

VOLVO V70 (08-), XC70 (08-) & S80 (07-)

WIRING DIAGRAM 2008 SUPPLEMENT



TP 39127202 LATE DESIGN

Vehicles with SRS (Airbag)/SIPS bag/ IC (Inflatable curtain)

Warning!

Extra caution must be exercised when working on vehicles equipped with SRS/SIPS bag/IC in order to avoid:

1. Personal injuries when performing repair work.
2. Damage or malfunction of the SRS/SIPS bag/IC system.

Work involving the SRS/SIPS bag/IC systems or other components in the vehicle that may affect the SRS/SIPS bag/IC systems must always be performed by an authorized Volvo workshop.

In case of doubt, consult the SRS and SIPS bag/IC service manual.

Is the vehicle equipped with SRS/SIPS bag/IC?

Vehicles with SRS are most easily recognized by the letters SRS in the center of the steering wheel. If the vehicle also has a passenger side airbag, the letters SRS are stamped on the dashboard above the glove compartment. SRS vehicles from 1993 and onward also have explosive seat belt tensioners. SIPS bags are only installed on SRS vehicles from 1995 and onward. SIPS bag decals are located on the windshield and seat compartment. Vehicles with IC can be recognized by the letters IC on the C/D panel (4 door) or the B panel (5 door).

General recommendations

- Be especially careful when working on or around SRS, SIPS, and IC components.
- Make sure that no wires are pinched, frayed, or pierced.
- Never fit accessories by the sensors.
- Where applicable, work on the steering wheel, steering shaft, or steering gear must be done in accordance with the methods in the SRS section of VIDA.
- Certain components of the aforementioned systems must be grounded while working. Read the appropriate sections in VIDA.
- Install no accessories in the areas between the A and B-posts, the B and C-posts, and the C and D-posts.

Test terminal

Fuse in cargo compartment auxiliary fuse box.

Changes introduced up to and including September 2007

Any changes made to the vehicle after this date are not included in the manual. If necessary, refer to service bulletins.

Volvo models are sold in versions adapted for different markets. These adaptations depend on factors such as legal requirements, taxation, and market demands.

This manual may therefore include illustrations and text that do not apply to the vehicles in your country.

Order number: TP 39127202

TP 39127202 Supplement, can also be found on Electronic Wiring Diagram (EWD) TP 39125002. TP39127202 contains updated information for the 2008 model late design, for other electrical systems see publication TP39115202.

We retain the right to make modifications.

© Volvo Car Corporation

Table of Contents 1:2

Vehicles with SRS (Airbag)/SIPS bag/ IC (Inflatable curtain)	2
Explanations	5
Abbreviations	5
How to use the wiring diagrams 1:2.....	6
Electrical distribution 1:2.....	8
Fuses	
Engine compartment electrical center F1-F7	10
Engine compartment distribution box F9-F24.....	11
Engine compartment distribution box F25-F30.....	12
Engine compartment distribution box F31-F37.....	13
Engine compartment distribution box F38	14
Engine compartment electrical center F39-F44.....	15
Central Electronic Module (CEM) F1 - F11.....	16
Central Electronic Module (CEM) F13 - F19.....	17
Central Electronic Module (CEM) F20 - F28.....	18
Rear electrical center FA1-FA12	19
Distribution box in cargo compartment FB1-FB12.....	20
Rear electrical center FD1-FD7	21
Battery PF1-PF2.....	22
Relays	
Relays in the engine compartment R2.....	23
Relays in the engine compartment R8-R9.....	24
Relays in the engine compartment R10-R13.....	25
Distribution box in cargo compartment RA1-RD1.....	26
Central Electronic Module (CEM)	27
Ground connections	
Overview.....	28
31/1 - 31/7	29
31/10 - 31/15	30
31/47 - 31/66	31
31/67 - 31/83	32
31/84 - 31/93	33
31/94 - 31/XX10.....	34
31/XX14 - 31/AL	35
Control modules	
Overview of locations.....	36
Overview designations.....	37
Data communication high speed CAN.....	38
Data communication high speed CAN 4 Cyl.....	39
Data communication LIN 1:2	40
Data communication MOST.....	42
Group 23 Fuel system	
Engine management system, 5 Cyl. Diesel 1:3	43
Engine management system, 4 Cyl. 1:2	46
Engine management system, 4 Cyl. Flexifuel 1:2.....	48
Engine management system, 4 Cyl. Diesel 1:2	50
Engine management system, 6 Cyl. Turbo 1:2.....	52
Engine management system, 8 Cyl. 1:2	54
Emission control, 4 Cyl.	56
Emission control, 8 Cyl.	57
Group 26 Cooling system	
Cooling fan, 4 Cyl.	58
Cooling fan, 4 Cyl. Diesel.....	59
Cooling fan, 5 Cyl. Diesel.....	60
Cooling fan, 5 Cyl. Turbo & 6 Cyl.....	61
Cooling fan, 8 Cyl.	62
Group 27 Engine controls	
Cruise control 4 Cyl.....	63
Cruise control 4 Cyl. Diesel.....	64
Cruise control 5 Cyl. & 6 Cyl.	65
Cruise control 5 Cyl. Diesel.....	66
Cruise control 8 Cyl.....	67
Group 32 Alternator and voltage regulator	
Power supply	68
Group 33 Starting system	
Starting system 4 Cyl.	69
Group 35 Lighting	
Running/parking lights, Tail lights V70.....	70
Running/parking lights, Tail lights (Bi-Xenon) V70.....	71
Fog lights, V70	72
Brake light, V70	73
Reversing lights, V70	74
Door handle lighting LHD.....	75
Door handle lighting RHD	76
Group 36 Other electrical equipment	
Direction indicator and Hazard warning flashers LHD, V70	77
Direction indicator and Hazard warning flashers RHD, V70.....	78
High-pressure headlight washer	79
Wiper/washer rear window, V70	80
Parking assistance.....	81
Keyless vehicle 4 Cyl. 1:2.....	82
Collision warning with brake servo.....	84
Alcolock	85

Table of Contents 2:2

Group 37 Wiring and fuses, Accessories	
Tow hitch cable harness, 4-pin V70.....	86
Tow hitch cable harness, 7-pin V70.....	87
Tow hitch cable harness, 13-pin V70.....	88
Group 38 Instruments	
Driver information module.....	89
Group 39 Other	
Audio 1:2	90
Audio Premium 1:3	92
Rear seat entertainment	95
Group 43 Transmission	
Differential Electronic Module (DEM).....	96
Group 55 Parking brake	
Electronic parking brake	97

Group 87 Climate control system	
Climate control system 4 Cyl. 1:2	98
Connectors	100
Branching points	112
Cable harness routing in vehicle	
Engine harness, 4 Cyl.....	117
Engine harness, 4 Cyl. Diesel.....	117
Engine harness, 8 Cyl.....	118
Harness engine compartment.....	118
Harness ceiling	119
Harnesses rear axle.....	119
Component illustrations	120
Index	124
List of components 1:4	125

Explanations

Abbreviations

Groups

Group 23	= Fuel system
Group 26	= Cooling system
Group 27	= Engine controls
Group 32	= Alternator and voltage regulator
Group 33	= Starting system
Group 35	= Lighting
Group 36	= Additional electrical equipment
Group 37	= Wiring and fuses
Group 38	= Instruments
Group 39	= Other
Group 43	= Transmission
Group 55	= Parking brake
Group 87	= Climate control system

Ignition switch symbols

X	= Accessories (audio position)
S	= Powered upon insertion of key
15	= Contact remains connected during start
15I	= Contact is broken while starting
30	= Constant power from the battery
50	= Start

Countries/Markets

A	= Austria
AUS	= Australia
B	= Belgium
CDN	= Canada
CH	= Switzerland
D	= Germany
DK	= Denmark
E	= Spain
EU/OS	= Markets outside USA and Canada
FIN	= Finland
GB	= Great Britain
ISR	= Israel
J	= Japan
KOR	= Korea
N	= Norway
NL	= Netherlands
S	= Sweden
USA	= United States of America
WEU	= Western Europe

Other

ACC	= Adaptive Cruise Control
AUTO	= Automatic transmission
BLIS	= Blind spot information system
CAN	= CAN communication
DPY	= Display
ECC	= Electronic climate control system
ETA	= Engine throttle body
GDL	= Gas discharge lamp
HISPEED	= High speed data bus
IR	= Infrared sensor
LIN	= LIN communication
LH	= Left-hand side
LHD	= Left-hand drive
MAN	= Manual transmission
MEMORY	= Memory driver's seat
MIDSPEED	= Midspeed data bus
MMS	= Mass Movement Sensor
PETROL	= Gasoline
RH	= Right-hand side
RHD	= Right-hand drive
SCR	= Screened
SRS	= Airbag
T	= Turbocharged engine
W/O	= Without
2WD	= Two-wheel drive
4CYL, I4	= 4-cylinder engine
5CYL, I5	= 5-cylinder engine
6CYL, I6	= 6-cylinder engine
8CYL, V8	= 8-cylinder engine

Colors

BK, SB	= Black
BN	= Brown
BU, BL	= Blue
GN	= Green
GY, GR	= Gray
LGN	= Light Green
NL	= Natural
OG, OR	= Orange
PK, P	= Pink
RD, R	= Red
VT, VO	= Violet
WH, W	= White
YE, Y	= Yellow

How to use the wiring diagrams 1:2

The descriptions below apply in general to all wiring diagram manuals, although not all sections are necessarily contained in this manual.

A. Component designation

Every component has a component designation that consists of two parts.

The first part is a type number that describes the type of component in question, for example 3/xx.

The second part of the designation is a serial number, e.g. x/2.

Together, this constitutes a component designation, e.g. 3/2.

At the end of the manual is a list of components, where, with the help of the component designation, you can read off the name of the component, for example, 3/2 = light switch.

List of type numbers

The list shows which type of component that respective type numbers refer to, for example, 3/x = switch, 6/x = electric motor, etc.

- 1 Battery
- 2 Relay
- 3 Switch
- 4 Control module
- 5 Driver information module
- 6 Electric motor
- 7 Sensor
- 8 Actuator
- 9 Heating element
- 10 Light
- 11 Fuse
- 15 Electrical distribution rail/box
- 16 Audio
- 17 Service/diagnostics
- 18 Contact reel
- 19 Meter
- 20 Ignition component/shunt
- 27 Optics
- 31 Ground connection
- 73 Branching point
- 74 Connector

B. Branching points

The wiring diagrams contain numbered branching points, for example 73/5035.

This manual contains a section with a list of branching points. This list shows all the components that are connected to each branching point.

The location of the branching points is shown in the "Cable harness routing in vehicle" section.

C. Connectors

Connectors provide a bridge between two cable harnesses and are described in the "Connectors" section.

D. Electrical distribution

Operation of the fuses and relays is shown in the "Electrical distribution" section.

E. Data communication

Today's cars contain CAN, LIN and MOST networks that transfer information. Connections to these networks are not shown in their entirety in the respective wiring diagram. Complete information on CAN, LIN and MOST communication is found in the section "Control modules".

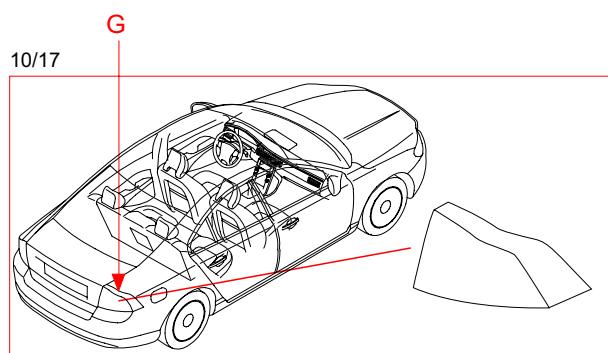
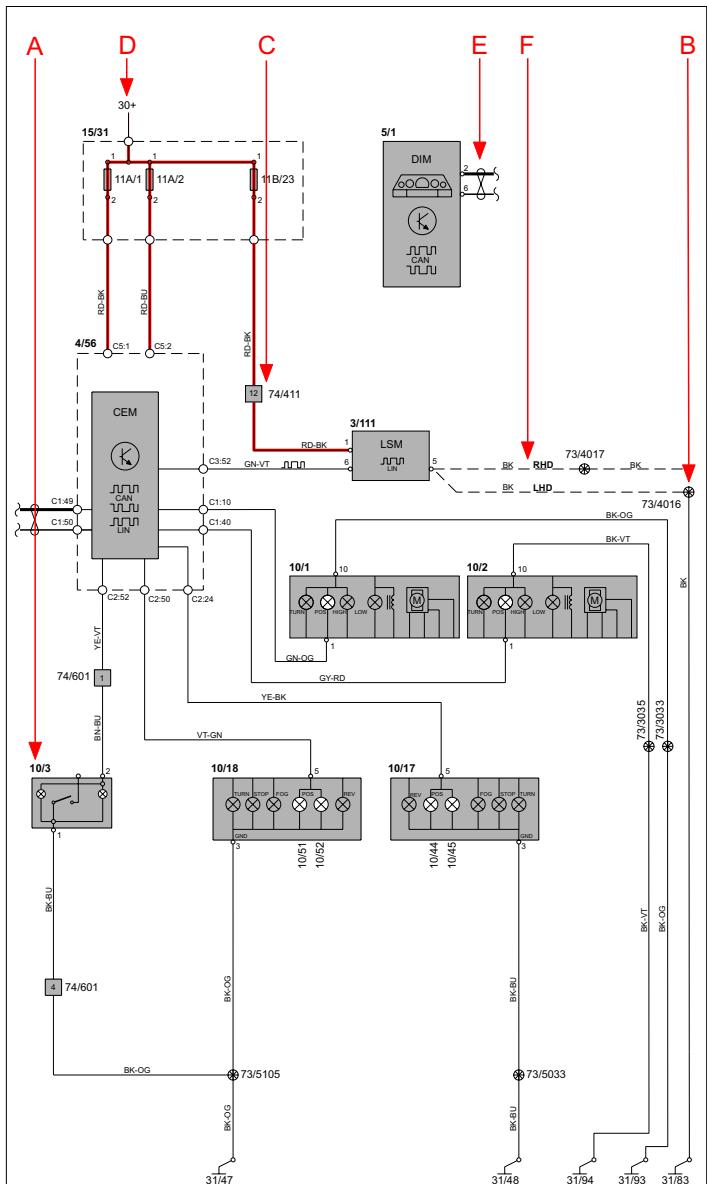
F. Abbreviations

A number of different abbreviations are used in the manual. These are explained in the section "Abbreviations".

G. Component location

The end of the manual contains a section that describes component appearance and location in numerical order.

How to use the wiring diagrams 2:2

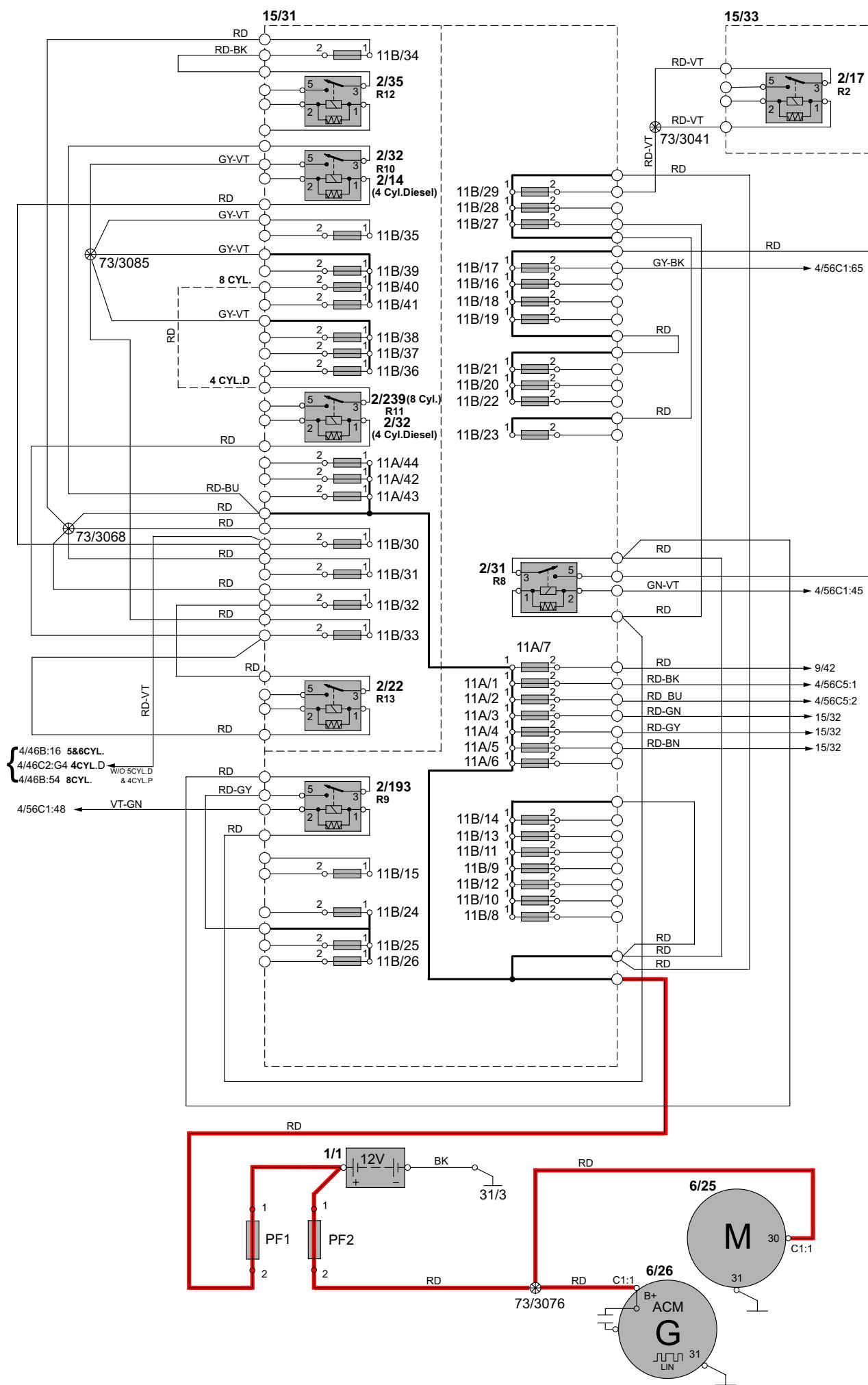


List of symbols

- = System voltage
- = Ground connection via wiring
- = Ground connection in component/chassis
- = Screened wire
- = Junction point
- = Twisted cable
- = Electrical connection
- = Variant
- = CAN communication
- = CAN high data signal (CAN H)
- = CAN low data signal (CAN L)
- = LIN communication
- = LIN communication
- = DIN cable, coaxial cable, etc.
- = Data communication
- = CAN communication
- = MOST communication
- = MOST communication
- = Connection with distribution box
- = Further connection to...
- = Connector between cable harnesses
- = Connector connected in component

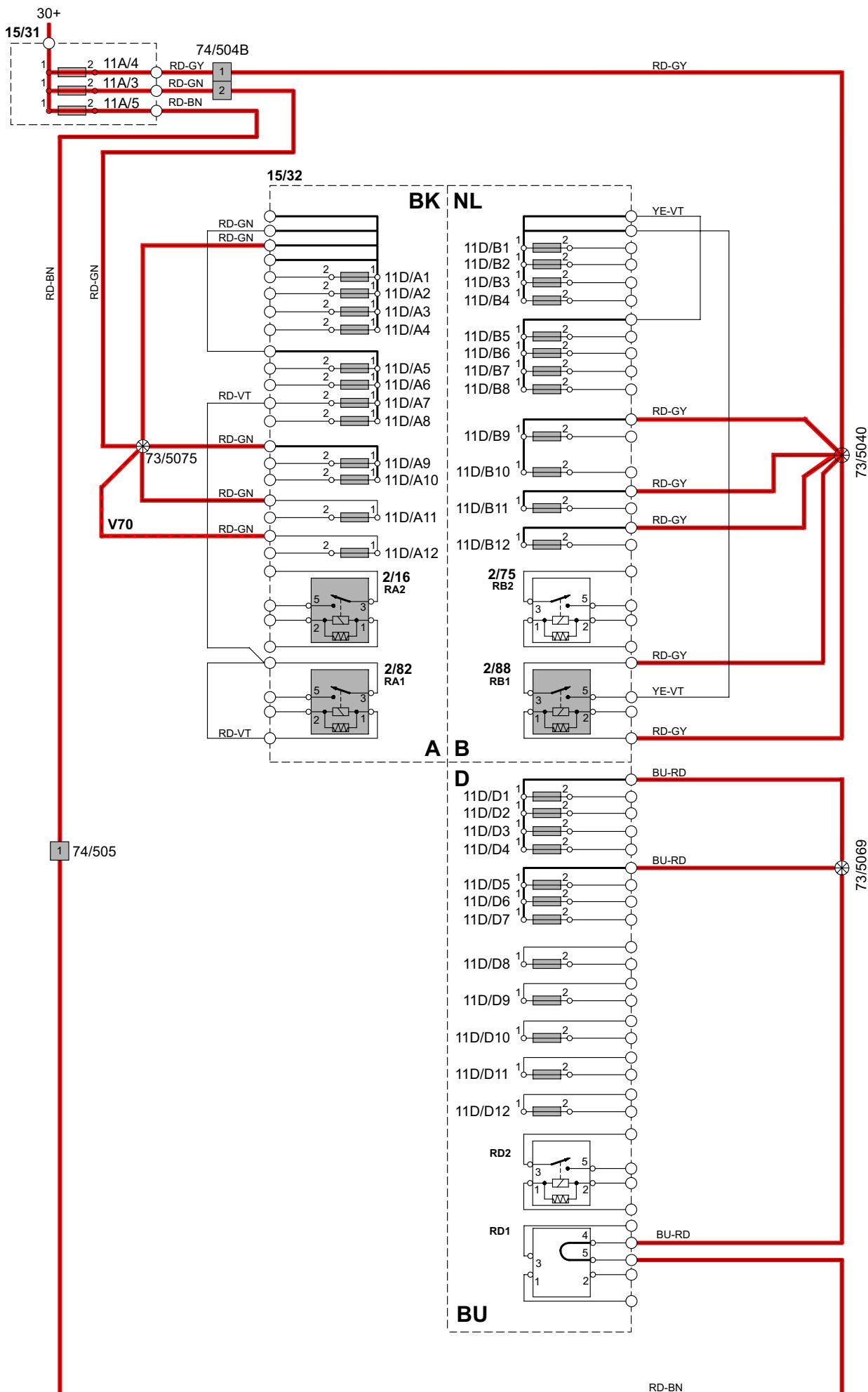
Electrical distribution 1:2

Overview, Electrical center and Cold zone in engine compartment



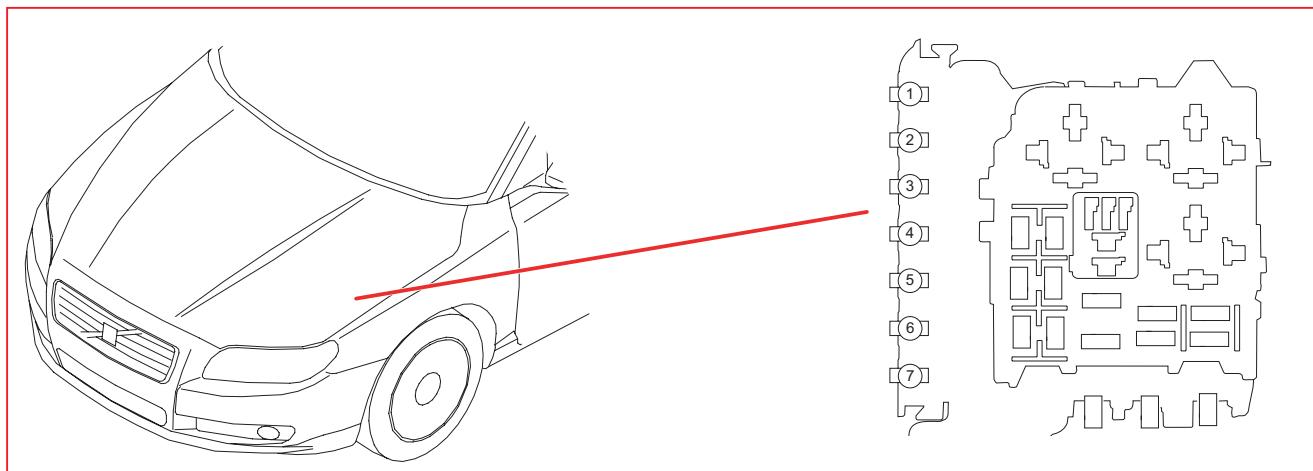
Electrical distribution 2:2

Overview, rear electrical center



Fuses

Engine compartment electrical center F1-F7

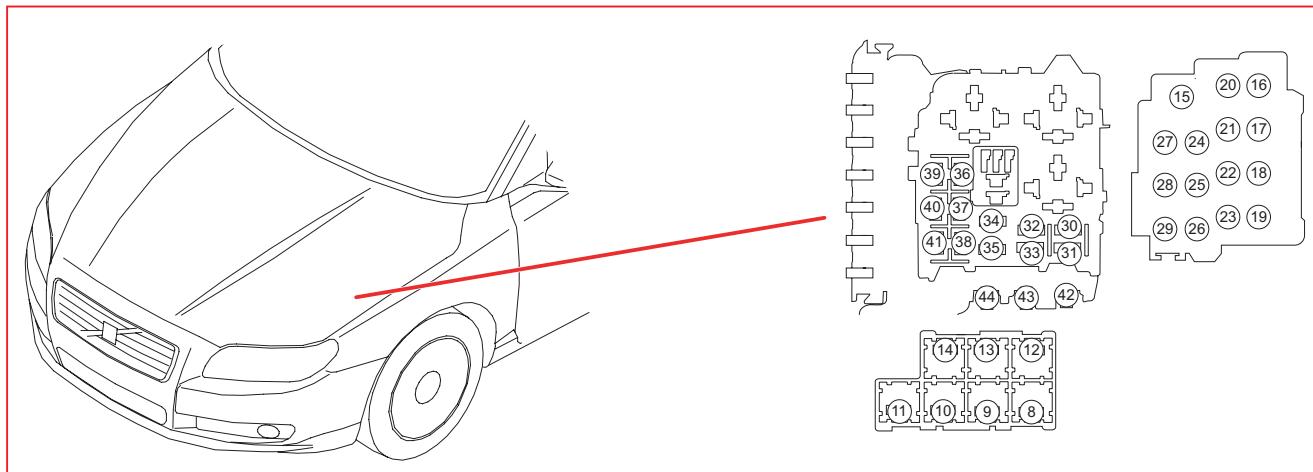


15/31 Engine compartment electrical center

No.	No.	Fuse function	via	A
F1	11A/1	Main fuse for fuses in CEM	4/56	50
F2	11A/2	Main fuse for fuses in CEM	4/56	50
F3	11A/3	11D/A1-11D/A12 Fuses in cargo compartment 15/32	-	60
F4	11A/4	11D/B1-11D/B12 Fuses in cargo compartment 15/32	-	60
F5	11A/5	11D/D1-11D/D7 Fuses in cargo compartment 15/32	-	50
F7	11A/7	9/42 PTC-element	-	100
continues				

Fuses

Engine compartment distribution box F9-F24



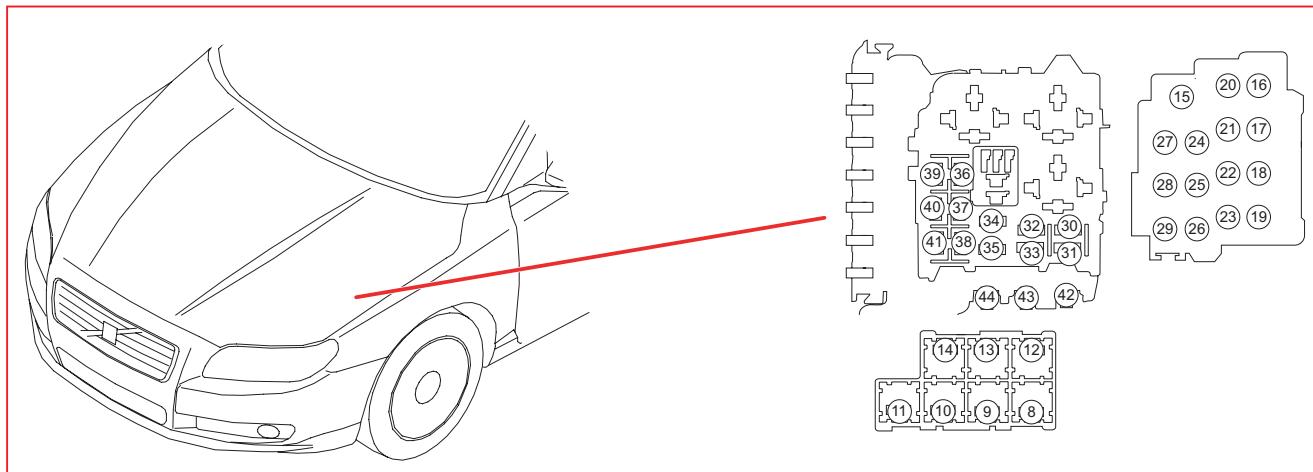
15/31 Engine compartment distribution box

No.	No.	Fuse function	via	A
F9	11B/9	6/1 Wiper Motor Module (WMM)	-	30
F10	11B/10	4/7 Combustion Preheater Module (CPM)		25
F11	11B/11	4/31 Fan control module 6/28 Motor, passenger compartment fan	-	40
F13	11B/13	4/16 Brake Control Module (BCM), pump	-	40
F14	11B/14	4/16 Brake Control Module (BCM), valves	-	20
F16	11B/16	4/118 Headlamp Control Module (HCM) 10/1 Lamp housing, front left 10/2 Lamp housing, front right	-	10
F17	11B/17	F2-F4 Fuses in the Central Electronic Module (CEM)	-	20
F18	11B/18	4/80 Forward Sensing Module (FSM) 7/203 Forward-aimed radar (FLR)	-	5
F19	11B/19	4/99 Electronic power steering control module	-	5
F20	11B/20	4/28 Transmission Control Module (TCM) 4/46 Engine Control Module (ECM) 4/9 Supplemental Restraint System Module (SRS)	-	10
F21	11B/21	9/43 Heated windshield washer nozzle, left 9/44 Heated windshield washer nozzle, right	-	10
F22	11B/22	6/114 Vacuum pump, 5 Cyl. T.	8/84	20
F23	11B/23	3/111 Light Switch Module (LSM)	-	5
F24	11B/24	6/104 High pressure headlight washer motor	-	15

continues

Fuses

Engine compartment distribution box F25-F30



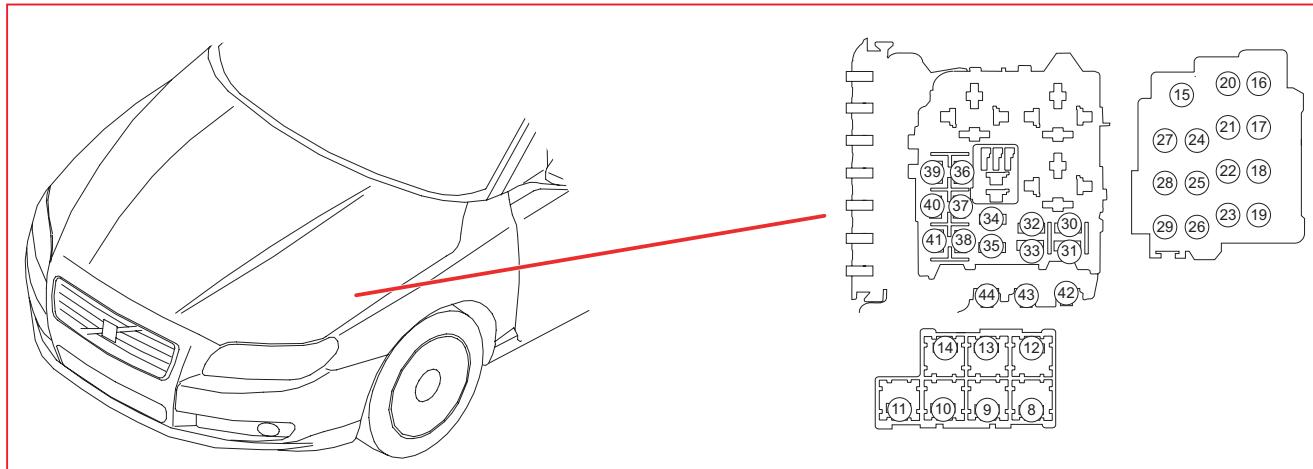
15/31 Engine compartment distribution box

No.	No.	Fuse function	via	A
F25	11B/25	9/1 Front 12V outlet 9/25 Rear 12V outlet 16/45 Portable navigation system 16/109 DVD player/control module	- - - -	15
F26	11B/26	3/117 Switch unit, ceiling light 4/33 Sunroof control module 6/48 Damper Motor Module (DMM), recirculation 6/95 Damper Motor Module (DMM), temperature, left side 6/96 Damper Motor Module (DMM), temperature, right side 6/102 Damper Motor Module (DMM), defroster 6/103 Damper Motor Module (DMM), floor/ventilation 7/159 Air Quality Sensor (AQS) 16/159 Control module, mobile phone handsfree	- - 3/112 3/112 3/112 3/112 3/112 3/112 -	5
F27	11B/27	2/31 Relay, 15-feed 2/193 Relay, comfort functions	- -	5
F28	11B/28	2/64 Relay auxiliary lights 10/65 Auxiliary light, front right 10/69 Auxiliary light, front left	- 2/64 2/64	20
F29	11B/29	2/17 Relay, horn 16/10 Horn 1 16/11 Horn 2	- 2/17 2/17	15
F30	11B/30	2/32 Main relay, engine management system 4/46 Engine Control Module (ECM), not Diesel	- -	10

continues

Fuses

Engine compartment distribution box F31-F37



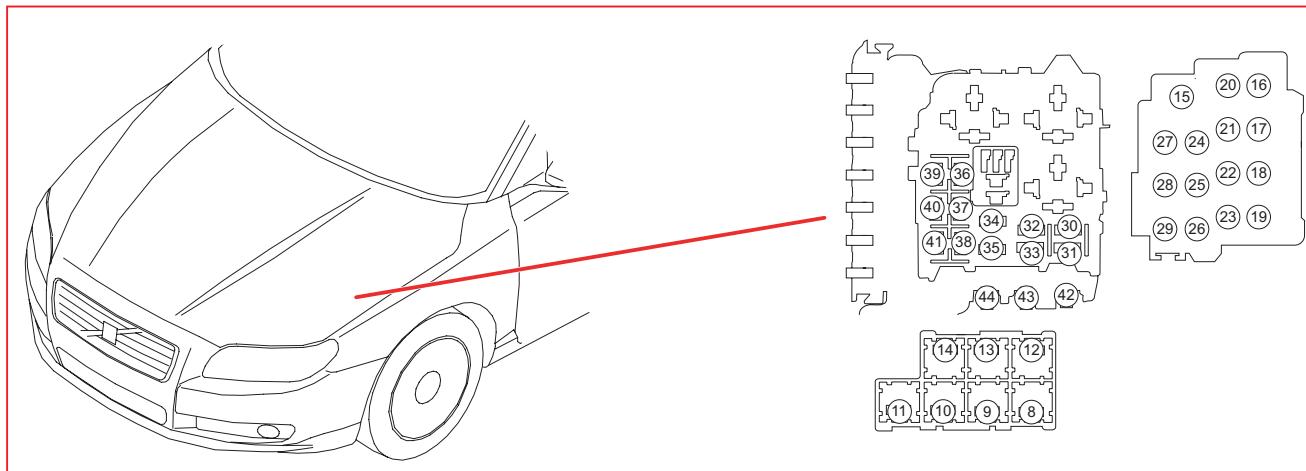
15/31 Engine compartment distribution box

No.	No.	Fuse function	via	A
F31	11B/31	4/28 Transmission Control Module (TCM)	-	15
F32	11B/32	8/3 Electromagnetic clutch, climate control system	2/22	15
F33	11B/33	2/14 Relay, glow plug control system, 4 Cyl. Diesel 2/22 Relay, climate control system 2/239 Relay, coolant pump, 8 Cyl.	- - -	5
F34	11B/34	6/25 Starter motor	2/35	30
F35	11B/35	20/3-8 Spark plug with ignition coil, 5, 6 & 8 Cyl. 20/12-13 Spark plug with ignition coil, 8 Cyl. 20/3-6 Spark plug with ignition coil, 4 Cyl. 20/22-26 Glow plug, 5 Cyl. Diesel 8/82 Solenoid variable turbo geometry, 4 Cyl. Diesel 8/132 Control valve intake, 4 Cyl. Diesel	- - - 4/109 - -	20 10
F36	11B/36	6/120 Engine throttle body 4/46 Engine Control Module (ECM), 4, 6, 8 Cyl. & Diesel 6/118 Control motor swirl duct throttle, 5 Cyl. 6/120 Electronic throttle actuator, 5 Cyl. 8/111 Control valve fuel flow 8/98 Control valve fuel pressure, 5 Cyl.	4/46 - 4/46 4/46 4/46 4/46	10 15
F37	11B/37	4/46 Engine Control Module (ECM), 6 Cyl. & 5 Cyl. Diesel 8/6-11 Injection valves 8/115 Injector 8/116 Injector 7/17 Mass air flow sensor (MAF)	- - - - -	15

continues

Fuses

Engine compartment distribution box F38



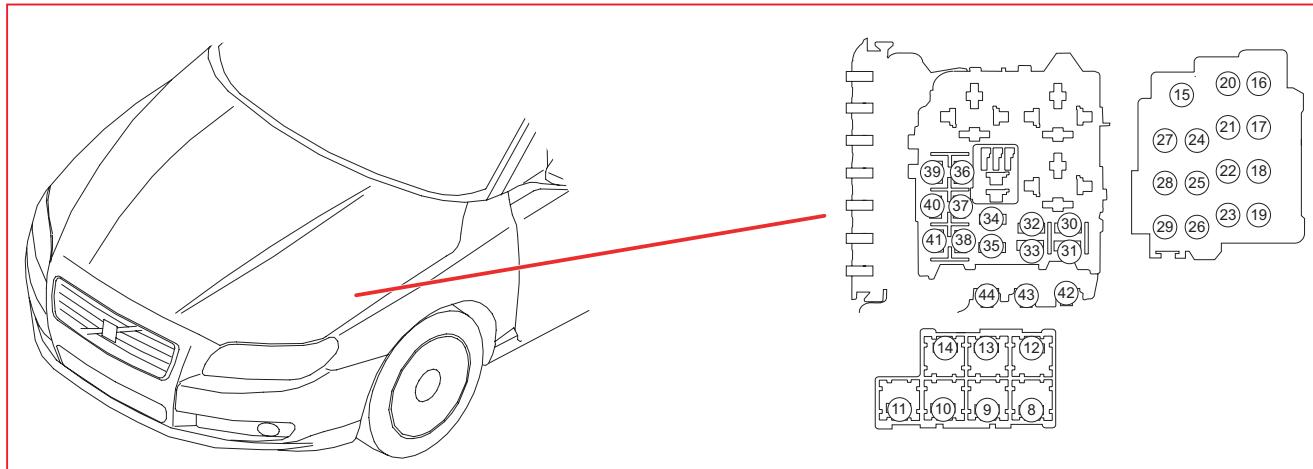
15/31 Engine compartment distribution box

No.	No.	Fuse function	via	A
F38	11B/38	6/99 Motor EGR, 4 Cyl. 8/45 Vacuum valve variable intake manifold, 4 Cyl. 8/114 Mixing valve, air/fuel, 4 Cyl.	-	10
		8/77 Control valve fuel volume, 4 Cyl. Diesel 8/133 Control valve fuel pressure, 4 Cyl. Diesel	-	
		8/3 Electromagnetic clutch climate control system, 5 Cyl. T. 8/28 Turbocharger control valve, 5 Cyl. T.	-	
		8/81 Solenoid, variable valve timing, exhaust, 5 Cyl. T. 8/117 Solenoid, variable valve timing, intake, 5 Cyl. T.	-	
		6/143 Control motor, turbo, 5 Cyl. 8/3 Electromagnetic clutch climate control system, 5 Cyl.	-	
		8/113 Bypass valve, EGR cooling, 5 Cyl. 8/120 EGR valve, 5 Cyl.	-	
		4/46 Engine Control Module (ECM), 6 Cyl. 6/139 Upper actuating motor, intake manifold, 6 Cyl.	-	
		6/140 Lower actuating motor, intake manifold, 6 Cyl.	-	
		8/3 Electromagnetic clutch climate control system, 6 Cyl. 8/117 Solenoid, variable valve timing, intake, 6 Cyl.	-	
		8/125 Solenoid front cam profile, 6 Cyl. 8/126 Solenoid rear cam profile, 6 Cyl.	-	
		4/46 Engine Control Module (ECM), 8 Cyl. 8/3 Electromagnetic clutch climate control system, 8 Cyl.	-	
		8/19 Solenoid, variable valve timing, intake, bank 2, 8 Cyl. 8/81 Solenoid, variable valve timing, exhaust, bank 2, 8 Cyl.	-	
		8/117 Solenoid, variable valve timing, intake, bank 1, 8 Cyl. 8/118 Solenoid, variable valve timing, exhaust, bank 1, 8 Cyl.	-	

continues

Fuses

Engine compartment electrical center F39-F44

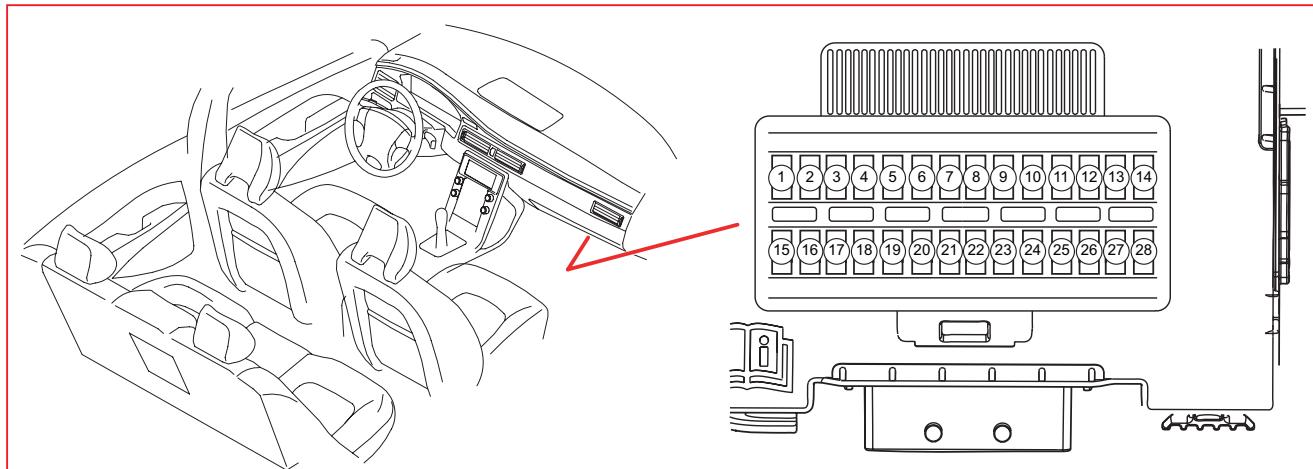


15/31 Engine compartment distribution box

No.	No.	Fuse function	via	A
F39	11B/39	7/15 Heated oxygen sensor, front, 5 Cyl. T.	-	15
		7/103 Rear heated oxygen sensor, 5 Cyl. T.	-	
		8/18 EVAP valve, 5 Cyl. T.	-	
		7/15 Front oxygen sensor, bank 1, 6 Cyl.	-	
		7/82 Rear oxygen sensor, bank 1, 6 Cyl.	-	
		7/103 Front oxygen sensor, bank 2, 6 Cyl.	-	
		7/104 Rear oxygen sensor, bank 2, 6 Cyl.	-	
		8/18 EVAP valve, 6 Cyl.	-	
		7/15 Front oxygen sensor, bank 2, 8 Cyl.	-	
		7/82 Front oxygen sensor, bank 1, 8 Cyl.	-	
		7/103 Rear oxygen sensor, bank 2, 8 Cyl.	-	
		7/104 Rear oxygen sensor, bank 1, 8 Cyl.	-	
		8/107 Variable intake valve, 8 Cyl.	-	
		8/118 Solenoid, variable valve timing, exhaust, bank 1, 8 Cyl.	-	
F40	11B/40	7/15 Heated oxygen sensor, front, 5 Cyl. T., Diesel	-	10
		9/32 PTC resistor, crankcase ventilation, 5 Cyl.	-	20
		9/38 Heated fuel filter, 5 Cyl.	-	
		9/47 PTC resistor crankcase ventilation in hose, 5 Cyl. Diesel	-	
		6/73 Coolant pump, 8 Cyl.	2/239	10
F41	11B/41	6/67 Pump fuel leakage control, not 4 & 5 Cyl.	-	5
F42	11A/42	20/22-26 Glow plug, 5 Cyl.	4/109	70
		20/22-25 Glow plug, 4 Cyl.	2/14	60
F43	-	-	-	-
F44	11A/44	4/71 Cooling fan control module	-	60
		4/71B Twin cooling fan control module	-	80

Fuses

Central Electronic Module (CEM) F1 - F11



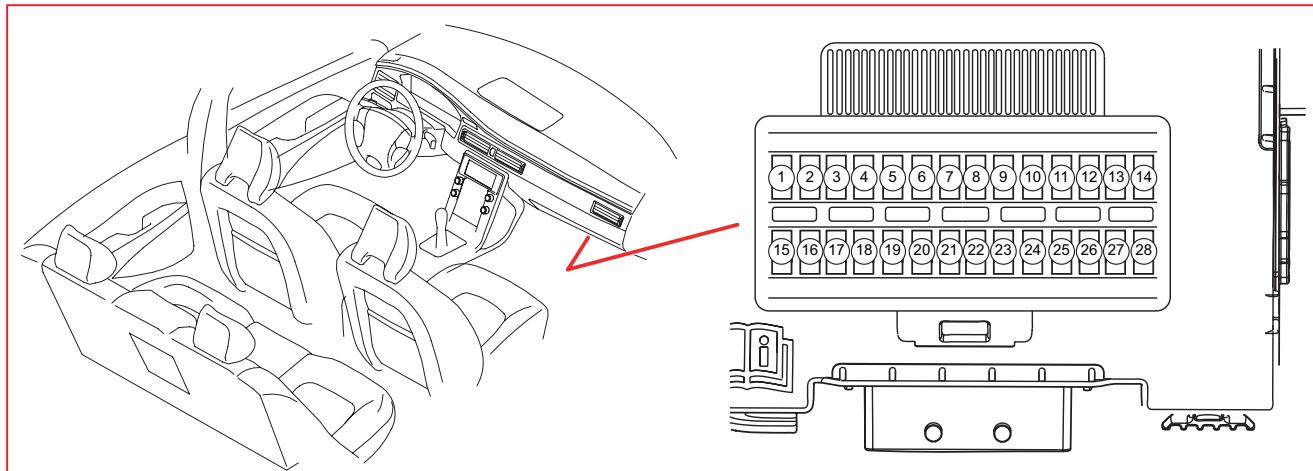
4/56 Central Electronic Module (CEM)

No.	Fuse function	via	A
F1	7/149 Rain Sensor Module (RSM)	4/56	5
F2	4/9 Supplemental Restraint System Module (SRS) 7/93 Occupant Weight Sensor (OWS)	-	10
F3	4/16 Brake Control Module (BCM)	-	5
F4	3/65 Switch, heated rear seat 7/51 Accelerator pedal sensor 8/48 Auto-dimming rearview mirror 9/42 PTC-element	-	7.5
F6	3/281 Infotainment Control Module (ICM) 16/1 Integrated Audio Module (IAM) 16/109 DVD player/control module 4/124 Accessory USB unit (AUU)	-	15
F7	3/4 Steering wheel switch left (SWSL) 3/131 Steering wheel switch right (SWSR) 3/135 RTI switch	3/130 3/130 3/131	7.5
F9	10/1 Lamp housing, front left 10/2 Lamp housing, front right	K2 K2	15
F10	4/33 Sunroof Module (SRM)	-	20
F11	10/48 Right-hand reversing light 10/55 Left-hand reversing light	K3 K3	7.5

continues

Fuses

Central Electronic Module (CEM) F13 - F19



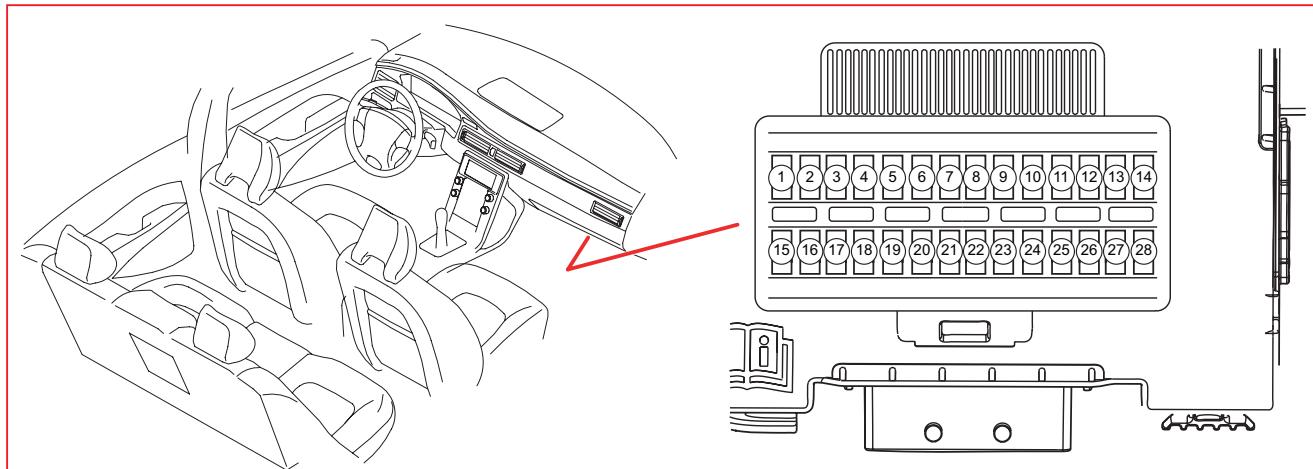
4/56 Central Electronic Module (CEM)

No.	Fuse function	via	A
F13	10/5 Fog light, front left 10/6 Fog light, front right	K1 K1	15
F14	6/127 Washer motor	K5A, K5B	15
F15	4/80 Forward Sensing Module (FSM)	-	10
F17	3/27 Switch unit, power passenger seat 3/176 Switch, driver's door power window 3/291 Tailgate closing switch 4/76 Remote control unit for garage door opener 10/25 Ceiling light, cargo compartment, V70 10/29 Glove compartment lighting 10/114 Left-hand vanity mirror lighting 10/115 Vanity mirror lighting, right 10/125 Left-hand front courtesy lighting 10/126 Right-hand front courtesy lighting 10/127 Lighting, cargo compartment, left-hand side, S80 10/128 Lighting, cargo compartment, right-hand side, S80 10/150 Rear reading light 26/5 DC/AC converter, fuel tank 26/6 Converter/control module, sill moldings, driver's side 26/7 Converter/control module, sill moldings, passenger side	-	7.5
F18	5/1 Driver Information Module (DIM)	-	5
F19	4/52 Power Seat Module (PSM)	-	5

continues

Fuses

Central Electronic Module (CEM) F20 - F28

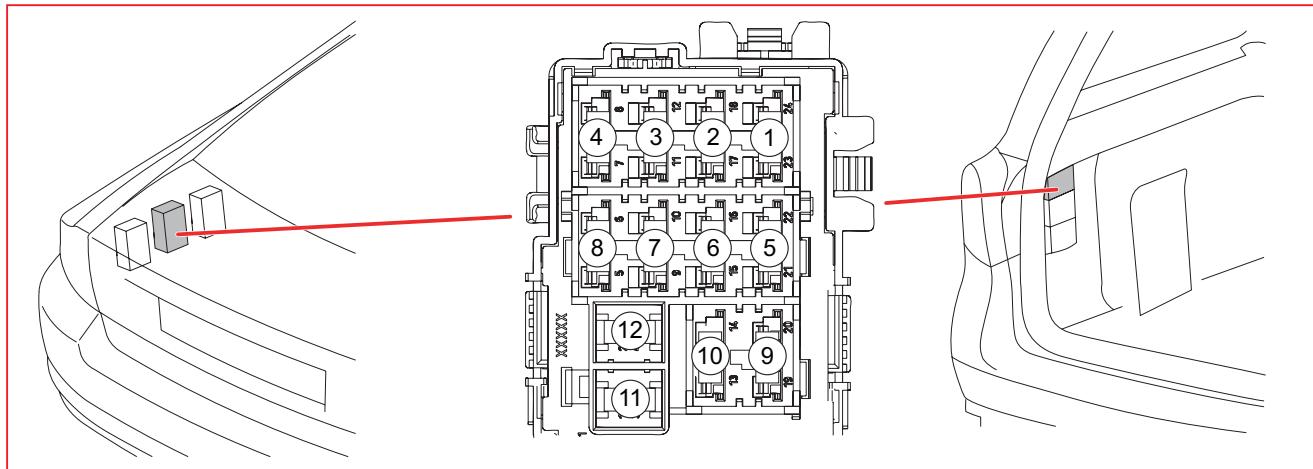


4/56 Central Electronic Module (CEM)

No.	Fuse function	via	A
F20	6/32 Rear window wiper motor, V70	2/16	15
F21	4/119 Signal receiver, keyless vehicle (RKE) 4/119.2 Remote Receiver Module (RRX) 7/199 Ultrasonic sensor (IMS) 7/214 Heartbeat sensor	- - - -	5
F22	6/33 Fuel pump	K8, 4/83	20
F23	4/102 Steering Column Lock Module (SCL)	K9	20
F25	K6-B Relay, soldered K12 Relay, soldered 3/78 Lock unit, tailgate V70 6/8 Lock motor central locking, trunk lid/tailgate, S80 6/37 Lock motor, fuel filler cover	- - K6-B K6-B K12	10
F26	4/6 Climate Control Module (CCM) 16/35 Siren Control Module (SCM) 17/13 Data link connector	- - -	5
F27	3/132 Start Control Module (SCU)	-	5
F28	4/93 Keyless Vehicle Module (KVM) 10/19 Auxiliary brake light 10/43 Right brake light 10/50 Left brake light	3/9 3/9, 4/56 3/9, 4/56 3/9, 4/56	5

