



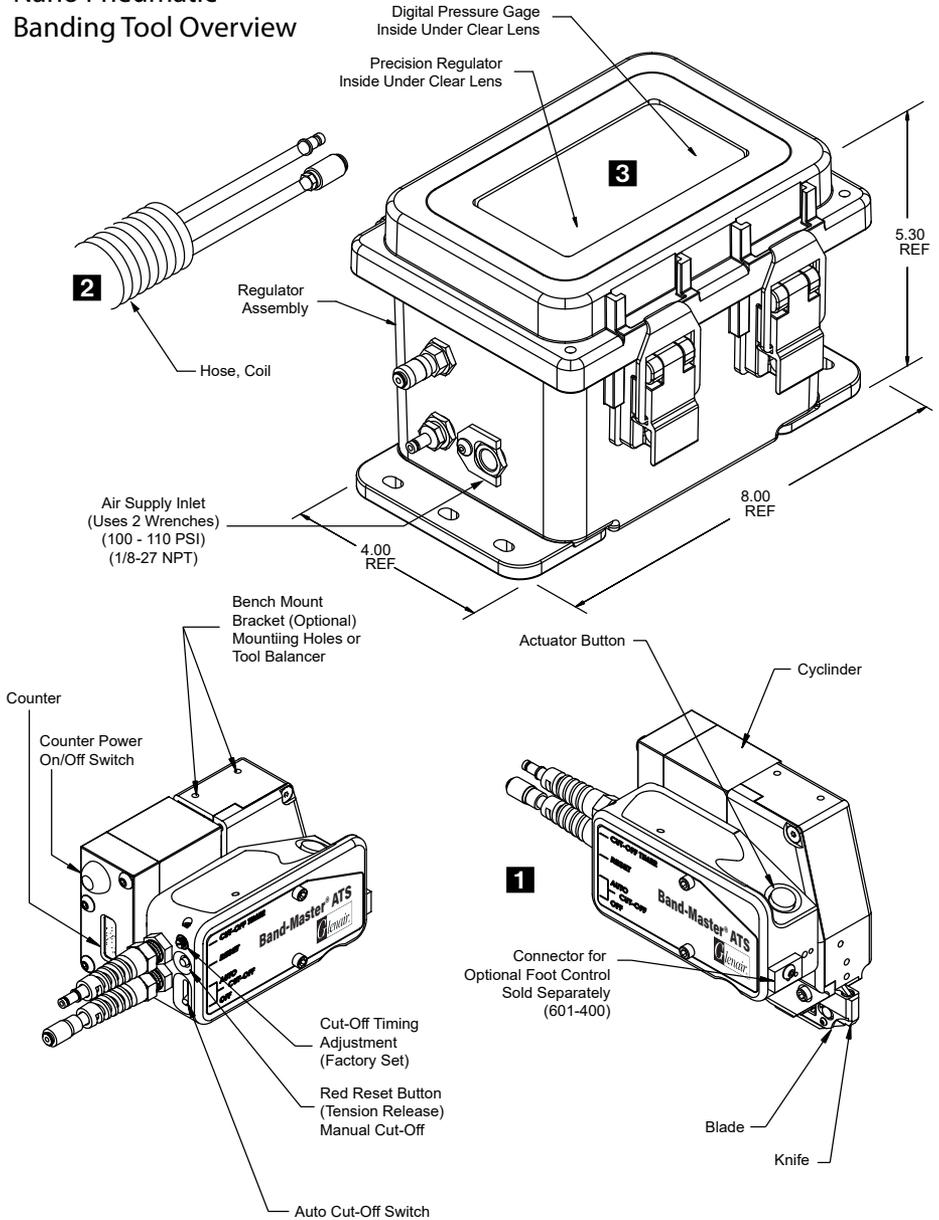
Band-Master® ATS 601-118 Nano Pneumatic Banding Tool Operating Instructions



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Figure 1
Band-Master™ ATS
Nano Pneumatic
Banding Tool Overview



Band-Master® ATS

The Advanced Termination System for Interconnect Cable Shielding

GLENAIR 601-118 NANO PNEUMATIC TOOL

For use with Band-Master® ATS bands P/N 601-500, 601-501, 601-504, 601-505, 601-508 and 601-509.

