Count AccuNumber Touch Airfed Automatic Numbering, Perforating, and Scoring Machine

Instruction Manual

Provided by

MyBinding.com®

When Image Matters.

Call Us at 1-800-944-4573

AccuNumber

10/2011
Version 1.0

*ACTUAL MODEL MAY VARY

Serial Number: _____

Date of Purchase:_____

INTRODUCTION

Congratulations,

You have purchased the most versatile air fed number, perforating and scoring machines on the market today. Designed to accommodate the demands of finishing both press and digitally produced media, the AccuNumber efficiently applies pneumatic driven heads with precision via its reliable air feed table. The AccuNumber also delivers a rotary compression perf, leaving a crisp, sharp perf as well as a rotary score wheel.

The AccuNumber with its simple yet robust transport promises many years of profitable operation and with it's numbering, perfing and scoring applications will be a very useful addition to your shop for years to come.

Your AccuNumber was manufactured at Count's headquarters in Escondido, California. We are proud to build quality equipment and stand behind our machines knowing that the quality of our product is exceeded only by the staff which supports it.

Thank you for choosing Count.

Sincerely,

David M. Gilbert

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ELECTRICAL SPECIFICATIONS

Power Requirement: 110v, 60 HZ, AC, **or** International 230v, 50/60HZ, AC
20 amp line required CHECK MACHINE LABEL.
Circuit Protection: Motor.....3 AMP Circuit Breaker

NOTE: Older buildings, overloaded lines, and bad grounds can affect the operation of your AccuNumber. A regulated dedicated line is recommended.

OPERATING SPEEDS

MODE	TRANSPORT SPEED (Feet per Sec.)	8 1/2 x 11 Sheet	Pulsed	Stream
Perf Mode	variable		23000 sph	32000 sph

△SPECIFICATIONS

Net Weight: AccuNumber.....350 lbs
Overall Dimensions: .....32″Lx27″Wx26″D
Boxed Dimensions: .....48″Lx48″Wx52″H
Min. Sheet Size: .....3″x5″
Max. Sheet Size: .....18″x20″

NOTE: The AccuNumber is capable of handling many types of applications above and beyond the standard specifications. It is possible to feed quite a variety of jobs, from 30″ sheets to die cut stocks. However, the performance of the AccuNumber on these special applications is directly related to the experience of the operator.

SAFETY PROCEDURES

BEFORE USE:

- Read through the owner's manual. Follow instructions CAREFULLY.
- NEVER use a wet area. Electric shock could occur.
- Use a GROUNDED outlet and a GROUNDED circuit. Do no use ungrounded equipment on the same circuit.
- Always use a dedicated line. DO NOT use with line splitting surge protector.

DURING USE:

- Keep fingers and hands away from numbering heads, score blades, perf blades, and rubber rollers.
- Keep cords clear of moving parts.

AFTER USE:

- Turn off machine at the side panel, and then unplug the main power cord. This will prevent damage to your machine by power/voltage spikes.
- To unplug cords, always grasp the plug body. Never pull on cords to disconnect. Wire fatigue and possible shock could result from improper disconnect procedures.

BE ALERT! BE CAREFUL!

CARE AND MAINTENANCE

The AccuNumber is a precision machine. It is very important to keep it free of excessive dust, dirt and foreign matter. We recommend that you keep the machine **covered** when not in use.

BEARINGS/BUSHINGS: The bearings are sealed roller bearings and are designed to be self lubricating, however dirt and dust can get into them causing clogging and dirt build up. It is recommended to oil them daily under heavy use or monthly under light use. The Bushings are Bronze and do require lubrication more frequently. Oil these once a week under heavy use.

RUBBER ROLLERS: These tend to harden when exposed, and in use, use water to clean them before and after each use. This will increase the life and require less replacement. Do not use "Blanket Wash" or other cleaners.

REMOVEABLE SCREWS: When these show signs of wear or stripping, replace as soon as possible. If these strip or hollow out they can be costly to remove. If you keep your AccuNumber clean and in top condition, it will give you many years of service.

COMPONENT IDENTIFICATION

REFERENCES

Feed Table Assembly	Pg. 17
Delivery Tray	Pg. 8
Paper Stops	Pg. 9
Pump with Vacuum Valve	Pg. 10
Perf and Score Assemblies	Pg. 31

WARRANTY

Count Machinery Company warrants each AccuNumber Machine against defective parts or workmanship under normal use and service for a period of **one year** on electrical and all other parts from the date of purchase. During this time COUNT will either repair or replace any COUNT unit returned (shipping prepaid) which, after examination by us, is determined to be defective. **All freight charges for equipment sent in for warranty service are the responsibility of the purchaser and must be prepaid.** Count will not be held responsible for any shipping charges. You may request your desired shipping method. If no method is stated, COUNT will send the item UPS ground. This warranty shall not apply to products that have been repaired or altered by anyone except for COUNT, or which has been subjected to misuse, negligence, or accident. Under no circumstances will COUNT be liable for consequential damages. The user shall determine the suitability of the product for the intended use and the user assumes all risk and liability whatsoever in connection herewith. For service, return the machine prepaid with written explanation of services needed to:

Count Machinery Company
2128 Auto Park Way Escondido, CA 92029
Tel: 760-489-1400 Fax: 760-489-1543
E-mail: info@countmachinery.com

Notice:

The warnings, cautions, and instructions discussed in this instruction manual cannot cover all possible conditions and situations that may occur. It must be understood by the operator that common sense and caution are factors which cannot be built into this product, but must be supplied but the operator.

We strive for continued improvements in our equipment line. Therefore, we reserve the right to change specifications without notice or liability to existing count equipment in the field.

Please complete the following information for your future reference.

Serial no. :_____
Purchased by : _____
Date purchased: _____
Count invoice no. :_____

AccuNumber

SETTING UP YOUR ACCUNUMBER

This machine is 99% ready to go when it arrives on your dock. There are only a few items that need to be put into position before it is ready to use. Those 2 items are below:

DELIVERY TRAY ASSEMBLY

INSTALLING THE DELIVERY TRAY

There are 2 positions for the receiving tray on the AccuNumber the upper position is for short runs where the tray will not need to be as deep. The lower is for longer runs so the tray would need to be empty less often. Position the tray to slide it under the dowel pins and rest it on the lower dowel pins.

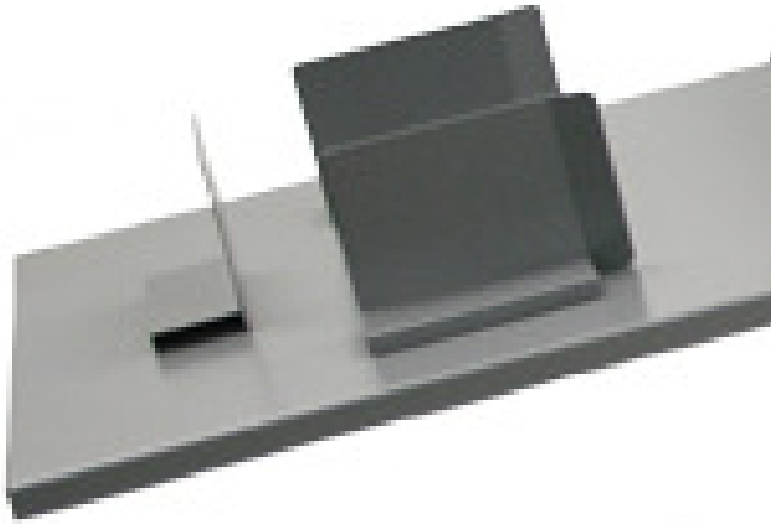
Upper Position shown below

Lower Position shown below

PAPER STOP ASSEMBLIES

INSTALLING THE PAPER STOPS

There are 3 different paper stops. 2 will have bends and 1 will be straight. The straight paper stop is the rear or back paper stop. The other 2 are the right and left paper stop and should be positioned as shown below. They hold there position using a magnet which makes it easy for adjustment. The positions for the paper stops will change for each individual job. If the paper stops are set to close the paper will hit them as it exits the machine and will cause a paper jam. If they are set too loose the paper will stack in an unorganized manner. Getting the position correct is imperative to smooth operation of the machine.



<u>Important Note</u>: In order to be able to identify the ideal pressure of the rubber gripper wheels feel the pressure on the wheels by rolling them <u>upwards</u> with your index finger. They should always be set uniformly on both the entry and exit of the machine and you should barely be able to roll them. The straightness of your perf and score as well as your numbering are dependant on these rollers being set evenly. <u>Always check pressure by rolling upwards.</u> These wheels are spring loaded and rolling downwards creates artificial pressure.

