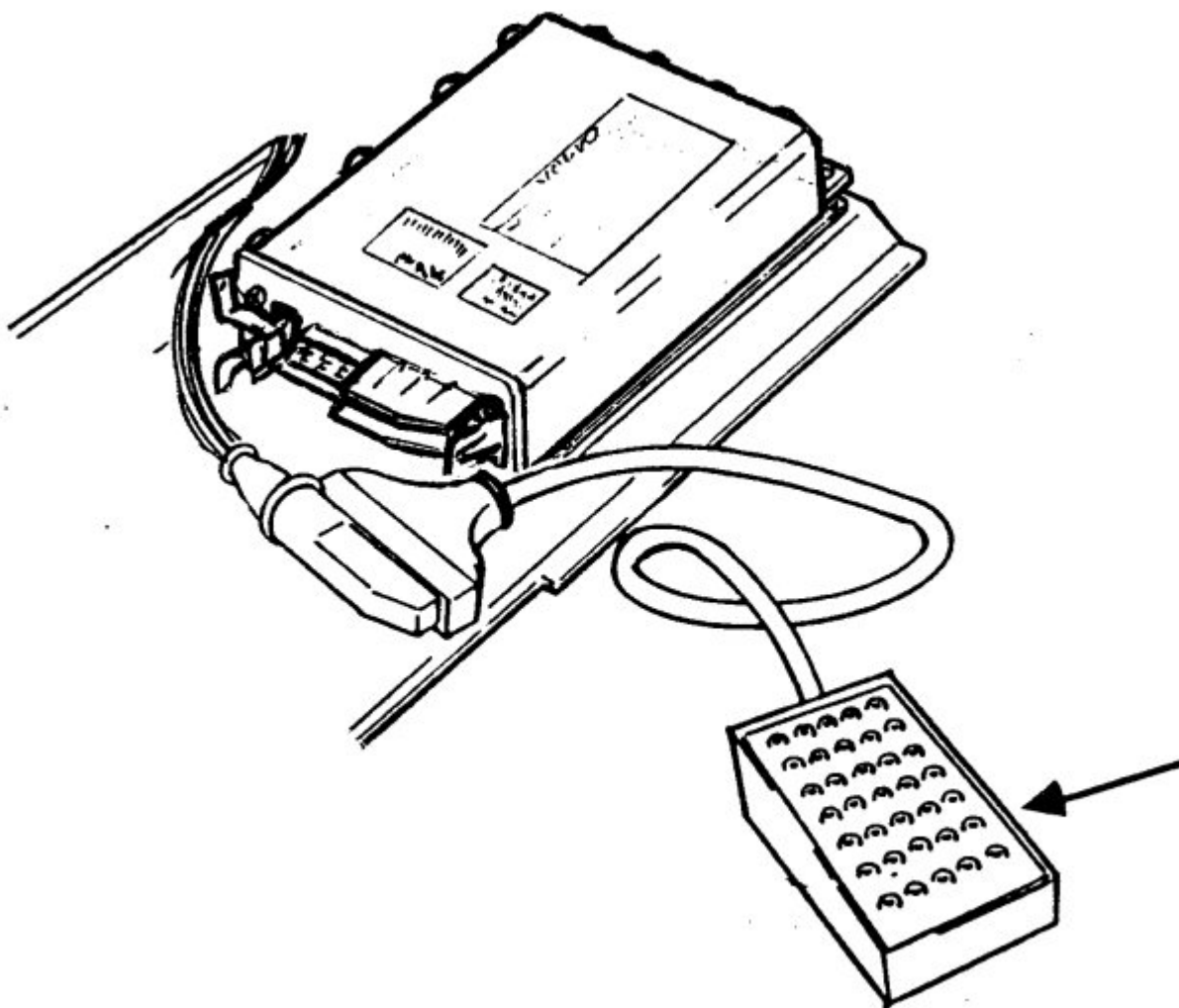


Electrical fault tracing



General

When checking the values specified in [Fault tracing with the help of fault codes](#) and [Other fault tracing](#) the following applies:

1. Make sure the starting key is in position *Off*.
2. Unplug the cable harness from the control unit and connect it to test unit 6899.
3. Follow the special instructions given under the appropriate titles.
4. Should it not be possible to trace the fault when checking as per [Fault tracing with the help of fault codes](#) continue fault tracing as described under [Other fault tracing](#).
5. When checking has been completed, turn the starting key back to *Off*.
6. Disconnect the test unit and re-connect the cable harness to the control unit.

