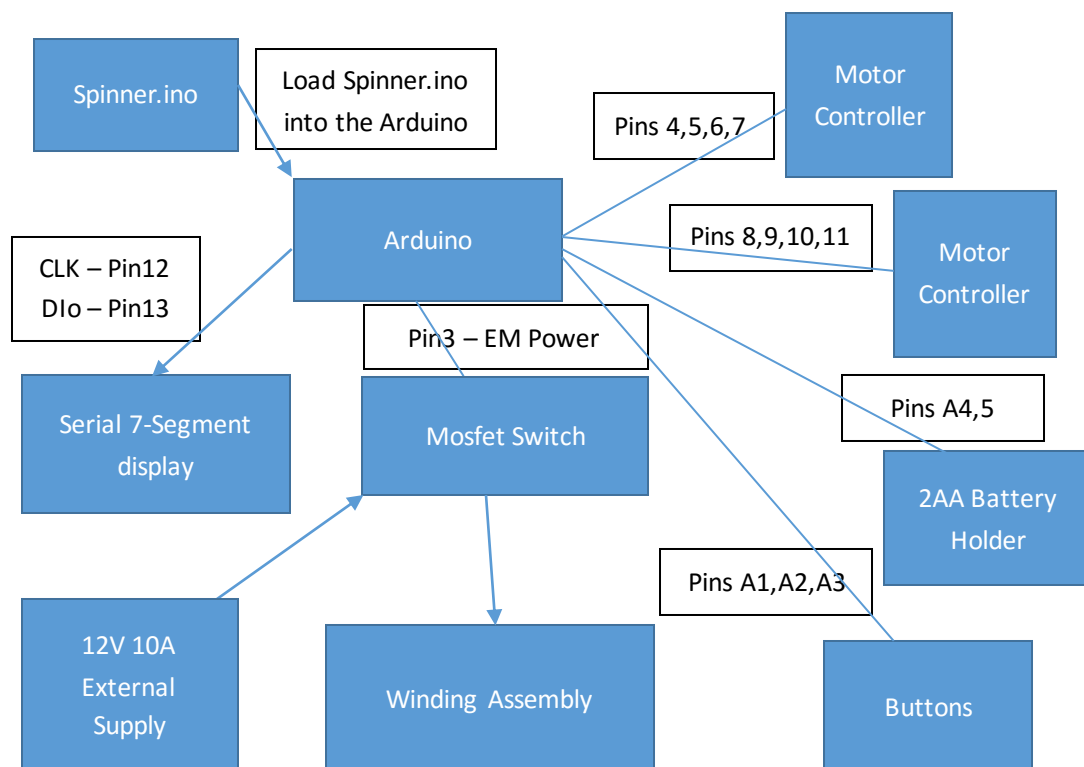


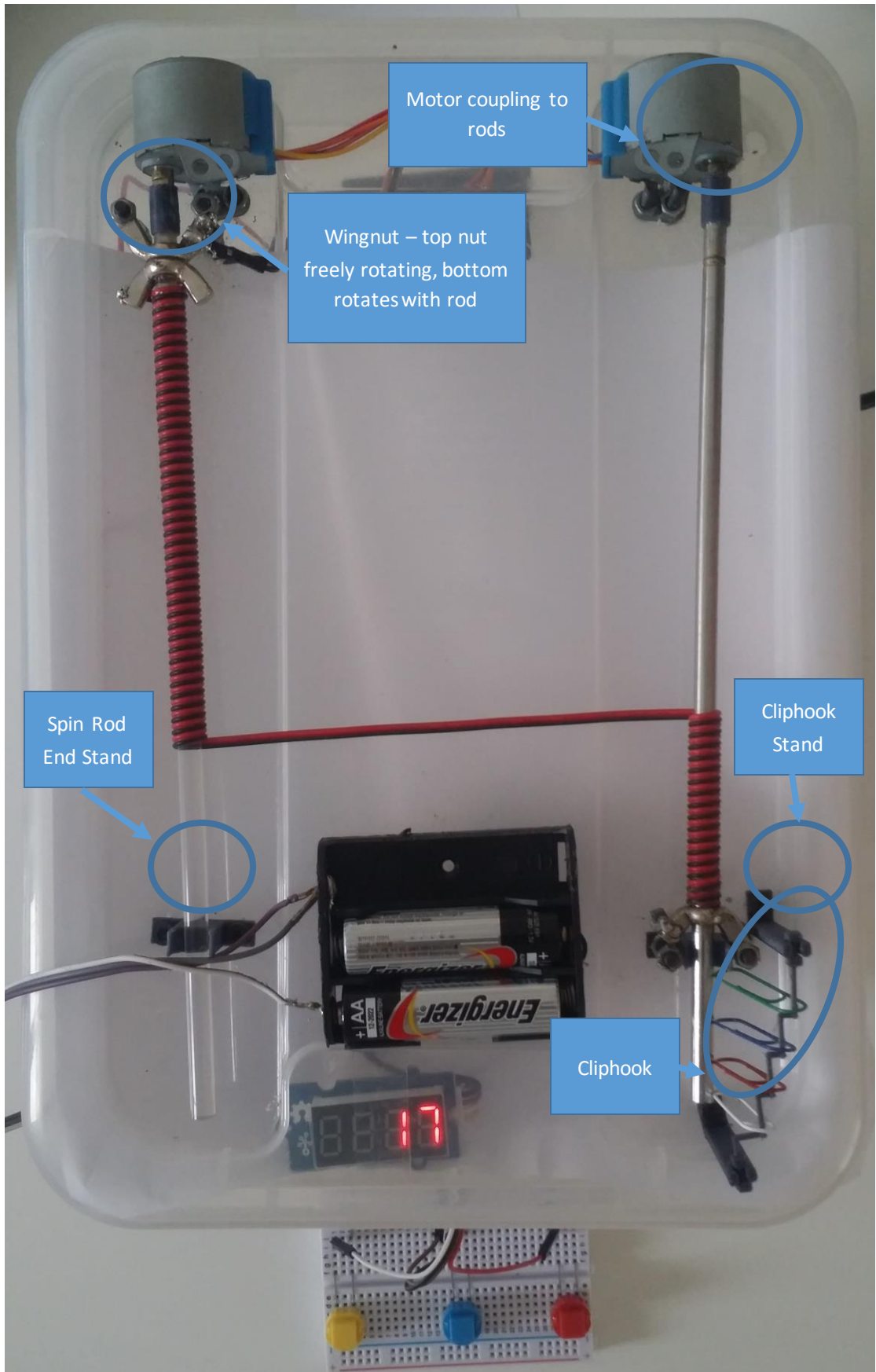
Bill of Materials

Items	Quantity	Comments
28BYJ-48 stepper motor and driver	2	
Soft Iron Rod (5mm dia, 300mm length)	1	
Clear Plastic Rod (5mm dia, 300mm length)	1	
Arduino Uno R3	1	Loaded with Spinner.ino
AC-DC 12V 10A	1	
Battery case 2AA	1	
Serial Enabled 4 Digit 7-Segment Display	1	
Four Channel MOSFET Switch	1	
TRRS3.5mm Jack Breakout	3	
5mm wingnuts	4	Remove threading, smoothen bore
Motor-Rod Coupling	2	CPAS-MotorSleeve.stl
Cliphook Stand	4	CPAS-CliphookStand.stl
Cliphook	2	CPAS-CliphookV2.stl
Spinning Rod End Stand	2	SpinStand.stl

Connection Guide



Assembly Guide



Motor coupling to rods

Wingnut - top nut freely rotating, bottom rotates with rod

Spin Rod End Stand

Cliphook Stand

Cliphook