

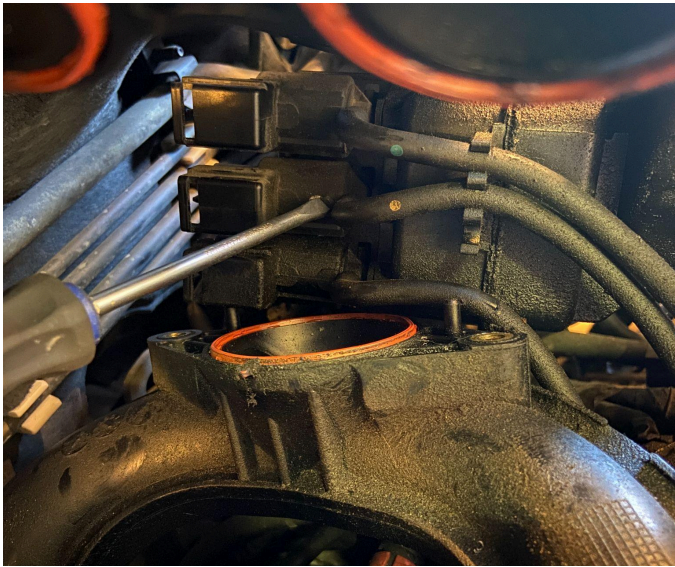


5. Removing the plastic upper intake manifold (UIM). It's held down by a couple of bolts around the intake. There are 2-3 bolts between the firewall and the intake which can be hard to reach without extensions and joints. After removing all bolts, let the intake stay on as we still have connectors and lines on the intake. You can lift it a bit to make removing these easier.





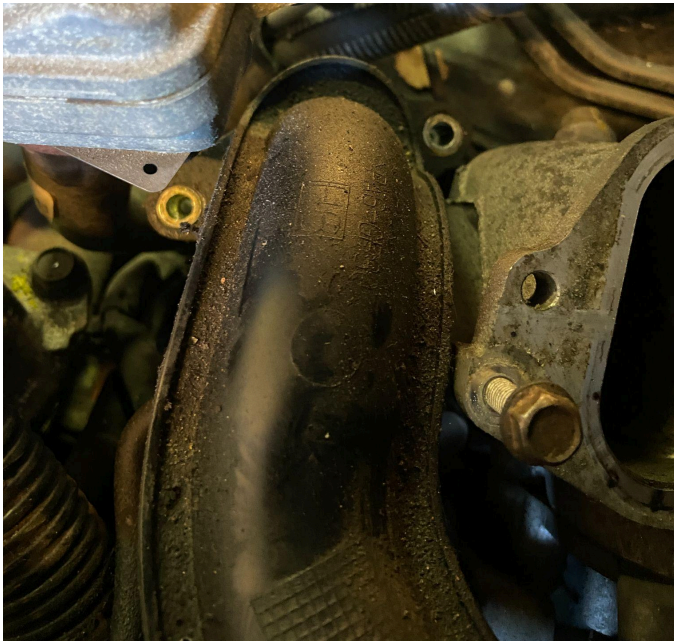
6. The next two images are taken standing by the right front wheel, looking behind the slightly lifted intake manifold. There are 3 cable connectors connected to the intake that needs to be removed, 1 black, 1 blue and 1 white. It's important to remember the order they are connected in. Disconnect these and then carefully lift the manifold a bit more. You'll then see 3 vacuum lines that you also need to disconnect. Remember to label everything.



