TACH-IT®

INSTRUCTION MANUAL FOR

MODEL #6115, 6180 and 6605

DEFINITE LENGTH TAPE DISPENSER

Ben Clements and Sons, Inc. / Clements Industries, Inc.

Please note that the photos shown and the model referenced in this manual are for the Model #6180 but all information except specifications are the same for all 3 models.

Overview and Modes (Manual, Semi-Automatic and Automatic):

The Tach-It Model #6180 is a definite length tape dispenser for use in feeding and cutting pressure sensitive tapes ranging in width from 2 1/4" to 3 1/8" and from 1" to 39.4" in length. This unit has a small table top design, and will feed and cut most types of tapes used in shipping, assembly, wire harnessing, industrial, retail and most other applications where pressure sensitive tape is used.
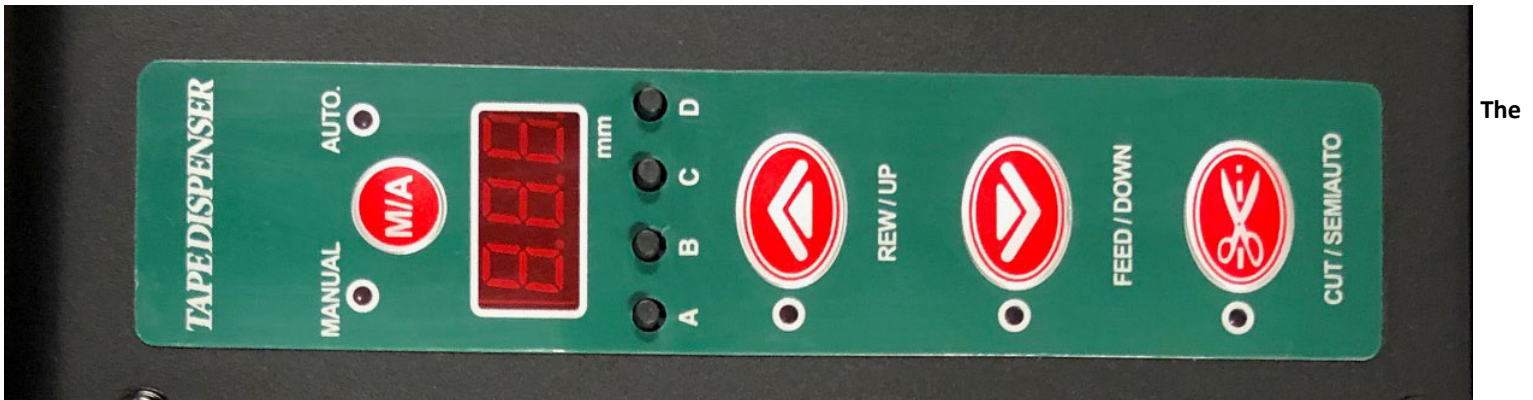
There is an adjustment knob on the top of the machine to accommodate different thicknesses of tapes.

4 memory presets for length are easily accessed as part of the Control Panel of the Model #6180

The Tach-It Model #6180 has a unique cradle device which holds the roll of tape. This allows for use on tapes of with any core diameter and with a maximum roll diameter of up to 11.75" Optional large roll stands are available and sold separately.

The Model #6180 uses standard 110 volt electricity and requires no air. 220 volt units are available on a special order basis.

Tach-It also manufacturer's a full line of manual, semi-automatic, automatic and carousel type definite length tape dispensers and please contact Tach-It or your local Tach-It distributor for information on their full line of pressure sensitive tape dispenser and applicating equipment for use in all industries.

The

Model #6180 works in 3 different modes:

Manual: The operator presses and holds the feed button until the desired length is reached and then presses the cut button for the tape to be cut.

Semi-Automatic: Using the arrow buttons located on the top of the machine the operator pre-determines the length of tape to be fed. The length can be seen in the LED located on the top of the machine and the LED displays the length to be fed in millimeter increments (there are 25.4 mm to an inch). When the tape is needed the operator pushes the cut button on the top of the unit, the pre-determined length of tape is fed and cut waiting for the operator to remove. The next piece of tape is fed and cut when the operator presses the cut button located on the top of the machine again.

