

# Ray Laser Stick Controller™

## Craggy Aero RAY Laser Stick Controller

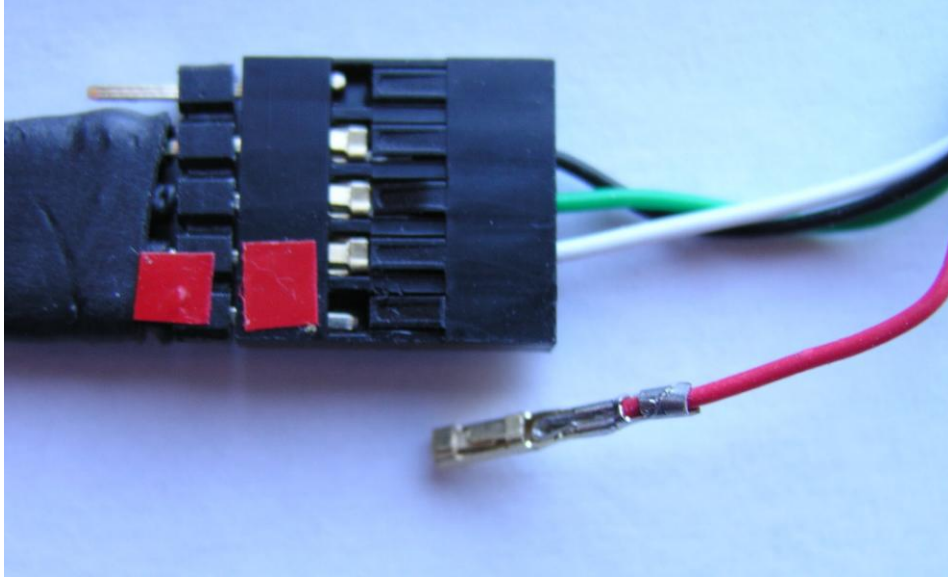
### DISASSEMBLE THE STICK GRIP

The stick grips are assembled at the factory to check fit and finish. The first step is to separate the grip halves. Use the 3/32" hex end wrench to remove the four 4-40 X 7/16" socket head screws at location A,B, C and D. See Figure below for details. As you pull the halves apart, be careful not to let the switch module fall to the floor. Notice how the Switch Module is supported in the grooves molded into the grip halves.



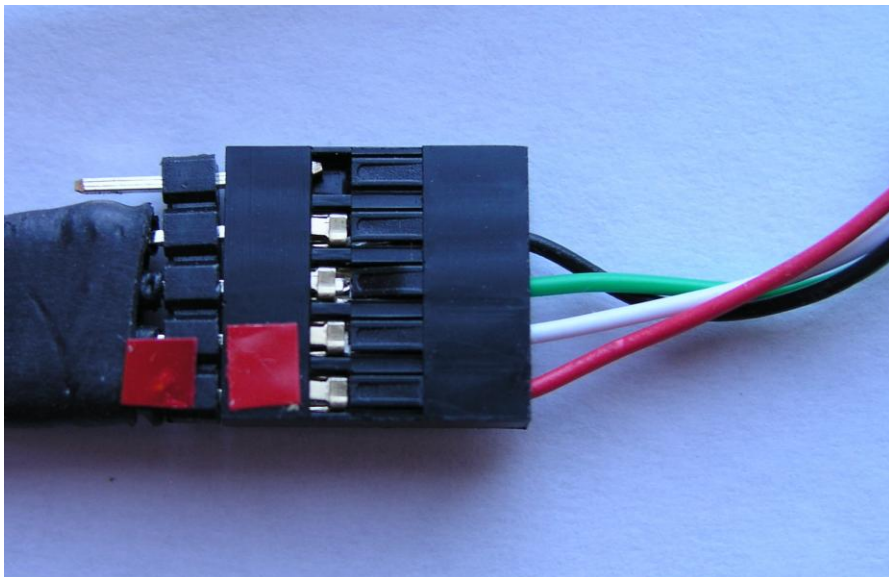
- Screw holes A, B, C caution and D are for securing the grip halves together with 4-40 X 7/16" socket head screws.
- **DO NOT** over tighten when reinstalling these screws!
- Screw holes 1 and 2 are for mounting the grip to your control tick with 4-40 X 1/2" socket head screws