7. You should now be able to remove the intake.

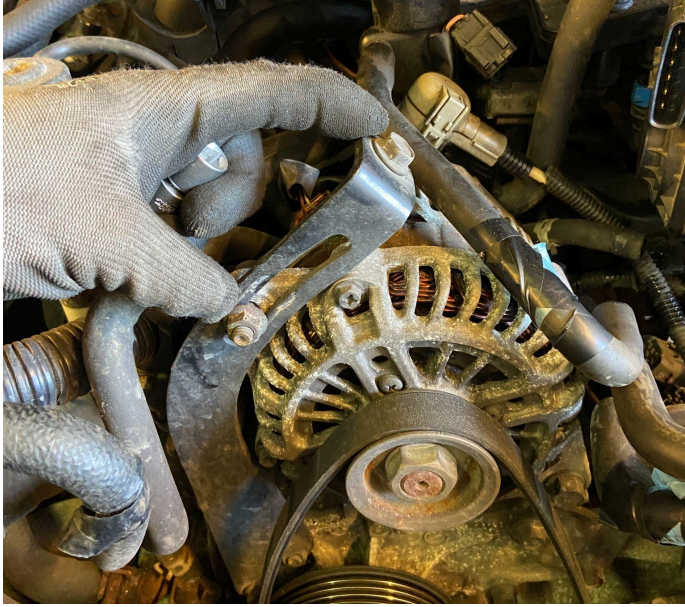


8. Unscrew the bolts holding the lower part of the intake manifold (LIM).

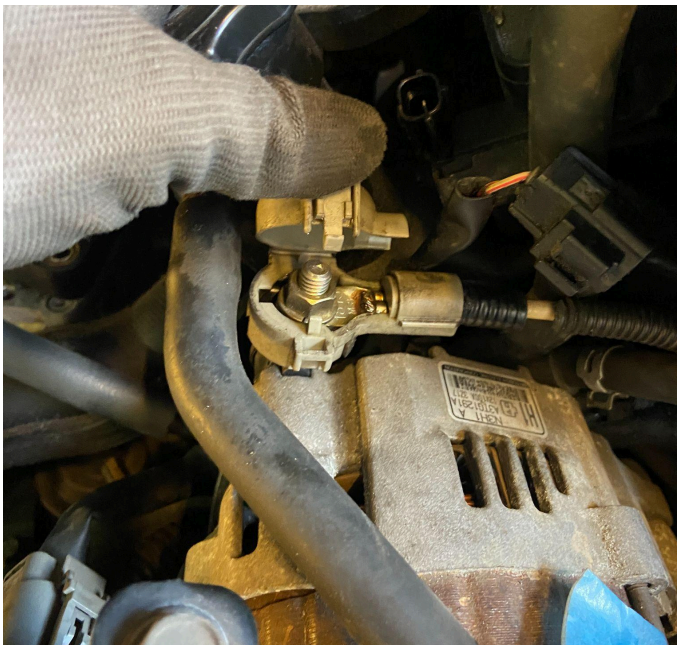
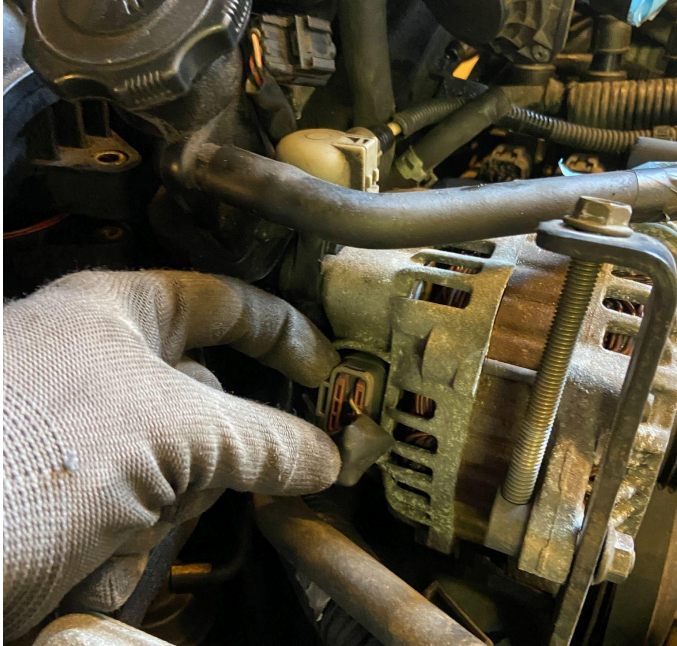


