

## **Carpet Installation in a BT7**

### **By Rich Chrysler**

Hi listers,

I mentioned the other day that I'd be willing to outline the steps usually taken to install carpets in the first fellow's situation, which was a BT7.

What resulted was a deluge of requests to set it up complete with detailed pictures on a web site that a number of fellows graciously volunteered to supply. Whew! Thanks to all for the kind offers.

A lot of folks mentioned the Moss video, and it of course is geared to their products of that time, complete with foam backed cut pile bound nylon stuff!

Yuck!

I do not currently have a BT7 here to photograph, nor do I have the time or inclination to travel somewhere else to do this right now. Anyway, I'll try to outline the steps I usually take to install a quality carpet set such as the one Heritage Trim and Interiors is currently supplying for a BT7:

#### **Preparation:**

1. To begin the area must be completely clean and well painted in the main colour of the car. All old remains of carpets, under lays and felt paper should be removed or at least carefully inspected for rot or deterioration.
2. The front "kick" panels must be removed. Take out the trim screws with their cup washers to accomplish this.
3. The inner and outer horizontal alloy threshold plates must be removed, along with the old door threshold seal. These are held in place with small posi-drive pan head screws. These screws will likely need to be replaced, as they really suffer over the years, and some may simply twist off when you try to remove them.
4. The rear quarter panels must be removed. This is accomplished by removing the vertical door shut pillar alloy plates, which will expose the slotted wood screws that screw inboard into the wood quarter panel leading edge block. With this block released, remove the two acorn nuts and washers from the rear wheel arch seat belt mounts. There are also self-tapping sheet metal screws holding the top "plateau" of the quarter panel to the wheel arch. This should release the quarter panel which has its rear edge fitted into the bracket which locates the lift out rear tonneau panel.

5. The aforementioned tonneau panel brackets must be removed, undoing the screws and nuts that locate it through the rear wheel arch.
6. The gearbox tunnel, and the forward bulkhead panel (if it's a side shift model) must be removed from the car.
7. The rear occasional seat pans must be removed from the car. These are fastened into position with 4 self-tapping trim screws and cup washers passing through each pan and into the surrounding metal. This is also a good time to inspect and renew the sealing rubbers around these openings if necessary
8. The dipswitch assembly complete with mounting bracket must be removed from the driver's side toe board. This can be left suspended from its cable for now, or can be hung from the pedals to aid in keeping it out of the way while installing the carpets.

### **Carpet felts and under lays:**

1. On all the flat floor sections a layer of black felt paper (30 lb. tarpaper) is laminated to the painted steel floors. The felt paper is overlaid with a 1/4" thick layer of jute that has a black upper surface similar to body undercoating material. A coarse square weave is visible in the black coating. The male carpet snaps are positioned and their centre hold down screw passes through the jute and the tarpaper, anchoring all into place.
2. On the toe board portions of the foot wells (and the vertical gearbox panel on side shift models) the jute underlay is glued directly to the painted metal.
3. While paying attention to the vertical gearbox panel on the side shift model, make sure the black rubber draught excluder piece is riveted into position on this panel with flat split rivets. This is an inverted "U" shaped piece of rubber, not unlike inner tube rubber, which is so shaped to drape around the gearbox and therefore cut down most of the hot air flow from passing back into the gearbox and drive shaft tunnel area.
4. On the gearbox cover of the BT7, the jute is glued to the underside of the carpet with the black surface facing down. The female portion of the ring type carpet snaps pass through carpet and underlay to be held in position on the tunnel by the snaps. You should be able to locate the original male snaps (or the screw holes) on the gearbox cover and the tunnel to correctly locate the new snaps.

## Carpet installation:

1. The first pieces to be installed are the left and right inner sill covers. These run from the rear edge of the inner sill forward onto the toe board area. When laid out flat for preliminary inspection it will be found that the carpet is cut with a slight curve taking it wider for the front few inches. This angled carpet will be applied to the outboard side of the sill so its edge will be nicely hidden by the bottom edge of the front hardboard kick panel. There will need to be a small dart cut out of the front corners of this sill carpet so the ends can lie flat on the angled toe board, and the sill carpet can be glued to the top of the sill and follow down the inboard vertical surface, leaving the inboard edge of carpet making a tight 90 degree bend onto the flat floor. This sill carpet must be trial fitted before any glue is applied to ensure there will be a good fit all along from front to back. At the very back, the sill carpet should have darts cut to allow the end to tab and glue to the wheel arch and the rear vertical panel.
2. Apply a fresh and good quality contact cement to the sill carpet and to the entire top surface and inboard vertical surface of the inner sill.  
(Note: Some folks choose a spray on trim glue, but so far I prefer using Lepages Premium Contact Cement, applied with a brush. Allow plenty of fresh air where you are working.)
3. Apply glue also to the areas where the ends will tab onto at the front and the back. Let the glue set up for a good 15 minutes then carefully work the carpet into place beginning with the outer edge of the sill top, making sure it fits right to this outer edge. Keep in mind that the alloy threshold plate will be fitting tightly to and covering this edge.
4. Work slowly and carefully to ensure a good fit, pressing and smoothing the carpet as you go. I use my thumb in a teaspoon as a handy means of getting carpet and vinyl smoothed into corners and along inner edges.
5. The toe board to inner gearbox sidewall carpets go in next. Examine these carefully. The ones we got from Heritage have fine white chalk lines indicating where they need to have darts cut to allow the carpets to bend through the inside 90 degree curve from toe board to side wall. Trial fit these carpet pieces carefully while dry, ensuring they fit well with their outboard bottom edge squared cutout aligned and fitted to the inner sill and the dart fitting exactly into the inner corner. When happy with the fit, apply glue to the toe board surface only. Fit and press this area into place before carrying on with gluing the inner vertical sidewall. On the side shift models, this vertical carpet should extend right to the edge of the metal. Later, when the "U" shaped bulkhead piece is fitted, a carpet to carpet seal will result.