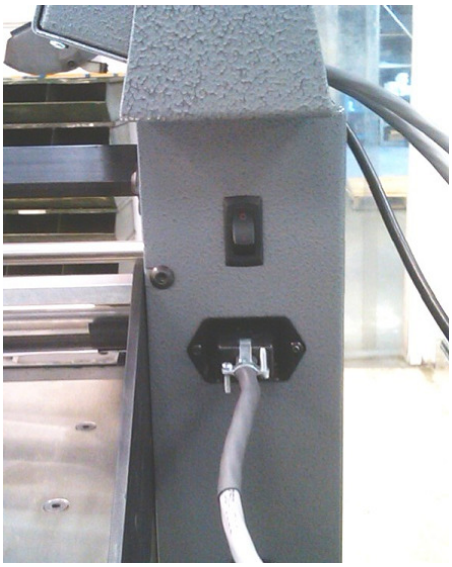
Now that the Machine is setup lets learn how to use the machine. The sections below will guide you through the operation of the machine.

MACHINE CONTROLS

There are many switches on the AccuNumber and it is very important that you know and understand what each of them does.

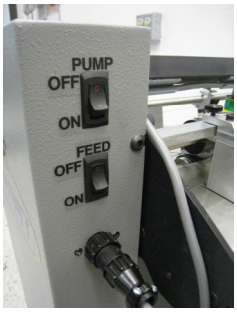
MAIN POWER

On the Non-Operator side cover at the top on the right side is the main power switch. This is the on and off power for the machine.



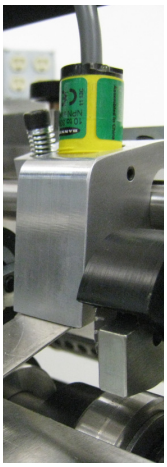
PUMP CONTROLS

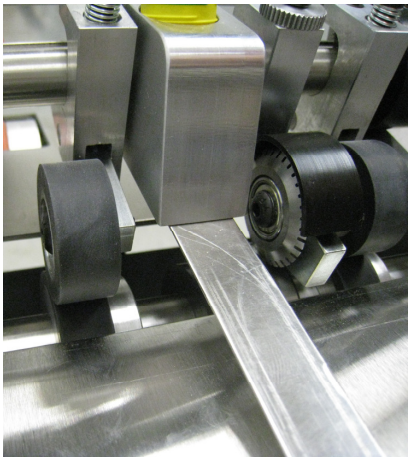
On the Operator side cover at the top on the right side is the pump switch. This switch turns the pump on and off. Use the knobs on the pump to control the output of the pressure and vacuum. As illustrated on the knobs you can control the suction and the blow affecting the stock. Depending on the stock you are using you will adjust these knobs to ensure proper feeding. The suction can be adjusted as well as the vacuum pickup point to ensure enough suction to pull the bottom sheet. The blow will "fluff" the stack along the rails and make it easier to pull the bottom sheet as well.



PULSED FEED CONTROLS

The Feed Switch is the control of a pulsed suction valve that allows the machine to fully control the feed of the paper. This mode of operations is a much more consistent way to run the machine. While the output speed is slower the end result is much more user friendly feed. To use the pulse suction press the FEED switch just below the pump on/off switch to the ON position. When using the pulsed feed it is very important that the proximity sensor is adjusted correctly. See the images below to identify the pulse sensor and position it needs to be in.





Note: Make sure nothing is below the proximity sensor and it is positioned between the sheet metal and perf shaft. <u>If this position is not correct the pulse feed will not work and the suction valve will stay off</u>.

Air Valve Assembly

MICROPROCESSOR CONTROLLER

Controller Display

The LCD displays programming information, prompts response, and verifies entered data or commands. The LCD also conducts a self diagnostic test when power is turned on. A countdown sequence from 9 to 0 will appear. If a number is missing from the sequence this indicates a failure in a component. If this occurs, contact the Count service department for further details. At the display of "ACCUNUMBER" the microprocessor is clear and ready to accept entries. The micro-controller is also equipped with volatile memory so when power is turned off the AccuNumber will retain the last programmed entry.

TRANSPORT OPERATION

- A document may be slowly advanced through the transport by pushing and holding this button.

  EXAMPLE:  

  The motor should advance transport at slow speed and stop whenever finger is lifted.
- Controls on-off function of motor.

  EXAMPLE:  

  Machine will run at mode and speed previously selected. If no mode has been selected, it will automatically run in perf mode at low speed.
- Machine will stop.  

NOTE: If the AccuNumber is stopped while a sheet is under the sensor, the display will flash "sensor blocked"

DATA PAD

•**Data Keys 0-9:** Allows entry of numeric data required for distances and number designation.
•**Enter/Yes:** Stores input information from data keys and answers display prompted questions.
•**Clear/No:** Erases errors entered and prompts for clearing total count. Answers "no" to display prompted questions.

PROGRAMMING CONTROLS (Mode Selection)

Speed Select: Pushing this will select speed, low, medium or high and show the speed selected on the display.
Mode Select: PERF/NUM Pushing this will Change the mode your machine runs in. By Default and every time your machine is powered off the machine will start in PERF mode. Press the PERF/NUM mode button twice to enter into Number Mode.

EXAMPLE:	DISPLAY READS:
	NUM Mode Low Speed
	NUM Mode Med Speed
	NUM Mode High Speed

These may be pressed until the desired mode is selected, then: 

Pressing 

will now run transport at selected mode.

PROGRAMMING FOR Numbering

•**Set-Up**: Pressing this will present a request for the selection of a distance where the location of the number is requested in hundredths of an inch from the lead edge of the sheet.
•**Print Test:** Pressing this button will fire head number 1 one time.

SETTING UP NUMBERING

Number Mode: Press the PERF/NUM button twice this will put the machine in number mode then hit enter and follow the steps below.

EXAMPLE:

DISPLAY READS:

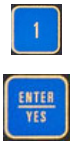
Dist 1 = 0.00

You can now enter the desired location for your crease, from .1 to 20 inches.

Dist 1 = 1.50

Sel Prt Head = 0

You can now select the head you have selected for the job.

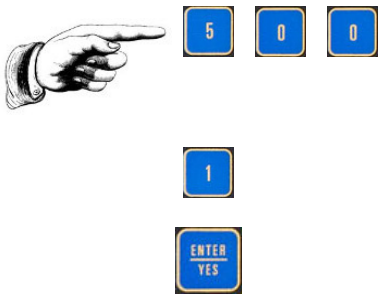


Sel Prt Head = 1

End Program? Y/N

Answering yes will complete the programming sequence. Answering no will prompt the next location for another number (see next page) the AccuNumber will accept up to 20 locations to number.

EXAMPLE:



DISPLAY READS:

Dist 2 = 0.00

Dist 2 = 5.00

Sel Prt Head = 0

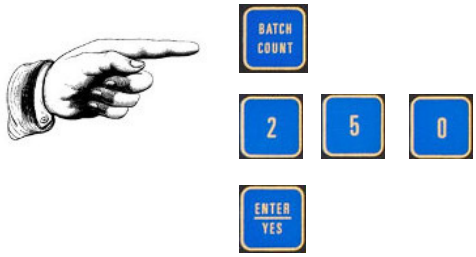
Sel Prt Head = 1

End Program Y/N Program Complete

You have now programmed your AccuNumber to number in two locations with head 1. Press run and place 1 sheet on the feed table. The sheet should feed through stopping twice to number. If this does not occur, check your mode and make sure your selections have been accepted. Remember, the speed and mode can be changed at any time, and will not affect the program.

BATCH COUNTER

EXAMPLE:



DISPLAY READS:

Batch Count = 0

Batch Count = 250

ACCUNUMBER

This will allow 250 sheets to pass the sensor then stop transport automatically. Pressing run will batch another group of 250 sheets. You can set the batch counter up to 9999.0 the feature is convenient for chip boarding small groups to be padded, or wrapping larger jobs in predetermined packages.

CLEAR BATCH COUNT:

DISPLAY READS:

Batch Count = 250

Batch Count - 0

ACCUNUMBER

TOTAL COUNTER

The micro-controller automatically counts any paper being run through the transport. This count is displayed as the AccuNumber is operating and when it is stopped. To clear the counter:

DISPLAY READS

Clr Tot Cnt = Y/N

Total Count = 0

SETTING THE DOUBLE SHEET DETECTOR

Note: Sheet detector works on the basis of measurement comparison using the length of the sheet to verify more than one sheet.

To turn on:

1.  

=Display will read (measuring length)
Machine will automatically start to advance

2. Place sheet of job to be run in machine

3. After paper runs through the machine will stop and a dashed line will appear in the bottom of left corner of display, thus indicating that the sheet detector is activated.

