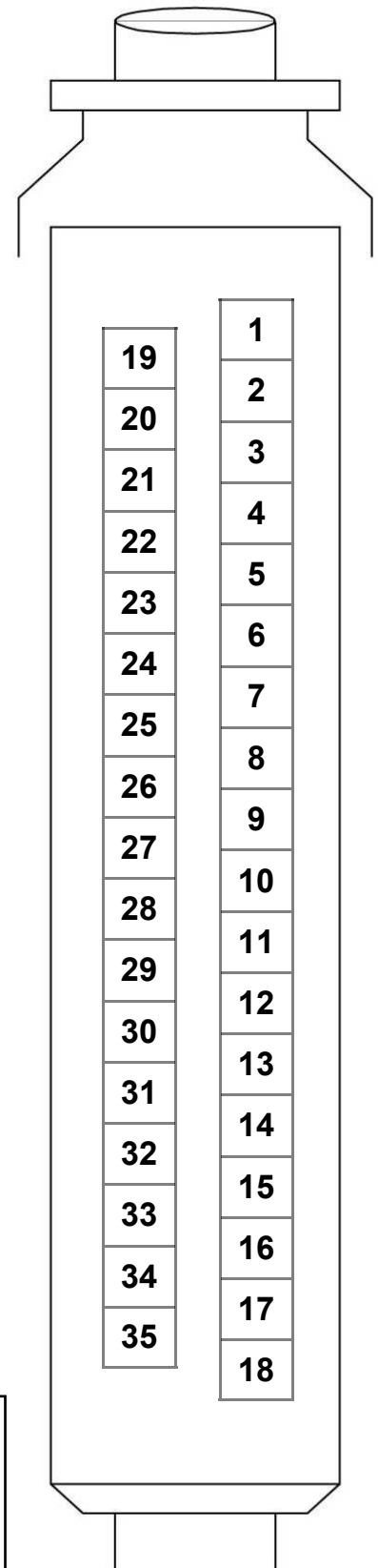


# K-Jetronic Continuous Injection (CI). 240 B21FT Lambda ECU Pin Functions.

1. —
2. (GN) Input signal from oxygen sensor (shielded).
3. —
4. (BK) SHIELD (shield for oxygen sensor GN wire).
5. (BK) Ground (external signal ground for shield).
6. —
7. 2-wires: (GN) all years, plus (GR) 1982-85. Input signal (ground) from sender/switch. When terminal 7 is grounded, the frequency valve duty cycle is set to 64-70° dwell (71-77%) for a richer mixture to provide warm-up or acceleration enrichment.  
(GN wire) (all years): Pressure switch on firewall closes when pressure exceeds 2.9 PSI for boost acceleration enrichment.  
(GR wire) (1982-85): Thermal cutout switch/sender is threaded into the side of the engine block (intake side, rear). This switch grounds terminal 7 when coolant is below 59° F (15° C) for cold fuel enrichment.
8. (GN) 12v input from Lambda relay pin 87 (which receives switched power via fuel pump relay pin 87).
9. —
10. —
11. (W) (late 1984, 1985 only) Input signal (ground) from the pressure differential switch for cold acceleration enrichment. This switch is connected by a vacuum hose to a thermal vacuum sensor in the head, which allows vacuum to pass to the pressure differential switch when the coolant temp is below 131° F (55° C). The pressure differential switch is open when vacuum is present. When the accelerator is quickly pressed, vacuum drops and the switch closes for up to 1.5 seconds, grounding terminal 11 for cold fuel enrichment. This sets the frequency valve duty cycle to 82° dwell (91%). The thermal vacuum sensor in the cylinder head disables this function by blocking vacuum when the engine is warm.
12. —
13. —
14. —
15. (BN) Control signal output (ground) to frequency valve.
16. (BK) Ground (external ground for control signal).
17. (RD) Lead to Lambda Sond test plug.
18. —

Pins 19 — 35 not used.

