Engineered Lifting Systems and Equipment, Inc. DBA Gorbel Canada
T (800) 263-9823 | F (519) 669-9047 | www.gorbel.com
275 Union Street | Elmira, ON N3B 3P1 | Canada

OPERATION MANUAL

Original Instructions
Restuff-it™ Loader

Models:
DTB2, DTB4, DTB5,
DTB6, DTB7, DTB8,
DTB9, DTB10, DTB11

Destuff-it™
Restuff-it

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MACHINE SPECIFICATIONS

Thank you for purchasing a Restuff-it™ Unloader from Engineered Lifting Systems & Equipment, Inc. DBA Gorbel® Canada (ELS).

This manual contains valuable safety and operation information. Ensure operators read the **SAFETY and OPERATING sections of this manual prior to operating your new machine.**

Unit Dimensions (LxWxH)	3.64 m x 2.06 m x 2.10 m (146.5” x 81” x 83”)
Unit Weight:	1,680 kg (3,700 lbs)
Travel Speeds:	10.7 m/min (35 fpm)
Power Supply Options:	480V 3PH 60HZ 415V 3PH 50HZ 400V 3PH 50HZ Refer to the Remote Panel serialized label to identify the required power.
Belt Width:	610 mm (24”)
Pivoting Conveyor Belt Capacity:	75 kg (165 lbs) on 30° incline
Belt Speeds:	Variable 26/37 m/min (86/120 fpm)
Operator Platform Capacity:	250 kg (550 lbs)
Operator Platform Height:	Maximum 660 mm (26”)
Sound Level:	The A-weighted sound pressure level of this machinery when in operation exceeds 70dB(A). The use of appropriate hearing protection is recommended.
Assembly:	No assembly required.
Manufactured By:	Engineered Lifting Systems & Equipment, Inc. DBA Gorbel® Canada (ELS) 275 Union Street, Elmira, ON CANADA N3B 3P1

CE DECLARATION OF CONFORMITY

Hereby, Gorbel Inc., declares that this material handling equipment is in compliance with the essential requirements and other relevant provisions listed below.

EMC Directive:	**2014/30/EU**	
Standard	EN 61000-6-4:2007 +A1 :2011	Electromagnetic compatibility (EMC) – Part 6-4: Generic standards
	EN 55011:2016	Industrial, scientific and medical equipment – Radio-frequency disturbance characteristics
	EN 61000-6-2:2005/AC:2005	Electromagnetic compatibility (EMC) - Part 6-2: Generic standards - Immunity for industrial environments
	EN 61000-6-4:2007 +A1:2011 /EN 55011:2016	Electromagnetic compatibility (EMC) – Part 6-4 Radiated & Conducted Emissions
	EN 61000-4-3:2006: +A1:2008+ A2:2010, IEC 61000-4-3:2006 + A1:2007 +A2:2010	Radiated Electromagnetic Field Immunity Alternative Spot Frequency Test
	EN/IEC 61000-4-4:2012	Electrical Fast Transient / Burst Immunity
	EN/IEC 61000-4-5:2014	Surge Immunity
	EN 61000-4-6:2014, IEC 61000-4-6:2013	Conducted Immunity
	EN/IEC 61000-4-11:2004	Voltage Dips / Voltage Interruptions
Machinery Directive:	**2006/42/EC**	
Standard:	Annex I of 2006/42/EC	"Essential health and safety requirement relating to the design and construction of machinery"
	EN 60204-1:2018	Safety of machinery – Electrical equipment of machines – Pa 1: General requirements
	EN 619 2002+A1	Continuous handling equipment and systems – Safety and EMC requirements for equipment for mechanical handling o unit loads

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Manufacturer's Name: **Gorbel Inc.**
Manufacturer's Address: 600 Fishers Run
Fishers, NY 14453-0593

Product: Destuff-it™ Restuff-it™
Model: DT- ___ - CE

Signature

Blake Reese
Robotics Engineering Manager

INTRODUCTION

Thank you for purchasing a Restuff-it™ Unloader. This manual provides safety and operation information for the machine.

When maintained and operated properly, the unit is designed to provide many years of reliable service.

The user shall not modify the design or configuration of the equipment without consulting the manufacturer or his authorized representative.

The unit has been designed and manufactured to meet or exceed the following standards:

- Steel Design Code (CSA S16 - latest Edition and AISC Steel Construction Manual - latest Edition)
- Occupational Health and Safety Act (O. Reg. 851) for Industrial Establishments
- Occupational Safety and Health Act (OSHA)
- Welded Steel Construction Code (CWB W59 and AWS D1.1/D1.1M)
- Canadian Electrical Code (CEC)
- NFPA 79:2015 Electrical Standard for Industrial Machinery
- EN 60204-1:2006 + A1 +AC Safety of Machinery -Electrical Equipment of Machines-Part 1

Owner information is updated regularly to reflect updates to the machine. However, in some cases, recently released features may not be described.

Illustrations are provided for demonstration purposes only. Depending on machine options, software version, region of purchase, and specific components, the machine may appear slightly different. However, the essential information that the illustrations and photographs are providing, is correct.

All specifications and descriptions are known to be accurate at time of publishing. However, because continuous improvement is a goal at ELS, we reserve the right to make product modifications at any time.

We may specify the location of a component as being on the left or right side of the machine. All four sides of the machine are labeled on the center floor plate.

Engineered Lifting Systems & Equipment Inc. (ELS) design solutions are certified by on-staff professionals to comply with all applicable regulatory codes and established engineering standards for mechanical, electrical and structural elements.

All personnel involved with this equipment must review the information contained in this manual and comply with all procedures and warnings presented. Operators must know, understand, and practice the safety rules and safe operations described in this manual. Operators must understand the unit's capabilities and limitations and ensure it is properly maintained.

If you have any questions or concerns regarding the content included in this manual, please call 1 (800) 263-9823.

NOTE: This manual is presented for informational purposes only. ELS will not be held liable for any injuries that may result from the improper operation or maintenance of this machine.

MANUFACTURER INFORMATION

Engineered Lifting Systems & Equipment, Inc. DBA Gorbel®
Canada (ELS)
275 Union Street, Elmira, ON Canada N3B 3P1

Toll Free: (800) 263-9823
Fax: (519) 669-9047
Email: sales@destuffit.com
Website: www.gorbel.com

SERVICE

Toll Free: 1-800-263-9823 opt. 4
After Hours: 1-800-211-5889
Email: dtservice@destuffit.com

PARTS

Toll Free: 1-800-263-9823 opt. 4
Email: dtservice@destuffit.com

WARRANTY POLICY

Engineered Lifting Systems & Equipment, Inc. DBA Gorbel® Canada (ELS) warrants their equipment, when shipped, and their work (including installation, construction, repair and start-up), when performed, will meet specifications agreed to in writing and will be free from defects in material and workmanship for a period of 1 year or 1,000 hours, whichever comes first.

PRE-TEST INSPECTION and WARRANTY PERIOD: Every major item of equipment manufactured by ELS is inspected and tested before shipment and is guaranteed against defects in workmanship and material, from the date of delivery to our customer, for a period of twelve months or 1,000 hours, whichever comes first.

REPLACEMENT: The liability of ELS under the conditions of the warranty is expressly limited to the cost of repair or replacement of any part found to be defective at our discretion, FCA our plant in Elmira, Ontario, Canada.

NOTIFICATION: The obligation of ELS under the warranty is conditional on the prompt receipt of written notice of the claim within the warranty period, including details of the defect.

APPROVAL: Prior to any repairs being done, approval must be obtained in writing from ELS for any inspection, adjustment, repair and/or replacement under the warranty, either at an ELS plant, or at the customer's or other location. Items to be returned to ELS must obtain a return approval number from ELS prior to shipment and must be returned by prepaid freight. Item must be paid in full to be eligible for warranty.

LOCATION: Any adjustments to be made under the warranty at any location other than the ELS plant must have complete and prior written approval from ELS, which must include approval of the nature of the adjustment and all parties performing any or all of the work involved. Repairs performed by anyone without the prior approval of ELS will invalidate and void the warranty.

REPAIR WORK: ELS is not liable if the purchaser carries out any changes or repair work without prior consent by ELS. Where warranty claims occur outside the Region of Waterloo, Ontario, Canada, ELS shall charge and the Purchaser shall pay, time and expenses for travel only, at ELS' rates then in effect by ELS.

LIMITATION: ELS will not be liable for any loss, or expense resulting from damages. ELS' liability to the buyer for any cause whatsoever shall be limited to the purchase price paid to ELS for the goods. In no event shall ELS be liable for any special, incidental, indirect, consequential or punitive damages, even if ELS has been advised of the possibility thereof, including but not limited to lost profits, lost business revenue, damages resulting from loss of data or loss of use of the goods or damages claimed against buyer by any other person, arising under any circumstance.

EXCLUSIONS: The following exclusions are not covered by this warranty:

a) Damages due to neglect by the Purchaser.
b) Damages due to lack of proper maintenance or due to misuse by the Purchaser. This warranty shall be voided due to the use of unauthorized repairs or use of unauthorized replacement parts.
c) Damages due to an act of God or other unforeseen accident or causes beyond the control of the Warrantor.
d) Any incidental, indirect, special or consequential damages.
e) Wear items.

SHIPPING: It is the responsibility of the customer to inspect all items of equipment immediately upon receipt and to notify both the carrier and the shipper of any claims resulting from shortages or damage and to provide all the documentation required to establish the claim.

MAXIMUM: Maximum liability is limited to and in no case to exceed the purchase price of the unit manufactured and warranted by ELS.

USAGE: There is no warranty, express or implied, of suitability, merchantability or fitness of any piece of equipment for any particular purpose or operation. The warranty applies only to equipment manufactured and warranted by ELS under normal use and service and does not apply in the event of any damage caused by neglect, accident, misuse, or resulting from any alteration to the equipment without prior specification approval from ELS.

SAFETY WARNINGS

There are a number of safety cautions noted in this manual. Follow recommended precautions and safe operating practices at all times.

DANGER: Indicates hazardous situation which has a high probability of serious injury or death if the precautions are not observed.

NOTE: Requests your attention be drawn to the subject because issues mentioned may not be obvious, even to well-qualified personnel.

NOTICE TO ALL OPERATORS

KNOW YOUR EQUIPMENT

Operators of this unit must be familiar with its principal parts and have a thorough understanding of its controls and movements.

RESPONSIBILITY

Each operator is directly responsible for the safe operation of the machine. Whenever there is any doubt as to safety, operator should stop using machine until safe operation has been assured.

INSPECTION

At beginning of each shift, each operator shall test all machine movements in all directions of travel. If an operator notices irregularities, department supervisor shall be notified immediately.

The user shall not modify the design or configuration of the equipment without consulting the manufacturer or his authorized representative.

OPERATION REQUIREMENTS

- Only fully trained and competent personnel shall operate unit and must read, understand and obey:
  - Manufacturer's instructions and safety rules – safety manuals and machine labels.
  - Employer's safety rules and worksite regulations.
  - Applicable government regulations.
- ALWAYS perform a pre-operation inspection, including function tests such as checking operation of E-Stop switch prior to operating unit.
- ALWAYS make sure everyone in immediate area is aware unit is in operation.
- ALWAYS ensure materials are removed from path of unit prior to operation.
- ALWAYS ensure conveyor is free from debris and garbage.
- ALWAYS ensure path is free and clear when driving. Unit should not be driven if anyone is standing beside machine.
- ALWAYS wear proper PPE.
- ALWAYS wear fitted clothing.
- ALWAYS tie back long hair.
- ALWAYS ensure conveyor belts are OFF before stepping off platform to machine base.
- ALWAYS stop conveyor belts to allow a 2nd operator to cross machine to operator platform.
- ALWAYS keep hands and feet inside machine area.
- ALWAYS ensure dock plate is in place before driving into trailer.
- ALWAYS turn conveyor belts OFF before crossing operator platform.
- ALWAYS stay 3 feet behind machine when in operation or motion.
- NEVER step onto this machine unless you have been fully trained and are authorized.
- NEVER step off a raised operator platform for any reason.
- NEVER rest hands or sit on belts.
- NEVER transport personnel on conveyor belts.
- NEVER wear loose clothing, rings or jewelry.
- NEVER walk across machine base when conveyor belts are moving.
- NEVER stand on base when conveyors are in operation.
- NEVER have more than two machine operators on operator platform.
- NEVER operate this equipment without completing daily inspection checklist.
- NEVER operate machine if safety devices have been altered or disabled.
- NEVER operate a potentially defective machine.
- NEVER exceed rated load capacity of unit or handle a load for which it was not designed.
- NEVER use unit as a ground for welding.
- NEVER wash down unit. Refer to Cleaning Instructions.
- NEVER operate or store machine in damp or wet environments.

LOCKOUT/TAGOUT PROCEDURES

Follow safe Lockout/Tagout procedures. For complete procedures, please refer to the following document.

Complete Destuff-it Safety Lockout Procedures – Document 860-6000

⚠ **WARNING**: Disconnect ALL power before servicing. Multiple power sources may be present. Failure to do so may cause property damage, personal injury or death. **RESIDUAL POWER REMAINS IN BATTERIES.**

⚠ **WARNING**: Do not disconnect the power and signal connectors between the conveyor belts and the Restuff-it while the unit is energized. Multiple power sources may be present. Failure to do so may cause property damage, personal injury or death. **RESIDUAL POWER REMAINS IN BATTERIES.**

REASONABLY FORESEEABLE MISUSE

Do not operate above design capacities.
- Do not use the machine with more than two people on the operator platform.
- Do not lift more than 250 kg maximum load on the operator platform.
- Do not lift or convey more than 75 kg maximum distributed load on the pivoting conveyor.

Conveying of unsuitable materials
- Do not convey wet materials
- Do not convey granular bulk materials
- Do not convey bags/sacks with loose material.

Non intended use of the machine
- Do not power other equipment from the Restuff-it machine.

Use of modified module and tool systems
- Do not modify any parts of the machine.

Do not install spare parts or accessories not approved by the manufacturer

Non-observance of signs of wear and damage
- Do not run belts if broken links are observed or there is visible damage to the machine or debris causing damage to the belts.
- Report and repair damaged operator buttons.
- Report and repair damaged electrical cables, cable track and harnesses.

Service work by untrained or unauthorized personnel
- Do not open any panels without authorization.

Operating the machine although the operating instructions are incomplete or not available in the local language
- Do not operate machine without reading the operating instructions.

Operating the machine without the safety devices provided
- Do not operate machine with missing or broken guards.

Deliberate or careless handling of the machine during operation.
- Never reach over moving belts to clear product jams – stop belts before clearing jams.
- Do not use E-Stops to stop belts or shut off machine – use AC selector switch.
- Do not drive on sloped surfaces greater than 3% grade maximum.
- Do not disconnect machine's 16 pin electrical connector when turned ON in AC mode.
- Keep hands away from any moving parts of the machine – rollers, guards, cable track, etc.
- Only use fingers/hands to operate controls/switches.
- Do not introduce/push any objects into gaps of machine components.
- Do not drive machine into trailer wall.
- Do not drive machine into trailers with obstructions, incorrect alignment to dock.
- Do not transport people on moving belts.
- Do not reach over a moving belt.
- Do not run on or around the machine and conveyors.
- Do not adjust O-rings on transfer conveyors.
- Do not operate machine with persons on the machine base.
- Do not use machine in a wet environment.
- Do not drive machine on unstable surface, off the side of dock plate or over holes.
- Do not raise/lower the operator platform or conveyor if they are in contact with anything.

Maintenance work on an unsecured machine

Non-compliance with the operating instructions
- Do not drive or use the machine unless you have been trained to operate it.
- Do not adjust any settings on battery chargers.
- Do not over rotate (zero turn) DTA machines to move the machine sideways – reposition the machine slowly over a distance of at least 15 ft using the forward/reverse functions.
- Do not park machine for more than 2 weeks without plugging in charger.
- Keep hands and other body parts/ long hair off moving belts.
- Do not wear loose clothing while operating machine.
- Do not allow debris or sharp objects to accumulate on the operator platform.
- Do not operate equipment if electrical connectors are improperly secured or damaged.
- Do not drive machine over obstacles, debris on the floor.
- Adhere to all warning labels on the machines to avoid injury.

