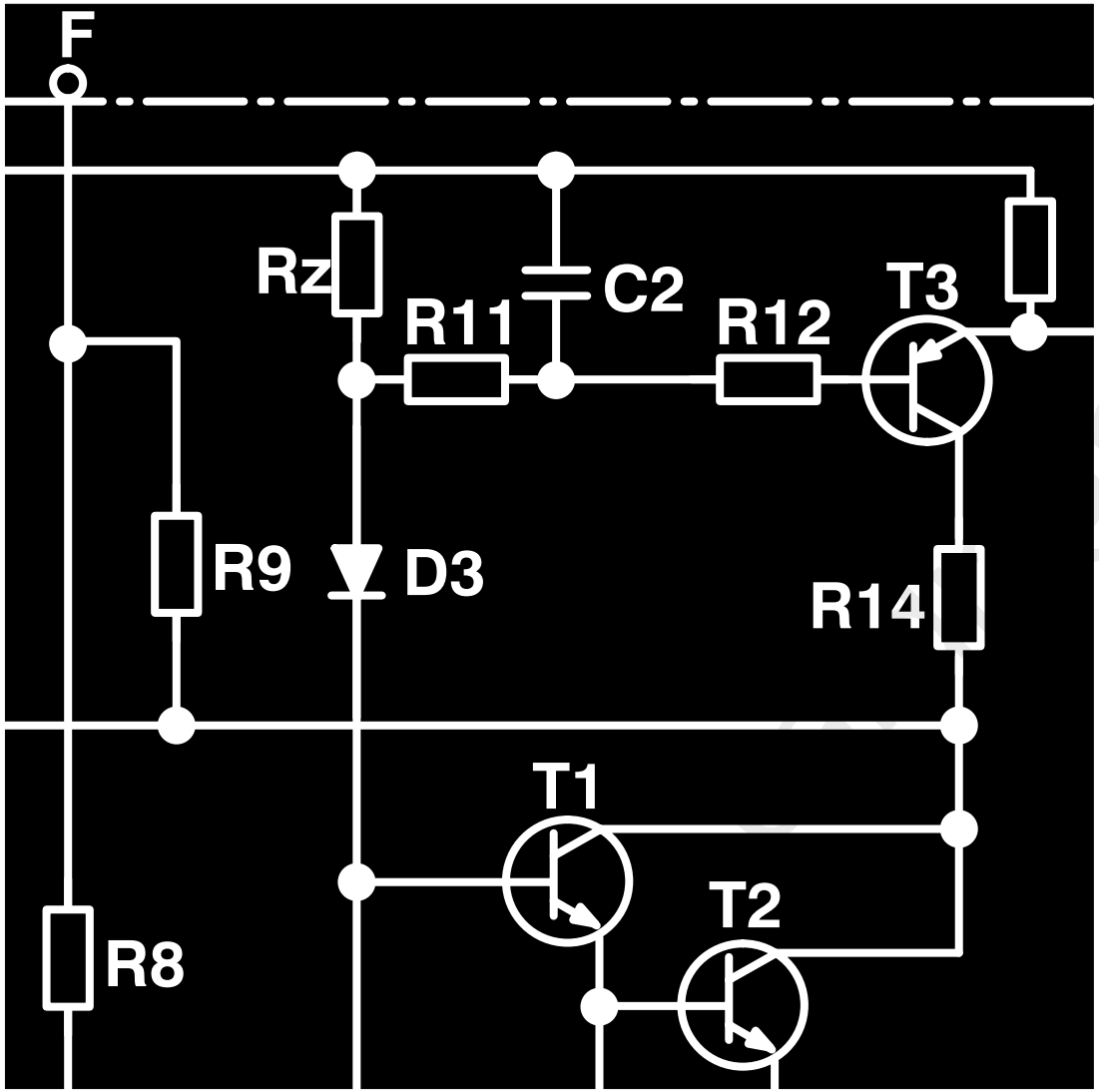


1997
BMW
Z3
(E36/7)
Electrical
Troubleshooting
Manual

Vehicles Produced 9/96 thru 8/97

PN 01 00 1 470 354

BMW NA

ELECTRICAL TROUBLESHOOTING MANUAL

SERIES 3 – E36/7 (Z3 Roadster)

SCHEMATICS MODEL YEAR 1997

0100.0	INDEX
0110.0	INTRODUCTION
0140.0	SYMBOLS
0670.0	POWER DISTRIBUTION CHART
0670.1	FUSE CHART
0670.2	POWER DISTRIBUTION
0670.3	FUSE DETAILS
0670.4	GROUND DISTRIBUTION
0670.5	DATA LINK
1210.17	ENGINE CONTROL SYSTEM MS41.1 (6–CYLINDER M52)
1210.20	ENGINE CONTROL SYSTEM (DME M5.2, 4–CYLINDER M44)
1230.0	CHARGING SYSTEM
1240.0	START
1290.0	E–BOX FAN
2460.2	ELECTRONIC TRANSMISSION CONTROL (EGS A4S 310R)
3234.0	SUPPLEMENTAL RESTRAINT SYSTEM (AIR BAG)
3450.0	SLIP CONTROL (ABS)
3450.1	SLIP CONTROL (ABS/ASC)
5116.0	POWER MIRRORS
5126.0	ZKE CENTRAL LOCKING (ZV)
5133.0	ZKE POWER WINDOWS (FH)
5200.0	POWER SEATS
5203.0	HEATED SEATS
6100.0	CENTRAL BODY ELECTRONICS (ZKE IV)
6133.0	HORN
6135.0	DRIVE–AWAY PROTECTION (EWS II)
6160.1	WIPER/WASHER MODULE (WWM)
6167.1	HEADLIGHT WASHER (SRA)
6169.0	WINDSHIELD WASHER JET HEATERS
6211.0	INSTRUMENT CLUSTER
6213.3	DIGITAL CLOCK
6300.0	LIGHT SWITCH DETAILS
6312.0	HEADLIGHTS/FOG LIGHTS
6313.0	TURN/HAZARD LIGHTS
6314.0	PARK/TAIL/UNDERHOOD LIGHTS
6320.0	LICENSE PLATE/LUGGAGE COMPARTMENT LIGHTS
6322.0	BACK UP LIGHTS
6325.0	BRAKE LIGHTS
6330.3	INTERIOR LIGHTS
6332.0	INTERIOR ACCESSORIES
6350.0	CRASH CONTROL MODULE
6424.0	REAR WINDOW DEFOGGER
6450.6	INTEGRATED HEATING– AND CLIMATE CONTROL
6510.1	RADIO/HIFI
6561.0	CELLULAR TELEPHONE (PROVISIONS)
6571.0	CRUISE CONTROL (TEMPOMAT)
6575.2	ANTI–THEFT SYSTEM (ALPINE)
6581.3	BOARD COMPUTER (BC–LOW)
7000.0	COMPONENT LOCATION CHART
7100.0	COMPONENT LOCATION VIEWS
8000.0	SPLICE LOCATION VIEWS
8500.0	CONNECTOR VIEWS

© BMW NA, Woodcliff Lake, NJ
ZU–S, Printed in U.S.A.

PART NUMBER 01 00 1 470 354

INDEX

ABS CONTROL MODULE/HYDRAULIC UNIT, A202 . . . . . 3450.0
ABS HYDRAULIC UNIT, Y1w 3450.1-01
ABS HYDRAULIC UNIT, Y1w 3450.1-07
ABS HYDRAULIC UNIT, Y1w 3450.1-11
ABS PUMP MOTOR RELAY, K75 . . . . . 3450.1-00
ABS PUMP MOTOR RELAY, K75 . . . . . 3450.1-06
ABS PUMP MOTOR RELAY, K75 . . . . . 3450.1-10
ABS RELAY, K10 . . . . . 3450.1-00
AIR BAG GAS GENERATOR, DRIVER'S, G5 . . . . . 3234.0-00
AIR BAG GAS GENERATOR, PASSENGER'S, G6 . . . . . 3234.0-00
AIR CONDITIONING COMPRESSOR, Y2 . . . . . 6450.6-02
AIR CONDITIONING/RECIRCULATING SWITCH ASSEMBLY, S220 . . . . . 6450.6-01
AIR PUMP, Y6133 . . . . . 1210.17-05
AIR PUMP, Y6133 . . . . . 1210.20-09
ANTENNA AMPLIFIER AM/FM, N8 . . . . . 6510.1-00
ANTI−THEFT CONTROL MODULE (ALPINE), N12w 6575.2
ANTI−THEFT HORN (ALPINE), H1w 6575.2-01
ANTI−THEFT SYSTEM (ALPINE) 6575.2
ASC DIODE, V7 . . . . . 3450.1-00
ASC SWITCH, S6 . . . . . 3450.1-02
ASC SWITCH, S6 . . . . . 3450.1-05
ASC SWITCH, S6 . . . . . 3450.1-09
AUTOMATIC TRANSMISSION RANGE SWITCH, S3 . . . . . 2460.2-08
AUXILIARY FAN MOTOR, M9 . . . . . 6450.6-03
AUXILIARY FAN MOTOR, M9 . . . . . 6450.6-04
AUXILIARY FUSE BOX, P97 . . . . . 0670.2-02
AUXILIARY THROTTLE POSITION MOTOR (ADS), M93 . . . . . 3450.1-02
AUXILIARY THROTTLE POSITION MOTOR (ADS), M93 . . . . . 3450.1-09
AUXILIARY THROTTLE POSITION SENSOR, R31 . . . . . 3450.1-04
AUXILIARY THROTTLE POSITION SENSOR, R31 . . . . . 3450.1-09
AUXILIARY TURN LIGHT, LEFT FRONT, H9 . . . . . 6313.0-02
AUXILIARY TURN LIGHT, RIGHT FRONT, H8 . . . . . 6313.0-02
B+ JUMP START JUNCTION POINT, G6430 . . . . . 0670.2-00
B+ JUMP START JUNCTION POINT, G6430 . . . . . 0670.2-01
BACK UP LIGHT, LEFT, H27 . . . . . 6322.0-00
BACK UP LIGHT, RIGHT, H28 . . . . . 6322.0-00
BACK UP LIGHTS 6322.0-00
BATTERY, G1 . . . . . 0670.2-00
BATTERY, G1 . . . . . 0670.2-01
BLOWER MOTOR, M30 . . . . . 6450.6-00
BLOWER RELAY, K4 . . . . . 6450.6-00
BLOWER RESISTORS, R11 . . . . . 6450.6-00
BLOWER SWITCH, S75 . . . . . 6450.6-00
BOARD COMPUTER (BC−LOW) 6581.3-00
BOARD COMPUTER (BC−LOW), A35y 6581.3-00
BRAKE FLUID LEVEL SWITCH, B18 . . . . . 6211.0-00
BRAKE LIGHT SWITCH, S30 . . . . . 6325.0-00
BRAKE LIGHT, LEFT, H24 . . . . . 6325.0-00
BRAKE LIGHTS 6325.0-00
BRAKE PAD SENSOR, LEFT FRONT, B16 . . . . . 6211.0-01
BRAKE PAD SENSOR, RIGHT REAR B17 . . . . . 6211.0-01
CAMSHAFT POSITION SENSOR (CYLINDER IDENTIFICATION), B6204 . . . . . 1210.17-06
CD CHANGER, N22 . . . . . 6510.1
CELLULAR TELEPHONE (PROVISIONS) 6561.0-00
CENTRAL BODY ELECTRONICS (ZKE IV) 6100.0
CHARCOAL FILTER SHUT−OFF VALVE, B6247 . . . . . 1210.17-10
CHARCOAL FILTER SHUT−OFF VALVE, B6247 . . . . . 1210.20-02
CHARGING SYSTEM 1230.0-00
CHIME MODULE, H10 . . . . . 6211.0-05
CLUTCH SWITCH, S32 . . . . . 6571.0-01
COMBINATION SWITCH, S7 . . . . . 6313.0-00
COMPONENT LOCATION CHART 7000.0
COMPONENT LOCATION VIEWS 7100.0
COMPRESSOR CONTROL RELAY, K19 . . . . . 6450.6-02
CONNECTOR VIEWS 8500.0
CONTACT RING, C101 . . . . . 3234.0-00
CONVERTIBLE TOP ACTUATING SWITCH, S143 . . . . . 5430.0-00
CONVERTIBLE TOP END−POSITION MICRO SWITCH, S164 . . 5430.0-00

