



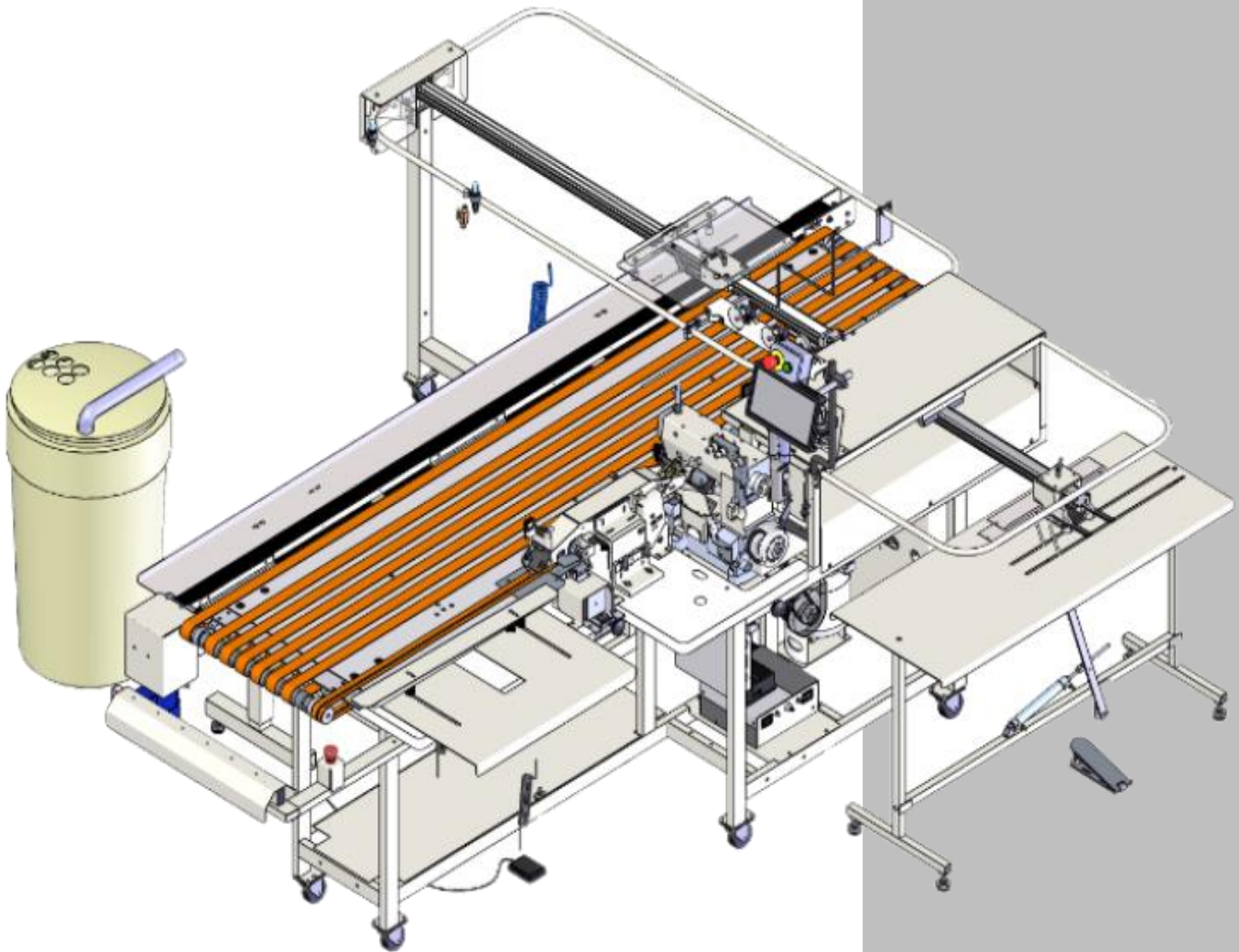
Model

# 213-ESG\_Y

## GateWay Controls

Revision 2 June 27, 2024(wr)

# Instruction Manual: English



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# Atlanta Attachment Company, Inc.

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This equipment is manufactured under one or more of the following patents:

4,280,421 • 4,432,294 • 4,466,367 • 4,644,883 • 5,134,947 • 5,159,889 • 5,203,270 •  
5,373,798 • 5,437,238 • 5,522,332 • 5,524,563 • 5,562,060 • 5,634,418 • 5,647,293  
•5,657,711 • 5,743,202 • 5,865,135 • 5,899,159 • 5,915,319 • 5,918,560 • 5,924,376  
•5,979,345 • 6,035,794 • 6,055,921 • 6,202,579 • 6,279,869 • 6,295,481 • 6,494,225  
•6,523,488 • 6,574,815 • 6,802,271 • 6,834,603 • 6,968,794 • 6,994,043 • 7,543,364  
•7,574,788 • 7,647,876 • 7,735,439

Foreign Patents: 9-520,472 • 0,537,323 • 92,905,522.6 • 96,936,922.2 • 2,076,379 •  
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## Safety Instruction



This part of the Instruction Material is provided for the safe use of your equipment. It contains valuable 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 Workstation 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.

## Safety

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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 conducted by dependable 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 conducted 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

## Safety

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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.

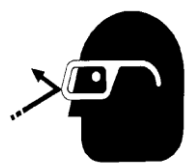
### Signs on the Machine

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 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 evaluated 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 main 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 main 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 main switch.

- Pneumatic / hydraulic energy - All our machines carry compressed air. In addition to switching off the main 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.

## Safety

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### **Delivery of the Machine/Packaging**

Note any markings on the packaging, such as weights, lifting points and specific 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.

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.

## Safety

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### 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 conducting 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 (main 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 conduct 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.

## Safety

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### Ventilation/Hazardous Gases

It is the end user's 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 conducted 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 retrofitted in accordance with 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, 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.

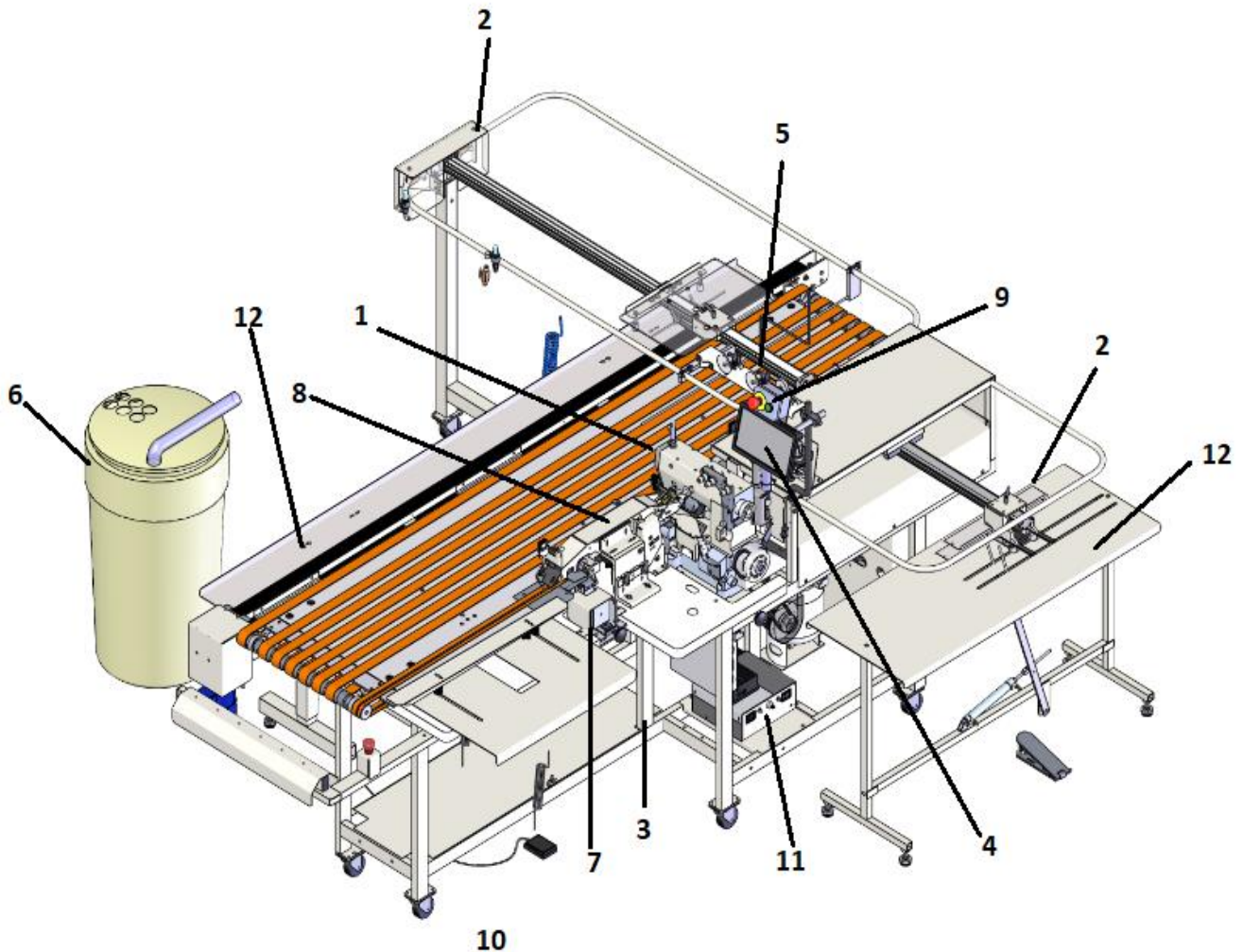
ALWAYS wear adequate eye protection when servicing the hydraulic system and battery.

- 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. Trained personnel should perform repairs or maintenance 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.

# 1. INSTALLATION

**NOTE:** It is important that the machine technician read this manual and is familiar with all the functions and safety concerns of the unit before installing and operating.

## 1.1. Parts and Components



1.- Sewing Head	5.- Thread Sensor	9.- Emergency Stop
2.- Stacker	6.- Waste	10.- Foot Pedal
3.- Console	7.- Edge Trim Knife	11.- Stepping motor Box (2 boxes)
4.- Touch Panel	8.- Top Conveyor	12.- Bundle Return Tables

## 1.2. Technical Data

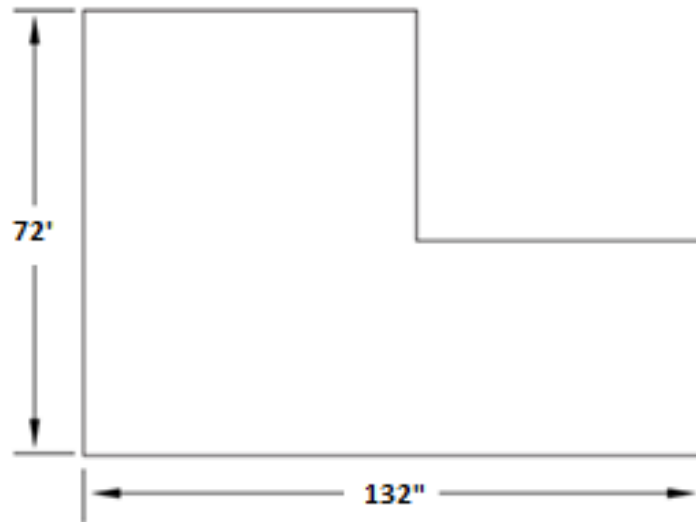
SPECIFICATIONS / ESPECIFICACIONES	
Voltage (v/ph/hz) / Voltaje (v/ph/hz)	220v 1ph
Current (amps) / Amperaje (amperios)	5
Air pressure (psi) / Presión de aire (psi)	90
Air consumption (cfm) / Consumo de aire (cfm)	<b>21</b>
Shipping weight (lbs) / Peso de embarque (lbs)	<b>1700</b>
Shipping dimensions (w/l/h, inch) / Dimensiones de embarque (w/l/h, pulgadas)	<b>132 X 72 x 65</b>

## 1.3. Production

Approximately 1950 Sleeves hems per hour, depending on material and size of parts.

## 1.4. Footprint

Machine footprint is 132" x 72" . Leave enough free space around to be able to open all doors and have access for maintenance.



## 1.5. Machine Identification Label

Machine identification is located on top to the table. Its contents are the machine class and the Serial Number. Ex: 208005081657

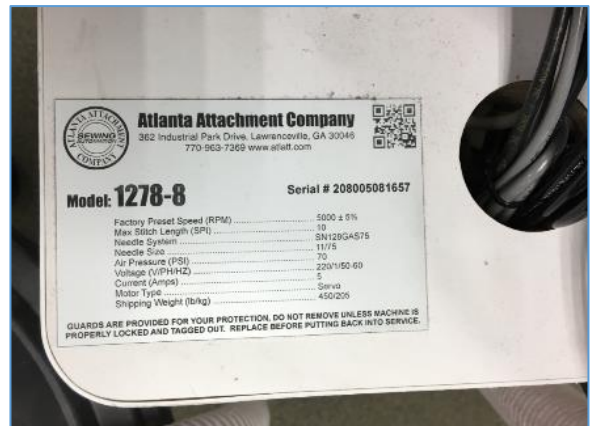
Serial number is divided as follow.

First 6 digits are the sales order number (208005)

Next 2 digits are the manufacturing month (08)

Next 2 digits are the manufacturing year (16)





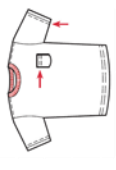



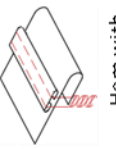


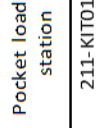




Last 2 numbers are random numbers (57)



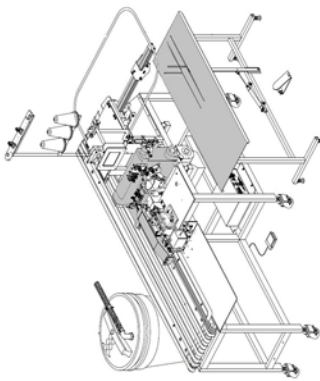
## 1.6. Options & Classes

Part Number		Description	SEWING HEAD				NEEDLE DISTANCE				MOTOR		
			Pegasus	Yamato	Juki	Rimoldi	4.5	4.8	5.6	6.4	PANA	EFKA	
<b>Index Table</b>		<b>MOST COMMON</b>											
*	2211ESEY6702	AUTO HMR, 2N, 5.6M, EFKA, STK & IND TBL, SBUS, PEGASUS	X					X					X
	2211ESEY6802	AUTO HMR, 2N, 6.4M, EFKA, STK & IND TBL, SBUS, PEGASUS	X						X				X
	2211ESEY6802	AUTO HMR, 2N, 6.4MM, EFKA, STK & IND TBL, SBUS, VG2700 YAMATO		X					X				X
*	2211ESEY6202	AUTO HMR, 2N, 5.6MM, EFKA, STK & IND TBL, SBUS, VG2700 YAMATO		X				X					X
<b>Shelf</b>													
	2211ESEY6107	AUTO HMR, 2N, 4.8M, EFKA, STK & IND TBL, SBUS, VG2700 YAMATO, SHELF		X				X					X
	2211ESEY6707	AUTO HMR, 2N, 5.6M, EFKA, STK, SBUS, PEGASUS BUNDLE SHELF		X				X					X
	2211ESEY6207	AUTO HMR, 2N, 5.6M, EFKA SBUS, VG2700 YAMATO, SHELF		X				X					X
		<b>SPECIAL ORDERS</b>											
	2211ESEY6203	AUTO HMR, 2N, 5.6M, EFKA, FIH IND TBL, SBUS, VG2700 YAM		X				X					X
	2211ESEY6704	AUTO HMR, 2N, 5.6M, EFKA SBUS, VG2700 YAMATO, NO STACKER		X				X					X

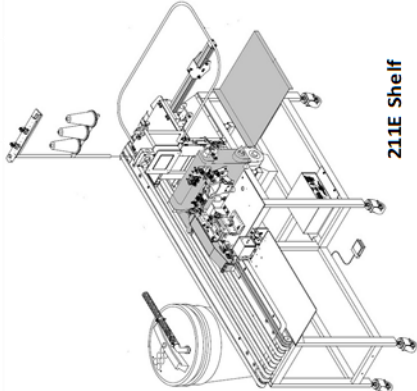
  

STANDARD COVER	TOP COVER	OPTIONS	
		3 NEEDLES	2211-EG2
 BOTTOM COVER 2 NEEDLES	 TOP COVER 3 NEEDLES	 40-3TCY	 2211-EG2
 2211PKIT01	 40-3TCG	 311-X	 Active Edge Guide 311-006B
 Hem with Decorative Trim	 661-X	 Fold in half stacker 2211PKIT01	 Pocket loading station
 311-3B	 Hem with Imitation Cuff	 211-KIT01	 Thread handling Thread handling



**211E Index**



**211E Shelf**

**Features**

- Patented Serial Bus Control System
- Independent sleeve edge trimmer
- Electronic controls with DC drive motor

**Options**

- 40-3TCG Top & bottom coverstitch
- 661-X Decorative trim may be added to any hem style
- 331-3B Imitation Cuff
- 2211-EG2 Electronic Sleeve edge Guiding System
- 311-006B Fold in half stacker
- 2211PKIT01 Pneumatic pocket loading station
- 211-KIT01 Thread Handling conversion kit

SBUS : SERIAL BUS  
 G : PEGASUS  
 Y : YAMATO  
 J : JUKI  
 R : RIMOLDI  
 FIH: FOLD IN HALF  
 PANA : PANASONIC  
 EFKA : EFKA  
 W/SC : WITH STITCH CONDENSING  
 N/SC : NO STICH CONDENSING  
 STK: STACKER  
 IND: INDEX  
 TBL: TABLE

## Installation

### 1.7. Installation & Set Up

- a) Remove all shipping straps from machine.
- b) 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.
- c) Position the machine in a desired location on a sound and reasonably level floor. Make sure that there is sufficient lighting over the machine. Remove all packing material.
- d) Apply with a clean towel a light coat of oil to all black oxide parts to avoid future corrosion.

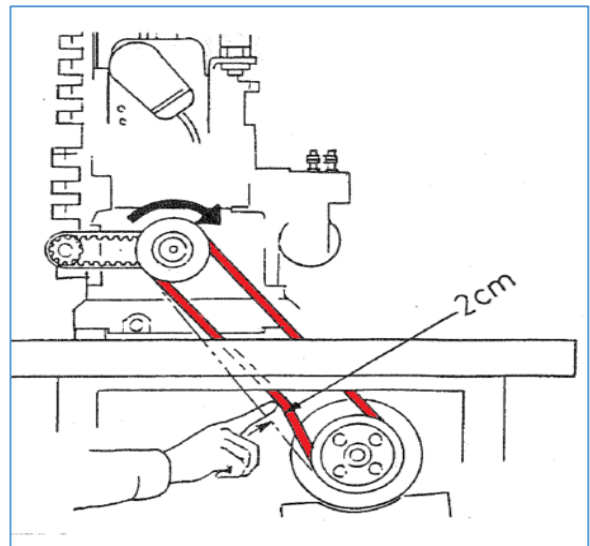
#### 1. Wheels

After removing machine from crate remove transportation plates and install all 4 wheels on the unit.



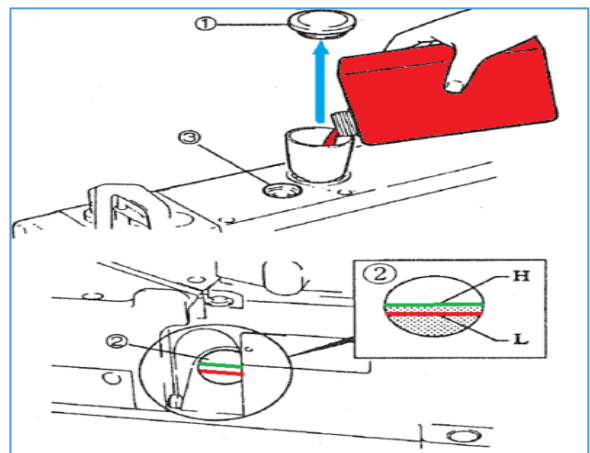
#### 2. V-belt

After removing machine from crate, reinstall V-belt on motor and head pulleys.



#### 3. Sewing Head Lubrication

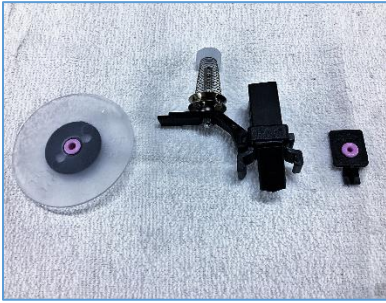
Oil may be removed before shipping. Prior to using refill and check the oil level in sewing heads. (ISO Viscosity Grade 22 part #)



## Installation

### 4. Thread Detectors

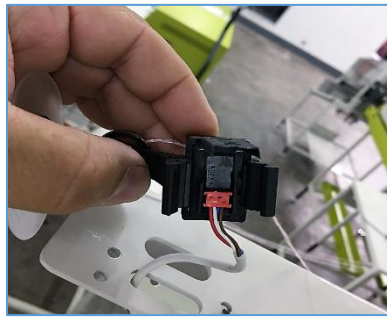
- Assemble all thread detectors according to the pictures.



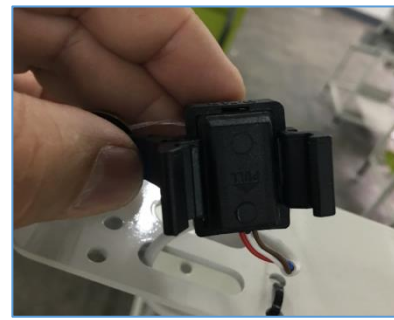
- Connect thread detector to the unit following steps A to F



A



B



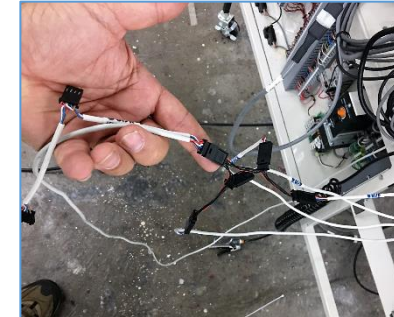
C



D



E



F

- Pass thread through detector picture A and the slot on the tension post as shown on B.



A



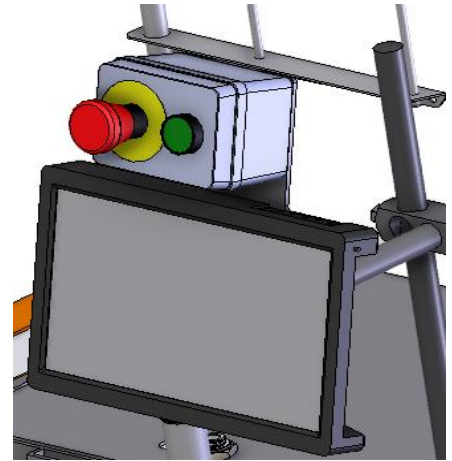
B

## Installation

### 5. Computer Boxes

Install Touch Screen. (Serial Bus)

Connect Serial Bus cables to the back of the screen.



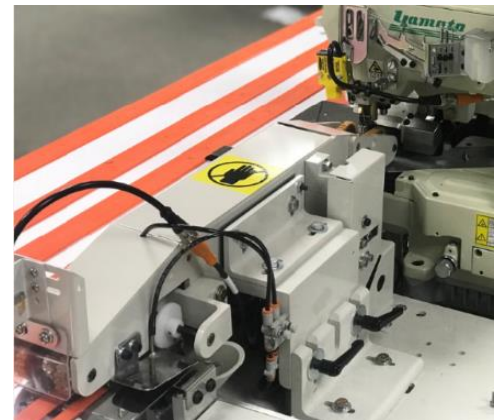
### 6. Waste System

Connect the waste tubes to the end of the Venturi on the back of the electrical panel as show in the picture. Make sure filter element is in place on the unit.



### 7. Top Conveyor.

Install top conveyor.



### 8. Air Supply

Connect 1/4" airline to the air input connector. Check regulators for proper PSI. The regulator should be set to 90 PSI. Turn the main air lock-out valve (Red Knob before the main pressure regulator) to the "ON" position. Air consumption is 19 CFM.



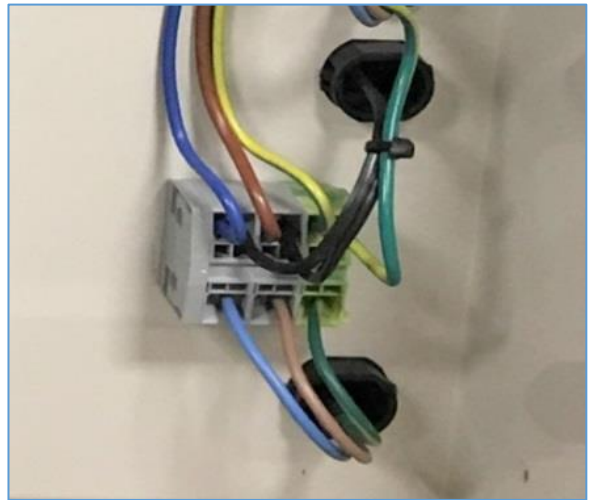
## Installation

### 9. Power Connection

Wire the power cord to 208-230vac, single phase. 5 Amp.

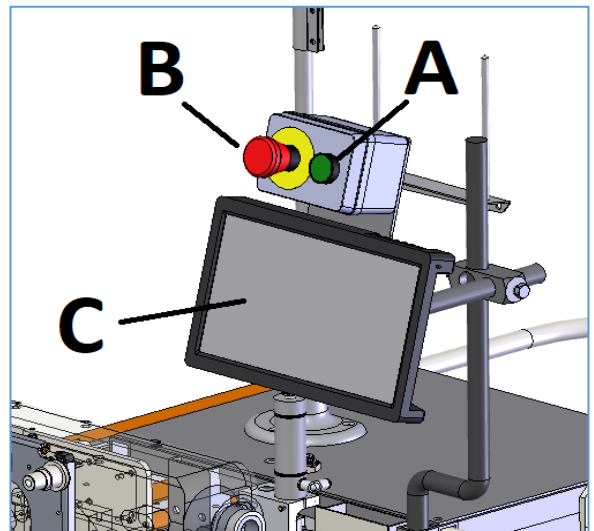
Turn "ON" the safety switch inside the control box.

NOTE: It is important that the green wire should be connected to earth ground.



### 1.8. Power "ON"

Twist the Emergency Stop Red button "B" clockwise to return to its normal position. Turn the machine "ON" by pressing the green button "A" on the box just above the touch screen. The machine will first display the language choices and after several seconds its show the "211FS" screen. This screen is the one that the operator will always see upon power up.



### 1. Electric Eyes

Turn on power. Examine all electric eyes (yellow) and ensure they are all adjusted and functioning properly. See service section for instructions. The unit has 4 electric eyes.

- 1.- Top conveyor
- 2.- Sewing head
- 3.- Stacker
- 4.- Needle positioning



## Installation

### Stepping Motors

Press “JOG” buttons and check function of all stepping motors.



### 2. Sew Pedal

Step on the sew pedal and verify proper function of sewing head.



### 3. Sewing Head

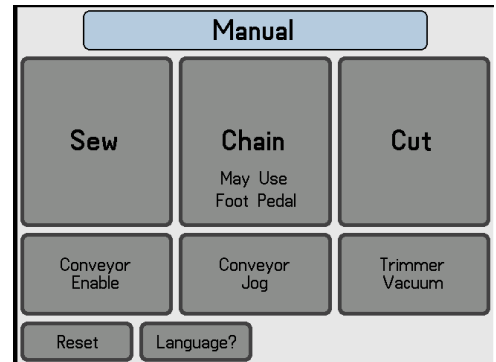
Rotate hand wheel by hand and check for freedom of movement. Hand wheel rotation should already be set.



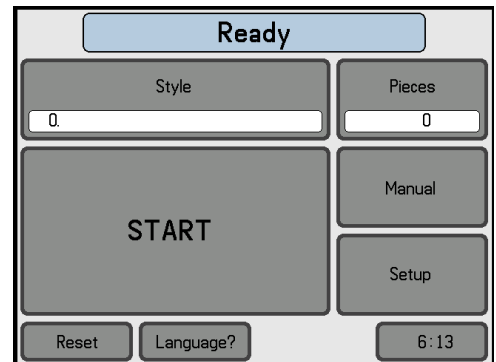
## Installation

Test rotation of the head as follow.

From the main screen press MANUAL



In the manual screen press SEW. Sewing head will rotate. Verify that it is rotating in the right direction.



