



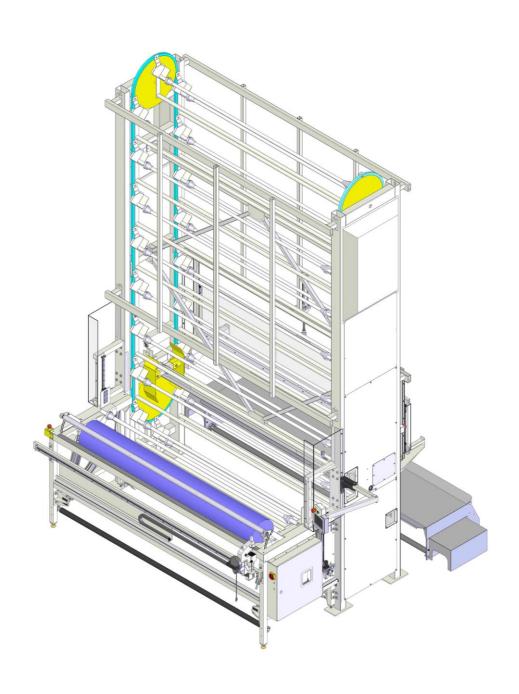
Model

1367S18S

Rev₀

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Technical Manual & Parts Lists



Atlanta Attachment Company

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IMPORTANT

It is important to read and understand the information contained within this manual before attempting to operate the machine. Atlanta Attachment Co., Inc. shall not be held liable for damage resulting from misuse of the information presented within, and reserves the right to change the information contained within, without prior notification.

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Important Safety Instruction



This part of the Instruction Material is provided for the safe use of your equipment. It contains important information to help work safely with the unit and describes the dangers inherent in machinery. Some of these dangers are obvious, while others are less evident.

Mandatory Information

All persons operating and/or working on the 1367S18S Carousel should read and understand all parts of the Safety Instructions. This applies, in particular, for persons who only operate and/or work on the unit occasionally (e.g. for maintenance and repair). Persons who have difficulty reading must receive particularly thorough instruction.

Scope of the Instruction Material

- The Instruction Material comprises:
- Safety information
- Operator Instructions
- Electrical and Pneumatic diagrams

And may also include;

- A list of recommended spare parts
- Instruction Manual(s) for components made by other manufacturers
- The layout and installation diagram containing information for installation

Intended Use

Our machines are designed and built in line with the state of the art and the accepted safety rules. However, all machines may endanger the life and limb of their users and/or third parties and be damaged or cause damage to other property, particularly if they are operated incorrectly or used for purposes other than those specified in the Instruction Manual.

Exclusion of Misuse



Non-conforming uses include, for example, using the equipment for something other than it was designed for, as well as operation without duly installed safety equipment. The risk rests exclusively with the end user.

Conforming use of the machine includes compliance with the technical data, information and regulations in all parts of the complete Instruction Material, as well as compliance with the maintenance regulations. All local safety and accident prevention regulations must also be observed.

Liability

The machine should only be operated when in perfect working order, with due regard for safety and the potential dangers, as well as in accordance with the Instruction Material. Faults and malfunctions capable of impairing safety should be remedied immediately. We cannot accept any liability for personal injury or property damage due to operator errors or non-compliance with the safety instructions contained in this booklet. The risk rests exclusively with the end user.

The Instruction Material should always be kept near the machine so that it is accessible to all concerned.

The local, general, statutory and other binding regulations on accident prevention and environmental protection must also be observed in addition to the Instruction Material. The operating staff must be instructed accordingly. This obligation also includes the handling of dangerous substances and provision/use of personal protective equipment.

The Instruction Material should be supplemented by instructions, including supervisory and notification duties with due regard for special operational features, such as the organization of work, work sequences, the personnel deployed, etc.

The personnel's awareness of the dangers and compliance with the safety regulations should be checked at irregular intervals.

Choice and Qualification of Personnel

Ensure that work on the machine is only carried out by reliable persons who have been appropriately trained for such work - either within the company, by our field staff or at our office - and who have not only been duly appointed and authorized, but are also fully familiar with the local regulations. Work on the machine should only be carried out by skilled personnel, under the management and supervision of a duly qualified engineer.

This not only applies when the machine is used for production, but also for special work associated with its operation (start-up and maintenance), especially when it concerns work on the hydraulic or electrical systems, as well as on the software/serial bus system.

Training

Everyone working on or with the machine should be duly trained and informed with regard to correct use of the safety equipment, the foreseeable dangers which may arise during operation of the machine and the safety precautions to be taken. In addition, the personnel should be instructed to check all safety mechanisms at regular intervals.

Responsibilities

Clearly define exactly who is responsible for operating, setting-up, servicing and repairing the machine. Define the responsibilities of the machine operator and authorize him to refuse any instructions by third parties if they run contrary to the machine's safety. This applies in particular for the operators of machines linked to other equipment. Persons receiving training of any kind may only work on or with the machine under the constant supervision of an experienced operator. Note the minimum age limits permitted by law.

A Word to the Operator

The greatest danger inherent in our machines:

is that of fingers, hands or loose clothing being drawn into a machine by live, coasting or rotating tools or assemblies or of being cut by sharp tools or burned by hot elements.

ALWAYS BE CONSCIOUS OF THESE DANGERS!

Safety Equipment on the Machines



All machines are delivered with safety equipment, which shall not be removed or bypassed during operation.

The correct functioning of safety equipment on machines and systems should be checked every day and before every new shift starts, after maintenance and repair work, when starting up for the first time and when restarting (e.g. after prolonged shutdowns).

If safety equipment has to be dismantled for setting-up, maintenance or repair work, such safety equipment shall be replaced and checked immediately upon completing the maintenance or repair work. All protective mechanisms shall be fitted and fully operational whenever the machine is at a standstill or if it has been shut down for a longer period of time.

Damage

If any changes capable of impairing safety are observed in the machine or its mode of operation, such as malfunctions, faults or changes in the machine or tools, appropriate steps must be taken immediately, the machine switched off and a proper lockout tagout procedure followed. The machine should be examined for obvious damage and defects at least once per shift. Damage found shall be immediately remedied by a duly authorized person before resuming operation of machine.

The machine should only be operated when in perfect working order and when all protective mechanisms and safety equipment, such as detachable protective mechanisms, emergency STOP systems, etc. are in place and operational.

Faults or Errors

The machine must be switched off and all moving or rotating parts allowed to come to a standstill and secured against accidental restart before starting to remedy any faults or errors.

Signs on the Machine

Safety and danger signs on the machine should be observed and checked at regular intervals to ensure that they are complete and undamaged. They should be clearly visible and legible at all times.

Clothing, Jewelry, Protective Equipment

Long loose hair loose-fitting clothes, gloves and jew

Long loose hair, loose-fitting clothes, gloves and jewelry, including rings, should be avoided in order to avoid injuries due to being caught, drawn in and wound up inside the machine.

Protective Eyewear



Protective eyewear that has been tested by the local authorities should be worn whenever there is a possibility of loose or flying objects or particles such as when cleaning the machine with compressed air.

Tools

Always count the number of tools in your possession before starting work on the machine. This will allow you to check that no tools have been left behind inside the machine. Never leave a tool in the machine while working.

Oils, Lubricants, Chemicals

Note the applicable safety regulations for the product used.

No Smoking, Fire, Explosion Hazard

Smoking and open flame (e.g. welding work) should be prohibited in the production area due to the risk of fire and explosions.

Workplace

A clear working area without any obstructions whatsoever is essential for safe operation of the machine. The floor should be level and clean, without any waste.

The workplace should be well lit, either by the general lighting or by local lights.

Emergency STOP

The emergency STOP buttons bring all machine movements to a standstill. Make sure you know exactly where they are located and how they work. Try them out. Always ensure easy access to the nearest emergency STOP button while working on the machine.

First Aid

- 1. Keep calm even when injured.
- 2. Clear the operator from the danger zone. The decision of what to do and whether to seek additional assistance rests entirely with you, particularly if someone has been trapped.
- 3. Give First Aid. Special courses are offered by such organizations as the employers' liability insurance association. Your colleagues should be able to rely on you and vice versa.
- 4. Call an ambulance. Do you know the telephone numbers for the ambulance service, police and fire service?

Important Notices

Reporting and Fighting Fires

Read the instructions posted in the factory with regard to reporting fires and the emergency exits. Make sure you know exactly where the fire extinguishers and sprinkler systems are located and how they are operated. Pass on the corresponding information to the firemen when they arrive. Ensure there are enough signs to avoid fire hazards.

The following fire extinguishers may be used:

- Dry powder extinguishers, ABC fire-extinguishing powder.
- Carbon dioxide fire extinguishers to DIN 14461 for electronic components. Great care must be exercised when using carbon dioxide fire extinguishers in confined, badly ventilated rooms (see DIN 14406 and 14270).

Isolate the machine from the power supply if a fire breaks out. Do not use water on burning electrical parts until it is absolutely certain that they have been completely disconnected from the power supply. Burning oils, lubricants, plastics and coatings on the machine can give off gases and vapors that may be harmful to your health.

A qualified person should be consulted to repair the damage after a fire.

Electrical Power Supply



Before undertaking any maintenance or repair work on the machine, switch off the electrical power to the machine at the main source and secure it with a padlock so that it cannot be switched on again without authorization.

In practice, this may mean that the technician, electrician and operator all attach their own padlock to the master switch simultaneously so that they can carry out their work safely. Locking extension plates should be available for multiple locks if required. The primary purpose for a lockout/tagout procedure is to protect workers

from injury caused by unexpected energizing or start-up of equipment.

Energy sources (electrical/pneumatic/hydraulic, etc.) for the equipment shall be turned off or disconnected and the switches locked or labeled with a warning tag. It is the responsibility of the employer to establish control procedures. Follow lockout/tagout procedures before, setup and/or any service or maintenance work is performed, including lubrication, cleaning or clearance of jams.

Caution: The machine is still not completely de-energized even when the master switch is off.

- Electricity The machine is always isolated from the electrical power supply whenever the master switch has been switched off. However, this does not apply for the power supply in the control cabinet, nor for equipment that does not draw its power via the master switch.
- Pneumatic / hydraulic energy Almost all our machines carry compressed air. In addition to switching off the master switch, the air supply must also be disconnected and the machine checked to ensure it is depressurized before starting any work on the machine; otherwise the machine may execute uncontrolled movements.

- Kinetic energy Note that some motors or spindles, for example, may continue to run or coast run on after being switched off.
- Potential energy Individual assemblies may need to be secured if necessary for repair work.

Delivery of the Machine/Packaging

Note any markings on the packaging, such as weights, lifting points and special information. Avoid temperature fluctuations. Condensation may damage the machine.

Transport Damage

The packaging and machine must immediately be examined for signs of damage in transit. Such damage must be reported to the shipper/transporter within the applicable time limits. Contact Atlanta Attachment Company and/or your transport insurer immediately, if signs of damage are visible. Never operate a damaged machine.

Interim Storage

If the machine has to be stored temporarily, it must be oiled or greased and stored in a dry place where it is protected from the weather in order to avoid damage. A corrosion-inhibiting coating should be applied if the machine has to be stored for a longer period of time and additional precautions taken to avoid corrosion.

Transporting the Machine

Disconnect the machine from all external connections and secure any loose assemblies or parts. Never step under a suspended load. When transporting the machine or assemblies in a crate, ensure that the ropes or arms of a forklift truck are positioned as close to the edge of the crate as possible. The center of gravity is not necessarily in the middle of the crate. Note the accident prevention regulations, safety instructions and local regulations governing transport of the machine and its assemblies.

Only use suitable transport vehicles, hoisting gear and load suspension devices that are in perfect working order and of adequate carrying capacity. Transport should only be entrusted to duly qualified personnel.

Never allow the straps to rest against the machine enclosure and never push or pull sensitive parts of the machine. Ensure that the load is always properly secured. Before or immediately after loading the machine, secure it properly and affix corresponding warnings.

All transport guards and lifting devices must be removed before the machine is started up again. Any parts that are to be removed for transport must be carefully refitted and secured before the machine is started up again.

Workplace Environment

Our machines are designed for use in enclosed rooms: Permissible ambient temperature approx. 5 - 40 °C (40 - 104 °F). Malfunctions of the control systems and uncontrolled machine movements may occur at temperatures outside this range.

Protect against climatic influences, such as electrostatic charges, lightning strikes, hail, storm damage, high humidity, salinity of the air in coastal regions.

Technical Manual & Parts Lists

Protect against influences from the surroundings: no structure-borne vibrations, no grinding dust, or chemical vapors.

Protect against unauthorized access.

Ensure that the machine and accessories are set up in a stable position.

Ensure easy access for operation and maintenance (Instruction Manual and layout diagram); also verify that the floor is strong enough to carry the weight of the machine.

Local Regulations

Particular attention must be paid to local and statutory regulations, etc. when installing machines and the plant (e.g. with regard to the specified escape routes). Note the safety zones in relation to adjacent machines.

Maintenance

General Safety Instructions

The machine shall be switched off, come to a standstill and be secured so that it cannot be switched on again inadvertently before starting any maintenance work whatsoever. Use proper lockout/tagout procedures to secure the machine against inadvertent startup.

Remove any oil, grease, dirt and waste from the machine, particularly from the connections and screws, when starting the maintenance and/or repair work. Do not use any corrosive-cleaning agents. Use lint-free rags.

Retighten all screw connections that have to be loosened for the maintenance and repair work. Any safety mechanisms that have to be dismantled for setting-up, maintenance or repair purposes must be refitted and checked immediately after completing the work.

Maintenance, Care, Adjustment

The activities and intervals specified in the Instruction Manual for carrying out adjustments, maintenance and inspections must be observed and parts replaced as specified.

All hydraulic and pneumatic lines should be examined for leaks, loose connections, rubbing and damage whenever the machine is serviced. Any defects found must be remedied immediately.

Waste, Disassembly, Disposal

Waste products should be cleared from the machine as soon as possible as not to create a fire hazard. Ensure that fuels and operating lubricants, as well as replacement parts are disposed of in a safe and ecologically acceptable manner. Note the local regulations on pollution control.

When scrapping (disassembling) the machine and its assemblies, ensure that these materials are disposed of safely. Either commission a specialist company familiar with the local regulations or note the local regulations when disposing of these materials yourself. Materials should be sorted properly.

Repair

Replacement Parts

We cannot accept any liability whatsoever for damage due to the use of parts made by other manufacturers or due to unqualified repair or modification of the machine.

Repair, Electrical

The power supply must be switched off (master switch off) and secured so that it cannot be switched on again inadvertently before starting any work on live parts.

Those parts of the machine and plant on which inspection, maintenance or repair work is to be carried out must be isolated from the power supply, if specified. The isolated parts must first be checked to determine that they are truly de-energized before being grounded and short-circuited. Adjacent live parts must also be isolated.

The protective measures implemented (e.g. grounding resistance) must be tested before restarting the machine after all assembly or repair work on electric parts.

Signal generators (limit switches) and other electrical parts on the safety mechanisms must not be removed or bypassed. Only use original fuses or circuit overloads with the specified current rating. The machine must be switched off immediately if a fault develops in the electrical power supply.

The electrical equipment of our machines must be checked at regular intervals and any defects found must be remedied immediately.

If it is necessary to carry out work on live parts, a second person should be on hand to operate the emergency OFF switch or master switch with voltage release in the event of an emergency. The working area should be cordoned off and marked by a warning sign. Only use electrically insulated tools.

Ventilation/Hazardous Gases

It is the end users responsibility to ensure adequate ventilation is provided to exhaust any and all noxious or hazardous gases that may be present in the working environment.

Hydraulic and Pneumatic Systems

Work on hydraulic or pneumatic equipment shall only be carried out by persons with training, knowledge and experience of hydraulic systems. Pressure lines shall be depressurized before starting any repair work.

General Liability

Liability for machine damage and personal injury is extinguished completely if any unauthorized conversions or modifications are undertaken. The machine must not be modified, enlarged or converted in any way capable of affecting safety without the manufacturer's prior approval.

Starting Machine Movements

Read the Instruction Manual carefully to establish which keys and functions start machine movements.

A Word to the End User

The end user has sole responsibility to enforce the use of safety procedures and guards on the machine. Any other safety devices or procedures due to local regulations should be should be retrofitted in accordance to these regulations and/or the EC Directive on the safety of machines.

Operator's position must always be readily accessible. Escape routes must always be kept clear and safety areas should be identified.

Safety Precautions

Safety should be a constant concern for everyone. Always be careful when working with this equipment. While normal safety precautions were taken in the design and manufacture of this equipment, there are some potential safety hazards.

Everyone involved with the operation and maintenance of this equipment should read and follow the instructions in this manual.

Operate the equipment only as stated in this manual. Incorrect use could cause damage to the equipment or personal injury.

It is the owner's responsibility to make certain that the operator reads and understands this manual before operating this equipment. It is also the owner's responsibility to make certain that the operator is a qualified and physically able individual, properly trained in the operation of this equipment.

Specific safety warning decals are located on the equipment near the immediate areas of potential hazards. These decals should not be removed or obliterated. Replace them if they become non-readable.

- ALWAYS keep safety shields and covers in place, except for servicing.
- ALWAYS operate equipment in daylight or with adequate working lights.
- Follow daily and weekly checklists, making sure hoses are tightly secured and bolts are tightened.
- ALWAYS watch and avoid holes or deep depressions.
- ALWAYS wear adequate eye protection when servicing the hydraulic system and battery.
- NEVER operate a poorly maintained machine.
- NEVER allow persons to operate this machine without proper instruction.
- NEVER put hands or feet under any part of the machine while it is running.
- NEVER attempt to make any adjustments or repairs to the machine while running. Repairs or maintenance should be performed by trained personnel only.
- NEVER work under the machine unless it is safely supported with stands, blocks or a hoist and blocks.
- NEVER touch hot parts of machine.

Setup & Installation Specifications



It is important that the machine operator and/or technician read this entire manual and become familiar with all the functions and safety concerns of the unit before installing or operating the equipment. It is not recommended to perform installation of the Carousel unit without an AAC service technician present.

Installation Requirements:

- Power: 208~230VAC, Single Phase, 25Amp
- Air Supply: 95 PSI, 3 cfm, 3/8" line
- Fork Lift (5000lb. Capacity) (Minimum 16ft reach w/ at least 4ft fork length) [Fork lift is to be provided by the customer]
- Scissor Lift (2 Person w/ 19ft reach)
 [Scissor lift is to be provided by the customer]
- Hammer Drill & Floor Anchors Carousel must be bolted to the floor before it is loaded with material
- 1.- Unpack the machine frame and install it with help of crane and forklift.
- 2.- Remove any shipping straps from machine.
- 3.- Inspect the machine for any damage that may have occurred during shipping. If damage is found, report this immediately to your supervisor. Document the damage and provide details and photographs.
- 4.- Secure end frames to sling straps at upper cross tube behind drive sprocket.
- 5.- Lift with suitable lifting device (fork lift shown) and lift both frames into vertical position with about 110" between legs. The carousel frame with up/down push buttons control panel should be erected on the right facing the away from the infeed of the quilter. (Refer to item #6 on the Component Identification drawing in this manual.)
- 6.- Center the frames in front of the quilter and about 97" from the front of the quilter base. (Refer to the Machine Layout drawing in this manual for detailed information.)









7.- With two frames held in place by lifting devices, bolt in the lower cross beam (the one without the bolts installed in the center bracket).



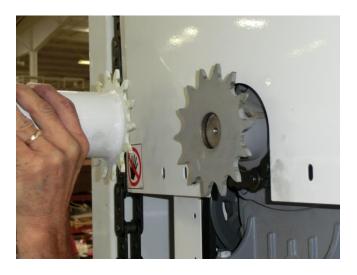
8.- Install the top cross beam with the center bracket down. Then install the angle supports.





9.- Disconnect the lifting devices, straps and equipment from the frames once cross beams are secure.

