# Engine ECU Volvo

## Volvo D13 2010

### A81 VECU_VOLVO_D13F

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|---|---|---|---|---|
| 15.1_Transmission:4 A | 0/12−16−18 | JB 6 | Sensor_Output_Shaft_Speed | |
| 15.2_Transmission_IShift:0 B | 12−16B−18 | JB 25 | Out_Supply | |
| | 5−916−18 | JB 10 | Throttle_5v_Supply | Out_Supply4 JB 5 |
| Se14 C2:4 | analog−417−18 | JB 8 | Throttle_position | |
| C2:8 | analog−952−18 | JB 22 | Throttle_Ground | |
| C2:3 | | JB 24 | Eng_RetBrk | |
| C2:21 | 12−500−18 | JB 19 | Output_Supply_12v | |
| C2:20 | 12−524C−18 | JA 23 | Idle_Validation_1 | |
| C72:11 12−500−18 | 24−541−18 | JA 1 | CC_Set_Decelerate | |
| 41.1_Steering_Mulifunction:1 E | 24−545−18 | JA 2 | CC_Resume_Accelerate | |
| 41.1_Steering_Mulifunction:1 E | 12−544−18 | JA 3 | CC_Enable | |
| C171:8 C72:2 | 12−510−18 | JA 29 | Fast_Idle | |
| C72:27 | 0−163B−18 | JA 28 | Retarder_En | |
| 12.1_BrakePedal_EngBrake_Retarder:3 A C21:68 C2A:20 | gnd−953−18 | JA 12 | Main_Battery_Ground | |
| 3.1_Main_Disti_Ign_Batt:1 E | 12−12VECU−14 | JA 13 | Battery_+12v_Controled | |
| 4.1_Power_Dist_FJB:1 E | 12−439−18 | JA 14 | Ignition | |
| 16.1_ABS:1 B | 24−583−18 | JA 20 | Engine_Brake_High | |
| 41.1_Steering_Mulifunction:1 C | 24−979−18 | JA 21 | Engine_Brake_Low | |
| 41.1_Steering_Mulifunction:1 C | gnd−91−18 | JB 11 | Park_Brake_Signal | |
| 12.1_BrakePedal_EngBrake_Retarder:2 D | | | | |
| | | | | IVS_Out JB 17 |
| | | | | Supply_Control_Relay JB 15 |
| C171:29 C72:7 | data−901−18 | JC 1 | J1587_B_901 | |
| 6.2_J1939_Network:2 C | data−900−18 | JC 2 | J1587_A_900 | |
| 6.2_J1939_Network:2 C | DATA−J1939H−18 | JC 4 | J1939_CAN1_H | |
| 6.2_J1939_Network:3 B | DATA−J1939L−18 | JC 5 | J1939_CAN1_L | |
| 6.2_J1939_Network:3 B | | | | |

### A55

IOA 24V

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|---|---|---|---|---|
| 41.1_Steering_Mulifunction:1 E | 24−80−18 | JA 5 | Brake_Redundant | |
| 3.2_EngineStart_ChrgSyst:0 C | 24−231A−18 | JA 6 | Crank_Signal | |
| J1:15 C11:28 | C8:4 | 24−167−18 | JA 17 | ACC_Time_Gap_Inc |
| J1:16 C11:29 | C8:5 | 24−168−18 | JB 7 | ACC_Time_Gap_Dec |

### A52

I/OB 24VI

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|---|---|---|---|
| J1:9 J1:10 | J1:1 | 0−291−16 | C91:14 C426:A 0−291−16 A |
| | J1:2 | 0−292−16 | C91:16 C426:B 0−292−16 B |
| | J1:6 | | C91:30 C426:C 24−290−16 C |
| | | | C91:1 C426:D 24−290A−16 D |

5.1_Pwr_Dist_RJB:2 C → D36 C17:4 A / B C17:6 (561740) → D37 C17:7 A / B C17:9 (561740)

