

# Sound & Heat Insulation Installation Instructions

### Suitable for all cars, but with car-specific templates and instructions for 1955-1962 Triumph TR3/TR3A (page 2) & 1962-1980 MG MGB (page 13)

PART # 409-013

**Note:** This kit includes enough Hushmat to cover the footwell, floor and transmission tunnel areas of most vehicles, as this is where the most noise and heat are coming from. If you would like to also cover the footwell side, the underseat area, the rearward transmission tunnel area, the rear seat/shelf/sides areas, you will need to order at least one additional 409-013 kit.



# Sound & Heat Insulation Installation Instructions For 1955-1962 Triumph TR3/TR3A

PART # 409-013

Tools required: A pair of scissors, black permanent ink marker, tape, spray contact adhesive (for carpet), sharp knife or boxcutter, a long straight edge or ruler, a phillips head screwdriver, a 7/16 inch combination wrench or ratcheting combination wrench (Gearwrench).

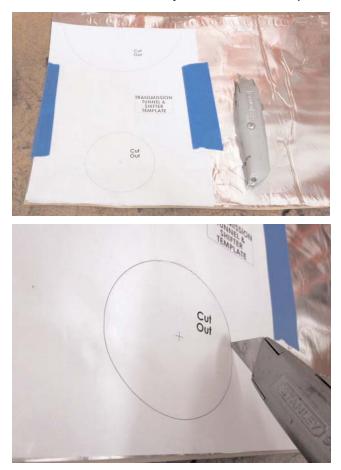
Note: This kit adds Hushmat to the footwell floor and transmission cover areas of the vehicle, as this is where the most noise and heat are coming from. If you would like to also cover the footwell side, the underseat area, the rearward transmission tunnel area, the rear seat/shelf/sides areas, you will need an additional 409-013 kit. This will cut down on noise and heat even more, but will also require more of the interior to be removed and replaced.



Preparation:1. Remove the two template page at the end

of these instructions. Use the pair of scissors to cut out the two areas mared "Cut Out".

**2.** Lay one sheet of insulating material on a table with the foil side facing upwards. There should be a non-stick wax paper mateiral on the bottom of the insulating materials to keep the material from sticking to the worktable. Tape the template to the insulating material. Then use the sharp knife or boxcutter to cut out the two areas that you cut out in Step 1.





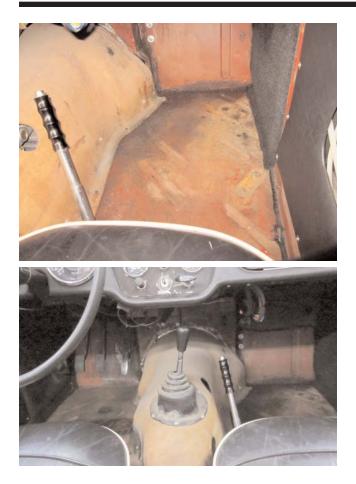
**3.** Lay another rectangular sheet of insulating material on the worktable. Cut the material in down the middle so that it is now shaped like **two squares**.

#### **Interior Removal:**

**4.** The seats **do not** need to be removed to install the Hushmat in the footwell and transmission cover area. However, it does make access to the area easier. If you choose to remove the seats, you will first need to slide the seat backward to expose the front seat slider bolts. Then remove the seat cushions. Use a 7/16" combination wrench to loosen and remove the eight (8) nuts/bolts that hold the seats to the front seat sliders. Then loosen and remove the six (6) nuts/bolts that hold the seat sliders to the floor. Remove the seat bottoms & seat rails. Save the hardware for later reuse.



**5.** Remove the footwell rubber floor mats and footwell carpet. The carpet at the far right and left sides of the footwell will not be removed. Also remove the carpet covering the transmission cover. Note that there may be retaining snaps securing the footwell carpets. These will have to be carefully unsnapped so as not to tear the snaps out of the carpet.



