



Model **PT-2000**
Revision 1.0 Updated August 22, 2019

Technical Manual



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Atlanta Attachment Company, Inc.

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4,280,421 • 4,432,294 • 4,466,367 • 4,644,883 • 5,134,947 • 5,159,889 • 5,203,270 •
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•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
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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 important information to help work safely with the unit and describes the dangers inherent in machinery. Some of these dangers are obvious, while others are less evident.

Mandatory Information

All persons operating and/or working on the 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

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

Choice and Qualification of Personnel

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

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

Training

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

Responsibilities

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

A Word to the Operator

The greatest danger inherent in our machines: is that of fingers, hands or loose clothing being drawn into a machine by live, coasting or rotating tools or assemblies or of being cut by sharp tools or burned by hot elements.

Always be conscious of these dangers!

Safety Equipment on the Machines



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

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

If safety equipment has to be dismantled for setting-up, maintenance or repair work, such safety equipment shall be replaced and checked immediately upon completing the maintenance or repair work.

All protective mechanisms shall be fitted and fully operational whenever the machine is at a standstill or if it has been shut down for a longer period of time.

Damage

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

Safety

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.

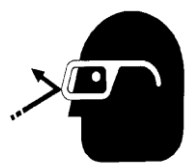
Signs on the Machine

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

Tools

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

Oils, Lubricants, Chemicals

Note the applicable safety regulations for the product used.

No Smoking, Fire, Explosion Hazard

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

Workplace

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

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

Emergency STOP

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

First Aid

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

Important Notices

Reporting and Fighting Fires

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

The following fire extinguishers may be used:

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

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

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

Electrical Power Supply



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

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

procedure is to protect workers from injury caused by unexpected energizing or start-up of equipment.

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

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

- Electricity - The machine is always isolated from the electrical power supply whenever the master switch has been switched off. However, this does not apply for the power supply in the control cabinet, nor for equipment that does not draw its power via the master switch.

- Pneumatic / hydraulic energy - Almost all our machines carry compressed air. In addition to switching off the master switch, the air supply must also be disconnected and the machine checked to ensure it is depressurized before starting any work on the machine; otherwise the machine may execute uncontrolled movements.

- Kinetic energy - Note that some motors or spindles, for example, may continue to run or coast run on after being switched off.

- Potential energy - Individual assemblies may need to be secured if necessary for repair work.

Safety

Delivery of the Machine/Packaging

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

Transport Damage

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

Interim Storage

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

Transporting the Machine

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

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

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

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

Workplace Environment

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

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

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

Maintenance

General Safety Instructions

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

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

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

Maintenance, Care, Adjustment

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

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

Waste, Disassembly, Disposal

Waste products should be cleared from the machine as soon as possible as not to create a fire hazard.

Ensure that fuels and operating lubricants, as well as replacement parts are disposed of in a safe and ecologically acceptable manner. Note the local regulations on pollution control.

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

Repair

Replacement Parts

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

Repair, Electrical

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

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

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

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

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

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

Safety

Ventilation/Hazardous Gases

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

Hydraulic and Pneumatic Systems

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

General Liability

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

Starting Machine Movements

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

A Word to the End User

The end user has sole responsibility to enforce the use of safety procedures and guards on the machine. Any other safety devices or procedures due to local regulations should be should be retrofitted in accordance to these regulations and/or the EC Directive on the safety of machines. Operator's position must always be readily accessible. Escape routes must always be kept clear and safety areas should be identified.

Safety Precautions

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

Everyone involved with the operation and maintenance of this equipment should read and follow the instructions in this manual. Operate the equipment only as stated in this manual. Incorrect use could cause damage to the equipment or personal injury.

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

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

- ALWAYS keep safety shields and covers in place, except for servicing.
- ALWAYS operate equipment in daylight or with adequate working lights.
- Follow daily and weekly checklists, making sure hoses are tightly secured and bolts are tightened.
- ALWAYS watch and avoid holes or deep depressions.

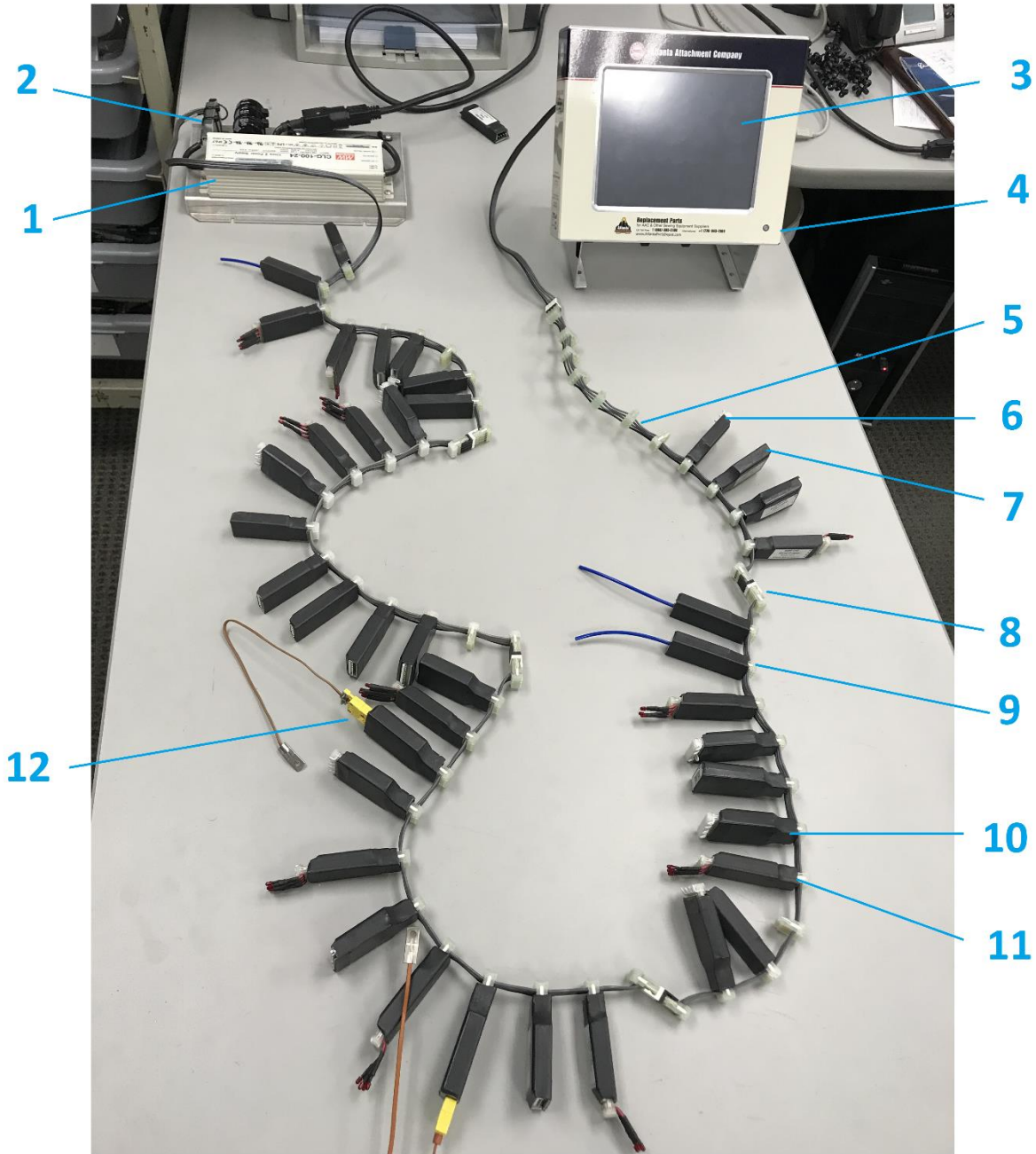
ALWAYS wear adequate eye protection when servicing the hydraulic system and battery.

- NEVER operate a poorly maintained machine.
- NEVER allow persons to operate this machine without proper instruction.
- NEVER put hands or feet under any part of the machine while it is running.
- NEVER attempt to make any adjustments or repairs to the machine while running. Repairs or maintenance should be performed by trained personnel only.
- NEVER work under the machine unless it is safely supported with stands, blocks or a hoist and blocks.
- NEVER touch hot parts of machine.

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.- Power Supply	5.- Cable (4 wires)	9.- Air Module
2.- Power Module	6.- Data Module	10.- Input Module
3.- Touch Screen	7.- Program module	11.- Output Module
4.- Tri-Color LED	8.- Wire extension connector	12.- Temperature Module

Installation

1.2. Technical Data

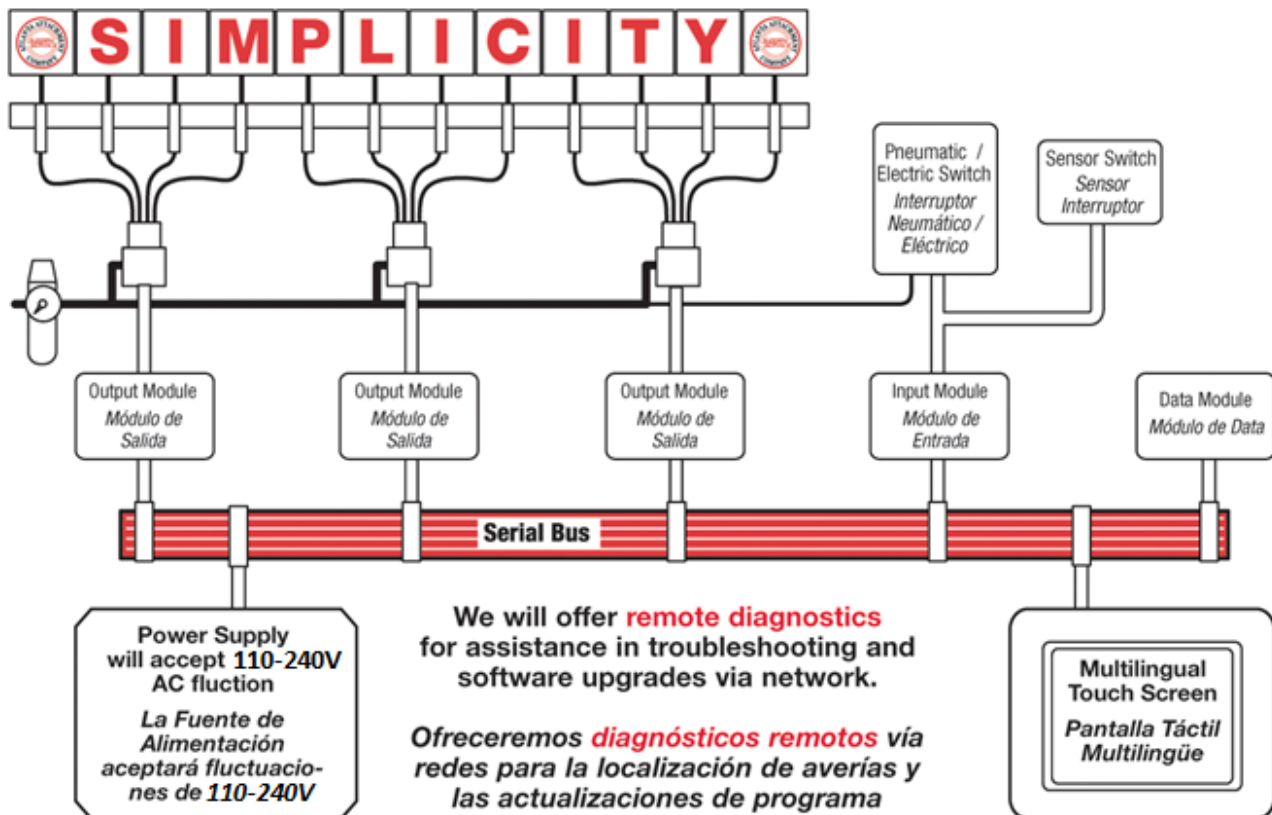
SPECIFICATIONS / ESPECIFICACIONES	
input Voltage / Voltage de Entrada	110-240 VAC 50/60 Hz
Input Current / Corriente de entrada	1.4A 50/60 Hz
Output Voltage / Voltage de Salida	+24V DC
Output Current / Corriente de Salida	4.0A

