

## Engine Control Module -J623-



### Note

- ♦ Some Engine Control Modules (ECMs) are not equipped with a protective housing. The removal and installation of the protective housing depends on the engine and transmission combination.
- ♦ The ECM -1- has a protective housing -2- and 5-. To make removing the shear bolts -4- for the retaining tabs -2- more difficult, the threads are coated with locking compound.
- ♦ The metal retainer must be removed in order to disconnect the connectors from the ECM, for example to connect the test box or replace the module.

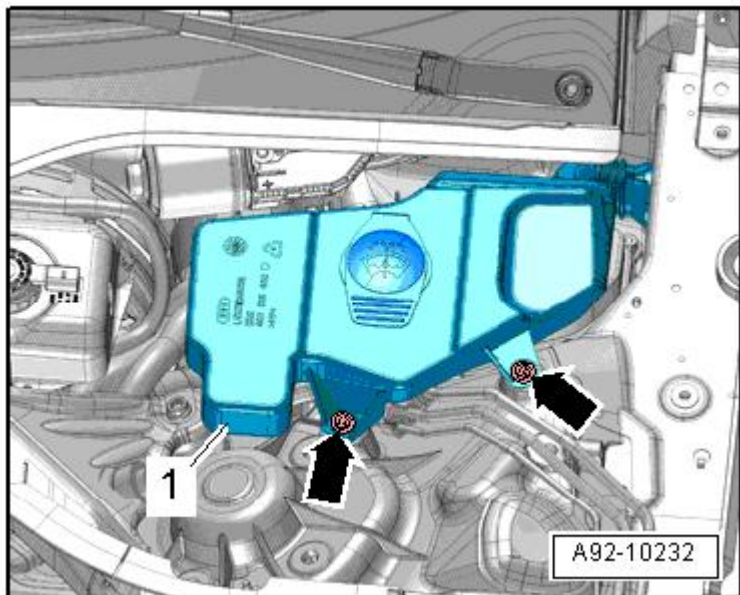
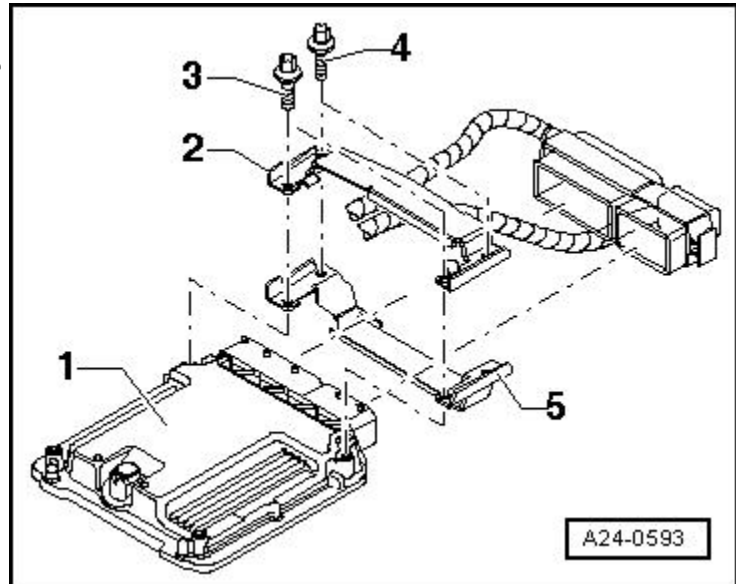
### Special tools and workshop equipment required

- ♦ Hot Air Blower -VAS 1978/14A- with the Shrink Element For Hot Air Blower -VAS 1978/15A- from the Wiring Harness Repair Set -VAS 1978B-
- ♦ Small Locking Pliers

### Removing

- Select “replace engine control module” under “Guided Functions” in the vehicle diagnostic tester if the ECM is being replaced.
- Turn off the ignition.
- Remove the windshield wiper fluid reservoir filler tube. Refer to

→ [Electrical Equipment; Rep. Gr.92; Removal and Installation.](#)



- Open the retainer -arrow- and remove the ECM-1-.



### Note

Ignore -2-.

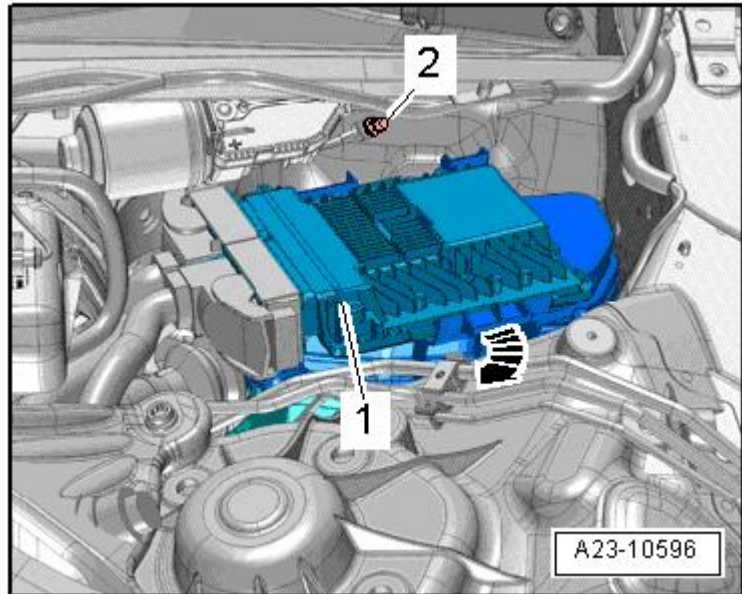
**Additional steps if there is a protective housing installed.**



