

Versa-VIP V2

By PSI Waste Equipment Services, Inc.



Versa-VIP V2 SUPPORT www.versa-vip.net

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Introduction

- The purpose of this manual is to provide the installer and owner with the necessary information to install our Versa-VIP Control system. Refer to equipment manufacturer's manual for additional information.
- PSI Waste shall not be responsible for conformity with any standards, codes, or regulations that apply to the combination of the features and options in the use of this product. The installer shall ensure, upon installation, the combination of features and options used are safe for the application and operational environment.
- Installer and user shall read and understand ANSI Standard Z245.2 (Compactor Safety), OSHA 29 CFR, Part 1910.147 (Lock out/ Tag out), and the OEM compactor operation, maintenance, and installation manual.
- If you are not fully qualified to install the Versa-VIP system safely, please stop and return it for a full refund!

Installation

Before installing

- Get familiar with the Versa-VIP system by studying the drawing and documentation included. It will not only save you time, but there are a lot of great features you'll want to use. Refer to it frequently.
- Please do not leave your manual behind when heading out to install our control system in the field! If you do forget it, please go to www.versa-vip.net to download one. If you don't have a smart phone find a computer, download a manual, and print it out.
- Make sure your control panel has a transformer that provides 120V power. Most compactors do.
- There are some vertical compactors that may NOT be compatible with our control system. If you are not sure, take a few pics and email us. We'll steer you in the right direction.
- Please leave all documentation in the control panel. There is nothing worse than getting to a site and not having the info you need to make a simple adjustment or troubleshoot a problem. If you need extra copies you can download them or call us and we'll send you a set, free of charge.

Install- PLEASE, DON'T FORGET YOUR MANUAL!

1. We have included a manual, schematic decal, motor data tag decal, wire ties, tie pads, screws, wire nuts etc. to ensure you can install the Versa-VIP system in a professional manner. Please do so.
2. Remove control system and terminal blocks. Leave only the transformer and starter. You can also leave the 24V transformer in if you plan to keep the drivers light low voltage.
3. Remove all wires from contact blocks on the control buttons.
4. Start button should have (1) N.O. contact block. E-Stop should have (1) N.C. contact block.
5. Install control system and wire according to diagram included.
6. Set pressure switch. We typically set the pressure switch 150-250psi below relief pressure.
7. Check relief pressure. Most compactors are set at 1800psi or so for timer shifting units. But some are much lower and some higher. If your compactor was limit or pressure shifting the relief is set too high for timer shifting.
8. Set Timer T0 (Forward Time), T1 (Auto Shut Down)
9. Install data decal and schematic decal.
10. Give us a call if you have any problems.

Basic operation

Ram stays in level position normally. Key switch (spring return) is actuated to raise ram.

Ram goes up, hits ram up limit switch and shuts off. Door is opened, trash loaded, door is closed. Compactor starts, travels down until either T0 times out or pressure switch is actuated for 2 secs. Ram returns until midpoint limit switch is released to the normal position.

If cycle is interrupted at any point and restarted, ram moves up to ram up limit switch.

Our Versa-VIP control system is similar to Marathon's standard VIP control system. Exceptions:

- The ram WILL NOT automatically go down unless door is opened and closed. This is for safety reasons. If the door switch fails in the "closed" position the unit will not run.
- The container switch, if used, is wired in series with the E-Stop. This allows user to reset full feature with E-stop.
- Ram goes down on time OR pressure, whichever hits first.
- Versa-VIP also has ERROR features that shut the compactor down in case of an error. If an error has occurred, the light will flash on and off (if it is hooked up and operable). See Error section for more info.

Program Notes

V1.1 and later- Upon initial start-up and if E-stop is pressed or power is lost START must be actuated for continued operation. If ram is up START must be actuated, then open and close door.

V1.2 or later- If ram is up and e-stop or power is lost all you have to do is actuate START to operate unit. Press B6 and B7 at the same time to deadhead up to set pressure switch. Unit will shut down if B0 is pressed, E-stop is pressed or if pressure switch is actuated.

V2.0 or later- added Status Screen and error messages.

Devices Used

- Ram up limit switch wired N.O., closed with ram is all the way up.
- Midpoint limit switch wired N.O. for controls and N.C. for driver's light. Neutral position with ram level. Closed when ram is above or below level.
- Pressure switch wired N.O. and plumbed to main pressure line
- Container switch wired N.O., closed when container is all the way in position
- Start key switch wired N.O.
- E-Stop wired N.C.
- Drivers light
- Full light
- Interlock on feed door
- Directional valve can be either 2 position (1 coil) or three position (two coils) tandem center.