1.3. Serial Bus Identification Label

Identification is located on back of the Console
Its contents the Console Style (Example: 4080-003)
and the serial number (Example SER NO. 125)



1.4. Concept Wiring



Installation

1.5. Models

Serial Bus System started in 1998. Different Models has been creted on the last 20 years. Some updates kits are available to update form old systems to the new larger screen version.



4080-000

4080-001

4080 003



4080A

4080 004

Installation

1.6. Installation & Set Up

2. Remove all shipping straps.
3. Inspect the unit 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.

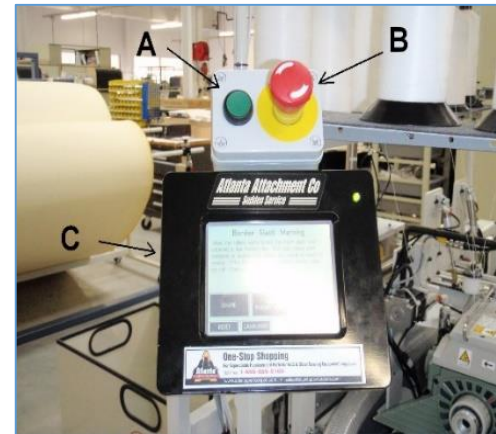
1. Connection

Install Touch Screen. (Serial Bus)
Connect Serial Bus cables to the back of the screen as show in the picture same as the Stop / Start box.



2. Power “ON”

Twist the Emergency Stop Red button “B” clock wise 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 “MACHINE MODEL” screen. This screen is the one that the operator will always see upon power up



3. Interim Storage

If the machine has to be stored temporarily, cover the screen and made sure you storage it in a dry area.

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. Introduction

The 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 as 2018 is 4080-004.



1. General Operation

Twist the Emergency Stop Red button “A” to return to its normal position. Turn the machine “ON” by pressing the green button “B” on the box just above the touch screen.

The controller check on the serial bus for the Data module and the program module. He look for a particular one that match the program he have. If the right ones are not found the controller stop and send an error message.

If there is a match the controller continue with the starting process. After that the controller do not talk to the program module again until the machine is turned off.

The machine will first display the language choices and after several seconds its show the “MAIN READY” screen “C”. 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

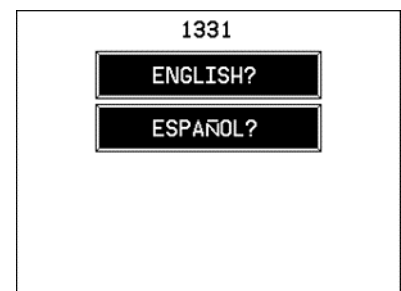
Startup Sequence

When the touch screen is powered up, the first screen displays the machine’s model information and requests that the operator choose a language.

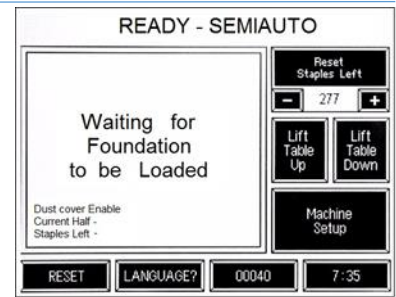
Lightly tap on the screen button to select the desired language

NOTE: Lightly tap, never use a metal object or excessive force to operate the screen to prevent scratching or breakage of the glass surface

Serial Bus support windows 1252 Character sets only



Upon receiving the operator's language selection, the touch screen displays the OPERATION screen



The operator accessible functions allow control of the normal production cycles and capture of production data. It also displays fault messages and guides the operator to choose the appropriate fault recovery functions. It allows the operator to adjust basic machine parameters. 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.

Navigation

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

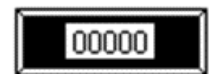
RESET: Always brings the machine back to its original power up state.



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



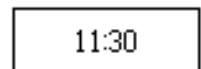
PIECE COUNT: The field on the left of the clock button is the piece counter that increases every time the border cycle is complete. Touching this area will bring up a screen to reset this count. This counter can be used for a daily production monitor, also located on this screen is an efficiency monitor that displays the machine run time vs. the machine on time and displays it as a percentage.



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.

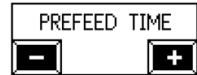
Others buttons are localized on top of or inside the screen

Service Instructions

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

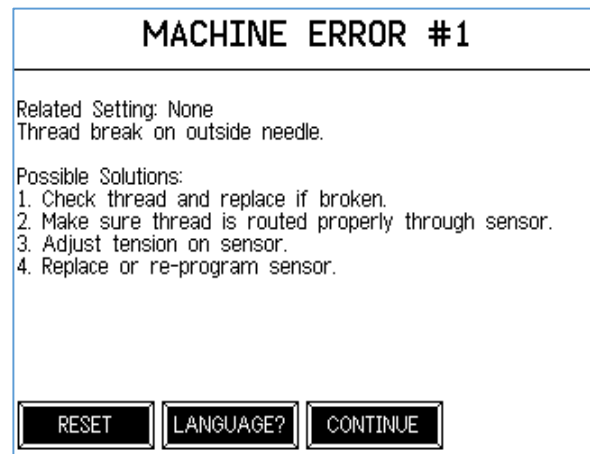


COUNTERS: Are identified with the "+" and "-" buttons in the corners. These counters may be adjusted by touching the "+" and "-" boxes.

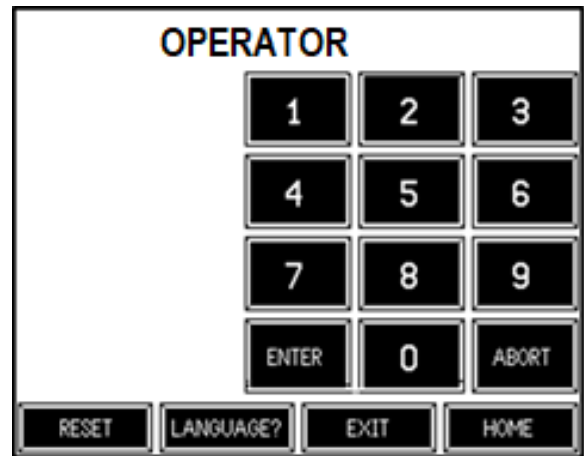


NOTES: When a button has a white background the function is "ON" or enabled. A dark background indicates off or disabled. Some buttons may toggle ON or OFF, others must be held in the ON state.

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.



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.



3. SERVICE

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

3.1. 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: Serial bus		Model: 2000		
Manufacturer: Atlanta Attachment Co.		Location:		
Energy		Location	Magnitude	Control Method
Electrical:	X	Disconnect/Ctrl Box	220V	Lockout & Tag
Pneumatic:	X	Main Regulator	80 PSI	Lockout & Tag
Gravity:	X	Conveyors, Belts		
Remember to Release All Stored Energy!				
Shutdown Procedure:				
<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>				
Startup Procedure:				
<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: _____

3.2. Mechanical

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

1. Cable Connection Module inputs

It is important a good contact between all wires and module inputs and outputs.

Two special wire insertion tools are used to insert the main 4 wire cable and the small cables to their connectors.

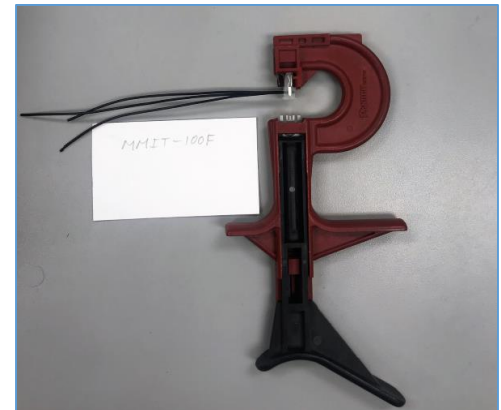
The EEMRT156F is used to grip the main big 4 wires cable to his connectors.

The EEMRT100 is use to connect the smaller output wires to their connectors



The MMIT156 is a little more complex and used to insert the main bigger 4 wires cable to his connectors.

The MMIT-100F is use to insert the smaller output wires to their connectors



2. Air Pressure Switch.

It is used only in old series. It is located inside the control box on most of the machines. This Sensor is responsible for the detection of the secondary air pressure if it does not reach the pre-adjusted value. It is connected to a module on the Serial bus system.. Part # AAVF51FM1B



3.3. Electrical

NOTE: All maintenance should be performed by a qualified electrician.

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.



Service Instructions

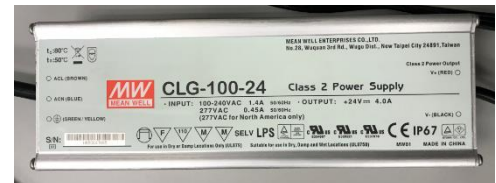
4. Power Supply

Earlier systems were provide with the 4080-990 Power Supply. Provide 24V to the whole system



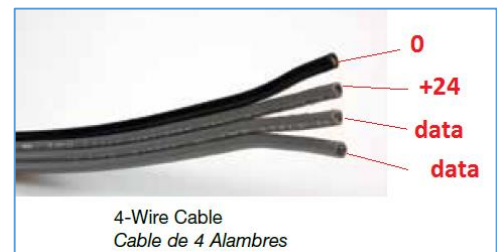
4080-990B

Later Systems use the 4080-990B power Supply. Provide 24V to the whole system



5. Wire Cable

Use to interconnect all the system. 2 lines are powered and the other 2 are used to transfer data from the touch screen to the module and form the modules to the touch screen.