To turn off:

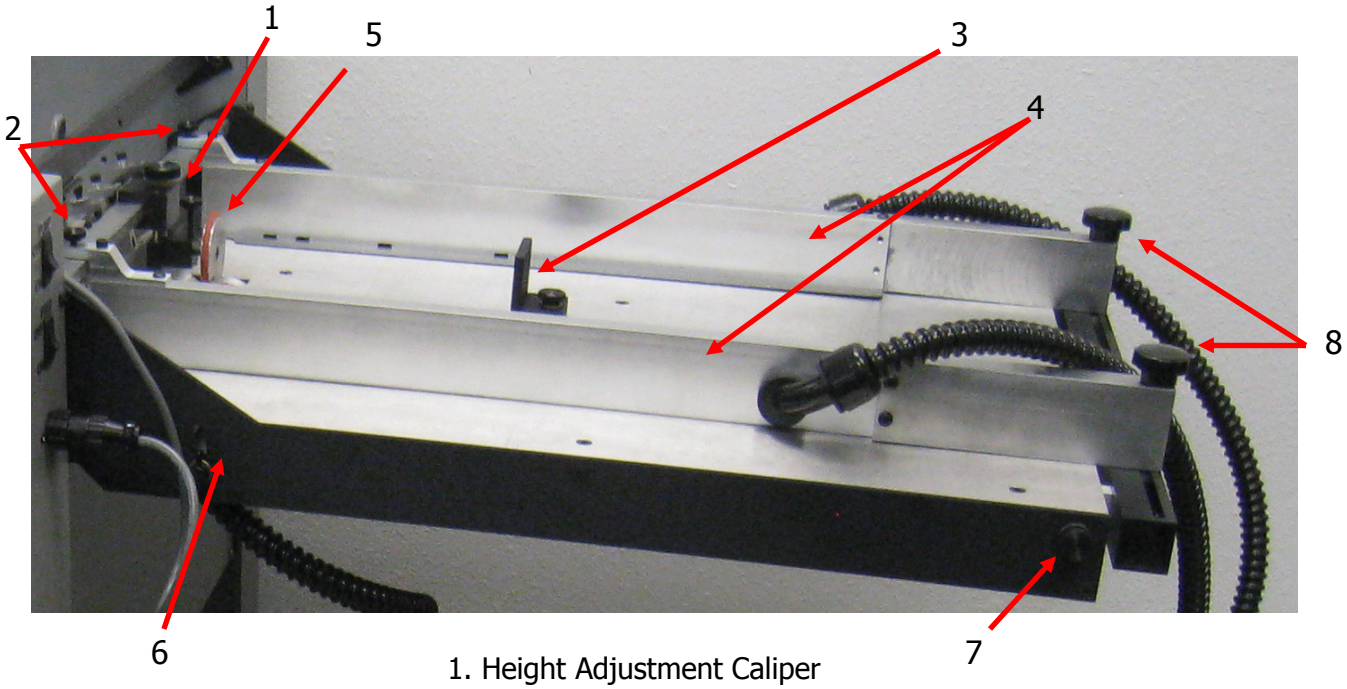
1.  

=Dashed line on display will vanish from display, thus indicating that the sheet detector is off.

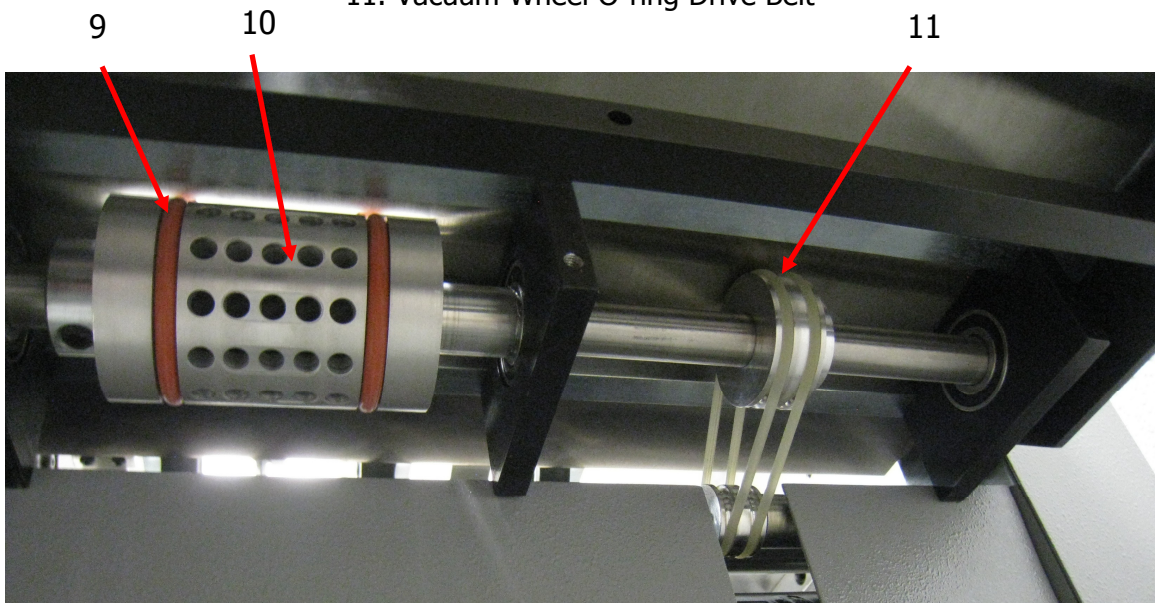
PROGRAMMING NOTES

- The micro controller is capable of numbering from approximately .01 of an inch from the lead edge to ½ inch from the tail edge
- The numbering heads can be programmed to strike simultaneously or independently with a capacity of 10 locations using 1 head or 20 locations using 2 heads.
- When programming multiple locations for the head to stamp, the distances must be entered in an ascending order. For example, if 1.5 is the first location, the controller will not accept an entry of 1.2 after this. If this is attempted, the display will beep and read "Num out of Range."
- If the incorrect key is pushed while programming, a beep will occur and the display will flash "Keyboard Sequence Error". Wait 3 seconds then respond as prompted.

FEED TABLE COMPONENT IDENTIFICATION



1. Height Adjustment Caliper
2. Feed Rail Lock Knob Front
3. Paper Back Stop
4. Feed Rails
5. O-ring Caliper Assembly
6. Vacuum Pickup Point Adjustment Knob
7. Micro Skew Adjustment Knob
8. Feed Rail Lock Knob Rear
9. Vacuum Wheel O-ring
10. Vacuum Wheel
11. Vacuum Wheel O-ring Drive Belt

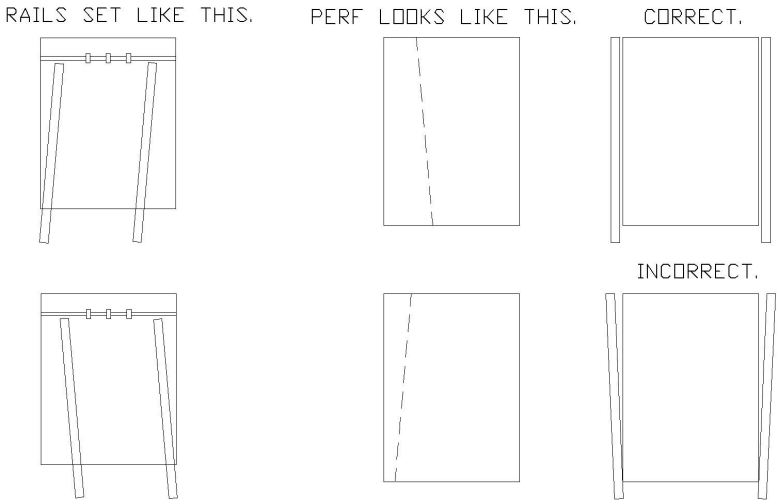


ADJUSTING THE FEED RAILS

The feed rails on your AccuNumber are designed to adjust easily in case of a problem with crooked feeding. By loosening the feed rail alignment lock knobs you can move each rail independently to square them to your stock. To maintain an accurate perf or score, it is important to get the rails as aligned and snug to the sheet as possible without "squeezing" the sheet, as this will create drag and cause the sheets to hang up in the rails.
To adjust this correctly, use one rail as your reference, the left (operator side). Place your stock squarely against it and then bring your right rail in and tighten, looking down at it from the rear. Adjust the rail with the skew adjustment knob so it is squared to the sheet. Then tighten the lock knob, and place your AccuNumber in perf mode. Set a sheet in the feeder, and under the feed wheels, then press run.
Check perf by folding over and aligning the perfed edge.

Perf holes should line up within a blade's width. If they do not line up, adjust rails accordingly, moving your left rail first and then adjusting the right rail to square the sheet. This may take a few attempts, but this adjustment is important to produce quality perf and score jobs.

EXAMPLE:

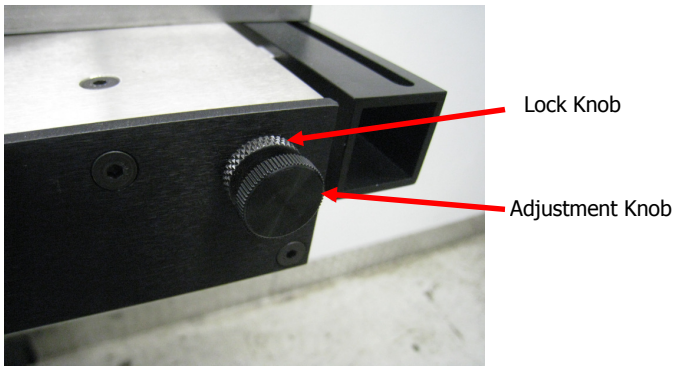


SQUARING THE FEED RAILS

The constant fine tuning of the rails will make it necessary to bring the rails back to true "square". To do this, take a sheet of 8 1/2 x 11" cover stock and place it in the feed table against the operator side guide. Pressing the sheet against the rail, slide the rail over so that the front edge of the stock lines up to the front edge of the feed table. Loosen the feed rail adjustment lock knob, and use the skew adjustment knob to adjust the rail so that the sheet is aligned with the left to right with the edge. Once this is done, slide the opposite side guide into position and adjust it to the edge of the sheet. Your rails should now feed the sheet perfectly aligned providing a straight perf or score.