## Wiring harness

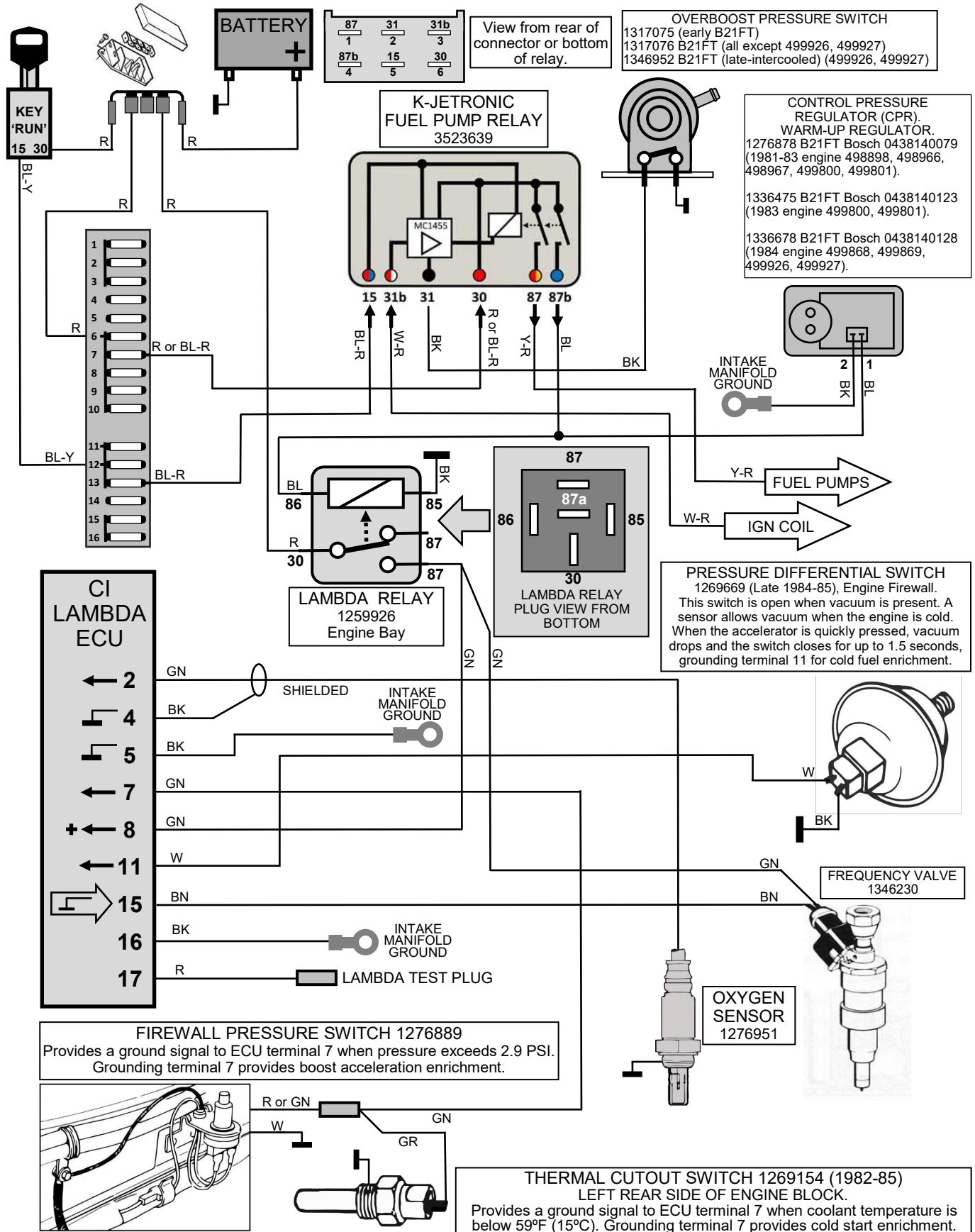


### LAMBDA ECU PART NUMBERS FOR B21FT

VOLVO 1276896 (1981 242 CH to 206790, 244 CH to 686099, 245 CH to 368309),

