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USERGUIDE

Vacuum Unloading Control System

Note: The instructions detailed in this manual must be supplemented by the wiring diagrams specific to the control in use. If the diagrams are not present in your control or this instruction packet, please make note of the numbers listed on the inside of the control door and notify Conair Customer Service for replacement prints.

The VU system is based upon Conair Franklin's "CLC" (Central Loader Control) format and many of the prints that document the system are identified with CLC nomenclature.

The Vacuum Unloading (VU) Control System

The "VU" (Vacuum Unloading) System from Conair Franklin provides a simplified control system for the sequential unloading of material sources through the use of a central vacuum pump.

Each unloading "station" in the system is provided with a 24 Volt AC signal designed to trigger a vacuum isolation valve at that particular station and allow the material present at that station to be off-loaded or otherwise moved with the negative pressure created by the central vacuum pump. The valve incorporated at each station will vary depending upon the specific system configuration purchased, but the function of the control panel remains the same.

Operation of the system is as follows:

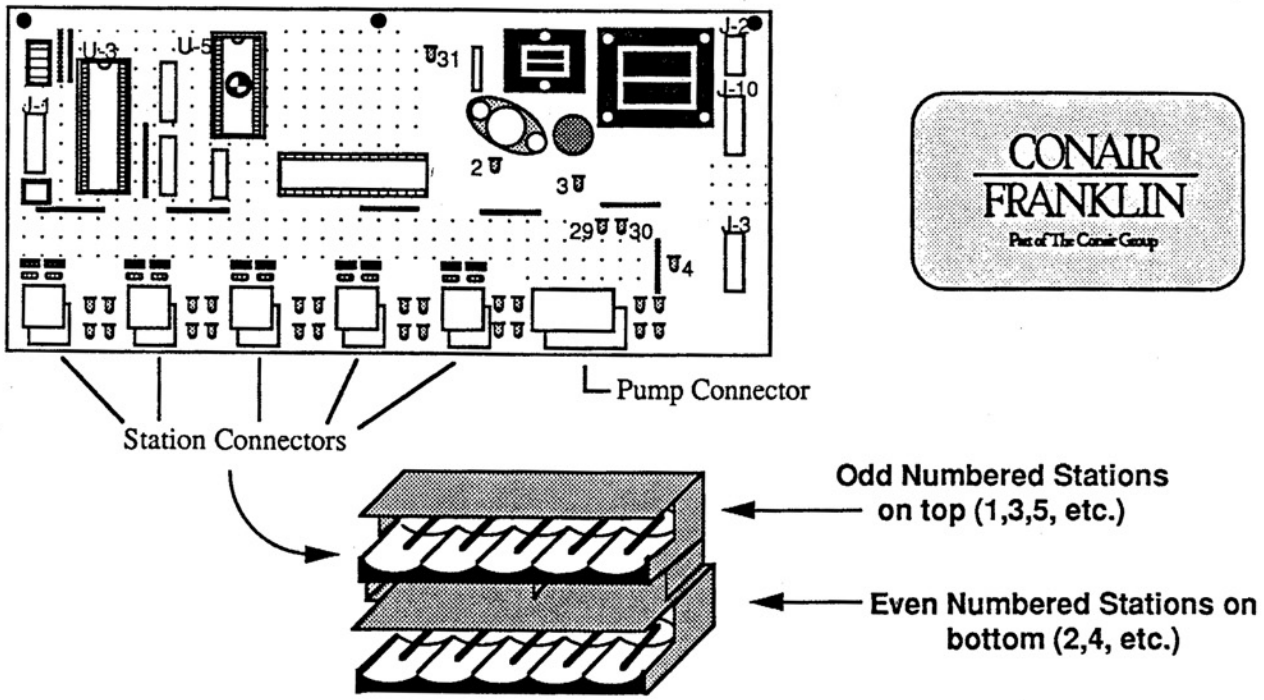
1. The power On switch energizes the VU control panel.
2. 24 VAC signals are sent to each unloading Station in the sequence designated with the connectors on the Input/output (I/O) boards (see prints accompanying the control).
3. The 24 VAC signals are sent for a time duration specified by the settings of "DIP" switches on the I/O boards (standard controls allow between 2 and 25 seconds of unloading time for each station). "Unloading Time " is set with switches numbered 4, 5 and 6.
4. Once all stations have sequenced through, the pump shuts down for a time duration programmed by DIP switches numbered 1, 2 and 3.
5. Once the time set for "Pump OFF" has elapsed, the system repeats the sequence.