mojim.com

CONVERTIBLE TOP MOTOR, M101 ..... 5430.0-00
CONVERTIBLE TOP RELAY I (CLOSE), K18363 ..... 5430.0-00
CONVERTIBLE TOP RELAY II (OPEN), K18364 ..... 5430.0-00
CRANKSHAFT POSITION/RPM SENSOR, B6203 ..... 1210.17-06
CRANKSHAFT POSITION/RPM SENSOR, B6203 ..... 1210.20-04
CRASH CONTROL MODULE 6350.0
CRASH CONTROL MODULE, N17 ..... 6350.0-01
CRUISE CONTROL (TEMPOMAT) 6571.0
CRUISE CONTROL ACTUATOR (TEMPOMAT), M25 ..... 6571.0-01
CRUISE CONTROL MODULE (TEMPOMAT), A8 ..... 6571.0
CRUISE CONTROL SWITCH, S28 ..... 6571.0-00
DATA LINK 0670.5
DATA LINK CONNECTOR, D100 ..... 0670.5
DIGITAL CLOCK 6213.3-00
DIGITAL CLOCK, A110 ..... 6213.3-00
DOOR JAMB SWITCH, DRIVER'S, S14 ..... 5126.0-01
DOOR JAMB SWITCH, PASSENGER'S, S13 ..... 5126.0-01
DOOR LOCK MOTOR, DRIVER'S, M12 ..... 5126.0-02
DOOR LOCK MOTOR, PASSENGER'S, M13 ..... 5126.0-02
DOOR LOCK SWITCH, DRIVER'S, S47 ..... 5126.0-00
DOOR LOCK SWITCH, PASSENGER'S, S49 ..... 5126.0-00
DOUBLE TEMPERATURE SWITCH, S36y 6450.6-04
DRIVE−AWAY PROTECTION (EWS II) 6135.0
DUAL TEMPERATURE SENSOR
(COOLANT TEMPERATURE), B6256 ..... 1210.17-02
E−BOX FAN 1290.0-00
E−BOX FAN, M6506 ..... 1290.0-00
ELECTRO−MECHANICAL CONVERTIBLE TOP 5430.0
ELECTRONIC IMMOBILIZER CONTROL MODULE (EWS II),
A836 ..... 6135.0-00
ELECTRONIC TRANSMISSION CONTROL (EGS A4S 310R) 2460.2
ENGINE CONTROL MODULE (DME), A6000 ..... 1210.17
ENGINE CONTROL MODULE (DME), A6000 ..... 1210.20
ENGINE CONTROL MODULE RELAY, K6300 ..... 1210.17-00
ENGINE CONTROL MODULE RELAY, K6300 ..... 1210.20-00
ENGINE CONTROL SYSTEM (DME M5.2, 4−CYLINDER M44) 1210.20
ENGINE CONTROL SYSTEM MS41.1 (6−CYLINDER M52) 1210.17
ENGINE COOLANT TEMPERATURE SENSOR, B6232 ..... 1210.17-02
ENGINE COOLANT TEMPERATURE SENSOR, B6232 ..... 1210.20-05
ENGINE COOLANT TEMPERATURE SENSOR, B6232 ..... 6211.0-02
ENGINE COOLANT TEMPERATURE SENSOR, B6236 ..... 1210.17-02
ENGINE HOOD SWITCH, S21w 6575.2-00
EVAPORATIVE EMISSION VALVE, Y6120 ..... 1210.17-05
EVAPORATIVE EMISSION VALVE, Y6120 ..... 1210.20-01
EVAPORATOR CONTROLLER, S221 ..... 6450.6-01
EVAPORATOR TEMPERATURE SENSOR, B14 ..... 6450.6-01
FOG LIGHT SWITCH, S10 ..... 6312.0-00
FOG LIGHT, LEFT, E26 ..... 6312.0-00
FRESH AIR RECIRCULATION MOTOR, M111 ..... 6450.6-01
FRONT ASHTRAY LIGHT, E25 ..... 6300.0-01
FRONT ASHTRAY LIGHT, E25 ..... 6332.0-00
FRONT CIGAR LIGHTER LIGHT, E29 ..... 6300.0-01
FRONT CIGAR LIGHTER LIGHT, E29 ..... 6332.0-00
FRONT CIGAR LIGHTER, E28 ..... 6332.0-00
FRONT FOG LIGHT RELAY, K47 ..... 6312.0-00
FRONT POWER DISTRIBUTION BOX, P90 ..... 0670.2
FUEL CHANGEOVER VALVE, Y6263 ..... 1210.20-09
FUEL INJECTION VALVE, CYL. 1, Y6101 ..... 1210.17-01
FUEL INJECTION VALVE, CYL. 1, Y6101 ..... 1210.20-01
FUEL INJECTION VALVE, CYL. 2, Y6102 ..... 1210.17-01
FUEL INJECTION VALVE, CYL. 2, Y6102 ..... 1210.20-01
FUEL INJECTION VALVE, CYL. 3, Y6103 ..... 1210.17-01
FUEL INJECTION VALVE, CYL. 3, Y6103 ..... 1210.20-01
FUEL INJECTION VALVE, CYL. 4, Y6104 ..... 1210.17-01
FUEL INJECTION VALVE, CYL. 4, Y6104 ..... 1210.20-01
FUEL INJECTION VALVE, CYL. 5, Y6105 ..... 1210.17-01
FUEL INJECTION VALVE, CYL. 6, Y6106 ..... 1210.17-01
FUEL PUMP RELAY, K6301w 1210.17-04
FUEL PUMP RELAY, K6301w 1210.20-02
FUEL PUMP, M2 ..... 1210.17-04

original

FUEL PUMP, M2 ..... 1210.20-02
FUEL SENSOR, B6y 6211.0-04
FUEL TANK PRESSURE SENSOR, B65 ..... 1210.17-10
FUEL TANK PRESSURE SENSOR, B65 ..... 1210.20-05
FUSE CHART 0670.1
FUSE DETAILS 0670.3
GENERATOR, G6509 ..... 1230.0-00
GROUND DISTRIBUTION 0670.4
HALL EFFECT CAMSHAFT SENSOR, B6209 ..... 1210.20-04
HARD TOP CONNECTOR 1, E99 ..... 6424.0-00
HAZARD FLASHER RELAY, K16 ..... 6313.0-00
HAZARD SWITCH, S18 ..... 6313.0-01
HEADLIGHT WASHER (SRA) 6167.1-00
HEADLIGHT, LEFT, E7 ..... 6312.0-01
HEADLIGHT, RIGHT, E8 ..... 6312.0-01
HEADLIGHT/FOG LIGHT WASHER PUMP, M7 ..... 6160.1-00
HEADLIGHT/FOG LIGHT WASHER PUMP, M7 ..... 6167.1-00
HEADLIGHTS/FOG LIGHTS 6312.0
HEAT/A/C CONTROL PANEL ILLUMINATION, E105 ..... 6300.0-02
HEAT/A/C CONTROL PANEL ILLUMINATION, E106 ..... 6300.0-02
HEATED SEATS 5203.0-00
HIFI AMPLIFIER, A18 ..... 6510.1
HIGH BEAM LIGHT RELAY, K46 ..... 6312.0-01
HIGH BEAM LIGHT, LEFT, E11 ..... 6312.0-01
HIGH BEAM LIGHT, RIGHT, E12 ..... 6312.0-01
HIGH LEVEL STOP LIGHT, H34 ..... 6325.0-00
HIGH RANGE SPEAKER, LEFT FRONT, H59 ..... 6510.1-01
HIGH RANGE SPEAKER, RIGHT FRONT, H50 ..... 6510.1-02
HIGH SPEED RELAY, K22 ..... 6450.6-03
HIGH SPEED RELAY, K22 ..... 6450.6-04
HORN 6133.0-00
HORN RELAY, K2 ..... 6133.0-00
HORN SWITCH, S4 ..... 6133.0-00
HORN, LEFT, H2 ..... 6133.0-00
HORN, RIGHT, H3 ..... 6133.0-00
HOT FILM AIR MASS METER, B6207 ..... 1210.17-05
HOT FILM AIR MASS METER, B6217 ..... 1210.20-06
IDLE SPEED CONTROL VALVE, Y6130 ..... 1210.20-01
IGNITION COIL, CYL. 1, T6151 ..... 1210.17-03
IGNITION COIL, CYL. 1, T6151 ..... 1210.20-03
IGNITION COIL, CYL. 2, T6152 ..... 1210.17-03
IGNITION COIL, CYL. 2, T6152 ..... 1210.20-03
IGNITION COIL, CYL. 3, T6153 ..... 1210.17-03
IGNITION COIL, CYL. 3, T6153 ..... 1210.20-03
IGNITION COIL, CYL. 4, T6154 ..... 1210.17-03
IGNITION COIL, CYL. 4, T6154 ..... 1210.20-03
IGNITION COIL, CYL. 5, T6155 ..... 1210.17-03
IGNITION COIL, CYL. 6, T6156 ..... 1210.17-03
IGNITION SWITCH, S2 ..... 0670.2-04
INDEX 0100.0
INSTRUMENT CLUSTER 6211.0
INSTRUMENT CLUSTER, A2w 6211.0
INTAKE AIR RESONANCE CHANGEOVER VALVE, Y6131 ..... 1210.20-01
INTAKE AIR TEMPERATURE SENSOR, B6205 ..... 1210.17-02
INTAKE AIR TEMPERATURE SENSOR, B6205 ..... 1210.20-05
INTEGRATED HEATING– AND CLIMATE CONTROL 6450.6
INTERIOR ACCESSORIES 6332.0-00
INTERIOR LIGHT, FRONT LEFT, E800 ..... 6330.3-00
INTERIOR LIGHTS 6330.3-00
INTERMEDIATE PRESSURE SWITCH, B9 ..... 6450.6-03
INTERMEDIATE PRESSURE SWITCH, B9 ..... 6450.6-04
INTRODUCTION 0110.0
JET HEATER THERMOSWITCH, S198 ..... 6169.0-00
JUMPER PLUG, B900 ..... 6571.0-01
KICK–DOWN SWITCH, S8507 ..... 2460.2-02
KICK–DOWN SWITCH, S8507 ..... 2460.2-06
KNOCK SENSOR, B6240 ..... 1210.17-06
KNOCK SENSOR, B6240 ..... 1210.20-05
LICENSE PLATE LIGHT, LEFT, E43 ..... 6320.0-00
LICENSE PLATE LIGHT, RIGHT, E44 ..... 6320.0-00