6. Connections Ports

NET: Connect the network connector. To external customer network. Use to industry 4.0

USB 1: Not function at this time. USB A type port

USB 2: Not function at this time. USB A type port

COM: Connect standard type B USB printer cable. Use to interchange data between computer and the control panel. Example updating software



1.- 16 port auxiliary connector not use a t his time.

2.- 7 port for the connection of the 4 wire cable



Service Instructions

7. Color LED

The bi or tri color LED is an independent status indicator that works even if the controller's display is not working correctly

Bi color LED

The Bi-color LED (A) is used on the 4080-003 and earlier controllers.

General Meanings

OFF : No power

FLASH GRN: OK. All is well and the application software is running.

RED: Program is not running.

RED flash: Software Booting

The software is initializing hardware and running memory checks.



The tri-color LED

The tri-color LED (B) is used on the 4080-004 and 4080-004A controllers.

General Meanings

In any color sequence, bright red, yellow, or green indicates the following general meanings:

GRN: OK. All is well and the application software is running.

YEL: Wait. The operating system is doing checks and resolving issues before launching the application.

RED: Fatal Error. The only option is to power down and fix the problem indicated.



Normal Operation

OFF : No power

The only time the LED should be off is if there is no power. The LED is always a power indicator. Even when the software crashes or locks up, if the -004 hardware is not broken, the LED should still be lit.

RED LO : Software not controlling LED yet

RED LO is normal for a few seconds after a hard reset / power up. Extended RED LO indicates software is not executing due to hardware failure or software that is so badly corrupted that it cannot try to auto-recover. If the issue is bad software, the only remedy is a USB download.

YEL HI/LO flash: Software Booting

The software is initializing hardware and running memory checks. This may take 6 or 7 seconds.

GRN HI/LOW 1 second "heart beat" : Machine software running

The green heart beat shows that the application software is executing normally.

In addition, this LED is used to indicate low level faults by blinking a sequence of colors. This information can be used with AAC technical support to troubleshoot issues.

3.4. Touch Screen 004

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

1. Calibration 004

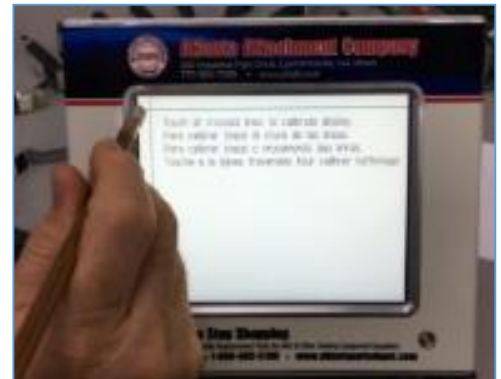
If you are having troubles locating the right place to get access to the function by touching the screen a screen calibration may be required.

Proceed as following:

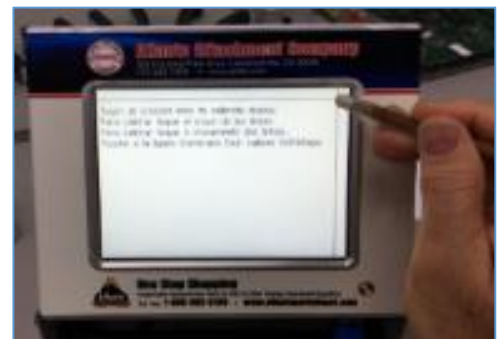
1. Place one finger on the screen and hold it there while pushing the Green ON button.



2. When the screen turns light, remove your finger and the screen will display two lines, one vertical and one horizontal, intersecting at the top left corner. The text "Touch at the crossed lines to calibrate display." should appear in various languages. In older machines, there will be no text. Using a small pointing device that will not puncture or damage the screen (such as a pencil eraser), touch the screen where the two lines intersect. Do this with as much accuracy as possible.



3. When the screen is touched, the display will change to two lines intersecting at the lower right of the screen.



CUTION: The implementation of step 2 and step 3 directly affects the validity of all the buttons in the entire program. It is very important to be accurate.

Service Instructions

4. Repeat step 2 where these lines intersect. On 004 screen all 4 corners need to be adjusted.



5. Press the language button of your choice.



6. Press the RESET button at the lower left corner of the screen. See figure.



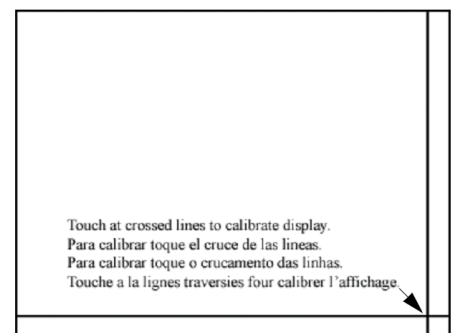
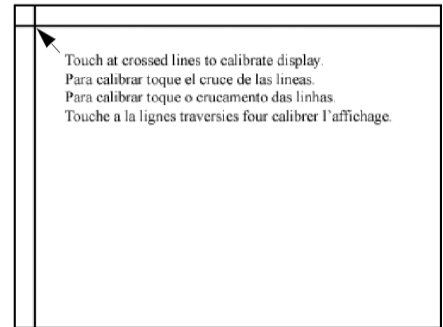
Service Instructions

2. Calibrating 003 and older Touch Screen

If you are having troubles locating the right place to get access to the function by touching the screen a screen calibration may be required.

Proceed as following:

1. Place one finger on the screen and hold it there while pushing the Green ON button.
2. When the screen turns light, remove your finger and the screen will display two lines, one vertical and one horizontal, intersecting at the top left corner. The text "Touch at the crossed lines to calibrate display." should appear in various languages. In older machines, there will be no text.
3. Using a small pointing device that will not puncture or damage the screen (such as a pencil eraser), touch the screen where the two lines intersect. Do this with as much accuracy as possible.
4. When the screen is touched, the display will change to two lines intersecting at the lower right of the screen.
5. Repeat step 4 where these lines intersect.



Service Instructions

NOTE: The implementation of step 3 and step 4 directly affects the validity of all the buttons in the entire program. It is very important to be accurate.

Press the language button of your choice.



Press the RESET button at the lower left corner of the screen. See figure 5.



3. Installation of New Screen

To install new screen you must follow these directions. **PICTURES**

1. Install new screen and turn power on.
2. When screen displays "Fatal Error Message" press continue.
3. Enter Mechanic Security Code.
4. After reading the "Warning Message" select the procedure you want to do.
5. Press continue again.
6. Screen will begin to process the up-loading of the existing program to o from the program module. This will take 60 - 90 seconds.
7. After reading the "Last Warning Message" press continue again.
8. Screen will begin to process information again for 15 - 30 seconds.
9. Reset routine will follow.

NOTE Machine assemblies will reset or move to home positions.

10. Screen will return to the Main Display and is ready to run.

3.5. Modules

1. Module types

Machine is can be supply with different modules. The module type is writing in the label in front of the module.

Input Module...4080-110

They are responsible for transferring signals from the machine to the computer such as switches, electric eyes, sensors, etc. There are 4 channels on it.



Quad Opto Input Module...4080-120

They are responsible for transferring signals from the machine to the computer such as external relays. They are optical insolated. Have 4 input channels



Quad Opto Output Module ...4080-130

They are responsible for transferring signals from the computer to external connections, servo motor controls, element that use their own energy (Opto insolated) 4 Channels.



Quad Output Module...4080-140

They are responsible for transferring signals from the computer to the working elements such as valves, motors and relays, etc. There are 4 channels on it.



Program Module...4080-150

Stores the program information. It is also used to load program modifications or updates. For update procedures please refer to next chapter. The Batch code is a 3 number that describe the software use and the date of manufacturing. There are 3 version. 3 of less revision for the 00,01,03 screens. They will not work on the new screens. The new revisions are the skinner ones and the versions are 8 and above. Machine can only use one of those.



Single Output Module ...4080-160

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



Air Pressure Module....4080-200

Responsible for monitoring the air pressure of the machine. If it falls below a specific level it will shut the machine off.



Service Instructions

Dual analog Module....4080-220

Interface to potentiometers or analog inputs. Its use 4 input channels



Temperature Module....4080-250

Used to monitor temperature



Temperature Module....4080-260

There are 2 version of it. A thermos couple is connected direct to it. Old style are version 0, new style is version 2. They use and stiff connections to get a better reading.

Data Module4080-930

Stores the unique data required to operate this particular machine; such as serial number, original factory parameters, etc. This module should never be exchanged with another machine.



Terminator 4080 940

Use on the end of the line.



Power Module 4080-950

Interface with the power supply. It have a led that indicate if the power supply is correct. When the LED is on mains energy is ok. When the LED flash means there are deficiencies of Energy. Machine can only use one of those.



Adapter Module 4080-960

For coupling the screen cable form old system screen into the new serial bus.

Memory Module 4080-970

Use on old version screens. Similar to the data module hold the machine information. Machine can only use one of those.



Adapter Module 4080-980

Interface for the panel use on old series machines. Machine can only use one of those.



Analog Module....RS32

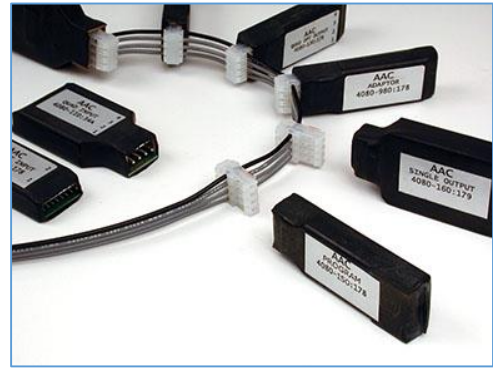
They are not use very often. Used on the glue machine.



2. 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 be appear

Press Reset and the home page will appear

3. Replacement of all Memory Module

Note: Make sure that all the settings and save styles are on file. (You will lose all setting and sizes)

During the process you need help from AAC. (Only do this procedure during AAC business hours)

Locate the Memory Module. (4080-970)



Service Instructions

- Replace the module for the new one.

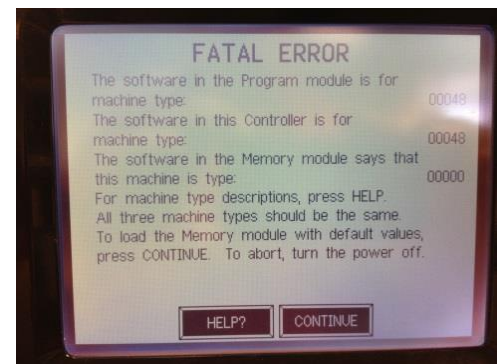


- Unplug all modules except Program (4080-150), memory (4080-970) and juts in the old 004 system the Adaptor module (4080-980).



- Power up the machine.

- Press continue.