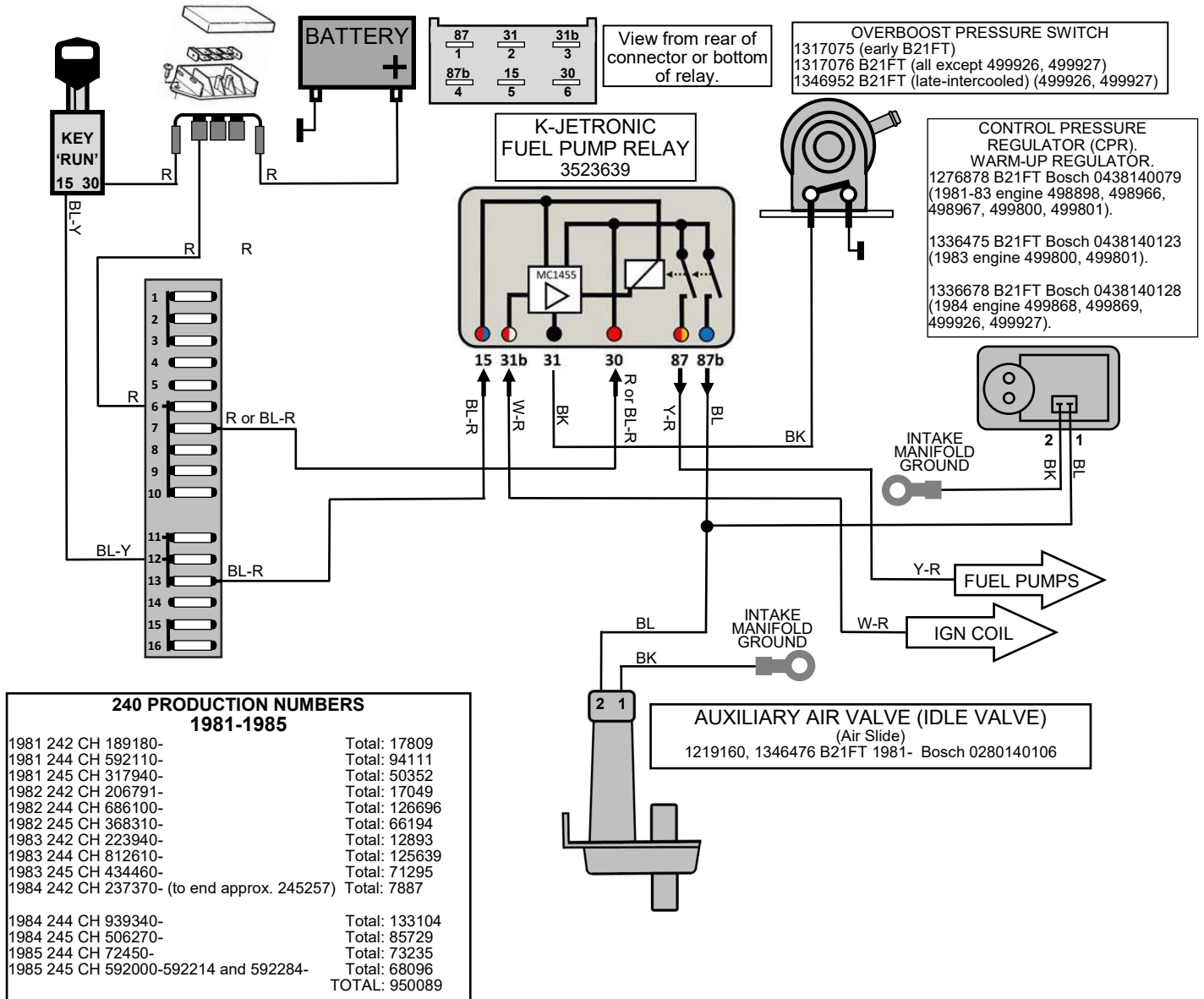
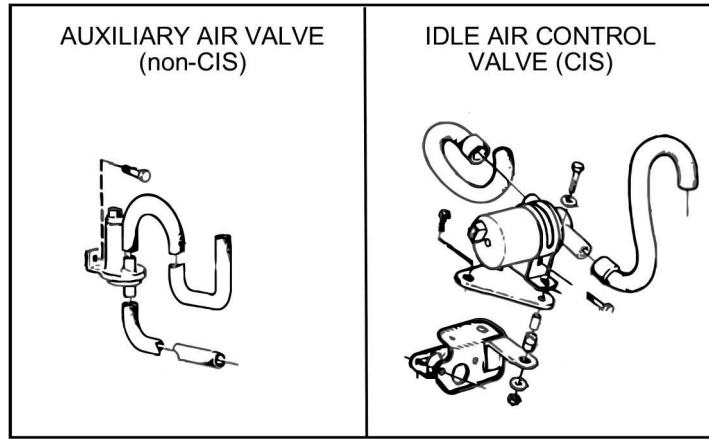
VOLVO 1306412 (1982+ 242 CH after 206791, 244 CH after 686100, 245 CH after 368310). BOSCH 0280800052.

