Perfmaster Air V3

12-2015

Serial Number _____

Date _____

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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 Perfmaster Air V2. 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: PERFMASTER AIR V2.....350 lbs
Overall Dimensions: .....32"Lx27"Wx26"D
Boxed Dimensions: .....48"Lx48"Wx52"H
Min. Sheet Size: .....3"x5-7/8"
Max. Sheet Size: .....18"x20"

NOTE: The Perfmaster Air V2 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 Perfmaster Air V2 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 score blades, perf blades, and rubber rollers.
- Keep cords clear of moving parts.

AFTER USE:

- Turn off machine at the side panel, 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

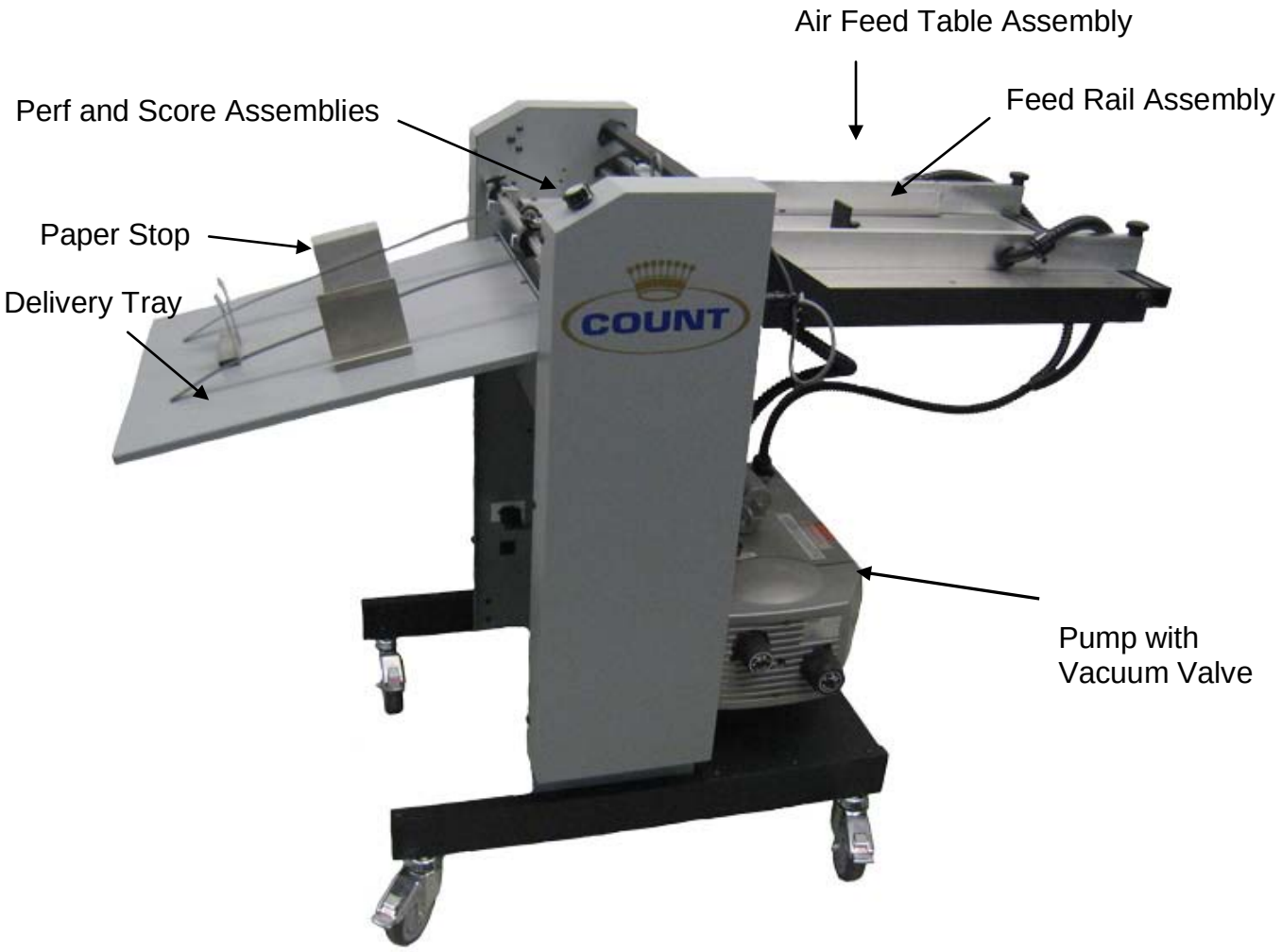
The PERFMASTER AIR V2 is a precision machine. It is very important to keep it free of excessive dust, dirt and foreign matter. We recommend that you keep the machine **covered** when not in use.

