**Angle bars cut and welded**

Four steel angle bars with measurements of ¼ x 1 were bought and cut into several specific measurements. The angle bars were then shaped and welded according to the frame design. After the frame is shaped, white rubber wheels were then welded to the base of the frame according to the design. Steel bars were with measurements of ( \*\*\*) were welded in shape of door frame. Cylindrical door hinges were welded to the frame. The door frame was installed to the frame. Angle bars were cut and welded into a shape of rectangle with dimensions of (\*\*\*). Galvanized mesh with dimension of (\*\*\*) were welded into the rectangle. Galvanized steel sheet with measurements of (\*\*\*) were measured, cut and welded to the walls. Aluminum handlebar and door knob installed via screw. The frame were spray painted with Bosny no. 40 white. After the paint was dry, mr. do it clear coat was applied. ¼ inch thick glass wall added to the door frame.

**Wheels welded**

Caster wheels welded and put as is.

**Door frame welded**

Angle were measured, cut and welded in shape for door. Hinges were welded, door were installed.

**Door catchers installed**

Door catches were welded and installed.

**Circuit chamber and sanitation chamber divider welded and installed**

angle bar were measured, cut and welded in shape, galvanized mesh welded into the shape.

**Galvanized steel wall added**

Galvanized steel wall welded.

**Handlebar and door knob installed**

Aluminum handlebar and door knob installed via screw.

**Bosny spray paint no. 40 white sprayed , 6 cans**

Spray painted white the frame.

**Clear coat mr. do it spray paint sprayed , c-01**

Put a clear coat to the frame.

**Glass wall added**

¼ inch thick glass wall added to the door frame.

Statement of the Problem

This study aims to determine the effectiveness of ultra violet lights in disinfecting using an automatic disinfection box.

Specifically, the study sought to find the answers to the following questions:

1. What is the significant difference between ultraviolet-based disinfectant and alcohol-based disinfectant in terms of their effectiveness? (t- test)

2. Is there a significant effect among the different factors listed below in terms of its effectiveness?

a) Intensity of ultraviolet to be used

b) Duration time to ultraviolet light exposure

3. How efficient the automatic disinfection box in terms of:

a) Production cost

b) Conveniency