MICRO SKEW ADJUSTMENT

The micro skew adjustment will allow for the rear adjustment of the feed rails. It adjusts both of the rear feed rails at the same time. This makes it easier to adjust for and straighten the perf or score.

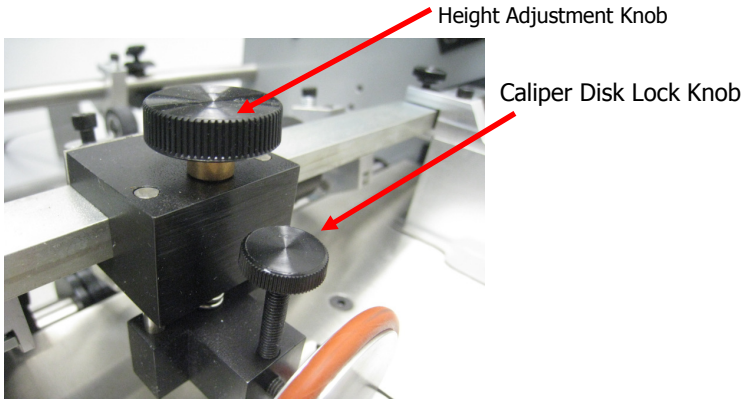


SETTING THE AUTOMATIC FEEDER

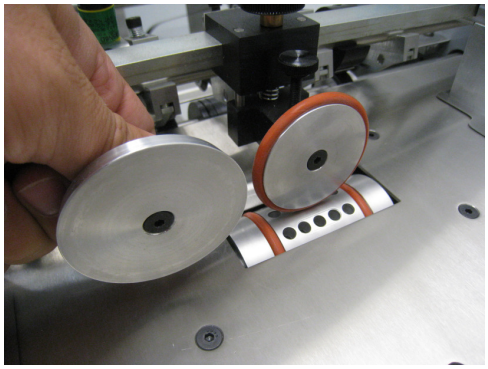
For efficient Auto-feeding, the setting of the caliper to the vacuum wheel is very important. Use a piece of the stock to be run as a "feeler gauge". Place a sheet under the feed wheels, turn the feed wheel adjustment screw (Counterclockwise to raise, clockwise to lower) so that the paper can slip freely under the wheels. The feed wheels should be barely touching the stock. If during the feeding you begin to get doubles, lower the feed wheels just enough to stop the double sheeting. The paper between the friction plate and the auto feed wheel must move freely and should not be gripped.

HEIGHT ADJUSTMENT CALIPER

The caliper setting is what ensures the feeding of one sheet and prevents the feeding of double sheets. It is very important that this caliper be set correctly. To set the caliper take one sheet of the stock you are running and slide it between the caliper and vacuum wheel. Take a second sheet and slide it back and forth, in and out while lowering the height adjustment until the second sheet cannot slide under the caliper. **DO NOT OVERTIGHTEN!** It is very important that the sheet is not pinched in anyway.

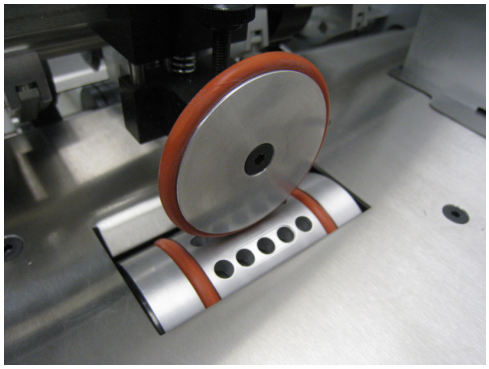


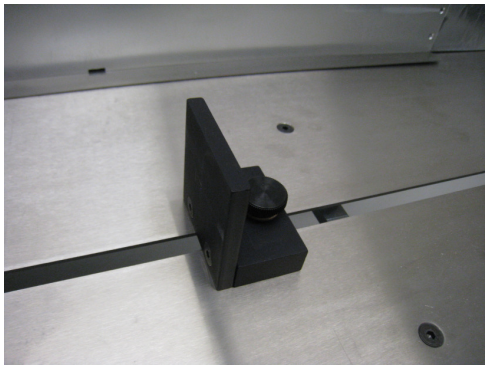
There are 2 different calipers the o-ring and the metal caliper. The metal caliper is designed to work better with heavy stock and the o-ring caliper is designed to work with lighter stocks. Use the o-ring caliper when running any multipart forms.



LOADING THE FEEDER

Take the paper and load the feed tray. **DO NOT OVER LOAD**. The weight and size for the stock you are running will determine how much can be loaded in the feed rails. The paper should sit snug between the caliper and back stop. Do not pinch the paper as it will affect the feeding consistency.





FEEDING NOTES

- When set properly, the feed is very efficient and flexible. When neglected it can become very frustrating to run even the simplest job. The adjustments previously discussed are very important.
- The AccuNumber is capable of running 20lb. single sheets, 4 part forms and 100 lb cover. It is also very capable of handling gloss, coated, and even laminated stocks. Its flexibility is directly related to the operator's experience.
- All carbonless sets are fed into the AccuNumber with as little air pressure as possible. Use just enough pressure to pull a single multi part form.

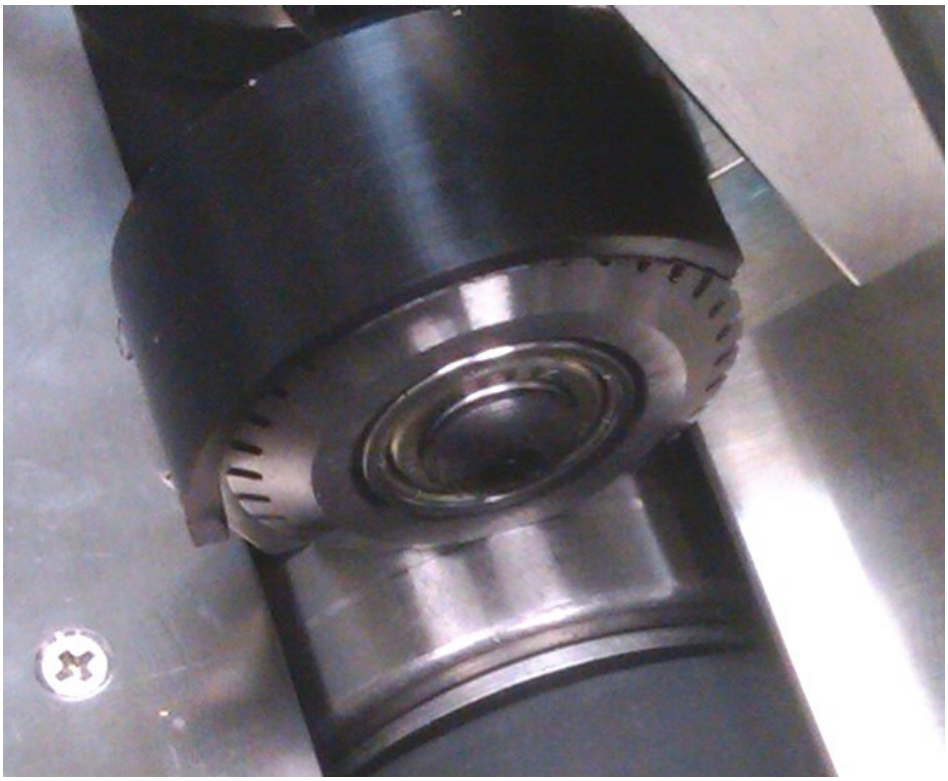
PERFORATING AND SCORING

Your AccuNumber will come equipped with 1 Perf and 1 Score assembly standard. Up to 4 perf or score assemblies can be used at the same time. Perf and Score assemblies require the corresponding Perf or Score lower assembly in order to function properly.

PERFORATING

To perforate on your AccuNumber you will lower the perf blade on the upper assembly down onto the lower perf assembly. The upper perf assembly will look similar to the score assembly in design, but will have a black protective shield covering the blade as illustrated below. The lower perf assembly is made of hardened steel. See the image in the Perorating and Scoring Section below for detail. From our quality control testing you will see a line dead center on the lower assembly and this is where you should lower the blade located on the upper assembly down onto the lower assembly.

Note: The lower perf assembly has a rubber core which is designed to have some give so that when the perf blade is set against the hardened steel lower you are not wearing away your perf blade. Because of this fact if you set the perf blade anywhere but center on the lower assembly the lower assembly will "lean" to the right or left and not give you the ideal perf quality or straightness.



Setting the Perf Blade

When locating the perf blade to where you would like to perf you must make sure that you can move the lower assembly and upper assembly to the location you want to perf. This may require moving the rubber gripper wheels or other upper and lower assemblies. The lower assemblies all have a single set screw that once broken loose will slide along the lower shaft. These are placed in line with each other for easier access. If you cannot see the lower assembly set screws rotate the lower shaft until they become accessible. The upper assemblies have one set screw on the upper shaft that when broken loose will allow you to slide or move them to the desired location.

