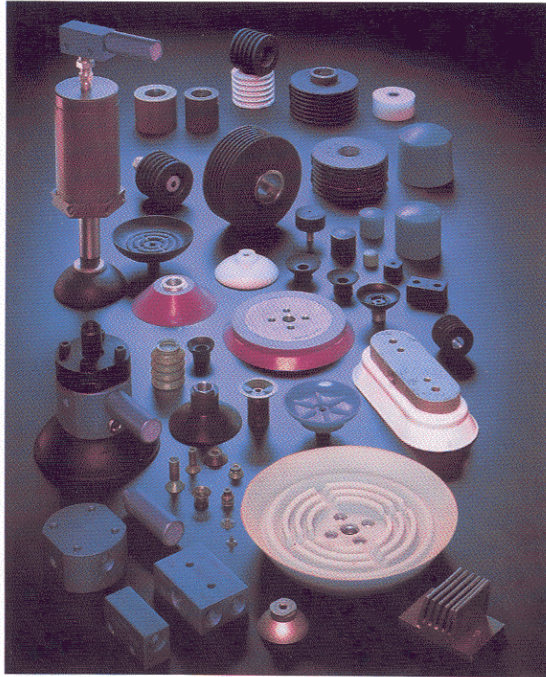


STILSON

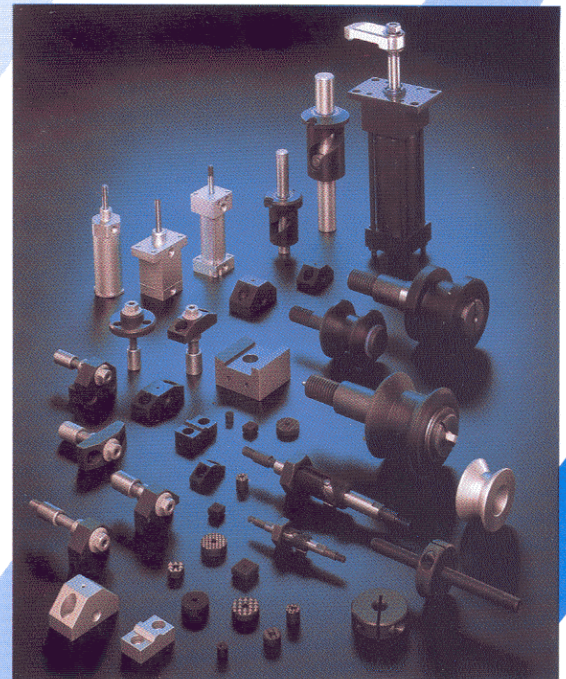
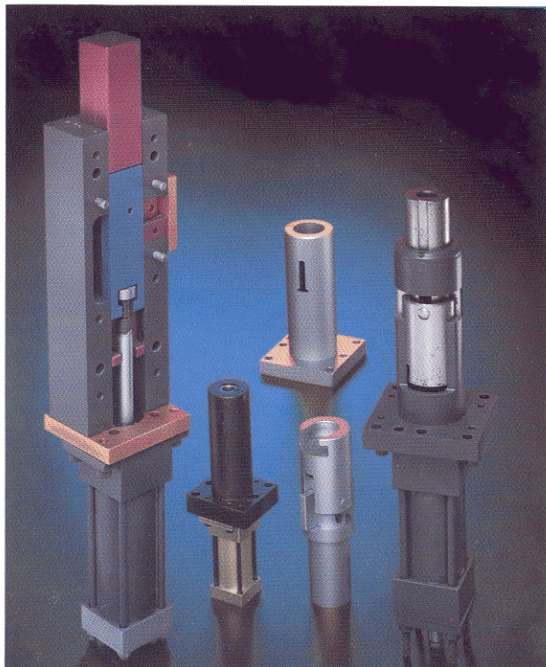
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Stilson Vac-Set Vacuum Operated Cylinder



Vac-Set is a vacuum operated spring return cylinder assembly. When used with a vacuum cup and a Stilson Venturi that converts shop air to vacuum (or any other vacuum source), it provides positive handling and holding of non-porous workpieces.

