QUIETING THE ACURA TSX VIA SOUND DEADING MATERIAL

One of the first thing that I noted when I got my TSX was the road noise, as my first project was to upgrade my stereo system, I knew that first decreasing the ambient noise would make my system sound cleaner and louder, below is summary of the various products on the market along with various pictures I pulled from the boards, (I did not take any of my own install).

*Note: Remember that when you lower the ambient noise of the car, all of the little squeaks will be much more pronounced and very annoying. As an example I can now hear my shoulder belt height adjusters rattling/buzzing on the freeway.

Goal:

- Decrease road, engine, and exhaust noises
- Experience a less stressful and/or fatiguing drive
- Decrease rattles and vibrations
- Increase the resale value of your vehicle.
- Increase SPL (how loud your stereo plays)
- Increase dynamic range of your stereo system

What Dynamat is for: The purpose of Dynamat is to absorb vibrations created by vibrating metals created by the movement of the car at speed.

What it is not for: It is not Sound proofing the car as the .2 inch thick material is not designed to absorb noise in the same way that a 1 inch thick acoustical panel that would actually absorb sound wayes.

Material Quality

Material Quantity: (These are loose numbers as it depends on how much overlapping you do.)	Min SQFT	Max SQFT
Doors:	36	40
Floors (rear seat to firewall)	50	60
Trunk/Rear Deck:	36	40
Rear Seat:	10	12
Headliner:	28	36
Total w/out Headliner	132	160
Total with Headliner	160	188

Material Choice Matrix:

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Material	Thickness	Cost per SQFT	Min SQFT Cost (no headliner)	Weight	Min SQFT Weight (no headliner)
		42.40			4.5.01
B-quiet Brown Bread (Asphalt Based)	60 Mills	\$2.40	\$331.00	0.35 lb/sqft	46.2lbs
B-quiet Extreme (Asphalt Based)	60 Mills	\$2.28	\$314.00	0.35 lb/sqft	46.2lbs
Cascade VB-1 (Liquid Vinyl Based)	Varies	\$2.24	\$309.12	0.32 lb/sqft	44.16lbs
Cascade VB-1x (Liquid Vinyl Based)	Varies	\$3.12	\$430.56	0.26 lb/sqft	35.88lbs
Cascade VB-2 (Vinyl Based)	42 Mills	\$4.50	\$621.00	.43lb/sqft	59.34lbs
Cascade V-Max (Vinyl Based)	60mills	\$5.57	\$768.66	.23/sqft	31.74lbs
eDead eDead v1 (Rubber Based)	45mills	\$1.00	\$138.00	.35/sqft	46.21bs
eDead eDead v1.SE (Rubber Based)	70mills	\$1.50	\$207.00	.50/sqft	69lbs
Dynamat Extreme	77mills	\$5.38	\$742.44	.45/sqft	62.1lbs
Dynamat Original	70 mills	\$3.30	\$455.40	0.68/sqft	93.84.bs

URL'S:

B-quiet Brown Bread (Asphalt Based)	http://www.b-quiet.com/brownbread.html
B-quiet Extreme (Asphalt Based)	http://www.b-quiet.com/ultimate.html
Cascade VB-1 (Liquid Vinyl Based)	http://www.cascadeaudio.com/prod/vb1.html
Cascade VB-1x (Liquid Vinyl Based)	http://www.cascadeaudio.com/prod/vb1x.html
Cascade VB-2 (Vinyl Based)	http://www.cascadeaudio.com/prod/vb2.html

Cascade V-Max (Vinyl Based) http://www.cascadeaudio.com/prod/vbalum.html

Cascade Products Spec's URL: http://www.partsexpress.com/webpage.cfm?WebPage_ID=138

eDead eDead v1 (Rubber Based) http://www.edesignaudio.com/product.php?cid=9&pid=7&tab=Specs&cur=USD eDead eDead v1.SE (Rubber Based) http://www.edesignaudio.com/product.php?cid=10&pid=25&tab=Specs&cur=USD

Dynamat Extreme http://www.dynamat.com/
Dynamat Original http://www.dynamat.com/

Areas to Focus On (Based on my experience)					
	Tires will make the biggest difference as this will lessen overall road				
	noise.				
	Doing all four doors will probably make the biggest audible impact in				
	terms of sound deadening. I used a single sheet over the inter part of the				
	door, I am told that it helps to put it on the inner skin of the door but that				
	would have taken for ever.				
	Double coating the panels behind the rear seat, made a very noticeable				
	difference in sounds coming from the back.				
	Floor/foot wells, also created a noticeable difference.				
	When I did the trunk I first did just the wheel wells, drove a bit and than				
	did the entire trunk. Doing just the wells made a slight difference, but				
	doing the trunk seemed a waist as I noticed no difference, however in the				
	future I will add some 10's so this was done to prevent future rattles.				
	I did not notice any difference from the Rear Deck Lid.				

Headliner (TBD) (I will attempt this in a few months)

Installation Instructions:

Doors (2-3hrs)

- 1. Disconnect the battery.
- 2. Remove the screw from behind the interior door lever.
- 3. Remove the screws from under the rubber cover in the door handle.
- 4. Remove the window controls and unplug it
- 5. Pop the cover off from the bottom up, (little plastic clips in place)
- 6. Carefully release the white clasp that is holding the door handle cable in place.
- 7. There are a variety of methods you could use to actually apply the material, to minimize cutting, and wasted material you could make a template out of cardboard and than cut the material to match. I did this on my accord however with the TSX I chose to put a single 3x2.5 sheet on the door and than make cuts along the path of the wires
- 8. When you apply it to the door cut around the wires, if you cover them you could be in for a challenge down the road if you ever have an electrical problem.
- 9. Don't cover the holes for the white plastic clips that hold the door panel in place.

