



Electrical troubleshooting manual

Series 3 – E36/5 compact (316i, 316g, 318ti, 318tds, 323ti)

Schematics

Model year 2000

0100.0	Index	2460.2	Electronic transmission control (EGS A4S 310R)
0110.0	Introduction	2460.4	Electronic transmission control (EGS A5S 310Z)
0140.0	Symbols	3234.0	Airbag (AB)
0670.0	Power distribution chart	3450.0	Antilock brake system (ABS)
0670.1	Fuse chart	3450.1	Automatic stability control (ASC)
0670.2	Power distribution	5116.0	Power mirrors
0670.3	Fuse details	5126.0	Central locking system (ZKE/ZV)
0670.4	Ground distribution	5133.0	Power windows (ZKE/FH)
0670.5	Diagnostic link	5200.2	Electric seat adjustment and lumbar support
1210.17	Engine management MS41.0 (6-cylinder M52)	5203.0	Heated seats
1210.19	Digital motor electronics (DME M1.7.3, 4-cylinder M43)	5410.1	Power tilt/slide sunroof (SHD)
1210.20	Digital motor electronics (DME M5.2, 4-cylinder M44)	5410.4	Electric folding sunroof
1210.24	Engine management BMS46 (4-cylinder M43)	6100.0	Central body electronics (ZKE IV)
1220.0	Preheating system	6133.0	Horn
1230.0	Alternator	6135.1	Electronic immobilizer (EWS III)
1240.0	Starter	6160.1	Wipe/wash module (WWM)
1360.3	Digital diesel electronics (DDE 2.1, 4-cylinder M41)	6167.1	Headlight washer system (SRA)
1380.0	Engine control CNG	6169.0	Windscreen washer jet heaters
		6211.0	Instrument cluster
		6213.0	Clock



Schematics

6300.0	Light switch	6450.6	Automatic climate control (IHKS)
6312.0	Headlight/fog light	6510.0	Radio/Stereo
6313.0	Turn signal/hazard warning system	6510.1	Radio/HiFi
6314.0	Park/tail/underhood lights	6561.0	Cellular telephone
6320.0	Licence plate/luggage compartment lights	6571.0	Cruise control
6322.0	Reversing lights	6581.3	On-board computer (BC – Low)
6325.0	Brake lights	6610.2	Remote control ZV/DWA
6328.1	Trailer coupling	6621.0	Park distance control (PDC)
6330.3	Interior lights	7000.0	Component location chart
6332.0	Interior	7100.0	Component location views
6350.0	Crash and alarm sensor	8000.0	Connector location views (soldering spots and comb-type connectors)
6410.7	Heating control (HS)	8500.0	Connector views
6424.0	Rear window defogger/antenna		

A/C compressor relay, K19	6450.6-02
A/C fan II switch, S2138	6450.6-05
ABS control unit, A202	3450.0
ABS hydraulic unit, Y1	3450.1-04
ABS overvoltage protection relay, K10	3450.1-03
ABS pump motor relay, timed, K125	3450.1-03
ABS/ASC control unit, A52	3450.1
Additional fuse box, P100	0670.2-02
ADS actuator, M93	3450.1-05
ADS potentiometer, R31	3450.1-07
Air flow meter, B6233	1210.19
Air pump, Y6133	1210.17-05
Air pump, Y6133	1210.24-08
Airbag (AB)	3234.0
Airbag diagnostic module, A12	3234.0
Alternator	1230.0
Alternator cut-out relay, K2200	1230.0-00
Alternator, G2023	1230.0-00
Alternator, G6509	1230.0-01
AM/FM antenna amplifier, N8	6424.0
Antilock brake system (ABS)	3450.0
Antitheft (DWA) LED, V5	6100.0-03
Antitheft horn (DWA), H1	6100.0-03
ASC diode, V7	3450.1-03
ASC switch, S6	3450.1
Automatic climate control (IHKS)	6450.6
Automatic climate control unit (IHKS), A107	6450.6
Automatic stability control (ASC)	3450.1
Auxiliary fan motor, M9	6410.7-02
Auxiliary fan motor, M9	6450.6
Auxiliary fan stage 1 relay, K21	6450.6
Auxiliary fan stage 2 relay, K22	6450.6
Auxiliary fuse box, P95	0670.2-05
Auxiliary fuse box, P97	0670.2-04
B+ external start terminal point, G6430	0670.2-02

Battery, G1	0670.2
Blower ballast resistor, R11	6410.7-01
Blower ballast resistor, R11	6450.6-00
Blower motor, M30	6410.7-01
Blower motor, M30	6450.6-00
Blower switch, S75	6410.7-01
Blower switch, S75	6450.6-00
Brake fluid level switch, B18	6211.0-00
Brake light switch, S29	6325.0-00
Brake light switch, S30	6325.0-00
Brake lights	6325.0
Camshaft sensor, B6204	1210.
Carbon canister valve, Y199	1210.17-10
Cassette box light, E45y	6332.0-00
CD changer, N22	6510.1
Cellular telephone	6561.0
Central body electronics (ZKE IV)	6100.0
Central locking (ZV) drive driver's door, M12	5126.0-00
Central locking (ZV) drive passenger's door, M13	5126.0-00
Central locking drive rear lid, M17	5126.0-01
Central locking system (ZKE/ZV)	5126.0
Changeover module CNG, K124	1380.0-01
Changeover valve for exhaust gas recirculation (AGR), B2017	1360.3-02
Changeover valve I, Y6131	1210.
Charcoal filter valve, Y6120	1210.
Charge air temperature sensor, B2012	1360.3-04
Charge pressure sensor, B2014	1360.3-04
Clock	6213.0
Clutch switch, S32	1360.3-06
Clutch switch, S32	6571.0
CNG control unit, A69900	1380.0
CNG relay, K69921	1380.0-00
CNG relay, K69922	1380.0-00
Component location chart	7000.0
Component location views	7100.0

Conductor loop hinged window left, R28	6100.0-04
Conductor loop hinged window right, R27	6100.0-04
Connector location views (soldering spots and comb-type connectors)	8000.0
Connector views	8500.0
Control Switch, automatic climate control (IHKS), S530	6450.6-01
Control unit, remote control, A194y	6610.2
Control unit, thermal oil level sensor (TOENS), A19007	1210.24-10
Coolant temperature sensor, B6236	1210.17-02
Crankshaft sensor, B6203	1210.
Crash alarm sensor, N17	6350.0-01
Crash and alarm sensor	6350.0
Cruise control	6571.0
Cruise control actuator (Tempomat), M25	6571.0-01
Cruise control module, A8	6571.0
Cruise control switch, S28	6571.0
DDE relay, K2003	1360.3-00
DDE2 control unit, A2019	1360.3
Decoupling diode lighting, V9	6314.0-02
Delivery pump relay, K2081	1360.3-00
Diagnostic connector, D100	0670.5
Diagnostic link	0670.5
Digital clock, A110	6213.0-00
Digital diesel electronics (DDE 2.1, 4-cylinder M41)	1360.3
Digital motor electronics (DME M1.7.3, 4-cylinder M43)	1210.19
DME control unit, A6000	1210.
DME relay, K6300	1210.
Driver's airbag gas generator, G5	3234.0-00
Driver's backrest heating, E56	5203.0-00
Driver's backrest recliner motor, M53	5200.2-00
Driver's door contact switch, S14	6100.0-04
Driver's door contact switch, S14	6330.3-01
Driver's door handle switch, S48	6610.2
Driver's door lock switch, S47	5126.0-02
Driver's door power window switch, S126y	5133.0-00

Driver's lumbar support switch, S52	5200.2-02
Driver's lumbar support/compressor valve, M55z	5200.2-02
Driver's make-up mirror light, E35	6330.3-01
Driver's make-up mirror switch, S77	6330.3-01
Driver's power mirror switch, S17	5116.0-00
Driver's seat adjustment switch, S51	5200.2-00
Driver's seat belt buckle switch, S58	6211.0-01
Driver's seat cushion tilt motor, M50	5200.2-00
Driver's seat heating switch, S53	5203.0-00
Driver's seat heating, E57	5203.0-00
Driver's seat height adjustment motor, M52	5200.2-00
Driver's seat movement motor, M51	5200.2-00
Driver's side impact sensor, B78	3234.0-01
Driver's window monitoring switch (DWA), S100	6100.0-04
Driver's window motor, M21	5133.0-01
Dry gas shut-off valve, Y69914	1380.0-00
Dual temperature sensor (coolant temperature), B6256	1210.
Dual temperature sensor (coolant temperature), B6256	6211.0-02
Dual temperature sensor, B2232	1360.3-05
Dual temperature sensor, B2232	6211.0-03
Dual temperature switch 80 °C/88 °C, S36y	6450.6-03
Dual temperature switch 80 °C/99 °C, S247	6450.6-03
Dual temperature switch 91 °C/99 °C, S36	6450.6-04
EGS control unit, A7000	2460.4
EGS control unit, A8500	2460.2
EJECT box telephone, A117	6561.0-00
Electric cutout, Y2009	1360.3-03
Electric folding sunroof	5410.4
Electric seat adjustment and lumbar support	5200.2
Electrical fuel pump relay, K6301	1210.
Electrochromatic rear view mirror, A22z	5116.0-02
Electronic immobiliser control unit (EWS III), A837	6135.1
Electronic immobilizer (EWS III)	6135.1
Electronic seat control, A113	3234.0-02
Electronic transmission control (EGS A4S 310R)	2460.2

Electronic transmission control (EGS A5S 310Z)	2460.4
Engine control CNG	1380.0
Engine management MS41.0 (6-cylinder M52)	1210.17
Engine speed sensor, B2013	1360.3-04
Engine speed sensor, B2013	6571.0-04
Evaporator sensor, B14	6450.6-01
Exhaust-gas flap valve, Y198	1210.17-04
Feed unit, CNG stepper motor, M69913	1380.0-04
Fog light relay, K47	6312.0
Fog light switch lighting, E98	6312.0
Fog light switch, S10	6312.0-01
Fog light switch, S82	6312.0-00
Folding roof comfort relay, K45	5410.4-00
Folding roof motor, M24z	5410.4-00
Folding roof switch, S238	5410.4-00
Fresh air circulation motor, M111	6450.6-01
Front cigar lighter light, E29	6332.0-00
Front cigar lighter, E28	6332.0-00
Front left ABS sensor, B2	3450.
Front left auxiliary flasher unit, H9	6313.0-02
Front left brake pad sensor, B16	6211.0-01
Front left flasher unit, H7	6313.0-02
Front left footwell light, E61	6330.3-00
Front lid microswitch, S21	6100.0-02
Front power distribution box, P90	0670.2
Front right ABS sensor, B1	3450.
Front right auxiliary flasher unit, H8	6313.0-02
Front right flasher unit, H4	6313.0-02
Front right footwell light, E62	6330.3-00
Fuel heating, E2000	1360.3-01
Fuel injector 1, Y6101	1210.
Fuel injector 2, Y6102	1210.
Fuel injector 3, Y6103	1210.
Fuel injector 4, Y6104	1210.
Fuel injector 5, Y6105	1210.17-01

Fuel injector 6, Y6106	1210.17-01
Fuel pump (EKP I), M2	1210.
Fuel pump (EKP I), M2	1360.3-01
Fuse chart	0670.1
Fuse details	0670.3
Fuse link, F97	0670.2
Gas density sensor, B80	1380.0-01
Gas generator, left side airbag, G14	3234.0-01
Gas generator, right side airbag, G15	3234.0-01
Gas quality switch, X6960	1380.0-02
Gas shut-off valve, S558	1380.0-00
Gas/petrol switch, S304	1380.0-01
Gear indicator light, E82	6300.0-02
Gear selector lever switch, S3	2460.
Gear-shift unit, Y8505	2460.2-01
Gearshift unit, Y8505y	2460.4-01
Glove compartment light switch, S37	6332.0-00
Glove compartment light, E42	6332.0-00
Glow plug cyl. 1, X2091	1220.0-01
Glow plug cyl. 2, X2092	1220.0-01
Glow plug cyl. 3, X2093	1220.0-01
Glow plug cyl. 4, X2094	1220.0-01
Gong I, H10	6621.0-00
Gradient monitor (DWA), B28	6100.0-03
Ground distribution	0670.4
Handbrake switch, S31	6211.0-00
Hazard flasher relay, K16	6313.0-00
Hazard warning switch, S18	6313.0-01
Headlight beam angle adjust potentiometer, R13	6312.0-06
Headlight relay, K48	6312.0
Headlight washer pump, M7	6167.1-00
Headlight washer system (SRA)	6167.1
Headlight/fog light	6312.0
Heated oxygen sensor, B6200	1210.19-04
Heated seats	5203.0

Heater plug relay, K2000	1220.0-01
Heating blower relay, K4	6410.7-00
Heating blower relay, K4	6450.6-00
Heating control (HS)	6410.7
Heating control unit lighting (HS), E103	6424.0-00
Heating control unit lighting (HS), E103	6450.6-00
Hifi amplifier, A18	6510.1
High beam relay, K46	6312.0
Horn	6133.0
Horn relay, K2	6133.0-00
Horn switch, S4	6133.0-00
Hot-film air mass meter, B6207	1210.17-05
Hot-film air mass meter, B6207	1210.24-07
Idle actuator, Y6130	1210.
Ignition coil 1, T6151	1210.
Ignition coil 2, T6152	1210.
Ignition coil 3, T6153	1210.
Ignition coil 4, T6154	1210.
Ignition coil 5, T6155	1210.17-03
Ignition coil 6, T6156	1210.17-03
Ignition switch, S2	0670.2-06
Ignition switch, S2	6314.0
Immersion tube sensor II, B25y	6211.0-05
Immersion tube sensor II, B25y	6581.3-00
Immersion tube sensor, B6	6211.0-05
Immersion tube sensor, B6	6581.3-00
Impedance converter, B6952	1210.19-05
Index	0100.0
Injection quantity control unit, Y2010	1360.3-05
Injection quantity control unit, Y2010	6571.0-04
Instrument cluster	6211.0
Instrument cluster, A2w	6211.0
Intake air temperature sensor, B6205	1210.
Interior	6332.0
Interior light, rear centre, E32z	6330.3-00

Interior lights	6330.3
Interior/reading lamp, front, E34	6330.3-00
Introduction	0110.0
Kick-down switch, S8507	2460.
Knock sensor 1, B6214z	1210.24-06
Knock sensor 1, B6241z	1210.19-05
Knock sensor, B6240	1210.
Left brake light, H24	6325.0-00
Left fog light, E26	6312.0
Left front high range speaker, H59	6510.0-00
Left front high range speaker, H59	6510.1-03
Left front low range speaker, H58	6510.0-00
Left front low range speaker, H58	6510.1-01
Left front mid-range speaker, H55	6510.1-03
Left headlight beam angle adjust actuator, M80	6312.0-06
Left headlight, E13	6312.0
Left headlight, E7	6312.0
Left headlight, E7	6314.0
Left high beam, E11	6312.0
Left horn, H2	6133.0-00
Left licence plate light, E43	6320.0-00
Left mid-range/high range speaker, H42	6510.1-03
Left outside mirror, Y5	5116.0-01
Left parking light relay, K26	6314.0-02
Left parking light, E15	6314.0
Left rear fog light, H26	6312.0
Left rear high range speaker, H56	6510.1-01
Left rear lid light, E46	0670.4-23
Left rear low range speaker, H57	6510.1-01
Left reversing light, H27	6322.0-00
Left tail light, H37	6314.0
Left windscreen washer jet heater, E51	6169.0-00
Licence plate/luggage compartment lights	6320.0
Light switch	6300.0
Light switch lighting, E97	6300.0

Light switch, S8	6300.0
Luggage compartment light switch, S61y	6320.0-00
Map sensor CNG, B69915	1380.0-04
Needle motion sensor, Y2008	1360.3-03
OBD II connector, D110	0670.5-09
Oil level switch, thermal, B6254	1210.24-12
Oil level, B6230	6211.0-03
Oil pressure switch, B2008	6211.0-03
Oil pressure switch, B6231	6211.0-02
On-board computer (BC – Low)	6581.3
On-board computer (BC – Low), A35y	6581.3-00
On-board computer temperature sensor, B21	6581.3-00
Oxygen sensor behind catalytic converter, B62002	1210.24-07
Oxygen sensor CNG, B69926	1210.19-03
Oxygen sensor I in front of catalytic converter, B62101	1210.17-04
Oxygen sensor II in front of catalytic converter, B62201	1210.17-04
Oxygen sensor in front of catalytic converter, B62001	1210.24-07
Oxygen sensor relay, K6303	1210.19-04
Park distance control (PDC)	6621.0
Park/tail/underhood lights	6314.0
Parking aid control unit, A81	6621.0
Passenger's airbag gas generator, G6	3234.0-00
Passenger's backrest heating, E59	5203.0-00
Passenger's backrest recliner motor, M58	5200.2-01
Passenger's door contact switch, S13	6100.0-04
Passenger's door contact switch, S13	6330.3-01
Passenger's door lock switch, S49	5126.0-02
Passenger's door power window switch, S127y	5133.0-00
Passenger's make-up mirror light, E36	6330.3-01
Passenger's make-up mirror switch, S78	6330.3-01
Passenger's seat adjustment switch, S56	5200.2-01
Passenger's seat cushion tilt motor, M61	5200.2-01
Passenger's seat heating switch, S54	5203.0-00
Passenger's seat heating, E58	5203.0-00
Passenger's seat height adjustment motor, M59	5200.2-01

Passenger's seat movement motor, M60	5200.2-01
Passenger's side impact sensor, B79	3234.0-01
Passenger's window monitoring switch (DWA), S99	6100.0-04
Passenger's window motor, M23	5133.0-01
Pedal value sensor, R10	1360.3-05
Pedal value sensor, R10	6571.0-03
Plug socket, left reading light, X18262x	6332.0-01
Plug socket, right reading light, X18262y	6332.0-01
Power distribution	0670.2
Power distribution chart	0670.0
Power mirrors	5116.0
Power tilt/slide sunroof (SHD)	5410.1
Power windows (ZKE/FH)	5133.0
Preheating system	1220.0
Pressure switch CNG, S69912	1380.0-00
Pressure switch, B8y	6450.6
Pressure switch, B9508	6450.6
Pressure switch, B9y	6450.6
Program switch, S8503	2460.
Pyrotechnical belt tensioner, driver's side, G12	3234.0-01
Pyrotechnical belt tensioner, passenger's side, G13	3234.0-01
Radio, N9	6510.0-00
Radio, N9	6510.1
Radio/HiFi	6510.1
Radio/Stereo	6510.0
Raised brake light, H34	6325.0-00
Reading lights relay, K127y	6332.0-01
Rear centre left converter, B35	6621.0-02
Rear centre right converter, B36	6621.0-02
Rear defogger relay, K13	6424.0-00
Rear fog light relay, K49	6312.0-00
Rear fog light relay, K49	6312.0-01
Rear left ABS sensor, B4	3450.
Rear left converter, B34	6621.0-02
Rear left flasher unit, H6	6313.0-03

Rear left speaker, H46	6510.0-00
Rear left speaker, H46	6510.1-01
Rear right ABS sensor, B3	3450.
Rear right brake pad sensor, B17	6211.0-01
Rear right converter, B37	6621.0-02
Rear right flasher unit, H5	6313.0-03
Rear right speaker, H45	6510.0-00
Rear right speaker, H45	6510.1-02
Rear window defogger I, E9	6424.0
Rear window defogger switch, S218	6424.0-00
Rear window defogger/antenna	6424.0
Rear wipe/wash interval control unit, A36	6160.1
Relay lighting Scandinavia, K200	6312.0-04
Remote control ZV/DWA	6610.2
Remote thermometer sensor, B6232	1210.
Remote thermometer sensor, B6232	1380.0-02
Remote thermometer sensor, B6232	6211.0-02
Resistor, R6240	0670.4
Reversing light switch, S2113	6322.0-00
Reversing light switch, S8511	6322.0-00
Reversing lights	6322.0
Right brake light, H31	6325.0-00
Right fog light, E27	6312.0
Right front high range speaker, H50	6510.0-00
Right front high range speaker, H50	6510.1-03
Right front low range speaker, H51	6510.0-00
Right front low range speaker, H51	6510.1-02
Right front mid-range speaker, H54	6510.1-03
Right headlight beam angle adjust actuator, M81	6312.0-06
Right headlight, E14	6312.0
Right headlight, E8	6312.0
Right headlight, E8	6314.0
Right high beam, E12	6312.0
Right horn, H3	6133.0-00
Right licence plate light, E44	6320.0-00

Right luggage compartment lamp, H91	6320.0-00
Right mid-range/high range speaker, H43	6510.1-03
Right outside mirror, Y6	5116.0-01
Right parking light, E19	6314.0
Right parking light/licence plate light relay, K25	6314.0-02
Right rear high range speaker, H53	6510.1-02
Right rear lid light, E47	0670.4-23
Right rear low range speaker, H52	6510.1-02
Right reversing light, H28	6322.0-00
Right tail light, H39	6314.0
Right windscreen washer jet heater, E52	6169.0-00
Secondary air pump relay, K6304	1210.17-05
Secondary air pump relay, K6304	1210.24-08
Shift lock selector lever lock, Y19	2460.
Solenoid clutch, Y2	6450.6-02
Solenoid valve, characteristic map cooling, Y6279	1210.24-08
Solenoid valve, injection timing device, B2011	1360.3-02
Solenoid valve, injection timing device, B2011	6571.0-04
Solenoid valve, secondary air pump, Y6163	1210.17-05
Solenoid valve, secondary air pump, Y6163	1210.24-08
Solenoid valve, sucking jet pump, Y6165	1210.24-08
Speedometer reed contact, B10	6211.0-05
Starter	1240.0
Starter, M2025	1240.0-01
Starter, M6510	1240.0-01
Subwoofer, H66	6510.1
Symbols	0140.0
Tail light, left, H25	6314.0
Tail light, right, H30	6314.0
Tank pressure sensor, B72	1210.17-10
Temperature selection switch, S531	6450.6-01
Thermal switch, heated jets, S198	6169.0-00
Throttle potentiometer, R6252	1210.
Tilt/slide sunroof control unit, A56	5410.1-00
Tilt/slide sunroof switch (SHD), S38	5410.1-00



Index

Toroidal coil EWS, L1	6135.1-00
Trailer coupling	6328.1
Turn indicator/low beam selector, S7	6312.0
Turn indicator/low beam selector, S7	6313.0-00
Turn indicator/low beam selector, S7	6314.0
Turn indicator/low beam selector, S7	6581.3-00
Turn signal/hazard warning system	6313.0
Unloader relay terminal 15, K9	5203.0-00
Unloader relay, terminal 15, K6326	1210.
VANOS valve 1, Y6275	1210.17-05
Volute spring, C101	3234.0-00
Washer pump, M4	6160.1
Water valve, Y4z	6450.6-01
Windscreen washer jet heaters	6169.0
Windscreen wiper switch, S5	6160.1
Wipe-wash module (Low II), A64	6160.1
Wipe/wash module (WWM)	6160.1-00
Wipe/wash module, A51	6160.1
Wiper motor, M3	6160.1
ZKE control unit, A104	6100.0
ZV drive tank flap, M16	5126.0-01

Schematics

The schematics divide the entire vehicle electrical system into individual circuits. Interacting electrical components are shown on one common schematic.

Switches and other components are represented in such a way that their general layout and function are self-explicit. They are arranged on the sheet such that the current path can be followed from positive (top) to negative (bottom).

Important: The components and wires are not drawn to scale. For instance, a lead with a length of over 1m can be shown as a lead which is only a few cm long. To ensure clear arrangement, all connectors, line branches and connected components from the fuses to the component and from the component to ground connection are not shown within the individual cells. If required, reference can be made to the cells **0670.3 Fuse Details** and **0670.4 Ground Distribution** where all lines are illustrated with all plug connections, line branches and connected components.

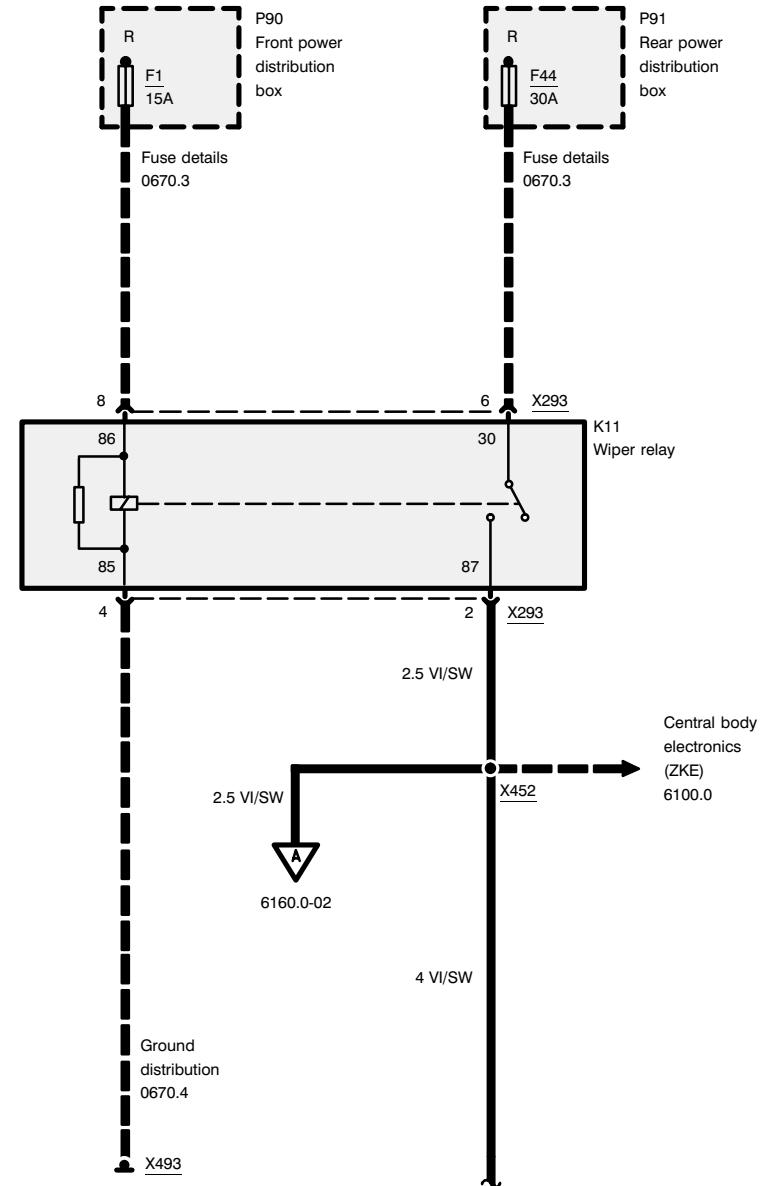
All circuit symbols used are listed and explained in the cell **0140.0 Symbols**.

In cell **7000.0 Component Location Chart** all important connectors, ground points and components are listed in tabular form. It provides a precise description of the component locations in the vehicle.

In cell **7100.0 Component Location Views** the locations of the connectors and components which are difficult to locate are shown in line arts or illustrations. In cell **8000.0 Solder Connector Location Views** all splices are listed in numerical order and illustrations are provided to assist in locating splices on larger harnesses. In cell **8500.0 Connector Views** diagrams of connectors with more than 2 pins are illustrated.

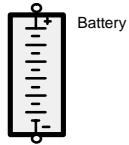
Example

General conventions can be explained based on the following schematic example.

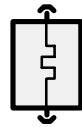


General conventions

1. Switches and relays are always shown in rest position (e.g. K11).
2. A component shown in a dashed frame signifies that the component is illustrated only in part (e.g. P90 and P94).
3. A component shown in a completely drawn frame signifies that the component is illustrated in full (e.g. K11).
4. The dashed line between pin 8 and pin 6 at the connector X293 indicates that both pins belong to the connector X293.
5. The dashed line from fuse 1 to pin 8 of the connector X293 shows the positive supply of the relay K11. If required, refer to cell **0670.3 Fuse details** at fuse F1 for the complete line progression with all plug connections, line branches, wire colours and cross sections.
6. The dashed line with arrow at the connector X452 indicates that several wires lead to the connector X452. All lines leading to the connection are illustrated in cell **6100.0 Central body electronics (ZKE)**. An uninterrupted line with arrow indicates that only this one line leads to another circuit.
7. The dashed line from pin 4 of connector X293 to ground X493 shows the ground supply of the relay K11. If required, refer to cell **0670.4 Ground distribution** at ground X493 for the complete line progression with all plug connections, line branches, wire colours and cross sections.
8. The uninterrupted line from connector X452 with an **A** in the open arrow is continued on Page 6160.0–02.
Termination of the wire 4 VI/SW from connector X452 with a wavy line indicates that the wire is continued on the opposite page.



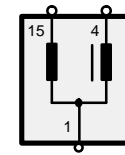
Battery



Heating element



Potentiometer Wiper
moved by external
force



Ignition coil



Fuses



Loudspeaker without
horn



Potentiometer
Change by pressure
or temperature



Control/performance
electronics



Radio



Fuse link



Bulb



Diode Current flows
in direction of arrow
only



Hall-effect sensor



Automatic cut-out



Variable resistor



Z-diode for voltage
control



Transistor switch



Solenoid coil



Overtemperature
protection



LED



Knock sensor



Solenoid valve



Permanent magnet
motor one speed



Oxygen sensor



Heating element



Permanent magnet
motor two speeds

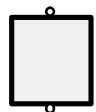
Symbols



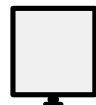
Entire component



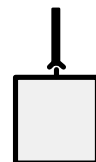
Part of a component



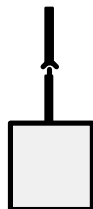
Component with screw terminals



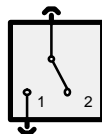
Component housing, connected directly to vehicle ground



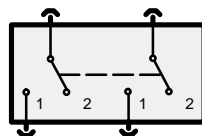
Plug connected at component



Plug connected to connection wire of component



One-pole on/off switch



Two-pole switch

Dashed line indicates mechanical connection between switches

Wire colour	
BL	blue
BR	brown
GE	yellow
GN	green
GR	grey
OR	orange
RS	pink
RT	red
SW	black
VI	violet
WS	white
TR	transparent

Single-colour wire insulation



Pin number

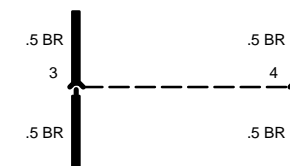
X270

Connector reference number for component location chart

Wire insulation with coloured stripes (green with white)



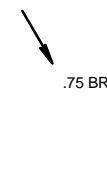
Wavy line indicates continuation of the line



Two connector pins in the same connector

Dashed line indicates connection points of the same connector

Line cross section in mm²

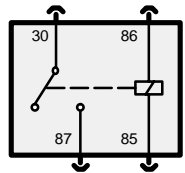


Line secured to body (ground connection)

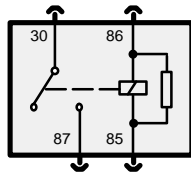
X165

Numbered ground connection for reference in component location chart

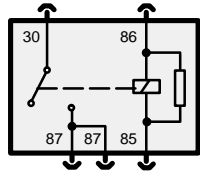
Symbols



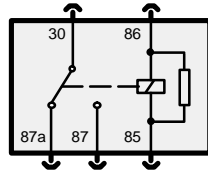
Contact relay



Contact relay with protective resistor

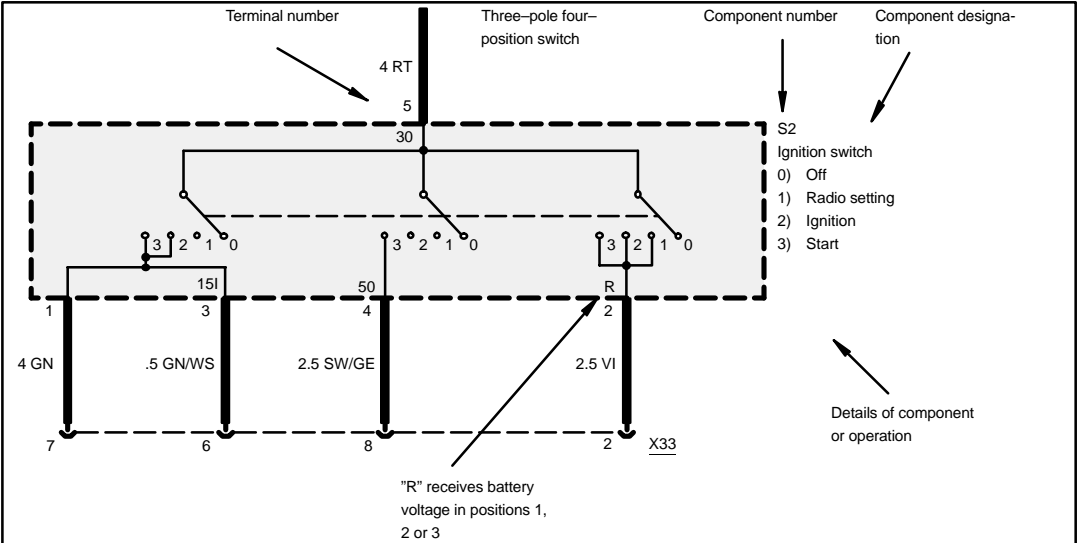


Contact relay with 2 outputs

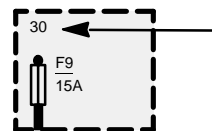


Centre-zero relay with 2 outputs

Terminal number	Designation
30	Relay input
85	Relay output (coil)
86	Relay input (coil)
87	Relay output (switched)
87a	Relay output (non-switched)



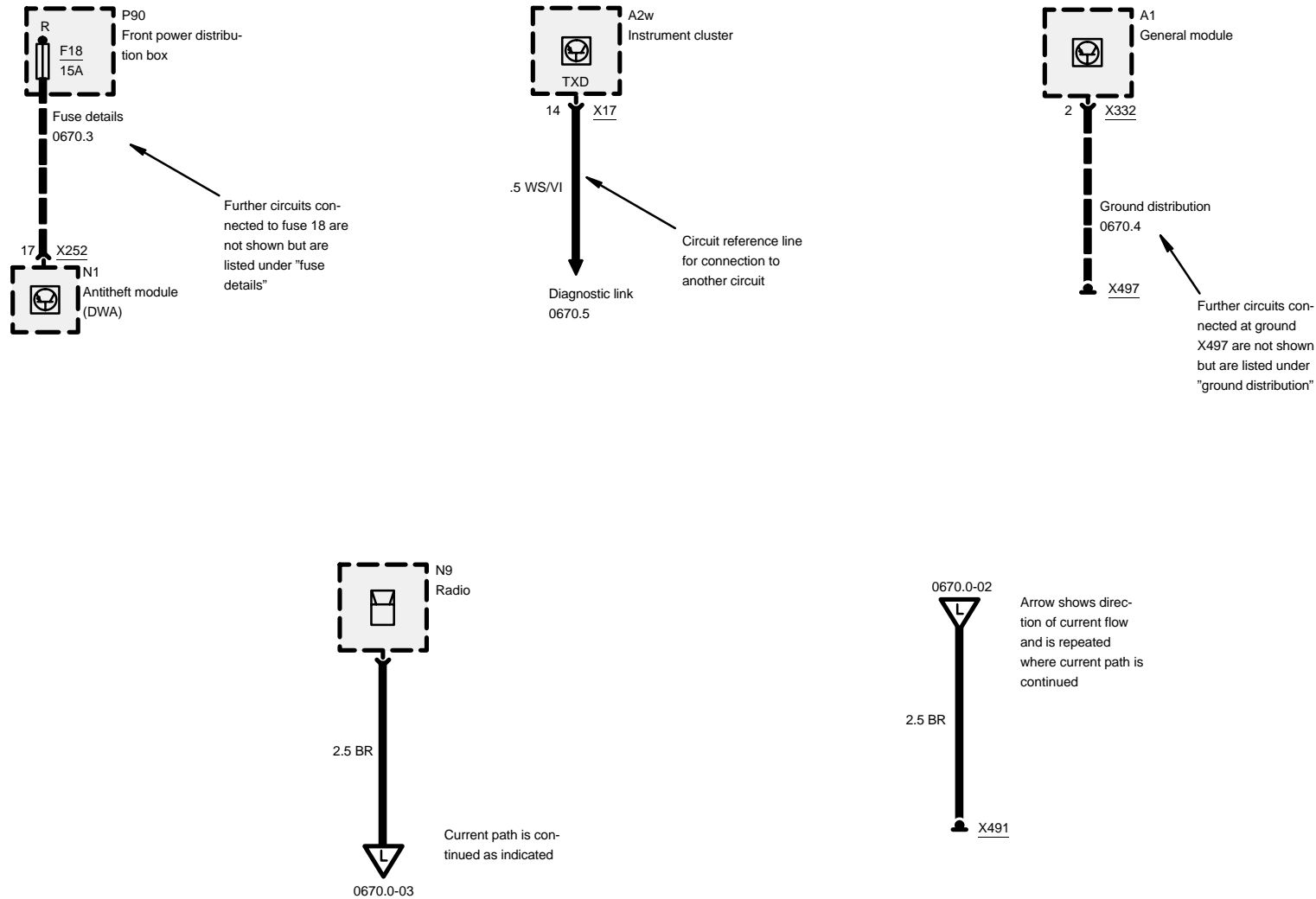
Terminal number	Designation	Terminal number	Designation
50	Battery voltage: Ignition switch in position 3	15I	Battery voltage: Ignition switch in position 2
30	Battery voltage: Supplied constantly	R	Battery voltage: Ignition switch in position 1, 2 or 3
15	Battery voltage: Ignition switch in position 2 or 3	31	Ground



Fuse constantly connected in current path

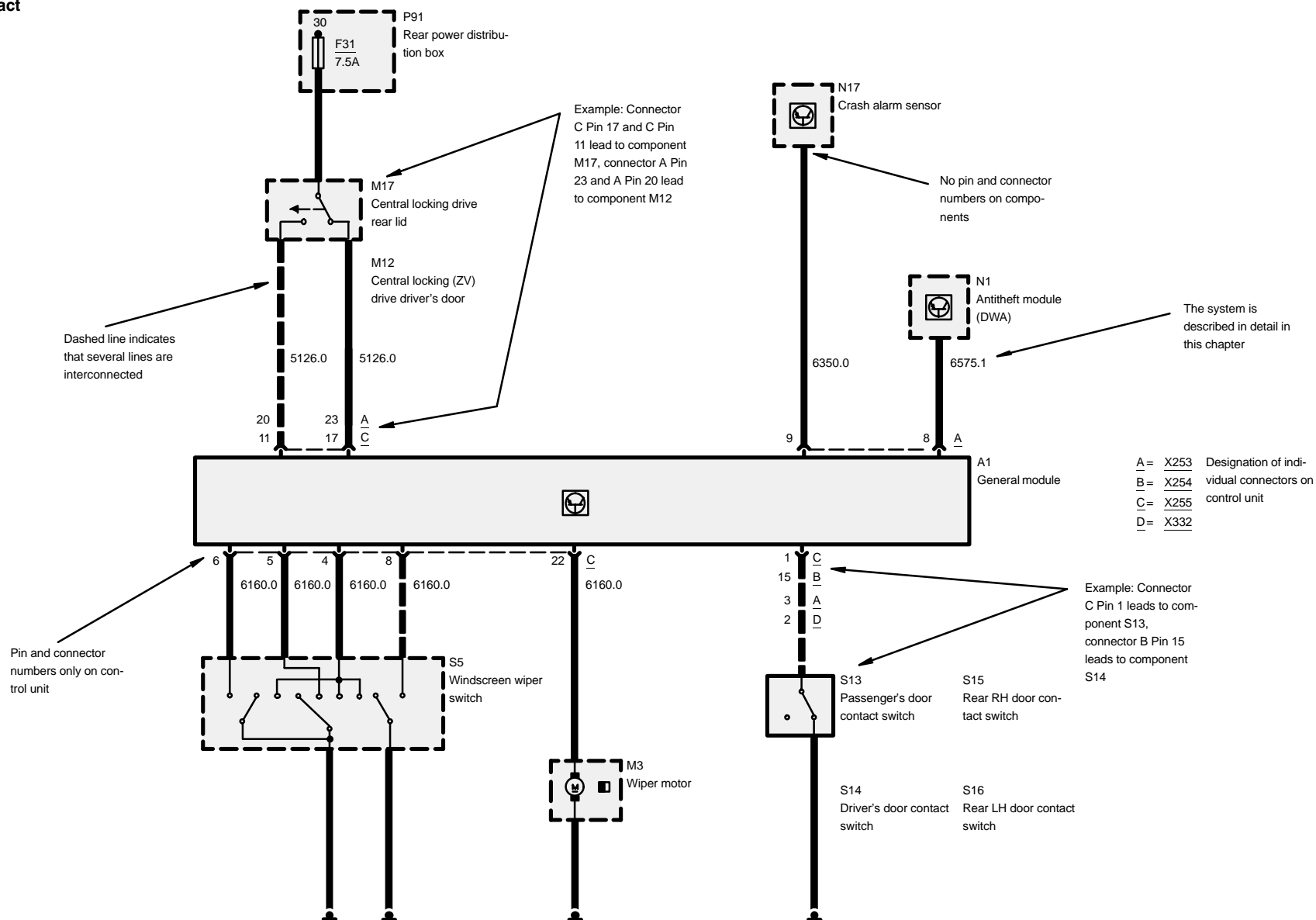
Terminal number	Designation
30	Battery voltage: Supplied constantly
15	Battery voltage: Ignition switch in position 2 or 3
R	Battery voltage: Ignition switch in position 1, 2 or 3

Symbols



Symbols

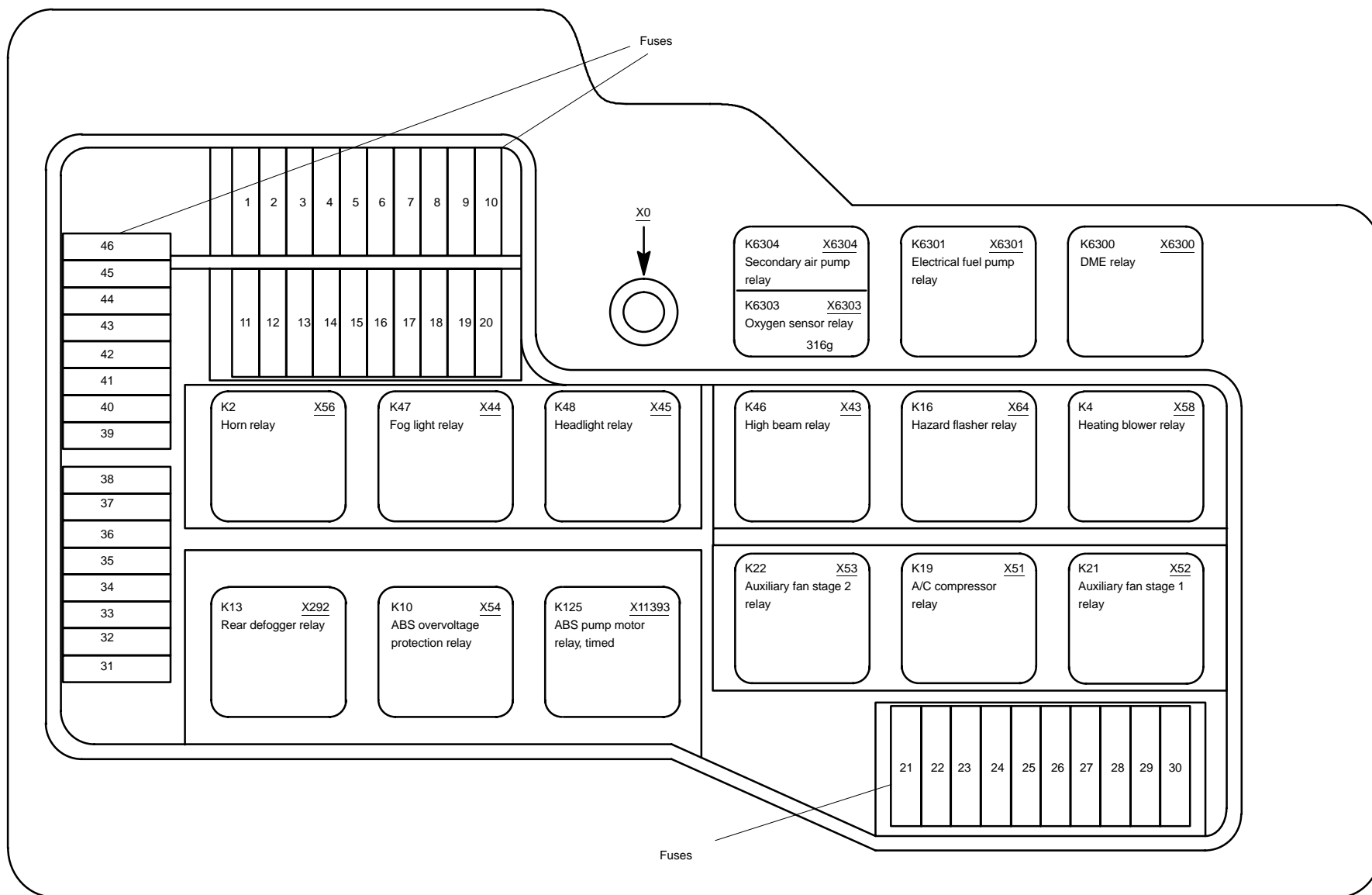
Block diagram



0670.0 Power distribution chart

Front power distribution box

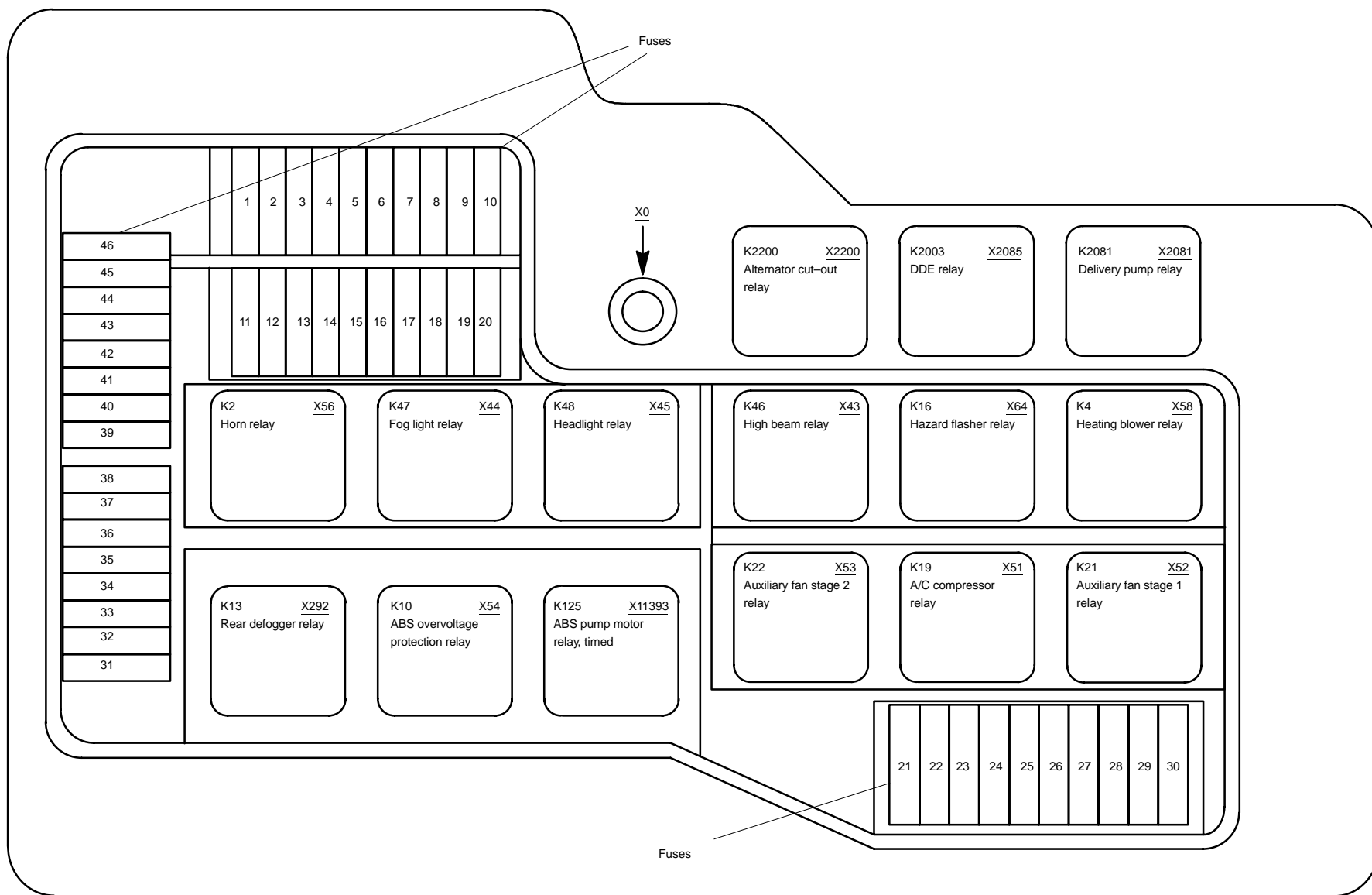
Petrol model



Power distribution chart

Front power distribution box

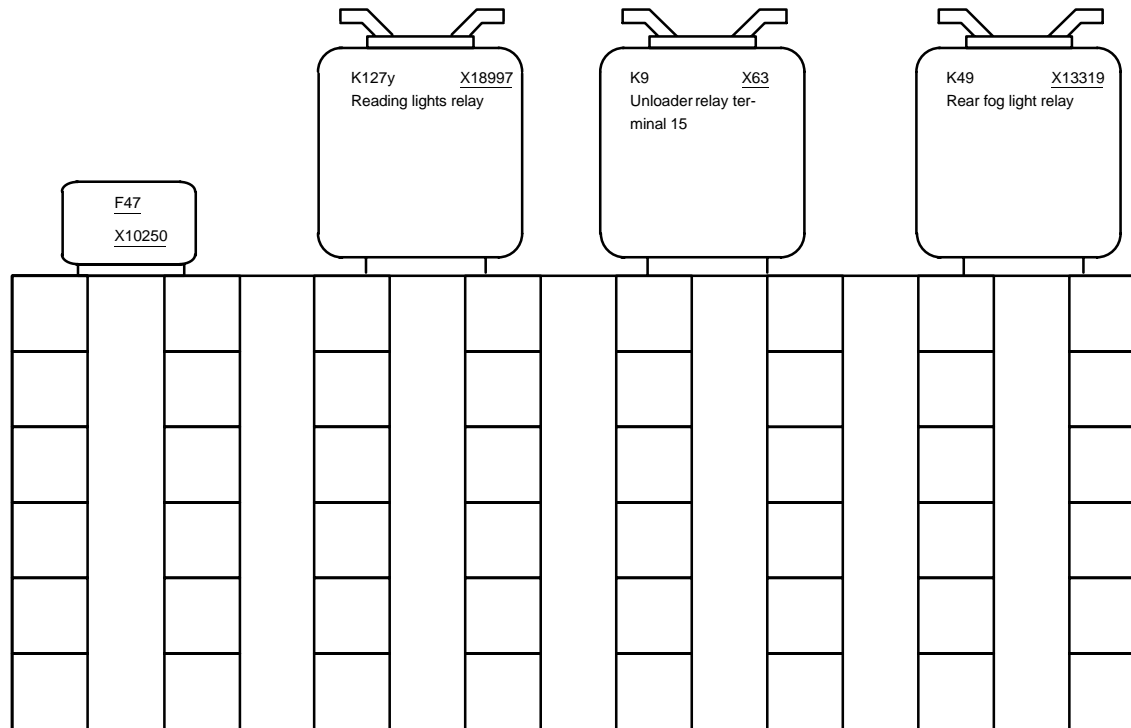
Diesel





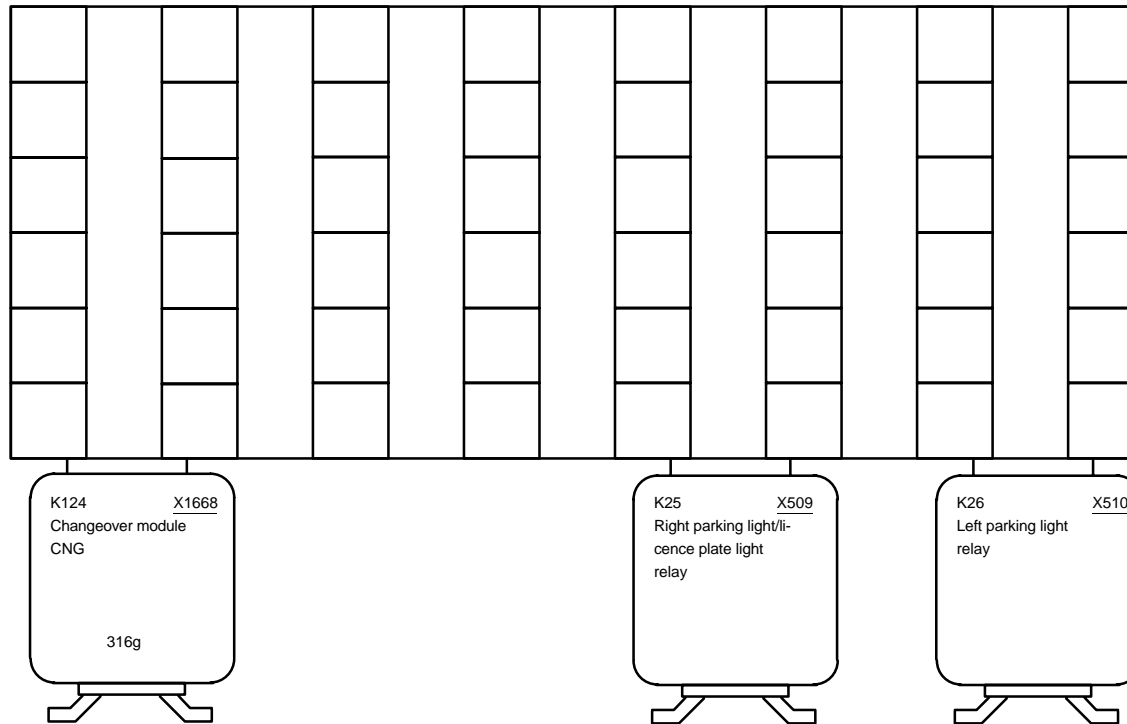
Power distribution chart

Connector strip under LH side of dash



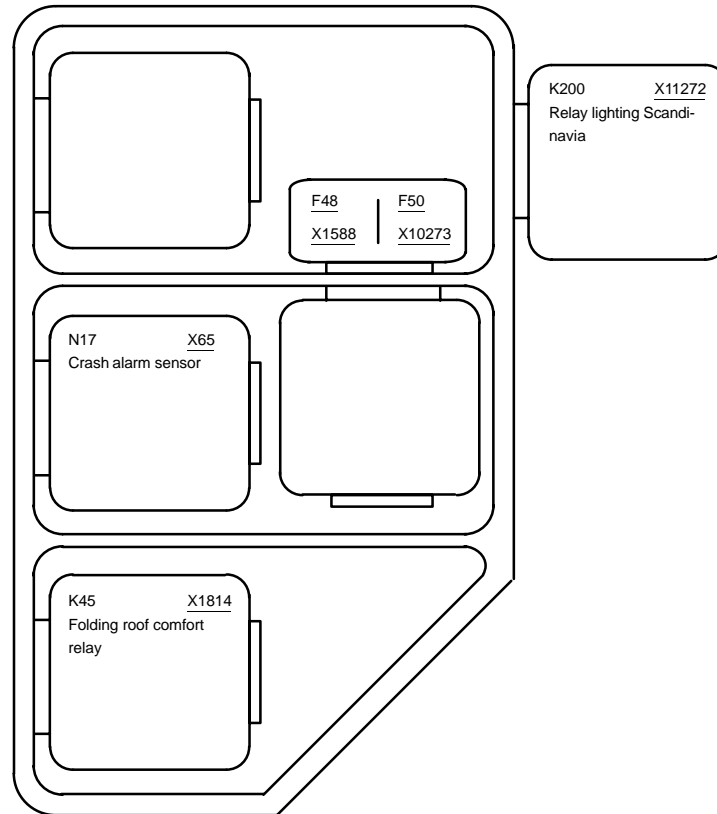
Power distribution chart

Connector strip under RH side of dash



Power distribution chart

Relay carrier under LH side of dash





0670.1 Fuse chart

Fuses 1 to 29

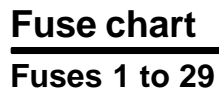
	Fuse number																												
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29
	30A	15A	30A	15A	30A	30A	5A	15A	20A	30A	7.5A	7.5A		30A	15A	5A		15A		30A	5A	5A	5A	10A	5A	10A	5A	5A	7.5A
1210.17 Engine management MS41.0 (6-cylinder M52)																●		●											
1210.19 Digital motor electronics (DME M1.7.3, 4-cylinder M43)																●		●										●	
1210.24 Engine management BMS46 (4-cylinder M43)																●		●					●			●			
1220.0 Preheating system																											●		
1230.0 Alternator																										●			
1240.0 Starter																												●	
1360.3 Digital diesel electronics (DDE 2.1, 4-cylinder M41)																●		●								●	●		
1380.0 Engine control CNG							●									●										●			
2460.2 Electronic transmission control (EGS A4S 310R)																										●		●	
2460.4 Electronic transmission control (EGS A5S 310Z)																										●		●	
3234.0 Airbag (AB)																											●		
3450.0 Antilock brake system (ABS)										●											●						●		
3450.1 Automatic stability control (ASC)										●											●						●		
5116.0 Power mirrors																								●		●			
5126.0 Central locking system (ZKE/ZV)							●																						
5133.0 Power windows (ZKE/FH)														●															
5200.2 Electric seat adjustment and lumbar support					●																								
5203.0 Heated seats			●																				●						
5410.1 Power tilt/slide sunroof (SHD)	●																												
5410.4 Electric folding sunroof	●																												



Fuse chart

Fuses 1 to 29

compact		Fuse number																												
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29
		30A	15A	30A	15A	30A	30A	5A	15A	20A	30A	7.5A	7.5A		30A	15A	5A		15A		30A	5A	5A	5A	10A	5A	10A	5A	5A	7.5A
6100.0	Central body electronics (ZKE IV)						●							●																
6133.0	Horn							●																						
6135.1	Electronic immobilizer (EWS III)																												●	
6160.1	Wipe/wash module (WWM)			●																										
6167.1	Headlight washer system (SRA)			●																										
6169.0	Windscreen washer jet heaters																							●						
6211.0	Instrument cluster																						●				●			
6213.0	Clock																													
6300.0	Light switch																					●	●		●					
6312.0	Headlight/fog light										●	●			●							●	●		●					●
6313.0	Turn signal/hazard warning system																						●							
6314.0	Park/tail/underhoodlights																													
6320.0	Licence plate/luggage compartment lights																													
6322.0	Reversing lights																										●			
6325.0	Brake lights																													
6328.1	Trailer coupling		●																											
6330.3	Interior lights																													
6332.0	Interior																													
6350.0	Crash and alarm sensor										●	●														●				
6410.7	Heating control (HS)															●					●									



10/99 ————— 0670.1-02 ————— 2000



Fuse chart

Fuses 30 to 50

	Fuse number																									
	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50					
	7.5A	5A	30A	10A	15A	25A	30A	10A	30A	7.5A	30A	30A	7.5A	5A	15A	7.5A	15A	15A	40A		5A					
1210.17 Engine management MS41.0 (6-cylinder M52)										●											●					
1210.19 Digital motor electronics (DME M1.7.3, 4-cylinder M43)																										
1210.24 Engine management BMS46 (4-cylinder M43)		●																								
1220.0 Preheating system																										
1230.0 Alternator																										
1240.0 Starter		●																								
1360.3 Digital diesel electronics (DDE 2.1, 4-cylinder M41)																	●									
1380.0 Engine control CNG																										
2460.2 Electronic transmission control (EGS A4S 310R)																	●									
2460.4 Electronic transmission control (EGS A5S 310Z)																	●									
3234.0 Airbag (AB)													●													
3450.0 Antilock brake system (ABS)									●								●									
3450.1 Automatic stability control (ASC)									●								●									
5116.0 Power mirrors														●												
5126.0 Central locking system (ZKE/ZV)						●																				
5133.0 Power windows (ZKE/FH)																										
5200.2 Electric seat adjustment and lumbar support											●															
5203.0 Heated seats																										
5410.1 Power tilt/slide sunroof (SHD)																										
5410.4 Electric folding sunroof																										



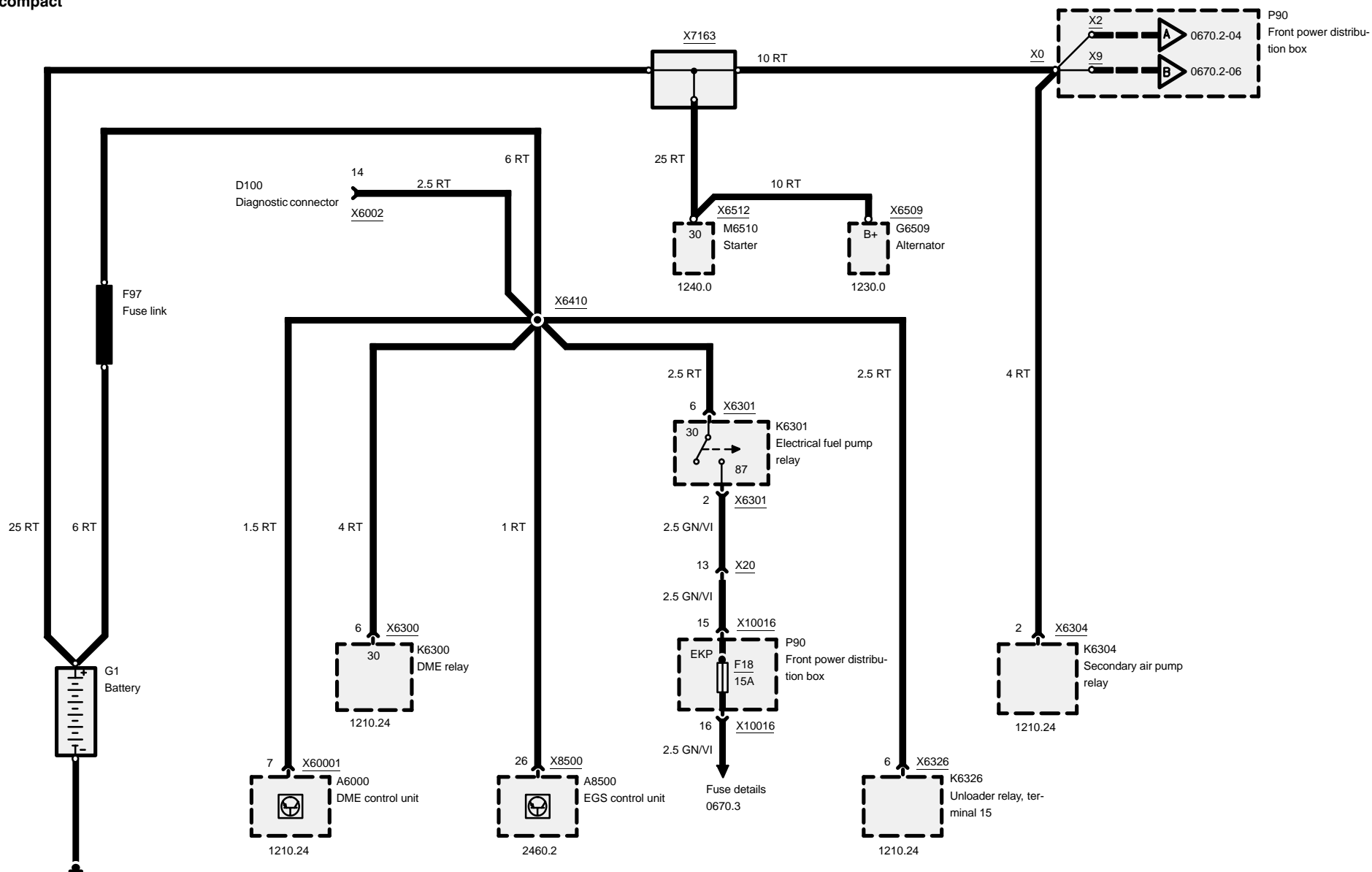
Fuse chart

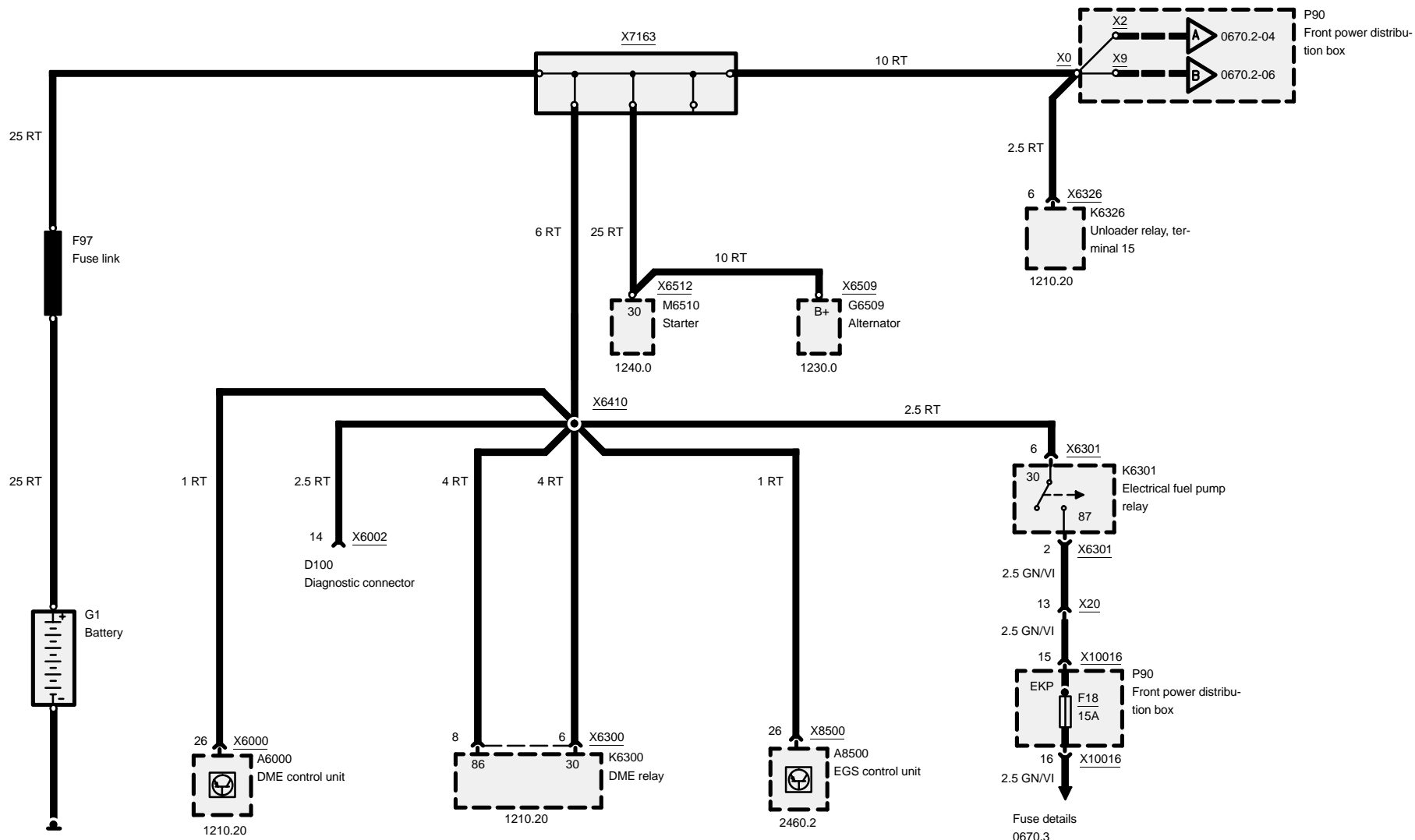
Fuses 30 to 50

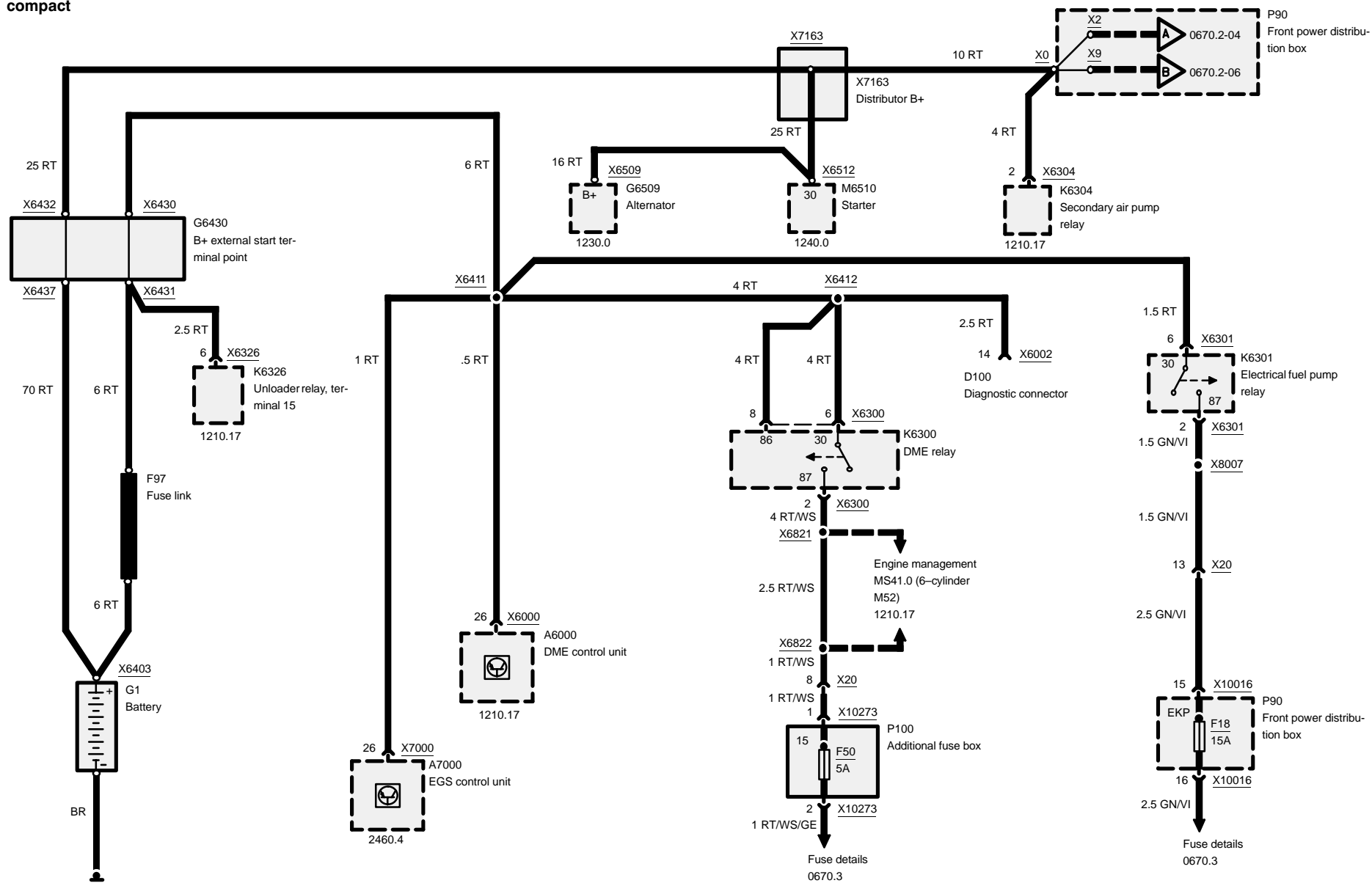
		Fuse number																											
		30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50							
		7.5A	5A	30A	10A	15A	25A	30A	10A	30A	7.5A	30A	30A	7.5A	5A	15A	7.5A	15A	15A	40A		5A							
6100.0	Central body electronics (ZKE IV)		●		●		●								●				●										
6133.0	Horn																												
6135.1	Electronic immobilizer (EWS III)		●																										
6160.1	Wipe/wash module (WWM)							●								●													
6167.1	Headlight washer system (SRA)							●								●													
6169.0	Windscreen washer jet heaters																												
6211.0	Instrument cluster		●											●				●											
6213.0	Clock		●															●											
6300.0	Light switch				●				●																				
6312.0	Headlight/fog light	●							●																				
6313.0	Turn signal/hazard warning system					●																							
6314.0	Park/tail/underhoodlights				●				●																				
6320.0	Licence plate/luggage compartment lights				●				●																				
6322.0	Reversing lights																												
6325.0	Brake lights																	●											
6328.1	Trailer coupling																												
6330.3	Interior lights				●										●														
6332.0	Interior			●					●						●	●													
6350.0	Crash and alarm sensor					●																							
6410.7	Heating control (HS)																			●									