10.- Installing the cross shaft: Check the height of one of the hanger bolts on the chains on both left and right sides to be sure they are level. If not, rotate one of the chain drive motor pulleys by hand until the bolts are level.





- 11.- Hold both ends of the cross shaft in position and wrap the chain around the sprockets and secure with master link and cotter pins. There are shims provided for the cross beams if needed to make shaft fit without binding.
- 12.- Install the two outside horizontal cross members onto the left and right carousel legs (Two sets on both sides of carousel.)
- 13.- Install the three sets of vertical upright beams onto the horizontal cross members. (Three pieces on both sides of carousel.)





- 14.- Install the two infeed roll support brackets on the left and right carousel legs. Refer to item# 1 in Figure 1 on the Component Identification page in this manual.
- 15.- Verify the location of the carousel and make sure it is centered with the quilter. Drill and anchor all four legs of the carousel to the floor before proceeding to the next step.

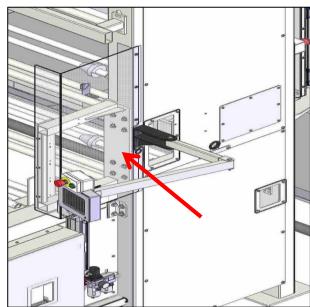
16.- Install the tick roll fetch and return assembly frame. Bolt this to the two legs that face the quilting machine input.





- 17.- Install the infeed front safety door by resting the door frame on the two infeed roll support brackets installed in step 14. Attach upper portion of frame and cylinder mount to the horizontal cross member installed in step 12.
- 18.- Install the four yellow hanger anti-sway brackets on both sides of the lower middle cross beam.





- 19.- Install the roll exist sensor and bracket on the lower middle cross beam.
- 20.- Install the left and right roll return assemblies onto the two carousel legs facing the quilter just above the tick roll fetch and return assembly installed in step 16. Refer to item# 15 in Figure 1 on the Component Identification page in this manual.
- 21.- Install the left and right roll return lexan guard panels on both left and right roll return assemblies.



22.- Provide 208~220VAC, Single phase, 25 Amp Service (Drop will be on left side carousel leg) **Please refer to the MACHINE LAYOUT drawing in this manual** (Also refer to the electrical diagrams located in the Assembly & Parts list section of this manual for connection details.)



- 23.- Provide 3/8" air supply line (95 PSI). (Drop will be on left side carousel leg) **Please refer to the MACHINE LAYOUT drawing in this manual**
- 24. Hook up all sensor cables and wiring harnesses as shown on the 1367S18S-WD1 & 1367S18S-WD2 wiring diagrams. Also connect all air lines between the carousel frame and fetch / return assembly using 1367S18S-PD pneumatic diagram. Perform a though I/O check before attempting to index the machine.



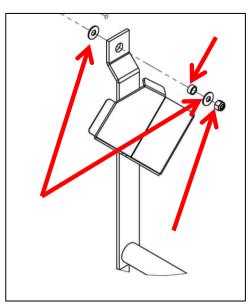
- 25.- Verify the left and right carousel drive motor rotation before proceeding to the next step of the installation. The motors must be turning in the same direction to prevent damage to the sync bar and carousel. Change motor wiring if required before proceeding to the next step. This can be changed at the thermal overload in the control panel mounted to the tick roll fetch and return assembly. Refer to item# 4 in Figure 1 on the Component Identification page in this manual.
- 26.- Once the manual jogging function of the carousel is operational, install the roll hangers on to the left and right drive chain links. The hangers are located 20" apart and are attached with provided bolts, bushings, lock nuts and spacer washers. This step will require three people to install all 18 hangers, two to install the hangers on the drive chain and one to jog the carousel when needed.



PLEASE NOTE TO KEEP HANDS CLEAR OF THE CAROUSEL DRIVE CHAIN WHILE THE MACHINE IS BEING INDEXED DURING THIS STEP.



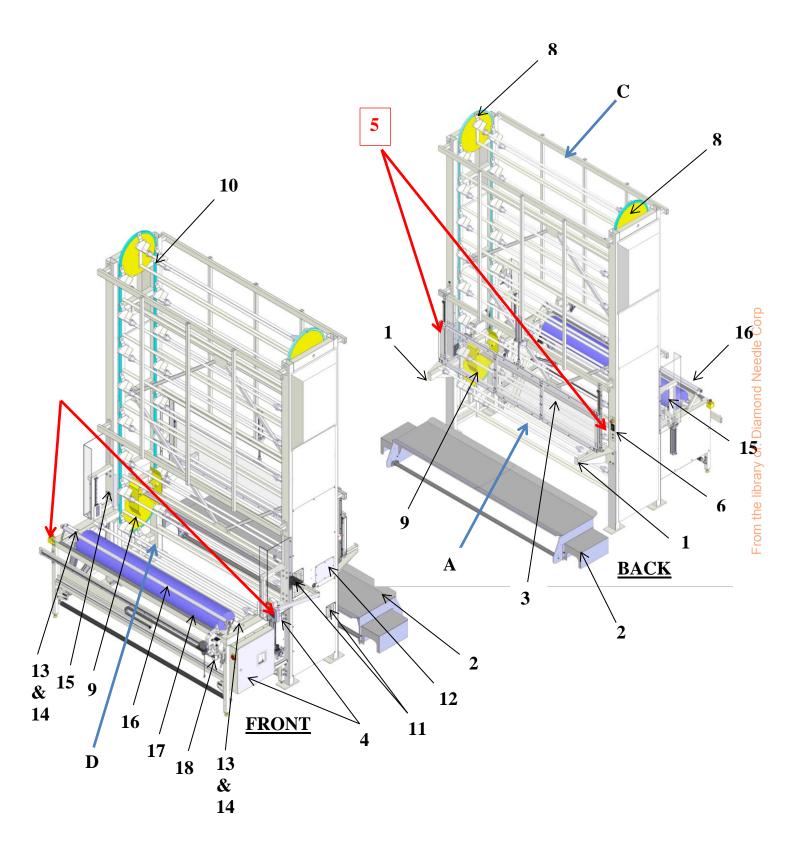




- 27.- Install the left and right lexan side guard panels on the front safety door and carousel legs.
- 28.- Install the infeed/front catwalk as shown in the Machine Layout drawing. It should be positioned approx.. 15" from the carousel leg and centered between the left and right carousel up-right legs.
- 29.- Do not install the carousel left side panel guards until all adjustments have been made to the carousel home position, fetch position, and return position proximity sensors. The right side covers and guards may be installed without interfering with sensor / machine adjustments.

Installation Notes:

Component Identification



Machine Layout

Refer to Figure 1 on page 16.

A. Carousel Infeed

- 1. Infeed Roll Support Bracket (Left & Right)
- 2. Infeed Catwalk
- 3. Infeed / Front Safety Door

B. Machine Controls

- 4. Touch Screen / Control Panel
- 5. Infeed Emergency Stops
- 6. Front Remote Operator Panel
- 7. Outfeed Emergency Stops

C. Main Carousel Components

- 8. Right Side & Left Side Carousel Drive Sprocket
- 9. Right Side & Left Side Carousel Idler Sprocket / Take-up
- 10. Hanger and Tick Roll Rod
- 11. Proximity Sensor Access Door (Home & Fetch/Return Ok Switches)
- 12. Encoder Access Door

D. Carousel Outfeed

- 13. Tick Roll Fetch / Return Arm Assembly
- 14. Tick Roll Eject Assembly
- 15. Tick Roll Return Assembly

E. Tick Roll "Run" Position

- 16. Accumulator / Clamp Roller
- 17. "Sew From" Position

F. Tick Roll Splice Station

18. Bag Closer

Power & Air Requirements

Volts 208-230 VAC, Single Phase, 60 Hz
Amps 25A
Air Consumption in SCFM 3 SCFM

Air Pressure 95 Psi

Power and Air Connection Left Side, Carousel Leg

Physical Machine Specifications

Overall Dimensions: 150"W x 126"L x 192"H

Machine Weight: 7,500 lbs. Shipping weight: 9,500 lbs.

Infeed Loading Height from Floor: 49"

Infeed Loading Height from Catwalk Surface: 34"

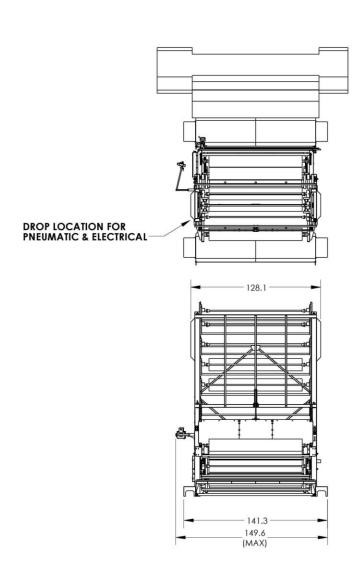
Max. Width of Tick Rolls: 92"

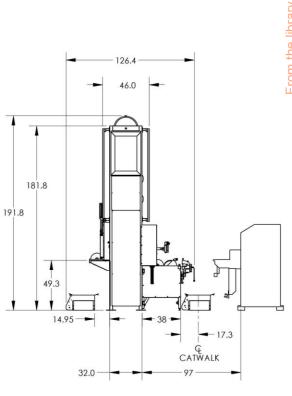
Min. Width of Tick Rolls: N/A

Max. Tick Roll Diameter: 15"

Max. Tick Roll Weight: 130 lbs.

Machine Layout





Machine Safety

The 1367S18S Carousel is large machine and has many powerful drives and mechanisms.

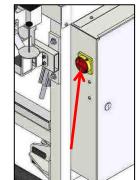
- ANYONE assigned to operate and/or maintain this machine must be properly trained by an Atlanta Attachment technician, or a trained and qualified factory mechanic. Operation and/or maintenance of this machine by untrained personnel may result in a serious injury or even death.
- ANYONE assigned to operate and/or maintain this machine, must read, understand, and follow the safety instructions and guidelines listed below mentioned in following pages.
- ANYONE assigned to operate or maintain this machine MUST READ AND BE FAMILIAR with the location and operation of ALL operator machine controls, with particular emphasis on the following:

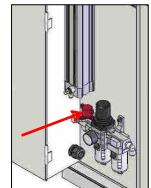
-Main Electrical Power ON/OFF switch (FIG.2)

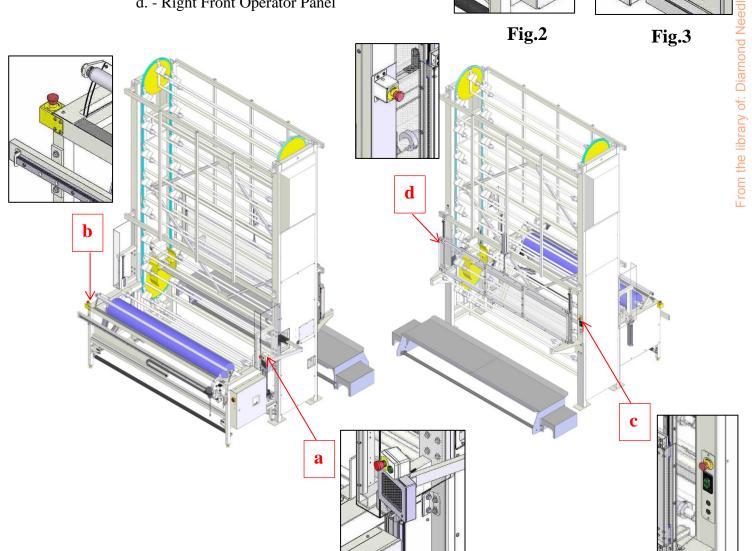
-Main Air Supply ON/OFF valve (FIG.3)

Four Emergency-Stops, located on:

- a. Main Control Box
- b. Right Rear Operator Box
- c. Left Front Operator Box
- d. Right Front Operator Panel







WARNINGS & PRECAUTIONS

In "AUTO MODE", the carousel can start automatically. Therefore, when the machine is turned on:

- NEVER ENTER INSIDE THE MACHINE
- NEVER CRAWL UNDER THE MACHINE
- NEVER CLIMB ON TOP OF THE MACHINE
- NEVER REACH INSIDE OR BEYOND THE GUARDS OF THE MACHINE FOR ANY REASON
- NEVER PLACE ANY PART OF YOUR BODY INSIDE THE MACHINE

In "MANUAL MODE", this machine may be prompted to execute any of its functions. Therefore, to prevent injury or machine damage, only a properly trained operator or mechanic should use the machine in this mode of operation.



CAUTION: The machine is energized with 208~230 VAC which can cause severe injury or death. Please follow all lockout/ tagout procedures when performing maintenance on this equipment. (PLEASE REFER TO THE "Lockout/Tagout (LOTO)" SECTION IN THIS MANUAL)

From the library of: Diamond Needle Corp

Lockout/Tagout (LOTO)

Lockout/Tagout (LOTO) refers to specific practices and procedures to safeguard employees from the unexpected energization and startup of machinery and equipment, or the release of hazardous energy during service or maintenance activities. This requires that a designated individual turns off and disconnects the machinery or equipment from its energy source(s) before performing service or maintenance and that the authorized employee(s) either lock or tag the energy-isolating device(s) to prevent the release of hazardous energy and take steps to verify that the energy has been isolated effectively. The following references provide information about the LOTO process.

Equipment Energy Control Procedure

Lockout/Tagout Program

Description:	Tick Carousel /w Auto Unload	Model:	1367S18S
Manufacturer:	Atlanta Attachment Co	Location:	

Energy		Location	Magnitude	Control Method
Electrical:	[X]	Disconnect/Ctrl Box	220 VAC	Lockout & Tag
Pneumatic	[X]	Main Air Regulator	6.5 bar / 95 PSI	Lockout & Tag

Remember to Release All Stored Energy!

Shutdown Procedure

- 1. Inform all affected personnel that the machine will be Locked & Tagged Out.
- 2. Follow proper shutdown procedure for Machine, Serial Bus / Touchscreen.
- 3. Push the RED "Emergency Stop" button.
- 4. Turn the power and pneumatic disconnects to the OFF position
- 5. Fill out the necessary information on the Lockout Tag
- 6. Install the Lockout device(s) (Power Mains & Pneumatic Disconnects)
- 7. Verify all stored electrical energy has been released by pressing the GREEN button on above the touch screen controller.
- 8. Use a meter to test circuits in the electrical panel to insure stored energy has been released.
- 9. Perform necessary maintenance, services and/or repairs.

Startup Procedure

- 1. Inform all affected personnel that the Lockout of this machine is being removed.
- Replace any guards or safety devices which may have been removed during maintenance.
- 3. Remove the Lockout device(s) and tags.
- 4. Turn the Main Power and Main Air disconnects to the ON position
- 5. Twist the RED "Emergency Stop" mushroom head to release the button.
- 6. Inform all affected personnel that the Lockout has been removed and the machine is ready for normal production operation.

Approved By:	Date:

From the library of: Diamond Needle Corp

Machine Operation

Machine Start-UP

- 1. Turn the Main On/Off switch to the ON position. Refer to Fig. 4.
- 2. Turn the Main Air valve to the ON position. The pressure gauge should be set to 95 PSI. Refer to Fig. 5.
- 3. Press the green POWER ON push button. Refer to Fig. 6.

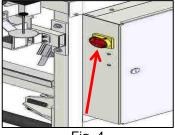


Fig. 4



Fig. 5

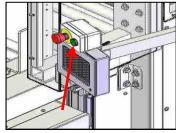


Fig. 6

- 4. The touchscreen control panel will power up and show a screen to request the language to display. Once the language is selected, the screen will show a request to move to move the carousel home. Refer to Fig. 7.
- 5. Press the CONTINUE button on the touch screen to proceed with homing the machine or press the ADVANCED MANUAL button to go into MANUAL mode. (Please refer to the Machine Control section of this manual for more information on ADVANCED MANUAL mode.)

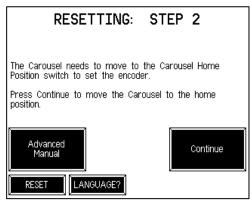


Fig. 7

6. Once the homing process has completed, the touch screen will display the MAIN MENU screen with the words "READY – 1367S18S" Refer to Fig. 8.

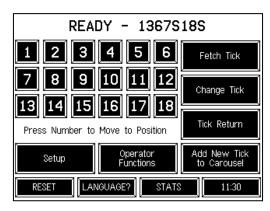


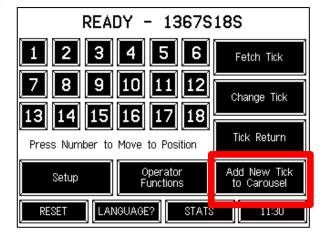
Fig.8

Machine Operation Screens

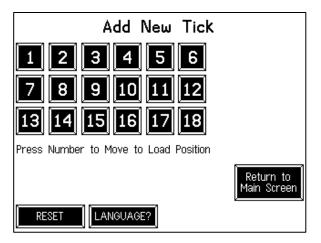
Add New Tick To Carousel Button

The "Add New Tick To Carousel" button is displayed on the main menu in the lower right corner. It can be accessed from the main menu after the machine is powered up and after the machine has reset to the home position. From this screen you can replenish/load ticking material onto the carousel hangers.

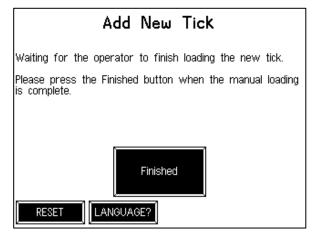
1. To add a roll of tick to the carousel, press the "Add New Tick To Carousel" button.



- 2. The touch screen will display the "Add New Tick" menu
- 3. Press the desired empty hanger position number on the screen keypad.
- 4. The carousel will move to the load position and the safety door will open to allow access to the desired hanger position to load the new tick roll.



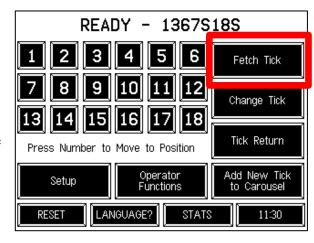
- 5. Once the new tick roll is loaded onto the carousel hanger and is resting correctly in the "V" cups of the left and right side of the hanger, press the "Finished" button.
- 6. The safety door will close and the touchscreen will return to the main menu indicating "READY 1367S18S"



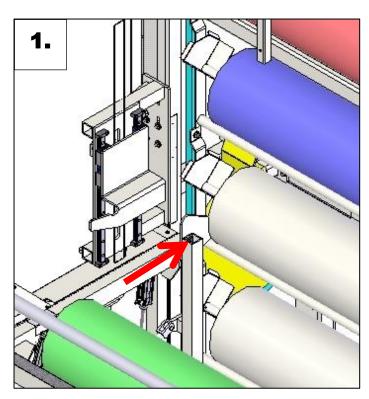
Fetch Tick Button

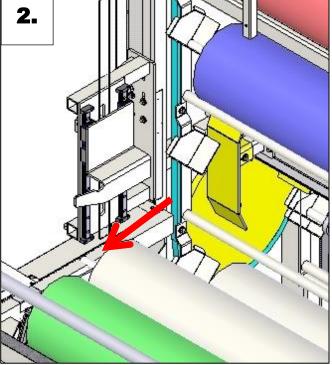
The "Fetch Tick" button is displayed on the main menu in the upper right corner. It can be accessed from the main menu after the machine is powered up and after the machine has reset to the home position. From this screen you can fetch ticking material from the carousel to load the next roll for sewing.

7. To Fetch a roll of tick from the carousel, press the desired hanger number on this menu and then press the "Fetch Tick" button. The carousel will rotate until the appropriate hanger is at the unload position. Once the hanger has made the extend OK proximity switch, the fetch arm will go into the carousel to retrieve the tick roll.