**Caution**

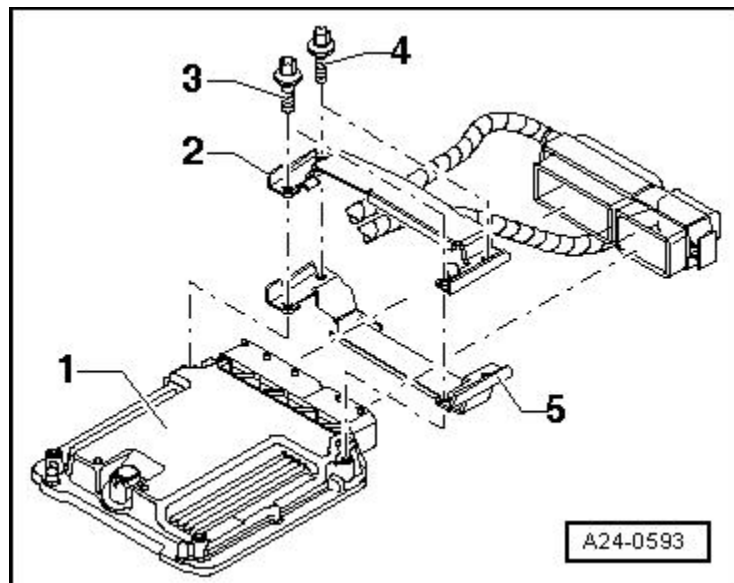
**Risk of damage (burning) from wiring and connectors, insulation and control modules.**

**Follow the next steps exactly! Observe hot air gun operating instructions.**

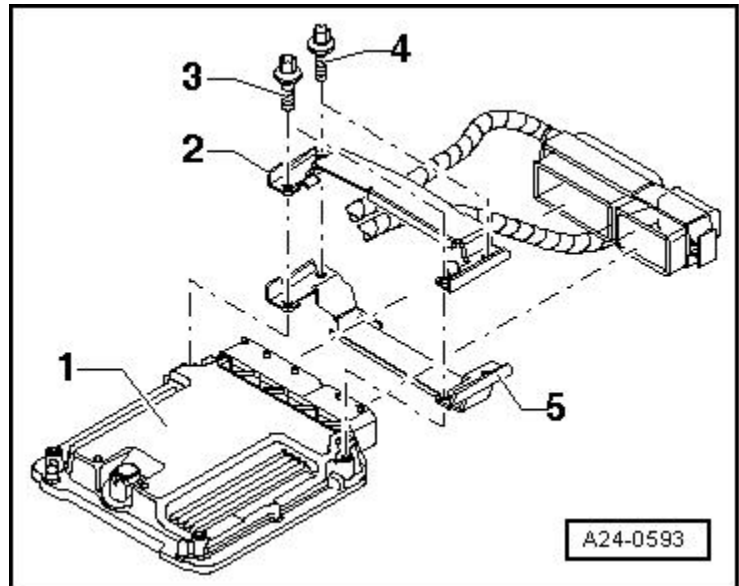


The ECM -1- is secured in a protective housing -5- with retaining tabs -2- and shear bolts -3 and 4- to make it harder to access it.

The threads of the shear bolts -4- (that are not screwed into the ECM) are coated with a locking compound. For this reason, the threads must be heated with the heat gun to remove both bolts.



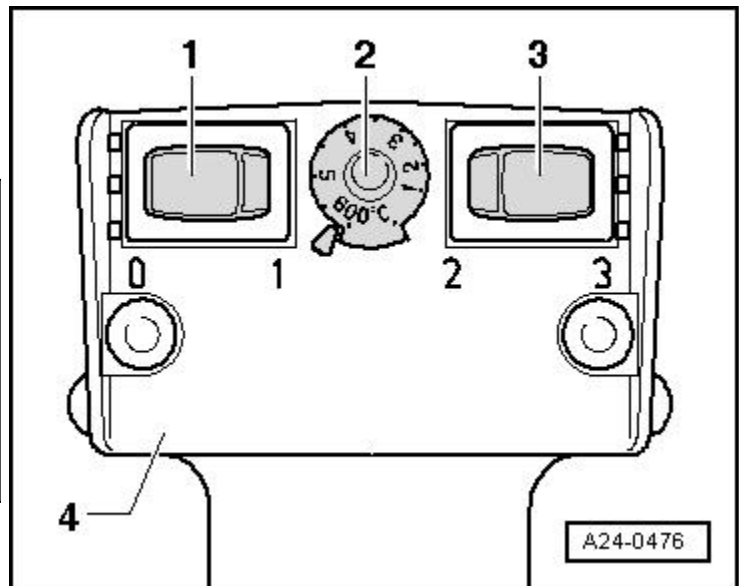
The threads of both shear bolts -3-, that are screwed into the ECM, are not coated with a locking compound. The threads in the ECM housing must not be heated and do not require to be heated (unintentional heating of the ECM).



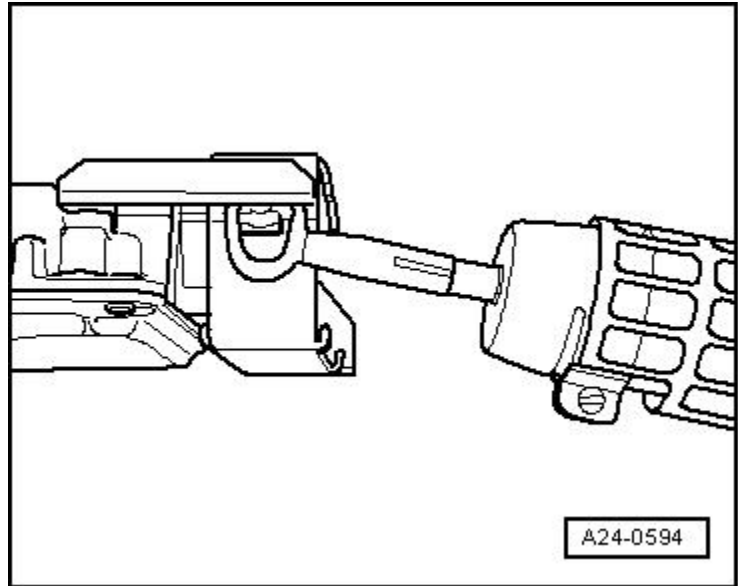
- Set the adjustment on the heat gun as shown in the illustration, with the temperature potentiometer -2- set to maximum heat and the two-stage airflow switch -3- set to level 3.


**WARNING**

*When heating threads of locking mechanism, shear bolts and components of protective housing are also heated intensely. Do not burn yourself on this! Make sure that only the threads are heated as much as possible, and not any of the surrounding parts. Possibly cover these parts.*



- Warm threads on connector-side shear bolts for approximately 25 to 30 seconds.

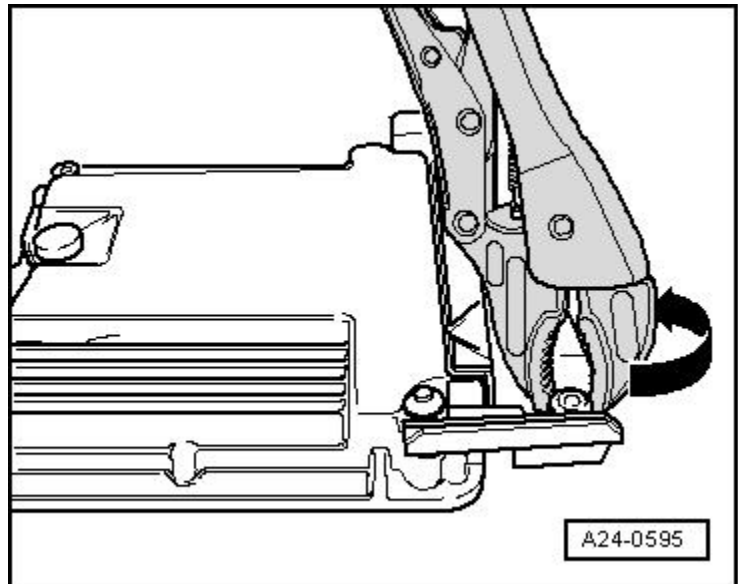


- Remove shear bolts with locking pliers (see direction of arrow).
- The shear bolts installed in the ECM do not need to be heated for removal. They can be removed without heat.
- Separate the protective housing from the control module connectors.
- Disengage the connectors from the ECM and disconnect the connector.

### Installing

Install in reverse order of removal. Note the following:

- Thereafter, the ECM must be equipped with the protective housing.
- Clean threaded holes for shear bolts of locking compound residue. Cleaning can be performed with a thread cutter (tap).
- Always use new shear bolts.
- Install the windshield wiper fluid reservoir filler tube. Refer to



→ [Electrical Equipment; Rep. Gr.92; Removal and Installation.](#)

### Perform the following step after installing a new ECM.

- Activate the ECM in “Guided Functions” under “replace engine control module”. Use a vehicle diagnostic tester for this.