




Idea 1:

Function	Idea	Image
Secure Parts	Straps	
Interpret User Interaction	Button	
Wash Parts	Spin and Wash	
Sanitize Parts	Steam	
Dry Parts	Hot Air	
Notify User	Notification Through Display	

Idea 2:

Function	Idea	Image
Secure Parts	Clamp	
Interpret User Interaction	Remote	
Wash Parts	Scrubbing System	
Sanitize Parts	Boiling Water	
Dry Parts	Centrifugal	
Notify User	Light Signal	

Rationale:

1. I believe that using straps would be a good idea for securing the parts down so that they don't get damaged during the cleaning process. I chose the user interaction to be very simple, and operate at the touch of a button. The device will be equipped with a small LCD screen that will display the state the machine is in, and when the cycle is complete the screen will show a notification that the cycle is finished. The system will wash the parts with a spin wash system, and once the water is drained, will steam the parts to sanitize them. Finally to reach the cycle complete stage, the system will dry the parts via hot air. This choice will be good in tandem with the steam as the chamber will be still hot from heating the water.

2. I think using a clamp would be a good idea for securing the pump parts, as that allows some automation, as the clamps can be controlled by servo motors. This will allow ease of use for the end user to place the items in the system, as well as keeping the parts in place. To start the system the user would use a remote to interact with the system. Once the system is started it will wash the parts by a scrubbing system, that way a lot of the grime can be removed from the parts. When all the parts are washed, the system will sanitize the parts by submerging the parts in boiling water. This can be combined with the scrubbing system to help save time. To dry the parts the inner chamber of the system will spin and remove water via centrifugal force. To notify the user that the parts are finished, the system will emit a colored light.