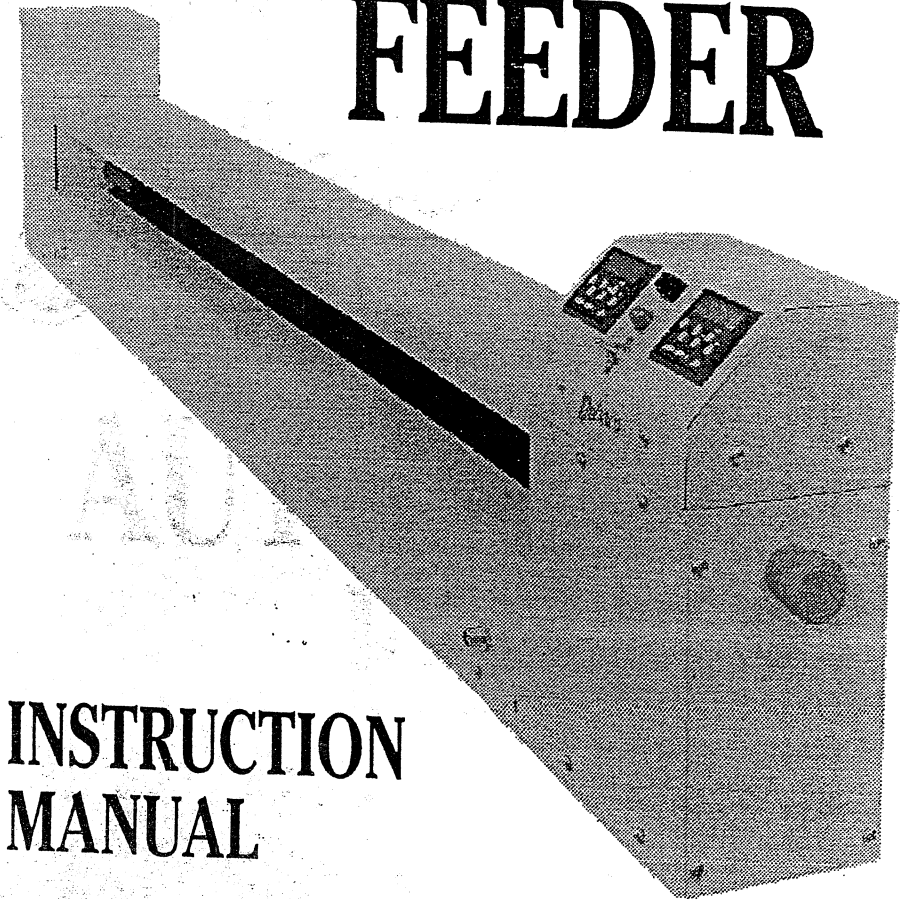


6-18-08

MAINTENANCE

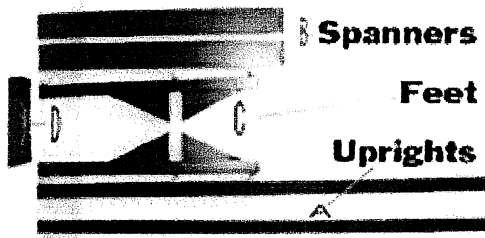
**Dehrco**<sup>TM</sup>

# AUTOMATIC FEEDER



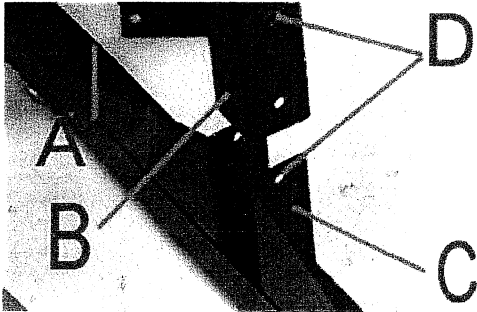
INSTRUCTION  
MANUAL

## ASSEMBLE THE MACHINE STAND (Assembly is easier with two people)



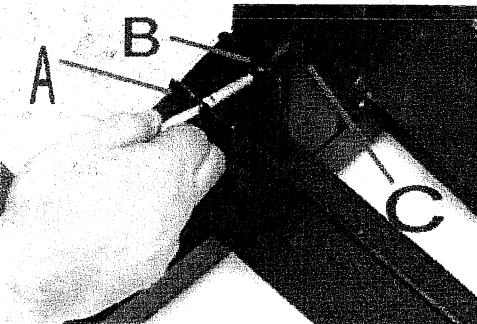
### The Basic Machine Stand Contains:

- A. Two 2" Sq. x 72" Steel Uprights
- B. Two Bent Sheet Metal Spanner Channels
- C. A Left and Right Leg Assembly
- D. 4ea.  $\frac{1}{2}$ " x 2  $\frac{1}{2}$ " Bolts
  - 4ea.  $\frac{1}{2}$ " Hex Bolts w/ Star Washers
  - 6ea. Leveling Feet

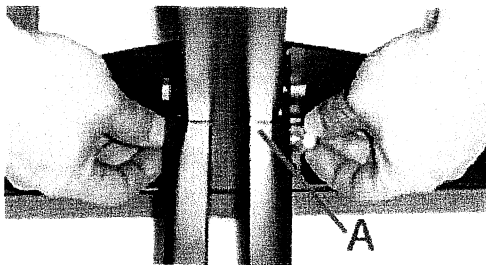


With the welded Sq. Tube part of the leg facing in (A), slide the square upright tube (B) into the leg channel (C) and align holes in the square upright with the holes in the leg bracket. (D)

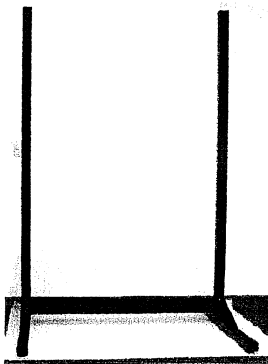
(NOTE: The end of the upright with the plastic plug should be at the top.)



1. Place  $\frac{1}{2}$ " x 2  $\frac{1}{2}$ " bolt thru top hole in the spanner channel. (A)
2. Insert bolt thru the top hole in the front face of the leg bracket (B), thru the upright (C) and out the back face of the leg bracket.
3. Insert the second bolt into the lower hole in the spanner channel, thru the leg bracket and upright and out the back face of the leg bracket.