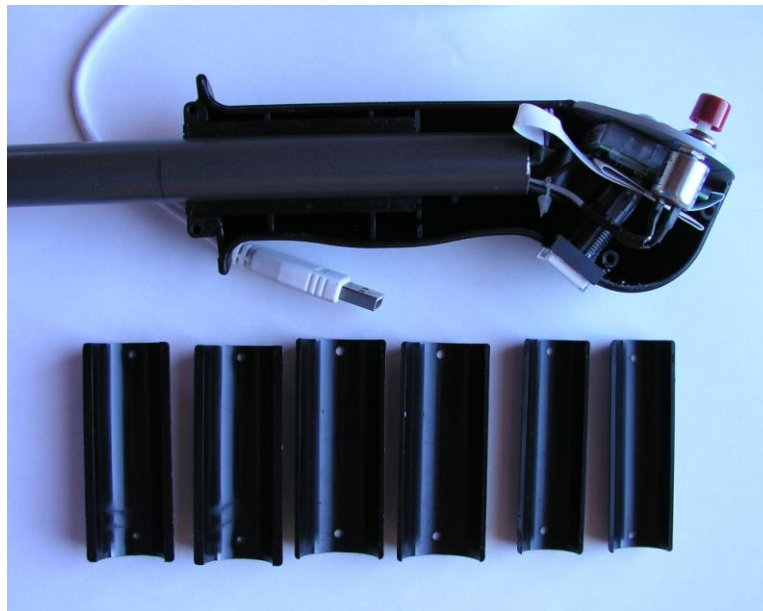
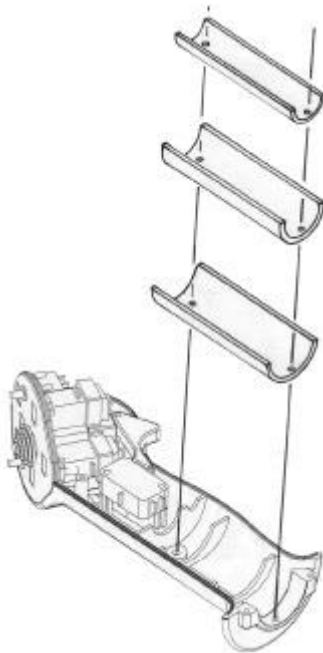
### USB Connector



A connector is provided for sticks that have a small access hole for wires. Remove the wires and thread thru the stick. Pay close attention to how the wires are secured into the connector. You can lift the plastic tab and pull out the contacts. Push tap down before reinserting the contacts. Insure the wires are in the correct color order. Red, white, green, black.

PPT and Other Switches don't have a connectors and can be easily threaded thru the stick.





## MOUNTING THE GRIP

Choose the proper spacer size or combination of sizes for your control stick diameter. Align the spacers using the screw hole locations and tack glue the spacers into the grip for easier assembly (we use Testors plastic model cement). Notice that the spacer's screw holes only align with the grip side in one orientation.

Assemble the grip with the spacers and position it onto your control stick.

**Make sure you test the full travel of the control stick to insure no interference!**

**You may have to cut down your control stick tube to avoid your instrument panel. The Stick is approx 2.5 inches above the end of your control stick.** Using the screw holes 1 and 2 on each grip half as drill guides, carefully drill #43 size holes through your control stick tube. Some control stick tubes are plated, so use a high quality drill (TiCN or Carbide). Remove the grip and tap all four holes in the control stick tube to a 4-40 thread size. Secure the grip to your control stick using the provided four 4-40 X 1/2" socket head cap screws as shown

