

## Console Supplies and Assembly Instructions

Console/armrest is for W113 center tray with rear window defroster assembly at front – net open length is ~15.5" If you do not have the defroster in the tray, many measurements will need to be adjusted accordingly.

The console/armrest is wrapped in MB-TeX, so that the lower portion ("inside sides") fits snugly into existing center tray, leaving upper portion ("outside sides, rear") to sit flush on the wood tray edges

*I recommend reading the entire instructions several times to understand the procedure – especially the MB-TeX pattern cut and installation.*

Wood (~\$22, Lowe's)

- 1/4" x 6" x 36" poplar project board (bottom)
- 3/8" x 6" x 36" pine project board (inside frame sides)
- 3/8" x 3" x 36" pine project board (outside upper sides and rear)
- 3/4" x 8" x 24" (sold as 1" x 8" x 36") poplar project board (ends)

MB-TeX (German Auto Tops) – about 24" x 48"

Felt

- I used 3 pieces of 12" x 24" adhesive-backed felt sheets from Rockler – very difficult to work with VERY sticky, unforgiving adhesive; felt stretches as it's being installed!
- A better approach is to buy felt from Joanne Fabrics and use spray contact cement (i.e., 3M Super 77 Multipurpose adhesive spray)

Hardware

- Flat butt hinges, 2" x 1 3/4" (2 needed), Rockler
- (Magnetic touch latch optional)
- Finish trim – 1/4" x 1/4" x 36" 90° plastic corner, Outwater (Amazon)

Armrest (~\$125-150)

- Mercedes-Benz armrest, from 108, 109, 111; 14" x ~5.5" bottom

### **NOTES:**

***All dimensions should be confirmed and triple-checked on your tray; dimensions may differ slightly. See attached drawings***

***TAKE YOUR TIME. DO NOT RUSH DOING THIS.***

### Preparation

1. Cut wood to size (dimensions are approximate – measure multiple places to determine length and width of tray). Allow clearance for MB-Tex covering and glue ( $\frac{3}{32}$ " per side, front, back)
  - Bottom (1 piece,  $\frac{1}{4}$ " thick) –  $4 \frac{5}{8}$ " x  $15 \frac{5}{16}$ "
  - "Inside" sides (2 pieces,  $\frac{3}{8}$ " thick) –  $3 \frac{1}{4}$ " x  $15 \frac{5}{16}$ " then cut corner off of front top. Angle of cut determined by connecting point  $1 \frac{1}{2}$ " from bottom along front side to point  $13 \frac{1}{2}$ " of top, measured from the back of the piece. When attached to the bottom, the front vertical dimension will fit exactly inside the tray.
  - "Inside" front (2 pieces,  $\frac{3}{4}$ " thick each) - top:  $\sim 3 \frac{1}{4}$ " (H) x  $3 \frac{7}{8}$ " (W), bottom:  $\sim 2 \frac{5}{8}$ " (H) x  $3 \frac{7}{8}$ " (W). Dry fit pieces and miter between pieces to match angle of sides. Save the trim pieces from the mitering to finish the inside top front
  - "Inside" rear (1 piece,  $\frac{3}{4}$ " thick) –  $3 \frac{1}{4}$ " (H) x  $3 \frac{7}{8}$ " (W)
  - "Outside" sides (2 pieces,  $\frac{3}{8}$ " thick) –  $1 \frac{3}{4}$ " x  $15.3125$ " then cut corner off of front top (allow additional lengths if mitering corners at rear)
  - "Outside" rear (1 piece,  $\frac{3}{8}$ " thick) –  $1 \frac{3}{4}$ " x  $4 \frac{5}{8}$ " (allow additional length if mitering corners at rear)
2. Cut MB-Tex to size (see photo). Before cutting MB-Tex, dry fit paper mockup to determine size and angles for MB-Tex. Repeat fit, repeat fit, repeat fit, until comfortable with the configuration. The "V" at the bottom of the "wings" should be carefully determined where the side wings will miter with the top front. This is complicated by the angle of the upper front surface. Note upper cut of the horizontal strips extends  $\frac{7}{8}$ " into front of piece – ending at where the front surface contacts the sides. Dry fit this to ensure finished fit. Finished MB-Tex is extended  $\frac{3}{4}$ " over the bottom and  $\frac{3}{4}$ " over inside edge, to be trimmed at end.