Note: It is essential that the starting key is in the Off position when the control unit cable harness is disconnected from the test unit and re-connected to the control unit.

Fault codes not indicated

- If high boost pressure is suspected despite fault code 15 not being displayed follow [Checking engine performance](#).
- Check brake contacts as per fault code 3.
Faulty brake contacts or faulty clutch pedal break contact can result in no fault codes being shown.
- Check clutch pedal break contact as described in [Other fault tracing](#).

The contact could be faulty or poorly earthed.

The contact could also be wrongly adjusted.

If constant engine speed or cruise controls are not functioning and there is no fault code indication, the fault could lie in the clutch pedal break contact.

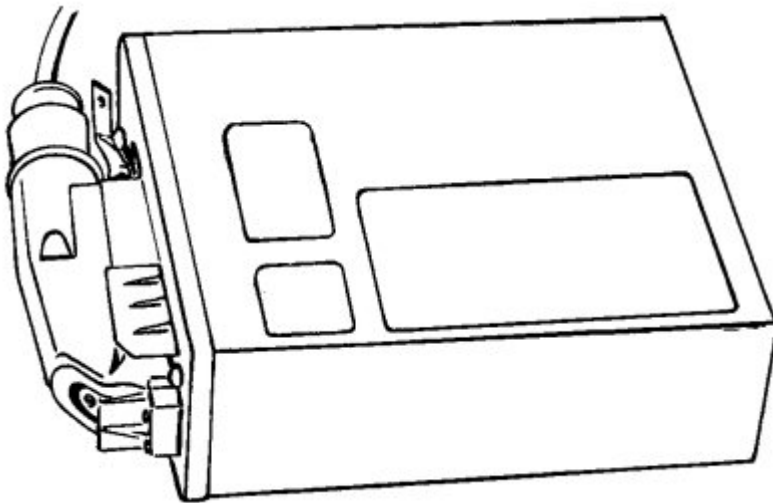
Fault tracing with the help of fault codes

Fault code 2

General programmed control unit.

The control unit is not VSP programmed, which means that it lacks certain parameters for the engine in question.

Engine will not start.