8. The carousel will then move to the retract OK position so that the roll material rod can clear the carousel hanger.





Fetch arm extended (Fetching New Roll from Carousel)

Fetch arm retracted (New Roll Retrieved from Carousel)

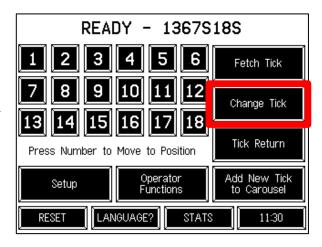
From the library of: Diamond Needle Corp

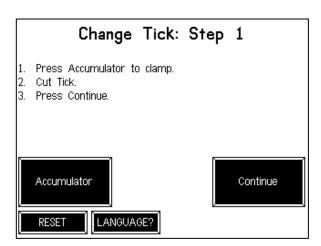
The "Change Tick" button is displayed on the main menu on the middle right side of the touch screen. It can be accessed from the main menu after the machine is powered up and after the machine has reset to the home position. From this screen you can swap ticking material from the RUN/SEW position with a new roll of tick from carousel fetch arm position.

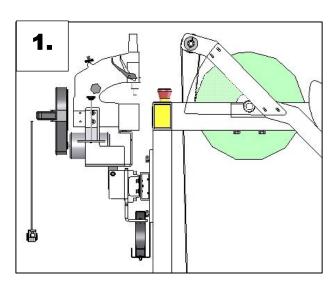
- 1. To Change Tick, press the "Change Tick" button. The touchscreen will display a "Step 1" screen to prompt the operator through a sequence of screens to change ticking rolls.
- 2. Follow the onscreen instructions/prompts. Press the "Accumulator" button to clamp the roll.



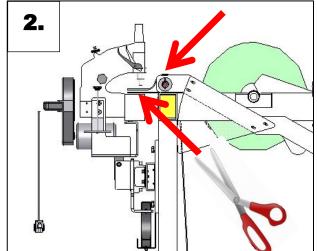
- 3. Oncce the roll is clamped, cut the tick with a pair of scissors.
- 4. Press the "Continue" button when these steps are complete.







Accumulator Unclamped



Accumulator Clamped (Splicing New Roll)

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- 5. Once "Step 1" is complete and the "Continue" button is pressed, the "Step 2" page will be displayed prompting the operator with a new set of instructions.
- 6. Press the "Eject Roll" button to move the old roll of ticking from the SEW/RUN position to the roll return arm.
- 7. Visually verify the roll has been transferred to the roll return arm.
- 8. Press the "Continue" button to return the eject roll cylinder to its home position and to continue to "Step 3"
- Change Tick: Step 2

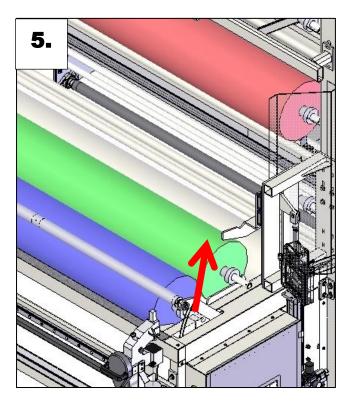
 1. Press Eject Roll to move tick from sew position.
 2. Verify roll was moved from eject position to Roll Return Arm.
 3. Press Continue to move Eject Roll down.

 Eject Roll

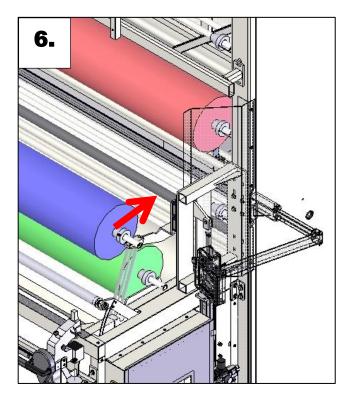
 Continue

 RESET

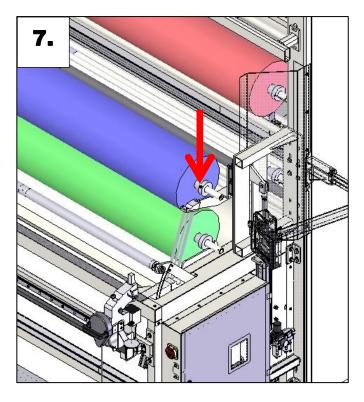
 LANGUAGE?
- 9. Move the new roll of tick from the fetch arm postion to the SEW/RUN position.



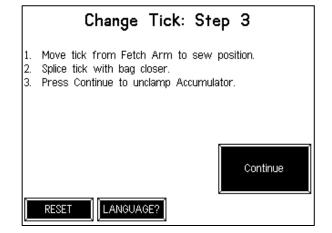
Roll eject cylinder extends to move roll from the RUN/SEW position to roll return arm

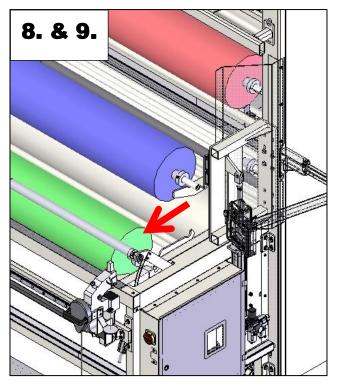


Roll eject cylinder extended moving roll from roll eject to roll return arm position

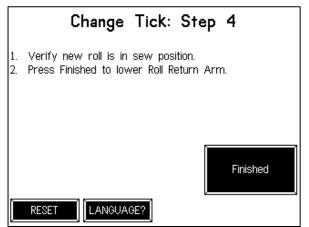


Roll eject cylinder extended moving tick roll to roll return arm automatically

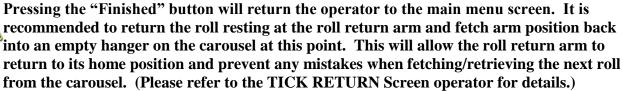


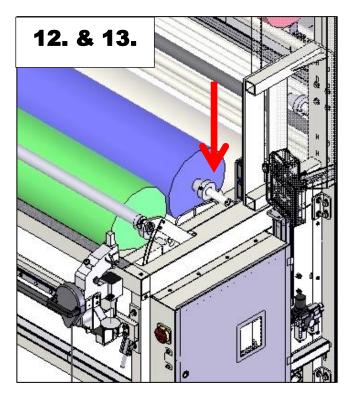


Roll eject cylinder retracted to home position and new tick roll moved to SEW/RUN position



- 10. Splice tick with bag closer
- 11. Press the "Continue" button to unclamp the accumulator and to proceed to "Step 4"
- 12. Visually verify that new roll is clear of roll return arm path and resting at the SEW/RUN position
- 13. Press "Finished" to lower the roll return arm and old tick roll to the fetch arm position for placement back into the carousel.



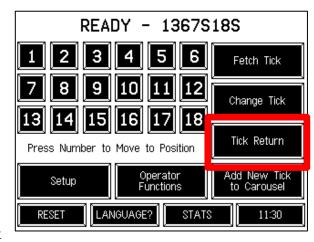


New roll resting at SEW/RUN position; roll return arm lowered and old roll ready to return to carousel

Tick Return Screen

The "Tick Return" button is displayed on the main menu on the middle right side of the touch screen. It can be accessed from the main menu after the machine is powered up and after the machine has reset to the home position. From this screen you can return the ticking material from RUN/SEW position back into the carousel on any remaining empty hanger.

1. To Return a roll of tick to the carousel, press the desired hanger number on this menu and then press the "Return Tick" button. The carousel will rotate until the appropriate hanger is at the unload position. Once the hanger has made the retract ok



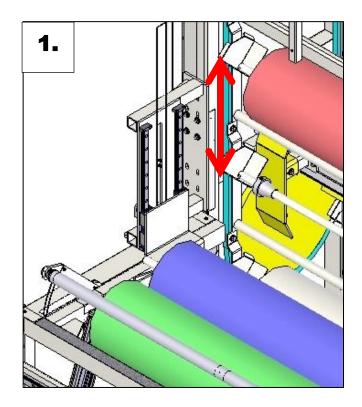


proximity switch, the fetch arm will go into the carousel to return the tick roll.

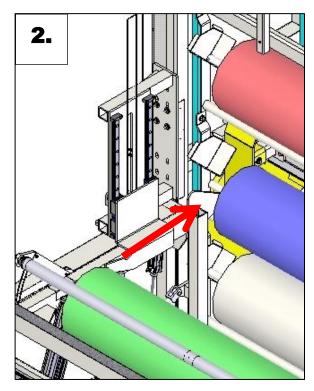
PLEASE NOTE THAT THE FETCH ARM WILL NOT RETURN A ROLL OF TICK TO A HANGER THAT IS OCCUPIED BY EITHER A TICK ROD OR ROLL OF TICK.

THIS CASE WILL TRIGGER A SERIAL BUS ERROR PAGE.

2. The carousel will then move to the extend OK position so that the fetch arm can clear the carousel hanger and tick material rod.



Fetch arm retracted Old Roll Ready to Return to Carousel)



Fetch arm extended (Returning Roll to Carousel)

Fabric / Tick Routing

The way and direction in which the fabric is routed from the tick roll at the "RUN / SEW" position through the various rolls up to the quilting machine is very important. Below in Figure 9 is the fabric / tick routing diagram.

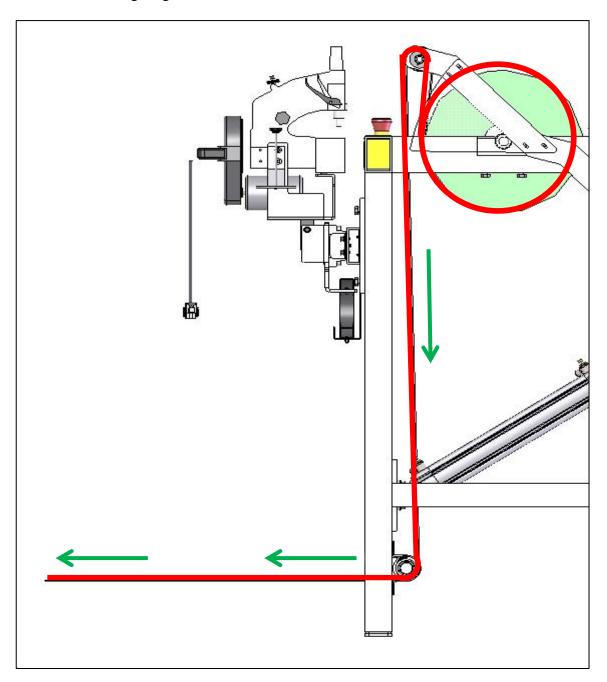
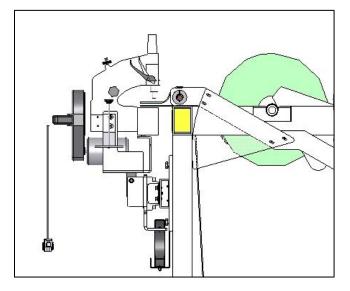


Figure 9

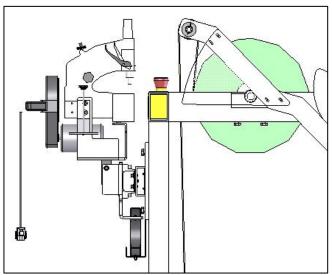
Fabric / Tick Splicing Station

1. When the ticking roll runs out, the 1367S18S is equipped with a splice station / bag closer sewing head to seam together the existing roll to a new roll of tick. In order to have enough tick material to make the splice, it may be necessary to stop the machine just prior to running the roll empty. Before any reverse feeding top or bottom film rolls, one must feed the other film roll forward approximately the same amount.





Accumulator Clamped (Splicing New Roll)



Accumulator Unclamped (Quilter Sewing New roll)

Machine Controls

Serial Bus Operation



CAUTION: DO NOT TOUCH THE SCREEN WITH ANY METAL OBJECTS, SHARP POINTS OR ROUGH EDGES This may damage the screen or reduce its performance.

Main Menu

This is the main screen that is displayed shortly after the machine is powered up and after the machine has reset to the home position. From this screen you can add a new tick roll to the carousel on the infeed side, fetch ticking material from the carousel on the outfeed side, change out the current ticking roll, and return the ticking roll back into the carousel. You can also reset the machine, access the setup, operator function, and status screens from this menu.

Stats Menu

By pressing the "STATS" button on the main screen you can view the number of times the carousel has been commanded to move or reset the move count display.

Language Menu

By pressing the "LANGUAGE" button on the main screen you can change the default language of the touchscreen display.

RESET Button

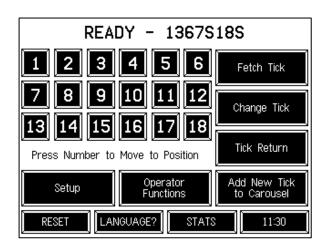
By pressing the "RESET" button on the main screen, the machine put into its initial startup configuration. This is equivalent to cycling machine power off then back on.

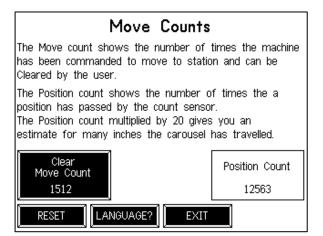
Time Button

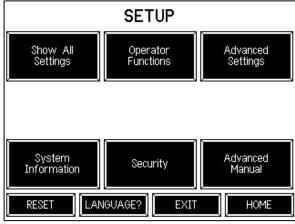
Pressing this button allows the operator to adjust the system time and date. This is only allowed on Main Screen

Setup Menu

Pressing the "SETUP" button on the Main screen will bring you to the Setup screen. From here you can access operator functions, advanced settings, system information, security features, and advanced manual controls. Use extreme caution when in Advanced Manual mode.

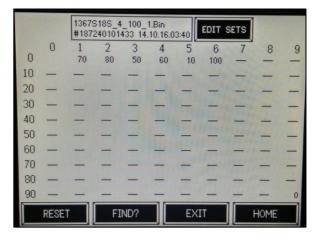






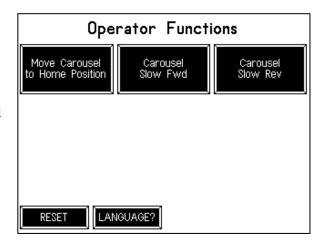
Show All Settings

This button displays a screen that shows all current machine adjustment / timer settings.



Operator Functions

By pressing the "Operator Functions" button on the SETUP page, a screen will display options to allow the operator to home the carousel or jog the carousel forward / reverse.



System Information

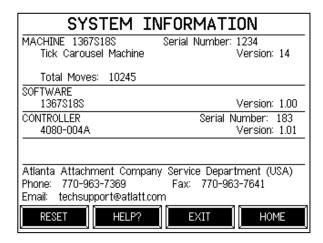
By pressing the "System Information" button on the SETUP menu the screen will display general machine information including software version.

Exit Button

Pressing the "EXIT" button will take you to the previous screen.

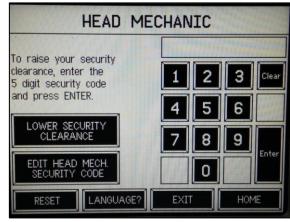
Home Button

Pressing the "HOME" button will take you back to the main menu screen.



Security Settings

The serial bus touchscreen controller is divided into different functions depending on set security levels. Basic functions accessible to the operator and advanced functions accessible to the technician. The advanced functions consist of five security levels: Supervisor, Mechanic, Chief Mechanic, Technician, and Engineer. To access the technical functions, a security key must be entered. The Security screen can be accessed via the SETUP menu by pressing the "Security" button on the Setup menu screen.



The Advanced Manual and Advanced Settings screens require a verification key code. Using the correct key code will allow the advanced options to appear. The key code may be changed to any 5-digit number on the Security screen.

In the normal operator's mode, a warning message is displayed when the machine encounters an error. The operator will be given various options to continue or the resolve machine's issue before restarting the cycle. Please refer to the ADVANCED MANUAL and ADVANCED SETTINGS section of this manual for more details.

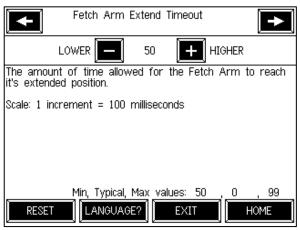
Advanced Settings

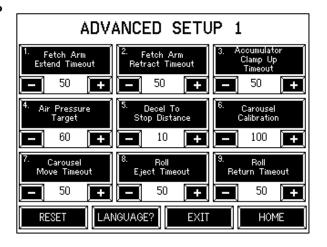
The "Advanced Settings" button is located on the SETUP menu and can be accessed via the main menu screen. This section of the touchscreen program allows access to timer and machine settings.

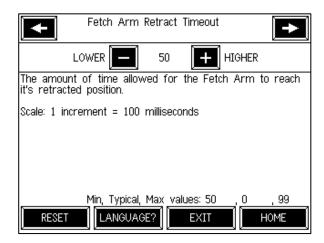


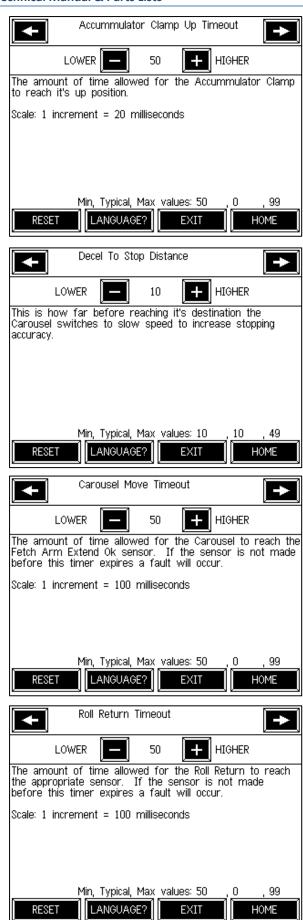
Use caution when changing default settings. Make sure to document the value before making any changes.

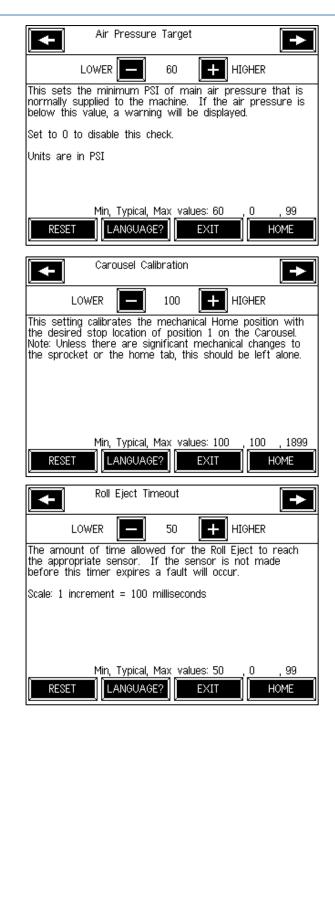
The values can be incremented or decremented using the "PLUS (+)" or MINUS (-)" key to the right and left of the setting value. You can also press the TEXT area above the value to access a special screen that details the function and scale of each setting value. Press the Left Arrow and Right Arrow buttons on these pages to scroll through the other Advanced Setup Settings.











Advanced Manual

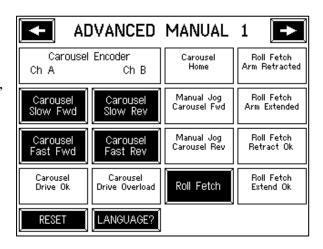
The "Advanced Manual" button is located on the SETUP menu and can be accessed via the main menu screen. This section of the touchscreen program allows access to Input and Output modules. There are two advanced manual screens. To move between screens, push the arrow buttons on the upper top corners of the touch screen.

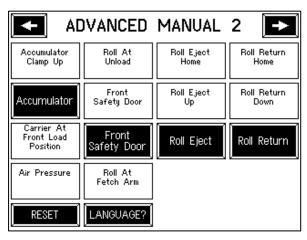
On the advanced manual screens you can verify the function of the most input sensors. A double line will appear on the sensor's window indicating that the sensor is activated.

On the advanced manual screens you can also activate the machine's output devices (such as valves) by pressing the corresponding output control button.

