

# GEARED TURBINE BUILD

## WHAT WILL YOU NEED?

You will need the following to assemble your geared turbine.

One #10 Washer

**Alternator  
(Stator & Rotor)**

A guide for creating the alternator is available at [TeacherGeek.com](http://TeacherGeek.com) or by clicking here.

**Blades & Hub**

A guide for creating the blades & hub is available at [TeacherGeek.com](http://TeacherGeek.com) or by clicking here.

**Gear Box**

A guide for creating the gearbox is available at [TeacherGeek.com](http://TeacherGeek.com) or by clicking here.

## 1. SLIDE ON THE STATOR

The stator should slide and loosely sit on the dowel

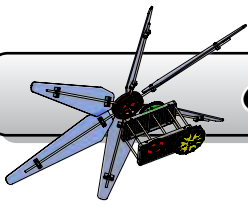
Machine screws from stator should pass through reamed holes in hole plate.

The stator center hole should be reamed so it slides on and rotates easily.

## 2. PRESS ON THE ROTOR

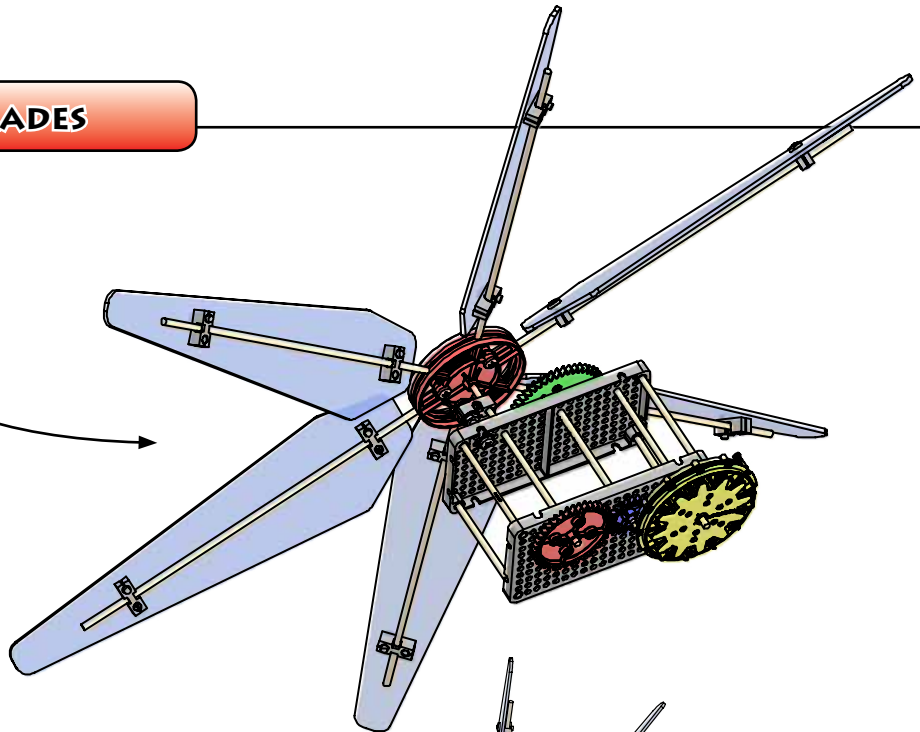
Place a #10 washer on the stator dowel. Press on the rotor. Keep the rotor slightly away from the stator (so the rotor spins freely).

Caution: Do not ream the rotor.



## 3. ATTACH THE BLADES

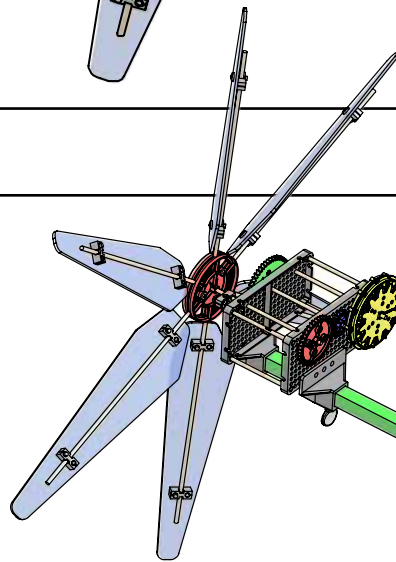
Carefully press or tap the hub onto the gearbox dowel.



## 4. TEST IT. IMPROVE IT.

It is now time to experiment and improve your turbine.

Try different blade angles, shapes and configurations. Make sure your transmission runs smoothly. The faster the rotor turns, the more energy your turbine will produce.



Use the TeacherGeek Wind Stand or build your own.