## Remove Alternator

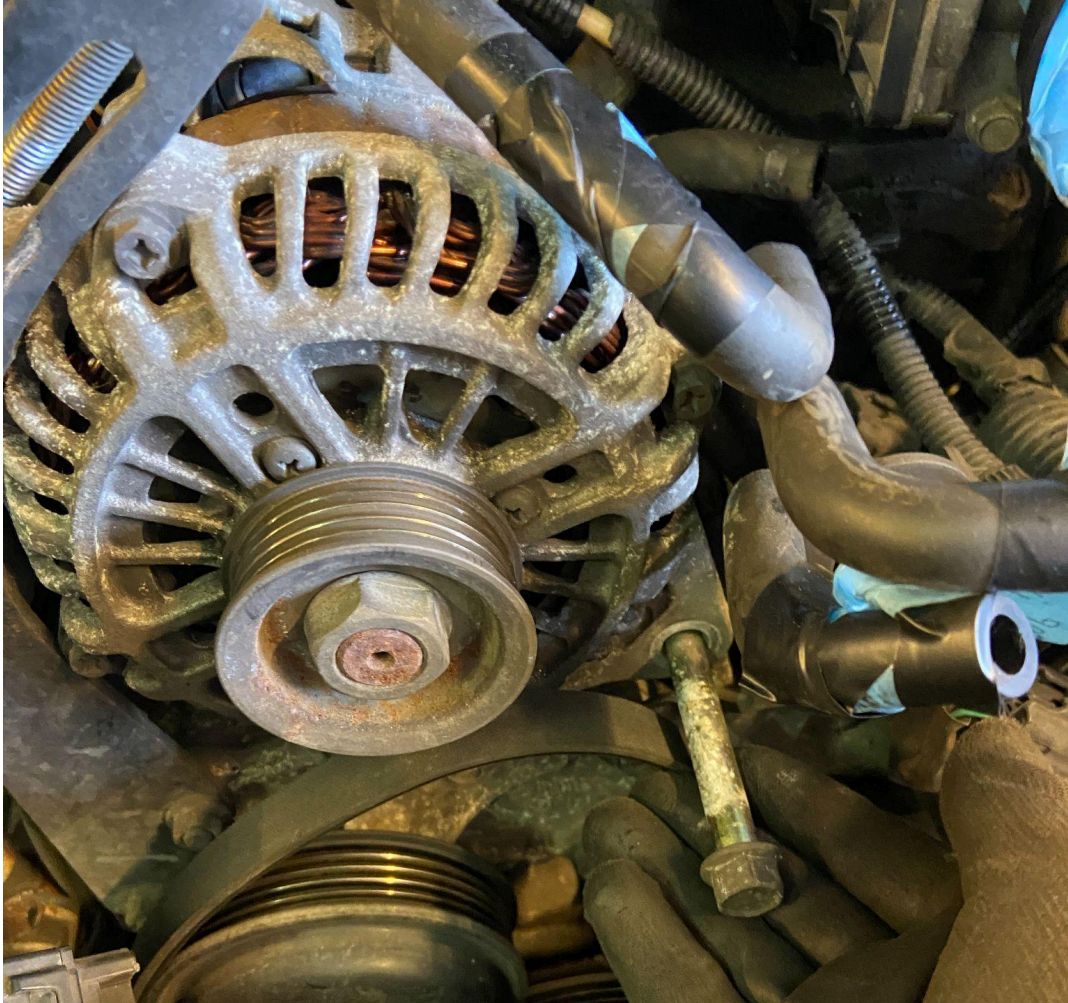
1. Loosen the bolts on the black tensioner arm to release belt tension. Remove the belt.



2. There are 2 cables connected to the alternator, disconnect these. One on the left side and one on top. For the one on top you have to remove a cap and then unscrew the nut.



3. Unscrew the long bolt under the alternator. After that, the alternator should be “free” and you can now remove it.
  - a. It could be hard to remove if it has been squeezed where the long bolt was, so wiggle it back and forth a bit and then try to pry it out.

