



Operations & Parts Manual

VersaClipper 3000S

Servo Driven, Fully Automatic, Clipping Machine

Model # 3000S

Serial # _____

Vertex Fasteners

An Elite Division of Leggett & Platt, Inc.
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VersaClipper 3000S



DESCRIPTION OF EQUIPMENT

The VersaClipper 3000S, a specially designed and engineered servo driven machine used by upholstered furniture manufacturers, quickly and accurately installs patented VersaClips into wooden frame rails. The straightforward, innovative design elements have resulted in a productive and versatile machine for all manufacturers.

The VersaClipper 3000S is made up of five main components:

- 1. Clip Dispenser Frame**
 - a. The Clip Dispenser Frame holds a spool of VersaClips containing 1,500 pieces.
- 2. Tool Assembly (Clipping Head)**
 - a. The Tool Assembly, which installs VersaClips into wooden furniture rails, is height adjustable to accommodate rails from 5/8" to 2 1/2" thick.
 - b. Each time the Tool fires, the "CLIPPER" indicator light on the Control Box will flash.
- 3. Control Box**
 - a. The Control Box coordinates and controls all functions of the machine: installation of all clips, timing/speed settings, tool height adjustment, manual clipping and programmed rail information.
- 4. Rail Sensor**
 - a. The purpose of the Rail Trigger Switch (VC5558), when activated, prompts the machine to begin the clipping sequence for the currently loaded rail program. When the Rail Trigger Switch is tripped, the "RAIL SENSOR" indicator light on the Control Box will illuminate.
- 5. Control Circuit**

!!! Attention !!!

For Expert Service and Additional Setup Assistance
~ Please Call Our Factory (847) 768 6139 ~
1798 Sherwin Avenue
Des Plaines, Illinois 60018
USA

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.

!!! Caution !!!

~ Always wear proper eye protection and avoid wearing loose clothing and jewelry while operating, servicing or cleaning Vertex equipment. ~

Chain Guard and Main Frame



OPERATING INSTRUCTIONS

Loading a Spool of VersaClips

1. Load clips so they run off top of spool (Fig 1).
2. Push spool against magnetic brake.
3. Thread clips over Clip Lifter and down Inside Chute.
4. Verify that feed cylinder is down.
5. While depressing "MANUAL CLIP" pushbutton (Fig. 2.5), push clips into back of tool until clips contact driver blade. Release pushbutton.

!!! Warning !!!
NEVER operate or run machinery without guards properly mounted and securely fastened in place!

Loading a Spool of VersaClips while Clips are Running

1. Remove empty spool while last of the clips are running.
2. Follow steps 1-3 above.
3. With constant pressure, feed clips in behind the last clip of the previous roll.
 - a. Apply constant pressure until feed cylinder has engaged new strand of clips.

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.

FIGURE 1

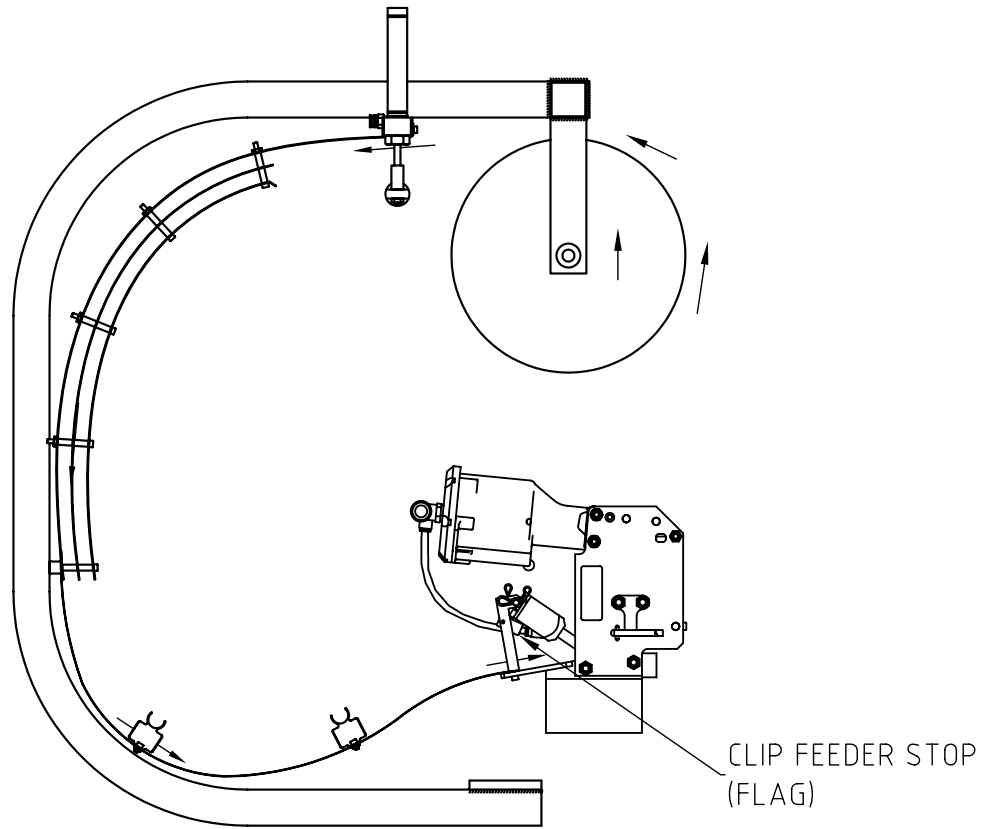
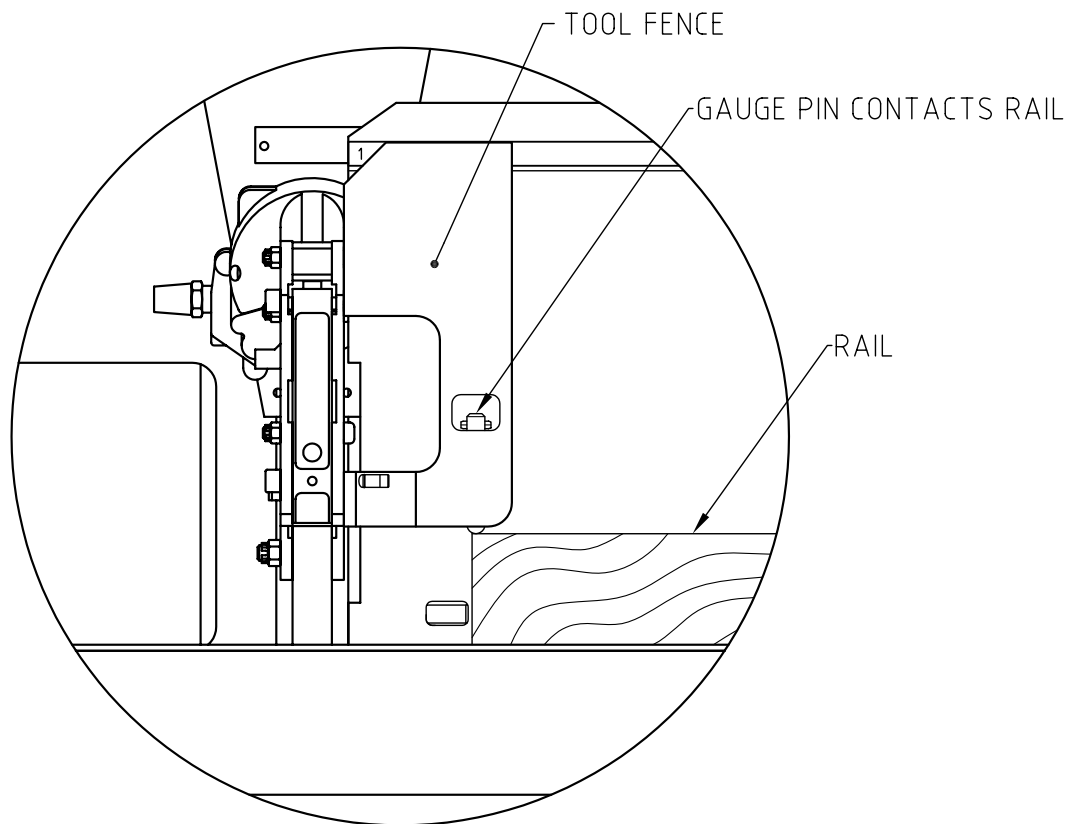


FIGURE 2



CONTROL BOX

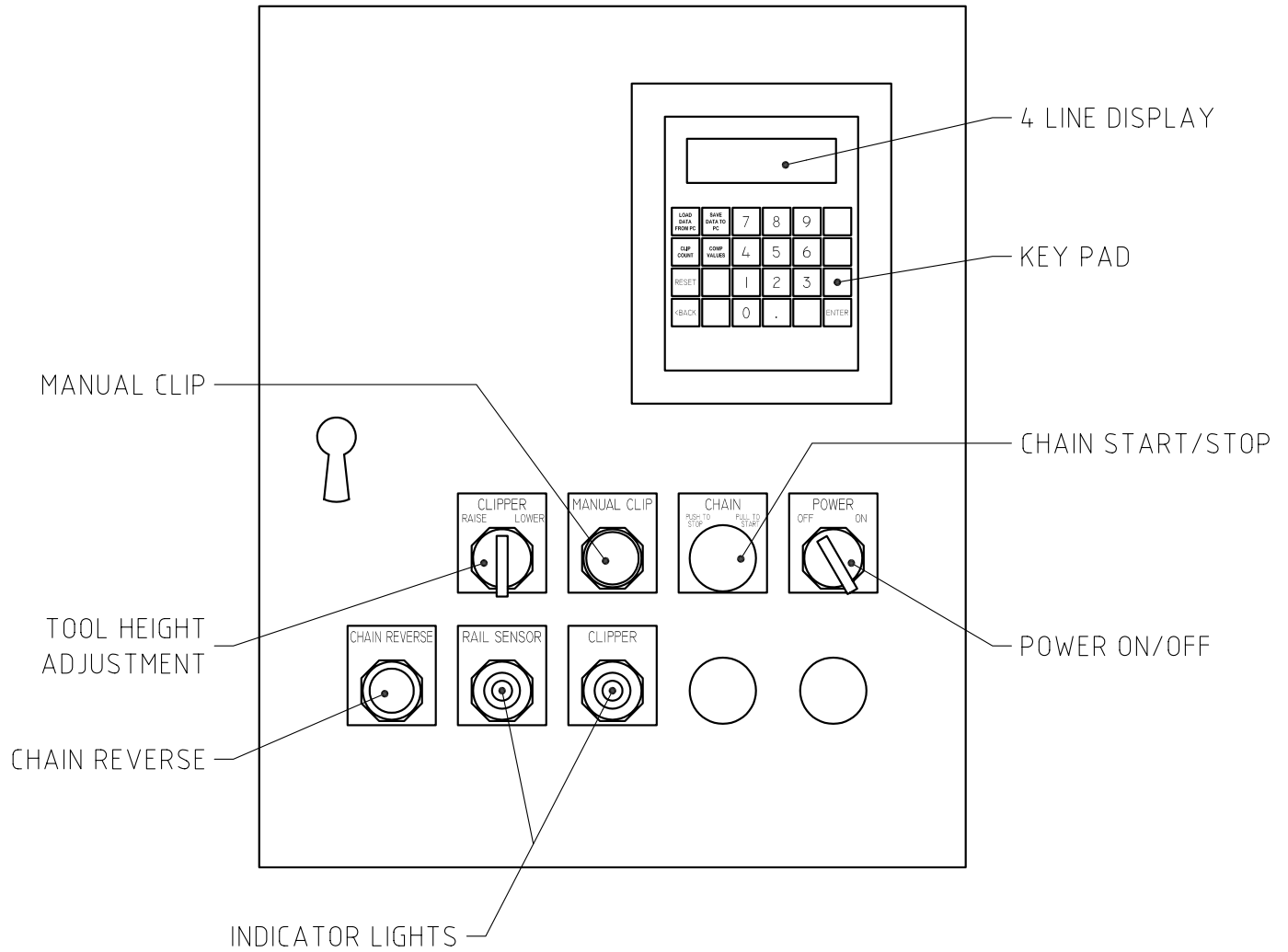
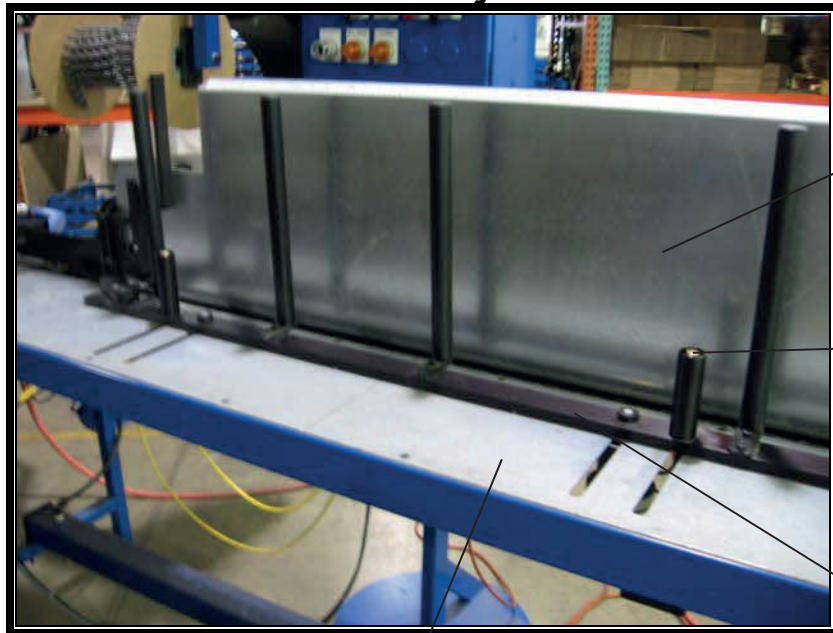


FIGURE 2.5

Adjustable Front Fence



Rear Fence VC5267

Pushbutton VH0562

Adjustable Front Fence
VC5571

Fence Track VC5286

Adjusting Fence Position

1. Place stack of rails against rear fence.
2. Depress both Pushbuttons (VH0562) on Front Fence Assembly (VC5571).
3. Slide front fence against stack, back off 1/8".
 - a. Correct location for front fence allows rails to drop freely onto (Fence Track) machine top.
4. Release Pushbuttons (VH0562).

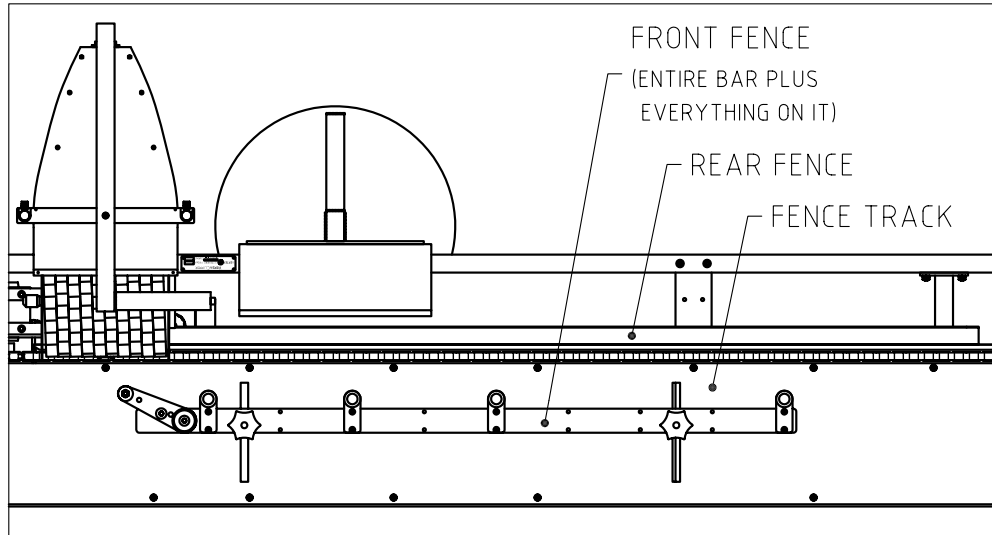
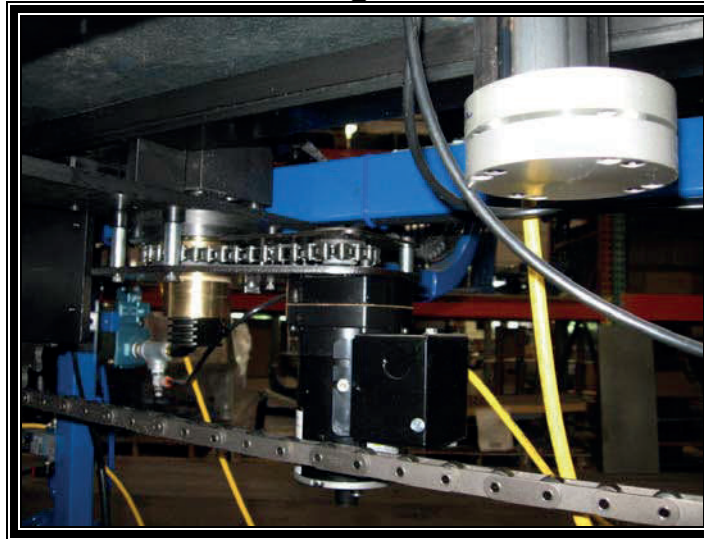


FIGURE 2.95
(TOP VIEW)

Tool Height Motor



Adjusting Tool Assembly Height

1. Turn "CLIPPER" selector lever (Fig. 2.5) counterclockwise to raise tool.
2. Place rail underneath tool fence (Fig. 2).
3. Turn "CLIPPER" selector lever clockwise to lower tool until height gauge pin contacts rail.

!!! Warning.... NEVER Adjust Tool Height While Chain is Moving!!!

Adjusting and Setting Machine Air Pressure

Set air pressure between 40–90 psi for proper operation of the VersaClipper 3000S. After the required adjustments have been made, the program set and the clips and rails have been loaded, you may begin production.

1. Start chain.
2. Continue to load rails as needed.

Calculating Lug Placement

Divide chain length, 270 inches, by number of lugs you wish to use.

- 2 lugs → 135 inches
- 3 lugs → 90 inches
- 4 lugs → 67.5 inches
- 5 lugs → 54 inches
- 6 lugs → 45 inches

A 4-inch gap should be left between end of rail and following lug. To optimize machine efficiency, use the maximum number of lugs appropriate for your rail length. To figure the maximum possible lugs you can use, add 4 inches to the rail length you will be using. Then divide the chain length, 270 by this number; the answer will equal the maximum number of lugs you may fasten to the drive chain.

Example:

Rail length = 48 inches

$$48 + 4 = 52$$

$$270 \div 52 = 5.019$$

5 lug maximum on drive chain

Use chart above for equal distant lug placement on chain.

Calculation Notes: _____

Applying Universal Lugs to Drive Chain

1. Twist front half of lug 90 degrees from rear half.
2. Insert pegs of rear half into chain.
3. Holding rear half in place, pull lug apart.
4. Twist front half back 90 degrees.
5. Insert pegs into chain.

Jammed Lugs

Should a lug become caught or wedged underneath a rail, follow this procedure.

1. Press, "CHAIN" knob (Fig. 2.5) to stop chain.
2. Raise tool by turning "CLIPPER" switch to the left.
3. Press, "CHAIN REVERSE" button until jammed lug is cleared.
4. Follow instructions on screen.

Warning ~ Please Use Caution & Common Sense...
Never use fingers, hands or feet.... to clear jams and obstructions...
!!! Always Wear Eye Protection !!!

Manual Clipping

- used to install individual clips without the use of a program or the chain.

1. Push "CHAIN" knob (Fig. 2.5) to turn chain off.
2. Line rail underneath clipping head of tool and flush against the back fence.
3. Once the rail is positioned correctly and hands are away from the tool, press the "MANUAL CLIP" pushbutton (Fig. 2.5) on the control box.

Programming

1. Using "POWER" selector switch (Fig. 2.5), turn machine "ON".
 - a. Welcome Screen will appear.

Welcome Screen

```
VERSACLIPPER 3000S  
Release xxx####x  
Vertex (847) 768-6139  
Hit Any Key To Start
```

- b. Main Menu Screen will appear.
 - i. Main Menu is also shown when "RESET" is pressed.
 - ii. "MANUAL CLIP" and "CHAIN" are operational while Main Menu is visible.

Main Menu Screen

```
ENTER SELECTION:  
1: RECALL SAVED RAIL  
2: RUN RAIL 12345678  
3: PROGRAM NEW RAIL
```

1) Running Preprogrammed Rails

- Press 1.

```
Input a Saved Rail  
Number and Hit ENTER
```

- Enter desired rail number.

Program Start Screen

```
#XXXX: XX CLIPS  
START CHAIN or RESET  
P1 at XXX  
To edit rail: hit 4
```

2) Continuing Current Program – used when production is interrupted or machine is turned off.

- Press 2.

Program Start Screen

```
#XXXX: XX CLIPS  
START CHAIN or RESET  
P1 at XXX  
To edit rail: hit 4
```

- Continue clip installation using most recent program loaded.

3) Programming New Rail Patterns

- Press 3.

```
Input a RAIL Number  
From 1-8 Digits Long
```

- Enter new rail number up to 8 digits long.
 - If number already exists, a warning message will appear.
 - You may overwrite existing program with new pattern.
 - New screen appears.

Rail Type Screen

```
STANDARD: hit 1  
GROUP: hit 2  
ODD: hit 3  
GO BACK: hit RESET
```

Standard – equally spaced center clips with a maximum of three additional end rail intervals. (Fig. 2.7A)

Group – application of multiple clip groups per rail. (Fig. 2.7B)

A set interval within group and another set interval between groups.

Odd – unique spacing for every clip. (Fig. 2.7C)

- Select type of rail.

Screen will prompt operator for the clip intervals. Spacing is measured from center to center of clip. Operator will enter appropriate number, minimum of 2.00, followed by "ENTER." Operator need not enter trailing zeros. Example: 3 = 3.00, 7.5 = 7.50. When entering new values, you may use "<BACK" key to delete previous number entered on that screen. Once you begin entering a new rail, you must proceed through the screens to exit.

STANDARD RAIL

P1 = END OF RAIL TO CENTER OF 1ST CLIP

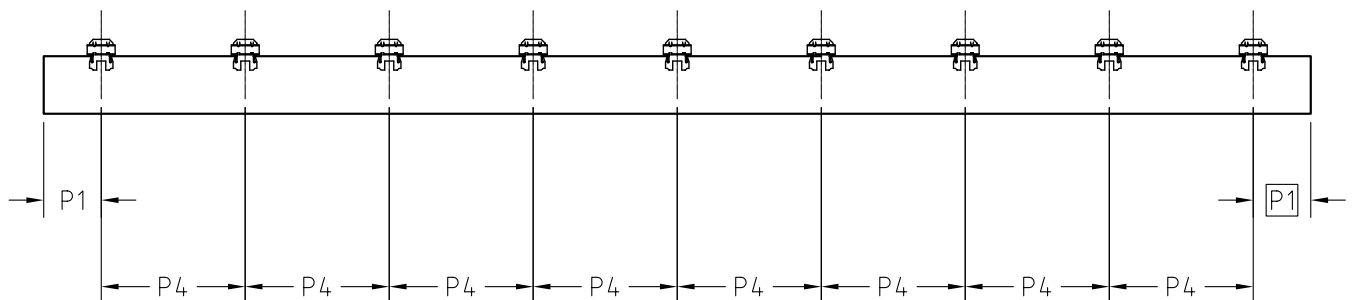
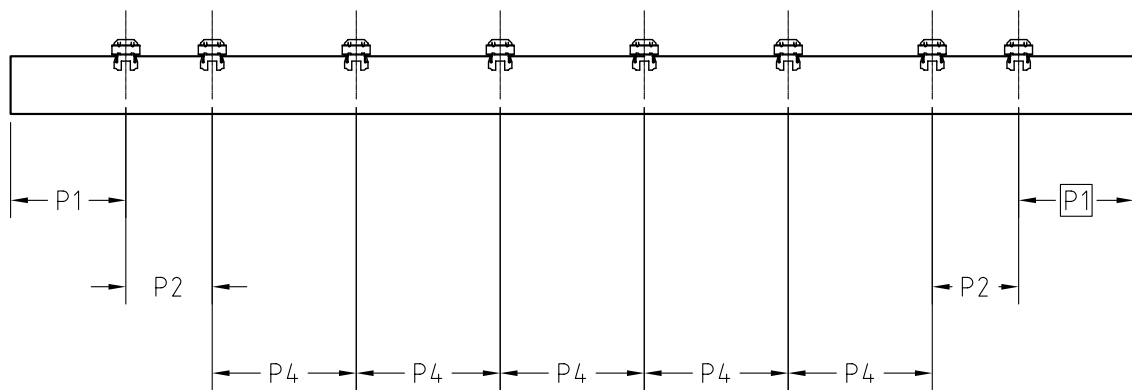
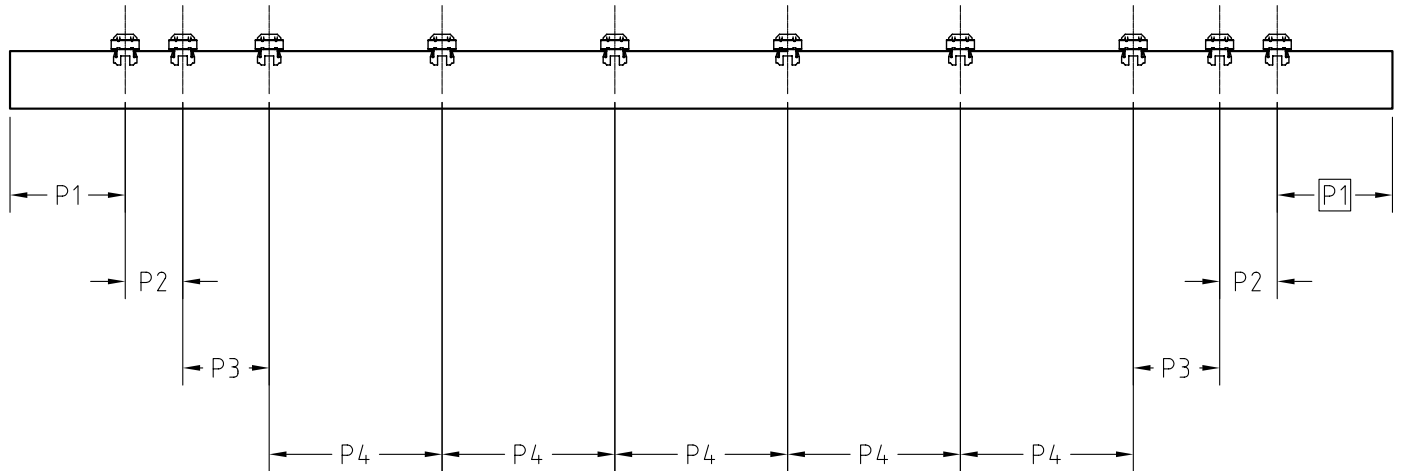
P2* = CENTER OF 1ST CLIP TO CENTER OF 2ND CLIP

