

VersaClipper 4000

Model # _____

Serial # _____



1798 Sherwin Avenue
Des Plaines, IL 60018 U.S.A.
EMAIL: vertex@leggett.com

PHONE: 847-768-6139 FAX: 847-768-7192

Table of Contents

DESCRIPTION OF EQUIPMENT	3
OPERATING INSTRUCTIONS.....	3
Loading a Spool of VersaClips	3
Removing VersaClips from Tool Assembly	4
Adjusting Tool Position for Straight Rail	4
Adjusting Tool Position for Curved Rail	4
Adjusting End Stop	4
Anvils	4
Air Pressure	5
Clipping Rails	5
Manual Clipping.....	5
SAFETY INSTRUCTIONS.....	6
MAINTENANCE.....	6
Recommended Spare Parts List.....	7
TROUBLESHOOTING INFORMATION	8
FIGURE 3.....	9
FIGURE 4.....	9
Specifications	10
<u>DRAWINGS</u>	
SPOOL ILLUSTRATION (VC5936).....	11
TOOL ASSEMBLY (VC5904).....	12
PNEUMATIC CYLINDER ASSEMBLY (VC5961).....	13
VERSACLIPPER 4000 (VC5009).....	14

DESCRIPTION OF EQUIPMENT

The VersaClipper 4000, a specially designed machine used by upholstered furniture manufacturers, quickly and accurately installs patented VersaClips into wooden frame rails. The multi-head tool allows you to simultaneously install clips on straight and curved rails. The straightforward, innovative design elements have resulted in a productive and versatile machine for all manufacturers.

The VersaClipper 4000 is made up of four main components:

1. Spool Arm
 - a. The Double Ended Spool Arm can hold two spools of VersaClips each containing 1,500 pieces.
2. Tool Assembly (Clipping Head)
 - a. The Tool Assembly, which installs VersaClips into wooden furniture rails, can be adjusted to suit the needs of straight or curved rails.
3. End Stop
 - a. Provides an accurate guide for correct and consistent placement of clips on rails.
4. Pneumatic Control Circuit

OPERATING INSTRUCTIONS

Loading a Spool of VersaClips

Refer to Spool Illustration (VC5936) drawing.

1. Point arrow on side of spool toward tools.
2. Slide roll of clips onto Double Ended Spool Rod (VC5907).
3. Run clips off spool, onto Clip Tray (VC5970), back up and on top of Clip Platform (VC5913).
4. Twist strand half turn.
5. Feed clips into back of tool.
6. Verify that Feed Cylinder is down.

Removing VersaClips from Tool Assembly

1. Lift feed cylinder up, swing flag up to support cylinder.
2. Spread left and right pawls away from side plates while removing clips from rear.

Caution: Do not overspread pawls.

Adjusting Tool Position for Straight Rail

1. Verify rear SHCS (VH0220) are in place on Tool Base (VC5915).
2. Depress Limit Valve (VH0468) on side of tool.
3. Position tool into desired location.
4. Release Limit Valve.

Adjusting Tool Position for Curved Rail

1. Remove rear SHCS (VH0220) on Tool Base (VC5915) if present.
2. Depress Limit Valve (VH0468) on side of tool.
3. Position tool into desired location.
4. Release Limit Valve

Adjusting End Stop

1. Press Limit Valve (VH0468) on side of Stop Base (VC5925).
2. Position Stop Base in correct location.
3. Release Limit Valve.

Place Stop (VC5924) on base. Choose hole location appropriate for rail width. Stop is used to ensure accurate and consistent placement of clips.

Anvils

Different Anvil heights are available and easily interchanged. Simply lift Anvil off Tool Base (VC5915), store on pegs provided below on Frame (VC5912) and place new anvil on Tool Base.

Air Pressure

Set air pressure between 50 – 60 psi for proper operation of the VersaClipper 4000. After required adjustments have been made you may begin production.