**6.** On our car, we removed the transmission cover from the vehicle and applied Hushmat to it. However, removing the transmission cover is unnecessary and the Hushmat can be applied with the cover still installed in the vehicle. This is the preferred method because the transmission cover is sealed to the floor which makes it difficult to remove.

#### **Sheet Installation:**

7. PLEASE IGNORE THE HUSHMAT THAT HAS BEEN APPLIED TO THE TRANSMISSION TUNNEL COVER IN THE FOLLOWING PHOTOS. THE PREFERRED METHOD OF INSTALLATION IS TO APPLY HUSHMAT TO THE FLOOR FIRST AND THEN TO THE TRANSMISSION COVER.

**8.** Obtain a full sheet of insulating material. **Leaving the wax paper in place,** set the sheet in the right side footwell with the forward edge at the line where the floorboard and the toeboard meet. The long length of <sup>409-013</sup>

the sheet should run from the front right corner back towards the rear of the car.



9. Once the position and fitment of the insulating material is confirmed, remove a few inches of the wax paper backing from the insulating material and apply the material to the floor. Then pull away the rest of the wax paper while pushing down on the insulating material and directing it into the nooks, crannies and folds of the floor. Take note of any carpet retaining snaps on the floor that will be covered up by insulating material. Use the black permanent ink marker to circle the locations of those covered carpet retaining snaps once the insulating material has been laid down.



10. Gather the two "almost square" Hushmat sheets that resulted from cutting a insulating material sheet in half back on Step 3. Leaving the wax paper backing place, apply one "almost square" insulating material sheet onto the toeboard just forward of the sheet laid down on the floor in Step 9. This time the long edge will lay from left to right in the vehicle. You may find that there is a wire harness that is in the way at the top of the sheet. If so, use the black permanent marker to mark the location of the wire harness on the left and the right sides of the Hushmat sheet. Take the marked sheet to the workbench and use the box-cutter to cut the sheet shorter so that it fits below the wire harness. You can use a straightedge to connect the marks for a cleaner installation.





**11.** Double check the fitment of the sheet into the vehicle. Remark and recut the sheet if necessary. Then remove the wax paper backing and apply the sheet to the vehicle.



**12.** You will notice that there is a strip of floorboard between the edge of the Hushmat sheet and the transmission tunnel cover. This strip will be covered next. Gather one of the discarded pieces of wax paper backing and the black permanent marker. Lay the

wax paper backing onto the area where the exposed strip of metal is. Use the black marker to draw an outline of the area onto the wax paper. Then take the wax paper over to the workbench. Apply the wax paper to the foil side of a sheet of Hushmat. Use the box cutters to cut the shape of the patch into the Hushmat sheet. Leaving the wax paper backing of the new patch in place, apply it to the area to confirm that there will not be any large gaps between the Hushmat sheet already in place and the new patch. Recut if necessary. Once satisfied with the shape, remove the wax paper backing and apply the patch to the floorboard. The patch panel can be stretched or shrunk a bit while installing, but it is difficult to turn. So, attempt to line up the patch edge with the sheet edge and then spread the sheet against the floor towards the transmission cover. Take note of any carpet retaining snaps or bolts on the floor that will be covered up by insulating material. Use the black permanent ink marker to circle the locations of those covered carpet retaining snaps and bolts once the insulating material has been laid down. Also mark the rear edge of the patch for the emergency brake hole.







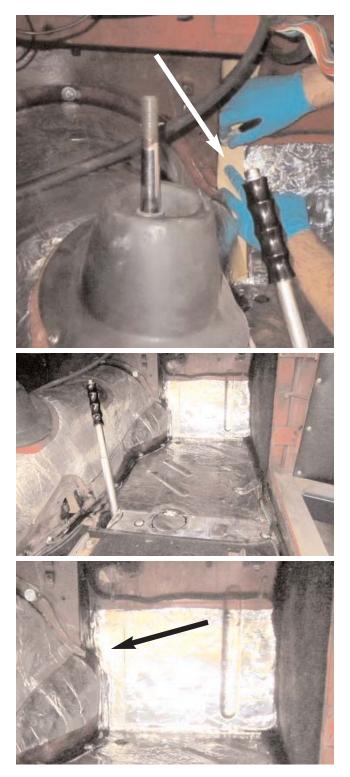
**13.** Now cover the area between the front of the seats and the sheets of Hushmat already applied to the floorboard area. Use the wax paper and the black permanent marker to draw an outline of the area onto the wax paper, cut it out, check the fitment, recut if necessary and install the sheet without the backing. Then use the black permanent marker to mark out the edge of the emergency brake handle hole, the two carpet snaps and the body drain plug hole.



