Garage



BMW Lighting - A repeat offender



Helpline



Tim Stock Helpline

Over the last year, we have a high number of help line calls for various BMW models with lighting, window and wiper issues. All these systems are connected to the FRM (Footwell) module.

This module is located on the right hand side, under the dash on the 3 Series E90. This module is also fitted to the Mini and is located on the left hand side, under the dash.

We have had many calls that range from lights not switching off, to complete failure of lights, electric windows failing and central locking being inoperative.



The 144 pin microcontroller in the module is relatively delicate, making the access a speciality

When trying to diagnose the FRM module, a communication issue that prevents faults from being read or data retrieved. In most cases, it starts off with a flat or low battery situation. But it has

been known when an overcharging issue has been present, due to failing alternator or even loose battery leads after a battery change.

Jump starting also has been reported as bringing on this issue. Unfortunately, the software seems to be the weak point here. If you can't communicate with the module, it is not possible to reload software via the diagnostic connector, so a replacement module could be the answer.

But all is not lost, the module can be reprogrammed with replacement software, but this requires a different approach.

By using a freescale programmer, the



A FRM Module from a BMW E89

microprocessor can be read, erased and reloaded with the correct flash and EEPROM data. The data is stored in the MC9S12 Micro controller in several locations, 3 typical locations are P flash, D flash and EEPROM. Some of the models affected include: E70, E81, E82, E87, E88, E89, E90 and Mini.

Due to the delicate nature of these 144 pin microcontrollers, it is a specialised service to read and reload data files. There are repair companies offering this service at a reasonable cost, making the repair worth while.

Join our growing team of members today, who all have access to 1000's of answers to tech questions on demand. Call us now on 01-905-9500 to join or for more information.