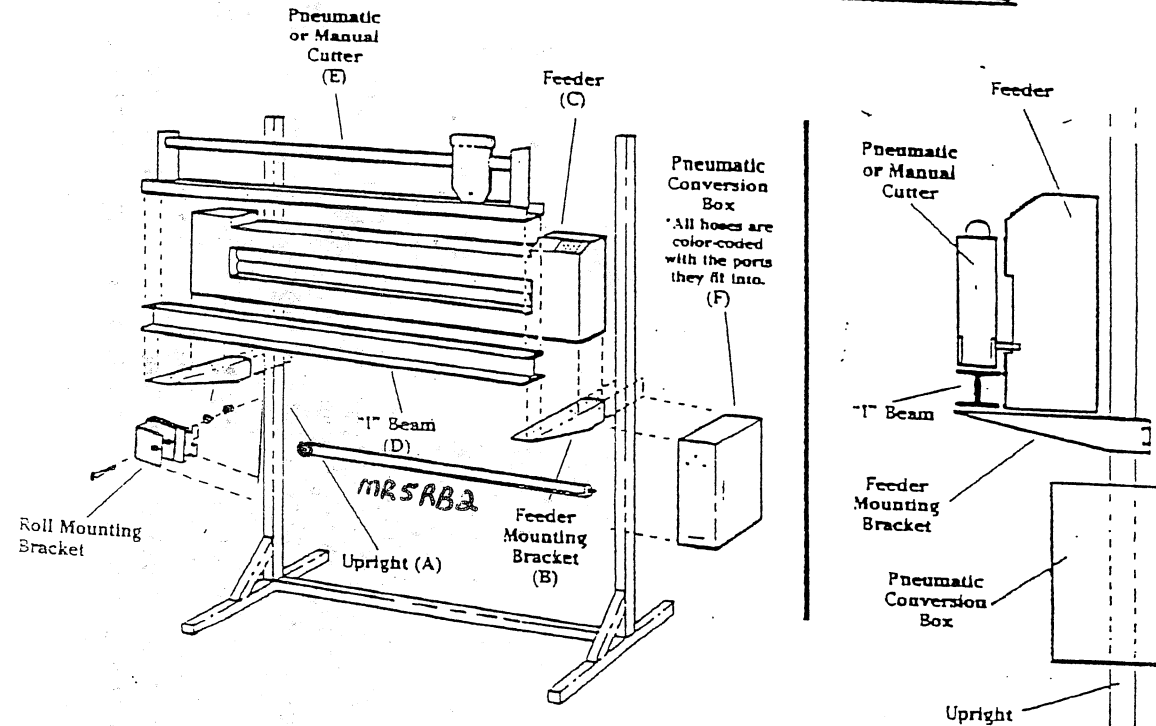


4. When both bolts clear the back side of the leg bracket, place the back spanner channel (A) on the bolts with the bent edges facing the front of the stand
5. Secure the bolts with  $\frac{1}{2}$ " hex nuts.
6. Repeat this procedure on the other end of the stand.



7. When both sides are assembled, square the stand and lock down the four bolts tightly.
8. The basic machine stand is assembled.

## MOUNTING DEHNCO FEEDERS AND CUTTERS



Step 1: Mount Feeder Mounting Brackets (B) to Uprights (A).

Step 2: Mount Feeder (C) to Feeder Mounting Brackets (B).

Step 3: Mount "1" Beam (D) to Feeder Mounting Brackets (B).

Step 4: Mount Cutter (E) to "1" Beam (D).

Step 5: Mount Pneumatic Conversion Box (F) to Upright (A).

Note: All hoses for Pneumatic operation are color coded.

# Feed To Length Program Module

## Power Light Indicator

Indicates the feeding system is on.

## Counter

Allows programming of length calibration settings (P1 & P2). Also displays length setting number.

## Control Box

Holds all readout and programming features.

## Main Reset Button

Resets the counter to the programmed length. Also acquates system when in RUN mode.

## Program Mode Toggle Switch

Allows for re-programming the dispenser without being able to activate system.

## Main Power On - Emergency Stop Button

Turns on power to dispenser and acts as an emergency shut off.

## Counter Ports

Ports on the back of the unit that connect the control box to the power box.

## Power Box

Holds all the active controls for activating system.

## Photo-Eye Port

Ports on the back of the unit that connect the photo eye to the power box.

## Heat Seal Post

## Solinoid Post

Plugs in power cord for hold down system.

Figure 1

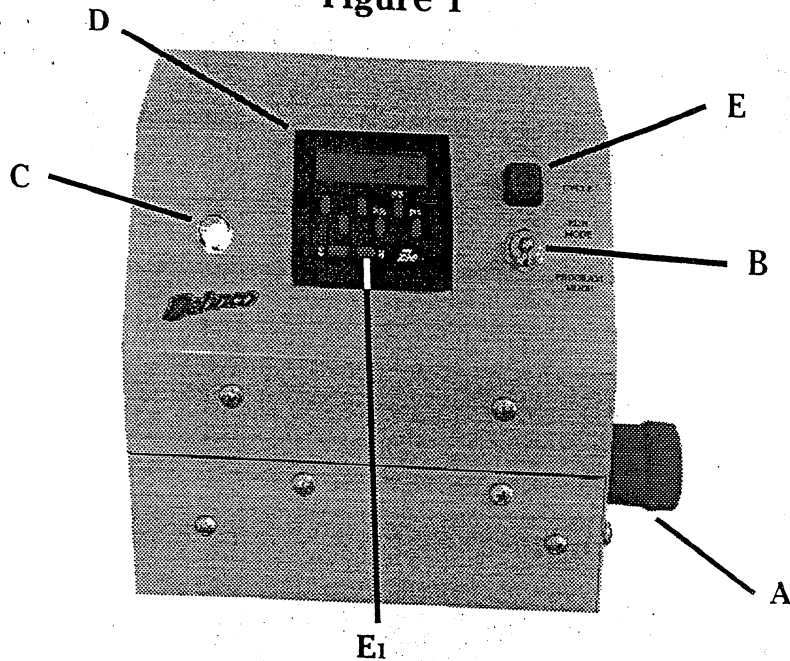
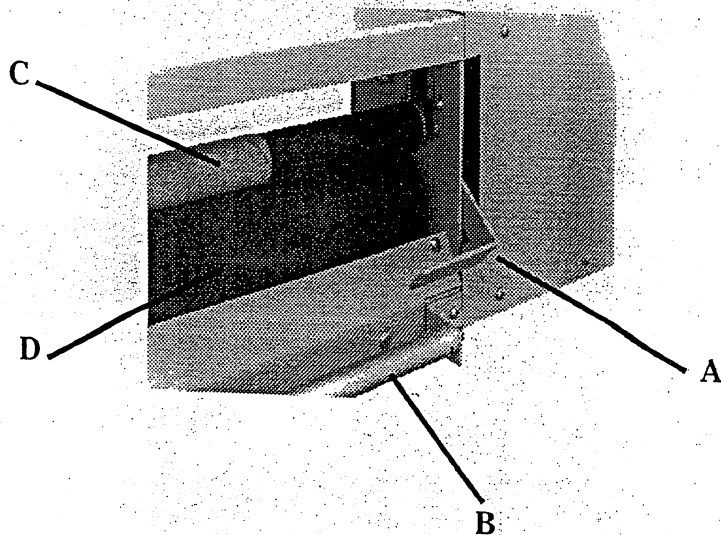