Non-compliance with maintenance instructions
- Do not adjust reroute cables on transfer conveyors unless authorized.
- Only clean scanners with approved cleaning wipes.
- Do not use water or chemicals to clean the machine, unless they are stipulated to be used for maintenance – see service manual/bulletins.

Bypassing or changing the safety devices
- Do not rig or tape switches to keep them activated all the time.
- Do not obstruct or damage beepers.
- Do not remove, cover up or alter any machine labels.

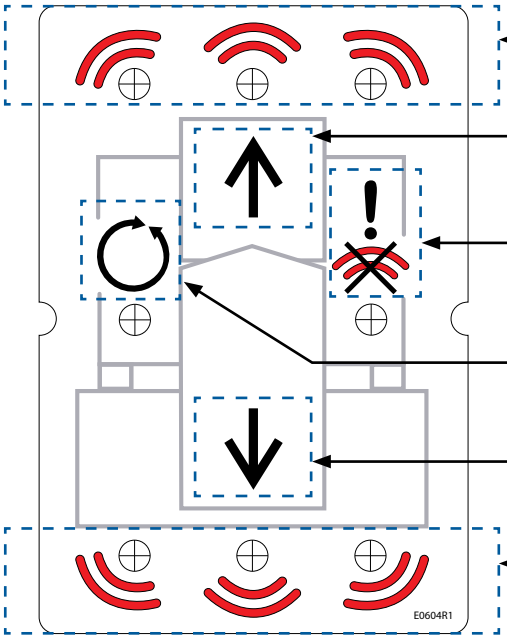
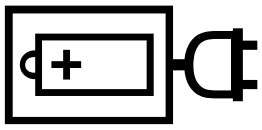
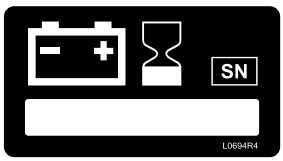
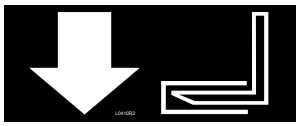
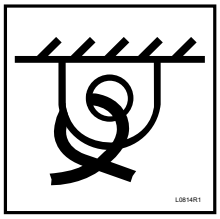
ISO GRAPHICAL SYMBOLS LEGEND

(For warning labels on the Destuff-it Restuff-it™ machines)

SYMBOL OR LABEL	DEFINITION
	This is the safety alert symbol. It is used to alert to potential personal injury hazards. Obey all safety messages that follow this symbol to avoid a possible injury or death.
	The addition of this symbol to a DANGER or WARNING safety label indicates that an electrical hazard exists, which will result in personal injury if the instructions are not followed.
	**DANGER** indicates a hazardous situation, which, if not avoided, **will result** in death or serious injury. **WARNING** indicates a hazardous situation, which, if not avoided, **could result** in death, serious injury, or equipment damage. **CAUTION** indicates a potenially hazardous situation, which, if not avoided **could result** in minor or moderate injury, or equipment damage.
	**EMERGENCY STOP**
	**NO ACCESS**
	**WARNING:** Read Operation Manual or Original Instructions
	**GROUND FAULT**
	**GROUND CHECK**
	**CYLINDER SAFETY BLOCK**

ISO GRAPHICAL SYMBOLS LEGEND

(For warning labels on the Destuff-it Restuff-it™ machines)

SYMBOL OR LABEL	DEFINITION
AREA SCANNER LABEL 	**REAR SCANNER FAULTS** (RIGHT / REVERSE / LEFT) **REVERSE SCANNER** **BYPASS RECOMMENDED** **ZERO POINT TURN RECOMMENDED** **FORWARD SCANNER** **FRONT SCANNER FAULTS** (RIGHT / FORWARD / LEFT)
	**BATTERY CHARGER**
	**BATTERY / HOUR METER WITH SERIAL NUMBER**
	**LIFT POINTS**
	**TIE DOWN POINTS**
	**CENTER OF GRAVITY POINT**

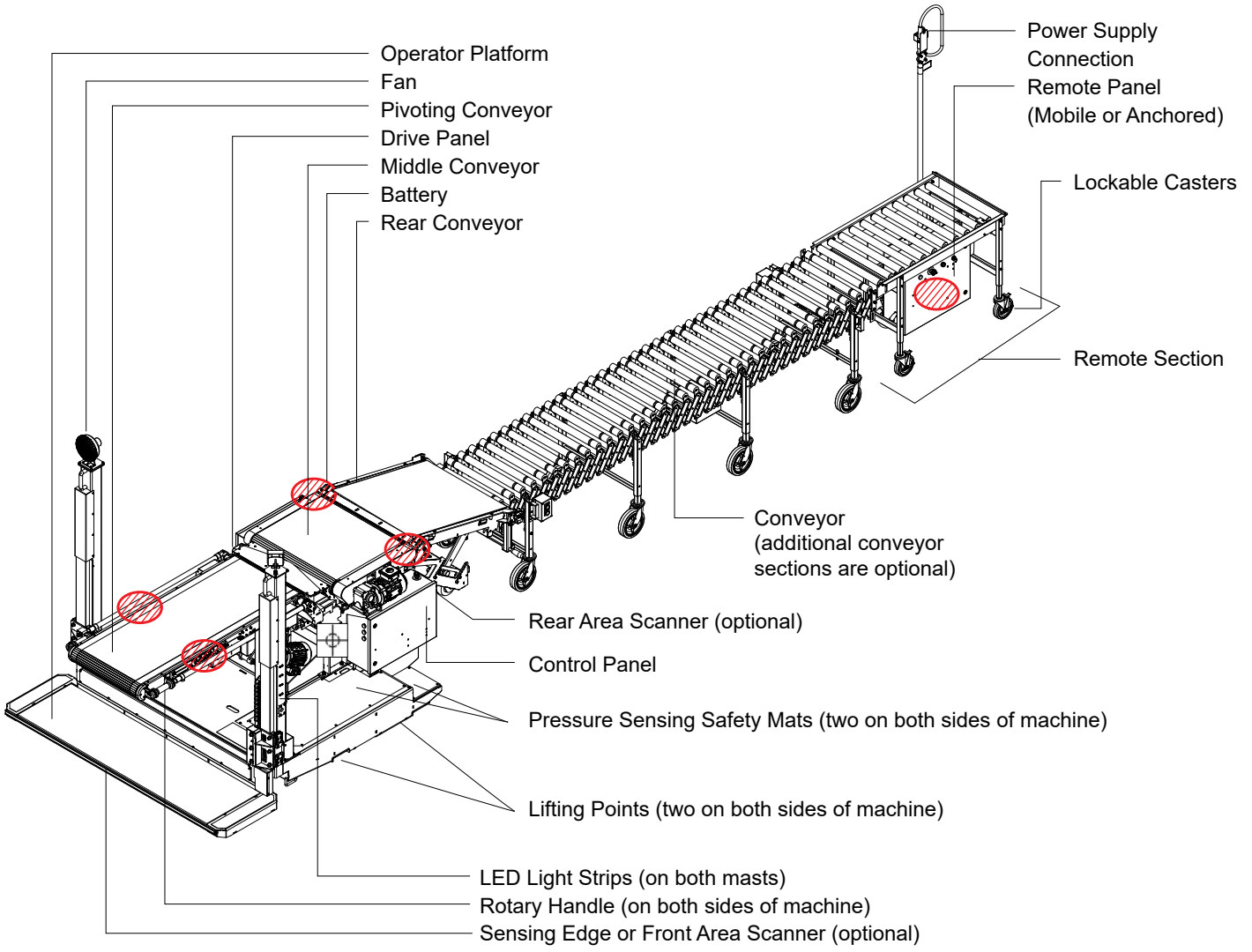
ISO GRAPHICAL SYMBOLS LEGEND

(For warning labels on the Destuff-it Restuff-it™ machines)

SYMBOL OR LABEL	DEFINITION
	POWER ON
	FAULT
	REMOTE STOP
	RUN AND JOG CONVEYOR
	RESET
	START

MACHINE OVERVIEW

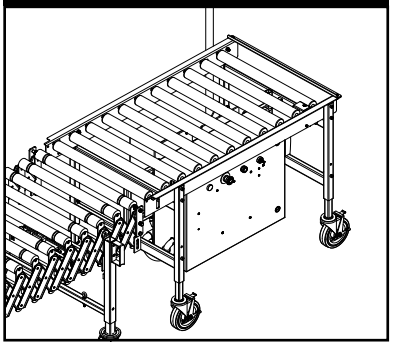
MACHINE OVERVIEW



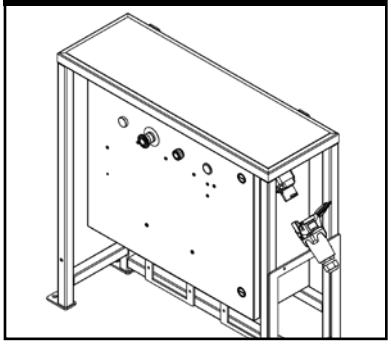
Emergency Stop (E-Stop Button)

Center of Gravity

Remote Panel (Mobile)



Remote Panel (Anchored)



UNLOADING THE MACHINE

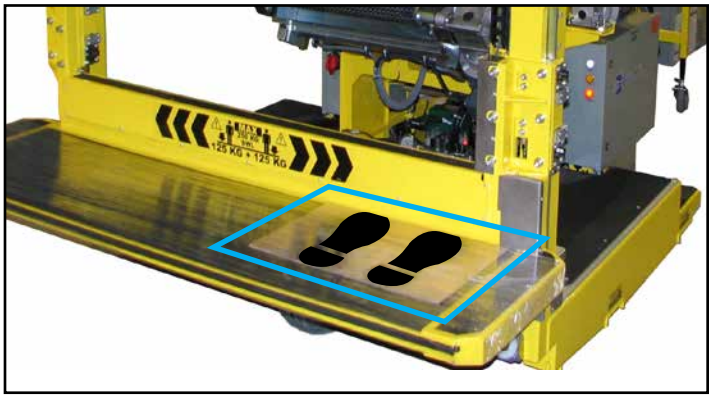
UNLOADING THE MACHINE

ONLY AUTHORIZED PERSONNEL SHOULD DRIVE THE RESTUFF-IT™.

1. Remove all packing materials and tether straps. Roll out remote section and conveyor (if applicable).

2. Prior to starting machine, ensure there are no obstacles in surrounding area.

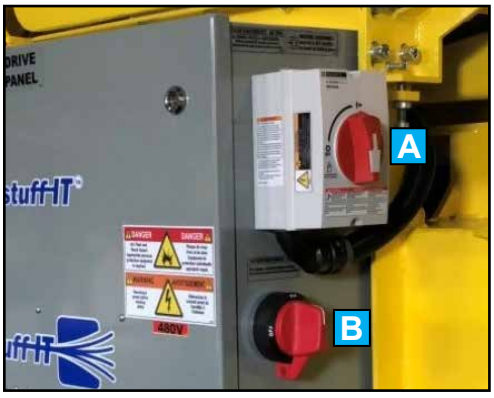
3. Stand on top of cardboard on operator platform.



4. Press green Start button on pivoting conveyor. Button will illuminate green when started. Wait 20 seconds for PLC to start.

5. If machine does not turn on by pressing Start button:

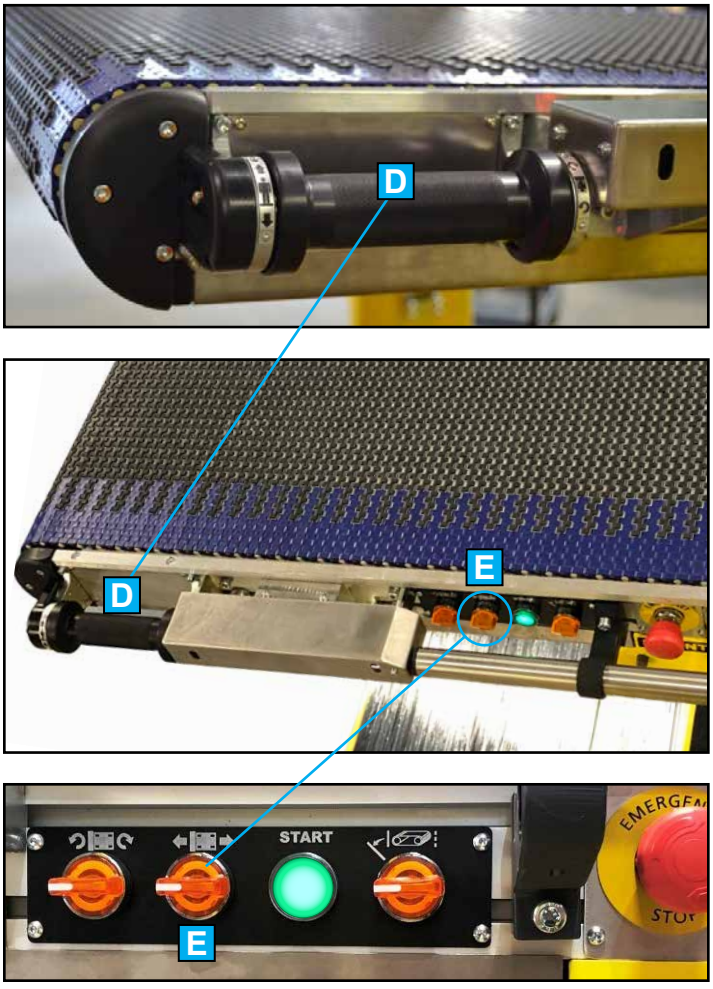
- Turn on AC disconnect. A
- Turn on DC disconnect. B
- Turn off AC ON/OFF selector switch on left mast. C
- Release all E-Stops.
- Press green Start button on front pivoting conveyor.



A AC Disconnect Switch
B DC Disconnect Switch
C AC On/Off Selector Switch
D Rotary Handle
E Travel Selector Switch

6. Ensure your weight is on operator sensing mat when standing on operator platform.

7. Hold rotary handle ensuring your fingers wrap around and are detected by hand present light beam. While standing on mat and holding rotary handle, use your other hand to drive unit FWD or REV holding the selector switch in the direction you want to travel. ***By rotating handle you will be able to steer the machine.***



NOTE: USE CAUTION WHEN DRIVING RESTUFF-IT™. USE A SPOTTER TO ASSIST WITH MACHINE TRAVEL TO DOCK.

FACILITY POWER SUPPLY

FACILITY POWER SUPPLY

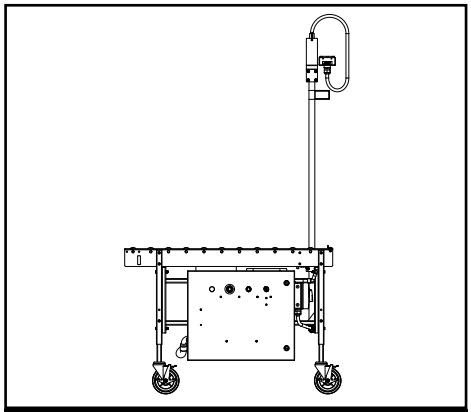
All electrical installations and connections are to be made by qualified installation personnel and adhering to national and local codes.

Method 1 - Remote Panel Mobile: install the supplied power drop kit as per the included documentation.

Method 2 - Remote Panel Anchored: The cable exiting the blue connector shipped loose (shown below) is to be connected to the supply power and must comply with national and local codes for hard usage. At no time is the cable allowed to be on the floor or for the connection to be under strain. The cable must be installed in a manner that it is protected from mechanical harm and material falling from adjacent conveyors. The conductors are to be connected to the connector following the supplied schematic.

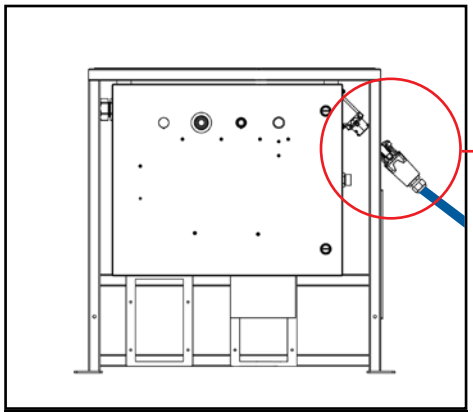
ONLY AUTHORIZED PERSONNEL SHOULD CONNECT POWER SUPPLY TO THE REMOTE PANEL. PERSONNEL MUST ALWAYS FOLLOW PROPER PROCEDURES AND WEAR APPROPRIATE PPE.

