

**Scope:**

For rear seat removed application, fill out the difference in height forward of cargo hatch door and metal seat bars protruding from the cargo floor with a foam floor mat, and attach a custom carpet liner on top that uses the metal seat bars to hold the carpet in place.

**Materials:**

1. Anti-Fatigue Foam Mat Set (4 pieces, used 2), from Harbor Freight, ~\$10  
Thickness: ½ inches (5/8” would be better to find another source, this pad is low cost)
2. Custom carpet with edge binding, online order, Koeckritz Rugs of Illinois, ~\$55 including shipping. Site is KoeckritzRugs.com

Shape: Rectangle, enter inch measurements and leave foot fields blank.

Size: 39.75 inches wide (This is side to side in the Jeep '20 JL SportS )

37.75 inches long ( This is front to back in no rear seat application )

Carpet: Charcoal Black Indoor Outdoor Soft Area Rug

SKU: Beaulieu-CharcoalBlk-HeavyChoice

Category: Indoor/Outdoor Area Rugs

Received in one week from online orders.

If choosing another carpet style, check height with tailgate door, can order free samples.

Email Ashley at [sales@koeckritzrugs.com](mailto:sales@koeckritzrugs.com) with order number, so she updates the order to use precise measurement in cutting room, otherwise they approximately round to nearest inch thinking it's for a room rug. Tell her she helped Dennis with a Cargo Liner rug and she'll know.

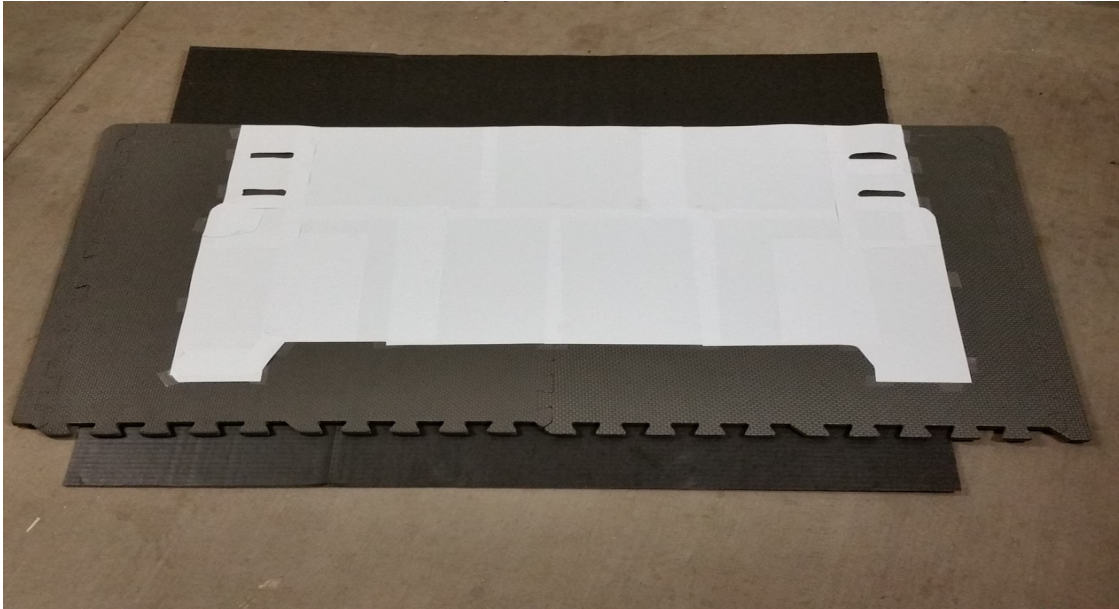
3. Velcro Industrial 4ft by 2in tape, Lowes Hardware, ~\$10
4. Gorilla Super Glue Gel, general sources, ~\$5
5. Remaining to determine: better glue to attach rug to velco, possible carpet glue.

Steps:

1. Lay out and tape together sheets of printer paper or poster board and create a paper template for cutting the foam pad. Tip – faster to cut larger holes around the seat bars and then add strips of paper to tighten template around them. It does not matter how “messy” the template is as long as it provides the right outline for foam cutting.

