customer manual

ORIGINAL INSTRUCTIONS

SAFETY PRECAUTIONS — AVOID INJURY

Safeguards are designed into this application equipment to protect operators and maintenance personnel from most hazards during equipment operation. However, certain safety precautions must be taken by the operator and repair personnel to avoid personal injury, as well as damage to the equipment. For best results, application equipment must be operated in a dry, dust-free environment. Do not operate equipment in a gaseous or hazardous environment.

Carefully observe the following safety precautions before and during operation of the equipment:

Always wear approved eye protection while operating equipment.

Always wear appropriate ear protection while using equipment.

Moving parts can crush and cut. Always keep guard(s) in place during normal operation.

Always insert power plug into a properly grounded receptacle to avoid electrical shock.

Always turn off the main power switch and disconnect the electrical cord from the power source and disconnect the air to the stripping module when performing repair or maintenance on the equipment.

Do not operate the equipment without guards in place.

Lift point for equipment

Use caution when working with this equipment.

Never insert hands into installed equipment. Never wear loose clothing or jewelry that may catch in moving parts of the equipment.

Never alter, modify, or misuse the equipment.

Never enter the electrical enclosure immediately after turning off the machine power switch and disconnecting the electrical cord from the power source. High residual voltages may be present in the electrical enclosure. Read the warning label on the electrical enclosure lid before entering the enclosure.

Never stare at the bright light used for machine lighting. Bright light can damage the eye.

Never use the machine for other than what it is designed, which is crimping terminals to wire. Do not use the machine for crushing any items.

TOOLING ASSISTANCE CENTER

CALL TOLL FREE 1-800-722-1111 (CONTINENTAL UNITED STATES AND PUERTO RICO ONLY)

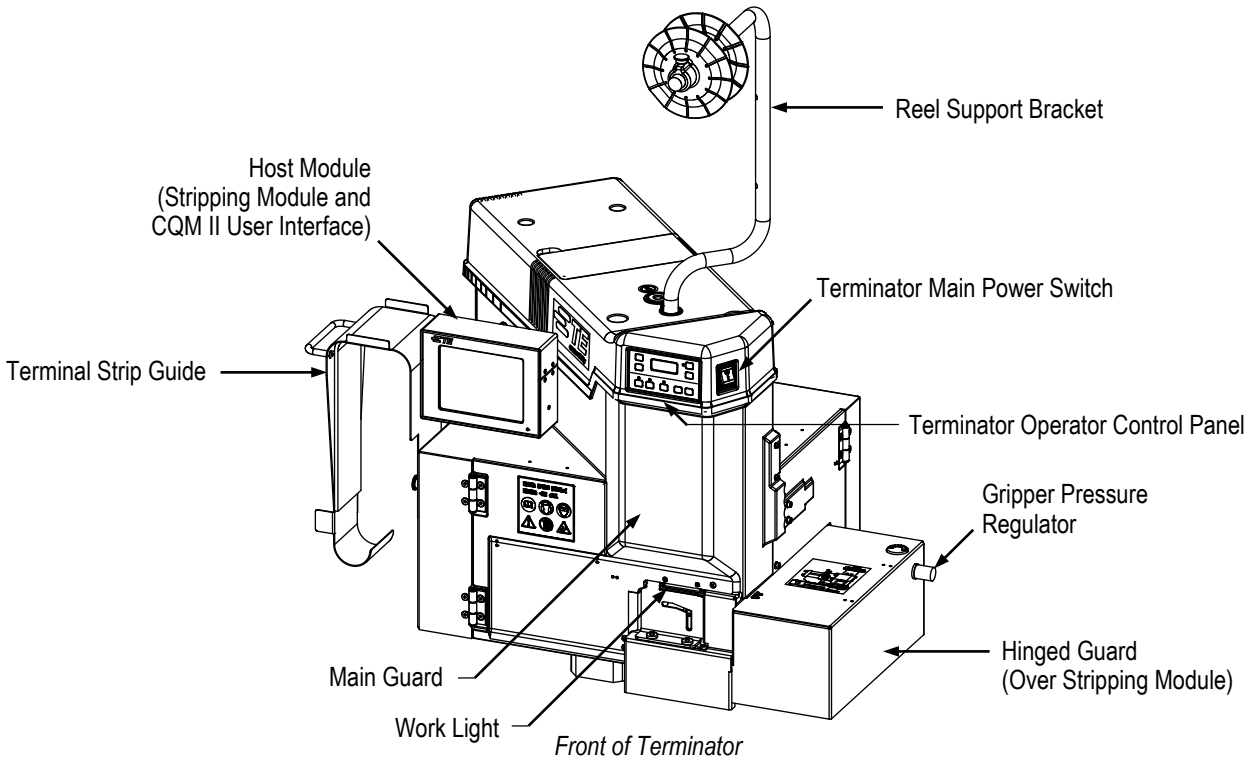
The **Tooling Assistance Center** offers a means of providing technical assistance when required. In addition, Field Service Specialists are available to provide assistance in the adjustment or repair of the application equipment when problems arise which your maintenance personnel are unable to correct.

INFORMATION REQUIRED WHEN CONTACTING THE TOOLING ASSISTANCE CENTER

When calling the Tooling Assistance Center regarding service to equipment, it is suggested that a person familiar with the device be present with a copy of the manual (and drawings) to receive instructions. Many difficulties can be avoided in this manner.

When calling the Tooling Assistance Center, be ready with the following information:

1. Customer name
2. Customer address
3. Person to contact (name, title, telephone number, and extension)
4. Person calling
5. Equipment number (and serial number if applicable)
6. Product part number (and serial number if applicable)
7. Urgency of request
8. Nature of problem
9. Description of inoperative component(s)
10. Additional information/comments that may be helpful



TERMINATOR	DESCRIPTION
2217001-1	AMP-O-LECTRIC Model G II Terminator (with Stripping Module)
2217001-2	AMP-O-LECTRIC Model G II Terminator (with Stripping Module and CQM II)

Figure 1

1. INTRODUCTION

AMP-O-LECTRIC Model G II terminators (with stripping module) 2217001-[ ] are each designed to strip wire and crimp a terminal onto the wire. See Figure 1. The crimp quality monitor (CQM) II is included with terminator -2 and can be added to terminator -1 by using CQM II terminator kit 2217288-2.

This manual covers operation, adjustments, and preventive maintenance concerning the stripping module. For information concerning the terminator, refer to 409-32035 and any documentation included with the terminator. For information concerning the CQM II, refer to 409-10100.

Most side-feed and end-feed and heavy-duty and light-duty mini applicators can be used with the stripping module. Slight modifications might be required, but most modifications involve removing the wire stop (described in Paragraph 4.2., Applicator Setup, Installation, and Removal). Refer to the applicator instruction sheet and documentation included with the applicator for information concerning the applicator.

Read and understand the entire manual before using the equipment.

When reading this manual, pay particular attention to DANGER, CAUTION, and NOTE statements.

DANGER
Denotes an imminent hazard that may result in moderate or severe injury.

CAUTION
Denotes a condition that may result in product or equipment damage.

NOTE
Highlights special or important information.

2. DESCRIPTION

The stripping module is a pneumatically-driven, microprocessor controlled, in-line stripping module that provides wire stripping capability to the AMP-O-LECTRIC Model G II terminator. The stripping module is assembled with metric hardware. Some commercial items may contain non-metric hardware.

NOTE
Dimensions in this customer manual are in metric units [with U.S. customary units in brackets]. Figures are not drawn to scale.

For specifications and requirements for the stripping module, refer to Figure 2.

Cable	Wire Size Range	0.03-2.0 mm^2 (32-14 AWG)
	Maximum Insulation Diameter	5.08 mm [.200 in.]
	Insulation Type	Wide Range
	Cable Breakout	Greater than 29 mm [1.14 in.]
	Strip Length	2.54-10.16 mm [.100-.400 in.]
Measurements		
	Weight	4.55 kg [10 lb]
	Height	127 mm [5 in.]
Operation		
	Gripping Jaw Pressure	Variable Air Pressure
	Noise	Less Than 82 dBa (Typical at Operator Position with Standard Mechanical Feed Applicator)
	Electrical	+24 VDC (Supplied by the Terminator)
	Air	620-760 kPA [90-100 psi] with 2.83 liters/sec (6 scfm)
Physical Environment		
	Temperature	4.45°-40°C [40°-104°F]
	Altitude	Not Applicable
	Relative Humidity	Less than 95% (Non-Condensing)
Transportation and Storage		Clean, Dry Environment After Lightly Coating All Surfaces with Rust Preventing Oil

Figure 2

2.1. Functional Description

The stripping module is a mechanism that prepares discrete wire by stripping the insulation from the conductor for preparation of a terminal crimp. The terminator consist of three functional areas: transfer subassembly, grip subassembly, and strip subassembly. See Figure 3 (detail components are shown in Figure 18).

The **transfer subassembly** consists of a side transfer block, applicator latches, and transfer air cylinder. This subassembly provides a means of sliding the mechanism to the side so that the terminal can be applied to the wire.