6. The next pieces to be fitted will be the large carpet section that fits around the rear seats and the one that extends down the vertical heel board panel. Originally these pieces were separate, though often the suppliers of carpet today will make this all one piece. I'll describe them as per original; separate pieces.
7. Again fit these sections dry, taking note of any edges or corners that do not want to fit smoothly, cutting small darts out if required to rectify any awkward areas. On the outboard edges the carpet surrounding the seat openings will edge up slightly onto the rear wheel arch. On the outboard edges of the vertical heel board, a slotted bracket holds the rear quarter trim panel in place. The carpet must butt right up to this bracket. At the bottom of the heel board panel, the carpet must bend and extend slightly onto the flat floor section. The inverted "U" shaped area of the heel board carpet must also be turned and fitted slightly onto the drive shaft tunnel. This will give the look of continuity when the floor and tunnel carpets are installed. Also be sure to have the carpet fit evenly around the openings of the rear occasional seats, leaving about " perimeter of bare painted metal around these openings.
8. Lastly, make sure to trim a clean 90-degree cutout where this heel board carpet will meet the carpet at the back end of the inner sill.
9. When you are sure this all fits well, apply glue to one half of the carpet and the car at a time and proceed to install, as before, smoothing and ensuring there are no wrinkles. The two sections of carpet must butt smoothly to each other forming a continuous looking piece of carpet. Usually these butted joints won't actually be seen, with the seat pans overlapping enough that only a bit in the middle, between the pans may show.
10. There will be three small carpet pieces that will be fitted and glued into the rear corners of the cockpit area behind where the lift out tonneau panel fits. One will fit into the acute angled corner on the left side of the car, butting up to the back edge of the rear wheel arch, and leaving a vertical edge on the rear sloped panel (where the top folds and stows). The second one will fit on the opposite side of the car, fitting similarly, and leaving a vertical edge. The third has three ears all going opposite directions. This will tuck into the rear right corner, wrapping somewhat around the sheet metal surrounding the fuel filler neck. It sounds confusing here, but when sorting out the three pieces and their locations, all will become apparent.
11. On the side shift models, the gearbox forward bulkhead panel should be trimmed and fitted next. This will have the aforementioned jute layer glued directly to the panel, and the carpet should be glued only to the outer perimeters on the backside only. This will result in the completion of the carpet-to-carpet seal we spoke of earlier. This panel will be fastened to the aperture with self-tapping trim screws and cup washers, 3 down each side.

12. The tunnel carpet can be installed next. First ensure that the tunnel has a good fit to the floor and the forward bulkhead, with good seals and the rectangular rubber inspection and filler aperture plugs are in good condition and fit well to the tunnel.
13. Next make sure that interior trim colour vinyl is fitted around the hand brake lever mounting area. This vinyl is simply contact cemented to the tunnel metal in the immediate area of the hand brake mounting screws. It should extend about 4 inches or so in every direction away from the mounting screws.
14. The tunnel carpet when fitted will be cut away and bound in this area, exposing this vinyl trim and allowing the lever and ratchet assembly to operate freely.
15. If the car is a side shift model there should be a strip of interior coloured vinyl glued along the front lip of the tunnel, extending back away from the lip about 1 =". When fitted, the tunnel carpet's leading edge will stop at this upturned lip, leaving the vinyl-trimmed lip exposed. The flat flanges of the cover that screw to the floor should also be trimmed in vinyl.
16. Also to be noted on the side shift gearbox models you should fit the rubber gear lever boot to the cup surrounding the base of the gear lever. The rest of the boot should form a cup with only the upper most lip of rubber fitting to the metal cover.
17. With the tunnel panel screwed into the floor with 4 sheet metal screws and washers down each side, make sure the shift lever aperture is well centered on the base of the lever, and not fighting the rubber shift boot.  
  