Fuses

Rear electrical center FA1-FA12

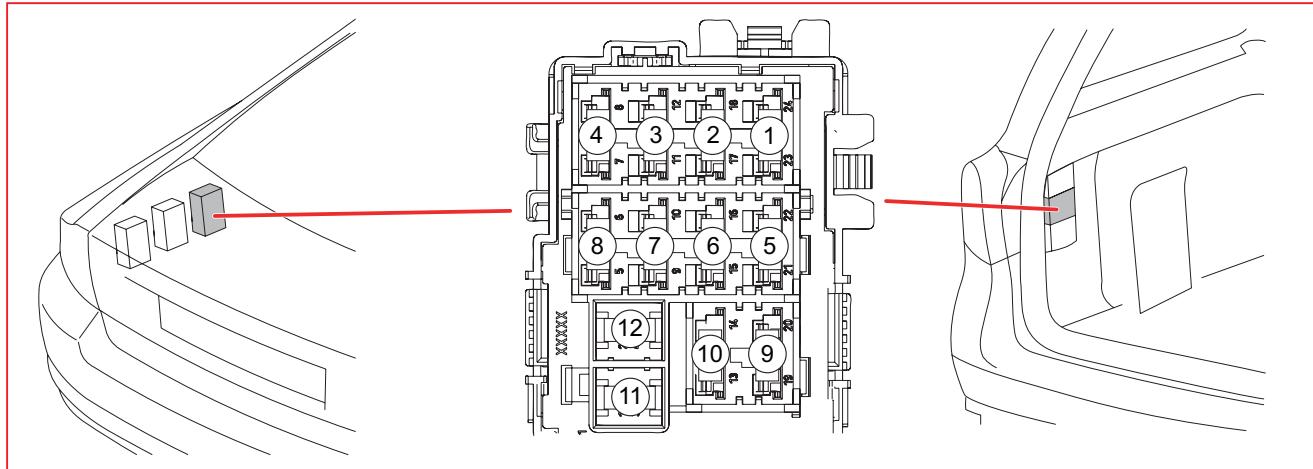


15/32 Rear electrical center

No.	No.	Fuse function	via	A
FA1	11D/A1	3/126 Driver Door Module (DDM)	-	25
FA2	11D/A2	3/127 Passenger Door Module (PDM)	-	25
FA3	11D/A3	3/128 Rear left Door Module (LDM)	-	25
FA4	11D/A4	3/129 Rear Right Door Module (RDM)	-	25
FA6	11D/A6	9/24 Refrigeration box 17/19 12V outlet, cargo compartment	2/141 -	15
FA7	11D/A7	2/82 Relay, heated rear window 9/2 Rear window defroster	- 2/82	30
FA8	11D/A8	8/59 Rear left head restraint solenoid, S80 8/60 Rear right head restraint solenoid, S80	2/75 2/75	15
FA9	11D/A9	17/39 13-pin outlet, tow hitch cable harness	-	15
FA10	11D/A10	4/52 Power Seat Module (PSM)		25
FA11	11D/A11	4/110 Trailer Module (TRM), Accessory	-	40
FA12	11D/A12	4/116 Power Operated Tailgate Module (POT), V70	-	30

Fuses

Distribution box in cargo compartment FB1-FB12

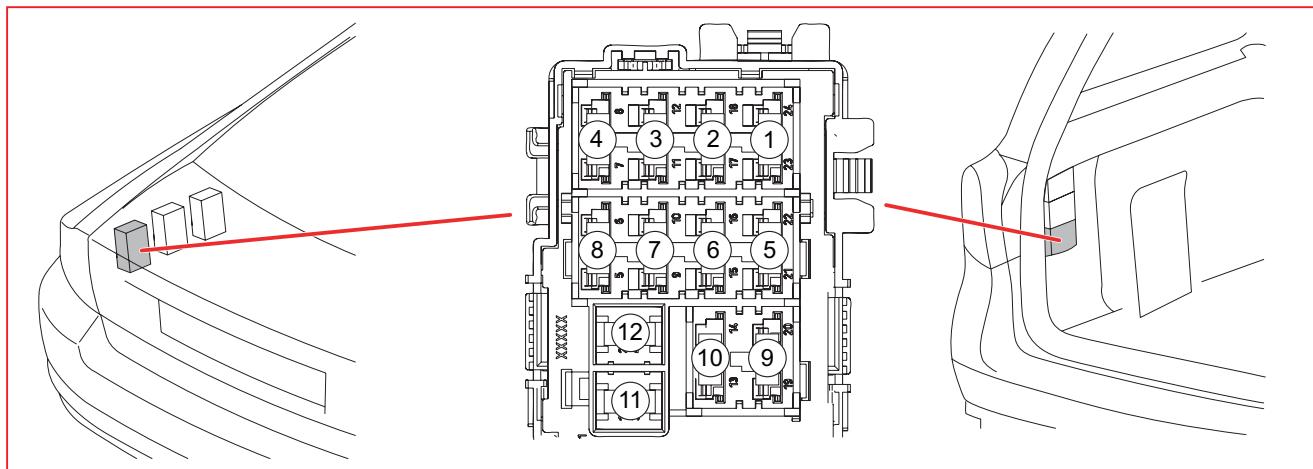


15/32 Rear electrical center

No.	No.	Fuse function	via	A
FB1	11D/B1	-	-	
FB2	11D/B2	4/84 Suspension Module (SUM)	-	15
FB3	11D/B3	9/12 Seat Heating Module (SHM), left	-	15
FB4	11D/B4	9/13 Seat Heating Module (SHM), right	-	15
FB5	11D/B5	9/15 Control module, rear right seat heater	-	15
FB6	11D/B6	4/82 Differential Electronic Module (DEM)	-	10
FB7	11D/B7	9/14 Control module, rear left seat heater	-	15
FB9	11D/B9	3/27 Switch unit, power passenger seat	-	25
FB10	11D/B10	4/93 Keyless Vehicle Module (KVM)	-	20
FB11	11D/B11	6/146 Lock motor, rear left brake disc	4/115	30
FB12	11D/B12	6/147 Lock motor, rear right brake disc	4/115	30

Fuses

Rear electrical center FD1-FD7

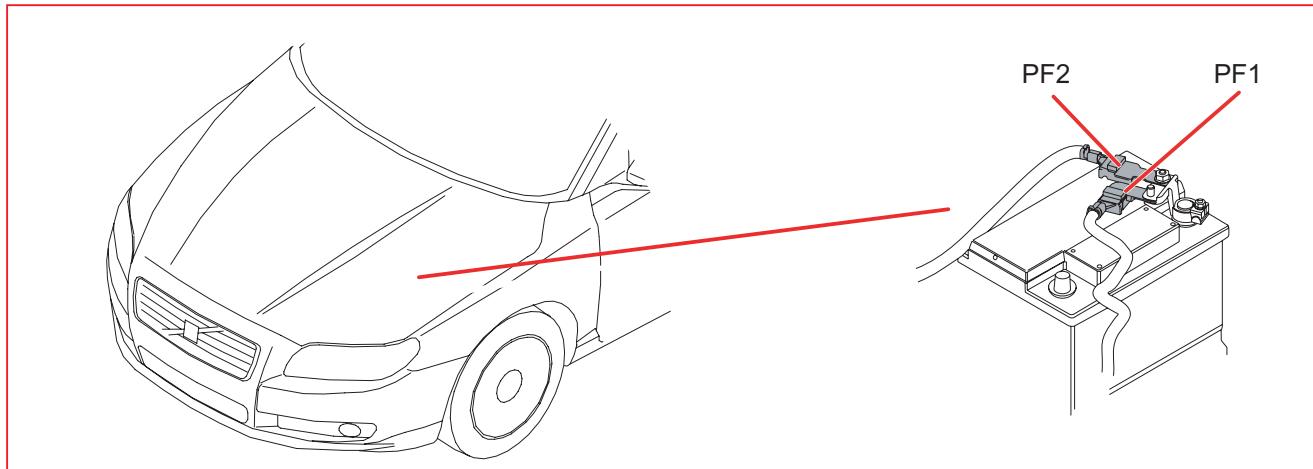


15/32 Rear electrical center

No.	No.	Fuse function	via	A
FD1	11D/D1	16/46 High Level Display Front module (HLDF) 16/108 Multimedia Module (MMM)	-	10
FD3	11D/D3	16/79 Subwoofer Module (SUB), V70		25
FD4	11D/D4	16/145 Remote digital audio receiver (RDAR)	-	5
FD5	11D/D5	16/105 Audio module (AUD)	-	25
FD6	11D/D6	3/281 Infotainment Control Module (ICM) 16/1 Integrated Audio Module (IAM) 4/124 Accessory USB unit (AUU)	-	15
FD7	11D/D7	16/60 Phone Module (PHM) 16/147 Bluetooth Phone Module (BPM)	-	5

Fuses

Battery PF1-PF2

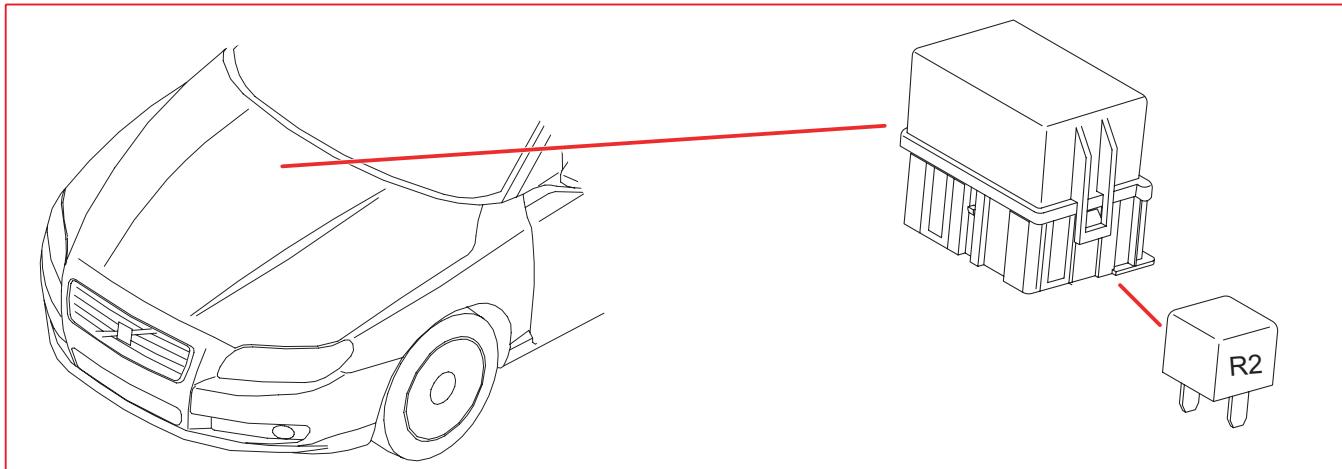


1/1 Battery

No.	Fuse function	via	A
PF1	11A/1-11A/7	Fuses in the engine compartment distribution box	-
	11B/8-11B/14	Fuses in the engine compartment distribution box	-
	11B/16-11B/21	Fuses in the engine compartment distribution box	2/31
	11B/22-11B/24	Fuses in the engine compartment distribution box	-
	11B/25-11B/27	Fuses in the engine compartment distribution box	2/193
	11B/28-11B/29	Fuses in the engine compartment distribution box	-
	11B/30-11B/34	Fuses in the engine compartment distribution box	-
	11B/35-11B/41	Fuses in the engine compartment distribution box	2/32
	11A/42-11A/44	Fuses in the engine compartment distribution box	-
PF2	6/25	Starter motor	-
	6/26	Alternator Control Module (ACM)	-
			150

Relays

Relays in the engine compartment R2

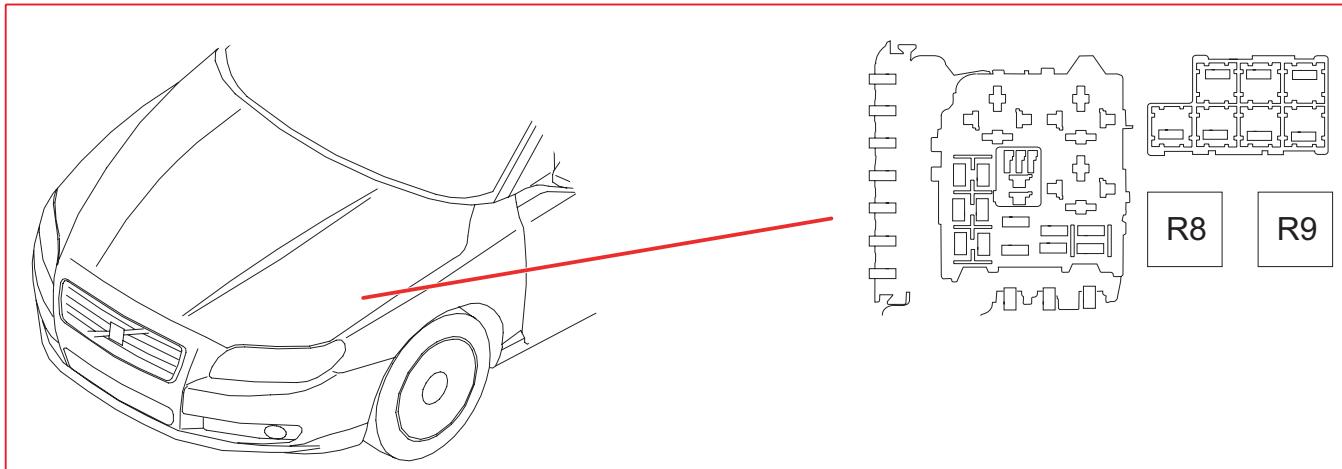


15/33 Engine compartment cold zone

Pos	Relay function	
R2	2/17	Relay, horn

Relays

Relays in the engine compartment R8-R9

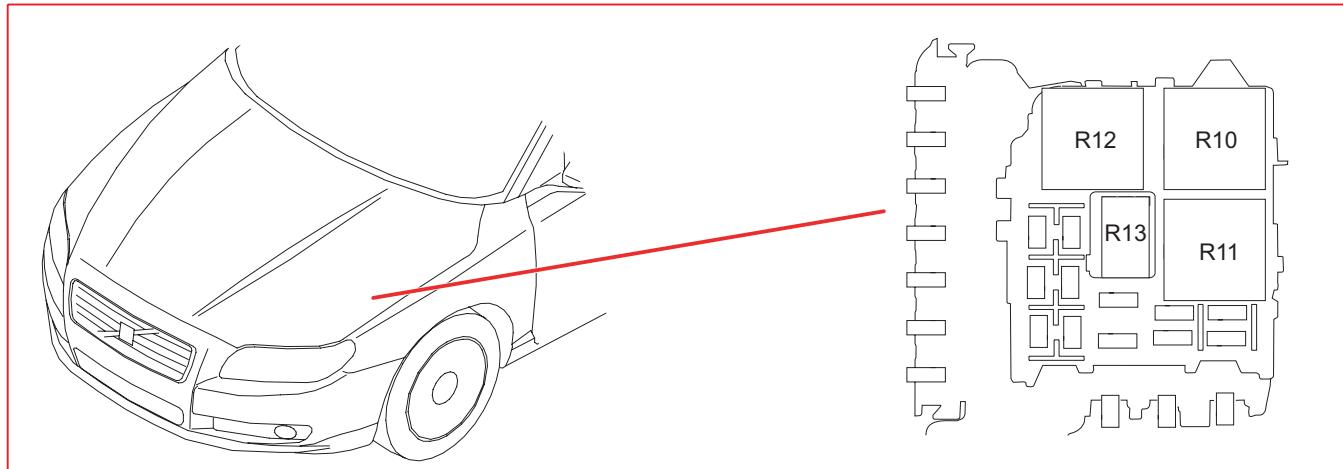


15/31 Engine compartment distribution box

Pos	Relay function	
R8	2/31	Relay, 15-feed
R9	2/193	Relay, comfort functions

Relays

Relays in the engine compartment R10-R13

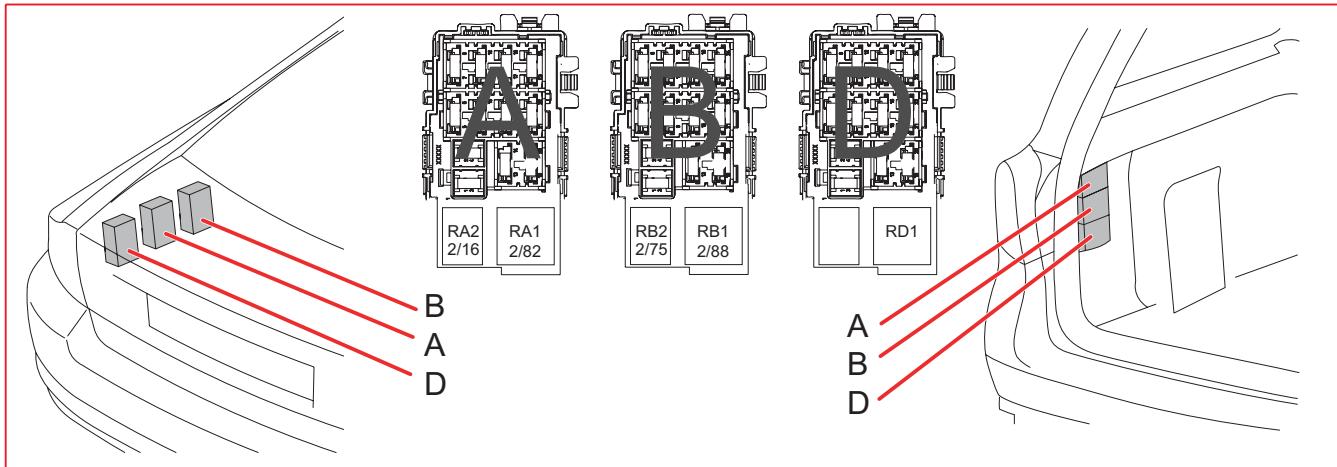


15/31 Engine compartment distribution box

Pos	Relay function	
R10	2/32	Main relay, engine management system
	2/14	Relay, glow plug control system, 4 Cyl. Diesel
R11	2/239	Relay, coolant pump, 8 Cyl.
	2/32	Main relay, engine management system, 4 Cyl. Diesel
R12	2/35	Relay, starter motor
R13	2/22	Relay, climate control system

Relays

Distribution box in cargo compartment RA1-RD1



15/32 Rear electrical center

Pos	Relay function	
RA1	2/82	Relay, heated rear window
RA2	2/16	Relay, rear window wiper
RB1	2/88	Relay, 15-feed rear
RB2	2/75	Rear adjustable head restraint relay
RD1		Mounting

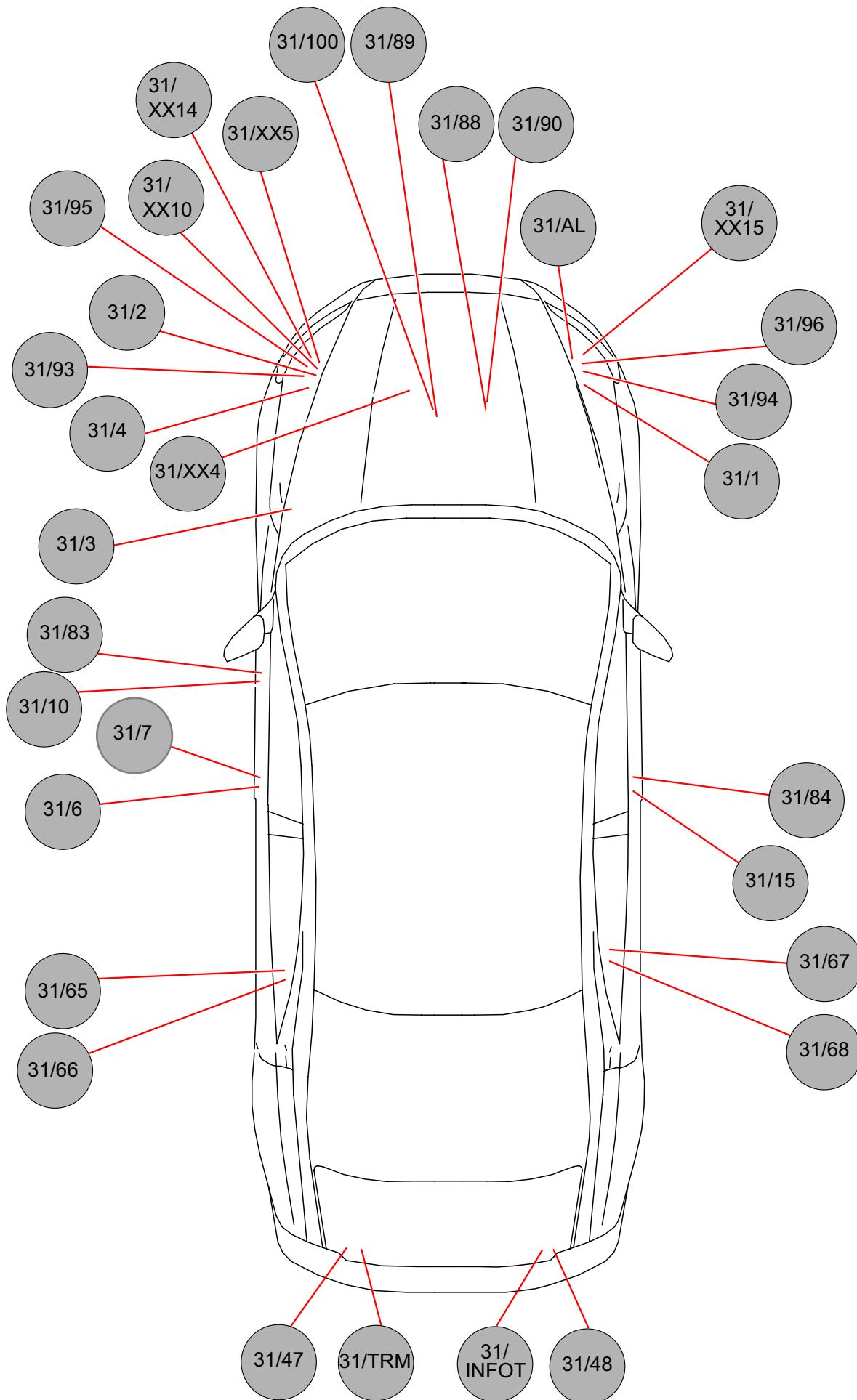
Relays - soldered Central Electronic Module (CEM)

4/56 Central Electronic Module (CEM)

Pos	Relay function
K1	Front fog lights
K2	High beam
K3	Reversing lights
K5-A	Washer motor
K5-B	Washer motor
K6-B	Central locking motor, trunk lid
K8	Fuel pump
K9	Steering Column Lock Module (SCL)
K10-A	Power seats, interior lighting
K12	Lock motor, fuel filler cover

Ground connections

Overview



Ground connections

31/1 - 31/7

31/1 Ground connection, PTC	
9/42	PTC-element
31/2 LH wheel housing	
4/71	Cooling fan control module
4/71B	Twin cooling fan control module
6/114	Vacuum pump
31/3 Body, battery	
1/1	Battery
31/4 Engine	
31/XX4	Engine compartment
31/6 Bottom rail, left	
3/27	Switch unit, power passenger seat, RHD
3/65	Switch, heated rear seat, LHD
3/126	Driver Door Module (DDM)
3/127	Passenger Door Module (PDM)
3/128	Rear left Door Module (LDM)
3/156	Gear Selector Module (GSM), LHD
3/176	Switch, driver's door power window, LHD
3/273	Lock contact, LH front door
3/275	Lock contact, left rear door
4/52	Power Seat Module (PSM), LHD
6/36	Lock motor, central locking, LH front door
6/57	Lock motor, central locking, LH rear door
8/134	Solenoid, reverse interlock, manual, LHD
9/1	Front 12V outlet, LHD
9/12	Seat Heating Module (SHM), driver's side, LHD
9/13	Seat Heating Module (SHM), passenger side, RHD
9/25	Rear 12V outlet, LHD
10/72	Front ashtray lighting, LHD
16/45	Navigation system portable, LHD
16/109	DVD player/control module, LHD
16/111	Rear headphone sockets, LHD
31/7 Bottom rail, left	
3/271	Contact, immobilizer, clutch pedal, LHD
3/284	Diagnostic contact, brake light, LHD
4/56	Central Electronic Module (CEM), RHD
7/51	Accelerator pedal sensor, LHD

Ground connections

31/10 - 31/15

31/10 Bottom rail, left	
3/6	Switch, hazard warning flashers
3/117	Switch unit, ceiling light
3/173	Switch, trunk lid/tailgate private lock
4/31	Fan control module
4/33	Sunroof control module
4/76	Remote control unit for garage door opener
4/102	Steering Column Lock Module (SCL)
4/119	Signal receiver, keyless vehicle (RKE)
4/119.2	Remote Receiver Module (RRX)
6/48	Damper Motor Module (DMM), recirculation
6/95	Damper Motor Module (DMM), temperature, left side
6/96	Damper Motor Module (DMM), temperature, right side
6/102	Damper Motor Module (DMM), defroster
6/103	Damper Motor Module (DMM), floor/ventilation
7/149	Rain Sensor Module (RSM)
7/159	Air Quality Sensor (AQS)
7/199	Ultrasonic sensor
8/48	Auto-dimming rearview mirror
10/19	Auxiliary brake light, S80
10/22	Ceiling light
10/29	Glove compartment lighting
10/114	Left-hand vanity mirror lighting
10/115	Vanity mirror lighting, right
10/150	Rear reading light
17/13	Data link connector

31/15 Bottom rail, right	
3/27	Switch unit, power passenger seat, LHD
3/65	Switch, heated rear seat, RHD
3/126	Driver Door Module (DDM)
3/127	Passenger Door Module (PDM)
3/129	Rear Right Door Module (RDM)
3/156	Gear Selector Module (GSM), RHD
3/176	Switch, driver's door power window, RHD
3/274	Lock contact, RH front door
3/276	Lock contact, RH rear door
4/52	Power Seat Module (PSM), RHD
6/55	Lock motor, central locking, RH front door
6/56	Lock motor, central locking, RH rear door
8/134	Solenoid, reverse interlock, manual, RHD
9/1	Front 12V outlet, RHD
9/12	Seat Heating Module (SHM), driver's side, RHD
9/13	Seat Heating Module (SHM), passenger side, LHD
9/25	Rear 12V outlet, RHD
10/72	Front ashtray lighting, RHD
16/45	Navigation system portable, RHD
16/109	DVD-player/control module S80, RHD
16/111	Rear headphone sockets, RHD

Ground connections

31/47 - 31/66

31/47 Rear bumper abutment, left

2/16	Rear window wiper relay, V70
3/35	Switch, handle, trunk lid/tailgate
3/78	Lock unit, tailgate V70
4/110	Trailer Module (TRM), S80
4/115	Parking Brake Module (PBM)
4/116	Power Operated Tailgate Module (POT), V70
6/8	Lock motor central locking, trunk lid/tailgate, S80
6/32	Rear window wiper motor, V70
6/149	Tailgate closing motor, V70
7/227A	Tailgate pinch sensor, right, V70
7/227B	Tailgate pinch sensor, left, V70
9/2	Heated rear window, V70
10/3	License plate lighting
10/17	Lamp housing, rear right V70
10/18	Lamp housing, rear left
10/19	Auxiliary brake light V70

31/48 Rear bumper abutment, right

2/141	Refrigeration box relay
4/86	Parking Assistance Module (PAM)
6/37	Lock motor, fuel filler cover
7/214	Heartbeat sensor
9/24	Refrigeration box
10/17	Lamp housing, rear right
17/19	12V outlet, cargo compartment

31/65 Rear seat riser, LH side

4/82	Differential Electronic Module (DEM)
4/110	Trailer Module (TRM), V70
4/120	Parking Assistance Camera module (PAC)
7/175	Weight sensor passenger seat, seat belt reminder, RHD
8/51	Front left side airbag igniter
8/59	Rear left head restraint solenoid, S80
9/14	Control module, rear left seat heater

31/66 Rear seat riser, LH side

4/83	Fuel pump control module
6/33	Fuel pump

Ground connections

31/67 - 31/83

31/67 Rear seat riser, right-hand side 1	
4/84	Suspension Module (SUM)
4/93	Keyless Vehicle Module (KVM)
7/175	Weight sensor passenger seat, seat belt reminder, LHD
8/51	Front left side airbag igniter, RHD
8/52	Front left side airbag igniter, LHD
8/60	Rear right head restraint solenoid, S80
9/15	Control module, rear right seat heater

31/68 Rear seat riser, RH side 2	
6/35	Fuel pump, auxiliary heater
9/38	Electrically heated fuel filter

31/83 Bottom rail, left	
3/4	Steering wheel switch left (SWSL)
3/37	Contact horn
3/47	Parking light contact
3/111	Light Switch Module (LSM)
3/130	Steering Wheel Module (SWM)
3/131	Steering wheel switch right (SWSR)
3/132	Start Control Module (SCU)
3/272	Parking brake contact
3/281	Infotainment Control Module (ICM)
3/293	Handsfree control panel cellular phone
4/6	Climate Control Module (CCM)
4/80	Forward Sensing Module (FSM)
4/124	Accessory USB unit (AUU)
5/1	Driver Information Module (DIM)
7/10	Interior temperature sensor
9/42	PTC-element
10/1	Lamp housing, front left
10/2	Lamp housing, front right
16/1	Integrated Audio Module (IAM)
16/60	Phone Module (PHM)
16/147	Bluetooth Phone Module (BPM)
16/159	Control module, mobile phone handsfree
16/123	Auxiliary equipment outlet (AUX)
17/13	Data link connector

Ground connections

31/84 - 31/93

31/84 Bottom rail, right	
3/271	Contact, immobilizer, clutch pedal, RHD
3/284	Diagnostic contact, brake light, RHD
4/56	Central Electronic Module (CEM), LHD
7/51	Accelerator pedal sensor, RHD

31/88 Engine ignition coils	
20/3	Spark plug with ignition coil, 6 Cyl. without Turbo
20/4	Spark plug with ignition coil, 5 Cyl. Turbo, 6 Cyl. without Turbo
20/5	Spark plug with ignition coil, 6 Cyl. Turbo
20/6	Spark plug with ignition coil, 6 Cyl. Turbo
20/3	Spark plug with ignition coil, 8 Cyl.
20/5	Spark plug with ignition coil, 8 Cyl.

31/89 Engine ignition coils	
20/5	Spark plug with ignition coil, 5 Cyl. Turbo
20/6	Spark plug with ignition coil, 5 Cyl. Turbo
20/7	Spark plug with ignition coil, 5 Cyl. Turbo
20/5	Spark plug with ignition coil, 6 Cyl. without Turbo
20/6	Spark plug with ignition coil, 6 Cyl. without Turbo
20/7	Spark plug with ignition coil, 6 Cyl.
20/8	Spark plug with ignition coil, 6 Cyl.
20/16	Capacitor, 6 Cyl. without Turbo
20/7	Spark plug with ignition coil, 8 Cyl.
20/12	Spark plug with ignition coil, 8 Cyl.

31/90 Engine ignition coils	
20/3-4	Spark plug with ignition coil, 6 Cyl. Turbo
20/4	Spark plug with ignition coil 8 Cyl.
20/6	Spark plug with ignition coil 8 Cyl.
20/16	Capacitor, 6 Cyl. Turbo

31/93 LH wheel housing 2	
5/1	Driver Information Module (DIM)
7/5	Washer fluid level sensor
9/43	Heated windshield washer nozzle, left
9/44	Heated windshield washer nozzle, right
10/1	Lamp housing, front left
10/5	Fog light, front left

Ground connections

31/94 - 31/XX10

31/94 RH wheel housing 2	
6/104	High pressure headlight washer motor
10/2	Lamp housing, front right
10/6	Fog light, front right
16/10	Horn 1
16/11	Horn 2

31/95 LH wheel housing 3	
4/56	Central Electronic Module (CEM), RHD
4/99	Electronic power steering control module
4/118	Headlamp Control Module (HCM)
7/4	Brake fluid level sensor
16/35	Siren Control Module (SCM)

31/96 RH wheel housing 3	
3/62	Hood alarm contact
4/56	Central Electronic Module (CEM), LHD
7/73	Coolant level sensor
7/203	Forward-aimed radar (FLR)

31/100 Engine ignition coils	
20/8	Spark plug with ignition coil 8 Cyl.
20/13	Spark plug with ignition coil 8 Cyl.

31/XX4 Engine - Body	
31/4	Ground connection

31/XX5 Ground connection, ECM	
4/46	Engine Control Module (ECM)

31/XX10 LH wheel housing 1	
3/10	Reversing light contact
3/282	Switch indication 1st gear, 5 Cyl. Diesel
4/28	Transmission Control Module (TCM)
4/46	Engine Control Module (ECM), 4 Cyl.
6/73	Coolant pump, auxiliary heater, 8 Cyl.
6/139	Upper actuating motor, intake manifold
6/140	Lower actuating motor, intake manifold
9/32	PTC resistor, crankcase ventilation, 5 Cyl. Diesel
9/47	PTC resistor crankcase ventilation in hose, 5 Cyl. Diesel

Ground connections

31/XX14 - 31/AL

31/XX14 LH wheel housing 3 (ABS)

4/16	Brake Control Module (BCM)
------	----------------------------

31/XX15 RH wheel housing

6/1	Wiper Motor Module (WMM)
-----	--------------------------

4/7	Combustion Preheater Module (CPM)
-----	-----------------------------------

31/TRM Accessory

17/37	4-pin outlet, tow hitch cable harness
-------	---------------------------------------

17/38	7-pin outlet, tow hitch cable harness
-------	---------------------------------------

17/39	13-pin outlet, tow hitch cable harness
-------	--

31/INFOT Infotainment

16/46	High Level Display Front module (HLDF)
-------	--

16/79	Subwoofer Module (SUB), V70
-------	-----------------------------

16/105	Audio module (AUD)
--------	--------------------

16/108	Multimedia Module (MMM)
--------	-------------------------

16/145	Remote digital audio receiver (RDAR)
--------	--------------------------------------

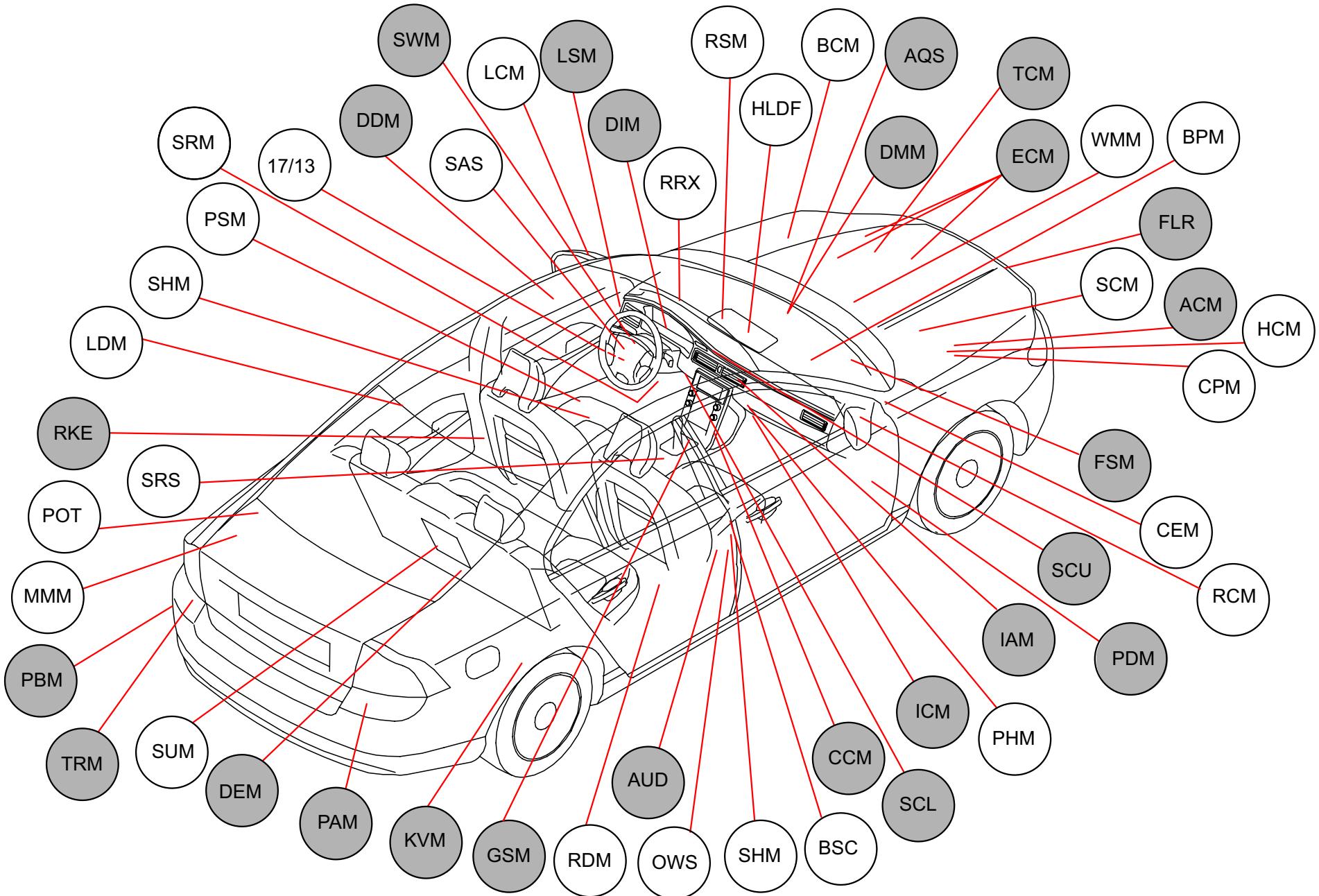
31/AL Auxiliary lights

10/65	Auxiliary light, front right
-------	------------------------------

10/69	Auxiliary light, front left
-------	-----------------------------

Control modules

Overview of locations



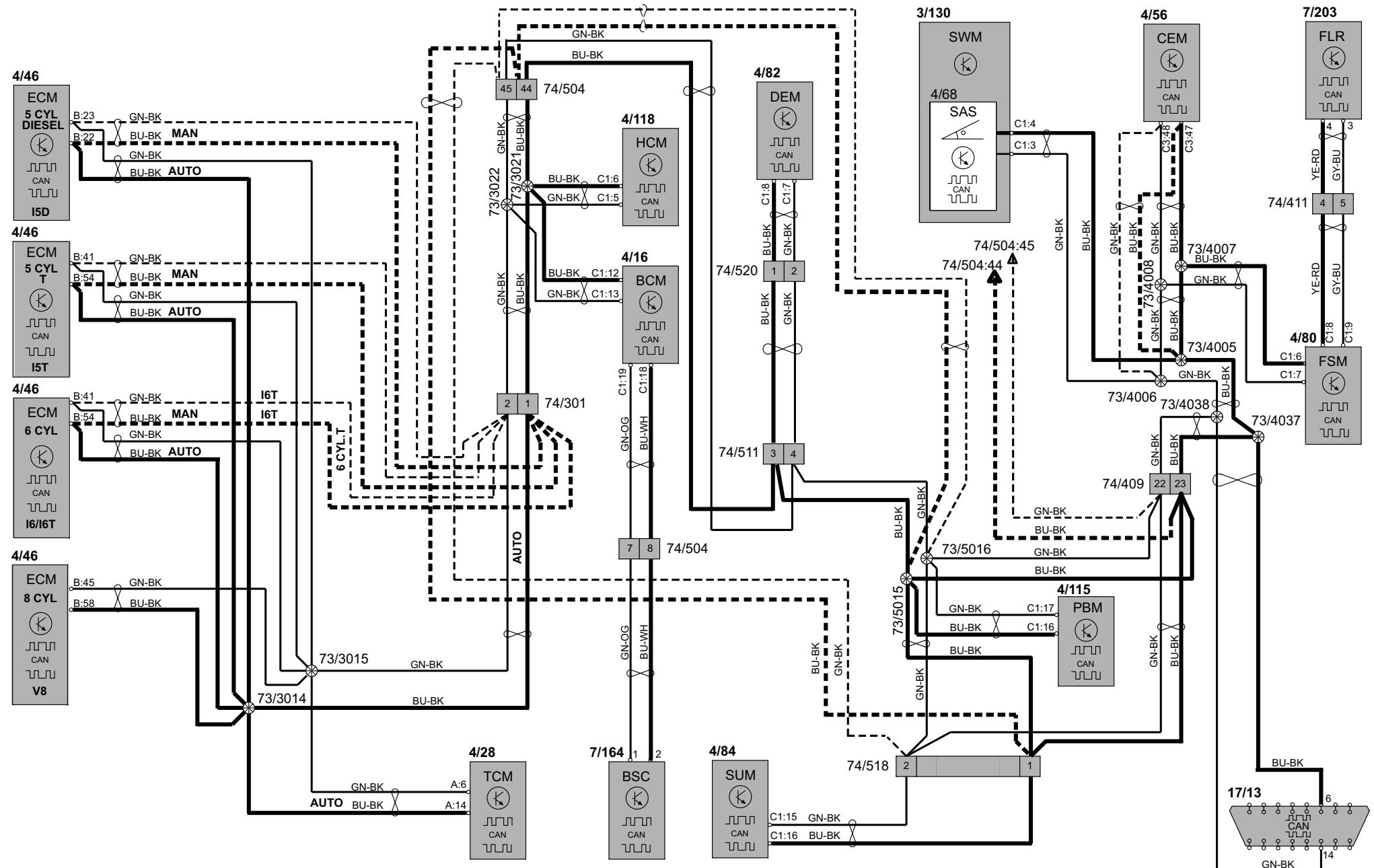
Control modules

Overview designations

Unit	Designation	Unit	Designation
ACM	6/26 Alternator Control Module (ACM)	PAM	4/86 Parking Assistance Module (PAM)
AQS	7/159 Air Quality Sensor (AQS)	PBM	4/115 Parking Brake Module (PBM)
AUD	16/105 Audio Module (AUD)	PDM	3/127 Passenger Door Module (PDM)
BCM	4/16 Brake Control Module (BCM)	PHM	16/60 Phone Module (PHM)
BPM	16/147 Bluetooth Phone Module (BPM)	POT	4/116 Power Operated Tailgate Module (POT)
BSC	7/164 Body Sensor Cluster Stability Sensor (BSC)	PSM	4/52 Power Seat Module (PSM)
CCM	4/6 Climate Control Module (CCM)	RCM	27/4 Right Camera Module (RCM)
CEM	4/56 Central Electronic Module (CEM)	RDM	3/129 Rear Right Door Module (RDM)
CPM	4/7 Combustion Preheater Module (CPM)	RKE	4/119 Signal receiver, keyless vehicle (RKE)
DDM	3/126 Driver Door Module (DDM)	RRX	4/119.2 Remote Receiver Module (RRX)
DEM	4/82 Differential Electronic Module (DEM)	RSM	7/149 Rain Sensor Module (RSM)
DIM	5/1 Driver Information Module (DIM)	SAS	4/68 Steering Wheel Angle Sensor Module (SAS)
DMM	Damper Motor Module (DMM)	SCL	4/102 Steering Column Lock Module (SCL)
ECM	4/46 Engine Control Module (ECM)	SCM	16/35 Siren Control Module (SCM)
FLR	7/203 Forward-aimed radar (FLR)	SCU	3/132 Start Control Module (SCU)
FSM	4/80 Forward Sensing Module (FSM)	SHM	9/12 Seat Heating Module (SHM), driver's side
GSM	3/156 Gear Selector Module (GSM)	SRM	4/33 Sunroof Module (SRM)
HCM	4/118 Headlamp Control Module (HCM)	SRS	4/9 Supplemental Restraint System Module (SRS)
HLDF	16/46 High Level Display Front module (HLDF)	SUM	4/84 Suspension Module (SUM)
IAM	16/1 Integrated Audio Module (IAM)	SWM	3/130 Steering Wheel Module (SWM)
ICM	3/281 Infotainment Control Module (ICM)	TCM	4/28 Transmission Control Module (TCM)
KVM	4/93 Keyless Vehicle Module (KVM)	TMC	16/49 Traffic Message Channel module (TMC)
LCM	27/3 Left Camera Module (LCM)	TRM	4/110 Trailer Module (TRM)
LDM	3/128 Rear left Door Module (LDM)	WMM	6/1 Wiper Motor Module (WMM)
LSM	3/111 Light Switch Module (LSM)	4/31	4/31 Fan control module
MMM	16/108 Multimedia Module (MMM)	4/71	4/71 Cooling fan control module
OWS	7/93 Occupant Weight Sensor (OWS)	17/13	17/13 Data link connector

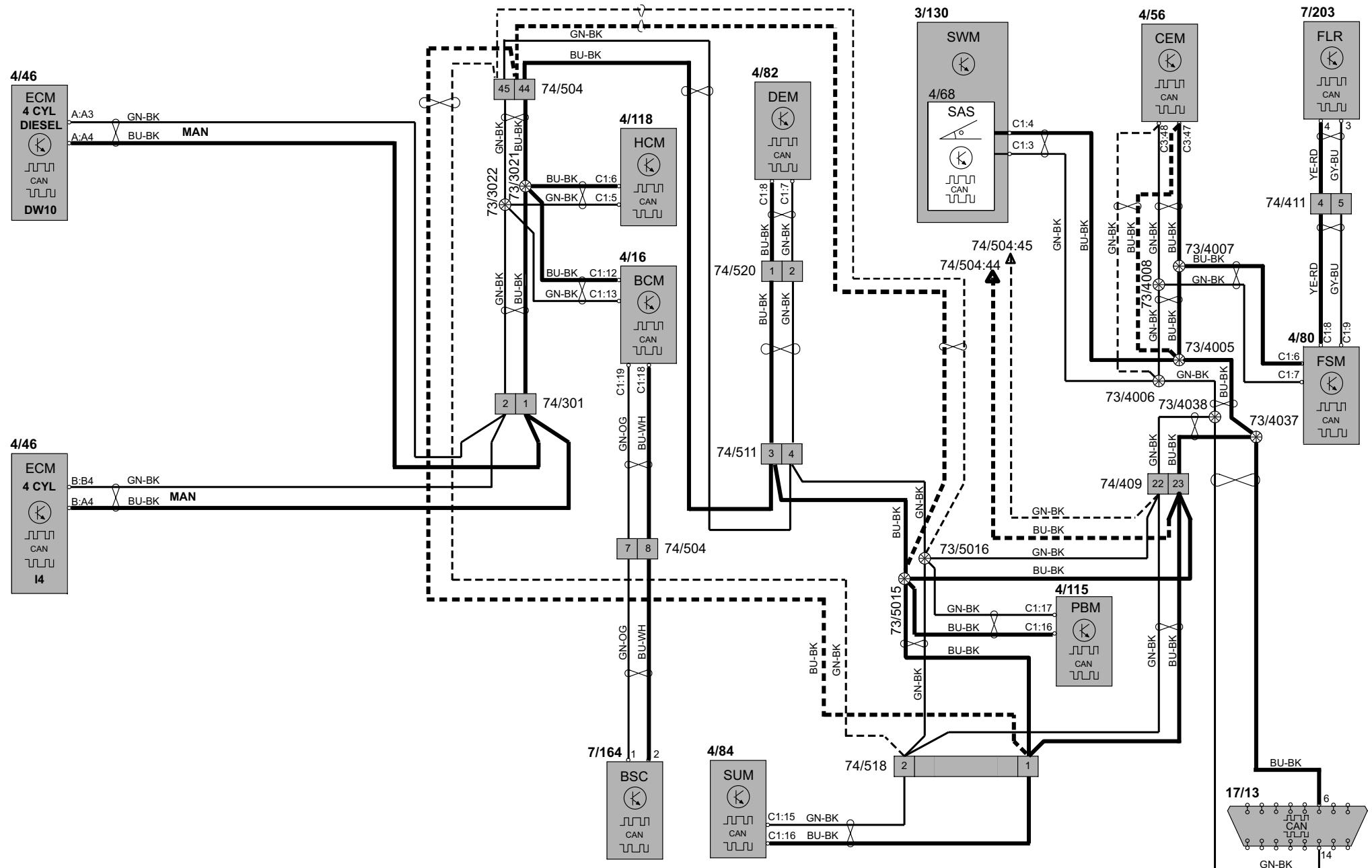
Control modules

Data communication high speed CAN



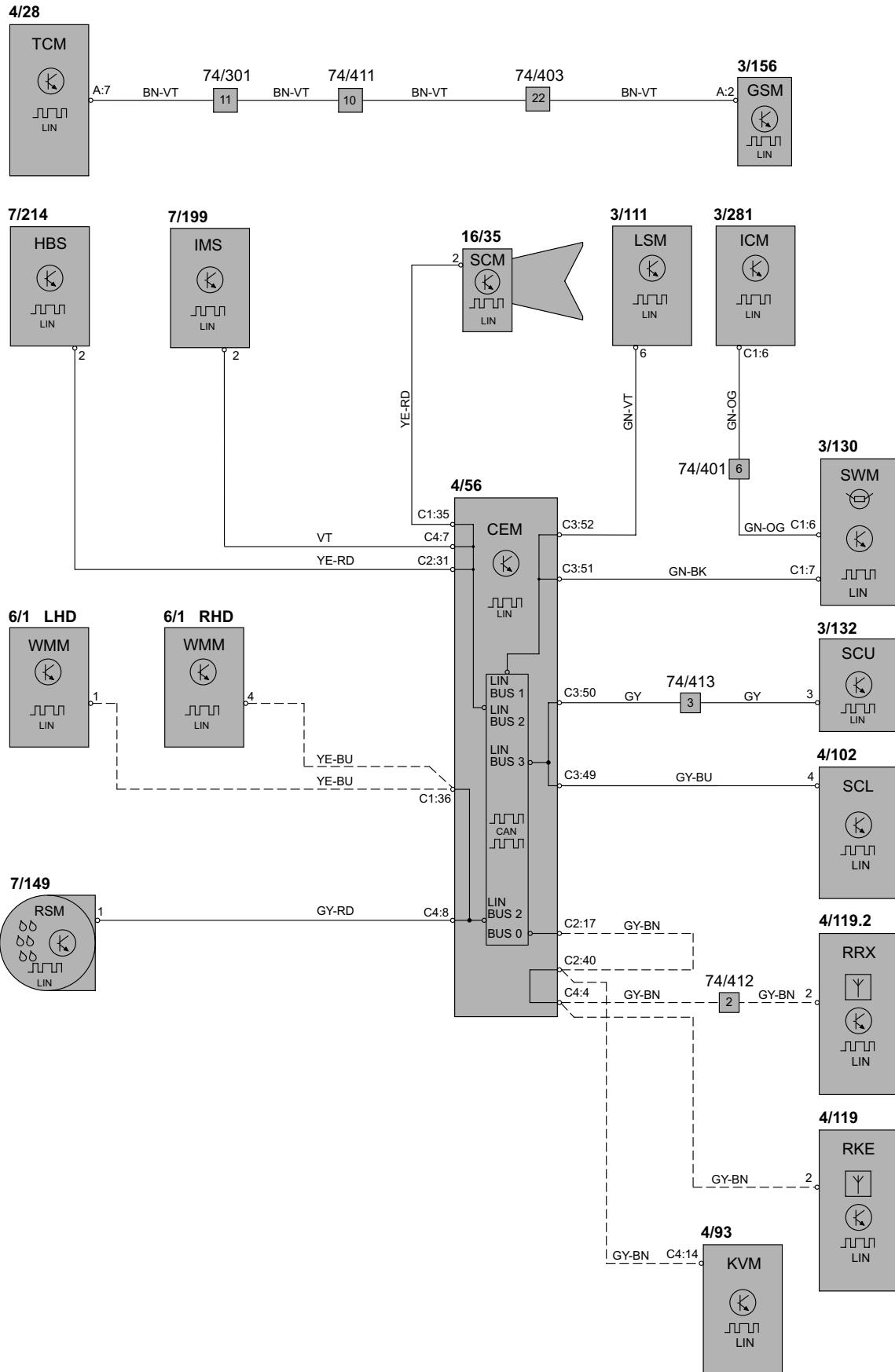
Control modules

Data communication high speed CAN 4 Cyl.