409-013

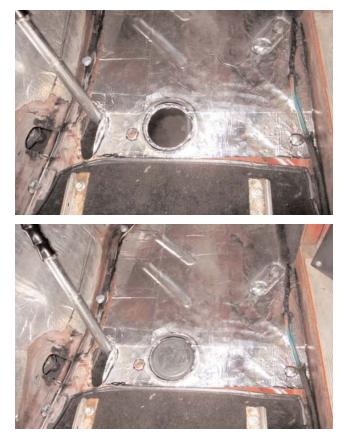


14. There is a strip on the toeboard just forward of the strip applied in **Step 12**. Use another piece of wax paper and the black permanent marker to draw an outline of the area onto the wax paper. Then apply the wax paper to the foil side of a sheet of Hushmat and use the box cutters to cut the shape of the patch into the Hushmat sheet. Leaving the wax paper backing of the new patch in place, apply it to the area to check for any large gaps between the Hushmat sheet already in place and the new patch. Recut if necessary. Once satisfied with the shape, remove the wax paper backing and apply the patch to the floorboard.



**15.** Now is the time to cut the excess Hushmat material covering the body drain plugs just in front of the seats. You will need to cut a circle out of the Hushmat sheet so that the body drain plug can fit into the original hole against the metal rather than

against the Hushmat. You will want to trim just a bit larger than the plug, try fitting the plug and then trim a bit more if necessary.



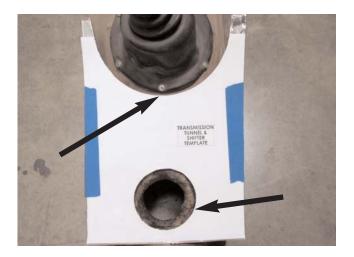
**16.** Now trim the Hushmat to the edge of the emergency brake handle hole. Then trim the Hushmat covering all of the carpet snaps that were marked out earlier using the black permanent marker.





17. Remember, the transmission tunnel does not need to be removed to install the Hushmat. Gather the Transmission Tunnel & Shifter Template shaped piece of Hushmat that you cut out in **Step 2**. Leaving the wax paper backing in place, fit the template against the transmission tunnel cover. The template should be placed to allow the rubber plug to be installed without interference from the Hushmat and without interfering with the transmission shift boot. Once satisfied with the orientation of the template, peel the backing off of the template and apply it to the transmission tunnel.





**18.** Use the remaining Hushmat material to cover the rest of the transmission tunnel cover. The shape is irregular, so it will often require the use of smaller pieces rather than attempting to cover large areas with full sheets of Hushmat. Remember to leave room for the emergency brake handle grommet, any rubber plugs and the many bolts that hold the transmission tunnel cover to the floor.