The **grip subassembly** consists of upper and lower gripper jaws, gripper mounting block, left and right gibs, jaw drive block, and gripper air cylinder. This subassembly provides a means of holding the wire during the wire stripping and terminal application process. The gripper mechanism is "tonked" during the terminator cycle to place the stripped wire in the terminal wire barrel.

The **strip subassembly** consists of a U-block, main block, gibs, blade drive block, blade adjustment block, inner and outer strip blades, start sensor block, start sensor arm, start sensor, start sensor air cylinder, strip cam, and strip air cylinder. This subassembly drives the inner strip blade to cut through the wire insulation. It also moves part of the mechanism away from the operator to pull the insulation slug off the wire. The mechanism contains the start sensor to begin the cycle.

NOTE
The start sensor is also referred to as the wire sensor.

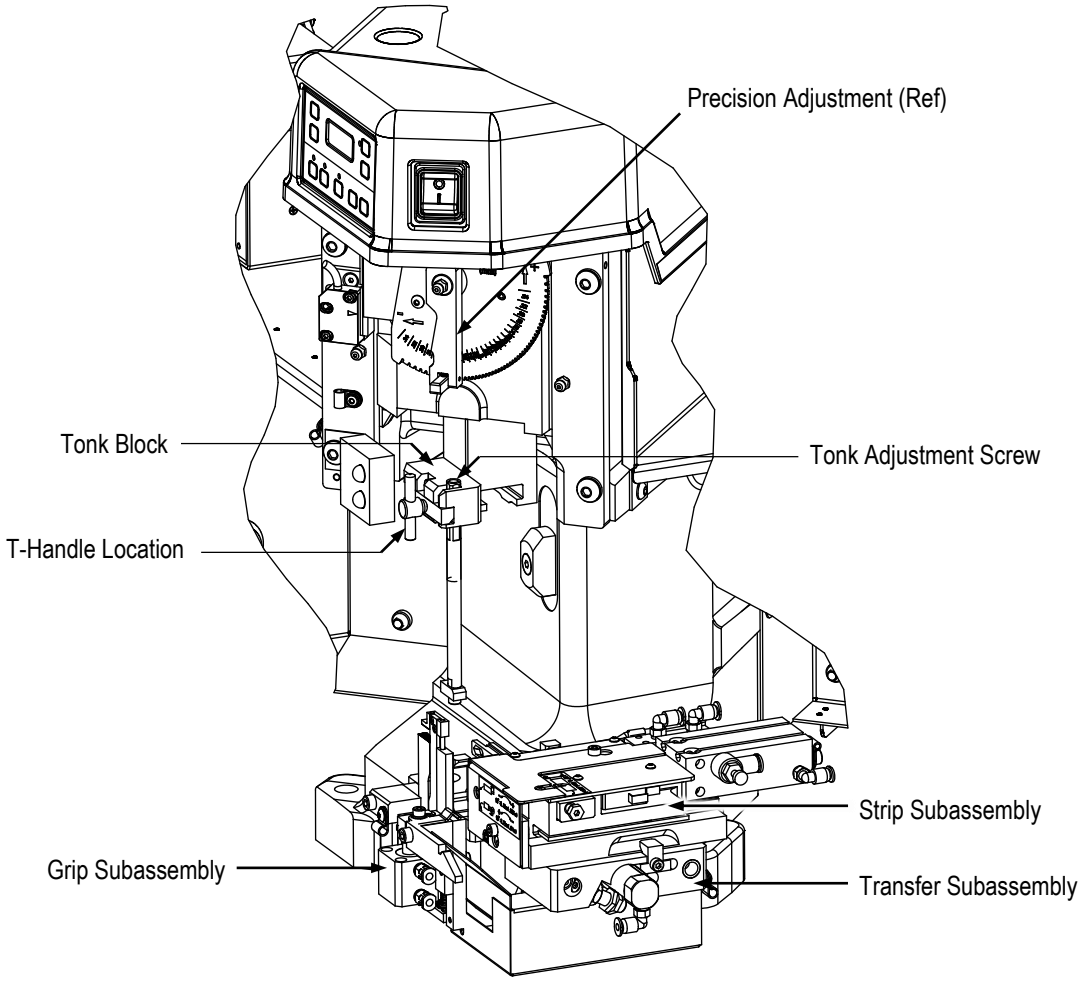


Figure 3

2.2. Electrical Description

The electrical portion of the stripping module consists of the control circuitry (located on the CPU assembly board in the machine electrical control box), host module, electrically-controlled pneumatic valves, and various switched and sensors.

The terminator main power switch/circuit breaker provides power to the control circuitry, host module, pneumatic valves, and various switches and sensors. The switch/circuit breaker is located on the front of the machine next to the operator control panel.

The host module operates on +24 VDC and provides the user interface (LCD display and touch screen) for setting up and operating the stripping module. The host module is mounted to a bracket on the left side of the terminator as shown in Figure 1.

NOTE
When the machine has the CQM option enabled, the host module is also used as the user interface for setting up and using the CQM feature. Special sensors are required to use the CQM feature.

NOTE
Refer to Section 4 for a description of stripping module screens and controls.

2.3. Terminator Guards

A combination of guards is installed to provide protection for the operator while maintaining proper visibility of the work area. See Figure 1. From the front of the terminator, the main guard swings open to the left and the hinged guard swings open to the right (refer to Figure 1 and Figure 4) to allow easy access for applicator installation and setup.

Safety interlocks on the guards prevent the terminator from cycling if the guard doors are open during production operation.

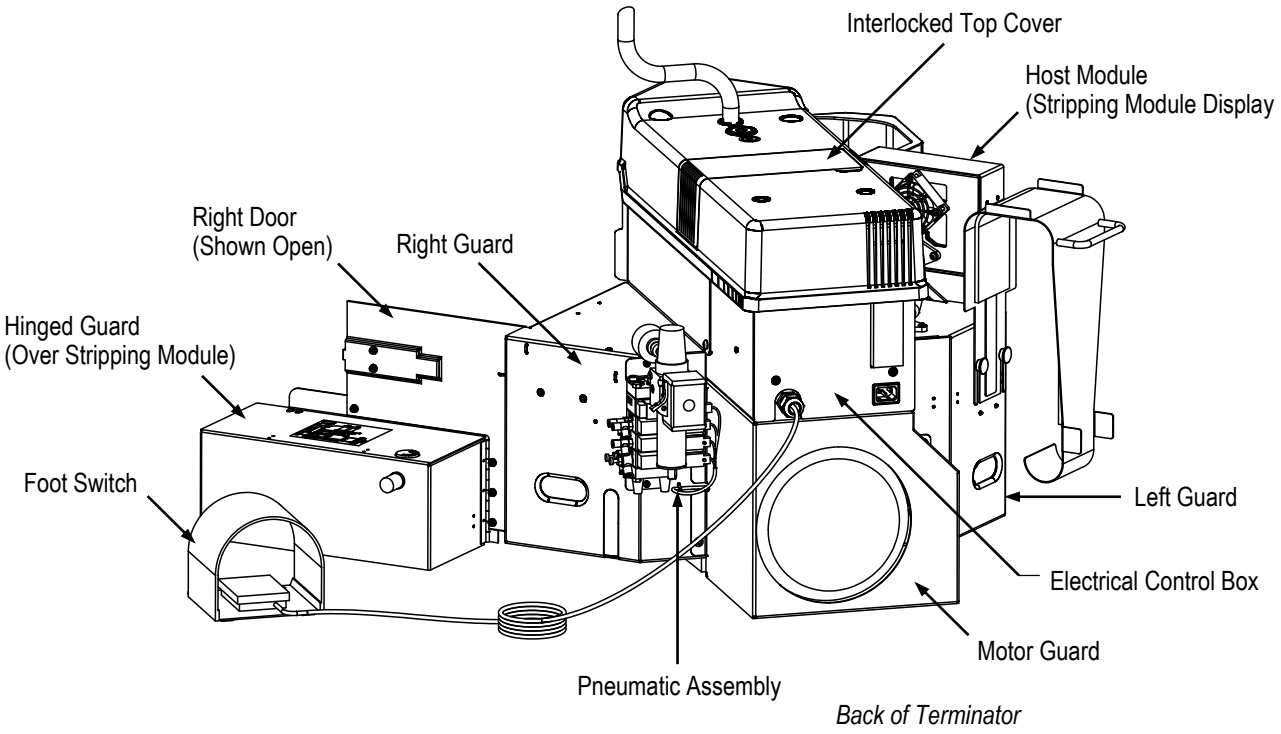


Figure 4

2.4. Description of Operation

The strip and crimp cycle of operation is as follows:

1. The cycle may be started automatically (with "wire sensor" selected as the starting means) or with the foot switch. In automatic operation ("wire sensor" selected as the starting means), the operator places a wire through the grip jaws and strip blades to depress the wire sensor, which automatically starts the cycle. With the foot switch as the starting means, the operator depresses the foot switch to activate the cycle.
2. The gripper jaws then close on the wire while the strip blades close to cut through the insulation. The stripping mechanism pulls the blades away from the operator to remove the insulation slug.
3. The stripping unit shifts to the right-side position to remove the stripping blades from the applicator.
4. The terminator cycles to crimp a terminal onto the wire.
5. After completing the crimp, the grippers open to release the crimped wire and the stripping blades retract.
6. The wire sensor arm then retracts so that the air blast can blow the insulation slug into the scrap bin.
7. The stripping unit then transfers back to the start position.