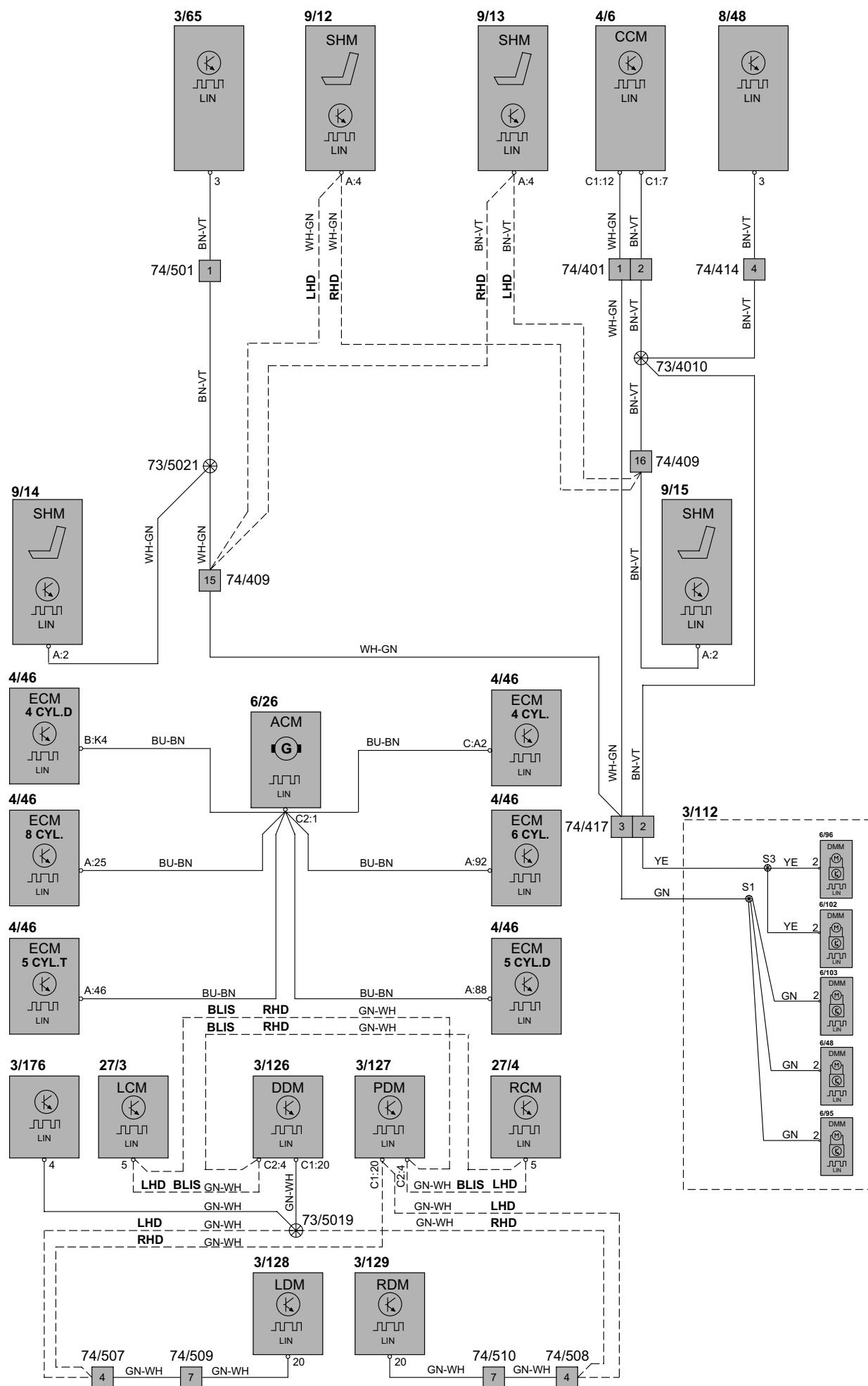
Control modules

Data communication LIN 1:2



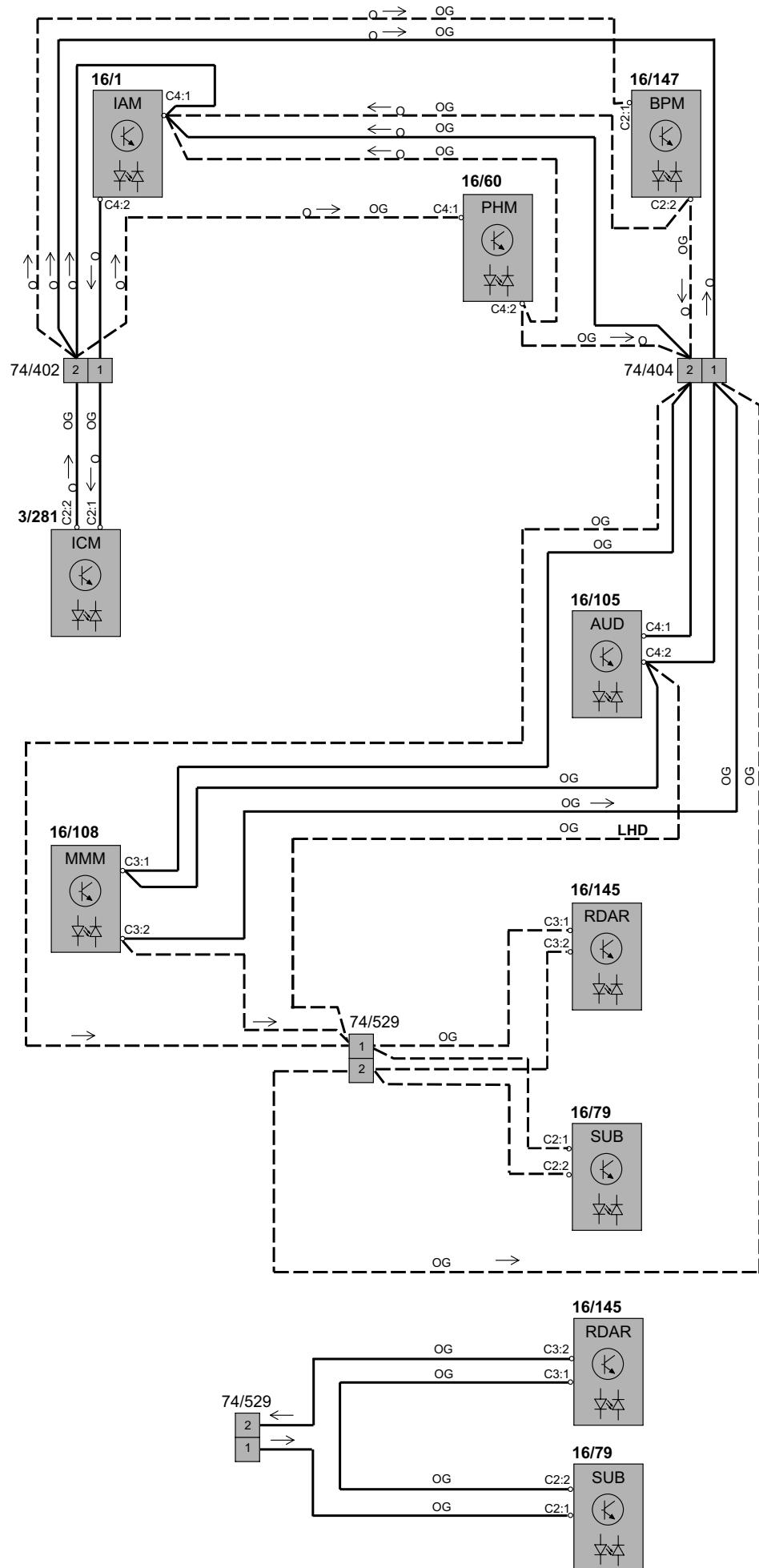
Control modules

Data communication LIN 2:2



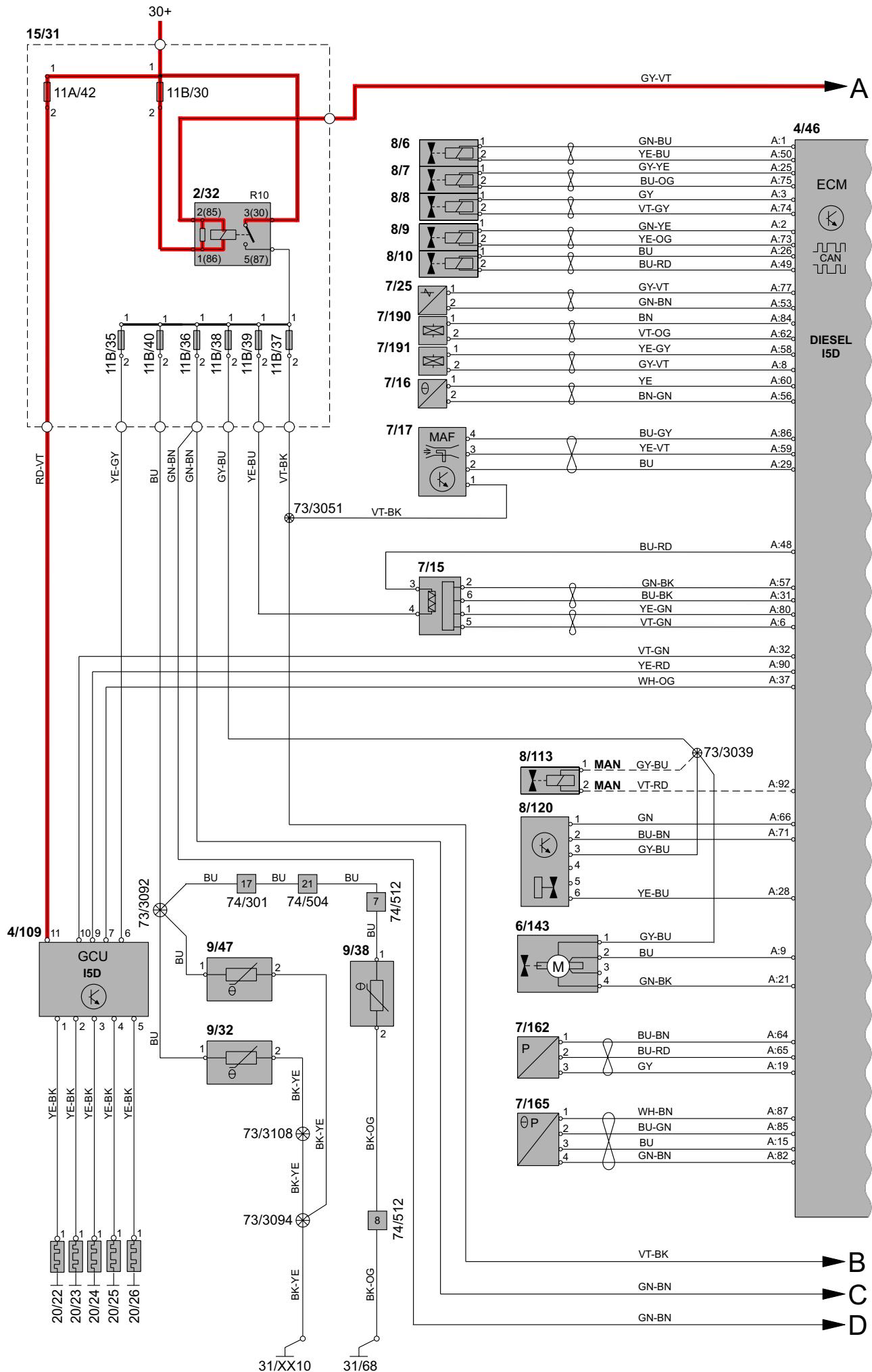
Control modules

Data communication MOST



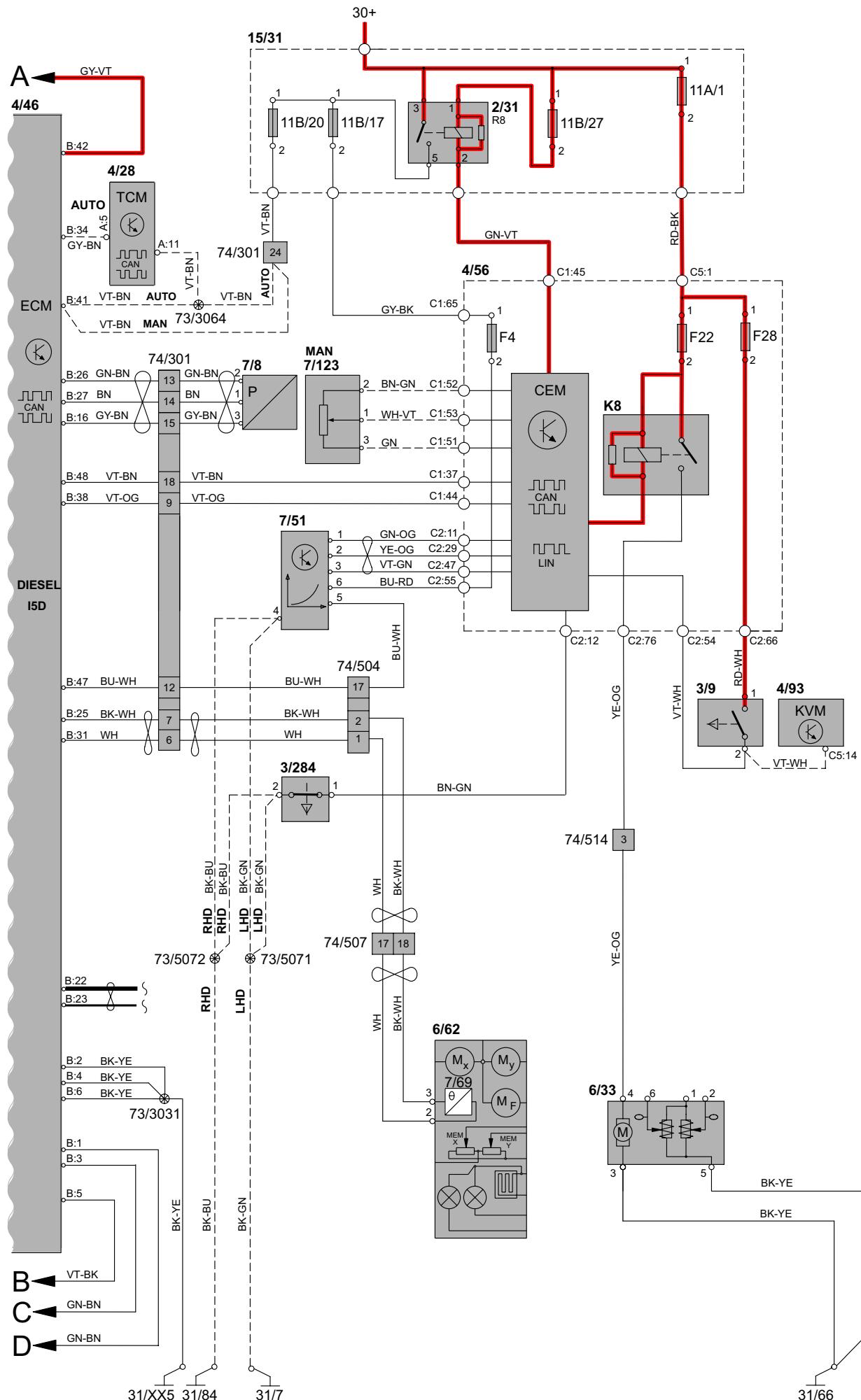
Group 23 Fuel system

Engine management system, 5 Cyl. Diesel 1:3



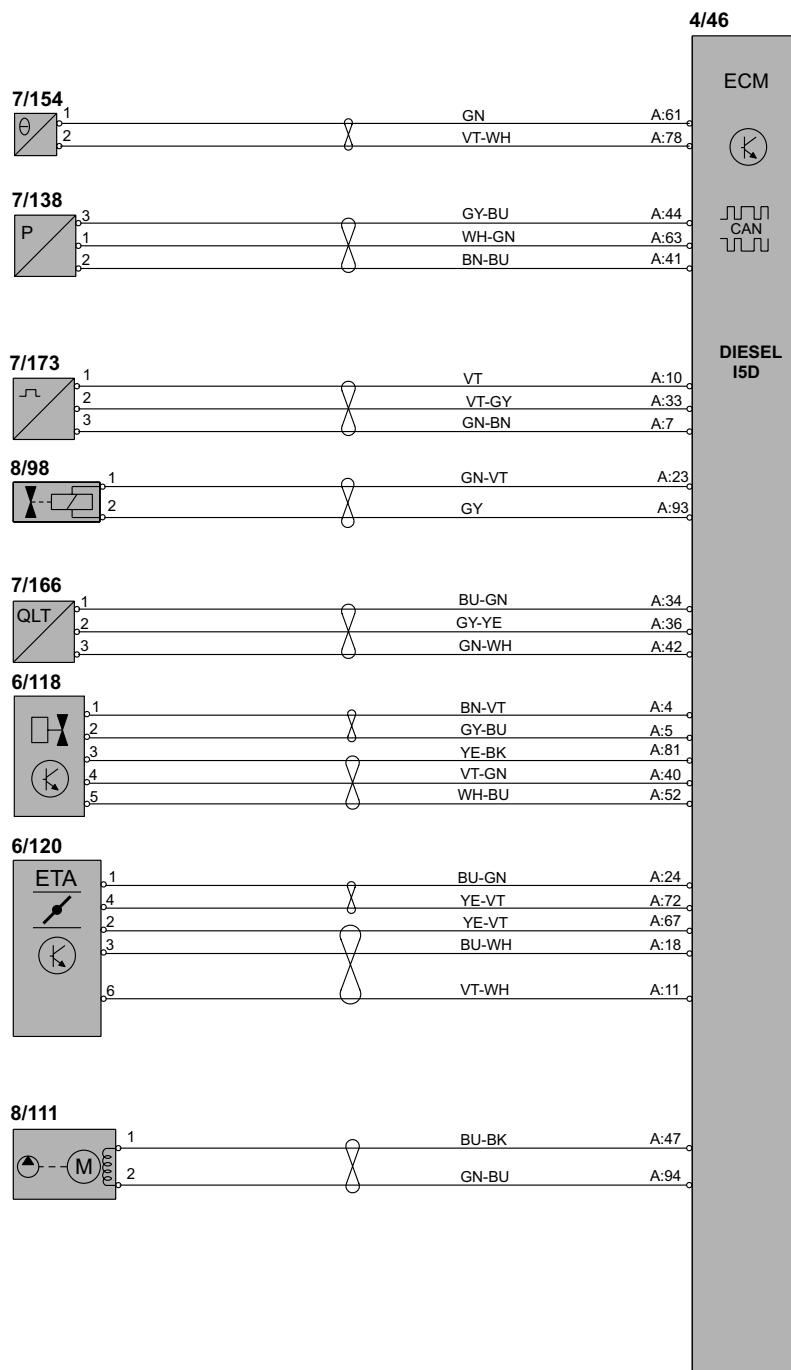
Group 23 Fuel system

Engine management system, 5 Cyl. Diesel 2:3



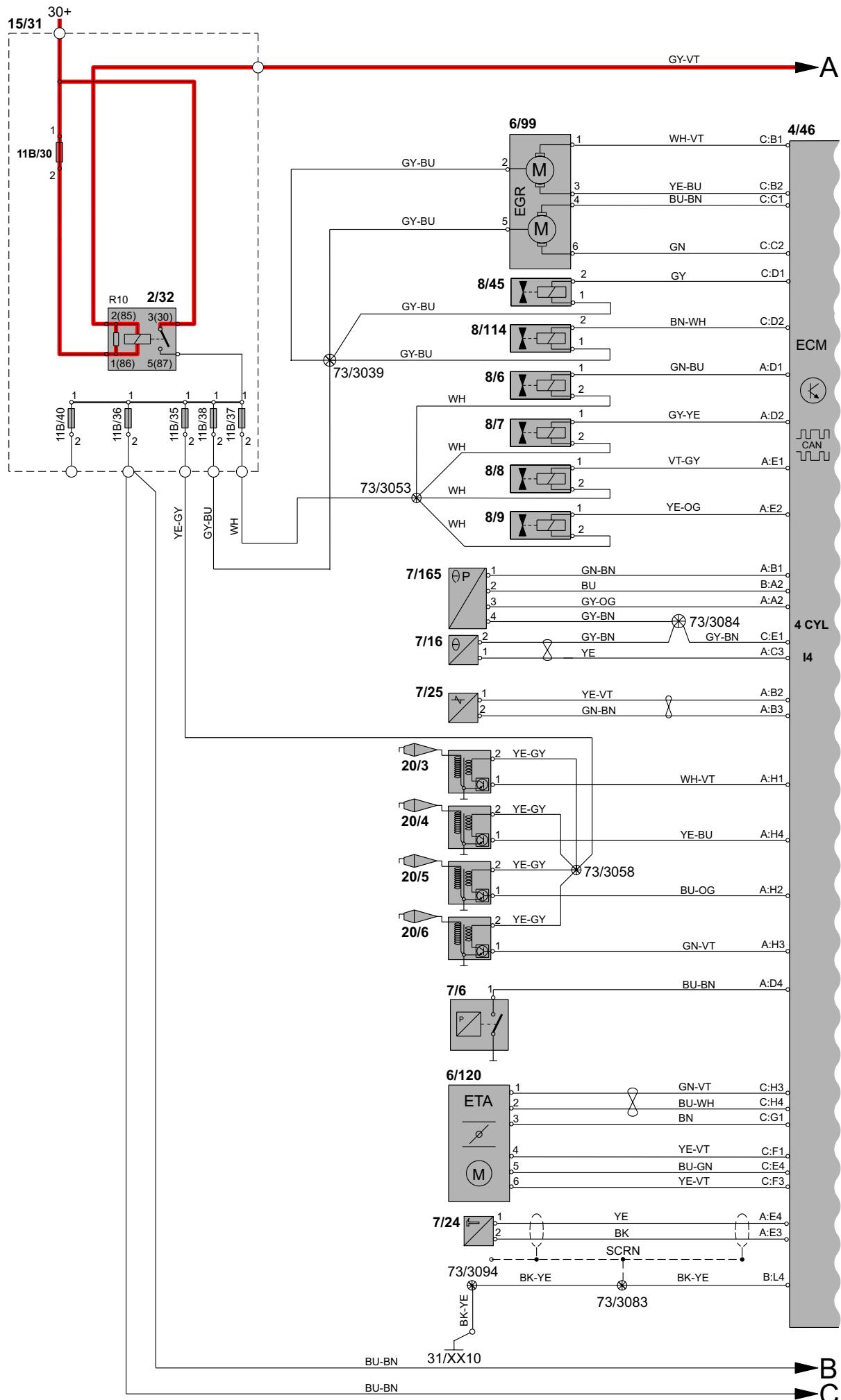
Group 23 Fuel system

Engine management system, 5 Cyl. Diesel 3:3



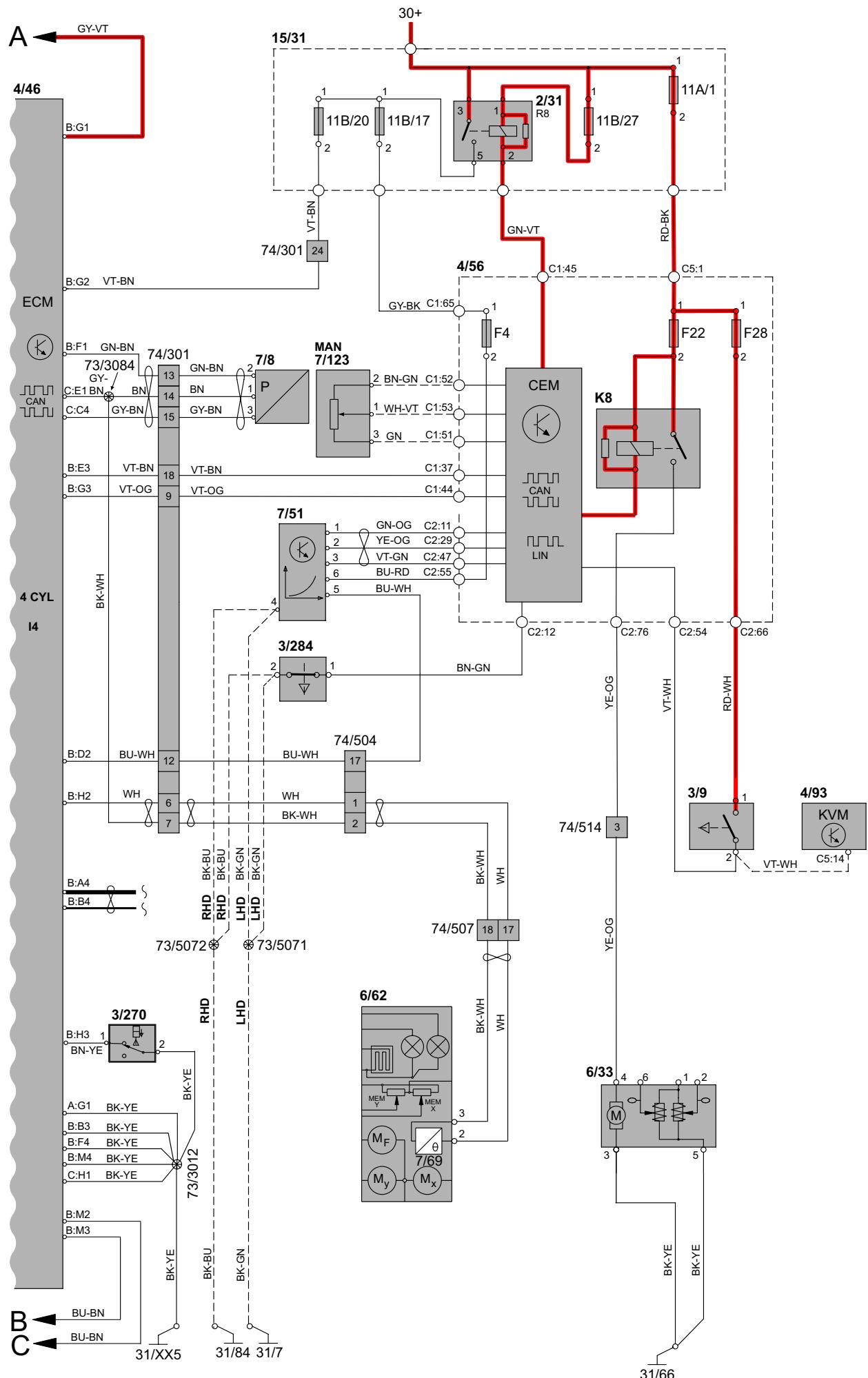
Group 23 Fuel system

Engine management system, 4 Cyl. 1:2



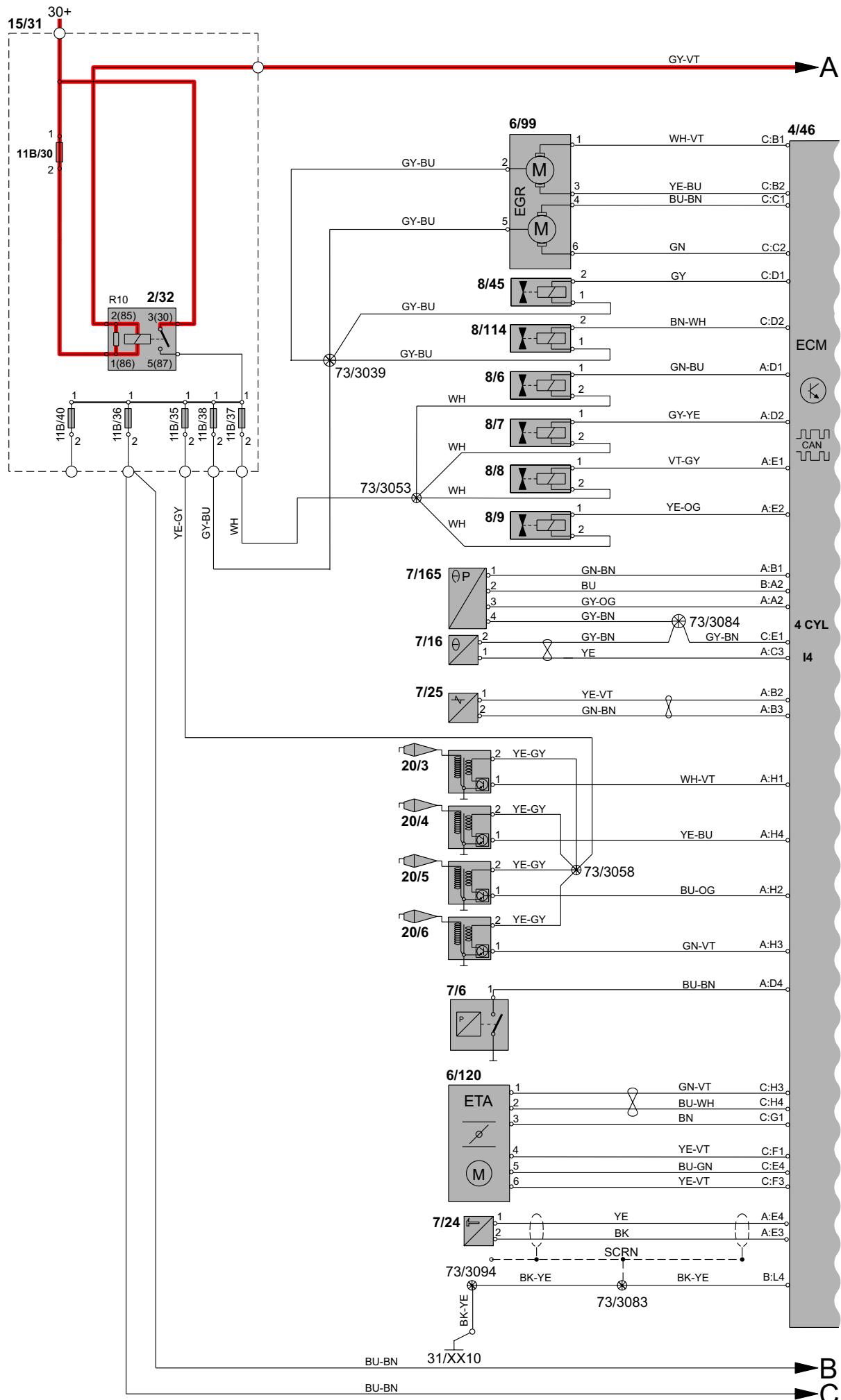
Group 23 Fuel system

Engine management system, 4 Cyl. 2:2



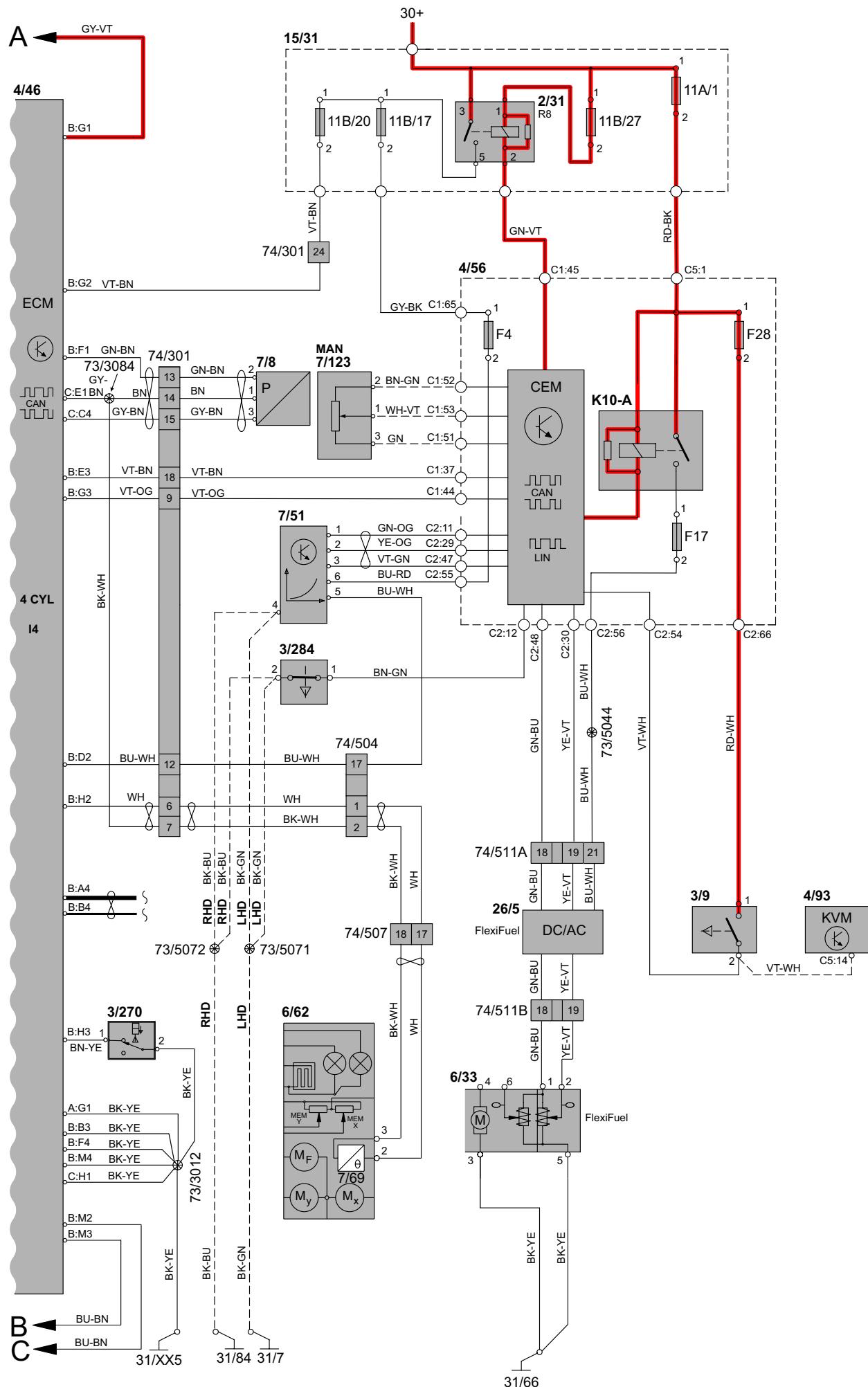
Group 23 Fuel system

Engine management system, 4 Cyl. Flexifuel 1:2



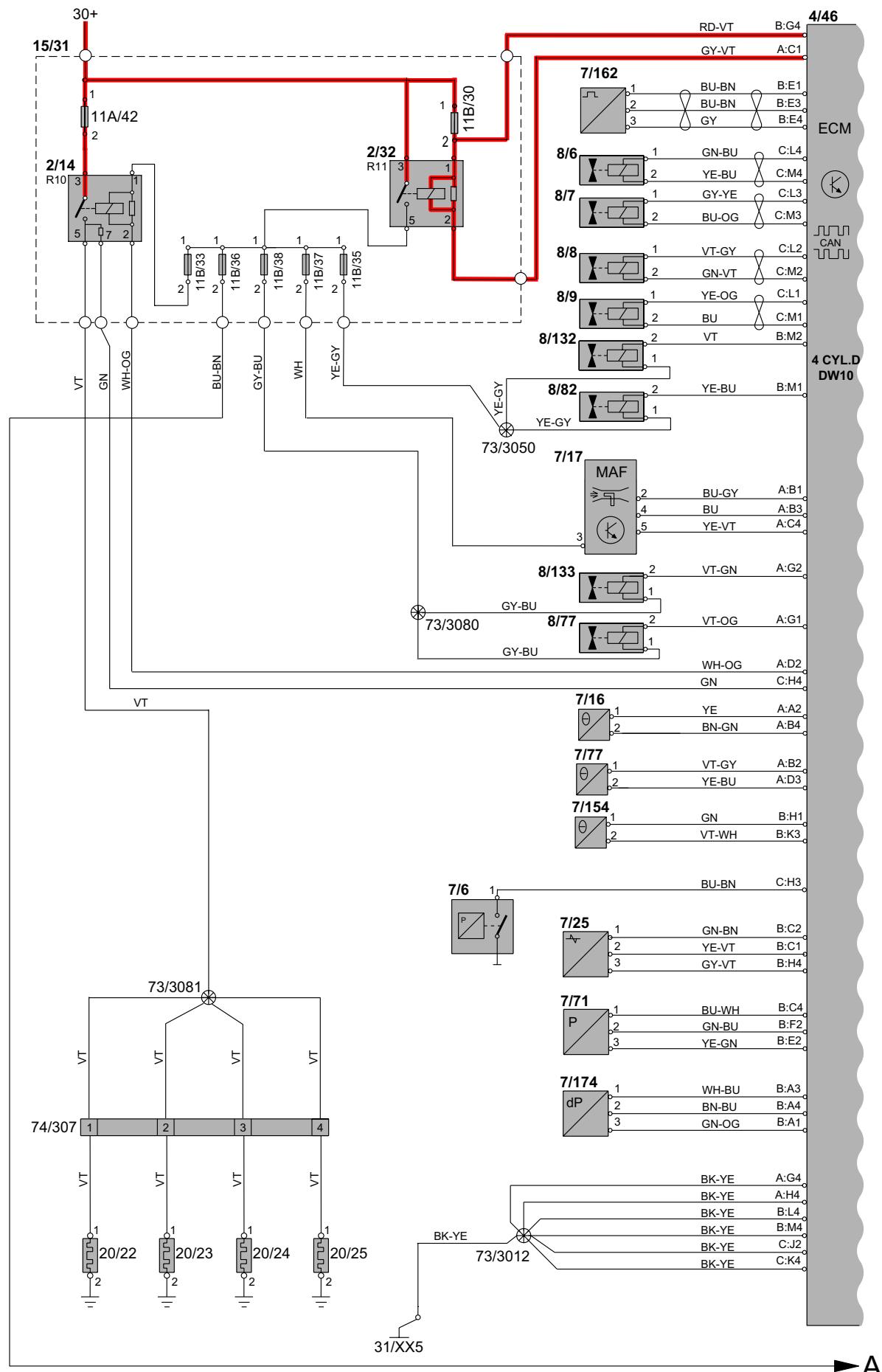
Group 23 Fuel system

Engine management system, 4 Cyl. Flexifuel 2:2



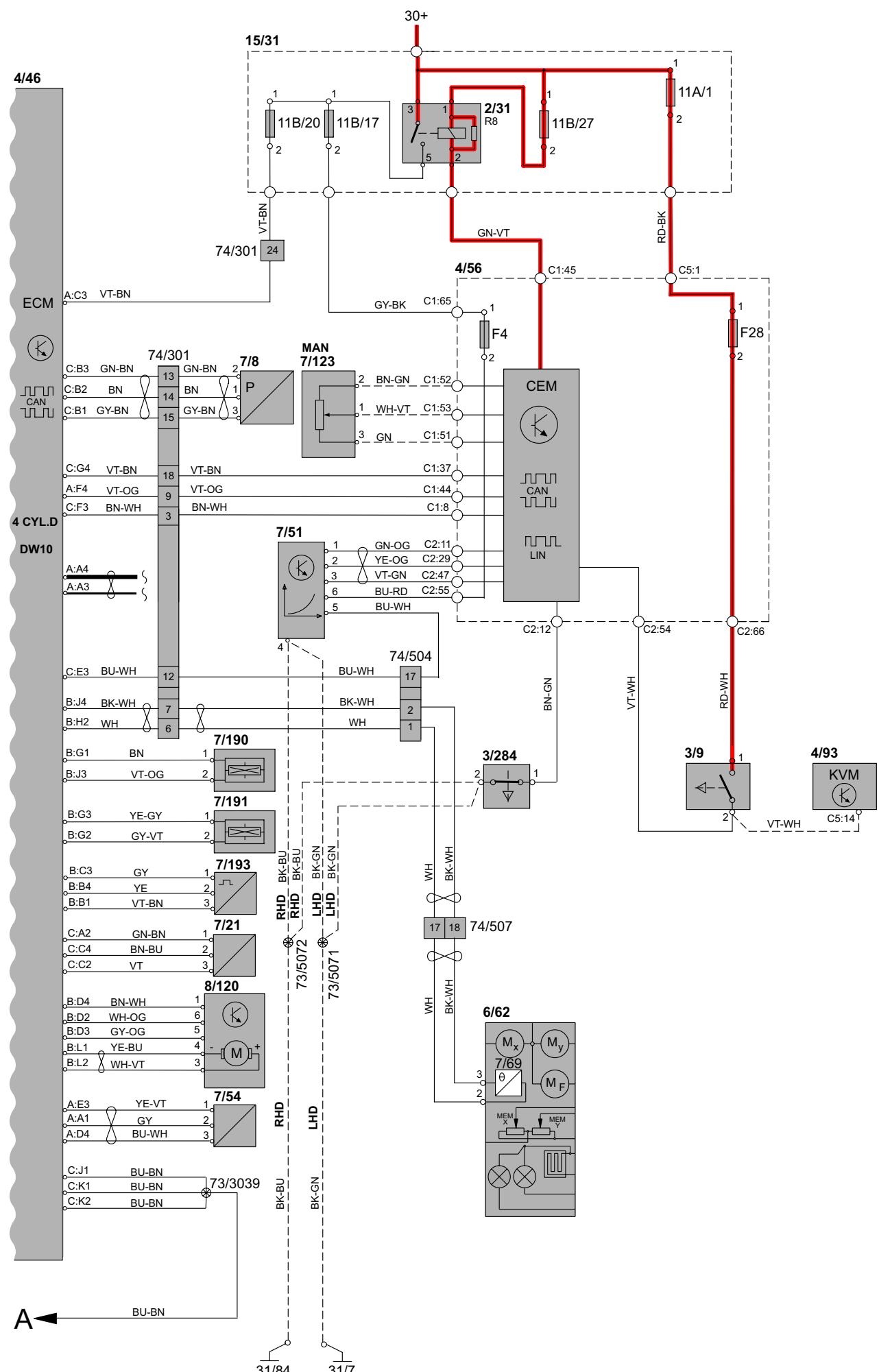
Group 23 Fuel system

Engine management system, 4 Cyl. Diesel 1:2



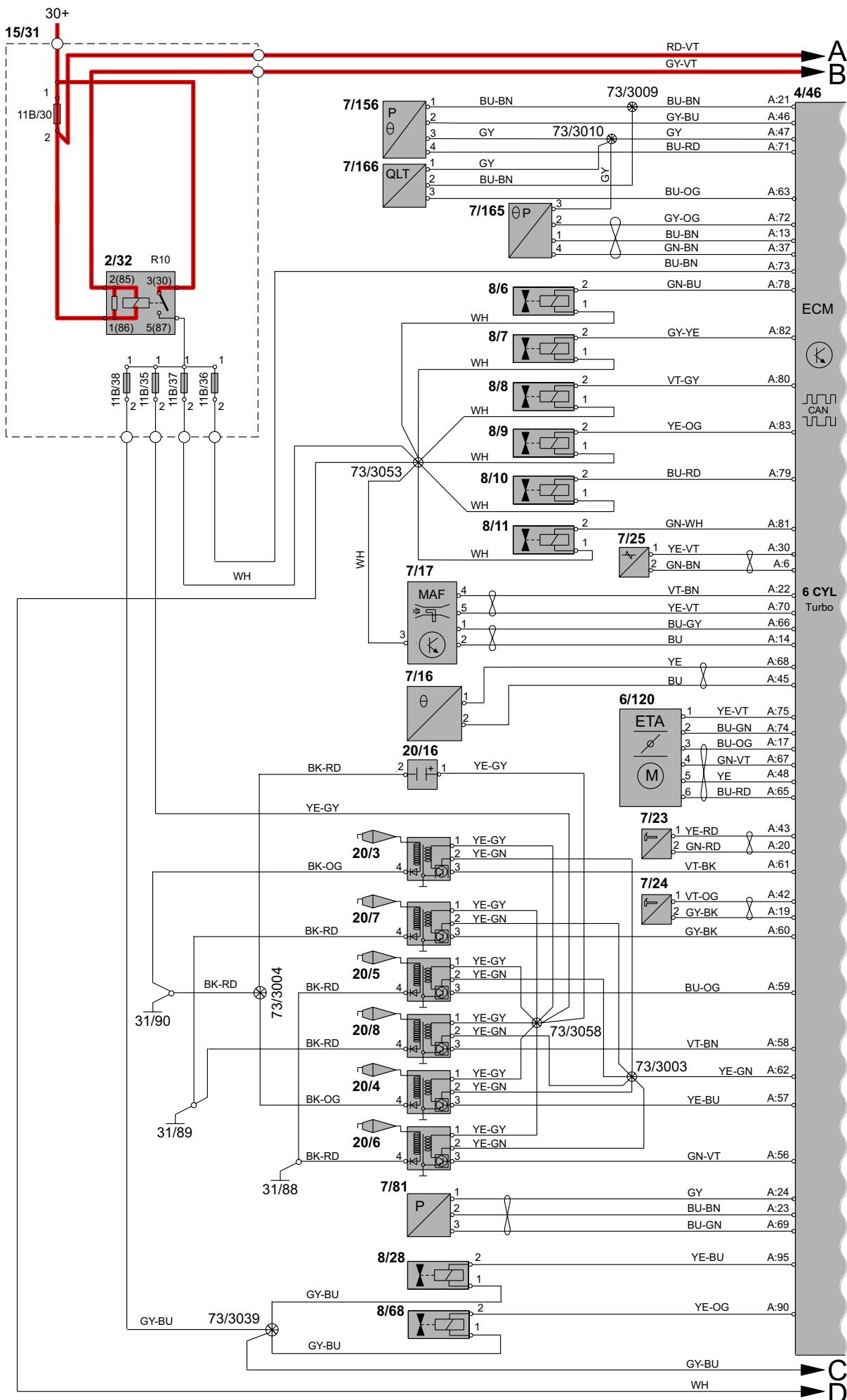
Group 23 Fuel system

Engine management system, 4 Cyl. Diesel 2:2



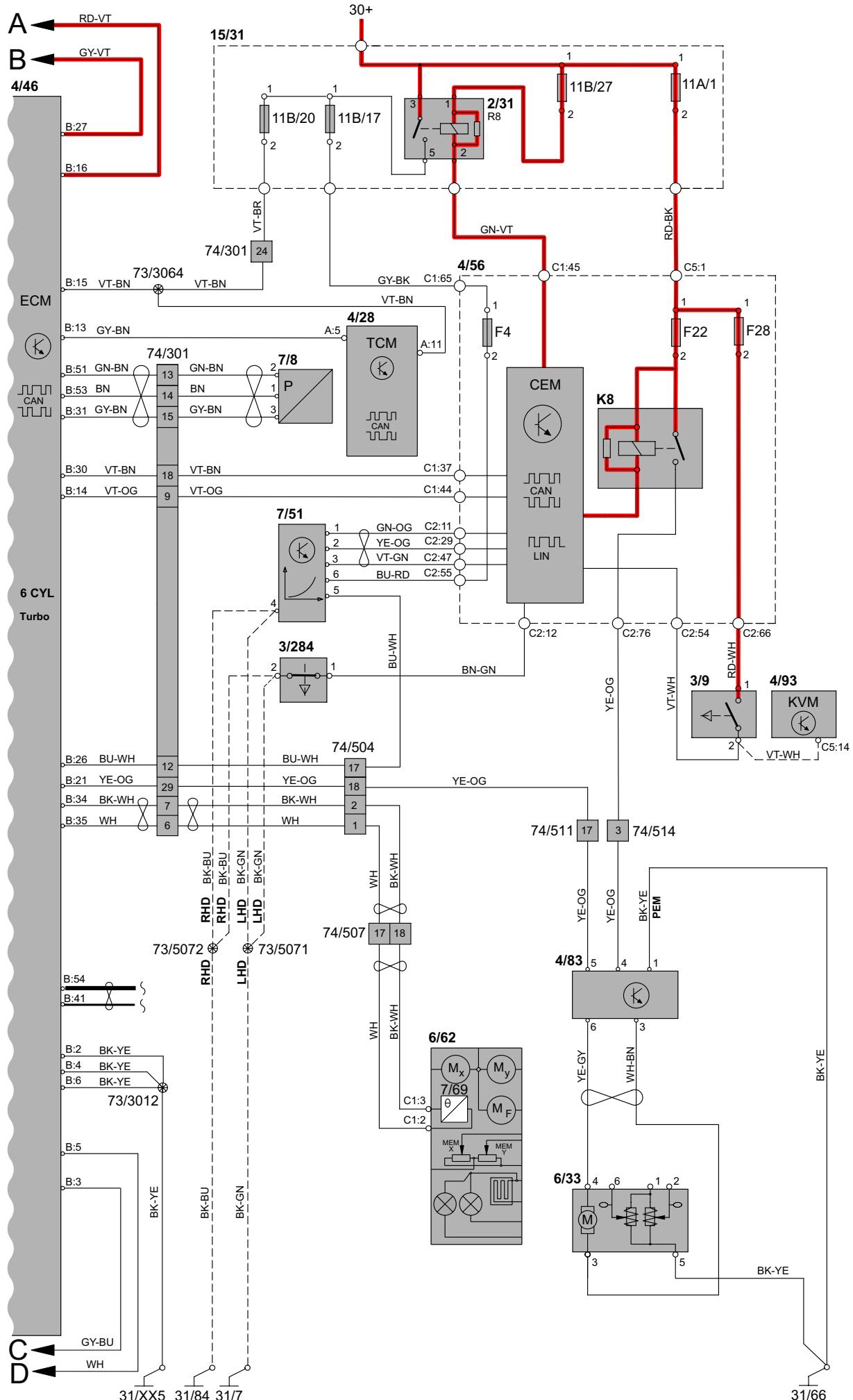
Group 23 Fuel system

Engine management system, 6 Cyl. Turbo 1:2



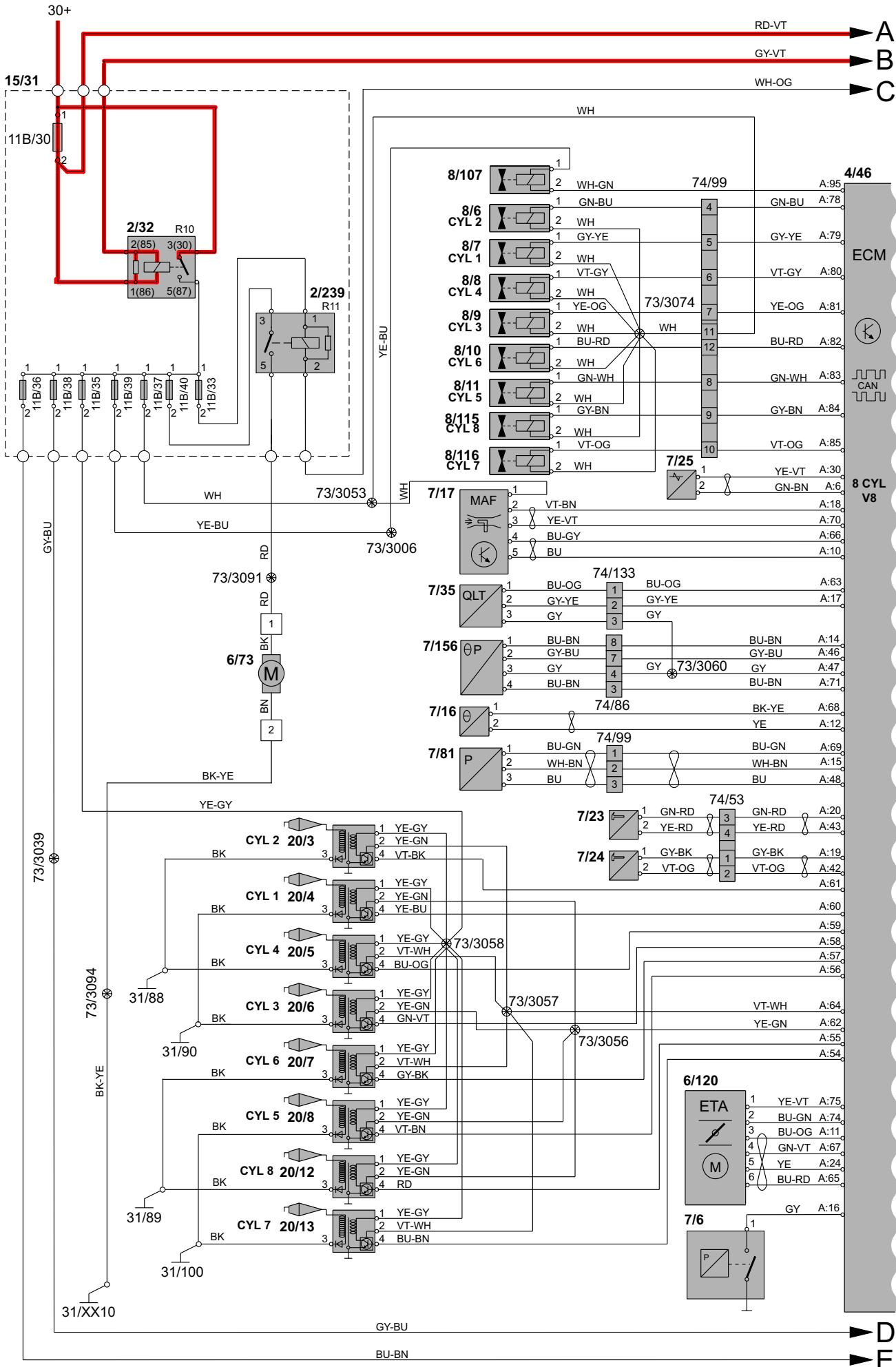
Group 23 Fuel system

Engine management system, 6 Cyl. Turbo 2:2



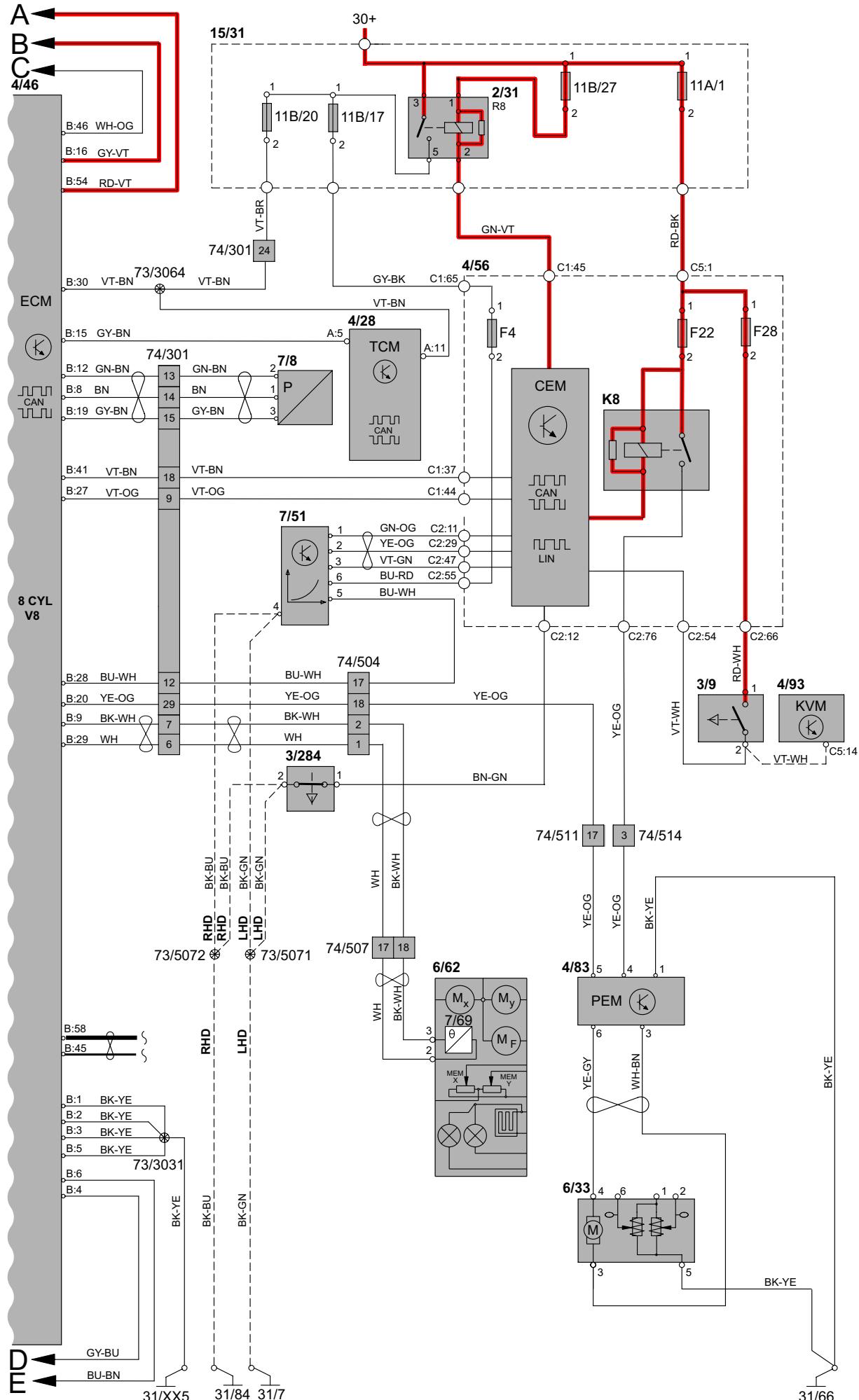
Group 23 Fuel system

Engine management system, 8 Cyl. 1:2

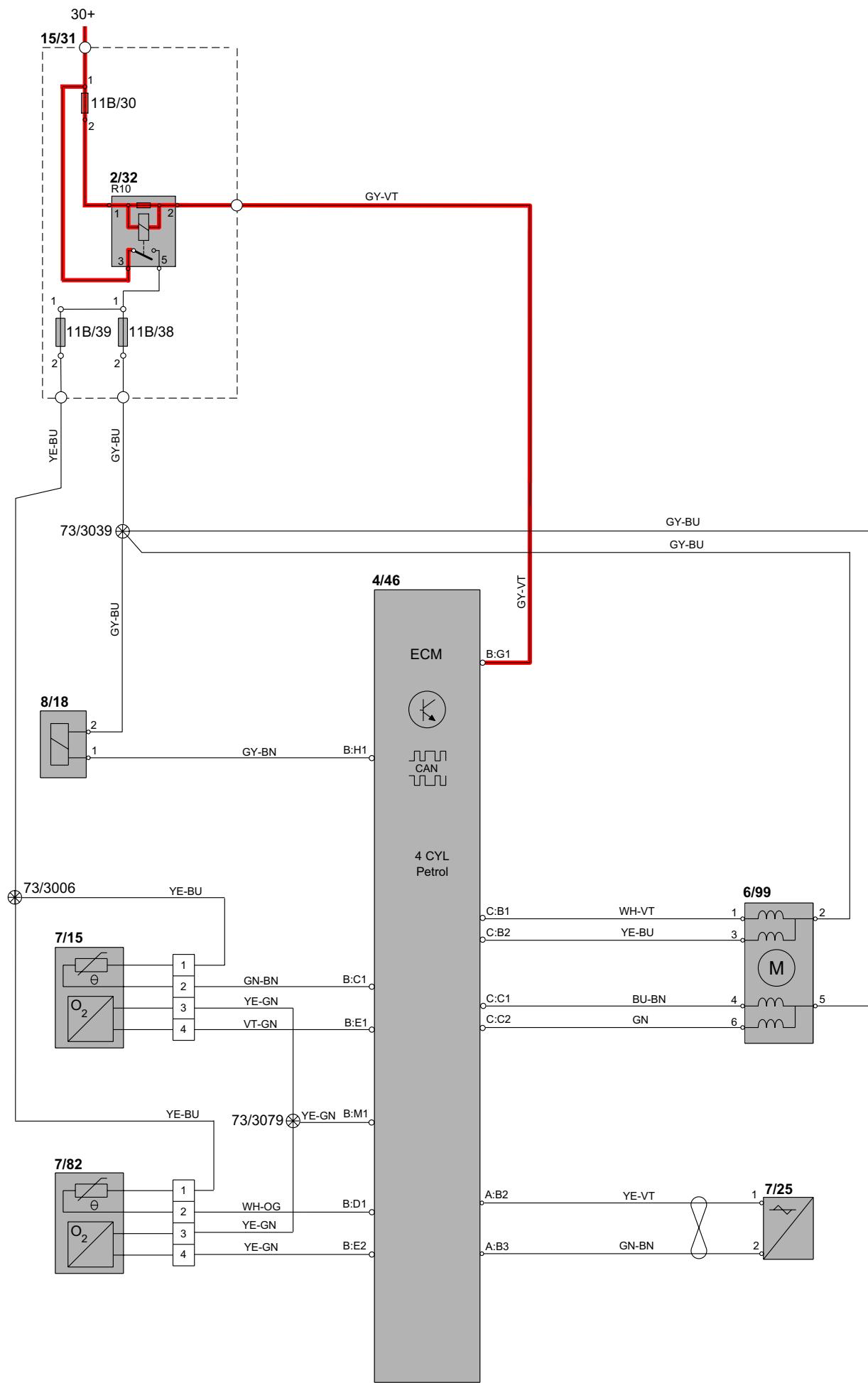


Group 23 Fuel system

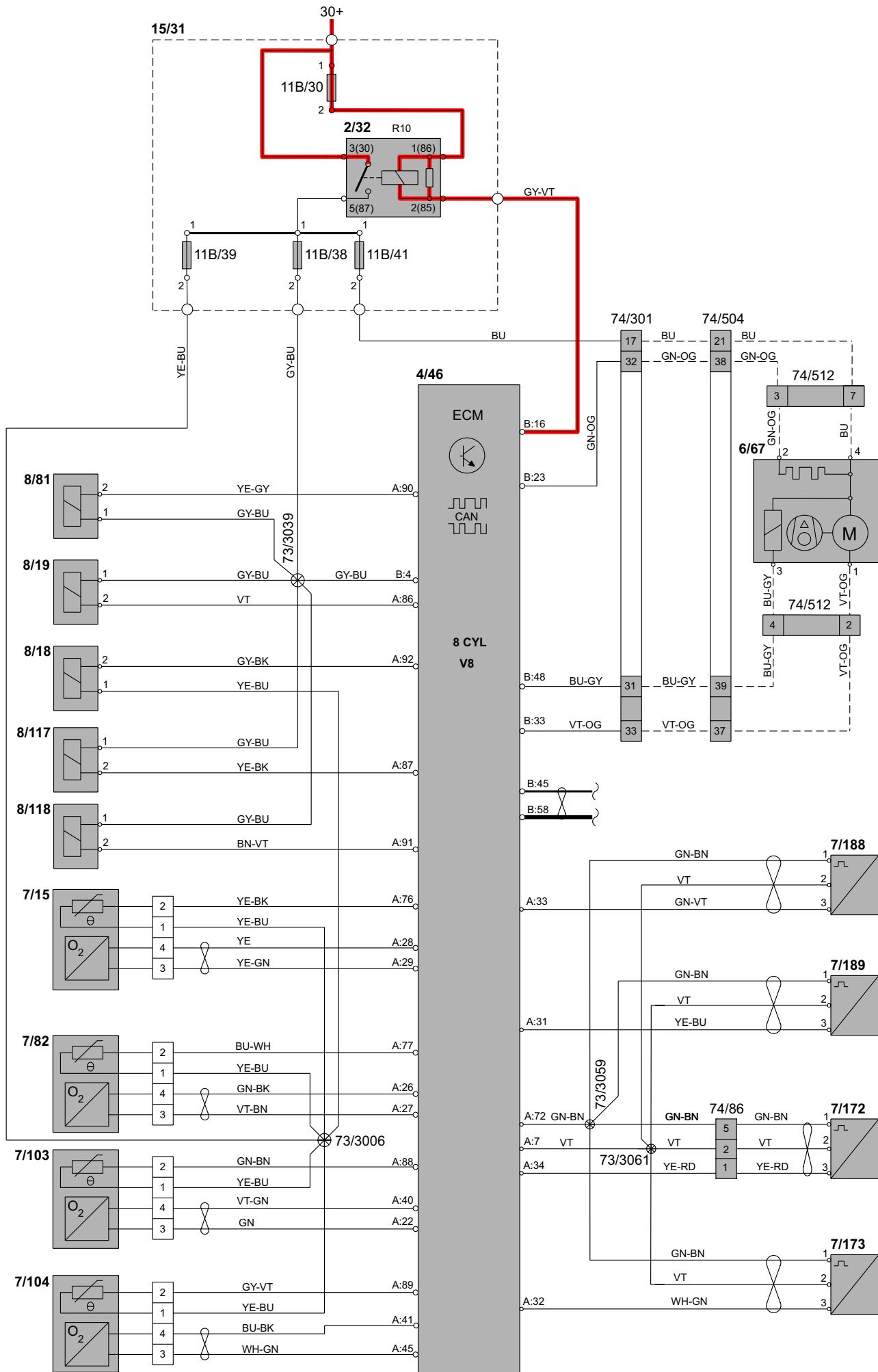
Engine management system, 8 Cyl. 2:2



Group 23 Fuel system Emission control, 4 Cyl.