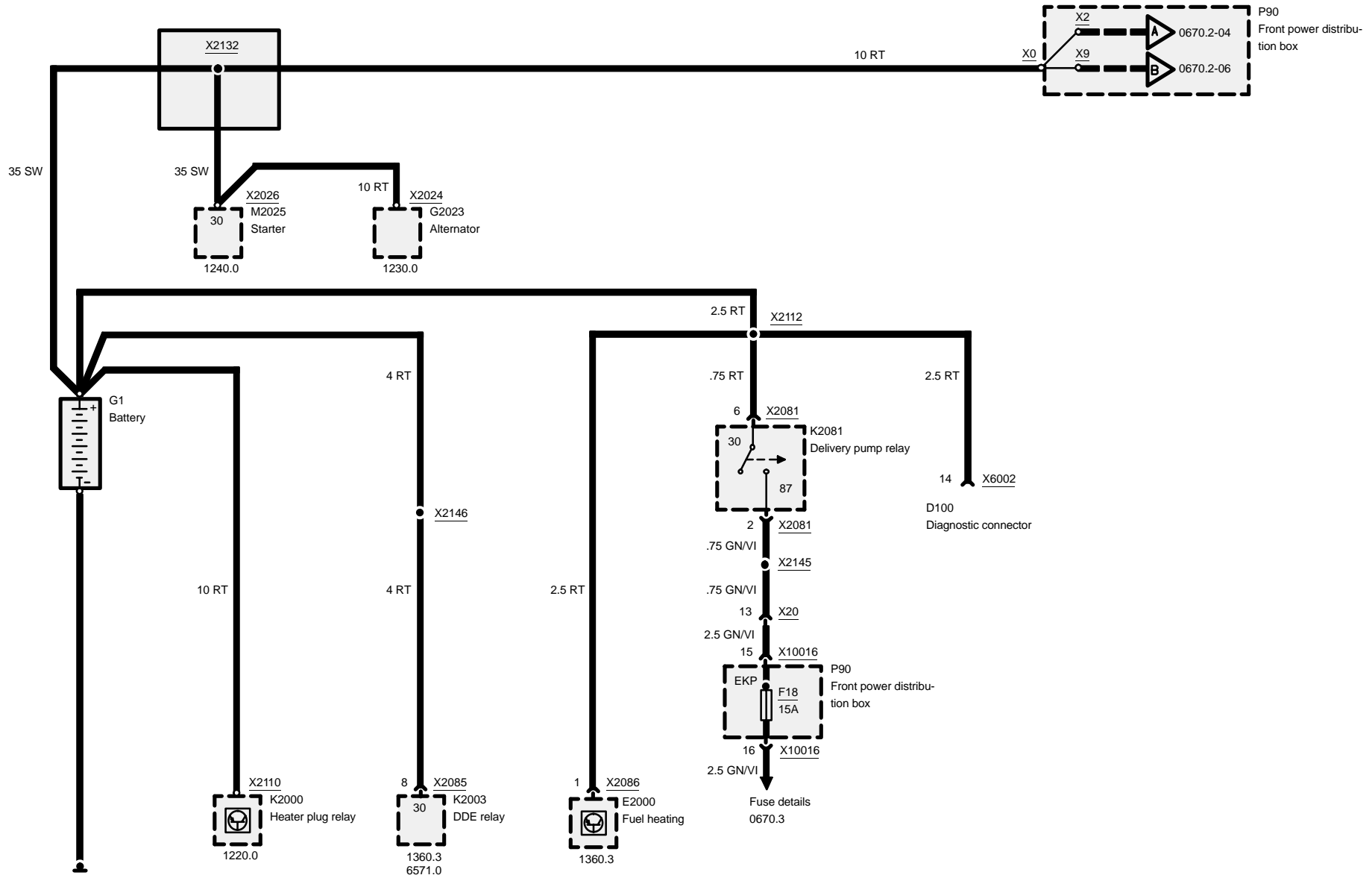


10/99 ————— 0670.1-05 ————— 2000





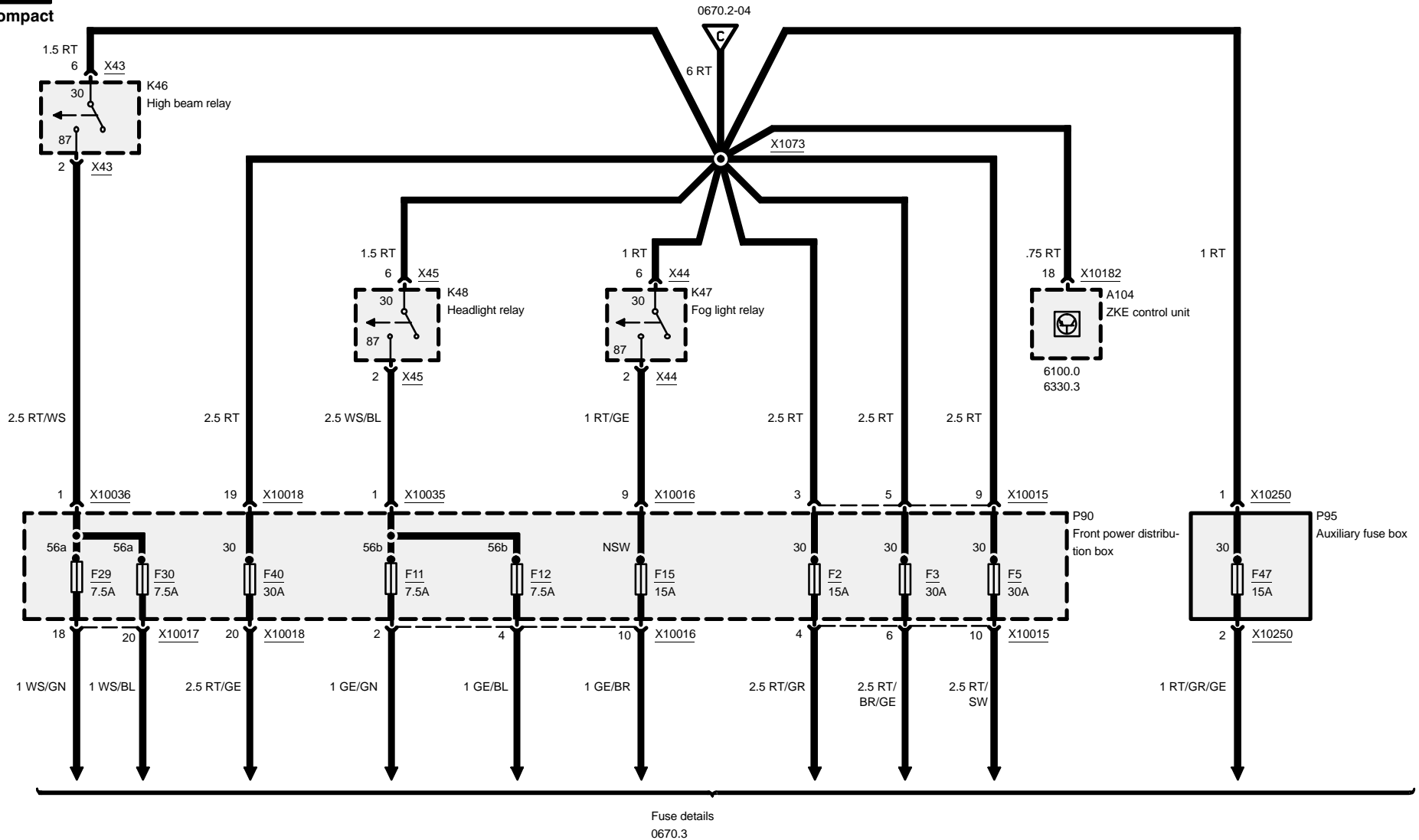




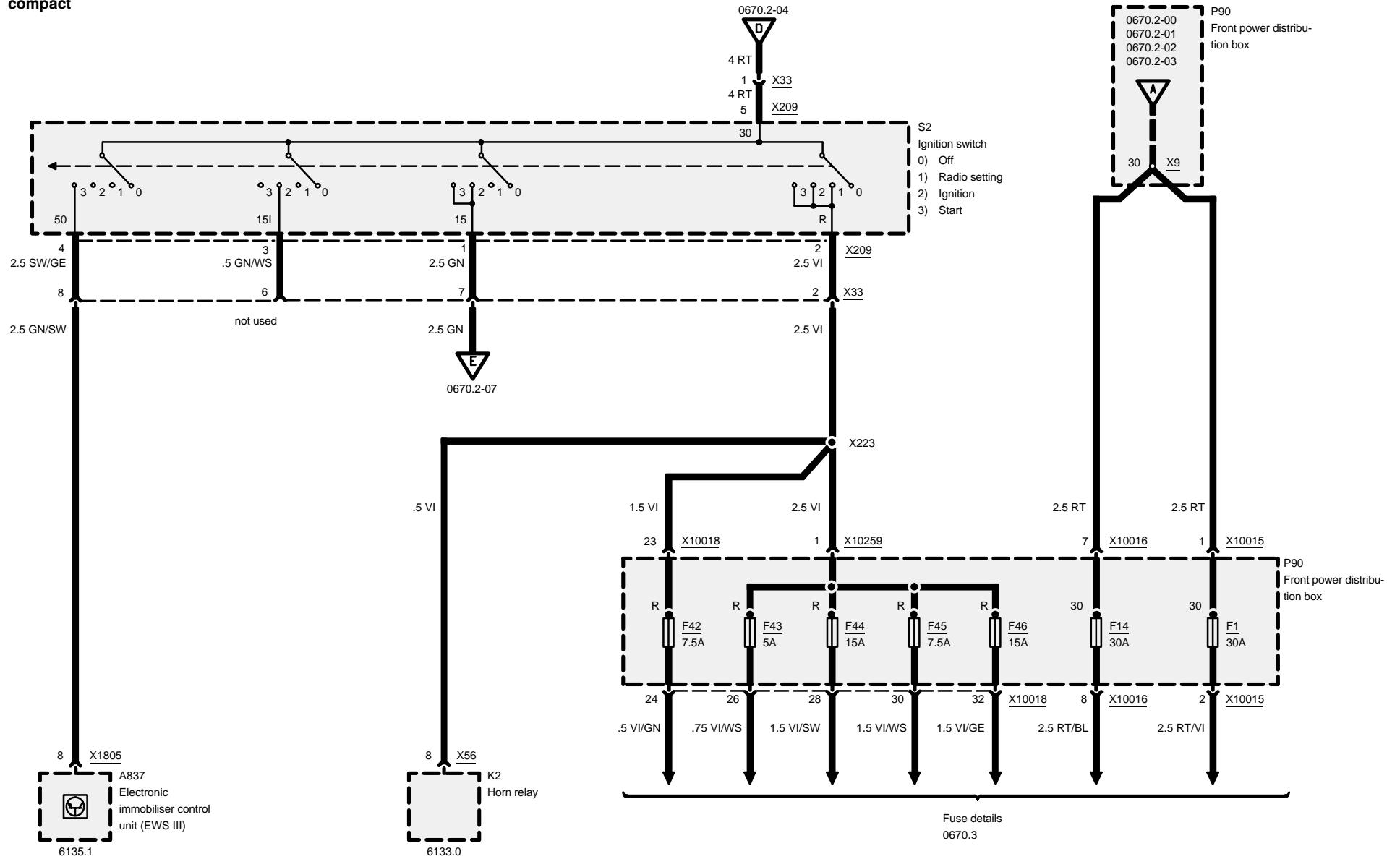


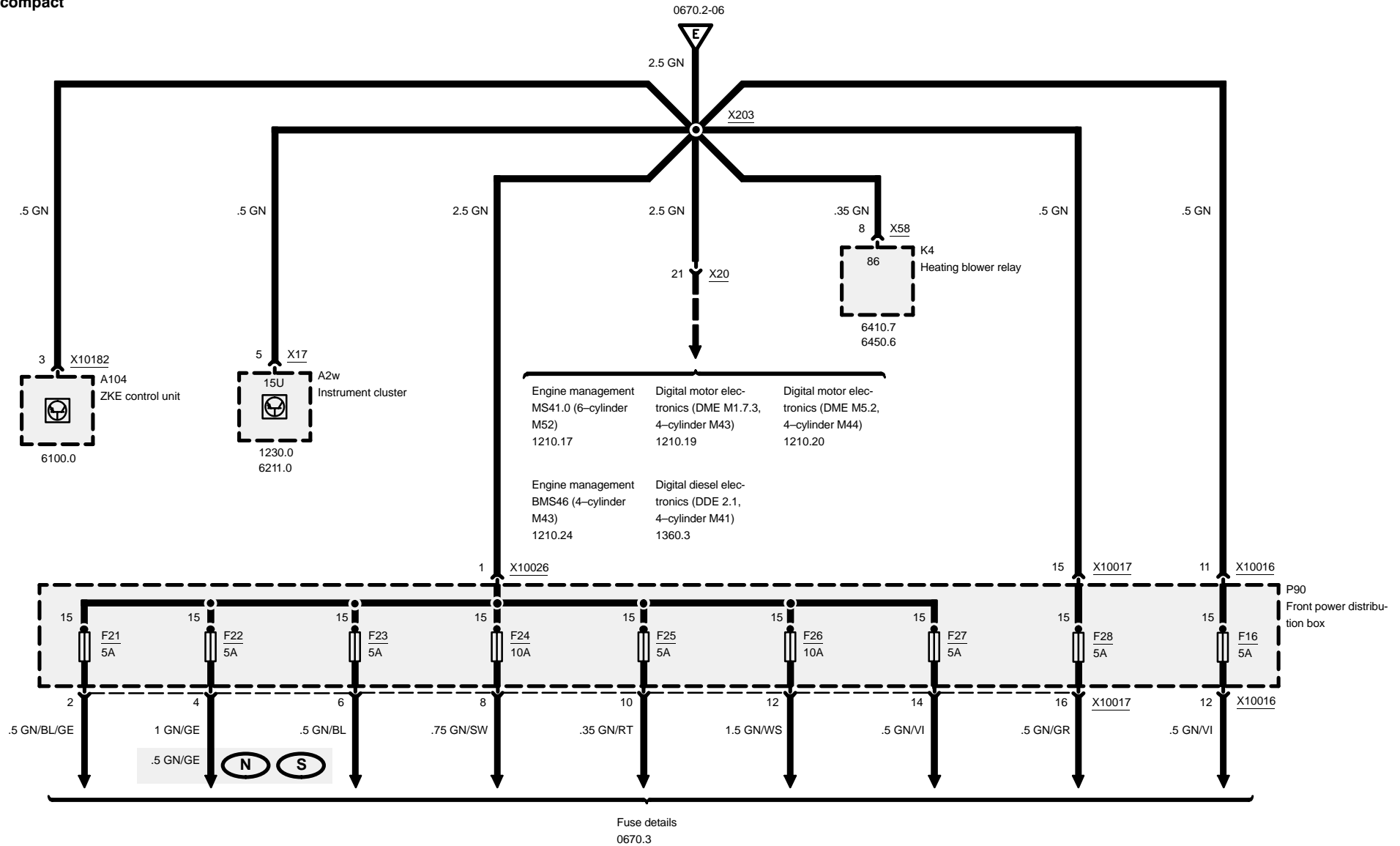


Power distribution



Power distribution



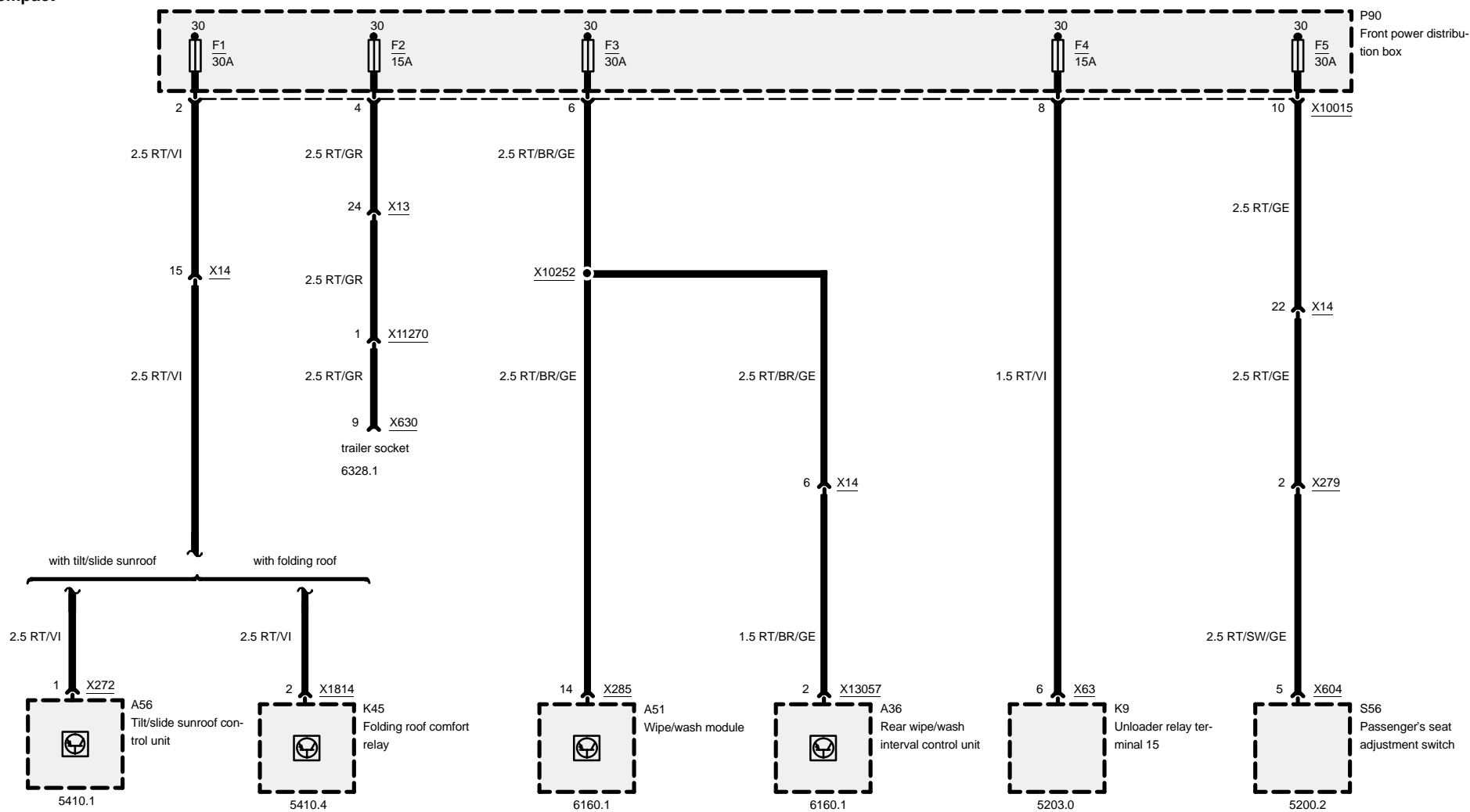




0670.3 Fuse details

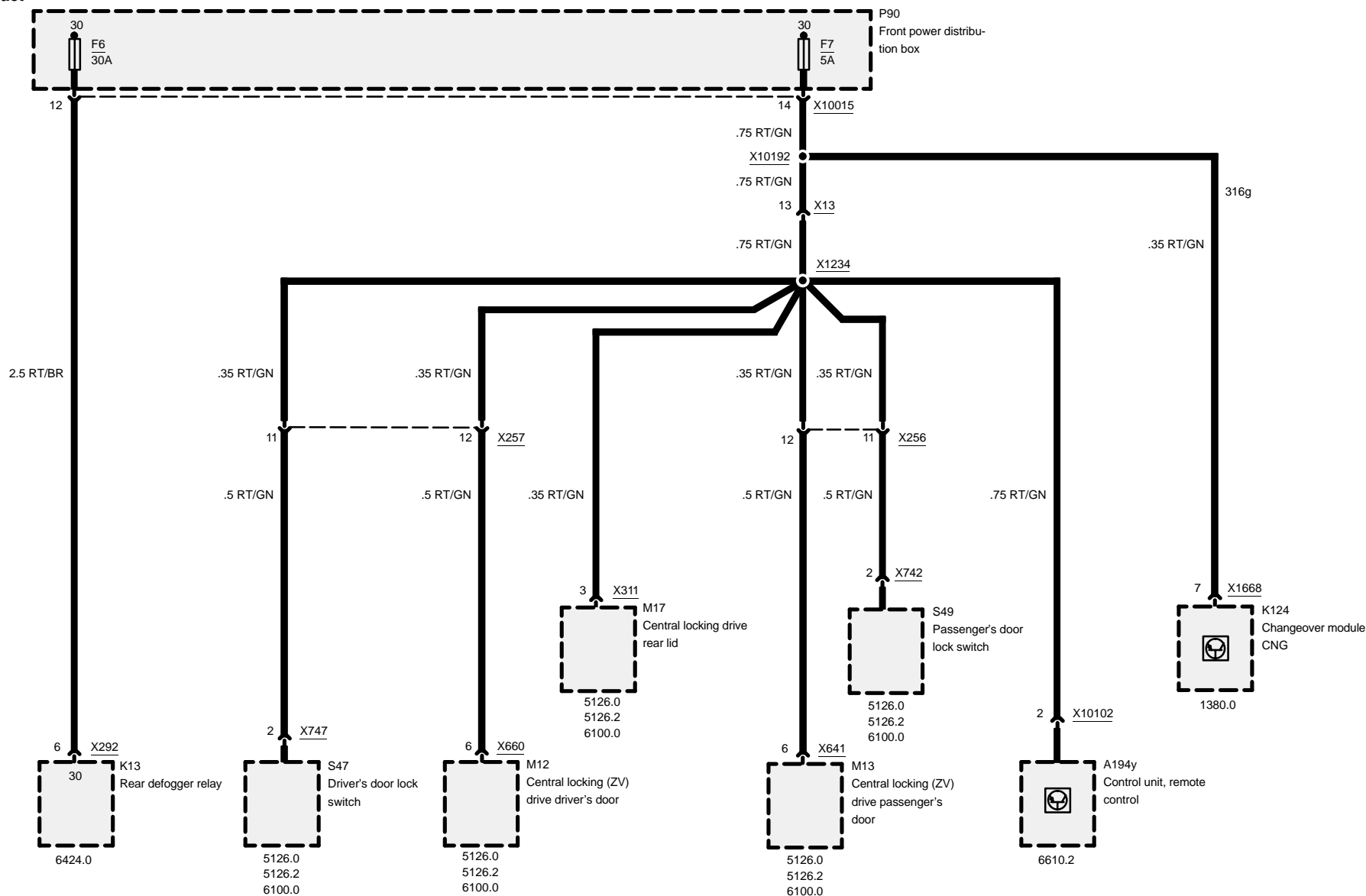
Fuses 1, 2, 3, 4 and 5

Right-hand drive



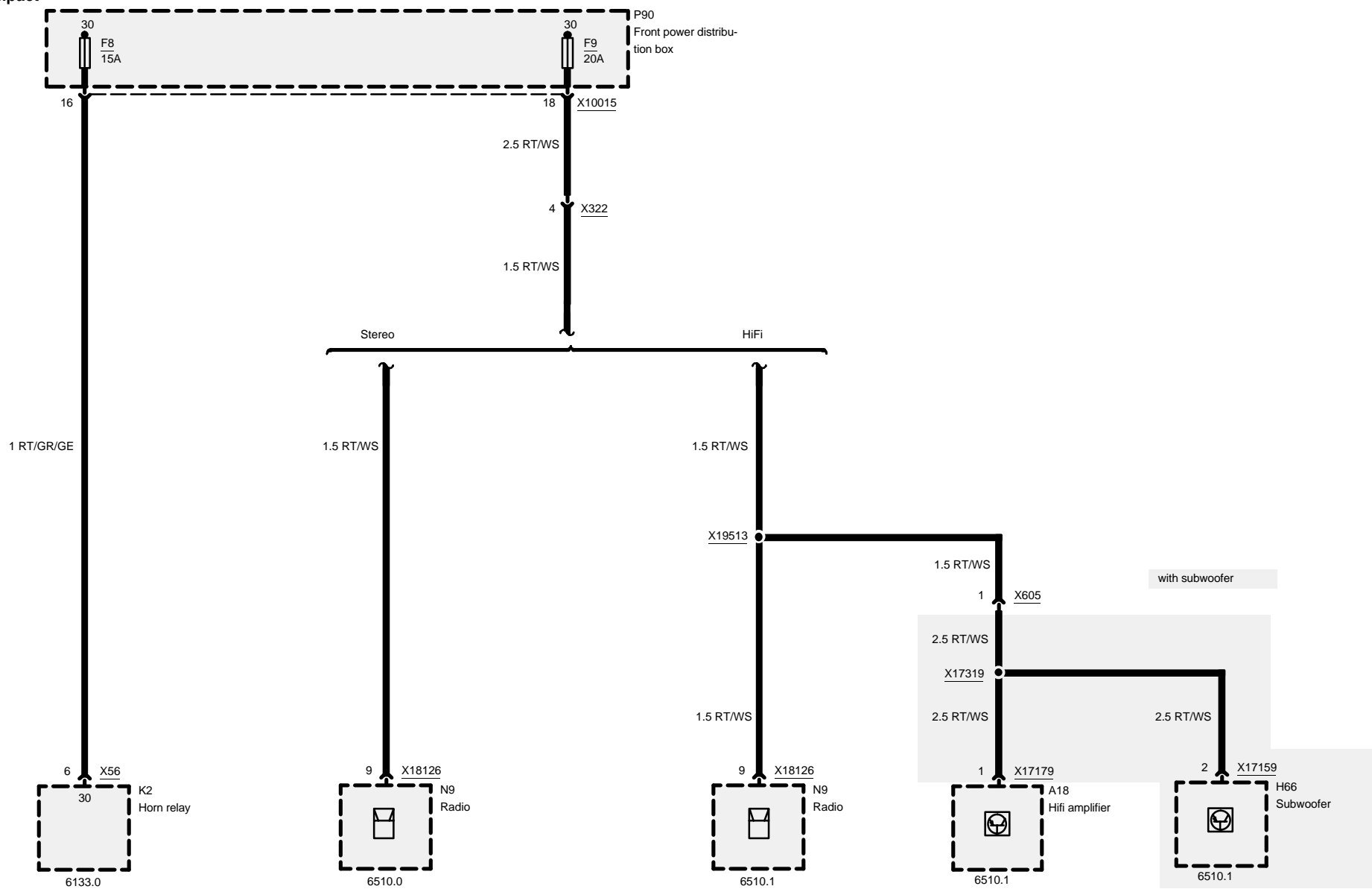
Fuse details

Fuses 6 and 7



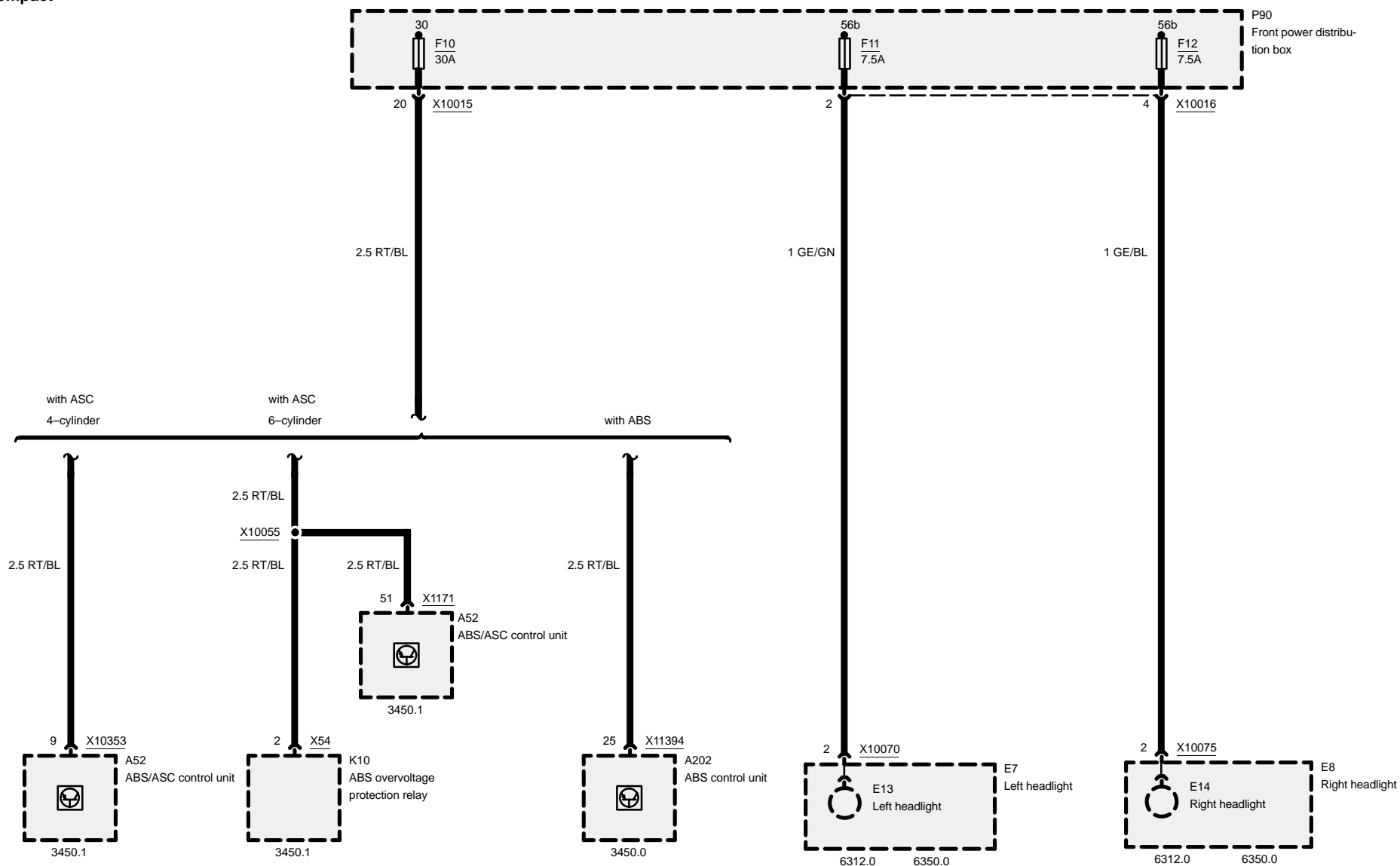


Fuses 8 and 9



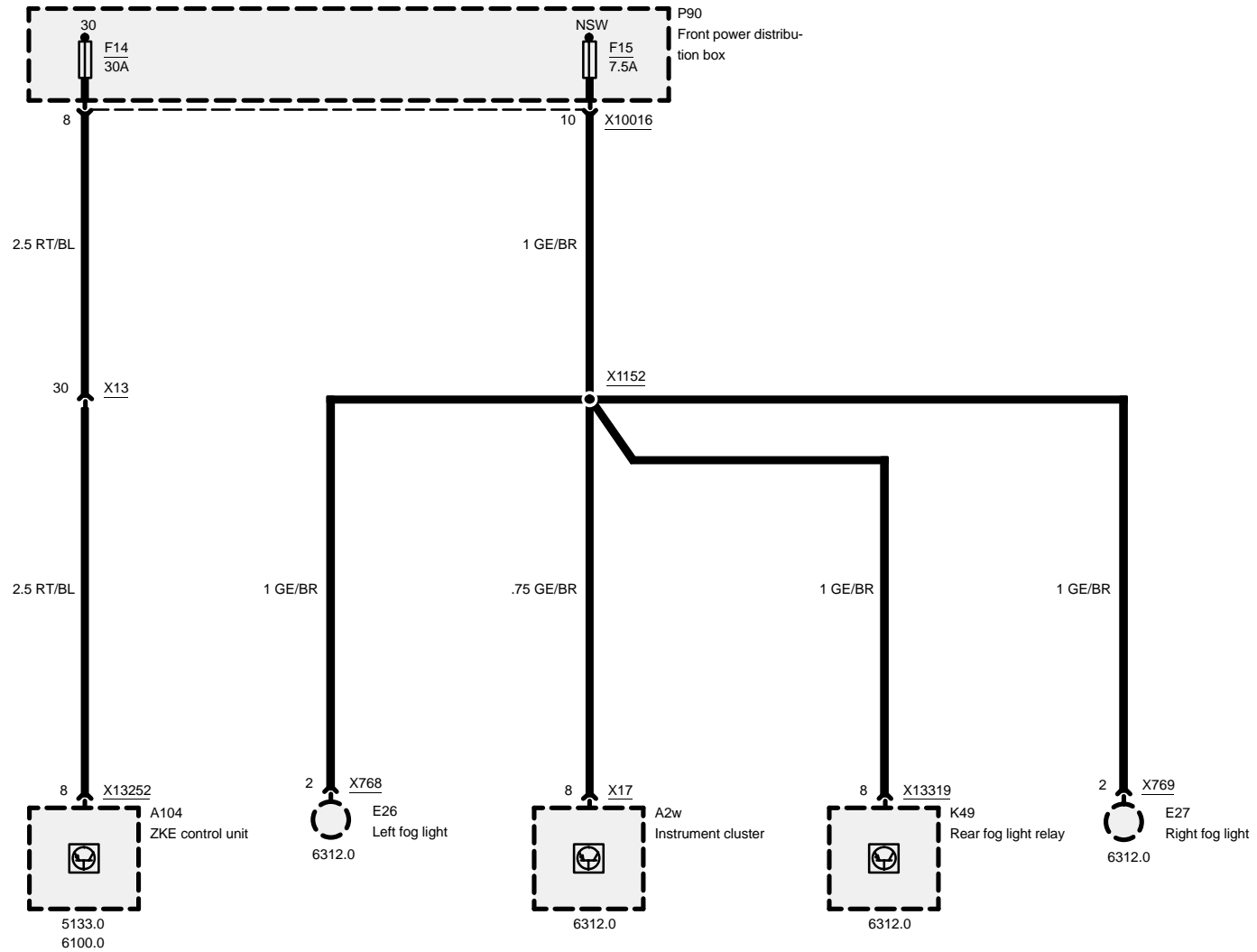
Fuse details

Fuses 10, 11 and 12



Fuse details

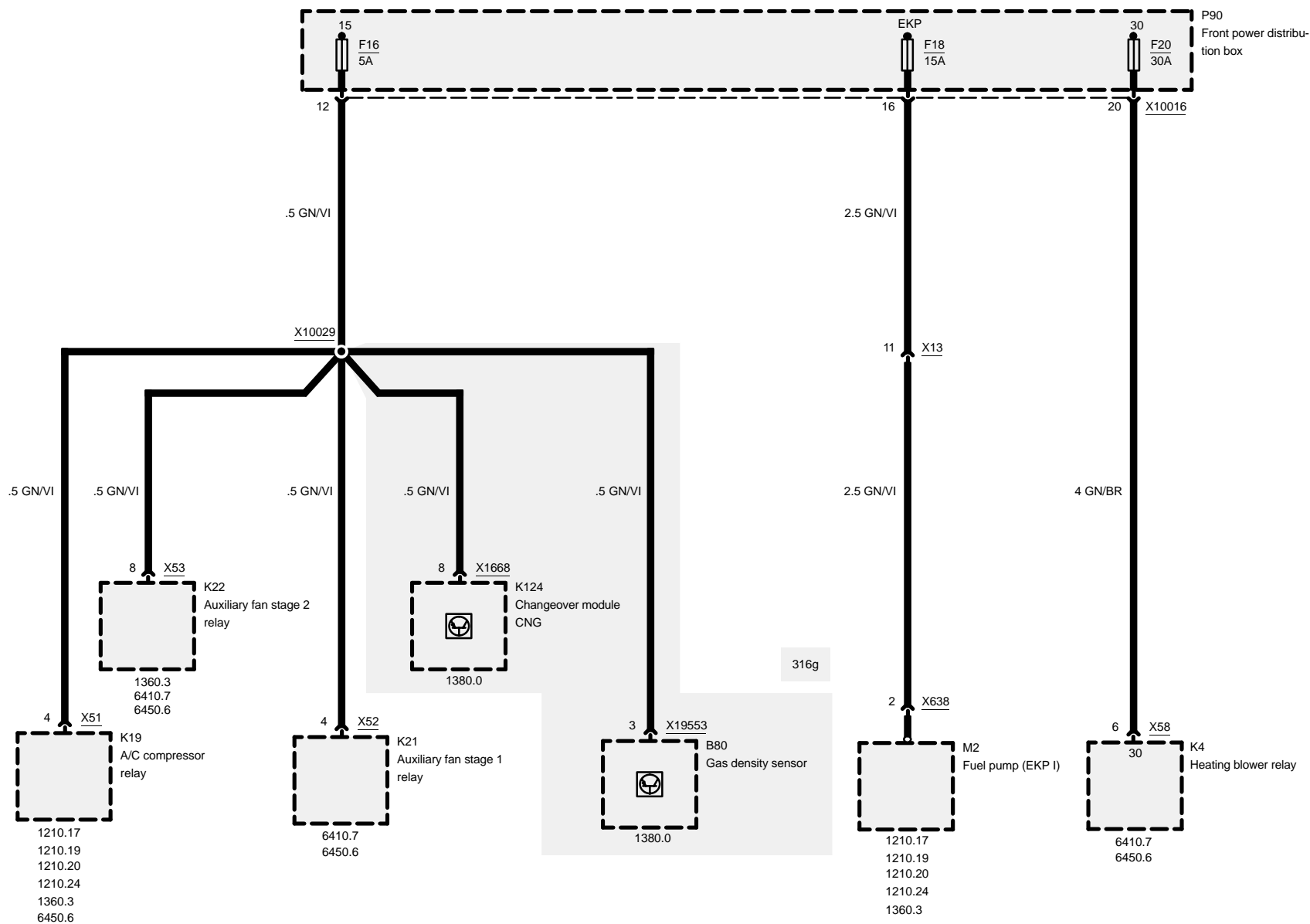
Fuses 14 and 15



Fuse details

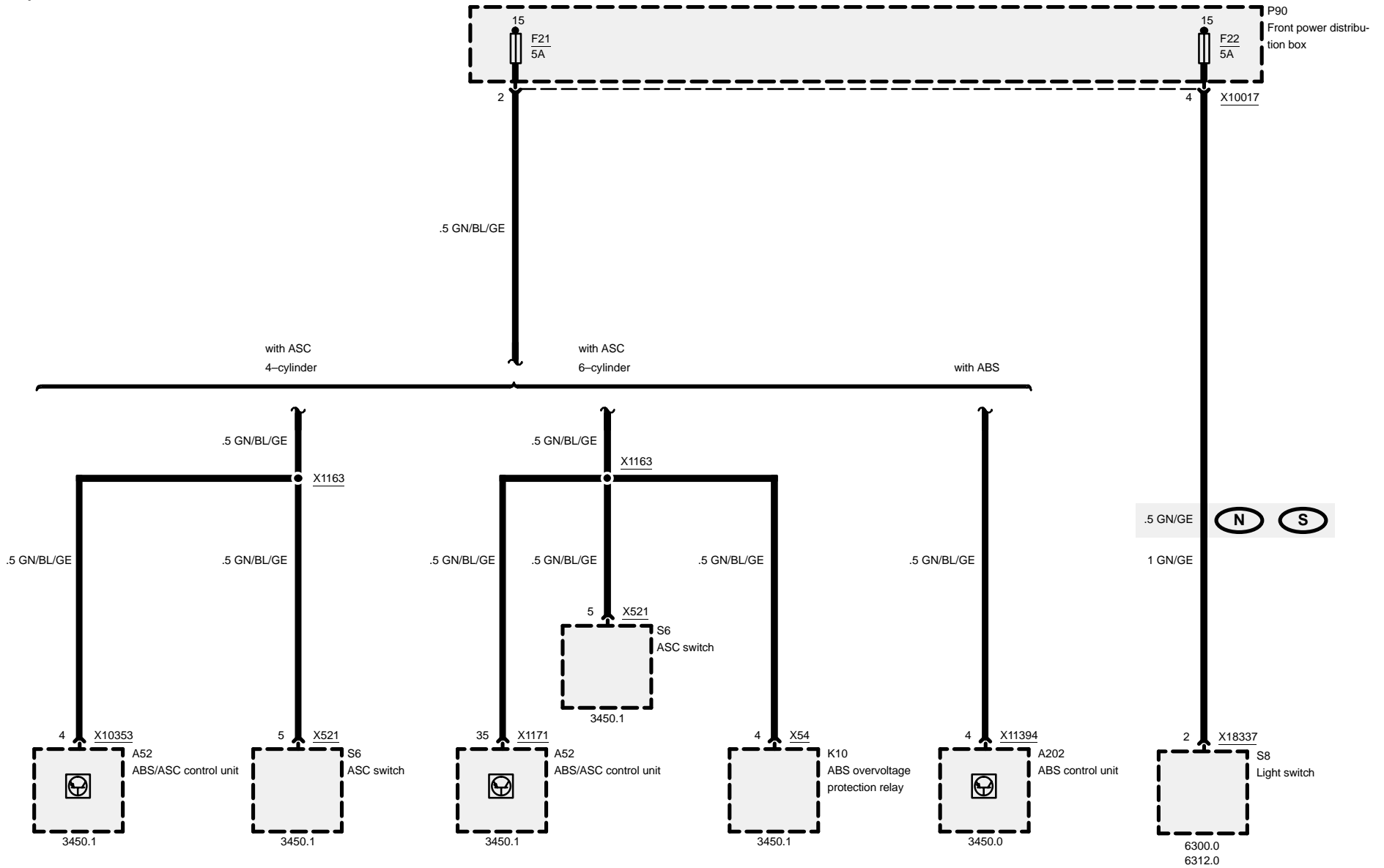
Fuses 16, 18 and 20

Right-hand drive



Fuse details

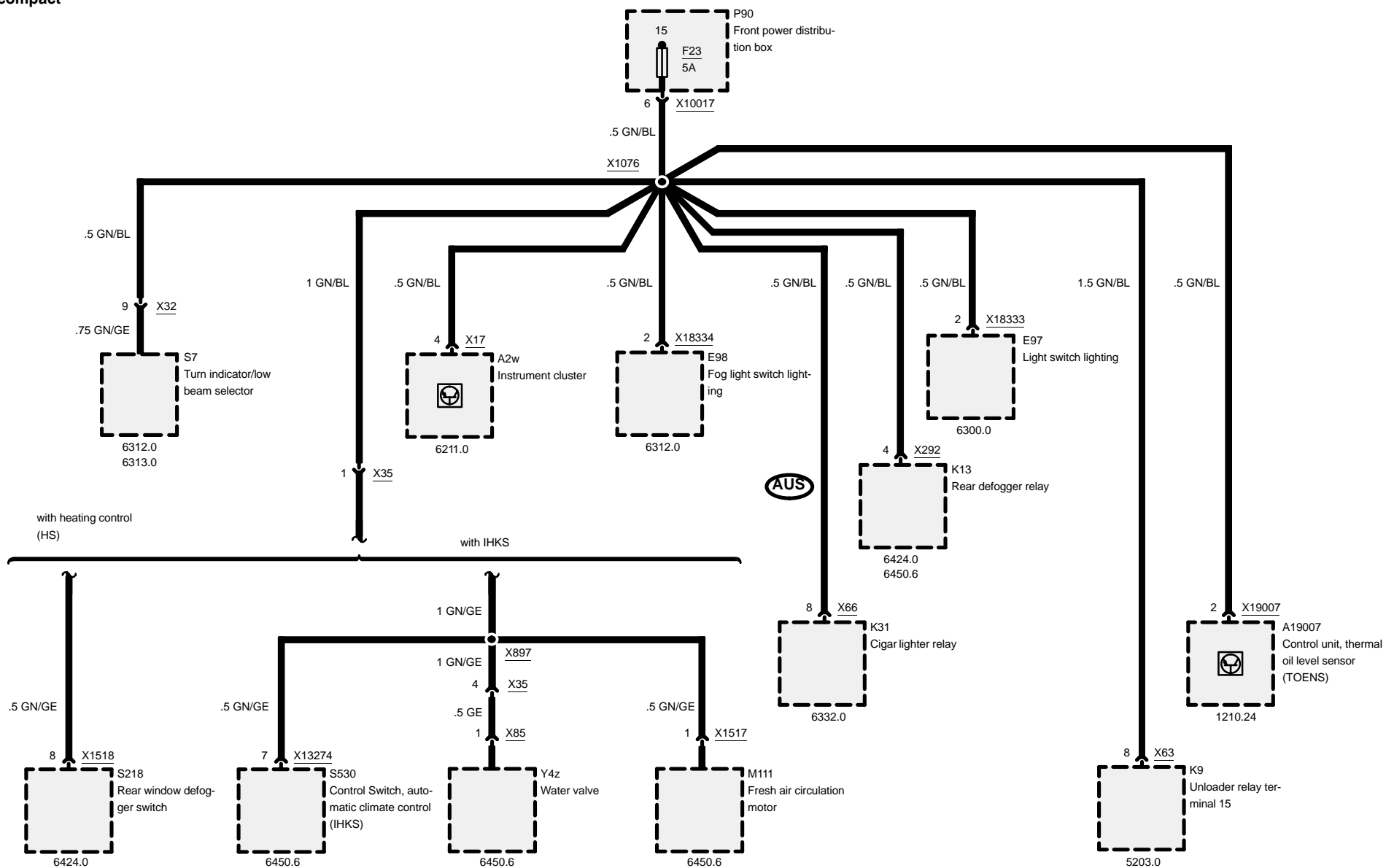
Fuses 21 and 22



Fuse details

Fuse 23

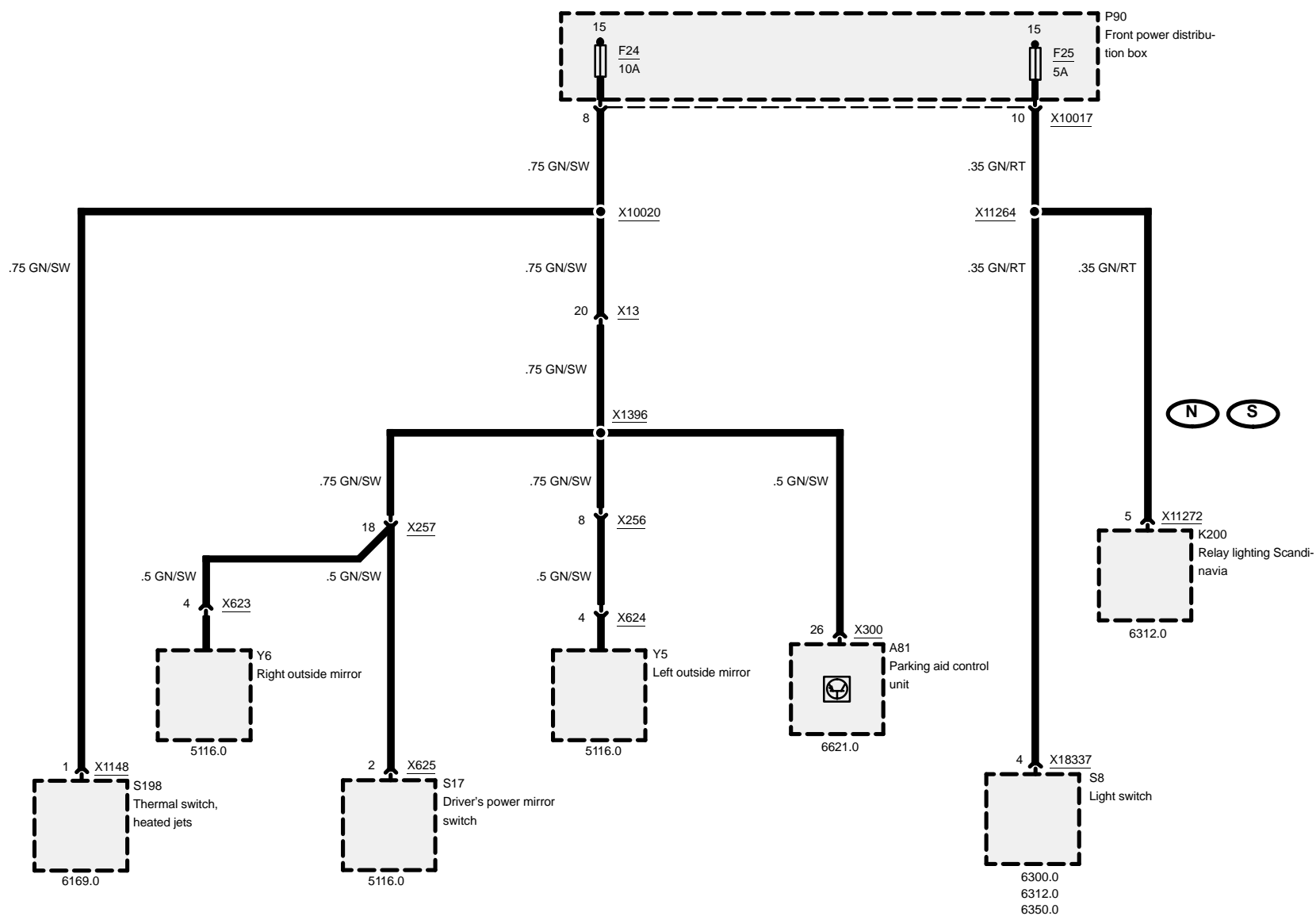
Right-hand drive





Fuses 24 and 25

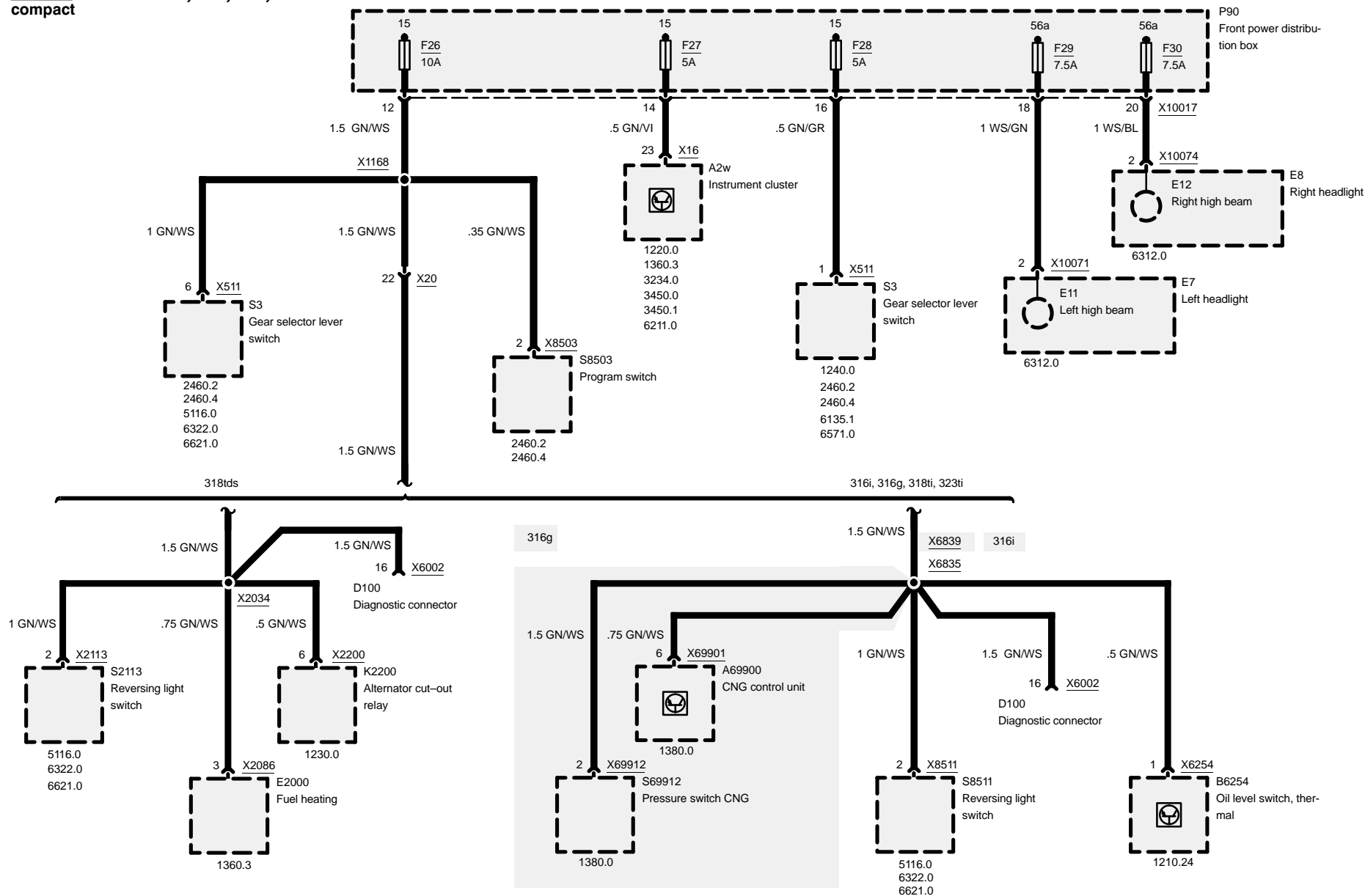
Right-hand drive



Fuse details

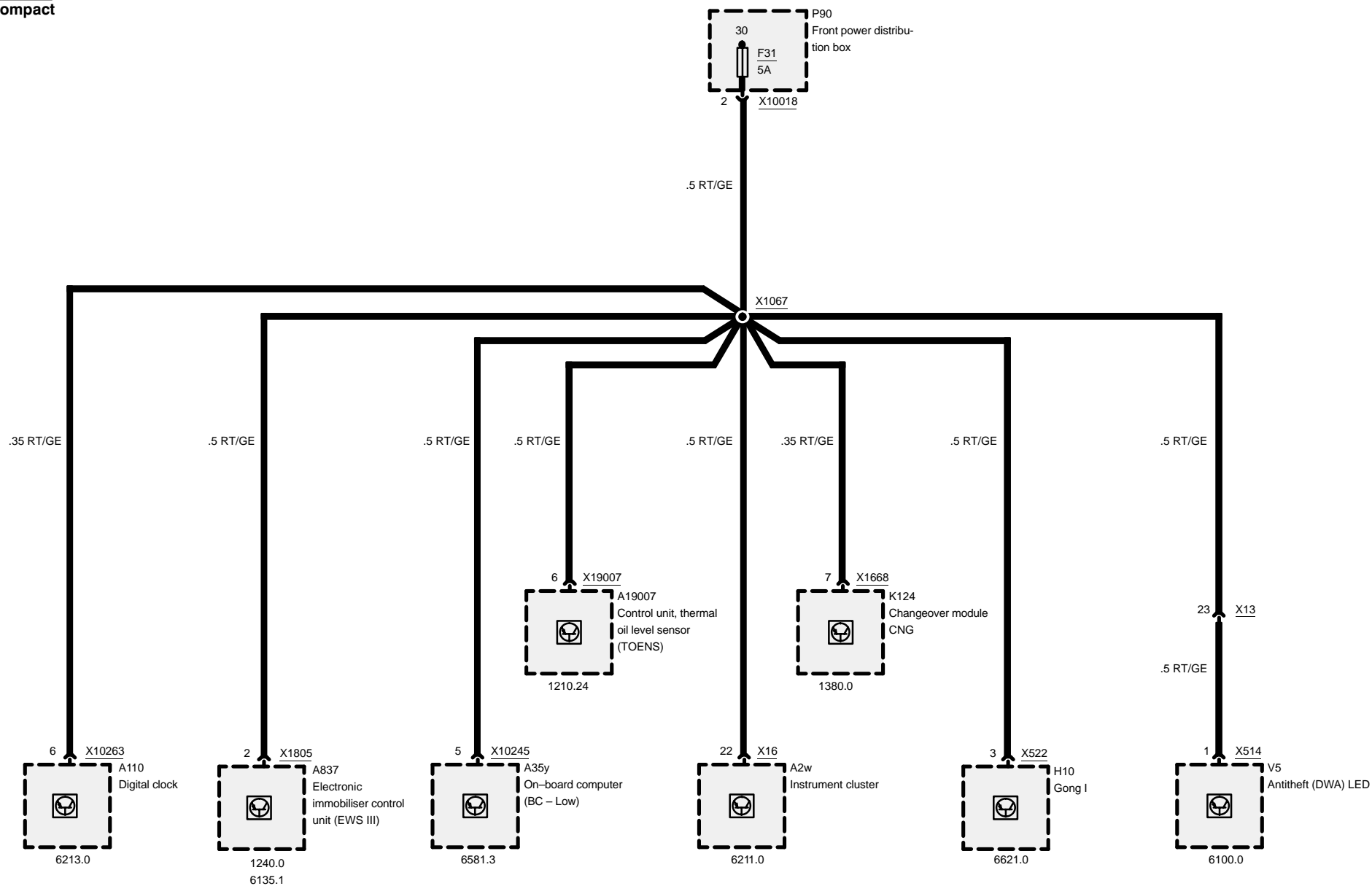
Fuses 26, 27, 28, 29 and 30

Right-hand drive



Fuse details

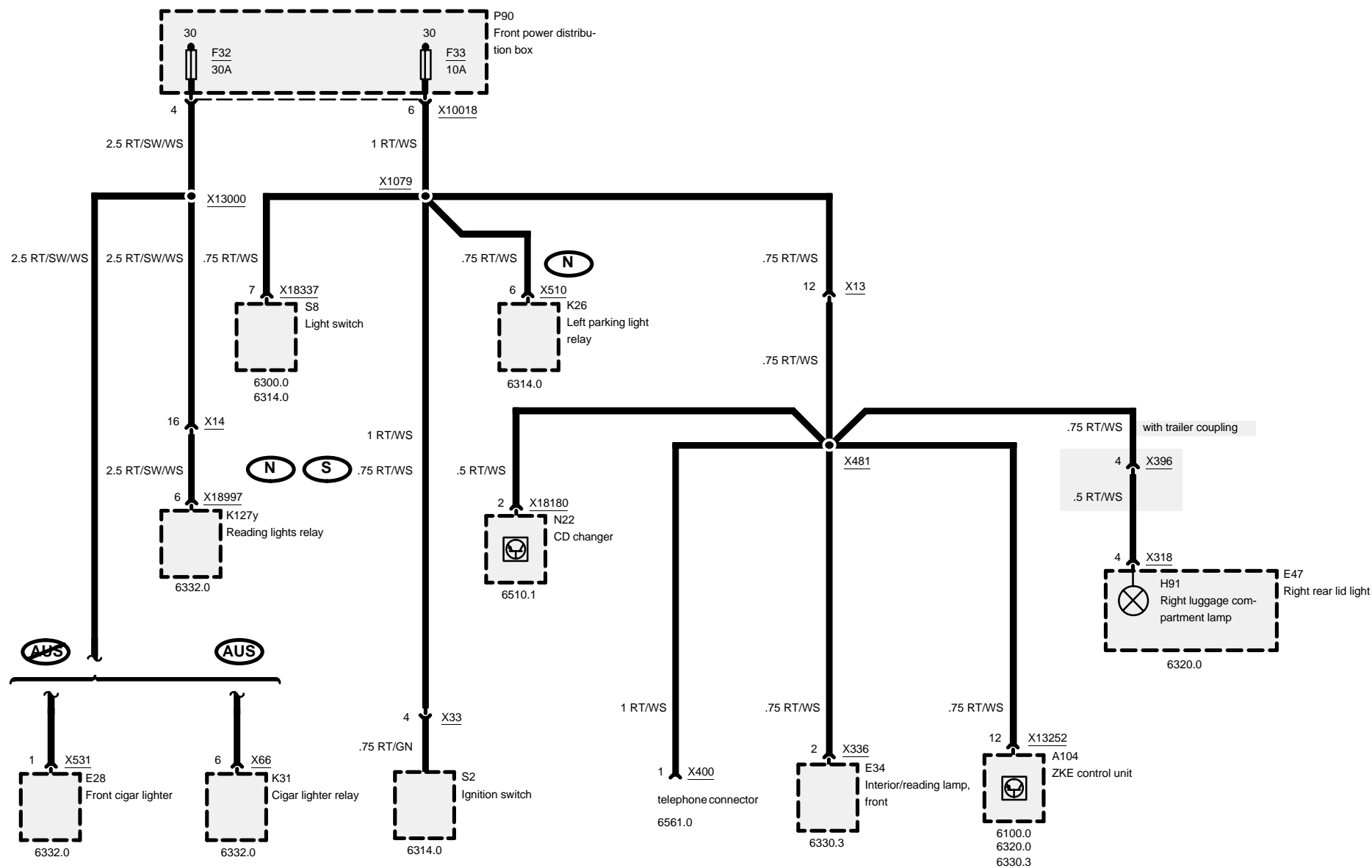
Fuse 31



Fuse details

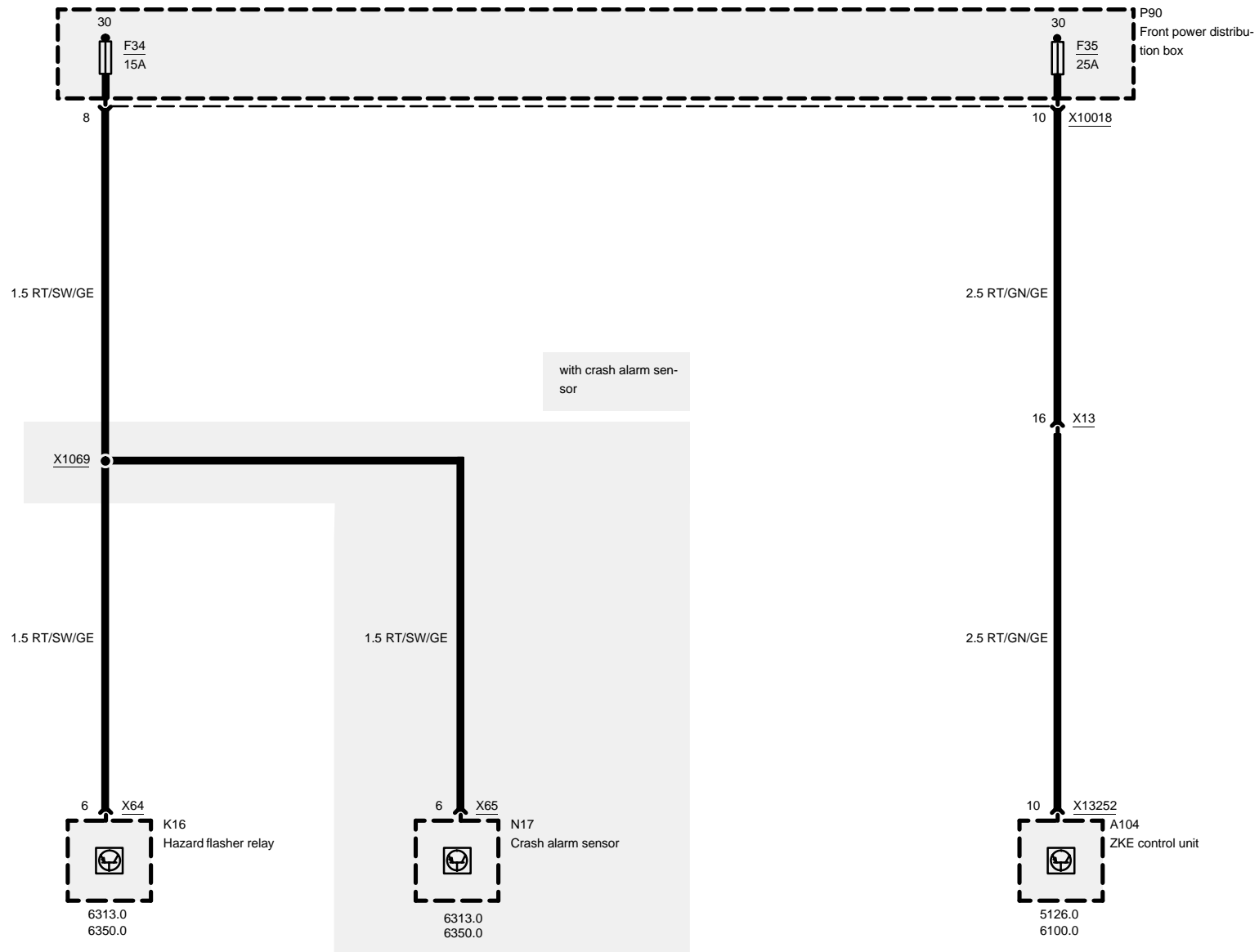
Fuses 32 and 33

Right-hand drive



Fuse details

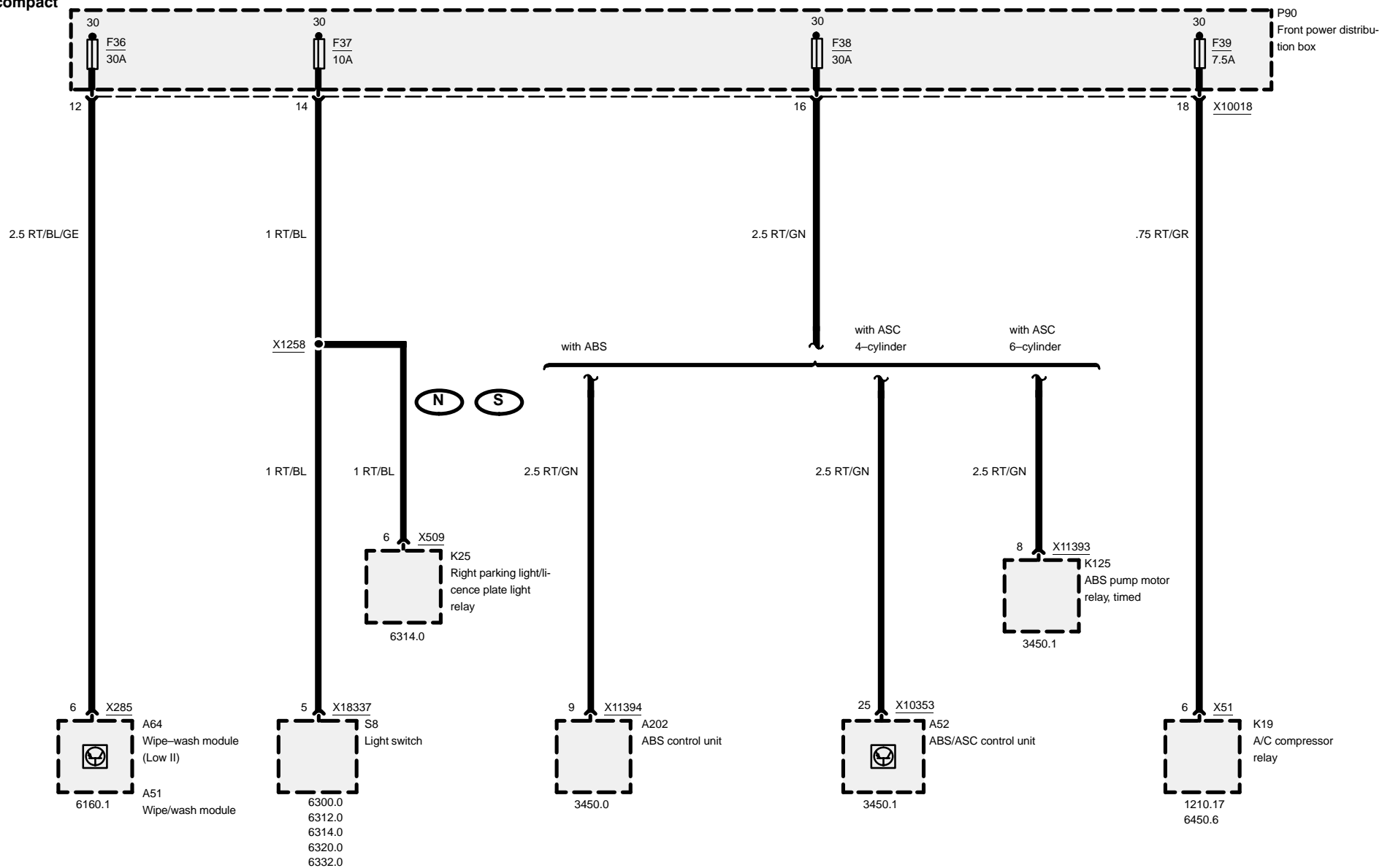
Fuses 34 and 35





Fuse details

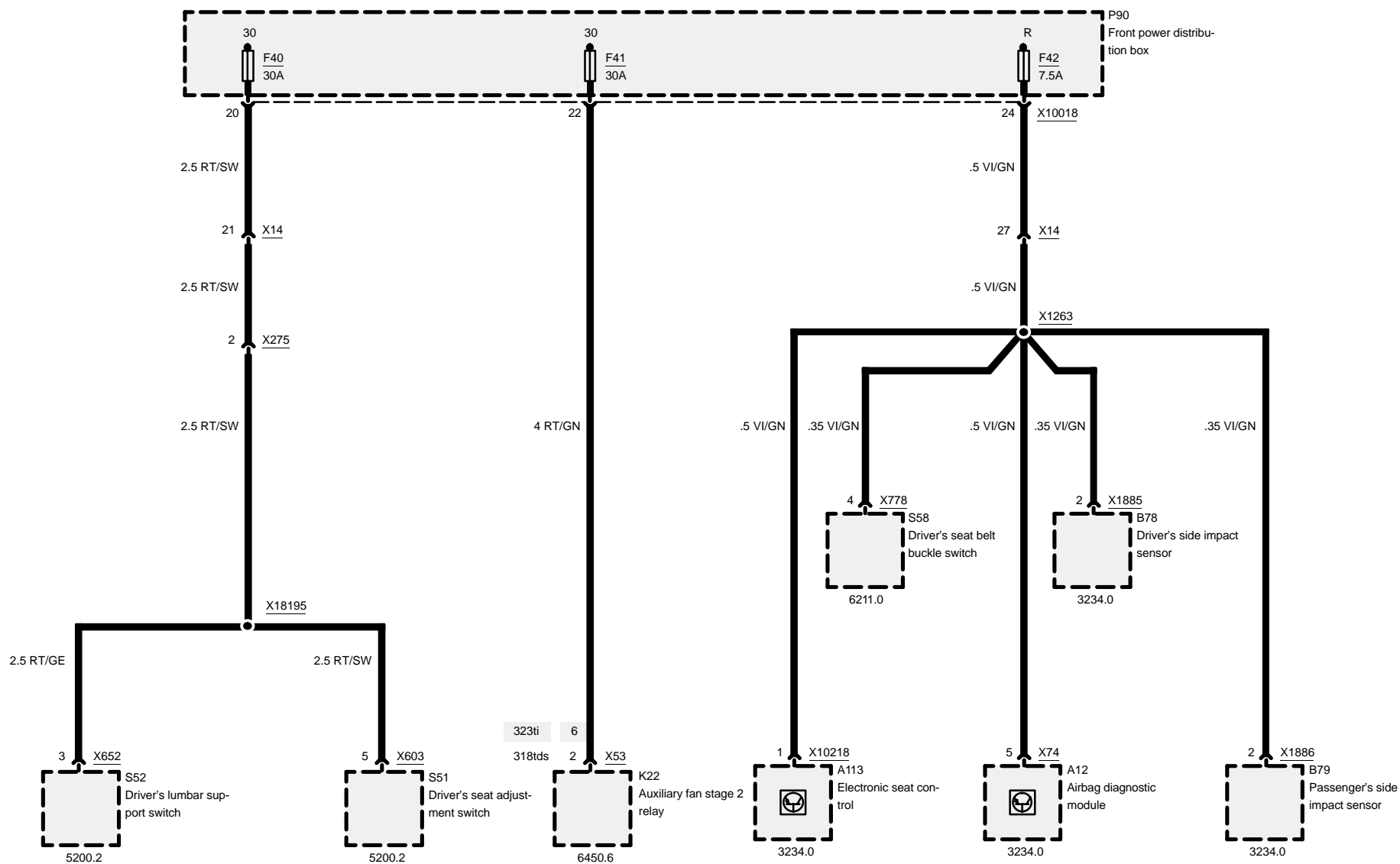
Fuses 36, 37, 38 and 39



Fuse details

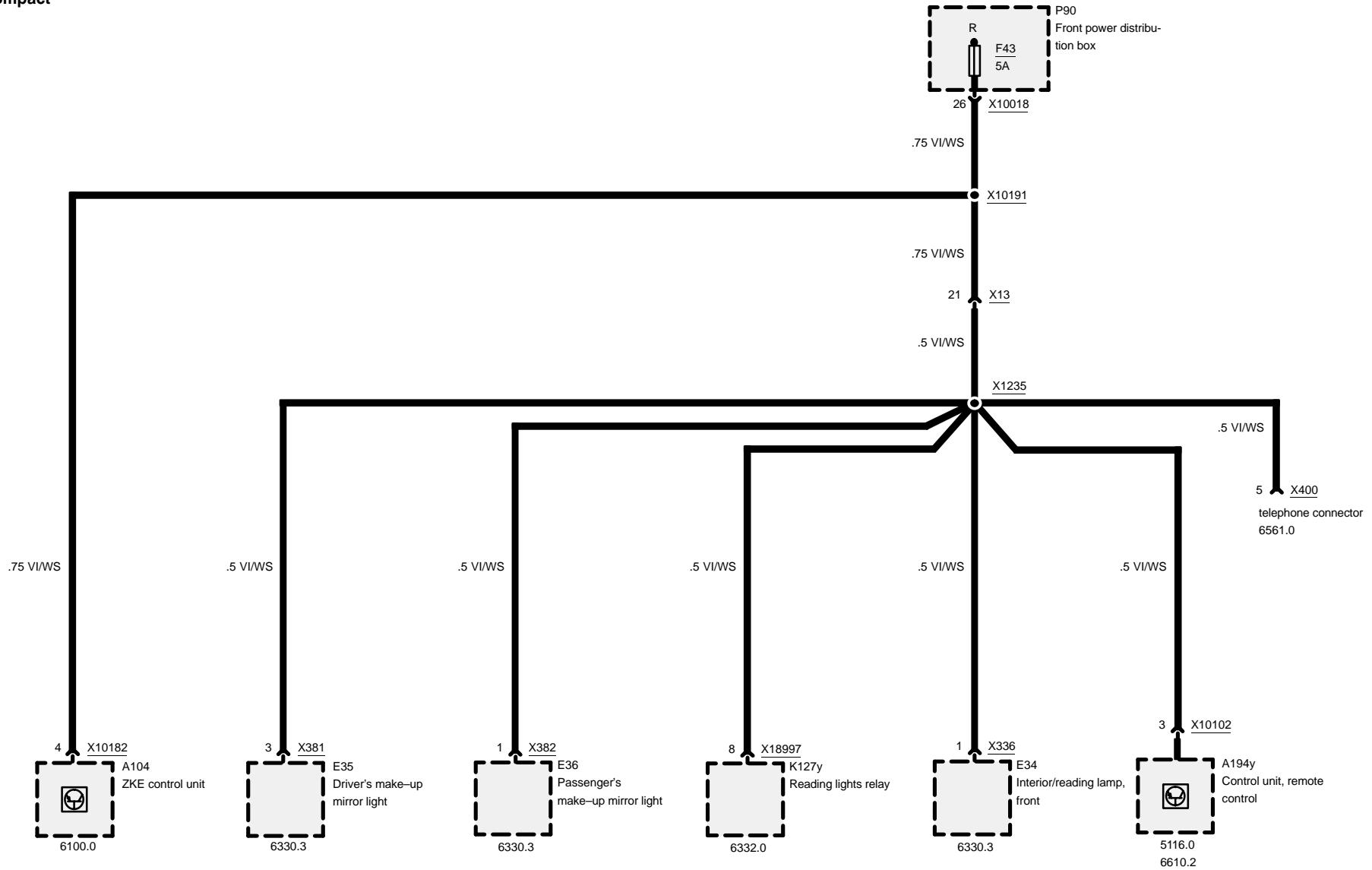
Fuses 40, 41 and 42

Right-hand drive



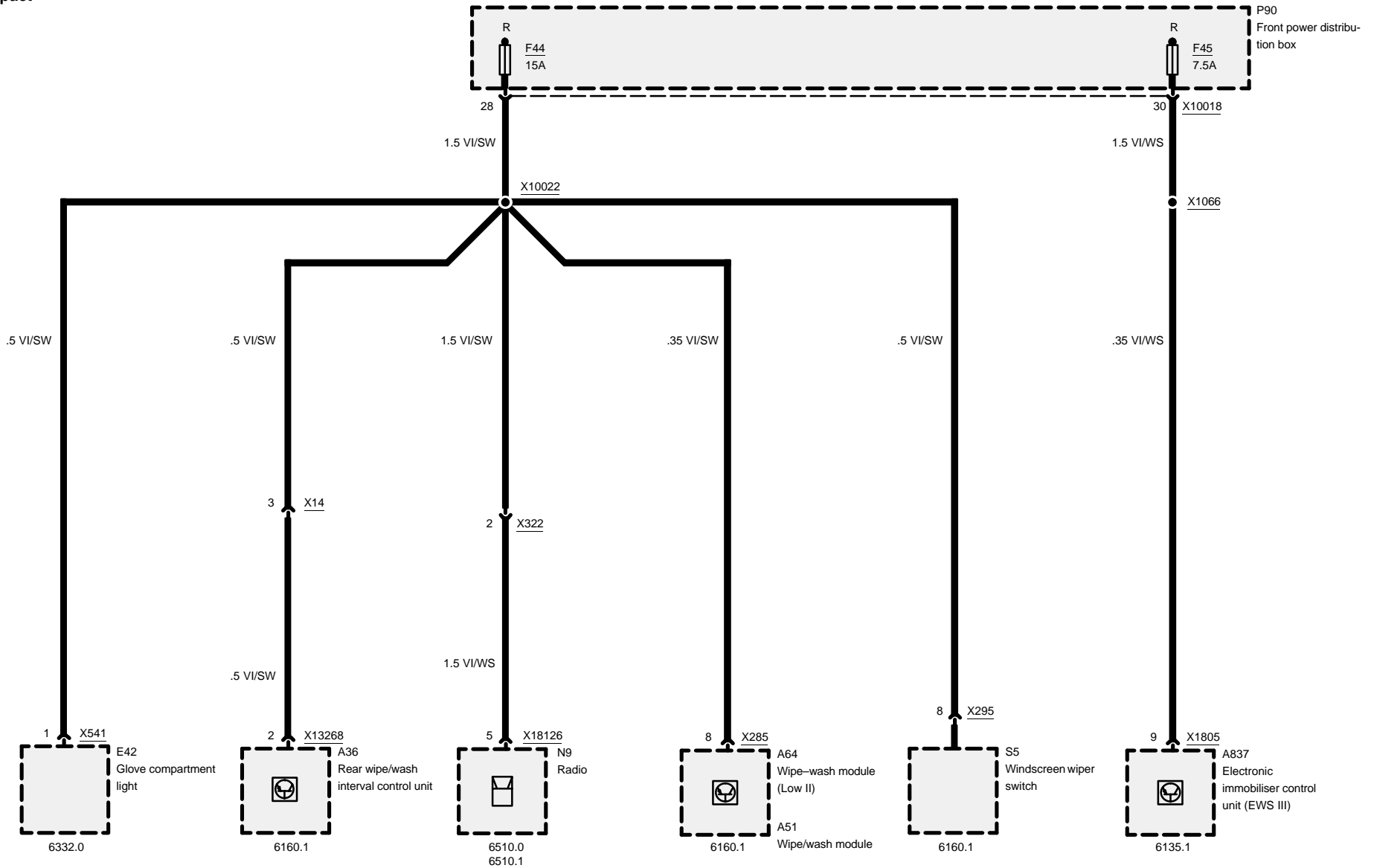
Fuse details

Fuse 43



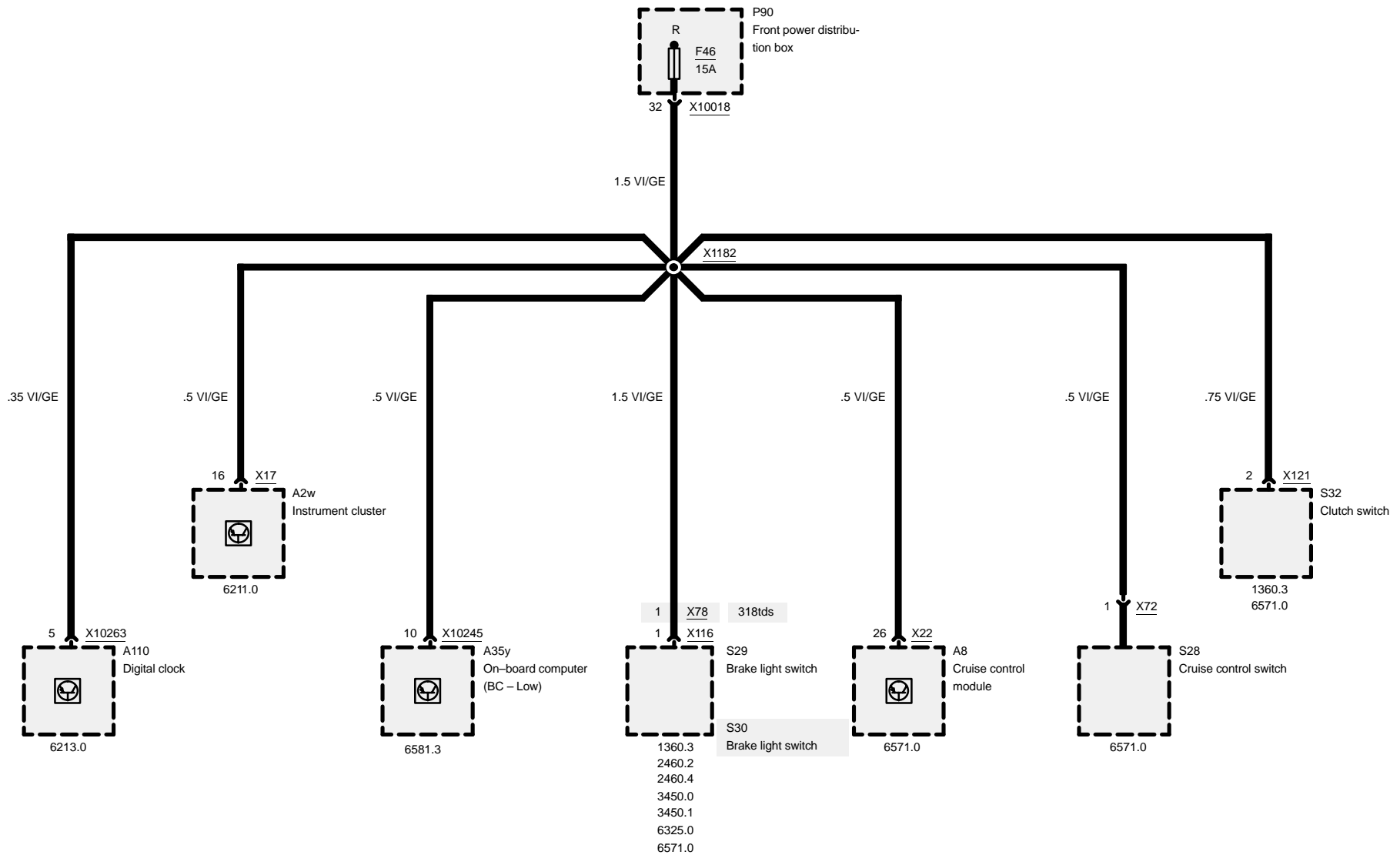
Fuse details

Fuses 44 and 45



Fuse details

Fuse 46

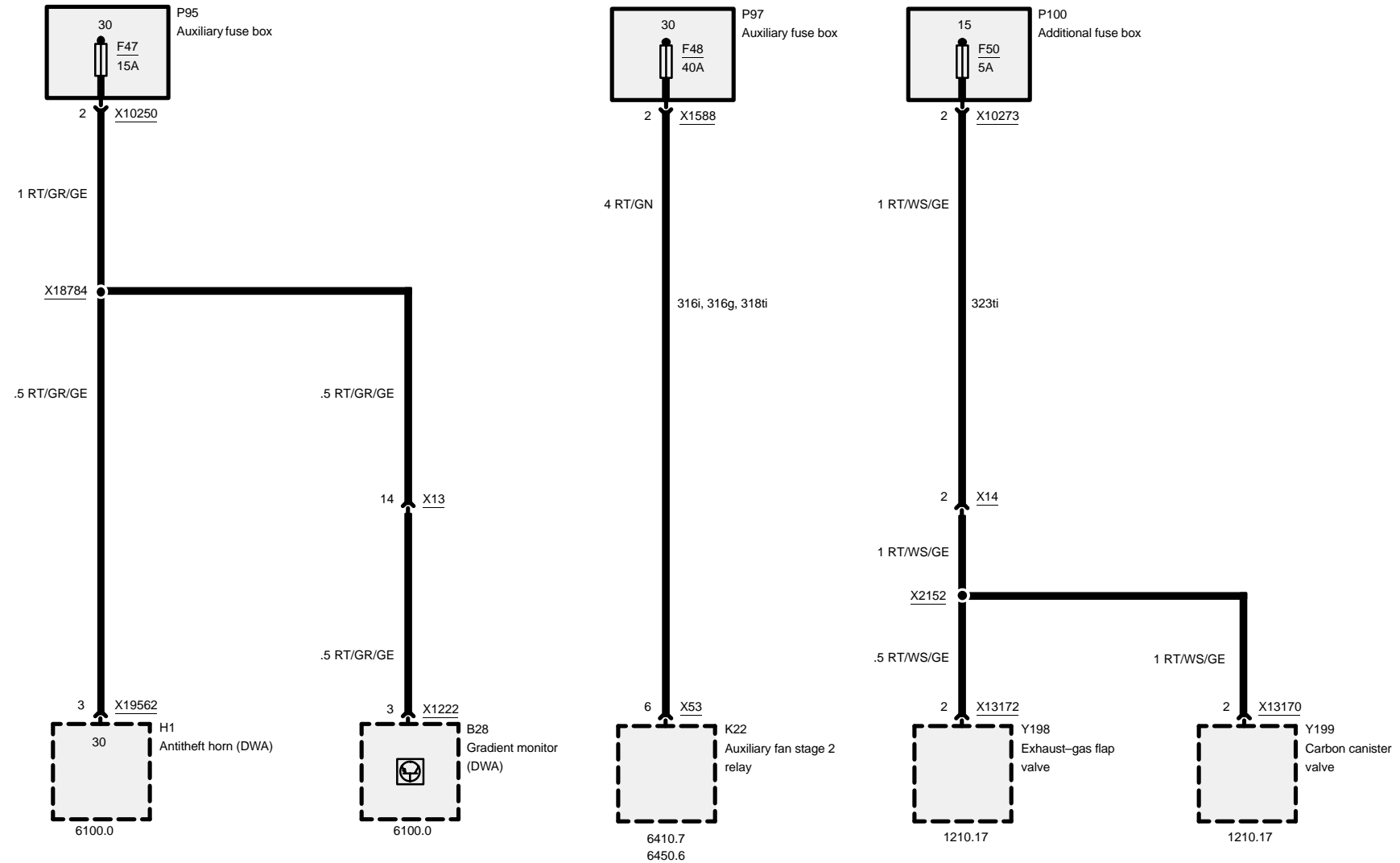




Fuse details

Right-hand drive

Fuses 47, 48 and 50

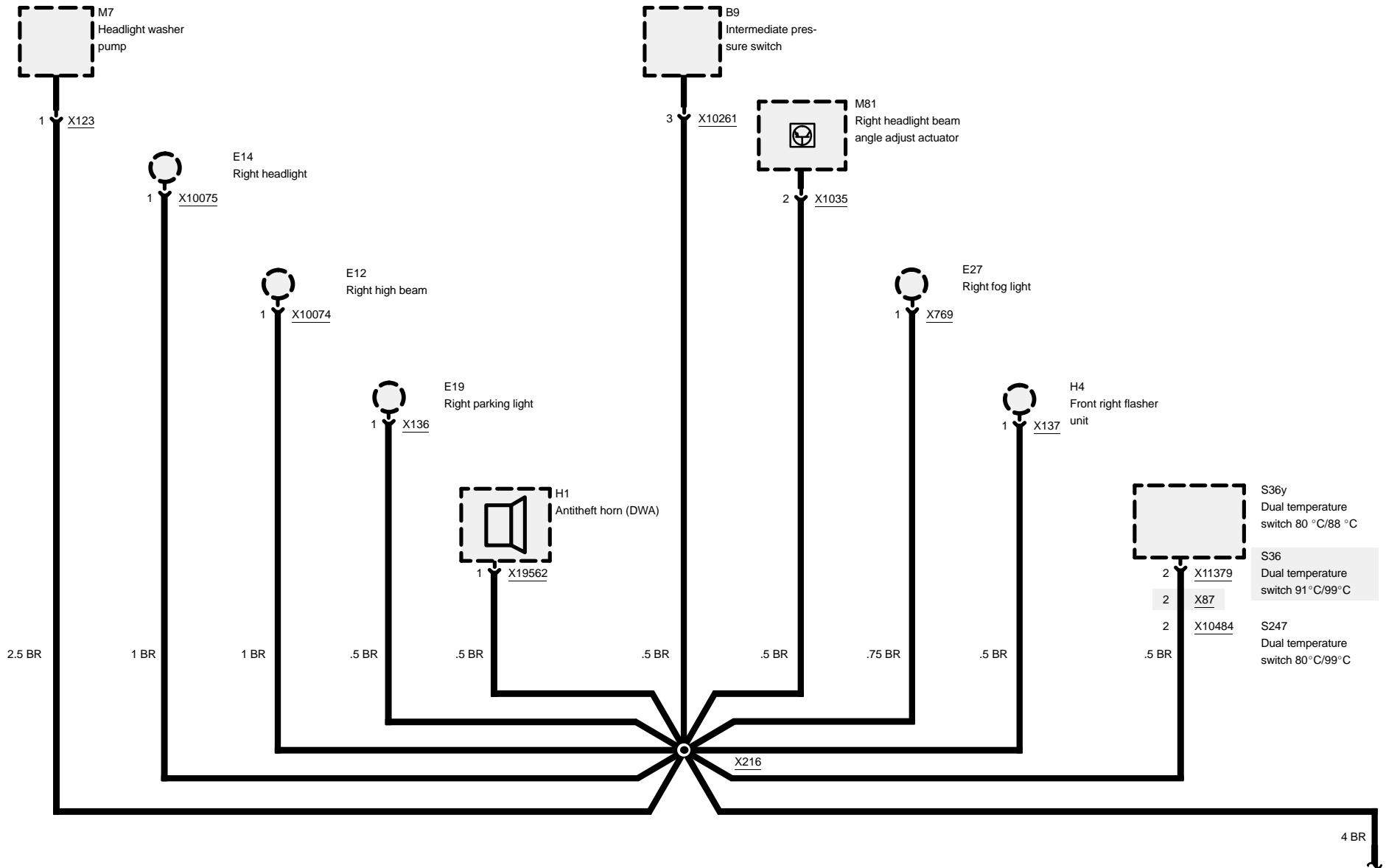




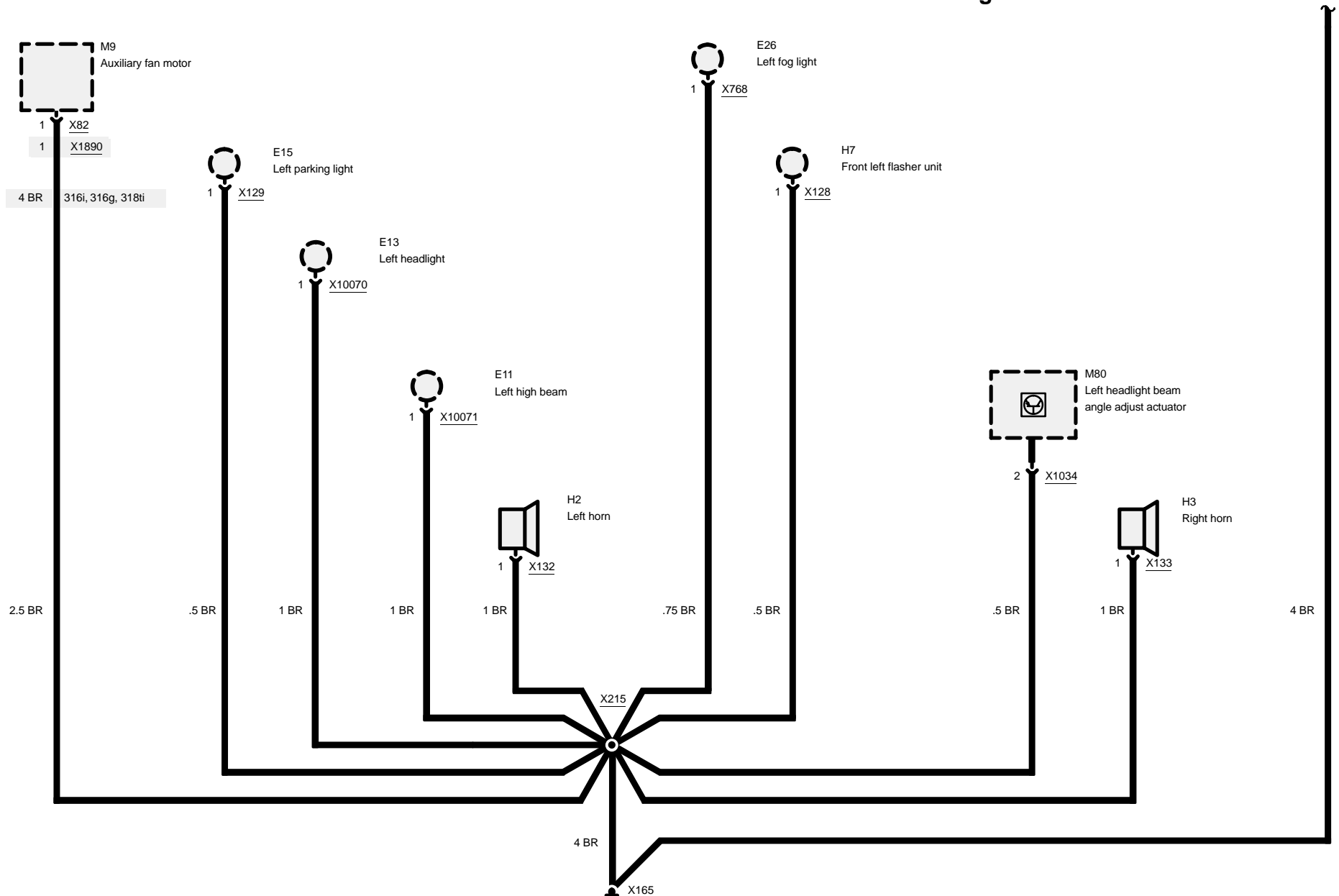
compact

0670.4 Ground distribution

Ground X165



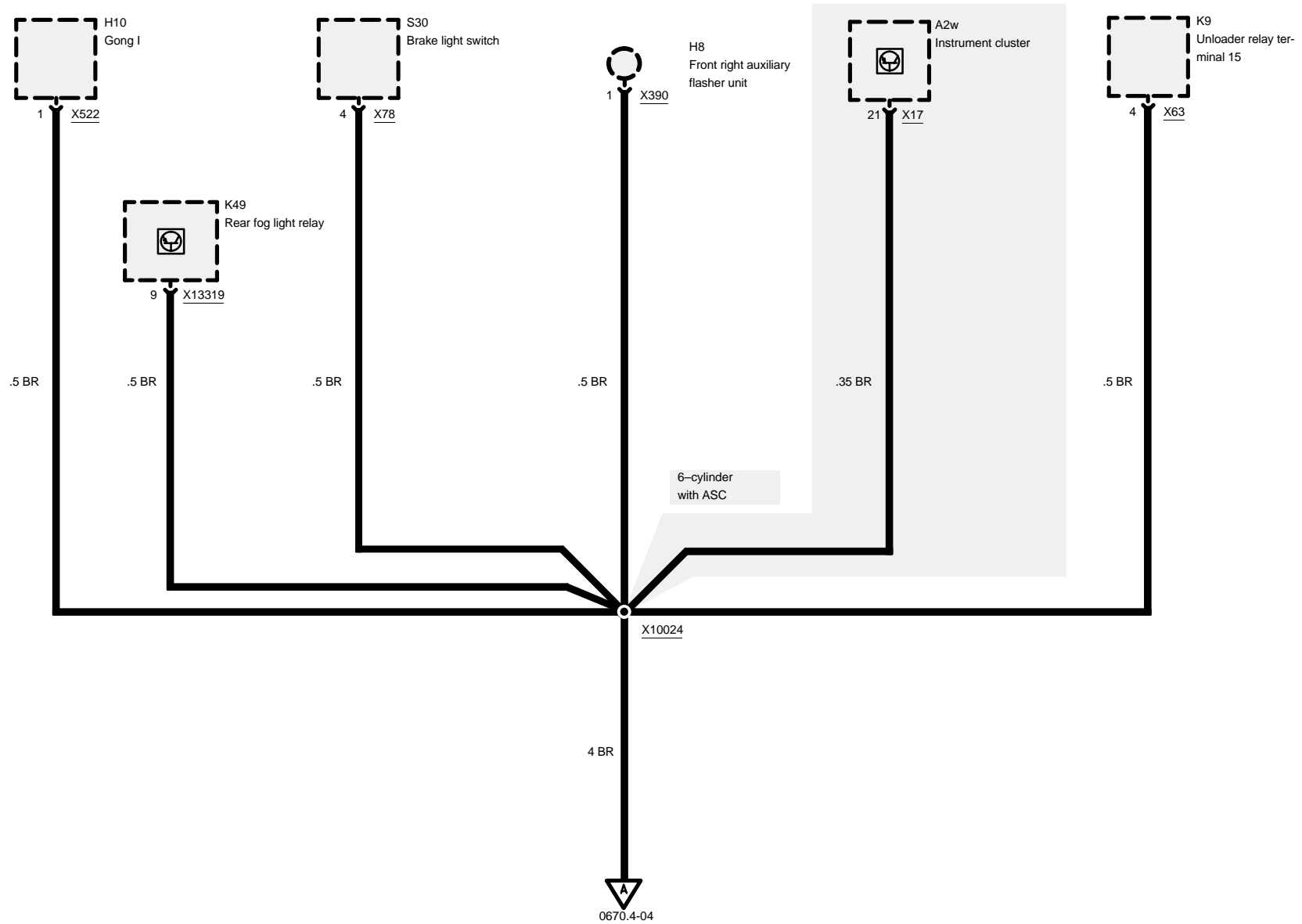
Right-hand drive





Ground distribution

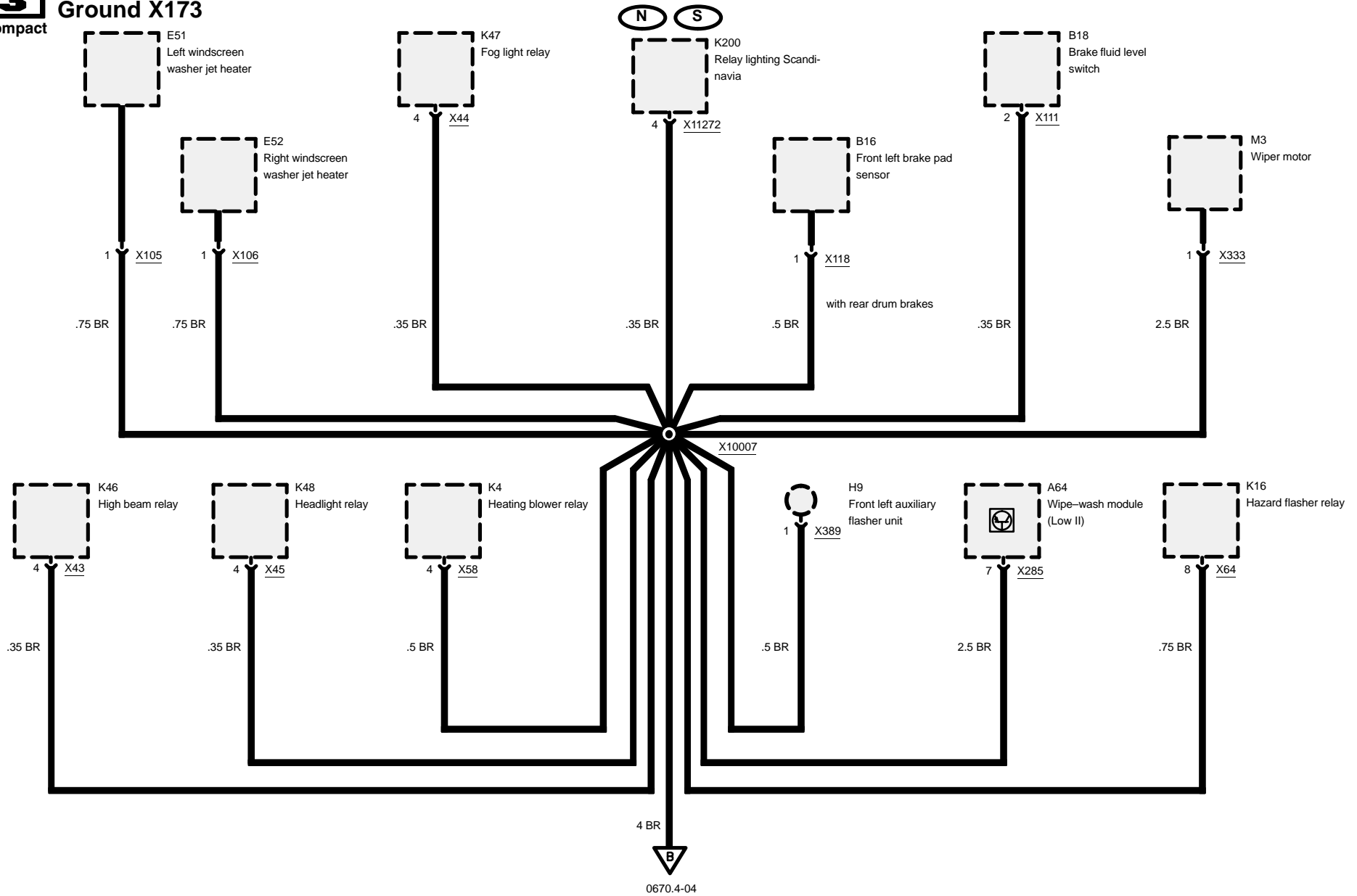
Ground X173





Ground distribution

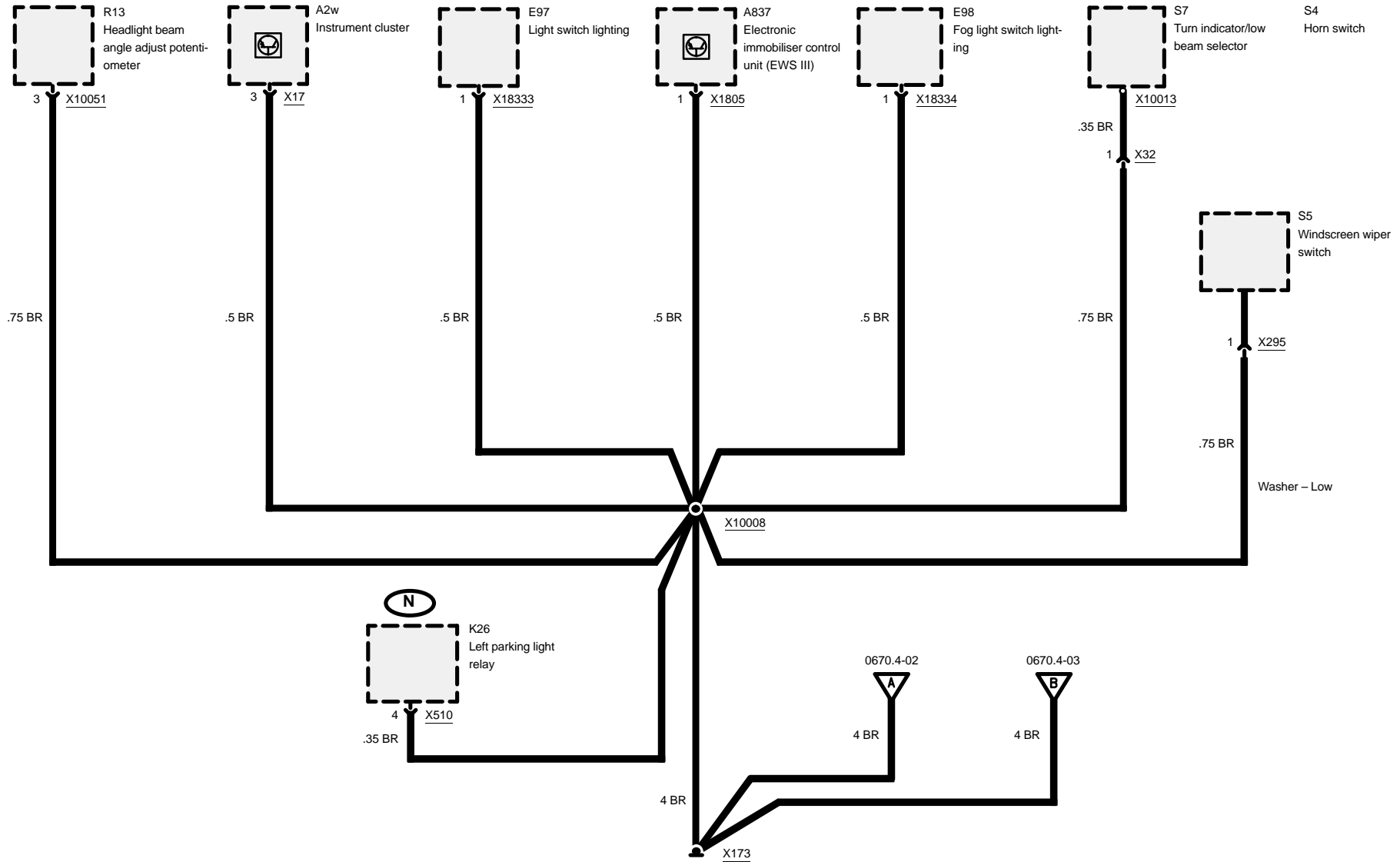
Ground X173





Ground distribution

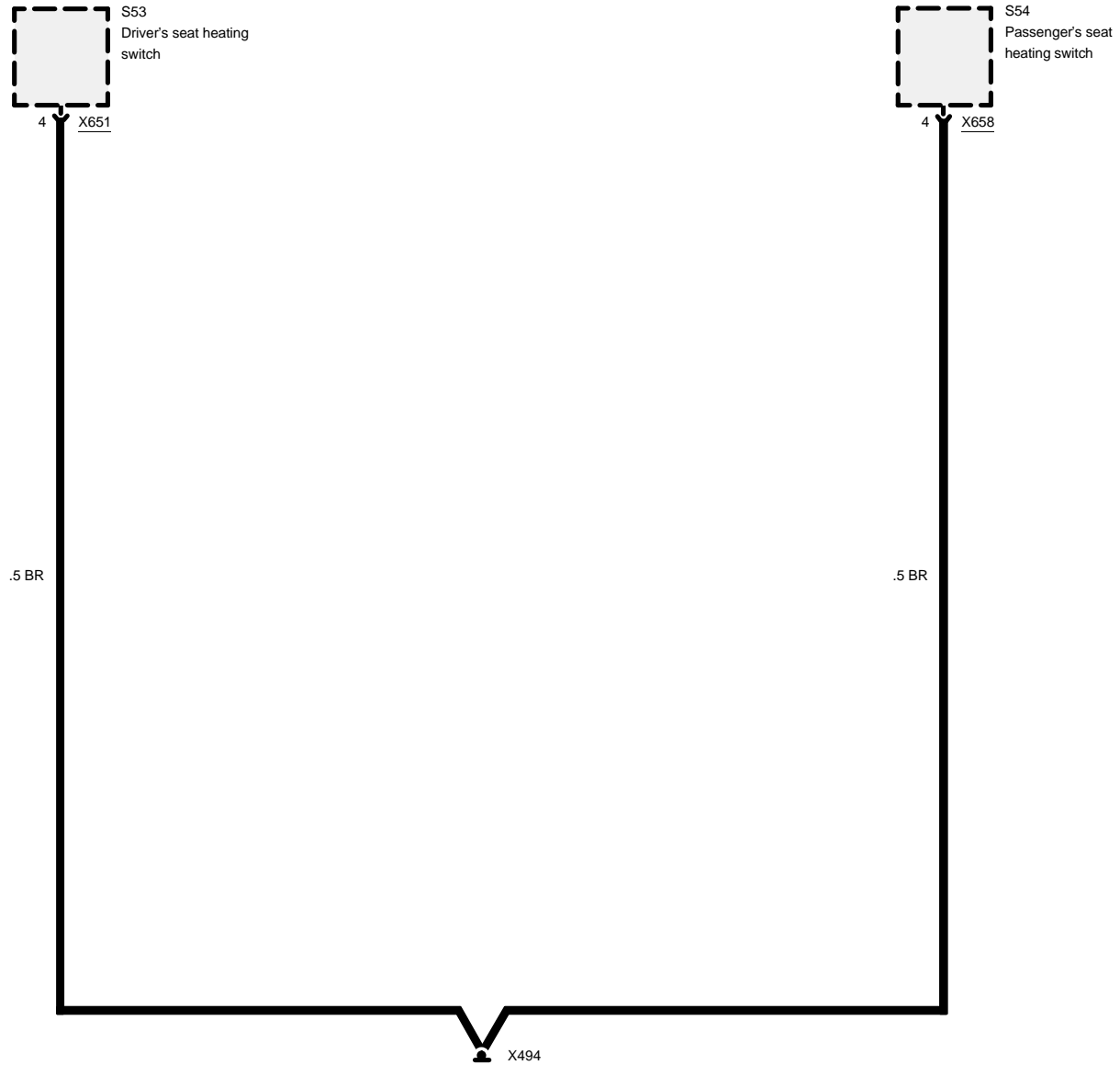
Ground X173





Ground distribution

Ground X494



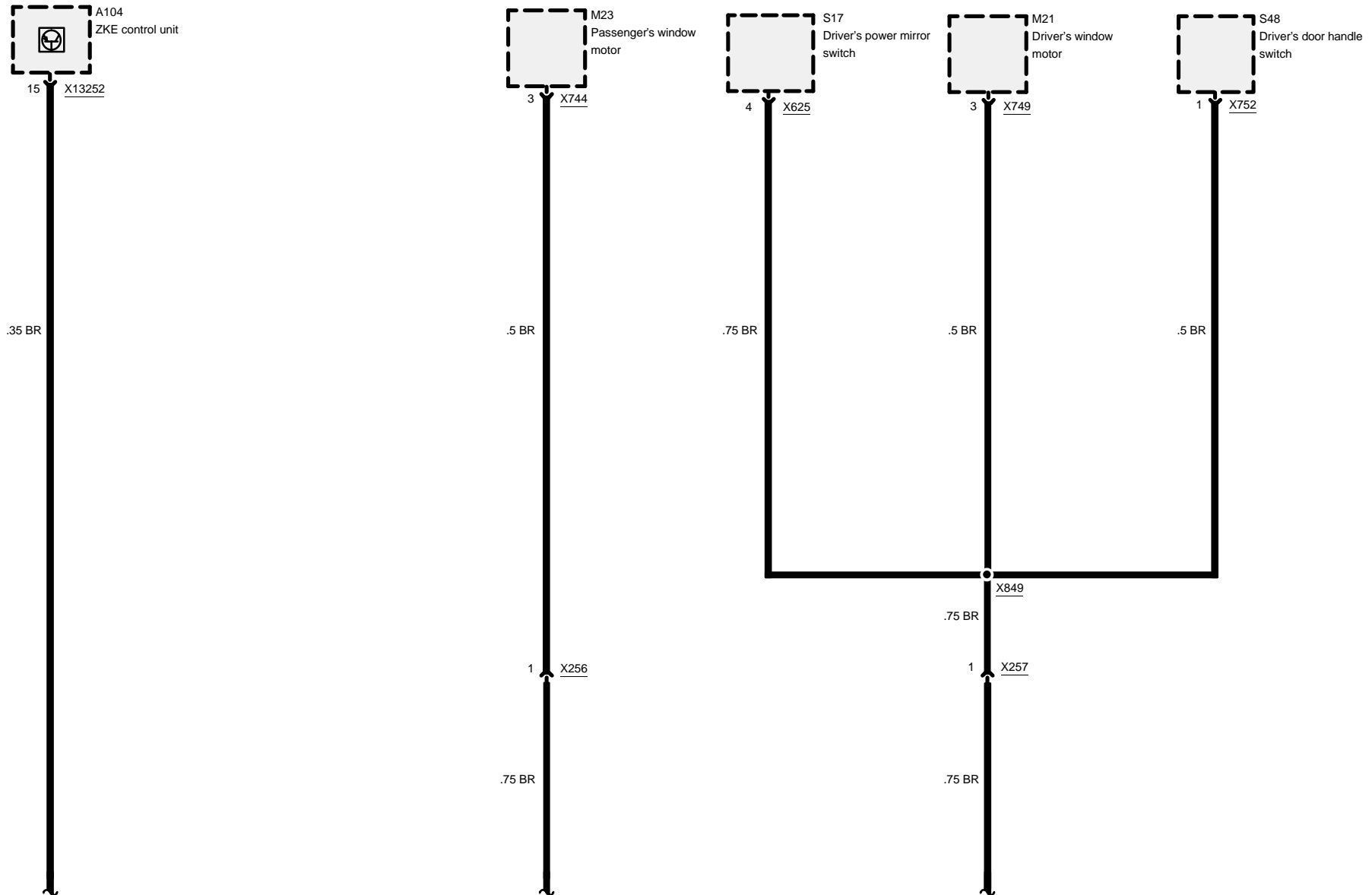


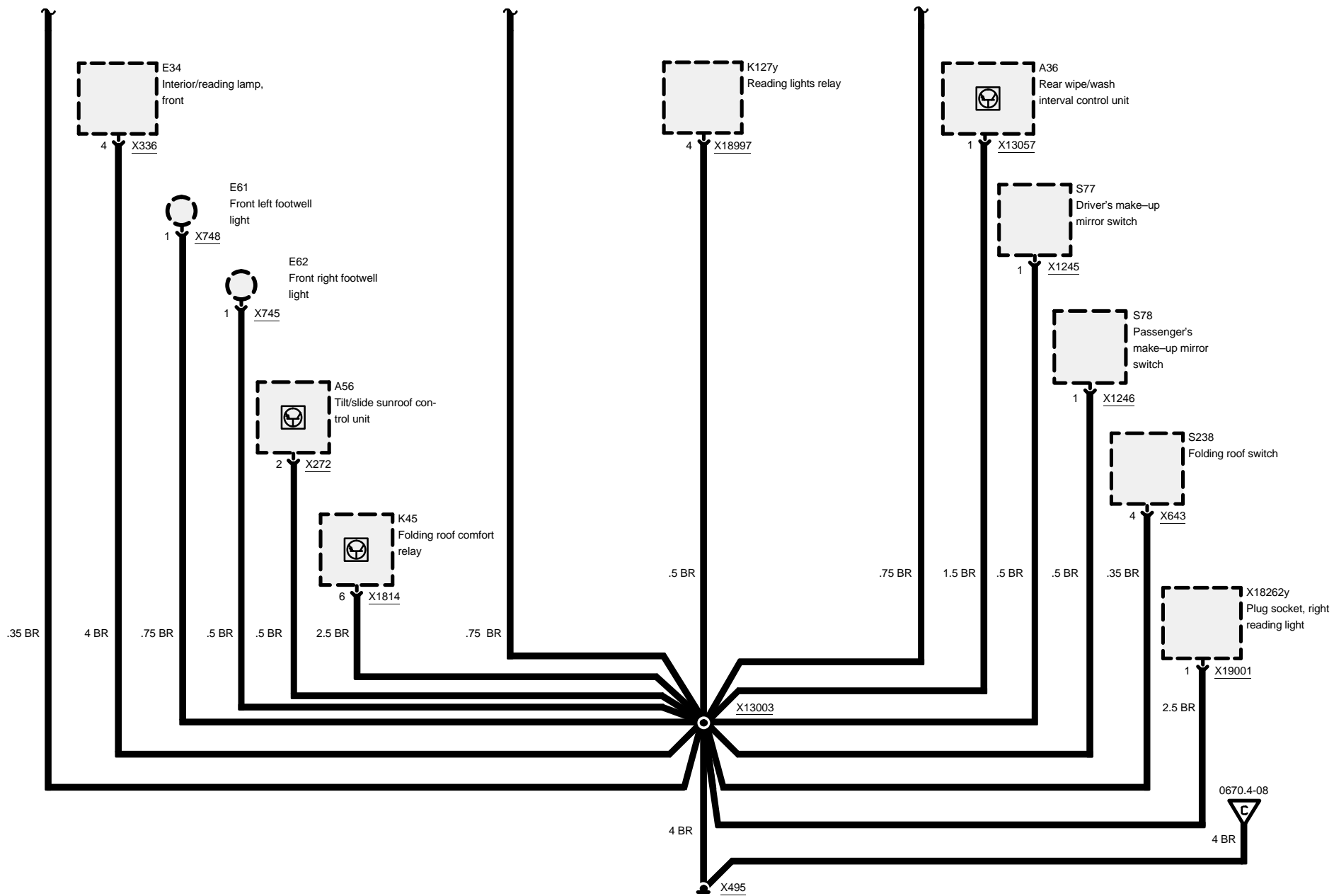
compact

Ground distribution

Ground X495

Right-hand drive



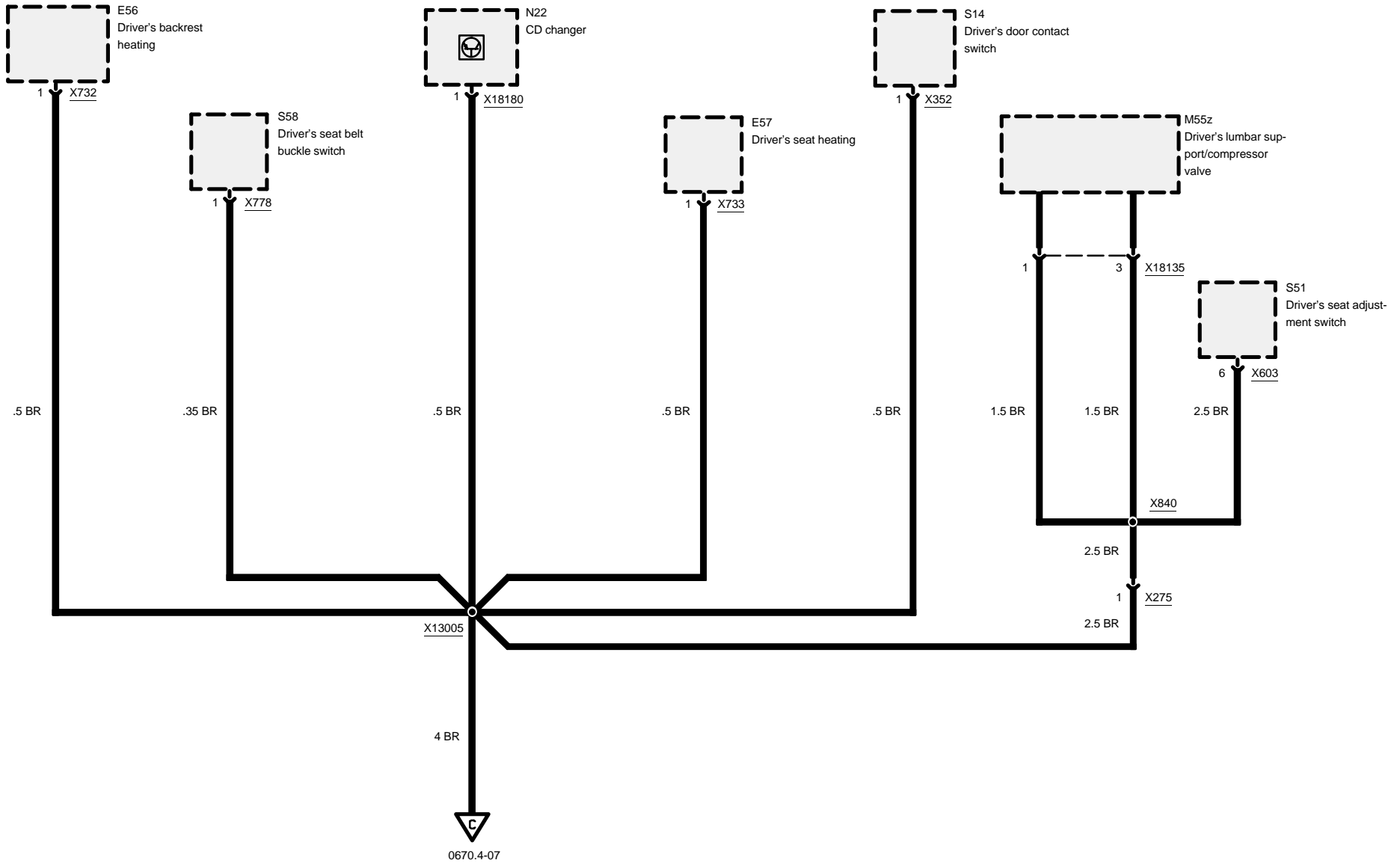




Ground distribution

Ground X495

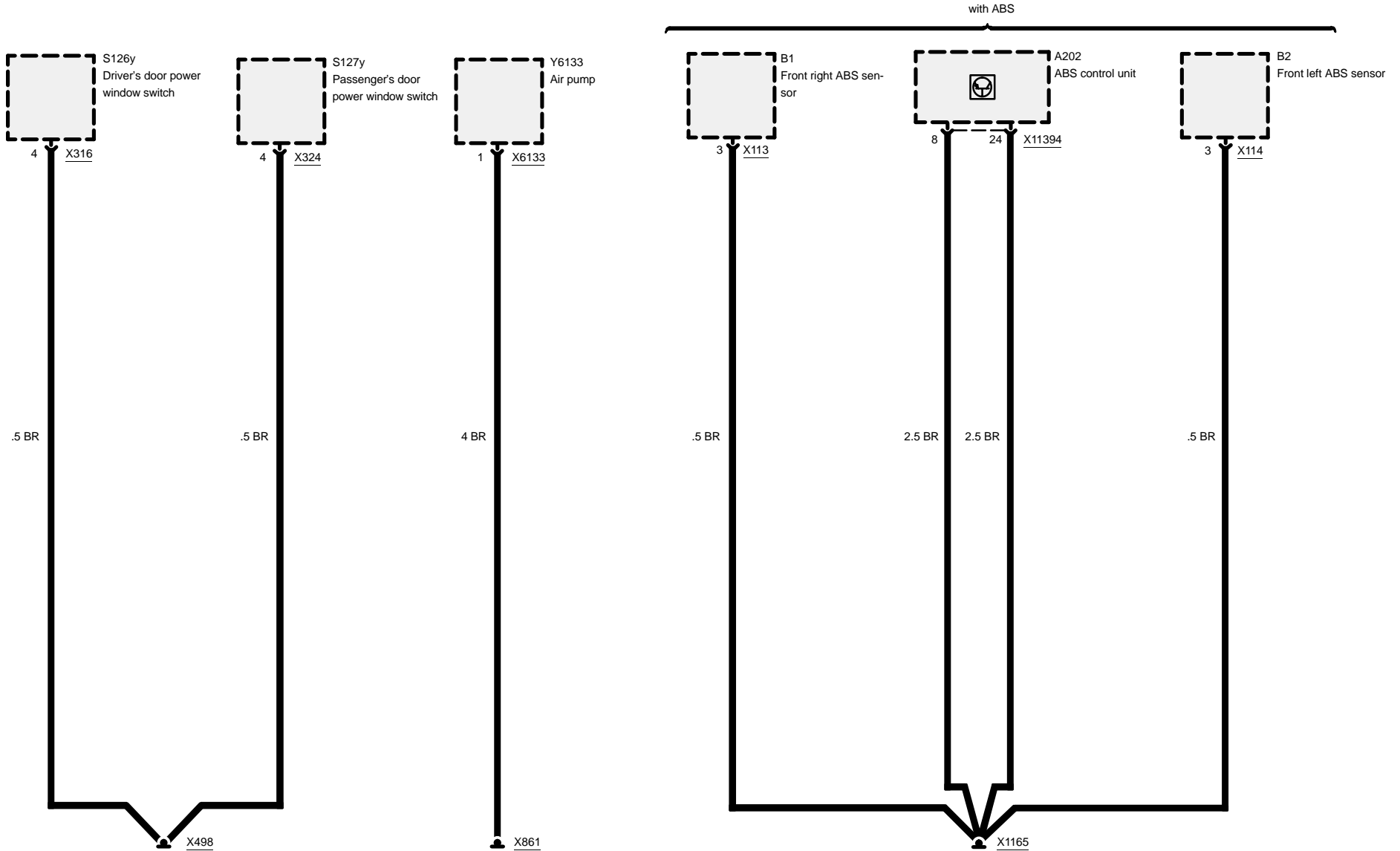
Right-hand drive





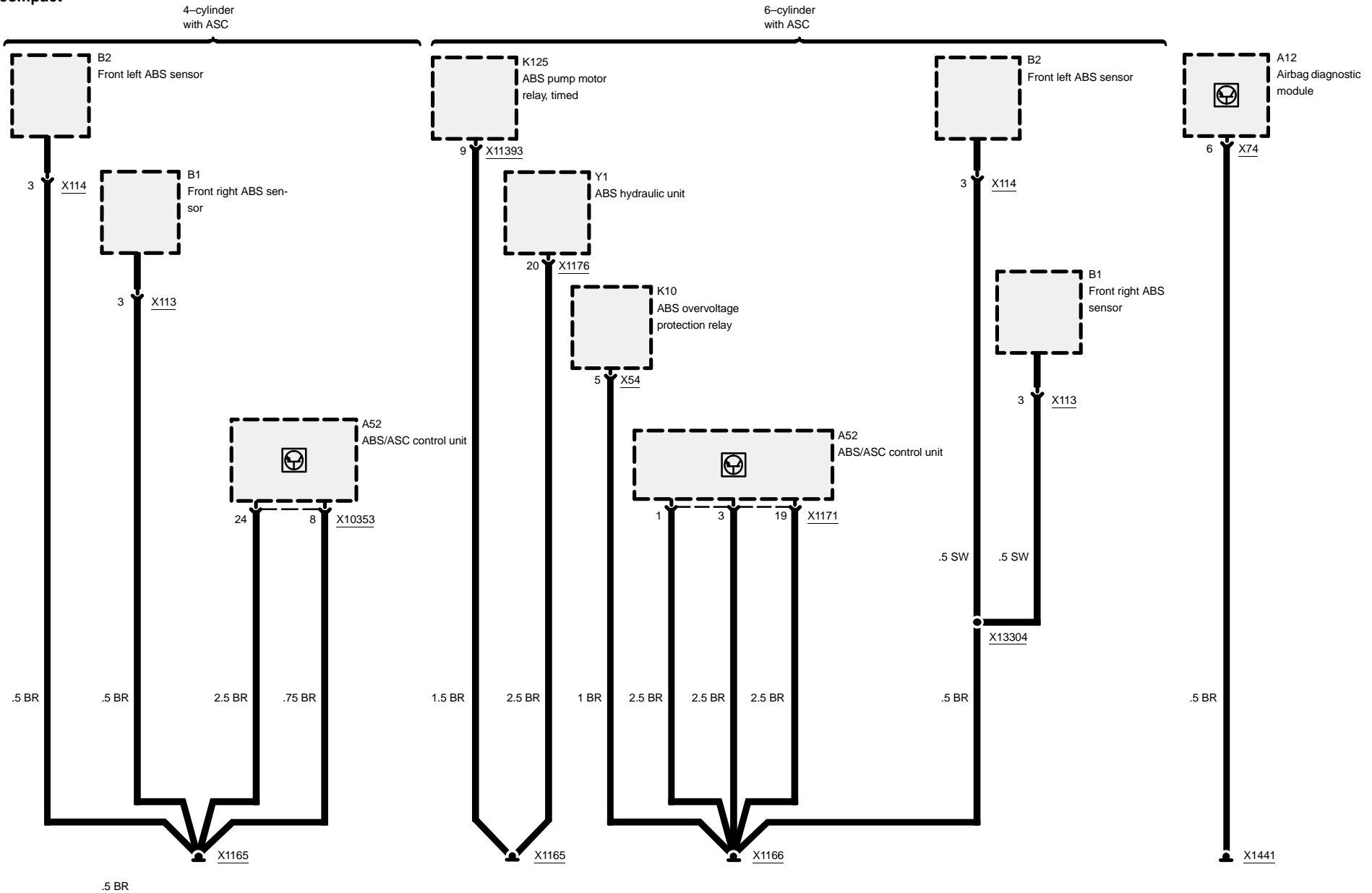
Ground distribution

Ground X498, X861 and X1165



Ground distribution

Ground X1165, X1166 and X1441

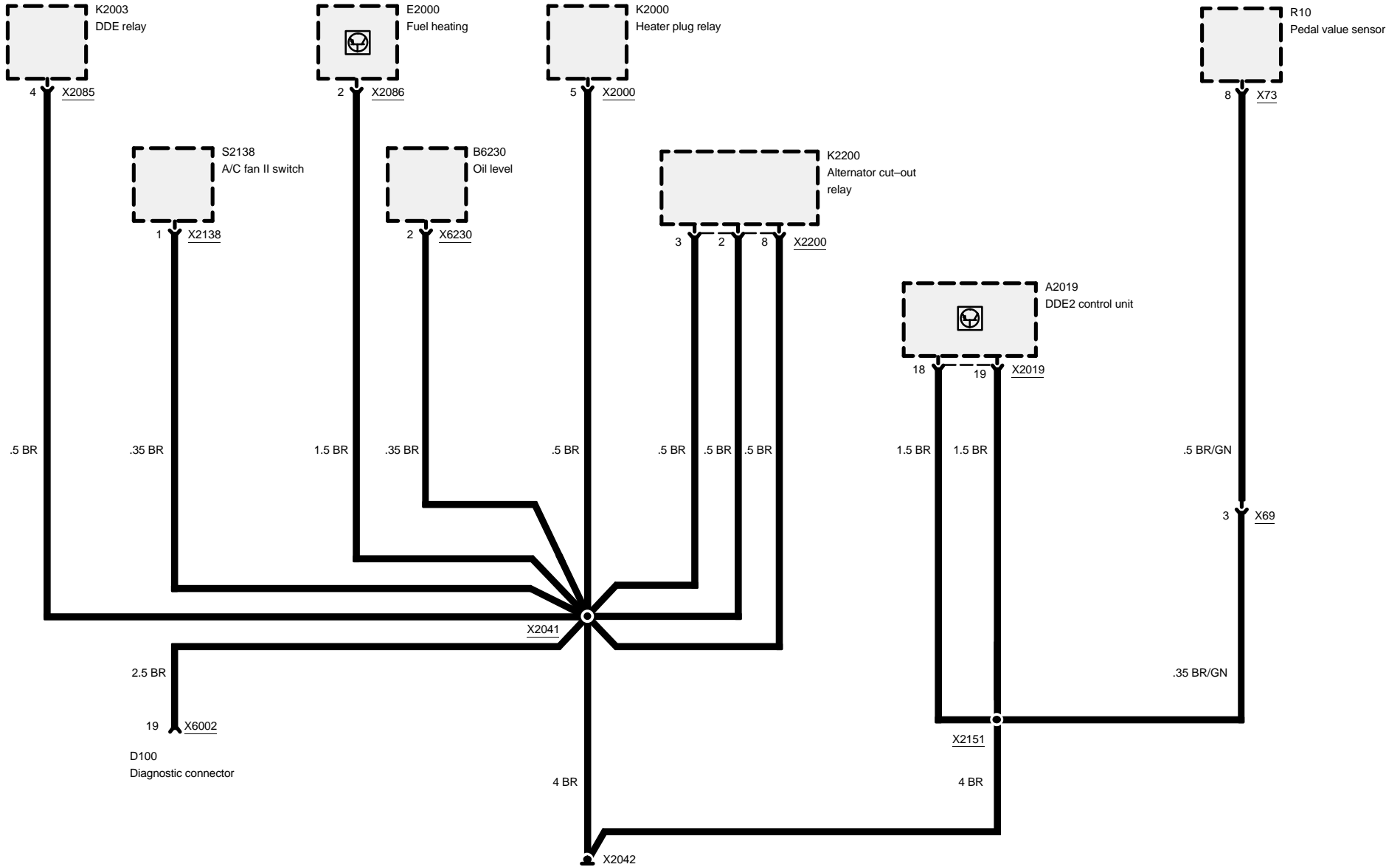




Ground distribution

318tds

Ground X2042

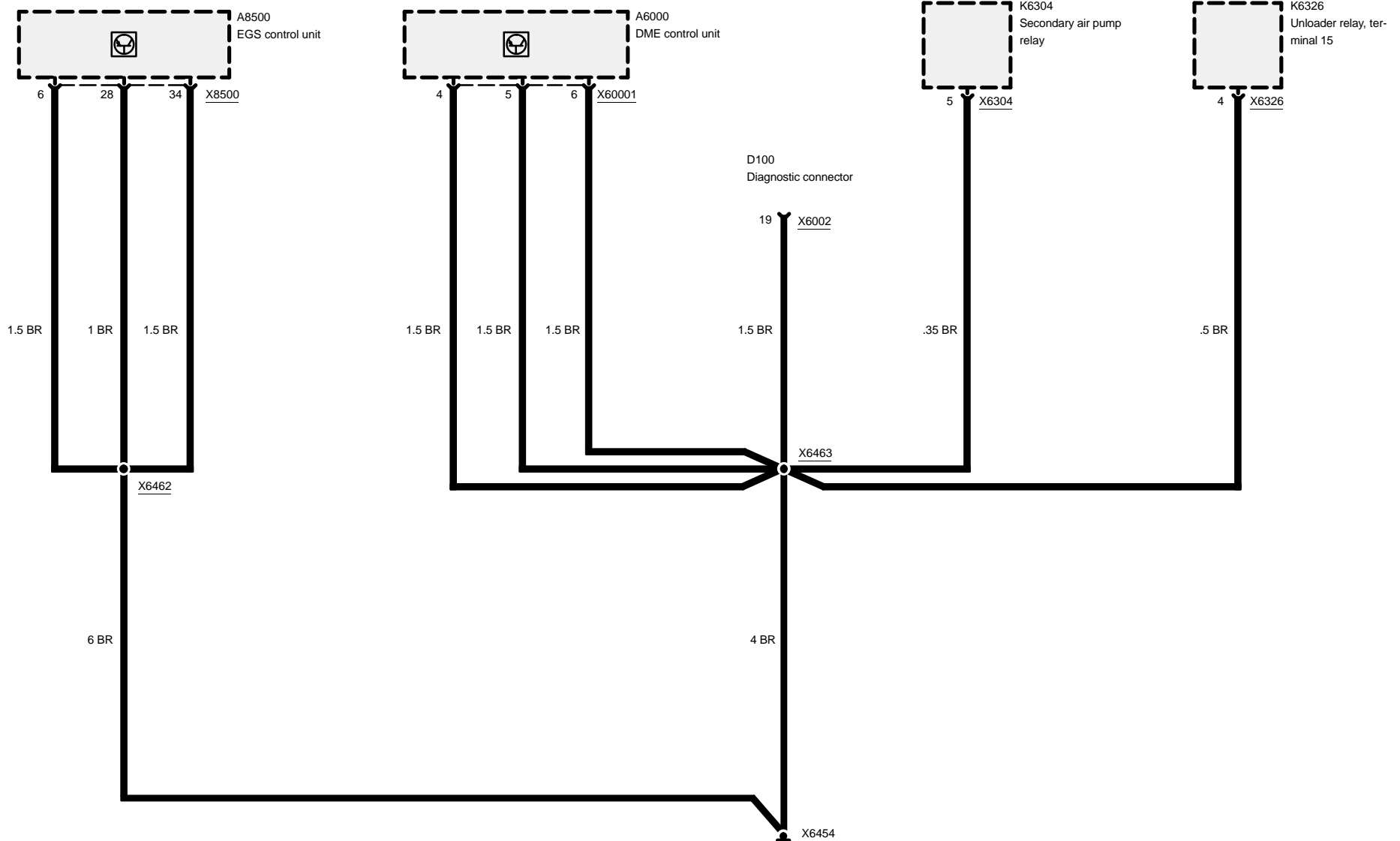




Ground distribution

Ground X6454

316i

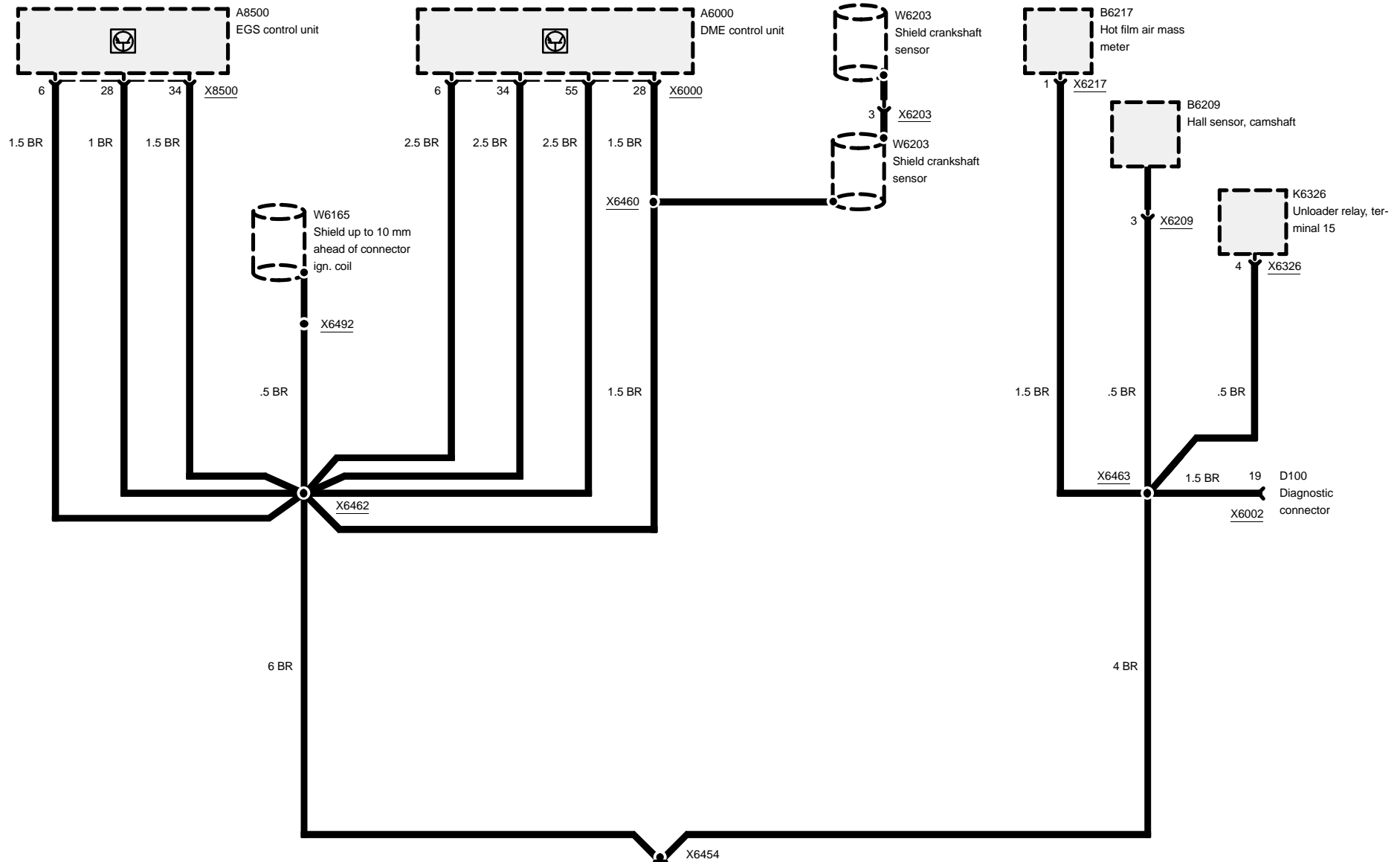




Ground distribution

Ground X6454

318ti Right-hand drive

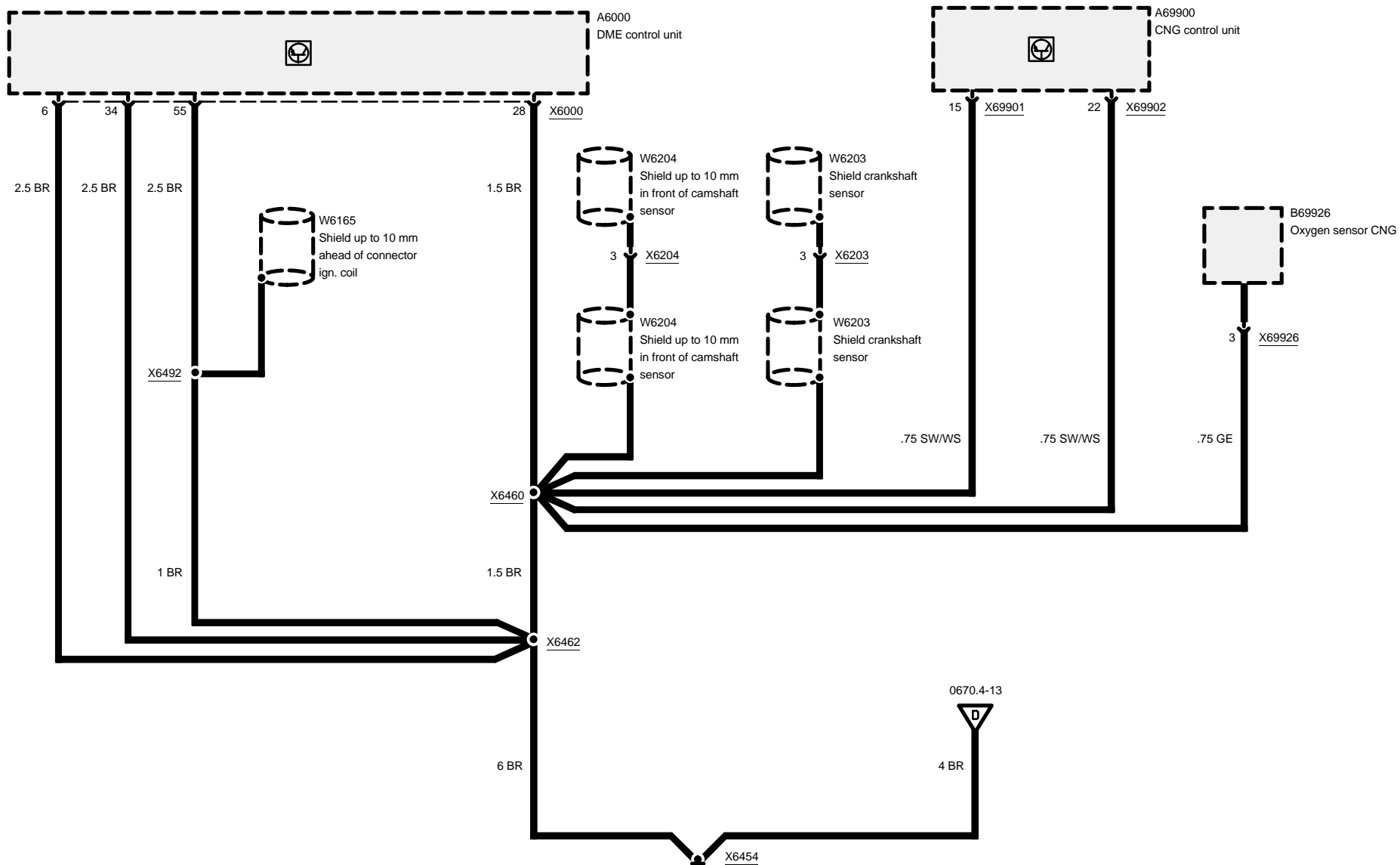




Ground distribution

Ground X6454

316g

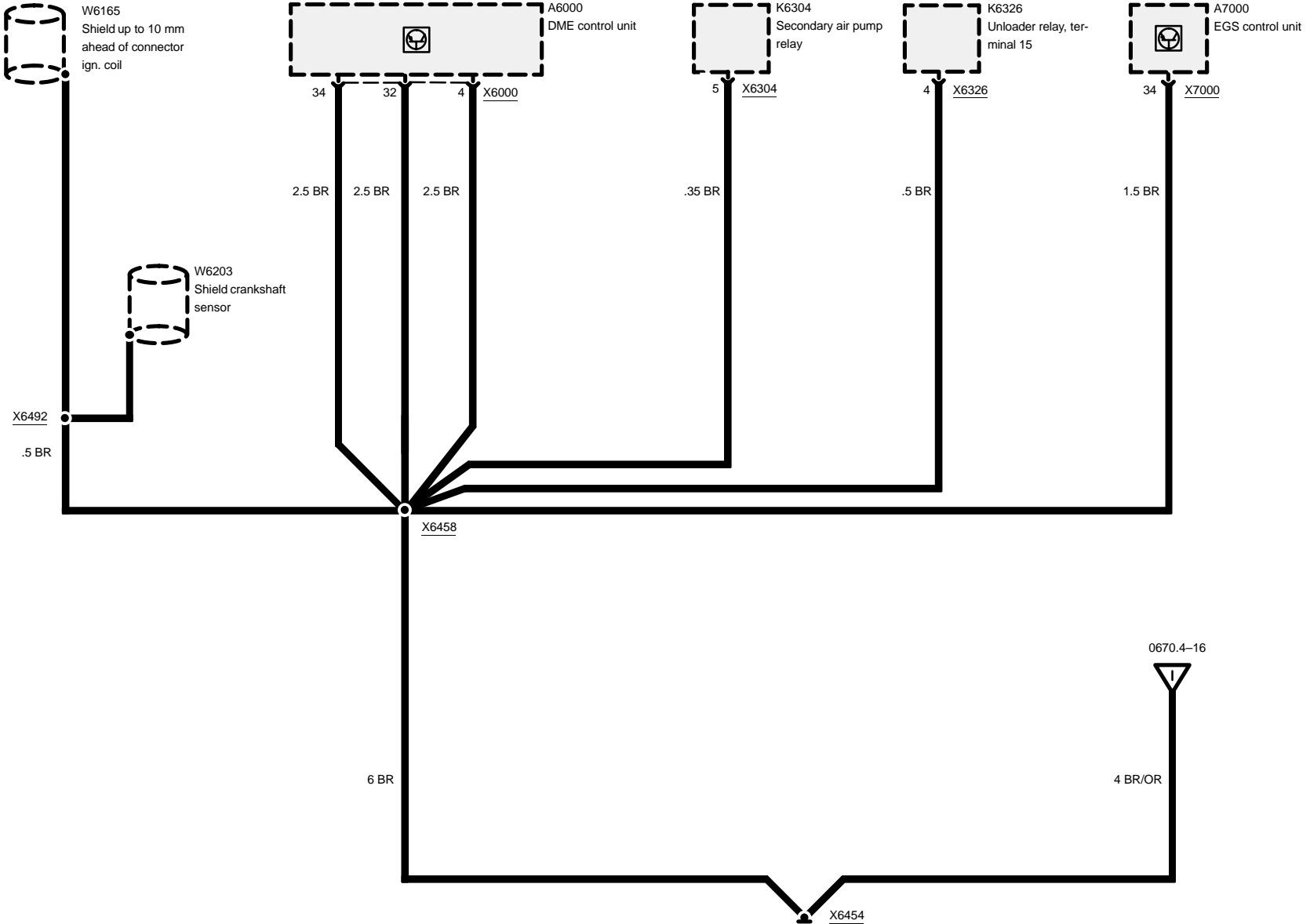




Ground distribution

Ground X6454

323ti

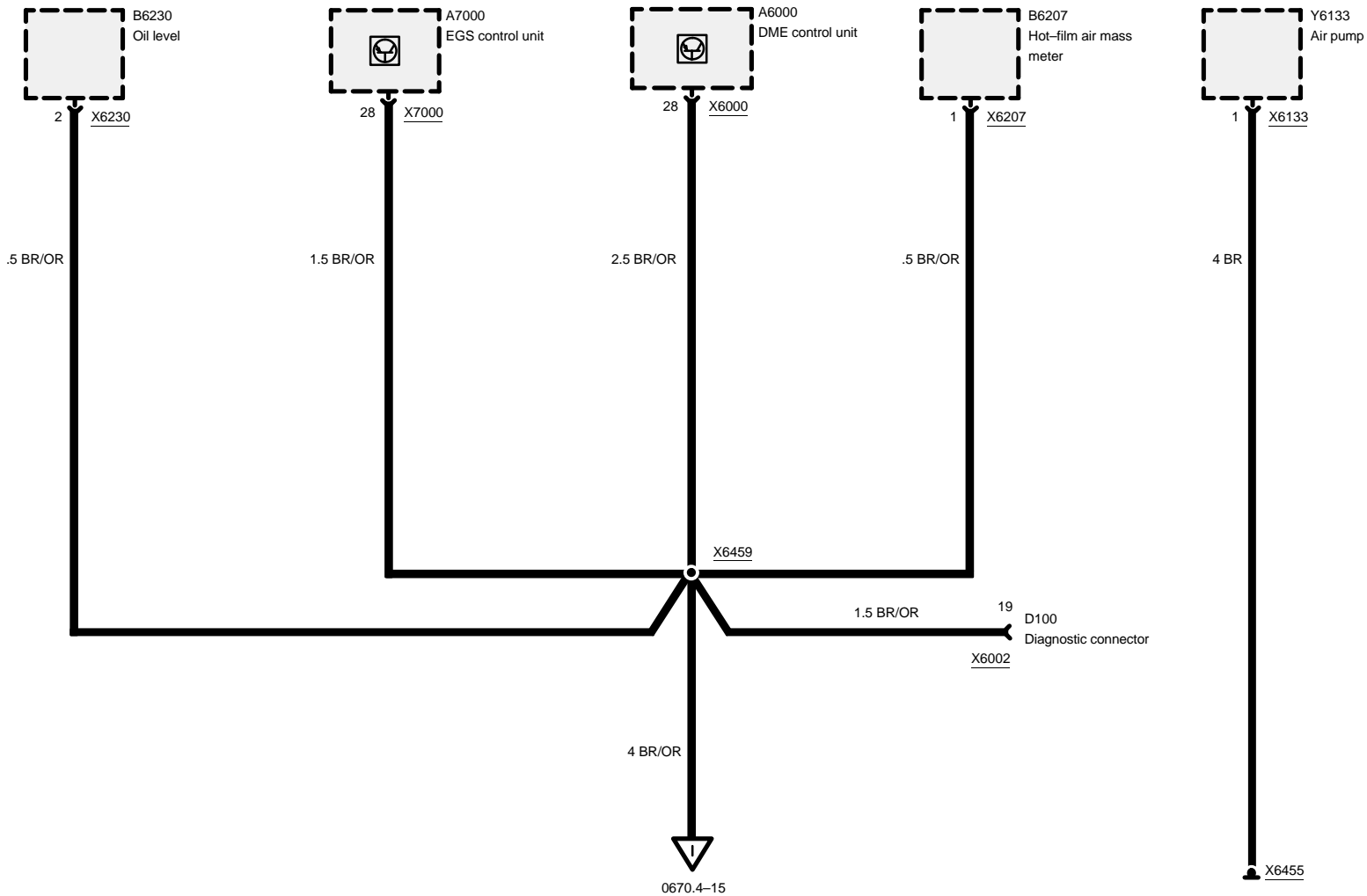




Ground distribution

Ground X6454 and X6455

323ti

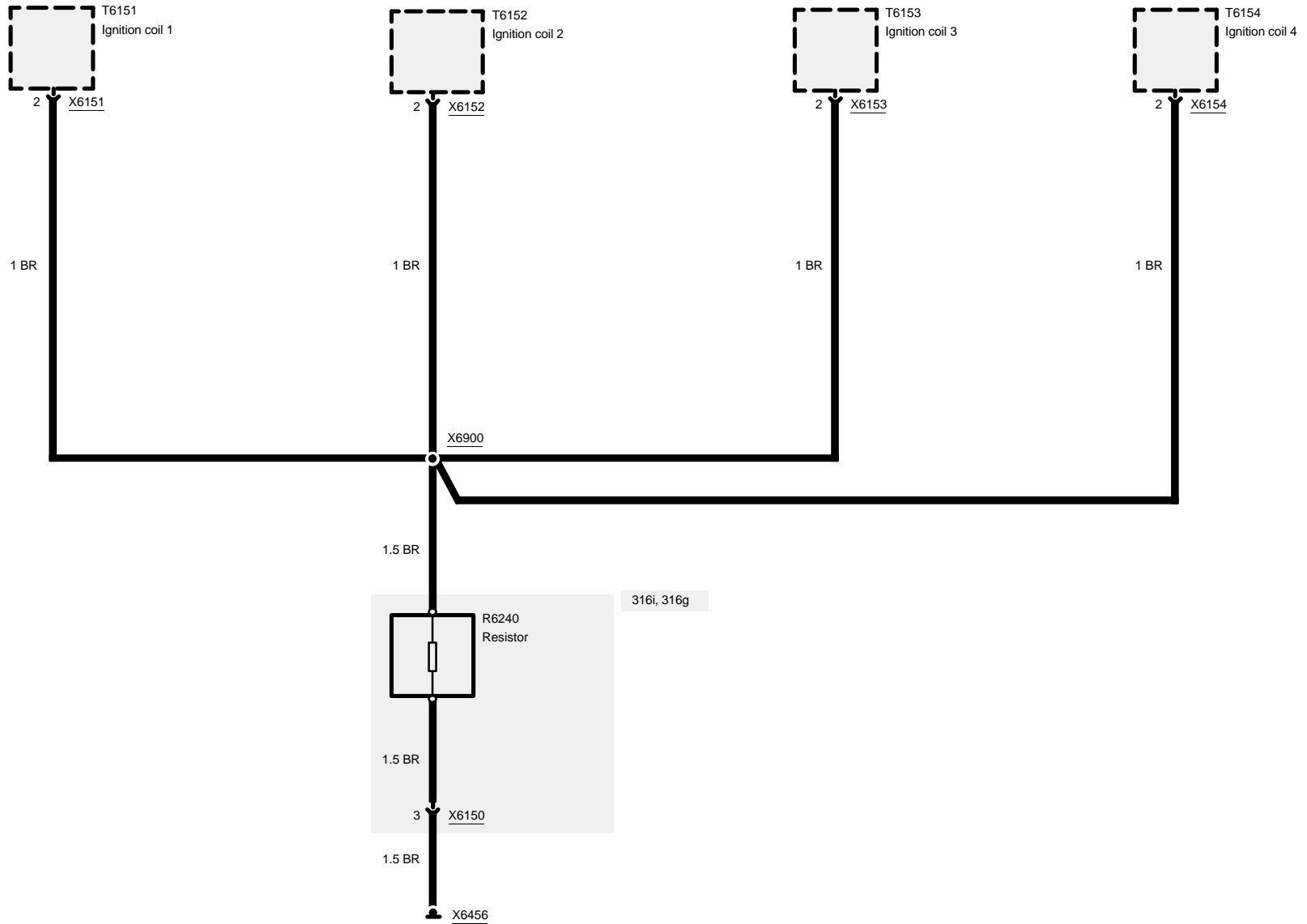




Ground distribution

316i, 316g, 318ti Right-hand drive

Ground X6456

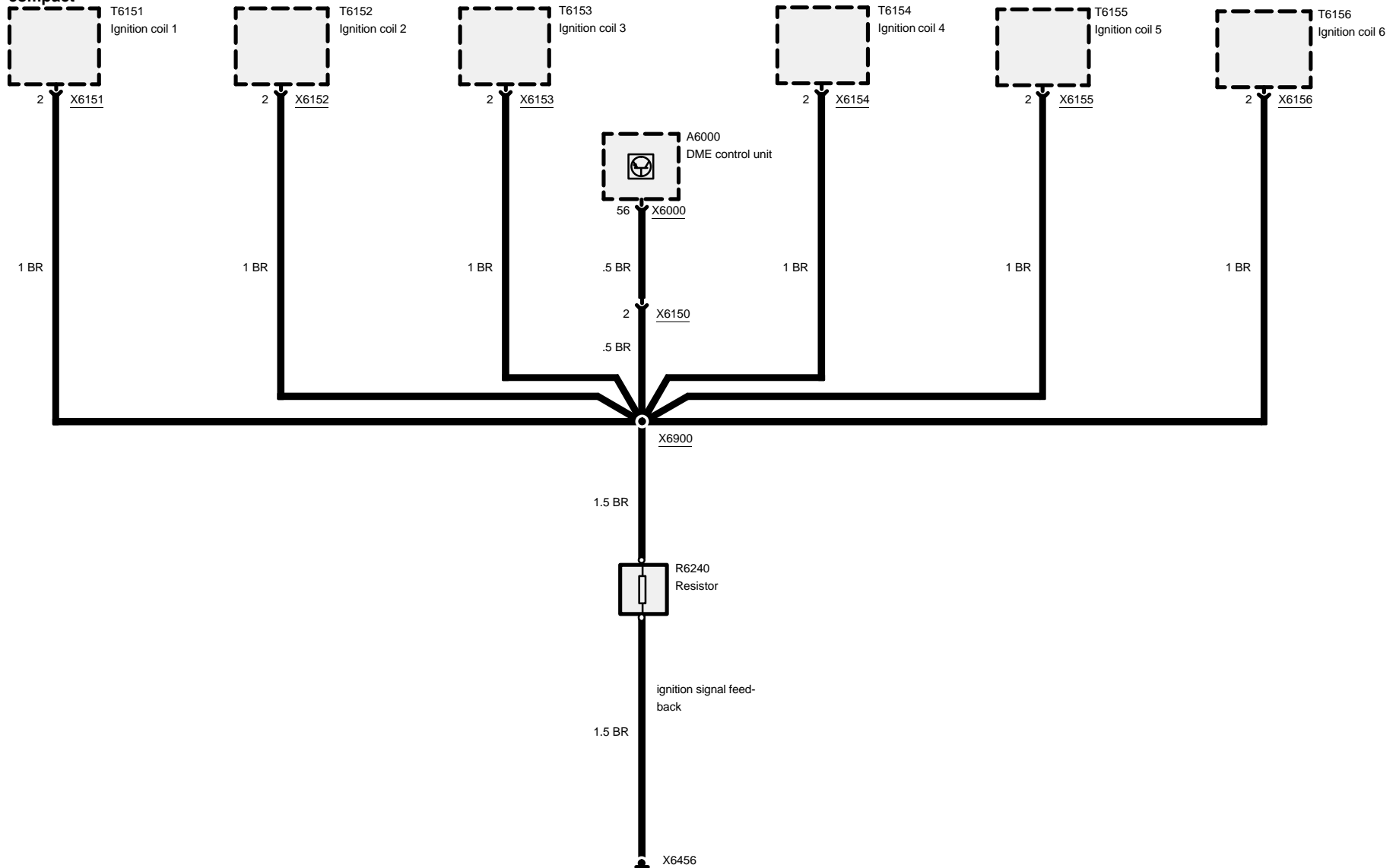




Ground distribution

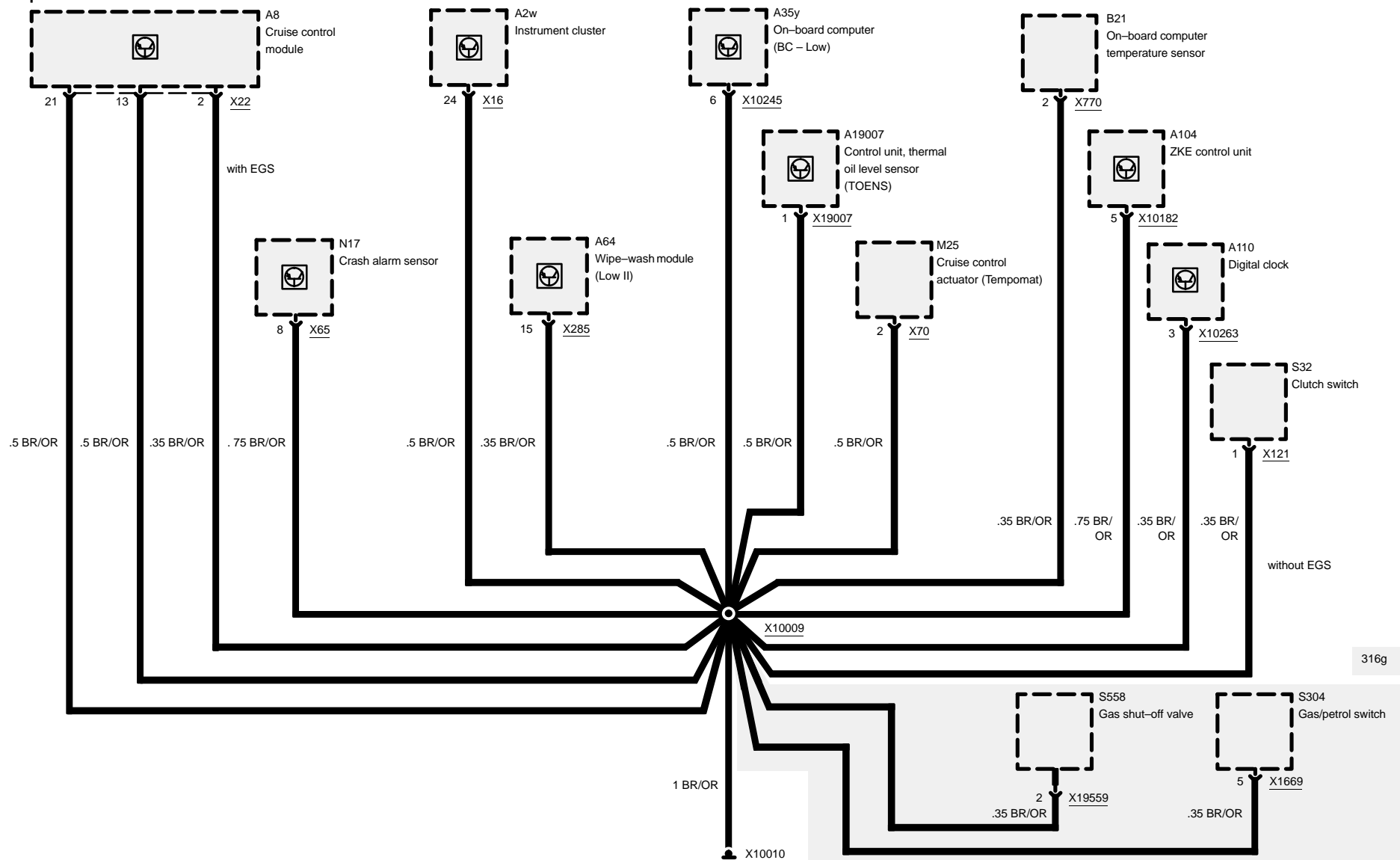
323ti

Ground X6456



Ground distribution

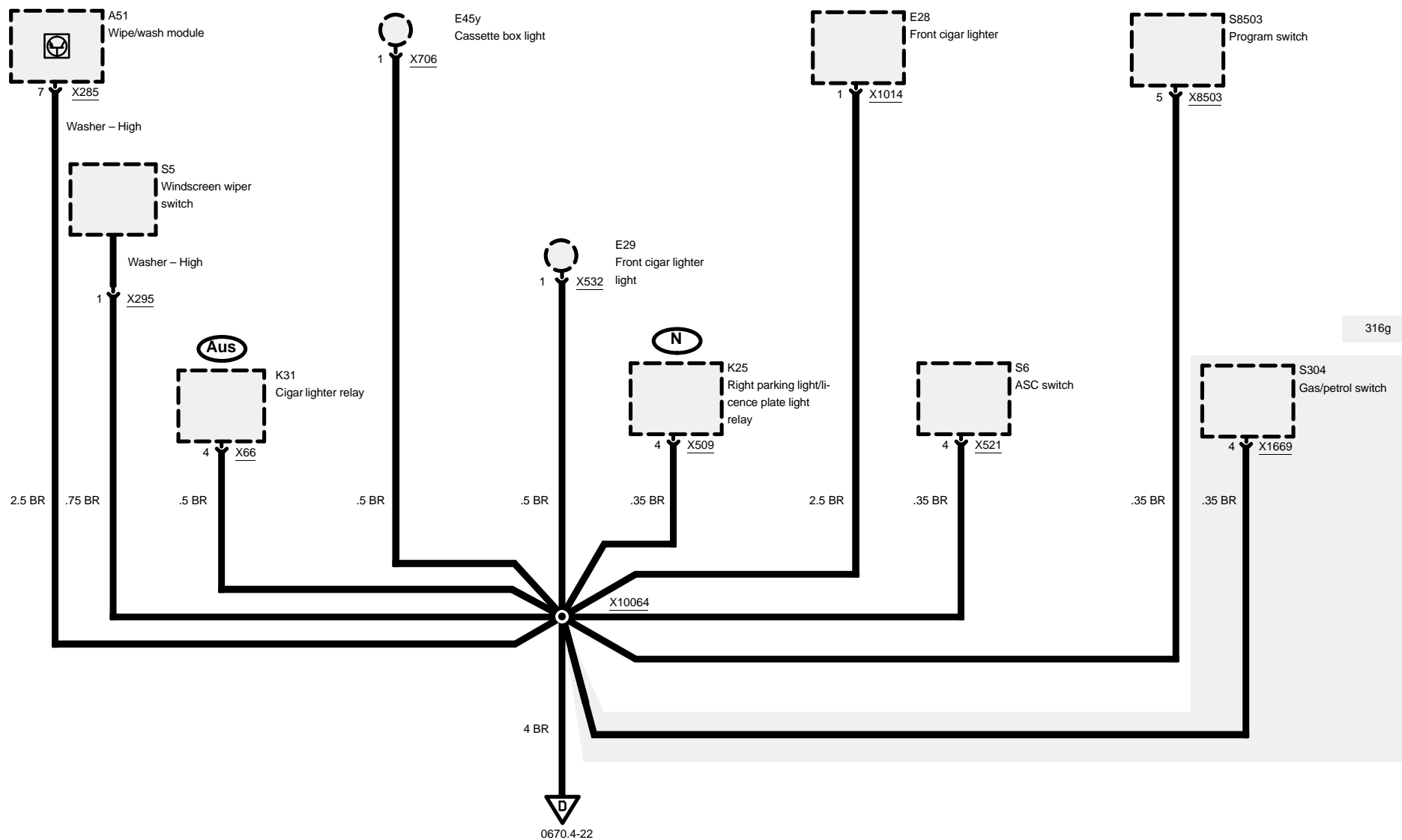
Ground X10010



Ground distribution

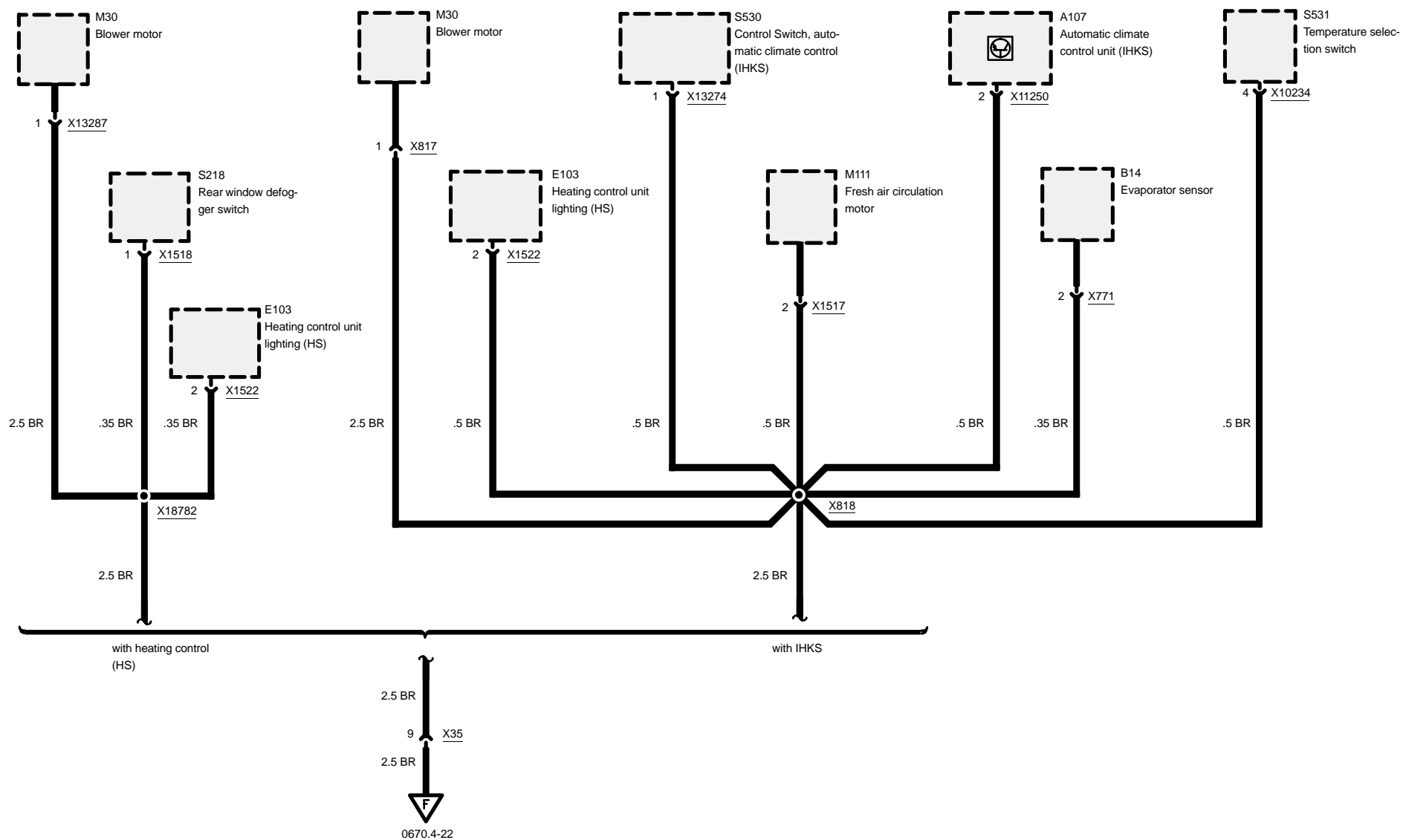
Ground X10012

Right-hand drive



Ground distribution

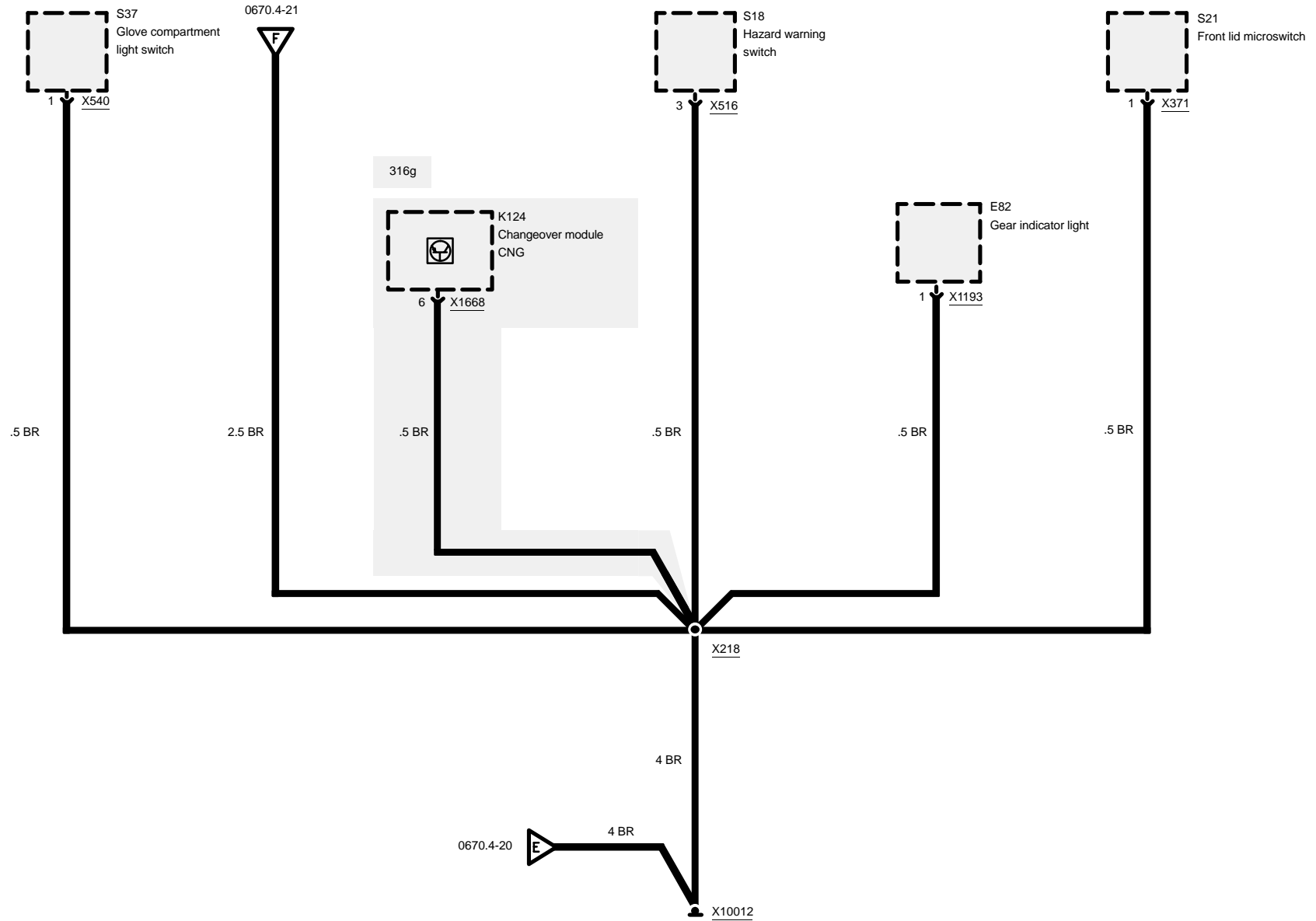
Ground X10012





Ground distribution

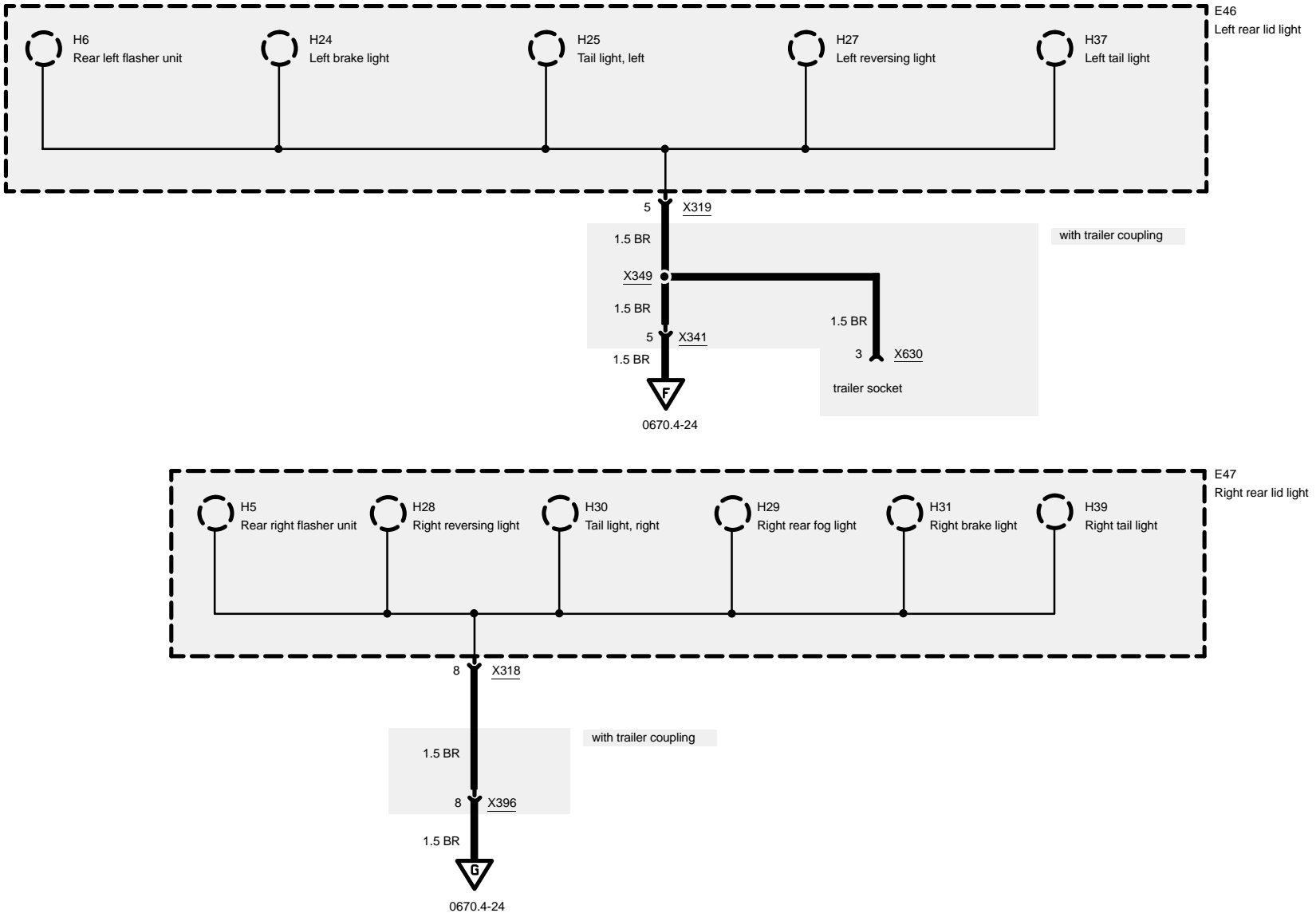
Ground X10012



Ground distribution

Ground X13006

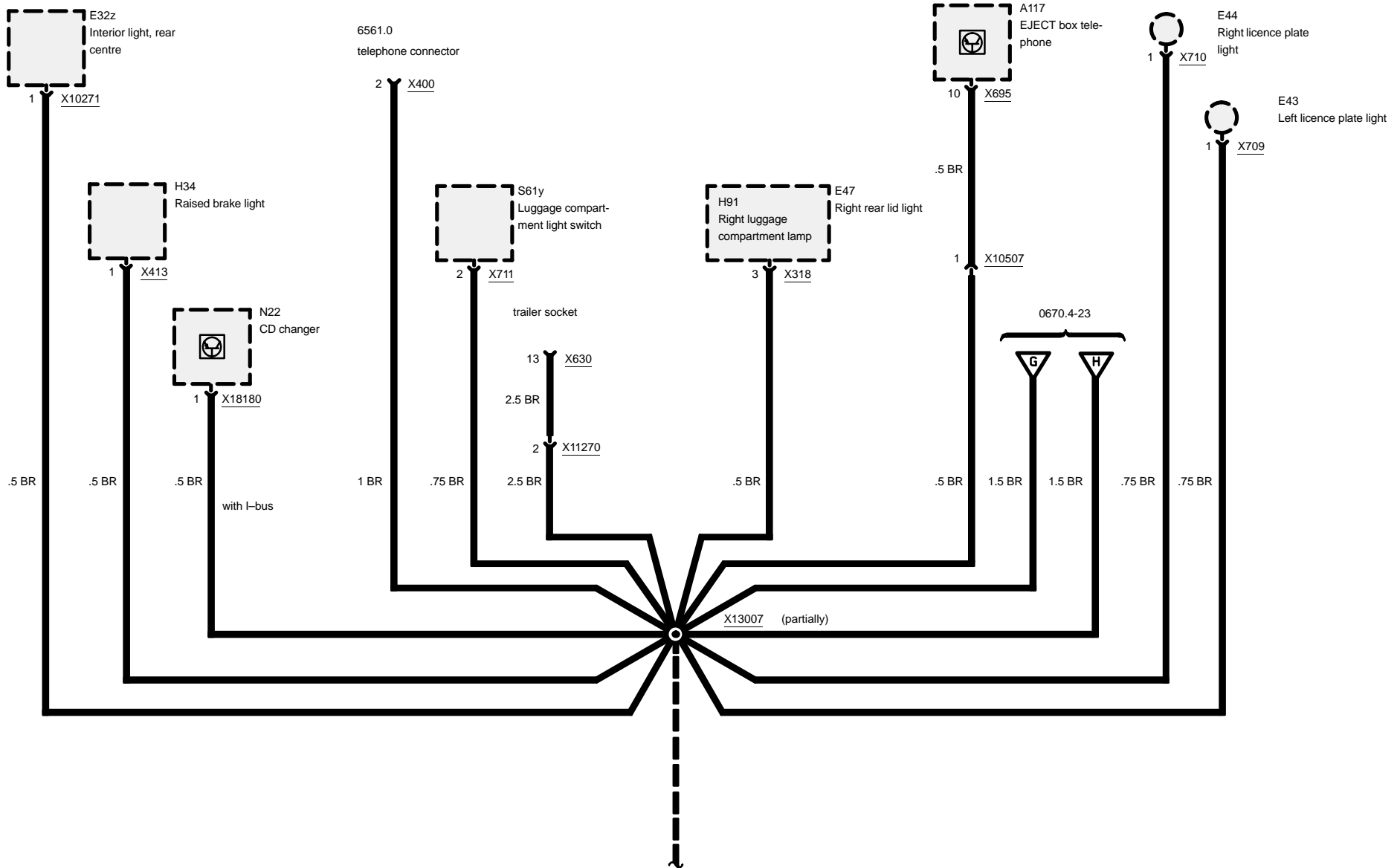
Right-hand drive



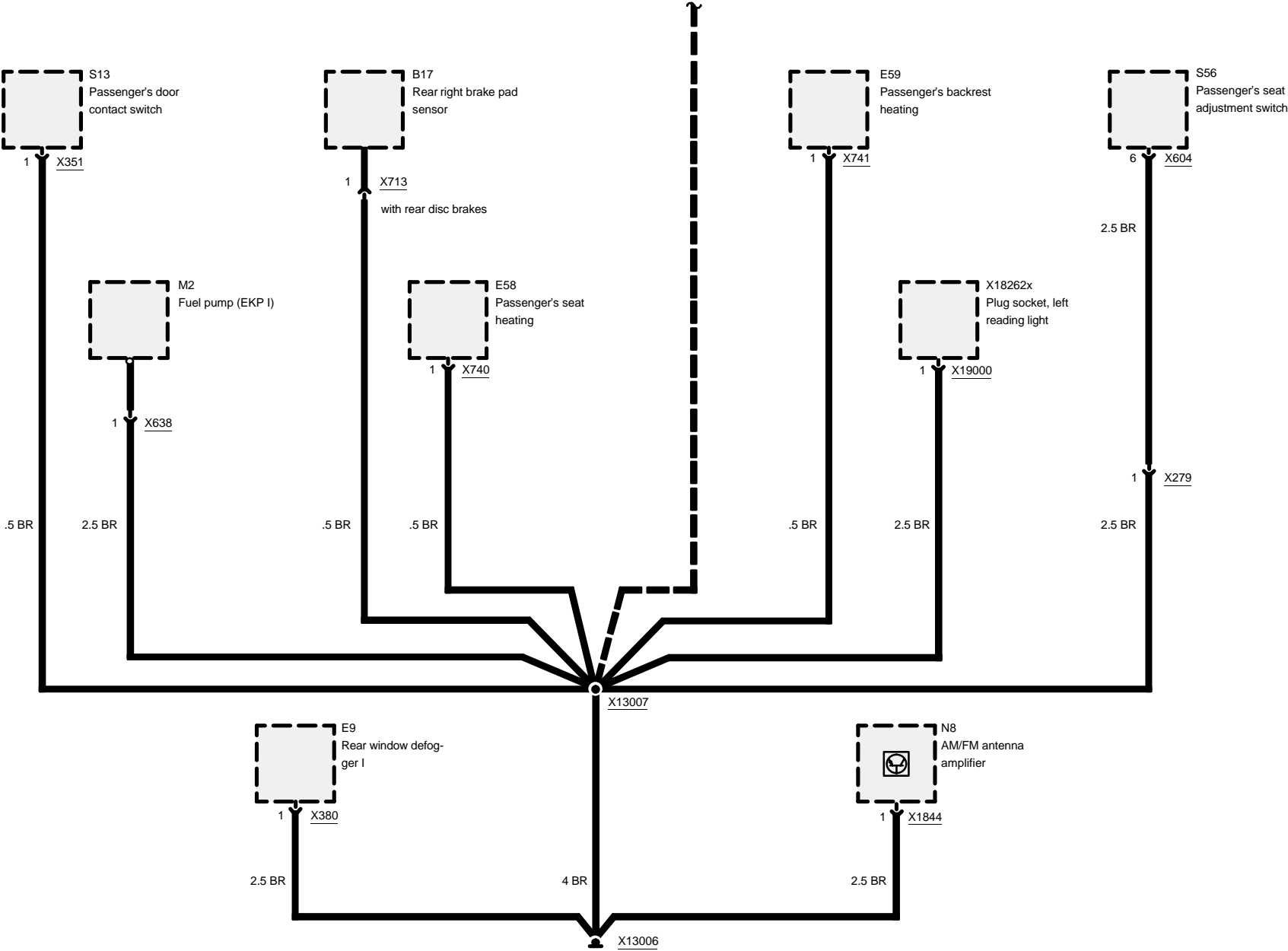


Ground distribution

Ground X13006



Right-hand drive

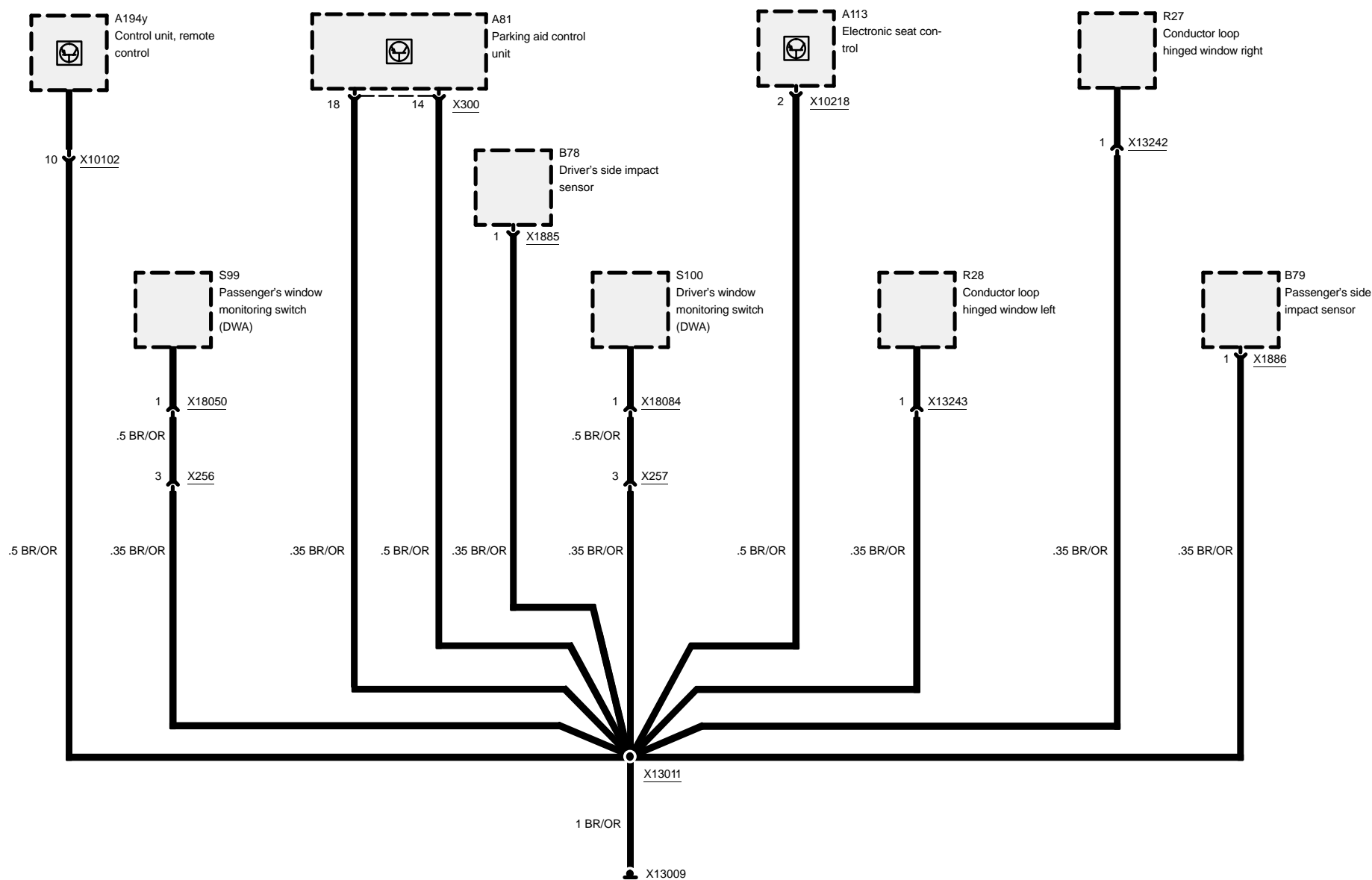




Ground distribution

Ground X13009

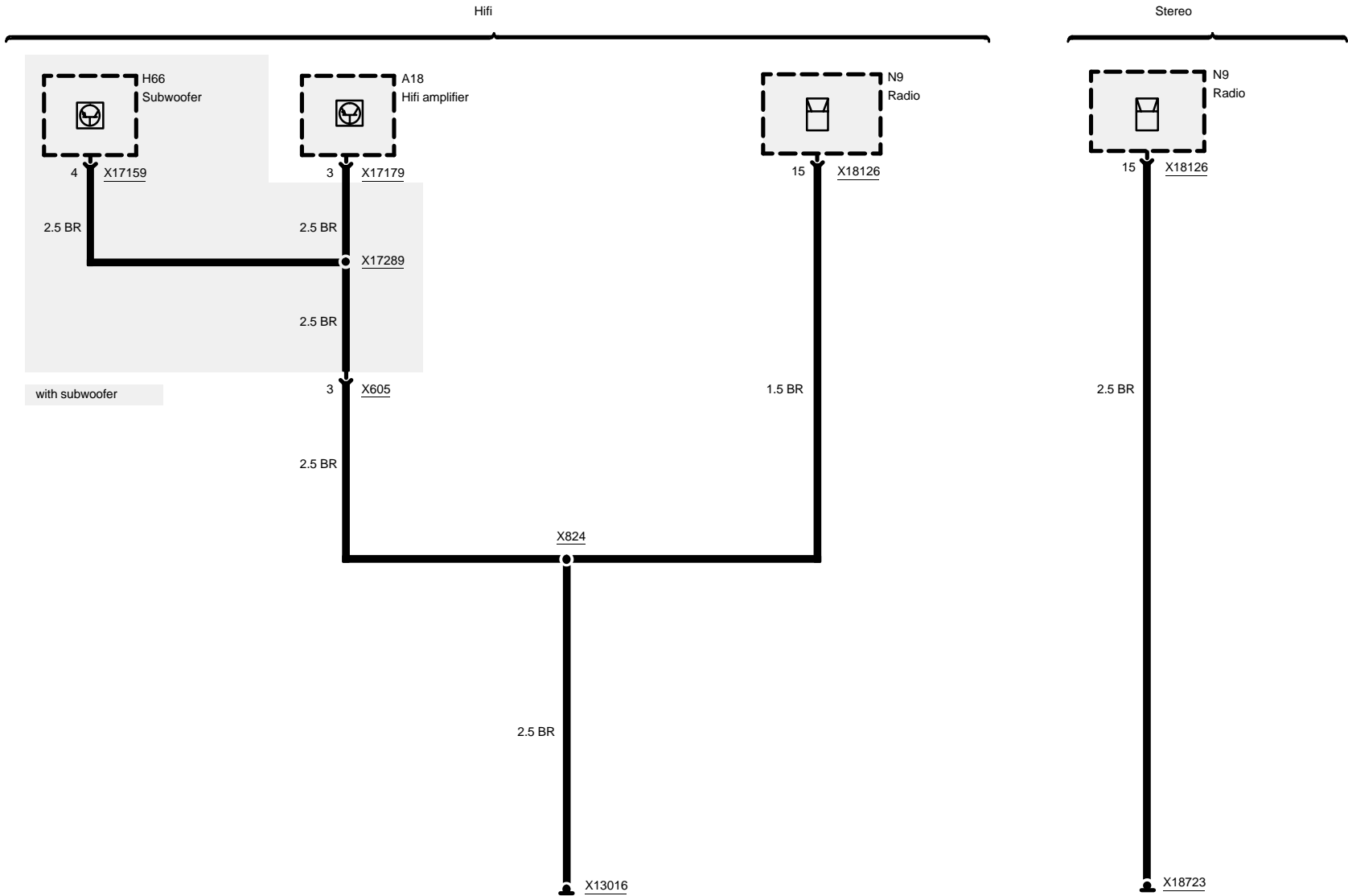
Right-hand drive

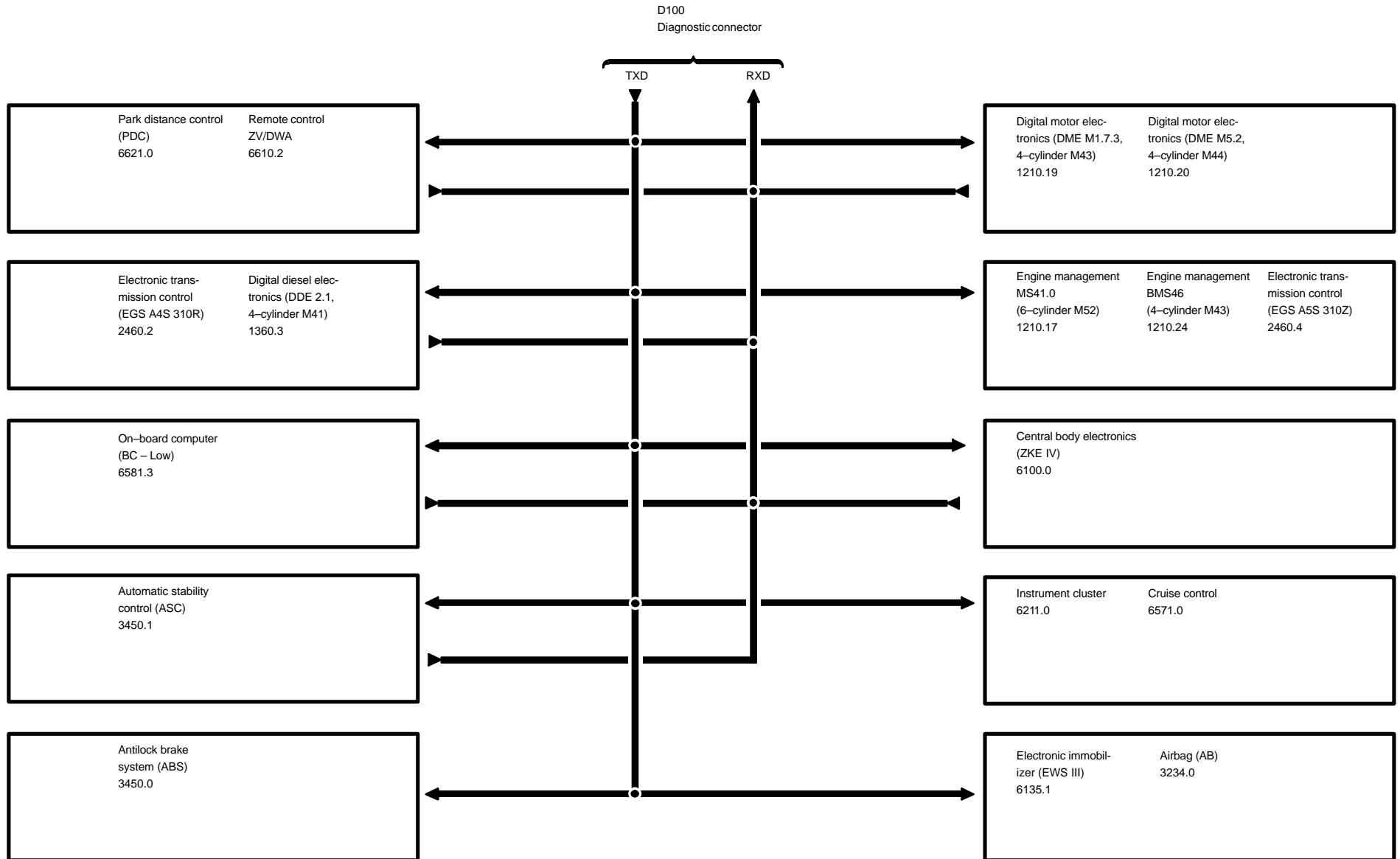




Ground distribution

Ground X13016 and X18723

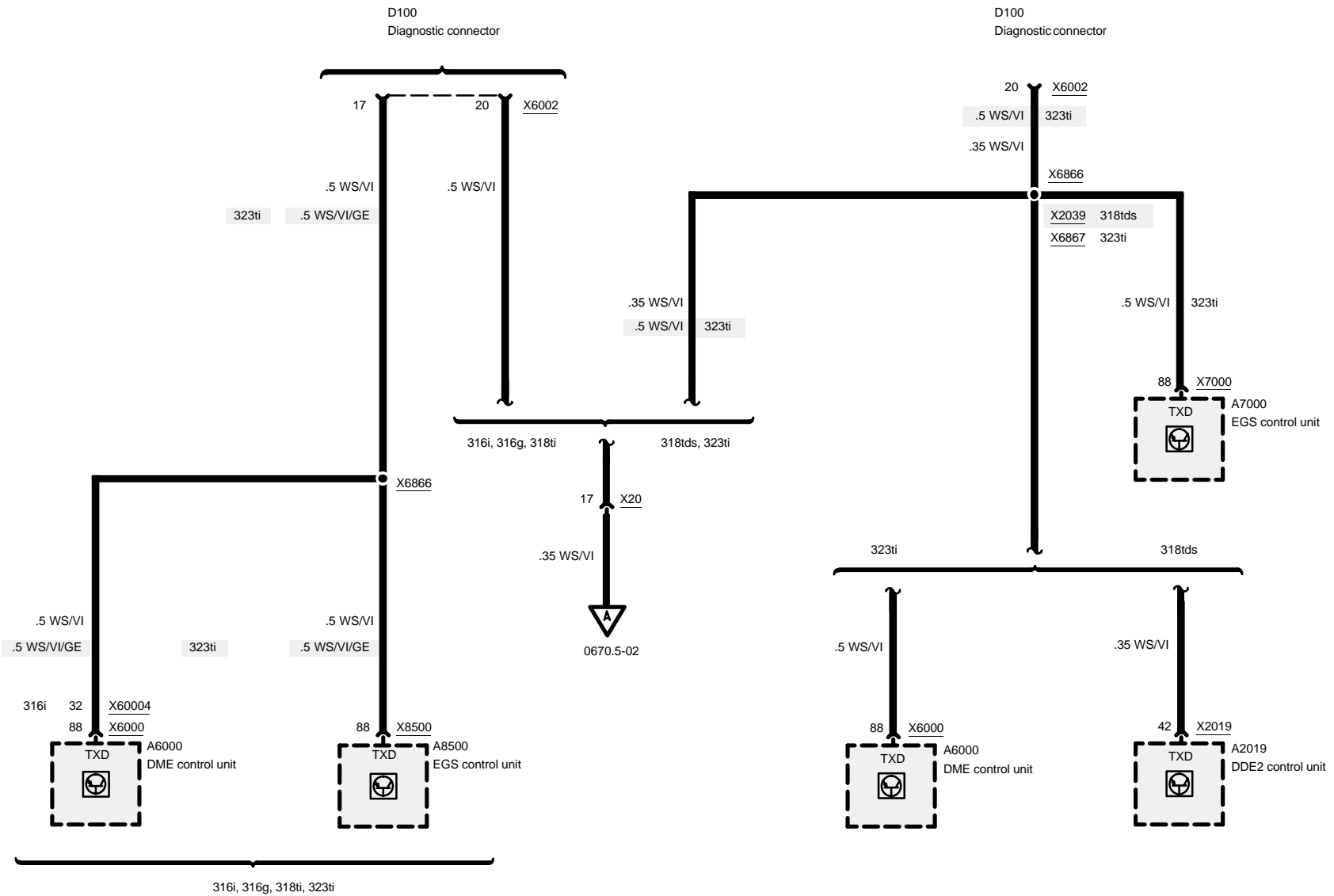




Diagnostic link

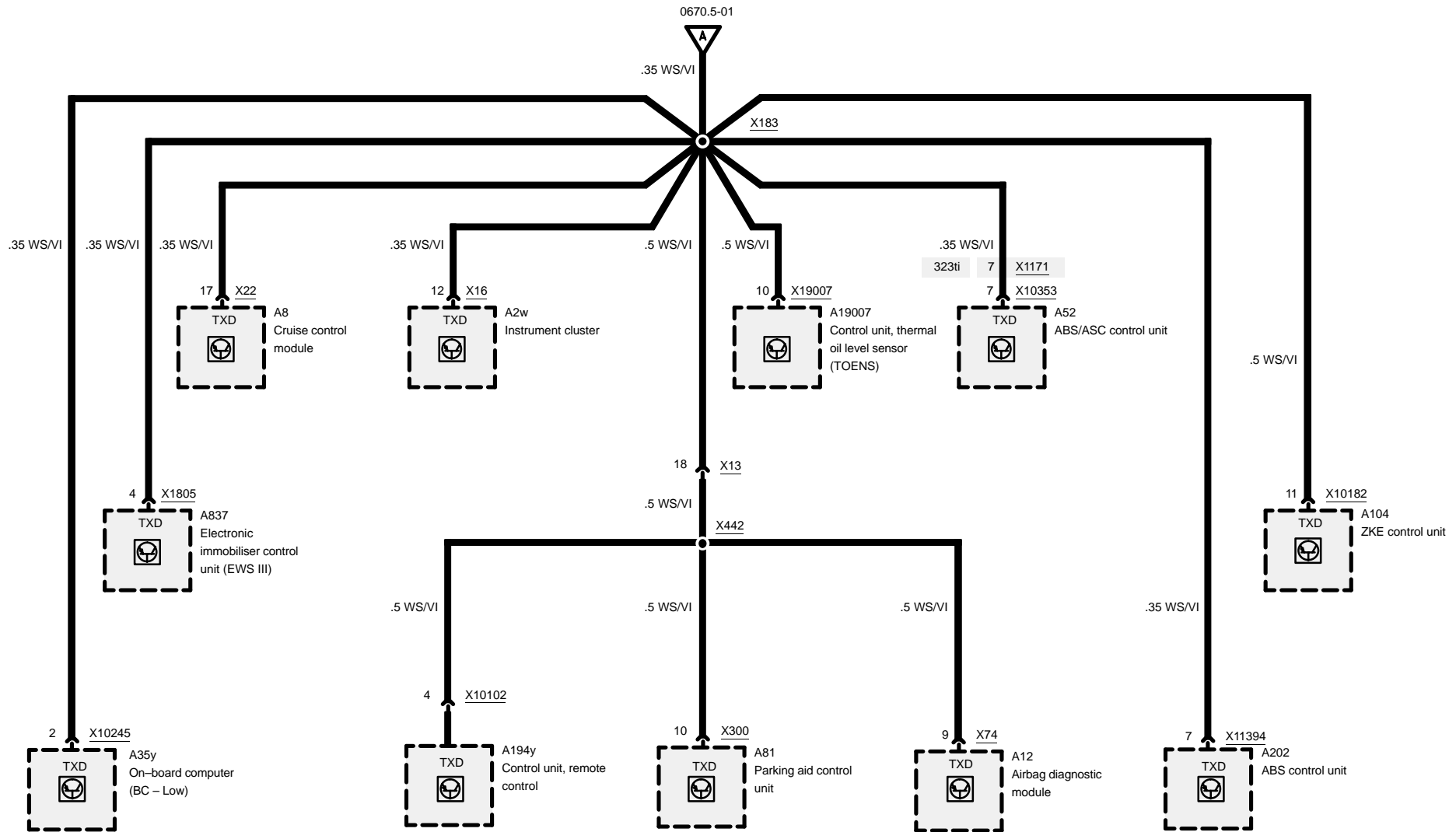
TXD, diagnostic connector, pins 17 and 20

Right-hand drive



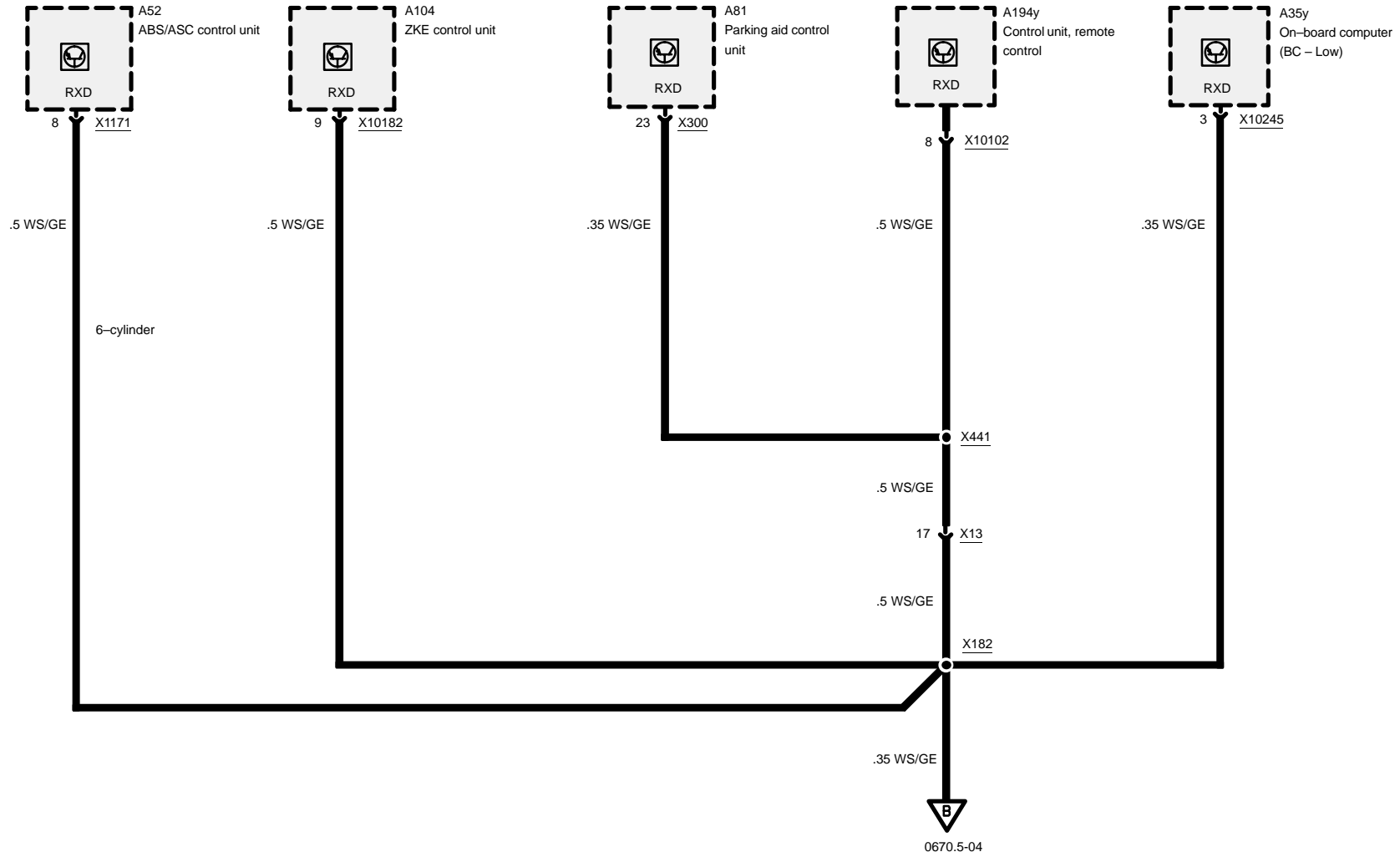
Diagnostic link

TXD



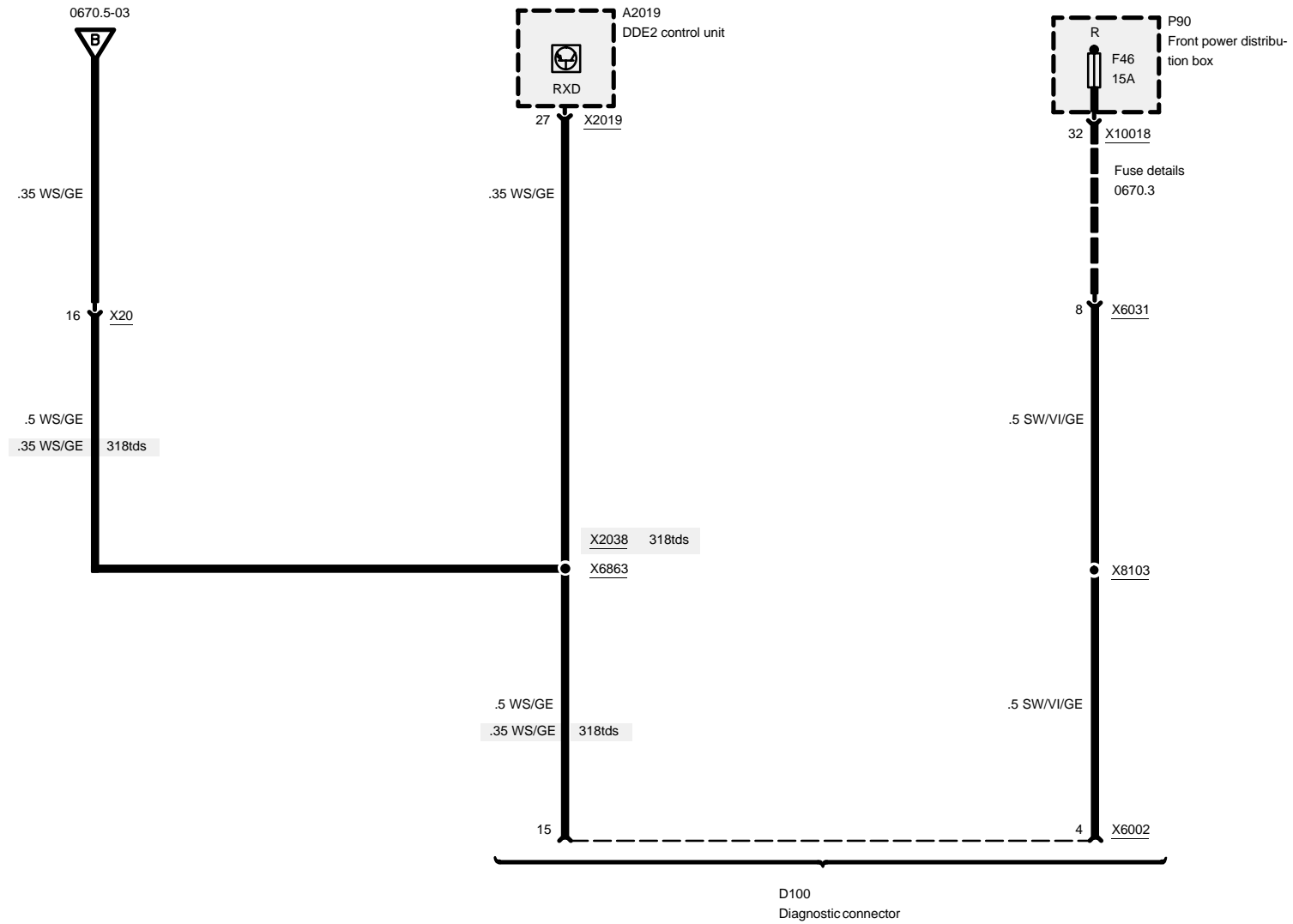
Diagnostic link

RXD



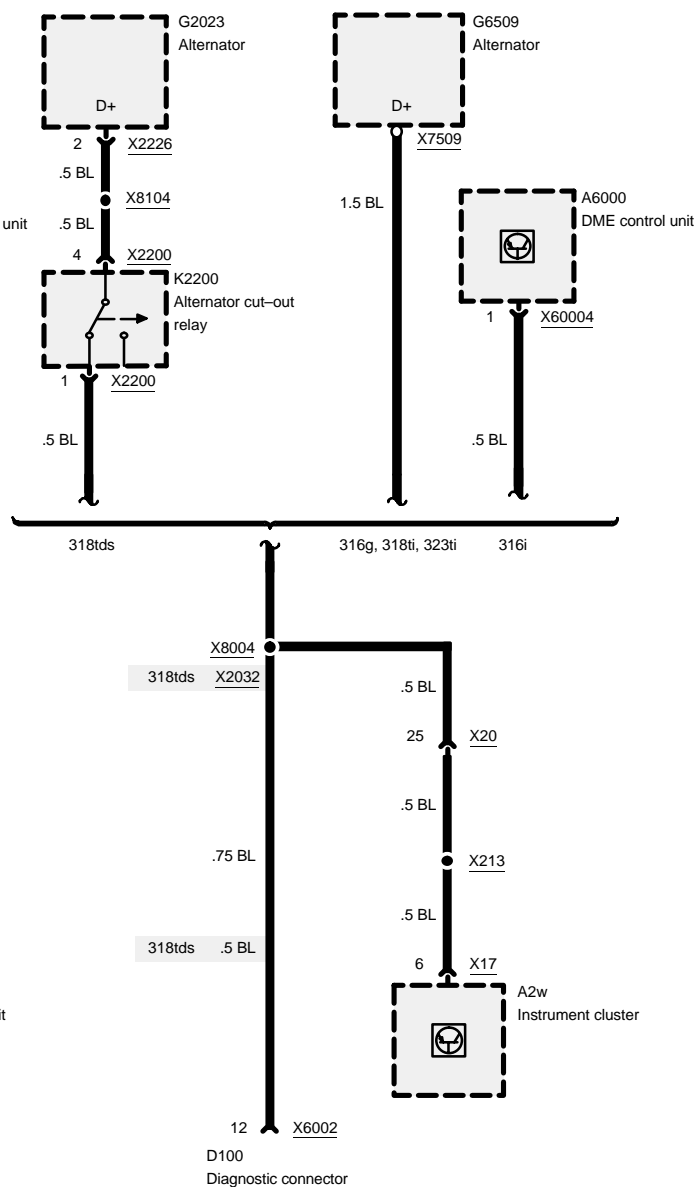
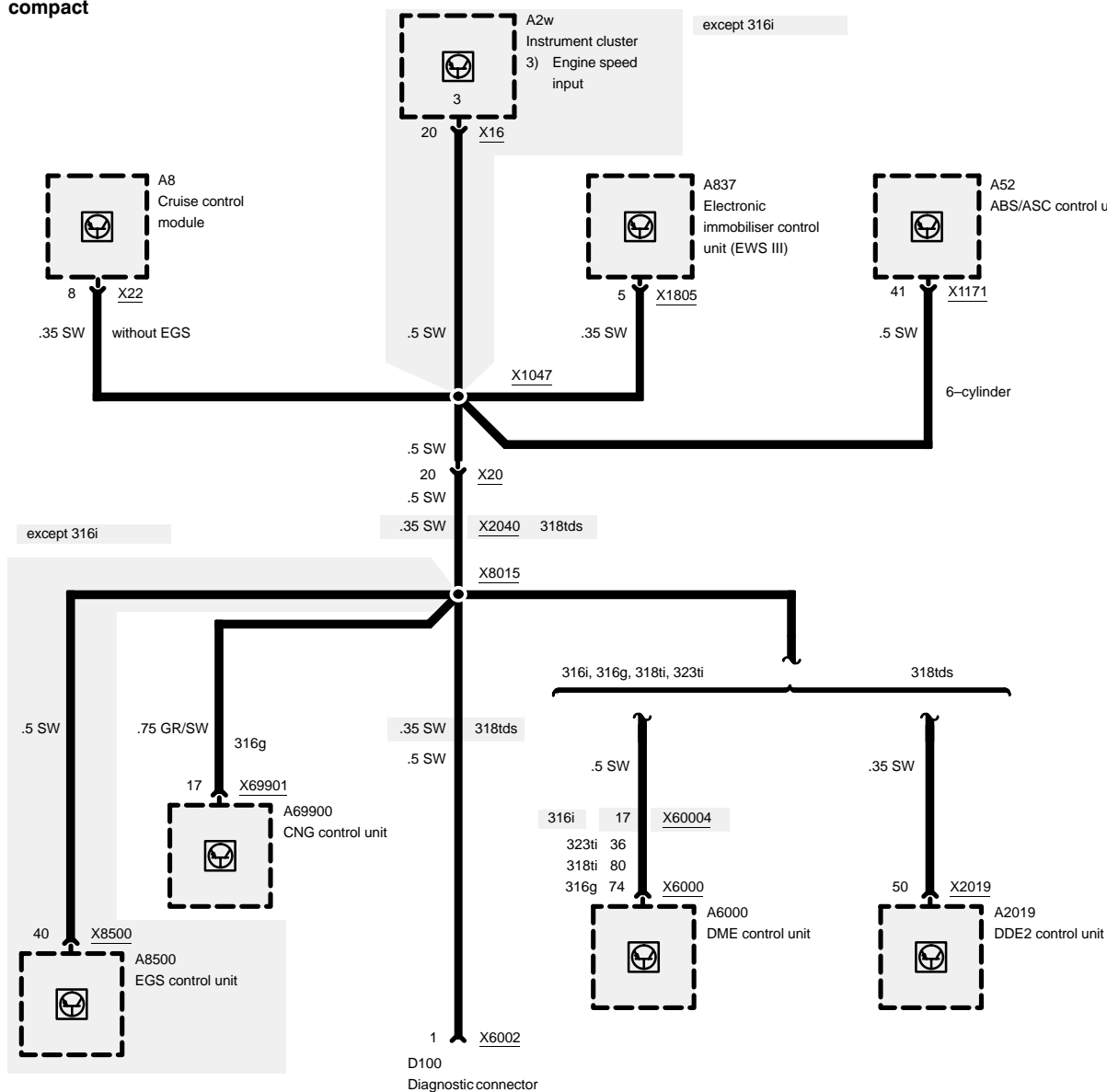
Diagnostic link

RXD, Diagnostic connector, pins 15 and 4





Diagnosis connector, pins 1 and 12

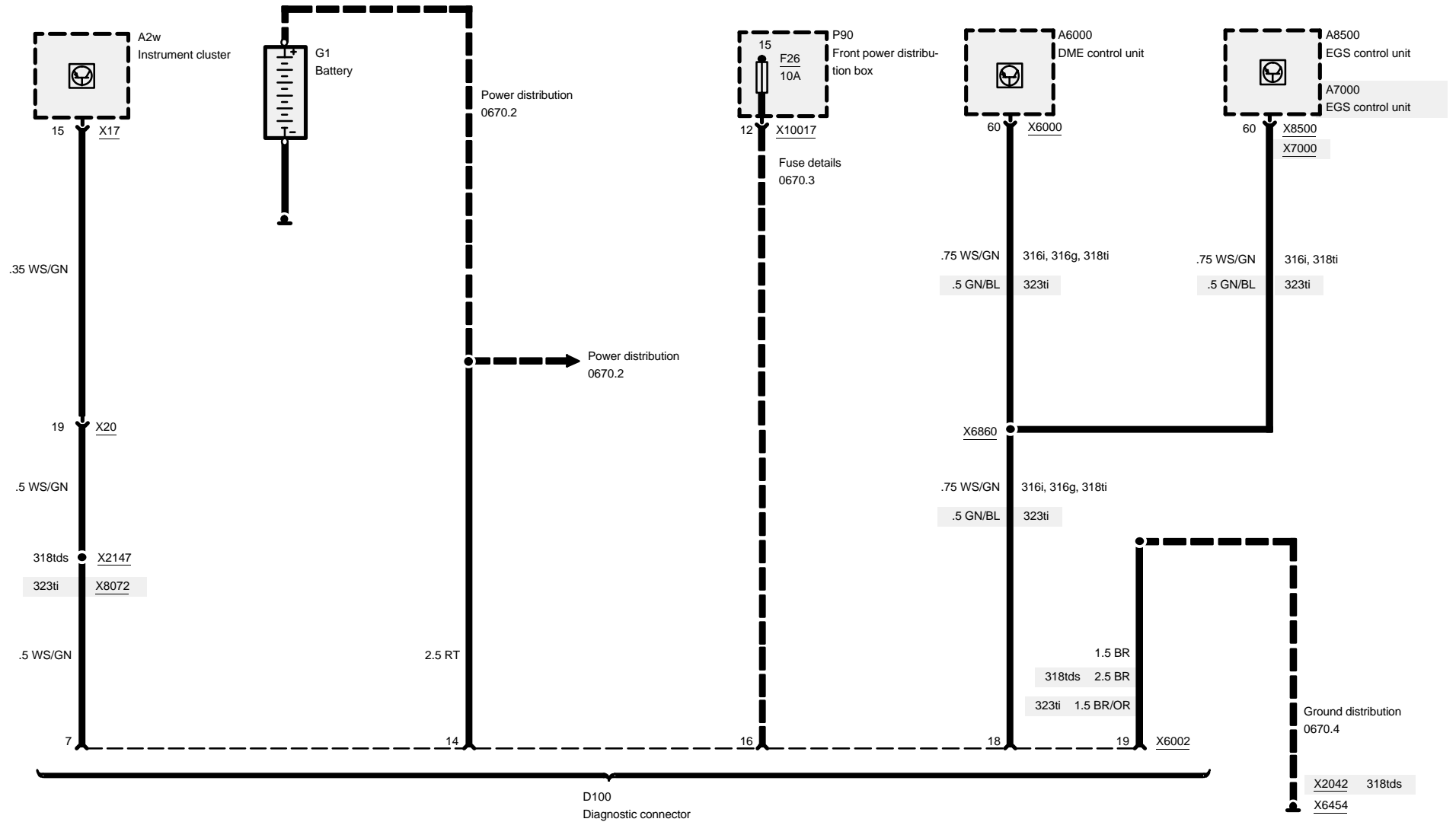




Diagnostic link

Diagnostic connector, pins 7, 14, 16, 18 and 19

Right-hand drive

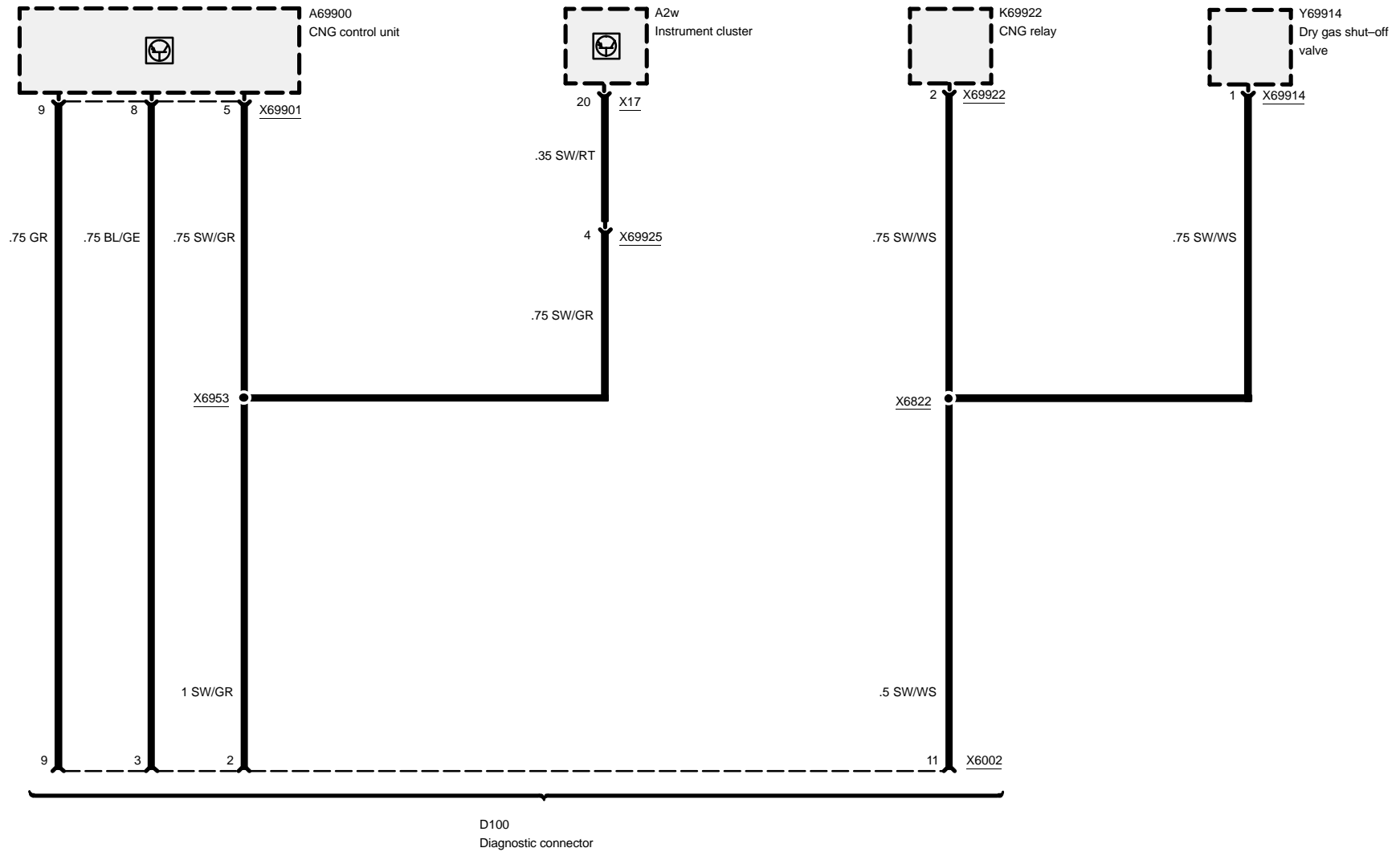




Diagnostic link

316g

Diagnostic connector, pins 2, 3, 9 and 11

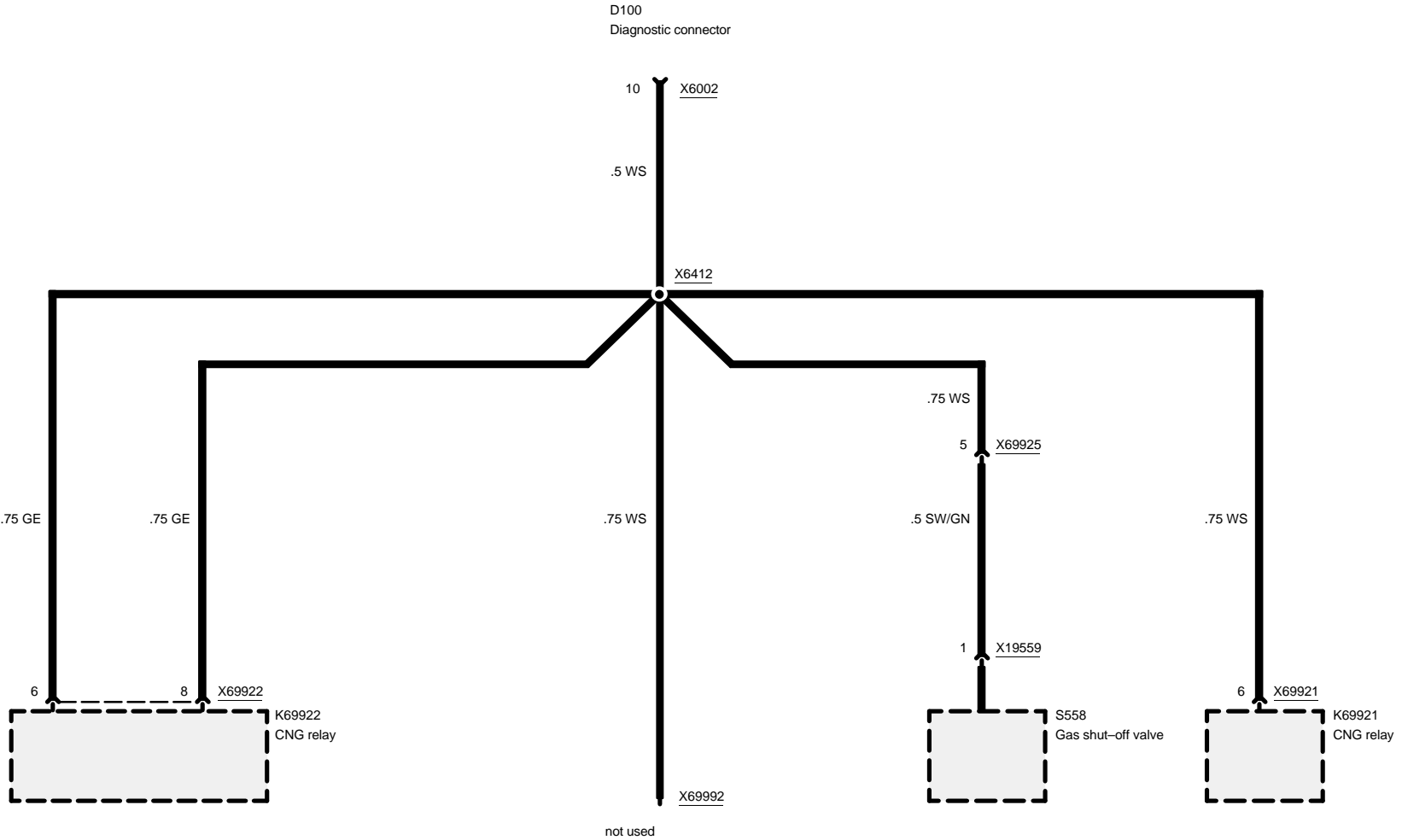




Diagnostic link

Diagnostic connector, pin 10

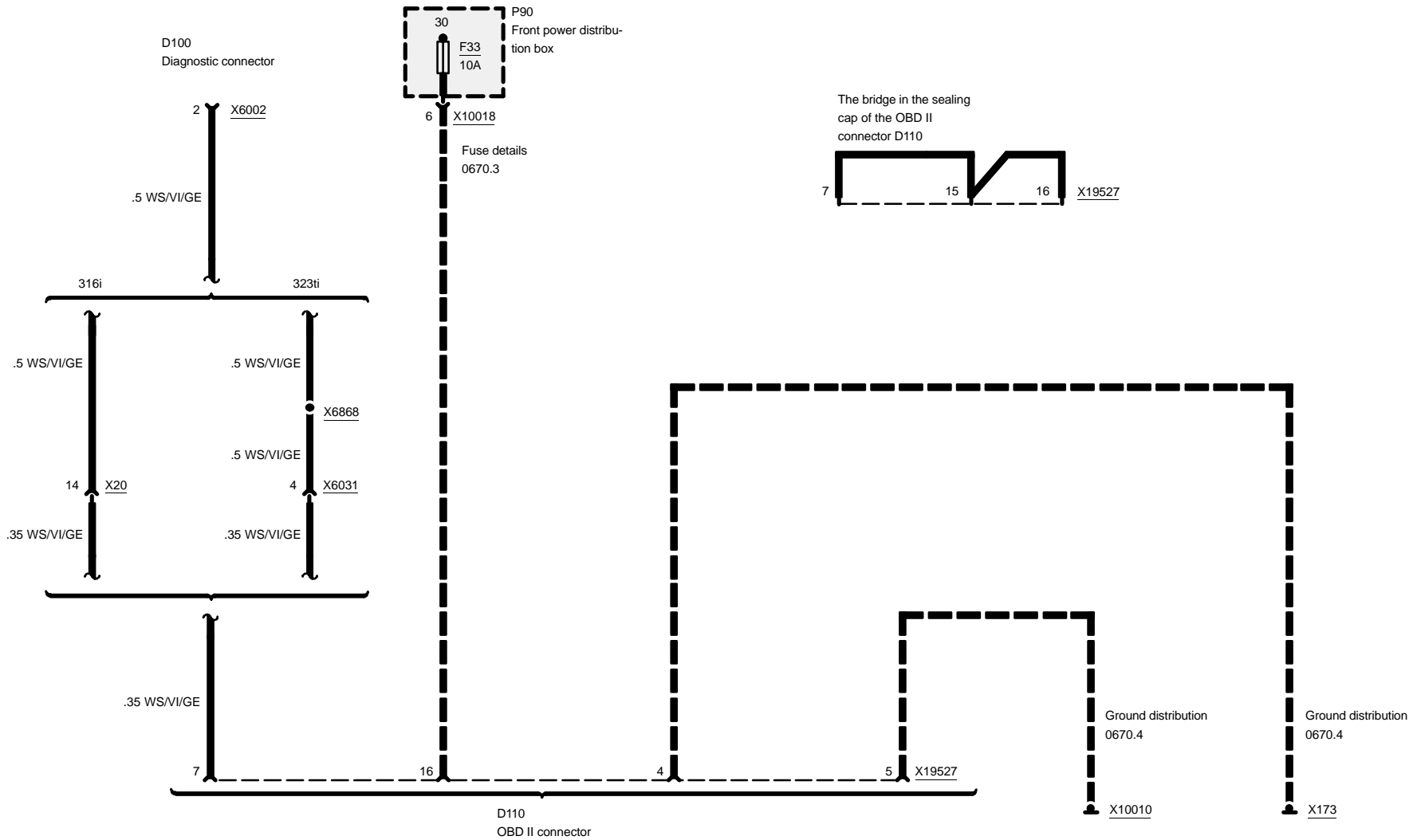
316g



Diagnostic link

316i, 323ti

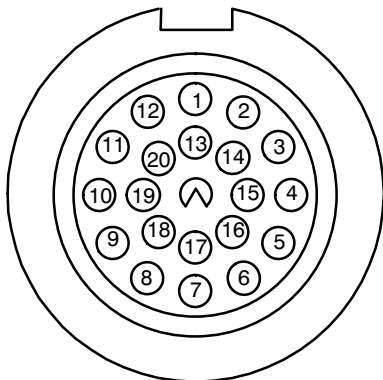
Diagnostic connector, pin 2 and OBD II connector



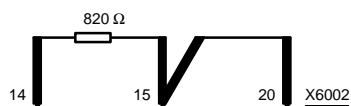
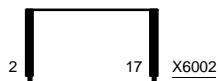
Diagnostic link

Diagnosis connector (X6002)

Right-hand drive

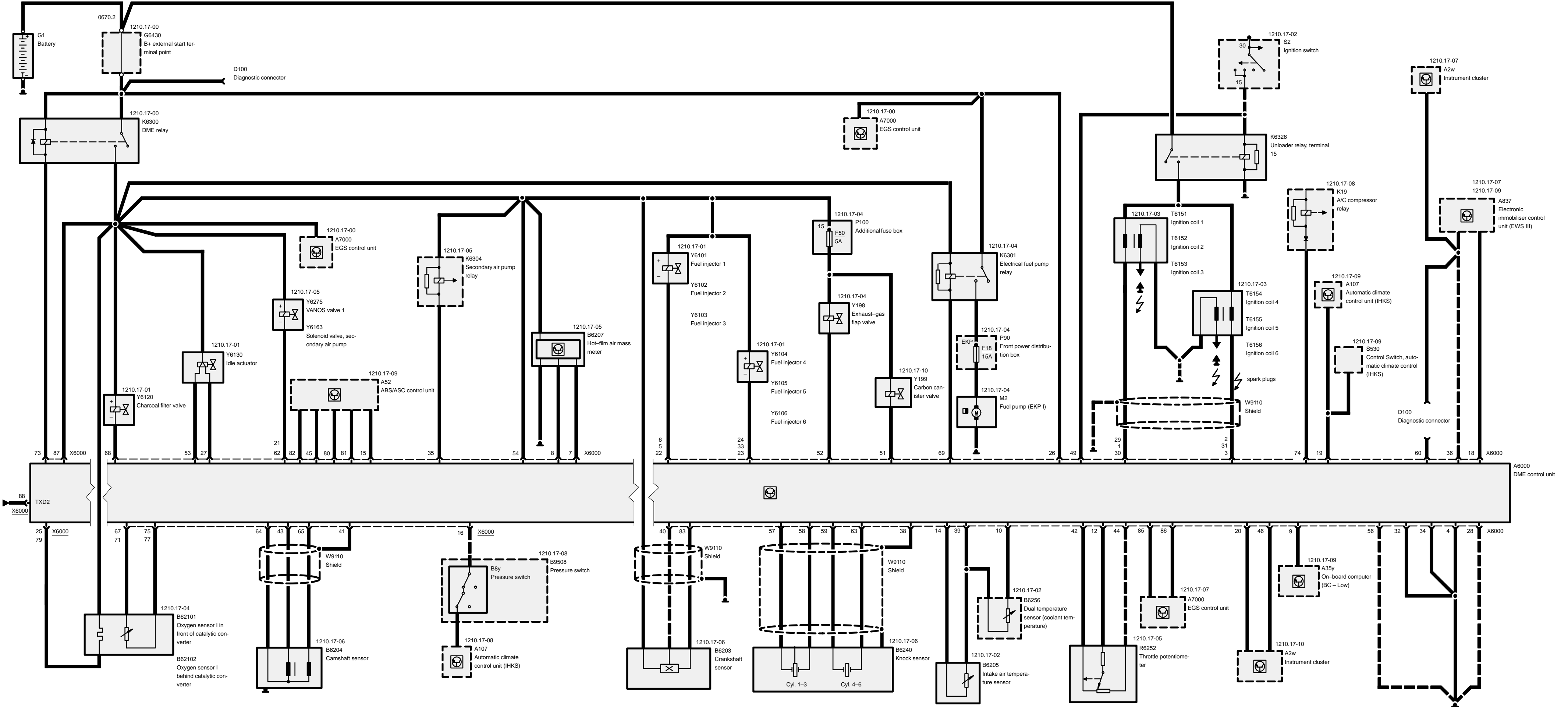


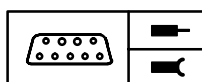
Jumpers in end cap
of diagnostic
connector D100



