

Service Manual Trucks

Group **37**

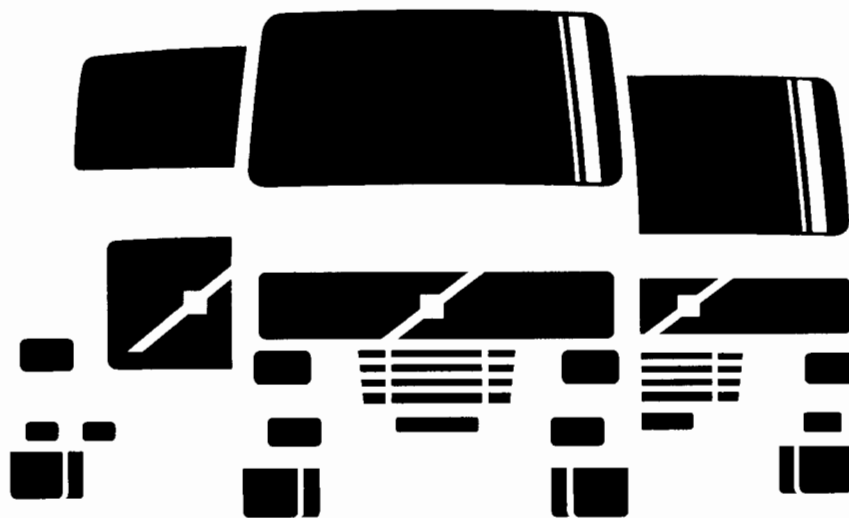
Electrical Schematic:

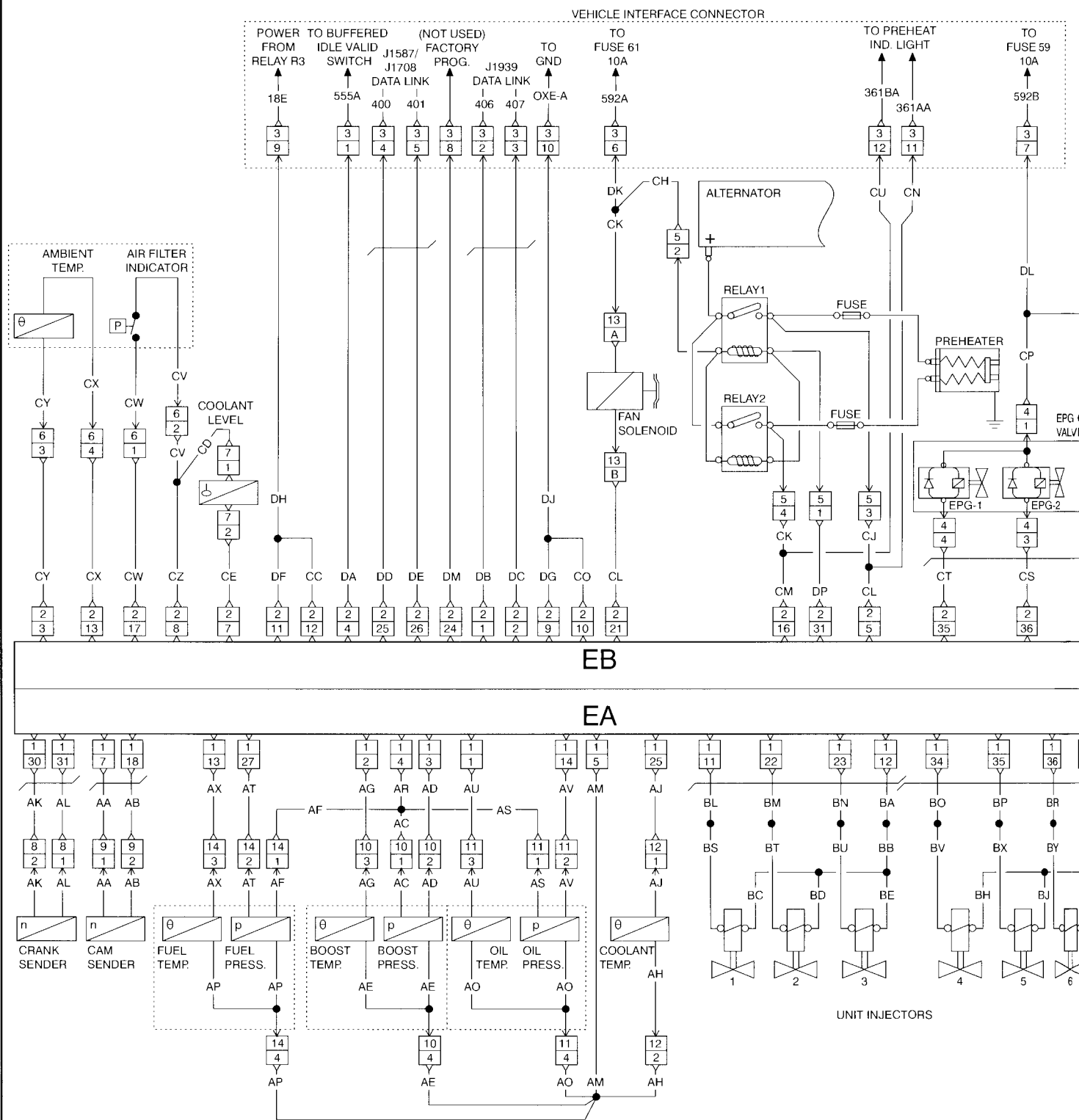
Engine ECU,

Volvo D12C

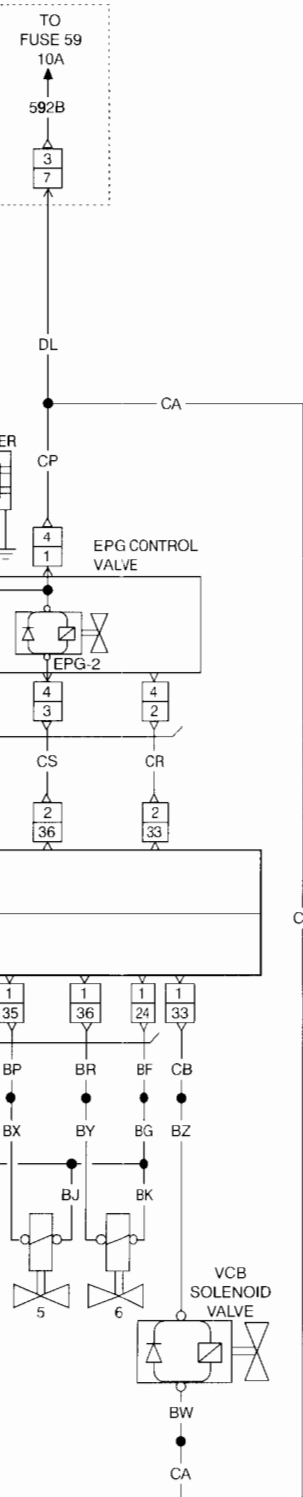
VN

From Build Date 5.99





Engine ECU, VOLVO D12C Engine - VN



CONNECTOR 1 ENGINE ECU EA

CAVITY	CIRCUIT	COLOR	FUNCTION
1	AU	GREEN	OIL TEMP
2	AG	BLUE/WHITE	BOOST TEMP
3	AD	GRAY	BOOST PRESS
4	AR	GREEN/WHITE	OIL FUEL BOOST COMMON (+)
5	AM	BROWN/WHITE	OIL FUEL BOOST TEMP GROUND COMMON
7	AA	YELLOW	ENGINE SPEED SENSOR CAM (+)
11	BL	WHITE	INJECTOR CYL 1
12	BA	WHITE	INJECTOR CYL 1 2 3 VOLTAGE OUTPUT
13	AX	GREEN	FUEL TEMP
14	AV	BROWN	OIL PRESSURE
18	AB	BROWN/WHITE	ENGINE SPEED SENSOR CAM (-)
22	BM	WHITE	INJECTOR CYL 2
23	BN	WHITE	INJECTOR CYL 3
24	BF	WHITE	INJECTOR CYL 4 5 6 VOLTAGE OUTPUT
25	AJ	YELLOW/WHITE	COOLANT TEMP IMPUT
27	AT	BROWN	FUEL PRESSURE
30	AK	BLUE/BLACK	ENGINE SPEED SENSOR CRANK (+)
31	AL	BLUE/RED	ENGINE SPEED SENSOR CRANK (-)
33	CB	WHITE	VCB SOLENOID VALVE
34	BO	WHITE	INJECTOR CYL 4
35	BP	WHITE	INJECTOR CYL 5
36	BR	WHITE	INJECTOR CYL 6