The Stilson Vac-Set is available in two models, each with six different strokes. The single-acting model is ideal for applications where sufficient clearance for loading and unloading exists.

Once the required vacuum level is reached and the cup is holding the workpiece, the vacuum then draws the cylinder up, compressing the return spring.

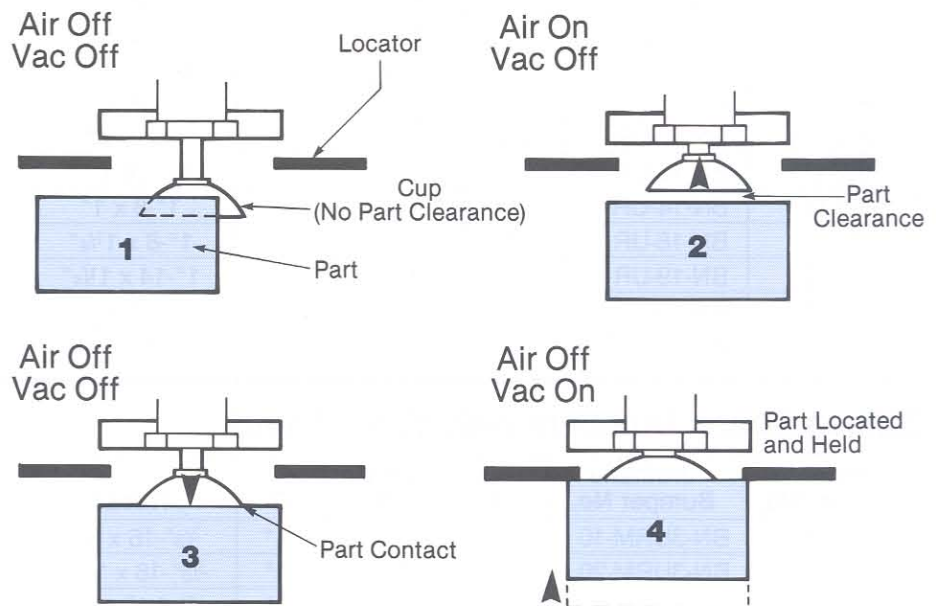
Double-acting models employ vacuum and spring in the same way; however, air is used to retract and hold the cup to provide clearance for part loading.

Vac-Sets can be used with vacuum cups from two to four inches in diameter, offering a wide range of lifting capacities.

Double Acting Model

Double-acting models of Stilson Vac-Set units are provided with an air inlet for holding the cup in a retracted position for part loading.

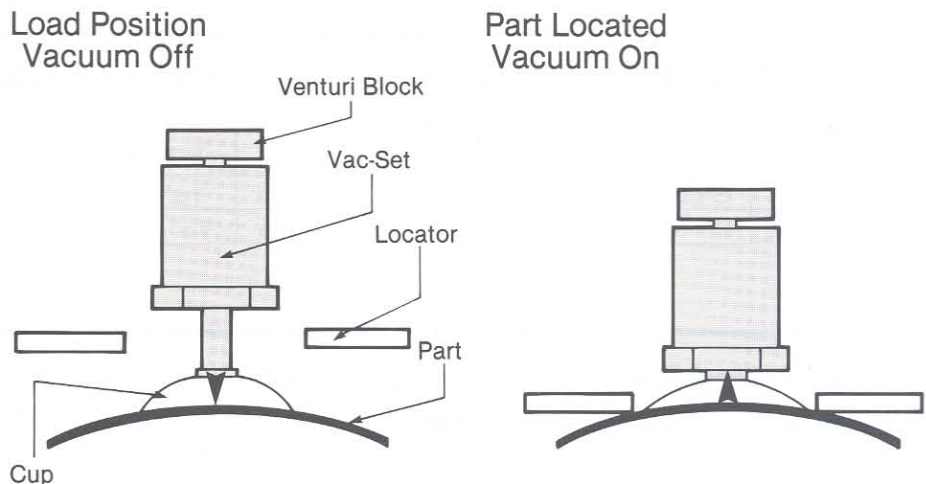
Sequence sketches show how Stilson double-acting Vac-Set units provide right now response to various combinations of air and vacuum.



