

Power Control Module (PCM) S58 - M2/M3/M4

Product part number: MMR50-1601 / MMR50-1602

Please take time to read these instructions thoroughly before proceeding. When performing the installation, read the instructions fully before working on the car. If you feel that you do not have the requisite skills or tools/facilities, please arrange for a qualified technician to perform the installation.

Ease of Fitment:

Required Tools:

Included in the box:



(the greater the star rating the easier the installation)

- 6 & 13 & 15mm Socket
- Plastic Trim Removal Tool
- Ratchet / Driver
- Tie Wraps

- x1 Power Control Module (PCM)
- x1 Carbon Fibre Mount
- x1 S58 Engine Wiring Loom
- x1 Blanking Plug

✗ Fitting Notes −

- > This is a complex install, and any mistakes can lead to vehicle warning lights & incorrect engine operation. Therefore, we highly recommend professional fitment of this PCM product.
- > Prior to install, if the engine has been in operation, please wait until the engine cools down before performing installation to avoid potential flesh burns.
- Ensure all wiring harness connections have a solid CLICK, to confirm a positive connection.
- MMR is NOT be liable for any damage caused by mis-installation.

★ Vehicle Preparation –

1. Unlock the vehicle and open bonnet (Hood). Once the bonnet is open wait for 15 minutes until vehicle all electrical components have discharged.

Vehicle Installation Notes:

- 1. Vehicles with 'Keyless Entry' place the key away from the vehicle, about 10-15m.
- 2. For vehicles with aftermarket alarms installed, the alarm must be disabled prior to starting any part of the PCM installation.

✗ Removal of Engine Cover & RH Airbox −

To allow easy access to the 3 wiring harness connection points, start by removing the engine cover and righthand airbox's for greater visibility and ease when routing the wiring harness around the engine components.

The engine cover is removed by first removing the central cross chassis brace. First using a plastic trim tool remove the $2 \times plastic plugs$ to allow access the mounting nuts, marked with arrows in Figure 1a,

Next using a 15mm socket remove the 4×1000 km socket remove the engine cover until all the mounting rubber bobbins are loose. Once detached remove from the engine and place the engine cover away from the engine bay to avoid any damage to the cover.

Next, the front 'V' shaped chassis brace requires removal. Using a 15mm socket remove the 4×10^{10} x bolt shown in Figure 1b, Once these fixings are removed lift and remove chassis brace from engine bay.

Finally, using a 6mm socket loosen the intake hose clamp shown in *Figure 1c*, once loose with a firm hold on the airbox, pull up to remove the airbox from its rubber mounting bobbins and remove from the engine bay and place alongside your engine cover to be refitted in a later installation step.





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✗ STEP 1

Once engine cover and airbox is removed all 3 wiring harness plug in points can be observed, please see below images for reference:

Turbo Boost Pressure Sensor = A / Manifold Absolute Pressure Sensor = B / Camshaft Position Sensor = C





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X STEP 2

Wiring Harness Installation: Lay wiring harness over engine bay and route the labelled harness sections to there respective connection points, using Figure 1e for reference.

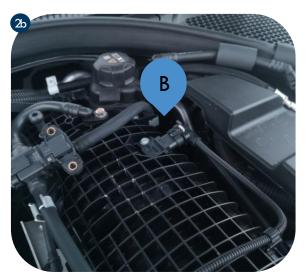
For each section of PCM wiring harness ensure an audible click is present when each fitting is connected with the OEM wiring loom. To ensure the PCM harness is routed securely, please use the provide zips ties where needed.

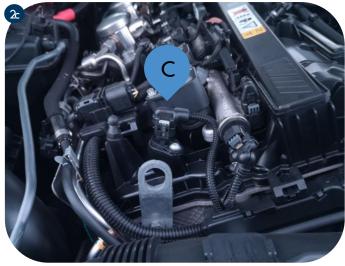
Harness Section A - Turbo Boost Pressure Sensor - Route section A down under the airbox and towards the front of the engine, Disconnect the turbo boost pressure sensor connecter and wire in series the PCM wiring harness section labelled A. See figure 2a for assistance.

Harness Section B - Manifold Absolute Pressure Sensor - Route section B down under the airbox and towards the front of the engine, Disconnect the manifold absolute pressure sensor connecter and wire in series the PCM wiring harness section labelled B. See figure 2b for assistance.

Harness Section C - Camshaft Position Sensor - Route section C down under the airbox and towards the front of the engine, Disconnect the camshaft position sensor connecter and wire in series the PCM wiring harness section labelled C. See figure 2c for assistance.







3.



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X STEP 4

Installation of PCM:

- The PCM is pre assembled and simply needs to be installed by removing the 1 x M8 bolt shown in Figure 4a using a 13mm socket.
- Next connect PCM wiring harness to the PCM, this is completed by offering the connecter to the PCM with
 the purple retaining clip pulled out. With the PCM and wiring harness connection contacting one another,
 push the clip inwards and this will result in the harness connector pulling itself onto the PCM connection
 shown in Figure 4b..
- Finally, Offer the PCM into place and using the M8 OEM bolt you removed earlier and use a 13mm socket and bolt the PCM into place, as shown in *Figure 4c*.







X STEP 5

Re-Installation of engine cover, air intake & undertray:

Now the PCM wiring harness is fully installed. The final step is to re-install the engine cover which is the reverse of Step 2.

Step 6:

Function test:

- Start the engine.
- Once the engine is running at idle, ensure check engine monitoring system lights appear and clear as normal. The vehicle should idle as normal and react to the throttle while idling same as pier to install.
- Switch off engine and Ignition.
- Your MMR Power Control Module is now fully installed and ready to be enjoyed.