The Restuff-it machine is equipped with a Surge-Protective Device (SPD) interlocking the safety circuits. The SPD is located in the Remote panel before the load side of the branch circuit overcurrent protective device

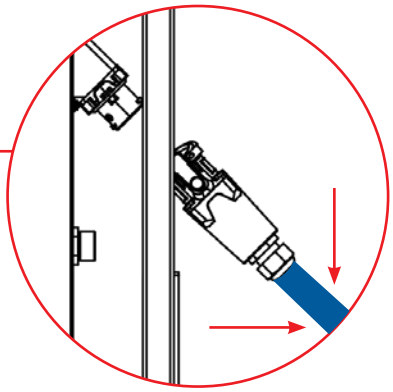


Remote Panel - Mobile (Method 1)

Meltric Connector - top of the post of Remote Section (Method 1)



Remote Panel - Anchored (Method 2)

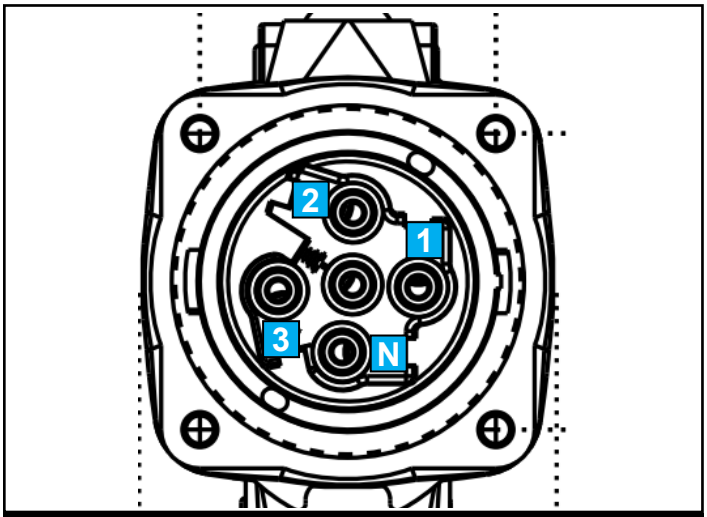


Power supply cable

PHASING

After connecting power supply to the Remote Panel, phasing must be verified. If phasing is correct, the LED Status on the Phasing Monitor Device (PMD) will be green and the White Power Light on the door of the Remote Panel will turn on. If phasing is reversed, the White Power Light on the door of the Remote Panel will not turn on. The Remote Panel door must be opened and the PMD observed to identify the LED Status. The LED Status on the PMD will appear red when phasing is reversed.

Only correct phasing on the supply side of the connector. Never change wiring on the machine side of the connector.



Meltric Connector Pins

1 PIN 1 = PHASE 1
2 PIN 2 = PHASE 2
3 PIN 3 = PHASE 3
N PIN N = NEUTRAL

PE= GND GREEN / GREEN/YELLOW
Ground conductor to be electrically continuous and bonded to earth at the source.
For all locations National and Local Electrical Safety codes are to be followed.

NORTH AMERICAN	20A APPLICATION	30A APPLICATION
CABLE TYPE	SOOW 600V UL CSA CE	SOOW 600V UL CSA CE
CONDUCTORS	3 and GROUND	3 and GROUND
SIZE	12 AWG	10 AWG
PHASE	PH 1, 2, 3 and GROUND	PH 1, 2, 3 and GROUND
DIAMETER RANGE	13-18 mm	18-25 mm
EUROPEAN	30A APPLICATION MAX.	
CABLE TYPE	HO7RN-F <HAR> 450/750V IEC 60811, EN 50395, EN 50396	
CONDUCTORS	4 and GROUND	
SIZE	2.5 mm	
PHASE	PH 1, 2, 3, N and GROUND	
DIAMETER RANGE	12-15 mm	

MACHINE COMPONENTS

MACHINE COMPONENTS

Modular front belt, middle belt, powered rear conveyor

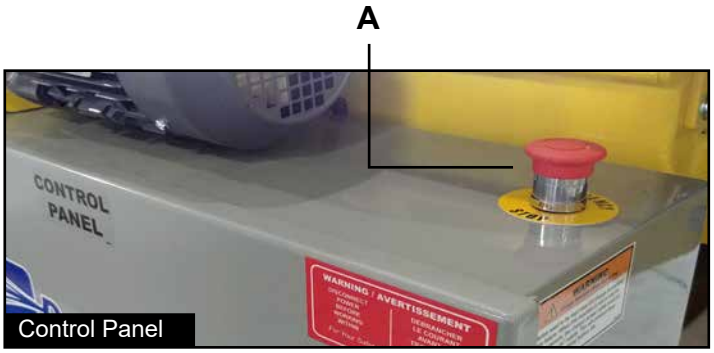
REMOTE PANELS

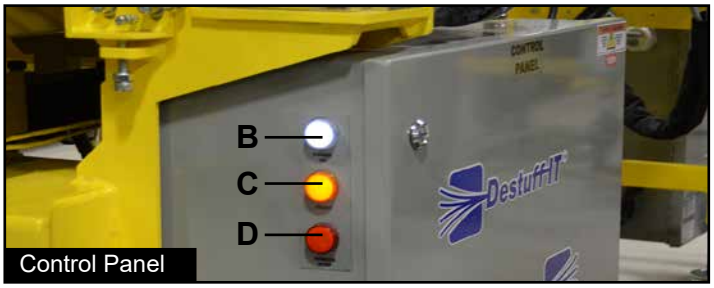
Mounted in Remote Section (Mobile)

Mounted in Stand (Anchored)

CONTROL PANEL

A E-Stop Button
B AC Power ON Light
C Fault Light
D Remote Stop Light



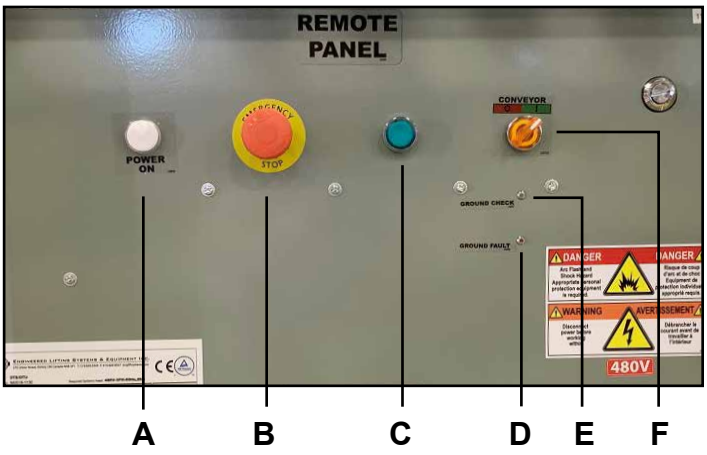


DRIVE PANEL

A E-Stop Button
B AC Power ON Light
C DC Disconnect on Machine
D AC Disconnect on Machine

REMOTE PANEL

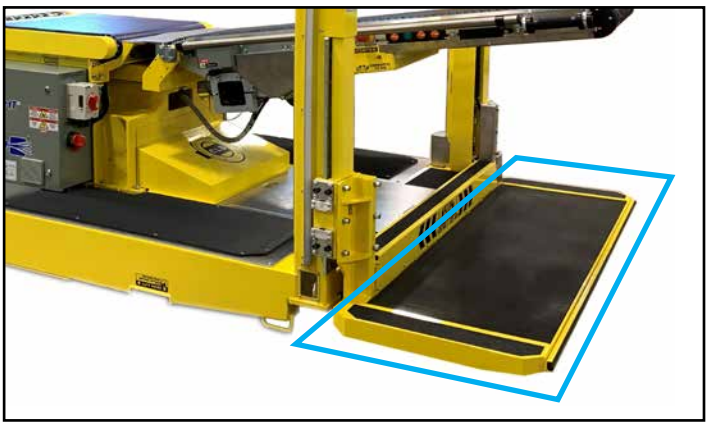
A White Power ON Light
B E-Stop Button
C Green START Button
D Ground Fault Red LED Indicator
E Ground Check Green LED Indicator
F Conveyor Start/Stop Selector Switch (if equipped)



OPERATOR PLATFORM

Operator platform is equipped with following features:

- Pressure Sensing Safety Mat
- Sensing Edge (when equipped)
- Area Scanner (when equipped)
- Maximum Operator Platform height: 66.04 cm (26”)



NOTE: Operator controls become active when mat senses operator’s weight.

EMERGENCY STOP (E-STOP) BUTTONS

There are 5 E-Stop buttons on each unit. E-Stop buttons are located on the control panel, drive panel, remote panel and both sides of front pivoting conveyor. **Pressing an E-Stop button will stop all machine motion immediately. Rotate E-Stop buttons gently to release. TO AVOID DAMAGE, NEVER PULL.**

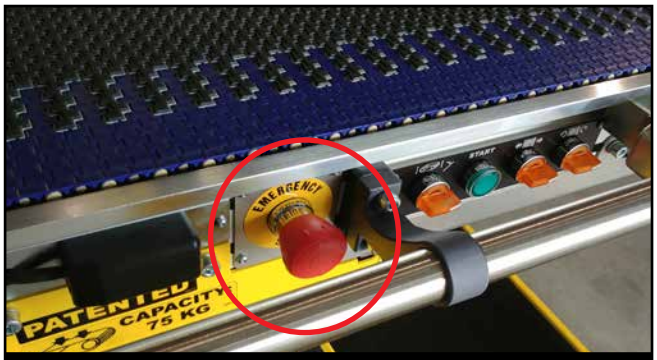
Activate the E-Stop whenever an accident, breakdown or other operational failure occurs. After trained and qualified personnel resolve the issue, follow the “Recover from an E-Stop” process to resume normal operation.

To reset from an E-Stop condition, release all E-Stop buttons (by rotating clockwise) and press Start button on remote panel, followed by Start button on pivoting conveyor. NEVER use E-Stops as a control stop for moving belts. Power down machine using proper procedures - See Shut Down Instructions under USING YOUR MACHINE.

E-Stop on Control Panel

E-Stop on Drive Panel

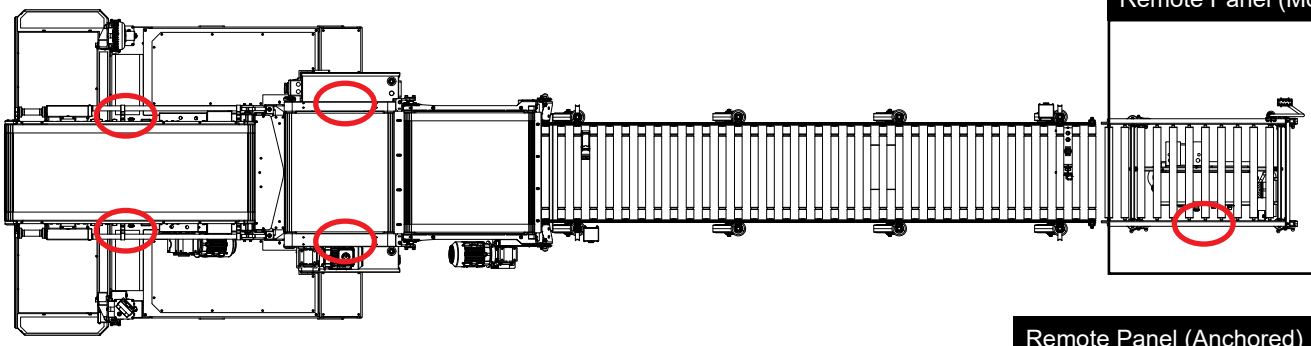
E-Stop on Remote Panel



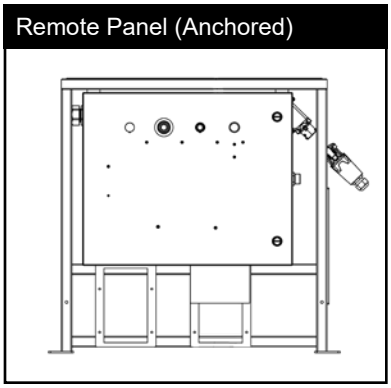
E-Stop on Pivoting Conveyor

HOW TO RECOVER FROM AN E-STOP:

1. Release all 5 E-Stops (by rotating clockwise).
2. Press Start button on remote panel. If power is present, cable connections and ground conductors are in place, then the green Start button remains illuminated.
3. Press Start button on either side of pivoting conveyor. If green light remains ON, machine has started properly.

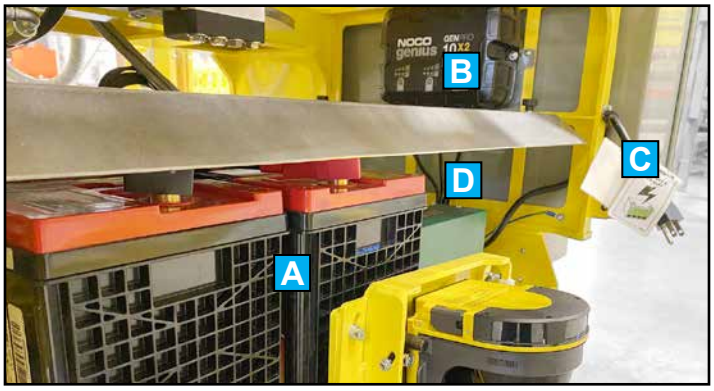


Emergency E-Stops



BATTERIES

A Batteries (2)
B Battery Charger
C 120VAC power cord
D Step-down Transformer



Machine uses 2 ODYSSEY® AGM batteries wired in series to provide 24VDC power source for control system and travel motors. Part# 31-PC2150, 12VDC, 100Ah at 20hr rating (5A for 20 hours).There is a battery timeout feature to save power if left unattended. Inactivity timeout equals 6 minutes. Ensure charger is set to AGM. Use rotary disconnect to isolate batteries from electrical system. Batteries can be accessed under middle conveyor unit. Batteries are maintenance free, but periodic inspection is required.

NOTE: AGM valve-regulated battery eliminates need for vent tubes. Further, no battery watering is required and there is no fear of acid burns or damage to finishes. Due to starved electrolyte design, the US Department of Transportation (USDOT) has classified ODYSSEY battery as a dry battery.

Operating Instruction Notes

Battery gauge is provided on control panel to show state of charge when machine is started. To get long service life from batteries, it is important batteries are kept near full charge, approximately 12.8 volts.

WARNING: When machine is not in use for extended periods, charger power cable must be plugged into an electrical wall outlet with an extension cord to prevent deep discharge and prolong battery service life. The recommended connection period is five days.

It can take up to 8 hours to fully charge machine if it is 100% discharged. When machine is connected to 3 phase supply and is started, charger operates automatically to maintain proper battery charge on both batteries independently.

Maintenance Instruction Notes

ODYSSEY® batteries are very different from standard liquid-acid batteries that are openly vented. ODYSSEY battery is and operates as a sealed battery, recycling nearly all gases internally under normal operating conditions. There is no corrosion of positive terminal or corrosion to surrounding area. Three year service life is expected when proper charging and storage procedures are followed.

BATTERY GAUGE

A battery gauge is also provided on control panel to show state of charge.

A Battery Charge Level Indicator
B Hour Meter (Belt Run Time)

Battery meter has 10 LEDS to show battery condition. When fully charged, only 10th green LED will light. As battery discharges, successively lower LEDs will light (9th, 8th, 7th and so on, lighting only 1 LED at a time).

- **At approximately 30% battery life, #3 LED will light and color is yellow.**
- **At approximately 20% battery life remaining, #2 LED will light as a flashing yellow.**
- **When battery discharges to approximately ~10% remaining life, #1 LED will start flashing red with #2 LED flashing yellow alternately.**

NEVER charge in an air tight compartment. NEVER attempt to remove top decal cover, as it will cause battery to fail.

