

# SAP Simulator Installation

## Disclaimer

The SAP Simulator is for off-road use only, not intended for highway vehicles.

This modification is not a factory approved modification, and engine damage may occur. Any and all work completed must be in accordance with the manufacturers repair manual and all best practices adhered to. This modification may also violate federal, state, and, or local laws. You, the consumer, accept all liability for these modifications.

## Required Tools

Ratchet  
10mm socket  
8mm socket and/or wrench  
Small flat-blade screwdriver

## Disassembly

1. Carefully remove the two fuel rail cover bolt caps by inserting a small flat-blade screwdriver in the slot on either side and prying them up. They break easily, if you happen to need replacements the part number is 11121726089.
2. Remove the two fuel rail cover bolts with 10mm socket.
3. Remove the fuel rail cover by pulling it up and towards the front of the car.

## Mounting

1. Remove the rear screw from the under-hood positive battery terminal bracket using an 8mm socket or wrench.
2. Mount the SAP Simulator using the screw from the under-hood positive battery terminal bracket.



## Wire routing

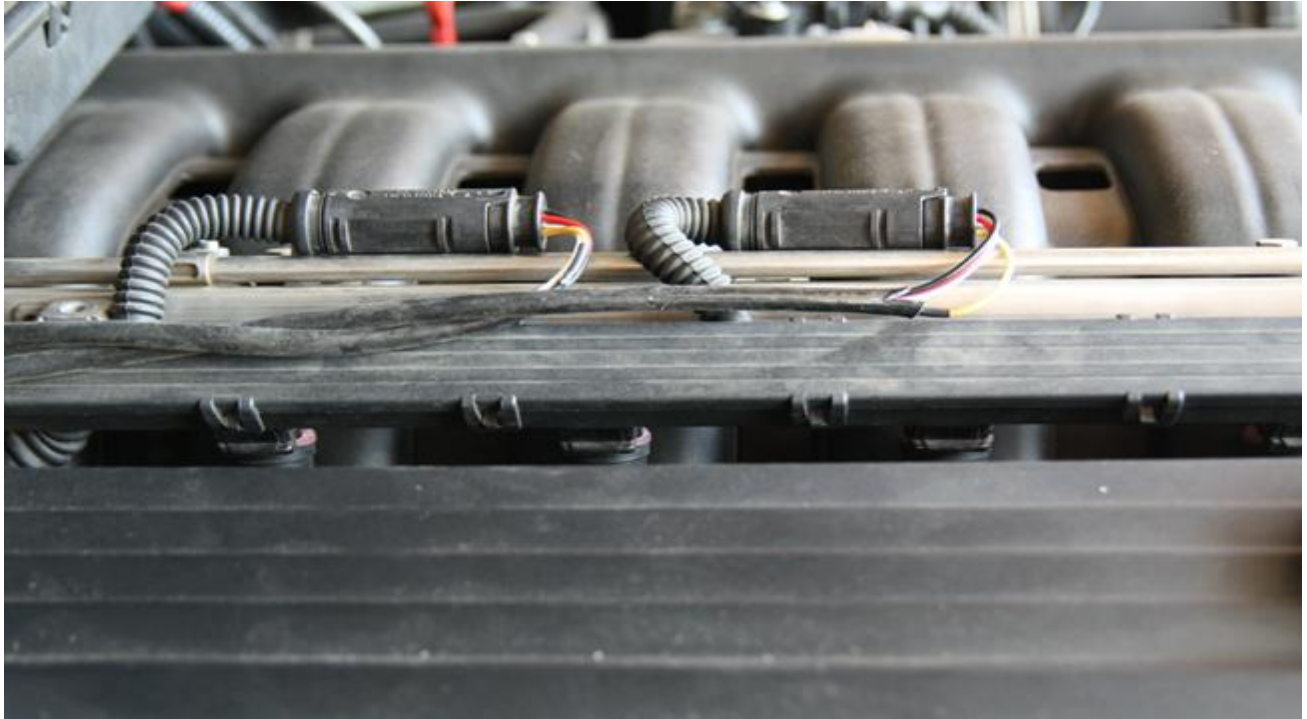
1. Run the SAP Simulator wire loom alongside of the existing engine harness wiring under the cowl vent towards the fuel rail.
2. Secure SAP Simulator wire loom to existing engine harness with the provided wire ties.



