

On Friday, as I intended, I replaced the engine mounts on my 2005 E 320 CDI with 113 K miles on it. It took me about 6 hours to do it in my garage, without lift or other fancy equipment. I did not remove steering rack, air filter assembly or anything else. It is much easier if you have someone to help you. Less boring, sharing the beer is nice and a second pair of hands and eyes helps.

My very good independent quoted me \$180 for labor. The parts are OEM MB from parts.com for \$260 (shipping included). I also have the official MB service DVD which guided me initially. I am cheap, but I am not that cheap, so I decided to let my mechanic do it. Then I decided to tackle the challenge, just for the sake of it.

Here is a step by step description of what was done, together with PITA code, ranging from 1 to 10 with 1 being the lowest.

1. Lift the car on stands. You will have some work to do under it. Two in the front is mandatory, but four are better and more convenient. Lift it high enough, so you could work relatively comfortably under the car. I did it with two.
2. Remove all 3 soundproof panels under the car.
3. Open the hood and remove the top engine covers.
4. Remove the right (passenger side) front wheel. You will need as much space as possible to work there. Removing the left front wheel is optional. I don't think it makes a difference.
5. Unbolt the two mount bolts from the undercarriage – PITA 2. Wrench size 13 mm, they are easily removed with socket and extension.
6. Lift the engine with your floor jack. Initially you need to lift it no more than 1-1/2 inch. PITA – 5. Good floor jack is necessary in this step. Be careful there! Slide the jack under the front center of the car. Find the imaginable lateral axis below the engine that connects the two engine mounts. That is where the engine is balanced and where you should lift it. The point is about the middle of the oil pan, 2-3 inches ahead of the drain plug. Put 1 or 2 square pieces of wood on the jack to distribute the pressure surface on the oil pan as evenly as possible. Start lifting SLOWLY and CAREFULLY. That is where the second guy comes into play. While one is lifting, the second is watching under the car the process. You must not allow any damage or deformation on the oil pan.
7. Time to remove the rear transmission mount from under the car. PITA – 3. Two bolts 16 mm wrench connect the mount to the transmission. Two bolts 13 mm wrench connect it to the chassis. All of them are easily removed. Slide out the rear transmission mount and install the new one.
8. Unbolt the top bolt of the left engine mount with wrench 16 mm. PITA – 4. This is done from the top of the engine with regular box wrench. Slide the engine mount out. Insert the new engine mount in place and put in place the bolt from the bottom of the chassis. Do not tighten it yet. Later you will need to adjust the mount and insert the top bolt. It is easier to work if you can move a little the mount around.
9. Remove the right mount. PITA – 9. This is the most interesting part where you likely will spend most of your time. MB DVD states that the mount cannot be taken out by itself. You must first detach the right engine support from the crankcase to which the top of the mount is attached

and then unbolt the mount itself. That is correct. There is not enough space there to work comfortably. The top right screw of the console is the worst one. It is almost invisible and inaccessible. The console is bolted to the engine block with four screws external torx 12. I was able to take out the top right screw with long torx socket and ratchet with small head. The other bolts are relatively easy to unscrew from under the car.

10. When the support is detached, you can rotate the entire assembly in such a way that you can easily unscrew the top bolt from the mount. You do not have to take the entire assembly out. You just need to access the top screw to remove it. This is also done from under the car. Slide the freed right mount out, insert the new one, match the notch in the console to the one in the mount and put the top screw back. If you do not have enough gap to remove the old mount, lift the engine a little bit. Do not overdo it. Put the support back in place and tighten the bolts back. It sounds easy but the place is tight, so patience and persistence is important.
11. Lower the engine a little bit and put the bottom screw of the right mount back in place. Do not tighten yet.
12. Lower the engine a little more. Go back to the left mount, match the notch to the mount and put the top bolt. Do not tighten yet.
13. SLOWLY lower the engine. Watch it to go back in place with the mounts properly positioned.
14. When you are sure everything is seated properly, mounts are in place in their notches, without being squeezed or deformed, and the engine is sitting securely and solidly in place, go ahead and tighten securely the bottom and top bolts.

Put all the covers back and you are done.

My old mounts were all fried and cracked. They were about ¼ inch lower than the new mounts and now the engine sits a little bit higher. There are definitely less vibrations and the engine runs smoother than before. If you have questions, please ask. It was well worth the experience but if you are doing it to save money, in my case \$180, it is probably not worth it. If you have to pay dealer prices... well it is up to you.

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Model designation:	Vehicle ident. number:	Engine number:	Unit number:	Gr.:	Entry:	Mod. Y.:	Op. no.:
320 CDI	WDB211026*	648.961					22 4350

R22.10-P-1260T      Removing/installing front engine mounts and/or the engine support      Full-size view      Validity OFF      Page: 2 / 9

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