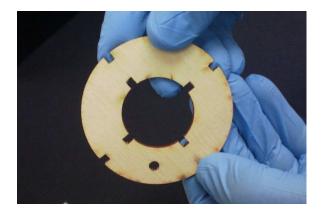


# **Expert Series 2.6 Arrow Assembly Instructions**



### **Shock Cord Preparation**

**Step 1 - Remove the shock cord** hole in both centering rings.



Step 3 - Pull the Kevlar cord through the holes in both centering rings.



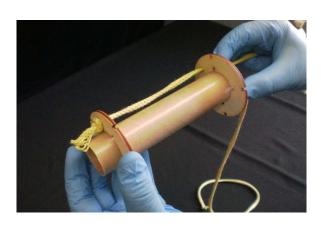
Step 5 - Insert the motor tube and rings w/shock cord knot down into the fin can tube with tick mark on at the top. The tick mark is used to align the tubes.



Step 2 - Tie a single overhand knot in the yellow shock cord and pull tight.



**Step 4 - Insert the motor tube into both centering rings.** 



Step 6 – Push motor tube until flush with the table. Shock cord should align with the lug holes and tick mark.



### **Fin Can Assembly**

Step 1 - Insert the all 4 fins into the fin can tube with all fins between the top and bottom centering rings.



Step 3 - Apply a glue fillet between the inside of the fin can tube and the top centering ring. Take care to not apply glue to the shock cord hole.



Step 5 - Insert a coupler into the top of the fin can.



Step 2 - Push in and lock the top centering ring with the top of all 4 fins.



Step 4 - Apply a glue fillet between the outside of the motor tube and the top centering ring.

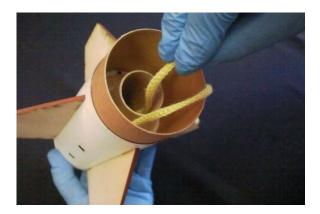


Step 6 - Push the coupler all the way down into the glue fillet on the top centering ring. Set aside to dry.

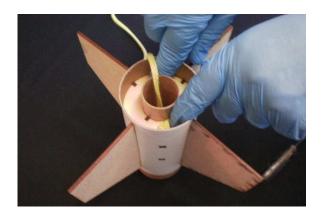


### Fin Can Assembly Continued...

Step 7 - Insert the end of the shock cord through the top of the motor tube.



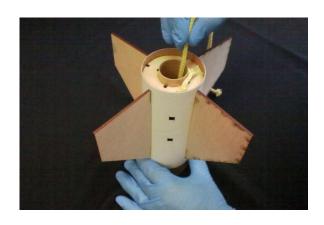
Step 9 - Push in and lock the bottom centering ring with the bottom of all 4 fins.



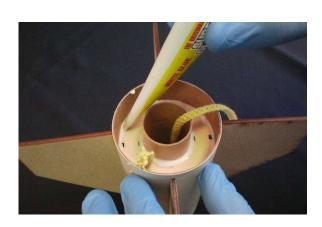
Step 11 - Apply a glue fillet between the outside of the motor tube and the bottom centering ring. Set aside to dry.



Step 8 - Pull the shock cord all the way through the bottom of the motor tube.

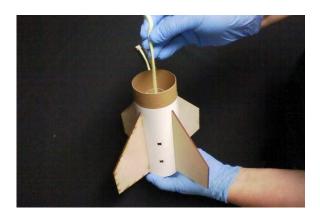


Step 10 - Apply a glue fillet between the inside of the fin can tube and the bottom centering ring. Take care to not apply glue to the shock cord hole and knot.



### **Main Tube Assembly**

Step 1 - Insert the shock cord through the bottom end of the motor tube and pull through the top of the fin can.



Step 3 - Apply a bead of glue around the inside bottom end of the main tube about 1/2" from the end.



Step 5 - Push together and twist the main tube and fin can until the tick marks align.



Step 2 - Take the main tube with the launch mount at the top end and insert the shock cord through the end marked with tick mark at the bottom of the tube.

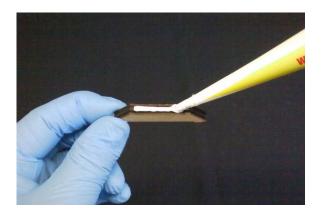


Step 4 - Insert the fin can and coupler into the bottom end of the main tube with the tick mark at the bottom.



### **Launch Lug Assembly**

Step 1 - Apply a bead of glue on one standoff along the top shorter surface.



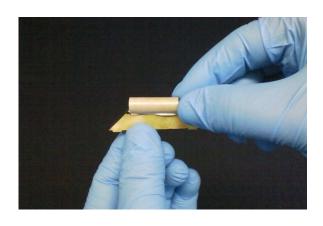
Step 3 - Align the launch lug straight to the standoff.



Step 5 - Apply glue to the bottom of the first launch lug assembly.



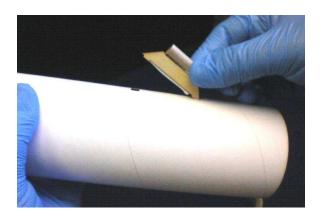
Step 2 - Attach the launch lug to the stand.



Step 4 - Do this for both launch lug assemblies and set aside to dry.

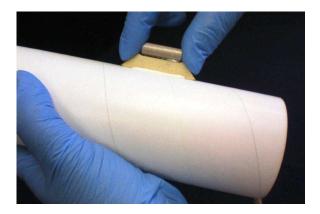


Step 6 - Insert the tabs on the bottom of the lug assembly into the alignment holes on the main tube section.



### Launch Lug Assembly Continued....

Step 7 - Press the lug assembly firmly onto the main tube section.