Service Instructions

- To get an engineer code call AAC. (Press on top of screen to get number for AAC)

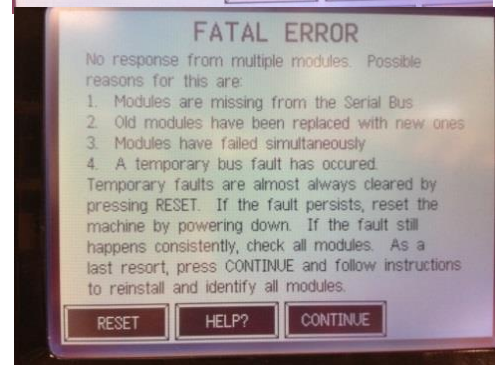


- After typing in the engineer code there will be a
- Warning screen.
- Presses continue at the Fatal Error screen.



- Follow the procedure on the screen until all modules are installed.

Note: Press "INSTALL" the first time without installing any modules! The unit should prompt the error message "No Modules installed or No Modules found". After clearing error message proceed as prompted on screen.



- When all modules are installed, reset machine.



Service Instructions

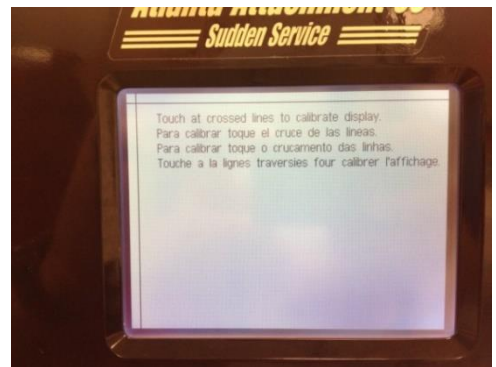
- To clear the 911 error code you need to call AAC
 - Power down the machine
 - Power up the machine while pressing the screen in the middle



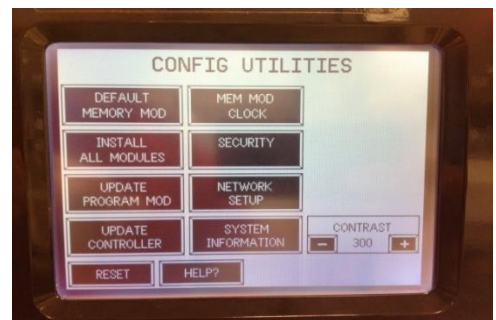
- Let go of the screen when the screen lit up.



- Follow the calibration procedure.



- Choose Language
- Press button "MEM MOD CLOCK".

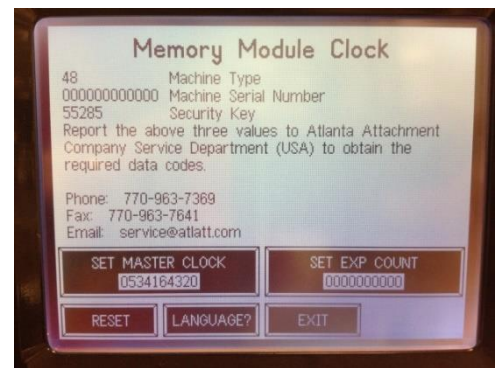


- Use you pass code (Default 22222)



Service Instructions

- Have the machine type, serial # and security # ready for AAC (Pic. 6)
- Press button "SET EXP COUNT" and type in the new code given by AAC.



- Reset the machine. (Machine should power up normal)
- Reset all setting in the machine and program the styles back.

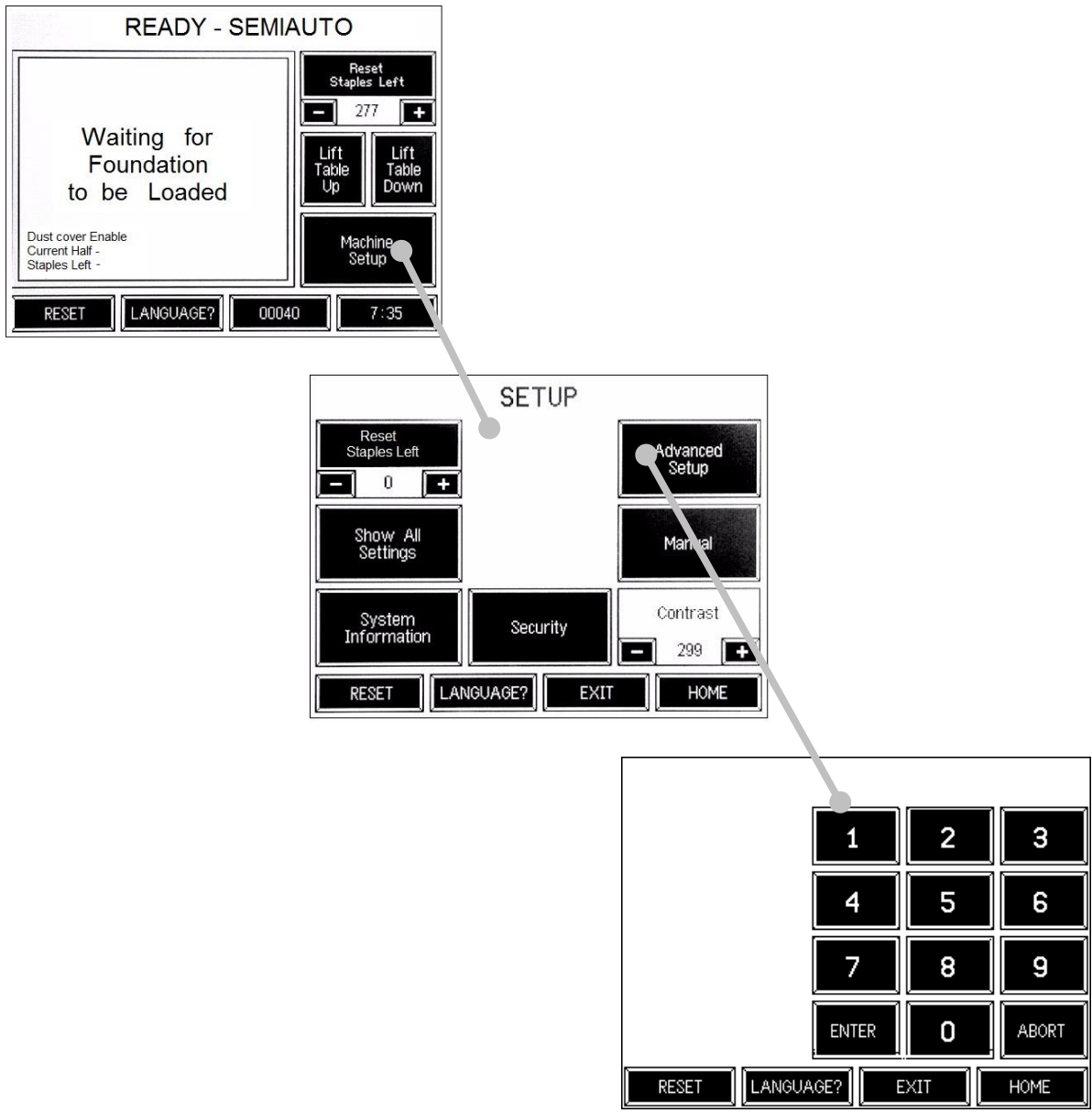
3.6. Screens

1. Introduction

The touch screen is divided into two major categories: Functions accessible to the operator and advanced functions accessible to the technician. The advanced functions consist of five security levels: Supervisor, Mechanic, Chief Mechanic, Technician, and Engineer. To access the technical functions, a security key must be entered

The [MACHINE ADJUSTMENTS] screen and [ADVANCED ADJUSTMENTS] screen require a verification key code. Using the correct key code will allow the [ADVANCED OPTIONS] screen to appear. The key code may be changed to any 5-digit number at the [SECURITY] screen.

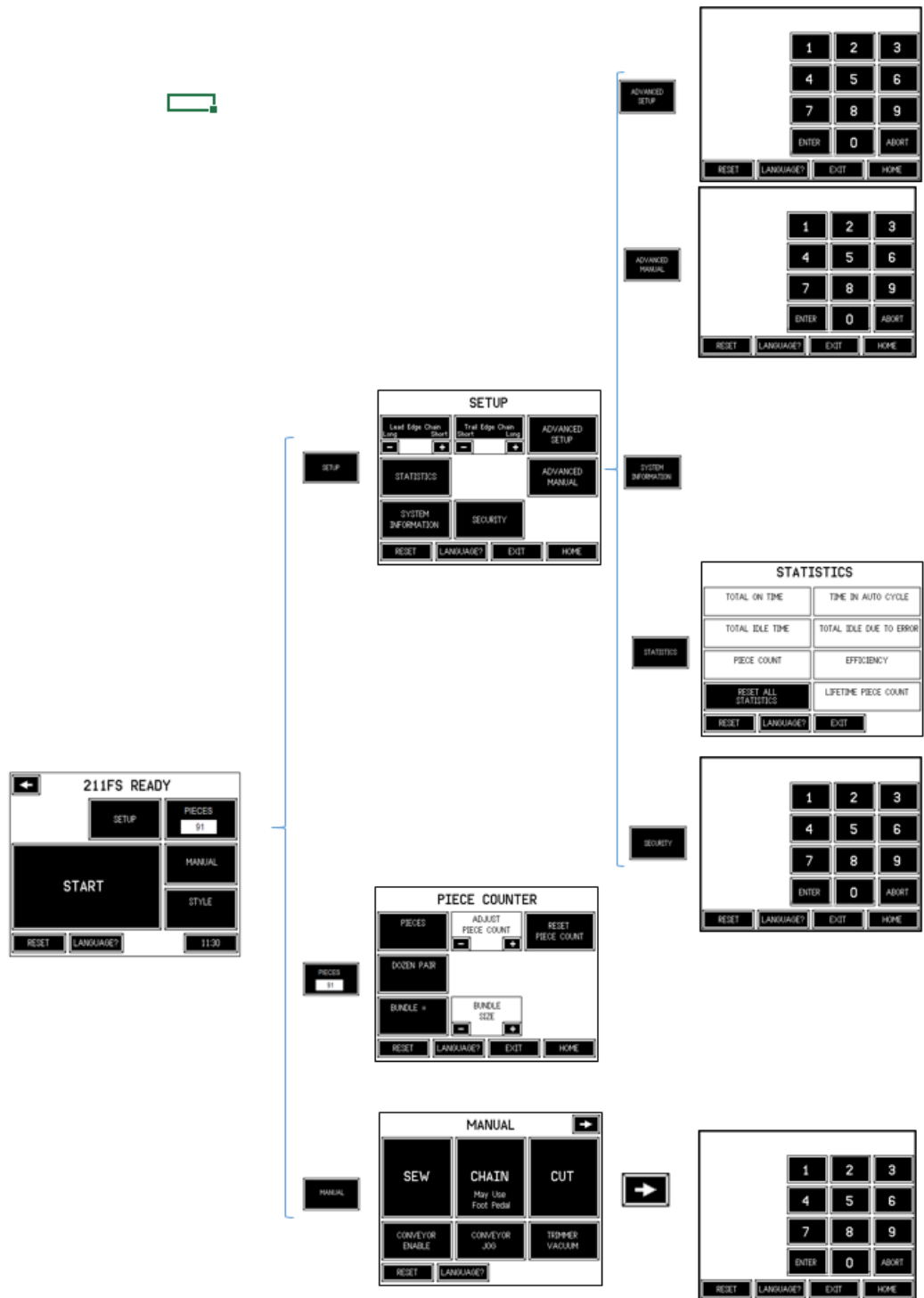
In the normal operator's mode, a warning message is displayed when the machine encounters an error and presents various options to the operator to continue the resolve or continue machine's cycles.