P3* = CENTER OF 2ND CLIP TO CENTER OF 3RD CLIP

P4 = COMMON CENTER TO CENTER

P5 = TOTAL NUMBER OF CLIPS

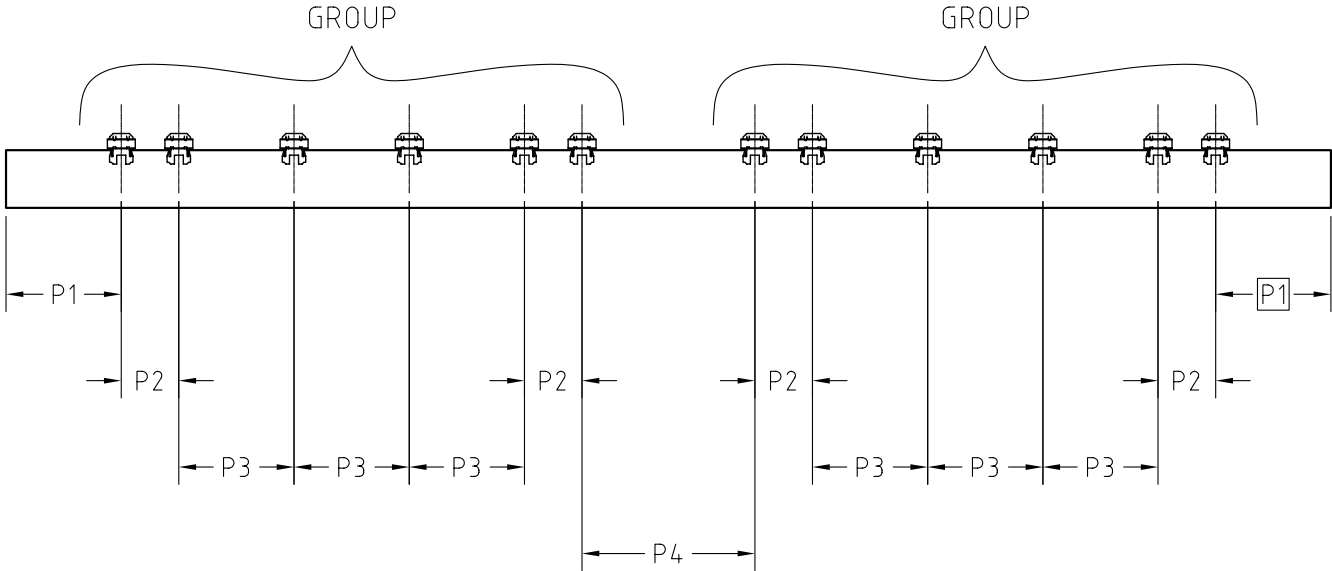
* OPTIONAL



GROUP RAIL

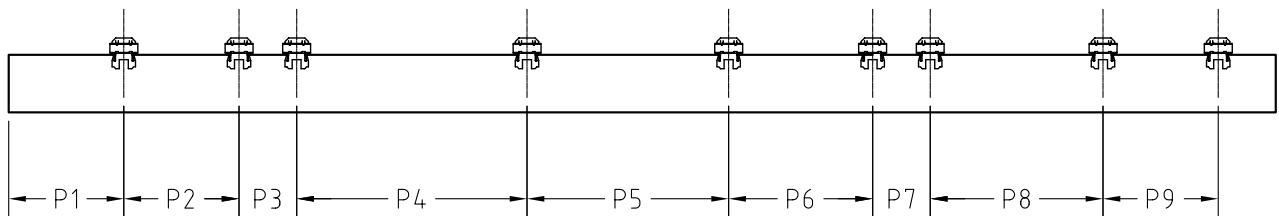
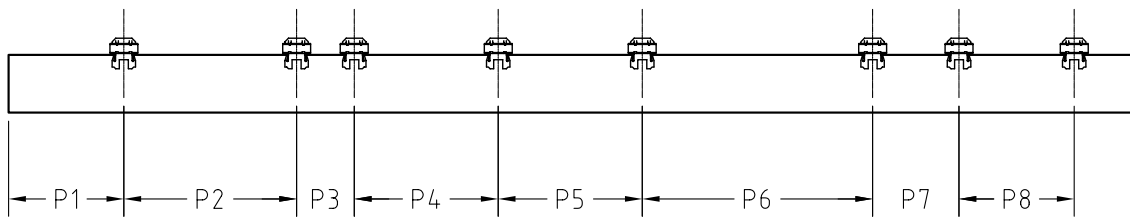
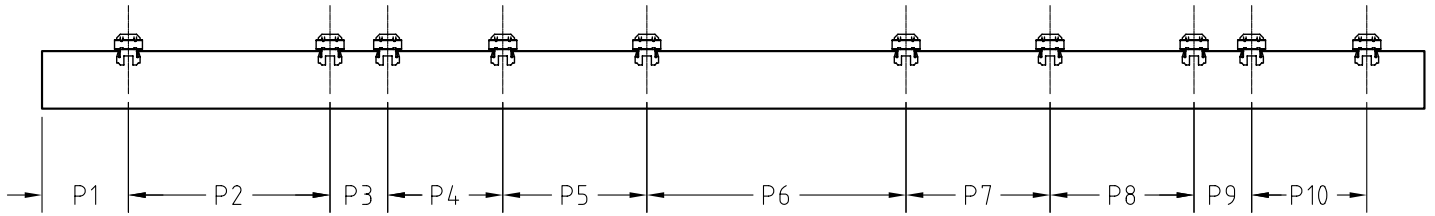
P1 = END OF RAIL TO CENTER OF 1ST CLIP
 P2 = CENTER OF 1ST CLIP TO CENTER OF 2ND CLIP
 P3 = CENTER TO CENTER IN GROUP

P4 = GROUP TO GROUP
 P5 = NUMBER OF CLIPS PER GROUP
 P6 = NUMBER OF GROUPS



P1 LAST P1 WILL EQUAL 1ST P1 ONLY IF CUSTOMER CALCULATIONS ARE CORRECT.

ODD RAIL



- VERTEX VERSACLIPPER 3000S -

Spreadsheet Rules for Clip Spacings

The clip spacing spreadsheet in Microsoft Excel should be created with the following guidelines. Deviating from these guidelines will cause unexpected results and possible damage to your **VersaClipper 3000S**.

1. Column headings must be labeled: NUMBER, TYPE, P1, P2, P3, P4, P5, P6.
Do not label additional columns.
2. NUMBER
 - a. Rail numbers cannot exceed 8 digits.
 - b. Use numbers only, no letters, decimals or symbols.
 - c. Do not use duplicate rail numbers.
 - d. 5,500 rail numbers max. (5,000 STANDARD & GROUP, 500 ODD)
3. TYPE
 - a. 1 = STANDARD spacing rail
 - b. 2 = GROUP spacing rail
 - c. 3 = ODD spacing rail
4. P1 thru P4
 - a. Refer to manual to determine P1-P4 definitions.
 - b. 2 places to the right of the decimal maximum. Examples: 4 or 4.1 or 4.12
 - c. Minimum dimension = 2.00
5. P5 & P6
 - a. Refer to manual to determine P5 & P6 definitions.
 - b. Use whole numbers only. Examples: 7, 5, 14, 3
 - c. For STANDARD rails, P5 must not exceed 24
 - d. For GROUP rails, (P5 x P6) must not exceed 24
6. For ODD rails, enter the individual clip spacings – rules for P5 & P6 do not apply.
 - a. 24 individual clip spacing's max. (Column Z)

Excel Spreadsheet Example:

NUMBER	TYPE	P1	P2	P3	P4	P5	P6						
22	1	5	0	0	4.25	7							
333	1	2.75	3	0	4.5	12							
3840	1	6	2.5	3.5	4	17							
876543	1	2.5	3	5.1	5.1	8							
123456	1	2.5	3	4	6	12							
1513540	2	2.75	3	3.75	3	7	2						
654321	2	4	3	4	3	9	2						
9	3	6.5	9	12	6								
55555	3	2.75	3	4.5	4.5	4.5	3	12	4				
81876542	3	10	3	3	3	12	4	4	4	4	4	4	3

!!! Important File Save Instructions !!!
 Save the rail data spreadsheet as a "CSV" (comma delimited) file.

- VERTEX VERSACLIPPER 3000S -

Procedure to Load Data from PC

1. Start the program "*Hyper Terminal*" from laptop.
2. For 1st time use, follow steps 3-8, otherwise proceed to step 9.
3. Create "New Connection".
4. Enter Name: **VersaClipper 3000S**
5. Select any Icon and click on "OK".
6. In the "Connect To" screen, pull down the "Connect using:" menu and select **assigned COM port** (COM#). Click on "OK".
(Note: Newer computers have USB I/O ports and these will then be selected)
7. In the "COM# Properties" or "USB Properties" screen, select:
 - Bits per second: **19200**
 - Data bits: **8**
 - Parity: **none**
 - Stop bits: **1**
 - Flow control: **hardware**
8. Click on "OK" then proceed to step 12.
9. Click on the "File" pull-down menu.
10. Select "Open..."
11. Double Click on VersaClipper 3000S
12. From the "Transfer" pull-down menu, select "Send File..."
13. In the "Send File" screen enter the file name to send. Protocol: Xmodem
14. Click on "Send"
15. Connect DB-9 adapter (Vertex part #VC5780) and cable (#VH0428) from COM# or USB port on laptop to external port marked "PC" on left side of VersaClipper 3000S Control Box.
16. Depress the "LOAD DATA FROM PC" key on VersaClipper 3000S Control Box and follow instructions. Note: This procedure will erase all the rails in memory before the new data is loaded.
17. When the operation is complete, depress key 9 to confirm the number of rails loaded.

- VERTEX VERSACLIPPER 3000S –

Procedure to Save Data to PC

1. Start the program "*Hyper Terminal*" from laptop.
2. For 1st time use, follow steps 3-8, otherwise proceed to step 9.
3. Create "New Connection".
4. Enter Name: **VersaClipper 3000S**
5. Select any Icon and click on "OK".
6. In the "Connect To" screen, pull down the "Connect using:" menu and select **assigned COM port (COM#)**. Click on "OK".
(Note: Newer computers have USB I/O ports and these will then be selected)
7. In the "COM# Properties" or "USB Properties" screen, select:
Bits per second: **19200**
Data bits: **8**
Parity: **none**
Stop bits: **1**
Flow control: **hardware**
8. Click on "OK" then proceed to step 12.
9. Click on the "File" pull-down menu.
10. Select "Open..."
11. Double Click on VersaClipper 3000S
12. From the "Transfer" pull-down menu, select "Receive File..."
13. In the "Receive File" screen click on "Receive" (If desired, you may change folder destination) Protocol: Xmodem.
14. In the "Receive Filename" screen, enter a filename. Examples: *rail data spacings 123* to be uploaded and click "OK".
15. Connect DB-9 adapter (Vertex part #VC5780) and cable (#VH0428) from COM# or USB port on PC to external port marked "PC" on left side of VersaClipper 3000S Control Box.
16. Depress the "SAVE DATA TO PC" key on VersaClipper 3000S Control Box and follow instructions.
17. When the operation is complete, you may open the uploaded file with Microsoft Excel.
18. When opening the file in Microsoft Excel, you will be prompted to format the file. Follow these steps:

Step 1. Select: Delimited
Start import at row: 1
File origin: Windows

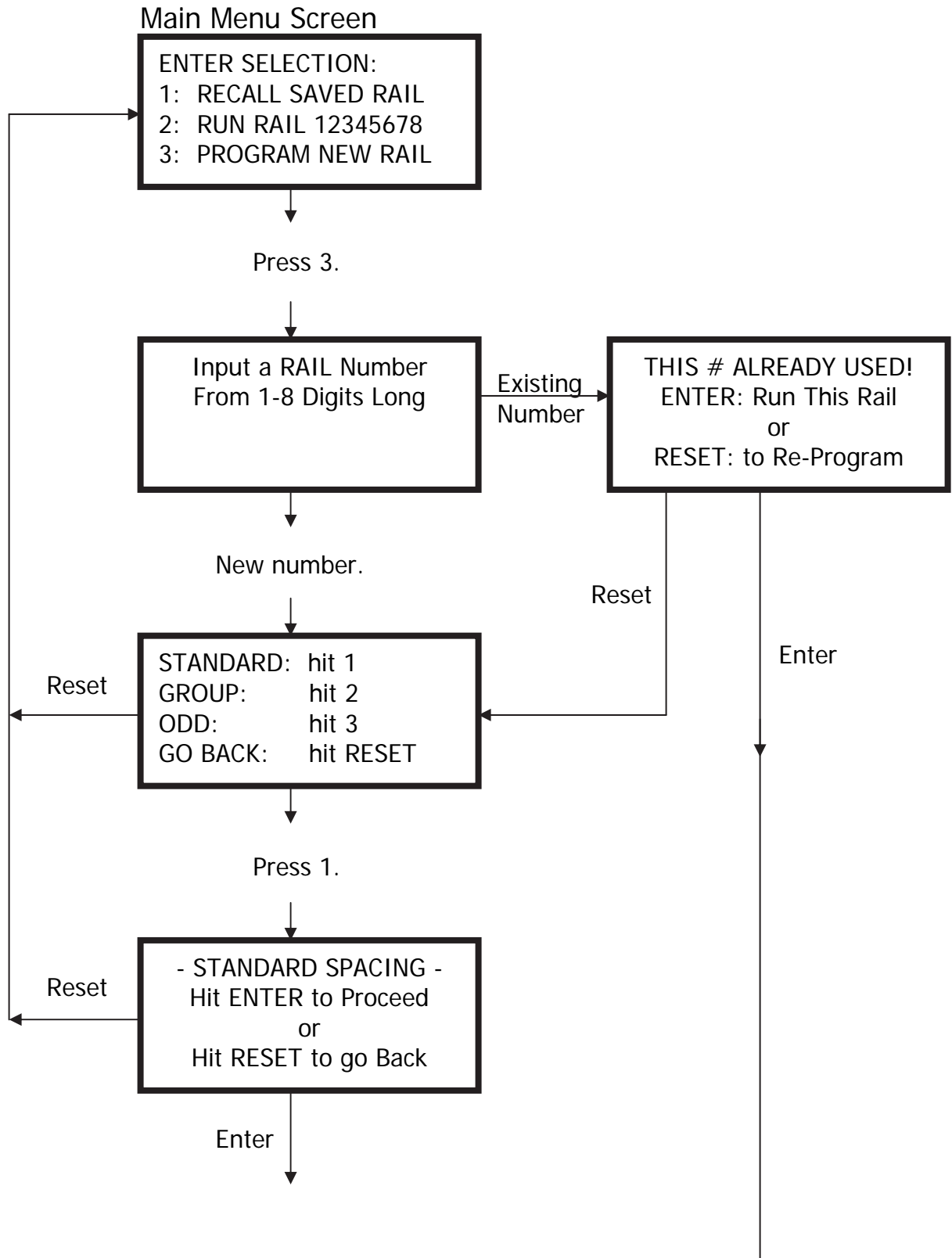
Step 2. Delimiters: Un-Check box next to *Tab*, Check box next to:
Comma, Space, Treat consecutive delimiters as one.

Step 3. Highlight "Number" Column in spreadsheet and check box marked
"text" under *column data format*.
Click: Finished

19. Save file with new settings. Save as type: CSV (Comma Delimited) !!!!!

Programming a **Standard** Rail

The default values for positions P2 and P3 are 0. If no change is necessary, the operator may continue by pressing, "ENTER." When entering "TOTAL CLIPS ON RAIL," this includes ALL clips.



END to 1st CLIP
ENTER P1: xx.xx

Enter number.

1st to 2nd CLIP
ENTER P2: xx.xx

(Optional)

Enter number or
press, "ENTER"

2nd to 3rd CLIP
ENTER P3: xx.xx

(Optional)

Enter number or
press, "ENTER"

EQUAL CENTER SPACING
ENTER P4: xx.xx

Enter number.

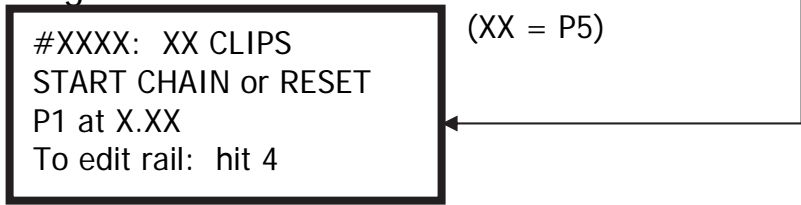
TOTAL CLIPS on RAIL:
ENTER P5:
Note: 24 CLIPS MAX



Once P5 is entered, a new screen is displayed.

Program Start Screen

#XXXX: XX CLIPS START CHAIN or RESET P1 at X.XX To edit rail: hit 4	(XX = P5)
--	-----------



Should you choose to edit or review the rail please refer to page 31.

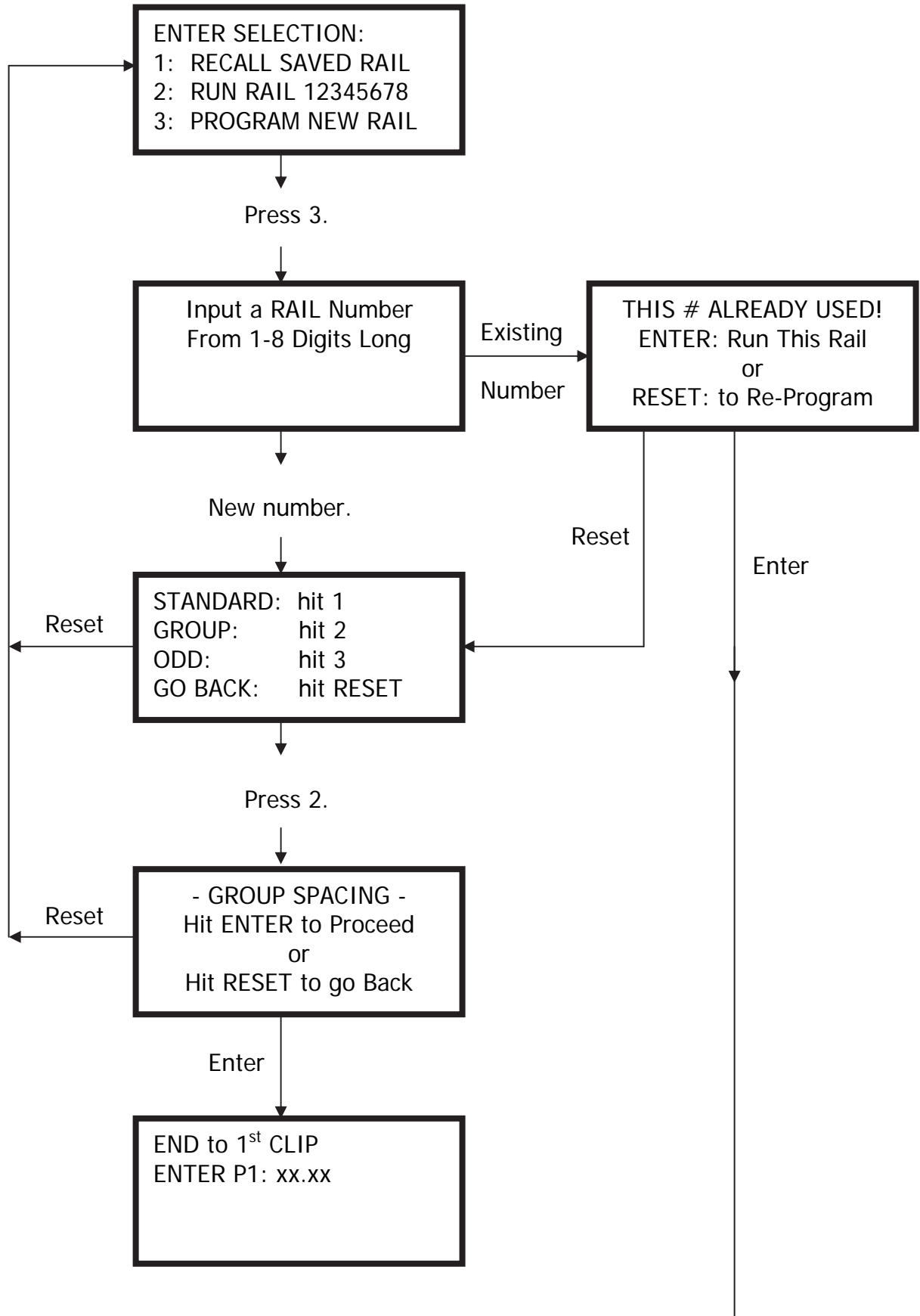
Program is now ready.

If clips and rails are loaded and tool height is set, pull the "CHAIN" knob (Fig. 2.5) to run rails. Otherwise, proceed with manual to continue machine setup.

Notes: _____

Programming a **Group** rail

Main Menu Screen



↓
Enter number.

↓
1st to 2nd CLIP (Optional)
ENTER P2: xx.xx

↓
Enter number or
press, "ENTER."

↓
EQUAL CENTER SPACING
ENTER P3: xx.xx

↓
Enter number.

↓
GROUP to GROUP
ENTER P4: xx.xx

↓
Enter number.

↓
CLIPS per GROUP
ENTER P5:

↓
Enter number.



↓
NUMBER of GROUPS
ENTER P6:

Once P6 is entered, a new screen is displayed.

Program Start Screen

#XXXX: XX CLIPS
START CHAIN or RESET
P1 at X.XX
To edit rail: hit 4

(XX = P5 x P6)

Should you choose to edit or review the rail please refer to page 31.

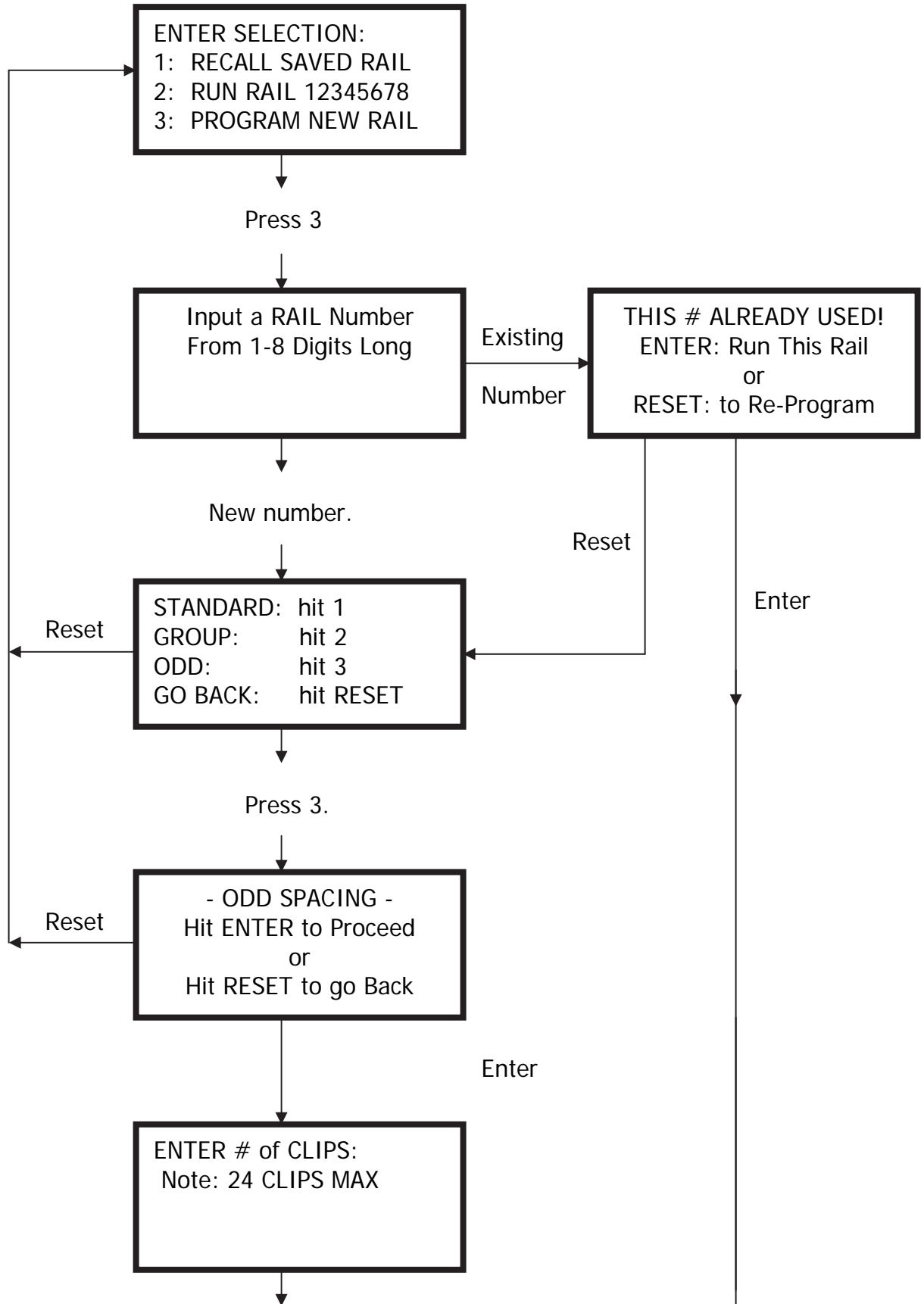
Program is now ready.

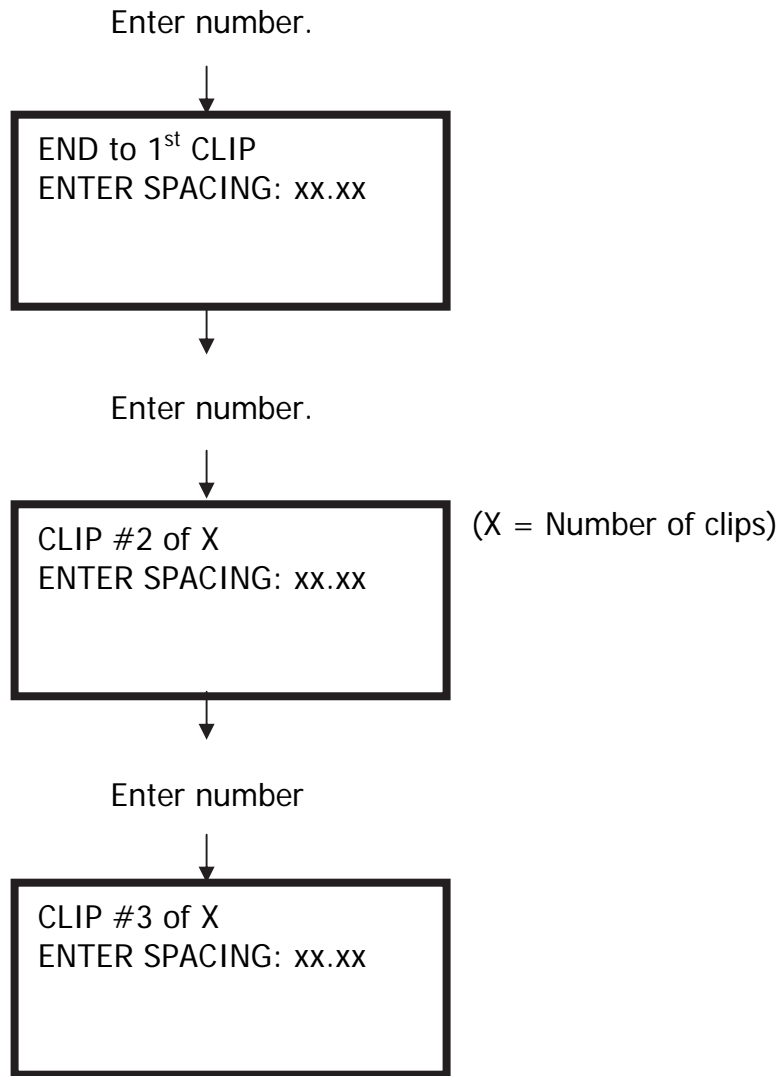
If clips and rails are loaded and tool height is set, pull the "CHAIN" knob (Fig. 2.5) to run rails. Otherwise, proceed with manual to continue machine setup.

