

[Petal] Arcs

Trumpet

SensorBoard

ActuatorBase

Linkage

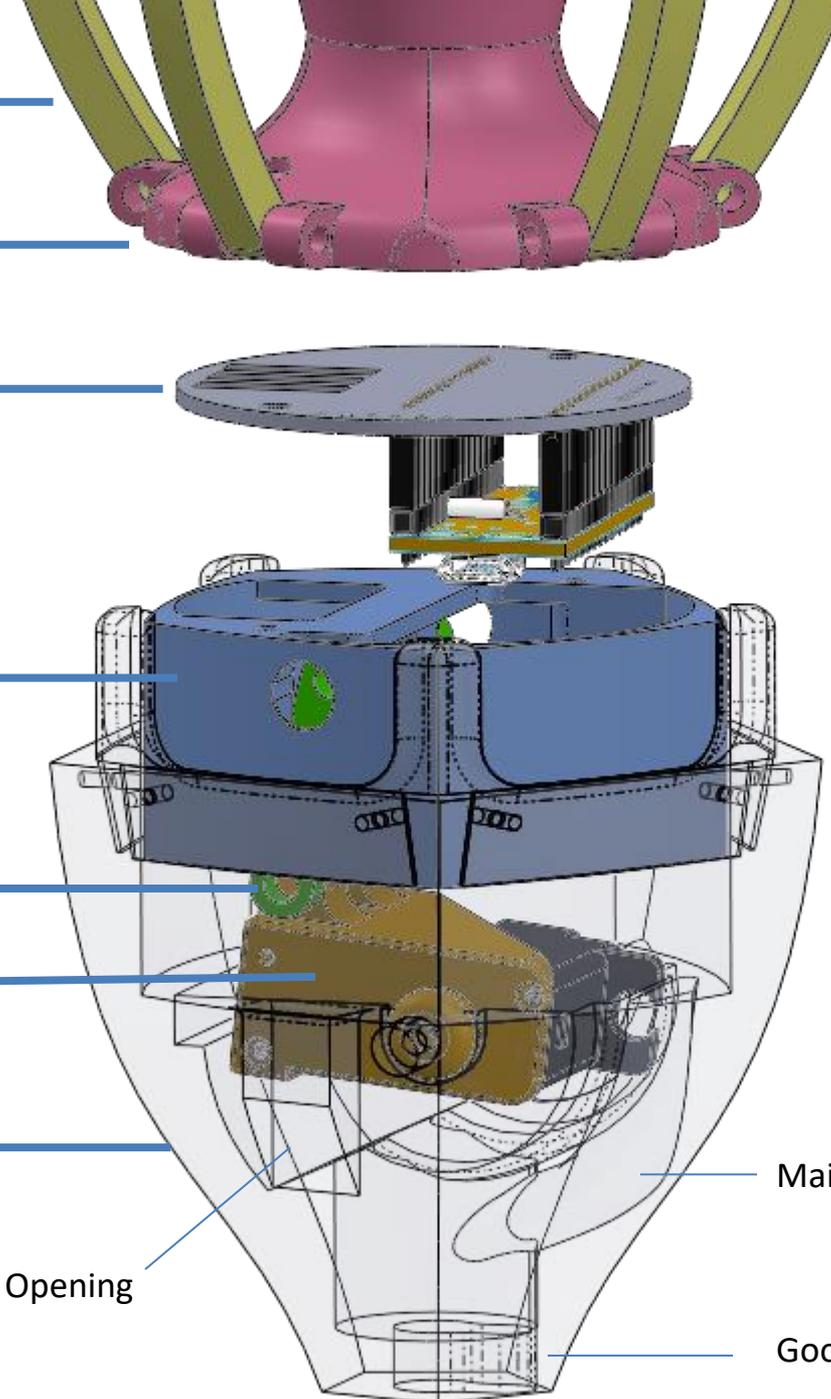
ServoCap

Base

PIR Sensor Wire Opening

Main Board Wire Chase

Gooseneck and Wire Opening



5. Install Petals and Arcs

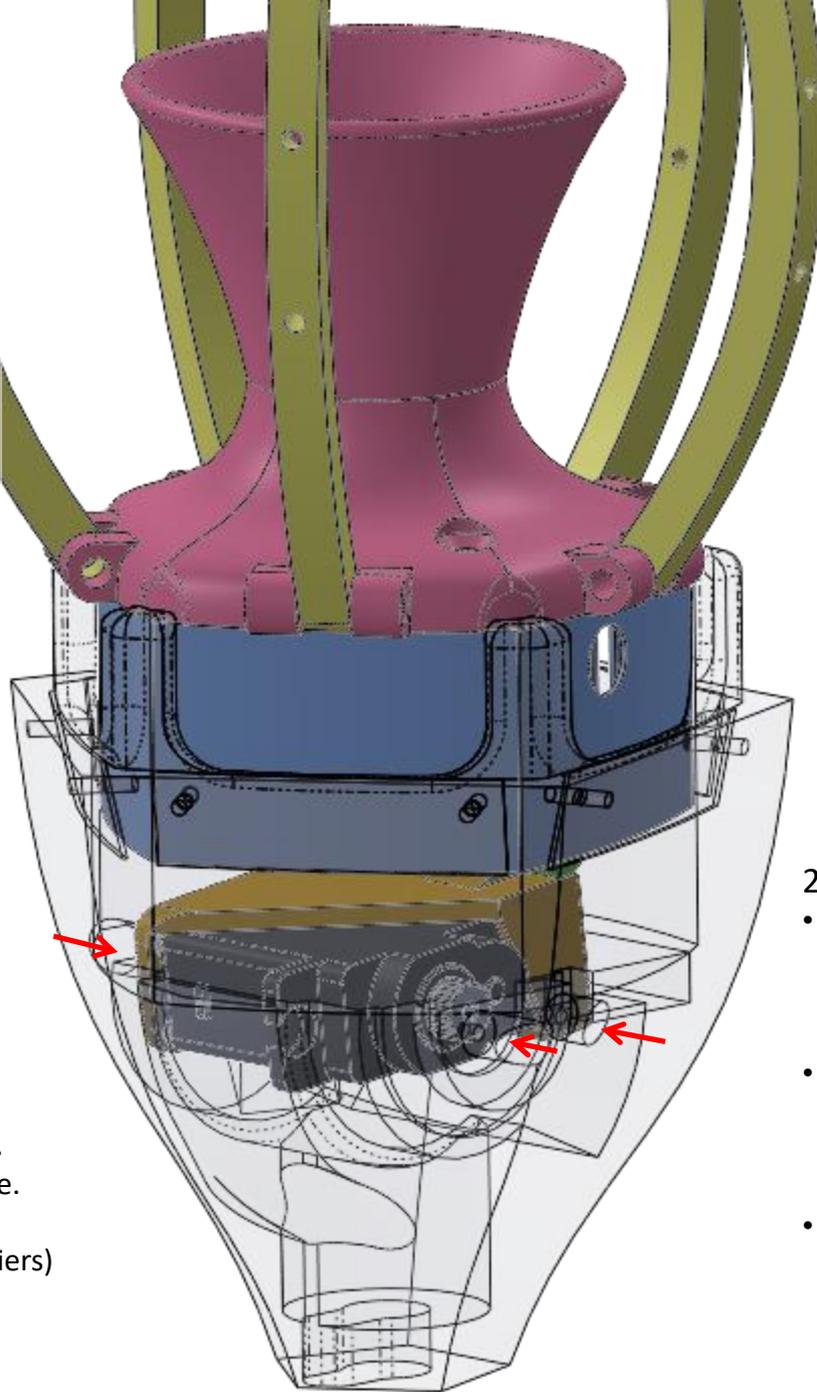
- The petals are attached to the arcs with #2x1/2" gold wood screws.
- Insert the plastic petal into the slots on the edge of the flower's base. A knife might be needed to clear the slot of obstructions.
- The arcs are attached to the trumpet with M2.5 x 20mm screws and lock nuts. (pliers)

3. Install Sensor Board

- Thread the PIR sensor wires.
- Attach servo connector.
- Attach mainboard connector to sensor board.
- If desired, attach ultrasound sensor.
- Program Teensy.
- Sandwich the sensor board between the actuator and trumpet.

1. Install Goose Neck Tubing.

- Insert tubing into flower base.
- Slide M8 nut over wires.
- Thread main-board wires (pliers)
- Secure nut (pliers)
- Add adhesive, if needed.



4. Install the Trumpet

- If desired, attach the ultrasound distance sensor to the underside of the trumpet. A recessed rectangular area is provided with ONE mounting hole for a #2x1/2" gold wood screw.
- Use #4x3/4" wood screws to affix the trumpet over the sensor board and into the actuator.

2. Install Servo and Actuator Assembly

- Power the servo, and use an Arduino to command it to 40 degrees (closed position). i.e. using the Arduino Servo.h library, "myservo.write(40);".
- Drop the assembly into the base of the flower. Hold the servo and assembly so the actuator is recessed into the base of the flower.
- Use one M2.5 x 10mm screw, and two #2x1/2" gold wood screws to secure the servo. Over tightening of these screws will bind the servo.