3. RECEIVING INSPECTION AND INSTALLATION

3.1. Receiving Inspection

The terminator is thoroughly inspected during and after assembly. A final series of inspections is made to ensure proper terminator functioning before packaging and shipping. To protect against damage that may have occurred during shipment, remove the terminator from the packaging and carefully inspect the terminator for damage. If damage is evident, file a claim against the carrier and immediately notify TE Connectivity.

3.2. Installation

1. Remove all mounting bolts securing the terminator to the shipping pallet. The lift point of the terminator is accessible from the interlocked top cover (shown in Figure 4).

Lift point for equipment

2. Place a M12×20 eye bolt lift ring (customer supplied) in the supplied hole. A lifting hook is not supplied with the terminator (shoulder eye bolt 1428156-1 is available separately).

CAUTION
Install the lift ring carefully. A 19.05-mm [.75-in.] thread length engagement is required for the lift ring to support the terminator.

3. Attach a suitable hoist to the lift ring, lift the terminator, and place it in the selected operating location.
4. Insert post of the reel support bracket into the appropriate hole on top of the terminator until the roll pin engages a groove in the terminator frame.
5. Attach the terminal strip guide (included with the terminator) with the two thumbscrews supplied. Mount the guide on the left guard for side-feed applicators, and mount the guide on the right guard for end-feed applicators.
6. Connect the power cord to a suitable electrical supply.

NOTE
The terminator will automatically detect the supply voltage and adjust the controller accordingly.

7. Connect the pneumatic assembly to a suitable air supply.
8. Apply AC power to the terminator by turning on the main power switch. The host module will proceed through a start-up process.
9. The host module is used on a variety of different pieces of equipment. **It is necessary to configure the host module for the equipment being used** as follows:

   a. Press the Tools icon located in the menu bar at the top of the screen. Refer to Figure 5.

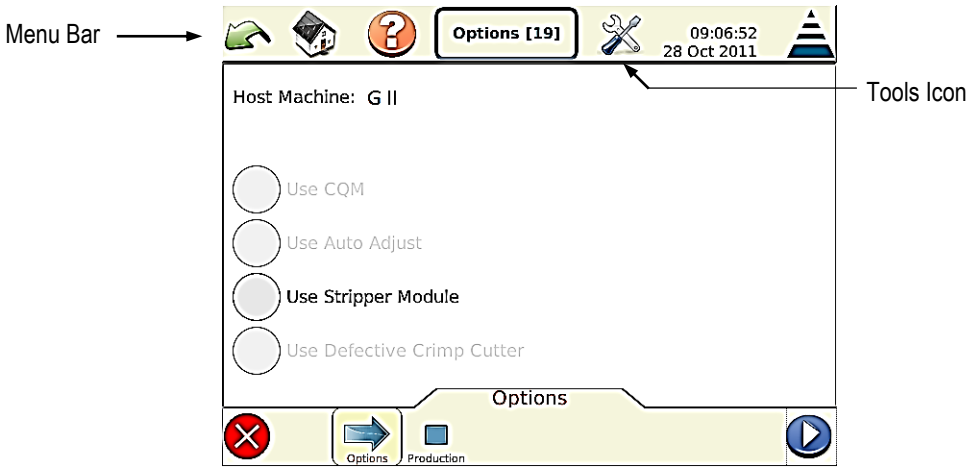


Figure 5

b. Scroll down and touch the System Settings icon. Refer to Figure 6.

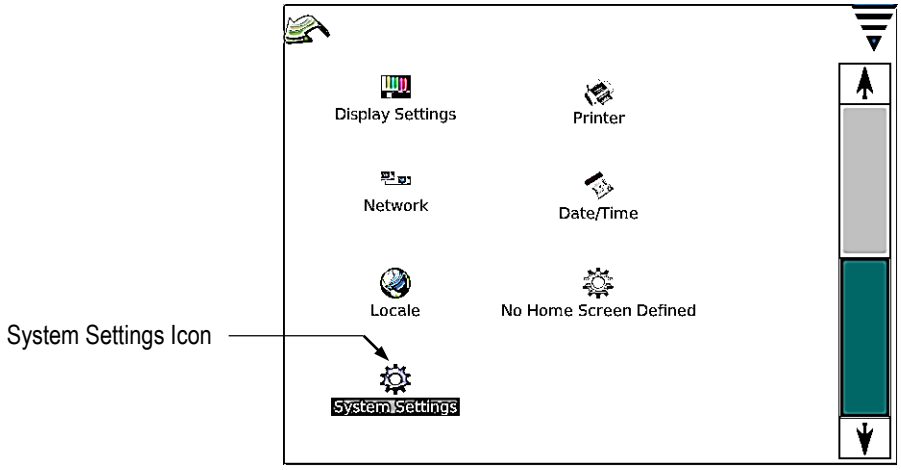


Figure 6

c. Select “G II” from the Host Machine pull-down menu as shown in Figure 7.

d. Select “Stripper Module Installed” from Options as shown in Figure 7.

NOTE
*Currently, the stripping module can **only** be used with this version of the terminator.*

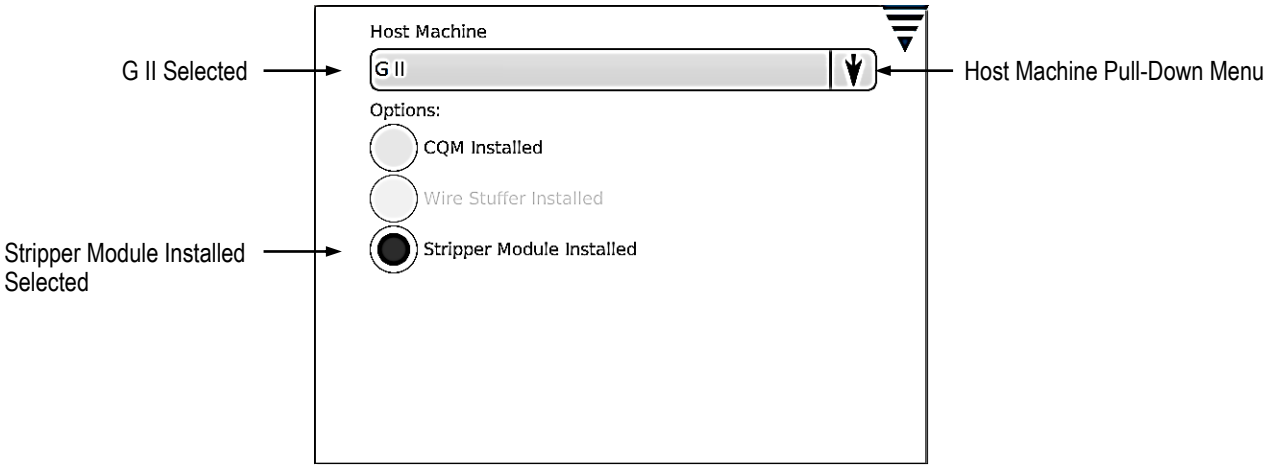


Figure 7

This completes the configuration of the host module for the terminator (with stripping module).

10. After configuring the host module, proceed as follows:

    a. Remove the applicator.

    b. Manually return the terminator ram to the top of its travel (top-dead-center).

    c. Connect the air, and turn on the main air shut-off valve.

    d. Close all guards.

    e. Reset the stripping module. Resetting the stripping module brings up the air to the stripping module and causes the mechanisms to move to their home position.

NOTE
The stripping module is not reset if a red "X" (as shown in Figure 8) or an exclamation point (which indicates that the system is in Error mode) is displayed at the bottom left corner of the screen.

To reset the stripping module, touch the red "X" or exclamation point, then press the reset button when displayed (shown in Figure 9).

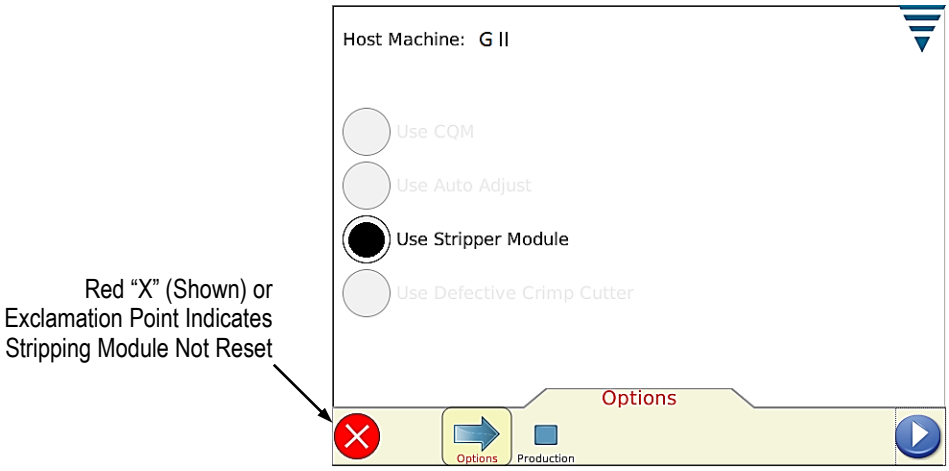


Figure 8

NOTE
The Reset screen will only be displayed for a few seconds if the operator does not press one of the buttons displayed. See Figure 9.