SPECIFICATIONS:

Tension Calibrate at 50 ±3 lbs of linear pull (15.0 to 15.5 psi on gauge)
Tool Head 2.52 lbs
Control Box 3.51 lbs

601-118 Kit Contains The Following Additional Items (see fig 1):

- 1** 601-118-1 Tool Head, Pneumatic
- 2** 601-310 Hose, coil
- 3** 601-311 Regulator Assembly
- 4** 601-400 Foot Control Unit/Bench Mount Kit (see page 16)

SAFETY

- Never use power tools or clamps for anything other than their intended purpose, if in doubt consult factory
- Keep hands away from clamps being tensioned
- Always wear safety glasses when operating power tool

INITIAL TOOL SET-UP

All Band-Master® ATS pneumatic tools operate on compressed air. Connect air supply to regulator assembly using a quick-disconnect socket 1/4" body. This connection is recommended so tool can be moved to another location or disconnected from air supply when not in use. Supply pressure to regulator assembly must be between 100-110 psi. Higher pressure could damage internal components. Lower pressure slows tool down and makes cutting of band uncertain. 40 micron pre-filtering element is recommended on contaminated supply lines.

An air dryer is recommended on supply lines with water accumulation problems. No lubricator is used on the tool. Introducing oil to air system will do more harm than good.

All tools are factory set for nominal clamping conditions. Tension is set by adjusting pressure on regulator assembly.

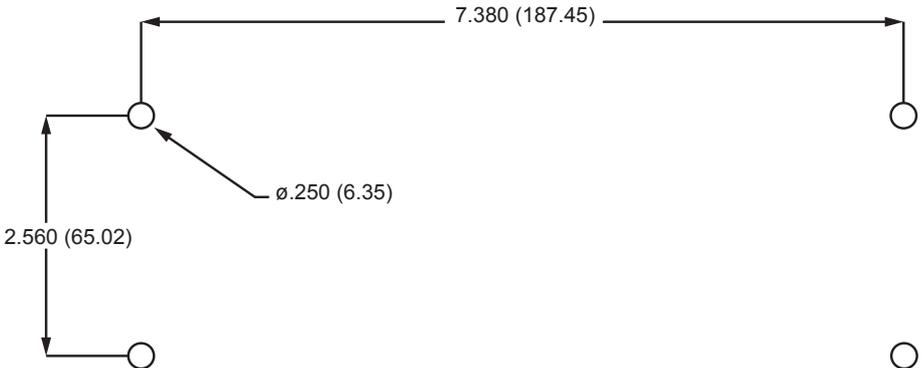
CAUTION: Under-tensioned clamps result in loose assemblies. Excessive tension may damage clamp, backshell or band tool mechanism

Regulator assembly mounting

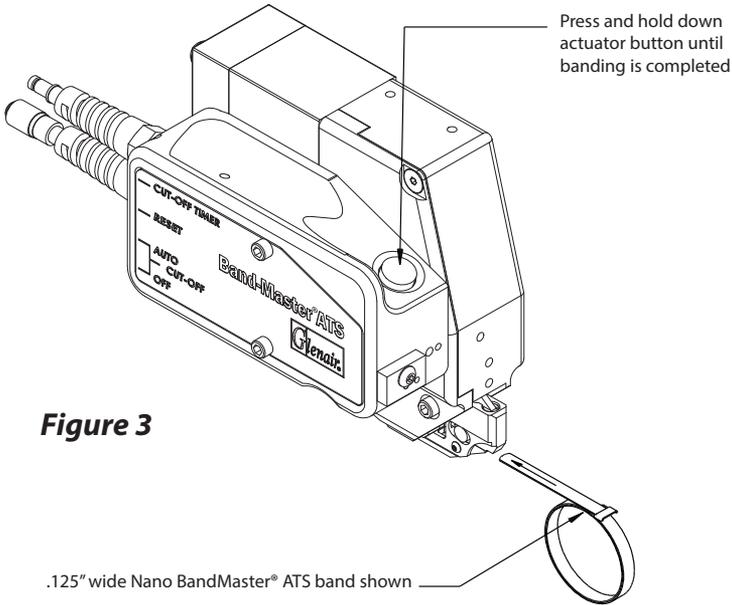
In a permanent installation, regulator assembly should be bolted to a flat surface to allow flexible cord to be stretched without dragging regulator assembly (see figure 2 for mounting pattern). Keep filter vertical to maximize the water and contaminant capacity.