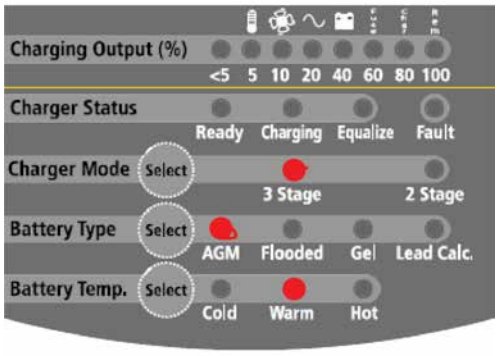
BATTERY CHARGERS

A) XANTREX® TRUECHARGE™ (IF SO PROVIDED)

If machine uses a Xantrex® TrueCharge™ 2 Battery Charger model **TC2024 (20A, 24VDC):**

WARNING: SHOCK HAZARD Truecharge™ 2 Battery Charger contains hazardous voltages in all modes including Standby. Even when AC power is removed, if Truecharge™ 2 Battery Charger is connected to a battery, charger will be energized by battery. Truecharge™ 2 Battery Charger is de-energized completely only after all AC and DC sources have been disconnected for five minutes.

Required Settings:
Charger Mode: 3 stage
Battery Type: AGM
Battery Temp: Warm



Three-Stage Charging

Three-stage charging mode employs following sequence: **Bulk, Absorption and Float**. Charging sequence starts when AC power is applied to charger.

When machine is connected to 3 phase supply and is started, charger maintains proper battery charge levels automatically using three-stage mode. During **Bulk** stage, batteries are accepting a constant maximum current. In **Absorption** stage, battery voltage is held constant and current declines. In **Float** stage, charger continues to provide voltage at a lower level to maintain battery in a fully charged state.

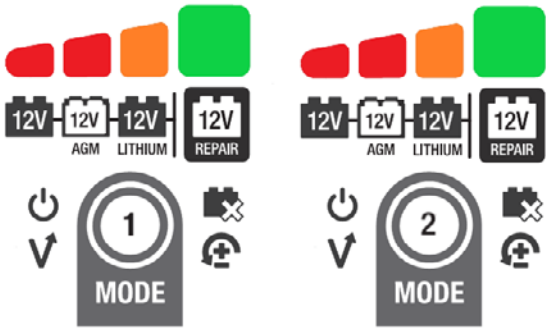
If there is no load on battery, it will typically draw very little charging current. Charger, however, is able to provide current to its full rating to power auxiliary DC loads connected to battery including PLC, sensors and operating controls. Charger will restart charging cycle in Bulk stage if battery voltage drops below 25 V for 15 minutes. It can take 8 hours to fully charge a 100% discharged battery pair.

See **Xantrex® owner's manual** for detailed troubleshooting instructions and fault codes.

B) NOCO GENIUS® GENPRO (IF SO PROVIDED)

If machine uses a NOCO Genius® GENPRO10X2 Battery Charger model **10amp x 2 (12V):**

Required Setting:
12V AGM – White LED is illuminated



When the machine is connected to the 3 phase, 480V power supply and is started, the charger maintains proper battery charge levels automatically. The battery charger has a 5-minute delay before it activates when the machine is running on 3 phase, 480VAC power.

There is an 120VAC cord next to the battery charger. This is used to power the battery charger when the machine is parked and not used for 3 days or more. Use an extension cord to plug the charger into a regular 120V wall outlet. This will allow the battery charger to automatically maintain the batteries in a full state of charge.

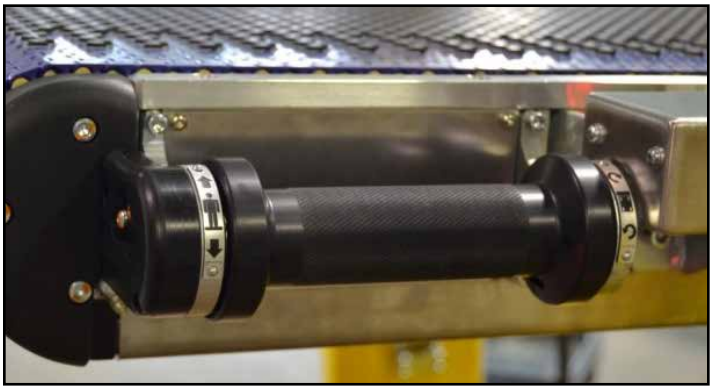
WARNING: SHOCK HAZARD
DO NOT turn on the machine with the AC cord plugged in.

See **NOCO Genius® GENPRO Series user manual** for detailed instructions and fault codes.

ROTARY HANDLE

Use rotary handle for conveyor UP/DN or to steer when travelling.

Gripping rotary handle releases brake allowing side to side front conveyor motion. Rotating rotary handle moves platform and/or pivoting conveyor up and down.

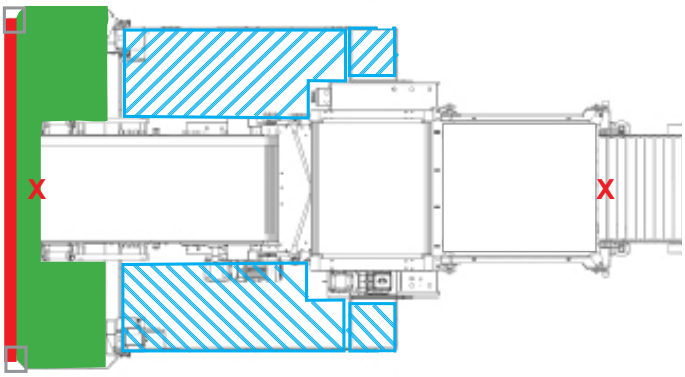


Conveyor can be moved up and down independently of platform when conveyor is in upper range of motion (above horizontal). To move conveyor ONLY up or down, rotate handle without breaking light beam sensor.

NOTE: Rotary handle is activated by breaking light beam located on underside of handle. Hand sensor must be activated for controls to work. All operator controls return to neutral position when released.

SENSORS

Operator Sensing Mat
Sensing Edge (when equipped)
Pressure Sensing Safety Mats
Area Scanners (when equipped) X



Pressure Sensing Safety Mats: Mats sense weight. If a box or a person places pressure/weight on either of mats, belts on machine and conveyor will stop. To restart belts and conveyor, pressure must be cleared and safety circuit needs to be reset. Turn conveyor RUN selector switch.

Sensing Edge (when equipped): If Sensing Edge is triggered by making contact with an obstruction during forward travel or platform up/down motion, a beeper will sound, all conveyors will stop and forward motion and motion of operator platform will be stopped.

To clear fault, operator must travel in reverse for 12” and release controls. Beeper will stop sounding and fault lights will turn off. All motions will now be fully functional. Conveyors must be started again for selector switch on side of conveyor.

Area Scanners (when equipped): See Options section (at the end of this manual) for more detail.

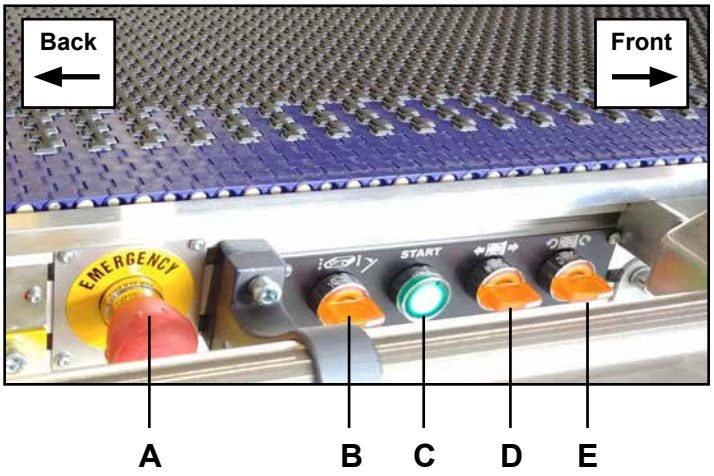
Operator Sensing Mat: Operator must be on operator platform mat to enable machine controls. Operator platform present sensor is triggered by an operator’s weight or placement of a foot. Sensor allows for forward/reverse travel, pivoting conveyor repositioning and operator platform lift.

Belts will stop when operator steps off operator platform mat sensor after 60 seconds. Belts can be started when you are standing on ground. It is possible to keep belts running when you step off mat. After stepping off mat (NOT BEFORE), reach and hold rotary handle for 0.25 seconds during 60 second window. Ensure you break hand present laser sensor by gripping entirely around the bottom of the handle.

NOTE: It is possible to operate the belts without standing on the operator platform. Simply turn belts to ON position before stepping onto the operator platform.

OPERATOR CONTROLS

CONTROLS ON PIVOTING CONVEYOR



Operator controls are mounted on both sides of front pivoting conveyor. They control:

A - Emergency Stop Button
B - Belt Motion Selector Switch (RUN/OFF/JOG)
C - Start Button
D - Machine Travel Selector Switch (FORWARD/REVERSE)
E - Machine Zero Turn Selector Switch

A - Emergency Stop (E-Stop) Button - See Emergency Stop (E-Stop) Button section.

B - Belt Motion Selector Switch

To RUN the belts: Turn momentarily towards the front of the machine to start the belts. Spring return to center.

To JOG the belts: When the belts are stopped, turn conveyor selector switch towards the back of the machine and hold.

To turn OFF the belts for Restuff-it™:
Turn conveyor selector switch once towards the back of the machine to stop belts on machine only. Conveyors connected to the machine will continue to run.

To RESTART Restuff-it™ belts: Turn conveyor selector switch momentarily towards the front of the machine to start the belts and connected conveyors. Spring return to center.

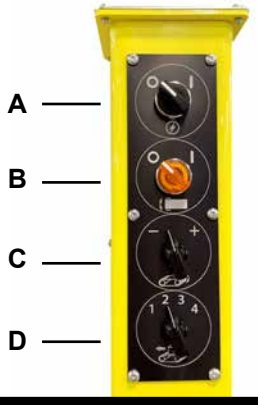
To RESTART belts after Pressure Sensing Mats have been triggered:
1. Remove weight (product or person) from sensing mat(s).
2. Return to Operator Platform.
3. Turn Belt Motion Control towards the back of the machine. Hold for only 1 second and release.
4. Turn conveyor selector switch momentarily towards the front of the machine.

C - Start - Press to START.

D - Machine Travel - Turn selector switch to move machine forward or backwards. Hold selector switch in position to maintain travel in desired direction.

E - Machine Rotate - Turn selector switch to rotate unit either clockwise or counterclockwise. Hold selector switch in position to maintain travel in desired direction.

CONTROLS ON MASTS



A AC On/Off Selector Switch
B Pivoting Conveyor Side-to-Side On/Off Lock
C Belt Speed
D Restuffing Modes Selector Switch

Left Mast

A Fan On/Off Switch
B Belt Direction Selector Switch
C Safety Mat Reset Light

Right Mast (with fan)

FAULT CODES

Three lights of selector switches (B, D, E) flash and beep to announce a fault. Codes are as follows:

One Flash/Beep

Sensor fault
Objects putting pressure on the mats
Remote panel conveyor selector set to STOP (when equipped)

Two Flashes/Beeps

Overload fault. Each belt conveyor and hydraulic pump have overload devices located in Drive Panel. Overloads are factory set to automatically reset after cooling.

Three Flashes/Beeps

Variable Frequency Drive (VFD) fault. Belts will not run. Conveyor motors are powered from a VFD in Drive Panel.

Continuous Flashing/Beeping

Travel sensing strip fault (when equipped). Travel backwards to clear fault.

LIGHTING

Machine is equipped with an LED strip located on each side of both masts. Once the machine is started, the lights turn on automatically. The lights will remain on for one minute after the machine is turned off.

PIVOTING CASTOR AND DRIVE WHEELS

Each unit is equipped with one steel dual swivel caster and two urethane drive wheels.

FAN

Unit has a fan located at top of right mast and can be used to direct air flow. Switch is located just below the fan.

STARTING THE MACHINE

STARTING THE MACHINE

IMPORTANT: Only persons who are appropriately trained and qualified with the safe operation and service of this machine should be allowed to carry out operation, installation, service or maintenance.

Follow this sequence to start up machine:

1. Connect Restuff-it™ to Flex Conveyor 1
2. Connect Flex Conveyor 1 and 2
3. Connect Conveyor to Remote Panel
4. Connect Power to Remote Panel

CONNECT RESTUFF-IT TO FLEX CONVEYOR 1

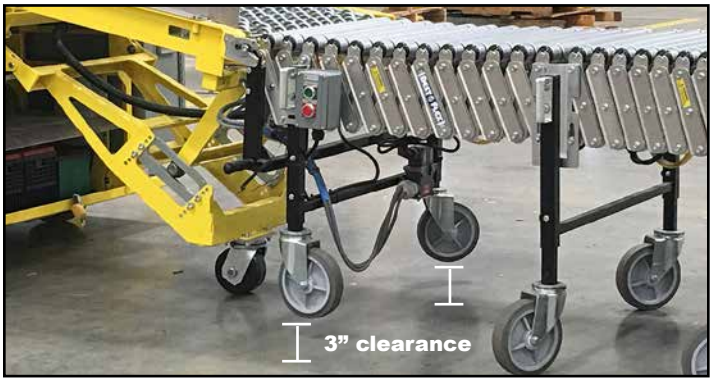
ALWAYS ensure power is OFF using AC Selector on left mast prior to connecting unit.

1. Bring flex conveyor into position to unit.
2. Connect plug to receptacle.

3. Connect carabiner end of strain relief to eye bolt.

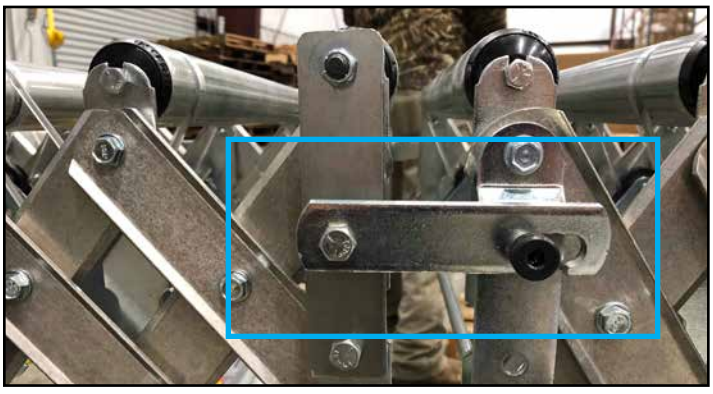
4. Lift and push flex conveyor into latching brackets.

⚠ Ensure front conveyor legs are raised 3 inches off the ground. If this step is not followed, damage will occur to the flex conveyor. It is recommended that two people connect conveyor to machine.



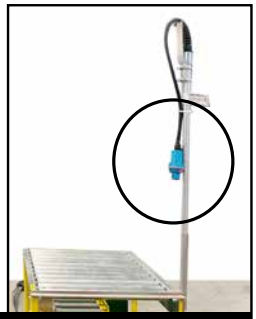
CONNECT CONVEYORS 1 AND 2

1. Bring both flex conveyors into position.
2. Connect cable to receptacle.
3. Connect strain relief cable.
4. Engage two hook plates.



CONNECT CONVEYOR TO REMOTE PANEL

Method 1: Suspended Power Drop (connected to cable in post in the Remote Section)



Remote Section (Mobile)

1. Bring Conveyor and Remote Section into position.
2. Connect cable from Remote Panel to receptacle at the end of the Conveyor.
3. Connect strain relief.
4. Engage two hook plates of Remote Section onto the two shafts on the Flex Conveyor.

Method 2: Conduit attached to the fused disconnect (connected from fused disconnect to Remote Panel)

1. Bring Conveyor near Remote Panel.
2. Connect cable from Remote Panel to receptacle at the end of Conveyor.
3. Connect strain relief.