**19.** Reinstall all grommets and plugs. Then reinstall the floorboard / footwell carpets.

**20.** If you removed the seats and seat rails, then reinstall the seats.

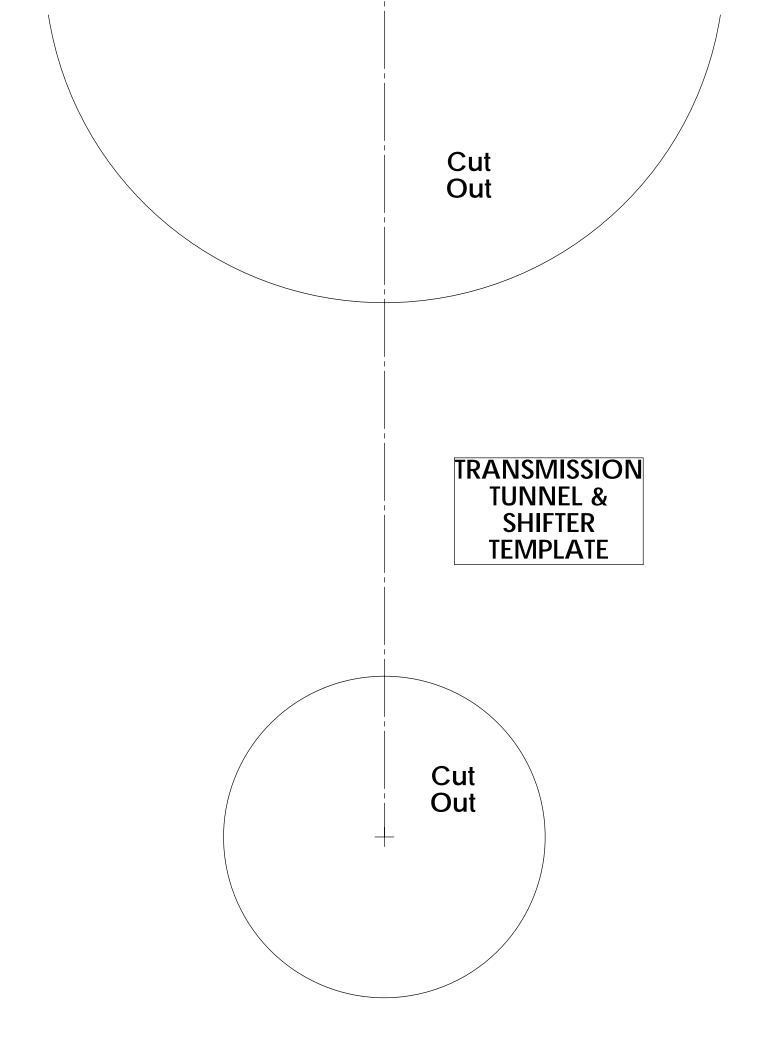
**21.** Enjoy your quieter & cooler TR3! Please visit Moss Motors for all of the TR3 restoration and performance needs!





Addtl. Hushmat kits allow more coverage.







# Sound & Heat Insulation Installation Instructions For 1962-1980 MG MGB

Tools required: A pair of scissors, black permanent ink marker, tape, spray contact adhesive (for carpet), sharp knife or boxcutter, a long straight edge or ruler, a phillips head screwdriver, a 1/2 inch combination wrench or ratcheting combination wrench (Gearwrench).

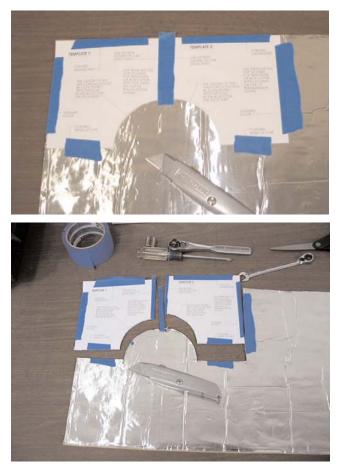


Preparation:

**1.** Remove the two template pages that make up the last two pages of these instructions. Use the pair of scissors to cut out "Template 1" and "Template 2".

**2.** Lay one sheet of insulating material on a table with the foil side facing upwards. There should be a non-stick wax paper mateiral on the bottom of the insulating materials to keep the material from sticking to the worktable. Tape "Template 1" and "Template 2" to the insulating material. Then use the sharp knife

or boxcutter to cut out the shape of the two templates.