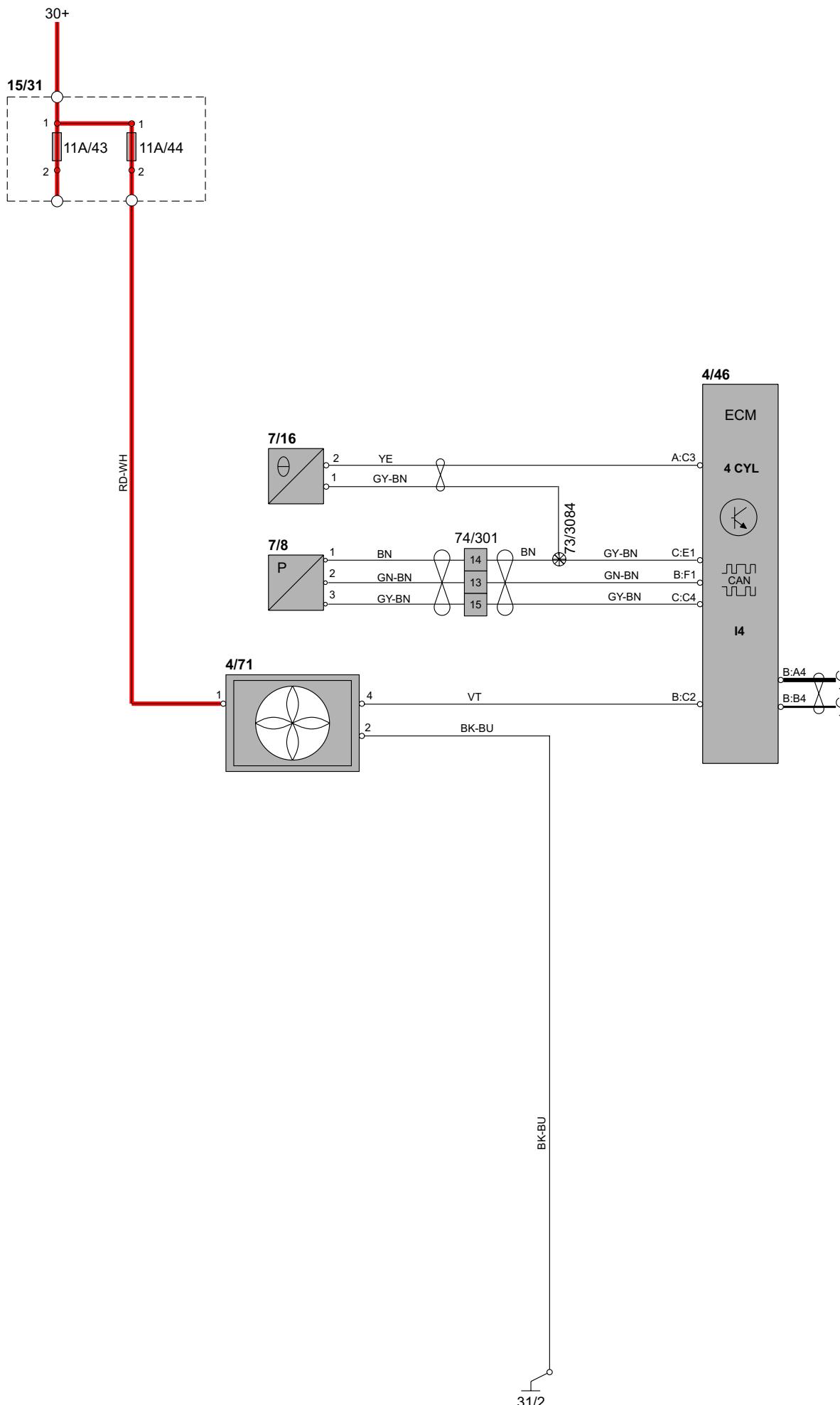


Group 23 Fuel system Emission control, 8 Cyl.



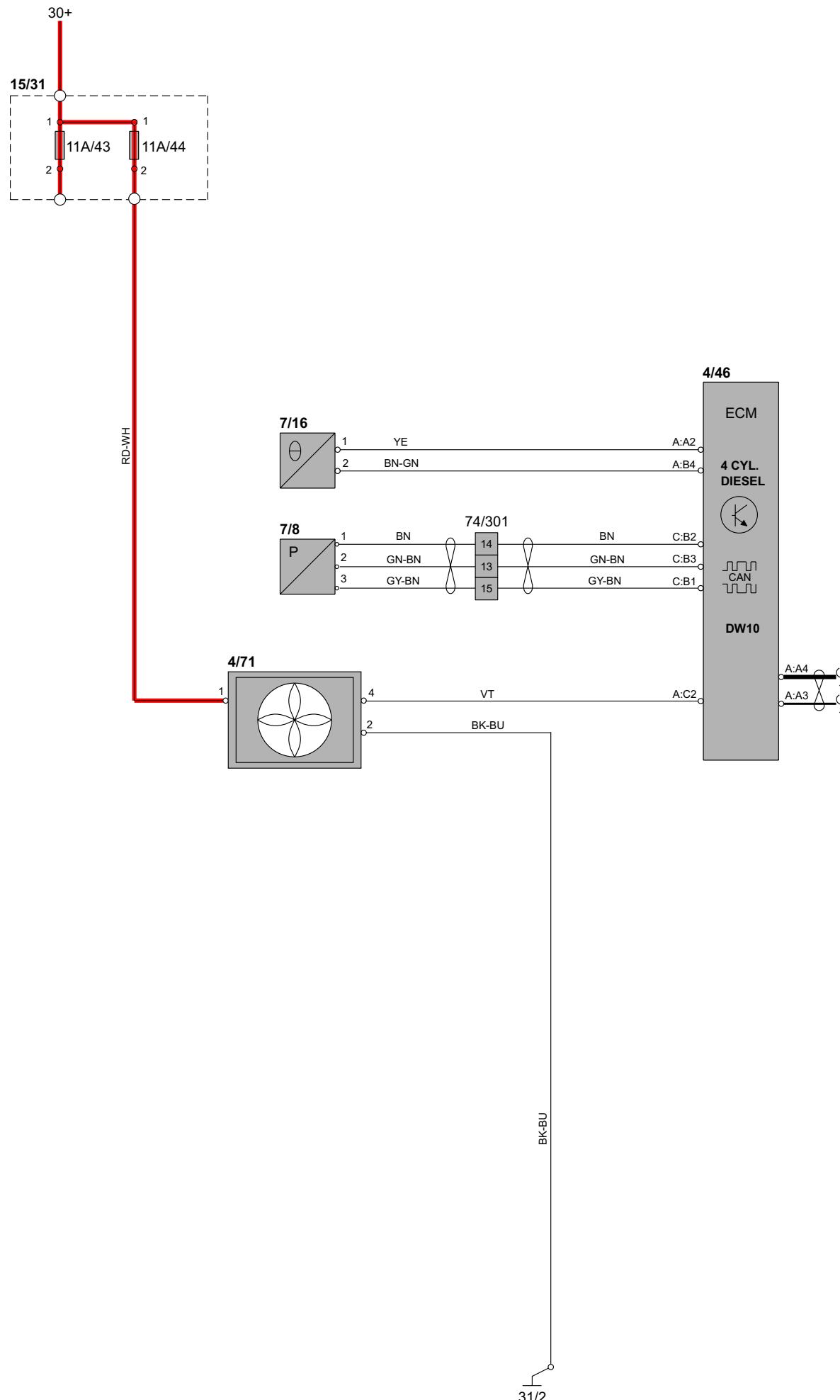
Group 26 Cooling system

Cooling fan, 4 Cyl.



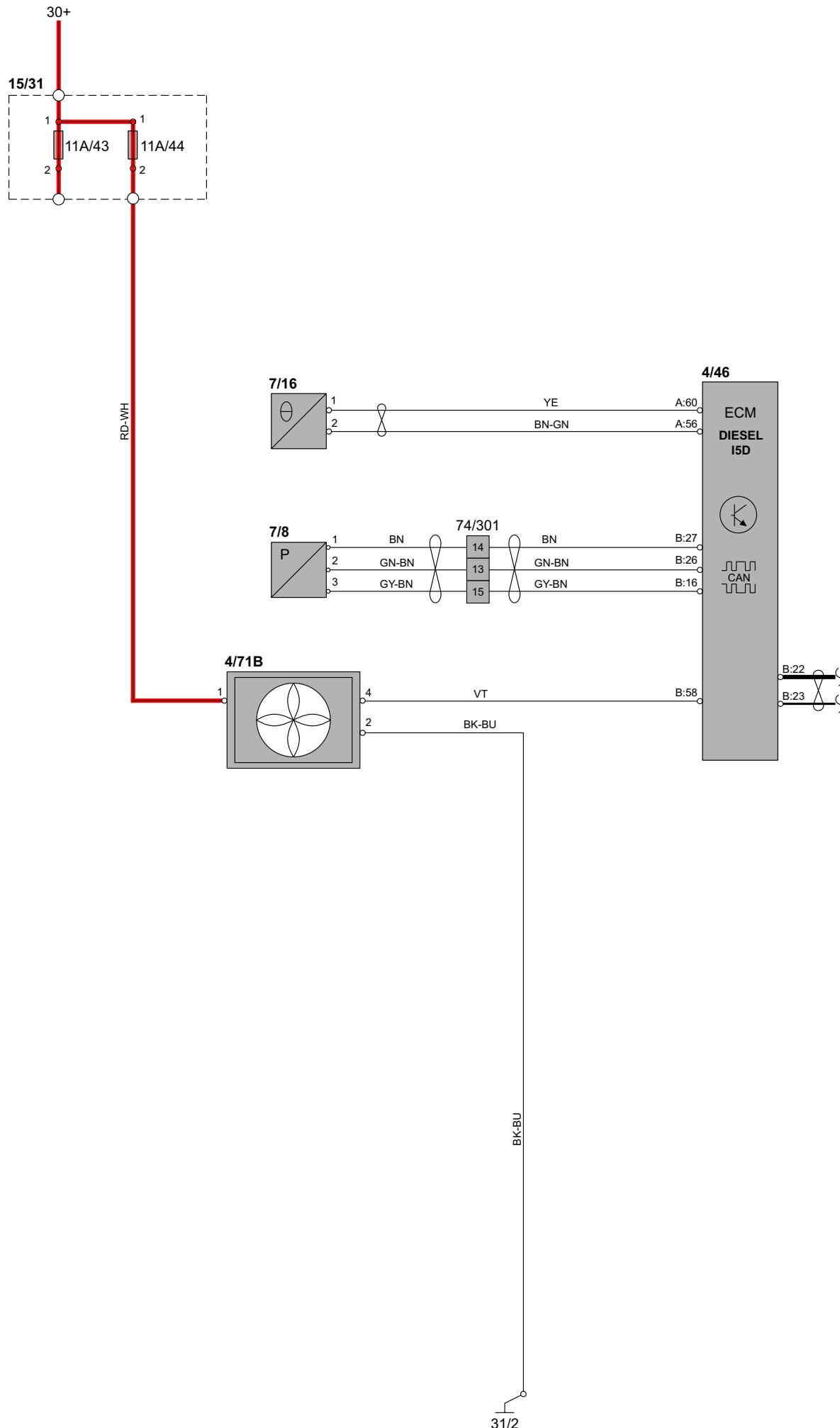
Group 26 Cooling system

Cooling fan, 4 Cyl. Diesel



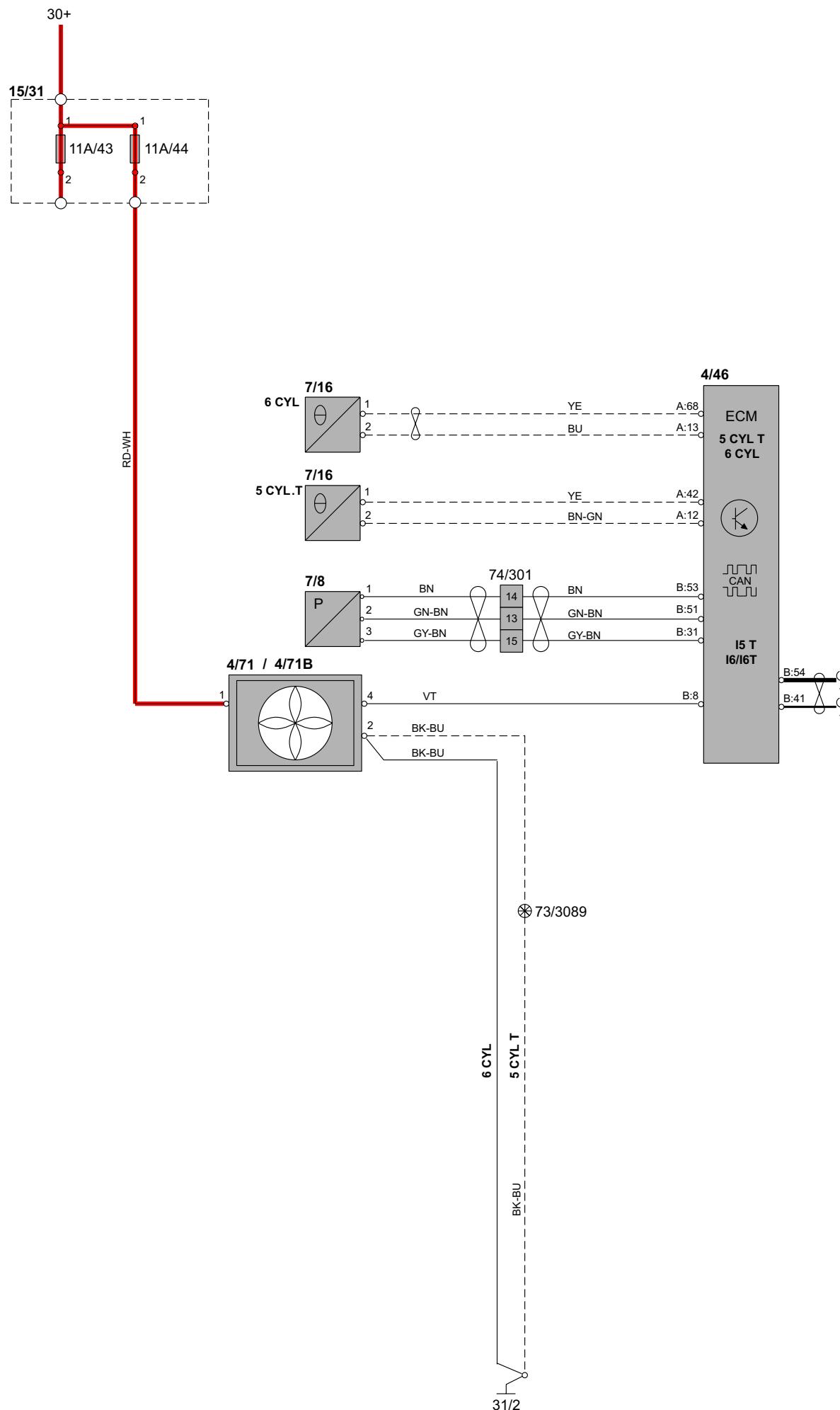
Group 26 Cooling system

Cooling fan, 5 Cyl. Diesel



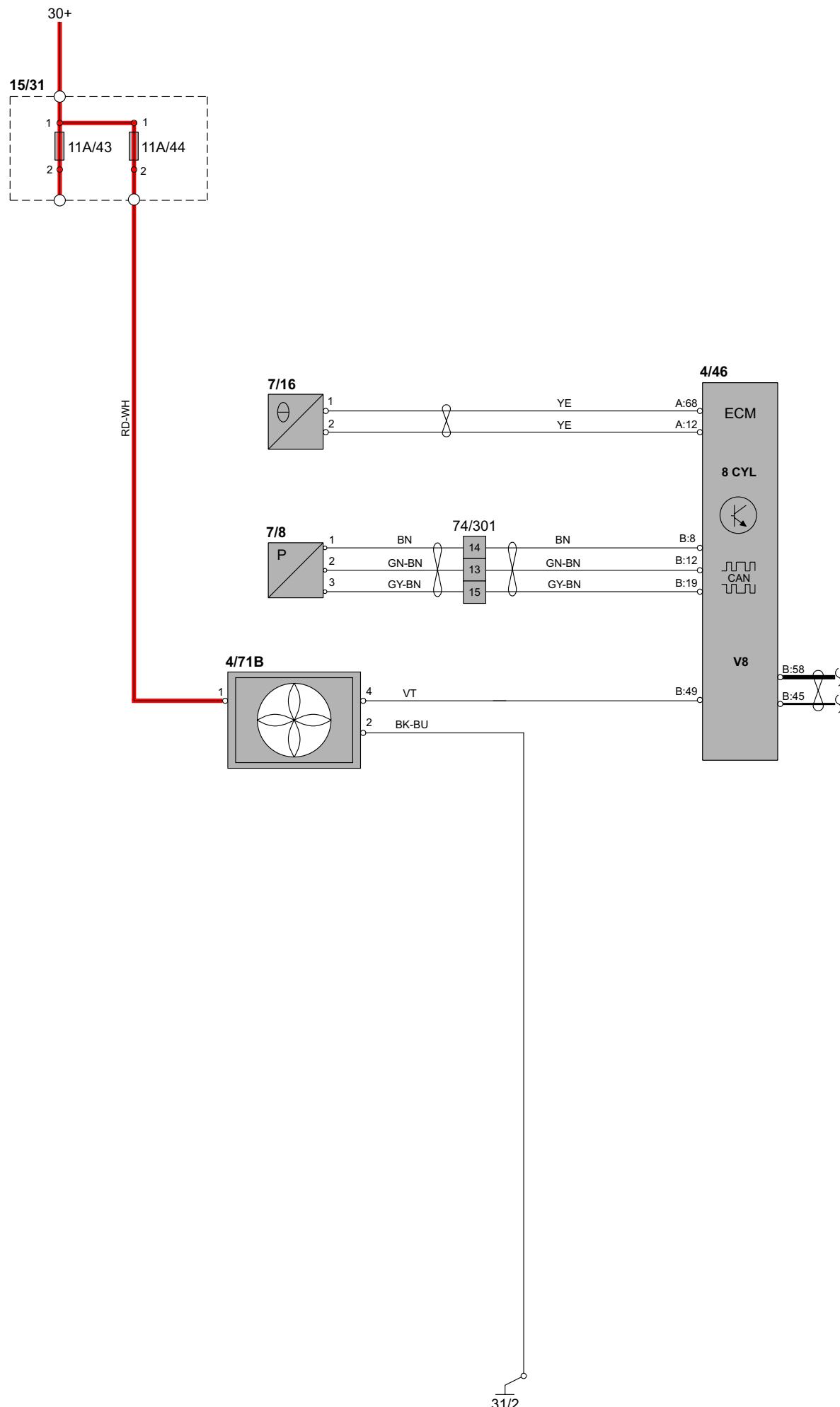
Group 26 Cooling system

Cooling fan, 5 Cyl. Turbo & 6 Cyl.



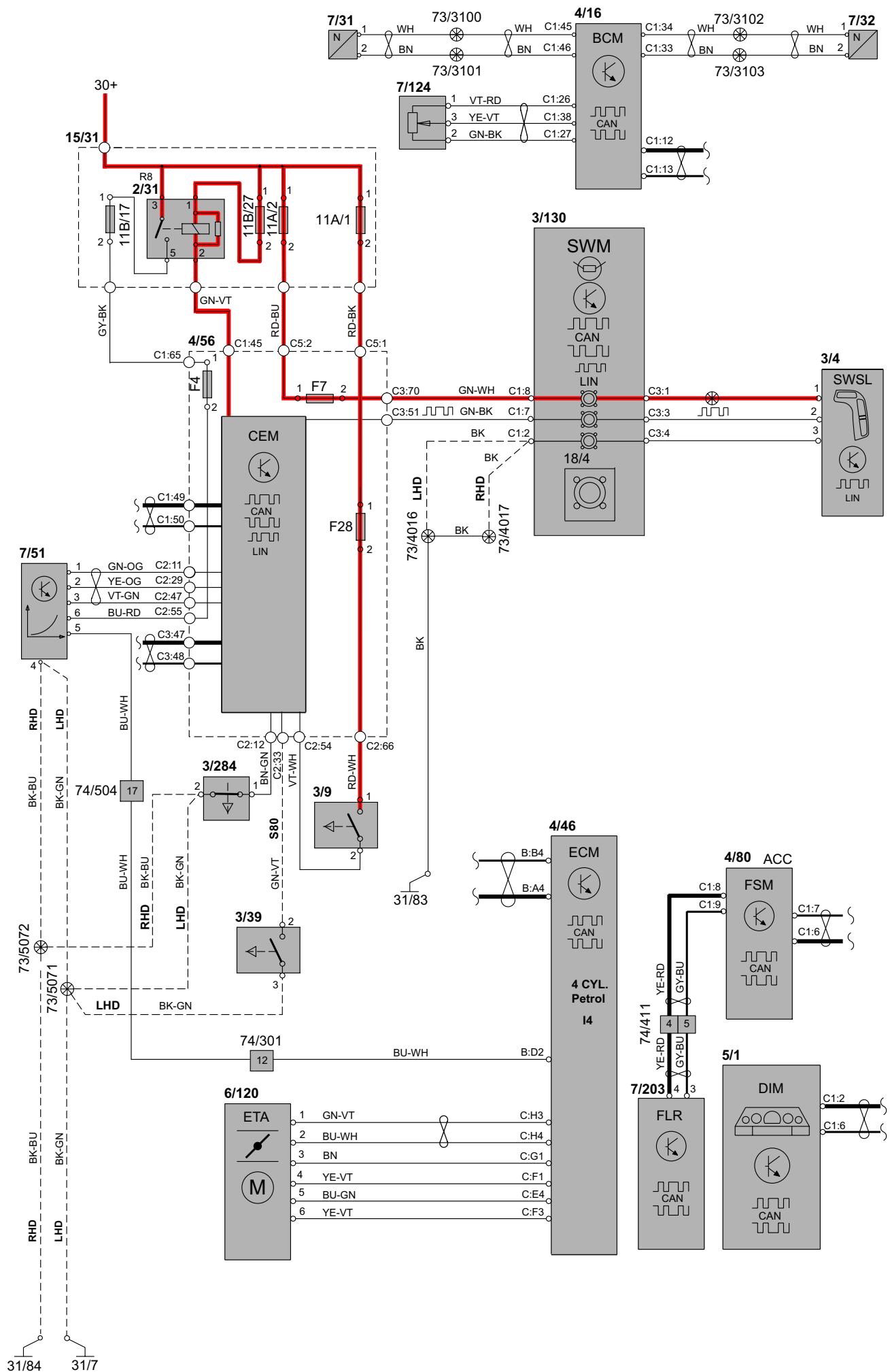
Group 26 Cooling system

Cooling fan, 8 Cyl.



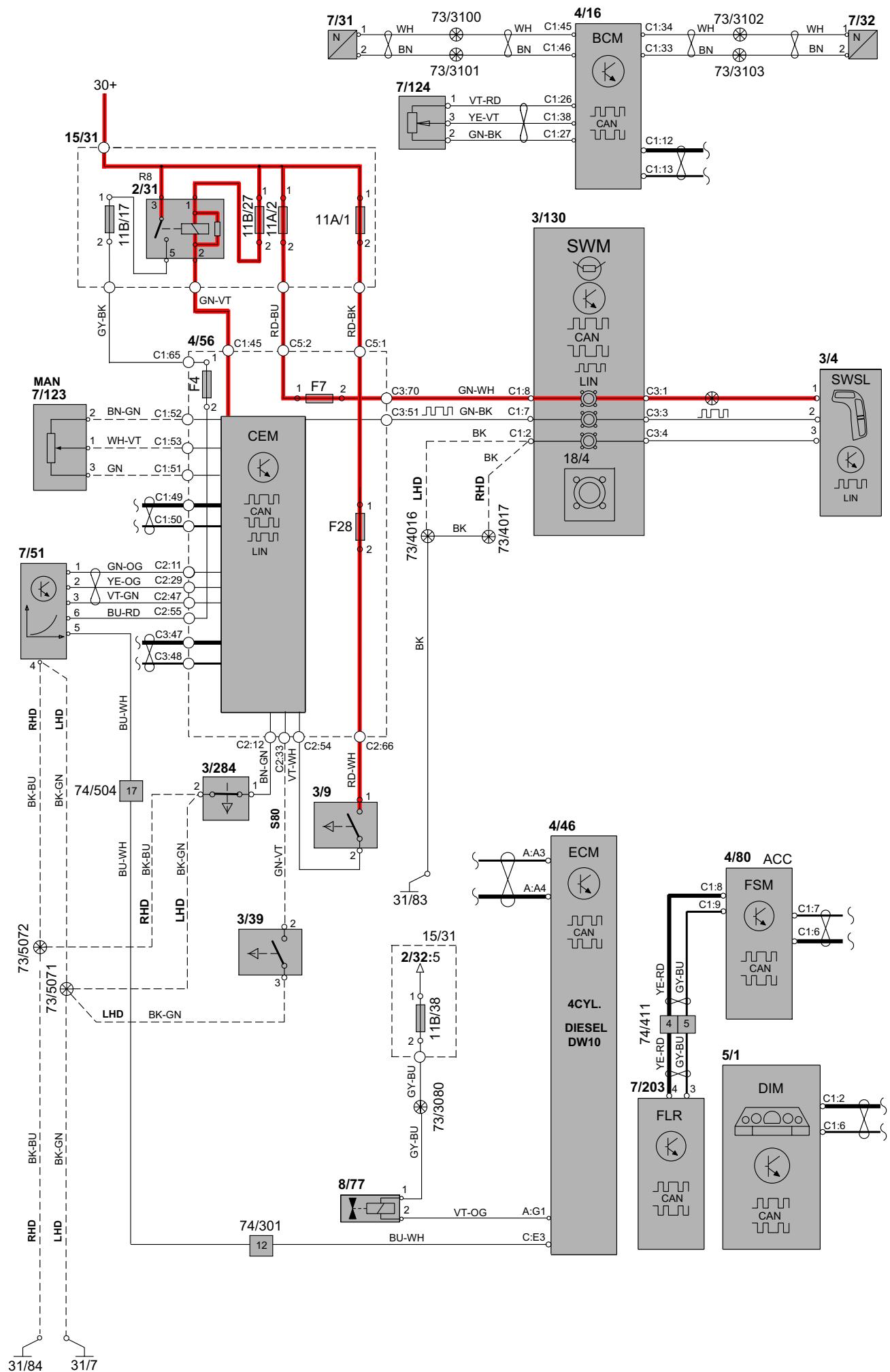
Group 27 Engine controls

Cruise control 4 Cyl.



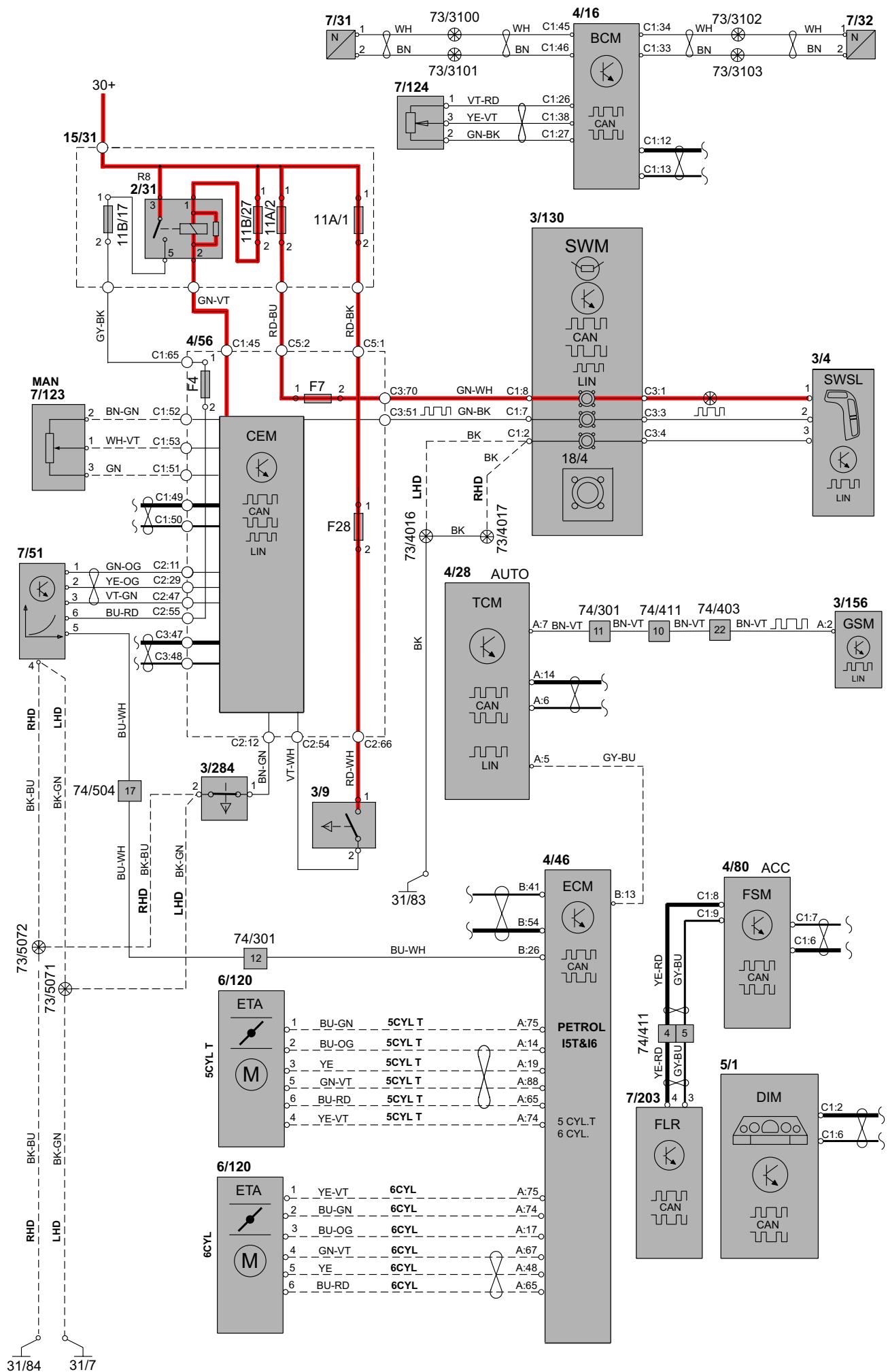
Group 27 Engine controls

Cruise control 4 Cyl. Diesel



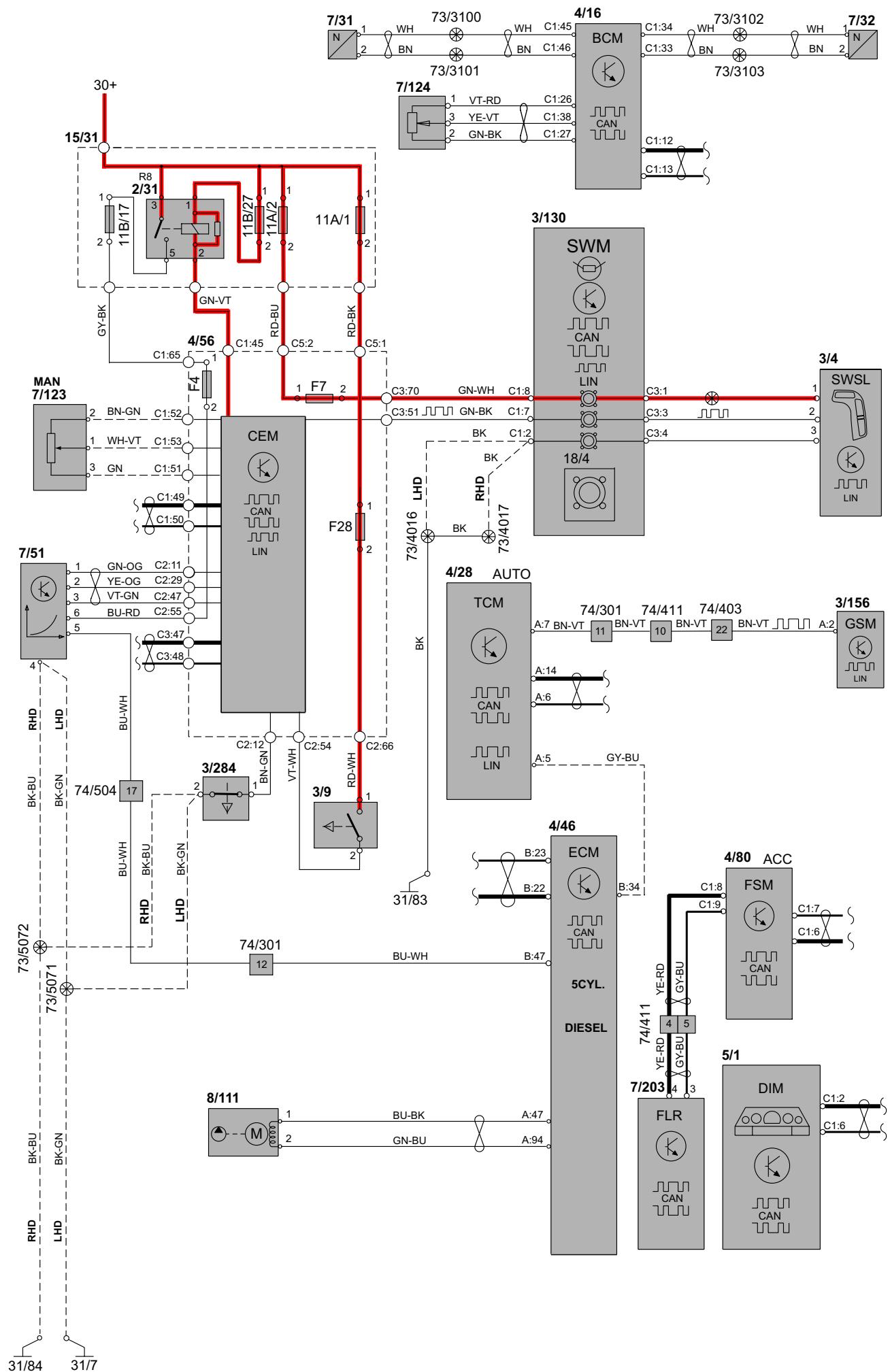
Group 27 Engine controls

Cruise control 5 Cyl. & 6 Cyl.



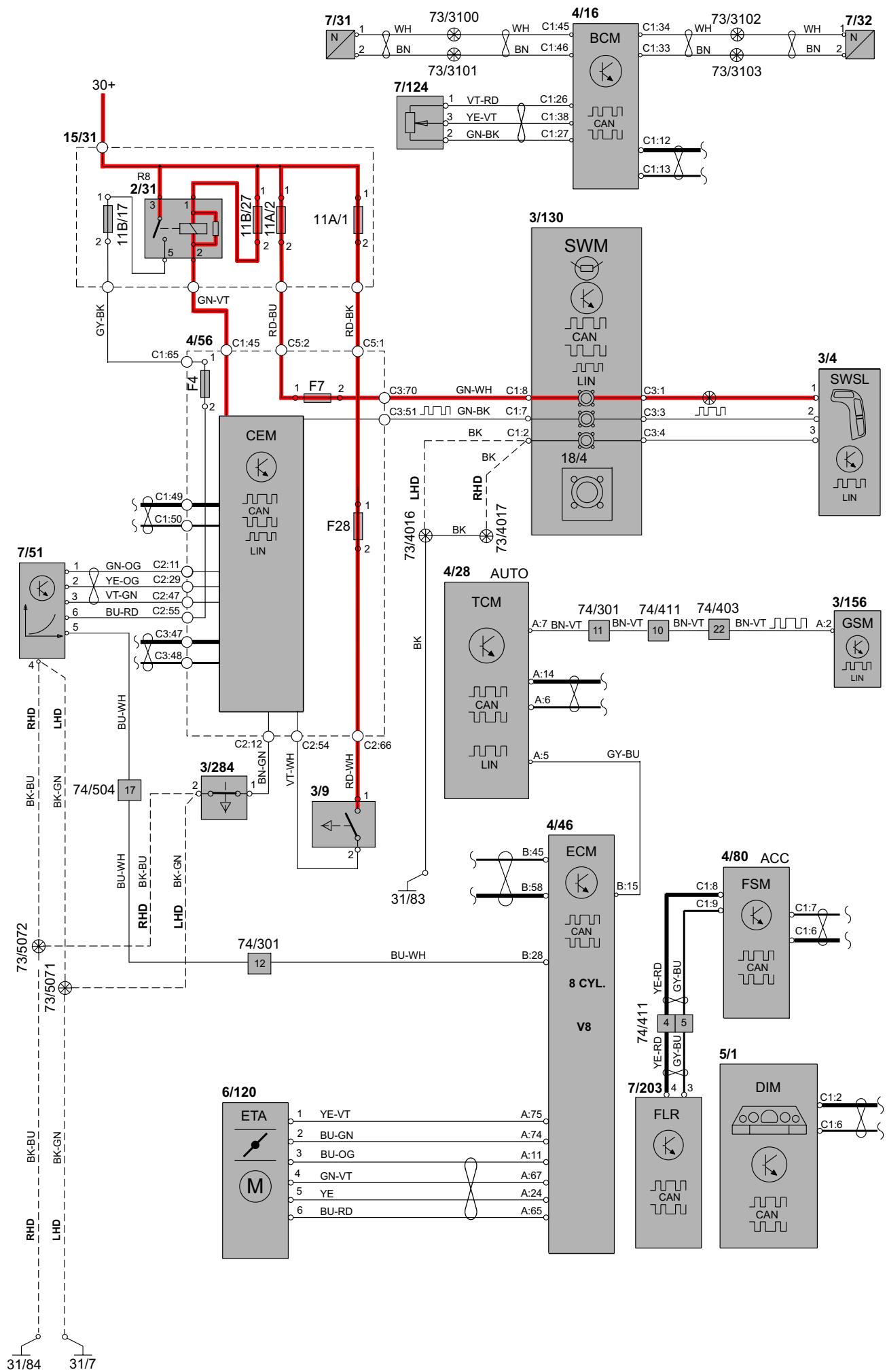
Group 27 Engine controls

Cruise control 5 Cyl. Diesel

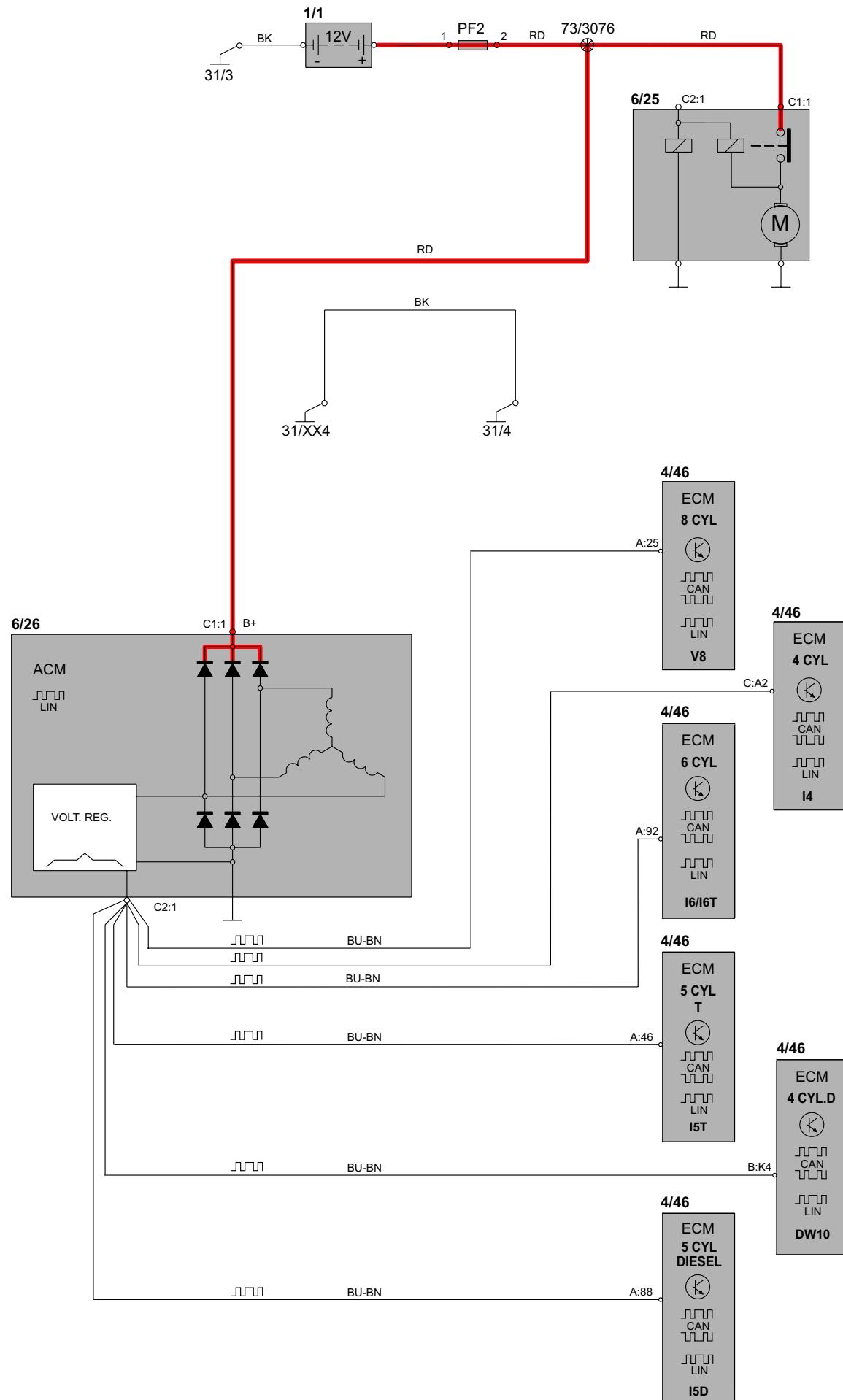


Group 27 Engine controls

Cruise control 8 Cyl.

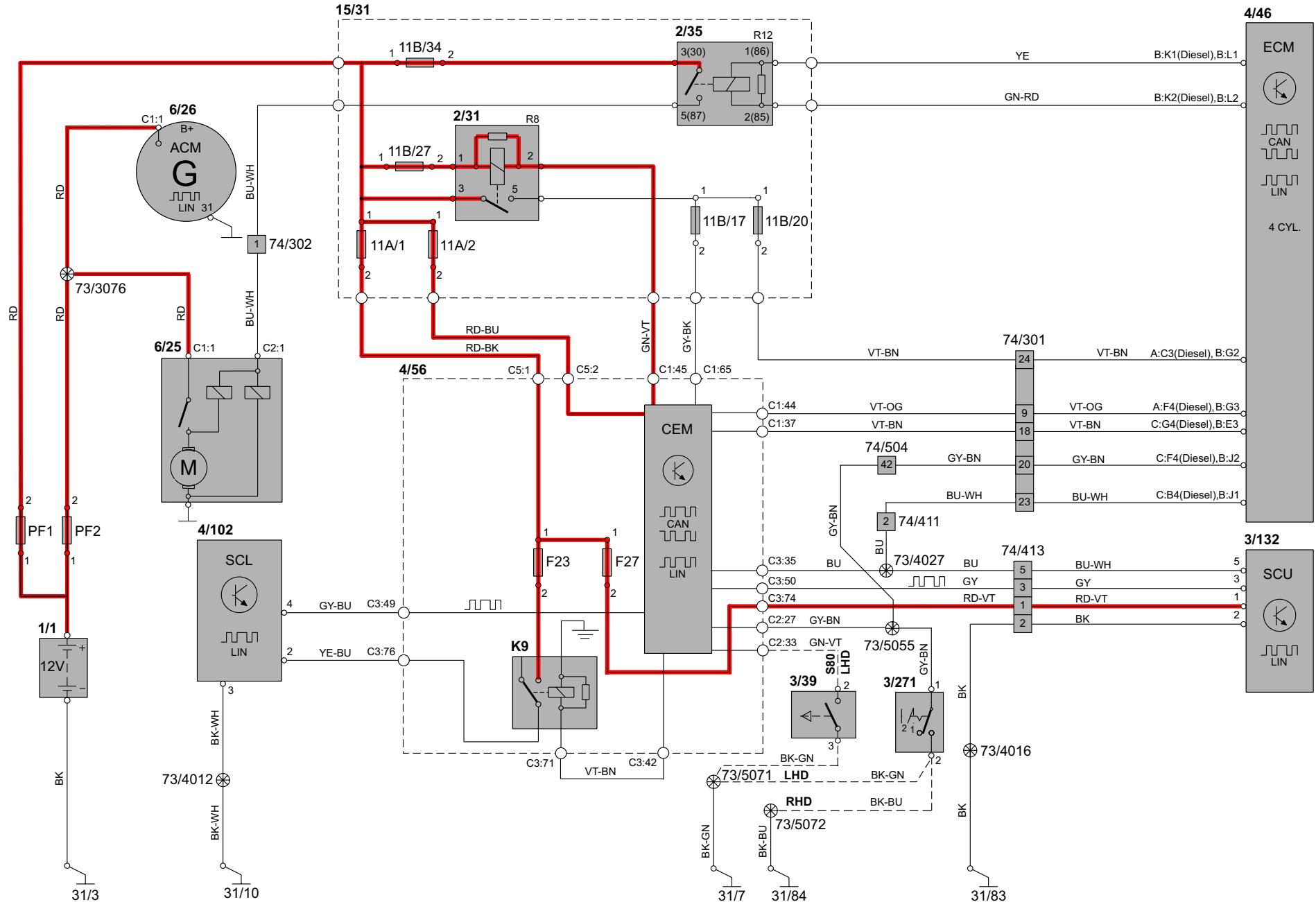


Group 32 Alternator and voltage regulator Power supply



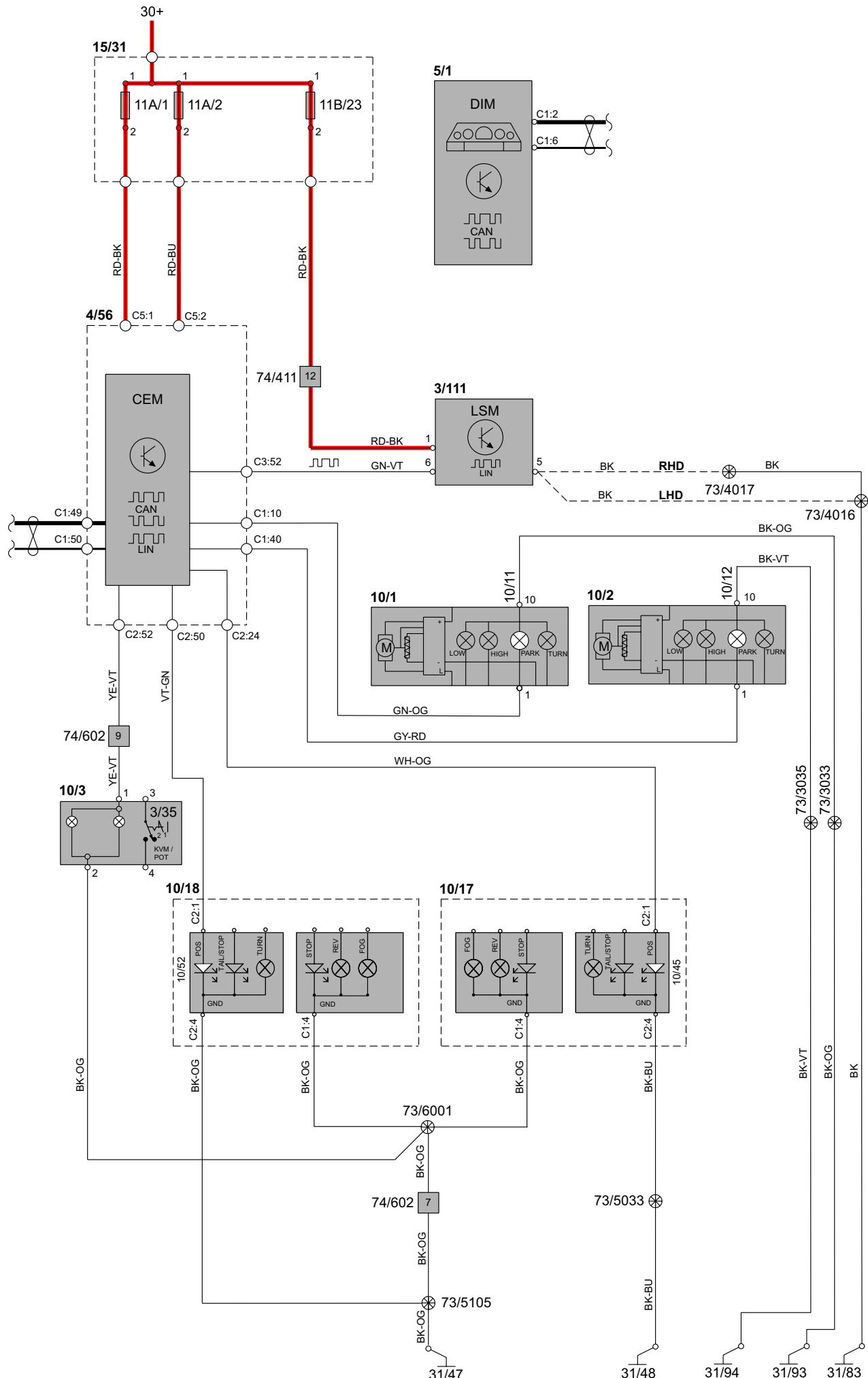
Group 33 Starting system

Starting system 4 Cyl.