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 do keep your Perfmaster Air V2 clean and in top condition, it will give you years of service.

COMPONENT IDENTIFICATION



REFERENCES

PERFMASTER AIR V2

Setting up your Perfmaster Air V2

This machine is 90% 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 Perfmaster Air V2 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.

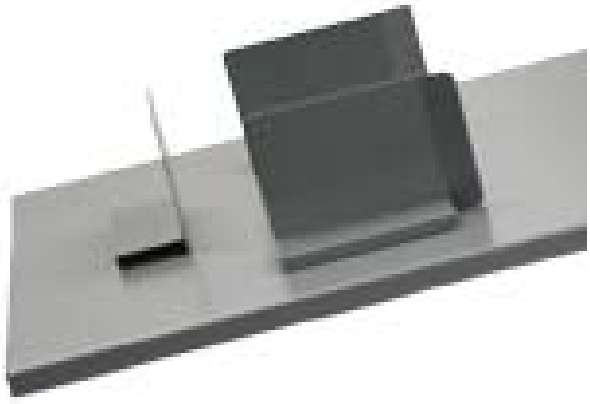
Upper Position shown below

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 teh right and left paper stop and should be positioned as shown below. The 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.



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 Perfmaster Air V2 and it is very important that you know and understand what each of them does.

MAIN POWER

On the Operator side cover at the bottom on the right side is the main power switch. This is the on and off power for the machine. Also there is a 3A fuse.

SPEED CONTROL

Speed control is done with a knob on the top of operator side cover. This is a variable speed machine. To start the motor turn the knob clockwise until you reach the desired speed. To stop the motor on the machine turn the speed pot counter clockwise.

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.

