

VC4
VC6
VC8

Engineering Operation & Maintenance

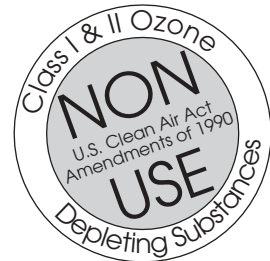


SANIFLO™ VC
SANITARY PUMP TECHNOLOGY

**Metal
Pumps**

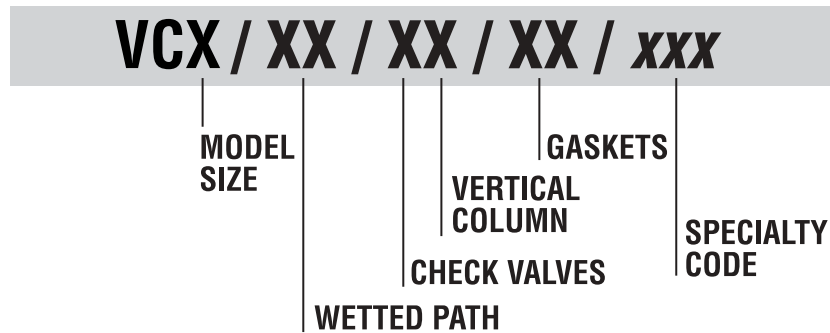
TABLE OF CONTENTS

	PAGE #
SECTION 1 – PUMP DESIGNATION SYSTEM	1
SECTION 2 – HOW IT WORKS	2
SECTION 3 – CAUTIONS - READ FIRST!.....	3
SECTION 4 – DIMENSIONAL DRAWING	4
SECTION 5 – INSTALLATION & OPERATION	
A. Installation.....	5-6
B. Operation & Maintenance.....	6
C. Troubleshooting	7
SECTION 6 – DIRECTIONS FOR DISASSEMBLY/REASSEMBLY	8-9
SECTION 7 – DIRECTIONS FOR USE OF PIPE PIG	10-11
SECTION 8 – DIRECTIONS FOR USE OF HEATED CAP	11
SECTION 9 – EXPLODED VIEW/PARTS LISTING	
A. Saniflo™ VC4 Exploded View/Part Listing.....	12-13
B. Saniflo™ VC6 Exploded View/Part Listing.....	14-15
C. Saniflo™ VC8 Exploded View/Part Listing.....	16-17
SECTION 10 – DIRECTIONS FOR CONTROL PANEL POWER HOOKUP....	18



SECTION 1

WILDEN PUMP DESIGNATION SYSTEM



MODEL SANIFLO™ VC MATERIAL CODES

MODEL SIZE

4 = 4"
6 = 6"
8 = 8"

WETTED PATH

SS = 304 Stainless Steel

CHECK VALVES

S = 304 Stainless Steel Flapper

VERTICAL COLUMN

S = 304 Stainless Steel

GASKETS

FB = FDA Buna-N
TF = Teflon® PTFE (White)

SPECIALTY CODE

072 = Saniflo™ USDA

ITEM #	Pump Description	Max Size Solids	Shipping Weight
80-1000	VC4/SS/SS/FB/072	7.6 cm (3")	41.7 kg (92 lbs.)
80-1002	VC4/SS/SS/TF/072	7.6 cm (3")	41.7 kg (92 lbs.)
80-1004	VC6/SS/SS/FB/072	10.2 cm (4")	48.9 kg (108 lbs.)
80-1006	VC6/SS/SS/TF/072	10.2 cm (4")	48.9 kg (108 lbs.)
80-1008	VC8/SS/SS/FB/072	15.2 cm (6")	69.9 kg (154 lbs.)
80-1010	VC8/SS/SS/TF/072	15.2 cm (6")	69.9 kg (154 lbs.)

SECTION 2

THE WILDEN SANIFLO™ VC PUMP HOW IT WORKS

The Wilden Saniflo™ pump is an air operated, positive displacement, electrically controlled pump. These drawings show the flow pattern through the pump upon its initial stroke. It is assumed the pump has no fluid in it prior to its initial stroke.

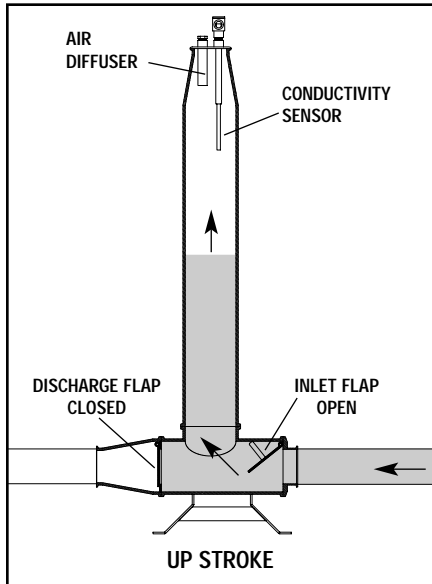


FIGURE 1 Once the control panel is turned on, the compressed air supplied to the panel is directed to the vacuum generator(s) located within the control panel. The vacuum generated by the vacuum generator(s) is applied to the vertical column of the Saniflo™ VC pump. This vacuum removes atmospheric pressure from the vertical column drawing the process medium into the pump past the inlet flap valve and into the vertical column. The process medium will continue to rise within the vertical column of the pump until the process medium reaches the conductivity sensor in the pump cap assembly.

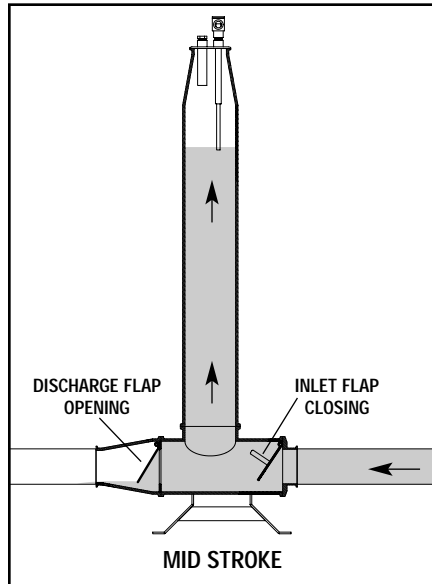


FIGURE 2 Once the process medium reaches the conductivity sensor at the top of the vertical column, the control panel senses the process medium and changes the direction of the air flow. Now the compressed air supplied to the controller is switched away from the internal vacuum generator(s) and directed into the vertical column of the pump. Once the compressed air is supplied to the top of the process medium, the hydraulic force will discharge the process medium from the vertical column. These same forces will close the inlet flap valve and open the discharge flap valve simultaneously causing the process medium to move downstream.

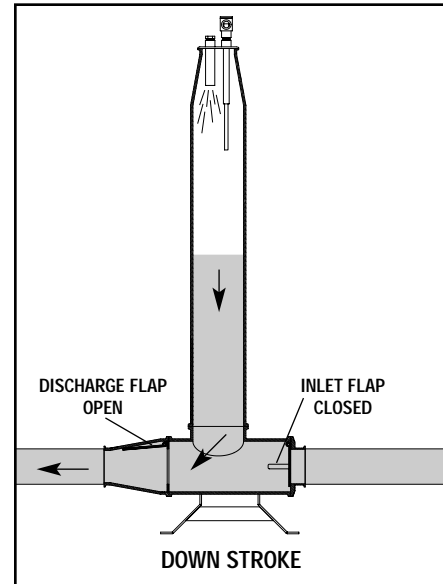


FIGURE 3 The discharge stroke length is controlled by the timer dial located on the right side of the Saniflo™ VC control panel. By adjusting the timer dial, the length of the time the compressed air is supplied directly to the process medium within the vertical column can be adjusted. Once the time has been set, the compressed air will be directed onto the process medium for the set time and then the control panel will redirect the air to the vacuum generator(s). Once air is redirected to the vacuum generator(s) the process medium is once again drawn up the vertical column towards the conductivity sensor. This constitutes one complete pumping cycle.

SECTION 3

WILDEN MODEL SANIFLO™ VC CAUTIONS – READ FIRST!



TEMPERATURE LIMITS:

Buna-N -12.2°C to 82.2°C 10°F to 180°F
Teflon® PTFE 4.4°C to 104.4°C 40°F to 220°F



CAUTION: Verify the chemical compatibility of the process and cleaning fluid to the pump's component materials in the Chemical Resistance Guide (see Wilden publication E-4).



CAUTION: When choosing pump materials, be sure to check the temperature limits for all components.



CAUTION: Maximum temperature limits are based upon mechanical stress only. Certain chemicals will significantly reduce maximum safe operating temperatures. Consult engineering guide for chemical compatibility and temperature limits.



WARNING: Prevention of static sparking – If static sparking occurs, fire or explosion could result. Pump, piping, and containers must be properly grounded whenever discharge of static electricity is a hazard.



