

# Installation Instructions

BMW/Toyota Engines - Bluespark Petrol

**Bluespark**  
AUTOMOTIVE



This product has been designed and manufactured to work correctly with installation as described in these instructions.

Failure to follow these instructions could result in damage to property, damage to the product and or potential injury.

It is very important that you read and understand these instructions thoroughly before installing this product.

## Included Contents:

- Tuning Module
- Wiring Loom
- Fastening Ties
- Installation and User instructions
- Protective Bag For Module – (prevents damage to unit casing)



## Before installation:

1. Open the vehicle's bonnet
2. Remove the ignition key
3. Close and lock the doors
4. Wait 5 minutes before removing any electrical plugs



**Do not open the vehicle doors while installation is in progress.**



**Use 99RON Fuel**  
(where possible)

## Installation Location:

The module should be installed between the vehicle's MAP and Boost sensors as shown in the diagram.

## Locating the Unit:

The unit itself should be mounted away from:



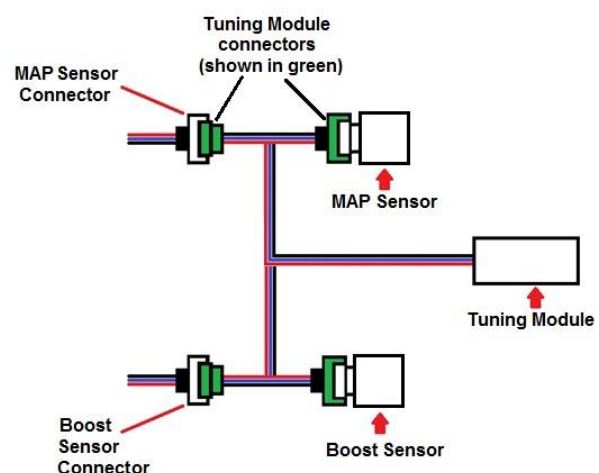
Sources of Extreme Heat



Sources of Vibration



Sources of Spray Water



H4#-H3#-Pet18-755

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## Important Notes Specific to This Engine:

- **Use 99 RON fuel (where possible)**

The B58 engine makes more power even as standard on 99RON fuel, BMW specify it and when tuned the difference it is like night and day.

There are only 3 99RON fuels available in the UK:

- Shell V-Power
- Tesco Momentum 99
- Costco 99.

All other Super Unleaded fuels are 97RON at best, all standard UK pump fuel is 95RON. In other countries, please use the best octane rating fuel available to you.

- **Fit the unit on standard settings and allow 200 miles before adjusting. DO NOT turn the box up to maximum settings immediately**

This allows the car's ECU to adjust to the changes made by the unit. It will allow you to achieve better, smoother gains.

- **Bear in mind the limitations of the stock charge-cooling system**

This engine is fitted with a water to air charge cooling system. It is a separate system from the engine coolant and is why there are two filler caps in the engine bay. It is extremely effective at cooling this engine when under load with the vehicle in motion and can handle large power increases easily.

It is however very susceptible to heat soak when stationary. The charge cooler radiator is not equipped with a cooling fan. Without airflow across it, the charge coolant increases in temperature rapidly while the vehicle is idling or moving at low speeds. If you have been stuck in stop start traffic, intake temperatures will quickly increase. While the coolant remains too hot, engine power will be reduced until temperatures return to normal, without any notification to the driver. This is not a fault and will happen on a stock or tuned vehicle. Warmer weather will naturally exacerbate this.

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## Fitting



- Ensure that your engine looks similar to the supplied photographs. (minor changes with ancillary components are to be expected, however if the engine looks nothing alike, please contact Support. )
- Familiarise yourself with the locations of the connectors highlighted.
- Make sure that you have a good grasp of the operation of the connector clips and or locking tabs. - If the connectors you are trying to access are in an awkward place, it may be useful to try unplugging (and then re-inserting) a connector on the vehicle which is more easily accessible. Alternatively try plugging together the connectors on the Tuning Module itself.