carjiagou.com

LICENSE PLATE/LUGGAGE COMPARTMENT LIGHTS 6320.0-00
LIGHT ASSEMBLY, LEFT REAR, E16 ..... 0670.4-12
LIGHT ASSEMBLY, RIGHT REAR E17 ..... 0670.4-12
LIGHT SWITCH DETAILS 6300.0
LIGHT SWITCH, S8 ..... 6300.0-00
LOW BEAM LIGHT RELAY, K48 ..... 6312.0-01
LOW BEAM LIGHT, LEFT, E13 ..... 6312.0-01
LOW BEAM LIGHT, RIGHT, E14 ..... 6312.0-01
LOW RANGE SPEAKER, LEFT FRONT, H58 ..... 6510.1-02
LOW RANGE SPEAKER, LEFT REAR, H57 ..... 6510.1-01
LOW RANGE SPEAKER, RIGHT FRONT, H51 ..... 6510.1-02
LOW RANGE SPEAKER, RIGHT REAR H52 ..... 6510.1-01
LUGGAGE COMPARTMENT LIGHT SWITCH, S826 ..... 6320.0-00
MARKER LIGHT, LEFT FRONT, E21 ..... 6314.0-01
MARKER LIGHT, RIGHT FRONT, E22 ..... 6314.0-01
MIDRANGE SPEAKER, LEFT FRONT, H55 ..... 6510.1-01
MIDRANGE SPEAKER, RIGHT FRONT, H54 ..... 6510.1-02
MIRROR CONTROL SWITCH, S17 ..... 5116.0-00
MIRROR, DRIVER'S SIDE, Y5 ..... 5116.0-01
MIRROR, PASSENGER'S SIDE, Y6 ..... 5116.0-01
NORMAL SPEED RELAY, K21 ..... 6450.6-03
NORMAL SPEED RELAY, K21 ..... 6450.6-04
OBD II CONNECTOR, D110 ..... 0670.5-05
OIL PRESSURE SWITCH, B6231 ..... 6211.0-02
ON–BOARD COMPUTER TEMPERATURE SENSOR, B21 ..... 6581.3-00
OXYGEN SENSOR (BEHIND CATALYTIC CONVERTER), B62002 ..... 1210.20-04
OXYGEN SENSOR (BEHIND CATALYTIC CONVERTER), B6220y 1210.17-04
OXYGEN SENSOR (IN FRONT OF CATALYTIC CONVERTER), B62001 ..... 1210.20-04
OXYGEN SENSOR (IN FRONT OF CATALYTIC CONVERTER), B6210y 1210.17-04
PARK BRAKE SWITCH, S31 ..... 6211.0-00
PARK LIGHT, LEFT, E15 ..... 6314.0-01
PARK LIGHT, RIGHT, E19 ..... 6314.0-01
PARK/TAIL/UNDERHOOD LIGHTS 6314.0
POWER DISTRIBUTION 0670.2
POWER DISTRIBUTION CHART 0670.0
POWER MIRRORS 5116.0
POWER SEATS 5200.0
POWER WINDOW SWITCH, DRIVER'S, S126y 5133.0-01
POWER WINDOW SWITCH, PASSENGER'S, S127y 5133.0-01
PRESSURE SWITCH, B8y 6450.6-03
PRESSURE SWITCH, B8y 6450.6-04
PRESSURE SWITCH, B9508 ..... 6450.6-03
PRESSURE SWITCH, B9508 ..... 6450.6-04
PROGRAM SWITCH, S8503 ..... 2460.2-03
PROGRAM SWITCH, S8503 ..... 2460.2-07
PYROTECHNICAL BELT TENSIONER, DRIVER'S SIDE, G12 ..... 3234.0-00
PYROTECHNICAL BELT TENSIONER, PASSENGER'S SIDE, G13 ..... 3234.0-00
RADIO ANTI–THEFT SWITCH, S20w 6575.2-00
RADIO, N9 ..... 6510.1
RADIO/HIFI 6510.1
REAR DEFOGGER I, E9 ..... 6424.0-00
REAR LEFT MID–HIGH RANGE SPEAKER, H55z 6510.1-01
REAR RIGHT MID–HIGH RANGE SPEAKER, H54z 6510.1-01
REAR WINDOW DEFOGGER 6424.0-00
REAR WINDOW DEFOGGER SWITCH, S76 ..... 6424.0-00
REAR WOOFER, H500 ..... 6510.1-01
RESISTOR, R8554 ..... 0670.4-07
REVERSING LIGHT SWITCH, S8511 ..... 6322.0-00
RIGHT BRAKE LIGHT, RIGHT, H31 ..... 6325.0-00
RIGHT FOG LIGHT, RIGHT, E27 ..... 6312.0-00
SEAT BELT SWITCH, DRIVER'S, S58 ..... 3234.0-01
SEAT BELT SWITCH, PASSENGER'S, S59 ..... 3234.0-01
SEAT CONTROL SWITCH, DRIVER'S SEAT, S51 ..... 5200.0-00
SEAT CONTROL SWITCH, DRIVER'S SEAT, S51 ..... 5200.0-02

carjam.com

SEAT CONTROL SWITCH, DRIVER'S SEAT, S51 ..... 5200.0-04
SEAT CONTROL SWITCH, DRIVER'S SEAT, S51 ..... 5200.0-06
SEAT CONTROL SWITCH, PASSENGER'S SEAT, S56 ..... 5200.0-01
SEAT CONTROL SWITCH, PASSENGER'S SEAT, S56 ..... 5200.0-03
SEAT CONTROL SWITCH, PASSENGER'S SEAT, S56 ..... 5200.0-05
SEAT CONTROL SWITCH, PASSENGER'S SEAT, S56 ..... 5200.0-07
SEAT HEATER SWITCH, DRIVER'S SEAT, S53 ..... 5203.0-00
SEAT HEATER SWITCH, PASSENGER'S SEAT, S54 ..... 5203.0-00
SEAT HEATER, DRIVER'S, E57 ..... 5203.0-00
SEAT HEATER, PASSENGER'S, E58 ..... 5203.0-00
SEAT HEIGHT MOTOR, DRIVER'S, M52 ..... 5200.0-00
SEAT HEIGHT MOTOR, DRIVER'S, M52 ..... 5200.0-02
SEAT HEIGHT MOTOR, DRIVER'S, M52 ..... 5200.0-04
SEAT HEIGHT MOTOR, DRIVER'S, M52 ..... 5200.0-06
SEAT HEIGHT MOTOR, PASSENGER'S, M59 ..... 5200.0-01
SEAT HEIGHT MOTOR, PASSENGER'S, M59 ..... 5200.0-03
SEAT HEIGHT MOTOR, PASSENGER'S, M59 ..... 5200.0-05
SEAT HEIGHT MOTOR, PASSENGER'S, M59 ..... 5200.0-07
SEAT LENGTH ADJUST CUT–OFF RELAY, DRIVER'S, K921 .... 5200.0-02
SEAT LENGTH ADJUST CUT–OFF RELAY, DRIVER'S, K921 .... 5200.0-06
SEAT LENGTH ADJUST CUT–OFF RELAY, PASSENGER'S, K911 ..... 5200.0-03
SEAT LENGTH ADJUST CUT–OFF RELAY, PASSENGER'S, K911 ..... 5200.0-07
SEAT LIMIT SWITCH, DRIVER'S, S910 ..... 5200.0-02
SEAT LIMIT SWITCH, DRIVER'S, S910 ..... 5200.0-06
SEAT LIMIT SWITCH, PASSENGER'S, S911 ..... 5200.0-03
SEAT LIMIT SWITCH, PASSENGER'S, S911 ..... 5200.0-07
SEAT MAT, I1008 ..... 3234.0-02
SEAT MOVEMENT MOTOR, DRIVER'S, M51 ..... 5200.0-00
SEAT MOVEMENT MOTOR, DRIVER'S, M51 ..... 5200.0-02
SEAT MOVEMENT MOTOR, DRIVER'S, M51 ..... 5200.0-04
SEAT MOVEMENT MOTOR, DRIVER'S, M51 ..... 5200.0-06
SEAT MOVEMENT MOTOR, PASSENGER'S, M60 ..... 5200.0-01
SEAT MOVEMENT MOTOR, PASSENGER'S, M60 ..... 5200.0-03
SEAT MOVEMENT MOTOR, PASSENGER'S, M60 ..... 5200.0-05
SEAT MOVEMENT MOTOR, PASSENGER'S, M60 ..... 5200.0-07
SEAT OCCUPANCY DETECTOR, A113 ..... 3234.0-02
SEAT TILT ADJUST CUT–OFF RELAY, DRIVER'S, K920 ..... 5200.0-02
SEAT TILT ADJUST CUT–OFF RELAY, DRIVER'S, K920 ..... 5200.0-06
SEAT TILT ADJUST CUT–OFF RELAY, PASSENGER'S, K910 ... 5200.0-03
SEAT TILT ADJUST CUT–OFF RELAY, PASSENGER'S, K910 ... 5200.0-07
SEATBACK HEATER, DRIVER'S, E56 ..... 5203.0-00
SEATBACK HEATER, PASSENGER'S, E59 ..... 5203.0-00
SECONDARY AIR PUMP RELAY, K6304 ..... 1210.17-05
SECONDARY AIR PUMP RELAY, K6304 ..... 1210.20-09
SECONDARY AIR PUMP VALVE, Y6163 ..... 1210.17-05
SECONDARY AIR PUMP VALVE, Y6163 ..... 1210.20-09
SHIFT–LOCK,Y19 ..... 2460.2-02
SHIFT–LOCK,Y19 ..... 2460.2-05
SIDE LIGHT SWITCH, S408 ..... 6330.3-00
SLIP CONTROL (ABS) 3450.0
SLIP CONTROL (ABS/ASC) 3450.1
SLIP CONTROL MODULE (ABS/ASC), A52 ..... 3450.1
SOLENOID VALVE ("RUNNING LOSSES"), Y6550 ..... 1210.17-05
SPEED SENSOR – ABS, LEFT FRONT, B2 ..... 3450.0-01
SPEED SENSOR – ABS, LEFT FRONT, B2 ..... 3450.1-03
SPEED SENSOR – ABS, LEFT FRONT, B2 ..... 3450.1-08
SPEED SENSOR – ABS, LEFT FRONT, B2 ..... 3450.1-12
SPEED SENSOR – ABS, LEFT REAR, B4 ..... 3450.0-01
SPEED SENSOR – ABS, LEFT REAR, B4 ..... 3450.1-03
SPEED SENSOR – ABS, LEFT REAR, B4 ..... 3450.1-08
SPEED SENSOR – ABS, LEFT REAR, B4 ..... 3450.1-12
SPEED SENSOR – ABS, RIGHT FRONT, B1 ..... 3450.0-01
SPEED SENSOR – ABS, RIGHT FRONT, B1 ..... 3450.1-03
SPEED SENSOR – ABS, RIGHT FRONT, B1 ..... 3450.1-08
SPEED SENSOR – ABS, RIGHT FRONT, B1 ..... 3450.1-12
SPEED SENSOR – ABS, RIGHT REAR B3 ..... 3450.0-01
SPEED SENSOR – ABS, RIGHT REAR B3 ..... 3450.1-03
SPEED SENSOR – ABS, RIGHT REAR B3 ..... 3450.1-08