Pin number	Terminal number	Terminal description	Wire colour
1	TD	TD signal	SW
2 *		gas operation indicator	SW/GR
2	TXD2	diagnosis—data line	WS/VI/GE
3 *		communication link	BL/GE
4	Kl. R	Fuse 46	SW/VI/GE
5	—	not used	
6	—	not used	
7	SI	service interval indicator	WS/GN
8	—	not used	
9 *	Kl. 31	diagnosis initialization line	GR
10 *	Kl. 30	manual opening (high pressure stop valve)	WS
11 *	Kl. 87	manual opening (low pressure stop valve)	SW/WS
12	61(D+)	charge lamp	BL
13	—	not used	
14	30	battery +	RT
15	RXD	diagnosis—data line	WS/GE
16	15S	voltage at ignition ON	GN/WS
17	TXD II	diagnosis—data line (316i, 316g, 318ti)	WS/VI
18	PGSP	programming line	WS/GN, GN/BL (323ti)
19	31	ground	BR, BR/OR (323ti)
20	TXD1	diagnosis—data line	WS/VI

* 316g



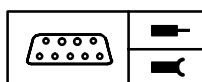


Pin assignments

X6000

Pin	Type	Description/Function	Connection
1	A	Ignition, terminal 1	Ignition coil, cyl. 2
2	A	Ignition, terminal 1	Ignition coil, cyl. 4
3	A	Ignition, terminal 1	Ignition coil, cyl. 6
4	M	Ground	Ground connection
5	A	Injection valve, cyl. 2	Injection valve, cyl. 2
6	A	Injection valve, cyl. 1	Injection valve, cyl. 1
7	E	Signal, air mass meter	Air mass meter
8	M	Ground, air mass meter	Air mass meter
9	A	TI signal	On-board computer
10	E	Coolant temperature signal	Coolant temperature sensor
11	E	Signal, fuel tank pressure sensor	Fuel tank pressure sensor
12	E	Throttle signal	Throttle potentiometer
13		Not used	
14	E	Intake air temperature signal	Intake air temperature sensor
15	A	ASC/ABS-signal	ASC/ABS control unit
16	A	Air conditioning ON signal	Pressure switch
17		Not used	
18	E	Vehicle immobilization	Control unit, electronic vehicle immobilization (EWS III)
19	A	Auxiliary fan signal	A/C control unit
20	A	CARB signal	Instrument cluster
21	A	Signal, camshaft control	VANOS valve 1
22	A	Injection valve, cyl. 3	Injection valve
23	A	Injection valve, cyl. 6	Injection valve
24	A	Injection valve, cyl. 4	Injection valve
25	M	Oxygen sensor heating	Oxygen sensor 1 before catalytic converter
26	E	Terminal 30	Jumper cable terminal point
27	A	Idle actuator signal	Idle actuator
28	M	Ground	Ground connection
29	A	Ignition, terminal 1	Ignition coil, cyl. 1
30	A	Ignition, terminal 1	Ignition coil, cyl. 3
31	A	Ignition, terminal 1	Ignition coil, cyl. 5
32	M	Ground	Ground connection

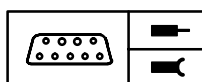
E = Input, A = Output, M = Ground



Pin assignments

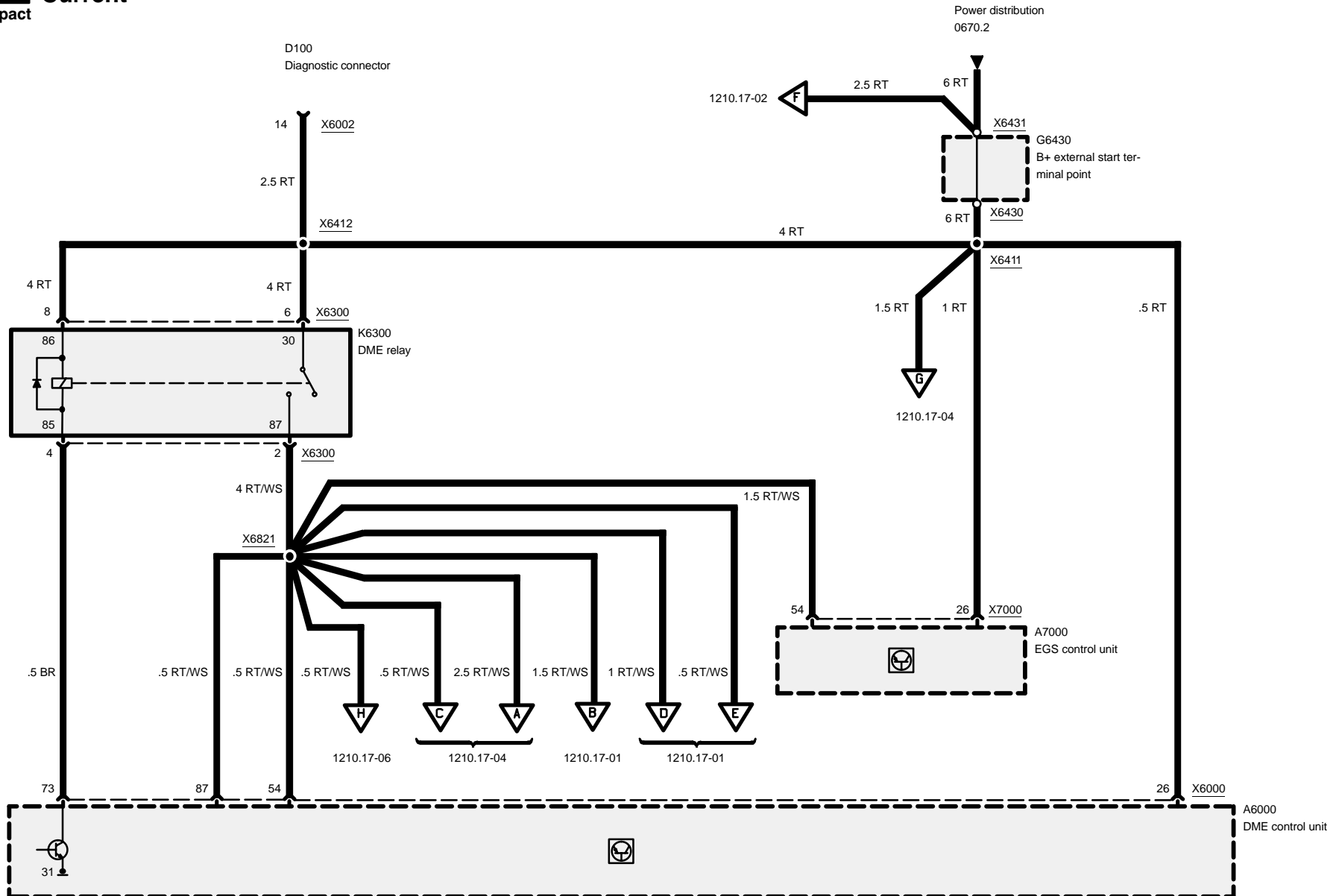
Pin	Type	Description/Function	Connection
33	A	Injection valve, cyl. 5	Injection valve
34	M	Ground	Ground connection
35	A	Activation, secondary air pump relay	Relay, secondary air pump
36	A	Engine speed signal TD	Instrument cluster
37		Not used	
38	M	Ground, shielding	Shield, knock sensor
39	M	Component ground	Temperature sensor
40	M	Ground	Crankshaft position/rpm sensor
41	M	Ground, shielding	Shield, camshaft sensor
42	A	Signal –	Throttle potentiometer
43	E	Signal –	Camshaft sensor
44	A	Signal +	Throttle potentiometer
45	A	ASC signal	ASC control unit
46	E	TANKF	Instrument cluster
47		Not used	
48	A	Signal +, 5V	Crankshaft position/rpm sensor
49	E	Terminal 15	Ignition lock
50		Not used	
51	A	Carbon canister valve	Carbon canister valve
52	A	Exhaust flap signal	Exhaust flap valve
53	A	Idle actuator signal	Idle actuator
54	E	Signal, >10V	DME main relay
55		Not used	
56	M	Ignition feedback signal	Resistor
57	A	Signal, knock sensor cyl. 1-3	Knock sensor
58	E	Signal, knock sensor cyl. 1-3	Knock sensor
59	A	Signal, knock sensor cyl. 4-6	Knock sensor
60	E	Programming voltage	Diagnostic connector
61		Not used	
62	A	Signal, secondary air pump	Solenoid valve, secondary air pump
63	E	Knock sensor signal, cyls. 4-6	Knock sensor
64	M	Component ground	Camshaft sensor
65	A	Signal +	Camshaft sensor
66		Not used	
67	M	Oxygen sensor ground	Oxygen sensor 1 before catalytic converter

E = Input, A = Output, M = Ground



Pin assignments

Pin	Type	Description/Function	Connection
68	A	Fuel tank ventilation valve	Fuel tank ventilation valve
69	A	Electric fuel pump relay and TR signal (crankshaft reference)	Fuel pump relay
70		Not used	
71	M	Oxygen sensor ground	Oxygen sensor after catalytic converter
72		Not used	
73	A	Relay activation	DME relay
74	E	Compressor ON signal	Relay, A/C compressor
75	E	Signal, oxygen sensor	Oxygen sensor 1 before catalytic converter
76		Not used	
77	E	Signal, oxygen sensor	Oxygen sensor after catalytic converter
78		Not used	
79	M	Oxygen sensor heating	Oxygen sensor after catalytic converter
80	A	ASC signal	ASC control unit
81	A	ASC signal	ASC control unit
82	A	ASC signal	ASC control unit
83	E	Crankshaft signal	Crankshaft position/rpm sensor
84		Not used	
85	A	Throttle valve position	EGS control unit
86	E	Ignition timing intervention	EGS control unit
87	E	Terminal 15	DME control relay
88	E/A	TxD2 diagnostic link	Diagnostic connector

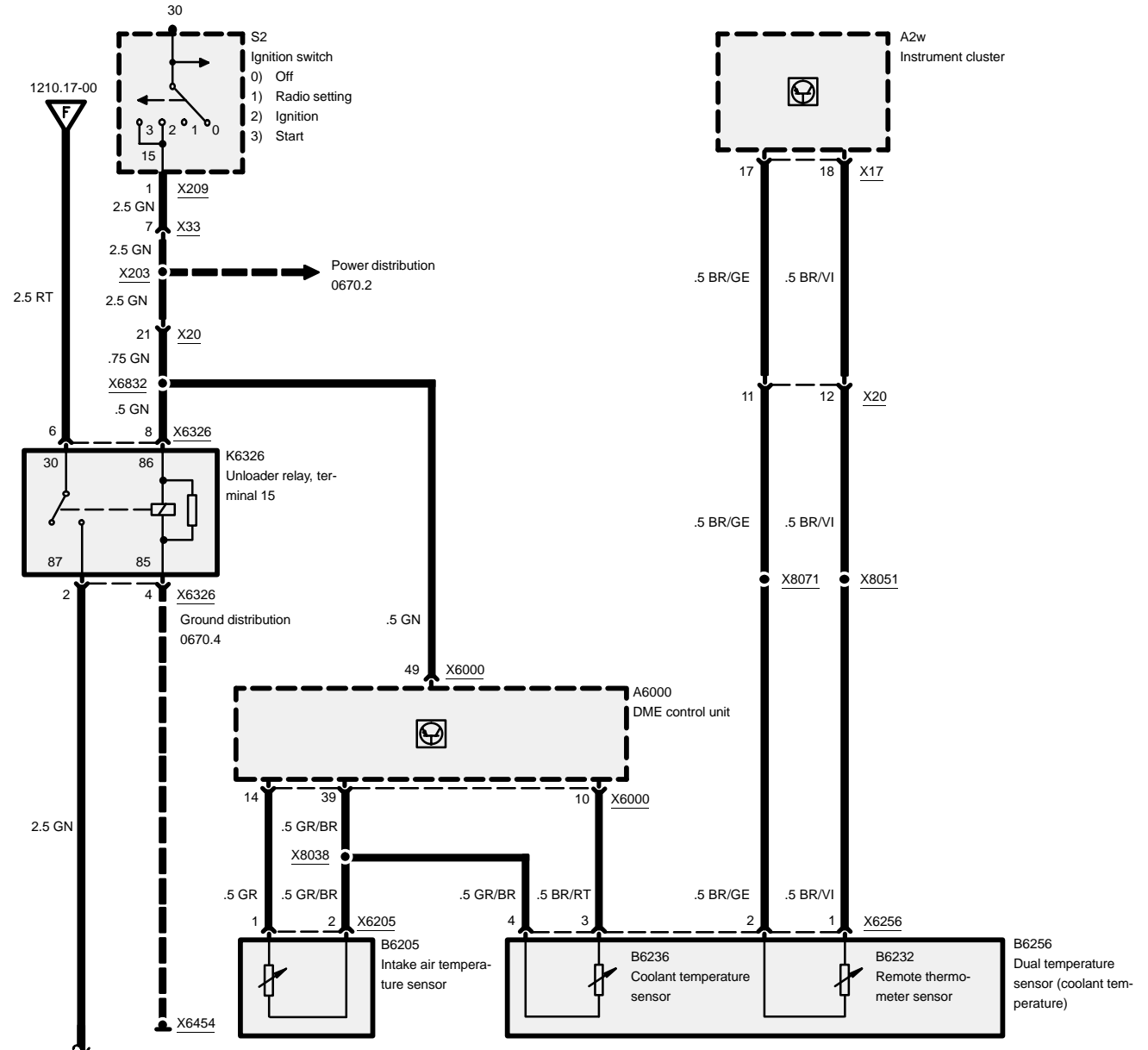


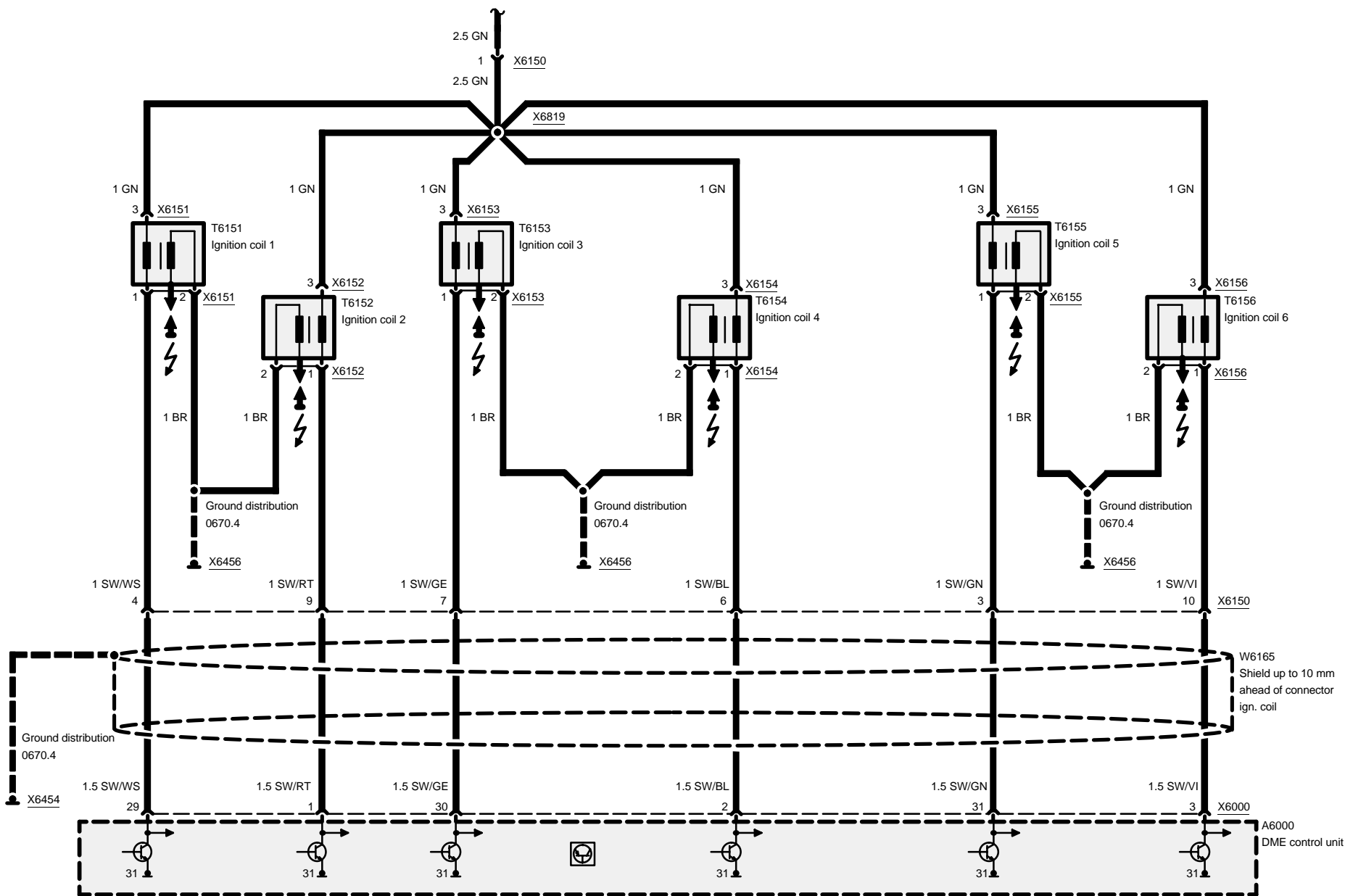


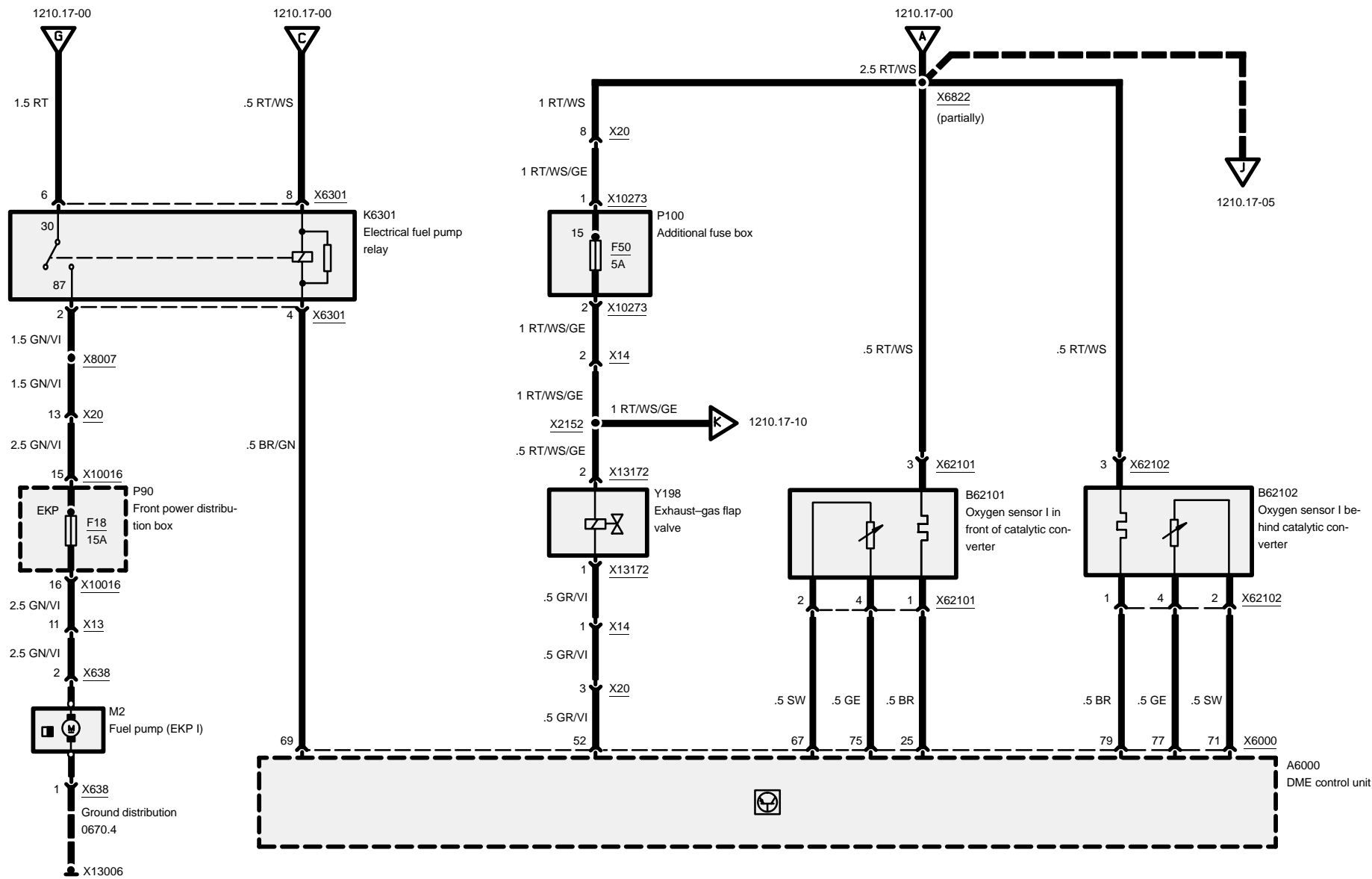


Engine management MS41.0 (6-cylinder M52)

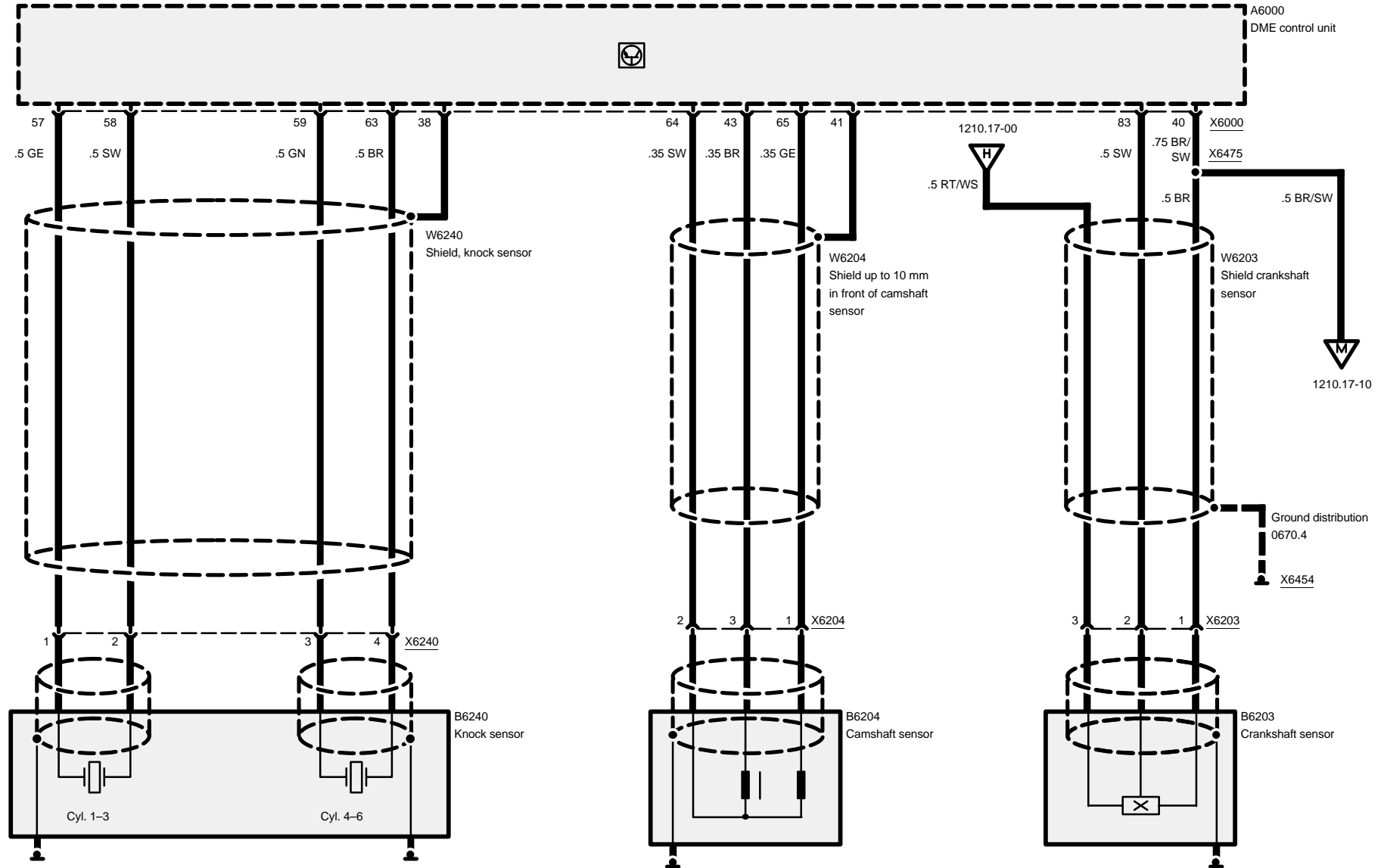
323ti

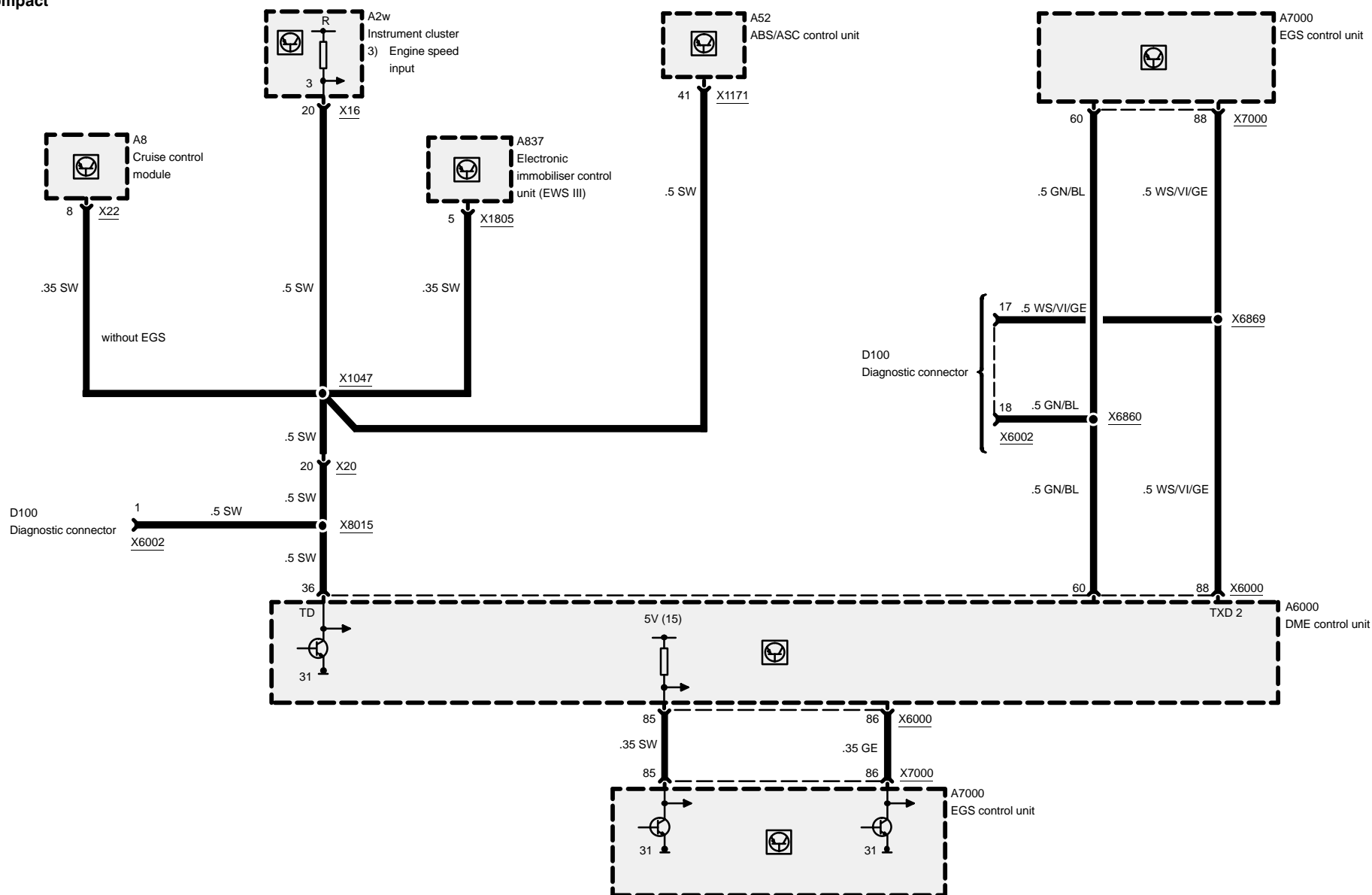


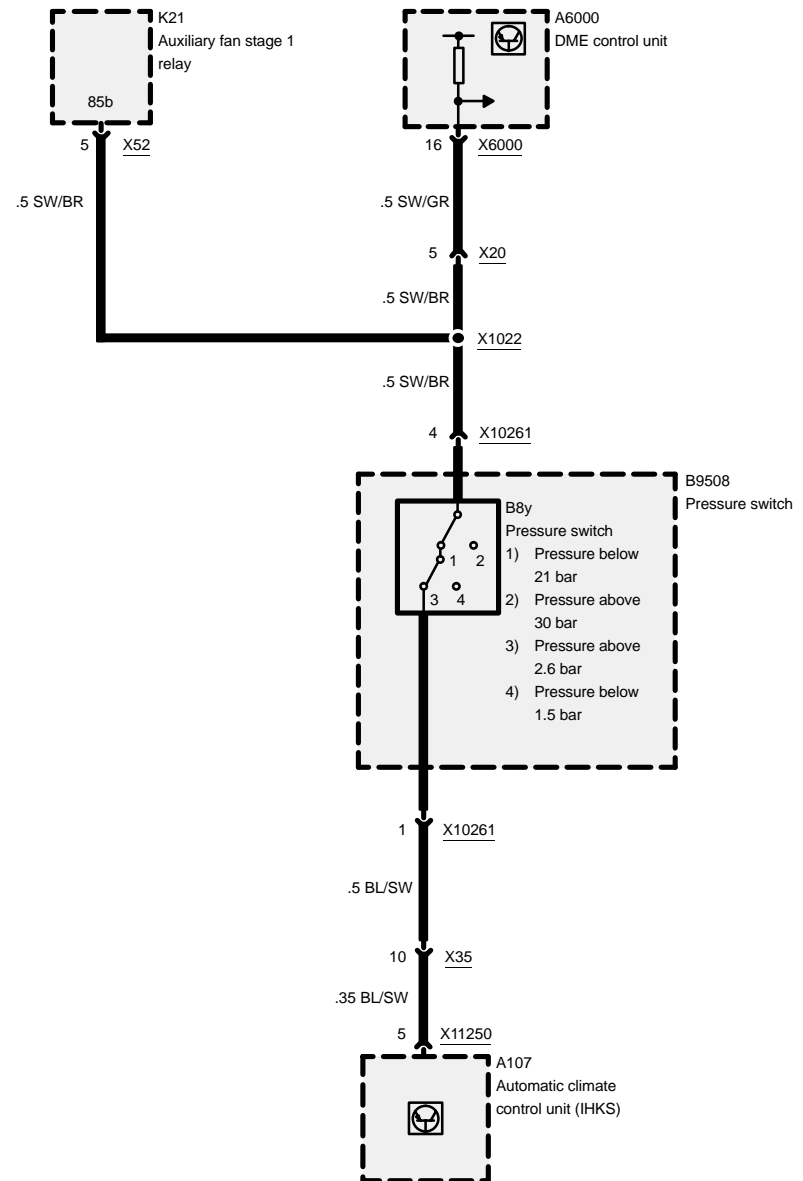
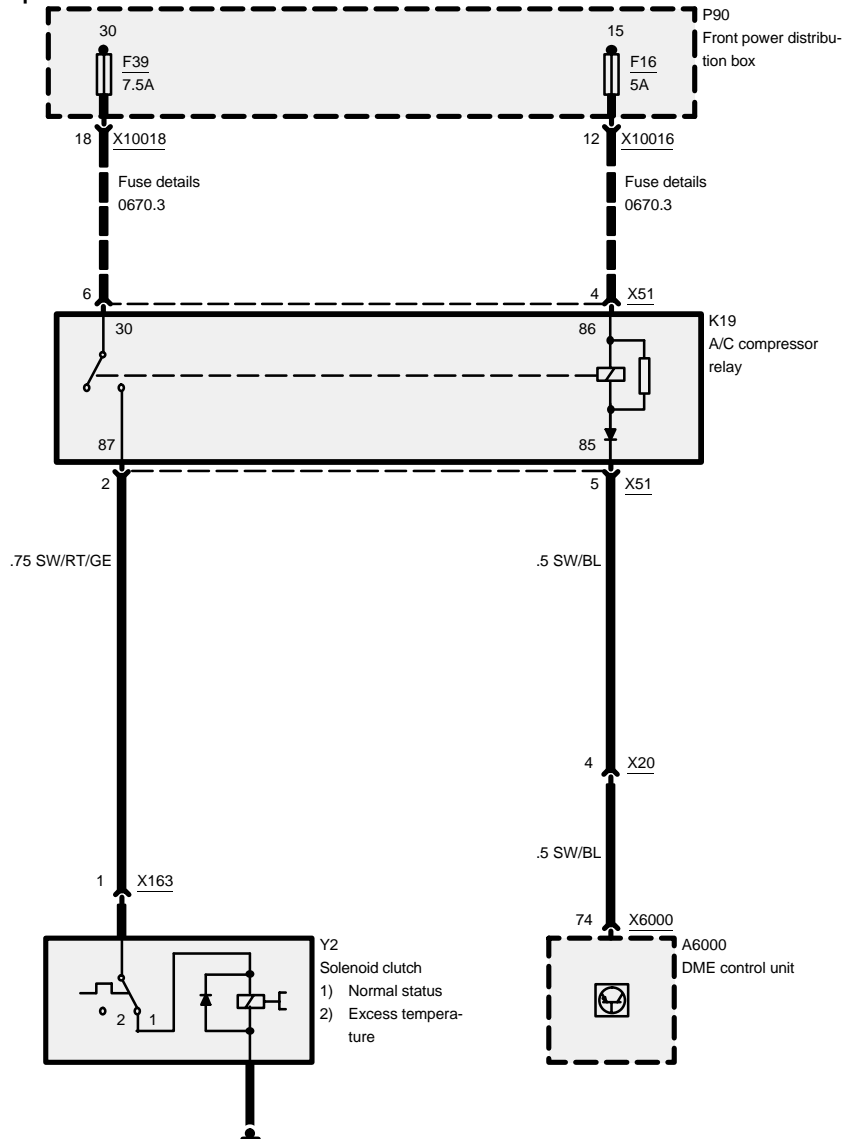


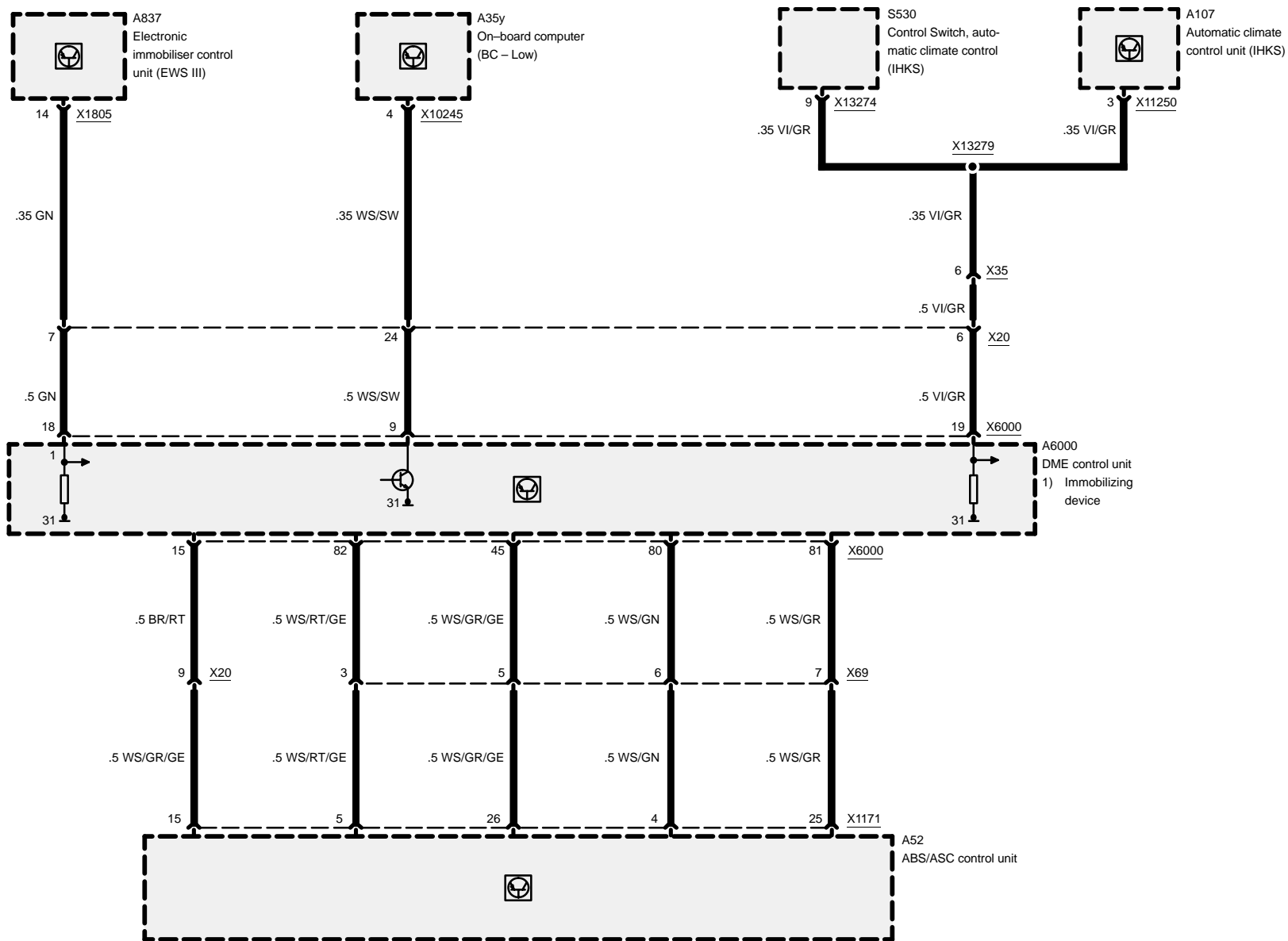












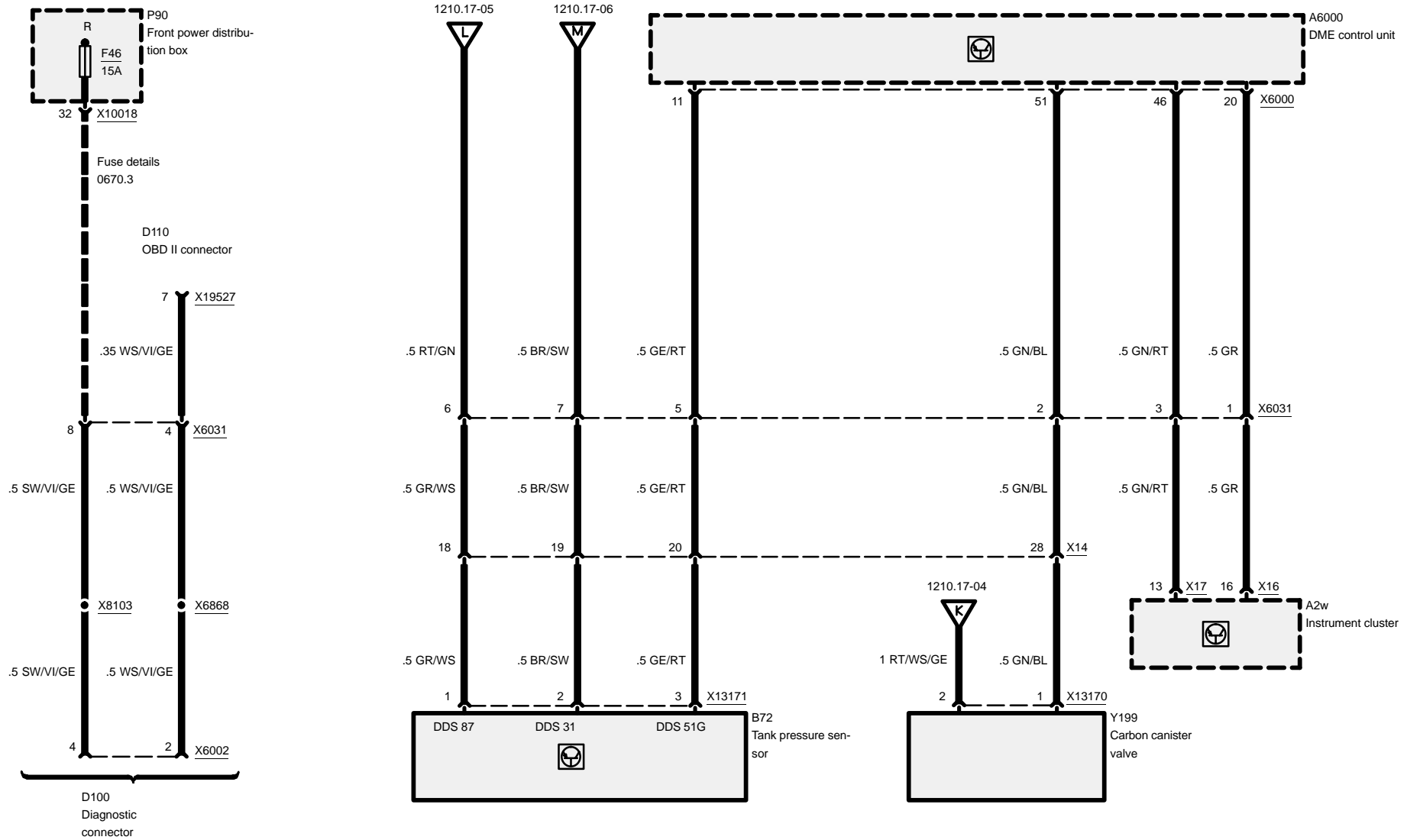


compact

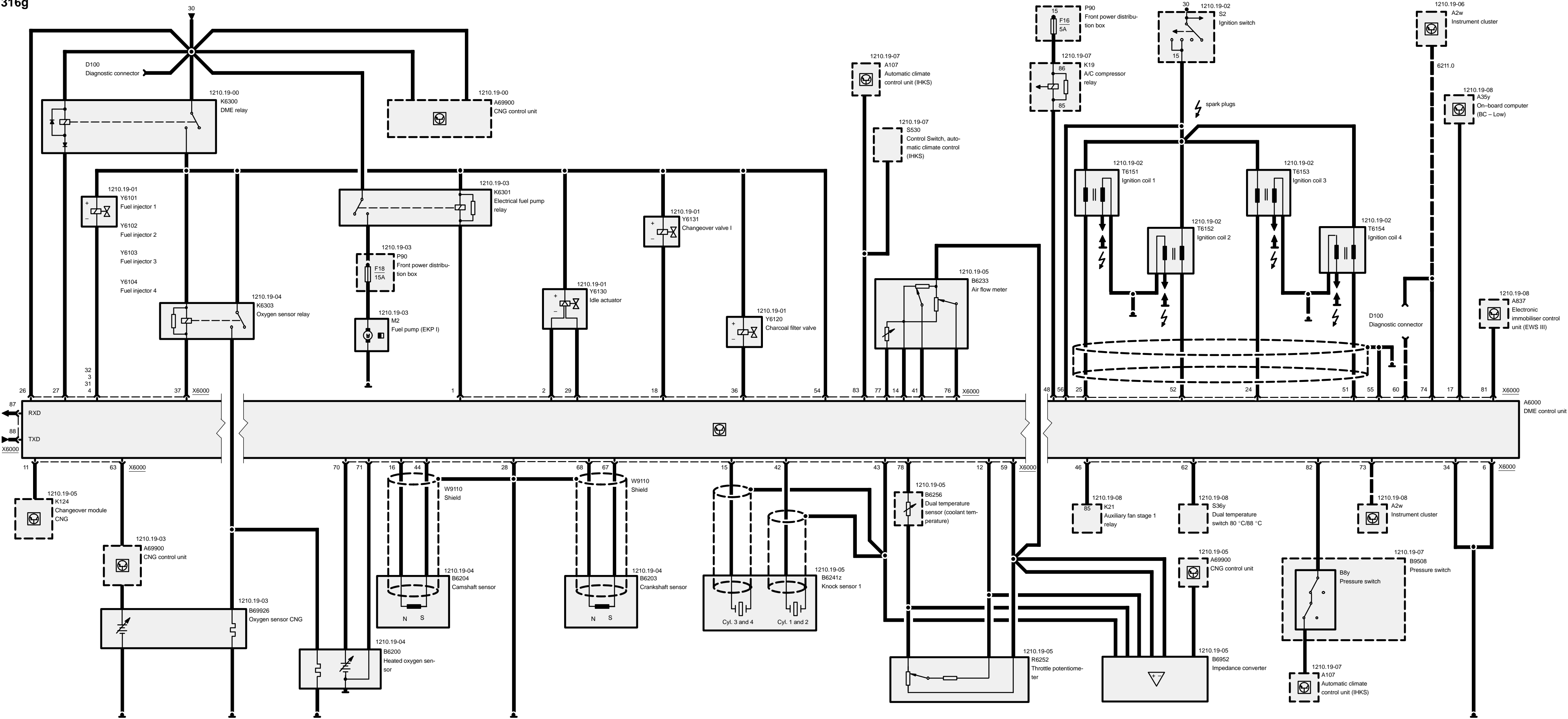
Engine management MS41.0 (6-cylinder M52)

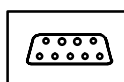
323ti

OBD II diagnosis



316g



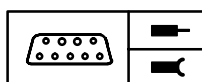


Pin assignments (316g)

X6000

Pin	Type	Description/Function	Connection
1	A	Relay activation	Electric fuel pump relay
2	A	Idle actuator signal	Idle actuator
3	A	Injection signal	Injection valve, cyl. 2
4	A	Injection signal	Injection valve, cyl. 4
5		Not used	
6	M	Ground, fuel injector output stages	Ground connection
7		Not used	
8		Not used	
9		Not used	
10		Not used	
11	E	Forced changeover petrol mode	CNG changeover module
12	E	Throttle valve position	Throttle potentiometer
13		Not used	
14	M	Component ground	Air flow rate sensor
15	E	Signal, knock sensor cyl. 3 and 4	Knock sensor
16	M	Component ground	Camshaft sensor
17	A	Signal, economy control (TI signal)	On-board computer
18	A	Changeover valve 1	Changeover valve
19		Not used	
20		Not used	
21		Not used	
22		Not used	
23		Not used	
24	A	Ignition signal cyl. 3, terminal 1	Ignition coil 3
25	A	Ignition signal cyl. 1, terminal 1	Ignition coil 1
26	E	Permanent positive, terminal 30	B+ terminal point
27	A	Activation, DME main relay	DME main relay, terminal 85
28	M	Ground for electronics and sensor shielding	Ground connection
29	A	Idle actuator signal	Idle actuator
30		Not used	
31	A	Injection signal	Injection valve, cyl. 3
32	A	Injection signal	Injection valve, cyl. 1

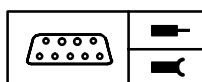
E = Input, A = Output, M = Ground



Pin assignments (316g)

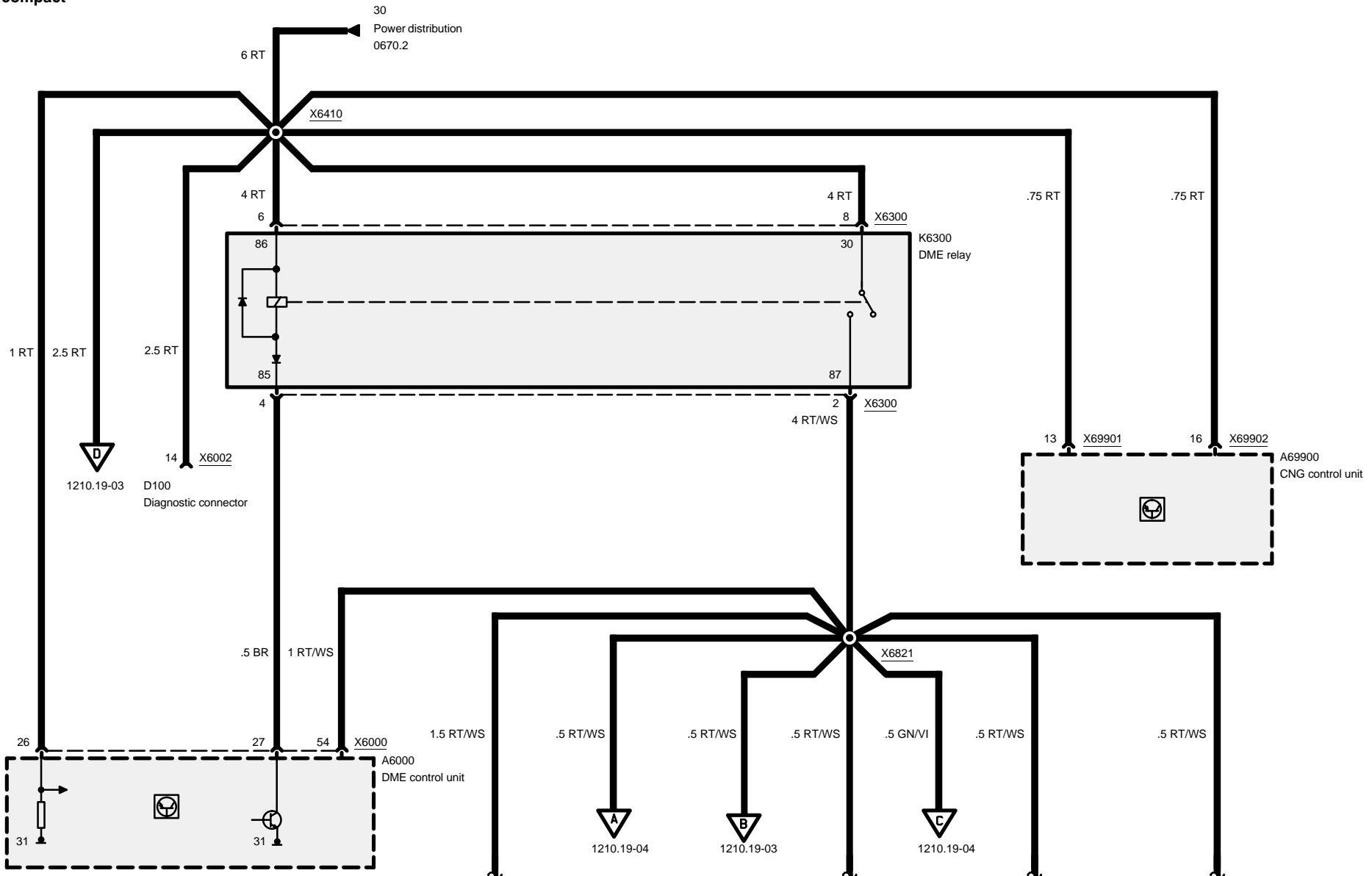
Pin	Type	Description/Function	Connection
33		Not used	
34	M	Ground for remaining output stages (except ignition and injection valves)	Ground connection
35		Not used	
36	A	Fuel tank ventilation valve	Fuel tank ventilation valve
37	A	Activation, oxygen sensor relay	Oxygen sensor relay
38		Not used	
39		Not used	
40		Not used	
41	E	Signal, air flow rate sensor	Air flow rate sensor
42	E	Signal, knock sensor cyl. 1 and 2	Knock sensor
43	M	Sensor ground	Impedance converter and shield for knock sensors
44	E	Camshaft signal	Camshaft sensor
45		Not used	
46	A	Relay activation	Auxiliary fan relay, stage 1
47		Not used	
48	A	A/C compressor shutdown	Air conditioner compressor relay
49		Not used	
50		Not used	
51	A	Ignition signal cyl. 4, terminal 1	Ignition coil 4
52	A	Ignition signal cyl. 2, terminal 1	Ignition coil 2
53		Not used	
54	E	B+ voltage	DME main relay
55	M	Ground, ignition	Ground connection
56	E	Ignition, terminal 15	Ignition lock
57		Not used	
58		Not used	
59	A	5V component supply	Throttle potentiometer/volume air flow sensor and impedance converter
60	E	Programming voltage	Diagnostic connector
61		Not used	
62	E	Signal, water temperature above 80°C	Dual temperature switch
63	E	Injection cutout	CNG control unit
64		Not used	
65		Not used	

E = Input, A = Output, M = Ground



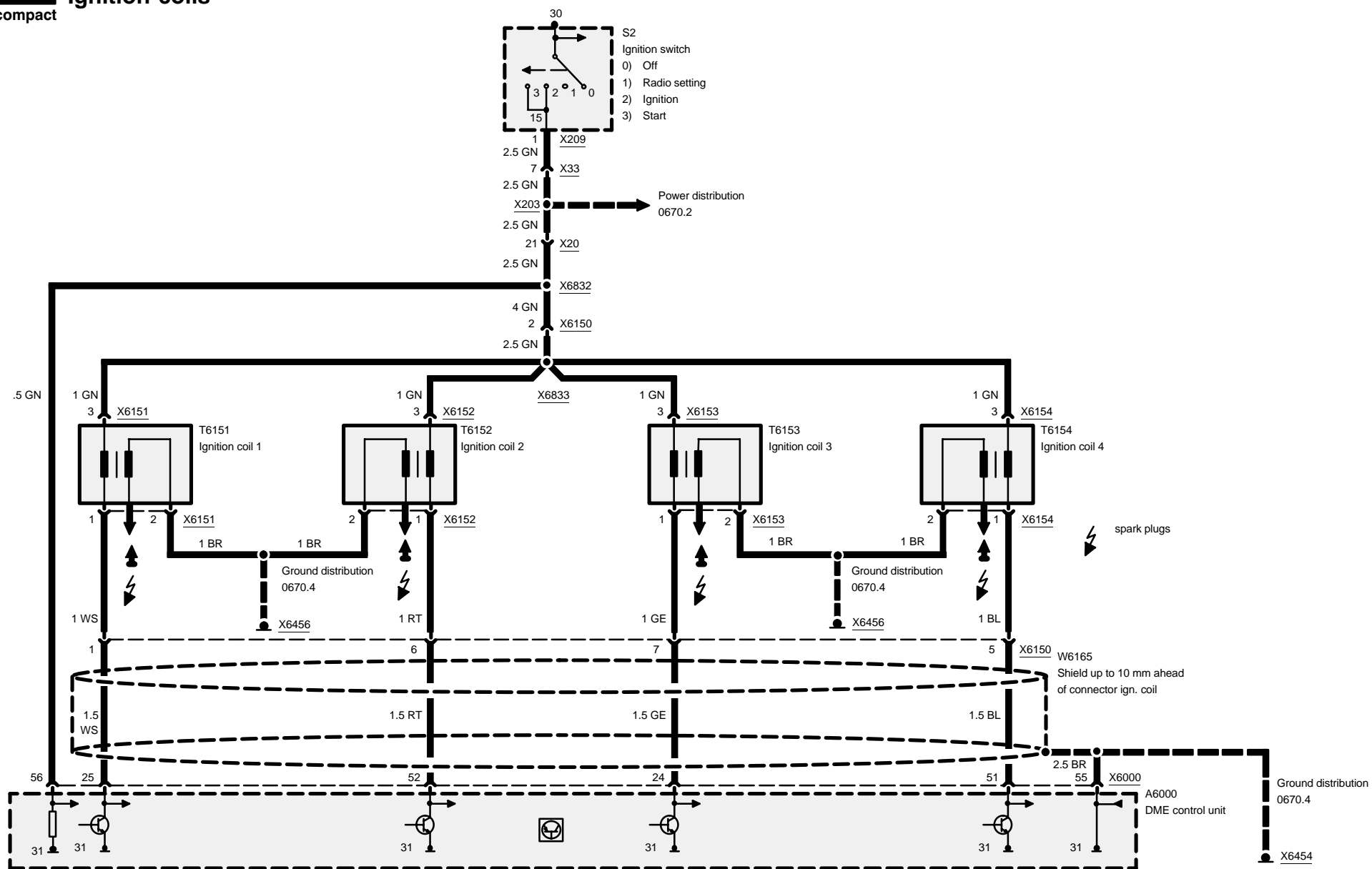
Pin assignments (316g)

Pin	Type	Description/Function	Connection
66		Not used	
67	E	Crankshaft signal	Crankshaft sensor
68	M	Component ground	Crankshaft sensor
69		Not used	
70	E	Oxygen sensor signal	Oxygen sensor
71	M	Component ground	Oxygen sensor
72		Not used	
73	E	Vehicle speed signal	Instrument cluster
74	A	TD signal	Instrument cluster
75		Not used	
76	E	Idle CO potentiometer	Air flow rate sensor
77	E	Intake air temperature sensor	Air flow rate sensor
78	E	Engine temperature sensor	Water temperature sensor
79		Not used	
80		Not used	
81	E	Vehicle immobilization	Control unit, electronic vehicle immobilization (EWS III)
82	E	Switch for A/C compressor	Pressure switch
83	E	Air conditioning ON signal	A/C control unit
84		Not used	
85		Not used	
86		Not used	
87	A	RxD diagnostic link	Diagnostic connector
88	E/A	TxD diagnostic link	Diagnostic connector

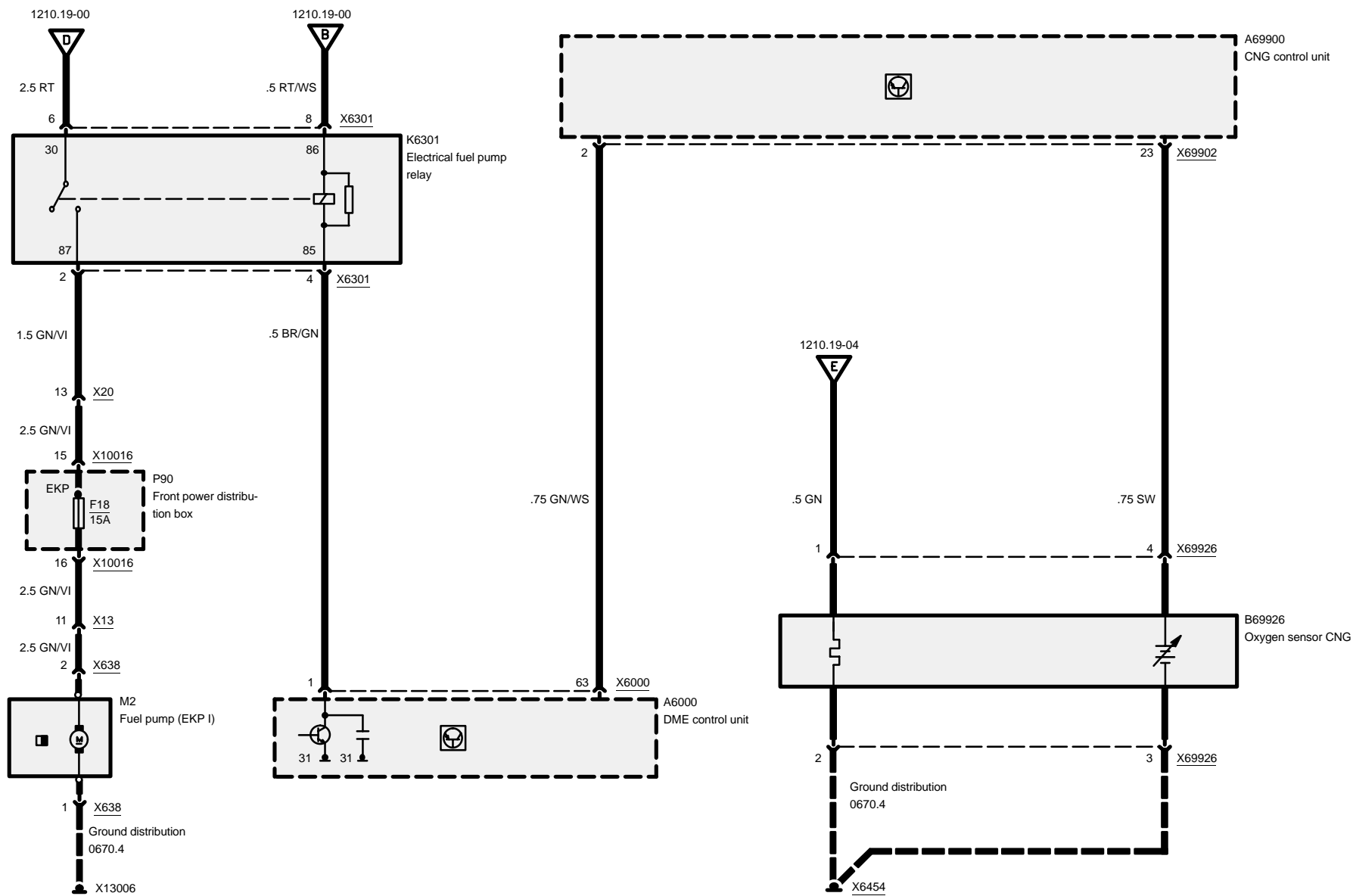


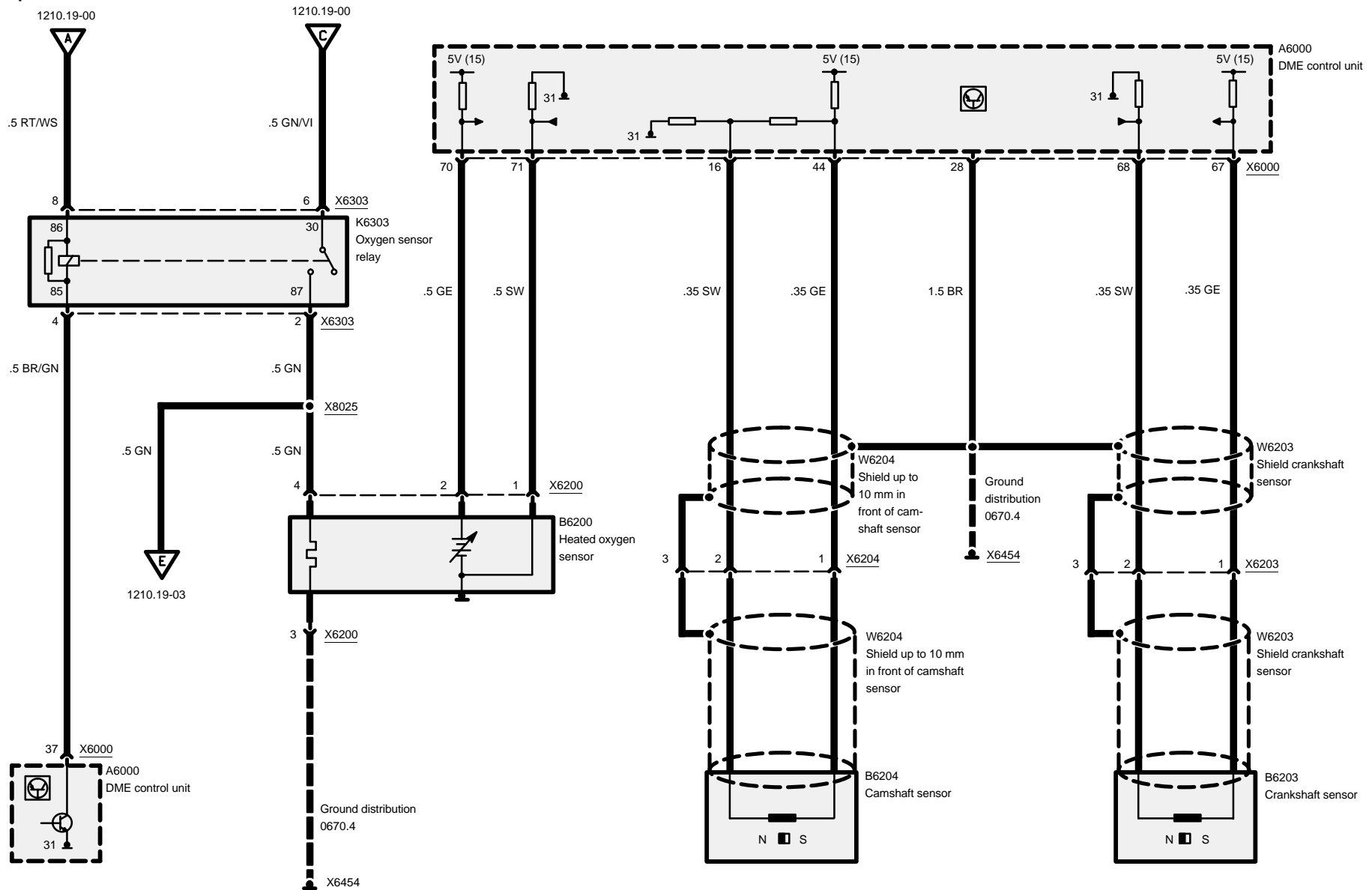


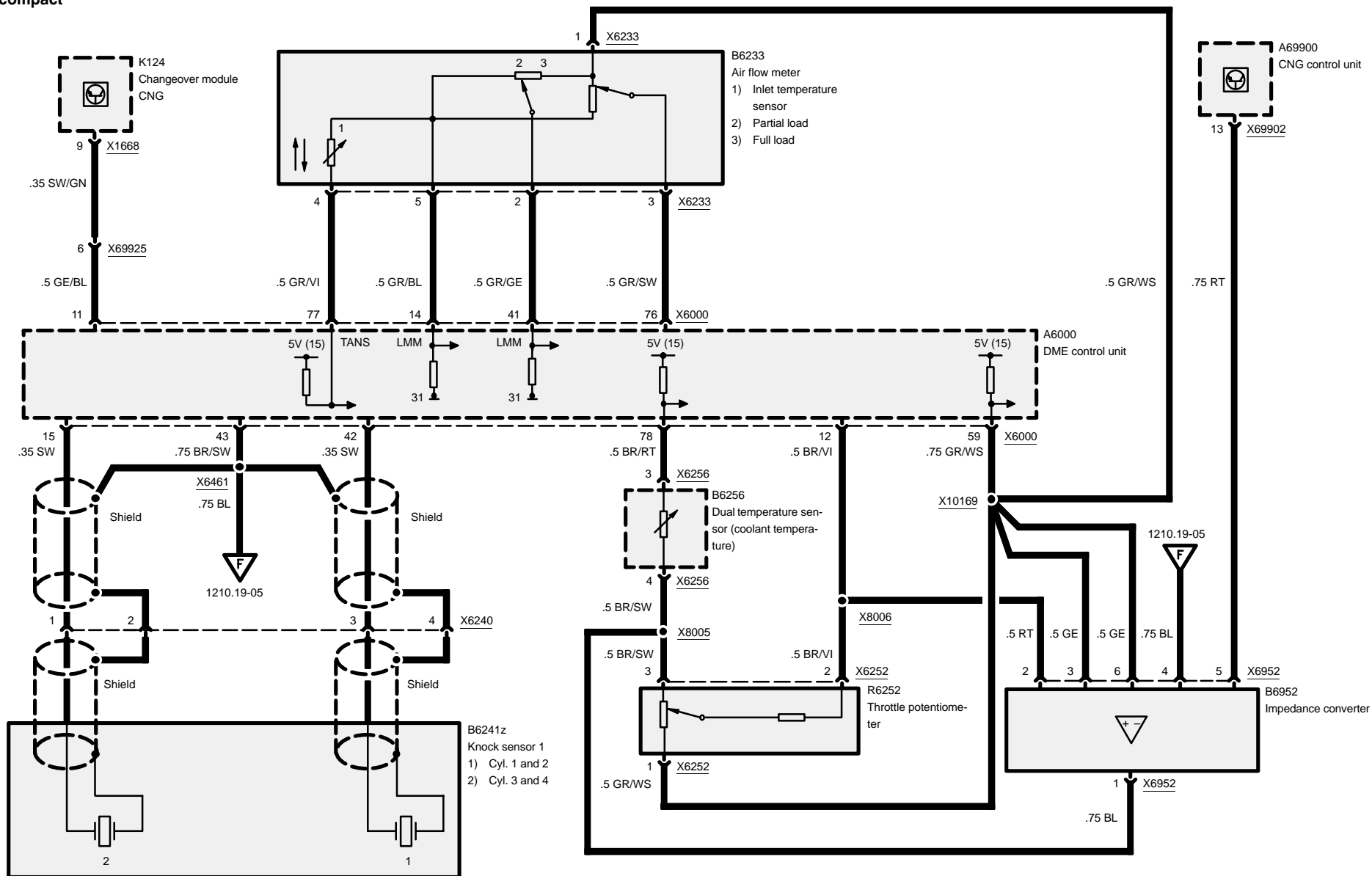
Ignition coils



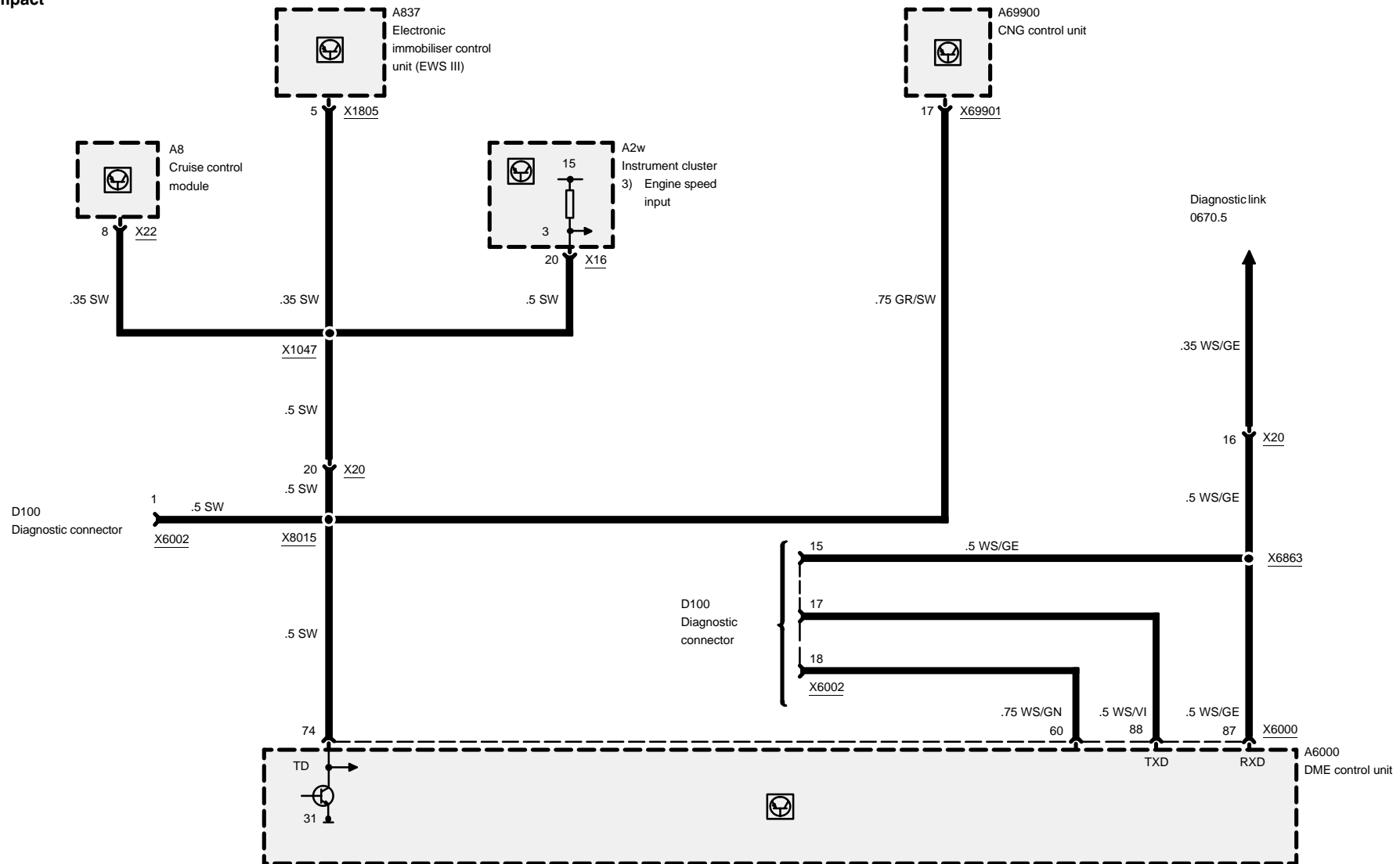
Fuel pump

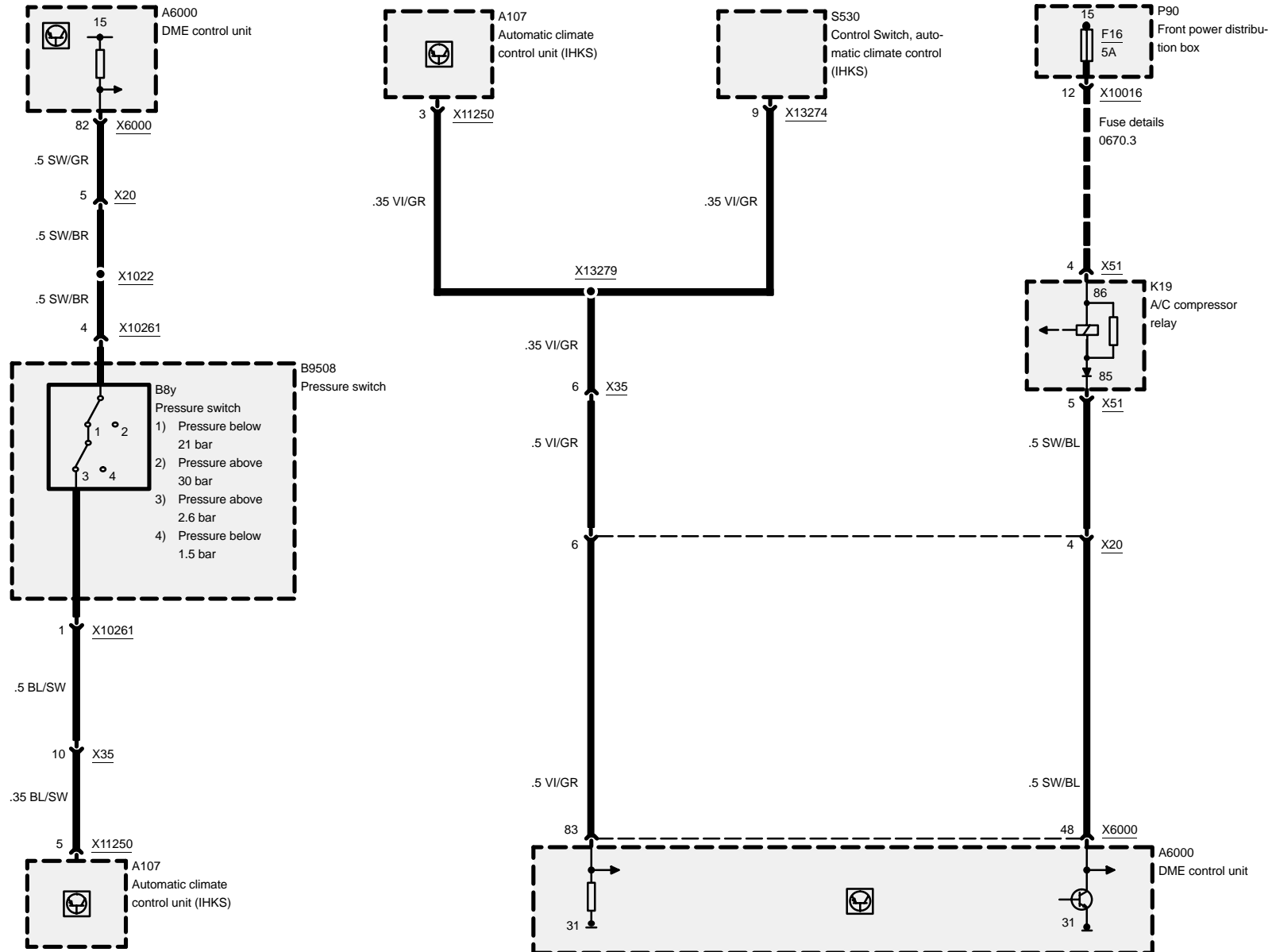






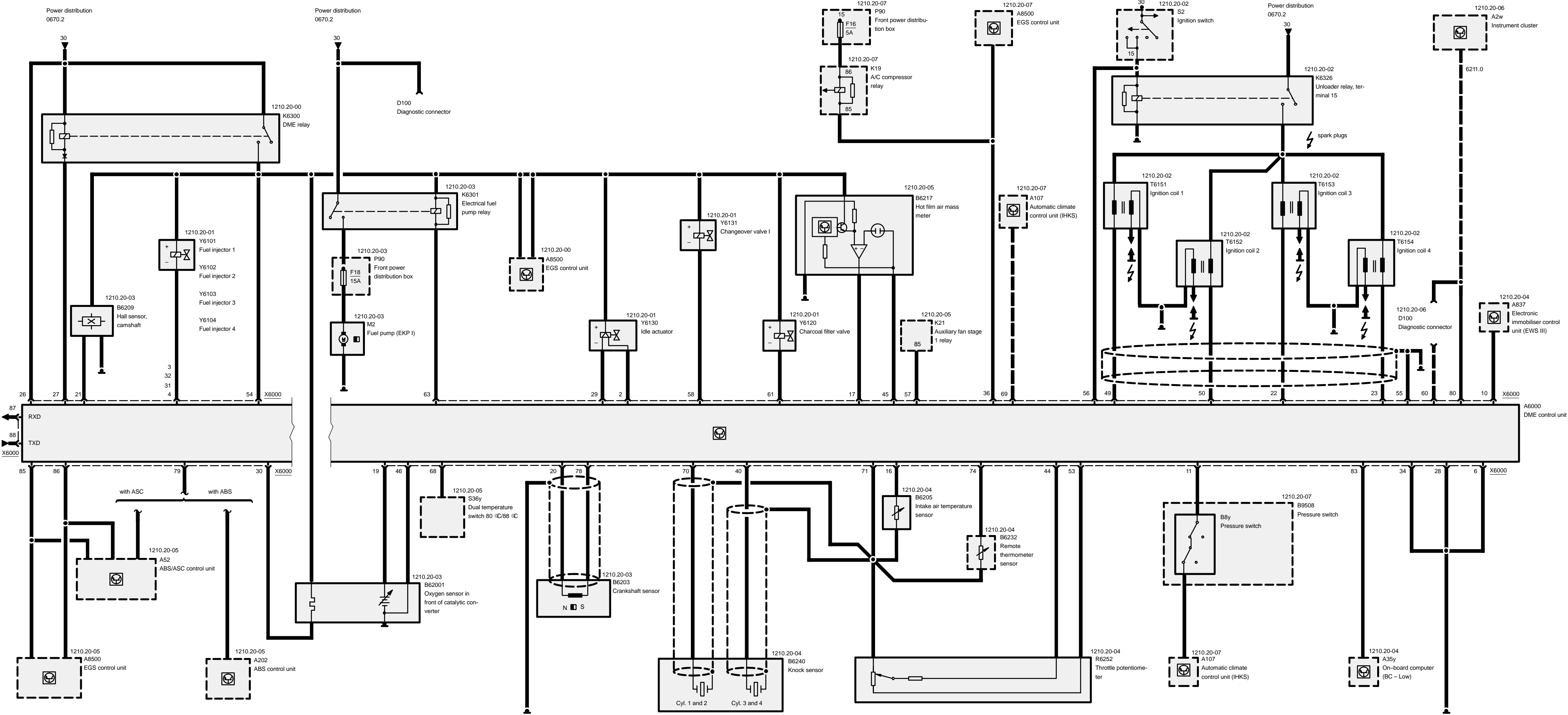
Diagnostic link

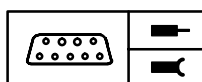






Right-hand drive



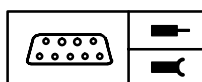


Pin assignments (Right-hand drive)

X6000

Pin	Type	Description/Function	Connection
1		Not used	
2	A	Idle actuator signal	Idle actuator
3	A	Injection signal	Injection valve, cyl. 1
4	A	Injection signal	Injection valve, cyl. 4
5		Not used	
6	M	Ground, fuel injector output stages	Ground connection
7		Not used	
8		Not used	
9		Not used	
10	E	Vehicle immobilization	Control unit, electronic vehicle immobilization (EWS III)
11	E	Air conditioning signal	Pressure switch
12		Not used	
13		Not used	
14		Not used	
15		Not used	
16	E	Temperature signal	Intake air temperature sensor
17	E	Signal input	Hot-film air mass meter
18		Not used	
19	E	Oxygen sensor signal	Oxygen sensor
20	M	Component ground	Crankshaft sensor
21	E	Camshaft signal	Camshaft Hall generator
22	A	Ignition signal, terminal 1	Ignition coil 3
23	A	Ignition signal, terminal 1	Ignition coil 4
24		Not used	
25		Not used	
26	E	Permanent positive, terminal 30	B+ terminal point
27	A	Activation, DME main relay	DME main relay, terminal 85
28	M	Ground for electronics and sensor shielding	Ground connection
29	A	Idle actuator signal	Idle actuator
30	M	Component ground	Oxygen sensor heating
31	A	Injection signal	Injection valve, cyl. 3

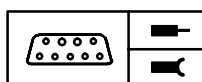
E = Input, A = Output, M = Ground



Pin assignments (Right-hand drive)

Pin	Type	Description/Function	Connection
32	A	Injection signal	Injection valve, cyl. 2
33		Not used	
34	M	Ground for remaining output stages (except ignition and injection valves)	Ground connection
35		Not used	
36	A	Air conditioning ON signal	Relay, A/C compressor
37		Not used	
38		Not used	
39		Not used	
40	E	Knock signal, cyls. 3 and 4	Knock sensor
41		Not used	
42		Not used	
43		Not used	
44	E	Throttle valve position	Throttle potentiometer
45	M	Component ground	Hot-film air mass meter
46	E	Oxygen sensor signal	Oxygen sensor
47		Not used	
48		Not used	
49	A	Ignition signal, terminal 1	Ignition coil 1
50	A	Ignition signal, terminal 1	Ignition coil 2
51		Not used	
52		Not used	
53	A	5V component supply	Throttle potentiometer
54	E	B+ voltage	DME main relay
55	M	Ground, ignition	Ground connection
56	E	Ignition, terminal 15	Ignition lock
57	A	Auxiliary fan ON actuation	Auxiliary fan relay, stage 1
58	A	Changeover valve signal	Changeover valve 1
59		Not used	
60	E	Programming voltage	Diagnostic connector
61	A	Signal, fuel tank ventilation	Fuel tank ventilation valve
62		Not used	
63	A	Relay activation, terminal 85	Electric fuel pump relay
64		Not used	
65		Not used	

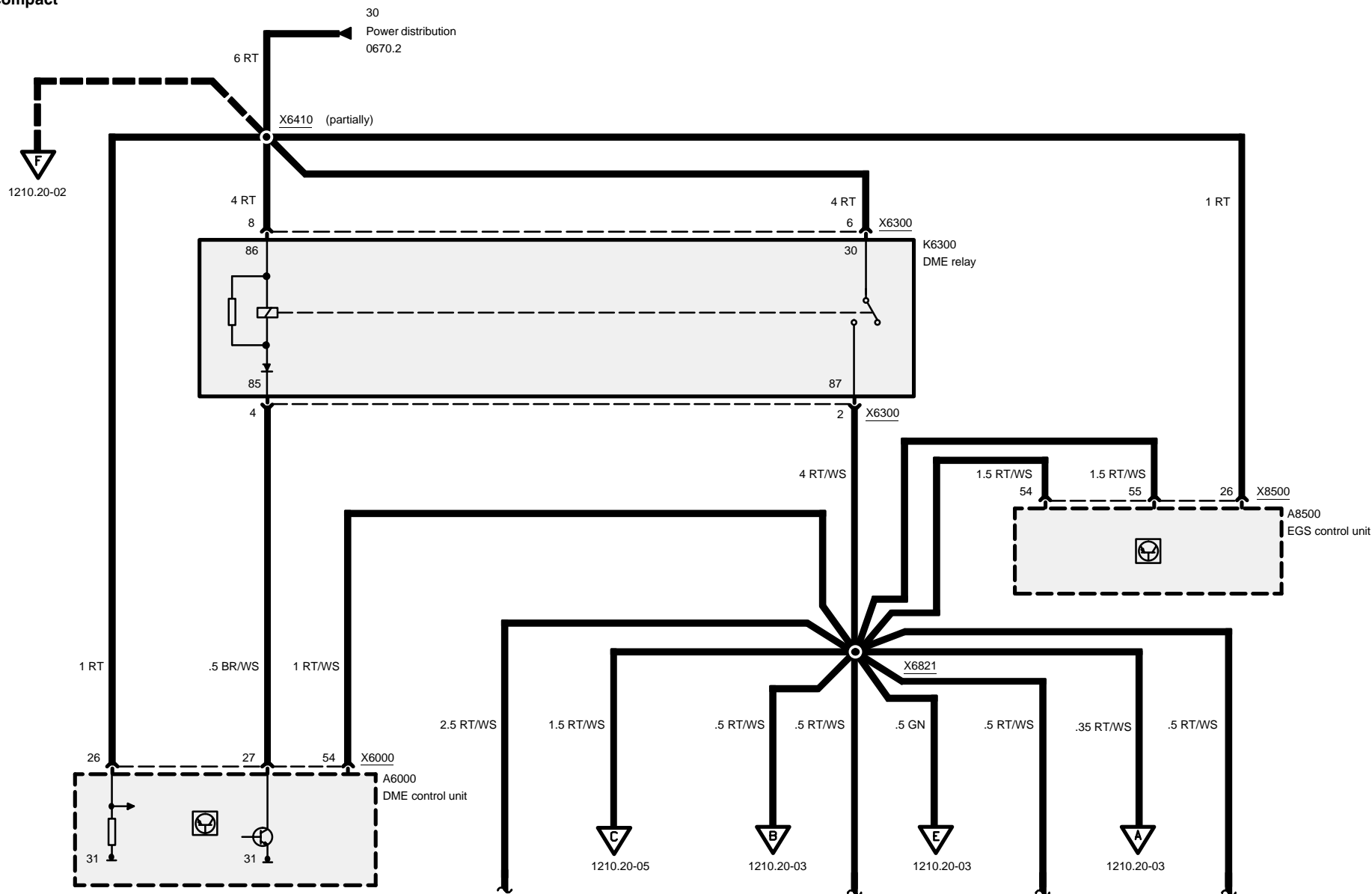
E = Input, A = Output, M = Ground

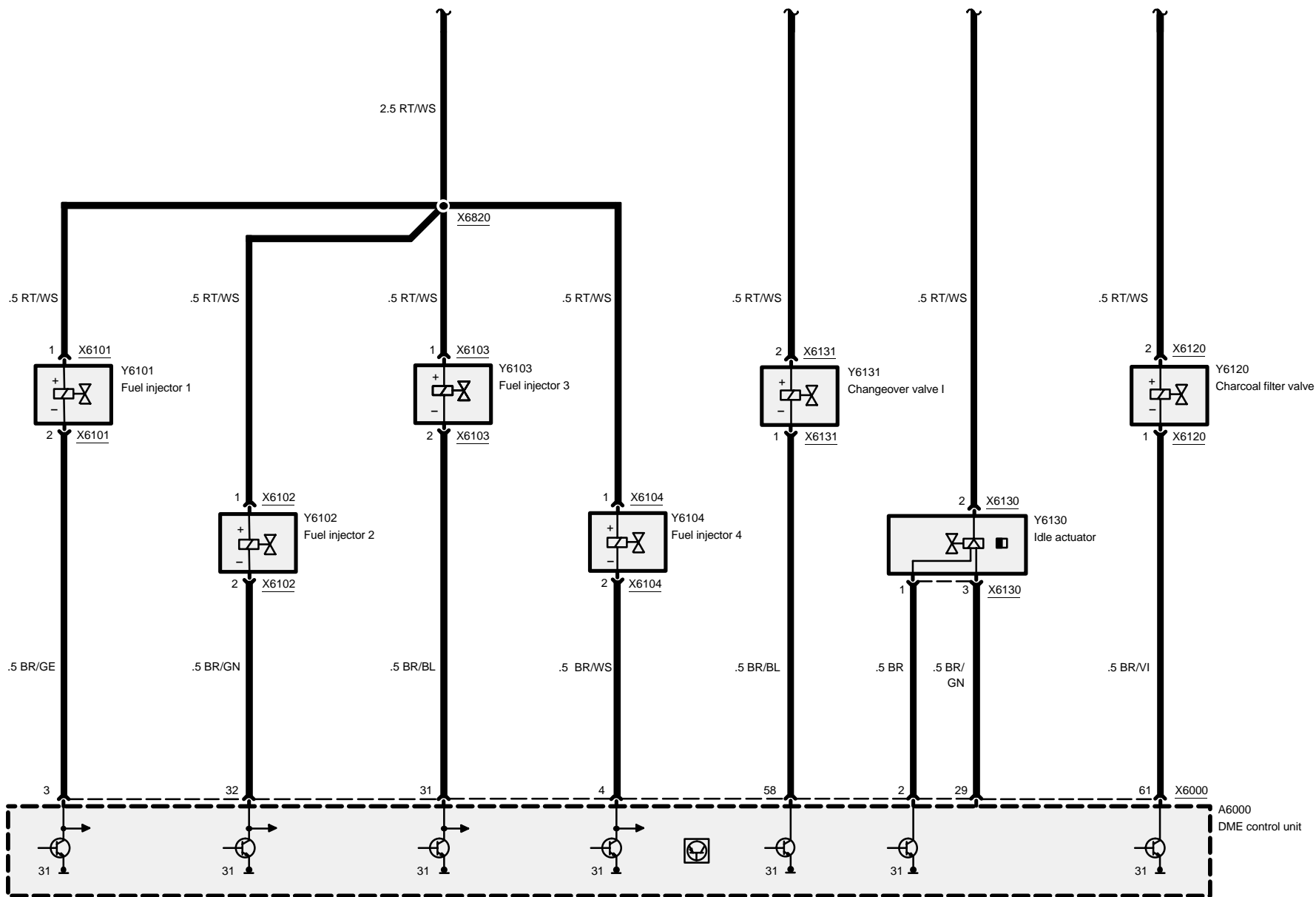


Pin assignments (Right-hand drive)

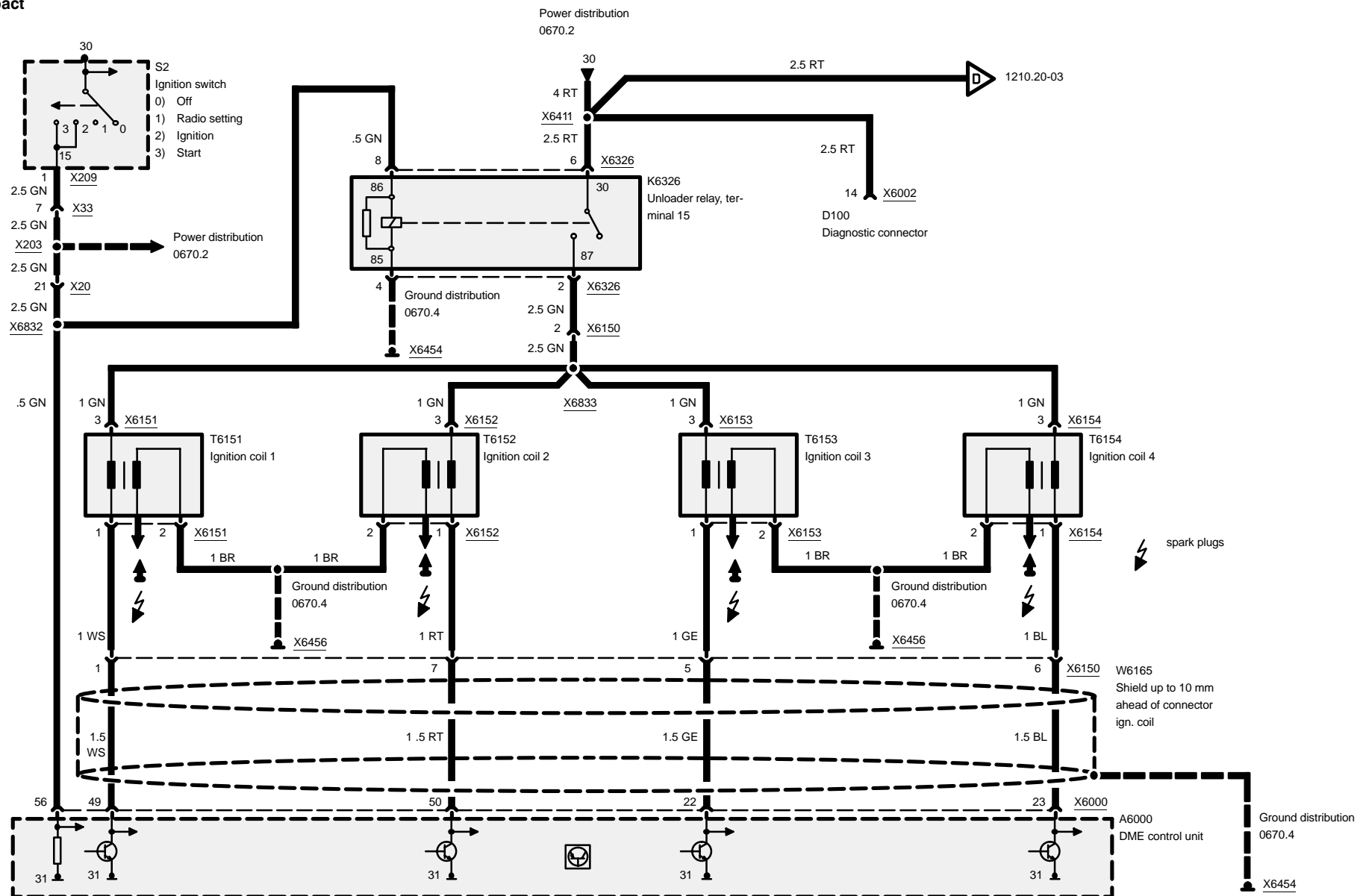
Pin	Type	Description/Function	Connection
66		Not used	
67		Not used	
68	E	Signal, water temperature above 80 °C	Dual temperature switch
69	E	Air conditioning ON signal	A/C control unit
70	E	Signal, knock sensor cyl. 1 and 2	Knock sensor
71	M	Sensor ground	Water/intake air temperature sensor, throttle potentiometer and knock sensors
72		Not used	
73		Not used	
74	E	Coolant temperature signal	Remote thermometer sensor
75		Not used	
76		Not used	
77		Not used	
78	E	Crankshaft signal	Crankshaft sensor
79	E	Wheel speed signal, rear right	ASC control unit/ABS control unit
80	A	TD signal	Instrument cluster
81		Not used	
82		Not used	
83	E	Vehicle speed signal	On-board computer
84		Not used	
85	E/A	CAN-LOW	EGS/ASC control unit
86	E/A	CAN-HIGH	EGS/ASC control unit
87	A	RxD diagnostic link	Diagnostic connector
88	E/A	TxD diagnostic link	Diagnostic connector

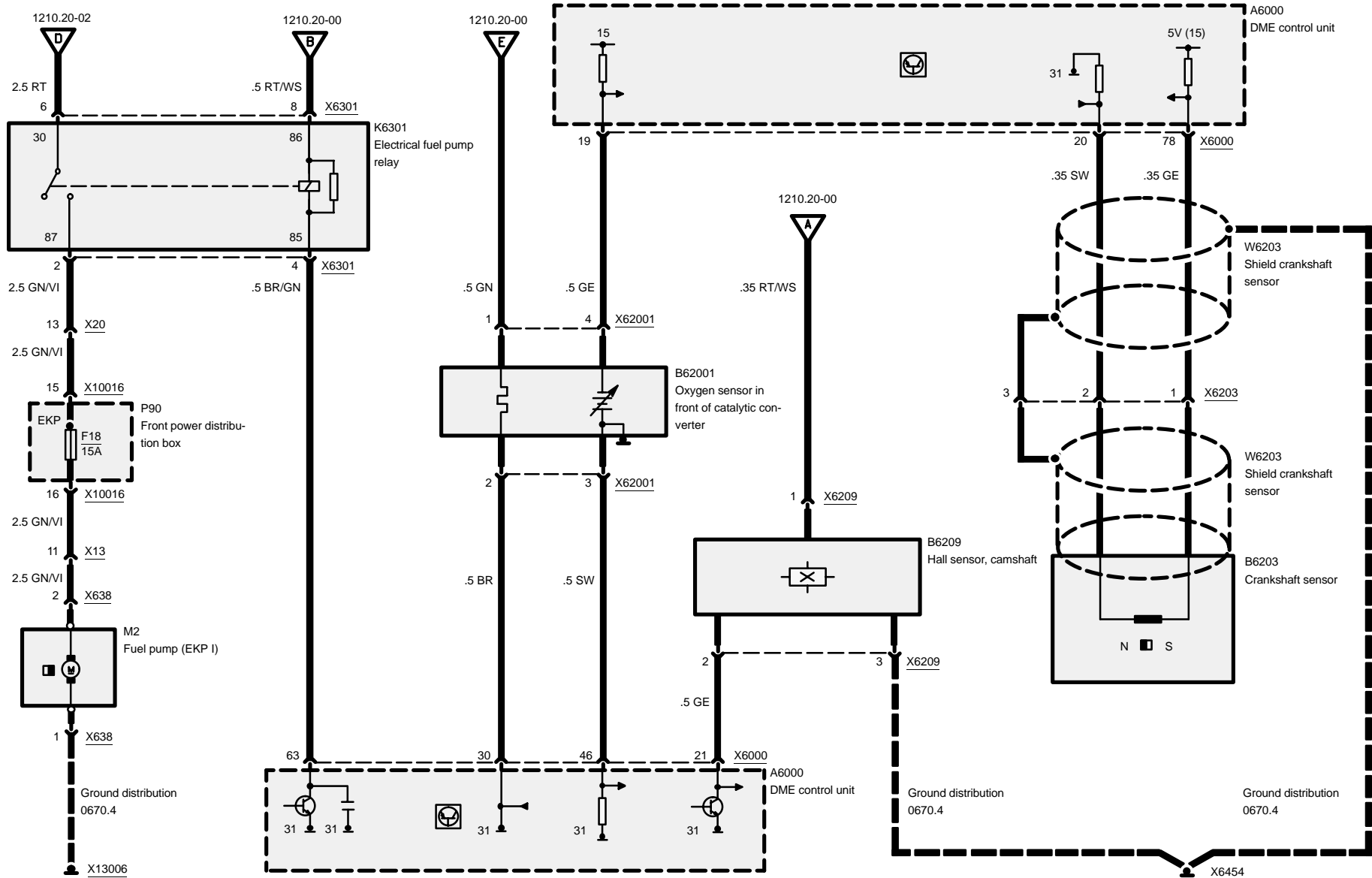
Current, injector valves





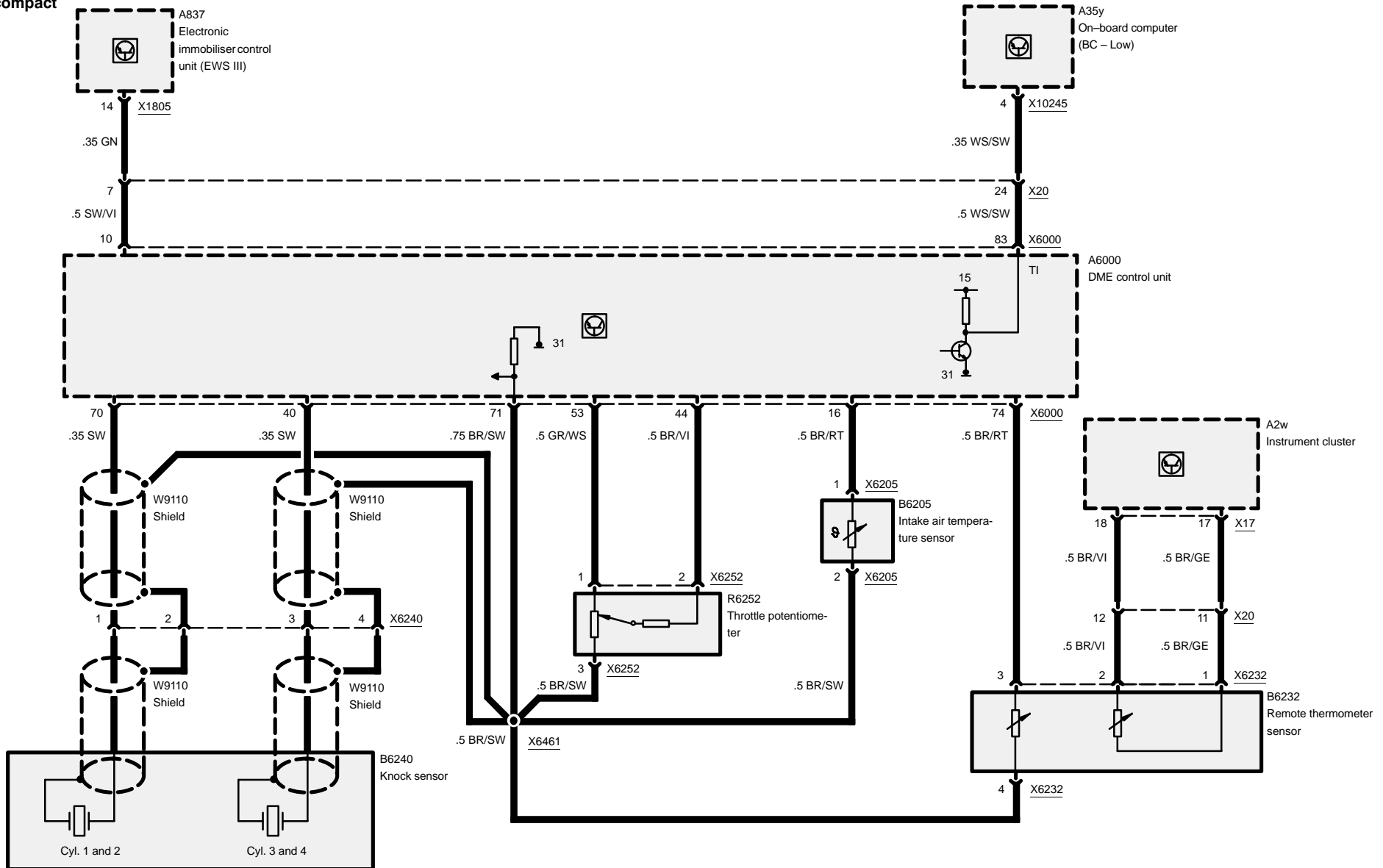
Ignition coils

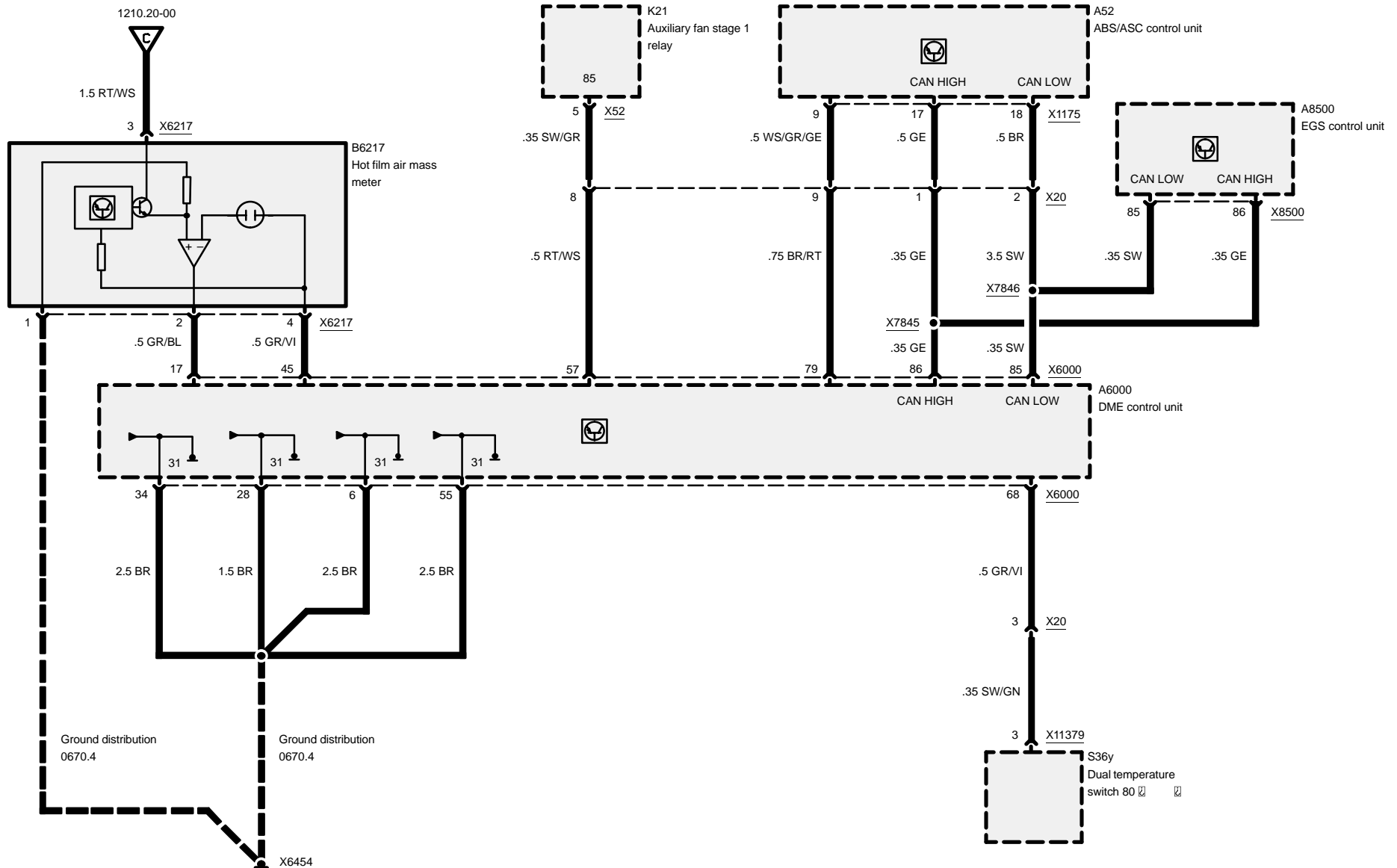




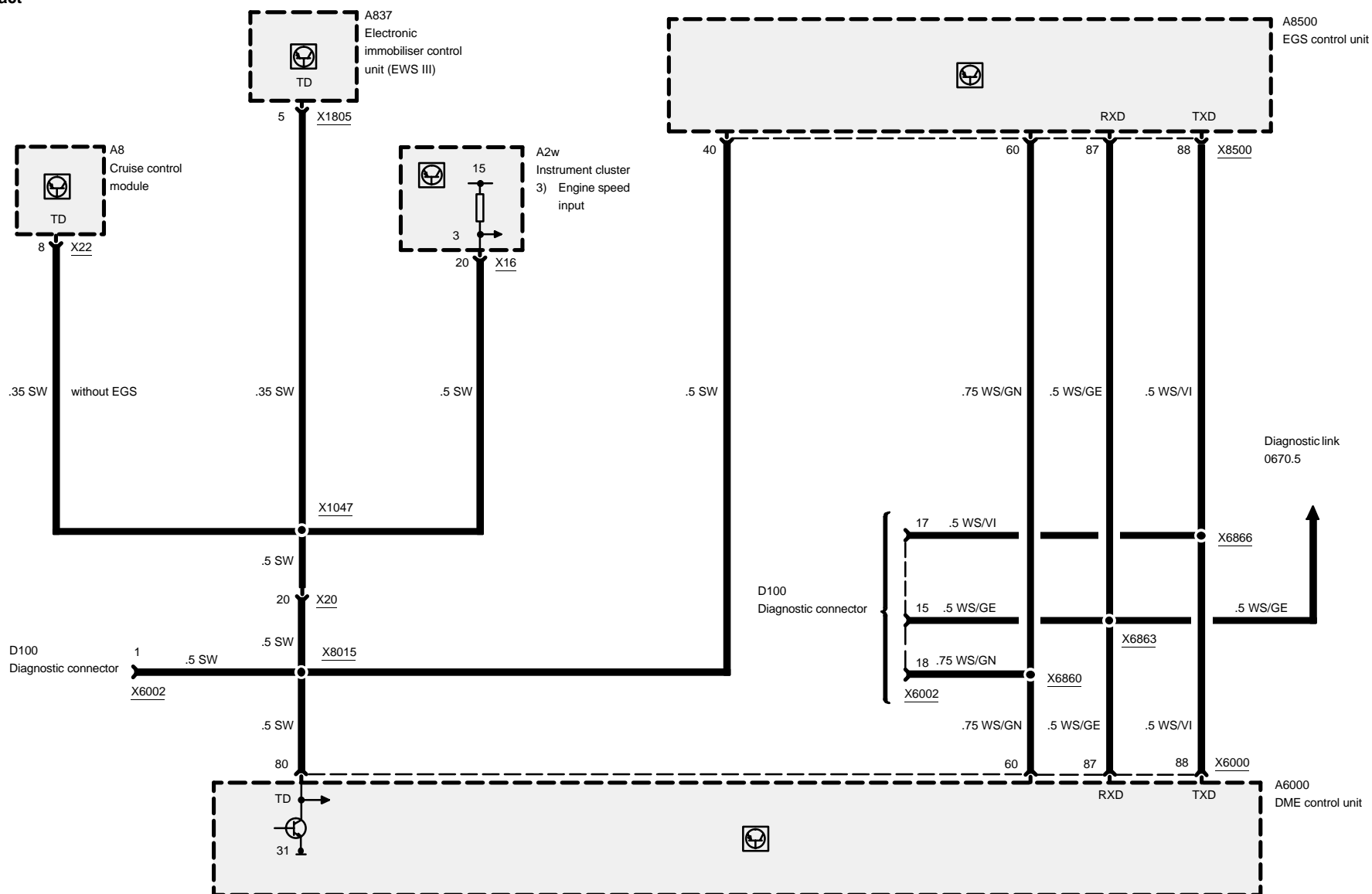
Digital motor electronics (DME M5.2, 4-cylinder M44)

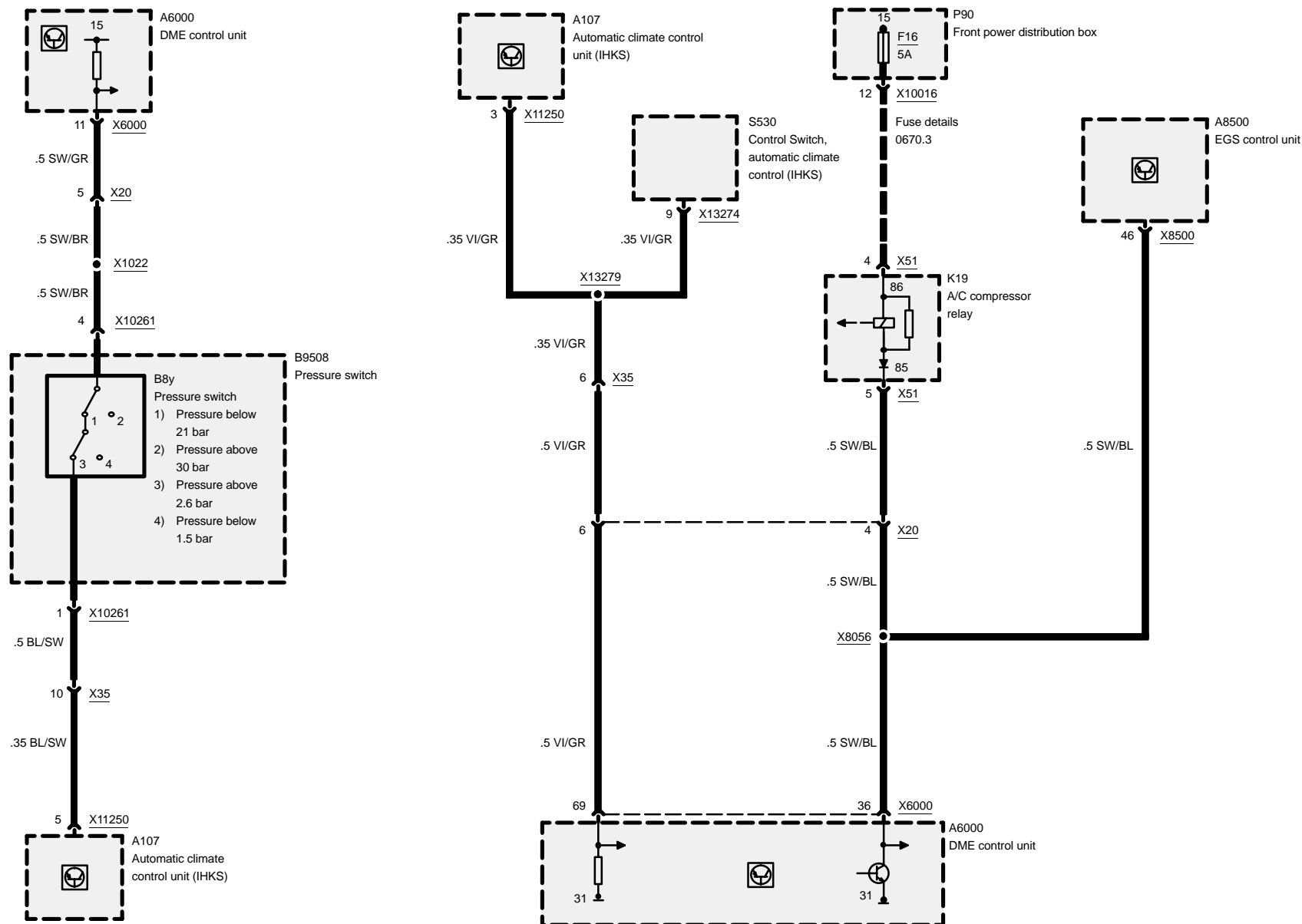
Right-hand drive

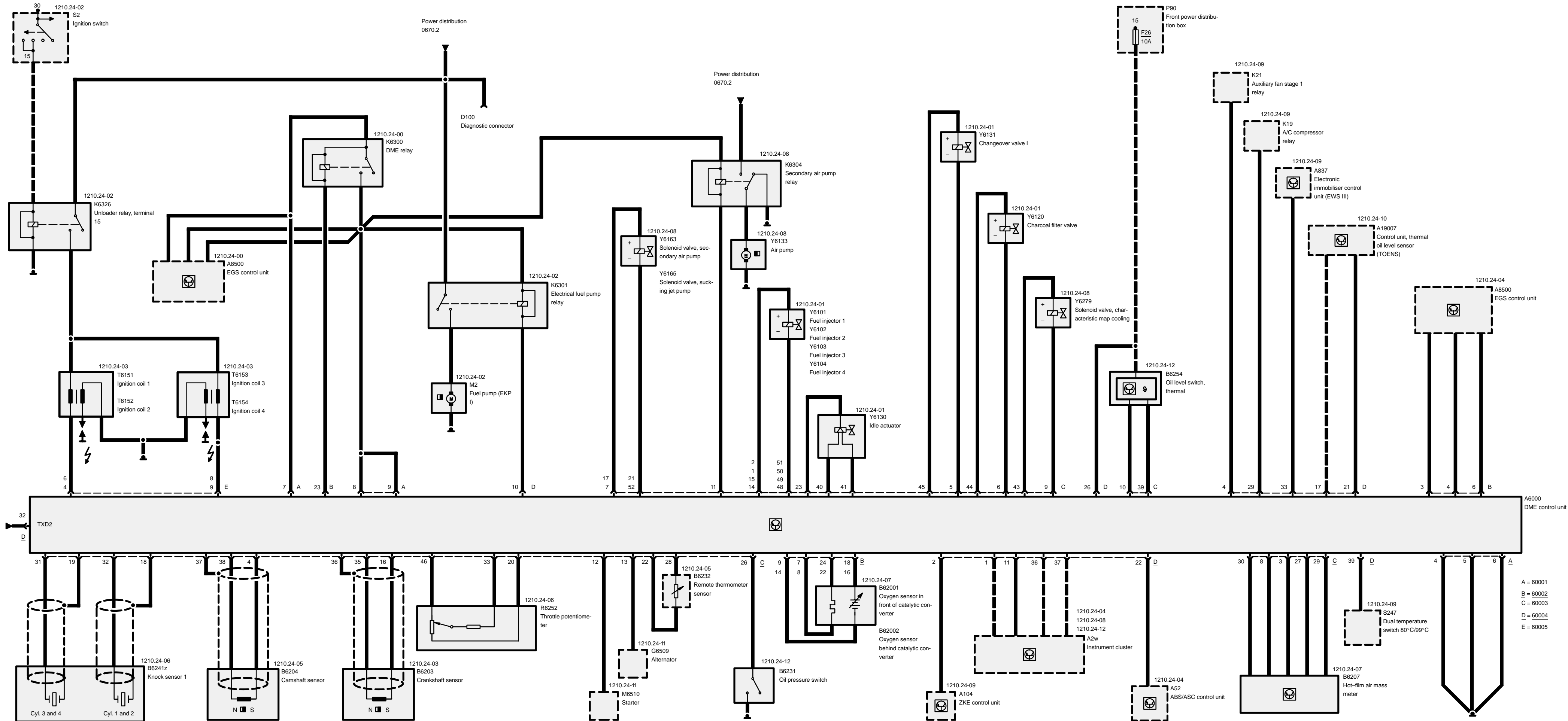


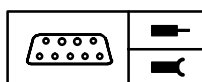


Diagnostic link









Pin assignments

A=X60001	9-pin, black
B=X60002	24-pin, black
C=X60003	52-pin, black
D=X60004	40-pin, black
E=X60005	9-pin, black

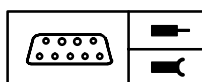
X60001

Pin	Type	Signal	Description/Function	Connection
1			Not used	
2			Not used	
3			Not used	
4	M	M_EL	Ground	Ground connector
5	M	M_EV	Ground	Ground connector
6	M	M_ES	Ground	Ground connector
7	E	30	Voltage supply	DME relay
8	E	U_HR<2	Voltage supply	DME relay
9	E	U_HR<2	Voltage supply	DME relay

X60002

Pin	Type	Signal	Description/Function	Connection
1			Not used	
2			Not used	
3	E/A	CAN-L	CAN-bus Low	EGS control unit
4	E/A	CAN-H	CAN-bus High	EGS control unit
5			Not used	
6	E/A	TXDII	TxD diagnostic link	EGS control unit
7	M	M_LHV1	Ground, oxygen sensor heater	Oxygen sensor before catalytic converter
8	M	M_LHH1	Ground, oxygen sensor heater	Oxygen sensor after catalytic converter
9	M	M_LSV1	Oxygen sensor ground	Oxygen sensor before catalytic converter
10			Not used	

E = Input, A = Output, M = Ground



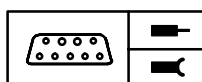
Pin assignments

Pin	Type	Signal	Description/Function	Connection
11			Not used	
12			Not used	
13			Not used	
14	M	M_LSH1	Oxygen sensor ground	Oxygen sensor after catalytic converter
15			Not used	
16	E	A_LSH1	Sensor signal	Oxygen sensor after catalytic converter
17			Not used	
18	E	A_LSV1	Sensor signal	Oxygen sensor before catalytic converter
19			Not used	
20			Not used	
21			Not used	
22	E	T_LHH1	Signal, oxygen sensor heater	Oxygen sensor after catalytic converter
23	A	S_HR	Relay activation	DME relay
24	E	T_LHV1	Signal, oxygen sensor heater	Oxygen sensor before catalytic converter

X60003

Pin	Type	Signal	Description/Function	Connection
1	A	U_EVZ2	Supply, valve	Injection valve, cyl. 2
2	A	U_EVZ1	Supply, valve	Injection valve, cyl. 1
3	A	U_HFM	Supply, mass air flow sensor	Hot-film air mass meter
4	A	U_NWG	Supply, camshaft sensor	Camshaft sensor
5			Not used	
6	A	U_TEV	Supply, valve	Fuel tank ventilation valve
7	A	M_TANS	Supply, air pump	Air pump valve/relay
8	M	M_HFM	Ground, air mass meter	Hot-film air mass meter
9	M	M_KFK	Ground, valve	Solenoid valve, characteristic map cooling
10	M	M_OTF	Sensor ground	Thermal oil level sensor
11	A	S_SLP	Relay activation	Relay, secondary air pump
12	E	S_30H	Start signal	Starter

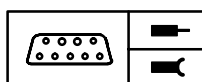
E = Input, A = Output, M = Ground



Pin assignments

Pin	Type	Signal	Description/Function	Connection
13	E	S_61-1	Charge signal	Alternator
14	A	U_EVZ4	Supply, valve	Injection valve, cyl. 4
15	A	U_EVZ3	Supply, valve	Injection valve, cyl. 3
16	A	U_KWVG	Supply, sensor	Crankshaft position/rpm sensor
17	A	U_SSP	Voltage supply	Suction jet pump valve
18	M	A_KS1B	Sensor ground	Knock sensor
19	M	A_KS2B	Sensor ground	Knock sensor
20	M	M_DKG	Ground, throttle potentiometer	Throttle potentiometer
21	E	S_SPAV	Suction jet pump	Suction jet pump shut-off valve
22	M	M_TMOT	Ground, sensor	Remote thermometer sensor
23	M	M_LLFS	Ground, idle speed control valve	Idle actuator
24			Not used	
25			Not used	
26	E	S_OLD	Oil pressure signal	Oil pressure switch
27	A	U_HFMREF	Reference voltage	Hot-film air mass meter
28	E	A_TMOT	Temperature signal	Remote thermometer sensor
29	E	A_TANS	Intake air temperature signal	Hot-film air mass meter
30	E	A_HFM	Signal, air mass meter	Hot-film air mass meter
31	E	A_KS2A	Knock sensor signal	Knock sensor cyl. 3 and 4
32	E	A_KS1A	Knock sensor signal	Knock sensor cyl. 1 and 2
33	E	A_DKG1	Signal, throttle position	Throttle potentiometer
34			Not used	
35	E	P_KWVG	Signal, crankshaft position/rpm sensor	Crankshaft position/rpm sensor
36	M	M_KWVG	Ground, crankshaft sensor/rpm sensor	Crankshaft position/rpm sensor
37	M	M_NWGA1	Ground, camshaft sensor	Camshaft sensor
38	E	P_NWGA1	Signal, camshaft sensor	Camshaft sensor
39	E	F_OLN	Oil level signal	Oil level sensor
40	A	T_LLFSO	Open signal	Idle actuator
41	A	T_LLFS	Close signal	Idle actuator
42			Not used	
43	A	S_KFK	Signal, characteristic map cooling	Solenoid valve, characteristic map cooling
44	A	T_TEV	Valve activation	Fuel tank ventilation valve
45			Not used	

E = Input, A = Output, M = Ground



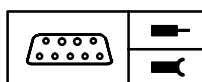
Pin assignments

Pin	Type	Signal	Description/Function	Connection
46	A	U_DKG	Supply, throttle valve	Throttle potentiometer
47			Not used	
48	A	P_EVZ4	Valve activation	Injection valve, cyl. 4
49	A	P_EVZ3	Valve activation	Injection valve, cyl. 3
50	A	P_EVZ2	Valve activation	Injection valve, cyl. 2
51	A	P_EVZ1	Valve activation	Injection valve, cyl. 1
52	A	S_SLV	Valve activation	Valve, secondary air pump

X60004

Pin	Type	Signal	Description/Function	Connection
1	A	S_61-1	Signal, charge indicator lamp	Instrument cluster
2	A	S_30H	Start signal	ZKE control unit
3	A	SLP	Activation, air pump	Not used
4	A	T_ELUE	Relay activation	Auxiliary fan relay, stage 1
5			Not used	
6			Not used	
7			Not used	
8			Not used	
9			Not used	
10	A	S_EKP	Relay activation	Relay, electric fuel pump
11	A	S_OLD	Oil pressure signal	Instrument cluster
12			Not used	
13			Not used	
14			Not used	
15			Not used	
16			Not used	
17	A	F_TD	Engine speed signal	Control unit, electronic vehicle immobilization (EWS III)
18			Not used	
19			Not used	
20			Not used	
21	A	F_OELN	Oil level signal	Control unit, thermal oil level sensor (TOENS)
22	E	F_DFAHR	Speedometer output signal	ABS/ASC control unit

E = Input, A = Output, M = Ground



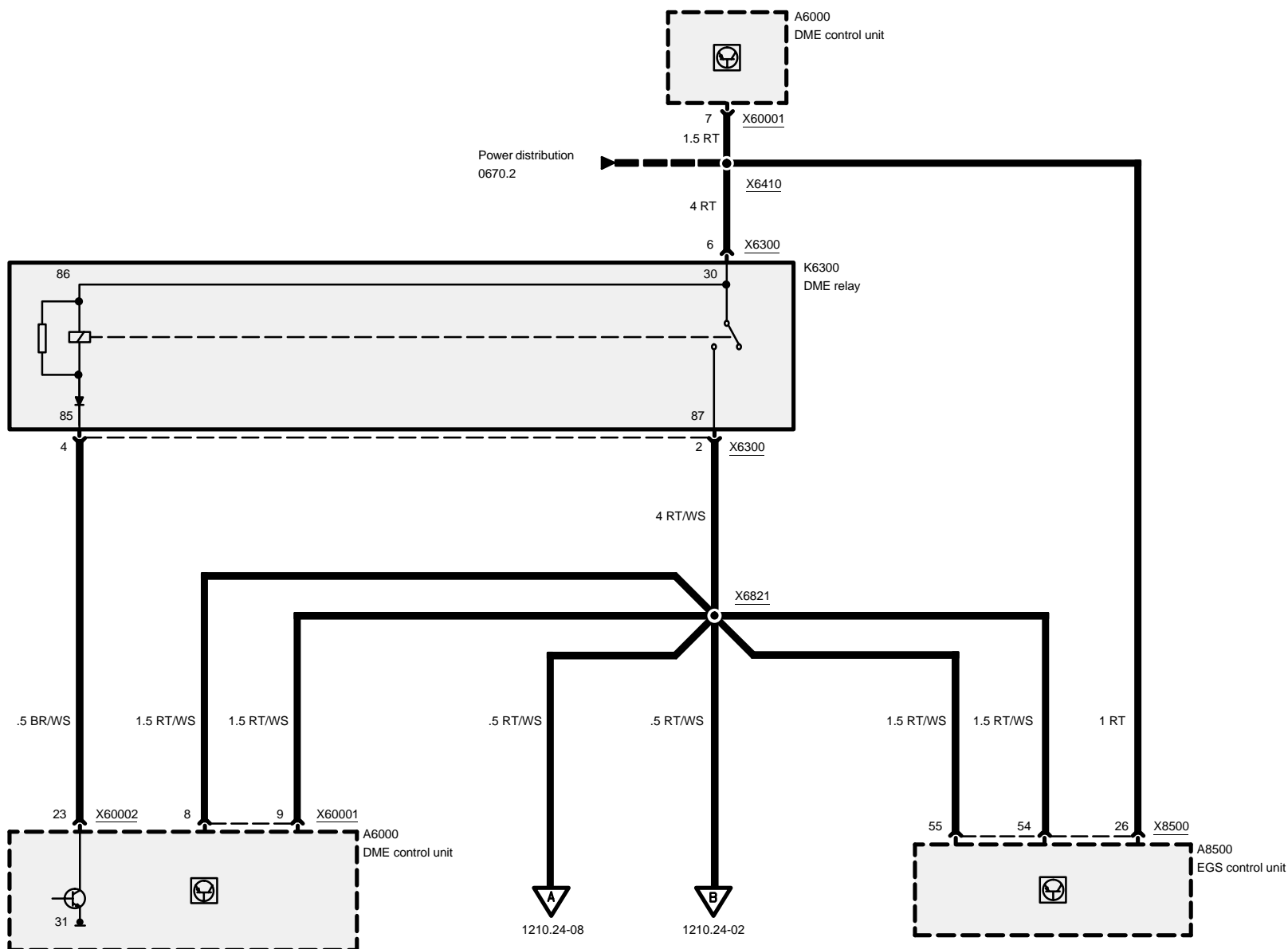
Pin assignments

Pin	Type	Signal	Description/Function	Connection
23			Not used	
24			Not used	
25			Not used	
26	E	15A26	Terminal 15	Fuse 26
27			Not used	
28			Not used	
29	A	S_KOREL	Relay activation	Relay, A/C compressor
30			Not used	
31			Not used	
32	E/A	TXDII	TxD diagnostic link	Diagnostic connector
33	E	D_EWS	Vehicle immobilization	Control unit, electronic vehicle immobilization (EWS III)
34			Not used	
35			Not used	
36	E/A	CAN+	CAN-bus High	Instrument cluster, ABS/ASC control unit
37	E/A	CAN-	CAN-bus Low	Instrument cluster, ABS/ASC control unit
38			Not used	
39	A	A_TKA	Coolant temperature signal +	Instrument cluster
40			Not used	

X60005

Pin	Type	Signal	Description/Function	Connection
1			Not used	
2			Not used	
3			Not used	
4	A	P_ZSZ2	Ignition signal	Ignition coil 2
5			Not used	
6	A	P_ZSZ1	Ignition signal	Ignition coil 1
7			Not used	
8	A	P_ZSZ3	Ignition signal	Ignition coil 3
9	A	P_ZSZ4	Ignition signal	Ignition coil 4

E = Input, A = Output, M = Ground



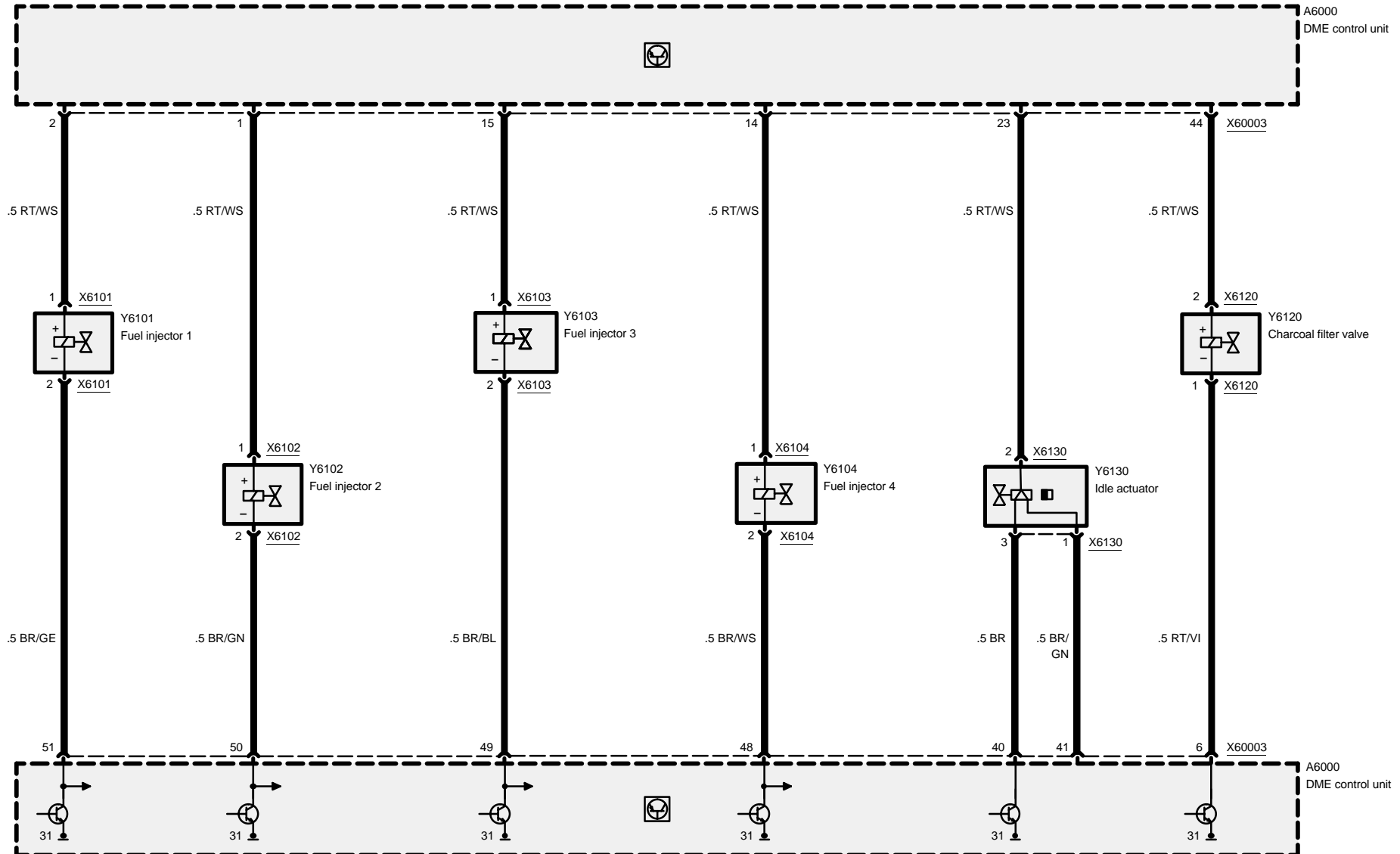


compact

Engine management BMS46 (4-cylinder M43)

316i

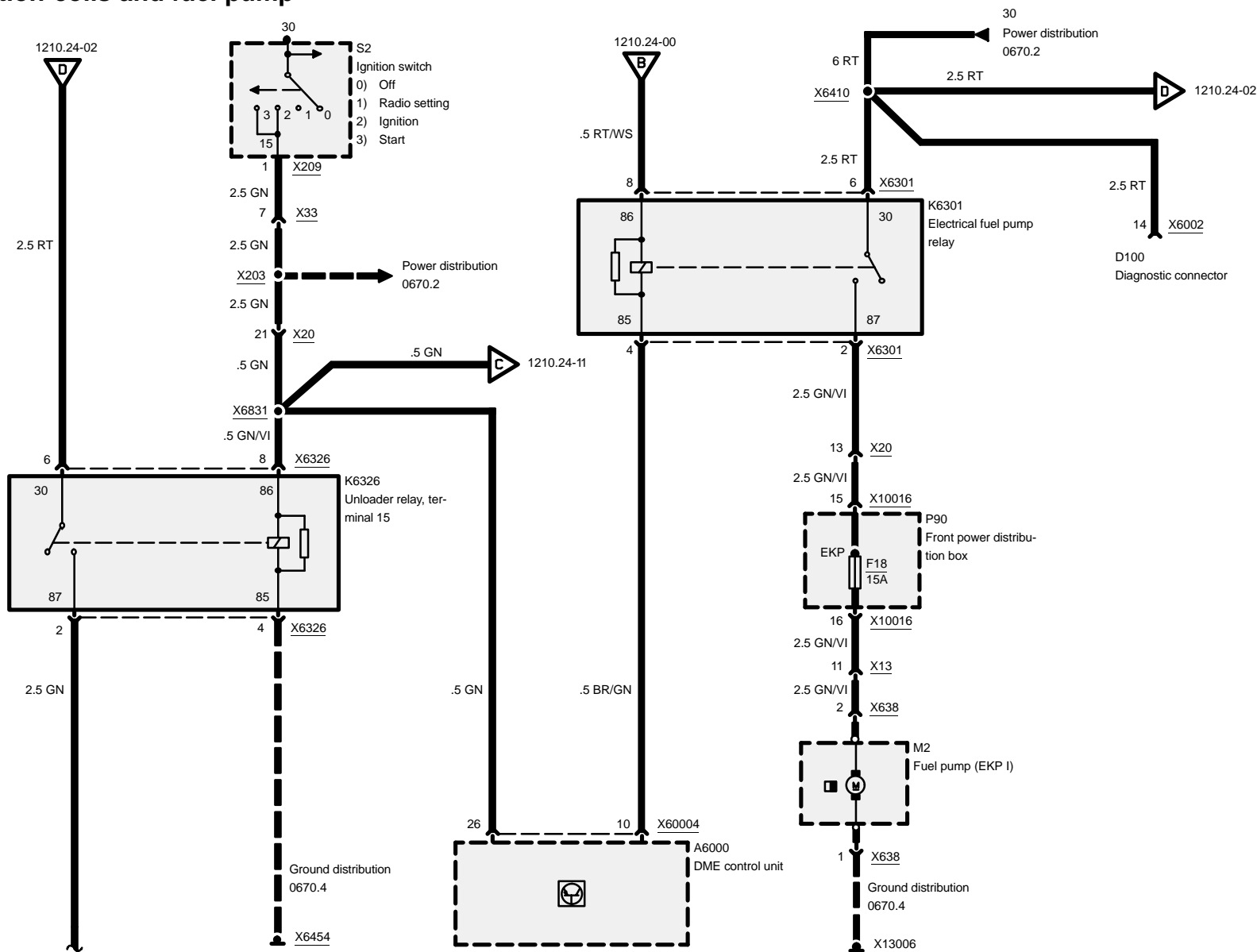
Injection valves

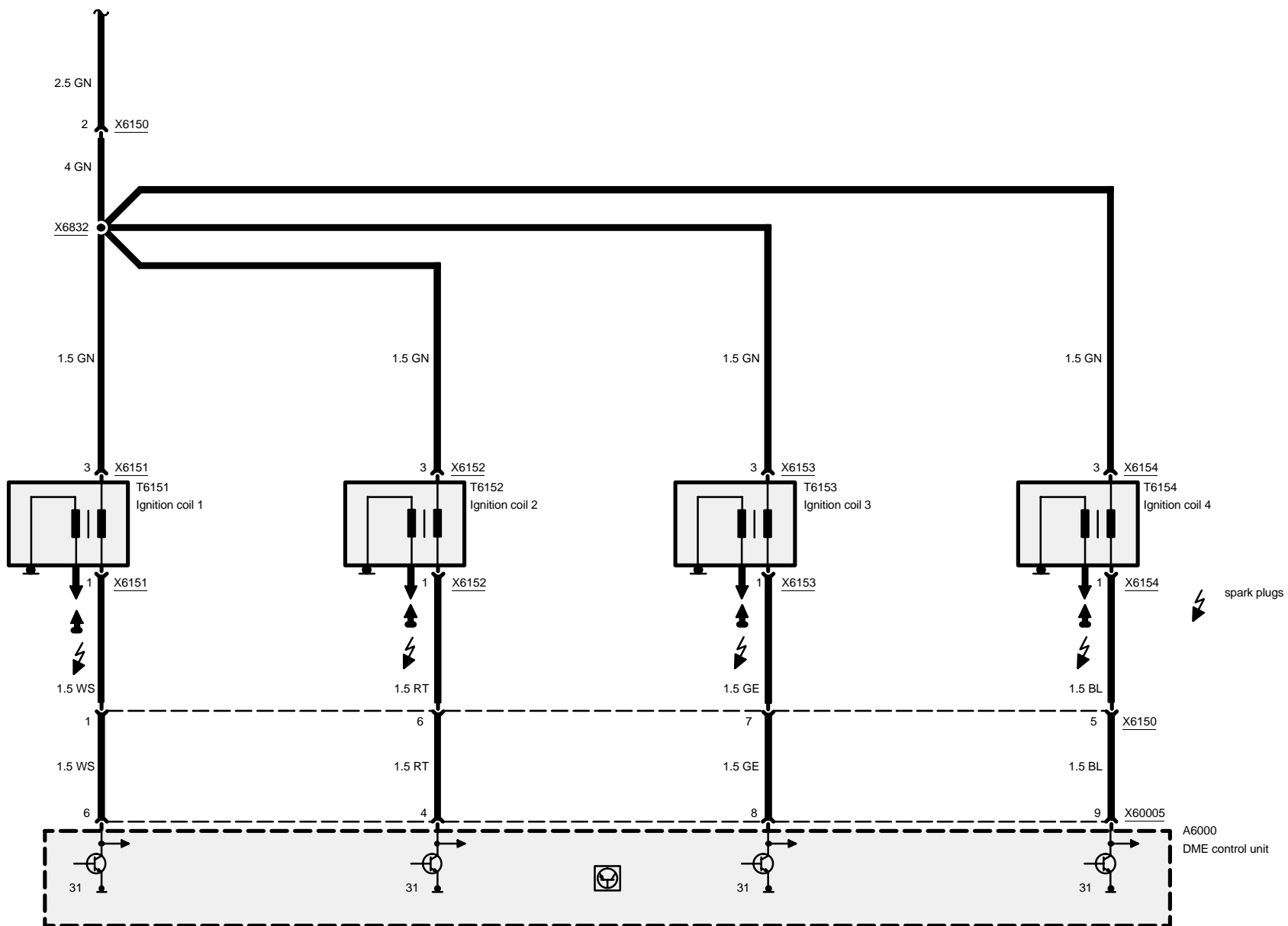


Engine management BMS46 (4-cylinder M43)

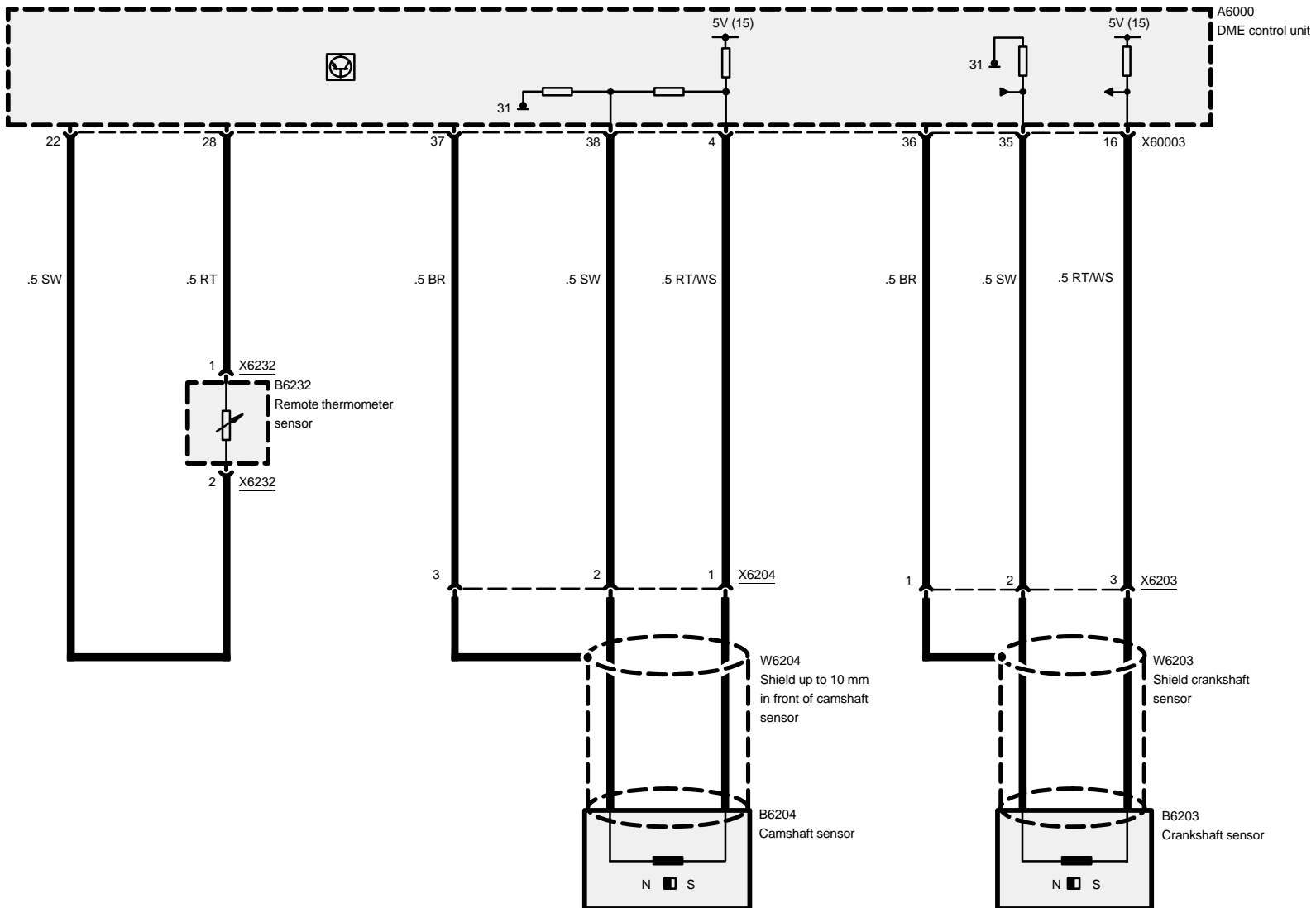
316i Right-hand drive

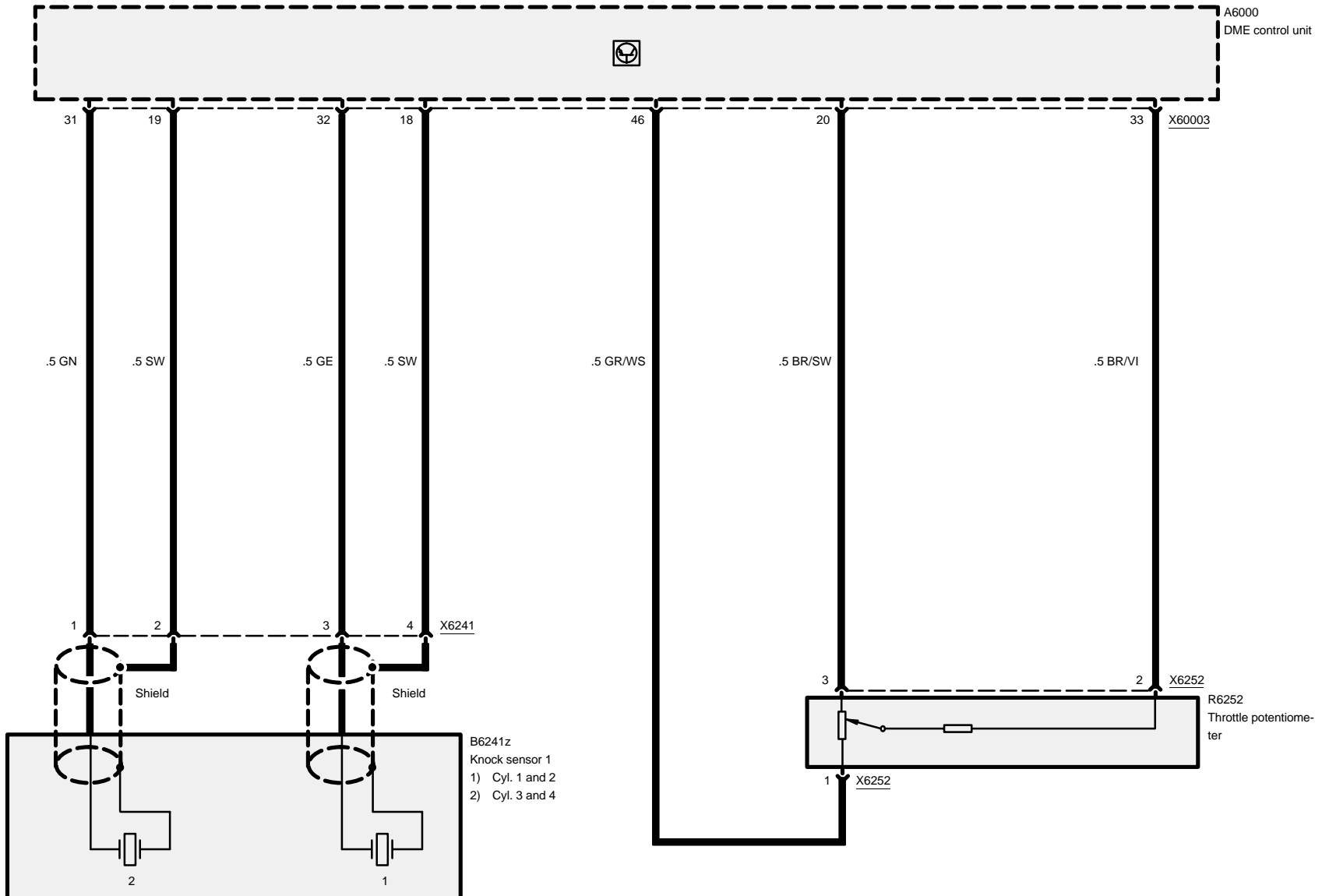
Ignition coils and fuel pump

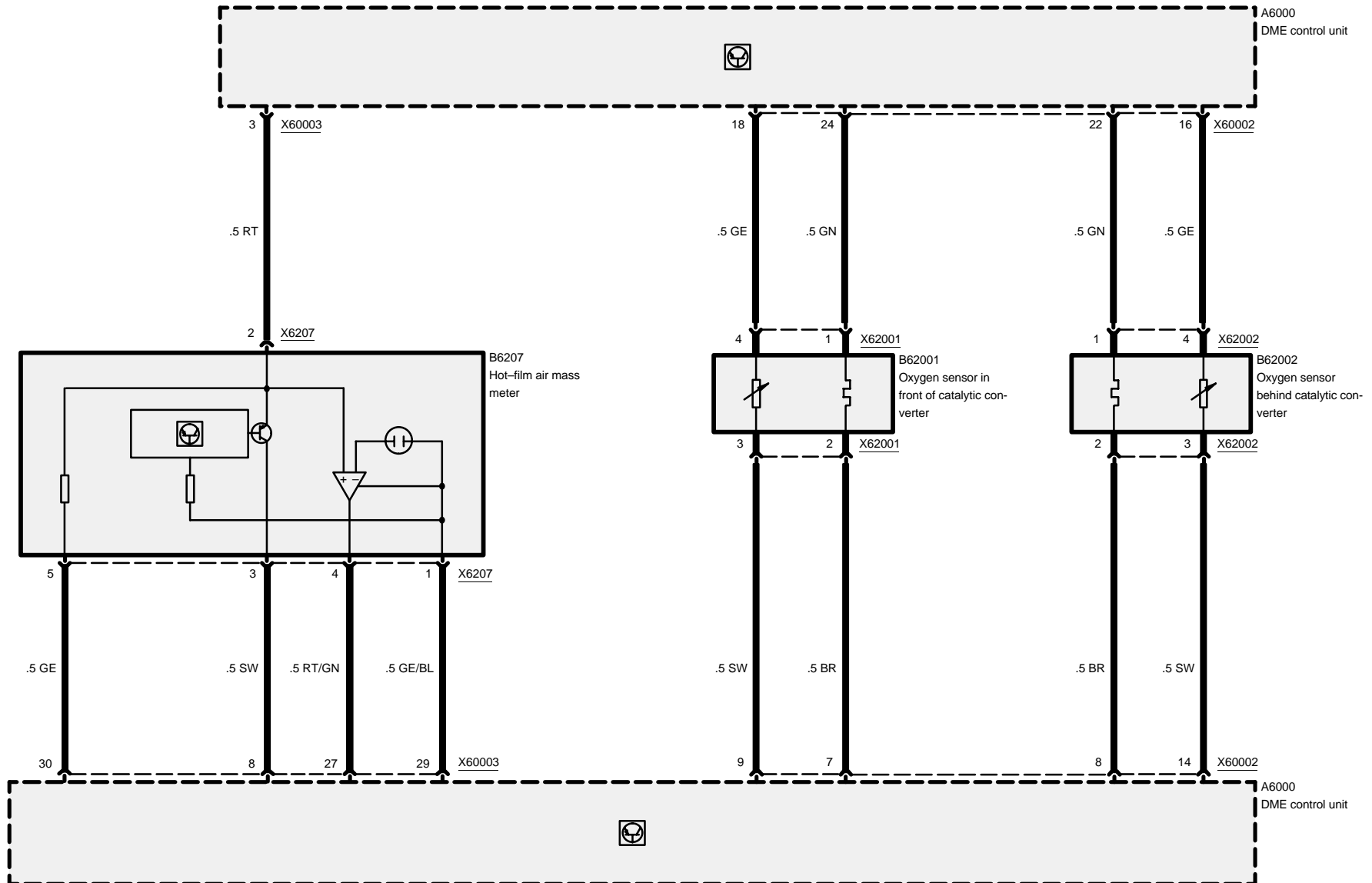


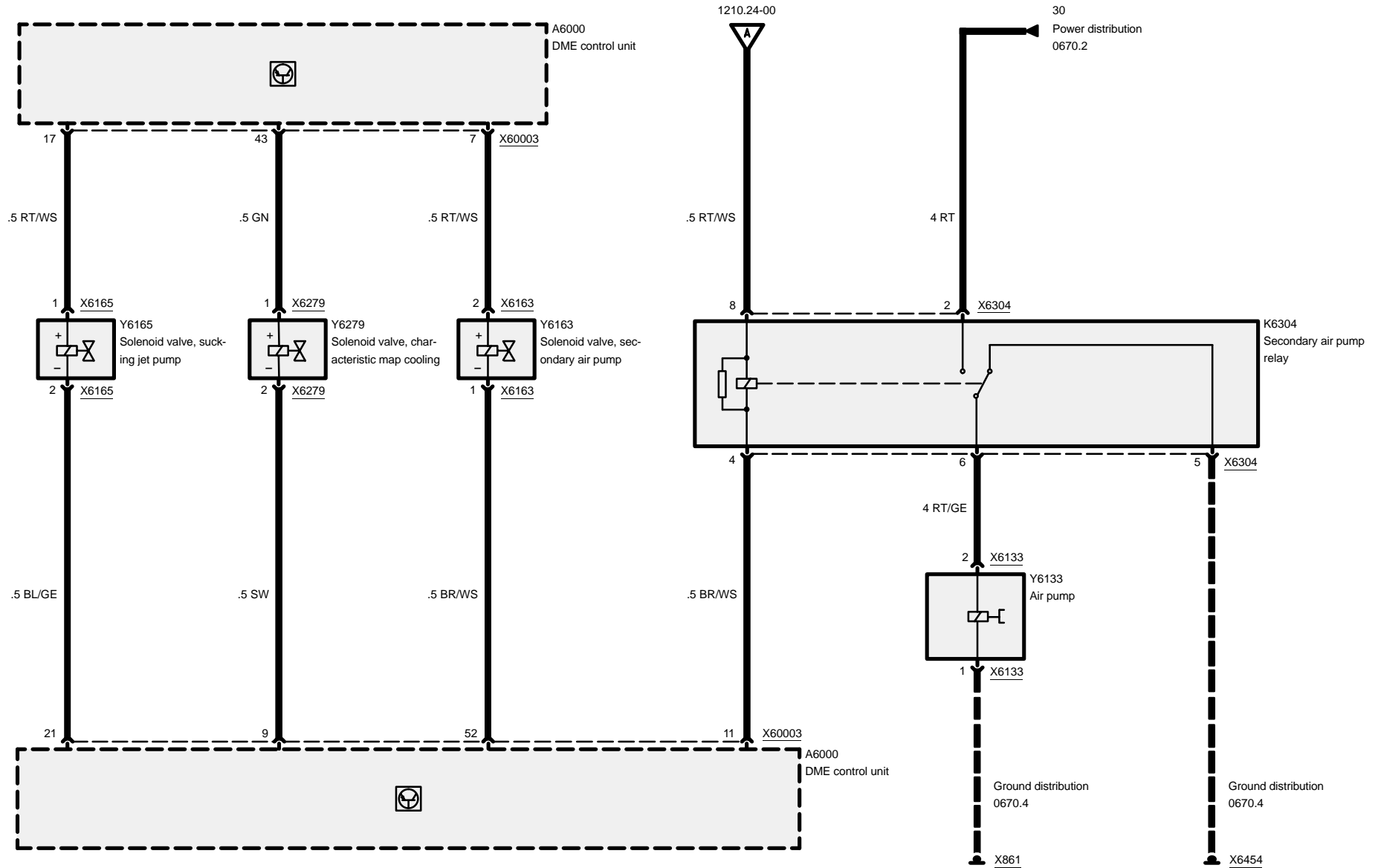








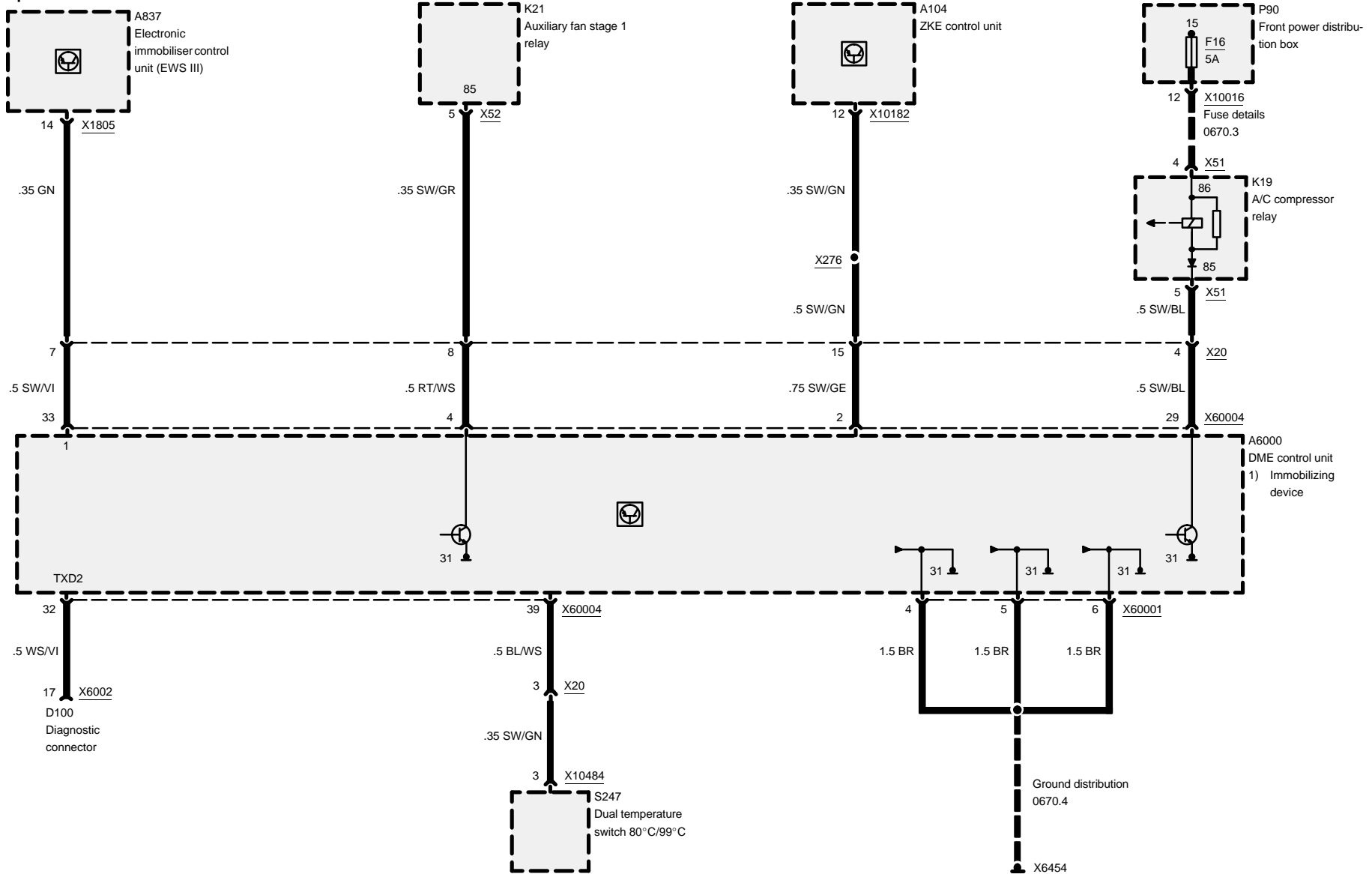






Engine management BMS46 (4-cylinder M43)