2. Operator Screens

Available Menus

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



Service Instructions

Ready

After the operator power it “ON” and the screen go through the starting sequence the machine stop at the home operation screen. There are many different options of Home screen accordantly to the machine class. Several field can be show that give the operator different options

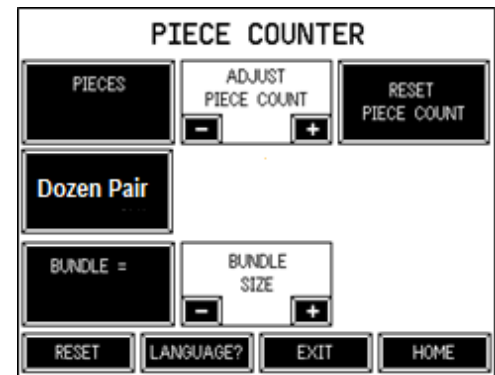
Start

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



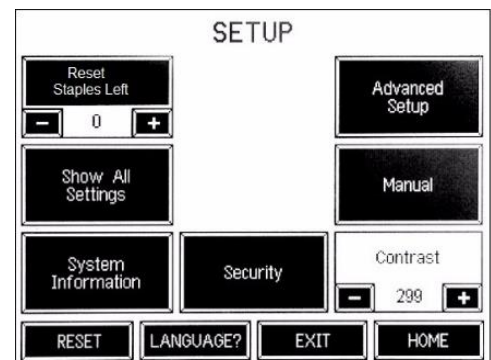
Piece Counter

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



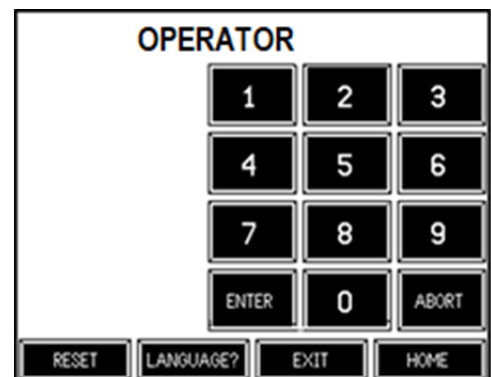
Set up Screen

From the Semiautomatic Screen, the operator may adjust various machine parameters by tapping the button [SET UP]. Some adjustments may be restricted and require a security password to allow changes.



Security

This screen is used to change key codes. It is recommended that the key codes be stored in a safe area.



Statistic

This button takes you to the Statistics screen which displays statistical information on the operation of the machine. The statistics page is set up to

Service Instructions

give the supervisor a rough estimate of the machine usage. Resetting the statistics requires a supervisor security level.

- 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 Error 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.

STATISTICS	
TOTAL ON TIME	TIME IN AUTO CYCLE
TOTAL IDLE TIME	TOTAL IDLE DUE TO ERROR
PIECE COUNT	EFFICIENCY
RESET ALL STATISTICS	LIFETIME PIECE COUNT
RESET	LANGUAGE?
EXIT	HOME

Contrast

Adjust the brightness of the old screen. New Screens does not use contrast adjustment. Please note: the screen becomes brighter after warming up. Allow at least 5 minutes prior to making any brightness adjustments.

Manual

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

CONVEYOR ENABLE: The conveyor will run if the functions of sewing or chaining are activated. If Conveyor is disable 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.

MANUAL		
SEW	CHAIN May Use Foot Pedal	CUT
CONVEYOR ENABLE	CONVEYOR JOG	TRIMMER VACUUM
RESET	LANGUAGE?	

Style

Once the machine is adjusted for a particular type 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.

SELECT STYLE MENU 1	
0. DEFAULT	4. STYLE 4
1. STYLE 1	5. STYLE 5
2. STYLE 2	6. STYLE 6
3. STYLE 3	7. STYLE 7
RESET	HELP?

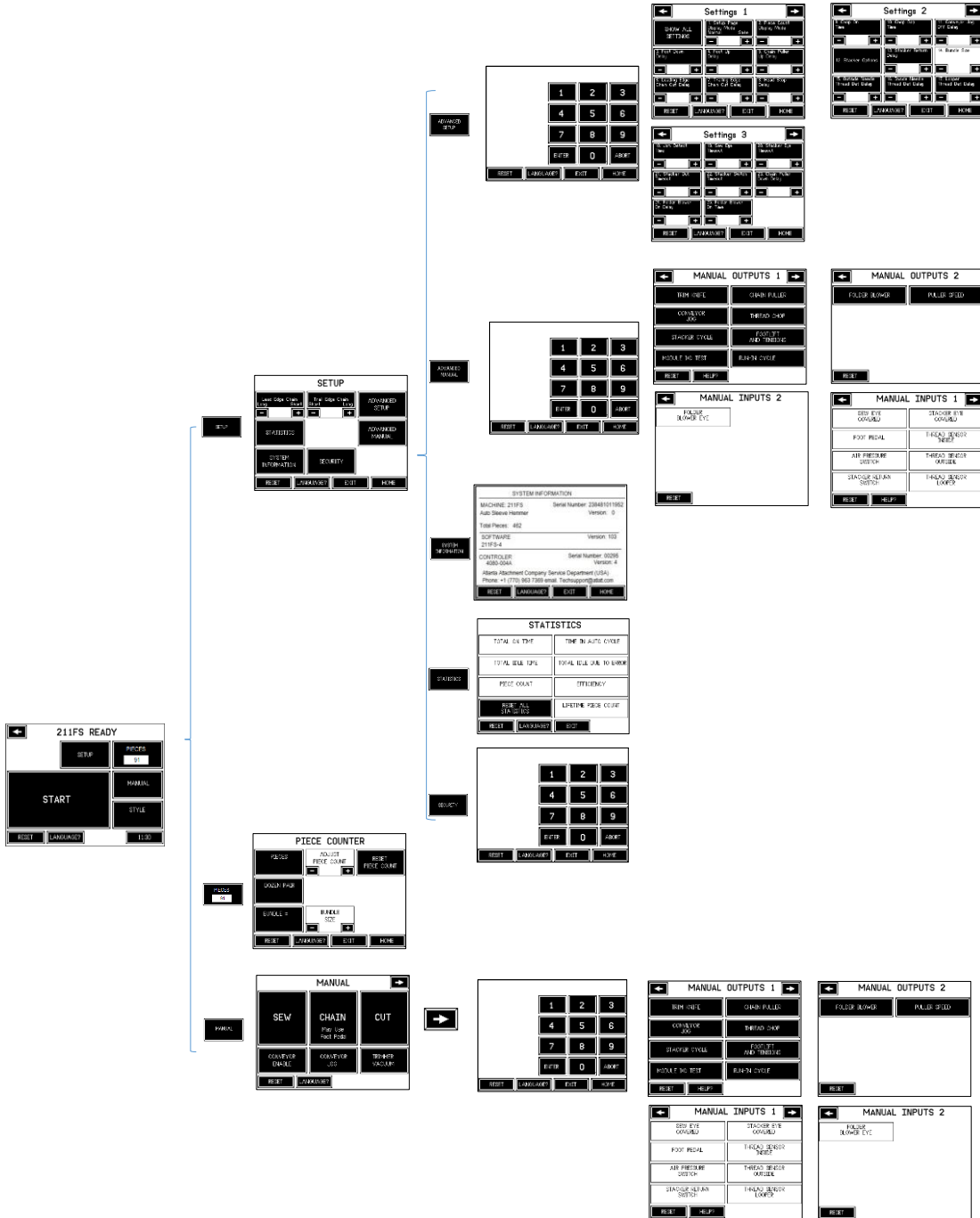
Service Instructions

3. Technical Screens

A password is required to access the Technical Screens. Factory Password is 5 time #3

Advanced Set Up, Advance Manual

Show ALL SETTINGS, MANUAL OUTPUTS AND MANUAL INPUTS



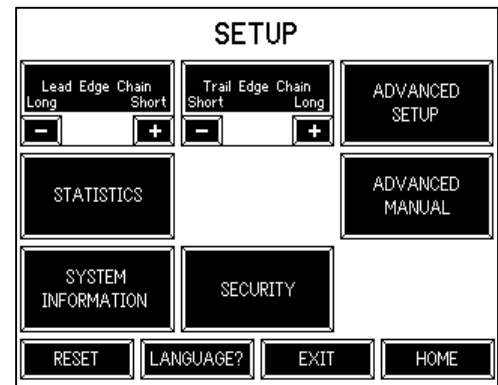
Service Instructions

Set Up

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

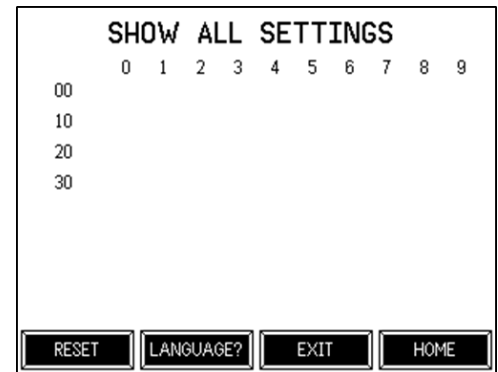
ADVANCE SET UP: This button takes you to the Advanced Functions screen. It is locked with a password. It is only to be use by technicians.

ADVANCE MANUAL: This button takes you to the Manual Input Test screens which allows you to test the input and output 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.



Show All Settings

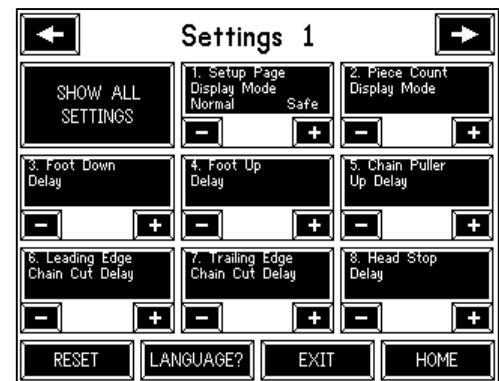
Shows the current parameter values being used by the machine. It doesn't show the function, only the value. Before any program or module change, take notes of these values or a picture in case of any program issues.