carjie.com

SPEED SENSOR – ABS, RIGHT REAR B3 . . . . . 3450.1-12
SPLICE LOCATION VIEWS 8000.0
START 1240.0
STARTER IMMOBILIZATION SWITCH, S235 . . . . . 1240.0-00
STARTER, M6510 . . . . . 1240.0-01
SUPPLEMENTAL RESTRAINT SYSTEM (AIR BAG) 3234.0
SUPPLEMENTAL RESTRAINT SYSTEM CONTROL MODULE, A12 . . . . . 3234.0
SYMBOLS 0140.0
TAIL LIGHT, LEFT, H25 . . . . . 6314.0-01
TAIL LIGHT, LEFT, H37 . . . . . 6314.0-01
TAIL LIGHT, RIGHT, H30 . . . . . 6314.0-01
TAIL LIGHT, RIGHT, H39 . . . . . 6314.0-01
TEMPERATURE SWITCH, S36 . . . . . 6450.6-03
TEMPERATURE WHEEL SWITCH, S531 . . . . . 6450.6-01
THROTTLE FLAP HEATER, E104 . . . . . 3450.1-02
THROTTLE POSITION SENSOR, R6252 . . . . . 1210.17-05
THROTTLE POSITION SENSOR, R6252 . . . . . 1210.20-05
TRANSMISSION CONTROL MODULE (EGS), A8500 . . . . . 2460.2
TRANSMISSION POSITION INDICATOR LIGHT, E82 . . . . . 6300.0-02
TRANSMISSION VALVE UNIT, Y8505y 2460.2-05
TRANSMISSION VALVE UNIT, Y8521 . . . . . 2460.2-01
TRANSMITTER MODULE (EWS II), A835 . . . . . 6135.0-00
TRUNK COMPARTMENT LIGHT, E32 . . . . . 6320.0-00
TRUNK LOCK MOTOR, M17 . . . . . 5126.0-03
TURN LIGHT, LEFT FRONT, H7 . . . . . 6313.0-02
TURN LIGHT, LEFT REAR, H6 . . . . . 6313.0-03
TURN LIGHT, RIGHT FRONT, H4 . . . . . 6313.0-02
TURN LIGHT, RIGHT REAR H5 . . . . . 6313.0-03
TURN/HAZARD LIGHTS 6313.0
UNLOADER RELAY, TERMINAL 15, K6326 . . . . . 1210.17-02
UNLOADER RELAY, TERMINAL 15, K6326 . . . . . 1210.20-02
UNLOADER RELAY, TERMINAL 15, K9 . . . . . 5203.0-00
VARIABLE CAMSHAFT CONTROL VALVE 1, Y6275 . . . . . 1210.17-01
VEHICLE SPEED SENSOR, B10 . . . . . 6211.0-04
WASHER JET HEATER, LEFT, E51 . . . . . 6169.0-00
WASHER JET HEATER, RIGHT, E52 . . . . . 6169.0-00
WASHER PUMP, M4 . . . . . 6160.1-01
WASHER PUMP, M4 . . . . . 6160.1-02
WATER VALVE, Y4z 6450.6-01
WINDOW MOTOR, DRIVER'S, M21 . . . . . 5133.0-02
WINDOW MOTOR, PASSENGER'S, M23 . . . . . 5133.0-02
WINDSHIELD WASHER JET HEATERS 6169.0-00
WIPER MOTOR, M3 . . . . . 6160.1-00
WIPER MOTOR, M3 . . . . . 6160.1-02
WIPER/WASHER MODULE (LOW II), A64 . . . . . 6160.1-02
WIPER/WASHER MODULE (WWM) 6160.1
WIPER/WASHER MODULE, A51 . . . . . 6160.1
WIPER/WASHER MODULE, A51 . . . . . 6167.1-00
WIPER/WASHER SWITCH, S5 . . . . . 6160.1-01
WIPER/WASHER SWITCH, S5 . . . . . 6160.1-02
ZKE CENTRAL LOCKING (ZV) 5126.0
ZKE POWER WINDOWS (FH) 5133.0

original.com

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 that is only a few cm long. To ensure clear arrangement , all connectors, lines 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 cells **0670.3 Fuse Details** and **0670.4 Ground Distribution** where all lines are illustrated with all plug connections, line branches and connected components.

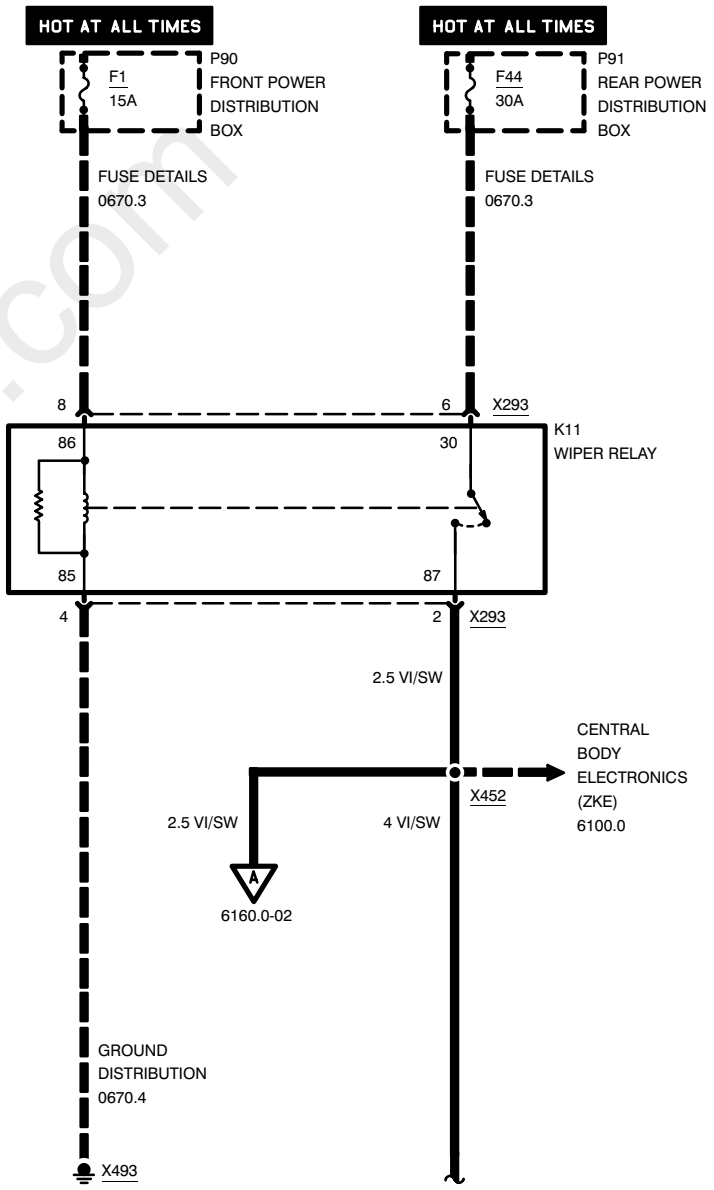
All circuit symbols used are listed and explained in cell **0140.0 Symbols**.

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 location of connectors and components which are difficult to locate are shown in line arts or illustrations. In cell **8000.0 Splice 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.



cardiagn.com

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 P91).

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 of connector X293 indicates that both pins belong to connector X293.

5. The dashed line from fuse F1 to pin 8 of connector X293 shows the positive supply of relay K11. If required, refer to cell **0670.3 Fuse Details** at fuse F1 for the complete line progressing with plug connections, line branches, wire colors and cross sections.

6. The dashed line with an arrow at splice X452 indicates that several wires lead to splice X452. All lines leading to the connection are illustrated in cell **6100.0 Central Body Electronics (ZKE)**. An interrupted line with an arrow indicates that only this one wire leads to another circuit.

7. The dashed line from pin 4 of connector X293 to ground X493 shows the ground supply for 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 colors, and cross sections.

8. The interrupted line from splice X452 with an **A** in the open arrow is continued on page 6160.0–02.
Termination of wire 4 VI/SW from splice X452 with a wavy line indicates that the wire is continued on the opposite page.

cardiagn.com

SYMBOLS


BATTERY


FUSE DETAILS

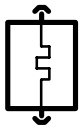

FUSIBLE LINK


CIRCUIT BREAKER


THERMO SWITCH

SOLENOID


SOLENOID CONTROLLED VALVE OR CLUTCH SOLENOID


HEATING ELEMENT


LOUDSPEAKER OR HORN


LIGHT


PERMANENT MAGNET MOTOR ONE SPEED


PERMANENT MAGNET MOTOR TWO SPEEDS


KNOCK SENSOR


VARIABLE RESISTANCE SENSOR VARIABLE CONTACT IS MOVED BY AN EXTERNAL FORCE


VARIABLE RESISTOR RESISTANCE IS CHANGED BY TEMPERATURE OR PRESSURE

DIODE CURRENT CAN FLOW ONLY IN DIRECTION OF ARROW

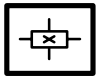
ZENER DIODE TO REGULATE VOLTAGE


LIGHT EMITTING DIODE


OXYGEN SENSOR


ANTENNA


CONTROL/POWER ELECTRONICS


HALL EFFECT SENSOR


RADIO



TRANSISTORIZED SWITCH



INDUCTIVE SENSOR



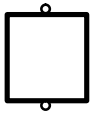
VEHICLE SPEED SENSOR

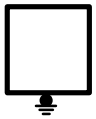
cardiagn.com

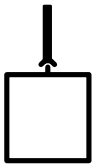
SYMBOLS

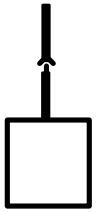

ENTIRE COMPONENT SHOWN

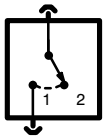

PART OF COMPONENT SHOWN


COMPONENT WITH SCREW TERMINALS

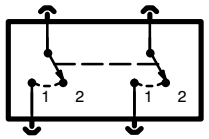

COMPONENT CASE ATTACHED DIRECTLY TO METAL PART OF CAR (GROUNDED)


CONNECTOR ATTACHED TO COMPONENT


CONNECTOR ATTACHED TO COMPONENT LEAD (PIGTAIL)



ONE POLE, TWO POSITION SWITCH



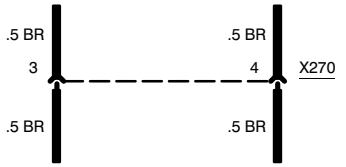
SWITCHES THAT MOVE TOGETHER

DASHED LINE SHOWS A MECHANICAL CONNECTION BETWEEN SWITCHES

WIRE COLOR	
BL	BLUE
BR	BROWN
GE	YELLOW
GN	GREEN
GR	GRAY
OR	ORANGE
RS	PINK
RT	RED
SW	BLACK
VI	VIOLET
WS	WHITE
TR	TRANSPARENT



