



Vicon Machinery LLC
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OPERATION & INSTRUCTION MANUAL

PITTSBURGH SEAM CLOSER

MODEL V-PSC-V516

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Instructions For Vicon Seam Closer

The Vicon seam closer has unique features that enable fast and productive seam closing. The machine's design allows the Pittsburgh seam to be tuned in either direction. It is not necessary to seam with the edge turned the same way each time. The Seamer will also seam parts of any length from 12 to 60 inches. The capacity is 26 through 16 gauge galvanized steel. It will also seam 18 gauge stainless steel.

When installing the machine, it is necessary to make sure that the machine platform that supports the duct is not setting below the floor level. This will put the duct in a bind when attempting to seam it. The floor surface can be slightly lower than the platform since the clamps will pull the duct into the "V" guides. If the platform is too high it will be necessary for the duct to be pressed into the "V" blocks before the clamps are operated. **NOTE!** The clamps will automatically center the duct in the "V" guides as long as the corner of the duct is within the groove of the "v" seaming wheel.

To seam duct it is necessary to pre-assemble the duct and close a small portion of the seam at each end of the duct. For heavier gauge duct it may be necessary to close a small portion in the center of the duct. The amount closed on the lower end must be enough to clear the upper, flat forming wheel. The upper end will close as far as the lower seaming roll will travel. Flanged duct requires that the wheel stop just short of the flange.

Operation

Turn the hydraulic power unit on.

1. Loosen the hand knobs and set the upper clamp to the height for the ducting to be seamed. Leave about 1/4" clearance from the end of the duct to the cross support plate.
2. Tighten the hand knobs.
3. Place the duct in the "V" guides making sure the duct is centered.
4. Set the control switch to manual.
5. Press the clamp button and hold it until the clamps are fully in position.
6. To manually seam the Pittsburgh, press and hold the cycle button until the carriage goes up and then down at which time it will stop and the clamps will open. It is recommended to start this way to get comfortable with the operation of the machine. **CAUTION!** If the duct is not centered, the clamps will close on the seam in an offset position and will miss-form the duct. By looking at the "V" guides before starting the cycle, this problem can be averted by unclamping the duct and realigning it before continuing with the seaming process. It is best to use the manual process for extra large ducts as they are more difficult to handle.

7. On smaller ducts it is easier to align them properly and it is recommended to run them in the automatic mode. The clamps will close and the seaming process will start automatically along with the clamps opening at the completion of the cycle. It is only necessary to place the duct in position, turn the switch to automatic and press the start button.

Maintenance for the Vicon Seamer

1. The seaming rolls are chrome plated, however if galvanize build-up should occur, it will be necessary to remove the zinc. This can be done by using a file. The rolls are hardened and the file will slide across areas that have no zinc build up. **CAUTION!** Do not use sand paper, emery cloth or grinding wheels as this will eventually remove the chrome plating and damage the wheels. Once damaged, the wheels will quickly build up with galvanize and render the machine unworkable. Some galvanized metals flake more aggressively which can be overcome by using a light oil on the rolls. This generally eliminates build-up.
2. The clamp pads are removable for cleaning also. If sealant is used on the Pittsburg Lock, overflow will get on the pads and must be kept to a minimum. Turn the machine to manual and raise the clamps. This will expose the clamps so the hinge pin can be easily accessed and taken out so the pads can be removed. A light coat of oil will make it easier to remove the duct sealant.
3. Chain oil should be applied to the carriage drive chain every 30 days.
4. The hydraulic oil should be checked every 30 days. **CAUTION!** If hydraulic oil should appear anywhere around the machine, turn the machine off and inspect for oil leaks. The tank should be full to the temperature gauge level so that the operating temperature can be monitored. The temperature should be less than 120 degrees. If it ever gets to 150 degrees, shut the unit off and trouble shoot the hydraulic system. The oil should be changed once a year. Use ISO 32 or equivalent.
5. The seaming rolls are mounted on self aligning bearings. There are grease fittings at both ends of each shaft. These should be greased often with small amounts. It is important to keep grease present especially when seaming duct with sealant present. The sealant has a way of getting into everything it comes into contact with. The grease will keep it from sticking to the bearings along with extending the life of the bearing.
6. The seaming roll carriage assembly is positioned in the center of the “V” guides. If the rolls get out of center, they must either be repositioned, or the “V” guides must be repositioned to maintain the centered relationship. Should this condition occur, it is recommended that the factory be contacted.

- 7. The 90 degree V roll is set slightly into an interference relationship with the duct. By putting a straight edge along each side of the roll and looking at the clearance between the straight edge and the “V” plates, you will see about a .050” gap. If the roll surfaces are less than that or even, the seam will not close and will have wrinkles. The rolls can be moved in or out by setting the adjustment screws on the rear of the carriage track mounts. The mount plates must be loosened prior to adjusting the screws. Each full turn of the adjustment screw will move the track 1/16”. A half turn will move the track 1/32”. All screws must be reset to keep from putting the tracks in a bind.**

- 8. Check for any fasteners that may have come loose. If any fasteners come loose repeatedly, advise the factory as this may be a sign of improper adjustments or use of the machine that may end up causing unnecessary damage to the machine.**