DO NOT OPERATE PUMP WITHOUT PROPER GROUND! It is very important that the control panel is properly grounded for safe and proper operation. Do not reverse the hot and neutral wire under any circumstance. Unit may cause severe electric shock if used or installed improperly.



CAUTION: Disconnect all power sources prior to opening control panel. Never operate pump without control panel lid securely closed.



CAUTION: Vibration and shock to the control panel should be avoided.



CAUTION: Unit is designed to be powered by 110 VAC or 220 VAC only. The control panel incorporates an automated transformer that can handle the following power supply options: 110V AC - 50Hz, 110V AC - 60 Hz, 220V AC - 50 Hz, 220V AC - 60 Hz.



CAUTION: The Saniflo™ VC pump is not submersible. Mount control panel where it is not directly in the wash down area.



CAUTION: Always wear safety glasses when operating pump. If rupture of wetted components occurs, material being pumped may be forced from pump and may create a hazardous situation.



CAUTION: Before any maintenance or repair is attempted, the compressed air line to the pump should be disconnected and all air pressure allowed to bleed from pump. Disconnect all intake, discharge and air lines. Power down the control panel and disconnect it from electrical source. Drain the pump by disconnecting the hopper, sanitary tubing, fittings and check valves allowing any fluid to flow into a suitable container.



CAUTION: Do not exceed 8.6 Bar (125 psig) air supply pressure. Minimum air supply pressure required for operation is 1.7 bar (25 psig).



CAUTION: Blow out air line for 10 to 20 seconds before attaching to the regulator mounted to the control panel.



CAUTION: Only install pump as per the installation diagram (see section 5).



CAUTION: Ensure that hopper is not higher than top of vertical column. When pump is unpowered liquid will seek its own level and cause damage to controls.



CAUTION: When connecting the pump to any type of hopper, never place flex hose into the hopper from the topside. The hopper should always be connected to the pump from the bottom using sanitary tubing and fittings.



CAUTION: Tighten all clamp bands at regular intervals to ensure product containment. Fittings may loosen due to vibration.



CAUTION: In certain applications the Saniflo™ VC pump may have to be primed to start the pump. Applications that may require priming include breast, thigh meat, tenders and other extremely thick products. The pump can be primed by placing a plastic bag over the discharge port of the pump.



WARNING: To prevent contamination of process media with contaminated air, the inlet air filter cartridge must be changed when indicator button moves into the "Up" position (see figures 1 & 2). Use part # 80-0099.



Figure 1: Button Down - Filter is Clean

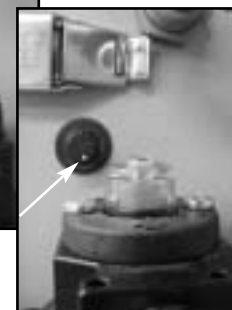
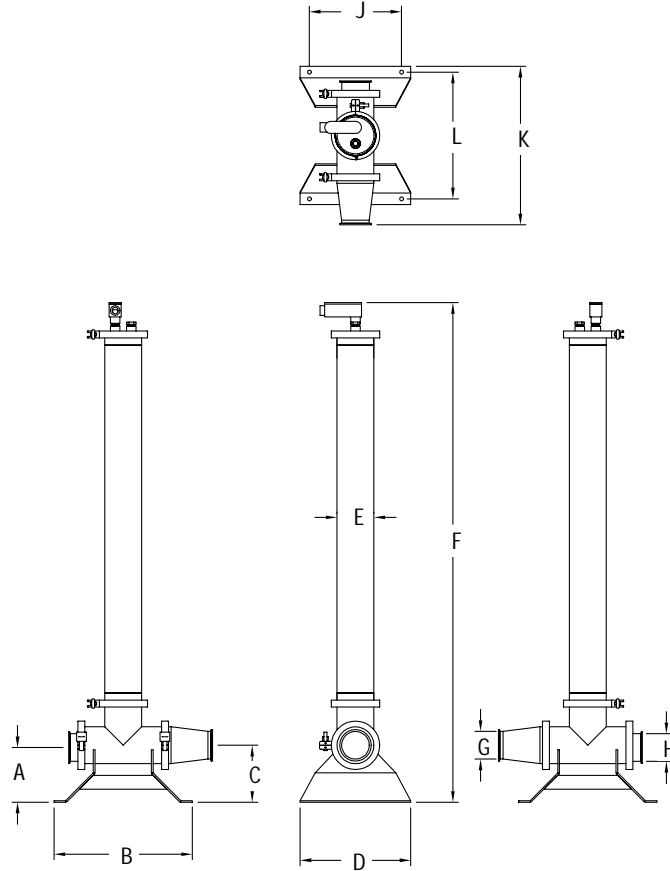


Figure 2: Button Up - Change Filter

SECTION 4

DIMENSIONAL DRAWING WILDEN MODEL SANIFLO™ VC



DIMENSIONS – SANIFLO™ VC						
ITEM	VC4		VC6		VC8	
	METRIC (mm)	STANDARD (inch)	METRIC (mm)	STANDARD (inch)	METRIC (mm)	STANDARD (inch)
A	150	5.93	184	7.25	209	8.25
B	381	15	381	15	381	15
C	157	6.18	N/A	N/A	N/A	N/A
D	304	12	304	12	304	12
E	101	4	152	6	203	8
F	1377	54.25	1423	56.06	1489	58.62
G	76	3	101	4	152	6
H	76	3	101	4	152	6
J	254	10	254	10	254	10
K	436	17.18	555	21.87	647	25.50
L	352	13.87	352	13.87	352	13.87

SECTION 5A

INSTALLATION

The pipe size should be at least the size of the inlet and discharge ports of the pump or larger if highly viscous material is being pumped. The suction hose must be non-collapsible, reinforced type as the SANIFLO™ VC pump is capable of pulling a vacuum. It is critical that all fittings and connections are airtight or a reduction or loss of pump suction capability will result.

INSTALLATION: Months of careful planning, study and selection efforts can result in unsatisfactory pump performance if installation details are left to chance.

Premature failure and long term dissatisfaction can be avoided if reasonable care is exercised throughout the installation process.

LOCATION: Noise, safety and other logistical factors usually dictate where equipment should be situated on the production floor. Multiple installations with conflicting requirements can result in congestion of utility areas, leaving few choices for additional pumps.

Within the framework of these and other existing conditions, every pump should be located in such a way that six key factors are balanced against each other to maximum advantage.

ACCESS: First, the location should be accessible. If it is easy to reach the pump, maintenance personnel will have an easier time carrying out routine inspections and adjustments. Should major repairs become necessary, ease of access can play a key role in speeding the repair process and reducing total downtime. Verify that the site also allows for ease of cleaning and proper drainage during wash down.

AIR SUPPLY: Every pump installation should use an air line large enough to supply the volume of air necessary to achieve the desired pumping rate. Use air pressure up to a maximum of 8.6 bar (125 psig) depending on pumping requirements. The minimum air pressure required to effectively operate the pump is 1.7 bar (25 psig).

ELECTRICAL: All pump control panels come equipped with 110V AC/220V AAC, 50/60 Hz capabilities. See page 18 for details on connecting panel to power source.

ELEVATION: Selecting a site that is well within the pump's dynamic lift capability will assure that loss-of-prime troubles will be eliminated. In addition, pump efficiency can be adversely effected if proper attention is not given to site location.

PIPING: Final determination of pump site should not be made until the piping problems of each possible location have been evaluated. The impact of current installations should be considered ahead of time to make sure that inadvertent restrictions are not created for any remaining sites.

The best choice possible will be a site involving the shortest and straightest hook-up of suction and discharge piping. Unnecessary elbows, bends and fittings should be avoided. Pipe sizes should be selected to keep friction losses within practical limits. All piping should be supported independently of the pump. In addition, the piping should be aligned to avoid placing stresses on the pump fittings.

If the pump is to be bolted down to a solid location, a mounting pad placed between the pump stand and the foundation will assist in minimizing pump vibration.

The proper orientation for this SANIFLO™ VC pump is to have the vertical column in the vertical position.