316i

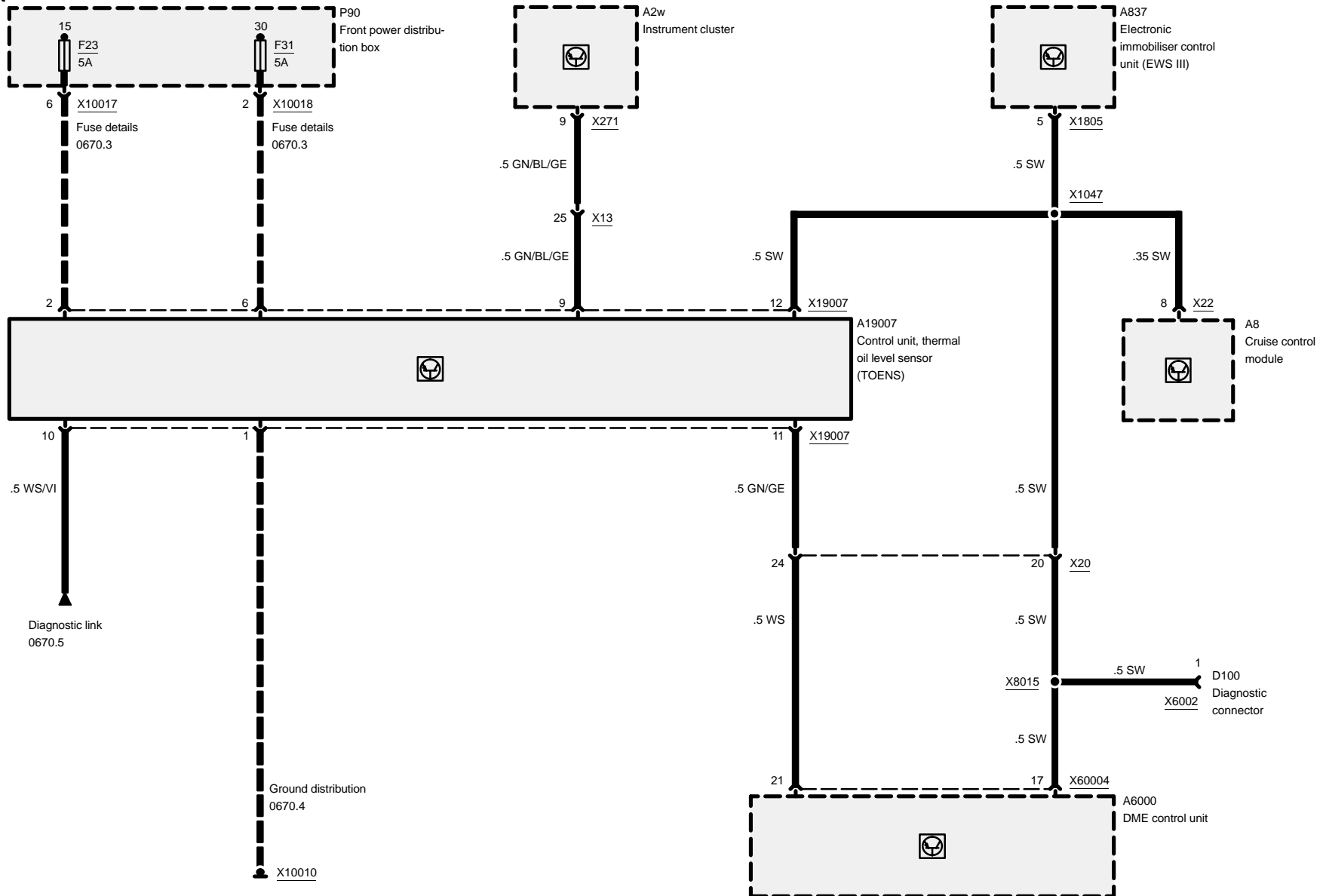


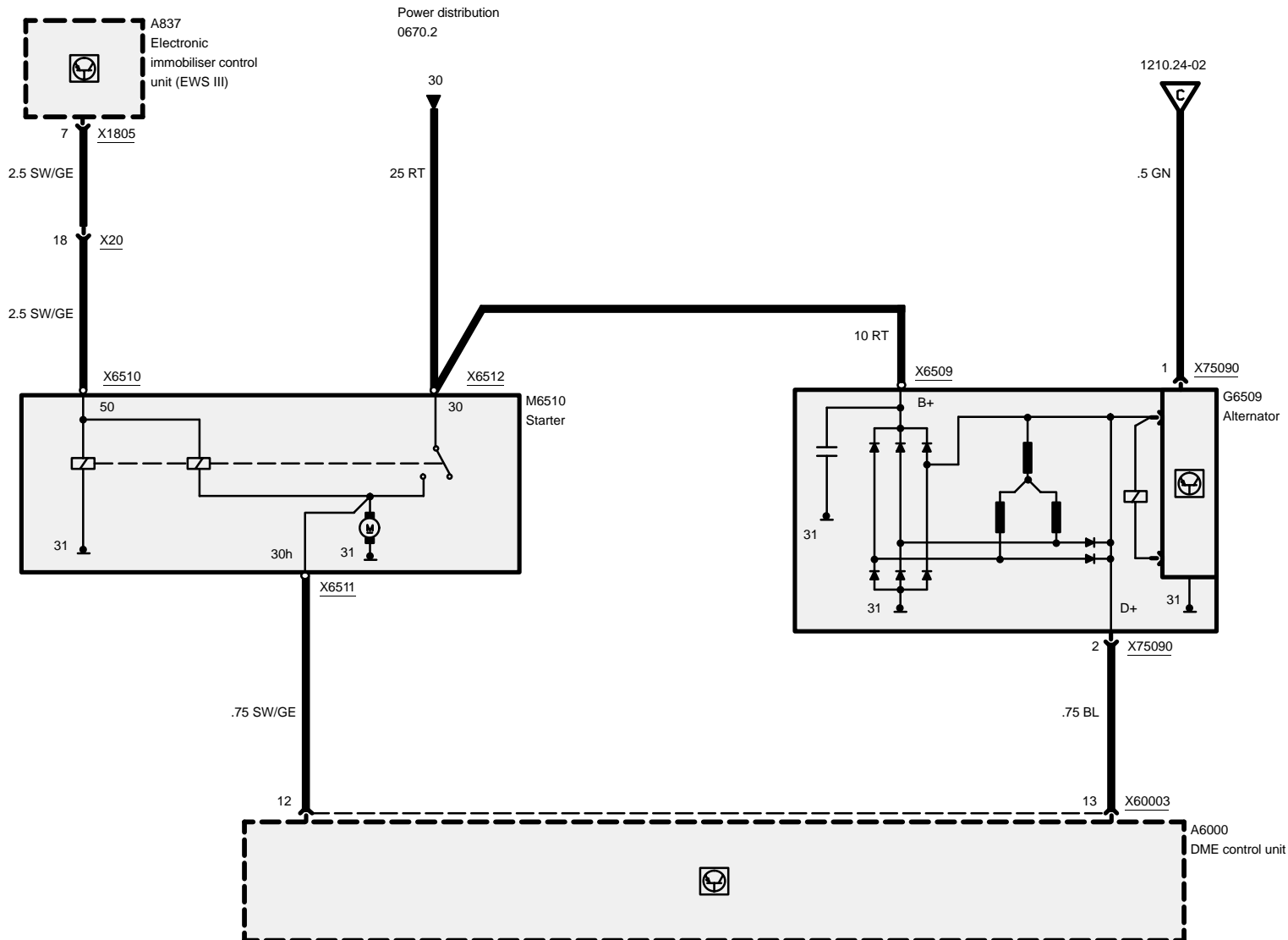


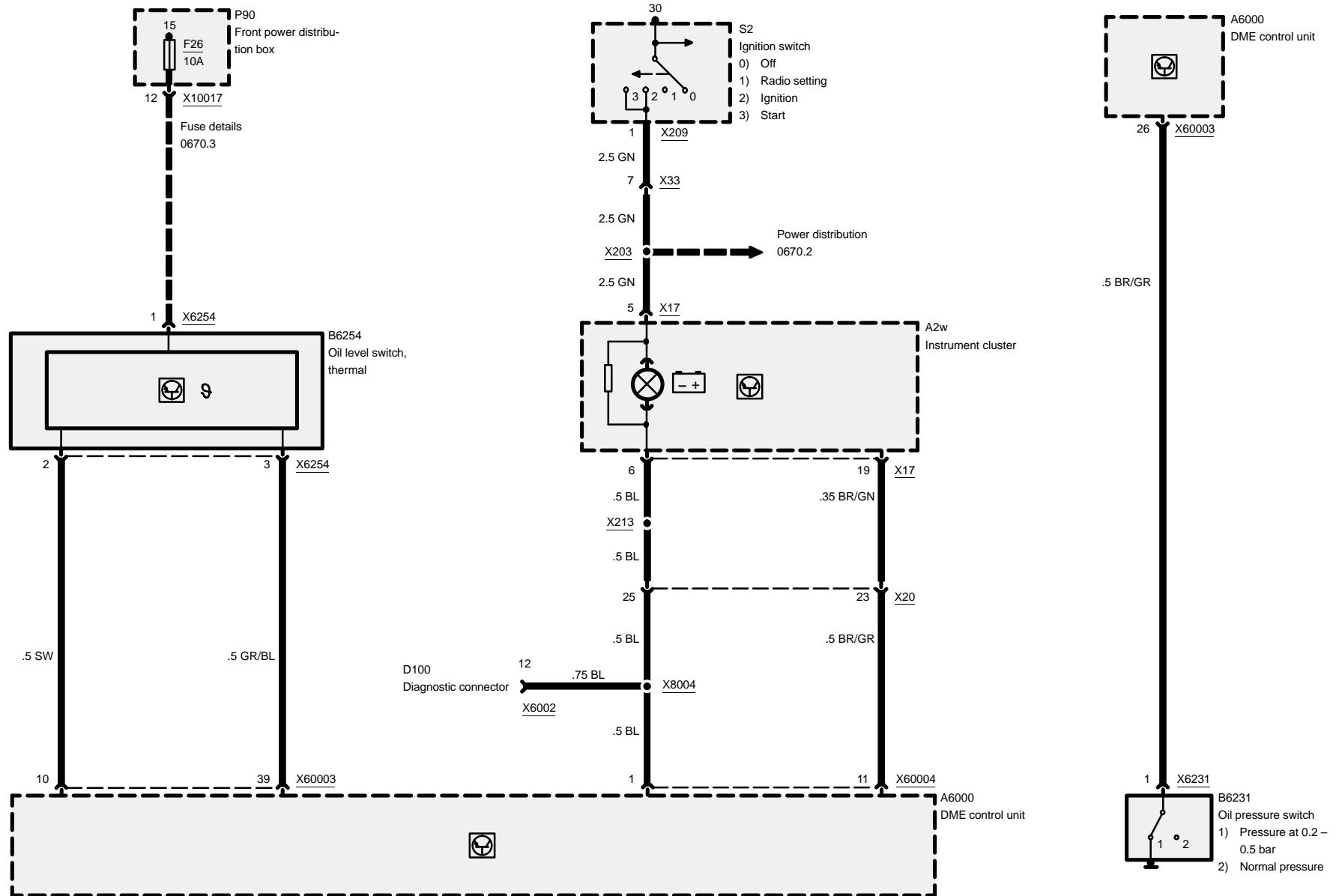
compact

Engine management BMS46 (4-cylinder M43)

316i



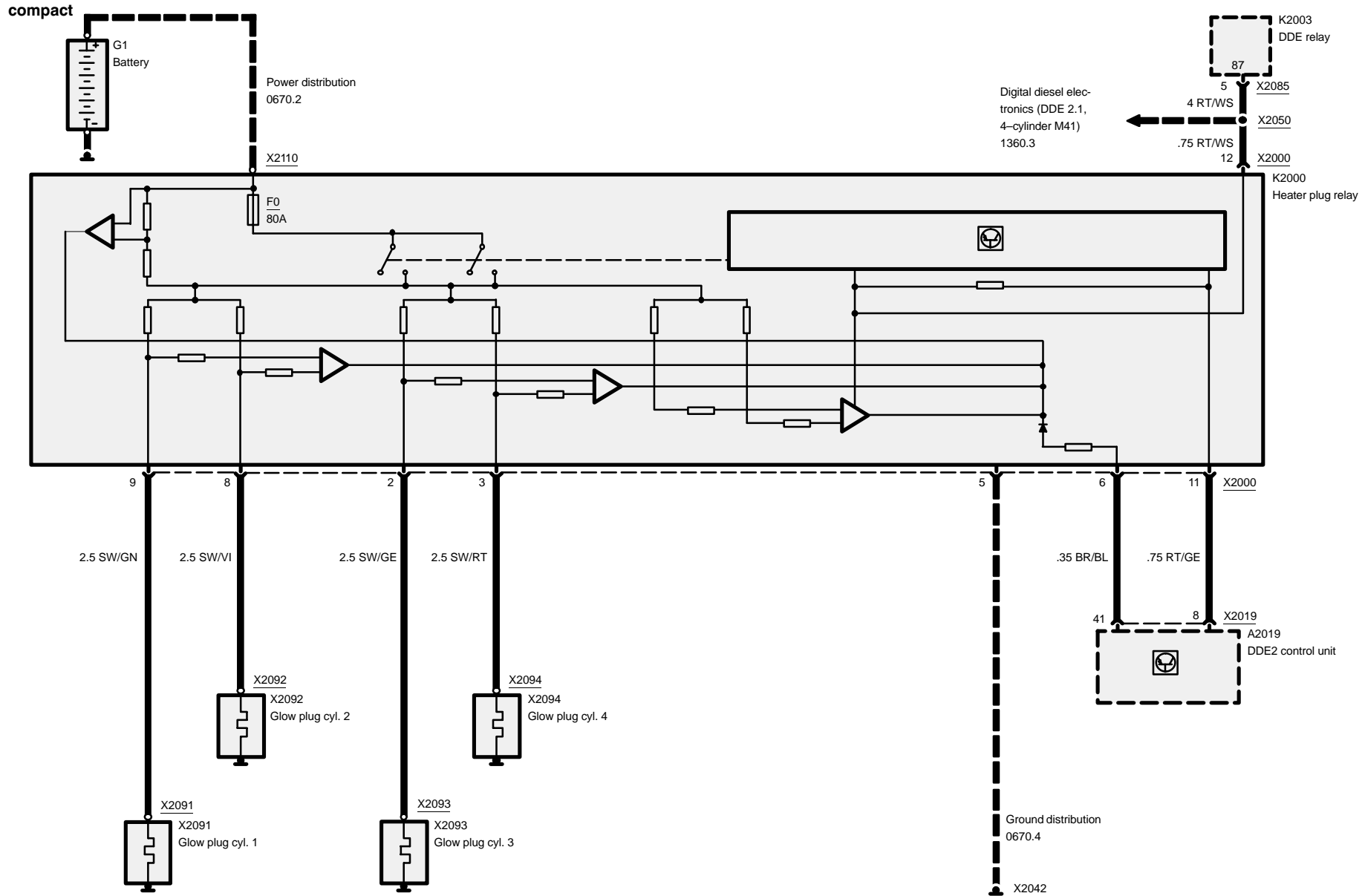








Preheating system

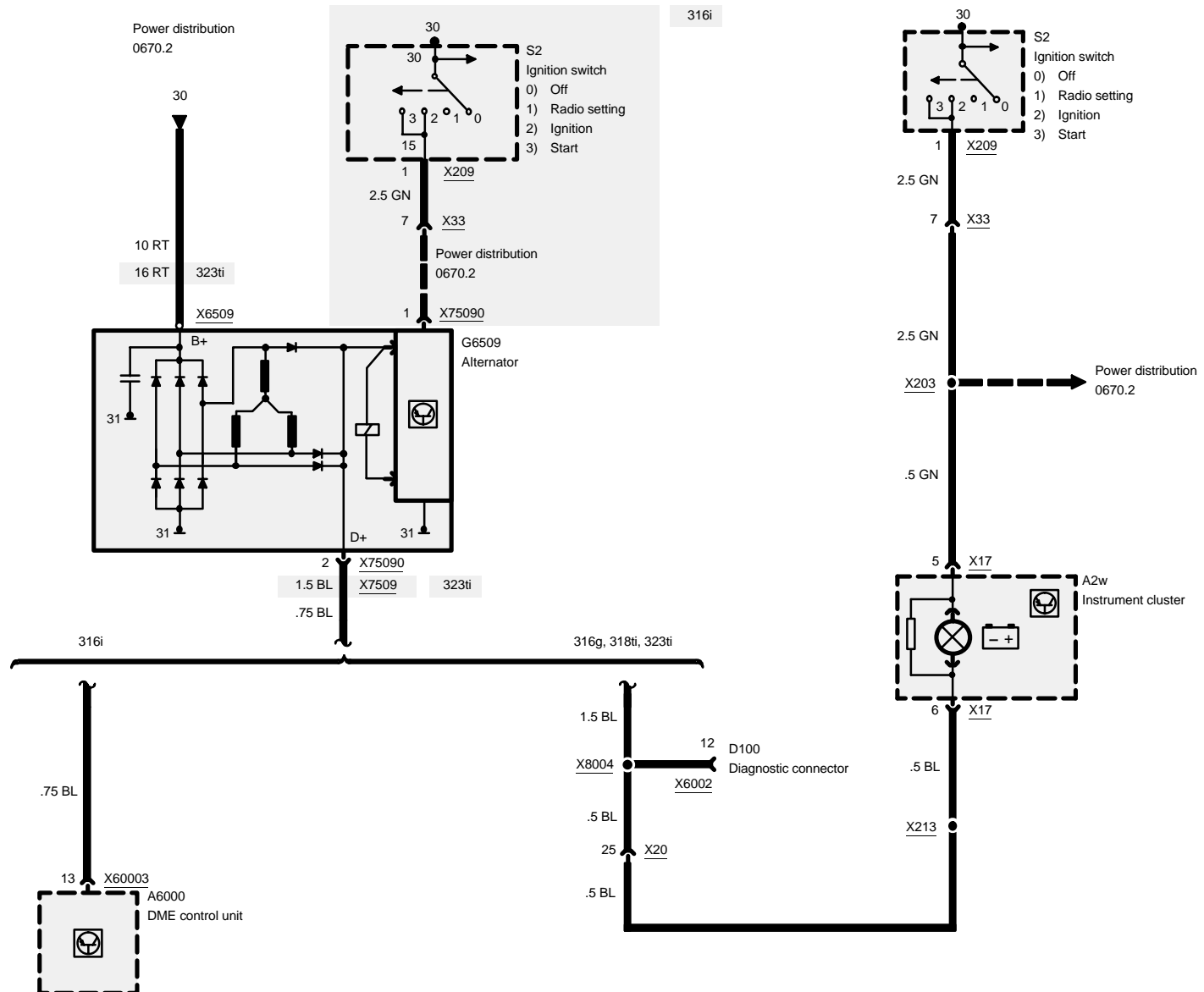


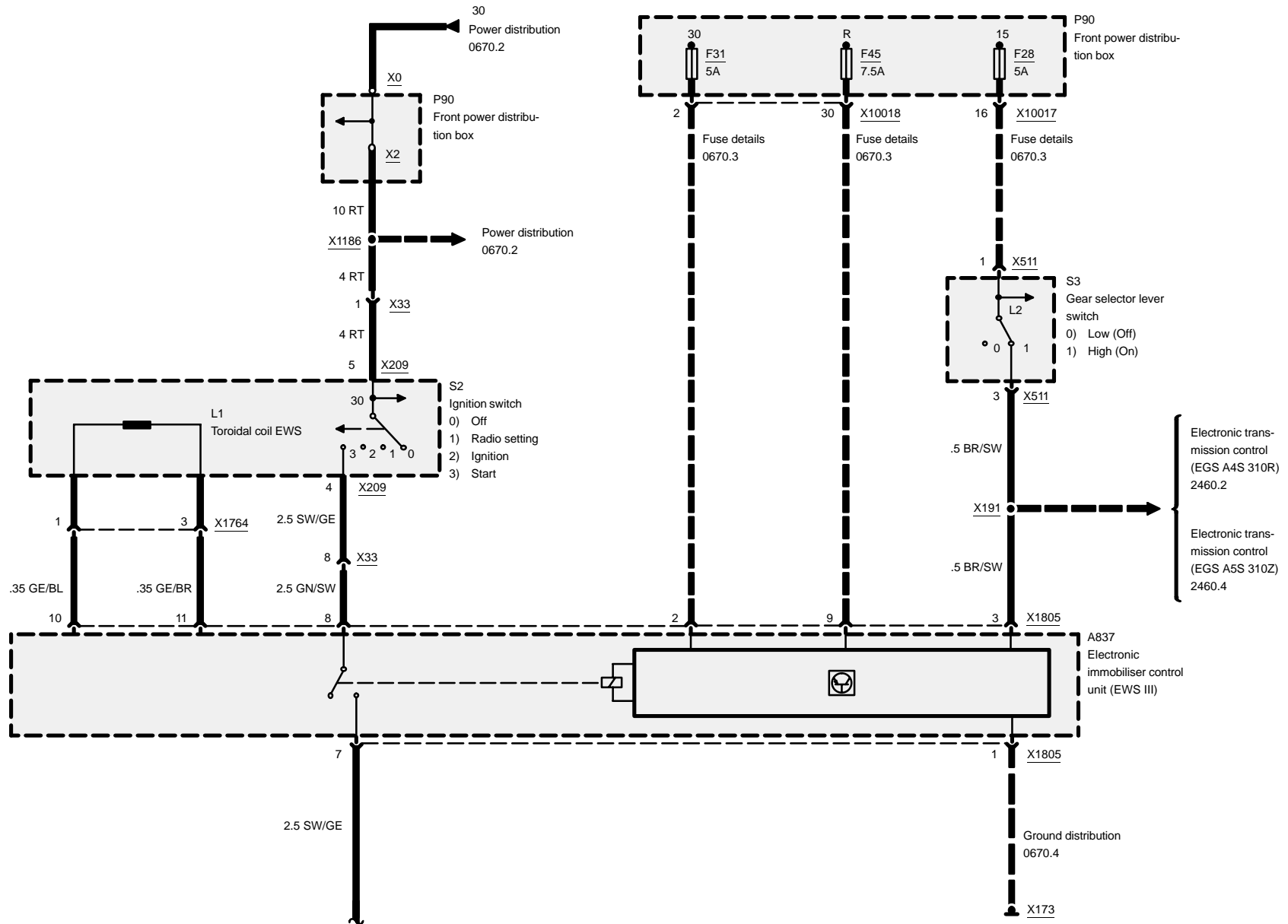


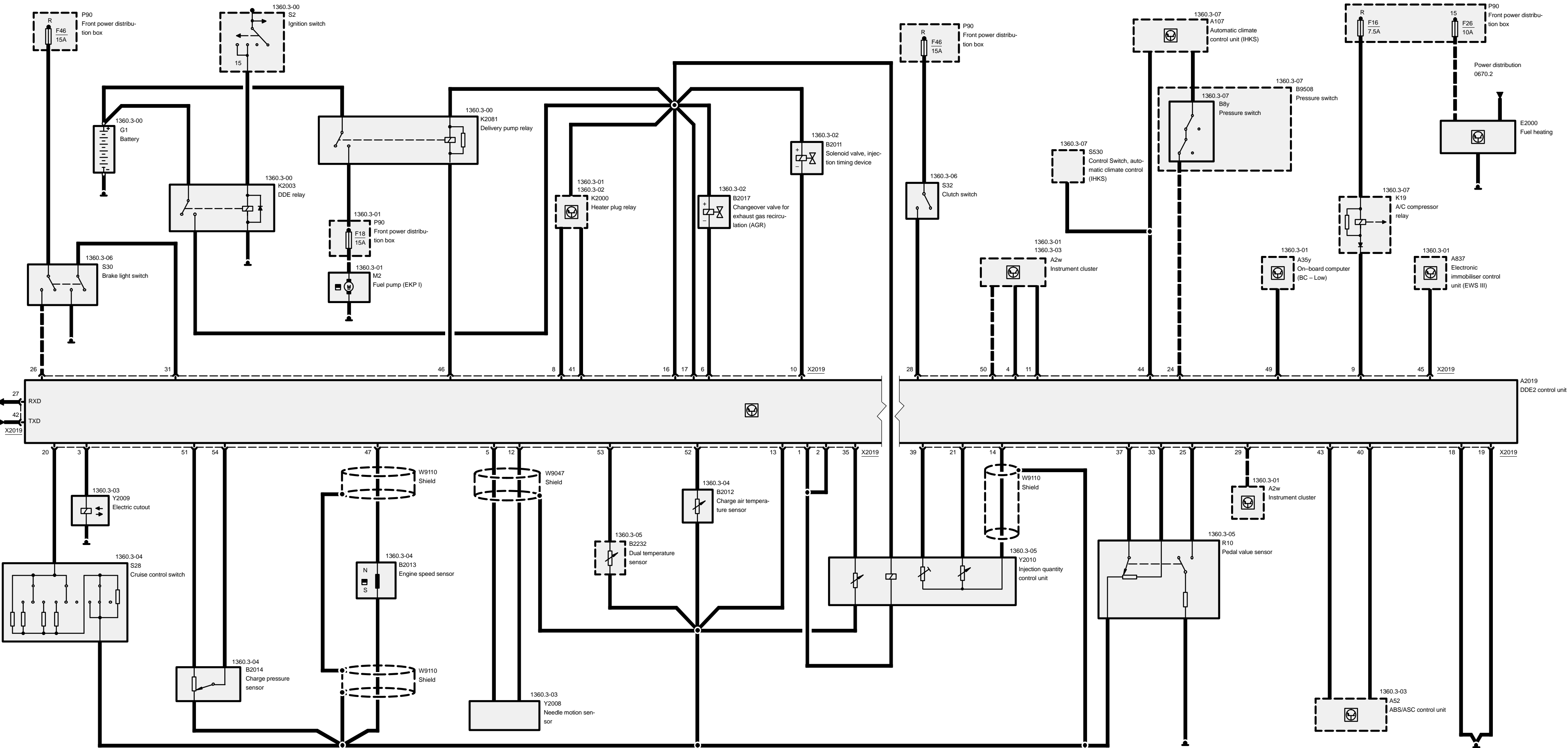
318tds

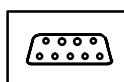


1230.0-00







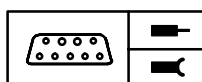


Pin assignments

X2019

Pin	Type	Description/Function	Connection
1	M	Component ground	Injection quantity actuator
2	M	Component ground	Injection quantity actuator
3	A	Electrical cutout	Electrical cutout
4	A	Display, digital diesel electronics (DDE)	Instrument cluster
5	A	Pointer movement sensor	Pointer movement sensor
6	E	Changeover valve	Exhaust gas recirculation
7		Not used	
8	E	Heating time control	Glow plug relay
9	E	A/C compressor ON signal	Relay, A/C compressor
10	E	Solenoid valve, injection timing device	Solenoid valve, injection timing device
11	A	Indicator lamp, preheat	Instrument cluster
12	M	Ground, pointer movement sensor	Pointer movement sensor
13	M	Ground for shield and sensor	Shield and sensor
14	M	Ground for actuator and pedal position sensor	Injection quantity actuator
15		Not used	
16	E	B+ voltage	Relay, digital diesel electronics (DDE)
17	E	B+ voltage	Relay, digital diesel electronics (DDE)
18	M	Ground	Ground connection
19	M	Ground	Ground connection
20	A	Cruise control (Tempomat)	Switch, cruise control (Tempomat)
21	E	Analog input, position encoder	Injection quantity actuator
22		Not used	
23		Not used	
24	E	A/C compressor signal	Pressure switch
25	E	Idle speed switch	Pedal position
26	E	Brake light signal	Brake light switch
27	A	RxD diagnostic link	Diagnostic connector
28	E	Clutch signal	Clutch switch
29	A	Road speed signal (speedometer-A)	Instrument cluster
30		Not used	
31	E	Brake light test signal	Brake light switch
32		Not used	

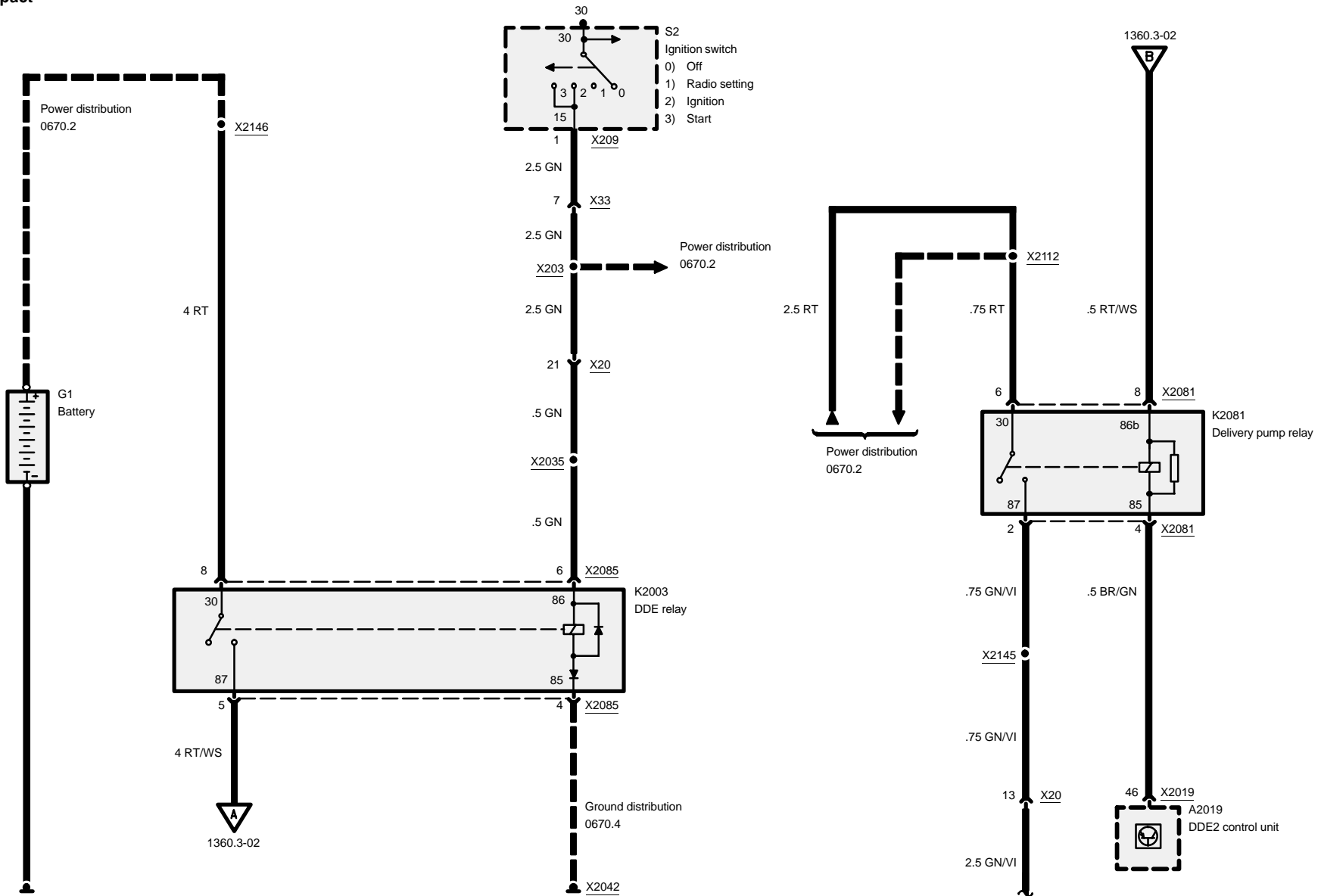
E = Input, A = Output, M = Ground



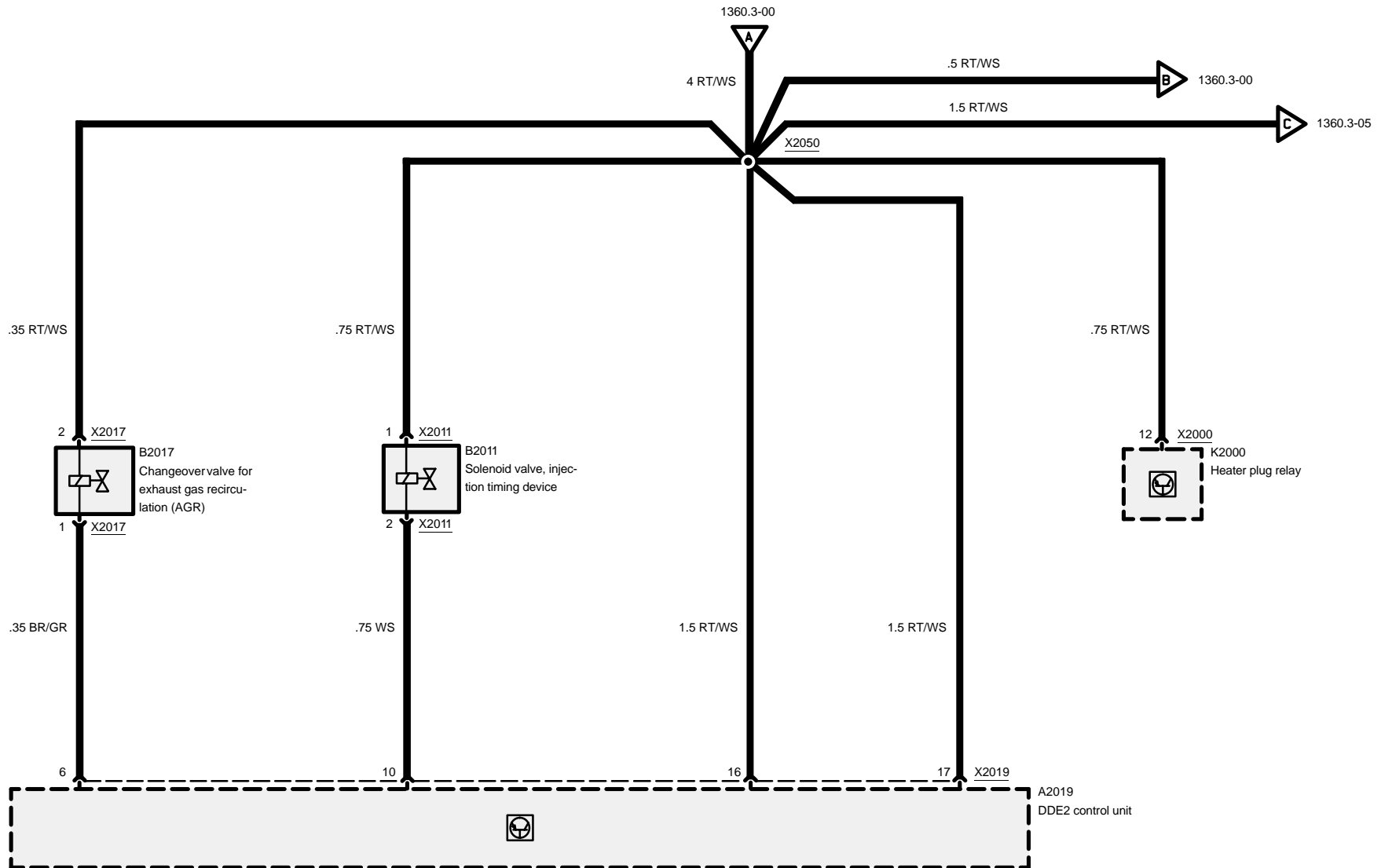
Pin assignments

Pin	Type	Description/Function	Connection
33	A	Power supply, pedal position sensor	Pedal position
34		Not used	
35	E	Fuel temperature sensor	Injection quantity actuator
36		Not used	
37	E	Analog input, pedal position sensor	Pedal position
38		Not used	
39	A	Sensor supply; slide valve position sensor	Injection quantity actuator
40	E/A	CAN-LOW	ASC control unit
41	E	Error message	Glow plug relay
42	E/A	TxD diagnostic link	Diagnostic connector
43	E/A	CAN-HIGH	ASC control unit
44	E	Air conditioning ON signal	A/C control unit
45	E	Vehicle immobilization	Control unit, electronic vehicle immobilization (EWS III)
46	A	Activation, terminal 85	Supply pump relay
47	E	Speed sensor	Speed sensor
48		Not used	
49	E	Consumption signal (TQ)	On-board computer
50	E	Engine speed signal (TD)	Instrument cluster
51	A	Power supply	Boost pressure sensor
52	E	Boost air temperature signal	Charge air temperature sensor
53	E	Water temperature signal	Water temperature sensor
54	E	Boost pressure sensor signal	Boost pressure sensor
55		Not used	

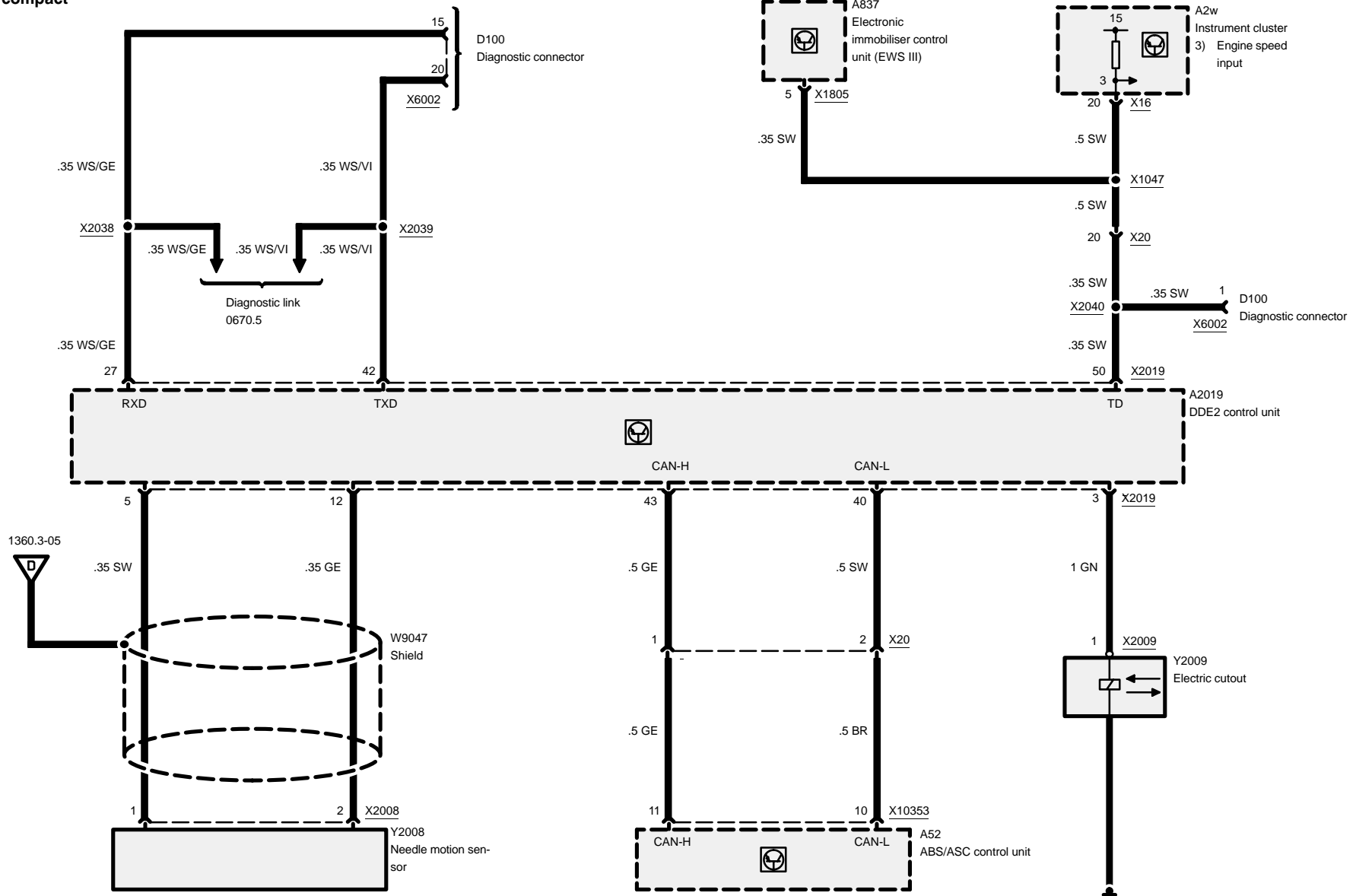
Digital diesel electronics (DDE 2.1, 4-cylinder M41)



Digital diesel electronics (DDE 2.1, 4-cylinder M41)



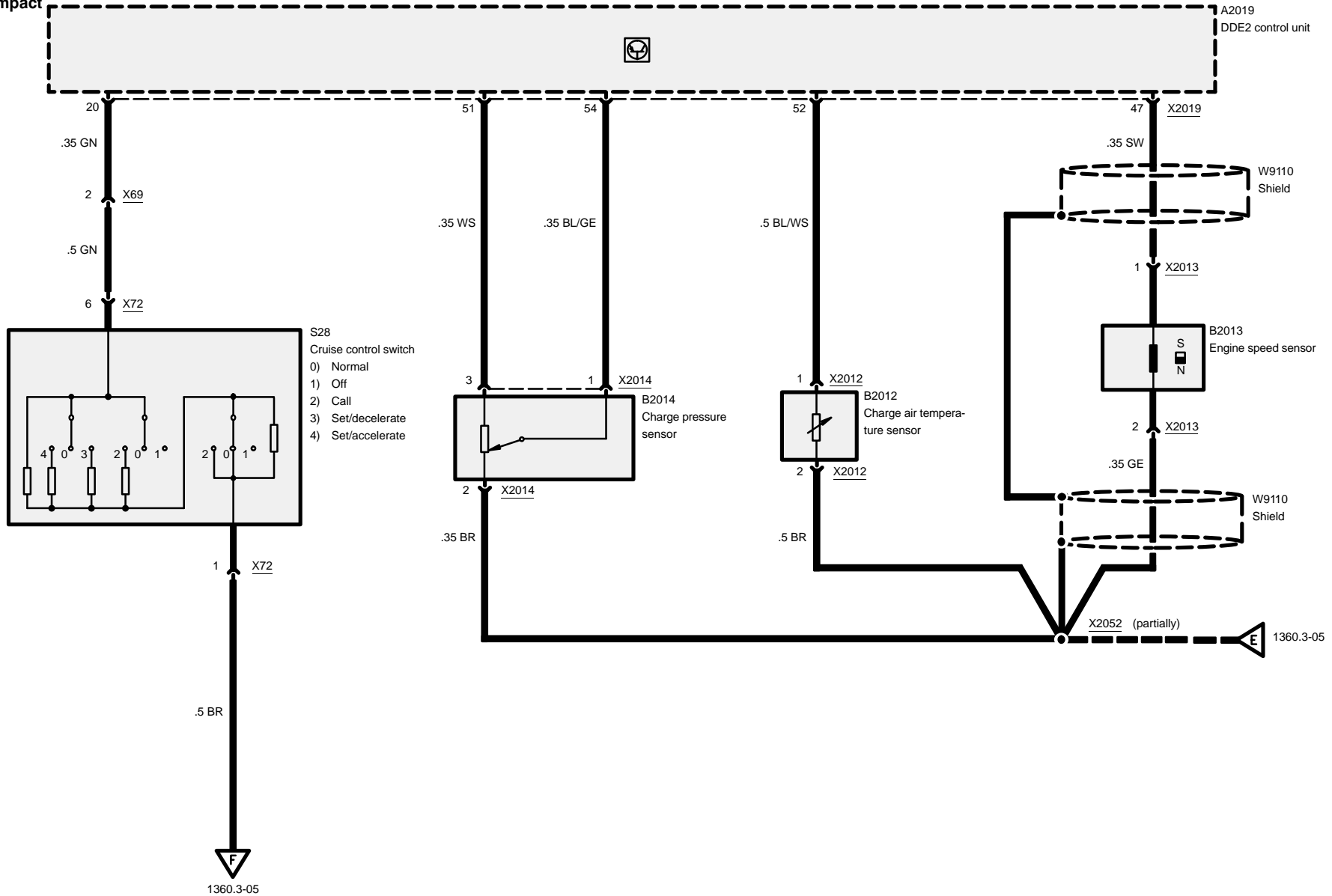
Digital diesel electronics (DDE 2.1, 4-cylinder M41)





Digital diesel electronics (DDE 2.1, 4-cylinder M41)

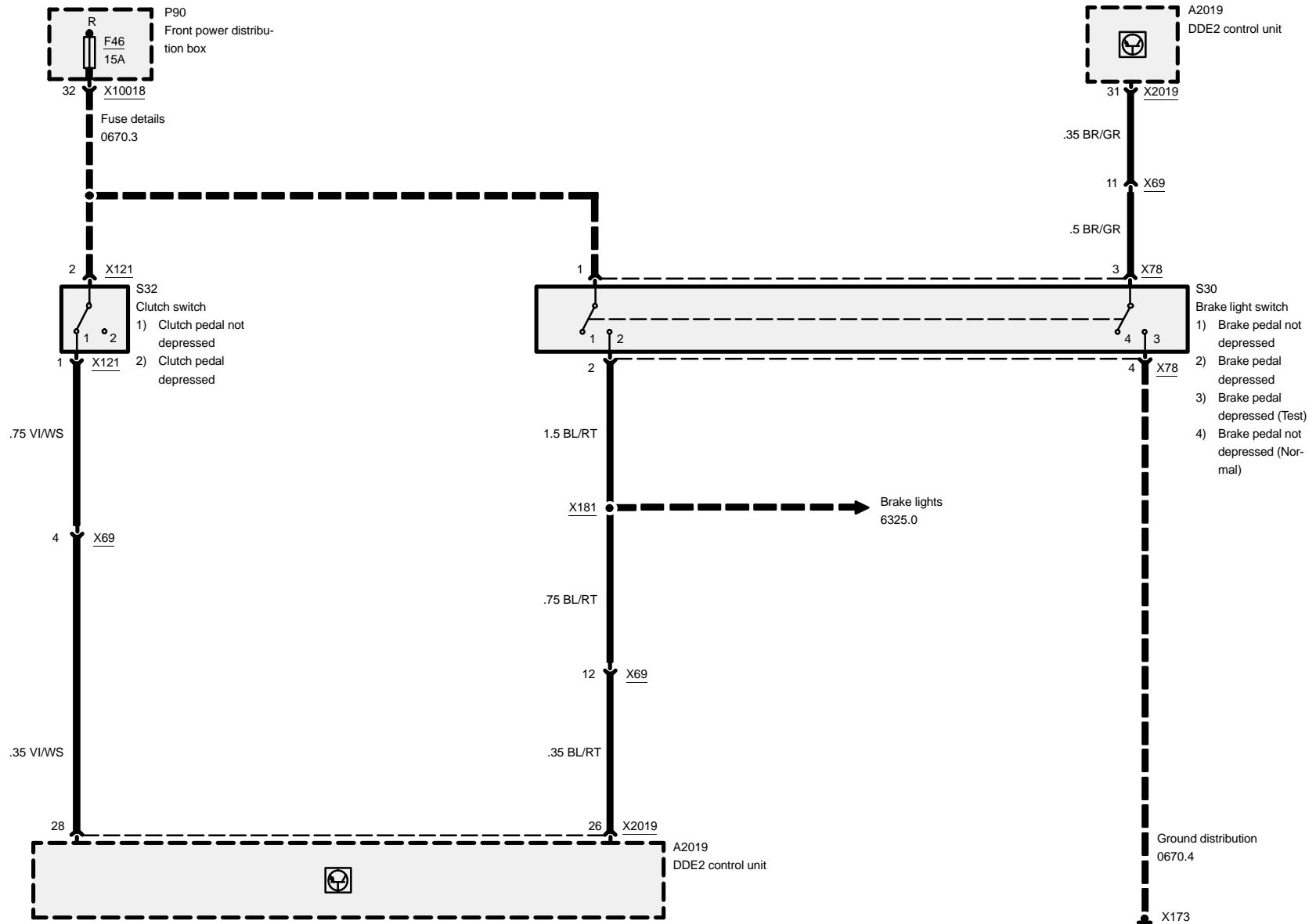
compact



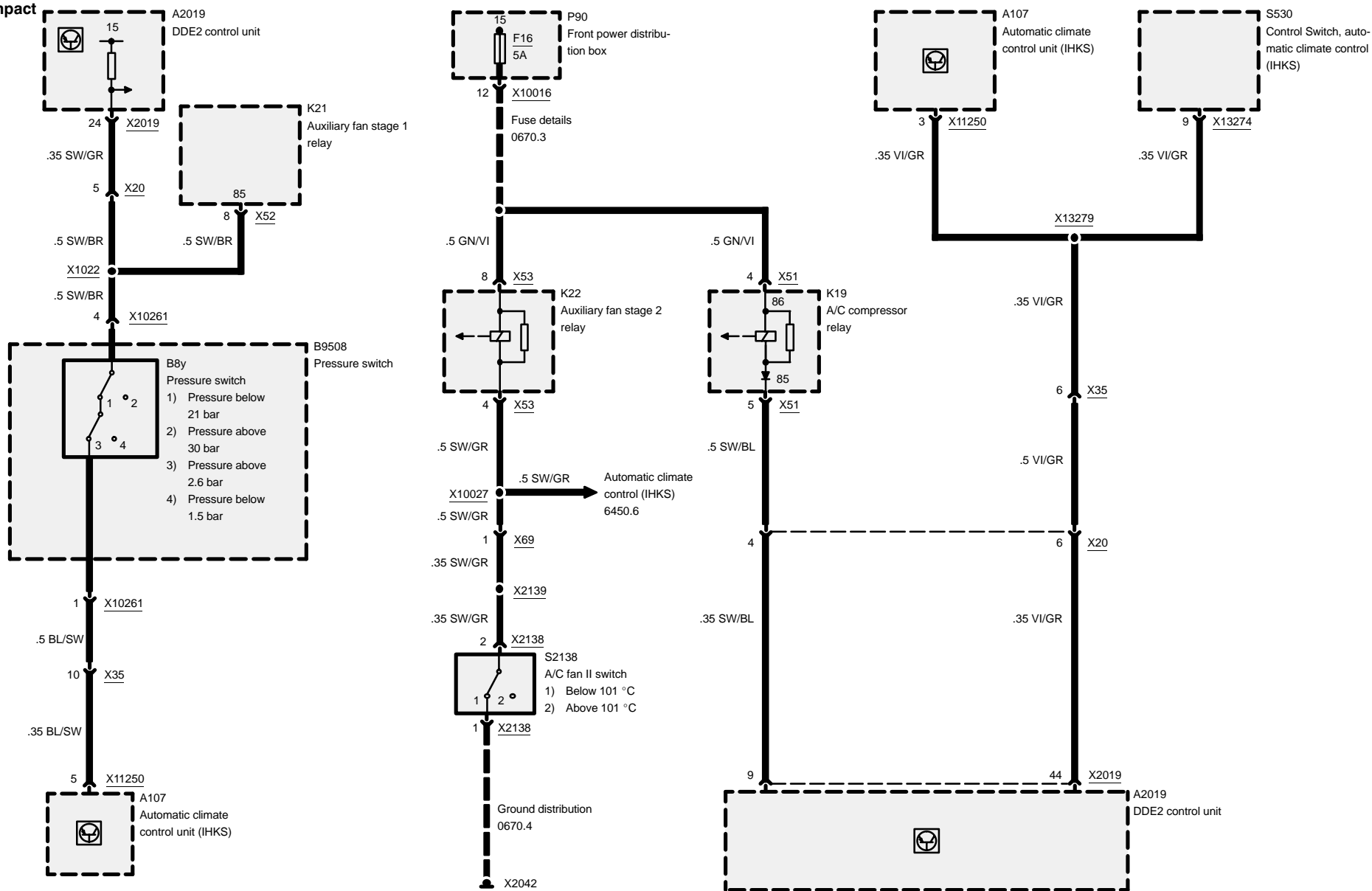


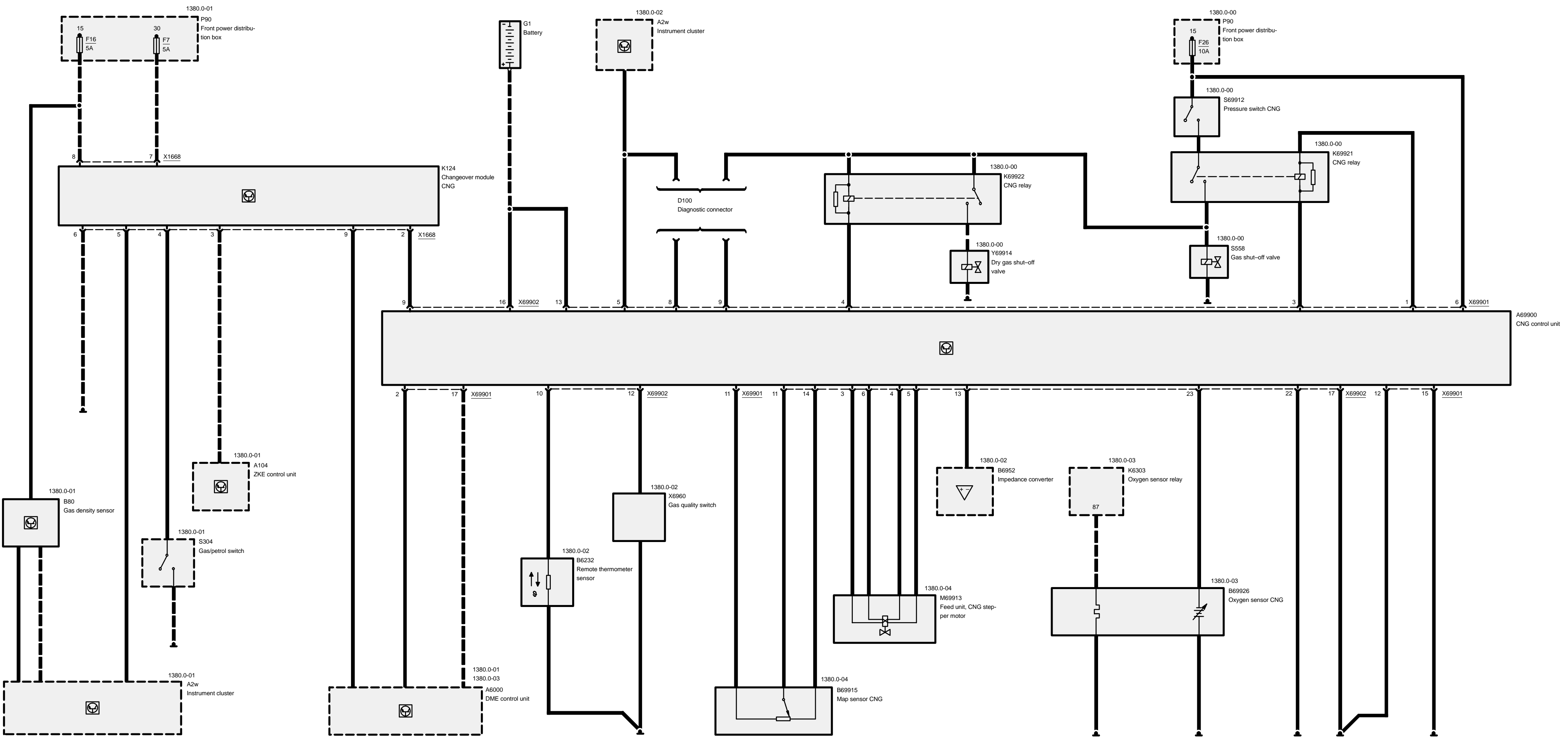
1360.3-05

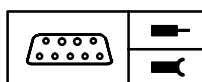
Digital diesel electronics (DDE 2.1, 4-cylinder M41)



Digital diesel electronics (DDE 2.1, 4-cylinder M41)







Pin assignments (316g)

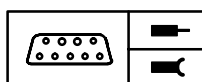
X69901

Pin	Type	Description/Function	Connection
1	A	High pressure shut-off valve (+)	Relay for high pressure shut-off valve
2	A	Injection cutout	DME control unit
3	A	High pressure shut-off valve (–)	Relay for high pressure shut-off valve
4	A	Dry gas shut-off valve (–)	Relay, dry gas shut-off valve
5	A	Gas operation indicator/fault lamp	Instrument cluster
6	E	Ignition, terminal 15	Fuse 26
7		Not used	
8	A	Communication link	Diagnostic connector
9	E	Diagnostic trigger link	Diagnostic connector
10		Not used	
11	A	Supply voltage	Map sensor CNG
12	M	Ground, terminal 31	Ground connection
13	E	Permanent positive, terminal 30	Battery voltage
14		Not used	
15	M	Ground, terminal 31	Ground connection
16		Not used	
17	E	Engine speed signal TD	DME control unit
18		Not used	
19		Not used	
20		Not used	
21		Not used	
22		Not used	
23		Not used	
24		Not used	

X69902

Pin	Type	Description/Function	Connection
1		Not used	
2		Not used	
3	A	Metering unit (–)	Metering unit stepper motor
4	E	Metering unit (+)	Metering unit stepper motor
5	A	Metering unit (–)	Metering unit stepper motor

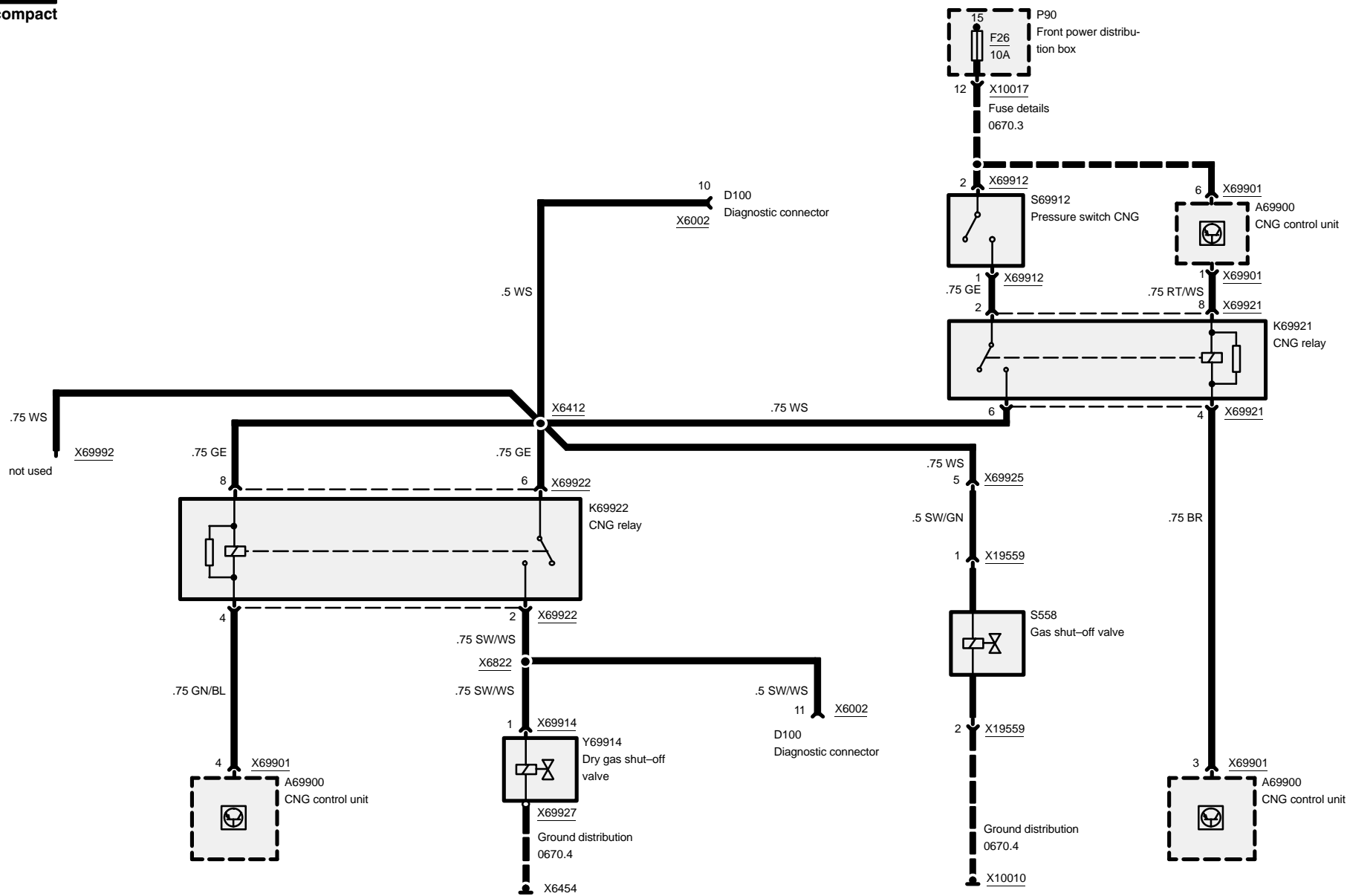
E = Input, A = Output, M = Ground



Pin assignments (316g)

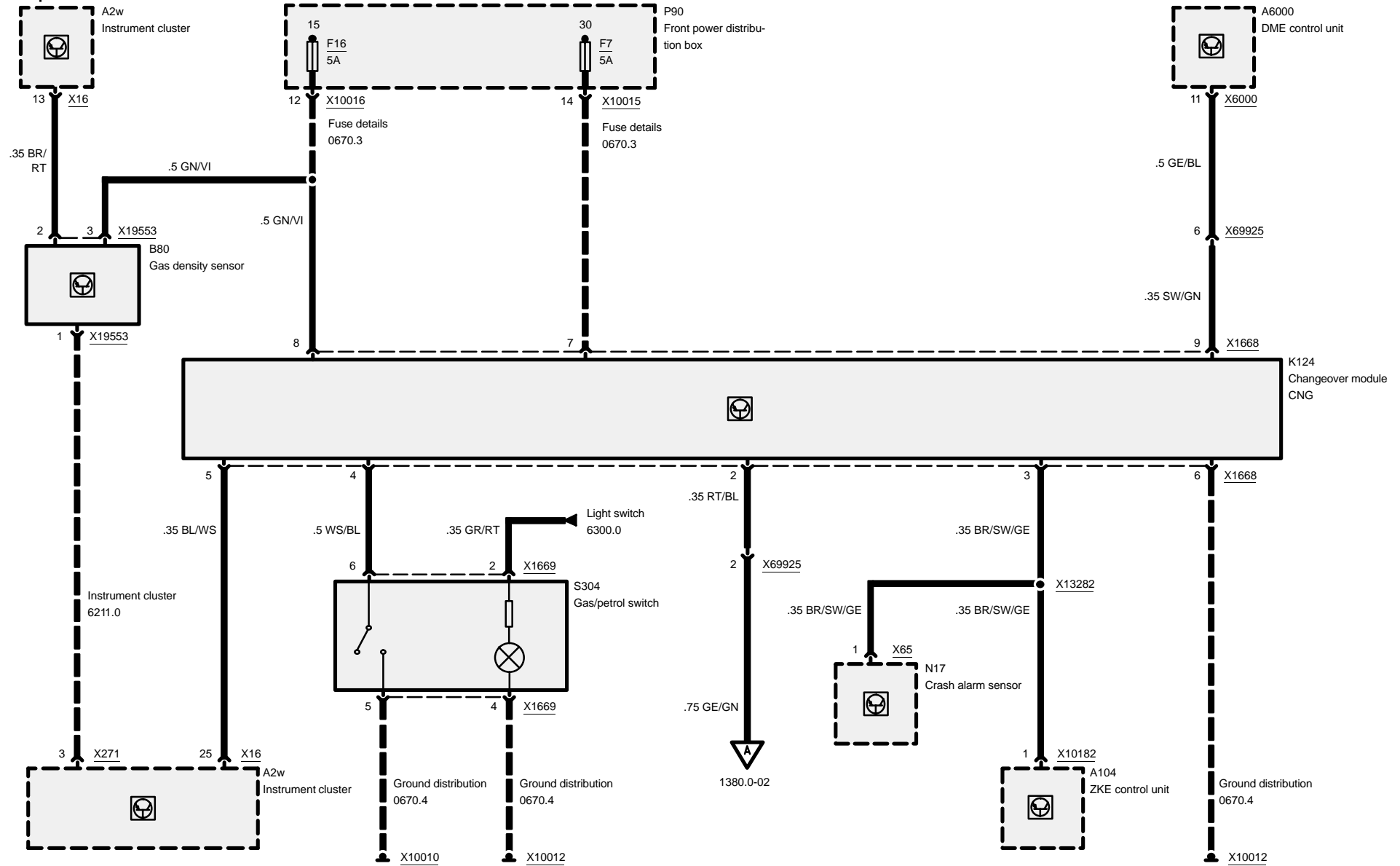
Pin	Type	Description/Function	Connection
6	E	Metering unit (+)	Metering unit stepper motor
7		Not used	
8		Not used	
9	E	Low=Petrol, High=Gas	Changeover module CNG
10	E	Remote thermometer (+)	Remote thermometer sensor
11	E	Evaluation, signal voltage	MAP sensor
12	E	Gas quality switch	Gas quality switch
13	E	Impedance converter	Impedance converter
14	E	Supply voltage	MAP sensor
15		Not used	
16	E	Permanent positive, terminal 30	Battery voltage
17	M	Ground, terminal 31	Ground connection
18		Not used	
19		Not used	
20		Not used	
21		Not used	
22	M	Ground, terminal 31	Ground
23	E	Input (+)	Oxygen sensor
24		Not used	
25		Not used	
26		Not used	
27		Not used	
28		Not used	
29		Not used	
30		Not used	
31		Not used	
32		Not used	

Engine control CNG

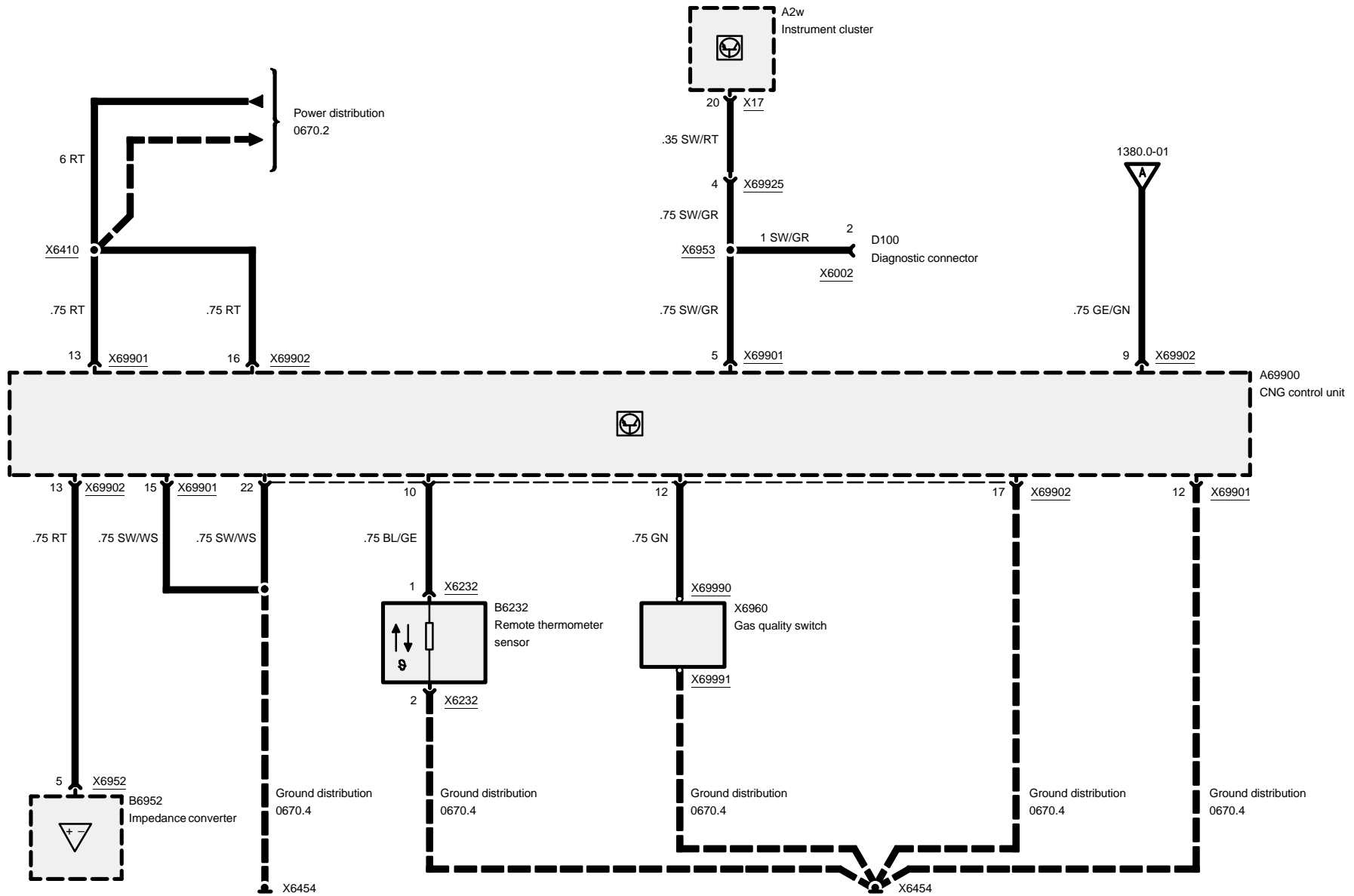




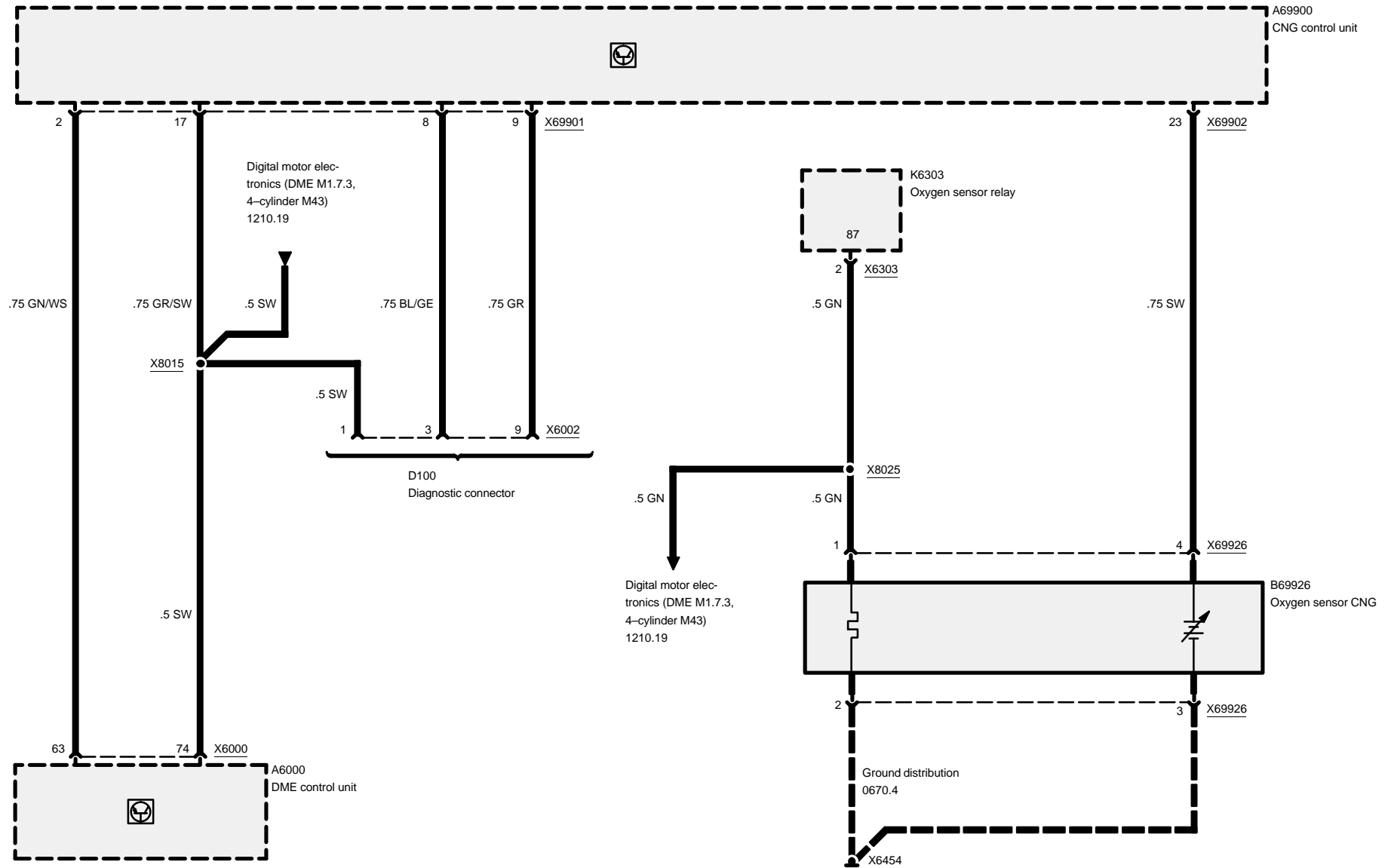
Engine control CNG

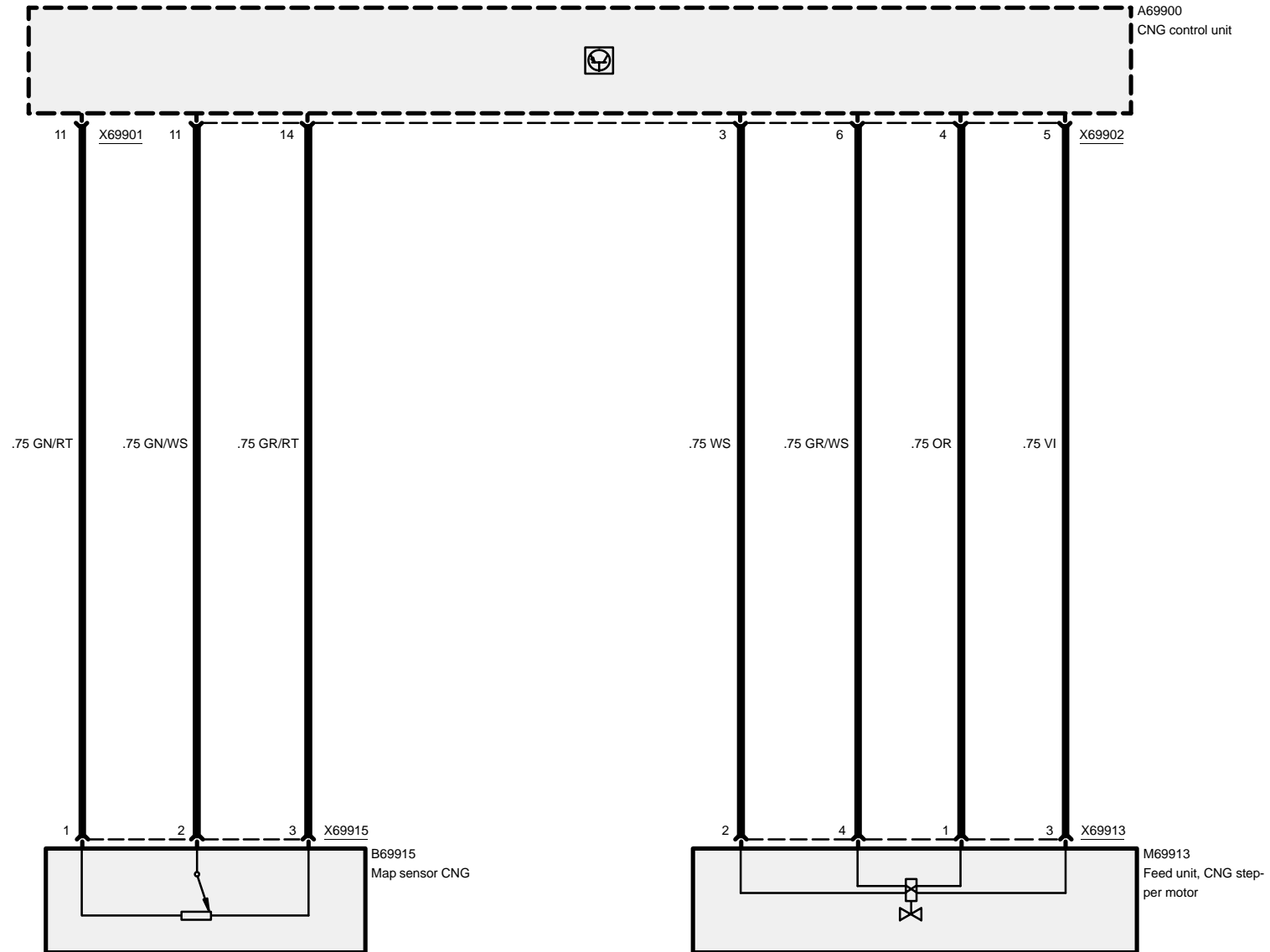


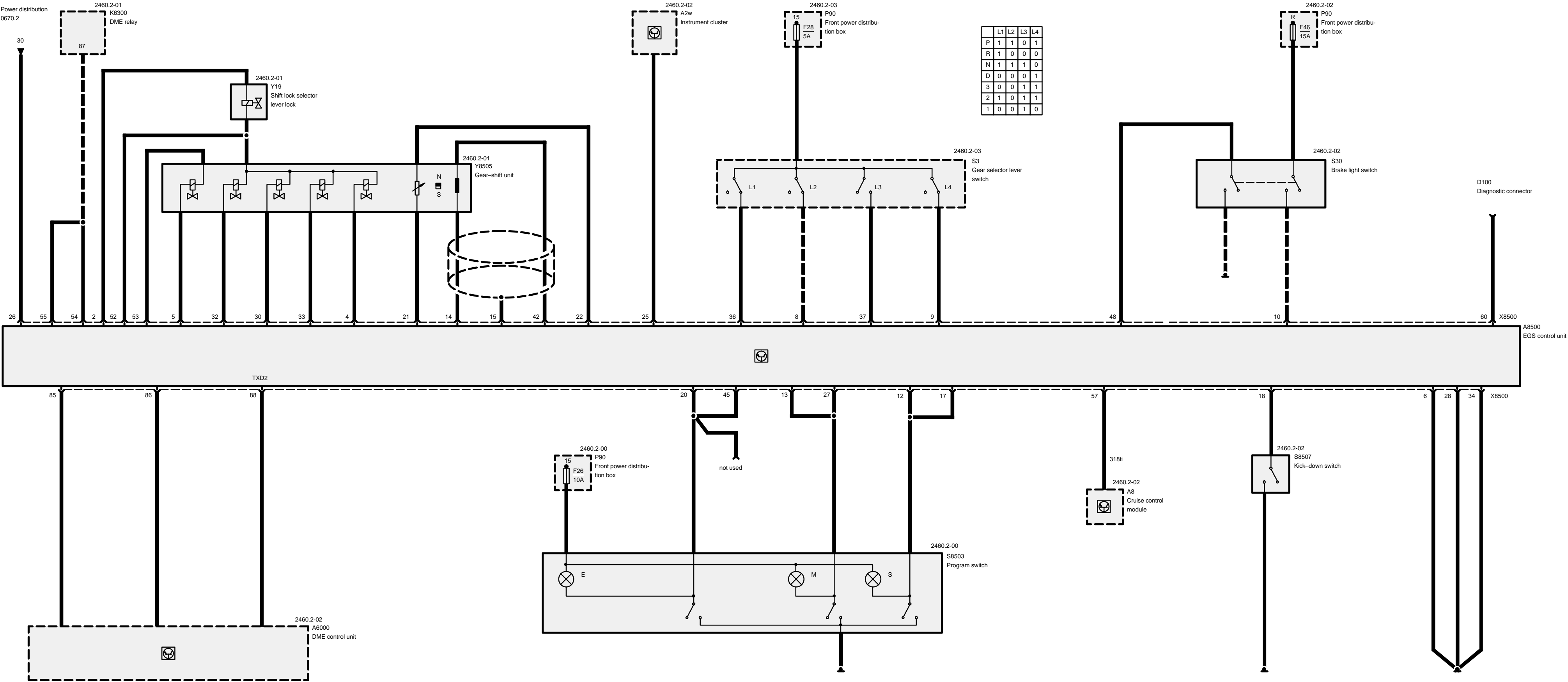
Engine control CNG

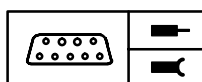


Engine control CNG







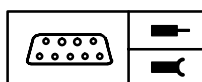


Pin assignments (Right-hand drive)

X8500

Pin	Type	Description/Function	Connection
1		Not used	
2	A	Solenoid, P/N shift-lock	Selector lever shift-lock
3		Not used	
4	A	Solenoid valve, band	Gearshift unit
5	A	Pressure regulator (-)	Gearshift unit
6	M	Ground	Ground connection
7		Not used	
8	E	Position switch L2	Selector lever switch
9	E	Position switch L4	Selector lever switch
10	E	Brake signal	Brake light switch
11		Not used	
12	E	S-program	Program switch
13	E	M-program	Program switch
14	M	rpm sensor (-)	Gearshift unit
15	M	Shield, speed sensor	Shield
16		Not used	
17	E	S-program	Program switch
18	E	Kick-down	Kick-down switch
19		Not used	
20	E	E-program	Program switch
21	E	Oil temperature sensor (-)	Gearshift unit
22	A	Oil temperature sensor (+)	Gearshift unit
23		Not used	
24		Not used	
25	A	Fault indicator	Instrument cluster (318ti)
26	E	B+ voltage	B+ distributor
27	E	M-program	Program switch
28	M	Ground	Ground connection
29		Not used	
30	A	Solenoid valve 1	Gearshift unit
31		Not used	
32	A	Solenoid valve, converter lockup clutch	Gearshift unit
33	A	Solenoid valve 2	Gearshift unit

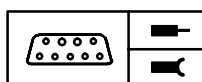
E = Input, A = Output, M = Ground



Pin assignments (Right-hand drive)

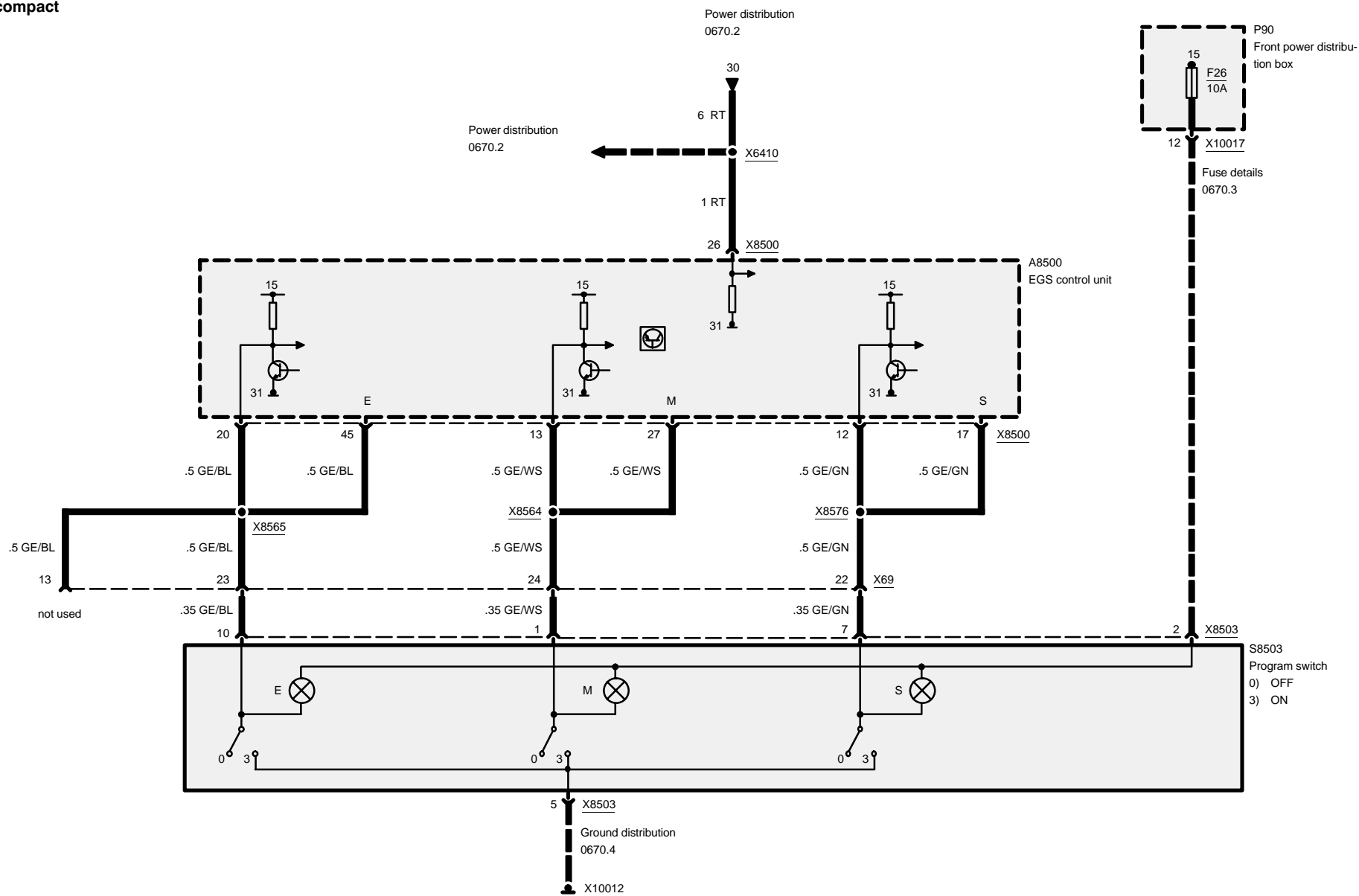
Pin	Type	Description/Function	Connection
34	M	Ground	Ground connection
35		Not used	
36	E	Position switch L1	Selector lever switch
37	E	Position switch L3	Selector lever switch
38		Not used	
39		Not used	
40	E	Fuel consumption (TD signal)	DME control unit (318ti)
41	E	Engine speed (TI signal)	DME control unit (316i)
42	E	rpm sensor (+)	Gearshift unit
43		Not used	
44		Not used	
45	E	E-program	Program switch
46	E	Air conditioning ON signal	Air conditioner compressor relay (318ti)
47		Not used	
48	E	Brake test signal	Brake light switch
49		Not used	
50		Not used	
51		Not used	
52	A	Solenoid valves (+)	Gearshift unit/selector lever shift-lock
53	A	Pressure regulator (+)	Gearshift unit
54	E	B+ voltage	DME relay
55	E	B+ voltage	DME relay
56		Not used	
57	E	Cruise control (Tempomat) signal	Cruise control (Tempomat) (318ti)
58		Not used	
59		Not used	
60	E	Programming voltage	Diagnostic connector (318ti)
61		Not used	
62		Not used	
63		Not used	
64		Not used	
65		Not used	
66		Not used	
67		Not used	
68		Not used	

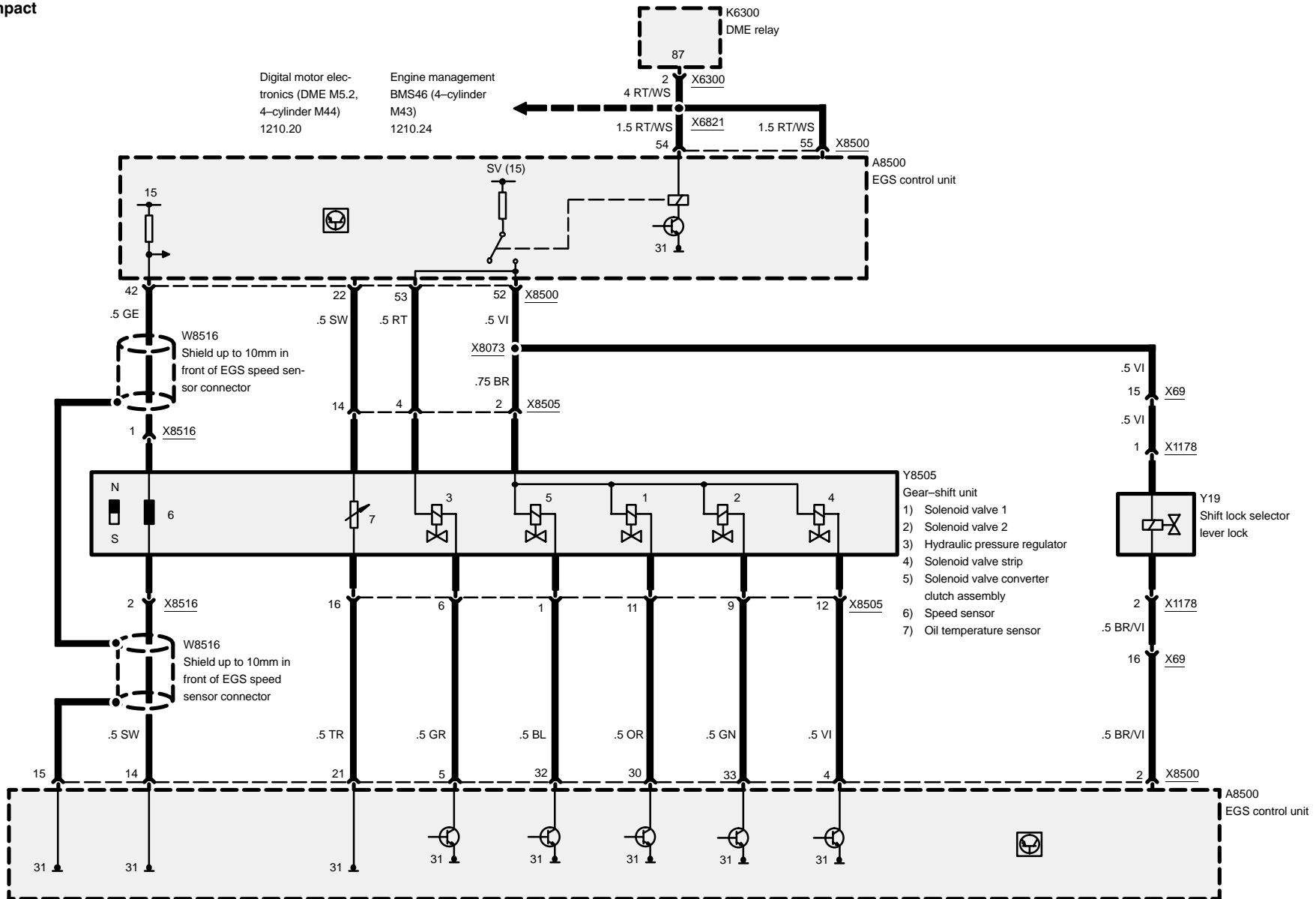
E = Input, A = Output, M = Ground

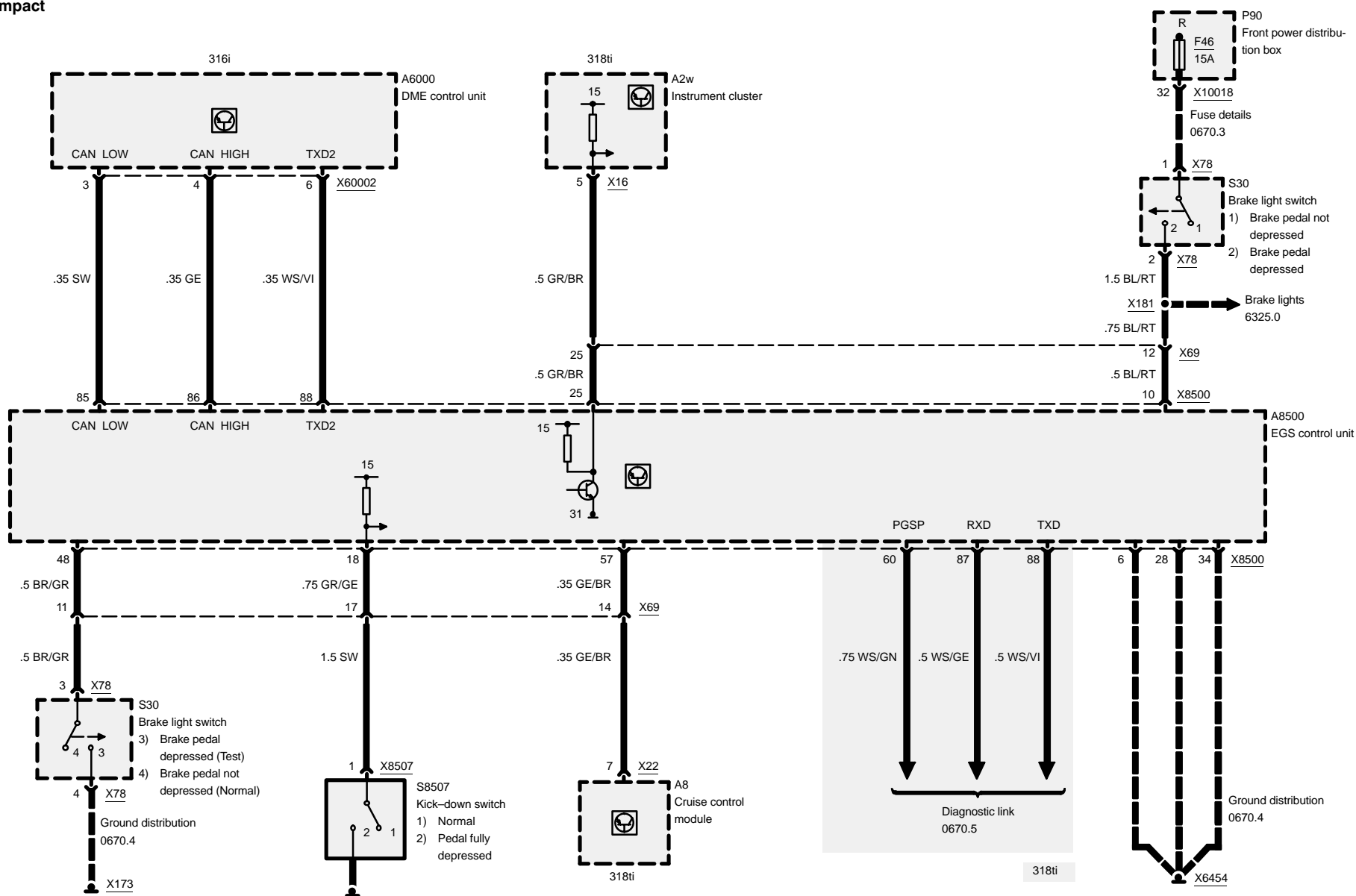


Pin assignments (Right-hand drive)

Pin	Type	Description/Function	Connection
69		Not used	
70		Not used	
71		Not used	
72		Not used	
73		Not used	
74		Not used	
75		Not used	
76		Not used	
77		Not used	
78		Not used	
79		Not used	
80		Not used	
81		Not used	
82		Not used	
83		Not used	
84		Not used	
85	E/A	CAN-LOW	DME/ASC control unit
86	E/A	CAN-HIGH	DME/ASC control unit
87	A	RxD diagnostic link	Diagnostic connector (318ti)
88	E/A	TxD diagnostic link	Diagnostic connector (318ti)

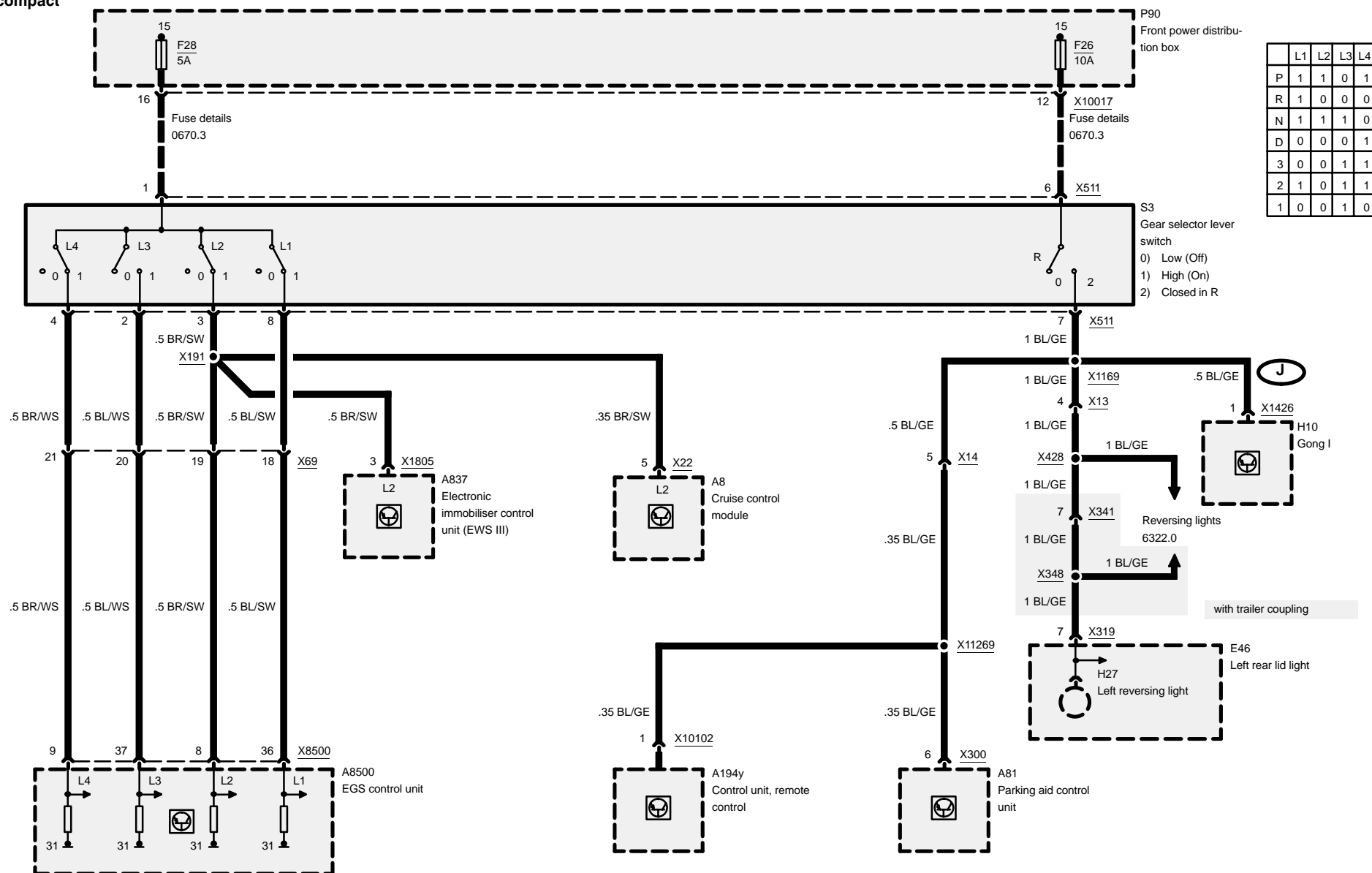


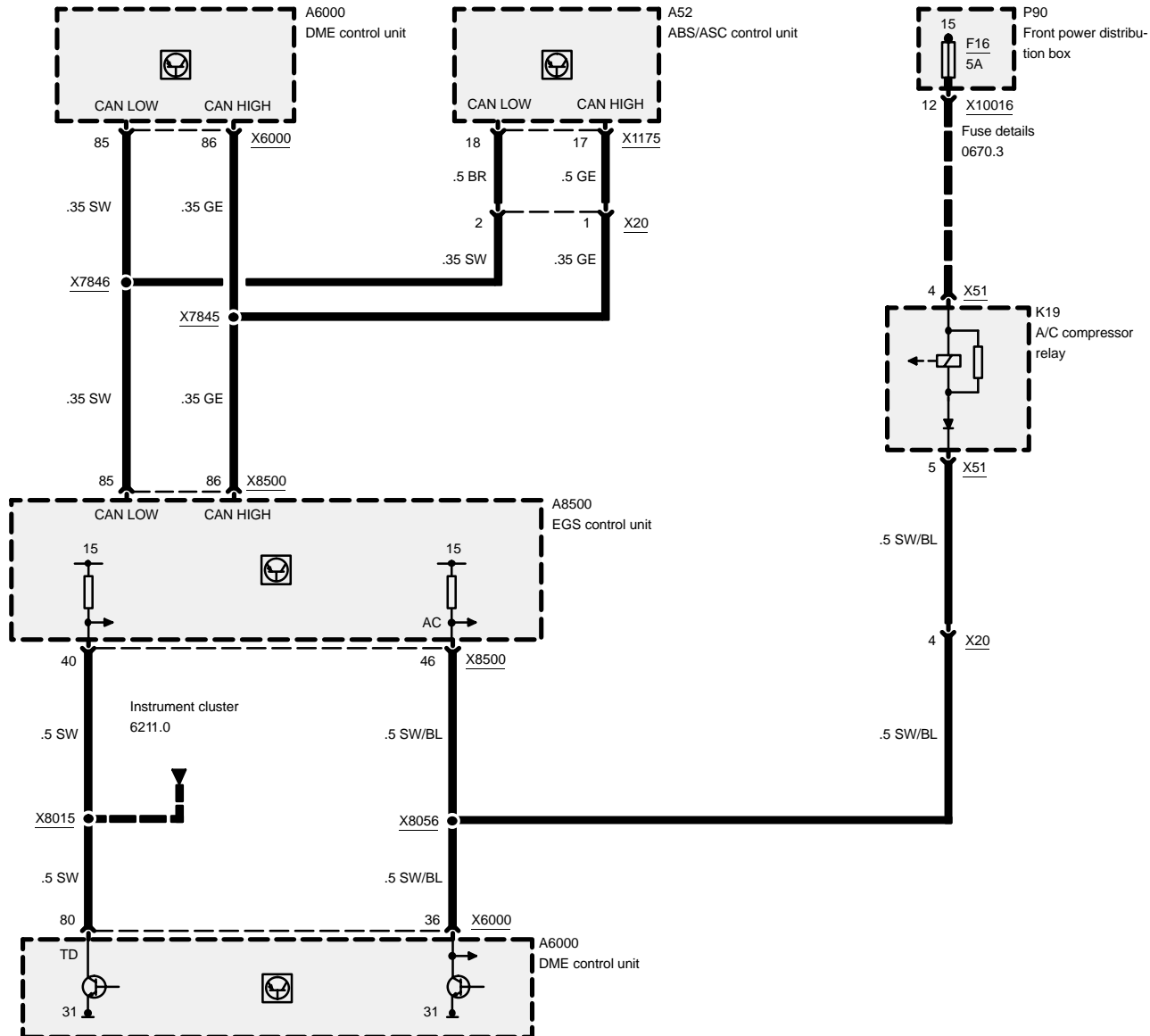


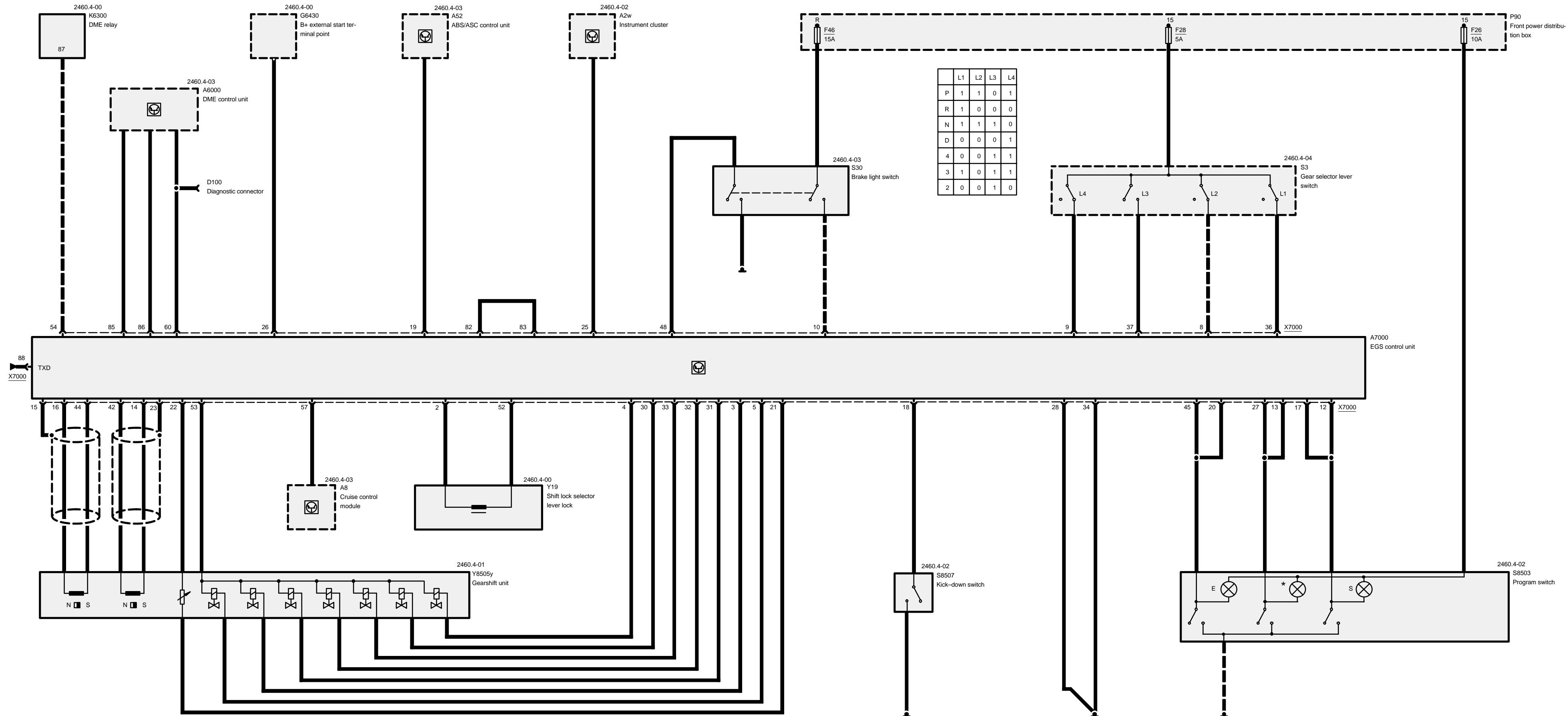


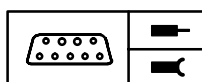
Electronic transmission control (EGS A4S 310R)

Right-hand drive







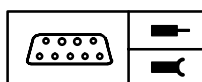


Pin assignments

X7000

Pin	Type	Description/Function	Connection
1		Not used	
2	A	Shift-Lock (+)	Selector lever lock
3	A	Solenoid valve 5	Gearshift unit
4	A	Solenoid valve, converter lock-up clutch	Gearshift unit
5	A	Pressure regulator (-)	Gearshift unit
6		Not used	
7		Not used	
8	E	Position switch L2	Gear selector lever
9	E	Position switch L4	Gear selector lever
10	E	Brake signal	Brake light switch
11		Not used	
12	E	S-program	Program switch
13	E	*-program	Program switch
14	E	rpm sensor, output (-)	Gearshift unit
15	M	Speed sensor shield	Shield
16	E	rpm sensor, turbine (+)	Gearshift unit
17	E	S-program	Program switch
18	E	Kick-down signal	Kick-down switch
19	E	ASC signal	ASC control unit
20	E	E-program	Program switch
21	E	Oil temperature sensor, NTC	Gearshift unit
22	M	Ground, oil temperature sensor	Gearshift unit
23	M	Shield for speed sensor	Shield
24		Not used	
25	A	Fault indicator	Instrument cluster
26	E	Terminal 30	Jumper cable terminal point
27	E	*-program	Program switch
28	M	Ground, electronics	Ground connection
29		Not used	
30	A	Solenoid valve 1	Gearshift unit
31	A	Solenoid valve 4	Gearshift unit
32	A	Solenoid valve 3	Gearshift unit
33	A	Solenoid valve 2	Gearshift unit

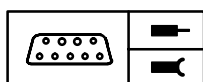
E = Input, A = Output, M = Ground



Pin assignments

Pin	Type	Description/Function	Connection
34	M	Power ground	Ground connection
35		Not used	
36	E	Position switch L1	Gear selector lever
37	E	Position switch L3	Gear selector lever
38		Not used	
39		Not used	
40		Not used	
41		Not used	
42	E	rpm sensor, output (+)	Gearshift unit
43		Not used	
44	E	Turbine speed sensor (–)	Gearshift unit
45	E	E-program	Program switch
46		Not used	
47		Not used	
48	E	Brake test signal	Brake light switch
49		Not used	
50		Not used	
51		Not used	
52	A	Shift-Lock (–)	Selector lever lock
53	A	Positive supply, solenoid valves	Gearshift unit
54	E	B+ voltage	DME relay
55		Not used	
56		Not used	
57	E	Cruise control (Tempomat) signal	Control unit, cruise control (Tempomat)
58		Not used	
59		Not used	
60	E	Programming voltage	Diagnostic connector
61		Not used	
62		Not used	
63		Not used	
64		Not used	
65		Not used	
66		Not used	
67		Not used	
68		Not used	

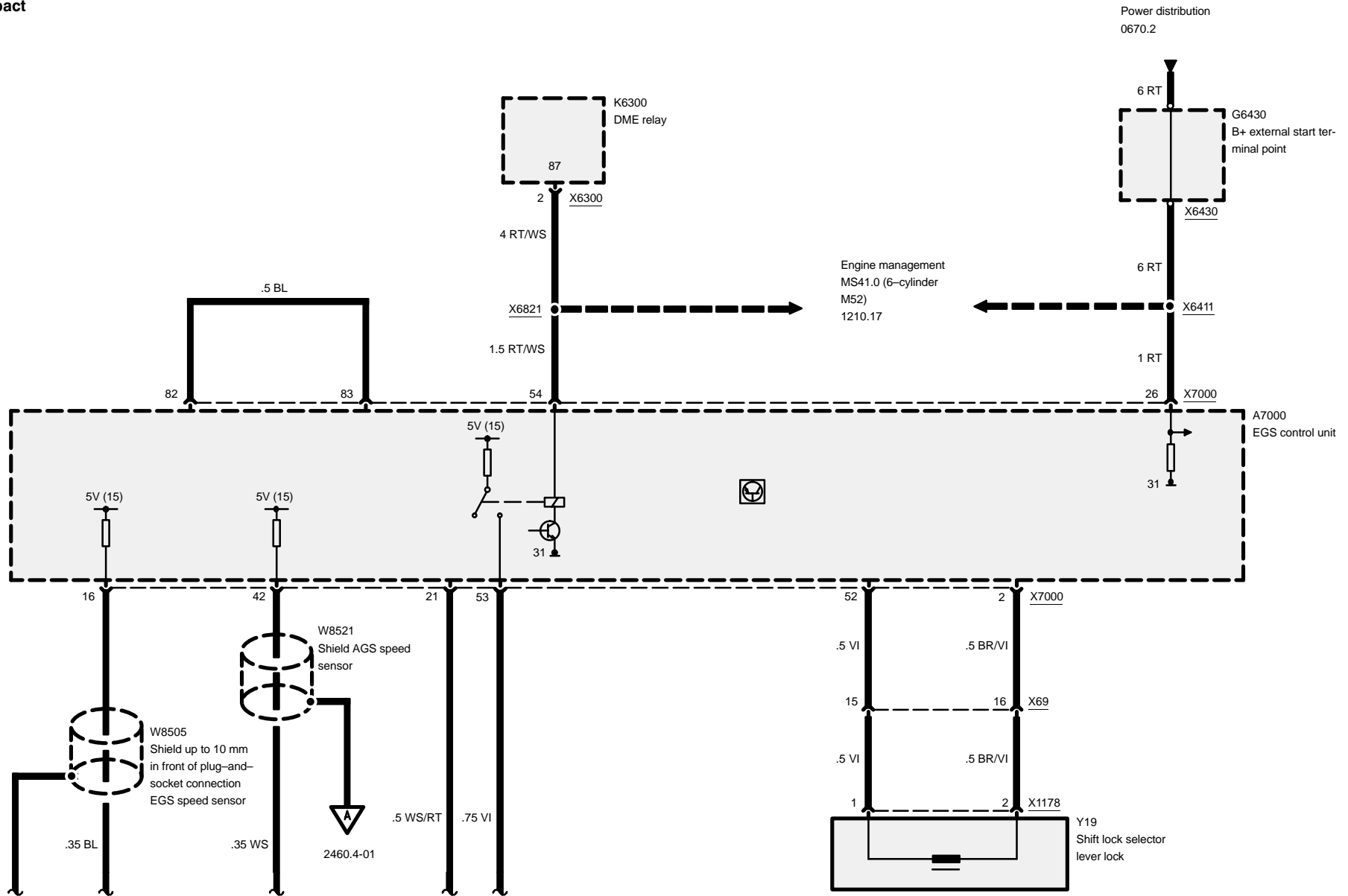
E = Input, A = Output, M = Ground

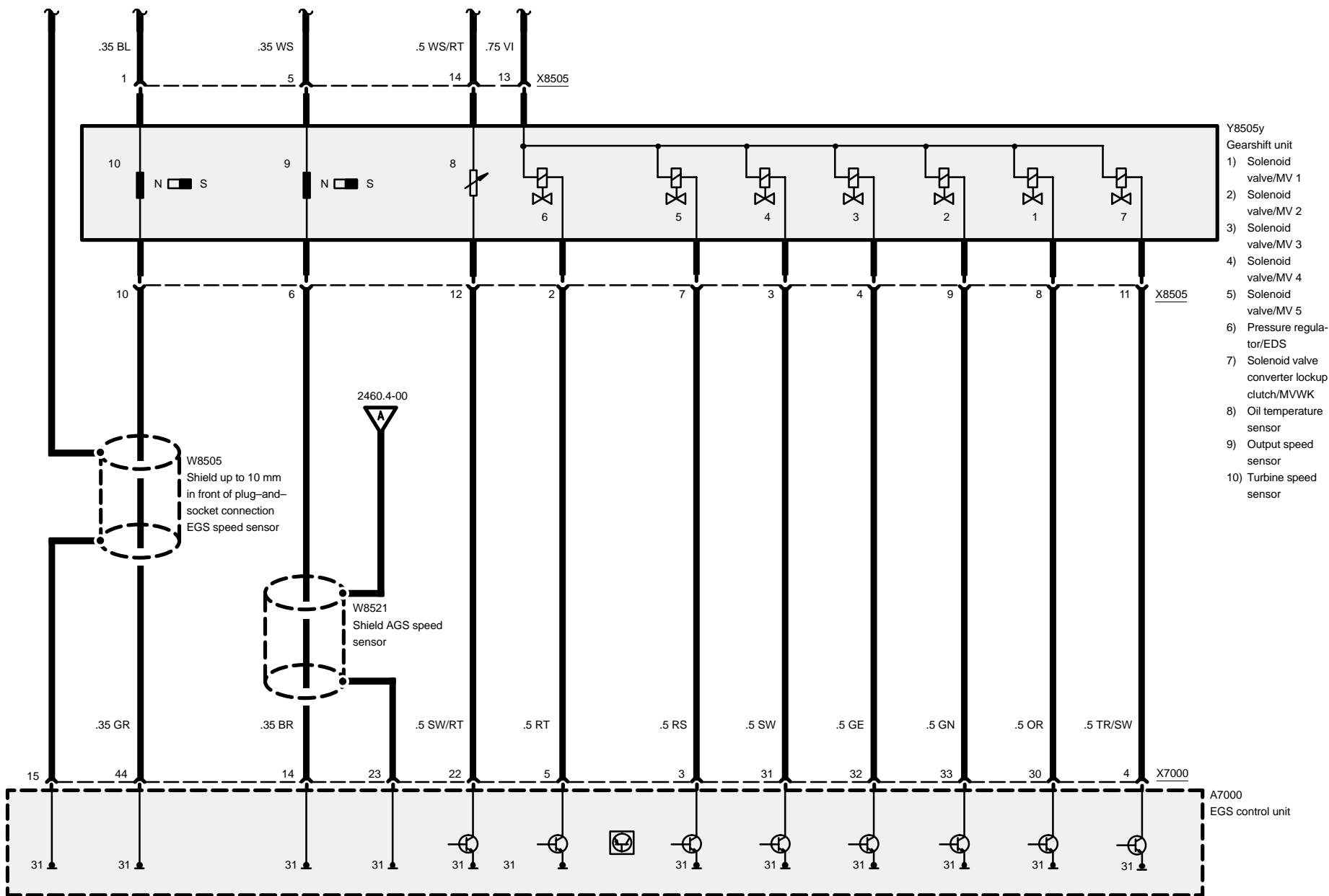


Pin assignments

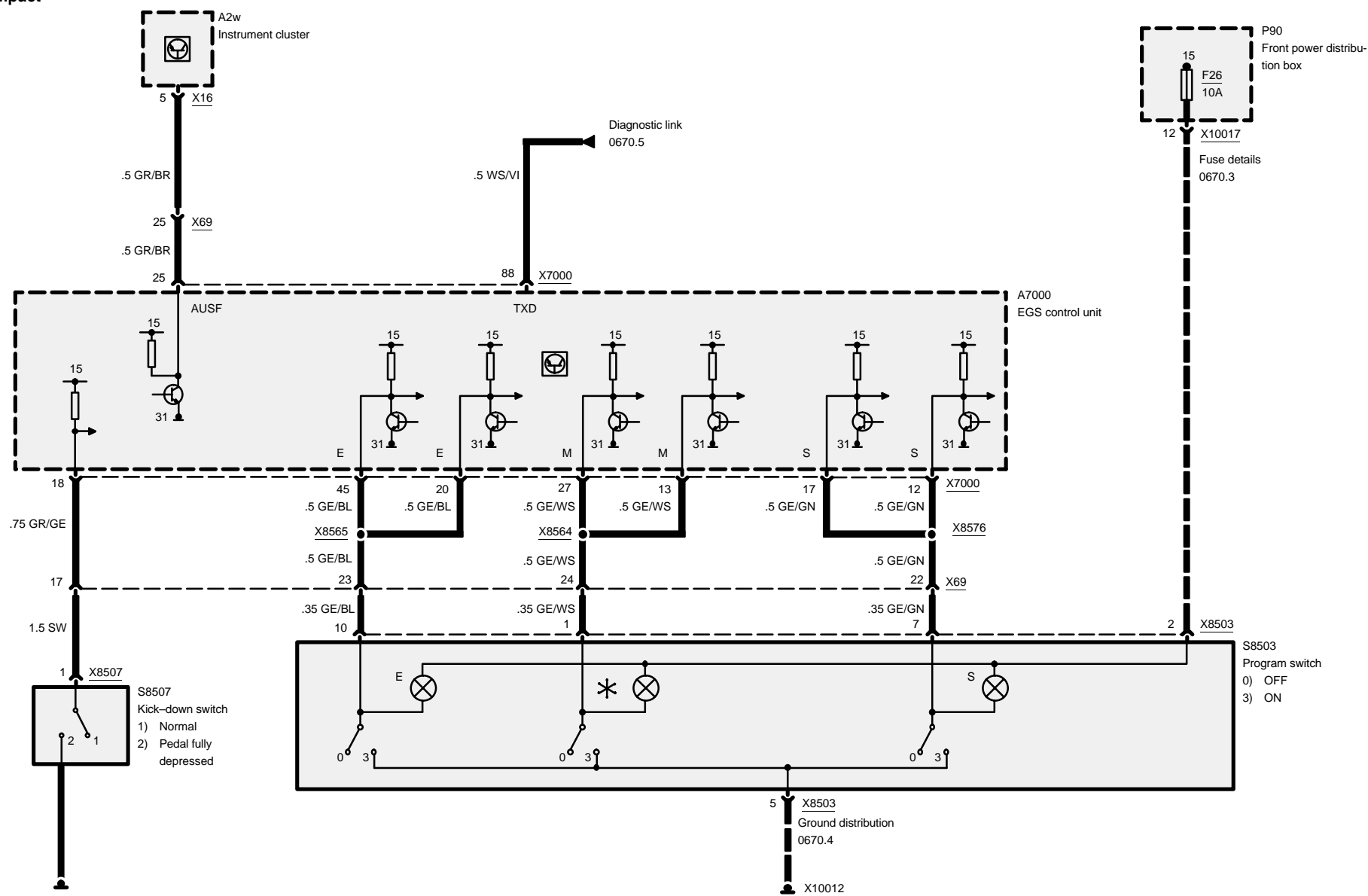
Pin	Type	Description/Function	Connection
69		Not used	
70		Not used	
71		Not used	
72		Not used	
73		Not used	
74		Not used	
75		Not used	
76		Not used	
77		Not used	
78		Not used	
79		Not used	
80		Not used	
81		Not used	
82	E/A	Jumper	
83	E/A	Jumper	
84		Not used	
85	E/A	CANCA-LOW	DME control unit
86	E/A	CANCA-HIGH	DME control unit
87		Not used	
88	E/A	TxD diagnostic link	Diagnostic connector

Electronic transmission control (EGS A5S 310Z)



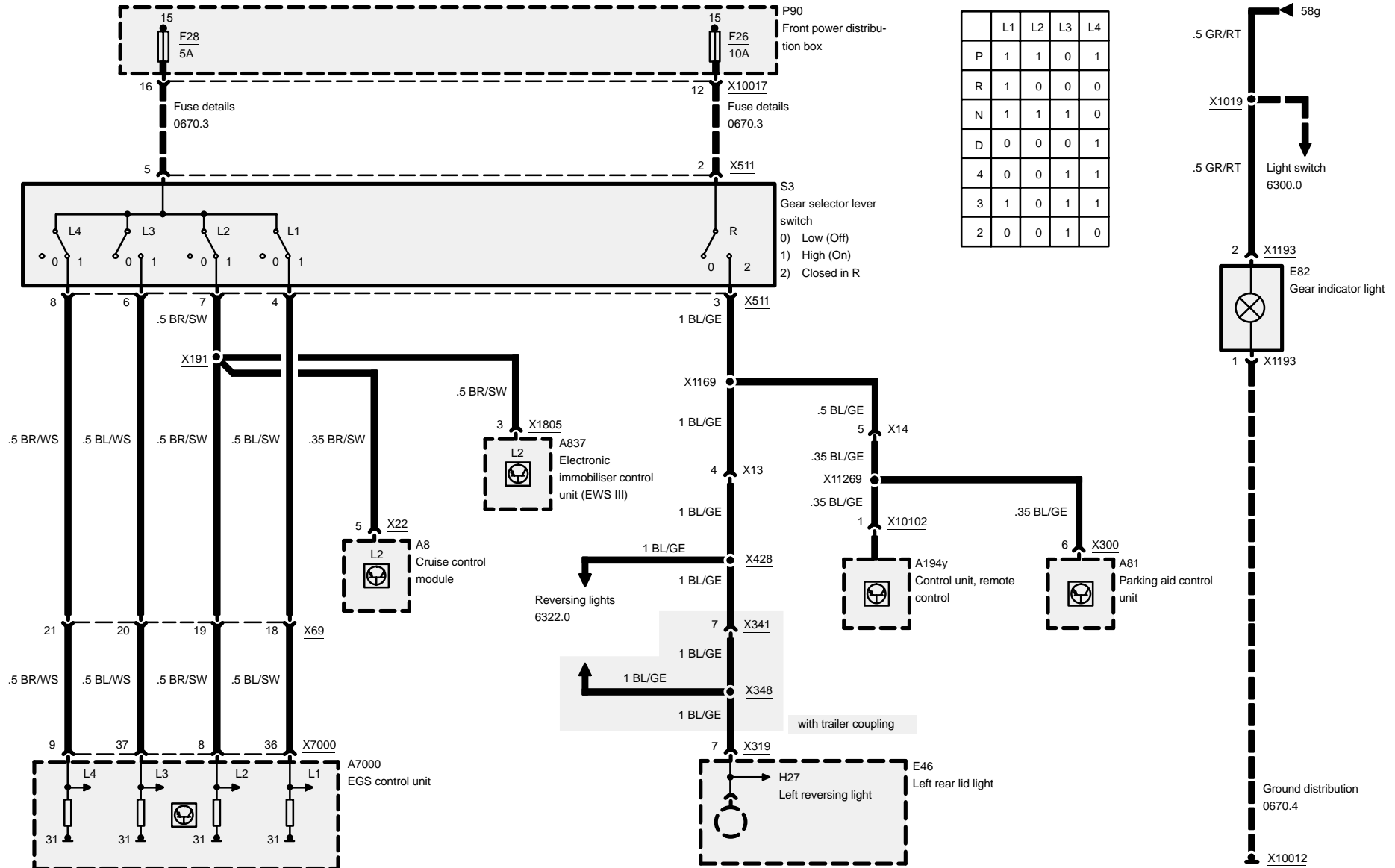


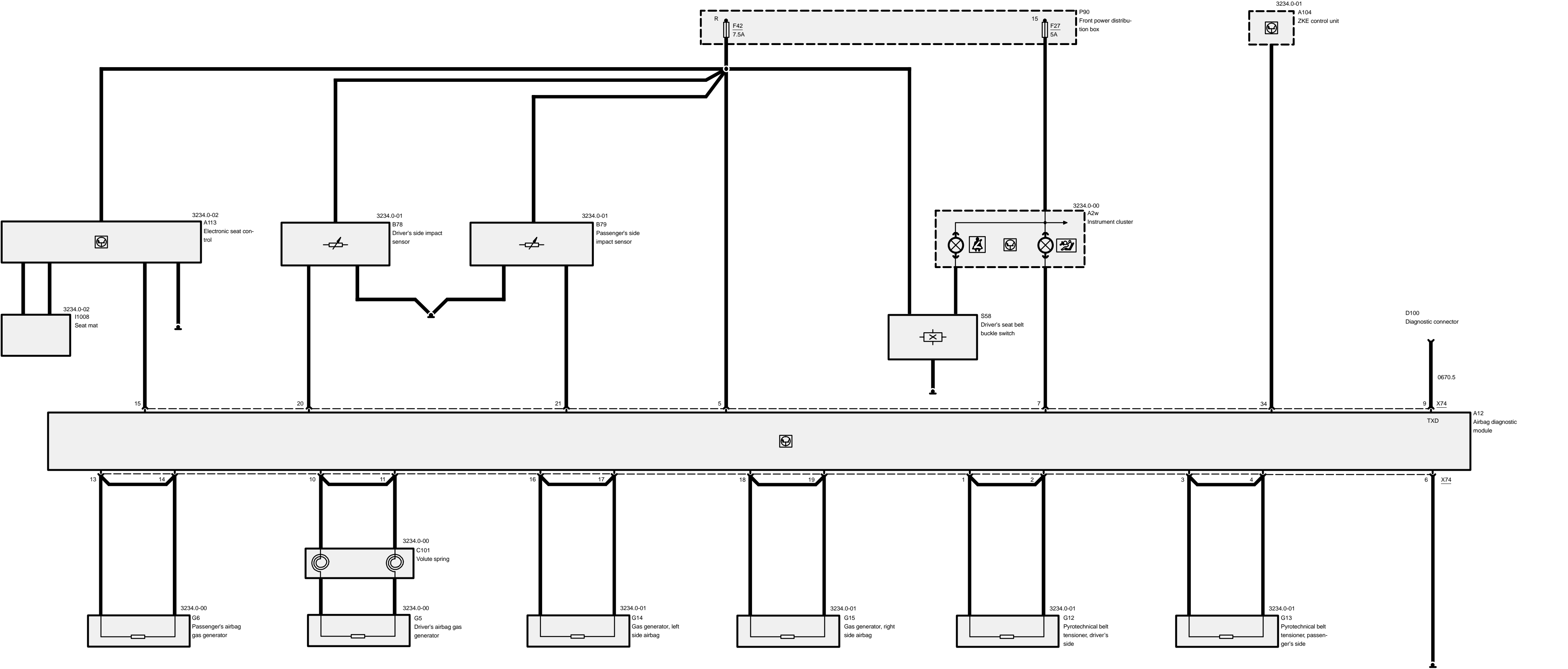
Electronic transmission control (EGS A5S 310Z)

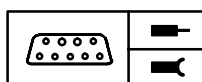




Electronic transmission control (EGS A5S 310Z)





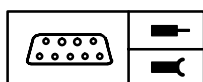


Pin assignments (Right-hand drive)

X74

Pin	Type	Description/Function	Connection
2	A	Pyrotechnical belt tensioner	Pyrotechnical belt tensioner, driver's side
3	A	Pyrotechnical belt tensioner	Pyrotechnical belt tensioner, driver's side
4	A	Pyrotechnical belt tensioner	Pyrotechnical belt tensioner, front passenger's side
5	A	Pyrotechnical belt tensioner	Pyrotechnical belt tensioner, front passenger's side
6	E	Supply voltage	Power distribution box, fuse 42
7	M	Ground	Ground connection
8	A	Airbag warning lamp	Instrument housing
9		Not used	
10	E/A	TxD diagnostic link	Diagnostic connector
11	A	Airbag (+)	Inflator assembly, driver's airbag
12	A	Airbag (-)	Inflator assembly, driver's airbag
13	A	Seat belt switch	Seat belt switch, driver's side
14	A	Airbag (+)	
15	A	Airbag (-)	Inflator assembly, front passenger's airbag
16	E	Seat occupancy electronics	Seat occupancy electronics
17	A	Inflator assembly	Inflator assembly, right side airbag
18	A	Inflator assembly	Inflator assembly, right side airbag
19	A	Inflator assembly	Inflator assembly, left side airbag
20	A	Inflator assembly	Inflator assembly, left side airbag
21	E	Impact sensor	Impact sensor, driver's side
22	E	Impact sensor	Impact sensor, front passenger's side
23		Not used	
24		Not used	
25		Not used	
26		Not used	
27		Not used	
28		Not used	
29		Not used	
30		Not used	
31		Not used	
32		Not used	

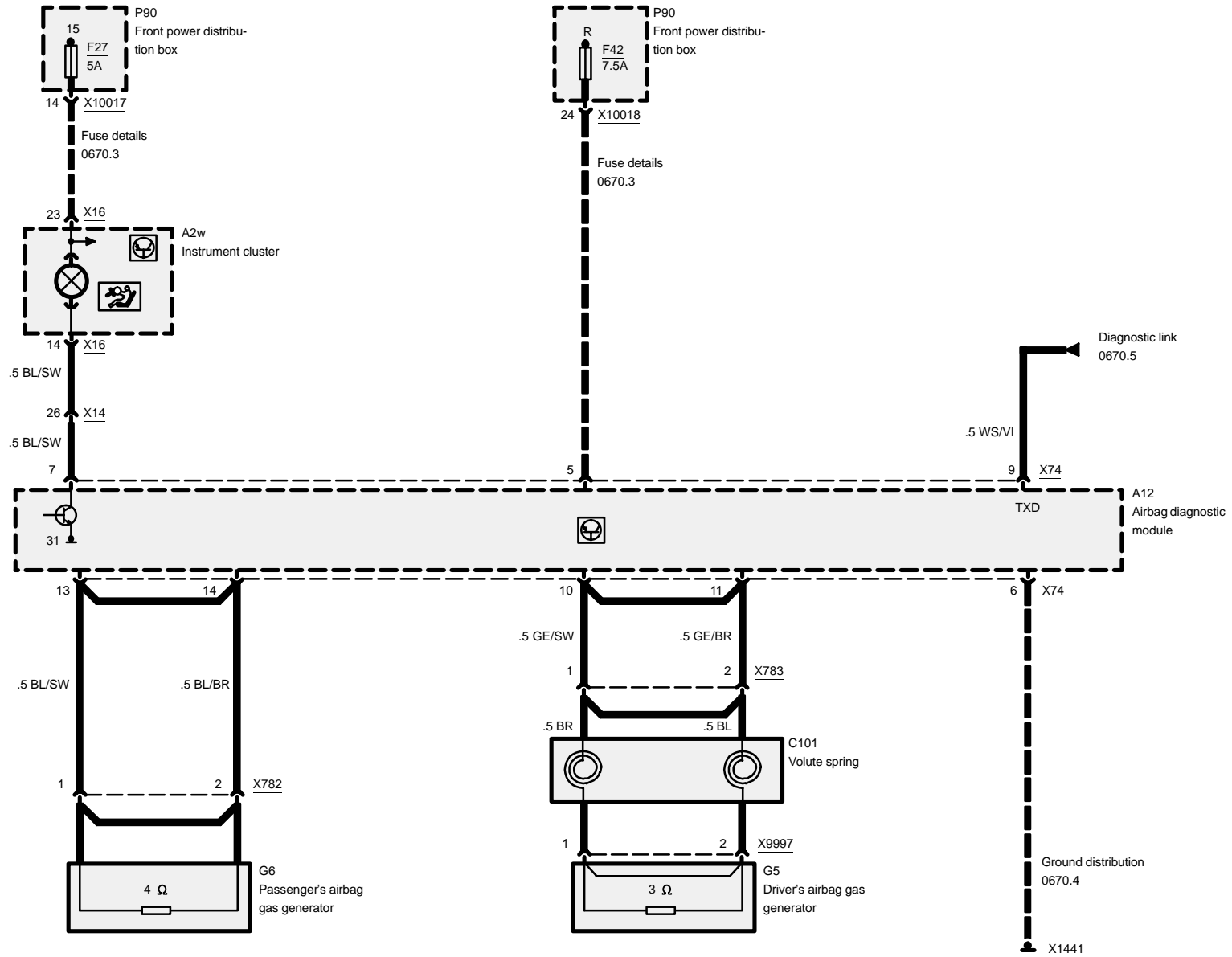
E = Input, A = Output, M = Ground



Pin assignments (Right-hand drive)

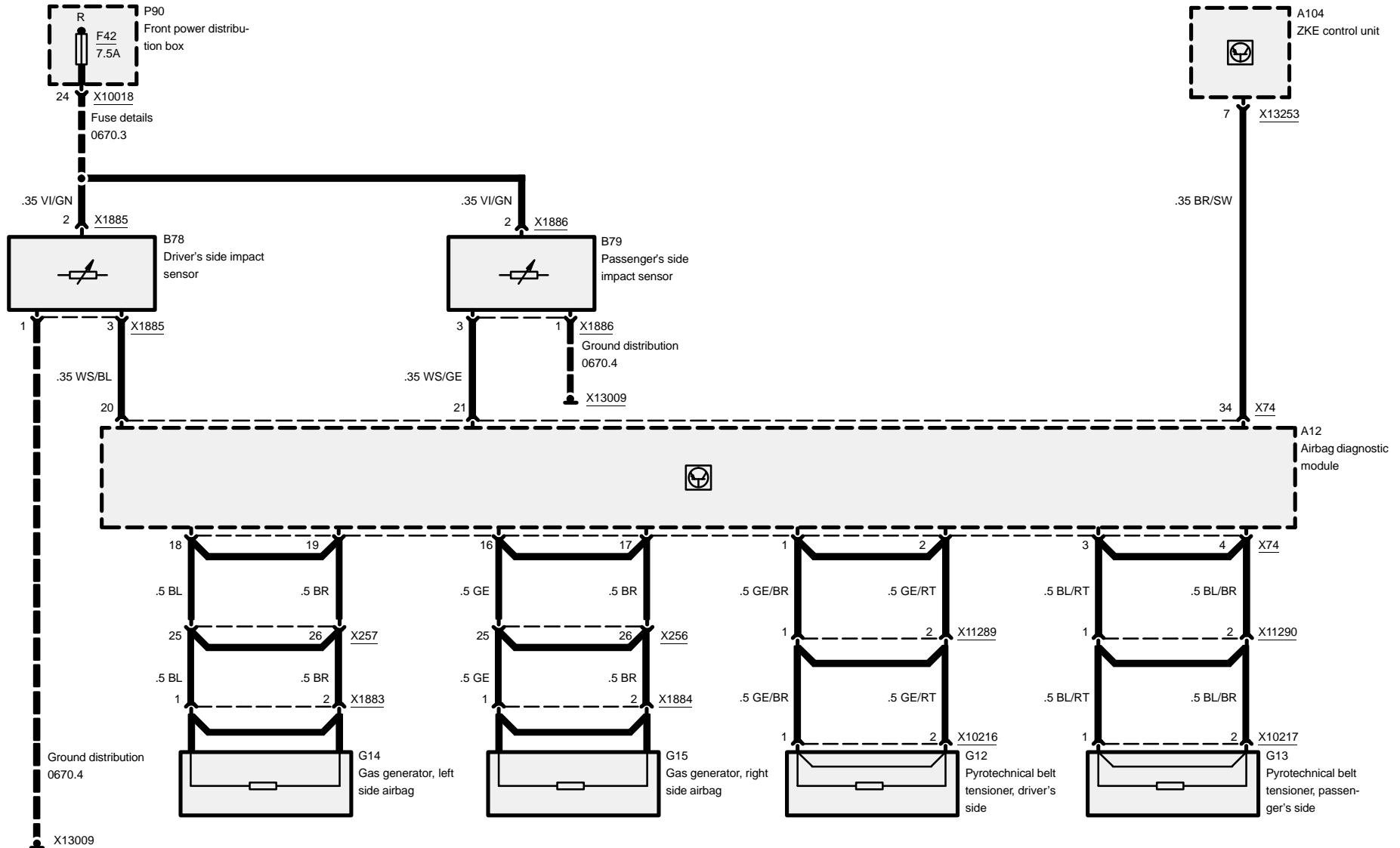
Pin	Type	Description/Function	Connection
33		Not used	
34		Not used	
35	A	Crash signal	ZKE control unit/central locking module (ZVM)
36		Not used	
37		Not used	
38		Not used	
39		Not used	
40		Not used	
41		Not used	
42		Not used	
43		Not used	
44		Not used	
45		Not used	
46		Not used	
47		Not used	
48		Not used	
49		Not used	
50		Not used	
51		Not used	

Airbag (AB)



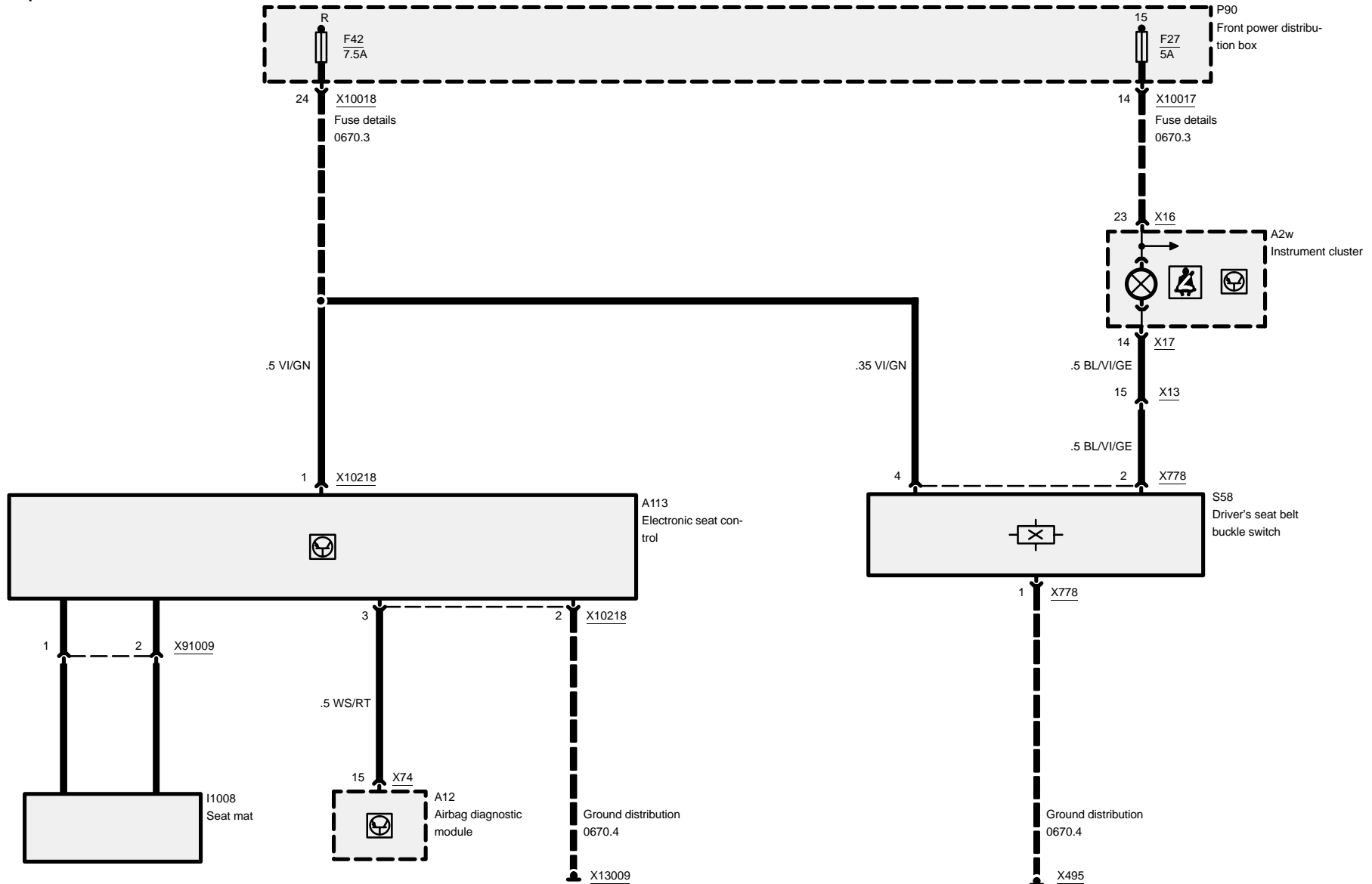
Airbag (AB) Side airbag

Right-hand drive

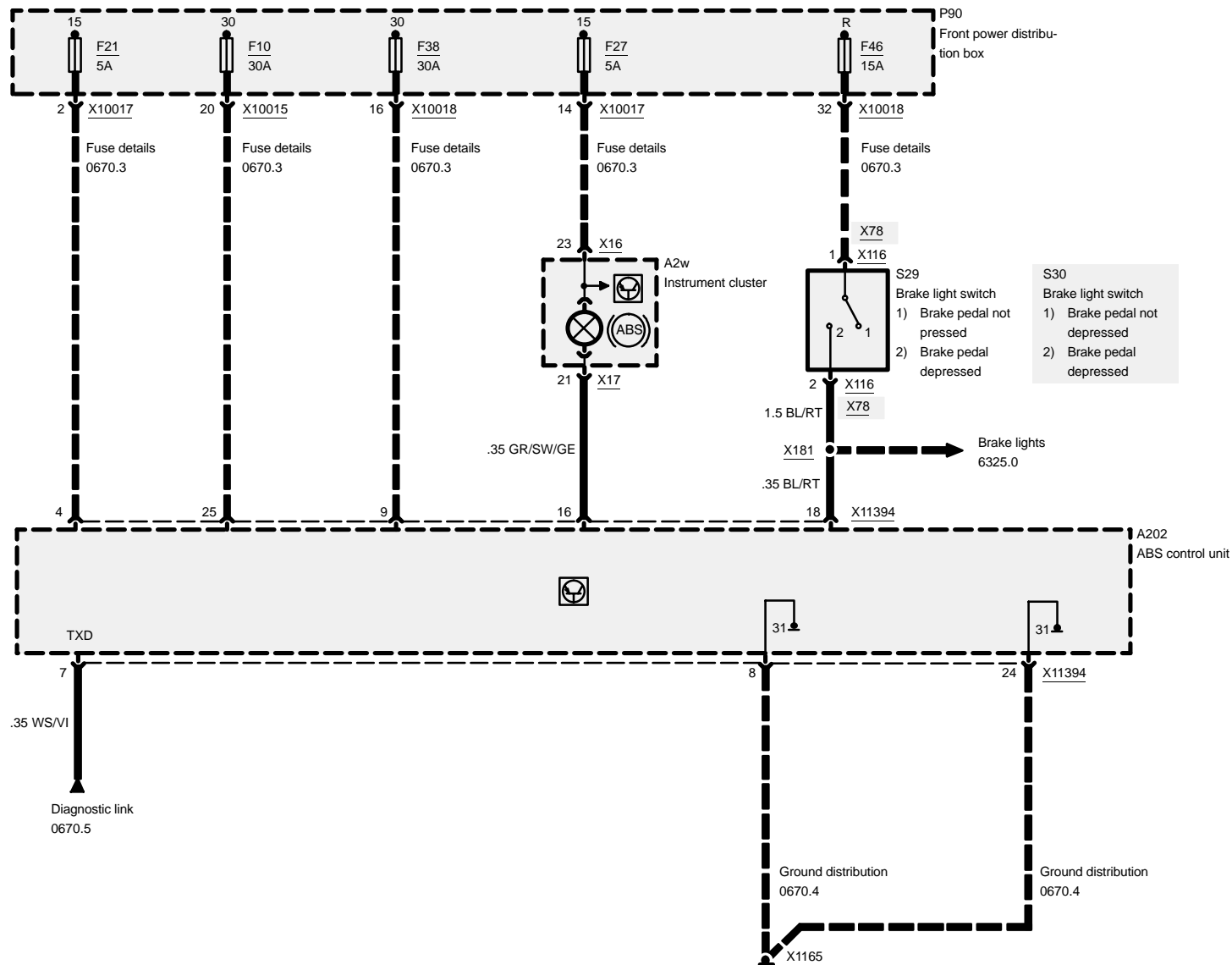


Airbag (AB)