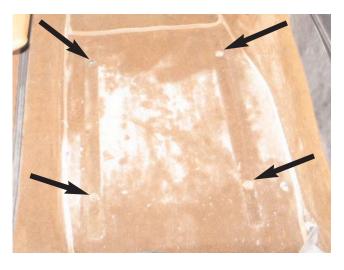
**3.** Lay another rectangular sheet of insulating material on the worktable. Cut the material in down the middle so that it is now shaped like **two squares**.

Interior Removal:

**4.** Slide the seats rearward. Use the 1/2 inch combination wrench (or the ratcheting combination wrench) to remove the two bolts under the front of each seat. Slide the seats forward. Remove the two bolts under the rear of each seat. Then remove the seats. Be sure to save any metal or plastic rail the seat was sitting on, as well as any metal washers under the seat bolts or spacers that were under the seat rails. They will be reused.







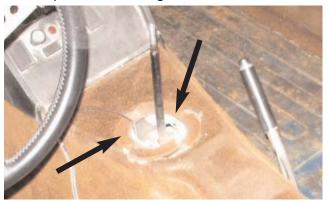
**5.** Remove the under seat carpets, the footwell floor carpets and the two toeboard carpets. Note that there may be retaining snaps securing the footwell carpets.



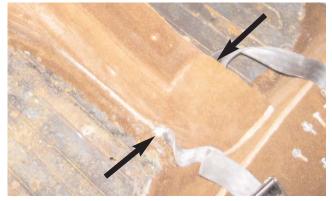
6. Remove the shift knob by loosening the locknut under the handle, unscrewing the handle and unscrewing the locknut. Remove the 4 large screws holding down the front of the center console rear section and lift the the inner and outer shift boots and the chrome shifter surround. Remove the retaining screw inside of the flip up armrest. Then remove the rear section of the center console.



**7.** Remove the fiber spacer that is on top of the carpet surrounding the shift lever.

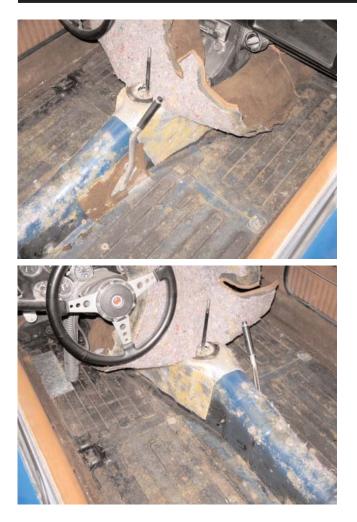


**8.** Remove the two seat belt retaining bolts that are bolted to the transmission tunnel next to where the seats used to be.



**9.** Pull up the carpet covering the top and sides of the center console area up to where the rear of the center console was separated from the front. The shift lever will keep the carpet from being pulled farther forward. Then pull up the carpet on the sides of the center console in the footwell area. There may be a factory aluminum heat shield in this area. If so, leave it in place. There is a separate piece of carpet behind the emergency brake. This should also be left in place.





**10.** Pull up just the edge of the carpet that touches the floor on both the left and right side square frame rail at the far left and right sides of the passenger compartment. The sound deadening mat will go **UNDER** the carpet here when installed.

Sheet Installation:

**11.** Use a vacuum cleaner to clean all the dirt, dust and bits of carpet that are left on the floor and toeboard. This will help the sound deadening material to stick to the floor better. Then take note of the locations of the floorboard carpet retaining snaps, toeboard carpet retaining snaps and the mounting holes for the seats.

**12.** Obtain a full sheet of insulating material, leaving the wax paper backing in place. Set the sheet in the left side footwell with the

forward edge at the line where the floorboard and the toeboard meet. The wide length of the sheet should run from the square body framerail on the left to the center transmission tunnel and then up the side of it.



13. Once the position and fitment of the insulating material is confirmed, remove a few inches of the wax paper backing from the insulating material, apply the material to the floor and then pull away the rest of the wax paper while pushing down on the insulating material and directing it into the nooks, crannies and folds of the floor. Run the insulating material under the carpet at the square frame rail, across the floor and up the transmission tunnel (under the center console carpet). If there is a factory aluminum heat shield there, run the insulating material over the heat shield but under the carpet. Take note of any carpet retaining snaps on the floor that will be covered up by insulating material. Use the black permanent ink marker to circle the locations of those covered carpet retaining snaps once the insulating material has been laid down.



