You will need an E12 torx wrench and E12 socket for the 2 bolts on the starter. Air tools are very helpful, but not necessary. If you can find an E12 wrench that is the ratcheting kind it would be **VERY** helpful!

Disconnect battery in the trunk!

Remove Air Filter box

Air filter box removed

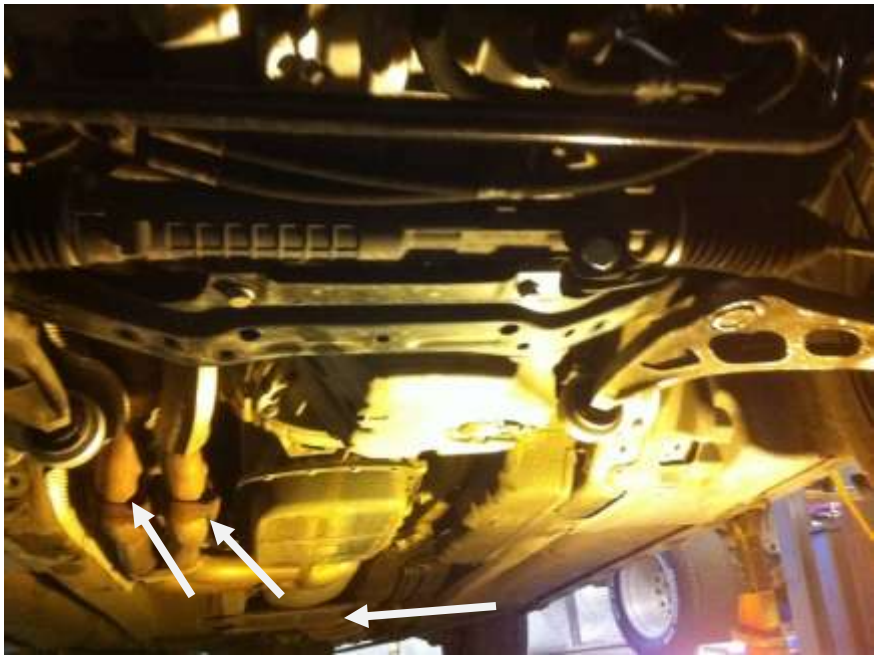
Remove cabin air filter housing. There are 3 twist off clips and then 4 torx screws at the back of the air filter housing. Unclip the positive cable that is attached to the front of the housing and you can then pull it out.

Remove firewall cover. There is a twist off clip on the driver corner and 2 torx screws that hold it n.

Firewall cover removed

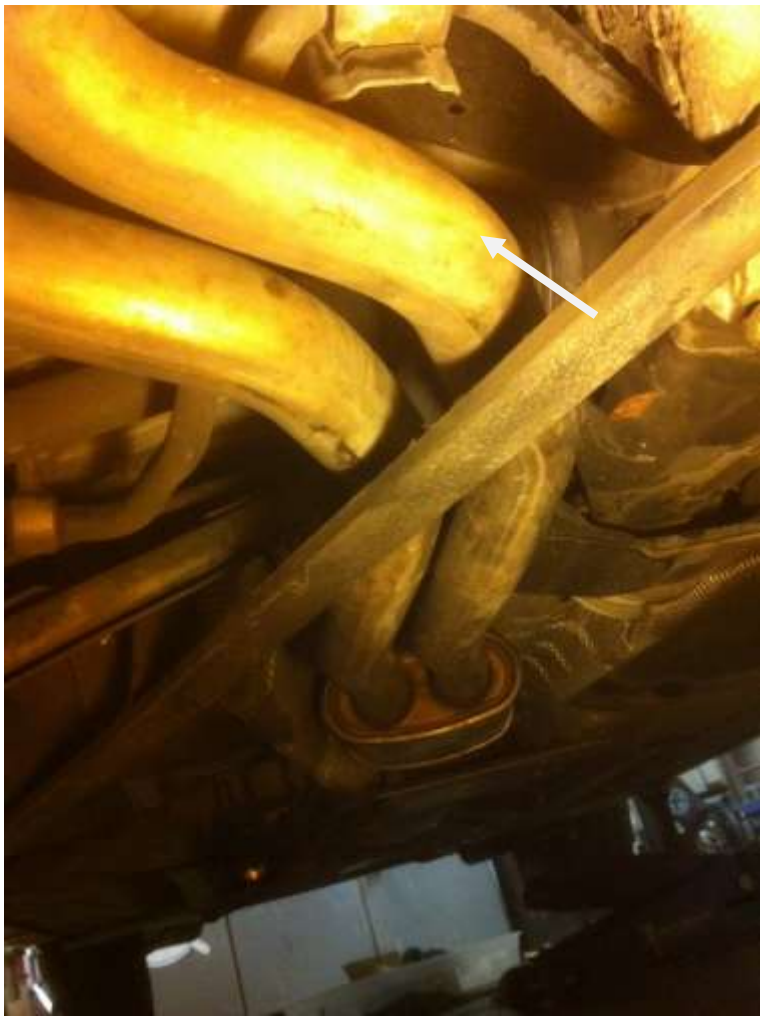
Remove cover next to ABS pump. Take off the weather stripping that is on top of this cover. That provides access to the 2 rubber grommets that hold the booster hose and wiring loom. Just slide those 2 grommets upwards and that will then free up the plastic cover-allowing you to remove it.

