
Spray-Tech® Spray Unit
Model VS-3000

USERS MANUAL

Spray-Tech inc.

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WARNING:

Before attempting to assemble and use your pump, please read all instructions thoroughly. Any damage due to incorrect assembly or misuse of your pump will void the warranty.

Items Enclosed:

Your pump is shipped to you with the following accessories:

- Two wheels with bolts.
- One A/B Manifold pre-assembled to a 10-12 foot hose/wiring harness. Note that there is a teflon tube inside each port of the nozzle.
- One handle with drip collection cup inserted for A bucket. A bolt for attaching this handle has been welded to the end of the frame. A nut and split ring washer are provided on this bolt for assembly.

Assembly:

- Attach the handle to your pump.
- Put on the wheels and invert the legs.
- Connect the wire by plugging in the jack.
- Cut off tip of a plastic static mixer at about middle of second ring from tip and insert in static mixer tube.
- Hold A/B Manifold tightly and screw the static mixer tube to the A/B Manifold. DO NOT use a wrench to tighten the nut; hand tighten only, otherwise you will occlude the airflow inside the dispersion gun.
- Remove the sprayer tip on to the end of the static mixer tube and spray inside the stainless tube and tip with release agent. NOTE the spray pattern can be adjusted by tightening or loosening the sprayer tip.
- Remove orange plug from air compressor and screw in air filter.

Preparing your pump for use:

- Set power switch to on position. "up"
- Set air compressor switch to on position. "up"

Very Important:

- Attach bucket connectors to buckets by placing buckets next to side of pump with bucket spout closest to the pump and pushing the connectors firmly into the hole in the lid of the bucket. Pull up on bucket connectors to extend flexible spout of bucket, this insures drainage.
- Place the buckets upside down on the top of the pump table and snap the elastic ties over the bottom of the buckets. The bucket connectors will fit into the slot in the top front of the pump table, allowing the buckets to stand flat on their lids.
- Punch a small vent hole in the top of each 5 gallon bucket.

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- Allow the fluids to gravity feed all the way to the inlets of both pumps. Be sure that both fluid A and B have arrived at the pump inputs before switching your unit on. If necessary move tubes around gently to free air bubbles.
 - Turn on the nozzle switch intermittently while watching the fluid going through the hose to ensure all air is excluded from the vertical tube connected to the pressure switch.
WAIT UNTIL ALL AIR IS EXCLUDED FROM THE PRESSURE SWITCH TUBE BEFORE PUMPING FLUID SUFFICIENTLY PAST THE PRESSURE SWITCH.

Using your pump:

SPRAYING:

- Turn air compressor on.
- Depress spray button to dispense material.
- Adjust spray cap and speed control for desired spray pattern and output.

CAUTION:

- Initially do not spray Polygel® on to mold until you are sure polymer is mixing properly.

POURING:

- Remove spray cap.
 - Turn off air compressor.
 - Depress spray button to dispense material.
 - Adjust speed control for desired output.
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General:

- The polymer must be at a temperature of at least 70 degrees fahrenheit for the unit to work at the maximum rated output.
- Spray the polymer, always beginning at the bottom of your work piece. Work your way upward from bottom to top with a very light spray pattern, leaving gaps between sprayed material. (It is important not to try to fill up the gaps, as it will cause pooling and subsequent runoff of material before it becomes slump free).

NOTE:

- The material sets to slump free condition in 15 seconds due to the initial cross linking characteristics of the Polygel®.

IMPORTANT:

- To prevent gel up of the throw away static mixer avoid polymer flow interruption for more than 10 seconds as much as possible once you have begun using your pump for a particular work session.

Shutting down your machine for daily storage:

- Allow material in the static mixer to reach a gelled state.
- Remove Static mixer from the tube and throw away.
- Clean tube, spray cap, and A/B Manifold of any remaining Polygel®.
- Replace brass cap to gun head.
- Never let the A/B Manifold be exposed to air. The A/B Manifold should always have its brass cap in place during storage.
- Leave buckets in place on the top of the unit; DO NOT disconnect the bucket connectors from the buckets unless you are replacing an empty bucket(s).
- Plug air hole in B bucket and A bucket.
- Clip A/B Manifold securely on to handle.

Preparing for use at the beginning of a new day:

- Remove the brass cap from gun head.
- Before starting your unit, check the A/B Manifold for blockage before replacing the static mixer, metal tube and spray cap. To clear any blockage, use a nail, stiff wire, or the pressure of the pump to force the solidified material out of the ports. Be careful not to damage teflon tubes.

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- Cut off tip of a plastic static mixer at about middle of second ring from tip and replace it, metal tube and spray nozzle cap.
 - Your machine is now ready to begin the new workday.

Medium term storage:

- Follow procedure for daily storage.
- Plus to prevent gelling of polymer in spray unit pump about one quart to polymer through the spray unit once a week, with a cut static mixer in place to provide necessary back pressure.

Long term storage:

- Take two 5 gallon buckets of 80 to 90 weight oil and connect bucket connectors to the oil buckets.
- Place the buckets upside down on the top of the pump table and snap the elastic ties over the bottom of the buckets.
- Punch a small vent hole in the top of each 5 gallon bucket.
- Pump half of the oil from both buckets through the machine with a static mixer in place.
- Remove metal tube from A/B Manifold and dispose of static mixer.
- Clean metal tube, spray cap, and A/B Manifold of any remaining Polygel®.

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- Never let the A/B Manifold be exposed to air. The A/B Manifold should always have its brass cap in place during storage.
 - Leave buckets in place on the top of the unit; DO NOT disconnect the bucket connectors from the buckets.
 - Clip A/B Manifold securely into handle.

Care of your pump:

- DO NOT INTERCHANGE THE A AND B BUCKETS. Follow the red markings on the top of your unit AT ALL TIMES. NEVER LET AIR REMAIN IN THE SYSTEM.
- If the static mixer is in place, along with the spray nozzle tip, do not run fluid without compressed air.
- If you need to run your pump without air, ALWAYS remove the spray nozzle tip from the end of the static mixer tube.
- ALWAYS PROTECT the A/B Manifold from being hit; DO NOT drop the A/B Manifold onto the floor.
- Plugs of hardened material may form in the A/B Manifold due to small amounts of cross mixing. These can be removed either by using a nail, stiff wire, or the pressure of the pump to force the solidified material out of the ports.
- If system shuts down (air & pump) check for clogging of check valves. Check valves are located at the input of hose assembly.
- Lubricate chain and gears periodically.

CAUTION:

- When changing polymer buckets, NEVER interchange A and B buckets. Carefully follow the A and B markings on the top of your unit. NEVER cross the bucket connectors.
- If you run out of either fluid A or B, and the magnetic cutoff switch fails, allowing air to be pulled into the system, purge the air immediately; NEVER allow air to remain in the system.
- Consult product technical bulletin and Material Safety Data Sheet to ensure safe and proper use of Polygel®.

Warranty:

- All parts are guaranteed for a period of 90 days under usage instructions of this manual. This warranty does not cover parts damaged due to improper use. Also this warranty does not cover damage to this unit due to jelling of Polygel®.
- **Spray-Tech®** is a registered trademark of **Spray-Tech inc.**, 5850 Fletcher Avenue, Lincoln, NE 68507, 402-466-1645, FAX 402-466-1752.