



**Haynes**  
shows you how

**BMW 3-Series 320i & 320xi (12-14), 325i, 325xi, 330i & 330xi (06) & 328i & 328xi (07-14) Haynes Online Manual**

## 12 Powertrain Control Module (PCM) or Digital Motor Electronics (DME) control unit – removal and installation

1 Disconnect the negative battery cable (see [Chapter 5](#)). **Note:** *Disconnecting the battery will erase any fault codes stored in the PCM. It is recommended that prior to battery disconnection, the fault code memory of the module should be checked using a professional scan tool at a dealer or other qualified shop.*

### 2.0L engine

**Note:**

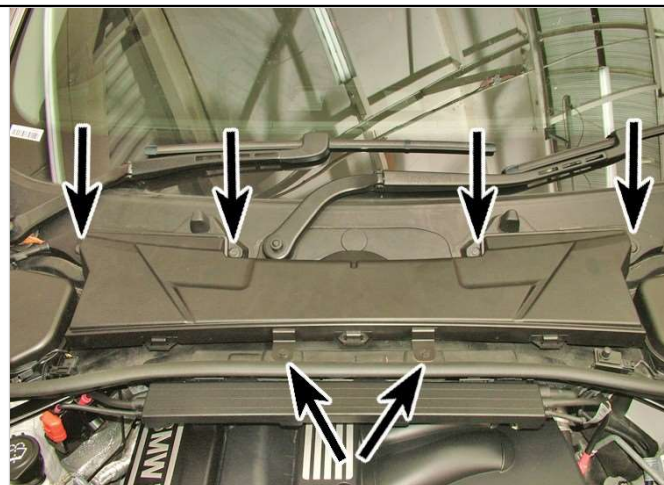
The Digital Motor Electronics (DME) control unit, is mounted in the engine compartment on top of the intake plenum.

- 2 Remove the engine cover by lifting the front of the cover up and pulling it forwards.
- 3 Remove the strut tower crossbrace plastic push-pins and bolts then remove the brace.
- 4 Remove the sound insulator plastic retainers and lift the insulator off of the engine.
- 5 Unlock and pull the electrical connectors from the DME control unit.
- 6 Remove the DME mounting screws and DME from the intake plenum.

### 3.0L engine

- 7 Remove the upper section of the cabin air filter housing (see illustration) .

**12.7 Remove the bolts and the cabin air filter cover**



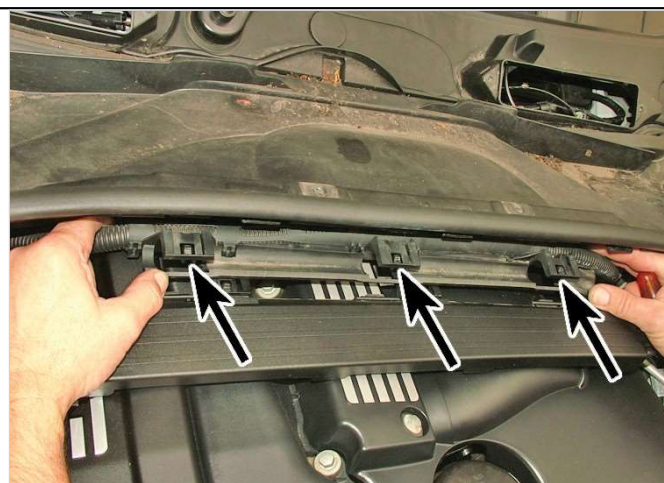
8 Release the clips and remove the plastic cover behind the left-hand strut tower in the engine compartment (see illustration) . Repeat this procedure for the plastic cover behind the right-hand strut tower.

**12.8 Release the clips and remove the plastic cover at each side of the cowl, behind the strut towers**



9 Release the clips and detach the cable guide from the front of the cabin air filter lower housing (see illustration) .

**12.9 Depress the clips and slide the cable guide forward**



**10 Remove the bolt and release the clip on each side, then pull the lower section of the cabin air filter housing forward and maneuver it out (see illustrations) .**

**12.10a Rotate the temperature sensor counterclockwise and pull it from the bracket on the lower cabin air filter cover**



**12.10b Release the catch and remove the bolt at each side . . .**



**12.10c . . . then pull the lower cabin air filter cover out from the cowl**



**11 Remove the mounting bolts, loosen the nut, and lift out the heater end plate.**

**12 Working in the right corner of the engine compartment, release the locking clips and remove the cover from the electrical box (see illustrations) .**



**12.12a Squeeze together the clips and pull the black plastic clips upward**

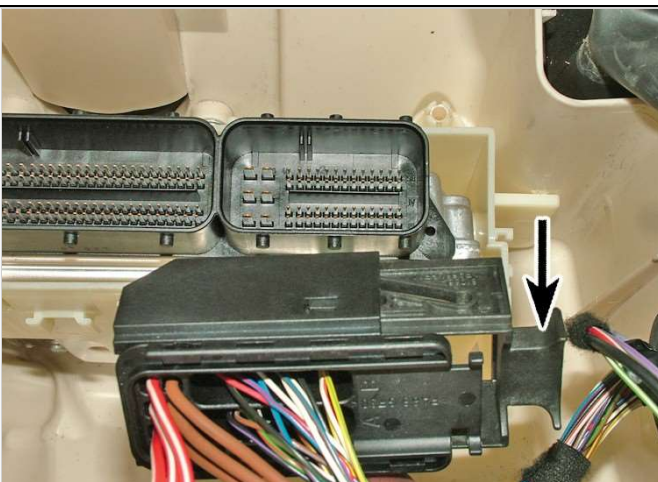


**12.12b Slide the catch to the “unlock” position**



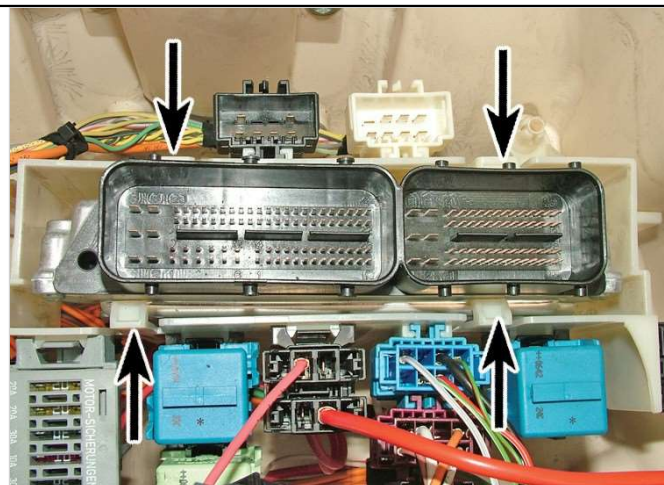
**13 Slide out the locking elements, disconnect the module wiring plugs, then disconnect the plugs behind the PCM (see illustration) .**

**12.13 Slide out the locking element**



**14 Release the retaining clips at the front, then slide the PCM upward from the vehicle (see illustration) .**

### 12.14 Release the clips and pull the PCM upward and out



## All models

15 Installation is the reverse of removal. After reconnecting the battery, the vehicle must be driven for several miles so that the PCM/DME can learn its basic settings. If the engine still runs erratically, the basic settings may be reinstated by a BMW dealer or specialist using special diagnostic equipment. **Note:** *If a new module has been installed, it will need to be coded using special test equipment. Entrust this task to a dealer or other qualified shop.*

© 2024 Haynes Manuals, Inc. Contact us