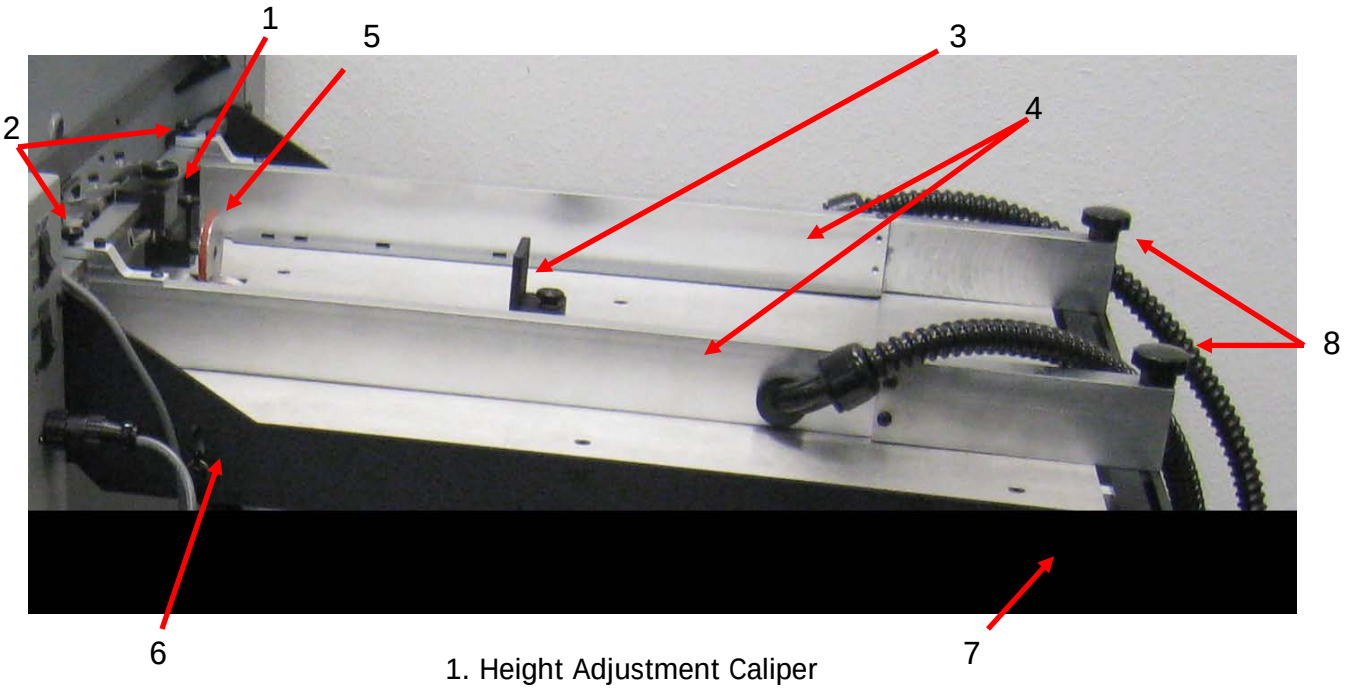
PULSED FEED CONTROLS

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 use the FEED switch just below the pump on/off switch. 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.

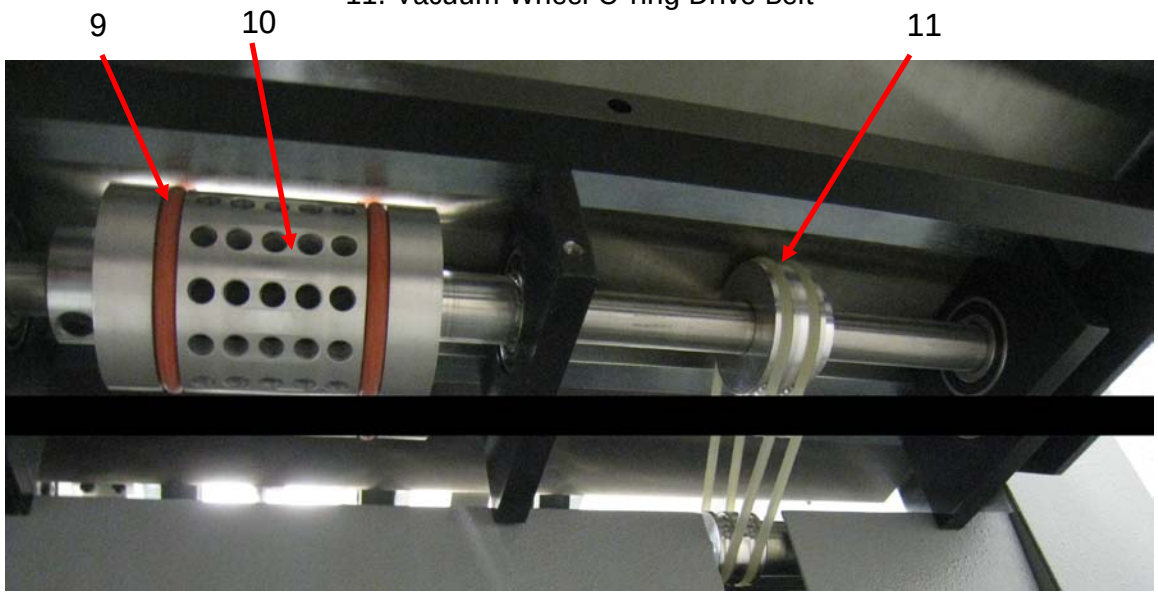
Make sure nothing is below the proximity sensor and it is positioned between the sheet metal and perf shaft. **If this position is not correct the pulse feed will not work and the suction valve will stay off.**