# K-Jetronic Continuous Injection (CI). 240 B21FT Lambda ECU and CPR Pin Functions. 240 Turbo using Constant Idle Speed (CIS) System.



# K-Jetronic Continuous Injection (CI). Early 240 Turbo WITHOUT Constant Idle Speed (CIS) System. (Lambda system not shown in this diagram)

If the Constant Idle Speed (CIS) System is NOT present, the car will have an Auxiliary Air Valve for cold/warm idle speed control. If the CIS System is present, it will include an Idle Air Control Valve, which is shown in following pages.



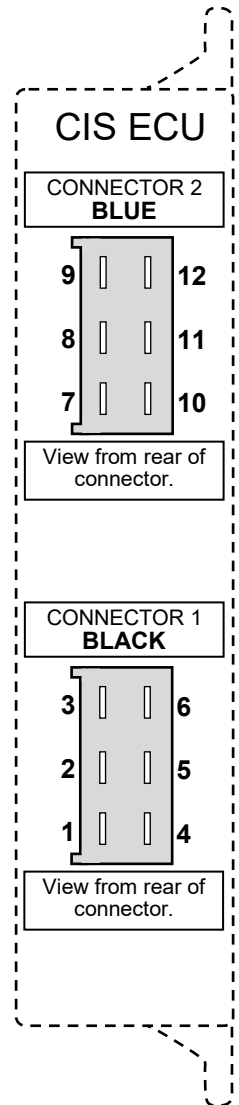
# K-Jetronic Constant Idle Speed (CIS) System. ECU Pin Functions for B21FT.

## CONNECTOR 1 (BOTTOM)

1. (B-R) 12v input from terminal 15 ignition switch.
2. (BK) Ground.
3. (W) Control signal output to idle air control valve pin 1
4. (BN) 12v output to idle air control Valve pin 2.
5. (GN) Control signal output to idle air control valve pin 3.
6. —

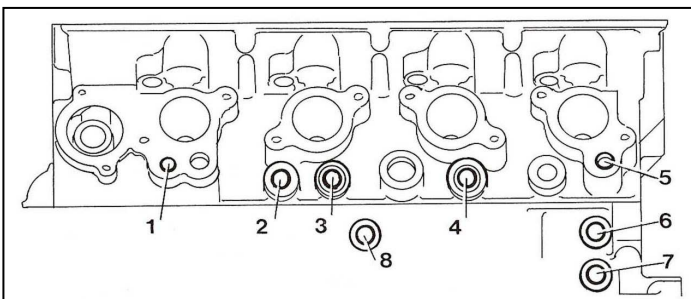
## CONNECTOR 2 (TOP) (BLUE CONNECTOR)

7. — (W-GN or R) (not used for B21FT) Input signal (12v) from AC for elevated idle.
8. (Y) Input signal (ground) from throttle microswitch (switch open at idle, closed above idle).
9. (R) Input signal from coolant temp sensor (CLT).
10. (BL-W) Lead to idle control service/test plug. Ground to set base idle.
11. (BL) Input signal from coolant temp sensor (CLT).
12. (W-R) Ignition pulse signal input from coil terminal 1 (Neg.)