Advance Settings

This button selection gives access to all available settings for the machine..

Note: All objects on Settings screens 1, 2, 3 etc are buttons that take you to a setting screen that will allow you to adjust the setting and will give a brief description of how the setting works.



Advance Manual

This area of the program allows access to the Input and Output modules. There can be several screens. To move between screens, tap the arrow buttons on the upper top corners of the touch screen

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

Manual Inputs

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.

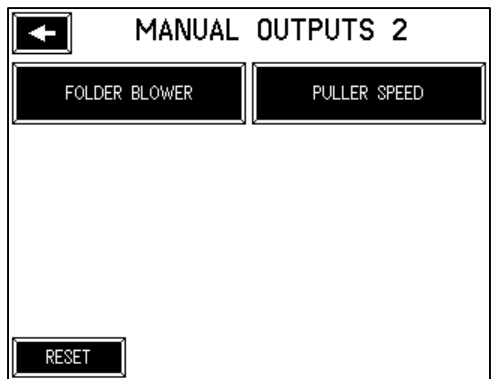
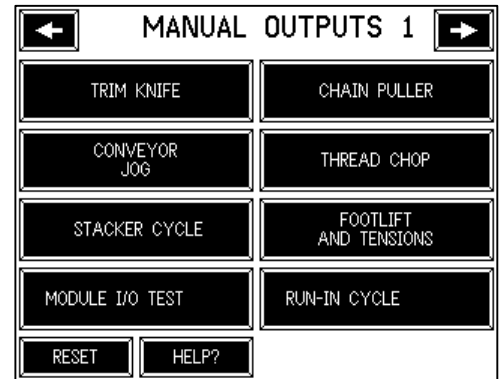
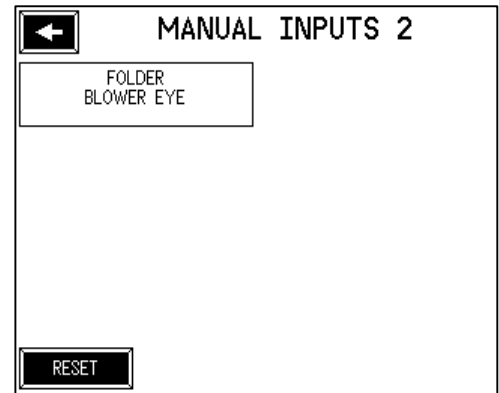
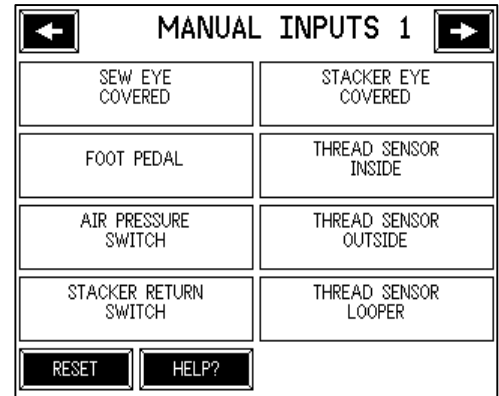
An example is when you manually cover the sew eye a double line below SEW EYE appears.

The eyes, foot pedals, and proximity switches can be checked.

Manual Outputs 1 - 2

Note: The buttons on the Manual Output Test screen manually activate that particular device or cycle.

They will allow the manual activation of the cylinders, solenoids, and motors.



System Information

Show combine Data and Program module from the memory module. The Serial number is stored on the data module and software for the controller is in the program module.

SYSTEM INFORMATION	
MACHINE	Serial Number:
Generic machine for OS development	Version:
Total Pieces:	
SOFTWARE	Version:
CONTROLLER	Serial Number:
	Version:
Atlanta Attachment Company Service Department (USA)	
Phone: 770-963-7369	Fax: 770-963-7641
Email: techsupport@atlatt.com	
Recomenzar	AYUDA?
SALIDA	1a Pagina

Style

The STYLE button shows the current style being used. Pressing the STYLE button will take you to the two pages listing the 15 available styles. At the bottom of the page are ADVANCED and RECALL SETTINGS buttons.

SELECT STYLE MENU 1	
0. DEFAULT	4. STYLE 4
1. STYLE 1	5. STYLE 5
2. STYLE 2	6. STYLE 6
3. STYLE 3	7. STYLE 7
RESET	HELP?

Edit the Style

- Press the ADVANCED button.
- The security keypad will appear.
- Enter the mechanic's security code and press ENTER.
- The screen will go back to the STYLE page selected.
- Press EDIT NAMES to change the style name. The name can be a combination of letters, numbers, or symbols including spaces. The page will show the current name in the box with four buttons around it. The buttons to the left and right of the box move the cursor left or right. The buttons on the top and bottom of the box increment or decrement through the alphabet, numbers, and symbols. When the Style Name is complete, press exit
- SAVE SETTINGS button will save all of the current parameter settings under that style.
- RECALL SETTINGS will install the last set of parameters saved to that style.



3.7. Program Update

Software of the unit is located in 2 places, the program module and the touch screen. Both program must be the same if not a error will occur. There are many different ways to update a Program on the machine.

1. Using a New Program Module

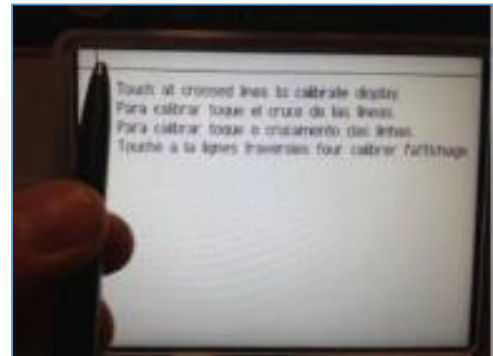
NOTE: Very important, before starting the procedure below, go to Advanced Settings and write down all the settings shown in these screens.

- a. Turn off power to the machine.
- b. Replace the existing Program Module with the Program Module that contains the updated program.
- c. With your finger on the screen, turn power on to the machine. When the screen changes from dark to light, remove your finger from the screen.
- d. Carefully calibrate the screen. See screen calibration.



CAUTION: Do not turn off the machine during this process for any reason, as vital information will be corrupted and it will be necessary to the call manufacturer for assistance and/or return the touch screen and module for base programming.

- e. Press the “Update Controller” button. Input mechanic security code 22222. This process takes up to 5 minutes and asks you to press the “Continue” button once during this time.



When complete the Controller will contain the updated program.

NOTE: Continue to item “f” only if you need to reprogram original module.

- f. Turn off power to the machine.
- g. Replace the Program Module that you installed in step #2 with the original Program Module that came with the machine.
- h. With your finger on the screen, turn power on to the machine. When the screen changes from dark to light, remove your finger from the screen.
- i. Carefully calibrate the screen.
- j. Press the “Update Program Mod” button. Input technician security code 22222. This process takes up to 5 minutes. When complete the original Program Module that came with the machine and the Controller will contain the updated program.

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.

2. Using a New Program Module Updating Machine Type and Memory

Note: Very important: 1 before starting the procedure below, go to Advanced Settings and write down all the settings shown in these screens. Call Atlanta Attachment Technical Services, during normal business hours for assistance with Engineering Code for item 5 below.

1. Turn off power to the machine.
2. Replace the existing Program Module with the Program Module that contains the updated program.
3. With your finger on the screen, turn power on to the machine. When the screen changes from dark to light, remove your finger from the screen.
4. Carefully calibrate the screen, by touching the intersecting lines at the top left and bottom right, then pick the desired language
5. Press the “Update Memory Module” button and you will be asked for an Engineering Code, will must be provided by Atlanta Attachment.
6. Press the “Update Controller” button. Input mechanic security code (3xxxx). This process takes up to 5 minutes and asks you to press the “Continue” button once during this time. When complete the Controller will contain the updated program.

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.

3. Using a New Program Module update Original Module

Note: Very Important – Before starting the procedure below, go to Advanced Settings and write down all the settings shown in these screens.

1. Turn off power to the machine.
2. Replace the existing Program Module with the Program Module that contains the updated program.
3. With your finger on the screen, turn power on to the machine. When the screen changes from dark to light, remove your finger from the screen.
4. Carefully calibrate the screen.
5. Press the “Update Controller” button. Input mechanic security code (3xxxx). This process takes up to 5 minutes and asks you to press the “Continue” button once during this time. When complete the Controller will contain the updated program.
6. Turn off power to the machine.

Service Instructions

7. Replace the Program Module that you installed in step #2 with the original Program Module that came with the machine.
8. With your finger on the screen, turn power on to the machine. When the screen changes from dark to light, remove your finger from the screen.
9. Carefully calibrate the screen.
10. Press the “Update Program Mod” button. Input technician security code (xxxxx). This process takes up to 5 minutes. When complete the original Program Module that came with the machine and the Controller will contain the updated program.

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. Using a New Program and Additional Modules

Note: Very Important – Before starting the procedure below, go to Advanced Settings and write down all the settings shown in these screens.

1. Turn off power to the machine.
2. Replace the existing Program Module with the Program Module that contains the updated program.
3. Unplug all numbered I/O modules from the SBUS cable. Do not unplug the Program, Data/Memory, or Adaptors.
4. With your finger on the screen, turn power on to the machine. When the screen changes from dark to light, remove your finger from the screen.
5. Carefully calibrate the screen.
6. Press the “Update Controller” button. Input mechanic security code (3xxxx). This process takes up to 5 minutes and asks you to press the “Continue” button once during this time. When complete the Controller will contain the updated program.

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.

5. Update a -004 Screen with a New Program Module

Note: Very Important – Before starting the procedure below, go to Advanced Settings and write down all the settings shown in these screens.

1. Turn off power to the machine.
2. Replace the existing Program Module with the New Program Module that contains the updated program.
3. Turn power on to the machine.

Service Instructions

4. On the “Controller Software Error” screen, press “Copy Program Module to Controller” button in the lower right corner of the page.
5. On the “System Mechanic Security” screen enter code “33333” and press “enter”.
6. When the “Warning” screen appears, press “continue”. The screen will go blank – DO NOT TURN OFF POWER.
7. When the upload is complete the machine will “Reset” itself.

6. Update a -004 Screen with New Program Module that has not had a Revision change

Note: Very Important – Before starting the procedure below, go to Advanced Settings and write down all the settings shown in these screens.