Clipping Rails

1. Check that desired tools are enabled.
 - a. To disable a tool, turn valve handle (VH0387) of desired tool to a horizontal position.
2. Lay rail on Anvils.
3. Slide rail toward End Stop and tools to make contact.
4. Depress Knee Switch – all Tools with Valve (VH0387) “On” (handle in vertical position) will install a clip.
5. Remove rail and repeat.

Manual Clipping

- Use to install individual clips without use of Knee Switch.
1. Position rail for correct placement of clip.
 2. Depress button on valve (VH0470) on side of tool you wish to fire.
 3. Repeat as necessary.

SAFETY INSTRUCTIONS

1. Operators should ALWAYS wear safety glasses while operating, maintaining or repairing the equipment.
2. NEVER place hands or fingers near clip exit area when operating tool or when connecting air supply to machine.
3. Always shut off air supply when servicing tool.

MAINTENANCE

Recommended Daily Maintenance

1. Using supplied air gun; blow off woodchips and debris from Tools.
2. Add 2-3 drops of 30-weight oil to opening between front plate and top of blade of Tool assembly.

Self-Lubricating Regulator

Use Air Tool Oil, Almo 525 or equivalent.

Turn knob one full turn from closed position for correct lubrication.

**VERSACLIPPER 4000
RECOMMENDED SPARE PARTS LIST**

PART #	DESCRIPTION	QTY
VC0340	AIR LUBE OIL	1
VC5117	TORSION SPRING	2
VC5121	PAWL SPRING	4
VC5122	LEFT-HAND PAWL	2
VC5123	RIGHT-HAND PAWL	2
VC5127	PISTON FEED SPRING	2
VC5132	PIN, FEED CYLINDER	2
VC5961	CYLINDER ASSY.	1
VC5977	CYLINDER/DRIVER ASSY.	1
VH0030	O'RING, #111	2
VH0069	PUSH-IN FTG, 90 DEG	2
VH0158	O'RING, #211	2
VH0468	SWITCH, LIMIT VALVE	1
VH0483	SWITCH, KNEE	1
VH0470	VALVE, PUSH BUTTON	1
VH0531	HAIR PIN	2

TROUBLESHOOTING INFORMATION

PROBLEM	CAUSE	SOLUTION
Blade does not return.	Obstruction in tool. Cylinder Spring damaged.	Remove obstruction. Replace Spring (VC5127).
Clips not feeding.	Dispenser obstruction. Feed cylinder not engaged.	Remove obstruction. Engage by lifting up cylinder allowing flag to drop.
Top of clip not seated against rail (Fig. 3).	Low air pressure. Incorrect anvil height.	Increase pressure. (Never exceed 60 psi) Use taller anvil.
Clip's base is away from rail (Fig. 4).	Board is warped. Rail is not against tool. Incorrect Tool position.	Operator must hold rail firmly against tools. Move tool in to correct location.
Incorrect clip spacing.	Tools are incorrectly spaced.	Move tool assemblies to correct location.
Tools do not fire.	Air Supply not connected. Main Valve is off.	Connect Air Supply. Turn valve (VH0172) on.
Missed clip.	Clips ran out. Valve (VH0387) is closed.	Reload with new spool. Line up rail for correct clip placement. Press button on valve to fire matching tool. Turn lever to vertical position.

FIGURE 3

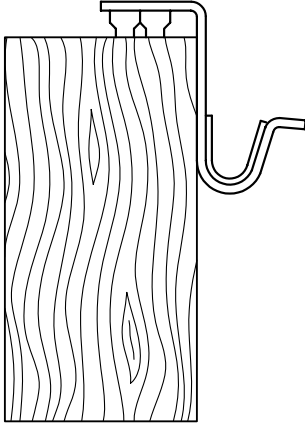
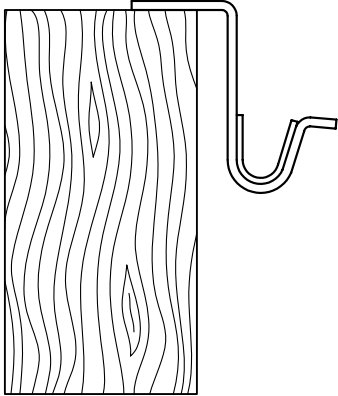