Trunk: (1-2hrs)

- 1. Remove the Trunk Tray, Spare Tire cover, and Spare Tire.
- 2. Remove the Black Plastic molding on the back wall of the trunk.
- 3. Remove all of the black plastic fasters that are holding the side carpet panels in place.
- 4. Remove the carpet panels; remember there is an extra fastener on each side behind the back seat.
- 5. Remove the crappy insulation on the tire wells, they are held in place by a plastic clip.
- 6. Put some 10penny nails or drywall screws in the holes for the fasteners so you don't cover up the holes and have to dig for them.
- 7. I took a rag with some alcohol and wiped the metal surface first to get the best adhesion.
- 8. Due to the curve of the spare tire well and wheel wells. I found its easiest to cut the material into 1ft squares and cover the vertical section of the spare tire well first, else you will be constantly cutting the material to get around the curves.
- 9. Don't worry to much about overlapping the material or non-uniform pieces as you are never going to see this when you are done.
- 10. I cut a series of 10" by 4" strips so I could do the rear deck lid from the underside. However I would recommend doing this from the top of the deck lid as I found that in severer heat the material will start to peel off of the underside of the deck lid and latterly fall onto the trunk liner or in my case a brand new \$90 white dress shirt that was ruined.
- 11. Once the trunk is done, unzip the carpet from the back of the rear seats and install a 2"x1.5" piece on the back of each seat, I did a double coat here as it had the biggest impact on quieting the ride on the freeway.

Floor: (8-10hrs with two people)

- 1. Disconnect the battery first as you will have to pull the front seats.
- 2. Wait about 20 minutes and pull the 4 seat bolts from each seat, lean the seat back and disconnect the SRS connectors (yellow) and Power Seat wires (black). (You will need some needle nose pliers to pull the clips securing the wires to the underside of the seat.)
- 3. Remove the gas pedal; it can be tricky as it has a special fastener on the floor.
- 4. Remove the plastic center console cover, I simply pulled hard on the cup holder and it popped right out, be careful no to crack it as its flimsy plastic held in place by 6-8 clips

Э.	Unplug the two connectors for the heated seats				
6.	Remove the center console by removing the following screws:				
	☐ One screw on each side at the back of the console.				
	☐ Two 8mm bolts inside the console under the rubber mating.				
	☐ Two screws at the front of the console near the shifter				
	☐ When you pull				

- 7. Rather than removing the gear shifter assembly, I simply cut through the carpet around it as this saved probably 30minutes.
- 8. Remove the plastic covers in the foot wells, I believe there are some clips there but I don't remember.
- 9. Remove the plastic carpet covers along the 4 door jams.
- 10. Remove the rear seat; there is only two clips and a single 10mm bold on the drivers side near the seatbelts.
- 11. The entire carpet should now come out of the car; however it does take two people and some wiggling to get it out the door.
- 12. Dynamat away, it will take quite awhile to do the floor, again don't cover the carpet fastener holes or it will be a pain in the ass to put it back together. The clips are very snug thus if you cover a hole and simply put a screwdriver through it, you wont be able

- to push the clip through without breaking it. Leave a small gap around all carpet clip holes.
- 13. Near the gas cap release leave a 2-3 inch gap around the assembly, if you don't it can be very difficult to get it back together as the tolerances are already quite tight.
- 14. Plan on busting a few carpet clips so order 2-3 new ones ahead of time.
- 15. This is an excellent time to lay upgraded RCA/Power to the trunk regardless if you are read to upgrade your system, as it is nearly impossible to push them under the carpet manually after install. Remember that Power and RCA should not be run together, I would run the power down the drivers side and the RCA's flowing from the rear up the center to the deck. If you are laying speaker wire as well, follow the path of the RCA's but once you reach the rear front seat bolt holes, go diagonally to the passenger foot well. I got this from *elduderino* as you will have electrical noise of you run the speaker wires up the center.
- 16. Don't cover any wires on the floor.
- 17. **DOUBBLE THE FLOOR**, you just spend 8hrs+ dismantling your car, double the floor, it s my biggest regret that I did not do this.
- 18. If you do double the floor, leave a 4" gap along the perimeter else it will be very difficult to reattach the plastic floor moldings as you will now have a ¼ difference in height.

Random Tidbits:

- 1. The doors make the most noticeable difference.
- 2. When I removed the seats/carpet I wish I had doubled the floor but I did not have enough material.
- 3. Remember, while this will lower the ambient noise in the car, individual rattles will be much more pronounced.
- 4. I used 3 different products when I did my car and I would stay away from the B-Quiet Brown Bread as after 6 months it started to peel off of the roof of my trunk. It simply does not adhere as good as other brands. EDead seems to have held up pretty well and is a little thicker than the B-quiet. However it is much cheaper than Dynamat. I did use some Dynamat and I simply don't believe it is worth the price as you can essentially buy twice the amount of other brands over Dynamat.
- 5. Undercoating the entire car will cost a fair amount, you can buy rubberized spray paint and put 6-10 coats in each wheel well.
- 6. Remove all dust and grease with a degreasing style product, such as acetone, paint thinner, denatured alcohol, DuPont Prepsol, etc.
- 7. Cut into pieces that will fit onto the offending panel. Use scissors or an utility knife
- 8. It is more pliable if heated with a hairdryer or heat gun. BEWARE! It gets hot! Heat likely won't be required if installing at or around room temperature.
- 9. For optimum results you can apply a second layer by applying the second layer, you obtain up to three times the deadening effect of that of just one layer.

Install Pictures: Doors Before:



After applying Cascade:











