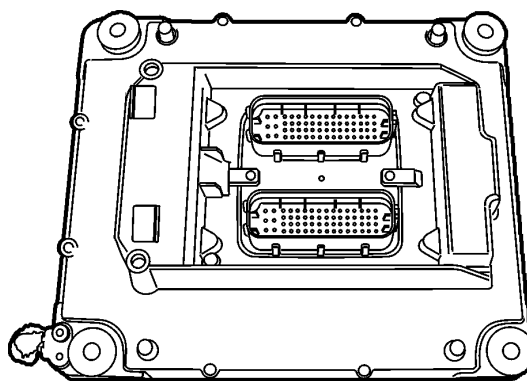


**Engine Control Unit  
Replacement  
D13F****Engine Control Unit, Replacement**

W2003778

This information covers the proper procedure for replacement of the Engine Electronic Control Unit (EECU) on the Volvo D13F engine.

**Contents**

- “Special Tools” page 2
- “Engine Control Unit, Replacement” page 3

**Note:** Information is subject to change without notice. Illustrations are used for reference only and can differ slightly from the actual vehicle being serviced. However, key components addressed in this information are represented as accurately as possible.

**Note:** You should not replace an EECU without prior authorization from Volvo Trucks North America, Inc.

## Tools

### Special Tools

The following special tools are used with VCADS Pro to diagnose engine faults. For special tools ordering instructions, refer to tool information in group 08.



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**9990008**

Test Pins

# Service Procedures

## 2841-03-02-01

### Engine Control Unit, Replacement

You must read and understand the precautions and guidelines in Service Information, group 20, "General Safety Practices, Engine" before performing this procedure. If you are not properly trained and certified in this procedure, ask your supervisor for training before you perform it.

**Note:** You should not replace an EECU without prior authorization from Volvo Trucks North America, Inc.

## Removal

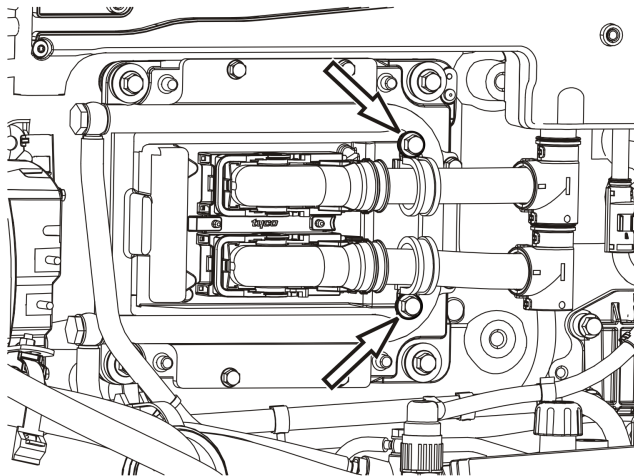
**1**

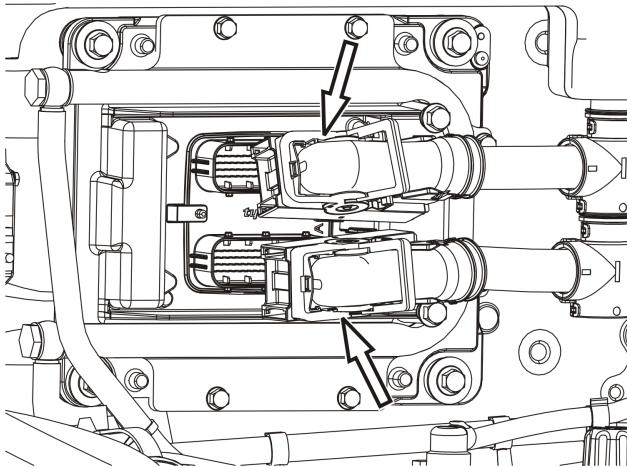
Remove all cables from the ground (negative) battery terminals to prevent personal injury from electrical shock.

**Note:** Disconnect any ground wiring from electrical equipment connected to the batteries such as ECUs, satellite systems, etc.

**2**

Remove the bolts mounting the upper and lower wiring harness clamps to the EECU housing.

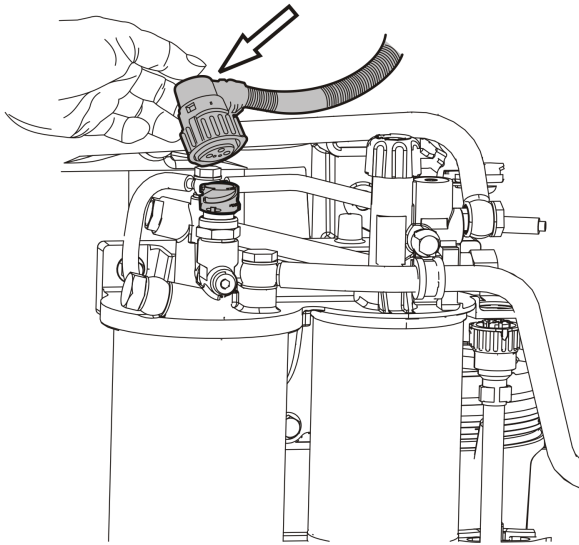




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**3**

Push the connector locks inward and rotate outward to disconnect both wiring harnesses from the EECU.