Figure 2



## STARTING THE FEEDER

### AUTO CUT FEED TO LENGTH

See Figure 1

#### START UP - BEFORE YOU LOAD MATERIAL

- Step 1:** Make sure on/off button (A) is in the off position, pressed in.
- Step 2:** Put PROGRAM/RUN toggle switch (B) in the PROGRAM (down) position.
- Step 3:** Twist ON/OFF button (A) counter-clockwise;
- Power Indicator light (C) will illuminate.
  - Counter (D) will turn on.
- Step 4:** Push the Re-set button (E or E1)
- This will re-set counter to the last preset number programmed in.

**NOTE:** At the start of each day steps 1-4 must be followed in this exact order.

**Step 5:** Push Toggle Switch (B) to RUN position, machine will cycle one time.

**Step 6:** To dispense again press Re-set button (E or E1).

## LOADING MATERIAL

See Figure 2

**NOTE:** If you have a Dehnco storage stand, see stand instructions for assembly.

- Step 1:** Lift pinch roller using handles (A).
- Step 2:** Feed leading edge of material under tension bar (B).
- Step 3:** Continue loading material into feeder between upraised pinch roller (C) and drive roller (D).
- Step 4:** Lower pinch roller (C) using handles (A).
- Step 5:** Cycle machine once to ensure proper feeding.

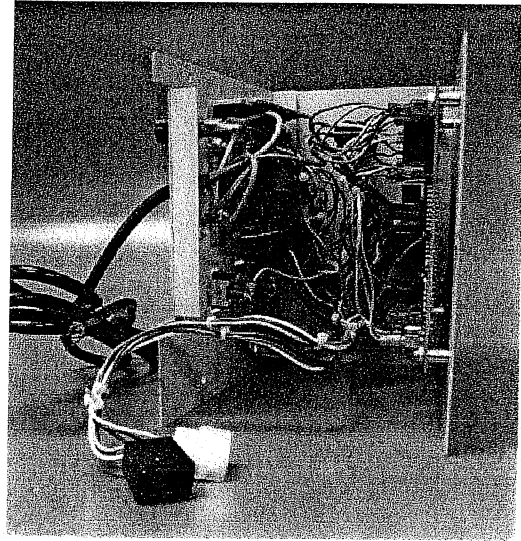
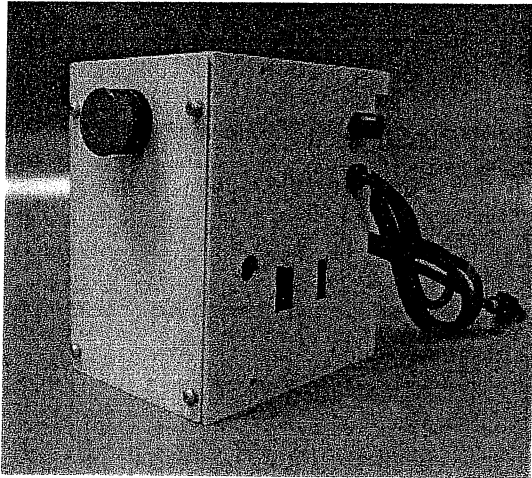
## TURNING FEEDER OFF

See Figure 1

- Step 1:** Push in On/Off button (A) is pushed in.
- Step 2:** Set PROGRAM/RUN Toggle switch (B) to down position.
- Machine is now properly turned off.

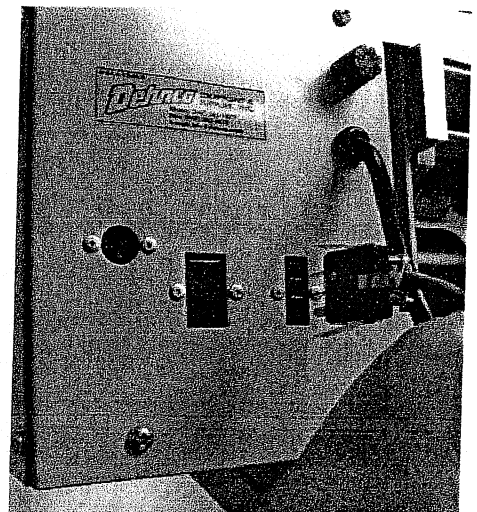
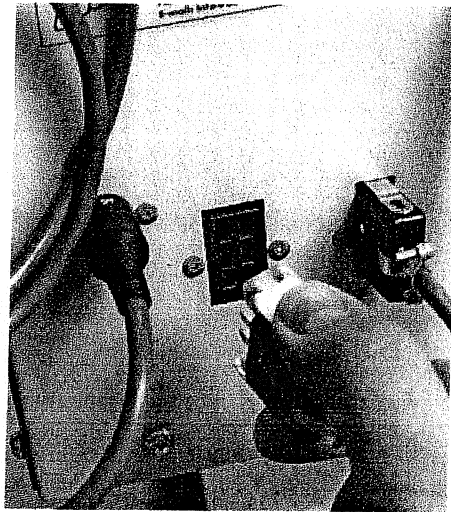
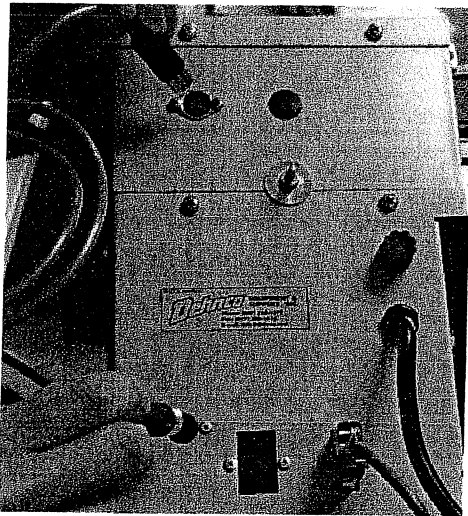
## Feeder Electronics (FEP-1000)