SOLIDS PASSAGE CAPABILITIES:

VC4	7.6 cm (3")
VC6	10.2 cm (4")
VC8	15.2 cm (6")

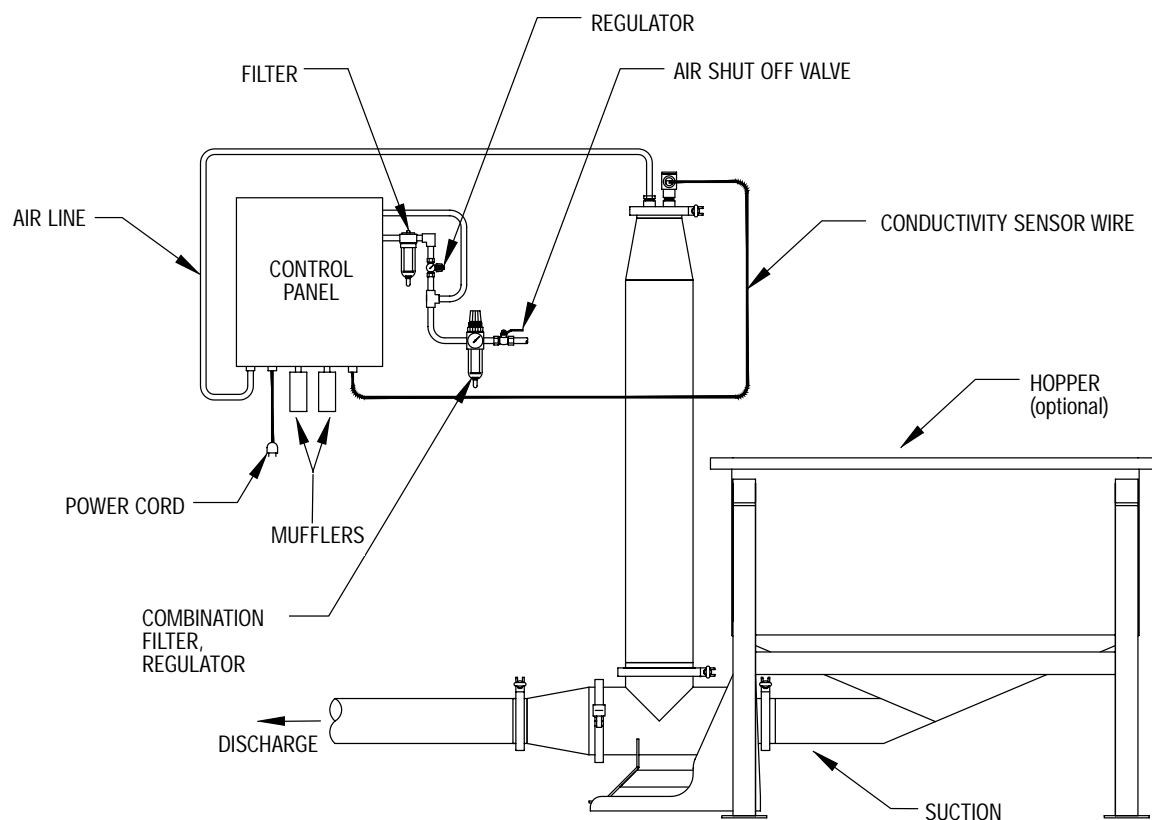
CONNECTING PUMP TO CONTROL PANEL: The control panel should be connected to the pump as close as possible without putting the control panel in harms way. The control panel comes complete with seven feet of hose to connect the control panel to the pump. The control panel may be mounted farther from the pump than seven feet, but this will decrease the capacity of the pump slightly. Moving the control panel farther away will also increase the air consumption by approximately 5% for every additional ten feet of air tubing. The sanitary cap which houses the probe and air diffuser is placed on top of the vertical column and secured by a four inch sanitary clamp. Your pump is now connected to the control panel.

CONNECTING PUMP TO HOPPER: The correct way to connect the hopper to the pump is from the bottom of the hopper using sanitary pipe & fittings. NOTE: When connecting pump to any type of hopper, never place the flex hose into the hopper from the topside. The hopper should always be connected to the pump from the bottom of the hopper.

**REFER TO SECTION 6A
(pages 8 and 9) FOR ASSEMBLY
INSTRUCTIONS**

SECTION 5A Cont.

SUGGESTED INSTALLATION



SECTION 5B

SUGGESTED OPERATION AND MAINTENANCE INSTRUCTIONS

OPERATION: The SANIFLO™ VC pump does not require inline lubrication.

HOW TO OPERATE PUMP, STEPS 1 - 9:

1. Insert panel power cord into electrical outlet.
2. Ensure that ball valve located at large air regulator is in the off position.
3. Ensure both small and large air regulators are in the off position by turning the dial counter clockwise until hitting the stop.
4. Adjust small regulator approx. 6 turns clockwise.
5. Adjust timer dial to mid-point.
6. Adjust power switch to the on position (to the right)
7. Open ball valve located at large regulator.
8. Now begin adjusting the large regulator clockwise at which pump will begin to cycle at approx. 1.7 bar (25 psig).
9. Now system is ready for fine-tuning by adjusting both the small and large air regulators and timer dial to desired flow rate. **NOTE:** Turn timer dial counter clockwise to decrease discharge time interval and clockwise to increase discharge time interval.

TO REMOVE PUMPING MEDIUM FROM PUMP:

Initiate process by continually pressing the system purge button on right side of panel. Continue pressing system purge button until product is completely removed from pump.

MAINTENANCE AND INSPECTIONS: Since each application is unique, maintenance schedules may vary for every pump. Frequency of use, viscosity and abrasive characteristics of process fluid all affect the parts life of a Wilden pump. Periodic inspections have been found to offer the best means for preventing unscheduled pump downtime. Personnel familiar with the pump construction and service should be informed of any abnormalities that are detected during operation.

NOTE: Daily inspections of the inlet air regulator are recommended to ensure proper operating pressure. Also, inspect filter bowl daily to ensure longevity of filter elements. Monthly inspections of the diffuser are recommended to ensure consistent and adequate pumping volume. Also, inspect pressure differential indicator (red pop-up) located at top of filter to ensure filter is replaced when needed.

Records: When service is required, a record should be made of all necessary repairs and replacements. Over a period of time, such records can become a valuable tool for predicting and preventing future maintenance problems and unscheduled downtime. In addition, accurate records make it possible to identify pumps that are poorly suited to their applications.

SECTION 5C

TROUBLESHOOTING

Pump will not prime or pull vacuum when the control panel suction light is on.

1. Push discharge button on side of control panel for approximately two seconds. If this does not help, disassemble the pump and clear the check valves.
2. Verify whether or not the air is turned on and that the air pressure is 25 psig or greater.
3. Inspect inlet and discharge flap valves to determine whether or not the flap in the flap valve is adequately sealing against flap valve housing.
4. Disassemble and clean vacuum generator. If this does not work, replace vacuum generator unit.
5. Verify that all tubing and plumbing connections, both inside the control panel and at the pump, are seated properly and there are no evident signs of air leaking.
6. Verify proper alignment of flap valve assembly. The hinge of the flap valve is to be located at the top or the assembly (not at the bottom).

Pump is in suction mode (control panel suction light is on) and will not cycle to the discharge mode.

1. Verify whether or not fuse is bad. This can be done by inspecting the color of the fuse. If the fuse is brown or gray in color, the fuse most likely has failed at which a new fuse will need to be replaced.
2. Remove relay and inspect contacts, clean contacts and replace relay. If problem persists replace relay.
3. Verify adequate probe connections at both ends of wiring.
4. Clean probe in reservoir tube.

Control Panel Will Not Cycle

1. Ensure power is properly connected to transformer.
2. Ensure power switch is turned on.
3. Ensure all solenoid wires are connected.

WARNING: To prevent contamination of process media with contaminated air, the inlet air filter cartridge must be changed when indicator button moves into the "Up" position (see figures 1 & 2). Use part # 80-0099.



Figure 1: Button Down - Filter is Clean

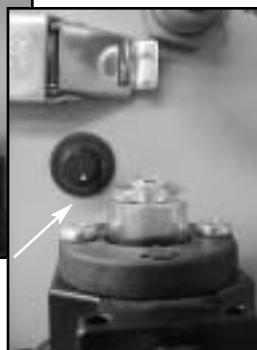


Figure 2: Button Up - Change Filter

Pump runs but little or no product flows.

1. Verify no obstructions or debris in wetted portion of pump or piping.
2. Verify whether or not the air is turned on and that the air pressure is 25 psig or greater.
3. Verify no interference at flap valve assembly.

Pump is in discharge mode (control panel discharge light is on) and will not cycle to suction mode.

1. Clean probe located at top of reservoir tube.
2. Verify adequate contact of terminal #6 wire on relay base (see control panel overview below).
3. Verify that both the relay base and terminal strip is free of corrosion (see control panel overview below).

Product comes out of pump joints.