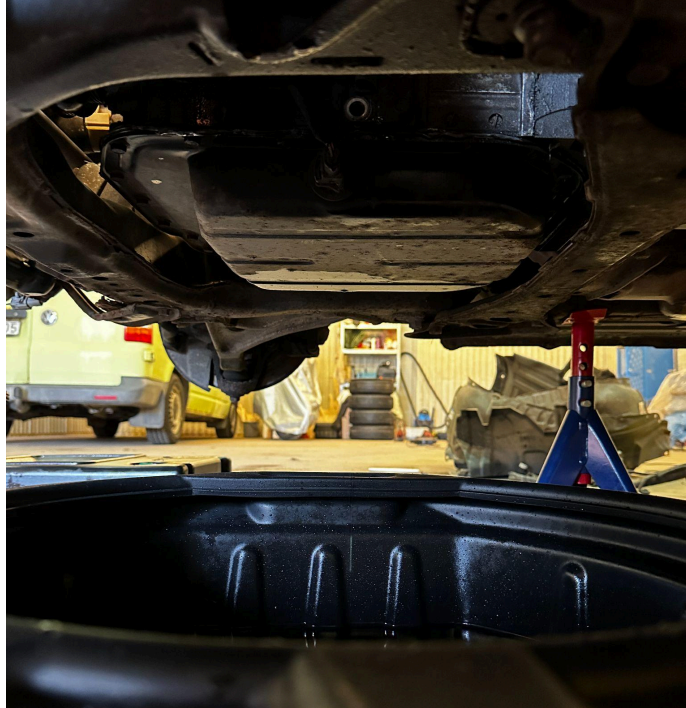


## Second Note

After this point I got lazy with the documentation, meaning I am missing a lot of pictures and I have probably forgotten a lot of stuff. I am also writing this part of the document +2 months after doing it, so I might have a hard time remembering everything.

## Drain Coolant from Engine Block

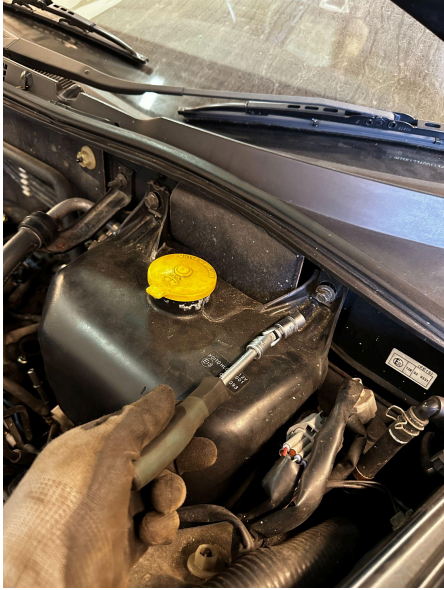
Locate the coolant drain bolt on the opposite side of the oil drain plug. Be ready — there's pressure. Coolant will shoot out, so don't place the drain pan directly under it. Offset it a bit to catch the stream.



## Remove Wiper Fluid Reservoir

Start by draining the remaining fluid and then unbolt the reservoir. Disconnect all electrical plugs and rubber hoses.

I dont think this is necessary to lift the engine but I removed it since I will be installing a Sohn adapter kit.