Approximate dimensions of MB-TeX pattern:

Horizontal overall length – 42"

Horizontal strip width – 2 1/2"

"Wing" length (each) – approx. 24"

"Wing" width – 3 5/8"

Approximate angle between "wing" and horizontal strip – ~54°

### Assembly

#### 1. Wood

- Attach inside 3/8" side pieces to top of bottom piece with brad nails and wood glue (overall height should be 3.5"). Allow to dry.
- Insert front and rear 3/4" pieces between side panels, brad nail and glue. Glue and brad nail extra miter trim piece into inside front of top (which is at an angle) to square off inside of box opening. Allow to dry.
- Glue and nail brad outside 3/8" side and rear pieces, miter corners. Allow to dry.
- Round off rear corners: lower portion to match inner radius of tray (~ radius of .880" diameter circle); upper portion to match outer radius of tray (~ radius of 1.5" diameter circle)
- Sand smooth, round off edges
- **CHECK FIT OF BOX IN TRAY.** Ensure sufficient space for MB-TeX with glue at sides, front and back.



Note: I used 1/2" wood for the "inner" side walls, which is why the sides look thicker in these pictures than they will with 3/8" recommended side walls



## 2. MB-TeX

- Applied to the outside of the wood box, glued with contact cement, in small areas at a time. Follow adhesive directions, allowing both sides to dry to tack before attaching.
- Mark the center of the upper and lower portions of the front and rear wood box to provide a guide where to center the MB-TeX installation.
- Tape off the underside of the lip along the sides of the upper portion with blue painter's tape to prevent glue coverage until ready later.
- Dry-fit the MB-TeX at the front, with the front area centered on the marked centerline and the horizontal strips of the MB-TeX, which wrap around the lower portion, just under the lip of the upper portion. Leave  $\frac{3}{4}$ " of the MB-TeX to extend below the bottom, to be folded under later. Then apply glue to lower (vertical) part of front wood and MB-TeX and lower portion of wood sides. Center and attach the lower part of the front (leaving  $\frac{3}{4}$ " extending below the bottom) while wrapping the sides (leaving  $\frac{3}{4}$ " extending below the bottom), tight to under the upper lip, against the tape. Leave the rear ends of the MB-TeX loose for later fit, attachment, and trimming. Allow to dry.
- Remove the tape from the underside of the upper lip and place new blue painter's tape over the newly installed MB-TeX, just under the lip of the sides, to prevent getting glue on the MB-TeX. Dry fit and determine correct cuts to make proper finished corners. Before applying glue pay close attention to the sloping front and the method to finish the corners at the top.
- Apply glue to the wood on the sloping front, and sides, and the underside of the lip (against the tape). Leave the top and rear wood and rear pieces of the MB-TeX strips unglued for now.
- Apply glue on the MB-TeX corresponding to the sloping portion of the front and sides (not the tops of the box or the portion on the rear), and then slowly wrap the MB-TeX around the sides, leaving  $\frac{3}{8}$ " extended over the bottom edge of the lip to tuck under. Leave the corners for after the glue has dried. Then, on the underside of the overhanging lip, slowly and carefully glue each cut angle, one at a time until completed. At the rear, leave the rear ends loose for later fit, attachment, and trimming. Leave the excess MB-TeX at the top to overhang into the box for trimming later.
- For the rear, mark the center of the upper and lower portions of the rear wood to provide a guide where to cut the remaining MB-TeX. Overlap the MB-TeX on each portion and determine the location of the cuts to enable a tight joint, centered where the marks were made. Glue final cuts.

- Finish the rear corners. On top, dry fit and determine where to miter cut for the top to make a tight seam. For corners under the lip, cut the underside of the lip with 2 cuts at the center arc of the MB-TeX at the corner and trim to make a tight fit. Finish the bottom with 45° cuts to make a clean miter cut at each corner.



Front



Rear



Side

### 3. Felt

- Apply felt on the inside of the box. I cut separate felt pieces for: front, rear, sides, bottom



#### 4. Final trim

- Install  $\frac{1}{4}$ " x  $\frac{1}{4}$ " plastic corner trim along inside edge of top, to finish the felt/MB-TeX edge. Miter cut corners with razor blade. Dry fit to ensure tight corners and tape down positions with blue painter's tape. Glue each piece, one at a time, with VLP vinyl adhesive (or equivalent) applied along the inside edge of the 90° angle, returning each piece to its location and tape down to cure.



