The enclosed plunger pumps can be used to meter and dispense System Three epoxy resin and hardener. They fit directly into the one gallon jugs and with minor modifications can be fitted to the 2.5 and 5 gallon containers. The pumps dispense about one fluid ounce per full stroke. If you do not choose to install a restrictor on the hardener pump then use two strokes of resin to one stroke of hardener to achieve the proper two to one ratio.

Enclosed with each set of pumps is a small white plastic tube (restrictor) which is slotted down one side. This can be placed on the hardener pump to limit the stroke by 50%. The restrictor must be placed between the pump cap and double flared seal at base. With the restrictor installed on the hardener pump one stroke of the epoxy resin pump (one fluid ounce) and one stroke of the hardener pump (1/2 fluid ounce) yields the proper mix ratio of two to one by volume.

**NOTE:** When pumping multiple strokes for large batches; alternate pumping one stroke of resin then one stroke of hardener- this allows time for the pump to return all the way to the top and also keeps the number of resin strokes equal to the number of hardener strokes. **DO NOT** pull up on the plunger when it is returning to its original position, so as to not trap air within the pump.

**USING THE PUMP:**
Remove the inlet tube and slide it into the hole at base of pump. Install into jug. You will need to cut the inlet tube when putting it into a 1/2 gallon or quart bottle. If you are installing the pump in the pint bottle you will need to cut the bottom of the pump slightly. When cutting, it works best if you cut the tube at a slant. Prime by pumping up and down a few times to make certain that all air is expelled from pump. If this priming is difficult then warm the material in the jug. Double check to make sure that the pumps you are using are metered in the proper 2:1 volumetric ratio. Units that have stood unused for several days or more should be pumped a few times to remove any air that may have seeped into the system.

**FOR USE WITH 2.5 & 5 GALLON CONTAINERS:**
Remove the cap from the 5 or 2.5 gallon jug and cut out the material that is blocking the 3/4" threaded hole in the cap. Place oversized inlet tube into pump end and slide pump body into the hole in the cap. If you need an oversized inlet tube and one is not included in our kit please call us at (800)333-5514 and we’ll get one right off to you!

**INSTALLING THE RESTRICTOR:**
Disassemble the pump by unscrewing the pump body at the cap. Slide cap towards top of pump. Place restrictor between pump cap and double flared seal at base. Reassemble.

The information contained herein is based on the data available to us and is believed to be correct. However, System Three Resins, Inc. makes no warranty, expressed or implied, regarding the accuracy of these data or the results to be obtained from the use thereof. System Three assumes no responsibility for injury from the use of the product described herein.