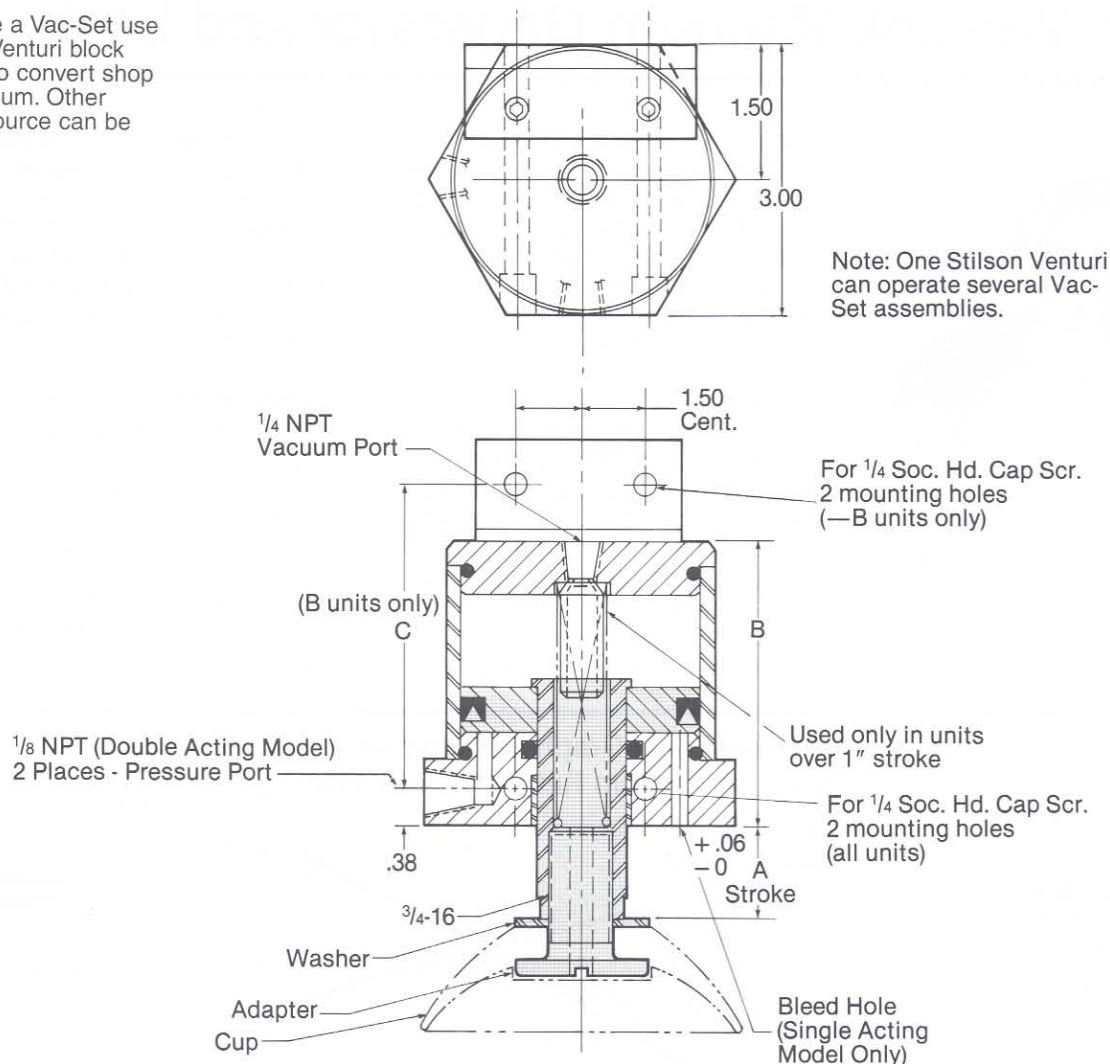
Single Acting Model

Shown with Vacuum On

Simplified construction of the Stilson Vac-Set features aluminum end caps, polished steel cylinder and steel piston rod. Single-acting Vac-Set, singly or in combination, will provide positive holding and positioning in normally inaccessible areas. Choose the single-acting model where clearance is allowed for part loading.



