

MG Midget, Series TC - Installing a Top

Parts needed -

Top (aka hood)	Front Bow Cover	Foam Strip for front bow
2 Top Straps (webbing or fabric)	Hidem Strip (front edge finish)	2 Hidem Strip End Caps
2 Dot Snaps & Screw Studs (back corners)	15 #8 x 5/8 slotted countersunk screws w/ trim washers	
4 Machine Screws 4-40 (or 4BA) x 1" with trim washers, flat washers & nuts (hood/straps to bow frame).		

Tacks or staples appropriate to the job, tools, protective coverings as needed.

It helps a great deal to have an assistant or second expert aiding in the install.

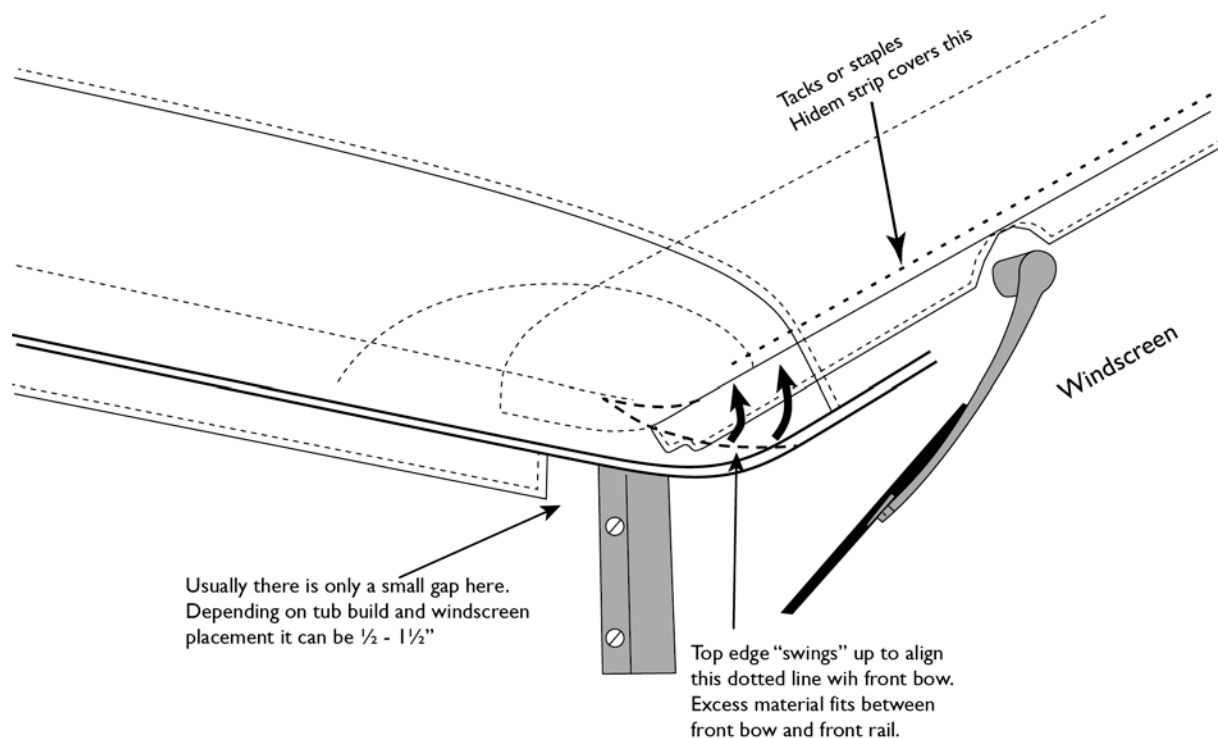
Pre-installation tips:

1. An ideal work environment should be roomy, well lighted, and comfortably warm. Fitting a top can best be accomplished at room temperature. Warmer materials (i.e., top material) is easier to work with than cold, so if you can do the job in sunlight, that's a great option. It may take several hours to install the top once all the prep work is complete, so plan time accordingly.
2. Familiarize yourself with the way a top is correctly installed. If you don't have an example to look at, send me a note and I can send you some pictures. Pay special attention to the front edge and bow cover.
3. Before removing the old top, lay the new top loosely over it, checking for fit.
4. Remove the old top from your car after studying its installation.
5. After removing old top, check the front wood rail for condition, and replace with a new one if deteriorated. Note that many of the new rails made today don't have enough curve in them and require undue force to spring them down to fit onto the windscreen posts. You may need to plane, trim, or steam bend a new one to improve fit.
6. Make sure the thumb screws and threaded holes to attach the top frame to the windscreen posts are in good condition. Screws should center onto the flats of the posts when tightened, and tightening should not put any pressure on the wood bow. If it does you have a structural problem to solve before installing the top.
7. Lay the new top over the raised top frame, checking for fit. Now is the time to address any obvious problems before starting the install.
8. The single driver's side windscreen wiper stud – the bow cover fits best if one of the flats on the stud housing is flat - parallel to the top of the windscreen frame. 5/16" BSF wrench is used to turn it.
9. Check the top frame for condition and proper mounting. Repair and refinish as appropriate. Check for bent or misshapen bows/frame, broken welds or damaged pivot rivets.
10. The rear tub rail pieces (2 corners and center piece) on the top of the body tub need to be in good condition and firmly mounted to the tub, as the tension on them for a snug fit of a new top is important.
11. The location of the top frame - mounting point, height of the bows, fit to the windscreen, and folding closed into the back of the tub are all important for proper fit. If you are unsure about this, study photos, information, or contact me for details. Mount points of the frame brackets are located approximately at the apex of the rear body elbow and immediately below the line of the hidem tacking strip. Careful use of an awl and visual cross checking of a slightly pulled back interior trim panel will help you locate the original holes - if the tub wood is original.

General sequence of steps

- | | |
|---------------------------------------|---|
| 1. Top frame fixed and installed. | 7. Stretch and set top |
| 2. Install front bow cover | 8. Fit front corners of top |
| 3. Install top webbing straps | 9. Final setting and tacking of top front |
| 4. Mark rear tub rail screw locations | 10. Tighten and final setting of top straps |
| 5. Install top onto rear tub rail | 11. Install corner snaps |
| 6. Attach top to front rail | 12. Install screws in two bows |
| | 13. Install Hidem strip on front edge |

MG Midget, Series TC - Installing a Top



Install bow cover on front wood bow.

1. On many (but not all) original TC front bow covers, the windscreen post holes had reinforcing grommets. Moss Motors sells a copper grommet (part 406-920) that fits into the post hole that's ideal for this. It's your option whether to install them or not; if you do so, the third step in this section is when to install them. If you install them, make sure the grommets are really flat so they keep the bow from fitting snug to the windscreen.
2. Attach the foam strip to the bottom of the front bow so that it sits squarely on the center of the windscreen top frame. You'll need to cut holes in the foam for the windscreen posts to go through. Original TC tops had a thin cushion strip - most installers miss this. This strip really improves the sealing of the front bow to the windscreen, minimizing water leaking in this joint when you get caught driving in the rain.
3. Raise top frame so it's a few inches off the top of the windscreen. Then set bow cover onto the windscreen top with the flap firmly against the front of the windscreen. Place with cutouts on front flap over the proper wiper posts (single width over the single wiper post, double width for the wide one). Mark and make small cuts on the cover to allow the windscreen posts to protrude through the top (or install the grommets right now). On a TC, distance between posts is 37" center to center.
4. Bring front bow down to windshield and secure with thumb screws, trapping bow cover in place. Center the bow cover and make sure the flap is tight against the windscreen (not too tight). Pull bow cover taut from the backside of the windscreen, wrap fabric around to the top front of the bow.
5. Check centering and position of the cover; once you are satisfied with it, start tacking or stapling in place. The first side to tack is the one wrapping under the bottom to the back (call this the back cover). It doesn't take many tacks to hold this in place - 6" apart or so is plenty. Start in the center and work out to 4"-6" from end of the bow. Tacks/staples should be placed about 1/4" to the back side of the bow's center line. The curved ends of the bows will need fabric cuts around the main side frame and the windscreen post hole for a proper fit.
6. Now attach the front section of the cover (the side wrapping over the front top). Start at the center, pull the material up and back, tacking/stapling left and right, working out to the edges. Tacks/staples should be placed about 1/4" to the front side of the bow's center line. The fabric will be trimmed so the edges meet in the center. Before trimming, carefully tuck, trim, and fold material at the curved ends of the bows to create a clean finish.