CONNECTOR 2 ENGINE ECU EB

CAVITY	CIRCUIT	COLOR	FUNCTION
1	DB	YELLOW	DATA LINK J1939 CAN HI
2	DC	GREEN	DATA LINK J1939 CAN LO
3	CY	BLUE/YELLOW	AMBIENT AIR TEMP
4	DA	PINK	BUFFERED IDLE VALIDATION SWITCH
5	CL	GREEN	PREHEAT SENSE 1
7	CE	GRAY/WHITE	COOLANT LEVEL WARNING
8	CZ	GRAY/WHITE	AP LITER COOLANT LEVEL COMMON GROUND
9	DG	WHITE	GROUND
10	CO	WHITE	GROUND
11	DF	RED/BLACK	12V POWER SUPPLY
12	CC	RED/BLACK	12V POWER SUPPLY
13	CX	RED/BLUE	AMBIENT AIR TEMP
16	CM	RED/WHITE	PREHEAT SENSE 2
17	CW	GRAY/WHITE	AIR FILTER INDICATOR
21	CL	GRAY/RED	COOLING FAN SOLENOID (GROUND INPUT)
24	DM	YELLOW/BLACK	FACTORY PROGRAMMING (NOT USED)
25	DD	GRAY	DATA LINK J1587/J1708 +
26	DE	ORANGE	DATA LINK J1587/J1708 -
31	DP	BLACK	PREHEAT RELAY (COIL GROUND)
33	CG	GREEN/WHITE	EPG CONTROL (NOT CURRENTLY USED)
35	CT	GRAY	EPG 1 CONTROL
36	CS	GRAY/WHITE	EPG 2 CONTROL

CONNECTOR 3 VEHICLE INTERFACE

CAVITY	CIRCUIT	COLOR	FUNCTION
1	DA	PINK	IDLE VALIDATION FEED
2	DB	YELLOW	DATA LINK J1939 CAN HI
3	DC	GREEN	DATA LINK J1939 CAN LO
4	DD	GRAY	DATA LINK J1587 +
5	DE	ORANGE	DATA LINK J1587 -
6	DK	BLACK	12V POWER SUPPLY
7	DL	GRAY/BLACK	12V POWER SUPPLY
8	DM	YELLOW/BLACK	END OF LINE PROGRAMMING
9	DH	RED/BLACK	12V POWER SUPPLY
10	DJ	WHITE	GROUND
11	CN	GREEN	PREHEAT SENSE 1 IND LAMP
12	CU	RED/WHITE	PREHEAT SENSE 2 IND LAMP

CONNECTOR 4 EPG CONTROL VALVE

CAVITY	CIRCUIT	COLOR	FUNCTION
1	CP	GRAY/BLACK	12V POWER SUPPLY
2	CR	GREEN/WHITE	NOT CURRENTLY USED
3	CS	GRAY/WHITE	EPG 2 CONTROL
4	CT	GRAY	EPG 1 CONTROL

CONNECTOR 5 PREHEATER HARNESS

CAVITY	CIRCUIT	COLOR	FUNCTION
1	DP	BLACK	RELAY COIL GROUND SUPPLY
2	CH	BLUE/RED	RELAY COIL 12V SUPPLY
3	CJ	GREEN	FAILURE INDICATOR FROM RELAY 1
4	CM	RED/WHITE	FAILURE INDICATOR FROM RELAY 2

