

# Injectronics

Remanufactured Automotive Electronics Components

## TECHNICAL BULLETIN

**Document number: T0058**

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**Make: Volvo / Saab / Porsche**

**Model: Various**

**Subject: LH 2.4L 35 pin ECM**

From approximately 1988 the Bosch LH version 2.4 was used on Saab, Volvo and the Porsche 928. This has a 35-pin connector and often fails due to a particular hybrid component within the ECM. Injectronics replaces this hybrid with a more robust custom designed circuit board. On Volvo vehicles the supply relays can also cause intermittent problems. Some of the more common problems that are caused by the ECM are:

### **No fuel pump control.**

This is fairly common and usually there will be other problems with the ECM, such as no fault codes or running rich. It can also be intermittent but first check the relays.

### **No output at all.**

There will be no injectors or fuel pump output. Check powers at pins 4, 9, and 35. Earth's at 5, 17 and triggered from EZK module on pin 1. Also check if you have spark. If you do not have ignition you are unlikely to get injection.

### **Runs rich or lean**

Vehicle intermittently starts and runs ok but after a short warm up time the engine progressively runs leaner.

### **Vehicle won't rev over approximately 2000 RPM**

This can also be a faulty air mass sensor so check there is an output from pin 3 on the sensor (see tech bulletin #56).

### **Powers**

- 35 – Ignition key
- 9 – From main relay
- 4 – Constant battery

### **Earth's – 5, 17**

- Injectors – 18
- Air Mass Meter – Signal 7
- Air Mass Meter – Burn off 8
- Trigger from EZK module – Zero / 12 volts square wave
- Main relay control – 21
- Pump control – 20
- Oxygen sensor signal – 24
- Idle speed control – 33

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