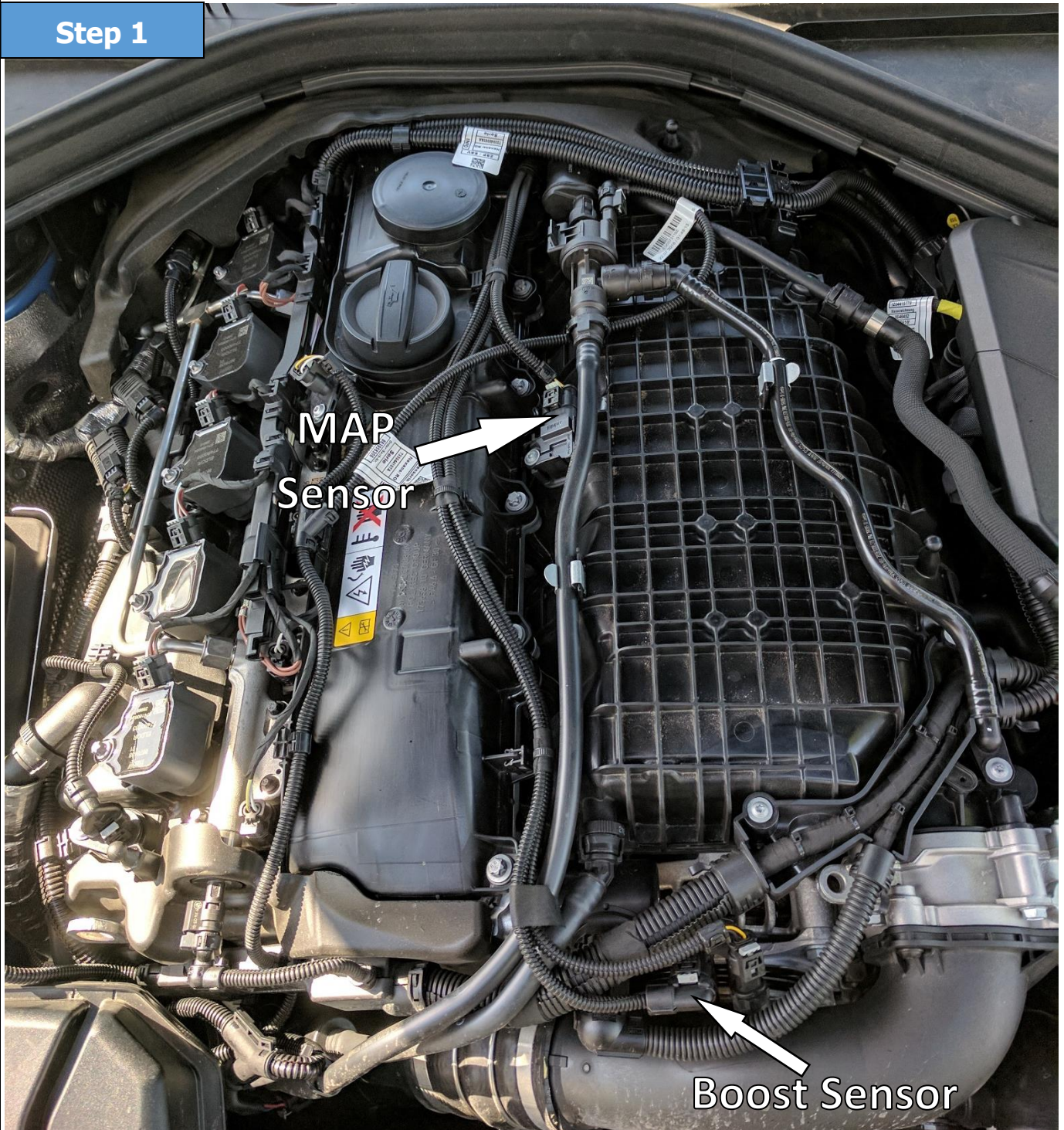


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## Step 1



- Please let the engine cool down before starting this installation due to the location of the sensors in relation to hot components.

