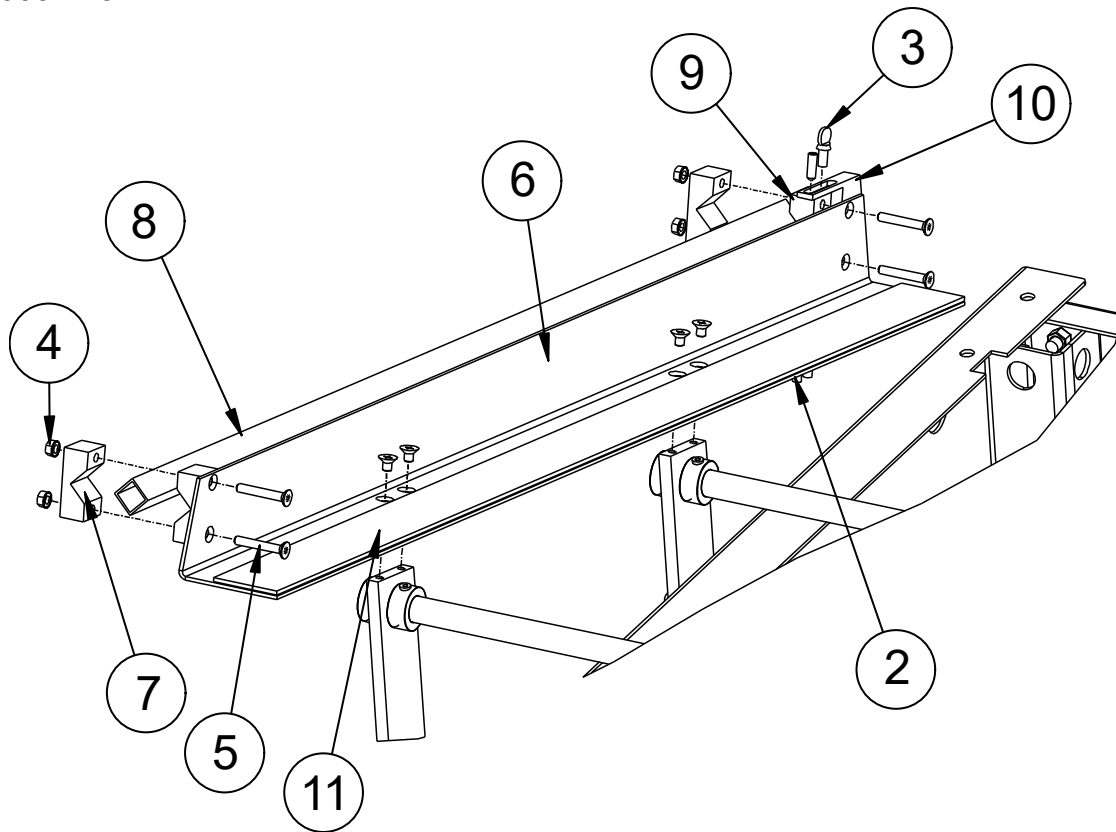
Item	Part Number	Description	Quantity
1	055020-099	Screw – FH ¼-20 × ⅜ (100) ZN	4
2	055298-081	Screw – Set 10-32 × 5/16 Allen Black	3
3	086348-001	Screw –Thumb, Shoulder ¼-20 × 0.5	1
4	102448-004	Nut – Kep, M6, Zinc	4
5	5000786	Screw – FH, M6×20, DIN 7991, Socket-Black	4
6	5002001	Fab – Carton Feed Chute	1
7	5002004	Mach – Side Slide Block	3
8	5002005	Fab – Side Guide Tube 0.75" × 0.75"	1
9	5002007	Mach – Side Slide Block, Mod	1
10	5002053	Mach – Box Stop	1
11	5003021	Fab – Bottom Carton Slide	1

Infeed Module Left Slide Guide – XL (1.04 – XL)

5010001-48

Item	Part No.	Description	Quantity
1	054982-006	Nut – Kep ¼-20 NC Zinc	3
2	055020-085	Screw – FH 10-32 × ⅜ SST PH(82)	4
3	055020-094	Screw – FH 10-32 × 1 SST PH	4
4	055293-044	Screw – HHC, ¼-20 × 1", SS	3
5	5002003	Fab – Side Slide Guide Plate	1
6	5002015	Fab – Left Box Support	1
7	5002030	Mach – Side Rail Weight	1
8	5002036	V-Bearing – Dua-L-Vee	3
9	5002037	Bushing – Eccentric Dua-L-Vee	1
10	5002038	Bushing – Concentric Dua-L-Vee	2
11	5002039	Door Hinge SST, Surface Mount	1
12	5002041	Fab – Bottom Carton Slide	1

Infeed Module Right Side Chute – XL (1.05 – XL)
5010001-48
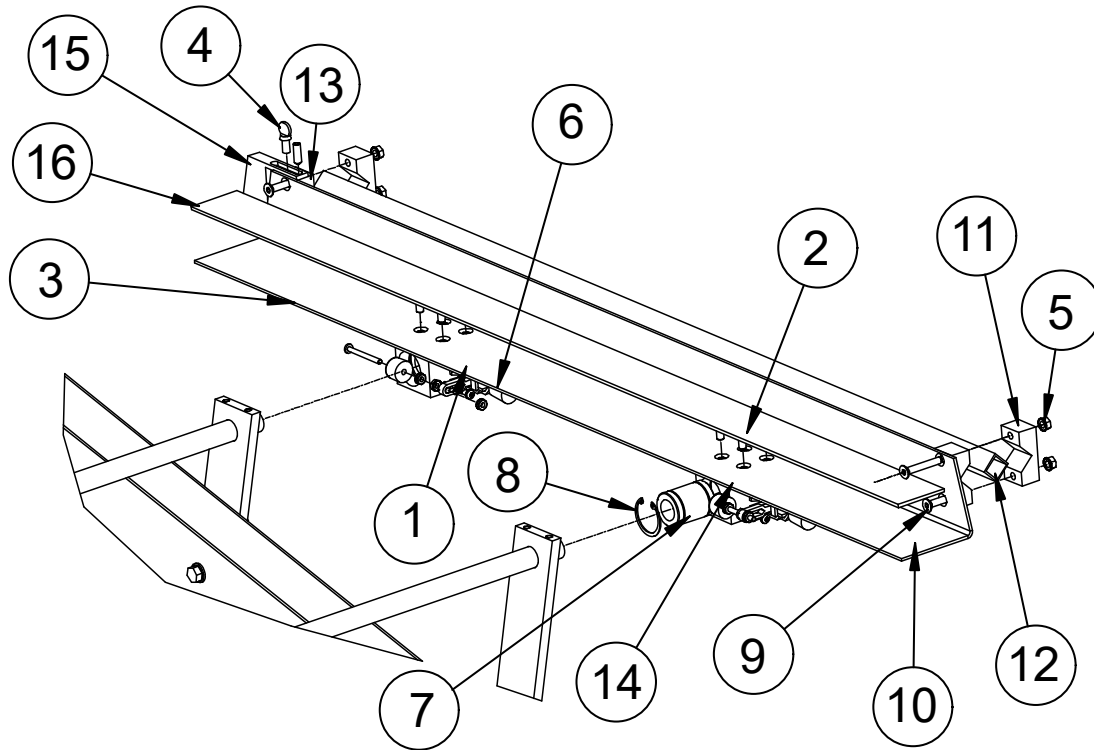
Item	Part No.	Description	Quantity
1	054979-097	Screw – PH 8-32 × ⅜ PH SEMS INT	8
2	055020-099	Screw – FH ¼-20 × ⅜" (100) ZN	8
3	055298-081	Screw – Set 10-32 × 5/16 Allen Black	3
4	086348-001	Screw – Thumb, Shoulder ¼-20 × 0.5"	1
5	102448-004	Nut – Kep, M6, Zinc	4
6	113825-002	Mod – Toggle Hold Down Clamp	2
7	5000520	Bearing – Linear Ball ¾" I.D.	2
8	5000521	Retaining Ring	4
9	5000786	Screw – FH, M6×20, DIN 7991, Socket - Black	4
10	5002001	Fab – Carton Feed Chute	1
11	5002004	Mach – Side Slide Block	3
12	5002005	Fab –Side Guide Tube 0.75" × 0.75"	1
13	5002007	Mach – Side Slide Block, Mod	1
14	5002026	Mach – Bushing Block, Slide Rail	2
15	5002053	Mach – Box Stop	1
16	5003021	Fab – Bottom Carton Slide	1

Infeed Module Right Slide Guide – XL (1.06 – XL)
50010001-48

Item	Part No.	Description	Quantity
1	054982-006	Nut – Kep ¼-20 NC Zinc	3
2	055020-085	Screw – FH 10-32 × ⅜" SST PH(82)	4
3	055020-094	Screw – FH 10-32 × 1" SST PH	4
4	055293-044	Screw – HHC, ¼-20 × 1", SS	3
5	5002003	Fab – Side Slide Guide Plate	1
6	5002016	Fab – Right Box Support	1
7	5002030	Mach – Block, Side Rail Weight	1
8	5002036	V-Bearing – Dua-L-Vee	3
9	5002037	Bushing – Eccentric Dua-L-Vee	1
10	5002038	Bushing – Concentric Dua-L-Vee	2
11	5002039	Door Hinge SST, Surface Mount	1
12	5002041	Handle – Knob, 4" Long, 5/16-18 Thread	1

Infeed Module Upper Frame End Triangles – XL (1.07 – XL)
5010001-48
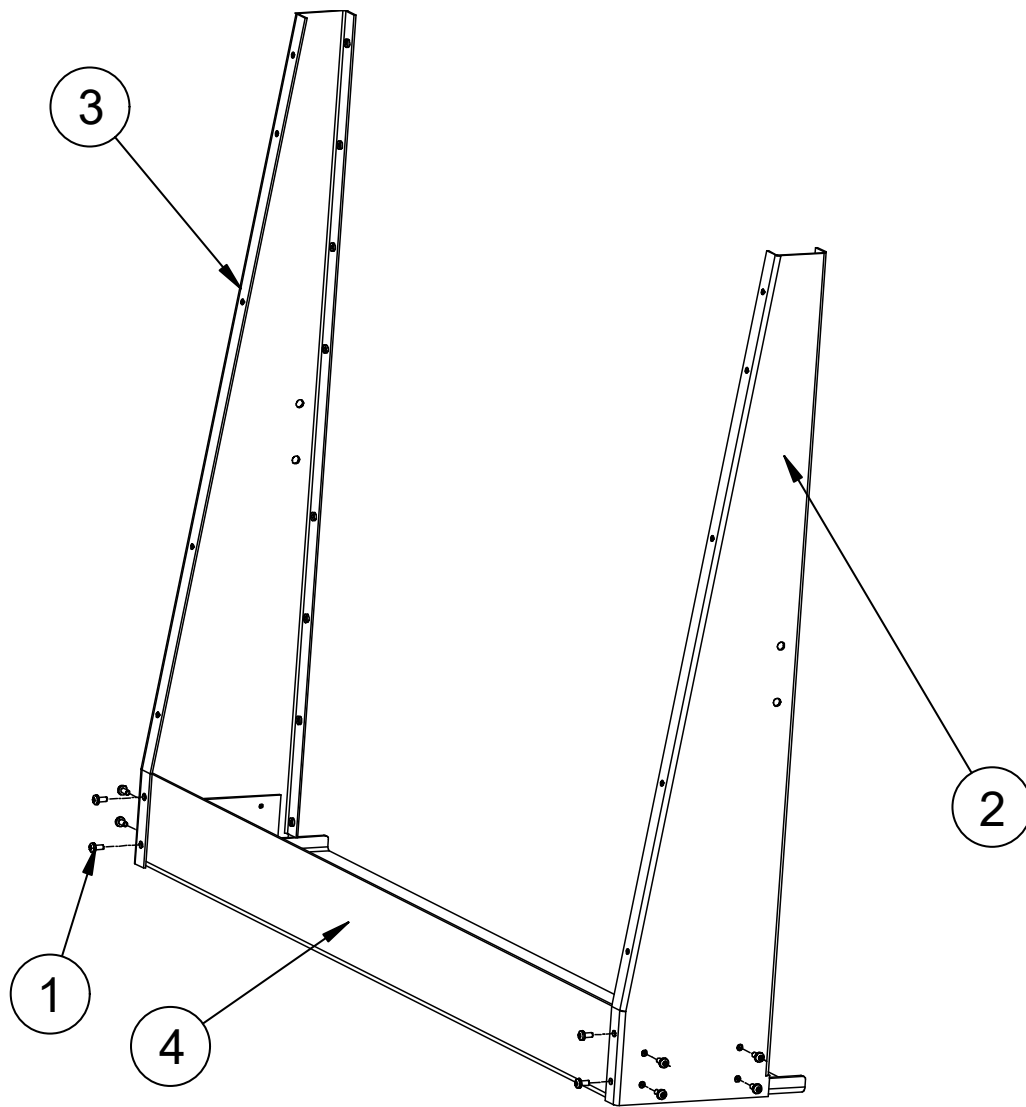
Item	Part Number	Description	Quantity
1	054979-097	SCREW – PH 8-32 × ⅜ PH SEMS INT	12
2	5002010	FAB – LEFT SIDE BRACE, INFEED	1
3	5002011	FAB – RIGHT SIDE BRACE, INFEED	1
4	5002014-48	FAB – BOX BRACE, INFEED	1