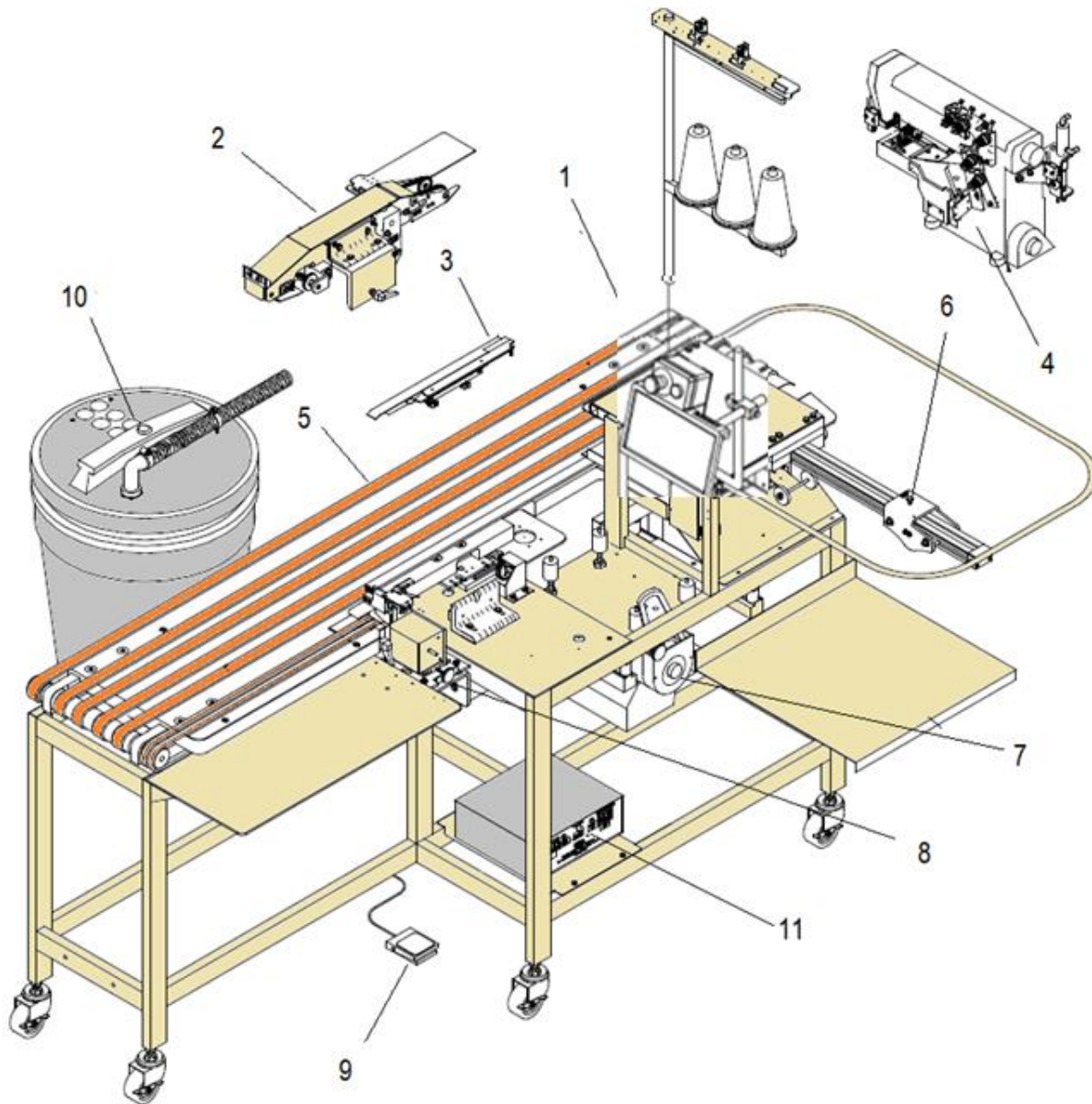
### 1.9. Interim Storage

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.

## 2. OPERATION

**Note:** It is important that the machine operator read this manual and is familiar with all the functions and safety concerns of the unit before operating.

### 2.1. Individual Components



1.- Control Panel	7.- Sewing Motor
2.- Top Conveyor	8.- Edge Trim Cutter
3.- Folder	9.- Sewing Pedal
4.- Sewing Head	10.- Waste System
5.- Main conveyor	11.- Stepping Motors Control Boxes
6.- Sleeve Stacker	

## Operation Instructions

### 1. Control Panel

The Control Panel allows the operator to start and stop the automatic function of the machine, shut off power to the machine in the event of an emergency.

**Caution: Unlocking the Emergency Stop Button with the Green Power “ON” engaged will turn on the power to the machine.**

#### a. Power On

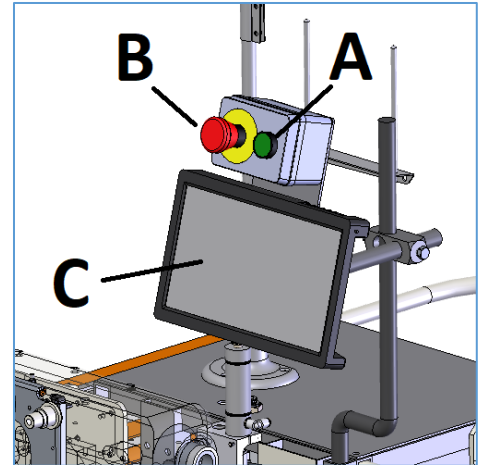
Power the machine “ON”. (A)

#### b. Emergency Stop

Pressing this button will turn off power to the machine. This button will lock when pressed. Twisting the button will cause it to unlock and return to its normal position.

#### c. Serial Bus control

Controls all machine functions. More details are available in related chapters in this manual.

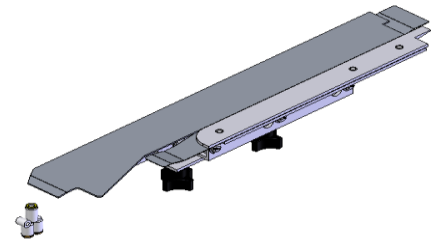


### 2. Top conveyor

Is responsible for the feeding of the material. Can be easily removed from the machine after loosening the 2 L bolts.

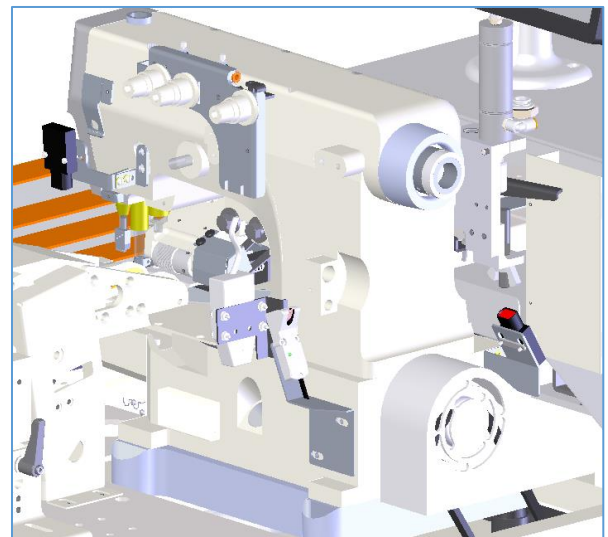
### 3. Folder

Is responsible for folding of the material before sewing. To remove from the unit, loosen the 2 knobs.



### 4. Sewing Head

Is responsible for the sewing. Machine can be supplied with different sewing heads and different needle configurations.



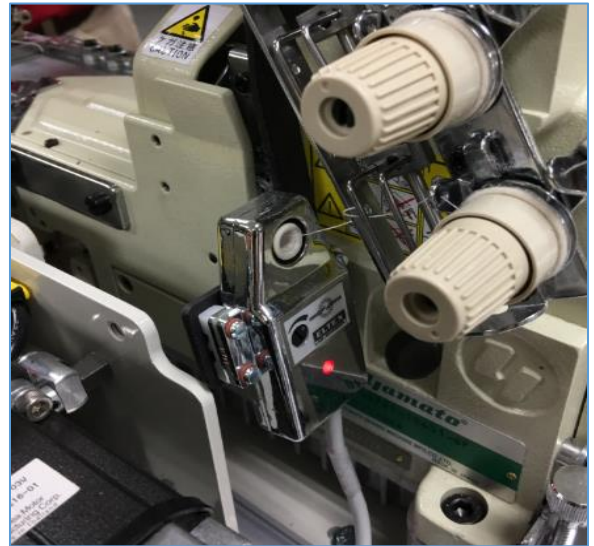
## 5. Thread Break Detectors.

### a Looper Thread Sensor

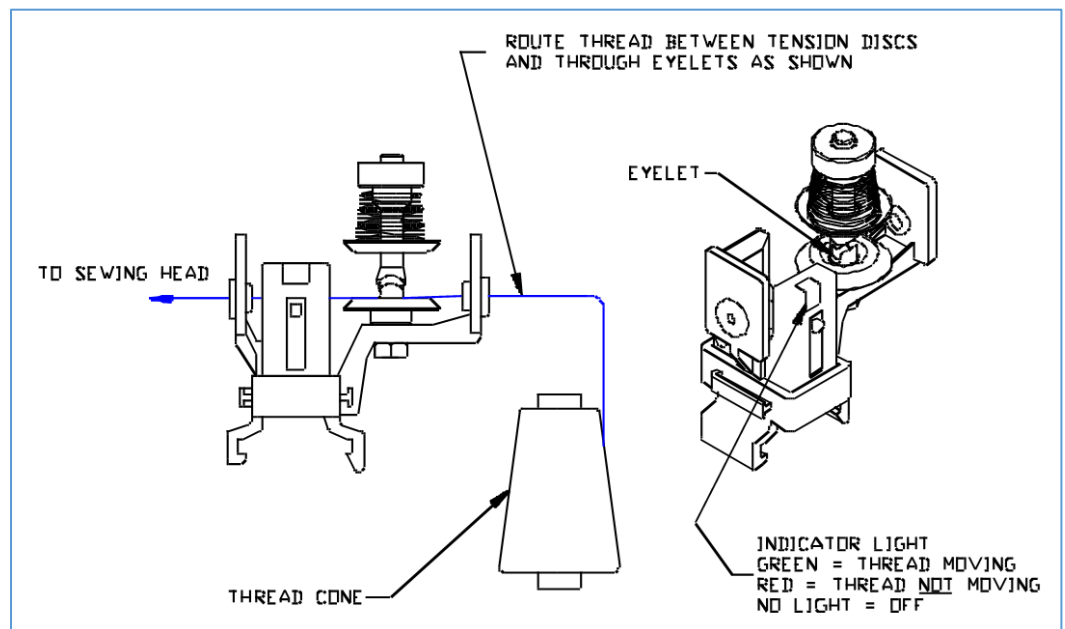
This type of thread detector monitors the consistent movement of thread over a ceramic surface. With the unit running in manual mode, the LED on the detector must not be on. The presence of a red light on any of the detectors indicates thread breakage or maladjustment, thus causing the unit to stop.

### b Needle Thread Sensor

Part Number: (4003-3WT2)



The needle thread Sensors are optical sensors that detect the vibration frequency of the thread as it is sewing. The tread must pass the sensor at the correct level and frequency to be detected. The tension spring assembly is the only adjustment for the vibration frequency, if is too rigid the thread won't vibrate enough, Use the minimum tension possible to get consistent detection.



The Sensor can be turned off and reset by pressing the RED Light on the Sensor.



## Operation Instructions

### 6. Main conveyor

Together with the top conveyor is responsible for the feeding of the material.

### 7. Sleeve Stacker

Is responsible for the stacking of the sleeves. The location where the sleeve will be stacked can be adjusted by changing the position of the release assembly after loosening the top screw.



### 8. Sewing Motor Control Boxes

Units can be supplied with 2 different motor types.

#### a. Efka

It is located under the sewing head. It has an on/Off switch which should remain in the "ON" position at all times, the Sewing head is controlled by this box



#### b. Panasonic

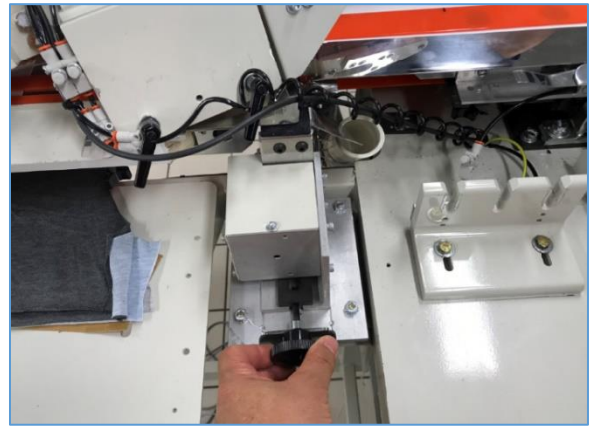
It is located under the sewing head (A), the sewing head is controlled by this box.



## Operation Instructions

### 9. Edge Cutter

Is responsible for the cutting of the material. Can be adjusted in or out to adjust the cut in reference to the sewing.



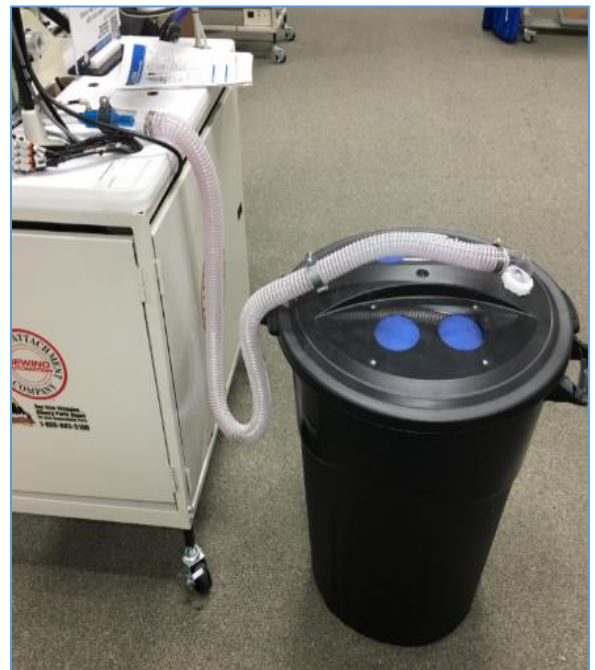
### 10. Start Sew Pedal

Activating this pedal starts the belt feeding.



### 11. Waste System

Only runs while the machine is in operation to reduce air consumption. Has filtered waste container to trap lint. It needs to be cleaned every day. See the maintenance section in this manual.



## Operation Instructions

### 12. Stepping Motors

There are 2 control boxes mounted below the sewing head. These boxes control the stepping motors that drive the conveyors and the Chain Puller. The upper one controls the 2 speeds of the puller and the lower one control the 2 speeds of the conveyor.



#### a. Upper Box.

**Three Thumbwheels Left:** Are used to control the speed of the puller when the sewing head is running in the Chaining Speed.

**Three Thumbwheels Right:** Are used to synchronize the speed of the puller when the sewing head is running in the Sewing Speed. If you change the sewing stitch length, it will be necessary to adjust these numbers to re-synchronize the puller to the sewing machine. Decreasing the number makes the puller go slower.

**JOG button.** Pressing this button will run the puller when the sewing machine is not running.



#### b. Lower box

**Three Thumbwheels:** Are used to synchronize the speed of the conveyor to the sewing machine when the sewing head is running. If you change the sewing stitch length, it will be necessary to adjust these numbers to re-synchronize the conveyor to the sewing machine. Decreasing the number makes the conveyors go slower. For example, if you changed the stitch length from 10 SPI to 11 SPI, you would need to decrease the number in the thumbwheels by 10% to match the 10% shorter stitch length.

**JOG button.** Pressing this button will run the conveyors when the sewing machine is not running.

**Rotating Dial:** Is set to run the Jog Speed off the conveyor. The jog speed of the belt should be the same as the sewing speed of the belt.

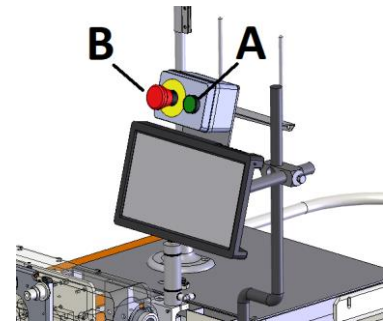
On the back of the boxes, there is a fuse holder and an on/off switch. Leave the switch on, except to do maintenance on the stepper motors or conveyors. Both amber lights must be on during machine operation.



## 2.2. Touchscreen

### 1. General Operation

Twist the Emergency Stop Red button “B” to return to its normal position. Turn the machine “ON” by pressing the green button “A” on the box just above the touch screen. The machine will first display the language choices and after several seconds its show the “MAIN READY” screen. This screen is the one that the operator will always see upon power up



### Caution: Do Not Use Any Sharp Objects to Touch the Screen

The graphics images presented on the touch screen show "3-dimensional" buttons, which may be pressed to access other screens, change counters and timers, or actuate hardware. Areas lacking the "3- dimensional" border contain information only.

The row of buttons across the bottom of the screen are called Standard buttons. They will appear or change based on the needs of the current screen.

**RESET:** Always brings the machine back to its original power up state.



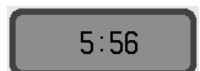
**LANGUAGE:** Return to the language screen. You can select multiple languages to use.



**HOME:** Leaves the current screen and takes you to the home page.



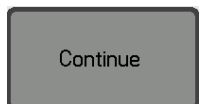
**CLOCK:** Lower right button allows access to a screen for setting the correct time. While on the Main Screen it allows you to set the time and date. On all other screens it is a display only.



**EXIT:** Leaves the current screen and takes you to an appropriate screen (usually back one level or to the previous screen you were on.



**CONTINUE:** Used to restart an event or function that has been temporarily paused or suspended.



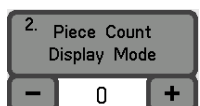
Other buttons are localized on top of or inside the screen



**ARROWS:** Pressing the arrows right or left will take you to the next or previous pages.



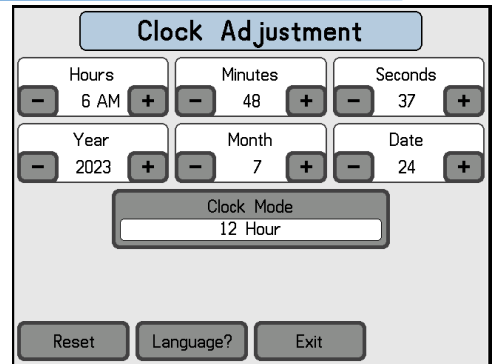
**COUNTERS:** Are identified with the "+" and "-" buttons in the corners. These counters may be adjusted by touching the "+" and "-" boxes.



**NOTES:** When a button has a white background, the function is “ON” or enabled. A dark background indicates off or disabled. Some buttons may toggle ON or OFF, others must be held in the ON state.

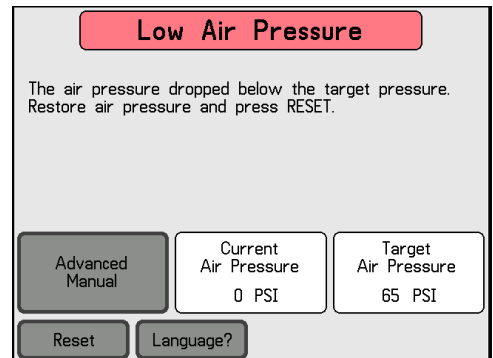
## Operation Instructions

### Press Time Button to Access Clock Adjustment Screen



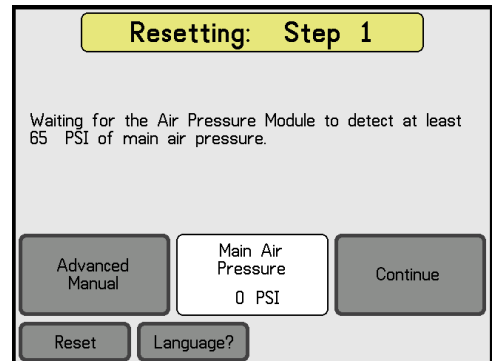
The Clock Adjustment screen features a title bar at the top. Below it are three rows of time settings, each with minus and plus buttons. The first row shows Hours (6 AM), Minutes (48), and Seconds (37). The second row shows Year (2023), Month (7), and Date (24). Below these is a Clock Mode dropdown menu set to 12 Hour. At the bottom are buttons for Reset, Language?, and Exit.

Other screens display whenever there is a machine error or other condition that prohibits the operation of the machine. Simply follow the instruction on the screens to resolve the problem.



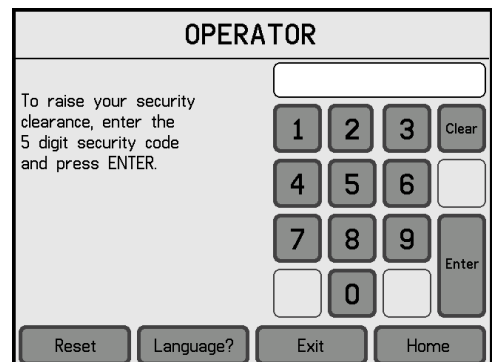
The Low Air Pressure screen has a red header. The main text reads: "The air pressure dropped below the target pressure. Restore air pressure and press RESET." Below this are three data boxes: "Advanced Manual", "Current Air Pressure 0 PSI", and "Target Air Pressure 65 PSI". At the bottom are buttons for Reset and Language?.

Pressing Reset Button will begin automatic sequence.



The Resetting: Step 1 screen has a yellow header. The main text reads: "Waiting for the Air Pressure Module to detect at least 65 PSI of main air pressure." Below this are three data boxes: "Advanced Manual", "Main Air Pressure 0 PSI", and "Continue". At the bottom are buttons for Reset and Language?.

There are also advanced settings and advance functions available. These functions are only accessible by a password, and include timers that control machine hardware, input and output test screens, and machine statistics. To get to the advanced functions the appropriate password must be entered at the security screen. Security access is reset whenever the main power is turned off, or the RESET button on the main page is pressed.



The OPERATOR screen has a title bar. The main text reads: "To raise your security clearance, enter the 5 digit security code and press ENTER." Below this is a 5-digit numeric keypad with buttons for 1-9, 0, Clear, and Enter. At the bottom are buttons for Reset, Language?, Exit, and Home.

Operation Instructions

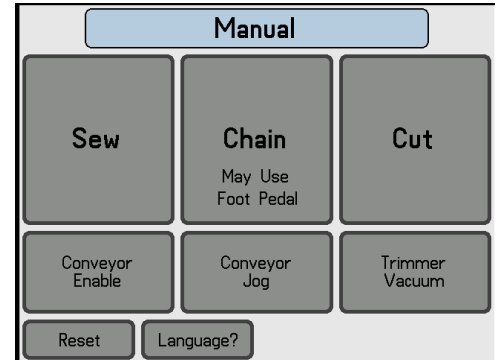
2. Available Menus

The following is a summary of the different screens and their functions available for the Sewing Operator.

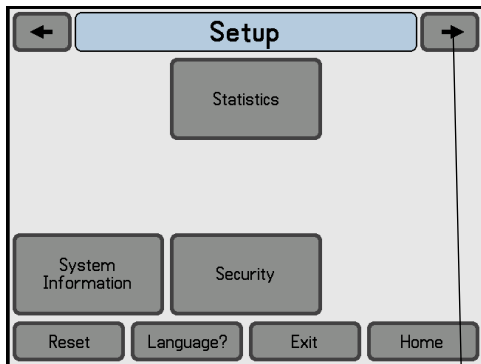
Start / Ready Screen



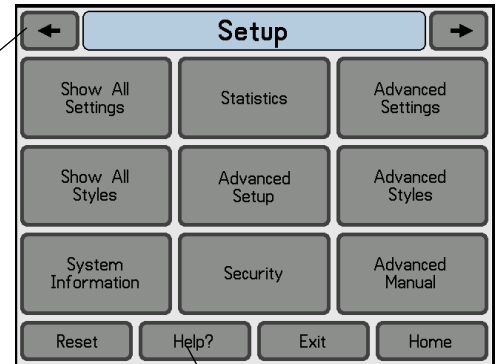
Ready to Manual Screen



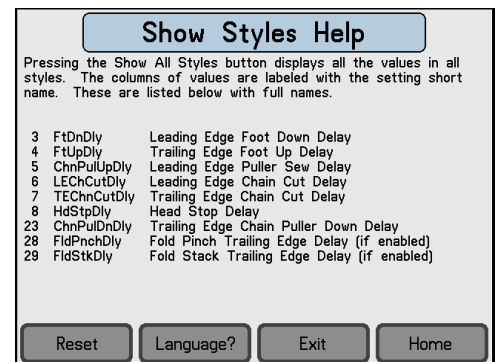
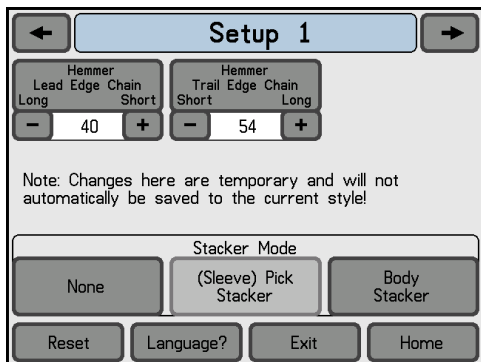
Setup Screen (Operator Level)



Setup Screen (Mechanic or above Level)

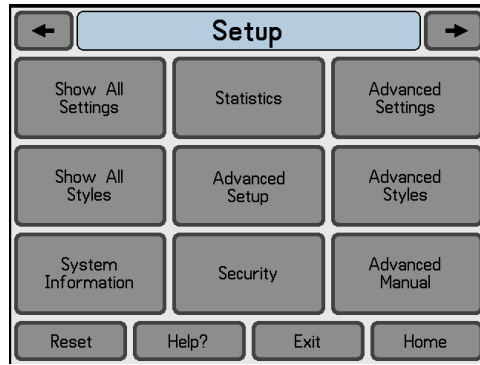


Press Arrow for Setup Screen Page 2



# Operation Instructions

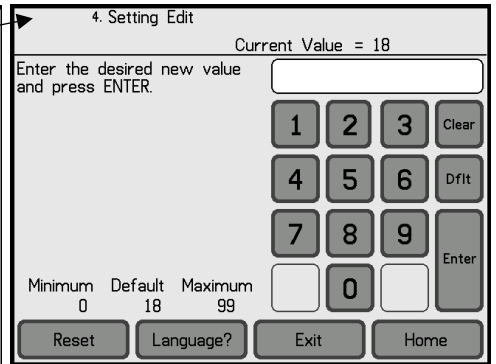
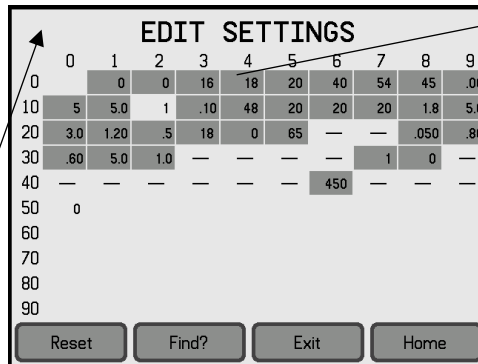
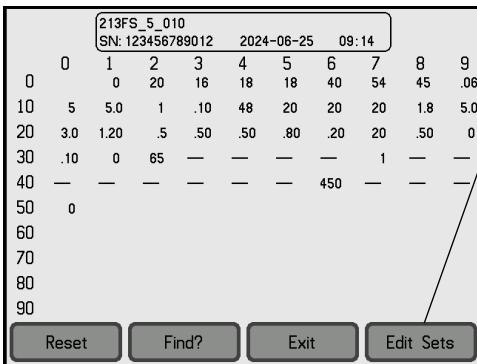
## Setup Screen Path



Show All Setting

Display of Settings

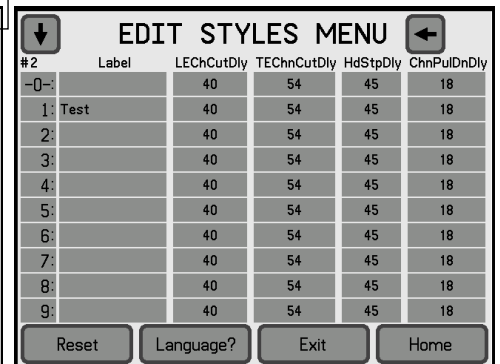
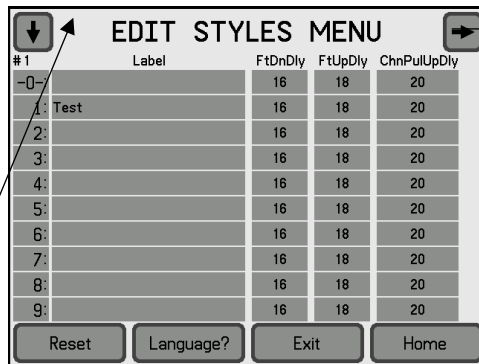
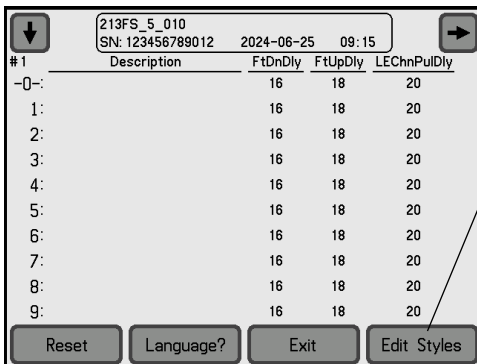
Touch any Setting to Edit