### Mo2

Radiator fan clutch

### Se13

Coolant_Level_Sensor

| | | | | |
|---|---|---|---|---|
| 5.1_Pwr_Dist_RJB:2 C | 12−241C−14 | C397:26 | 12−241C−14 | 37 |
| 3.1_Main_Disti_Ign_Batt:4 D | gnd−151A−14 | C397:33 | gnd−151A−14 | 39 |
| 3.1_Main_Disti_Ign_Batt:4 D | gnd−151B−14 | C397:38 | gnd−151B−14 | 31 |
| 3.1_Main_Disti_Ign_Batt:4 D | gnd−151C−14 | C397:42 | gnd−151C−14 | 27 |
| 5.1_Pwr_Dist_RJB:2 E | 12−241A−14 | C397:44 | 12−241A−14 | 25 |
| 5.1_Pwr_Dist_RJB:2 E | 12−240A−14 | C397:37 | 12−240A−14 | 13 |
| 5.1_Pwr_Dist_RJB:2 E | 12−240A−14 | C397:41 | 12−240A−14 | 15 |
| 5.1_Pwr_Dist_RJB:2 E | 12−241A−14 | C397:66 | 12−241A−14 | 21 |

### EI — REF. TO VOLVO ENGINE DIAGRAM

| | | | | |
|---|---|---|---|---|
| 6.2_J1939_Network:1 C | C397:48 | Data−900−18 | 2 | J1587_A_900 |
| 6.2_J1939_Network:1 C | C397:47 | gnd−901−18 | 5 | J1587_B_901 |
| 6.2_J1939_Network:1 B | C397:21 | Data−J1939L−18 | 4 | J1939−1_CAN1_L |
| 6.2_J1939_Network:1 B | C397:20 | Data−J1939H−18 | 1 | J1939−1_CAN1_H |
| C2:32 | C21:30 | C397:46 | Data−502−18 8 | IVS |
| | C91:5 | C397:49 | gnd−115−18 28 | Colant_Level_Sensor |
| | C91:28 | C397:25 | gnd−0H−18 18 | Sw_Ground |

EI: Preheater_Relay 7 — gnd−515−18 C397:7 ← 14.1_Engine_Ecu:5 A

EI: DPF_Pressure_Signal 24; DPF_Sensor_5v_Supply 22; DPF_Sensor_Ground 26; Temp_After_Part_Filter 29; Temp_Upstream_Catalyst 34; Temp_Downstream_Catalyst 36

EI: WIF_Heater; Ground1; Ground2; Ground3; Battery3_PreHeater_VGT; Battery4_EMS; Battery5_EMS; Battery2_VCB_DRV

EI: J1939−7_CAN2_H 3 — C397:30 — Data−CAN2−H−18 → 14.2_Volvo_Urea:1 D

EI: J1939−7_CAN2_L 6 — C397:31 — Data−CAN2−L−18 → 14.2_Volvo_Urea:1 D

### So33

5.1_Pwr_Dist_RJB:2 C — C397:39 — 12−241C−14 — A 12v

2.1_Gnd_Dist:5 F — C397:40 — gnd−0RB6−14 — B GND

Air Solenoid
7 th Injector

### Preheater_Volvo

R29 563348

14.1_Engine_Ecu:5 C — gnd−515−18 — 5.1_Pwr_Dist_RJB:2 D

3.1_Main_Disti_Ign_Batt:2 A — 24−24VB−2 — Term130 — F109 150 A — Term129 — 24−24VB1−2 — Term128 — Ring 1/4 Etroit — Term127 — 24−24VB2−2 — Term126 — C1 ENGINE PRE HEATER

Ring 5/16 ou .3125

2.1_Gnd_Dist:1 D — gnd−0B1−2 — Term131 — B1

C21:16 — C2A:15 — C72:4 0−515−18 → 10.1_Cluster:4 C

### Sw17 — Stop engine override

gnd−00A−18 — 0−352−18 — C74:25 → 38.1_Auto_Fire_Supp_Sys:0 D

12−114A−18

19.1_Driver_lts:2 D

2.1_Gnd_Dist:1 B

4.1_Power_Dist_FJB:3 D

### Sw35 — Cruise ON/OFF switch

12−115A−18 — gnd−953−18 — C171:37 — 12−114A−18

19.1_Driver_lts:3 C

0−953−18

12.1_BrakePedal_EngBrake_Retarder:0 D

### Throttle Position Sensor / Idle Validation Switch

*opt*

12−524C−18 → 15.2_Transmission_IShift:

12−500−18

### Sw14 — Fast Idle

4.1_Power_Dist_FJB:3 E

12−115A−18 — gnd−00A−18 — 12−500−18 — 12−510−18 — 12−114A−18

19.1_Driver_lts:2 C