Notes: _____

Programming an **Odd** rail

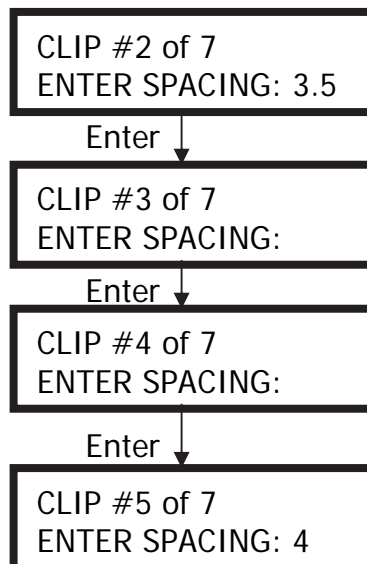
Main Menu Screen





Repeats until all clips have been completed. Should a clip interval repeat itself in a row, the operator may hit "ENTER" to repeat the previous entry.

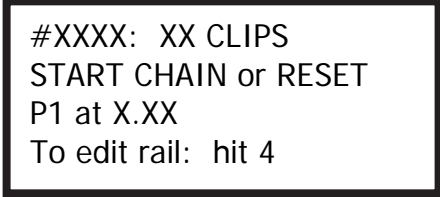
Example:



Clips 2, 3 and 4 will have the same spacing of 3.50 inches.

Once all clip spacing has been entered, a new screen is displayed.

Program Start Screen



```
#XXXX: XX CLIPS  
START CHAIN or RESET  
P1 at X.XX  
To edit rail: hit 4
```

Should you choose to edit or review the rail please refer to page 31.

Program is now ready.

If clips and rails are loaded and tool height is set, pull the "CHAIN" knob (Fig. 2.5) to run rails. Otherwise, proceed with manual to continue machine setup.

Notes: _____

huEditing a Program

Used to review settings or alter previously set values. If a setting is correct, do not reenter the value, simply press, "ENTER" to continue.

Starting from the Program Start Screen.

Program Start Screen

```
#XXXX: XX CLIPS  
START CHAIN or RESET  
P1 at XXX  
To edit rail: hit 4
```

- Press 4.
 - Next screen shown will list the value entered for that particular program.
 - You may input a new value or press, "ENTER" to continue to the next clip setting.
 - Repeat this procedure for all settings.
 - Program Start Screen will reappear.

Notes: _____

Hidden Screens

-accessible through the **Main Menu Screen**.

Contact Vertex 847-768-6139 for password.

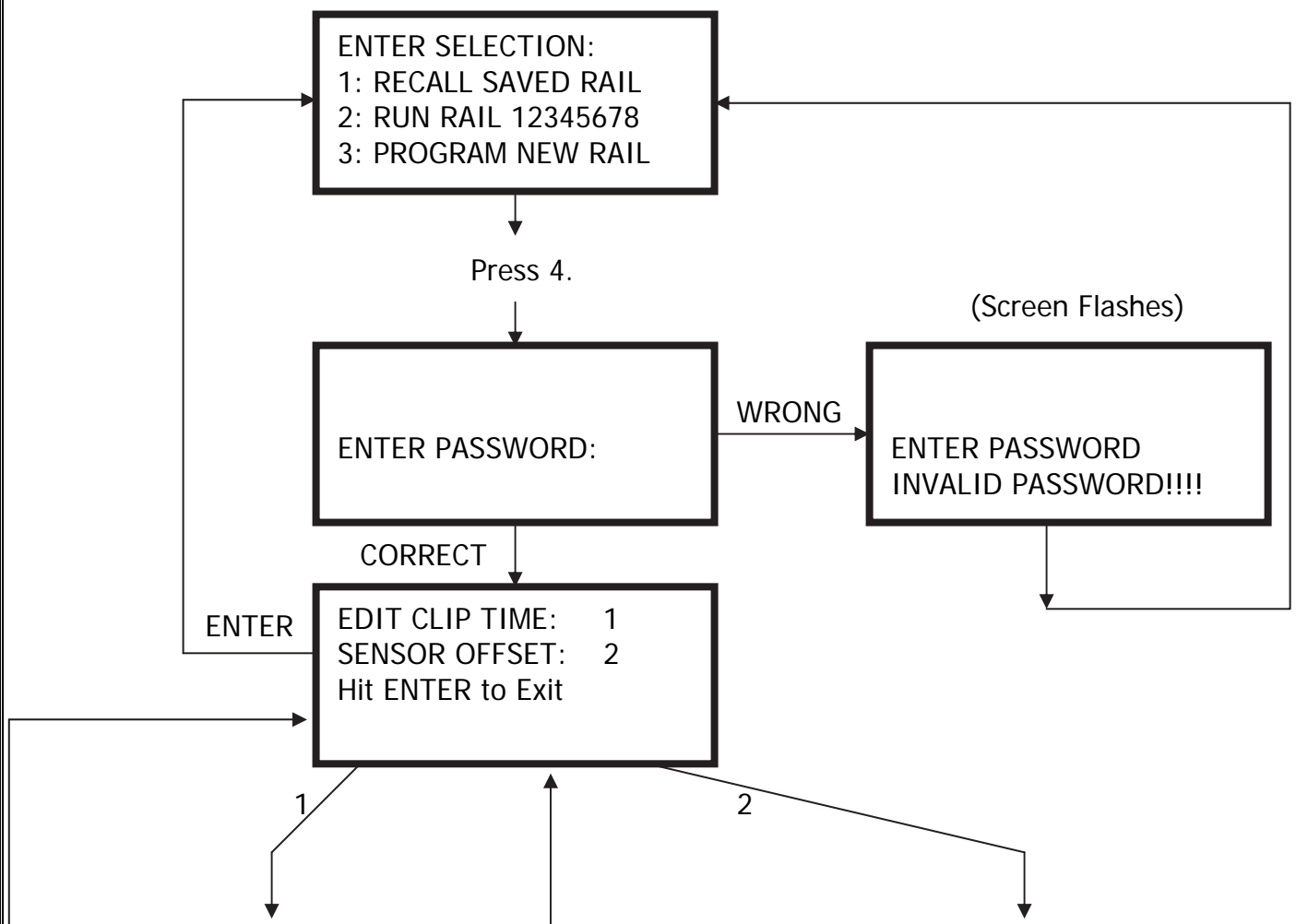
4 = Setup Screen – allows changes to be made to clipping parameters.
Disregard “DRILL Time” or “DRILLING” references.

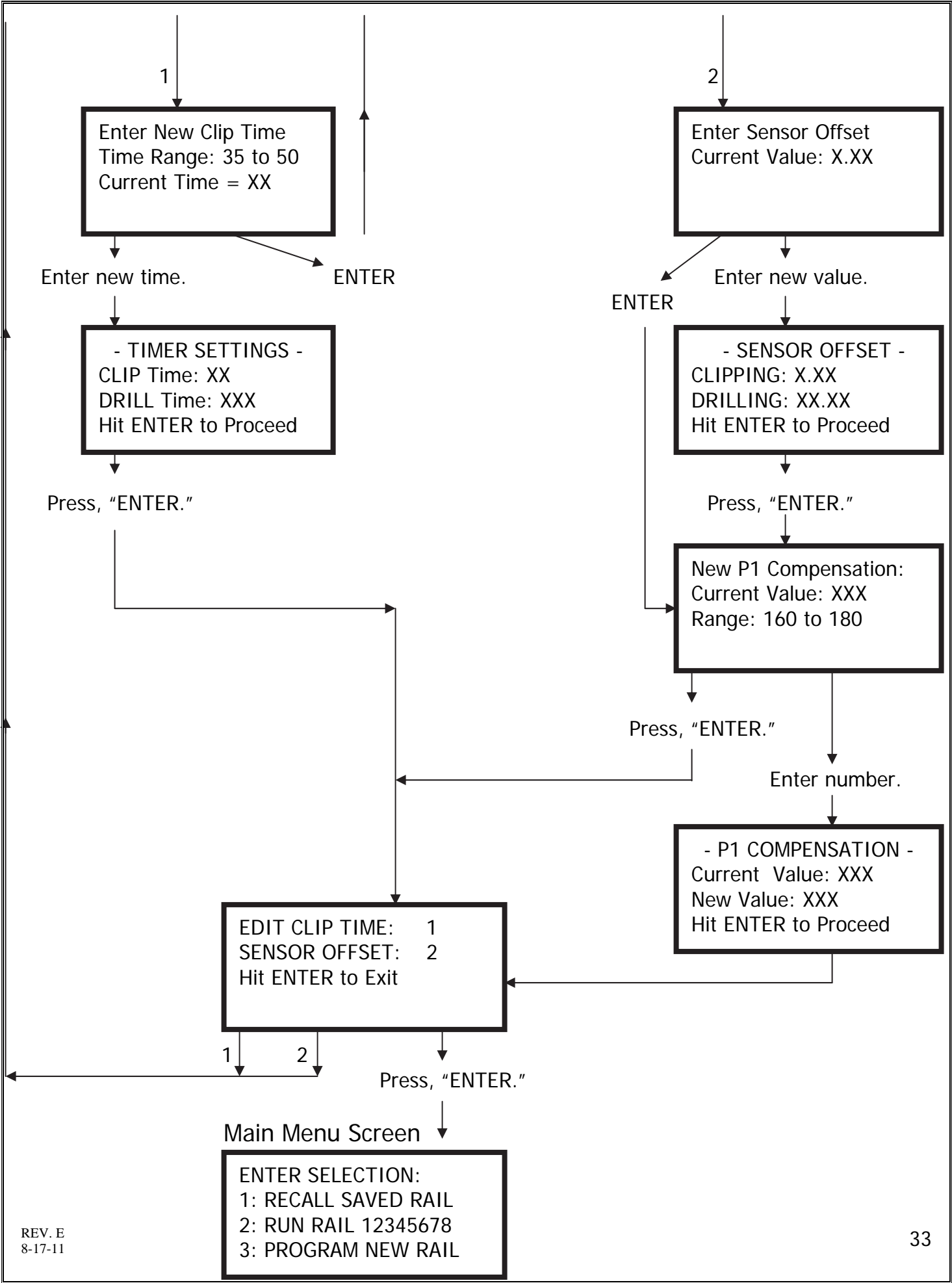
Edit Clip Time – allows changes to be made to clip tool cycle time (default = 30).
Larger value = longer tool cycle, smaller value = shorter tool cycle.

Sensor Offset – allows changes to be made to entire set of clips (default = 3.00).
If all clips are longer than their correct placement, decrease the sensor offset value. Increase the value if all clips are short of their correct placement.

P1 Compensation - allows changes to be made to 1ST clip offset (default = 176). Decrease if 1ST clip position is short of P1 setting. Increase if 1ST clip position is longer than P1 setting.

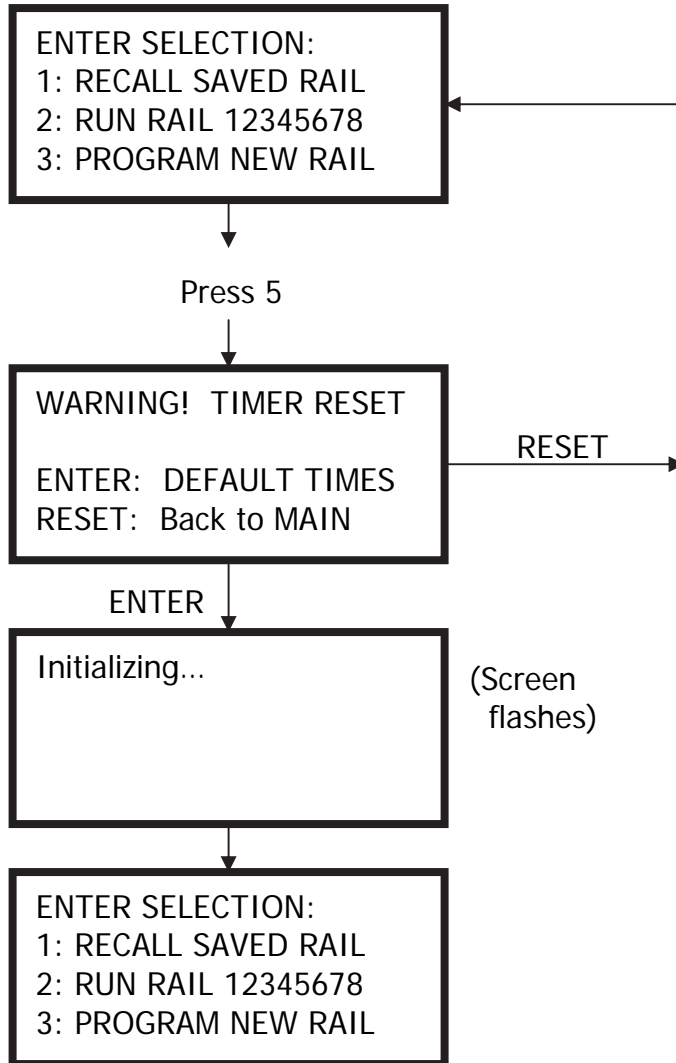
Main Menu Screen





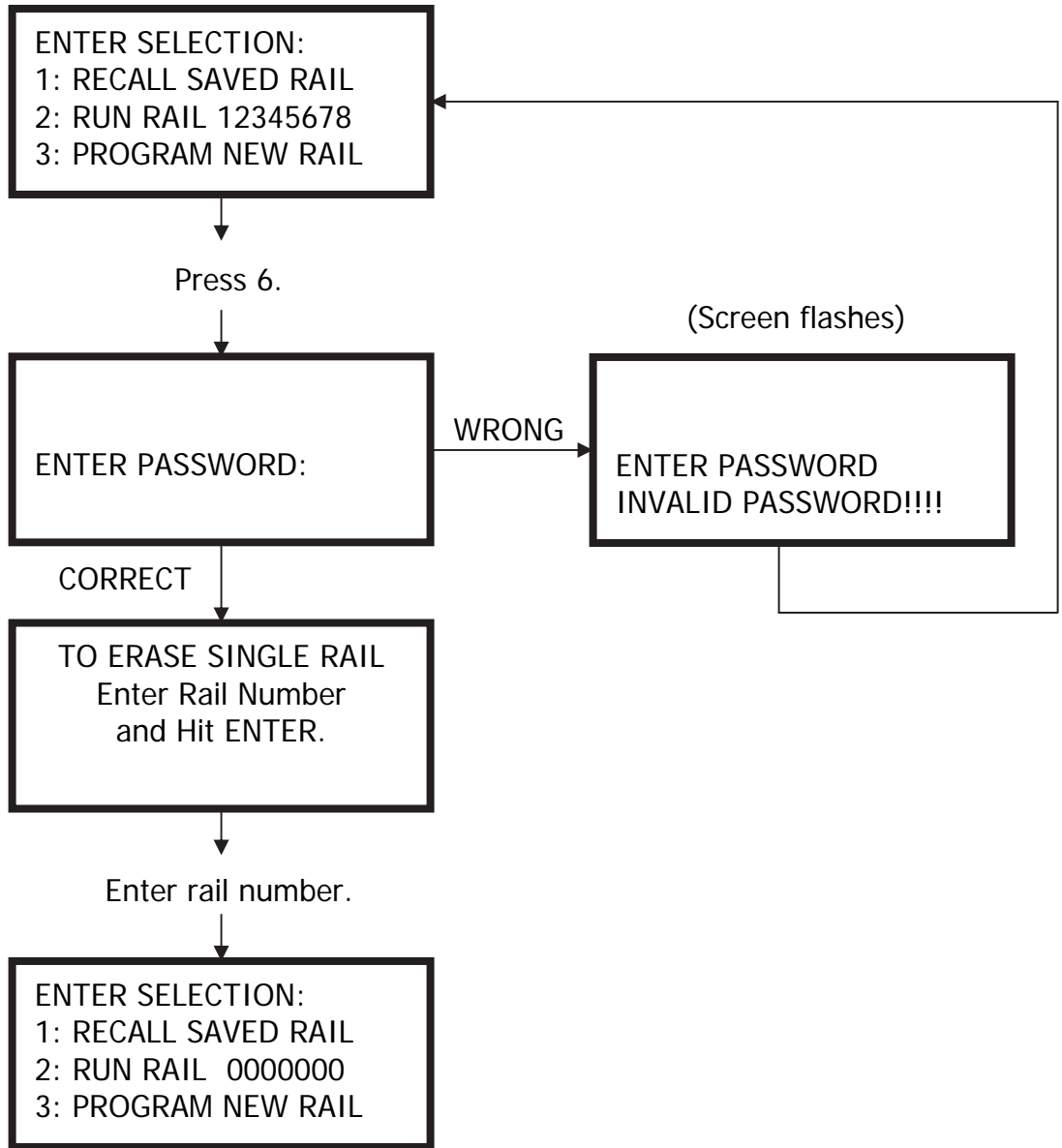
5 = Initialize Screen – reloads all initial settings (Clipping Time and Sensor Offset).

Main Menu Screen



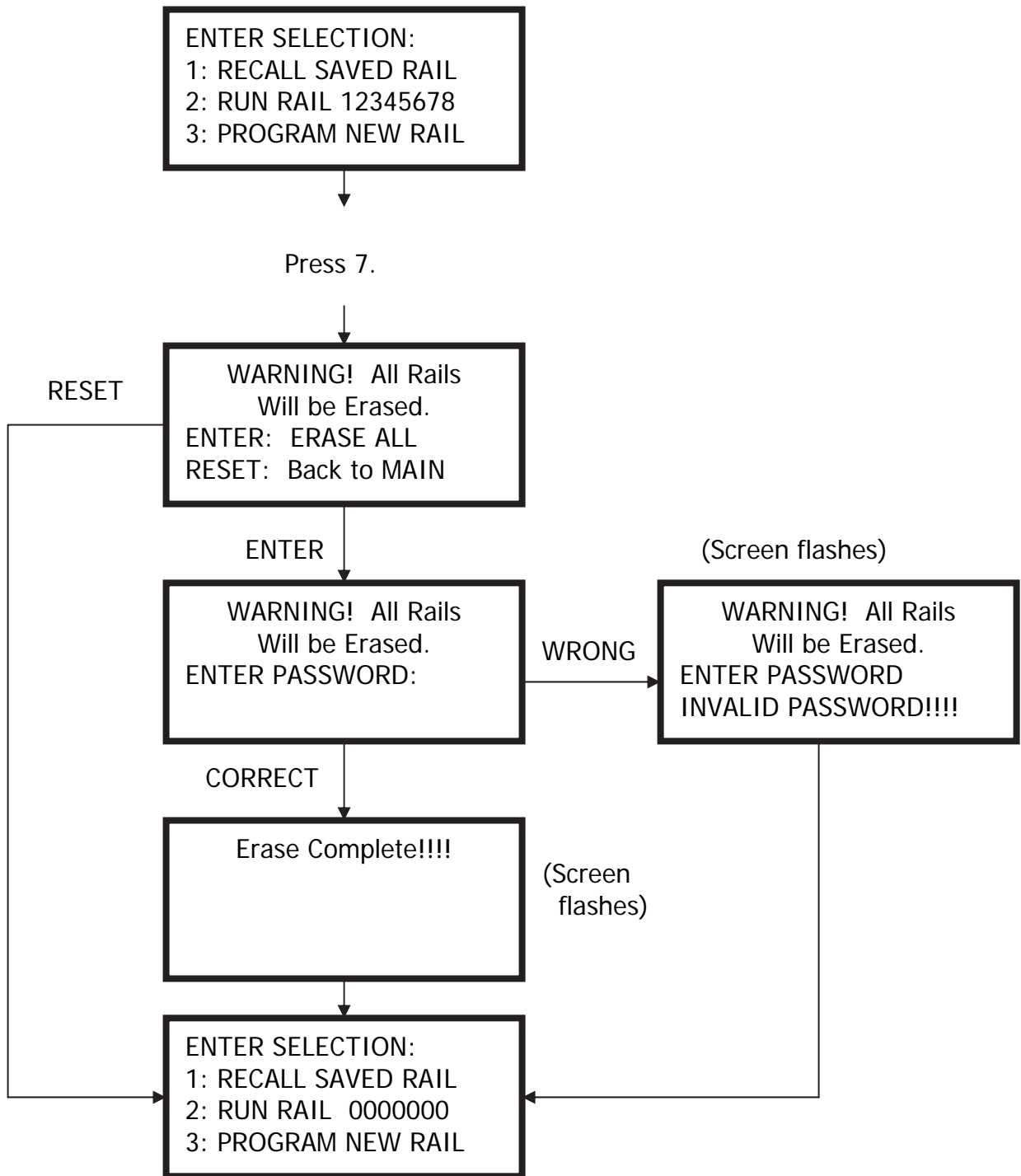
6 = Individual Erase – erases **INDIVIDUAL** rails from memory.
Contact Vertex 847-768-6139 for password.

Main Menu Screen



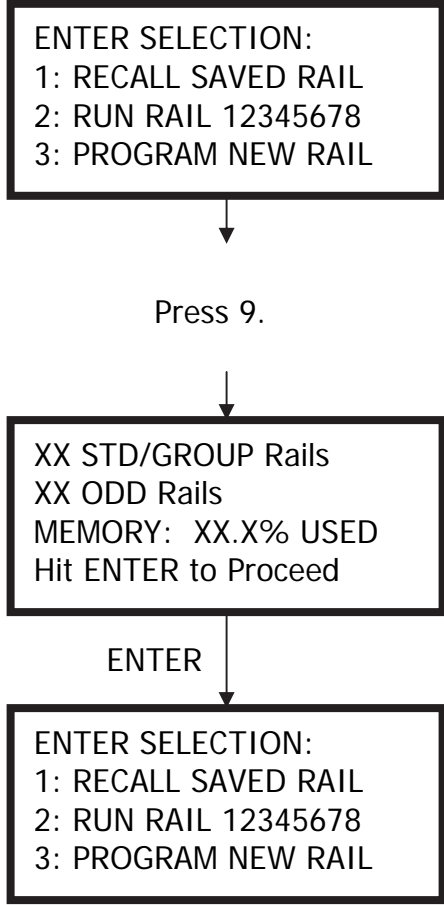
7 = Global Erase Screen – erases **ALL** rails from memory.
Contact Vertex 847-768-6139 for password.

Main Menu Screen



9 = Memory Allocation Screen – shows the quantity of rails in memory.

Main Menu Screen

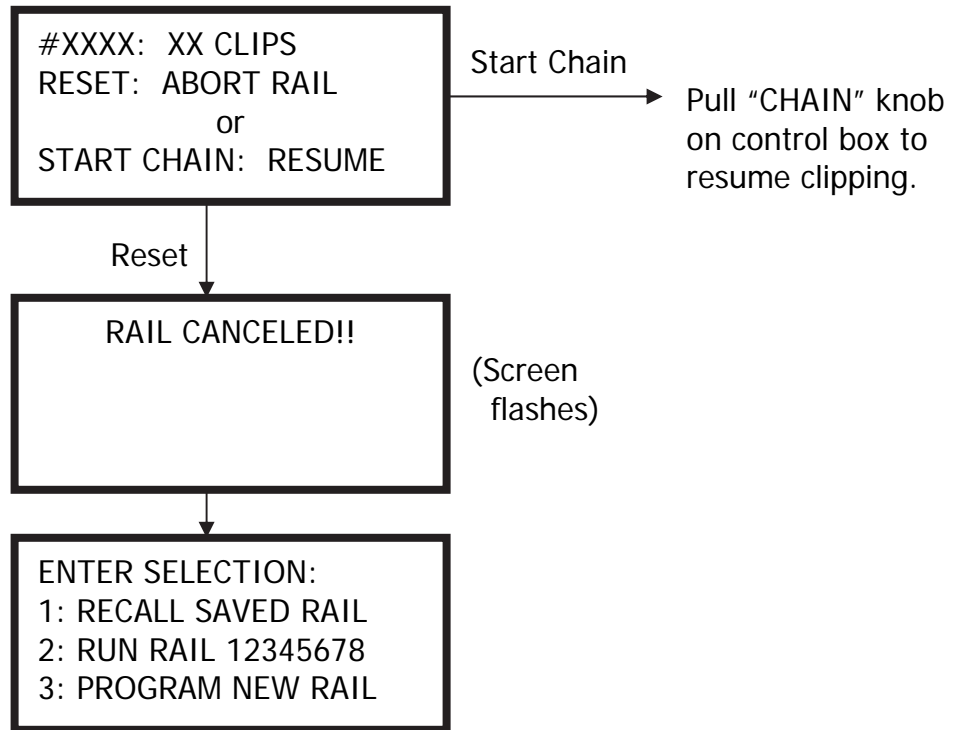


Notes: _____

Aborting a Rail

- interrupting a rail in mid clipping operation.

- Stop Chain.
- Screen appears.



Notes: _____

Recommended Spare Parts List

Part #	Description	Qty
VC0009	ROLLER	1
VC0011	LINK	2
VC0340	AIR LUBE OIL	1
VC5102	TOP PLATE	1
VC5113	FRONT PLATE	1
VC5117	TORSION SPRING	1
VC5118	LINK PIN	2
VC5121	PAWL SPRING	2
VC5122	LEFT HAND PAWL	1
VC5123	RIGHT HAND PAWL	1
VC5127	PISTON FEED SPRING	2
VC5132	PIN, FEED CYLINDER	1
VH0010	O-RING, #335 PISTON	1
VH0030	O-RING, #111 FEEDER SEAL	2
VH0069	PUSH-IN FTG, 90 DEG	2
VH0135	O-RING, #210 FEEDER PIST	2
VH0531	HAIR PIN	1
VH0520	REPAIR KIT, MAC VALVE VH0362	1
VH0569	REPAIR KIT, MAC VALVE VH0696	1

Notes: _____

TROUBLESHOOTING INFORMATION

PROBLEM	CAUSE	SOLUTION
Blade does not return.	Obstruction in tool.	Remove obstruction.
Clips not feeding.	Dispenser obstruction. Feed cylinder not engaged.	Remove obstruction. Engage by lifting up cylinder allowing flag to drop (Fig. 1).
Top of clip not seated against rail (Fig. 3).	Low air pressure. Incorrect tool height.	Increase pressure. (Never exceed 100 psi) Lower tool.
Clip's base is away from rail (Fig. 4).	The board is warped. Rail is not against rear fence.	Operator must adjust front fence closer to rear fence.
Incorrect clip spacing.	Program is set inaccurately.	Edit program to correct interval.
Clip driven too far into rail.	Air pressure too high.	Reduce air pressure.
First clip too long.	P1 compensation wrong.	See Page 32, P1 compensation.
First clip too short.	P1 compensation wrong.	See Page 32, P1 compensation.
Machine locked up.	Logic confused.	Reset Function 5 (Page 34)
Rail sensor light "ON" continuously.	Obstruction in sensor arm	Remove obstruction.
Rail sensor light never on.	Sensor Arm loose.	Readjust and tighten arm.
Chain will not run.	Circuit Breaker tripped.	Reset Breaker.