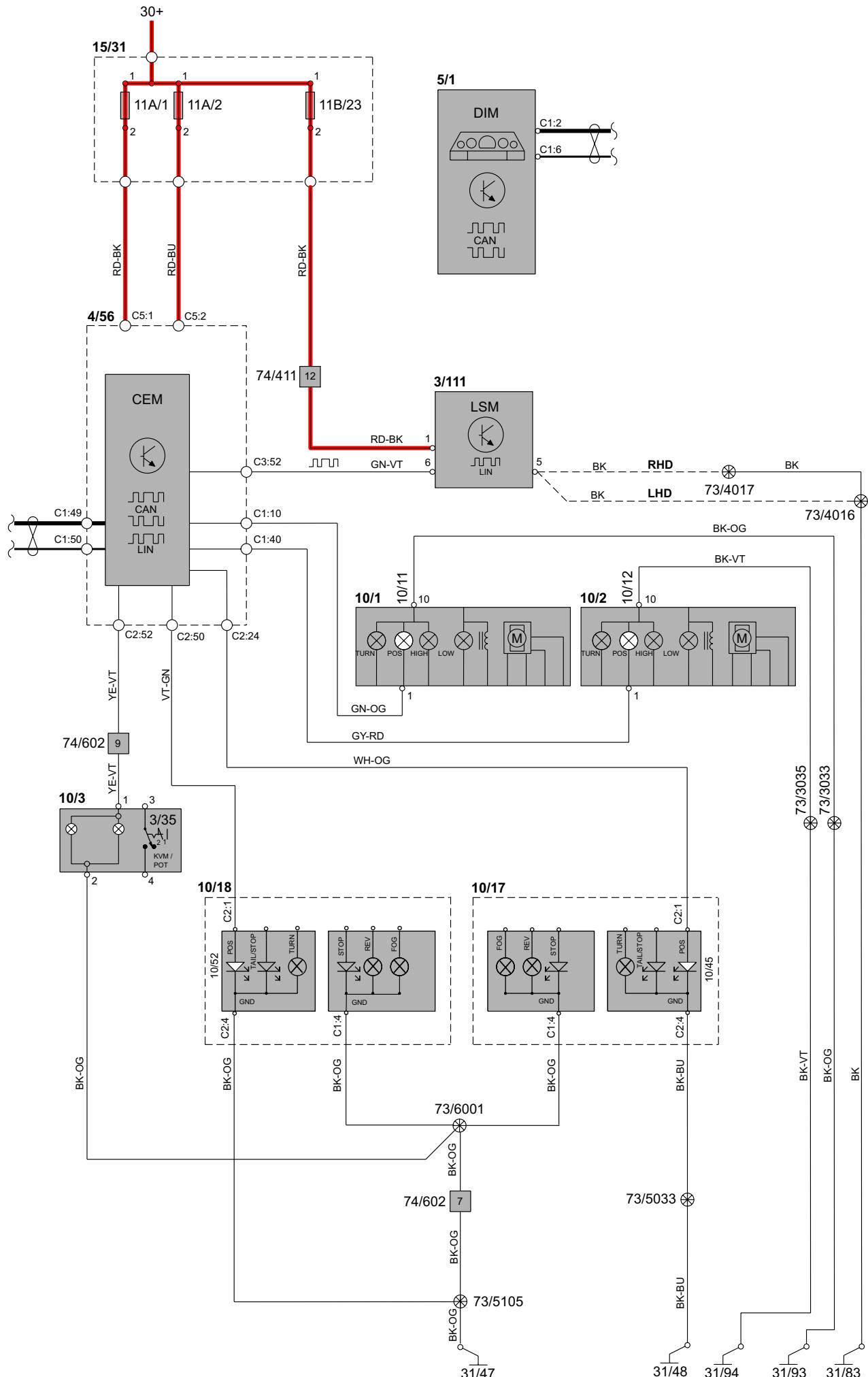
Group 35 Lighting

Running/parking lights, Tail lights V70



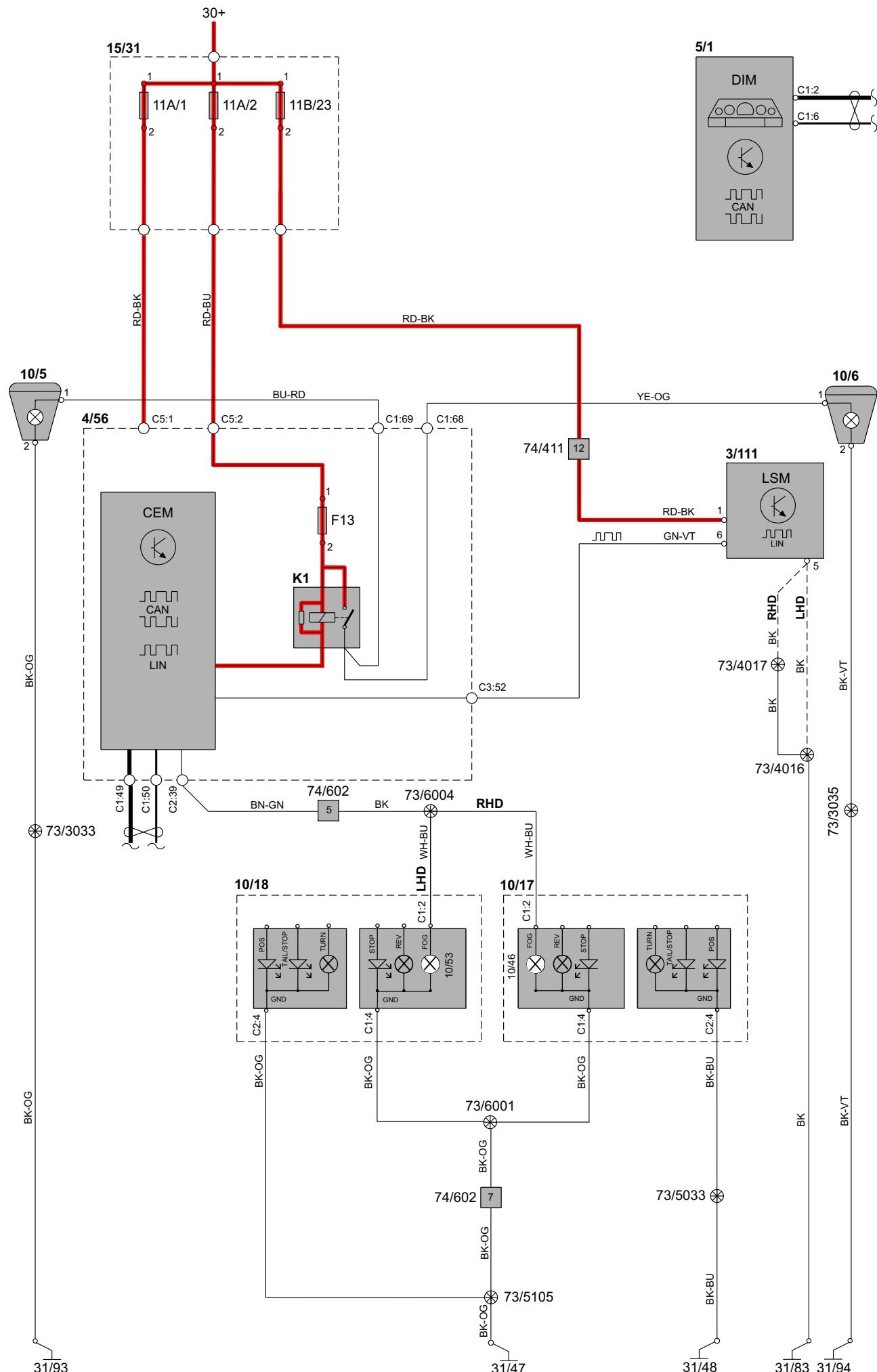
Group 35 Lighting

Running/parking lights, Tail lights (Bi-Xenon) V70



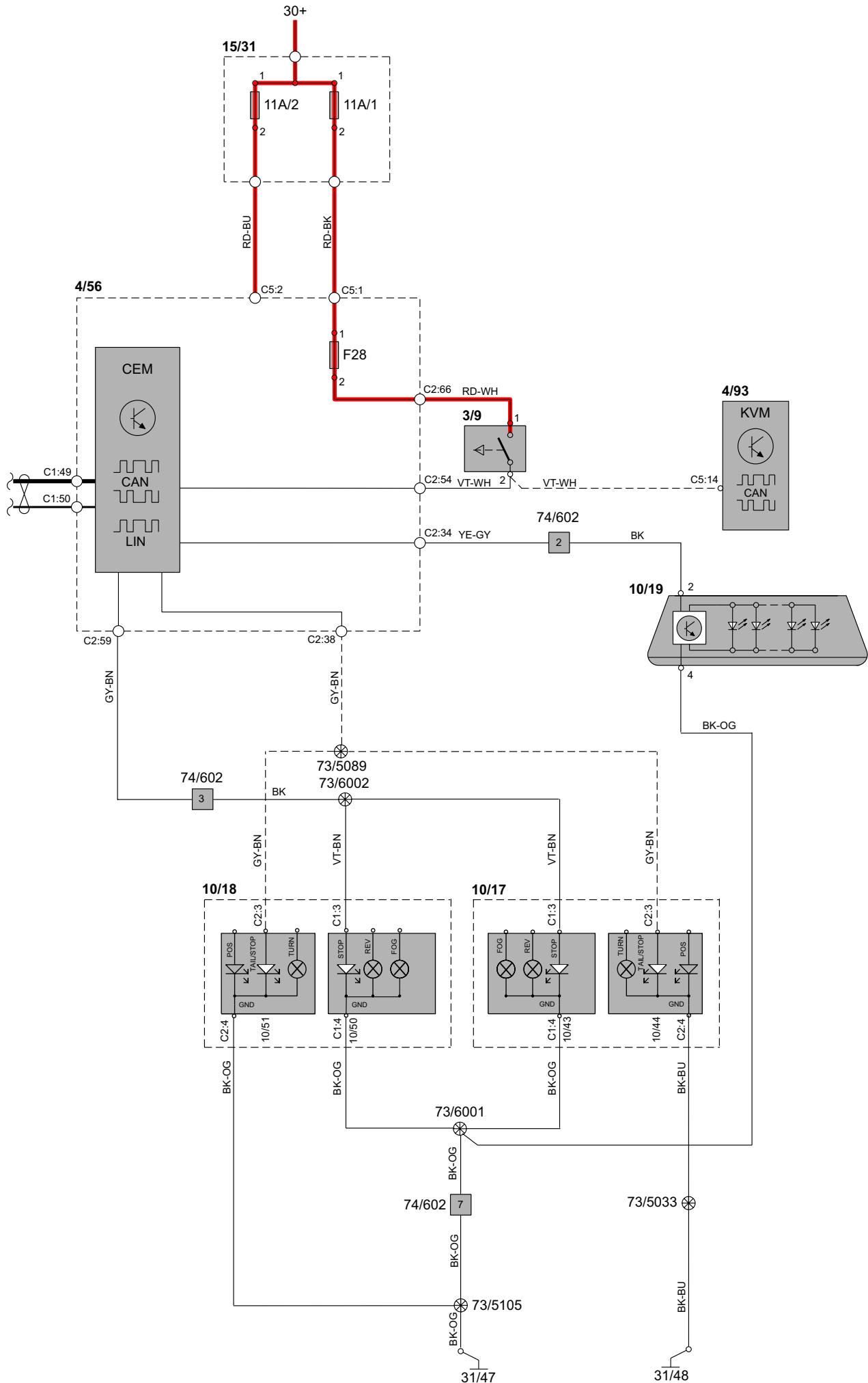
Group 35 Lighting

Fog lights, V70



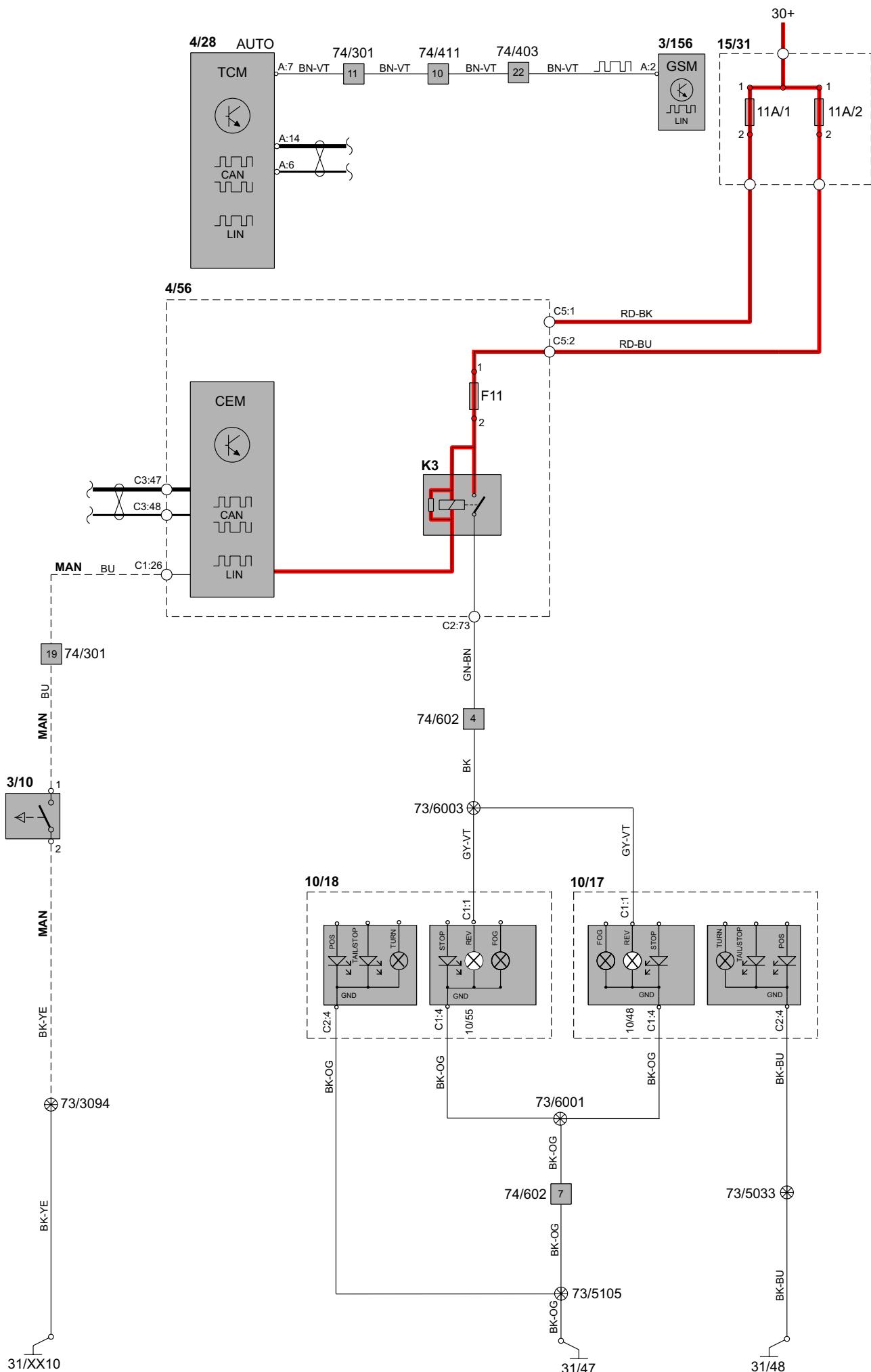
Group 35 Lighting

Brake light, V70



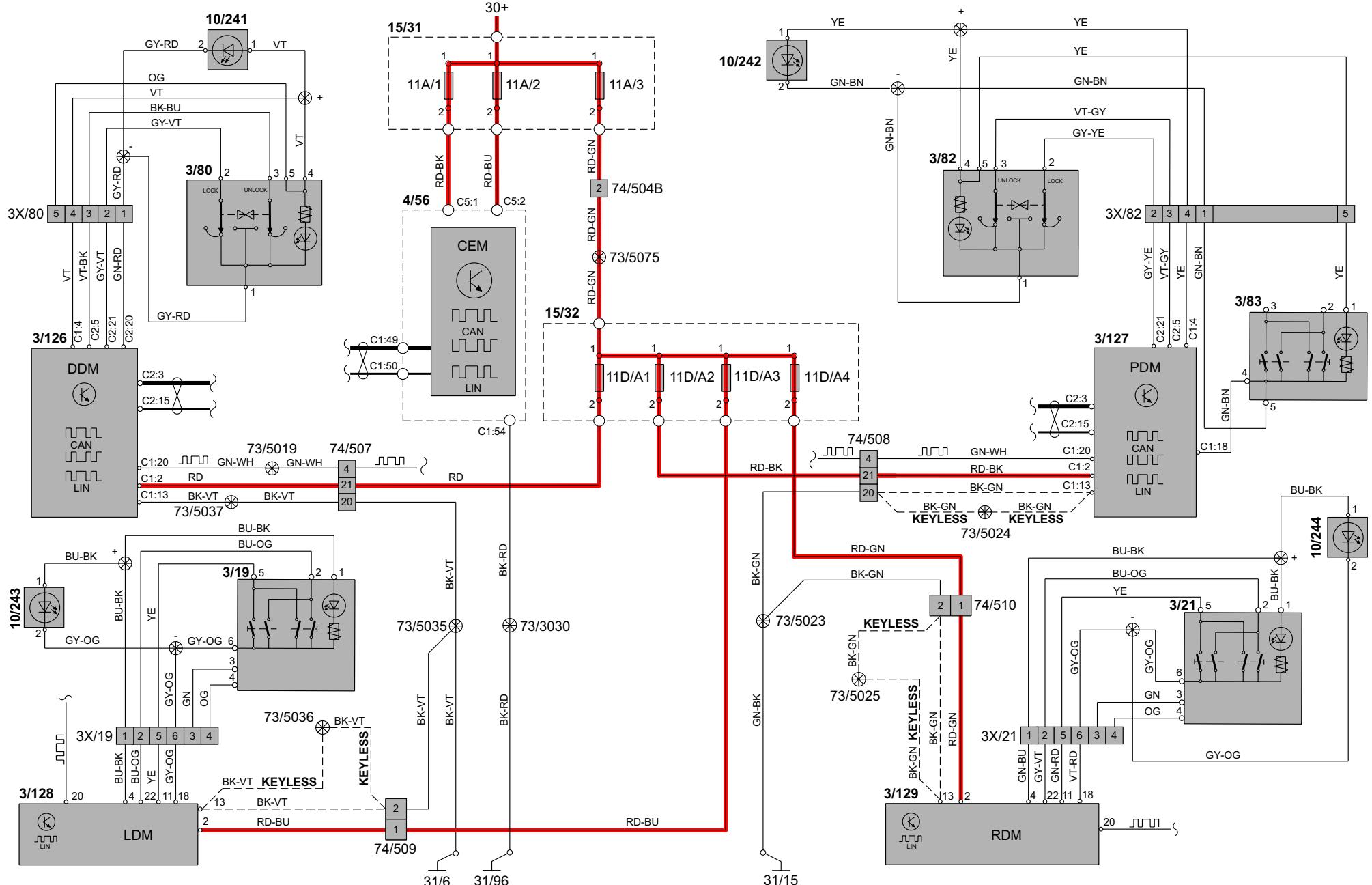
Group 35 Lighting

Reversing lights, V70



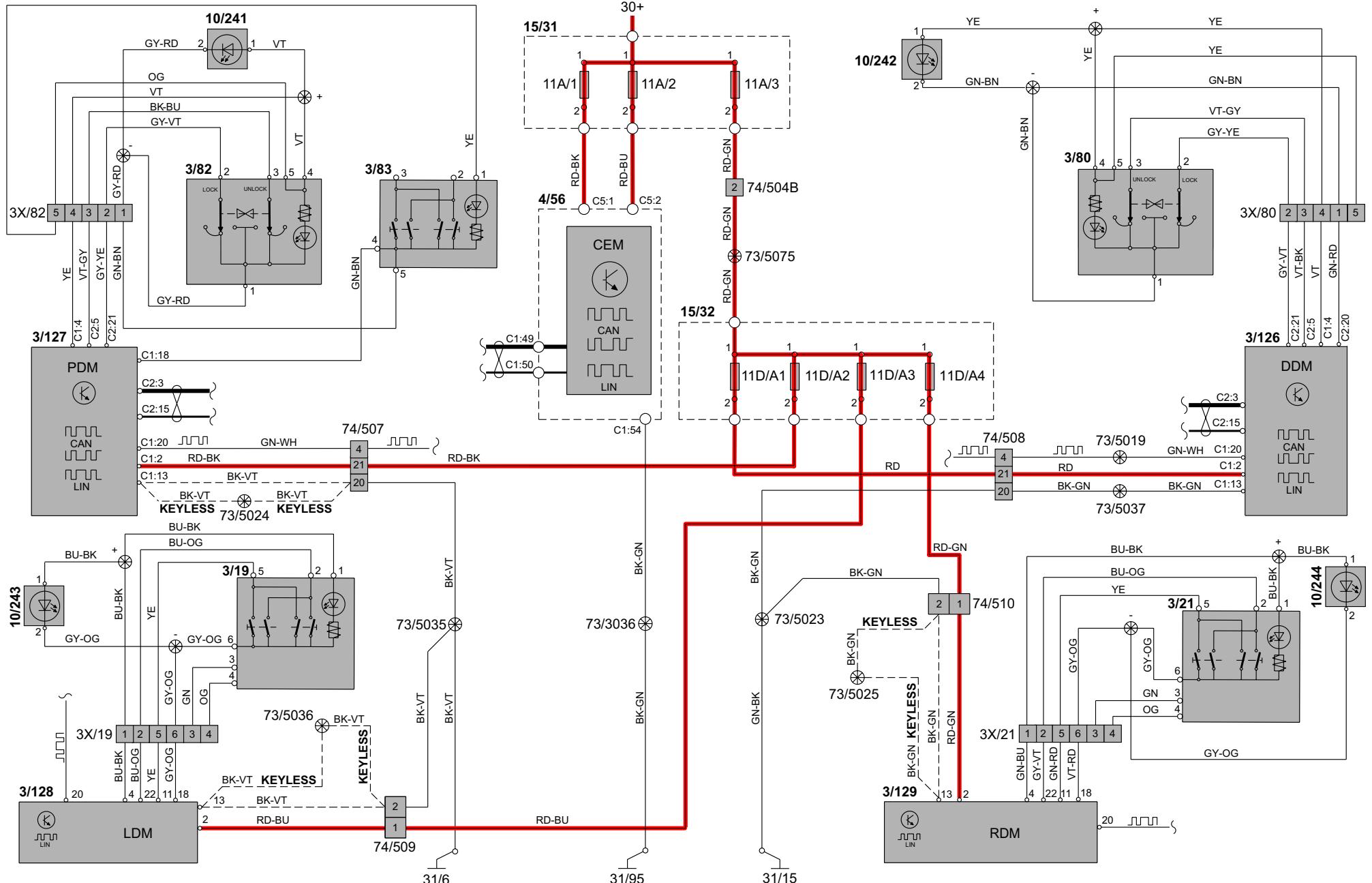
Group 35 Lighting

Door handle lighting LHD



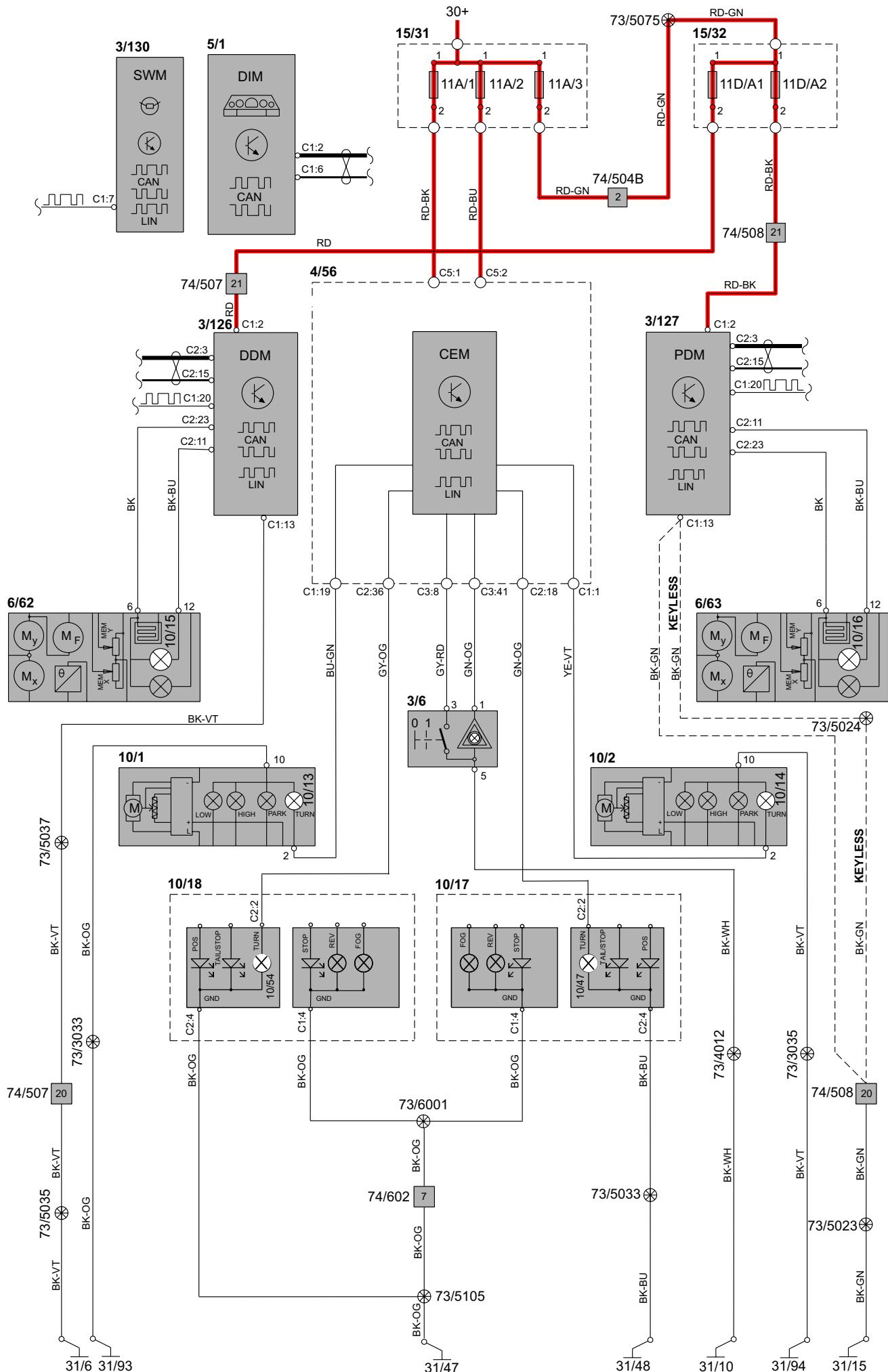
Group 35 Lighting

Door handle lighting RHD



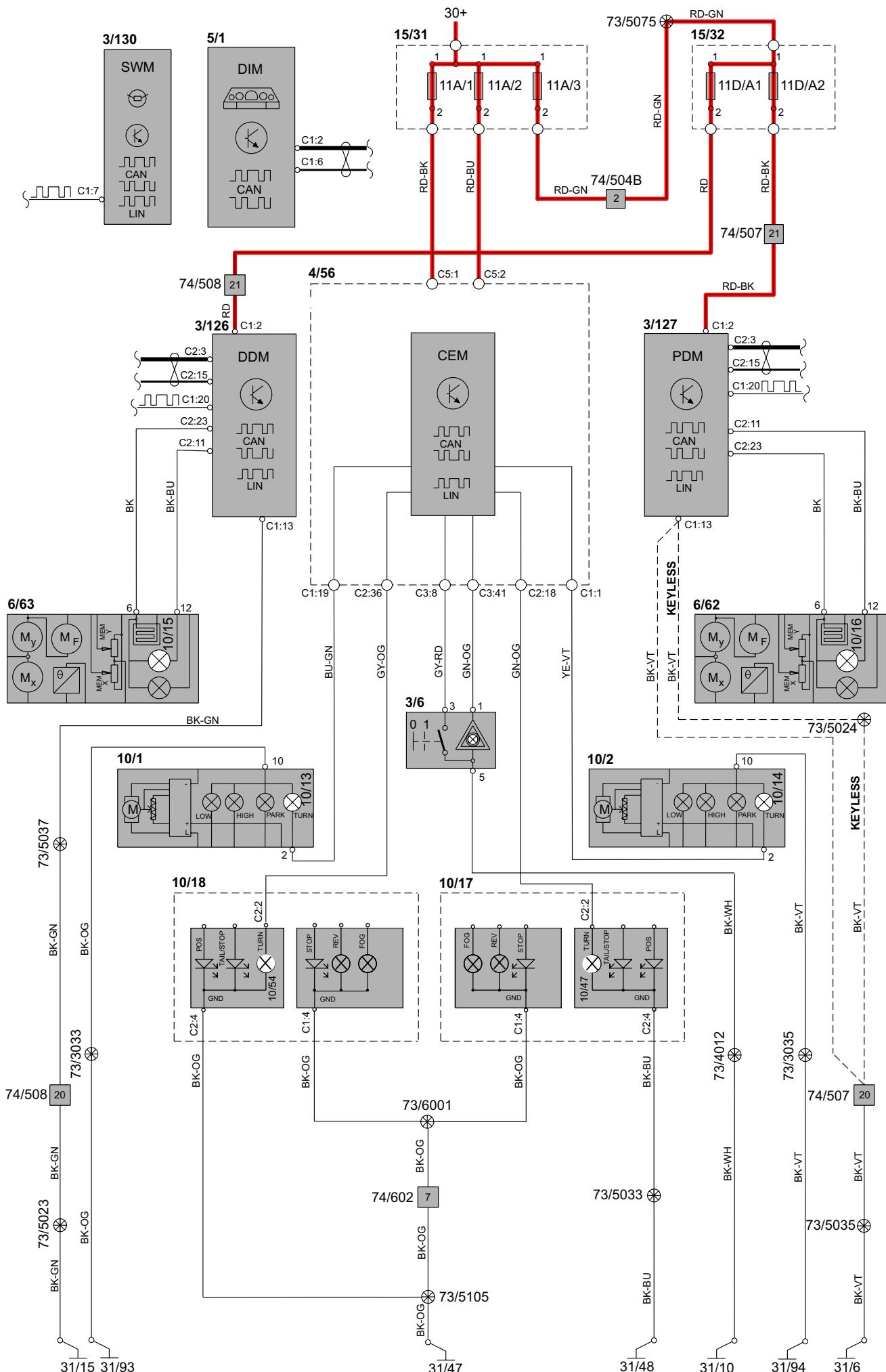
Group 36 Other electrical equipment

Direction indicator and Hazard warning flashers LHD, V70



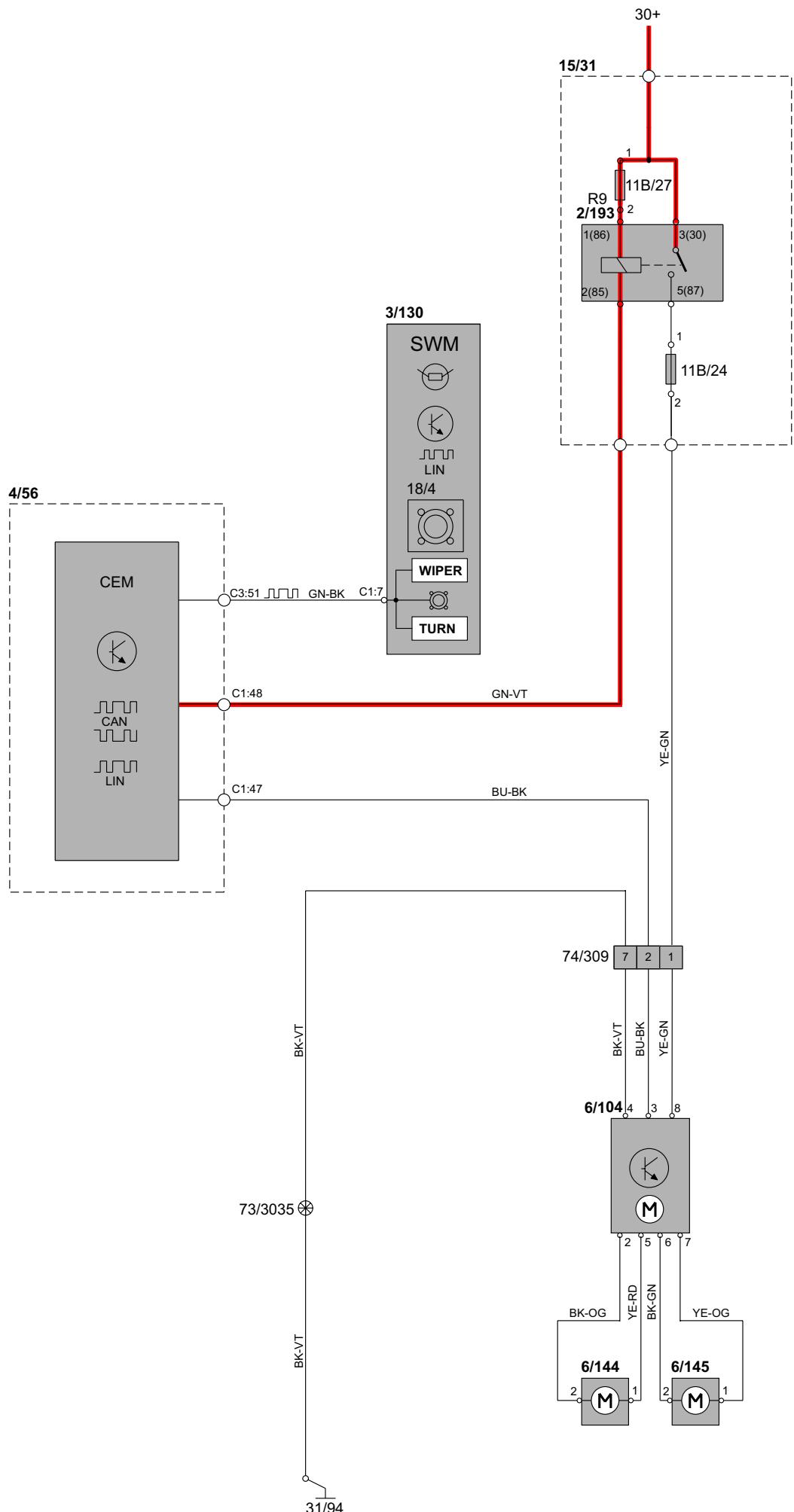
Group 36 Additional electrical equipment

Direction indicator and Hazard warning flashers RHD, V70



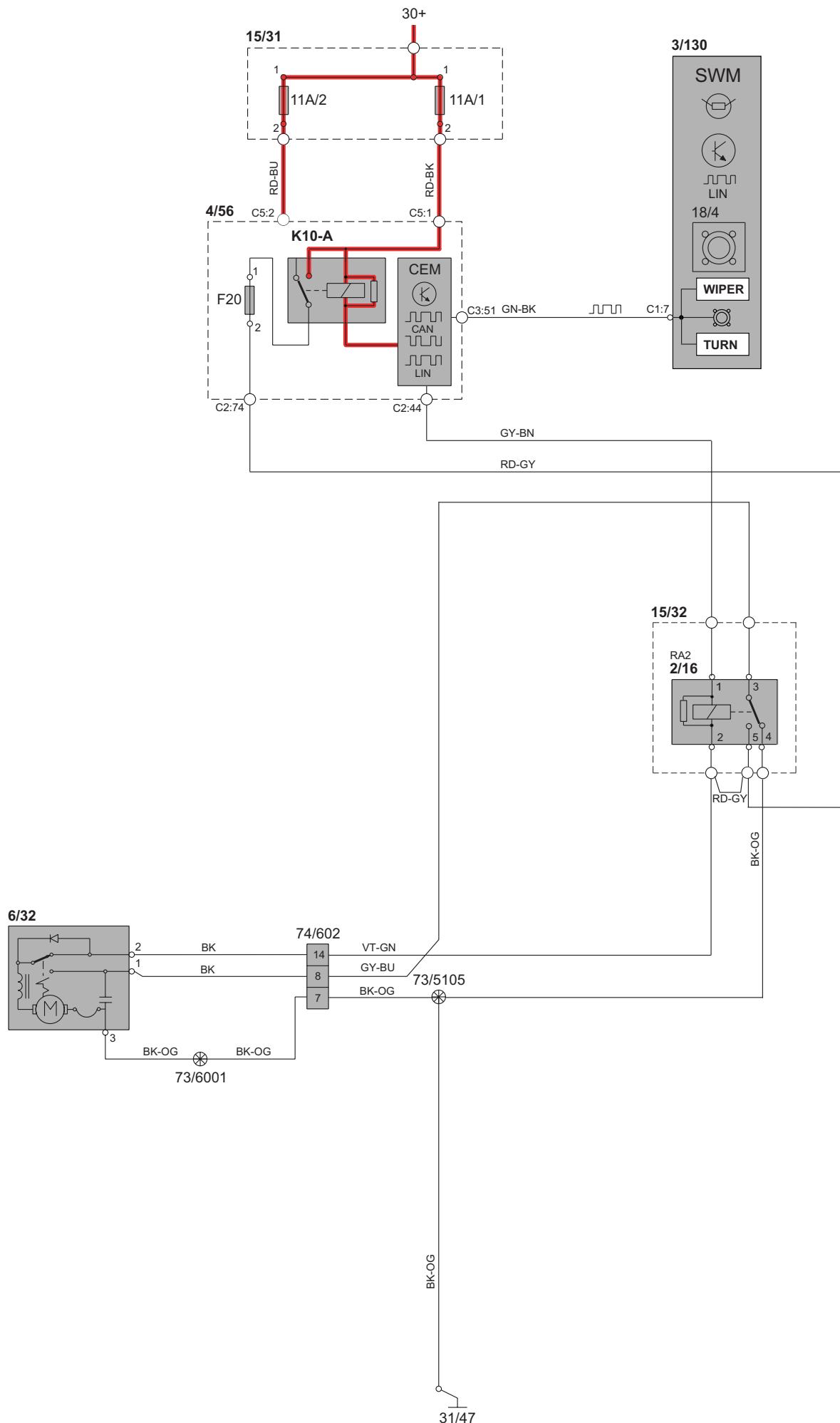
Group 36 Additional electrical equipment

High-pressure headlight washer



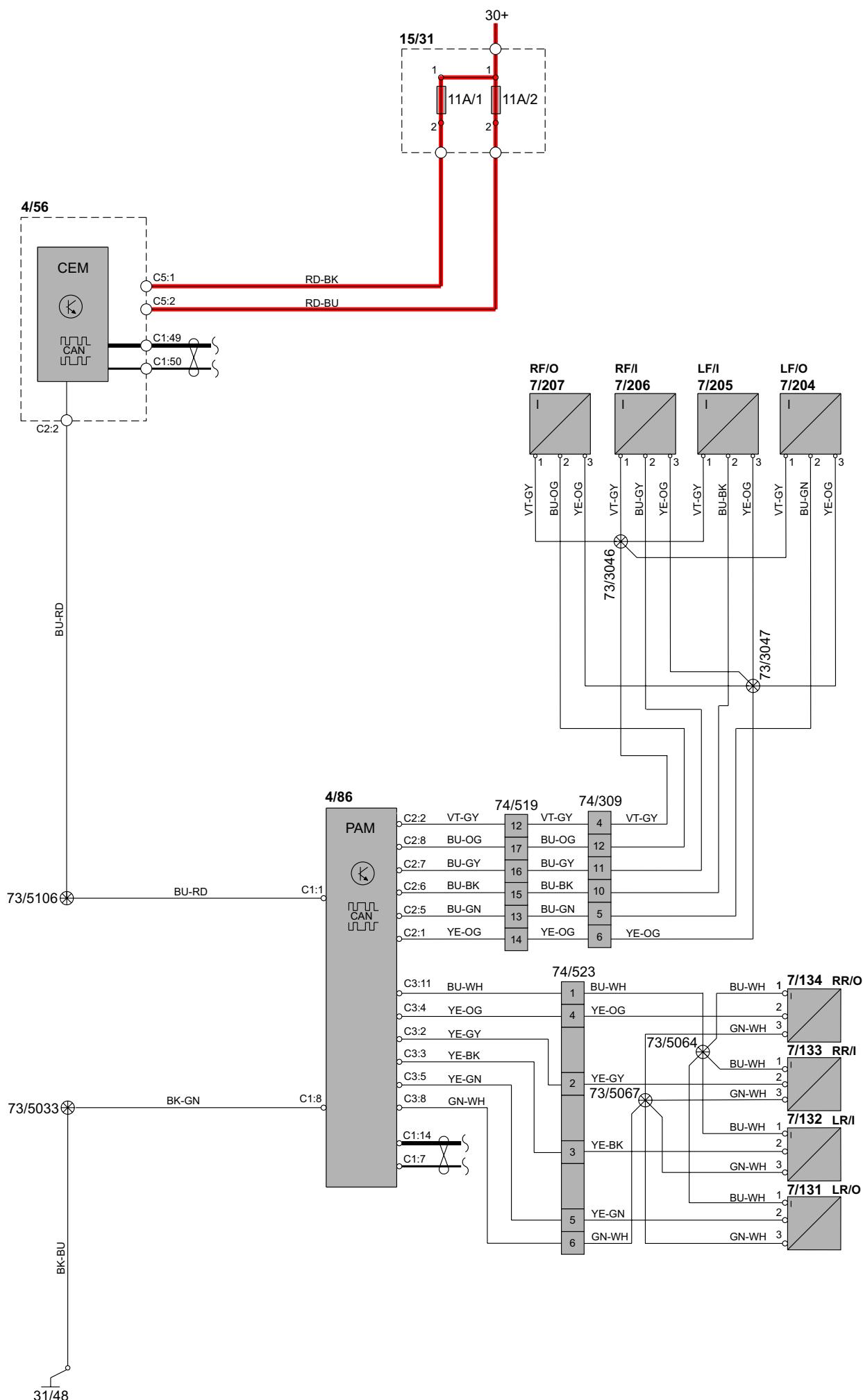
Group 36 Additional electrical equipment

Wiper/washer rear window, V70



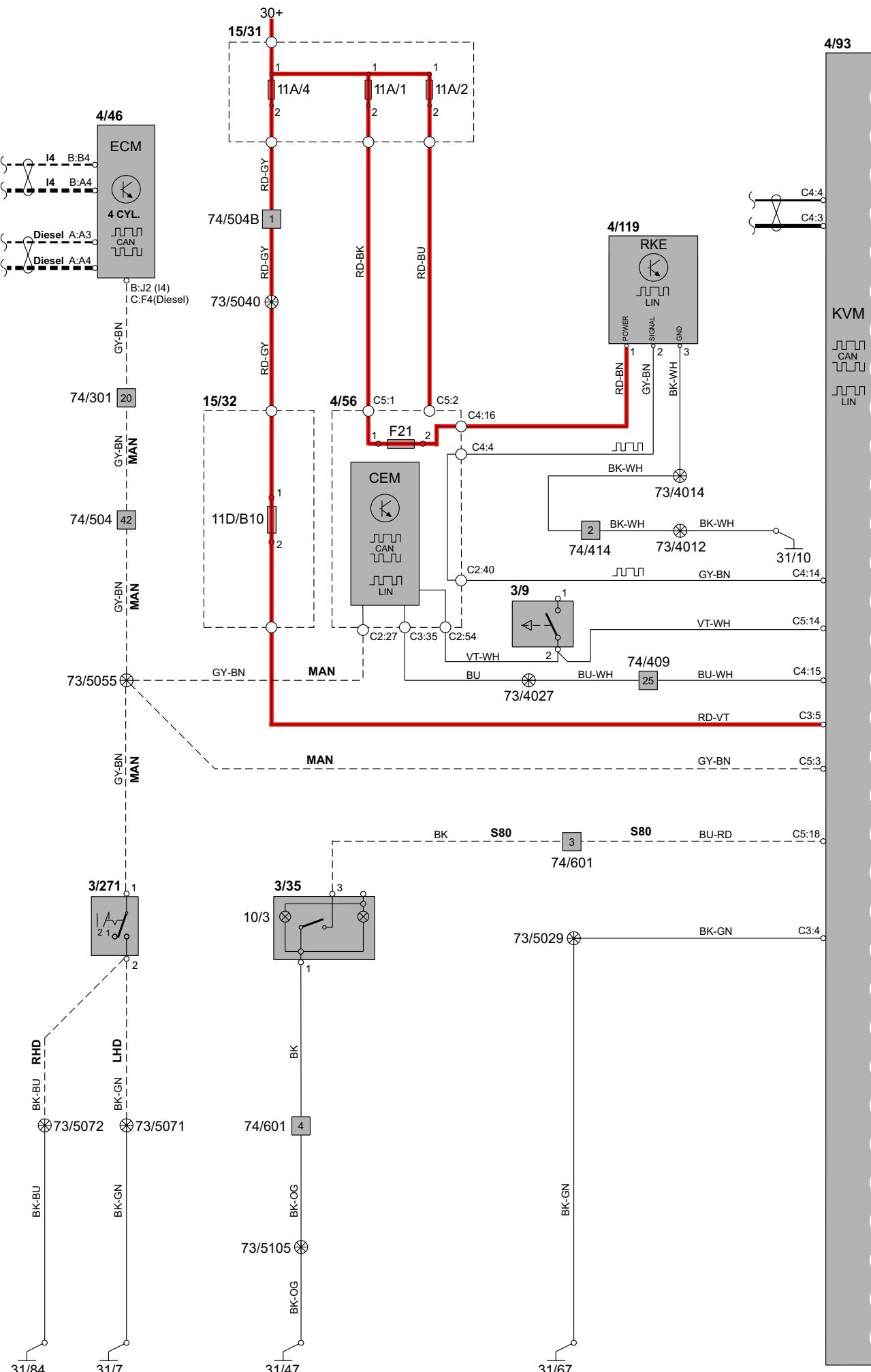
Group 36 Additional electrical equipment

Parking assistance



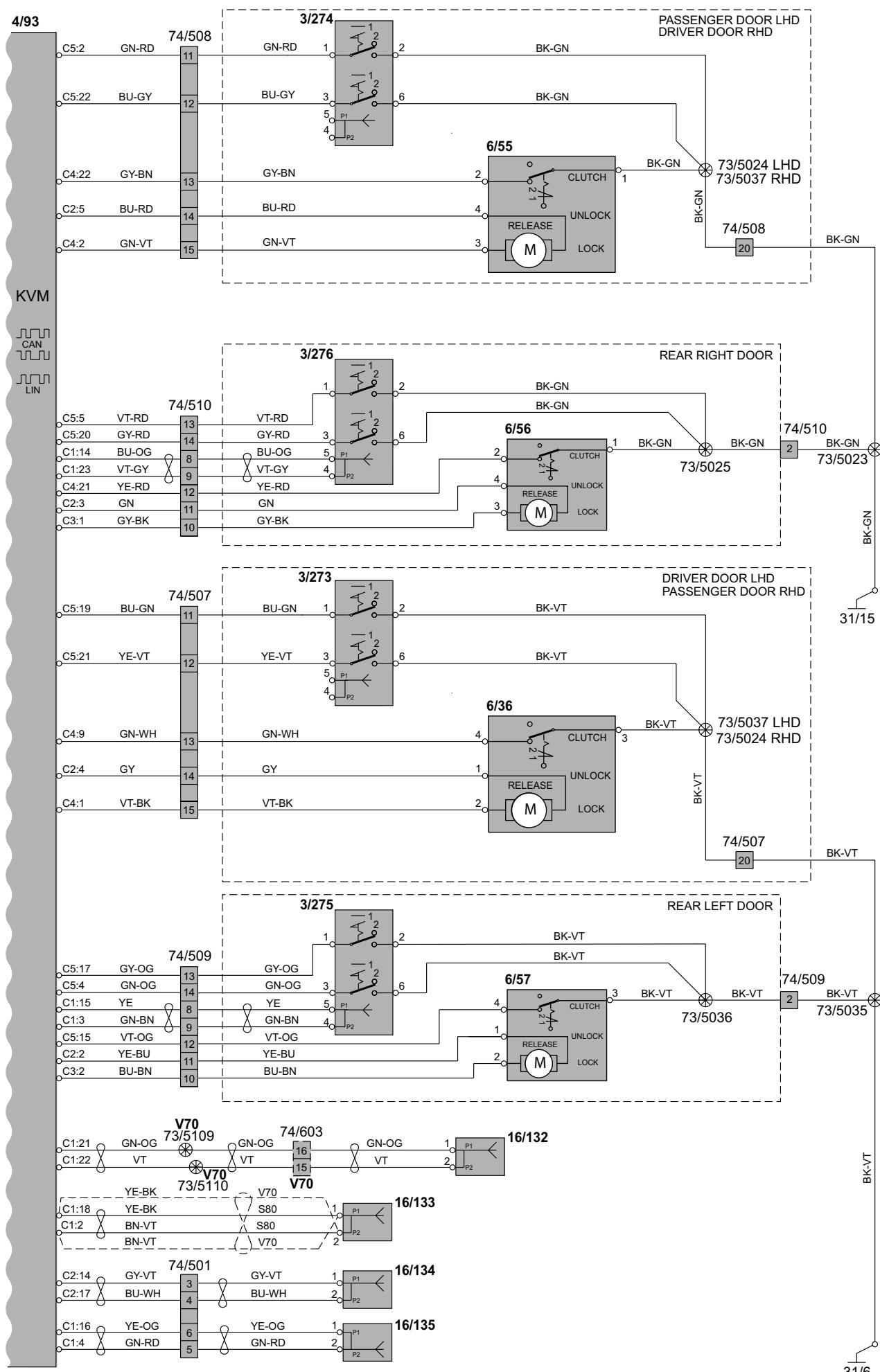
Group 36 Additional electrical equipment

Keyless vehicle 4 Cyl. 1:2



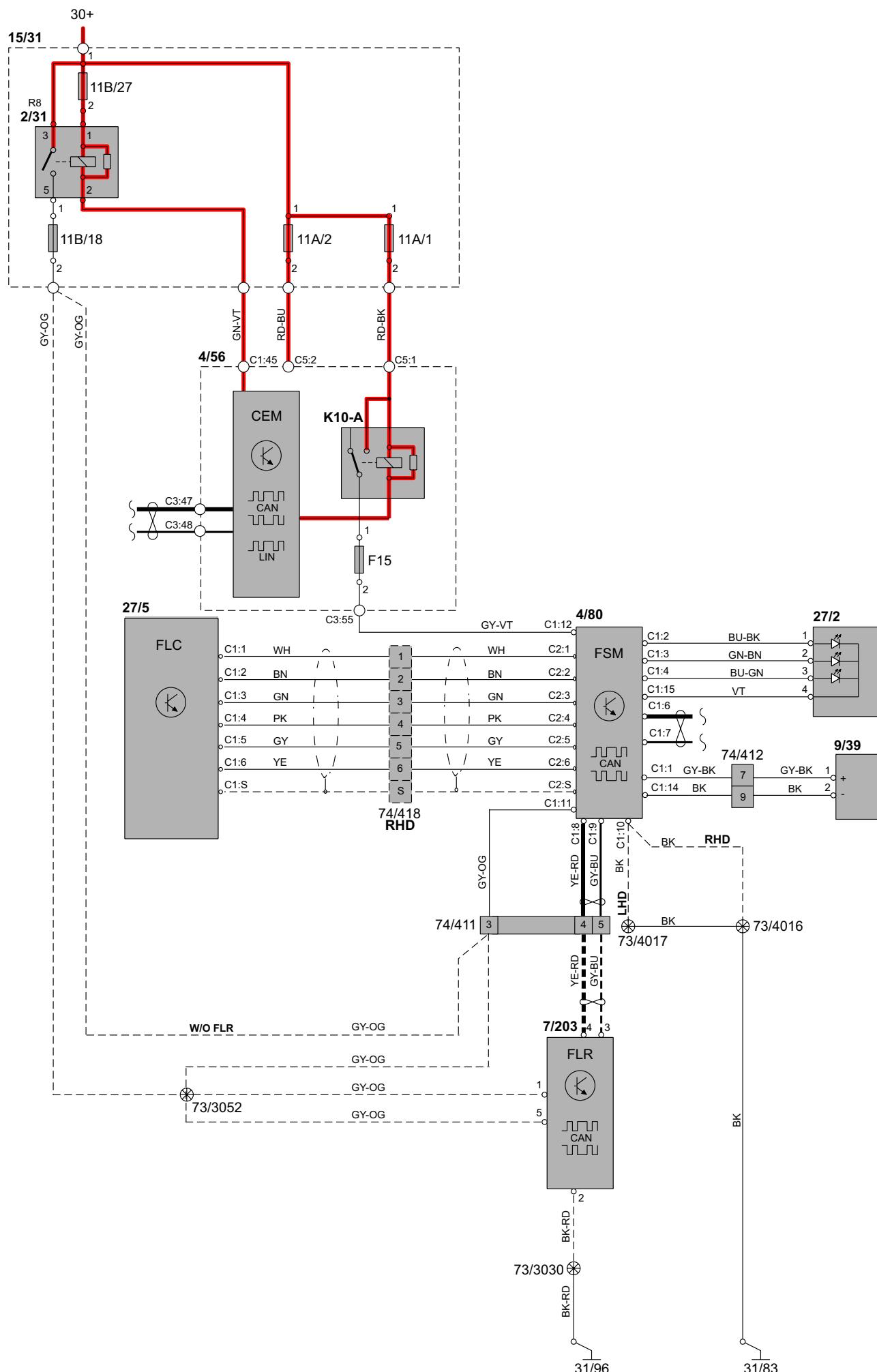
Group 36 Additional electrical equipment

Keyless vehicle 4 Cyl. 2:2



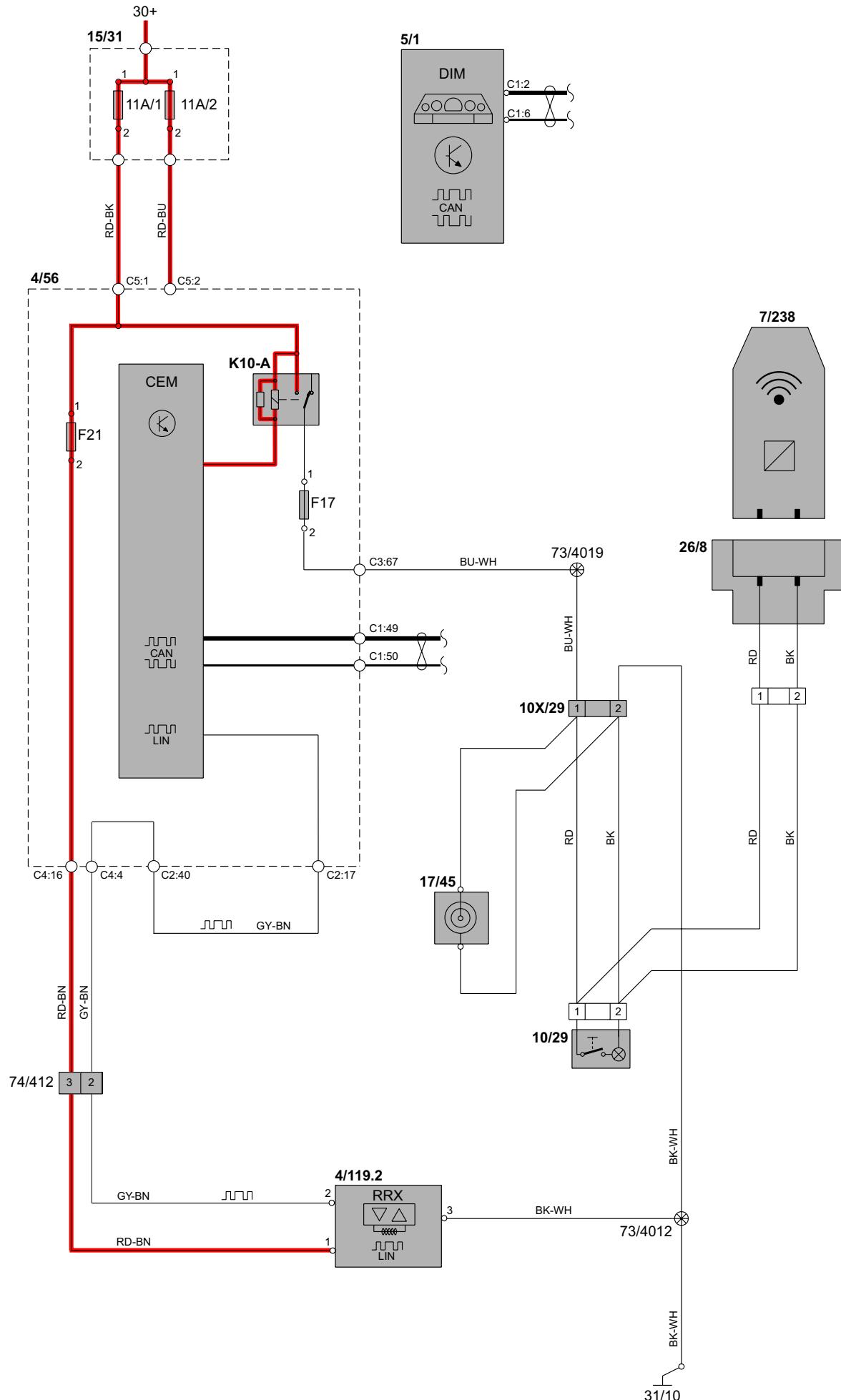
Group 36 Additional electrical equipment