On the feeder electronic, you will find a red e-stop button. This is used to turn the power on and off. To turn the power on, twist the button clock wise it will pop out and the power will be on. To turn off the power just press the button in.



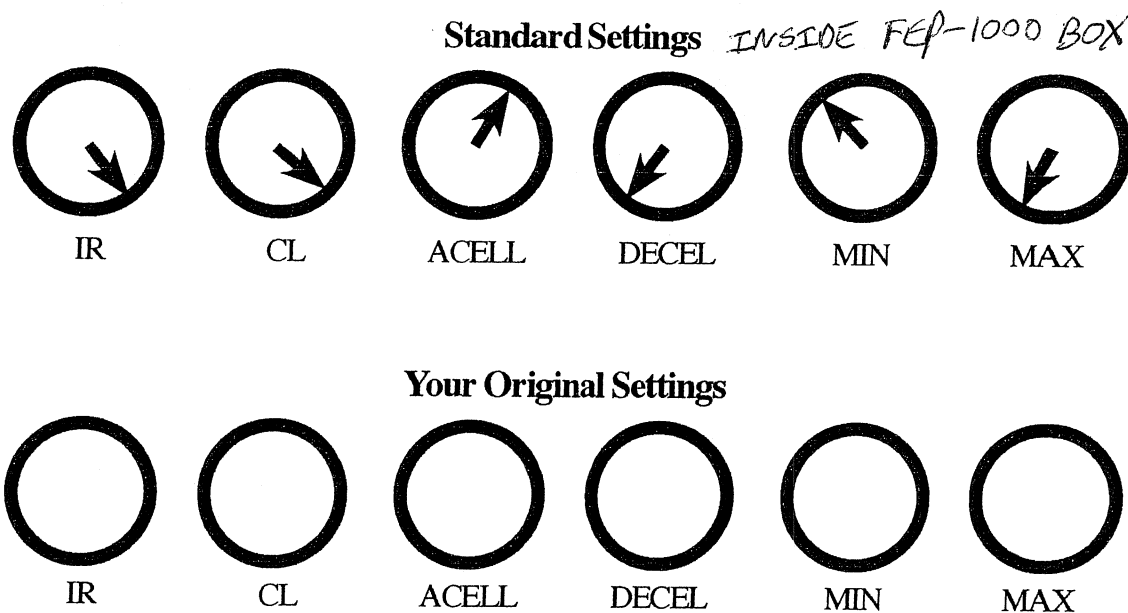
On the back of the feeder electronics, you will find the powercord, fuse holder and three ports.

Inside there are two quick connects. One plugs into the encoder, the other plugs into the six pins on the frame of the feeder.



Looking from the back, on the left, there is an eight pin (female) round port. This is where you will plug in the counter cable. The next is a six pin (female) port for the air box to plug in and finally on the right is a three pin port (female) this is where the cable for the cutter guard (safety shield) plugs in.

The speed in which we feed can be adjusted. To adjust the speed you need to remove the feeder electronics inside the electronics you will find a drive board located on the back panel there are six pots located at the bottom of that board. To adjust the speed you can manipulate the accel and decel as well as the min. and max. below is an approximation of the factory preset.

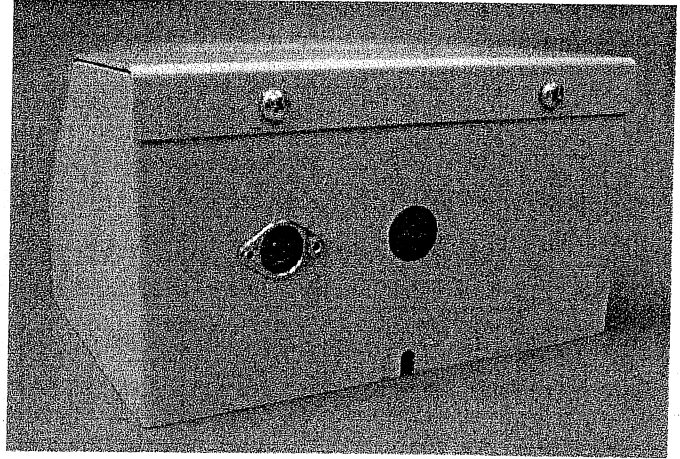


\*Please note that changing these settings can effect the accuracy. The faster the feeder runs, the greater the variance can be.

C.L. (current limit)	These control the amount of power to the motor
I.R. (current resistance)	
ACCEL (acceleration time)	This will adjust how quickly the feeder ramps up to full speed. Adjust clockwise to slow down. Adjust counter clockwise to speed up.
DECEL (deceleration time)	This will adjust how quickly the feeder slows down. (This is usually set all the way counter clockwise.) Adjust clockwise to slow down. Adjust counter clockwise to speed up.
ACCEL (acceleration time)	This will adjust how quickly the feeder ramps up to full speed. Adjust clockwise to slow down. Adjust counter clockwise to speed up.
MIN (ramp down adjustment)	This will adjust how quickly the feeder ramps down from full speed. Adjust clockwise to slow down. Adjust counter clockwise to speed up.
MAX (max speed adjustment)	This will adjust how quickly the feeder ramps up to full speed. (This is usually set all the way counter clockwise, and not recommended to be changed.) Adjust clockwise to slow down. Adjust counter clockwise to speed up.