Infeed Module Upper Frame Cover Panels – XL (1.08 – XL)
5010001-48
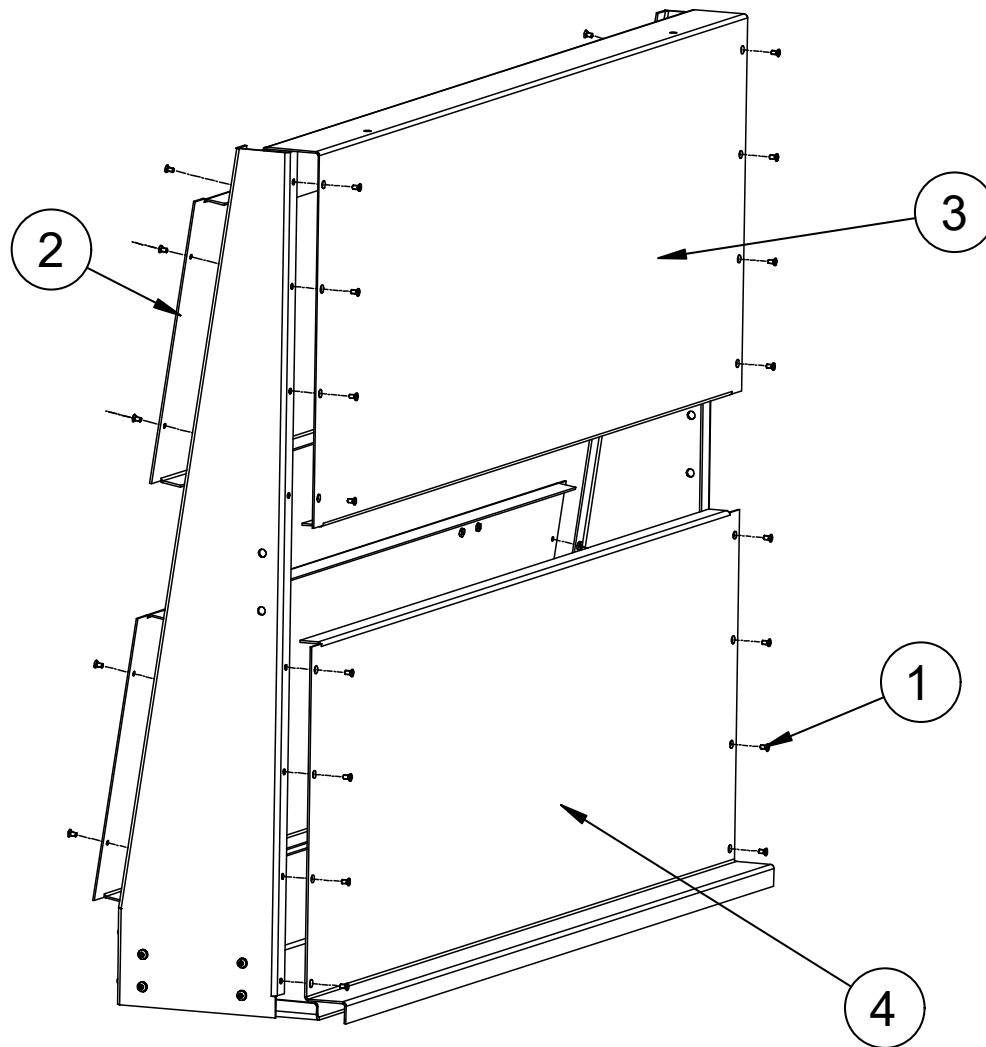
Item	Part Number	Description	Quantity
1	055020-052	Screw – FH 6-32 × ¼ SST PH (100)	26
2	5002008-48	Fab – Back Upper Cover	2
3	5002012-48	Fab – Top Front Frame, Infeed	1
4	5002013-48	Fab – Bottom Front Frame, Infeed	1

Infeed Module Guide Shafts and Bushing Block – XL (1.09 – XL)
5010001-48
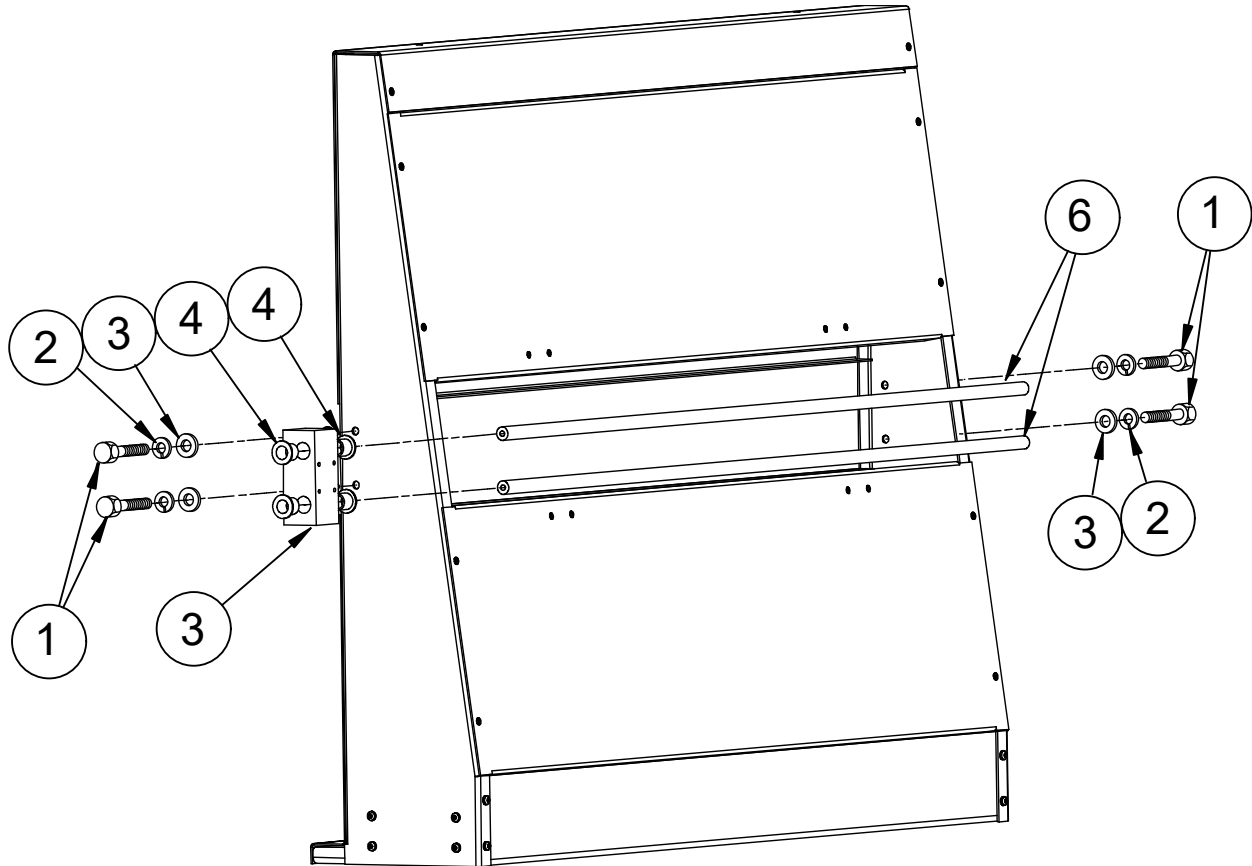
Item	Part Number	Description	Quantity
1	054979-141	Screw – PH ¼-20 × ½ NI PH Ext	4
2	5000816	Bushing – Flange	4
3	5002021	Mach – Block, Push Bar	1
4	5002024-48	Mach – Shaft Guide	2

Infeed Module Air Cylinder and Locking Bracket – XL (1.10 – XL)
5010001-48
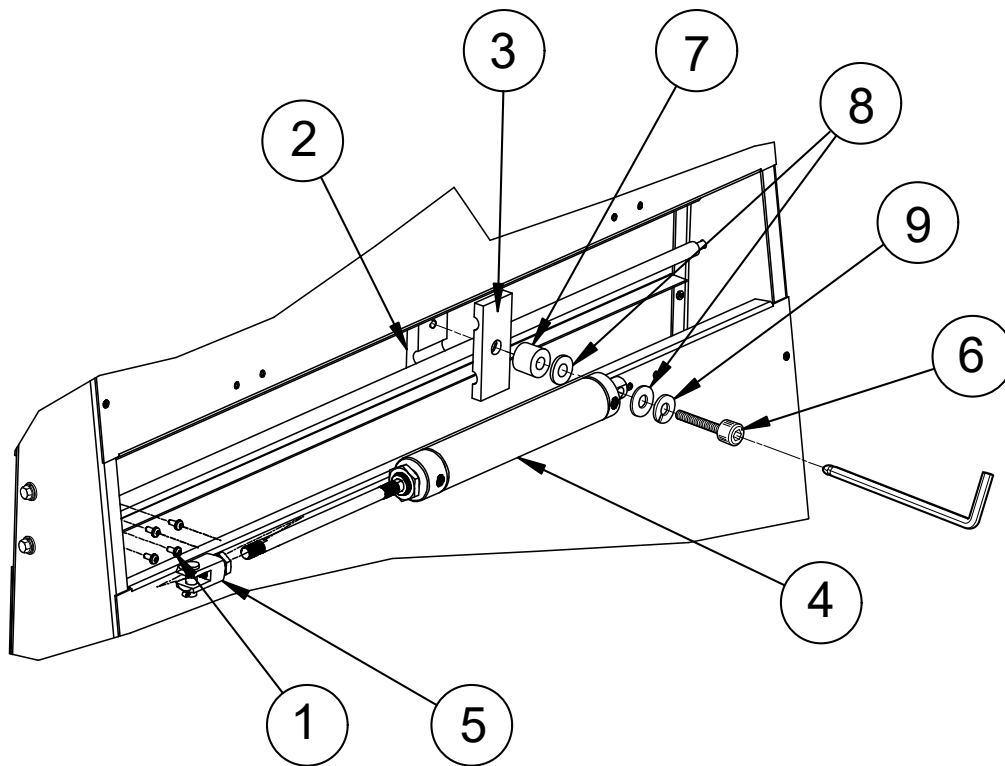
Item	Part Number	Description	Quantity
1	054979-097	Screw – PH 8 - 32 × ⅜ PH Sems Int	4
2	5002022	Mach – Air Cylinder Bracket Front	1
3	5002023	Mach – Air Cylinder Locking Bracket Rear	1
4	5002040-48	Air Cylinder, 7" Stroke, 1-½" Bore	1
5	5002043-48	Rod Clevis For 1-½" Bore Cylinder	1
6	5000970	⅜"-16 × 2-½" SST Socket Head Cap Screw	1
7	5003052	Spacer – ¾" O.D. × ¾" Long	1
8	4605065	⅜" Flat Washer	1
9	055310-042	⅜" Lock Washer	1
10	5003037	Fitting Elbow (1 ea. Cylinder Ports — Not Shown)	2

Infeed Module Air Cylinder Cover Door Assembly – XL (1.11 – XL)

