Elastic Element Preparation Instructions

In order to fabricate the elastic element, you should ensure you have the PMC-780 urethane rubber (parts A and B) and that you have 3D printed the following files: *Mold_base.stl* and *Mold.stl.*

1. Preparation – The PMC-780 has a limited shelf life and should be used as soon as possible. Materials should be stored and used at room temperature (73°F/23°C). Humidity should be low. Wear safety glasses, long sleeves and rubber gloves to minimize contamination risk. Good ventilation is necessary.

2. Measuring & Mixing - Liquid urethanes are moisture sensitive and will absorb atmospheric moisture. Mixing tools and containers should be clean and made of metal or plastic. Pre-mix the Part B before using. After dispensing the required amounts of Parts A and B into mixing container, mix thoroughly for at least 3 minutes making sure that you scrape the sides and bottom of the mixing container several times.

3. Removing bubbles - Although this product is formulated to minimize air bubbles in the cured rubber, vacuum degassing will further reduce entrapped air. A pressure casting technique using a pressure chamber can yield totally bubble free castings.

4. Assembly – Assembly the parts of the 3D printed mold before pouring the mixture (ensure you have 3D printed the files *Mold_base.stl* and *Mold_hole.stl)*.

5. Pouring - Pour your mixture in a single spot at the lowest point of the containment field. Let the rubber seek its level up and over the model. A uniform flow will help minimize entrapped air. The liquid rubber should level off at least 1.3 cm over the highest point of the model surface.

6. Curing - Allow the mold to cure (at least 48 hours) at room temperature (73°F/23°C) before demolding. Do not cure rubber in temperatures less than 65°F/18°C.

7. Finishing – Remove the top piece of the mold and remove the elastic element. Trim the edges of the elastic element to fit in your part. Use a small amount of superglue to glue the elastic element to the base of your mechanism.