Note that there are 4 male carpet snaps fitted down each side of the tunnel. If they are not still there, you should be able to locate the original mounting holes and mount new ones. They should be about 2 inches or so up from the bottom flange.
18. When satisfied that all is fitting well, fit the tunnel carpet into place, butting the leading edge as mentioned to the forward tunnel lip, and making sure the carpet material is equally fitted down each side of the tunnel and drive shaft tunnel. Pull the carpet evenly out and down to get a smooth fit. Ensure that the trimmed ring of vinyl binding fits centrally around the gear lever aperture.
19. Locate the bump of the male carpet studs beneath the carpet and mark the exact location on the outer surface with a piece of white chalk. Install the round ring of the carpet snaps (provided) with the 3 piercing tabs through the carpet and carefully fit and crimp the tabs over onto the female portion of the snap on the underside of the carpet. Fit these snaps one at a time and check each one for carpet position and fit. If you locate one a bit off, simply uncrimp the tabs and reposition the snap assembly.
20. Usually there is extra width of carpet allowed here, and any extra beyond an inch or so can be trimmed away with a sharp knife later. I use an Xacto knife with a fresh

blade for this. You want to be able to make a clean precise cut with no ragged edges or straggling threads remaining.

21. Now, with the white chalk, mark the absolute centre of the drive shaft tunnel. This will be used to locate where the armrest will be sewn on. Remove the tunnel carpet, and cut a slot down the centre of the line, and two "Y" shaped cuts, one at each end, so the flaps formed by the cuts can be opened up to gain inner access to sew the armrest into place.
22. The recess for the ashtray must be located and the carpet carefully cut out using the Xacto knife. The chromed ashtray assembly is located and screwed into place using two #6 flat head Phillips self-tapping screws passing through the bottom and into the tunnel.
23. The rear floor carpets can be located next. Note that there are clearly left and right side pieces, determined by the spacing of the carpet vs. seat track slots, the slight chamfer on the outboard rear corner, and the chamfer on the inboard front corner to clear the gearbox tunnel.
24. Temporarily fit the carpet piece into place and make sure there is no interference in the fit of the outer perimeters to other carpet sections, and the slotted sections which should be able to clear the seat slides. Each rear floor carpet piece will be located and held in place using two carpet snaps as described previously. These two snaps are located toward the rear of the carpet about 3" in from the outer edges and from the rear edge. Again as with the tunnel carpets, the male snaps will be felt through the carpet, the chalk mark is made and the ring tabs pierce through the carpet. Finally the female portion of the snap is locked in place by bending and crimping the 3 tabs out flat. Test fit and adjust as necessary.
25. The forward floor carpets are now fitted in a similar manner. Note that as of this writing Heritage Trim and Interiors has assured me that they now prefit and install the two front snaps under the sewn in Austin heel mat on the driver's side. The two rear snaps will be about 3" in from the back and outboard edges.
26. The floor carpet pieces are made a bit larger on purpose to allow for the slight differences in tunnel and bulkhead positioning. These carpets must be final trimmed along the inboard edges as necessary to give a smooth and continuous fit where it meets up with the vertical plane of these areas.
27. The parcel tray carpet piece can simply be set into the tray, assuming that the tray has been properly trimmed in the appropriate vinyl. Make sure that the edges all fit smoothly, including the cutout for the windscreen washer bottle.
28. The rear quarter trim panels can now be refitted to the car and fastened in place as previously described. The flat steel plateau that rivets to the panel and is positioned in the car with the self-tapping screws will now be fitted with carpet. Again ensure

the edges fit precisely and butt up to the inner wall of the panel, and that the clearance holes for the hood frame socket are trimmed to fit. It will also be noted that there is a 90-degree notch out of the carpet toward the front edge. This is to clear the little wood block which is trimmed in vinyl and is screwed in place using a self-tapping screw passing through the block's counter bored center hole. This trimmed block will in turn have the polished anodized satin alloy capping piece fitted using 3 pan head countersunk chromed wood screws. This capping piece holds and anchors the rearmost edge of door threshold seal to give the area a completed look.

This will now have all the carpets installed. You can now carry on reinstalling the alloy shut trim plates and threshold plates, both inner and outer, the door seals, the rear tonneau panel brackets, and so on.

Well, I believe that's about it for the BT7 carpet installation. I hope I've been able to describe things well enough to get you through the job.

It really became apparent to me while writing this that each series has its own unique details and steps that must be taken to do the job correctly. I dare say, there's probably a book's worth of details that could be written on trimming out Healeys, with at least a chapter on each series. I am no professional when it comes to trimming these cars, but with the correct materials, colours, quality workmanship of the components, I think a very respectable results can be achieved.

This has not attempted to deal with colours, aftermarket heat insulating tricks, or the subject of fitting armacord boot trim, interior vinyl trimmed panels, etc., let alone seats, tops, tonneau covers and so on.

Maybe some other time...