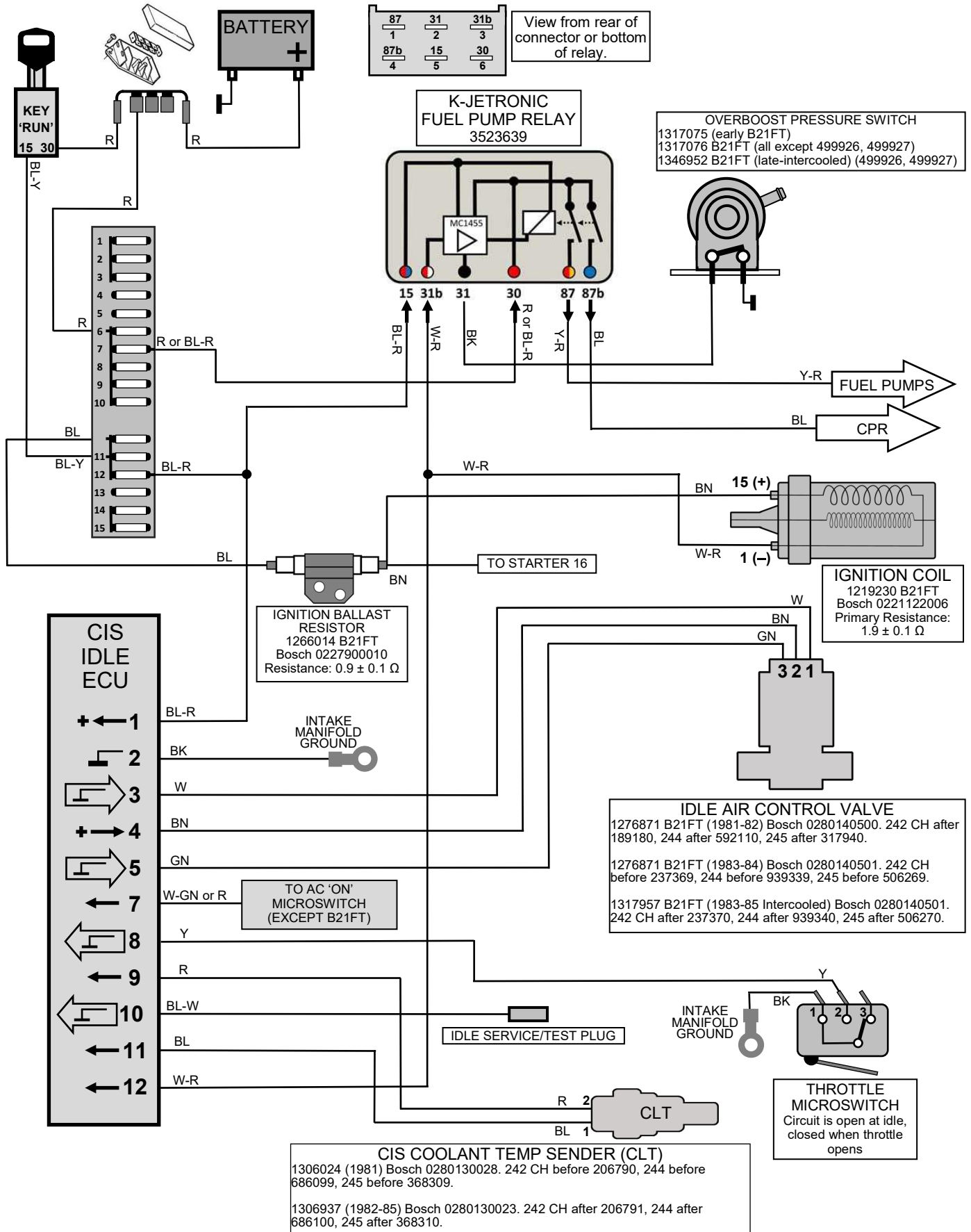
**CIS ECU PART NUMBERS B21FT**

(1981) VOLVO 1276897, BOSCH 0280220003.  
 (1982) VOLVO 1317499, BOSCH 0280220005.  
 (1983-85 non-intercooler and intercooler)  
 VOLVO 1317499, BOSCH 0280220005.