Figure 2

Bench Top Mounting Hole Pattern (for controller box bracket)

**Attach tool head to regulator**

1. Assemble tool and regulator using coil hose.
2. If pressure needs to be adjusted open cover and loosen the 5/16" hex nut slightly under the adjustment knob.
3. Touch ON/OFF button on the digital gage to turn on readout. Readout will auto shutoff after 20 minutes.
4. Adjust the regulator while reading the digital pressure gage to achieve the correct psi. Nano 5/64 inch band, 15.0 to 15.5 psi, 50 pound pull.
NOTE: Pressure is factory set. Adjust only if necessary. Pressures are for reference only, exact values change from tool to tool.
5. The digital gauge on the top of the regulator assembly **MUST** indicate the proper pressure for the type of tool and band used.
6. Lock the adjustment shaft by tightening the 5/16 nut under the adjustment knob.



Operating instructions

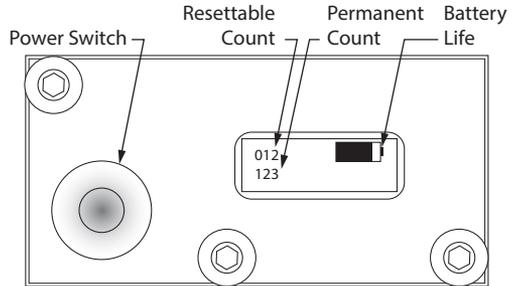
1. Insert band tail through the tool nose opening (see figure 3), making sure that clamp circle is directed away from the tool body.
2. To tension the band, press and hold down actuator button. Always install bands perpendicular to the axis of the object to be clamped. Do not force tool sideways or in any other direction when band tail is under tension or during cut-off. Doing so may damage clamp and/or tool.
3. The Band-Master® ATS Pneumatic tool will automatically cut the band once the desired tension has been reached. If no cut-off occurs, check to make sure the automatic cut-off switch has been turned "on" (the silver switch on the back side of the handle should point toward the red reset button). If the switch is pointing in the wrong direction, flip it to the "auto" position and the tool will cut off the band. If cut-off stalls, turn switch off and immediately on again while holding down actuator button. This may have to be done only once with the first band, after tool has been pressurized.
4. Immediately after cut-off, release actuator button and remove the excess band from the tool.

Counter features

(see figure 4)

1. Resettable Mileage counts (top display)(see page 13)
2. Permanent life accumulate counts (bottom display)
3. Counter display on switch
4. Power switch

Figure 4



Important notes:

- Air supply line pressure is critical. 100-110 psi is required at the inlet port of the regulator assembly to allow the tool to operate properly. For line pressures less than 100 psi the tool must be tested for proper operation.
- **DO NOT ADJUST THE REGULATOR ON THE REGULATOR ASSEMBLY OVER 100 PSI**
- Do not over tighten the 5/16 inch hex locking collar for the regulator shaft, damage may occur.
- Improperly installed clamps may result in faulty shield termination and insufficient ground bonding.
- Do not twist or force tool or cable assembly in any direction while installing clamps.
- Always install clamps perpendicular to the axis of the cable being terminated. When clamping irregular shaped band platforms, choose a location of the buckle where it is well supported on the bottom. A properly designed backshell with a lip are essential when tensile loads may be expected.
- To verify tension setting after the tool has been at rest for some time, actuate the tool momentarily and confirm pressure setting on the digital pressure gauge.
- Glenair recommends that banding occur on an unfixtured cable assembly. Trying to band on a firmly fixed surface may affect the applied forces and interfere with the cut-off operation. The cut-off operation causes a rotation of the band termination in order to affect a lock. Therefore, when performing the banding operation on a fixtured cable or device the operator **MUST** allow the band tool to rotate slightly as the cut-off operation is performed.

MAINTENANCE

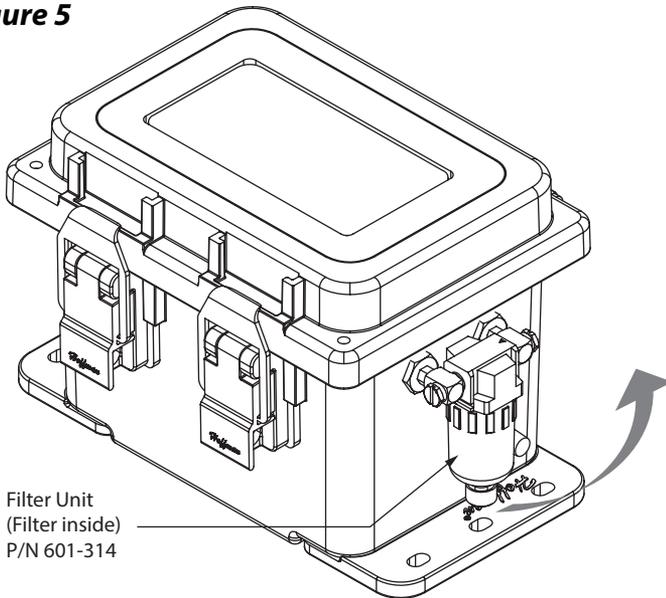
Drain accumulated water from filter assembly (see figure 5)

1. Disconnect air pressure.
2. Rotate filter and place a small cup under the filter.
3. unscrew the valve, as indicated, at the base of the filter.

