

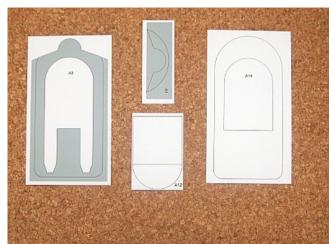
**VERSION 1** Pate Museum of Transportation, Cresson, Texas

# PROJECT MERCURY

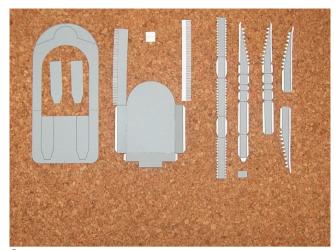
Instruction



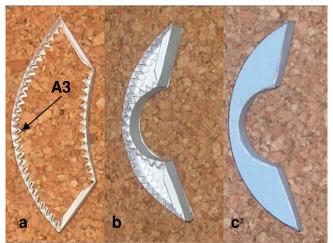
G. Buchmayer © 2007



A. Flight couch parts:
1.
Print out model sheets. Cut out A1, A9, A12, A14 along the red lines and glue on cardstock.



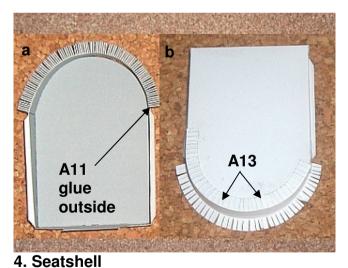
**3.** Cut out A2 – A8, A10, A11, A13, A15.



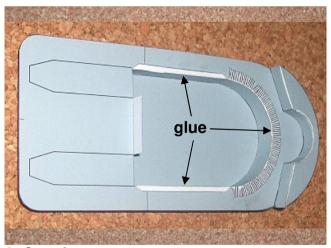
**5. Headrest** Fold A2 and glue ends to A3 (a), glue A2/A3 to the backside of A1 (b, c).



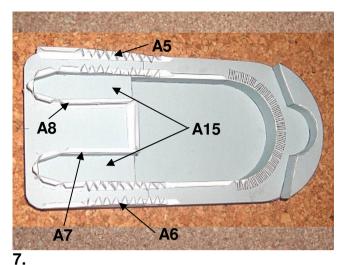
**2.** Cut out laminated parts A1, A9, A12, A14.



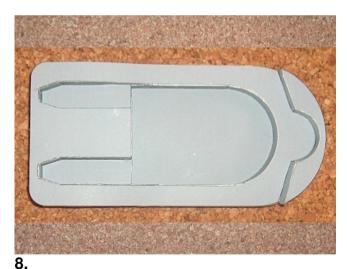
Fold A10, built up the curve by using A11 (*a*) and A13 (*b*).



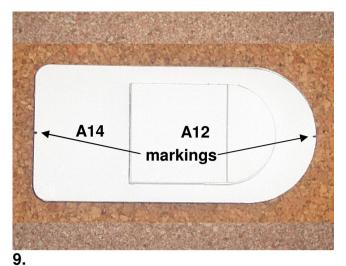
**6. Couch** Glue headrest and seatshell to A4.



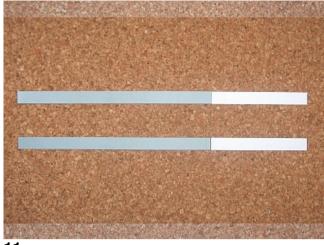
Glue A7 to A8. Glue A5, A6, A7/A8 to A4. (A5 and A6 are longer than necessary, cut length for proper fitting as shown in the photo). Glue A15 to A4.



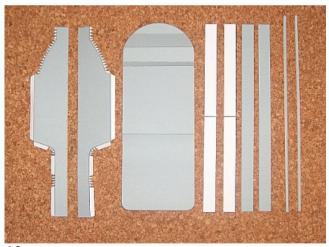
Glue A9 to the couch (to fit closely between headrest and footshells A9 has to be adjusted exactly).