## Length and batch box (LBB-1000)



The length and batch box allows the operator to set a desired length and the desired number of pieces they wish to run.

Facing the length and batch box you will see two counters, one on the left (the batch) and one on the right (the length). In between the counters there is an indicator lamp, an on/off toggle switch, and a reset button.

The length is set in inches down to the tenths. The longest length that can be set is 99999.9 inches. The shortest is 00000.1 inches. (The smallest piece that we recommend is 3 inches.)

The batch counts down from the number set. The largest number that can be set for a batch is 999999 and the lowest number that can be set on a batch is 1. The feeder does not know if there is material or not, if a batch is set larger than the amount of material available, the unit will run until it reaches zero.

The First counter (right side) controls the batch, the number of pieces to be cut. The second counter controls the length of the pieces to be feed and cut.

### Setting the batch counter.

Check that the teather cable is connected to the back of the feeder electronics (FEP-1000) and the other end is connected to the back of the batch box.

To program the batch (the number of pieces) turn the toggle switch on the batch box to the off position.

Turn the power on, to the feeder.

The indicator lamp along with both of the counter displays should now all be lit.

Press the P2 button on the batch counter. The display will now be showing all six positions with no decimal. By depressing the button under each of the numbers the counter will scroll for 0-9. (Each column is independent from one another. The value for each column from left to right is 100,000's, 10,000's, 1,000's, 100's, tens, and ones.) Once the desired value is dialed in press the reset button (R),

followed by the enter button (E), and the reset button (R) again. The display should now be showing the number you set. If it is not displaying the number you set, repeat the previous steps.

Press the P1 button on the batch counter. The display will now be showing all six positions with no decimal. The display should be all zeros (000000) If not by depressing the button under each of the numbers the counter will scroll for 0-9. (Each column is independent from one another). Press the appropriate buttons to set all zeros. Once the desired value is dialed in press the reset button (R), followed by the enter button (E), and the reset button (R) again.

Press the PS button. This is the pre scale. The correct setting for the batch counter is 1.00000. The PS setting is set at the factory and is locked out. For additional help with this setting please contact Dehnco for technical assistance.

## **Setting the length counter.**

Check that the teather cable is connected to the back of the feeder electronics (FEP-1000) and the other end is connected to the back of the batch box.

To program the length (the size of piece) turn the toggle switch on the batch box to the off position.

Turn the power on, to the feeder.

The indicator lamp along with both of the counter displays should now all be lit.

Press the P2 button on the length counter. The display will now be showing all six positions. The last column is preceded by a decimal By depressing the button under each of the numbers the counter will scroll for 0-9. (Each column is independent from one another. The value for each column form left to right is 10,000's, 1,000's, 100's, tens, ones, and tenths.) Once the desired value is dialed in press the reset button (R), followed by the enter button (E), and the reset button (R) again. The display should now be showing the number you set. If it is not displaying the number you set, repeat the previous steps.

The next setting on the length counter is the P1 setting. This controls our ramp down (then point which we cut power to the motor). The P1 setting always has to be less than the P2 setting (the desired length).

To program the P1 setting, turn the toggle switch on the batch box to the off position.

Turn the power on, to the feeder.

The indicator lamp along with both of the counter displays should now all be lit.

Press the P1 button on the length counter. The display will now be showing all six positions. The last column is preceded by a decimal. By depressing the button under each of the numbers the counter will scroll for 0-9. (Each column is independent from one another. The value for each column form left to right is 10,000's, 1,000's, 100's, tens, ones, and tenths.) Once the desired value is dialed in press the reset button (R), followed by the enter button (E), and the reset button (R) again. The display will now

be showing the number you set as the P2. To Check that your setting was taken press the P1 button. You can press the reset (R), followed by the enter button (E), and the reset button (R) again, or just wait and the counter will time out and default to the P2 setting.

Press the PS button. This is the pre scale. The correct setting for the length counter is determined at the factory. The standard PS setting is 0.13540. The PS setting is set at the factory and is locked out. For additional help with this setting please contact Dehnco for technical assistance.

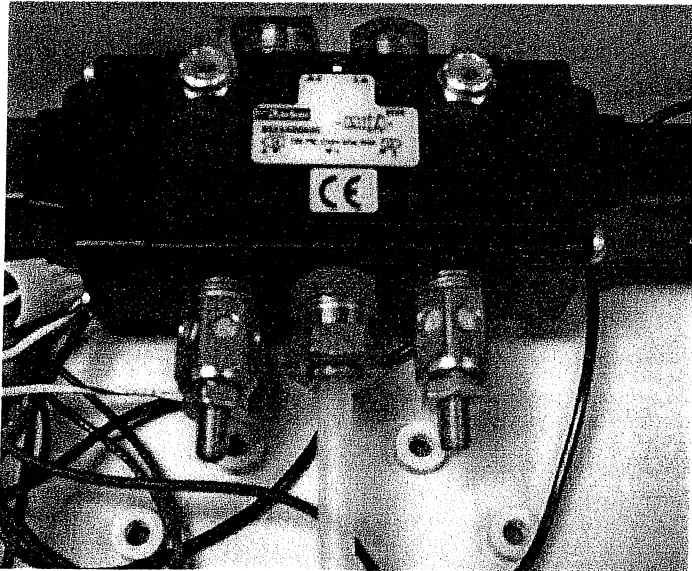
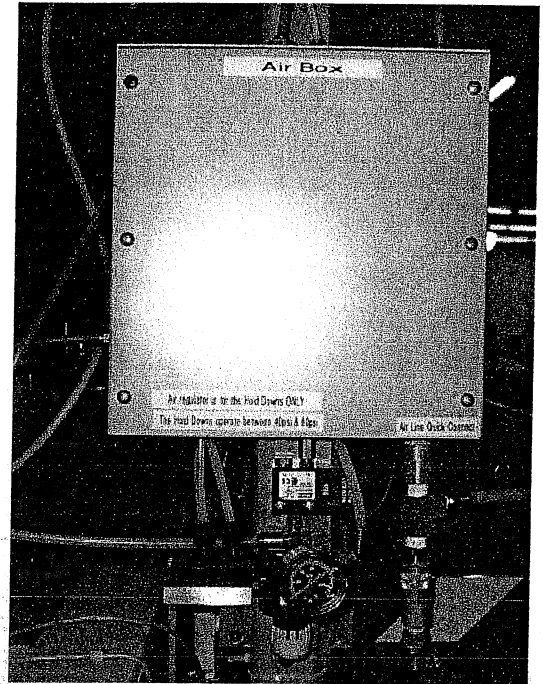
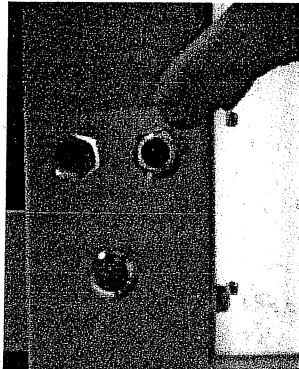
The length counter also has a timing delay built into it.