Remote Panel (Anchored)

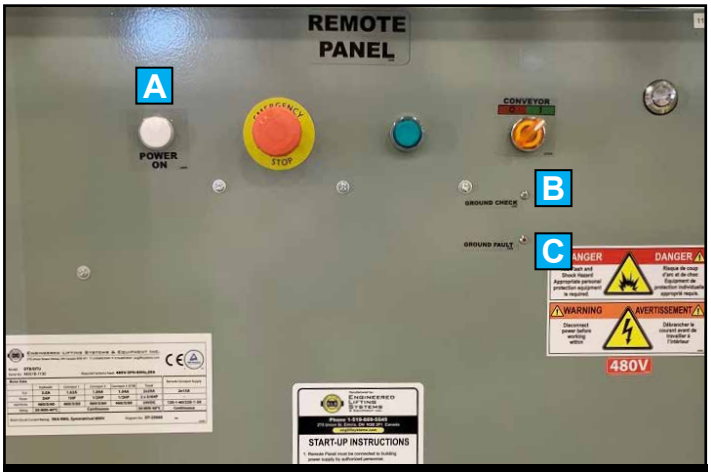
CONNECT POWER TO REMOTE PANEL

Method 1:

1. Ensure power supply from the building is OFF.
2. Connect Remote Panel to facility's power supply with Meltric Connector at the end of the post in the Remote Section.
3. Use Power Drop kit to ensure cables are off the floor. Refer to Power Drop kit information located under Facility Power Supply.

Method 2:

1. Ensure power supply from building is OFF.
2. Connect cable from facility's power supply to Remote Panel with Meltric connector.



Remote Panel

A	B	C
Start Light: 3-phase power is present.	**Green LED**: Ground check. Cables connected and ground conductor in place.	**Red LED**: Ground fault. Maintenance required to correct and reset.

NOTE: Customer power supply must be fed from a floor-mounted disconnect near machine. Customer power supply cable (suspended from above) is connected to Meltric connector at top of post on remote section (Method 1) or directly connected to an anchored Remote Panel (Method 2), ensuring absolutely NO cables are on floor. NEVER unplug or plug in cables unless the system is off and isolated.

ALWAYS ENSURE POWER SUPPLY IS OFF BEFORE CONNECTING OR DISCONNECTING ELECTRICAL CABLES TO THE REMOTE PANEL.

START-UP SEQUENCE

1. Turn facility fused disconnect to ON position.

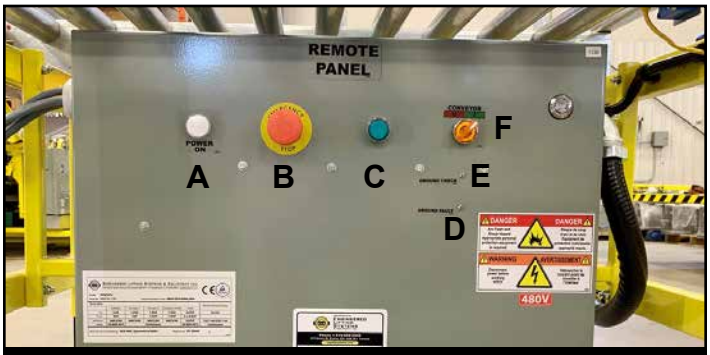
2. Verify all 5 E-Stops are released (by rotating clockwise).

3. Verify AC and DC Disconnects at Drive Panel are in the ON position.

4. Turn AC Selector at left mast to the ON position.

NOTE: The white power light on the Remote Panel will turn on if power is present. If cable connections are correct and AC Selector Switch at left mast is turned on, the green LED/Ground Check Indicator illuminates. If the red LED/Ground Fault Indicator illuminates, there is a Ground Fault which must be corrected before proceeding. **Contact Maintenance. The green LED/ Ground Check Indicator must be illuminated or the system will not run.**

5. Press the green START button on the remote panel. The START button will remain illuminated.



Remote Panel (Mobile)

Remote Panel (Anchored)

LIGHTS LEGEND

WHITE: 3 phase power present at Remote Panel.
GREEN LED: Ground Check. Cables connected and ground conductor in place.
RED LED: Ground Fault present. System will not start.

6. Stand on operator platform.

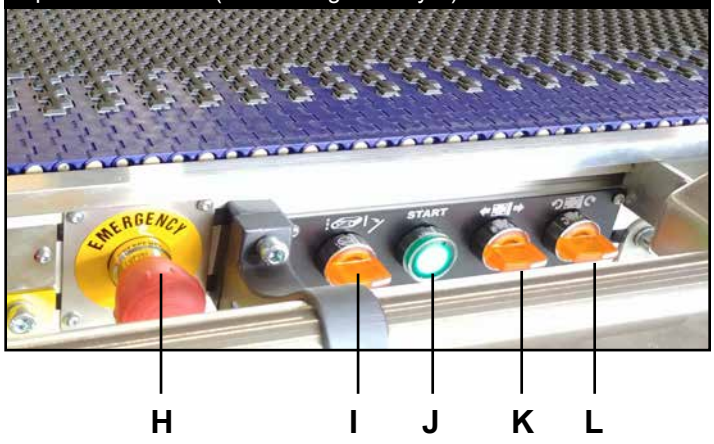
7. Press green START button on pivoting conveyor. Button will illuminate green when started. Wait 20 seconds for PLC to start.

8. Use Operator controls mounted on either side of pivoting conveyor.

9. Prior to starting the belts, the sensing mats need to be reset. Turn Belt Motion selector switch towards the back; hold for two seconds; the blue light on right mast will turn off if the mats have been properly reset.

10. Rotate the Belt Motion Control towards the front to start belts and connected conveyors.

Operator Controls (on Pivoting Conveyor)



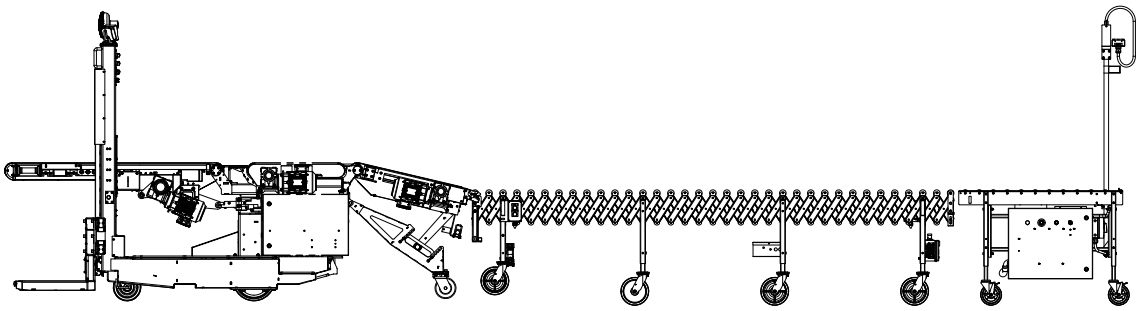
Remote Panel (Anchored or Mobile)

- **A** Power ON light
- **B** E-Stop Button
- **C** System Start Button
- **D** Ground Fault Indicator LED (red)
- **E** Ground Check Indicator LED (green)
- **F** Conveyor Start/Stop Selector Switch (if equipped)
- **G** Meltric Connector (Remote Panel - Anchored)

Operator Controls (on Pivoting Conveyor)

- **H** Emergency Stop (E-Stop)
- **I** Belt Motion Control
- **J** START Button
- **K** Machine Travel Switch (Forward/Reverse)
- **L** Machine Zero-Turn Radius Switch

QUICK START GUIDE WITH CONVEYOR



WARNING: DO NOT operate the Restuff-it™ machine without proper authorization. Failure to avoid this hazard could result in serious injury. ENSURE MACHINE IS CONNECTED PROPERLY PRIOR TO STARTING.

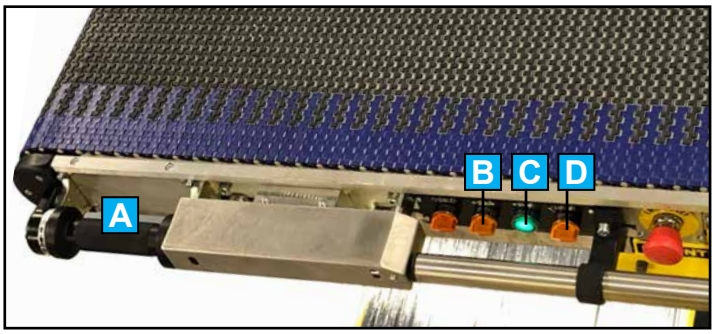
Carefully read and completely understand the Operation Manual and all warnings and instruction labels on the Restuff-it™. This page does not replace the operator instructions found in this Operation Manual. Before operating the Restuff-it™ machine, perform the following steps:

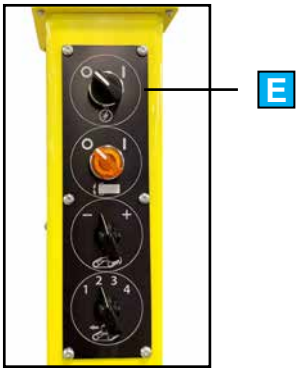
1. Connect all multipin connectors on machine and conveyor.
2. Ensure AC and DC Disconnects at drive panel (located on machine) are in the ON position. AC and DC Disconnects should remain ON at all times.
3. Release 4 E-Stops on machine (by rotating clockwise).
4. Turn ON the AC On/Off selector switch (located on left mast) by turning the switch to the “I” position.
5. Release E-Stop on remote panel (by rotating clockwise).
6. Press Start button on remote panel. Start button remains illuminated green.

NOTE: The white power light on the Remote Panel will turn on if 3 phase power is present. If cable connections are correct and the AC Selector Switch at the left mast is turned to ON, the green LED/Ground Check Indicator on the Remote Panel illuminates. If the green Ground Check Indicator does not illuminate, ensure that all multipin connectors are secure and the AC On/Off Selector Switch is turned to ON. If the red LED/Ground Fault Indicator illuminates, there is a Ground Fault which must be corrected before proceeding. **Contact Maintenance.**

The green LED/Ground Check Indicator must be illuminated or the system will not run.

7. Mount operator platform. Press Start button (C). If green light remains on, machine has started properly. Wait 20 seconds for machine diagnostics.
8. To move the machine, grasp rotary handle (A) with one hand and with the other rotate Forward/Reverse Selector Switch (B) to move in the direction of choice. Rotate Rotary Handle to steer.
9. Prior to starting the belts, the sensing mats must be reset. Turn the Belt Motion Selector Switch towards the back; hold for two seconds; the blue light on the right mast will turn off if the sensing mats have been reset. Sensing Mats must be reset for belts to run.
10. To start conveyor, rotate the Belt Motion Control Switch (D). Check that the conveyor belt direction is moving according to operation activity.
11. Perform visual and daily maintenance inspections. If any of the following occurs, contact maintenance immediately:
    - Does not appear to be working properly.
    - Has been damaged or appears to have worn or missing parts.
    - Has alterations or modifications not approved by the manufacturer.
    - Has safety devices which have been altered or disabled.
    - Has been tagged or blocked out for non-use or repair.





A Rotary Handle
B Forward/Reverse Selector Switch
C Start Button
D Belts Motion Selector Switch
E AC On/Off Selector Switch (Left Mast)

FLEXIBLE CONVEYOR
(when provided)

FLEXIBLE CONVEYOR

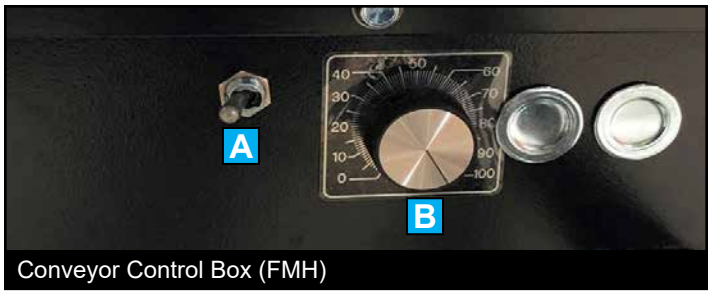
1. Ensure Conveyor Start/Stop Selector switch (located on remote panel if equipped) is turned to ON.

Conveyor Start/Stop Selection Switch (if equipped)

2. Press START buttons (two in each conveyor section).


Start/Stop Box (in each FMH conveyor section)

3. Verify that Conveyor direction is set according to operation. If necessary, adjust in control box (FMH conveyors) or in Start/Stop Box at the end of conveyor (ConveyX conveyors).



Conveyor Control Box (FMH)

Start/Stop Box (ConveyX)

A Conveyor Directional 3-Position Switch (LOAD/STOP/UNLOAD)

B Speed Control Dial

C Conveyor Directional FWR/REV Switch

4. Adjust Speed Control dial on each Conveyor Control Box to suit handling of product size/weight.
5. To start conveyor, rotate Belt Motion selector switch on pivoting conveyor towards the front of the machine.

   NOTE: If the blue light on the left mast is on, the sensing mats need to be reset for belts to run. Turn Belt Motion selector switch towards the back; hold for 2 seconds; the blue light will turn off if the mats have been reset.

6. Adjust Speed Control dial to suit handling of product size or weight.
7. To stop conveyors rotate Belt Motion selector switch on pivoting conveyor towards the back of the machine. The belts on the machine and connected conveyors will stop.

Conveyor Control Box (ConveyX)

Box jams at flex conveyor will result in damaged O-Rings. NEVER leave flex conveyor in cold containers/trailers. This will stiffen O-Rings and cause premature wear.

Ensure direction of rollers matches loading operation.

To change directions of rollers:

1. Turn conveyor direction switch to OFF.
2. When rollers have come to a stop, change direction of switch.

NEVER overload flex conveyors.
NEVER allow motors to continue to run under a jammed product. This will cause premature O-Ring damage.
NEVER unplug flex conveyors with power on. White light on interconnection box will indicate power is present.

NOTE: Conveyors should be started and allowed to run for a few mintues to warm up O-Rings. This will ensure efficient product transfer. After starting flex conveyor, ensure ALL rollers are turning. Manually turn any rollers that are slipping to get each started. NEVER put your hands between the rollers. After all rollers are started, run conveyor for 5 minutes. This will improve product transfer and extend O-Ring lifespan.

Ensure adjacent legs/casters are on same floor surface at joints between flex sections to prevent uneven roller height.

If product is jammed, clear condition right away to prevent O-Ring wear.

Flex conveyor is powered and has multiple pinch points. As a result, it is a hazard. Use handles on either sides when conveyor needs to be repositioned.

PROCEDURE TO SAFELY DISCONNECT FLEX CONVEYOR

1. Turn unit off using the AC Selector on the left mast.
2. Mechanically disconnect sections.
3. Unplug electrical connector.
4. Ensure plug is lifted off the ground.
5. Disconnect strain relief.

PREVENTIVE MAINTENANCE

Daily Maintenance
Keep conveyor clean and free of debris, dirt and grease accumulation.

Inspect wires and cables for damage. If damage to wires or cable is found, disconnect power supply immediately. Do not operate unit until proper repairs are made.

Verify all Start/Stop switches and sensor operate properly.

Weekly Maintenance
Clean roller grooves with mild detergent or denatured alcohol to ensure traction between O-Ring and roller. Clean rollers more frequently in dusty environments. For conveyors that have been out of operation, clean rollers before start-up.

Inspect side link nuts and bolts for looseness or missing parts. Tighten or replace as needed.

Inspect casters to verify swivel function, brake function and roll ability.

O-Rings
Standard O-Ring for unit is light green #004739. Operating temperature range is 30 to 130° F. Low temperature version is clear, part #004739-001. Operating temperature is -30 to 130° F.

ALWAYS observe O-Ring wear and tear. Replace damaged O-Rings to prevent others from wearing.

NEVER use lubricant near O-Rings.

CASCADING BELT CONVEYOR
(when provided)

CASCADING BELT CONVEYOR

1. Bring conveyor into position near Restuff-it™ machine. Connect hitch to ball on Restuff-it™.

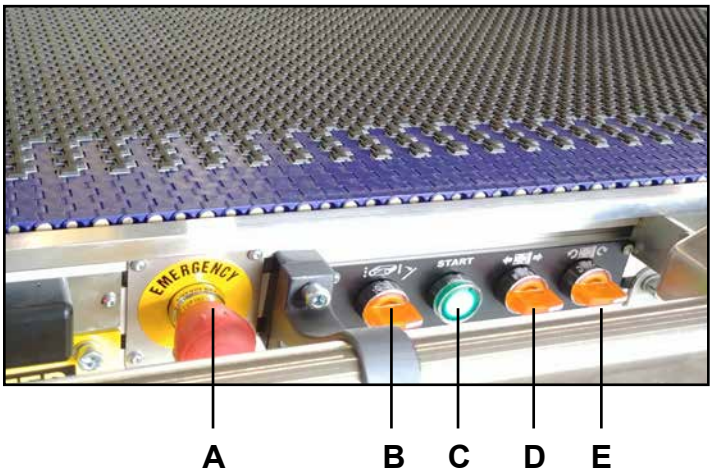
2. Connect plug to receptacle.