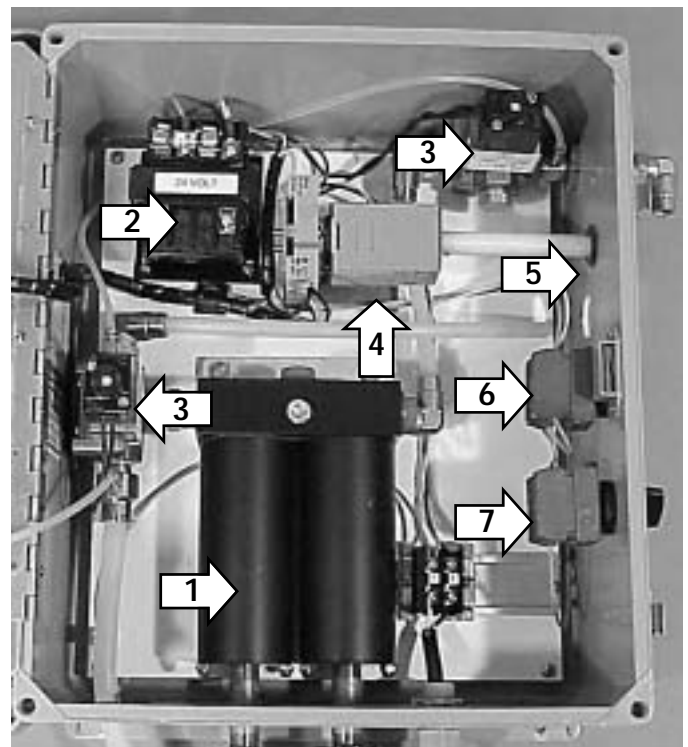
1. Retighten all fasteners as required.
2. Replace all worn seals.

NOTE: Ensure that hopper is not higher than top of pump reservoir tube. When pump is unpowered liquid will seek its own level and cause damage to controls.

Control Panel Breakdown

- | | |
|---------------------|-----------------|
| 1. Vacuum Generator | 5. Timer Dial |
| 2. Transformer | 6. Purge Button |
| 3. Solenoid Valve | 7. Power Switch |
| 4. Timer Relay | |

Control Panel



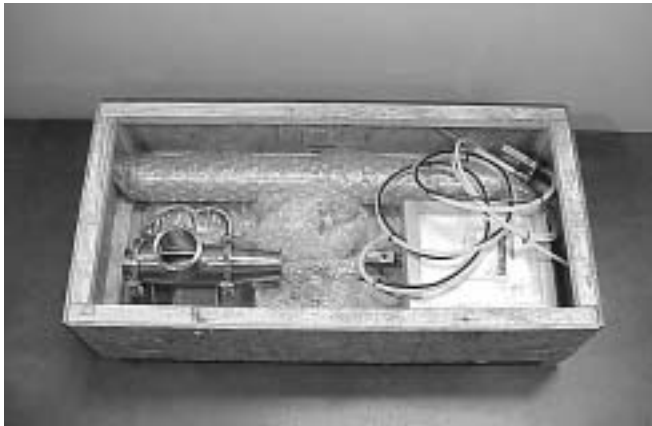
SECTION 6

MODEL SANIFLO™ VC DIRECTIONS FOR ASSEMBLY

CAUTION: Before any maintenance or repair is attempted, all electrical and air connections should be unhooked. Be aware of the hazardous effects of contact with your process medium.

TOOLS REQUIRED:

Quantity 2 – Adjustable Wrenches
Vise equipped with soft jaws (such as plywood, plastic or other suitable material).



Step 1

Figure 1

Prior to assembly, confirm pump inventory (refer to parts matrix, VC4 pg. 13, VC6 pg. 15 and VC8 pg. 17). (*Figure 1*)



Step 2

Figure 2

Prior to assembly, carefully remove pump parts from box making sure not to damage components. (*Figure 2*)



Step 3

Figure 3

Begin assembly by installing the flange gasket and inlet flap valve housing to pump base. After joining components, secure with clamp band. NOTE: When installing inlet flap valve housing, ensure that hinged portion of flap valve is located in the up position by utilizing the "UP" reference mark on the inlet housing. (*Figure 3*)



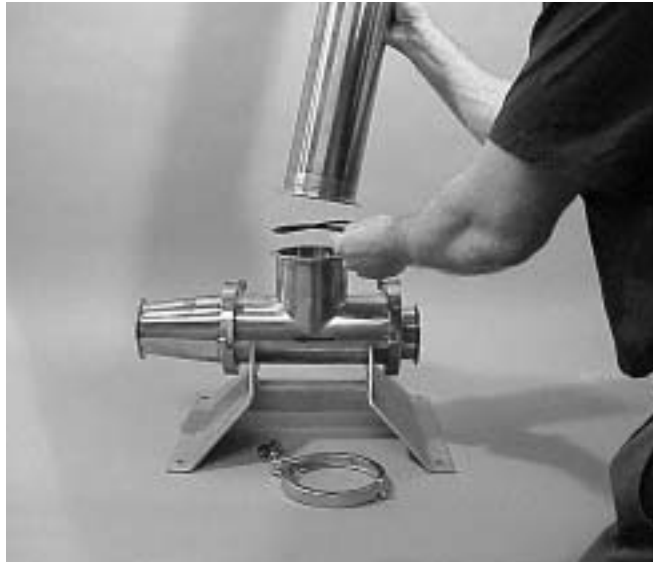
Step 4

Figure 4

Position flange gasket and discharge flap valve housing to pump base. After joining components, secure with clamp band. NOTE: When installing discharge flap valve housing, ensure that hinged portion of flap valve is located in the up position utilizing the "UP" marking on flange housing. (*Figure 4*)

SECTION 6 Cont.

MODEL SANIFLO™ VC DIRECTIONS FOR ASSEMBLY



Step 5

Figure 5

Position flange gasket and vertical column to pump base. After joining components, secure with clamp band. *(Figure 5)*



Step 6

Figure 6

Position flange gasket and cap to vertical column. After joining components, secure with clamp band. *(Figure 6)*



Step 7

Figure 7

With the assembly process now complete, pump can be positioned into place and control panel mounted with suitable fasteners to appropriate substrate. *(Figure 7)*

SECTION 7

MODEL SANIFLO™ VC DIRECTIONS FOR USE OF PIPE PIG

CAUTION: Before any maintenance or repair is attempted, the compressed air line to the pump should be disconnected. Be aware of the hazardous effects of contact with your process medium.

NOTE: The pipe pig option is designed to help clear the process lines of valuable product prior to cleaning. By installing the pipe pig T-section in the discharge line after the pump, the pipe pig can be inserted as shown prior to depressing the pump air purge button. Wilden offers the pipe pig as a kit that includes everything for installation.

Kit, Pipe Pig, 3" 80-0012

Kit, Pipe Pig, 4" 80-0013



Step 1

Figure 1

With a tee section installed downstream from pump but as close to discharge of pump as possible, insert pipe pig into tee section. **NOTE:** Pipe pig can be inserted into tee section either way, bolt or smooth side first. (*Figure 1*)



Step 2

Figure 2

When inserting pipe pig into tee section, press backside of pipe pig. This will allow pipe pig to be easily maneuvered around the corner of the tee section. (*Figure 2*)



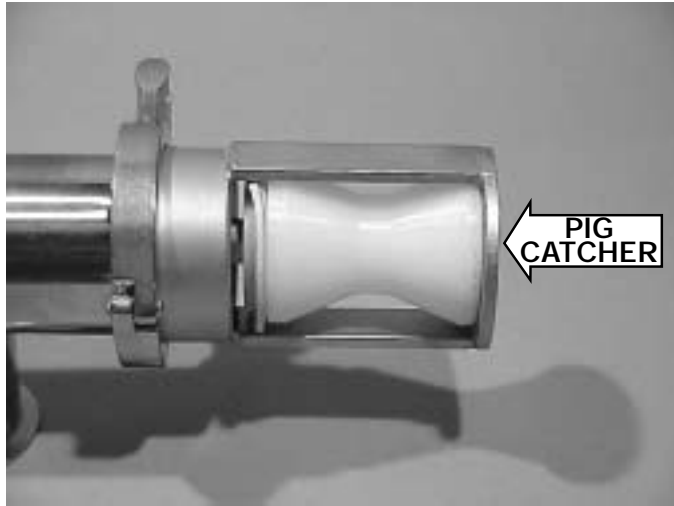
Step 3

Figure 3

After inserting pipe pig, install flange gasket and cap to tee section. After joining components, secure with clamp band. (*Figure 3*)

SECTION 7 CONT.