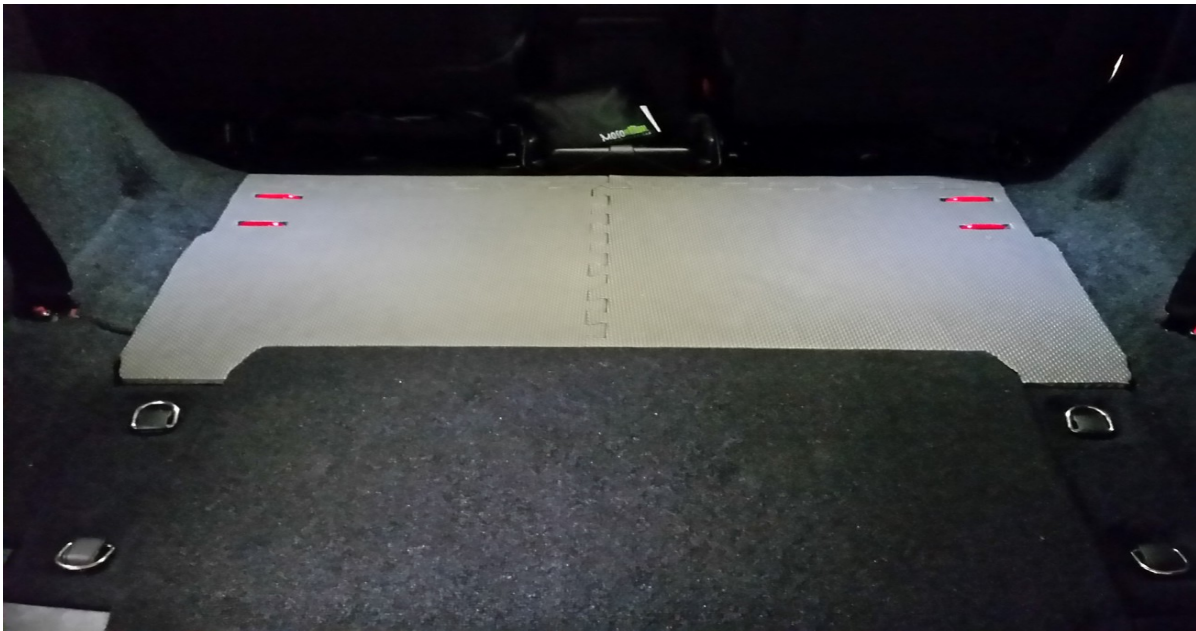


2. Assemble two foam pads with finished edge to be front seat side of cargo area. For this test case , the position was on top of the rounded cargo floor edge with rear seats removed.
3. Center the paper template on the pad and trace with pen, or initially scribe with X-acto. In the example below, the bottom edge was cleaned up with ruler to be straight across.