FIGURE 3

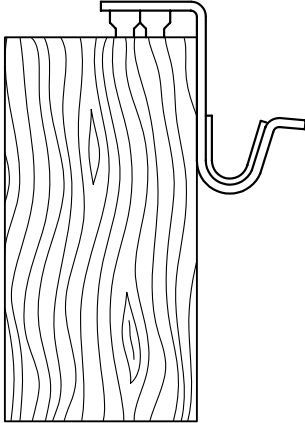
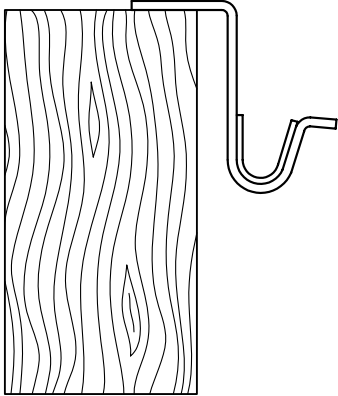


FIGURE 4



OVERALL MACHINE MAINTENANCE

Recommended Daily ~ Preventative Maintenance

1. Using supplied air gun, blow off woodchips and debris from Tools, Rail Trigger and acme rod/tool height motor area.
2. Add 2-3 drops of 30 weight oil to opening between front plate and top of blade of Tool assembly.
3. Remove air hose from the Clip Feed Cylinder, add 2-3 drops of 30 weight oil to opening and reinstall hose

Recommended Bi-Weekly Maintenance

1. Drain Air Reservoir Tank for condensation.
2. Check and adjust main drive chain for proper tension (VC5773).

Recommended Monthly Maintenance

1. Remove front plate from tool and lubricate driver blade, front plate and top plate.
2. Check guard fasteners.

!!! Very Important Note !!!

Using only Vertex Clip Fasteners and Vertex factory engineered and hand fabricated quality replacement parts when servicing or repairing your Vertex machine or hand tools will help insure and provide many years of reliable, superior, trouble-free and highly productive operation! Please call Vertex (847) 768-6139 for your quality replacement parts and friendly expert service!





Machine Specifications

Re: Model VC3000S - Servo Driven & Micro-Processor Controlled Machine

Power: 120 VAC, 50/60 Hz, 15 amps
(Optional ~ 240 VAC, 50/60Hz, 7.5Amp)

Air: 40-90 psi, 6 cfm

Machine Size: Length: 17' 1"
Width: Footprint = 21", Overall 54"
Height: 73"
Weight: 500 lbs

Chain Speed: 144 FPM

Rail Dimensions: Height: 5/8" - 2 1/2"
Width: 5/8" - 9 3/4"
Length: 84" Maximum

Rail Memory Storage Space: 5,000 Standard/Group Rails
500 Odd Rails

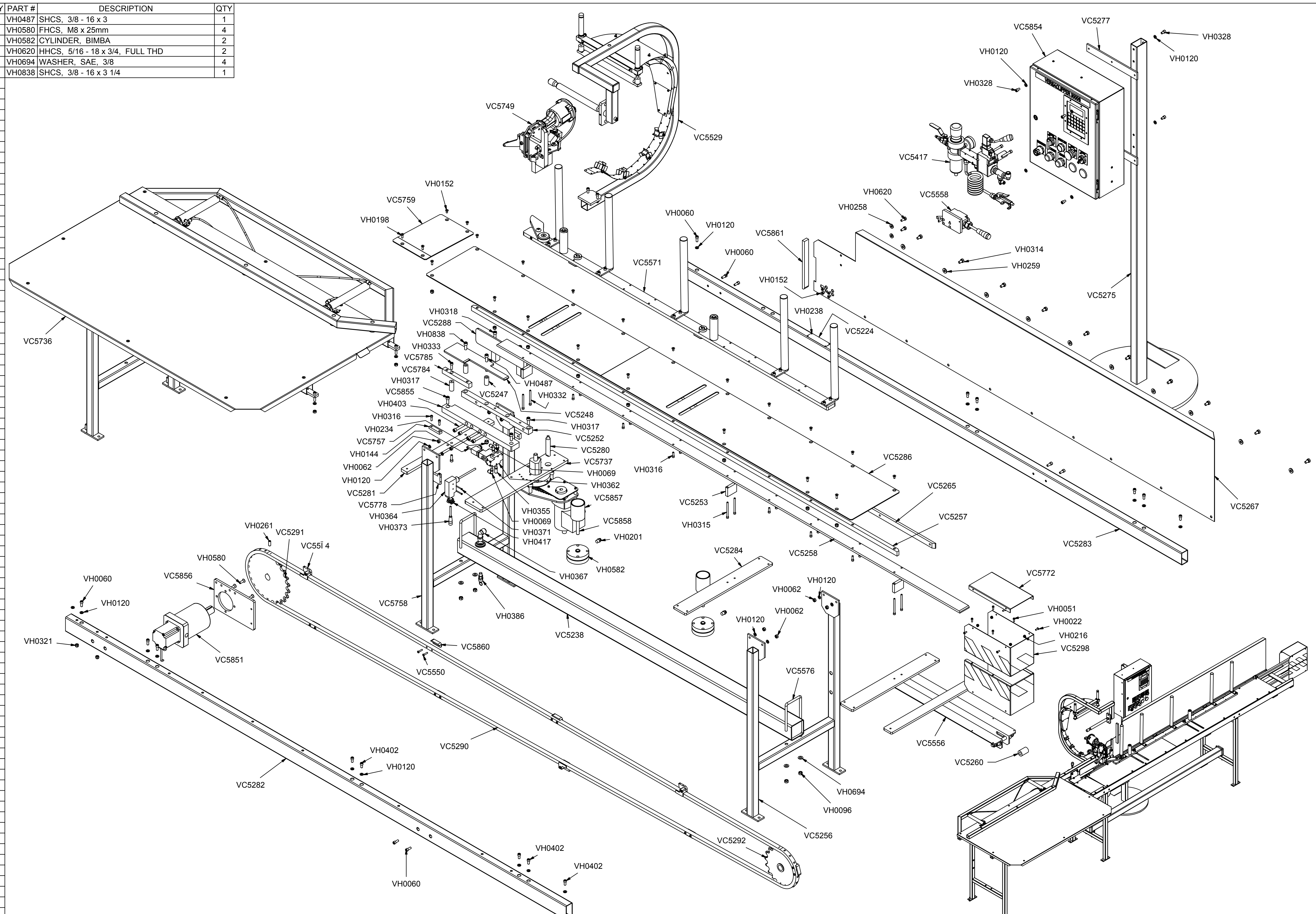
Clips per Rail: 24 Clips Maximum
1 Clip Minimum

Clipping Speed: 6,000-8,000 Clips/Hour Capable
(Rail speed and throughput depend on rail sizes and the operator's abilities.)

Clip Dispenser Capacity: 1,500 VersaClips

Notes: _____

PART #	DESCRIPTION	QTY	PART #	DESCRIPTION	QTY
VC5224	VC NAMEPLATE	1	VH0487	SHCS, 3/8 - 16 x 3	1
VC5238	AIR TANK	1	VH0580	FHCS, M8 x 25mm	4
VC5247	SPACER - EXTENSION PLATE	2	VH0582	CYLINDER, BIMBA	2
VC5248	EXTENSION PLATE	1	VH0620	HHCS, 5/16 - 18 x 3/4, FULL THD	2
VC5252	MOTOR MOUNT	1	VH0694	WASHER, SAE, 3/8	4
VC5253	RISER	3	VH0838	SHCS, 3/8 - 16 x 3 1/4	1
VC5256	LEG ASSEMBLY	1			
VC5257	FRONT CHAIN SUPPORT RAIL	1			
VC5258	CHAIN SUPPORT RAIL	1			
VC5260	IDLER SPROCKET RACE	1			
VC5265	REAR CHAIN SUPPORT RAIL	1			
VC5267	REAR FENCE	1			
VC5275	CONTROL BOX STAND	1			
VC5277	CONTROL BOX MOUNTING STRAPS	2			
VC5280	TOOL POST	1			
VC5281	STRUT	1			
VC5282	FRONT RAIL	1			
VC5283	REAR RAIL - AUTOMATIC	1			
VC5284	STRUT	1			
VC5286	FENCE TRACK	1			
VC5288	EXIT GUIDE PLATE	1			
VC5290	DRIVE CHAIN	1			
VC5291	DRIVE SPROCKET	1			
VC5292	IDLER SPROCKET W/ FLANGED BEARINGS	1			
VC5298	SPROCKET GUARD	2			
VC5417	CONTROL VALVE DETAIL	1			
VC5529	DISPENSER FRAME ASSY	1			
VC5550	BHCS FOR BLANK LUG VC5860	12			
VC5556	SPROCKET JACK ASSEMBLY	1			
VC5558	RAIL TRIGGER SWITCH DETAIL - SERVO	1			
VC5571	FRONT FENCE DETAIL	1			
VC5576	U-BOLT	2			
VC5736	EXIT TABLE DETAIL	1			
VC5737	TOOL HEIGHT MOTOR DETAIL - SERVO	1			
VC5749	TOOL ASSEMBLY	1			
VC5574	LUG ASSEMBLY	3			
VC5757	SWITCH PLATE LATCH	1			
VC5758	LEG ASSEMBLY	1			
VC5759	FENCE TRACK EXTENSION	1			
VC5772	SPROCKET GUARD COVER	1			
VC5778	SWITCH PLATE SHORT	1			
VC5784	SPACER FOR FENCE EXTENSION	1			
VC5785	MOUNT FOR TRACK EXTENSION	1			
VC5851	SERVO MOTOR	1			
VC5854	CONTROL BOX	1			
VC5855	MOTOR MOUNT BRACKET - SERVO MOTOR	1			
VC5856	MOTOR MOUNT - SERVO	1			
VC5857	SPACER - JOYSTICK/CYLINDER	2			
VC5858	THREADED ROD - JOYSTICK CYLINDER	2			
VC5860	CHAIN RAIL SUPPORT	6			
VC5861	RAIL SPOOL STOP	1			
VH0022	BHCS, 10 - 32 x 1/2	4			
VH0051	SHCS, 10 - 32 x 1/2	4			
VH0060	SHCS, 5/16 - 18 x 3/4	12			
VH0062	NUT, HEX, 5/16 - 18	8			
VH0069	PUSH-IN FTG, 90, 1/4 OD x 1/8 NPT	3			
VH0096	NUT, HEX, 3/8 - 16	4			
VH0120	WASHER, LOCK, 5/16	29			
VH0144	SHCS, 10 - 32 x 1	2			
VH0152	FHCS, 1/4 - 20 x 1/2	16			
VH0198	FHCS, 1/4 - 20 x 3/4	10			
VH0201	PUSH-IN FTG, STR, 1/4 OD x 1/4 NPT	2			
VH0216	NUT, NYLOCK, 10 - 32	4			
VH0234	NUT, NYLOCK, 3/8 - 16	1			
VH0238	DRIVE SCREW	4			
VH0258	WASHER, THICK - 1/8, 5/16	2			
VH0259	WASHER, THICK, 3/8	10			
VH0261	SET SCREW, 3/8 - 16 x 1	1			
VH0314	HHCS, 3/8 - 16 x 5/8, FULL THD	10			
VH0315	SHCS, 1/4 - 20 x 3	4			
VH0316	SHCS, 1/4 - 20 x 3/4	14			
VH0317	SHCS, 3/8 - 16 x 1	3			
VH0318	SHCS, 3/8 - 16 x 4	2			
VH0321	NUT, NYLOCK, 1/4 - 20, HEAVY DUTY	10			
VH0328	SHCS, 5/16 - 18 x 1/2	6			
VH0332	SHCS, 1/4 - 20 x 2 3/4	2			
VH0333	SHCS, 5/16 - 18 x 1	2			
VH0355	MUFFLER, 1/8	1			
VH0362	MAC VALVE, 24V DC	1			
VH0364	SWITCH	1			
VH0367	PUSH-IN FTG, 90, 1/2 OD x 1/2 NPT	1			
VH0371	SHCS, 6 - 32 x 1 1/4	2			
VH0373	CABLE - EXIT CONVEYOR	1			
VH0386	SAFETY VALVE	1			
VH0402	SHCS, 5/16 - 18 x 5/8	10			
VH0403	SHCS, 3/8 - 24 x 2	4			
VH0417	CONDUIT FITTING CONNECTOR, 3/8 STR	1			



REV	ECN	DESCRIPTION	BY	APPD	DATE	MATERIAL:	TOL UNLESS SPECIFIED	© 2011	VERTEX FASTENERS
A			JMW		8-6-01		INCHES X++ = .005 XX+ = .015 XXX = .005 ANGLES ± 1/2	DWN BY	JMW
B			JMW		4-29-02	HEAT TREATMENT:		APPD	
C	404		JMW	DA	9-8-04			DATE	
D	1097	INV & UPDATE	JMW	JMF	9-13-11	FINISH:		SCALE 1:8	
								INVENTOR	DWG. NO. VC5003
									PAGE 1 OF 3
									D

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VC5736 - EXIT TABLE DETAIL		
PART #	DESCRIPTION	QT
VC5221	BRACKET	2
VC5256	LEG ASSEMBLY	1
VC5538	PUSHER	1
VC5539	NUT, EXIT CONVEYOR	2
VC5541	EXIT PUSHER GLIDE - TRI SERVO	4
VC5786	EXIT TABLE TOP W/ FRAME & FSTNRS	1
VC5271	EXIT CONVEYOR	(1)
VC5768	EXIT TABLE TOP	(1)
VH0198	FHCS, 1/4 - 20 x 3/4	(10)
VH0321	NUT, NYLOCK, 1/4 - 20, HEAVY DUTY	(10)
VH0424	WASHER, 1/4	(10)
VH0002	NUT, FLEX, 1/4 - 20	4
VH0037	PUSH-IN FTG, STR, 1/4 OD x 1/8 NPT	4
VH0060	SHCS, 5/16 - 18 x 3/4	8
VH0062	NUT, HEX, 5/16 - 18	6
VH0069	PUSH-IN FTG, 90, 1/4 OD x 1/8 NPT	4
VH0120	WASHER, LOCK, 5/16	10
VH0128	HHCS, 3/8 - 16 x 1 1/2	2
VH0143	SHCS, 10 - 32 x 3/4	2
VH0152	FHCS, 1/4 - 20 x 1/2	4
VH0207	NUT, JAM, 3/8 - 16, GR5	2
VH0246	TUBING, 1/4, POLYETHYLENE x 12	2
VH0246	TUBING, 1/4, POLYETHYLENE x 19	2

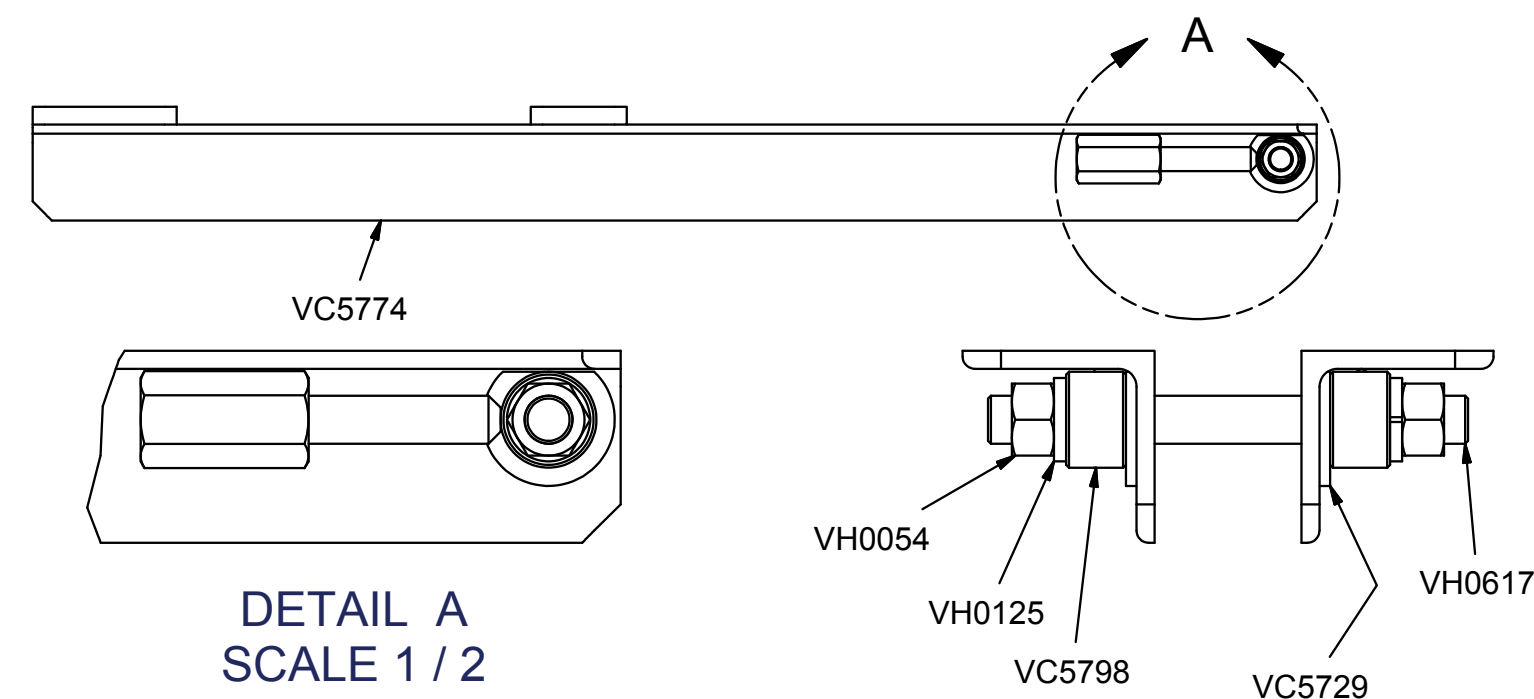
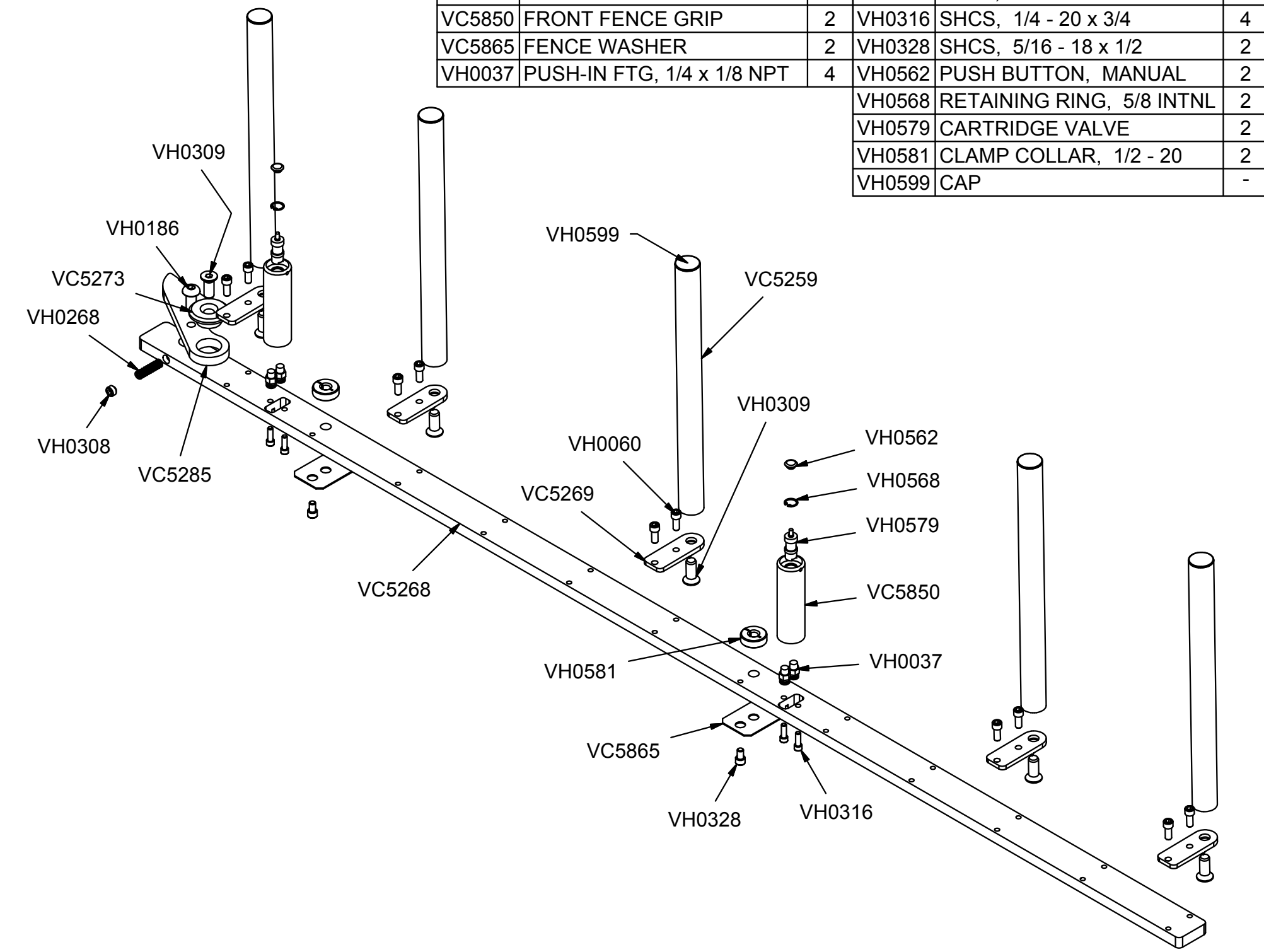
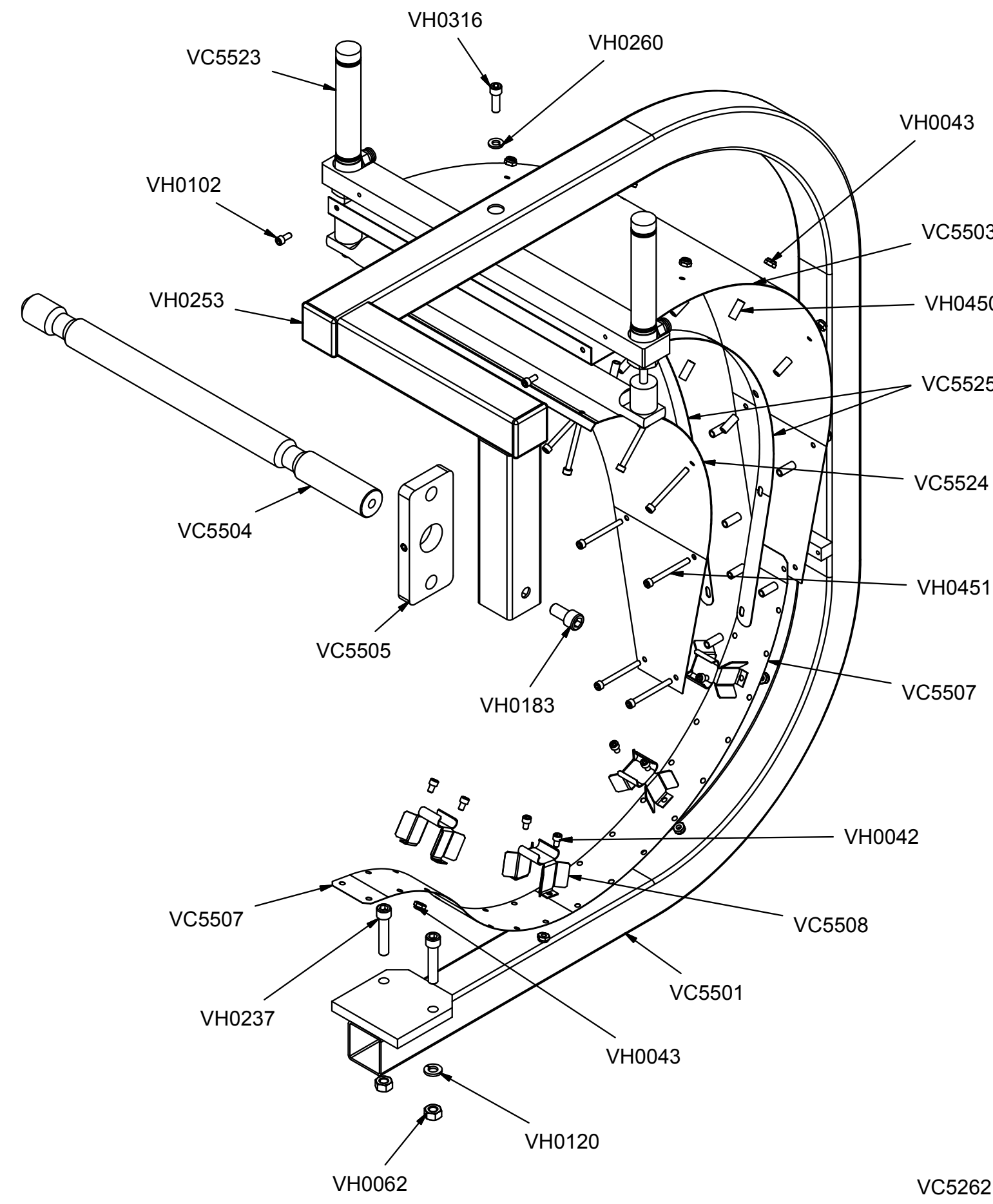
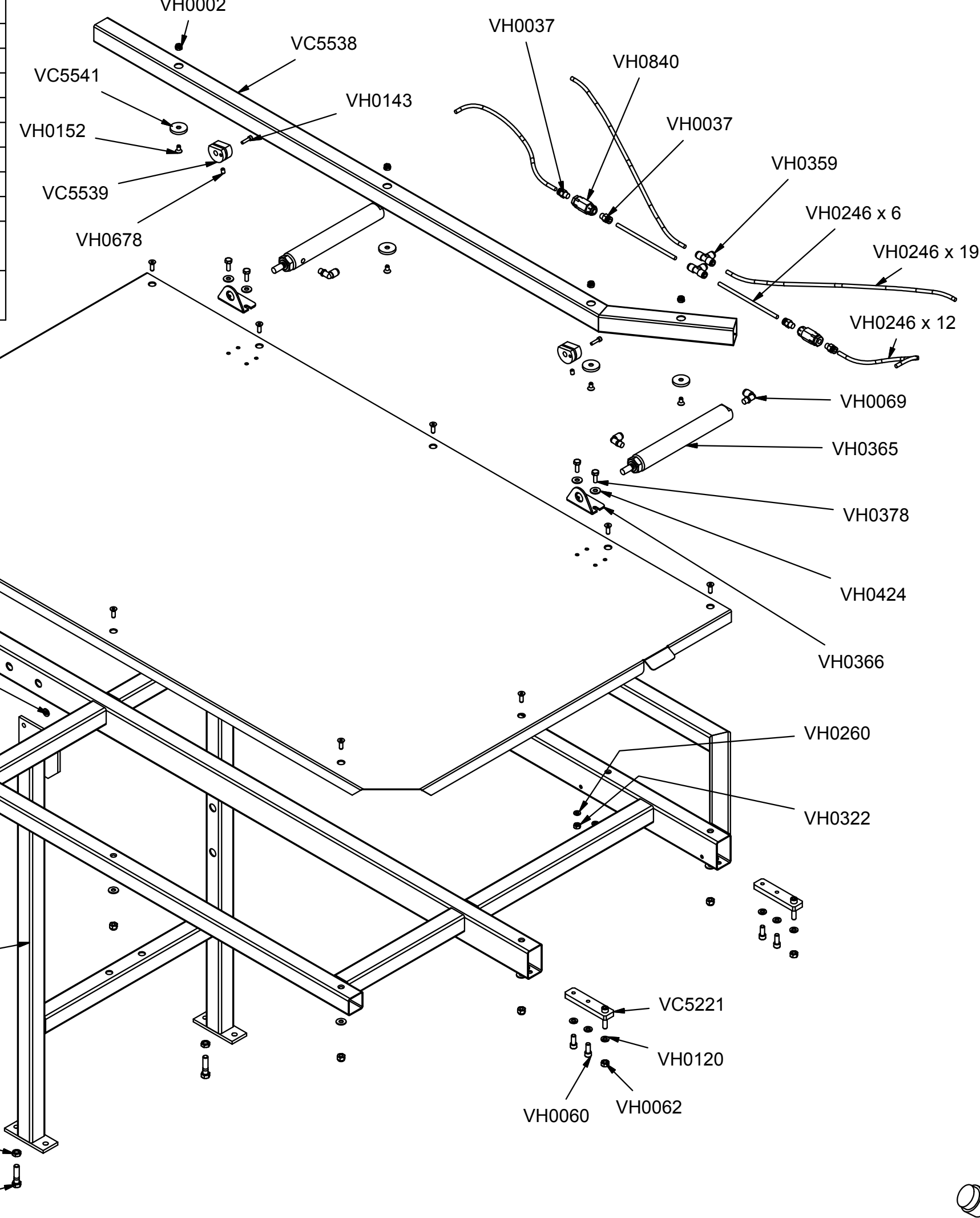
VC5736 - EXIT TABLE DETAIL		
PART #	DESCRIPTION	QT
VH0246	TUBING, 1/4, POLYETHYLENE x 6	2
VH0260	WASHER, LOCK, 1/4	4
VH0322	NUT, HEX, 1/4 - 20	4
VH0359	PUSH-IN FTG, TEE, 1/4 OD	2
VH0365	CYLINDER	2
VH0366	CYLINDER, HARDWARE	2
VH0378	HHCS, 1/4 - 20 x 3/4, FULL THD	4
VH0424	WASHER, 1/4	4
VH0678	SET SCREW, 1/4 - 20 x 3/8	2
VH0840	FLOW CONTROL VALVE	2