Clean and replace filter element (see figure 5)

1. Disconnect air supply.
2. Rotate filter up and unscrew clear plastic housing.
3. Unscrew filter element and clean/replace gold colored element.
4. Replacement (if necessary) must be a 5 micron filtering element, available from Glenair (part number 601-314).

Figure 5

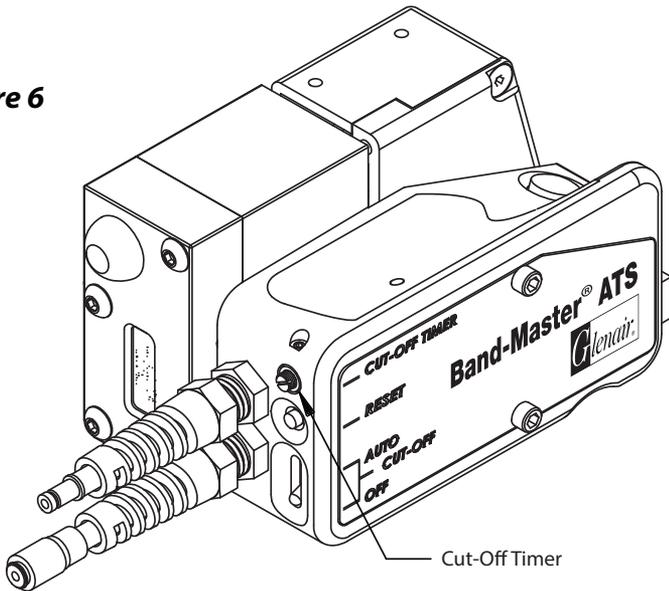


Adjust cut-off timer (see figure 6)

1. Do not alter factory setting, unless necessary.
2. A small copper screw found on the back of the tool handle (above the reset button) adjusts the cut-off timing.
3. Using a small, standard screwdriver, turn the screw clockwise to increase the cut-off delay, and counter-clockwise to decrease the cut-off delay.

Caution: Adjusting cut-off delay timing too short will result in premature cut-off, and a loose clamp.

Figure 6



Replace worn/damaged cut-off blade (see figure 7)

This procedure is easier to do if tool is connected to air supply.

1. Using two .050" hex keys, remove one of the screws from the threaded sleeve; then push the sleeve out.
2. Using a 7/64" hex key, remove screw holding blade
3. If cutting edge of the blade is damaged or worn, the blade must be replaced.

Important:

To order correct replacement part, tool model number (part number) must be provided.

Replace cutter knife (see figure 7)

This procedure is easier to do if tool is connected to air supply.

1. Remove cut-off blade (see instructions on how to **Replace Worn/Damaged Cut-Off Blade** above).
2. Remove cylinder mounting screws.
3. Pull back cut-off cylinder until knife mounting pin lines up with access hole on tool head. Remove pin thru access hole.
4. Note the orientation of knife and push it downwards out of tool head. When installing new knife, be sure to orient it the same way as the old one.
5. Line up holes on knife and arm with access hole on tool head and push pin back into place.
6. Push cylinder forward and install/tighten cylinder mounting screws.
7. Reinstall blade.

Important: To order replacement parts contact the factory.