Wiring Instructions:

Each station is wired to the VU control panel with 2 conductor cable (plus ground). Holes are provided in the bottom of the control panel that may be fitted with appropriate strain relief devices.

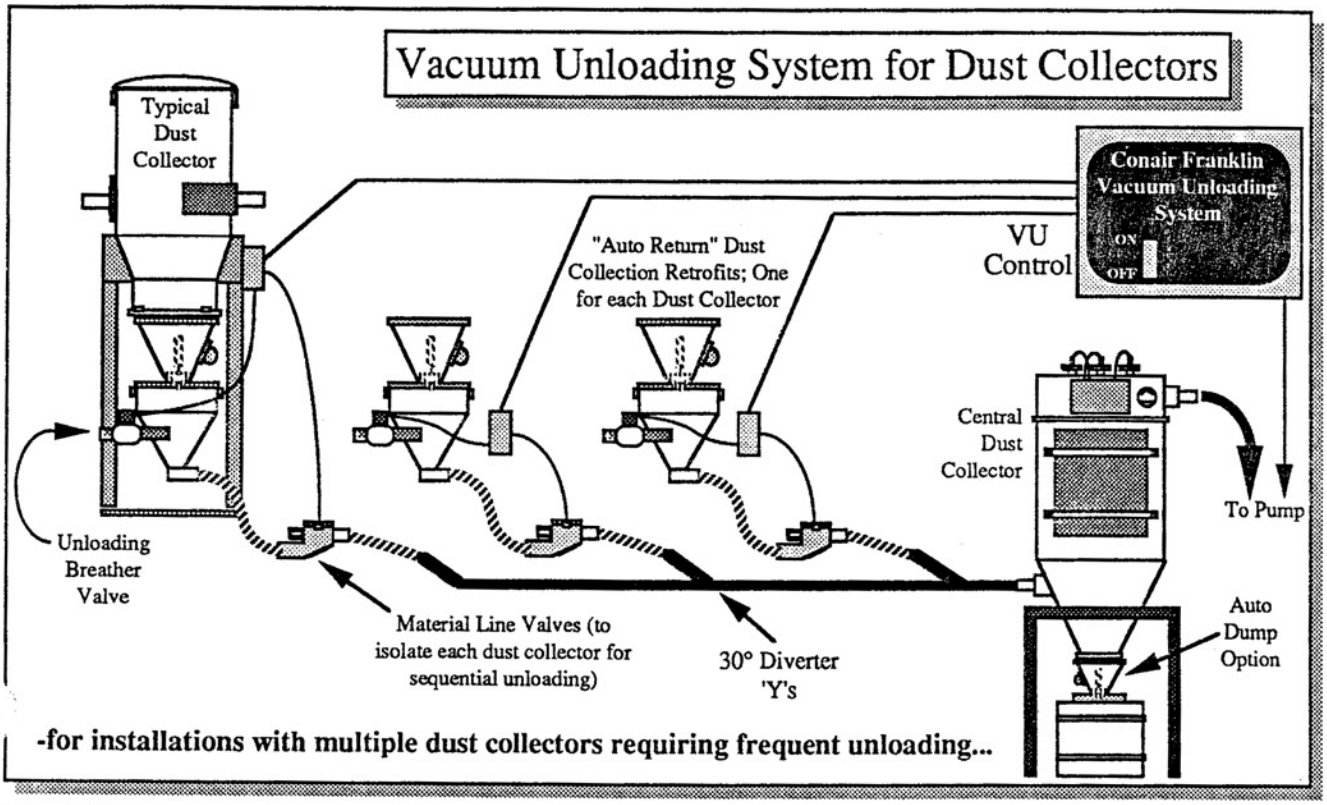
Inside the control, each station is terminated on the PC boards with connectors that may be removed to facilitate easy wiring. The connectors are arranged as shown on the drawing below.