1. Turn off power to the machine.
2. Replace the existing Program Module with the New Program Module that contains the updated program.
3. With your finger on the screen, turn power on to the machine. When a message appears under your finger, remove your finger from the screen.
4. Carefully calibrate the screen by touching the screen at all four corners at the cross lines with the tip of a pen.
5. Select a language from the list.
6. In the “System Mechanic Security” screen enter code “33333” and press “enter”.
7. In the “Controller Setup” screen press “continue”
8. In the “Config Utilities” screen press the “Copy Program Module To Controller” button.
9. Wait for the “Program Module Check” to finish.
10. When the “Warning” screen appears press “continue”. The screen will go blank – DO NOT TURN OFF POWER.
11. When the upload is complete the machine will “Reset” itself.

Service Instructions

7. Update a -004 Screen with New Program using a Laptop

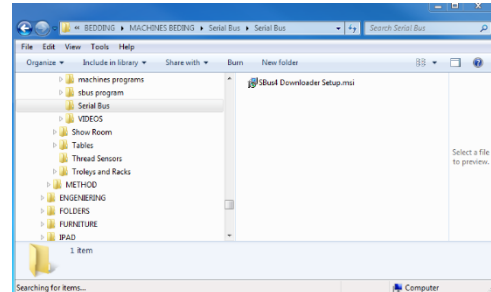
Note: Very Important – Before starting the procedure below, go to Advanced Settings and write down all the settings shown in these screens.

Before starting, make sure you have a Windows laptop with .NET 3.5 or later and a USBA-USBB cable that looks like the one on the picture



Install the SBus 4 Downloader software and program on your laptop.

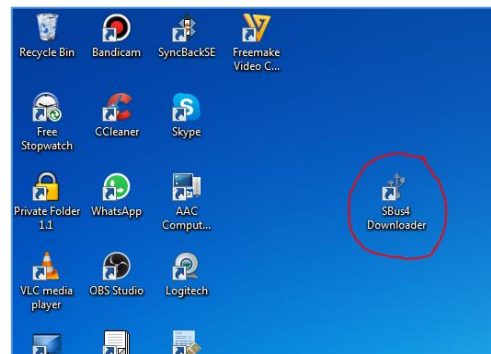
- A. Use the Dropbox link above to save “SBus4 Downloader Setup.msi” to your desktop (close the website’s signup window if needed).



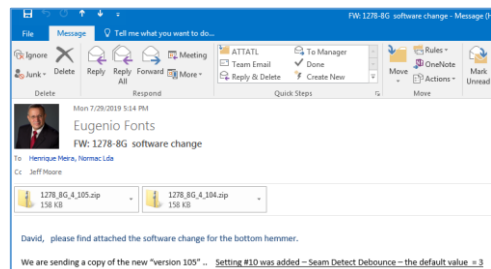
We use dropbox for file hosting because Outlook won't allow .msi attachments.

<https://www.dropbox.com/s/lik7e99fif1zzi1/SBus4%20Downloader%20Setup.msi?dl=0>

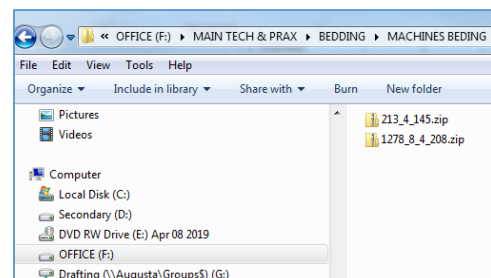
- B. Run this .msi setup file and follow the steps to install the program. When finished, it should create a shortcut on your desktop called SBus4 Downloader.



- C. Get the new program. Example: example: 1278_8G_105.zip .



- D. Load the program in a directory in your computer. Do not unzip the file.



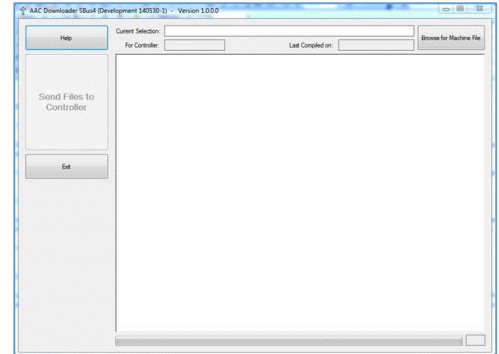
Service Instructions

Download a new program to the Controller.

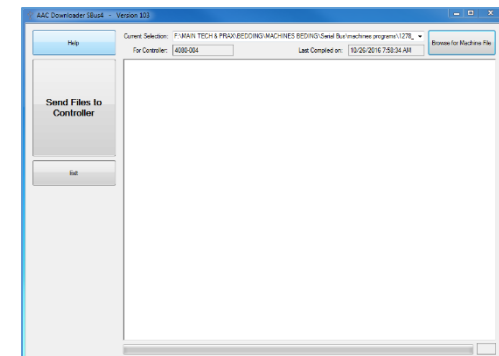
- A. Hook up your USB cable from your laptop to the COM port on 4080-004 controller.



- B. Power up the machine and run the SBus4 Downloader program. Make sure they have been connected for 10 seconds or so (this lets Windows auto-detect the controller). When connecting to the controller for the first time, it may take Windows some extra time to set up the USB drivers – just keep an eye on the system tray and it should report when the device is ready.



- C. Then press “Browse for Machine File” on upper right Colum and choose the program that you saved to your computer earlier. Example: “1278_8_105.zip”



- D. Press “Send Files to Controller” and it should take less than 60 seconds to finish the download. During the download, it is normal for the controller screen to fade and/or show colored stripes.

Once the controller powers up, you can shut down the downloader and disconnect the USB cable.

If the software you uploaded is a different version than what is in the program module, it will prompt you with a program version conflict. Choose to copy from the controller to the program module. It will automatically erase, program, and verify the program module.

3.8. Expiration Count 911

1. On 004 Screens

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

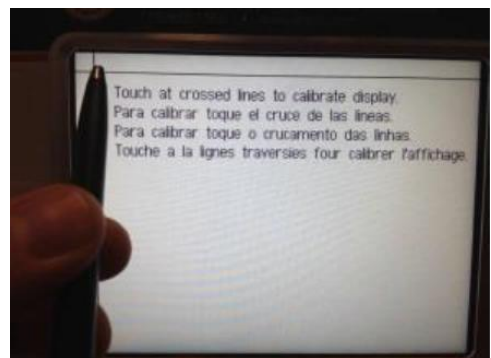
- The machine type
- The machine serial number
- The security key
- The master clock

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
2. Once in contact, provide the following information.
000 Machine Type
000000000000 Machine Serial Number
00000 Security Key
00000000000 Master Clock
To TEMPORARILY (10 days) bypass this warning, press CONTINUE

Unlock Procedure

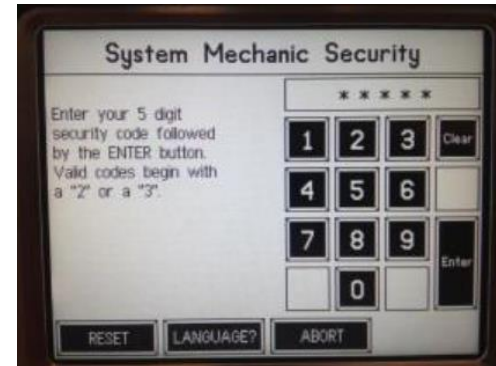
1. Power up the machine while pressing the center of the screen with your finger.
2. Once the screen becomes white, remove your finger and two lines should appear crossing in the upper left corner of the screen.
3. Calibrate the touch screen by pressing where the lines cross with the tip of a pencil eraser or ball point pen cap..
4. Two other lines should appear crossing in the lower right corner of the screen.
5. Calibrate the touch screen by pressing where the lines cross with the tip of a pencil eraser or ball point pen cap..



6. A language selection menu should now appear.



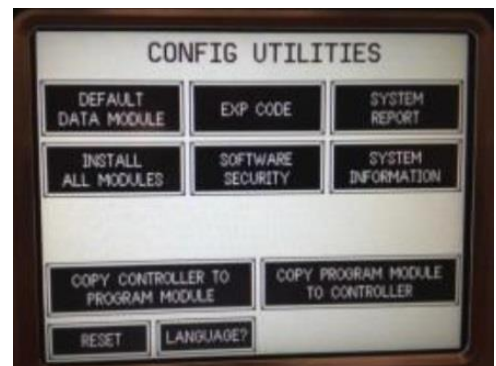
7. A MECHANIC SECURITY SCREEN should appear.
Type your 5 digit security code. (22222)



8. The Controller Setup show up; press continue

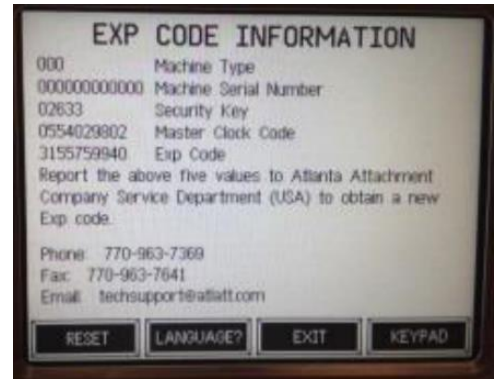


9. In the screen CONFIG UTILITIES, press EXP CODE.

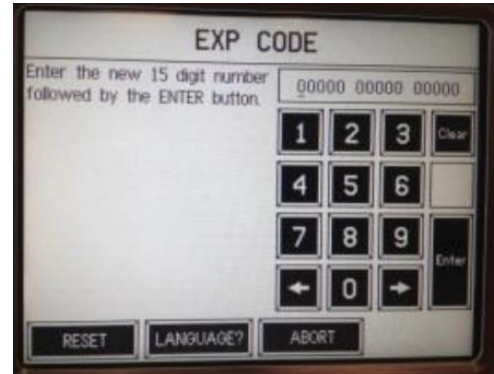


Service Instructions

10. Report the three numbers at the top to the AAC Service department staff.
 - A. The machine type
 - B. The machine serial number
 - C. The security key



11. The AAC Service department staff will provide you with the new EXP CODE value.
12. To enter it, press the KEYPAD button at the bottom right of the screen.
13. Enter in the new EXP CODE using the keypad on the screen. When the 15 digit number is correct, Press Enter.
14. Press RESET to reboot the machine.



2. On old Screens

1. Power up the machine while pressing the center of the screen with your finger. Once the screen the screen becomes white, remove your finger and two lines should appear crossing in the upper left corner of the screen.
2. Calibrate the touch screen by pressing where the lines cross with the tip of your finger. Release. Two other lines should appear crossing in the lower right corner of the screen.
3. Calibrate the touch screen by pressing where the lines cross with the tip of your finger. Release. A language selection menu should now appear. Touch the language that you wish to use. The Config Utility screen should appear.
4. Press the Mem Mod Clock button at the top center of the screen. A Mechanic Security screen should appear. Enter your 5-digit Mechanic code on the key pad and press Enter. The Memory Module Clock page should appear.
5. Report the three numbers at the top to the AAC Service department staff.
The machine type
The machine serial number
The security key
6. The AAC Service department staff will provide you with the new EXP COUNT value. To enter it, press the SET EXP COUNT button at the bottom right of the screen. The Exp Count screen should appear.
7. Enter in the new EXP COUNT value using then left and right buttons to position the cursor where desired. Use the Increment and Decrement buttons above and below to adjust the value under the cursor. When the 15 digit number is correct, press Enter. The Mem Mod Clock page should appear.
8. Press RESET to leave the Config mode.