MG Midget, Series TC - Installing a Top

7. Measure and mark center of installed bow cover. Mark on the top with a chalk or pencil line.
8. On the top, measure distance between deck seams on the top at the front with the fabric pulled taut. Mark this on the top of the front bow - these are the center marks for attaching the top webbing straps.
9. Measure and mark the center point of the top at the front and back - mark with a thin chalk line. Mark the back on the inside, and make sure there is a mark on the rear securing strip.

Install Top straps and set rear mounting holes

August 4, 2015 note: *Webbing straps originally had rear point folded and sewn - that's how I make kits. This requires setting the back of the straps first, then pulling them tight and tacking to the front bow. Set them in same position as noted in the next paragraph. Make sure they are tight enough to not need moving again. The #8 x 3/4" Slotted countersunk screws and flange washers are used to attach webbing to the back rail (5/8" screws are used on the rest of the rail).*

Install the top webbing straps (when back end isn't sewn). Straps are first attached at the front, centered on the deck seam lines you marked on the top front bow cover. The front edge of each strap is tacked/stapled to bow (4 tacks), with the strap end just short of the bow's leading edge.

Run the straps to the back, centered over the mounting holes in the top frame bows. Each strap is attached to the tub rail with two #8 x 5/8" (or 3/4") screws and trim washers. Straps should be equidistant from the center point of the tub rail and run parallel to each other. Don't trim excess strap now - leave this until the end of the job.

Locate and mark position of screw holes in rear rails for attachment of the top to the rail. Screw locations ideally are:

- 1 at center
- 2 to attach each webbing piece
- 3 between center and each webbing piece, equidistant in spacing
- 1 at corner of each side of tub
- 1 between corner screw and front end of tub rail.

Before committing yourself by drilling 1/8" pilot holes, lay top cover over frame and check for fit of securing strip (that's the piece attached to the inside edge of the back of the top). Adjust locations as needed and drill all holes; use a tapered bit for #8 wood screw if you have one.

Mark screw hole locations on the securing strip of the top - these are the same as the holes in the tub rail. At the strap where there are 2 screws, only the inner screw goes through the securing strip; the outer screw stays underneath the strip. The edge of the securing strip should be just below the tub rail to tub seam.

Install Top

Remove the top and punch the center screw hole in the securing strip with a punch or awl. Place top back on frame and insert a screw with washer in this hole to attach to rear rail. Proper placement will put the bottom edge of securing strip just below top edge of body tub where it meets with rear rail. The screws and washers will be properly positioned in the lower third of this strip, visually, from the facing side of material. Working from side to side, pull top taut and install each screw and washer. Where the straps are only the inside screw (of the 2 attaching the strap) goes through the securing strip. As you near corners, it is a good idea to check fit of top at back edge of side curtains. Minimal adjustment of the installed screws can be accomplished without being noticeable. The front corner edge (at the front edge of the tub rail) is held in place by the two Dot Snaps supplied. The screw studs (there is both 1 piece Phillips Head and 2 piece slotted - choose one type to use) are located at the front edge of side rail pieces. It's a good idea to pierce through top with an awl and temporarily install the screw stud through the top to hold it in place, then install the snap later.