To operate a Vac-Set use a Stilson Venturi block VB 5625 to convert shop air to vacuum. Other vacuum source can be used.



Note: One Stilson Venturi can operate several Vac-Set assemblies.

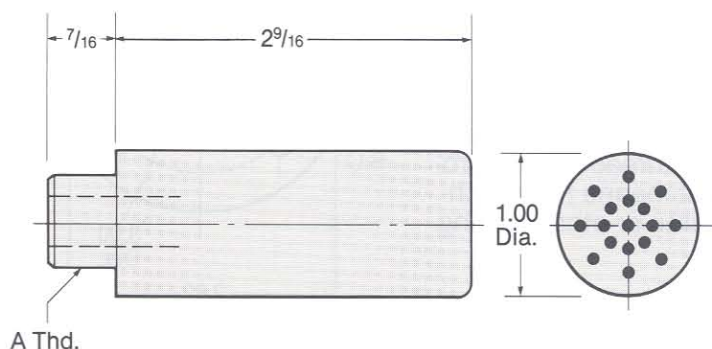
Stroke A	Part Number Side Mount		Part Number Bracket Mount		B	C
	Single Acting	Double Acting	Single Acting	Double Acting		
1	VS-82751	VS-82751-10	VS-82751-B	VS-82751-10-B	3.25	3.5
2	VS-82752	VS-82752-10	VS-82752-B	VS-82752-10-B	4.75	5.0
3	VS-82753	VS-82753-10	VS-82753-B	VS-82753-10-B	5.75	6.0
4	VS-82754	VS-82754-10	VS-82754-B	VS-82754-10-B	6.75	7.0
5	VS-82755	VS-82755-10	VS-82755-B	VS-82755-10-B	7.75	8.0
6	VS-82756	VS-82756-10	VS-82756-B	VS-82756-10-B	8.75	9.0

Caution
Maximum lift capacity for a single acting Vac-Set is 40 pounds at 21 inches of mercury.

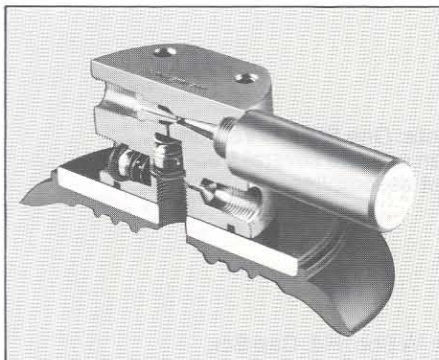
Stilson Air Exhaust Silencer

Designed for use with Stilson Venturis, these silencers are available in 2 sizes and are used to silence escaping air. They comply completely with the Walsh-Healy Act for Occupational Noise Exposure.

Part No.	"A"
SV-5738	5/8-18
SV-5837	1/2 NPT



Stilson Vac-Lok Vacuum Generator and Lock



The Vac-Lok Venturi provides added safety for vacuum material handling systems. Once it creates a vacuum, it automatically seals and holds until you release it. It's a necessity on applications where

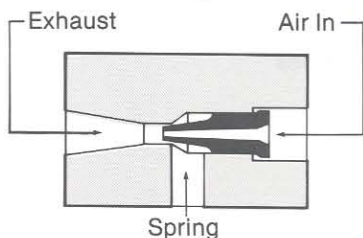
air supply lines must be disconnected for long periods of time or have the potential of being accidentally cut. The result is less damage to workpieces.

Vac-Lok operates on the same principle as a standard Venturi with the addition of two ball check valves. Pressurized air is introduced through the air-in port. It passes through a small opening, drawing air up through the vacuum port, thereby creating the vacuum for lifting and holding parts. This flow of air through the vacuum port lifts the ball check off its seat until the required vacuum is reached. At this time the spring loaded ball seats and

seals the vacuum. The pressurized air flow is discharged through the exhaust port which is threaded to accept a Stilson silencer. An additional port is provided for gaging and sensing the amount of vacuum on applications where cups must hold for long periods of time without a constant air supply, or as an extra vacuum port for operating other cups.

