

## Spring 2013 MAE3 Kit Parts and Rules of Use

### Qty / Description

2 DC Geared Motor  
1 DC 90 Degree Motor  
3 DC Non-Geared Motors  
1 Solenoid  
3 1/4" Timing Belts (2 small/1 large) Pitch size 0.2" XL.  
6 O-ring belts (2 small/2 medium/2 large)  
1 36" length O-ring  
Nylon string 5 ft (Serve yourself)  
Fishing line 5 ft (Serve yourself)  
Electrical Wire 12 ft (Serve yourself)  
3 Large rubber bands  
3 Medium rubber bands  
3 Small rubber bands  
10 Small paper clips  
1 Set of springs (2 small/2 medium/2 large)  
1 Shim stock 1" x 6" x 0.010"

### Qty / Description

2 Aluminum sheet metal  
2 Aluminum square tubing  
1 Aluminum angle 1.5 x1.5"x16"  
1 Aluminum angle 0.75"x0.75"x16"  
2 Aluminum rod D=1/4" L=16"  
1 Aluminum rod D=3/8" L=12"  
1 Aluminum rod D=1/2" L=6"  
1 Stainless Steel Shaft (DO NOT CUT!)  
1 Acrylic 0.25"x12"x12" (clear)\*\*\*  
2 Acrylic 0.25"x12"x16" (colored)  
2 Acrylic 0.125"x12"x16" (colored)  
1 Delrin 0.25"x12"x1" (white)  
1 Sheet of foamcore\*\*\*  
2 Tubes of super glue  
1 Robot Power Cord (Must be returned at the end of class)  
Set Needle nose pliers, Diagonal cutter, (3) Black wrenches, Sharpie,  
and Box cutter(Must be returned at the end of class)

\* If any piece of paper is detached (even partially) from the acrylic it must be discarded (i.e. paper cannot be used as a separate element in the machine)

\*\* The insulation must remain on the electrical wire except where the wire end is attached to another component, and there up to 0.5" of insulating can be removed.

\*\*\* [Clear Acrylic 0.25 thick and foamcore are for testing.](#)

If you include any clear acrylic or foamcore in your final machine, you must remove an equivalent amount of colored acrylic that was used in making the part.