Make sure that you have even distribution of gripper wheels across the width of your sheet when setting your perf up. While your sheet size may not require all 4 gripper wheels to securely guide the sheet you will want as even distribution and uniform pressure on all the gripper wheels.

With the corresponding T-Handle wrench provided with your machine lower the perf blade down until the blade just touches the hardened steel lower. Then turn the T-Handle ½ turn and hand screw the lock down to lock the blade into the down position. You are now ready to perf. Remember, depending on the thickness of stock you may need to adjust the perf blade up or down to fine tune your perforation.

Important: When you lower a perf or score assembly you are putting downward force on the lower shaft. By doing this you are changing the pressure on the rubber gripper wheels located on the shaft. It is very important that you re-check and tighten these wheels to where you can barely spin them upwards with your finger. It is imperative that these gripper wheels be set with even pressure or your perf will not come out straight as one side will inevitably be tighter and pull the sheet harder causing the perf to "turn" towards the end of the sheet.

SCORING

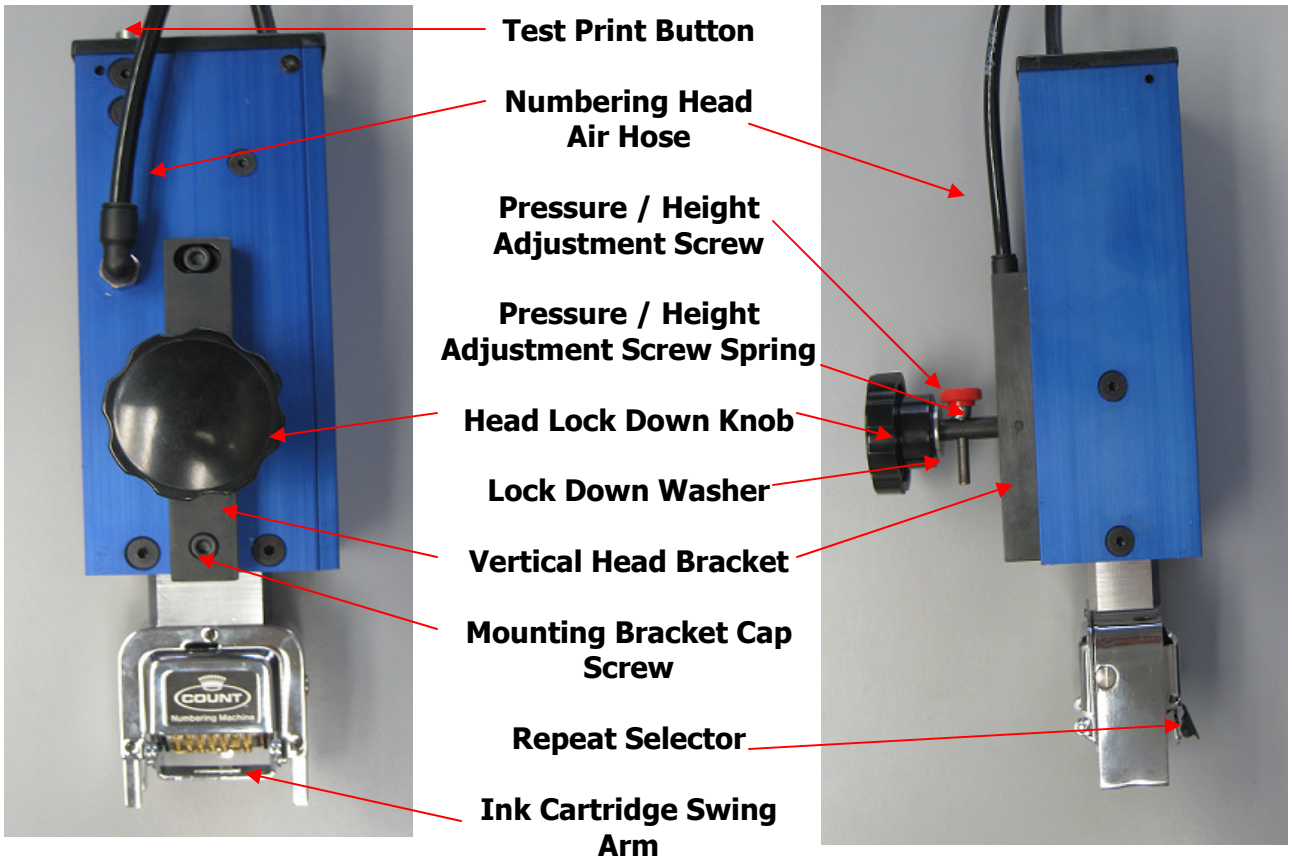
Just as in setting the perforation on your machine setting the score may require you to move around gripper wheels and other assemblies in order to set up your score in the proper location.

The score upper assembly will look similar to the perf upper assembly without a safety guard covering the blade. See the image in the Perorating and Scoring Section below for detail. The lower assembly for the score will be a solid dark colored lower with 3 grooves located towards the edges of the assembly. These groves correspond to the depth and the width of the score as well as the ability to score thicker stocks. A wider groove will allow for scoring of heavier stock or a deeper score than a thinner groove.

Setting the Score Blade

To set the score into position lock the upper score assembly into place with the single set screw into the groove on the upper shaft. Loosen the set screw on the lower assembly on the perf shaft and slide whichever groove your job requires under the score blade. Then lower the score blade down and into the lower score assembly groove. Take a strip of the stock you are scoring (approximately 1/2 to 1 inch) and press the advance button to advance this strip into the score assembly. This will self-center the bottom score assembly to the score blade. With the stock still in the score tighten the bottom assembly set screw and your score is set. Advance the remaining stock out and you are ready to score. Remember you may need to adjust the depth of the score blade to avoid slitting the sheet or scoring too lightly. This will depend on the stock and will require some fine tuning to achieve the score results you are looking for.

PNEUMATIC NUMBERING HEADS



Numbering Head - The Numbering Heads can be operated simultaneously and the wheelset can be rotated by hand in any direction.

Head Mounting Bracket - Mounts Head to machine and slides from side to side to position Head in desired position.

Mounting Bracket Cap Screw -Tightening this locks bracket onto position.

Vertical Head Bracket - Mounts to the side of the Numbering Head and positions the head into the head of the Mounting Bracket.

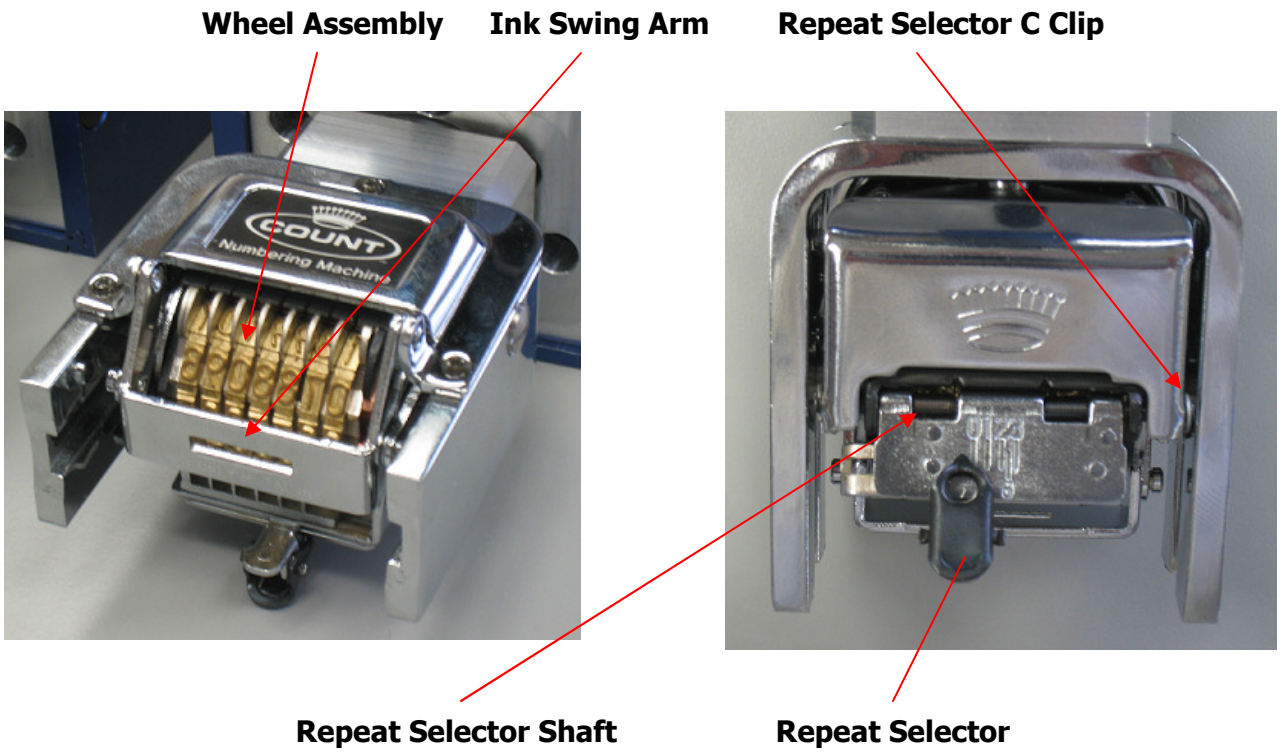
Pressure / Height Adjustment Screw - This screws into the Vertical Head Bracket Stem to adjust the pressure of the strike of the head.