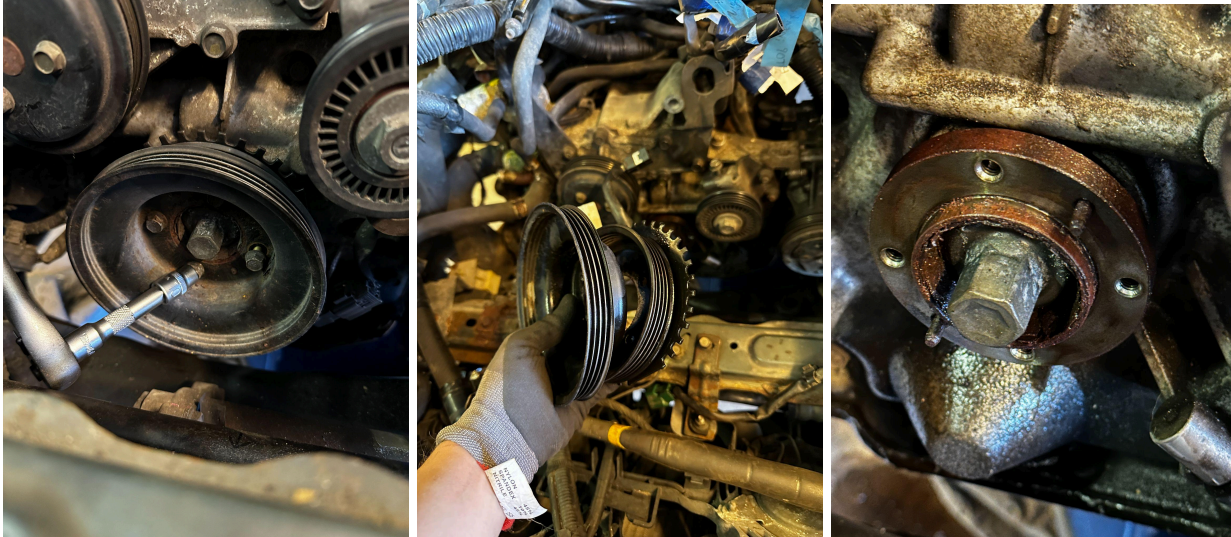


## Remove Crankshaft Pulley

This is held by 4 bolts (M12 i think). Removing it should help with clearance.

- **Do not remove the center bolt! It holds the eccentric shaft.**

FYI, the pulley comes in 3 parts.



## Remove Coolant Reservoir

Also not necessary I think, but oh well.

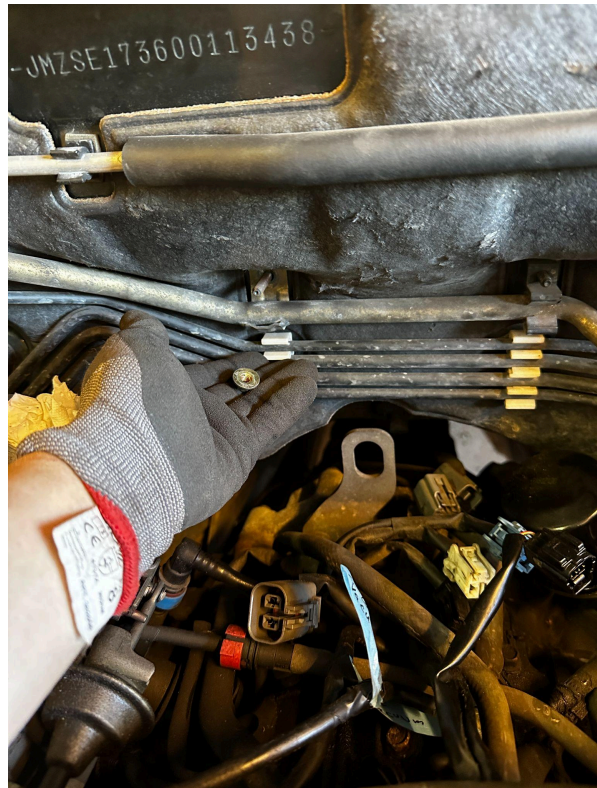
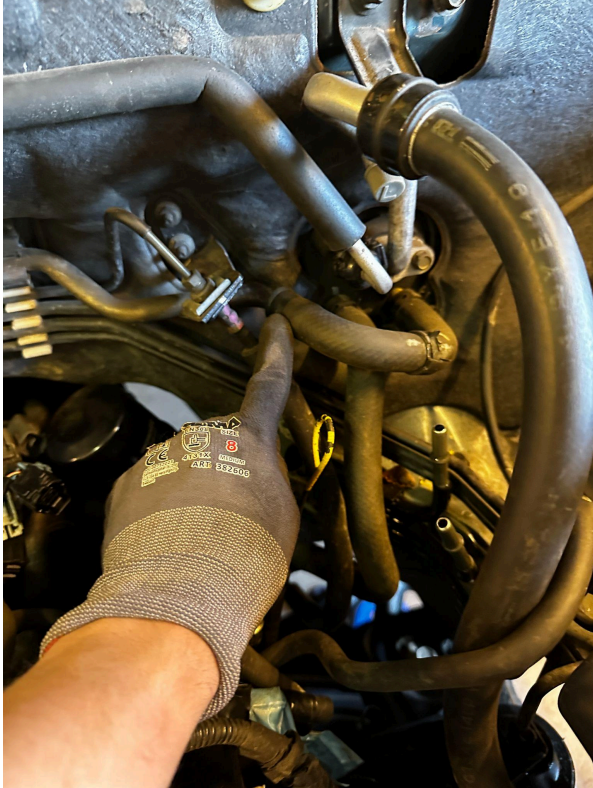
Unplug the 2 rubber hoses (1 on top and 1 below the reservoir) and unscrew the 2 nuts holding the reservoir.