3. Connect strain relief cable to Restuff-it™.

4. Attach any additional conveyor (optional).

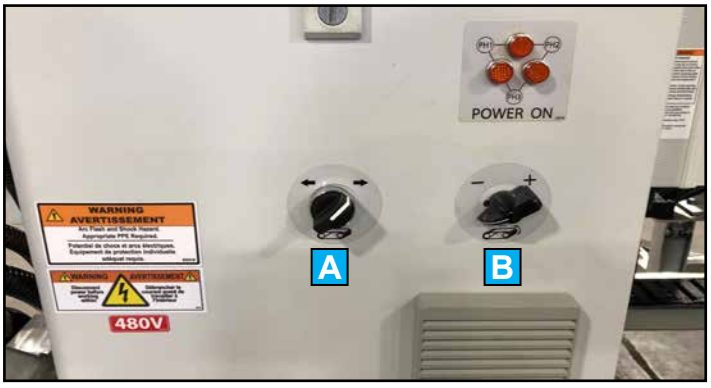
5. Select direction of product to be transferred.

6. To start conveyor, rotate the RUN control selector switch on pivoting conveyor towards the front of the machine.



A - Emergency Stop
B - Conveyor Selector switch (RUN/OFF/JOG)
C - START button
D - Machine Travel switch (forward/reverse)
E - Machine Zero Turn switch

7. Adjust speed control dial to suit handling of product.



A Conveyor Directional 3 position switch (LOAD/STOP/UNLOAD)
B Speed Control dial

8. To STOP conveyor, rotate RUN control selector switch on pivoting conveyor towards the back of the machine.

On loading mode, turn selector switch once. Belts on machine and connected conveyor will stop.

NEVER overload conveyors.

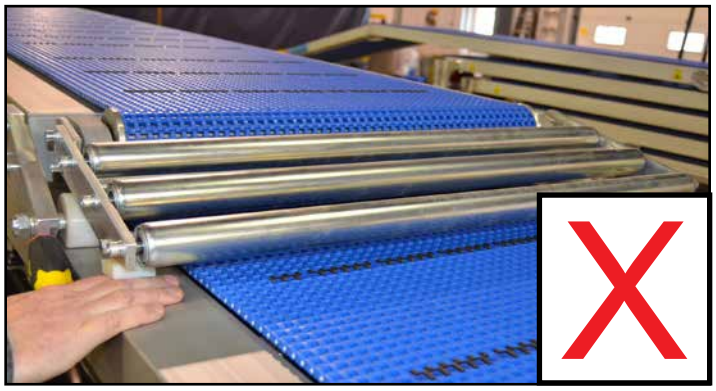
NEVER allow motors to continue to run under a jammed product.

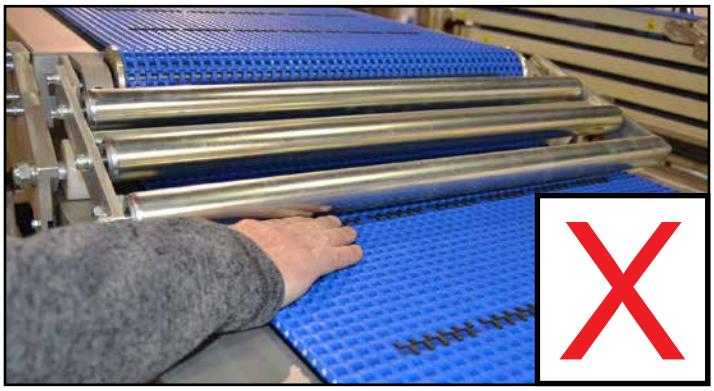
NEVER unplug conveyors with the power on.

PROCEDURE TO SAFELY DISCONNECT CONVEYOR

1. Turn unit off at remote section.
2. Mechanically disconnect sections.
3. Electrically unplug.
4. Store plug in storage receptacle.

Conveyor is powered and has multiple hazardous pinch points. Do not put hands where parts are moving and wear fitted clothing.





OPERATING THE MACHINE

OPERATING THE MACHINE

This section provides necessary information needed to operate the Restuff-it™ machine. It is important for all users to read and understand this section prior to operating the machine.

GENERAL

Dock inspection: Ensure warehouse floor, dock leveler, dock plate and dock doors are in good working condition.

Ensure machine is in good working order and each operator meets all necessary qualifications. Follow maintenance and inspection schedules referred to in this manual and in the **860-7200 DTU DTB Service & Maintenance Manual.**

OPERATOR QUALIFICATIONS

Only trained and authorized personnel shall be permitted to operate Restuff-it™ machine.

Safe use of this Restuff-it™ machine requires operator to understand limitations and warnings, operating procedures and operator's responsibility for inspection and maintenance. Accordingly, operator must understand and be familiar with this operating manual, its warnings and instructions, and all warnings and instructions of Restuff-it™ machine.

Operator must be familiar with employer's work rules and related government regulations and be able to demonstrate ability to understand and operate this make and model of Restuff-it™ machine in the presence of a qualified person.

OPERATOR RESPONSIBILITY FOR INSPECTIONS

Operator should make a copy of Daily Checklist form. It is the responsibility of each operator, prior to each work shift, to perform the following:

VISUAL AND DAILY INSPECTIONS

Designed to discover any damage of components before Restuff-it™ machine is in service. This should be completed before operator performs function tests.

⚠ **WARNING**: Failure to locate and repair damage, and discover loose or missing parts may result in an unsafe operating condition.

FUNCTION TESTS

Designed to discover any malfunctions before Restuff-it™ machine is put into service.

Operator must understand and follow step-by-step instructions to test all machine functions.

If machine is damaged or any unauthorized variation from factory delivered condition is discovered, machine must be tagged and removed from service.

ALWAYS report any equipment issues to supervisor. It is important to monitor belts are tracking in middle of conveyor to prevent damage.

OPERATOR RESPONSIBILITIES FOR MAINTENANCE

Serious injury could result from using a Restuff-it™ machine that is not properly maintained or kept in good working condition.

Operator must be sure Restuff-it™ machine has been properly maintained and inspected before using it.

Repairs to Restuff-it™ machine may only be made by a qualified service technician. After repairs are completed, operator must perform visual and daily inspections and function tests again.

Scheduled maintenance inspections shall only be performed by a qualified service technician.

MAINTENANCE AND INSPECTION SCHEDULE

Inspection points covered in Maintenance manual indicate areas of Restuff-it™ machine to be maintained or inspected and at what intervals maintenance and inspections are to be performed.

Actual operating environment of Restuff-it™ machine may affect maintenance schedule.

Use original or manufacture-approved parts and components for Restuff-it™ machine.

OWNER INSPECTIONS

It is the responsibility of owner and/or operator to arrange daily, quarterly or 500 hours and annual inspections of Restuff-it™ machine. Refer to **Document - 860-7200 DTU DTB Service & Maintenance Manual.**

OPERATING INSTRUCTIONS

Stand on operator platform sensing mat to enable travel motion, platform UP/DN and conveyor UP/DN. Use platform UP/DN features and pivoting conveyor functions to optimize loading heights.

Rotate handle up to raise conveyor and platform. Rotate handle down to lower conveyor and platform. Release UP motion after upper conveyor limit has been reached.

NOTE: Platform raises in sync with conveyor above horizontal position.

Hold sensing rotary handle and turn selector switch to travel forward or reverse. When travelling forward or reverse, rotate handle to steer. Hold sensing rotary handle and turn selector switch to rotate unit clockwise or counterclockwise. Reverse selector switch position to change direction. Turn belts ON/OFF/JOG using selector switch. Sensing edge (when equipped) stops FWD travel and operator platform UP and DOWN. Reverse travel clears a fault. All controls return to neutral position when released.

NOTE: In the event of an electrical fast transient burst or surge the system will protect itself by safely shutting down the machine. Follow the "Recover from an E-Stop" process to resume normal operation.

⚠ **WARNING**: The A-weighted sound pressure level of this machinery when in operation exceeds 70dB(A). The use of appropriate hearing protection is recommended.

DRIVING INSTRUCTIONS

ALWAYS ensure clearance of obstructions before driving unit toward dock.

When entering the truck, ALWAYS drive the machine with the operator platform raised approximately 8 inches from the ground. This will protect the operator platform from getting damaged if the dock and the truck are not level.

Operator platform must be raised above dock leveler when advancing toward it to prevent a collision. Operator platform may be gradually lowered as front wheel of machine starts to advance up the dock leveler.

ALWAYS maintain a proper distance from walls, dock edges and sides of container.

NEVER drive the machine with the operator platform in the fully raised position. (The only exception to this rule is when clearing a fault if the front area scanner has been triggered. Once the area scanner has been cleared of obstacles, the operator platform can be lowered).

DO NOT OVER-EXTEND OR OVER-CONTRACT FLEX CONVEYOR WHEN TRAVELLING.

WHEN CONNECTED TO FLEX CONVEYORS, ALWAYS ENSURE FRONT LEGS OF CONVEYOR ARE RAISED 3 INCHES FROM FLOOR. IF THIS STEP IS NOT FOLLOWED, DAMAGE WILL OCCUR TO THE FLEX CONVEYOR.

OPERATIONAL SHUT DOWN INSTRUCTIONS

Turn belts OFF. Turn AC Selector on left mast OFF.

To RESTART, turn AC selector switch on left mast ON. Press green Start button on remote panel. Button illuminates green when started. If button does not stay green, check E-Stops are released (rotate clockwise to release). Phase monitor device must also be clear of faults for system to start. Fault codes are listed on panel label.

Press START button on pivoting conveyor. Button illuminates green when started. Program Logic Control (PLC) will take several seconds to boot.

CLEANING INSTRUCTIONS

Frame: Damp cloths may be used to clean unit. Do not use abrasive or strong cleaning materials such as steel wool or scouring powder as they will damage painted surfaces. Touch up any chips or scratches in paint. To remove heavy dirt or grease, use non-abrasive, non-acidic cleaners.

Belts: Damp cloth can be used to clean belts. Ensure belts are regularly cleaned to ensure maximum grip on inclined transfer. Debris must not be allowed to accumulate in conveyor belts and/or rollers. **DO NOT REMOVE GUARDS OR ACCESS PANELS UNLESS SYSTEM IS LOCKED OUT. NEVER ATTEMPT TO CLEAN RUNNING BELTS!**

DANGER: Machine must be locked out before cleaning. See Lockout/Tagout Procedures.

RESTUFFING BEST PRACTICES

LOADING CONTAINER (BOTTOM OF THE BOX WALL)

- Keep pivoting conveyor at waist height allowing product to fall into place (using gravity as main energy source). Pivot conveyor side to side as product falls into place. When loading a row, place boxes at outside walls first, then fill in middle.
- Leave gap between end of pivoting conveyor and box wall. A gap of approximately 12” provides ability to safety support box from underside with first hand and guide back surface of box with second hand.

NOTE: Gaps allow room to steer product into a tight opening and also provides increased safety around moving belt.

NOTE: Gaps vary based on product size and weight. Loading operator must control gap based on feedback from Restuff-it™ operator. Communication between team members improves efficiency and safety.

LOADING CONTAINER (TOP OF THE BOX WALL)

- When loading a row, place boxes at outside walls first and then fill in middle.
- Leave gap between end of pivoting conveyor and box wall. A gap of approximately 12” provides ability to safely support box from underside with first hand and guide back surface of box with second hand.

DOCK FLOOR

- Plan workflow to eliminate unnecessary wait times. Organize dock floor. Organize work so physical demands and work pace increase gradually.
- Position pallet loads at a height that allows workers to lift and lower with ease.
- Proper gaps between boxes ensures belts do not stop. Highest loading rates are achieved when belts run continuously. Load product with appropriate gaps:
  - 5 to 8 seconds between boxes after transition from
  - Flex 1 to Flex 2
  - Flex 1 at 100% speed
  - Flex 2 at 50% speed

Gaps allow room to steer product into a tight opening and also provides increased safety around moving belt.

Gaps vary based on product size and weight. Loading operator must control gap based on feedback from the Restuff-it™ operator. Communication between team members improves efficiency and safety.

RESTUFFING MODES

Four modes of operation are provided to assist operators loading a trailer or container. These modes can be used to ensure the operator is in control of product flow at all times. Different modes are selected depending on size and weight of package, gap distance between packages, belt speeds, 1 or 2 operators on platform as well as box wall height.

The Restuffing Modes Selector Switch is located on the left hand mast.

Restuffing Modes Selector Switch

BELT STATUS LED INDICATORS

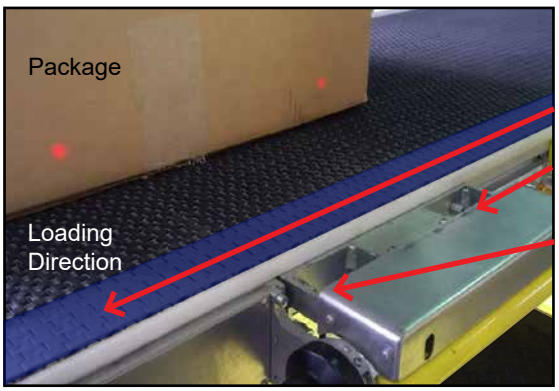
Belt status LED indicators are located on left and right-hand sides of front conveyor, facing operator. LED changes colour depending on current status. Indicators provide feedback to operator and work in conjunction with the four restuffing modes.

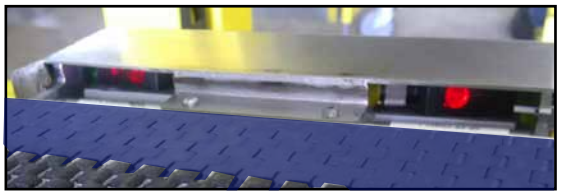
Green LED:
Conveyor is running. Next box will pass through sensors and not stop.

Amber LED:
Conveyor is running. Next box will stop when it is detected by first sensor.

Red LED:
Conveyor is stopped.

The Restuff-it™ machine is equipped with 4 LED sensors to detect packages on the front conveyor belt when loading. Red beams can be observed on the box in picture below. These sensors are used in conjunction with the four Restuffing Modes:





MODE 1 - NEVER STOP

Belts always run. Packages never stop at end of conveyor. Machine sensors never stop the product.

LED always shows GREEN.

Ideal for:
- Very small packages.
- Use with two operators.


MODE 2 - ALWAYS STOP

Belt stops for every package entering first pair of sensors. Belts remain stopped until package is removed from sensors. Belt can be restarted from conveyor RUN selector switch. This is very helpful for heavy packages.

LED constantly shows AMBER and RED when product is stopped.

Ideal for:
- Heavy packages.
- Loading near top of box wall.



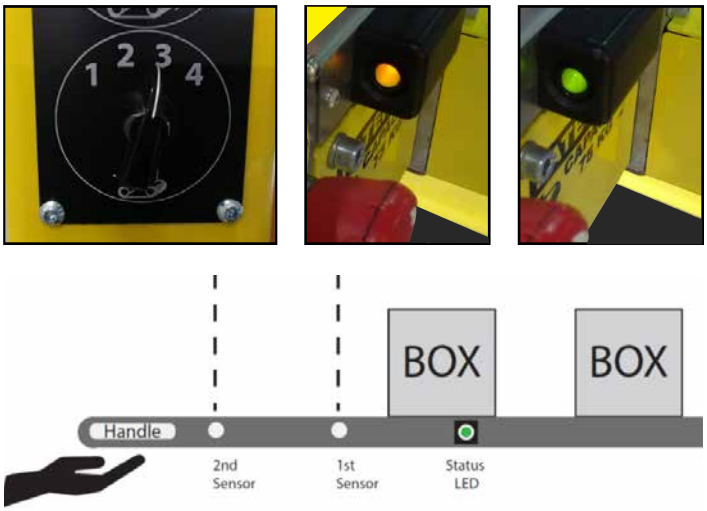
MODE 3 - CONTROLLED GO

Belt stops for every package unless operator requests package to pass through. To request package to pass through and not stop, quickly tap underside of rotary handle (LH or RH side). Belt status LED will turn green indicating next box will pass through.