VC5529 - DISPENSER FRAME ASSEMBLY		
PART #	DESCRIPTION	QT
VC5501	DISPENSER FRAME	1
VC5503	CLIP CHUTE	1
VC5504	SPOOL ROD	1
VC5505	MAGNETIC BRAKE BLOCK ASSEMBLY	1
VC5507	TRACK	1
VC5508	TRACK GUIDE	4
VC5523	CLIP LIFTER ASSEMBLY	1
VC5524	INSIDE CLIP CHUTE	1
VC5525	STRIP GUIDE FOR CHUTE	1
VH0042	SHCS, 8 - 32 x 1/4	8

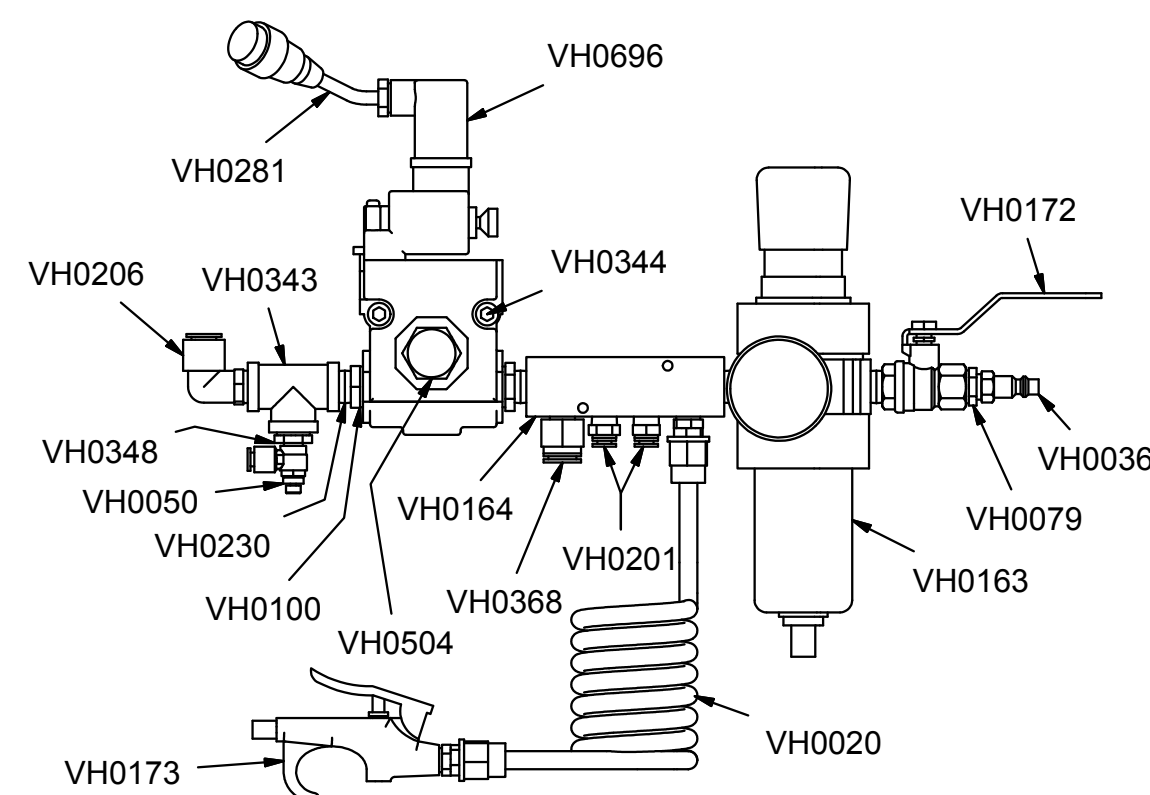
VC5529 - DISPENSER FRAME ASSEMBLY		
PART #	DESCRIPTION	QT
VH0043	NUT, NYLOCK, 8 - 32, THIN HT	16
VH0062	NUT, HEX, 5/16 - 18	2
VH0102	SHCS, 8 - 32 x 3/8 W/ PATCH	3
VH0120	WASHER, LOCK, 5/16	2
VH0183	SHCS, 3/8 - 16 x 3/4	1
VH0237	SHCS, 5/16 - 18 x 1 1/2	2
VH0253	CAP	2
VH0260	WASHER, LOCK, 1/4	1
VH0316	SHCS, 1/4 - 20 x 3/4	1
VH0450	SPACER, 1/4 OD x 5/8, #8	20
VH0451	SHCS, 8 - 32 x 1 3/4	10

VC5571 - FRONT FENCE DETAIL		
PART #	DESCRIPTION	QT
VC5259	FENCE POST ASSEMBLY	5
VC5268	FENCE MOUNT	1
VC5269	FENCE POST MOUNT	5
VC5273	PIVOT BUSHING	1
VC5285	ARM	1
VC5850	FRONT FENCE GRIP	2
VC5865	FENCE WASHER	2
VH0037	PUSH-IN FTG, 1/4 x 1/8 NPT	4

VC5571 - FRONT FENCE DETAIL		
PART #	DESCRIPTION	QT
VH0060	SHCS, 5/16 - 18 x 3/4	10
VH0186	BHCS, 1/2 - 13 x 1	1
VH0268	SPRING	1
VH0308	SET SCREW, 1/2 - 13 x 3/8	1
VH0309	FHCS, 1/2 - 13 x 1 1/4	6
VH0316	SHCS, 1/4 - 20 x 3/4	4
VH0328	SHCS, 5/16 - 18 x 1/2	2
VH0562	PUSH BUTTON, MANUAL	2
VH0568	RETAINING RING, 5/8 INTNL	2
VH0579	CARTRIDGE VALVE	2
VH0581	CLAMP COLLAR, 1/2 - 20	2
VH0599	CAP	-

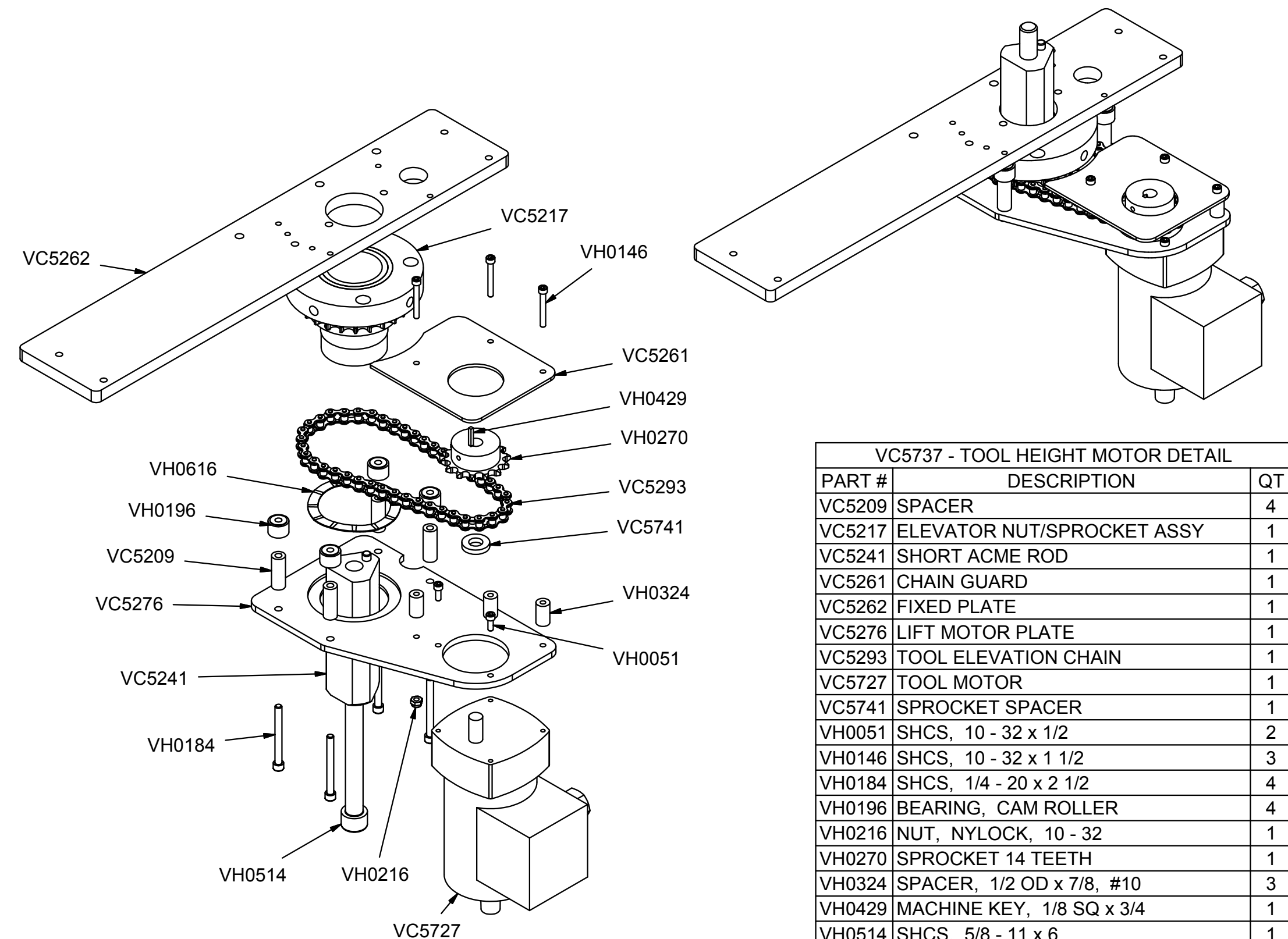


VC5556 - SPROCKET JACK ASSY		
PART #	DESCRIPTION	QT
VC5729	IDLER SPROCKET WASHER	2
VC5774	IDLER SPROCKET BRACKET	1
VC5798	JACK SPACER	2
VH0054	NUT, HEX, 1/2 - 13, GR5	2
VH0125	WASHER, LOCK, 1/2	2
VH0508	SET SCREW, 1/2 - 13 x 3	2
VH0617	THREADED STUD, 1/2 - 13 x 5	1



VC5417 - CONTROL VALVE DETAIL		
PART #	DESCRIPTION	QT
VH0020	RETRACTABLE HOSE	1
VH0036	PLUG, MALE, 1/4 - 1/4	1
VH0050	FLOW CONTROL	1
VH0079	BUSHING, REDUCER, 3/8 x 1/4	1
VH0100	BUSHING, REDUCER, BRASS, 1/2 x 3/8	2
VH0163	FILTER/REGULATOR W/ GAUGE	1
VH0164	MANIFOLD	1
VH0172	VALVE, VENTED SHUT-OFF BALL	1
VH0173	AIR GUN	1
VH0201	PUSH-IN FTG, STR, 1/4 OD x 1/4 NPT	2

VC5417 - CONTROL VALVE DETAIL		
PART #	DESCRIPTION	QT
VH0206	PUSH-IN FTG, 90, 1/2 OD x 3/8 NPT	1
VH0230	NIPPLE, 3/8 NPT x 1 CLOSE	4
VH0281	SOLENOID CABLE	1
VH0343	TEE, 3/8	1
VH0344	SHCS, 5/16 - 18 x 2	2
VH0348	BUSHING, REDUCER, 3/8 x 1/8	1
VH0368	PUSH-IN FTG, STR, 1/2 OD x 1/4 NPT	1
VH0504	MUFFLER	1
VH0696	VALVE, 24V DC, TOOL	1



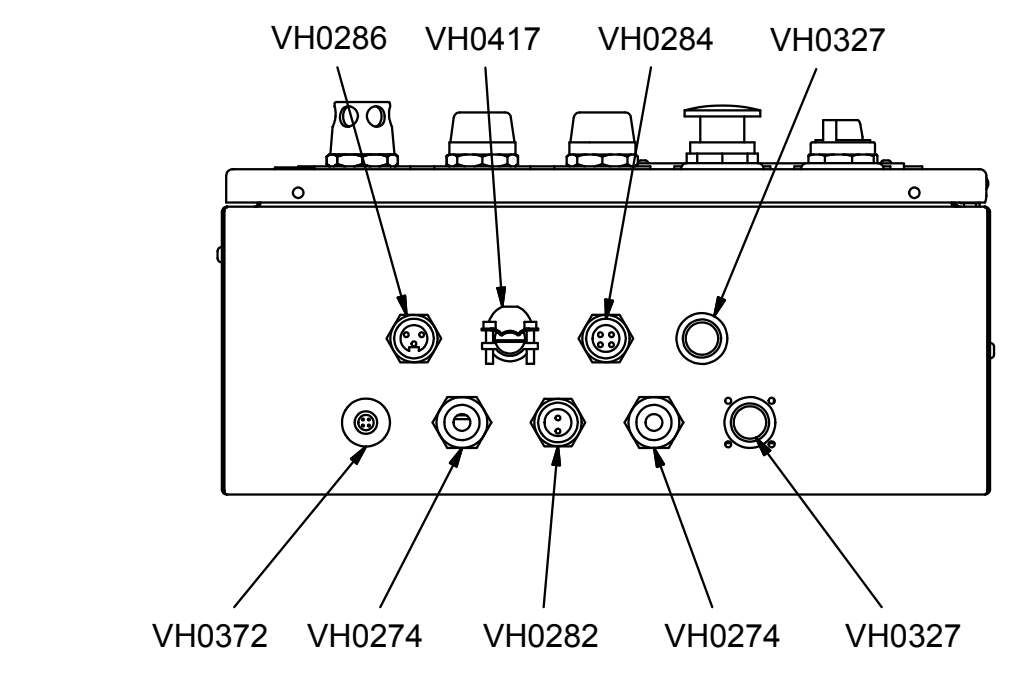
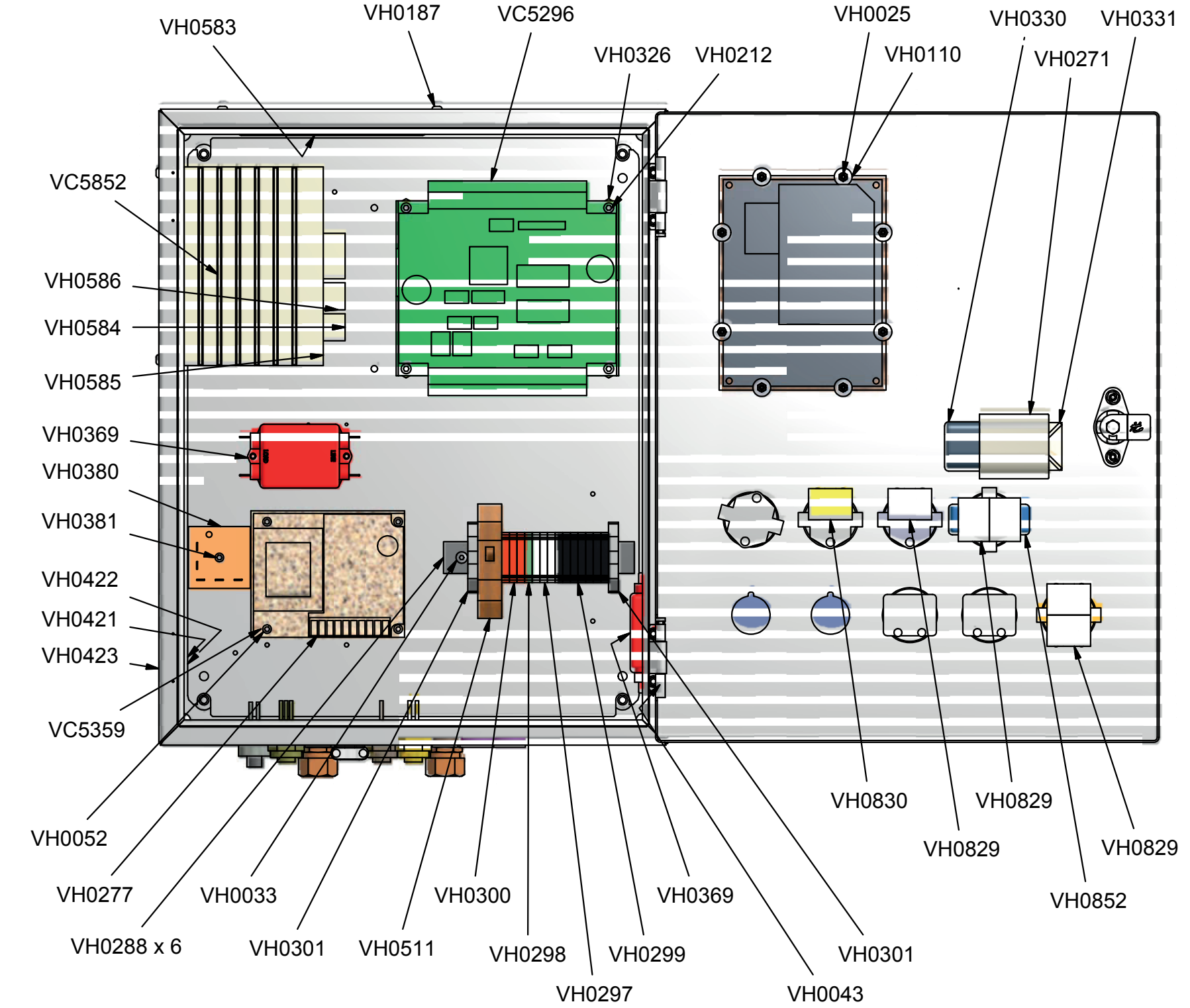
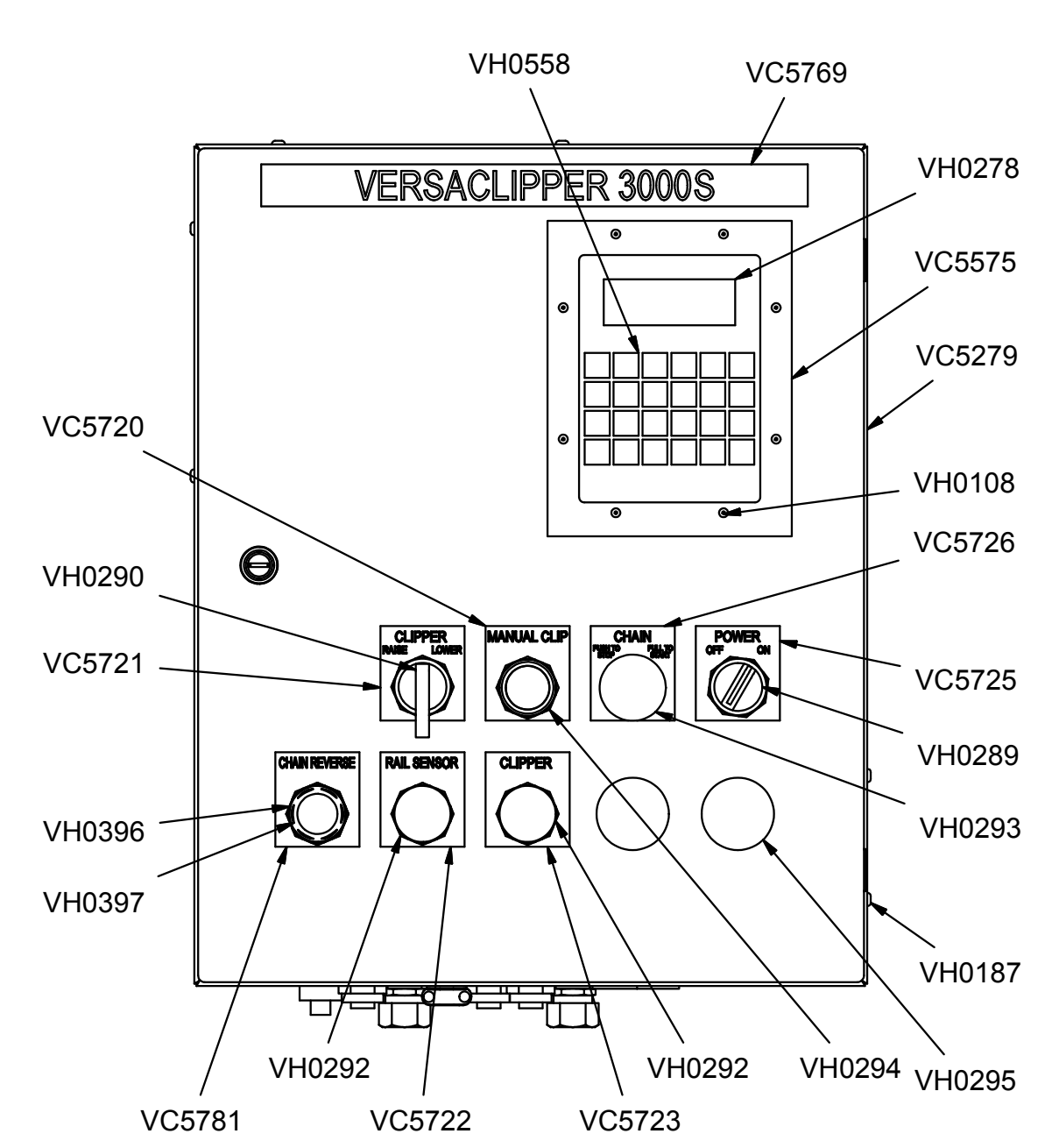
VC5737 - TOOL HEIGHT MOTOR DETAIL		
PART #	DESCRIPTION	QT
VC5209	SPACER	4
VC5217	ELEVATOR NUT/SPROCKET ASSY	1
VC5241	SHORT ACME ROD	1
VC5261	CHAIN GUARD	1
VC5262	FIXED PLATE	1
VC5276	LIFT MOTOR PLATE	1
VC5293	TOOL ELEVATION CHAIN	1
VC5727	TOOL MOTOR	1
VC5741	SPROCKET SPACER	1
VH0051	SHCS, 10 - 32 x 1/2	2
VH0146	SHCS, 10 - 32 x 1 1/2	3
VH0184	SHCS, 1/4 - 20 x 2 1/2	4
VH0196	BEARING, CAM ROLLER	4
VH0216	NUT, NYLOCK, 10 - 32	1
VH0270	SPROCKET 14 TEETH	1
VH0324	SPACER, 1/2 OD x 7/8, #10	3
VH0429	MACHINE KEY, 1/8 SQ x 3/4	1
VH0514	SHCS, 5/8 - 11 x 6	1
VH0616	WASHER, WAVE SPRING	1

REV	ECN	DESCRIPTION	BY	APPD	DATE	MATERIAL:
A			JMW		8-6-01	
B			JMW		4-29-02	HEAT TREATMENT:
C	404		JMW	DA	9-8-04	
D	1097	INV & UPDATE	JMW	JMF	9-13-11	FINISH:

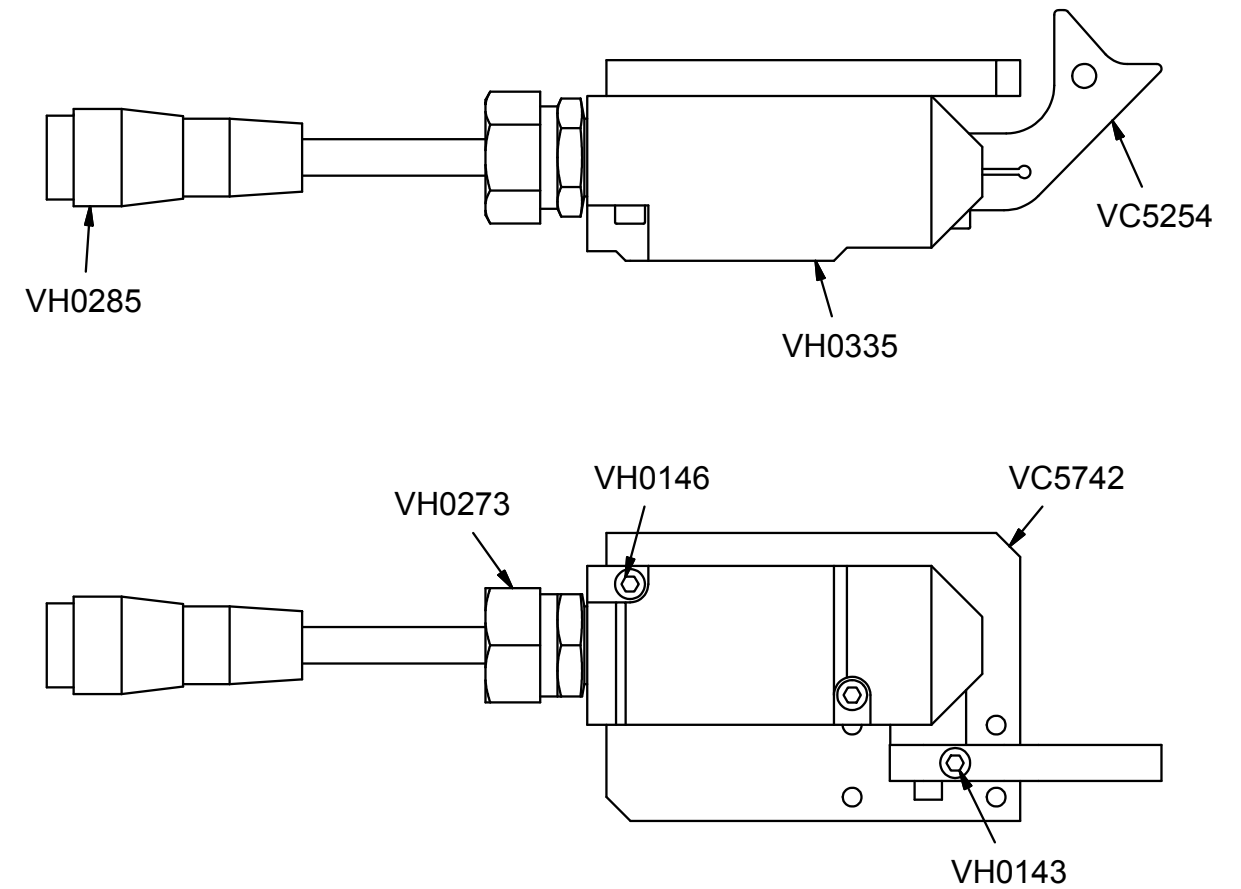
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ANGLES ±1/2					
© 2011	VERTEX FASTENERS	1798 SHERWIN AVENUE DES PLAINES, IL 60018 U.S.A.			
APPD	JMW	VERSACLIPPER 3000S SINGLE SERVO ASSEMBLY			
DATE					
SCALE					
INVENTOR	DWG. NO. VC5003	PAGE 2 OF 3	D		

VC5854 - CONTROL BOX ASSEMBLY			VC5854 - CONTROL BOX ASSEMBLY			VC5854 - CONTROL BOX ASSEMBLY			VC5854 - CONTROL BOX ASSEMBLY		
PART #	DESCRIPTION	QT	PART #	DESCRIPTION	QT	PART #	DESCRIPTION	QT	PART #	DESCRIPTION	QT
VC5279	CONTROL BOX	1	VH0052	SHCS, 8 - 32 x 7/8	4	VH0292	PILOT LIGHT	2	VH0381	SHCS, 8 - 32 x 1 1/4	1
VC5296	MICRO-PROCESSOR	1	VH0108	BHCS, 4 - 40 x 1/2	8	VH0293	SWITCH, PUSH/PULL	1	VH0396	SWITCH, PUSH BUTTON	1
VC5359	SPACER	4	VH0110	WASHER, FENDER, #6	8	VH0294	SWITCH, PSH BTN, MMNTRY (BLOCK)	1	VH0397	BUTTON GUARD	1
VC5575	BEZEL	1	VH0187	BHCS, 8 - 32 x 3/8	6	VH0295	CLOSURE BUTTON	2	VH0417	CONDUIT FITTING CNCTR, 3/8 STR	1
VC5720	NAME PLATE - MANUAL CLIP	1	VH0212	SHCS, 10 - 32 x 3/8 W/ PATCH	8	VH0297	CONTACT BLOCK - WHITE	3	VH0421	SNAP-IN MODULES, 8 CONDUCTOR	1
VC5721	NAME PLATE - CLPR RAISE / LWR	1	VH0271	CAPACITOR	1	VH0298	CONTACT BLOCK - GREEN	1	VH0422	SNAP-IN MODULES, 6 CONDUCTOR	1
VC5722	NAME PLATE - RAIL SENSOR	1	VH0274	STRAIN RELIEF	2	VH0299	CONTACT BLOCK - BLACK	7	VH0423	DUPLEX	1
VC5723	NAME PLATE - CLIPPER	1	VH0277	DC POWER SUPPLY	1	VH0300	CONTACT BLOCK - RED	3	VH0511	CIRCUIT BREAKER	1
VC5725	NAME PLATE - POWER ON / OFF	1	VH0278	KEYPAD	1	VH0301	END CLAMP	2	VH0558	KEYPAD MEMBRANE	-
VC5726	NAME PLATE - CHAIN PUSH / PULL	1	VH0282	RECEPTACLE	1	VH0326	STANDOFF, HEX, 1/2 OD x 3, #10	4	VH0583	RESISTOR - REGEN	1
VC5769	NAME PLATE	1	VH0284	RECEPTACLE	1	VH0327	PLUG, 1/2 CONDUIT	2	VH0584	CABLE, 3 M POWER	1
VC5781	NAME PLATE - CHAIN REVERSE	1	VH0286	RAIL SENSOR	1	VH0330	RUBBER BOOT	1	VH0585	CABLE, 3 M ENCODER	1
VC5852	SERVOPACK	1	VH0288	DIN RAIL	1	VH0331	ADHESIVE PAD	1	VH0586	CABLE, INTERFACE	1
VH0025	NUT, NYLOCK, 4 - 40	8	VH0289	SWITCH, SELECTOR	1	VH0369	LINE FILTER	2	VH0829	CONTACT BLOCK, N/O	-
VH0033	BHCS, 10 - 32 x 1/4	2	VH0290	SELECTOR SWITCH	1	VH0372	RECEPTACLE	1	VH0830	CONTACT BLOCK, N/C	-
VH0043	NUT, NYLOCK, 8 - 32, THIN HT	6				VH0380	TIMING RELAY	1	VH0852	ARC SUPPRESSOR	2

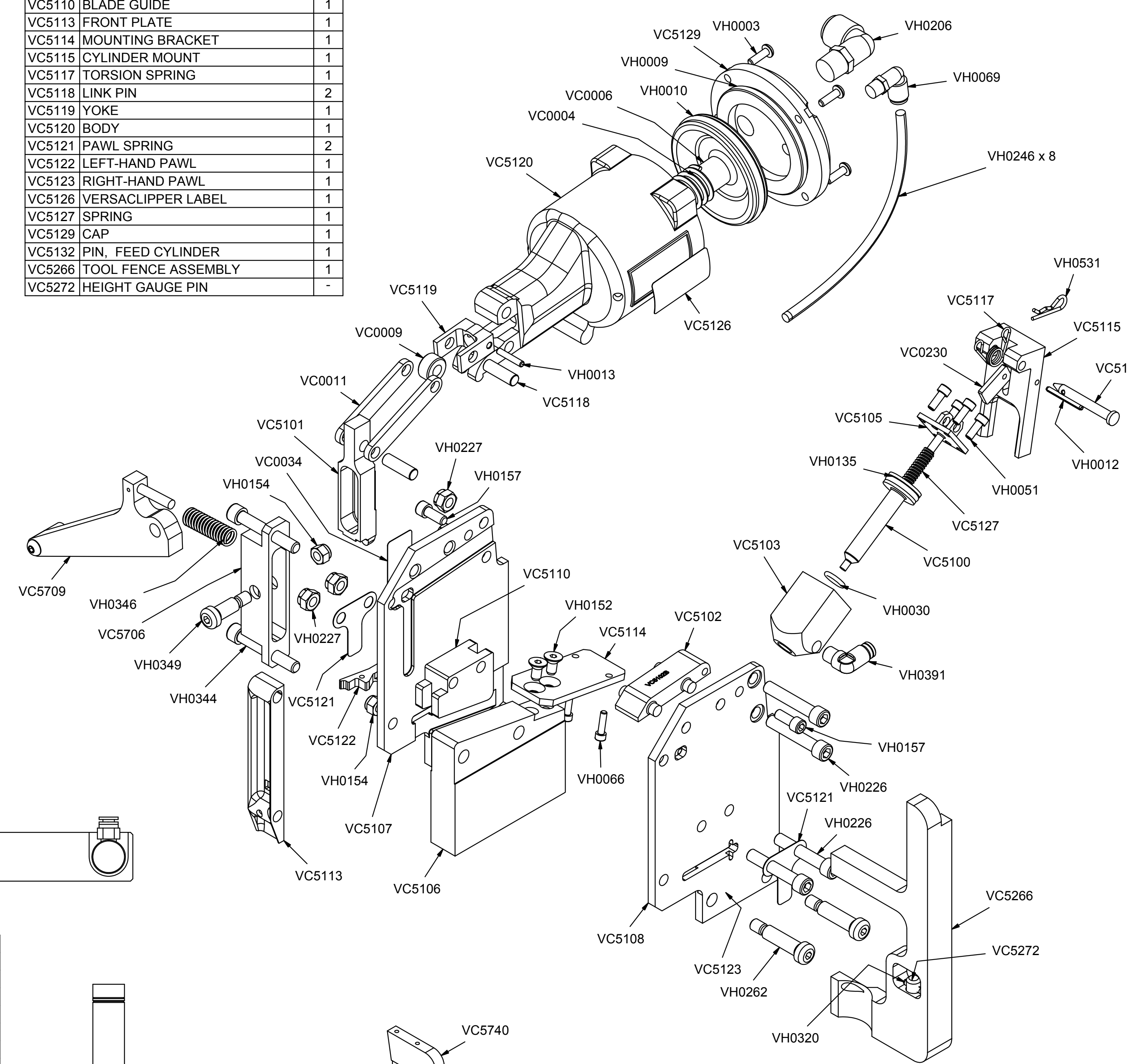
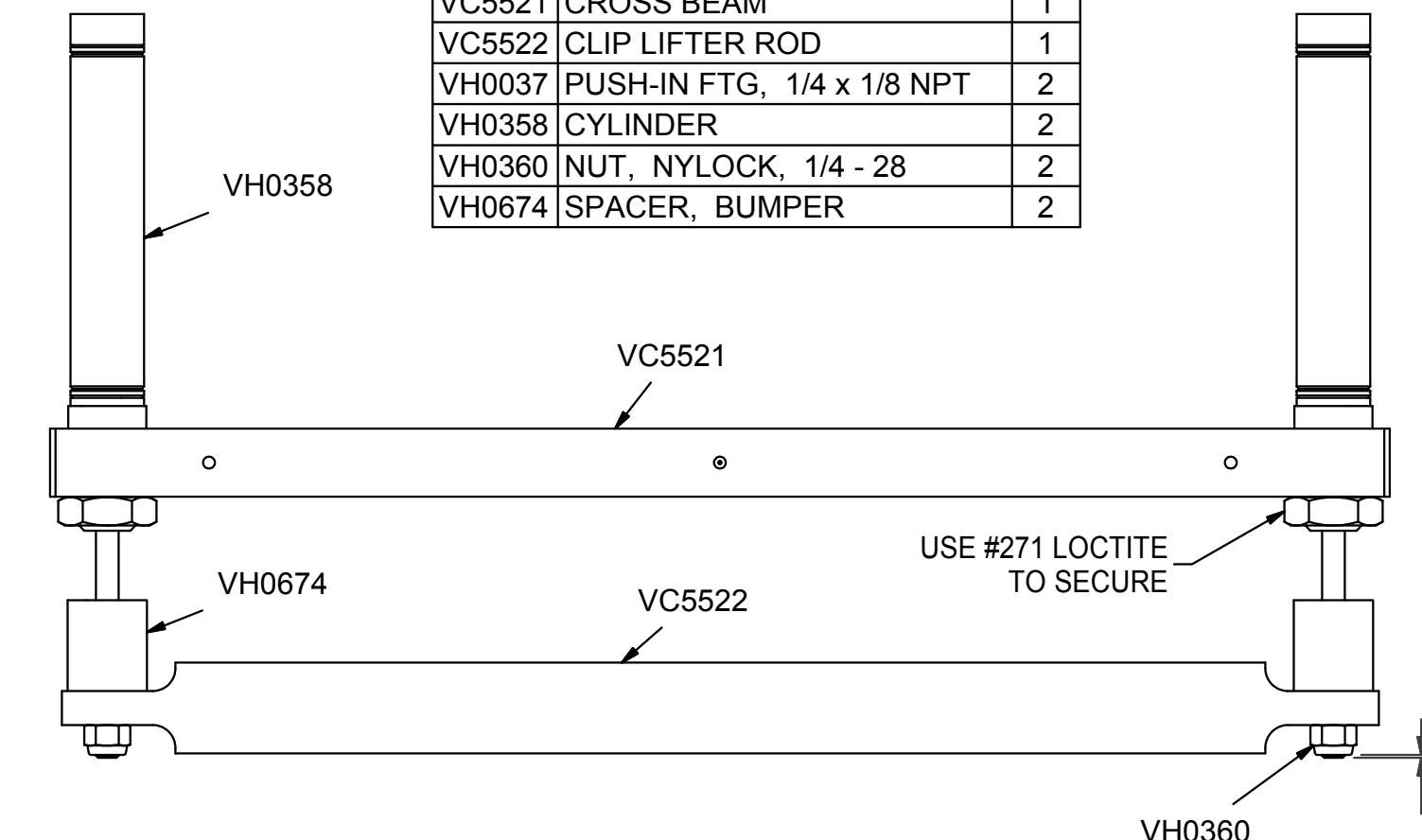
VC5749 - TOOL ASSEMBLY			VC5749 - TOOL ASSEMBLY			VC5749 - TOOL ASSEMBLY		
PART #	DESCRIPTION	QT	PART #	DESCRIPTION	QT	PART #	DESCRIPTION	QT
VC0004	SPRING, PISTON	1	VC5706	PIVOT ARM MOUNT	1	VH0157	SHCS, 1/4 - 20 x 5/8 W/ PATCH	2
VC0006	PISTON ASSEMBLY	1	VC5709	EXIT PRESSER FOOT	1	VH0206	PUSH-IN FTG, 90 1/2 OD x 3/8 NPT	1
VC0009	ROLLER	1	VH0003	SHCS, 10 - 14 x 5/8 PLASTITE	5	VH0226	SHCS, 5/16 - 24 x 1 3/4	4
VC0011	LINK	2	VH0009	O-RING, #040	-	VH0227	NUT, FLEX, 5/16 - 24	4
VC0034	WARNING LABEL	1	VH0010	O-RING, #335	-	VH0246	TUBING, 1/4	1
VC0230	CLIP FEEDER STOP	1	VH0012	PIN, ROLL, 1/8 x 1 1/4	1	x 8		
VC5100	PISTON (CLIP FEEDER)	1	VH0013	PIN, DOWEL	1	VH0262	SHOULDER BOLT, 3/8 x 1 1/4	2
VC5101	DRIVER BLADE	1	VH0030	O-RING, 7/16 x 5/8	-	VH0320	PIN, SLOTTED, 5/32 x 5/8	-
VC5102	TOP PLATE	1	VH0051	SHCS, 10 - 32 x 1/2	4	VH0344	SHCS, 5/16 - 18 x 2	2
VC5103	CYLINDER BODY (CLIP FEEDER)	1	VH0066	SHCS, 8 - 32 x 5/8	2	VH0346	SPRING	1
VC5105	CYLINDER END CAP (CLIP FEEDER)	1	VH0069	PUSH-IN FTG, 90, 1/4 OD x 1/8 NPT	1	VH0349	SHOULDER BOLT, 3/8 x 3/4	1
VC5106	ANVIL	1	VH0135	O-RING, #210	-	VH0391	PUSH-IN FTG, 1/4 x 1/8 NPT	1
VC5107	LEFT-HAND SIDE PLATE	1	VH0152	FHCS, 1/4 - 20 x 1/2	2	VH0531	HAIR PIN	1
VC5108	LEFT-HAND SIDE PLATE	1	VH0154	NUT, NYLOCK, 5/16 - 18	3			
VC5110	BLADE GUIDE	1						
VC5113	FRONT PLATE	1						
VC5114	MOUNTING BRACKET	1						
VC5115	CYLINDER MOUNT	1						
VC5117	TORSION SPRING	1						
VC5118	LINK PIN	2						
VC5119	YOKE	1						
VC5120	BODY	1						
VC5121	PAWL SPRING	2						
VC5122	LEFT-HAND PAWL	1						
VC5123	RIGHT-HAND PAWL	1						
VC5126	VERSACLIPPER LABEL	1						
VC5127	SPRING	1						
VC5129	CAP	1						
VC5132	PIN, FEED CYLINDER	1						
VC5266	TOOL FENCE ASSEMBLY	1						
VC5272	HEIGHT GAUGE PIN	-						



VC5558 - RAIL TRIGGER SWITCH		
PART #	DESCRIPTION	QT
VC5254	RAIL TRIGGER	1
VC5559	RAIL TRIGGER SWITCH ASSY - SERVO	1
VH0273	STRAIN RELIEF	-
VH0285	RAIL SENSOR CABLE	-
VH0335	SWITCH, TRIGGER	-
VC5742	TRIGGER PLATE	1
VH0143	SHCS, 10 - 32 x 3/4	1
VH0146	SHCS, 10 - 32 x 1 1/2	2



VC5523 - CLIP LIFTER ASSY		
PART #	DESCRIPTION	QT
VC5521	CROSS BEAM	1
VC5522	CLIP LIFTER ROD	1
VH0037	PUSH-IN FTG, 1/4 x 1/8 NPT	2
VH0358	CYLINDER	2
VH0360	NUT, NYLOCK, 1/4 - 28	2
VH0674	SPACER, BUMPER	2

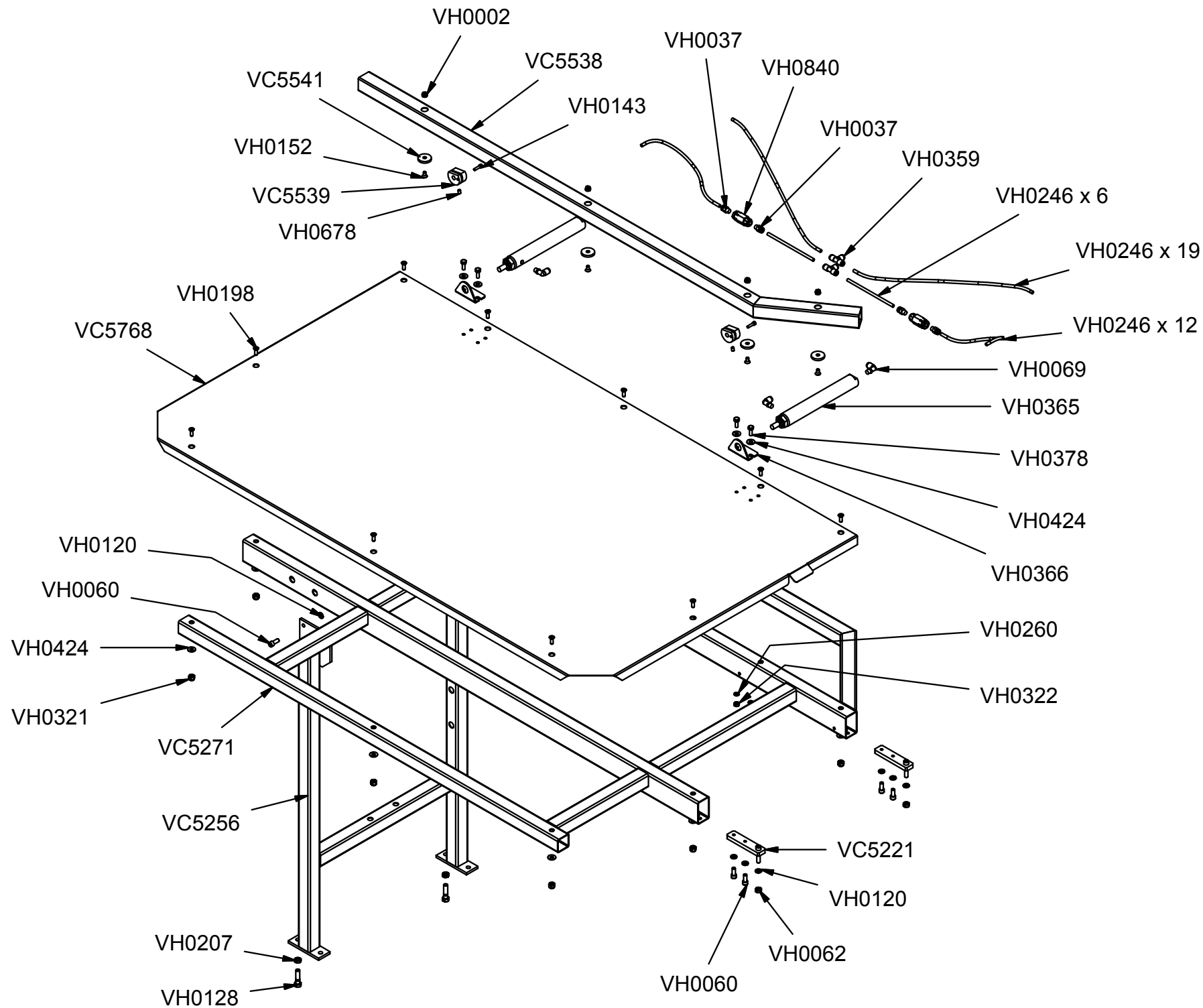


VC5754 - LUG ASSEMBLY		
PART #	DESCRIPTION	QT
VC5724	LUG BOLT	1
VC5739	FRONT HALF LUG	1
VC5740	REAR HALF LUG	1
VH0265	SPRING	1

REV	ECN	DESCRIPTION	BY	APPD	DATE	MATERIAL:	TOL UNLESS SPECIFIED	© 2011	VERTEX FASTENERS
A			JMW		8-6-01		INCHES X++ = .005 XX = .015 XXX = .005 ANGLES ± 1/2	DWN BY	JMW
B			JMW		4-29-02	HEAT TREATMENT:		APPD	
C	404		JMW	DA	9-8-04			DATE	
D	1097	INV & UPDATE	JMW	JMF	9-13-11	FINISH:		SCALE	

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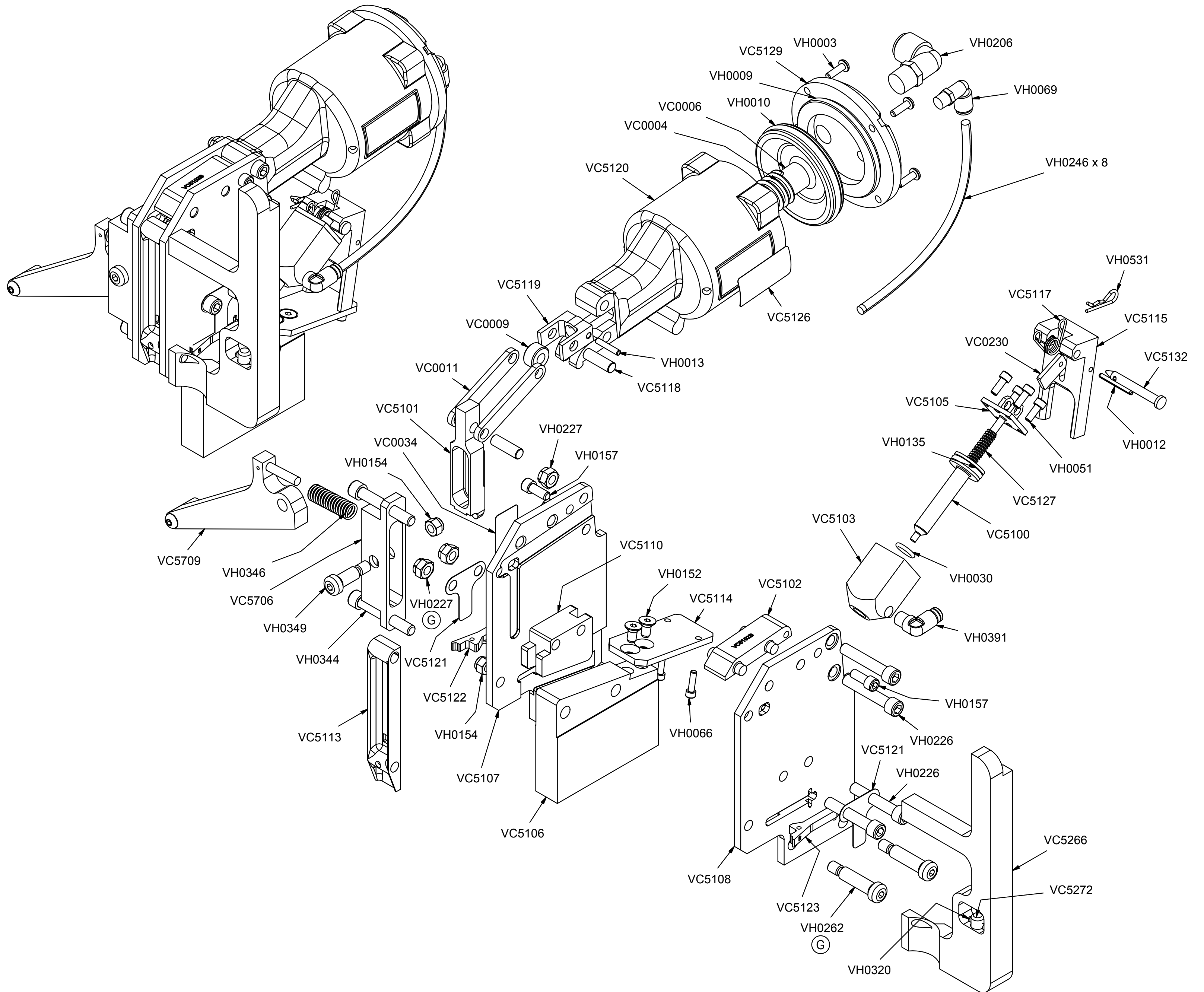
PART #	DESCRIPTION	QT
VC5221	BRACKET	2
VC5256	LEG ASSEMBLY	1
VC5538	PUSHER	1
VC5539	NUT, EXIT CONVEYOR	2
VC5541	EXIT PUSHER GLIDE - TRI SERVO	4
VC5786	EXIT TABLE TOP W/ FRAME & FSTNRS	1
VC5271	EXIT CONVEYOR	(1)
VC5768	EXIT TABLE TOP	(1)
VH0198	FHCS, 1/4 - 20 x 3/4	(10)
VH0321	NUT, NYLOCK, 1/4 - 20, HEAVY DUTY	(10)
VH0424	WASHER, 1/4	(10)
VH0002	NUT, FLEX, 1/4 - 20	4
VH0037	PUSH-IN FTG, STR, 1/4 OD x 1/8 NPT	4
VH0060	SHCS, 5/16 - 18 x 3/4	8
VH0062	NUT, HEX, 5/16 - 18	6
VH0069	PUSH-IN FTG, 90, 1/4 OD x 1/8 NPT	4
VH0120	WASHER, LOCK, 5/16	10
VH0128	HHCS, 3/8 - 16 x 1 1/2	2
VH0143	SHCS, 10 - 32 x 3/4	2
VH0152	FHCS, 1/4 - 20 x 1/2	4
VH0207	NUT, JAM, 3/8 - 16, GR5	2
VH0246	TUBING, 1/4, POLYETHYLENE x 12	2
VH0246	TUBING, 1/4, POLYETHYLENE x 19	2
VH0246	TUBING, 1/4, POLYETHYLENE x 6	2
VH0260	WASHER, LOCK, 1/4	4
VH0322	NUT, HEX, 1/4 - 20	4
VH0359	PUSH-IN FTG, TEE, 1/4 OD	2
VH0365	CYLINDER	2
VH0366	CYLINDER, HARDWARE	2
VH0378	HHCS, 1/4 - 20 x 3/4, FULL THD	4
VH0424	WASHER, 1/4	4
VH0678	SET SCREW, 1/4 - 20 x 3/8	2
VH0840	FLOW CONTROL VALVE	2