5010001-48
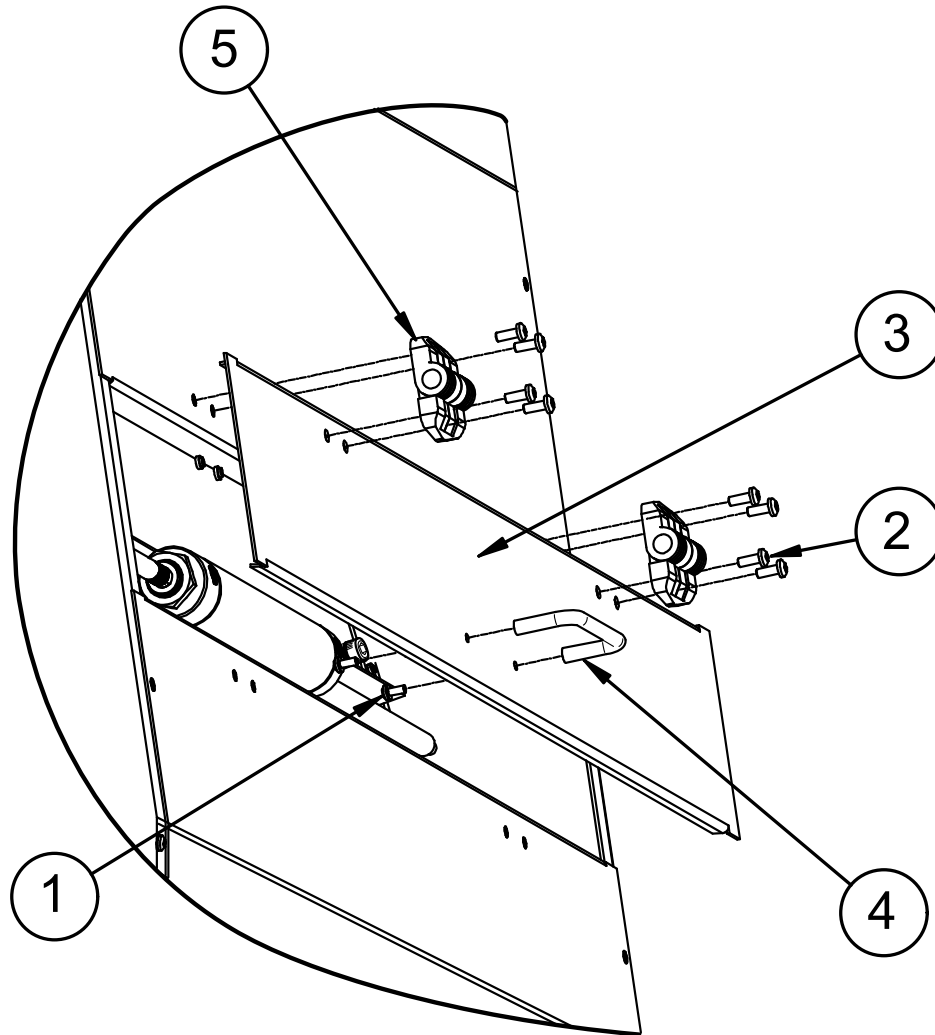
Item	Part Number	Description	Quantity
1	054979-097	Screw – PH 8-32 × ⅜ PH Sems Int	2
2	054979-123	Screw – PH 10-32 × 0.5 PH SS Sems - In	8
3	5002018-48	Fab – Back Middle Cover	1
4	5002035	Pull Handle – Round, Threaded	1
5	5002049	Friction Hinge Surface Mount	2

Infeed Module Upper to Lower Frame & Attach Push Bar – XL (1.12 – XL)

5010001-48

NOTE: Item number (8) is provided with every VCTS.

NOTE: Screws (1) must be installed with thread locking compound applied
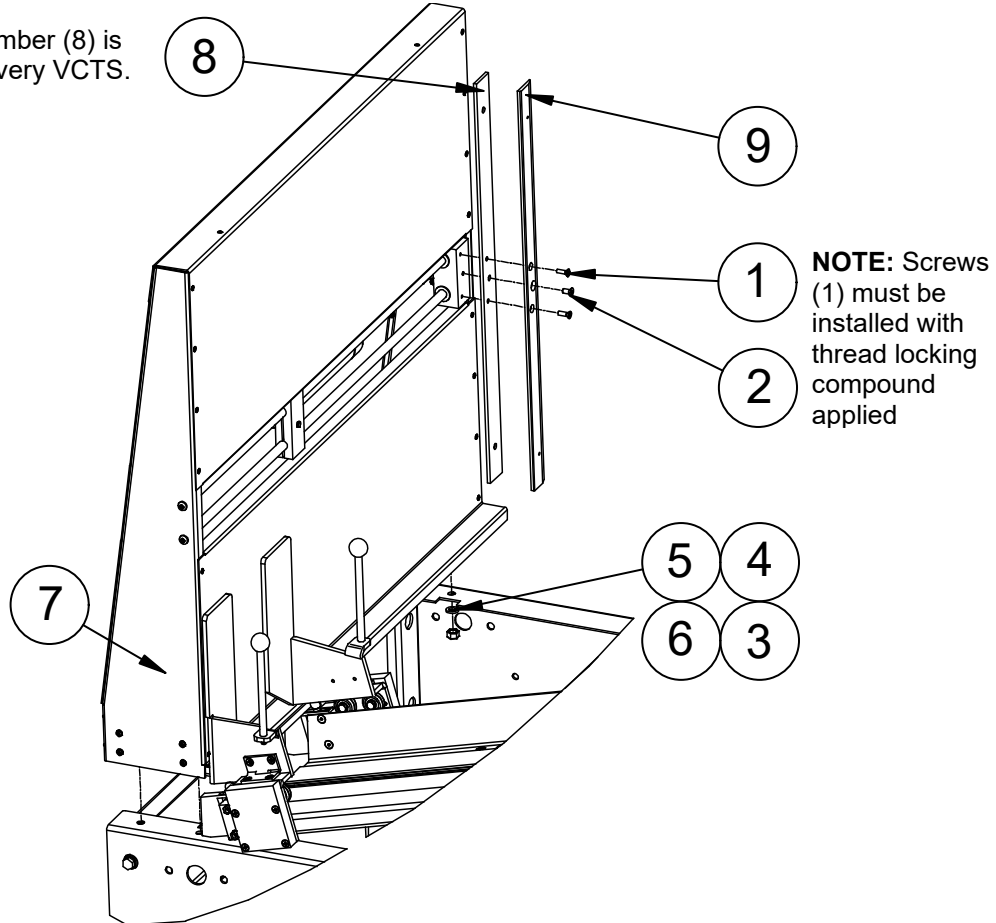
Item	Part Number	Description	Quantity
1	054979-088	Screw – FH, 10-32 × ½, SST, PH(82)	2
2	055020-099	Screw – FH, ¼-20 × ⅜" (100) ZN	1
3	055029-022	Washer – Flat ⅜ Zinc	4
4	055307-062	Nut – Hex ⅜-16 NI	4
5	055310-042	Washer – Split ⅜ NI	4
6	5000791	Screw – HH ⅜-16 × 1 NI	4
7	5002009-48	Assembly – VCTS Box Frame	1
8	5002019	Fab – Box Pusher Filler	1
9	5002020	Mach – Bar, Box Pusher	1

Print Station Base Frame – XL (2.01 – XL)
5010002-48

Item	Part Number	Description	Quantity
1	055029-022	Washer – Flat, ⅜ Zinc	24
2	055307-062	Nut – Hex, ⅜-16 NI	24
3	055310-042	Washer – Split ⅜ NI	24
4	5000195	Fab/Weld – Leg Extension	4
5	5000552	Fab – Leg (R/L)	2
6	5000553	Fab – Leg, Left Rear	2
7	5000554-48	Fab – Brace, Front	2
8	5000791	Screw – HH ⅜-16 × 1 NI	24
9	5003003	Fab – Frame, Brace, End, VCTS	2
10	5003004	Brace – Front	2
11	5003012-48	Fab – Frame, Print Station	1

Print Station Side Contact Spring Support Blocks–XL (2.02–XL)
5010002-48
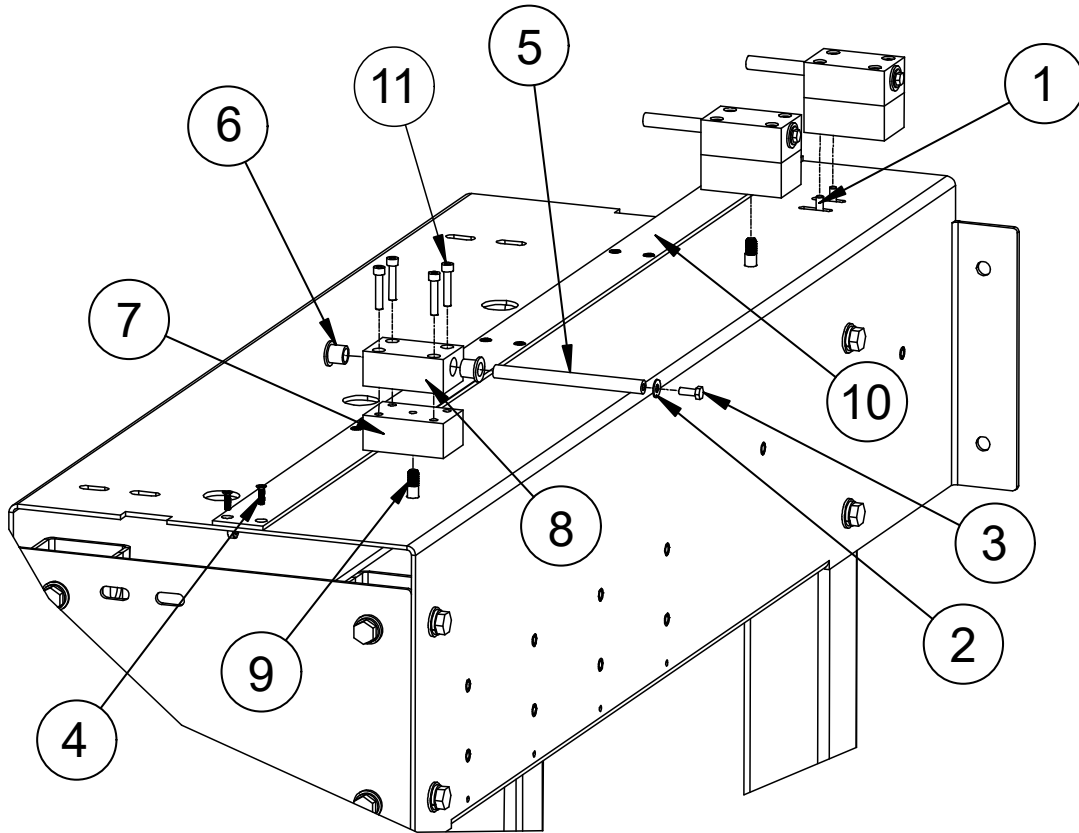
Item	Part Number	Description	Quantity
1	054979-123	Screw – PH, #10-32 × 0.5 PH SS Sems - IN	2
2	055029-011	Washer – Flat, #10 SST 0.031 THICK	3
3	055293-025	Screw – HH @10-32 × ½ Zinc	3
4	1600072	Screw – PHP SS, 6-32 × ½ Black	10
5	5000065	Mach – Spacer, Head Plates 3"	3
6	5000868	Bushing – Flanged ⅜" I.D., ½" O.D.	6
7	5003000	Mach – Drive, Support Block	3
8	5003001	Mach – Block, Side Drive	3
9	5003024	Screw – Shoulder ¼-20 × ½ Shoulder	2
10	5003026-48	Fab – Print Station Box Slide	1
11	5003028	Screw – SHC 10-32 × 1" Black	12