Collision warning with brake servo



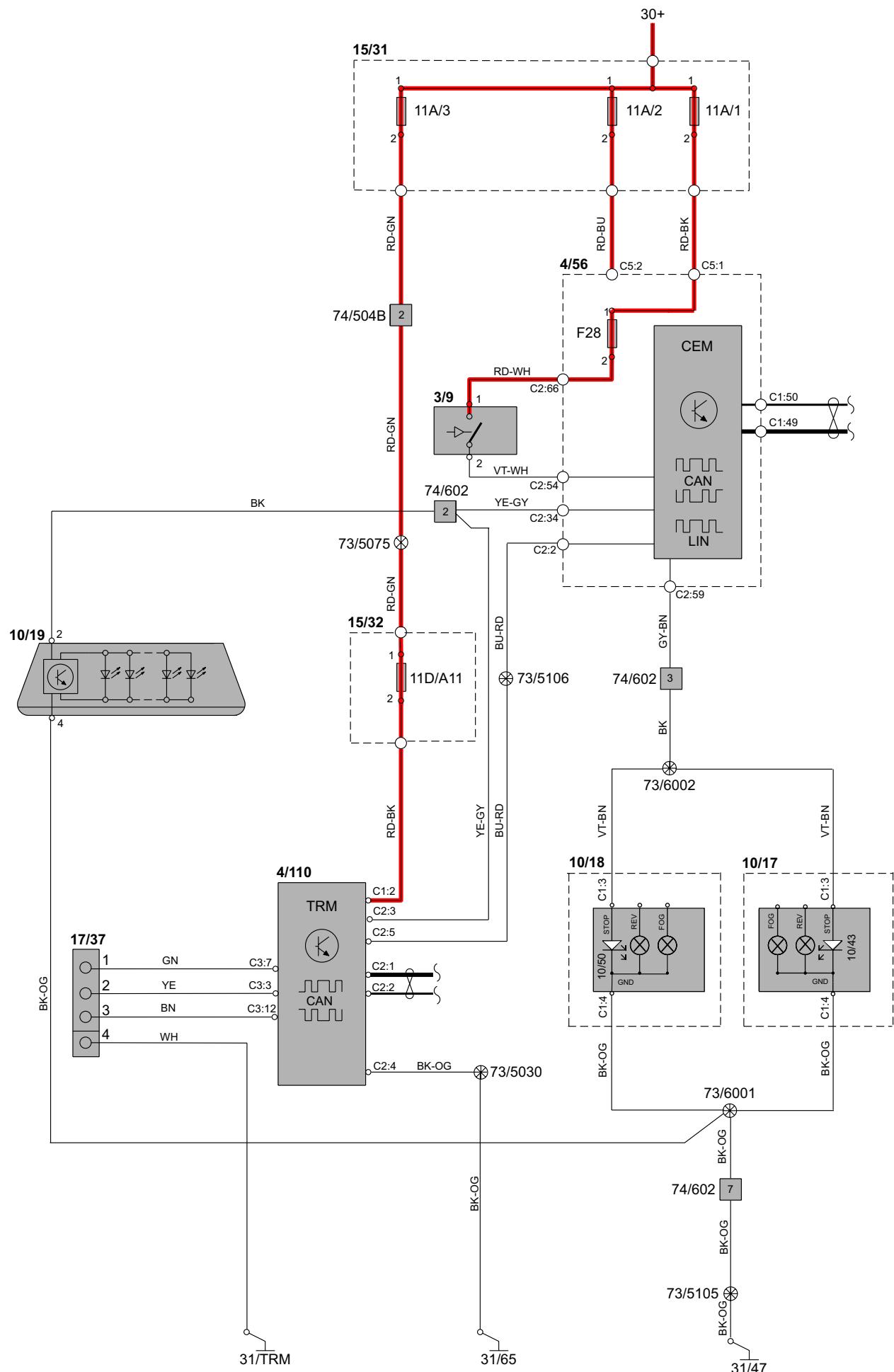
Group 36 Additional electrical equipment, Accessories

Alcolock



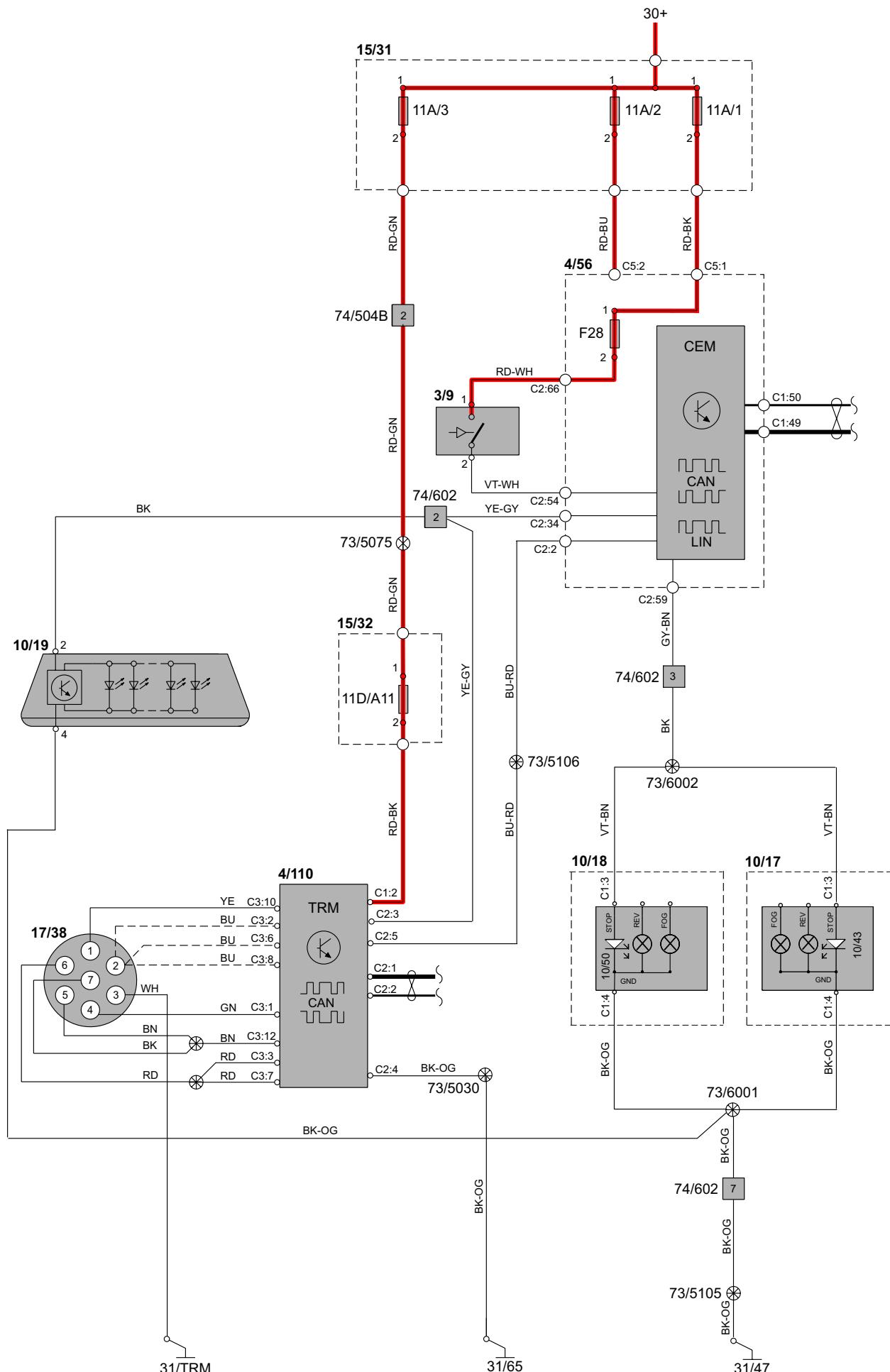
Group 37 Wiring and fuses, Accessories

Tow hitch cable harness, 4-pin V70



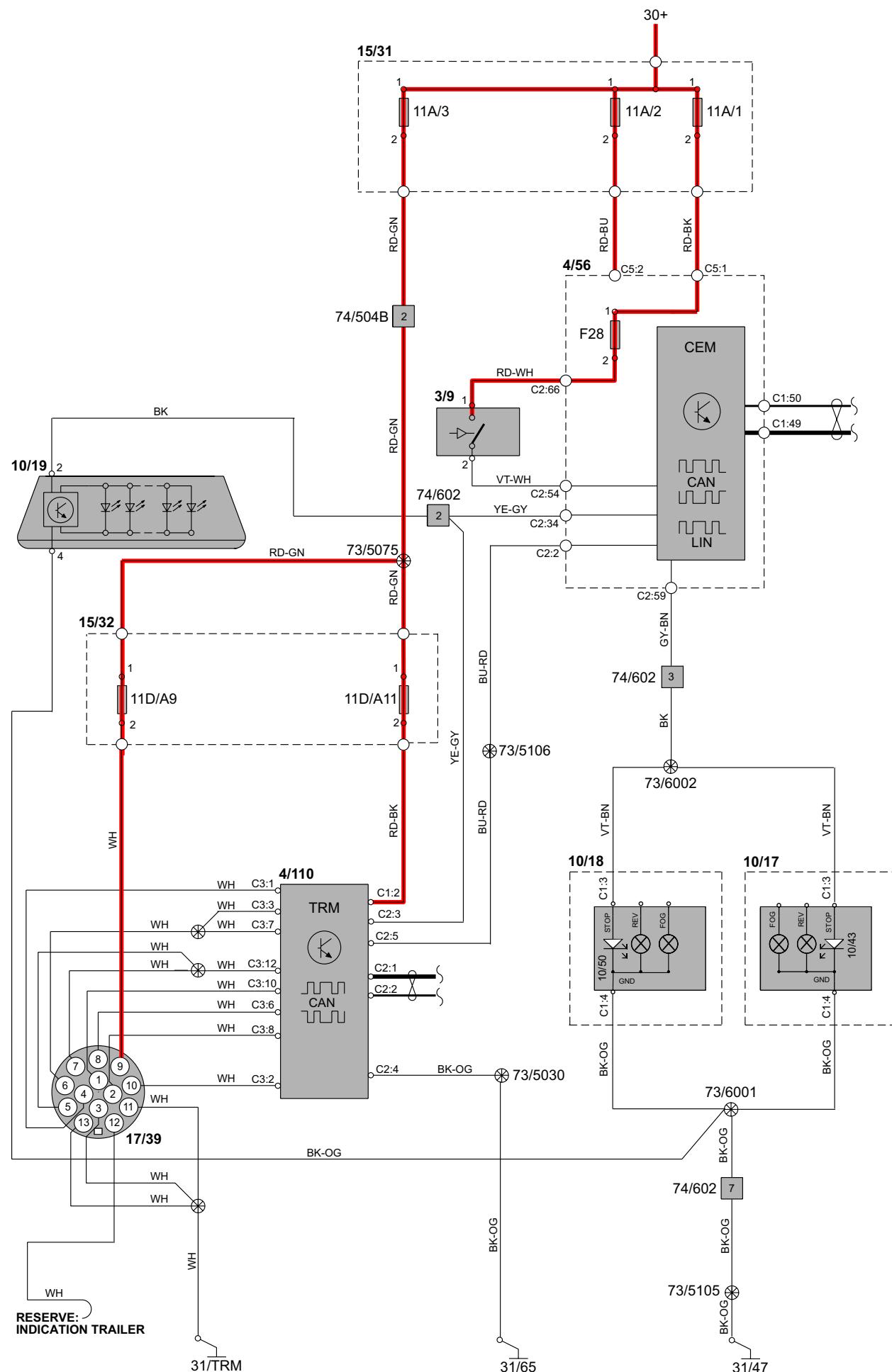
Group 37 Wiring and fuses, Accessories

Tow hitch cable harness, 7-pin V70



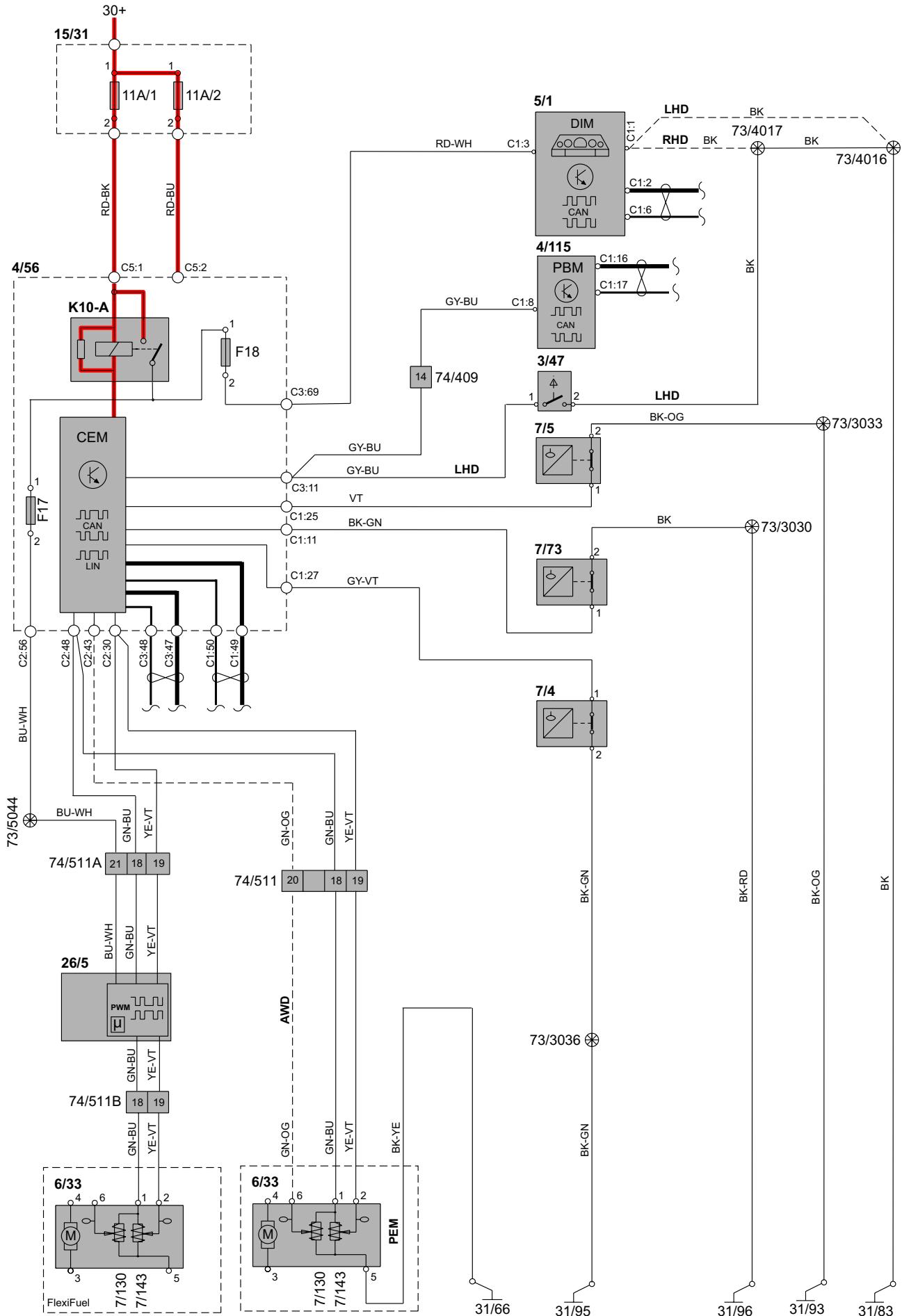
Group 37 Wiring and fuses, Accessories

Tow hitch cable harness, 13-pin V70



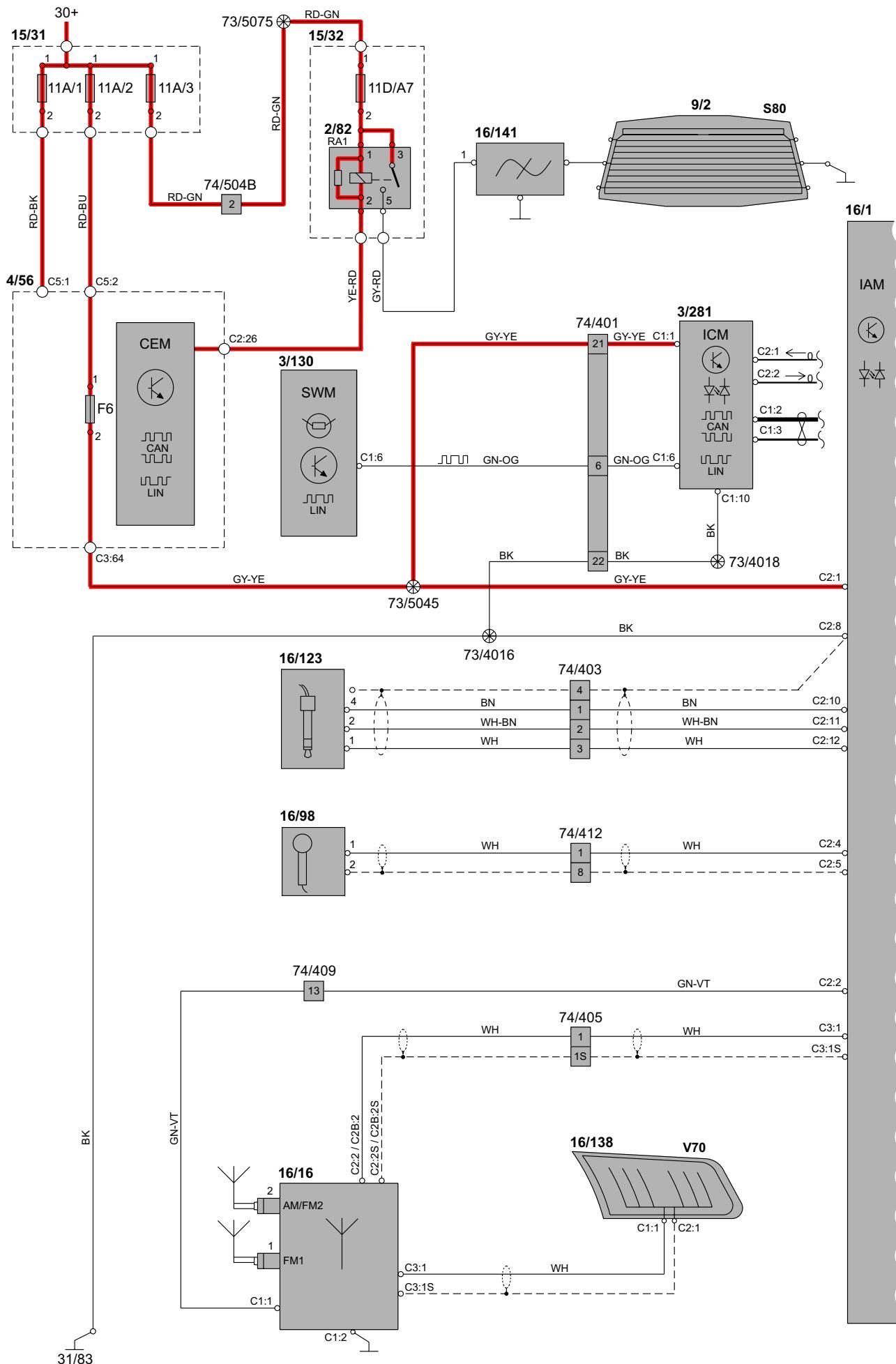
Group 38 Instruments

Driver information module



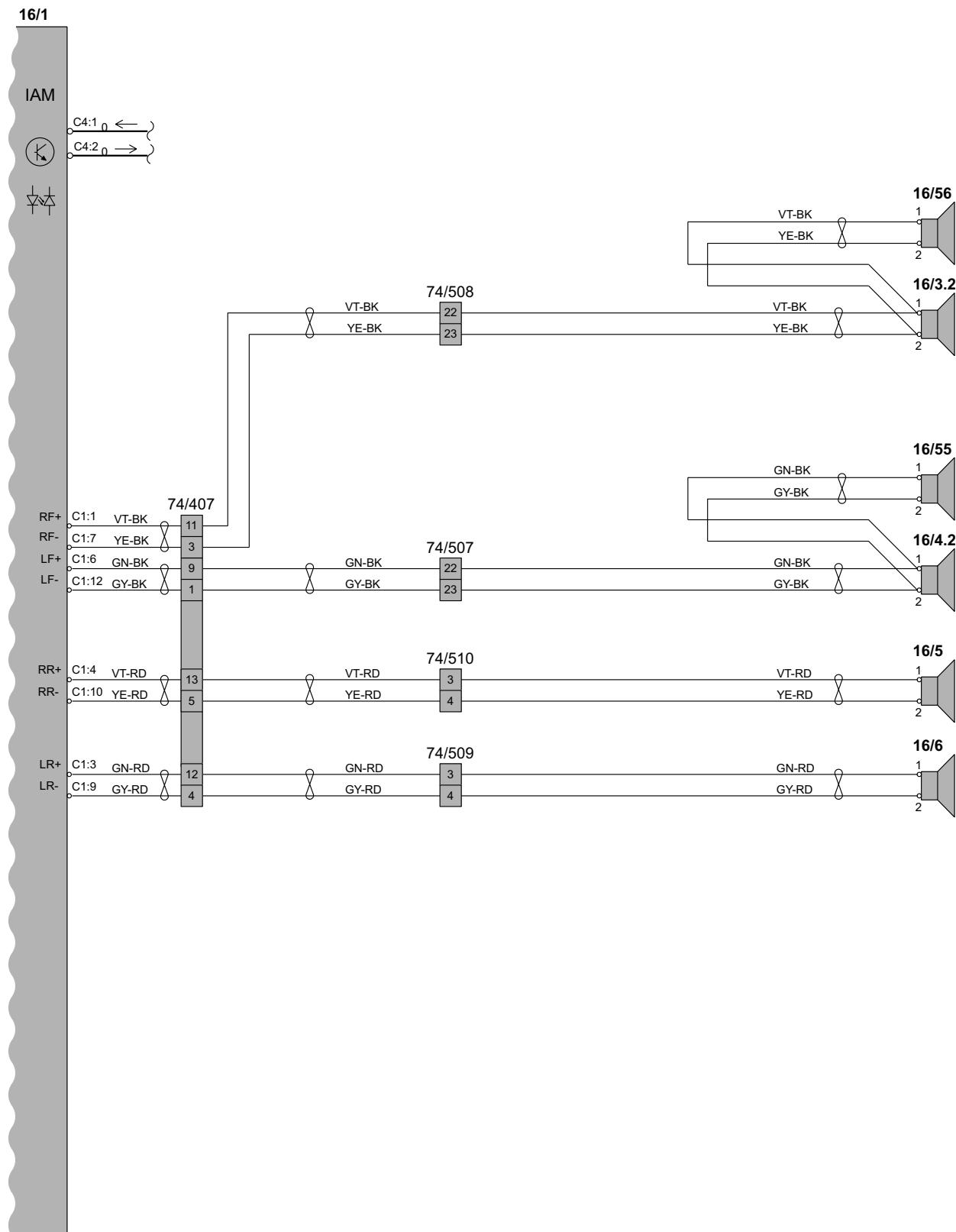
Group 39 Other

Audio 1:2

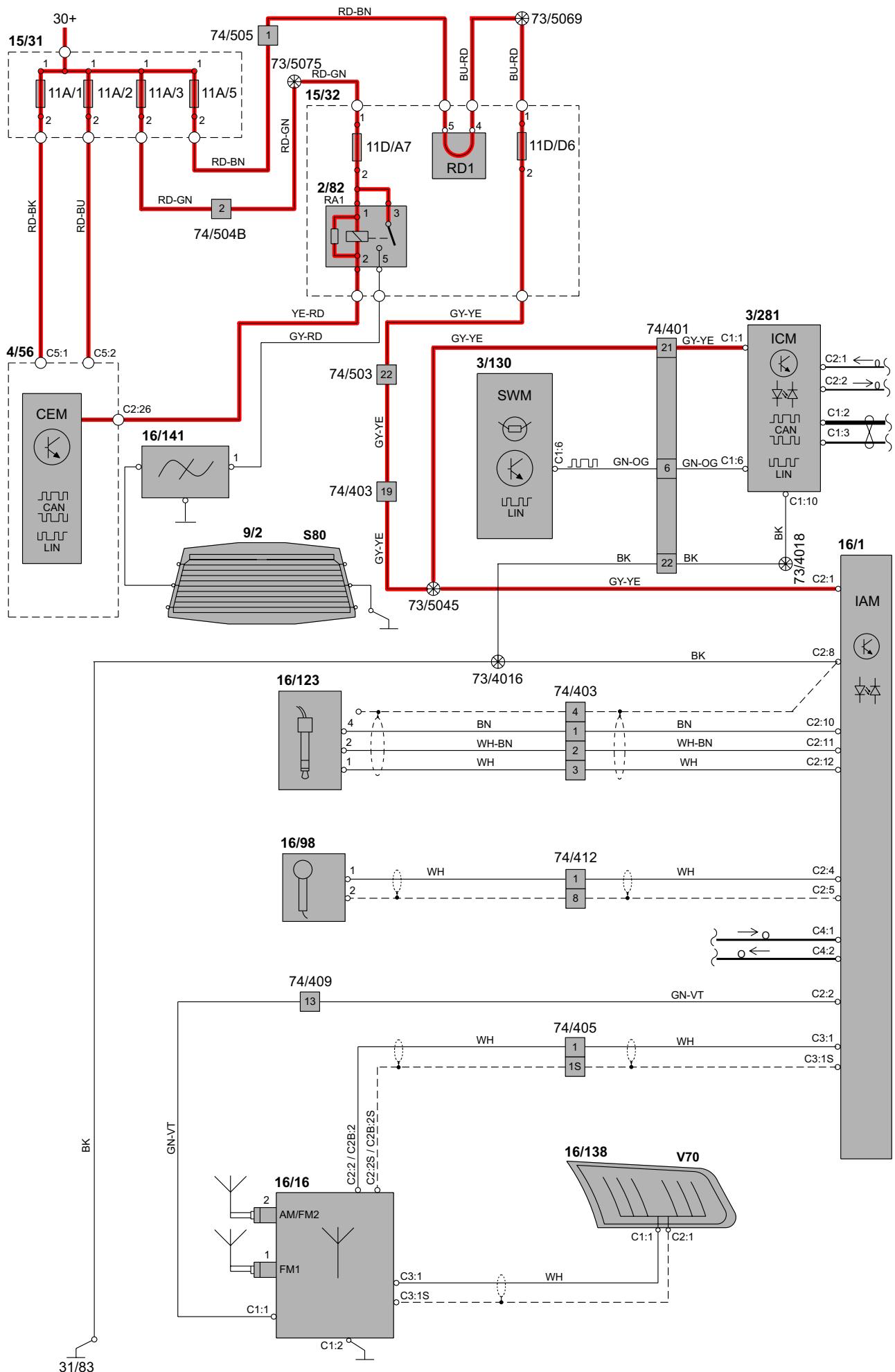


Group 39 Other

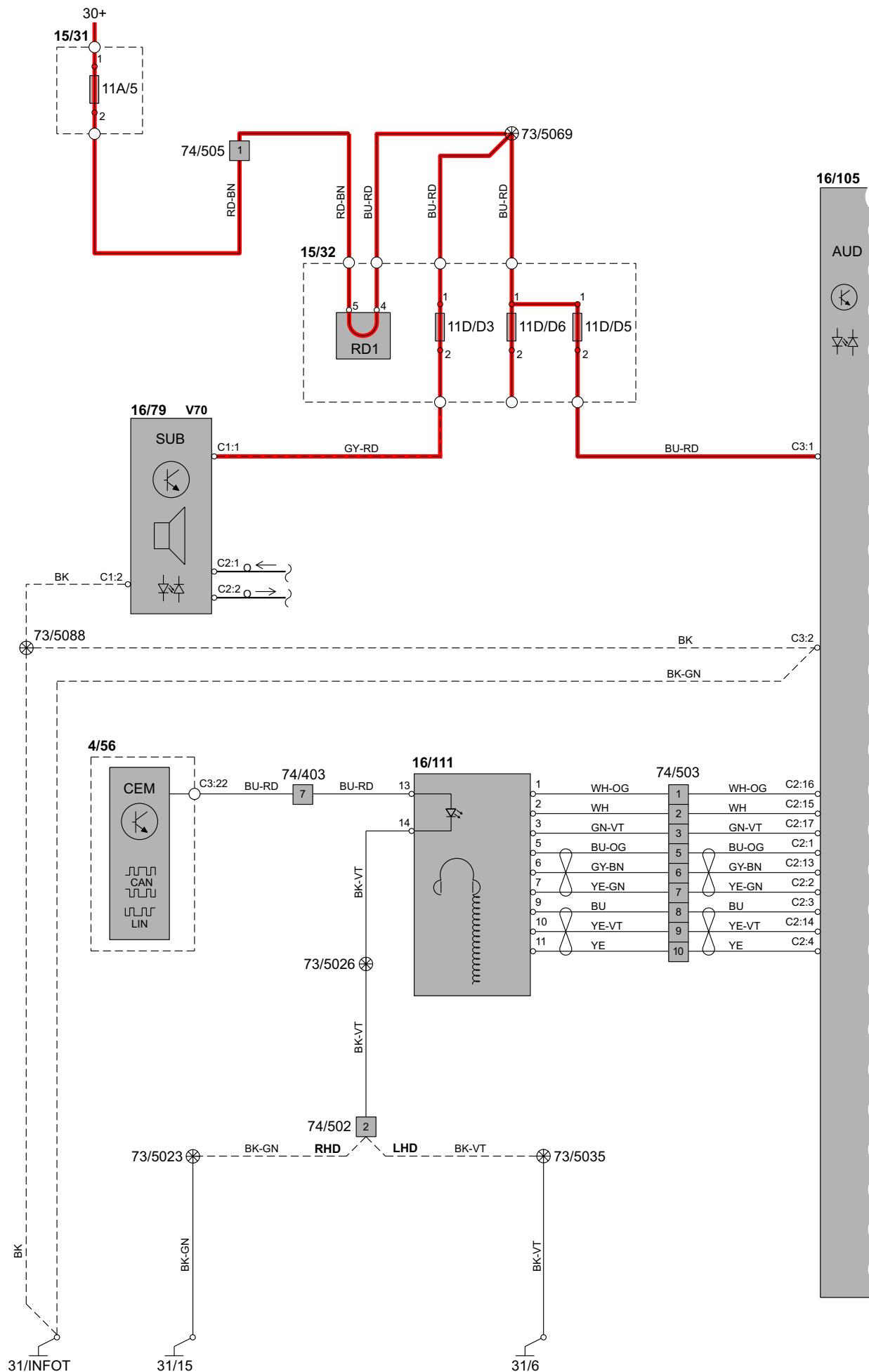
Audio 2:2



Group 39 Other Audio Premium 1:3

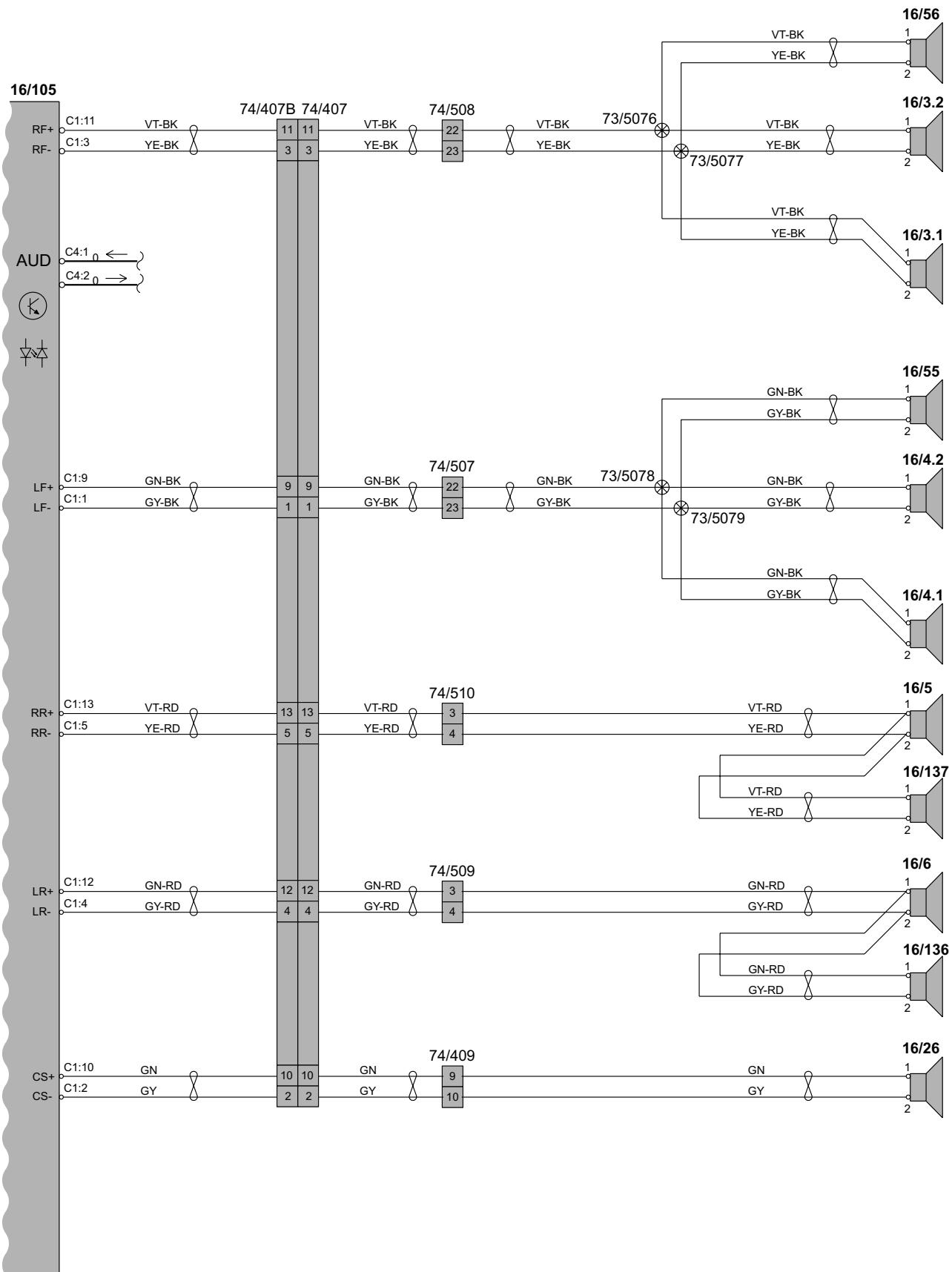


Group 39 Other Audio Premium 2:3



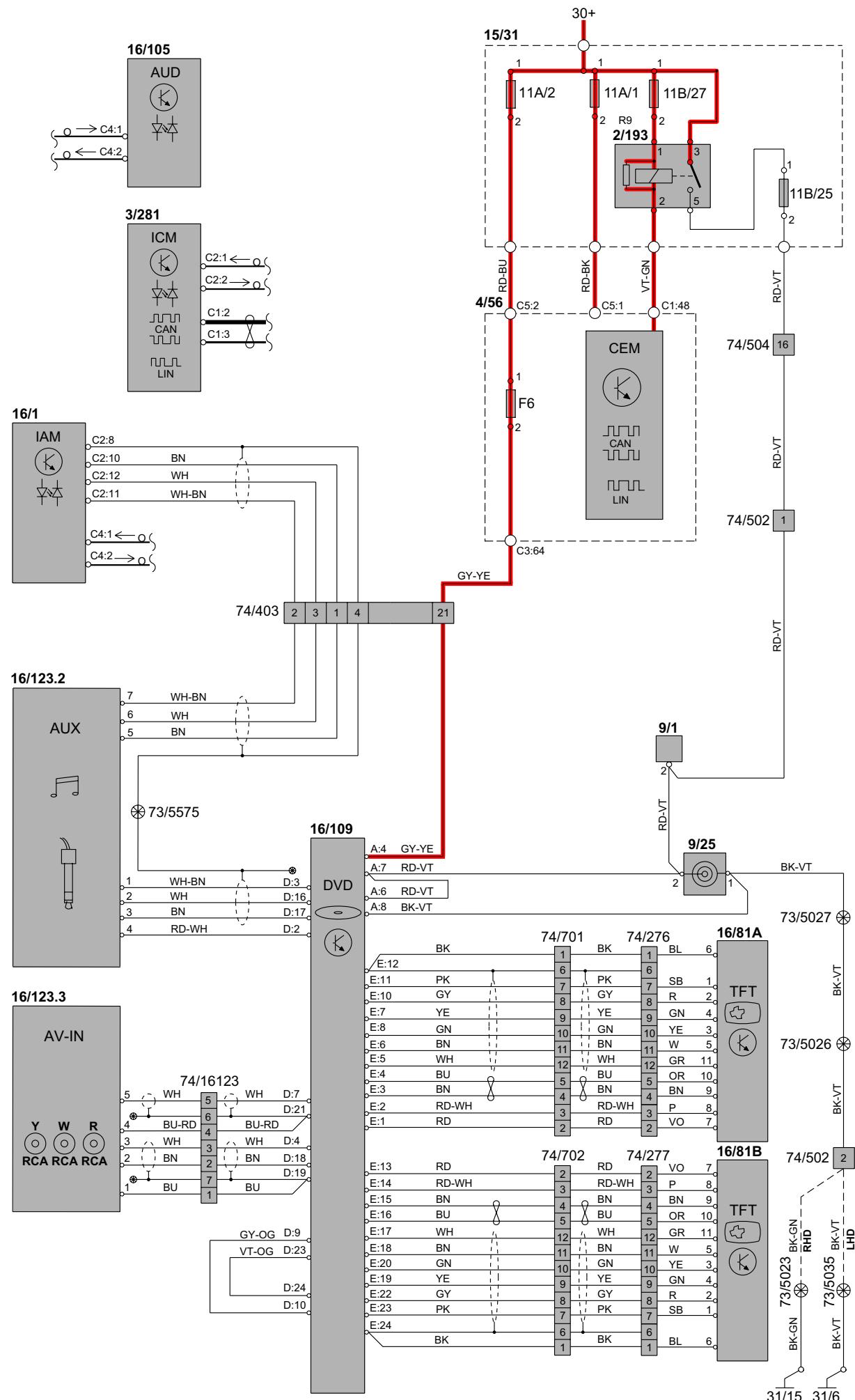
Group 39 Other

Audio Premium 3:3



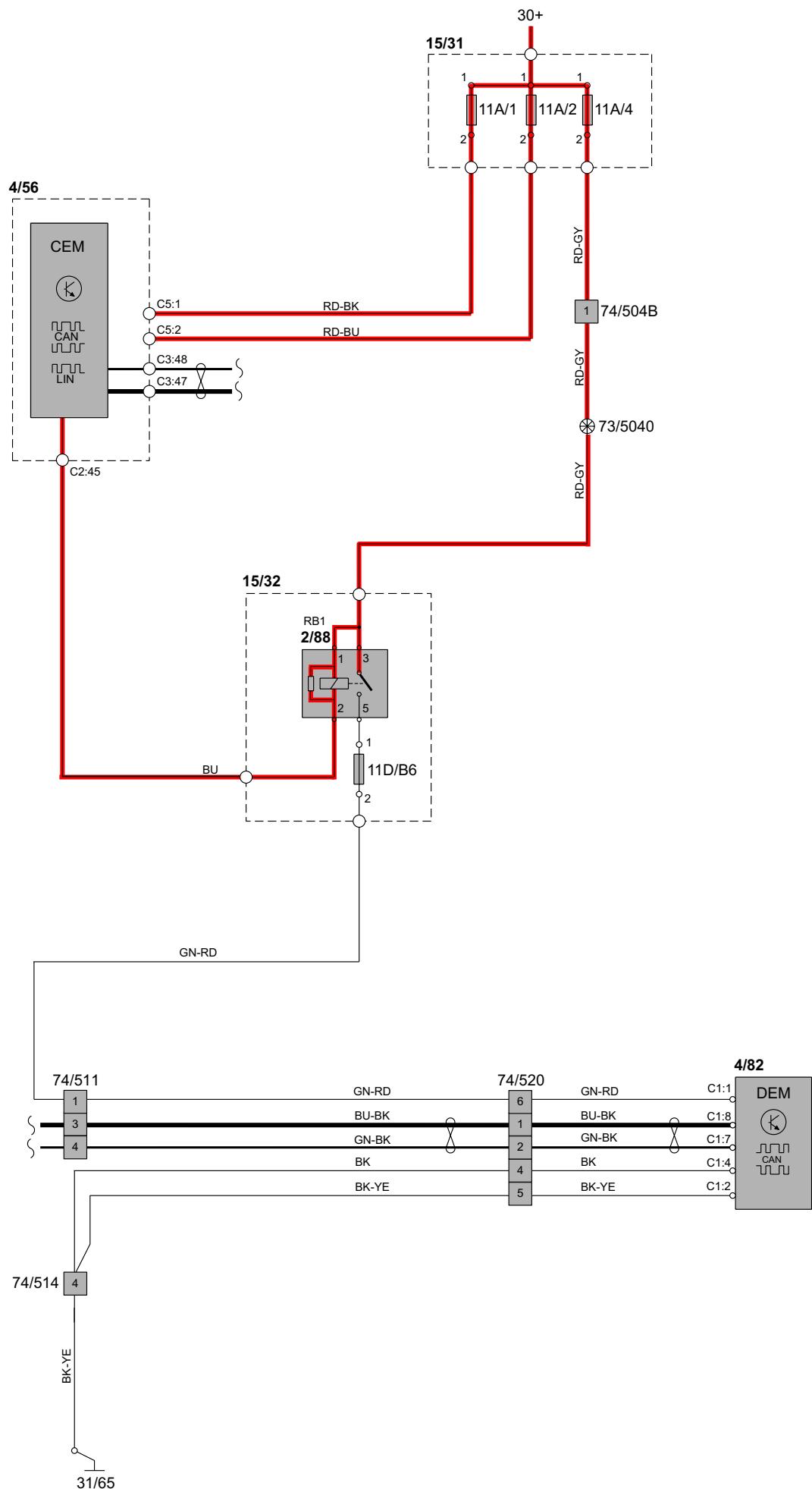
Group 39 Other

Rear seat entertainment



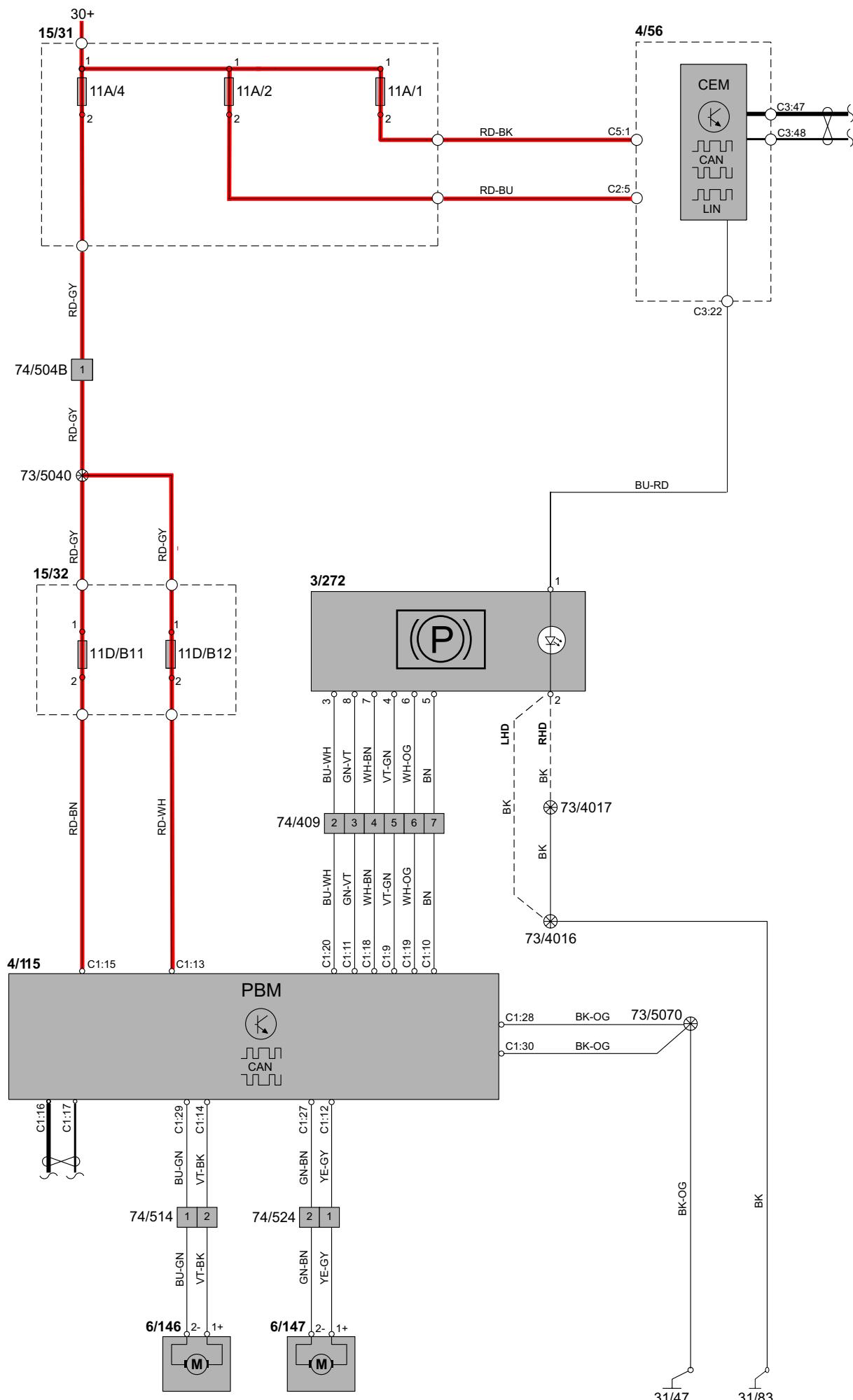
Group 43 Transmission

Differential Electronic Module (DEM)



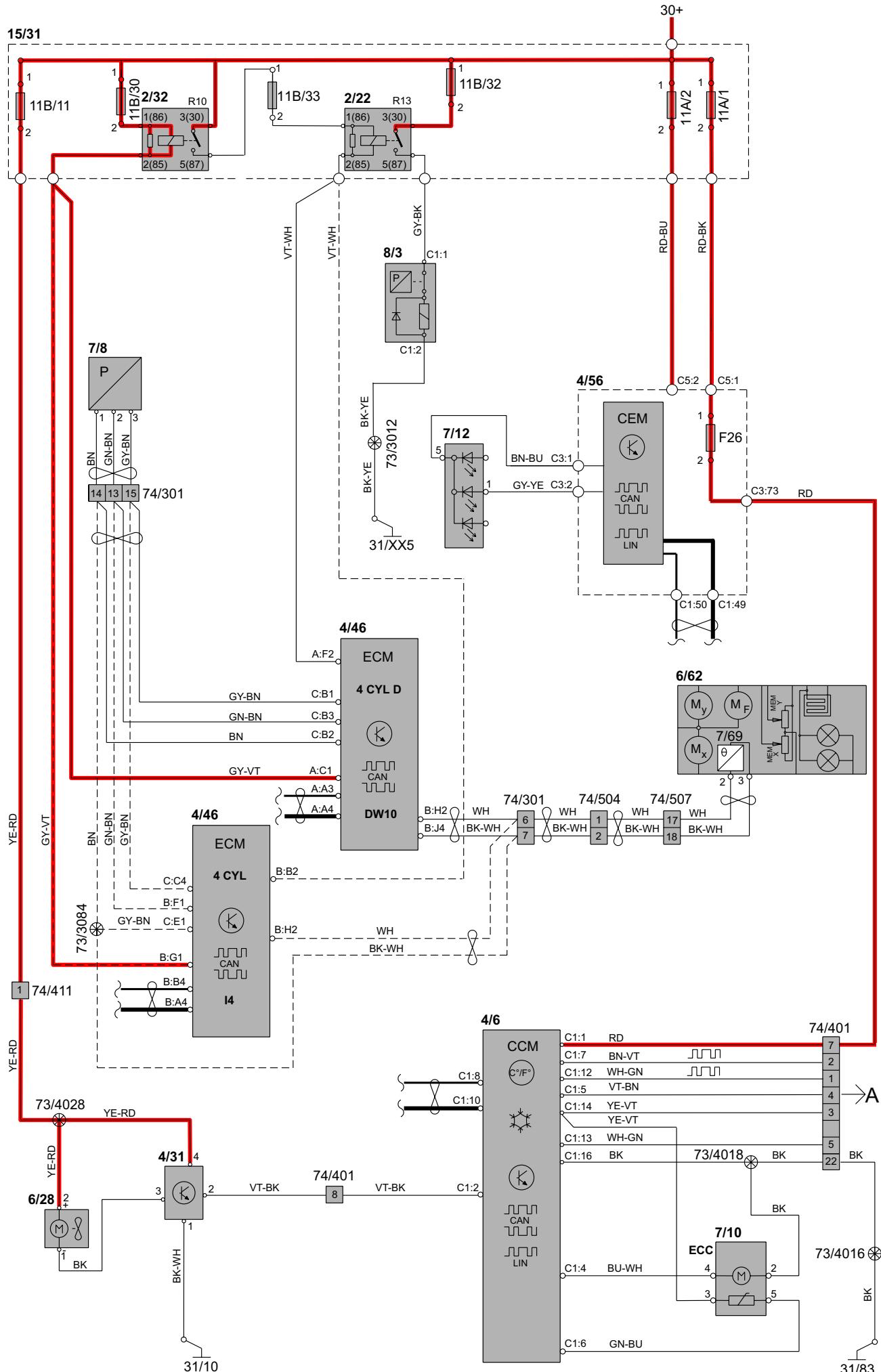
Group 55 Parking brake

Electronic parking brake



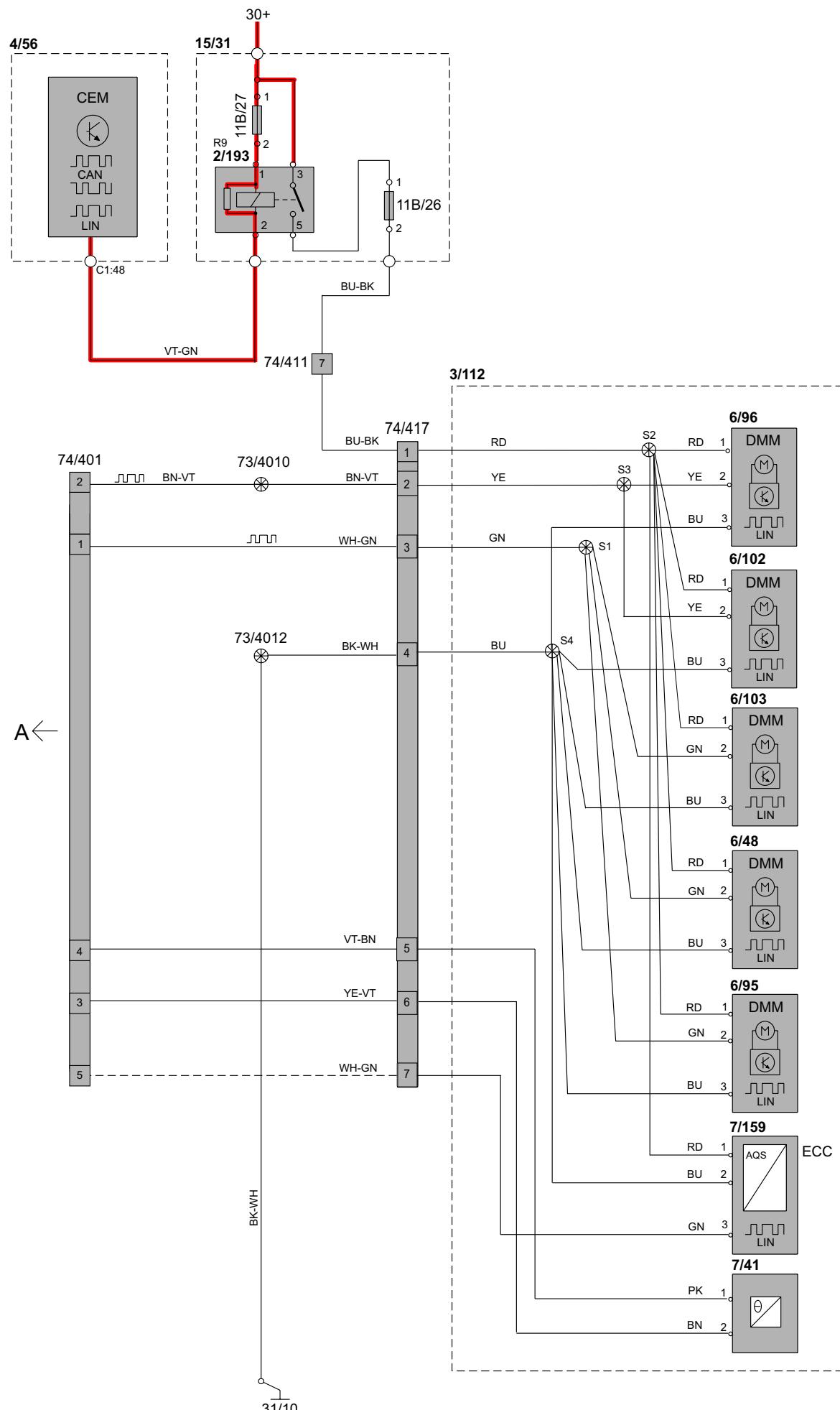
Group 87 Climate control system

Climate control system 4 Cyl. 1:2



Group 87 Climate control system

Climate control system 4 Cyl. 2:2



Connectors

74/86 - 74/301:1-12

74/86

8-pin gray

No.	Engine			Engine		
1	4/46A:34	Engine Control Module (ECM)	YE-RD	7/172:3	Intake camshaft position sensor, bank 2, 8 Cyl.	YE-RD
2	73/3061	Branching point	VT	7/172:2	Intake camshaft position sensor, bank 2, 8 Cyl.	VT
3	4/46A:71	Engine Control Module (ECM)	BU-BN	7/156:4	Pressure and temperature sensor, fuel	BU-BN
4	73/3060	Branching point	GY	7/156:3	Pressure and temperature sensor, fuel	GY
5	73/3059	Branching point	GN-BN	7/172:1	Intake camshaft position sensor, bank 2, 8 Cyl.	GN-BN
6	-		-	-		-
7	4/46A:46	Engine Control Module (ECM)	GY-BU	7/156:2	Pressure and temperature sensor, fuel	GY-BU
8	4/46A:14	Engine Control Module (ECM)	BU-BN	7/156:1	Pressure and temperature sensor, fuel	BU-BN

74/301, 4 Cyl.

34-pin black

No.	Engine harness			Engine compartment harness		
1	4/46B:A4 73/3014	Engine Control Module (ECM) Branching point	BU-BK	73/3021	Branching point	BU-BK
2	4/46A:A4 73/3015	Engine Control Module (ECM), diesel Branching point	GN-BK	73/3022	Branching point	GN-BK
3	4/46C:F3	Engine Control Module (ECM), diesel	BN-WH	4/56C1:8	Central Electronic Module (CEM)	BN-WH
4	-		-	-		-
5	-		-	-		-
6	4/46B:H2	Engine Control Module (ECM)	WH	74/504:1	Connector	WH
7	4/46B:J4 73/3084	Engine Control Module (ECM), diesel Branching point	BK-WH	74/504:2	Connector	BK-WH
8	-		-	-		-
9	4/46B:G3 4/46A:F4	Engine Control Module (ECM) Engine Control Module (ECM), diesel	VT-OG	4/56C1:44	Central Electronic Module (CEM)	VT-OG
10	4/28A:13	Transmission Control Module (TCM)	GN-OG	74/411:9	Connector	GN-OG
11	4/28A:7	Transmission Control Module (TCM)	BN-VT	74/411:10	Connector	BN-VT
12	4/46B:D2 4/46C:E3	Engine Control Module (ECM) Engine Control Module (ECM), diesel	BU-WH	74/504:17	Connector	BU-WH

continues

Connectors

74/301:13-34 - 74/302

74/301, 4 Cyl.