## Remove Heater Hard Pipe

(Honestly dont remember what this is for but I think its the heater return pipe)

Wiggle the rubber line off and unscrew the nut holding the hardline to the firewall.



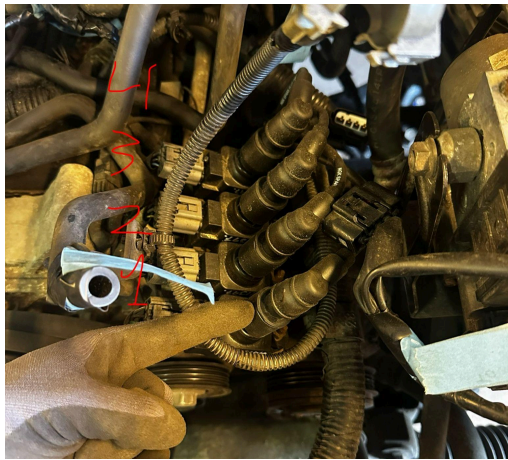
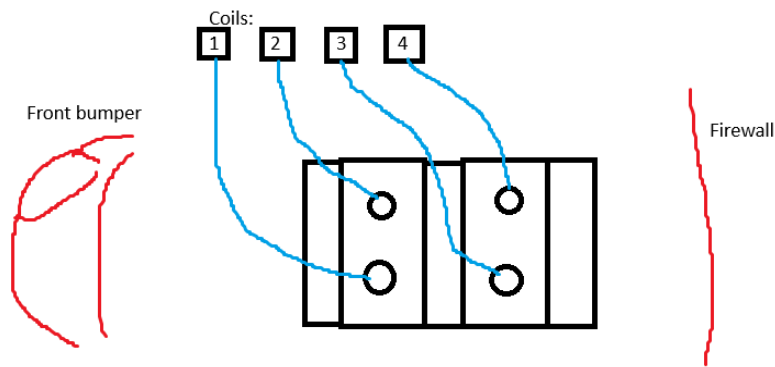
## Remove Ignition Coil

Note: keep the coils on the bracket for simplicity. You will need to remember the order of these

I think there are 2-3 bolts holding the bracket to the engine.

- Unplug the connectors from the sparkplugs.
- Unplug all the electrical connectors
- Remove the bracket.

Label everything!



## Remove AC Compressor

You do **not** need to disconnect the refrigerant lines if you're just removing the engine — keep them intact.

I had a lot of issues with rust on this one, so apply a generous amount of penetrating oil/rust removal.

There are 4 bolts holding the ac compressor to the engine.

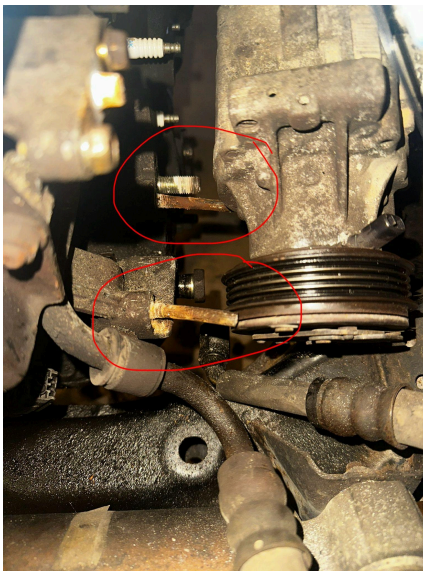
For me:

1 bolt came out no problem

1 broke by the threads

1 broke at the head of the bolt

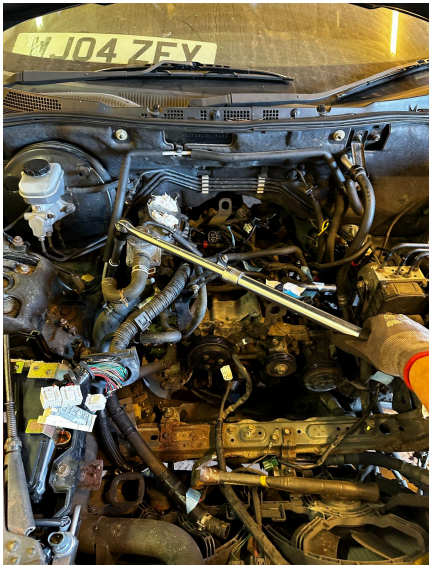
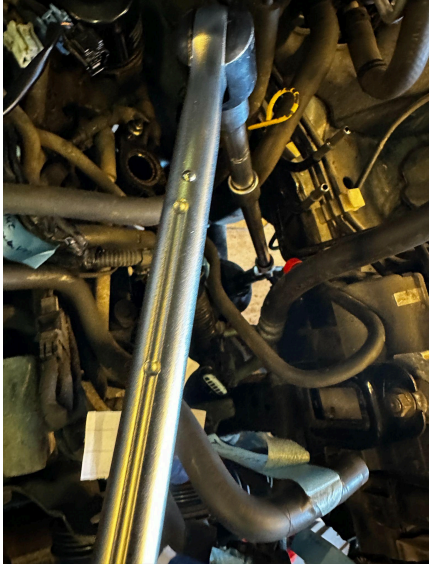
The last was basically welded to the compressor. So I just cut the bolt off using a multicutter...



Leave the compressor in the engine bay, tied or supported out of the way.

## Remove Engine Mounts

1. Remove the M14 through-bolt from each rubber engine mount.
2. Support the engine slightly with the hoist — just enough to take weight off the mounts.
3. Remove the 2x M14 side bolts from each mount (holding rubber mount to subframe).
4. Raise the engine ~5 cm to access and remove the rubber bushings.
5. Remove the 3x M17 bolts/nuts that hold the metal mount bracket to the engine.
6. Repeat step 3-5 on the other side.



## Remove “the other stuff”

This is where you look around the engine bay for anything still attached. No order, just chaos. :)

## Other stuff

As you start lifting/lowering the engine, look for things that are still stuck and remove these. It's very common to forget e.g ground cables etc.

## Battery cables



## Oxygen sensor wiring and more

There are some sensor cables on top of the transmission, remove these. It helps to lower the engine by about 10 cm. It helps even more to remove the bracket just under the bellhousing so you can lower the engine even more, but it's not necessary.

## Oil cooler lines

Forgot to mention these, check another guide for detailed help. 2 lines, one under the beam in front of the engine, the other under the ac compressor. Carefully pry off the retainer clip and just pull to separate the lines.

## Exhaust

You also need to remove the bolts holding the exhaust manifold to the midpipe.

## Starter

If memory serves me right, there is 1 electrical connector and 2 bolts holding the starter. just remove it.

## Separate Transmission from Engine

### **SUPPORT TRANSMISSION WITH JACKSTAND BEFORE REMOVING ANY BOLTS**

When the engine is lowered you can remove the bolts on top of the transmission. Then go under the car and remove the rest of the bolts.

# Lift the Engine!

Get that sucker out of there!

1. Double-check everything is disconnected
  - a. Slowly pull up 1–2 cm and check for anything tugging/pulling/stretching (wires, hoses, grounds). This is the #1 place things go wrong.
2. Tilt the Engine Slightly Nose-Up
  - a. Tilt the engine slightly backward. This helps clear the engine-to-trans input shaft and firewall.
3. Continue a slow and controlled lift
  - a. Lift in stages (a few cm at a time).
  - b. Watch the transmission bellhousing — the input shaft will slip out of the clutch.
  - c. You may need to wiggle slightly forward and upward to clear the beam in the front and the firewall.
4. Clear the Bay
  - a. Once the engine is free, angle it forward slightly and lift straight up.
  - b. Watch your hoist legs and front bumper area for clearance.
5. Move to Stand or Pallet
  - a. Lower the engine to a stand or wooden pallet.
  - b. Plug all open coolant, oil, and fuel holes to prevent spillage.



## Thanks

Big thanks to the RX8Club community and all the content creators out there who helped me along the way. If this document helps you — even a little — then it was worth putting together.