Request must be made before package enters first sensor. Package stops when box is detected by first sensor pair. Belts remain stopped until package is removed from sensors. Belt can be restarted from conveyor RUN selector switch. This is very helpful for heavy packages. Packages must be minimum size of 8” long x 4” wide x 4” high.

LED constantly shows AMBER, then GREEN when product travels freely.

Ideal for:
- Heavy packages.
- Loading near top of box wall.
- Gaps between packages are too small.



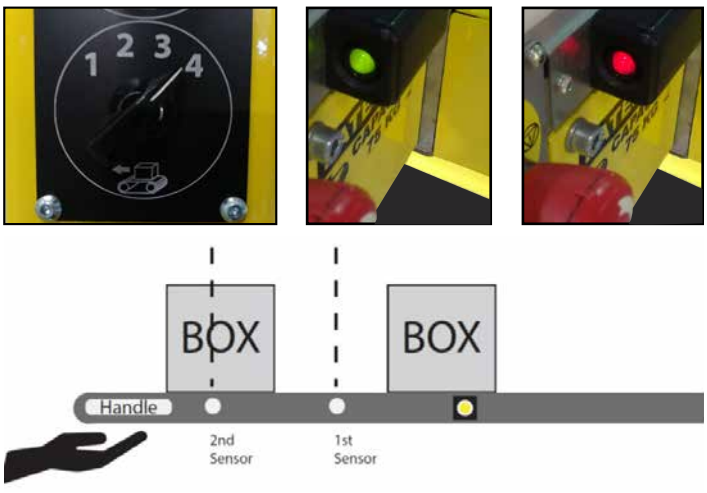
MODE 4 - CONTROLLED STOP

Belt never stops unless operator requests next package to stop. To request package to stop, quickly tap the underside of rotary handle (LH or RH side). Belt status LED will turn AMBER indicating the next box will stop. Request must be made before the package enters the first sensor. Belts remain stopped until package is removed from sensors.

Belt can be restarted from the conveyor RUN Selector Switch. This is very helpful for heavy packages. Packages must be a minimum size of 8” long x 4” wide x 4” high and gaps of 4 ft between packages.

LED constantly shows GREEN, then AMBER to show that the box is about to stop, and RED when product is fully stopped.

Ideal for:
- Light packages.
- Building lower two thirds of box wall.



DAILY OPERATIONS DESTUFF-IT™ RESTUFF-IT™ CHECKLIST

[Operator's Daily/Pre-Shift Inspection Form]

Unit #: _____ Department: _____ Date: _____

Operator's Name: _____ No. of Hours on Machine: _____

ITEM #	INSPECT	CHECK FOR	PASS	FAIL
1	Electrical Cables and Connectors	Damaged connectors or latches. Check for kinked, worn, or damaged electrical cables.		
2	Steel Cables/Strain Reliefs at electrical connectors	Steel cables/strain reliefs are properly secured at all locations where electrical connectors are present: (1) between remote panel and flex conveyor, (2) between connected flex conveyors, and (3) between flex conveyor and Destuff-it.		
3	Ground Check LED	Green ground check LED is illuminated on Remote Panel.		
4	Batteries	Any kind of damage, voltage level is green on gauge.		
5	Hydraulic Hoses	Any kind of damage to hoses, rubbing or leaks. Inspect floor for oil leaks.		
6	E-Stop Buttons	All 5 E-Stop buttons work and reset.		
7	Safety Mats including Operator Sensing Mat	Visually inspect all safety mats for visible damage. Check that all the safety mats function and will make the conveyors stop.		
8	Operating Controls	All buttons and handles. Report any damage to buttons, handles, switches, fans, and lights.		
9	Operator Platform and Forward Sensing Edge (IF EQUIPPED)	Run platform and conveyor fully up and down. Ensure smooth motion. Check wire rope/pulleys at inspection windows are not worn/damaged. Report to maintenance if visibly damaged or exhibiting unusual noise or vibration. Confirm forward sensing edge (IF EQUIPPED) is functioning.		
10	Debris in Conveyors	Conveyors are free from debris. Check dirt/debris is not building up at front conveyor pivot points/joints.		
11	Pivoting Front Belt Conveyor	Report to Maintenance if belt is visibly worn/damaged or is exhibiting unusual noise or vibration.		
12	Middle Conveyor and Rear Conveyor	Report to Maintenance if belt or skate wheels are visibly damaged or exhibiting unusual noise or vibration.		
13	Travel Wheels	Report to Maintenance if rough ride. Ensure wheels and drive mechanisms are free from debris.		
14	Flex and/or Belt Conveyor Sections (IF EQUIPPED)	Check for worn or damaged drive O-rings, unusual noise. Inspect all mechanical and strain relief connections, rollers, and Start/Stop switches.		
15	End of Travel Sensor (IF EQUIPPED)	Ensure immediate stop and restart of conveyor.		
16	Area Scanner Sensors (IF EQUIPPED)	Ensure Area Scanner Sensor LEDs (IF EQUIPPED) are NOT illuminated. If illuminated, report to Maintenance.		
17	Cylinder Safety Block	Ensure safety block is stored on machine. Refer to the 860-7200 Service & Maintenance Manual for location.		

When reporting, refer to Item # and explain the problem. **NOTE: This is not a complete list of items. Operators are responsible for ensuring the machine is in proper working condition in accordance with the manufacturer's specifications. Do not operate the machine if problems are detected. Report defects to supervisor immediately.**

Signed: _____

Comments: _____

TRANSPORTATION AND STORAGE

TRANSPORTING THE MACHINE

This section provides necessary information needed to safely transport the Restuff-it™ machine within a warehouse operation. It is not intended to cover normal operation and use which are covered under other sections of this manual. **The safest way to move the unit is under its own power.** Should the need arise, instructions for transporting the unit with a forklift will be covered below.

GENERAL

The safest way to move the unit is under its own power. Should the need arise to transport with a forklift, fork pockets are properly located and labelled to distribute the center of gravity only when the third conveyor is attached. No other means of lifting are allowed unless the unit is fully crated. No lifting by use of cranes and hoists is supported.

TRANSPORTING WITH A FORKLIFT

The following guidelines need to be followed when transporting a Restuff-it™ machine with a forklift.

GENERAL

It is important for all users to read and understand this section prior to transporting the machine.

Ensure warehouse floor and doors are in good working condition.

Ensure forklift is in good working order, is of sufficient capacity and each operator meets all necessary qualifications to operate the equipment.

OPERATOR QUALIFICATIONS

Only trained and authorized personnel shall be permitted to operate a forklift.

Safe use of a forklift requires operator to understand limitations and warnings, operating procedures and operator's responsibility for inspection and maintenance of the equipment.

Operator must be familiar with employer's work rules and related government regulations and be able to demonstrate ability to understand and operate the model of forklift to be utilized.

SPECIAL PRECAUTIONS

Forks or fork extensions at least 1372 mm (54") long are required to lift a Restuff-it™ machine. Fork pockets on the Restuff-it™ machine are properly located at the machine's center of mass only when the third conveyor is attached. Attempting to lift a unit without the third conveyor attached will result in a dangerous off-balanced lift that could result in operator injury or death.

The Restuff-it™ machine must be powered off and be disconnected from the Remote Panel and all other external power sources. The Restuff-it™ utilizes AGM valve-regulated batteries that eliminate the need for vent tubes. The US Department of Transportation (USDOT) has classified this battery as a dry battery. There are no special precautions or requirements to remove or stabilize these batteries prior to movement with a forklift.

The Restuff-it™ utilizes a sealed hydraulic system to facilitate proper and efficient operation. There are no special precautions or requirements surrounding this system prior to movement with a forklift.

OPERATOR RESPONSIBILITIES FOR SAFE TRANSPORTATION

Serious injury could result from not following the proper precautions or using a forklift that is not properly maintained. Operator is responsible for making sure the forklift has been properly maintained and inspected prior to use.

Operator is responsible for ensuring the use of forks or fork extensions at least 1372 mm (54") long when lifting a Restuff-it™ machine. If fork extensions are used they must be approved by the forklift manufacturer.

Operator is responsible for making sure the forklift to be used has the proper lifting capacity when utilizing 1372 mm (54") long forks or fork extensions.

Operator is responsible for checking to make sure that the 3rd conveyor is assembled to the equipment before attempting to lift the Restuff-it™ machine.

Operator is responsible for following all safe forklift operating practices such as travel speed, load height from floor, securing of the load, etc. when utilizing a forklift to transport a Restuff-it™ machine.

STORAGE

The following procedures should be followed when placing a Restuff-it™ unit into storage. Units should only be stored in a dry, rodent and insect free environment between 0º C (32º F) and 60º C (140º F). Storage within this range will not require any special packaging, machine settings or draining of fluids. The batteries in the machine will continue to drain throughout the storage period. Failure to follow these procedures will eventually result in dead batteries that in some cases can not be recovered. In these situations, the only solution will be the purchase of replacement batteries.

For Short Term Storage (defined as < 2 weeks):

Fully charge the batteries prior to placing the unit into storage. If planned storage period changes so it will exceed 2 weeks, follow the appropriate Long Term Storage instructions below for the brand of battery charger on the machine. These procedures apply to machines in temporary storage at construction sites as well as on customer sites.

For Long Term Storage (defined as > 2 weeks):

Please see next section **"Preventing Battery Rundown for Long Term Storage".**

PREVENTING BATTERY RUNDOWN (FOR LONG TERM STORAGE)

Machines that will be parked/stored for more than 2 weeks must either be maintained by the onboard battery charger or disconnected. The battery charger must be plugged into a 120V wall outlet with an extension cord. The battery charger will automatically maintain the batteries. If this option is not feasible, the batteries must be disconnected. Simply turning off the DC disconnect switch does not eliminate the parasitic draw on the batteries on certain machines.

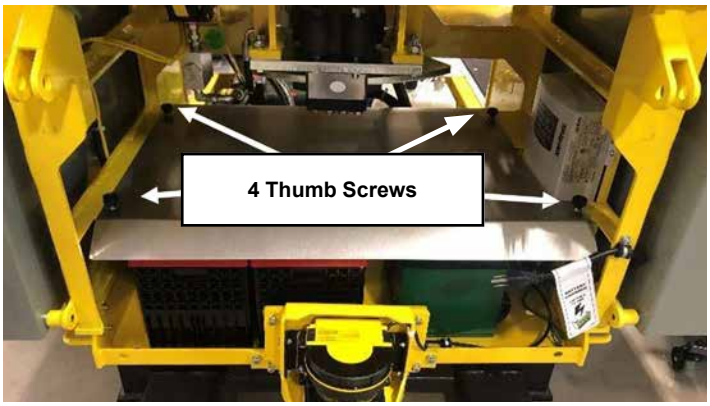
For machines with Xantrex Battery Charger:

Turn OFF the DC disconnect switch on the Drive panel.

Check if there is a connector on the battery charger output, if so, squeeze the two catches on the one connector to disconnect them from each other. The machine is now ready for storage. If the machine doesn't have this connector proceed to Step 1.

Step 1 - Ensure the DC disconnect switch on the Drive panel is OFF.

Step 2 - Remove the 4 thumb screw knobs and washers that secure the guard over top of the batteries. Remove the guard and place it on the machine in a safe place. Reinstall the thumb screws and washers to prevent them from being lost.



Step 3 - Remove the battery cable that joins the two batteries together. Place the jumper cable with the guard previously removed. Spin the two nuts used to secure the cable to the battery, back onto the battery terminal studs to prevent them from being lost.

The machine is now ready for storage.

Prior to the machine being taken out of long storage, reverse the process so the machine can start.

For machines with NOCO Battery Charger:

Turn OFF the DC disconnect switch on the side of the Drive Panel, no other steps are necessary. The machine is now ready for storage.

REMOVING A UNIT FROM STORAGE

Prior to placing a unit back into service after either short-term or long-term storage, the operator must complete an overall inspection of the machine to ensure it is in proper working condition. Use of the **"Daily Operation Checklist"** in this manual is recommended for this purpose. Beware that this checklist is not a complete list of items that should be inspected. The operator should perform other inspections as appropriate per each individual situation.

Ensure the machine is clean and free of debris prior to placing back in service. Directions for this cleaning process can be located in the **"Cleaning Instructions"** section of this manual. Operators are ultimately responsible for ensuring unit is in proper working condition in accordance with manufacturer's specifications. Do not operate or move the machine if problems are detected. Report defects to your supervisor immediately.

SAFE HANDLING

Do not operate machine:

- Unless trained and authorized.
- Unless operator manual is read and understood.
- Unless mentally and physically capable of following machine instructions.
- Under the influence of alcohol or drugs.
- While using a cell phone or other types of electronic devices.
- If not in proper operating condition.
- If all safety devices are not in place and operating properly
- In outdoor areas. This machine is for indoor use only.
- In areas where flammable vapors/liquids or combustible dusts are present.
- In areas that are too dark to safely see the controls or operate machine.

When operating machine:

- Use only as described in this manual.
- Report machine damage or faulty operation immediately.
- Wear closed-toe, non-slip work shoes.
- Walk slowly on inclines and slippery surfaces.
- Always be aware of surroundings while operating machine.
- Drive slowly through doorways and narrow openings.
- Use care when reversing machine.
- Keep children and unauthorized persons away from machine.
- Do not allow machine to be used as a toy.

Safe handling of battery:

- Do not expose battery to flame.
- Do not disassemble or mistreat battery.
- Do not drop, crush or subject battery to impact.
- Stop using or charging the battery immediately if battery has abnormal temperature, leakage or other abnormal conditions.

ENVIRONMENTAL CONDITIONS

This machine is intended for indoor use only. Do not expose machine to rain or damp environments. Operating temperature range is 0º C (32º F) to 40º C (104º F). To prevent potential damage, use and store in a rodent and insect free environment.

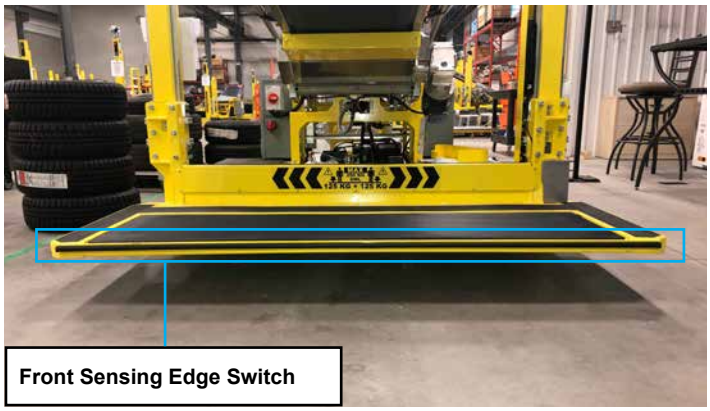
OPTIONS

OPTIONS

Depending on the options you choose to be included in your Restuff-it™ unit, your machine may have the following features:

SENSORS

The Restuff-it™ machine may use a forward sensing edge switch to stop forward travel if the machine impacts an object. The machine will stop driving forward and the conveyor belts will shut off. The fault can be cleared by driving the machine backwards for one foot. The switch is located along the forward edge of the operator platform. The switch is a 2 wire normally open switch. It sends a 24VDC signal to the PLC if activated. There is terminal strip connector inside the platform box which connects the switch to the PLC circuits. The switch is fused in the Control Panel.