FIGURE 4



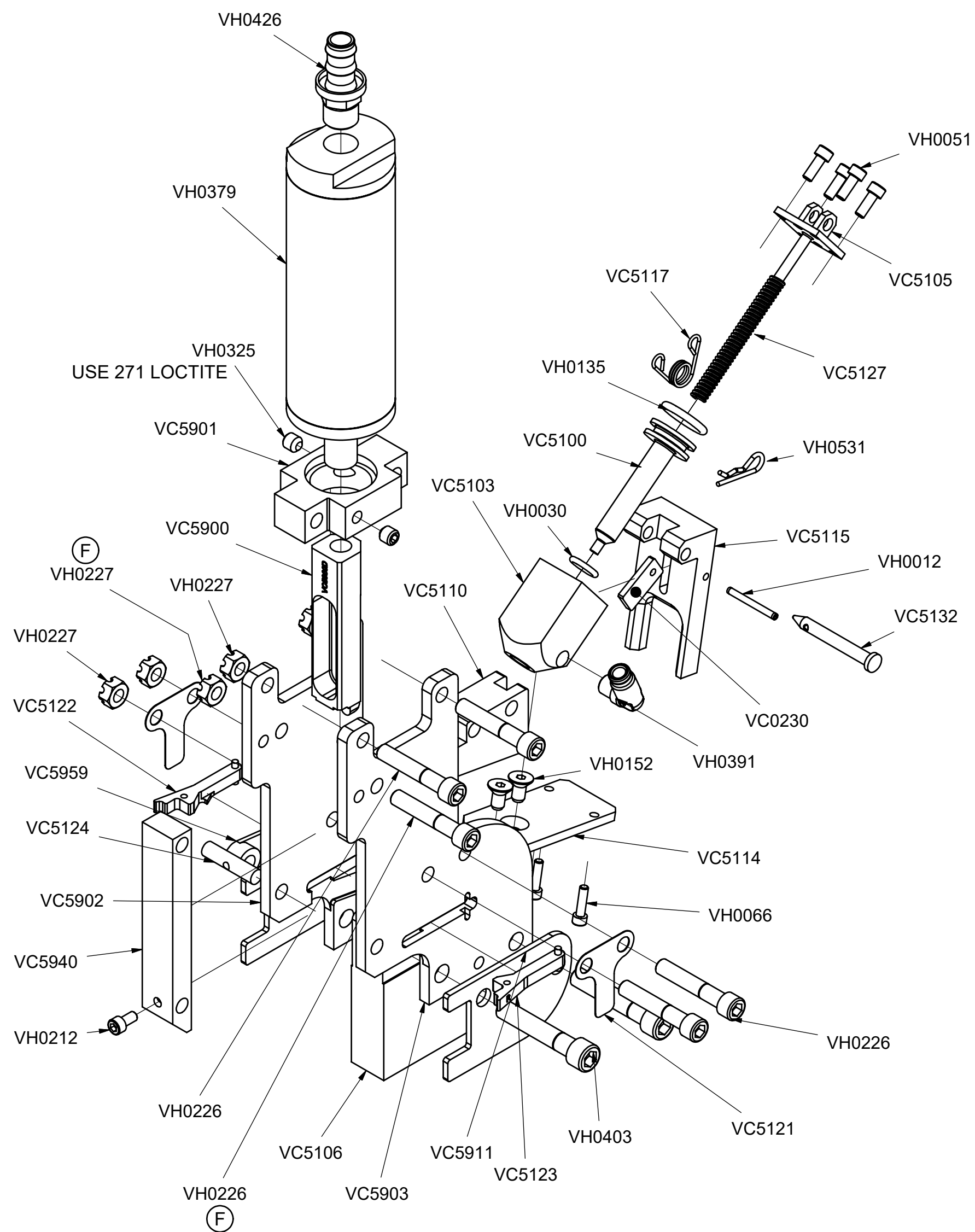