Remove plastic cover and front subframe cover.
Plastic Cover is just Phillips screw driver
The subframe cover has 8- 16MM bolts.



Remove exhaust. The exhaust is one long heavy piece. There are 4 nuts to remove at the end of the cat converters (see arrows in pic). It might be wise to spray with penetrating oil as these will likely be rusted tight. These nuts are copper, so they will round off easy, make sure you have the socket on the nut properly to reduce this risk. I think they are 15MM

Remove the center exhaust cover (located mid-car).



Remove the angled brace on the driver side that goes from near the rear jack point to a metal cover over the differential. Remove the 4 bolts and pull it out of the way.

You may want to place a jack or jack stand under the muffler as it is quite heavy. Then remove last 4 nuts at the very back by the muffler must be removed. These 4 nuts hold up the 2 rubber mounts on the muffler. (sorry about flash in the pic-it is just showing the muffler on the ground)

Remove the long center heat shield which covers the drive shaft.

Disconnect the front of driveshaft from transmission. There are 3 bolts that go through the driveshaft into the guibo. 18MM ratchet on the bolt head and 18MM open end wrench on the nut. Leave the guibo attached to the trans.
I found it easiest to put the car in neutral and rotate the driveshaft till 2 bolts were accessible. Put the car in park and the e-brake on, remove the 2 bolts. Rotate the driveshaft again and remove that last bolt.

Unbolt the center support bearing. 13MM nuts I believe

Once you unbolt the center support bearing, let it hang free and slide the front driveshaft back. Support it off to the side.

Support transmission with a floor jack.

I added a second jack with a 4x4 spanning the trans pan for additional security.

Unbolt transmission support cross member, I did not remove it from the transmission though. I left it connected to the trans and placed one of the jacks under it.

SLOWLY lower transmission until rear of cylinder head touches firewall. If auto tranny, only tilt engine until top of fan touches fan shroud. (Mine is auto trans). Since I used 2 jacks I had to lower both at the same time.

Disconnect electrical wires from starter, from top or bottom, whichever is easiest. Make sure to note where the 4 wires on the starter go.

One 13MM nut- hold the 2 large red taped wires, one 8MM nut- holds the yellow/black wire and one 10MM nut holds the smaller black wire.

From the side photo the yellow/black wire is unseen, it is on top and not accessible until you unbolt the starter.

Here comes the HARD PART! This can take a couple hours to get these 2 bolts out.

Using several extensions that will reach the e12 torx bolt from rear of transmission remove the lower starter bolt. There isn't much I can explain on this part…it isn't fun. I put the e12 torx socket on the bolt, then attached a wobble extension, and then 2 long extensions.

I unfortunately do not have a picture from the top side. I found it easier to remove the top starter bolt from the top of the engine.

I used an e12 wrench and since it was to short I had to fabricate a longer piece of metal on it for leverage to get the top bolt to break free.

I also found out that it was easier to access the top starter bolt by raising the transmission back to its normal position.

Back under the car, just wobble the starter back and forth. There is a metal peg on the top of the starter that was a little stubborn, but I used a flathead screwdriver to wedge between the starter and transmission to get it to break free.

Lower the starter from the bottom of car. I had to remove the driver side lower control arm to get enough room to get the starter out.

Side note: if your car is higher mileage you might as well replace the lower control arms since you have removed the necessary pieces to access them.

I would suggest threading the starter bolts into the new starter before installing it to ensure the threads match up okay. Mine were not perfect and I had to tap them to remove some paint that made the threads a bit thicker. Better to check the thread pattern with the starter in your hand then after you have worked it back onto the car.

I would also suggest, starting the car once the new starter is installed. Do this very briefly, but that will at least let you know that it is all hooked up properly and working before you bolt everything back on the car.

Once it fires up…put the car back together and enjoy a 6 pack- you deserve them!