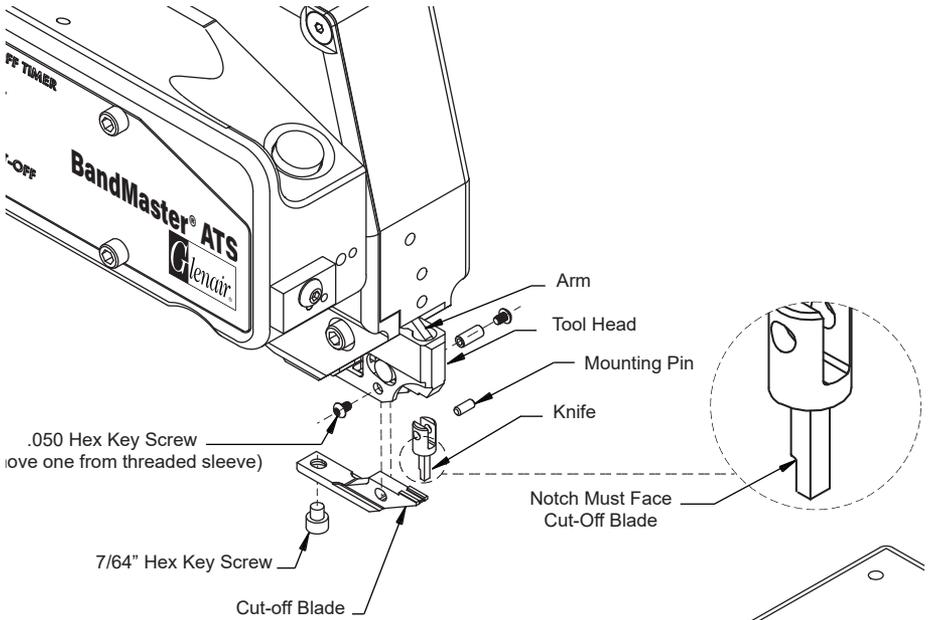
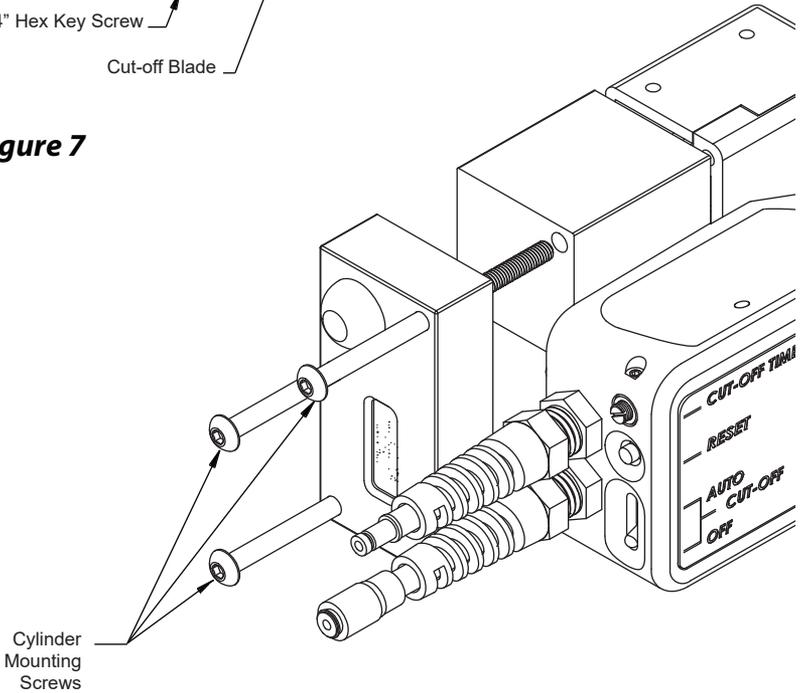


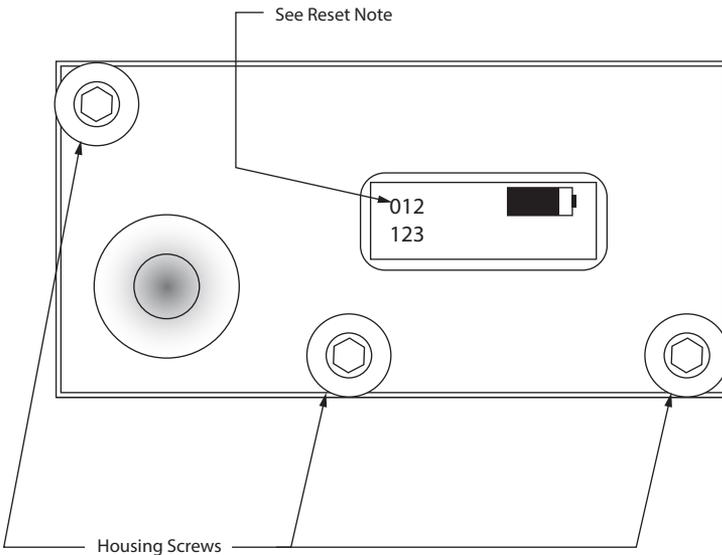
Figure 7



Counter Battery Replacement (see figure 8)