REV	ECN	DESCRIPTION	BY	APPD	DATE	MATERIAL:	TOL. UNLESS SPECIFIED	© 2008	VERTEX FASTENERS
B		REDESIGN	JMW		9-27-01		INCHES .X = ± .030 .XX = ± .015 .XXX = ± .005 ANGLES ± 1/2	DWN BY	3714 JARVIS AVENUE
C		REDESIGN	JMW		4-5-02	HEAT TREATMENT:		APPD	SKOKIE, IL 60076 U.S.A.
D	404		JMW	DA	9-1-04			DATE	EXIT CONVEYOR DETAIL
E	900	NEW PUSHER & INVENTOR	JMW	MR	11-26-08	FINISH:		SCALE -	
F	1086	-VH0050, +VH0840, +(2) VH0069, +(4) VH0037, +TUBING	JMW	JMF	8-11-11		INVENTOR	DWG. NO. VC5736	B

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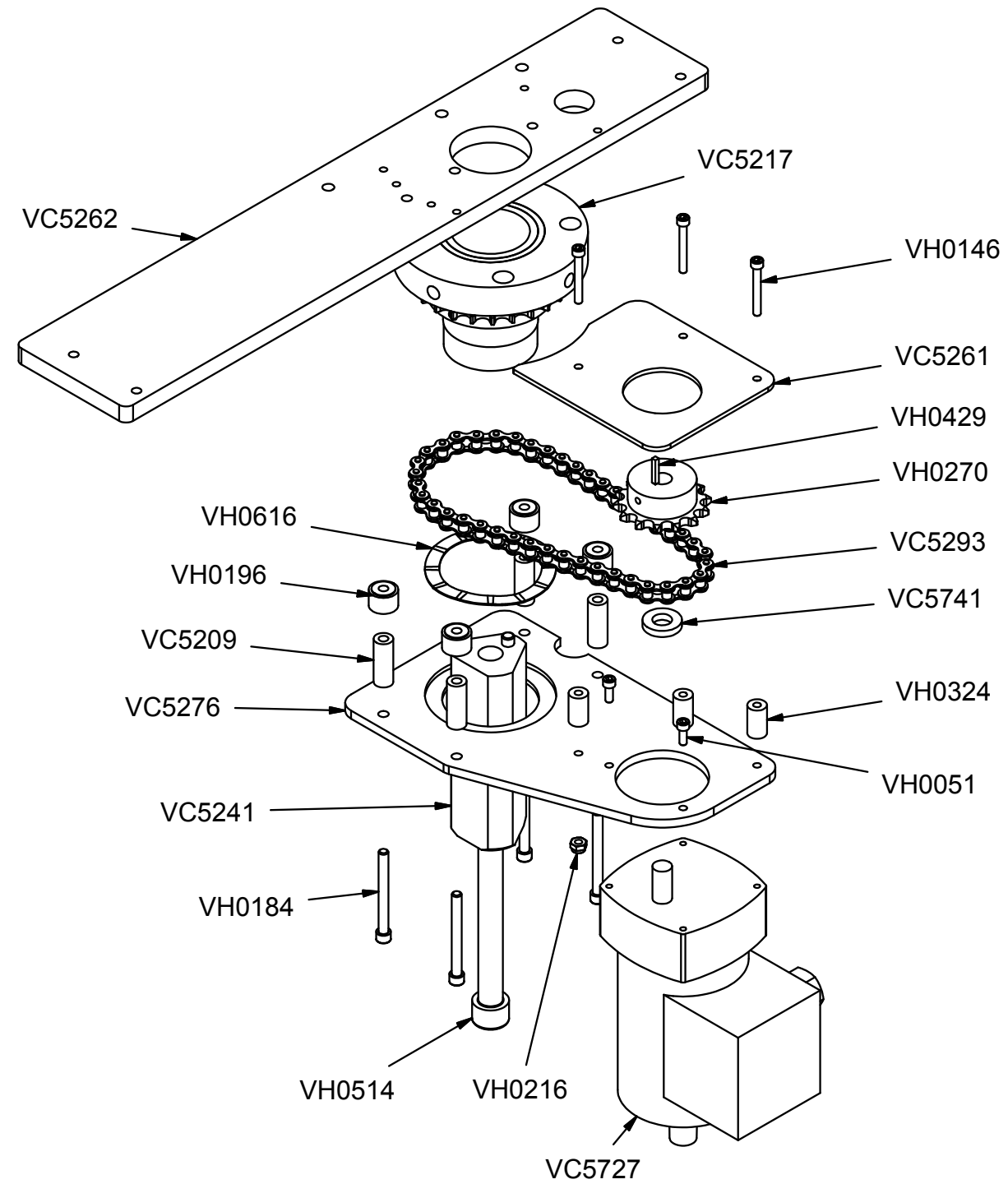
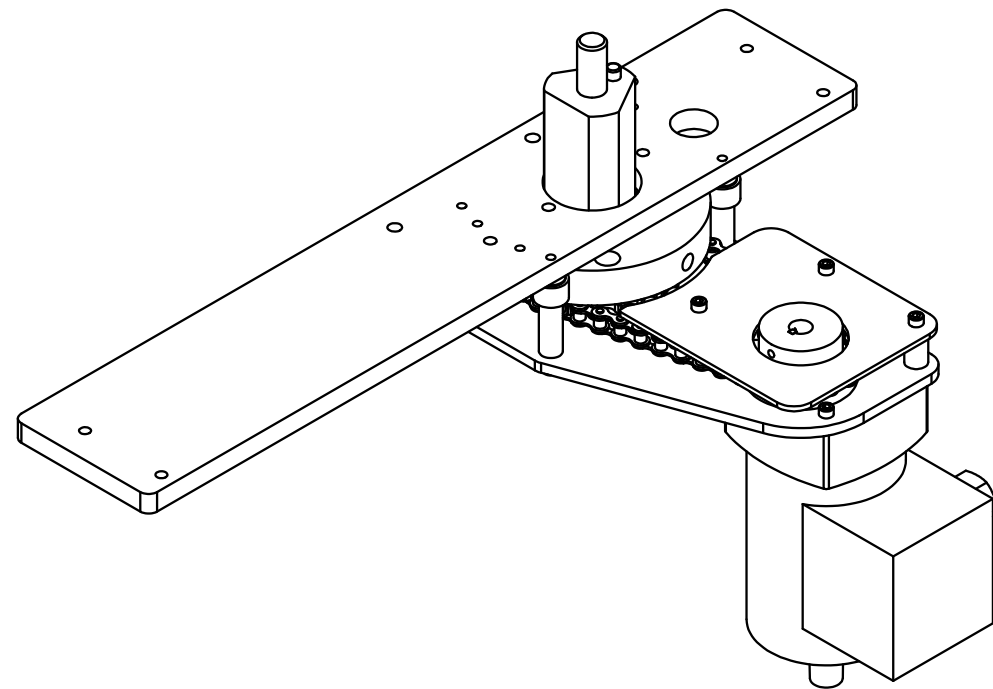
PART #	DESCRIPTION	QT
VC0004	SPRING, PISTON	1
VC0006	PISTON ASSEMBLY	1
VC0009	ROLLER	1
VC0011	LINK	2
VC0034	WARNING LABEL	1
VC0230	CLIP FEEDER STOP	1
VC5100	PISTON (CLIP FEEDER)	1
VC5101	DRIVER BLADE	1
VC5102	TOP PLATE	1
VC5103	CYLINDER BODY (CLIP FEEDER)	1
VC5105	CYLINDER END CAP (CLIP FEEDER)	1
VC5106	ANVIL	1
VC5107	LEFT-HAND SIDE PLATE	1
VC5108	LEFT-HAND SIDE PLATE	1
VC5110	BLADE GUIDE	1
VC5113	FRONT PLATE	1
VC5114	MOUNTING BRACKET	1
VC5115	CYLINDER MOUNT	1
VC5117	TORSION SPRING	1
VC5118	LINK PIN	2
VC5119	YOKE	1
VC5120	BODY	1
VC5121	PAWL SPRING	2
VC5122	LEFT-HAND PAWL	1
VC5123	RIGHT-HAND PAWL	1
VC5126	VERSACLIPPER LABEL	1
VC5127	SPRING	1
VC5129	CAP	1
VC5132	PIN, FEED CYLINDER	1
VC5266	TOOL FENCE ASSEMBLY	1
VC5272	HEIGHT GAUGE PIN	-
VC5706	PIVOT ARM MOUNT	1
VC5709	EXIT PRESSER FOOT	1
VH0003	SHCS, 10 - 14 x 5/8 PLASTITE	5
VH0009	O-RING, #040	-
VH0010	O-RING, #335	-
VH0012	PIN, ROLL, 1/8 x 1 1/4	1
VH0013	PIN, DOWEL	1
VH0030	O-RING, 7/16 x 5/8	-
VH0051	SHCS, 10 - 32 x 1/2	4
VH0066	SHCS, 8 - 32 x 5/8	2
VH0069	PUSH-IN FTG, 90, 1/4 OD x 1/8 NPT	1
VH0135	O-RING, #210	-
VH0152	FHCS, 1/4 - 20 x 1/2	2
VH0154	NUT, NYLOCK, 5/16 - 18	3
VH0157	SHCS, 1/4 - 20 x 5/8 W/ PATCH	2
VH0206	PUSH-IN FTG, 90 1/2 OD x 3/8 NPT	1
VH0226	SHCS, 5/16 - 24 x 1 3/4	4
VH0227	NUT, FLEX, 5/16 - 24	4
VH0246	TUBING, 1/4 x 8	1
VH0262	SHOULDER BOLT, 3/8 x 1 1/4	2
VH0320	PIN, SLOTTED, 5/32 x 5/8	-
VH0344	SHCS, 5/16 - 18 x 2	2
VH0346	SPRING	1
VH0349	SHOULDER BOLT, 3/8 x 3/4	1
VH0391	PUSH-IN FTG, 1/4 x 1/8 NPT	1
VH0531	HAIR PIN	1



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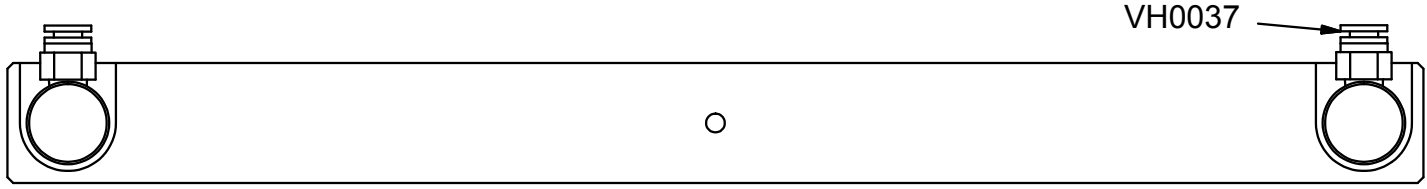
REV	ECN	DESCRIPTION	BY	APPD	DATE	MATERIAL:	TOL UNLESS SPECIFIED	© 2000	VERTEX FASTENERS INC.
E	404	UPDATED DWG	JMW	DA	9-1-04		INCHES X = ± .030 XX = ± .015 XXX = ± .005 ANGLES ± 1/2	DWN BY	JMW
F	504	O-RING CHNG WAS VH0158 (#211), NOW VH0135 (#210)	JMW	DA	6-14-05	HEAT TREATMENT:		APPD	DA
G	656	WAS VH0155 & VH0002	JMW	DA	3-20-06	FINISH:		DATE	12-19-00
H	869	INVENTOR FILE	JMW	DA	3-11-08			SCALE	1:2
J	901	VC5266 ASS	JMW	MR	12-10-08		INVENTOR	DWG. NO.	VC5749
									TOOL ASSEMBLY
									C

PART #	DESCRIPTION	QT
VC5209	SPACER	4
VC5217	ELEVATOR NUT/SPROCKET ASSY	1
VC5241	SHORT ACME ROD	1
VC5261	CHAIN GUARD	1
VC5262	FIXED PLATE	1
VC5276	LIFT MOTOR PLATE	1
VC5293	TOOL ELEVATION CHAIN	1
VC5727	TOOL MOTOR	1
VC5741	SPROCKET SPACER	1
VH0051	SHCS, 10 - 32 x 1/2	2
VH0146	SHCS, 10 - 32 x 1 1/2	3
VH0184	SHCS, 1/4 - 20 x 2 1/2	4
VH0196	BEARING, CAM ROLLER	4
VH0216	NUT, NYLOCK, 10 - 32	1
VH0270	SPROCKET 14 TEETH	1
VH0324	SPACER, 1/2 OD x 7/8, #10	3
VH0429	MACHINE KEY, 1/8 SQ x 3/4	1
VH0514	SHCS, 5/8 - 11 x 6	1
VH0616	WASHER, WAVE SPRING	1

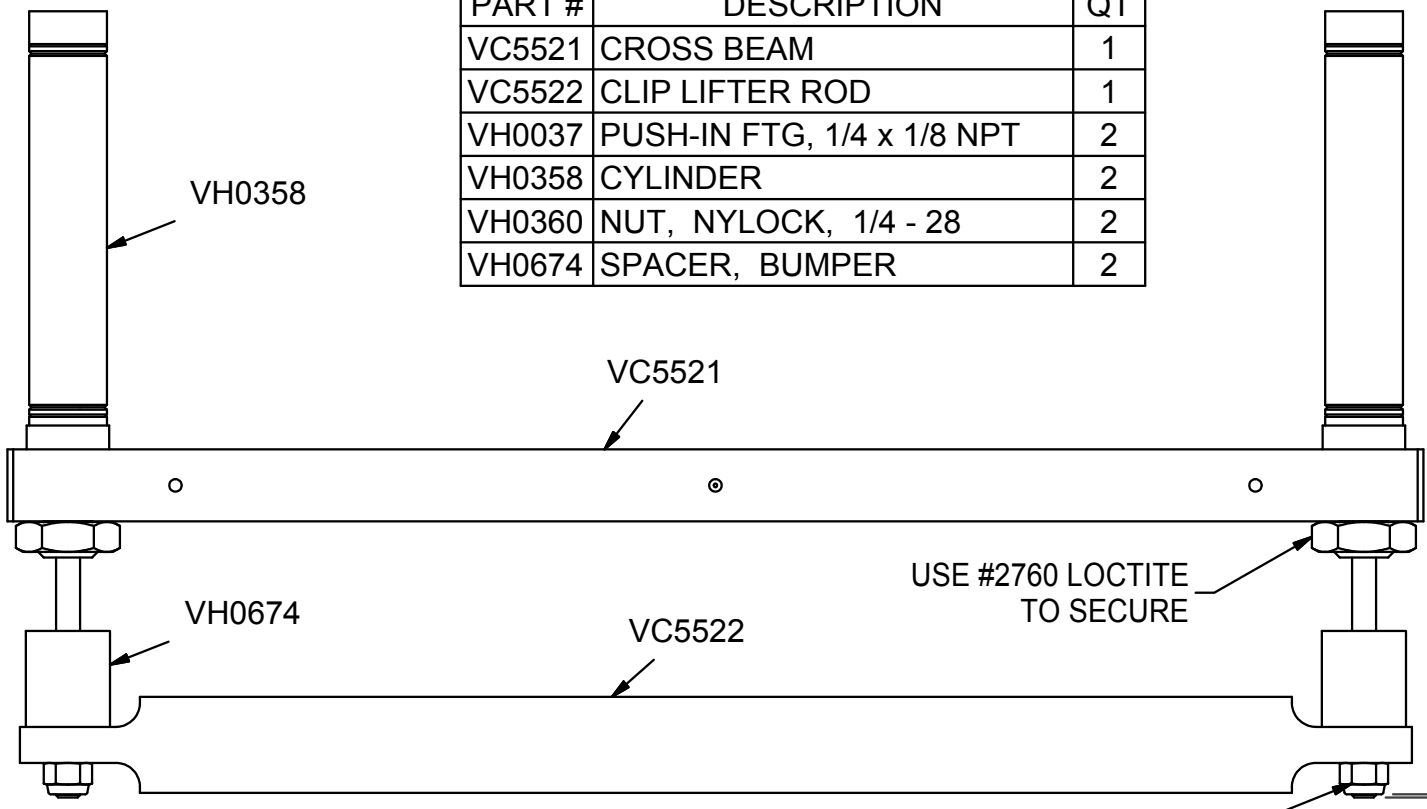
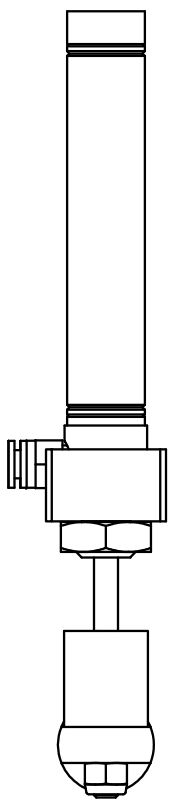


REV	ECN	DESCRIPTION	BY	APPD	DATE	MATERIAL:	TOL. UNLESS SPECIFIED	© 2000	VERTEX FASTENERS
B		NEW ACME ROD	JMW		3-26-01		INCHES .X = ± .030 .XX = ± .015 .XXX = ± .005 ANGLES ± 1/2	DWN BY	1798 SHERWIN AVENUE
C		+ VH0429	JMW		2-20-02	HEAT TREATMENT:		APPD	DA
D	404		JMW	DA	8-19-04			DATE	TOOL HEIGHT MOTOR
E	619		JMW	DA	1-25-06	FINISH:		SCALE	DETAIL - SERVO
F	348	ACAD TO INVENTOR	JMW	MR	7-22-09		INVENTOR	DWG. NO.	VC5737
									B

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PART #	DESCRIPTION	QT
VC5521	CROSS BEAM	1
VC5522	CLIP LIFTER ROD	1
VH0037	PUSH-IN FTG, 1/4 x 1/8 NPT	2
VH0358	CYLINDER	2
VH0360	NUT, NYLOCK, 1/4 - 28	2
VH0674	SPACER, BUMPER	2



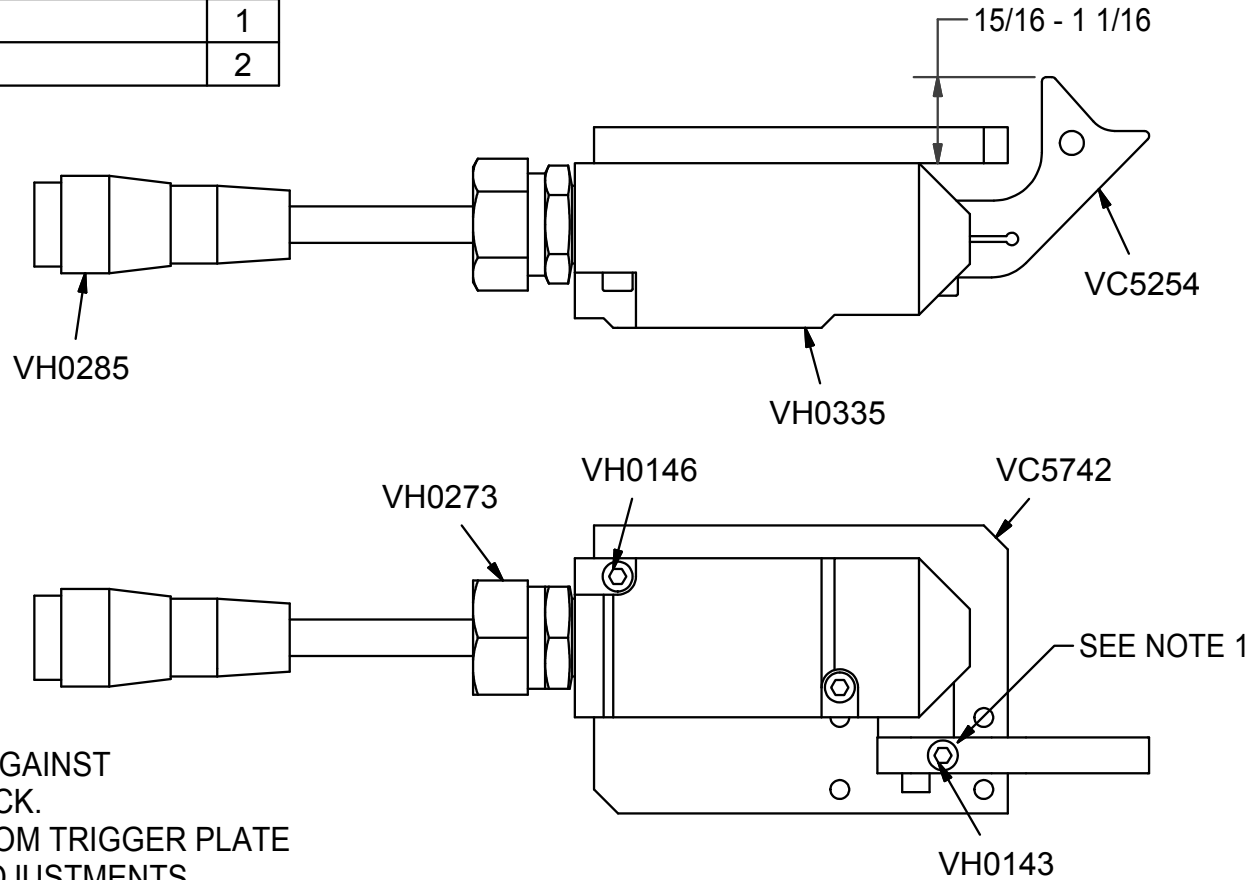
USE #2760 LOCTITE TO SECURE

VH0360
USE #2760 LOCTITE

.031 OF ROD EXPOSED

REV	ECN	DESCRIPTION	BY	APPD	DATE	MATERIAL:	TOL. UNLESS SPECIFIED INCHES .X = ± .030 .XX = ± .015 .XXX = ± .005 ANGLES ± 1/2	© 2008	VERTEX FASTENERS 3714 JARVIS AVENUE SKOKIE, IL 60076 U.S.A.	
A	892	INVENTOR, WAS VH0192	JMW	MR	9-23-08					
B	927	WAS #271 LOCTITE	JMW	MR	6-2-09	HEAT TREATMENT:		APPD	DA	CLIP LIFTER ASSEMBLY
						FINISH:		DATE	3-27-01	
								SCALE	1:2	
							INVENTOR	DWG. NO.	VC5523	A

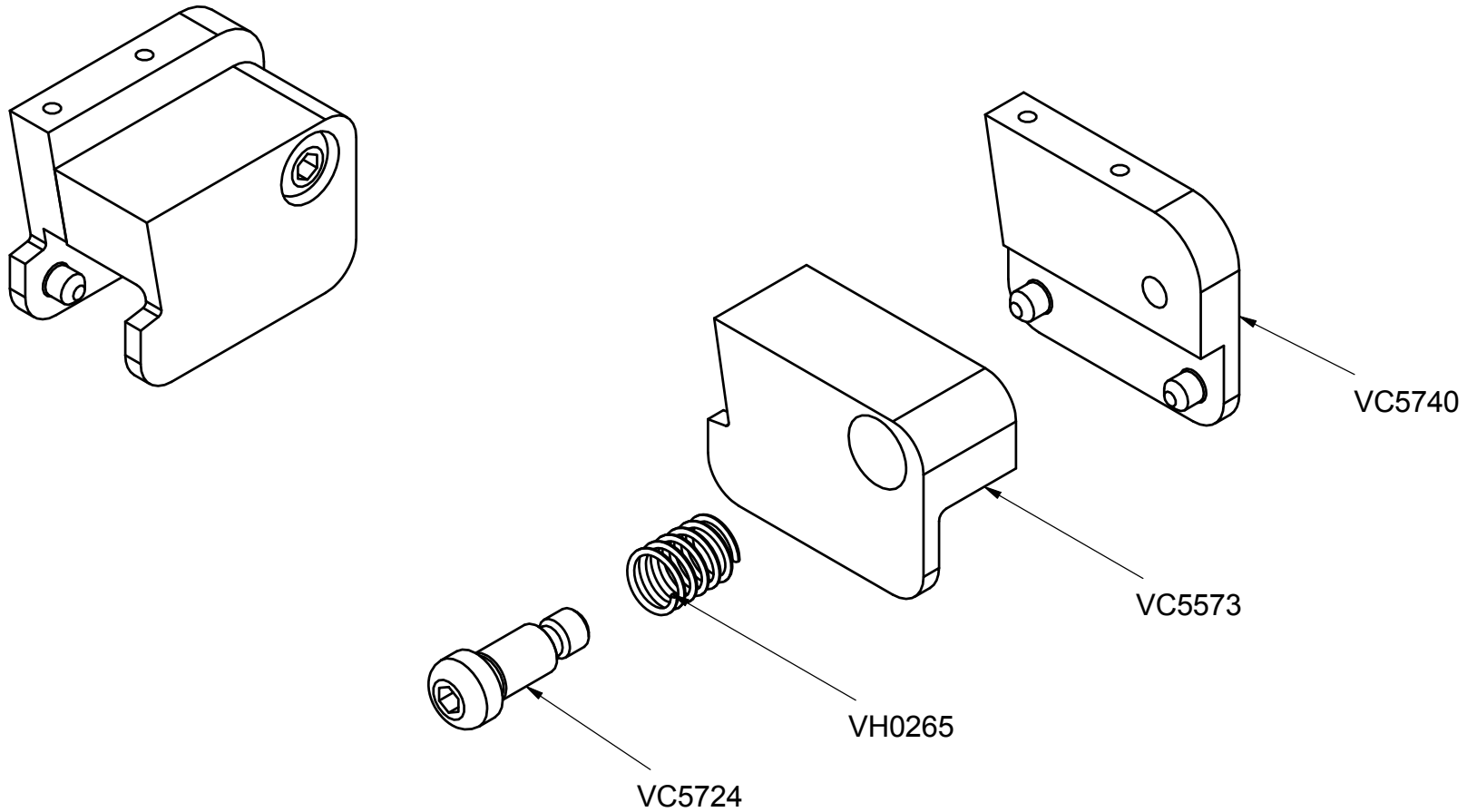
PART #	DESCRIPTION	QT
VC5254	RAIL TRIGGER	1
VC5559	RAIL TRIGGER SWITCH ASSY - SERVO	1
VH0273	STRAIN RELIEF	-
VH0285	RAIL SENSOR CABLE	-
VH0335	SWITCH, TRIGGER	-
VC5742	TRIGGER PLATE	1
VH0143	SHCS, 10 - 32 x 3/4	1
VH0146	SHCS, 10 - 32 x 1 1/2	2



NOTES:

1. RAIL TRIGGER MUST BE PUSHED AGAINST SHOULDER ON RAIL TRIGGER BLOCK.
2. REMOVE RAIL TRIGGER BLOCK FROM TRIGGER PLATE TO MAKE NECESSARY TRIGGER ADJUSTMENTS.