## 5. Hinges

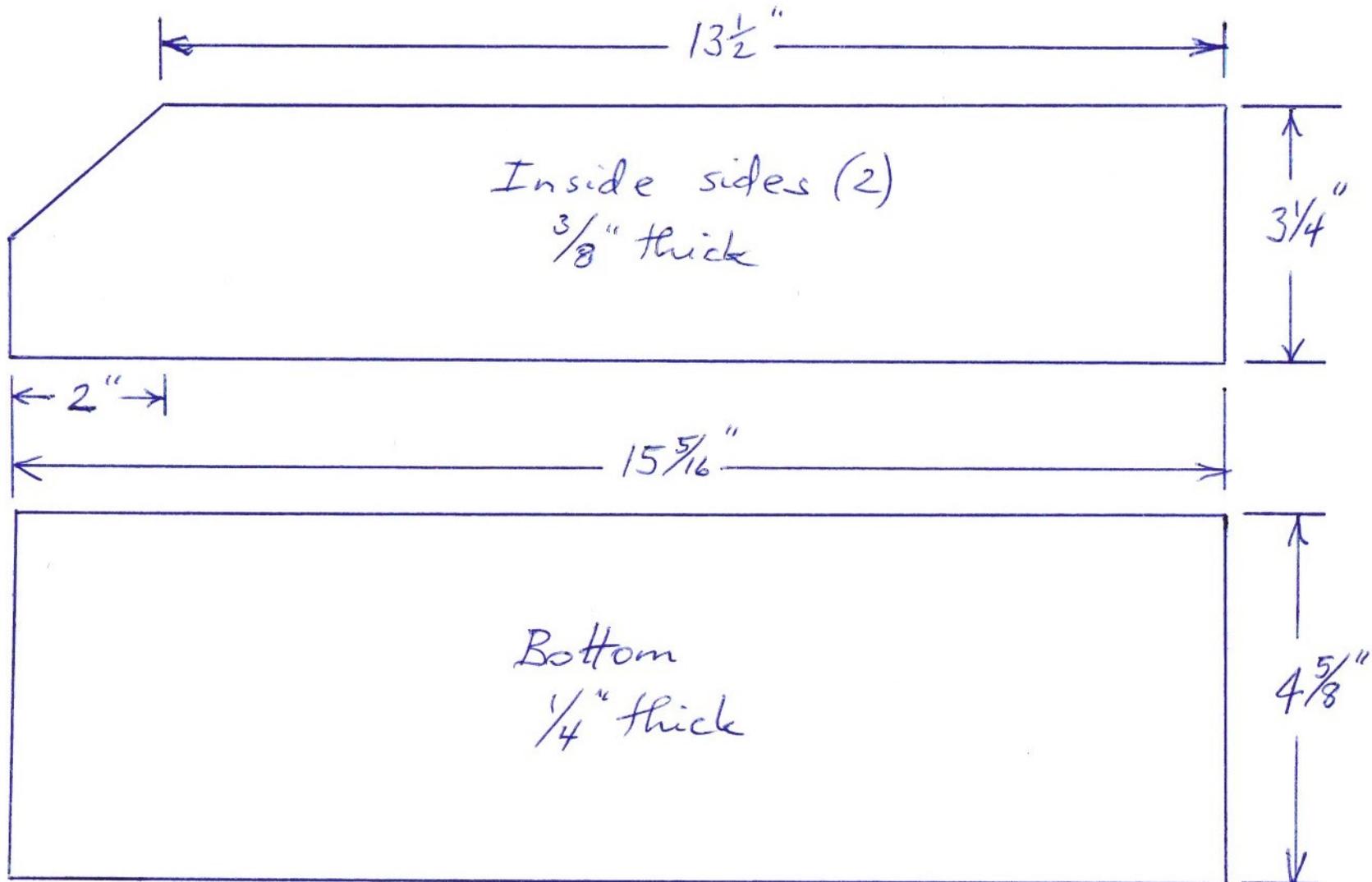
- Install the hinges, side by side, centered on the (centered) rear seam, with the barrels of the hinges extending slightly over the edge. Align the armrest cushion with the top of the box at the front and rear, centered side-to-side (note that the cushion is slightly tapered, narrower in the rear and slightly wider at the front. After determining the correct location of the holes for the hinge screws on the underside at the rear of the armrest cushion, connect the other side of the hinge on the rear of the armrest cushion.





Pagoda Center Console/Armrest  
(sizes from 280SL w/rear window defogger)

1/2



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