Print Station Side Contact Springs and Slide Bar–XL (2.03–XL)
5010002-48
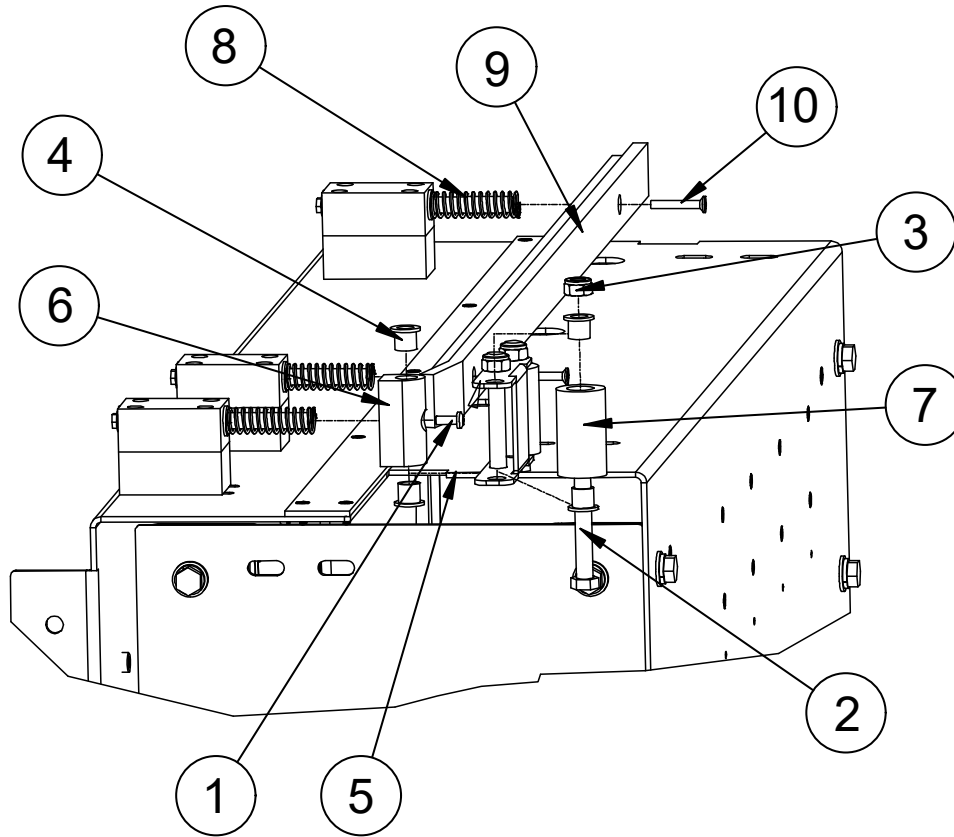
Item	Part No.	Description	Quantity
1	054979-123	Screw – PH 10-32 × 0.5 PH SS Sems - IN	1
2	055293-073	Screw – HH ⅜-16 × 2-¾ Zinc	3
3	1605029	Nut – Hex Nylock ⅜-16	3
4	5000868	Bushing – Flanged ⅜" I.D., ½" O.D.	6
5	5002045	Fab – Roller Bracket	1
6	5002046	Fab – Pivot Bracket	1
7	5003014	Idle Roller, Rubber	2
8	5003015	Spring – Comp, 2" × 0.072WD × 0.6" O.D.	3
9	5003017-48	Mod – Box Guide – 5" Long SST/UHMW	1
10	5003023	Screw – FH, #10-32 × ½, SST, PH(82)	2

Print Station Side Belt Assembly – XL (2.04 – XL)
5000637
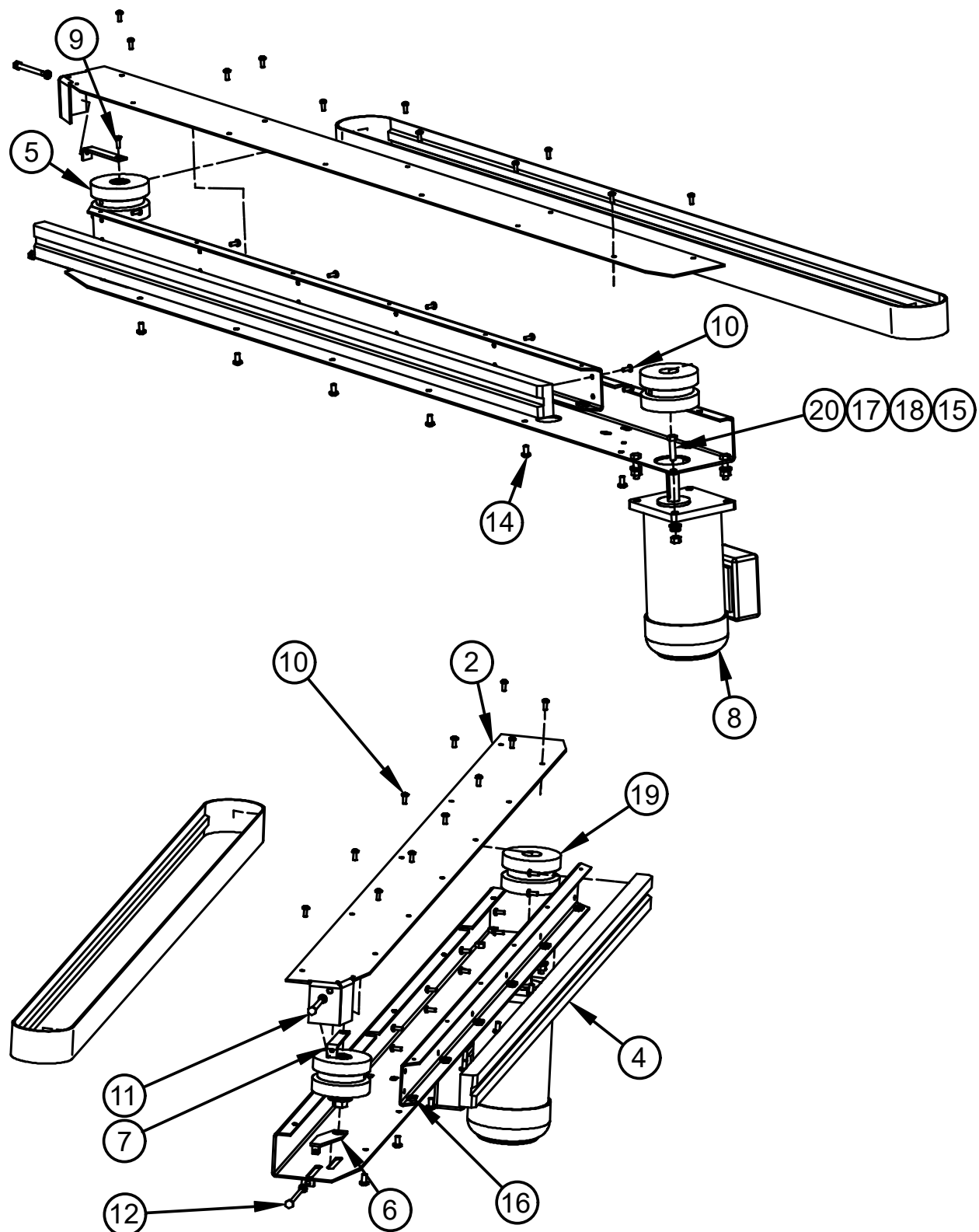
Item	Part Number	Description	Quantity
1	5000153	Fab – Drive Frame, Left	1
2	5000155	Fab – EZ-Packer Drive Cover, Left	1
3	5000640	Mach – EZ-Packer Belt Strip	1
4	5000640	Mach – EZ-Packer Belt Strip	1
5	5000641	Mach – Idle Roller – EZ-Packer	1
6	5000702	Fab/Weld – Belt, Teflon Bracket, L	1
7	5000928	Fab – Belt Tracking Bracket	1
8	5000311	Side Belt Gear Motor	1
9	055020-088	Screw – FH, #10-32 × ½, SST, PH (82)	1
10	054973-123	Screw – PH #10-32×.5 PH SS SEMS – IN	23
11	5000804	Screw – HH ¼-20 × 2-½ ZN	1
12	055293-049	Screw – HH ¼-20 × 3-½ Tap Bolt	1
13	100694-001	Washer – Flat, M6, DIN 125 a	2
14	054979-141	Screw – PH ¼-20× ½ NI PH Ext	6
15	055307-055	Nut Hex $5/16$-18 ZN	4
16	5000158	Strip Bracket Weldment	1
17	5000333	Washer – Flat $5/16$, ZN	4
18	5000339	Washer – $5/16$ Split, ZN	4
19	5000643	Assembly – EZ-Packer Drive Wheel W/V Groove	1
20	5000803	Screw – HHC, 5/16-18 × 1-¼, SS	4
21	5001037_HALF	Belt (Set) – EZ-Packer, with V-Guide	1

Print Station Side Belt Attaching Hardware – XL
(2.08 – XL)
5010002-48
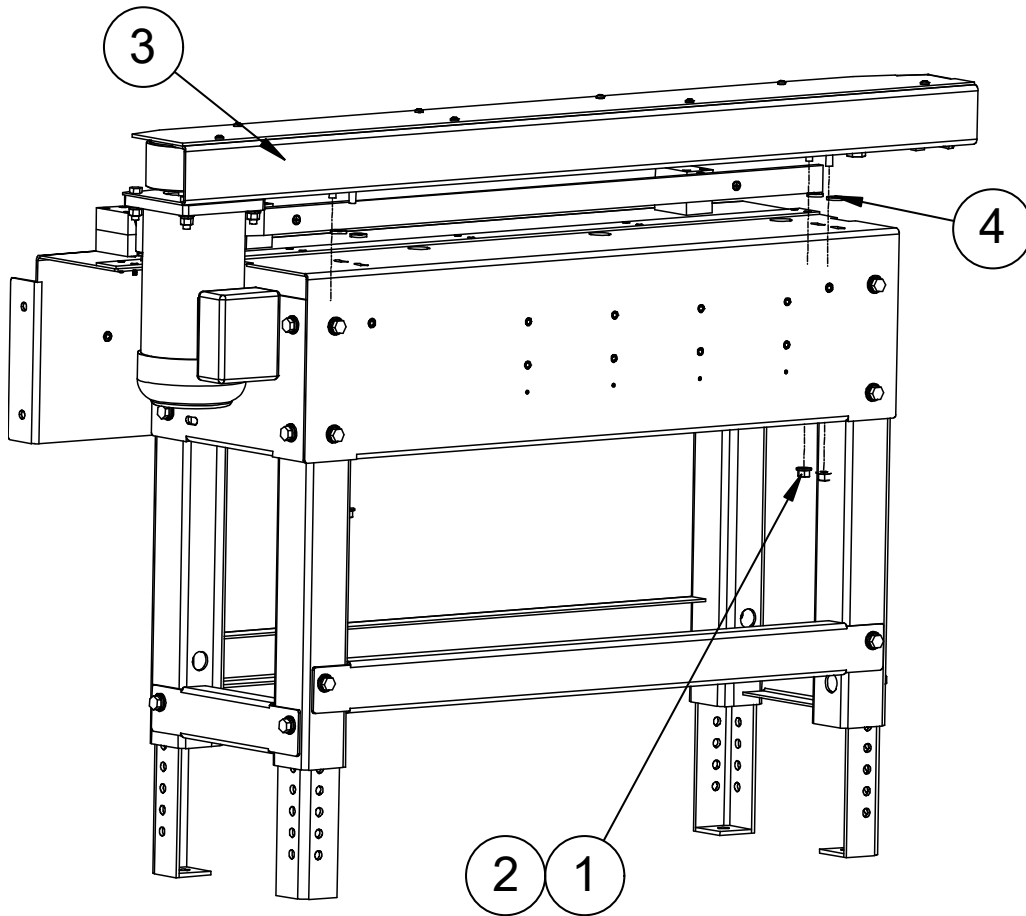
Item	Part Number	Description	Quantity
1	055307-055	Nut – Hex, $5/16$-18 Zinc	4
2	5000333	Washer – Flat $5/16$ Zinc	4
3	5000402	Assy – Side Belt Drive Left	1
4	5003025	Washer – Fender $5/16$" Flat	4

Exit Rollers and Guide Rod Assembly Option for VCTS–XL (3 – XL)