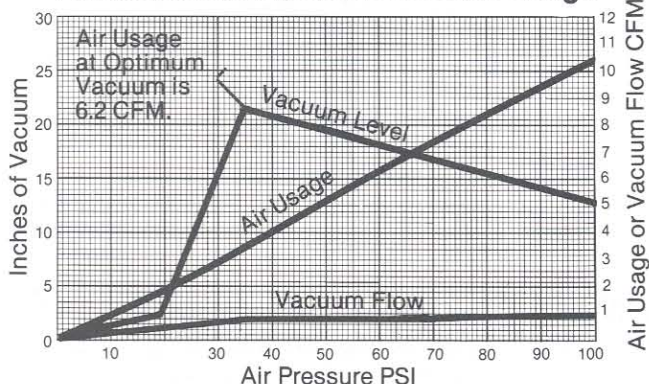
The second ball check is located in the vacuum release port. The vacuum may be released by two methods: Introducing air into the vacuum release port, or a manual release button. Both methods open the check valve.

Venturi Principle

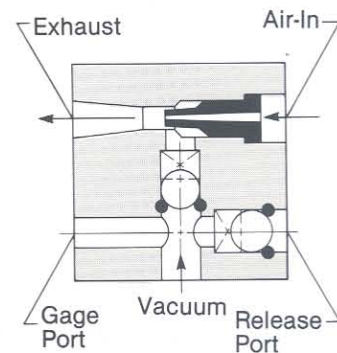


Venturi blocks convert "shop air" to vacuum by passing compressed air through a small opening as indicated by the above sketch.

Operational Graph Showing Air Pressure/Vacuum Ratio and Air Usage



Vac-Lok

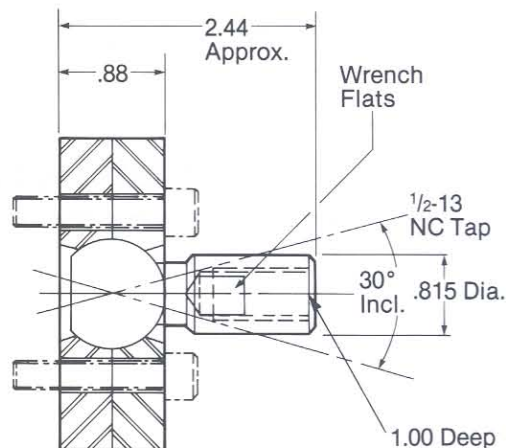
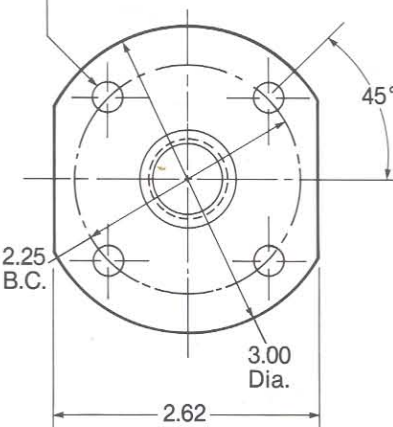