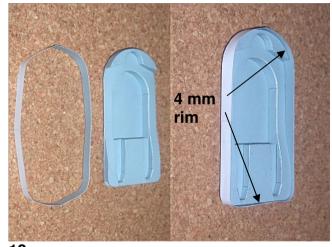
Glue A12 and A14 to the backside of the couch and mark the centerline on A14.



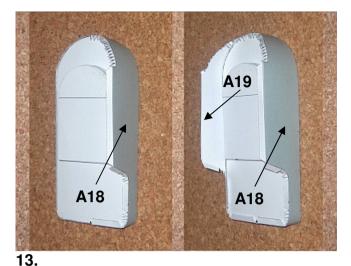
**11.** Glue A16 to A17 (*2x*)



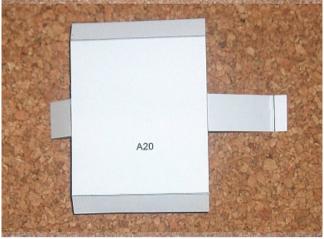
**10.** Cut out A16 – A19, A22, A23.



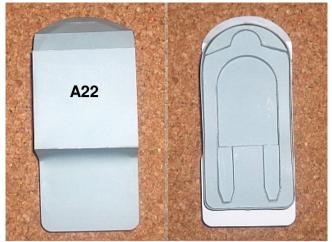
**12.** Glue A16/A17 to a ring. Pull and glue the ring around the couch. Keep a rim of 4 mm above the headrest and the footshells.



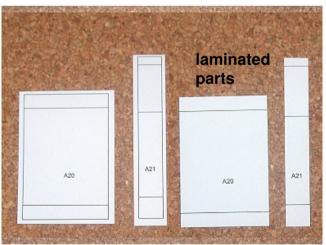
Glue A18 and A19 to the couch. Adjust the length according to the centerline markings (9.).



Glue A21 to the backside of A20. Fold A20 and A21 according to the fold lines (*see photo*).

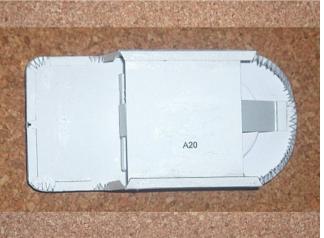


**17.** Glue A22 to the backside of the couch (*see photo*).



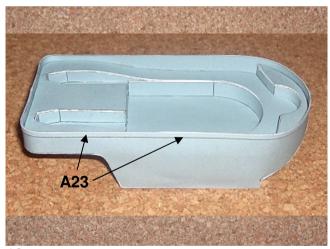
14.

Cut out A20 and A21 along the red lines and glue on cardstock. Cut out laminated parts A20 and A21.

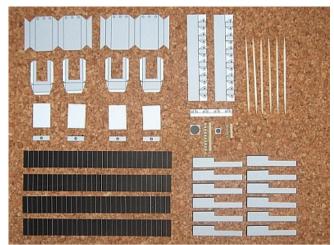


16.

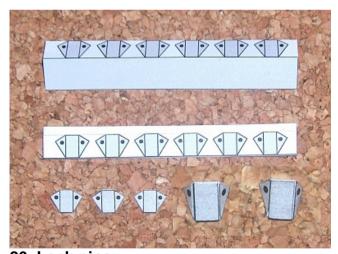
Glue A20/A21 to the backside of the couch (*see photo*).



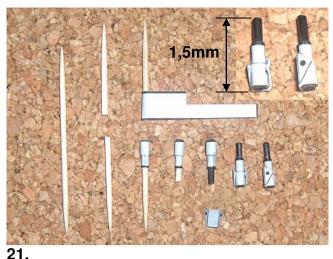
**18.** Cut away the extended paper of A22. Glue A23 around the couch.