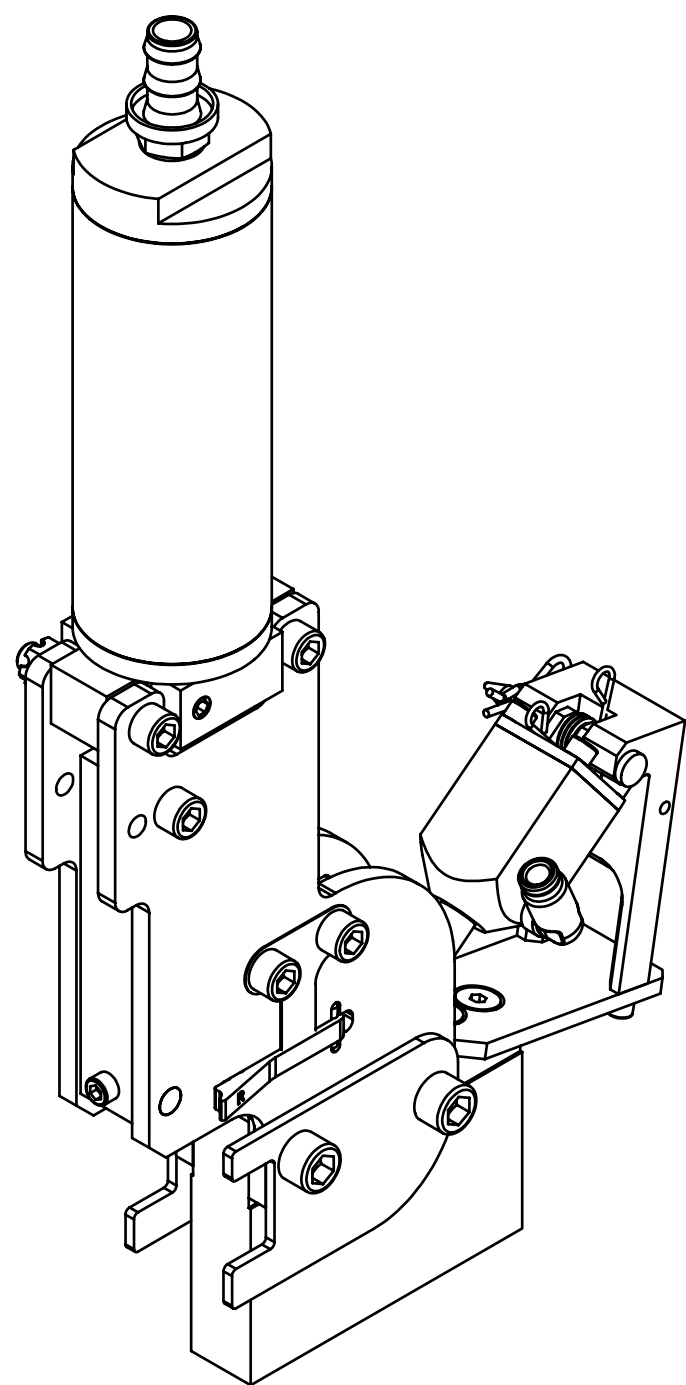
Specifications

