

# Mech Bootcamp 2015

## 1) Each student will fabricate these 9 items:

- tape follower chassis (aluminum)
- wheel (clear Lexan / polycarbonate)
- tire (from green rubber putty)
- plywood bracket (aluminum)
- plywood piece (19mm thick plywood)
- ski thrust bearing bracket (aluminum)
- QRD sensor holder (aluminum)
- wire ski (aluminum wire 4mm diam)
- spring (steel wire)

## 2) **Assembly: build one tape follower per work bench (=two per team). Since each student makes all the parts as seen in step (1), there will be more parts available than needed to make one. Pick the best!**

### To make one tape follower, you will need:

- 1 TINAH board
- 1 Lipo battery
- 1 rubber foam piece (one side sticky), 40 mm long
- sections of black ABS plastic rod (called "ABS standoff) plus red rubber tubing
- 2 motors "solarbotics GM7"
- 2 wheels
- 2 green rubber tires
- 2 SHCS (socket head cap screws) #6-32 x 0.375
- 2 QRD sensors (as prepared in Elec Bootcamp)
- 1 plywood piece
- 4 pop rivets
- 6 sheet metal (also usable for wood) screws #8, length 0.5"
- 1 o-ring