CONNECTOR 6 AMBIENT AIR TEMP SENSOR

CAVITY	CIRCUIT	COLOR	FUNCTION
1	CW	BLUE/RED	AIR FILTER INDICATOR
2	CV	GRAY/WHITE	AIR FILTER COOL LEVEL GROUND COMMON
3	CY	BLUE/YELLOW	AMBIENT AIR TEMP
4	CX	VIOLET/WHITE	AMBIENT AIR TEMP RETURN

CONNECTOR 7 COOLANT LEVEL SENSOR

CAVITY	CIRCUIT	COLOR	FUNCTION
1	CD	BLUE/BLACK	AIR FILTER COOL LEVEL GROUND COMMON
2	CE	GRAY/WHITE	COOLANT LEVEL WARNING

CONNECTOR 8 CRANK SENDER

CAVITY	CIRCUIT	COLOR	FUNCTION
1	AL	BLUE/RED	ENGINE SPEED SENSOR CRANK (-)
2	AK	BLUE/BLACK	ENGINE SPEED SENSOR CRANK (+)

CONNECTOR 9 CAM SENDER

CAVITY	CIRCUIT	COLOR	FUNCTION
1	AA	YELLOW	ENGINE SPEED SENSOR CAM (+)
2	AB	BROWN/WHITE	ENGINE SPEED SENSOR CAM (-)

CONNECTOR 10 BOOST PRESSURE AND TEMPERATURE

CAVITY	CIRCUIT	COLOR	FUNCTION
1	AC	GREEN/WHITE	OIL FUEL BOOST COMMON (+)
2	AD	GRAY	BOOST PRESSURE
3	AG	BLUE/WHITE	BOOST TEMP
4	AE	BROWN/WHITE	OIL FUEL BOOST COMMON GROUND

CONNECTOR 11 OIL TEMPERATURE/PSI SENSOR

CAVITY	CIRCUIT	COLOR	FUNCTION
1	AS	GREEN/WHITE	OIL FUEL BOOST COMMON (+)
2	AV	BROWN	OIL PRESSURE
3	AU	GREEN	OIL TEMP
4	AO	BROWN/WHITE	OIL FUEL BOOST COMMON GROUND

CONNECTOR 12 COOLANT TEMPERATURE SENSOR

CAVITY	CIRCUIT	COLOR	FUNCTION
1	AJ	YELLOW/WHITE	COOLANT TEMP
2	AH	BROWN/WHITE	PRESS/TEMP SENSOR GROUND COMMON

CONNECTOR 13 COOLING FAN SOLENOID

CAVITY	CIRCUIT	COLOR	FUNCTION
A	CK	BLACK	12V POWER SUPPLY
B	CL	GRAY/RED	COOLING FAN CONTROL

CONNECTOR 14 FUEL TEMPERATURE/PRESSURE SENSOR

CAVITY	CIRCUIT	COLOR	FUNCTION
1	AF	GREEN/WHITE	OIL FUEL BOOST COMMON (+)
2	AT	BROWN	FUEL PRESSURE
3	AX	GREEN	FUEL TEMP
4	AP	BROWN/WHITE	OIL FUEL BOOST COMMON GROUND

