

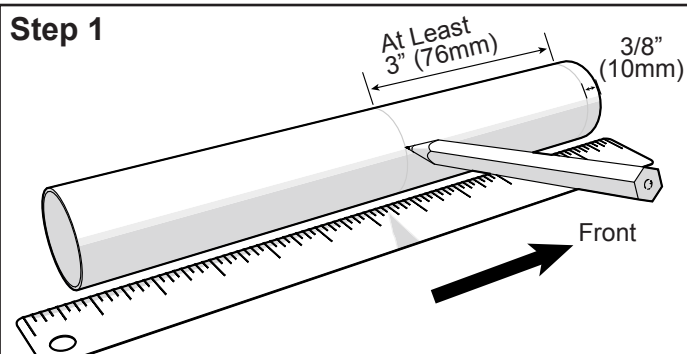
As this is a high-power motor mount, building with epoxy is recommended. Epoxy provides both additional strength and a longer working time than wood glue. This process is handy during the installation process. For many uses, however, the wood glue is still stronger than both the plywood and the cardboard tubes, so it's a perfectly serviceable adhesive to build a reliable and long-lasting rocket.

### Assembly

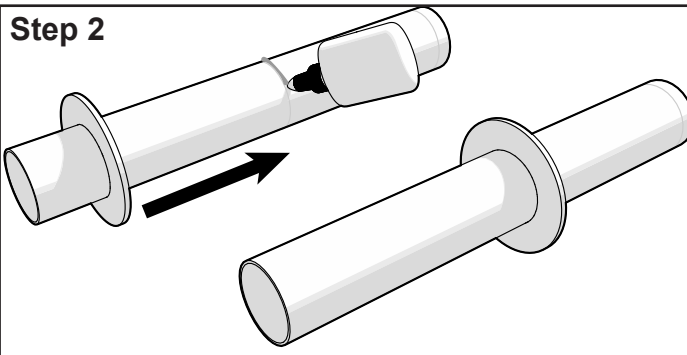
1. Label one end of the AT-38/11" motor mount tube (P/N 10137) "Front". Mark  $\frac{3}{8}$ " (10mm) from this end. Also, mark the location for the middle ring. The middle ring should be at least 3" back to ensure that the mount installs as straight as possible. If through-the-wall (TTW) fins are not being used on the rocket, mark halfway down the tube ( $5\frac{1}{2}$ ", 140 mm) from the end marked "Front". Alternatively, if the fins do have TTW tabs, place the middle ring so that it will touch the front edge of the tabs.
2. Glue one of the CR-38/74 (P/N 13320) rings at the marked point in the middle of the tube using your adhesive of choice.
3. **Optional:** If mounting a shock cord directly to the motor mount, tie the shock cord around the tube on the forward side of the installed middle ring.
4. **Optional:** File a notch into one of the remaining CR-38/74 (P/N 13320) rings to allow the shock cord to pass between the ring and the motor mount tube. This will be the forward centering ring.

Item #	Item Name	Qty
10137	AT-38-11"	1
13310	CR-38-54 1/4" Ply	1
13320	CR-38/74 (3" Thin Wall) 1/8" Ply	3
30921	MMT Adapter Kit 38/74 Instructions	1