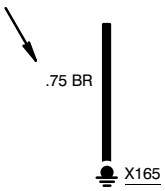




TWO CONNECTIONS (PINS) IN THE SAME CONNECTOR

DASHED LINE INDICATES TERMINALS OF THE SAME CONNECTOR

WIRE SIZE IN MM SQUARED

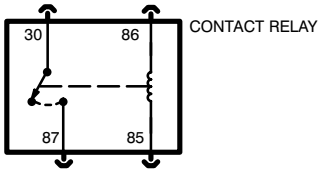


WIRE ATTACHED TO METAL PART OF CAR (GROUNDED)

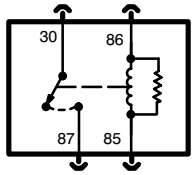
GROUND NUMBERED FOR REFERENCE ON COMPONENT LOCATION CHART

carDiagn.com

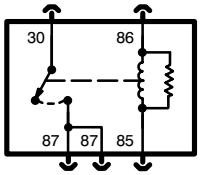
SYMBOLS



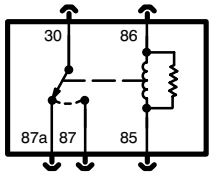
CONTACT RELAY



RELAY WITH RESISTOR ACROSS WINDING

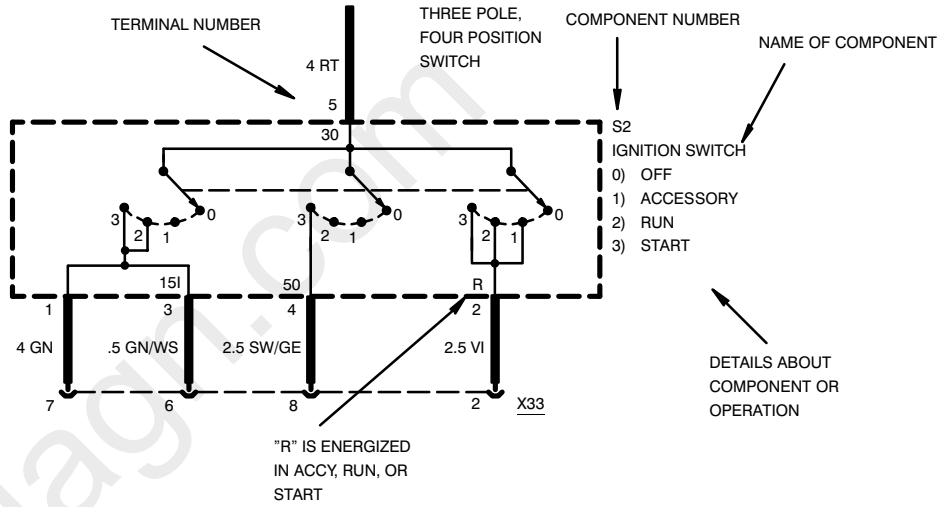


CONTACT RELAY WITH TWO OUTPUTS

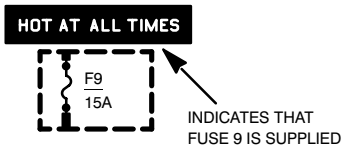


CHANGEOVER RELAY WITH TWO OUTPUTS

TERMINAL NUMBER	DESCRIPTION
30	RELAY INPUT
85	RELAY OUTPUT (WINDING)
86	RELAY INPUT (WINDING)
87	RELAY OUTPUT (ENERGIZED)
87a	RELAY OUTPUT (AT REST)



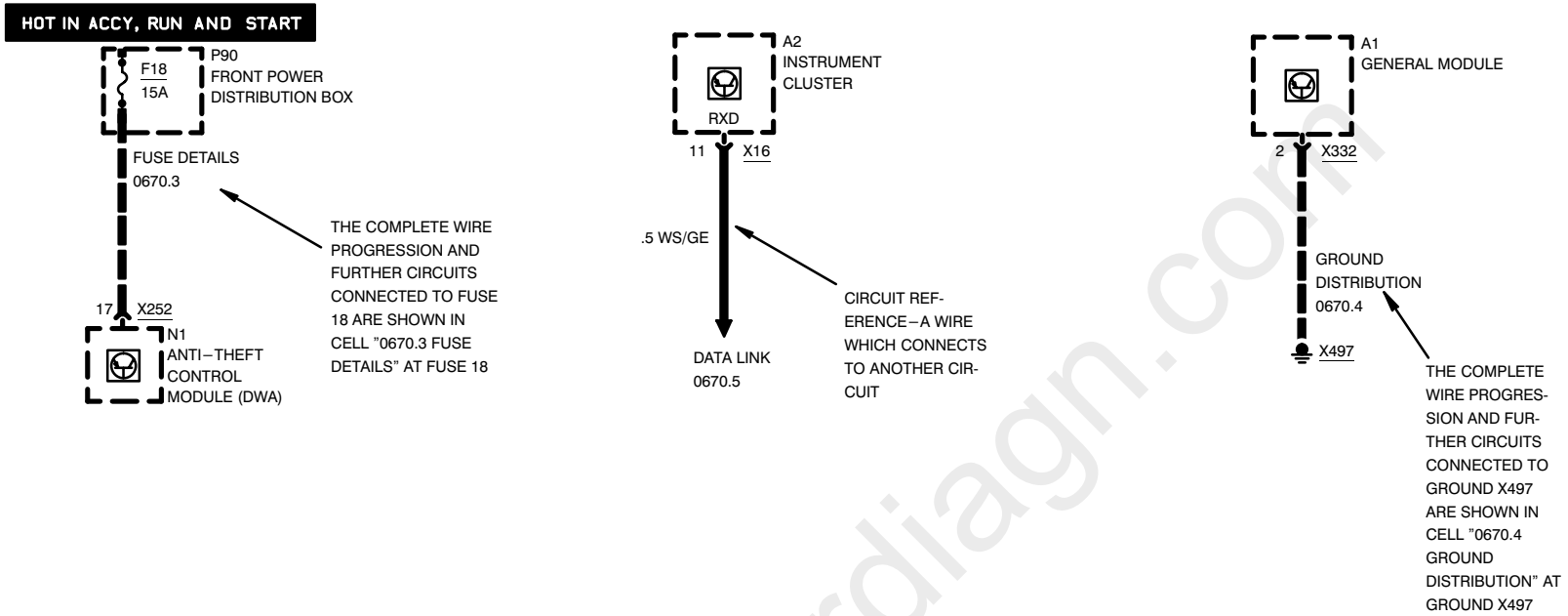
TERMINAL NUMBER	DESCRIPTION	TERMINAL NUMBER	DESCRIPTION
50	VOLTAGE: IGNITION SWITCH IN START	15I	VOLTAGE: IGNITION SWITCH IN RUN
30	VOLTAGE: SUPPLIED AT ALL TIMES	R	VOLTAGE: IGNITION SWITCH IN ACCESSORY, RUN OR START
15	VOLTAGE: IGNITION SWITCH IN RUN OR START	31	GROUND



POWER STATUS	DESCRIPTION
HOT AT ALL TIMES	VOLTAGE: SUPPLIED AT ALL TIMES
HOT IN RUN AND START	VOLTAGE: IGNITION SWITCH IN RUN OR START
HOT IN ACCY, RUN AND START	VOLTAGE: IGNITION SWITCH IN ACCESSORY, RUN OR START