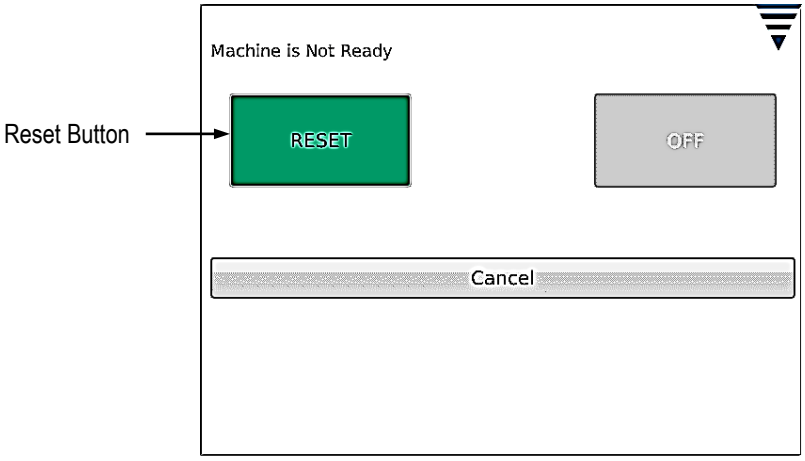


Figure 9

A green check displayed at the bottom left corner of the screen indicates that the stripping module has been reset. See Figure 10.

NOTE
The operator can go back into the Reset screen at any time by touching the green check icon at the bottom left corner of the screen. If the system is already reset, an OFF button (shown in Figure 9) will be active and can be used to remove air from the stripping module.

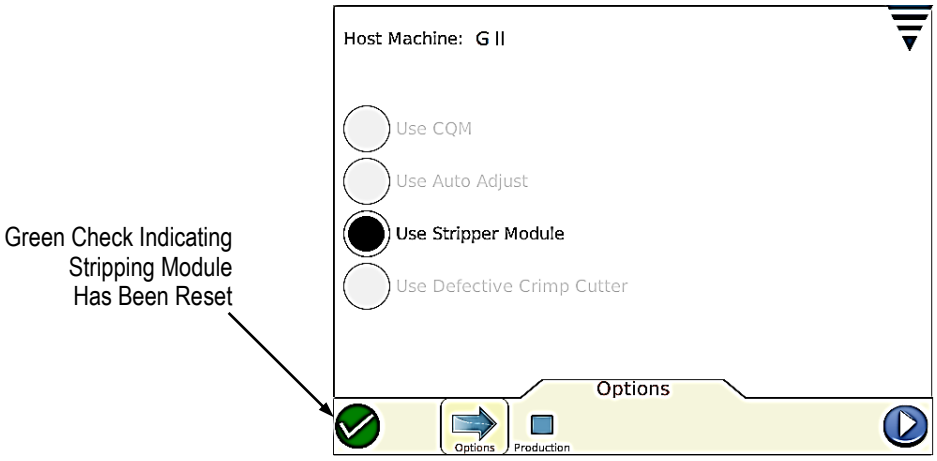


Figure 10

11. Check for proper functioning of the terminator by operating the stripping module in the Step mode. Refer to Paragraph 4.1.

3.3. Considerations Affecting Placement of Bench Machines

The location of the terminator in relation to the operator's position is extremely important in terms of both safety and maximum efficiency. Studies have repeatedly shown that operator fatigue will be reduced, and greater efficiency achieved, if: (1) the bench is of appropriate height, preferably with sound-deadening rubber mounts; (2) the terminator is properly located on the bench with ample work areas on both sides to facilitate work flow; (3) the operator uses a swivel chair with padded seat and back rest which are independently adjustable; and (4) the foot switch is placed on a rubber mat to maintain its movability, while preventing it from sliding unintentionally. Refer to Figure 11.

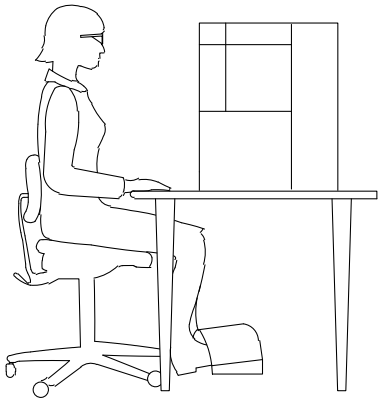


Figure 11

A. Bench

The bench to be used should be of sturdy construction, preferably with rubber mounts to minimize noise. A height of 762 to 812.8 mm [30 in. to 32 in.] is the most suitable for operator comfort and convenience. This height allows the operator to rest both feet on the floor, thereby providing for the shifting of weight and leg position.

B. Mounting and Location on Bench

The terminator should be located near the front of the bench with the "target area" (tooling area where the product is applied) not more than 152.4 to 203.2 mm [6 to 8 in.] from the front edge or a minimum of 50.8 mm [2 in.] from the front edge as shown in Figure 12. This location will eliminate unnecessary operator motion and help to avoid back strain and fatigue.

Orientation of the terminator should be such that the "target area" is facing the front of the bench and is parallel to the front edge. Access to the back of the terminator **must** also be provided.

The terminator should be securely bolted to the bench, and should not extend beyond the front of the bench. Refer to Figure 12.

C. Operator's Chair

The operator's chair should swivel and have independent seat height and back rest adjustments. The seat and back rest should be padded, and the back rest should be large enough to provide support both above and below the waist line. In use, the chair should be far enough under the bench so that the operator's back is straight and is supported by the back rest.

Mounting and Location on Bench

Figure 12

4. OPERATION

4.1. Host Module Controls

To operate the terminator with the stripping module, the Options screen must have the Use Stripper Module radio button selected as shown in Figure 13. To operate the terminator without the stripping module (crimp only operation), the Use Stripper Module radio button must be *deselected*.

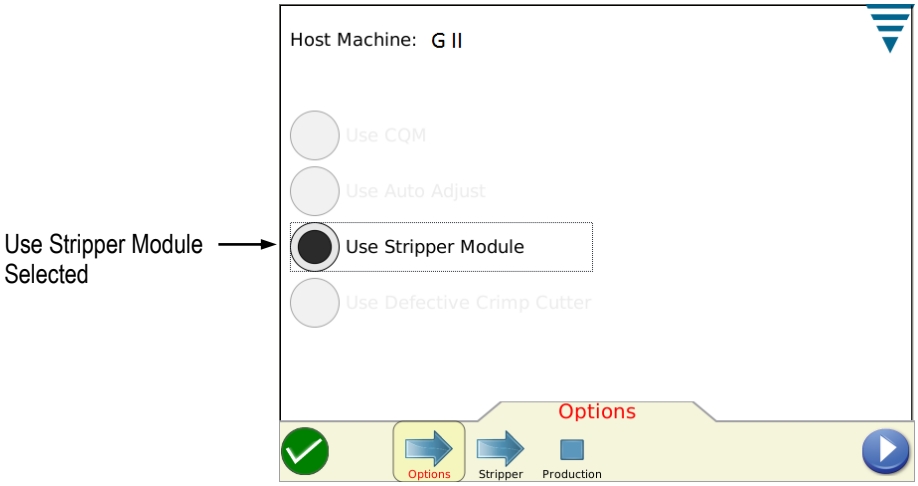


Figure 13

From the Stripper screen, shown in Figure 14, the operator can select how to perform the stripping operation.

Mode Selection: allows selection of strip and crimp or strip

Enable via: allows selection of using the wire sensor or foot switch to cycle the system

Air Blast Duration: allows selection to increase or decrease the duration that the air blast is applied (longer air blast durations may be necessary to remove stripped debris from tooling; default value is 0.1 s)

Transfer Return Delay: allows selection to increase or decrease the delay time for removal of completed crimps from tooling after each cycle (default value is 0.0 s)

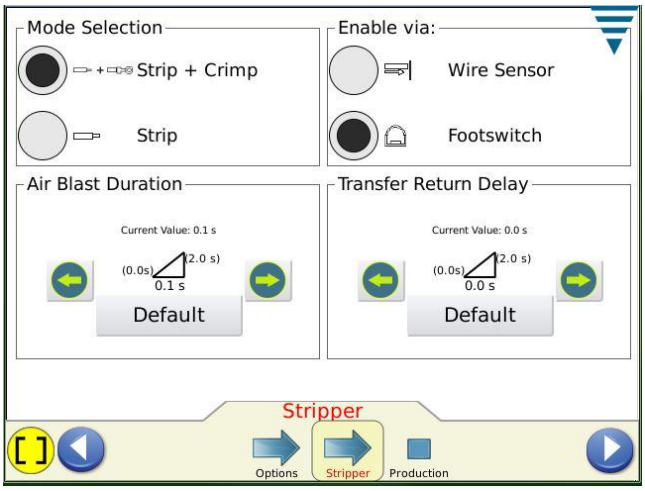


Figure 14

From the Production screen, the operator can select the way to cycle the system: Full Cycle or Step mode.

