

# Volvo error code readout for the following models

## **850 model 1996- with Motronic 4.3 or Fenix 5.2,**

Engine Codes  
Cruise Control  
ECC

## **S-V70 1997-1998, only Fenix 5.2**

Engine Codes  
Cruise Control

## **C70 97-98**

Cruise Control

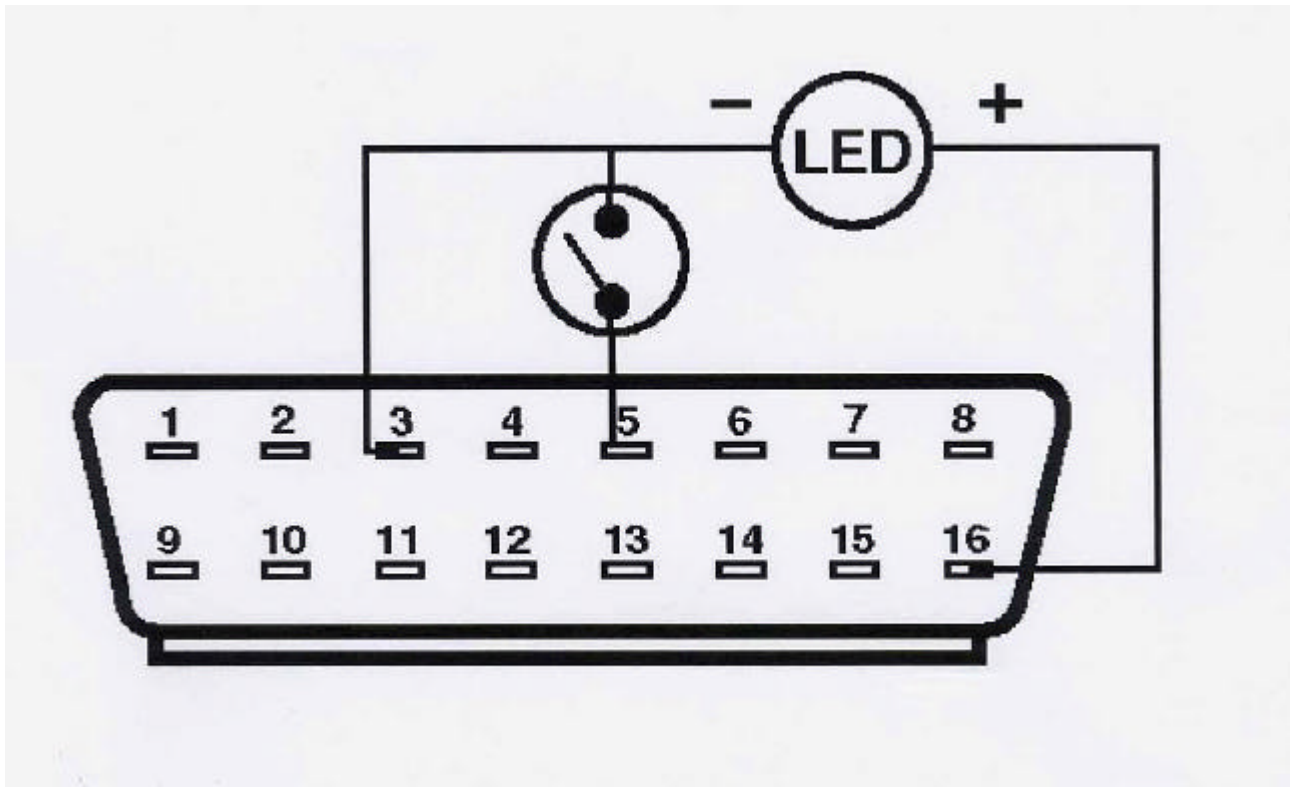
## **900 series from 1996 and S-V90**

ABS  
Cruise Control

## **S-V40 1997-1998**

Cruise Control

## VOLVO OBD Code readout European sold cars only!!



I have gathered these information from a lot of places on the internet, as well as wiring diagrams from Volvo. I have only tested the system on a 1996 Volvo 850R, and on that car it works. I presume it works on the other models mentioned on the front page aswell, at least that what I was told.

Remember when you work with electronics in a car to follow the description precisely or you might damage something in the car.

From model year 1996 Volvo changed the error code readout system from a led in the engine compartment to the 16 in OBD connector.

This makes the readout a bit more difficult and furthermore it limits what codes you can get, because some of the codes needs to be readout with an OBD reader and some Volvo specific software. Volvo uses pin 7 on the OBD connector, the so called K-line and communicates through the ISO-9141 protocol. There is a lot of hardware that can read ISO-OBD signals, but the Volvo codes aren't standard, so you need to combine a decoder with specific Volvo software.

The only place i have found selling that software fairly cheap is  
<http://www.onboarddiagnostics.co.uk/volfcr/index.htm>

The codes you can read without the software and the OBD hardware, and how you read them, are shown below.

Step one it to switch off the ignition.

To read error codes on the previously mentioned cars you need some wire and a LED. It has to be a LED or it will not work. You can use a 12V LED directly as shown on the drawing or you can use a 5V LED in series with a 1K8 ohm resistor. Remember to install the LED with correct polarity.

Pin 16 is +

Pin 5 is ground

Pin X is the pin which gived the error code

After the wiring is finished switch on the ignition.

To read the code connect pin 5 with pin X for about one second. When you disconnect you should get the code as a number of flashes on the led. Each error code is divided into three groups of flashes with a pause of 3 seconds between each group. If you get the code 1-1-1 it means the thing you are checking is free of error. When one code has been shown you can check if there are more by connecting pin 5 and X for one second again.

After all the codes have been read and you have fixed the problems, you can delete the codes.

To delete the codes follow the instructions on the top of this page again, swtich off ignition, connect the wiring and the LED etc.

When you have read all the codes connect pin 5 and pin X for 5 seconds. Disconnect the wire and the LED will light. Connect pin 5 and pin X again for 5 seconds and disconnect again. Connect in 5 and pin X for 1 second and when you disconnect you should get the code 1-1-1.

You can read error codes for these things. The pin number here is the one that is called X in the text on the previous page.

850 model 1996-

Motronic 4.3 or Fenix 5.2, both pin 3

Cruise Control, pin 13

ECC, pin 6

S-V70 1997-1998

Fenix 5.2, pin 3

Cruise Control, pin 13

C70 97-98

Cruise Control, pin 13

900 from 1996- and S-V90

ABS, pin 12

Cruise Control, pin 13

S-V40 1997-1998

Cruise Control, pin 13

Pin 9 should be error codes for the Volvo Timer type 4, which is used together with the original Volvo petrol heaters. I havent tested that yet.