cardiagn.com

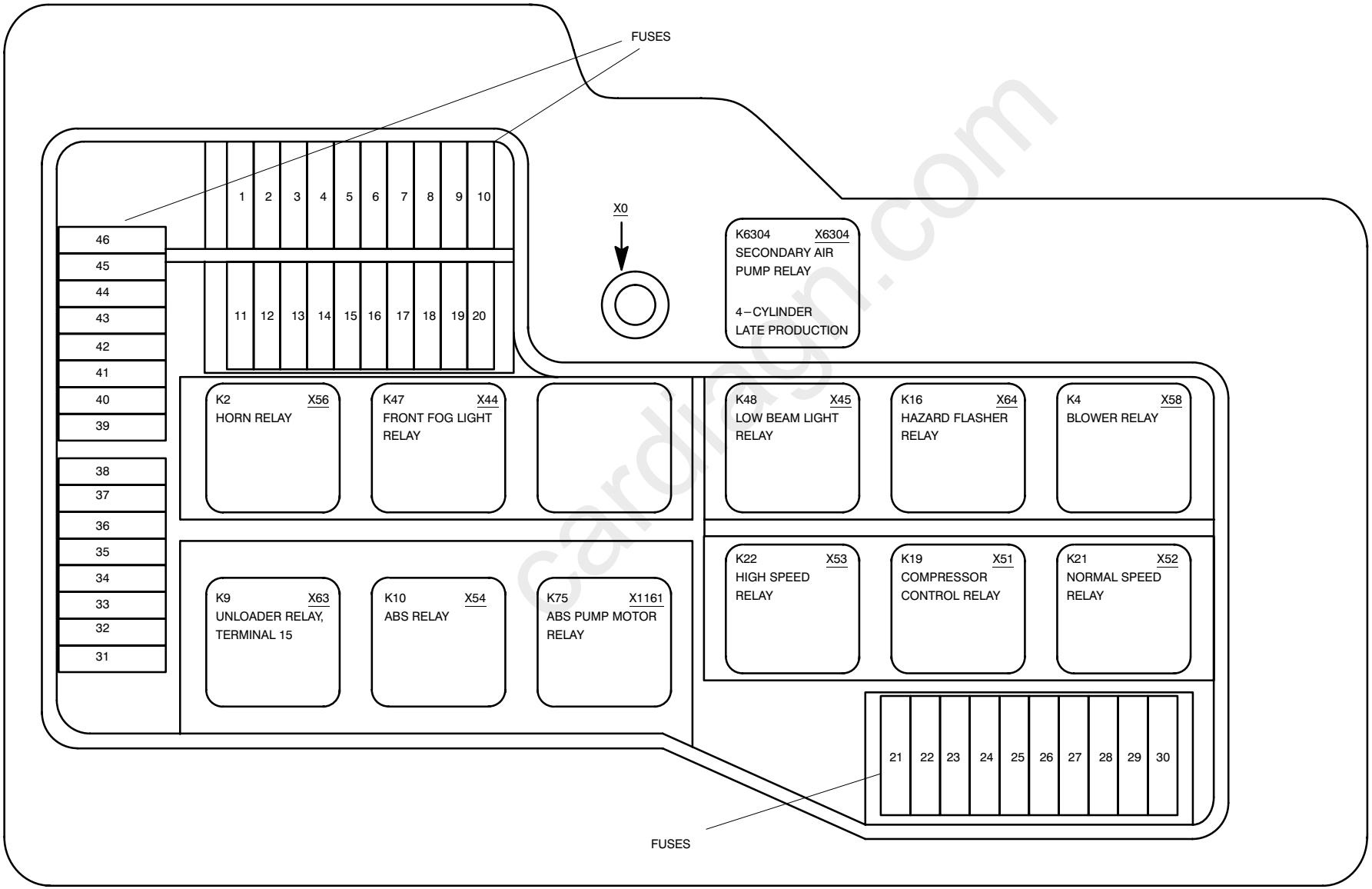
SYMBOLS



cardiagn.com

POWER DISTRIBUTION CHART

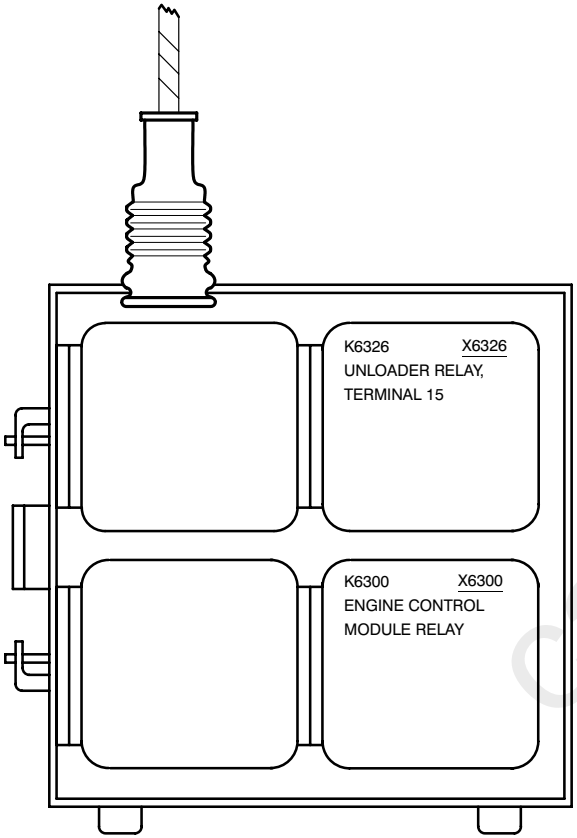
FRONT POWER DISTRIBUTION BOX



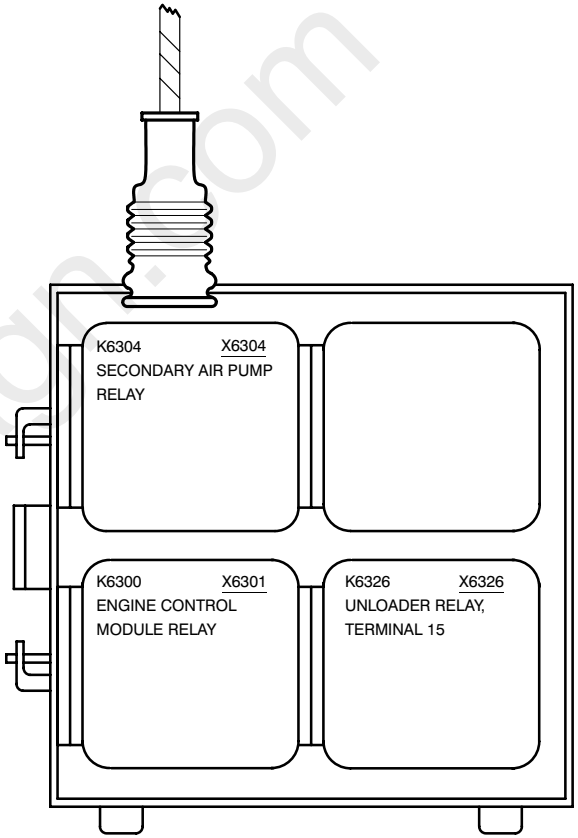
cardiagn.com

POWER DISTRIBUTION CHART

IN E–BOX



4–CYLINDER

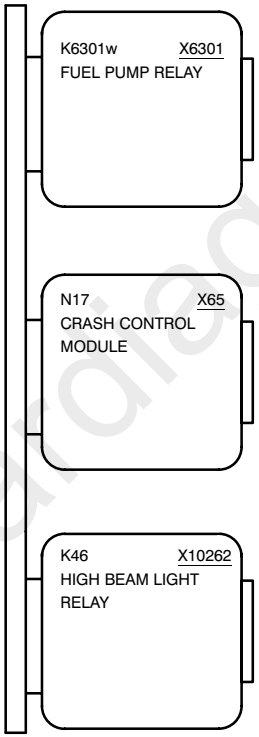


6–CYLINDER

cardiagn.com

POWER DISTRIBUTION CHART

RELAY PANEL UNDER LH SIDE OF DASHBOARD



cardiagn.com

BMW 3 Z3

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	20A	5A	15A	20A	30A	7.5A	7.5A	5A	30A	15A	5A		15A	30A	30A	5A	5A	5A	10A	5A	10A	5A	5A	7.5A
1210.17	ENGINE CONTROL SYSTEM MS41.1 (6−CYLINDER M52)													●			●		●											
1210.20	ENGINE CONTROL SYSTEM (DME M5.2, 4−CYLINDER M44)													●			●		●											
1230.0	CHARGING SYSTEM																										●			
1240.0	START																												●	
1290.0	E−BOX FAN																													
2460.2	ELECTRONIC TRANSMISSION CONTROL (EGS A4S 310R)																										●		●	
3234.0	SUPPLEMENTAL RESTRAINT SYSTEM (AIR BAG)																											●		
3450.0	SLIP CONTROL (ABS)										●											●						●		
3450.1	SLIP CONTROL (ABS/ASC)										●											●					●	●		
5116.0	POWER MIRRORS																								●					
5126.0	ZKE CENTRAL LOCKING (ZV)							●																						
5133.0	ZKE POWER WINDOWS (FH)														●															
5200.0	POWER SEATS					●														●										
5203.0	HEATED SEATS				●																			●						
5430.0	ELECTRO−MECHANICAL CONVERTIBLE TOP	●																												
6100.0	CENTRAL BODY ELECTRONICS (ZKE IV)														●															
6133.0	HORN								●																					
6135.0	DRIVE−AWAY PROTECTION (EWS II)																												●	
6160.1	WIPER/WASHER MODULE (WWM)			●																										
6167.1	HEADLIGHT WASHER (SRA)			●																										
6169.0	WINDSHIELD WASHER JET HEATERS																								●					

cardiagn.com

BMW 3 Z3

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	20A	5A	15A	20A	30A	7.5A	7.5A	5A	30A	15A	5A		15A	30A	30A	5A	5A	5A	10A	5A	10A	5A	5A	7.5A
6211.0	INSTRUMENT CLUSTER																							●				●		
6213.3	DIGITAL CLOCK																													
6300.0	LIGHT SWITCH DETAILS																						●	●		●				
6312.0	HEADLIGHTS/FOG LIGHTS											●	●			●							●	●		●				●
6313.0	TURN/HAZARD LIGHTS																							●						
6314.0	PARK/TAIL/UNDERHOOD LIGHTS																													
6320.0	LICENSE PLATE/LUGGAGE COMPARTMENT LIGHTS																													
6322.0	BACK UP LIGHTS																										●			
6325.0	BRAKE LIGHTS																													
6330.3	INTERIOR LIGHTS																													
6332.0	INTERIOR ACCESSORIES																													
6350.0	CRASH CONTROL MODULE											●	●													●				
6424.0	REAR WINDOW DEFOGGER						●																							
6450.6	INTEGRATED HEATING– AND CLIMATE CONTROL																●				●									
6510.1	RADIO/HIFI									●																				
6561.0	CELLULAR TELEPHONE (PROVISIONS)																													
6571.0	CRUISE CONTROL (TEMPOMAT)																												●	
6575.2	ANTI–THEFT SYSTEM (ALPINE)																													
6581.3	BOARD COMPUTER (BC–LOW)																													

cardiagn.com

FUSE CHART

FUSES 30 TO 48

		FUSE NUMBER																	
		30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48
		7.5A	5A	30A	10A	15A	25A	30A	10A	30A	7.5A	30A	15A	5A	5A	15A	7.5A	15A		40A
1210.17	ENGINE CONTROL SYSTEM MS41.1 (6−CYLINDER M52)										●									
1210.20	ENGINE CONTROL SYSTEM (DME M5.2, 4−CYLINDER M44)																			
1230.0	CHARGING SYSTEM																			
1240.0	START		●														●			
1290.0	E−BOX FAN																			
2460.2	ELECTRONIC TRANSMISSION CONTROL (EGS A4S 310R)																	●		
3234.0	SUPPLEMENTAL RESTRAINT SYSTEM (AIR BAG)												●	●						
3450.0	SLIP CONTROL (ABS)									●								●		
3450.1	SLIP CONTROL (ABS/ASC)									●								●		
5116.0	POWER MIRRORS																			
5126.0	ZKE CENTRAL LOCKING (ZV)						●								●					
5133.0	ZKE POWER WINDOWS (FH)																			
5200.0	POWER SEATS																			
5203.0	HEATED SEATS																			
5430.0	ELECTRO−MECHANICAL CONVERTIBLE TOP																	●		
6100.0	CENTRAL BODY ELECTRONICS (ZKE IV)				●		●								●					
6133.0	HORN																			
6135.0	DRIVE−AWAY PROTECTION (EWS II)		●													●	●			
6160.1	WIPER/WASHER MODULE (WWM)							●	●							●				
6167.1	HEADLIGHT WASHER (SRA)							●								●				
6169.0	WINDSHIELD WASHER JET HEATERS																			