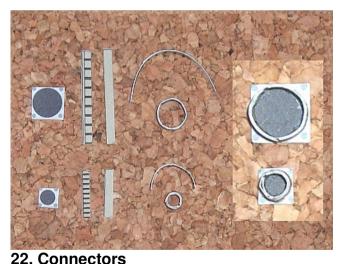
B. Flight couch external parts:
19.
Cut out B1 – B14. Provide 6 toothpicks.



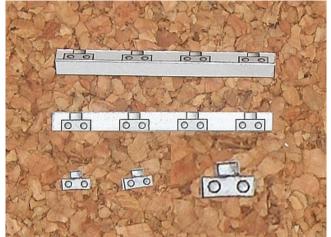
**20. Lock pins** Fold B7 according to the foldline (*a*) and laminate part (*b*). Cut out parts (*c*) and fold as shown in the photo (*d*) (12x).



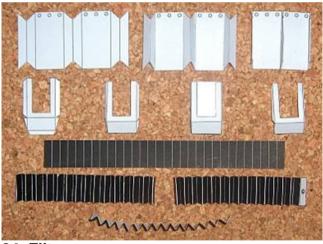
Cut toothpicks in the middle. Glue B8 around the end of each half. Cut part to a total length of 15mm. Paint the ends black, and glue part to B7 as shown in the photo (12x)



Glue B10 to B11 and B13 to B14 (*blank* sides together and shifted) (a). Bend rings (*B11 and B14 are the inner parts*) and glue together (*b*). Glue rings to B9 and to B12 (*c*).

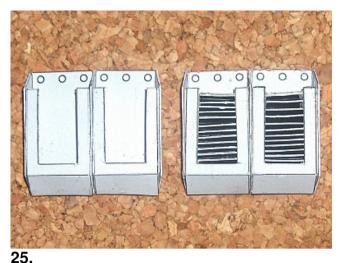


**23. Fixation** Fold B6 according to the foldline (*a*) and laminate part (*b*). Cut out parts (*c*) (4x).

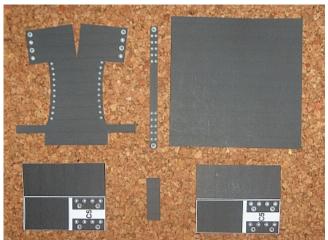


### 24. Filter

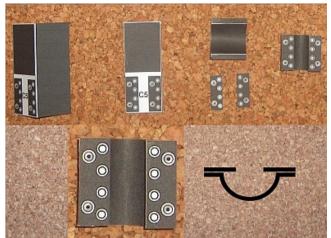
Fold B1 and glue as shown in the photo (*a*). Fold B2 and glue on B3 for stabilization. Cut out blank part of B3 (*b*). Fold B5 and glue B4 on one end as shown in the photo (*c*).



Glue B2/B3 (2x) to B1. Glue B4/B5 into the duct as shown in the photo (2x).



C. Flight couch internal parts: 27. Seat Cut out C1 – C5.



**29. Foot band** Fold C5 according to the foldline (*a*) and laminate part (*b*). Cut out parts and fold/glue as shown in the photo.

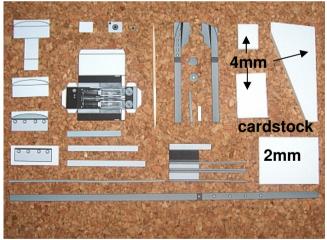


Glue lock pins (12x), connectors (2x), fixation (4x) and filter (2x) to the couch. Use the markings on the sidewalls for positioning.



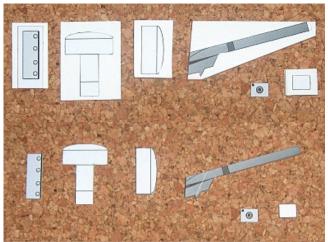


Glue C1 to the backside of C4. Cut away the extended paper. Glue C3 to C1. Glue C2 to the backside of C1 to the form the seat (*see photo*).

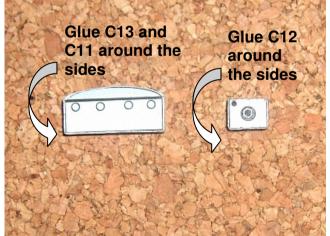


30.