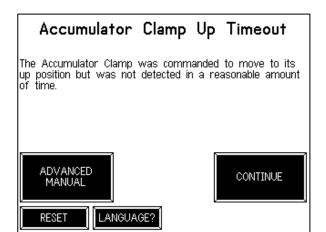


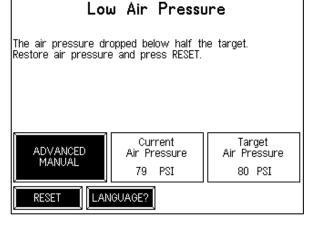
Use extreme caution while manually activating output devices since this will activate various parts of the machine without any interlocking or safety controls of the main program. This may in some cases cause damage to the machine or to personnel.

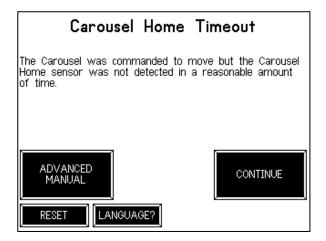


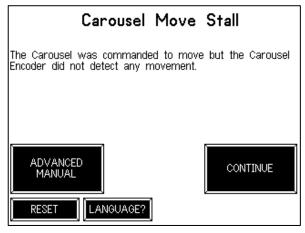


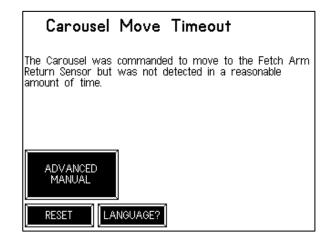
Serial Bus Error Screens (Page 1)

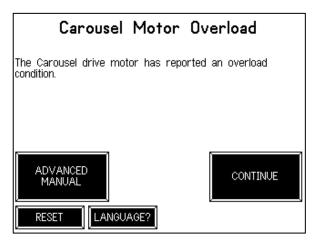




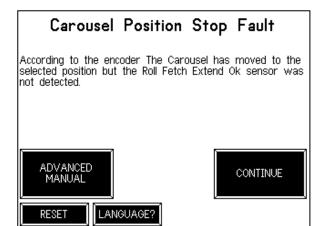


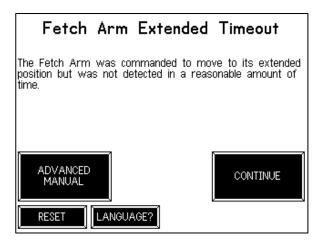


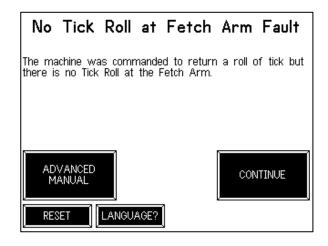


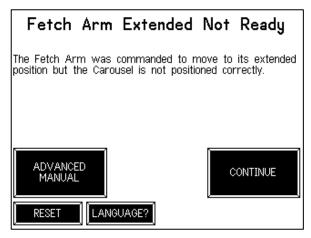


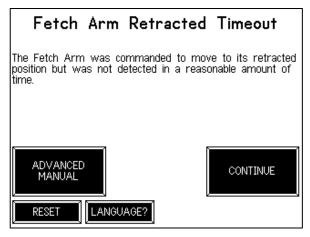
Serial Bus Error Screens (Page 2)

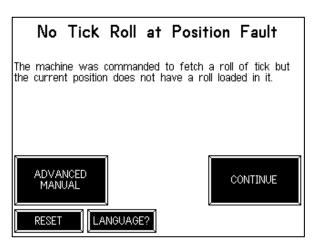




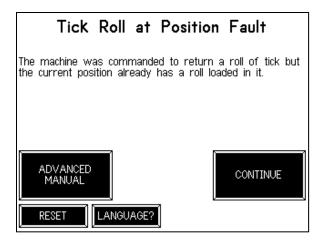


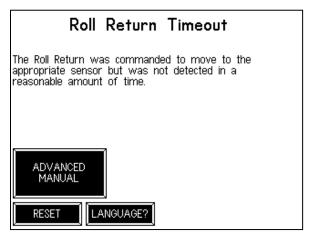


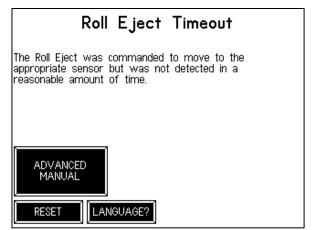


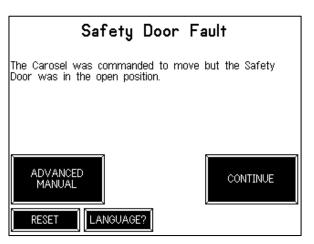


Serial Bus Error Screens (Page3)









Other Operator Controls

1. Emergency Stop & Power On - allows the machine to be turned on and stopped.



2. Remote Operator Panel & Estop (Right Side) – located to the right side of the safety door and just above the infeed roll support bracket, allows the operator to quickly stop the machine in case of any problems. This remote panel also lets the operator jog the carousel while in manual mode.



3. Outfeed Emergency Stop - located on the far right side of the fetch / return assembly frame, allows the operator to quickly stop the machine in case of any problems.



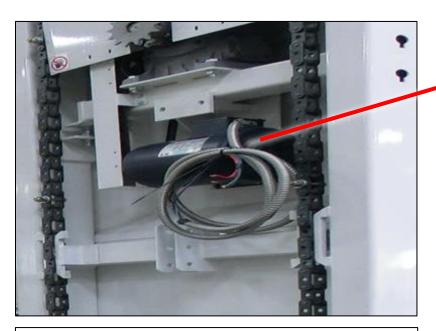
4. Infeed Emergency Stop (Left Side) - located to the left side of the safety door and just above the infeed roll support bracket, allows the operator to quickly stop the machine in case of any problems.

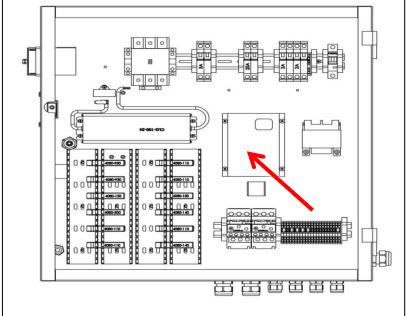


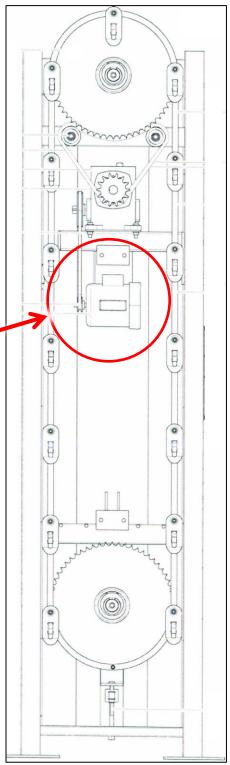
Motor Drives and Settings

The 1367S18S machine has two motor drives. The following images below show the physical drive locations. One ACTech frequency inverter controls both motors. The table on the proceeding pages of this manual shows the drive machine parameters and their settings. These parameters may vary slightly based on the final installation requirements. To edit these drive parameters, refer to "Programming ACTech SCL/SCM Drive" on page 29. If the parameters have to be modified, record the new settings and keep them with this manual for future reference.

Note: Do not change any of the other drive parameters, leave them as defaults.







Programming ACTech SCL/SCM Drive (1367S18S Only)

The drive is already pre-programmed** with settings specifically for the 1367S18S Unit by Atlanta Attachment Co. These settings are listed in the chart on the following page. Password protection is currently disabled so that control of the parameters is immediately available to the user. After the controller settings have been "fine-tuned", you can use parameter 44 to set a password value between 1-999 to "lock" the control setting for the motors.

The buttons and display on the front of the motor controller can be used to change any specific parameter. Pressing the mode button will take you to the last parameter viewed. Parameters are designated with a "P" as the first character on the display. The arrow up and arrow down buttons will scroll through to the desired parameter. Pressing "Mode" displays the current parameter setting (point "above" decimal point blinks). This setting can be changed by using the arrow up and arrow down buttons. When the desired setting is found press the mode button to store the new value. This will store the new value and exit the program mode. To change another parameter value, press the mode key again and repeat the procedure.

**In the event the controller has not been pre-programmed by AAC, the default password from the factory is 225.

Every SCL/SCM Series drive has an Electronic Programming Module (EPM) installed on the main control board. The EPM stores the user's parameter settings and special OEM default settings (if programmed). The EPM is removable, allowing it to be installed in another drive for quick set-up. For example, if a drive is being replaced with a new one, the EPM can be taken out of the first drive and installed in the new drive. Downtime is minimized because the new drive does not require programming - it is ready to run when the EPM is installed.

NOTE: The drive will not operate without the EPM installed. The drive will display "F1" if the EPM is missing or damaged.

WARNING!

Do not remove the EPM while power is applied to the drive. Damage to the EPM and/or drive may result.

See tables on following pages...

Carousel Drive Motor Parameters Menu (INV 1)

AAC custom setting shown in last column.

NO.	PARAMETER NAME	RANGE OF ADJUSTMENT	FACTORY DEFAULT	AAC SETTING
01	LINE VOLTAGE	High (01), LOW (02)	HIGH (01)	02
02	CARRIER FREQUENCY	4kHz (01), 6kHz (02), 8 kHz (03), 10 kHZ (04)	6 kHZ (02)	04
03	START METHOD	NORMAL (01), START ON POWER UP (02), START WITH DC BRAKE (03), AUTO RESTART WITH DC BRAKE (04), FLYING RESTART 1 (05), FLYING RESTART 2 (06), FLYING RESTART 3 (07)	NORMAL (01)	
04	STOP METHOD	COAST (01), COAST W/ DC BRAKE (02), RAMP (03), RAMP W/ DC BRAKE (04)	COAST (01)	04
05	STANDARD SPEED SOURCE	KEYPAD (01), PRESET #1 (02), 0-10VDC (03), 4-20mA (04)	KEYPAD (01)	02
06	RELAY OUTPUT	NONE (01), RUN (02), FAULT (03), INVERSE FAULT (04), FAULT LOCKOUT (05), AT SET SPEED (06), ABOVE PRESET #3 (07), CURRENT LIMIT (08), AUTO SPEED (09), REVERSE (10)	NONE (01)	06
10	TB-13A FUNCTION SELECT	NONE (01), 0-10 VDC (02), 4-20 mA (03), PRESET SPEED #1 (04), START FORWARD (05), RUN REVERSE (06), START REVERSE (07), EXTERNAL FAULT (08), INVERSE EXT FAULT (09), AUXILARY STOP (10), ACCEL/DECEL #2 (11)	NONE (01)	06
11	TB-13B FUNCTION SELECT	NONE (01), 0-10 VDC (02), 4-20 mA (03), PRESET SPEED #2 (04), DECREASE FREQ (05), START FORWARD (06), JOG FORWARD (07), JOG REVERSE (08), EXTERNAL FAULT (09), INVERSE EXT FAULT (10), AUXILARY STOP (11), ACCEL/DECEL #2 (12), REMOTE KEYPAD (13)	NONE (01)	04
12	TB-13E INPUT FUNCTIONS TB-13 OUTPUT FUNCTIONS OTHER	NONE (01), 0-10 VDC (02), 4-20 mA (03), PRESET SPEED #3 (04), INCREASE FREQ (05), START FORWARD (06), EXTERNAL FAULT (07), INVERSE EXT FAULT (08), AUX STOP (09), ACCEL/DECEL #2 (10), RUN (11), FAULT (12), INVERSE FAULT (13), FAULT LOCKOUT (14), AT SET SPEED (15), ABOVE PRESET #3 (16), CURRENT LIMIT (17), AUTO SPEED (18), REVERSE (19), DYNAMIC BRAKING (20),	NONE (01)	04
	FUNCTIONS	REMOTE KEYPAD (21)		

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Technical Manual & Parts Lists

			Technical Manual & Parts Lists	
14	CONTROL	TERMINAL STRIP ONLY (01) REMOTE KEYPAD ONLY (02)	TERMINAL STRIP ONLY (01)	
16	UNITS EDITING	TENTHS OF UNITS (01), WHOLE UNITS (02)	WHOLE UNITS (02)	
17	ROTATION	FORWARD ONLY (01), FORWARD AND REVERSE (02)	FORWARD ONLY (01)	02
19	ACCELERATION TIME	0.1 - 3600.0 SEC	20.0 SEC	1.0
20	DECELERATION TIME	0.1 - 3600.0 SEC	20.0 SEC	0.2
21	DC BRAKE TIME	0.0 - 3600.0 SEC	0.0 SEC	0.5
22	DC BRAKE VOLTAGE	0.0 - 30.0%	0.0 %	1.5
23	MINIMUM FREQUENCY	0.0 - MAXIMUM FREQUENCY	0.0 Hz	
24	MAXIMUM FREQUENCY	MINIMUM FREQUENCY - 240 Hz	SCL = 50.0 Hz SCM = 60.0 Hz	60
25	CURRENT LIMIT	30 - 180 %	180 %	150
26	MOTOR OVERLOAD	30 - 100 %	100 %	
27	BASE FREQUENCY	25.0 - 500 Hz	SCL = 50.0 Hz SCM = 60.0 Hz	60
28	FIXED BOOST	0.0 - 30.0 %	1.0 %	20
29	ACCEL BOOST	0.0 - 20.0 %	0.0 %	
30	SLIP COMPENSATION	0.0 - 5.0 %	0.00%	
31	PRESET SPEED	0.0 - MAXIMUM FREQUENCY	0.0 Hz	50
32	PRESET SPEED	0.0 - MAXIMUM FREQUENCY	0.0 Hz	10
33-37			0.0	0.0
38	SKIP BANDWIDTH	0.0 - 10 Hz	0.0 Hz	
39	SPEED SCALING	0.0 - 6500.0	0.0	
42	ACCEL/DECEL #2	0.1 - 3600.0 SEC	20.0 SEC	
44	PASSWORD	000 - 999	225	*000
45	SPD AT MIN SIGNAL	MINIMUM FREQUENCY - 999 Hz	0.0 Hz	
46	SPD AT MAX SIGNAL	MINIMUM FREQUENCY - 999 Hz	SCL = 50.0Hz SCM = 60.0Hz	
47	CLEAR HISTORY	MAINTAIN (01), CLEAR (02)	MAINTAIN (01)	

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Technical Manual & Parts Lists

48	PROGRAM SELECTION	USER SETTINGS (01), OEM SETTINGS (02), RESET OEM (03), RESET 60 (04), RESET 50 (05), TRANSLATE (06)	SCL = RESET 50 (05) SCM = RESET 60 (04)				
50	FAULT HISTORY	(VIEW ONLY)	(N/A)				
51	SOFTWARE CODE	(VIEW ONLY)	(N/A)				
52	DC BUS VOLTAGE	(VIEW ONLY)	(N/A)				
53	MOTOR VOLTAGE	(VIEW ONLY)	(N/A)				
54	LOAD VOLTAGE	(VIEW ONLY)	(N/A)				
55	0-10 VDC INPUT	(VIEW ONLY)	(N/A)				
56	4-20mA INPUT	(VIEW ONLY)	(N/A)				
57	TB STRIP STATUS	(VIEW ONLY)	(N/A)				
58	KEYPAD STATUS	(VIEW ONLY)	(N/A)				
* PASSWORD IS SET TO "000" WHICH DISABLES THE PASSWORD FUNCTION							

Carousel Drive Chain Tension

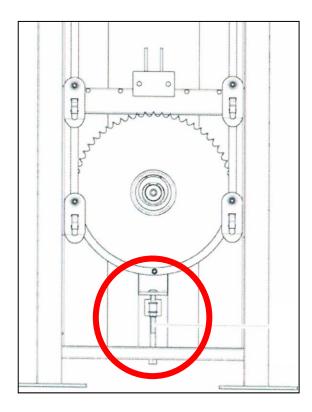
Chains are responsible for synchronized movement of the tick roll hangers. **Both sides** of the carousel drive chains must be checked for proper tension.

To check tension and adjust if needed:



Inspect the drive chain for wear, proper alignment and tension. The maximum deflection of the hanger chains should not exceed 1/8". Inspect the main load chain and tighten if it is too loose. With the carousel loaded, the chain should not sag more than 1" from the bottom chain guard.

Note: Tension should be checked every month.





Maintenance

Under normal operating circumstances, the 1367S18S machine does not require much maintenance. The following list outlines the normal machine maintenance that should be performed on periodic bases to keep the machine in a good working order:

Daily

- 1. Clean and blow off lint from carousel drive chain (Both sides)
- 2. Visually inspect each loaded hanger to ensure that the roll plastic is free from the roll and hanger ends to prevent the plastic from getting caught in the carousel drive chains It is recommended to use Velcro straps to keep rolls from unwinding during carousel movement.
- 3. Visually inspect hangers for loose nuts and hardware, secure if needed
- 4. During machine operation, listen for any unusual noises and watch for any uncommon machine behavior like the drive chain jumping or jerking on either side of the carousel
- 5. Clean the machine and remove any plastic film scraps or other debris. They may cause mechanism to jam and potentially fail.

Weekly

- 1. Check the main air supply filter for any accumulation of oil or debris. Empty the filter bowl before it is filled to the maximum level indicated on the side of the bowl
- 2. Check the smoothness and synchronized movement of the left and right chains
- 3. Check for oil leaks around the left and right motor gearboxes
- 4. Check the left and right drive chain for proper alignment and tension
- 5. Check all safety guards and covers to ensure they are tight and mounted properly

Monthly

- 1. Check the motor drive belt tension on left and right carousel motors. Adjust as needed. To tighten belt, loosen the four bolts on the motor, move the motor down, and then re-tighten to bolts.
- 2. Check hanger drive chain alignment and inspect for chain wear
- 3. Lubricate carousel hangers & hanger bolts with a spray lithium grease
- 4. Lubricate chains with lightweight oil. Apply the oil to the chain using an oil soaked sponge and wipe off excess oil with dry rag. PLEASE USE EXTREME CAUTION IF INDEXING THE MACHINE WHILE OILING THE CHAIN.



- 1. Check all carousel bearings and inspect for wear.
- 2. Inspect all motor and gearbox mounting bolts to ensure they are secure
- 3. Check gearbox oil levels and condition, refill as needed.
- 4. Check motor drive belt tension and alignment. Inspect for wear. Replace as needed.
- 5. Check motor pulley and sprocket set screws to ensure they are tight
- 6. Check the left and right hanger chain master link cotter pins for wear
- 7. Check all air cylinders on the load and unload frame for smooth operation
- 8. Clean all lint from splicing station linear rail and bearing. Lubricated bearing if needed.
- 9. Blow off and clean all photo sensors, check alignment, and verify they are working properly.

Troubleshooting

Machine does not power up when the Power ON button is pressed.

- 1. Check to make sure all four Emergency Stops are pulled out and operational.
- 2. Check to make sure the main disconnect switch is turned on
- 3. Check and reset the circuit breakers
- 4. Check to make sure the carousel machine load is evenly balanced. If one of the carousel motors has been overloaded, the thermal overload may have tripped. Press the reset button on the motor overload to reset. Check machine for any possible drive blockage, hanger crash or debris caught in carousel chain before restarting machine.

Carousel is noisy or squeaking

- 1. Tighten set screws on pulley and/or tighten motor drive belt (Replace belt if necessary)
- 2. Check for correct chain alignment
- 3. Oil hanger and drive chains

Proximity Switches

All proximity switches used on the 1367S18S machine have 8mm sensing range. The distance between the end of the sensor and the target flag should be set at about 5/32" for best performance. Refer to Fig. 10. This includes the HOME POSITION sensor shown in Fig. 11, the FETCH EXTEND OK sensor shown in Fig. 12 and the FETCH RETRACT OK sensor shown in Fig. 12.