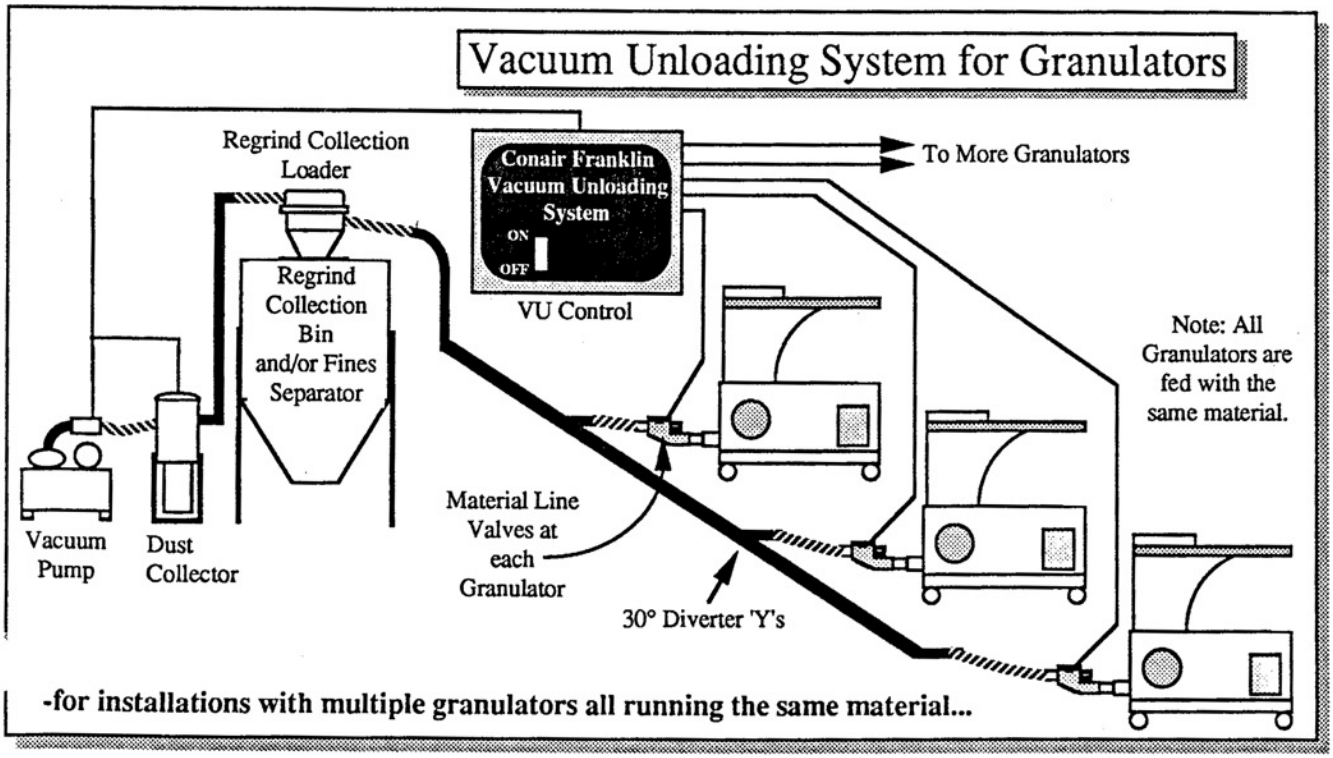
All additional, specific wiring information may be found on the prints accompanying the control panel.