5010003-48
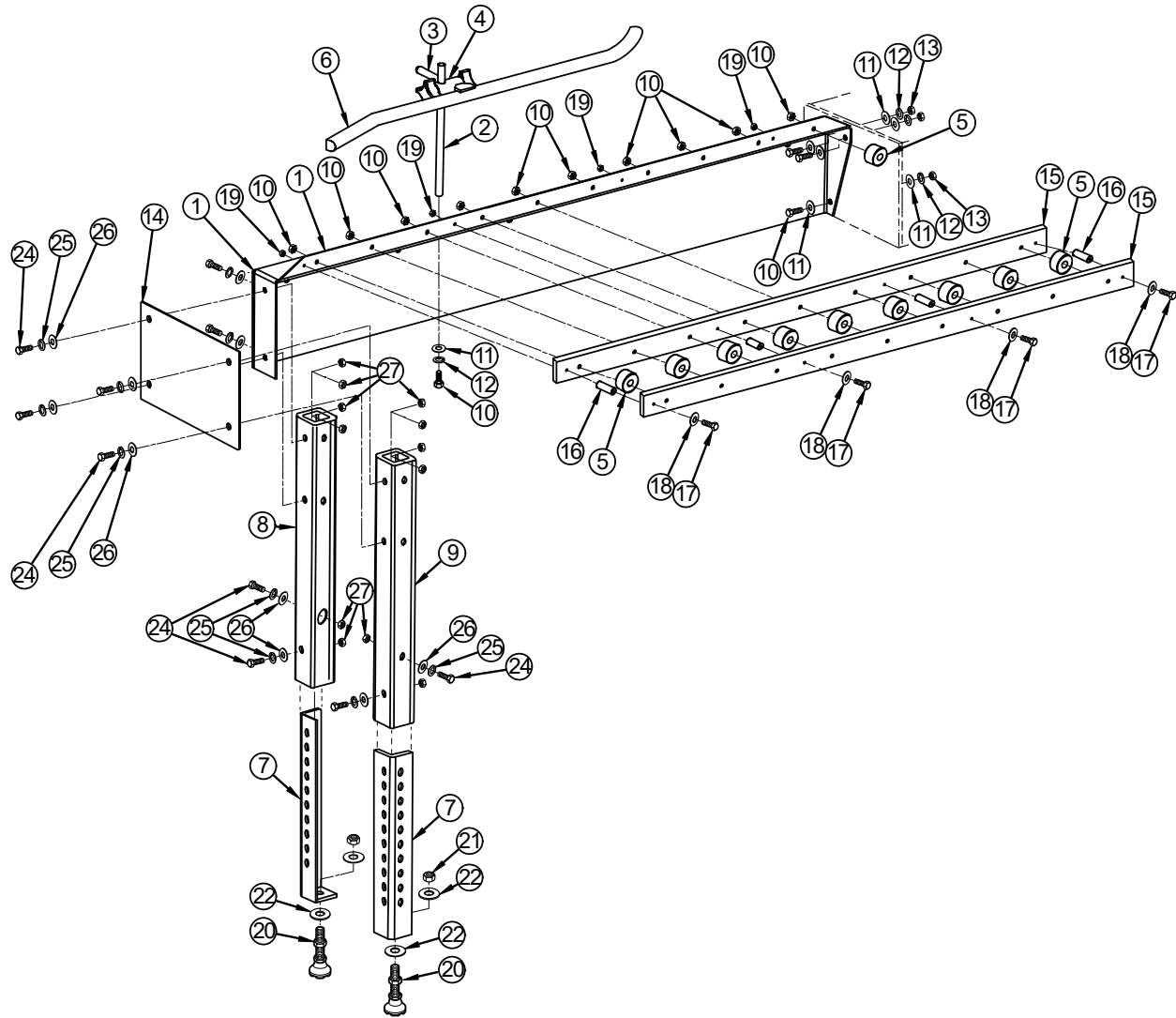
Item	Part Number	Description	Quantity
1	5004010-48	Fab / Weld – Frame, Roller Section XL	1
2	5004011	Shaft – ½" O.D. × 16" Long, Threaded End	1
3	5004012	Clamp – With Shaft Guide Rail Mount	1
4	5004014	Block – Dual Shaft Mount ½" O.D.	1
5	5000043	Rollers – Belt Guide	10
6	5004013-1	Plastic Guide Rail With SST Core, 5'	1
7	5000195	Fab / Weld Leg Extension	2
8	5000552	Fab – Leg (R/L)	1
9	5000553	Fab – Leg, Left Rear	1

Item	Part Number	Description	Quantity
10	055293-056	Screw – HH $5/16$-18 × ¾ Zinc	3
11	5000333	Washer – FLAT $5/16$ Zinc	3
12	5000339	Washer – $5/16$ Split Zinc	3
13	55307-055	Nut – Hex $5/16$-18 Zinc	3
14	5004024	Mach-– End Section Leg Bracket VCTS-XL	1
15	5004025	Fab – Lower Box Guide	2
16	110225-002	Spacer, AL 1.25" Long	4
17	110084-001	Screw – #10-32 × 2 SHCS, Black	4
18	055029-011	Washer – Flat #10 CRS Zinc	4
19	054982-005	Nut – Kep #10-32 NF Zinc	4
20	2006040	Foot Leveling	2
21	055307-069	Nut – Hex ½-13 Zinc	2
22	055029-025	Washer – Flat ½ CS Zinc	4
23	054982-006	Nut – Keps ¼-20 NC Zinc	10
24	5000791	Screw, HHC, ⅜-16 × 1 Zinc	8
25	055310-042	Washer, Split, ⅜, NI	8
26	055029-022	Washer, Flat, ⅜, Zinc	8
27	055307-062	Nut – Hex ⅜-16, NI	8

Electrical / Pneumatic Enclosure with Control Panel and External Connections (4)
5003022-UL
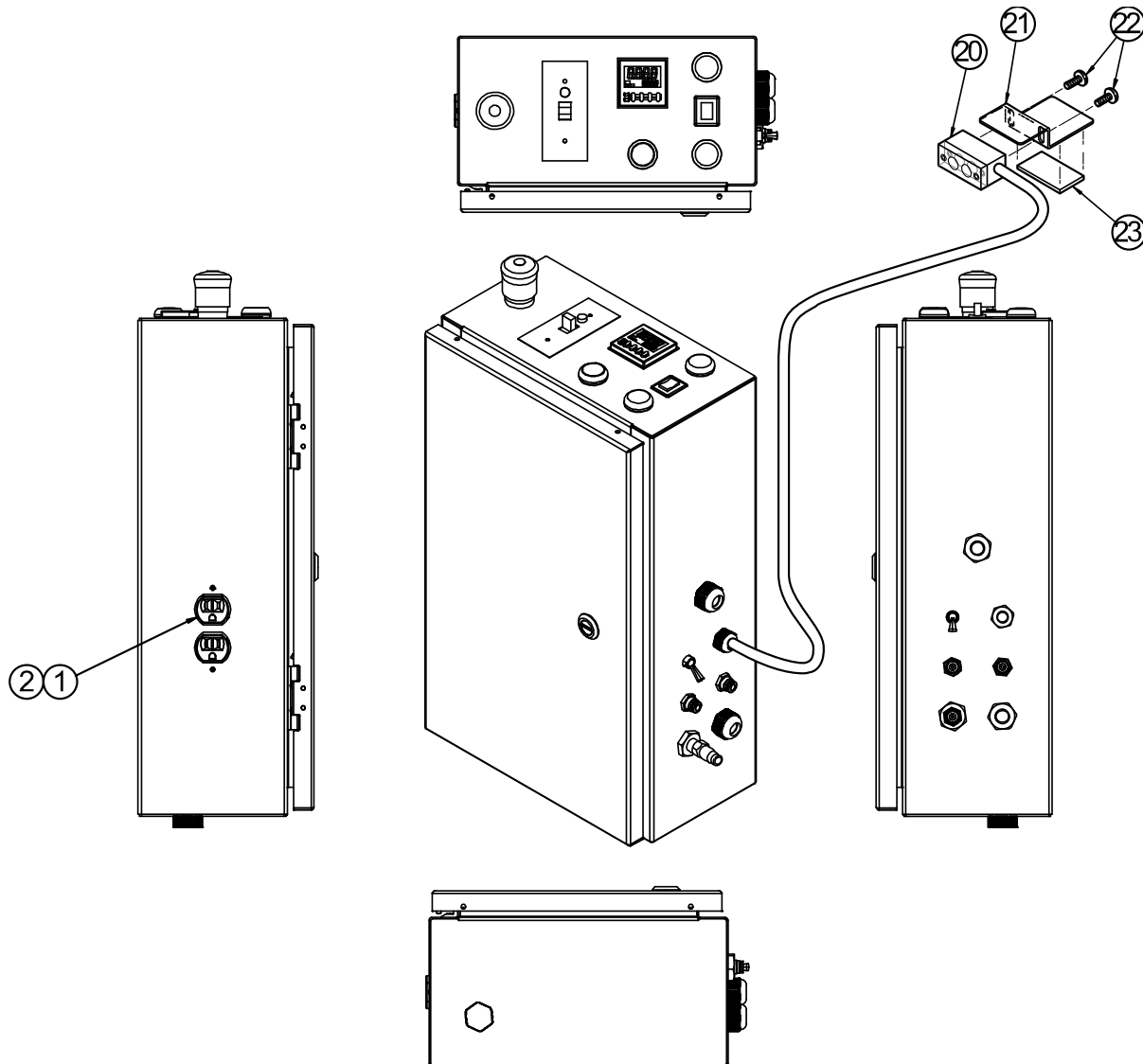
Item	Part Number.	Description	Quantity
1	5005169	125V AC Receptacle Wiring Module	1
2	5005170	Receptacle	1
20	5000524	Photo Eye with Cable	1
21	5003029	Fab – Photo Eye Bracket	1
22	2003224	Screw, FHP, 4-40 × $^3/_{16}$ SS	2
23	5003058	Magnetic Strip Adhesive Back	1"

Electrical / Pneumatic Panel Internal Components (4)

5003022-UL
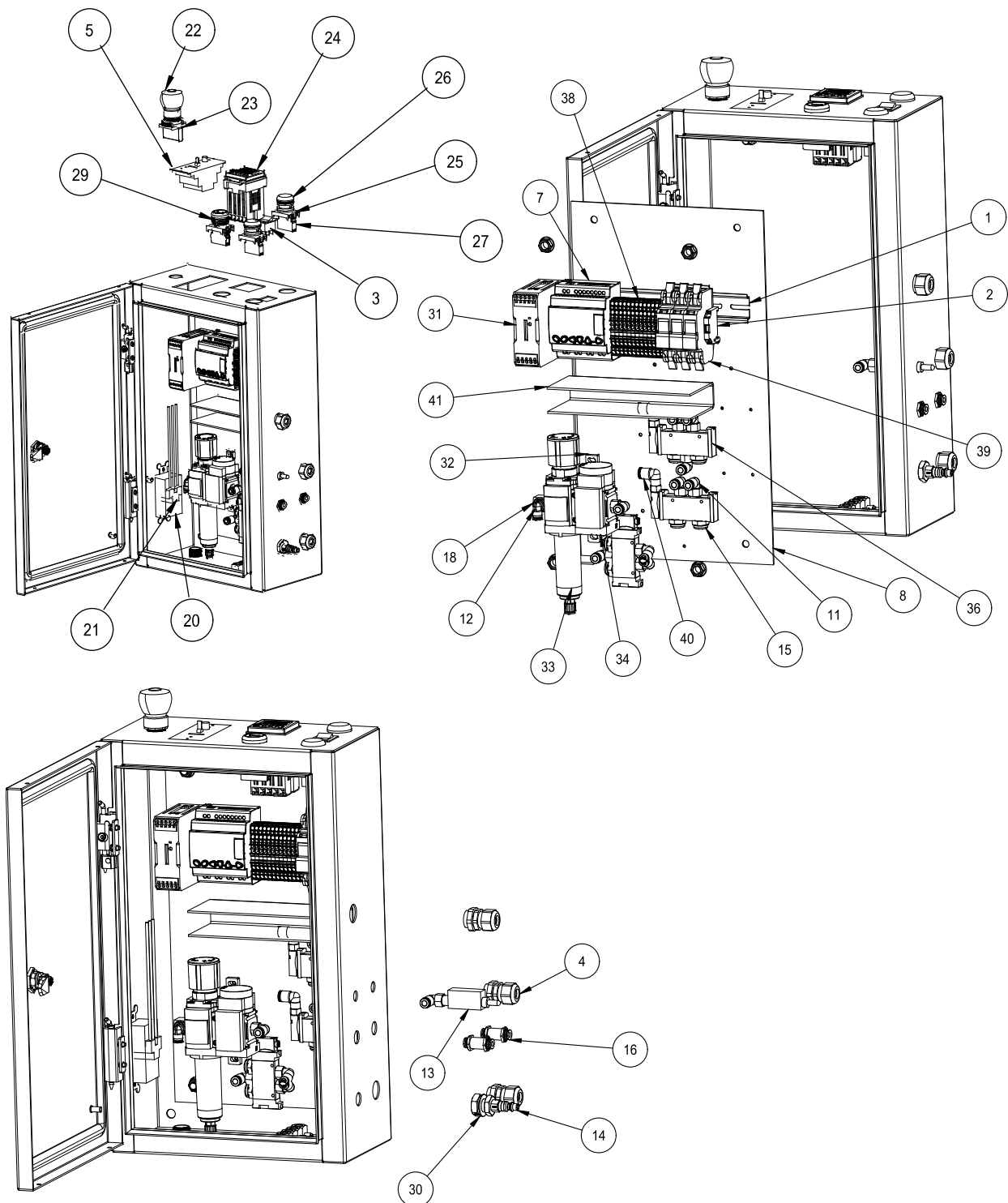
NOTE: When connecting Photo Eye leads, use the ferrules provided (part number 4501851) to reinforce the end of each wire from the Photo Eye as it is connected into the terminal block.