MODEL SANIFLO™ VC DIRECTIONS FOR USE OF PIPE PIG



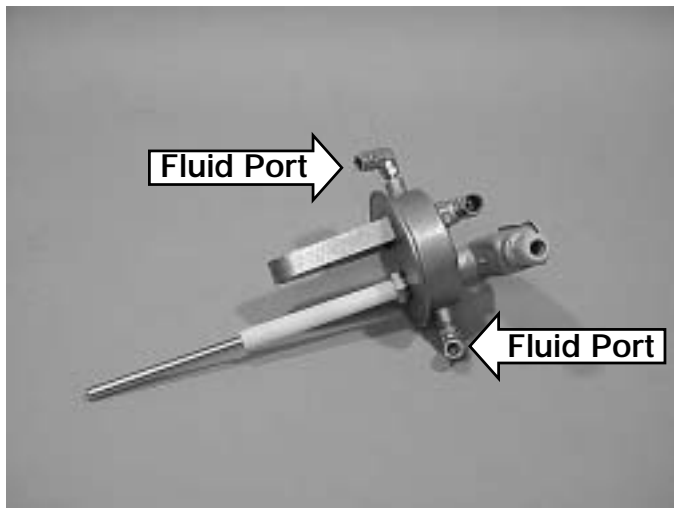
After securing tee section cap with clamp band, install pipe pig catcher to end of process discharge piping. When installation of pipe pig catcher is complete, begin purging process by continually pressing the system purge button on right side of control panel. When purging process is complete, retrieve pipe pig from pipe pig catcher. (Figure 4)

Step 4

Figure 4

SECTION 8

DIRECTIONS FOR USE OF HEATED CAP

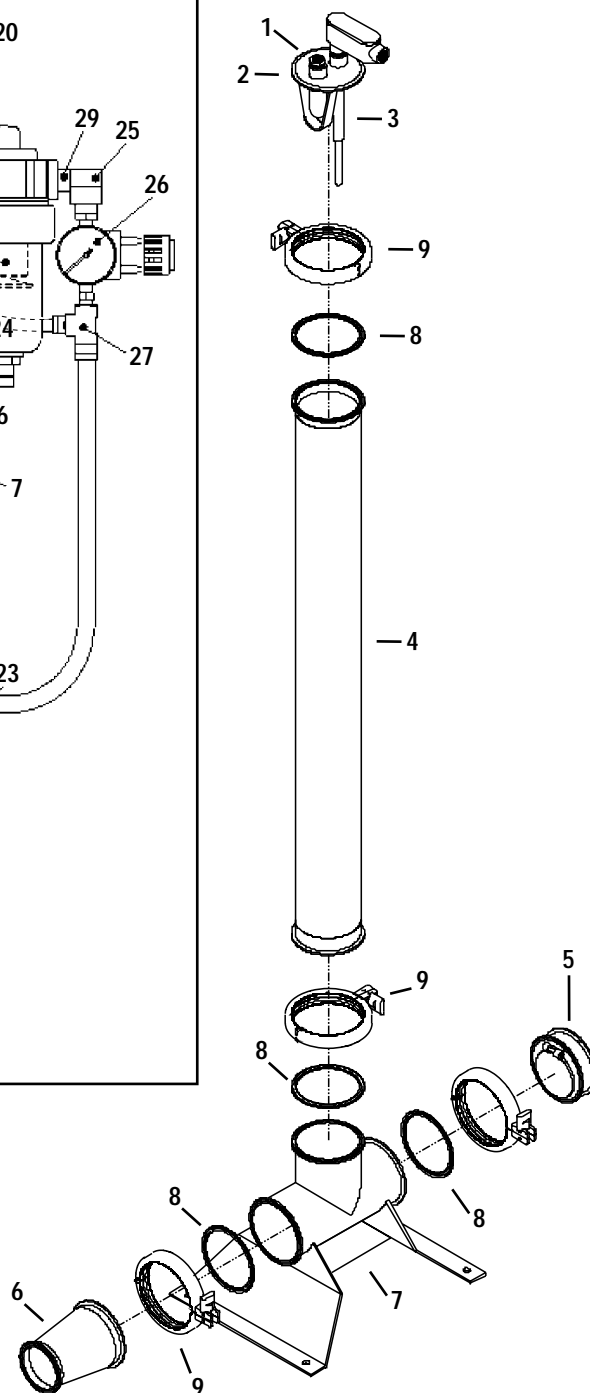
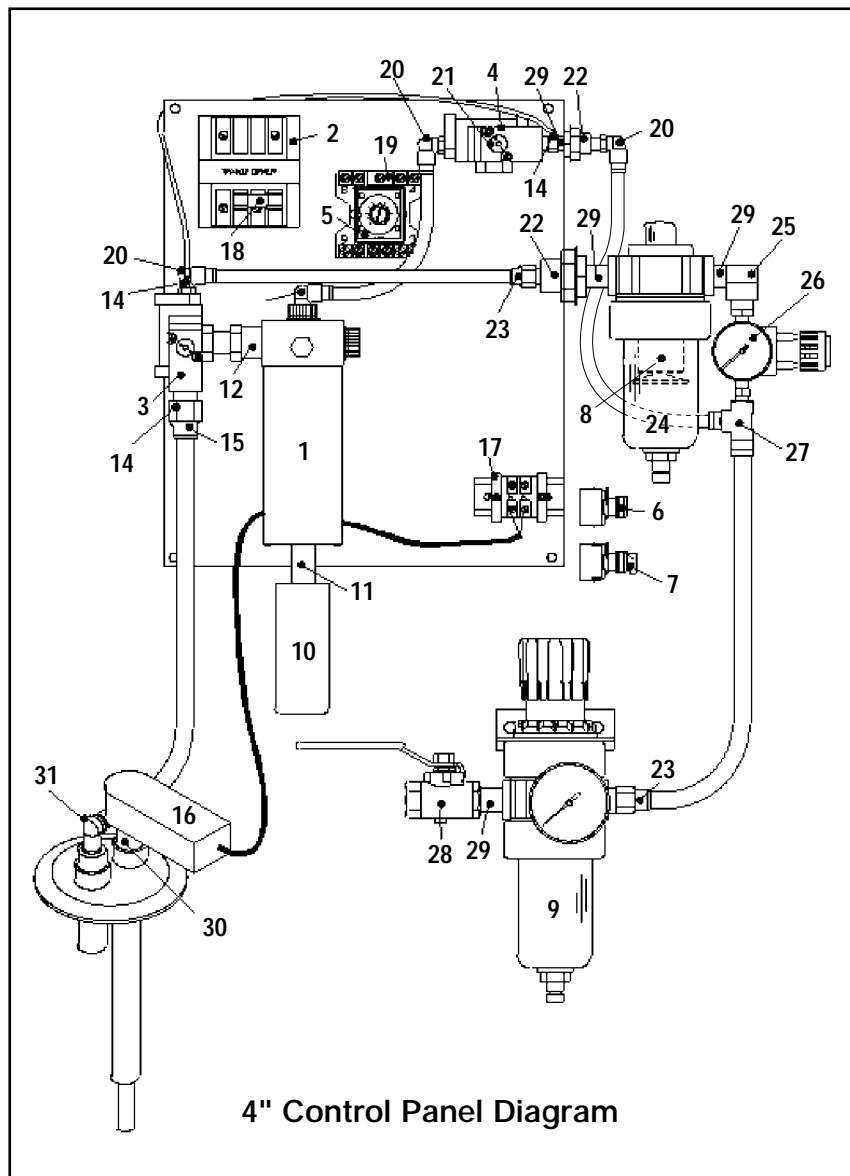


The heated cap option is designed for use in extremely cold or humid environments. The heater cap may be necessary to limit freezing at cap area. This heated cap is specifically designed to limit freezing in the vertical column due to the expansion of compressed air as it enters the column. Simply connect a hose to both liquid ports and continuously flush with warm water or steam. The warm water or steam counteracts the freezing condition inside the vertical column cap. The optional heated cap can be ordered using part #80-0088.

Figure 1

SECTION 9A EXPLODED VIEW

SANIFLO™ VC4



SECTION 9A Cont.

