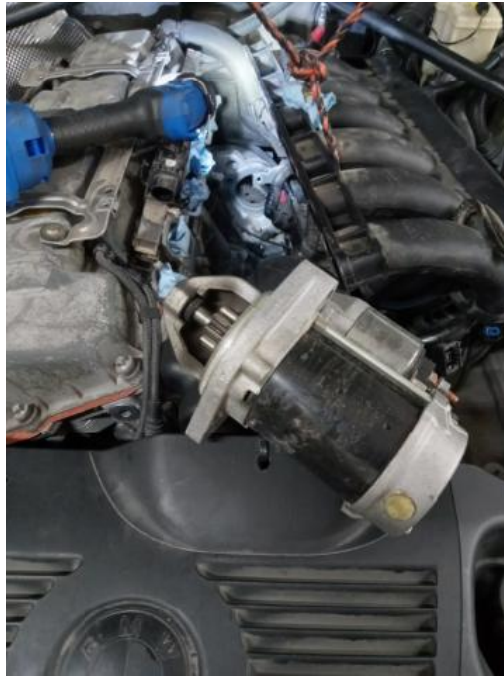


# BMW Z4 Starter Replacement



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## Purpose

This document describes what had to be done to replace the Z4 starter that went out in June 2024.

## Access Issues

In most vehicles replacing a starter is a quick and simple job, but in the Z4 the starter is placed such that it is almost impossible to get to it. As you can see below it is located at the bottom of the engine wedged in between the engine and the firewall with very little access.



Because the Z4 is extremely low to the ground it is impossible to get underneath the car without using a lift (which I don't have.)

## Repair Sequence

### Step 1 – Unfasten Intake Manifold

First you need to remove the engine cover and un-bolt the intake manifold.



There are various hoses and cables that also need to be disconnected so that you pull the manifold away from the engine – these are not documented here.

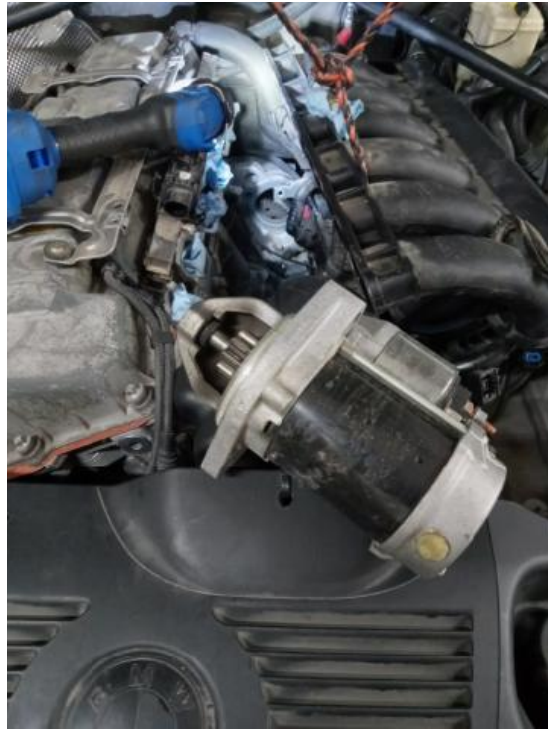
### Step 2 – Support Manifold from Falling Down

Rather than disconnecting everything on the manifold you can support the manifold by tying it to the hood latch with a rope (you will also need to prop the hood open with a 2x4 or something.) This makes the job much easier as there are only one or two cables/hoses that are too short to allow you to swing the manifold away from the engine.



### Step 3 – Swing Manifold away from Engine

You can now swing the manifold away from the engine and gain access to the starter mounting bolts. Don't forget to put rags in the intake ports to prevent debris from entering while you are working.



You can now replace the starter with 'relative' ease (although it is still a little tight squeezing it through the gap between the engine and the manifold, but possible.)

### Step 4 – Put Everything Back Together

Once you have replaced the starter, you simply need to put everything back together in the reverse order. Make sure to use the proper torque on the manifold bolts.