Pressure / Height Adjust. Screw Spring - This spring is necessary to retain the setting of the screw.

Head Lock-Down Knob - Tightens the Head Assembly to the Mounting Bracket.

Lock-Down Knob Washer -Installs with the Lock-Down Knob. (Unidirectional)

Test Print Button – Manually fires the head and will keep in "Open" position as long as it is held down. Used for setting up numbers.



Pneumatic Head Parts Numbers:

Numbering Head - H-1125

Head Mounting Bracket - F-0466

Mounting Bracket Cap Screw - H-0225

Vertical Head Bracket - F-0500

Vertical Head Bracket Assy. - S-AAM-0800 Complete assembly includes: F-0500, H-0475, H-0835 & H-0575.

Pressure / Height Adjustment Screw - S-AAM-0620

Pressure / Height Adjust. Screw Spring - H-0575

Head Lock-Down Knob - H-0835

Lock-Down Knob Washer - H-0475

Power Cord - E-0975

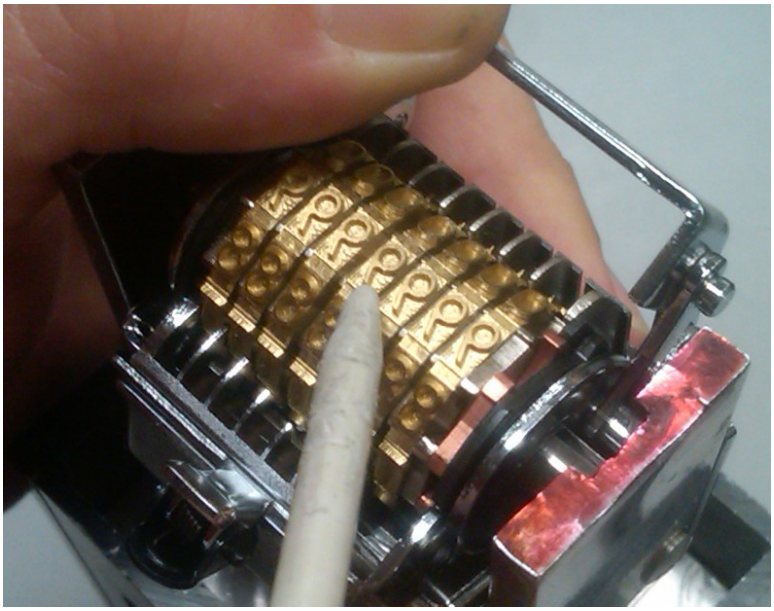
Repeat Selector - S-AAM-0870

Repeat Selector Shaft & C-Clip - H-1176

Wheel Assembly - H-1125

Swing Arm - S-UNS-0912

DEPRESSING A WHEEL

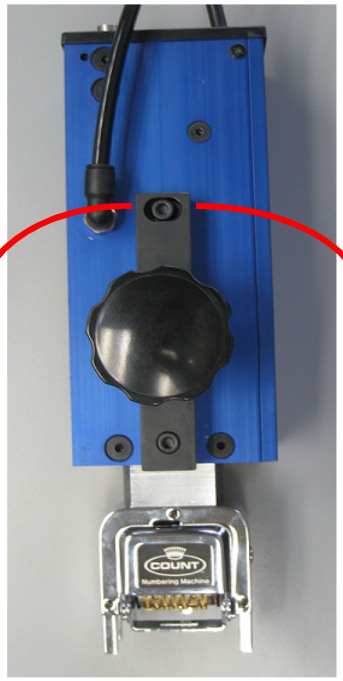


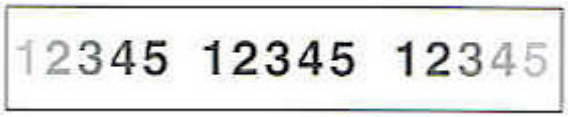
The standard Pneumatic Numbering Head is capable of recessing the first four (4) wheels so there is no image when striking. For example, to print the number 4750 instead of 0004750, you will need to depress the first three wheels. To do so, remove the Numbering Head from the Head Bracket and hold it upside down resting it on a flat surface. By doing this you will activate the Test Print button. This will keep the head in the "Open or Down" position for as long as the button is depressed. This will swing the Ink Cartridge away from the wheels or you can remove it altogether. Using the provided set-up tool rotate the 1st wheel until the 9 is in the up position. Then press forward slightly and down, you will feel the wheel depress below the level of the others. Do the same to the 2nd and 3rd wheel. Now you can print a 4 digit number. To return to position, simply rotate the wheel and it will pop up. This feature is also available on the custom Numbering Wheel with letters. Rotate the wheel until the blank position is up then press forward and down.

CHANGING DIRECTION OF THE HEAD

Changing the direction of the number is done very simply by firmly twisting the U-Frame and rotating the numbering wheels in either direction. This U-frame is held in place by an O-ring that when set will firmly hold the numbering head in the set position. The ideal way to change direction of the numbers is to twist the U-frame slightly past where you want the number to settle and then back a little to your ideal position. This will allow for the rubber O-ring tension to be released as after turning the U-frame the O-ring will settle back a little from where you set it.

ADJUSTING THE VERTICAL BRACKET





The top of the vertical bracket is slotted to allow for movement. The effect of this movement depends on the orientation of the head. To make an adjustment to the vertical bracket, simply loosen the top screw and slide toward the direction desired, then retighten the screw. It is not necessary to loosen the bottom screw. This will allow you to compensate for a number that is heavier on one side and lighter on the other.

ADJUSTING FOR A LEVEL IMPRESSION

To begin the leveling process, move your numbering head's to the desired lateral position on the bar. To do this you must first loosen the two cap screws on the mounting bracket. Then loosen the head lock down knob on the head to allow head to slide into the mounting bracket. When these are both released, the head and bracket will slide along the bar. By using your horizontal adjust screw (Red knob on the bottom side of the mounting bracket) you can adjust the angle of the number. Clockwise rotation will tilt the numbering head higher on the feed side. Turning Counterclockwise will tilt the numbering head higher on the exit side of the machine.

Your vertical adjust pressure / adjust screw (Red Knob on the head) will adjust the height of the numbering head from the strikeplate. Use this knob for fine adjustments to pressure as well as levelness prior to tightening lock down knob and mount bracket cap screws. You are now ready to number.

TIPS FOR LEVELING HEAD

Leveling the numbering head is the most critical part of the set up process. If the head is not level you will get a blurred or "Ghosted" Impression. This can also occur when the head is set to hit too lightly or too heavy. Never set pressure to favor the drop wheels, for this will depreciate the life of the numbering wheels.

The easiest way to check your impression is to use a 3 part carbonless set. Program the Auto Pro Plus to stamp in one location anywhere on the sheet. Run your test sheet through the machine and check impression for pressure as well as levelness. By level we mean a level impression. Where the impression of the 1st digit is the same pressure and impression as the 5th and 6th digit and the top of the digits is the same as the bottom you are level. We do not mean "plumb level," as using a small level will not help.

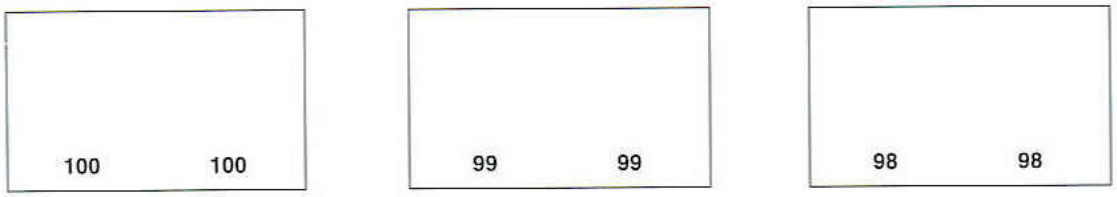
SETTING THE REPEAT SELECTOR

This allows you to select the number of times that the head will strike without advancing to the next number.

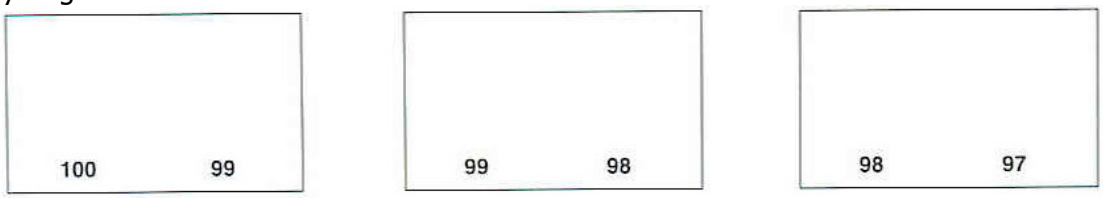
EXAMPLE: If you need to number a job which requires the same number in two (2) positions, slide the selector to "2." The head will now strike the same number twice.