Show All Styles

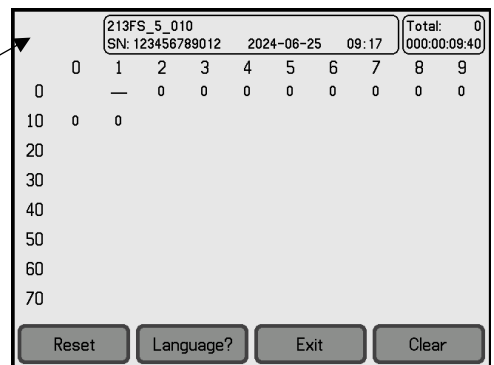
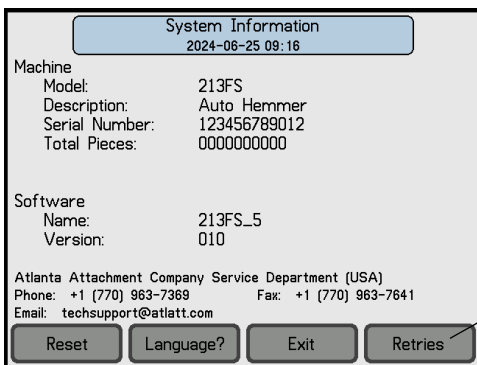
Display of Settings

Touch Arrow -Page 2

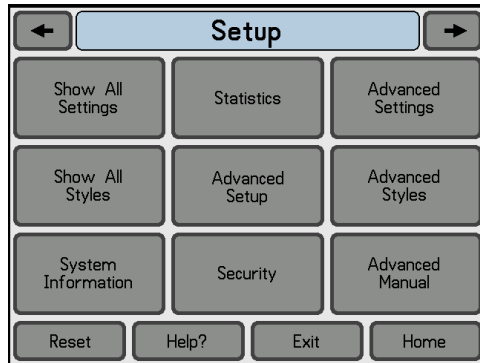


System Information Button

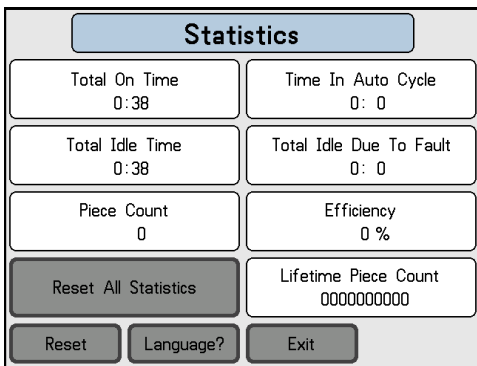
Retries Page



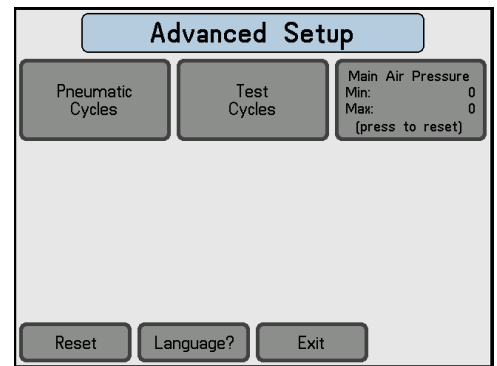
Operation Instructions  
Setup Screen Path Continued



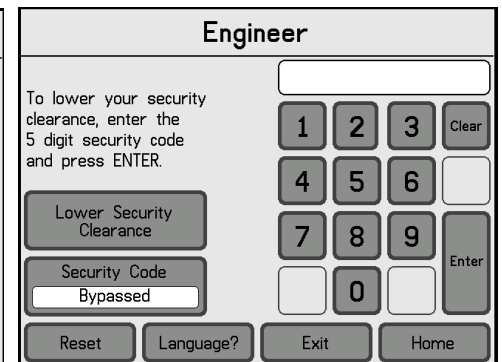
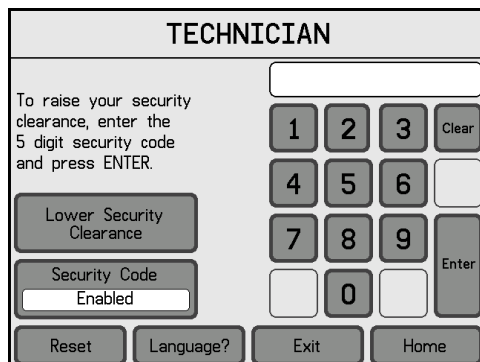
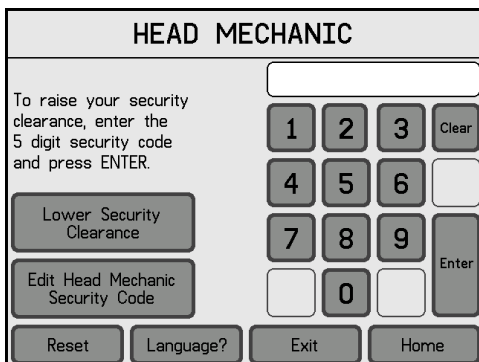
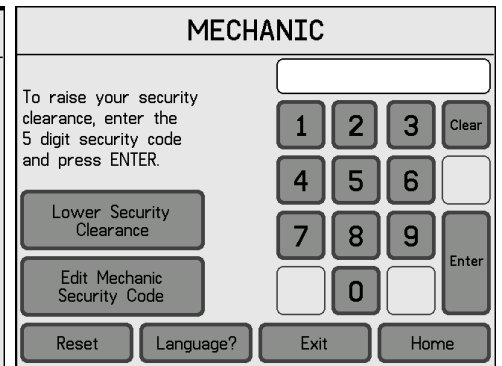
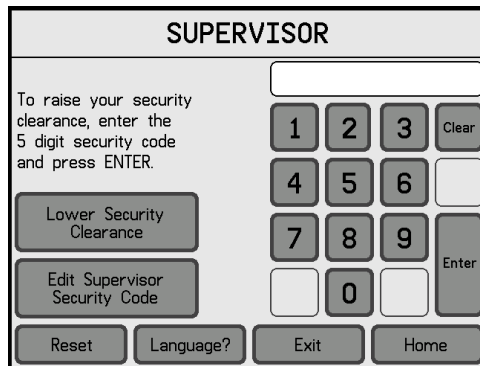
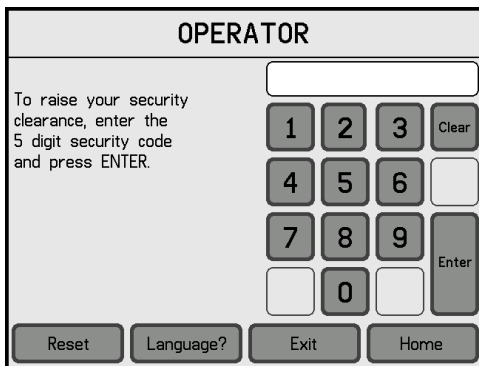
Statistics Button



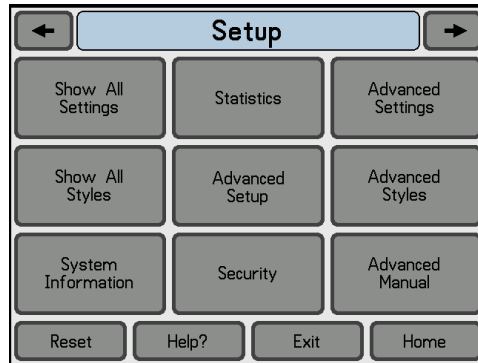
Advanced Setup Button



Security (Levels of Access with Code)

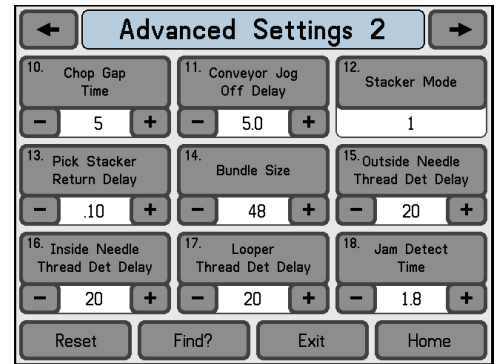
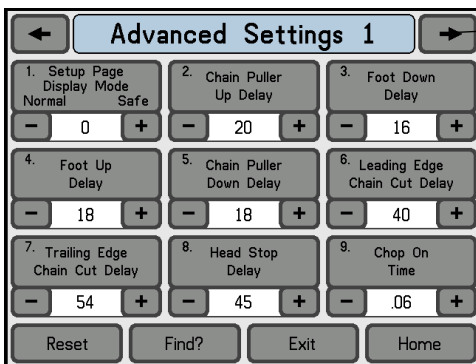


Operation Instructions  
Setup Screen Path Continued



Advanced Setting Button

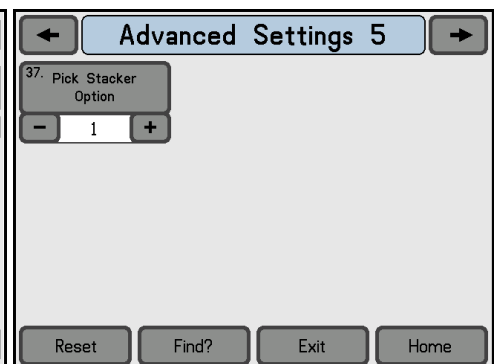
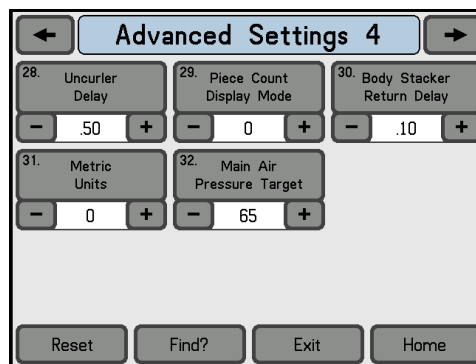
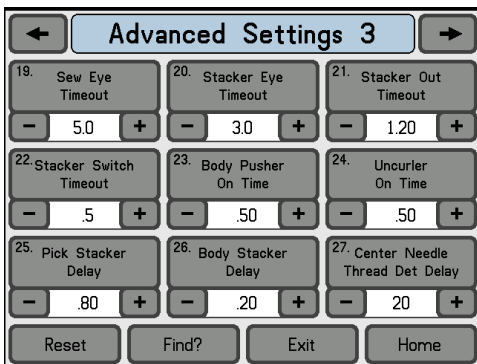
Press Arrow for Page 2



Page 3

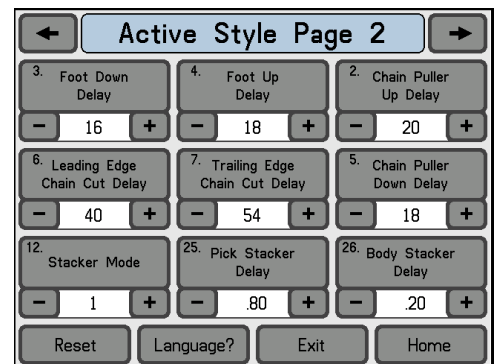
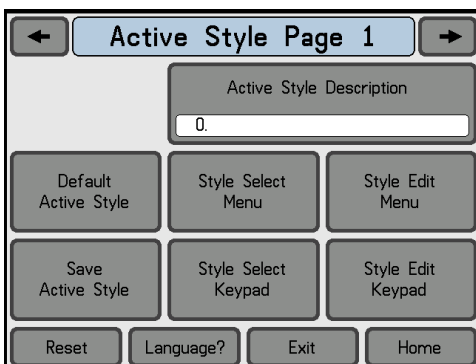
Page 4

Page 5



Advanced Styles

Page 2



Operation Instructions  
Advanced Styles Page Continued

Active Style Page 1

Active Style Description  
0.

Default Active Style    Style Select Menu    Style Edit Menu

Save Active Style    Style Select Keypad    Style Edit Keypad

Reset    Language?    Exit    Home

Style Select Menu Button

Style Edit Menu Button

Style Select Menu

-0-	10.
1. Test	11.
2.	12.
3.	13.
4.	14.
5.	15.
6.	16.
7.	17.
8.	18.
9.	19.

Reset    Language?    Exit    Home

EDIT STYLES MENU

#1	Label	FtDnDly	FtUpDly	ChnPulUpDly
-0-		16	18	20
1: Test		16	18	20
2:		16	18	20
3:		16	18	20
4:		16	18	20
5:		16	18	20
6:		16	18	20
7:		16	18	20
8:		16	18	20
9:		16	18	20

Reset    Language?    Exit    Home

Style Select Keypad

Style Edit Keypad

Style Select Keypad  
Current Style = 0

Enter the desired new style number.

1 2 3 Clear  
4 5 6 DfIt  
7 8 9 Enter  
0

Minimum 1    Default 1    Maximum 99

Reset    Language?    Exit    Home

Edit Style Keypad  
Active Style = 0

Enter the desired style number to be edited.

1 2 3 Clear  
4 5 6 DfIt  
7 8 9 Enter  
0

Minimum 1    Default 1    Maximum 99

Reset    Language?    Exit    Home

Advanced Manual

Press Arrow for Page 2

Page 3

Advanced Manual 1

Thread Sensor Outside    Thread Sensor Center    Thread Sensor Inside    Thread Sensor Looper

Conveyor Eye Covered    Sew Eye Covered

Conveyor Disable    Sew    Chain Vacuum    Puller Lift

Conveyor Jog    Thread Chop    Footlift and Tension    Puller Speed Chain

Reset    Language?

Advanced Manual 2

Foot Pedal    Typical (No Load) Motor Current: 1.23 Amps    Main Air Pressure 0 PSI

Trim Knife Current .00 Amps

Trimmer Vacuum    Trim Knife    Uncurler Leading Edge

Body Uncurler

Reset    Language?

Advanced Manual 3

Body Stacker Out (Return) Prox    Body Stacker Home Prox    Pick Stacker Out (Return) Prox

Body Stacker Out    Pick Stacker Out

Pick Stacker Pusher Up

Stacker Eye Covered

Reset    Language?

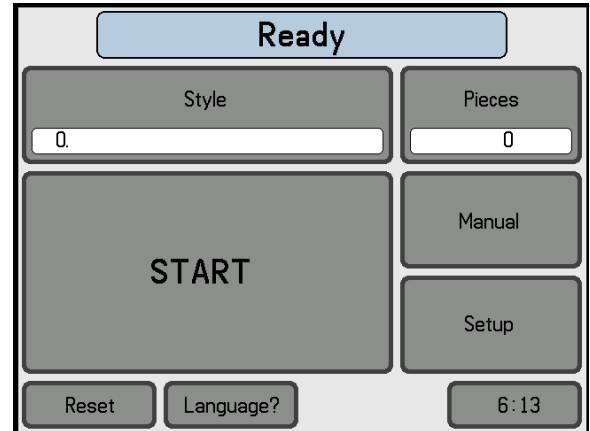
## Operation Instructions

### a. Ready Screen:

After you power it "ON" this screen appears. This is the home operation screen.

### b. Start:

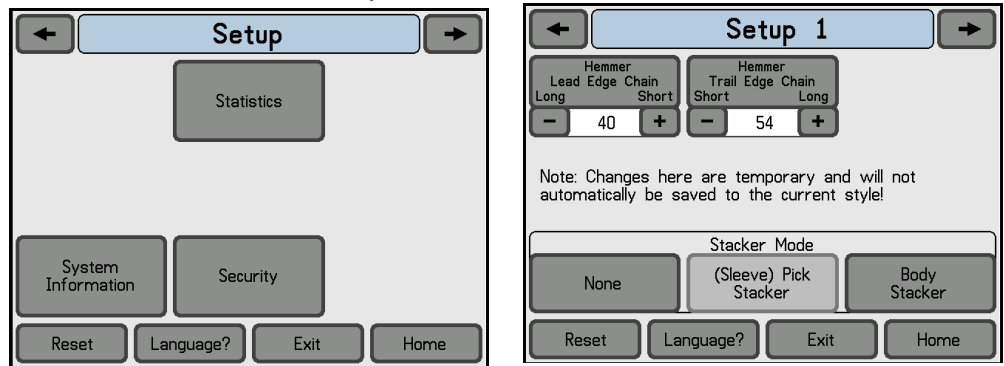
This button starts the machine in automatic mode allowing the machine to run continually as long as sleeves are being loaded.



### c. Set-up:

Allows fast access to several of the machine adjustment. Some of the options are password protected and not available to operators.

#### \*Operator Level Screens\*

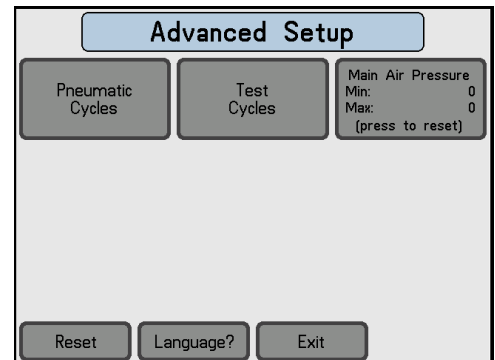


**Leading Edge Chain:** This setting allows the user to control the amount of time from the sew eye seeing the leading edge of a sleeve till the leading-edge chain chop occurs. The higher the number the shorter the length of chain.

**Trail Edge Chain:** This setting allows the user to control the amount of time from the sew eye seeing the trailing edge of a sleeve till the trailing edge chain chop occurs. The lower the number the shorter the length of chain.

### d. Advanced Set-up:

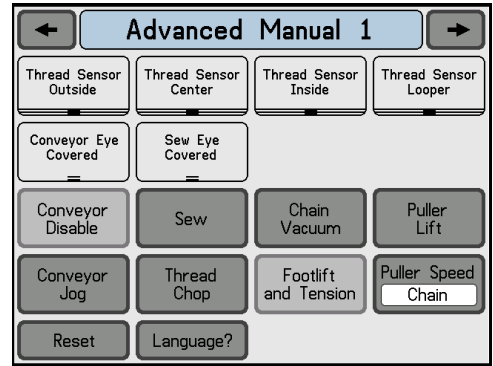
This button takes you to the Advanced Functions screen. It is locked with a password. It is only to be used by technicians.



## Operation Instructions

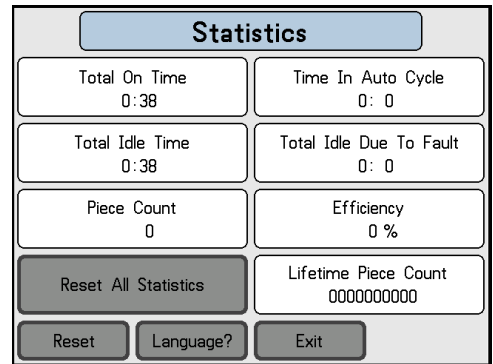
### e. Advanced Manual:

This button takes you to the Manual Input Test screens which allows you to test the inputs and outputs on the machine, such as photoelectric eyes and switches. Mechanic security level required. It is locked with a password. It is only to be use by technicians.



### f. Statistics:

This button takes you to the Statistics screen which displays statistical information on the operation of the machine. Resetting the statistics requires a supervisor security level.



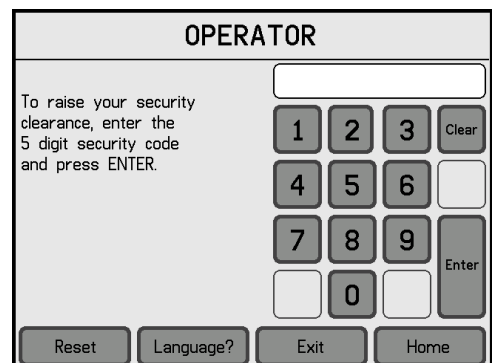
### g. System Information:

This button takes you to a screen that displays various information about the machine, such as: serial number or software revision number.



### h. Security:

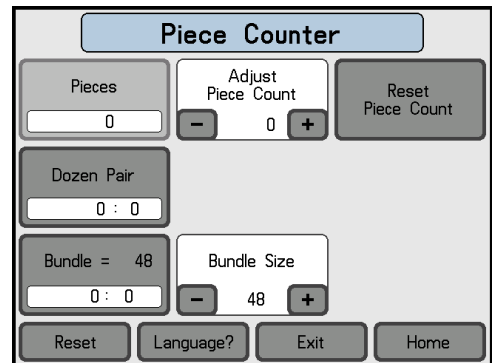
Allows you to change your current level of security or change the password for your security level or any level below you. Appropriate security level required.



## Operation Instructions

### i. Piece Counter:

This is an adjustable piece counter that increments every time the stacker operates in automatic mode.



### j. Manual:

This button takes you to a screen which allows the operator to manually run the sewing head in either sewing or chaining mode.

**SEW:** After pressing the button, the presser foot will be lowered, touching the material, sewing head and puller will run at the sewing speed. There should be material under the presser foot.

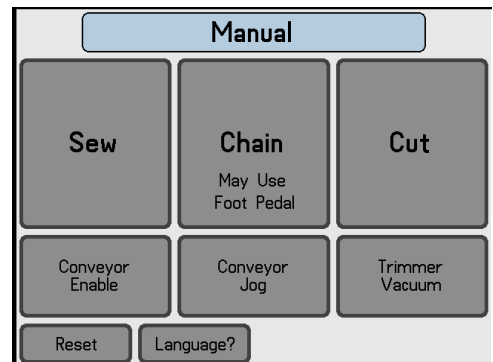
**CHAIN:** After pressing the button, sewing head will run and puller will run at chaining speed. The presser foot will be lifted.

**CUT:** Pressing this button manually activates the thread chop knife.

**CONVEYOR ENABLE:** The conveyor will run if the functions of sewing or chaining are activated. If Conveyor is disabled, the conveyor will not work in the sewing or chaining mode.

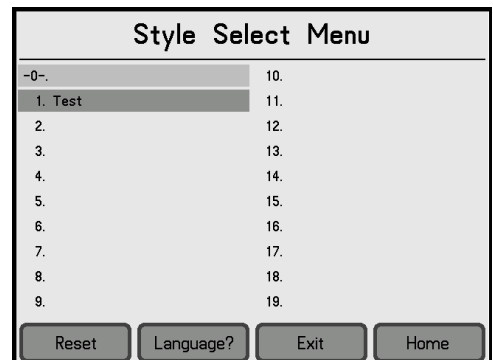
**CONVEYOR JOG:** This button allows the operator the manually run the conveyor if needed.

**TRIMMER VACUM:** Will activate the Vacuum of the edge trimmer.



### k. Style:

Once the machine is adjusted for a particular type of sleeve or material the style may be saved and recalled at a later time. Mechanic security level is required to save styles, operators may recall styles.



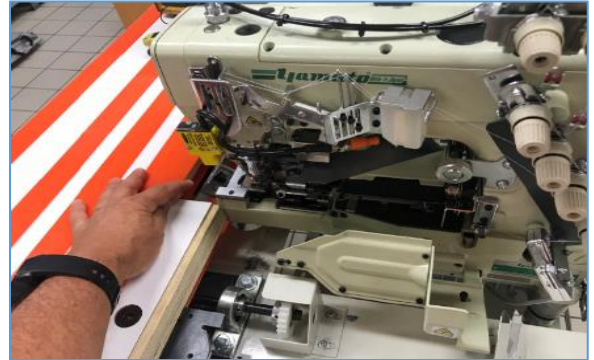
## 2.3. Set-up and preparation

The 2211ESE is a versatile unit for hemming sleeves, pockets, and small bodies. It is available with picker stacker, return conveyor and fold in half stacker. The modular design of AAC's Two Needle Hemmer allows the flexibility of picking the combination of components to design a custom system best suited to the need. In addition it is an electronically controlled workstation consisting of a conveyORIZED downturn hemming apparatus with two needle bottom cover stitch sewing head, electronic motor, automatic edge trim and cut part.

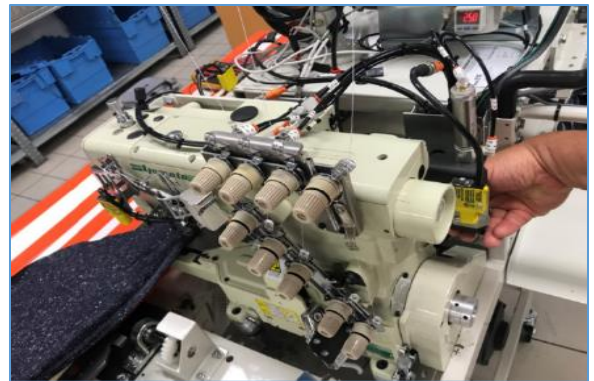
## Operation Instructions

### 1. Sewing Head

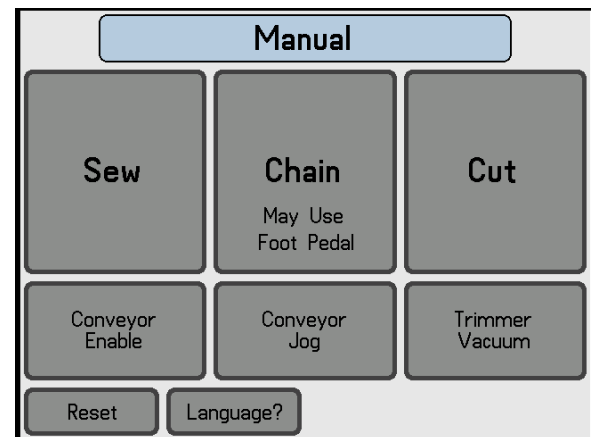
- Open all covers and thread the machine according to the sewing head you are using.



- Manually raise the presser foot and set a piece of material under the presser foot.



- Turn the unit ON. On the manual Screen press Sew and start sewing some stitches on the sleeve to make sure the unit is sewing properly.



- Keep running until the end of the sewing material reaches the presser foot.

- After reaching the edge of the material, Press CHAIN on the MANUAL Screen



## Operation Instructions

- Continue sewing in the CHAIN mode until the sewing material passes the cutting Knife
- Press CUT on the Manual screen. The chain will be cut and pulled inside the tube of the chain vacuum.

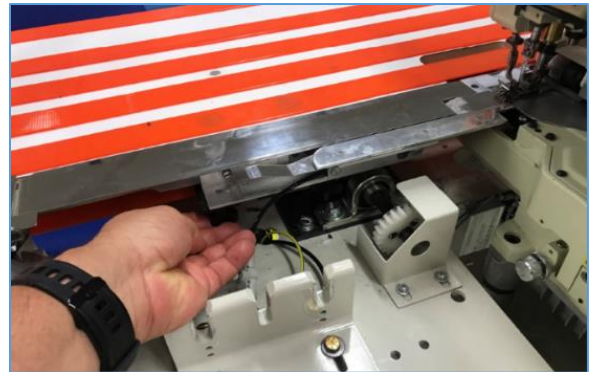


## 2. Folder

- Set the folder in the proper position. Make sure the folder is aligned against the table and the airlines are connected.

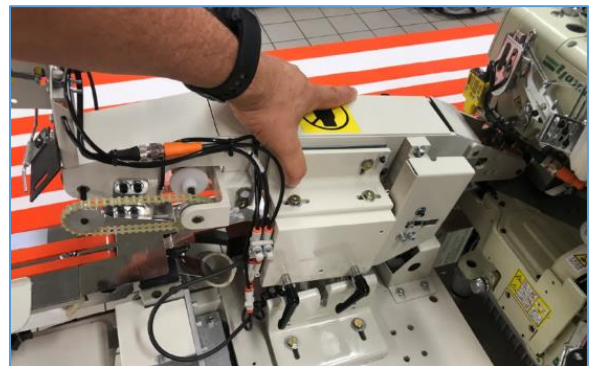


- Tighten the folder with the 2 knobs underneath.



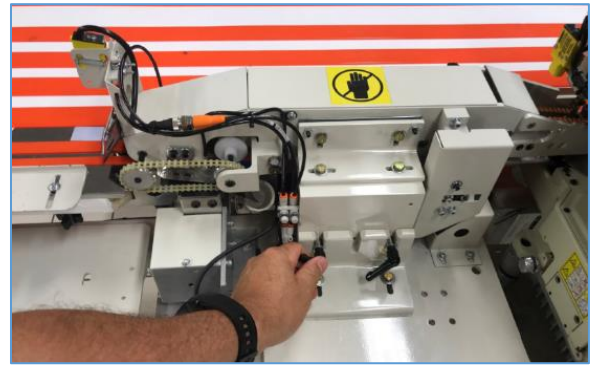
## 3. Top Conveyor

- Set the top conveyor in the right position. Make sure the conveyor is completely flat with the belt table. Check that there is not any airline or cable clamped underneath the conveyor.

