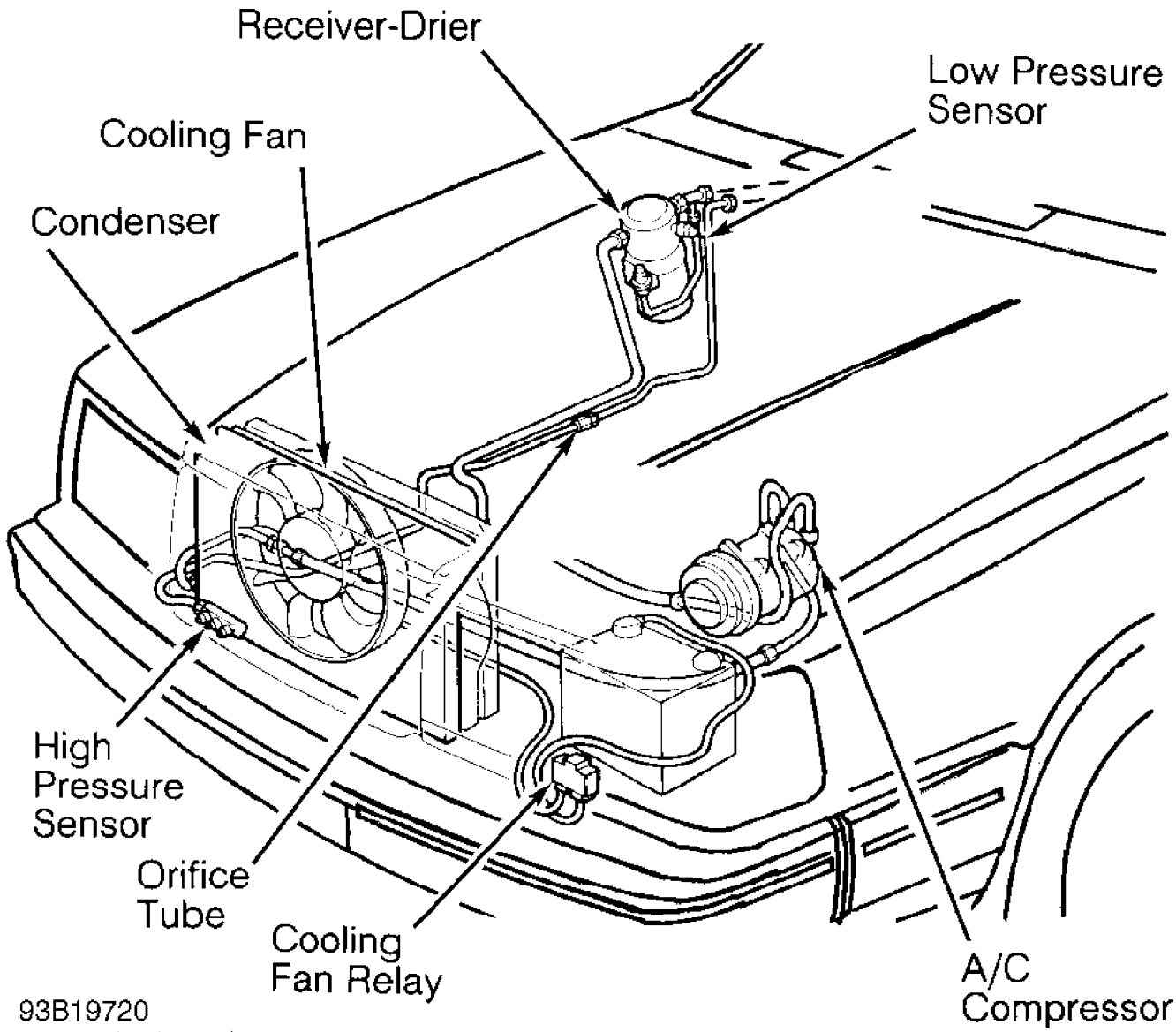

Fig. 2: Identifying A/C-Heater System Components
Courtesy of Volvo Cars of North America

TROUBLE SHOOTING

SELF-DIAGNOSTIC SYSTEM

The EEC system incorporates a self-diagnostic function that indicates system faults through a series of trouble codes. The presence of fault(s) is indicated by flashing A/C OFF button. The control panel is programmed to enter a pre-programmed mode when a fault is detected. Under fault condition, control panel ignores the faulty signal, selects an alternative pre-programmed value and prevents delivery of faulty output signals.

Entering Self-Diagnostics

1) To enter mode, ensure engine is running. Shine a non-

fluorescent, bright light on solar sensor. Place blower fan control knob in AUT position and function selector knob in vent position.

2) Place temperature control knob to maximum cooling (pointing straight down). Ensure recirculated air switch is depressed and A/C OFF button is released. Depress and release A/C OFF button within 5 seconds to start self-diagnostic mode.

3) Each fault code consists of 3 digits. For example, Code 132 is displayed by a single flash of the A/C OFF button for the first digit (number 1). After a pause, the second digit of code (number 3) is indicated by 3 flashes. After another pause, the third digit of code (number 2) is indicated by 2 flashes. See TROUBLE CODE IDENTIFICATION table.

4) Three different fault codes may be stored in memory. However, only one code may be displayed upon request. It may be necessary to request display of fault codes a number of times to ensure all fault codes are displayed.

Exiting Self-Diagnostics & Clearing Codes

To exit self-diagnostics, turn ignition off. All codes are cleared when ignition is turned off. Fault codes are not stored in memory. Even if a code has occurred several times during a period of time, code will only be stored until ignition is turned off.

TROUBLE CODE IDENTIFICATION TABLE

Affected Circuit/Sensor	Code
Fault Free System	111
Outside Temperature Sensor	
Short Circuit To Ground	121
Open Circuit Or Short Circuit To 12 Volts	122
In-Vehicle Temperature Sensor	
Short Circuit To Ground	131
Open Circuit Or Short Circuit To 12 Volts	132
Water (Coolant) Temperature Sensor	
Short Circuit To Ground	141
Open Circuit Or Short Circuit To 12 Volts	142
Alternator (D+ Signal Fault)	151
Solar Sensor	161
Servomotor/Potentiometer	
Open Circuit Or Short Circuit To Ground	211
Short Circuit To 12 Volts	212
Servomotor	
Incorrect 12-Volt Supply To Pins No. 17 & 18	213
Servomotor	
Fails To Operate Within 10 Seconds	214
ECC Control Panel	
Faulty Temperature Control	231
Fan Motor Excessive Starting Current	233
Power Unit - Incorrect 12-Volt Supply	
Affected Output:	
Coolant Valve	241
Bi-Level	242
Vent	243
Recirculated Air	244
Defrost	245
Floor	246
Fan (Maximum Speed Relay)	247
A/C Compressor	248
Radiator Fan Relay	249