To adjust this setting press the P1 and the reset (R) button at the same time. A four digit display will light up. The factory default is 07. To increase the time between feeds increase this number. To shorten the time between feeds decrease this number. Once the setting desired is set press the Reset (R), then the Enter (E), and then Reset (R) again.

Step 2: Press the P2 and the Reset (R) button again a four digit display will be illuminated. The P2-R setting should be three less than the P+R setting. Once set press the R-E-R

## The Air Box (AB-0000, AB-1000, and AB-2000)

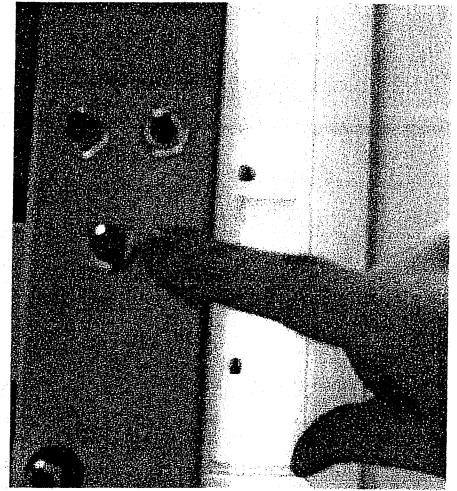
Each air box has 2 ports at the top, one yellow, one blue, connect the corresponding hoses to each port. There is also a six pin cable that plugs into the back of the feeder electronics (see image 2). On the left side of the air box, there are two black buttons. One button on the left and one button on the right (see image 3). If you have air to the air box and the power on the left and the right button will send the cutter head to the right. \*These will be used when the feeder and cutter are out of cycle.



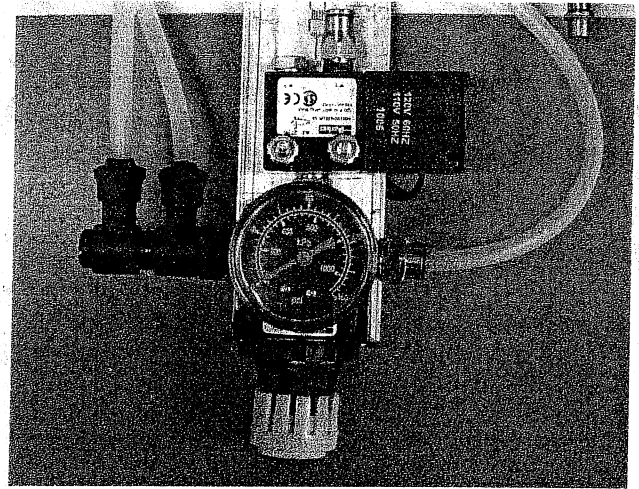
Inside the air box at the bottom of the large selector valve there are two speed control mufflers. You can adjust the speed that the cutter head goes across by opening or closing the center screw (opening backing out) the screw increases the air flow to the cylinder which in turns speeds up the cut. Closing (tightening) the screw will restrict the airflow and slow down the cutter.

On a Dehnco single hold down and double hold down air box (AB-1000) (AB-2000) on the left side of the air box you will find another quick connect "Red" connect the red hose to this port.

On a double hold down air box (AB-2000) you will find another button located under the manual cut override buttons. This button is red and when depressed will bring the hold down it must be held in the whole time if you wish to do a manual cut. While holding the red button in, press either the left or right cut button once the cut has been made return the cutter head to the original position.



There is also one more valve as well as a regulator with a gauge located at the bottom of the air box. The white hose goes to the valve and the regulator controls the air volume for the hold downs only. This pressure should be set between 40-60 psi (no more). The air pressure controls how fast we come down and how fast we lift.



### **The cutter not cutting completely through the material**

1. Adjust the compression on the cutter arm, by turning the knobs on the left and right side of the cutter.
2. If the cutter is not cutting in the center, there is an adjustment that can be made under the cutter. This is done by removing the cutter from the I-beam and using 1/4" allen wrench. By loosening the screws under the cutter a bow can be placed into the base. (This will result in more compression in the center of the units, you may need to loosen the compression on the cutter arm at this time.)
3. Check the blade. It should also be checked and replaced when too dull to make the cut.
4. Check the cutting strap. If it is cracked or cut through **STOP DO NOT USE**. The strap **MUST** be replaced before you continue. *Continued use will damage the base and you will go through straps at a much faster pace.*  
(The aluminum base can be replaced if it gets damaged.)

### **Hold downs not working**

#### **Not functioning at all**

1. Check all air lines for any damage.
2. Check the air flow regulator on the air box. Is there air pressure? The regulator should be between 40psi and 60psi.

#### **Not coming down fast enough or not lifting fast enough**

1. Check the air line for any damage.
2. Check the air flow regulator on the air box. This is for the hold downs only. It should be set between 40psi and 60psi.
3. There are also flow control fittings on the bottom of each cylinder. These can be opened or closed to get the desired effect.

