

ENG-12, Motor Mounts - Replacing



Acrobat Printable Version

Introduction

First, I'd like to thank Ben Davis for providing the pictures for this procedure.

Next, I'd like to point out that you'll likely find during this procedure that it is much easier to remove the old motor mounts than it is to install the new ones. The picture below should explain why (old mount on left, new mount on right).



Tools Needed

- Jack stands
- Floor Jack
- Pry Bar
- Metric Socket set
- Metric Wrench set
- Torque Wrench

Parts and Part Numbers

Parts	Part Numbers
Motor mounts (2)	951 375 042 04
Bolts (8 x 38 mm)	900 378 024 02
Bolts (8 x 42 mm)	900 378 034 02
Washers (4)	N 015 401 3

* The number of each length of bolt is determined during replacement. However, If access can be gained to the left side motor mount, the length of the required bolts can be determined before starting as described in Step 15.

Procedure

1. Loosen the lug nuts on the front wheels several turns.
2. Place the car on jack stands.
3. Remove the front wheels.
4. Remove the belly pan.
5. Remove the front sway bar.



6. Remove the motor mount heat shields. (M6 bolt, 10 mm socket)



7. Remove the lower motor mount lock nuts. (M6 bolt, 17 mm open end wrench)



8. Remove the upper motor mount bolts. These are difficult to get to. Use a flex head ratchet and 13 mm socket or a short 13 mm wrench. If the old mounts are the full rubber mounts, you will need

another 13 mm wrench to hold the nut on the bottom of the mount.



9. Place a block of wood on the pad for the floor jack (to provide a cushion). Jack up the engine on the oil pan to remove the tension on the motor mounts.



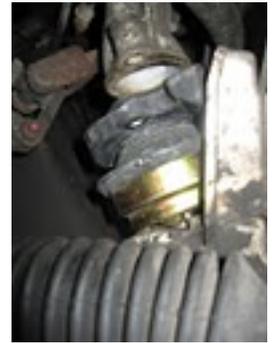
10. Use a sharp object to scribe a mark around the cross-member mounting bolts (4 per side).
11. Support the engine under the oil pan using a floor jack and a piece of plywood (as a jacking pad). The piece of plywood should be large enough to evenly distribute the weight of the engine over a good size area. I normally use a 12" x 12" piece of plywood.
12. Jack the engine up just enough to remove most of the weight from the motor mounts.
13. Loosen the cross-member mounting bolts (19 mm) until they are nearly removed. The easiest way to do this is to completely remove them one at a time and then thread them back in two turns.



14. Between jacking the engine up slightly and lowering the cross-member by loosening the cross-member bolts, this should give you enough room to slide the old motor mounts out. However, you may need to use a pry bar to raise one side of the engine enough to slide the old motor mount out and the new mount in. You will have to twist the mount to get it out as part of the mount inserts into a pocket in the side of the cross-member.



15. Before you install the new mounts, you may want to chase the threads in the mounting bolt holes of the new motor mounts with an M8 tap (i.e. retap the holes). In recent years there have been instances with OE mounts where the threads in the mounting bolt holes were not cut deep enough. This causes the threads in the holes to strip during mounting bolt installation.
16. The right side motor mount uses two of the M8 x 38 mm bolts and standard thickness washers. The old spacer washers (if your car still has them) are not used with the new style motor mounts. Install the right side mounting bolts and washers.
17. To determine the correct length bolt for the left side, measure the thickness of the ledge at the bottom of the left-side mounting bracket where the mounting bolt holes penetrate. If the ledge is 21 mm thick, you will need two 8 x M38 mm bolts. If the ledge is 25 mm thick, you will need two M8 x 42 mm bolts. Install the appropriate bolts with washers. The length of the bolts is important because if you use a bolt that is too long it will damage the new motor mount.
18. Installation is the reverse of removal.



19. Torque specs for mounting hardware are as follows:

Fastener	Torque
Sway bar to Chassis (8mm bolts, 13 mm sockets)	17 ft-lbs.
Upper Motor Mount Bolts (8 mm bolts, 13 mm sockets)	17 ft-lbs.
Cross-member to body bolts (12 mm bolts, 19 mm socket)	62 ft-lbs.