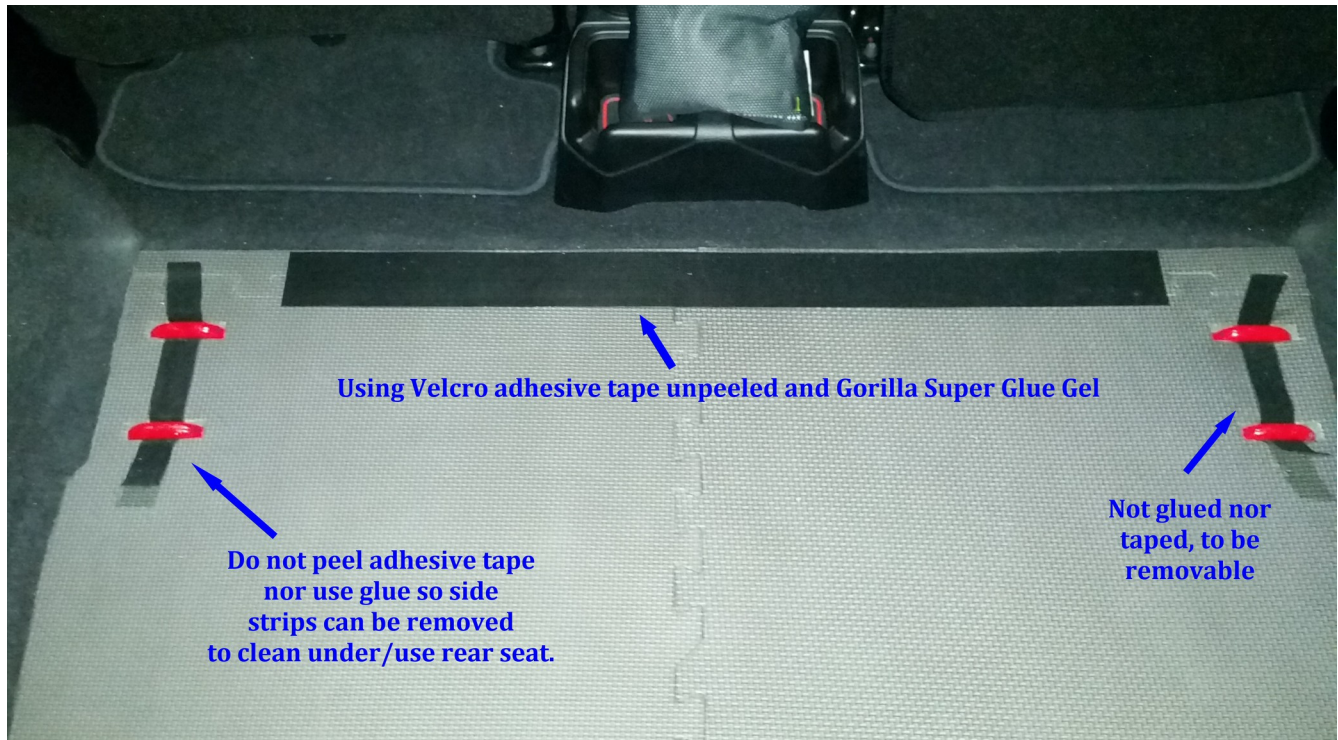
4. Cut out the foam pad with scissors. Cutting down all the way with X-acto is less clean cut. Regular sharp scissors work fine.

5. Test the foam pad in Jeep. Most likely the sides toward the tailgate will need 3/8" trim and rounding as that part of the cargo area ramps upwards. Cut with scissors until pad fits well.