1. Remove housing screws (3).
2. Remove black electrical insulation tape
3. Remove battery
4. Insert new battery with (+) sign facing out (opposite to screen display)
5. Re-attach counter with black electrical insulation tape
6. Lock counter housing with three screws

Figure 8



Counter Reset

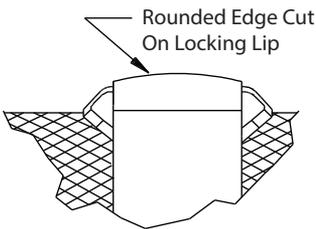
1. Remove housing
2. Push reset button on counter module or remove and replace battery

BAND INSPECTION AND REPLACEMENT PARTS

Banding Inspection (See figure 9)

1. Be sure to read regulator system instructions and notes before using tool.
2. Adjust regulator to a reading of 15.0 -15.5 psi for a 50 pound pull. For accurate tension setting, Band-Master® ATS calibration device must be used (part no. 601-200). Do not adjust tool outside tension range. Pressure reading on gauge should be used for reference only. Same tension output may occur at somewhat different pressure readings from tool to tool due to manufacturing tolerances. Calibration device will ensure proper tension setting. Tool is factory calibrated to 50 ±3 lbs tension.
3. 601-118 Nano pneumatic tool uses only .075" wide Band-Master® ATS bands.
4. Condition of locking lip should be visually inspected on completed clamps. If lip appears partially torn, damaged or not present at all, check tool tension and condition of blade and knife. Make necessary adjustments and repairs. Be sure to remove and replace faulty clamps. If lip is damaged or missing, re-calibrate tool tension, check condition of cutter blade and knife, replace if worn or damaged.

Front View of Nano Clamp



Lip Lock

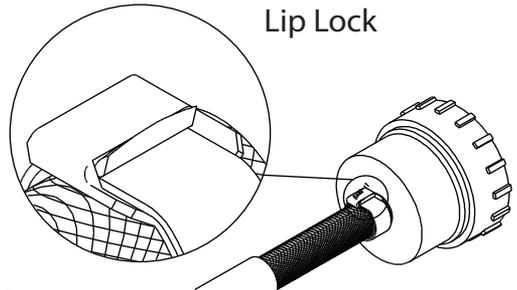


Figure 9

NOTE: 1. If poor cutoff quality persists after knife and blade replacement, the tool must be serviced **2.** Band can be removed by lifting buckle with a screwdriver or diagonal cutters.

Replacement Parts

Contact factory for replacement parts

BANDS

Bands	Band-Master® ATS Band Selection			Accommodates Diameter In.(cm)
	Length in./cm	Part Number		
		Flat	Pre-Coiled	
Short Band	6.00	601-500	601-501	.60 (15.2)
Medium Band	9.00	601-504	601-505	.94 (23.9)
Long Band	14.00	601-508	601-509	1.80 (45.7)

For more information on tools and accessories visit us at: www.glenair.com

Training videos available at <http://www.glenair.com/banding/>

Consult factory for additional recommendations for technical information on overall shields with distributed individual shields on common terminations.

ACCESSORIES

Tool Balancer

Glenair tool balancer part number 601-401 is available for purchase. Contact factory for details and pricing

Tool Balancer Hook (see figure 10)

1. If a tool balancer is desired, install tool balancer hook and set balancer to approximately 2.5 lbs balance weight
2. Balancer hook can be used with locator installed. Choose the most convenient mounting hole located on the tool body. **Be sure that lock nut is no more than .20" away from tip of thread to prevent interference with internal components.**

601-400 Foot Pedal Control (See fig. 11)

Every Pneumatic Band-Master® ATS, now includes foot pedal control, which frees both hands to help assure more accurate, reliable and faster shield terminations. For installation instructions see **Foot Control and Bench Mount Kit Installation** on page 18. See figure 12 for bench mounted configuration options.