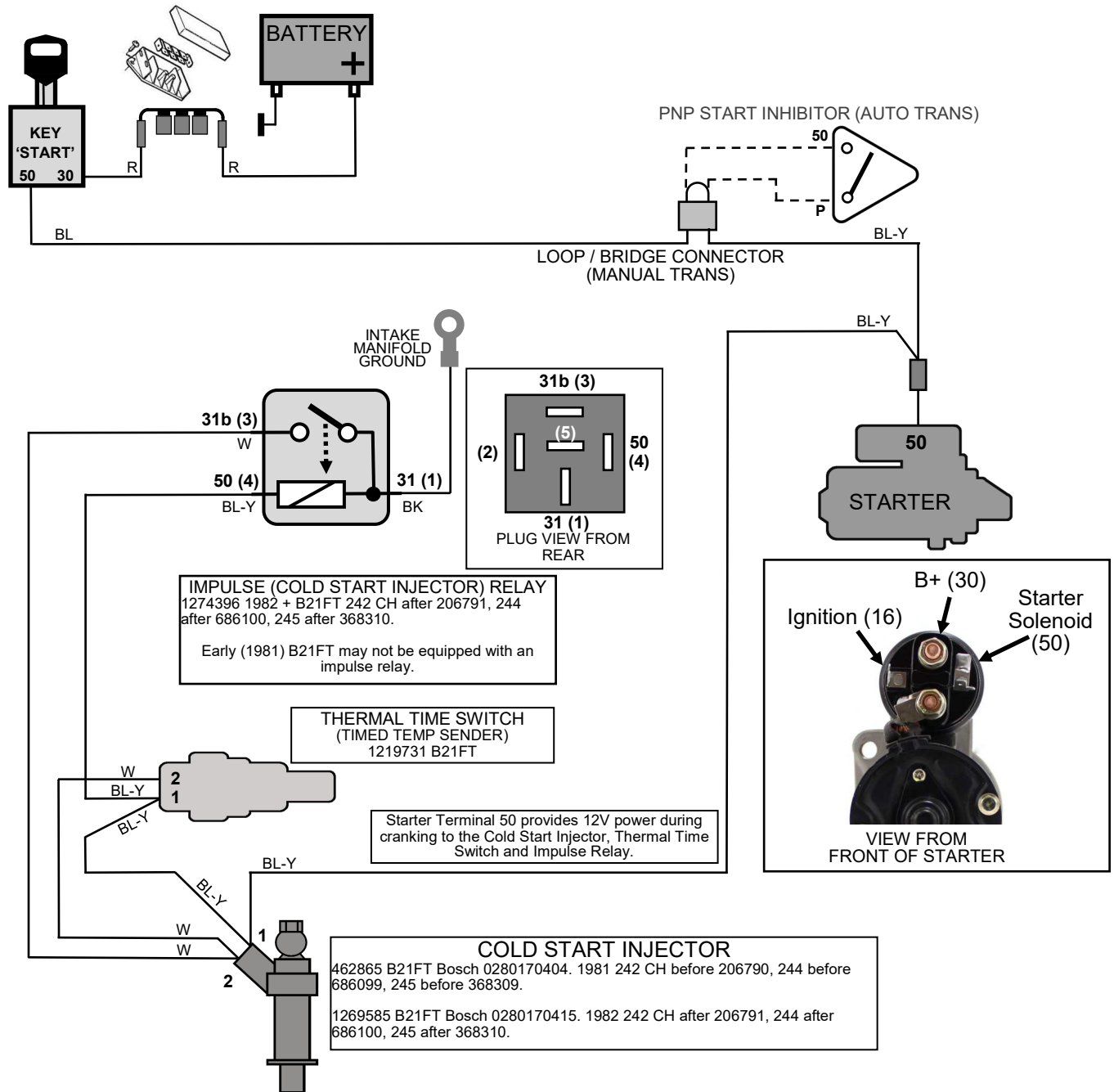


- B21FT ENGINE CONTROL SENSORS**
2. 1269355 Thermostat Valve. Acceleration enrichment (vacuum hoses).
  3. 460191 Temperature (dash gauge) Sender. (Y wire).
  4. 1219731 Thermal Time Switch (cold start valve) (BL-Y, W wires).
  6. 1306024 (1981), 1306937 (1982-85) CIS Temp Sender (R, BL wires).
  7. 1269154 (1982-85) Thermal Cutout Switch (Lambda) (GR wire).

# K-Jetronic Constant Idle Speed (CIS) System. ECU Pin Functions for B21FT.



# K-Jetronic Continuous Injection (CI). B21FT Cold Start Injector Circuits.

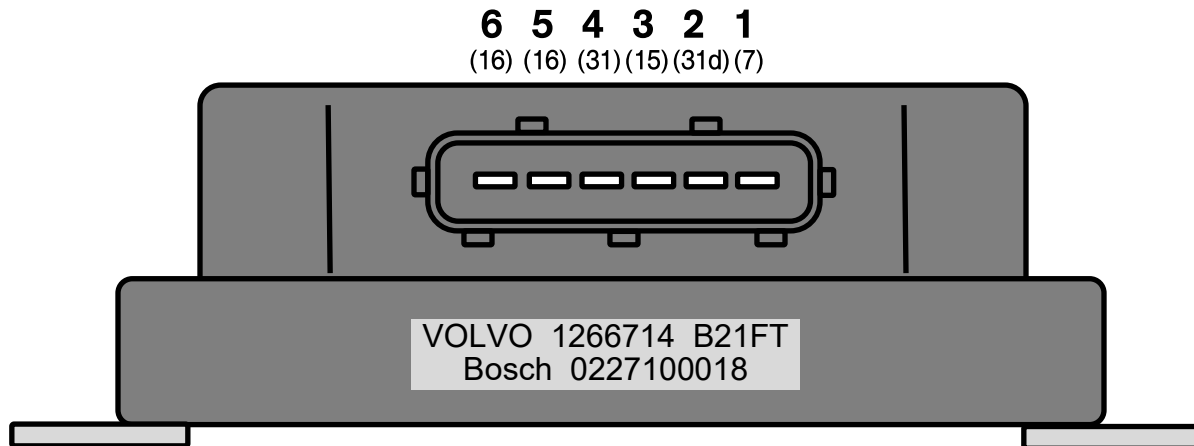


The COLD START INJECTOR will assist the starting of the engine when cold. It's activated when the starter motor is activated. The length of time that this additional injector sprays is determined by the engine's temperature, which is seen by the THERMAL TIME SWITCH.

The THERMAL TIME SWITCH, when cold, will provide the ground path to activate the cold start injector via a heated bimetal strip, which is heated by voltage from the starter motor during cranking. As the strip heats, over a period of about 8 to 10 seconds (when cranking only), the legs on the bimetal strip separate and the ground path is disengaged, deactivating the injector. A moderately warm engine may only require a few seconds before the circuit is deactivated. A hot engine will already have an open circuit and the injector will not activate.

The IMPULSE RELAY will provide limited cold start injector operation to assist during warm starts, such as when the car has been parked for up to a couple of hours. During warm starts (during cranking), the impulse relay will engage after about 1.5 seconds. It will then give 0.1 second of injection with 0.3 second intervals.

## Breakerless Electronic Ignition for B21FT. ECU Pin Functions.



1. (7) (GN) Engine speed input from distributor Hall generator.
2. (31d) (BN) Signal ground for Hall generator input.
3. (15) (BL) 12v input from ignition switch terminal 15.
4. (31) (BK) Ground.
5. (16) (W) Control signal output to coil terminal 1 (negative).
6. — (not used)

# Breakerless Electronic Ignition for B21FT. ECU Pin Functions.