To operate the system in the Step mode, the Single Step Mode radio button must be selected. When the system is in Step mode, each touch of the Step button will perform a single step until the cycle has been completed. See Figure 15.

NOTE
In Single Step mode, the wire sensor and the foot switch cannot be used.

The Calculate Head Room button, Force vs. Time graph, Nominal Crimp Height, and Part Number are only displayed on the this screen if the stripping module is being used with the CQM II option. See Figure 15.

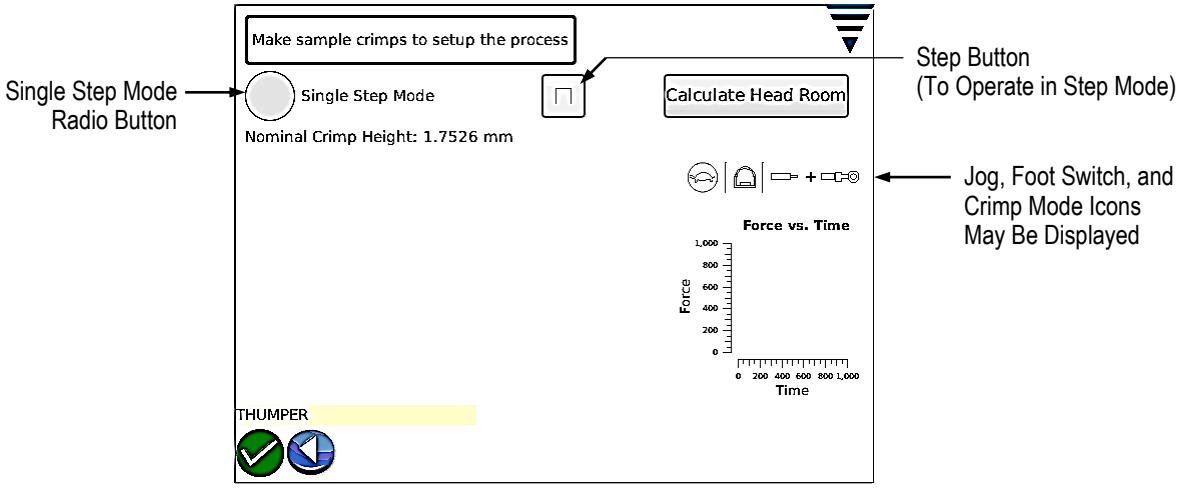
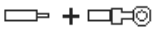


Figure 15

In addition, the following icons *may* be displayed on the right side of the screen that indicate the current operational status of the terminator. See Figure 15.

Jog: indicates that the terminator Jog buttons are operational and jogging is allowed

Foot Switch: indicates that the foot switch was selected to be used to cycle the system



Crimp mode: indicates that the terminator was set up for Strip and Crimp mode

4.2. Applicator Setup, Installation, and Removal

A. Applicator Preparation and Setup

1. Prepare **side-feed applicators** for use with the stripping module by removing the applicator wire stop. Prepare **end-feed applicators** for use by removing the applicator wire stop and moving the track-mounted “hold down” back as far as possible.
2. Install the applicator onto the terminator as described in Paragraph 4.2.C. Adjust the wire brush and strip length, and check for any interferences. If interference with the track-mounted “hold down” exists, remove the track-mounted hold down.

B. Terminal Sticking Elimination and Prevention

NOTE
Certain types of terminals are more likely to stick in the crimpers than other types. In many types of application equipment, the wire stop acts as a terminal stripper. When using the stripping module however, the wire stop must be removed.

In addition to removing the applicator wire stop, the following methods may be used to eliminate and /or prevent terminal sticking:

— Use a terminal lubricator.

— Use a spring-loaded, ram-mounted wire depressor mounted between the crimper and the wire barrel crimper.

— Use a ram-mounted terminal "hold-down" commonly found on end-feed applicators.

C. Applicator Installation and Removal

DANGER
To avoid personal injury, be sure to disconnect power to the stripping module and terminator before installing or removing the applicator.

It may be necessary to install the applicator from either the left side or the right side of the gripper mechanism, depending on the applicator and type of product being run.

To remove an applicator, disconnect power to the terminator, and remove it in reverse order of installation.

C.1. Left-Side Installation

DANGER
To avoid personal injury, be sure to disconnect power to the stripping module and terminator before installing the applicator.

1. Slide the stripping module and movable part of the transfer assembly to the right-side position.
2. Remove the tonk from the ram post adapter.
3. Loosen the screw holding the scrap deflector, and rotate the scrap deflector toward the front of the terminator.
4. Loosen the applicator latch of the terminator base plate, and push it out of the way.

5. From the left side of the grip subassembly, tilt the applicator and place it in position on the base plate.
6. Slide the applicator ram into the ram post of the terminator.
7. Place the left (applicator) latch of the terminator into the slots on the applicator base plate.
8. Lift the right (applicator) latch, and tighten against the applicator base plate.
9. Rotate the scrap deflector back against the applicator base plate, and tighten the hold-down screws.
10. Install the tonk into the ram post adapter.
11. Manually cycle the terminator and stripping module to verify fit, clearance, and proper operation.

C.2. Right-Side Installation

DANGER
To avoid personal injury, be sure to disconnect power to the stripping module and terminator before installing the applicator.

1. Remove the upper portion of the strip subassembly by loosening the locking latch on the right side of the transfer subassembly.
2. Lift the strip subassembly off the transfer subassembly, and set it on a work bench.
3. Remove the tonk from the ram post adapter.
4. Loosen the screw holding the scrap deflector, and rotate the scrap deflector toward the front of the terminator.
5. Loosen the applicator latch of the terminator base plate, and push it out of the way.
6. From the right side of the grip subassembly, place the applicator on the base plate.
7. Slide the applicator ram into the ram post of the terminator.
8. Place the left (applicator) latch of the terminator base plate into the slots on the applicator base plate.
9. Lift the right (applicator) latch and tighten it against the applicator base plate.
10. Rotate the scrap deflector back against the applicator base plate, and tighten the hold-down screws.
11. Place the upper portion of strip subassembly back on the transfer subassembly.
12. Partially tighten the locking latch.
13. Push the upper portion of the strip subassembly toward the rear of the terminator until the wire brush adjustment screw bottoms on the rear stop.
14. Install the tonk into the ram post adapter.
15. Manually cycle the terminator and stripping module to verify fit, clearance, and proper operation.

4.3. Stripping Module Removal

The stripping module might need to be removed when changing applicators. Refer to Paragraph 4.2.C. for applicator installation procedure.

DANGER
To avoid personal injury, be sure to disconnect power to the stripping module and terminator before installing or removing the stripping module.

1. Loosen the cap screw located at the right side of the stripping module.
2. Back off the clamp on the right side of the stripping module.
3. Slide the stripping module to the right and lift up to remove the stripping module from the mounting base.

5. PREVENTIVE MAINTENANCE

Preventive maintenance will keep the stripping module in good working order and ensure maximum reliability and service from its components.

DANGER
*To avoid personal injury, electrical and pneumatic power must be **disconnected** at the source prior to maintenance.*

5.1. Cleaning

1. Clean any debris from the stripping module daily.

DANGER
To avoid personal injury, compressed air used for cleaning must be reduced to less than 207 kPa [30 psi], and effective chip guarding and personal protective equipment (including eye protection) must be used.

2. If an air feed assembly is installed, check and replace the air filter element, if necessary.
3. Wipe off the guards with a clean soft cloth.

CAUTION
Do not use any solvent to clean the guards. *Solvent could damage the guards.*

4. Remove the strip subassembly, and proceed as follows:
   a. Thoroughly clean both the strip subassembly and the area in and around the base plate.
   b. Inspect the strip subassembly for damaged parts, clean the subassembly, and remove all insulation scrap and wire strands.
   c. Remove all insulation scrap and wire strands from the grip subassembly.
   d. Re-install the strip subassembly.

5.2. Lubrication

1. Lubricate all sliding surfaces with a general purpose grease at least every 250,000 cycles.

NOTE
Make sure to apply grease to groove in the bottom of the strip cam.

2. Apply light-weight oil to the surfaces of the strip blades.

CAUTION
***Do not** get oil on the cutting surfaces of the blades; otherwise, sticking of the insulation slug may occur.*

3. Use a grease gun to apply grease to the transfer subassembly through the grease fitting at least every million cycles.

NOTE
It will be necessary to remove the tooling-in-position switch to gain access to the grease fitting.

5.3. Terminator Preventive Maintenance

For preventive maintenance procedures for the terminator, refer to 409-32035.

When performing the monthly mandatory safety checks from the terminator customer manual, make sure that the stripping module is disabled during the tests. For example, when the guards are opened or the magnetically-operated switch actuator is removed, power to the stripping module main air valve is removed, disabling its operation.

6. DIAGNOSTICS

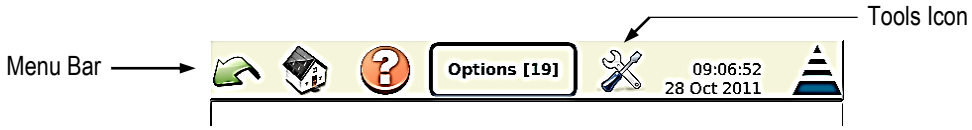
To verify correct operation of the stripping module, manually operate the stripping module in the Step mode as described in Paragraph 4.1.