Automatic: Using the arrow buttons located on the top of the machine the operator pre-determines the length of tape to be fed. The length can be seen in the LED located on the top of the machine and the LED displays the length to be fed in millimeter increments (there are 25.4 mm to an inch). Once set in automatic mode, the tape is fed and cut. When the operator removes the presented piece of pre-cut tape the next piece is fed and cut to the pre-determined length.

Mode changes are accomplished by pushing a button located on the top of the machine marked M/A. See the figure of the control panel above. Indicator lights display which mode the Model #6180 is in.

Manual indicator is illuminated—Manual mode as described above

 Manual and Auto indicators are illuminated—Semi-Automatic mode as described above.

Auto indicator is illuminated—Automatic mode as described above.

Cautions:

1) Before operating this machine make sure to read and understand the complete instruction manual.

2) Never have the power cord of this machine plugged into an outlet when any covers or the cutter assembly of this machine have been removed.

3) Install and operate this machine only on a flat, level and dry surface.

4) Use only the specified electrical power input with this machine.

5) Always turn the power off and unplug this machine prior to clearing any tape or tape jams from the machine, particularly in the areas of the cutters and feed mechanisms.

6) Always keep hand, clothing, jewelry and hair away from all moving parts of this machine.

7) This machine has a very sharp guillotine cutter assembly. Never put hands or any other part of the body or any other item into the cutter opening unless the machine is off and the power has been unplugged.

8) Never operate this machine with any of the safety covers removed.

9) Keep this machine clean and dry at all times.

10) Service on this machine should only be performed by factory trained authorized service personnel.

11) Never use this machine for other than its intended purpose of feeding and cutting pressure sensitive tapes. Use of this machine for other than its intended purposes can cause harm to the operator, the machine and to the product and will void all actual and implied warranties. Please contact the manufacturer if there are any questions as to whether this machine can be used for a particular

Specifications:

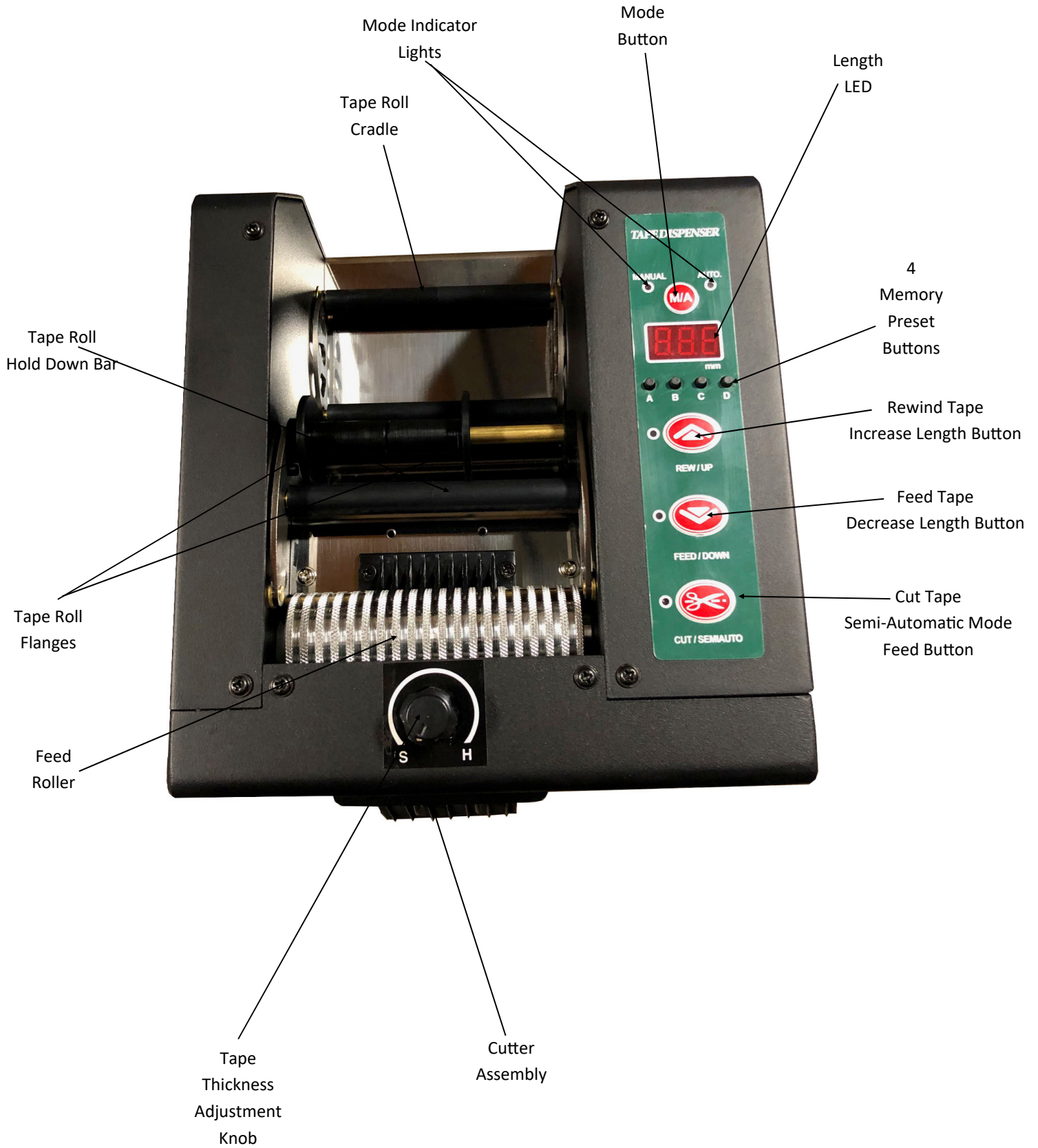|	#6115	#6180	#6605
Dimensions:			
Length	8" (203 mm)	9" (229 mm)	10 1/2" (260 mm)
Width	5" (127 mm)	7 1/2" (191 mm)	9" (230 mm)
Height	5 1/2" (130 mm)	6" (152 mm)	5 1/2" (140 mm)
Weight	7 1/2 Lbs (3.5 Kgs)	11 1/2 Lbs (5.2 Kgs)	15 1/2 Lbs (7 Kgs)
Power	Power 110/220 Volt VAC 50/60 Hzs	Power 110/220 Volt VAC 50/60 Hzs	Power 110/220 Volt VAC 50/60 Hzs
Minimum Tape Width	1/4" (6.35 mm)	2 1/4" (57 mm)	3/4" (20mm)
Maximum Tape Width	2" (50 mm)	3 1/8" (79 mm)	6" (150 mm)
Minimum Tape Length	1/2" (12.5 mm)	1" (25.4 mm)	3/4" (20 mm)
Maximum Tape Length	39.3" (999 mm)	39.3" (999 mm)	39.3" (999 mm)
Maximum Roll Diameter	6" (152 mm)	11 3/4" (298 mm)	12" (300 mm)
Core Size	3" (75 mm)	Cradle Design - not applicable	Cradle Design - not applicable

Parts Identification:

Mode Indicator Lights

Mode Button

Length LED

Tape Roll Cradle

4 Memory Preset Buttons

Tape Roll Hold Down Bar

Rewind Tape Increase Length Button

Feed Tape Decrease Length Button

Tape Roll Flanges

Cut Tape Semi-Automatic Mode Feed Button

Feed Roller

Tape Thickness Adjustment Knob

Cutter Assembly

Figure 1 Top View:

Figure 2 Back View: ↓

Tape Roll Flanges

Tape Roll Hold Down Bar

Tape Roll Cradle

SENSOR
H

Tape Sensor Adjustment Knob

On/Off Switch

IEC Power Cord Receptacle and Fuse Holder

Figure 3 Front View: ↓

Tape Thickness Adjustment Knob

Infra-Red Tape Sensors

⚠ **DANGER**

DON'T INSERT HAND!