Air: 50-60 psi, 6 cfm

Machine Size: Depth: Footprint = 58", Overall 74"
Width: Footprint = 36", Overall 52"
Height: 65"
Weight: 5 Head tool machine = 520 lbs

Rail Dimensions: Thickness: 5/8" – 2 1/2"
Length: Consult factory

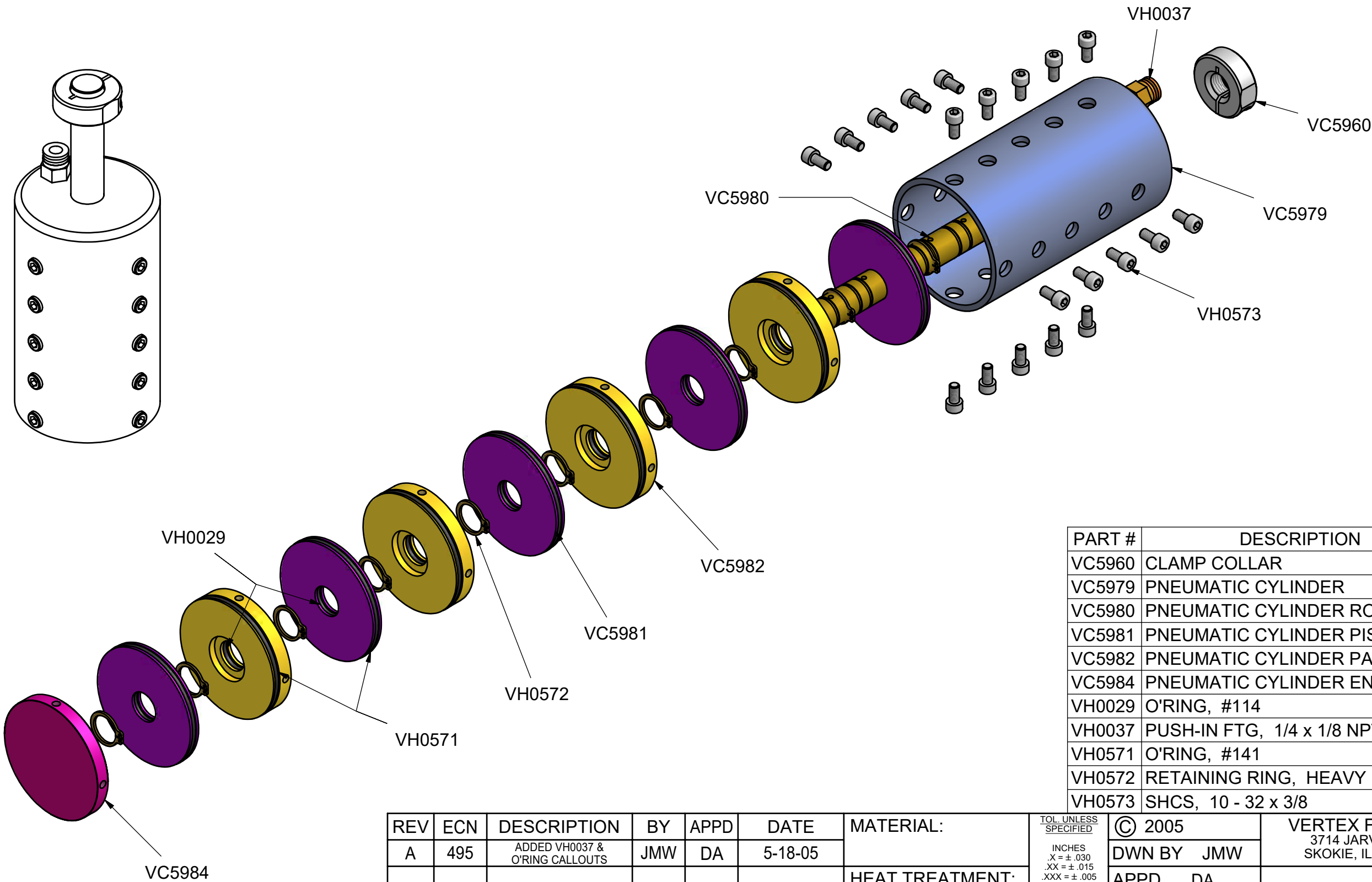
Clip Roll Capacity: 1,500 VersaClips



PART #	DESCRIPTION	QT
VC0230	CLIP FEEDER STOP	1
VC5100	PISTON	1
VC5103	CYLINDER BODY	1
VC5105	CYLINDER END CAP	1
VC5106	ANVIL	1
VC5110	BLADE GUIDE	1
VC5114	MOUNTING BRACKET	1
VC5115	CYLINDER MOUNT	1
VC5117	TORSION SPRING	1
VC5121	PAWL SPRING	2
VC5122	LEFT-HAND PAWL	1
VC5123	RIGHT-HAND PAWL	1
VC5124	FRONT PLATE PIN (SPECIAL)	1
VC5127	SPRING	1
VC5132	PIN, FEED CYLINDER	1
VC5900	DRIVER BLADE	1
VC5901	CYLINDER MOUNT	1
VC5902	LEFT-HAND SIDE PLATE	1
VC5903	RIGHT-HAND SIDE PLATE	1
VC5911	GUIDE PLATE	2
VC5940	FRONT PLATE	1
VC5959	STRAP NUT	1
VH0012	SPRING PIN, 1/8 x 1 1/4	1
VH0030	O-RING, 7/16 x 5/8	1
VH0051	SHCS, 10 - 32 x 1/2	4
VH0066	SHCS, 8 - 32 x 5/8	2
VH0135	O-RING, #210	-
VH0152	FHCS, 1/4 - 20 x 1/2	2
VH0212	SHCS, 10 - 32 x 3/8	1
VH0226	SHCS, 5/16 - 24 x 1 3/4	5
VH0227	FLEX NUT, 5/16-24	5
VH0325	SET SCREW, 5/16 - 18 x 3/8	2
VH0379	CYLINDER	1
VH0391	PUSH-IN FTG, 1/4 x 1/8 NPT	1
VH0403	SHCS, 3/8 - 24 x 2	2
VH0426	HOSE BARB, 1/2 x 3/8 NPT	1
VH0531	HAIR PIN	1

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REV	DESCRIPTION	BY	APPD	DATE	MATERIAL:	TOL. UNLESS SPECIFIED	© 2003	VERTEX FASTENERS INC.