Item	Part Number	Description	Quantity
1	080849-001	DIN Rail	1
2	091186-002	End Stop-Entrelec TB-Min	2
3	106820-001	Switch-Rocker DPDT Mini 3 Pos	1
4	1602253	Cord Grip ½ NPT	3
5	5000039	Switch/MS-On/Off 120VAC	1
6	5000042	Motor Starter Heater Coil	1
7	5000514	PLC-Millenium 24VDC Programmed	1
8	5003020-1	Fab-Side Panel Control Box	1
9	5003022-UL-BOX	14ga Carbon Steel	1
10	5003022-UL-DOOR	SCE-RD20EL12 Door Assembly	1
11	5003037	⅛-¼ Push-In L Fitting	11
12	5003039	Fitting-Elbow ¼ NPT Quick Conn	1
13	5003042	2-Way Toggle	1
14	5003045	Fitting-Comp Air Nipple ⅛ NPT	1
15	5003046	Fitting-Muffler Exhaust Speed Ctrl	6
16	5003047	Fitting-Bulkhead ¼ OD Quick	2
17	5003049	Fitting-3-Way Shuttle Valve ⅛ NPT	4
18	5003053	Brass Elbow	1
19	5003061	½ Breather Vent	1
20	5005169	125V AC Receptacle Wiring Module	1
21	5005170	Connector-Tail Plug 12-3 AWG	1
22	5005171	22MM Red Pull-To-Release Button	1
23	5005172	22MM No Contact Block	1
24	5005173	1-Stage Pre-Set Counter	1
25	5005174	Indicator Light Housing	2
26	5005175	2MM Green Indicator Lens	1
27	5005176	12-30V AC/DC White LED	2
28	5005177	22MM Amber Indicator Lens	1
29	5005178	Non-Illuminating MOM PB Silver-Bezel Flush Green 1NO	1
30	5005181	¼ NPT Bulkhead	1
31	5005183	Power Supply 60W 24VDC	1
32	5005184	MS4-WP Mounting Bracket	1
33	5005185	MS4N-LFR-¼-D6-E-R-M Filter Regulator	1

Item	Part Number	Description	Quantity
34	5005186	MS4N-DL-1/4-1/4 NPT SOFT START	1
35	5005187	VUVG-LK14-M52-AT-G18-1H2L-S SOLENOID VALVE	1
36	5005188	VUWG-L14-M52-M-G18 PNEUMATIC VALVE	2
37	5005189	GROUND TERMINAL BLOCK	2
38	5005190	4 CONN. 22-12 AWG TERMINAL BLOCK	11
39	5005191	1-POLE CC FUSE HOLDER	3
40	5005195	5MM TO 1/4 PUSH-IN L FITTING	2
41	CHANNEL	CABLE CHANNEL	1
42	4501851	WIRE FERRULE WHITE	9

NOTE: When connecting Photo Eye leads, use the ferrules provided (part number 4501851) to reinforce the end of each wire from the Photo Eye as it is connected into the terminal block.

Appendix A: Electrical

Main Electrical Enclosure

NOTE: When connecting the Photo Eye Leads, use the ferrules provided (part number 4501851) to reinforce the end of each wire from the Photo Eye as it is connected into the terminal block.

Restacking Hopper Electrical / Pneumatic Enclosure

ELECTRICAL BOX ON RESTACKER
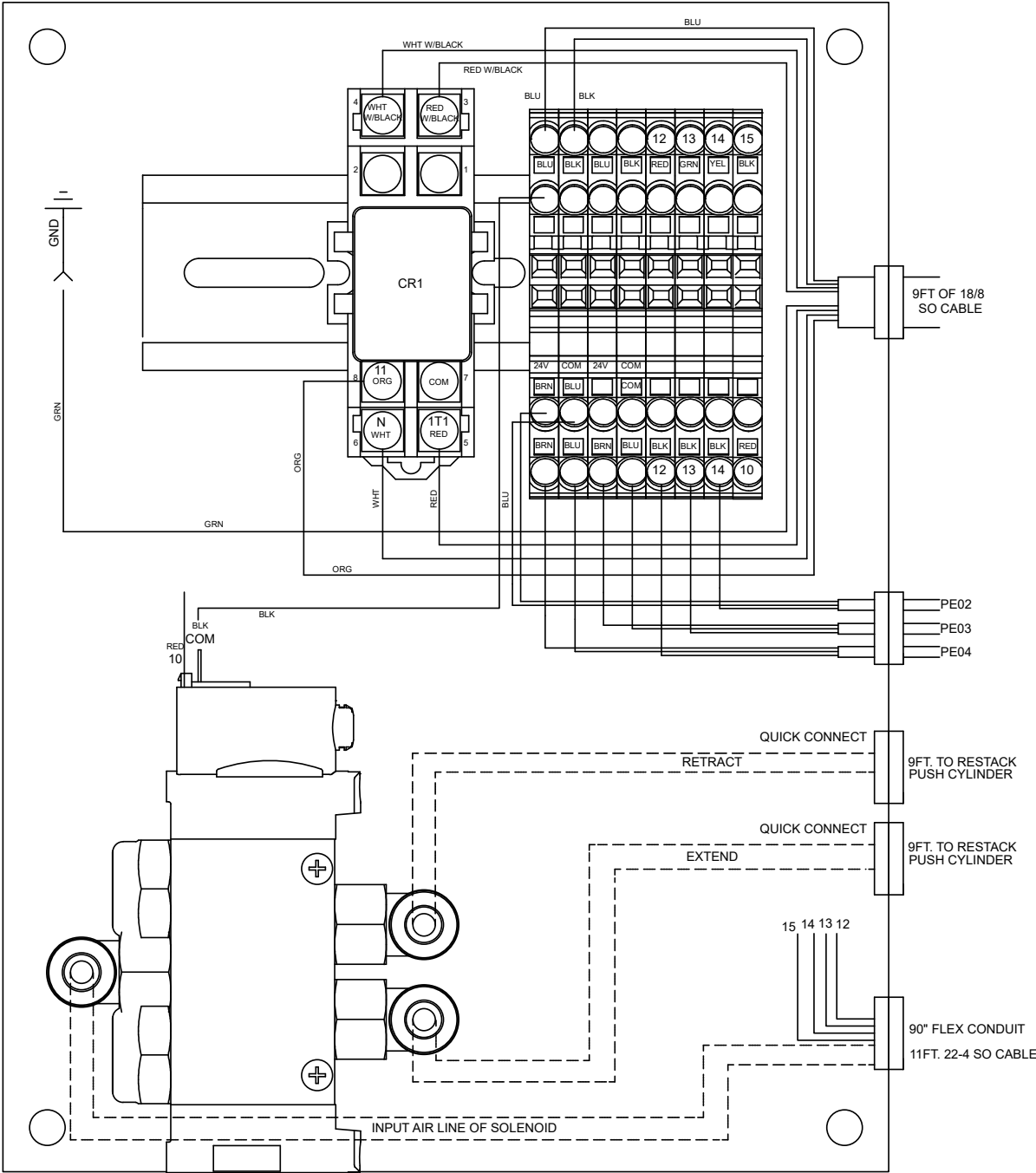
	Drawn By: RPW	Date: 08/10/2024	Rev: A
EASTEY ENGAGE TECHNOLOGIES 7041 Boone Ave N Brooklyn Park, MN 55428	Description VCTS CONTROL PANEL [RESTACKER]		
	Drawing Number: SUBR5475L	Sheet 1	Of 1

NOTE: When connecting Photo Eye leads, use the ferrules provided to reinforce the end of each wire from the Photo Eye as it is connected into the terminal block.

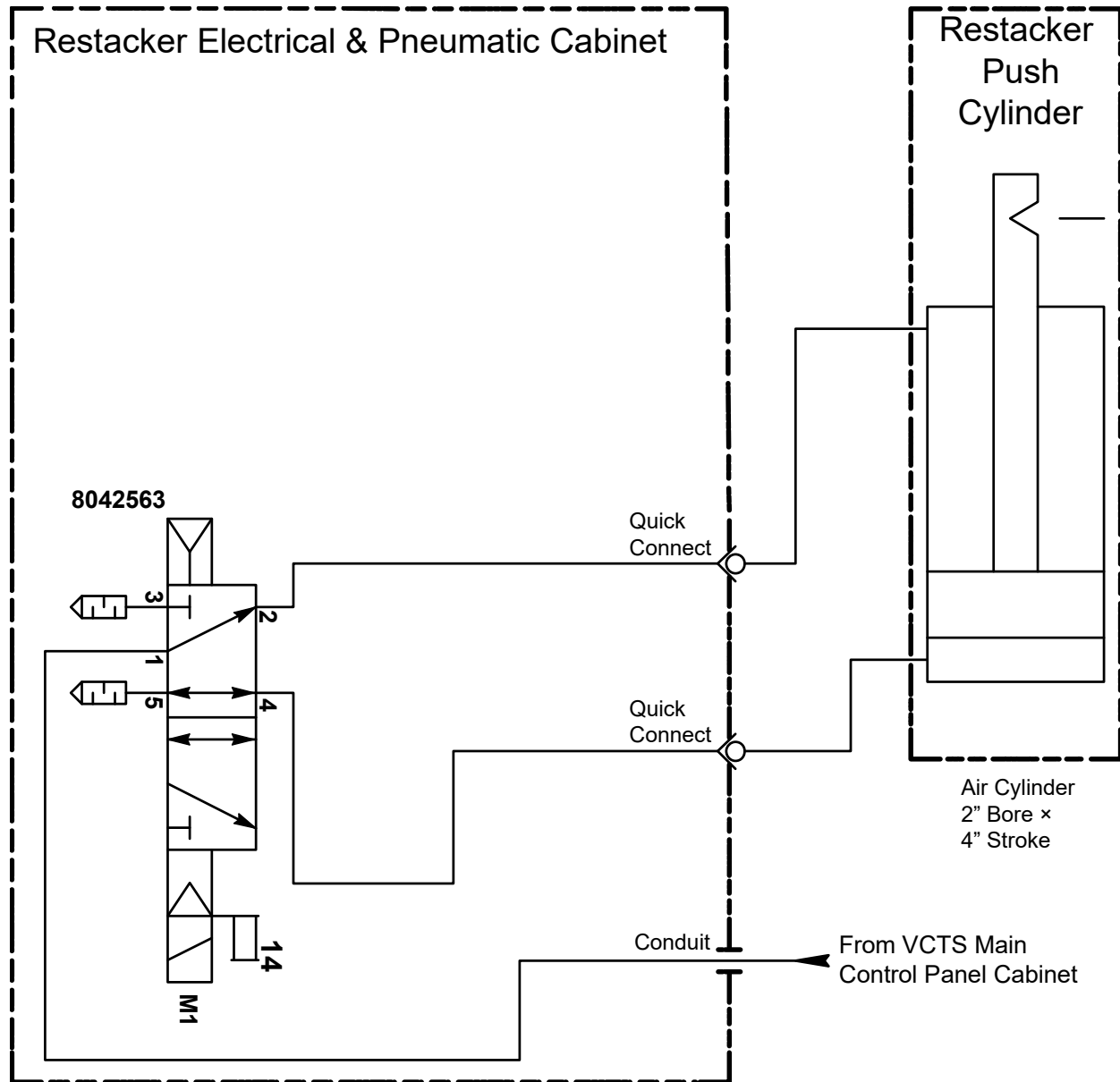**Restacking Hopper Retrofit Electrical Connections instructions:**

A.) Replace Crouzet PLC with the new programmed PLC provided.