Reposition rear bow if necessary to register with seam joining rear curtain and front deck before securing front of top to front bow. The preferred method of "basting" a top in place is to use #4 x 7/16" tacks driven halfway in (12 to 15 will trial-fit a cover to front bow). Center the top on front bow, aligning marks made previously. Pull top forward over front bow, stretch tight and temporarily tack in place. Begin at the center by placing three tacks (or staples if you prefer; staples can be harder to remove). Before proceeding further, check overhang side to side at the front corners, making sure it is uniform. The construction of your top material is such that it has "stretch" to some degree from a side to side pull. Bear this in mind,

MG Midget, Series TC - Installing a Top

as a firm diagonal pull to the outer edge of front bow will change the fit of your top especially the side valance front edge to windscreen space. Place the next two tacks or staples into both deck seams, pulling straight forward on top. The area in-between deck seam and center-line can now be filled in. As you proceed to pull and tack the top, check the fit over side curtains (if in place) and overall appearance of cover. It will probably be necessary to adjust/retighten the center deck area as you finish off ends. A properly installed top will usually have 1-1 1/2" of material trimmed off the front edge when done.

The most difficult area of the top to finish off is the two front outer corners. The drawing on page 4 best illustrates the technique used where a compound curve is encountered on a top, where the side valance falls below the front bow line. A little patience, study of the diagram, and practice folding of the material will enable you to carry out the fit of this area. To set corner in place, grasp side valance with your whole hand just behind front bow and pull firmly forward. With other hand, "swing" material up and temporarily tack in place at binding line, set over the rest of top material. At this point, go back to center and retighten or adjust any looseness in the top cover. Work top to each side, stopping just past deck seams. Any wrinkles created by pulling the corners tight may be worked out in this process.

To final fit both corners, each side will need to have the temporary tack removed and a "V" cut will be taken out of corner to remove excess material. Swing material back up, this time underneath the front edge of top, securing at inner end right on binding edge. Finish off end by overlapping with the remaining 4" or so of material outward of deck seam. If a little pucker appears at outward corner, it can be worked down with an awl and will be covered by the Hidem strip.

Trim off all excess material just above bottom edge of front rail, providing you are satisfied with overall fit of the top cover.

The Hidem strip goes on next. Start at one side of car, with the placement of the end 1" in front of back edge of front bow. If you are using the Hidem End Caps, trim this edge to fit into the cap before attaching it to the bow. Attach strip with a tack or staple and stretch tight to opposite side of car, placing a couple tacks/staples to hold at this end.

Going back to first side, fill in all the way across front of car, placing bottom edge of Hidem even with the bottom edge of front bow (see Figure #3). The pointed ends of Hidem Tips should terminate about 1/2" in front of back edge of front rail. Pre-drilling the nail hole for Hidem Tip with a drill bit will ensure that splitting the front rail is not a concern. The ends of the hidem may need to be trimmed at an angle to fit within the end cap.

Install both Dot Snaps at back corners of the tub rail. Make sure bows are in proper position before final positioning of the snaps. It's best to have the rear side curtains in place when committing to exact snap location.

There may now be slack in the top straps from. If so, remove the two screws at rail and pull straps taut. Repunch and secure each strap one at a time for proper support of rear half of top and rear curtain, trim off excess tail of strap even with bottom edge to finish.

The final step is installation of the 4 machine screws in the rear bows. On the rear bow, screws go through the top, strap, and bow. The middle bow screw goes through the bow and webbing only (underneath the protective strip) If your strap is fabric, see the note below. This middle bow screw is optional - some people omit it.

An awl will assist in putting a hole through top strap and top cover. This hole, by the way, is drilled at quite an angle, which can be deceiving. To prevent tear-out, this screw MUST go through seam allowance material just to the inside of the intersection of the sewn seams here. Before committing yourself to punching these two holes, a pair of screws pushed up from backside of top material will tell you if the locations are equal distance of the side seams running front to back where the top deck joins the side valances. The top may be pulled slightly from side to side to adjust if necessary. When satisfied with the positioning, punch holes and install screws.

If your top bow strap is fabric, when you install the machine screws into the middle bow, make a small slot centered and parallel to the sides on the underside just behind the bow. Use this slot to insert the screw and trim washer into the bottom layer of the strap fabric and through the bow. This way the top layer of the strap fabric will protect the top from abrasion from the screw head.

Now you're done!

MG Midget, Series TC - Installing a Top

Windscreen Post grommet from
Moss Motors part 406-920



Original late TC hood fastened to rear bow.