Status Screen

The Status Screen lets you know the program version, whether or not you are set to auto start, and error status. To switch to the status screen, press the |ESC 0| button. To change back to the home screen, press |ESC 0| again.

Use the status screen to check for the following.

- Program version will be displayed on line 1
- Set Pressure. If you are using the Set Pressure function, "Set Pressure" will appear on line 2.
- Error Status. If unit shut down because of an error, the last error will be displayed on line 4.

Setting Parameters

We have a great YouTube video for setting parameters. The video is for our Versa-Pak system but you'll still get the point. Stop, if you can, and go to watch our 3-1/2min video. It will save you time and walk you through better than the instructions below.

If you would rather wing it, keep reading.

To get to HOME screen turn power off and back on or press |ESC 0|. From HOME screen press |OK 1| ▼ 2| ▼ 2|. PARAMETERS should be blinking on and off. Press |OK 1|. Now you will see the 0 of T0 blinking on and off. Press |▼ 2|. You should be on Down time. Press |OK 0| to change. Use |▲ 5| ▼ 2| ► 4| ◀ 3| to change each digit. You can set Down time down to the 1/10th of a second. Once the time is set, press |OK| to save. Then navigate up to the parameter T0. To go to a different parameter press |OK| then use |▲ 5| to go to T1. Press |OK|. This should be the only parameter you need to change.

Timers

Parameter / Default	Parameter Name	Function	Notes
T0 / 14.50	Down Timer	Shifts from DOWN to UP at the end of the stroke if the pressure does not reach the pressure switch setting first.	Set for the time it takes the ram to go from the fully up to fully down position. Take a fraction of a second off to prevent unnecessary dead-heading of unit.
T1 / 25.00	Auto Shut-Down	Shuts compactor down if it runs too long.	Set for T0 plus 10 seconds.
T2 / 05.00	Pressure Too Long	Shuts compactor down if pressure is above pressure switch setting for too long.	Protects compactor from damage.

Versa-VIP Errors

If Versa-VIP detects an error the machine will shut off and the E-Stop light will flash on and off (if used). Re-set machine by pushing E-Stop in and then pulling back out.

Errors will display until the machine gets full or the Error is manually cleared. If the machine errors again the new error will over write the old if different.

From STATUS SCREEN you can manually clear the error by pressing |ALT 7| and |▲ 5| at the same time. You will see lines 3 and 4 go blank (as long as the Error is no longer active).

Error	Common Causes	Possible Solution
Run Too Long	Compactor has run too long Improper timer settings	Check timer settings, Check T1 for proper setting. See timer section of manual
PSI Too Long	Pressure switch was on too long.	Check pressure switch for proper function Check T2 setting Check relief pressure setting Check limit switches
Limt/ValvErr	Limit switch is stuck Limit switch is bad Valve is stuck Valve coil is bad No power to valve Bad input on controller Loose or cut wire	Check for trash on top of ram Check for proper operation of limit switches and pressure switches Check for loose connections Check for proper operation of valves, coils
CompactrFull	Compactor is full Midpoint limit switch malfunction Pressure switch malfunction	Dump compactor- reset with E-Stop Verify proper operation of mid-point limit Verify proper operation of pressure switch