34-pin black

No.	Engine harness			Engine compartment harness	
13	4/46B:F1 4/46C:B3	Engine Control Module (ECM) Engine Control Module (ECM), diesel	GN-BN	7/8:2	Pressure sensor, climate control system
14	4/46C:B2 73/3048	Engine Control Module (ECM), diesel Branching point	BN	7/8:1	Pressure sensor, climate control system
15	4/46C:C4 4/46C:B1	Engine Control Module (ECM) Engine Control Module (ECM), diesel	GY-BN	7/8:3	Pressure sensor, climate control system
16-17	-		-	-	-
18	4/46B:E2 4/46C:G4	Engine Control Module (ECM) Engine Control Module (ECM), diesel	VT-BN	4/56C1:37	Central Electronic Module (CEM)
19	3/10:1	Reversing light contact, Man	BU	4/56C1:26	Central Electronic Module (CEM)
20	4/46B:J2 4/46C:F4	Engine Control Module (ECM) Engine Control Module (ECM), diesel	GY-BN	74/504:42	Connector
21	4/28A:16	Transmission Control Module (TCM)	BU-GY	74/411:11	Connector
22	-		-	-	-
23	4/46B:J1 4/46C:B4	Engine Control Module (ECM), Gasoline Engine Control Module (ECM), diesel	BU-WH	74/411:2	Connector
24	4/46A:C3 4/46B:G2 73/3064	Engine Control Module (ECM), diesel, Man Engine Control Module (ECM), Man Branching point, Auto	VT-BN	11B/20:2	Fuse, engine compartment electrical center
25-34	-		-	-	-

74/302, 4 Cyl.

1-pin black

No.	Engine		Starter motor	
1	2/35:5	Relay, starter motor	BU-WH	6/25C2:1 Starter motor

Connectors

74/307 - 74/309

74/307, 4 Cyl. Diesel

4-pin black

No.	Engine			Glow plug		
1	73/3081	Branching point	VT	20/22:1	Glow plug	VT
2	73/3081	Branching point	VT	20/23:1	Glow plug	VT
3	73/3081	Branching point	VT	20/24:1	Glow plug	VT
4	37/3081	Branching point	VT	20/25:1	Glow plug	VT

74/309

12-pin gray

No.	Engine compartment			Front parking assistance		
1	11B/24:2	Fuses in the engine compartment fuse box	YE-GN	6/104:8	High pressure headlight washer motor	YE-GN
2	4/56C1:47	Central Electronic Module (CEM)	BU-BK	6/104:3	High pressure headlight washer motor	BU-BK
3	-	-	-	-	-	-
4	74/519:12	Connector	VT-GY	73/3046	Branching point	VT-GY
5	74/519:13	Connector	BU-GN	7/204:2	Front parking assistance sensor	BU-GN
6	74/519:14	Connector	YE-OG	73/3047	-	YE-OG
7	73/3035	Branching point	BK-VT	6/104:4	High pressure headlight washer motor	BK-VT
8	-	-	-	-	-	-
9	-	-	-	-	-	-
10	74/519:15	Connector	BU-BK	7/205:2	Front parking assistance sensor	BU-BK
11	74/519:16	Connector	BU-GY	7/206:2	Front parking assistance sensor	BU-GY
12	74/519:17	Connector	BU-OG	7/207:2	Front parking assistance sensor	BU-OG

Connectors

74/402 - 74/403:1-15

74/402

2-pin black

No.	Center console harness		Dashboard harness		
1	3/281C2:1	Infotainment Control Module (ICM)	OG	16/1C4:2	Integrated Audio Module (IAM) OG
2	3/281C:2	Infotainment Control Module (ICM)	OG	16/1C4:1 16/60C4:1 16/147C2:1 74/404	Integrated Audio Module (IAM) Phone Module (PHM) Bluetooth Phone Module Connector

74/403

22-pin gray

No.	Dashboard harness		Tunnel harness		
1	16/1C2:10	Integrated Audio Module (IAM)	BN	16/123:4 16/123:2:5	Auxiliary equipment input (AUX)
2	16/1C2:11	Integrated Audio Module (IAM)	WH-BN	16/123:2 16/123:2:7	Auxiliary equipment input (AUX)
3	16/1C2:12	Integrated Audio Module (IAM)	WH	16/123:1 16/123:2:6	Auxiliary equipment input (AUX)
4	16/1C2:8	Integrated Audio Module (IAM)	-	73/5575	Branching point
5	-	-	-	-	-
6	4/56C3:68	Central Electronic Module (CEM)	BU-RD	3/65:1	Switch, heated rear seat
7	4/56C3:22	Central Electronic Module (CEM)	BU-RD	16/111:13 10/72:1	Rear headphone sockets Front ashtray lighting
8	74/411:9	Connector	GN-RD	3/156A:3	Gear Selector Module (GSM)
9	74/411:11	Connector	BU-GY	3/156A:1	Gear Selector Module (GSM)
10	16/46C2:5	High Level Display Front module (HLDF)	BK	74/503:12	Connector
11	-	-	-	-	-
12	16/60C1:18	Phone Module (PHM)	-	16/62:3	Hand unit, mobile phone
13	16/60C1:17	Phone Module (PHM)	GN-WH	16/62:5	Hand unit, mobile phone
14	16/60C1:8	Phone Module (PHM)	WH-BU	16/62:4	Hand unit, mobile phone
15	16/60C1:19	Phone Module (PHM)	WH-BN	16/62:1	Hand unit, mobile phone
continues					

Connectors

74/403:16-22 - 74/411:1-5

74/403

22-pin gray

No.	Dashboard harness		Tunnel harness		
16	16/60C1:20	Phone Module (PHM)	WH	16/62:2	Hand unit, mobile phone
17	16/46C2:1	High Level Display Front module (HLDF)	RD-BN	74/503:14	Connector
18	16/60C1:5	Phone Module (PHM)	YE	74/503:13	Connector
	16/147C1:32	Bluetooth Phone Module (BPM)			YE
19	73/5045	Branching point	GY-YE	74/503:22	Connector
20	4/56C3:43	Central Electronic Module (CEM)	WH-BN	8/134:1	Solenoid, reverse interlock, manual
21	4/56C3:64	Central Electronic Module (CEM)	GY-YE	16/109A:4	DVD player/control module
22	74/411:10	Connector	BN-VT	3/156A:2	Gear Selector Module (GSM)
					BN-VT

74/404

2-pin black

No.	Dashboard harness		Infotainment harness	
1	74/402:2	Connector	OG	16/105C4:2 Audio module (AUD) 16/108C3:2 Multimedia Module (MMM) 74/529:2 Connector
2	16/1C4:1 16/60C4:2 16/147C2:2	Integrated Audio Module (AIM) Phone Module (PHM) Bluetooth Phone Module (BPM)	OG	16/105C4:1 Audio module (AUD) 16/108C3:1 Multimedia Module (MMM) 74/529:1 Connector

74/411

26-pin gray

No.	Engine compartment harness		Dashboard harness		
1	11B/11:2	Fuse, engine compartment electrical center	YE-RD	73/4028	Branching point
2	73/4027	Branching point	BU	74/301:23	Connector
3	73/3052 11B/18:2	Branching point Fuses in the engine compartment fuse box	GY-OG	4/80C1:14	Forward Sensing Module (FSM)
4	7/203:4	Forward-aimed radar (FLR)	YE-RD	4/80C1:8	Forward Sensing Module (FSM)
5	7/203:3	Forward-aimed radar (FLR)	GY-BU	4/80C1:9	Forward Sensing Module (FSM)
			continues		

Connectors

74/411:6-26 - 74/412:1-4

74/411

26-pin gray

No.	Engine compartment harness			Dashboard harness		
6	10/1:8 10/2:8	Lamp housing, front left Lamp housing, front right	BK	73/4017 73/4016	Branching point, LHD Branching point, RHD	BK
7	11B/26:2	Fuse, engine compartment electrical center	BU-BK	74/414:3 74/417:1	Connector Connector	BU-BK
8	-		-	-	-	-
9	74/301:10	Connector	GN-OG	74/403:8	Connector	GN-RD
10	74/301:11	Connector	BN-VT	74/403:22	Connector	BN-VT
11	74/301:21	Connector	BU-GY	74/403:9	Connector	BU-GY
12	11B/23:2	Fuse, engine compartment electrical center	RD-BK	3/111:1	Light Switch Module (LSM)	RD-BK
13	10/1:12 10/2:12	Lamp housing, front left Lamp housing, front right	VT-GN	3/111:4	Light Switch Module (LSM)	VT-GN
14-20	-		-	-	-	-
21	7/178:1	Front impact sensor, right	WH-GN	4/9C2:50	Supplemental restraint system module (SRS)	WH-GN
22	7/178:2	Front impact sensor, right	YE-RD	4/9C2:49	Supplemental restraint system module (SRS)	YE-RD
23	7/179:1	Front impact sensor, left	WH-BU	4/9C2:75	Supplemental restraint system module (SRS)	WH-BU
24	7/179:2	Front impact sensor, left	GY-BN	4/9C2:74	Supplemental restraint system module (SRS)	GY-BN
25	11B/20:2	Fuse, engine compartment electrical center	VT-BN	4/9C2:68	Supplemental restraint system module (SRS)	VT-BN
26	-		-	-	-	-

74/412

16-pin green

No.	Floor harness			Roof harness		
1	16/1C2:4	Integrated Audio Module (IAM)	WH	16/98:1	Microphone	WH
2	4/56C4:4	Central Electronic Module (CEM)	GY-BN	4/119.2:2	Remote Receiver Module (RRX)	GY-BN
3	4/56C4:16	Central Electronic Module (CEM)	RD-BN	4/119.2:1	Remote Receiver Module (RRX)	RD-BN
4	16/60C1:14	Phone Module (PHM)	-	3/267:2	Switch unit, telematics	-

continues

Connectors

74/412:5-16 - 74/418 RHD

74/412

16-pin green

No.	Floor harness			Roof harness		
5	16/60C1:3	Phone Module (PHM)	BU-GY	3/267:3	Switch unit, telematics	BU-GY
6	4/9C2:70	Supplemental restraint system module (SRS)	GN-WH	3/117C1:7	Switch unit, ceiling light	GN-WH
7	4/80C1:1	Forward Sensing Module (FSM)	GY-BK	9/39:1	Heating element camera	GY-BK
8	16/1C2:5	Integrated Audio Module (IAM)	-	16/98:2	Microphone	-
9	4/80C1:14	Forward Sensing Module (FSM)	BK	9/39:2	Heating element camera	BK
10	4/9C2:47	Supplemental Restraint System Module (SRS)	GY-BU	3/117C1:7	Switch unit, ceiling light	GY-BU
11	16/60C1:15	Phone Module (PHM)	WH	3/267:1	Switch unit, telematics	WH
12	73/4019	Branching point	BU-WH	73/4020	Branching point	BU-WH
13	16/60C1:2	Phone Module (PHM)	GY-VT	3/267:6	Switch unit, telematics	GY-VT
14	16/60C1:1	Phone Module (PHM)	BN-GN	3/267:5	Switch unit, telematics	BN-GN
15	16/60C1:4	Phone Module (PHM)	YE-VT	3/267:4	Switch unit, telematics	YE-VT
16	16/60C1:13	Phone Module (PHM)	VT	3/267:7	Switch unit, telematics	VT

74/418 RHD

6-pin gray

No.	Engine compartment			Dashboard		
1	27/5C1:1	Forward looking camera	WH	4/80C2:1	Forward Sensing Module (FSM)	WH
2	27/5C1:2	Forward looking camera	BN	4/80C2:2	Forward Sensing Module (FSM)	BN
3	27/5C1:3	Forward looking camera	GN	4/80C2:3	Forward Sensing Module (FSM)	GN
4	27/5C1:4	Forward looking camera	PK	4/80C2:4	Forward Sensing Module (FSM)	PK
5	27/5C1:5	Forward looking camera	GY	4/80C2:5	Forward Sensing Module (FSM)	GY
6	27/5C1:6	Forward looking camera	YE	4/80C2:6	Forward Sensing Module (FSM)	YE
S	27/5C1:S	Forward looking camera	-	4/80C2:S	Forward Sensing Module (FSM)	-

Connectors

74/511

22-pin gray

No.	Floor harness			Left rear axle harness		
1	11D/B6:2	Fuse, rear electrical center	GN-RD	74/520:6	Connector	GN-RD
2	31/65	Ground connection	BK-YE	73/5087	Branching point	BK-YE
3	73/5015 74/504:44	Branching point Connector	BU-BK	74/520:1	Connector	BU-BK
4	73/5016 74/504:45	Branching point Connector	GN-BK	74/520:2	Connector	GN-BK
5	-	-	-	-	-	-
6	74/504:12	Connector	GN-RD	7/56:2	Sensor ABS, rear left	BN
7	74/504:11	Connector	BU-OG	7/56:1	Sensor ABS, rear left	WH
8	73/5015	Branching point	BU-BK	73/5080 74/511:3	Branching point Connector, 2WD	BU-BK
9	73/5016	Branching point	GN-BK	73/5081 74/511:4	Branching point Connector, 2WD	GN-BK
10	-	-	-	-	-	-
11	-	-	-	-	-	-
12	74/525:4	Connector	GN-BU	8/22:1	Shock absorber, Four-C, rear left	GN-BU
13	74/525:5	Connector	YE-BU	8/22:2	Shock absorber, Four-C, rear left	YE-BU
14	74/525:1	Connector	YE-GN	7/120:5	Height sensor, suspension, rear left	YE-GN
15	74/525:2	Connector	GN-BN	7/120:1	Height sensor, suspension, rear left	GN-BN
16	74/525:3	Connector	VT-WH	7/120:4	Height sensor, suspension, rear left	VT-WH
17	74/504:18	Connector	YE-OG	4/83:5	Fuel pump control module	YE-OG
18	4/56C2:48 6/33:1	Central Electronic Module (CEM) Fuel pump	GN-BU	6/33:1 26/5	Fuel pump DC/AC converter, fuel tank	GN-BU
19	4/56C2:30 6/33:2	Central Electronic Module (CEM) Fuel pump	YE-VT	6/33:2 26/5	Fuel pump DC/AC converter, fuel tank	YE-VT
20	4/56C2:43	Central Electronic Module (CEM)	GN-OG	6/33:6	Fuel pump	GN-OG
21	73/5044	branching point	BU-WH	26/5	DC/AC converter, fuel tank	-BU-WH
22	-	-	-	-	-	-

Connectors

74/514 - 74/519:1-12

74/514

4-pin gray

No.	Floor harness		Left rear axle harness		
1	4/115C1:29	Parking Brake Module (PBM)	BU-GN	6/146:2	Lock motor, rear left brake disc
2	4/115C1:14	Parking Brake Module (PBM)	VT-BK	6/146:1	Lock motor, rear left brake disc
3	4/56C2:76	Central Electronic Module (CEM)	YE-OG	4/83:4 6/33:4	Fuel pump control module Fuel pump
4	31/65	Ground connection	BK-YE	74/520:4 74/520:2	Connector Connector

74/519

22-pin gray

No.	Infotainment harness		Engine compartment harness		
1	4/84C1:6	Suspension Module (SUM)	BU-BK	8/20:1	Shock absorber, Four-C, front left
2	4/84C1:7	Suspension Module (SUM)	VT-BN	8/20:2	Shock absorber, Four-C, front left
3	4/84C1:9	Suspension Module (SUM)	GY-YE	8/21:1	Shock absorber, Four-C, front right
4	4/84C1:8	Suspension Module (SUM)	BU-OG	8/21:2	Shock absorber, Four-C, front right
5	73/5052	Branching point	YE-GN	7/118:5	Height sensor, suspension, front left
6	4/84C1:12	Suspension Module (SUM)	BU-RD	7/118:4	Height sensor, suspension, front left
7	73/5066	Branching point	YE-GN	73/3077	Branching point
8	4/84C1:27	Suspension Module (SUM)	GY-VT	7/119:4	Height sensor, suspension, front right
9	4/84C1:22	Suspension Module (SUM)	BU-GY	7/88:1	Acceleration sensor, Four-C, front right
10	4/84C1:10	Suspension Module (SUM)	VT-RD	7/87:1	Acceleration sensor, Four-C, front left
11	4/84C1:19	Suspension Module (SUM)	GN-BN	73/3078	Branching point
12	4/86C2:2	Parking Assistance Module (PAM)	VT-GY	74/309:4	Connector

continues

Connectors

74/519:13-22 - 74/520

74/519

22-pin gray

No.	Infotainment harness			Engine compartment harness	
13	4/86C2:5	Parking Assistance Module (PAM)	BU-GN	74/309:5	Connector
14	4/86C2:1	Parking Assistance Module (PAM)	YE-OG	74/309:6	Connector
15	4/86C2:6	Parking Assistance Module (PAM)	BU-BK	74/309:10	Connector
16	4/86C2:7	Parking Assistance Module (PAM)	BU-GY	74/309:11	Connector
17	4/86C2:8	Parking Assistance Module (PAM)	BU-OG	74/309:12	Connector
18-22	-		-	-	-

74/520

6-pin gray

No.	Left rear axle harness			All wheel drive harness		
1	74/511:3	Connector	BU-BK	4/82C1:8	Differential Electronic Module (DEM)	BU-BK
2	74/511:4	Connector	GN-BK	4/82C1:7	Differential Electronic Module (DEM)	GN-BK
3	-		-	-		-
4	74/514:4	Connector	BK	4/82C1:4	Differential Electronic Module (DEM)	BK
5	74/514:4	Connector	BK-YE	4/82C1:2	Differential Electronic Module (DEM)	BK-YE
6	74/511:1	Connector	GN-RD	4/82C1:1	Differential Electronic Module (DEM)	GN-RD

Connectors

74/602 - 74/603:1-4

74/602

14-pin gray, V70

No.	Floor harness		Trunk lid harness		
1	2/82:5	Relay, heated rear window	GY-RD	9/2A:1	Rear window defroster
2	4/56C2:34 4/110C2:3	Central Electronic Module (CEM) Trailer Module (TRM)	YE-GY	10/19:2	Auxiliary brake light
3	4/56C2:59	Central Electronic Module (CEM)	GY-BN	73/6002	Branching point
4	4/56C2:73	Central Electronic Module (CEM)	GN-BN	73/6003	Branching point
5	4/56C2:39	Central Electronic Module (CEM)	BN-GN	73/6004	Branching point
6	10/25:4	Ceiling light, cargo compartment	BU-BK	3/78:3	Lock unit, trunk lid/tailgate
7	73/5105	Branching point	BK-OG	73/6001	Branching point
8	2/16:3	Relay, rear window wiper	GY-BU	6/32:1	Rear window wiper motor
9	4/56C2:52	Central Electronic Module (CEM)	YE-VT	10/3:1	License plate lighting
10	4/56C2:72	Central Electronic Module (CEM)	GN-VT	3/78:6	Lock unit, trunk lid/tailgate
11	4/56C2:71	Central Electronic Module (CEM)	GY-BN	3/78:4	Lock unit, trunk lid/tailgate
12	4/56C2:53	Central Electronic Module (CEM)	GN-YE	3/78:2	Lock unit, trunk lid/tailgate
13	4/56C2:10 4/116C2:5	Central Electronic Module (CEM) Power Operated Tailgate Module (POT)	YE-GO	3/78:5	Lock unit, trunk lid/tailgate
14	2/16:2	Relay, rear window wiper	VT-GN	6/32:2	Rear window wiper motor

74/603

22-pin gray, V70

No.	Floor harness		Trunk lid harness		
1	4/116C2:7 4/93C2:1	Power Operated Tailgate Module (POT) Keyless Vehicle Module (KVM)	GN-WH	3/78:7	Lock unit, trunk lid/tailgate
2	4/93C3:3 4/116C2:14	Keyless Vehicle Module (KVM) Power Operated Tailgate Module (POT)	GN-OG	3/78:8	Lock unit, trunk lid/tailgate
3	-	-	-	-	-
4	4/116C2:6	Power Operated Tailgate Module (POT)	YE-OG	3/78:9	Lock unit, trunk lid/tailgate

continues

Connectors

74/603:5-22 - 74/16123

74/603

22-pin gray, V70

No.	Floor harness		Trunk lid harness		
5	4/116C2:1	Power Operated Tailgate Module (POT)	GN-OG	6/149:3	Tailgate closing motor
6	4/116C2:8	Power Operated Tailgate Module (POT)	GN-BU	6/149:4	Tailgate closing motor
7	4/116C2:9	Power Operated Tailgate Module (POT)	GN	6/149:2	Tailgate closing motor
8	-		-	-	-
9	4/116C2:4	Power Operated Tailgate Module (POT)	GY-BN	3/291:1	Tailgate closing switch
10	73/5044	Branching point	BU-WH	3/291:5	Tailgate closing switch
11	4/116C2:2 4/93C5:18	Power Operated Tailgate Module (POT) Keyless Vehicle Module (KVM)	GY-YE	3/35:3	Switch, handle, trunk lid/tailgate
12	4/116C2:11	Power Operated Tailgate Module (POT)	BN-VT	7/227A:1	Tailgate pinch sensor, right
13	4/116C2:10	Power Operated Tailgate Module (POT)	BN-VT	7/227B:1	Tailgate pinch sensor, left
14	-		-	-	-
15	73/5110	Branching point	VT	16/132:2	Antenna door lock trunk lid/tailgate
16	73/5109	Branching point	GN-OG	16/132:1	Antenna door lock trunk lid/tailgate
17-22	-		-	-	-

74/16123

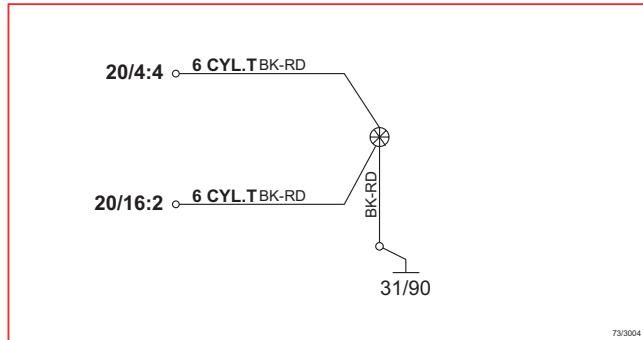
7-pin green

No.	Tunnel RSE		RSE-AUX input		
1	16/109D:19	DVD player/control module	BU	16/123.3:1	RSE-AUX input
2	16/109D:18	DVD player/control module	BN	16/123.3:2	RSE-AUX input
3	16/109D:4	DVD player/control module	WH	16/123.3:3	RSE-AUX input
4	16/109D:21	DVD player/control module	BU-RD	16/123.3:4	RSE-AUX input
5	16/109D:7	DVD player/control module	WH	16/123.3:5	RSE-AUX input
6	16/109D:21	DVD player/control module	-	-	-
7	16/109D:19	DVD player/control module	-	-	-

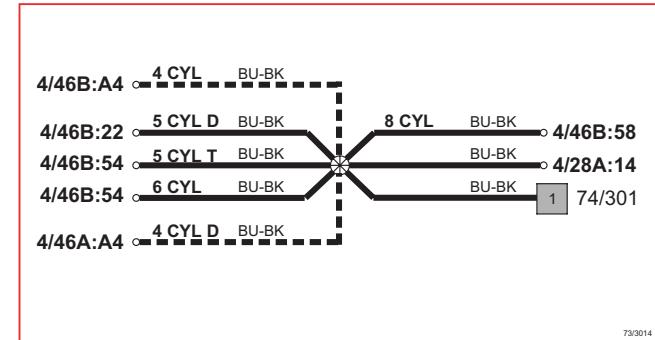
Branching points

73/3004 - 73/3039 4 Cyl.

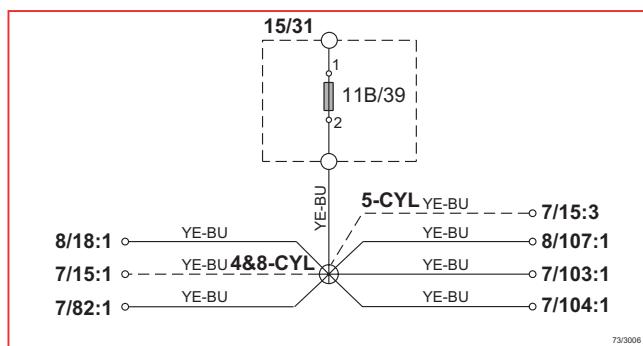
73/3004



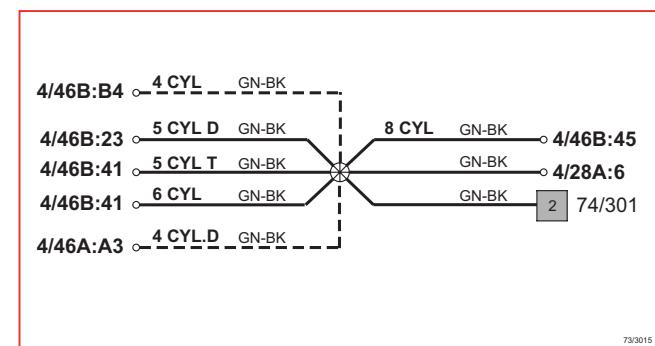
73/3014



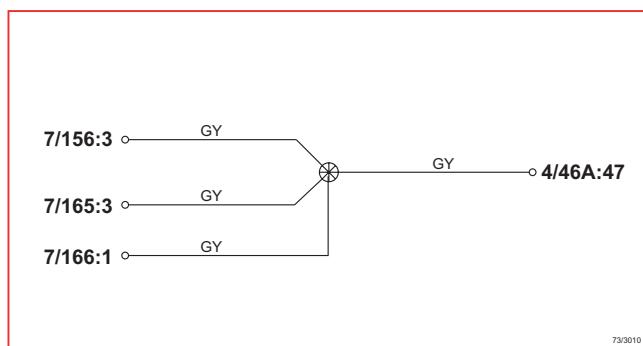
73/3006



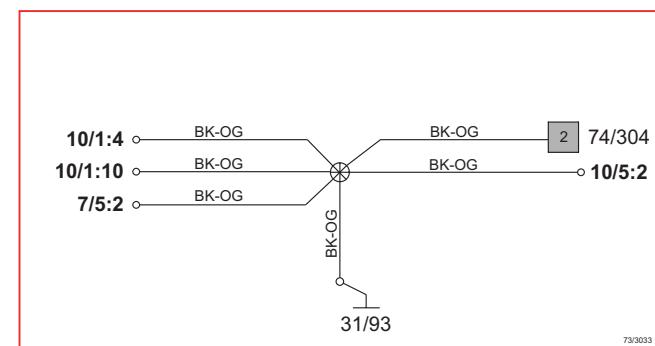
73/3015



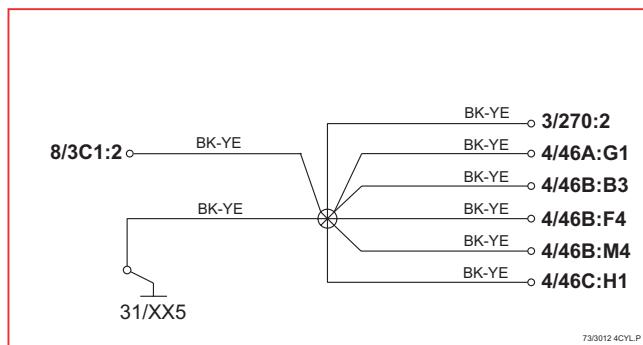
73/3010



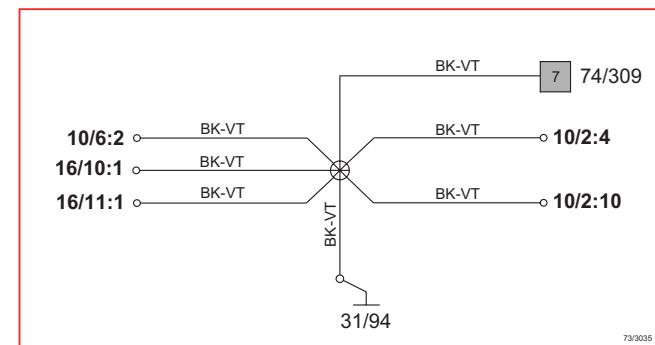
73/3033



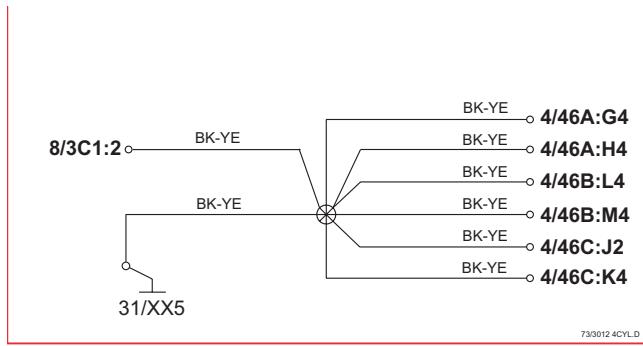
73/3012 4 Cyl.



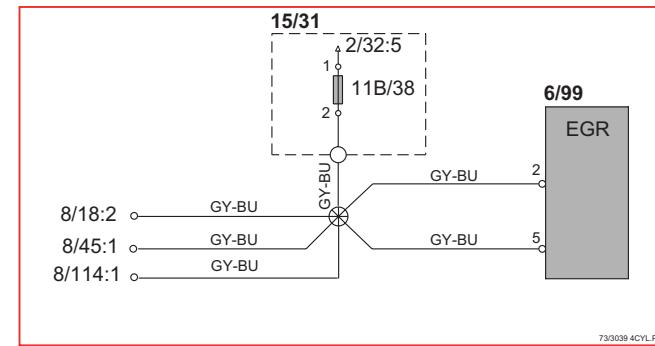
73/3035



73/3012 4 Cyl. Diesel



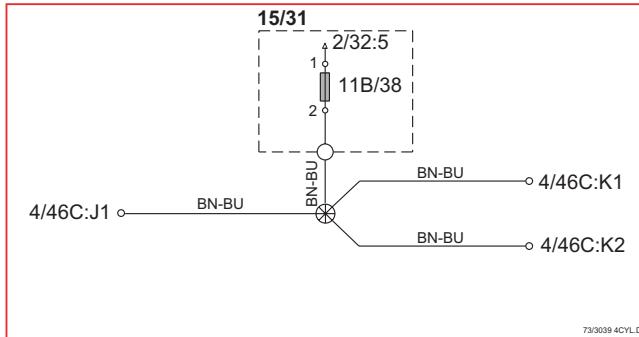
73/3039 4 Cyl.



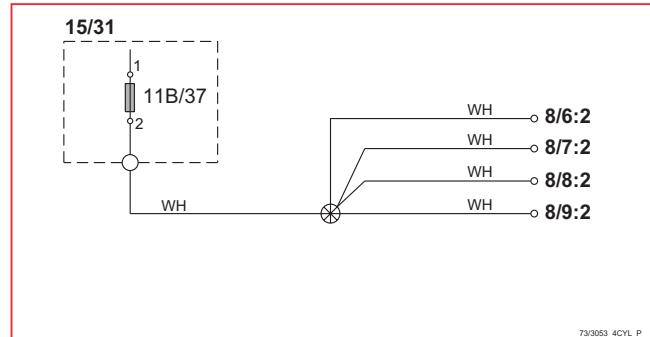
Branching points

73/3039 - 73/3059

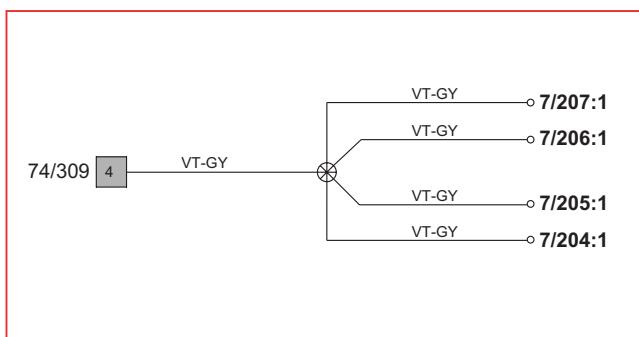
73/3039 4 Cyl. Diesel



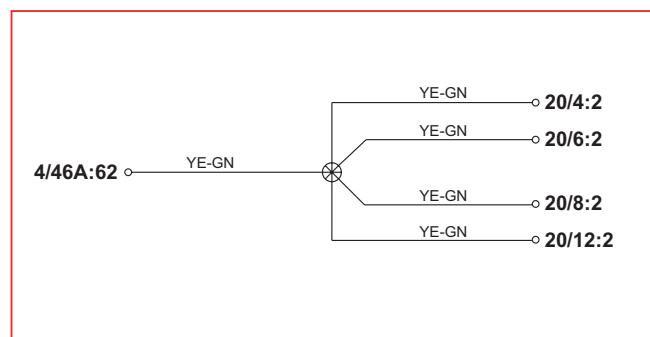
73/3053 4 Cyl.



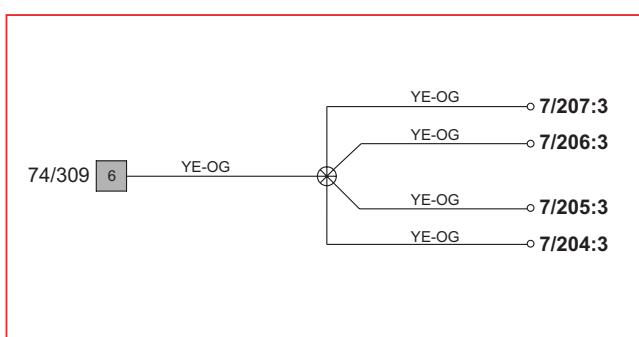
73/3046



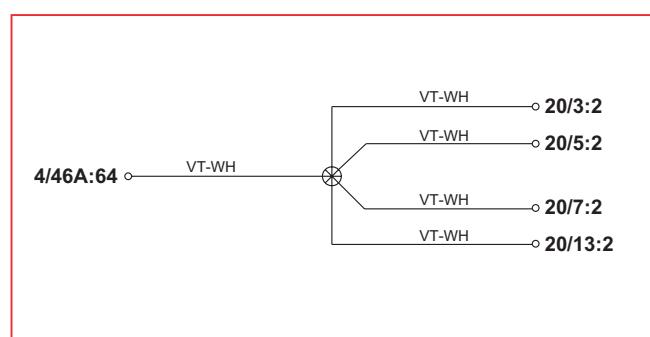
73/3056 8 Cyl.



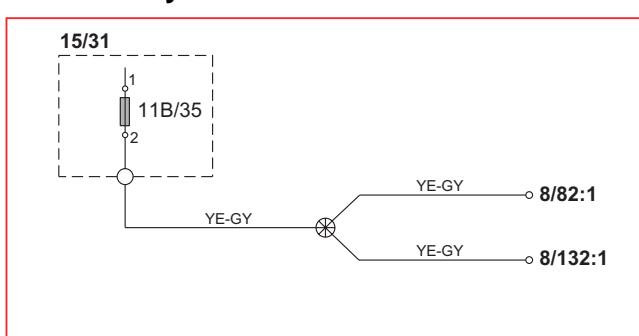
73/3047



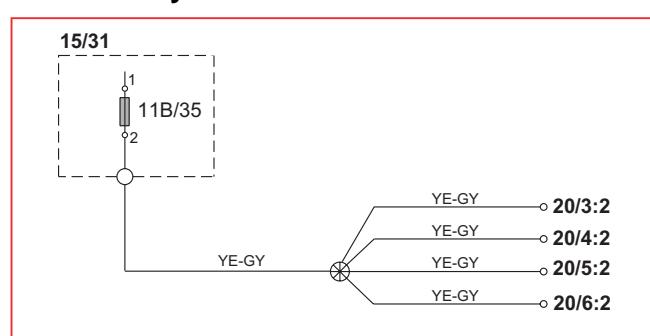
73/3057 8 Cyl.



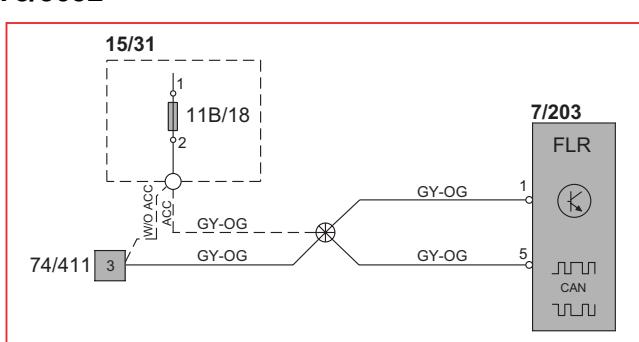
73/3050 4 Cyl. Diesel



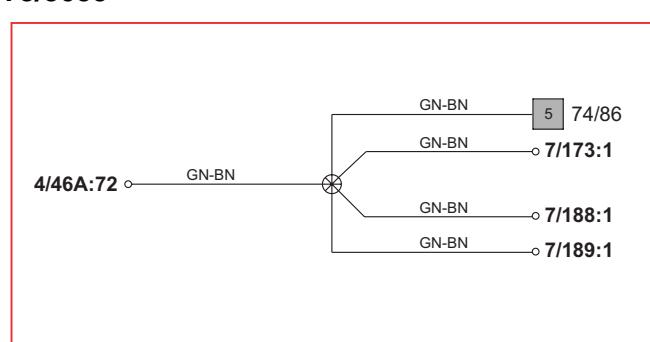
73/3058 4 Cyl.



73/3052

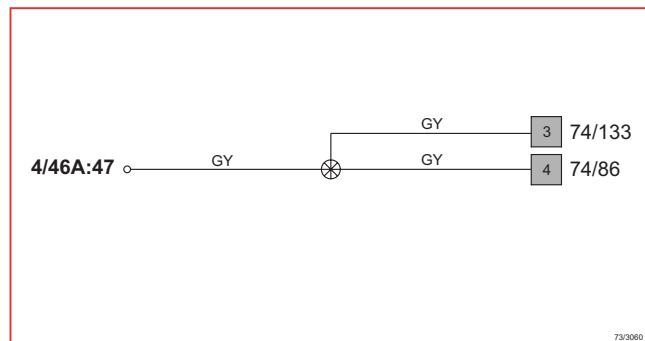


73/3059

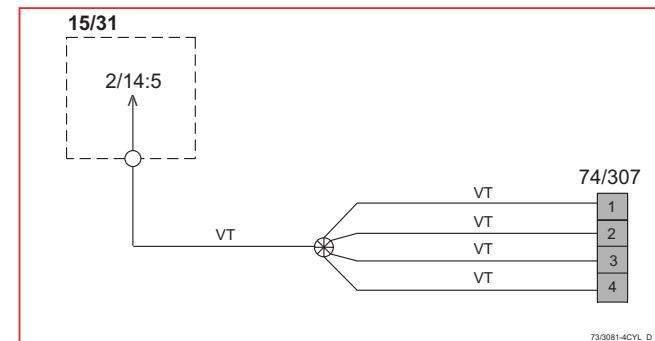


Branching points 73/3060 - 73/3094

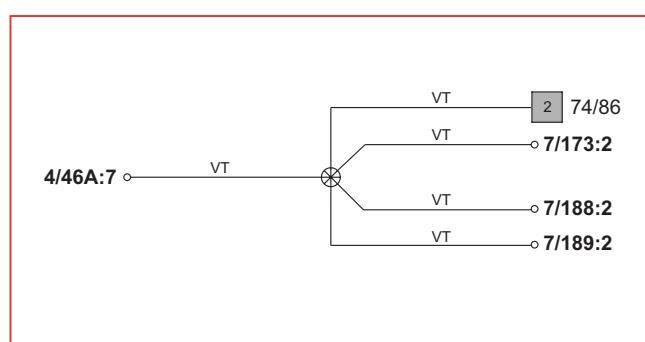
73/3060



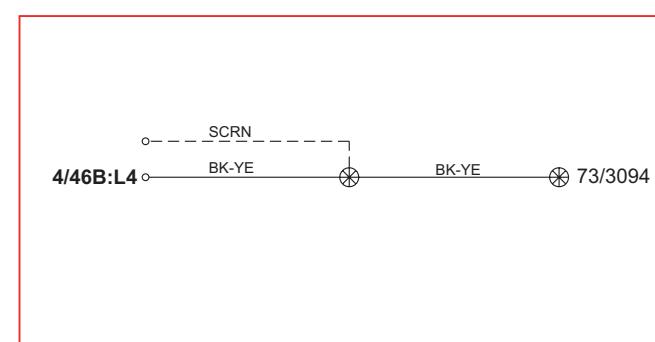
73/3081 4 Cyl. Diesel



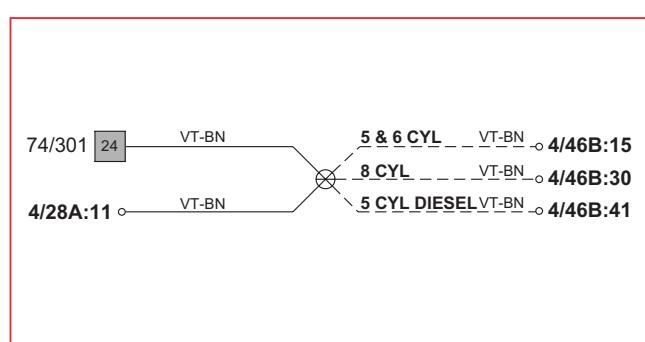
73/3061



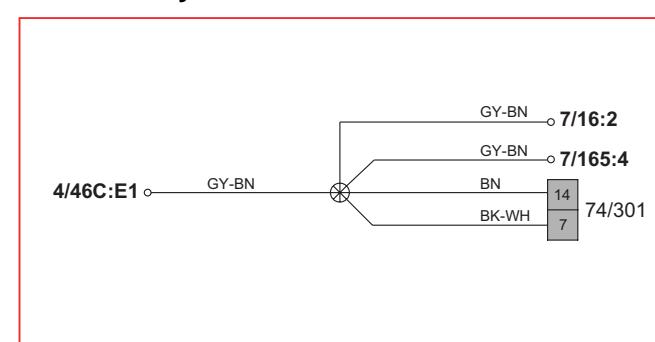
73/3083 4 Cyl.



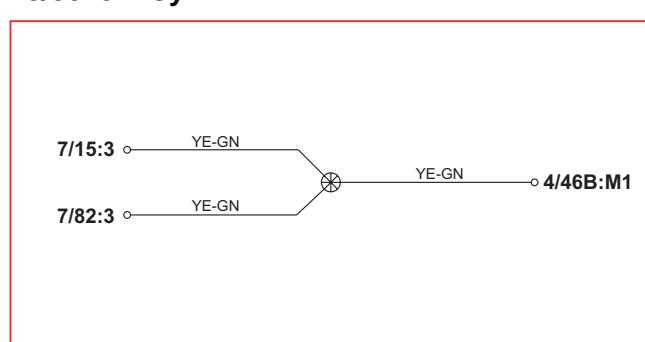
73/3064



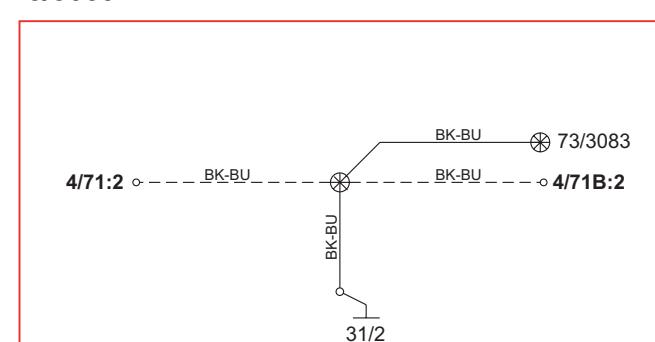
73/3084 4 Cyl.



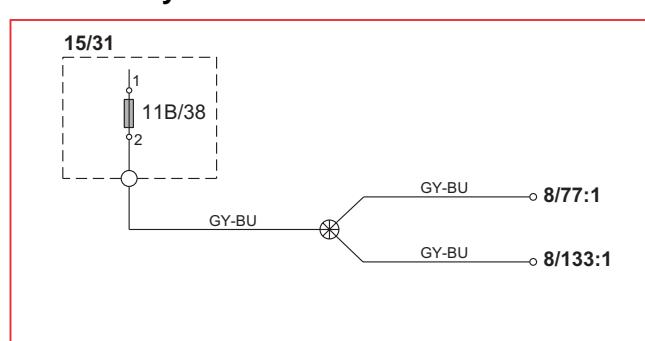
73/3079 4 Cyl.



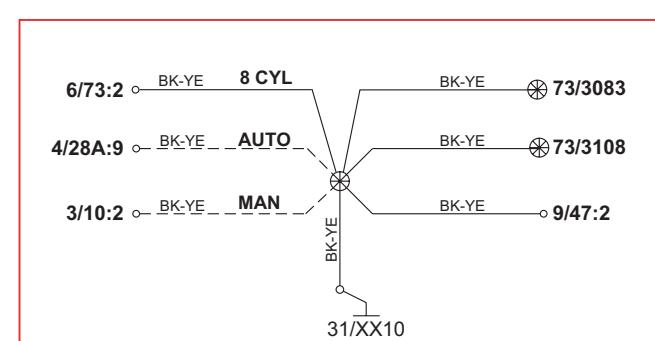
73/3089



73/3080 4 Cyl. Diesel

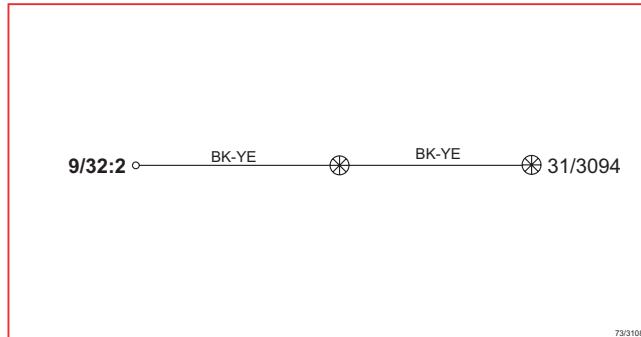


73/3094

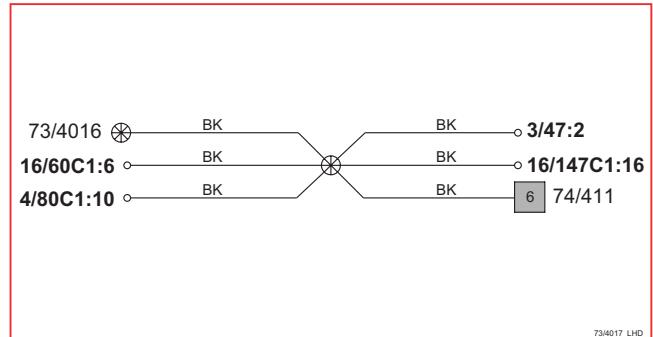


Branching points 73/3108 - 73/5027

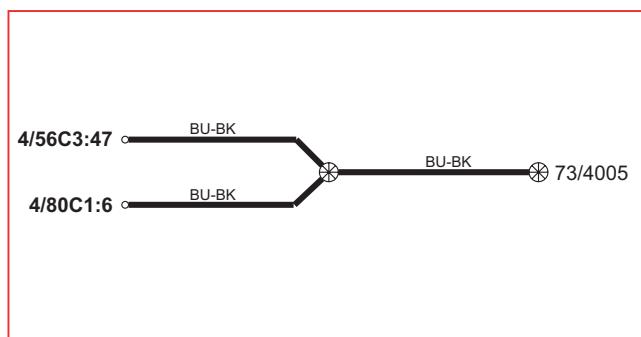
73/3108



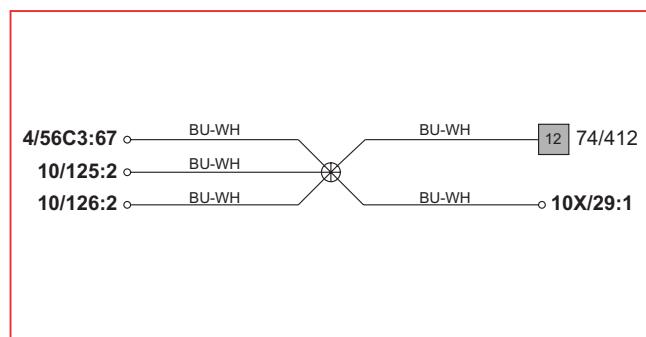
73/4017 LHD



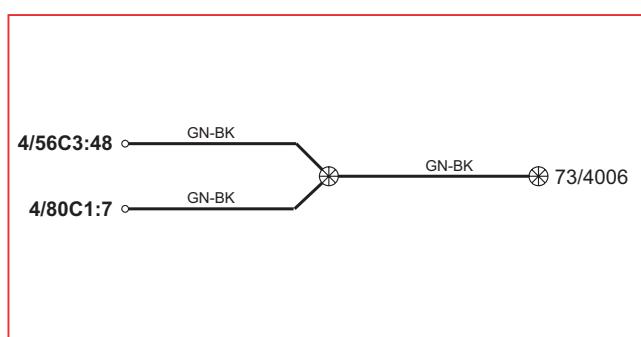
73/4007



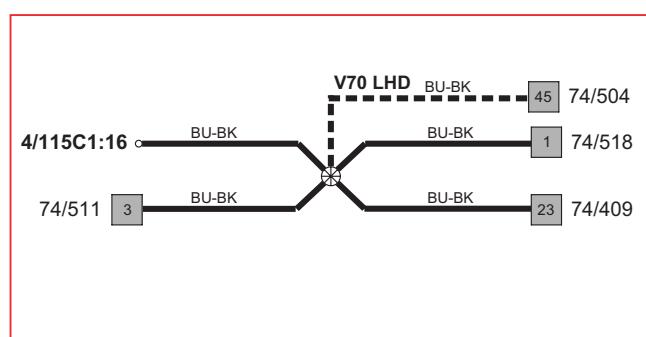
73/4019



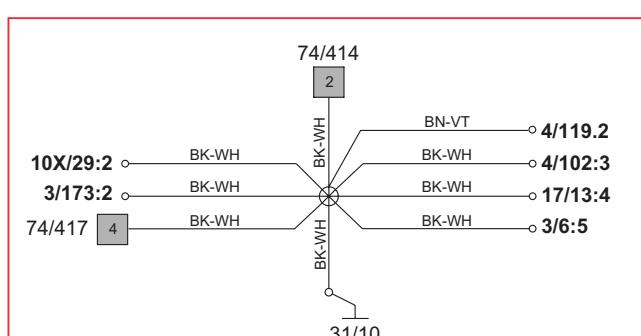
73/4008



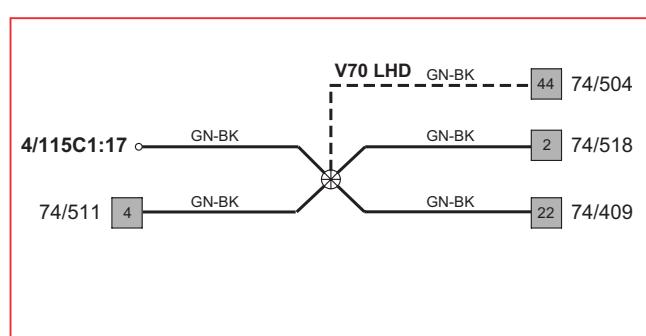
73/5015



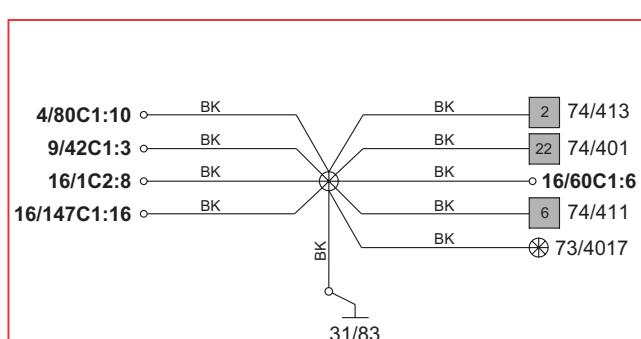
73/4012



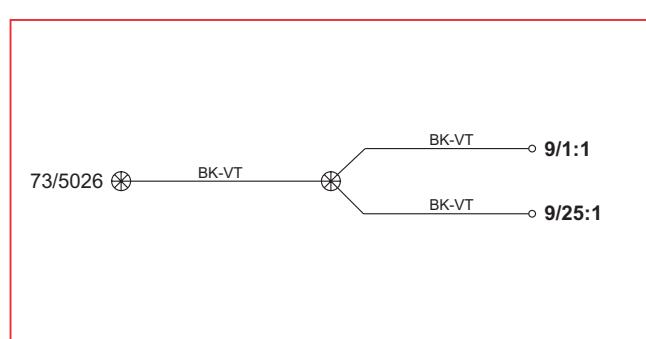
73/5016



73/4016 RHD



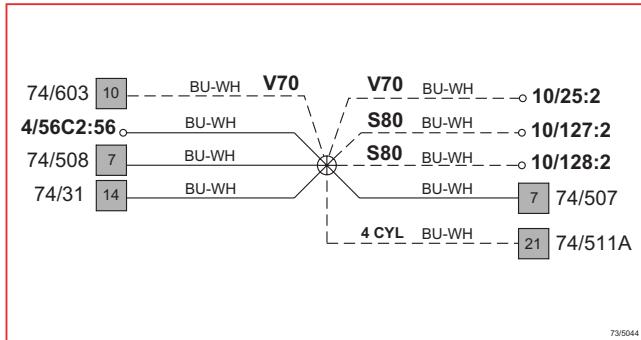
73/5027



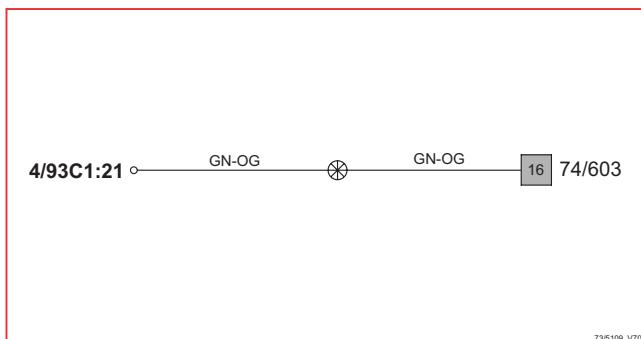
Branching points

73/5044 4 Cyl. - 73/6001 V70

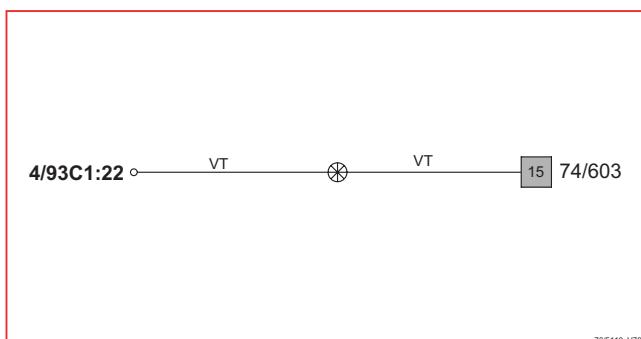
73/5044 4 Cyl.