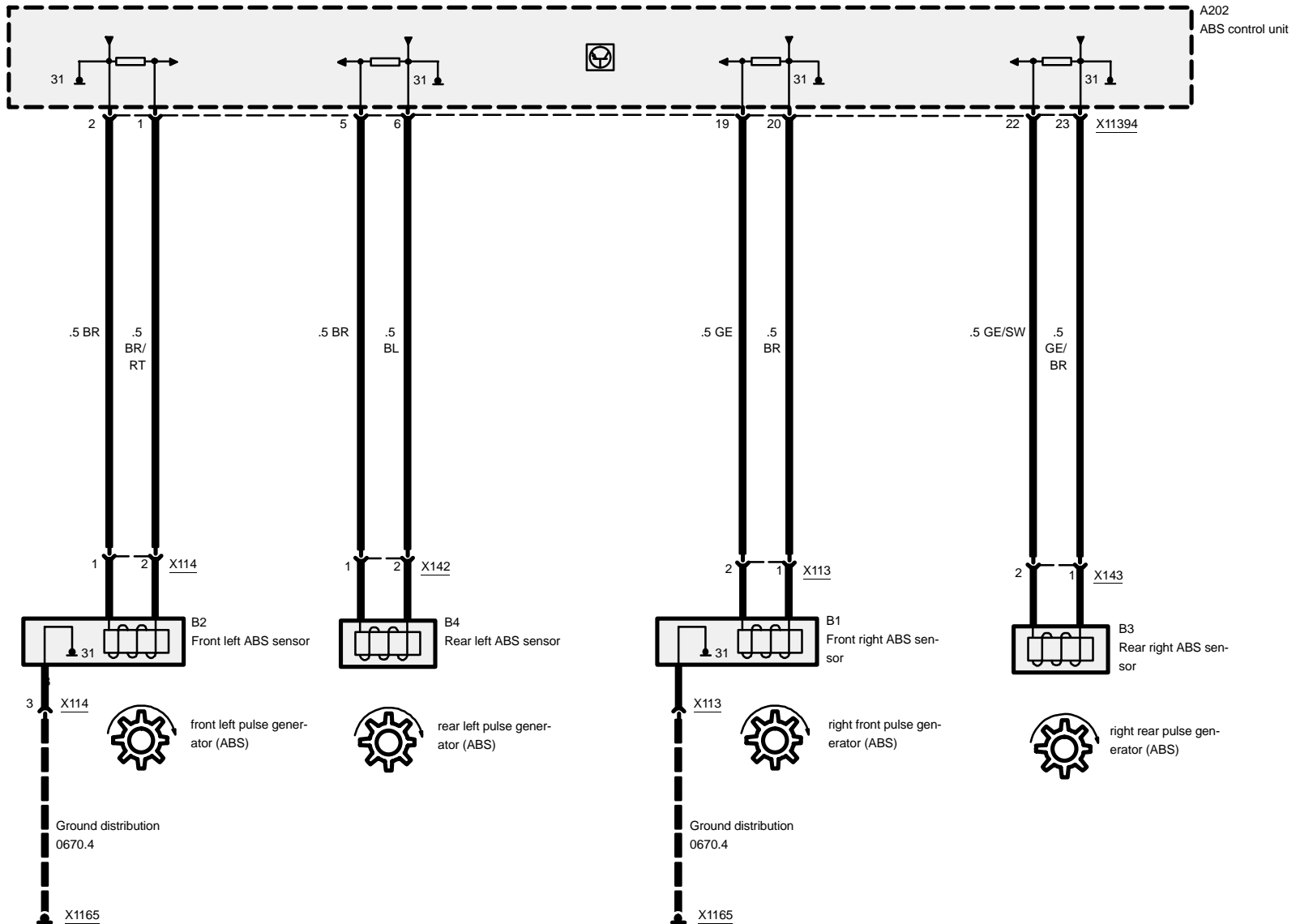
Right-hand drive



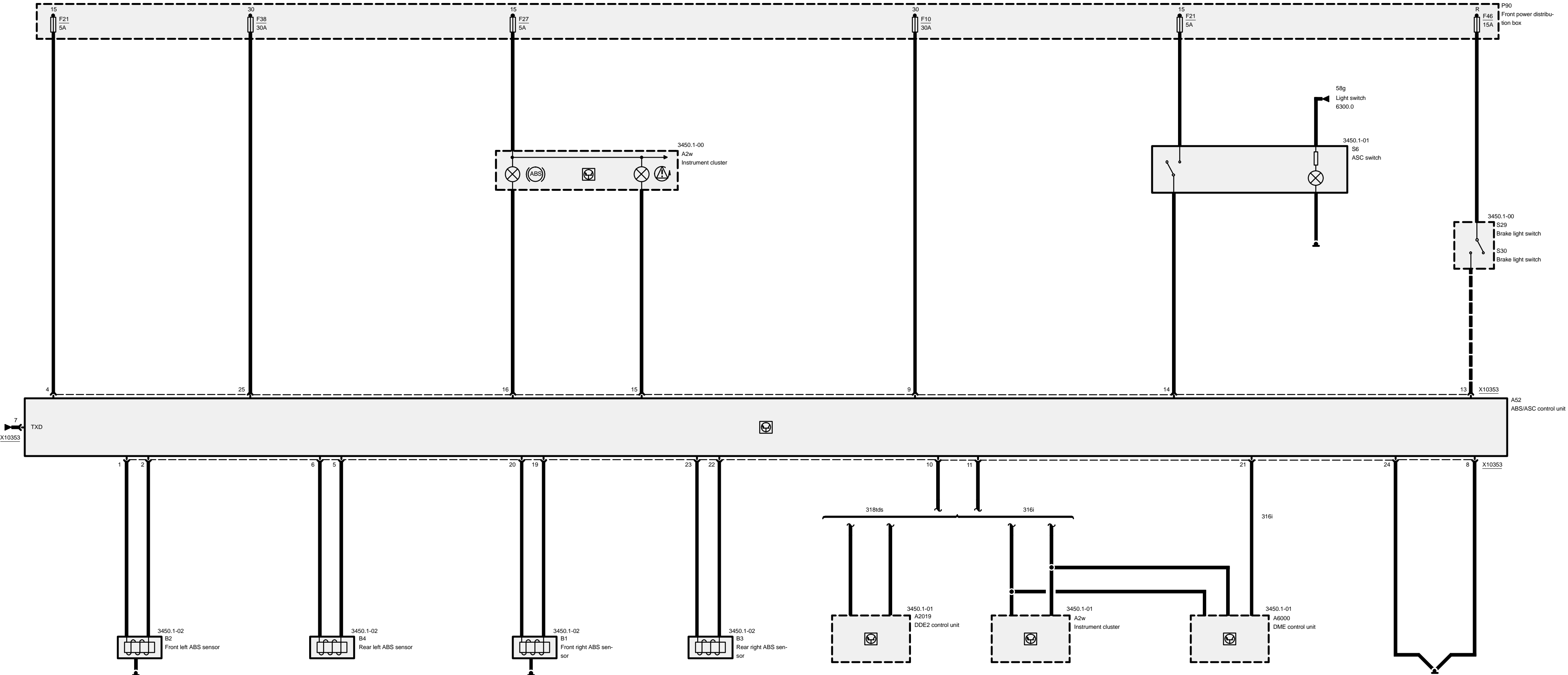
3450.0 Antilock brake system (ABS)



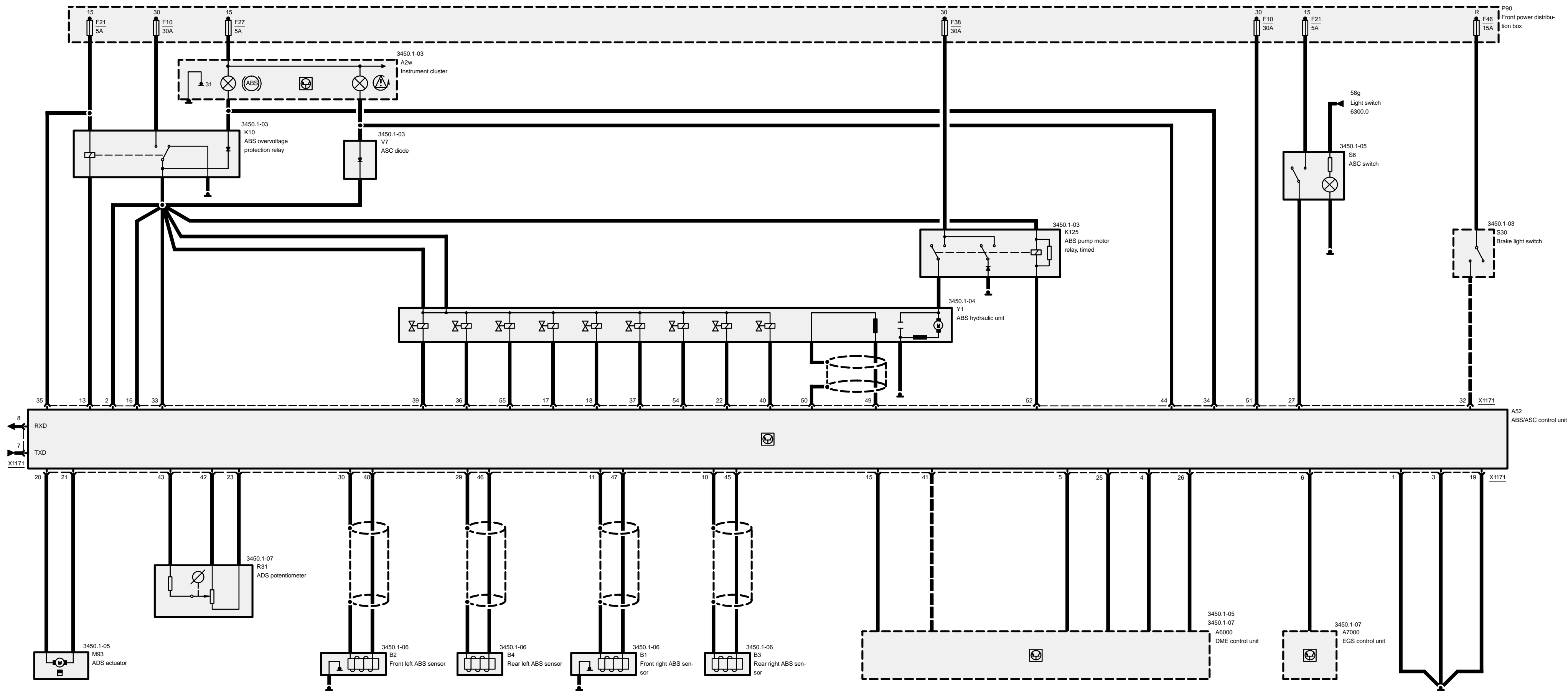
Antilock brake system (ABS)

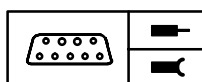


4-cylinder



6-cylinder



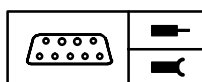


Pin assignments (4-cylinder)

X10353

Pin	Type	Signal	Description/Function	Connection
1	A	VL-	Speed sensor ground, front left	Speed sensor, front left
2	E	VL+	Signal, speed sensor, front left	Speed sensor, front left
3			Not used	
4	E	15<21	Terminal 15	Fuse 21
5	A	HL-	Speed sensor ground, rear left	Speed sensor, rear left
6	E	HL+	Signal, speed sensor, rear left	Speed sensor, rear left
7	E/A	TXD	TxD diagnostic link	Diagnostic connector
8	M	31L	Component ground	Ground connection
9	E	30<10	Terminal 30	Fuse 10
10	E/A	CAN-	CAN-	DME/DDE2 control unit
11	E/A	CAN+	CAN+	DME/DDE2 control unit
12			Not used	
13	E	KL.54	Terminal 54	Brake light switch
14	E	ASCS	ASC ON signal	ASC switch
15	A	WLASC	ASC warning lamp	Instrument cluster
16	A	WLABS	ABS warning lamp	Instrument cluster
17			Not used	
18			Not used	
19	A	VR-	Speed sensor ground, front right	Speed sensor, front right
20	E	VR+	Signal, speed sensor, front right	Speed sensor, front right
21	A	RROUT	Speed signal, RR	DME/DDE control unit
22	E	HR+	Signal, speed sensor, rear right	Speed sensor, rear right
23	A	HR-	Speed sensor ground, rear right	Speed sensor, rear right
24	M	31L	Component ground	Ground connection
25	E	30<38	Terminal 30	Fuse 38

E = Input, A = Output, M = Ground

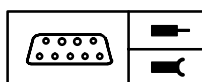


Pin assignments (6-cylinder)

X1171

Pin	Type	Description/Function	Connection
2	M	Component ground	Ground connection
3	E	Operating voltage	ABS overvoltage protection relay
4	M	Component ground	Ground connection
5	E	Signal, traction control system	DME control unit
6	A	EML signal	DME control unit
7	A	Transmission intervention	EGS control unit
8	E/A	TxD diagnostic link	Diagnostic connector
9	A	RxD diagnostic link	Diagnostic connector
10		Not used	
11	A	Speed sensor ground, rear right	Speed sensor, rear right
12	A	Speed sensor ground, front right	Speed sensor, front right
13		Not used	
14	A	ABS overvoltage protection relay	ABS overvoltage protection relay
15		Not used	
16	A	ASC signal	DME control unit
17	E	Operating voltage	ABS overvoltage protection relay
18	A	Actuation, rear left inlet valve	ABS hydraulic unit
19	A	Activation, rear left outlet valve	ABS hydraulic unit
20	M	Component ground	Ground connection
21	A	ADS actuator	ADS actuator
22	A	ADS actuator	ADS actuator
23	A	Inlet valve drive, front right	ABS hydraulic unit
24	E	ASC throttle valve potentiometer	ASC throttle valve potentiometer
25		Not used	
26	E	Signal, engine drag torque control	DME control unit
27	A	Throttle valve position	DME control unit
28	E	ASC switch signal	ASC switch
29		Not used	
30	A	Speed sensor ground, rear left	Speed sensor, rear left
31	A	Speed sensor ground, front left	Speed sensor, front left
32		Not used	
33	E	Terminal 54	Brake light switch
34	E	Operating voltage	ABS overvoltage protection relay

E = Input, A = Output, M = Ground



Pin assignments (6-cylinder)

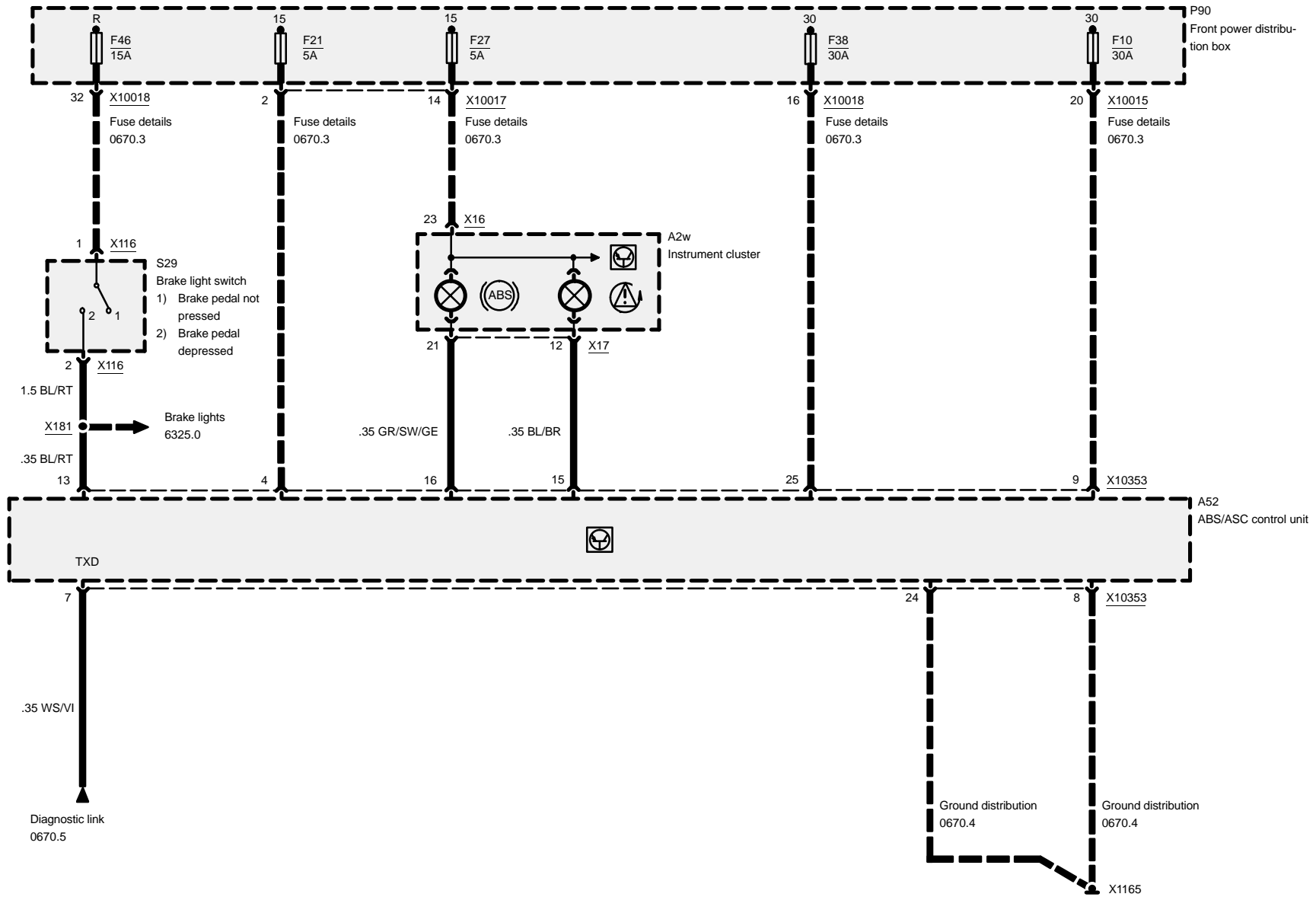
Pin	Type	Description/Function	Connection
35	A	Activation, ABS warning lamp	Instrument cluster
36	E	Terminal 15	Fuse 21
37	A	Separating valve	ABS hydraulic unit
38	A	Actuation, front right outlet valve	ABS hydraulic unit
39		Not used	
40	A	Inlet valve drive, rear right	ABS hydraulic unit
41	A	Inlet valve drive, front left	ABS hydraulic unit
42	E	Vehicle speed signal	DME control unit
43	E	ASC throttle valve potentiometer	ASC throttle valve potentiometer
44	E	ASC throttle valve potentiometer	ASC throttle valve potentiometer
45	A	ASC warning lamp drive	Instrument cluster
46	E	Signal, speed sensor, rear right	Speed sensor, rear right
47	E	Signal, speed sensor, rear left	Speed sensor, rear left
48	E	Signal, speed sensor, front right	Speed sensor, front right
49	E	Signal, speed sensor, front left	Speed sensor, front left
50	E	Signal, pump motor sensor	ABS hydraulic unit
51	E	Shield, pump motor sensor	ABS hydraulic unit
52	E	Voltage supply (+)	Fuse 10
53	A	ABS pump motor relay	ABS pump motor relay
54		Not used	
55	A	Outlet valve drive, front left	ABS hydraulic unit
56	A	Actuation, front right outlet valve	ABS hydraulic unit



compact

Automatic stability control (ASC)

4-cylinder

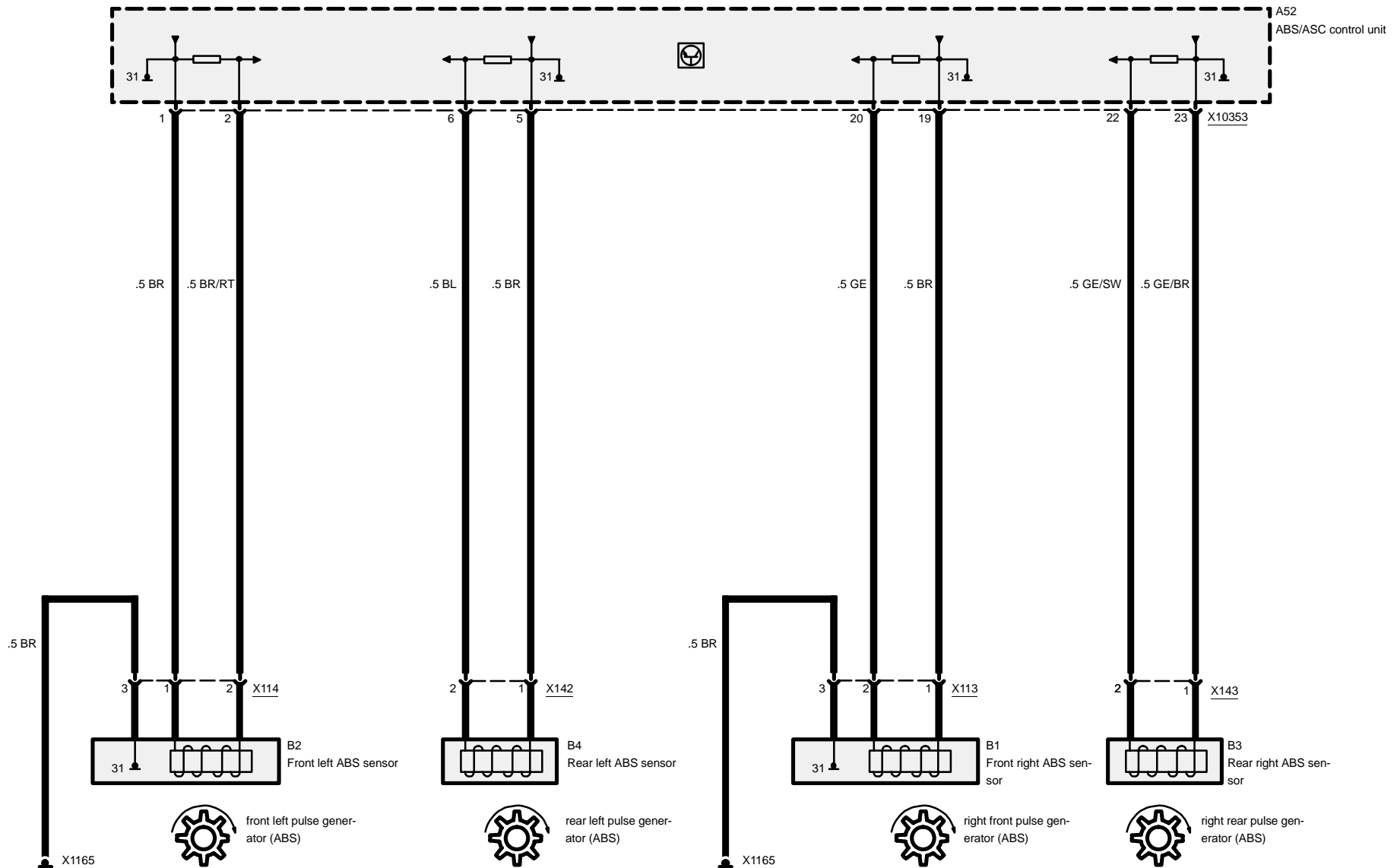




4-cylinder



2000

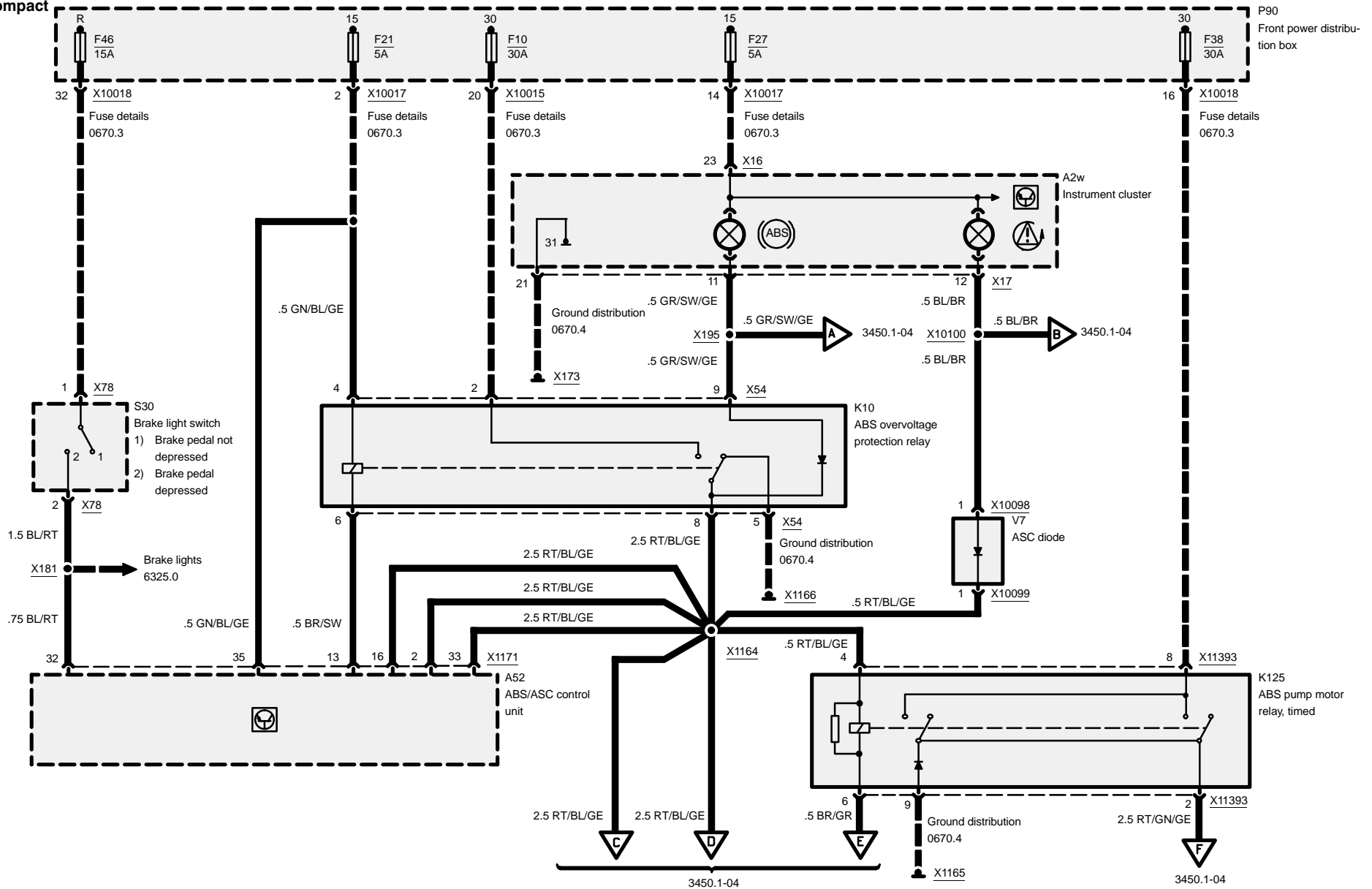


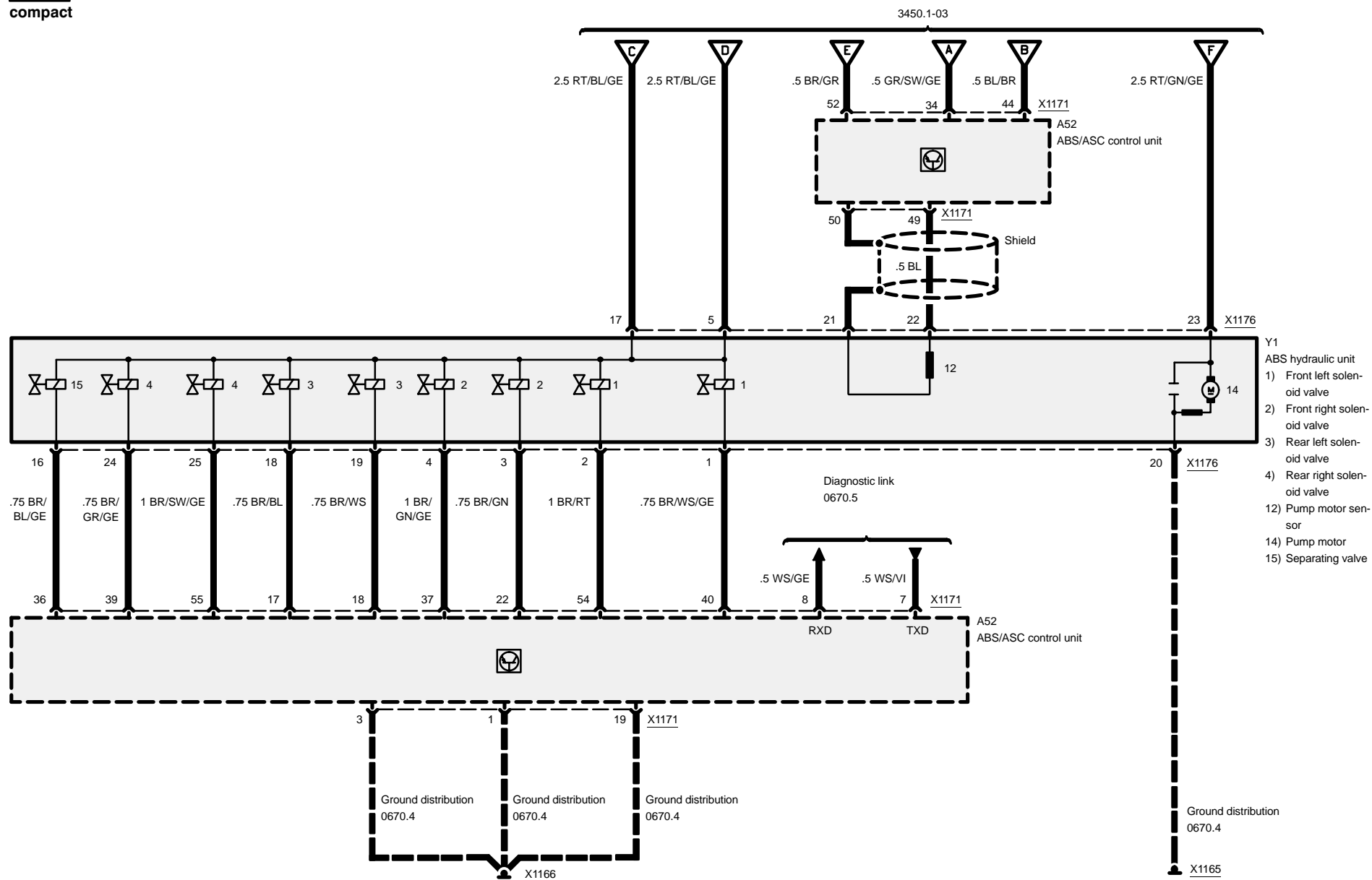


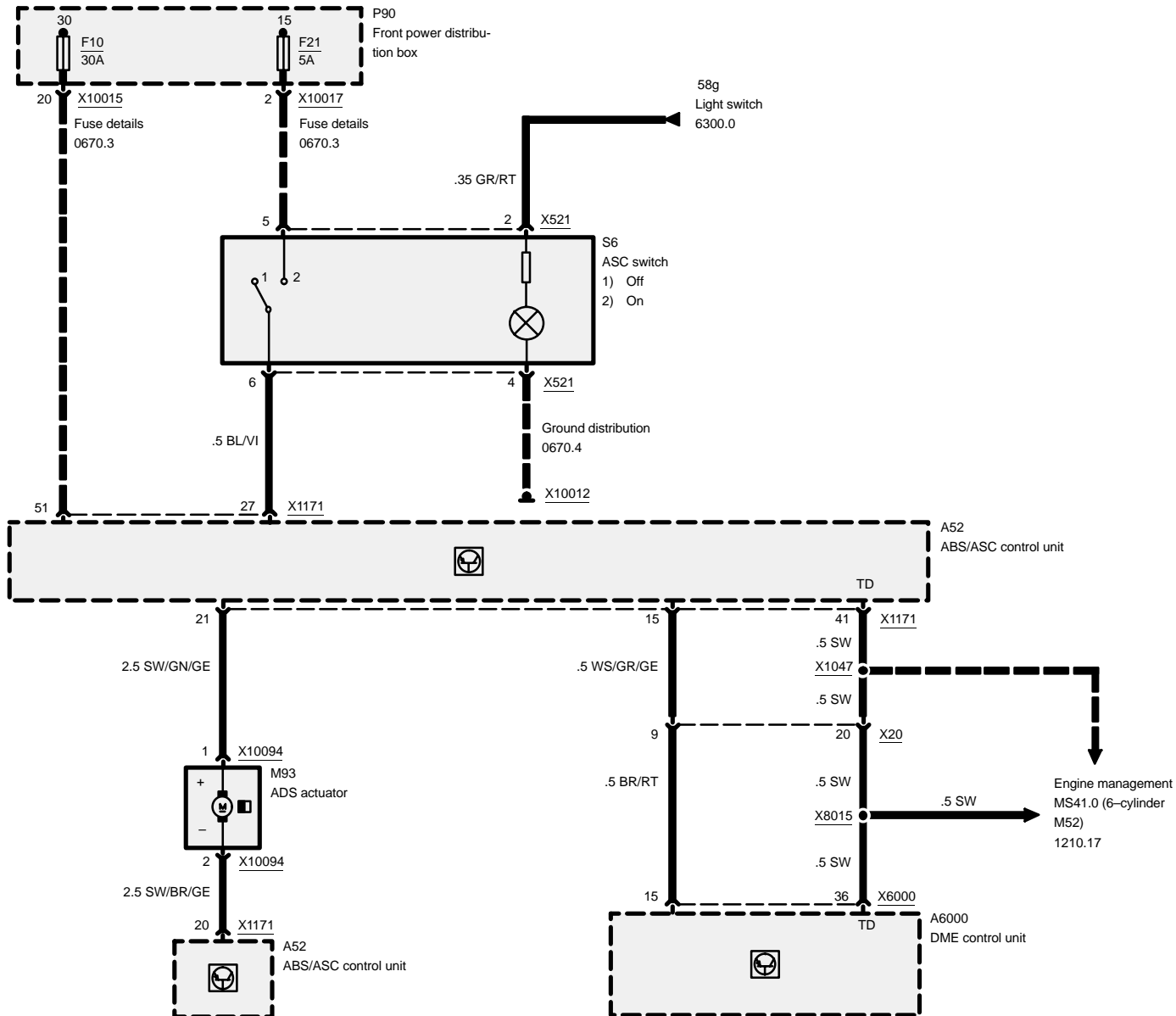
compact

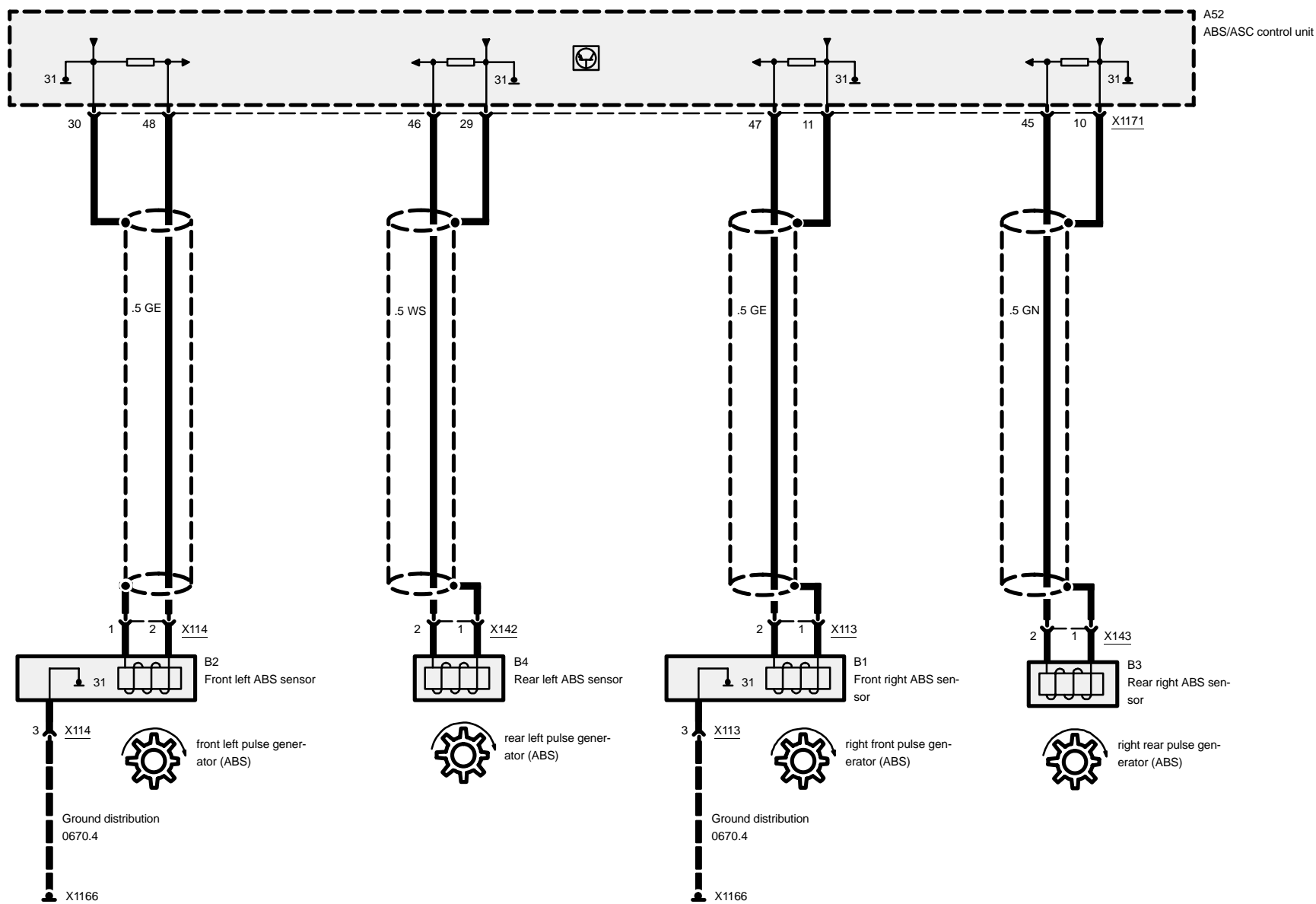
Automatic stability control (ASC)

6-cylinder







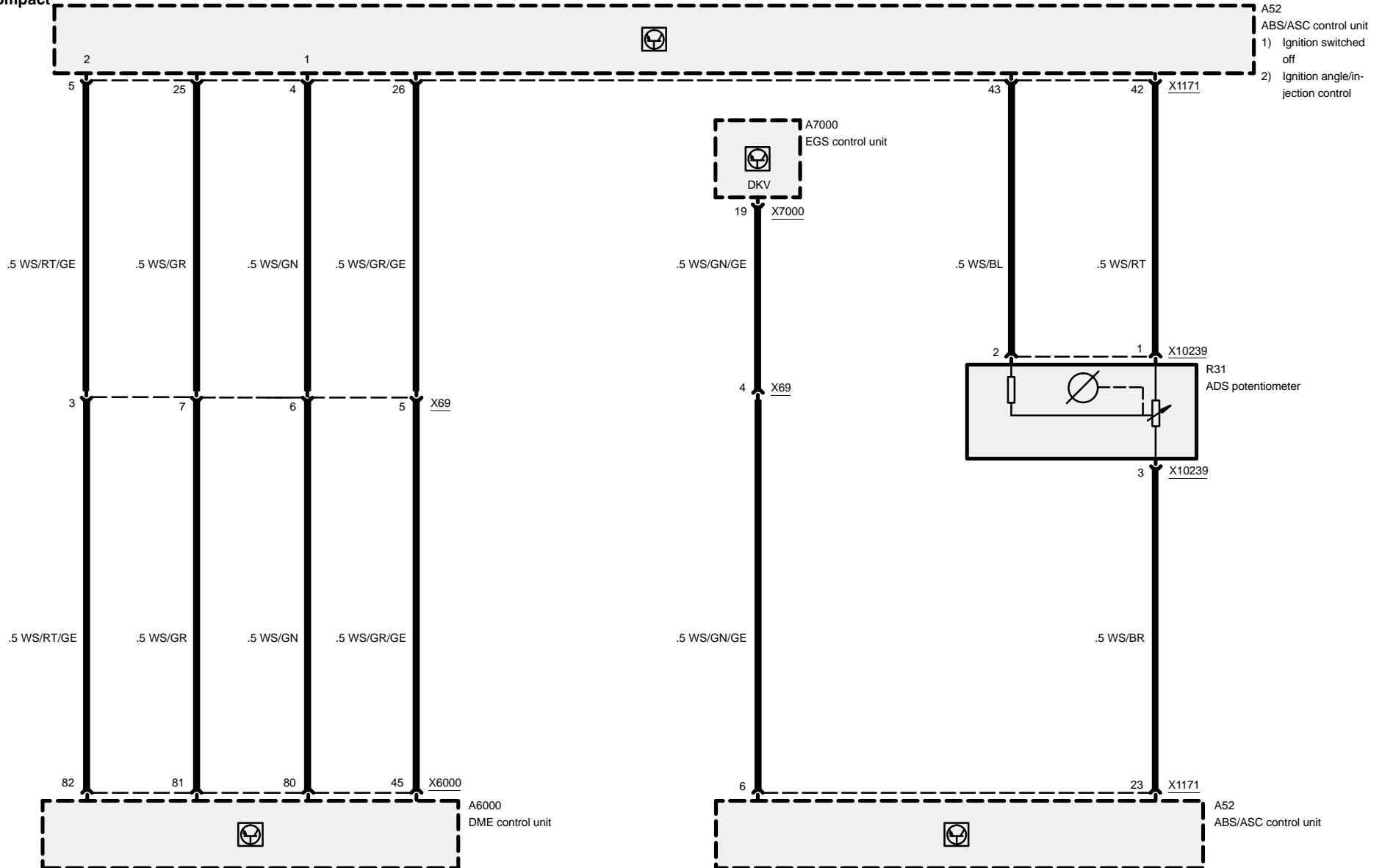




Automatic stability control (ASC)

6-cylinder

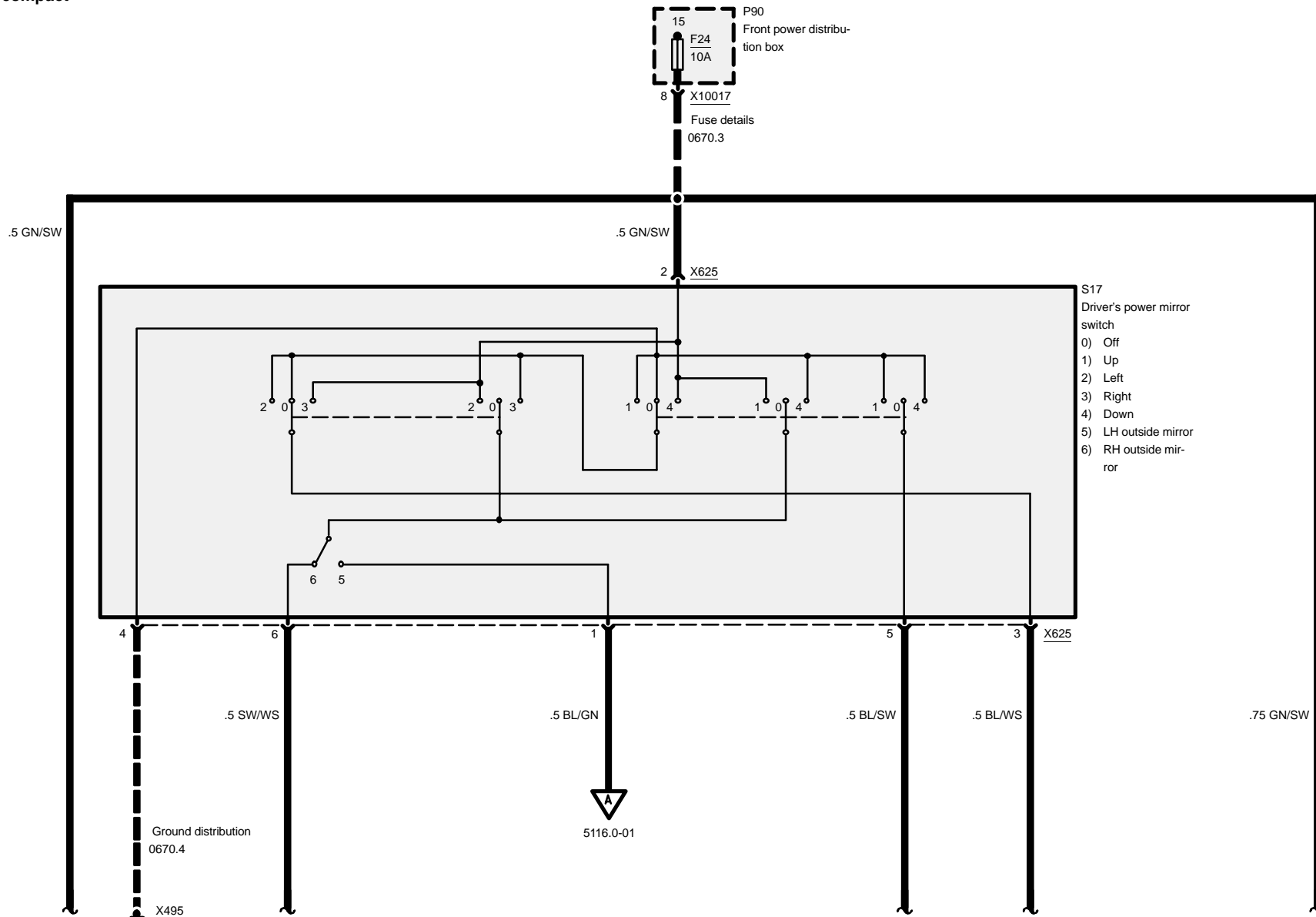
compact

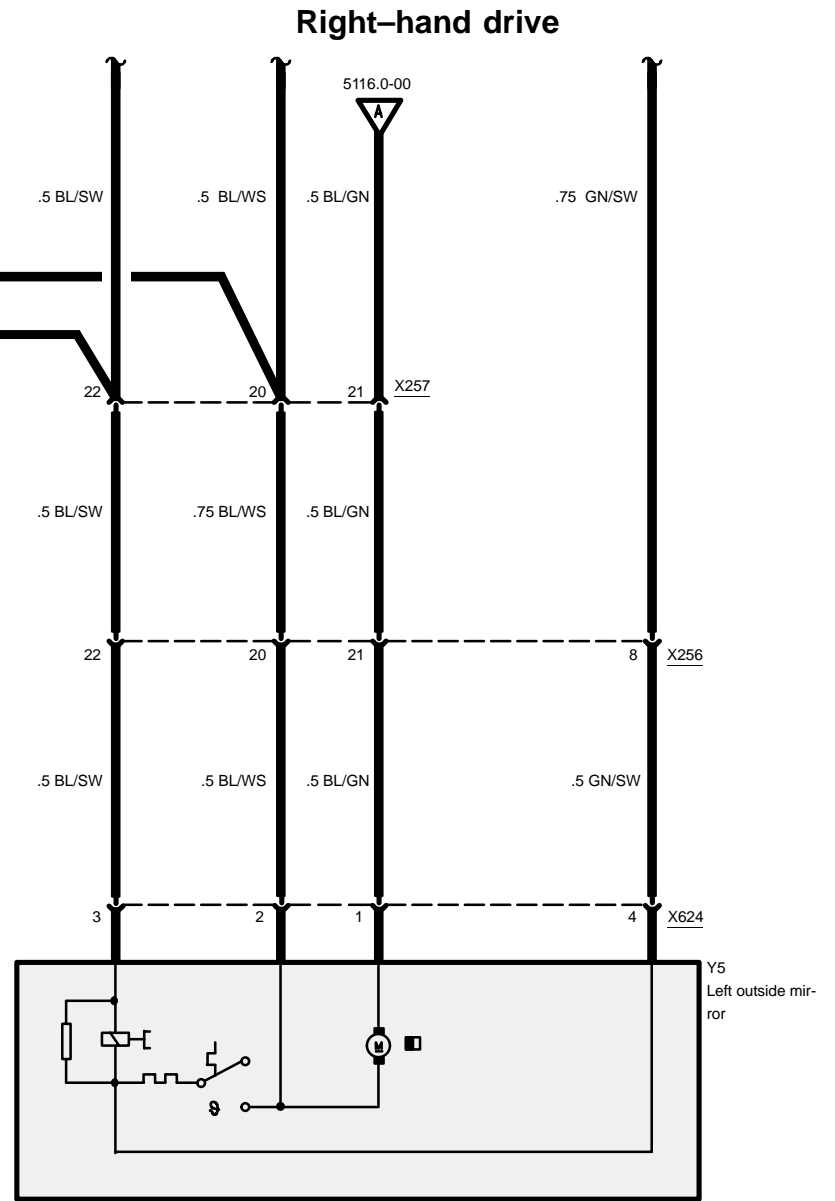
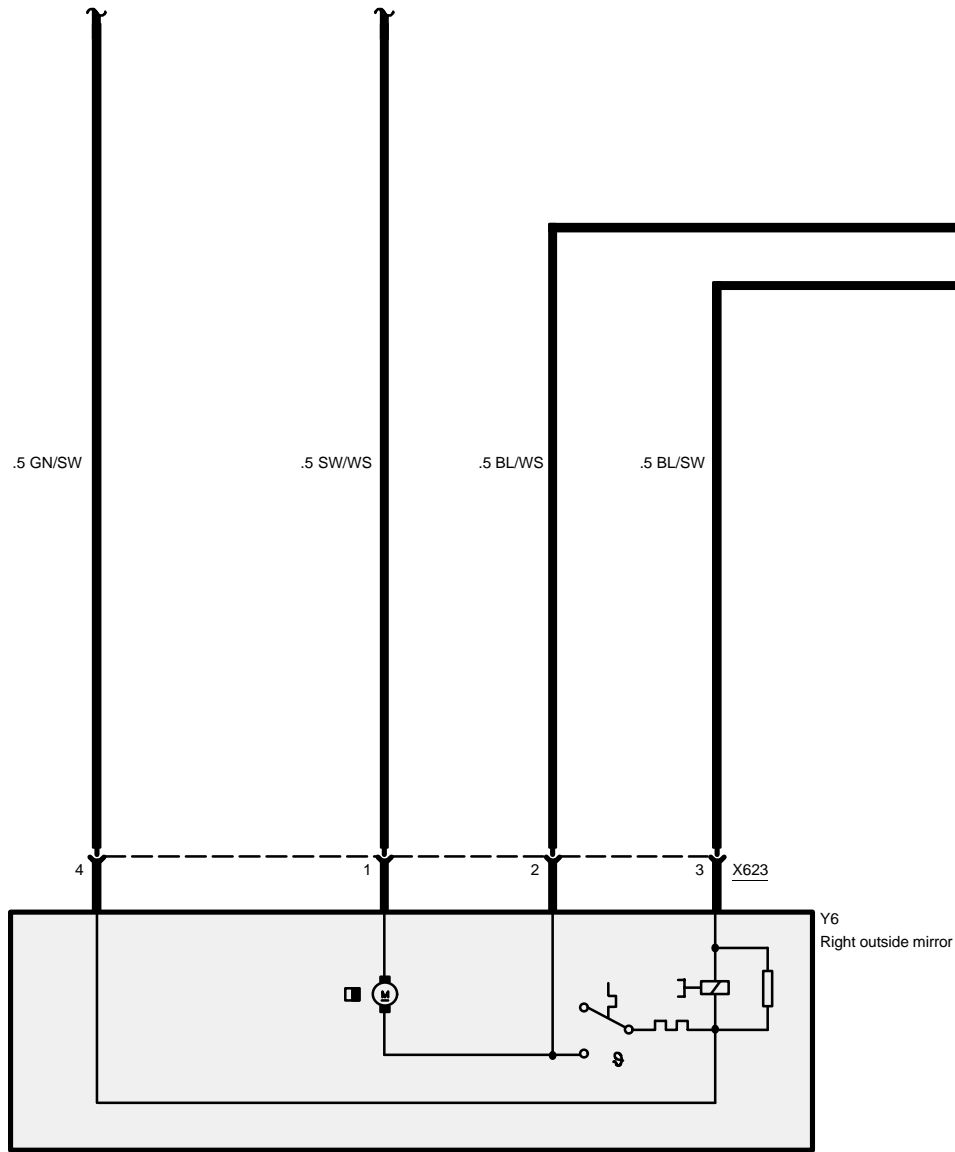


5116.0 Power mirrors

Outside mirror

Right-hand drive

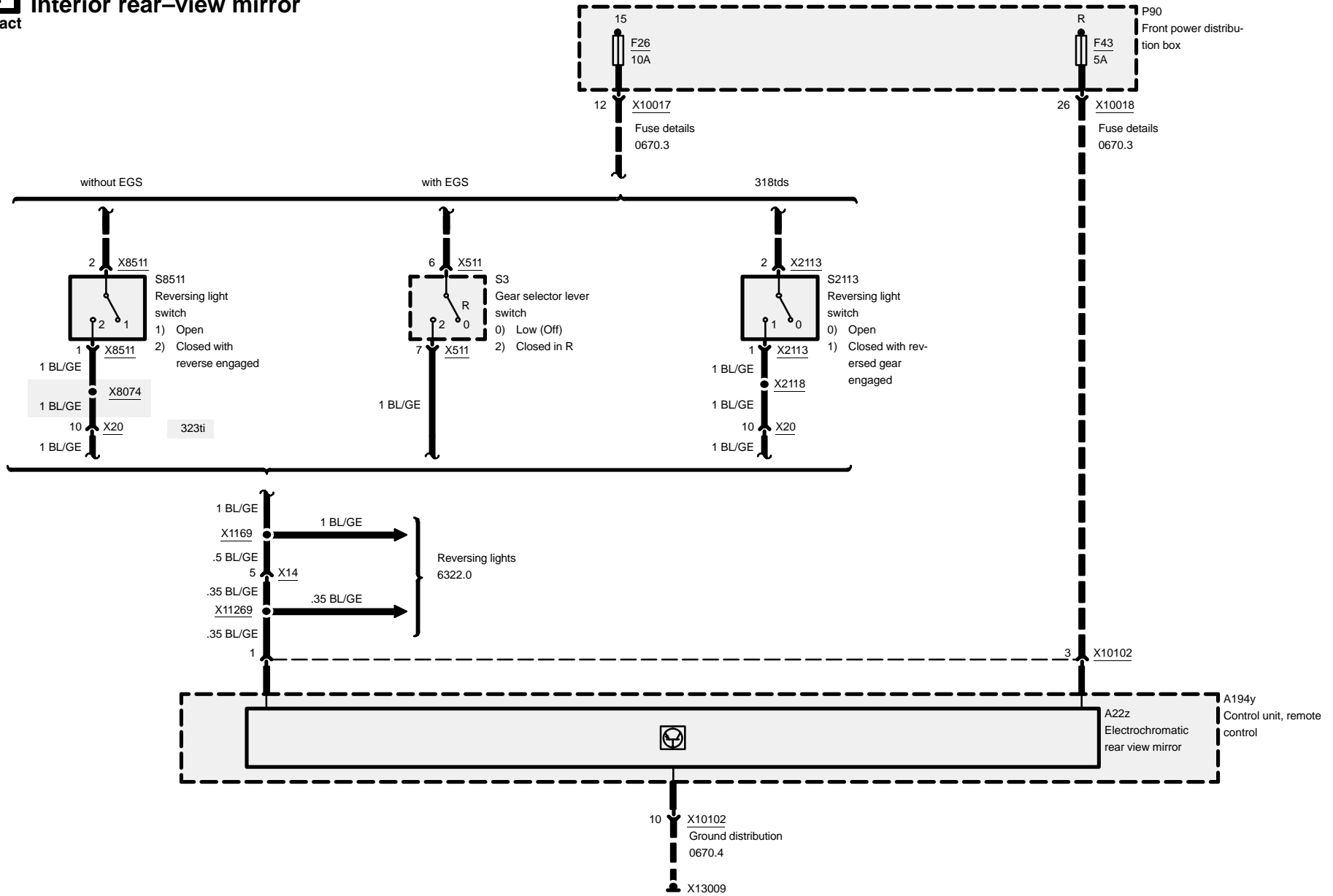




Power mirrors

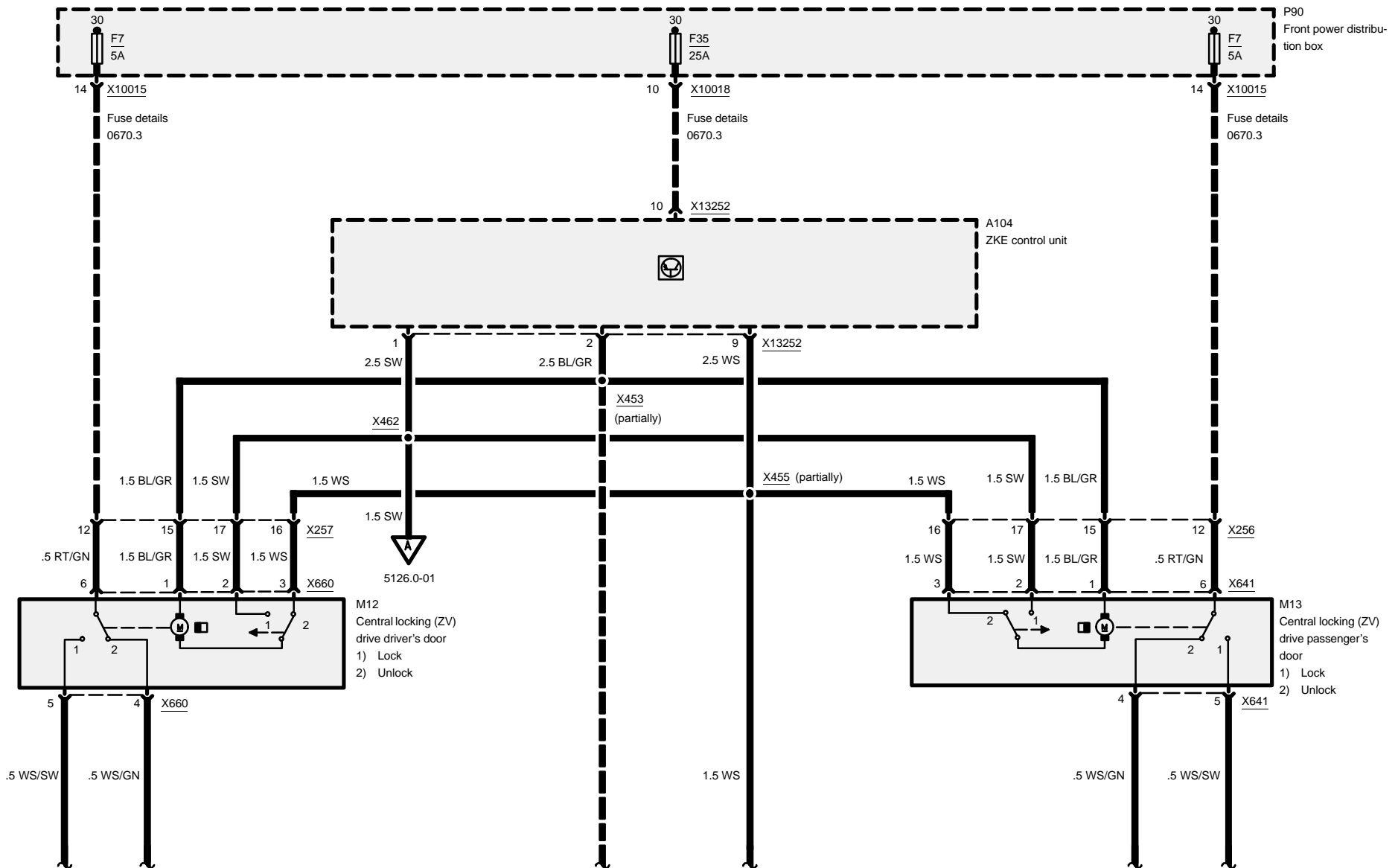
Interior rear-view mirror

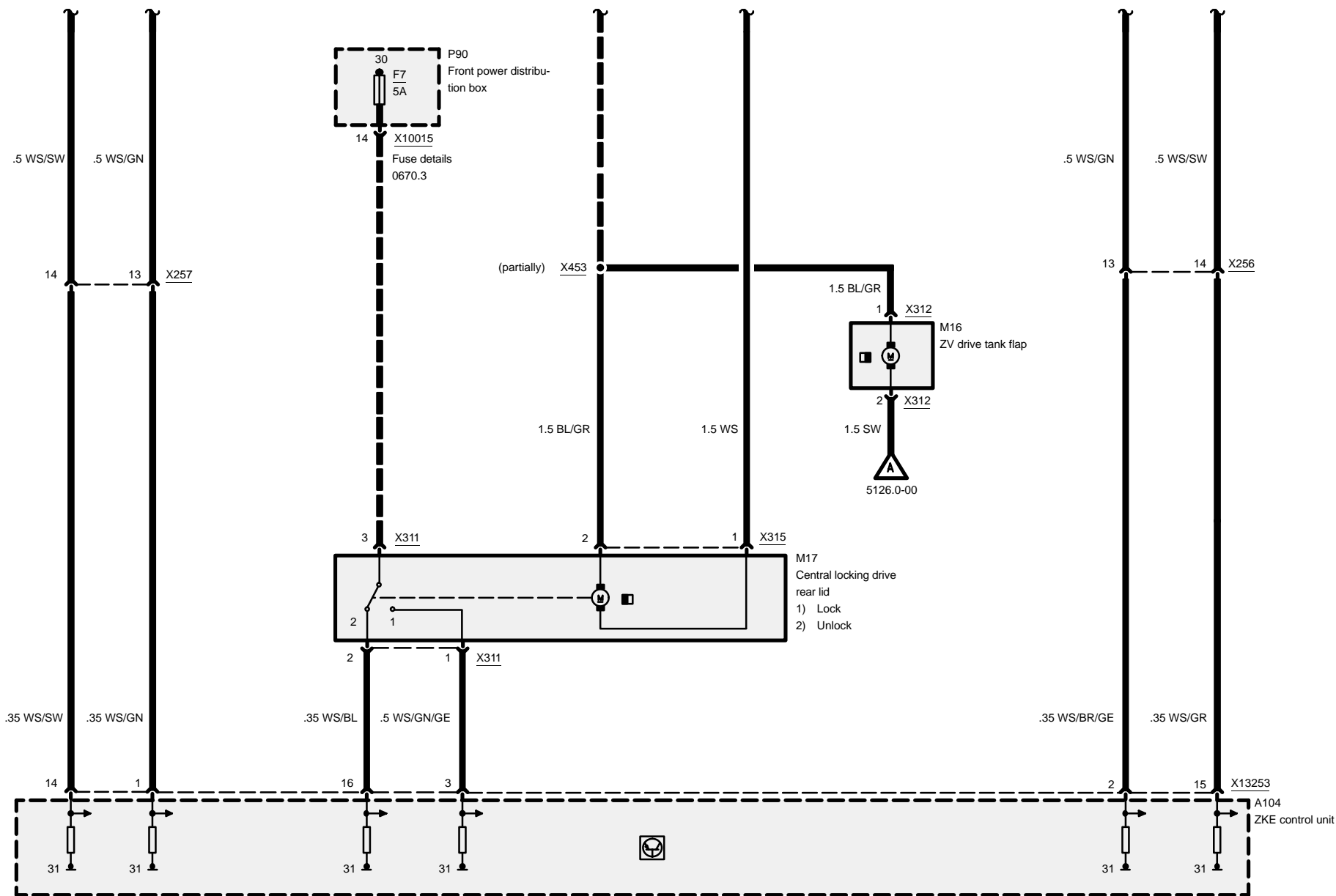
Right-hand drive



5126.0 Central locking system (ZKE/ZV)

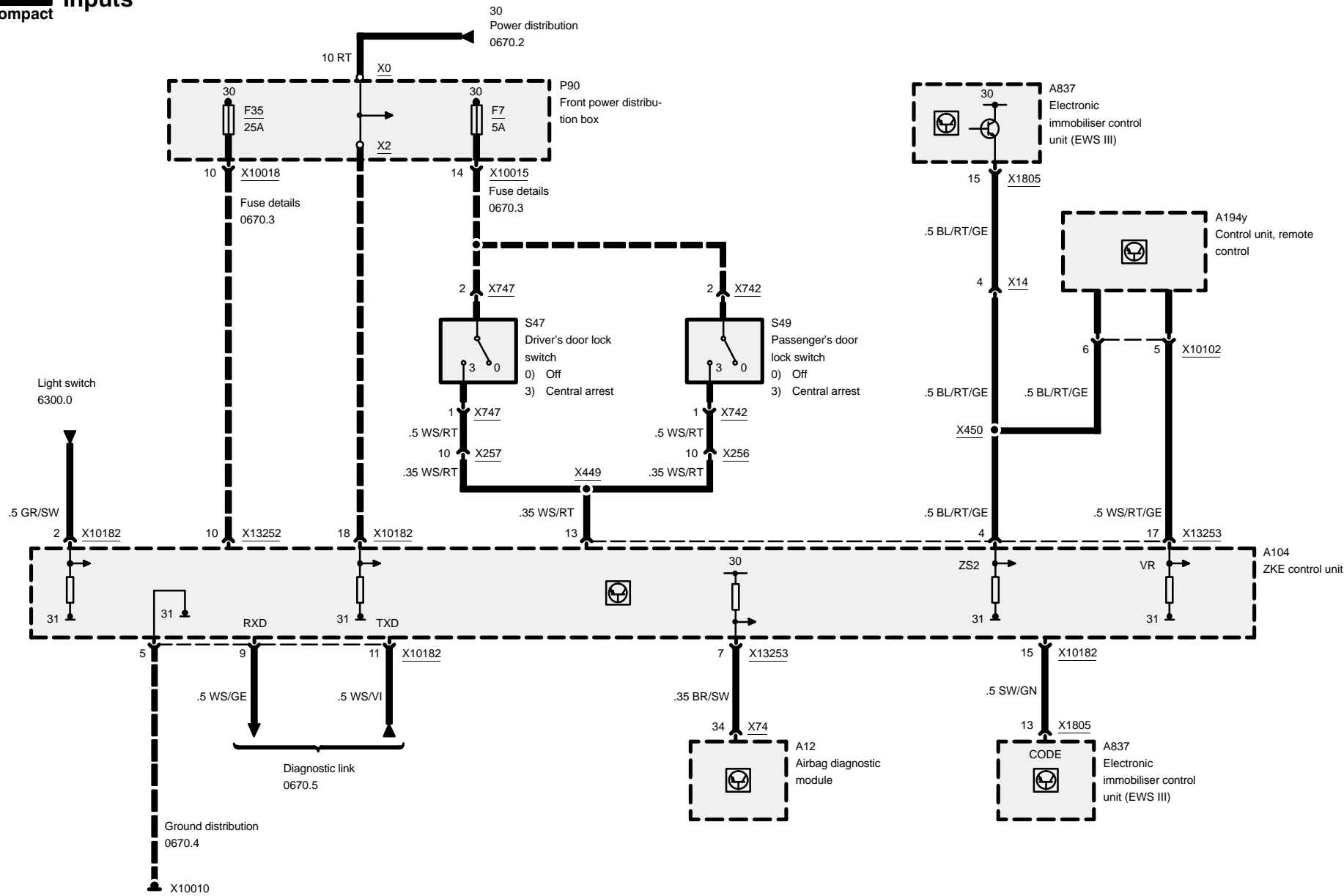
Outputs

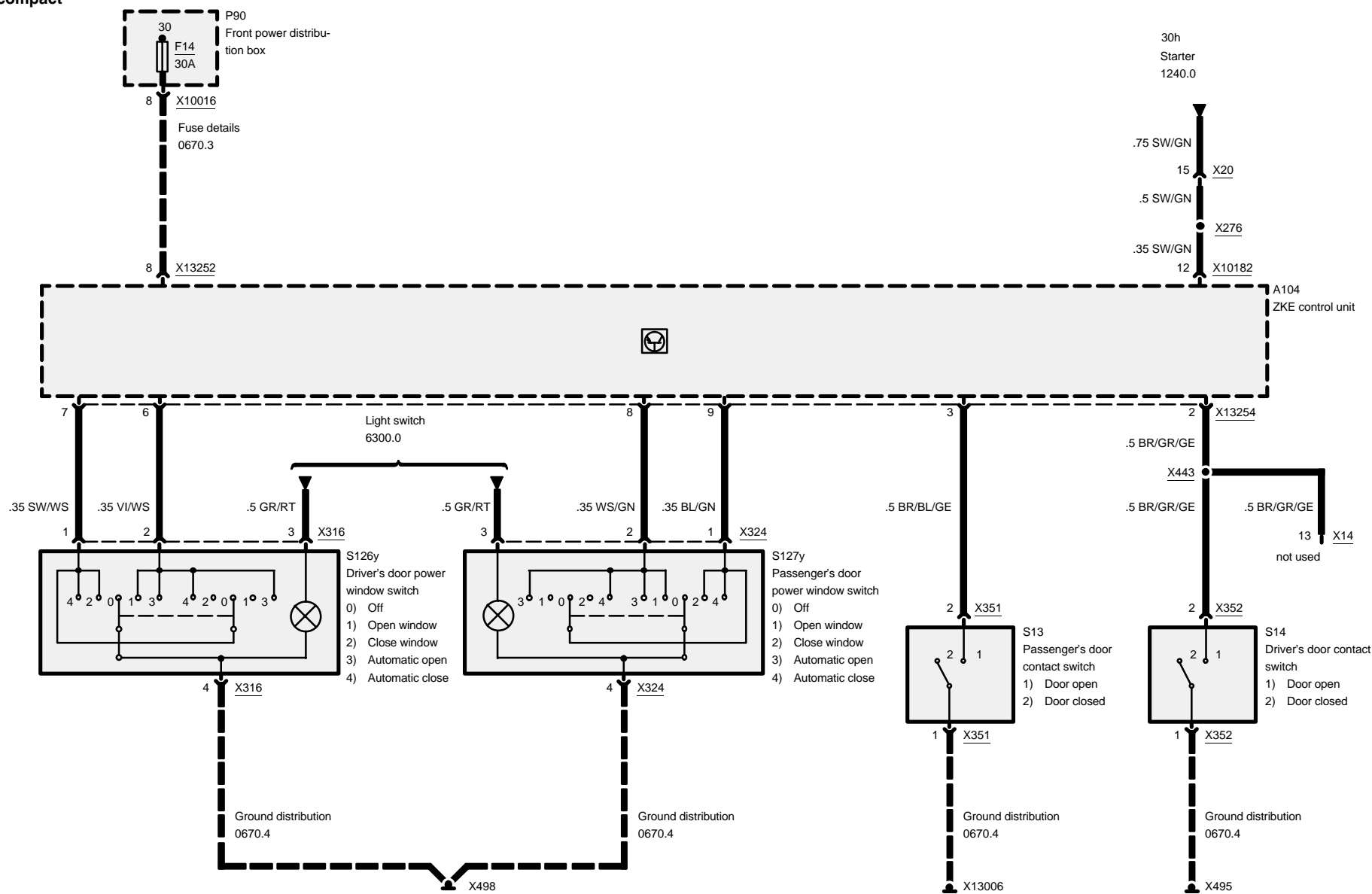




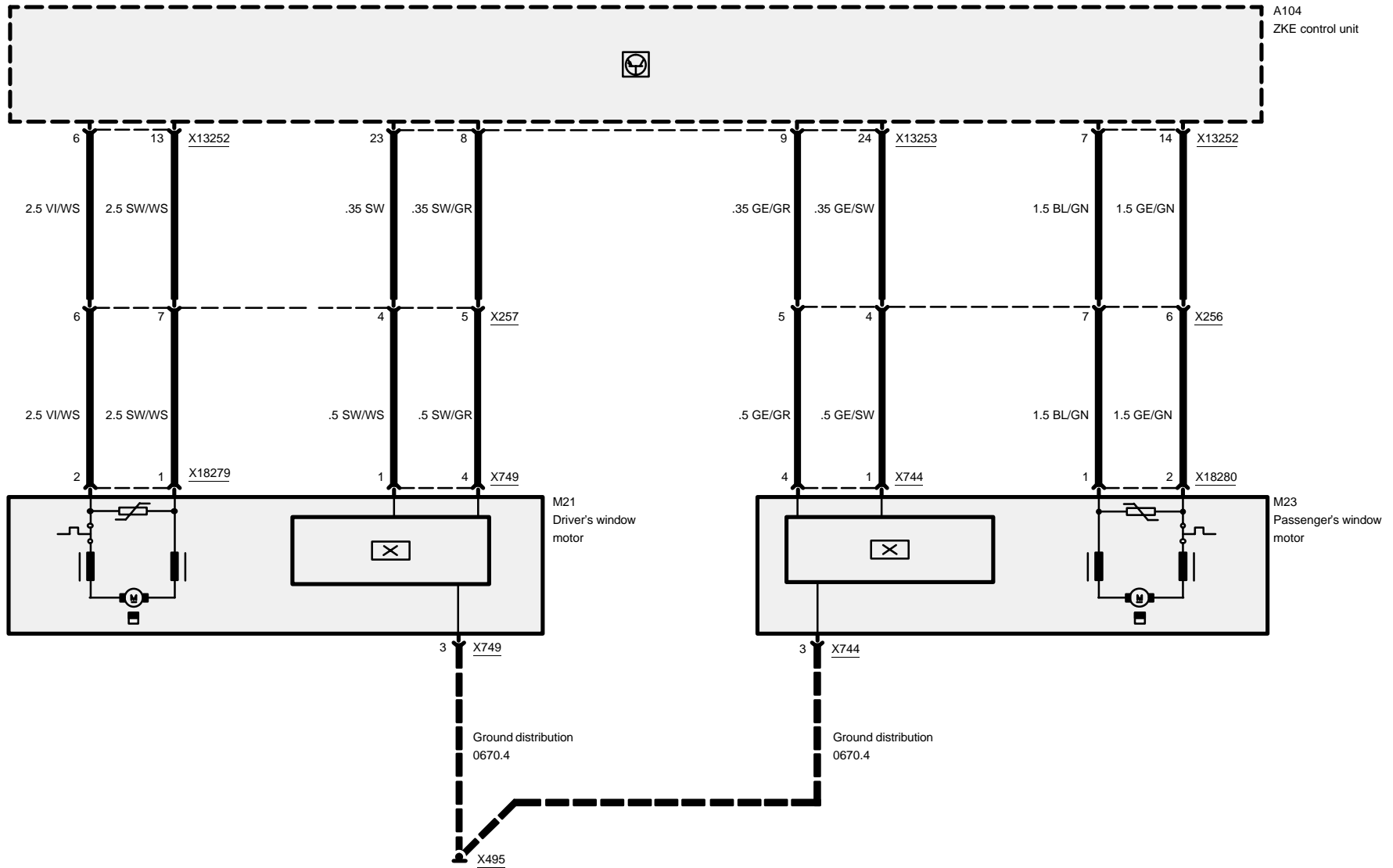
Central locking system (ZKE/ZV)

Inputs





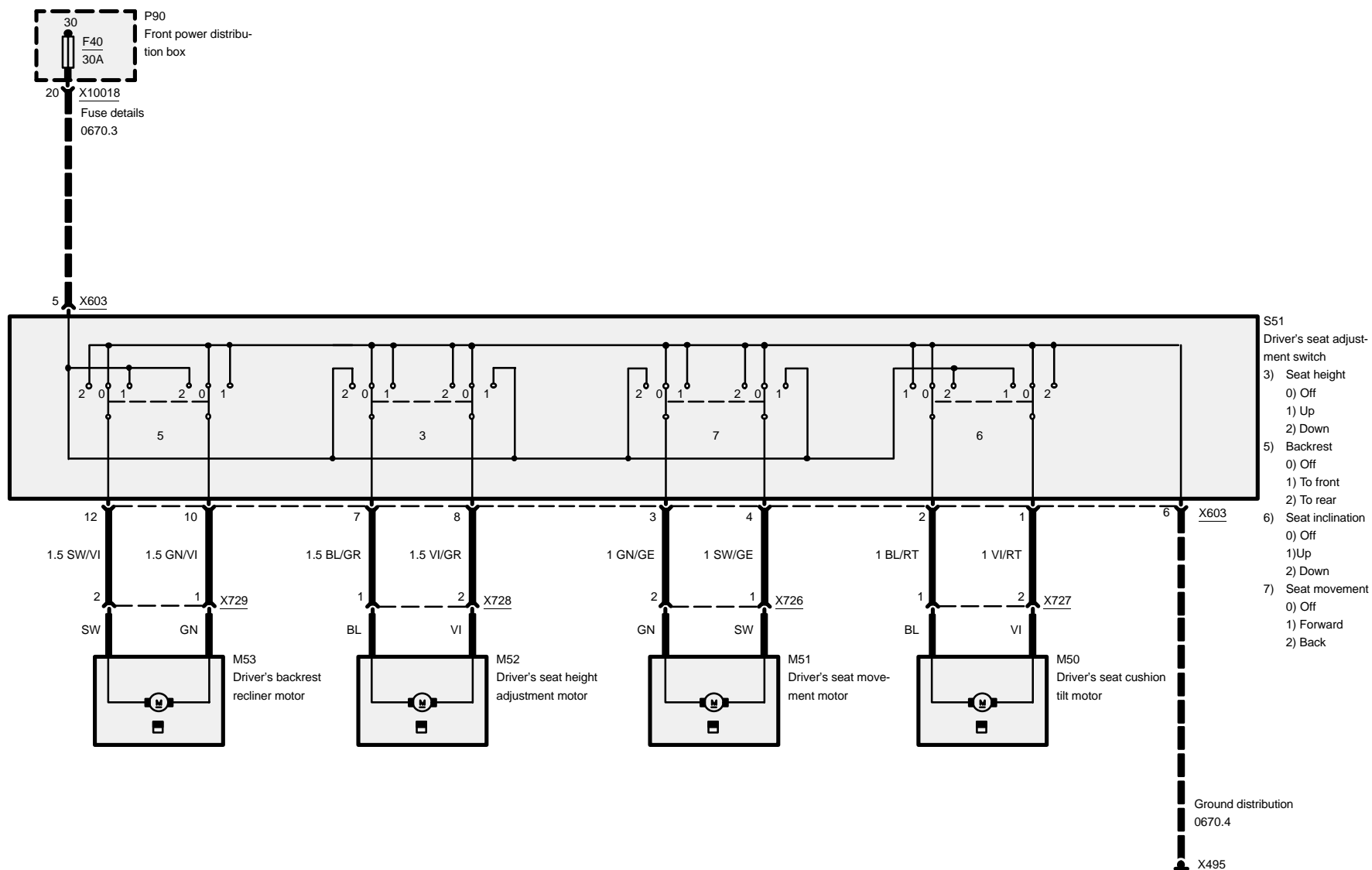
Power windows (ZKE/FH)



5200.2 Electric seat adjustment and lumbar support

Right-hand drive

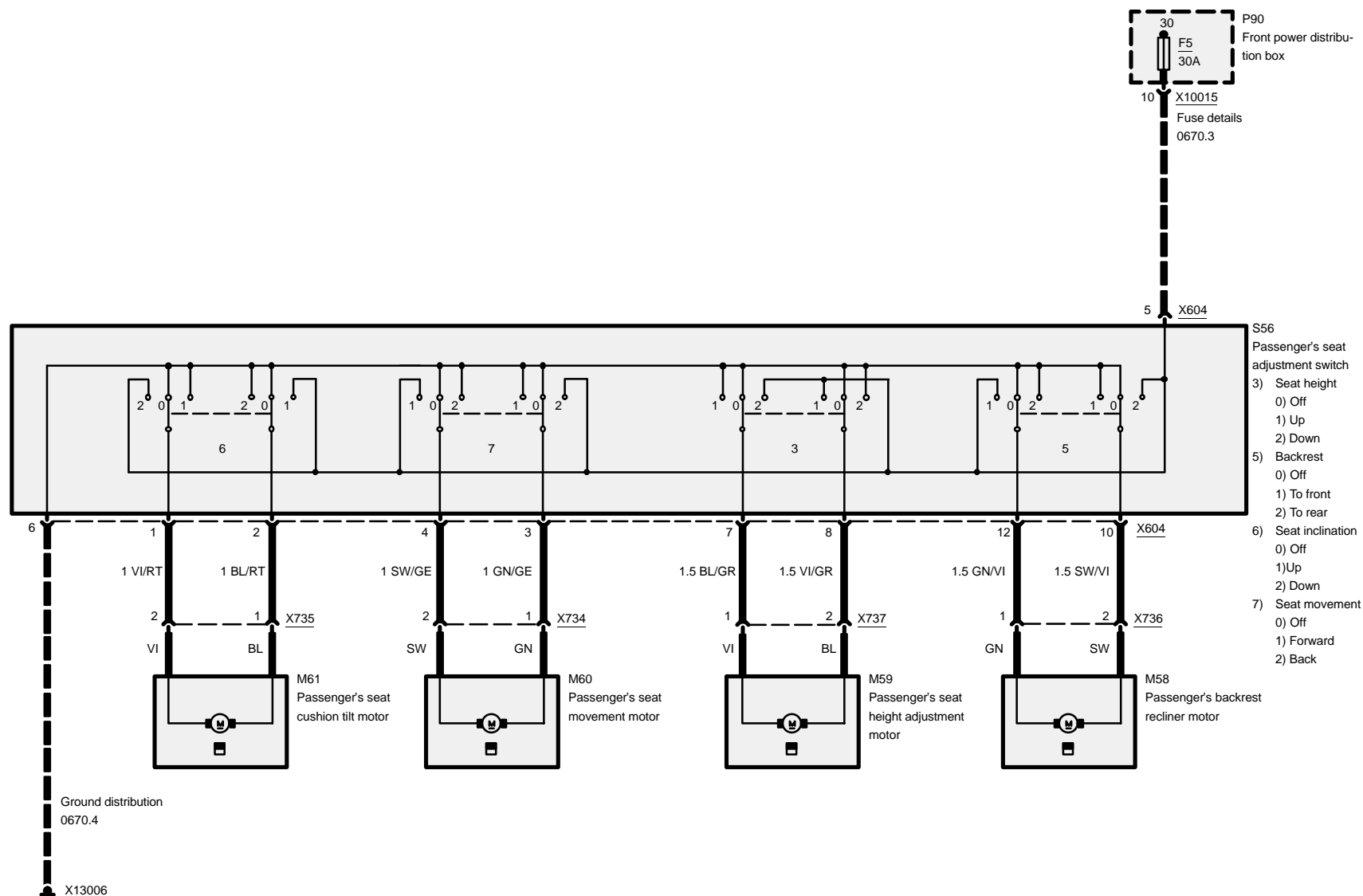
Driver's seat



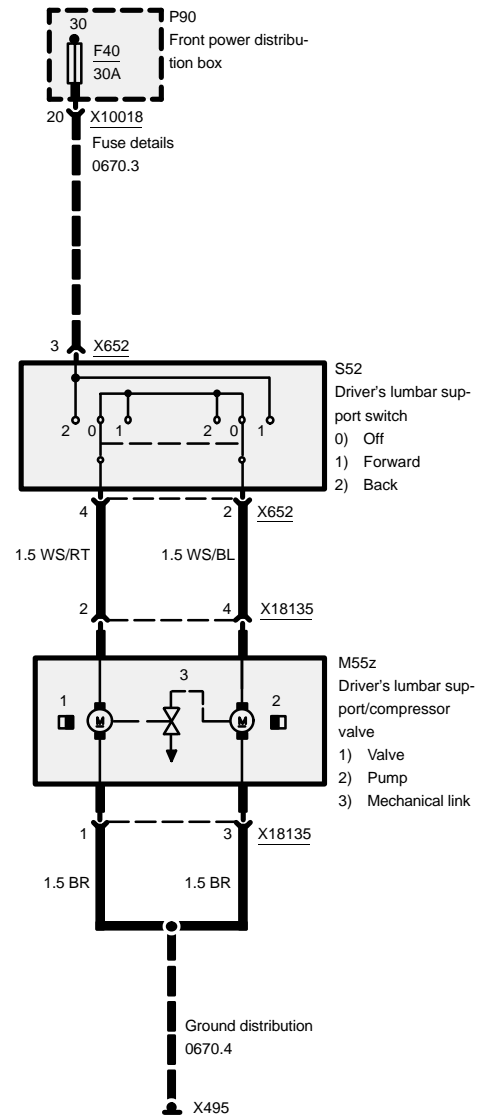
Electric seat adjustment and lumbar support

Right-hand drive

Passenger's seat



Driver's lumbar support

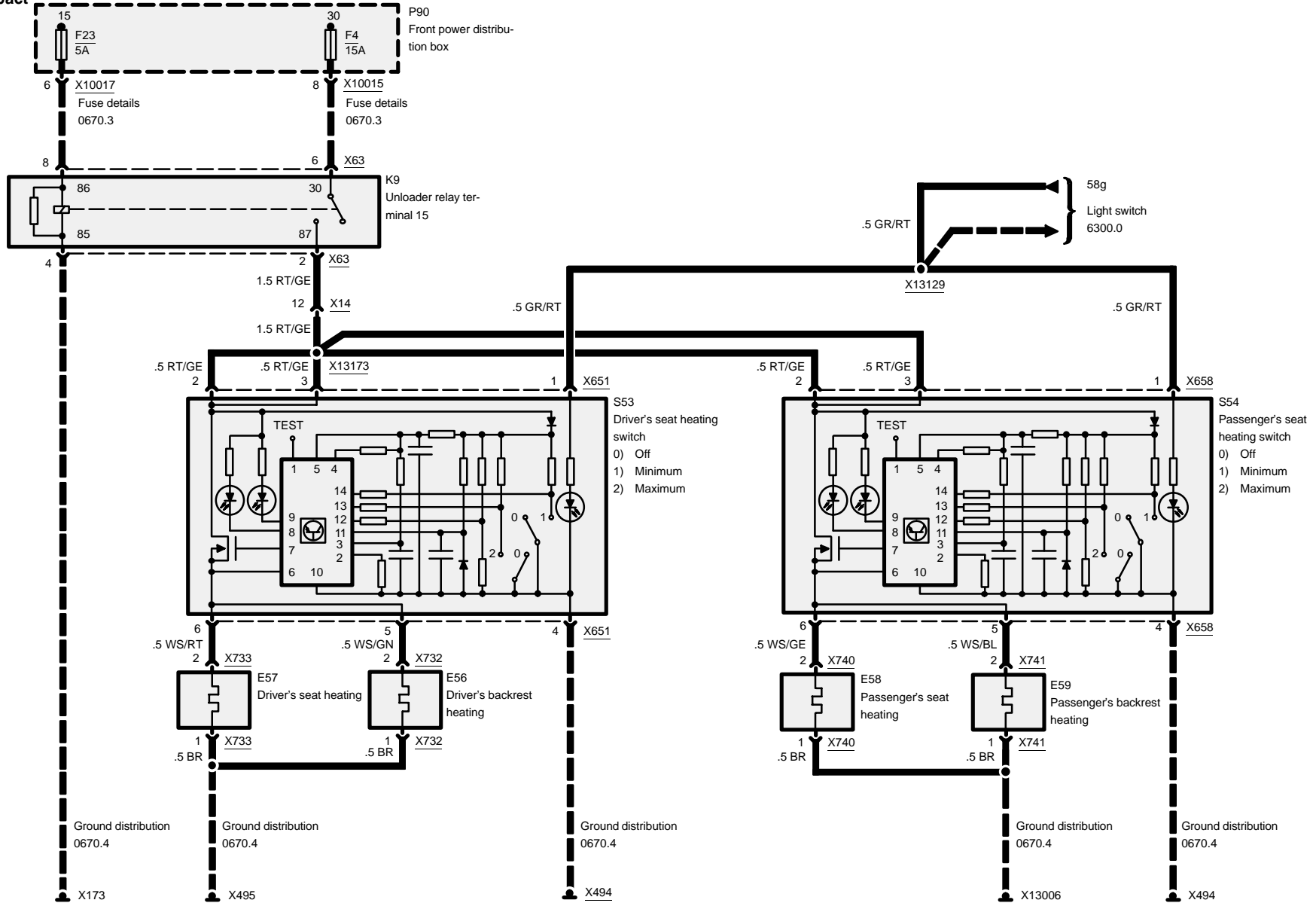




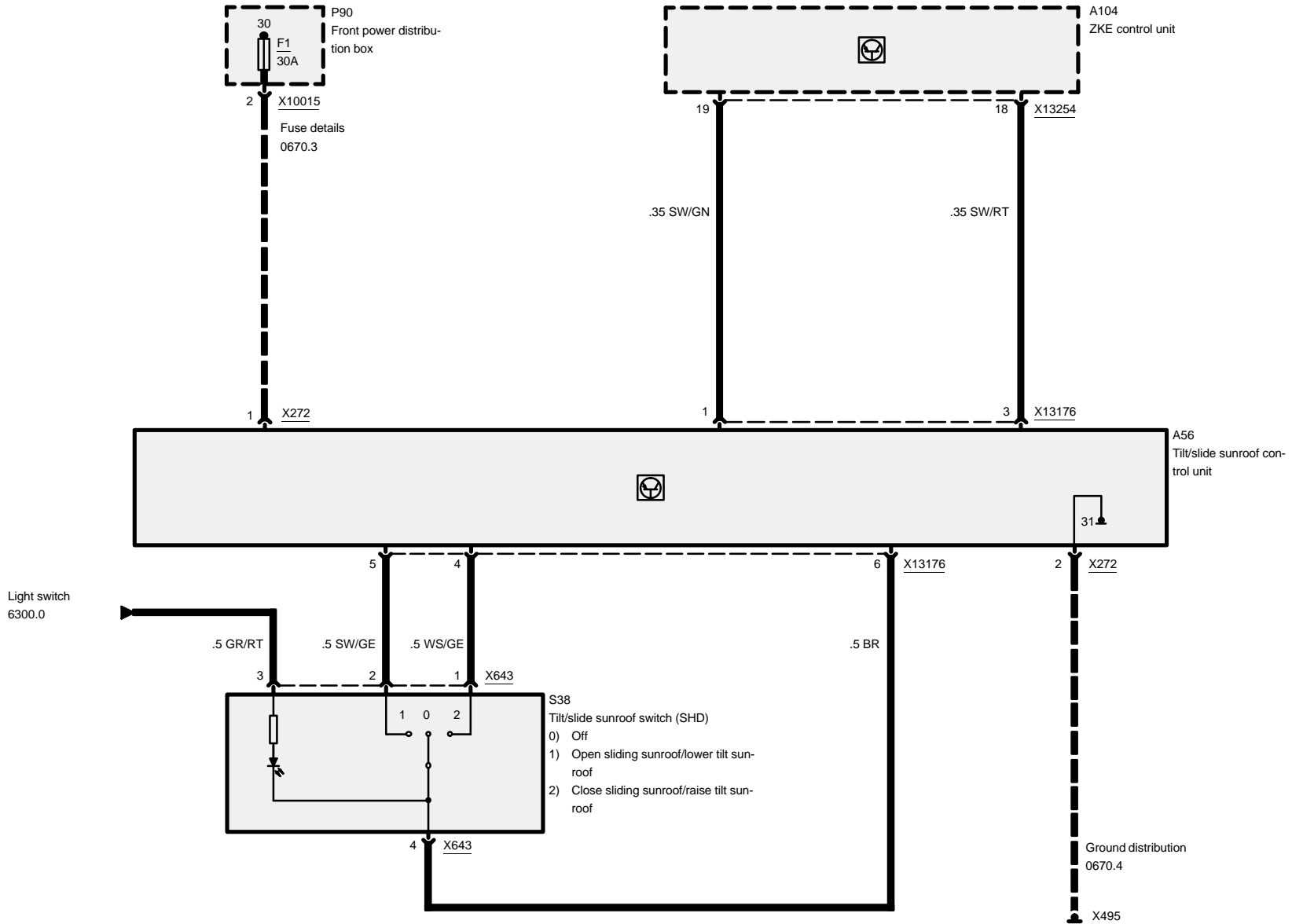
compact

5203.0 Heated seats

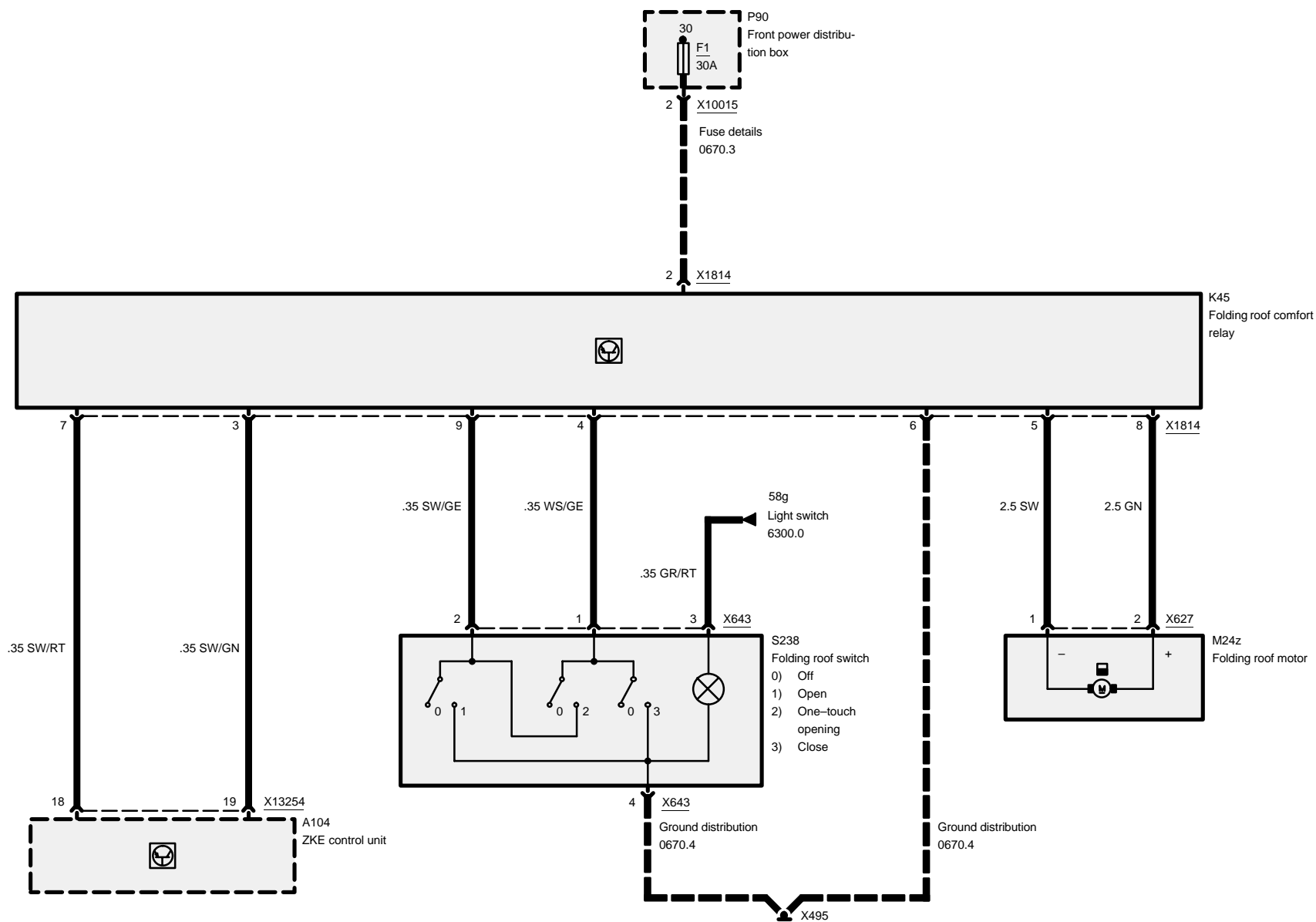
Right-hand drive

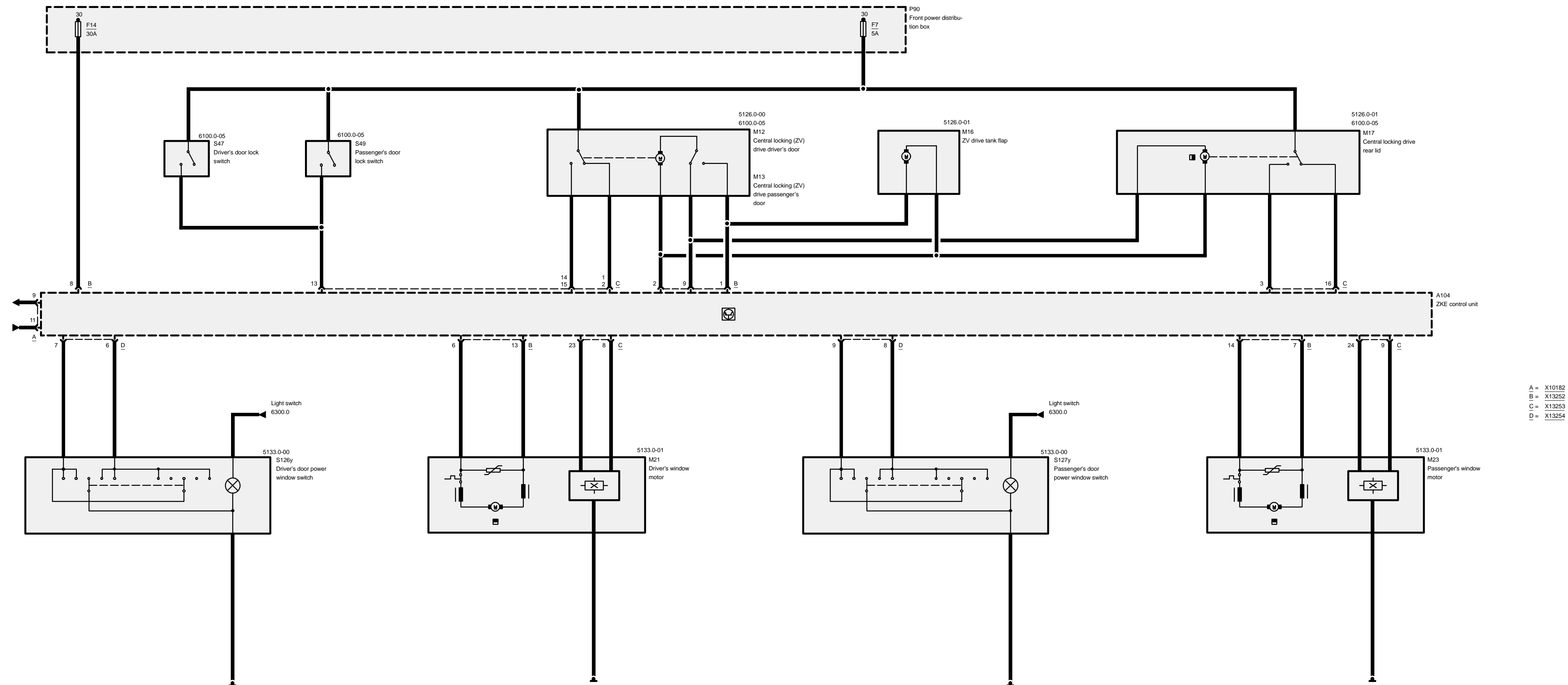


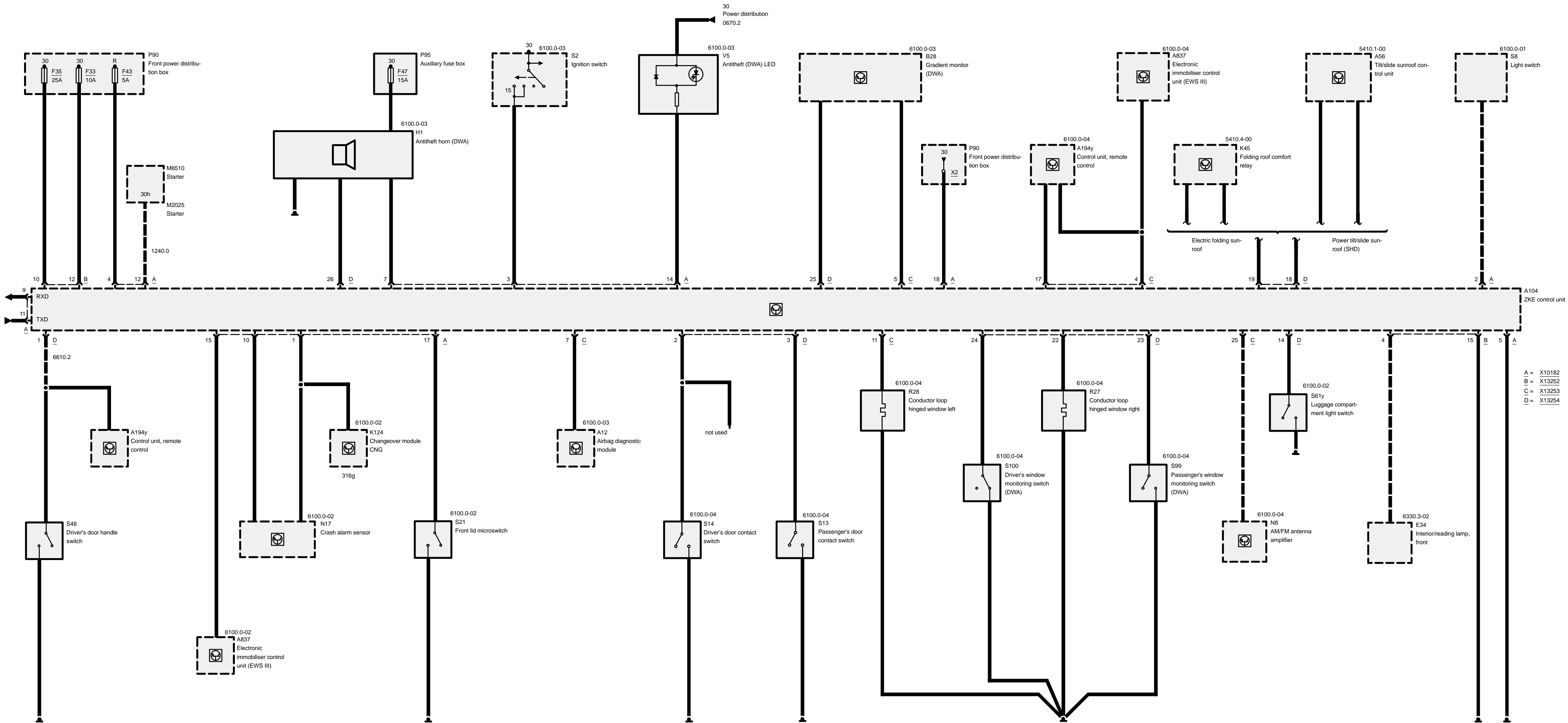
5410.1 Power tilt/slide sunroof (SHD)

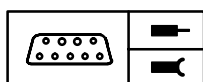


5410.4 Electric folding sunroof









Pin assignments

A=X10182	18-pin, black
B=X13252	15-pin, black
C=X13253	26-pin, yellow
D=X13254	26-pin, green

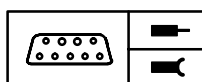
X10182

Pin	Type	Description/Function	Connection
1	A	Hazard warning signal	Crash alarm sensor/CNG changeover module
2	E	Parking light signal	Light switch
3	E	Terminal, ignition	Ignition switch
4	E	Terminal, radio	Fuse 43
5	M	Ground	Ground connection
6		Not used	
7	A	Horn activation	Antitheft (DWA) horn
8		Not used	
9	A	RxD diagnostic link	Diagnostic connector
10	A	Visual alarm DWA	Crash alarm sensor
11	E/A	TxD diagnostic data link	Diagnostic connector
12	E	Starter signal	Starter
13		Not used	
14	A	LED	DWA LED
15	A	Vehicle immobilization	Electronic vehicle immobilizer control unit (EWS III)
16		Not used	
17	E	DWA signal	Front lid microswitch
18	E	Power supply, terminal 30	Front power distribution box

X13252

Pin	Type	Description/Function	Connection
1	A	Arrest signal	Drives, central locking
2	A	Unlock signal	Drives, central locking
3		Not used	

E = Input, A = Output, M = Ground



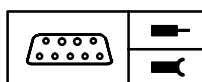
Pin assignments

Pin	Type	Description/Function	Connection
4	A	Interior lights	Reading light
5		Not used	
6	A	Open signal	Power window motor, driver's door
7	A	Close signal	Power window motor, passenger's door
8	E	Power supply, front power window	Fuse 14
9	A	Lock signal	Drives, central locking
10	E	Power supply, central locking	Fuse 35
11		Not used	
12	E	Power supply, Interior lights	Fuse 33
13	A	Close signal	Power window motor, driver's door
14	A	Open signal	Power window motor, passenger's door
15	M	Ground	Ground connection

X13253

Pin	Type	Description/Function	Connection
1	E	Unlock signal	Central locking drive, driver's door
2	E	Unlock signal	Central locking drive, front passenger's door
3	E	Unlock signal	Central locking drive, boot lid
4	E	Arrest signal	Control unit, electronic vehicle immobilization (EWS III)
5	E	Tilt signal	Tilt alarm sensor
6		Not used	
7	E	Crash pulse	Airbag control unit
8	E	Position pulse A	Power window motor, driver's door
9	E	Position pulse A	Power window motor, passenger's door
10		Not used	
11	E	Window monitor	Conductor loop, rear left
12		Not used	
13	E	Central arrest signal	Lock switch
14	E	Lock signal	Central locking drive, driver's door
15	E	Lock signal	Central locking drive, front passenger's door
16	E	Lock signal	Central locking drive, boot lid
17	E	Remote control, lock	Remote control unit

E = Input, A = Output, M = Ground



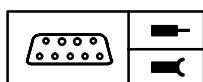
Pin assignments

Pin	Type	Description/Function	Connection
18		Not used	
19		Not used	
20		Not used	
21		Not used	
22		Not used	
23	A	Position sensor	Power window motor, driver's door
24	A	Position sensor	Power window motor, passenger's door
25	E	Rear window monitor	Antenna amplifier
26		Not used	

X13254

Pin	Type	Description/Function	Connection
1	E	Door handle contact	Microswitch on door handle
2	E	Driver's door	Door contact switch
3	E	Front passenger's door	Door contact switch
4		Not used	
5		Not used	
6	E	Open signal	Power window switch, driver's door
7	E	Close signal	Power window switch, driver's door
8	E	Open signal	Power window switch, passenger's door
9	E	Close signal	Power window switch, passenger's door
10		Not used	
11		Not used	
12		Not used	
13		Not used	
14	E	Luggage compartment monitoring, DWA	Luggage compartment light switch
15		Not used	
16		Not used	
17		Not used	
18	A	Convenience locking	Sunroof control unit/comfort relay, folding top
19	A	Enable sunroof/folding top	Comfort relay, folding top/sunroof control unit
20		Not used	

E = Input, A = Output, M = Ground



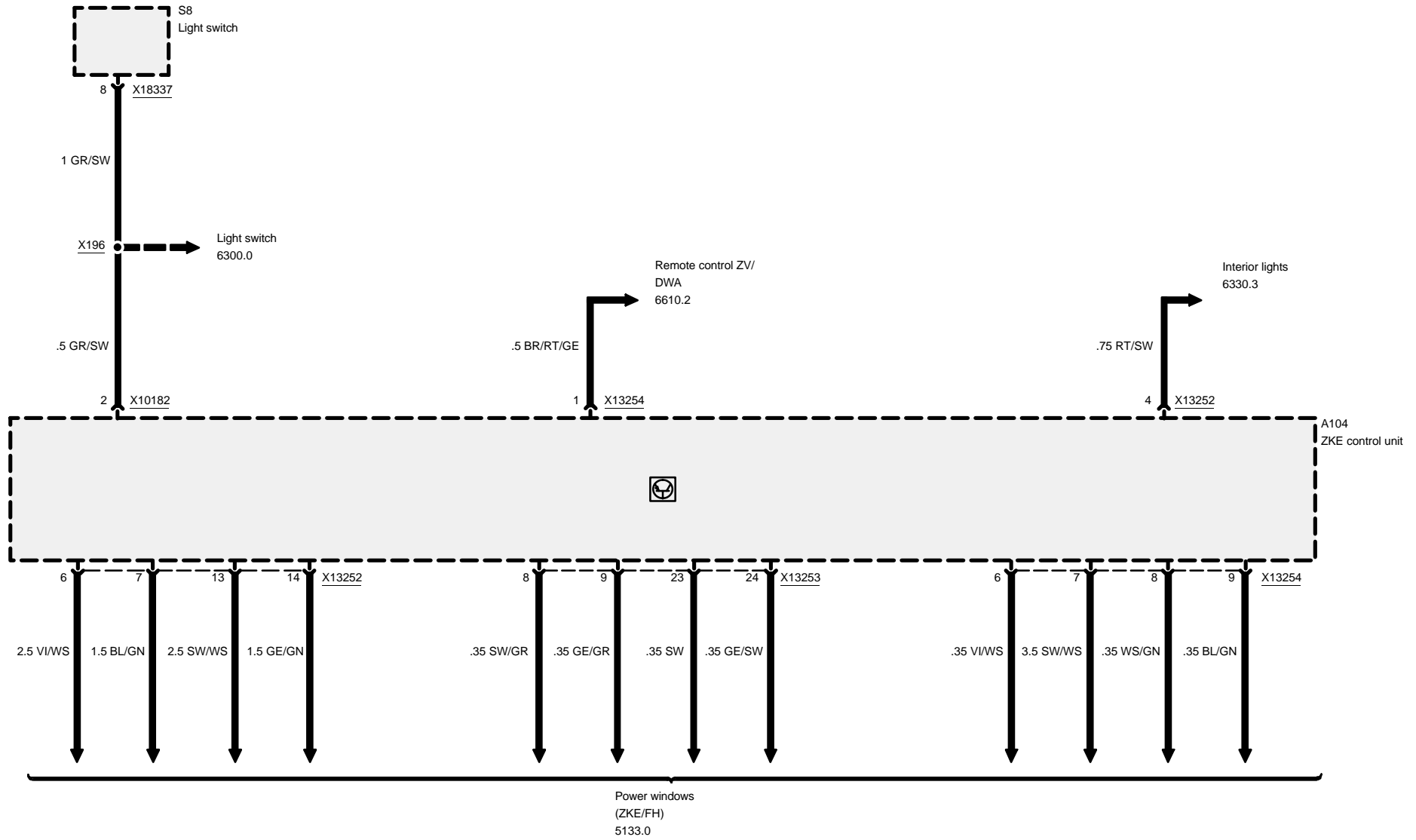
Pin assignments

Pin	Type	Description/Function	Connection
21		Not used	
22	E	Window monitor	Rear right conductor loop
23	E	Window monitor	Window monitoring switch, front passenger's door
24	E	Window monitor	Window monitoring switch, driver's door
25	A	DWA output	Tilt monitor
26	A	Alarm signal	Antitheft (DWA) horn





Central body electronics (ZKE IV)

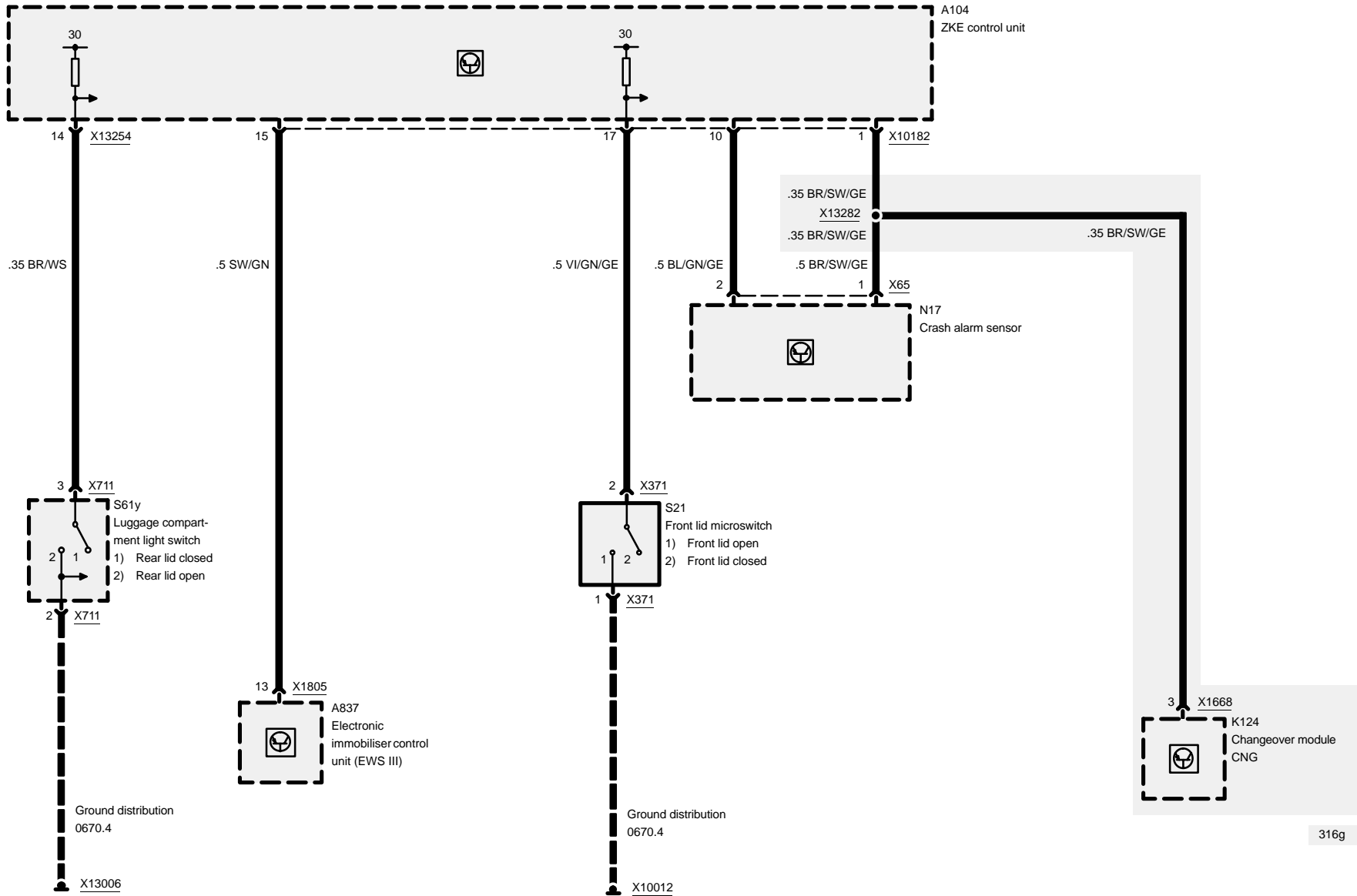




compact

Central body electronics (ZKE IV)

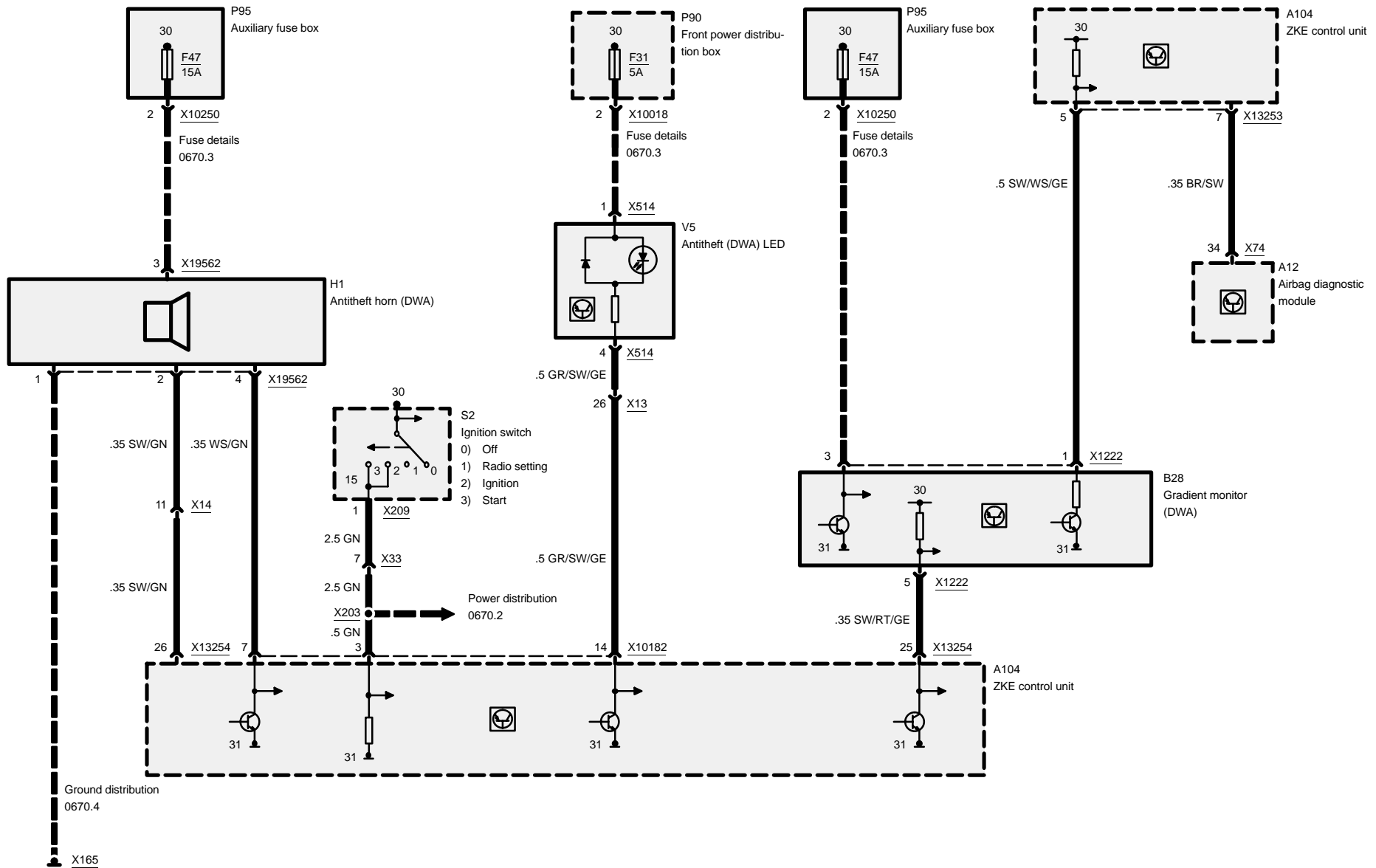
DWA, immobiliser, engine hood



316g

Central body electronics (ZKE IV)

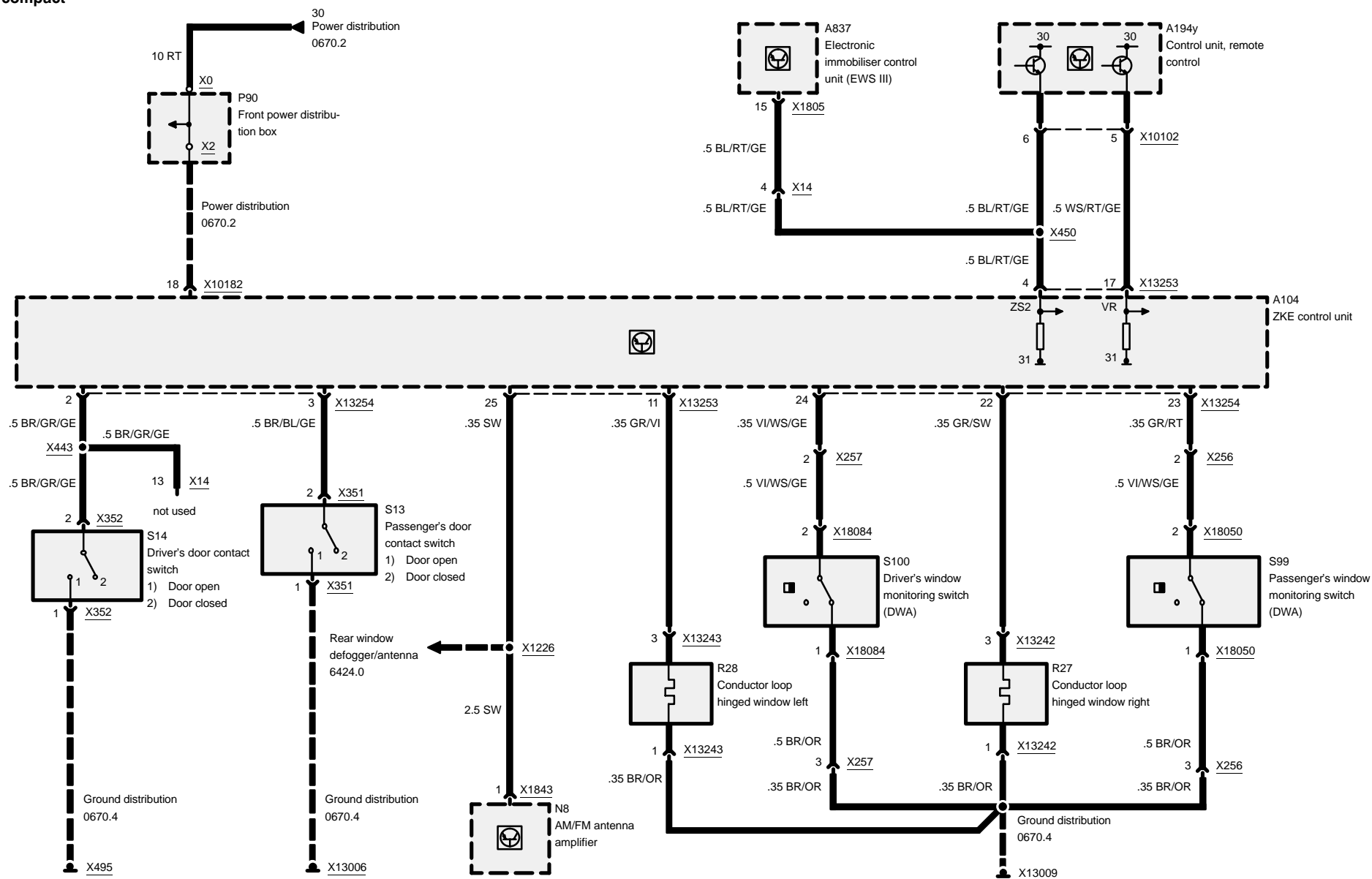
DWA, tilt monitor, alarm horn



Central body electronics (ZKE IV)

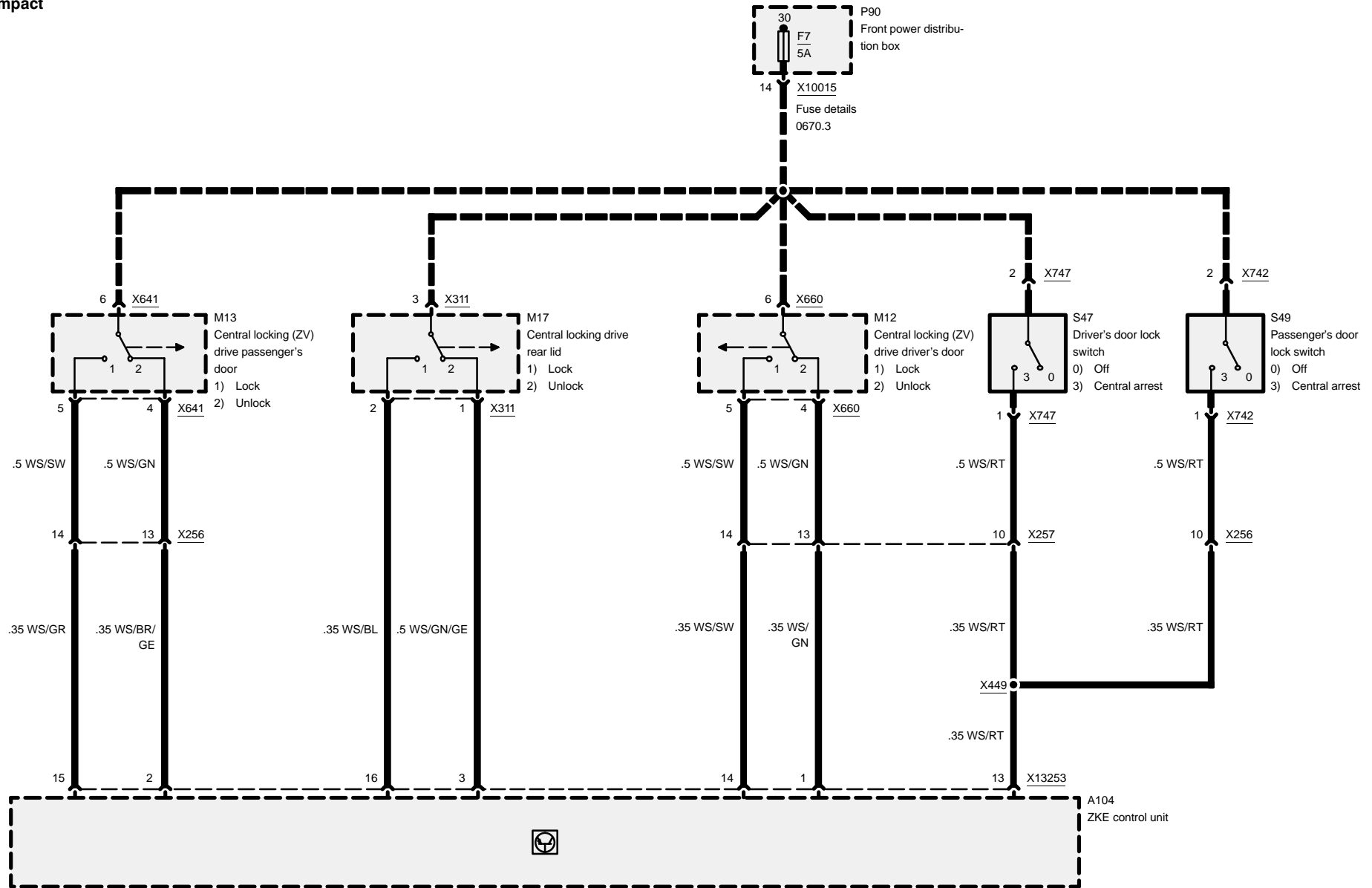
DWA, power, door contacts, window protection

Right-hand drive

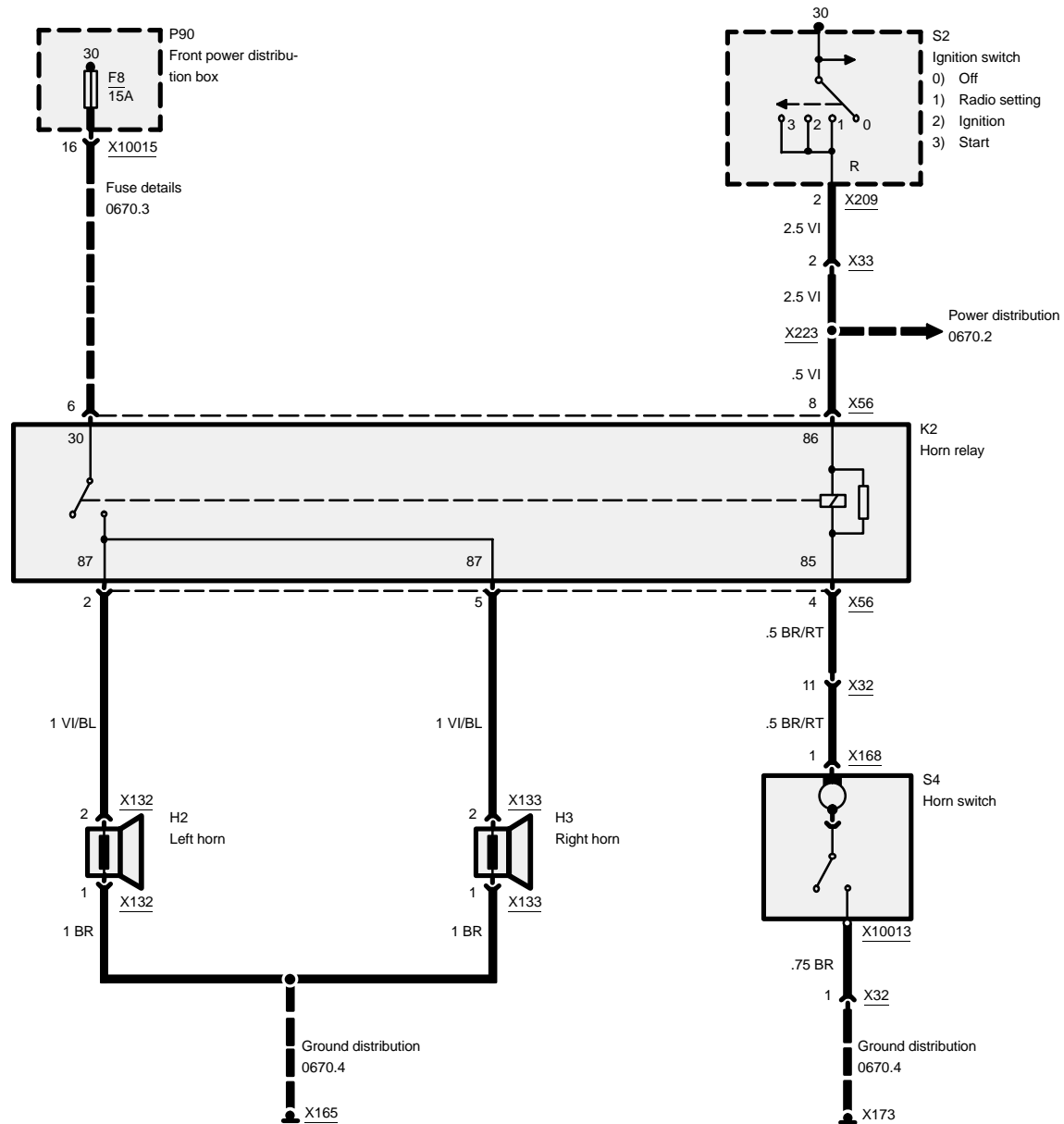


Central body electronics (ZKE IV)

DWA input signal rear lid, driver's door and front passenger's door



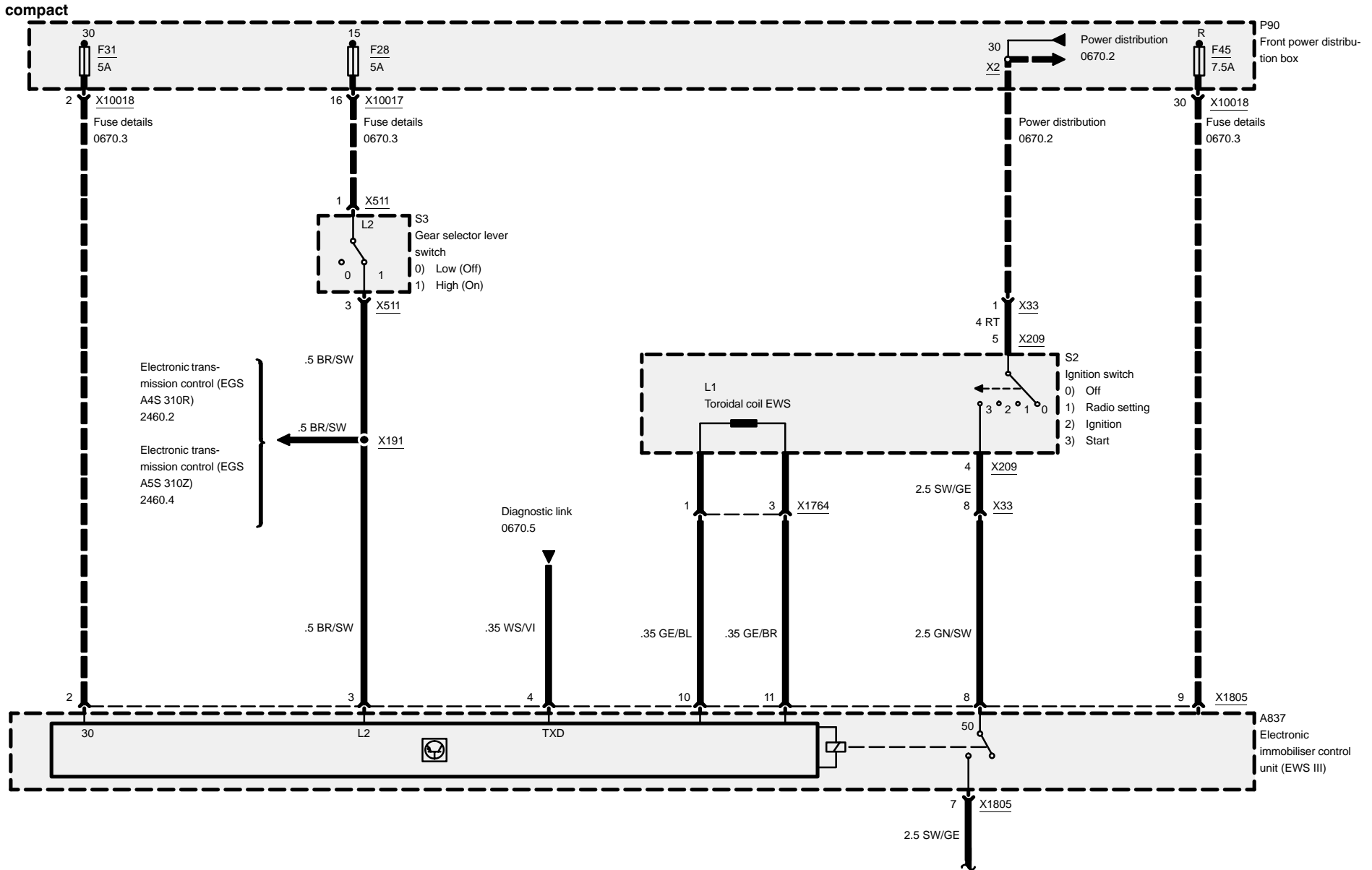
6133.0 Horn



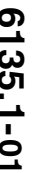


6135.1 Electronic immobilizer (EWS III)

Right-hand drive

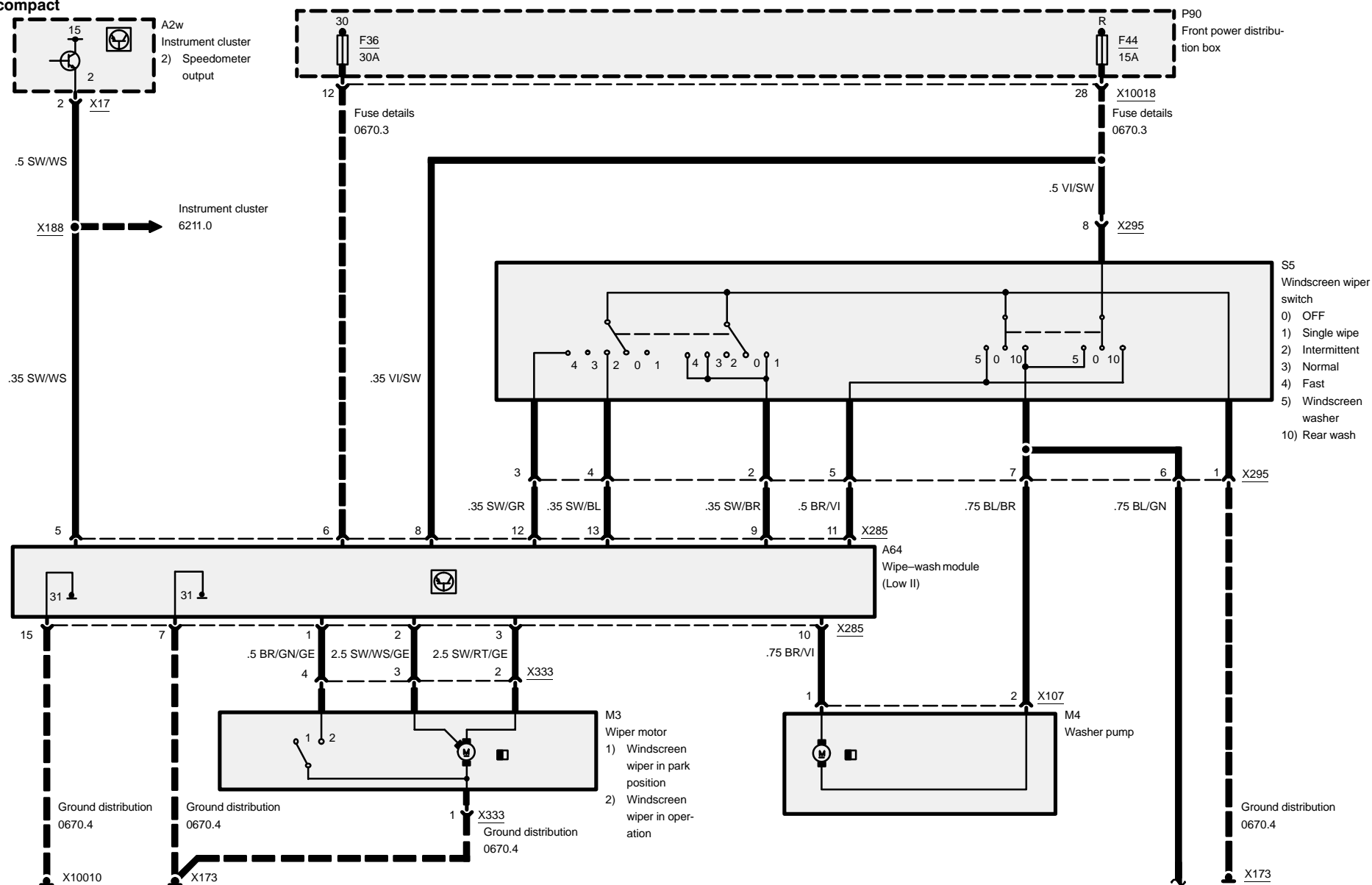


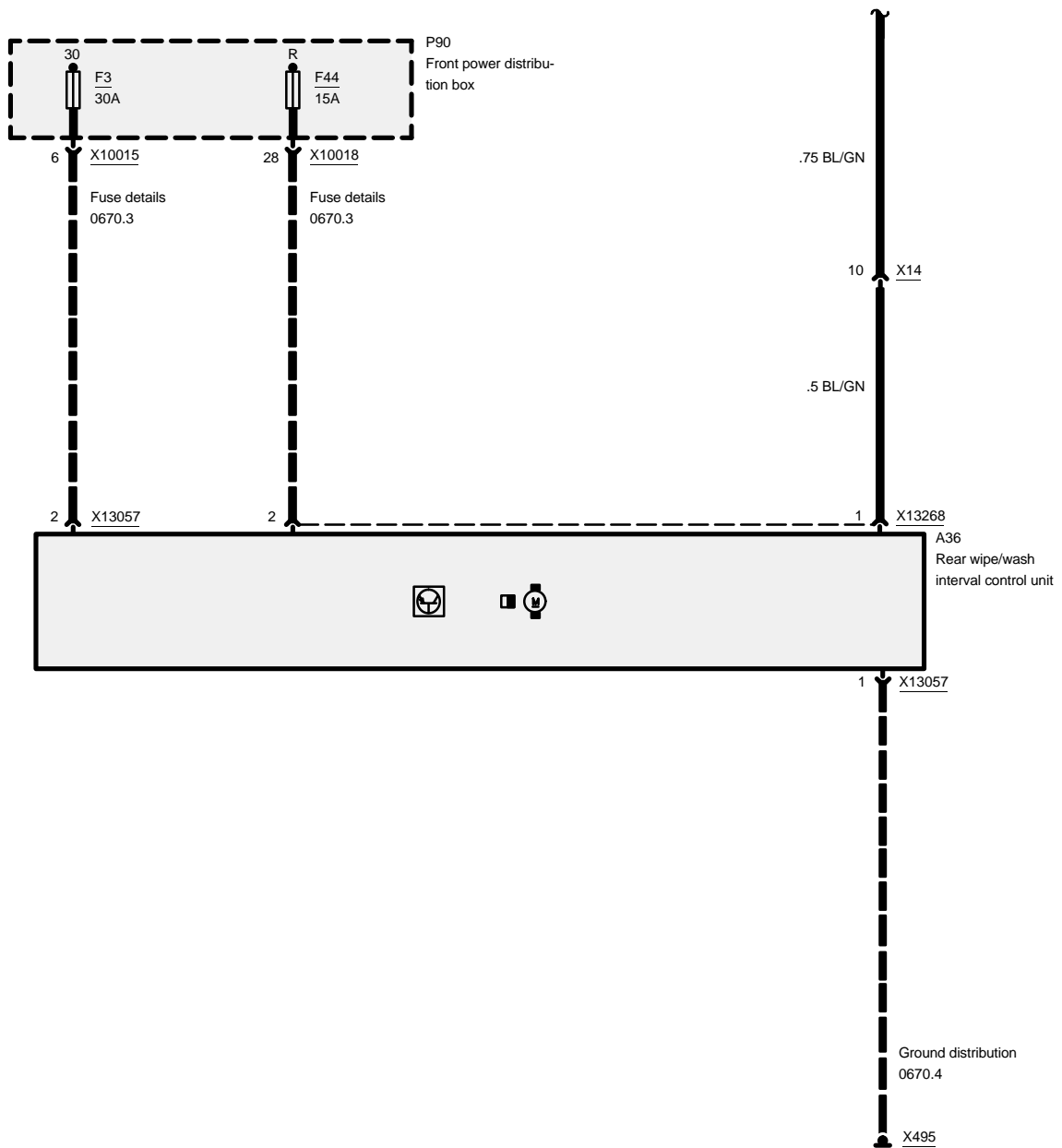
10/99



6160.1 Wipe/wash module (WWM)

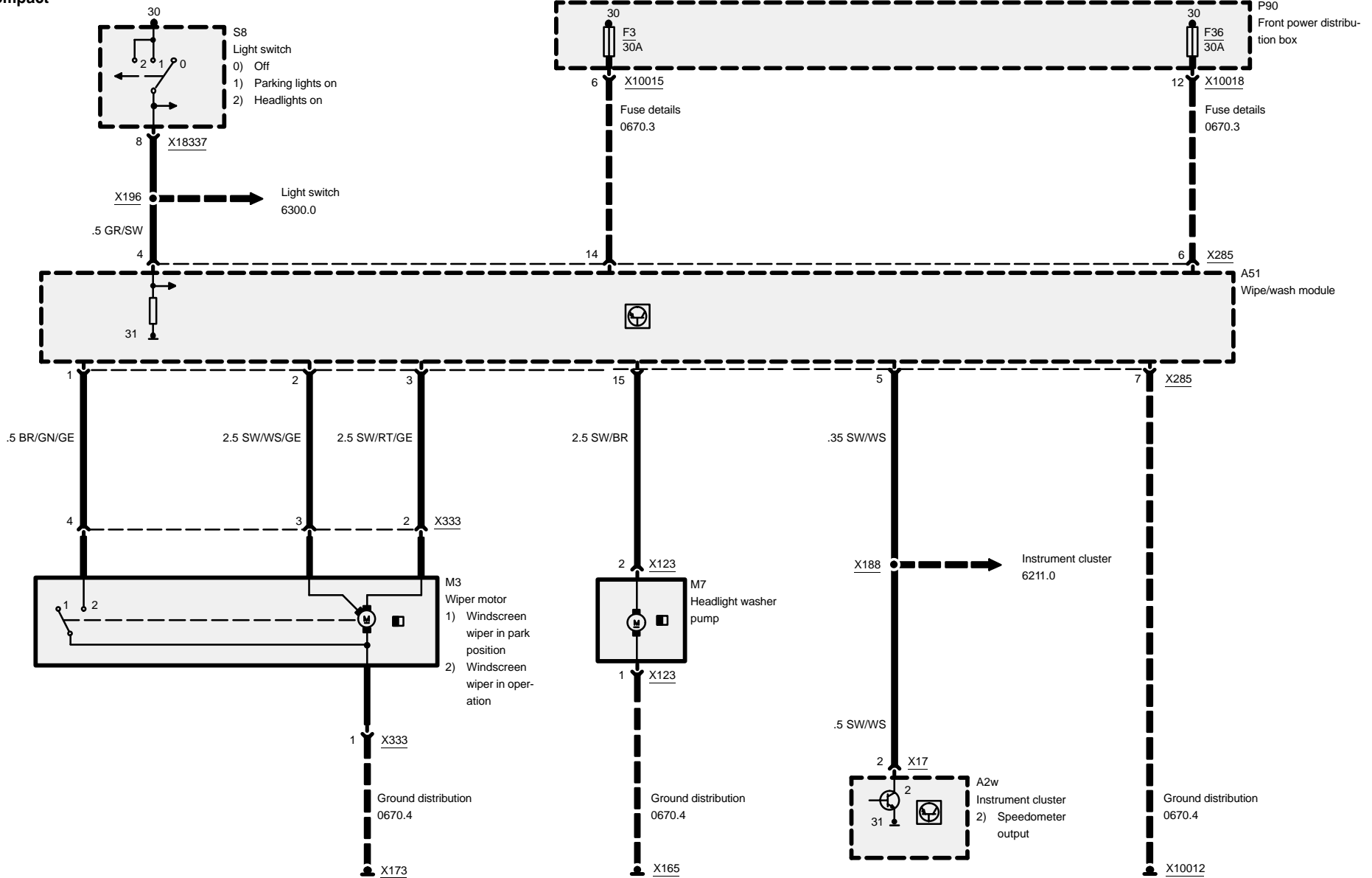
Washer – Low





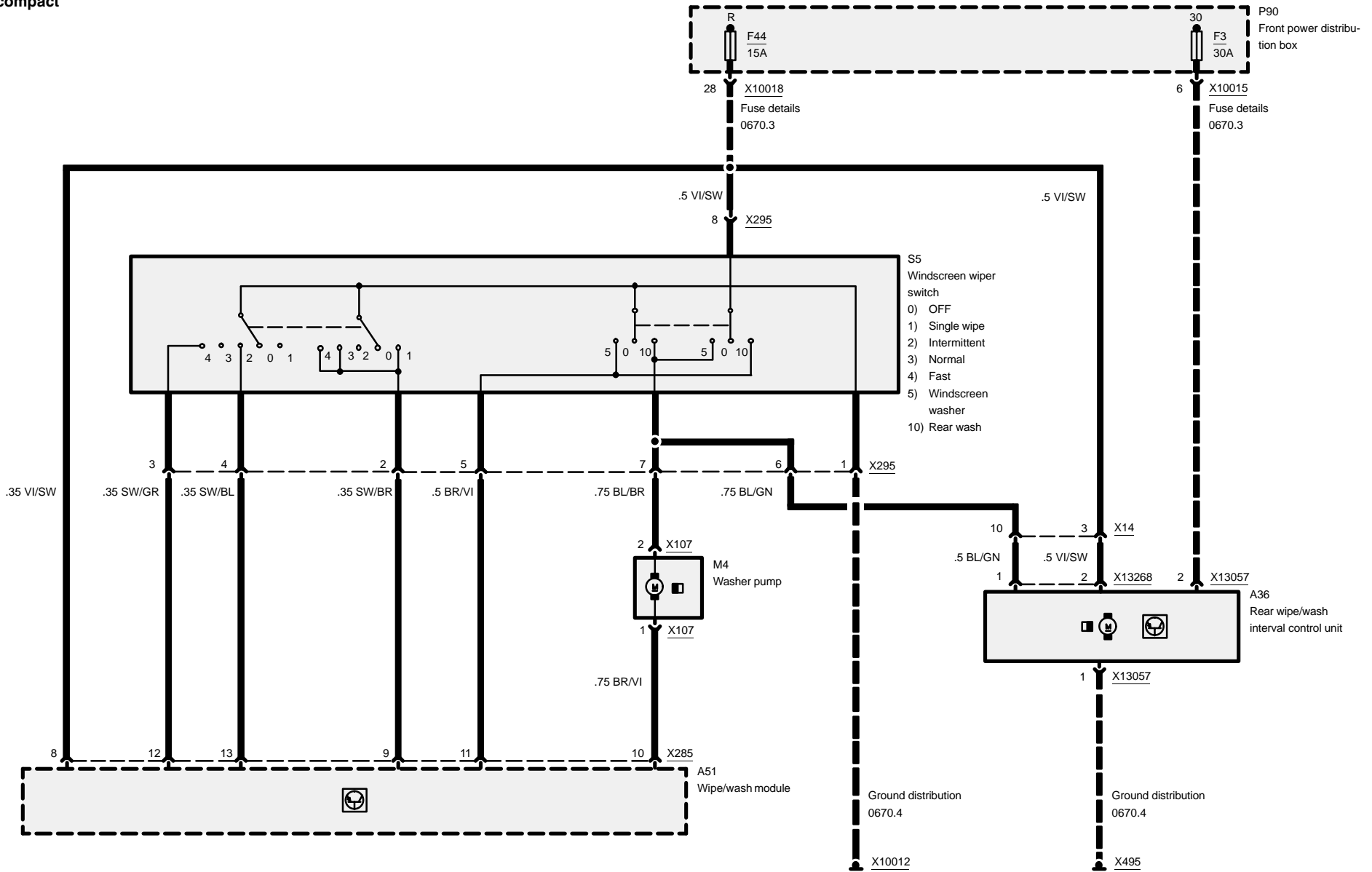
Wipe/wash module (WWM)

Headlight washer – High

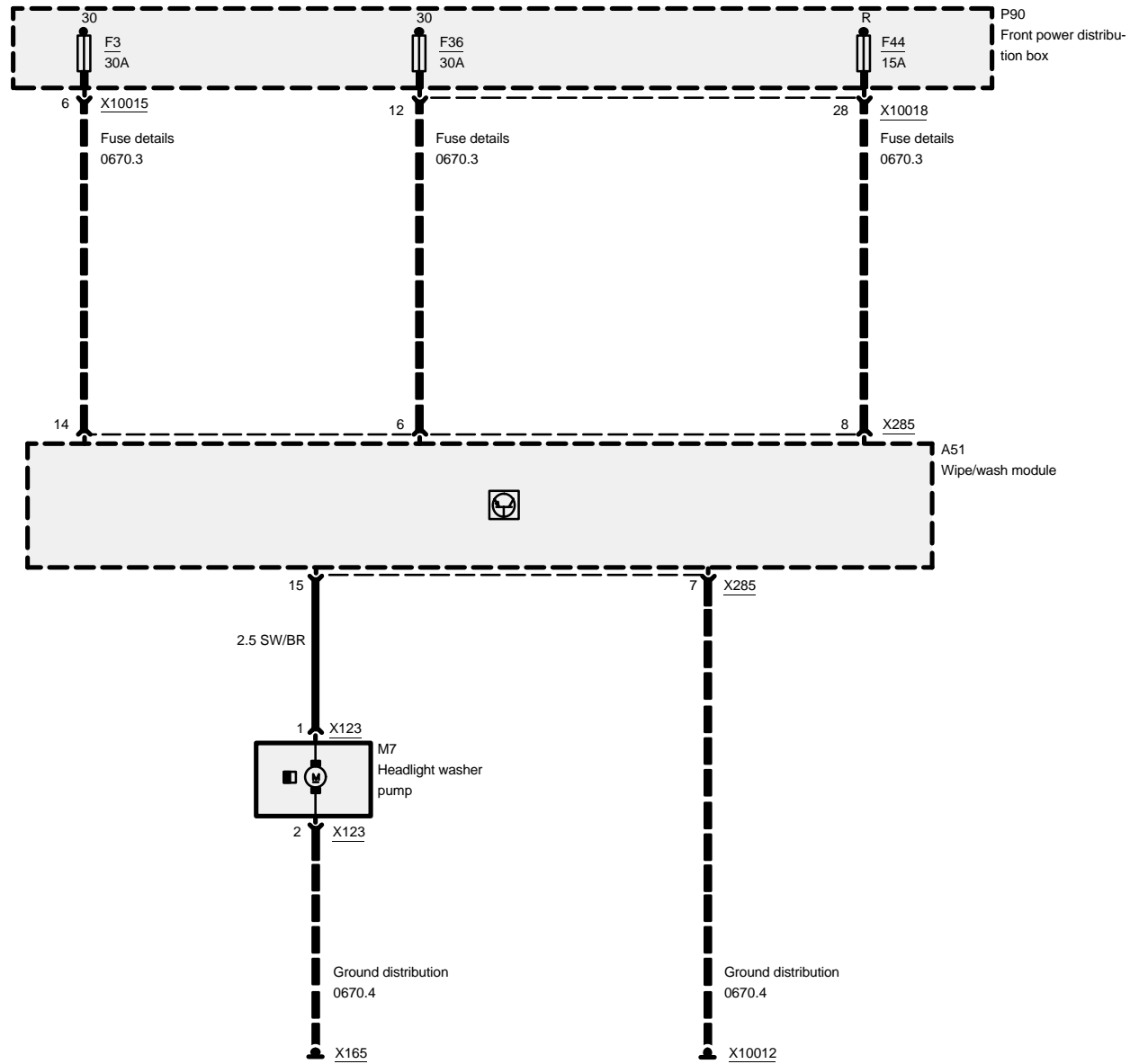


Wipe/wash module (WWM)

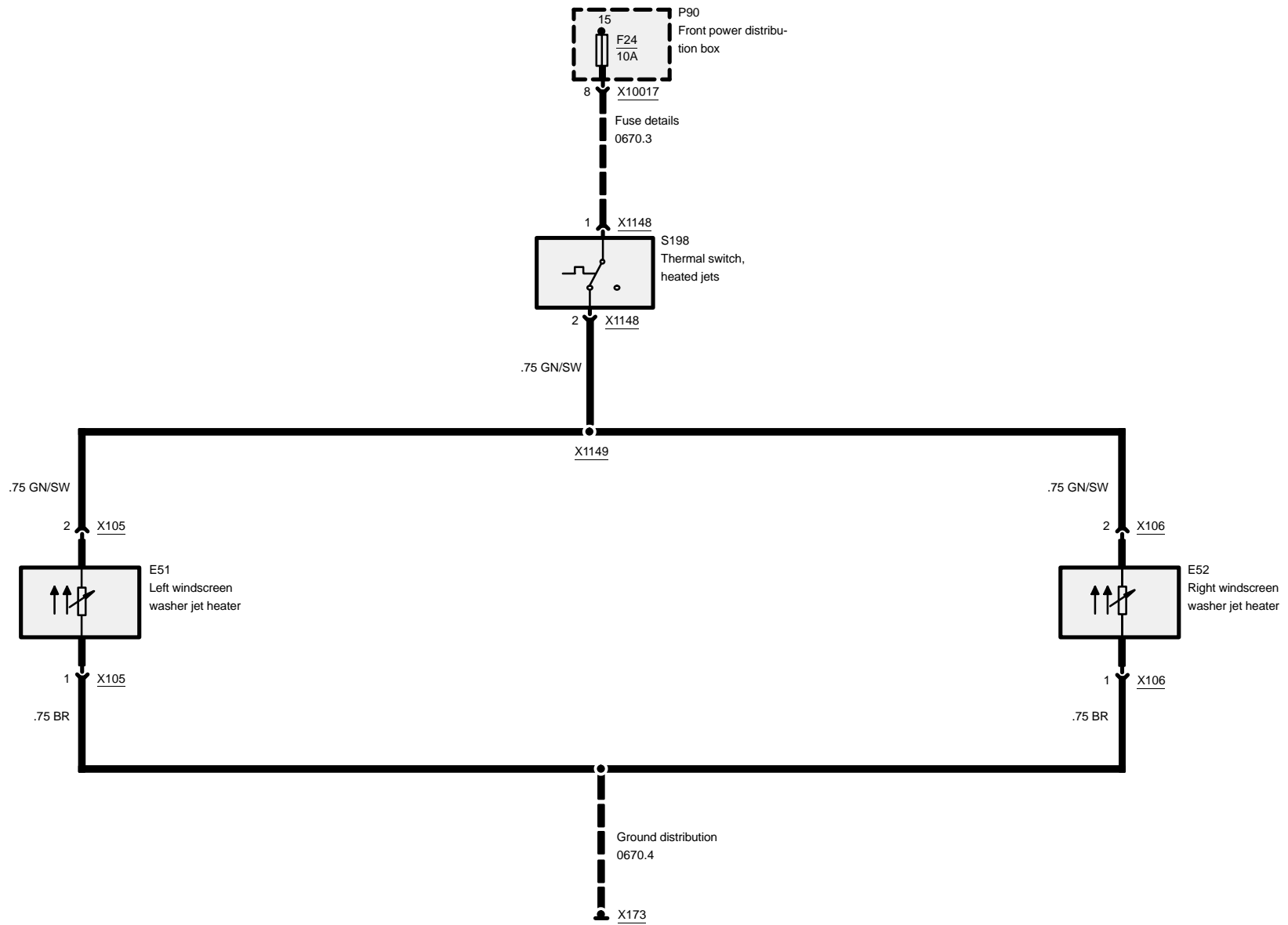
Washer – High

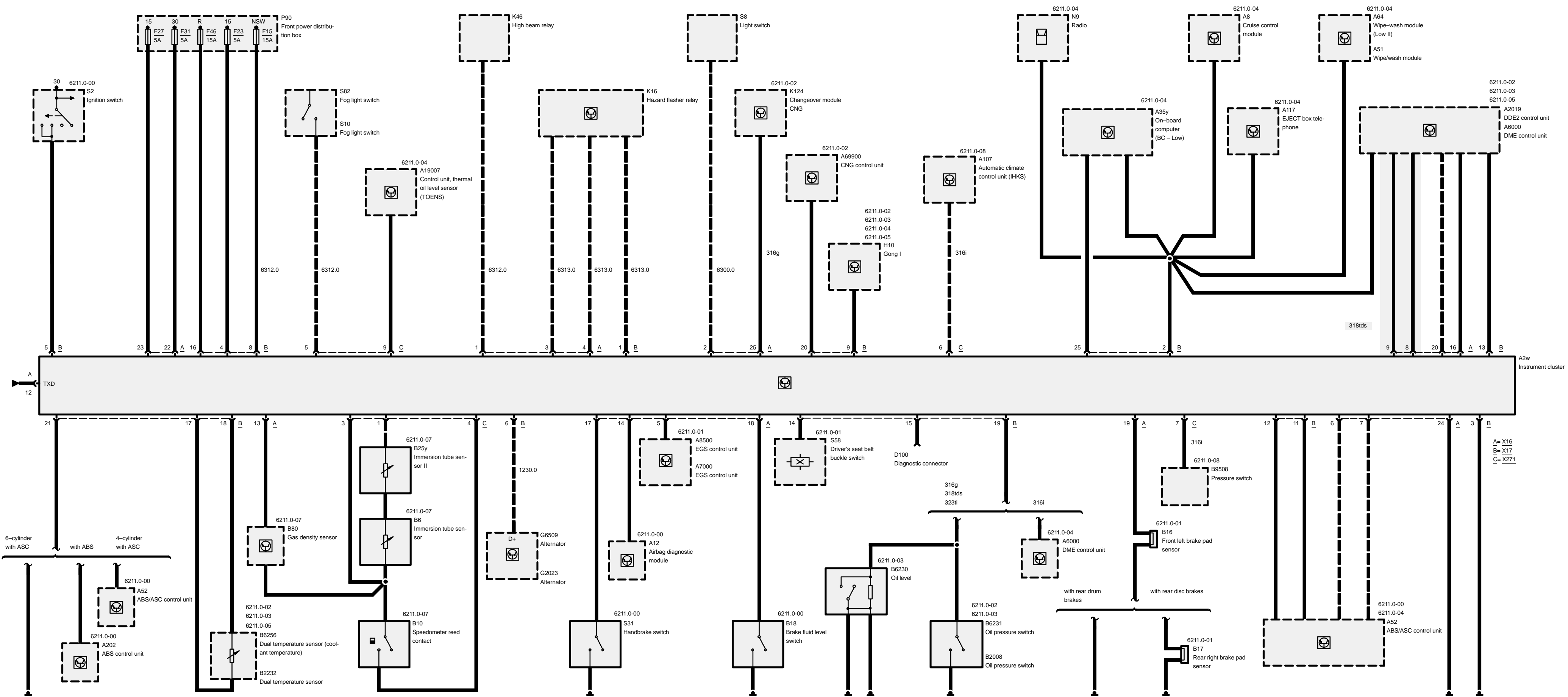


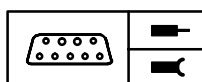
6167.1 Headlight washer system (SRA)



