

Sound Deadener Showdown

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Passenger Compartment Floor, Kick Panels

Vehicle Floors Don't make Themselves Easy to Treat



There's an interior between you and it. Everything has to come out. This is real "knee bone connected to the thigh bone" stuff - there are always a few things that need to come out before you can get to the piece you want to remove.

If you're not familiar with how your vehicle's interior comes apart, this would be a good time to get some help. The shop manual for your vehicle is probably the best tool available. They can be expensive or they may be freely available online. Vehicle specific online forums can be great too. Many have member contributed how-to articles that can

be professional quality.

Before removing a vehicle's interior it can be a good idea to remove the negative battery terminal and wait for 30 minutes or so before proceeding. Some vehicles have complicated reconnection sequences that would be worth knowing beforehand. The danger with working on a powered vehicle is that you may cause electrical damage, might trigger warning lights or, probably worst of all, may blow an airbag.

You'll need to remove everything that touches the carpet. Please be careful. You will be working around pedals, air bags, HVAC ducting and all sorts of other things you need to have functioning as intended.

I can treat a floor and roof in one day - working with an experienced body shop team. Don't expect that you can do it faster than that unless you **know** you can do it faster than that. You can not drive the vehicle when the interior is removed. Please don't start this project on a Sunday afternoon and expect to drive to work on Monday morning.

People often consider not treating the roof to save time and cost. I believe it is one of the most important areas of the vehicle to treat. You won't believe how close you are to the headliner by the time the carpet is removed in most vehicles.

Dealing with Stock Treatments



This is the passenger side front floor board of a 2005 Honda Civic EX sedan less than a month after I bought it. There really is nothing wrong with the vibration damper on the floor. It's actually a few materials, designed to be vibration damper, stiffener and weak sauce barrier in one package. If the factory material is in good shape, I leave it alone.

There is nothing to be gained by applying additional vibration damper over the factory material. We'll add a barrier, but CLD Tiles™ would be completely wasted.

You can also see the stock barrier layer that comes down the firewall, all the way to the foot well. My goal is to butt a layer of CCF up against the stock barrier and then overlap the stock barrier with MLV, as far up the firewall as I can go. This is super critical on the driver's side - make sure you do not interfere with the pedals!

Could Have Done More



This is the floor of a 1995 Honda Del Sol. The stock material had completely lifted away from the center tunnel and was dicey on the floor. Because time was short we cleaned up the mess on the center tunnel, left the stuff on the front floor and added a few tiles to the untreated areas.



The floor always needs less vibration damper than other areas of the vehicle. It has seats, seat belts and trim bolted to it. It's a structural component so is stronger to begin with. Floors are often convoluted and well braced. If that's not enough, there's usually a carpet and the weight of your feet.

If this were my car and a vehicle I planned to keep, I'd have removed all of the asphalt. There have been big improvements made between the 1995 Del Sol and the 2005 Civic.

Adding CCF and MLV



My CCF used to be "natural" color until I gave into peer pressure and started having it made gray because I thought it looked cooler :) I used to have 1/4" CCF cut for the floors but found it to be easier and less expensive to just double up 1/8" in the bottoms of the foot wells. The extra thickness is only needed where the material is subject to compression from the weight of your feet. You want it to not compress to be an effective decoupler. An interesting additional benefit is that by thoroughly decoupling your feet and legs from the

floor of the car, you reduce the perception of noise created by the vibration traveling into and through your skeleton.

More Damaged Stock Material



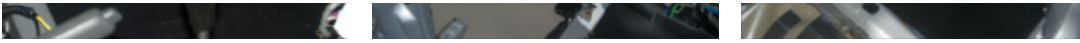
This is from a Pontiac Solstice. I worked on a lot of these cars, both Solstices and Saturn Skys. About half of them had the factory vibration damper separating from the floor. If there's air between the substrate and vibration damper there's no damping going on. We decided to remove the stock material. This was interesting because the owner is a plumber. We used heat and putty knives to remove the factory stuff. I used a heat gun. He used an acetylene

torch.

More yellow CCF.

2005 Honda Civic





Watch for Opportunities



The carpet was up held with a Velcro patch. Used that to hold the MLV with another piece on the MLV to hold the carpet. Use what's there!

Dealing with Heat

For radiant heat concerns that might come from through the firewall, transmission tunnel or areas of the floor near exhaust components, I use radiant barrier foil - the same stuff you'd use to line n attic. The thin reinforced foil, not the bubble wrap or CCF composite.

Integrate the foil into the barrier layers. Since it needs an airspace to be effective, stack the layers: CCF/Foil/MLV where there is just one layer of CCF. On the floor, try to use 2 layers of CCF and put the foil between them.

Estimating Materials

First we need to measure the area. I find it easiest to do it like this:

1. Height and width of the kick panel/front foot well outer sides.
2. Width of the floor (include the sides and top of the center tunnel and the height of each outer sill).
3. Distance from as far up the firewall as you can reach to the front edge of the front seats.
4. Distance from the front edge of the front seats to the front of the base of the platform for the back seat.

Add it all up in square inches. Divide this number by 240 to get the most CLD Tiles™ the area will ever need. You will need fewer than this. In a to the sheet metal restoration I'd shoot for half the calculated number. If I knew the floor was covered at the factory I'd add 2 or 3, "just in case". Otherwise I'd expect to use 1/3 the calculated number of tiles.

Divide the square inches by 144 to get square feet. You'll need that amount of MLV. I like to double up the 1/8" CCF in the foot wells. add that extra area and you'll know how much CCF you'll need.

I'd expect to use a Velcro Strip or three.