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**4**

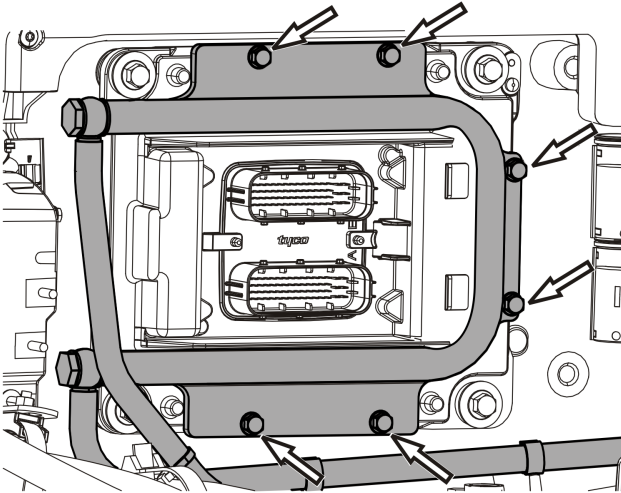
Disengage the fuel sensor harness connector from the fuel filter housing.

**5**

Position the EECU harness out of the way to gain access to the EECU.

**6**

Remove the P-clamp securing the EECU cooler fuel line to the cylinder block.

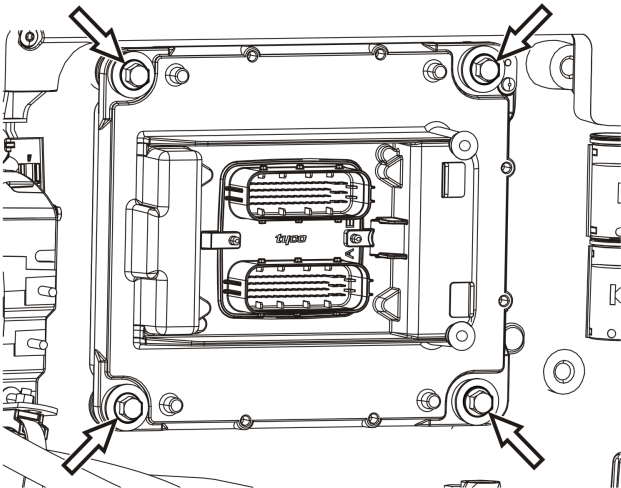


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**7**

Remove the bolts securing the EECU cooler to the EECU housing. Position the EECU cooler away from the EECU and allow the cooler to hang by the fuel lines.

**Note:** Keep the EECU cooler fuel lines attached and position the cooler out of the way.



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**8**

Remove the mounting bolts securing the EECU to the engine block and remove the EECU.

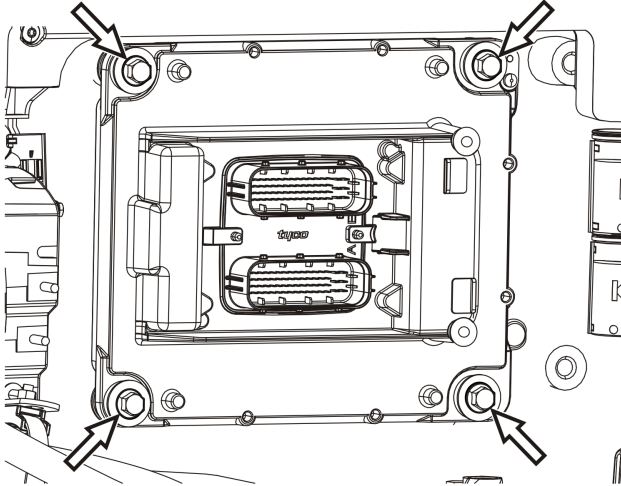
## Installation

**Note:** Make sure that the EECU contact surface on the engine block is free of dirt.

**1**

Mount the EECU to the engine block. Install and tighten the mounting bolts to specification.

**Note:** Make sure that rubber isolators are correctly installed and that the ground strap is grounded to the engine block.

