General

This is a second generation system which is similar to the LH-Jetronic I system used on earlier models (to 1982).

The LH-Jetronic II system can be identified by a throttle position sensor mounted to the throttle housing (which can not be found on the LH-Jetronic I injection).

This system is an electronic system with one injector per cylinder. The system consists of a control unit which...
The LH is an abbreviation for the German equivalent of hot air wire. This name is derived from the fact that engine intake air flow is measured by an air mass meter consisting of an electrically heated wire. This wire is cooled by intake air flow. The control unit constantly regulates the wire heating current to keep the wire at a constant temperature. Heating current is a measure of intake air mass. Because intake air mass is measured, the system is not affected by ambient air pressure or temperature.

Components

**System Relay (9)**
- Provides control unit and air mass meter with current.
- Control unit senses battery voltage via system relay.

**Fuel Pump Relay (15)**
- Provides current to injectors, fuel pump, tank pump and air control valve.

**Control Unit (8)**
- Receives signals from various sensors.
- Calculates corresponding fuel quantity.
- Regulates fuel quantity by variations in injection duration.
- Regulates idle speed by varying air control valve opening.

**Air Mass Meter (1)**
- Measures intake air mass.

**Ignition Coil (5)**
- Control unit senses engine speed via ignition coil connection # 1.
- Ignition pulses give information on both engine speed and when injection should begin.

**Coolant Temperature Sensor (3)**
- Senses coolant temperature. Sensor resistance decreases as temperature increases.

**Lambda-Sond (Oxygen Sensor) (6)**
- Senses oxygen content in exhaust gas. Oxygen content is a measure of combustion effectiveness.

**Throttle Valve Switch (2)**
- Senses throttle valve position.
- Throttle valve switch has two functions, a micro-switch which closes at engine idle and a switch which closes at full-throttle.

**Starter Motor (7)**
- Signals control unit when starting engine.

**Idle Air Control Valve (19)**
- Bypasses air around throttle valve.
- Regulated by control unit.

**Micro-Switch, Air Conditioning (A/C) (4)**
- Switch closes when A/C system engaged.
- Control unit then increases idle speed.

**Idle Adjustment Screw (26)**
- For basic setting idle speed.
Intended for use when basic setting idle speed.

**Lambda-Sond Test Point (21)**
- Used by Volvo Mono-Tester to Check and Adjust CO-Content.

**In-Tank Fuel Pump (18)**
- Pumps fuel from tank to main fuel pump and maintains fuel line to main pump under pressure.
- Eliminates risk for vapor lock.

**Main Fuel Pump (17)**
- Supplies system with fuel and builds-up line pressure.

**Fuel Filter (22)**

**Injection Manifold (23)**

**Fuel Pressure Regulator (24)**
- Senses intake manifold pressure.
- Regulates fuel pressure to a constant level above intake manifold pressure.

**Fuel Injectors (16)**
- Inject fuel.
- Injection duration regulated by control unit.

**Catalytic Converter (25)**