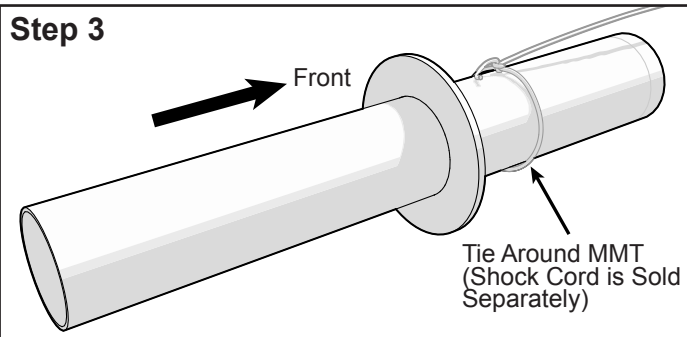
#### Step 1



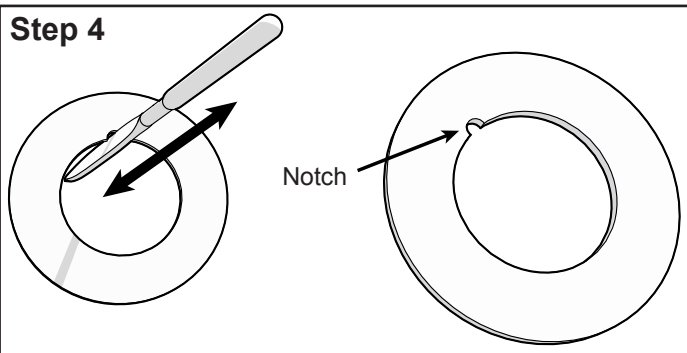
#### Step 2



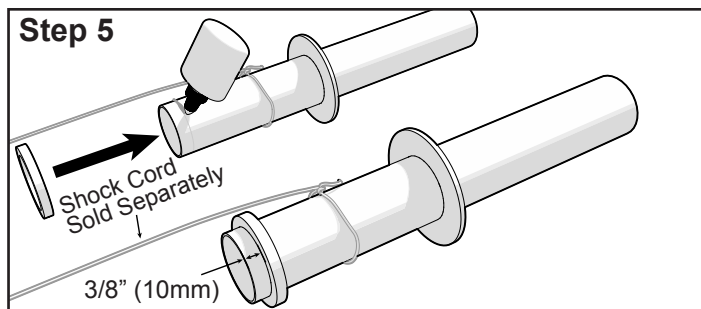
#### Step 3



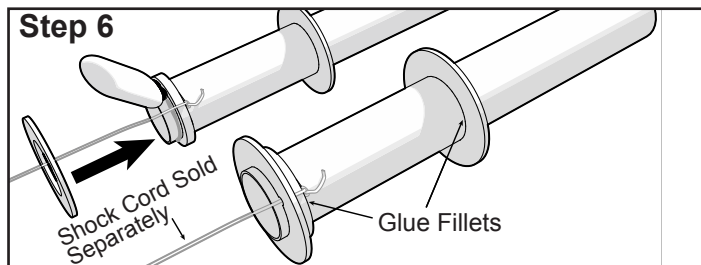
#### Step 4



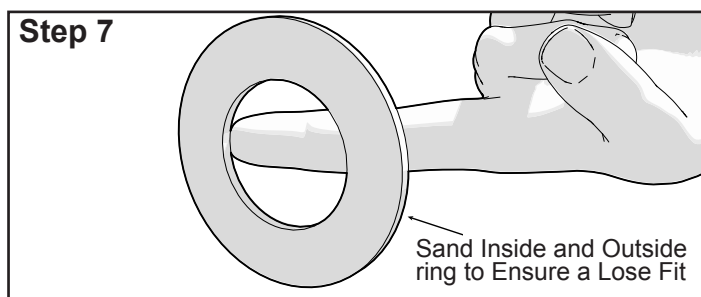
5. Glue the CR-38/54 centering ring (P/N 13310) to the tube just aft of the mark  $\frac{3}{8}$ " (10mm) from the front edge of the tube.



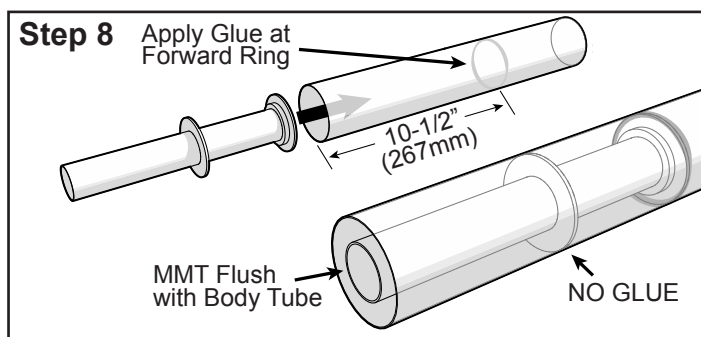
6. Glue the forward centering ring (notched, if a shock cord is attached) to the forward end of the motor mount using the small CR-38/54 ring as a support. If a shock cord is mounted, route the shock cord through the center hole of the ring before the ring is mounted. Apply fillets to the forward and middle rings.



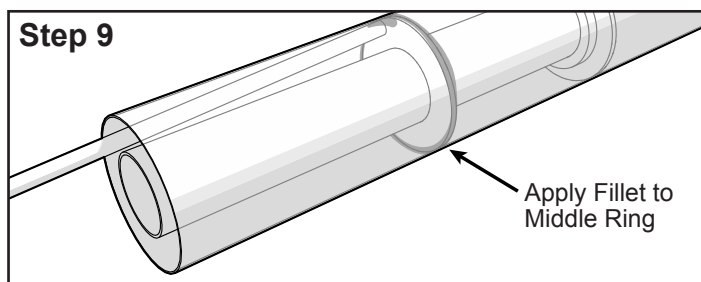
7. Use coarse (150 grit) sandpaper to sand the inside and outside of the remaining centering ring to ensure it slides loosely both over the motor mount tube and within the body tube. Set the ring aside.



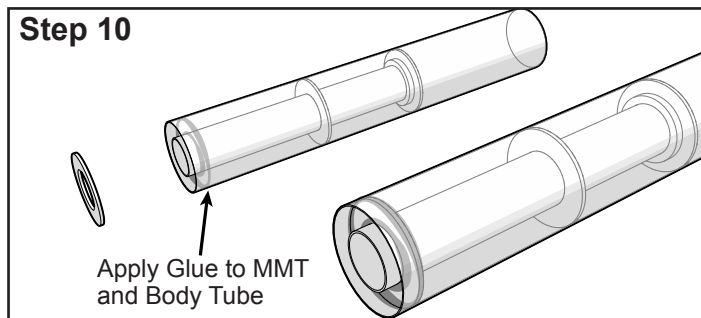
8. Install the motor mount into the rocket by applying a bead of glue inside the body tube at the location of the forward ring (approximately  $10\frac{1}{2}$ " or 267mm from the aft end of the body tube), and then sliding the mount into place with the motor mount tube flush with the aft end of the body tube.



9. Use a long dowel to apply fillets to the aft side of the middle ring and to any TTW tabs if those are present. Allow the adhesive to set until the motor mount will not move with pressure applied to ensure correct alignment.



10. Apply a bead of glue to both the motor mount tube and body tube (as well as the aft edge of any TTW tabs) and install the aft centering ring. If desired, apply a glue fillet to the exposed edges of the aft centering ring as well and let the adhesive set.



11. Congratulations, you have completed your 38 mm x 74 mm motor mount!