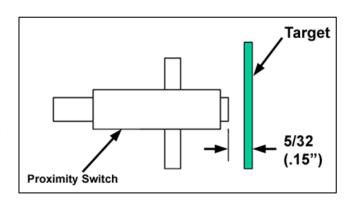


Figure 10





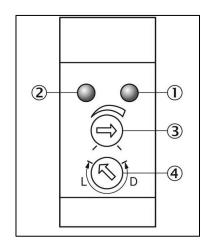


Figure 12

Photo Eyes

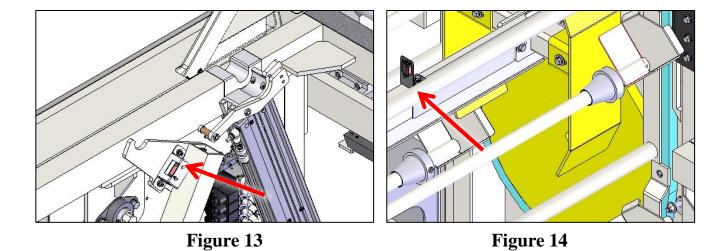
All adjustable field photo eyes on the 1367S18S machine are set to Light operated mode. These type of photo sensors do not need a reflector to operate.

- 1. LED display orange: Switching Output Active
- 2. LED display green: Stable Indicator
- 3. Scanning distance adjuster (270°) (0" to 35")
- 4. Light/dark rotary switch: L = light-switching D = dark-switching



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The adjustable field photo eyes are located in two places on the carousel. The first location is on the left side fetch/return arm. Refer to Figure 13. This sensor checks to see if a roll is present in the fetch/return arm. The second location is inside the carousel on the left hand side. Refer to Figure 14. This sensor looks for a roll to be present at the fetch/return location on the carousel hanger.



Assembly Drawings & Parts Lists

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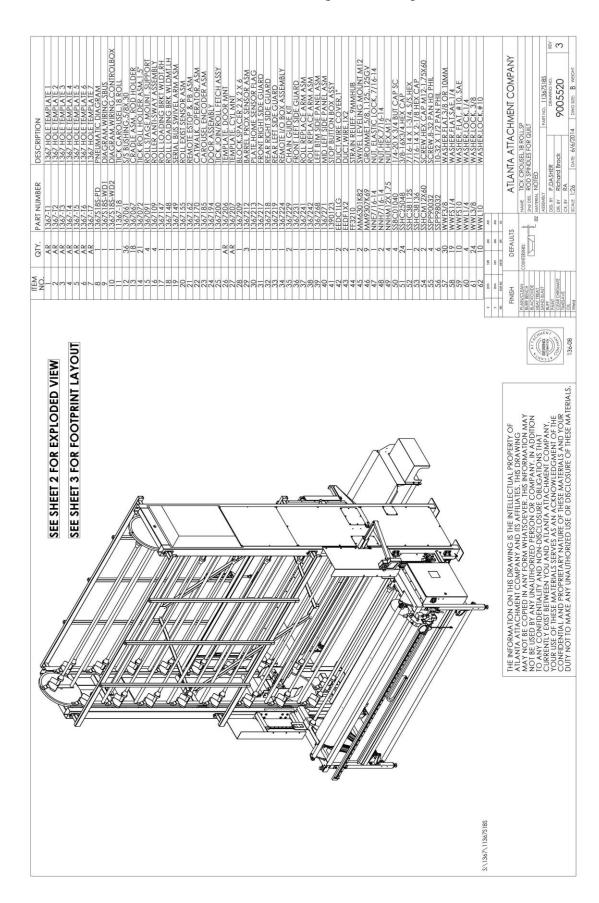
One-Stop Shopping

For Expendable Replacement Parts for AAC & Other Bedding Equipment Suppliers

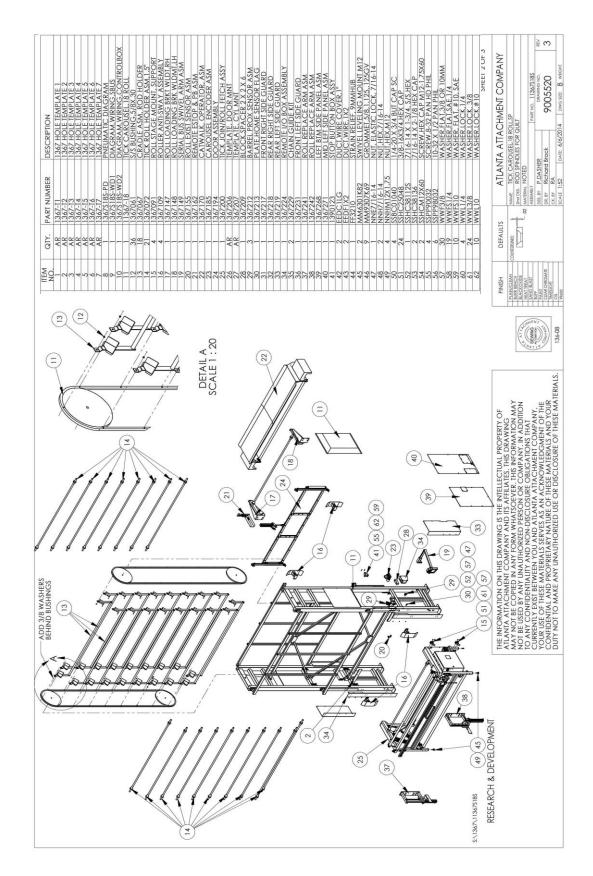
Toll Free: 1-866-885-5100

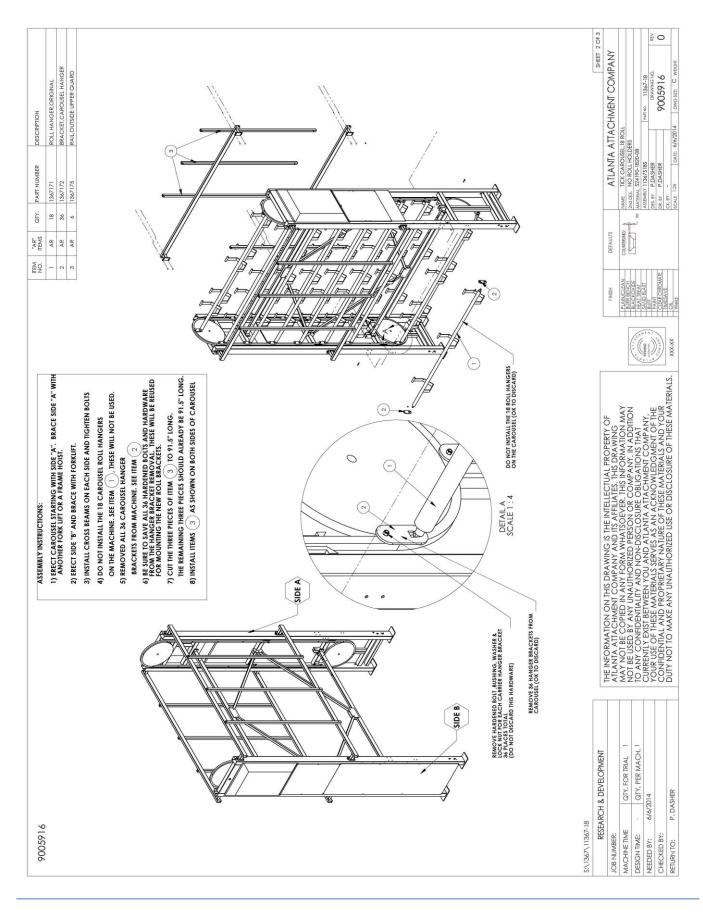
www.atlantapartsdepot.com • sales@atlantapartsdepot.com

1367S18S - Tick Carousel,18 Roll (Sheet 1)

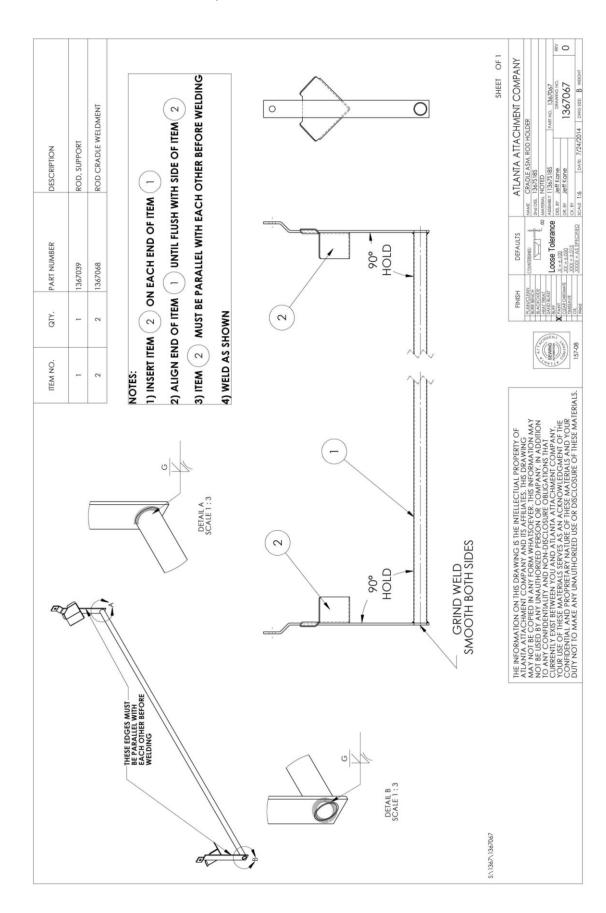


1367S18S - Tick Carousel,18 Roll (Sheet 2)

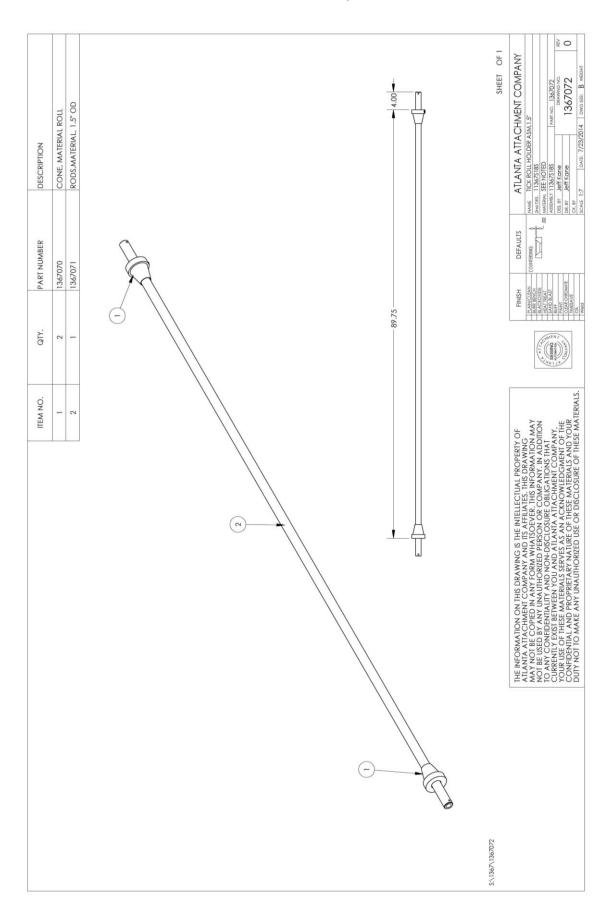




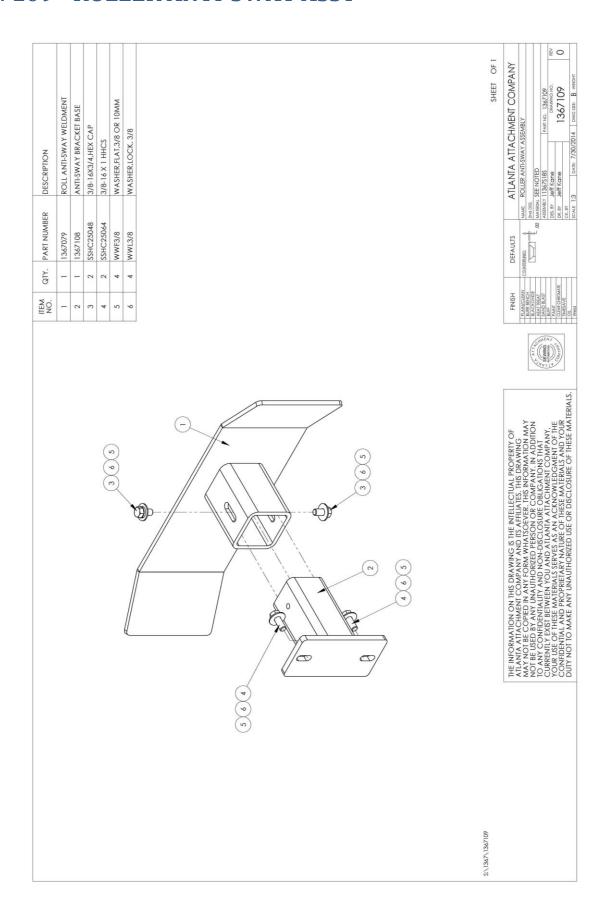
1367067 - CRADLE ASM, ROD HOLDER



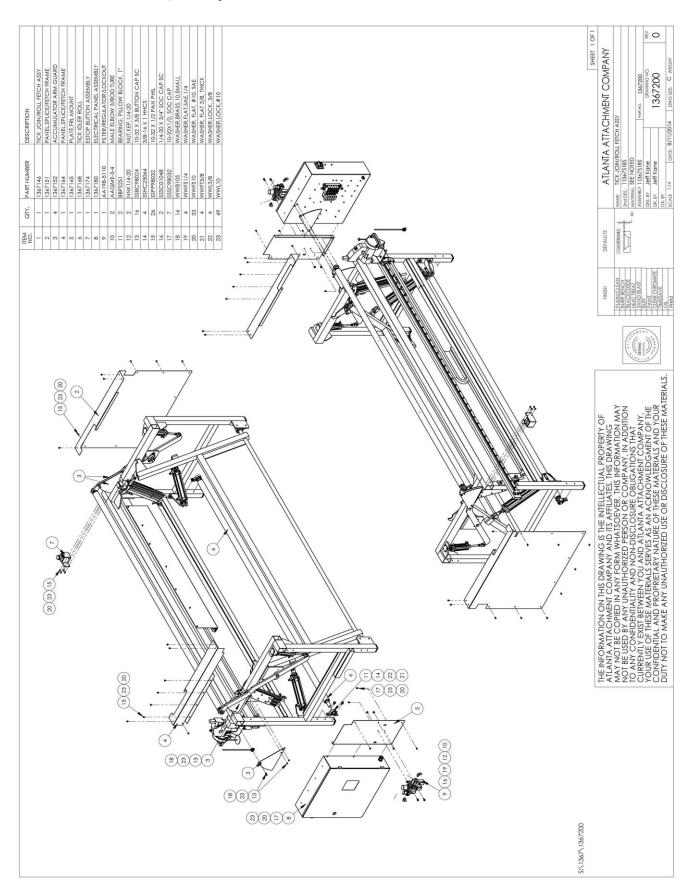
1367072 - TICK ROLL HOLDER ASM, 1.5"



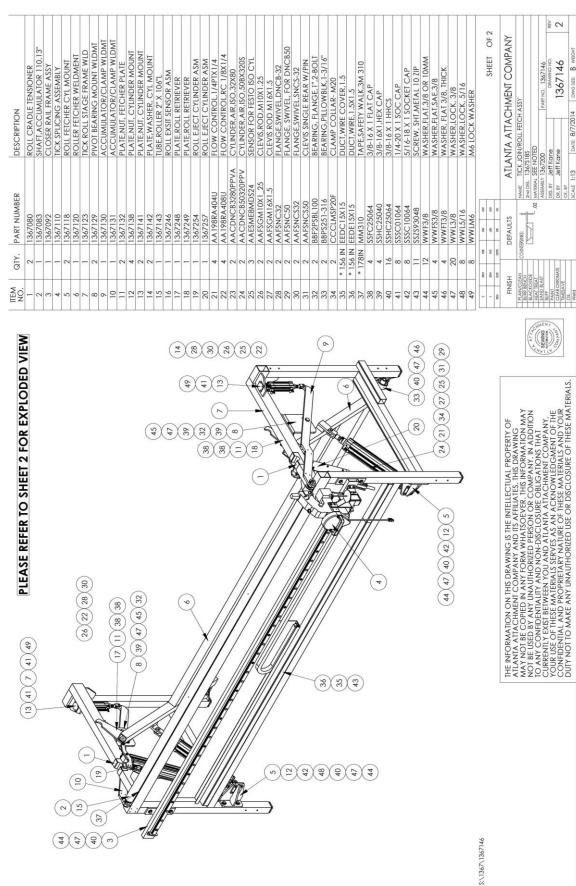
1367109 - ROLLER ANTI-SWAY ASSY



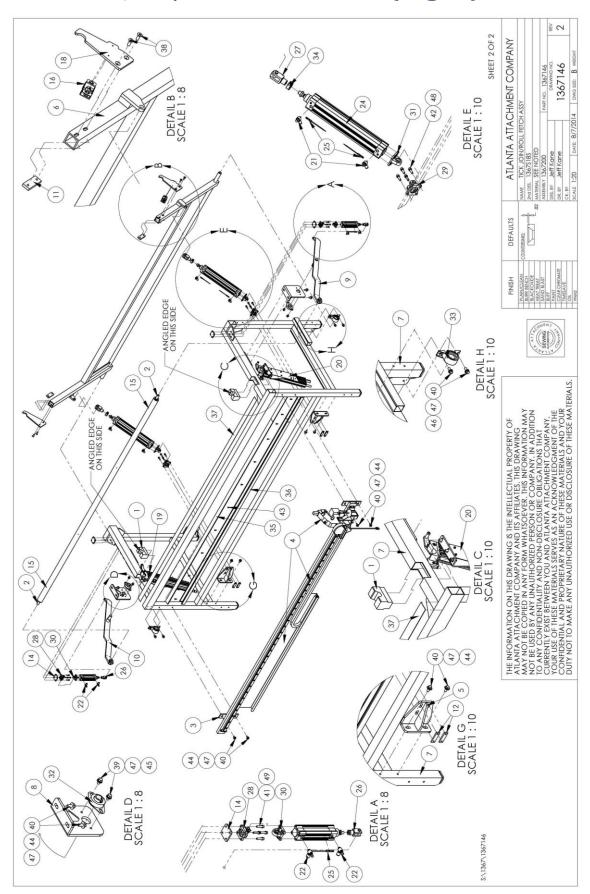
1367200 - TICK JOIN/ROLL FETCH ASSY



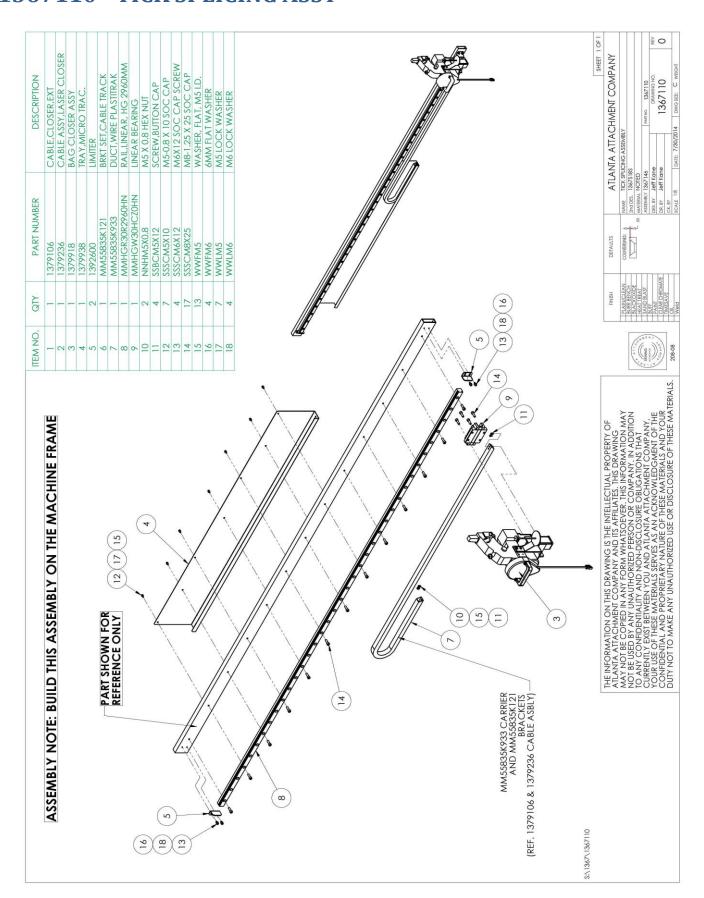
1367146 - TICK JOIN/ROLL FETCH ASSY (Page 1)



