

COMANCHE-3 CUSTOM MODIFICATIONS

Re-designed to fly on 18mm first stage, 13mm second stage, and 13mm third stage.

Stage 1: B-6-0, C6-0

Stage 2: A10-0T

Stage 3: ½A3-4T, A3-4T, A10-3T

First Stage - Changes made to accommodate 18mm engine

- Use BT-50, 2 ¾", that came with kit as outer body tube.
- Cut 1 ¾" BT-20 for engine mount tube.
- Glue one 20/50 ring at each end of BT-20.
- Glue assembly flush with rear of BT-50 tube.
- Glue stage coupler as per kit instructions.
- Use fins as is and install as per kit instructions.

Second Stage - Changes made to accommodate 13mm engine

- Cut BT-50 outer body tube that came with kit to 1 ¾" length. (= 13mm length)
- Cut 1 ¼" BT-5 for engine mount tube.
- Make (2) 5/50 rings from 5/20 rings, BT-20 tube, and 20/50 rings.
- Glue 5/50 rings ¾" from rear of BT-5 engine mount tube.
- Glue BT-5 assembly into BT-50, flush with rear of tube.
- Glue stage coupler as per instructions.
- Cut fins down to third stage size and install as per kit instructions.

Third Stage - Changes made to accommodate 13mm engine

- Cut 11" BT-5 for engine mount/stuffer tube.
- Make (3) 5/50 rings from 5/20 rings, BT-20 tube, and 20/50 rings.
- Glue 5/50 rings - ¾" from rear, at mid point of stuffer tube, and at end.
- Glue an engine block 1 3/8" from rear of BT-5.
- Glue this assembly into 18" BT-50 outer body tube that came with kit, tube ends flush.
- Use fins as is, but install 12mm forward of rear of outer body tube.

Third Stage - Payload section modifications

- Install BT-50 balsa bulkhead into rear of 12" BT-50 tube.
- Install screw eye into balsa BT-50 block.
- Glue in nose cone to front.
- Increased shock cord length about 50%.