Air Valve Assembly

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

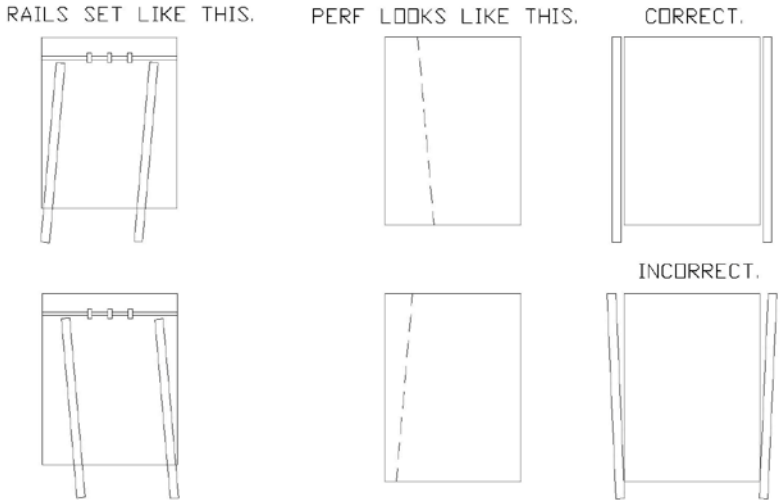


ADJUSTING THE FEED RAILS

The feed rails on your PERFMASTER AIR V2 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 then bring your right rail in and tighten, looking down 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 PERFMASTER AIR V2 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.

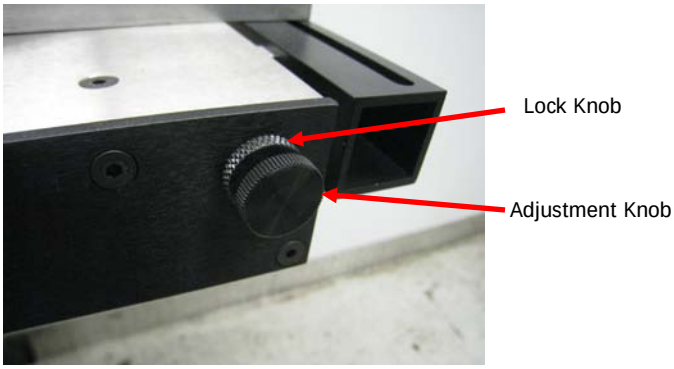
EXAMPLE:



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.

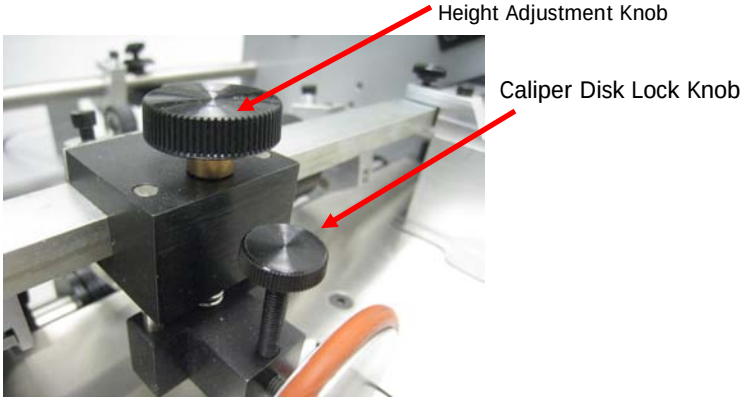


SETTING THE AUTOMATIC FEEDER

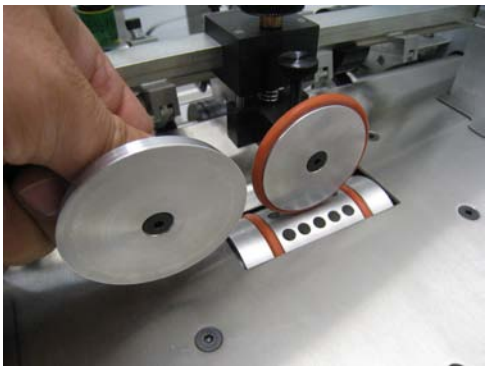
For efficient Auto-feeding, the setting of the caliper to the vacuum wheel is very important.
Use a piece of the stock to be run as a “feeler gauge”. Place a sheet under the feed wheels, turn the feed wheel adjustment screw (Counterclockwise to raise, clockwise to lower) so that the paper can slip freely 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 sheets and prevents the feeding of double sheets. It is very important that this caliper is 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.