1367146 - TICK JOIN/ROLL FETCH ASSY (Page 2)

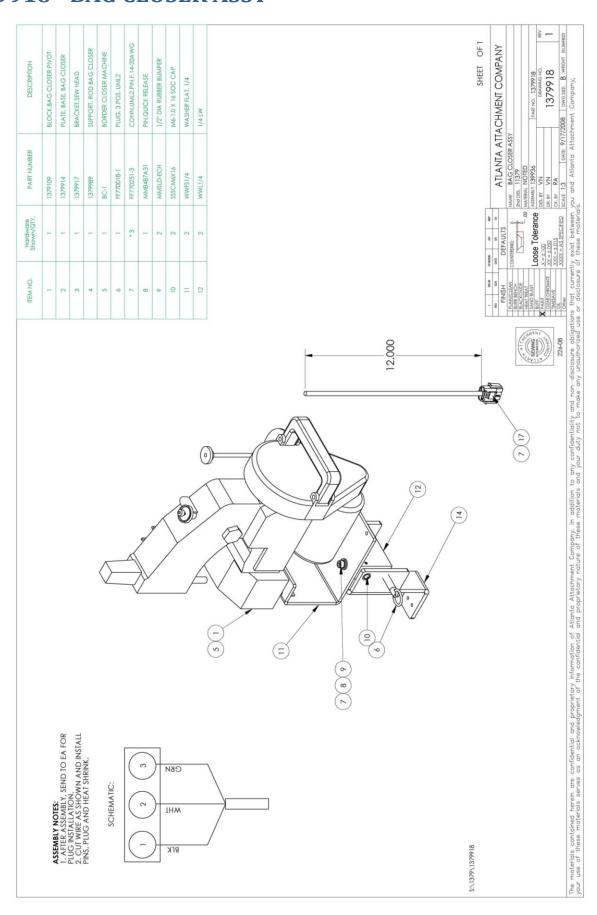


1367110 - TICK SPLICING ASSY

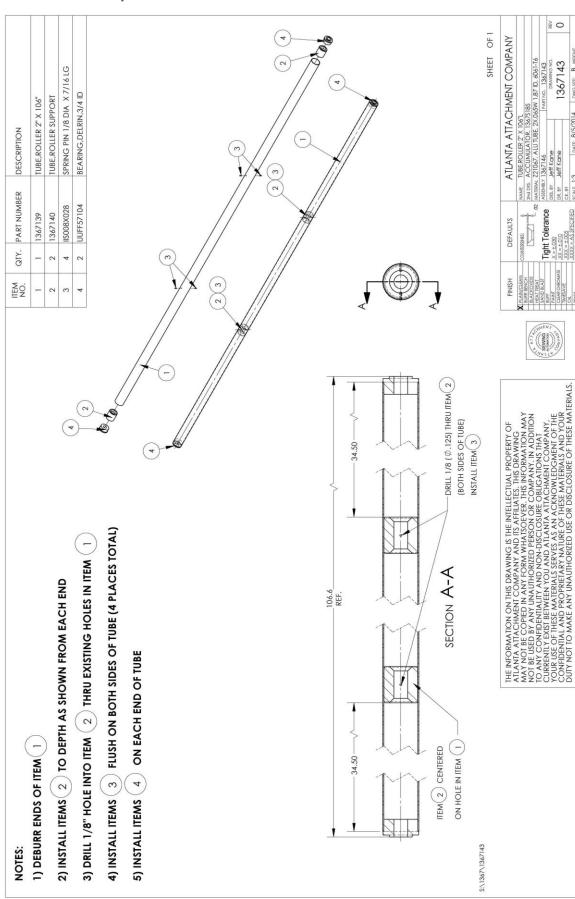


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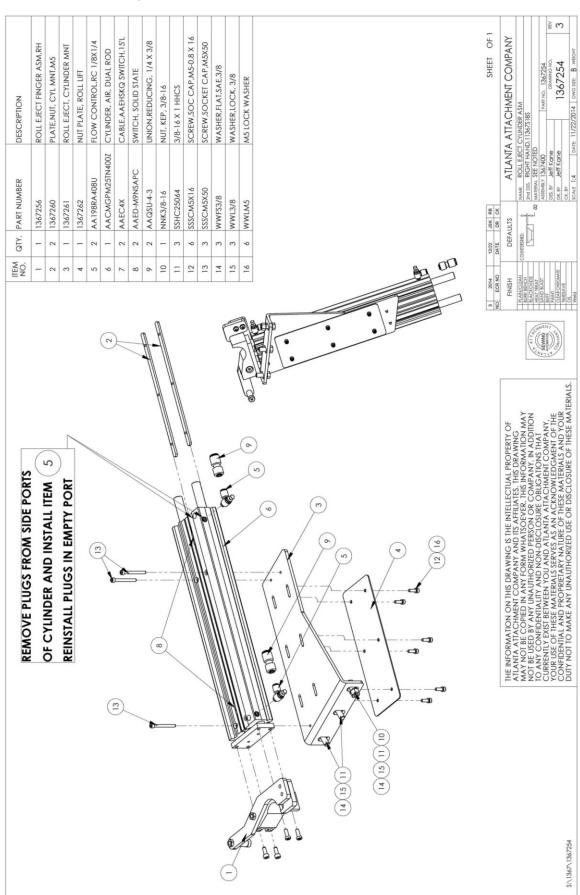
1379918 - BAG CLOSER ASSY



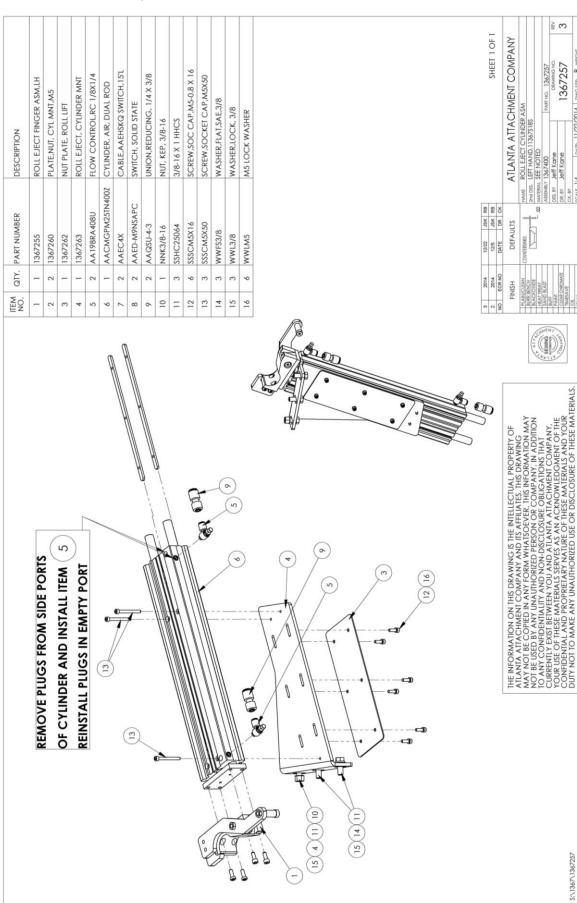
1367143 - TUBE, ROLLER 2 X 106



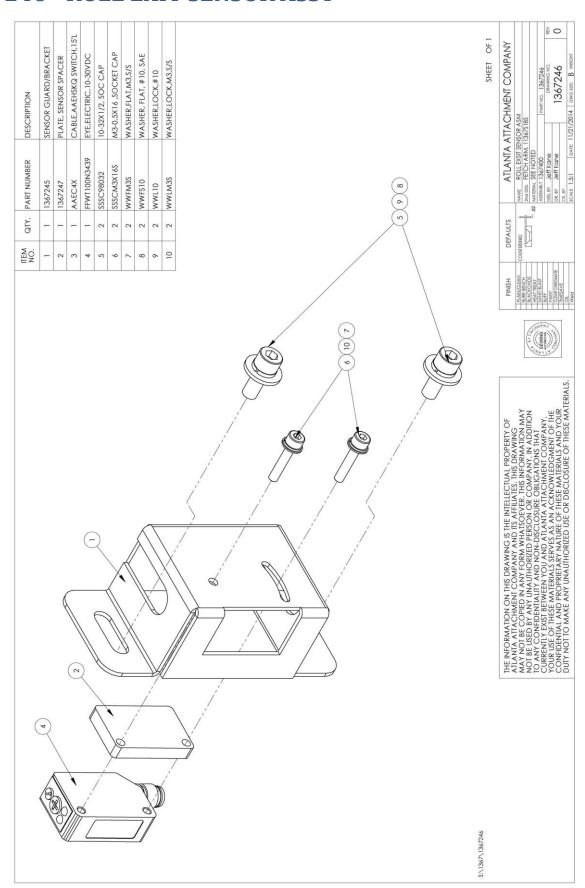
1367254 - ROLL EJECT CYLINDER ASSY, RH



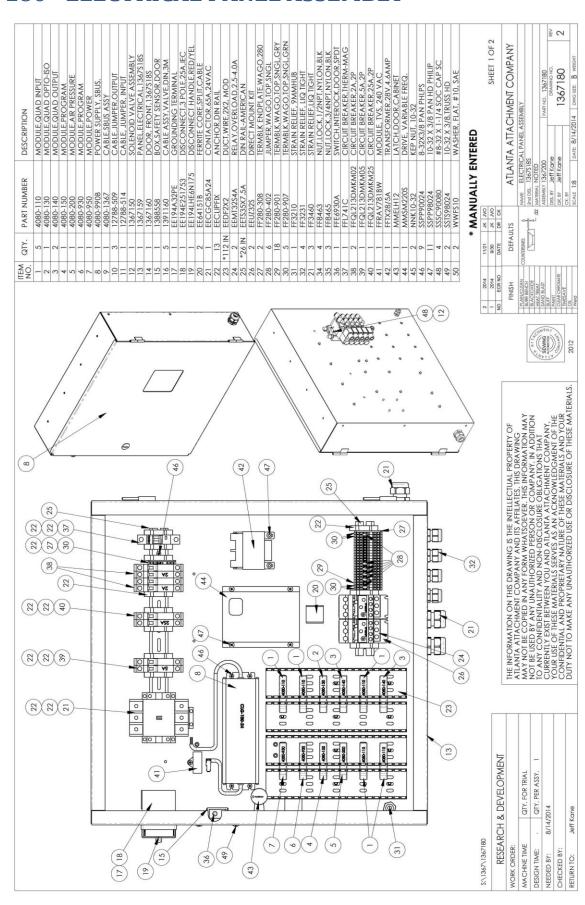
1367257 - ROLL EJECT CYLINDER ASSY, LH



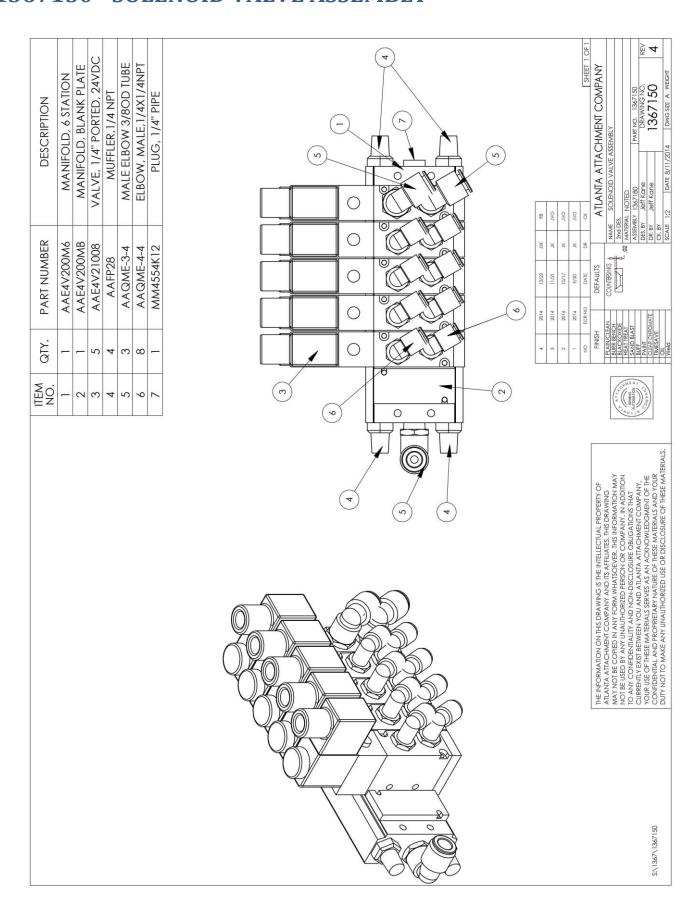
1367246 - ROLL EXIT SENSOR ASSY



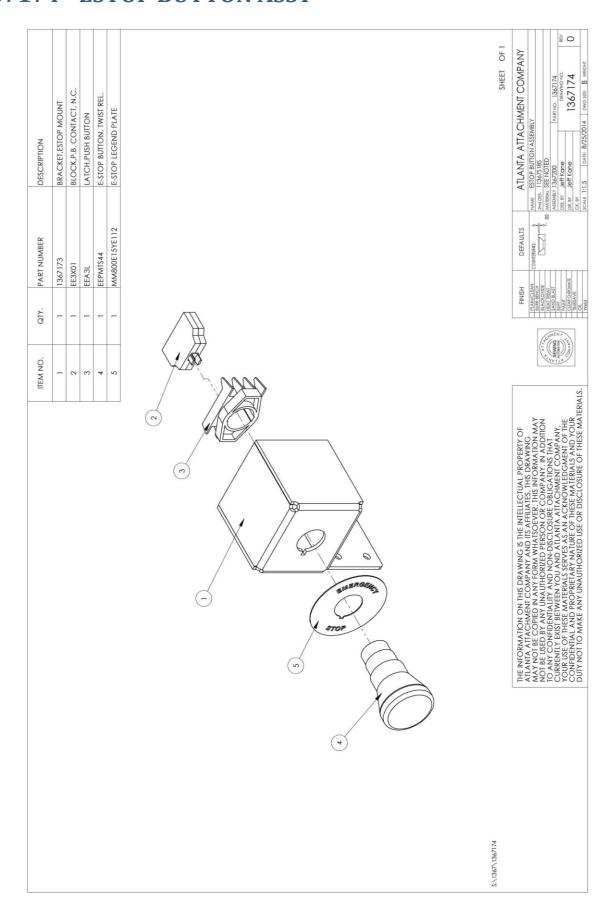
1367180 - ELECTRICAL PANEL ASSEMBLY



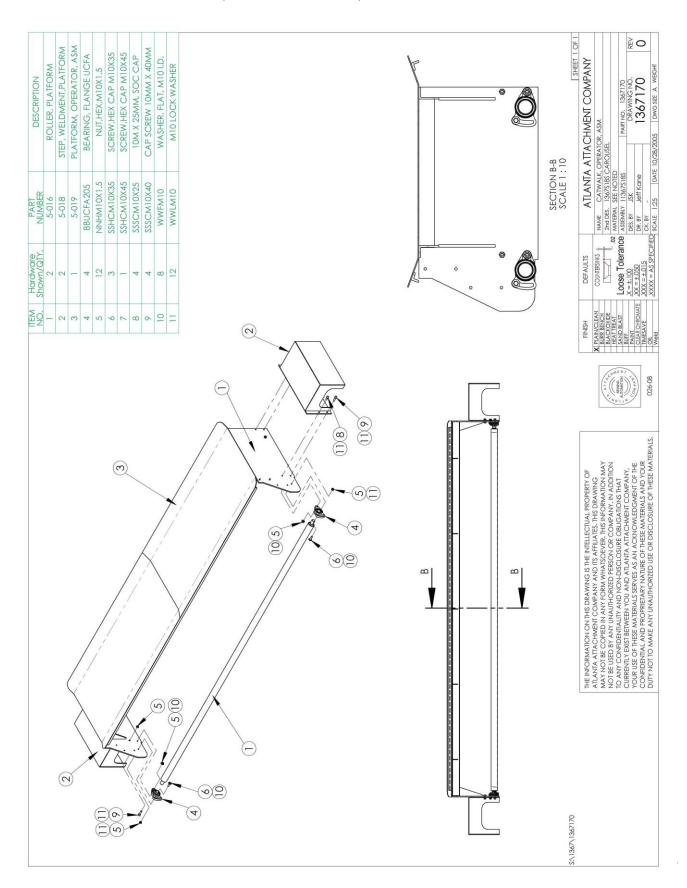
1367150 - SOLENOID VALVE ASSEMBLY



1367174 - ESTOP BUTTON ASSY

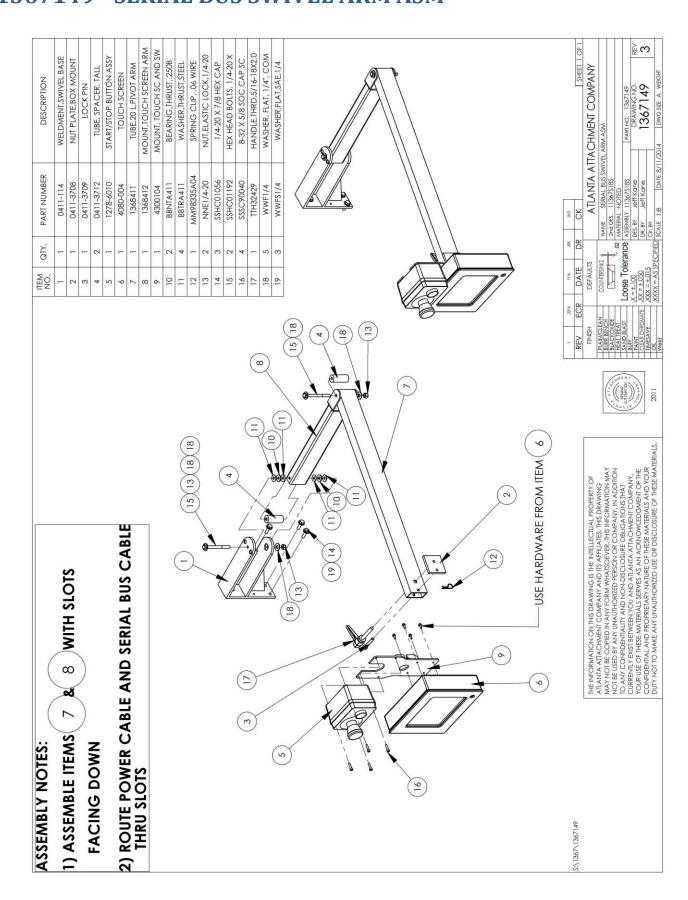


1367170 - CATWALK, OPERATOR, ASM

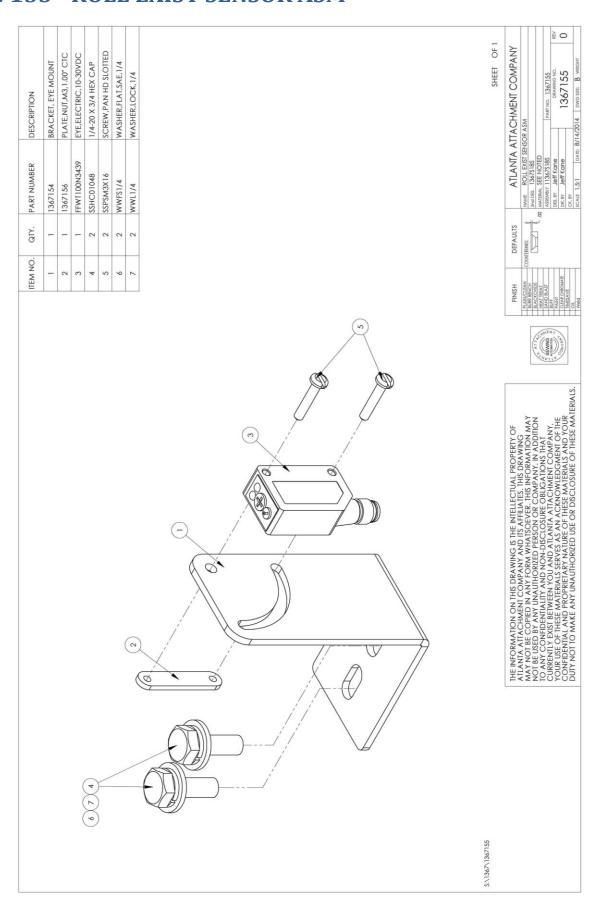


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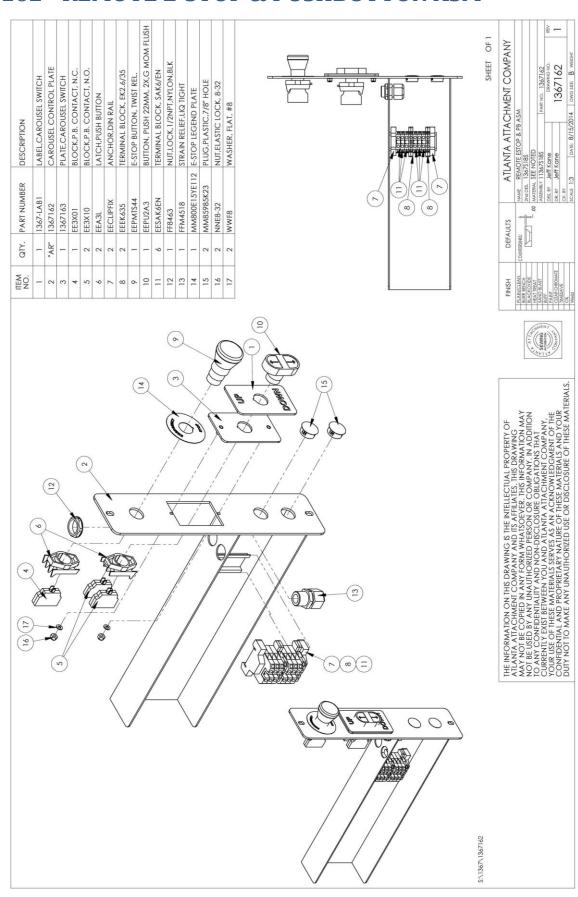
1367149 - SERIAL BUS SWIVEL ARM ASM