3.9. Maintenance

NOTE: Always wear proper safety equipment when operating or performing maintenance on any equipment.

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

Service Instructions

2. Preventive Maintenance

- Clean the screen with a clean and soft cloth.



- Never use Chlorine or alcohol base products. It may deteriorate the first layer of the screen



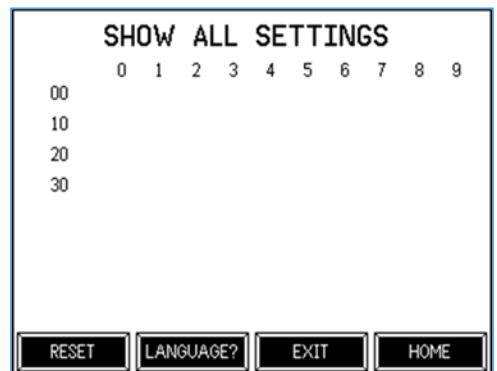
- Clean the Modules and components; make sure the cable cabinet is organized and all modules are properly connected. Avoid any contact with oil on the system.



- Avoid power cables close to the serial bus than produce static to the system



- Take notes or picture of the ALL SETTINGS screen for your records.



3.10. Troubleshooting

1. Screen Messages



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



Troubleshooting

Problem	Cause:
----------------	---------------

Problem	Cause:
4.- Low air pressure detected.	<ul style="list-style-type: none"> A. Air shutoff valve is closed. B. Air line 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 needs adjustment. G. Air pressure switch has failed. H. Module #5 has failed.

4. ASSEMBLY DRAWINGS & PARTS LISTS

The materials contained herein are confidential and proprietary information of Atlanta Attachment Company. In addition to any confidentiality and non-disclosure obligations that currently exist between you and Atlanta Attachment Company, your use of these materials serves as an acknowledgment of the confidential and proprietary nature of these materials and your duty not to make any unauthorized use or disclosure of these materials.

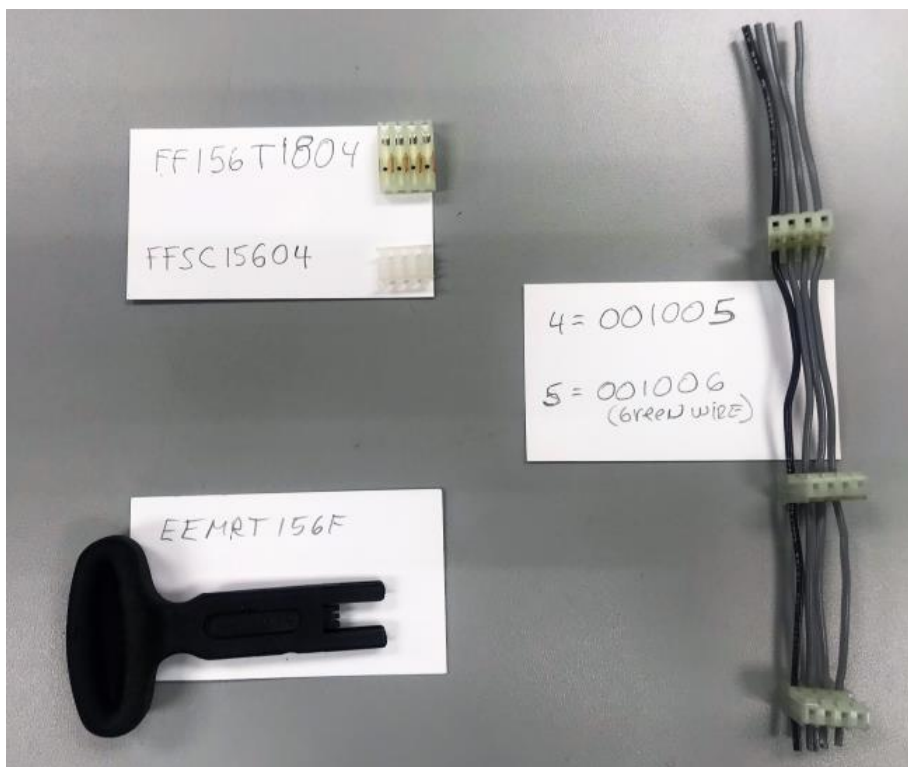


One-Stop Shopping

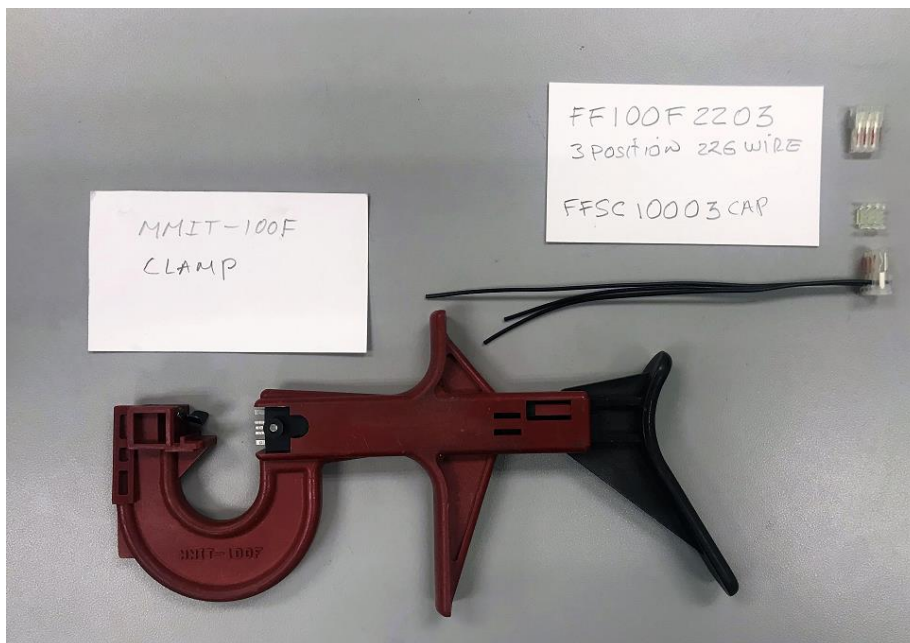
For Expendable Replacement Parts for AAC & Other Bedding Equipment Suppliers

Toll Free: **1-866-885-5100**

www.atlantapartsdepot.com • sales@atlantapartsdepot.com



FF156T1804	CONN IDC, 1X4X.156, #18 AWG THRU
FFSC15604	COVER, STRAIN RELIEF
001005	CABLE, 4 COND, 18 AWG, SBUS RIBBON, PVC
001006	CABLE, 5 COND, 18 AWG, SBUS RIBBON, PVC
EEMRT156F	TOOL, MASCON, CONN T-GRIP, .156



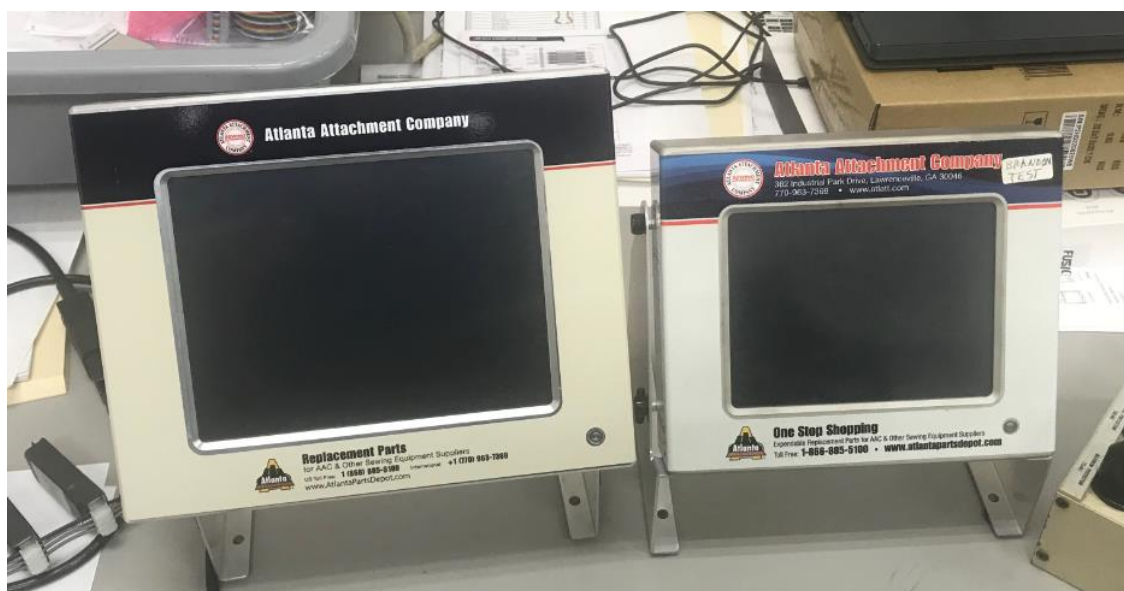
MMIT-100F
FF100F2203
FFSC10003

TOOL, CRIMPING, ITW 100 SERIES CONNECTORS
CONN IDC, 1X3, .100 #22 AWG, END, RED
STRAIN REL, CONN, 100, 3

4080-990 Power Supply. (Old Version)



4080-990B Power Supply New version



4080 004A Touch Screen

4080 004 Touch Screen



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 con-firmed 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.

TRAINING

Check	Description	Time Hrs.
	Basic Function - Review Of Machine	2
	•	
	•	
	•	
	•	
	•	
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	•	
	•	
	•	
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	•	
	•	
	•	
	Evaluate any questions.	1

Participants:



Instructor: _____

Date: _____



ADVANCED SETTINGS	34	PIECE COUNT	12
Air Pressure Switch	15	Piece Counter	31
Calibration.....	18	Pneumatic	0, 3, 6, 14
CLOCK	12	RESET	12, 13, 19, 45
Contents.....	1	Safety Instruction	0
Control Panel	11	Screen Error Messages	48
Edit the Style	36	Security.....	31
Electrical.....	0, 3, 5, 14, 16, 24	Serial Bus	10, 11
Emergency Stop	10, 11	SERVICE	14
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Expiration Count 911	43	SET UP	33, 34
First Aid	2	Set up Screen.....	31
Ground.....	16	SHOW ALL SETTINGS	34
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INSTALLATION.....	7	START	16
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Main Power Contactor.....	16	Style.....	32, 36
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OPERATION	11	Technical Screens	33
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