B.) Knock or drill $^7/_8$" hole and ¾" hole in bottom of main electrical panel for Romex connector and 90-degree liquid-tight connector.

C.) Wire 18-8 cable into correct locations. (See schematic, wires marked 18-8.)
- Existing motor leads (1T1, N) will need to be pulled from their current location tied into Red with Black stripe (1T1), and White with Black stripe (N).

   NOTE: When connecting Photo Eye leads, use the ferrules provided (part number 4501851) to reinforce the end of each wire from the Photo Eye as it is connected into the terminal block.

D.) Hook 22-4 wire (Red, Green, Yellow) into the input side of the PLC (I4, IB, IC, respectively). See schematic.

E.) Hook the Black 22-4 wire (#10) into the output of the PLC (O3). See schematic.

F.) Hook the Black 18-8 wire (COM) into COMMON on the terminal block.

G.) Use the T fitting provided to tie the air line from the conduit into the main air supply.

H.) Add a jumper wire to connect from (24V) on the terminal block to outputs (O3 and O4) on the PLC.

I.) Use 4501851 wire ferrules on all photo eye connections.

Appendix B: Air Diagram

Push Cylinder Panel

M1

Air Cylinder
1-½" Bore
7" Stroke
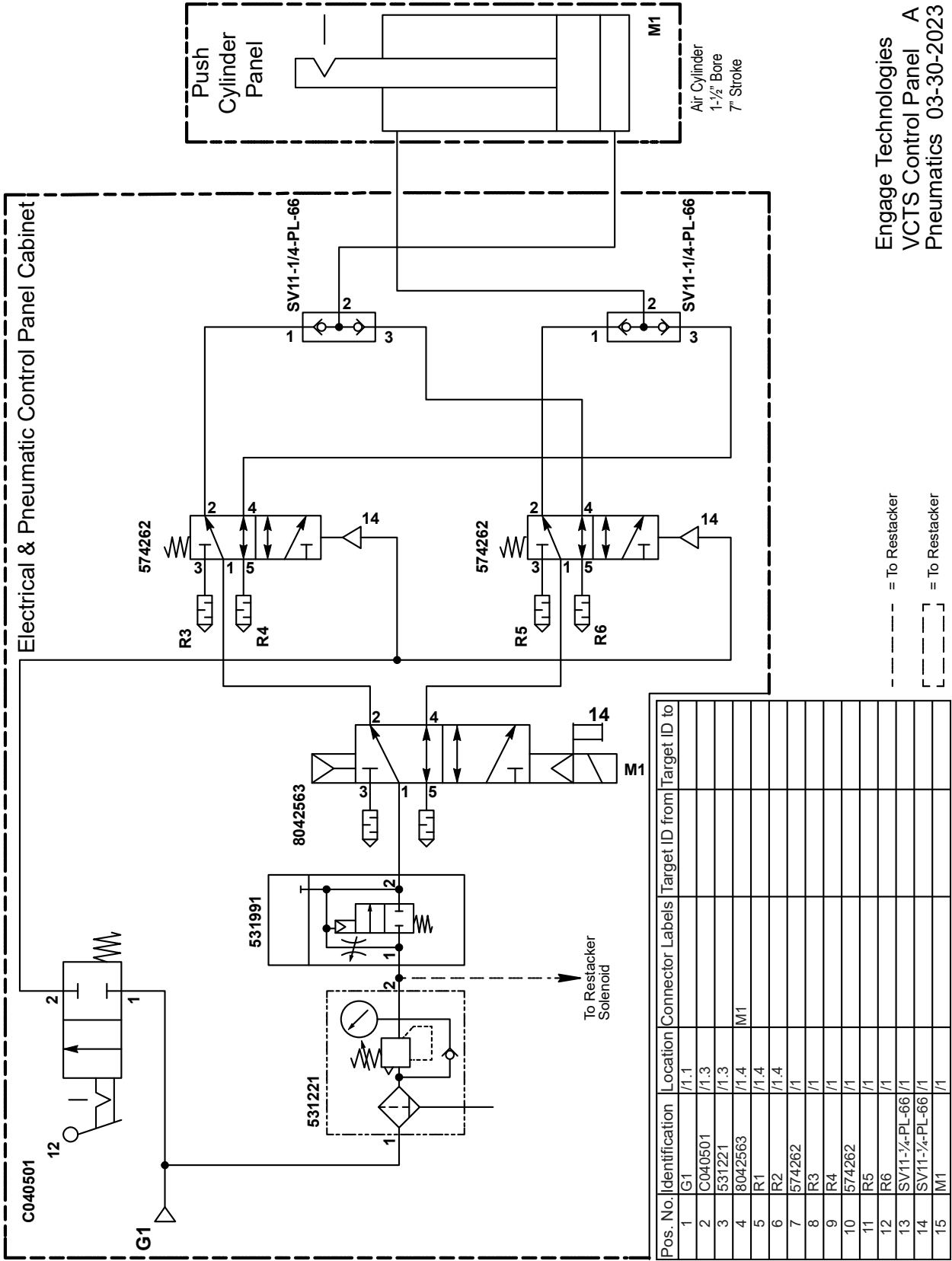
Engage Technologies
VCTS Control Panel   A
Pneumatics 03-30-2023

Electrical & Pneumatic Control Panel Cabinet

SV11-1/4-PL-66

SV11-1/4-PL-66

574262

574262

R3   R4

R5   R6

8042563

M1

531991

To Restacker
Solenoid

531221

C040501

G1

- - - - - = To Restacker

- - - - - = To Restacker

Pos. No.	Identification	Location	Connector Labels	Target ID from	Target ID to
1	G1	/1.1			
2	C040501	/1.3			
3	531221	/1.3			
4	8042563	/1.4	M1		
5	R1	/1.4			
6	R2	/1.4			
7	574262	/1			
8	R3	/1			
9	R4	/1			
10	574262	/1			
11	R5	/1			
12	R6	/1			
13	SV11-¼-PL-66	/1			
14	SV11-¼-PL-66	/1			
15	M1	/1			

Restacking Hopper Air Diagram Addendum

Restacker Electrical & Pneumatic Cabinet

Restacker
Push
Cylinder

8042563

3

2

1

5

4

14

M1

Quick
Connect

Quick
Connect

Air Cylinder
2" Bore ×
4" Stroke

Conduit

From VCTS Main
Control Panel Cabinet

Engage Technologies
Restacker Pneumatics
Addendum 03-30-2023

Appendix C: Squid Check Connection

This appendix explains how to wire the Squid Check to the VCTS or VCTS-XL electronic controls to work with the VCTS or VCTS-XL.
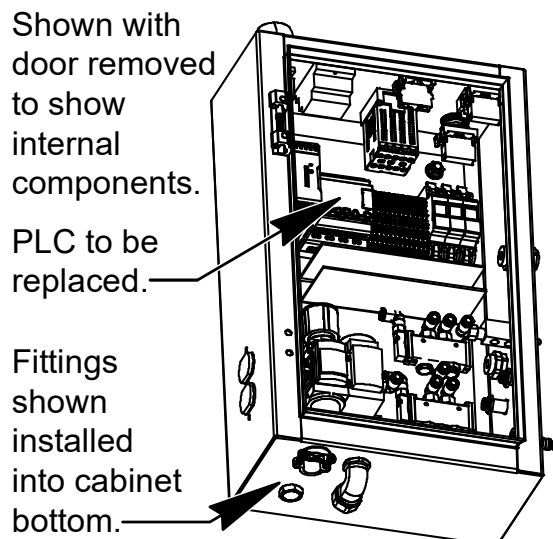
NOTE: This configuration of the VCTS or VCTS-XL and Squid Check is for the VCTS or VCTS-XL only, without the Restacker. If the VCTS or VCTS-XL with Squid Check and Restacker, consult Eastey Engineering.

1. Modify the VCTS or VCTS-XL main electrical enclosure by adding two (2) 7/8" diameter holes in the bottom of the enclosure at the locations shown in the drawing below.

Ø 0.875 Thru Hole for 3/4" Romex Connector

Ø 0.875 Thru Hole for 90° Conduit Elbow
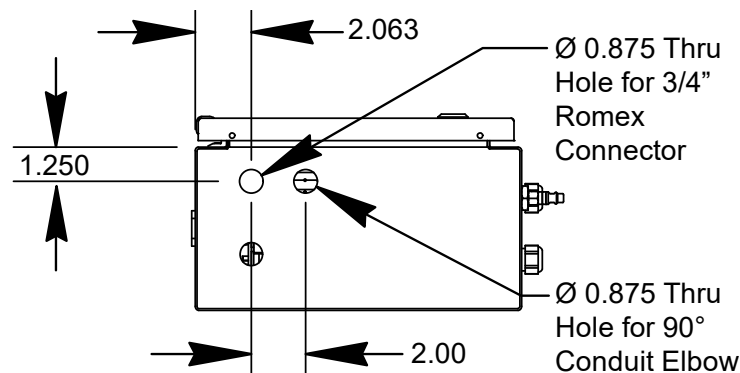
VCTS & VCTS-XL Enclosure Bottom Modification For Squid Check

2. Install a ¾" Romex connector and 90° conduit elbow into the holes created in the previous step as shown in the illustration below.

Shown with door removed to show internal components.

PLC to be replaced.

Fittings shown installed into cabinet bottom.

3. The existing PLC must be removed and replaced with a PLC that has been programmed for the VCTS or VCTS-XL with the added Squid Check option.

