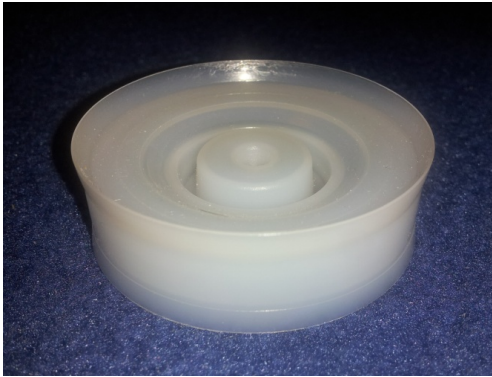


PharmaPump Engine Priming Tips



The first picture shows the piston out of the bottle. Note how the top edges flare out slightly to fit securely inside the diameter of the bottle. The product/cream sits on top of the piston as it is shown here inside the bottle cylinder. As the piston rises from the bottom of the bottle, it lifts the product up to the bottom of the engine. Note the design of the middle section of the piston.

The second picture is the bottom of the engine. Note the nipple in the middle and how it will fit inside the middle section of the piston. This design helps to provide good evacuation of the product.



The 3rd picture shows the piston at the bottom of the bottle. This is how the bottles are shipped. The cream is loaded into the opening at the top of the bottle and sits on top of the piston. Depending on the amount of cream put in the bottle, when the bottle is filled, there could be empty space (air gap) below the bottom of the engine and the top of the cream. We recommend that you prime the bottles to ensure that the cream is dispensed properly with each stroke. Priming removes that air gap and allows the engine to pump the bottle contents.

The 4th picture shows a piston that has been pushed up slightly from the bottom of the bottle using a priming wand. This is how to properly prime the bottles for testing or use. Before pushing the piston up, make sure to “tap” the bottle down on a hard surface to remove any air bubbles and settle the cream. Any visible air gaps will cause improper dispensing. The engine must be securely snapped into place on top of the bottle cylinder prior to priming. You will hear a distinct snapping sound when this is done properly. Make sure to remove the orifice plug prior to priming. The bottle is properly primed once the contents are flush with the bottom of the engine. Don’t force the cream any higher or it could squeeze over the edge of the piston. Make sure to angle the wand in the hole on the bottom of the bottle so that you are pushing in the center of the piston.

Priming the bottles should be done prior to issuing to a patient or before testing. Be sure to replace the orifice plug. After priming, unless testing the bottles, don’t pump the cream through the engine. This should be done by the client prior to their first use. This will prevent any leaking of the cream during transit. Once primed, only a few strokes by the client is necessary for the engine to begin dispensing the cream. Contact us for info about our Pharma Primers which allow you to prime a bottle in seconds with no effort.