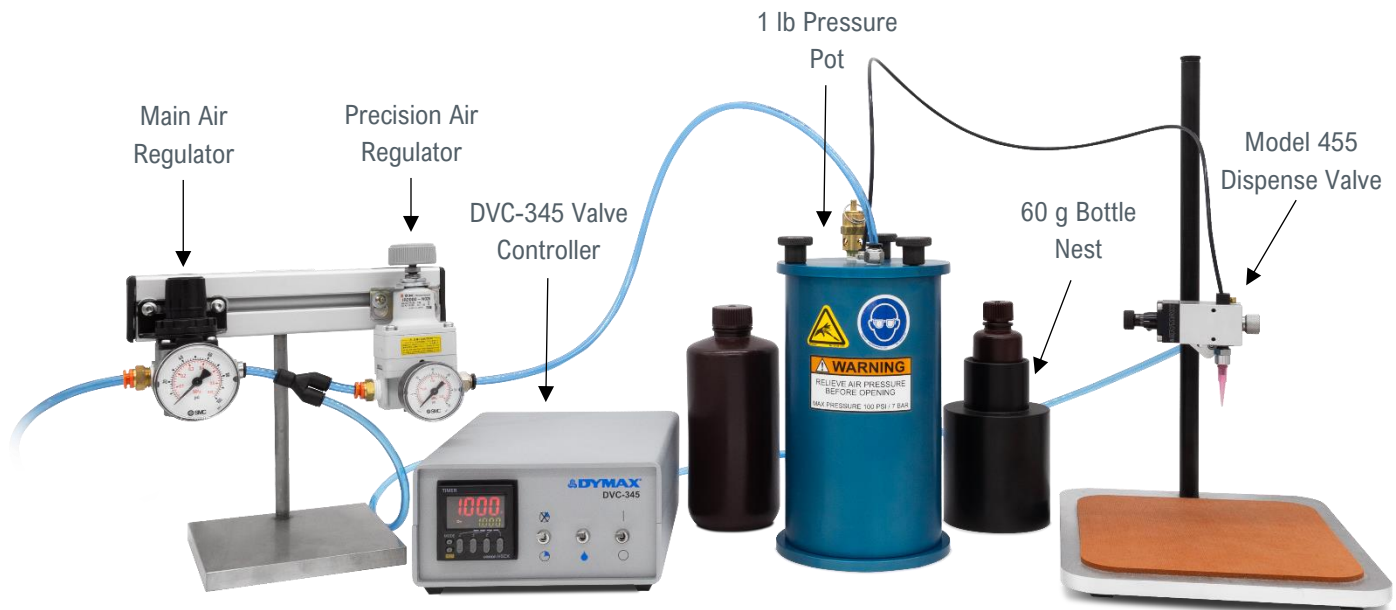




HLC Model 455 System

Installation, Operation, and Maintenance Instructions



- 1) Remove the 1 lb Pressure Pot, Regulator Dispense Stand, DVC-345 Valve Controller, and Model 455 Dispense Valve from their packaging and place them on a flat stable work surface.
- 2) Dymax recommends using an opaque, black material line in the Model 455 Dispense Valve to protect against UV light. To install the material line, use the following steps:
 - a. Run the tubing through the tube support assembly and press the barbed end of the tubing insert into the end of the tube.
 - b. Press the tube adapter against the tubing insert, then place the tube fastener screw over the tube adapter and tighten it onto the tube support assembly.
 - c. Seat the tube support assembly in the Model 455 Dispense Valve, and verify the piston is pressed against the tubing.
 - d. Install the release screw on the Model 455 Dispense Valve body and install the desired dispense tip by pressing it firmly over the tube adapter.
- 3) Remove the top cover assembly of the 1 lb Pressure Pot by unscrewing the three knob screws mounted on the cover.
- 4) Place an uncapped material container in the center of the tank. For 60 g containers place the 60 g Bottle Nest in the tank first, then seat the 60 g container in the top of the nest.
- 5) Cut the material line to the desired length, allowing enough length between the pressure pot and user to operate comfortably.
- 6) Run the material line through the push-through fitting on the cover of the pressure pot and into the material container, ensuring the material line reaches the bottom of the container when the cover is reinstalled.

NOTE: It is very important that the end of the tube in the material bottle is cut at an angle to ensure proper material flow.

- 7) With the material line still in the container, reinstall the cover and firmly tighten the three knob screws.
- 8) A wye push-connect fitting will have to be installed after the main regulator to supply air to both the DVC-345 controller and precision regulator. To do so, perform the following steps:
 - a. Cut two pieces of ¼” tubing to approximately 2” each. These may be trimmed later to better fit between the main air regulator and precision air regulator.
 - b. Attach one of the trimmed pieces of tubing to the output of the main regulator and install the wye push-connect fitting on the other end.
 - c. Attach the other trimmed piece of tubing to the input of the precision regulator and run it to the wye push-connect fitting.
 - d. The remaining port on the wye push-connect fitting is used to connect the DVC-345 controller to the main air regulator. The length of this tubing is dependent on the position of the controller and operator in relation to the regulators.
- 9) Install an air line between the output of the precision air regulator and the compressed air input on the cover of the 1 lb Pressure Pot. Ensure an appropriate length of ¼” tubing is used to properly position the air regulators and pressure pot.
- 10) Install another air line between the remaining port of the wye push-connect fitting and the “Air In” input on the back panel of the DVC-345 controller.
- 11) The DVC-345 controller has two air outputs, N.C. and N.O. (Normally Closed and Normally Open). Verify there is a plug in the N.O. output, then install an airline between the N.C. output and the air input of the Model 455 Dispense Valve. Ensure an appropriate length of ¼” tubing is used to properly position the 455 Dispense Valve.
- 12) Verify the main regulator dump valve is in the “EXH” position, then connect shop air to the main air regulator and set the main regulator to 80 psi.
- 13) Move the dump valve to the “SUP” position and adjust the precision regulator to control the rate of material flow. The micrometer adjustment on top of the Model 455 Dispense Valve can also be used to further regulate material flow. **Note:** *Recommended starting pressure on the precision regulator is 5 psi. Increment the pressure gradually to achieve desired flow rate.*

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