NOTE: After selecting a repeat sequence, replace head and run a test sheet through the AccuNumber.

You should get this:



If you get this:



The number changes at the wrong strike, the wheel cam is not in sync with the paper. To remedy this, you must get the head to fire 1 time. This can be done by programming in a single strike and running a sheet through or run a sheet through with the existing program and quickly unplug the head after the first strike. Once you have achieved a single strike the cam is now in the correct changing sequence.

INK CARTRIDGE

The ink cartridge slides under the swing arm and locks into place. When installing a new ink cartridge, first remove the foam pad using an X-acto knife and place a small cut into the reservoir. This will supply ink to the foam through the action of the swing arm. Start with a small hole as it is easier to make the hole larger, but if you start with the hole too large you cannot control the flow of the ink.

NOTE: The flow of ink can be sensitive to temperature. On a cold day the ink will be thicker and not flow easily, whereas on a hot day the ink will be thin and flows faster. Also, be sure to shake cartridge well.

We also suggest that when opening a new cartridge to use the piece of tape which holds the cover on to wrap around the cartridge about 1/4 of an inch. This will help reduce excess ink on the numbering head especially when only using 3 or 4 digits where the foam would have a tendency to lift on the opposite side.

ADJUSTING THE AIR PRESSURE:

The air pressure knob has been pre-set to approximately 45-50 psi from the factory quality control process. If the knob has been turned and the psi is reading much higher or lower we suggest setting the air to 45 psi and making small adjustments up or down from there to achieve the number you desire. Generally, you will not have to adjust more than 5 psi in either direction.

NOTE: Make adjustments to the pressure of the number strike by adjusting the Vertical Adjustment Screw before adjusting the PSI. By using too high PSI you will be risking prematurely damaging your wheelset.

PERFORATING AND SCORING ASSEMBLIES

For removing and old blade and attaching a new blade to the pressure adjust mounting bracket, remove the (1) button head cap screw. **BE SURE TO TIGHTEN THE SET SCREW SECURELY TO THE BAR.** Once you have the upper and lower perf assemblies in place, you can tighten the half dog screw.

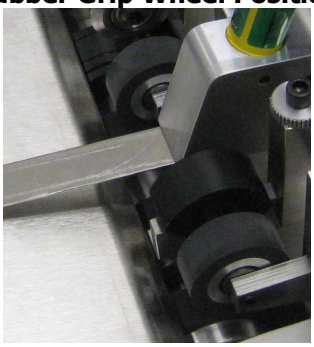
Complete: #S-APP-0129

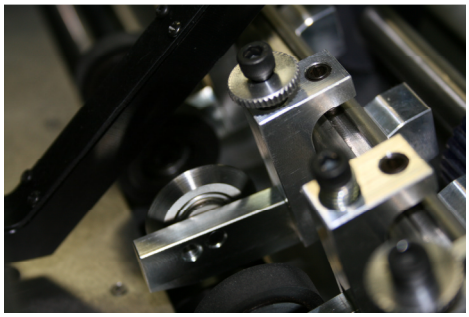
Complete: #S-APP-0139

Part No.	Description
H-0215	Screw-10-32x1/2" button head socket
H-0250	Screw-10-32x 1 1/2"socket cap
H-0270	Screw-1/4"-20x1/4" socket set
H-0275	Screw-1/4-20x1/4" socket set
H-0278	Screw-1/4-20x1/4" socket half dog
H-0456	Washer – flat .20
H-0580	Compression spring 1 ½"
F-0403	315-s40 silicone gripper wheel
F-0425	Forward roller mount ap-app
F-0430	Forward roller (rubber only)
S-APP-0116	Roller wheel assembly
S-APP-0131	Score blade assembly
S-APP-0141	Perf blade assembly
S-APP-0132	Lower score hub assy.Hub ap
S-APP-0142	Lower perf assy. Hub app
S-APP-0622	Bracket-perf/score pres,adj. assy

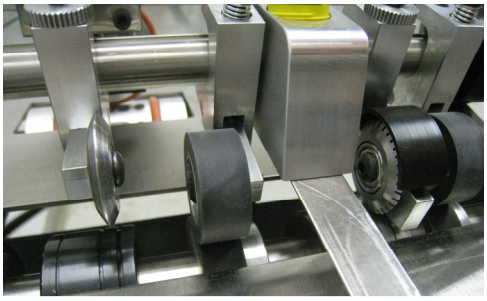
GRIPPER WHEEL PERF/SCORE MOUNTING

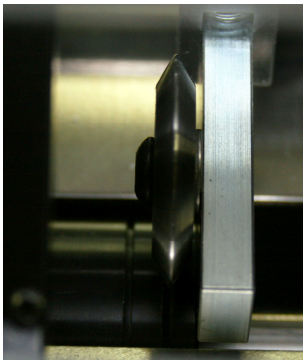
Rubber Grip Wheel Position





Score Wheel

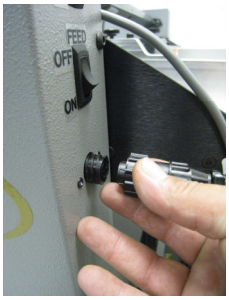




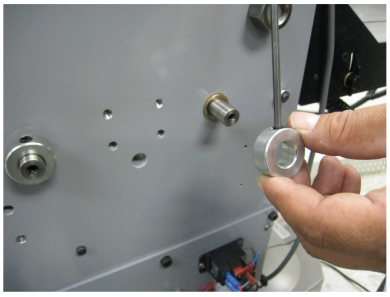
Position your score blade as desired. Scores should be made so that the blade runs on the side of the sheet that will be on the inside of the finished fold. Scores may be made on the AccuNumber in three different ways using the different grooves on the lower score assembly.

REMOVING THE PERF SHAFT

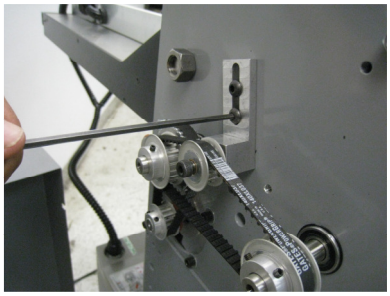
Make sure all the upper perf, score, and roller assemblies are lifted. Loosen the brass tip set screws on the lower assemblies. Loosen the operator side cover. Disconnect the pulse feed sensor.

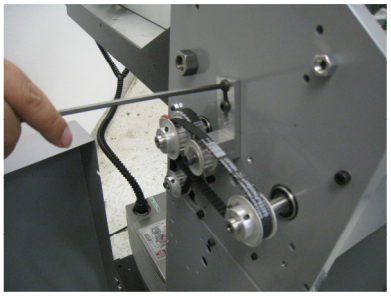


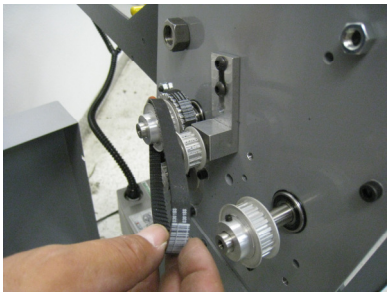
Remove the cover and rest it on the ground. Locate and remove the perf shaft lock collar.

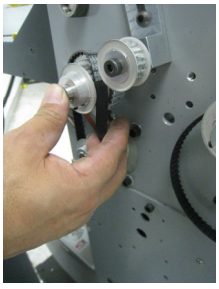


Next, remove the non-operator side cover. Loosen the belt tensioner idler pulley bracket. You do not need to remove these as loosening them will allow enough movement to free the belt. Remove the belt. Walk the motor belt off the inner pulley. If it is too difficult to walk off you could loosen the motor and pull it up as it is mounted in slots.

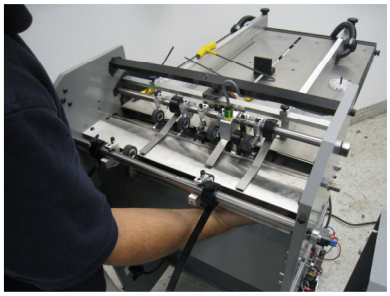


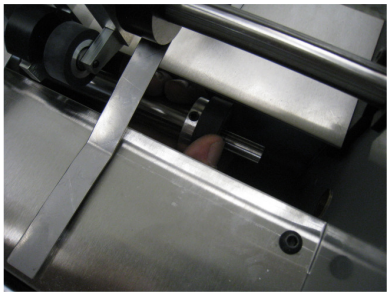


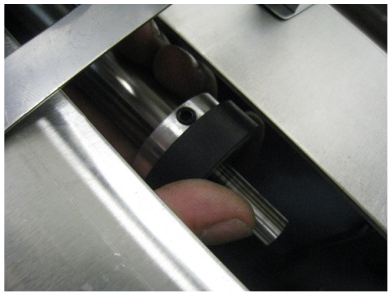




Reach in under the exit side of the machine with your right hand and slide the shaft out of the left side enough to slide the assemblies on and off the shaft.