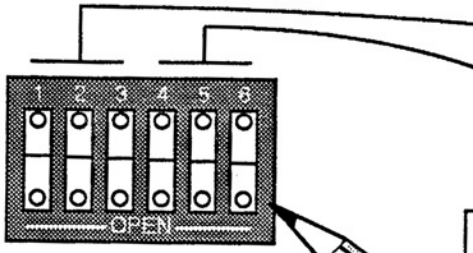
Typical Vacuum Unloading Applications

The examples shown below are typical applicaitons where VU controls allow the unloading of material sources. Your application may be very different form the configurations shown, but the operating principles remain the same. See the "Operation of the System" description elsewhere in this manual.



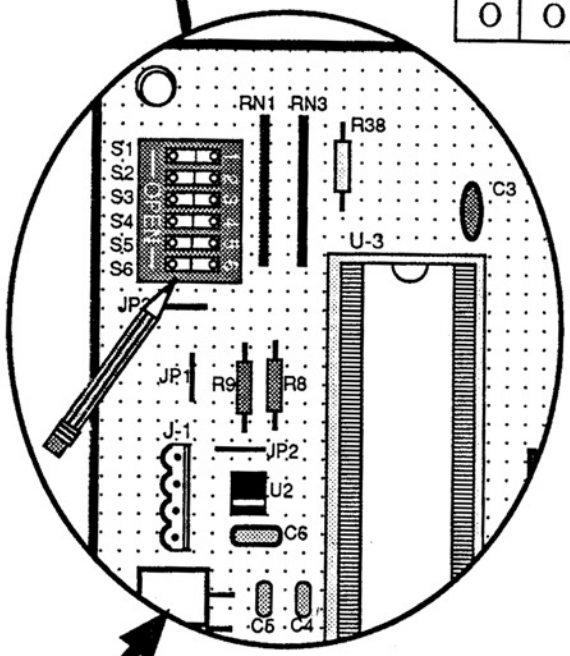


Programming the Vacuum Unloading (VU) System



6	5	4	Unload Time Seconds
X	X	X	2
X	X	O	4
X	O	X	6
X	O	O	8
O	X	X	10
O	X	O	15
O	O	X	20
O	O	O	25

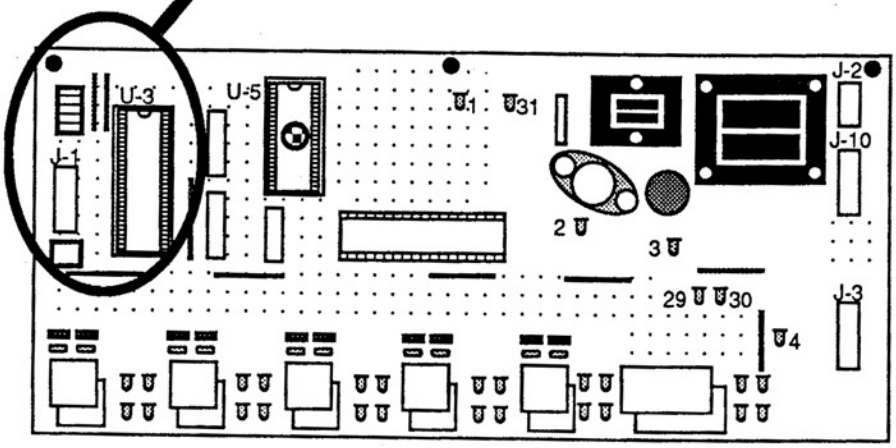
3	2	1	Pump "OFF" Time Minutes
X	X	X	10
X	X	O	15
X	O	X	20
X	O	O	25
O	X	X	30
O	X	O	40
O	O	X	50
O	O	O	60



The "Unload Time" of each station may be set according to the chart above:

"X" = Switch Closed
"O" = Switch Open

and the "Pump OFF" for the entire system may also be set with the same logic.



Note that on older model VU systems (before 1992), the DIP switches must be set on the main I/O board (the one on the top as the control is opened) and the switch settings of the second board are not relevant.

On newer VU systems (after 1991), the "Unload Time" switch settings of each group of 10 stations (each I/O board) may be set independently, if desired. The "Pump OFF" time for the entire system is set on the main I/O board (switches 4, 5 and 6).
The 1, 2, and 3 DIP switch settings of the additional I/O boards are not relevant.