- Making note of where wires are connected to the PLC, remove the original PLC and replace it with the replacement PLC provided. Transfer wires from the original PLC to the connection terminals on replacement PLC as shown in the following photo.
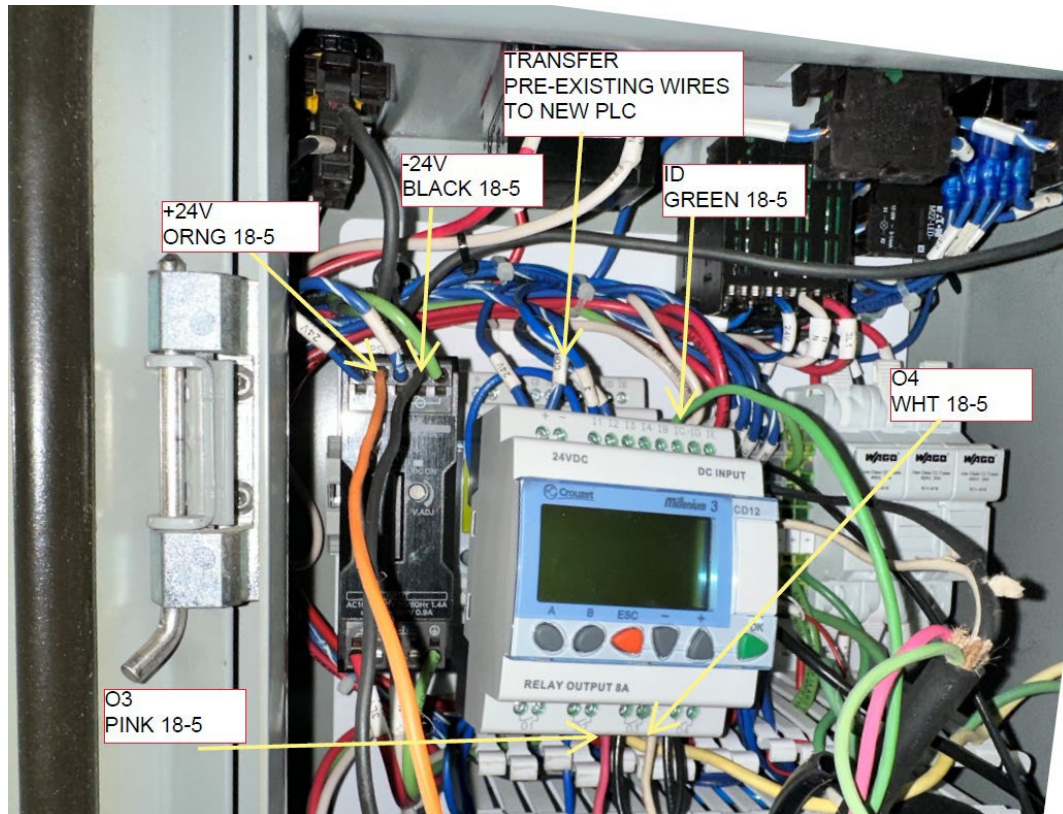
4. Connect the 18-4 wires indicated in the following photo to the motor leads as shown.
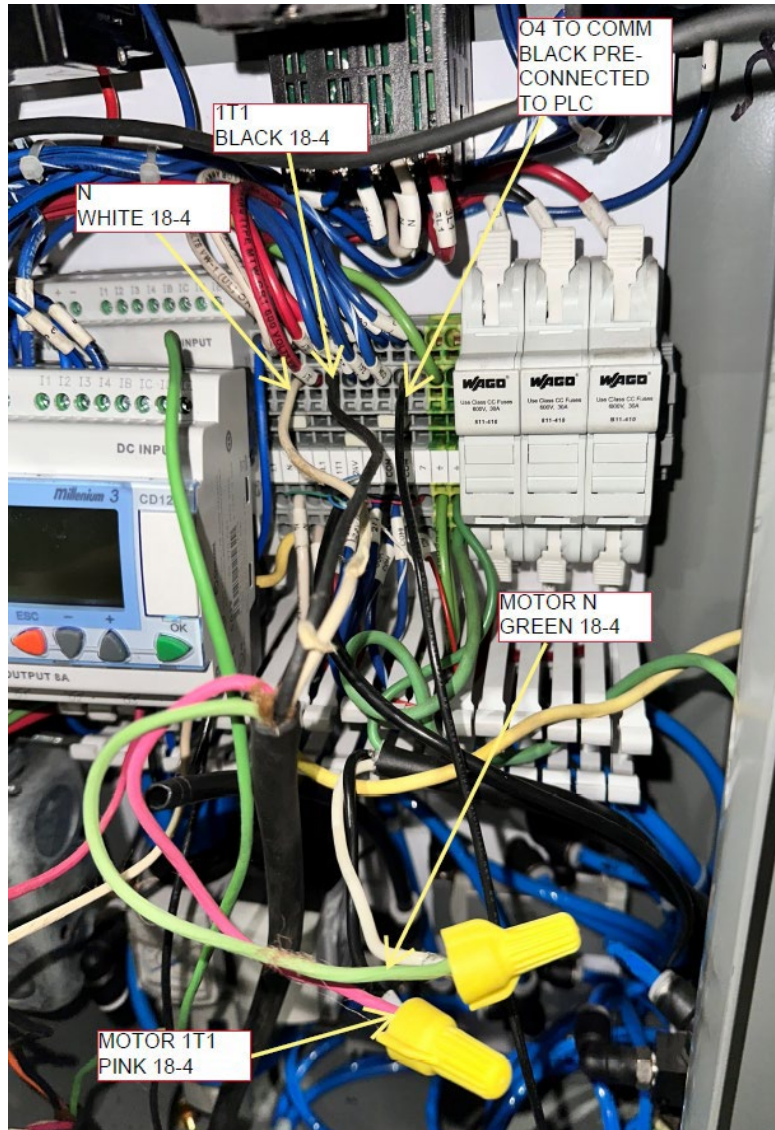
Refer to electrical schematics on the following pages for reference when connecting wires and to verify electrical system wiring.

VCTS / VCTS-XL with Squid Check Electrical Schematics

18-4 MTR CNTRL

1T1 18-4 BLK
N 18-4 WHT
MTR N 18-4 GRN
MTR LOAD PNK

PLC O3 18-5 PINK
COMM 18-5 BLK
+24V 18-5 ORNG
PLC ID 18-5 GRN
PLC O4 18-5 WHT

18-5
DC
POWER
AND
CONTROLS

+5V
COMM
+24V

REMOTE ENCLOSURE

18-4 BLK
18-4 PNK
18-4 WHT
18-4 GRN

SQUID CHECK
LIGHT TOWER

5
6
7
8
GND
RED

RED

Drawn By: GRQ	Date: 12/12/2022	Rev: F

Description
VCTS CONTROL PANEL W/SQUID CHECK

Drawing Number:
50057505S

Sheet 2 Of 2

EASTEY

ENGAGE TECHNOLOGIES
7041 BooneAve N
Brooklyn Park, MN 55428

REV.	DESCRIPTION	DATE	BY	APPR

Video Library

The videos below cover topics discussed in this user guide. To view them, click the link or input the link text into a browser, or scan the QR code at right with the camera app on your mobile device.

Application Videos

VIDEO: VCTS Product Overview and Operation

Eastey VCTS (Vertical Case Transport System) VCTS-XL Product Overview

VIDEO: VCTS Operation with Exit Case Restacker Option

Eastey VCTS (Vertical Case Transport System) with Exit Collection Bin

VIDEO: VCTS Operation with a Squid Ink Printer

Eastey VCTS Operation with a Squid Ink Printer

Application Video Playlist

VIDEO PLAYLIST

Application Videos – Vertical Case Transport System (VCTS)

Warranty Statement
Case Taping and Material Handling Equipment

This Warranty Statement is Available Online
This Warranty Statement is also available from the Eastey Support Website in electronic format for web browsers and e-readers. Go to EngageTechnologies.net >> Eastey Case Sealing & Packaging Equipment >> Warranty >> Case Taper & Material Handling Warranty >> Warranty Statement Case Taping and Material Handling Equipment, or scan the QR Code at right using the camera app on your mobile device to go directly to the online version of the most current version this Warranty Statement.

Warranty Statement
Eastey warrants that all of the case taping and material handling equipment it ships (case tapers, case erectors, case formers, conveyors, VCTS) will be in good working order and free from defects in material and workmanship for a period of one (1) year from the date of shipment by Eastey and will conform to the published specifications for that product under proper and normal use and maintenance: Purchased parts will also be warranted for one (1) year.

Eastey tape heads are warranted for a period of three (3) years from the date of shipment by Eastey (except for moving parts subject to normal wear and tear).

Damage caused during transport is the responsibility of the carrier and is not covered under this warranty. All damages detected upon receipt of equipment should be reported immediately to the carrier and Eastey should be notified.

Warranty Period – Specific Items
Any moving or wear parts are covered for 180 days after the date of purchase. This includes items such as rollers, blades, and belts. Fuses are consumable items and are not covered under warranty.

Repairs
All in-house repairs are rigorously tested for optimum operation and performance and warranted to be, under normal and proper use, free from defects in material and workmanship for a period of 90 days from the date of service.

Shipping Policy
Customer pays all incoming shipping charges for replacement components. If the item is defective and under warranty, Eastey will pay return shipping charges via the least costly method. If expedited shipping is desired, the customer must furnish their shipping account number and shipping fees will be charged to that account.

Exclusions
Damage due to tampering, abuse, improper adjustment, electrical interference, or the use of non-approved components will void any and all warranties by Eastey and its distributors.

Warranty Verification

If you believe that a product may be defective and may be covered by warranty, obtain a Return Material Authorization number by calling our technical support number (toll free at 1-800-835-9344, or 763-428-4846 or Fax: 763-795-8867) or e-mail: info@eastey.com. Based on the recommendation from Eastey technical support, replacement components may be shipped out via UPS Ground or similar method. If expedited shipping is desired, the customer must furnish their shipping account and shipping fees will be charged to that account.

Customer is required to return the defective component to Eastey. If, after 30 days, Eastey hasn't received the defective component, the customer will be invoiced for the replacement component. If the returned component is found to not be eligible for warranty, Eastey will contact the customer, and the customer will be invoiced tor the replacement component.

Warranty within 60 days of invoice

For warranty questions that take place within 60 days of the original invoice, Eastey will allow cross-shipment of a replacement component to an end-user customer or Eastey distributor. The customer will be invoiced for the replacement component 60 days after it ships. Upon receipt of the returned component, Eastey will evaluate it and issue credit where necessary.

For components that have been misused or externally damaged, Eastey will not issue credit and will contact the customer to determine whether or not they want the component repaired and/or returned.

Warranty after 60 days of invoice

For warranty questions that take place more than 60 days from the original invoice, Eastey requires the end-user or Eastey distributor to return the component to Eastey for repair. Upon receipt of the returned component, Eastey will evaluate it and repair as necessary.

Components that fail within our warranty policy will be repaired normally within 5 business days or receipt and returned to the customer via standard ground shipping at Eastey's expense. If expedited shipping is required, the customer must furnish their shipping account number and shipping fees will be charged to that account.

For components that have been misused or externally damaged, Eastey will contact the customer to determine whether or not they want the component repaired and/or returned.

Warranty Eligibility

The warranty provided by Eastey will only be covered provided that"

- Equipment usage is proper and normal
- Equipment is still owned by the original buyer
- Equipment has been operated in accordance with generally approved practice and in accordance with Eastey's specifications and instructions
- No repairs, alterations, or replacement have been made by others without Eastey's prior written approval
- Genuine Eastey repair components are used during the warranty period

Limited Warranty

THIS WARRANTY SHALL NOT APPLY IF ANY MODIFICATION, ALTERATION OR ADDITION IS MADE TO THE PRODUCT WITHOUT EASTEY'S PRIOR WRITTEN

APPROVAL. FURTHERMORE, THEIS WARRANTY DOES NOT APPLY TO PRODUCT DEFECTS DUE TO MISUSE, ABUSE, NEGLECT, OR FAILURE TO FOLLOW RECOMMENDED PROCEDURES. ANY PRODUCT REPAIRED OR ALTERED BY PERSONS OTHER THAN AUTHORIZED EASTEY REPRESENTATIVES WILL NOT BE COVERED BY THIS WARRANTY. THIS WARRANTY DOES NOT APPLY TO CONSUMABLE ITEMS.

EXCEPT AS EXPRESSLY PROVIDED IN THIS WARRANTY, EASTEY MAKES NO REPRESENTATION OR WARRANTY, EXPRESSED OR IMPLIED, WITH RESPECT TO THE PRODUCT, INCLUDING, WITHOUT LIMITATION, ANY WARRANTY AS TO MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, NON-INFRINGEMENT OR ANY OTHER MATTER. EASTEY SHALL HAVE NO LIABILITY TO ANY PERSON FOR INCIDENTAL, CONSEQUENTIAL, OR SPECIAL DAMAGE OF ANY DESCRIPTION WHETHER ARISING OUT OF WARRANTY OR OTHER CONTRACT, NEGLEGENCE OR OTHER TORT, OR OTHERWISE. NO AGENT, EMPLOYEE, OFFICER, OR OTHER REPRESENTATIVE OF EASTEY HAS AUTHORITY TO BIND EASTEY TO ANY REPRESENTATION OR WARRANTY EXCEPT AS STATED HEREIN. UNDER NO CIRCUMSTANCES SHALL EASTEY'S LIABILITY HEREUNDER, FOR ANY REASON OR CAUSE EXCEED THE PRICE PAID TO EASTEY FOR THE PRODUCT.

Disclaimer of Damages
REGARDLESS OF WHETHER ANY REMEDY SET FORTH HEREIN FAILS OF ITS ESSENTIAL PURPOSE, IN NO EVENT WILL EASTEY BE LIABLE FOR ANY SPECIAL, CONSEQUENTIAL, INDIRECT OR SIMILAR DAMAGES, INCLUDING LOST PROFIT OR LOST OPPORTUNITIES OF ANY TYPE ARISING OUT OF THE USE OR INABILITY TO USE THESE PRODUCTS EVEN IF EASTEY HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

Terms and Conditions
Eastey's Terms and Conditions of Sale are set forth separately at WWW.EASTEY.COM and are hereby incorporated by reference into this warranty statement as if fully set out within.

Customer Support

Eastey Technical Service

For help setting up, operating or maintaining the Eastey Enterprises Vertical Case Transport please contact Eastey Technical Service at one of the numbers listed below.

Toll-Free Phone	800-835-9344
Phone	763-428-4846
Fax	763-795-8867
E-mail	info@eastey.com
Web	www.eastey.com

Thanks again for your purchase of Eastey products. We are pleased to be a part of your packaging and marking needs.