Cut out C6 – C25. Laminate cardstock to 1mm and to 4mm thickness (*see photo*). Provide one toothpick.



Glue C23 to C9. Glue C14 to cardstock and cut out the laminated part. Glue C6 to 2mm laminated cardstock and C7, C8, C17 to 4mm laminated cardstock. Cut out the laminated parts.

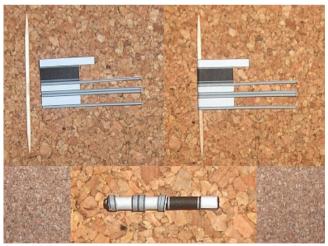


**32. Blood pressure transducer** Glue C14 to C10, both on top of C7. Glue C13 around grey part of C7 and C11 around olive green part of C7. Glue C9 on top of C8. Glue C12 around C8.

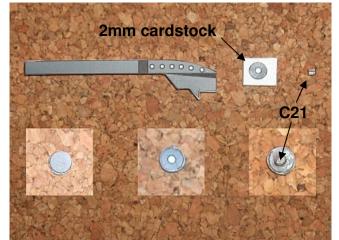


33.

Glue C25 around C6. Glue C15 to a box. Build blood pressure transducer as shown in the photo.

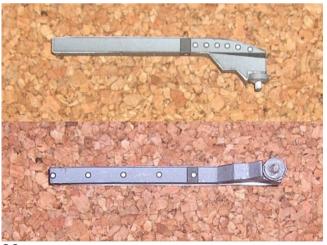


**34. Urine collecting system** Glue C24 around a toothpick and cut ends. Paint the ends black.

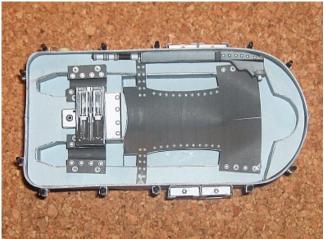


### 35. Drinking assembly

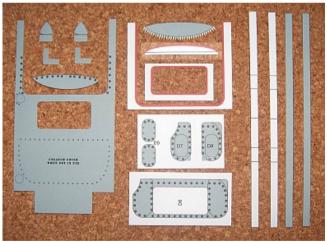
Glue C16 to the backside of laminated C17. Glue C20 to 2mm laminated cardstock, cut out and glue C19 to the backside. Roll C21 and glue to C20. Glue C22 around C19/C20



**36.** Glue C19/C20/C21 to laminated C16/C17. Glue C18 around the drinking assembly.

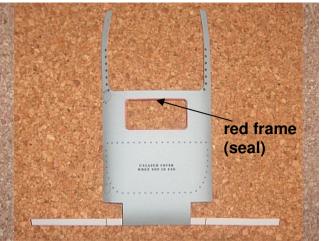


Glue seat, foot band, blood pressure transducer, urine collecting system and drinking assembly system to the inside of the couch (*see photo*).



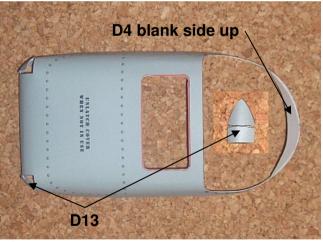
## D. Cover parts: 38.

Cut out D6 and D7, D8, D9 along the red lines and glue to cardstock. Cut out D1 - D5 and D10 - D14.



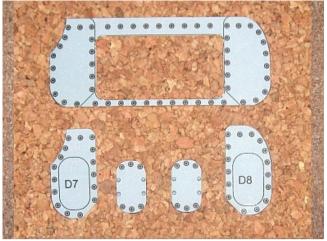
### 39. Cover

Form D3 as shown in the photo. Glue D10 on the backside of D3 (*the result should be a red seal around the window*). Glue D2 to D3 (*mind markings for proper adjustment*).