PARTS LISTING VC4

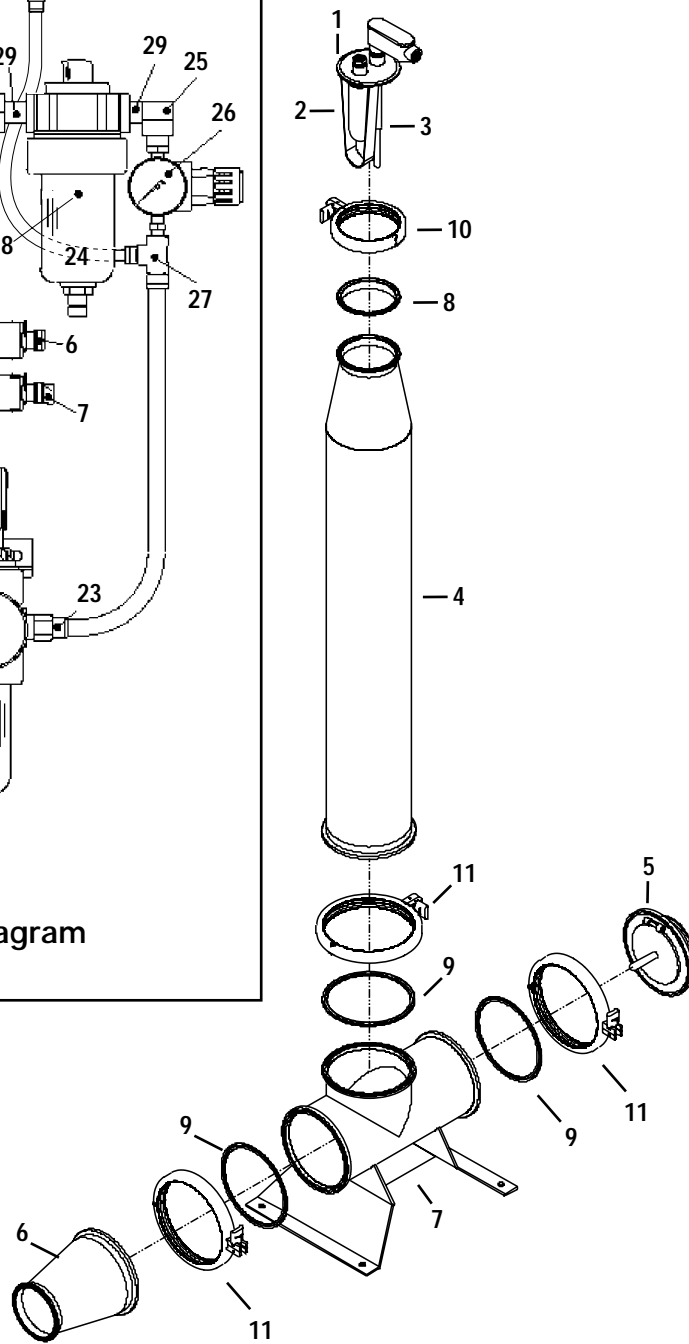
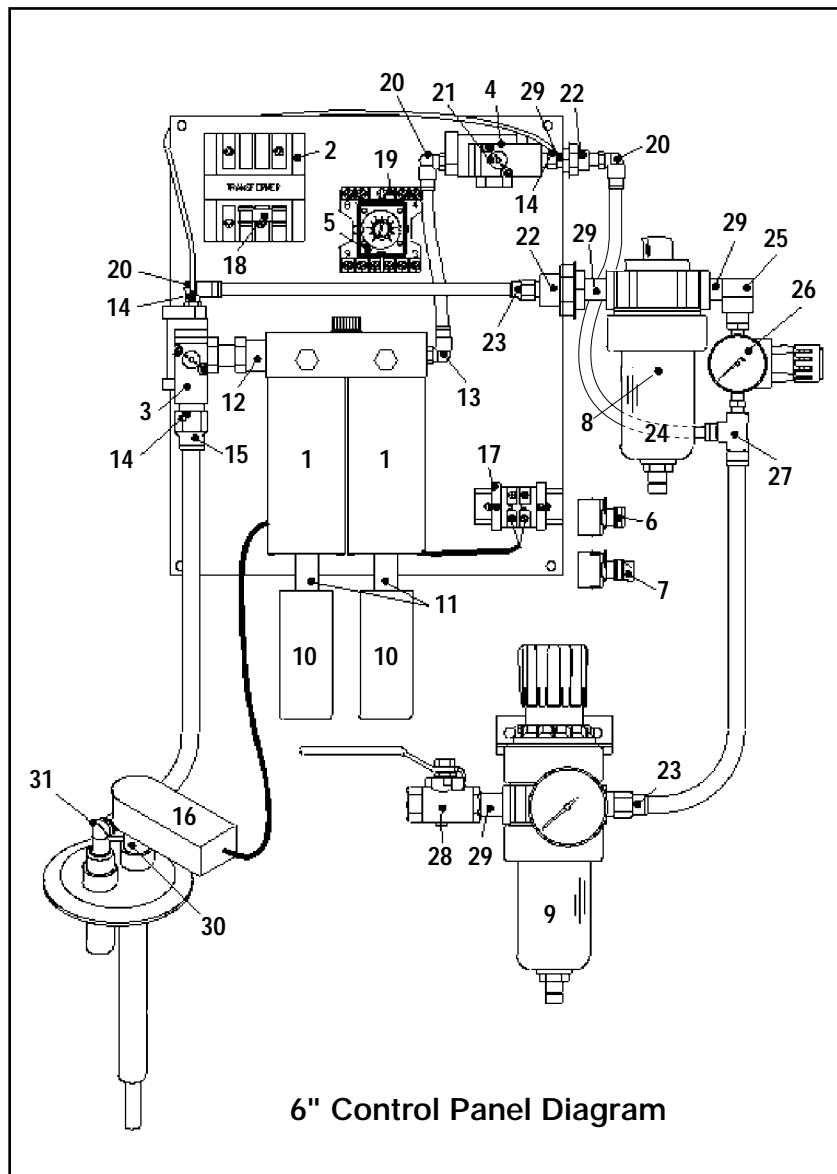
VC4 PUMP COMPONENTS				
Item	Part Description	Qty. Per Pump	VC4/SS/SS/TF/072 P/N	VC4/SS/SS/FB/072 P/N
1	Cap - A3 Sensor	1	80-0087	80-0087
	Cap - Water Heated Sensor (not shown)	optional	80-0088	80-0088
2	Diffuser - C2	1	80-0094	80-0094
3	Probe	1	80-0116	80-0116
4	Tube - 4" Reservoir 40"	1	80-0127	80-0127
5	Valve - 4" Inlet Check	1	80-0144	80-0144
6	Valve - 4" Outlet Check	1	80-0145	80-0145
7	Base - 4" Pump	1	80-0084	80-0084
8	Gasket - 4" FB Buna	4	N/A	80-0101
8	Gasket - 4" Teflon	4	80-0152	N/A
9	Clamp - 4" H.D.	4	80-0089	80-0089

VC4 CONTROL PANEL COMPONENTS			
Item	Part Description	Qty. Per Panel	P/N
1	Vacuum Generator - Single	1	80-0140
2	Transformer (24V)	1	80-0126
3	Valve - 3-Way MAC,(PE) 24V	1	80-0142
4	Valve - 3-Way MAC,(PI) 24V	1	80-0143
5	Timer Relay (24V)	1	80-0125
6	Switch - Purge, w/ n/o & n/c Contact	1	80-0121
7	Switch - On/Off Switch with n/o Contact	1	80-0120
8	Coalescent Filter Cartridge	1	80-0091
9	Regulator - 3/8" Filter,150 psi w/Gage	1	80-0117
10	Muffler	1	80-0109
11	Nipple - 3/8"x2 1/2", Stainless	1	80-0114
12	Nipple - 1/2"x3/8", Brass Male Reducing	1	80-0111
13	Tube,3/8"x1/8",NPTM,Swivel,90 Elbow	1	80-0132
14	Tube,5/32"x10/32,UNF,Male Connector	1	80-0138
15	Tube,1/2"x3/8",NPTM,Male Connector	3	80-0131
16	Elbow - 1/2" Alum Body	1	80-0095
17	Terminal Strip Assembly	1	80-0124
18	Fuse 250V, 2A	1	80-0100
19	Relay Socket	1	80-0119
20	Tube,3/8"x3/8",NPTM,Swivel,90 Elbow	3	80-0135
21	Plug - 3/8" Brass	1	80-0115
22	Connector - 3/8" Brass Bulkhead	2	80-0092
23	Tube,3/8"x3/8",NPTM,Male Connector	1	80-0134
24	Filter - 3/8" Colescent	1	80-0097
25	Elbow - 3/8" Brass Street 90	1	80-0096
26	Regulator - 3/8" w/gauge	1	80-0118
27	Tube,3/8"x3/8",NPTM,Swivel,Male Run Tee	1	80-0136
28	Valve - 3/8" Brass Ball	1	80-0141
29	Nipple - 3/8" Brass Close Hex	3	80-0113
30	Nipple - 1/2" Stainless Close	1	80-0110
31	Tube, 1/2"x1/2", NPT, 90 Elbow	1	80-0130



SECTION 9B EXPLODED VIEW

SANIFLO™ VC6



SECTION 9B Cont.