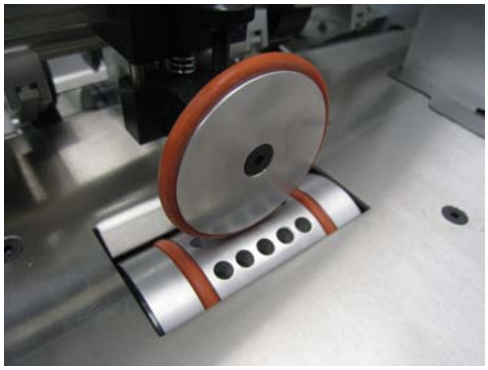


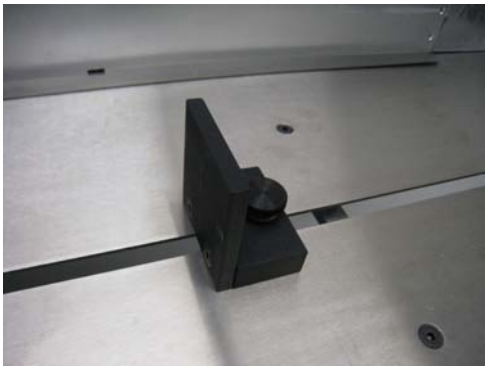
There are 2 different calipers the o-ring and the metal caliper. The metal caliper is designed to work better with heavy stock and the oring caliper is designed to work with lighter stocks. Use the oring caliper when running any multipart forms.



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.

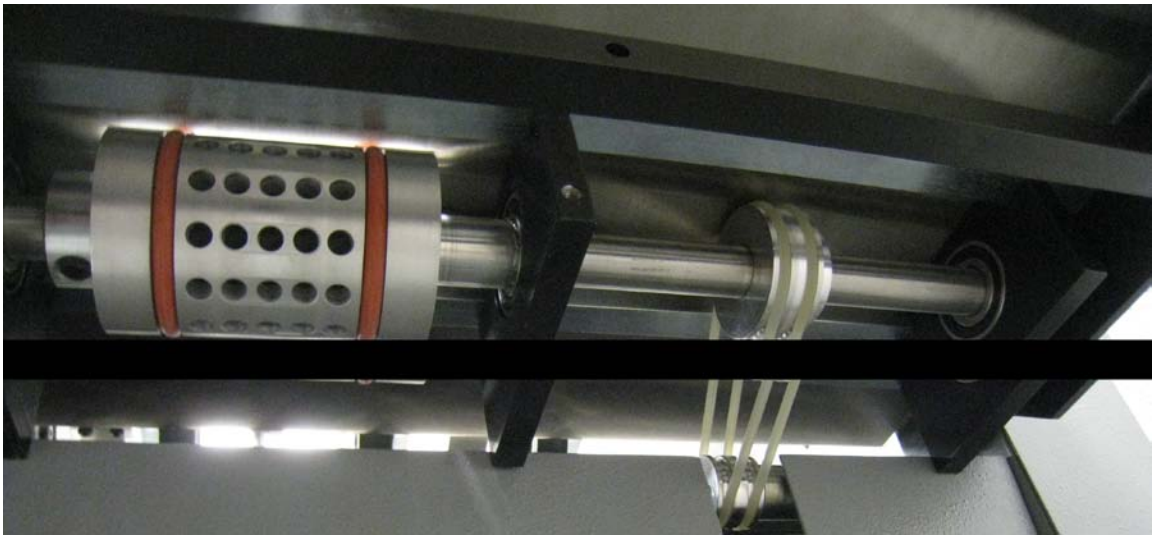




FEEDING NOTES

- 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 Perfmaster Air V2 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 Perfmaster Air V2 with as little air pressure as possible. Use just enough pressure to pull a single multi part form.