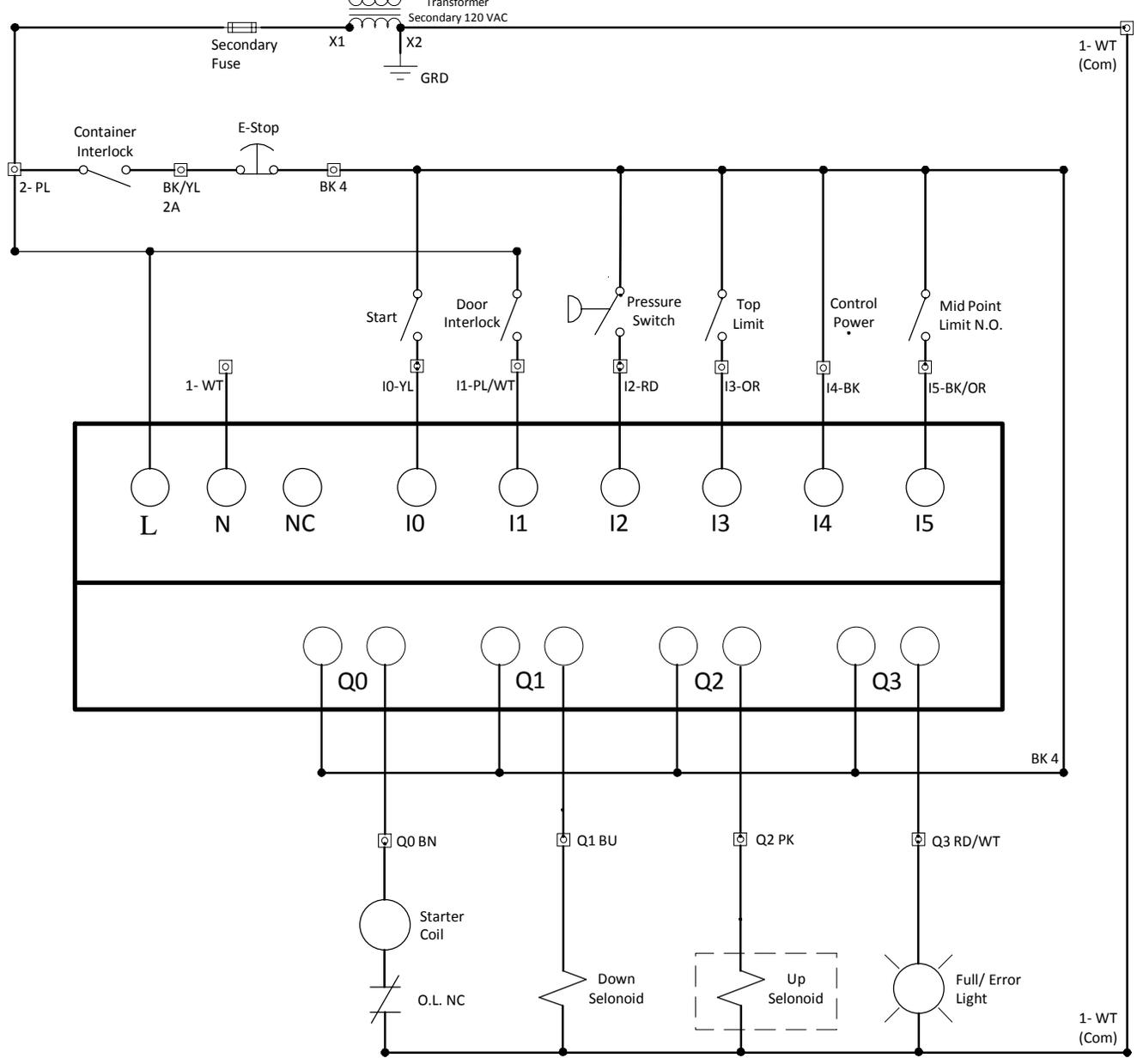
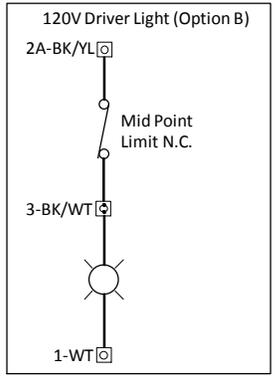
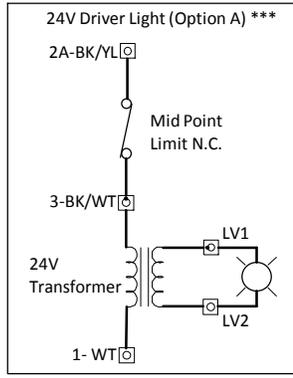
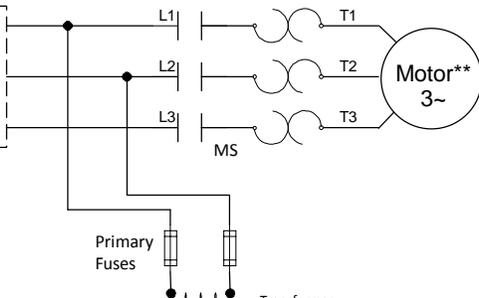
Buttons

Simultaneously press the following combination of buttons to accomplish the listed task. The buttons are located on the controller (PLC) to the right of the screen.

Combination of Buttons	Purpose	Notes
ALT 7 and ▲ 5	Clear Errors	After correcting an error, this may be useful to determine if the same error occurred in the future.
ALT 7 and DEL 6	Set Pressures	Causes ram to deadhead up so you can set pressures. Motor will shut off if pressure switch setting is reached, or if B0 is pressed. Also, E-Stop will stop the motor as well.

**For single phase jump T2 to L3 on starter, connect motor to T1 and T3.
 ***Earlier schematic versions used 2 instead of 2A and did not use Terminal 3.

Main disconnect/branch circuit protection must be supplied by customer. Refer to fuse and breaker chart and local codes.



Description: Versa-VIP V2 Wiring. For support go to www.versa-vip.net or call 352-742-4774.