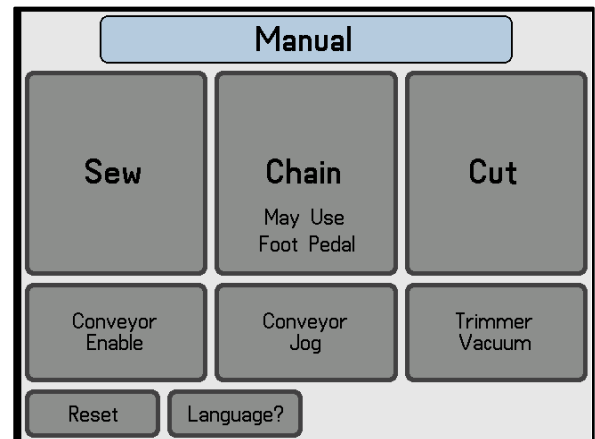


## Operation Instructions

- Tighten the top conveyor with the 2 L screws.



- Press CONVEYOR JOG on the Manual screen and make sure the bottom and top conveyors are running smoothly.



## 2.4. Sewing Sequence

- Operator presses START on the main Screen.
- Conveyor belt starts running.

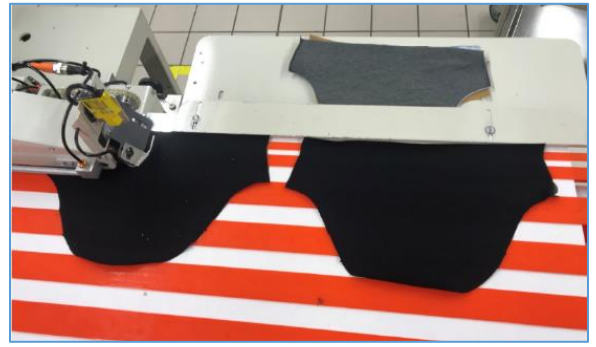


- The operator places sleeve against the edge guide and initiates sewing.

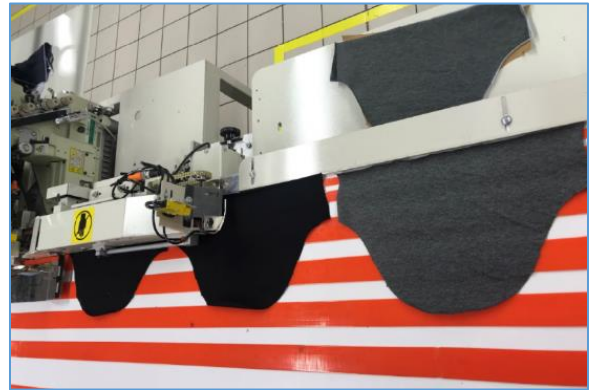


## Operation Instructions

- The operator places a second sleeve against the edge guide.



- The unit will continue sewing as long as parts are placed on the conveyor within a specific distance.



- The sew cycle will stop if the operator fails to position the next part, thereby reducing thread waste.

Average production on sleeves is 350 - 400 dozen pair per 8-hour day.

## 3. SERVICE

**NOTE:** Maintenance should only be performed by trained, qualified personnel.

### 3.1. Maintenance

It is important that the machine operator read this manual and is familiar with all the functions and safety concerns of the unit before operating.

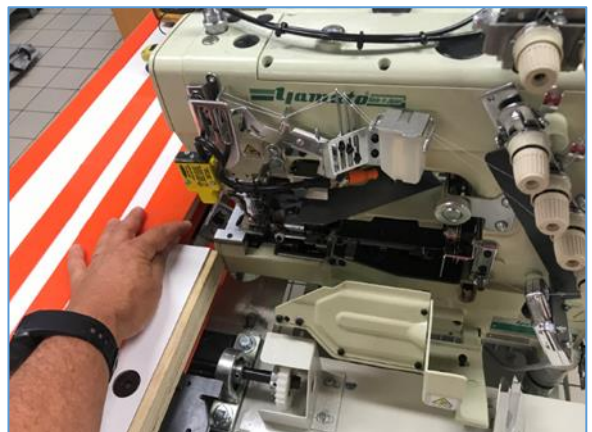
#### 1. General Safety Instructions

Maintenance should only be performed by trained, qualified personnel. Before performing any maintenance or repair work, switch off the electrical, pneumatic, etc. power to the machine at the main source and secure it with a padlock so that it cannot be switched on again without authorization. Refer to lockout/tag out procedures.

- Always wear proper safety equipment when operating or performing maintenance on any equipment.
- All recommended maintenance is for a single shift schedule; adjust as necessary for a multi-shift operation.
- Equipment should not be used for purposes other than designed or specified.
- 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/tag out 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.

#### 2. Maintenance Preparation

Remove folder and top conveyor, open all sewing head covers.



3. Preventive Maintenance Charts



Preventive Maintenance 8 Hrs



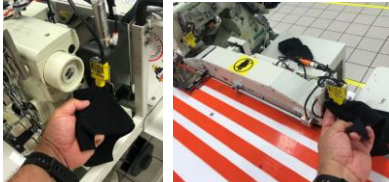


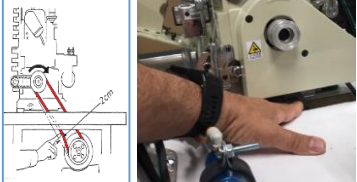
<b>Model:</b>	213ESE	<b>Required Materials</b>
<b>Serial #:</b>		
<b>Operation:</b>	Sleeve Hemming	
<b>Sew Head:</b>		
<b>Serial #:</b>		
<b>Needle:</b>	SNUY128GAS-70	

<b>Before starting the day's shift with "The Machine Off"</b>		
<p>.- Wipe off all electric eyes and reflecting tapes with a clean cloth.</p>		
<p>.- Check for liquid waste in the air filter and drain if necessary.</p>		
<p>.- Check the oil level in the lubrication tank and add if required. Keep Level between lines H and L of oil gauge</p>		
<p>Clean filter on waste container. Dump as necessary</p>		
<b>After a day's shift with "The Machine Off"</b>		
<p>.- Check for thread accumulation on rollers, pulleys and the moving parts</p>		
<p>.- Open covers, blow out and wipe with a clean cloth the machine and remove any dirt or tangled threads. Clean sewing motor ventilation</p>		
<p>.- Cover the machine and notify the supervisor of any unusual noise or abnormality that is present during the working shift</p>		



# Preventive Maintenance 40 Hrs

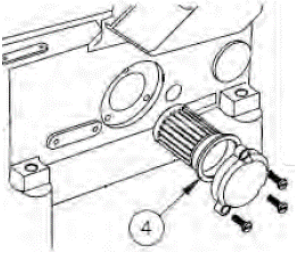





<b>Model:</b>	213ESE	<b>Required Materials</b>
<b>Serial #:</b>		
<b>Operation:</b>	Sleeve Hemming	
<b>Sew Head:</b>		
<b>Serial #:</b>		
<b>Needle:</b>	SNUY128GAS-70	

<p>.- Open covers, remove needle plate. With an air gun blow the machine out and remove accumulated dirt in hard to reach areas</p>	
<p>Check Sharpness of edge trimming knives and sharpen if required. Replace if needed</p>	
<p>Check all reflecting tape for wear and replace if required. If tape is replaced readjust eye sensors</p>	
<p>Check all air cylinders for correct activation speed. Adjust flow control if required. Check pressure regulator and adjust. Main 90 psi,</p>	
<p>Check all mechanical assemblies. Tighten loose components if found. (Turn air pressure off and move by hand)</p>	
<p>Check tension of all stepping motor belts and sewing motor v-belt and adjust if necessary</p>	
<p><b>In addition - Perform Daily Maintenance</b></p>	



# Preventive Maintenance 960 Hrs

<b>Model:</b> 213ESE	<b>Required Materials</b>
<b>Serial #:</b>	
<b>Operation:</b> Sleeve Hemming	
<b>Sew Head:</b>	
<b>Serial #:</b>	
<b>Needle:</b> SNUY128GAS-70	

Oil and filter change intervals should occur at 30 days or 200 service hours after installation and then every 6 months or 1200 service hours. If you run the unit on 24-hour shifts, factor in the hours in operation and change accordingly.	
Check filter elements in air regulator and replace if necessary	
Inspect pillow blocks and other non-sealed bearings (conveyors and rotating shafts) and apply one shot of recommended grease to each bearing/fitting.	
Open or remove doors and/or covers and inspect belt(s) for debris or wear and clean or replace as necessary.	
Remove and clean the top conveyor assembly.	
Remove and clean chain puller assembly.	
<b>In addition - Perform Weekly Maintenance</b>	

### 3.2. Lockout/Tagout Program

"Lockout/Tagout (LOTO)" refers to specific practices and procedures to safeguard employees from the unexpected energization or 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: <b>Sleeve Hemmer</b>		Model: <b>213ESE</b>		
Manufacturer: <b>Atlanta Attachment Co.</b>		Location:		
Energy		Location	Magnitude	Control Method
Electrical:	X	Disconnect/Ctrl Box	<b>220V</b>	Lockout & Tag
Pneumatic:	X	Main Regulator	<b>80 PSI</b>	Lockout & Tag
Gravity:	X	Conveyors, Belts		
Remember to Release All Stored Energy!				
<b>Shutdown Procedure:</b>				
<p>Inform all affected personnel that the machine will be in Lockout status.                      Turn the power and pneumatic disconnects to the OFF position.                      Fill out the tag with necessary information of the Lockout.                      Install the Lockout device.                      Verify all stored electrical energy has been released by pressing the power on button. Also, use meter to test circuits in the electrical panel to insure stored energy is released there as well.                      Perform necessary maintenance, services and/or repairs.</p>				
<b>Startup Procedure:</b>				
<p>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.                      Remove the Lockout device and tag.                      Turn the power and pneumatic disconnects to the ON position.                      Push the green button on the back of the control panel to turn the machine on.                      Inform all affected personnel that the Lockout has been removed and that the machine is ready for normal production operation.</p>				

Approved By: \_\_\_\_\_

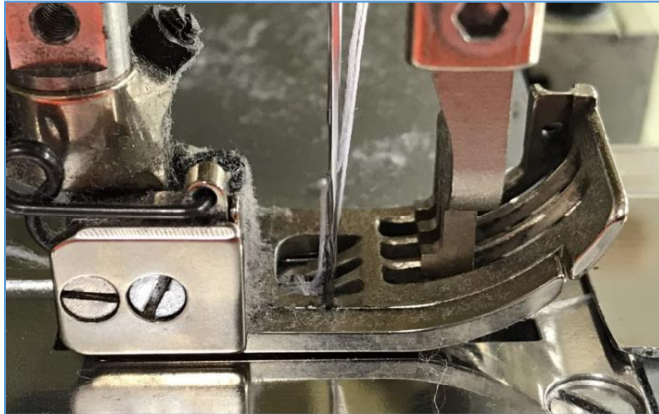
Date: \_\_\_\_\_

### 3.3. Mechanical

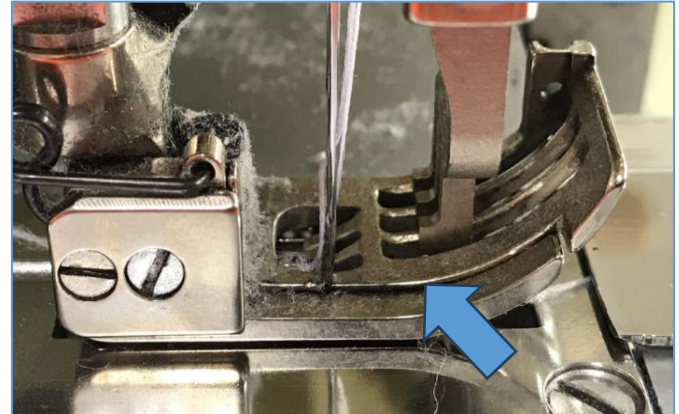
**NOTE:** All maintenance should be performed by a qualified service technician.

#### 1. Presser Foot Height

In its maximum upper position, the outside sole of the presser foot should stay in touch with the stitch plate. A small clearance should be present in the inside part of the presser foot.



DOWN



UP

Adjustments are made with the limit screw (A)



#### 2. Puller Adjustment

After the proper height adjustments have been made the puller roller must be set so that it is level with the chaining plate. This adjustment should be made with the power OFF. Care should be taken in making this adjustment, as an improper adjustment may cause thread breakage and skipped stitches during the chaining process. Loosen the two 5/16-18 hex cap bolts (Fig. 2, item 2) that secure the puller to the mounting bracket. It may or may not be necessary to raise or remove the presser foot to make this adjustment. When the roller is level with the chaining plate tighten the two hex cap bolts.

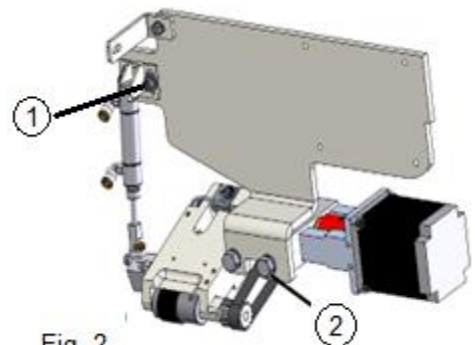
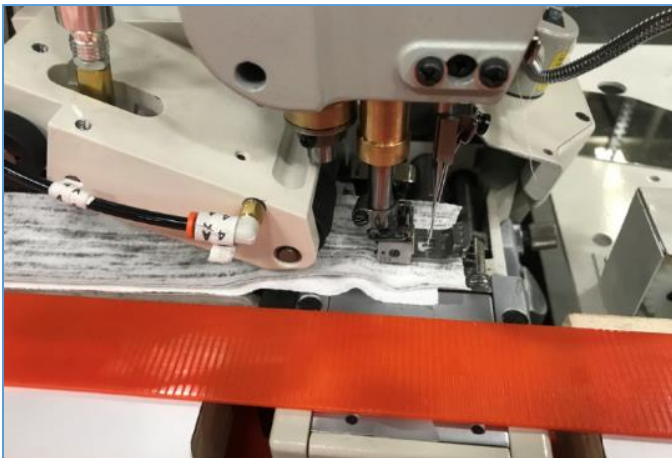


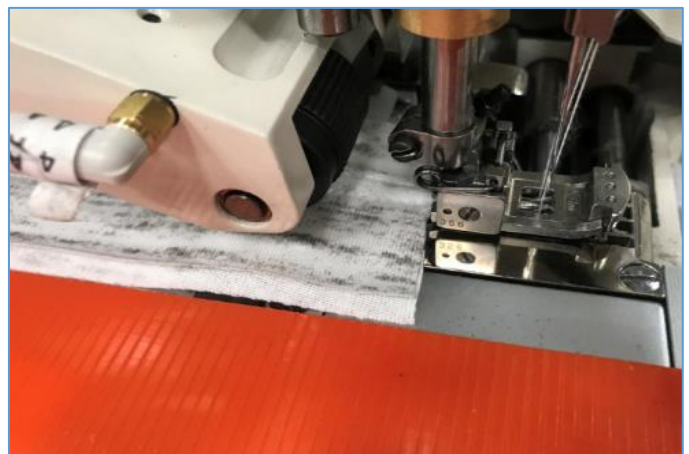
Fig. 2

### 3. Sewing Head Feed Adjustments

1. Remove top feed belt and folder.
2. Lift puller and keep it lifted through this part of the adjustment.
3. With the top belt, without any puller interference use 2 pieces of material 2 inches wide x 20 inches long. Perfectly align the 2 pieces off material and introduce it under the presser foot.
4. Sew it on the "SEW" mode.

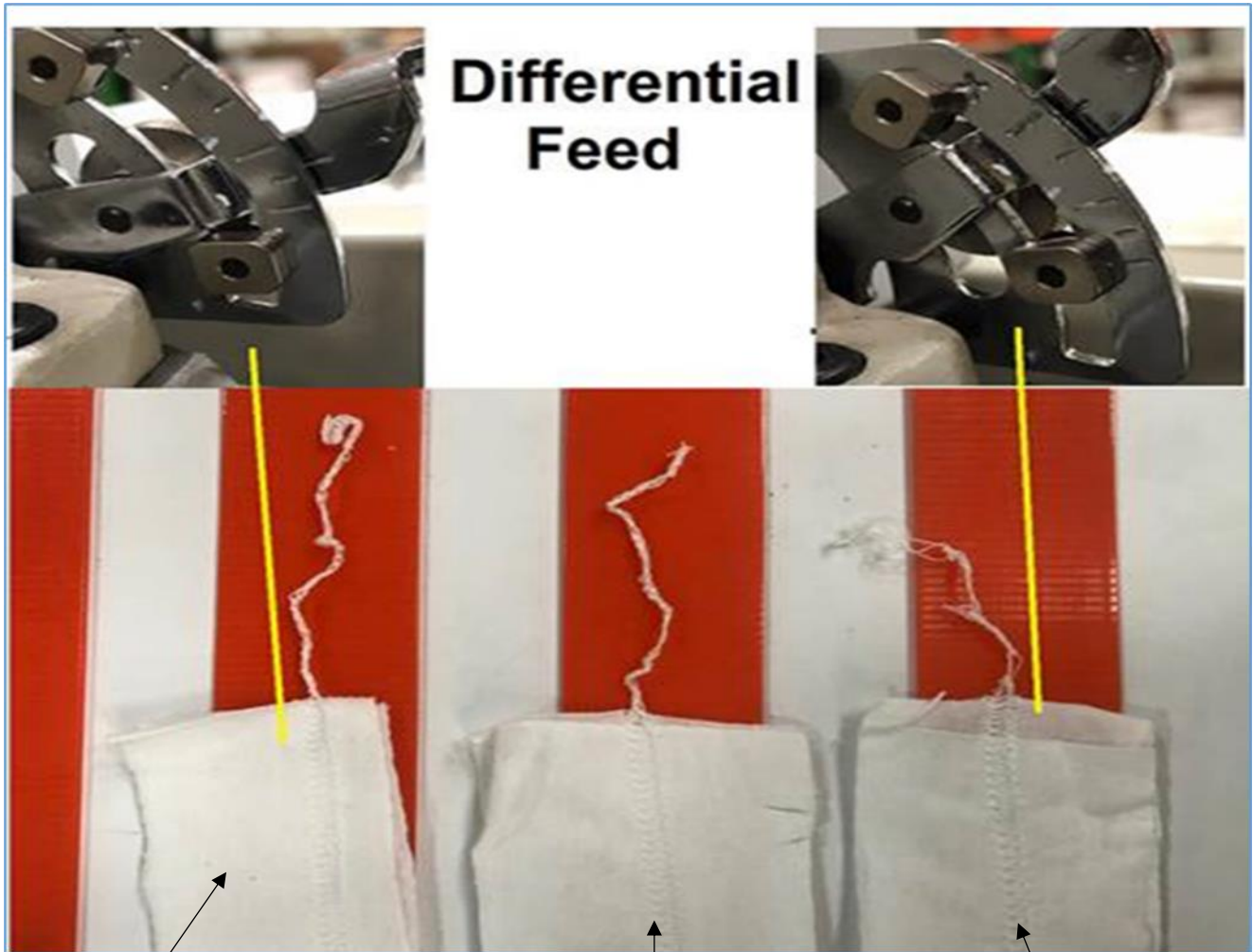


Too much feed in the bottom



Correct top and bottom feeding

Material should be aligned from the beginning to the end. If this condition does not happen adjust top feed to make this happen. A complete flat seam needs to be achieved without the belt feed or the puller feed.



Low Feed Ratio

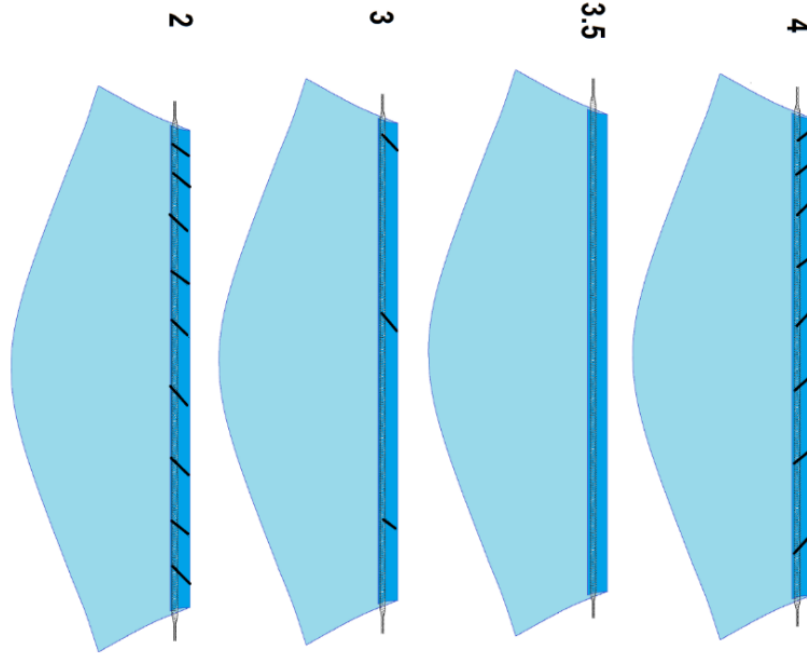
Right Feed Ratio

Too Much Feed Ratio

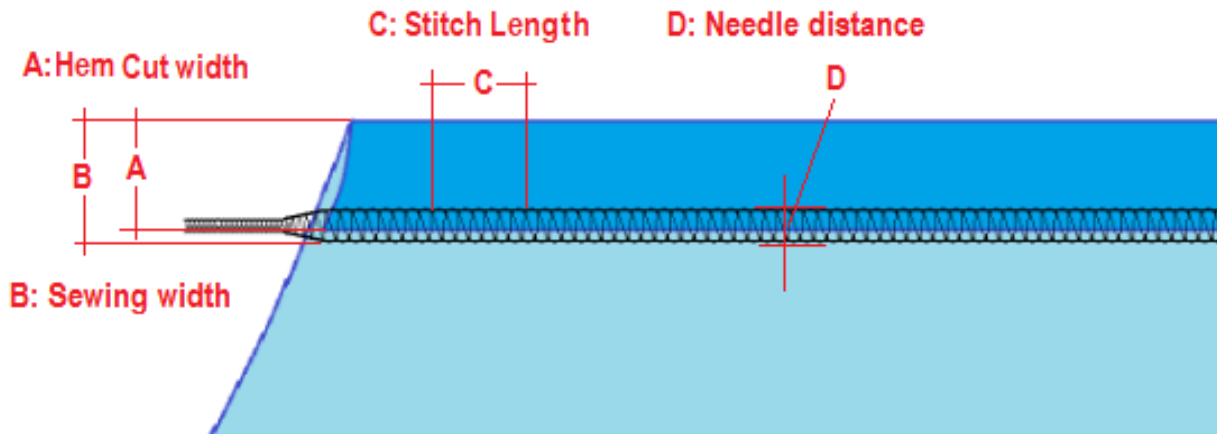
Service

Seam must be flat and nice from the beginning to the end. If this condition does not happen adjust sewing head, calibrate thread tension, calibrate feeding, inspect throat plate for any burrs, etc.

Diferencial Botton Feed



4. Seam Width



## 5. Sewing Head, Start and Stop Timing Sequences.



**1 = Presser foot down**  
2 to 3 stitches after beginning  
Too early: gathering at the beginning  
Too late: extra large stitches at the beginning

**2 = Puller pressure off**  
2 to 3 stitches after presser foot down  
Too early: thread break (chain wrap around looper)  
Too late: long stitches on the beginning

**3 = Chain cutter leading edge**  
3/8 to 1/4 inches thread chain at the beginning  
Too early: chain too long  
Too late: cutting sleeve

**4 = Presser foot up with puller pressure on**  
2 stitches before trailing edge  
Too early: long stitches at the end  
Too late: thread wrap and break

**5 = Trailing edge cut**  
3/8 chain length  
Too early: cuts the material  
Too late: chain too long

## 6. Hem Cutting Width

The cutting margin is determined by the knife position in relation to the needles. To adjust, release the screw below the assembly and adjust the knob moving the complete cutting assembly in or out.

If the screw is turned counterclockwise, the knife will move to the inside and the raw edge of the material will be inside the cover stitch.

If the screw is turned clockwise, the knife will move outward, and the raw edge will be outside the cover stitch.



## 7. Sewing Width

The sewing width is the distance from the left needle to the folded edge of the material.

To adjust move the sewing head left or right after loosening the 2 screws that hold the sewing head and moving the head left or right.



## 8. Stitch Length

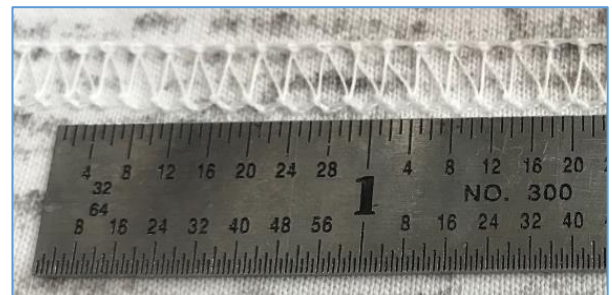
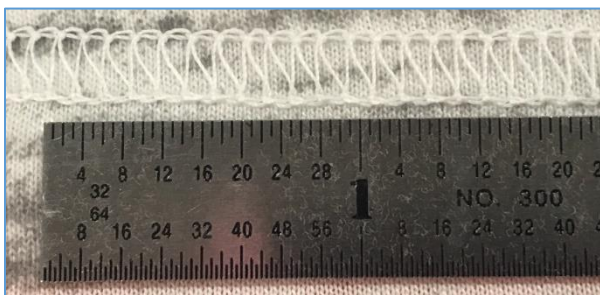
The stitch length can be adjusted using the knob on the front of the machine.

The Stitch length without the influence of the puller should be 10% smaller than the final stitch length required.

1. Move the puller pressure airline to the bottom cylinder fitting to hold the puller up.
2. Place material under the foot.
3. Press the SEW button to sew a seam to measure the stitch length.
4. When the end of the material gets to the foot, press CHAIN and pull the material until the material clear the thread knife.
5. Press CUT and check the stitch count on the sample.
6. Adjust the stitch length knob and sew another sample if needed.
7. When desired stitch count is achieved, move the puller pressure airline back to the top fitting.
8. Place material under the foot to begin setting the SEW puller speed.
9. After the first stitch is accomplished drop the puller and run the unit on "SEW" mode. Puller must pull the material gently and increase the stitch length 10%.
10. Adjust the puller Sewing Speed if required.



Example: If the stitch length without the puller is 11 with the puller should be 10.



11. Run the sewing head on "CHAIN" mode without sewing material.
12. The Chain puller speed should be at least 20% higher than the puller sewing speed.

**Stitch length continued**

Example: If the puller speed is set to 80 in the control box the chaining speed should be set to 100.

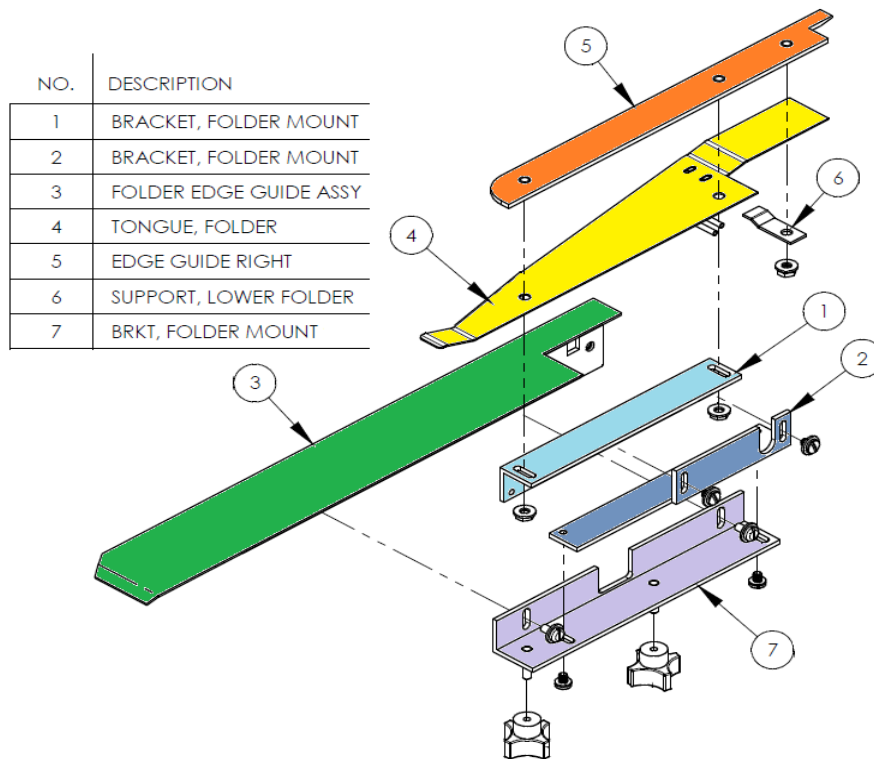
Machine should be chaining correctly with a uniform chain.