6169.0 Windscreen washer jet heaters







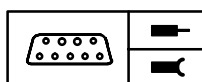
Pin assignments

F=X16	26-pin, natural
G=X17	26-pin, blue
H=X271	12-pin, black

X16

Pin	Type	Description/Function	Connection
1	E	Indicator light, high beam	High beam relay
2	E	Terminal 58g, instrument panel lights	Dimmer
3	E	Indicator lamp, turn signal indicator, right	Hazard warning light relay
4	E	Indicator lamp, turn signal indicator, left	Hazard warning light relay
5	E	Warning lamp, EGS fault/information signal gearbox oil temperature	EGS control unit
6	E/A	CAN-LOW	DME/ABS/ASC control unit
7	E/A	CAN-HIGH	DME/ABS/ASC control unit
8	E	DDE failure	DDE2 control unit (diesel)
9	E	Indicator lamp, preheat	DDE2 control unit (diesel)
10		Not used	
11		Not used	
12	E/A	TxD diagnostic link	Diagnostic connector
13	E	Gas pressure	Gas density sensor
14	E	Warning light, airbag	Airbag diagnosis module
15		Not used	
16	E	CARB signal	DME control unit
17	E	Warning light, handbrake	Handbrake switch
18	E	Warning light, brake fluid	Brake fluid level switch
19	E	Warning lamp, brake pad wear	Brake pad sensor, front left
20	E	TD signal (rpm signal)	Engine control unit (DME/DDE)
21		Not used	
22	E	Terminal 30	Front power distribution box Fuse 31
23	E	Terminal 15/voltage supply for indicator and warning lamps	Front power distribution box Fuse 27
24	M	Terminal 31/ground supply for instrument cluster electronics	Ground

E = Input, A = Output, M = Ground



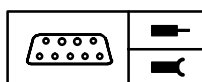
Pin assignments

Pin	Type	Description/Function	Connection
25	E	Gas tank empty	CNG changeover module
26		Not used	

X17

Pin	Type	Description/Function	Connection
1	E	Indicator lamp, trailer turn signal indicator	Hazard warning light relay
2	A	Speedometer A-signal	Various control units
3	M	Terminal 31/ground supply for indicator and warning lamps	Ground
4	E	Terminal 15/voltage supply for instrument cluster electronics	Front power distribution box Fuse 23
5	E	Terminal 15/power supply for battery charge indicator lamp	Ignition switch
6	E	Terminal 61/ground supply for battery charge indicator lamp	Alternator
7		Not used	
8	E	Indicator lamp front fog light	Front power distribution box Fuse 15
9	A	Acoustic output	Gong
10		Not used	
11	E	Warning lamp, antilock brake system (ABS)	ABS/ASC control unit
12	E	Warning lamp, anti-slip control (ASC)	ABS/ASC control unit
13	A	TANKF	DME control unit
14	E	Seat belt warning lamp	Seat belt switch, driver's side (Gulf States, Tropics version)
15	E	S/A reset/service indicator	Diagnosis socket
16	E	Terminal R	Front power distribution box Fuse 46
17	E	Coolant temperature signal (-)	Coolant temperature sensor
18	E	Coolant temperature sensor (+)	Coolant temperature sensor
19	E	Warning lamp, oil pressure /oil level	Oil pressure switch/oil level
20	E	Gas mode indicator	CNG control unit
21	E	ABS warning lamp	ABS control unit
	M	Ground, ABS warning lamp	Ground connector (6-cylinder)
	E	ABS warning lamp	ABS/ASC control unit (4-cylinder)

E = Input, A = Output, M = Ground



Pin assignments

Pin	Type	Description/Function	Connection
22		Not used	
23		Not used	
24		Not used	
25		Signal, on-board computer	On-board computer (316i)
26		Not used	

X271

Pin	Type	Description/Function	Connection
1	A	Fuel tank sensor/fuel level sensor	Fuel tank sensor
2		Not used	
3	A	Fuel tank sensor, position signal generator (reed contact)	Ground, terminal 31b
4	E	Position signal TW	Position signal generator (reed contact)
5	E	Indicator lamp, rear fog light	Rear fog lamp switch
6	E	Air conditioning ON signal	IHKS control unit (316i)
7	A	Pressure switch signal	Pressure switch (316i)
8		Not used	
9	E	Signal, oil level sensor	Control unit, thermal oil level sensor (TOENS)
10		Not used	
11		Not used	
12		Not used	

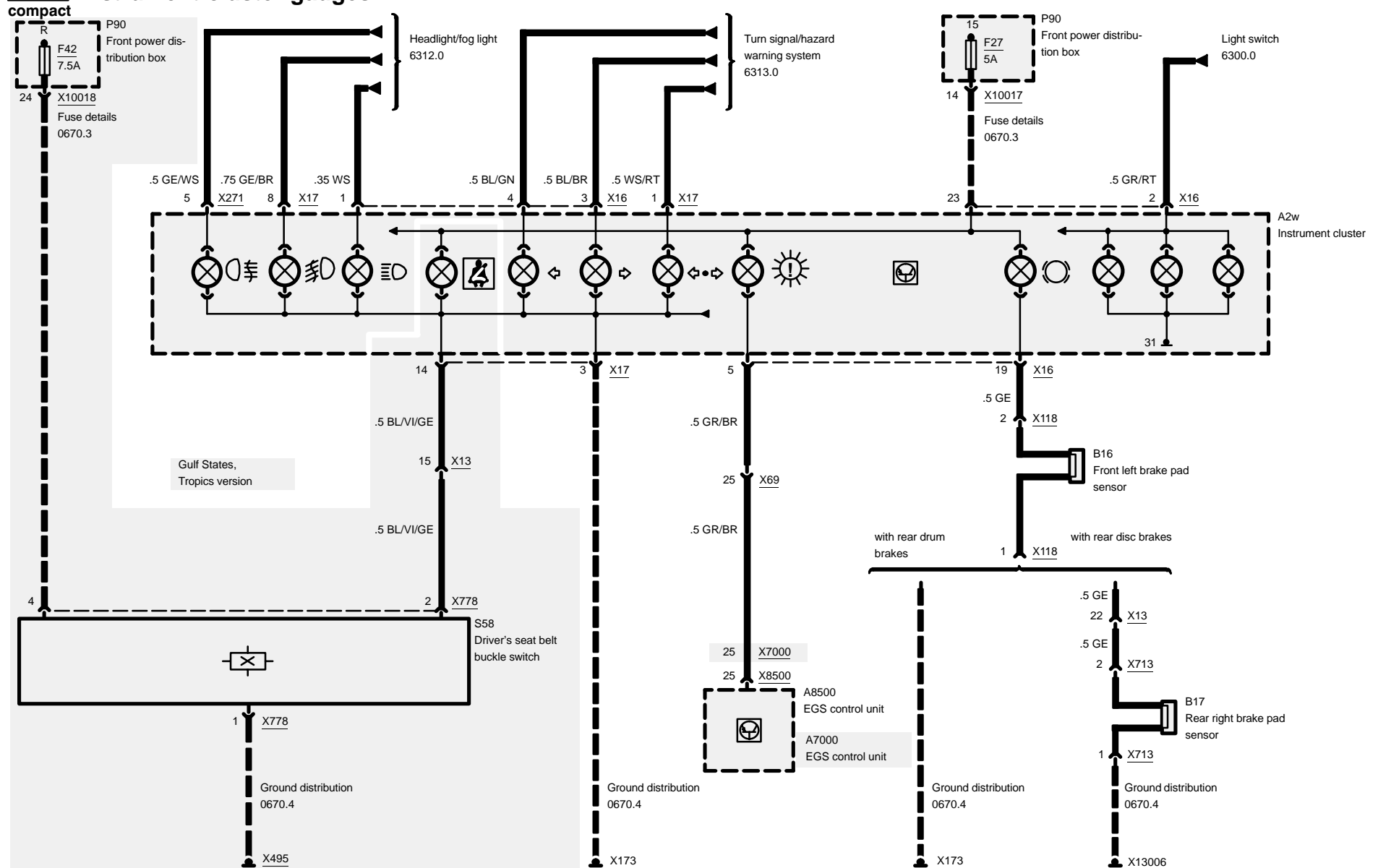


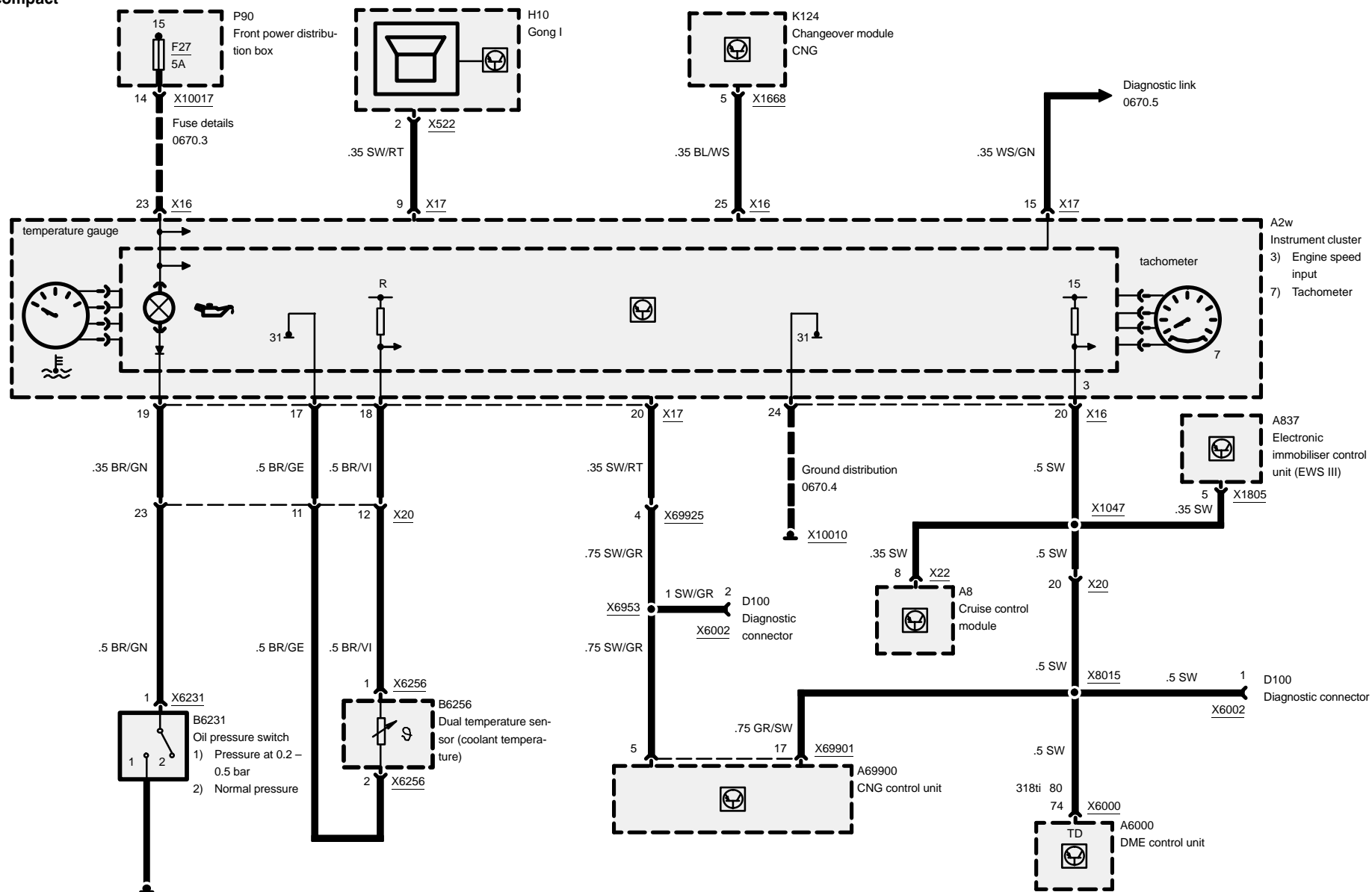


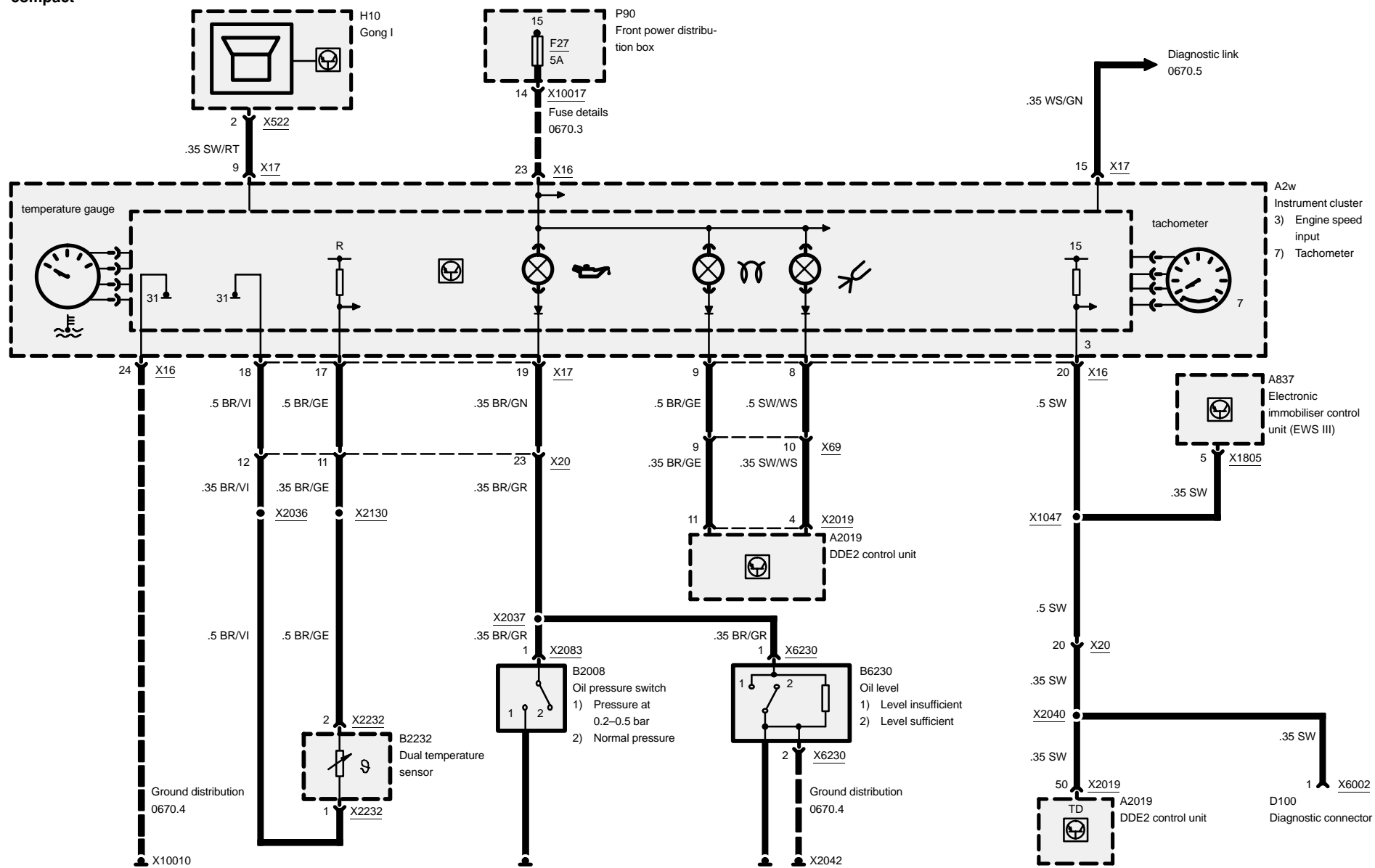
Instrument cluster

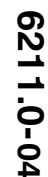
Instrument cluster gauges

Right-hand drive

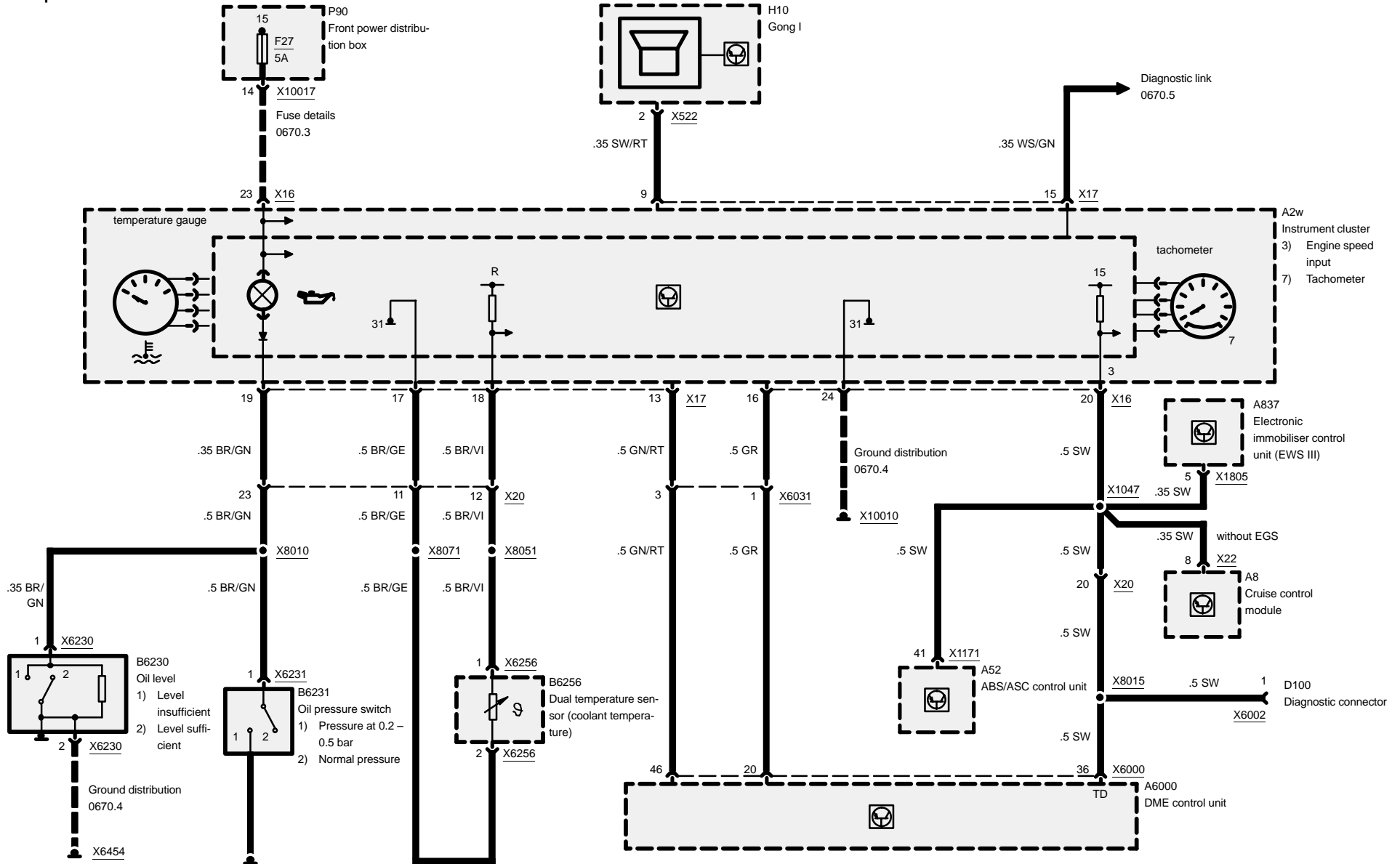


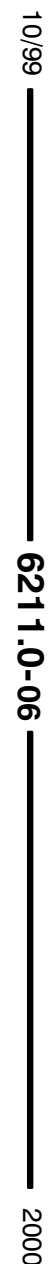






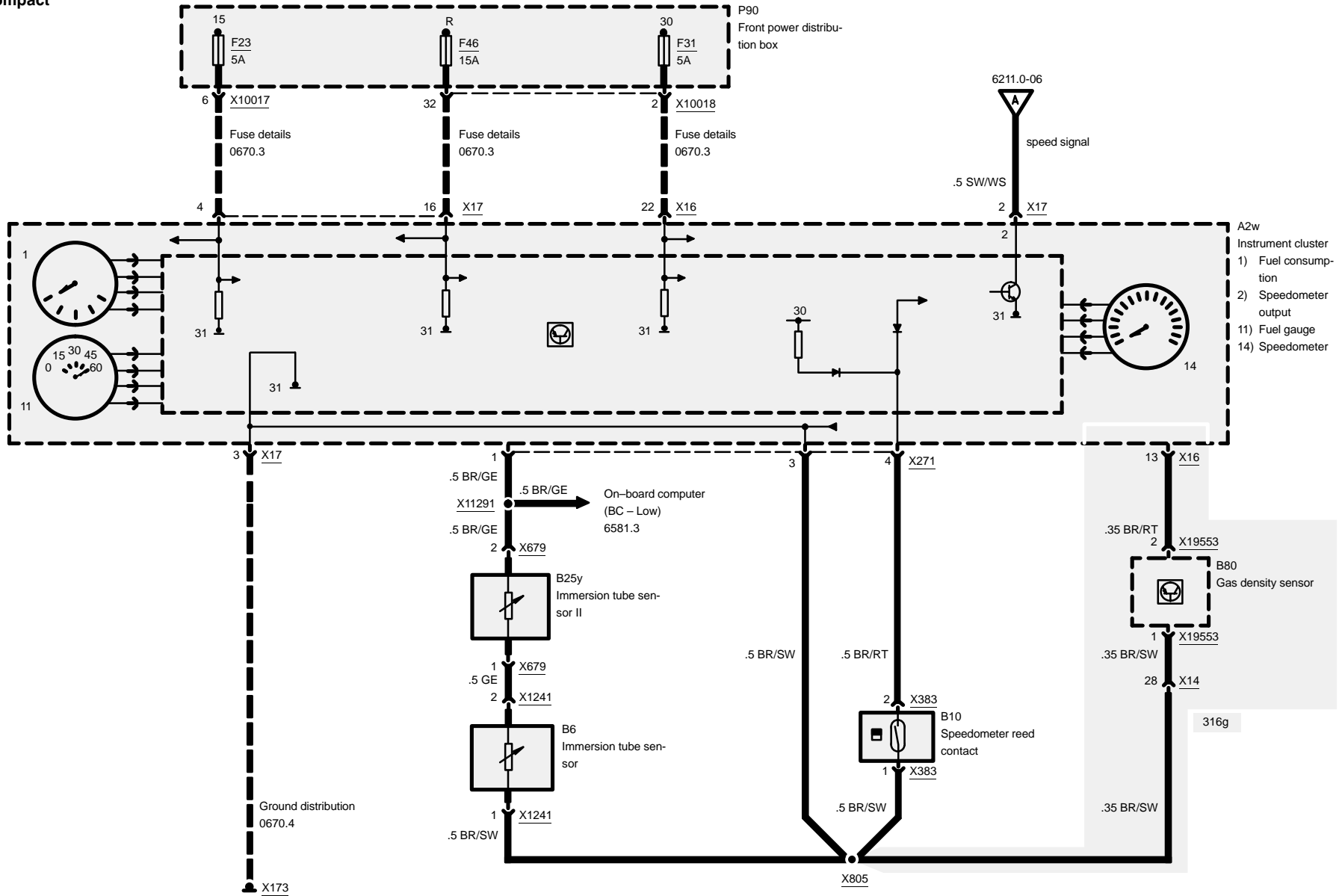
Instrument cluster gauges

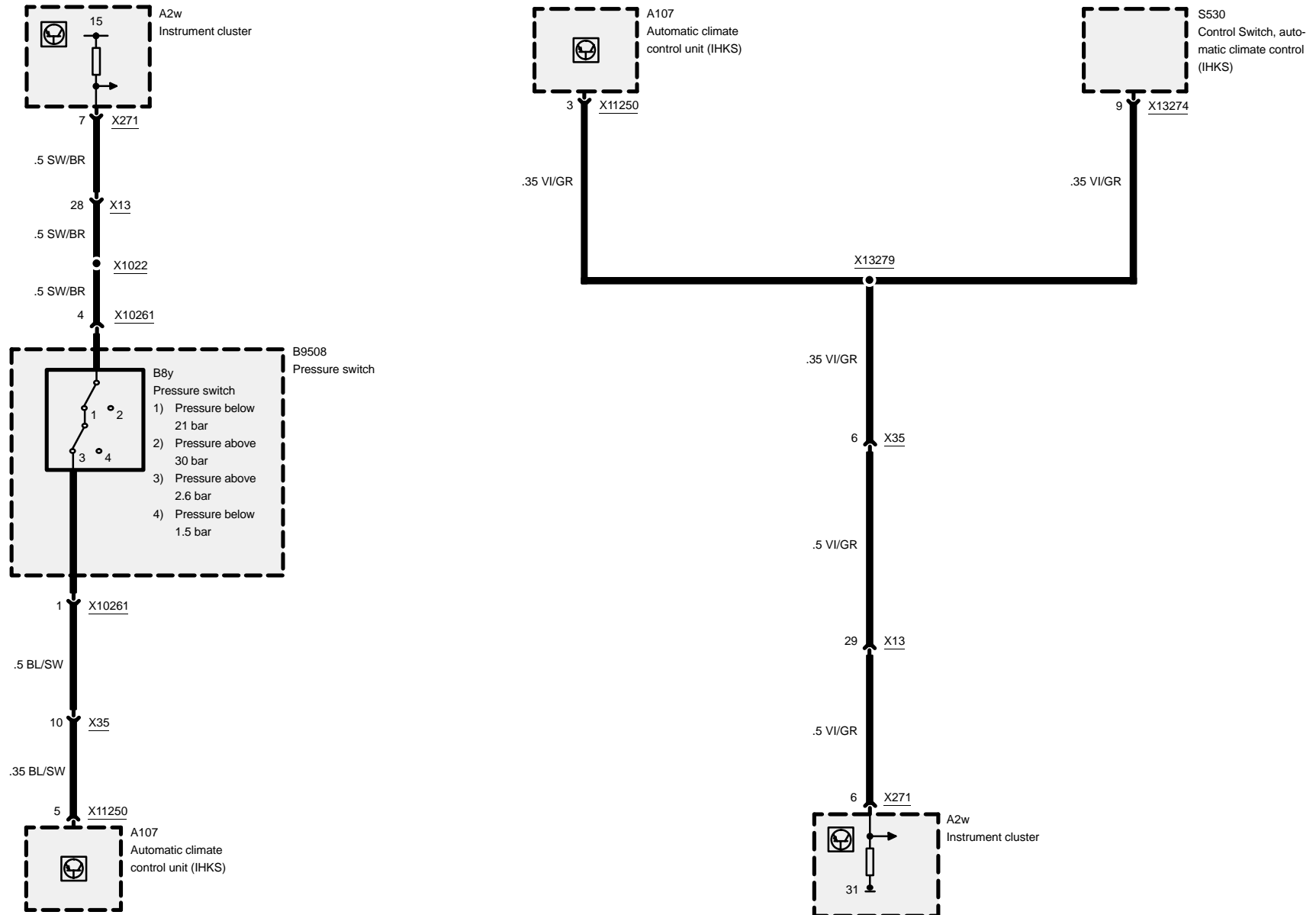


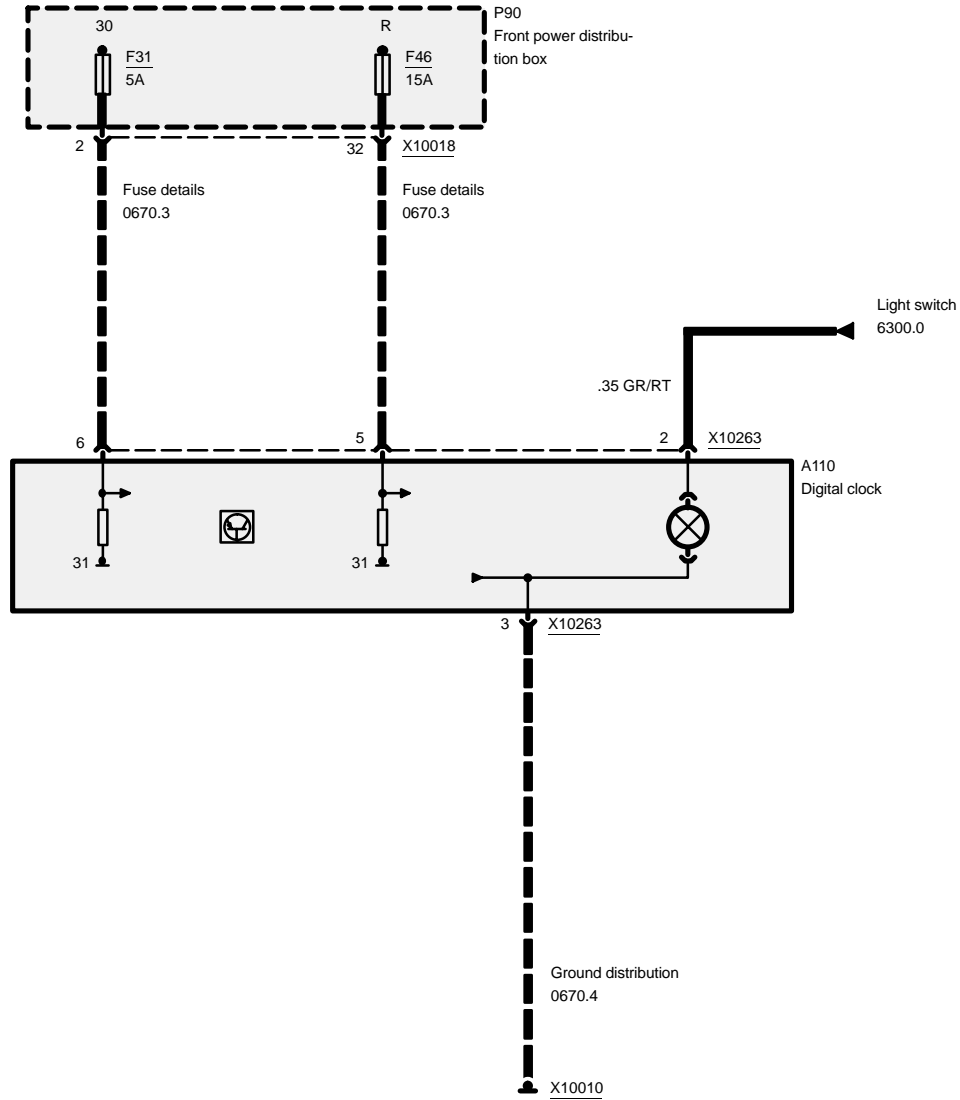


Instrument cluster

Instrument cluster gauges





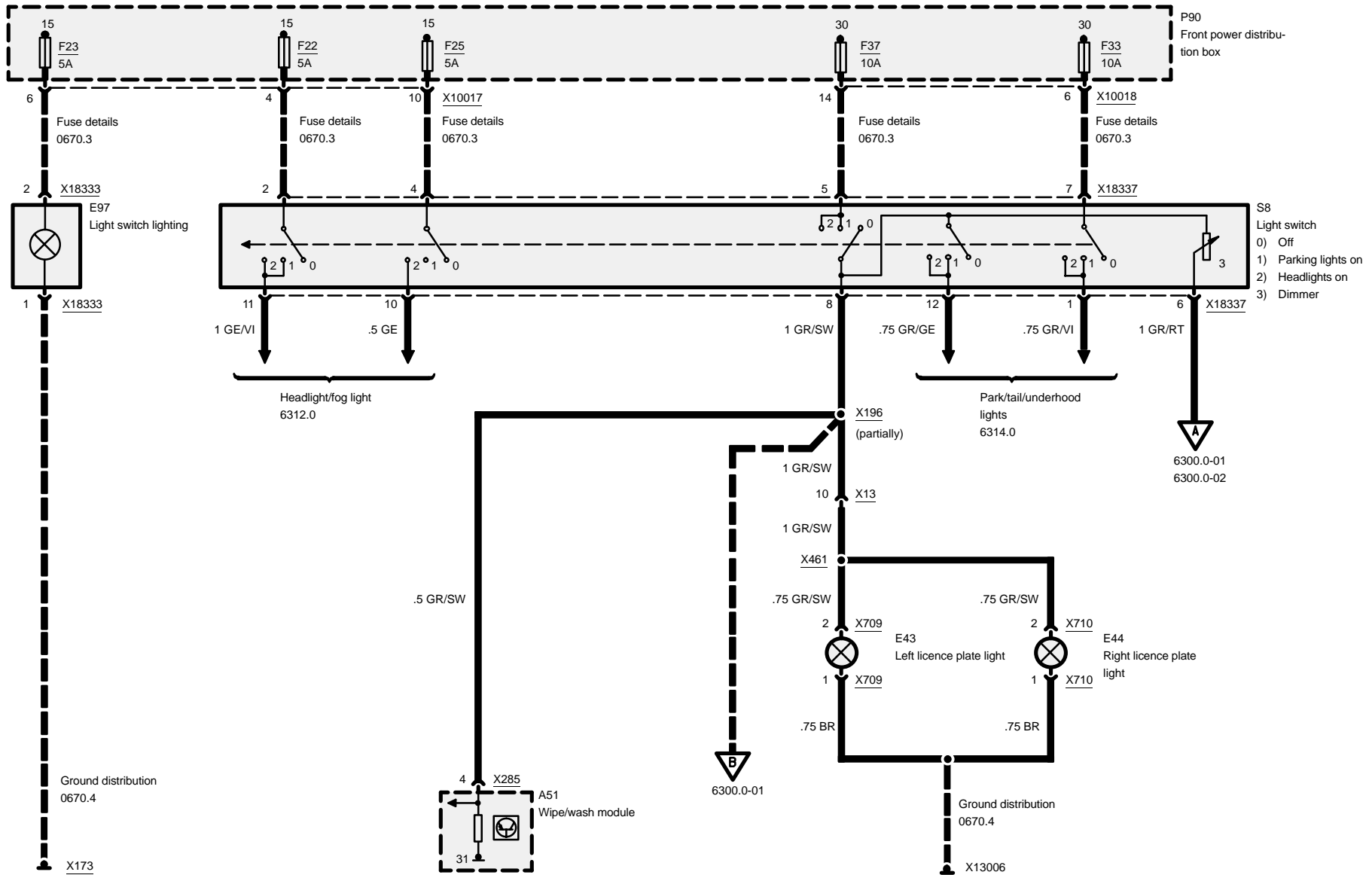




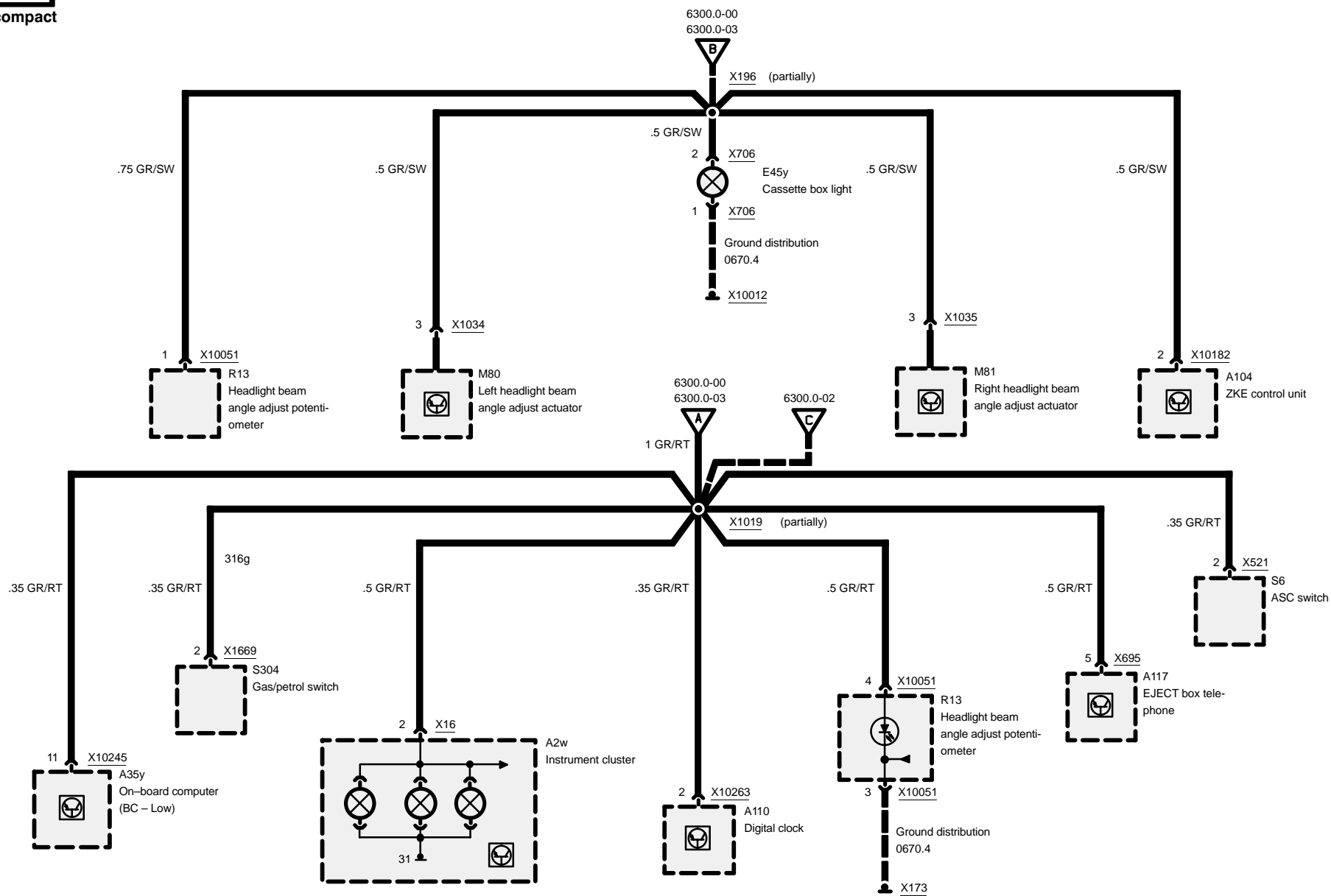
6300.0 Light switch



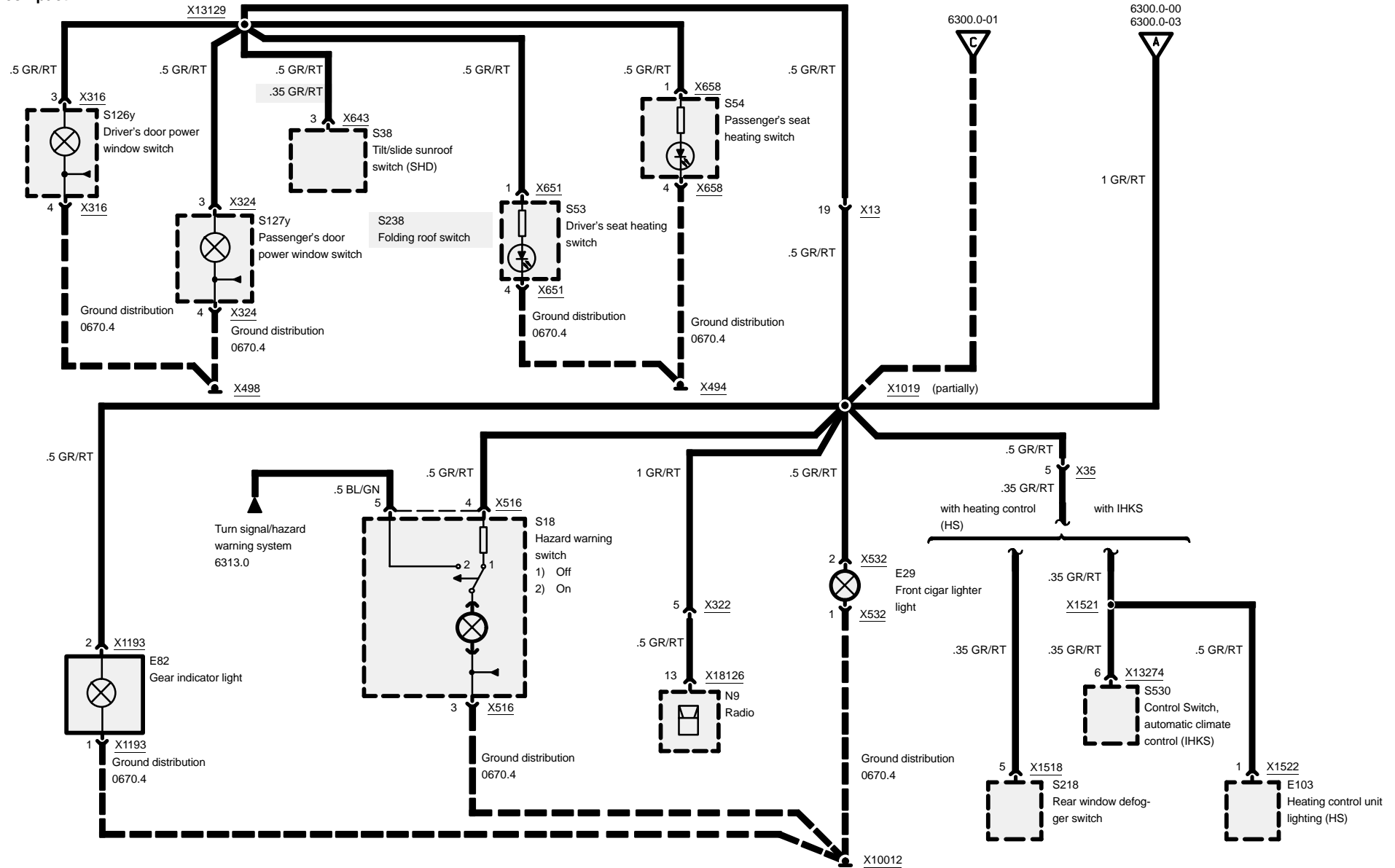
compact



Light switch



Light switch

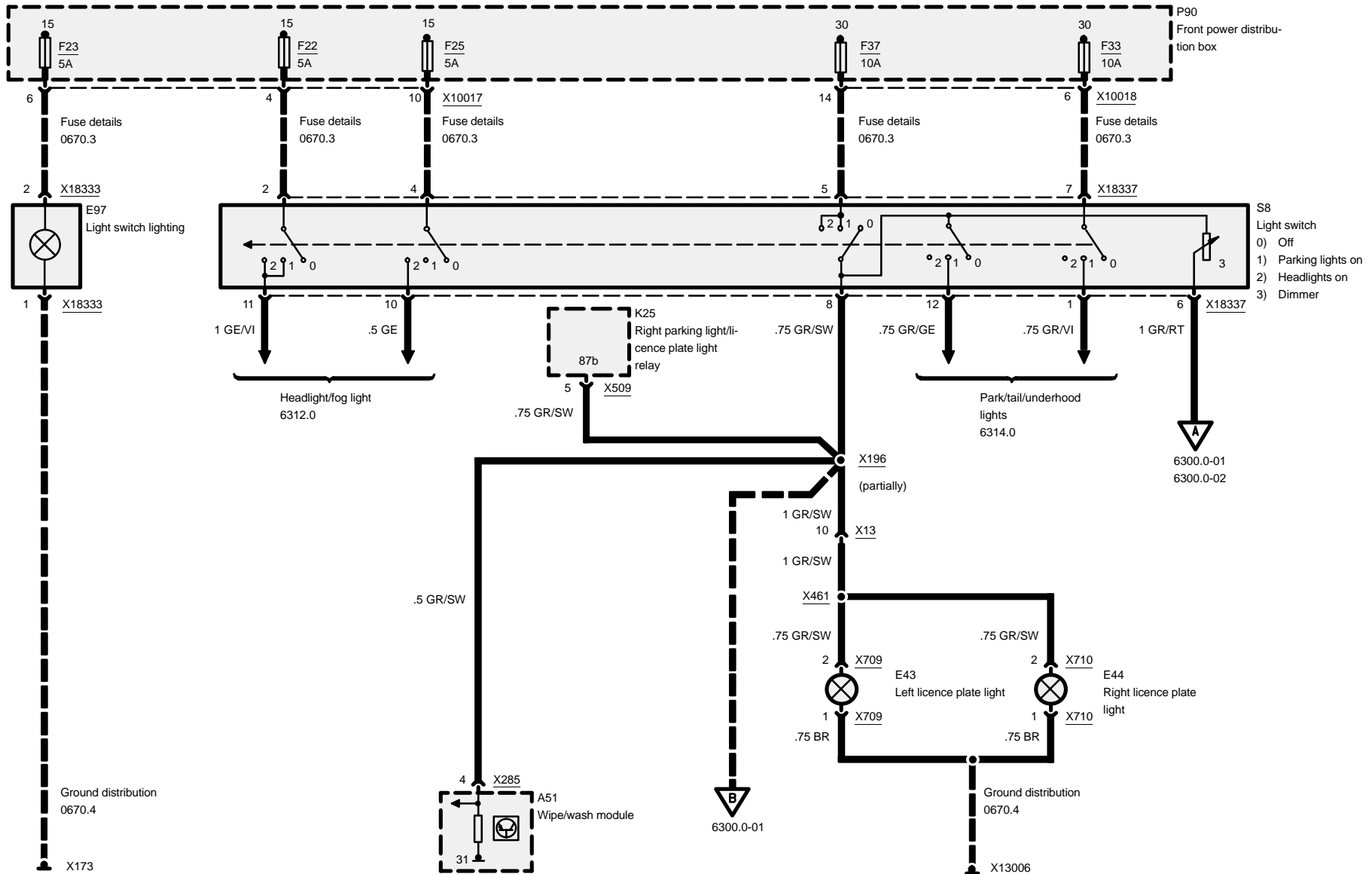




Light switch

N S

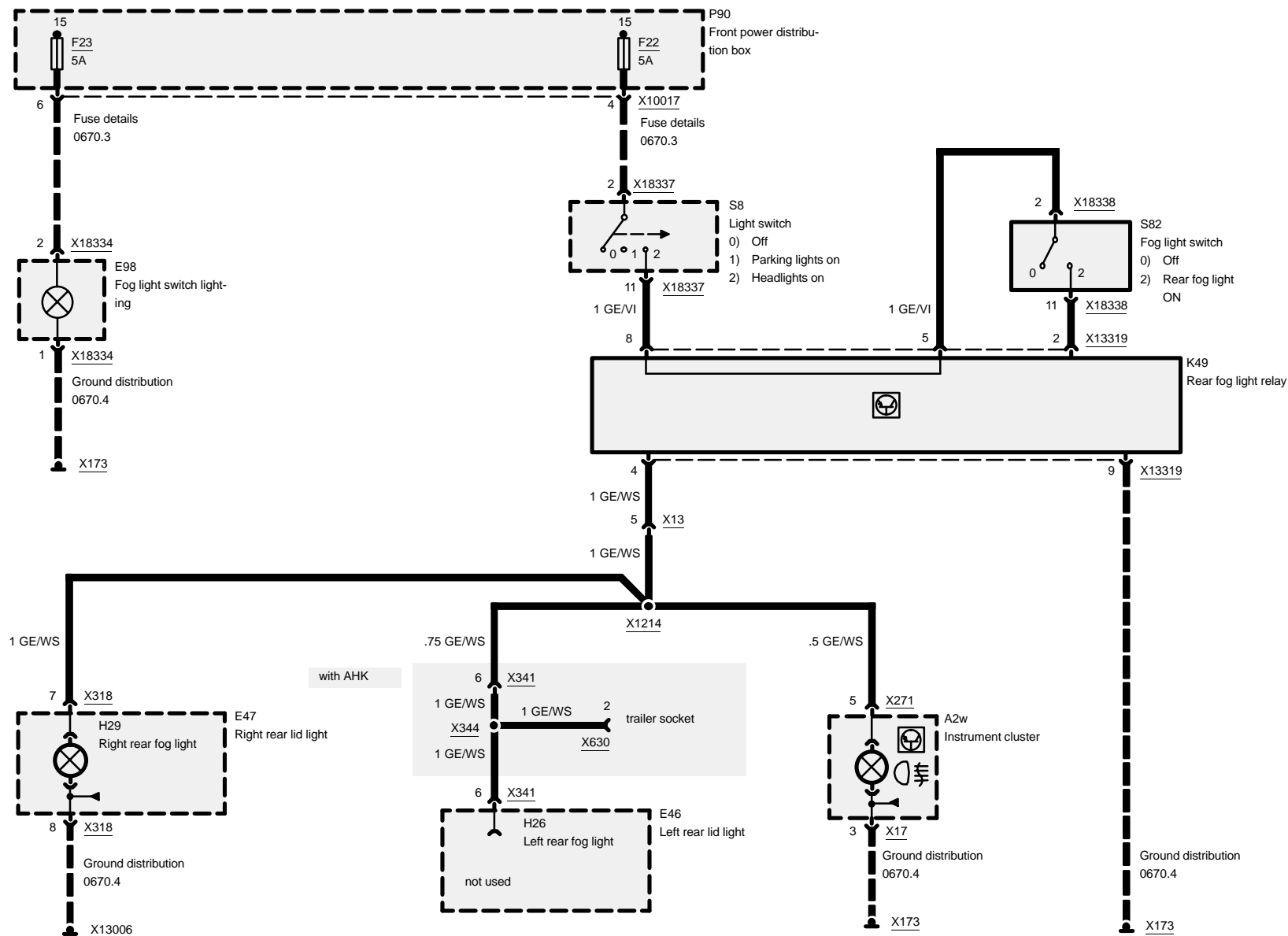
compact



6312.0 Headlight/fog light

Right-hand drive

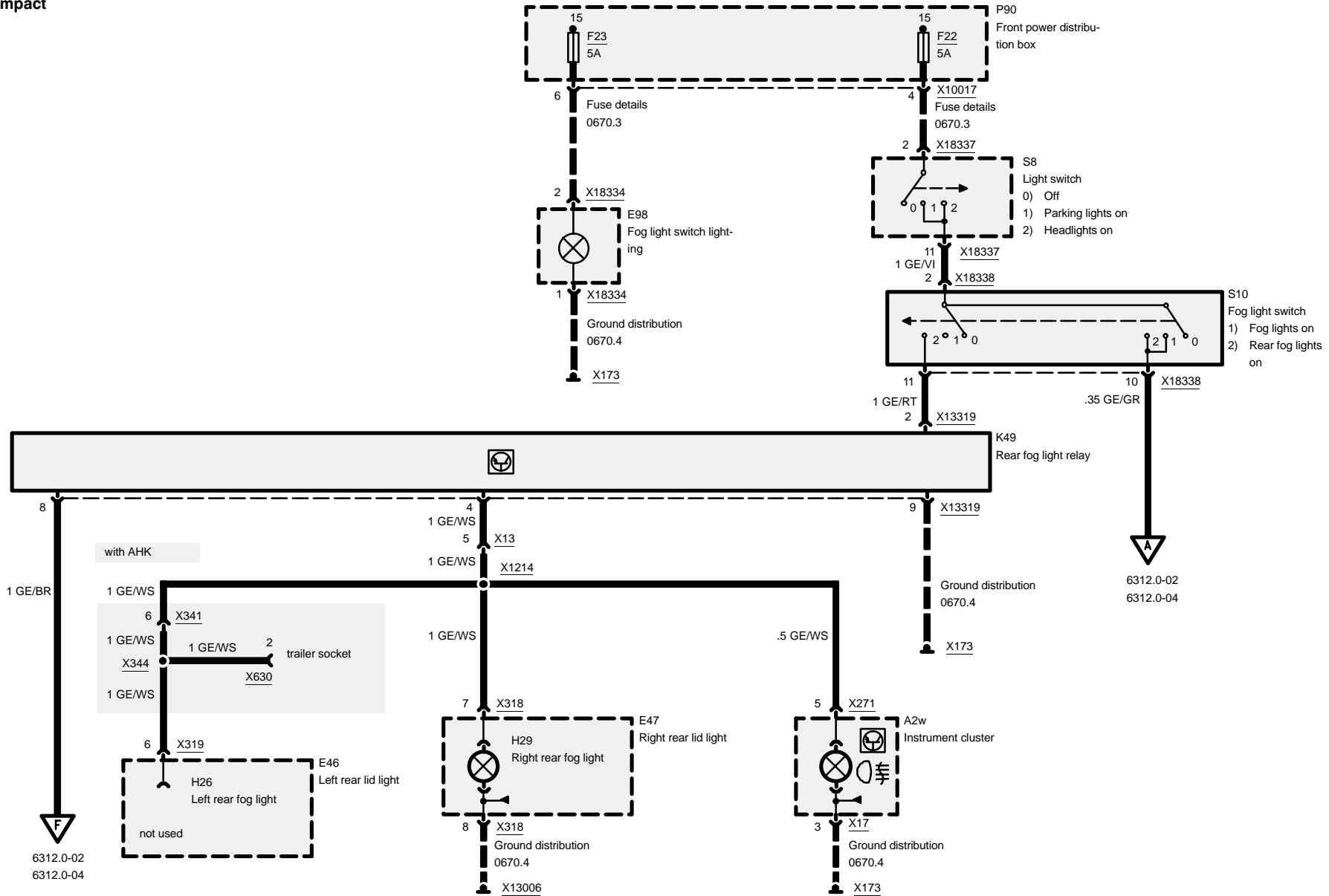
Rear fog light, without fog light



6312.0 Headlight/fog light

Rear fog light, with fog light

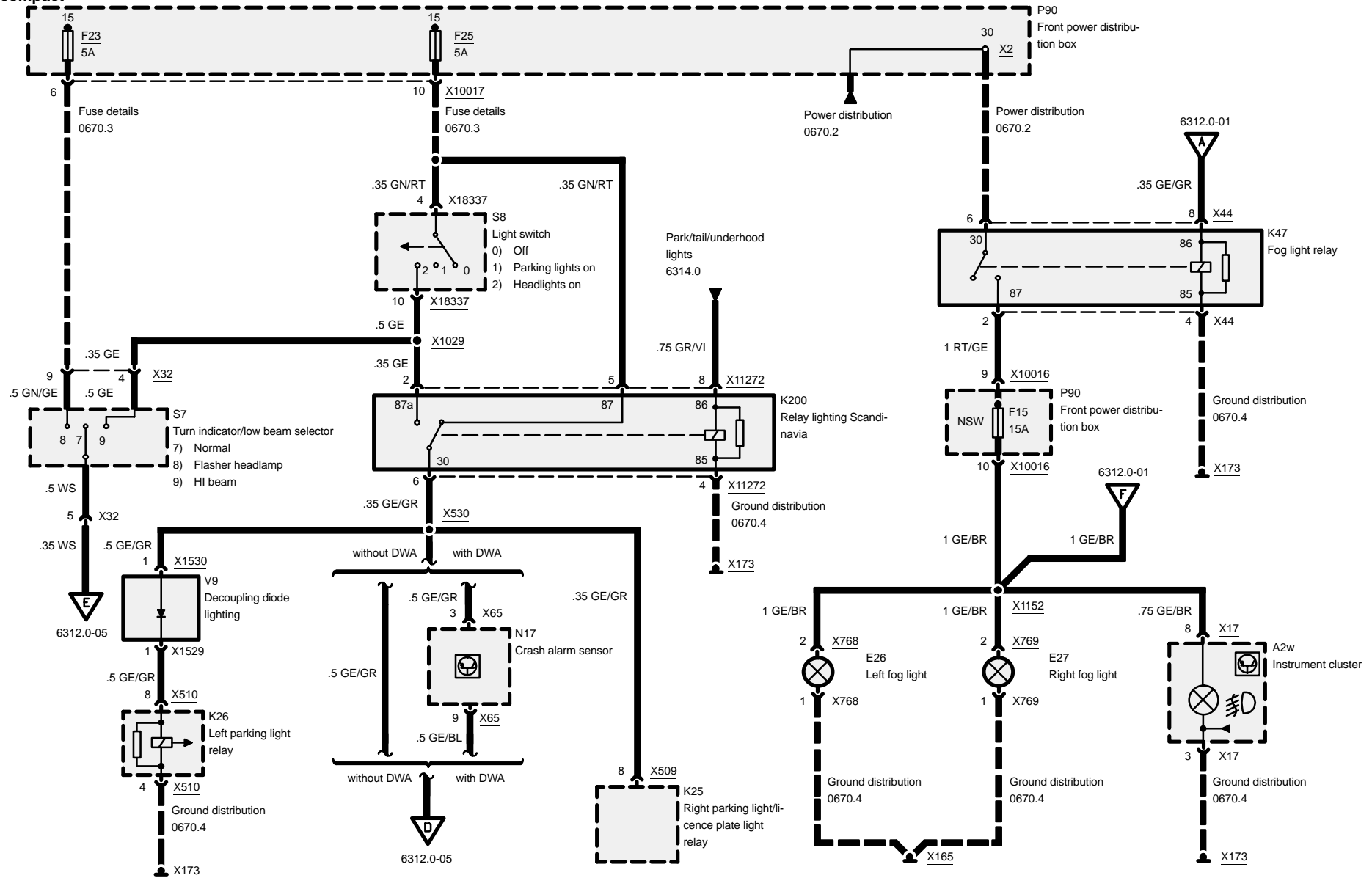
Right-hand drive







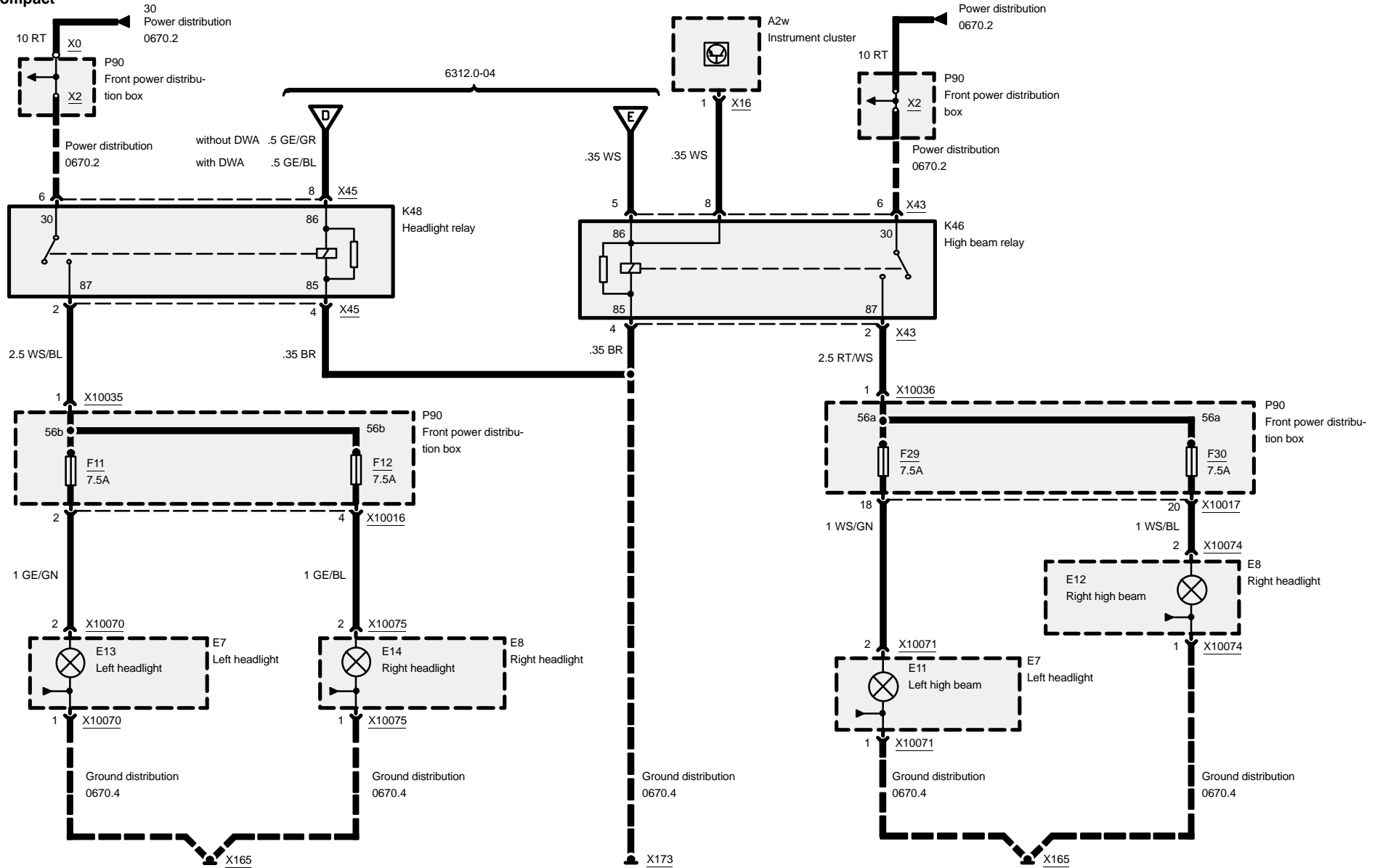
Headlight/fog light





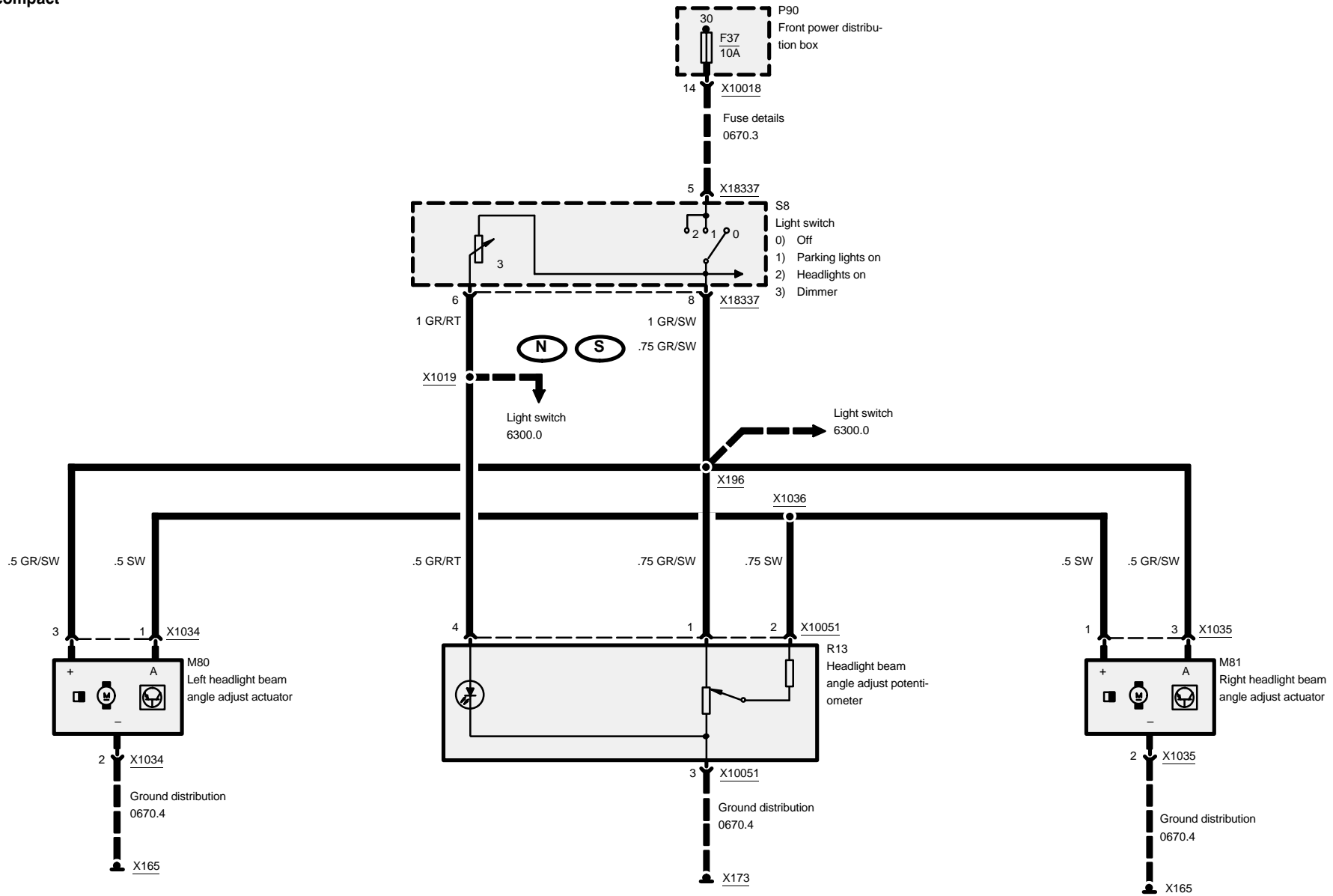
Headlight/fog light

N S

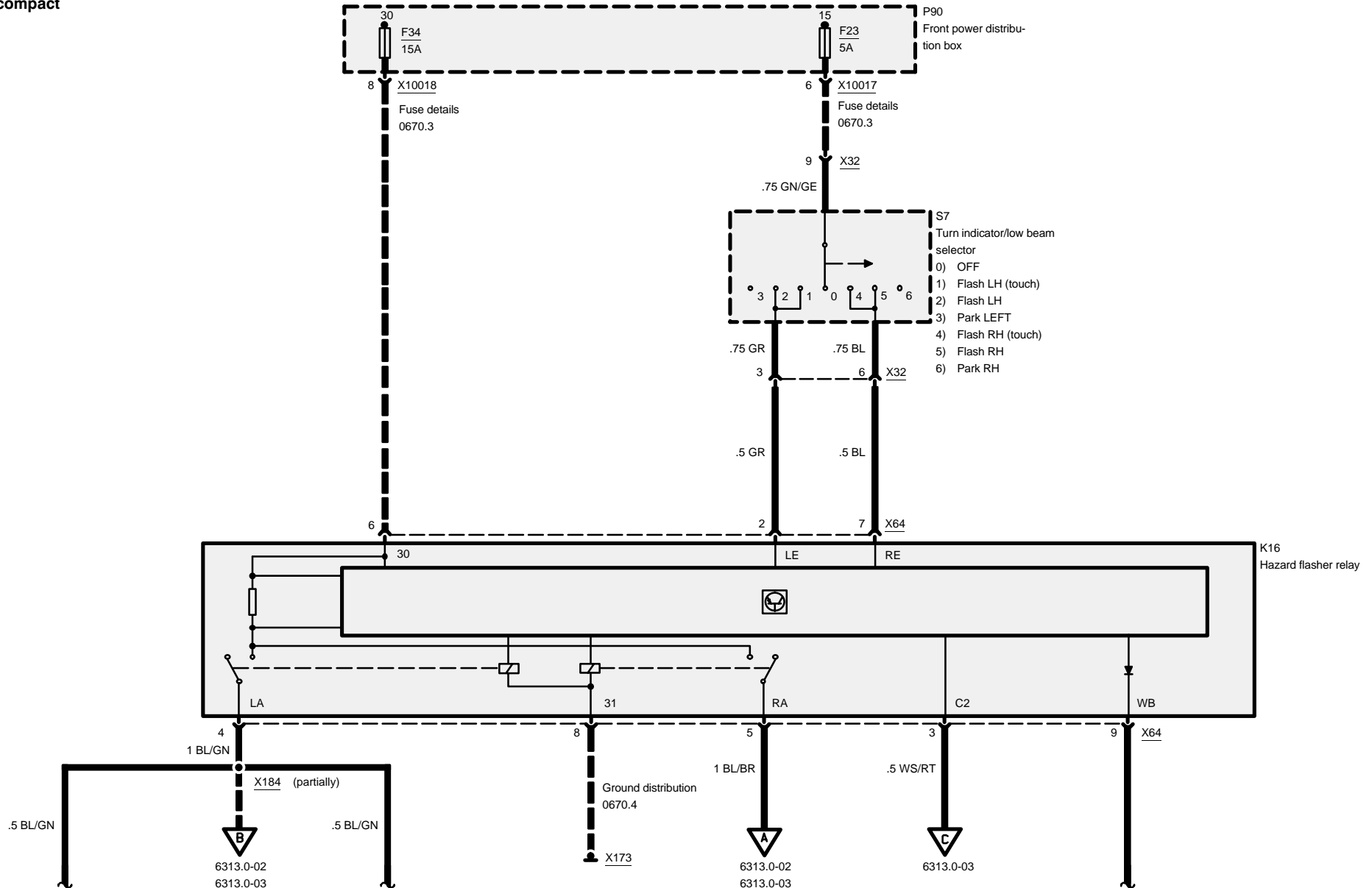


Headlight/fog light

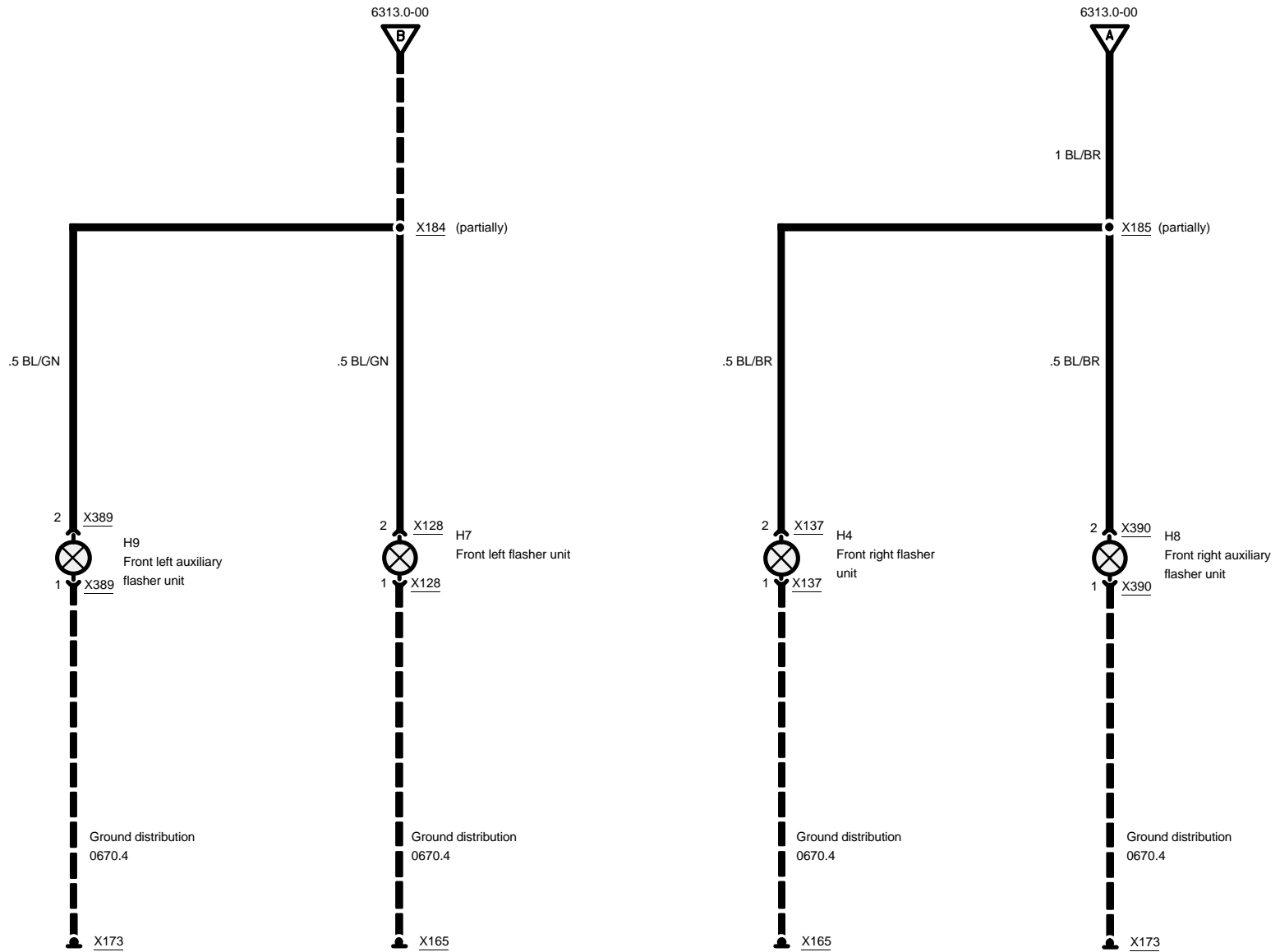
Headlight range adjustment



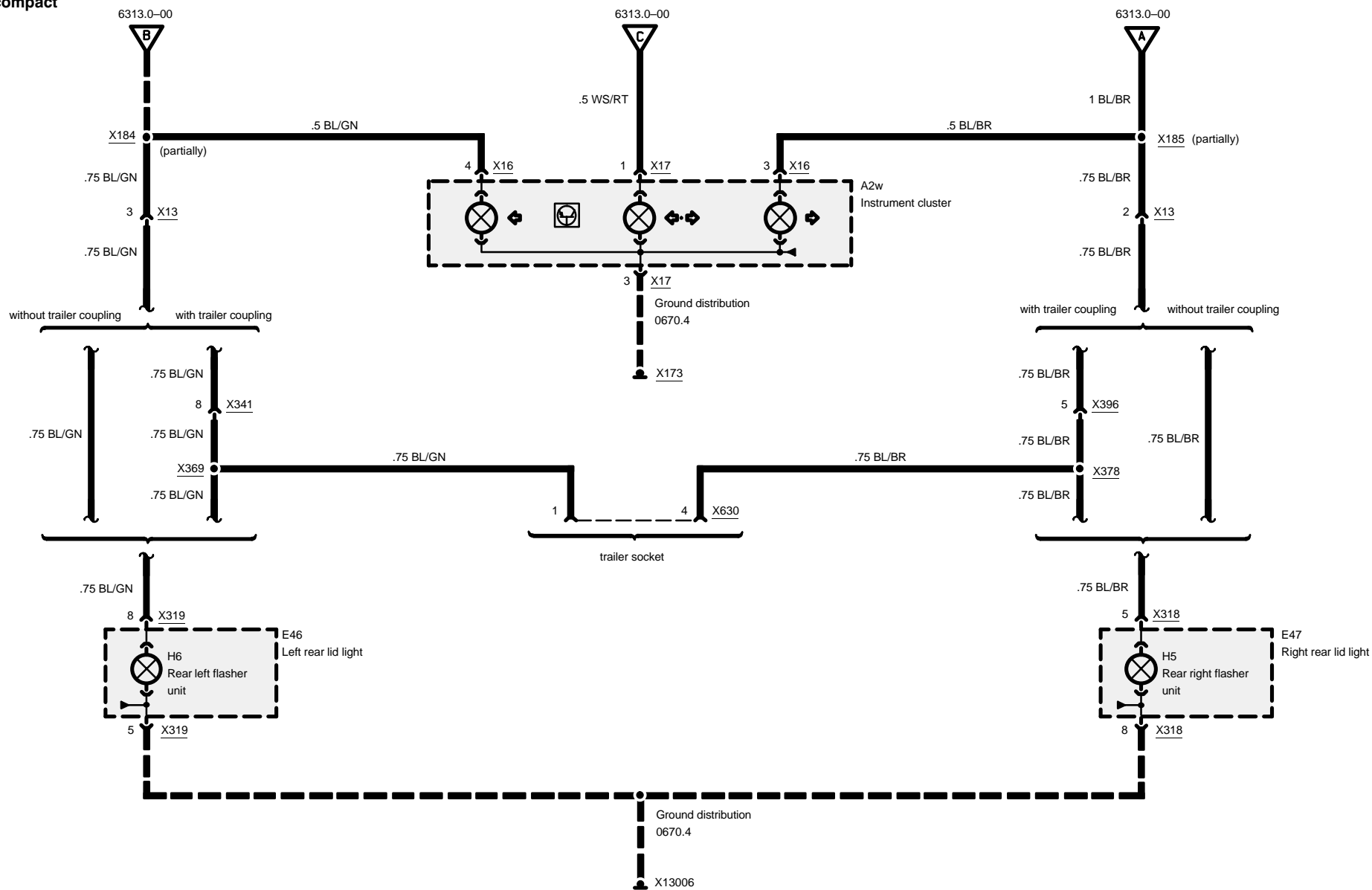
6313.0 Turn signal/hazard warning system



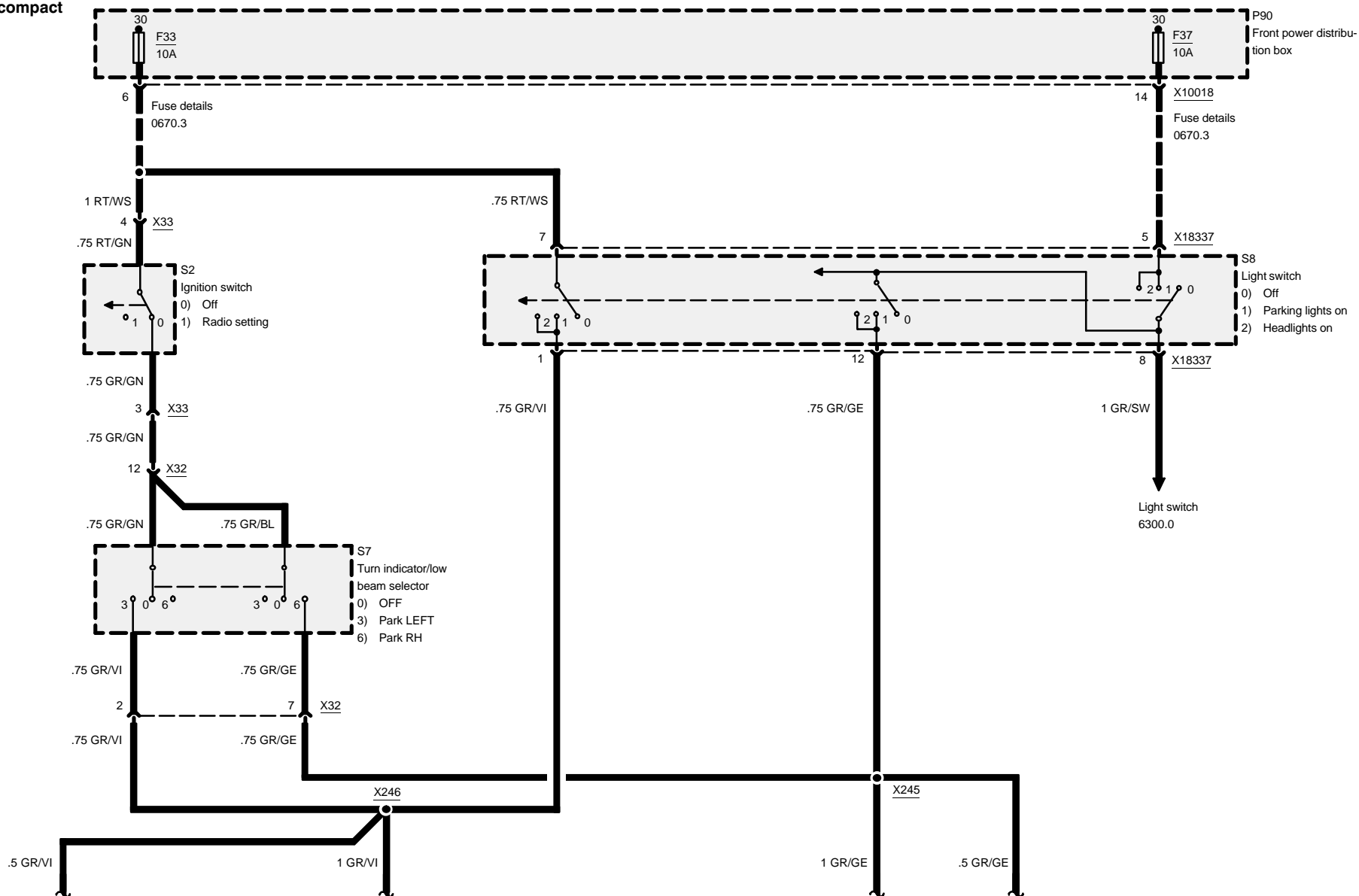
Turn signal/hazard warning system

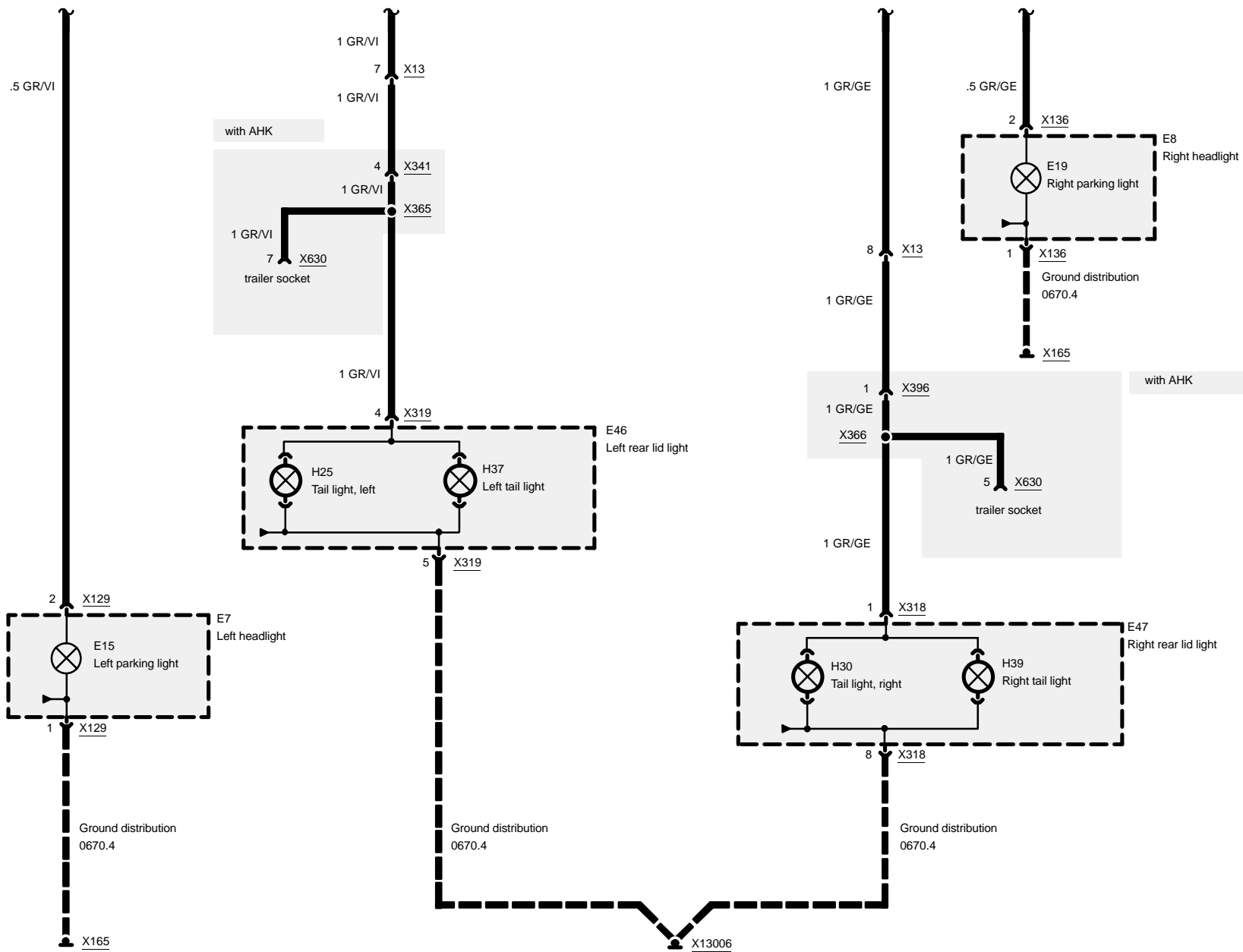


Turn signal/hazard warning system



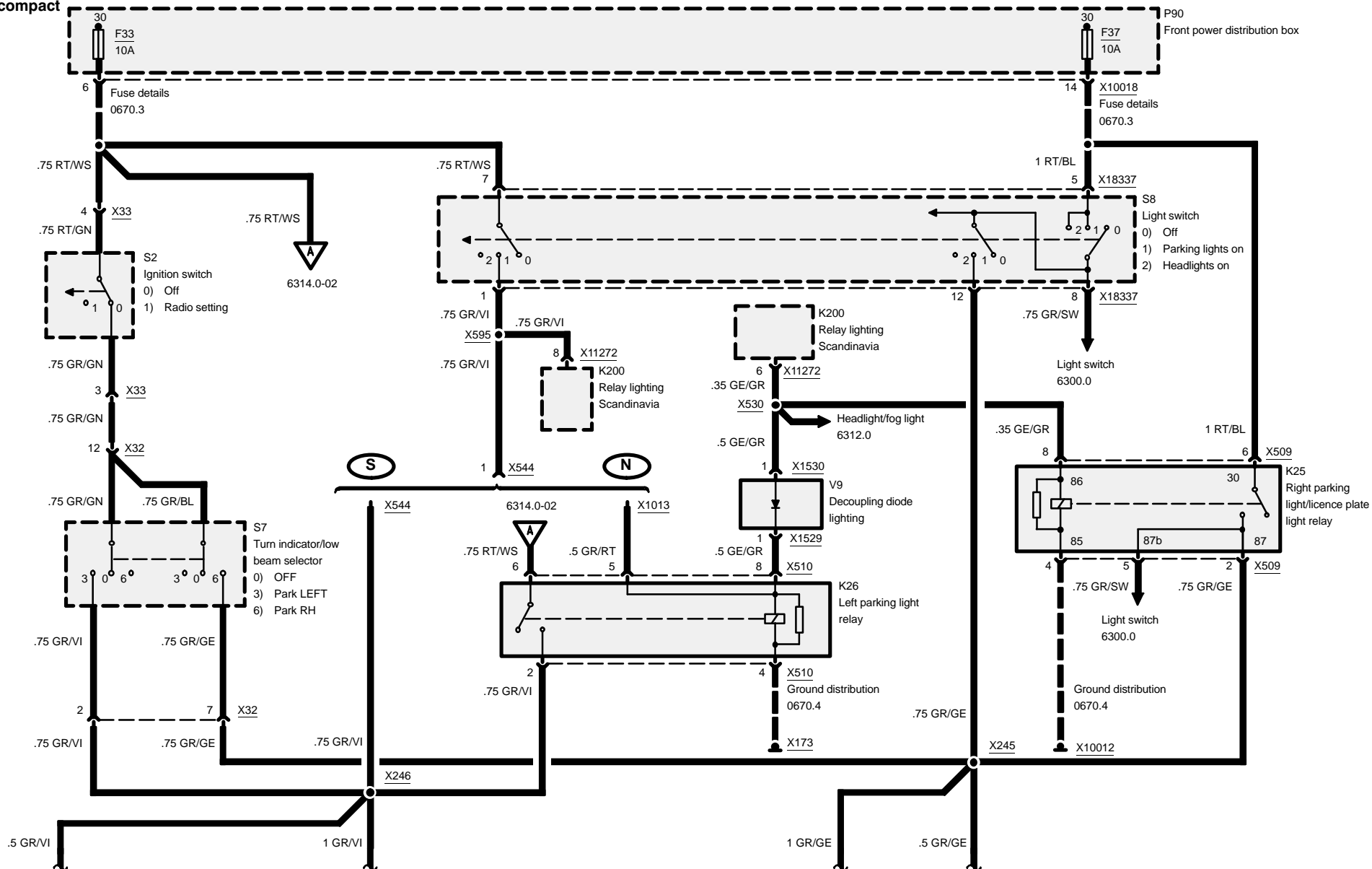
6314.0 Park/tail/underhood lights

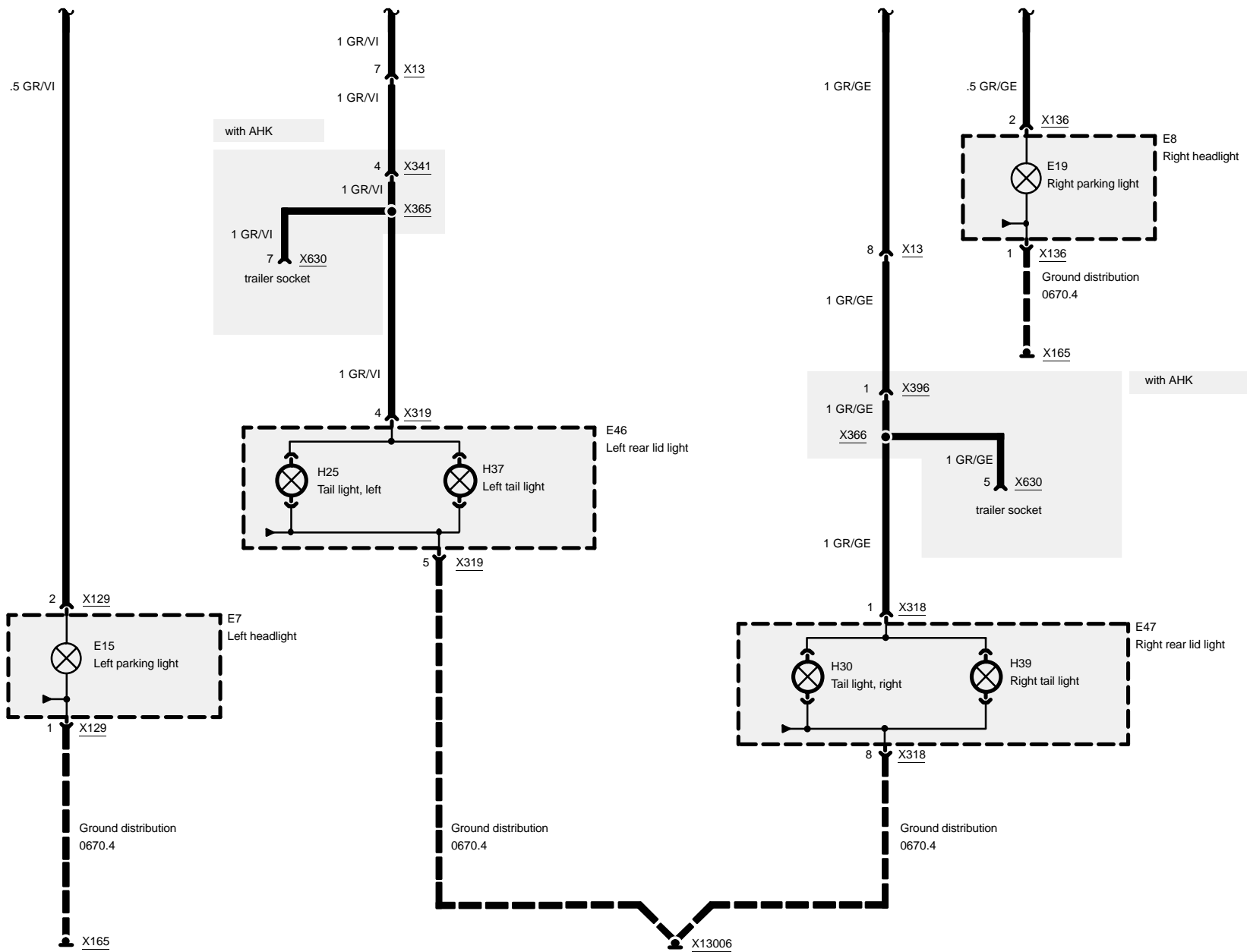






N S

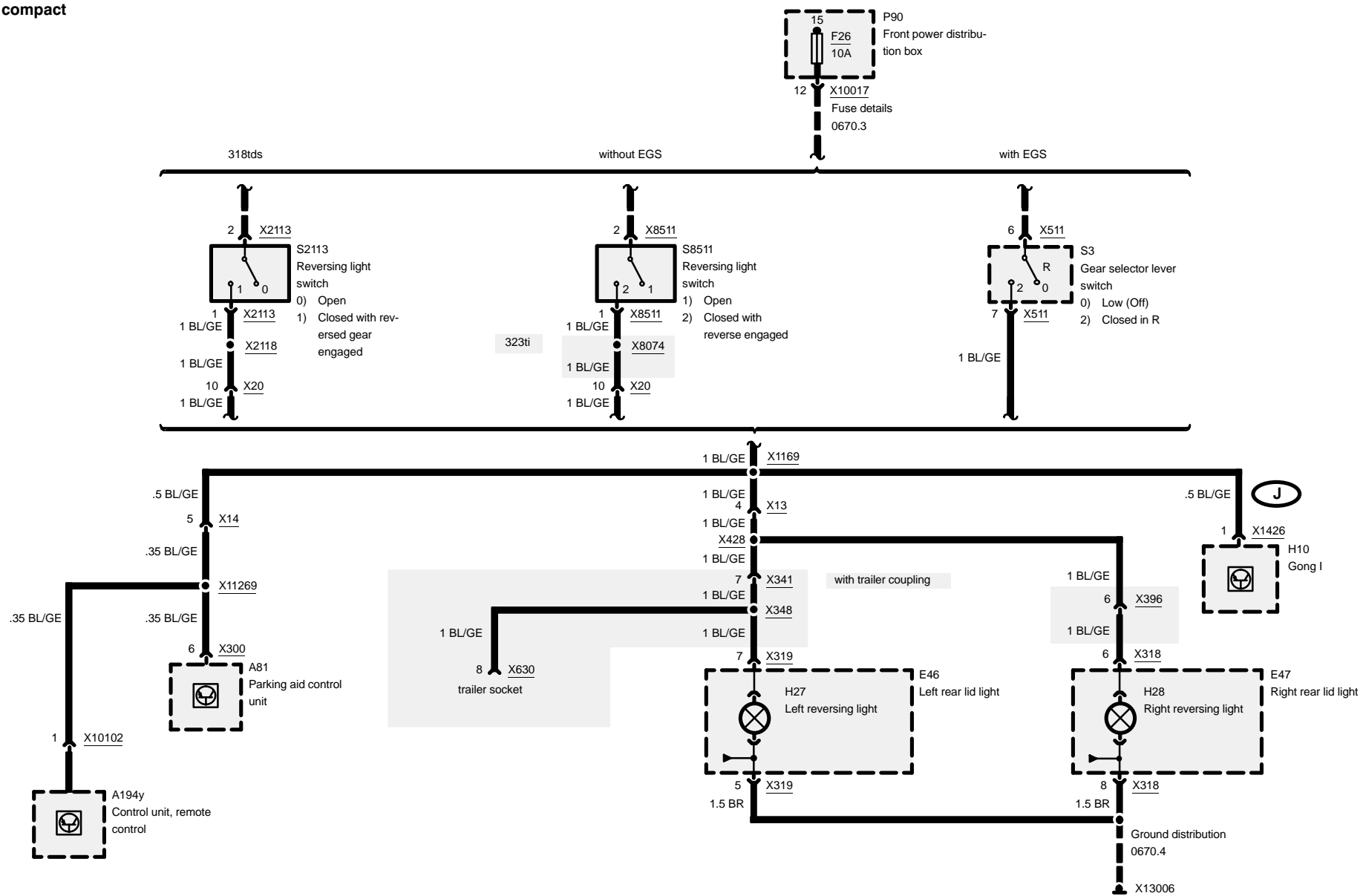






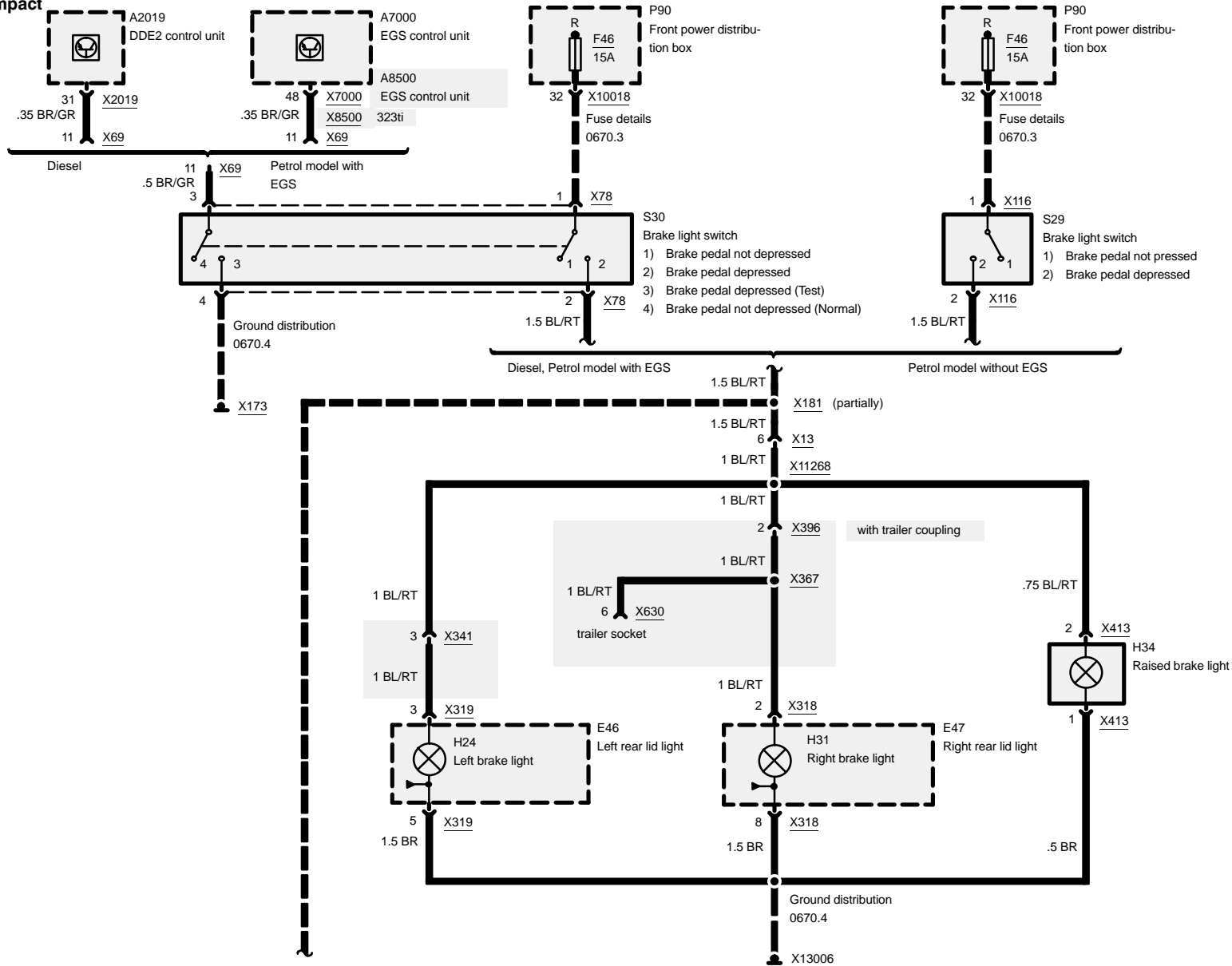
6322.0 Reversing lights

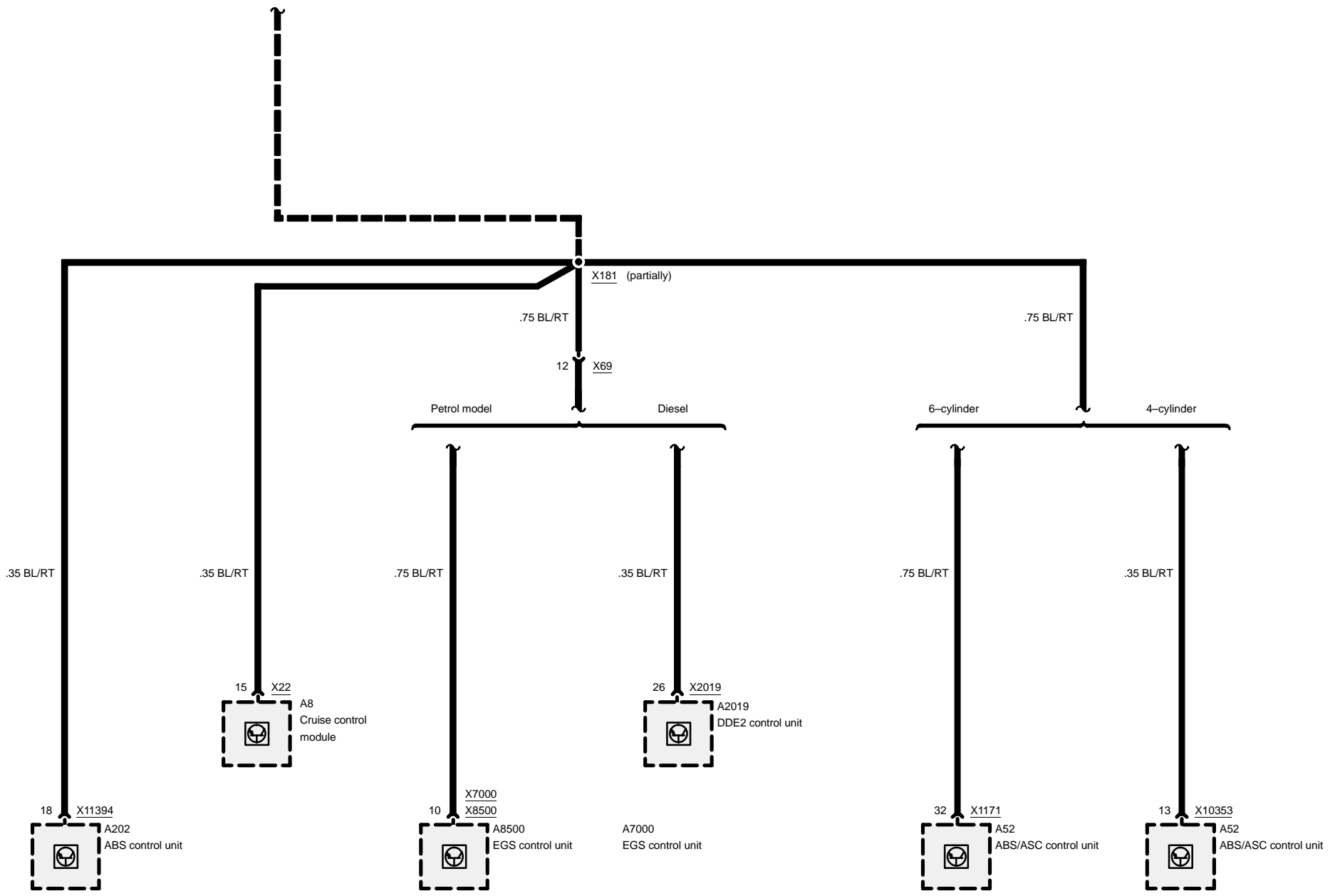
Right-hand drive



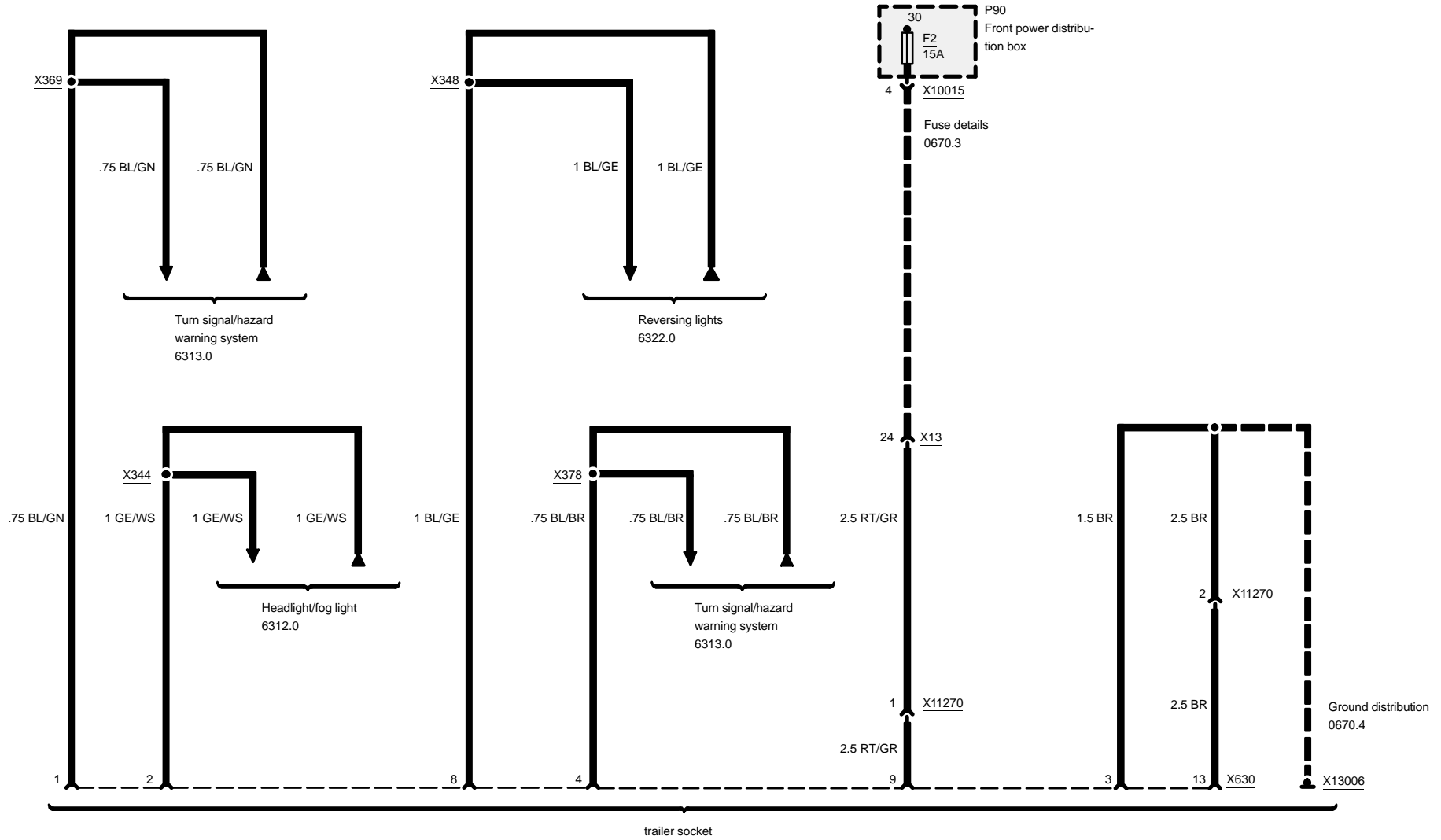


6325.0 Brake lights

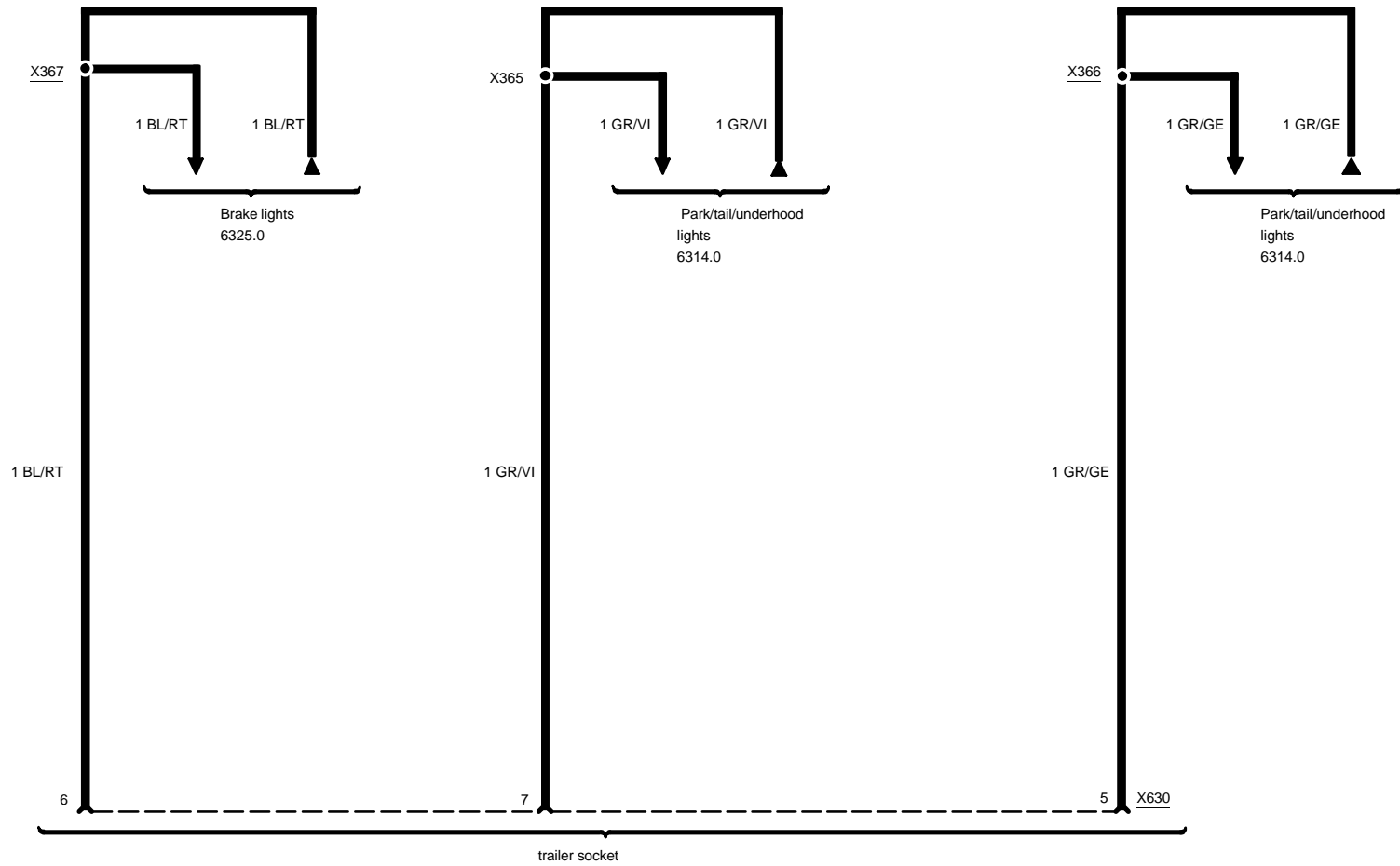




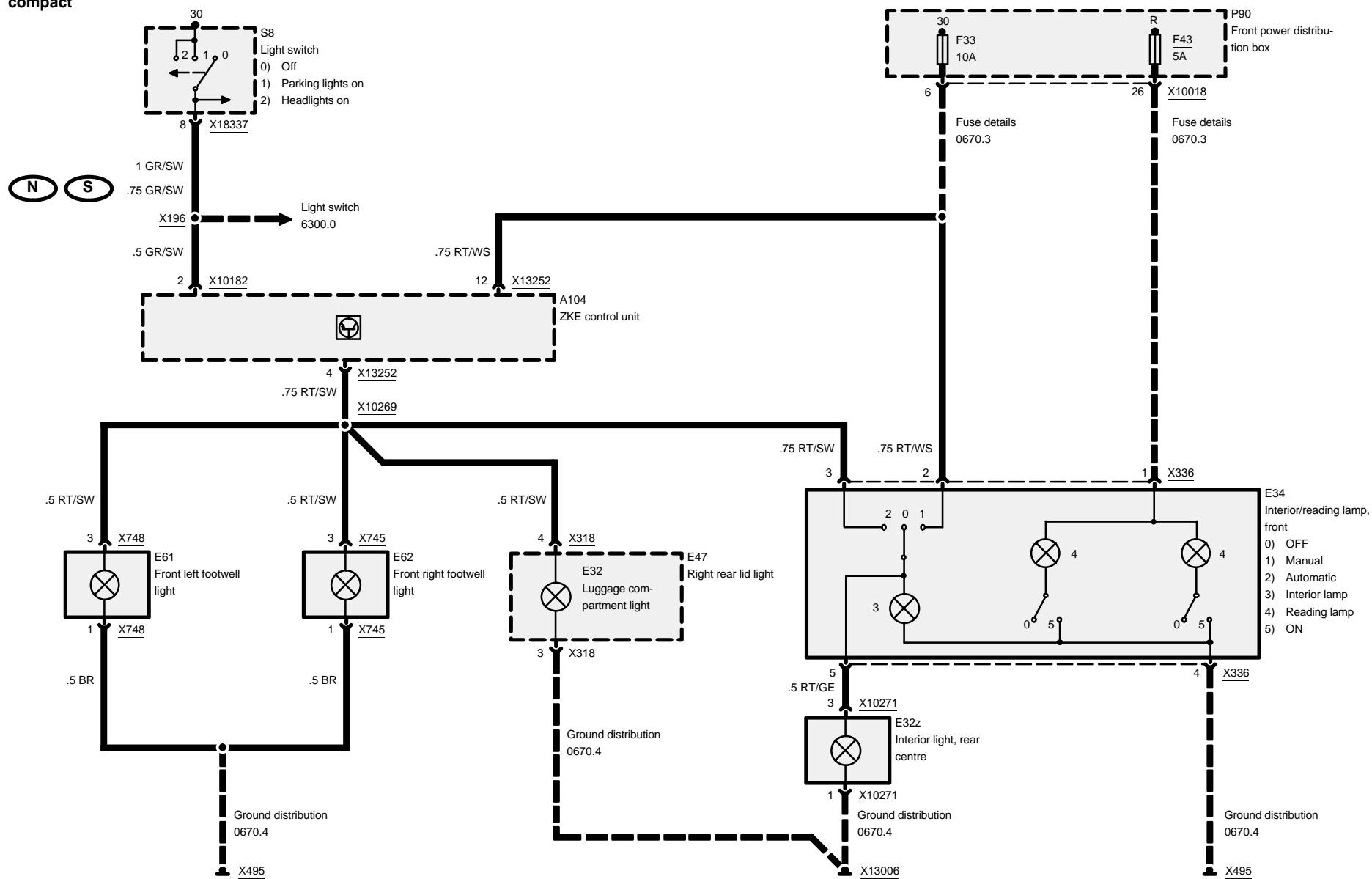
6328.1 Trailer coupling

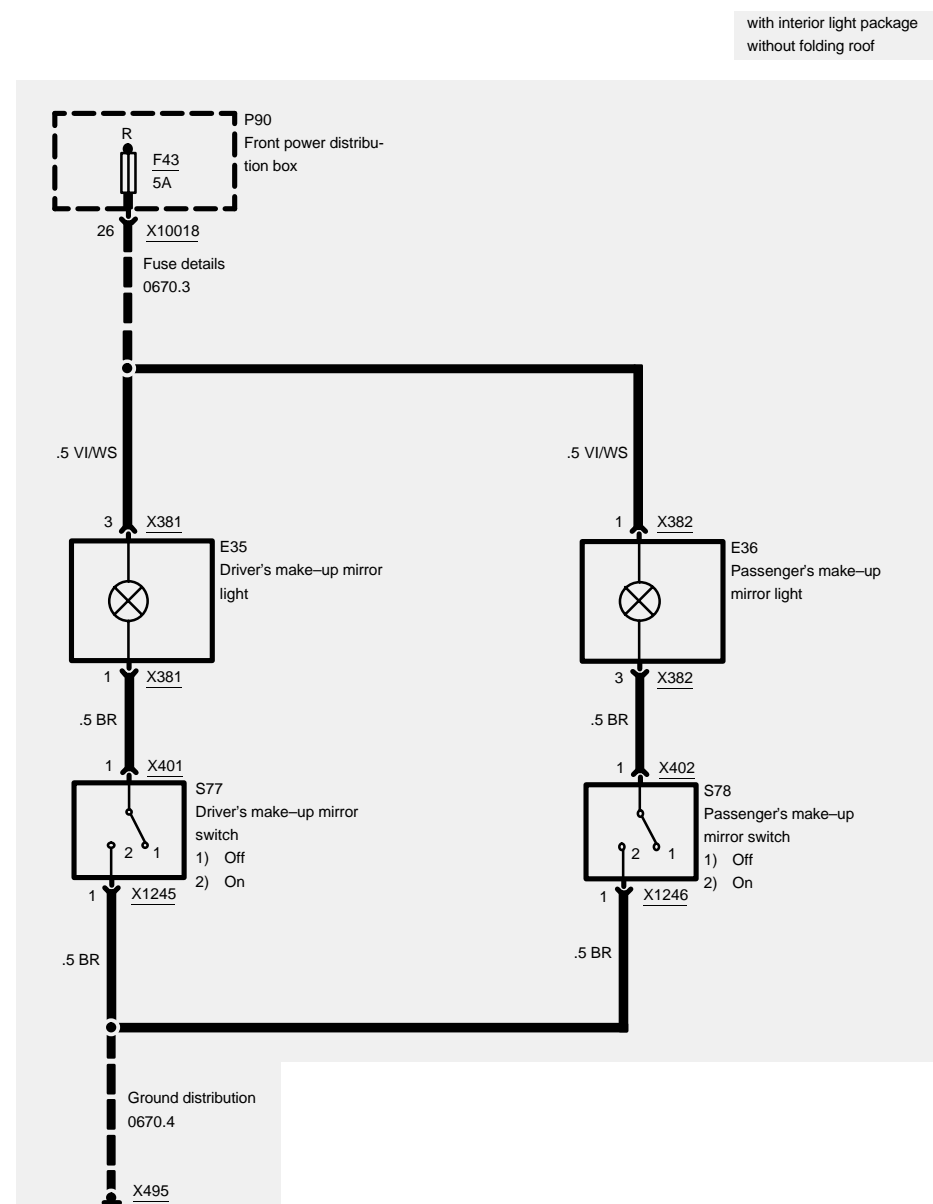
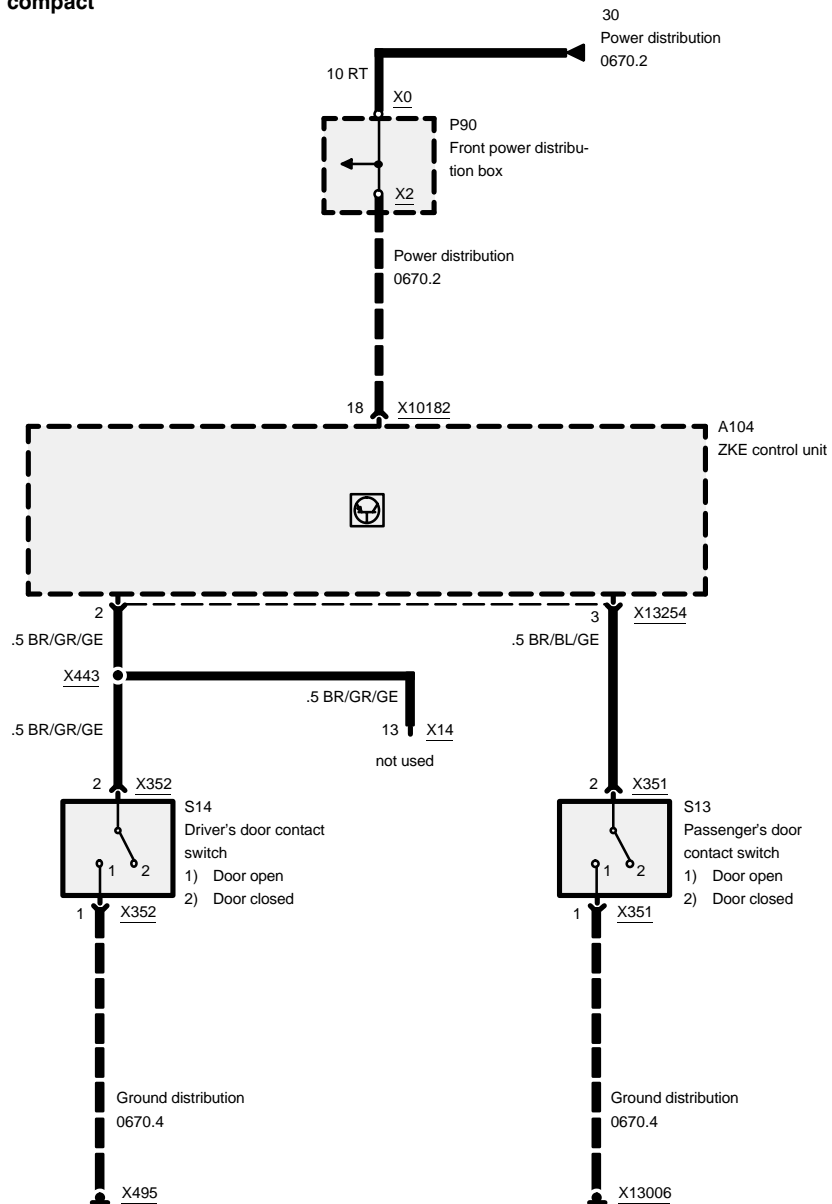


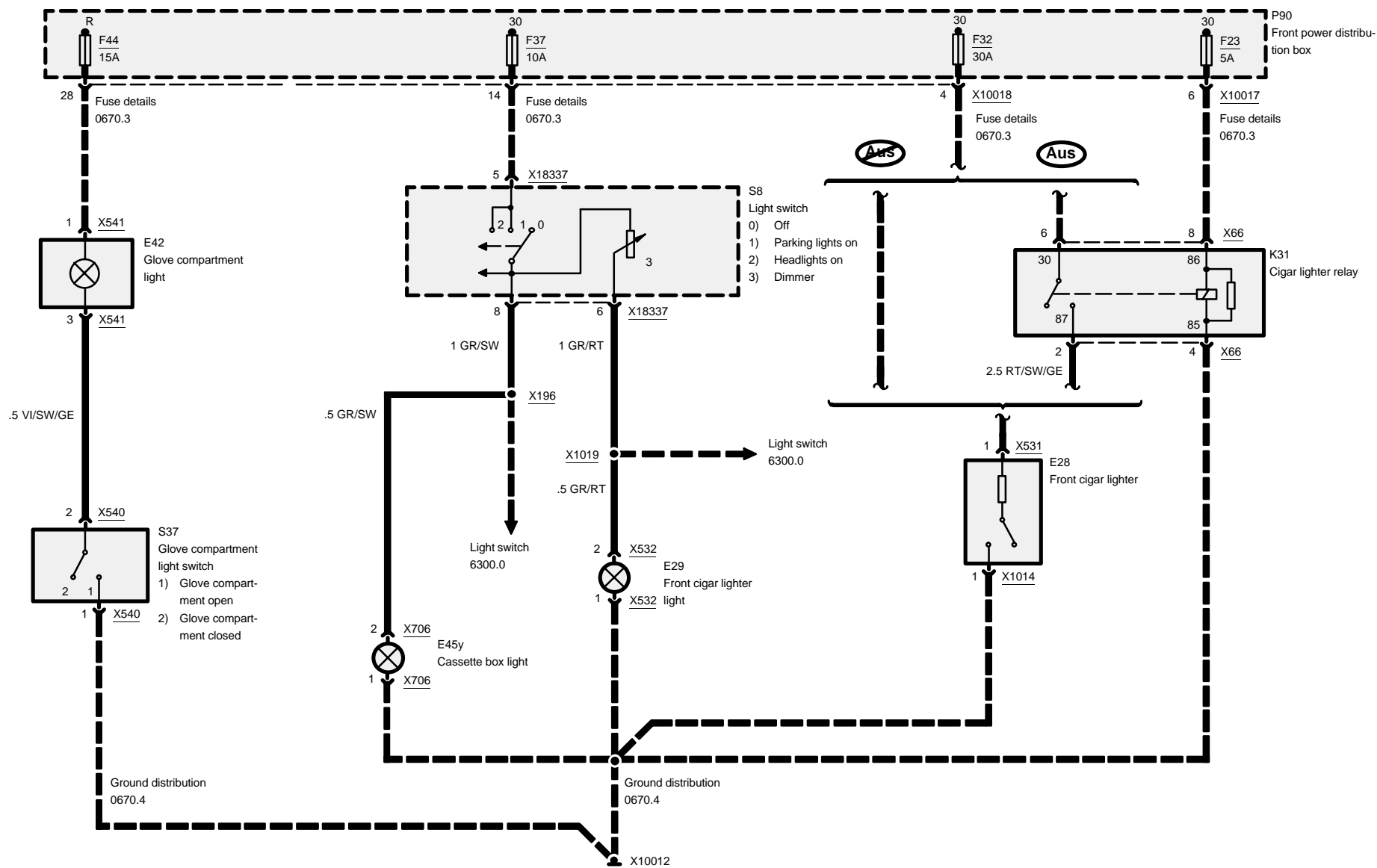
Trailer coupling

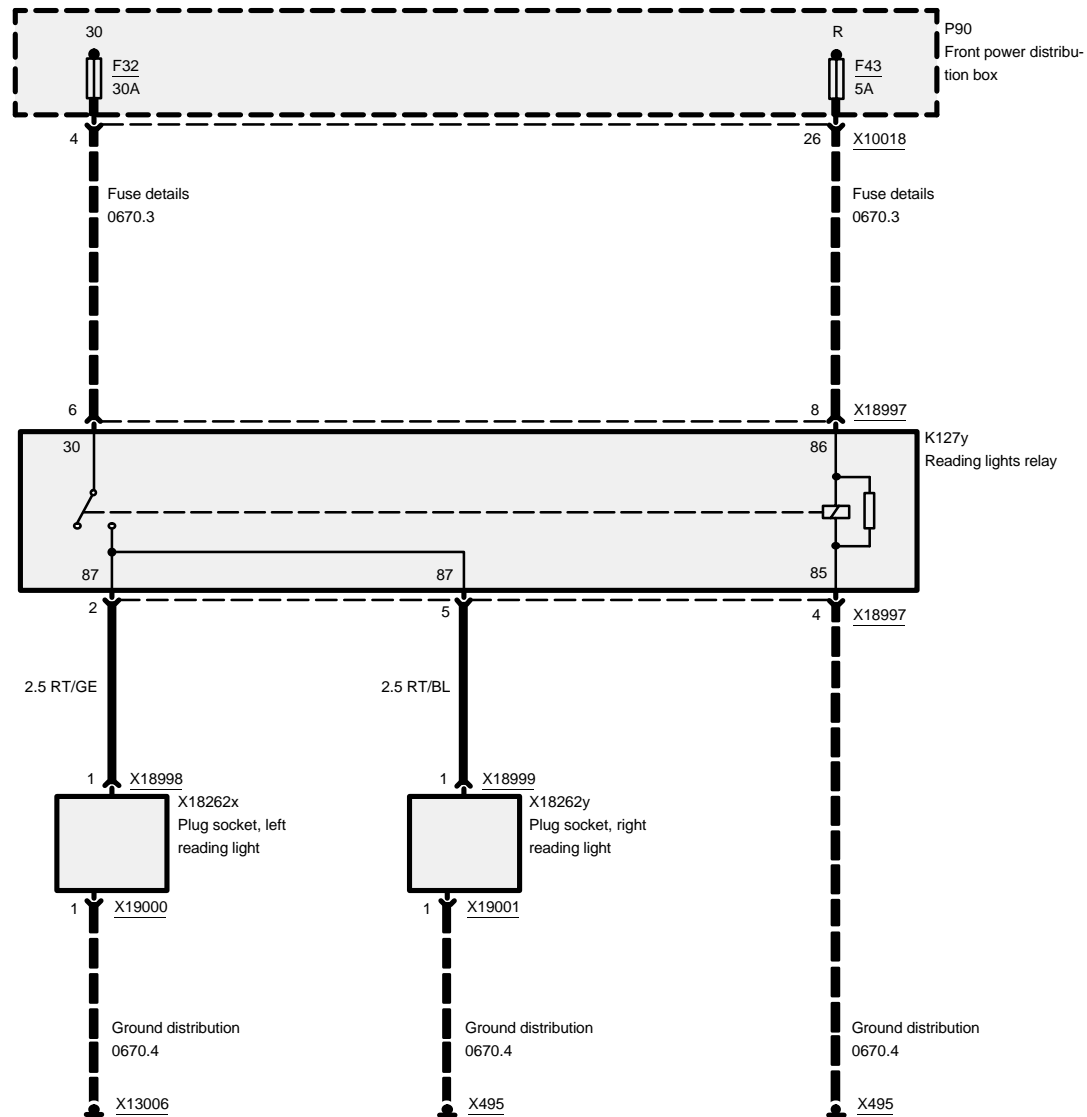


6330.3 Interior lights

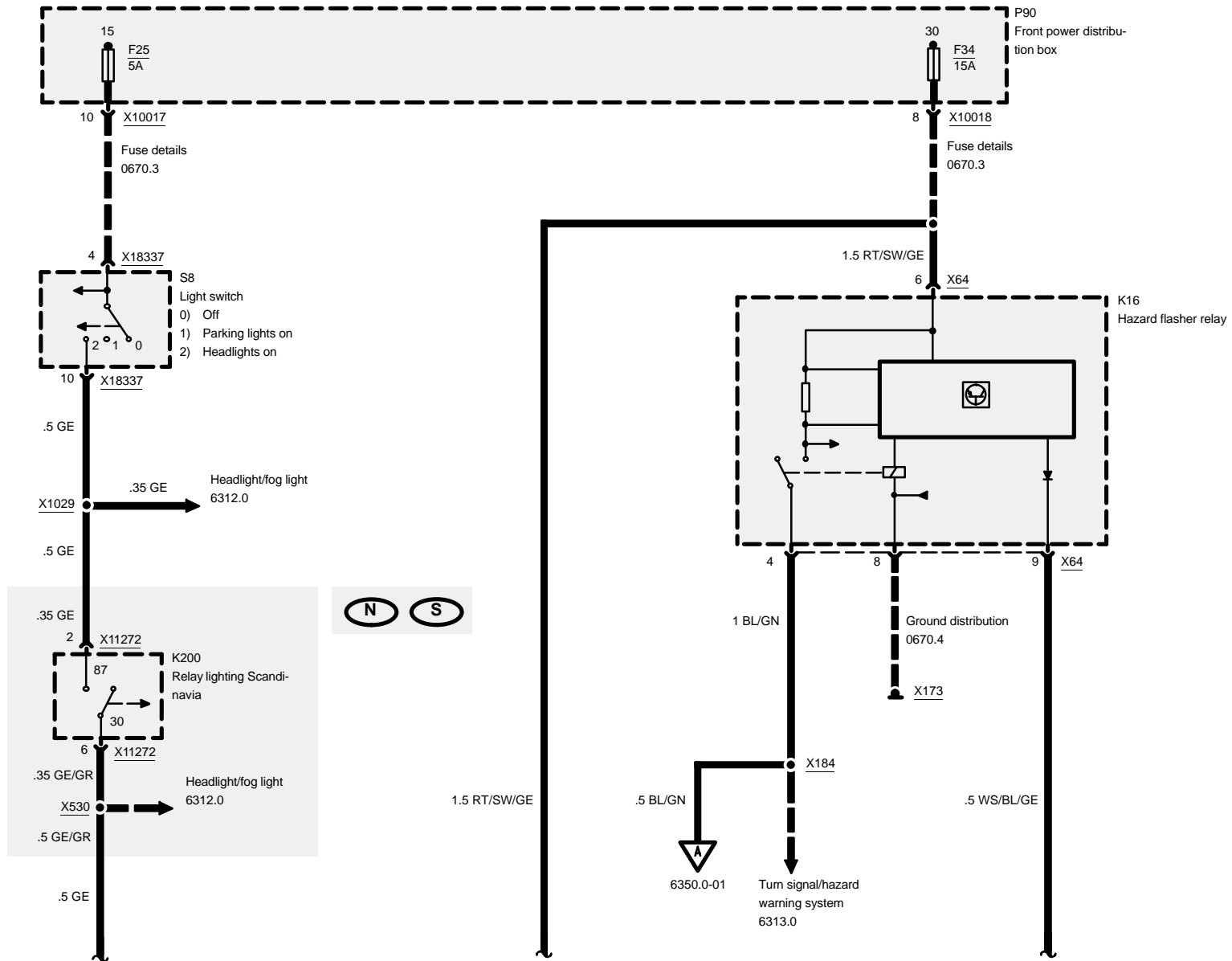


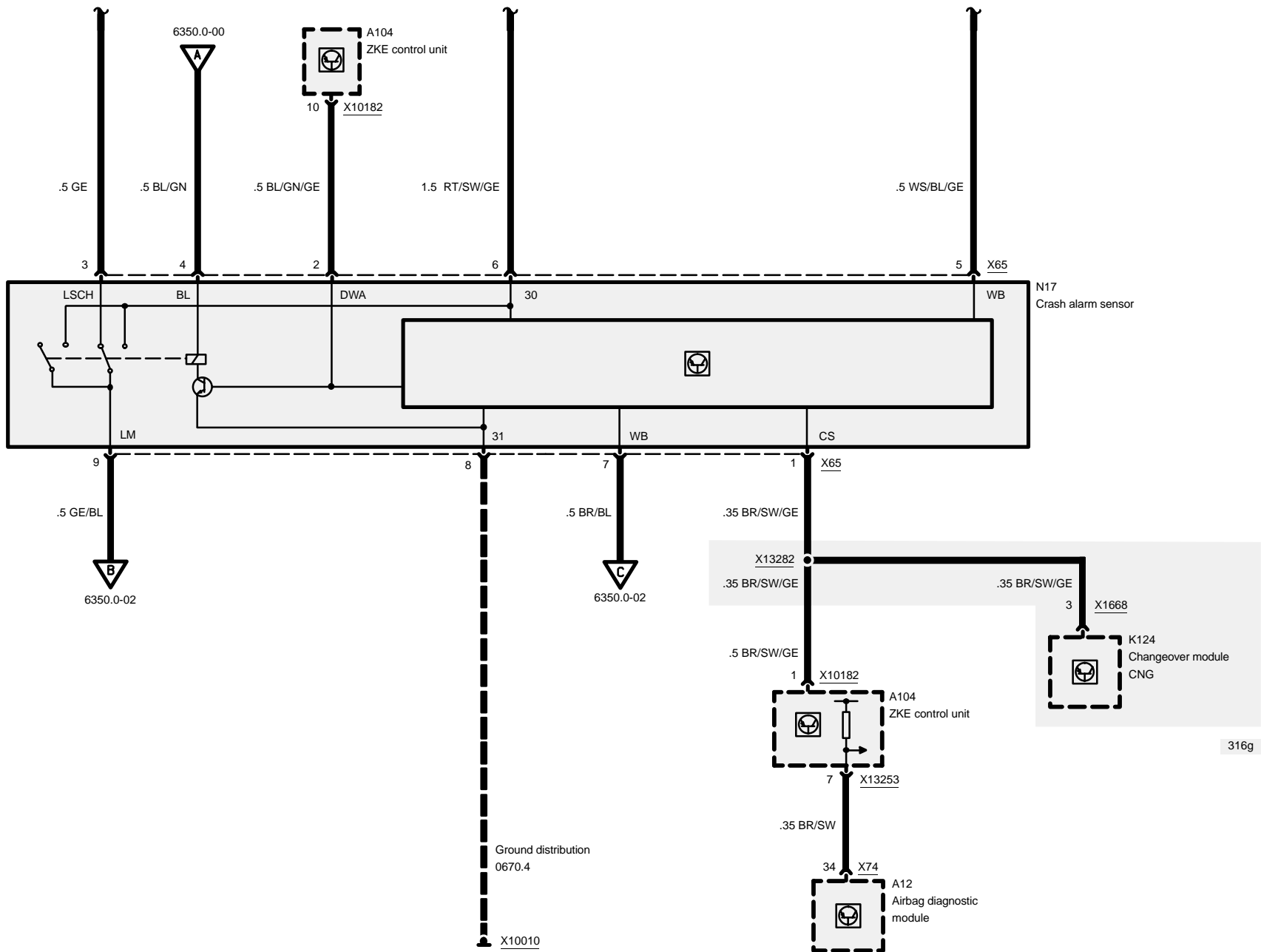






6350.0 Crash and alarm sensor

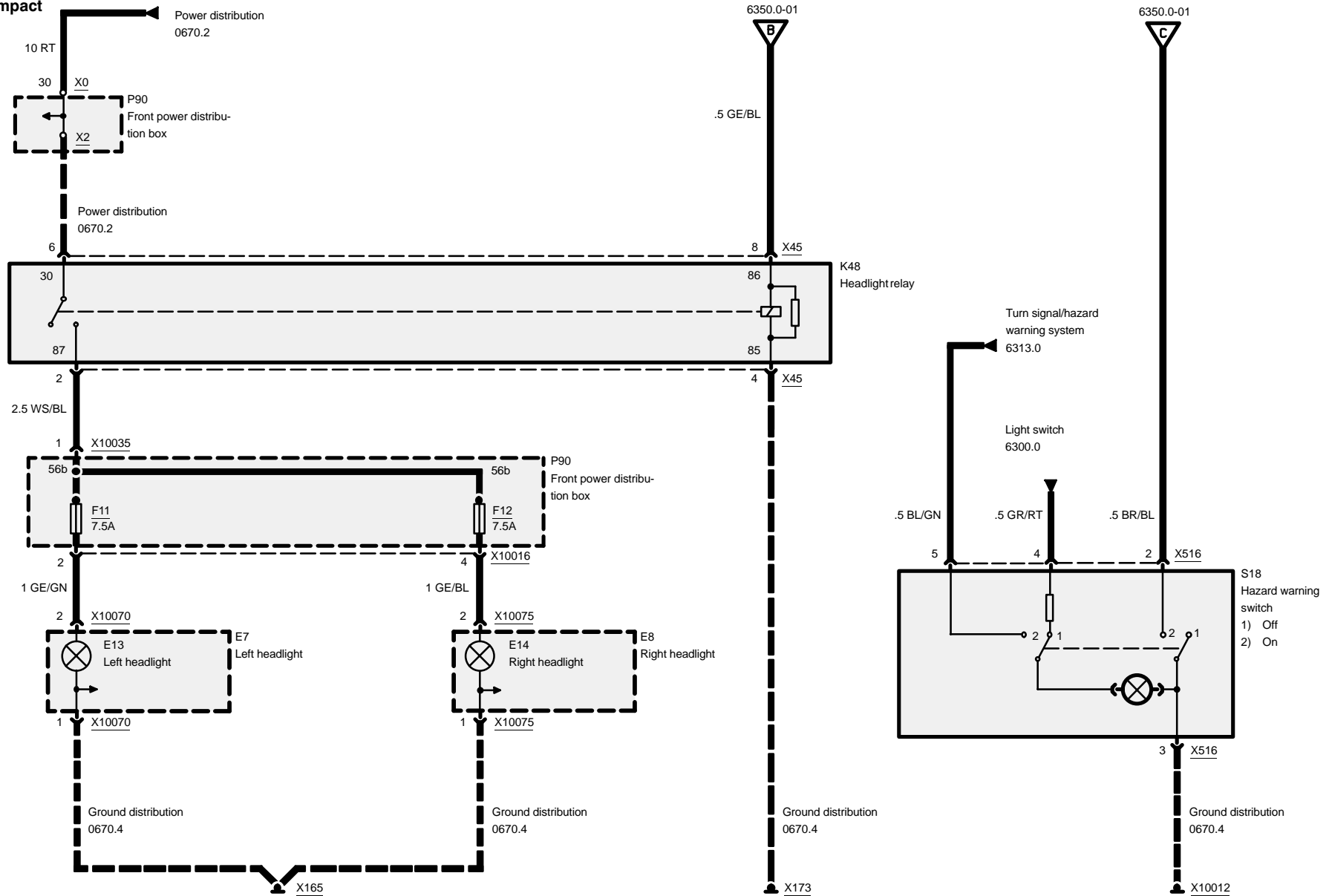




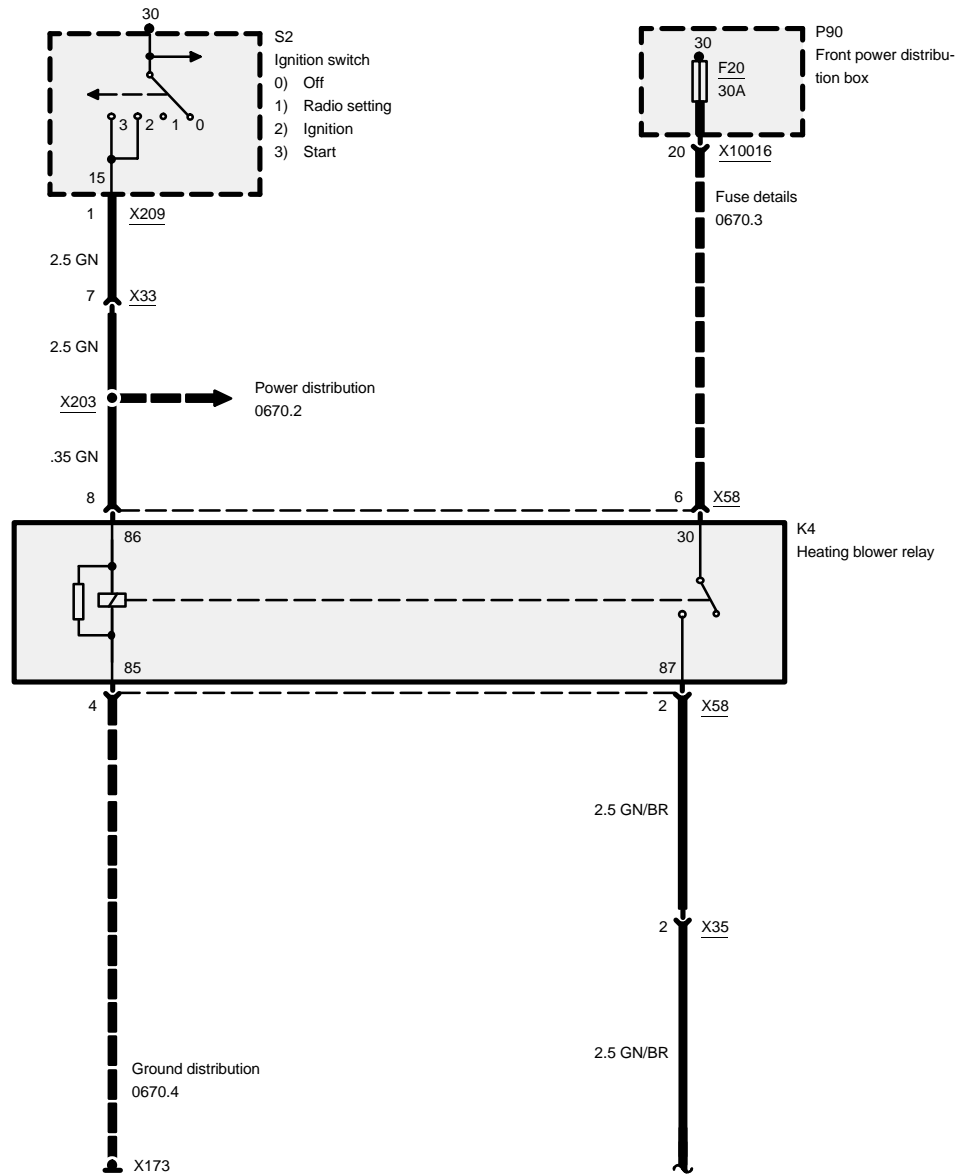


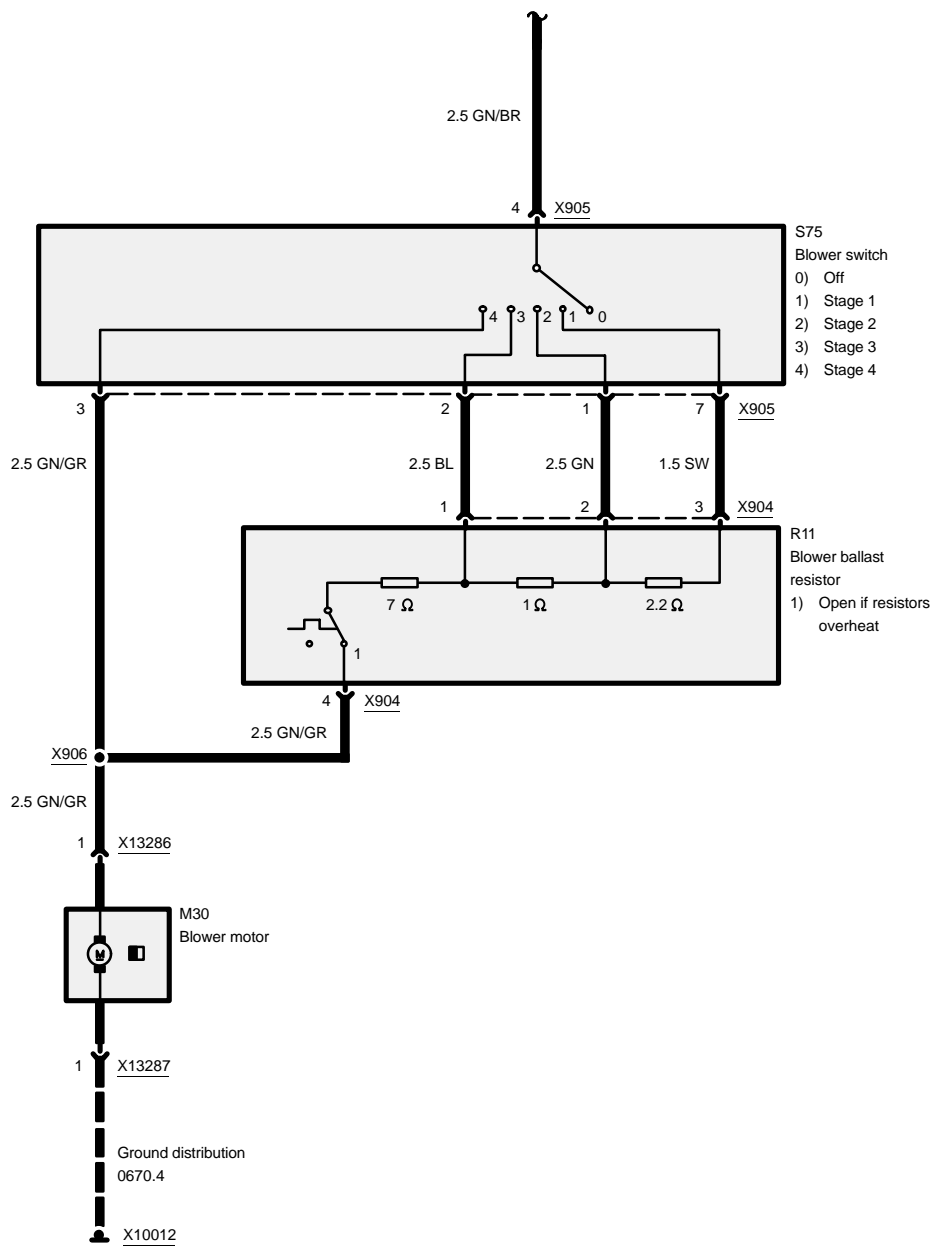
compact

Crash and alarm sensor



6410.7 Heating control (HS)

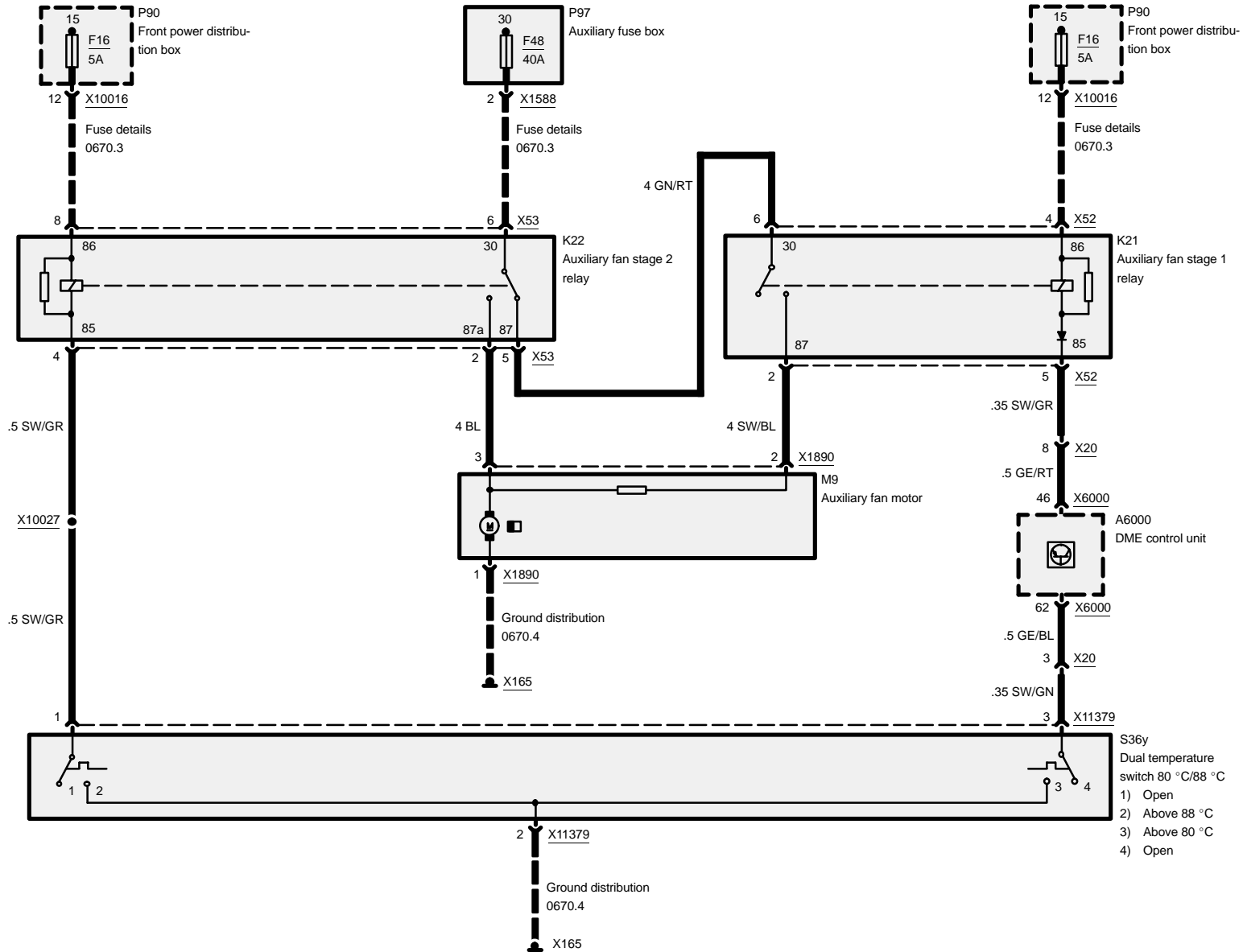




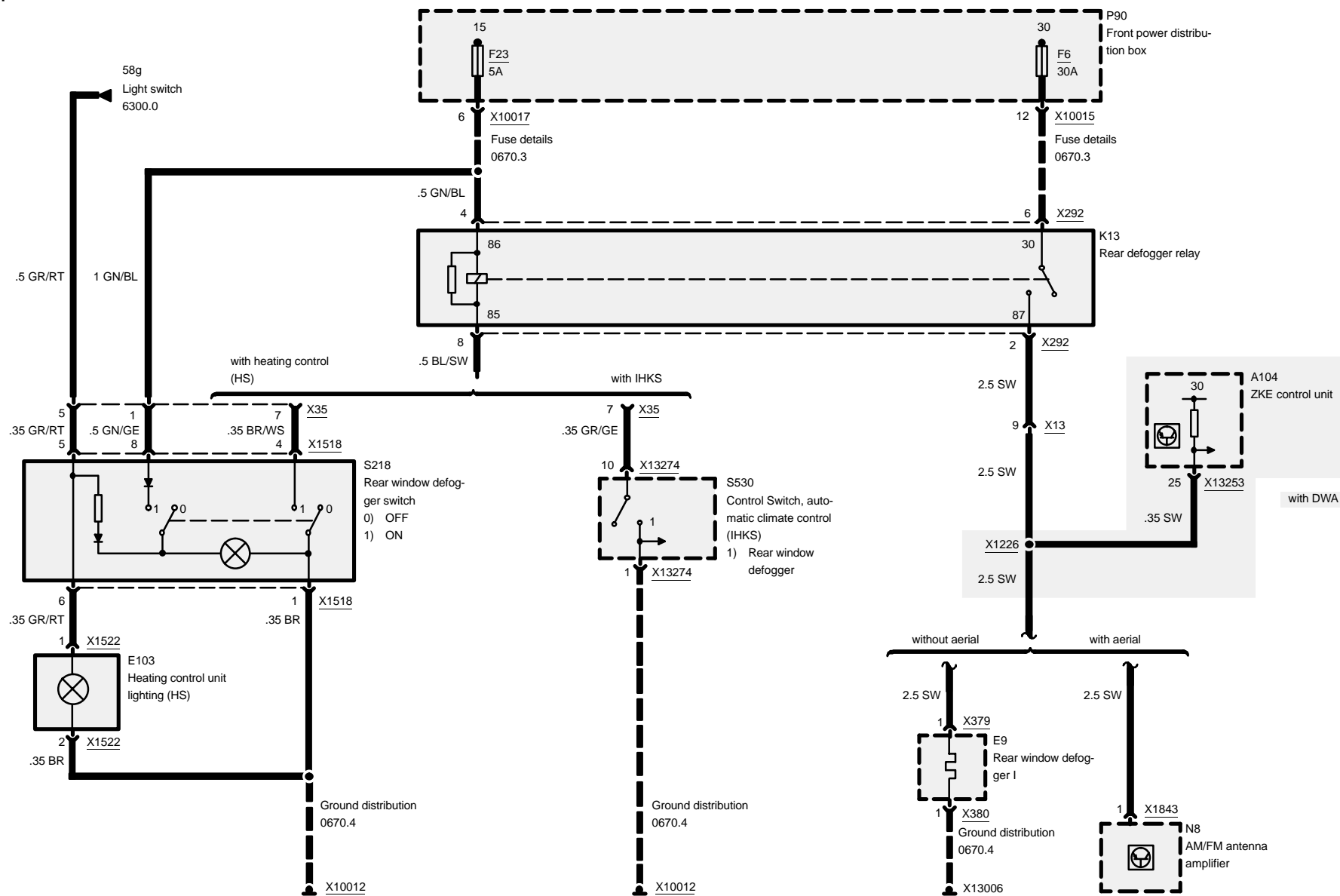
Heating control (HS)