Stilson Ball Swivel Assembly

Part No. SA-5895

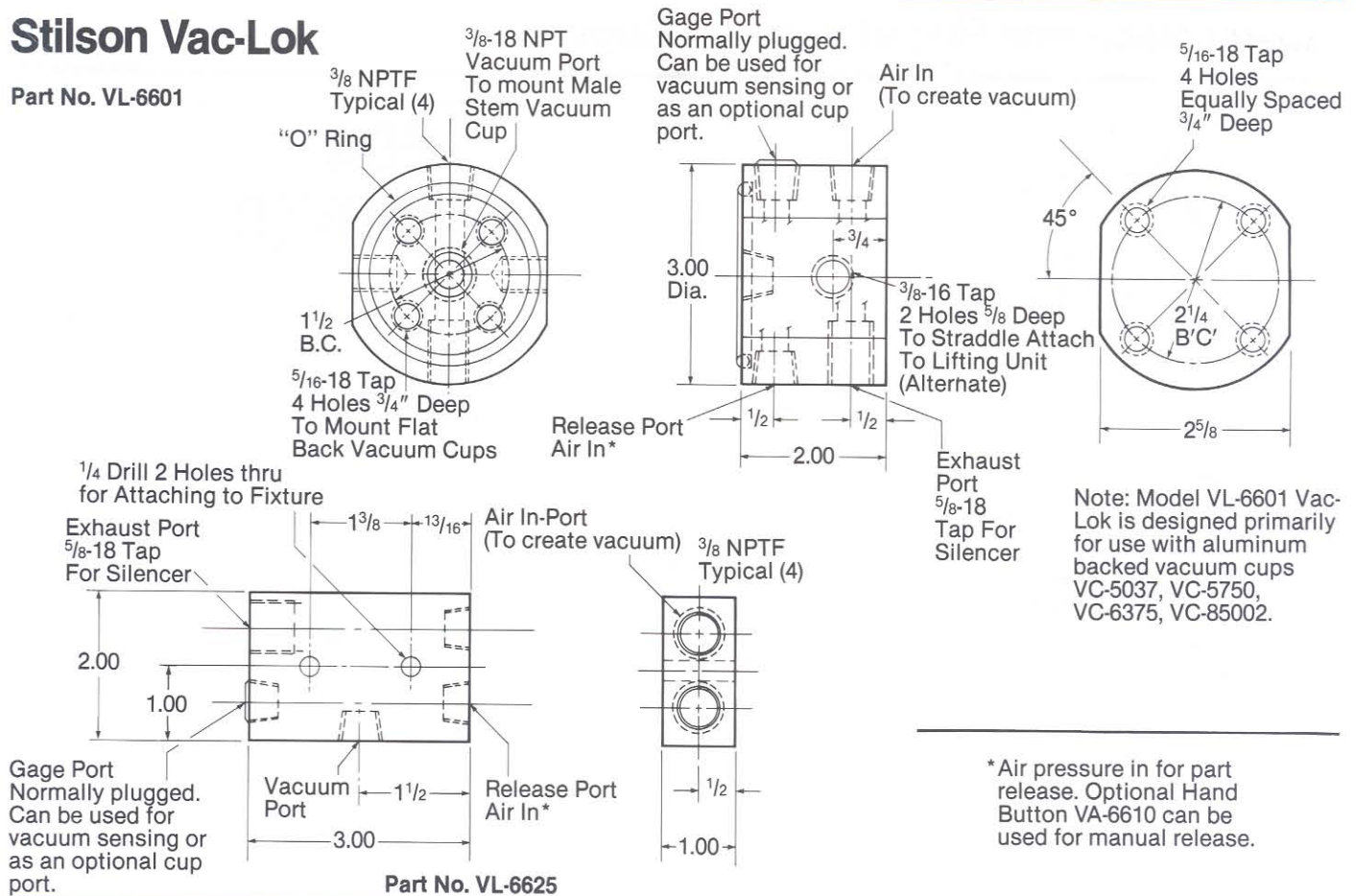
Swivel Assemblies attach to Venturi blocks, VB-5850 and VB-6601. They increase the capability for handling mildly contoured or out-of-plane surfaces. The threaded stud is for attachment to fixtures or other holding devices. When attached to the back of a Venturi block and cup, it increases the cup's ability to handle contoured or out-of-plane surfaces. The threaded stud provides an ideal means for attachment to fixtures or other holding devices.

For $\frac{5}{16}$ Soc. Hd. Scr.
4 Holes



Stilson Vac-Lok

Part No. VL-6601



Stilson Venturi Vacuum Generator

Part No. VB-5850

Note: For optimum performance, use 1/4" air line.

Note: These Venturi blocks are designed primarily for use with Stilson aluminum backed vacuum cups VC-5037, VC-5750, VC-6375, VC-85002.