If this condition is not happening, make sure the puller pressure is activated and the puller is pulling the chain while sewing. Inspect the throat plate for any damage and the bridge under the throat plate that help the chain does not have any damage.

**9. Needle Distance**

The distance is defined by the sewing components of the machine. The most common are 6.4 mm and 5.6 mm.

**10. Folder Adjustments**

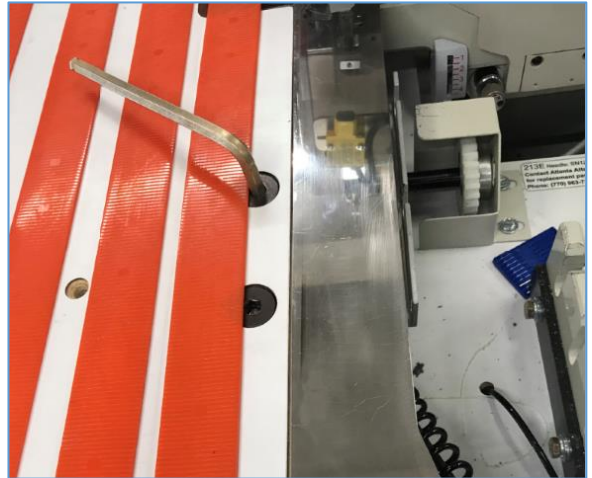


### 1. Polish

Folder assembly must be perfectly smooth and shiny on all surfaces that will have direct contact with the sewing material and the top belt.

### 2. Holding plate

Install the folder on the mount bracket and make sure that the 2 screws that hold it in the bracket are touching the end of the slots. If necessary, loosen the 2 screws that hold the bracket to the wooden table, install the folder and tighten it up.



### 3. Alignment

With the folder assembly tight in the mount bracket, align the edge of the folder with the edge of the table cutout and tighten the 2 screws.



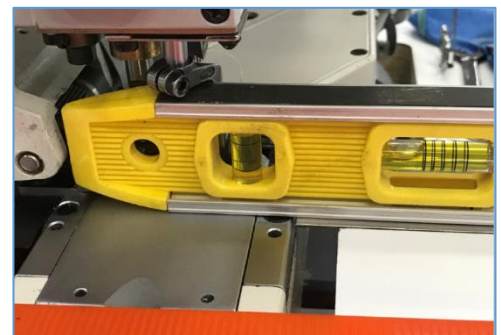
### 4. Height of the Folding Edge Guide

Folding Edge Guide must be aligned in height with the wooden table. Loosen the 2 screws that hold the Folding Edge guide to the folder mount bracket and adjust the height



### 5. Sewing Head height.

The height of the sewing head must match the height of the Folding Edge Guide. Loosen the 2 nuts that hold the sewing head support post and adjust if required. Tighten the nuts.



### 6. Folder Material Gap

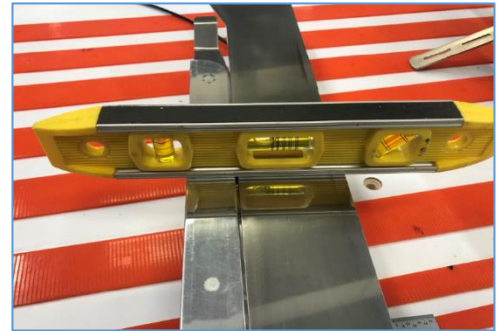
Space from the Edge Guide Right to Folder Edge Guide should be approximately 2 millimeters and it should be parallel from the beginning to the end.

For thin material, a distance of 1.5mm can be used. For thick material 3mm or more may be required.

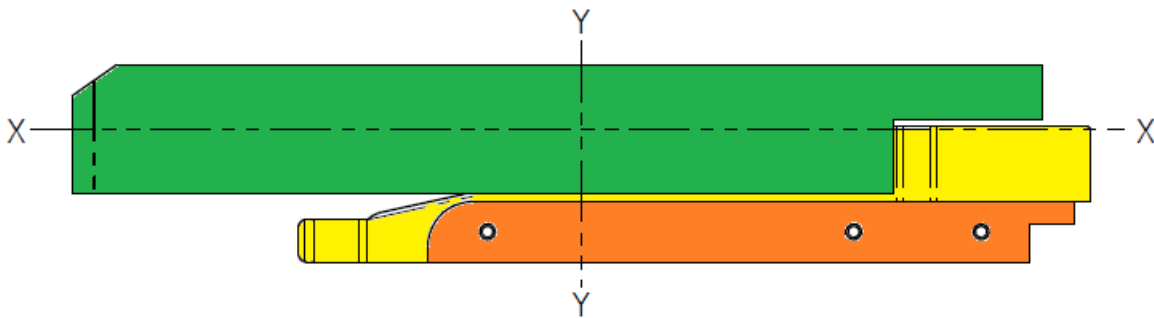


### 7. Height of the Edge Guide Right

The Edge guide Right must be aligned in height with the Folder Edge guide. Release both screws and adjust of required.



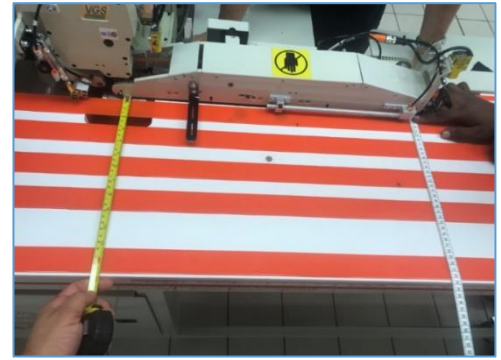
**Note:** After completing adjustments verify carefully that X and Y are completely flat and the distance between the Edge Guide Right and the Folder Edge guide is parallel.



## 11. Top Conveyor Adjustment

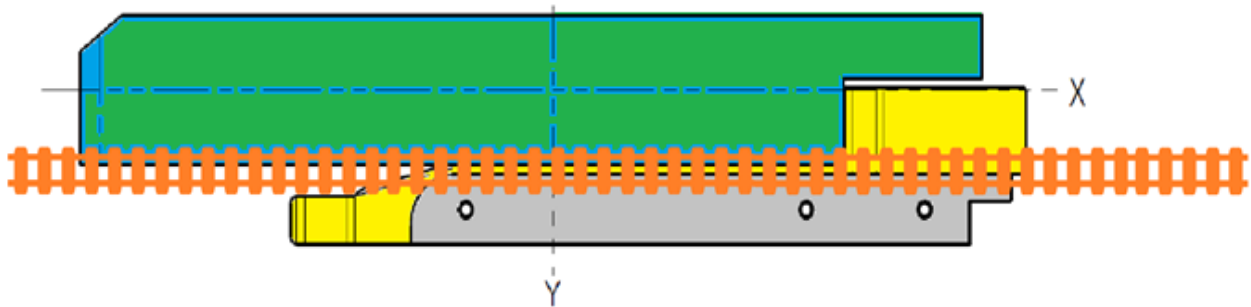
### 1. Alignment

Conveyor should be perfectly aligned with the folder.



### 2. Position

Right belt should be aligned with the slot of the folder from the beginning to the end.



### 3. Level

Conveyor should be leveled with the machine table in all direction

### 4. Height

The height of the conveyor is adjusted so that both belts should have contact with the Lexan plates and should be held down against the folder and the table with the pressure of the Lexan plates.



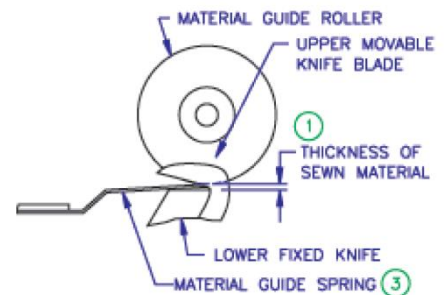
## 12. Material Edge Trimming Guide Adjustments

The Material Guide Roller Should Be Adjusted using these Dimensions

- The material guide roller should be located vertically to be 2 times the thickness (1) (Fig. 1) of the sewn material above the lower fixed knife.

This is accomplished by loosening the two 1/4-20 bolts (2) (Fig. 4, page 1-17) attaching the material guide roller support block to the frame of the upper conveyor.

Care should be taken to keep the support block moved to the right as it is also used to tension the drive belt. Once the adjustment is made, tighten the two 1/4-20 bolts securely.



- The material guide spring (3) (Fig. 1) should be adjusted to be only slightly above the lower fixed knife.

Fig. 1

## Service

- c) The material guide roller moves slower than the conveyor belts and should **NOT** contact the material, set the clearance at 2X's the material thickness. It is used to guide the material into the knife. If the wheel or material guide spring creates drag or pinches the material, the cut edge will be ragged or saw-toothed.
- d) The material guide roller should be adjusted along the sewing plane so as to be centered at the right 1/3 (Fig. 2) of the cutting edge of the upper movable knife blade. This is accomplished by loosening the two 1/4-20 bolts (4) (Fig. 4) located in the slotted holes of the upper conveyor mounting bracket. After locating the material guide roller properly, tighten the two 1/4-20 bolts securely.

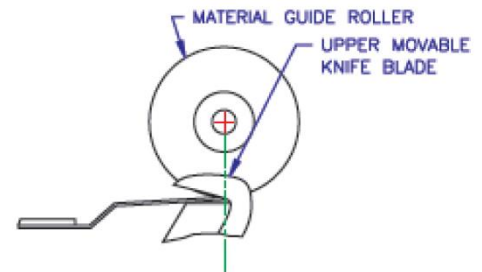


Fig. 2

- e) The material guide roller should be adjusted along the drive shaft to leave 1/16" clearance between the roller and the upper movable knife blade. This is accomplished by loosening the set screws (5) (Fig. 3) in the material guide roller and moving the roller along the shaft until the desired 1/16" clearance is reached. Tighten the set screws. Do not overtighten, the roller is plastic.

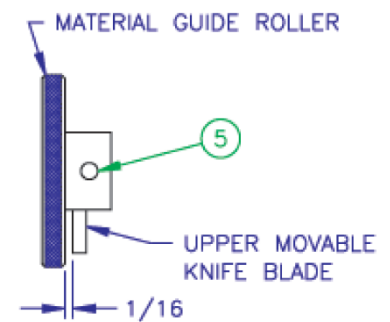


Fig. 3

**Note: These adjustments will have to be repeated every time the material trimming knife is adjusted for the amount of trim off.**

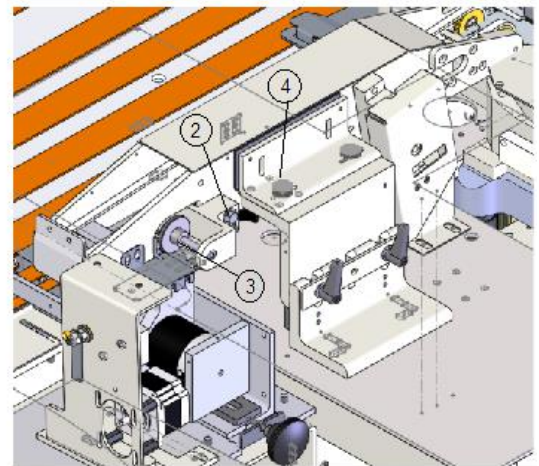


Fig. 4

### 3.4. Pneumatic

**NOTE:** All maintenance should be performed by a qualified service technician.

#### 1. Air Maintenance Unit FR

The FR (Filter Regulator). unit assembly is located behind the electrical panel. It has 3 components “1” the P Pressure Regulator (1) the Air Filters (3). The pressure gauge. This unit does not require an Air lubricator

#### 2. Pressure Regulator

The purpose of the regulator is to keep the operating pressure of the system (secondary pressure) constant regardless of fluctuations in the line pressure (primary pressure) and the air consumption. The pressure regulator is set to 90 psi.

#### 3. Air Filters

Clean air from your compressed air system is essential for the safe and efficient operation of this equipment. This unit has 1 compressed air filter. It removes contamination from compressed air after compression has taken place. Harmful contaminants like oil, dust, dirt, rust, and water-alone or in combination-can attack your system and clog sensitive pneumatic parts.

- It can reduce the efficiency of the unit.
- Wear out seals and erode system components.
- Increase maintenance and repair costs.

Air leaving a standard screw or piston compressor will have a high-water content, as well as a high concentration of oil and other contaminants.

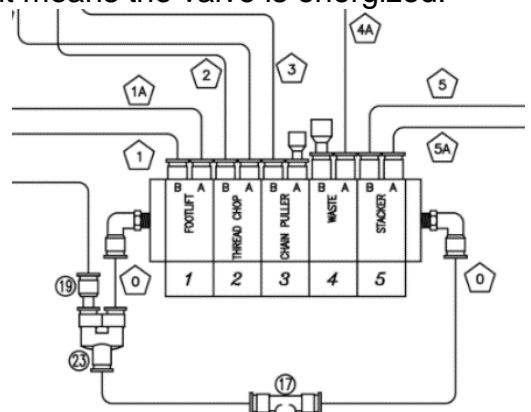
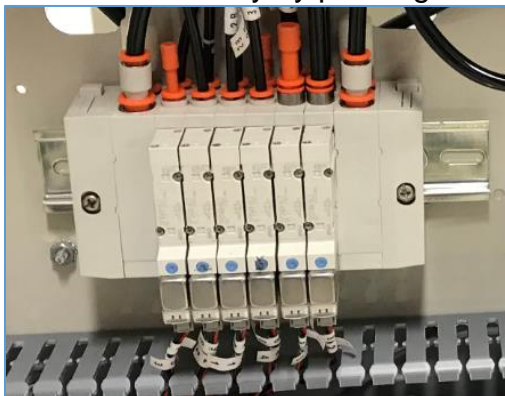
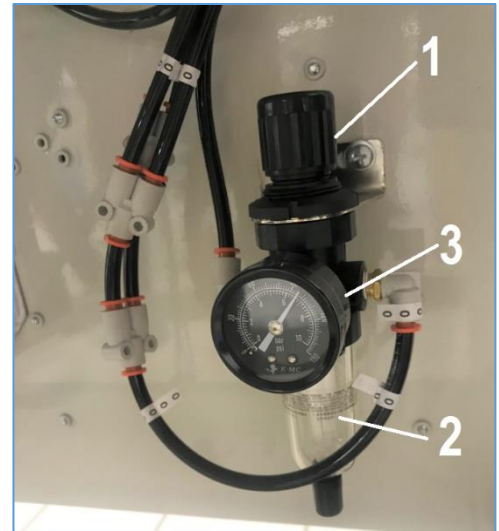
Condensate is drained manually by pushing the red bottom on the drain plug. They require a regular maintenance schedule (i.e., once per shift).

#### 4. Pressure Gauge.

Its function is to show the air pressure that is actually in the machine.

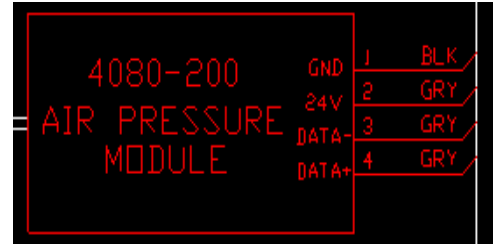
#### 5. Solenoid Valve Stacking Manifold

They are located inside the control box. Control System voltage is 24 VDC, each valve can be activated manually by pushing the blue button. The red light means the valve is energized.



## 6. Air Pressure Switch.

It is located inside the control box. This air pressure module is responsible for the detection of the secondary air pressure if it does not reach the pre-adjusted value. For more details of connections see plumbing diagram located at the end of the Spare Parts Book. Part 4080-200.



## 7. Waste Venturi

The purpose of the waste venturi is to pull the trimmings away as they're cut off of the sleeve. The air flow should be enough to get the material from the knife to the waste can.

- If it is set too high, it will pull the edge of the sleeve and hold it.
- If it is too low, it will not pull the cut material into the trashcan



## 8. Blowers

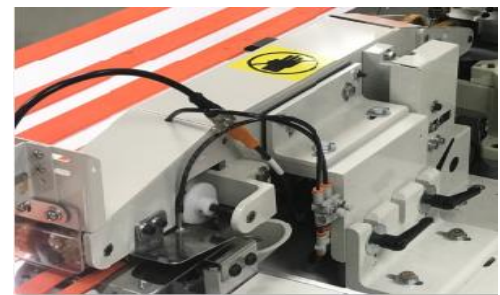
### a. Inside the Folder

It is the jet of air that help the folded leading edge to feed under the presser foot.



### b. Front of Top Conveyor.

Help to uncurl the edge material before arriving to the belt. The air flow should be enough to uncurl the material as it passes the air jet. If it is too low, the material will remain curled up and may get sewn into the seam curled.



### c. Front of the Trimming Knife.

Helps to keep the material flat before is being cut by the edge trimming knife.

### d. On the side of the Top conveyor.

Helps to keep the sleeve flat against the top conveyor.



## 3.5. Electrical

**NOTE:** All maintenance should be performed by a qualified service technician.

### 1. Ground

This unit need to be connected to ground (earth) for several reasons. In mains powered equipment, exposed metal parts are connected to ground to prevent user contact with dangerous voltage when electrical insulation fails. In electrical power distribution systems, a protective ground conductor is an essential part of the safety Grounding system. Connection to ground also limits the build-up of static electricity.



### 2. Main Circuit Breaker

The main power on/Off switch is on the inside of the control Panel. It is used to turn the power on to the whole machine. This machine requires 220V Single Phase. If you have problems with the power not coming on when the ON button is pressed, you may check this switch.



**ATTENTION. Make sure that the machine is unplugged before proceeding and that all lock out/tag out procedures have been correctly followed (See to Lockout tag out procedure)**

### 3. Main Power Contactor.

When you press the green button above the touch Screen, it activates the contactor to turn on the power to the machine. It also functions to protect the unit after a power failure. It will keep the machine without power until the green START button is pressed.



### 4. Electric Eyes

The unit use several eyes to control the process of sewing.

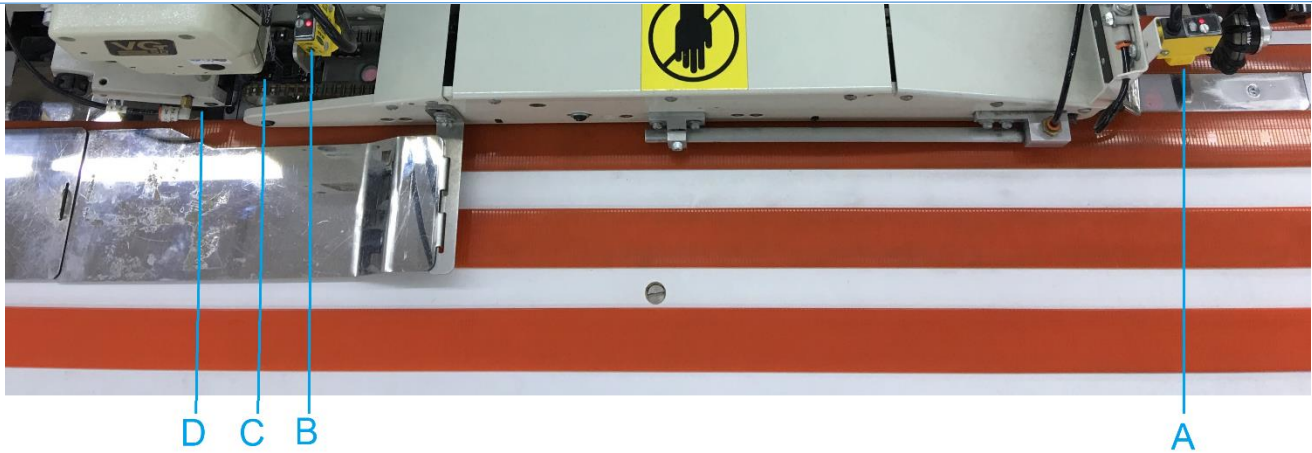
#### a. Uncurler /Folder Eye

The function of the eye is to read the leading Edge of the sleeve and start several of the time counters.

#### b. Sew Eye

Located in front of the presser foot, the function of eye is to read the leading and trailing Edges of the sleeve and start several of the time counters

## Service



### B Cover

- Head Start
- 3 Foot Down Delay
- 5 Chain Puller Sewing Delay
- 6 Leading Edge Chain Cut Delay
- 15 Outside Thread Detector Delay
- 16 Inside Thread Detector Delay
- 17 Loper Thread Detector Delay
- 27 Center Thread Detector Delay

### A Cover

- 11 Conveyor Jog Off Delay
- 28 Uncurler Delay  
(Leading Edge Folder Blower)

A: Uncurler / Folder Eye

B: Sew Eye

C: Presser Foot

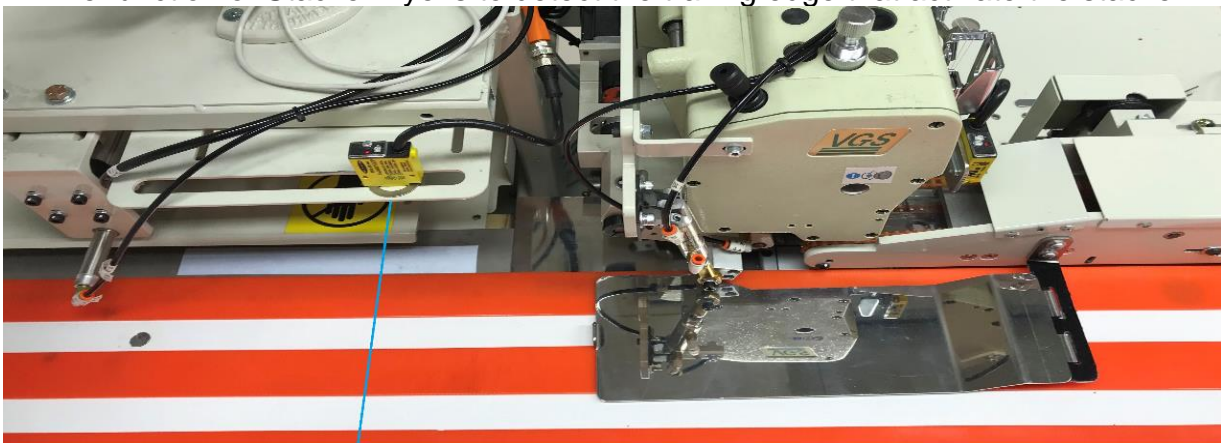
D: Chain Puller

### B Uncover

- 4 Foot Up Delay
- 7 Trailing Edge Chain Cut Delay
- 8 Head Stop Delay
- 23 Puller Chain Puller Chaining Delay

### c. Stacker Eye

The function of Stacker Eye is to detect the trailing edge that activate the stacker

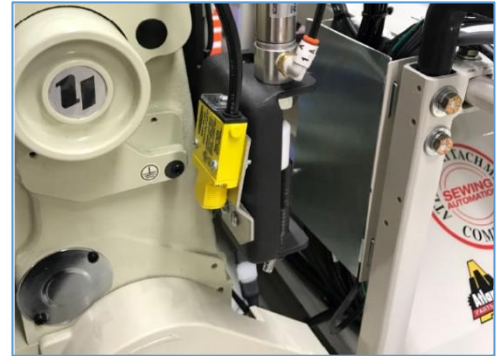


**Uncover**  
Stacker Activate

## Service

### d. Needle Positioning Eye.

The function of the needle positioning eye is to control the position of the needle stop and monitor the motor speed.



### e. Eye Sensor Adjustment

Remove the clear plastic cover from the end of the sensor. There are two adjusting screws under the cover. One is labeled "GAIN" and is used to set the sensitivity of the sensor. The other screw is labeled "DO & LO" and should always be fully clockwise.

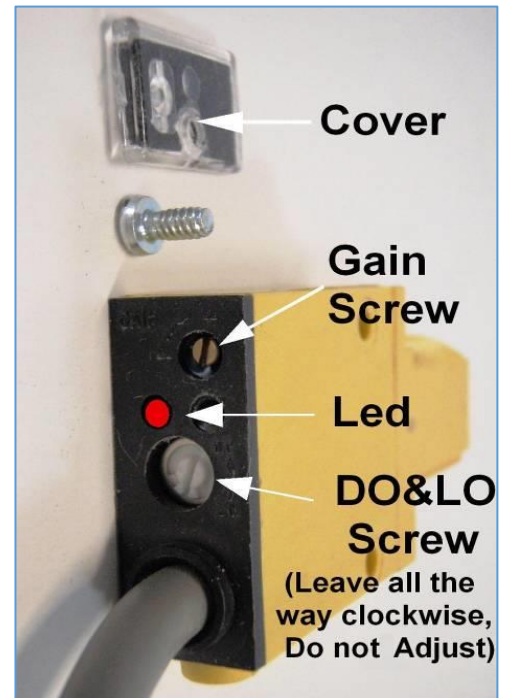
With the end of the sensor pointing at the center of the reflective tape, turn the "GAIN" screw counterclockwise until the red LED indicator is off.

Then turn the "GAIN" screw clockwise until the LED indicator comes on.

Then turn the "GAIN" screw one full turn clockwise. The LED indicator should be blinking slowly approximately 2 pulses per second. The eye on the hand wheel should be at least 2 full turns.

Cover the eye so that the sensor cannot see the reflective tape and the LED should go off.

Part #FFSM312VQ



### f. Reflective Tape Maintenance

Use a soft cloth for cleaning. Do not use chemicals or abrasives to clean it. Avoid any contact with oils and liquids. Do not touch the tape with bare fingers. If tape is dirty or opaque, the eye may not function correctly.



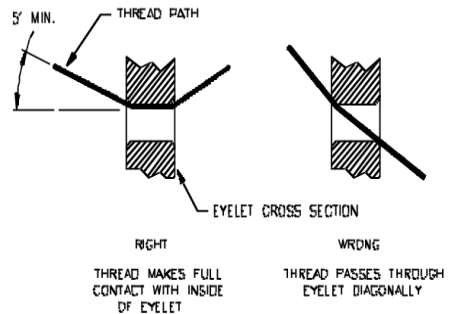
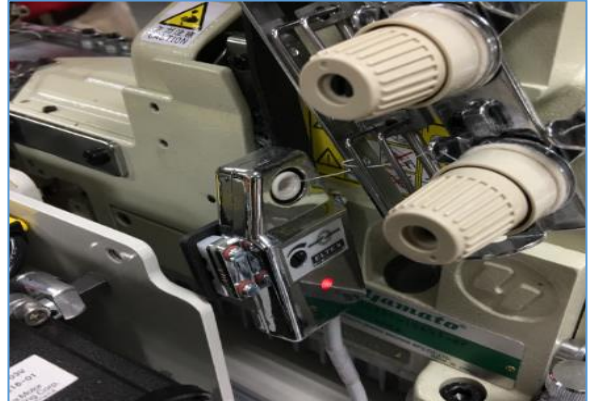
## 5. Thread Break Detectors.

### a. Looper Thread Sensor

This type of thread detector monitors the consistent movement of thread at a 5-degree angle (see picture) over a ceramic surface. With the unit running in manual mode, the LED on the detector must not be on. The presence of a red light on any of the detectors indicates thread breakage or maladjustment, thus causing the unit to stop. Part # 011-132A

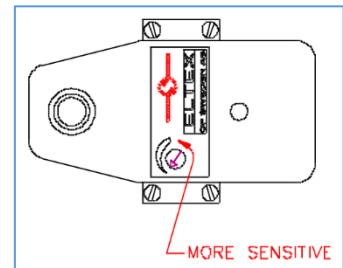
### b. Adjustment.

To adjust thread detector, switch control panel to manual. Depress the chain switch to make unit run and chain-off. Take precaution that the chain is under chain puller before running.