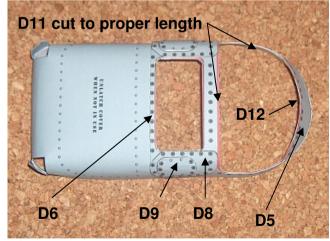


### 40.

Glue D2 continuously to the inner sidewalls of D3 (*mind markings*) Continue with the second D2. Form D13 and glue to D2 as shown in the photo (2x). Glue D4 to D3.

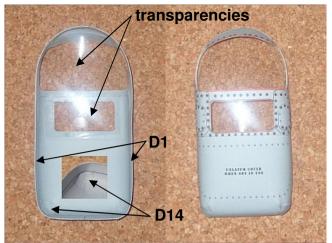


**41.** Cut out laminated parts D6 – D9.

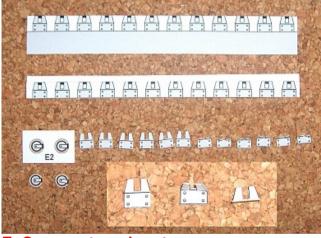


### 42.

Glue D5 on top of D4. Glue D12 to the inside of D4 and D11 to the inside of D3 (red seals). Form D6 and glue to cover (*see photo*). Glue D7 and D8 to D6. Glue D9 (2) to D7 and D8.

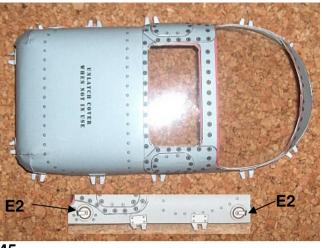


Glue D14 to connect D13 to the upper part of the cover. Glue D1 to the rim of the inner cover. **Take care that the cover is not distorted!** Cut out transparencies (*use templates*) and glue to the inner cover.



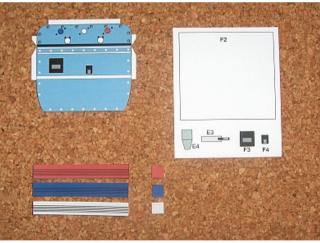
### <u>E. Cover external parts:</u> 44.

Cut out E1 along the red line and glue to cardstock. Cut out E2, fold, laminate, cut out and fold according to the photo (12x).



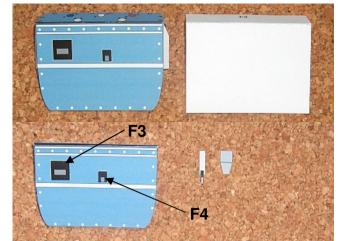
45.

Glue parts E1 to the cover sidewalls. Adjust exactly according to the lock pin positions. Glue E2 to the marked positions on the left cover sidewall.

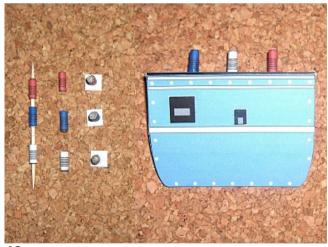


F. Cover internal parts: 46.

Cut out F2 - F6 along the red line and glue to 0,5 mm cardstock. Cut our F1 and F7-F12.

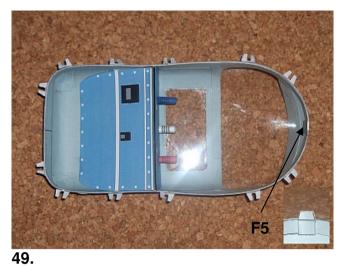


**47. Performance test apparatus** Cut out laminated parts F2 – F6. Fold F1 and F2 according to the photo. Glue F2 to the backside of F1 and cut away the extended cardstock. Glue F3 and F4 to F1.



48.

Provide 1 toothpick.and roll F7 - F11 around. Cut exactly to the length of F7, F9, F11. Glue F8, F10 and F12 as shown in the photo. Cut away the extended paper. Glue parts to F1.



Glue performance test apparatus to the inside cover. Glue F5 to the inside cover.



**50.** Glue F6 to the cover.

You have finished the chimp couch model !!!