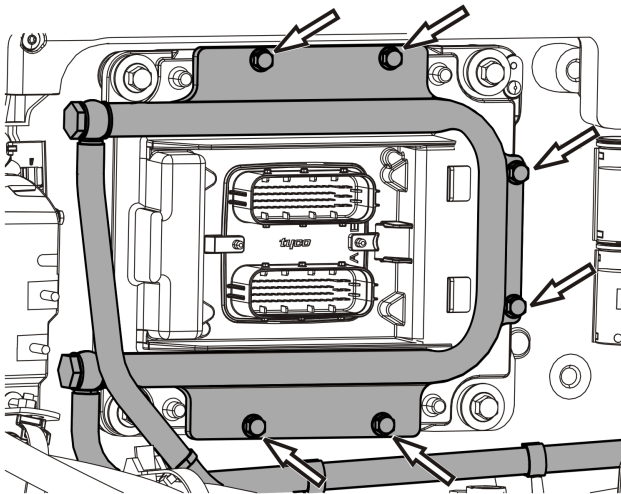


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**2**

Position the EECU cooling plate to the EECU, install the bolts and tighten to specification.

**Note:** If the EECU is painted in the region contacting the cooler, remove the paint to provide for the most efficient cooling.



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**3**

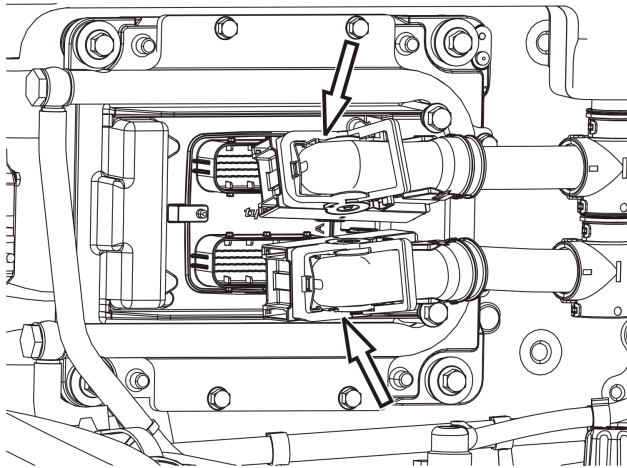
Install the P-clamp to secure the EECU cooler fuel line to the cylinder block.

**4**

Check the tension of the terminal connector pins using the test pins tool kit.

**Note:** If terminal pins are damaged or corroded, replace as necessary.

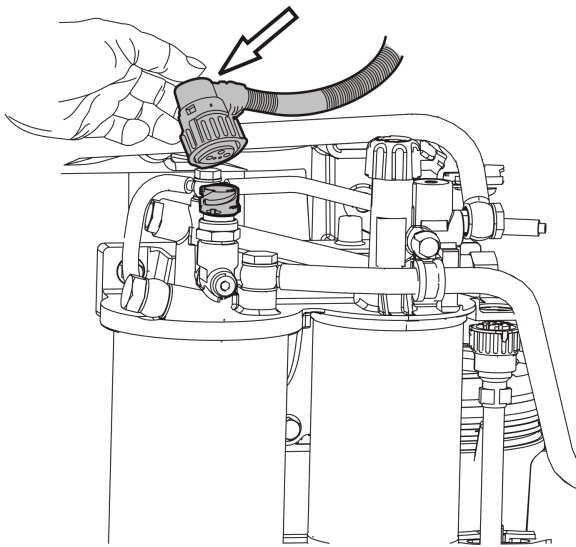
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**5**

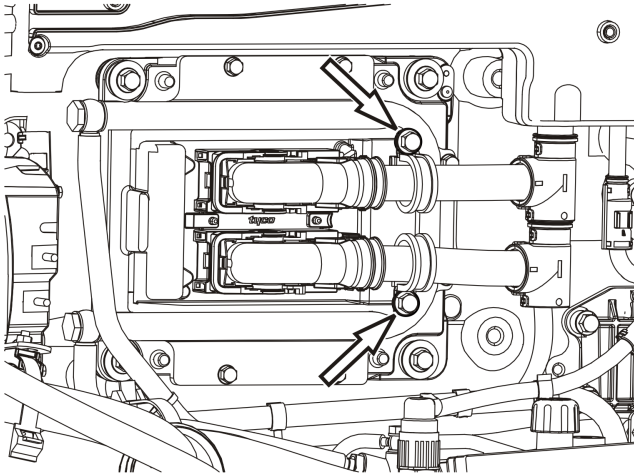
Carefully engage the upper and lower wiring harness connectors to the EECU. Verify that the connectors are latched and properly locked in position.



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**6**

Install the fuel sensor harness connector to the fuel filter housing.



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**7**

Install the bolts to secure the wiring harness clamps to the EECU.

**8**

Install all previously removed cables to the ground (negative) battery terminals.

**Note:** Reconnect any ground wiring for electrical equipment connected to the batteries such as ECUs, satellite systems, etc.

**9**

Connect VCADS Pro to the diagnostic connector and program the EECU (if not yet programmed).

**10**

Start the engine and check that there are no fault codes.