REV	ECN	DESCRIPTION	BY	APPD	DATE	MATERIAL:	TOL. UNLESS SPECIFIED	© 2008	VERTEX FASTENERS
							INCHES .X = ± .030 .XX = ± .015 .XXX = ± .005 ANGLES ± 1/2	DWN BY JMW	3714 JARVIS AVENUE SKOKIE, IL 60076 U.S.A.
						HEAT TREATMENT:		APPD MR	RAIL TRIGGER SWITCH DETAIL - SERVO
						FINISH:		DATE 11-25-08	
								SCALE 1:2	
							INVENTOR	DWG. NO. VC5558	A

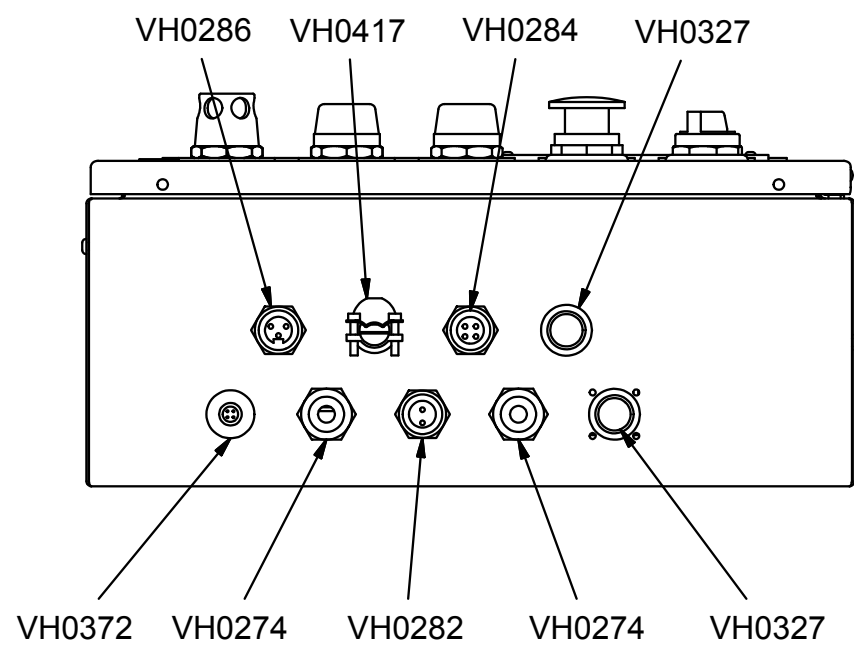
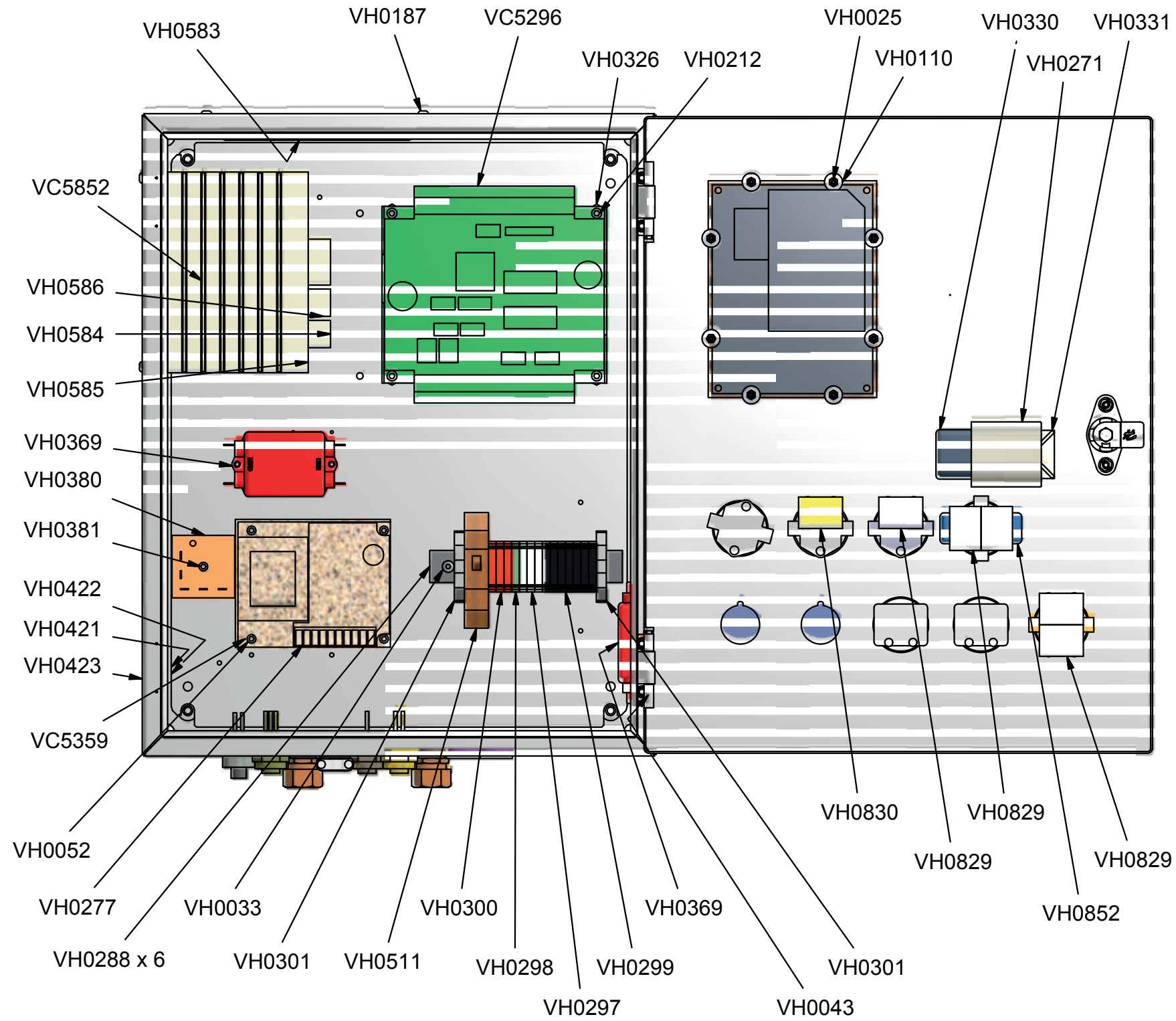
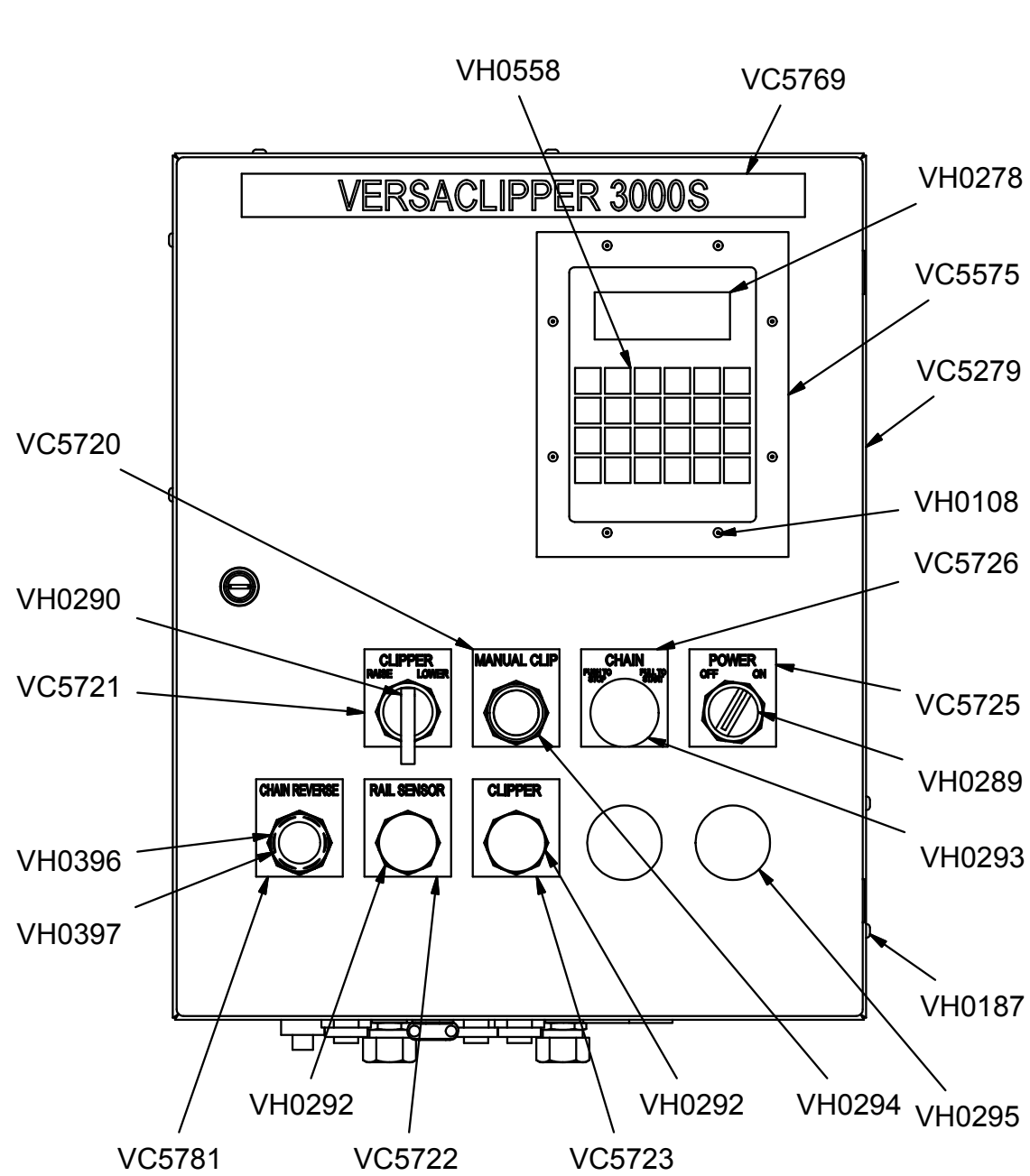


NOTE: ASSEMBLY WITH LOCTITE 271.

PART #	DESCRIPTION	QT
VC5573	FRONT HALF LUG	1
VC5724	LUG BOLT	1
VC5740	REAR HALF LUG	1
VH0265	SPRING	1

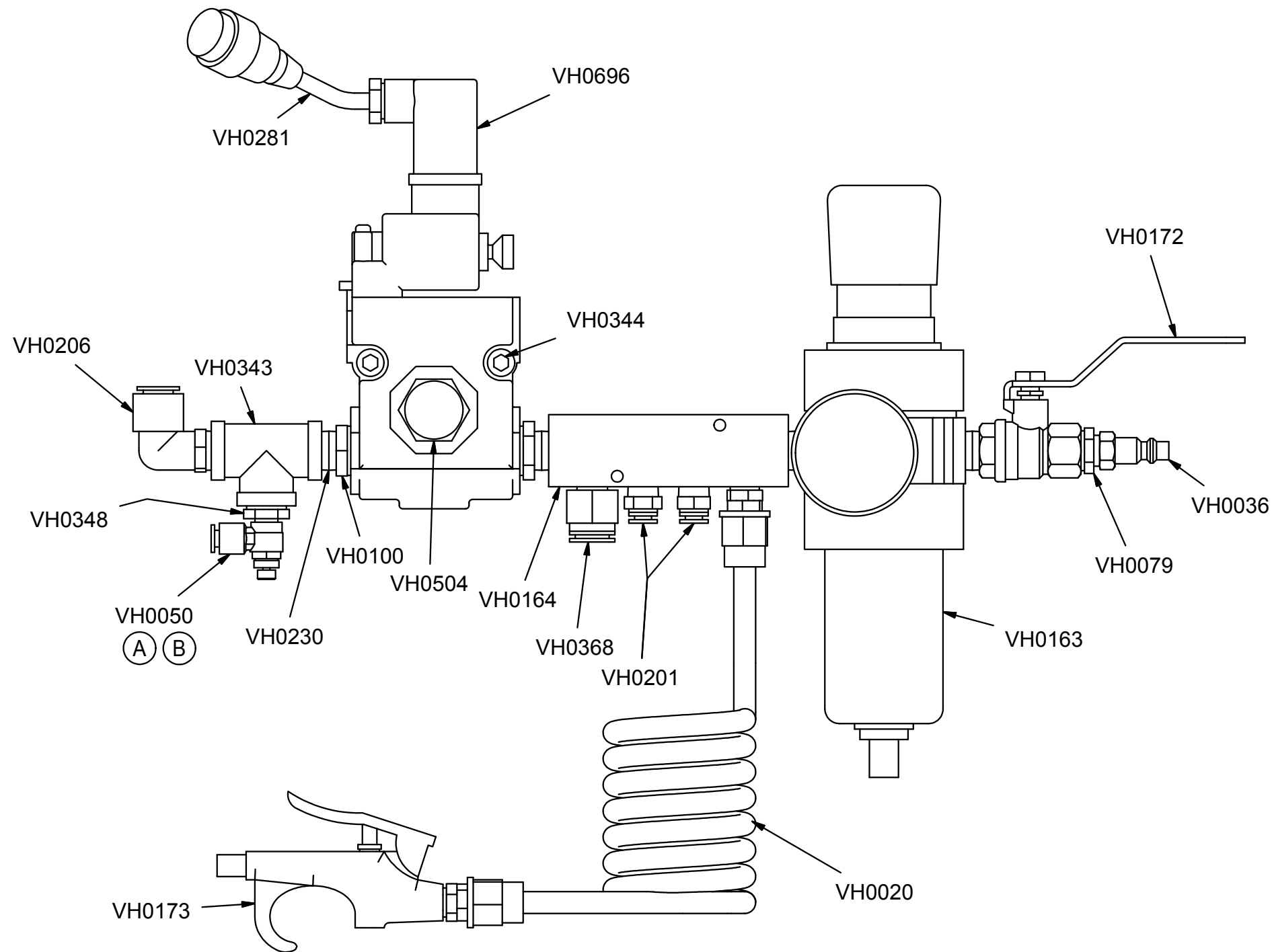
REV	ECN	DESCRIPTION	BY	APPD	DATE	MATERIAL:	TOL. UNLESS SPECIFIED	© 2009	VERTEX FASTENERS 1798 SHERWIN AVENUE DES PLAINES, IL 60018 U.S.A.
A	1111	INV FILE	JMW	JMF	9-13-11		INCHES .X = ± .030 .XX = ± .015 .XXX = ± .005 ANGLES ± 1/2	DWN BY MR	LUG ASSEMBLY (UNIVERSAL)
						HEAT TREATMENT:	APPD JMW	DATE 12-02-09	
						FINISH:	SCALE FULL	DWG. NO. VC5574	
							INVENTOR	A	

PART #	DESCRIPTION	QT	PART #	DESCRIPTION	QT
VH0829	CONTACT BLOCK, N/O	-	VC5279	CONTROL BOX	1
VH0830	CONTACT BLOCK, N/C	-	VC5296	MICRO-PROCESSOR	1
VH0852	ARC SUPPRESSOR	2	VC5359	SPACER	4
			VC5575	BEZEL	1
			VC5720	NAME PLATE - MANUAL CLIP	1
			VC5721	NAME PLATE - CLPR RAISE / LWR	1
			VC5722	NAME PLATE - RAIL SENSOR	1
			VC5723	NAME PLATE - CLIPPER	1
			VC5725	NAME PLATE - POWER ON / OFF	1
			VC5726	NAME PLATE - CHAIN PUSH / PULL	1
			VC5769	NAME PLATE	1
			VC5781	NAME PLATE - CHAIN REVERSE	1
			VC5852	SERVOPACK	1
			VH0025	NUT, NYLOCK, 4 - 40	8
			VH0033	BHCS, 10 - 32 x 1/4	2
			VH0043	NUT, NYLOCK, 8 - 32, THIN HT	6
			VH0052	SHCS, 8 - 32 x 7/8	4
			VH0108	BHCS, 4 - 40 x 1/2	8
			VH0110	WASHER, FENDER, #6	8
			VH0187	BHCS, 8 - 32 x 3/8	6
			VH0212	SHCS, 10 - 32 x 3/8 W/ PATCH	8
			VH0271	CAPACITOR	1
			VH0274	STRAIN RELIEF	2
			VH0277	DC POWER SUPPLY	1
			VH0278	KEYPAD	1
			VH0282	RECEPTACLE	1
			VH0284	RECEPTACLE	1
			VH0286	RAIL SENSOR	1
			VH0288	DIN RAIL	1
			x 6		
			VH0289	SWITCH, SELECTOR	1
			VH0290	SELECTOR SWITCH	1
			VH0292	PILOT LIGHT	2
			VH0293	SWITCH, PUSH/PULL	1
			VH0294	SWITCH, PSH BTN, MMNTRY (BLOCK)	1
			VH0295	CLOSURE BUTTON	2
			VH0297	CONTACT BLOCK - WHITE	3
			VH0298	CONTACT BLOCK - GREEN	1
			VH0299	CONTACT BLOCK - BLACK	7
			VH0300	CONTACT BLOCK - RED	3
			VH0301	END CLAMP	2
			VH0326	STANDOFF, HEX, 1/2 OD x 3, #10	4
			VH0327	PLUG, 1/2 CONDUIT	2
			VH0330	RUBBER BOOT	1
			VH0331	ADHESIVE PAD	1
			VH0369	LINE FILTER	2
			VH0372	RECEPTACLE	1
			VH0380	TIMING RELAY	1
			VH0381	SHCS, 8 - 32 x 1 1/4	1
			VH0396	SWITCH, PUSH BUTTON	1
			VH0397	BUTTON GUARD	1
			VH0417	CONDUIT FITTING CNCTR, 3/8 STR	1
			VH0421	SNAP-IN MODULES, 8 CONDUCTOR	1
			VH0422	SNAP-IN MODULES, 6 CONDUCTOR	1
			VH0423	DUPLEX	1
			VH0511	CIRCUIT BREAKER	1
			VH0558	KEYPAD MEMBRANE	-
			VH0583	RESISTOR - REGEN	1
			VH0584	CABLE, 3 M POWER	1
			VH0585	CABLE, 3 M ENCODER	1
			VH0586	CABLE, INTERFACE	1



REV	ECN	DESCRIPTION	BY	APPD	DATE	MATERIAL:	TOL UNLESS SPECIFIED	© 2011	VERTEX FASTENERS
							INCHES X = ± .030 XX = ± .015 XXX = ± .005 ANGLES ± 1/2	DWN BY JMW	1798 SHERWIN AVENUE DES PLAINES, IL 60018 U.S.A.
						HEAT TREATMENT:		APPD MR	CONTROL BOX
						FINISH:		DATE 1-14-11	
								SCALE 1:8	
								DWG. NO. VC5854	C

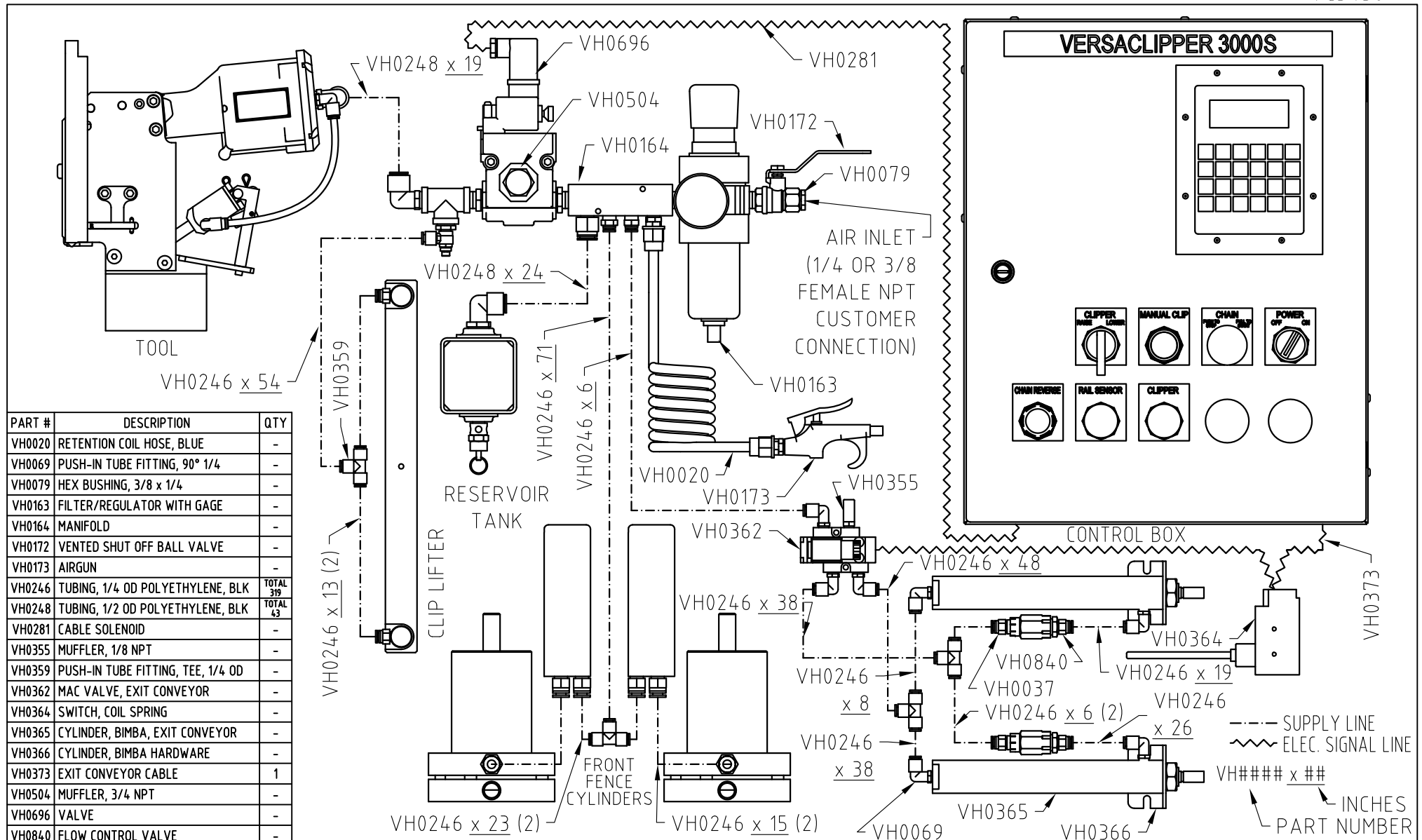
PART #	DESCRIPTION	QT
VH0020	RETRACTABLE HOSE	1
VH0036	PLUG, MALE, 1/4 - 1/4	1
VH0050	FLOW CONTROL	1
VH0079	BUSHING, REDUCER, 3/8 x 1/4	1
VH0100	BUSHING, REDUCER, BRASS, 1/2 x 3/8	2
VH0163	FILTER/REGULATOR W/ GAUGE	1
VH0164	MANIFOLD	1
VH0172	VALVE, VENTED SHUT-OFF BALL, 3/8 NPT	1
VH0173	AIR GUN	1
VH0201	PUSH-IN FTG, STR, 1/4 OD x 1/4 NPT	2
VH0206	PUSH-IN FTG, 90, 1/2 OD x 3/8 NPT	1
VH0230	NIPPLE, 3/8 NPT x 1 CLOSE	4
VH0281	SOLENOID CABLE	1
VH0343	TEE, 3/8	1
VH0344	SHCS, 5/16 - 18 x 2	2
VH0348	BUSHING, REDUCER, 3/8 x 1/8	1
VH0368	PUSH-IN FTG, STR, 1/2 OD x 1/4 NPT	1
VH0504	MUFFLER	1
VH0696	VALVE, 24V DC, TOOL	1



REV	ECN	DESCRIPTION	BY	APPD	DATE	MATERIAL:	TOL. UNLESS SPECIFIED	© 2008	VERTEX FASTENERS 1798 SHERWIN AVENUE DES PLAINES, IL 60018 U.S.A.
A	931	WAS VH0050	JMW	MR	7-23-09		INCHES .X = ± .030 .XX = ± .015 .XXX = ± .005 ANGLES ± 1/2	DWN BY JMW	
B	1085	BACK TO VH0050	JMW	JMF	8-11-11	HEAT TREATMENT:		APPD MR	CONTROL VALVE DETAIL (SINGLE & TRI SERVO)
						FINISH:		DATE 9-23-08	
								SCALE NONE	
								DWG. NO. VC5417	B

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INVENTOR



PART #	DESCRIPTION	QTY
VH0020	RETENTION COIL HOSE, BLUE	-
VH0069	PUSH-IN TUBE FITTING, 90° 1/4	-
VH0079	HEX BUSHING, 3/8 x 1/4	-
VH0163	FILTER/REGULATOR WITH GAGE	-
VH0164	MANIFOLD	-
VH0172	VENTED SHUT OFF BALL VALVE	-
VH0173	AIRGUN	-
VH0246	TUBING, 1/4 OD POLYETHYLENE, BLK	TOTAL 319
VH0248	TUBING, 1/2 OD POLYETHYLENE, BLK	TOTAL 43
VH0281	CABLE SOLENOID	-
VH0355	MUFFLER, 1/8 NPT	-
VH0359	PUSH-IN TUBE FITTING, TEE, 1/4 OD	-
VH0362	MAC VALVE, EXIT CONVEYOR	-
VH0364	SWITCH, COIL SPRING	-
VH0365	CYLINDER, BIMBA, EXIT CONVEYOR	-
VH0366	CYLINDER, BIMBA HARDWARE	-
VH0373	EXIT CONVEYOR CABLE	1
VH0504	MUFFLER, 3/4 NPT	-
VH0696	VALVE	-
VH0840	FLOW CONTROL VALVE	-

REV	DESCRIPTION	BY	APPD	DATE	MATERIAL:	TOL. UNLESS SPECIFIED	© 2011	VERTEX FASTENERS 1798 SHERWIN AVENUE DES PLAINES, IL 60018 U.S.A. PNEUMATICS
					-	INCHES	DWN BY JMW	
					HEAT TREATMENT:	.X = ±.125	APPD JMF	
					-	.XX = ±.030	DATE 9-15-11	
					FINISH:	.XXX = ±.005	SCALE -	
					-		DWG. NO. VC5456	A