Figure 10

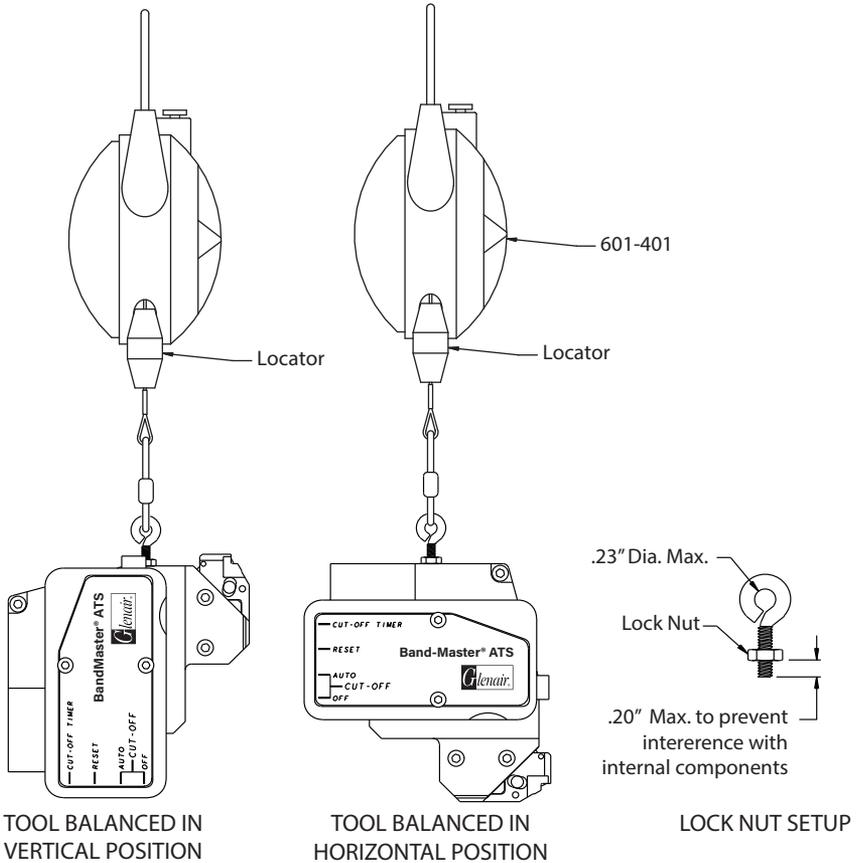
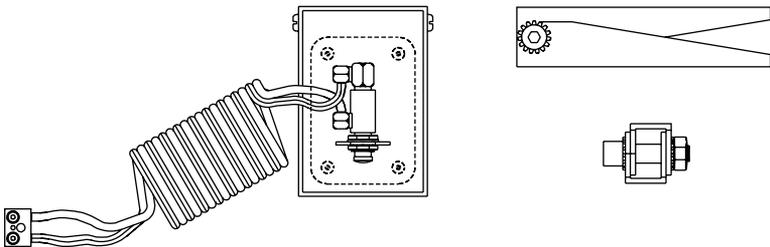


Figure 11



601-400 Foot Pedal Control

Foot Control and Bench Mount Kit Installation (601-400)

1. Disconnect tool from air supply and mount bracket to tool as shown. (See fig. 13)
2. Remove air block from handle and store using second set of mounting holes. (See to fig. 12 and 13)
3. Attach foot control connector using button head screw. (See fig. 14)
4. Determine mounted set-up configuration. (See fig. 13)
5. Mount bracket to top surface of tool using 2 socket head screws. Use smaller holes in bracket. (See fig. 14)
6. Mount other leg of bracket to bench using larger holes.
7. Adjust angle of tool to desired position and tighten bolt.

Figure 12

Removal of Blocking Plate

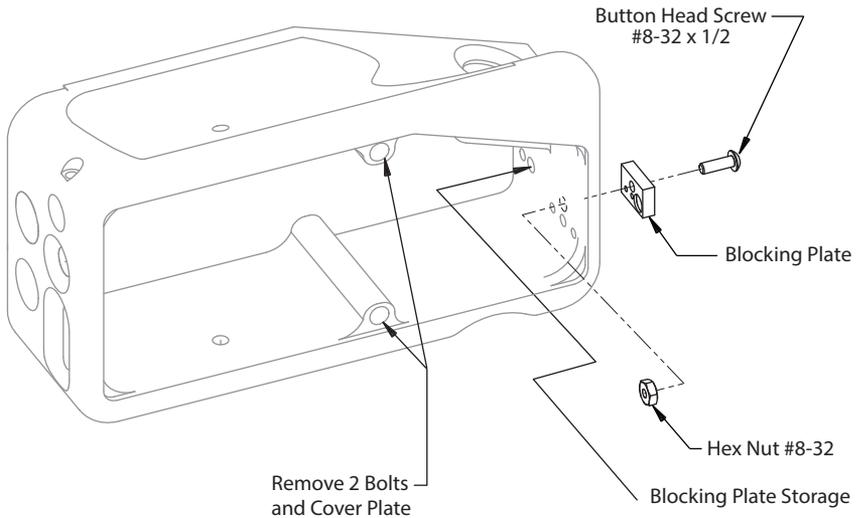
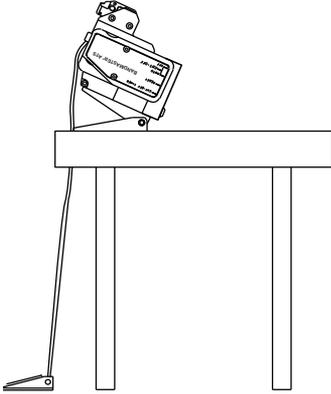