If further diagnostic troubleshooting is necessary, the operator can use the Diagnostics mode.

CAUTION
Diagnostics mode should only be attempted by someone thoroughly knowledgeable with the equipment. In Diagnostics mode, outputs can be turned on or off directly by the operator. It is possible for the operator to damage tooling by directly turning on outputs that cause tooling to collide.

Enter the Diagnostics mode as follows:

1. Touch the Tools icon on the menu bar (from the Options screen, it might be necessary to touch the upside-down triangle in the upper right corner of the screen to display the menu bar).



2. Scroll down and touch the Diagnostics icon. See Figure 16.

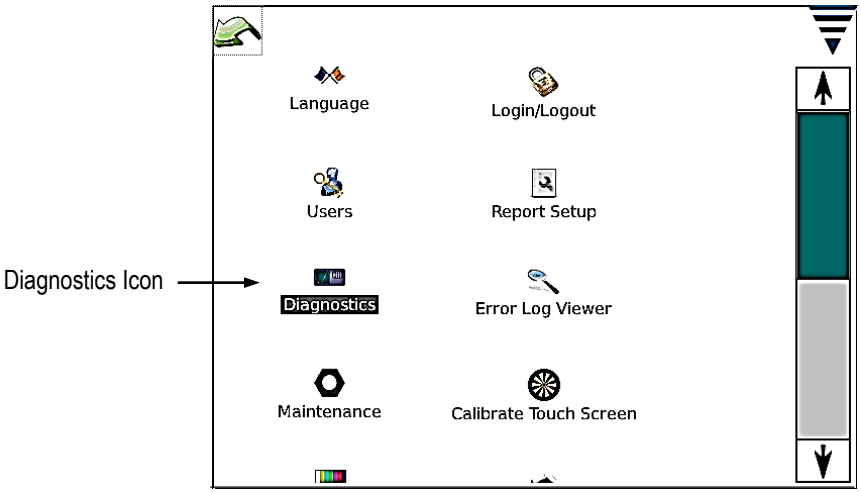


Figure 16

3. Touch the “G II” or “G II (2)” tab at the top of the screen. See Figure 17.

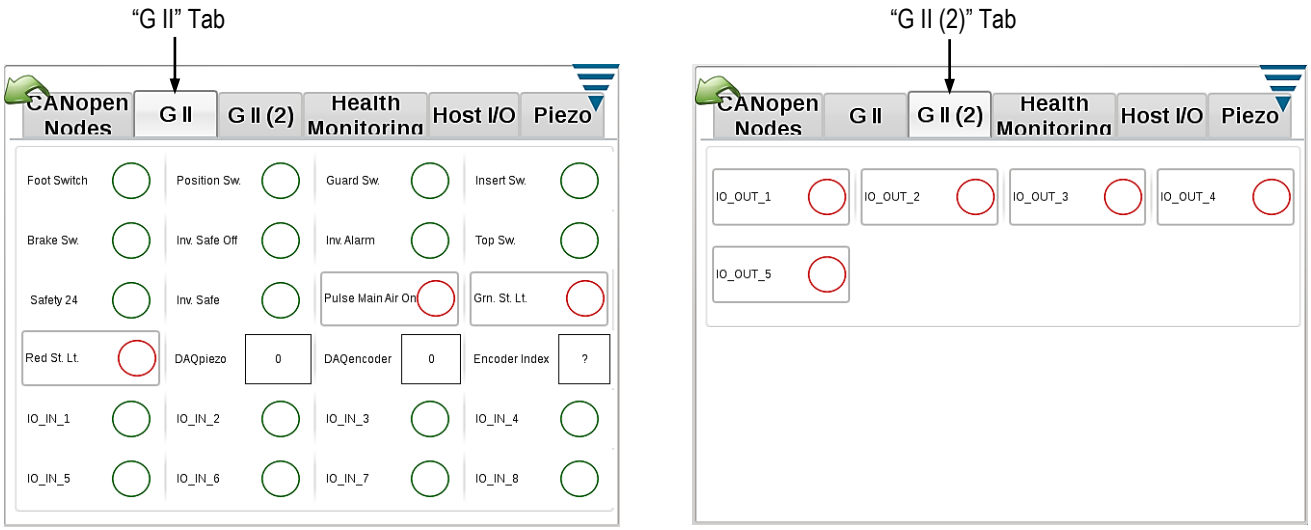


Figure 17

The stripping module I/O can be viewed and changed (outputs).

CAUTION
The operator should be completely familiar with all stripping module mechanisms before attempting to change any outputs; otherwise, it is not recommended to use the Diagnostics mode and the operator should instead go to the Single Step mode operation on the Production screen.

The stripping module I/O consists of the following:

Outputs	Inputs	
Grip/Strip	Pull-Back Switch	Foot Switch
Transfer	Tonk Switch	Wire Sensor
Air Blast	Tooling-In-Place	Guard Interlock
	Side Transfer	

7. MECHANICAL ADJUSTMENTS

DANGER
To avoid personal injury, make sure to disconnect power to the stripping module and terminator before making any adjustments.

Most of the mechanical adjustments are made with adjustment screws containing polyamide locks. A 3-mm wrench is required to make most adjustments.

NOTE
If the adjustment screws become loose, the polyamide locks can be tightened by turning the back-up setscrew clockwise.

7.1. Strip Blade Closure Adjustment

The strip blades must be adjusted to a depth that will permit the cutting and stripping of the insulation slug from the conductor wires. This adjustment is made by turning the setscrew *clockwise* to strip a *smaller* wire and *counter-clockwise* to strip a *larger* wire. Refer to Figure 18.

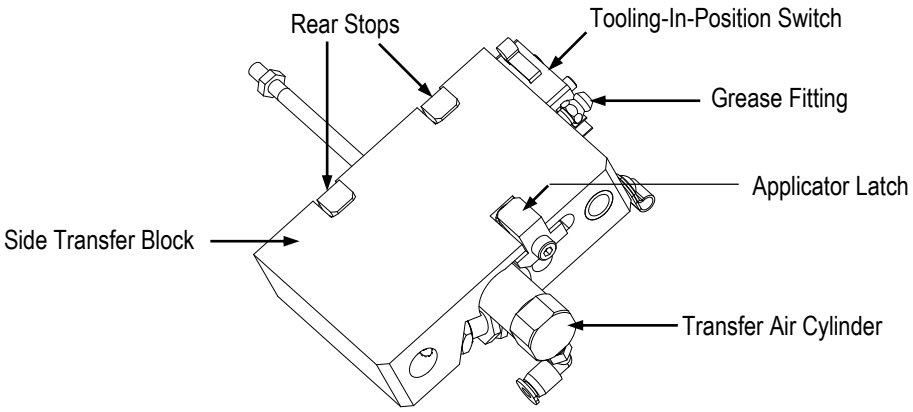
1. Turn power to the stripping module off.
2. Open the main guard.
3. Move the strip subassembly to the right side of the transfer subassembly.
4. Loosen the scrap cover retaining screw.
5. Slide the scrap cover forward, and lift the cover off.
6. Insert a stripped wire into the opening of the blade assembly.
7. Insert a 3-mm hex wrench through the slot that was hidden by the scrap cover and into the hole in the strip cam.
8. Pull the cam assembly forward using a 3-mm hex wrench (blades should be in the "closed" position).
9. Using the strip depth adjustment screw, adjust the blade closure until the blades drag on the conductor of the wire, then rotate the adjustment screw a one-quarter turn *counter-clockwise*. Rotate the adjustment screw *clockwise* to *close* the blades for smaller wire and *counter-clockwise* to *open* the blades for larger wire.
10. Remove the hex wrench, and install the scrap cover.

7.2. Strip Length Adjustment

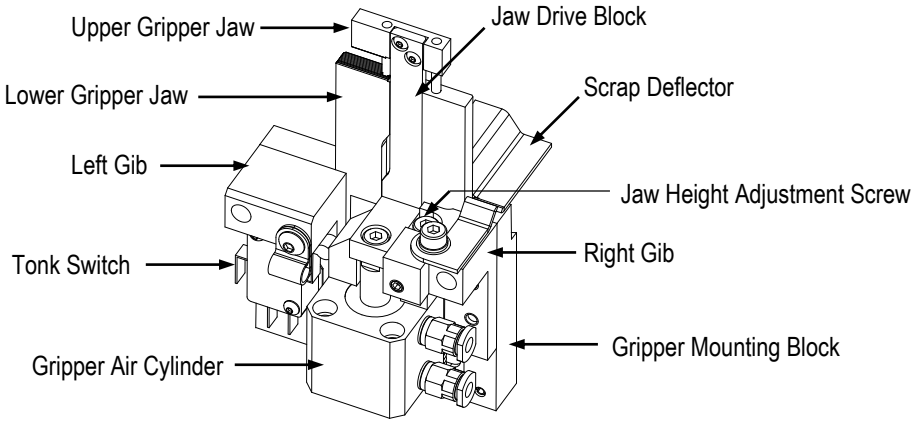
The wire strip length may vary between applicators and terminals.