14. Using the same steps, test fit and then install one insulating material sheet just behind the first sheet. Note that because of the changing shape of the transmission tunnel, there will be a gap between the sheets as they rise up the transmission tunnel. That gap will be filled in later. Repeat for both sides of the vehicle. Take note of any carpet retaining snaps on the floor that will be covered up by insulating material. Use the black permanent ink marker to circle the locations of those covered carpet retaining snaps once the insulating material has been laid down.

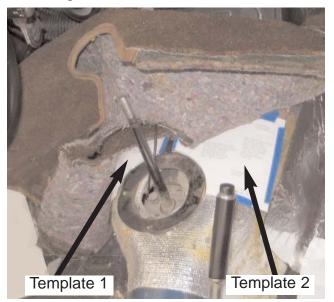


**15.** Gather the two "almost square" sheets that resulted from cutting a insulating material sheet in half back on **Step 3**. Apply one "almost square" insulating material sheet onto the toeboard on each side of the vehicle. Again, take note of any carpet retaining snaps on the floor that will be

covered up by insulating material. Use the black permanent ink marker to draw a circle around the locations of those covered carpet retaining snaps once the insulating material has been laid down.



**16.** Gather Template 1 & Template 2. They are marked on top with arrows and lines that show the proper orientation that they should go in around the stick-shift area on top of the transmission tunnel. Peel the backing off of the template, lift up the carpet as far as it will go and install the templates on top of the transmission tunnel and any factory heat shielding that may already be there. Then remove the tape and paper off of the templates so that all that is left is the insulating material itself.



### **MGB Sound & Heat Insulation Instructions**

**17.** Gather the black magic marker, one of the wax paper backings from the already installed insulating material and the insulating material sheet that Template 1 and Template 2 were cut out of. Look for gaps between the full-size insulating material sheets already laid on the car floor. Use the black permanent marker on the non-waxy side of the wax paper backing to mark the shape of the gaps. Then cut that shape out of the insulating material sheet 2. Then apply that newly cut shape to the gaps.





### **MGB Sound & Heat Insulation Instructions**

**18.** Use the box cutter (razor blade with handle) to cut the insulating material that is covering the carpet snaps. The locations were marked out with black permanent marker back on Step 15. Remember, you will need to remove the material above the snap, as well as another 1/2 inch beyond the edge of the snap so that the carpet side of the snap can properly attach to the floor side of the snap. Depending on model, there may be snaps on the floor and on the toeboard.







19. Confirm that the edge of the insulating material is UNDER THE CARPET both on the transmission tunnel side and at the side nearest the door. If it is not, pull up the insulating material, pull up the carpet, lay the insulating material down and lay the carpet on top. This is important, because it will allow the carpet contact adhesive to hold the sides of the floormats in place, keeping them from moving around or slipping out from under your feet when stepping into the vehicle.



**20.** Spray the carpet contact adhesive onto the top of the transmission center console in between where the seats mount. Then lay the carpet down and press into place.

**21.** Bolt the two centermost seatbelts back into place.

**22.** Reinstall the under seat, footwell and toeboard carpets. Spray carpet contact adhesive along the edges of the carpet where the floorboard carpets will overlap the center console carpet and the strip of carpet that runs next to the door and kickpanel.

**23.** Reinstall the center console. Apply the factory fiberboard gasket at the stickshift. Lay the center console on top. Reinstall the four screws that hold the shifter boots and chrome trim in place. Then reinstall the screw that goes under the center armrest.

**24.** Reinstall the seats. Include any washers or plastic strips that were removed during the seat removal. Installing the seats requires that the seats be slid foward to reach the rear bolts and that the seats be slid rearward to reach the front bolts.

23. Enjoy your quieter & cooler MGB!