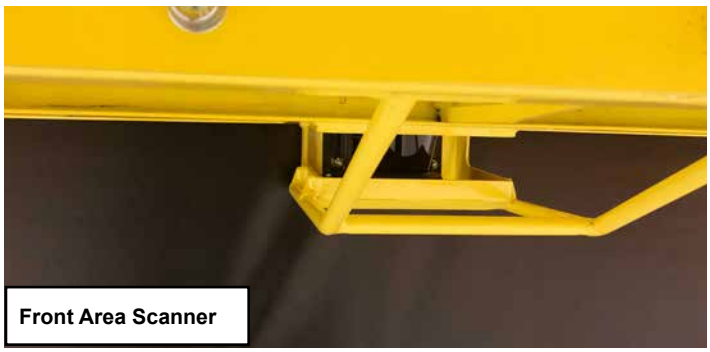


Front Sensing Edge Switch

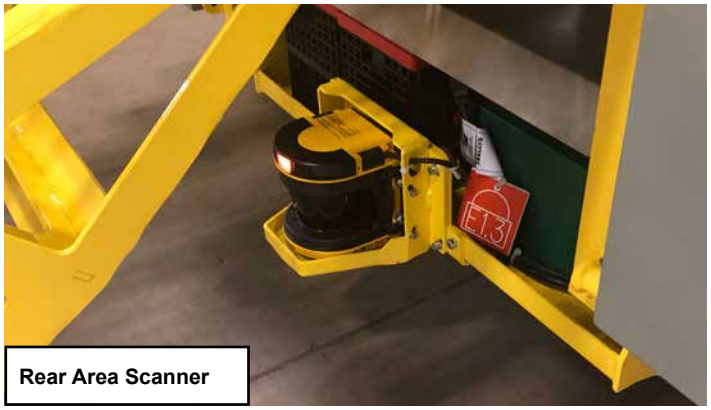
AREA SCANNERS

There is an option on the Restuff-it™ machine for an area scanner on the front or rear of the machine or both.

The area scanners are comprised of a few parts. The main body of the area scanner, which incorporates the actual optical scanner, is located under the front of the operator platform and on the rear of the machine base. The scanner head/display for each unit is found inside an enclosure under the center floor plate in the base of the machine. On the top of each display/head is the black memory module. The memory module contains the software for the scanner and connects to a power/logic output harness. The scanner body and display are connected with a dedicated cable. The scanner lens and ledge must be kept clean for the scanner to function. The lens must only be cleaned with a clean, soft, damp cloth or a pre-moistened lens cleaning cloth. The area scanner is an optical device so the lens or ledge may not appear dirty, but should be cleaned if it senses something that isn't visibly apparent.



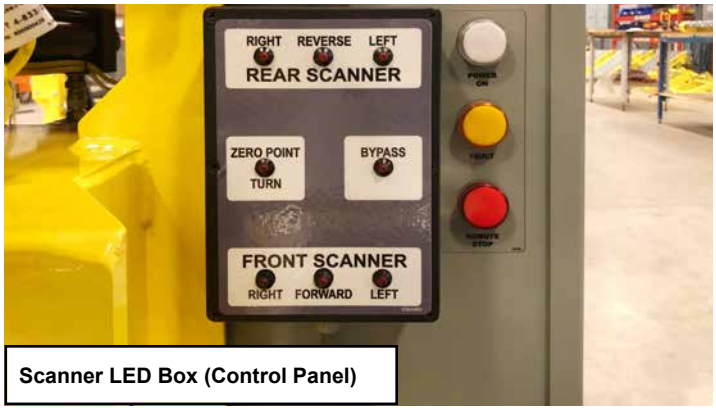
Front Area Scanner



Rear Area Scanner

The area scanners control various operations of the Restuff-it™. The scanners have two distinct zones. There is a warning zone and a stop zone for each scanner. The front and rear zones are different sizes and shapes. The zones are programmed by ELS and must not be altered. The zones are calibrated to ignore machine components always within their view such as the cage frame on the front unit and the support frame for the third conveyor. If a warning zone is activated, the machine will slow down and steer away from it automatically. If a stop zone is activated, the machine will stop driving and the conveyor belts will shut off and/or stop the platform from lowering.

A scanner LED box is installed on the Control panel. The LEDs on the box indicate which area the scanner is detecting an object and whether it is in the warning zone (LED flashes) or stop zone (LED is solid). The scanner display box will also activate a Zero Point Turn or Bypass LED which recommends the action needed to move the machine away from the object.



Scanner LED Box (Control Panel)

The scanner body should never be adjusted or moved without authorization first. The scanner bodies are precisely positioned and should never need adjustment.

AREA SCANNER BYPASS

The scanners can be temporarily bypassed by the operator if the machine is in a position where it cannot move or the platform won't go down. Using the switches on either side of the front conveyor, the operator can temporarily bypass the scanners to move the machine. The operator can only move in one direction (zero turn, forward or reverse) until the scanners re-activate. Once the operator stops the machine travel, the area scanners work again. If required, they can be bypassed again to perform another movement of the machine, until the machine is clear of the obstruction. This procedure can be done in either AC or DC mode.

NETWORK INTEGRATION

If your machine has Network Integration, the Remote, Control and Drive Panels will appear different. The Network cable will be integrated in the panels and will connect to an ethernet port at the Rear Conveyor.

Ethernet Connection

STANDARD OPERATOR PLATFORM

EXTENDED OPERATOR PLATFORM

The Standard Operator Platform has a depth of 23.13” and the Extended Operator Platform has a depth of 32.56”.

SAFETY GUARD RAILS

SIDE GUIDES

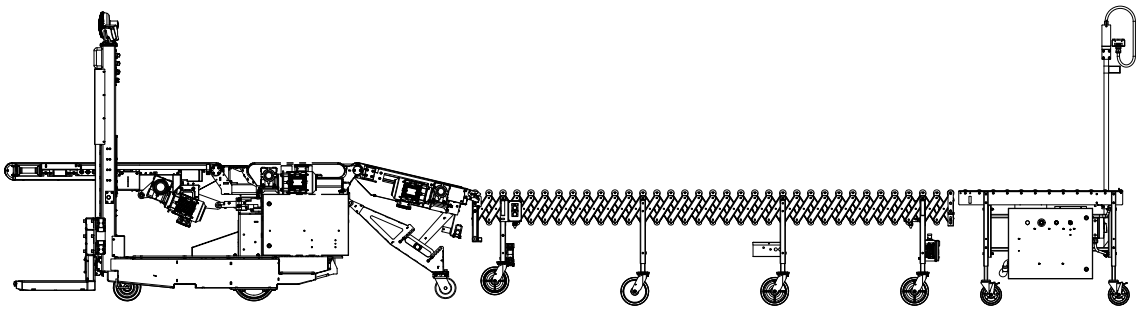
The middle and rear conveyors may utilize installed Side Guides to guide product travelling along the conveyors.

DUAL FAN KIT

The unit comes standard with a fan installed on the right mast. As an option, a second fan can be mounted on the left mast for additional air flow.

SPANISH

GUÍA RÁPIDA DE INICIO Y FUNCIONAMIENTO



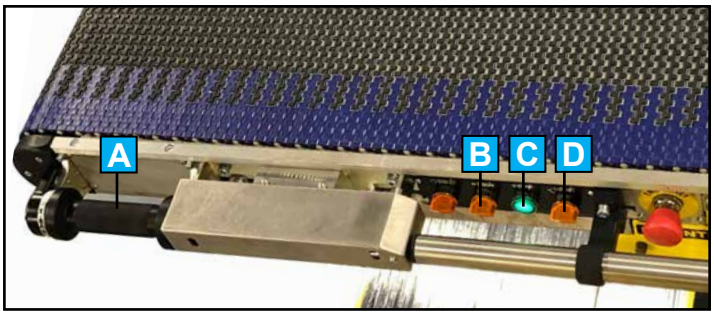
ADVERTENCIA: NO opere la máquina Destuff-it™ o Restuff-it™ sin la debida autorización. El no obedecer esta advertencia puede ocasionar lesiones graves. ASEGÚRESE DE QUE LA MÁQUINA ESTÉ CONECTADA CORRECTAMENTE ANTES DEL ARRANQUE.

Lea detenidamente y comprenda por completo el Manual de Operación y todas las advertencias y etiquetas de instrucciones en el Destuff-it™ o Restuff-it™. Esta página de instrucciones no reemplaza las instrucciones del operador que se encuentran en el Manual de Operación Antes de operar la máquina Destuff-it™ o Restuff-it™, realice los siguientes pasos:

1. Conecte todos los conectores multipunto en la máquina y en las bandas transportadoras.
2. Asegúrese de que los interruptores AC y DC en el panel de la unidad (Drive Panel) ubicado en el lado derecho de la máquina se encuentren en la posición de encendido. Los interruptores AC y DC deben permanecer en la posición de encendido todo el tiempo.
3. Libere los 4 frenos de emergencia (E- Stop) en la máquina. (Rotándolos hacia la derecha).
4. Gire a la posición de encendido el interruptor AC on/off ubicado en el poste izquierdo de la máquina.
5. Libere el freno de emergencia (E-Stop) en el panel remoto. (Rotándolo hacia la derecha).
6. Presione el botón de inicio en el panel remoto. El botón verde de inicio permanecerá encendido.

NOTA: *La luz blanca en el panel remoto se enciende si la corriente trifásica se encuentra debidemente conectada. Si los cables están conectados correctamente y el interruptor AC on/off en el poste izquierdo de la máquina se encuentra en la posición de encendido, indicador LED verde se encenderá. SI EL INDICADOR LED VERDE NO SE ENCIENDE, ASEGURESE DE QUE TODOS LOS CONECTORES MULTIPUNTO ESTAN DEBIDAMENTE CONECTADOS Y QUE EL INTERRUPTOR AC ON/OFF SE ENCUENTRE EN LA POSICION DE ENCENDIDO. Si el indicador LED rojo en el Panel Remoto se enciende, hay una falla en la polaridad a tierra la cual debe ser corregida antes de continuar. El indicador LED verde debe estar encendido o el sistema no se iniciará.*

7. Suba a la plataforma del operador. Presione el botón de inicio (C). Si la luz verde permanece encendida, la máquina comenzó a funcionar correctamente. Espere 20 segundo hasta que la máquina realice el procedimiento de diagnóstico.
8. Para mover la máquina, sujete la manija giratoria (A) con una mano y con la otra gire el interruptor selector de AVANCE/RETROCESO (B) para moverse en la dirección de elección. Gire la manija giratoria para dar dirección a la máquina.
9. Antes de iniciar las bandas transportadoras los sensores de los tapetes laterales deben ser reiniciados. Gire hacia atrás el botón de Movimiento de las Bandas (D), sosténgalo por segundos, la luz azul en el poste derecho se apagará si los sensores han sido reiniciados. (Las bandas transportadoras no se moverán si estos sensores no son reiniciados).
10. Para iniciar las bandas transportadoras, gire momentáneamente el control de Movimiento de las Bandas (D) hacia el frente de la máquina. Verifique que las bandas esten girando de acuerdo con el tipo de operación (carga o descarga).
11. Realice inspecciones visuales y de mantenimiento diario. Si ocurre algo de lo siguiente, comuníquese de inmediato con mantenimiento:
    - Parece que no funciona correctamente.
    - Ha sido dañado o parece tener piezas desgastadas o faltantes.
    - Tiene alteraciones o modificaciones no aprobadas por el fabricante.
    - Tiene dispositivos de seguridad que han sido alterados o deshabilitados.
    - Ha sido etiquetada o bloqueada por falta de uso o reparación.



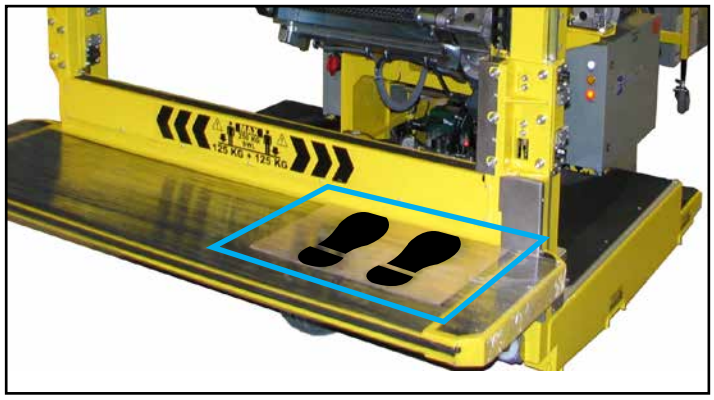
A Manija Giratoria
B Interruptor selector de AVANCE/RETROCESO
C Botón de inicio
D Gire el interruptor
E Gire el interruptor de corriente alterna “AC”

DESCARGANDO SU MÁQUINA

NOTE: SOLAMENTE PERSONAL AUTORIZADO PUEDE CONDUCIR LA MAQUINA RESTUFF-IT™.

1.Retire todo el material de embalaje y las correas de sujeción. Manualmente mueva la sección remota y la banda transportadora (si corresponde) fuera del camión.

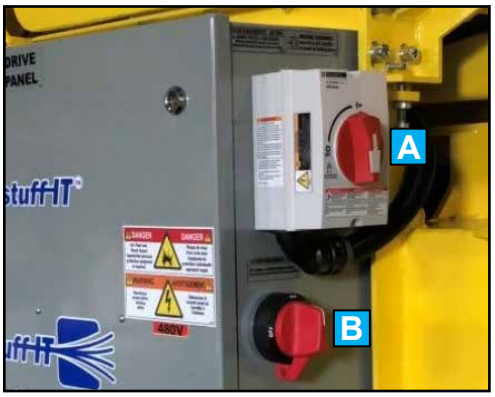
2. Antes de encender la maquina asegúrese de que no haya obstáculos en el área circundante



4. Presione el botón verde de inicio en la cinta transportadora pivotante. El botón se iluminará en verde cuando se haya iniciado. Espere 20 segundos para que se inicie el PLC.

5. Si la máquina no se enciende presionando el botón de inicio:

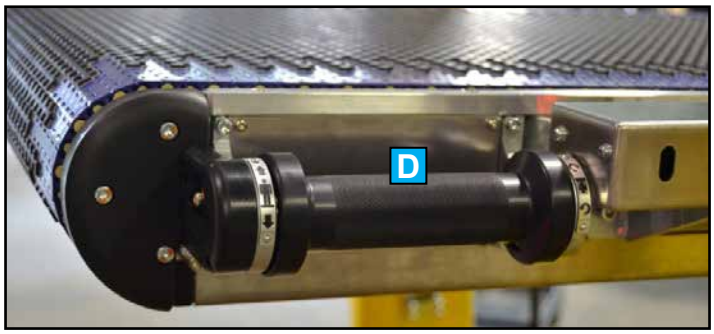
- Gire a la posición de encendido “ON” el interruptor de corriente alterna “AC”. (A)
- Gire a la posición de encendido “ON” el interruptor de corriente directa “DC”. (B)
- Gire a la posición de encendido el interruptor AC en el poste izquierdo. (C) Libere todos los frenos de emergencia “E-Stops”.
- Presione el botón verde de inicio que se encuentra en la cinta transportadora pivotante.

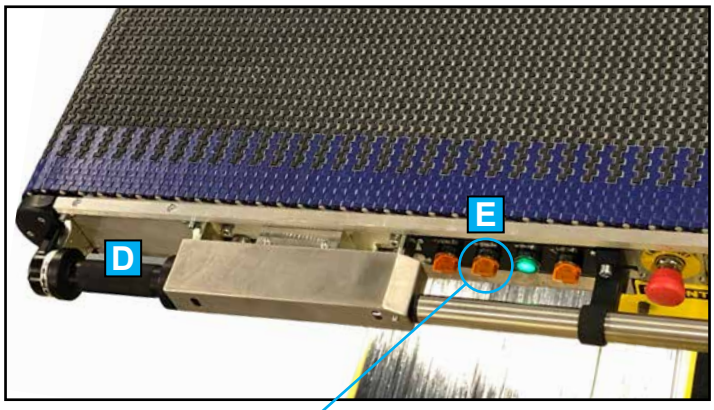


A Interruptor de corriente alterna “AC”
B Interruptor de corriente directa “DC”
C Interruptor “AC”
D Manija Giratoria E Interruptor de Selección de Recorrido

6. Asegúrese de que su peso se encuentre sobre del tapete de detección del operador cuando se encuentre sobre la plataforma del operador.

7. Sujete la manija giratoria, asegurándose de que sus dedos la envuelvan y sean detectados por el haz de luz del sensor de presencia del operador. Estando de pie sobre la plataforma, y sujetando la manija giratoria, use la otra mano para conducir la unidad Adelante/Reversa utilizando el interruptor de selección de recorrido. ***Utilice la manija giratoria para dar dirección a la máquina.***





NOTA: TENGA CUIDADO CUANDO CONDUZCA RESTUFF-IT™. USE UN OBSERVADOR PARA AYUDAR CON EL VIAJE DE LA MÁQUINA AL MUELLE DE CARGA.