SYMBOL DEFINITION

— DENOTES TWISTED PAIR

DENOTES CONNECTOR — 2

DENOTES CAVITY — 33

EFFECTIVE DATE	DESCRIPTION
10/99	CORRECTED PIN
5/01	ADDED PREHEAT

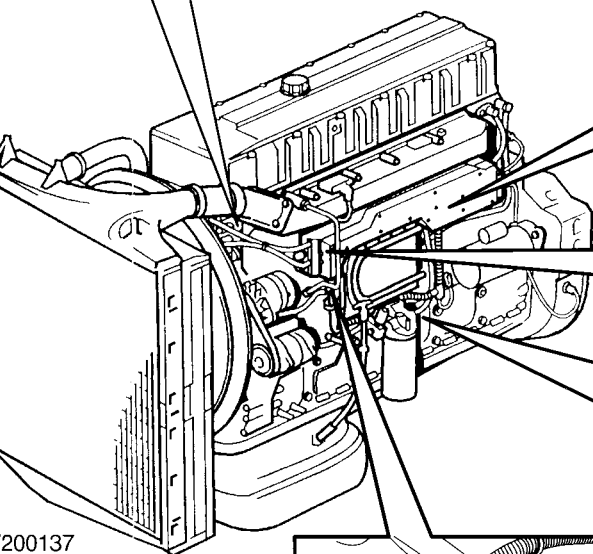
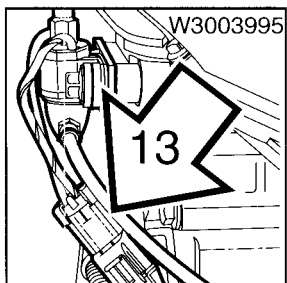
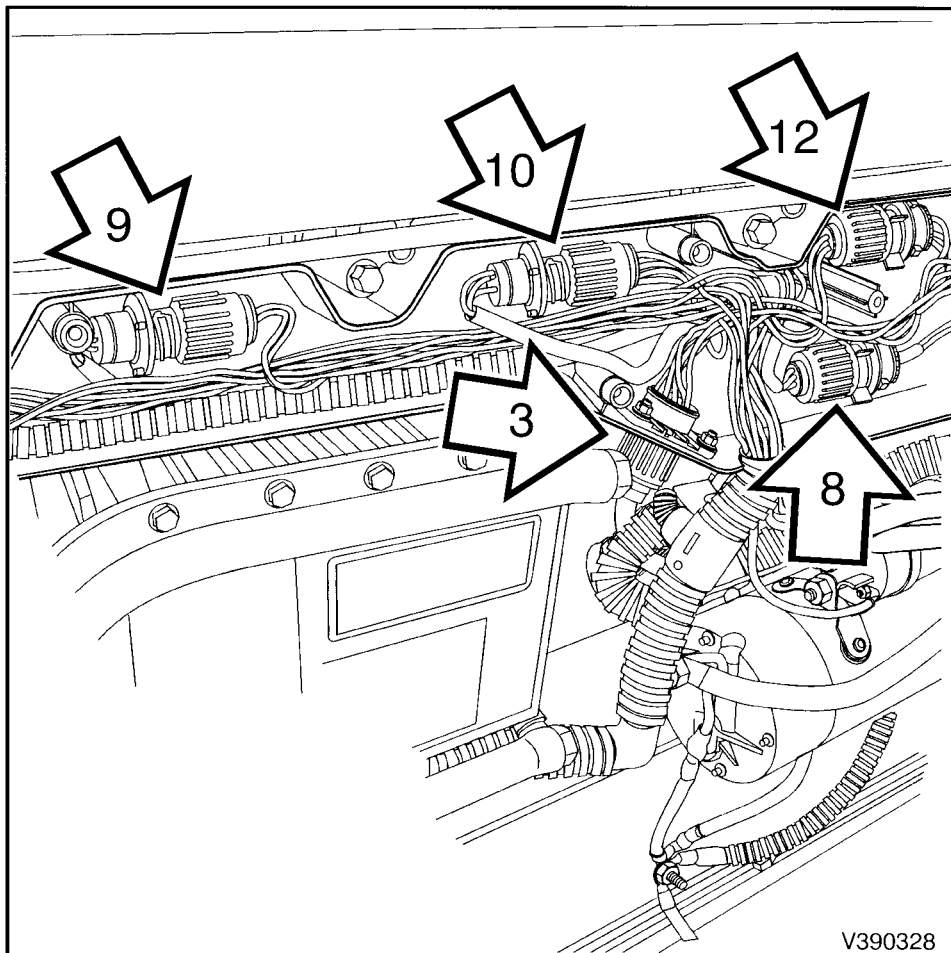
V200137

CHANGE HISTORY

DESCRIPTION

CORRECTED PINOUTS

ADDED PREHEAT LAMP CIRCUITRY



200137