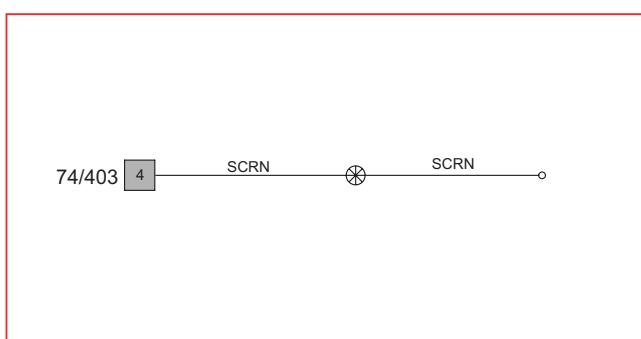
73/5109 V70



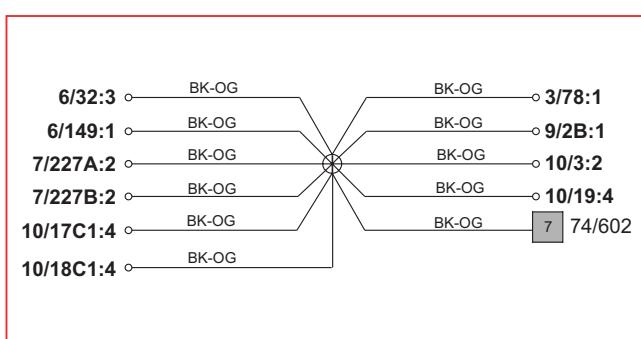
73/5110 V70



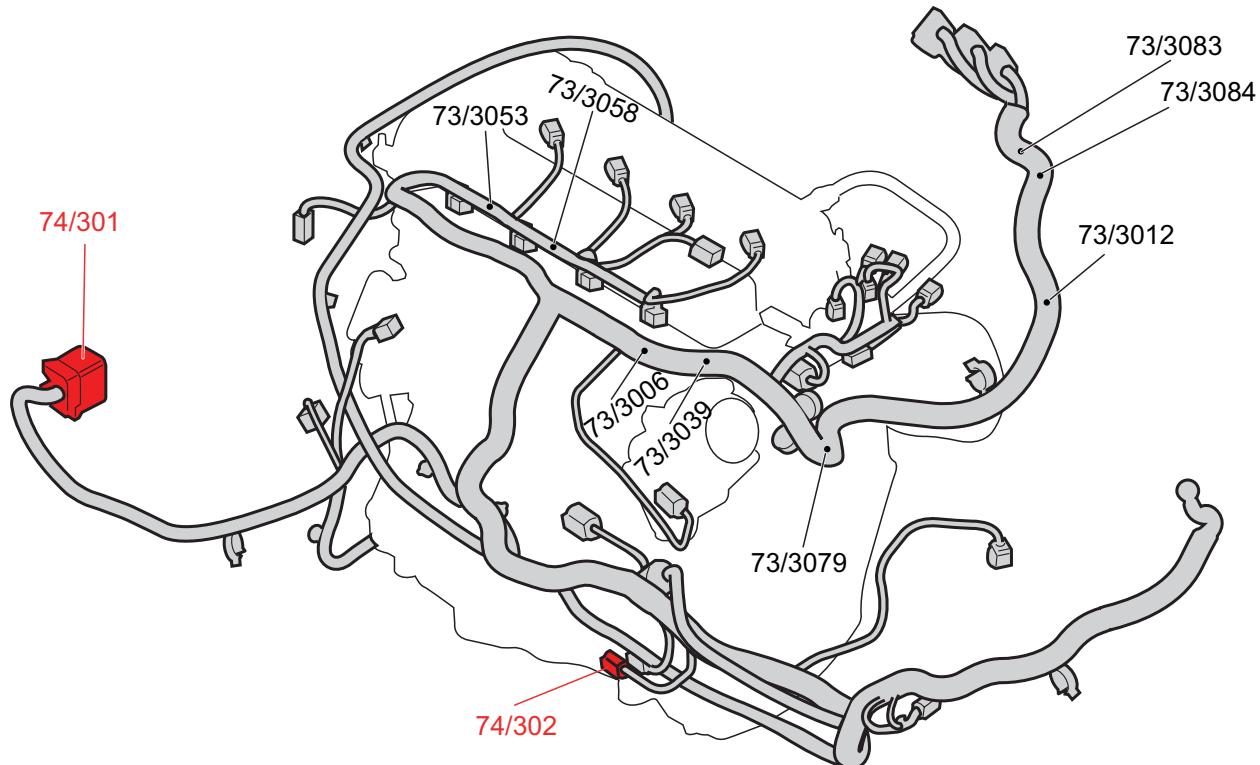
73/5575 RSE



73/6001 V70

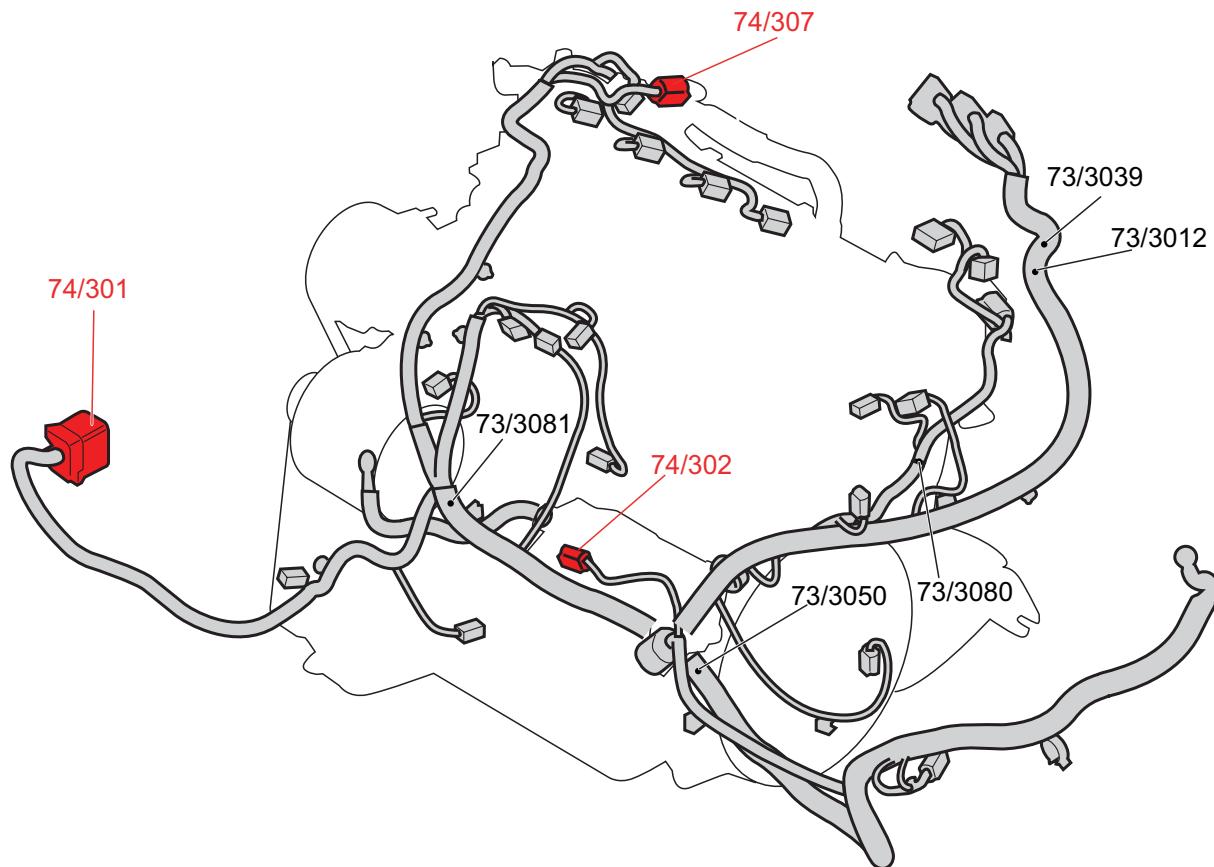


**Cable harness routing in vehicle
Engine harness, 4 Cyl.**



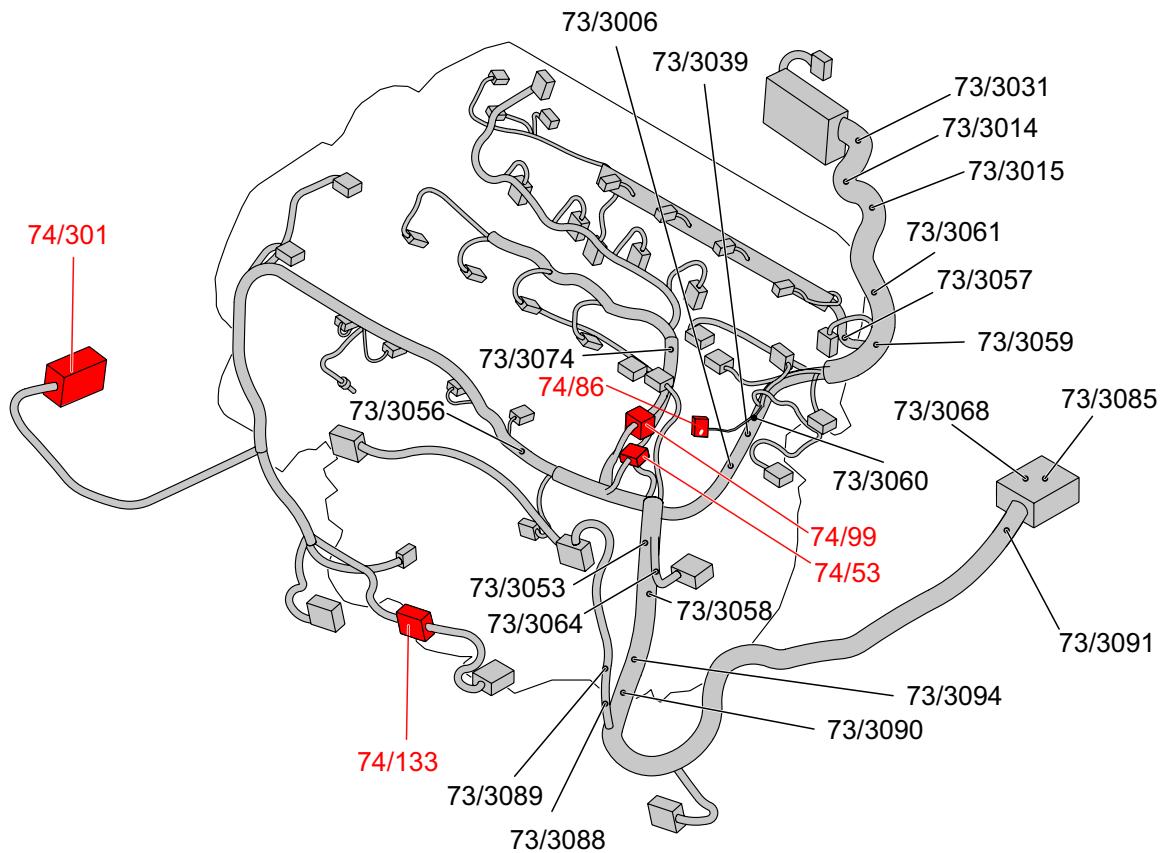
G028507

**Cable harness routing in vehicle
Engine harness, 4 Cyl. Diesel**

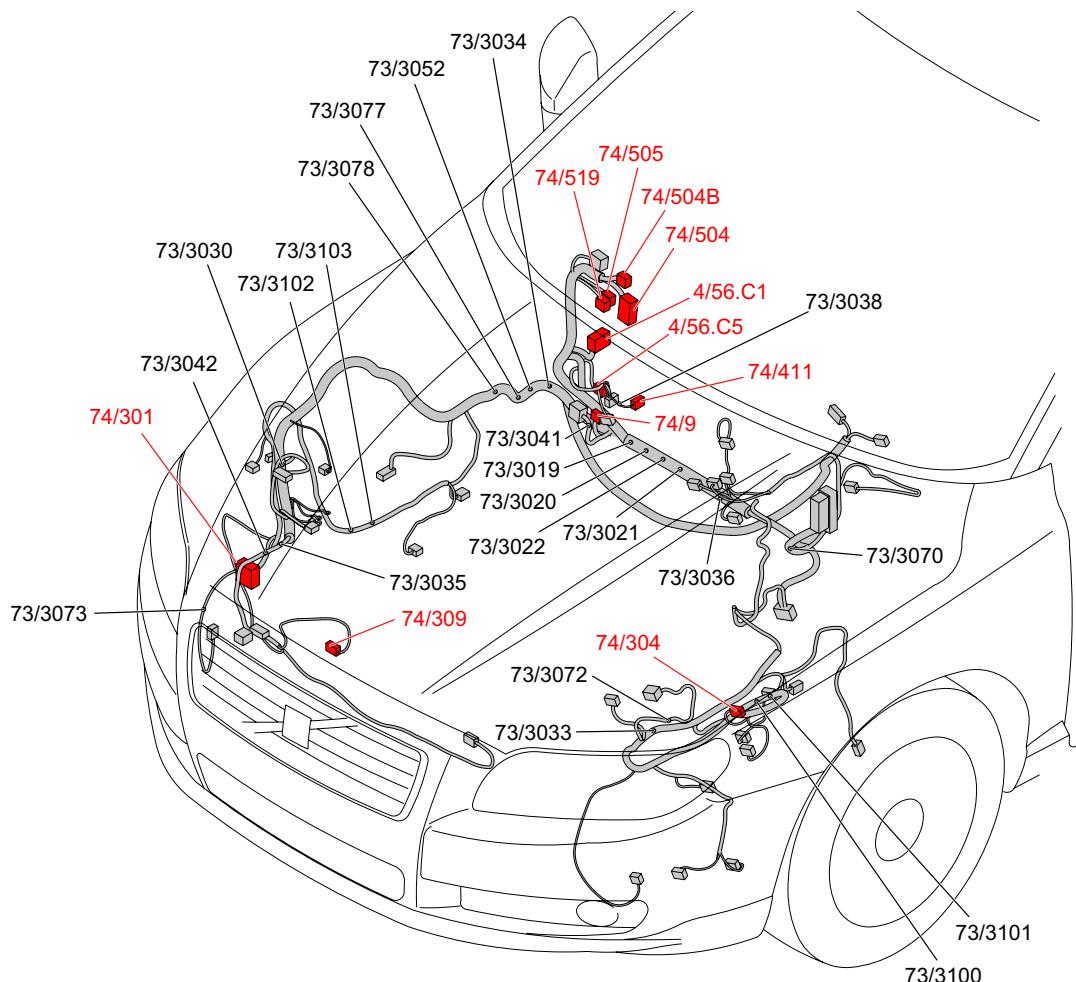


G028508

Cable harness routing in vehicle Engine harness, 8 Cyl.



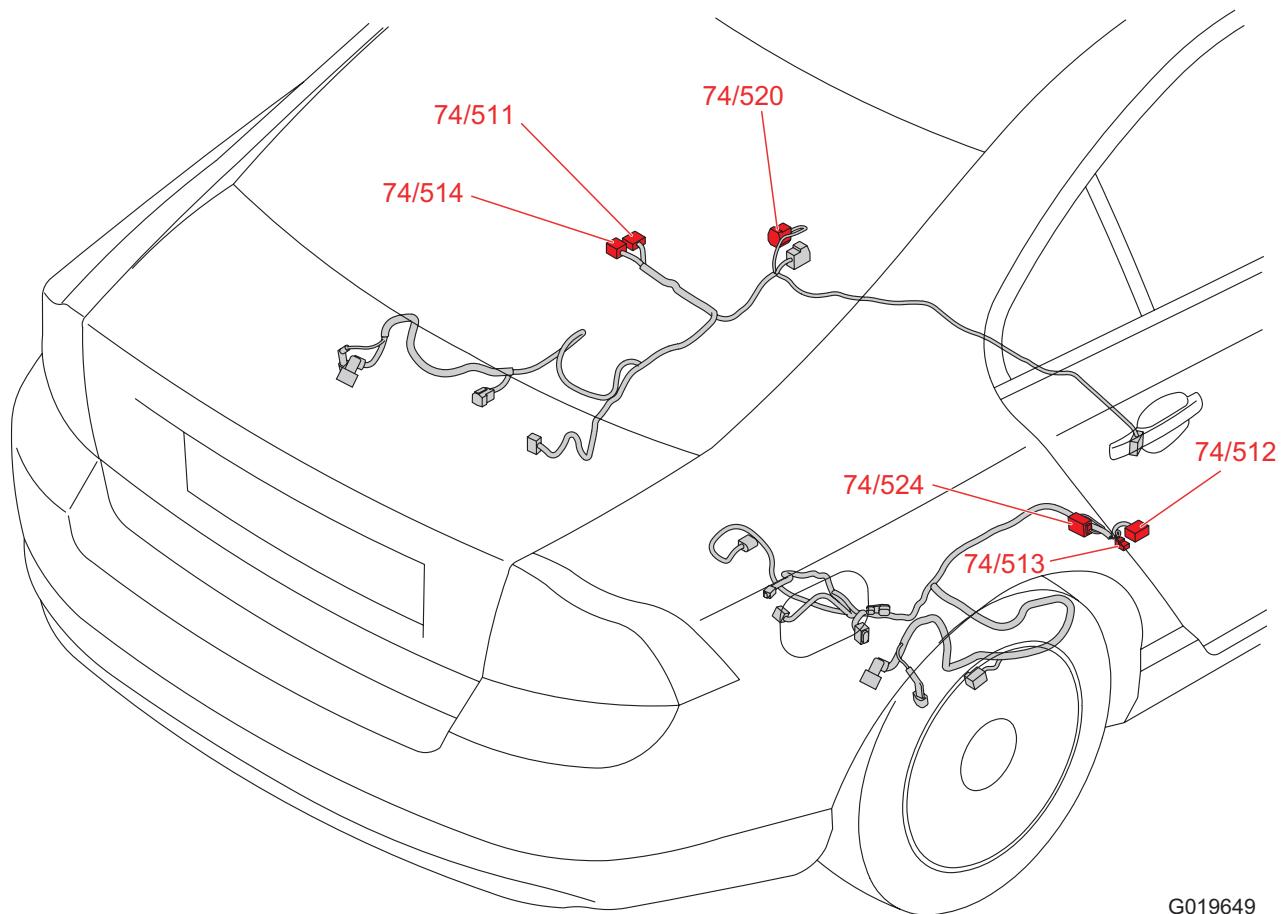
Cable harness routing in vehicle Harness engine compartment



Cable harness routing in vehicle Harness ceiling



Cable harness routing in vehicle Harnesses rear axle

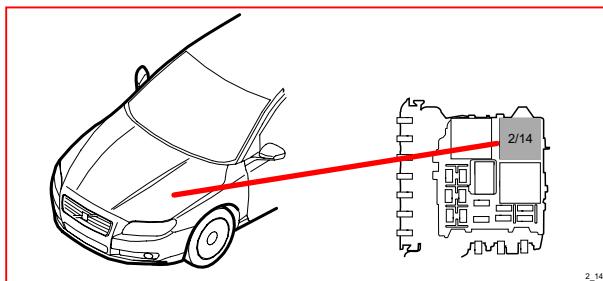


G019649

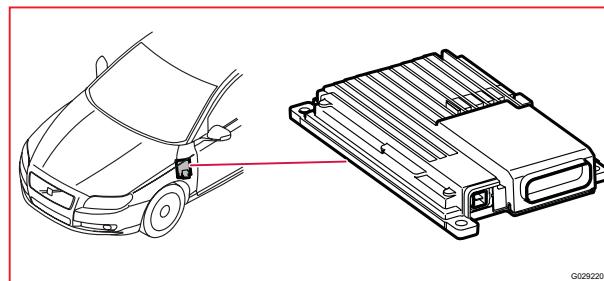
Component illustrations

2/14 - 7/71

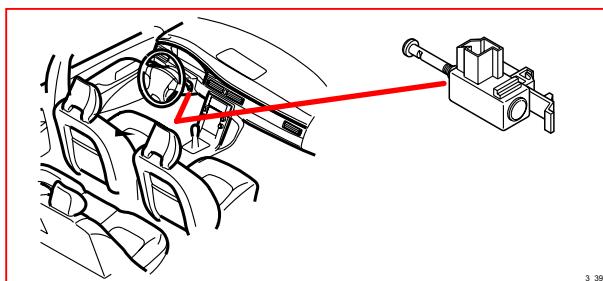
2/14 Relay, glow plug system



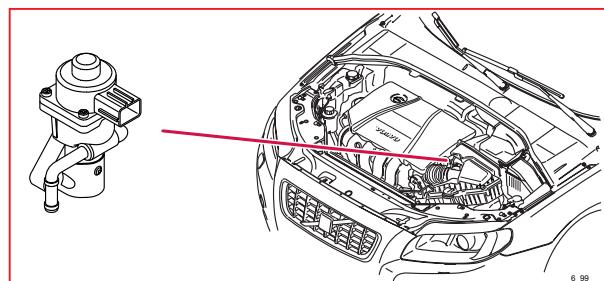
4/80 Forward Sensing Module (FSM)



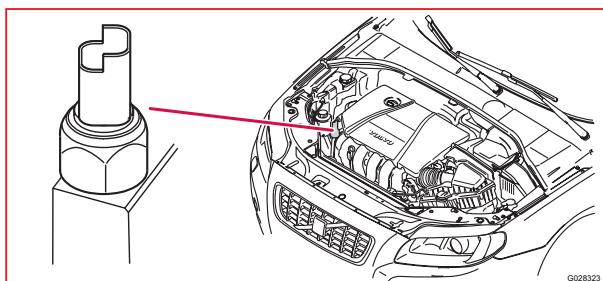
3/39 Clutch pedal contact



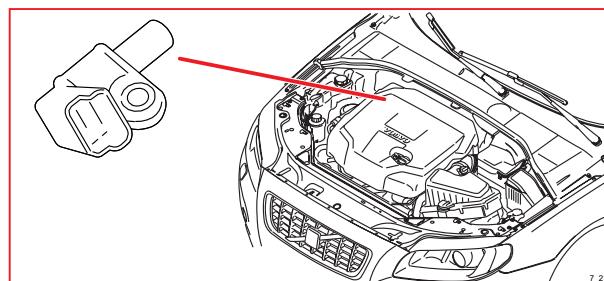
6/99 Engine EGR



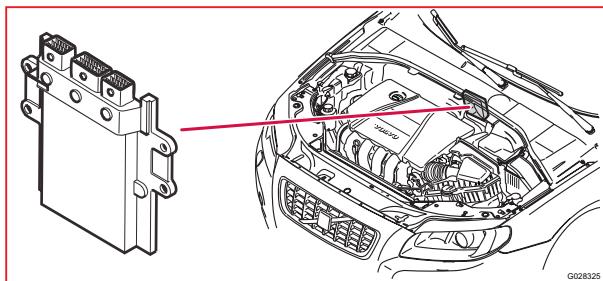
3/270 Contact servo pressure



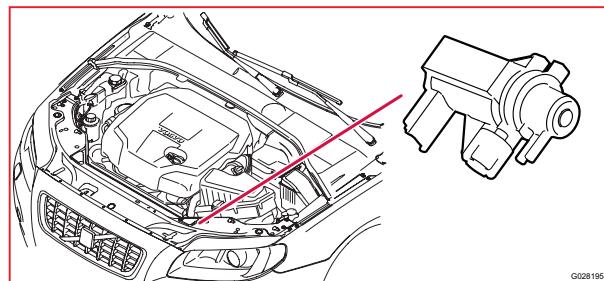
7/21 Camshaft position sensor



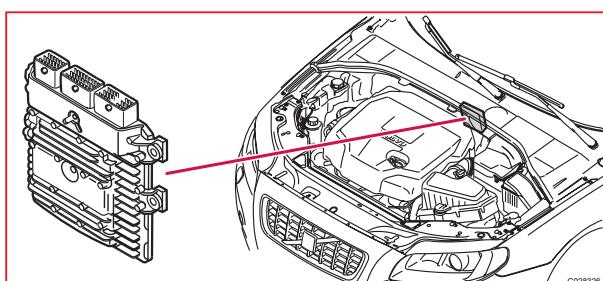
4/46 Engine Control Module (ECM), 4 Cyl.



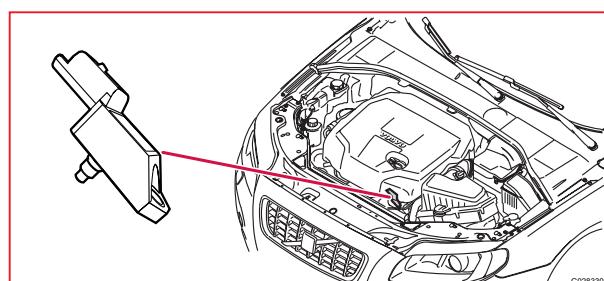
7/54 Intake throttle position sensor



4/46 Engine control module (ECM), 4 Cyl.
Diesel



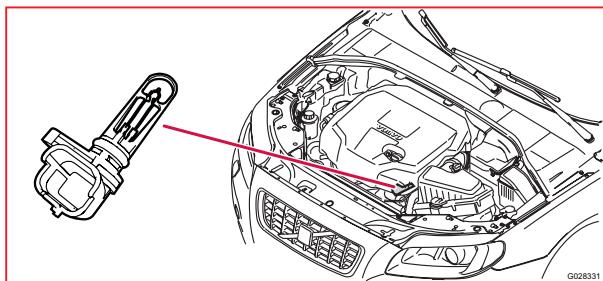
7/71 Sensor boost pressure



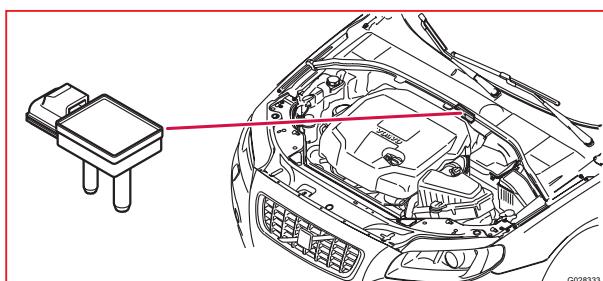
Component illustrations

7/77 - 8/133

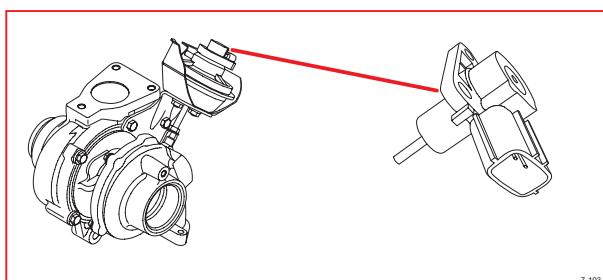
7/77 Temperature sensor, intake air 1



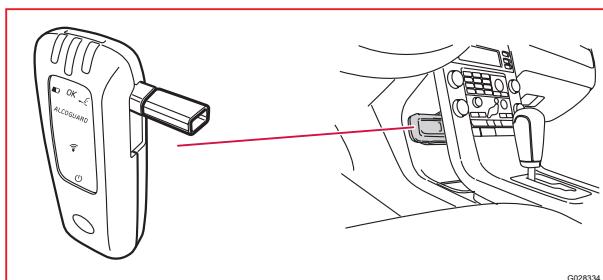
7/174 Differential pressure sensor, particle filter



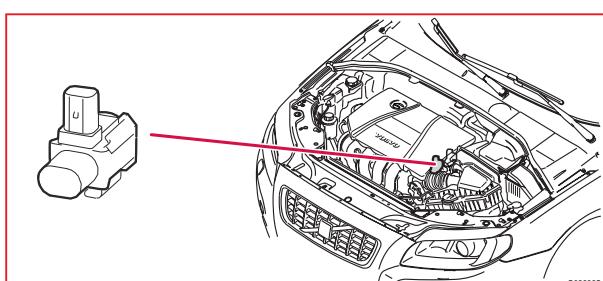
7/193 Position sensor turbo



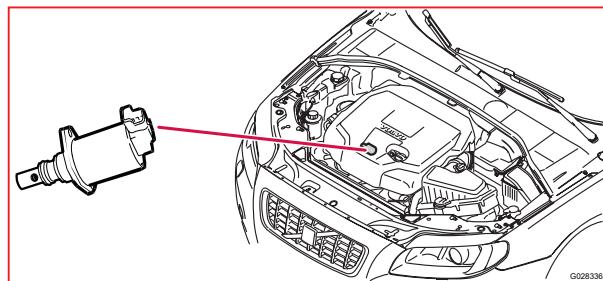
7/238 Alcolock sensor



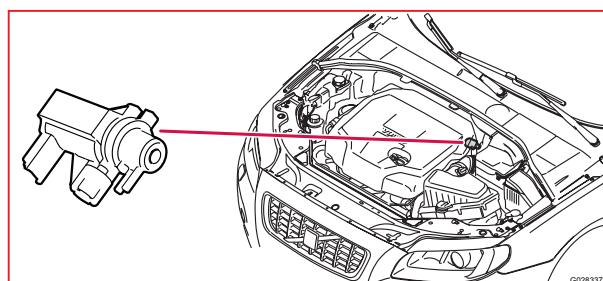
8/45 Vacuum valve variable intake manifold



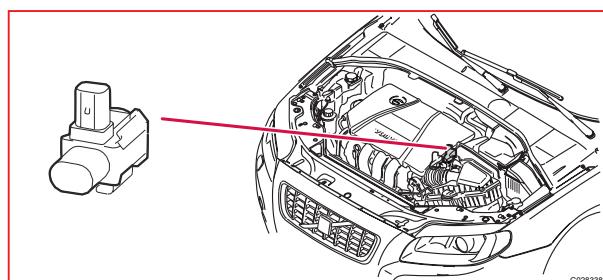
8/77 Control valve, fuel volume



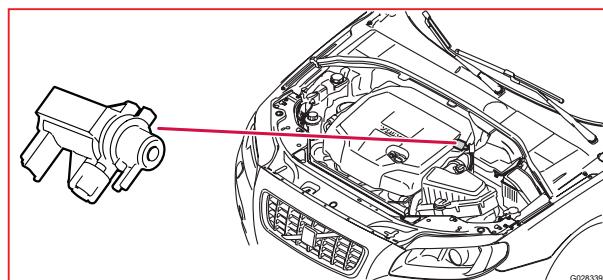
8/82 Solenoid, variable turbo geometry



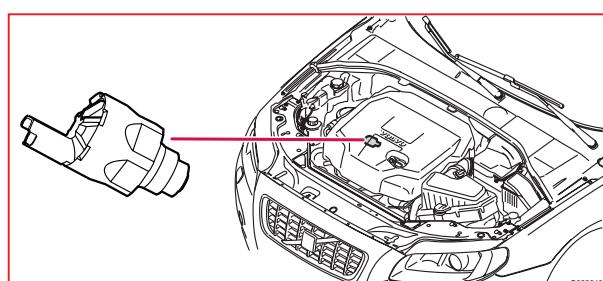
8/114 Valve mixing air/fuel



8/132 Control valve inlet



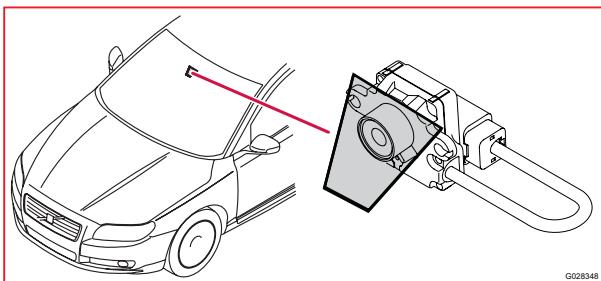
8/133 Control valve fuel pressure



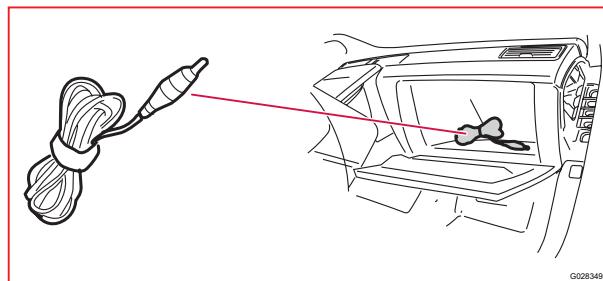
Component illustrations

9/39 - 27/5

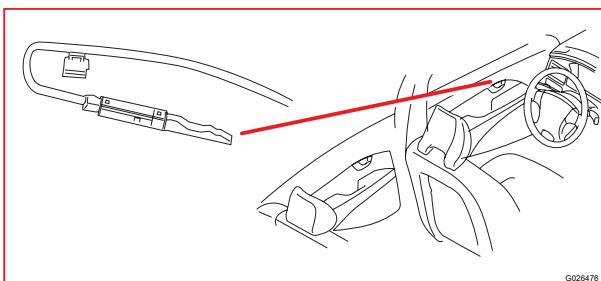
9/39 Heating element camera



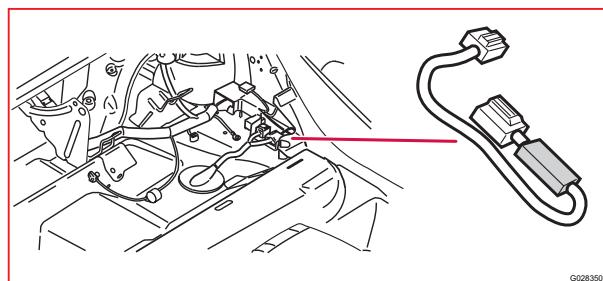
17/45 Alcolock outlet



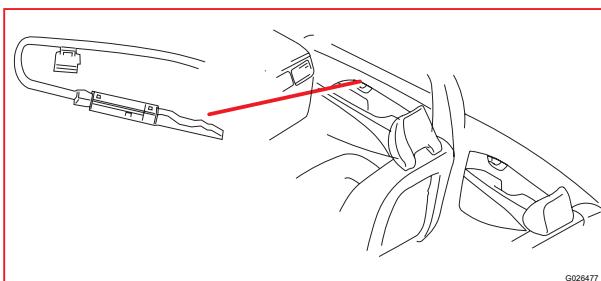
10/241 Left-hand front door handle lighting



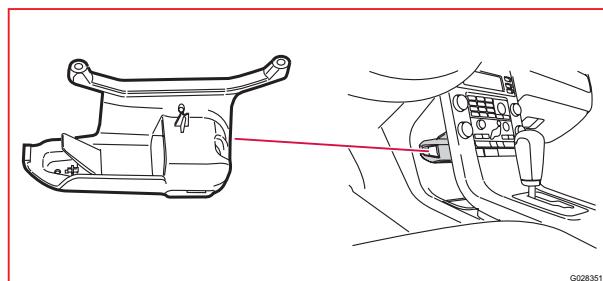
26/5 DC/AC converter, fuel tank



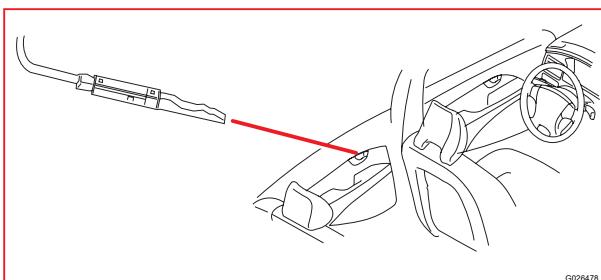
10/242 Right-hand front door handle lighting



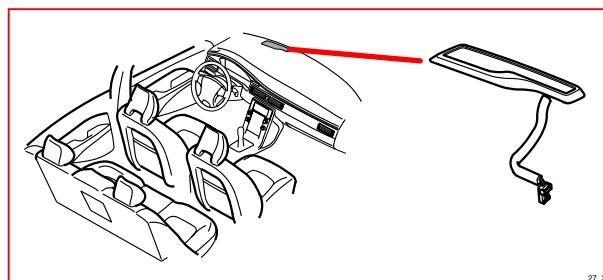
26/8 Alcolock charging cradle



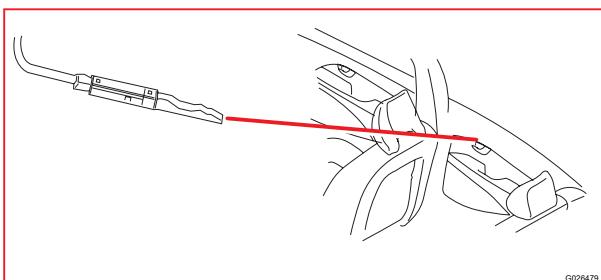
10/243 Left-hand rear door handle lighting



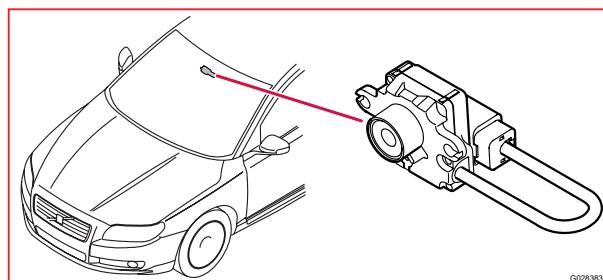
27/2 Indicator, visual collision warning



10/244 Right-hand rear door handle lighting



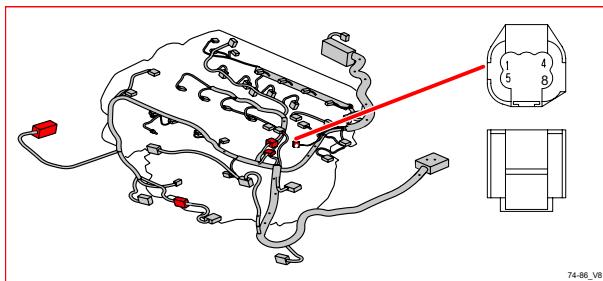
27/5 Forward looking camera



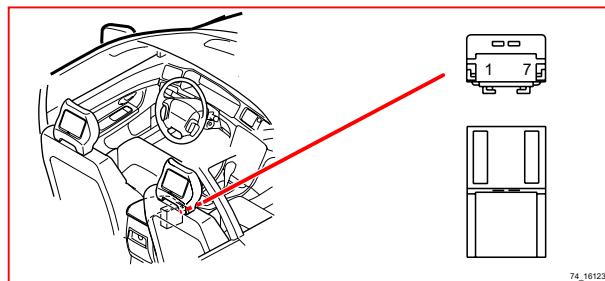
Component illustrations

74/86 - 74/16123

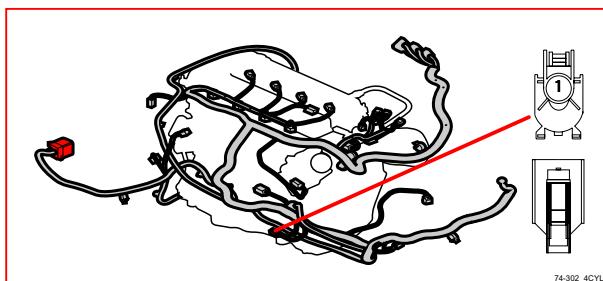
74/86 Connector



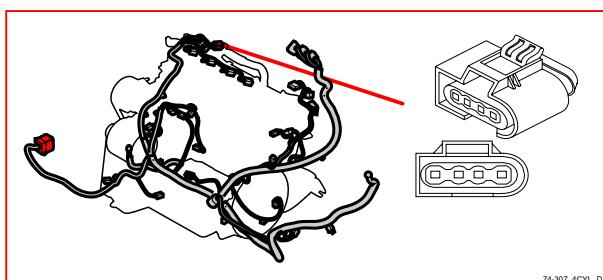
74/16123 Connector



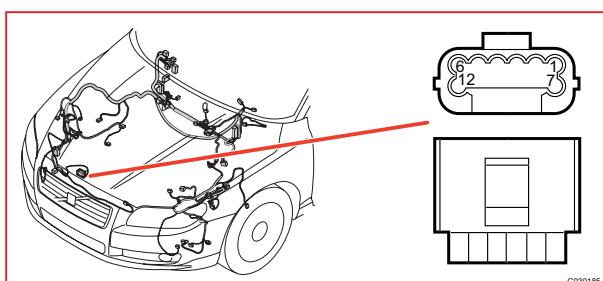
74/302 Connector



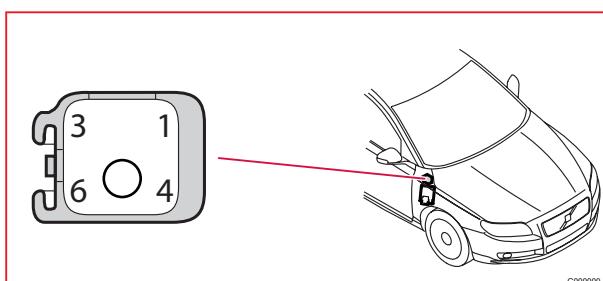
74/307 Connector



74/309 Connector



74/418 Connector



Index

A

Abbreviations	5
Accessories	85, 86, 87, 88
Alcolock	85
Alternator and voltage regulator, Group 32	68
Audio	90
Audio Premium	92

B

Brake light	73
Branching points	112

C

Cable harness routing in vehicle	117
Climate control system	98, 99
Climate control system, group 87	98
Collision warning with brake servo	84
Component illustrations	120
Connectors	100
Control modules	36
Cooling fan	58, 59, 60, 61, 62
Cooling system, Group 26	58
Countries/Markets, abbreviations	5
Cruise control	63, 64, 65, 66, 67

D

Data communication high speed CAN	38
Data communication LIN	40
Data communication MOST	42
Differential Electronic Module (DEM)	96
Direction indicator	77, 78
Door handle lighting	75, 76
Driver information module	89

E

Electrical distribution overview	8
Electronic parking brake	97
Emission control, 4 Cyl.	56
Emission control, 8 Cyl.	57
Engine controls, Group 27	63
Engine harness 4 Cyl.	117
Engine harness 4 Cyl. Diesel	117
Engine harness 8 Cyl.	118
Engine management system, 4 Cyl.	46
Engine management system, 4 Cyl. Diesel	50
Engine management system, 4 Cyl. Flexifuel	48
Engine management system, 5 Cyl. Diesel	43
Engine management system, 6 Cyl. Turbo	52
Engine management system, 8 Cyl.	54

F

Fog lights	72
Fuel system, group 23	43
Fuses	10
Fuses at the battery	22
Fuses in cargo compartment distribution box	19, 20, 21
Fuses in Central Electronic Module (CEM)	16, 17, 18
Fuses in engine compartment distribution box	10
Fuses in the engine compartment distribution box	11, 12, 13, 14, 15

G

Group number, abbreviations	5
-----------------------------------	---

H

Harness Ceiling	119
Harness engine compartment	118
Harnesses rear axle	119
Hazard warning flashers	77, 78
High-pressure headlight washer	79
How to use the wiring diagrams	6

I

Ignition switch symbols	5
Instruments, group 38	89

K

Keyless vehicle (KVM)	82
-----------------------------	----

L

Lighting, Group 35	70
List of symbols	7

O

Other electrical equipment	77
Other, Group 39	90
Overview of control module locations	36
Overview of ground connections	28

P

Parking assistance	81
Parking brake, Group 55	97
Power supply	68

R

Relays	23
Relays in Engine compartment distribution box ...	24, 25
Relays in the Central Electronic Module (CEM)	27
Reversing lights	74
Running/parking lights	70
Running/parking lights, (Bi-Xenon)	71

S

Starting system, Group 33	69
---------------------------------	----

T

Tail lights	70
Tail lights (Bi-Xenon)	71
Tow hitch cable harness, 13-pin	88
Tow hitch cable harness, 4-pin	86
Tow hitch cable harness, 7-pin	87

W

Wiper/washer rear window	80
Wiring and fuses, Group 37	86

List of components 1:4

1/1	Battery	4/46	Engine control module (ECM), 4 Cyl. Diesel
2/14	Relay, glow plug system	4/56	Central Electronic Module (CEM)
2/16	Rear window wiper relay, V70	4/68	Steering Wheel Angle Sensor Module (SAS)
2/17	Relay, horn	4/71	Cooling fan control module
2/22	Relay, climate control system	4/71B	Twin cooling fan control module
2/31	Relay, 15-feed	4/80	Forward Sensing Module (FSM)
2/32	Main relay, engine management system	4/82	Differential Electronic Module (DEM)
2/35	Relay, starter motor	4/83	Fuel pump control module
2/75	Rear adjustable head restraint relay	4/84	Suspension Module (SUM)
2/82	Relay, heated rear window	4/86	Parking Assistance Module (PAM)
2/88	Relay, 15-feed rear	4/93	Keyless Vehicle Module (KVM)
2/193	Relay, comfort functions	4/102	Steering Column Lock Module (SCL)
2/239	Relay, coolant pump, 8 Cyl.	4/109	Glow plug control module
		4/115	Parking Brake Module (PBM)
3/4	Steering wheel switch left (SWSL)	4/118	Headlamp Control Module (HCM)
3/9	Contact brake light	4/119	Signal receiver, keyless vehicle (RKE)
3/19	Power window switch, rear left door	4/119.2	Remote Receiver Module (RRX)
3/21	Power window switch, right rear door	4/120	Parking Assistance Camera module (PAC)
3/35	Switch, handle, trunk lid/tailgate	5/1	Driver Information Module (DIM)
3/35	Switch, handle, trunk lid/tailgate	6/1	Wiper Motor Module (WMM)
3/39	Clutch pedal contact	6/25	Starter motor
3/35	Switch, handle, trunk lid/tailgate	6/26	Alternator Control Module (ACM)
3/47	Parking brake contact	6/28	Motor, passenger compartment fan
3/65	Switch, heated rear seat	6/33	Fuel pump
3/80	Switch, central locking system, driver's door	6/36	Lock motor, central locking, LH front door
3/82	Switch, central locking system, passenger door	6/48	Damper Motor Module (DMM), recirculation
3/83	Switch, passenger door power window	6/55	Lock motor, central locking, RH front door
3/111	Light Switch Module (LSM)	6/56	Lock motor, central locking, RH rear door
3/112	Climate control system	6/57	Lock motor, central locking, LH rear door
3/126	Driver Door Module (DDM)	6/62	Power door mirror, left
3/127	Passenger Door Module (PDM)	6/63	Power door mirror, right
3/128	Rear left Door Module (LDM)	6/67	Pump, fuel leakage control
3/129	Rear Right Door Module (RDM)	6/73	Coolant pump
3/130	Steering Wheel Module (SWM)	6/95	Damper Motor Module (DMM), temperature, left side
3/132	Start Control Module (SCU)	6/96	Damper Motor Module (DMM), temperature, right side
3/156	Gear Selector Module (GSM)	6/99	Engine EGR
3/176	Power window switches, driver's door	6/102	Damper Motor Module (DMM), defroster
3/270	Contact servo pressure	6/103	Damper Motor Module (DMM), floor/ventilation
3/271	Contact, immobilizer, clutch pedal	6/104	High pressure headlight washer motor
3/272	Switch, parking brake	6/118	Regulator motor, swirl throttle
3/273	Lock contact, LH front door	6/120	Engine throttle body
3/274	Lock contact, RH front door	6/127	Washer motor
3/275	Lock contact, left rear door	6/143	Regulator motor, Turbo
3/276	Lock contact, RH rear door	6/144	Telescopic nozzle, left
3/281	Infotainment Control Module (ICM)	6/145	Telescopic nozzle, right
3/284	Diagnostic contact, brake light	6/146	Lock motor, rear left brake disc
		6/147	Lock motor, rear right brake disc
4/6	Climate Control Module (CCM)		
4/16	Brake Control Module (BCM)		
4/28	Transmission Control Module (TCM)		
4/31	Fan control module		
4/46	Engine Control Module (ECM), 4-cyl.		

List of components 2:4

7/4	Brake fluid level sensor	7/203	Forward-aimed radar (FLR)
7/5	Washer fluid level sensor	7/204-	
7/6	Oil pressure monitor	7/207	Front parking assistance sensor
7/8	Pressure sensor, climate control system	7/214	Heartbeat sensor
7/10	Interior temperature sensor	7/238	Alclock sensor
7/12	Solar sensor, twilight sensor and indicator alarm	8/3	Electromagnetic clutch, climate control system
7/15	Heated oxygen sensor, front	8/6-10	Injection valves
7/16	Sensor, coolant temperature	8/18	EVAP valve
7/17	Mass airflow sensor (MAF)	8/19	Solenoid, variable valve timing, intake, bank 2, 8 Cyl.
7/21	Camshaft position sensor	8/28	Turbo control valve
7/23	Rear knock sensor	8/36	Solenoid shift lock
7/24	Front knock sensor	8/37	Automatic transmission
7/25	Impulse sensor	8/38	Shift solenoid 1
7/31	Sensor ABS, front left	8/39	Shift solenoid 2
7/32	Sensor ABS, front right	8/40	Lock-up solenoid
7/35	Oil level sensor	8/45	Vacuum valve variable intake manifold
7/41	Temperature sensor evaporator	8/48	Auto-dimming rearview mirror
7/51	Accelerator pedal sensor	8/68	Relief valve
7/54	Intake throttle position sensor	8/71	Throttle solenoid
7/61	Input speed sensor	8/77	Control valve, fuel volume
7/62	Output speed sensor	8/81	Solenoid, variable valve timing, exhaust, bank 2, 8 Cyl.
7/69	Sensor outdoor temperature	8/82	Solenoid, variable turbo geometry
7/71	Sensor boost pressure	8/98	Control valve fuel pressure
7/73	Coolant level sensor	8/107	Variable intake valve
7/74	Fluid temperature sensor, automatic transmission	8/111	Control valve fuel flow
7/77	Temperature sensor, intake air 1	8/113	Bypass valve, EGR cooling
7/81	Intake manifold pressure sensor	8/114	Valve mixing air/fuel
7/82	Rear oxygen sensor, bank 1, 6 Cyl.	8/115-	Injector, 8 Cyl.
7/82	Front oxygen sensor, bank 1, 8 Cyl.	8/116	Solenoid, variable valve timing, intake, bank 1, 8 Cyl.
7/103	Rear oxygen sensor, bank 2, 8 Cyl.	8/117	Solenoid, variable valve timing, exhaust, bank 1, 8 Cyl.
7/104	Rear oxygen sensor, bank 1, 8 Cyl.	8/118	EGR valve
7/123	Clutch pedal sensor	8/120	Control valve inlet
7/124	Sensor brake pedal	8/132	Control valve fuel pressure
7/130	Fuel level sensor, ejector side	8/133	Linear pressure solenoid SLB1
7/131-		8/142	Linear pressure solenoid SLC1
7/134	Rear parking assistance sensor	8/143	Linear pressure solenoid SLC2
7/138	Exhaust pressure sensor	8/144	Linear pressure solenoid SLC3
7/143	Sensor fuel level, pump side	8/145	
7/149	Rain Sensor Module (RSM)	9/2	Rear window defroster
7/154	Sensor fuel temperature	9/12	Seat Heating Module (SHM), driver's side
7/156	Pressure and temperature sensor, fuel	9/13	Seat Heating Module (SHM), passenger side
7/159	Air Quality Sensor (AQS)	9/14	Control module, rear left seat heater
7/162	Pressure sensor, fuel line	9/15	Control module, RH rear seat heater
7/164	Body Sensor Cluster Stability Sensor (BSC)	9/32	PTC resistor, crankcase ventilation
7/165	Pressure and temperature sensor, intake manifold	9/38	Electrically heated fuel filter
7/172	Intake camshaft position sensor, bank 2, 8 Cyl.	9/39	Heating element camera
7/173	Exhaust camshaft position sensor, exhaust bank 2, 8 Cyl.	9/42	PTC-element
7/173	Camshaft position sensor, exhaust side, Diesel	9/47	PTC resistor crankcase ventilation in hose
7/174	Differential pressure sensor, particle filter		
7/188	Camshaft position sensor, intake bank 1, 8 Cyl.		
7/189	Camshaft position sensor, exhaust bank 1, 8 Cyl.		
7/190	Temperature sensor, catalytic converter		
7/191	Temperature sensor, particle filter		
7/193	Position sensor turbo		
7/199	Ultrasonic sensor (IMS)		

List of components 3:4

10/1	Lamp housing, front left	16/135	Antenna, door lock, passenger compartment 3
10/2	Lamp housing, front right	16/136	LH rear door tweeter
10/3	License plate lighting	16/137	RH rear door tweeter
10/17	Lamp housing, rear right	16/138	Right-hand rear window antenna
10/18	Lamp housing, rear left	16/141	Interference filter, rear window, left
10/241	Left-hand front door handle lighting	16/145	Remote digital audio receiver (RDAR)
10/242	Right-hand front door handle lighting	16/147	Bluetooth Phone Module (BPM)
10/243	Left-hand rear door handle lighting	17/13	Data link connector
10/244	Right-hand rear door handle lighting	17/45	Alcolock outlet
11A/no.	Main fuses in the engine compartment fuse box	18/4	Contact reel
11B/no.	Fuses in the engine compartment fuse box	20/3-8	Spark plug and ignition coil
11D/A	Fuses in cargo compartment fuse box	20/12-13	Spark plug and ignition coil
11D/B	Fuses in cargo compartment fuse box	20/16	Capacitor
11D/D	Fuses in cargo compartment fuse box	20/22-26	Glow plug
15/31	Distribution box in engine compartment	26/5	DC/AC converter, fuel tank
15/32	Rear electrical center	26/8	Alcolock charging cradle
15/33	Engine compartment cold zone	27/2	Indicator, visual collision warning
16/1	Integrated Audio Module (IAM)	27/3	Left Camera Module (LCM)
16/3.1	Right-hand front door speaker	27/4	Right Camera Module (RCM)
16/3.2	Right-hand front door speaker	27/5	Forward looking camera
16/4.1	Left-hand front door speaker	27/5	Forward looking camera
16/4.2	Left-hand front door speaker	31/1	Ground connection, PTC
16/5	Right-hand rear door speaker	31/2	Ground connection, Left wheel housing
16/6	Left-hand rear door speaker	31/3	Ground connection, Body battery
16/16	Window antenna amplifier	31/4	Ground connection, engine
16/26	Center dashboard speaker	31/6	Ground connection, Left bottom rail
16/35	Siren Control Module (SCM)	31/7	Ground connection, Left bottom rail
16/55	Left-hand front tweeter	31/10	Ground connection, Left bottom rail
16/56	Right-hand front tweeter	31/15	Ground connection, Right bottom rail
16/60	Phone Module (PHM)	31/47	Ground connection, Left rear bumper abutment
16/79	Subwoofer Module (SUB), V70	31/48	Ground connection, Right rear bumper abutment
16/98	Microphone	31/65	Ground connection, Rear seat riser, left side
16/105	Audio Module (AUD)	31/67	Ground connection, Rear seat riser, right side 1
16/108	Multimedia Module (MMM)	31/68	Ground connection, Rear seat riser, right side 2
16/111	Rear headphone sockets	31/83	Ground connection, Left bottom rail
16/123	Auxiliary equipment input (AUX)	31/84	Ground connection, Right bottom rail
16/123.3	RSE-AUX input	31/88	Ground connection, Engine ignition coils
16/132	Antenna door lock trunk lid/tailgate, V70		
16/132	Antenna, door lock, bumper, S80		
16/133	Antenna, door lock, cargo compartment		
16/134	Antenna, door lock, passenger compartment 2		

List of components 4:4

31/89	Ground connection, Engine ignition coils	74/413	Connector
31/90	Ground connection, Engine ignition coils, 8 Cyl.	74/414	Connector
31/93	Ground connection, Left wheel housing 2	74/418	Connector
31/94	Ground connection, Right wheel housing 2	74/501	Connector
31/95	Ground connection, Left wheel housing	74/502	Connector
31/96	Ground connection, Right wheel housing 3	74/503	Connector
31/100	Ground connection, Engine ignition coils, 8 Cyl.	74/504	Connector
31/XX4	Ground connection, Engine-Body	74/504B	Connector
31/XX5	Ground connection, ECM	74/505	Connector
31/XX10	Ground connection, Left wheel housing 1	74/507	Connector
31/XX14	Ground connection, Left wheel housing 3 (ABS)	74/508	Connector
31/XX15	Ground connection, Right wheel housing	74/509	Connector
31/AL	Ground connection, Auxiliary lights	74/510	Connector
31/INFOT	Ground connection, Infotainment	74/511	Connector
31/TRM	Ground connection, Accessories	74/512	Connector
74/53	Connector	74/514	Connector
74/86	Connector	74/518	Connector
74/99	Connector	74/519	Connector
74/133	Connector	74/520	Connector
74/301	Connector	74/523	Connector
74/302	Connector	74/524	Connector
74/307	Connector	74/529	Connector
74/309	Connector	74/601	Connector
74/401	Connector	74/603	Connector
74/402	Connector	74/16123	Connector
74/403	Connector	F/no.	Fuses
74/404	Connector	PF/no.	Main fuse by battery
74/405	Connector	3X/19	Connector interface, original car
74/407	Connector	3X/21	Connector interface, original car
74/407B	Connector	3X/80	Connector interface, original car
74/409	Connector	3X/82	Connector interface, original car
74/411	Connector	10X/29	Connector interface, original car
74/412	Connector		