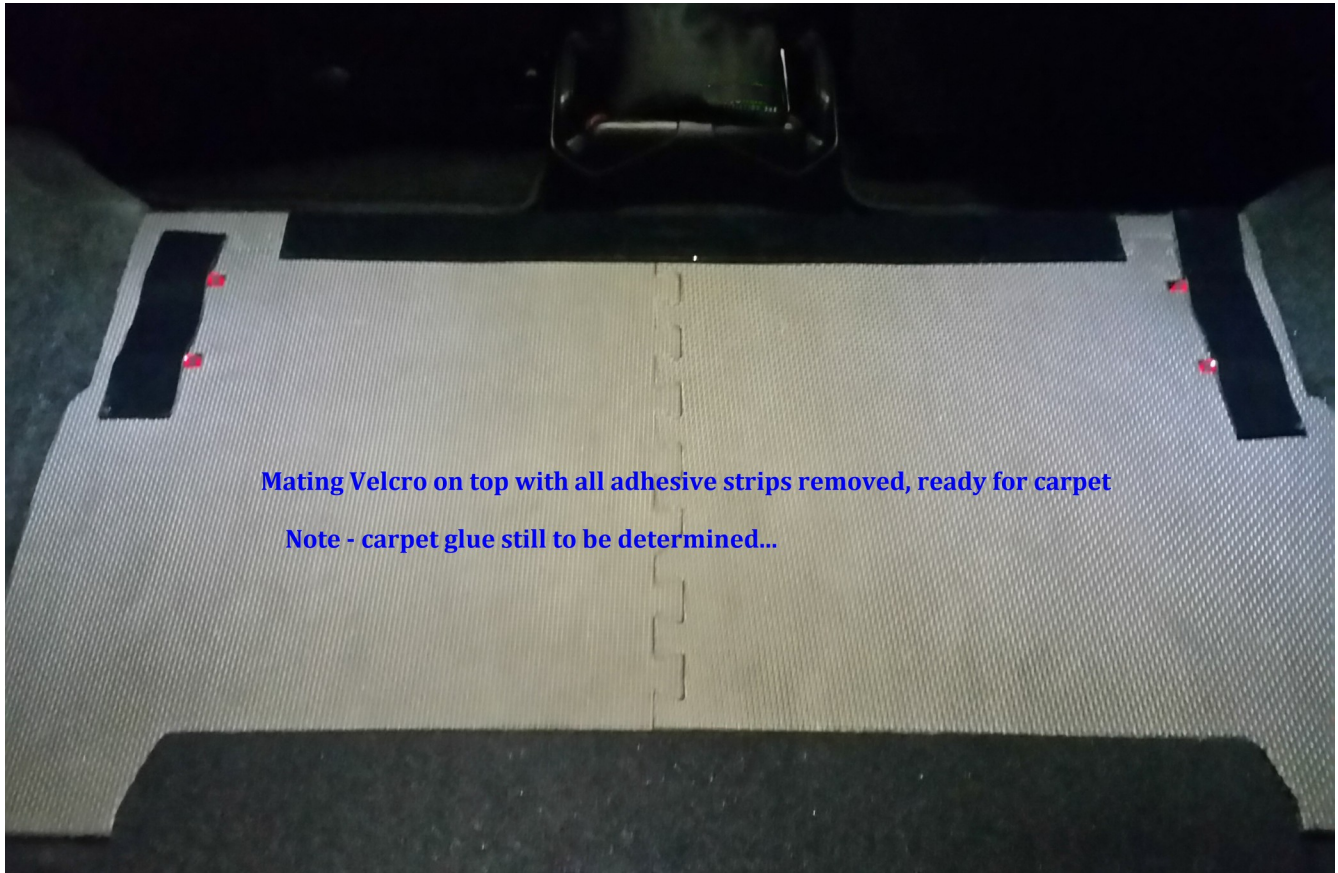
6. Cut a portion of two inch Velcro tape into one inch halves and feed each strip under the metal seat bars and on top of the foam pad. The carpet will Velcro to those strips to hold the carpet onto the bars. Do not remove the adhesive backing nor glue those two strips to the foam pad to have the option of removing the pad to reinstall seat or clean under pad.

7. Add a strip of two inch Velcro along top of the foam pad between the metal seat bars. Velcro tape has adhesive, but can add dots of Gorilla Super Glue Gel spaced inch or so apart. That glue bonds tightly to the foam pad instead of just the surface of the pad, and in three weeks does not show signs of cratering or eating away the foam, thus far. Seems to be enough chemical reaction to bond well.



8. Cut two inch strips of the mating Velcro tape and attach with adhesive side up.

Option – and this is where the project is still in progress. The Velcro adhesive is not very strong on the carpet underside, Gorilla glue does not hold well either. Testing other glues, perhaps a carpet glue, but needs to bond between plastic adhesive tape and fiber carpet.



9. Lay out the carpet just below the velcro strips. Check – the carpet is not square – that the carpet is oriented properly. Curl the carpet slightly in both hands from side edges of carpet, from the rear of Jeep, and mate the front edge of carpet to be near front seats to the front edge of the foam pad, but curled upwards to not touch the Velcro yet, assure the carpet is straight along the pad, and then press down from front to back to fix onto the Velcro. Weight on top of extra foam pad useful while drying overnight.





### Test notes and improvements:

T1. Foam pad of 1/2" thickness is not quite up to cargo hatch door height and metal seat bars are slightly felt under the carpet. Appears a 5/8" common size foam pad can be an improvement.

T2. Riveted snaps could be an option that are removable way to fasten the carpet upper carpet corners to pad, instead of Velcro using better foam, perhaps snap fabric strip around the seat bars. In that case, seek more substantial foam and explore 5/8" thick instead of 1/2" test case.

T3. Gorilla Glue was tested for three weeks in binding velcro strip to foam. Tested Flex glue, Shoe Goo, and Gorilla Super Glue gel, around house. Flex and Shoe goo easily peeled from the foam.

Gorilla gel was well affixed, showing some chemical reaction around the surface of foam, perhaps from curing vapors. After three weeks, the bond was solid with no cratering nor breakdown of foam.

T4. For Velcro attachment, glue of Velcro adhesive to underside of carpet to be determined.