This adjustment is made with the adjustment screw located at the front of the stripping module. Turn the adjustment screw *clockwise* to *increase* the strip length or *counterclockwise* to *decrease* the strip length. Refer to Figure 18.

Transfer Subassembly



Grip Subassembly



Strip Subassembly

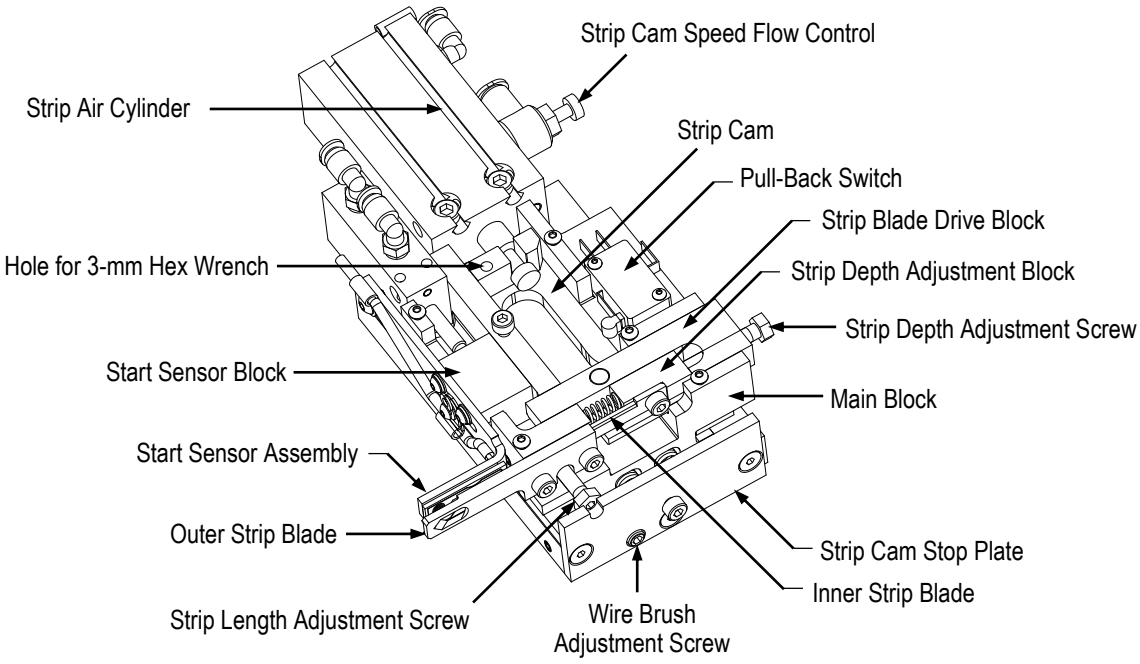


Figure 18

7.3. Wire Brush Adjustment

1. Remove the pneumatic power by opening the guard to access the stripping module.
2. Slightly loosen the applicator latch located on the transfer subassembly. See Figure 18.
3. Turn the wire brush adjustment screw *clockwise* to *decrease* the wire brush or *counter-clockwise* to *increase* the wire brush.
4. Push the strip mechanism toward the rear of the terminator until the adjustment screw hits the rear stop.
5. Tighten the applicator latch.

CAUTION
If the applicator latch is not fully tightened, the top portion of the strip subassembly may move, causing variations in the wire brush.

7.4. Gripper Adjustment

A. Jaw Height

The jaw height adjustment is required to align the center of the wire to be stripped with the center of V-shaped opening in the outer strip blade.

1. Open the guard to remove the pneumatic power and access the stripping module.
2. Place a wire onto the lower jaw (see Figure 18), and insert the wire through the opening in the strip blades.
3. Center the wire in the center of the V-shaped opening in the outer blade by turning the jaw height adjustment screw located on the top of the right gib of the grip subassembly. Turning the adjustment screw *clockwise* will *lower* the jaw. Turning the adjustment screw *counter-clockwise* will *raise* the gripper jaw.

B. Gripper Pressure

The gripper pressure adjustment may be necessary to prevent damage to the wire insulation.

To see the pressure level on the gage, enter the Step mode while in the Strip and Crimp mode or Strip Only mode. Perform the first step by pressing the Step button. This will close the grip jaw and the pressure will be displayed on the gage next to the gripper pressure regulator (shown in Figure 1).

— *Increase* the pressure by pulling the lock knob away from the terminator and turning the knob *clockwise*. Push the lock knob back toward the terminator after adjustment.

— *Decrease* the pressure by pulling the lock knob away from the terminator and turning the knob *counter-clockwise*. Push the lock knob back toward the terminator after adjustment.

CAUTION
If the pressure is set too low, the wire may be pulled through the gripper jaws during the pull-back motion causing wire damage. If this occurs, increase the gripper pressure until the insulation is pulled off the wire properly.

7.5. Tonk Adjustment

The tonk adjustment is required to make sure that the wire is level between the terminal and gripper jaws during the crimping operation.

1. Open the main guard to remove the pneumatic power and to access the stripping module.
2. Push the transfer subassembly (see Figure 18) along with the strip subassembly to the right-side position.
3. Insert a pre-stripped wire through the gripper jaws into the approximate location required for wire stripping.
4. Manually close the upper gripper jaw (shown in Figure 18) onto the wire.

5. Remove the interlocked top cover by pulling it straight up. Place a 22-mm wrench (customer supplied) on the crankshaft nut and use it to lower the ram until it is at its lowest position.
6. Make sure that the wire is sitting in the terminal wire barrel. If the wire is not in the correct position, loosen the T-handle on the tonk block (shown in Figure 3), and turn the tonk adjustment screw *clockwise* to *lower* the wire and *counter-clockwise* to *raise* the wire.
7. Tighten the T-handle on the tonk block.
8. Return the terminator ram to its top position. Remove the 22-mm wrench, and place the interlocked top cover back in position.

7.6. Strip Cam Speed Adjustment

The strip cam speed may need to be adjusted (slowed) if the gripper pressure is lowered enough to slow the gripper air cylinder.

To adjust the strip air cylinder speed, turn the flow control knob on the side of the strip air cylinder *clockwise* to *decrease* the speed, and turn the knob *counter-clockwise* to *increase* the speed. Refer to Figure 18.

7.7. Start Sensor Gap Adjustment

If the start sensor lever gap becomes too small, the start sensor may not operate properly. An error message will occur indicating a stuck wire sensor.

Using the setscrew on the back side of the start sensor assembly, adjust the start sensor lever gap to achieve a gap between the printed circuit (pc) board and the lever that meets the dimension given in Figure 19.

Turn the setscrew *clockwise* to *increase* the gap, and *counter-clockwise* to *decrease* the gap.

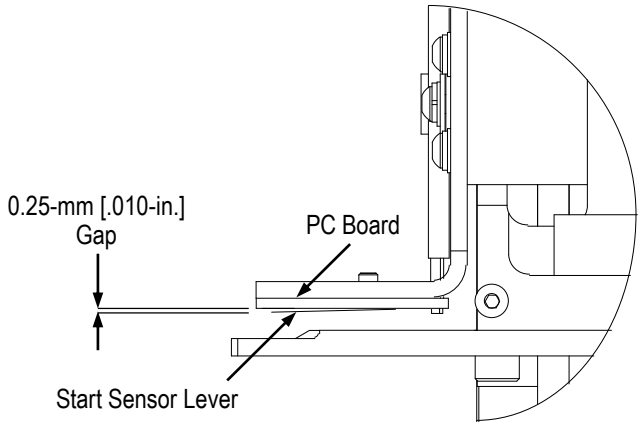


Figure 19

8. ELECTRICAL ASSEMBLY

Refer to the electrical assembly drawings shipped with the terminator.

9. PARTS REPLACEMENT AND REPAIR

9.1. Strip Blade Replacement

DANGER
To avoid personal injury, be sure to disconnect power to the stripping module and terminator before replacing strip blades.

1. Open the main guard to remove pneumatic power and to access the stripping module. See Figure 20.
2. Loosen the screws securing the scrap covers. Then slide the scrap covers off.
3. Remove the outer blade by removing the two screws securing the blade to the main block.