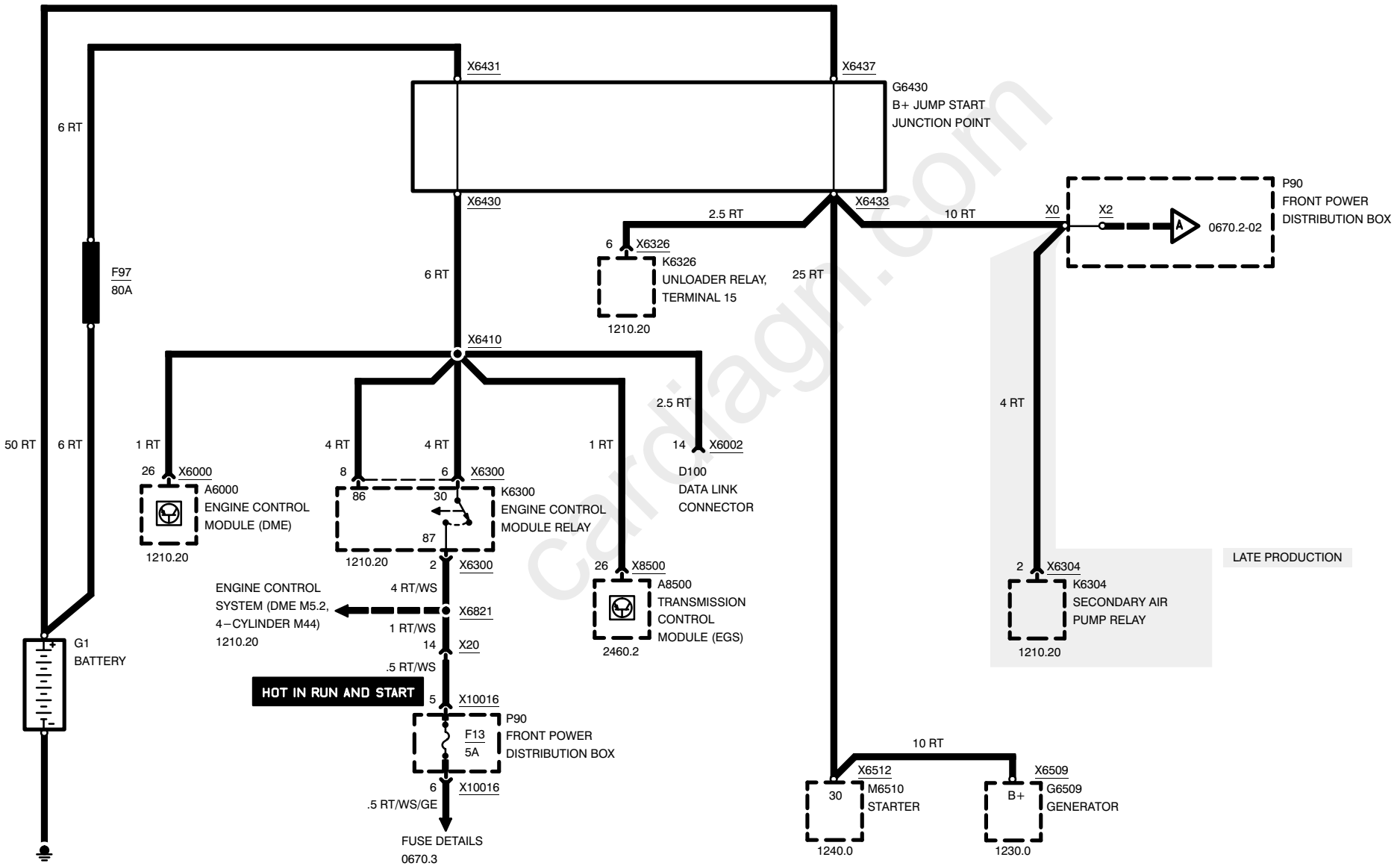
cardiagn.com

FUSE CHART

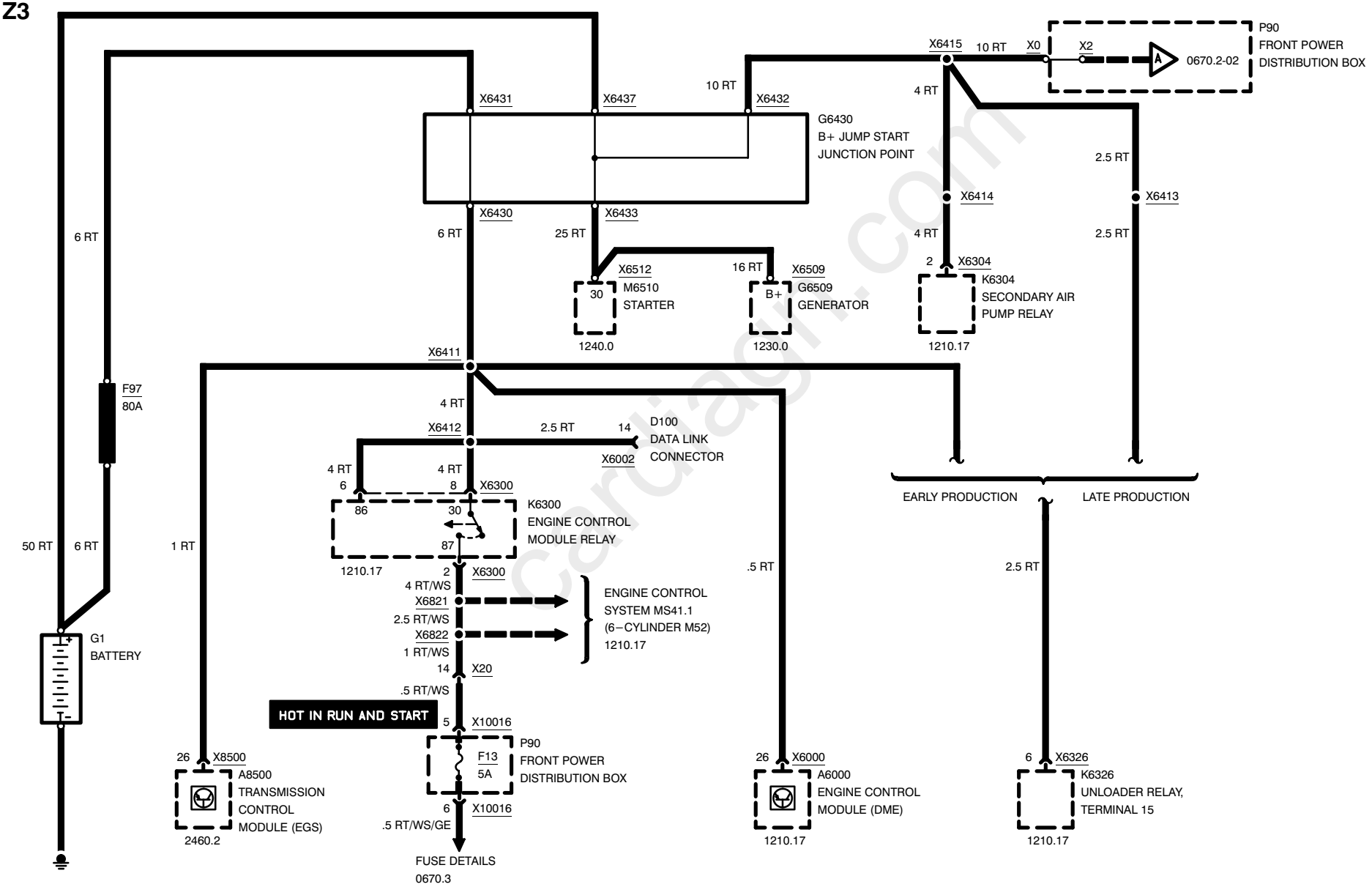
FUSES 30 TO 48

		FUSE NUMBER																		
		30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48
		7.5A	5A	30A	10A	15A	25A	30A	10A	30A	7.5A	30A	15A	5A	5A	15A	7.5A	15A		40A
6211.0	INSTRUMENT CLUSTER		●															●		
6213.3	DIGITAL CLOCK		●														●			
6300.0	LIGHT SWITCH DETAILS				●				●											
6312.0	HEADLIGHTS/FOG LIGHTS	●																		
6313.0	TURN/HAZARD LIGHTS					●														
6314.0	PARK/TAIL/UNDERHOOD LIGHTS				●				●											
6320.0	LICENSE PLATE/LUGGAGE COMPARTMENT LIGHTS				●				●											
6322.0	BACK UP LIGHTS																			
6325.0	BRAKE LIGHTS																	●		
6330.3	INTERIOR LIGHTS				●										●					
6332.0	INTERIOR ACCESSORIES			●					●											
6350.0	CRASH CONTROL MODULE					●														
6424.0	REAR WINDOW DEFOGGER																			
6450.6	INTEGRATED HEATING– AND CLIMATE CONTROL										●	●								●
6510.1	RADIO/HIFI															●				
6561.0	CELLULAR TELEPHONE (PROVISIONS)				●											●				
6571.0	CRUISE CONTROL (TEMPOMAT)																	●		
6575.2	ANTI–THEFT SYSTEM (ALPINE)		●												●					
6581.3	BOARD COMPUTER (BC–LOW)		●															●		