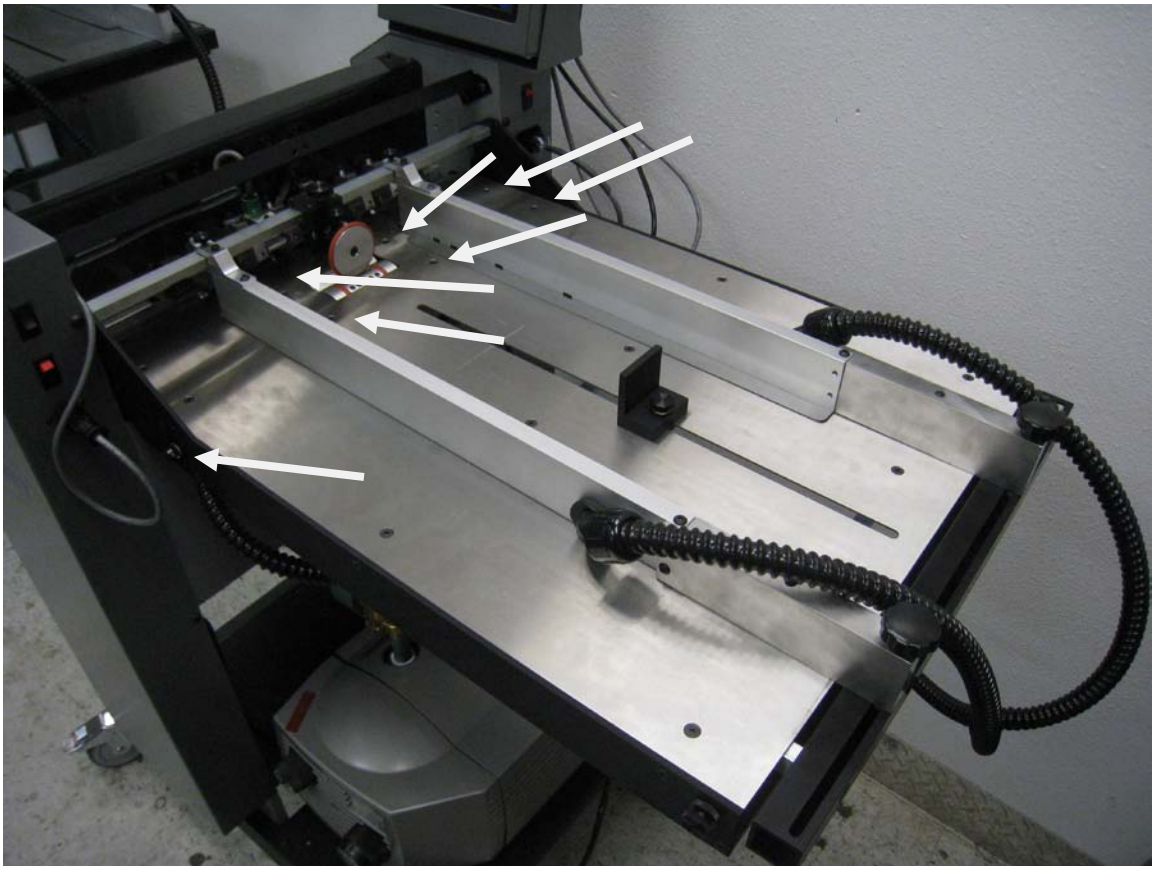
REPLACING THE VACUUM RUBBER ORINGS



There are 2 different orings on the feed table. The Drive orings and the vacuum wheel orings. to replace the drive orings remove the 2 screws the mount the outside bearing block from the top of the machine. then slide the bearing block off the shaft. loosen the oring put the new oring drive pulleys on the shaft and roll them over the oring pulley and over teh machein drive pulley.

To replace the vacuum wheel drive orings 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 oring 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 orings off the vacuum wheel roll the new orings on the vacuum wheel and reinstall in the reverse order.