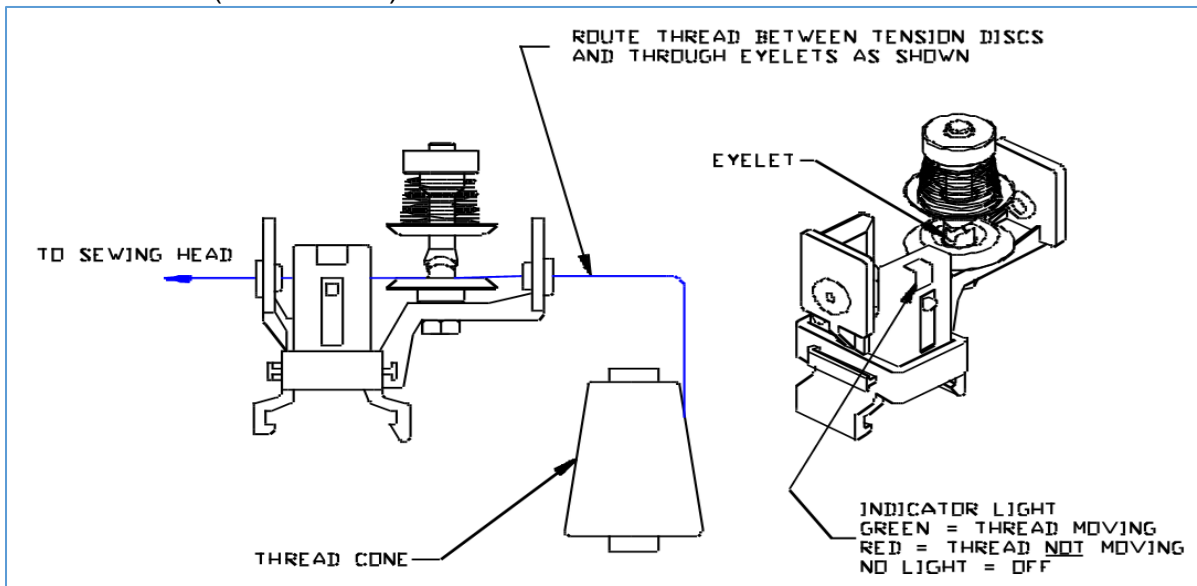
CROSS SECTION OF THREAD EYELET SHOWING RIGHT AND WRONG THREAD PATH.

Looking at the face of the thread detector with unit running in manual chaining mode, turn blue nylon screw (see Fig. 2) counterclockwise until you see the LED light up. Turn screw clockwise until LED goes out. Turn 1/16" more CW.



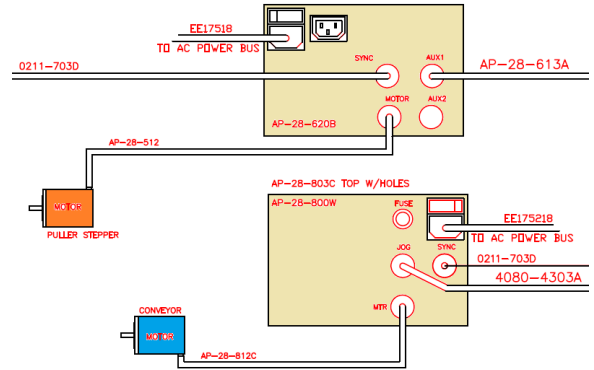
### c. Needle Thread Sensor

Part Number: (4003-3WT2)



## 6. Stepping Motors

There are 2 stepping motors in the machine. The Chain Puller and the conveyor belt. Each one is controlled by an independent control box. The Chain puller has a 2 AMP motor, and the conveyor belt has a 4 AMP motor.



## 7. Stepping Motor Control Box

The control boxes power the puller feeding and conveyor belt. The amber light show that the box is energized.

### a. Thumbwheels

The three thumbwheels on the bottom box adjust the synchronous speed of the feed belts while sewing

- If you change the RPM of the sewing head, there is no need to adjust the thumbwheels; they will remain synchronized to the head.
- If you change the sewing stitch length, it will be necessary to adjust these numbers to re-synchronize the feed belt with the sewing head.
- Decreasing the number makes the belt go slower. For example, if you changed the stitch length from 10 SPI to 11 SPI, you would need to decrease the number in the thumbwheels by 10% to match the 10% shorter stitch length.



### b. JOG button

Pressing the JOG button will turn on the belt stepping motor.

### c. Jog Speed Dial.

It controls the Jog Speed of the belt. This speed must match the synchronous speed of the belt while sewing. Readjust the center dial of the box if required.



## 8. Sewing Head Puller Control Box

### a. Thumbwheels

The left thumbwheels on the box adjust the speed of the puller roller when running in CHAIN Speed.

- If you change the RPM of the sewing head, there is no need to adjust the thumbwheels; they will remain synchronized to the head.
- Decreasing the number makes the puller go slower.



The right thumbwheels on the box adjust the speed of the puller roller when running in SEWING Speed.

- If you change the RPM of the sewing head, there is no need to adjust the thumbwheels; they will remain synchronized to the head.
- If you change the sewing stitch length, it will be necessary to adjust these numbers to re-synchronize the feed belt with the sewing head.
- Decreasing the number makes the belt go slower. For example, if you changed the stitch length from 10 SPI to 11 SPI, you would need to decrease the number in the thumbwheels by 10% to match the 10% shorter stitch length.

### b. JOG button

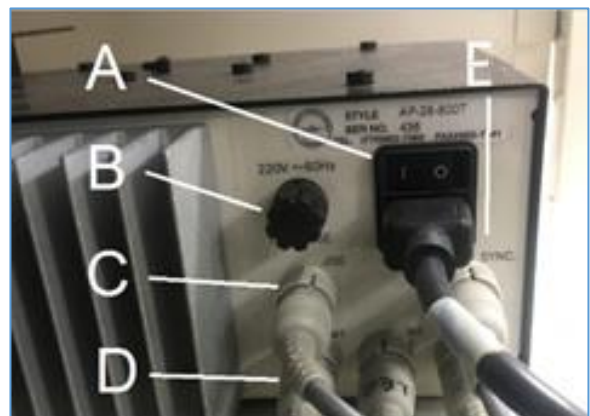
Pressing the JOG button will turn on the stepping motors.

### c. Power

There is an On/Off switch (A), fuse (B), JOG cable (C), stepping motor cable (D) and Sync cable (E) on the back of the boxes

Leave the on/Off switch ON all the time.

**NOTE:** When working on the box always disconnect the power cord before servicing.

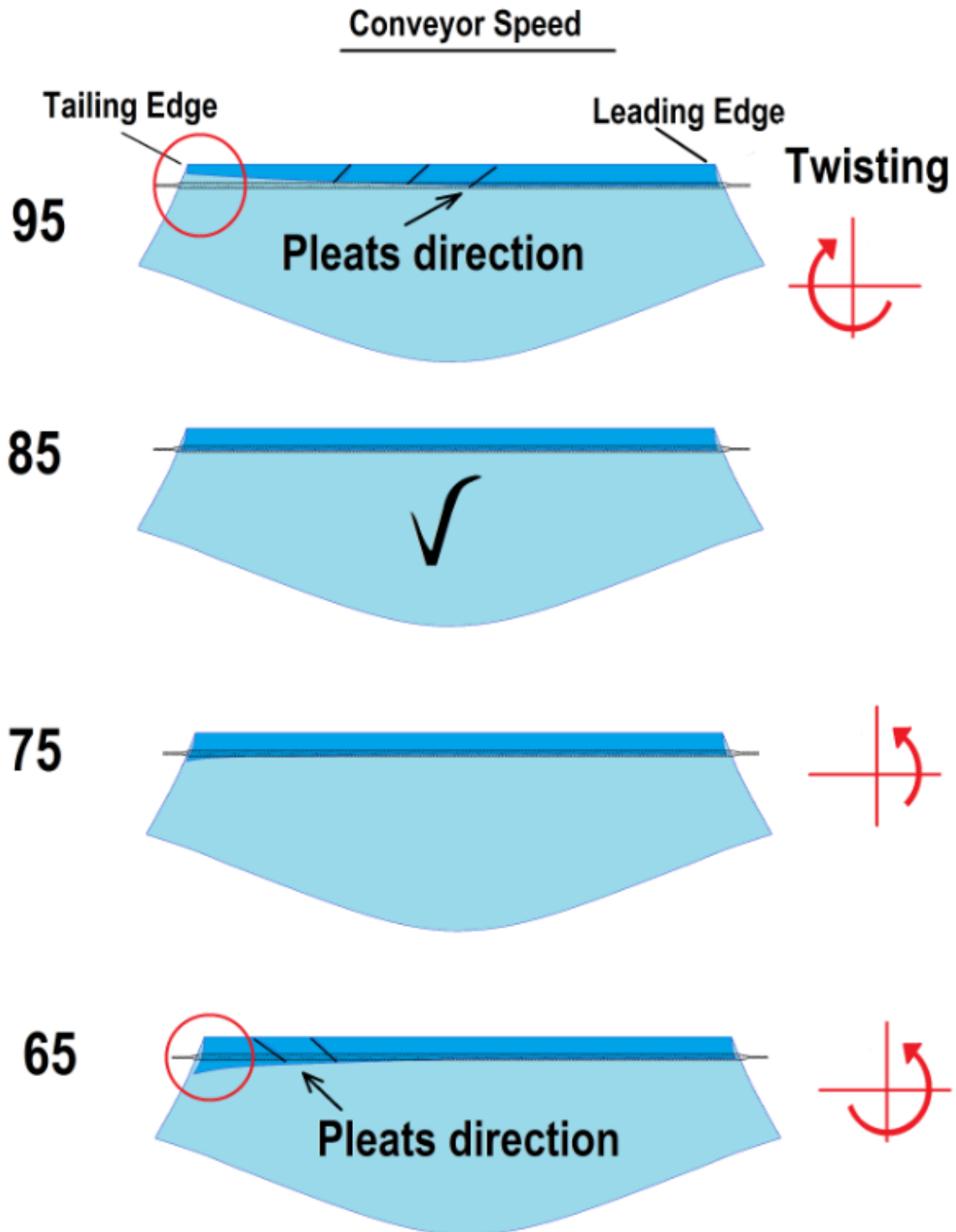


## 9. Conveyor speed adjustment

### 1. SEW SPEED.

The conveyor belt should feed at the same lineal speed as the sewing head.

Based on the stitch length, calculate the lineal speed. Measuring with a tachometer, run the conveyor on "SEW": speed and see if it matches the sewing lineal speed. Adjust the 3 digits dial of the conveyor box that control the conveyor speed to match the lineal sewing speed. See example below of the material reaction with different Sew speed values.



## **10. Efka Sewing Motor**

### **a. Programming the Code Number**

**NOTE:** The parameter numbers in the illustrations below serve as examples and may not be available in all program versions. In this case, the display shows the next higher parameter number. See List of Parameters. If you have a screen with 4 digits your access code will be 5913 instead of 591

### **b. Parameter Settings EFKA DC1500**

[See Printable document on next page](#)

213ESPAR4 Parameter Settings (Efa AB221A/1500DC)			
PARAMETER	RANGE	VALUE	DESCRIPTION
Do this first	*****	****	Perform a master reset before programming, see below
290		5	Mode of operation. <b>MUST SET THIS PARAMETER FIRST!</b>
026		0	Treadle mode
110	70-390 rpm	200	Positioning speed.
111	200-9900 rpm	4800	Maximum speed when "129" is 0, 1, or 2.
161	0-1	0=cw/1=ccw	Motor rotation
220	1-55	55	Acceleration power
270	0-5	1	External handwheel sensor configuration.
272	020-255	1000	Drive ratio between motor pulley and handwheel pulley. If handwheel pulley is smaller than motor pulley, increase this value to slow down sewing head until measured speed matches speed set with parameter 111. (For Yamato and Pegasus, setting should be 100; for Rimoldi, setting should be 124)
362	0-1	1	Position sensor voltage: 0 = 5V, 1 = 15V
436		0	Muse use code "5913". This disables an input that was causing box to reset itself.
401	0-1	1	Change from 0 to 1 to save parameters
<b>To Perform Master Reset of Parameters:</b>			
LED 1: Off			1. Power on holding down the "P" button till "COD" is displayed.
LED 2: Off			2. Press ">>" once and enter the number "5913"
LED 3: Off			3. Press "E" twice and "093" is displayed.
LED 4: Off			4. Press "+" once, "094" is displayed.
LED 5: Off			5. Press "P" to exit programming mode with all default values.
LED 6: Off			
LED 7: Off, Stop at needle down.			
LED 8: On, Stop at needle up.			
<b>Programming Instructions:</b>			
			1. Power on holding down the "P" button till "COD" is displayed.
			2. Press ">>" once and enter the number "5913"
			3. Press "E" once and "2.0.0" is displayed. This is a parameter.
			4. Press "E" again and the value for parameter 200 is displayed.
			5. With the value on the screen, adjust to desired setting.
			6. Press "E" to enter value and continue with parameter setting.
			7. Repeat for other parameters, press "P" once when complete.
			<b>8. Run sewing head to save parameters before powering down</b>

## 11. Panasonic Motor Sewing Motor

### a. Programming D9 Motor

1. Turn off power to machine.
2. Hold Up Arrow button, Turn on the power.
3. Display shows Axxx
4. Use + & - buttons to scroll to desired parameter #.
5. Press > to toggle to parameter value.
6. Displays shows the parameter value xxxx.
7. Use + & - buttons to change parameter value.
8. Press enter (E) button to save change.
9. Press > to toggle to back to parameter number.
10. Use + & - buttons to scroll to next desired parameter #.
11. Repeat until all desired parameters are updated. Be sure to press enter (E) after changing the parameter values.
12. Turn off the power momentarily.
13. For 1278-8 set the following parameters:
  - A 27 = 1 (Stop needle up)
  - A 29 = 1 (Rotation, 1 CCW, 0 CW)
  - A 70 = 5000 (max speed)
  - A 91 = 1 (Pneumatic solenoid foot lift, 100% modulation)
1. Turn off power to machine.
2. Hold "E" & "-" buttons, Turn on the power
3. Use + & - buttons to change parameter value to F166.
4. Press > to toggle to parameter value.
5. Use + & - buttons to change parameter value to 600 (one minute foot time-out).
6. Press enter (E) button to save change.
7. Turn off the power momentarily.

**b. Programming D7 Motor**

**Apply to Small Programmer Mpur01a10**

**NOTE:** to adjust parameters after initial programming, start with step number 10

1. Turn off power to machine.
2. Plug in the small Panasonic programmer.
3. Hold ENTER and MODE "+", Turn on the power. Continue holding down buttons for 8 seconds, until 106 Y2 is displayed on screen.
4. Double-click the "ENTER" button to exit parameter mode.
5. Turn off the power.
6. Turn the speed control on the motor to the minimum.
7. Turn on the power.
8. Run the sewing head for a few seconds (at least 5) to set the pulley ratio in the Panasonic Motor. Pressing the sew pedal will cause the head to sew.
9. Turn off the power.
10. Turn on the power.
11. Press MODE "+" several times until the word parameter is displayed on the screen.
12. Double-click the "ENTER" button to enter parameter mode.
13. Using the MODE "+" and "-" buttons to locate the parameter and the DATA "+" and "-" buttons to adjust the individual parameter, set the following parameters:
  - 135 = desired RPM
  - 605 = 64 (foot modulation On-time)
  - 606 = 1 (foot modulation Off-time)
14. (Refer to this step only for Pegasus Machines with a hall effect under trimmer sensor) Set parameter 011 equal to 131. (011=3 is default)
15. (Refer to this step only for Rimoldi Machines with a hall effect position sensor) Set parameter 520 equal to 1 and parameter 523 equal to 222.
16. Double-click the "ENTER" button to exit parameter mode.
17. Turn off the power.
18. Turn the speed control on the motor to the maximum.
19. Turn on the power.
20. Test RPM of sewing head with tachometer.
21. The sewing speed shouldn't exceed the setting in parameter 135

Start delay from lifted foot is parameter 603 and is typically set at the factory default. \*

**Reset sequence for large programmer:**

Hold the "A", "B" and "ENTER" buttons, while turning on the power, wait 5 sec.  
Press the enter button.

**Parameter programming sequence for large programmer:**

Hold the "D" and "ENTER" buttons, while turning on the power, wait 5 sec.  
Press the enter button.

Press the backtick buttons (the two buttons on the bottom right of the programmer)  
Use the "A" and "B" buttons to locate the parameter (see step 13 above) and "C" and "D" to adjust the individual parameter (see step 13 above)

### 3.6. Serial Bus

The Gateway Serial Bus System, based on only four wires, is self-diagnostic and offers helpful solutions to solve the problem. An operator using a touch screen control panel manages this rugged, uncomplicated system. Designed to international standards, this multi-lingual, easy to operate interface will allow parameters to be saved, allow technician access with password protection, and offers a built-in production performance monitor which can be networked to a central computer.

A warranty of 3-Year covers all electrical components of the state-of-the-art Serial Bus Control. Controller part number is 4082105.

#### 1. Touch Screen



**CAUTION: Do Not Use Any Sharp Objects to Touch the Screen.**

#### Installation

To install new screen requires no special procedures and it is plug and play.

**NOTE** After replacement Machine assemblies will reset or move to home positions. Screen will return to the Main Display and is ready to run.

## 2. Modules

### a. Gateway Module...4080-900

Interface module, connects the touch screen to the serial bus control system



### b. Output Module...4080-140

They are responsible for transferring signals from the computer to the working elements such as valves, motors, and relays, etc.



### c. Input Module...4080-110

They are responsible for transferring signals from the machine to the computer such as switches, electric eyes, sensors, etc.



### d. Single Output Module ...4080-160

They are responsible for transferring signals from the computer to external single channel device (electrically insulated), usually high load motors.



### e. Output Module ...4080-130

They are responsible for transferring signals from the computer to external connections, servo motor controls (electrically insulated)



### f. Module Replacement

**NOTE:** Even though all output and/or input modules within the machine are identical, they cannot be moved to another location on the serial bus cable, as the computer automatically assigns a working address for each one.

- If a replacement is necessary, always replace with a new or loaner module from another machine.
- Electrical Power to the machine must be turned "OFF" during replacements.
- Computer will show an error if one or more modules are missing.
- Removing more than 1 module at a time will require reinstalling all of the modules.

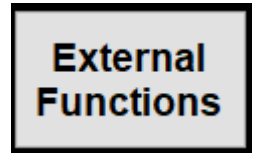
### Procedure:

1. Remove the old module and connect the new one. After turning on the power, the computer will show a "Missing module error".
2. Press Continue and the new module will be addressed, and "All modules installed" message will appear.
3. Press Reset and the home page will appear

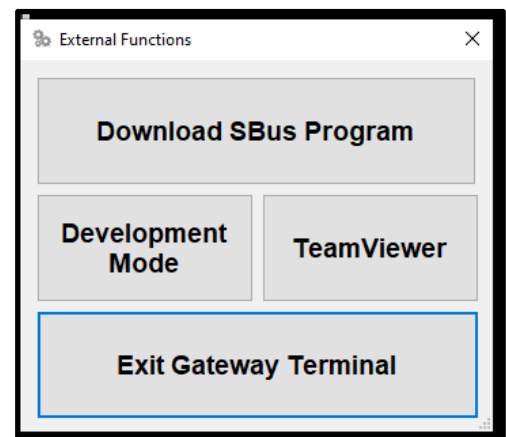
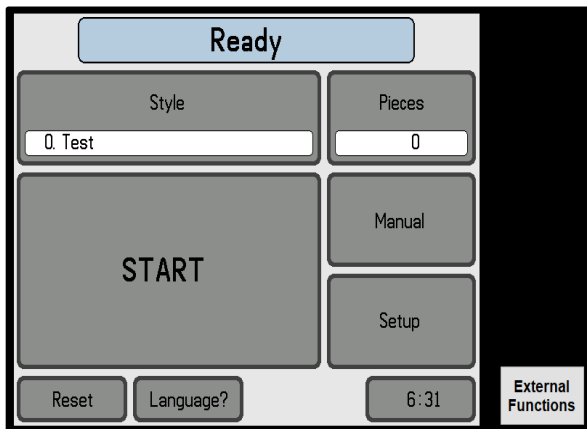
### 3. Program Update

NOTE: Important, before starting the procedure below, go to Advanced Settings and write down all the settings shown in these screens.

- a. New Program will be loaded from the Gateway PC Desktop.
- b. Gateway PC on the Workstation can access internet Wi-Fi.
- c. Click on External Functions button (located on the lower right side of the screen) and Open TeamViewer on the PC.
- d. Remotely connect to the Gateway PC with your PC and transfer the program file to the Desktop.
- e. Using the External Functions, click on Download SBus Program and select the new program file from Desktop location.
- f. Wait for the Download to complete.
- g. Gateway Terminal will restart, and begin running the new program, after recognizing and applying the new software update.

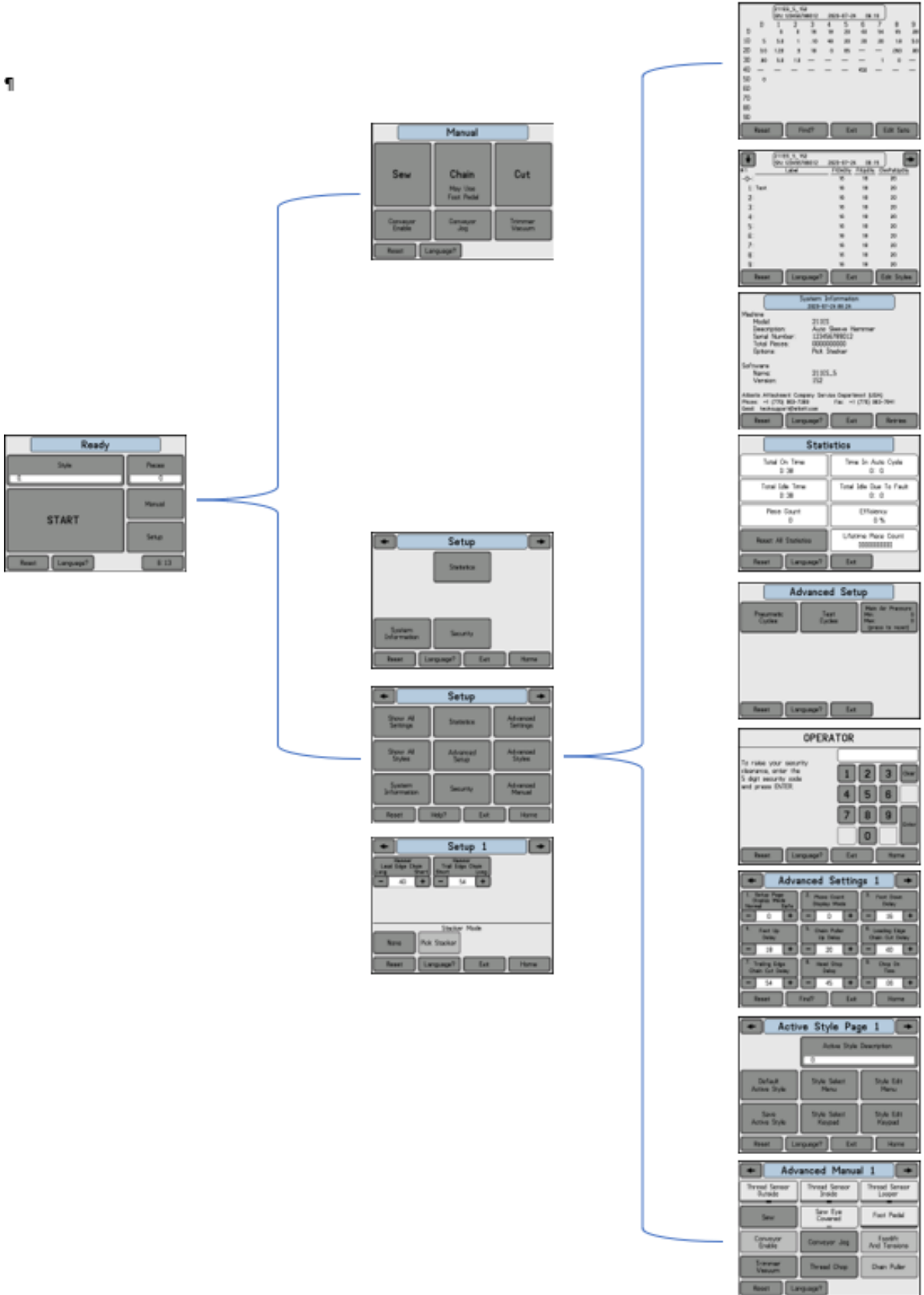


Now that the process is complete, go to Advanced Settings and verify them using the settings you wrote down at the beginning of the process. Make any necessary corrections.



### 4. Technical Screens

A password is required to access the Technical Screens. Factory Password is 33333

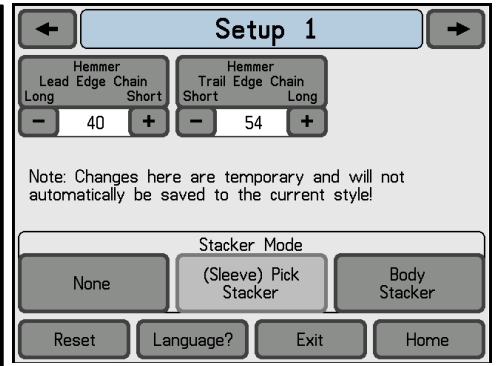
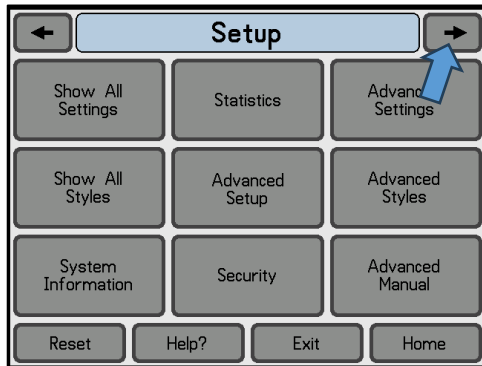
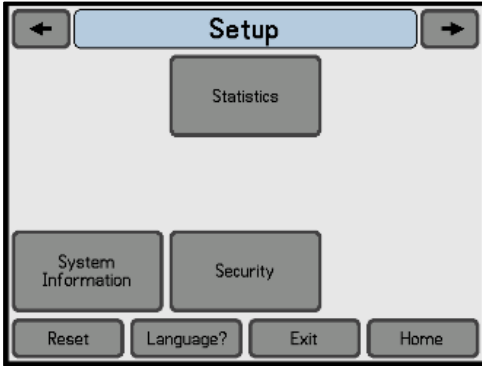


A. Setup Screens

Operator Level

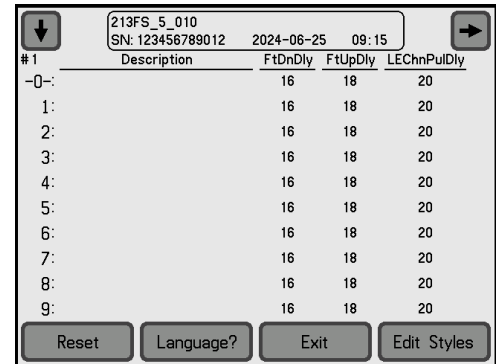
Mechanic or higher-level

Setup Page 1



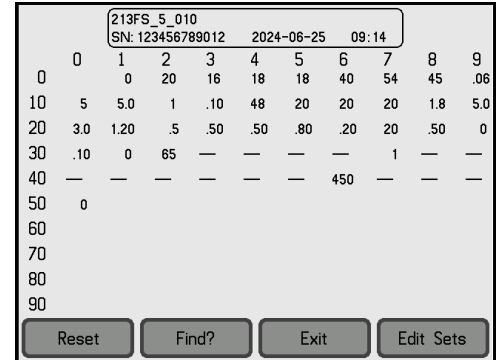
1. Show All Styles

Shows all styles currently programmed in machine



2. Show All Settings

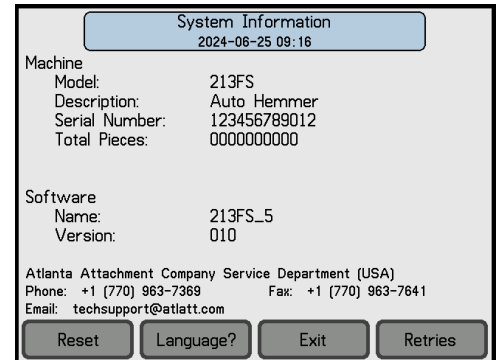
Shows the current parameter values being used by the machine. It doesn't show the function, only the value. Before any program or module change, take notes of these values or a picture in case of any program issues.



3. System Information

Shows general system information from the memory module.

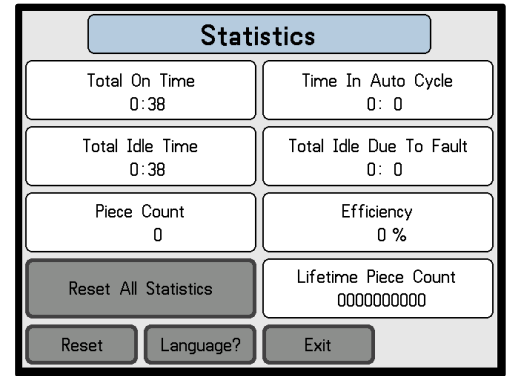
The Serial number is stored on the data module and software for the controller is in the program module.