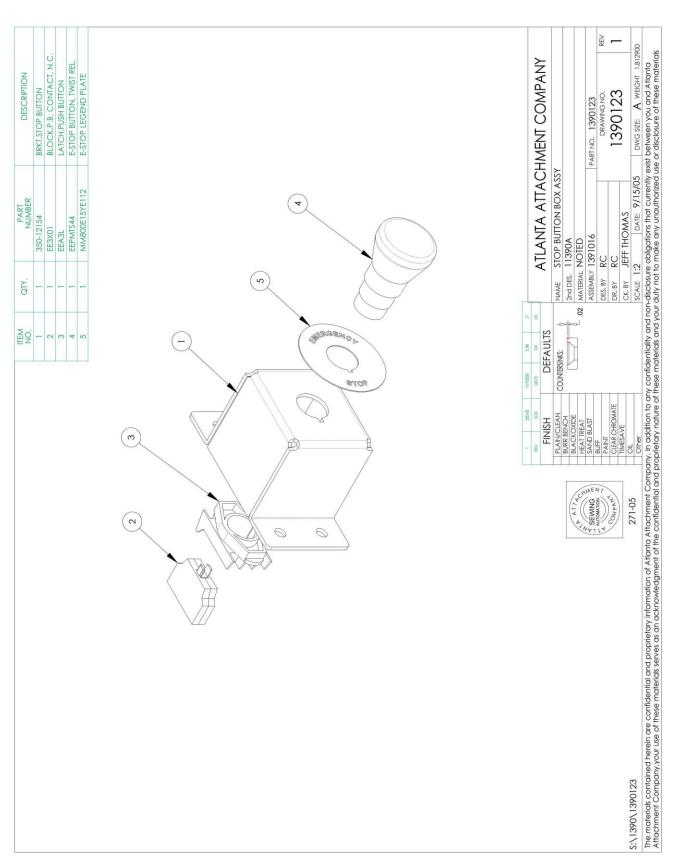
1367155 - ROLL EXIST SENSOR ASM



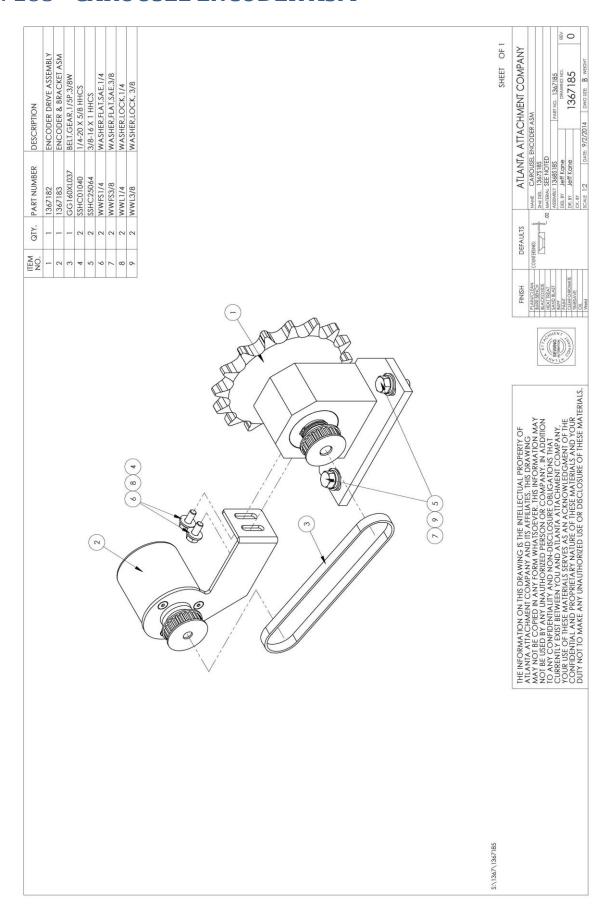
1367162 - REMOTE E-STOP & PUSHBUTTON ASM



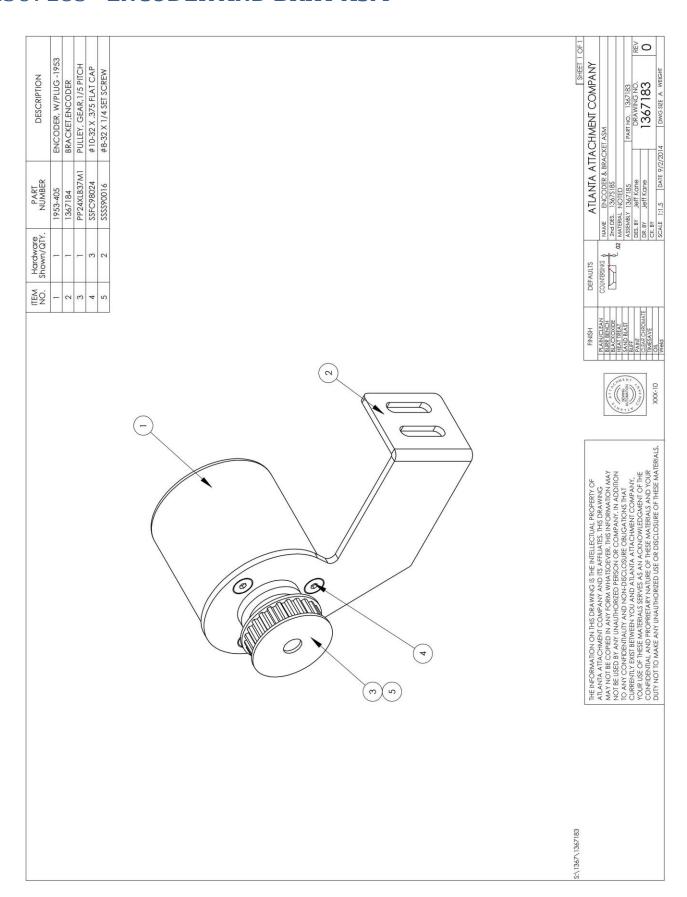
1390123 - STOP BUTTON BOX ASSY



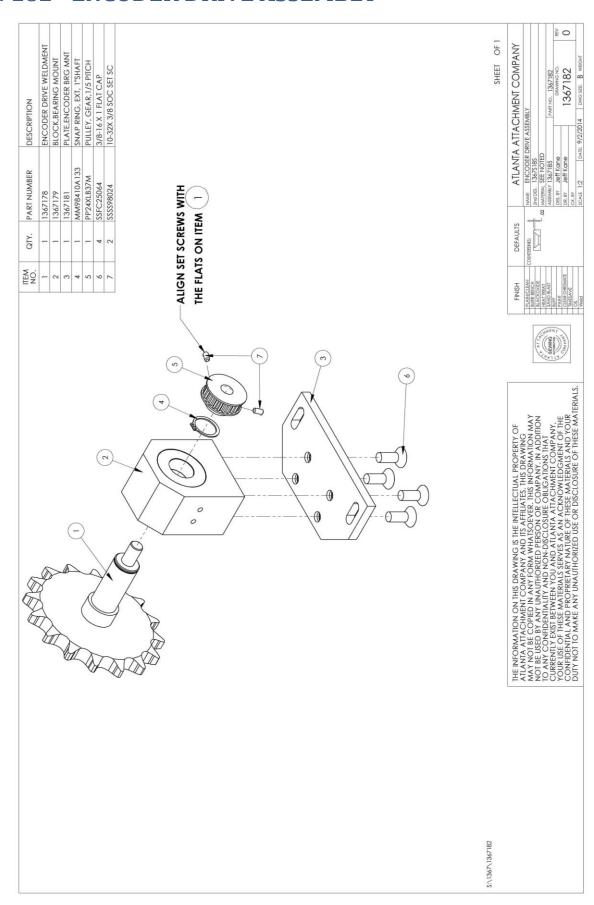
1367185 - CAROUSEL ENCODER ASM



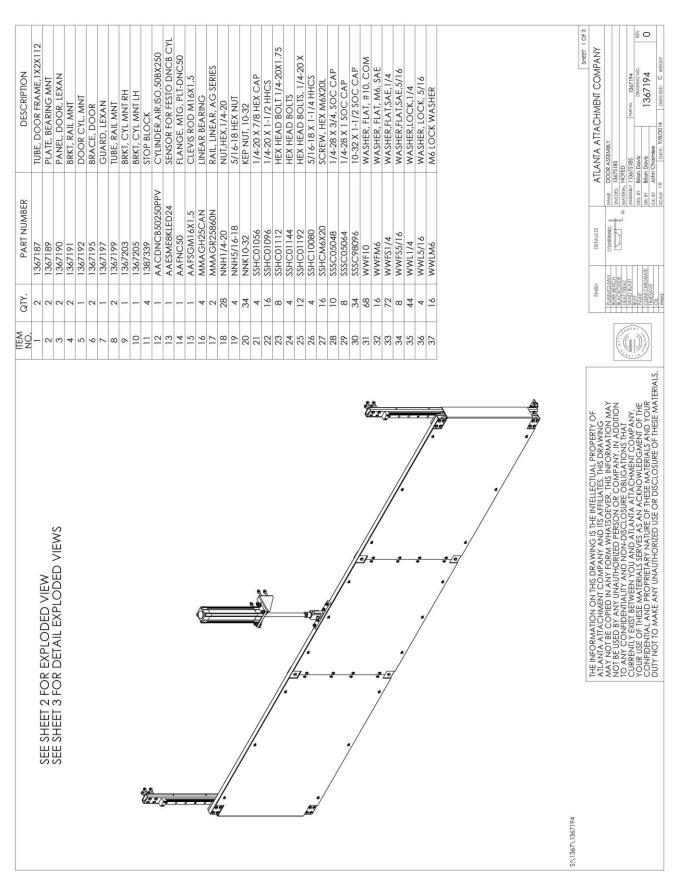
1367183 - ENCODER AND BRKT ASM



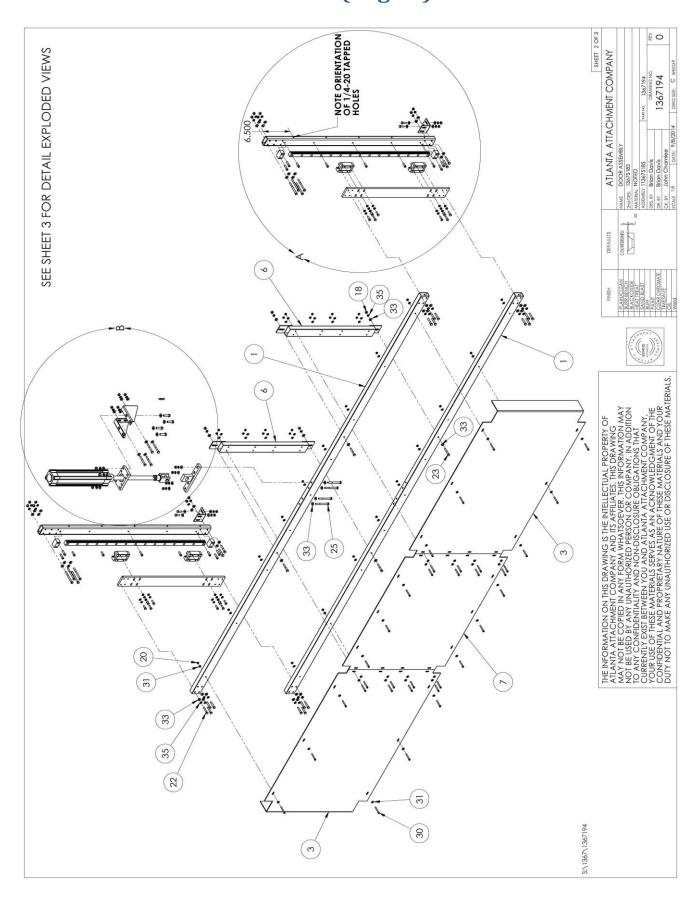
1367182 - ENCODER DRIVE ASSEMBLY



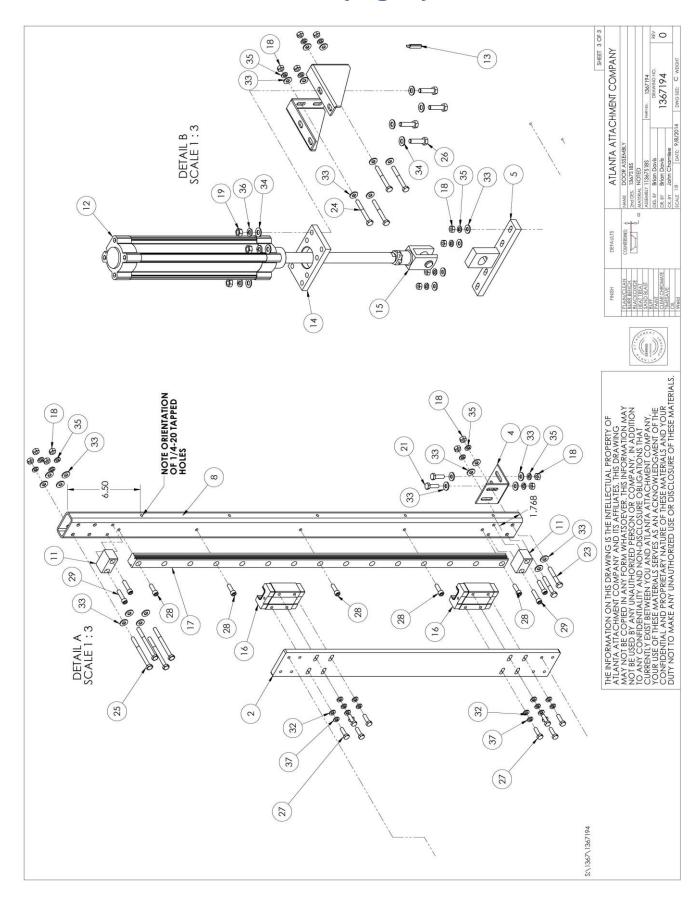
1367194 - SAFETY DOOR ASSY (Page 1)



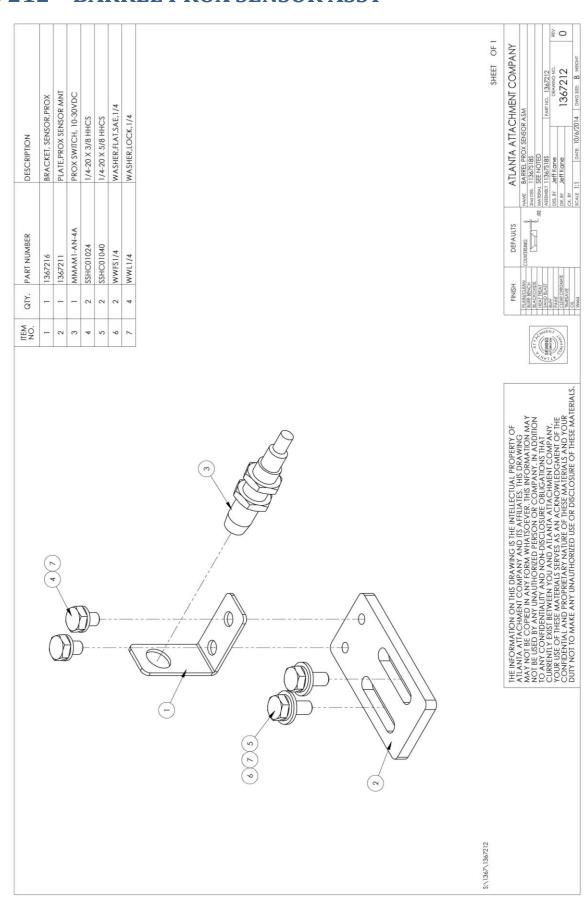
1367194 - SAFETY DOOR ASSY (Page 2)



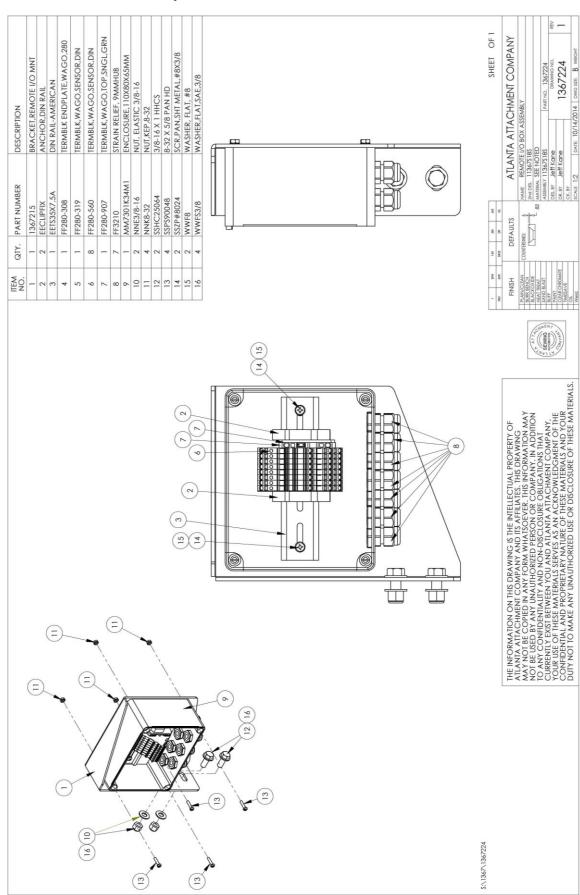
1367194 - SAFETY DOOR ASSY (Page 3)