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.

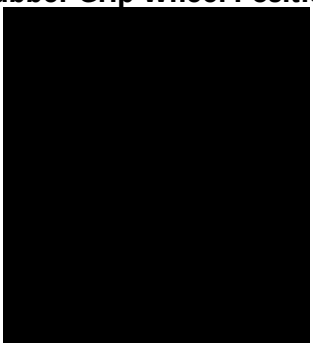
Complete: #S-APP-0129

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

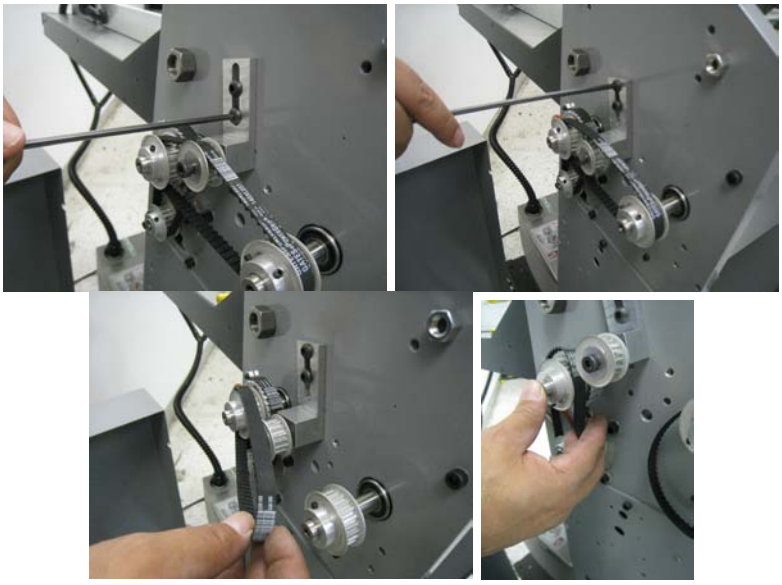
Position your score blade as desired. Scores should be made so that the blade runs on the side of the sheet that will be on the inside of the finished fold. Scores may be made on the EZ CREASER in three different ways using the different grooves on the lower score assembly.

REMOVING THE PERF SHAFT

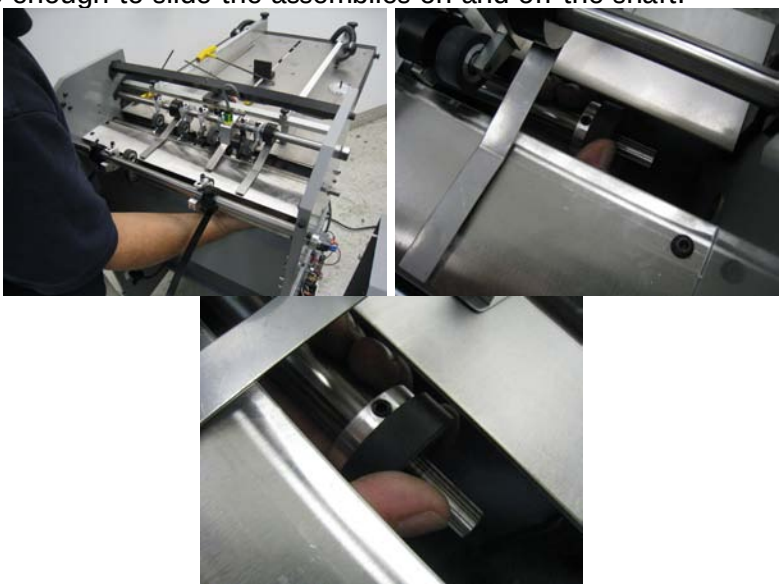
Make sure all the upper perf, score, and roller assemblies are lifted. Loosen the brass tip set screws on the lower assemblies. Loosen the operator side cover. Disconnect the pulse feed sensor.

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.

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 Caliper Adjustment.
    2. Feed wheels do not have equal pressure on them, check adjustment.
    3. 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.

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