**ADS Maintenance:**

The feeder should be cleaned off once a week or as needed (basic dusting of the feeder). Check the nip rollers once a week or as needed. Check all the outer screws are tight once a month.

Wipe the cutter rail once a week with a lubricant.( Spray a rag with WD-40 or equivalent). The guide posts for the double hold downs can also be wiped down.

Check the cutting strap daily, if you cut through the strap or the strap cracks or breaks, you must stop using the unit until it is replaced. If used without replacing strap permanent damage will occur to the aluminum base.

Check the compression settings make sure the adjustment knobs are set equal on both sides. Over time one side will rise and the other will fall due to the pneumatic heads constant movement from one side to the other.

# TO MOUNT CUTTER:

Use cutter as a template to mount to table

## TO INCREASE TENSION: - WHEN NOT CUTTING

1. Turn tension knob (B) clockwise to decrease pressure or counter-clockwise to increase pressure to blade.
2. Using an Allen Wrench, raise or lower base (F) by adjustment screw under cutter (G).

NOTE: ONCE BLADE IS REMOVED, REVERSE PROCEDURE TO RESEMBLE.

SPARE  
PARTS

## TO CHANGE BLADE:

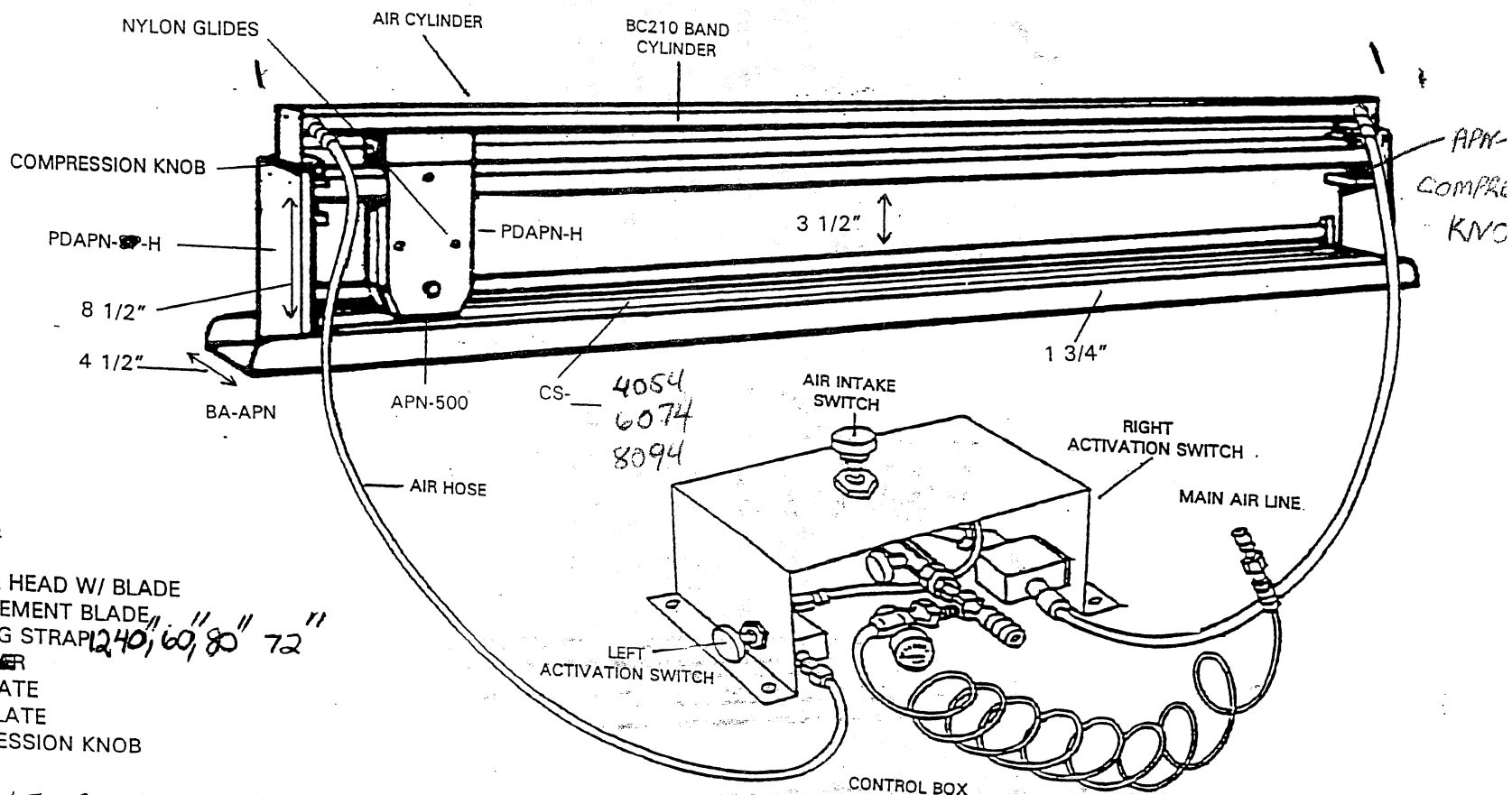
1. Raise guide bar (A) by turning tension knobs (B) clockwise.
2. Move blade housing (C) to left or right side of cutter.
3. Remove hex bolts (D) from one side of blade housing.
5. Remove blade.