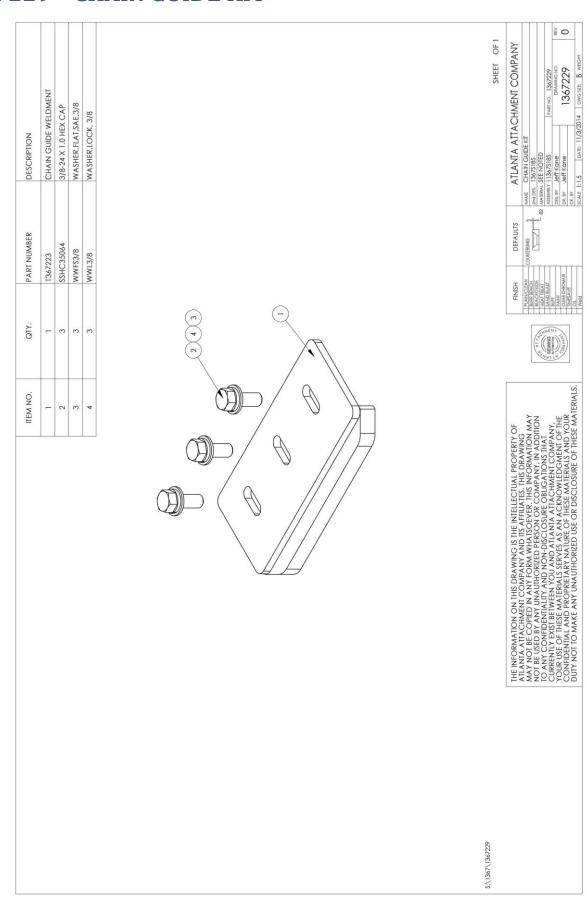
1367212 - BARREL PROX SENSOR ASSY



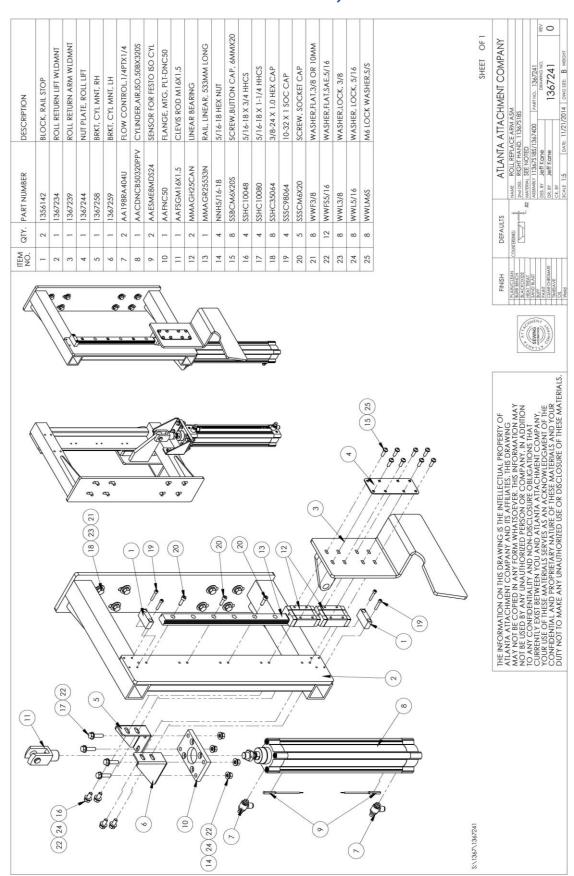
1367224 - REMOTE I/O BOX ASSY



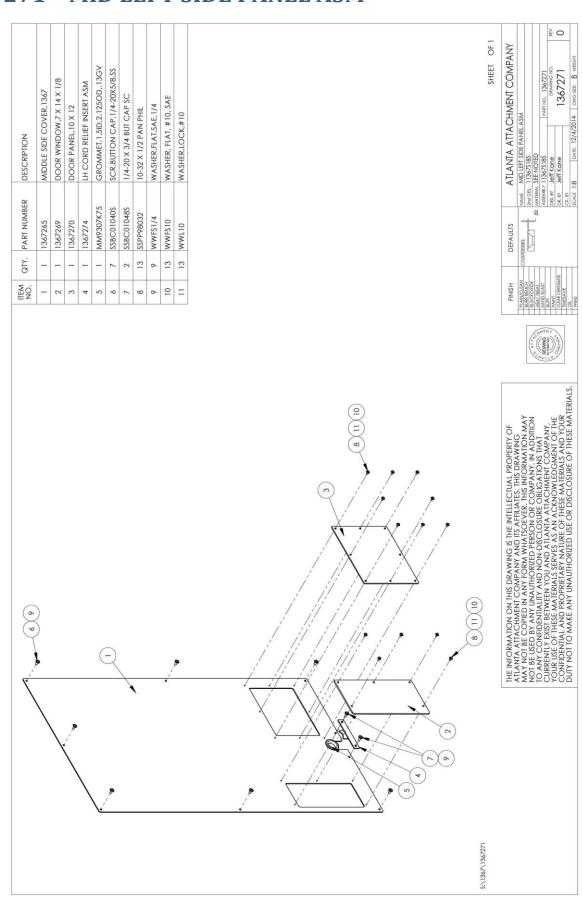
1367229 - CHAIN GUIDE KIT



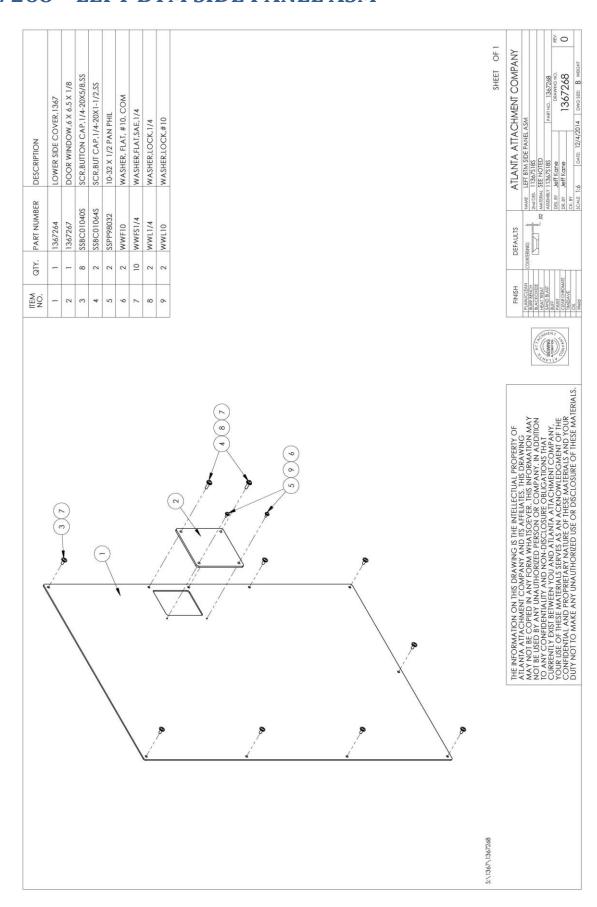
1367241 - ROLL REPLACE ARM ASM, RH



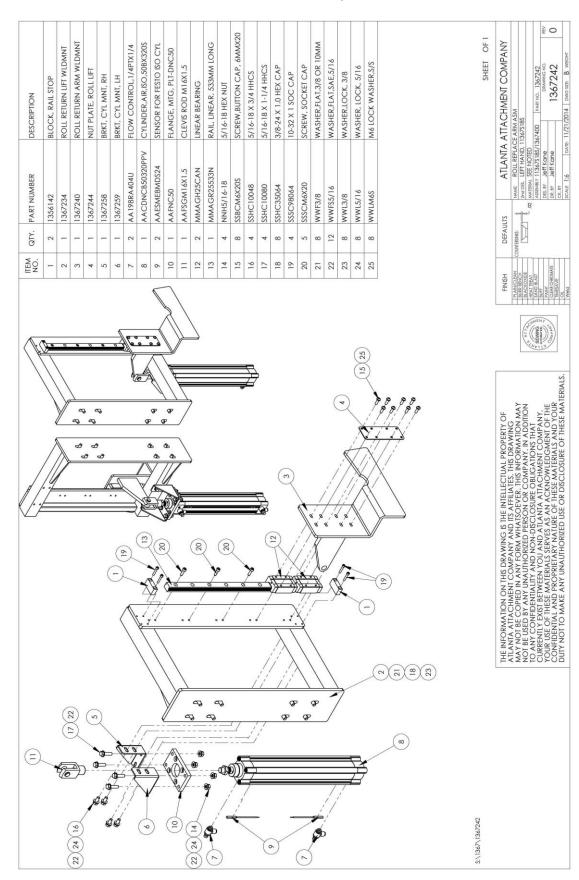
1367271 - MID LEFT SIDE PANEL ASM



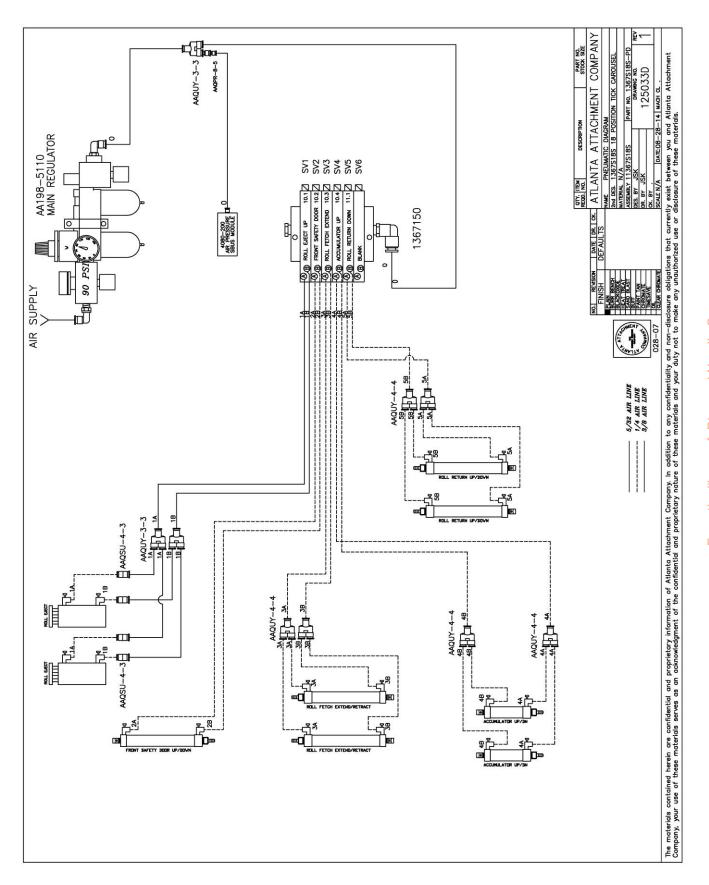
1367268 - LEFT BTM SIDE PANEL ASM



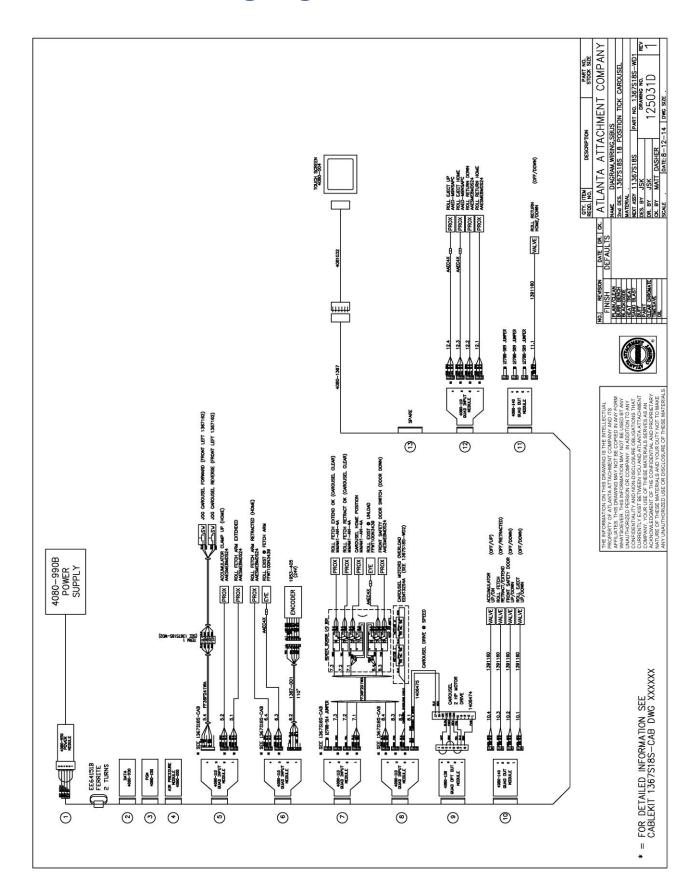
1367242 - ROLL REPLACE ARM ASM, LH



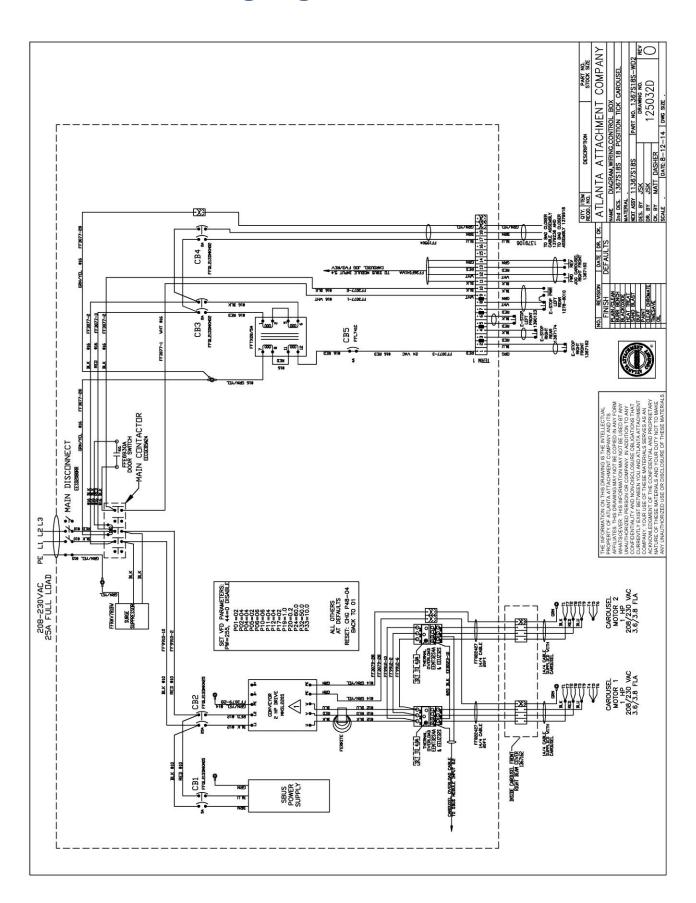
1367S18S -PD1 Pneumatic Diagram



1367S18S -WD1 Wiring Diagram, SBUS



1367S18S -WD2 Wiring Diagram, Control Box



Atlanta Attachment Company (AAC) Statement of Warranty

Manufactured Products

Atlanta Attachment Company warrants manufactured products to be free from defects in material and workmanship for a period of eight hundred (800) hours of operation or one hundred (100) days whichever comes first. Atlanta Attachment Company warrants all electrical components of the Serial Bus System to be free from defects in material or workmanship for a period of thirty six (36) months.

Terms and Conditions:

- AAC Limited Warranty becomes effective on the date of shipment.
- AAC Warranty claims may be made by telephone, letter, fax or e-mail. All verbal claims must be confirmed in writing.
- AAC reserves the right to require the return of all claimed defective parts with a completed warranty claim form.
- AAC will, at its option, repair or replace the defective machine and parts upon return to AAC.
- AAC reserves the right to make the final decision on all warranty coverage questions.
- AAC warranty periods as stated are for eight hundred (800) hours or one hundred (100) days whichever comes first.
- AAC guarantees satisfactory operation of the machines on the basis of generally accepted industry standards, contingent upon proper application, installation and maintenance.
- AAC Limited Warranty may not be changed or modified and is not subject to any other warranty
 expressed or implied by any other agent, dealer, or distributor unless approved in writing by AAC in
 advance of any claim being filed.

What Is Covered

- Electrical components that are not included within the Serial Bus System that fail due to defects in material or workmanship, which are manufactured by AAC are covered for a period of eight hundred (800) hours.
- Mechanical parts or components that fail due to defects in material or workmanship, which are manufactured by AAC.
- Purchased items (sewing heads, motors, etc.) will be covered by the manufacturers (OEM) warranty.
- AAC will assist in the procurement and handling of the manufacturers (OEM) claim.

What Is Not Covered

- Parts that fail due to improper usage, lack of proper maintenance, lubrication and/or modification.
- Damages caused by; improper freight handling, accidents, fire and issues resulting from unauthorized service and/or personnel, improper electrical, plumbing connections.
- Normal wear of machine and parts such as Conveyor belts, "O" rings, gauge parts, cutters, needles, etc.
- Machine adjustments related to sewing applications and/or general machine operation.
- Charges for field service.
- Loss of time, potential revenue, and/or profits.
- Personal injury and/or property damage resulting from the operation of this equipment.

Declaración de Garantia

Productos Manufacturados

Atlanta Attachment Company garantiza que los productos de fabricación son libres de defectos de mate-rial y de mano de obra durante un periodo de ochocientos (800) horas de operación o cien (100) días cual llegue primero. Atlanta Attachment Company garantiza que todos los componentes del Serial bus son libres de defectos de material y de mano de obra durante un periodo de treinta y seis (36) meses.

Términos y Condiciones:

- La Garantía Limitada de AAC entra en efecto el día de transporte.
- Reclamos de la Garantía de AAC pueden ser realizados por teléfono, carta, fax o correo electrónico. Todo reclamo verbal tiene que ser confirmado vía escrito.
- AAC reserva el derecho para exigir el retorno de cada pieza defectuosa con un formulario de reclamo de garantía.
- AAC va, según su criterio, reparar o reemplazar las máquinas o piezas defectuosas devueltas para AAC.
- AAC reserva el derecho para tomar la decisión final sobre toda cuestión de garantía.
- Las garantías de AAC tiene una validez de ochocientas (800) horas o cien (100) días cual llega prim-ero.
- AAC garantiza la operación satisfactoria de sus máquinas en base de las normas aceptadas de la industria siempre y cuando se instale use y mantenga de forma apropiada.
- La garantía de AAC no puede ser cambiado o modificado y no está sujeto a cualquier otra garantía implicado por otro agente o distribuidor menos al menos que sea autorizado por AAC antes de cual-quier reclamo.

Lo Que Está Garantizado

- Componentes eléctricos que no están incluidos dentro del sistema Serial Bus que fallen por defectos de materiales o de fabricación que han sido manufacturados por AAC son garantizados por un peri-odo de ochocientas (800) horas.
- Componentes mecánicos que fallen por defectos de materiales o de fabricación que han sido manufacturados por AAC son garantizados por un periodo de ochocientas (800) horas.
- Componentes comprados (Motores, Cabezales,) son protegidos debajo de la garantía del fabricante.
- AAC asistirá con el manejo de todo reclamo de garantía bajo la garantía del fabricante.

Lo Que No Está Garantizado

- Falla de repuestos al raíz de uso incorrecto, falta de mantenimiento, lubricación o modificación.
- Daños ocurridos a raíz de mal transporte, accidentes, incendios o cualquier daño como resultado de servicio por personas no autorizados o instalaciones incorrectas de conexiones eléctricas o neumáti-cas.
- Desgaste normal de piezas como correas, anillos de goma, cuchillas, agujas, etc.
- Ajustes de la máquina en relación a las aplicaciones de costura y/o la operación en general de la máquina.
- Gastos de Reparaciones fuera de las instalaciones de AAC
- Pérdida de tiempo, ingresos potenciales, y/o ganancias.
- Daños personales y/o daños a la propiedad como resultado de la operación de este equipo.



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