PARTS LISTING VC6

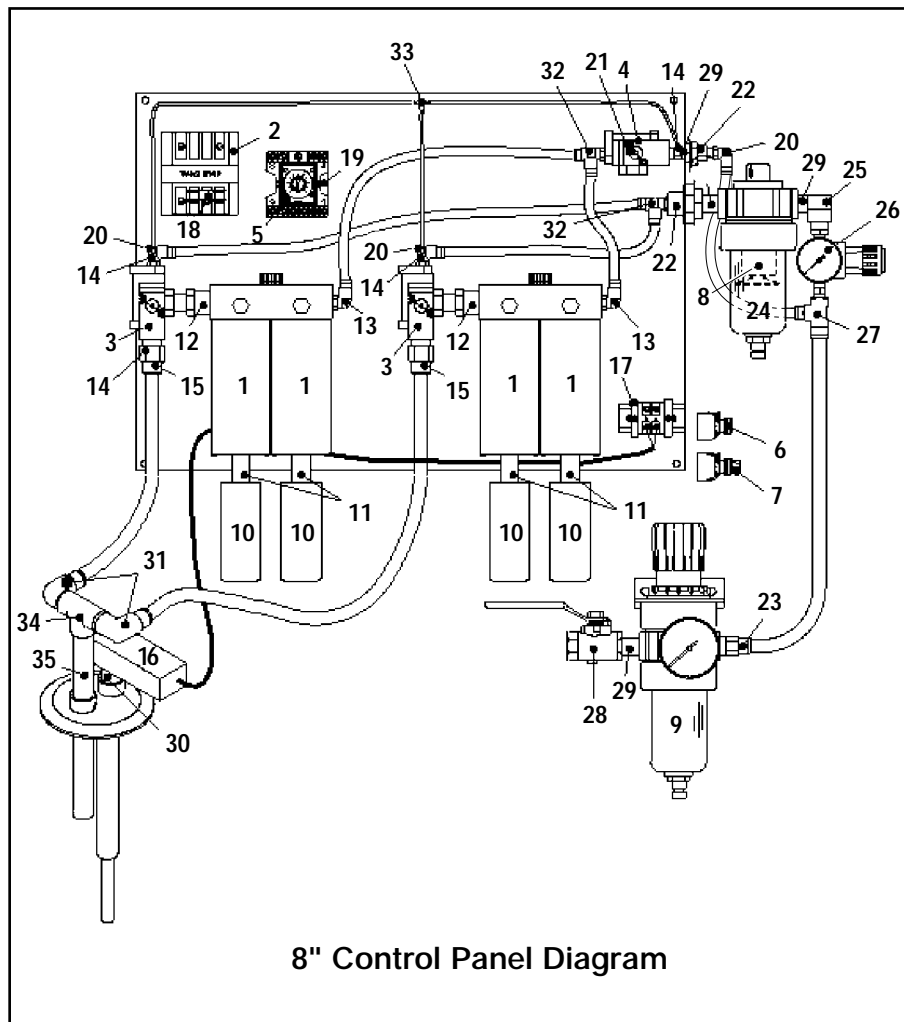
VC6 PUMP COMPONENTS				
Item	Part Description	Qty. Per Pump	VC6/SS/SS/TF/072 P/N	VC6/SS/SS/FB/072 P/N
1	Cap - A3 Sensor	1	80-0087	80-0087
	Cap - Water Heated Sensor (not shown)	optional	80-0088	80-0088
2	Diffuser - C2	1	80-0094	80-0094
3	Probe	1	80-0116	80-0116
4	Tube - 6" Reservoir	1	80-0128	80-0128
5	Valve - 6" Inlet Check	1	80-0146	80-0146
6	Valve - 6" Outlet Chk,w/6x4 Reducer	1	80-0147	80-0147
7	Base - 6" Pump	1	80-0085	80-0085
8	Gasket - 4" FB Buna	1	N/A	80-0101
8	Gasket - 4" Teflon	1	80-0152	N/A
9	Gasket - 6" FB Buna	3	N/A	80-0102
9	Gasket - 6" Teflon	3	80-0153	N/A
10	Clamp - 4" HD	1	80-0089	80-0089
11	Clamp - 6" HD	3	80-0090	80-0090

VC6 CONTROL PANEL COMPONENTS			
Item	Part Description	Qty. Per Panel	P/N
1	Vacuum Generator - Double	1	80-0139
2	Transformer (24V)	1	80-0126
3	Valve - 3-Way MAC,(PE) 24V	1	80-0142
4	Valve - 3-Way MAC,(PI) 24V	1	80-0143
5	Timer Relay (24V)	1	80-0125
6	Switch - Purge, w/ n/o & n/c Contact	1	80-0121
7	Switch - On/Off Switch with n/o Contact	1	80-0120
8	Coalescent Filter Cartridge	1	80-0091
9	Regulator - 3/8" Filter,150 psi w/Gage	1	80-0117
10	Muffler	2	80-0109
11	Nipple - 3/8"x2 1/2", Stainless	2	80-0114
12	Nipple - 1/2"x3/8", Brass Male Reducing	1	80-0111
13	Tube,3/8"x1/8",NPTM,Swivel,90 Elbow	1	80-0132
14	Tube,5/32"x10/32,UNF,Male Connector	3	80-0138
15	Tube,1/2"x3/8",NPTM,Male Connector	1	80-0131
16	Elbow - 1/2" Alum Body	1	80-0095
17	Terminal Strip Assembly	1	80-0124
18	Fuse 250V, 2A	1	80-0100
19	Relay Socket	1	80-0119
20	Tube,3/8"x3/8",NPTM,Swivel,90 Elbow	3	80-0135
21	Plug - 3/8" Brass	1	80-0115
22	Connector - 3/8" Brass Bulkhead	2	80-0092
23	Tube,3/8"x3/8",NPTM,Male Connector	2	80-0134
24	Filter - 3/8" Colescent	1	80-0097
25	Elbow - 3/8" Brass Street 90	1	80-0096
26	Regulator - 3/8" w/gauge	1	80-0118
27	Tube,3/8"x3/8",NPTM,Swivel,Male Run Tee	1	80-0136
28	Valve - 3/8" Brass Ball	1	80-0141
29	Nipple - 3/8" Brass Close Hex	3	80-0113
30	Nipple - 1/2" Stainless Close	1	80-0110
31	Tube, 1/2"x1/2", NPT, 90 Elbow	1	80-0130

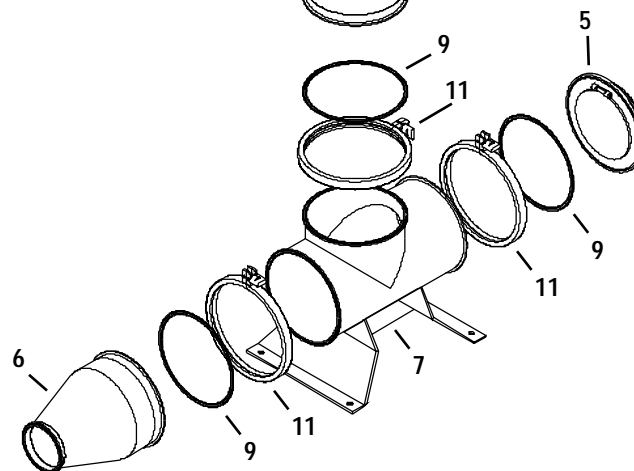


SECTION 9C EXPLODED VIEW

SANIFLO™ VC8



8" Control Panel Diagram



SECTION 9C Cont.

PARTS LISTING VC8

VC8 PUMP COMPONENTS				
Item	Part Description	Qty. Per Pump	VC8/SS/SS/TF/072 P/N	VC8/SS/SS/FB/072 P/N
1	Cap - Water Heated Sensor	1	80-0088	80-0088
2	Diffuser Stainless Steel (Water-Heated Sensor Cap)	1	80-0093	80-0093
3	Probe	1	80-0116	80-0116
4	Tube - 8" Reservoir	1	80-0129	80-0129
5	Valve - 8" Inlet Check	1	80-0148	80-0148
6	Valve - 8" Outlet Check	1	80-0149	80-0149
7	Base - 8" Pump	1	80-0086	80-0086
8	Gasket - 4" FB Buna	1	N/A	80-0101
8	Gasket - 4" Teflon	1	80-0152	N/A
9	Gasket - 8" FB Buna	3	80-0151	80-0151
9	Gasket - 8" Teflon	3	80-0154	80-0154
10	Clamp - 4" H.D.	1	80-0089	80-0089
11	Clamp - 8" H.D.	3	80-0150	80-0150