#### 4. Statistics

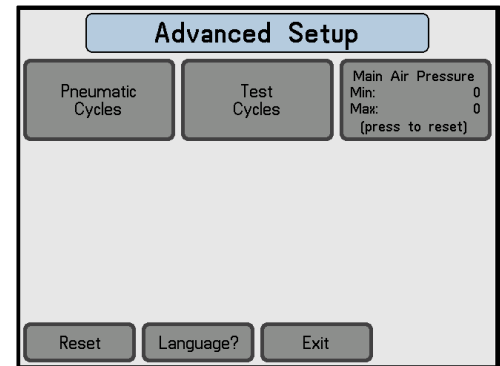
The statistics page is set up to give the supervisor a rough estimate of the machine usage.

- **Total On Time** is how long the machine has been powered up since the last reset.
- **Time In Auto Cycle** is how long the machine has run in the automatic mode since the last reset.
- **Total Idle Time** is how long the machine has been powered up, but the machine has not been running since the last reset.
- **Total Idle Time Due to Fault** is the amount of time the machine has been powered up, but not running due to an error registered by the serial bus system, since the last reset.
- **Piece Count** is the number of cycles the machine has run since the last reset.
- **Efficiency** is Time in Auto Cycle divided by Total On Time.
- **Lifetime Piece Count** is the total number of cycles the machine has run. It is not reset by pressing the Reset All Statistics button.



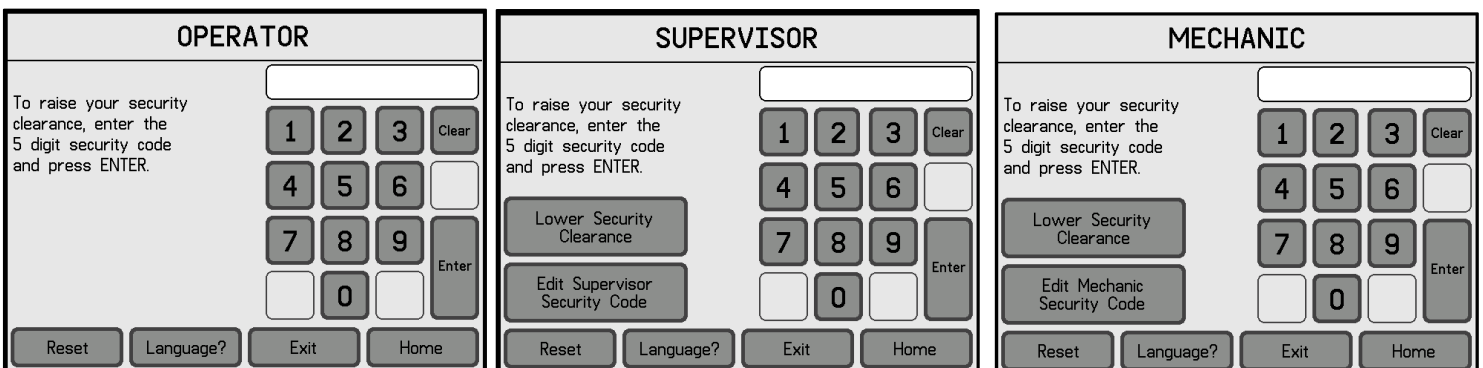
#### 5. Advanced Setup

Provides access to Pneumatic and Test cycles



#### 6. Security

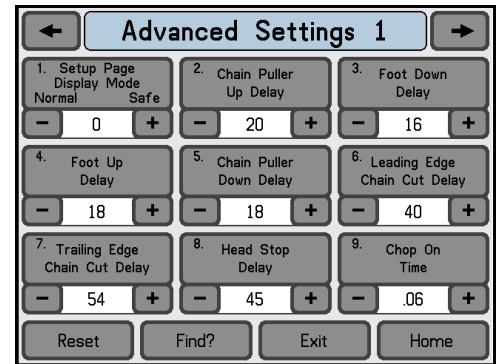
Provides six(6) different levels of access with input of codes



## 7. Advanced Settings Page 1

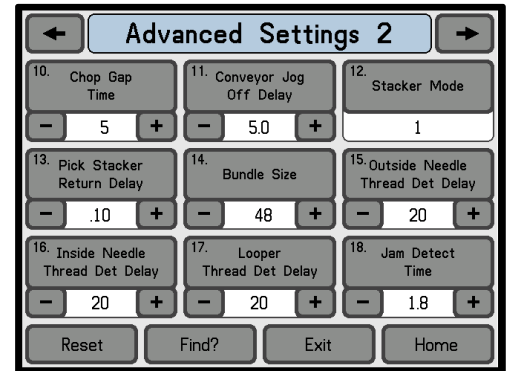
This button selection gives access to all available settings for the machine **Note:** Screens 1-5 accesses functions that will allow you to adjust the setting and will give a brief description of how the setting works.

- **Setup Page Display Mode:** Selects the content of the Operator's setup page
- **Chain Puller Up Delay:** Time from the sew eye seeing the leading edge of the sleeve till the puller goes into sewing speed while sewing on the material. The sewing speed should change at the first stitch in the sleeve.
- **Foot Down Delay:** Time from the sew eye seeing the leading edge of the sleeve till the presser foot drops. The foot should drop at the first stitch in the sleeve. If set too early, it will cause thread breaks.
- **Foot Up Delay:** Time from the sew eye seeing the trailing edge of the sleeve till the presser foot lifts to allow chaining. The foot should lift at the last stitch in the sleeve. If set too late it will cause thread breaks.
- **Chain Puller Down Delay:** Time from the sew eye seeing the trailing edge of the sleeve till pressure is applied to the chain puller
- **Leading Edge Chain Cut:** Same as Leading Edge Chain Chop on 211ES Main Screen.1 under set up
- **Trailing Edge Chain Cut Delay:** Time from the sew eye seeing the trailing edge of the sleeve till the chain cutter cuts. Same as Trailing Edge Chain Chop under set up on main screen.
- **Head Stop Delay:** Time from the sew eye seeing the trailing edge of the sleeve till the head stops sewing.
- **Chop On Time:** Time the knife stays in the down position. Too small prevents the knife from cutting reliably, too large causes the leading-edge chain to wad up in front of the knife.



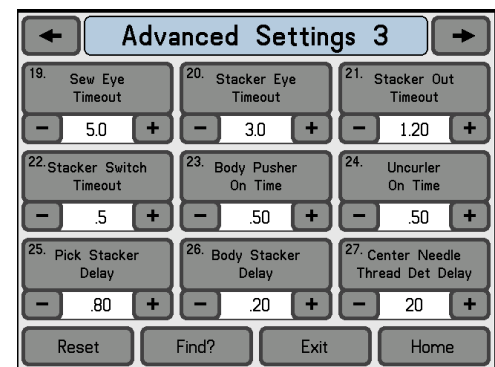
## Advanced Settings Page 2

- **Chop Gap Time:** Time of gap from the ends of the trailing and leading-edge chains. If gap is smaller than this setting, only the leading-edge cut will occur. A single cut between sleeves is preferred.
- **Conveyor Jog Off Delay:** Time the conveyor runs after hemming is finished. Same As Conveyor Stop
- **Stacker Mode:** on / off
- **Stacker Return Delay:** Controls how long the stacker clamp stays open to release the sleeve. This delay starts when the stacker limit switch is tripped. Once expired, the stacker reverses direction. If set too low, the stacker will reverse directions too soon and preventing the sleeve from stacking properly.
- **Bundle Size:** Sets quantity of sleeves in bundle
- **Outside Needle Thread Detect Delay:** Sets time delay before machine will stop due to thread break
- **Inside Needle Thread Detect Delay:** Sets time delay before machine will stop due to thread break
- **Looper Thread Detect Delay:** Sets time delay before machine will stop due to thread break
- **Jam Detect Time:** Time from the sew eye seeing the leading edge of the sleeve till the sleeve should arrive under the stacker eye.



## Advanced Settings Page 3

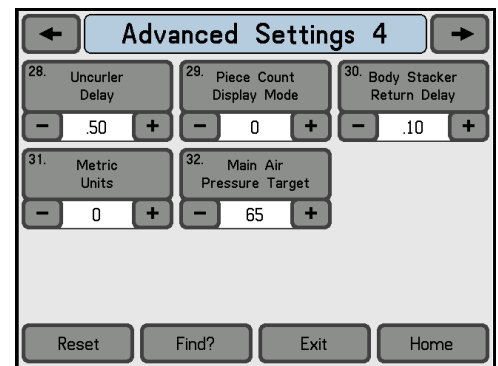
- **Sew Eye Timeout:** Time that the sew eye may see fabric continuously without causing a jam error.
- **Stacker Eye Timeout:** Time that the stacker eye may see continuous fabric without causing a jam error.
- **Stacker Out Timeout:** Maximum expected time from stacker carriage sent out till stacker switch should be activated.
- **Stacker Switch Timeout:** Time that the stacker switch can be engaged without causing a jam error.
- **Body Pusher On-Time:** Time allowed for the Body Pusher to position the body in the body stacker clamp.



- **Uncurler On-Time:** Time from the Cloth At Conveyor eye seeing the leading edge of the body till the Body Uncurler blower turns off.
- **Pick Stacker Delay:** Time from the Cloth At Stacker eye seeing the leading edge of the material till the Pick Stacker cycle starts.
- **Body Stacker Delay:** Time from the Cloth At Stacker eye seeing the leading edge of the material till the Body Stacker cycle starts.
- **Center Needle Thread Detect Delay:** Time from the Foot dropping till the Center Needle Thread Detector is expected to provide valid thread Information.

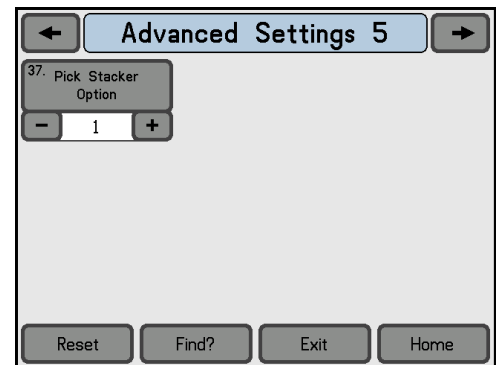
**Advanced Settings Page 4**

- **Uncurler Delay:** The amount of time after the Cloth At Conveyor eye covers until the Body Uncurler blower turns on.
- **Piece Count Display Mode:** Selects the way Piece Count is displayed on the Ready and Run pages.
- **Body Stacker Return Delay:** Controls how long the stacker clamp stays open to release the sleeve.
- **Metric Units:** Sets all data to Metric or US measurements
- **Main Air Pressure Target:** Sets Lowest level of air pressure acceptable before machine will turn off, if it falls below set number.



**Advanced Settings Page 5**

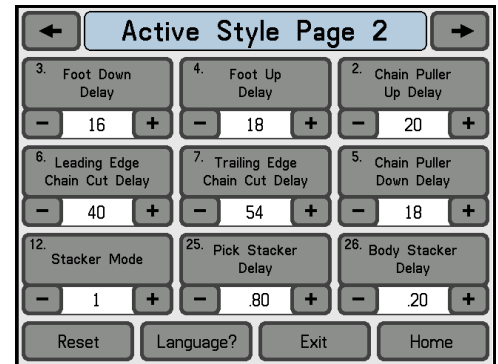
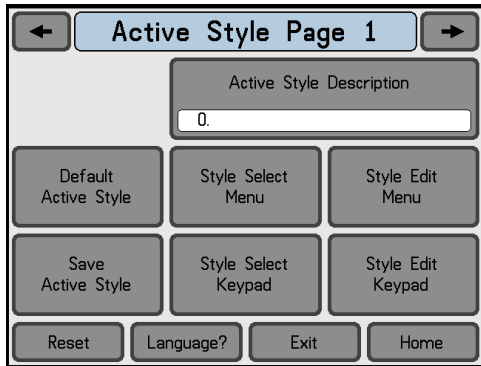
- **Pick Stacker Option:** on / off



## Service

### 8. Advanced Styles

Provides access to several settings which can be customized within a Style for easy of change over time for different materials or patterns of sleeves



### Style Edit Menu

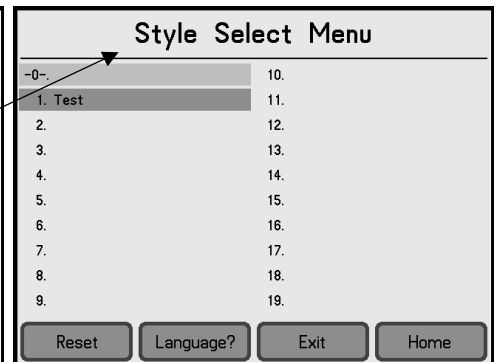
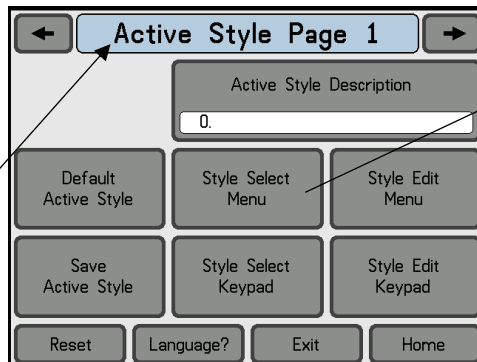
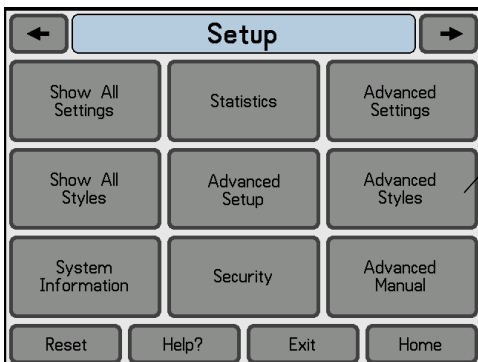
EDIT STYLES MENU

#1	Description	FtDnDly	FtUpDly	LEChnPulDly
-0-		16	18	20
1:		16	18	20
2:		16	18	20
3:		16	18	20
4:		16	18	20
5:		16	18	20
6:		16	18	20
7:		16	18	20
8:		16	18	20
9:		16	18	20

Reset | Language? | Exit | Home

#### a. Styles

The Style Button shows the current style being used. Pressing the STYLE button will take you to the Page/Menu of all available styles.

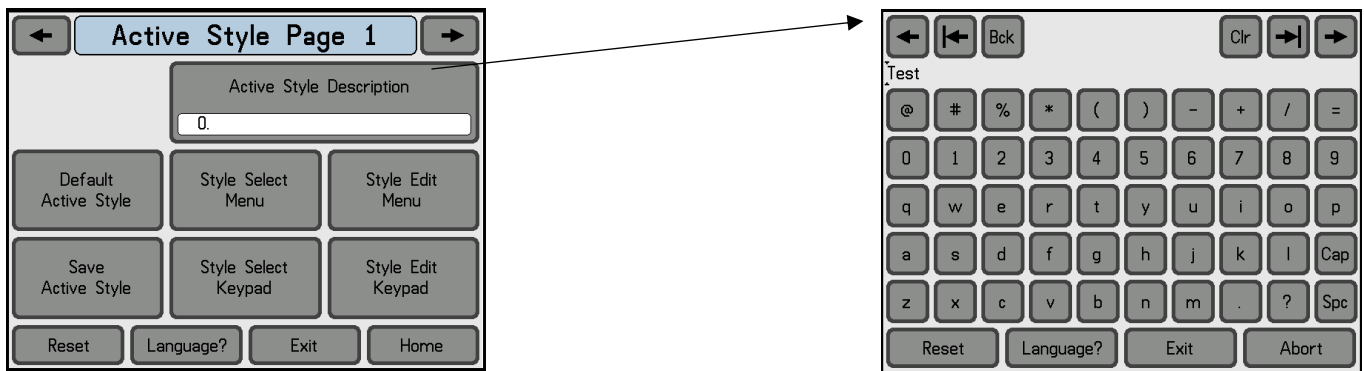


**b. Editing Styles**

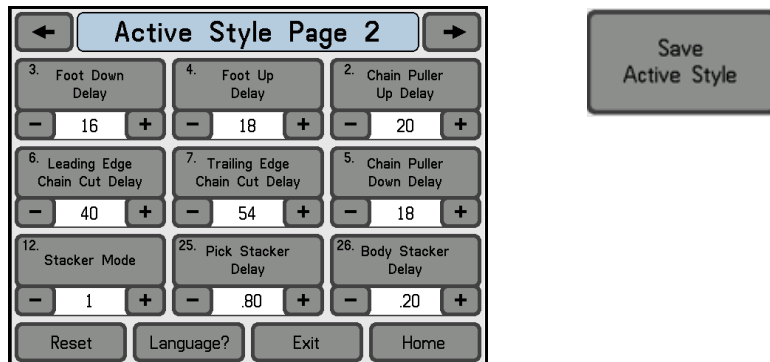
There are several other ways to access the Style Edit Menus

**Example # 1:**

- Go to Setup Page and press the ADVANCED STYLES button.
- The ACTIVE STYLE PAGE will appear.
- Pressing the ACTIVE STYLE DESCRIPTION button will allow you to name or Re-name a style. The name can be a combination of letters, numbers, or symbols including spaces. The page will show the current name in the box surrounded by a touch keypad. When the Style Name is entered, press exit, and then press SAVE ACTIVE STYLE, Page 1

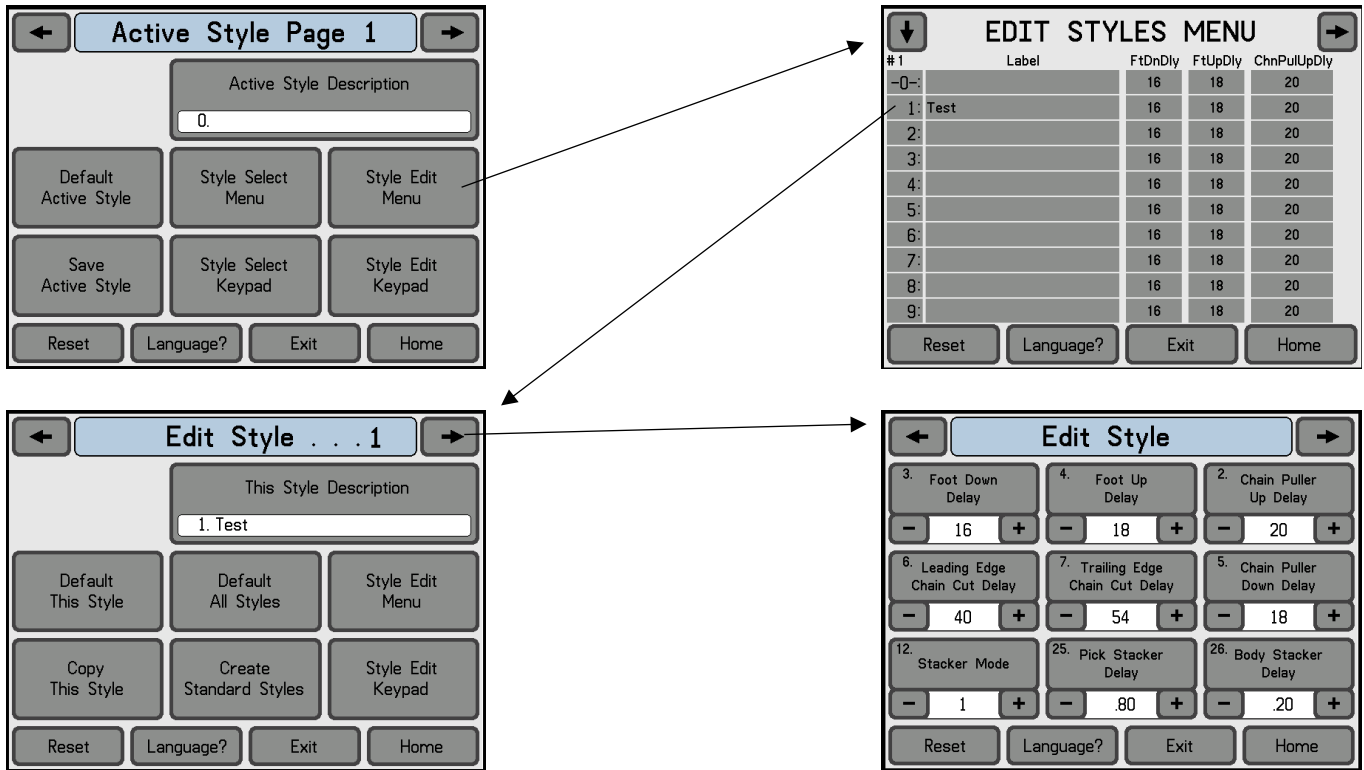


- Go to ACTIVE STYLE PAGE 2 to change numerical counter settings of Current / Active Style, when completed, press exit and then press SAVE ACTIVE STYLE, Page 1



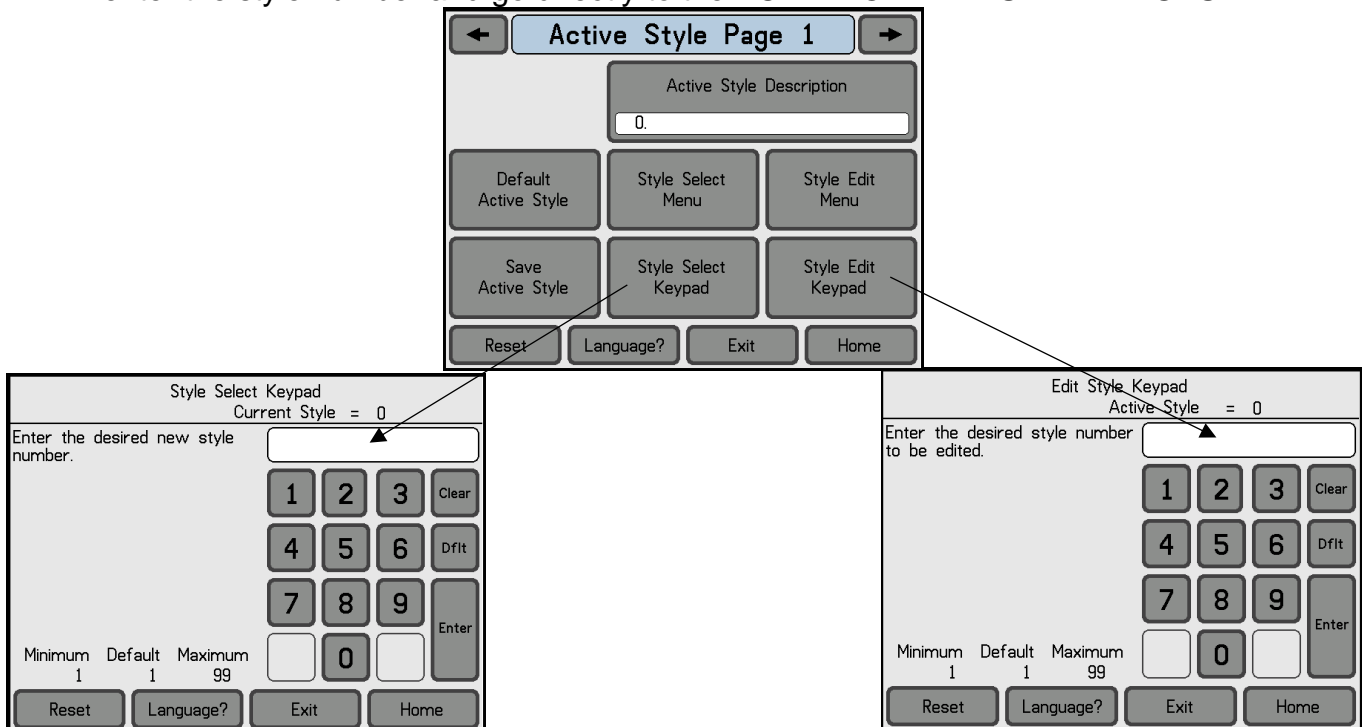
**Example # 2**

- Push the STYLE EDIT MENU button and then press the corresponding number on the left side of EDIT STYLE MENU and the EDIT STYLE PAGE 1 will appear, push the right arrow for numerical counter changes, Page 2.



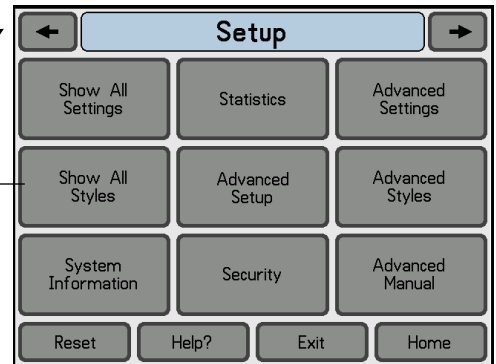
**Example # 3**

- From READY Screen, go to SETUP Page and press the ADVANCED STYLES button.
- Pressing the STYLE SELECT KEYPAD OR STYLE EDIT KEYPAD will allow you to enter the style number and go directly to the ACTIVE OR EDIT STYLE PAGES.



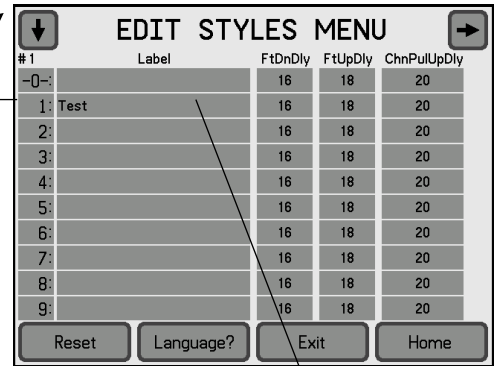
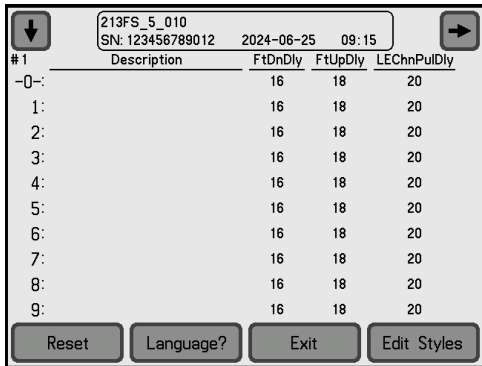
**Example # 4**

- From READY Screen, go to SETUP Screen and press SHOW ALL STYLES



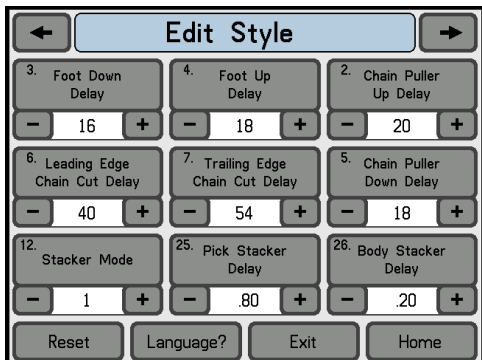
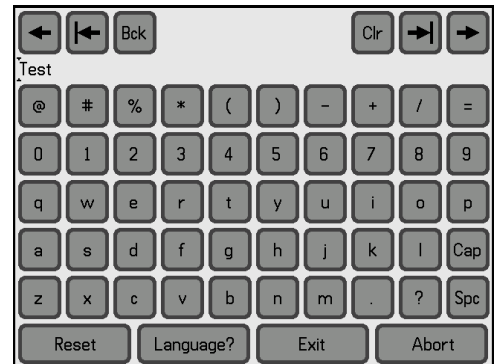
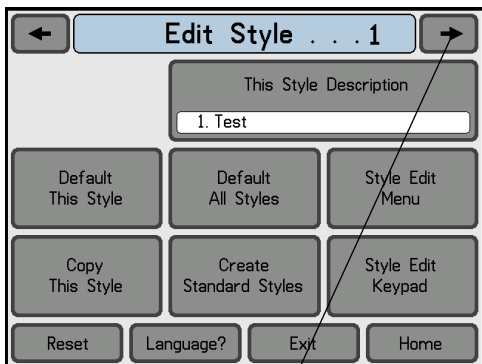
- Press EDIT STYLES button

Press style number or name to be changed.