Cutter Assembly

Adjustable Tape Ramp for long Lengths of Tape.

Unpacking of the Machine:

1) Carefully open the box with the machine and remove all components.

2) Remove all packing materials and set it aside. It is suggested that the box and packing materials is kept in case the machine needs to be re-packed and shipped for repair.

3) Place the machine on a clean, dry, flat surface near an electric outlet having the same voltage as the machine. It is not recommended that the machine be used with an extension cord and that there is a surge protector between the power outlet and the machine to protect the electronics of the machine from power surges and irregularities.

Loading the Machine with Tape:

1) Plug the Power Cord into the proper electrical outlet making sure the voltage of the outlet is the same as the voltage of the machine.

2) Locate the Tape Roll Cradle and make sure that it is extended as shown in Figure 1 of the Parts Identification. If it is not extended flip the bar back towards the rear of the machine until it is extended. If the tape being used is on a small diameter roll this may not be necessary.

3) Flip the Tape Roll Hold Down Bar up by pulling it towards the back of the machine until it releases from its pins and that rotate it up.

4) Place the roll of Tape into the Tape Roll Cradle making sure that the Tape is feeding from the top of the roll and that the adhesive side of the Tape is down towards the body of the machine.

5) With the Tape Roll Hold Down Bar in the up position manually advance the Tape until it reached the Feed Roller as shown in Figure 1 of the Parts Identification and adhere the Tape to the Feed Roller by pressing it down against the Feed Roller.

6) Spreading the Tape Roll Flanges as shown in Figure 1 of the Parts Identification, lower the Tape Roll Hold Down Bar and move it forward till it locks into place and release the Tape Roll Flanges until they straddle the roll of Tape.

7) Using the Feed Tape Decrease Length Button as shown in Figure 1 of the Parts Identification advance the Tape until it exits the Cutter Assembly. If the Tape does not feed through the Cutter Assembly and exit the front the machine adjust the Tape Thickness Adjustment Screw by turning it clockwise until there is enough clearance for the Tape to exit.

   Please Note that for the initial piece of tape it may be necessary to assist the Tape through the Cutter Assembly by using a pair of needle nose pliers and pulling the Tape through as you press the Feed Tape Decrease Length Button. <u>Do not at any time place your fingers into the Cutter Assembly.</u>

8) Press the Cut Tape Semi-Automatic Mode Feed Button to cut the initial piece of Tape.

9) The machine is now ready for use.

Using the Machine in Manual Mode:

Manual Mode: The operator presses and holds the feed button until the desired length is reached and then presses the cut button for the tape to be cut.

1) Load the unit with Tape per the instructions above.

2) Locate the Mode Button on the machine (see Figure 1 of Parts Identification) and press it until only the Manual side of the Mode Indicator Light is illuminated (only this indicator should be illuminated for Manual Mode). This light is located slightly above and to the left of the Mode Button (see Figure 1 of Parts Identification).

3) To feed the Tape press and hold the Feed Tape Decrease Length Button until the desired length of Tape is dispensed.

4) To cut the Tape press the Cut Tape Semi-Automatic Mode Feed Button and the Tape will be cut automatically.

5) To feed the next piece of Tape repeat steps 3 and 4 above.

Using the Machine in Semi-Automatic Mode:

Semi-Automatic: Using the arrow buttons located on the top of the machine the operator pre-determines the length of tape to be fed. The length can be seen in the LED located on the top of the machine and the LED displays the length to be fed in millimeter increments (there are 25.4 mm to an inch). When the tape is needed the operator pushes the cut button on the top of the unit, the pre-determined length of tape is fed and cut waiting for the operator to remove. The next piece of tape is fed and cut when the operator presses the cut button located on the top of the machine again.

1) Load the unit with Tape per the previous instructions.