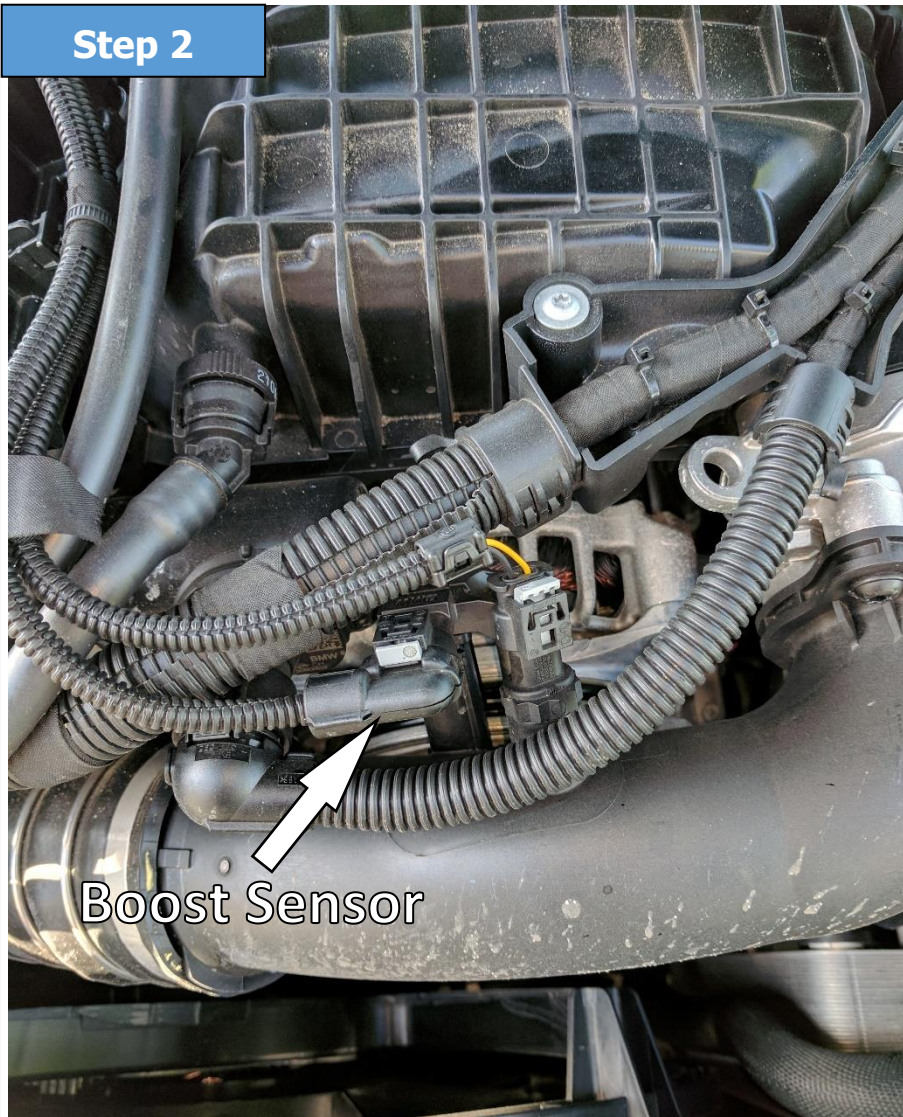


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## Step 2



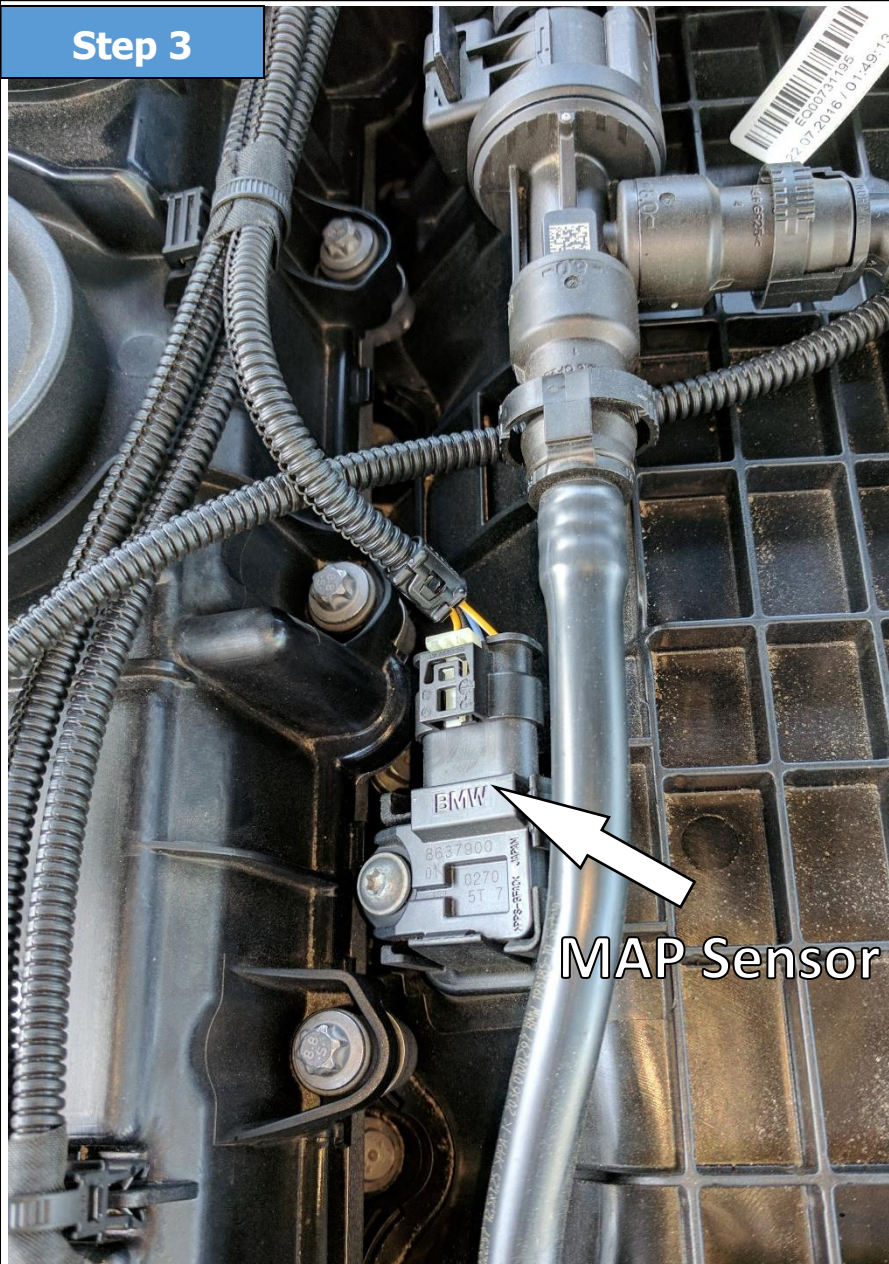
- Unplug the Boost Sensor connector (3 pin) by pulling back on the releasing tab, then press down the releasing tab and pull back on the connector.
- Insert the connector from the Tuning Module's wiring loom into the Boost Sensor.
- Insert the Vehicle's Boost Sensor connector into the corresponding connector on the Tuning Module's wiring loom.

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## Step 3



- Unplug the MAP Sensor connector (4 pin) by pulling back on the releasing tab, then press down the releasing tab and pull back on the connector.
- Insert the connector from the Tuning Module's wiring loom into the MAP Sensor.
- Insert the Vehicle's MAP Sensor connector into the corresponding connector on the Tuning Module's wiring loom.



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## Locating The Unit



The unit is best mounted under the plastic cover on the right hand side of the bay as you look at it (left side of the vehicle). There is a black metal brace under here ideal for securely strapping the unit to.

## Finalise

- With the unit successfully installed please secure the unit and wiring loom within the engine bay, paying attention to the guidelines highlighted on page 1.



Route the tuning box wiring harness away from sources of heat (exhaust manifolds, EGR pipes, most stainless steel pipes) and also away from any rotating parts such as belts.

- Double check all connections are correct and firmly connected. If this is the case, start the vehicle and ensure there are no engine warning lights or error messages displayed.

If everything is as it should be, please feel free to take the vehicle out for a test drive and enjoy the added responsiveness and power added to your vehicle by the Tuning Module.