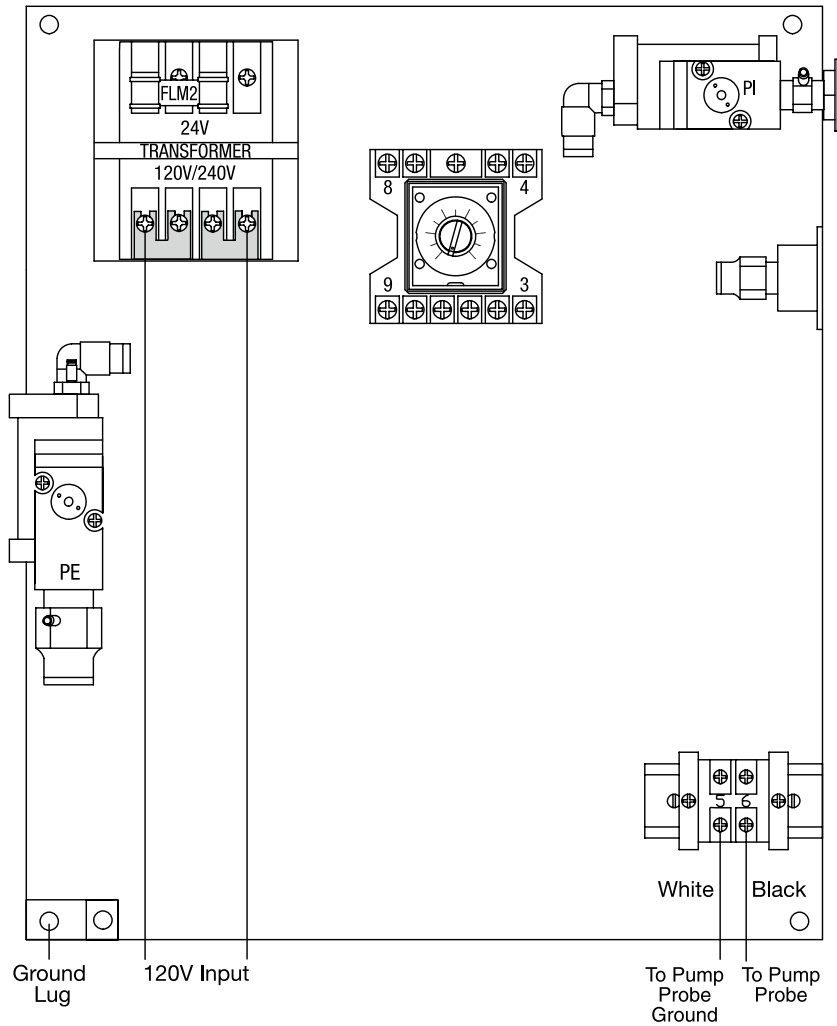
VC8 CONTROL PANEL COMPONENTS			
Item	Part Description	Qty. Per Panel	P/N
1	Vacuum Generator - Double	2	80-0139
2	Transformer (24V)	1	80-0126
3	Valve - 3-Way MAC,(PE) 24V	1	80-0142
4	Valve - 3-Way MAC,(PI) 24V	1	80-0143
5	Timer Relay (24V)	1	80-0125
6	Switch - Purge, w/ n/o & n/c Contact	1	80-0121
7	Switch - On/Off Switch with n/o Contact	1	80-0120
8	Coalescent Filter Cartridge	1	80-0091
9	Regulator - 3/8" Filter,150 psi w/Gage	1	80-0117
10	Muffler	4	80-0109
11	Nipple - 3/8"x2 1/2", Stainless	4	80-0114
12	Nipple - 1/2"x3/8", Brass Male Reducing	2	80-0111
13	Tube,3/8"x1/8",NPTM,Swivel,90 Elbow	2	80-0132
14	Tube,5/32"x10/32,UNF,Male Connector	4	80-0138
15	Tube,1/2"x3/8",NPTM,Male Connector	2	80-0131
16	LB - 1/2" Alum Body	1	80-0095
17	Terminal Strip Assembly	1	80-0124
18	Fuse 250V, 2A	1	80-0100
19	Relay Socket	1	80-0119
20	Tube,3/8"x3/8",NPTM,Swivel,90 Elbow	3	80-0135
21	Plug - 3/8" Brass	1	80-0115
22	Connector - 3/8" Brass Bulkhead	2	80-0092
23	Tube,3/8"x3/8",NPTM,Male Connector	1	80-0134
24	Filter - 3/8" Colescent	1	80-0097
25	Elbow - 3/8" Brass Street 90	1	80-0096
26	Regulator - 3/8" w/gauge	1	80-0118
27	Tube,3/8"x3/8",NPTM,Swivel,Male Run Tee	1	80-0136
28	Valve - 3/8" Brass Ball	1	80-0141
29	Nipple - 3/8" Brass Close Hex	3	80-0113
30	Nipple - 1/2" Stainless Close	1	80-0110
31	Tube, 1/2"x1/2", NPT, 90 Elbow	2	80-0130
32	Tube,3/8"x3/8",NPT,Swivel,Male Run Tee	2	80-0133
33	Tee - 5/32" Tube Union	1	80-0123
34	Tee - 1/2" NPTF	1	80-0122
35	Nipple - 1/2"x4"	1	80-0112



SECTION 10

MODEL SANIFLO™ VC DIRECTIONS FOR CONTROL PANEL POWER HOOK-UP

CAUTION: Do not run pump without proper ground.



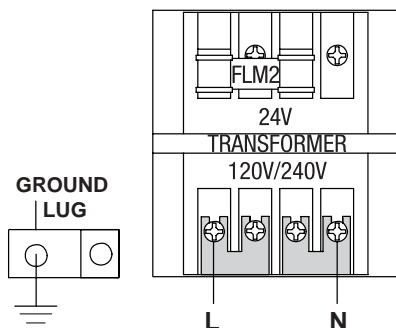
Ensure that all wiring is installed according to local codes and regulations by qualified electrical personnel. Follow these steps to connect the SANIFLO™ VC control panel.

1. Disconnect all electrical power to the circuits being serviced.
2. Install the metal jumpers to the screw terminals on the transformer as appropriate for either 120 VAC (Figure A) or 240 VAC (Figure B).
3. Connect the black or brown conductor into the terminal labeled L.
4. Connect the white or blue conductor into the terminal labeled N.
5. Connect the green or green/yellow conductor into the ground terminal.

Caution: When you install the conductors, make sure that the entire conductor is in the screw terminal and that there are no loose strands outside of the terminal. Only install one wire in each terminal.

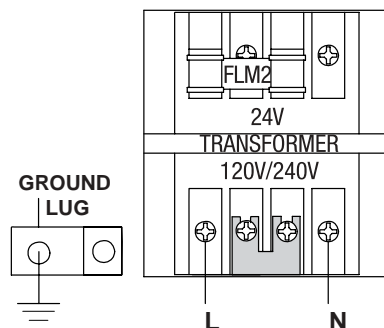
6. Upon completion of installation, restore power to the circuit and verify proper installation.

FIGURE A
120 Volt Single Phase Hookup



- 1) Set jumpers as shown
- 2) Connect positive, negative and ground wires as shown.

FIGURE B
240 Volt Single Phase Hookup



- 1) Set jumpers as shown
- 2) Connect positive, negative and ground wires as shown.

Be careful to install the correct conductor in the appropriate terminal. The color of the conductor wires varies depending on North American versus international standards.

1. Line wire (black by North American standards; brown by international standards)
2. Neutral wire (white by North American standards; blue by international standards)
3. Ground wire (green by North American standards; green/yellow by international standards)

WARRANTY

Each and every product manufactured by Wilden Pump and Engineering Company is built to meet the highest standards of quality. Every pump is functionally tested to insure integrity of operation.

Wilden Pump and Engineering Company warrants that pumps, accessories and parts manufactured or supplied by it to be free from defects in material and workmanship for a period of one year from date of startup or two years from date of shipment, whichever comes first. Failure due to normal wear, misapplication, or abuse is, of course, excluded from this warranty.

Since the use of Wilden pumps and parts is beyond our control, we cannot guarantee the suitability of any pump or part for a particular application and Wilden Pump and Engineering Company shall not be liable for any consequential damage or expense arising from the use or misuse of its products on any application. Responsibility is limited solely to replacement or repair of defective Wilden pumps and parts.

All decisions as to the cause of failure are the sole determination of Wilden Pump and Engineering Company.

Prior approval must be obtained from Wilden for return of any items for warranty consideration and must be accompanied by the appropriate MSDS for the product(s) involved. A Return Goods Tag, obtained from an authorized Wilden distributor, must be included with the items which must be shipped freight prepaid.

The foregoing warranty is exclusive and in lieu of all other warranties expressed or implied (whether written or oral) including all implied warranties of merchantability and fitness for any particular purpose. No distributor or other person is authorized to assume any liability or obligation for Wilden Pump and Engineering Company other than expressly provided herein.

PLEASE PRINT OR TYPE AND FAX TO WILDEN

Item # _____ Serial # _____

Company Purchased From _____

Your Company Name _____

Industry _____

Your Name _____ Title _____

Your Address (Street) _____

(City) _____ (State) _____ (Postal Code) _____ (Country) _____

(Telephone) _____ (Fax) _____ (e-mail) _____

Number of pumps in facility? _____ Diaphragm _____ Centrifugal

_____ Gear _____ Submersible _____ Lobe _____ Other _____

Chemical(s) being pumped _____

How did you hear of Wilden Pump? _____ Trade Journal _____ Trade Show

_____ Internet/E-mail _____ Distributor _____ Other _____

ONCE COMPLETE, FAX TO (909) 783-3440

NOTE: WARRANTY VOID IF PAGE IS NOT FAXED TO WILDEN