

3D Printed Transition Product Documentation

Rocketry Works' 3D printed transitions are made of sturdy ABS plastic, and feature convenient threaded access to an internal altimeter bay with static ports that equalize pressure between the ambient altitude and the altimeter inside. The transition also comes with a plywood altimeter sled pre-drilled to support commonly used TARC altimeters: The Pnut, APRA, and Stratologger CF by PerfectFlite, as well as the unofficial flight suitable Jolly Logic Altimeter Snap Mount. Also included are a large end bulkhead and mounting hardware to secure the PerfectFlite altimeters to the plywood sled, and to secure the plywood sled to the transition. Some assembly is required.





Assembly Instructions

It is vital that you assemble your transition before flight. The transition prints in 3 parts:

- The large end, with the static ports and an internally threaded portion; this is usually glued into a larger payload tube, with a bulkhead on top.
- The angled transition, with an externally threaded portion and anchor for the altimeter sled
- The small end, with a shock cord anchor; this is usually used as the shoulder to the payload section where you attach your parachute and/or shock cord. You need to epoxy this to the angled transition section.

Glue the Small Coupler into the Angled Transition Section

- 1. Pull apart the small end from the angled transition portion. It is a tight fit, but you can twist and pull them apart easily.
- 2. Mix 5 grams of 5 minute epoxy, and apply it to the inside edge of the small end of the angled transition section.
- 3. Before the epoxy cures, twist and slide the small coupler section into the angled transition section, making sure to wipe away any excess epoxy that may drip out.
- 4. Check inside the assembled transition for any dripping adhesive, and make sure it's smeared smooth onto the joint so it won't drip.

Glue the Large Coupler and Bulkhead into the Payload Tube

- Mix 10 grams of 5 minute epoxy, and apply it to the inside of the aft end of the payload tube. Make sure to spread the epoxy evenly around the tube, leaving a generous layer.
- Before the epoxy cures, twist and slide the large coupler all the way into the payload tube.
 The twisting motion improves the bond by smearing the glue into the sides of the coupler.
- 3. Before the epoxy cures, insert the plywood bulkhead into the forward end of the payload tube, sliding it all the way down to rest in the bead of epoxy at the forward end of the coupler.