316g

Auxiliary fan

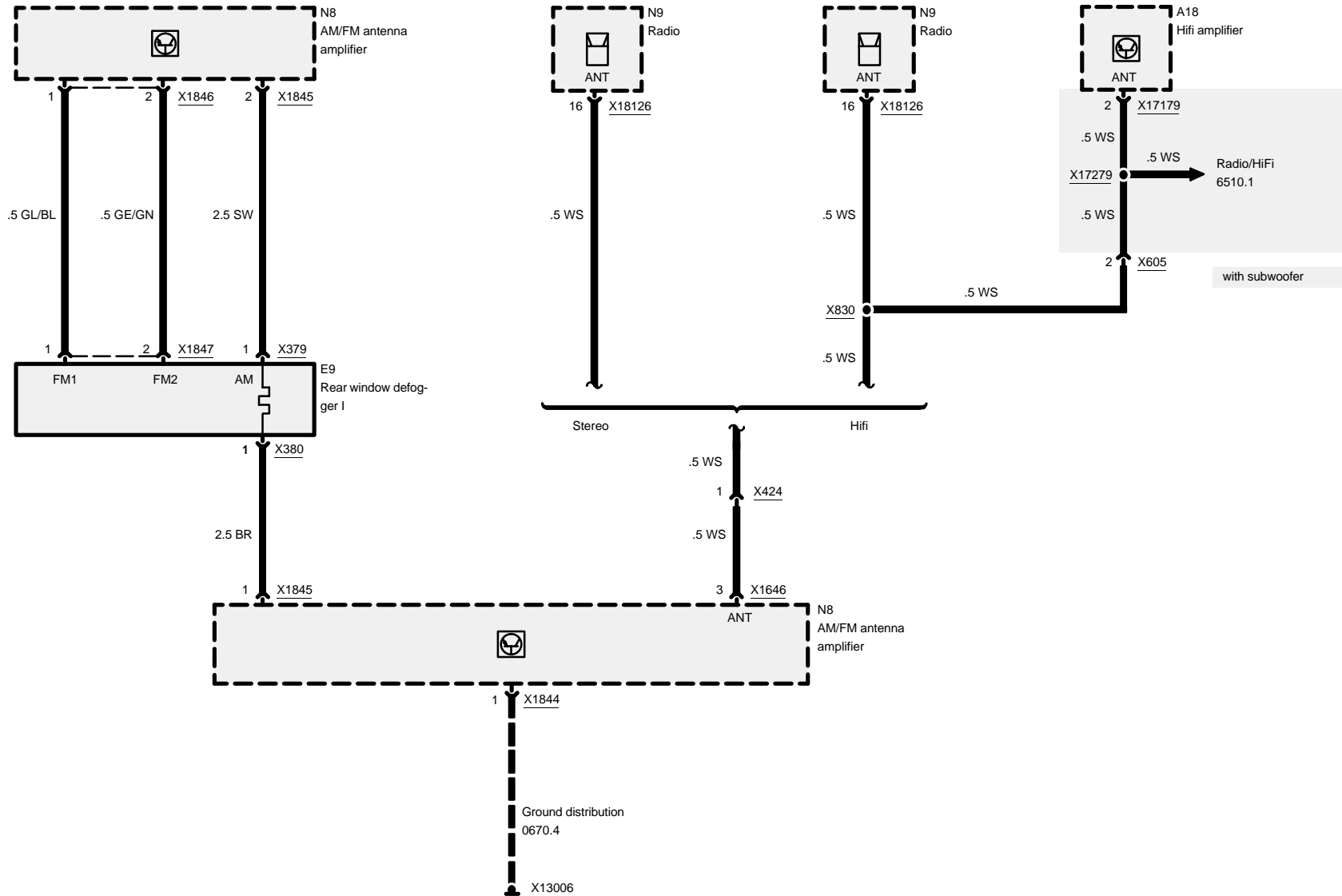


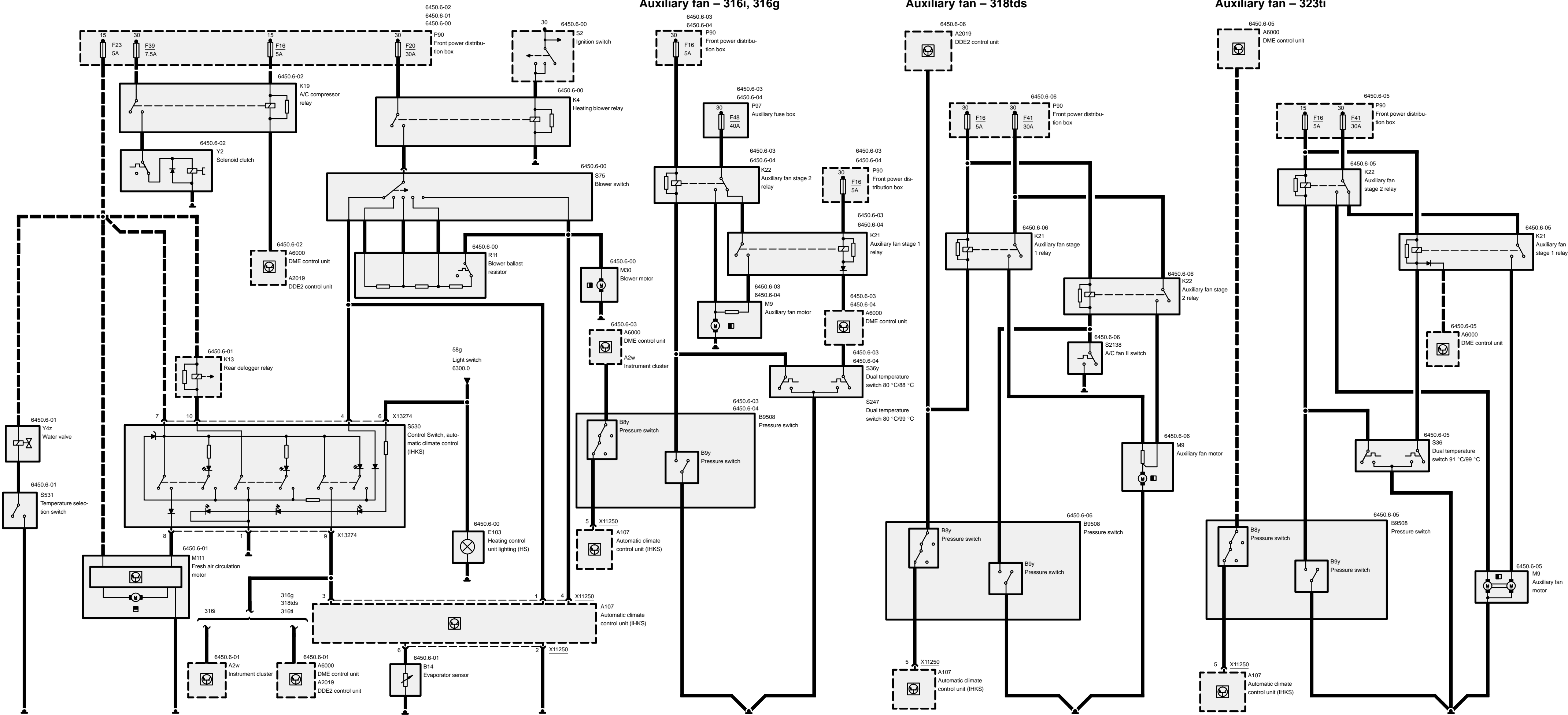
6424.0 Rear window defogger/antenna

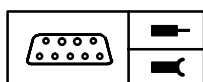


Rear window defogger/antenna

Rear window antenna







Pin assignments

I=X11250	6-pin, black
J=X13274	10-pin, black

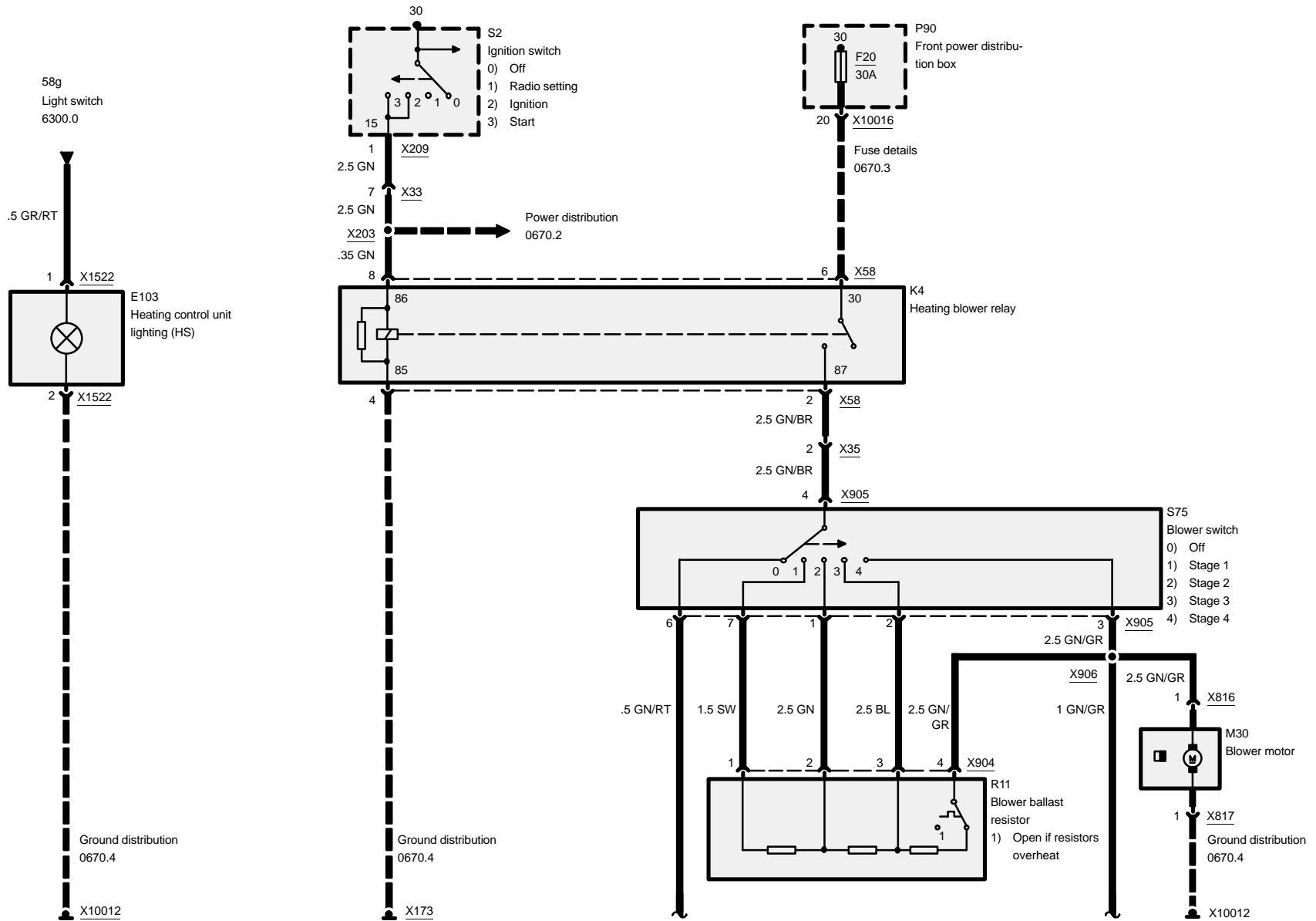
X11250

Pin	Type	Description/Function	Connection
1	E	Signal, recirculated air	Blower switch
2	M	Ground	Ground connection
3	E	Air conditioning ON signal	IHKS switch, DME/DDE control unit
4	E	Signal, recirculated air	Blower switch
5	E	Pressure switch signal	Pressure switch
6	E	Evaporator sensor, temperature	Evaporator sensor

X13274

Pin	Type	Description/Function	Connection
1	M	Ground	Ground connection
2		Not used	
3		Not used	
4	E	Signal, recirculated air	Blower switch
5		Not used	
6	E	Lights	Light switch
7	E	Terminal 15	Front power distribution box, fuse 23
8	A	Signal, recirculated air	Fresh air/recirculated air motor
9	A	Air conditioning ON signal	IHKS control unit, DME/DDE control unit
10	A	Signal, heated rear window	Rear window defogger relay

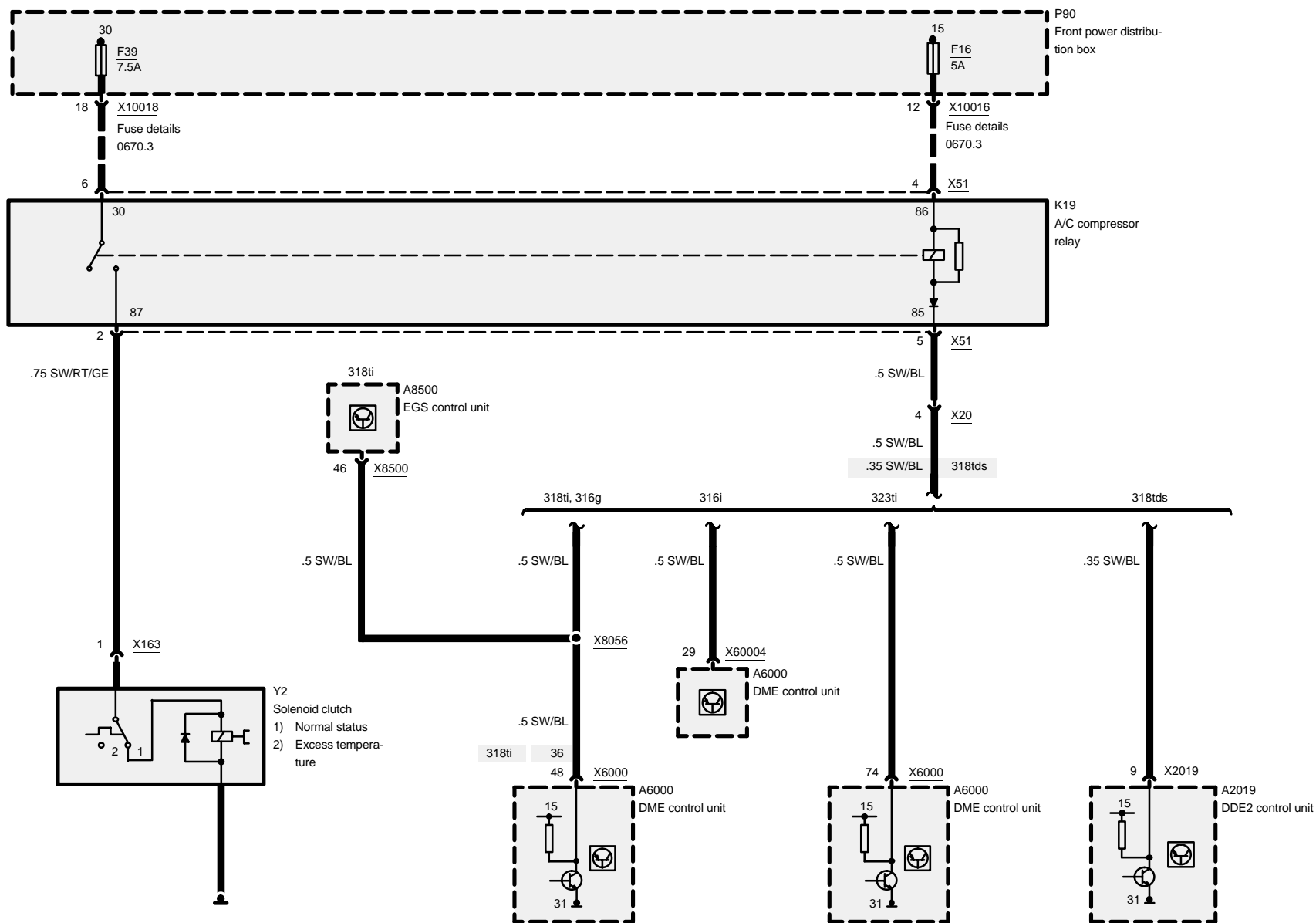
Automatic climate control (IHKS)



Automatic climate control (IHKS)

Right-hand drive

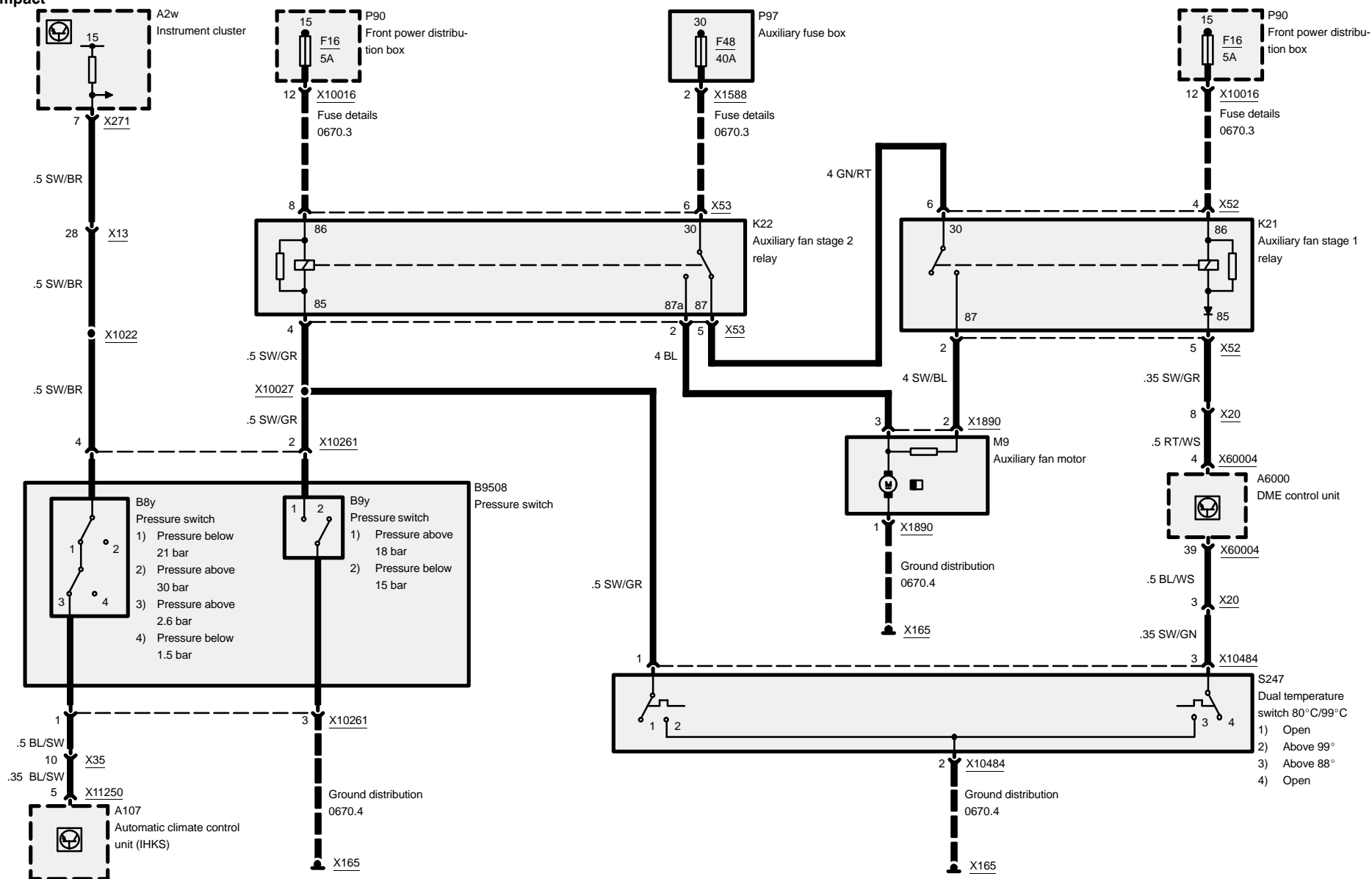
Compressor control



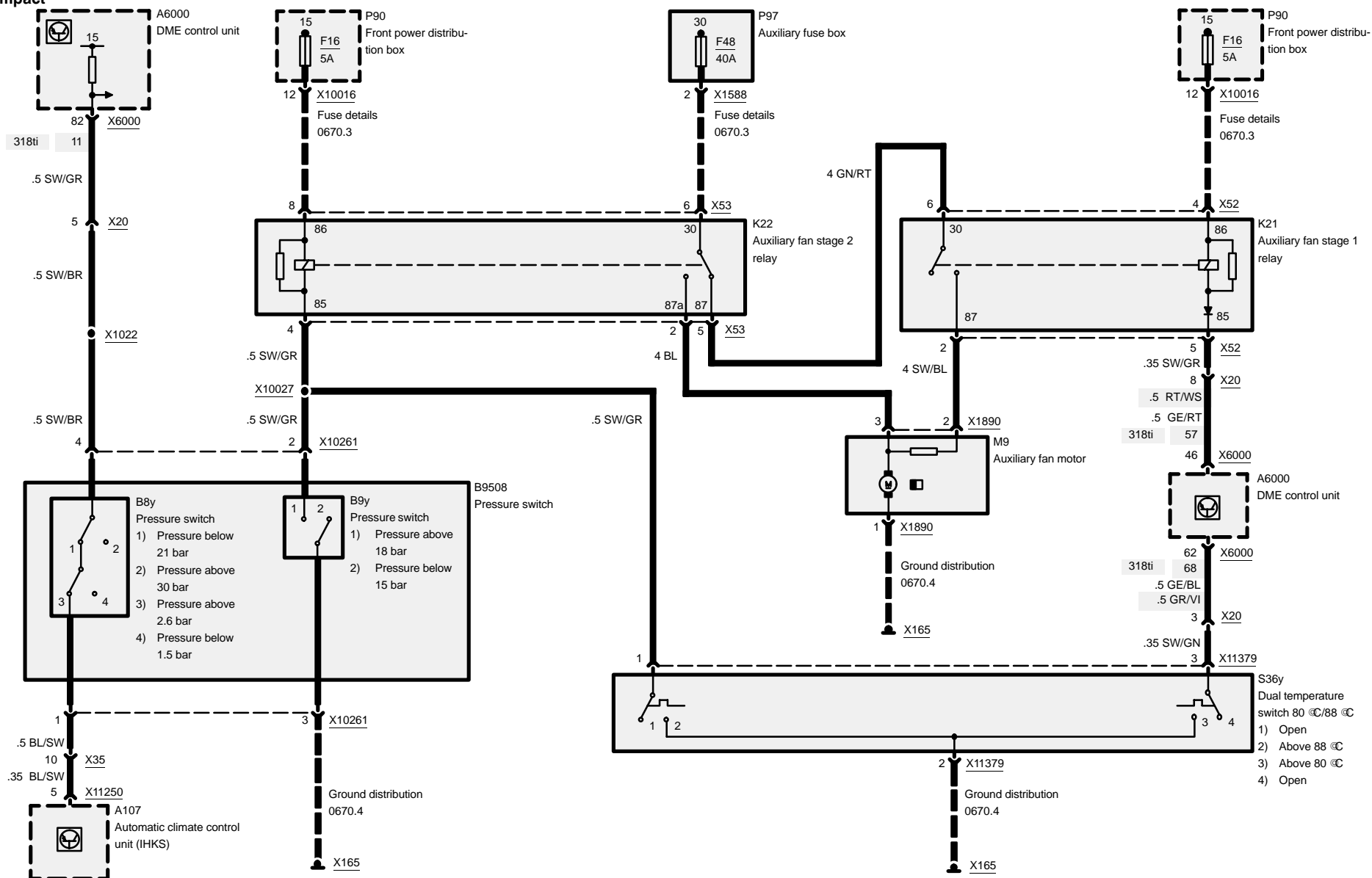
Automatic climate control (IHKS)

316i

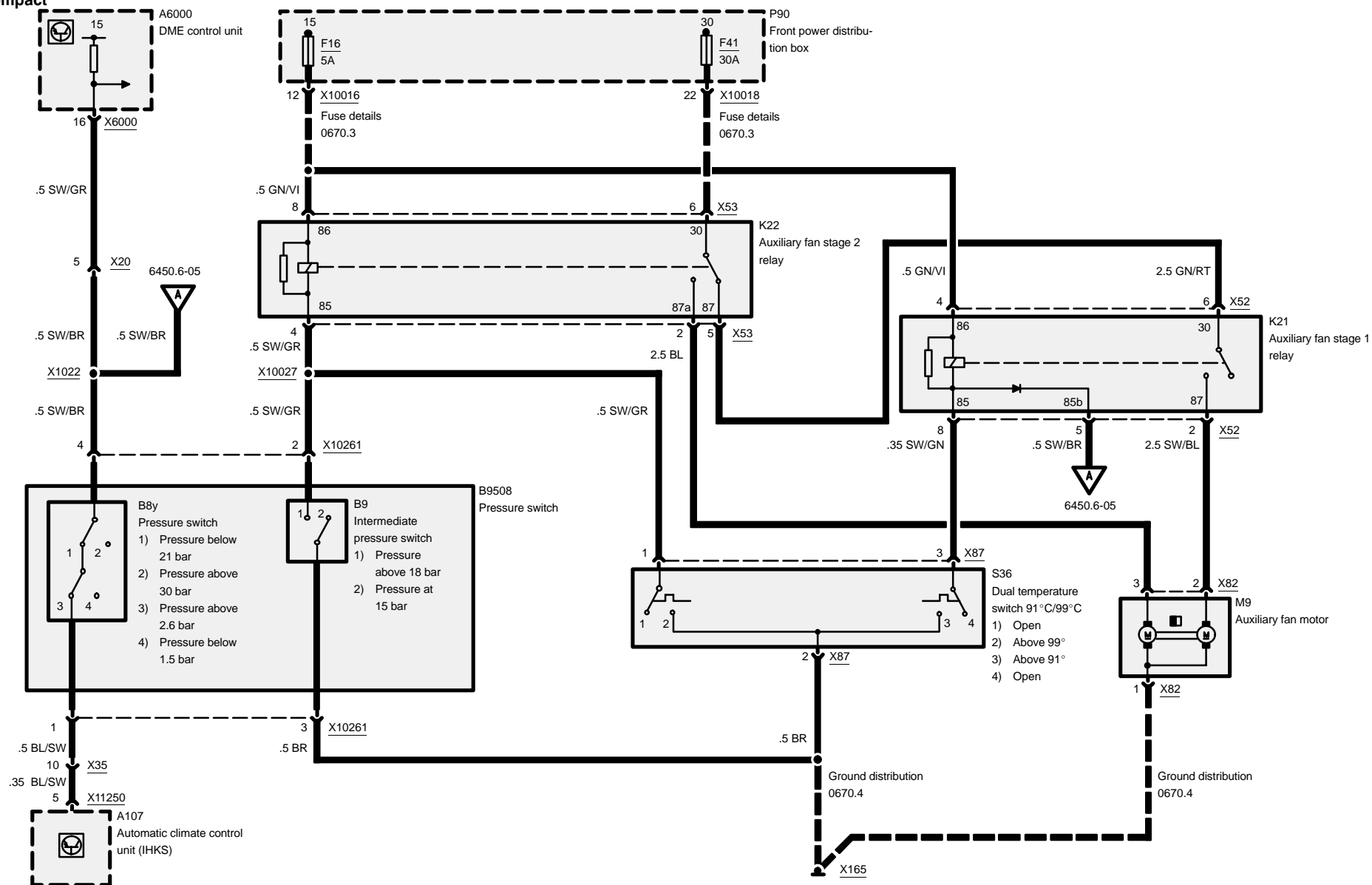
Auxiliary fan



Auxiliary fan



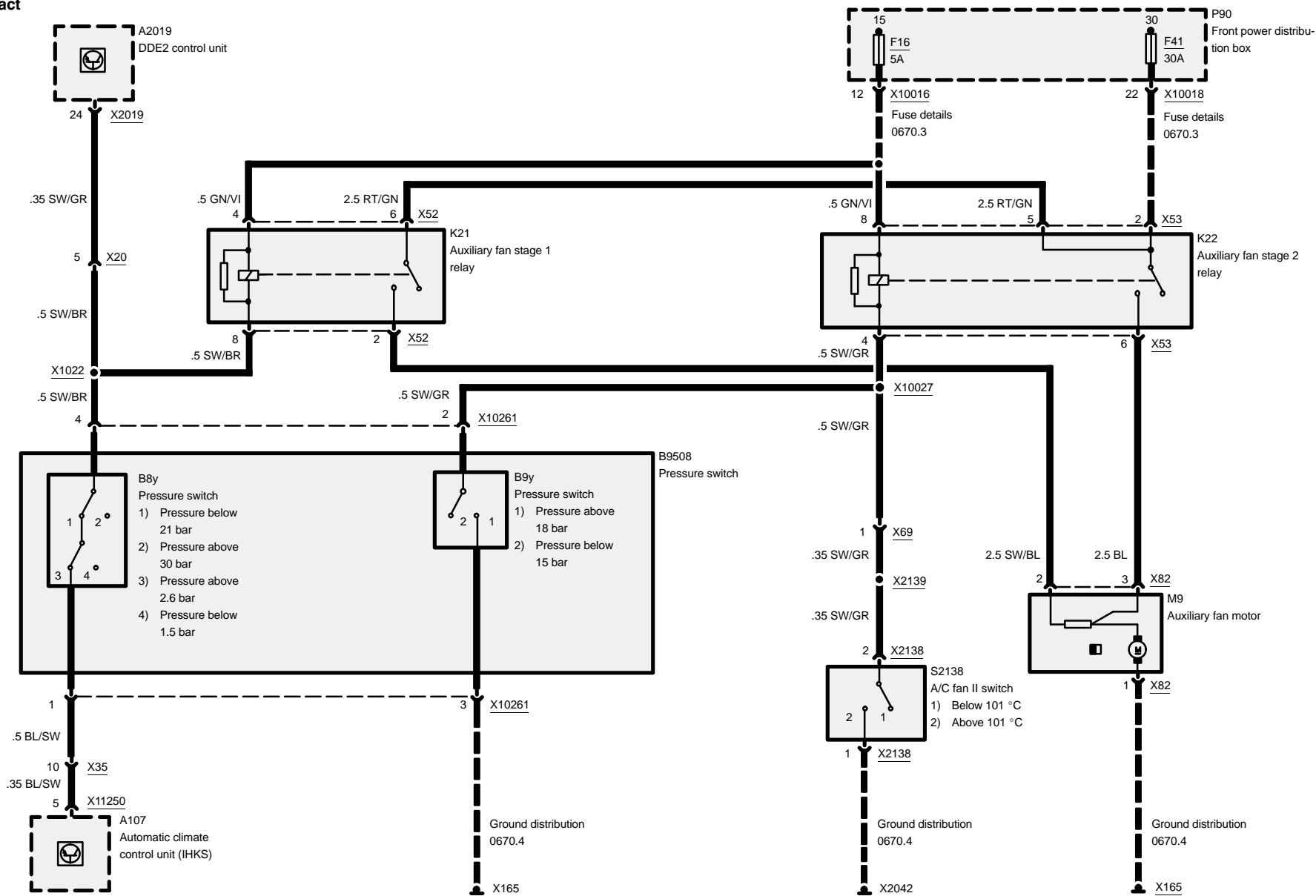
Auxiliary fan



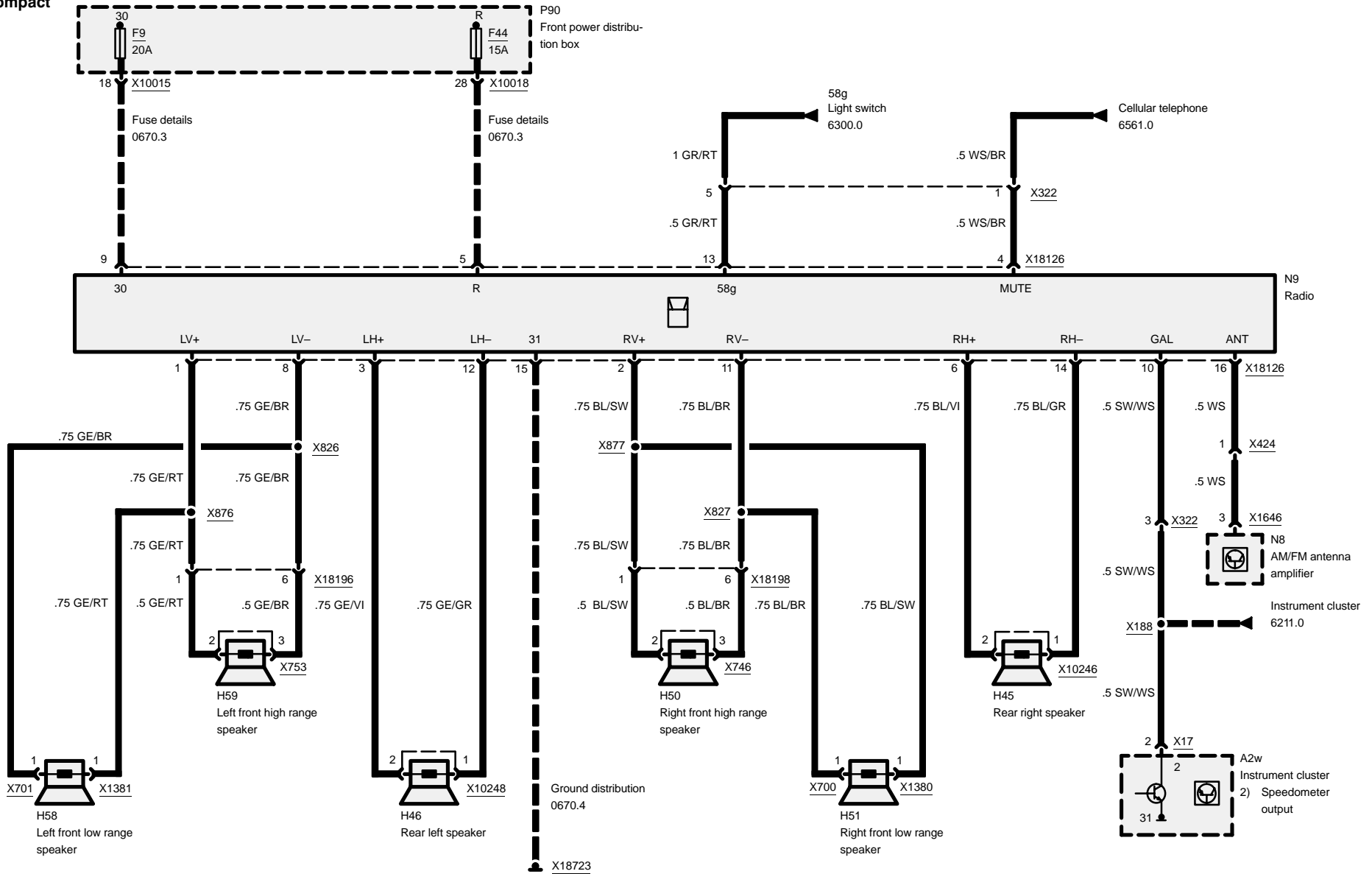
Automatic climate control (IHKS)

Auxiliary fan

318tds



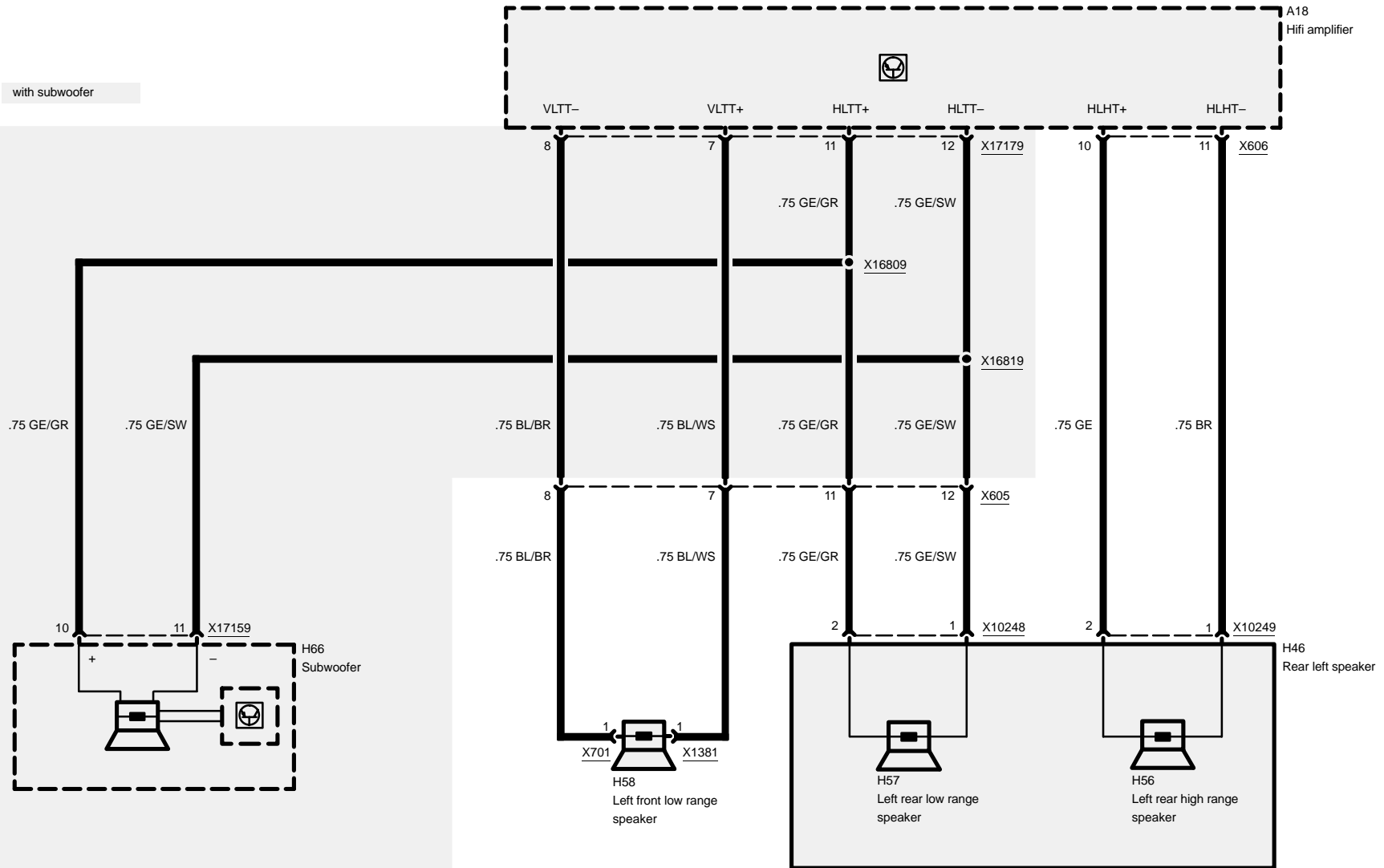
6510.0 Radio/Stereo

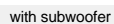


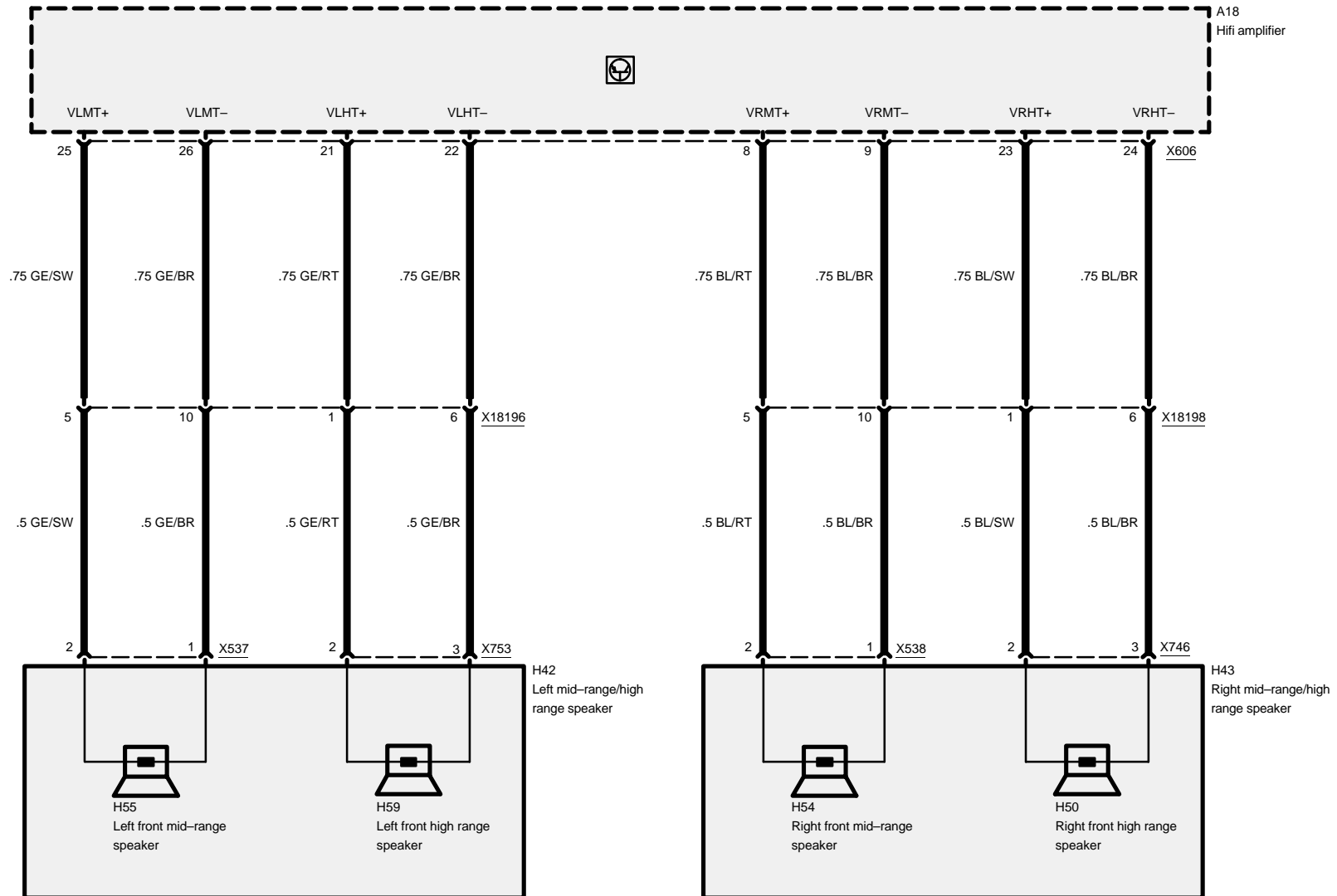


6510.1-00

with subwoofer

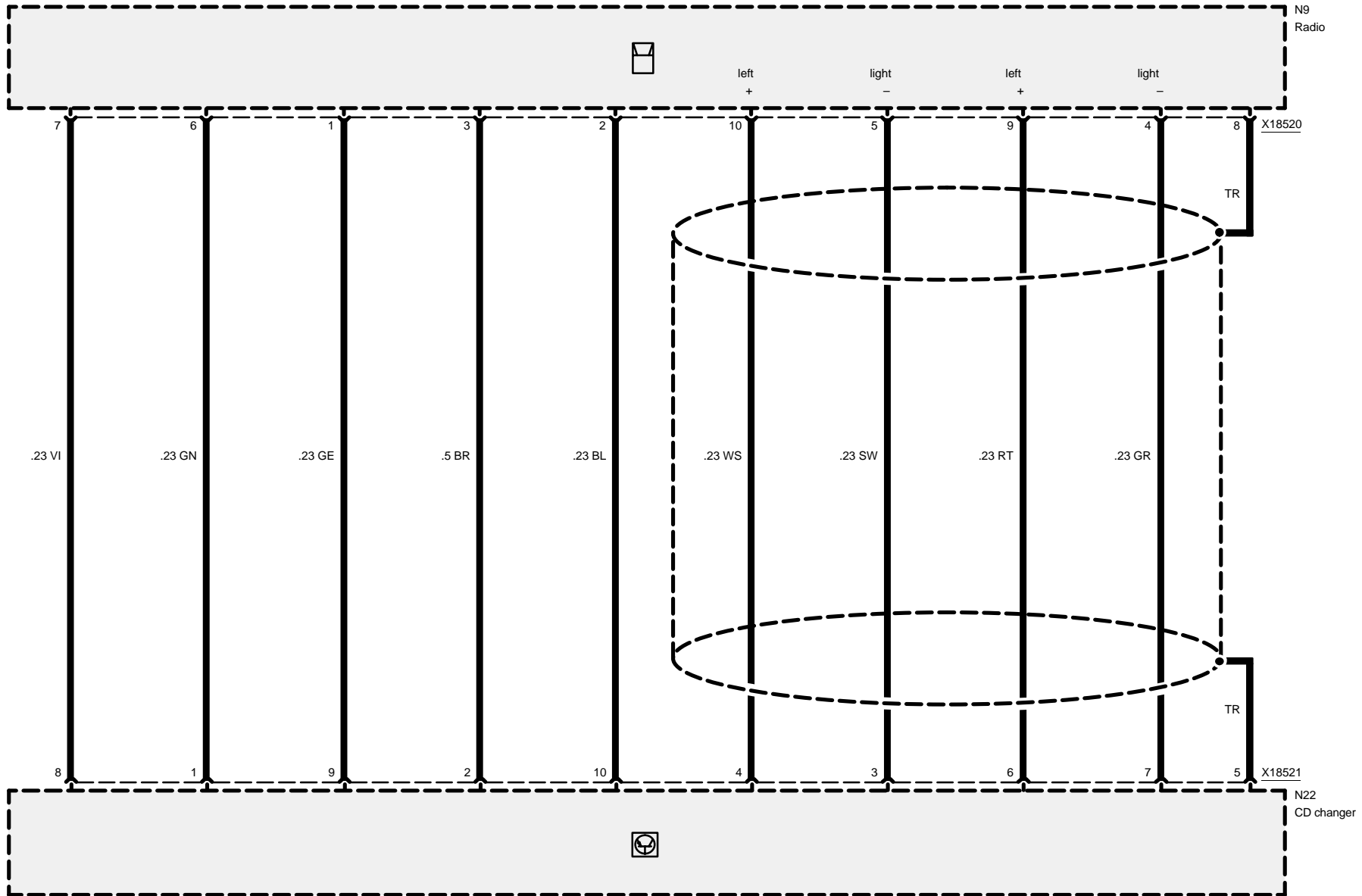








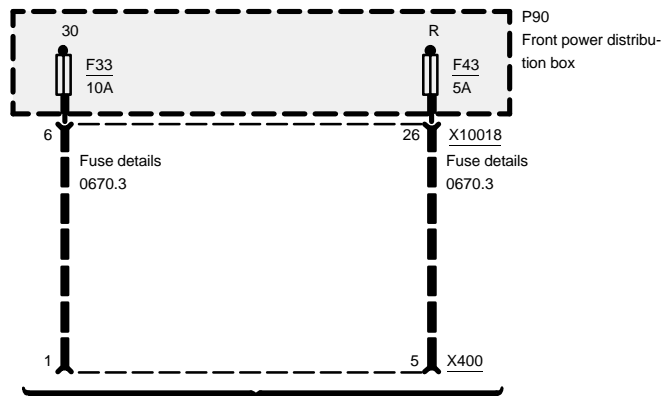
Radio/HiFi





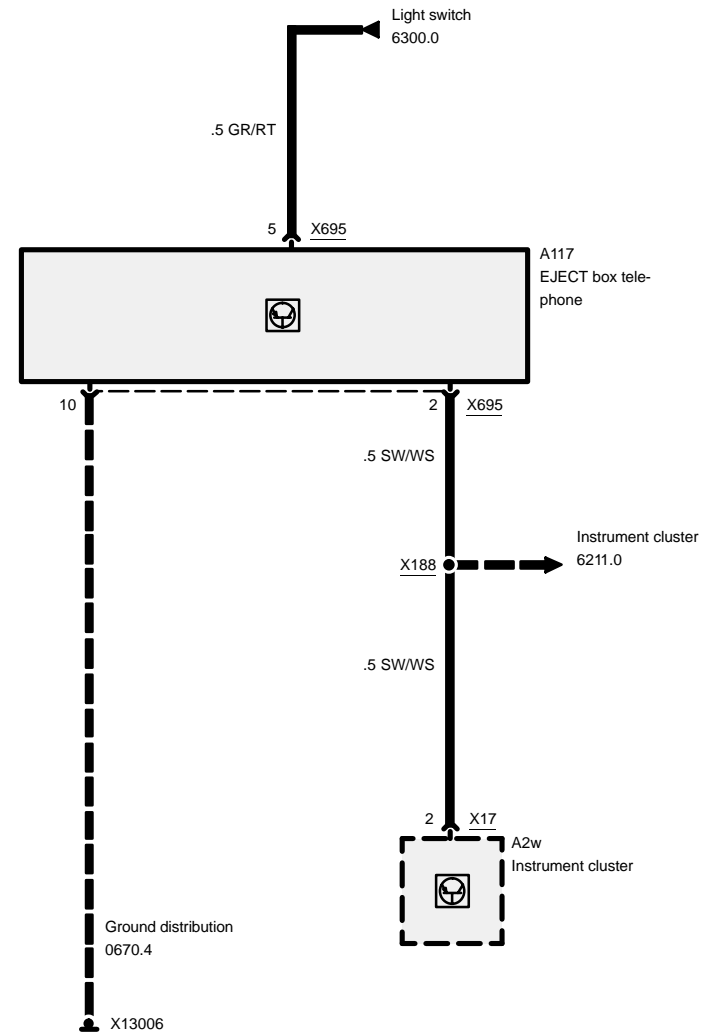
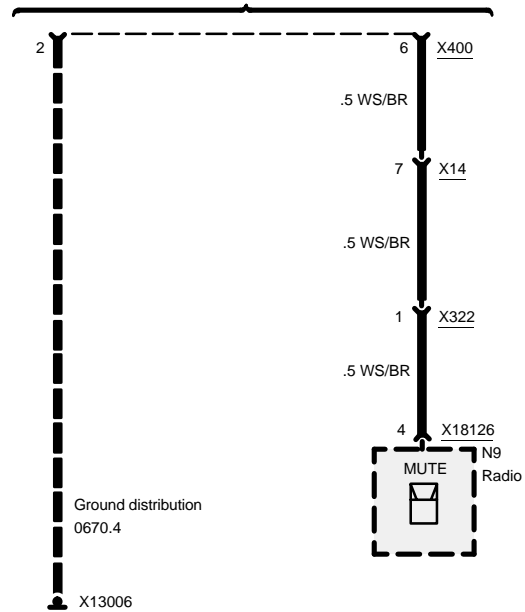
6561.0 Cellular telephone

Provisions



telephone connector

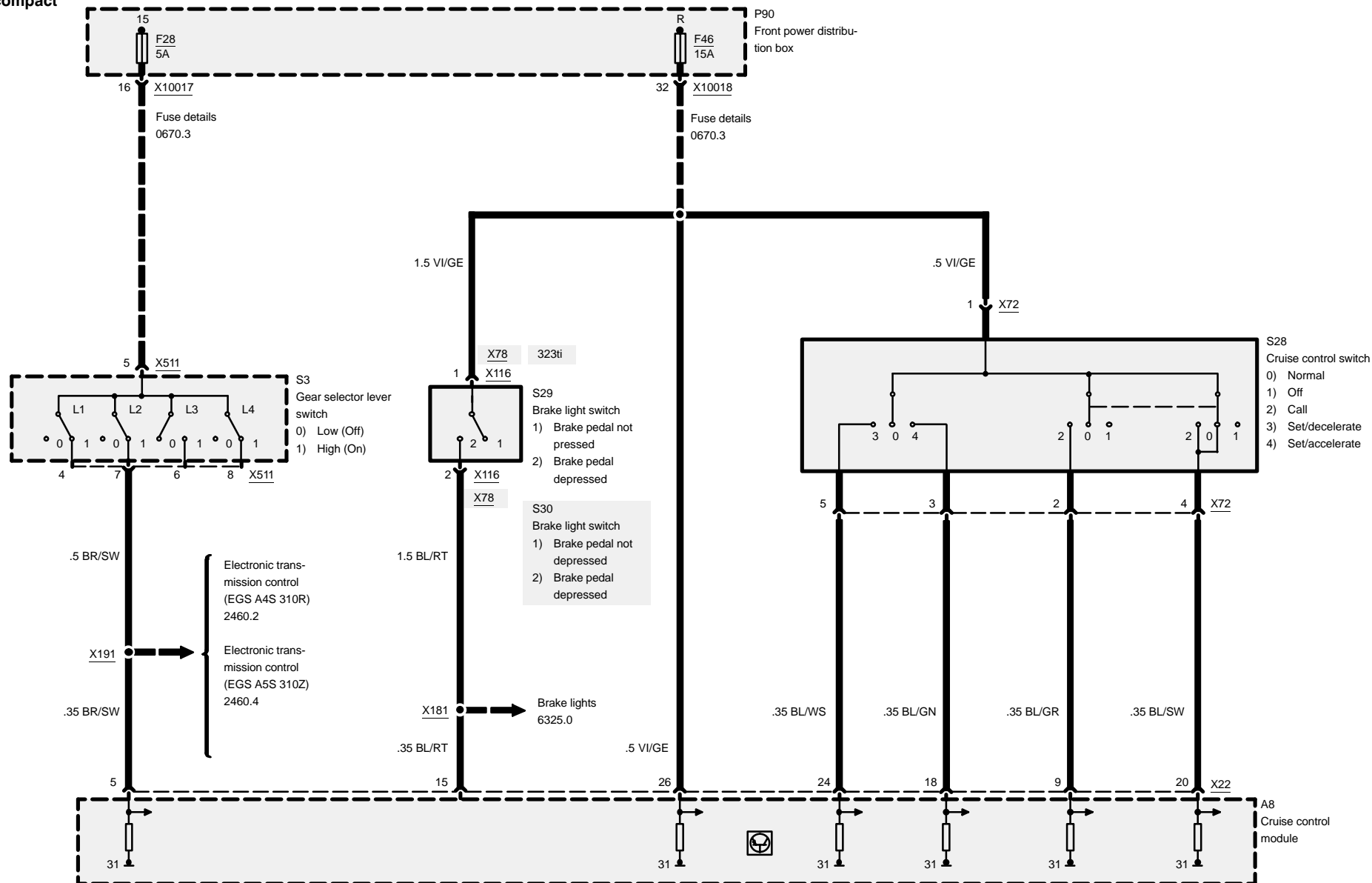
luggage compartment



6571.0 Cruise control

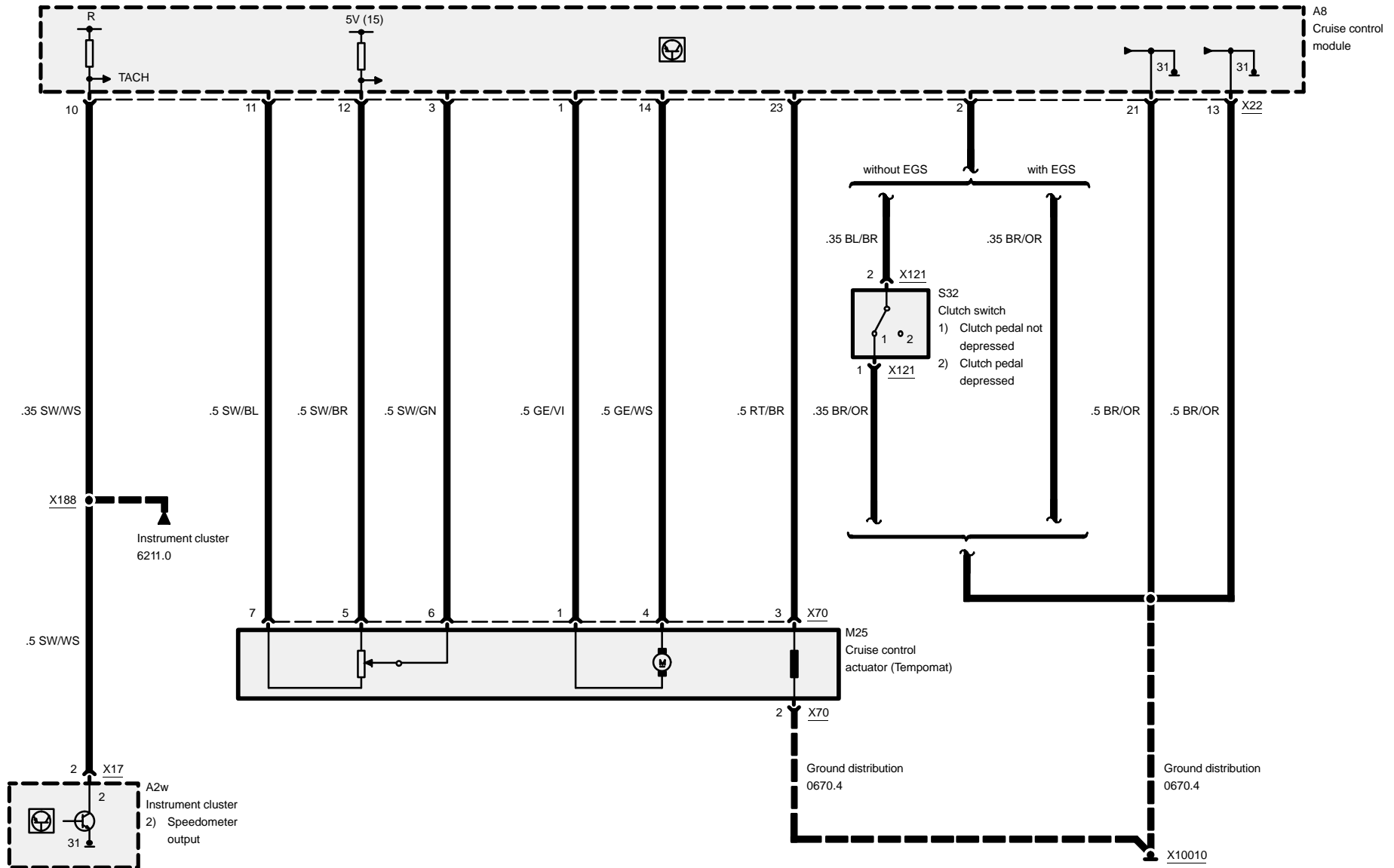
Petrol-driven vehicle

Right-hand drive



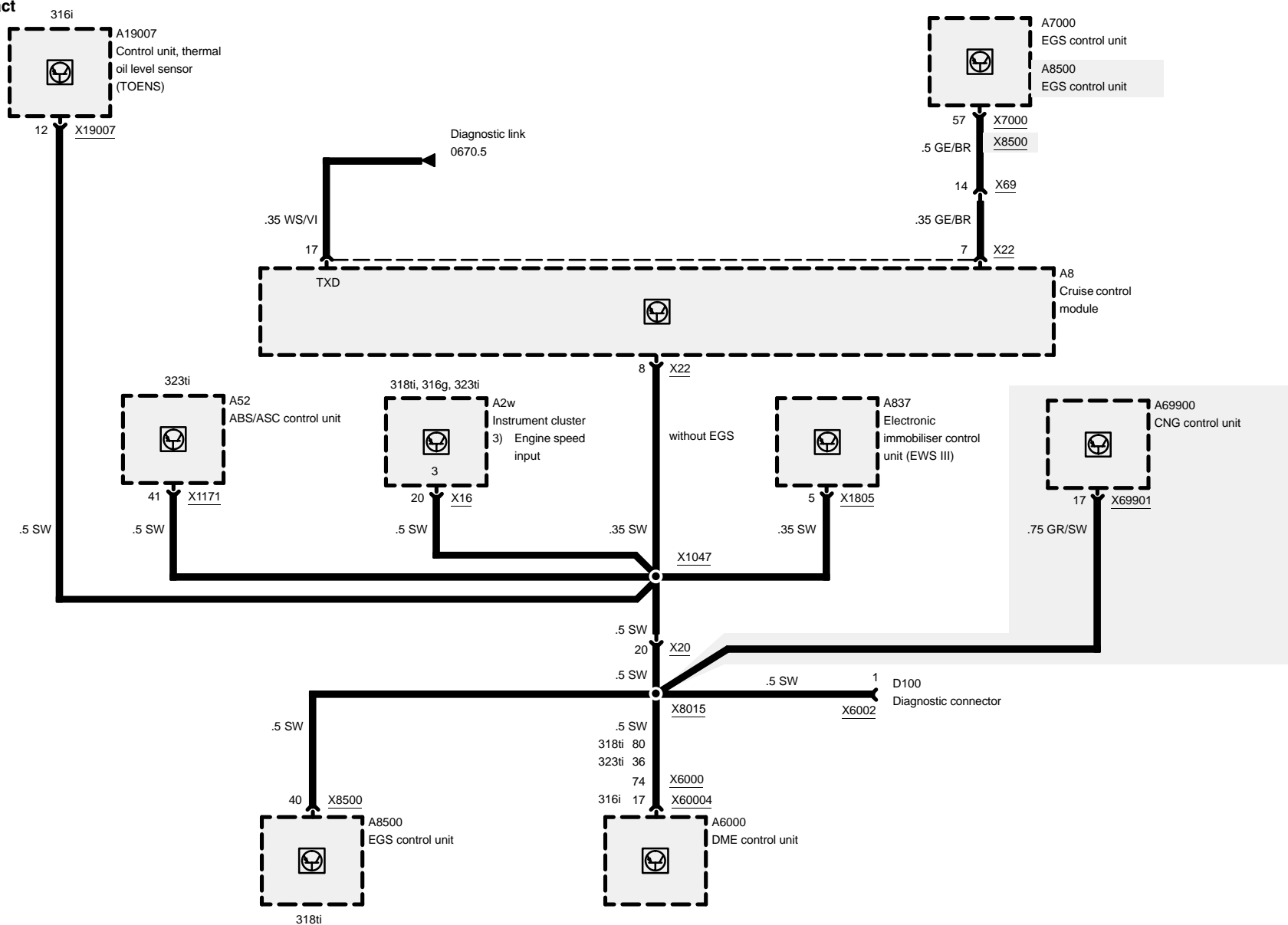
Cruise control

Petrol-driven vehicle



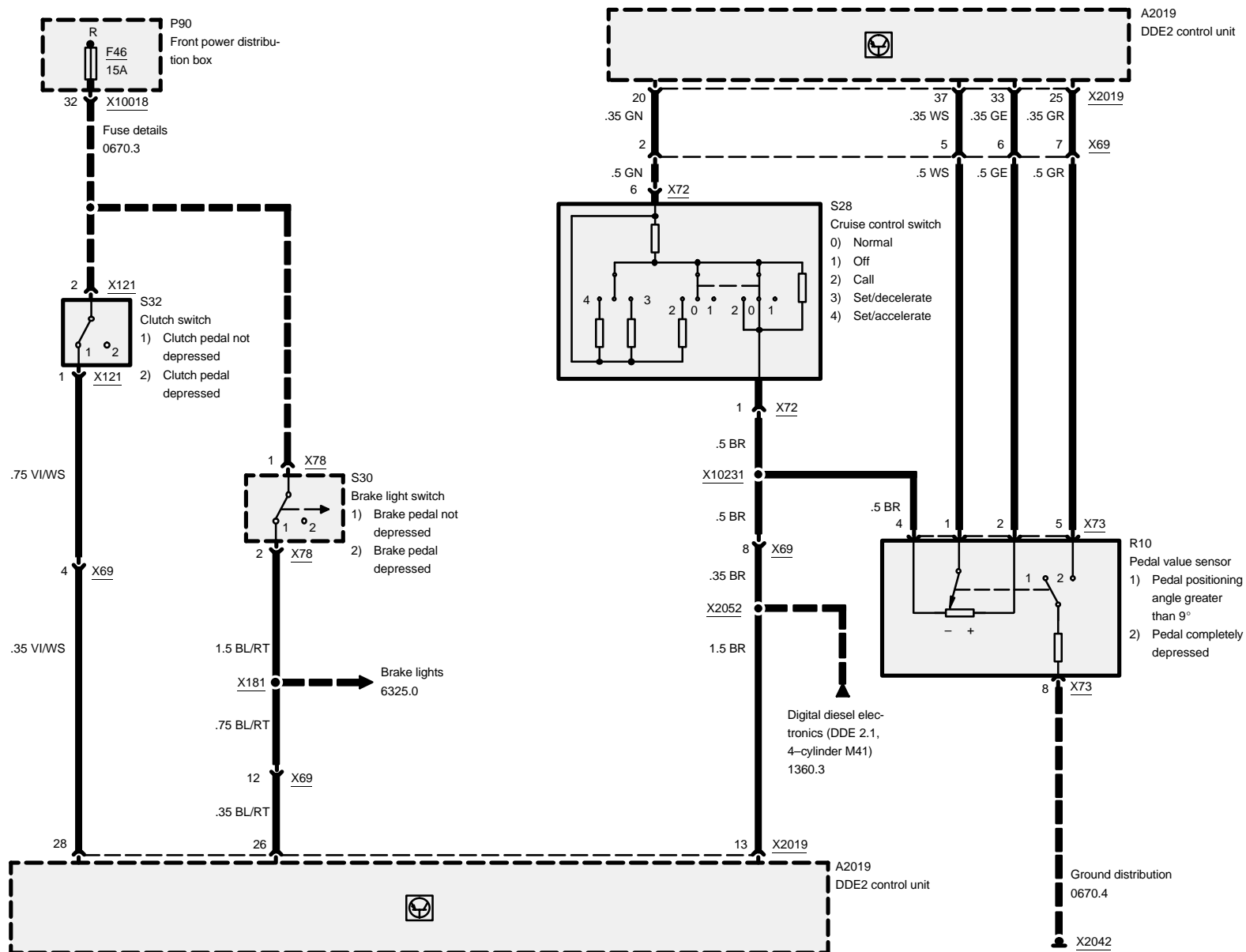
Petrol-driven vehicle

Right-hand drive



Cruise control

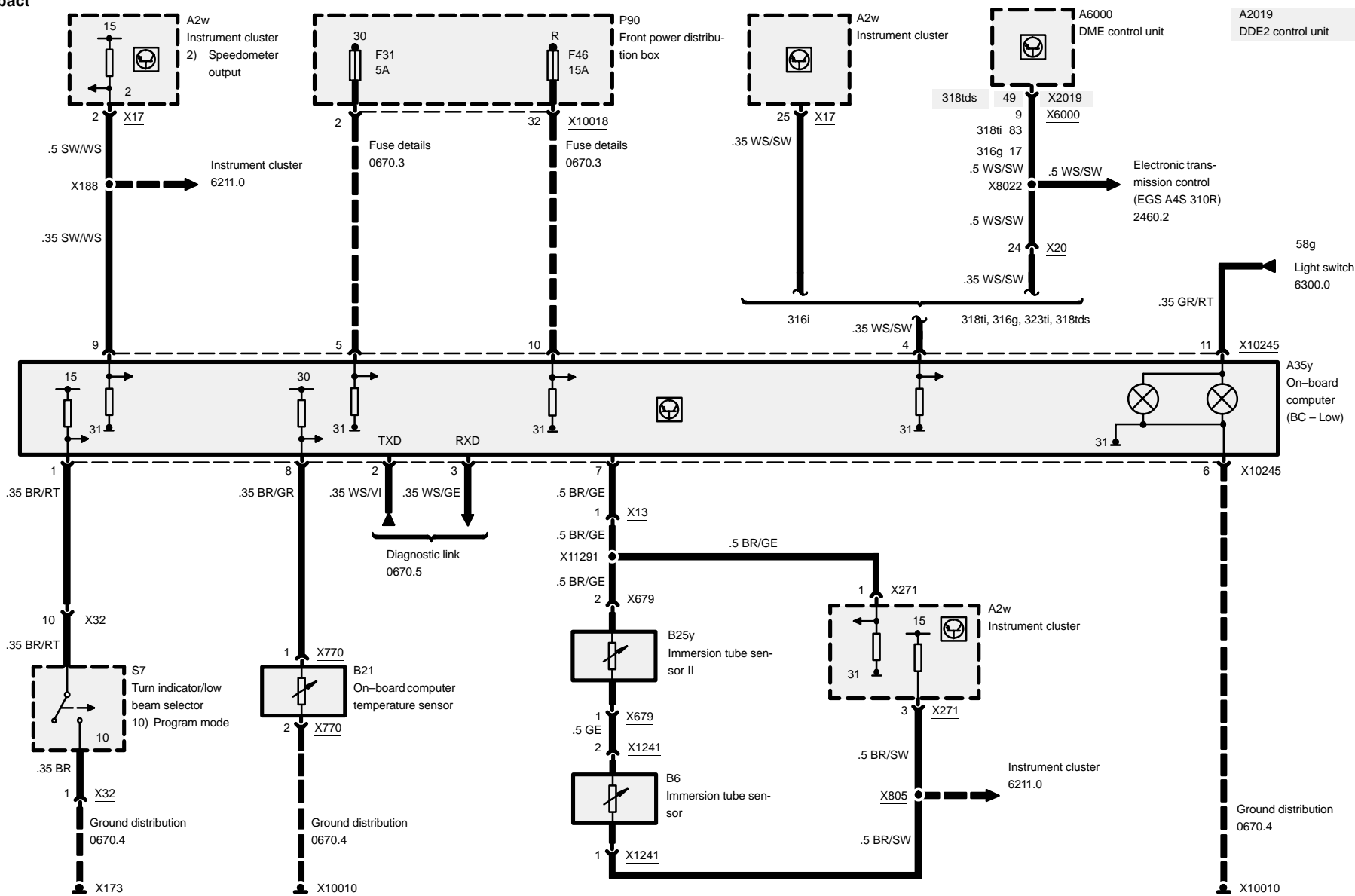
Diesel vehicle



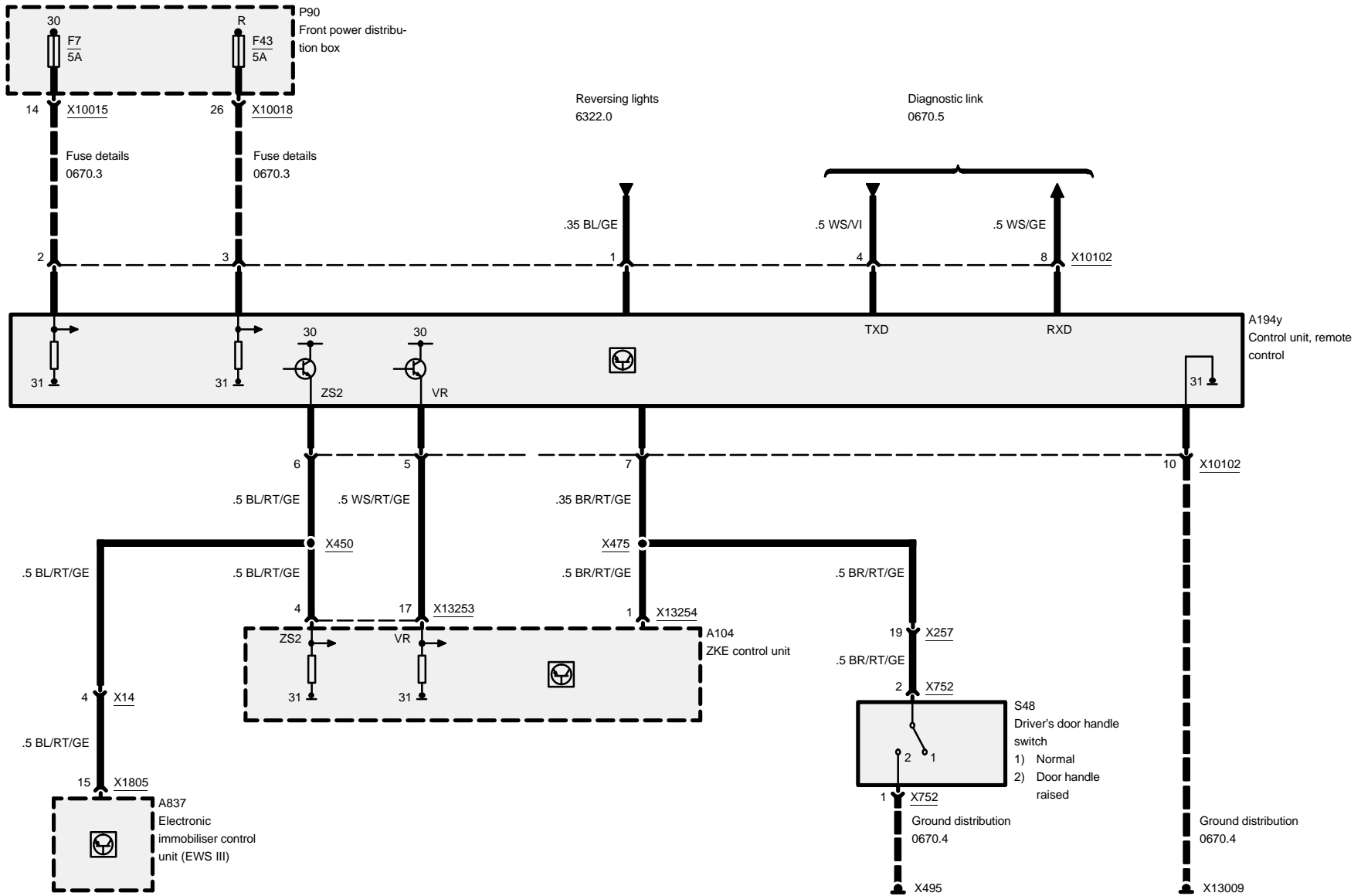


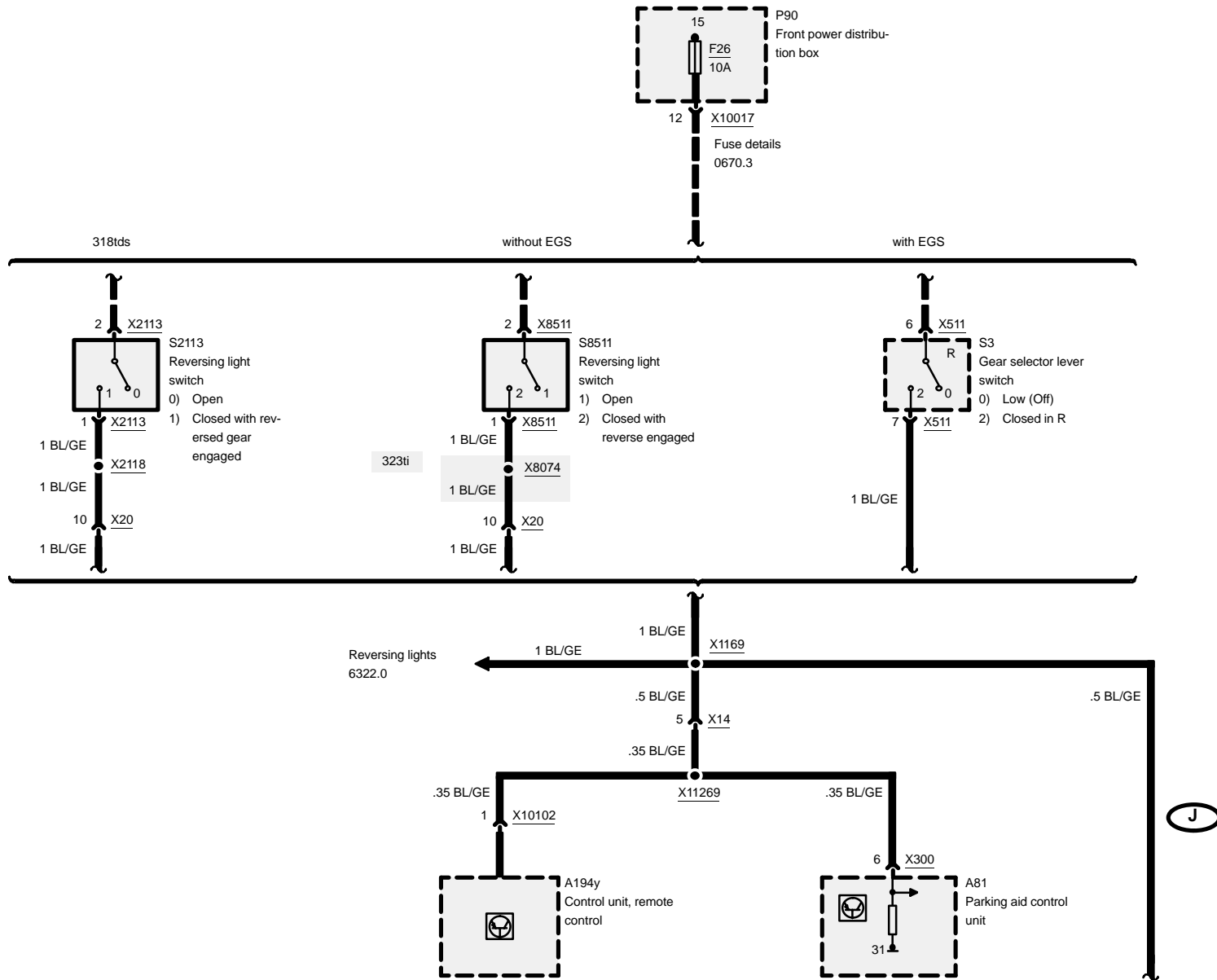
6581.3 On-board computer (BC – Low)

Right-hand drive

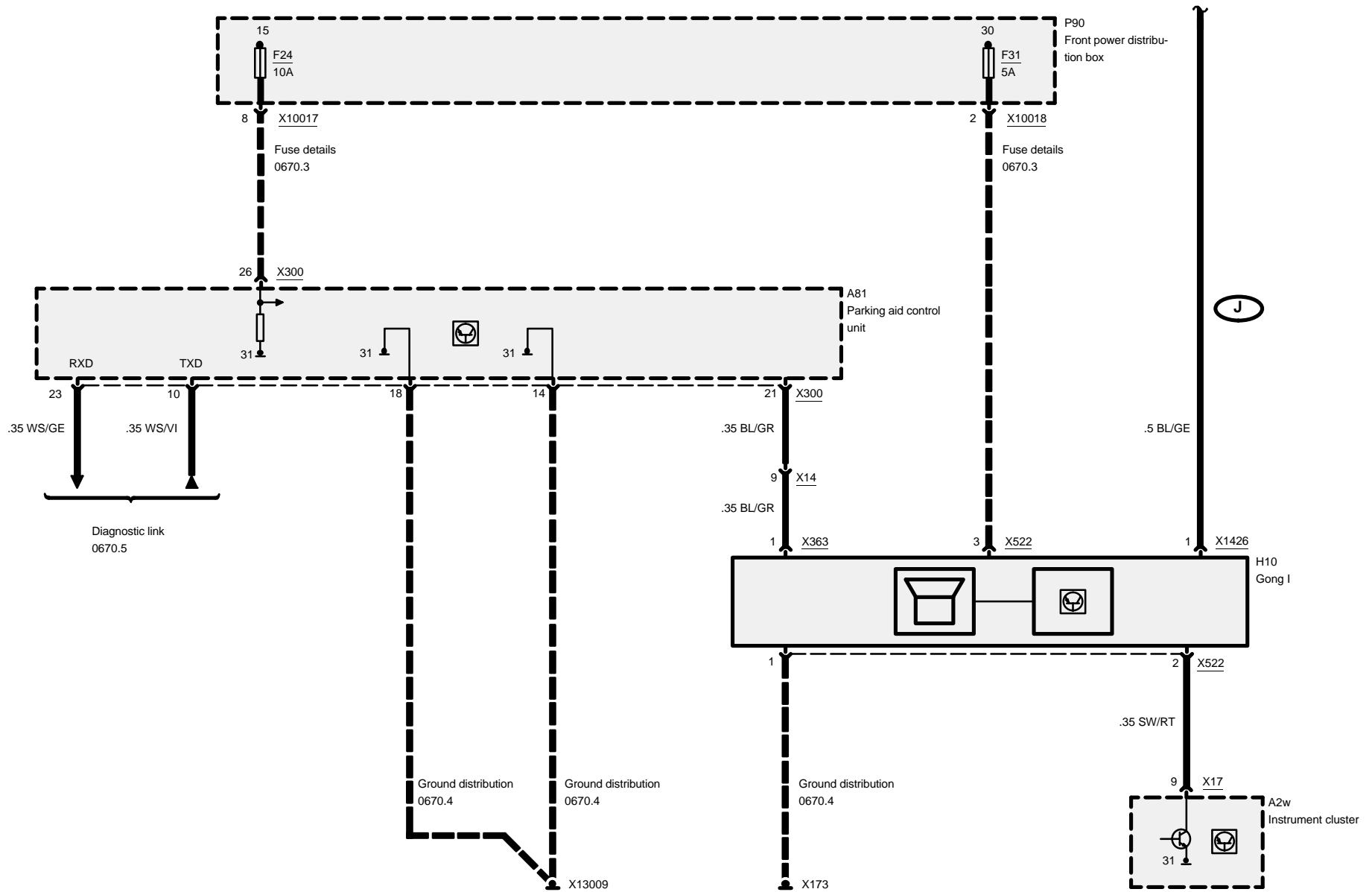


6610.2 Remote control ZV/DWA

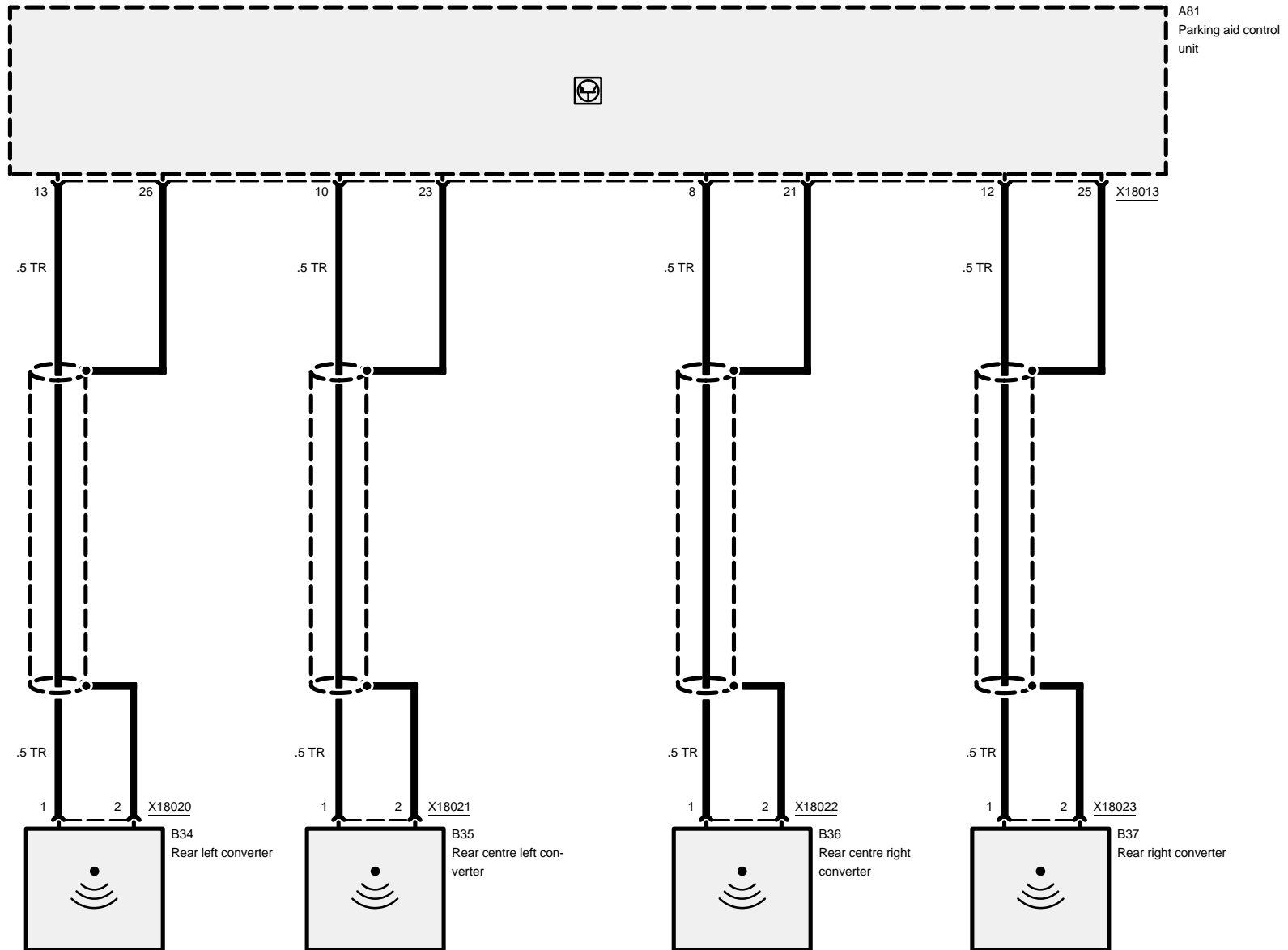




Right-hand drive



Park distance control (PDC)





7000.0 Component location chart

Comp.	Description	Location	7100.0	8500.0
A2w ...	Instrument cluster	LH side of dash	18-3	
A8	Cruise control module	behind glove compartment	01-3	
A12 ...	Airbag diagnostic module	under rear seat	02-1	
A18 ...	Hifi amplifier	in LH side of luggage compartment behind trim	00-3	
A22z ..	Electrochromatic rear view mirror	in interior rear view mirror	15-3	
A35y ..	On-board computer (BC – Low)	centre of dash centre console		
A36 ...	Rear wipe/wash interval control unit	in rear lid	36-3	
A51 ...	Wipe/wash module	behind glove compartment	02-2	
A52 ...	ABS/ASC control unit	behind glove compartment	01-3	
A56 ...	Tilt/slide sunroof control unit	in head lining	01-2	
A64 ...	Wipe-wash module (Low II)	behind glove compartment	02-2	
A81 ...	Parking aid control unit	in RH side of luggage compartment behind trim	00-2	
A104 ..	ZKE control unit	behind glove compartment	01-1	
A107 ..	Automatic climate control unit (IHKS)	rear of centre console	02-3	
A110 ...	Digital clock	LH side of dash		
A113 ...	Electronic seat control	under RH front seat		
A117 ...	EJECT box telephone	under centre console		
A194y .	Control unit, remote control	near interior rear view mirror	15-3	
A202 ..	ABS control unit	rear LH side of engine compartment behind LH spring strut dome		
A837 ..	Electronic immobiliser control unit (EWS III)	under LH side of dash		
A2019 .	DDE2 control unit	rear RH side of engine compartment in electronics box	00-1	
A6000 .	DME control unit	rear RH side of engine compartment in electronics box	00-1	



Component location chart

Comp.	Description	Location	7100.0	8500.0
A7000	EGS control unit	rear RH side of engine compartment in electronics box	00-1	
A8500	EGS control unit	rear RH side of engine compartment in electronics box	00-1	
A19007	Control unit, thermal oil level sensor (TOENS)	behind glove compartment		
A69900	CNG control unit	rear RH side of engine compartment in electronics box		
B1	Front right ABS sensor	on RH front wheel, above brake calliper	06-3	
B2	Front left ABS sensor	on LH front wheel, above brake calliper	06-3	
B3	Rear right ABS sensor	on RH rear wheel, above brake calliper		
B4	Rear left ABS sensor	on LH rear wheel, above brake calliper		
B6	Immersion tube sensor	under LH side of rear seat	14-1	
B8y	Pressure switch	front RH side of engine compartment near front RH headlight		
B9y	Pressure switch	front RH side of engine compartment near front RH headlight		
B10	Speedometer reed contact	on differential	06-1	
B14	Evaporator sensor	RH side of LH footwell	18-1	
B16	Front left brake pad sensor	on LH front wheel, above brake calliper	06-3	
B17	Rear right brake pad sensor	behind RH rear wheel		
B18	Brake fluid level switch	rear LH side of engine compartment on break fluid reservoir	26-3	
B21	On-board computer temperature sensor	in engine compartment LH bottom of engine compartment	15-1	
B25y	Immersion tube sensor II	under RH side of rear seat		
B28	Gradient monitor (DWA)	in RH side of luggage compartment behind trim	23-3	
B34	Rear left converter	in LH side of rear bumper	08-1	
B35	Rear centre left converter	in LH side of rear bumper	08-1	



Component location chart

Comp.	Description	Location	7100.0	8500.0
B36 ...	Rear centre right converter	in RH side of rear bumper	08-2	
B37 ...	Rear right converter	in RH side of rear bumper	08-2	
B78 ...	Driver's side impact sensor	under LH front seat	31-2	
B79 ...	Passenger's side impact sensor	under RH front seat		
B80 ...	Gas density sensor	RH side under centre of vehicle		
B2008 .	Oil pressure switch	LH side of engine compartment	35-1	
B2011 .	Solenoid valve, injection timing device	LH side of engine compartment	35-2	
B2012 .	Charge air temperature sensor	front of engine	36-2	
B2013 .	Engine speed sensor	LH side of engine	27-3	
B2014 .	Charge pressure sensor	LH side of engine compartment	36-1	
B2017 .	Changeover valve for exhaust gas recirculation (AGR)	LH side of engine compartment	36-1	
B2232 .	Dual temperature sensor	front of engine compartment	35-3	
B6200 .	Heated oxygen sensor	under centre of car on catalytic converter	09-3	
B6203 .	Crankshaft sensor	RH side under front of vehicle behind radiator	09-1	
B6204 .	Camshaft sensor	front LH side of engine compartment (4-cylinder)	27-1	
B6204 .	Camshaft sensor	front LH side of engine compartment (6-cylinder)		
B6205 .	Intake air temperature sensor	LH side of engine (4-cylinder)	28-2	
B6205 .	Intake air temperature sensor	LH side of engine (6-cylinder)	33-2	
B6207 .	Hot-film air mass meter	LH side of engine	28-2	
B6209 .	Hall sensor, camshaft	front of engine	27-1	
B6217 .	Hot film air mass meter	front top of engine	28-3	



Component location chart

Comp.	Description	Location	7100.0	8500.0
B6230	Oil level	LH side of engine compartment		
B6231	Oil pressure switch	front LH side of engine compartment below intake manifold (4-cylinder)	11-1	
B6231	Oil pressure switch	front LH side of engine compartment below intake manifold (6-cylinder)	34-2	
B6232	Remote thermometer sensor	front LH side of engine compartment below intake manifold	11-2	
B6233	Air flow meter	LH side of engine compartment	10-2	
B6236	Coolant temperature sensor	front LH side of engine compartment below intake manifold		
B6240	Knock sensor	front top of engine (4-cylinder)		
B6240	Knock sensor	LH side of engine (6-cylinder)	34-1	
B6241z	Knock sensor 1	front top of engine		
B6254	Oil level switch, thermal	underside of oil tray		04-2
B6256	Dual temperature sensor (coolant temperature)	front LH side of engine compartment below intake manifold (4-cylinder)	11-2	
B6256	Dual temperature sensor (coolant temperature)	front LH side of engine compartment below intake manifold (6-cylinder)	34-2	
B6952	Impedance converter	on cylinder head		
B9508	Pressure switch	front RH side of engine compartment near front RH headlight	28-1	
B62001	Oxygen sensor in front of catalytic converter	under centre of car on catalytic converter	12-2	
B62002	Oxygen sensor behind catalytic converter	under centre of car		
B62101	Oxygen sensor I in front of catalytic converter	on catalytic converter		
B62201	Oxygen sensor II in front of catalytic converter	on catalytic converter		
B69915	Map sensor CNG	centre of engine compartment		



Component location chart

Comp.	Description	Location	7100.0	8500.0
B69926	Oxygen sensor CNG	under centre of car		
C101 ...	Volute spring	top of steering column	17-1	
D100 ...	Diagnostic connector	rear LH side of engine compartment (4-cylinder)	26-3	
D100 ...	Diagnostic connector	rear RH side of engine compartment (6-cylinder)	32-3	
D110 ...	OBD II connector	centre console		
E7	Left headlight	front LH side of engine compartment		
E8	Right headlight	front RH side of engine compartment		
E9	Rear window defogger I	on rear lid		
E11	Left high beam	near front LH headlight		
E12 ...	Right high beam	near front RH headlight		
E13 ...	Left headlight	near front LH headlight		
E14 ...	Right headlight	near front RH headlight		
E15 ...	Left parking light	front of vehicle		
E19 ...	Right parking light	front of vehicle		
E26 ...	Left fog light	under front LH bumper	06-2	
E27 ...	Right fog light	under front RH bumper	06-2	
E28 ...	Front cigar lighter	centre console		
E29 ...	Front cigar lighter light	centre console		
E32z ...	Interior light, rear centre	in head lining		
E34 ...	Interior/reading lamp, front	in head lining	01-2	
E35 ...	Driver's make-up mirror light	in sun visor	30-1	
E36 ...	Passenger's make-up mirror light	in sun visor	16-1	



Component location chart

Comp.	Description	Location	7100.0	8500.0
E42 ...	Glove compartment light	right of glove compartment		
E43 ...	Left licence plate light	underside of rear lid, near number plate	07-1	
E44 ...	Right licence plate light	underside of rear lid, near number plate	07-1	
E45y ...	Cassette box light	centre console	26-2	
E46 ...	Left rear lid light	in rear LH side of glove compartment		
E47 ...	Right rear lid light	in rear RH side of luggage compartment		
E51 ...	Left windscreen washer jet heater	underside of front lid		
E52 ...	Right windscreen washer jet heater	underside of front lid		
E56 ...	Driver's backrest heating	in top of LH backrest	24-3	
E57 ...	Driver's seat heating	under LH front seat	24-3	
E58 ...	Passenger's seat heating	bottom of RH front seat		
E59 ...	Passenger's backrest heating	in top of RH backrest		
E61 ...	Front left footwell light	footwell, driver's side		
E62 ...	Front right footwell light	footwell, passenger's side		
E82 ...	Gear indicator light	centre console		
E97 ...	Light switch lighting	on instrument cluster		
E98 ...	Fog light switch lighting	on instrument cluster		
E103 ..	Heating control unit lighting (HS)	behind centre of dash		
E2000 .	Fuel heating	LH side of engine compartment	36-1	
F97	Fuse link	rear of engine compartment		
G1	Battery	rear RH side of engine compartment (4-cylinder)	03-3	
G1	Battery	in luggage compartment (6-cylinder)		



Component location chart

Comp.	Description	Location	7100.0	8500.0
G5	Driver's airbag gas generator	behind steering wheel	17-1	
G6	Passenger's airbag gas generator	behind glove compartment top	19-3	
G12 . . .	Pyrotechnical belt tensioner, driver's side . .	driver's seat right		
G13 . . .	Pyrotechnical belt tensioner, passenger's side	passenger's seat left		
G14 . . .	Gas generator, left side airbag	in driver's door	29-2	
G15 . . .	Gas generator, right side airbag	in passenger's door		
G2023 .	Alternator	front LH side of engine compartment	35-1	
G6430 .	B+ external start terminal point	rear RH side of engine compartment	32-3	
G6509 .	Alternator	front LH side of engine compartment	03-1	
H1	Antitheft horn (DWA)	in front RH bumper		
H2	Left horn	front of engine compartment		
H3	Right horn	front of engine compartment		
H4	Front right flasher unit	front of vehicle		
H5	Rear right flasher unit	RH side of body rear end		
H6	Rear left flasher unit	LH side of body rear end		
H7	Front left flasher unit	front of vehicle		
H8	Front right auxiliary flasher unit	front of vehicle		
H9	Front left auxiliary flasher unit	front of vehicle		
H10 . . .	Gong I	under LH side of dash		
H24 . . .	Left brake light	Left rear lid light		
H25 . . .	Tail light, left	Left rear lid light		



Component location chart

Comp.	Description	Location	7100.0	8500.0
H26 ...	Left rear fog light	Left rear lid light		
H27 ...	Left reversing light	Left rear lid light		
H28 ...	Right reversing light	Right rear lid light		
H30 ...	Tail light, right	Right rear lid light		
H31 ...	Right brake light	Right rear lid light		
H34 ...	Raised brake light	rear parcel shelf		
H37 ...	Left tail light	Left rear lid light		
H39 ...	Right tail light	Right rear lid light		
H42 ...	Left mid-range/high range speaker	in top of LH front door		
H43 ...	Right mid-range/high range speaker	in top of RH front door		
H45 ...	Rear right speaker	in RH side of luggage compartment	23-3	
H46 ...	Rear left speaker	in LH side of luggage compartment	29-1	
H50 ...	Right front high range speaker	in top of RH front door		
H51 ...	Right front low range speaker	in bottom of RH A-post		
H52 ...	Right rear low range speaker	under rear window shelf		
H53 ...	Right rear high range speaker	under rear window shelf		
H54 ...	Right front mid-range speaker	in top of RH front door		
H55 ...	Left front mid-range speaker	in top of LH front door		
H56 ...	Left rear high range speaker	under rear window shelf		
H57 ...	Left rear low range speaker	under rear window shelf		
H58 ...	Left front low range speaker	in bottom of LH A-post		
H59 ...	Left front high range speaker	in top of LH front door		



Component location chart

Comp.	Description	Location	7100.0	8500.0
H66 ...	Subwoofer	rear parcel shelf		
H91 ...	Right luggage compartment lamp	Right rear lid light		
K2	Horn relay	rear LH side of engine compartment in power distribution box	13-2	
K4	Heating blower relay	rear LH side of engine compartment in power distribution box	13-2	
K9	Unloader relay terminal 15	under LH side of dash	20-3	
K10 ...	ABS overvoltage protection relay	rear LH side of engine compartment in power distribution box	13-1	
K13 ...	Rear defogger relay	rear LH side of engine compartment in power distribution box	13-1	
K16 ...	Hazard flasher relay	rear LH side of engine compartment in power distribution box	13-2	
K19 ...	A/C compressor relay	rear LH side of engine compartment in power distribution box	13-1	
K21 ...	Auxiliary fan stage 1 relay	rear LH side of engine compartment in power distribution box	13-1	
K22 ...	Auxiliary fan stage 2 relay	rear LH side of engine compartment in power distribution box	13-1	
K25 ...	Right parking light/licence plate light relay ..	RH side of dash behind glove compartment		
K26 ...	Left parking light relay	RH side of dash behind glove compartment		
K45 ...	Folding roof comfort relay	behind LH side of dash	19-1	
K46 ...	High beam relay	rear LH side of engine compartment in power distribution box	13-2	
K47 ...	Fog light relay	rear LH side of engine compartment in power distribution box	13-2	
K48 ...	Headlight relay	rear LH side of engine compartment in power distribution box	13-2	
K49 ...	Rear fog light relay	under LH side of dash		
K124 ..	Changeover module CNG	behind glove compartment		
K125 ..	ABS pump motor relay, timed	power distribution box rear LH side of engine compartment	13-1	
K127y .	Reading lights relay	under LH side of dash	20-3	
K200 ..	Relay lighting Scandinavia	behind LH side of dash		



Component location chart

Comp.	Description	Location	7100.0	8500.0
K2000	Heater plug relay	rear RH side of engine compartment	27-2	
K2003	DDE relay	rear LH side of engine compartment in power distribution box	13-3	
K2081	Delivery pump relay	rear LH side of engine compartment in power distribution box	13-3	
K2200	Alternator cut-out relay	rear LH side of engine compartment in power distribution box	13-3	
K6300	DME relay	rear LH side of engine compartment in power distribution box	13-3	
K6301	Electrical fuel pump relay	rear LH side of engine compartment in power distribution box	13-3	
K6303	Oxygen sensor relay	rear LH side of engine compartment in power distribution box	13-3	
K6304	Secondary air pump relay	in power distribution box	03-2	
K6326	Unloader relay, terminal 15	rear RH side of engine compartment in electronics box	00-1	
K69921	CNG relay	rear RH side of engine compartment in electronics box		
K69922	CNG relay	rear RH side of engine compartment in electronics box		
M2	Fuel pump (EKP I)	under RH side of rear seat	15-2	
M3	Wiper motor	rear of engine compartment below centre of fresh air cowl	10-1	
M4	Washer pump	front RH side of engine compartment on washer fluid reservoir	07-3	
M7	Headlight washer pump	front RH side of engine compartment on washer fluid reservoir	08-3	
M9	Auxiliary fan motor	vehicle front, behind grille behind trim	12-1	
M12	Central locking (ZV) drive driver's door	in bottom of LH front door behind trim		
M13	Central locking (ZV) drive passenger's door	in bottom of RH front door behind trim		
M16	ZV drive tank flap	in rear RH side of luggage compartment behind trim		
M17	Central locking drive rear lid	in rear of luggage compartment behind trim	29-3	
M21	Driver's window motor	LH front door behind door trim panel	22-3	
M23	Passenger's window motor	RH front door behind door trim panel	22-1	



Component location chart

Comp.	Description	Location	7100.0	8500.0
M24z	Folding roof motor	in windscreen header		
M25	Cruise control actuator (Tempomat)	front LH side of engine compartment	28-2	
M30	Blower motor	rear of engine compartment under RH fresh air trim		
M50	Driver's seat cushion tilt motor	under LH front seat	24-3	
M51	Driver's seat movement motor	under LH front seat	24-3	
M52	Driver's seat height adjustment motor	under LH front seat	24-3	
M53	Driver's backrest recliner motor	under LH front seat	24-3	
M55z	Driver's lumbar support/compressor valve	under LH front seat		
M58	Passenger's backrest recliner motor	under RH front seat		
M59	Passenger's seat height adjustment motor	under RH front seat		
M60	Passenger's seat movement motor	under RH front seat		
M61	Passenger's seat cushion tilt motor	under RH front seat		
M80	Left headlight beam angle adjust actuator	front LH side of engine compartment		
M81	Right headlight beam angle adjust actuator	front RH side of engine compartment		
M93	ADS actuator	front LH side of engine compartment		
M111	Fresh air circulation motor	behind centre of dash		
M2025	Starter	rear LH side of engine compartment		
M6510	Starter	rear LH side of engine compartment		
M69913	Feed unit, CNG stepper motor	in engine compartment		
N8	AM/FM antenna amplifier	in rear lid	23-2	
N9	Radio	centre console		
N17	Crash alarm sensor	behind LH side of dash	19-1	



Component location chart

Comp.	Description	Location	7100.0	8500.0
N22 ...	CD changer	in front LH side of luggage compartment		
P90 ...	Front power distribution box	rear LH side of engine compartment	03-2	
P95 ...	Auxiliary fuse box	under LH side of dash	20-3	
P97 ...	Auxiliary fuse box	behind LH side of dash	19-1	
P100 ..	Additional fuse box	behind LH side of dash	19-1	
R10 ...	Pedal value sensor	behind accelerator pedal		
R11	Blower ballast resistor	behind centre of dash	19-2	
R13 ...	Headlight beam angle adjust potentiometer	under LH side of dash	18-2	
R27 ...	Conductor loop hinged window right	RH B-pillar		
R28 ...	Conductor loop hinged window left	LH B-pillar		
R31 ...	ADS potentiometer	LH side of engine compartment		
R6240 .	Resistor	front of engine		
R6252 .	Throttle potentiometer	LH side of engine compartment	27-1	
R6252 .	Throttle potentiometer	LH side of engine compartment	32-2	
S2	Ignition switch	LH side of dash	17-3	
S3	Gear selector lever switch	centre console	20-1	
S4	Horn switch	on steering wheel	17-1	
S5	Windscreen wiper switch	LH side of dash right of steering column top		
S6	ASC switch	centre console	25-2	
S7	Turn indicator/low beam selector	LH side of dash left of steering column top	17-3	
S8	Light switch	LH side of dash	25-3	
S10 ...	Fog light switch	LH side of dash		



Component location chart

Comp.	Description	Location	7100.0	8500.0
S13 ...	Passenger's door contact switch	RH front door jamb	21-3	
S14 ...	Driver's door contact switch	front left door post	21-3	
S17 ...	Driver's power mirror switch	in top of LH front door		
S18 ...	Hazard warning switch	under centre console	20-1	
S21 ...	Front lid microswitch	front RH side of engine compartment	08-3	
S28 ...	Cruise control switch	LH side of dash right of steering column top	17-3	
S29 ...	Brake light switch	LH footwell on brake pedal support bracket behind LH footwell trim	16-3	
S30 ...	Brake light switch	LH footwell on brake pedal support bracket behind LH footwell trim	16-2	
S31 ...	Handbrake switch	centre console on rear of handbrake lever	26-2	
S32 ...	Clutch switch	LH footwell on clutch pedal support bracket behind LH footwell trim	16-3	
S36 ...	Dual temperature switch 91 °C/99 °C	front RH side of engine compartment near front RH headlight	28-1	
S36y ..	Dual temperature switch 80 °C/88 °C	front RH side of engine compartment near front RH headlight	28-1	
S37 ...	Glove compartment light switch	in glove box		
S38 ...	Tilt/slide sunroof switch (SHD)	in head lining	24-1	
S47 ...	Driver's door lock switch	LH front door next to door lock		
S48 ...	Driver's door handle switch	LH front door next to door lock		
S49 ...	Passenger's door lock switch	RH front door next to door lock		
S51 ...	Driver's seat adjustment switch	under LH front seat		
S52 ...	Driver's lumbar support switch	front of LH front seat		
S53 ...	Driver's seat heating switch	centre console	25-2	
S54 ...	Passenger's seat heating switch	centre console	25-1	
S56 ...	Passenger's seat adjustment switch	under RH front seat		



Component location chart

Comp.	Description	Location	7100.0	8500.0
S58 ...	Driver's seat belt buckle switch	in LH front seat belt buckle		
S61y ..	Luggage compartment light switch	underside of rear lid	23-1	
S75 ...	Blower switch	centre of dash		
S77 ...	Driver's make-up mirror switch	above LH sun visor in sun visor mounting	30-1	
S78 ...	Passenger's make-up mirror switch	above RH sun visor in sun visor mounting	16-1	
S82 ...	Fog light switch	on instrument cluster		
S99 ...	Passenger's window monitoring switch (DWA)	RH front door behind trim		
S100 ..	Driver's window monitoring switch (DWA) ..	LH front door behind door trim panel		
S126y .	Driver's door power window switch	centre console near gear lever	20-2	
S127y .	Passenger's door power window switch ...	centre console near gear lever	20-2	
S198 ..	Thermal switch, heated jets	front RH side of engine compartment	26-1	
S218 ..	Rear window defogger switch	centre of dash		
S247 ..	Dual temperature switch 80 °C/99 °C	front RH side of engine compartment		
S304 ..	Gas/petrol switch	centre of dash		
S530 ..	Control Switch, automatic climate control (IHKS)	centre of dash		
S531 ..	Temperature selection switch	centre of dash		
S558 ..	Gas shut-off valve	near the CNG tank		
S2113 .	Reversing light switch	LH side of transmission		
S2138 .	A/C fan II switch	front of engine		
S8503 .	Program switch	centre console		



Component location chart

Comp.	Description	Location	7100.0	8500.0
S8507	Kick-down switch	LH footwell		
S8511	Reversing light switch	LH side of transmission	31-1	
S69912	Pressure switch CNG	centre of engine compartment		
T6151	Ignition coil 1	RH side of engine compartment (6-cylinder)	33-1	
T6151	Ignition coil 1	RH side of engine compartment (4-cylinder)	11-3	
T6152	Ignition coil 2	RH side of engine compartment (6-cylinder)	33-1	
T6152	Ignition coil 2	RH side of engine compartment (4-cylinder)	11-3	
T6153	Ignition coil 3	RH side of engine compartment (6-cylinder)	33-1	
T6153	Ignition coil 3	RH side of engine compartment (4-cylinder)	11-3	
T6154	Ignition coil 4	RH side of engine compartment (6-cylinder)	33-1	
T6154	Ignition coil 4	RH side of engine compartment (4-cylinder)	11-3	
T6155	Ignition coil 5	RH side of engine compartment (6-cylinder)	33-1	
T6156	Ignition coil 6	RH side of engine compartment (6-cylinder)	33-1	
V5	Antitheft (DWA) LED	centre console near gear lever	25-1	
V7	ASC diode	power distribution box rear LH side of engine compartment		
V9	Decoupling diode lighting	power distribution box rear LH side of engine compartment		
X0	B+ terminal point	rear LH side of engine compartment	03-2	
X2	B+ terminal point	rear LH side of engine compartment	03-2	
X9	B+ terminal point	rear LH side of engine compartment	03-2	
X13	(30 pins, black)	LH side of LH footwell	17-2	00-4
X14	(30 pins, natural)	LH side of LH footwell	17-2	00-4
X16	(26 pins, natural)	LH side of dash rear of instrument cluster, A2w	18-3	00-2



Component location chart

Comp.	Description	Location	7100.0	8500.0
X17 ...	(26 pins, blue)	LH side of dash rear of instrument cluster, A2w	18-3	00-2
X20 ...	(25 pins, black)	rear LH side of engine compartment	26-3	04-4
X22 ...	(26 pins, grey)	behind glove compartment	01-3	00-2
X32 ...	(12 pins, natural)	LH footwell underside of steering column	21-1	02-4
X33 ...	(12 pins, black)	LH footwell underside of steering column	21-1	02-4
X35 ...	(12 pins, natural)	under LH side of dash right of steering column	21-1	02-4
X43 ...	(9 pins, black)	power distribution box rear LH side of engine compartment		03-4
X44 ...	(9 pins, black)	power distribution box rear LH side of engine compartment		03-4
X45 ...	(9 pins, black)	power distribution box rear LH side of engine compartment		03-4
X51 ...	(9 pins, black)	power distribution box rear LH side of engine compartment		03-4
X52 ...	(9 pins, black)	power distribution box rear LH side of engine compartment		03-4
X53 ...	(9 pins, black)	power distribution box rear LH side of engine compartment		03-4
X54 ...	(9 pins, black)	power distribution box rear LH side of engine compartment		03-4
X56 ...	(9 pins, black)	power distribution box rear LH side of engine compartment		03-4
X58 ...	(9 pins, black)	power distribution box rear LH side of engine compartment		03-4
X63 ...	(9 pins, black)	under LH side of dash		03-4
X64 ...	(9 pins, black)	power distribution box rear LH side of engine compartment		03-4
X65 ...	(9 pins, black)	behind LH side of dash		03-4
X69 ...	(25 pins, grey)	rear LH side of engine compartment	26-3	11-5
X70 ...	(7 pins, black)	front LH side of engine compartment	28-2	11-4
X72 ...	(6 pins, natural)	LH footwell underside of steering column	21-1	03-6
X73 ...	(8 pins, grey)	LH side of dash		03-3



Component location chart

Comp.	Description	Location	7100.0	8500.0
X74 ...	(50 pins, yellow)	under rear seat	02-1	08-4
X78 ...	(4 pins, black)	LH footwell on brake pedal support bracket behind LH footwell trim	16-2	03-6
X82 ...	(3 pins, black)	front of engine compartment on auxiliary fan	12-1	06-4
X85 ...	(3 pins, black)	rear LH side of engine compartment	12-3	05-3
X87 ...	(3 pins, black)	front RH side of engine compartment near front RH headlight	28-1	04-2
X105 ..	(2 pins, black)	underside of front lid		
X106 ..	(2 pins, black)	underside of front lid		
X107 ..	(2 pins, black)	front RH side of engine compartment on washer fluid reservoir	07-3	
X111 ...	(2 pins, black)	rear LH side of engine compartment on break fluid reservoir	26-3	
X113 ...	(3 pins, grey)	above RH front wheel well behind RH front wheel	07-2	06-3
X114 ...	(3 pins, grey)	above LH front wheel well behind LH front wheel	07-2	06-3
X116 ...	(2 pins, black)	LH footwell on brake pedal support bracket behind LH footwell trim	16-3	
X118 ...	(2 pins, black)	above LH front wheel well behind LH front wheel	07-2	
X121 ..	(2 pins, natural)	LH footwell on clutch pedal support bracket behind LH footwell trim	16-3	
X123 ..	(2 pins, grey)	front RH side of engine compartment on washer fluid reservoir	08-3	
X128 ..	(2 pins, black)	front LH side of engine compartment		
X129 ..	(2 pins, black)	near front LH headlight		
X130 ..	(4 pins, black)	near front LH headlight		
X132 ..	(2 pins, black)	front of engine compartment		
X133 ..	(2 pins, black)	front of engine compartment		
X135 ..	(4 pins, black)	near front RH headlight		
X136 ..	(2 pins, black)	near front RH headlight		



Component location chart

Comp.	Description	Location	7100.0	8500.0
X137 ..	(2 pins, black)	front RH side of engine compartment		
X142 ..	(2 pins, grey)	LH side under rear of vehicle near differential		
X143 ..	(2 pins, grey)	LH side under rear of vehicle near differential	06-1	
X163 ..	(3 pins, black)	front RH side of engine compartment near front RH headlight	07-3	11-3
X165 ..	Ground	front LH side of engine compartment	04-1	
X168 ..	(1 pin, —)	left of steering column		
X173 ..	Ground	under LH side of dash	04-3	
X256 ..	(26 pins, black)	ahead of RH front door in bottom of RH A-post	22-1	03-5
X257 ..	(26 pins, black)	ahead of LH front door in bottom of LH A-post		03-5
X271 ..	(12 pins, black)	LH side of dash rear of instrument cluster, A2w	18-3	01-3
X272 ..	(2 pins, natural)	in head lining	24-1	
X275 ..	(4 pins, natural)	under LH front seat under carpet	24-2	03-1
X279 ..	(4 pins, natural)	under RH front seat	21-2	03-1
X285 ..	(15 pins, blue)	behind glove compartment	02-2	00-3
X292 ..	(9 pins, black)	power distribution box rear LH side of engine compartment		03-4
X295 ..	(8 pins, black)	LH footwell underside of steering column	21-1	03-3
X300 ..	(26 pins, black)	in RH side of luggage compartment behind trim	00-2	00-2
X311 ...	(3 pins, black)	underside of rear lid left	29-3	01-1
X312 ..	(2 pins, black)	in rear RH side of luggage compartment behind RH rear light assembly		
X315 ..	(2 pins, black)	underside of rear lid left	29-3	
X316 ..	(4 pins, violet)	centre console near gear lever	20-2	07-1
X318 ..	(8 pins, black)	in rear RH side of luggage compartment behind RH rear light assembly		01-4



Component location chart

Comp.	Description	Location	7100.0	8500.0
X319	.. (8 pins, black)	in LH side of luggage compartment behind trim	23-2	01-4
X322	.. (6 pins, black)	under LH side of dash	20-3	05-2
X324	.. (4 pins, violet)	centre console near gear lever	20-2	07-1
X333	.. (4 pins, natural)	rear of engine compartment below centre of fresh air cowl	10-1	06-2
X336	.. (6 pins, natural)	under roof centre panel	01-2	03-6
X341	.. (8 pins, black)	in LH side of luggage compartment behind trim		01-4
X351	.. (2 pins, black)	in top of RH B-post		
X352	.. (2 pins, black)	in top of LH B-post		
X363	.. (1 pin, black)	under LH side of dash		
X371	.. (2 pins, black)	front RH side of engine compartment	08-3	
X379	.. (1 pin, natural)	in top of LH C-post		
X380	.. (1 pin, natural)	in top of RH C-post		
X381	.. (3 pins, black)	under roof centre panel	30-1	01-1
X382	.. (3 pins, black)	above RH sun visor	16-1	01-1
X383	.. (2 pins, black)	under rear of vehicle to left near on differential	06-1	
X389	.. (2 pins, black)	rear LH side of engine compartment		
X390	.. (2 pins, black)	vehicle, front right		
X396	.. (8 pins, black)	in rear RH side of luggage compartment behind RH rear light assembly		01-4
X400	.. (8 pins, black)	in rear LH side of glove compartment		01-4
X401	.. (1 pin, black)	above LH sun visor	30-1	
X402	.. (1 pin, black)	above RH sun visor	16-1	
X413	.. (3 pins, black)	rear parcel shelf		01-1



Component location chart

Comp.	Description	Location	7100.0	8500.0
X423 ..	(1 pin, —)	below centre console on rear of handbrake lever	26-2	
X424 ..	(1 pin, natural)	in LH side of luggage compartment behind trim	23-2	
X494 ..	Ground	under driver's seat	05-3	
X495 ..	Ground	right of glove compartment	04-2	
X498 ..	Ground	under driver's seat	05-3	
X509 ..	(9 pins, black)	behind glove compartment		03-4
X510 ..	(9 pins, black)	behind glove compartment		03-4
X511 ...	(8 pins, black)	centre console near gear lever	20-1	01-4
X514 ..	(4 pins, black)	centre console	25-1	07-1
X516 ..	(5 pins, black)	centre console	20-1	02-6
X521 ..	(6 pins, blue)	centre console		09-4
X522 ..	(3 pins, natural)	under LH side of dash	21-1	08-1
X531 ..	(1 pin, —)	centre console near gear lever	25-2	
X532 ..	(2 pins, black)	centre console near gear lever	25-2	
X537 ..	(3 pins, black)	LH front door behind door trim panel	31-3	01-1
X538 ..	(3 pins, black)	RH front door behind door trim panel	22-1	01-1
X540 ..	(2 pins, black)	LH side of glove box	19-3	
X541 ..	(3 pins, black)	LH side of glove box	19-3	01-1
X544 ..	(2 pins, natural)	behind dash		
X603 ..	(12 pins, black)	under LH front seat		02-4
X604 ..	(12 pins, black)	under RH front seat		02-4
X605 ..	(12 pins, black)	in LH side of luggage compartment behind trim	00-3	10-3



Component location chart

Comp.	Description	Location	7100.0	8500.0
X606 ..	(26 pins, black)	in LH side of luggage compartment behind trim	00-3	00-2
X623 ..	(4 pins, black)	in top of LH front door behind door trim panel		07-1
X624 ..	(4 pins, black)	in top of RH front door behind door trim panel	22-1	07-1
X625 ..	(6 pins, black)	LH front door behind door trim panel	31-3	02-5
X627 ..	(2 pins, black)	in head lining		
X630 ..	(13 pins, black)	under centre of rear bumper		07-4
X638 ..	(2 pins, grey)	under RH side of rear seat	15-2	
X641 ..	(6 pins, natural)	RH front door behind door trim panel		06-5
X643 ..	(4 pins, violet)	in head lining (with tilt/slide sunroof (SHD))	24-1	07-1
X643 ..	(4 pins, natural)	in head lining (with folding roof)		07-1
X651 ..	(6 pins, violet)	centre console	25-2	04-5
X652 ..	(6 pins, —)	front of LH front seat		08-3
X658 ..	(6 pins, violet)	centre console	25-1	04-5
X660 ..	(6 pins, black)	LH front door behind door trim panel	22-2	06-5
X679 ..	(2 pins, yellow)	under RH side of rear seat	15-2	
X695 ..	(10 pins, black)	below centre console		02-3
X700 ..	(1 pin, —)	behind RH footwell speaker cover		
X701 ..	(1 pin, —)	behind LH footwell speaker trim cover		
X706 ..	(2 pins, black)	centre console	26-2	
X709 ..	(2 pins, black)	underside of rear lid, near number plate	07-1	
X710 ..	(2 pins, black)	underside of rear lid, near number plate	07-1	
X711 ...	(3 pins, black)	underside of rear lid	23-1	01-1



Component location chart

Comp.	Description	Location	7100.0	8500.0
X713	.. (2 pins, black)	LH side under rear of vehicle near differential	06-1	
X726	.. (2 pins, —)	under LH front seat	24-2	
X727	.. (2 pins, —)	under LH front seat	24-2	
X728	.. (2 pins, —)	under LH front seat	24-2	
X729	.. (2 pins, —)	under LH front seat	24-2	
X732	.. (4 pins, black)	under LH front seat under carpet		03-1
X733	.. (4 pins, black)	under LH front seat under carpet		03-1
X734	.. (2 pins, —)	under RH front seat		
X735	.. (2 pins, —)	under RH front seat		
X736	.. (2 pins, —)	under RH front seat		
X737	.. (2 pins, —)	under RH front seat		
X740	.. (4 pins, black)	under RH front seat	21-2	03-1
X741	.. (4 pins, black)	under RH front seat	21-2	03-1
X742	.. (2 pins, yellow)	RH front door next to door lock		
X744	.. (4 pins, grey)	RH front door behind door trim panel	22-1	10-1
X745	.. (3 pins, black)	footwell, passenger's side		01-1
X746	.. (3 pins, natural)	RH front door behind door trim panel	22-1	01-1
X747	.. (2 pins, yellow)	LH front door behind door trim panel	22-2	
X748	.. (3 pins, black)	footwell, driver's side		01-1
X749	.. (4 pins, grey)	LH front door behind door trim panel	22-3	10-1
X752	.. (2 pins, grey)	LH front door behind door trim panel	22-2	
X753	.. (3 pins, natural)	LH front door	22-3	01-1



Component location chart

Comp.	Description	Location	7100.0	8500.0
X768 ..	(2 pins, white)	in engine compartment near front LH headlight	06-2	
X769 ..	(2 pins, white)	in engine compartment near front RH headlight	06-2	
X770 ..	(2 pins, yellow)	in engine compartment near front LH headlight	15-1	
X771 ..	(2 pins, black)	on RH side of LH footwell	18-1	
X778 ..	(4 pins, black)	under LH front seat		07-1
X782 ..	(3 pins, orange)	LH side of glove box	19-3	09-1
X783 ..	(3 pins, black)	underside of steering column		09-1
X816 ..	(1 pin, —)	rear of engine compartment under RH fresh air trim		
X817 ..	(1 pin, —)	rear of engine compartment under RH fresh air trim		
X904 ..	(4 pins, black)	behind centre of dash	19-2	03-1
X905 ..	(7 pins, black)	behind centre of dash		10-2
X1013 .	(2 pins, natural)	behind dash		
X1014 .	(1 pin, black)	centre console near gear lever	25-2	
X1034 .	(3 pins, black)	front LH side of engine compartment	14-3	08-1
X1035 .	(3 pins, black)	front RH side of engine compartment		08-1
X1148 .	(2 pins, black)	front RH side of engine compartment Thermal switch, heated jets	26-1	
X1165 .	Ground	under LH side of dash	04-3	
X1166 .	Ground	right of glove compartment	04-2	
X1171 .	(55 pins, natural)	behind glove compartment	01-3	00-1
X1176 .	(25 pins, black)	rear LH side of engine compartment behind LH spring strut dome	12-3	11-5
X1178 .	(2 pins, natural)	centre console		
X1193 .	(3 pins, black)	centre console on RH side of gear shift lever	20-1	01-1



Component location chart

Comp.	Description	Location	7100.0	8500.0
X1222	(6 pins, black)	in RH side of luggage compartment behind trim	23-3	03-6
X1241	(2 pins, black)	under LH side of rear seat	14-1	
X1245	(1 pin, black)	above LH sun visor	24-1	
X1246	(1 pin, black)	above RH sun visor	16-1	
X1292	(4 pins, natural)	centre console		07-1
X1380	(1 pin, —)	behind RH footwell speaker cover		
X1381	(1 pin, —)	behind LH footwell speaker trim cover		
X1441	Ground	under RH rear seat	02-1	
X1517	(3 pins, black)	on washer fluid reservoir		04-3
X1518	(8 pins, black)	behind centre of dash		01-4
X1522	(2 pins, black)	behind centre of dash		
X1529	(1 pin, —)	power distribution box rear LH side of engine compartment		
X1530	(1 pin, —)	power distribution box rear LH side of engine compartment		
X1588	(2 pins, black)	behind LH side of dash	19-1	
X1646	(3 pins, black)	in rear lid		01-1
X1668	(9 pins, black)	behind glove compartment		03-4
X1669	(6 pins, blue)	behind centre of dash		09-4
X1764	(3 pins, black)	on steering column		01-1
X1805	(15 pins, natural)	under LH side of dash		00-3
X1814	(9 pins, black)	behind LH side of dash		03-4
X1843	(1 pin, black)	in rear lid		
X1844	(1 pin, natural)	in rear lid		



Component location chart

Comp.	Description	Location	7100.0	8500.0
X1845	(2 pins, black)	in rear lid		
X1846	(3 pins, yellow)	in rear lid		01-1
X1847	(3 pins, black)	in rear lid		11-1
X1883	(3 pins, yellow)	in driver's door	29-2	11-1
X1884	(3 pins, yellow)	in passenger's door		11-1
X1885	(3 pins, black)	under LH front seat left	31-2	06-6
X1886	(3 pins, black)	under RH front seat right		06-6
X1890	(3 pins, black)	front of engine compartment on auxiliary fan	12-1	06-4
X2000	(12 pins, black)	rear RH side of engine compartment	27-2	10-3
X2008	(2 pins, black)	RH side of engine compartment	35-2	
X2009	Cable shoe, electrical cut-out	LH side of engine	36-2	
X2010	(7 pins, black)	LH side of engine compartment	35-3	11-4
X2011	(2 pins, black)	LH side of engine compartment	35-2	
X2012	(2 pins, black)	front of engine	36-2	
X2013	(2 pins, black)	LH side of engine	27-3	
X2014	(3 pins, black)	LH side of engine compartment	36-1	08-2
X2017	(2 pins, black)	LH side of engine compartment	36-1	
X2019	(55 pins, natural)	in electronics box	27-2	00-1
X2024	Cable shoe	LH bottom of engine compartment on alternator		
X2025	Cable shoe	rear LH side of engine compartment below intake manifold		
X2026	Cable shoe B+	rear LH side of engine compartment below intake manifold		
X2027	Cable shoe	rear LH side of engine compartment below intake manifold		



Component location chart

Comp.	Description	Location	7100.0	8500.0
X2042	Ground	rear RH side of engine compartment		
X2081	(9 pins, black)	rear LH side of engine compartment in power distribution box		03-4
X2083	(2 pins, black)	LH side of engine compartment	35-1	
X2085	(9 pins, black)	rear LH side of engine compartment in power distribution box		03-4
X2086	(3 pins, black)	LH side of engine compartment	36-1	06-4
X2091	Glow plug cyl. 1	centre of engine compartment		
X2092	Glow plug cyl. 2	centre of engine compartment		
X2093	Glow plug cyl. 3	centre of engine compartment		
X2094	Glow plug cyl. 4	centre of engine compartment		
X2110	Cable shoe, heater plug relay	rear RH side of engine compartment	27-2	
X2113	(2 pins, black)	on transmission left		
X2138	(2 pins, black)	front of engine		
X2200	(9 pins, black)	rear LH side of engine compartment in power distribution box		03-4
X2226	(3 pins, black)	front LH side of engine compartment	35-1	08-2
X2232	(4 pins, black)	front of engine compartment	35-3	01-2
X6000	(88 pins, natural)	rear RH side of engine compartment in electronics box		05-1
X6002	(20 pins, black)	rear LH side of engine compartment (4-cylinder)	26-3	04-1
X6002	(20 pins, black)	rear RH side of engine compartment (6-cylinder)	32-3	04-1
X6101	(2 pins, black)	centre top of engine		
X6102	(2 pins, black)	centre top of engine		
X6103	(2 pins, black)	centre top of engine		
X6104	(2 pins, black)	centre top of engine		



Component location chart

Comp.	Description	Location	7100.0	8500.0
X6105	(2 pins, black)	centre top of engine		
X6106	(2 pins, black)	centre top of engine		
X6120	(2 pins, black)	LH side of engine compartment	14-2	
X6130	(3 pins, black)	front LH side of engine compartment (4-cylinder)	27-1	08-2
X6130	(3 pins, black)	front LH side of engine compartment (6-cylinder)	34-1	08-2
X6131	(2 pins, black)	rear LH side of engine compartment	28-3	
X6133	(2 pins, violet)	LH side of engine compartment		
X6150	(7 pins, black)	RH side of engine compartment (4-cylinder)	11-3	10-4
X6150	(10 pins, black)	RH side of engine compartment (6-cylinder)	32-3	02-1
X6151	(3 pins, grey)	RH top of engine		10-5
X6152	(3 pins, grey)	RH top of engine		10-5
X6153	(3 pins, grey)	RH top of engine		10-5
X6154	(3 pins, grey)	RH top of engine		10-5
X6155	(3 pins, grey)	RH top of engine		10-5
X6156	(3 pins, grey)	RH top of engine		10-5
X6163	(2 pins, black)	LH side of engine		
X6165	(2 pins, black)	rear of engine left		
X6200	(4 pins, black)	under centre of car	09-3	03-2
X6203	(3 pins, black)	front of engine below intake manifold (4-cylinder)		08-2
X6203	(3 pins, black)	front of engine below intake manifold (6-cylinder)	33-3	08-2
X6204	(3 pins, black)	front of engine below intake manifold (4-cylinder)		08-2
X6204	(3 pins, black)	front of engine below intake manifold (6-cylinder)	33-3	08-2



Component location chart

Comp.	Description	Location	7100.0	8500.0
X6205	(2 pins, black)	LH side of engine (4-cylinder)	28-2	
X6205	(2 pins, black)	LH side of engine (6-cylinder)	33-2	
X6207	(4 pins, black)	LH side of engine compartment, right of LH spring strut dome	28-2	01-2
X6209	(3 pins, black)	front of engine Hall sensor, camshaft		08-2
X6217	(4 pins, grey)	front top of engine	28-3	06-1
X6230	(3 pins, black)	LH side of engine compartment		08-2
X6231	(2 pins, black)	front LH side of engine compartment below intake manifold (4-cylinder)	11-1	
X6231	(2 pins, black)	front LH side of engine compartment below intake manifold (6-cylinder)	34-2	
X6232	(4 pins, black)	front LH side of engine compartment below intake manifold	11-2	01-2
X6232	(2 pins, black)	front LH side of engine compartment below intake manifold (316g)		
X6233	(7 pins, black)	LH side of engine compartment	10-2	10-4
X6240	(4 pins, black)	front top of engine (4-cylinder)		01-2
X6240	(4 pins, black)	front top of engine (6-cylinder)	33-3	01-2
X6241	(4 pins, black)	LH side of engine	10-3	01-2
X6252	(3 pins, black)	LH side of engine compartment (4-cylinder)	27-1	08-2
X6252	(3 pins, black)	LH side of engine compartment (6-cylinder)	32-2	08-2
X6254	(3 pins, black)	underside of oil tray		12-5
X6256	(4 pins, black)	front LH side of engine compartment below intake manifold (4-cylinder)	11-2	01-2
X6256	(4 pins, black)	front LH side of engine compartment below intake manifold (6-cylinder)	34-2	01-2
X6275	(2 pins, black)	on cylinder head	34-3	
X6279	(2 pins, black)	LH side of engine		



Component location chart

Comp.	Description	Location	7100.0	8500.0
X6300	(9 pins, black)	rear LH side of engine compartment		03-4
X6301	(9 pins, black)	rear LH side of engine compartment		03-4
X6303	(9 pins, black)	rear LH side of engine compartment		03-4
X6304	(9 pins, black)	in power distribution box		03-4
X6326	(9 pins, black)	rear RH side of engine compartment in electronics box	00-1	03-4
X6430	Cable shoe B+ terminal point	rear RH side of engine compartment		
X6431	Cable shoe B+ terminal point	rear RH side of engine compartment		
X6432	Cable shoe B+ terminal point	rear RH side of engine compartment		
X6437	Cable shoe B+ terminal point	rear RH side of engine compartment		
X6454	Ground	rear RH side of engine compartment behind RH spring strut dome	30-3	
X6456	Ground	rear RH side of engine compartment behind RH spring strut dome	30-3	
X6509	Cable shoe, alternator B+	front LH side of engine compartment	03-1	
X6510	Cable shoe, starter terminal 50	rear LH side of engine compartment below intake manifold		
X6511	Cable shoe, starter terminal 30h	rear LH side of engine compartment below intake manifold		
X6512	Cable shoe, starter terminal 30	rear LH side of engine compartment below intake manifold		
X6952	(6 pins, —)	on cylinder head		
X6960	Gas quality switch	in engine compartment		
X7000	(88 pins, natural)	rear RH side of engine compartment in electronics box		05-1
X7509	Cable shoe, alternator D+	front LH side of engine compartment		
X8500	(88 pins, natural)	rear RH side of engine compartment in electronics box		05-1
X8503	(10 pins, natural)	centre console on RH side of gear shift lever	20-2	02-3
X8505	(16 pins, black)	on RH side of transmission	30-2	07-2



Component location chart

Comp.	Description	Location	7100.0	8500.0
X8507	(1 pin, black)	under LH side of dash		
X8511	(2 pins, black)	under front of car LH side of transmission	31-1	
X8516	(2 pins, black)	on RH side of transmission	30-2	
X9997	(2 pins, orange)	behind steering wheel	17-1	
X10010	Ground	behind glove compartment	05-2	
X10012	Ground	right of glove compartment	04-2	
X10013	(1 pin, —)	on steering wheel		
X10051	(4 pins, natural)	under LH side of dash	18-2	03-1
X10070	(2 pins, grey)	front LH side of engine compartment	14-3	
X10071	(2 pins, black)	front LH side of engine compartment	14-3	
X10094	(2 pins, black)	front LH side of engine compartment		
X10098	(1 pin, —)	power distribution box rear LH side of engine compartment		
X10099	(1 pin, —)	power distribution box rear LH side of engine compartment		
X10102	(10 pins, black)	near interior rear view mirror	15-3	02-3
X10182	(18 pins, black)	behind glove compartment		01-5
X10216	(2 pins, yellow)	driver's seat right		
X10217	(2 pins, yellow)	driver's seat left		
X10218	(3 pins, natural)	under RH front seat	21-2	01-1
X10234	(4 pins, —)	centre of dash		
X10239	(3 pins, black)	LH side of engine compartment		08-2
X10245	(12 pins, black)	behind centre of dash		01-3
X10246	(2 pins, black)	in RH side of luggage compartment	23-3	



Component location chart

Comp.	Description	Location	7100.0	8500.0
X10247	(2 pins, white)	in RH side of luggage compartment		
X10248	(2 pins, black)	in LH side of luggage compartment	29-1	
X10249	(2 pins, white)	in LH side of luggage compartment		
X10250	(2 pins, black)	under LH side of dash	20-3	
X10261	(4 pins, black)	front RH side of engine compartment near front RH headlight	28-1	10-1
X10263	(6 pins, black)	LH side of dash		09-4
X10271	(3 pins, black)	in head lining		01-1
X10273	(2 pins, black)	behind LH side of dash	19-1	
X10353	(25 pins, grey)	rear LH side of engine compartment behind LH spring strut dome		09-2
X10484	(3 pins, blue)	front RH side of engine compartment		04-2
X10507	(1 pin, black)	LH side of LH footwell		
X11250	(6 pins, black)	rear of centre console	02-3	11-2
X11270	(2 pins, black)	in rear LH side of glove compartment	23-2	
X11272	(9 pins, black)	behind LH side of dash		03-4
X11289	(3 pins, violet)	under LH front seat		01-1
X11290	(3 pins, violet)	under RH front seat		01-1
X11379	(3 pins, natural)	front RH side of engine compartment near front RH headlight	28-1	04-2
X11393	(9 pins, black)	power distribution box rear LH side of engine compartment		03-4
X11394	(25 pins, black)	rear LH side of engine compartment behind LH spring strut dome		09-2
X13006	Ground	in LH side of luggage compartment	05-1	
X13009	Ground	in LH side of luggage compartment	05-1	
X13016	Ground	under LH side of dash	04-3	



Component location chart

Comp.	Description	Location	7100.0	8500.0
X13057	(2 pins, black)	in rear lid	36-3	
X13172	(2 pins, black)	under luggage compartment floor lining		
X13176	(6 pins, natural)	in head lining		04-5
X13242	(3 pins, black)	RH B-pillar		07-3
X13243	(3 pins, black)	LH B-pillar		07-3
X13252	(15 pins, black)	behind glove compartment	01-1	00-3
X13253	(26 pins, violet)	behind glove compartment	01-1	00-2
X13254	(26 pins, green)	behind glove compartment	01-1	00-2
X13268	(3 pins, black)	in rear lid	36-3	01-1
X13271	(1 pin, natural)	LH A-pillar		
X13272	(1 pin, natural)	RH A-pillar		
X13274	(10 pins, —)	centre of dash		02-3
X13286	(1 pin, black)	centre of dash rear of centre console		
X13287	(1 pin, white)	centre of dash rear of centre console		
X13319	(9 pins, black)	under LH side of dash		03-4
X17159	(12 pins, —)	rear parcel shelf		10-3
X17179	(12 pins, —)	in LH side of luggage compartment behind trim		10-3
X18013	(26 pins, yellow)	in RH side of luggage compartment behind trim	00-2	00-2
X18020	(2 pins, black)	in LH side of rear bumper Rear left converter	08-1	
X18021	(2 pins, black)	in LH side of rear bumper Rear centre left converter	08-1	
X18022	(2 pins, black)	in RH side of rear bumper Rear centre right converter	08-2	
X18023	(2 pins, black)	in RH side of rear bumper Rear right converter	08-2	



Component location chart

Comp.	Description	Location	7100.0	8500.0
X18050	(2 pins, black)	RH front door behind trim		
X18084	(2 pins, black)	LH front door behind door trim panel	31-3	
X18126	(17 pins, black)	centre console behind radio		02-2
X18135	(4 pins, black)	under LH front seat		
X18180	(3 pins, natural)	in rear RH side of luggage compartment		04-3
X18196	(10 pins, black)	ahead of LH front door in bottom of LH A-post		02-3
X18198	(10 pins, black)	ahead of RH front door in bottom of RH A-post		02-3
X18262x	Plug socket, left reading light	LH B-pillar		
X18262y	Plug socket, right reading light	RH B-pillar		
X18279	(2 pins, grey)	LH front door behind door trim panel	22-3	
X18280	(2 pins, grey)	RH front door behind door trim panel	22-1	
X18333	(2 pins, black)	on instrument cluster	18-2	
X18334	(2 pins, black)	on instrument cluster	18-2	
X18337	(12 pins, black)	on instrument cluster	18-2	09-3
X18338	(12 pins, black)	on instrument cluster	18-2	09-3
X18520	(10 pins, —)	centre console Radio		02-3
X18521	(10 pins, —)	RH side of luggage compartment CD changer		02-3
X18723	Ground	under LH side of dash	04-3	
X18997	(9 pins, black)	under LH side of dash		03-4
X18998	(1 pin, natural)	LH B-pillar		
X18999	(1 pin, natural)	RH B-pillar		
X19000	(1 pin, —)	LH B-pillar		



Component location chart

Comp.	Description	Location	7100.0	8500.0
X19001	(1 pin, —)	RH B-pillar		
X19007	(12 pins, black)	behind glove compartment		01-3
X19527	(16 pins, black)	centre console		05-4
X19549	(12 pins, black)	rear LH side of engine compartment		01-6
X19553	(3 pins, black)	RH side under centre of vehicle		04-2
X19559	(2 pins, black)	near the CNG tank		
X19562	(4 pins, natural)	in front RH bumper		10-1
X60001	(9 pins, black)	rear RH side of engine compartment in electronics box		12-4
X60002	(24 pins, black)	rear RH side of engine compartment in electronics box		12-3
X60003	(52 pins, black)	rear RH side of engine compartment in electronics box		12-1
X60004	(40 pins, black)	rear RH side of engine compartment in electronics box		12-2
X60005	(9 pins, black)	rear RH side of engine compartment in electronics box		12-4
X62001	(4 pins, black)	under centre of car, Oxygen sensor in front of catalytic converter	12-2	01-2
X62002	(4 pins, black)	under centre of car, Oxygen sensor behind catalytic converter		01-2
X62101	(4 pins, black)	centre top of engine	33-3	01-2
X62201	(4 pins, black)	centre top of engine	33-3	01-2
X69901	(24 pins, —)	rear RH side of engine compartment in electronics box		
X69902	(32 pins, —)	rear RH side of engine compartment in electronics box		
X69912	(2 pins, black)	centre of engine compartment		
X69913	(4 pins, —)	in engine compartment		
X69914	(1 pin, —)	in engine compartment		
X69915	(3 pins, black)	centre of engine compartment		



Component location chart

Comp.	Description	Location	7100.0	8500.0
X69921	(9 pins, black)	rear RH side of engine compartment in electronics box		03-4
X69922	(9 pins, black)	rear RH side of engine compartment in electronics box		03-4
X69925	(12 pins, black)	rear LH side of engine compartment		01-6
X69926	(4 pins, black)	under centre of car		03-2
X69927	Cable shoe Dry gas shut-off valve	in engine compartment		
X69990	(1 pin, —)	in engine compartment		
X69991	(1 pin, —)	in engine compartment		
X75090	(3 pins, black)	on alternator		08-2
X90260	(3 pins, —)	right of steering column		
X91009	(2 pins, black)	under passenger's seat		
Y1	ABS hydraulic unit	rear LH side of engine compartment behind LH spring strut dome	12-3	
Y2	Solenoid clutch	front RH side of engine compartment		
Y5	Left outside mirror	in top of LH front door		
Y6	Right outside mirror	in top of RH front door		
Y4z	Water valve	rear LH side of engine compartment	12-3	
Y19	Shift lock selector lever lock	centre console		
Y198	Exhaust-gas flap valve	under luggage compartment floor lining		
Y2008	Needle motion sensor	RH side of engine	35-2	
Y2009	Electric cutout	LH side of engine	36-2	
Y2010	Injection quantity control unit	LH side of engine compartment	35-3	
Y6101	Fuel injector 1	on cylinder head (6-cylinder)	32-1	
Y6101	Fuel injector 1	on cylinder head (4-cylinder)	09-2	

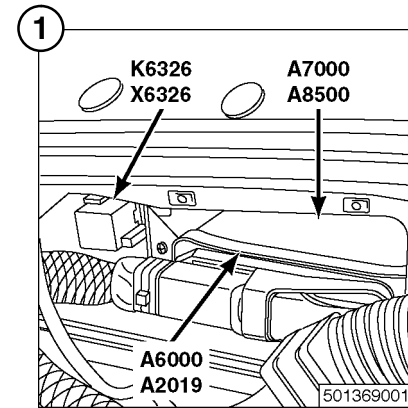
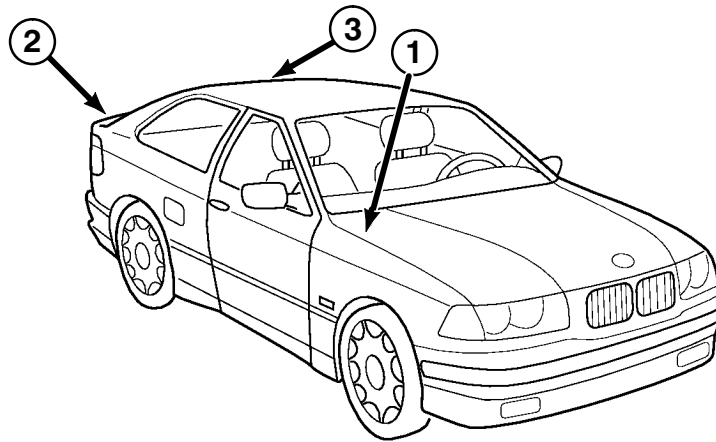


Component location chart

Comp.	Description	Location	7100.0	8500.0
Y6102	Fuel injector 2	on cylinder head (6-cylinder)	32-1	
Y6102	Fuel injector 2	on cylinder head (4-cylinder)	09-2	
Y6103	Fuel injector 3	on cylinder head (6-cylinder)	32-1	
Y6103	Fuel injector 3	on cylinder head (4-cylinder)	09-2	
Y6104	Fuel injector 4	on cylinder head (6-cylinder)	32-1	
Y6104	Fuel injector 4	on cylinder head (4-cylinder)	09-2	
Y6105	Fuel injector 5	on cylinder head (6-cylinder)	32-1	
Y6106	Fuel injector 6	on cylinder head (6-cylinder)	32-1	
Y6120	Charcoal filter valve	LH side of engine compartment	14-2	
Y6130	Idle actuator	front LH side of engine compartment below intake manifold (4-cylinder)	27-1	
Y6130	Idle actuator	front LH side of engine compartment (6-cylinder)	34-1	
Y6131	Changeover valve I	rear of engine compartment left	28-3	
Y6133	Air pump	LH side of engine compartment		
Y6163	Solenoid valve, secondary air pump	LH side of engine		
Y6165	Solenoid valve, sucking jet pump	rear of engine left		
Y6275	VANOS valve 1	on cylinder head	34-3	
Y6279	Solenoid valve, characteristic map cooling	LH side of engine		
Y8505	Gear-shift unit	on RH side of transmission (4-cylinder)		
Y8505y	Gearshift unit	on RH side of transmission (6-cylinder)		
Y69914	Dry gas shut-off valve	in engine compartment		

7100.0 Component location views

Location of control units



A2019
DDE2 control unit

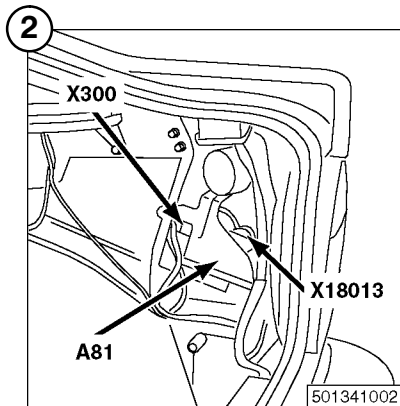
A8500
EGS control unit

A6000
DME control unit

K6326
Unloader relay, terminal 15

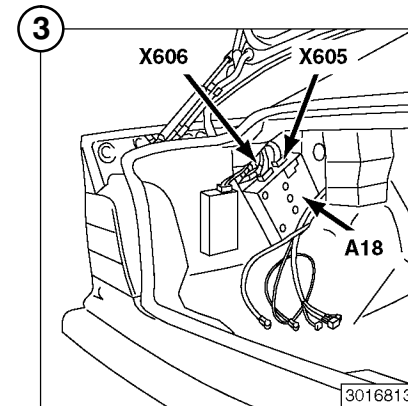
A7000
EGS control unit

X6326



A81
Parking aid control unit

X300
X18013

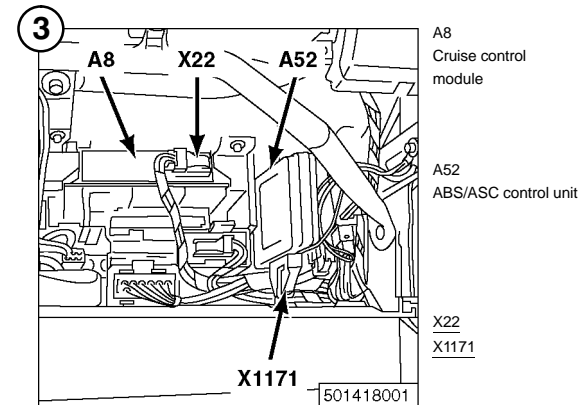
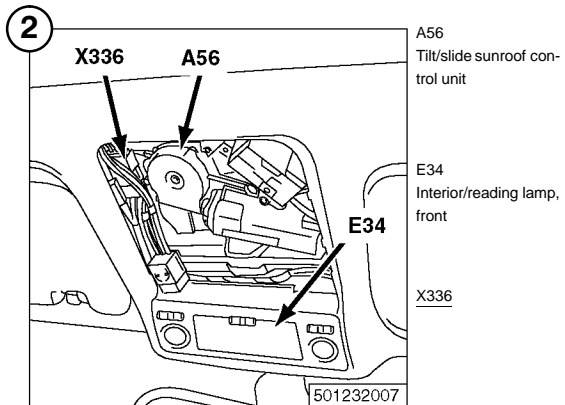
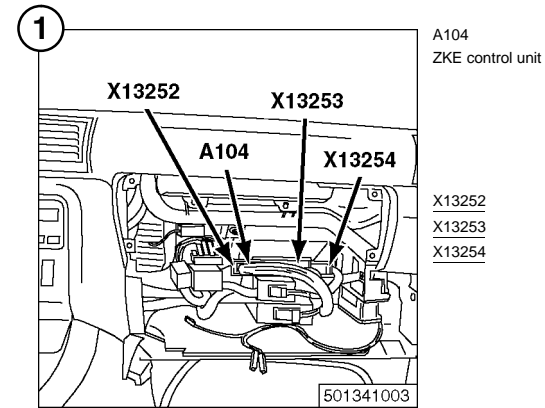
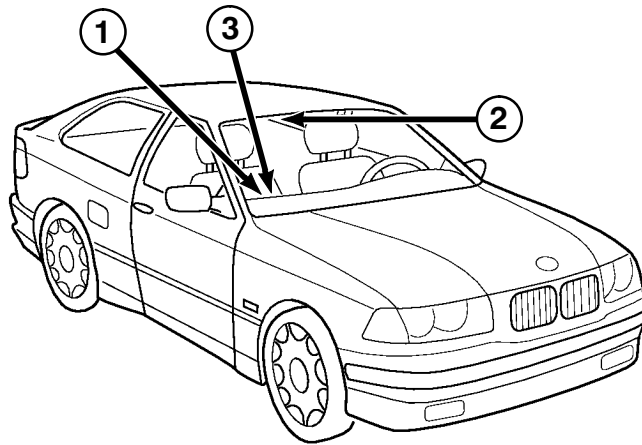


A18
HiFi amplifier

X605
X606

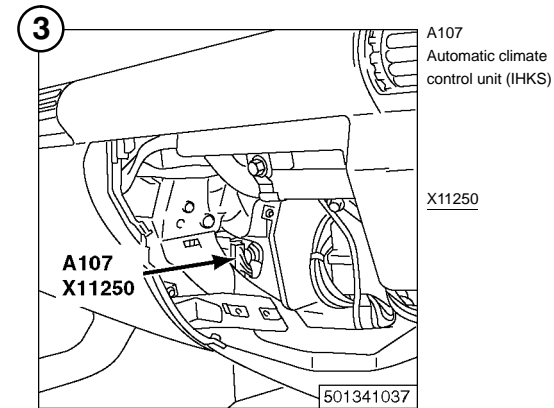
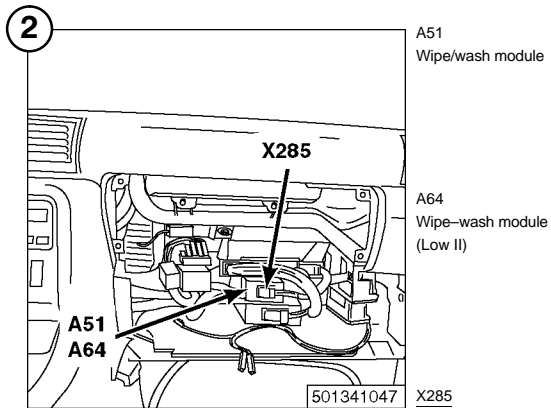
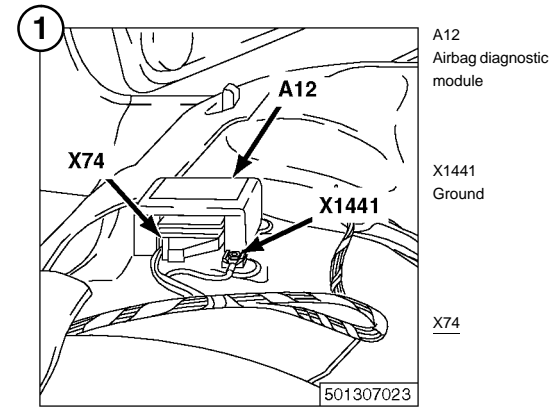
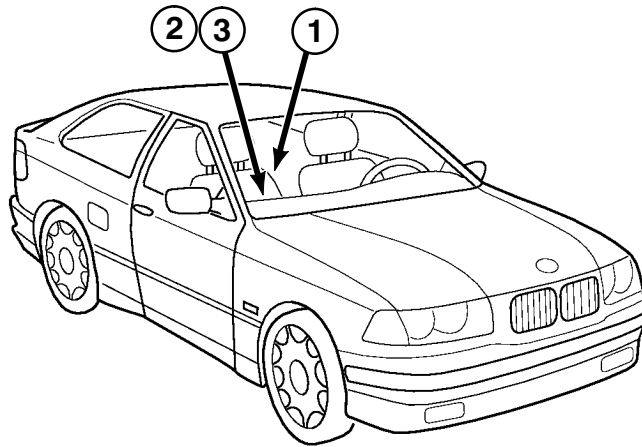
Component location views