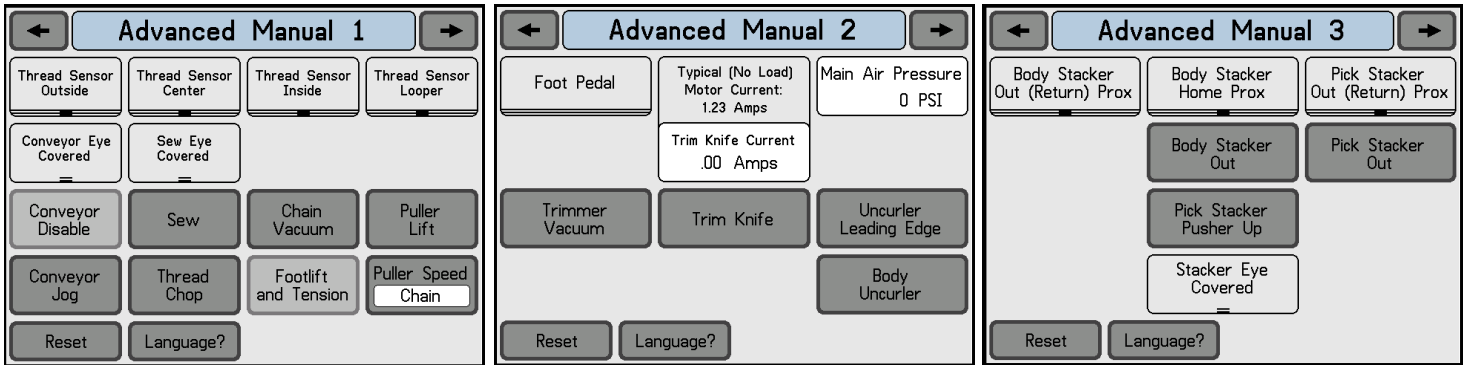
- Numerical Counter Page changes

Name change Page



### 9. Advanced Manual

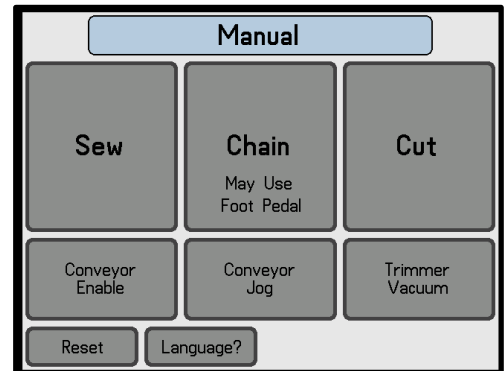
Provides access to visual indicators of machine sensors to tell if component is activated or idle. It all allows for manual operation of several key components for testing functions.



**Note: While testing input devices the machine WILL NOT start in automatic mode.** A double line below the name of an input device is used to denote a change in its state. An example is when you manually cover the sew eye a double line below SEW EYE appears. The eyes, foot pedals, and proximity switches can be checked.

### B. Manual Outputs

Note: The buttons on the Manual Screen allow quick access to manually activate an individual device or cycle, such as cylinders, solenoids, and motors.



## 5. Expiration Count 911

Expiration Count Code "911" is not an error that can be resolved without assistance from Atlanta Attachment.

- Machine has displayed this error as the result of someone removing or installing modules incorrectly.
- Machine has completed a predetermined time-cycle set by the factory.

When contacting Atlanta Attachment via phone or e-mail, please provide this information below, as displayed on the "911" screen.

- The machine type.
- The machine serial number
- The security key.
- The master clock.

Here is what the 911 warning currently says:

### **Warning 911 Instructions**

1. Contact the Atlanta Attachment Company Service Department (USA).

Phone: +1 (770) 963-7369

Fax: +1 (770) 963-7641

Email: [techsupport@atlatt.com](mailto:techsupport@atlatt.com)

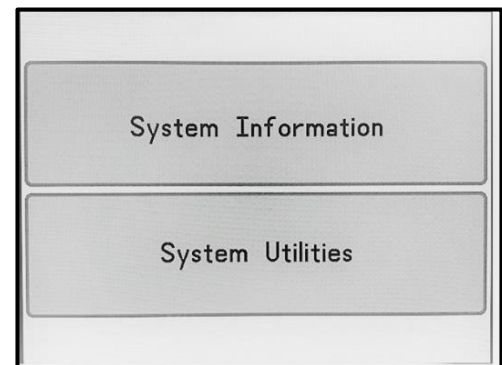
2. Once in contact, provide the following information.

000	Machine Type
000000000000	Machine Serial Number
00000	Security Key
00	Master Clock

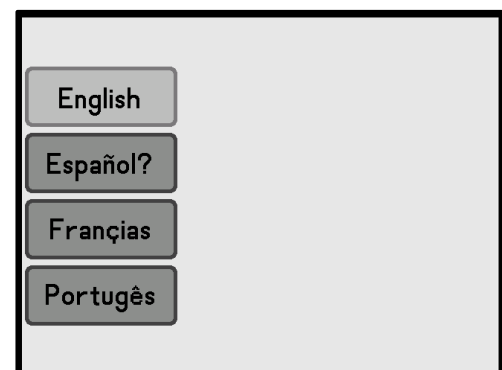
To TEMPORARILY bypass this warning, press CONTINUE

#### **a. Unlock Procedure**

1. As the machine is powering up or after pushing the Reset Button, you must push the System Utilities Button as it becomes visible on the Screen. Note: if you miss the opportunity, push the Reset Button a second time and the process will repeat.

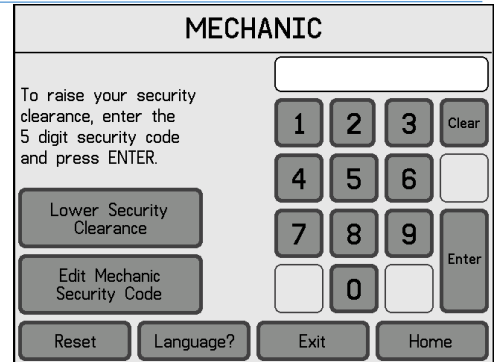


2. Enter your Language preference on the next screen.

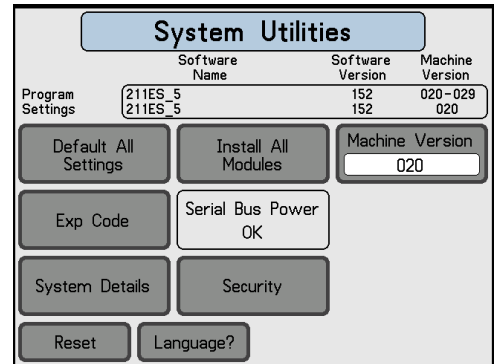


Service

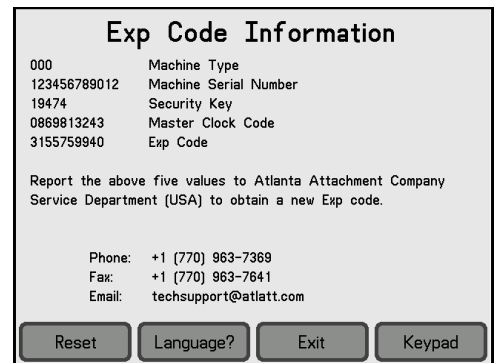
3. . Enter your 5-digit Security Code 33333 to Continue



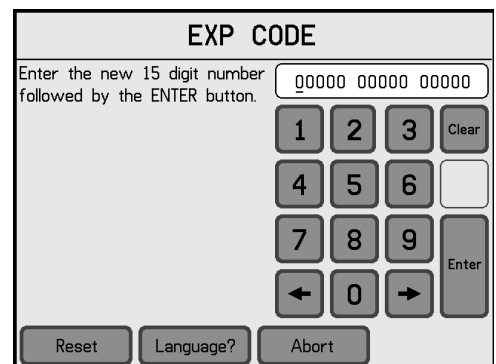
4. When the System Utilities Screen appears, push the EXP Code Button



5. Provide the Information to AAC Service Department and when prompted, push the Keypad Button on the lower right of the screen.



6. Enter the 15-digit number provided and push Enter, the machine reboot and return to the Ready Screen.



### 3.7. Troubleshooting

#### 1. Screen Messages

MACHINE ERROR #1		
Related Setting: None Thread break on outside needle.		
Possible Solutions: 1. Check thread and replace if broken. 2. Make sure thread is routed properly through sensor. 3. Adjust tension on sensor. 4. Replace or re-program sensor.		
RESET	LANGUAGE?	CONTINUE

MACHINE ERROR #2		
Related Setting: None Thread break on inside needle.		
Possible Solutions: 1. Check thread and replace if broken. 2. Make sure thread is routed properly through sensor. 3. Adjust tension on sensor. 4. Replace or re-program sensor.		
RESET	LANGUAGE?	CONTINUE

MACHINE ERROR #3		
Related Setting: None Thread break on looper.		
Possible Solutions: 1. Check thread and replace if broken. 2. Make sure thread is routed properly through sensor. 3. Adjust Sensitivity of sensor (Light goes off as thread moves through it. 4. Replace sensor.		
RESET	LANGUAGE?	CONTINUE

MACHINE ERROR #4		
Related Setting: None Low air pressure detected.		
Possible Solutions: 1. Air shutoff valve is closed. 2. Air line is disconnected from machine. 3. Air supply pressure is below 80 PSI. 4. Air regulator is adjusted below 70 PSI. 5. Air pressure switch is disconnected. 6. Air pressure switch is needs adjustment. 7. Air pressure switch has failed. 8. Module #5 has failed.		
RESET	LANGUAGE?	CONTINUE

MACHINE ERROR #5		
Related Setting: Jam Detect Time Possible Sleeve Jam.		
Possible Causes: 1. Sleeve is jammed under the foot. 2. Sleeve is jammed under the conveyor.		
RESET	LANGUAGE?	CONTINUE

MACHINE ERROR #6		
Related Setting: Stacker Switch Timeout Stacker bypassed return limit switch		
Possible Causes: 1. Stacker limit switch timeout is set to low. 2. Possible defective limit switch.		
RESET	LANGUAGE?	CONTINUE

### MACHINE ERROR #7

Related Setting: None  
Foot pedal pressed at power up or Reset.

Possible Causes:  
1. Something is pressing down on the switch.  
2. Possible defective foot pedal.

RESET

LANGUAGE?

### MACHINE ERROR #8

Related Setting: Stacker Switch Jam Timeout  
Stacker limit switch has been engaged to long.

Possible Causes:  
1. Stacker is jammed at switch.  
2. Possible defective limit switch.

RESET

LANGUAGE?

CONTINUE



### MACHINE ERROR #9

Related Setting: None  
Sew eye covered at automatic startup.  
Continued:  
sew eye is covered and there is no material under the foot, simply remove the top conveyor and remove the sleeve.  
2. Possible defective sew eye.

MANUAL MODE

RESTART IN AUTOMATIC

RESET

LANGUAGE?

### MACHINE ERROR #9



Related Setting: None  
Sew eye covered at automatic startup.  
1. The sew eye is prevented from seeing the reflective tape. All eyes must be clear to start in automatic mode. Restart in Automatic starts the machine as if it were in the middle of a sleeve. Use this button ONLY if the sleeve is under the foot and covering the sew eye. If material is under the foot and the sew eye is uncovered then Manual mode MUST be used. If the  
Press the Next Arrow to Continue.

MANUAL MODE

RESTART IN AUTOMATIC

RESET

LANGUAGE?

### MACHINE ERROR #10

Related Setting: Sew Eye Timeout  
Sew eye has been covered to long.

Possible Causes:  
1. The sew eye is prevented from seeing the reflective tape.  
2. The conveyor has stopped.  
3. Possible jam under sew eye.  
4. Possible defective sew eye.

RESET

LANGUAGE?

CONTINUE

### MACHINE ERROR #11

Related Setting: Stacker Eye Timeout  
Stacker eye has been covered to long.

Possible Causes:  
1. The stacker eye is prevented from seeing the reflective tape.  
2. The conveyor has stopped.  
3. Possible jam under stacker eye.  
4. Possible defective stacker eye.

RESET

LANGUAGE?

CONTINUE

Service  
Troubleshooting

<b>Problem</b>	<b>Cause:</b>
1.- Chain cutter knife not cutting.	A. Manually activate solenoid valve and check operation of air cylinder. B. Disconnect air pressure and check hardware for mechanical problems. C. Check cutting blades for proper adjustment. D. Check cables and wiring for loose connections. E. Check Chop On Time Delay.
2. Sewing Head will not run.	A. Check if Emergency switch is ON. B. Check cable at computer "B" socket and at motor socket. C. Check eye in front of foot.
3. Edge trimming knife not cutting cleanly.	A. Check sharpness of knives. B. Check knife adjustment. C. Check top conveyor alignment. Right conveyor belt must be parallel to line of feed and aligned with edge of fabric at edge of folder. D. Plastic roller must be kept close to top knife blade. See "adjustment to material edge trimming guide system" page
4. Foot does not raise and drop at edge of sleeve.	A. Check Foot down delay setting. B. Check electric eye adjustment at front of foot. C. Check reflective tape.
5. Machine skipping or breaking thread.	A. See adjustment in manual on page 1-17. B. Check needle thread tension too tight or too loose. C. In case of thread breaking during chaining, check the levelness of the puller to the chaining plate. This is very critical to proper chaining. Look for adjustment of levelness. D. Chaining must be checked in "MANUAL MODE".
6. Thread chain wraps around roller.	A. Check air jets on puller bracket. B. Check that the trimmer venturi is working. C. Check roller for wear or burrs.
7. Machine stops while front electric eye remains covered.	A. Check adjustment of front eye. B. Check for thread breaks. C. Check sew eye time out setting.
8. Thread break sensor tripping without broken thread.	A. Adjust thread break detectors per manual.
9. Machine runs-away when power is turned on.	A. Be sure power is turned on to all control boxes. B. Disconnect remote treadle plug at sewing motor and apply power. If machine runs-away, then replace defective Motor. C. If machine runs-away when remote treadle cable is plugged back in then replace defective AAC control box. D. Sew pedal is jammed in sewing position
10. Stepping motor will not run in automatic, JOG, or runs backwards.	A. Check the socket at the stepping motor for broken or bent pins. B. Check the stepping motor cable and plugs for loose connections. C. Check pulleys and belts. D. With power turned off and the stepping motor still plugged in, turn the stepping motor shaft by hand. Moderate resistance to turning indicates a defective stepper motor control box or shorted cable. Make this test again with the other end of the cable disconnected at the stepper motor control box to see if it is the control box or cable.

Service

<b>Problem</b>	<b>Cause:</b>
1. Thread break on outside needles.	A. Check thread and replace if broken. B. Make sure thread is routed properly through sensor. C. Adjust tension on sensor. D. Replace or re-program sensor.
2. Thread break on inside needles.	A. Check thread and replace if broken. B. Make sure thread is routed properly through sensor. C. Adjust tension on sensor. D. Replace or re-program sensor
3. Thread break on looper.	A. Check thread and replace if broken. B. Make sure thread is routed properly through sensor. C. Adjust Sensitivity of sensor (Light goes off as thread moves through it. D. Replace sensor.
4.- Low air pressure detected.	A. Air shutoff valve is closed. B. Airline is disconnected from machine. C. Air supply pressure is below 80 PSI. D. Air regulator is adjusted below 70 PSI. E. Air pressure switch is disconnected. F. Air pressure switch is needing adjustment. G. Air pressure switch has failed. H. Module #5 has failed.
5. Possible sleeve jam. Relative setting: Jam Detect Time	A. Sleeve is jammed under the presser foot. B. Sleeve is jammed under the conveyor.
6. Stacker bypassed return limit switch. Relative setting: Stacker Switch Timeout.	A. Stacker switch timeout setting set to low. B. Possible defective limit switch.
7. Foot pedal pressed at power up or reset.	A. Something is pressing down on the switch. B. Possible defective foot pedal.
8. Stacker limit switch has been engaged too long. Relative setting: Stacker Switch Jam Timeout.	A. Stacker is jammed at switch. B. Possible defective limit switch.
9. Sew eye is covered at automatic startup.	A. The sew eye is prevented from seeing the reflective tape. All eyes must be clear to start the machine in automatic mode. Manual can be used to remove material from under the foot. Restart in Automatic starts the machine as if it were in the middle of a sleeve. B. Possible defective sew eye. Possible Causes:
10. Sew eye has been covered too long. Relative setting: Sew Eye Timeout.	A. The sew eye is prevented from seeing the reflective tape. B. The conveyor has stopped. C. Possible jam under sew eye. D. Possible defective sew eye.
11. Stacker eye has been covered too long. Relative setting: Stacker Eye Timeout.	A. The stacker eye is prevented from seeing the reflective tape. B. The conveyor has stopped. C. Possible jam under stacker eye. D. Possible defective stacker eye

## Service

### 2. Efka Controller Error

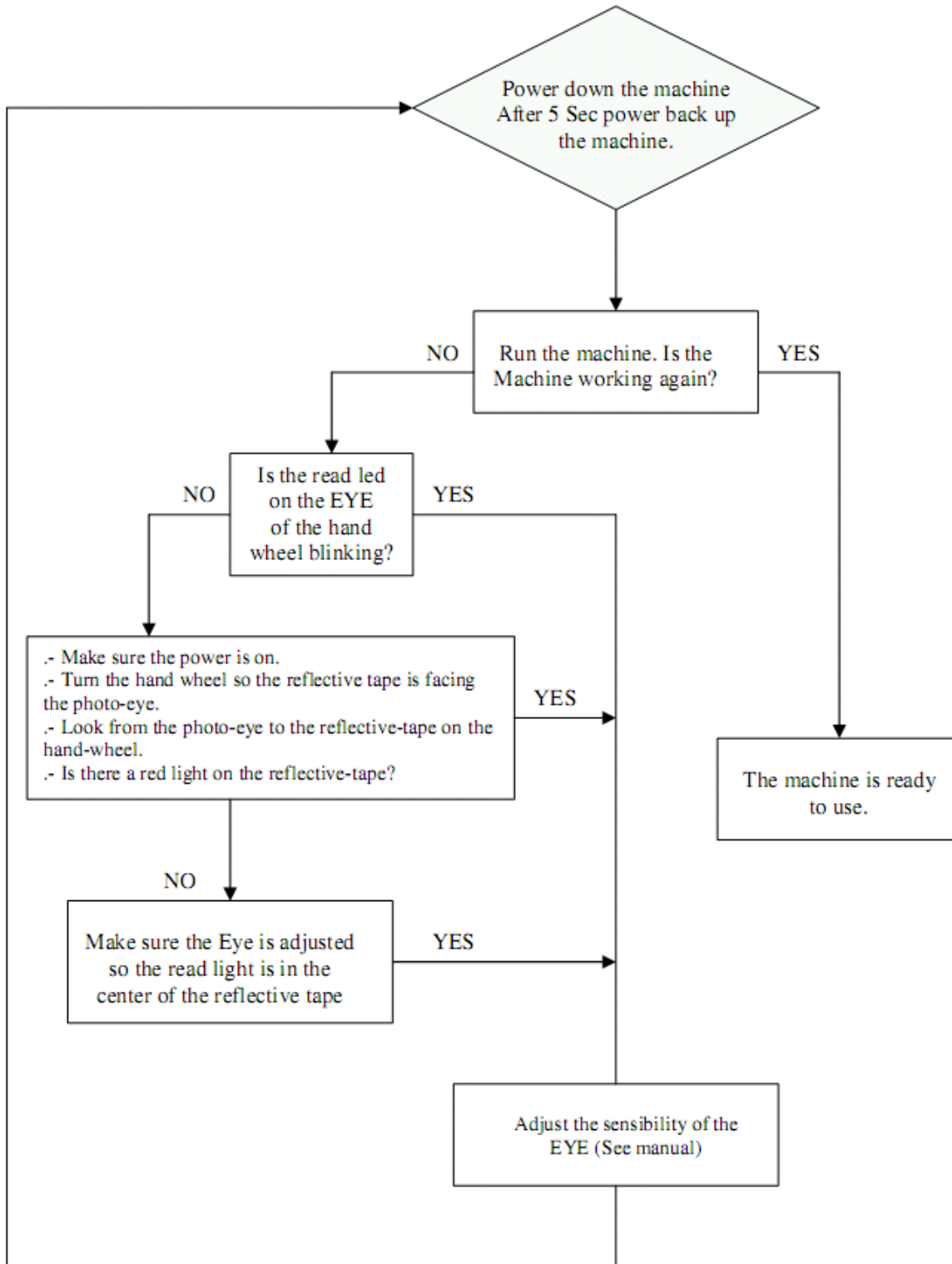
<b>General Information</b>			
<b>On the control</b>	<b>On the V810</b>	<b>On the V820</b>	<b>Signification</b>
A1	InF A1	InF A1	Pedal not in neutral position, when turning the machine on
A2	-StoP- blinking	-StoP- blinking + symbol display	Machine run blockage
A3	InF A3	InF A3	Reference position is not set
A6	InF A6	InF A6	Light barrier monitoring
A7	Symbol blinking	Symbol blinking	Bobbin thread monitor

<b>Programming Functions and Values (Parameters)</b>			
<b>On the control</b>	<b>On the V810</b>	<b>On the V820</b>	<b>Signification</b>
Returns to 000 or to last parameter number	Returns to 0000 or to last parameter number	Like V810 + display InFo F1	Wrong code number or parameter number input

<b>Serious Condition</b>			
<b>On the control</b>	<b>On the V810</b>	<b>On the V820</b>	<b>Signification</b>
E1	InF E1	InF E1	The external pulse encoder e.g. IPG... is defective or not connected.
E2	InF E2	InF E2	Line voltage too low, or time between power off and power on too short.
E3	InF E3	InF E3	Machine blocked or does not reach the desired speed.
E4	InF E4	InF E4	Control disturbed by deficient grounding or loose contact.
E9	InF E9	InF E9	EEPROM defective.

<b>Hardware Disturbance</b>			
<b>On the control</b>	<b>On the V810</b>	<b>On the V820</b>	<b>Signification</b>
H1	InF H1	InF H1	Commutation transmitter cord or frequency converter disturbed.
H2	InF H2	InF H2	Processor disturbed

### 3. Flow Chart EFKA Error E1



## 4. Panasonic D9 Controller Errors

D-9 Error Code and Solutions			
Error Code	Abnormality Items	Cause of the Problem	Action Required
E - 1	Sewing Machine Locked	<ul style="list-style-type: none"> <li>*Sewing machine locked</li> <li>*Needle Sensor connector is disconnected</li> <li>*V-belt has loose tension</li> <li>*Motor connector is disconnected</li> <li>*Trimmer sequence is set improperly</li> </ul>	<ul style="list-style-type: none"> <li>*Check rotation of handwheel</li> <li>*Check the needle sensor connections</li> <li>*Tighten the v-belt</li> <li>*Check the motor connections</li> <li>*Confirm trimmer sequence</li> </ul>
E - 2	Hardware tripping in control	<ul style="list-style-type: none"> <li>*Abnormal power supply voltage for control box</li> <li>*High voltage at braking from high speed</li> </ul>	<ul style="list-style-type: none"> <li>*Check the power supply voltage</li> <li>*Replace the control box to repair the regenerated circuit</li> </ul>
E - 3	Encoder signal of motor sensor is abnormal	<ul style="list-style-type: none"> <li>*Motor connector is disconnected</li> </ul>	<ul style="list-style-type: none"> <li>*Check and connect the motor connector</li> <li>*Check the wires of the motor sensor cable</li> </ul>
E - 4	Commutation signal of motor sensor is abnormal	<ul style="list-style-type: none"> <li>*Motor connector is disconnected</li> </ul>	<ul style="list-style-type: none"> <li>*Check and connect the motor connector</li> <li>*Check the wires of the motor sensor cable</li> <li>*Replace the motor</li> </ul>
E - 5	Abnormal motor speed	<ul style="list-style-type: none"> <li>*Abnormal control box</li> </ul>	<ul style="list-style-type: none"> <li>*Replace control box</li> </ul>
E - 6	Motor over-load or locked	<ul style="list-style-type: none"> <li>*Machine sewing a heavy load</li> <li>*Motor connector is loose or disconnected</li> </ul>	<ul style="list-style-type: none"> <li>*Reduce load, if too heavy</li> <li>*Check and connect the motor connector</li> </ul>
E - 7	High voltage supply	<ul style="list-style-type: none"> <li>*Power supply voltage abnormal</li> </ul>	<ul style="list-style-type: none"> <li>*Exchange control box</li> </ul>
E - 8	Abnormal solenoid	<ul style="list-style-type: none"> <li>*Solenoid is short circuited</li> </ul>	<ul style="list-style-type: none"> <li>*Check the solenoid and replace if required</li> </ul>
E - 10	Control box memory is abnormal	<ul style="list-style-type: none"> <li>*EEPROM has wrong data</li> </ul>	<ul style="list-style-type: none"> <li>*Reset EEPROM by using (RESET) node</li> </ul>
E - 11	Abnormal Communication	<ul style="list-style-type: none"> <li>*The console cable was plugged in after power on</li> </ul>	<ul style="list-style-type: none"> <li>*Plug in the consold cable with power off, then power on</li> </ul>
SAFE	Safety Switch	<ul style="list-style-type: none"> <li>*Trimming protection</li> <li>*Safety switch broken</li> <li>*Safety switch setting incorrect (open or close)</li> </ul>	<ul style="list-style-type: none"> <li>*Correct trimming device to be used</li> <li>*Check if the switch is damaged</li> <li>*Usually set to close, use A14 to adjust</li> </ul>

## Warranty

# 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 Garantía

### Productos Manufacturados

Atlanta Attachment Company garantiza que los productos de fabricación son libres de defectos de material 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 primero.
- 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 implicada por otro agente o distribuidor menos al menos que sea autorizado por AAC antes de cualquier 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 período de ochocientas (800) horas.
- Componentes mecánicos que fallen por defectos de materiales o de fabricación que han sido manu-facturados 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 a la 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 neumáticas.
- Desgaste normal de piezas como correas, anillos de goma, cuchillas, agujas, etc.
- Ajustes de la máquina en relación con 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.

## 4. TRAINING

Check	Description	Time Hrs.
	<b>Basic Function - Review Of Machine</b> <ul style="list-style-type: none"> <li>Sequence of operation</li> <li>Manual And Automatic Operation For Technicians</li> </ul>	2
	<b>Discuss Operation Of Drive System</b> <ul style="list-style-type: none"> <li>Puller drive system, stepping motor controller.</li> <li>Adjustments and functions of each.</li> <li>Setting of jog feature of each.</li> <li>Power connections and AMP settings of each.</li> </ul>	3
	<b>Electric eyes: Edge Guiding</b> <ul style="list-style-type: none"> <li>Discuss the ease of setting the eyes in correct position.</li> <li>Easy removal of eyes.</li> <li>Set gain on electric eyes.</li> <li>Maintenance of reflective tape.</li> </ul>	1.5
	<b>Sewing Heads of Each Unit – Maintenance</b> <ul style="list-style-type: none"> <li>Basic function.</li> <li>Oil and filter change intervals.</li> <li>Timing and adjustments.</li> <li>Recommended speeds for different threads.</li> </ul>	4
	<b>Hemmer Sewing Head</b> <ul style="list-style-type: none"> <li>Foot lift/head lift switch.</li> <li>Air electric switch in conjunction with foot lift.</li> <li>Chain cutter assembly basic function.</li> <li>Maintenance of chain trimmer.</li> <li>Proper adjustments of knife blades.</li> <li>Setting of chain trimmer to sewing head.</li> </ul>	2
	<b>Waste System Assembly Function and Operation</b> <ul style="list-style-type: none"> <li>Disassemble vacuum assembly; adjust for proper air volume; set to proper PSI (90 psi.).</li> <li>Discuss how to perform preventative maintenance.</li> <li>Proper tube connection.</li> </ul>	1
	<b>Edge Trimming Knife</b> <ul style="list-style-type: none"> <li>Knife adjustment, disassembly and adjustments.</li> <li>Proper setting and changing blades.</li> <li>Height of assembly to folder.</li> </ul>	1
	<b>Folder on Hemmer</b> <ul style="list-style-type: none"> <li>Basic function.</li> <li>Mechanical breakdown adjustment</li> <li>Alignment procedure.</li> <li>Adjust hem size procedure.</li> <li></li> </ul>	1
	<b>Thread Detectors Hemmer and Seamer</b> <ul style="list-style-type: none"> <li>Proper alignment.</li> <li>Adjust sensitivity.</li> </ul>	0.5

Training

	<ul style="list-style-type: none"> <li>• Operation procedure</li> </ul>	
	<b>Stacker</b> <ul style="list-style-type: none"> <li>• Basic operation.</li> <li>• Adjustment of door and tray alignment.</li> </ul>	1
	<b>Sew Off Machine</b> <ul style="list-style-type: none"> <li>• Start review of any questions thus far.</li> </ul>	1
	<b>Electrical and Pneumatics</b> <ul style="list-style-type: none"> <li>• Diagram evaluation.</li> <li>• Discuss on-board programming of new AAC logic control</li> </ul>	4
	<b>Troubleshoot Unit</b>	1
	<b>Basic Function - Review Of Machine with Operator</b> <ul style="list-style-type: none"> <li>• Sequence of operation</li> <li>• Operator instruction and breakdown</li> <li>• Manual And Automatic Operation For Operator</li> </ul>	2
	<b>Evaluate any questions.</b>	1

**Participants:**

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**Instructor:** \_\_\_\_\_

**Date:** \_\_\_\_\_

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**Printed in USA**  
Digital Version of this Manual Available at:  
[http://atlatt.com/tech\\_manuals.php](http://atlatt.com/tech_manuals.php)

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