Strip Blade Replacement and Start Sensor Replacement

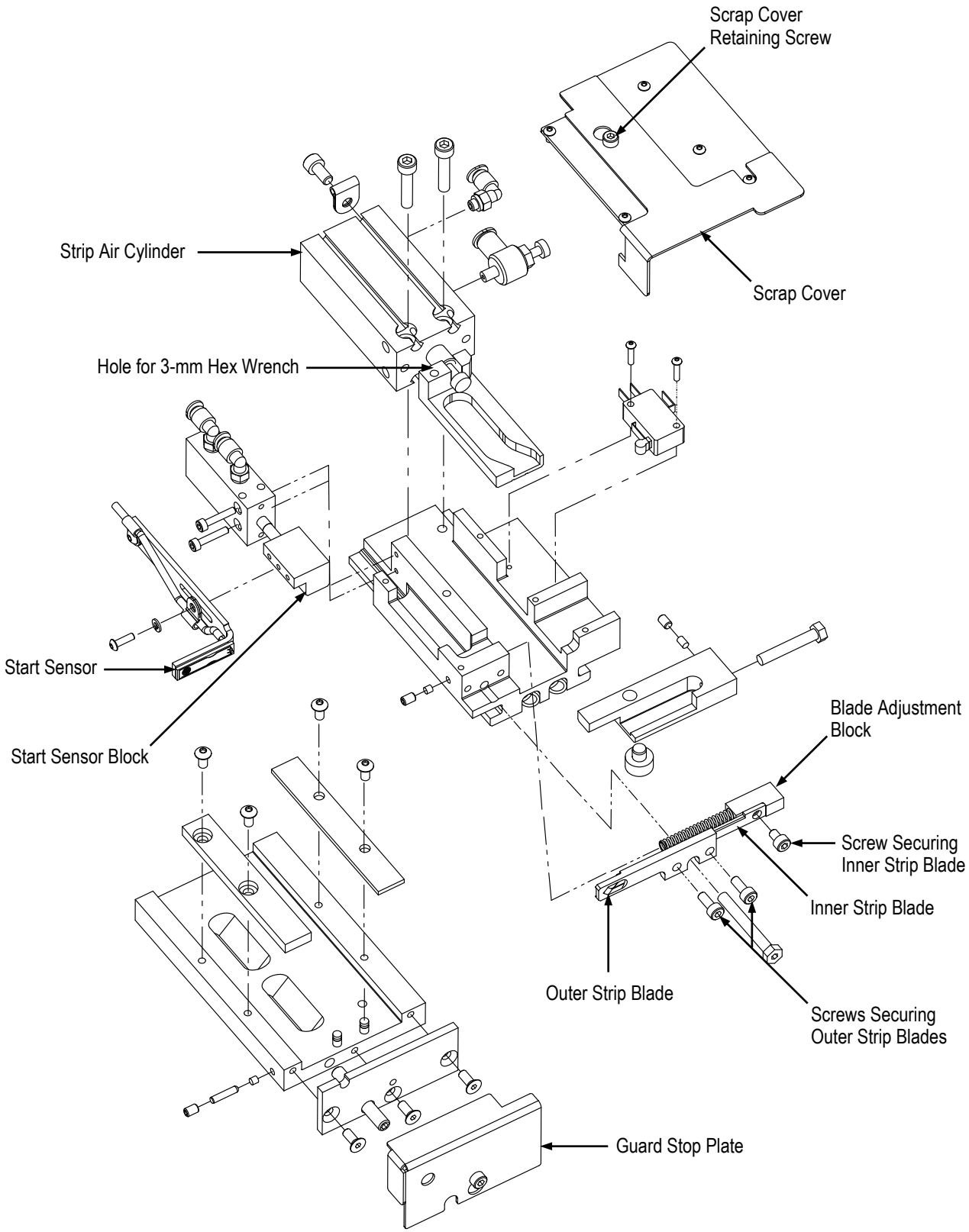


Figure 20

4. Remove the inner blade by removing the single screw securing the blade to the blade adjustment block.
5. Install new blades (replacement is in reverse order of removal).
6. Check the strip depth after removing and replacing the blades. Adjustment may be required.

9.2. Start Sensor Assembly Replacement

DANGER
To avoid personal injury, be sure to disconnect power to the stripping module and terminator before replacing the start sensor.

1. Open the main guard to remove pneumatic power and to access the stripping module. See Figure 20.
2. Remove the cable clamp from the rear of the strip air cylinder.
3. Remove the three screws securing the start sensor assembly to the start sensor block.
4. Install the new start sensor assembly onto the start sensor block by installing the two outer screws into the block and loosely tightening them.
5. Turn the strip length screw *clockwise* until the main block is 10.16 mm [.400 in.] from the strip cam stop plate. See Figure 21.
6. Adjust the start sensor arm so that the lever is 4.78 mm [.188 in.] from the back of the cutting surface of the outer strip cam. See Figure 21.

NOTE
When adjusting the outer strip arm, make sure that the start sensor block is pushed forward against the strip length adjustment screw.

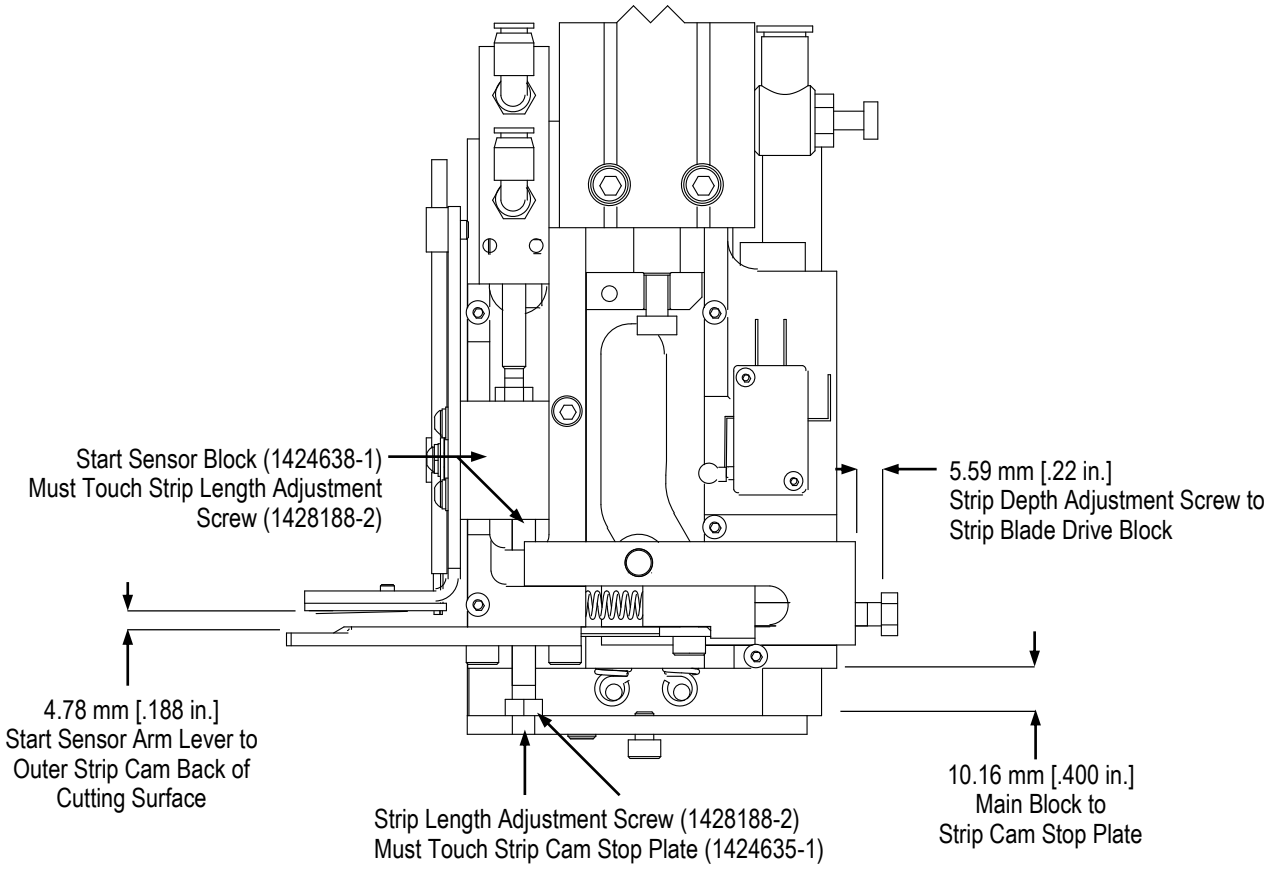


Figure 21

7. Adjust the height of the start sensor so that the lever is centered in the opening of the outer strip blade.
8. Fully tighten the two screws securing the start sensor assembly to the start sensor block.
9. Install the middle screw through the wire clamp and start sensor arm and into the start sensor block. Fully tighten the middle screw.
10. Install the wire clamp onto the strip air cylinder with the new start sensor assembly wire passing through the clamp.

NOTE
Make sure that a loop of wire exists between the wire clamp on the back of the strip air cylinder and the start sensor arm when the arm is located all the way forward.

9.3. Recommended Spare Parts

— start sensor
— stripping blades (front blade, rear blade)

NOTE
Refer to the drawing and documentation package included with the terminator to identify recommended spare parts.

Order replacement parts through your representative or call 1-800-526-5142 or send a facsimile of your purchase order to 717-986-7605 or write to:

CUSTOMER SERVICE (038-035)
TYCO ELECTRONICS CORPORATION
PO BOX 3608
HARRISBURG PA 17105-3608

10. TROUBLESHOOTING

Contact the Tooling Assistance Center at 1-800-722-1111.

11. DISPOSAL

Contact TE Customer Service at 1-800-526-5142.

12. RESTRICTION ON HAZARDOUS SUBSTANCES (RoHS) INFORMATION

Information on the presence and location of any substances subject to RoHS can be found at http://www.te.com/customersupport/rohssupportcenter

Click the Resources tab, click Check Product Compliance, enter the terminator part number then click “Search”.

13. REVISION SUMMARY

Initial release of customer manual