PD APN

# PNEUMATIC DRIVEN - APN UNIT COMPLETE WITH CUTTER

## CUTTING STRAPS

CS-3044  
CS-4054  
CS-5064  
CS-6074  
CS-7286  
CS-8094



## PDAPN PARTS

PDAPN-H  
APN-500  
CS-  
BC-210  
PDAPN-SP-H  
BA-APN

CUTTER HEAD W/ BLADE  
REPLACEMENT BLADE  
CUTTING STRAP 12, 40, 60, 80, 72"  
CYLINDER  
SIDE PLATE  
BASE PLATE  
COMPRESSION KNOB

D-1111 - NEEDLE BEARING

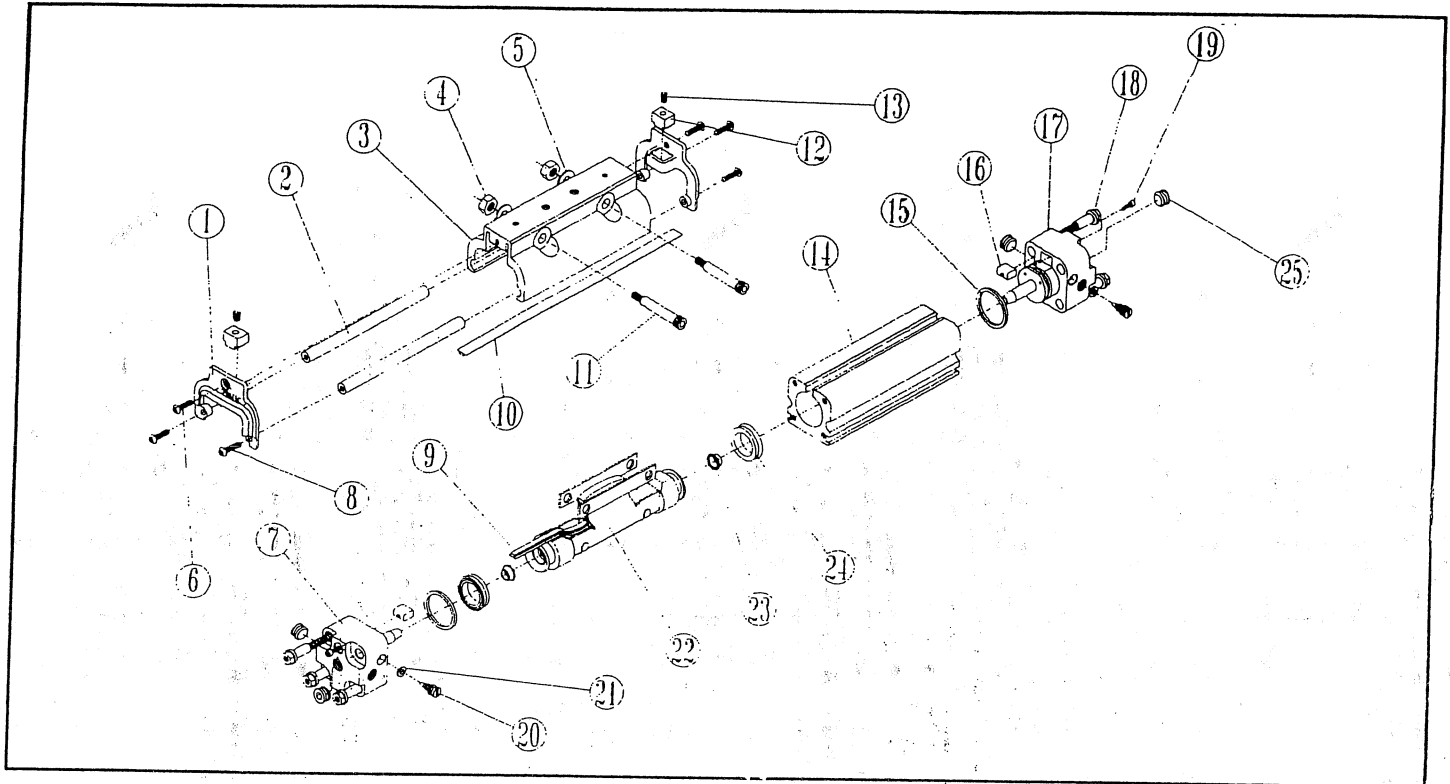




### BC2 Series™ Band Cylinder®

BC210/BC2M(M)10

1" (25 mm) Bore



#### Cylinder Assembly Parts Listing

Item	Part No.	Description	US STANDARD	METRIC (M) Taper Rc Heads	METRIC (MM) Parallel G Heads
1.*	4510-1002	End Cap	2	2	2
2.*	0910-1170	Bearing Rod	2		
	4910-1170	Bearing Rod		2	2
3.	0510-1003	Carrier	1		
	4510-1003	Carrier		1	1
4.	0910-1288	Nut	2		
	4910-1288	Nut		2	2
5.	0810-1221	Washer	2	2	2
6.	0910-1290	Screw	2		
	4910-1003	Screw		2	2
7.	0510-9022	Left Head Assembly	1		
	4510-9022	Left Head Assembly		1	
	5510-9022	Left Head Assembly			1
8.	0910-1172	Screw	4		
	4910-1172	Screw		4	4
9.*	0912-9006	Sealing Band	A/R	A/R	A/R
10.*	0912-9000	Dust Band	A/R	A/R	A/R
11.	0910-1287	Shoulder Bolt	2		
	4910-1287	Shoulder Bolt		2	2
12.*	4515-1012	Band Insert	2	2	2
13.*	4520-1012	Spring	2	2	2

Item	Part No.	Description	US STANDARD	METRIC (M) Taper Rc Heads	METRIC (MM) Parallel G Heads
14.	4510-1009	Tube	A/R	A/R	A/R
15.*	0910-1160	O-Ring	2	2	2
16.†	0910-1343	Band Clamp	2		
	4910-1343	Band Clamp		2	2
17.	0510-9021	Right Head Assembly	1		
	4510-9021	Right Head Assembly		1	
	5510-9021	Right Head Assembly			1
18.	0910-1344	Head Fastener	8		
	4910-1344	Head Fastener		8	8
19.†	1307-1019	Screw	2		
	0610-1033	Screw		2	2
20.†	0910-1177	Cushion Needle	2	2	2
21.*†	0910-1178	O-Ring	2	2	2
22.	0910-9013	Piston Bracket Assembly	1		
	4910-9013	Piston Bracket Assembly		1	1
23.*	0910-1184	Cushion Seal	2	2	2
24.*	0910-1206	U-Cup	2	2	2
25.†	1014-1065	Pipe Plug	4		
	4910-1002	Pipe Plug		4	
	5910-1006	Pipe Plug			4

See other side ➡

Parts marked with an "\*" are included in Repair Kits RKBC210 (U.S. Standard), RKBC2M10 (Metric Taper ported and parallel ported Heads). Parts marked with a "†" are included in Head Assemblies.