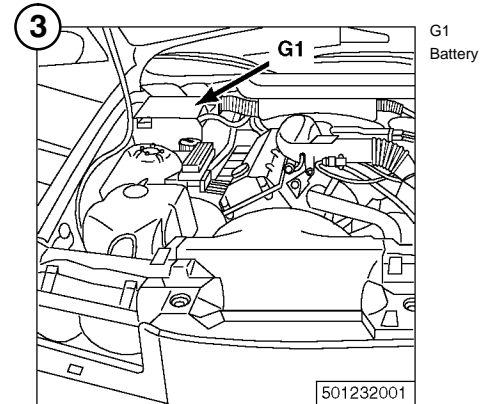
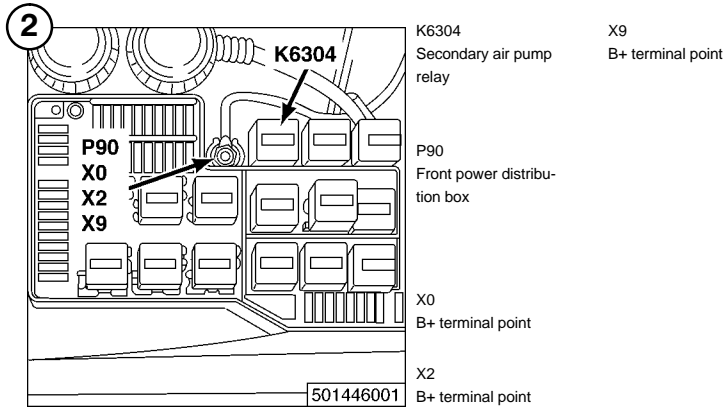
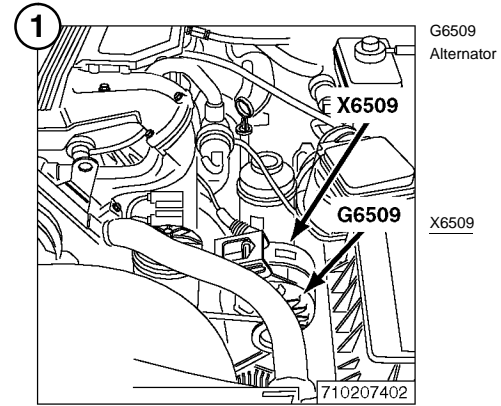
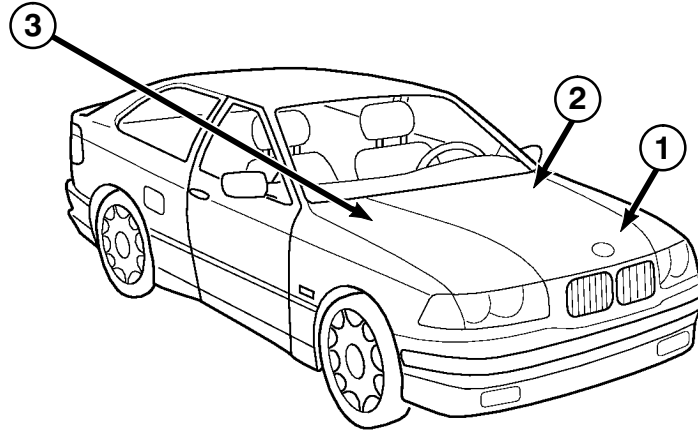
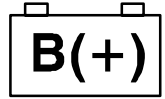
Location of control units

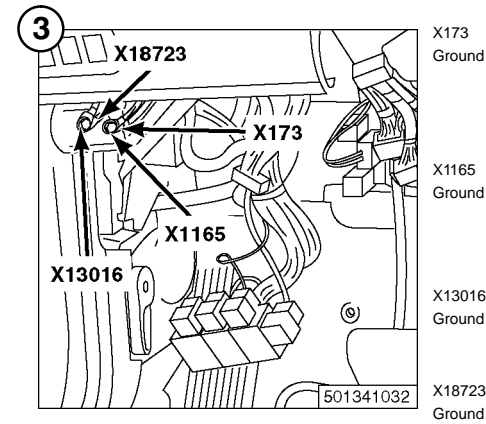
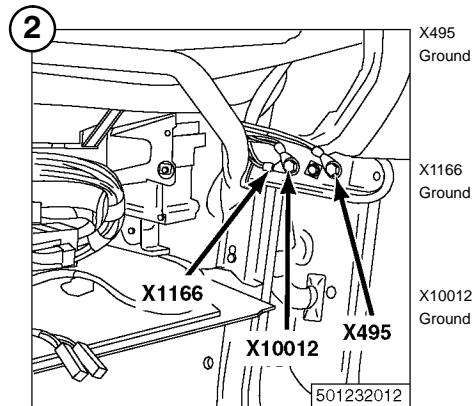
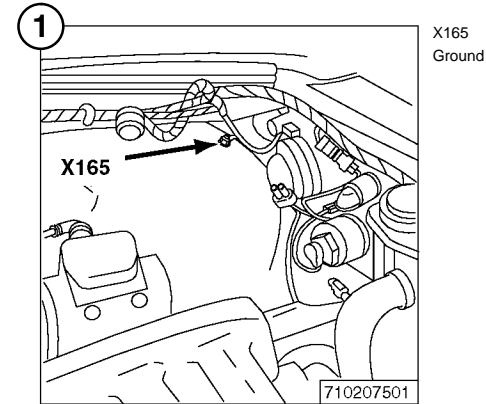
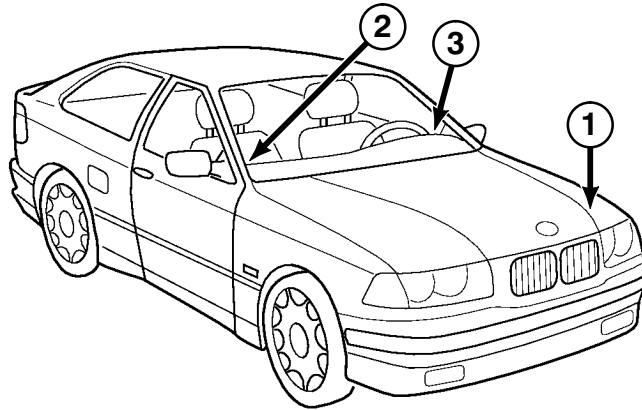
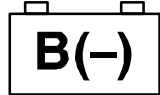


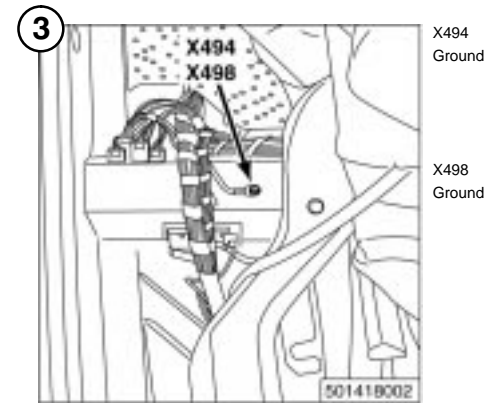
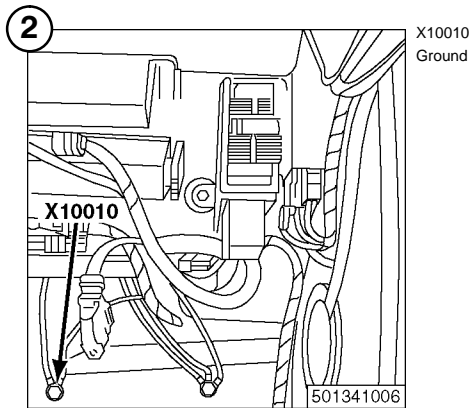
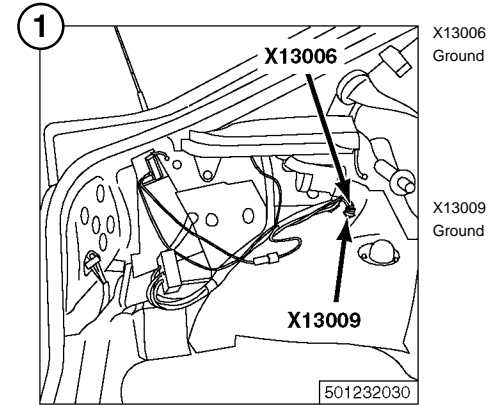
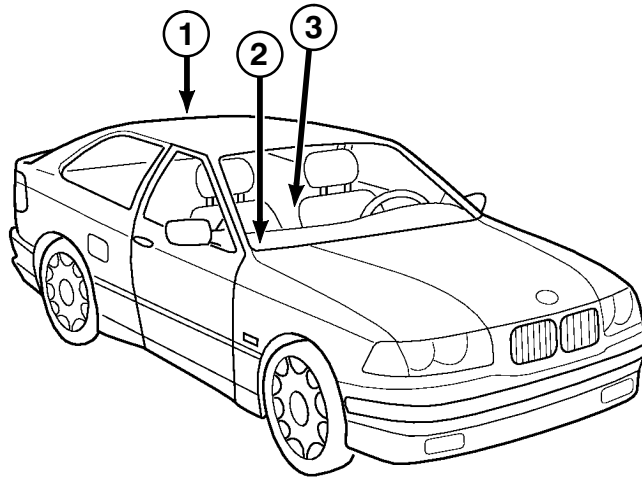
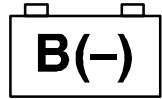
Component location views

Location of control units

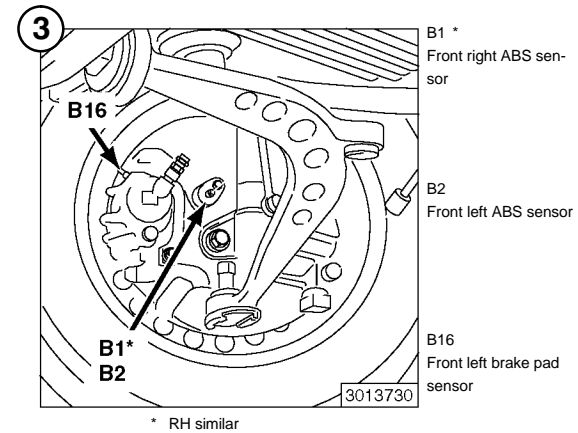
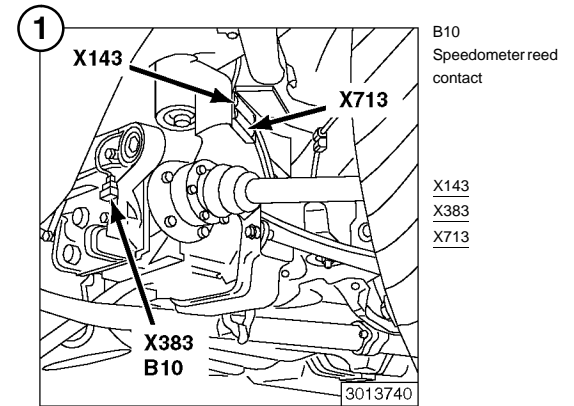
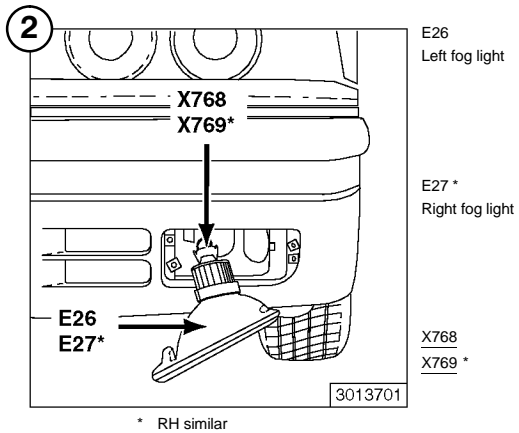
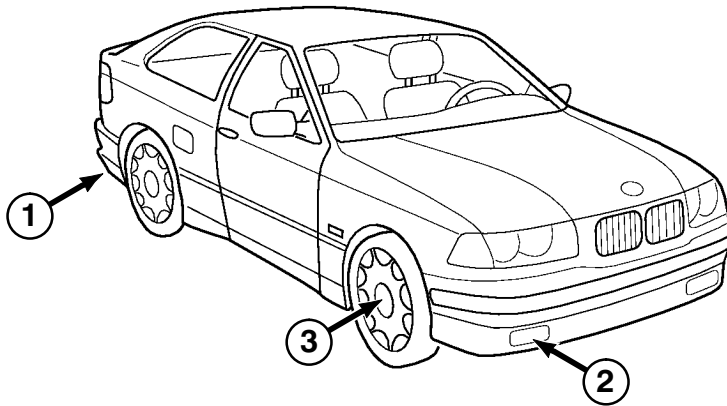




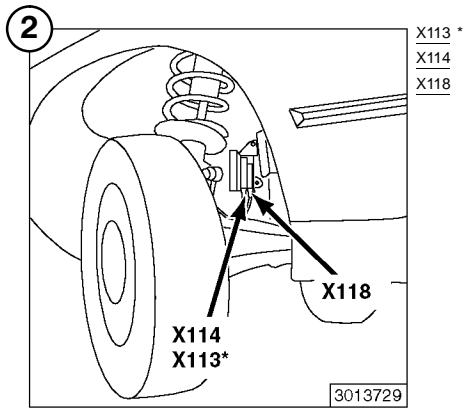
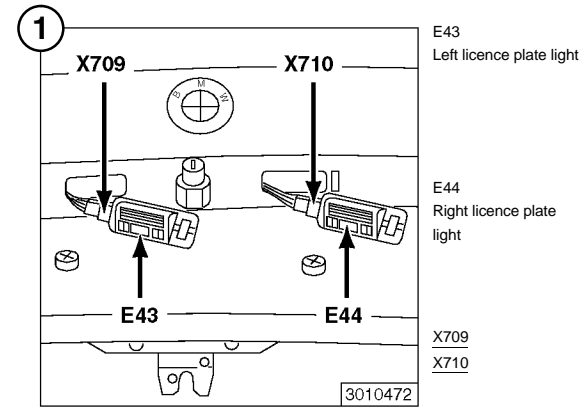
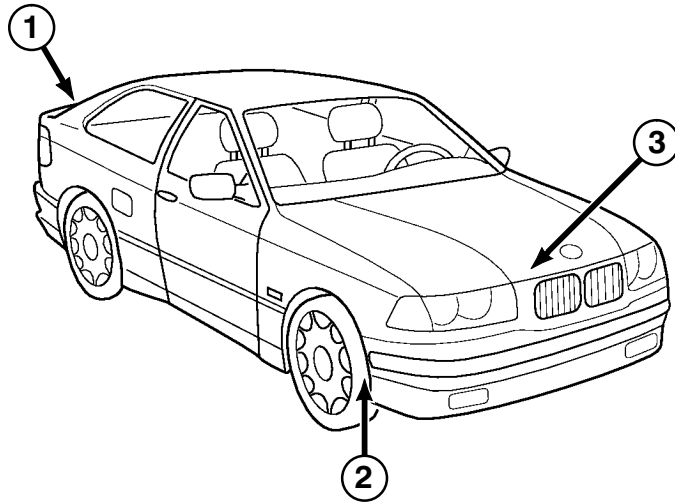




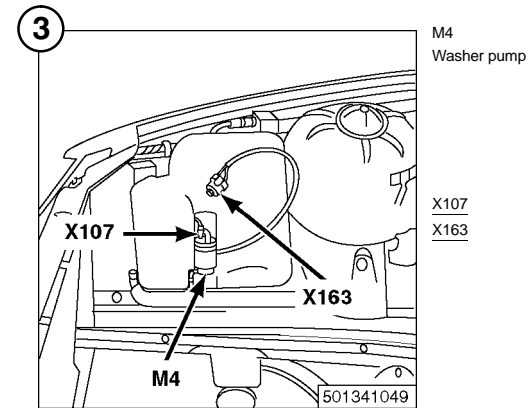
Component location views



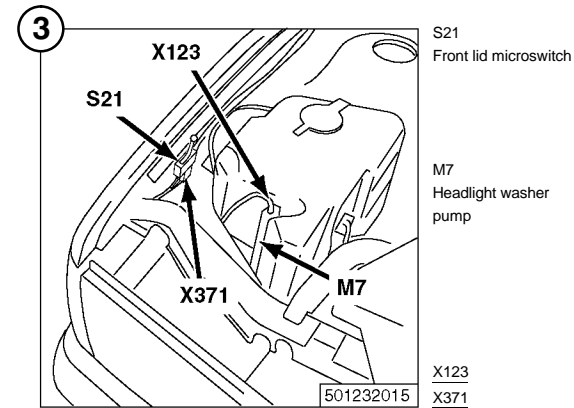
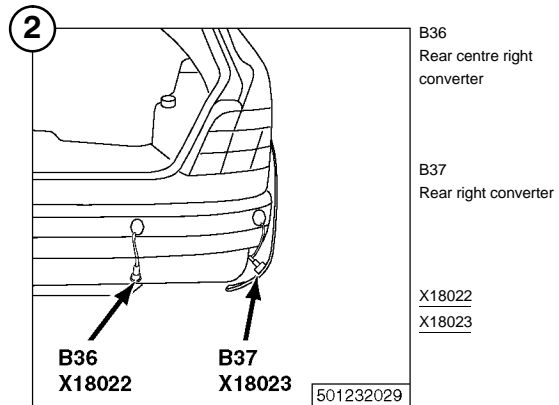
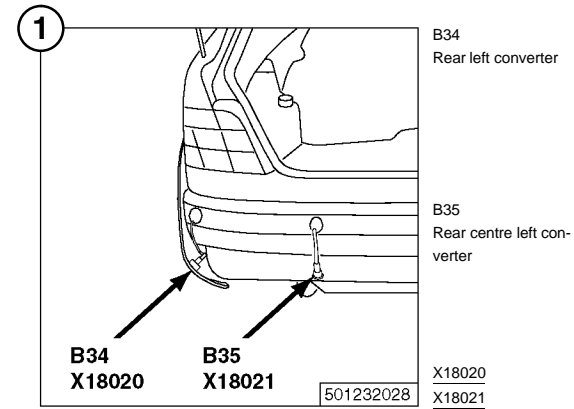
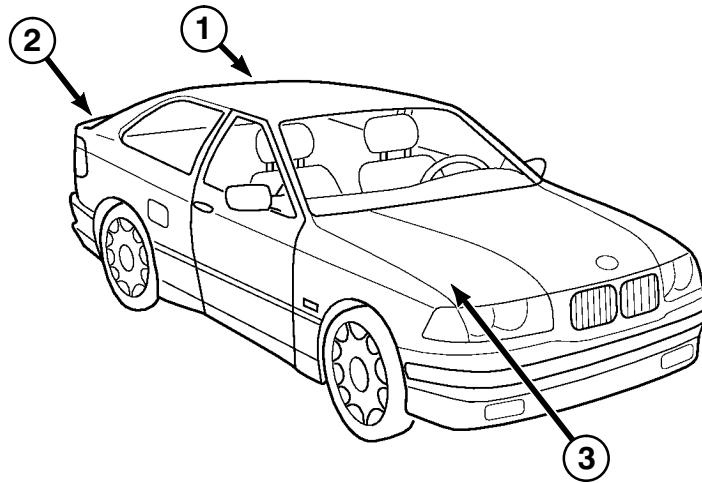
Component location views



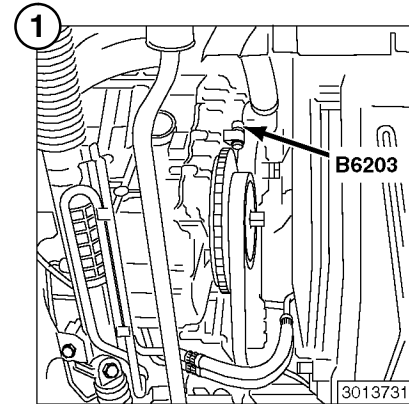
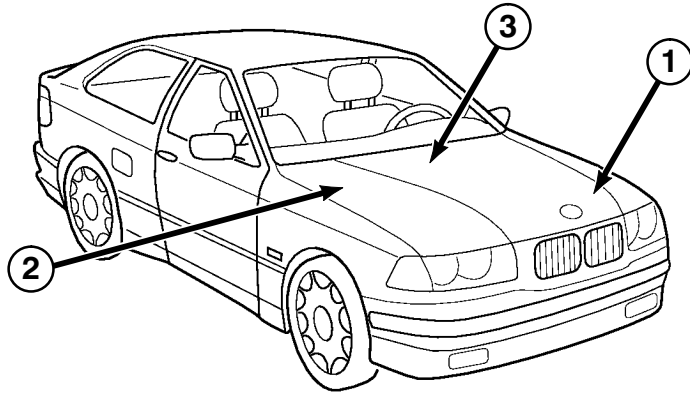
* RH similar



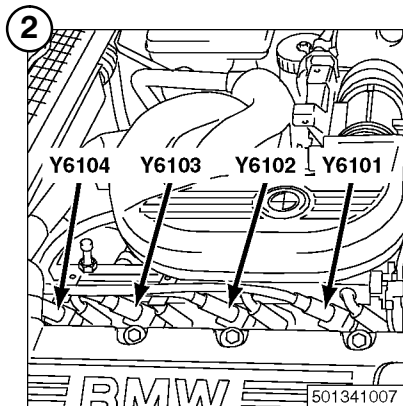
Component location views



Component location views



B6203
Crankshaft sensor

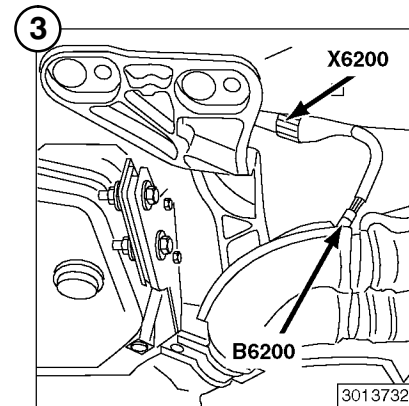


Y6101
Fuel injector 1

Y6104
Fuel injector 4

Y6102
Fuel injector 2

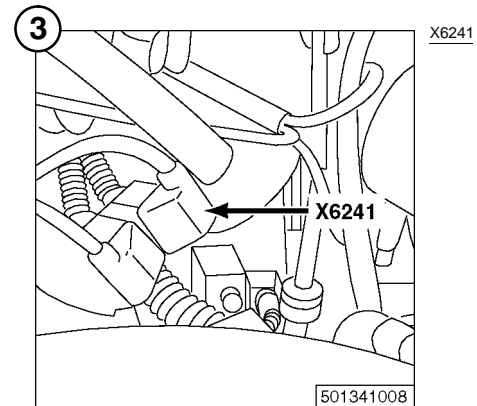
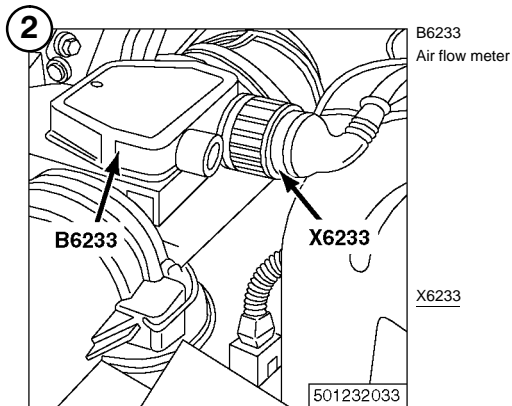
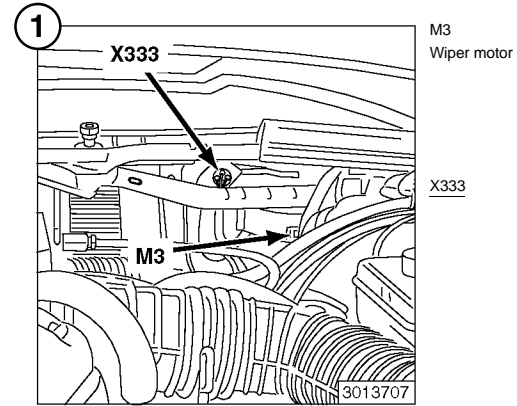
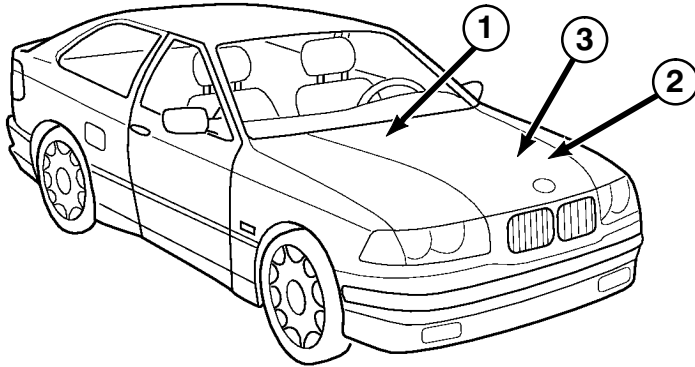
Y6103
Fuel injector 3



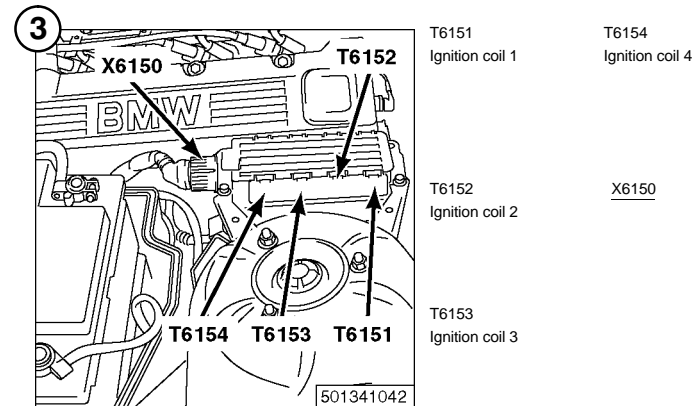
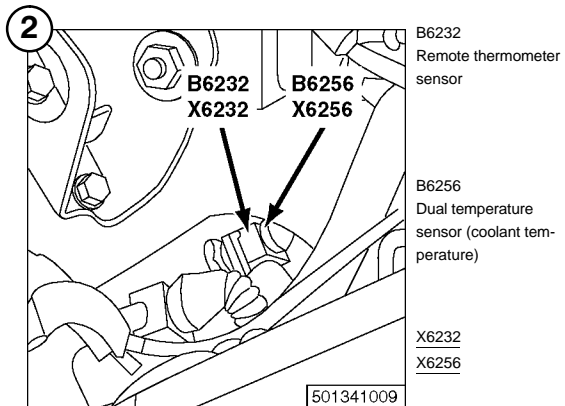
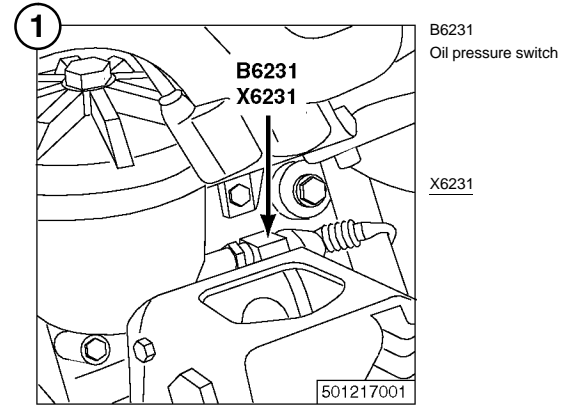
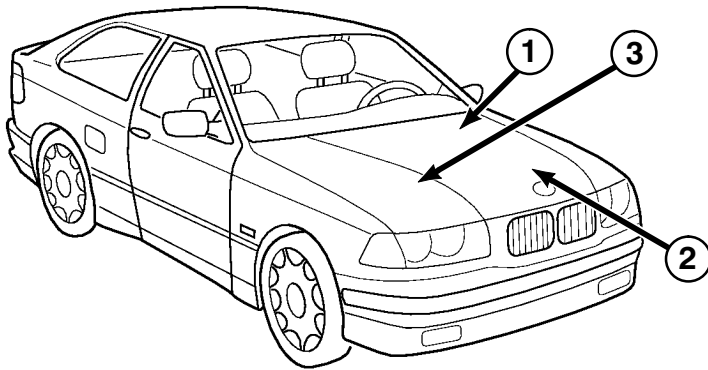
B6200
Heated oxygen sensor

X6200

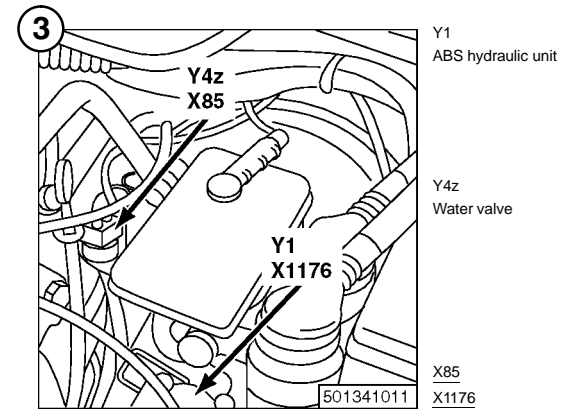
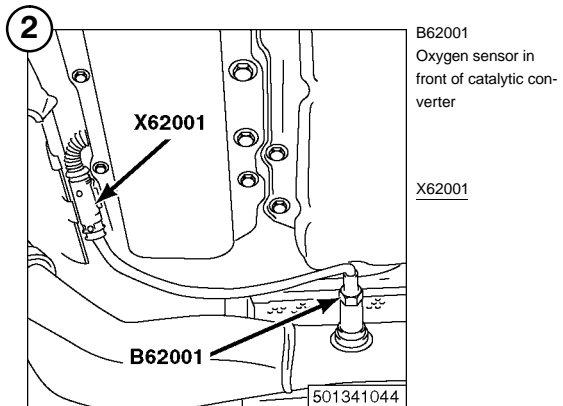
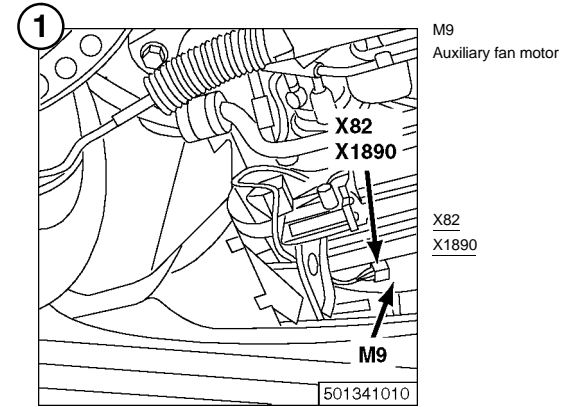
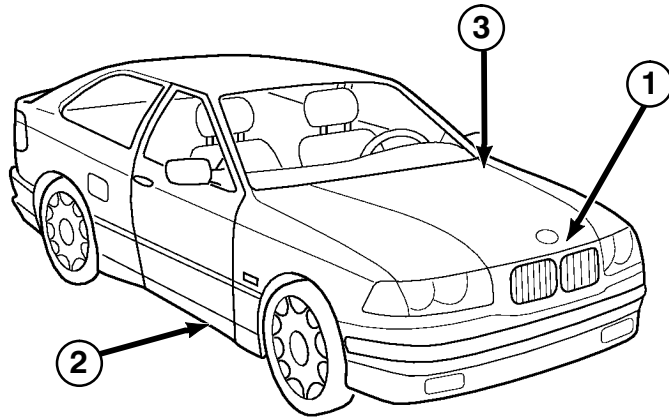
Component location views



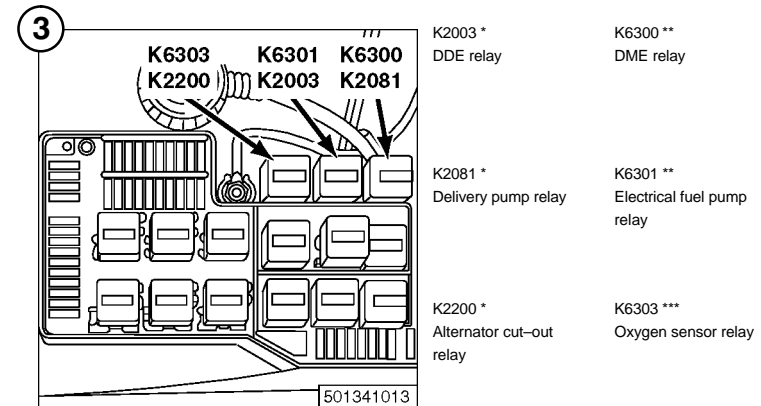
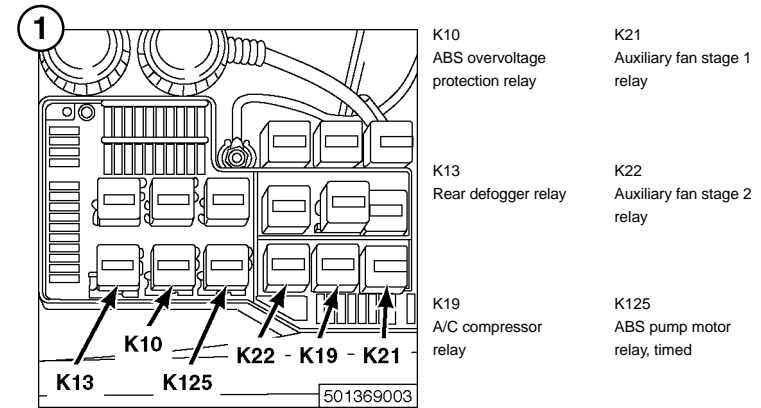
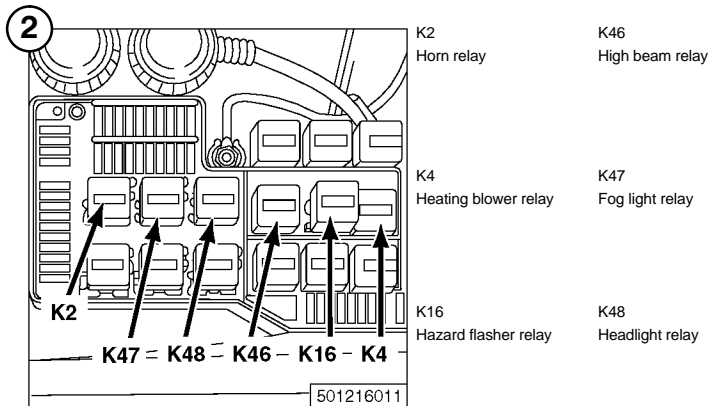
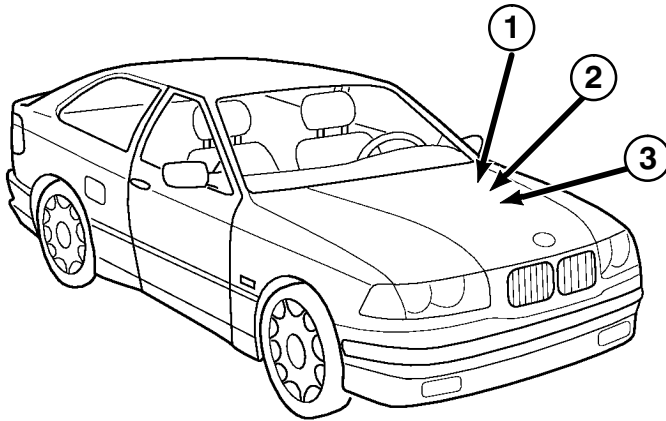
Component location views



Component location views

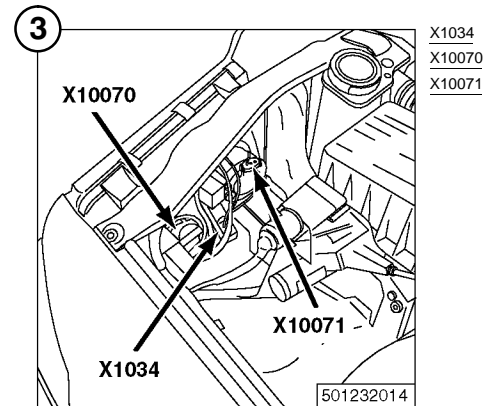
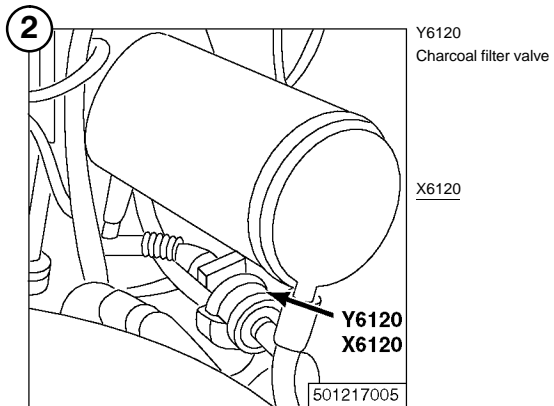
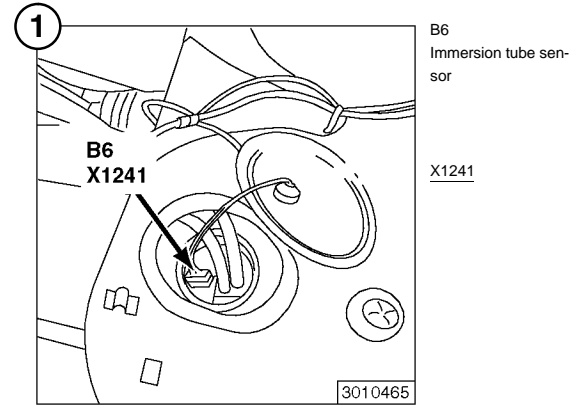
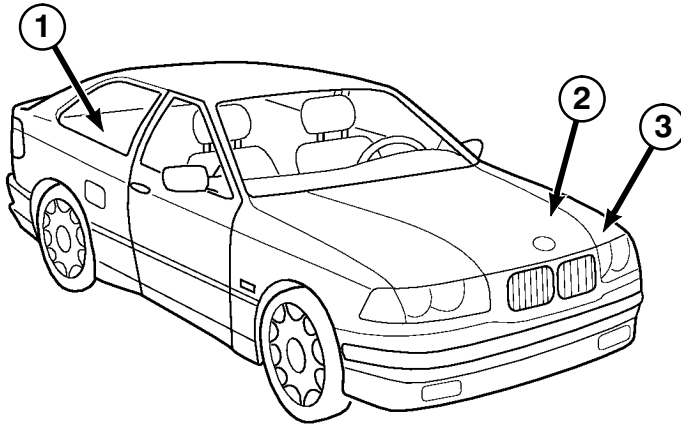


Component location views

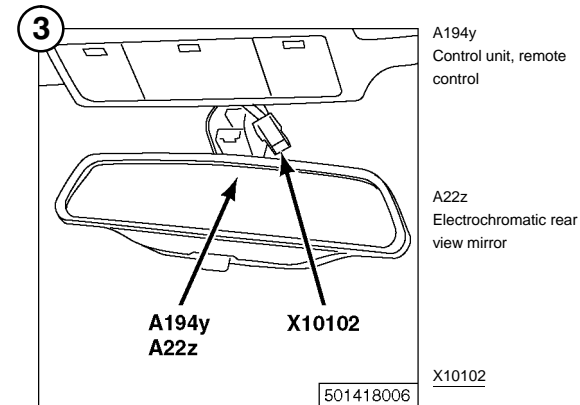
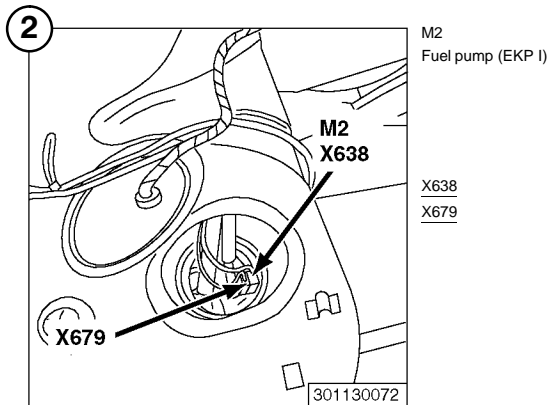
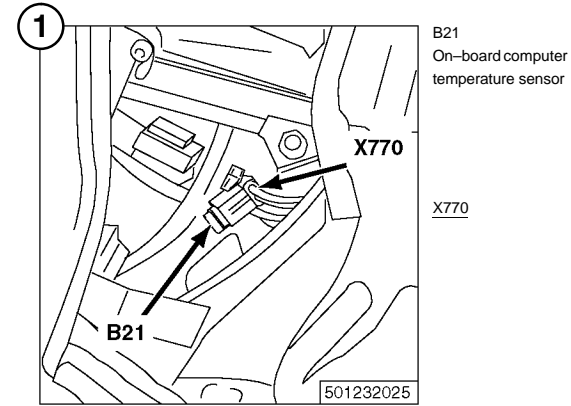
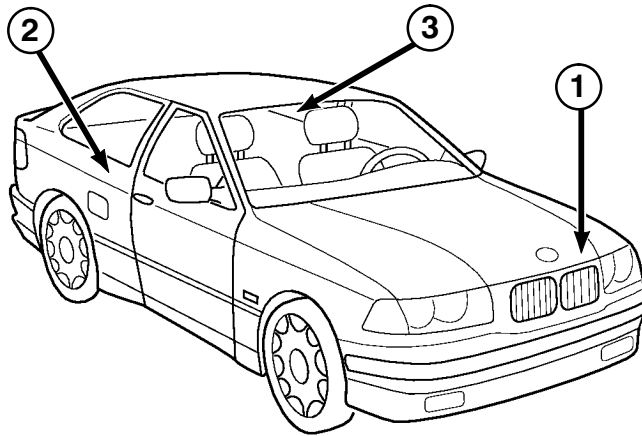


* Diesel
** Petrol model
*** 316g

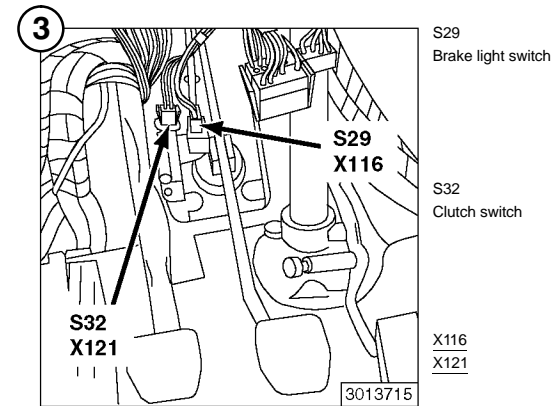
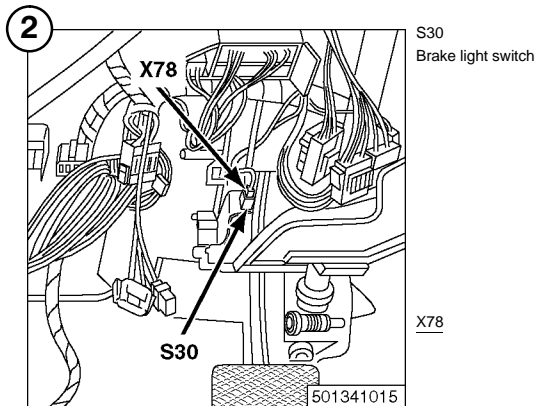
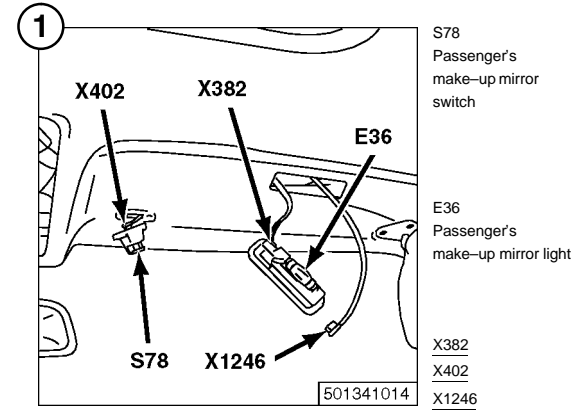
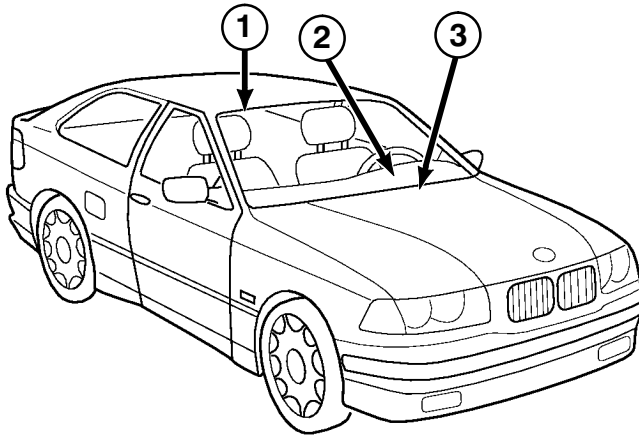
Component location views



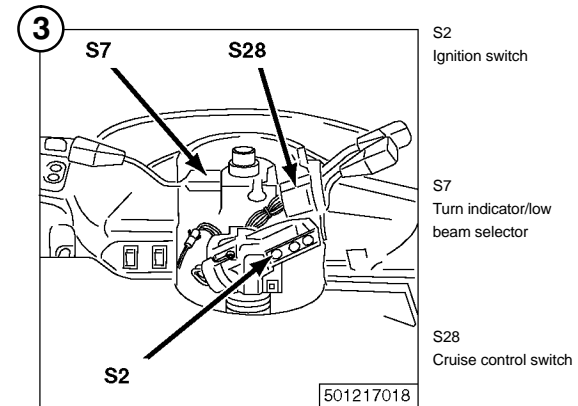
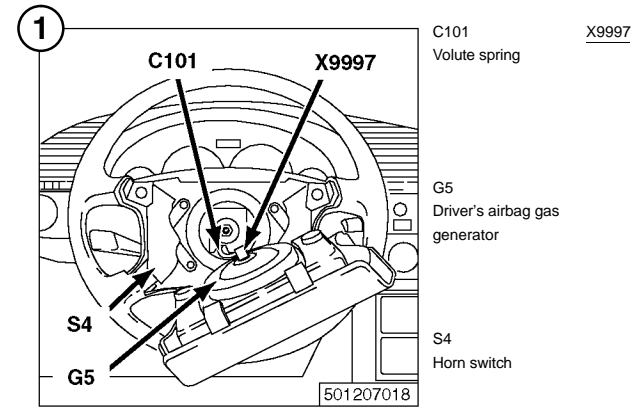
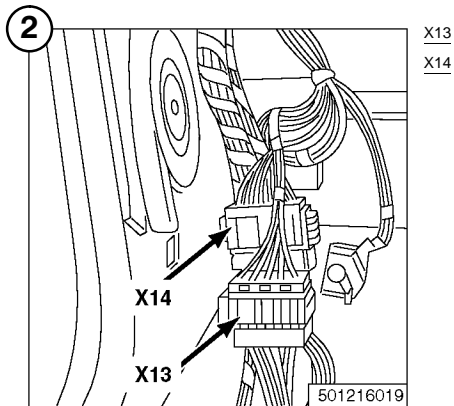
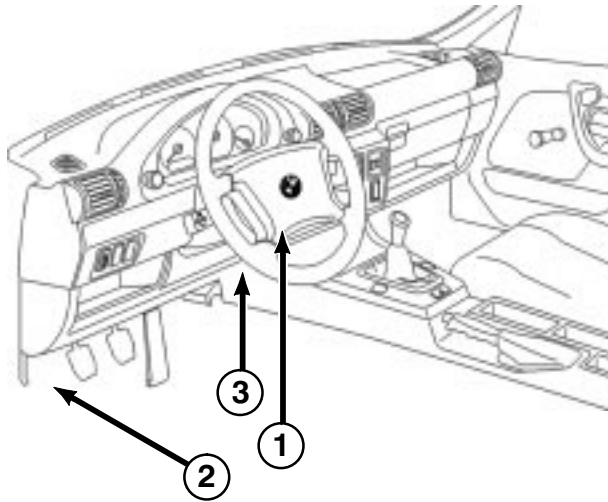
Component location views

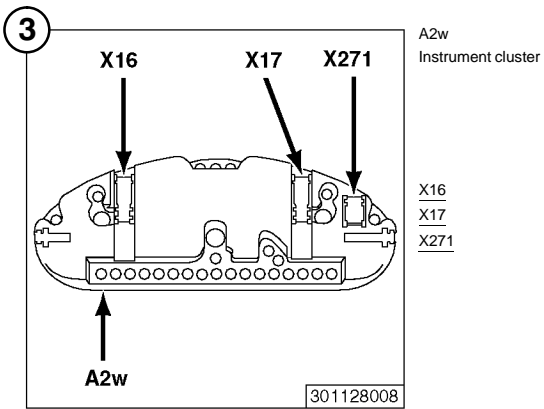
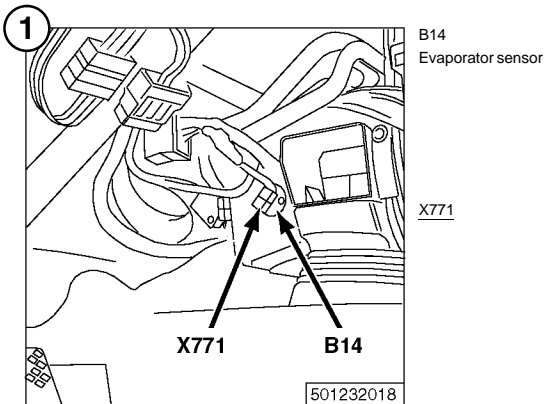
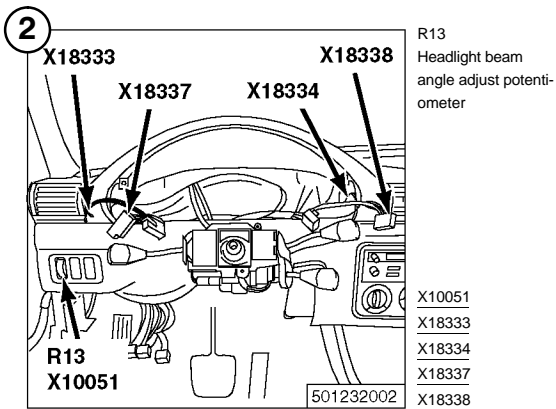
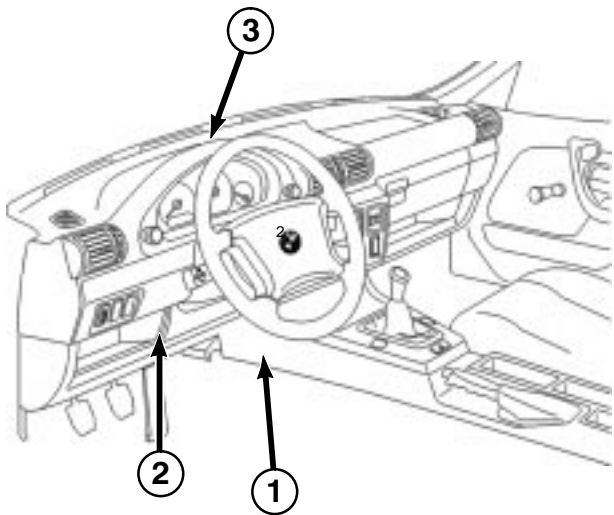


Component location views

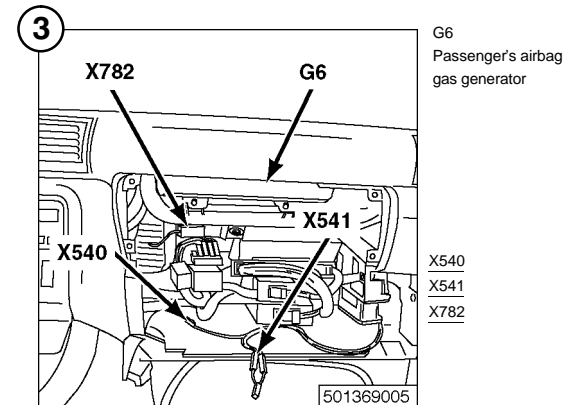
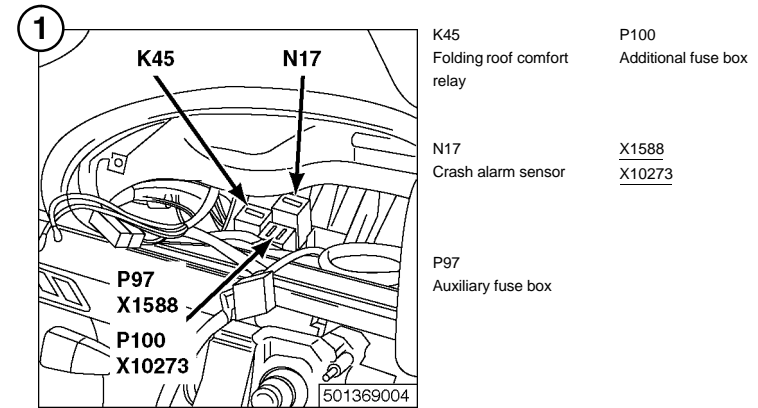
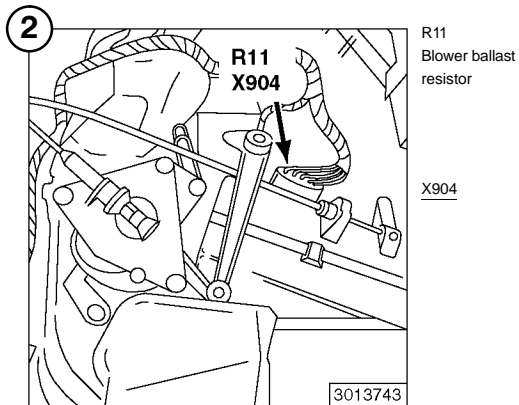
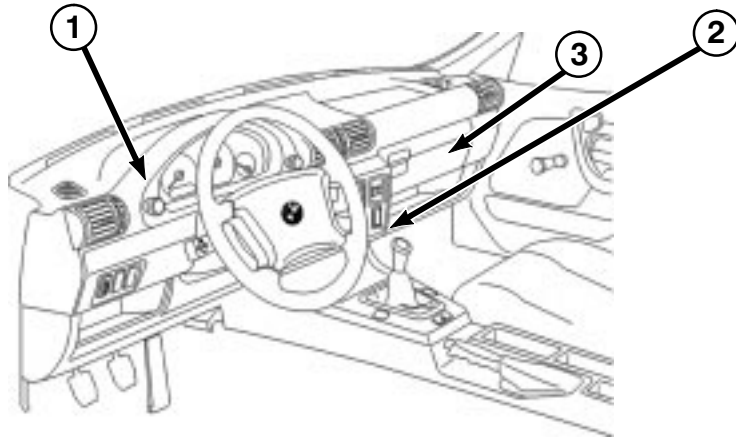


Component location views

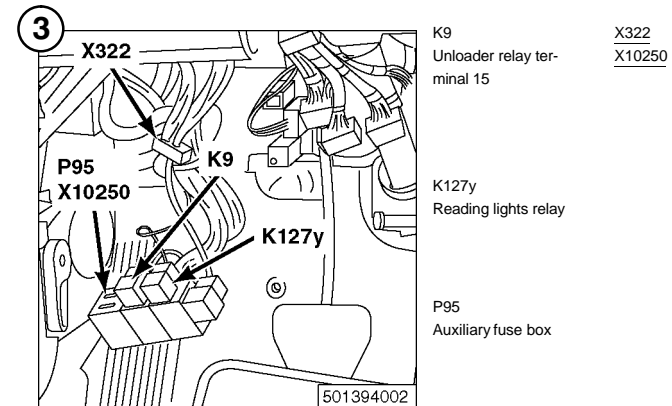
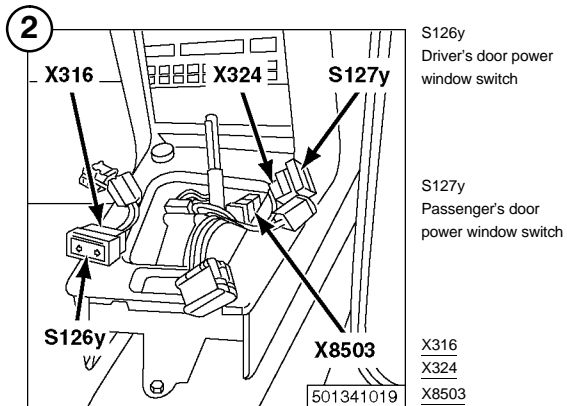
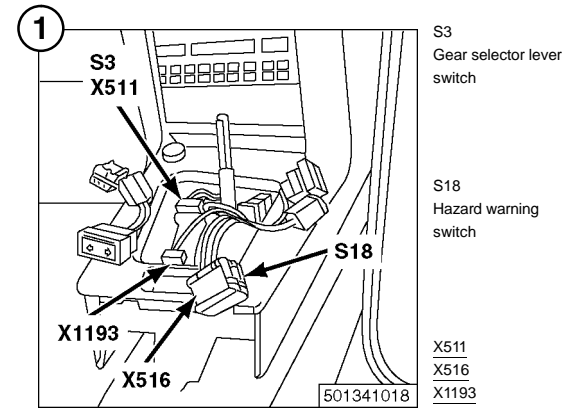
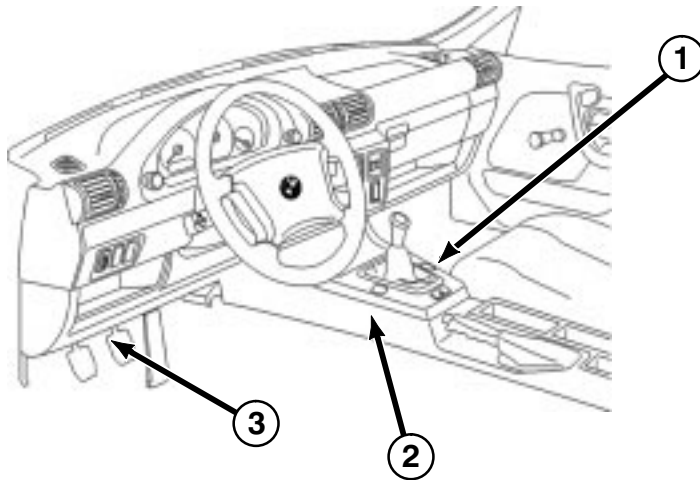




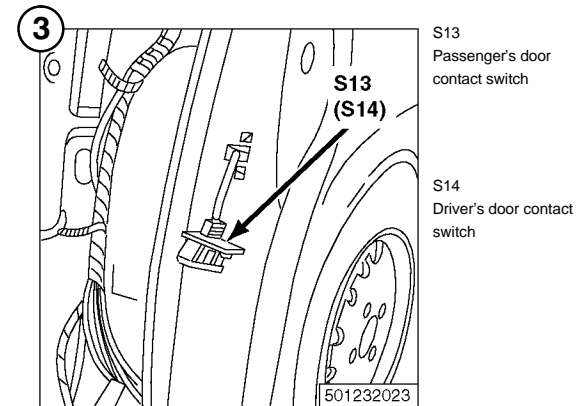
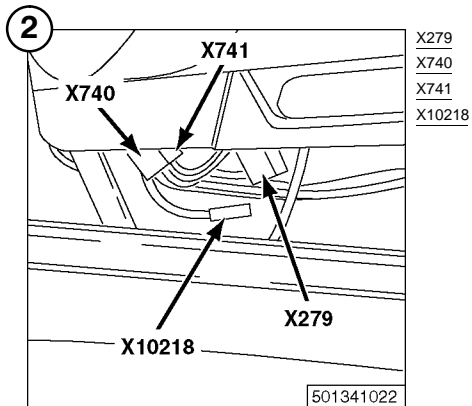
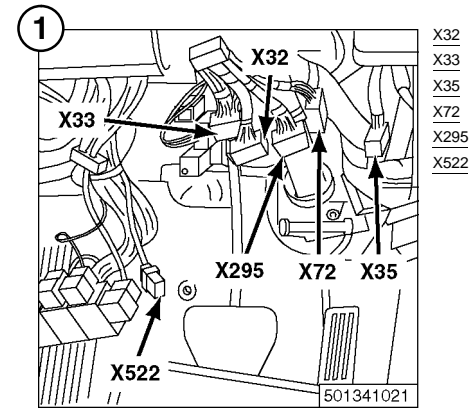
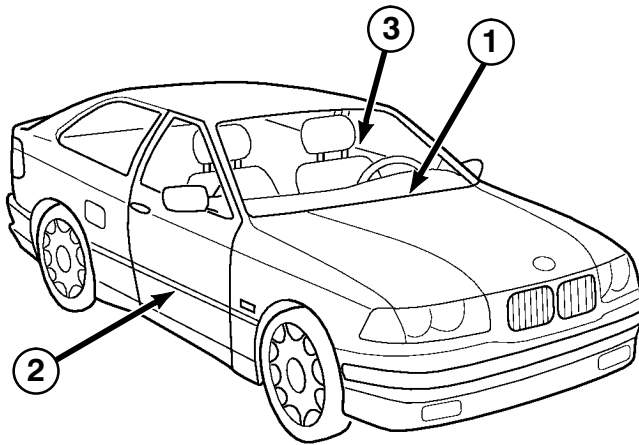
Component location views



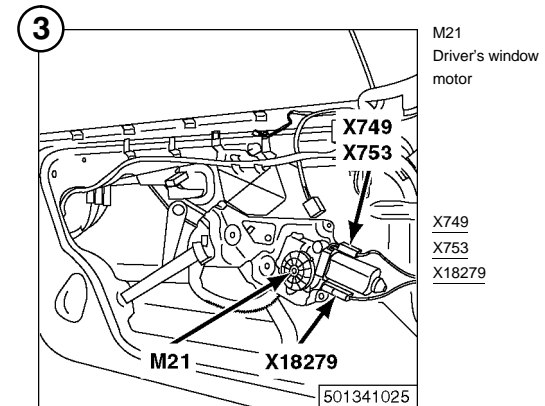
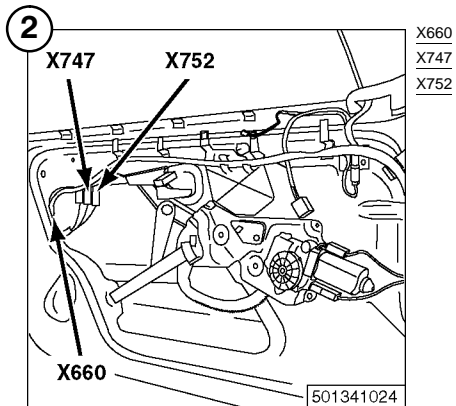
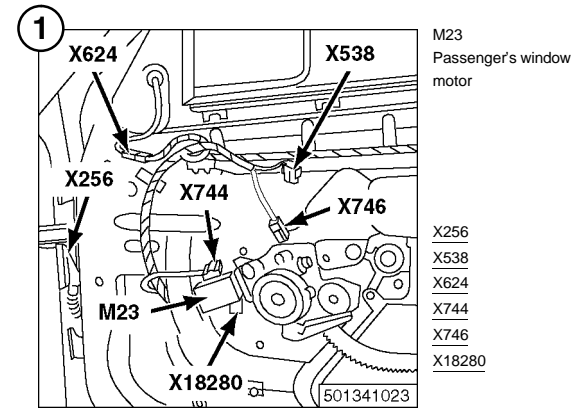
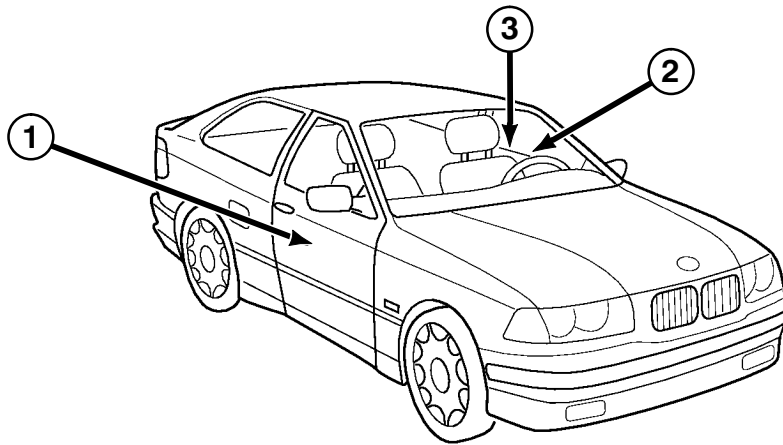
Component location views



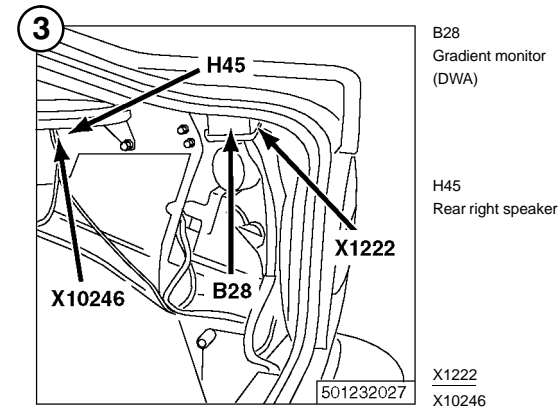
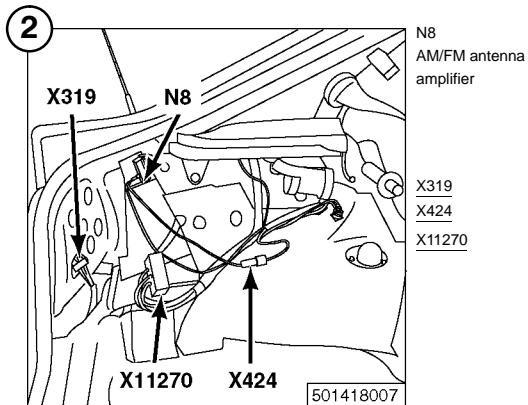
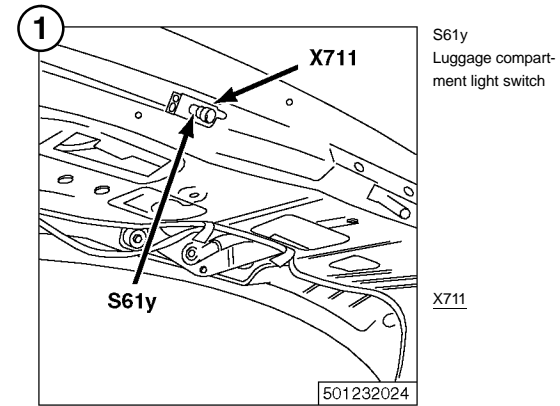
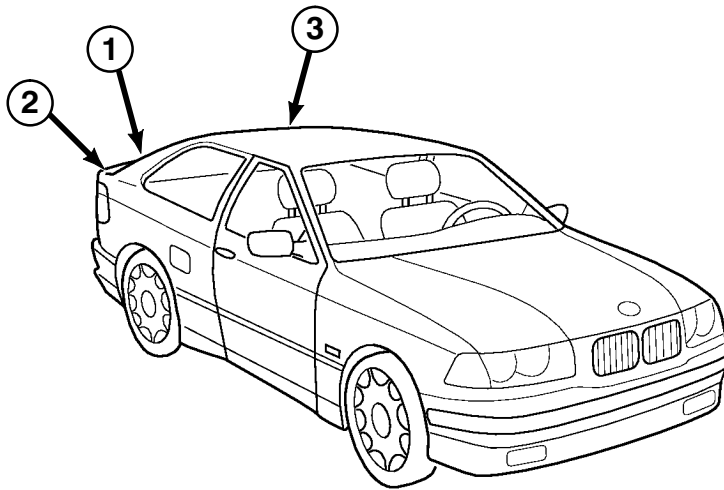
Component location views



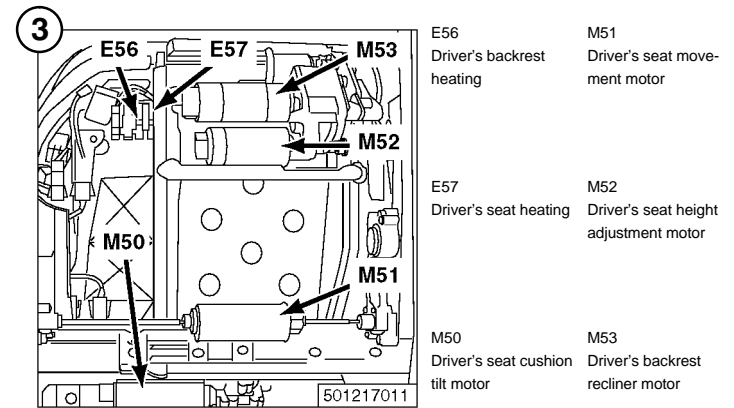
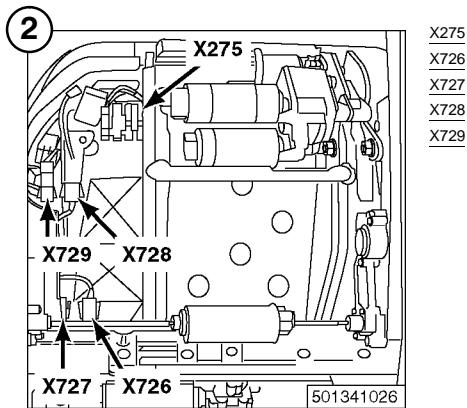
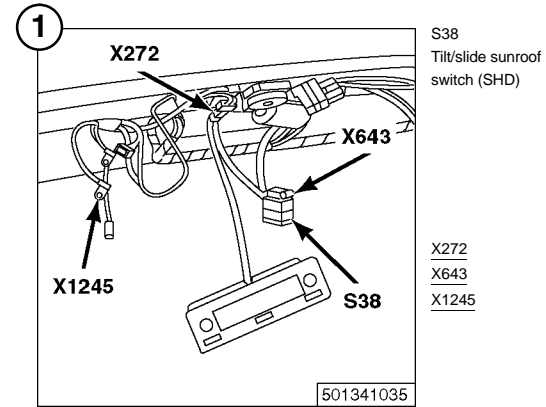
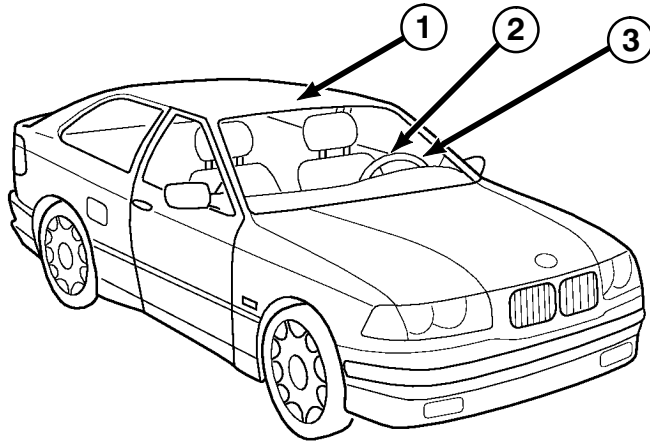
Component location views



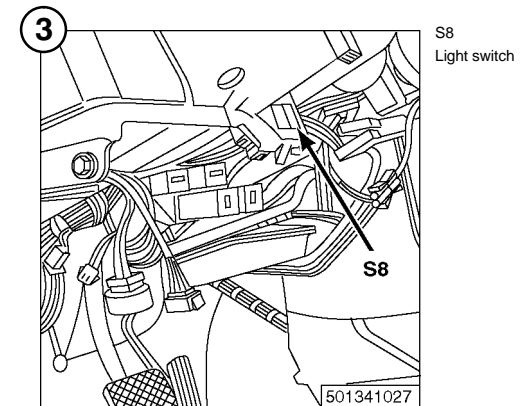
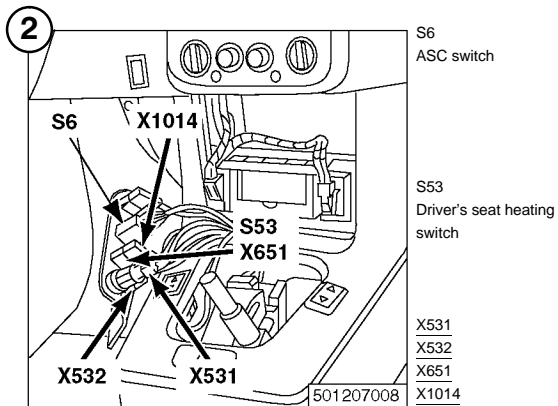
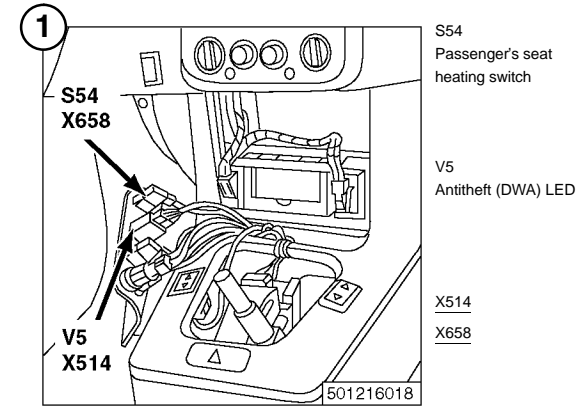
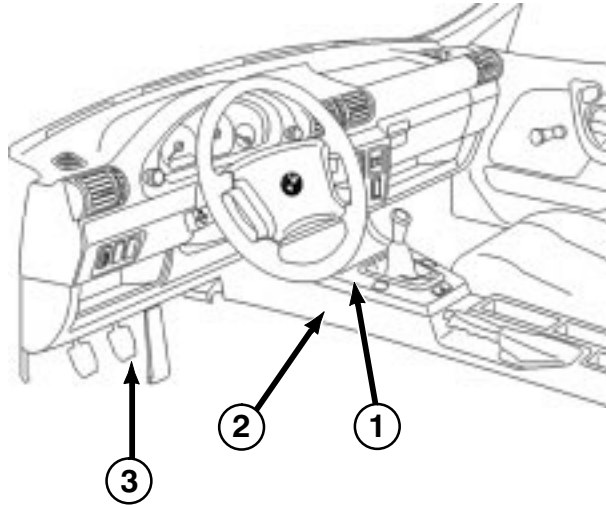
Component location views



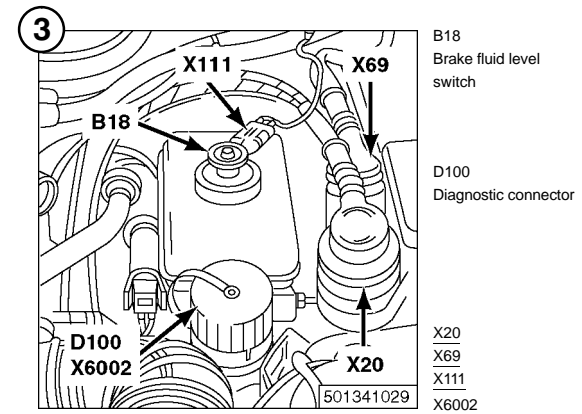
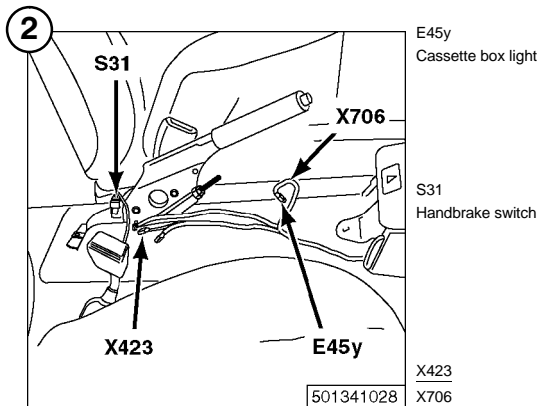
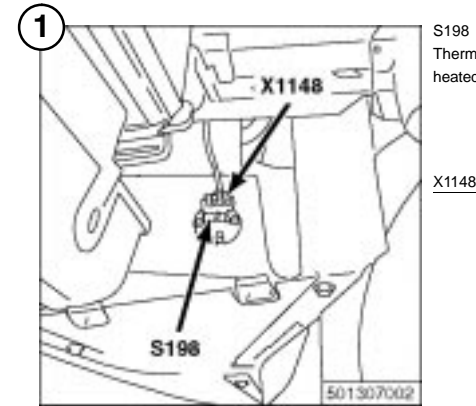
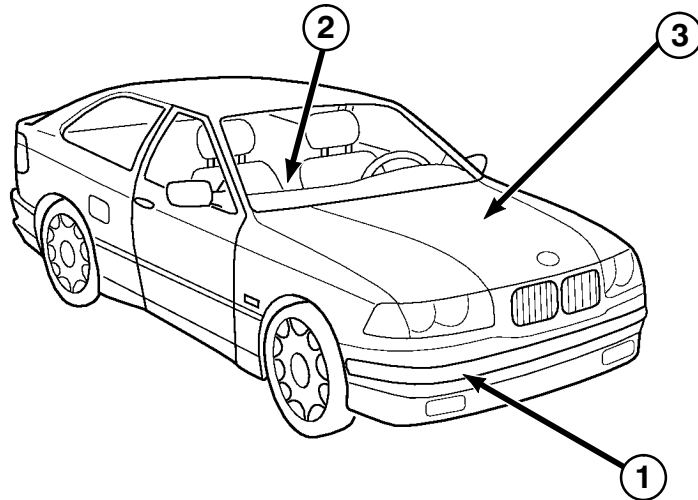
Component location views



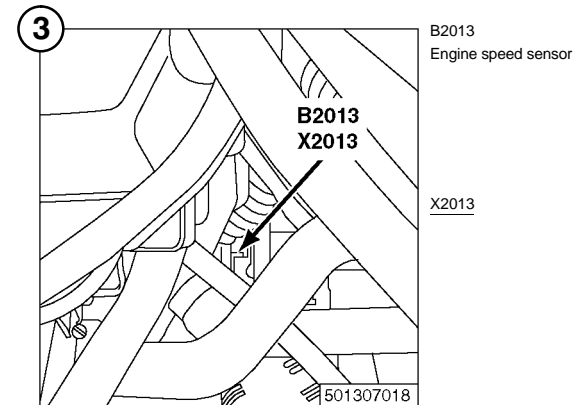
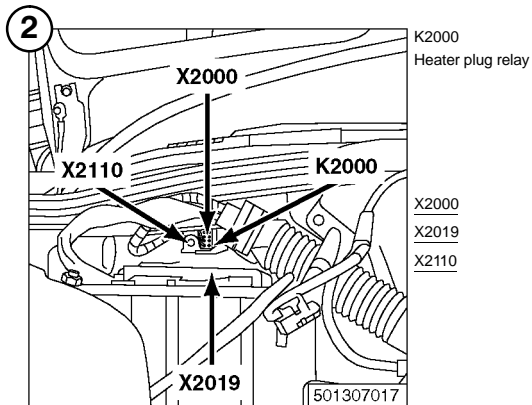
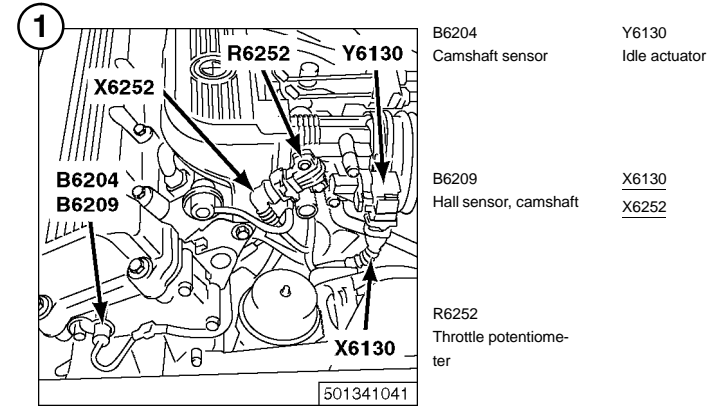
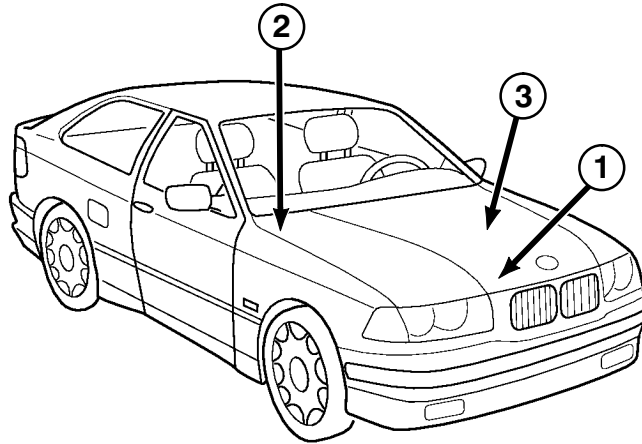
Component location views



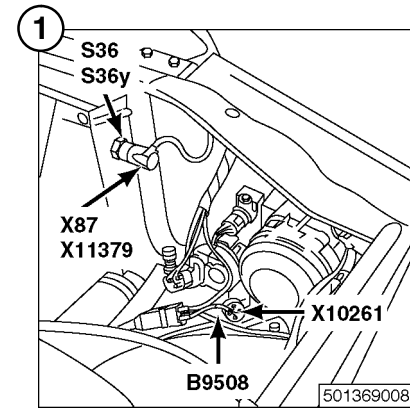
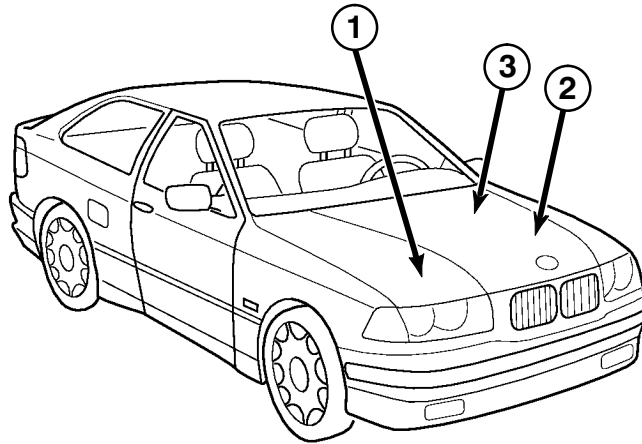
Component location views



Component location views



Component location views

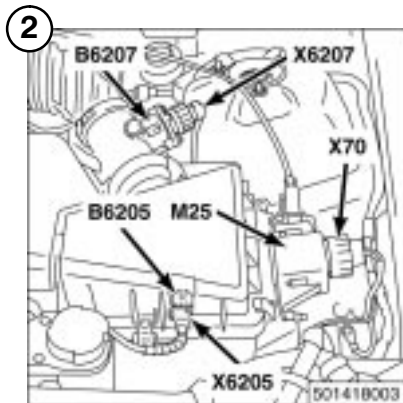


B9508
Pressure switch

X87
X10261
X11379

S36
Dual temperature
switch 91 °C/99 °C

S36y
Dual temperature
switch 80 °C/88 °C

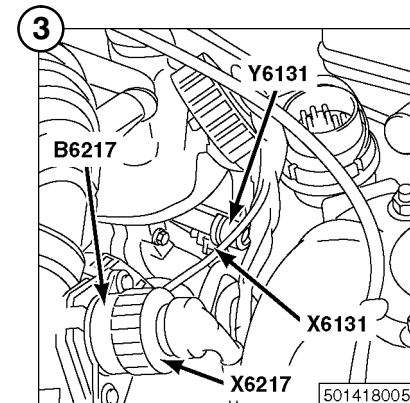


B6205
Intake air tempera-
ture sensor

X70
X6205
X6207

B6207
Hot-film air mass
meter

M25
Cruise control
actuator (Tempomat)

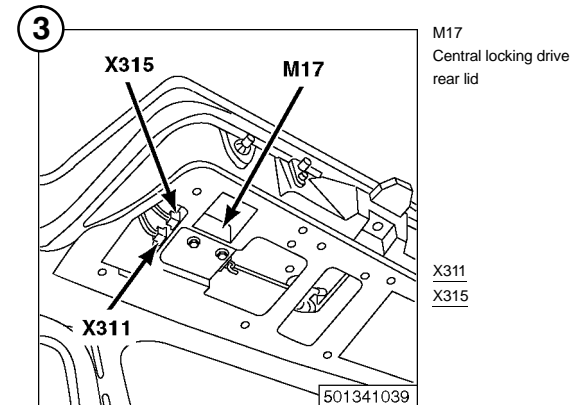
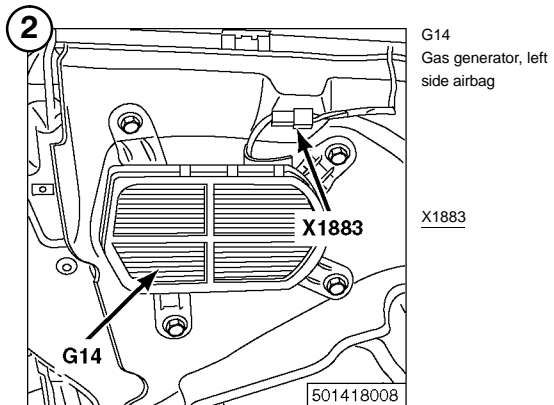
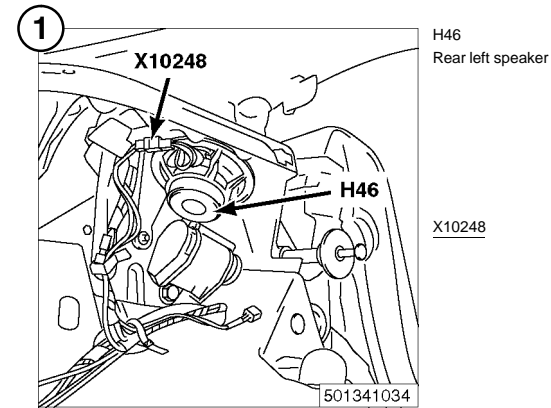
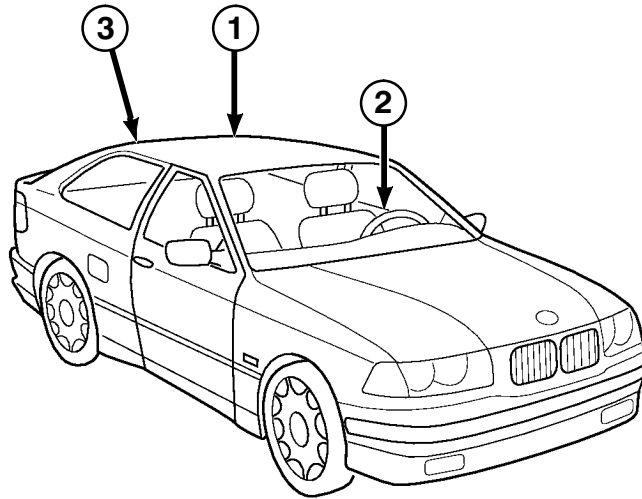


B6217
Hot film air mass
meter

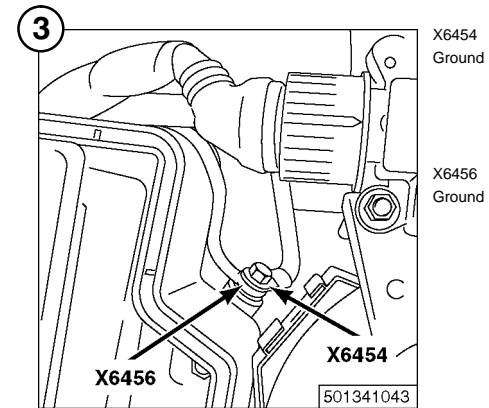
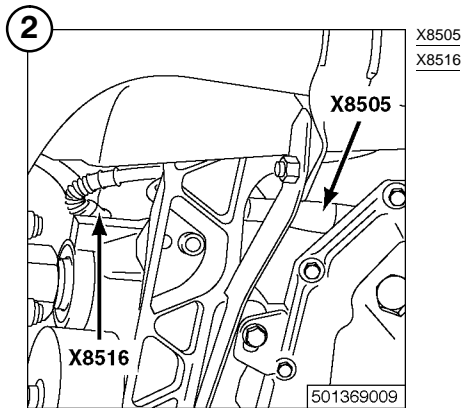
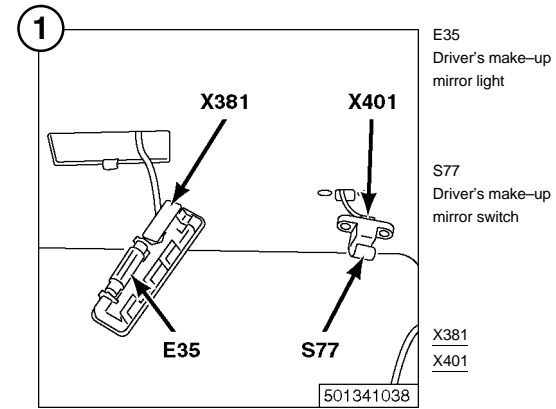
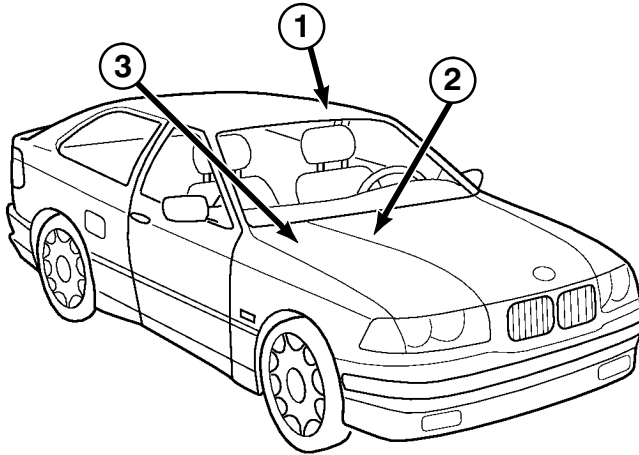
Y6131
Changeover valve I

X6131
X6217

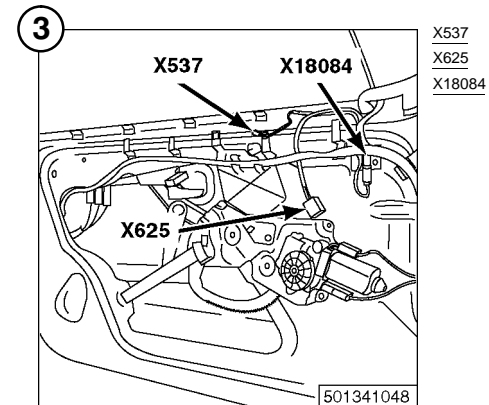
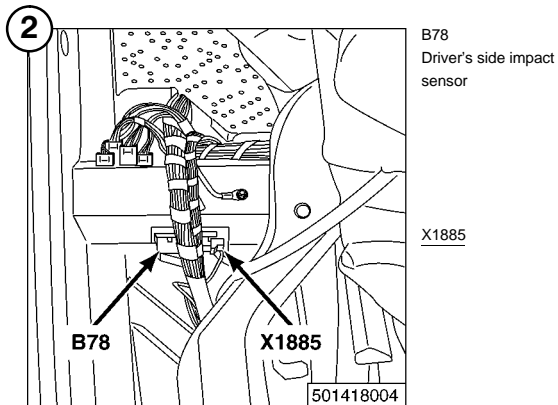
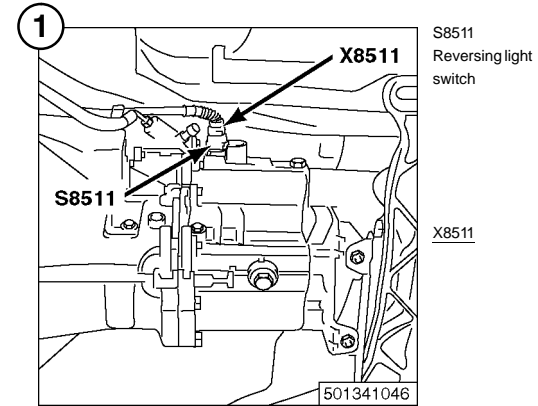
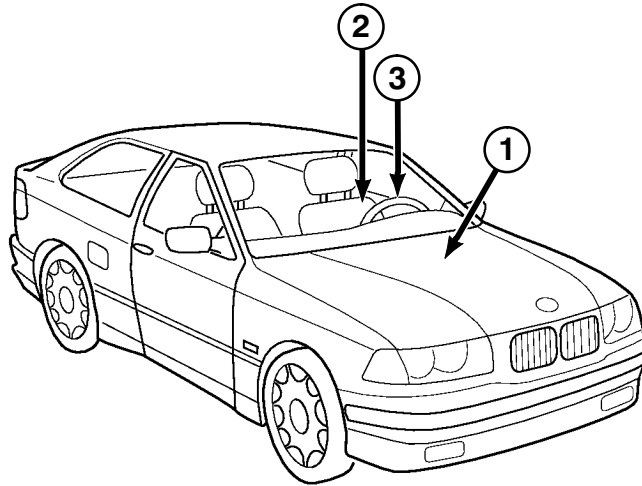
Component location views



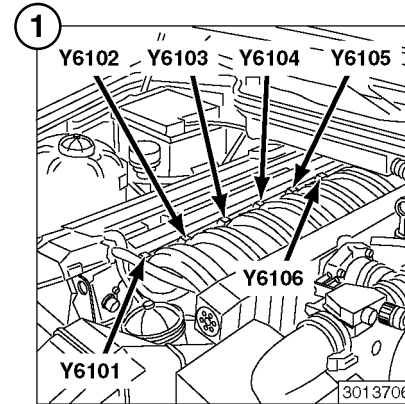
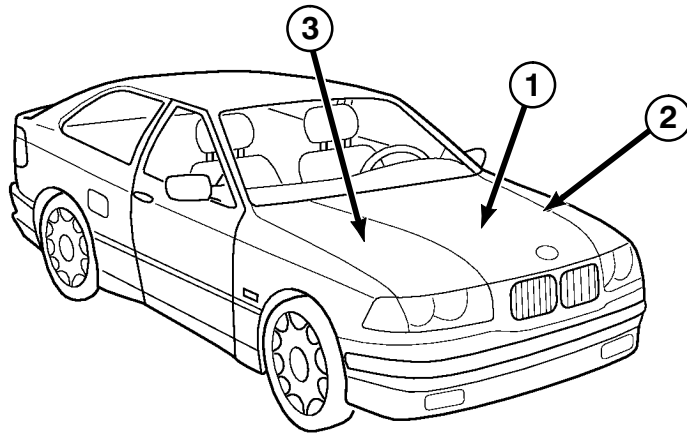
Component location views



Component location views



Component location views



Y6101
Fuel injector 1

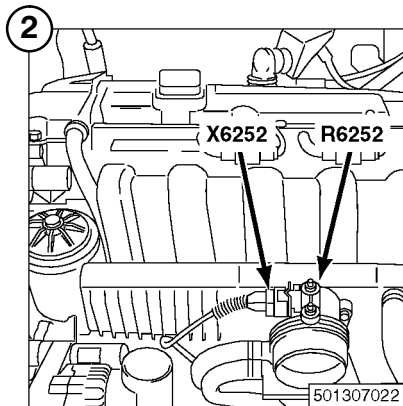
Y6104
Fuel injector 4

Y6102
Fuel injector 2

Y6105
Fuel injector 5

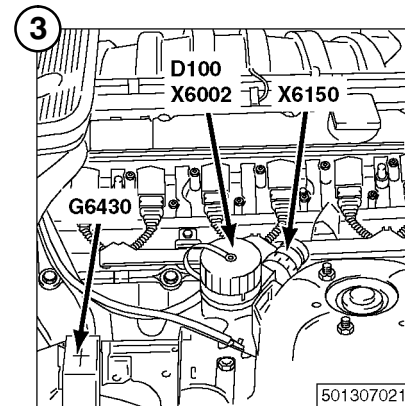
Y6103
Fuel injector 3

Y6106
Fuel injector 6



R6252
Throttle potentiometer

X6252

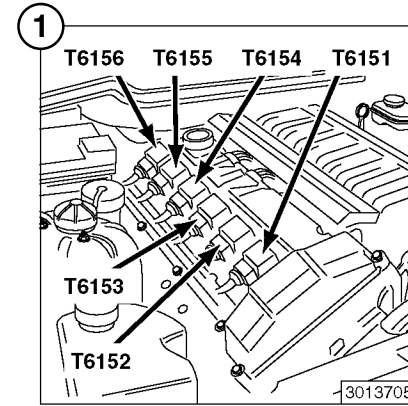
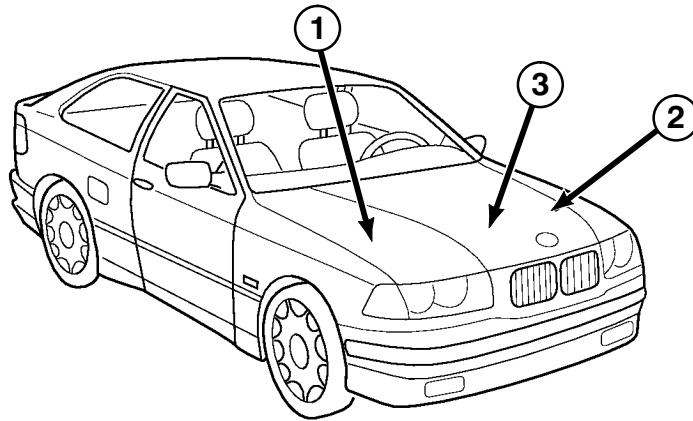


D100
Diagnostic connector

G6430
B+ external start terminal point

X6002
X6150

Component location views



T6151
Ignition coil 1

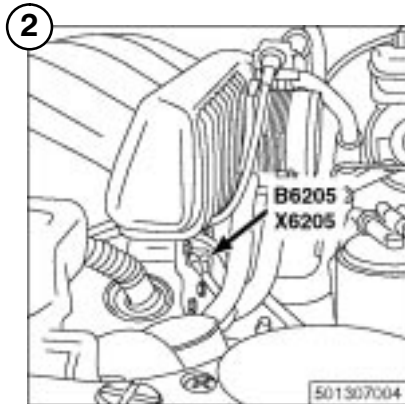
T6154
Ignition coil 4

T6152
Ignition coil 2

T6155
Ignition coil 5

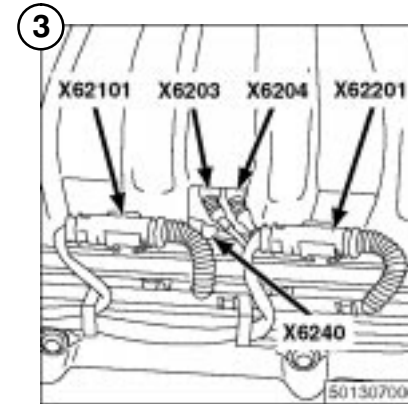
T6153
Ignition coil 3

T6156
Ignition coil 6



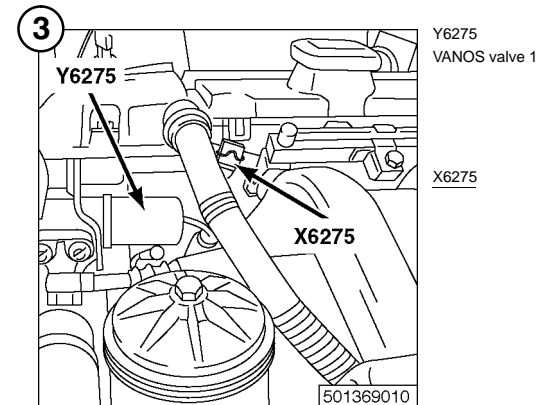
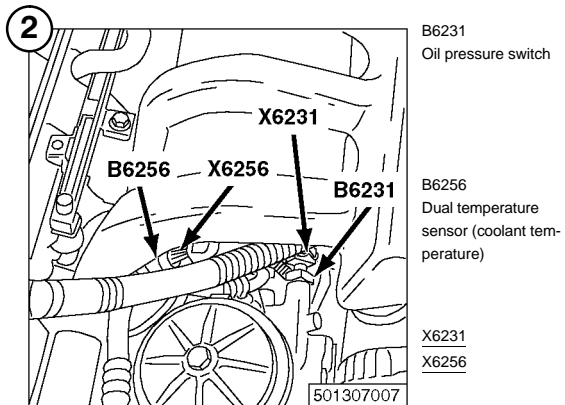
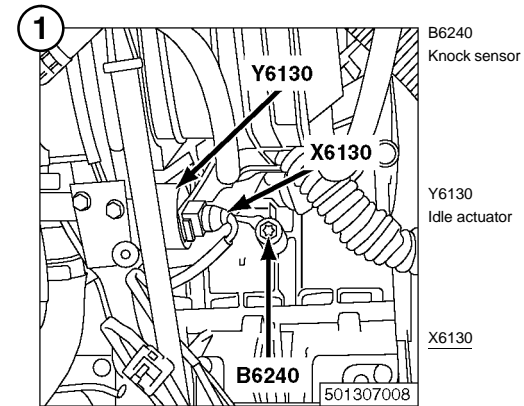
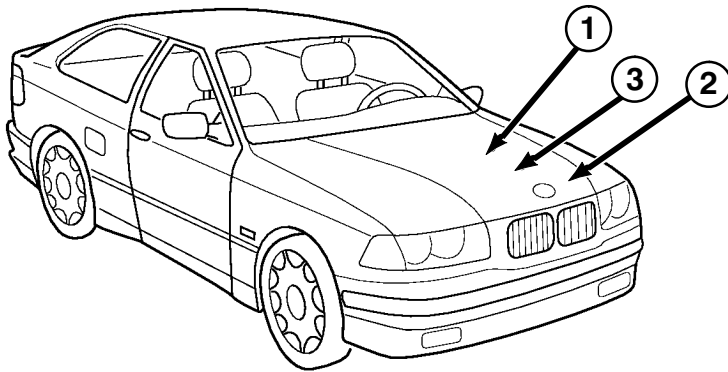
B6205
Intake air temperature sensor

X6205

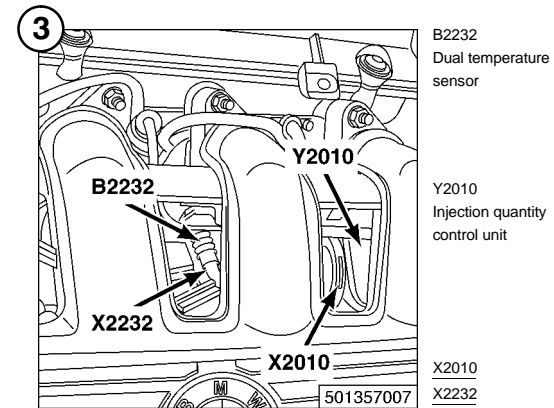
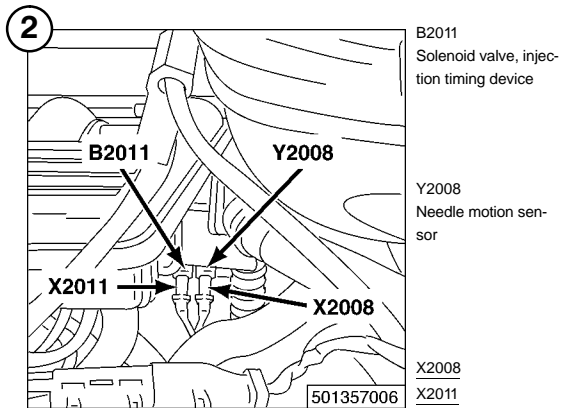
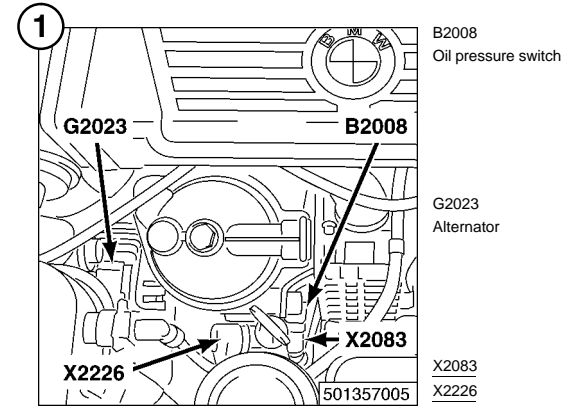
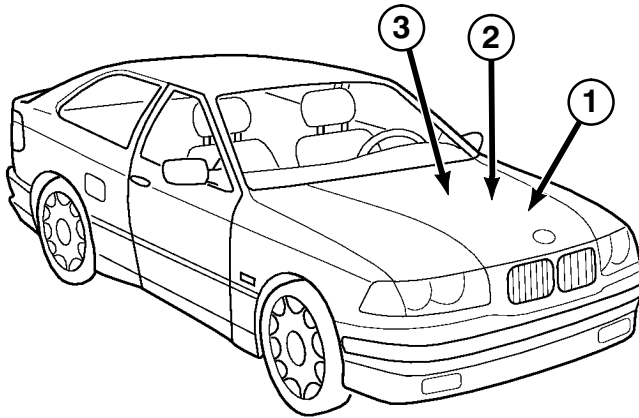


X6203
X6204
X6240
X62101
X62201

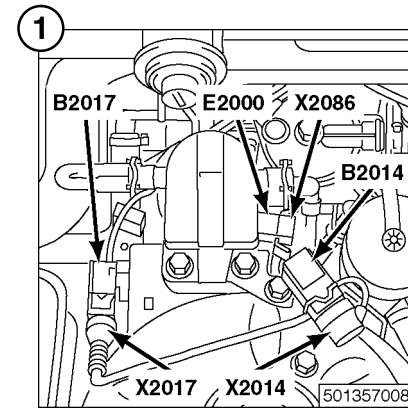
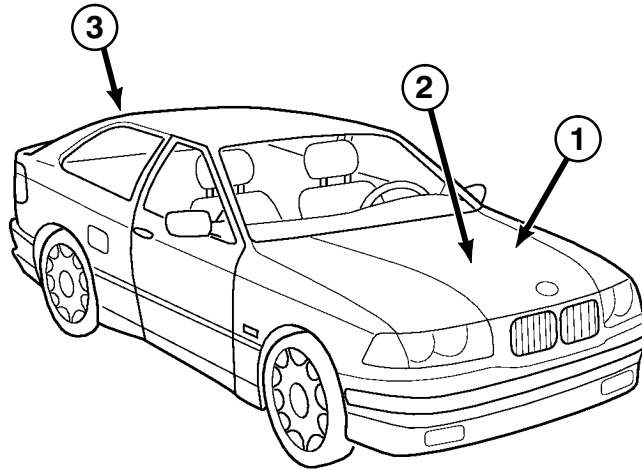
Component location views



Component location views



Component location views

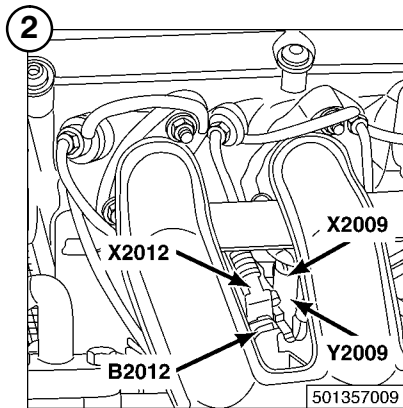


B2014
Charge pressure
sensor

X2014
X2017
X2086

B2017
Changeover valve for
exhaust gas recircu-
lation (AGR)

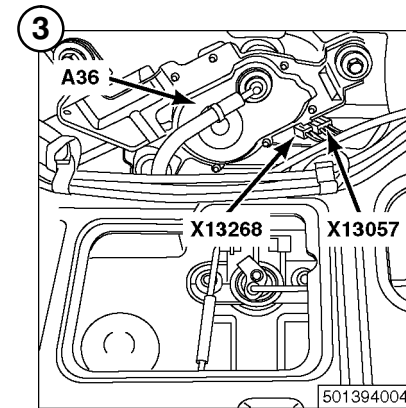
E2000
Fuel heating



B2012
Charge air tempera-
ture sensor

Y2009
Electric cutout

X2009
X2012



A36
Rear wiper/wash
interval control unit

X13057
X13268

8000.0 Connector location views (soldering spots and comb-type connectors)

Solder connector	Wire harness	Side
X181–X276	Front	8000.0-02
X344–X378	Trailer adapter module	No Fig.
X428–X481	Rear	8000.0-03
X530–X595	Front	8000.0-02
X805	Rear	8000.0-03
X818	HS/IHKS	No Fig.
X824–X830	Radio	No Fig.
X849	Driver's door	No Fig.
X876–X877	Radio	No Fig.
X897	HS/IHKS	No Fig.
X906	HS/IHKS	No Fig.
X942	Passenger's door	No Fig.
X1015–X1164	Front	8000.0-02
X1167	Rear	8000.0-03
X1168–X1192	Front	8000.0-02
X1212–X1214	Rear	8000.0-03
X1225	Front	8000.0-02
X1226	Rear	8000.0-03
X1233	Front	8000.0-02
X1234–X1238	Rear	8000.0-03
X1258	Front	8000.0-02
X1263	Rear	8000.0-03
X1387–X1396	Rear	8000.0-03
X1541–X1542	Front	8000.0-02
X1682–X1693	Front	8000.0-02
X1896	Rear	8000.0-03
X2029–X2052	M41 engine	8000.0-07
X2112–X2139	M41 engine	8000.0-07

Solder connector	Wire harness	Side
X2145–X2151	M41 engine	8000.0-07
X6410–X6411	M43 engine	8000.0-04
X6410–X6412	CNG engine	8000.0-05
X6411–X6412	M52 engine	8000.0-06
X6420–X6492	M52 engine	8000.0-06
X6460–X6492	CNG engine	8000.0-05
X6460–X6492	M43 engine	8000.0-04
X6810–X6863	CNG engine	8000.0-05
X6810–X6866	M52 engine	8000.0-06
X6820–X6866	M43 engine	8000.0-04
X6835	M41 engine	8000.0-07
X6953	CNG engine	8000.0-05
X7845–X7846	CNG engine	8000.0-05
X8004–X8056	CNG engine	8000.0-05
X8004–X8073	M43 engine	8000.0-04
X8004–X8074	M52 engine	8000.0-06
X8104	M41 engine	8000.0-07
X8564–X8589	M43 engine	8000.0-04
X8564–X8576	M52 engine	8000.0-06
X8576	CNG engine	8000.0-05
X10007–X10104	Front	8000.0-02
X10118	Rear	8000.0-03
X10120–X10123	Front	8000.0-02
X10169	M43 engine	8000.0-04
X10169	CNG engine	8000.0-05
X10191–X10231	Front	8000.0-02
X10233	HS/IHKS	No Fig.
X10252	Front	8000.0-02

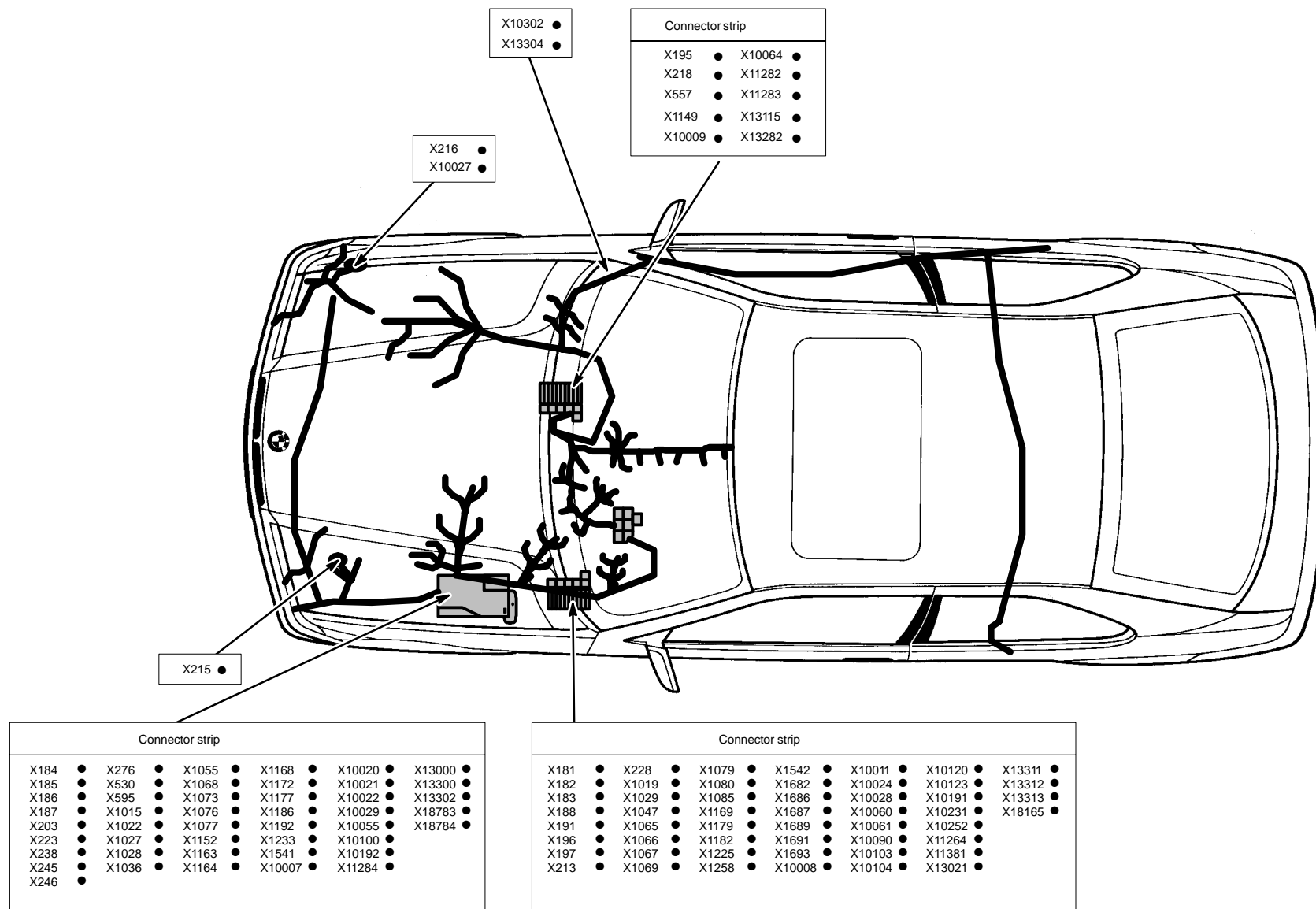


Connector location views (soldering spots and comb-type connectors)

Solder connector	Wire harness	Side
X10269	Rear	8000.0-03
X10302	Front	8000.0-02
X10308–X10310	Rear	8000.0-03
X11264	Front	8000.0-02
X11268–X11269	Rear	8000.0-03
X11282–X11284	Front	8000.0-02
X11291	Rear	8000.0-03
X11380	Rear	8000.0-03
X11381	Front	8000.0-02
X13000	Front	8000.0-02
X13002–X13011	Rear	8000.0-03
X13021–X13115	Front	8000.0-02
X13118–X13173	Rear	8000.0-03
X13279	HS/IHKS	No Fig.
X13282	Front	8000.0-02
X13289	Rear	8000.0-03
X13300–X13304	Front	8000.0-02
X13309	Rear	8000.0-03
X13311–X13313	Front	8000.0-03
X16809–X16819	Radio	No Fig.
X17279–X17319	Radio	No Fig.
X18165	Front	8000.0-02
X18782	HS/IHKS	No Fig.
X18783–X18784	Front	8000.0-02
X19513	Radio	No Fig.

Connector location views (soldering spots and comb-type connectors)

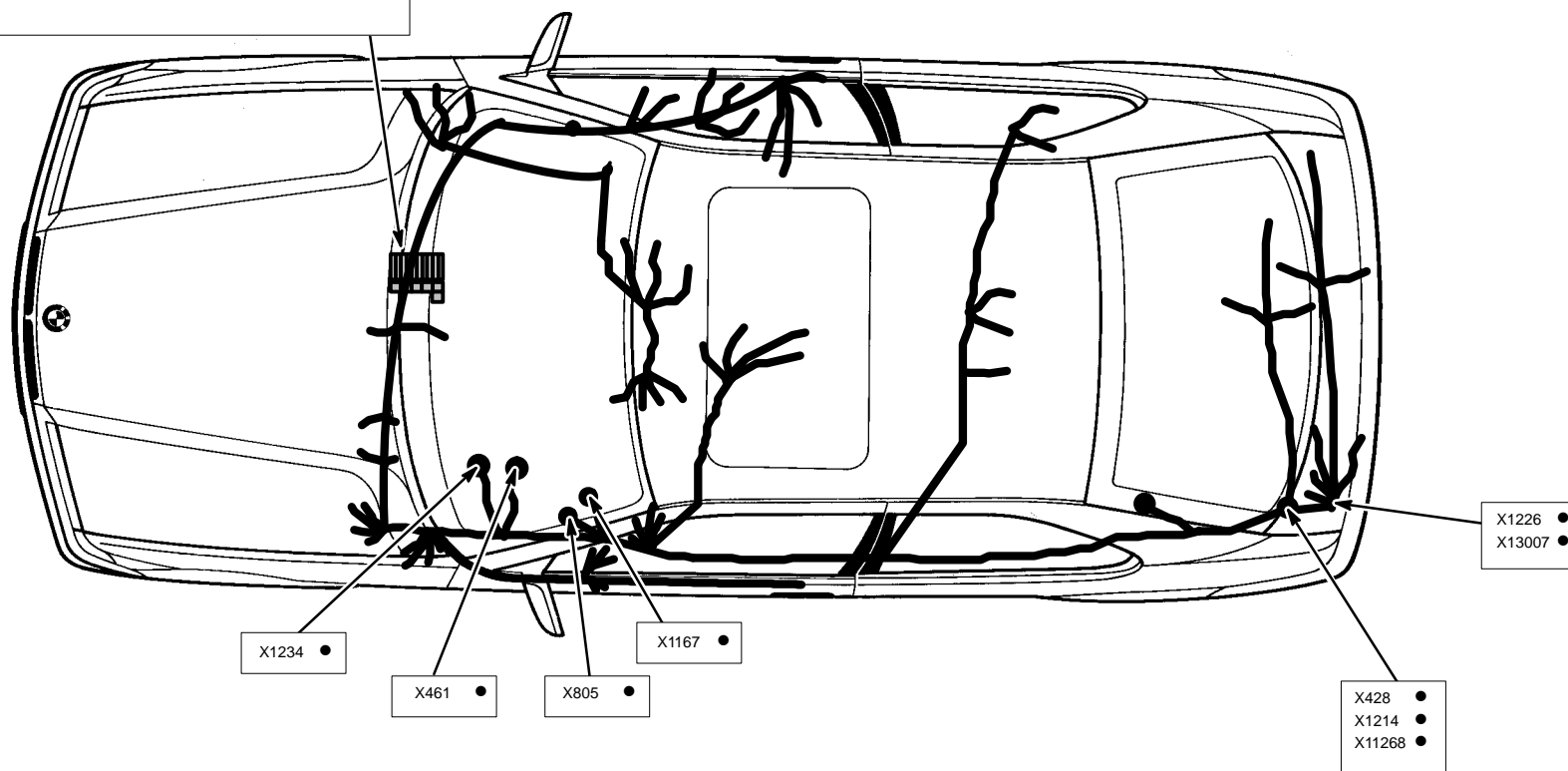
Front wire harness



Connector location views (soldering spots and comb-type connectors)

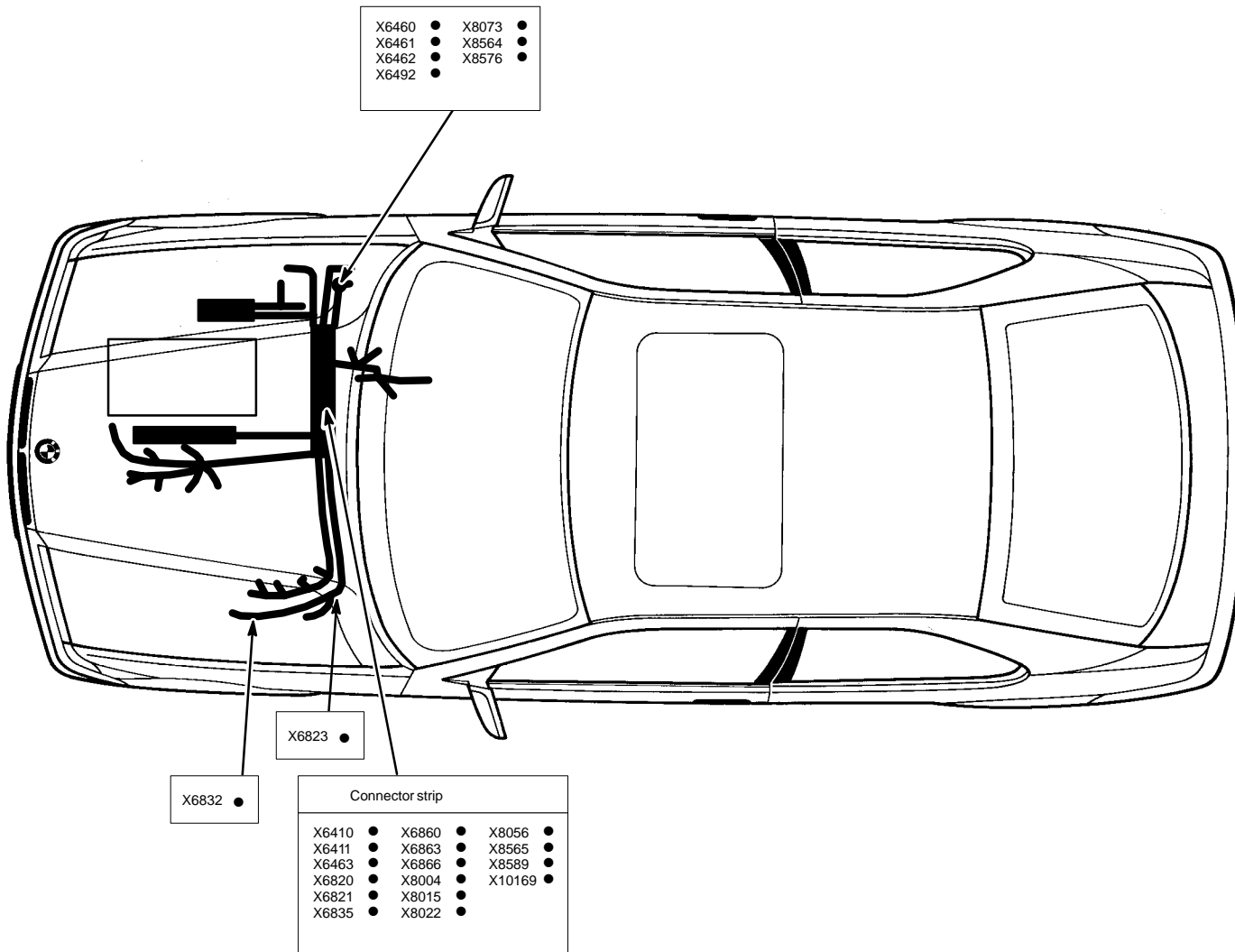
Rear wire harness

Connector strip									
X441	•	X455	•	X1237	•	X10309	•	X13011	•
X442	•	X456	•	X1238	•	X10310	•	X13118	•
X443	•	X460	•	X1263	•	X11269	•	X13127	•
X444	•	X462	•	X1387	•	X11291	•	X13129	•
X445	•	X475	•	X1396	•	X11380	•	X13132	•
X449	•	X481	•	X1896	•	X13002	•	X13168	•
X450	•	X1212	•	X10118	•	X13003	•	X13173	•
X453	•	X1235	•	X10269	•	X13005	•	X13289	•
X454	•	X1236	•	X10308	•	X13010	•	X13309	•



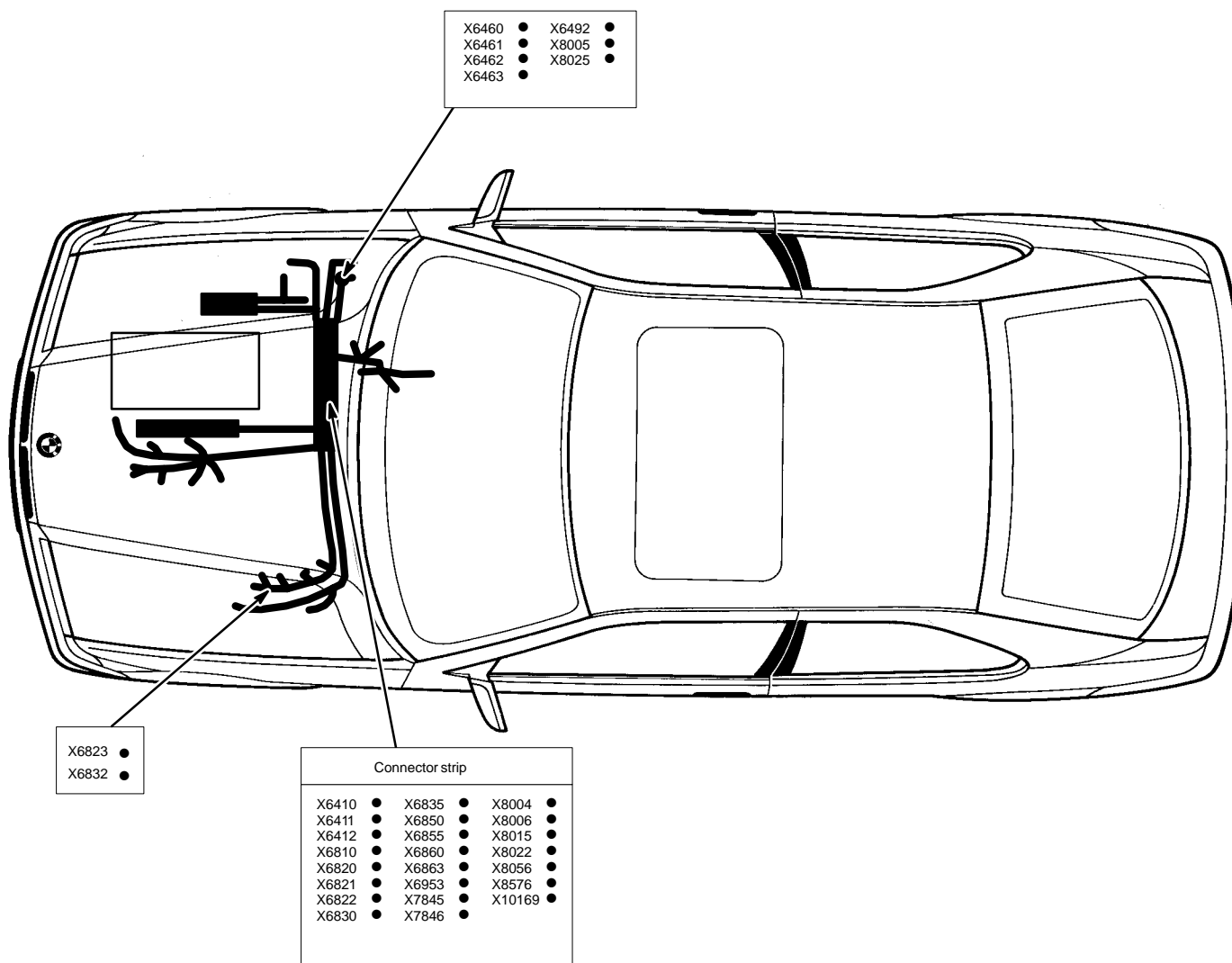
Connector location views (soldering spots and comb-type connectors)

Engine wire harness M43



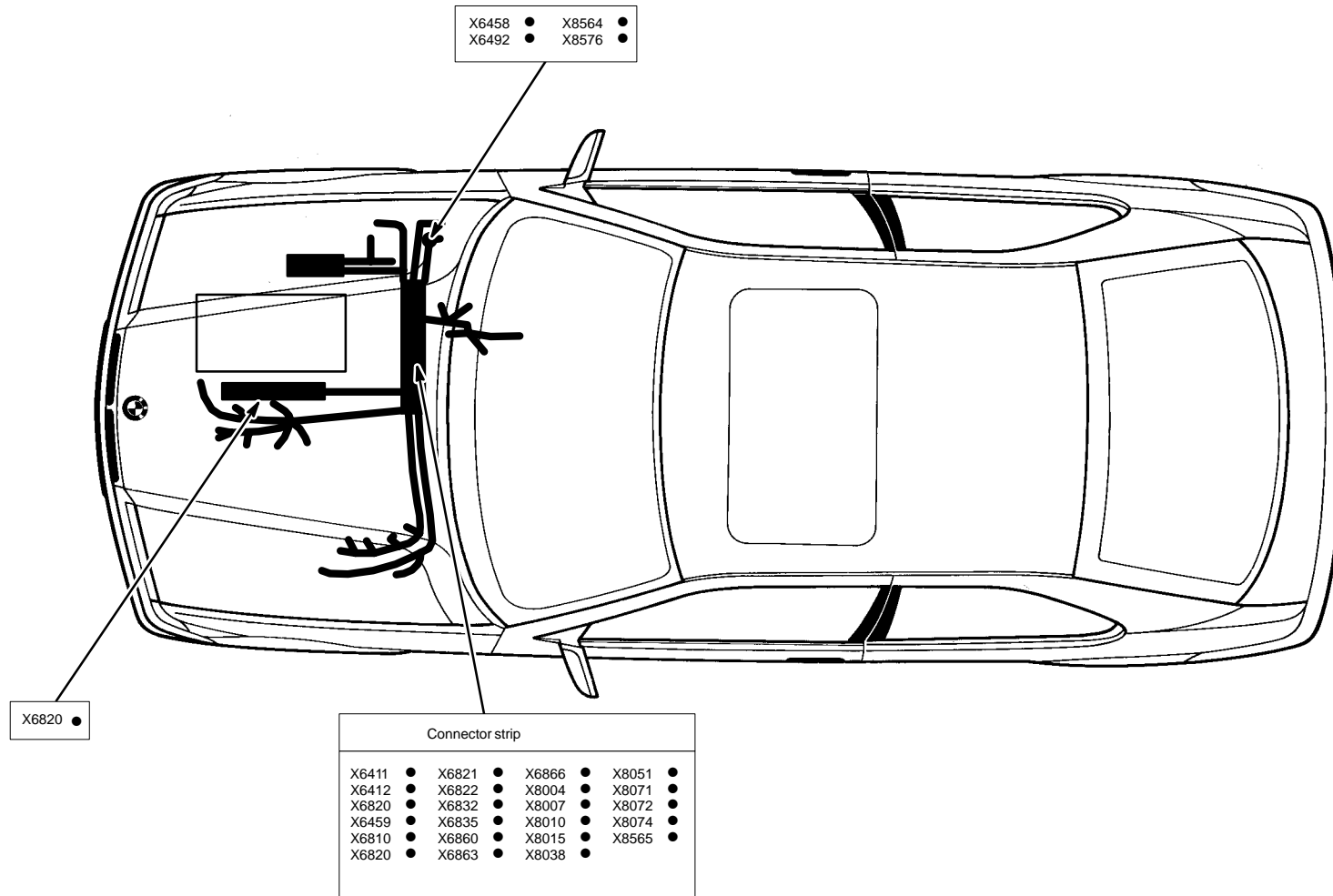
Connector location views (soldering spots and comb-type connectors)

Engine wiring harness CNG



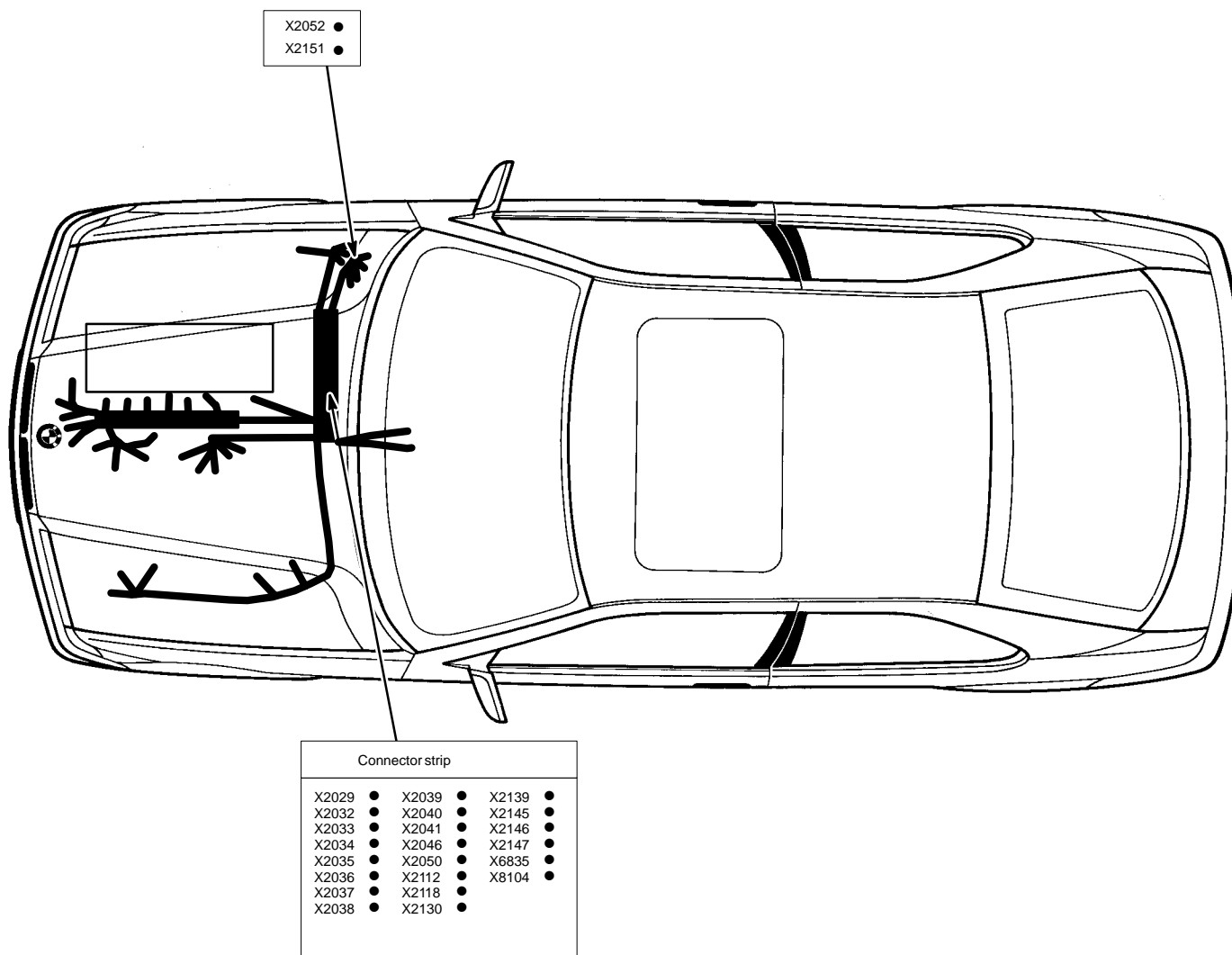
Connector location views (soldering spots and comb-type connectors)

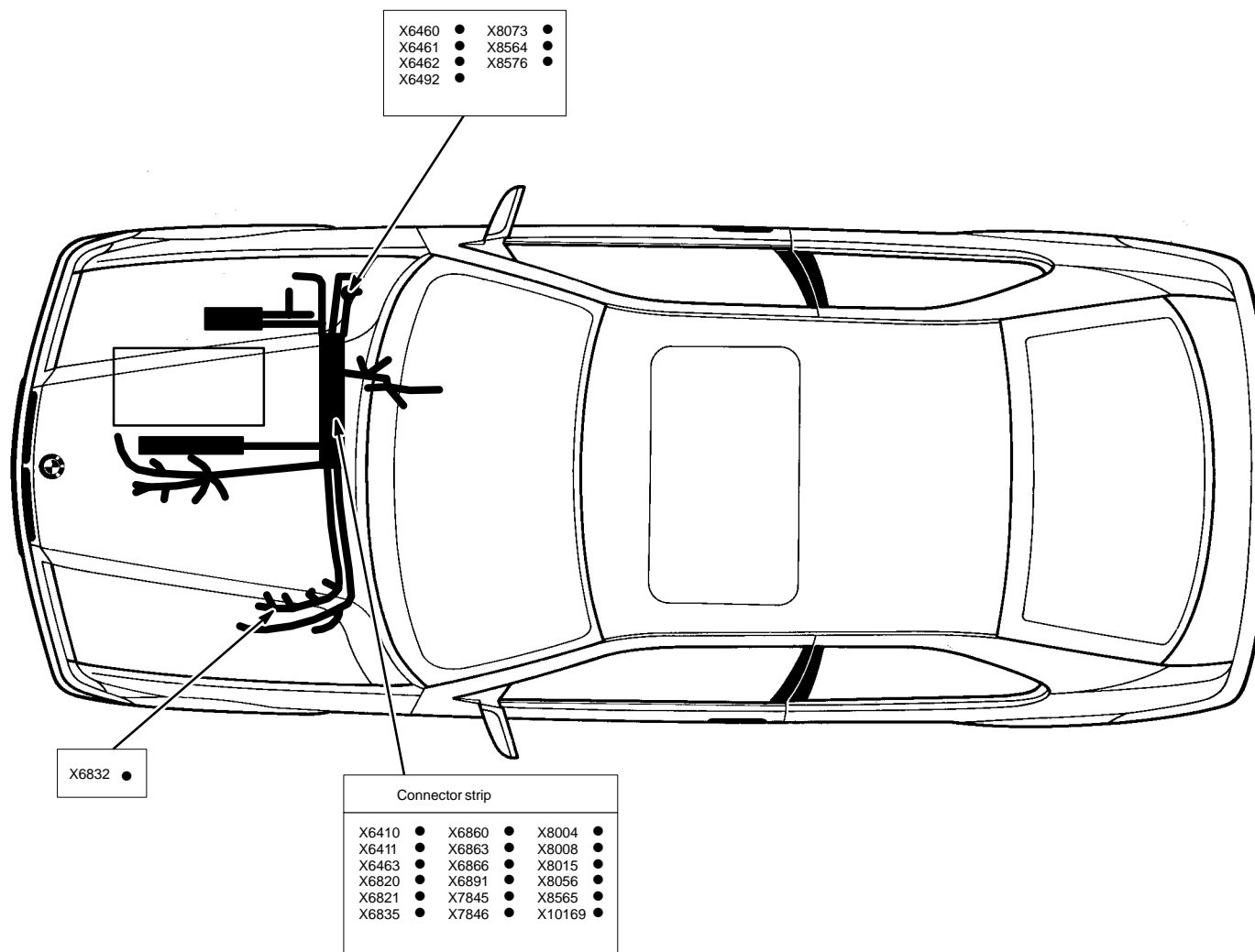
Engine harness M52



Connector location views (soldering spots and comb-type connectors)

Engine wire harness M41





8500.0 Connector views

Fig. 1

B550001.03

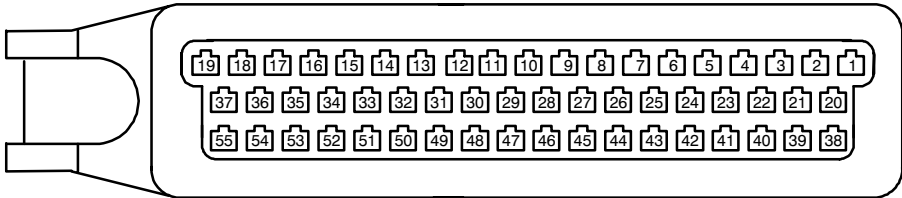


Fig. 2

B260005.01

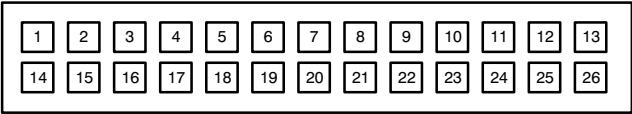


Fig. 3

B150003.00

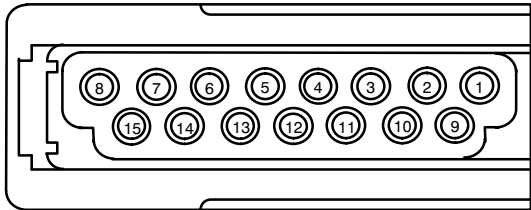
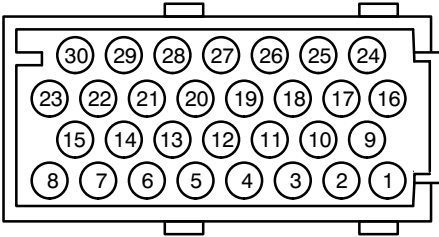


Fig. 4

B300001.00



Connector views

Fig. 1

B030024

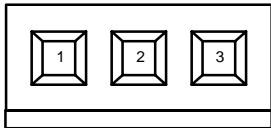


Fig. 2

B040023.02

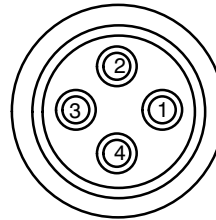


Fig. 3

B120001.00

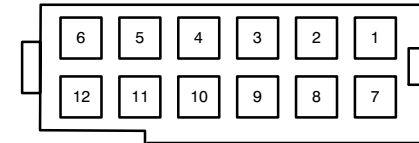


Fig. 4

B080002.00

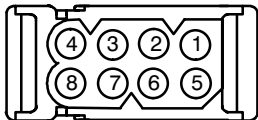


Fig. 5

B180000.00

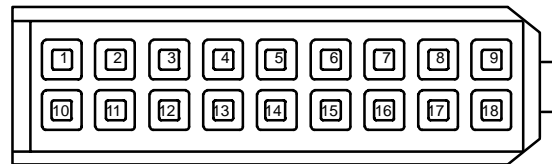


Fig. 6

B120015

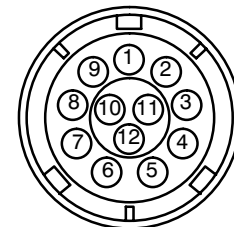


Fig. 1

B100001.00

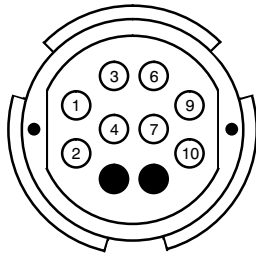


Fig. 2

B170001.00

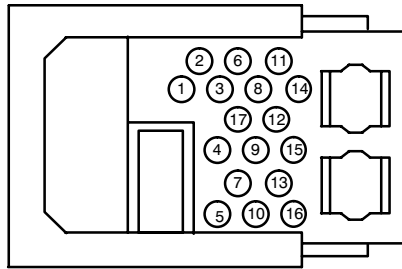


Fig. 3

B100008.00

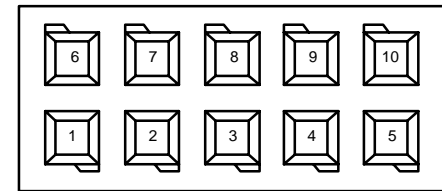


Fig. 4

B120004.01

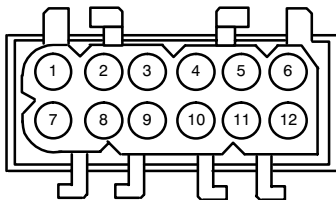


Fig. 5

B060046.00

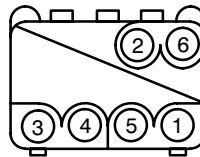


Fig. 6

B050003.00

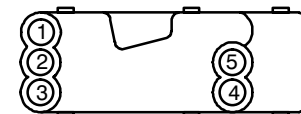


Fig. 1

B040004.00

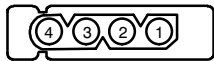


Fig. 2

B040018

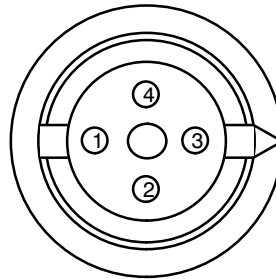


Fig. 3

B080001.00

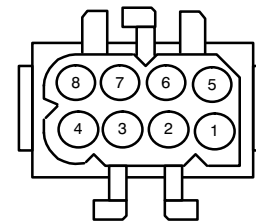


Fig. 4

B090002.00

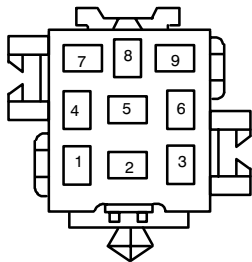


Fig. 5

B260008.00

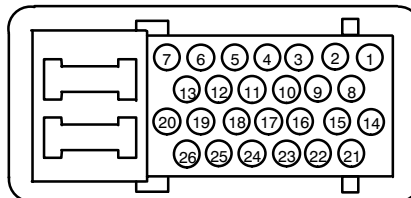
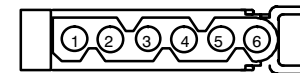


Fig. 6

B060001.02



Connector views

Fig. 1

B200003.00

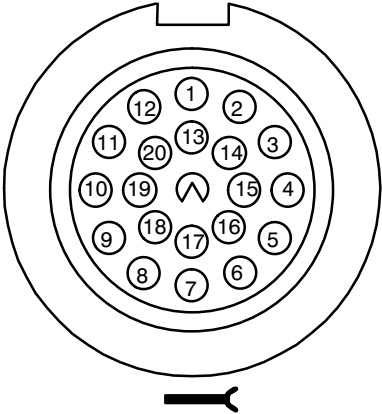


Fig. 2

B030004.01

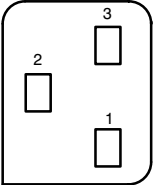


Fig. 3

B030003.02

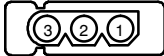


Fig. 4

B250001.01

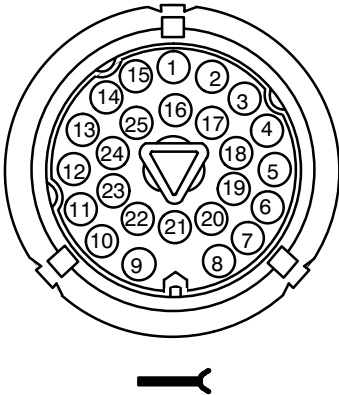


Fig. 5

B060019.02

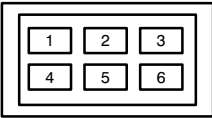


Fig. 1

B880001.00

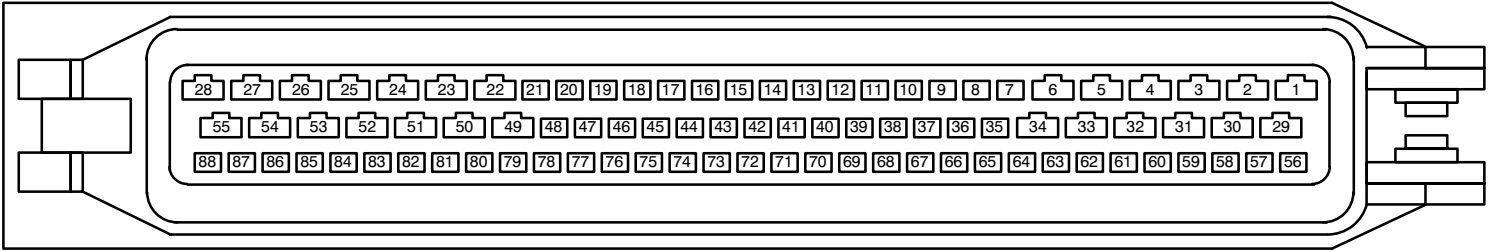


Fig. 2

B060038.00

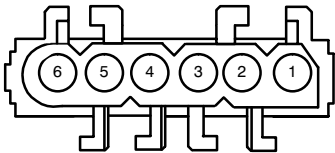


Fig. 3

B030006.00

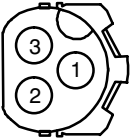


Fig. 4

B160004.00

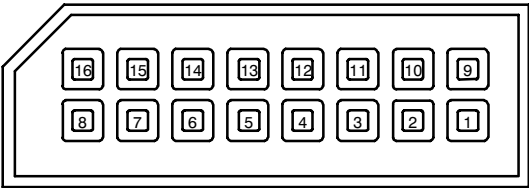


Fig. 1

B040023.00

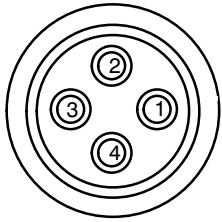


Fig. 2

B040029.00

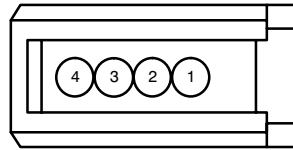


Fig. 3

B0300044.00

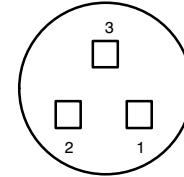


Fig. 4

B030025.00

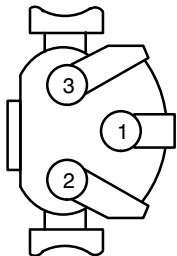


Fig. 5

B060041.00

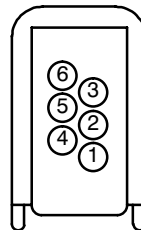


Fig. 6

B030047.00

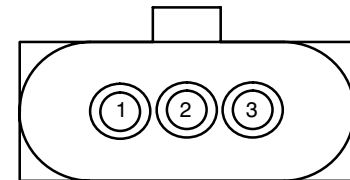


Fig. 1

B040026

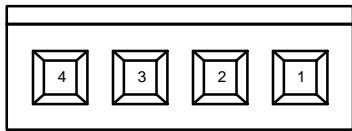


Fig. 2

B160001.00

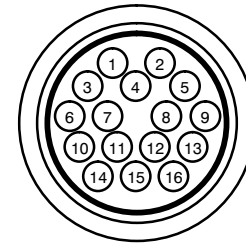


Fig. 3

B030022.00

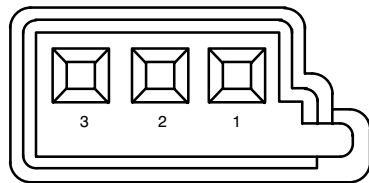
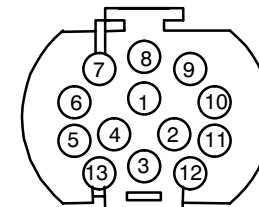


Fig. 4

B130002.00



Connector views

Fig. 1

B030009.00

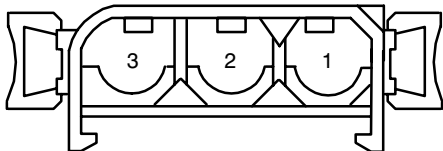


Fig. 2

B030018.02

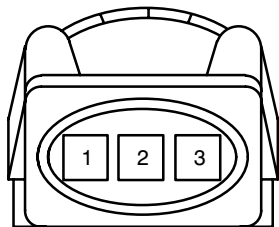


Fig. 3

B060008.00

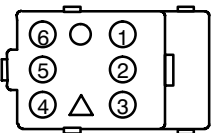


Fig. 4

B500000.00

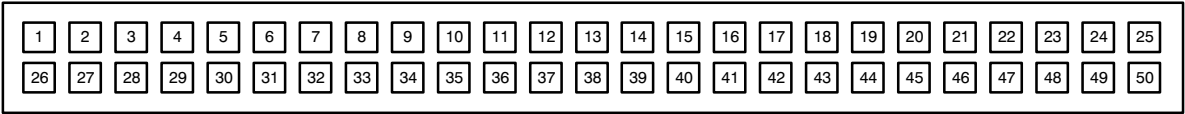


Fig. 1

B030042.00

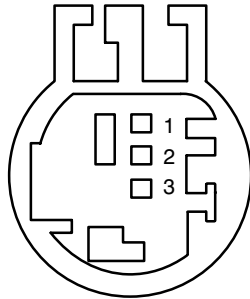


Fig. 2

B250004.00

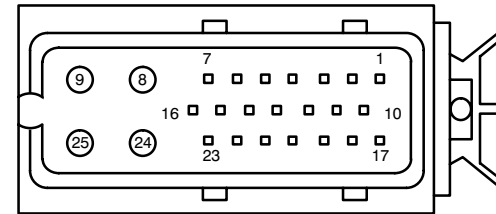


Fig. 3

B120006.00

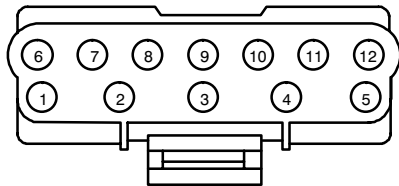


Fig. 4

B060019.03

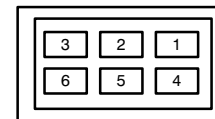


Fig. 1

B040027.00

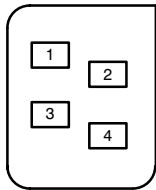


Fig. 2

B070012.00

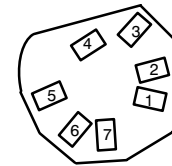


Fig. 3

B120002.02

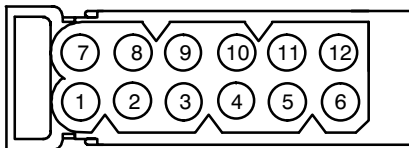


Fig. 4

B070005.01

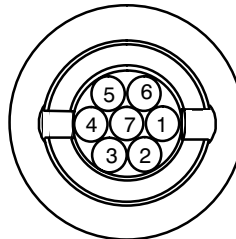


Fig. 5

B030015.08

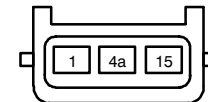


Fig. 1

B030036.01

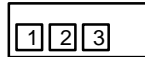


Fig. 2

B060042

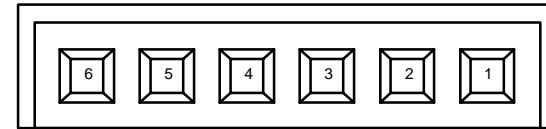


Fig. 3

B030017.01

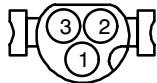


Fig. 4

B070013.00

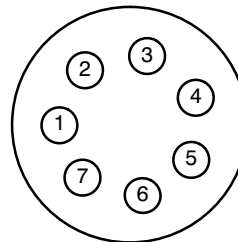


Fig. 5

B250001.02

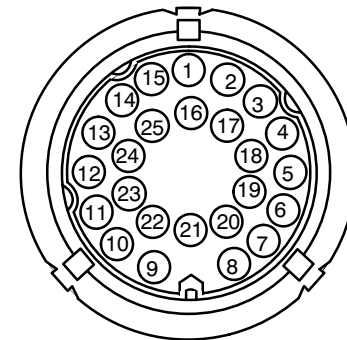


Fig. 1

B520001.00

52	51	50	49	48	47	46	45	44	43	42	41	40
39	38	37	36	35	34	33	32	31	30	29	28	27
26	25	24	23	22	21	20	19	18	17	16	15	14
13	12	11	10	9	8	7	6	5	4	3	2	1



Fig. 2

B400000.00

31	32	33	34	35	36	37	38	39	40
21	22	23	24	25	26	27	28	29	30
11	12	13	14	15	16	17	18	19	20
1	2	3	4	5	6	7	8	9	10



Fig. 3

B240002.00

24	23	22	21	20	19
18	17	16	15	14	13
12	11	10	9	8	7
6	5	4	3	2	1



Fig. 4

B090008.00

9	8	7
6	5	4
3	2	1



Fig. 5

B030050.00