B	MOVED FTGS TO TANK	JMW		3-11-02		.INCHES .X = ± .030 .XX = ± .015 .XXX = ± .005 ANGLES ± 1/2	DWN BY JMW	3714 JARVIS AVENUE SKOKIE, IL 60076 U.S.A.
C	GENERAL UPDATE	JMW	DA	4-15-03	HEAT TREATMENT:		APPD DA	
D	ECN 304, REPLACE H #S 48 & 49 W/ 531 & C5132	JMW	DA	12-9-03	FINISH:		DATE 1-2-02	TOOL ASSEMBLY VERSACLIPPER 4000
E	ECN 504, WAS VH0158 (#211), NOW VH0135 (#210)	JMW	DA	6-15-05			SCALE 1:2	
F	ECN 656, WAS VH0155 & VH0002	JMW	DA	3-14-06			DWG. NO. VC5904	C



PART #	DESCRIPTION	QT
VC5960	CLAMP COLLAR	1
VC5979	PNEUMATIC CYLINDER	1
VC5980	PNEUMATIC CYLINDER ROD	1
VC5981	PNEUMATIC CYLINDER PISTON	5
VC5982	PNEUMATIC CYLINDER PARTITION	4
VC5984	PNEUMATIC CYLINDER END CAP	1
VH0029	O'RING, #114	-
VH0037	PUSH-IN FTG, 1/4 x 1/8 NPT	1
VH0571	O'RING, #141	-
VH0572	RETAINING RING, HEAVY DUTY,	10
VH0573	SHCS, 10 - 32 x 3/8	20

REV	ECN	DESCRIPTION	BY	APPD	DATE	MATERIAL:
A	495	ADDED VH0037 & O'RING CALLOUTS	JMW	DA	5-18-05	
						HEAT TREATMENT:
						FINISH:

<small>TOL. UNLESS SPECIFIED</small> INCHES .X = ± .030 .XX = ± .015 .XXX = ± .005 ANGLES ± 1/2	© 2005	VERTEX FASTENERS 3714 JARVIS AVENUE SKOKIE, IL 60076 U.S.A. PNEUMATIC CYLINDER ASSEMBLY
	DWN BY JMW	
	APPD DA	
	DATE 3-15-05	
	SCALE 1:2	
INVENTOR	DWG. NO. VC5983	B

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