Fault code 3

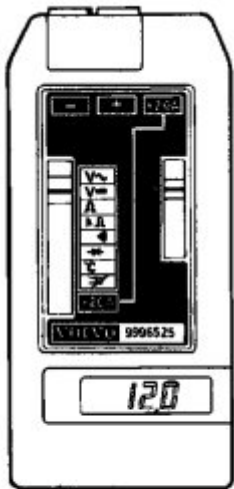
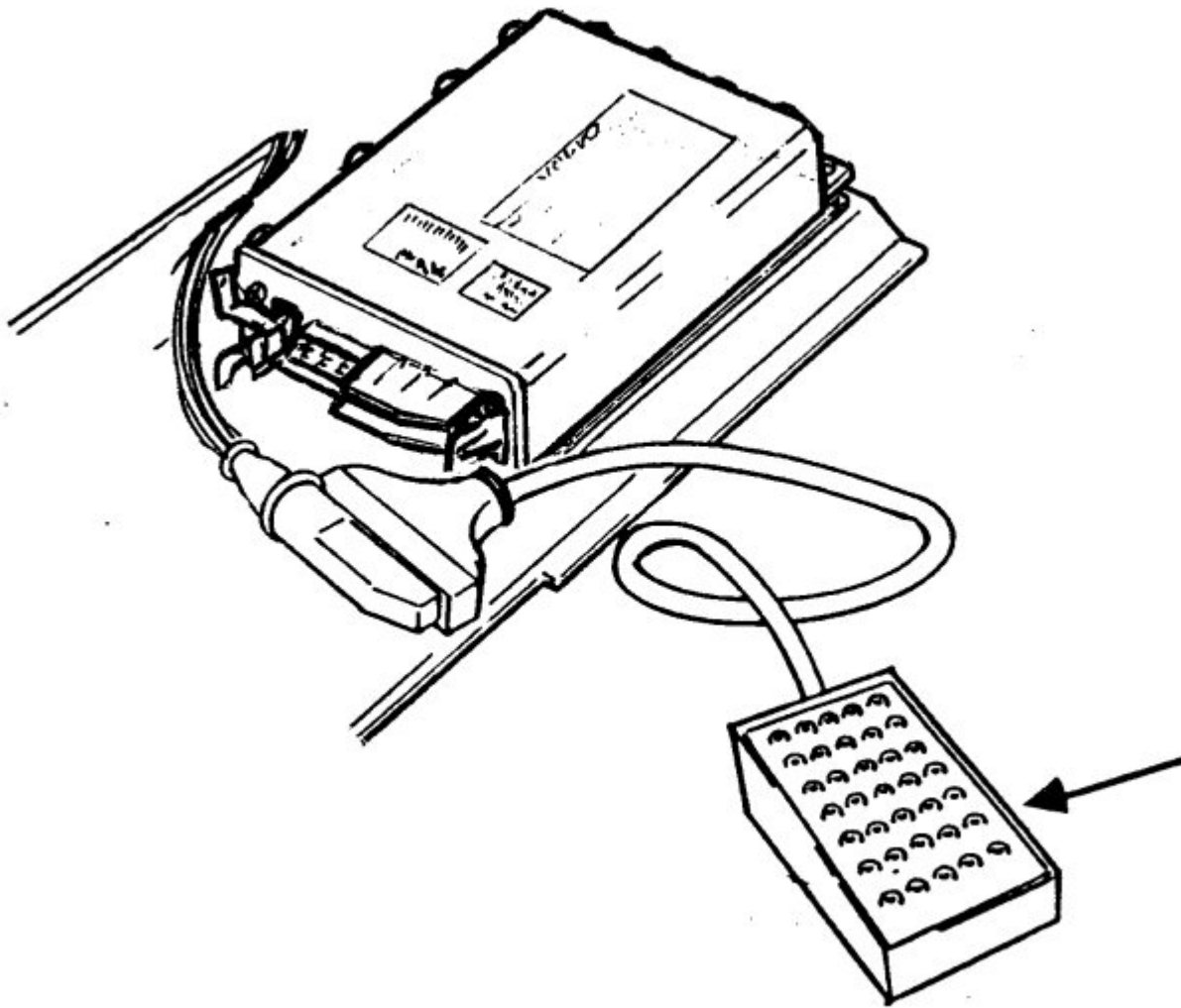
Brake check not carried out or faulty brake contacts. Fault code 3 means that cruise control will not work.

This indicates that the brake check has not been carried out. Should the fault code not disappear after the brake pedal has been pressed down approx. 4 seconds, check the brake contacts.

Note: The air tanks must be fully charged. The fault code will not be stored in the fault memory.

If any of the brake contacts are faulty, RESUME will not be available.

However engine speed can be adjusted with the SET+ and SET- functions.



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Brake circuit 1

Standard brake light switch on rear axle (216)

The blocking valve must be pressed down and the air tanks charged

Volvo Engine D16a Electrical Fault Tracing

Full download: <http://manualplace.com/download/volvo-engine-d16a-electrical-fault-tracing/>

Starting key at Drive

Multimeter	Test unit	Expected value	Remarks
DC	11-19	0 V	At rest
DC	11-19	Battery voltage	Braking
DC	11-19	Battery voltage	Braking, trailer

Brake circuit 2

(Front axle, separate contact 2008 for EDC system)

Starting key at Drive

Multimeter	Test unit	Expected value	Remarks
DC	5-19	Battery voltage	At rest
DC	5-19	0 V	Braking

Starting key at "Off"

Multimeter	Test unit	Expected value	Remarks
Resistance	5-1	0-20 Ω	At rest
Resistance	5-1	Greater than 5 k Ω	Braking

Fault code 4

Engine speed signal lost from both injection pump and alternator.

When the engine starts, the fault code should disappear. The fault code will not be stored in the fault memory.

Fault code 5

Engine speed signal from injection pump faulty. Engine speed control now uses back-up signal from alternator.