2) Using the Mode Button (see Figure 1 of the Parts Identification), press it until both Mode Indicator Lights are illuminated. The lights are located above and to the sides of the Mode Button (see Figure 1 of the Parts Identification).

3) Find the LED Indicator to view the current length of tape that has been set and will be dispensed. If this is not the desired length of tape, use the proper Preset Memory Button if this has been set previously (A, B, C, D) and press that button confirming the proper length by using the LED display. If the desired length has not been previously set, determine which Memory Button that is to be used for this preset length and use the Rewind Tape Increase Length Button and the Feed Tape Decrease Length Button (see Figure 1 of the Parts Identification) to set the desired length. Next time that Preset Memory Button is pressed, it will return to the last length set.

   Please note that this length is displayed in millimeters (mm) and that there are 25.4 mm per inch so that 1 inch of tape is equivalent to 25mm, 2 inches of tape 50mm, 3 inches 76mm and etc. To determine the length desired multiply your desired length x 25.4 to equal the millimeter equivalent.

4) To dispense the Tape, the operator pushes the Cut Tape Semi-Automatic Mode Feed Button located on the top of the machine (see Figure 1 of the Parts Identification) and the Tape will be fed to the desired length and cut.

5) To feed the same length of Tape continue pressing the Cut Tape Semi-Automatic Mode Feed Button. To feed a different length of Tape please repeat steps 3 and 4.

Using the Machine in Automatic Mode:

Automatic: Using the arrow buttons located on the top of the machine the operator pre-determines the length of tape to be fed. The length can be seen in the LED located on the top of the machine and the LED displays the length to be fed in millimeter increments (there are 25.4 mm to an inch). Once set in automatic mode, the tape is fed and cut. When the operator removes the presented piece of pre-cut tape the next piece is fed and cut to the pre-determined length.

1) Load the unit with Tape per the previous instructions.

2) Using the Mode Button (see Figure 1 of the Parts Identification), press it until Auto Mode Indicator Light is the only light illuminated. This light is located above and to the right of the Mode Button (see Figure 1 of the Parts Identification).

3) Find the LED Indicator to view the current length of tape that has been set and will be dispensed. If this is not the desired length of tape, use the proper Preset Memory Button if this has been set previously (A, B, C, D) and press that button confirming the proper length by using the LED display. If the desired length has not been previously set, determine which Memory Button that is to be used for this preset length and use the Rewind Tape Increase Length Button and the Feed Tape Decrease Length Button (see Figure 1 of the Parts Identification) to set the desired length. Next time that Preset Memory Button is pressed, it will return to the last length set.

   Please note that this length is displayed in millimeters (mm) and that there are 25.4 mm per inch so that 1 inch of tape is equivalent to 25mm, 2 inches of tape 50mm, 3 inches 76mm and etc. To determine the length desired multiply your desired length x 25.4 to equal the millimeter equivalent.

4) To dispense the Tape, the operator pushes the Cut Tape Semi-Automatic Mode Feed Button located on the top of the machine (see Figure 1 of the Parts Identification) and the Tape will be fed to the desired length and cut. As the piece of Tape is removed from the machine another piece of Tape will be fed and cut to the desired length. This process will continually repeat.

5) To change the length of Tape being fed repeat steps 3 and 4.

Removing Tape from the Machine:

1) Remove any cut pieces of Tape from the machine.

2) Press the Rewind Tape Increase Length Button until the Tape has been retracted and can be removed manually from the Feed Roller.

3) Left the Tape Roll Hold Down Bar per the instructions in Loading the Machine with Tape section of this manual and remove the roll of Tape from the Tape Cradle.

4) Machine is now ready for another roll of Tape.

Adjusting the Infra-Red Tape Sensors:

The Model #6180 uses Infra-Red Sensors to detect when the tape has been fully fed and when the tape has been removed from the machine to initiate the next cycle.

One indication that the sensors are not set correctly is if the tape is feeding through the Cutter Assembly and continues to feed beyond the preset length.

Another indicator is that the tape length is not consistent.