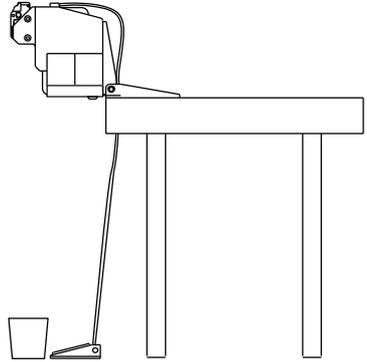
Figure 13

TOP OF BENCH
MOUNTED SET-UP CONFIGURATIONS



Foot
Control

Leave area behind tool
free for excess band.



Place waste container
under tool to collect excess band.

UNDER BENCH
MOUNTED SET-UP CONFIGURATION

Bracket must be reversed for this set-up.
If controller box is mounted to edge of work bench,
this configuration will leave top of bench space free.
Place waste container under tool to collect excess band.

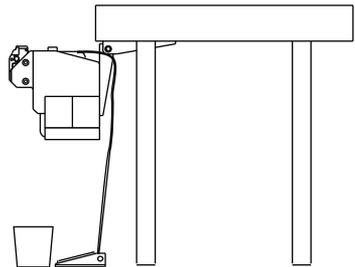
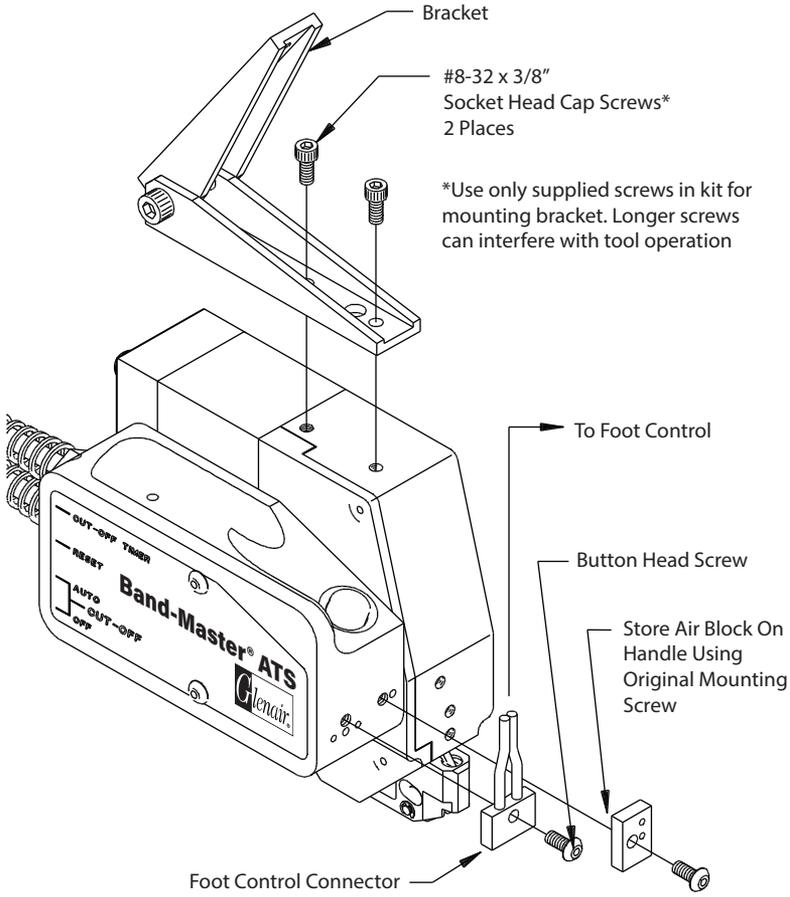


Figure 14
Install Foot Control Connector and Bracket





1211 Air Way, Glendale, California 91201-2497

818.247.6000