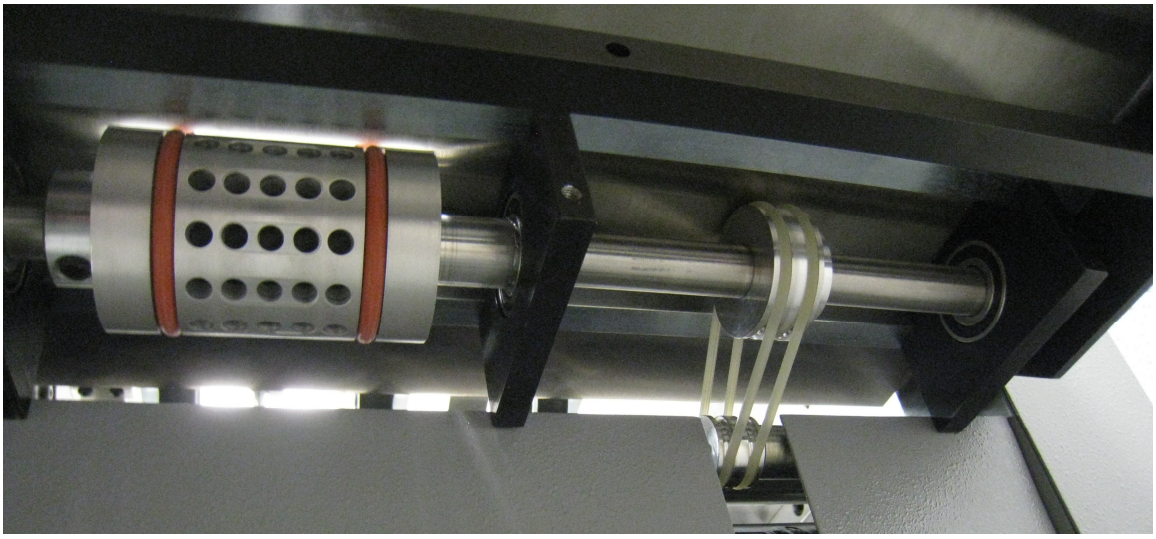






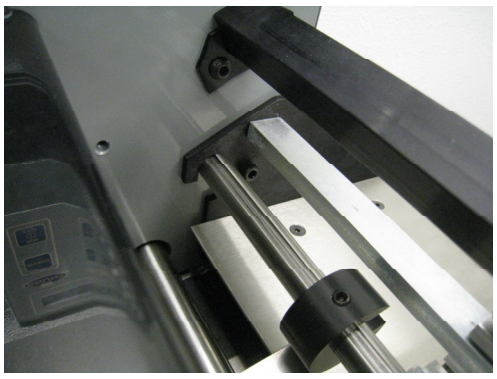
Reverse procedure to install components back on in the order needed.

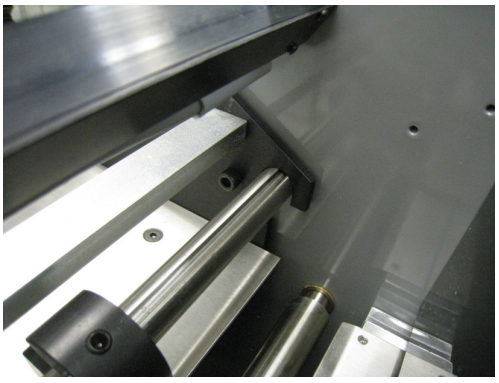
REPLACING THE VACUUM RUBBER O-RINGS



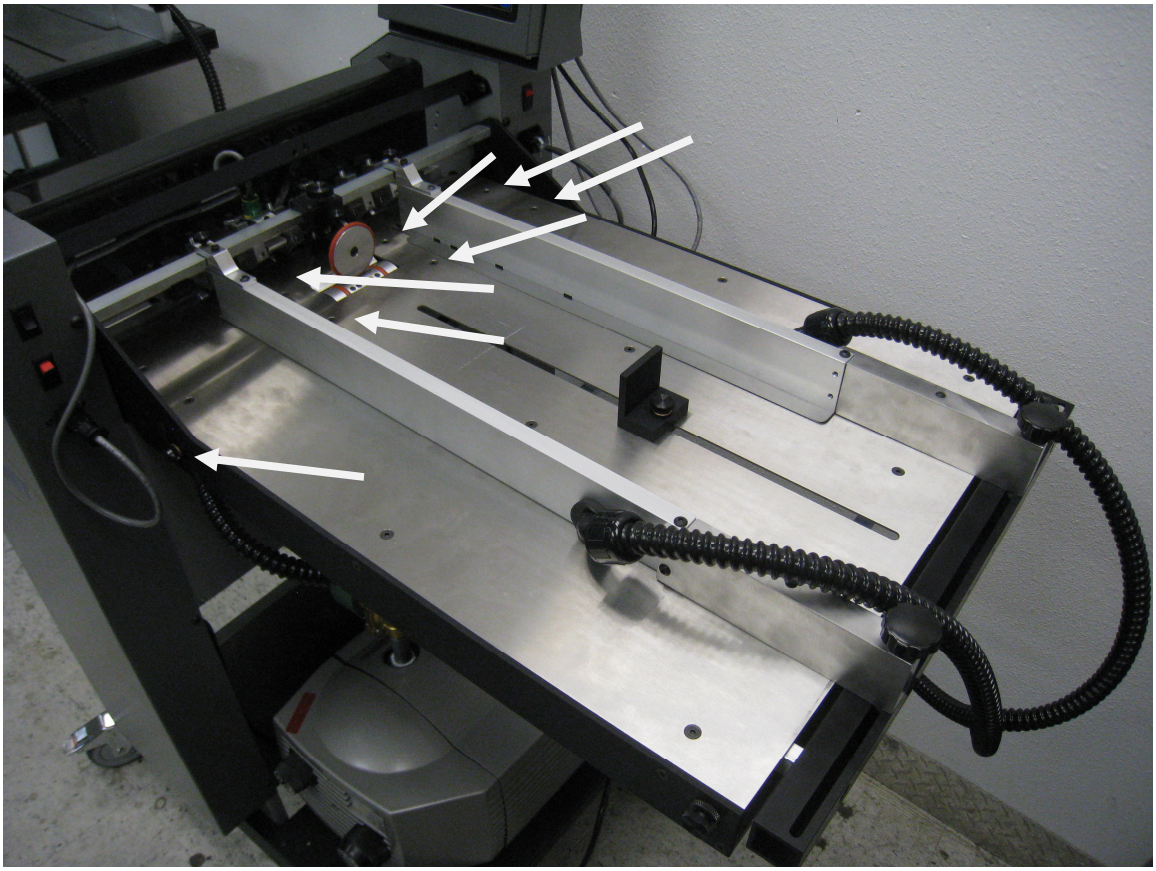
There are 2 different o-rings on the feed table. The Drive o-rings and the vacuum wheel o-rings. To replace the drive o-rings remove the 2 screws that mount the outside bearing block from the top of the machine. Then slide the bearing block off the shaft. Loosen the o-ring put the new o-ring drive pulleys on the shaft and roll them over the o-ring pulley and over the machine drive pulley.

To replace the vacuum wheel drive o-rings you must remove the table. To remove the feed table you must take off all of the pressure adjustment brackets including any perf, score assemblies, pulse sensor assemblies, and paper hold downs. Disconnect the pumps lines from the pump. Disconnect the o-ring drive belts from the drive assembly of the machine. Loosen and remove the feed table mount screws shown below.





Lift the feed table off and set it on a table. Remove the six flat head screws on the front of the table shown below.



These are the bearing block screws. Also remove the vacuum pickup point adjustment knob from the operator side of the feed table. Now all the lower assemblies will drop to the table. Cut the old o-rings off the vacuum wheel roll the new o-rings on the vacuum wheel and reinstall in the reverse order.

TROUBLE SHOOTING

- **POWER DOES NOT TURN ON**

    1. Check fuse on side cover.
    2. Check outlet for power.

- **FEED TABLE NOT FEEDING CORRECTLY**

    1. Check Height Caliper Adjustment.
    2. Change Caliper (O-Ring or Metal).
    3. Check Pick Up Point location.
    4. Adjust Suction levels.
    5. Adjust Blow levels.
    6. Remove some stock from pile to lessen weight.
    7. Check pulse sensor alignment.

- **SHEETS NOT FEEDING STRAIGHT**

    1. Unequal feed wheel pressure.
    2. Align feed rails "check for squareness". This can be checked by the lead edge of the paper feeding into the machine should line up with the front edge of the feed plate.
    3. Not enough pressure on forwarding rollers.
    4. Clean ALL rubber rollers.

- **PERF IS NOT STRAIGHT**

    1. Check for equal pressure on all grip wheels and that none are hanging up.
    2. Recheck all steps under (SHEET NOT FEEDING STRAIGHT)

- **PERFORATION IS NOT CLEAN OR CUTS SHEETS**

    1. Not enough pressure on perf wheel.
    2. Perf blade is worn.