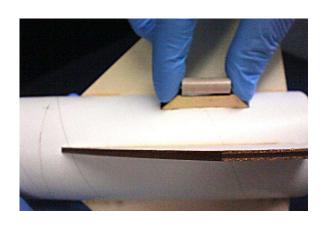
Step 9 - Insert the tabs on the bottom of the second lug assembly into the alignment holes on the fin can section.



Step 8 - Apply glue to the bottom of the second launch lug assembly.

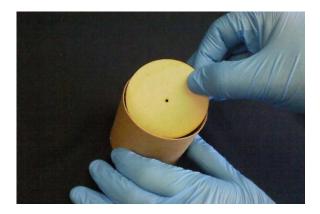


Step 10 - Press the lug assembly firmly onto the fin can section and check both launch lug assemblies to make sure they are aligned with each other.

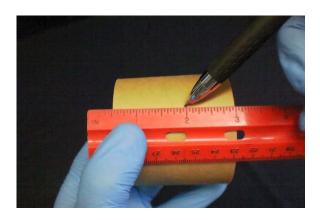


### Payload Section Assembly

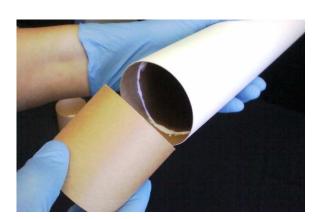
Step 1 - Inset the bulkhead plate into the second coupler and place onto a table top.



Step 3 - Mark the bulkhead assembly 1" from the open end of the coupler opposite the bulkhead plate.



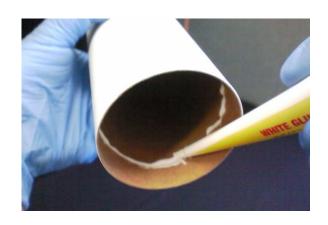
Step 5 - Insert the open end of the bulkhead assembly into the end of the payload tube.



Step 2 - With the bulkhead plate and coupler flush on the table, apply a glue fillet between the coupler and the bulkhead plate. Set aside to dry.



Step 4 - Apply a bead of glue about 1/2" from one end of the payload tube.



Step 6 - Push and twist the coupler in to the mark leaving 1½" of the bulkhead assembly exposed.

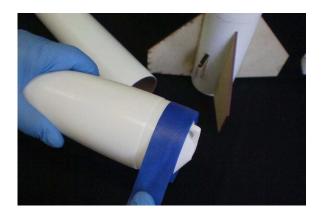


## Payload Section Assembly Continued...

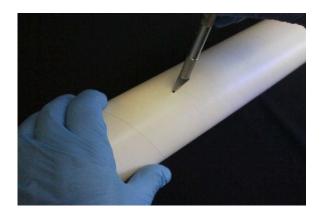
Step 7 - Apply a drop of glue in the center hole on bulkhead plate.



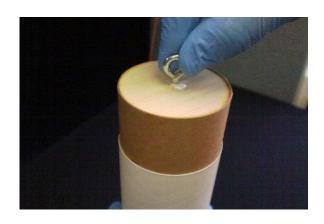
Step 9 - Apply a couple of wraps of masking tape around the shoulder of the nose cone.



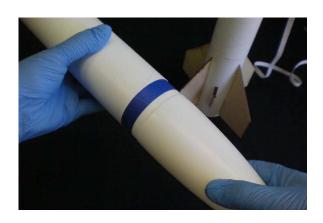
Step 11 - Using a knife or drill bit, drill a 1/8" hole in the middle of the payload section.



Step 8 - Insert and screw eye in screw in until the treads are all the way in the bulkhead plate.



Step 10 - Test that the fit is tight and press the nose cone into the top of the payload section.



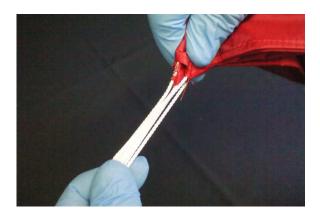
The hole in the payload section will prevent pressure changes during flight from popping the nose cone out of the payload section. Make sure the hole is open after painting your Arrow.

# Recovery and Final Assembly

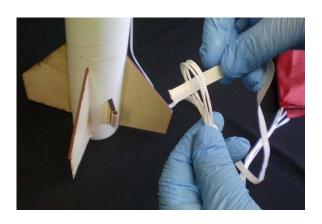
Step 1 - Align the ends of the Kevlar and elastic shock cords and tie a single overhand knot.



Step 3 - Align the ends of the parachute at the shroud lines.



Step 5 - Pass the end of the elastic shock cord through the loop at the end of the parachute lines.



Step 2 - Pull and check that the knot is tight.



Step 4 - Pull the parachute lines straight to the end and tie a single knot in the end of the parachute lines.



Step 6 - Tie the elastic shock cord to the screw eye on the payload section with a double knot.



# Recovery and Final Assembly Continued...

Step 7 - Fold the parachute and roll parachute around the parachute lines. Do not twist the lines while rolling.



Step 9 - Insert the bulkhead end of the payload section into the top end of the body tube.



Step 11 – Smooth the glue beads into a fillet using a clean finger. Set aside to dry.



Step 8 - Insert the parachute and shock cords in the top end of the main body tube.



Step 10 - Apply a bead of glue to the fins and launch lug assemblies where they intersect the main body and payload section tubes.



Your Arrow rocket is complete!

CAUTION: INSERT RECOVERY
WADDING INSIDE THE ROCKET
BETWEEN THE PARACHUTE AND
MOTOR TO PREVENT THE HEAT OF
THE EJECTION CHARGE FROM
DAMAGING YOUR PARACHUTE
WHILE FLYING!!!