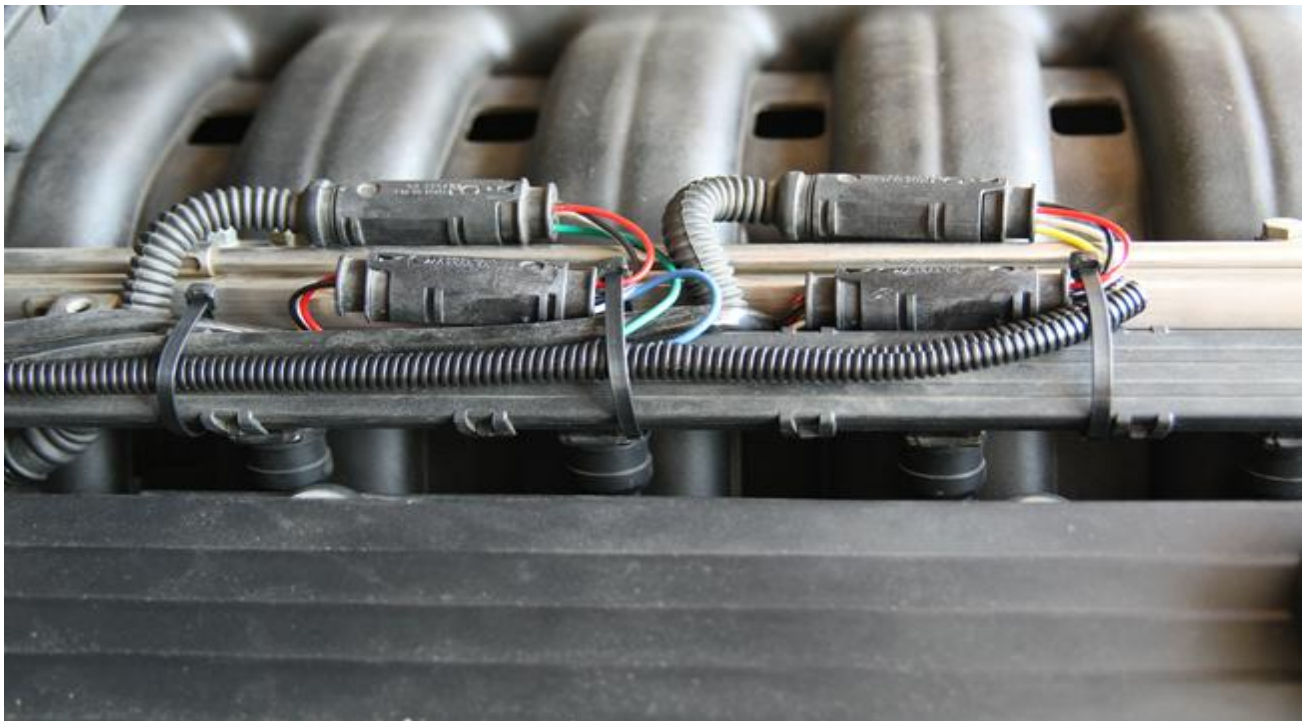
## Wire connections

1. Locate the two pre-cat oxygen sensor connectors alongside the fuel rail.
2. Unplug the front pre-cat oxygen sensor connectors and plug the SAP Simulator connectors with the yellow/pink wires into the connectors.
3. Unplug the rear pre-cat oxygen sensor connectors and plug the SAP Simulator connectors with the green/blue wires into the connectors.
4. Secure the SAP Simulator harness to the fuel rail using the supplied wire ties
5. Plug the SAP Simulator power connector into the SAP power connector.

Before SAP simulator installation:



After SAP Simulator installation:



## Assembly

1. Replace the fuel rail cover making sure the wiring underneath is not pinched.
2. Tighten the two fuel rail cover bolts with 10mm socket.
3. Carefully replace the two fuel rail cover bolt caps. Remember... they break easily.

## Wiring Quick-Reference

Yellow – first oxygen sensor yellow wire towards engine harness/DME

Pink – first oxygen sensor yellow wire towards sensor

Green – second oxygen sensor yellow wire towards engine harness/DME

Blue – second oxygen sensor yellow wire towards sensor