Also, if there is a NO error in the LED Indicator screen, that means that the tape is not being detected or the tape is being removed from the machine too quickly by the operator and the sensors did not have the time to detect the tape.

To adjust the sensitivity of the Infra-Red Tape Sensors, do the following:

1) Locate the Tape Sensor Adjustment Knob on Figure 2 which was displayed earlier in this manual.

2) Place the machine into the Semi-Automatic mode and see if the tape feed properly.

3) If the tape continues to feed, using the Tape Sensor Adjustment Knob, turn the Knob a little either clockwise or counter-clockwise until the tape feeds to the pre-determined length.

4) If a NO indication is seen in the LED display, use the Tape Sensor Adjustment Knob by turning either clockwise or counter-clockwise until the error message stops appearing and the desired length of tape is fed.

This adjustment should only be made by personnel familiar with the machine.

Adjustments and Maintenance of the Machine:

Adjustments: The only adjustment of the machine is if the Tape is not feeding out straight. Different thicknesses of Tape may feed differently causing the Tape to curl or to not feed out straight. This can be caused by the spacing between the Feed Rollers of the machine. To alleviate this problem, the Model #6180 has the Tape Thickness Adjustment Knob located on the top of the machine above the Cutter Assembly (see Figure 1 of the Parts Identification). If the Tape is curling, or there are indentations in the Tape from the knurled rollers, increase the spacing between the Feed Rollers by turning the Tape Thickness Adjustment Screw in a clockwise rotation. If the Tape is not feeding consistently or is just falling down against the body of the machine decrease the spacing between the Feed Rollers by turning the Tape Thickness Adjustment Screw in a counter-clockwise rotation.

Please note, that the Tape Thickness Adjustment knob should be turned carefully as not to damage the head of the screw or the internal Feed Rollers. Also, there will be some trial and error in setting this adjustment and we highly recommend that the screw is rotated slightly then the unit is tried and if necessary this procedure is repeated until the desired tension is reached.

For some Tapes when feeding longer lengths they may tend to fall back against the machine and the table the machine is mounted on. IF this is happening decrease the space between the Feed Rollers by turning the Tape Thickness Adjustment Screw counter-clockwise. Also, If this is occurring locate the Tape Ramp (see Figure 3 Front View of the Parts Identification) and extend the Tape Ramp. This will help keep the Tape from folding directly down against the machine and the table.

Maintenance: Whenever a machine is working with adhesives, it is important to avoid any adhesive build up. If this is occurring use an adhesive solvent to keep all components of the Feed Rollers and the Cutter Assembly clean and free of adhesive build up. The type of Tape will dictate how often this is necessary.

It is not recommended that any lubricant be used on this machine as it can affect the function of the machine and can cause problems particularly if the unit is being used in the Automatic mode as the Tape may not hold at the end of the Cutter Assembly or be seen by the sen-

Troubleshooting:

Symptom	Cause	Remedy
Machine will not turn on:	Bad Fuse	Check and replace Fuse if Necessary
	Machine not plugged in	Plug Machine into proper Power Outlet
Tape Will not Feed	Stuck Piece of Tape in Feed Rollers	Locate stuck piece of Tape and Remove
	Feed Rollers adjusted to close	Adjust spacing in Feed Rollers per the instructions in the Adjustments section of this manual
Machine will not stay in Automatic Mode	Sensors are dirty	Using an adhesive solvent clean sensors.
	Tape is being removed to quickly, before the sensors can pick up the cut piece of Tape..	The operator must wait a fraction of a second before removing the cut piece of Tape giving the sensors time to locate and "See" that a piece of Tape was dispensed.
Tape is curling	Feed Rollers are adjusted to close	Adjust the spacing in the Feed Rollers per the instructions in the Adjustment section of this manual.
Tape Feed is inconsistent	Feed Rollers are adjusted to far apart	Adjust the spacing in the Feed Rollers per the instructions in the Adjustment section of this manual.
Tape is falling down against the machine or table.	Feed Rollers are adjusted to far apart	Adjust the spacing in the Feed Rollers per the instructions in the Adjustment section of this manual.