cardiagn.com

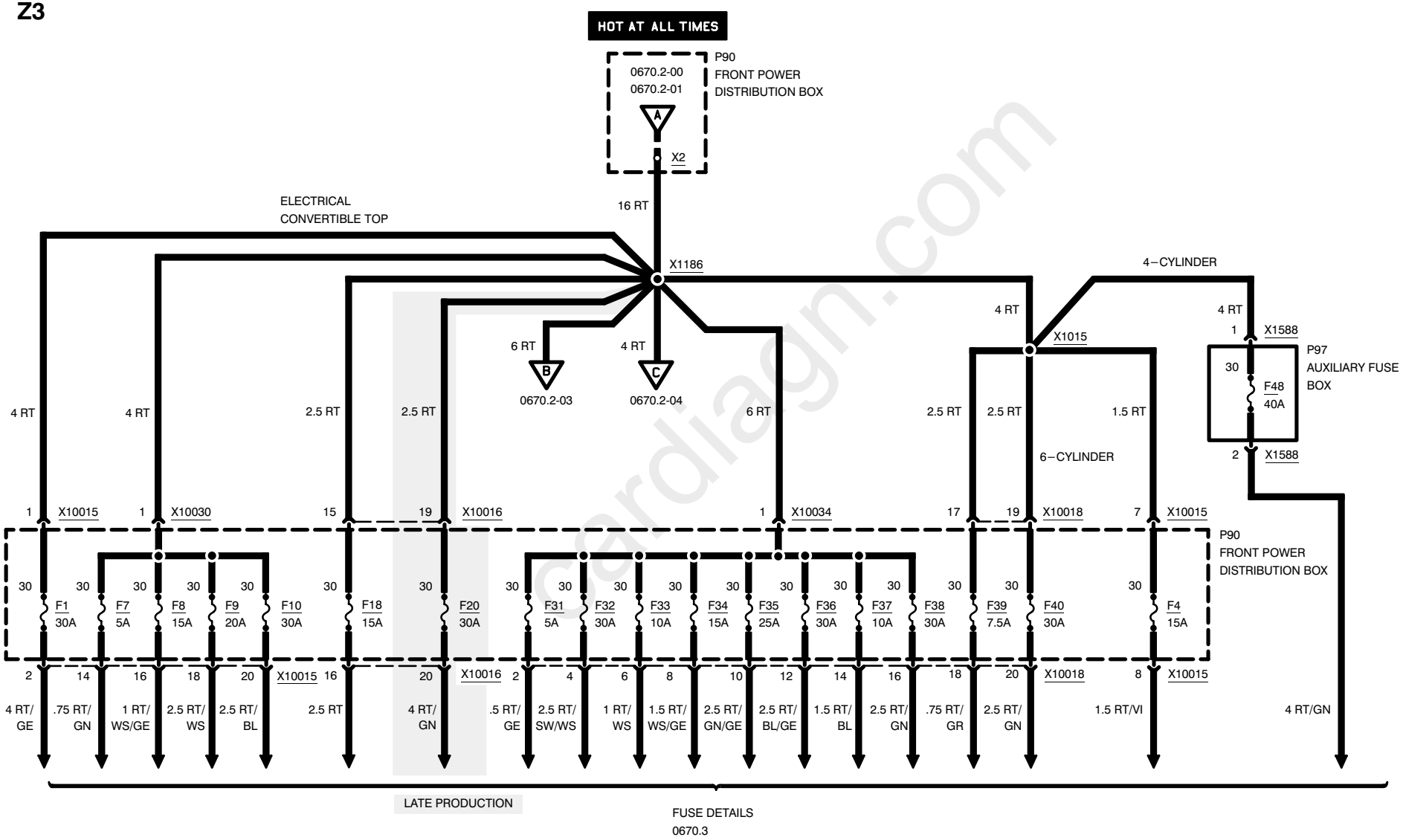


cardiagn.com



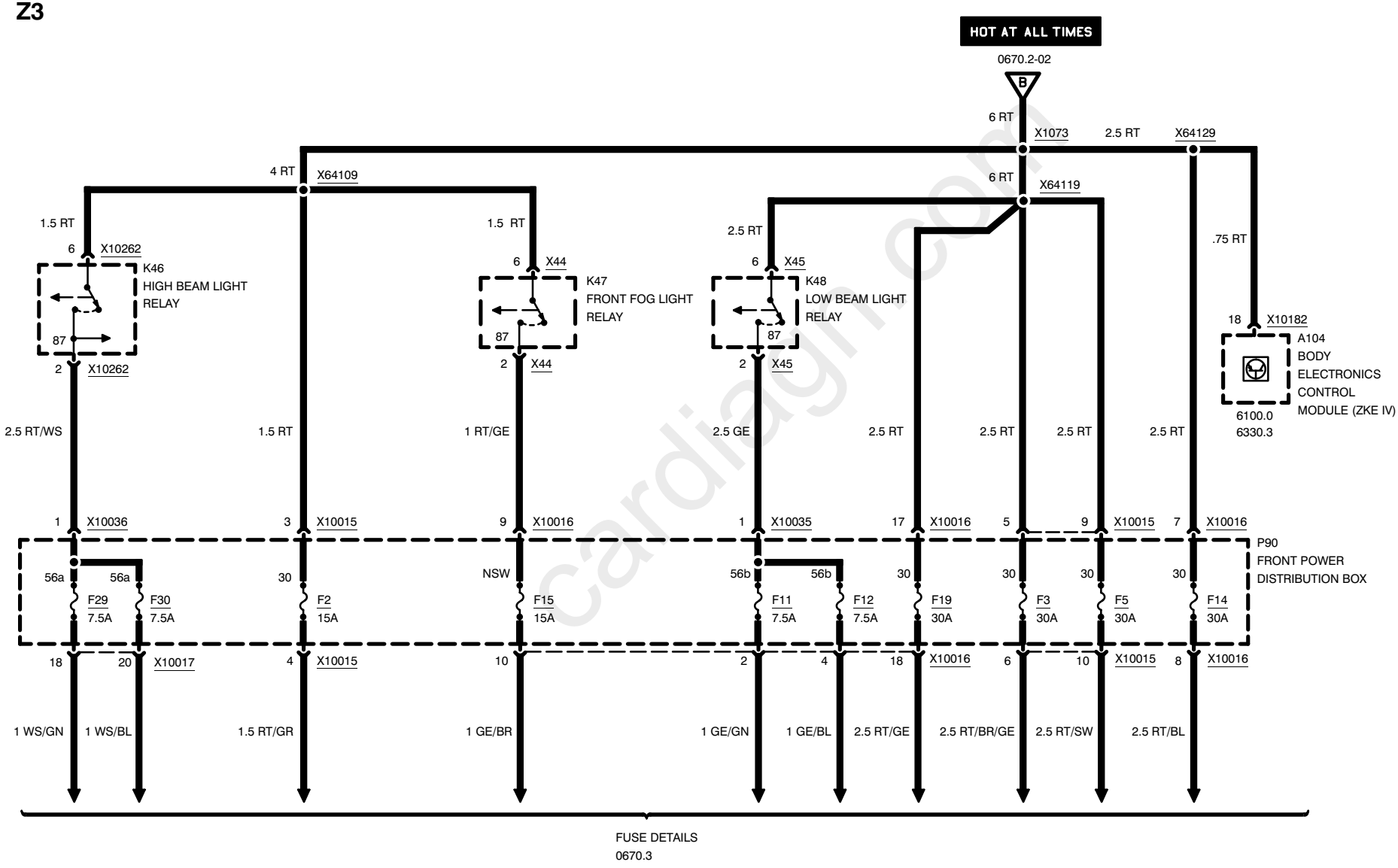
Cartiagr.com

POWER DISTRIBUTION



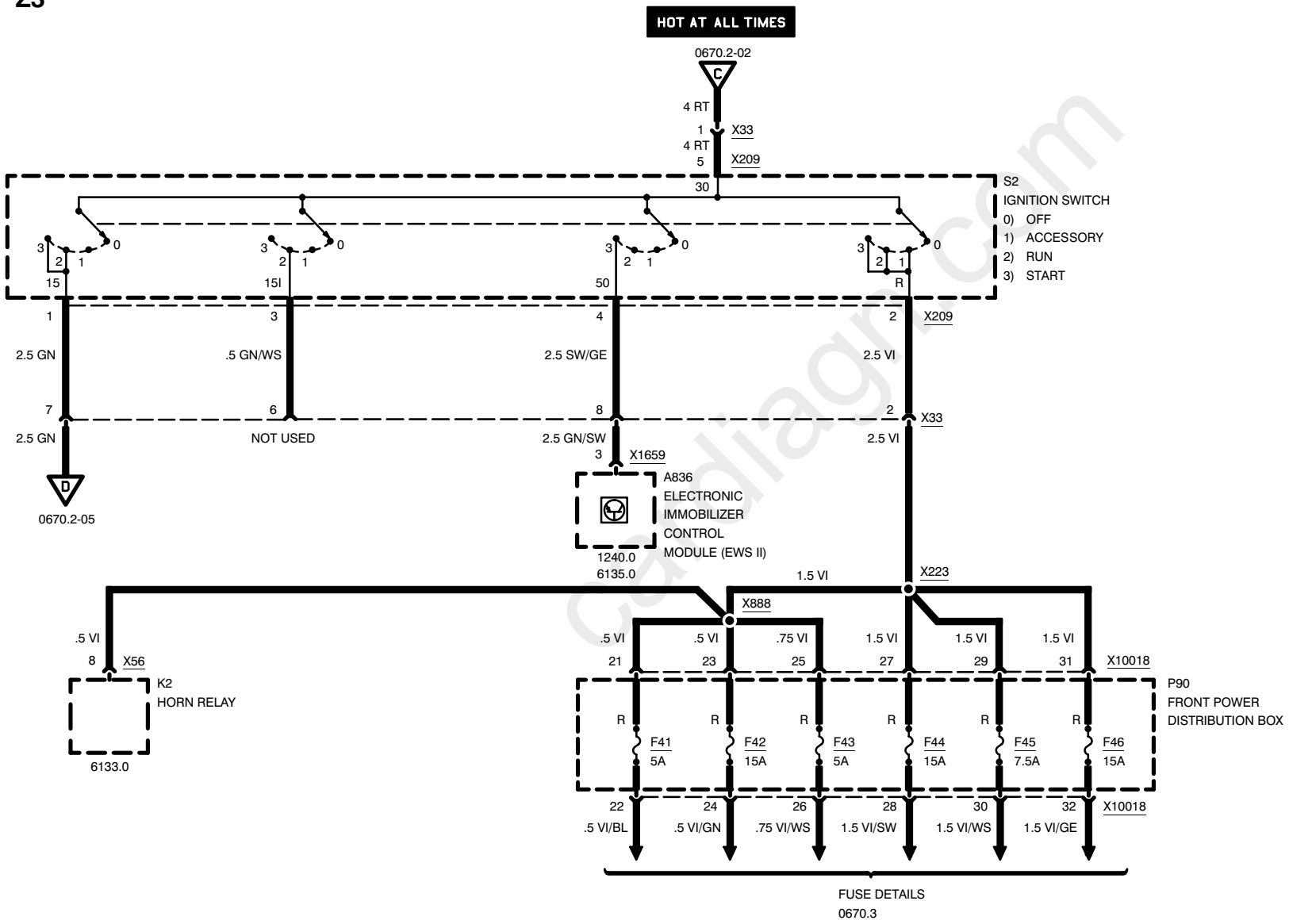
cardiagn.com

POWER DISTRIBUTION



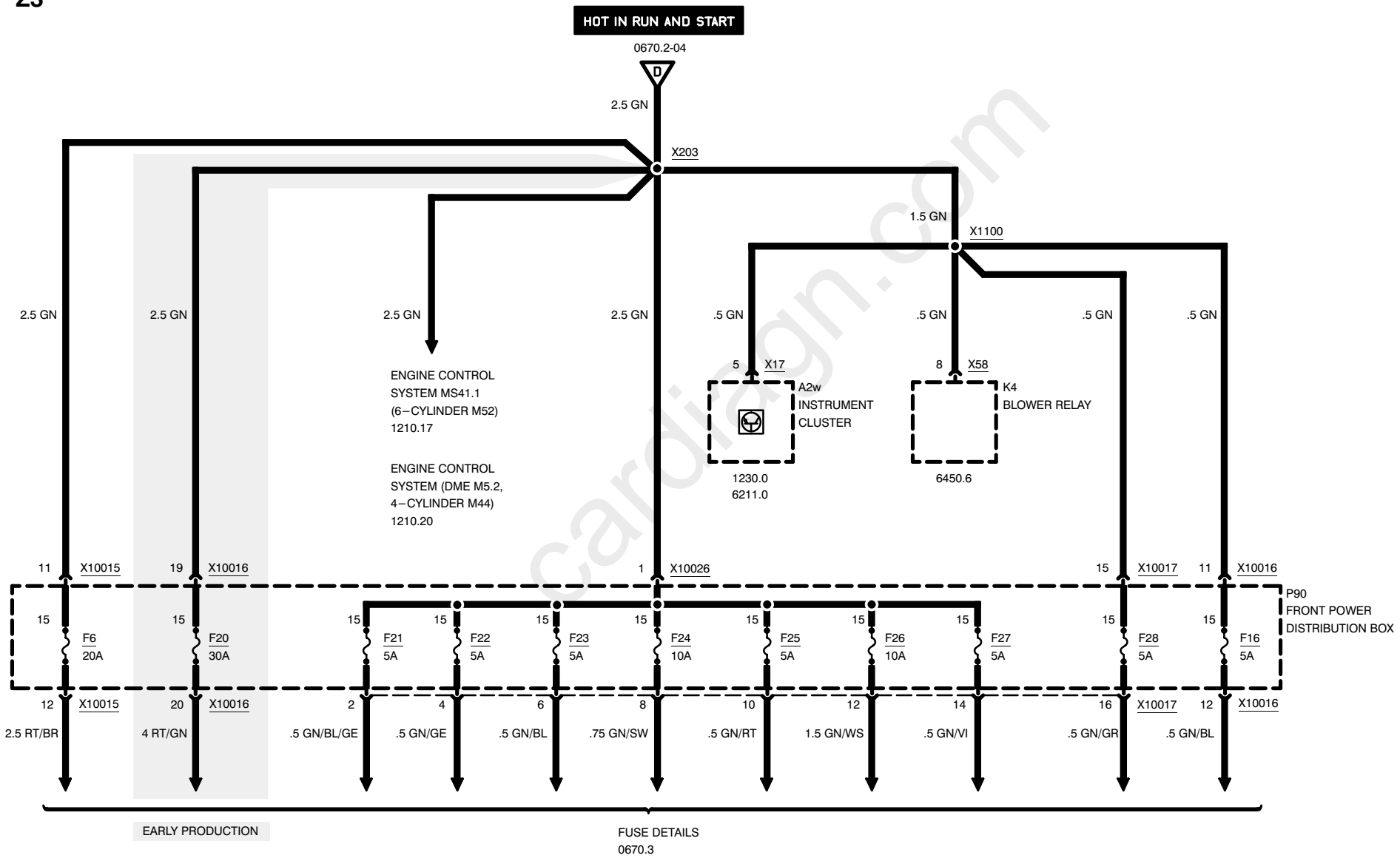
cardiagn.com

POWER DISTRIBUTION



cardiagn.com

POWER DISTRIBUTION

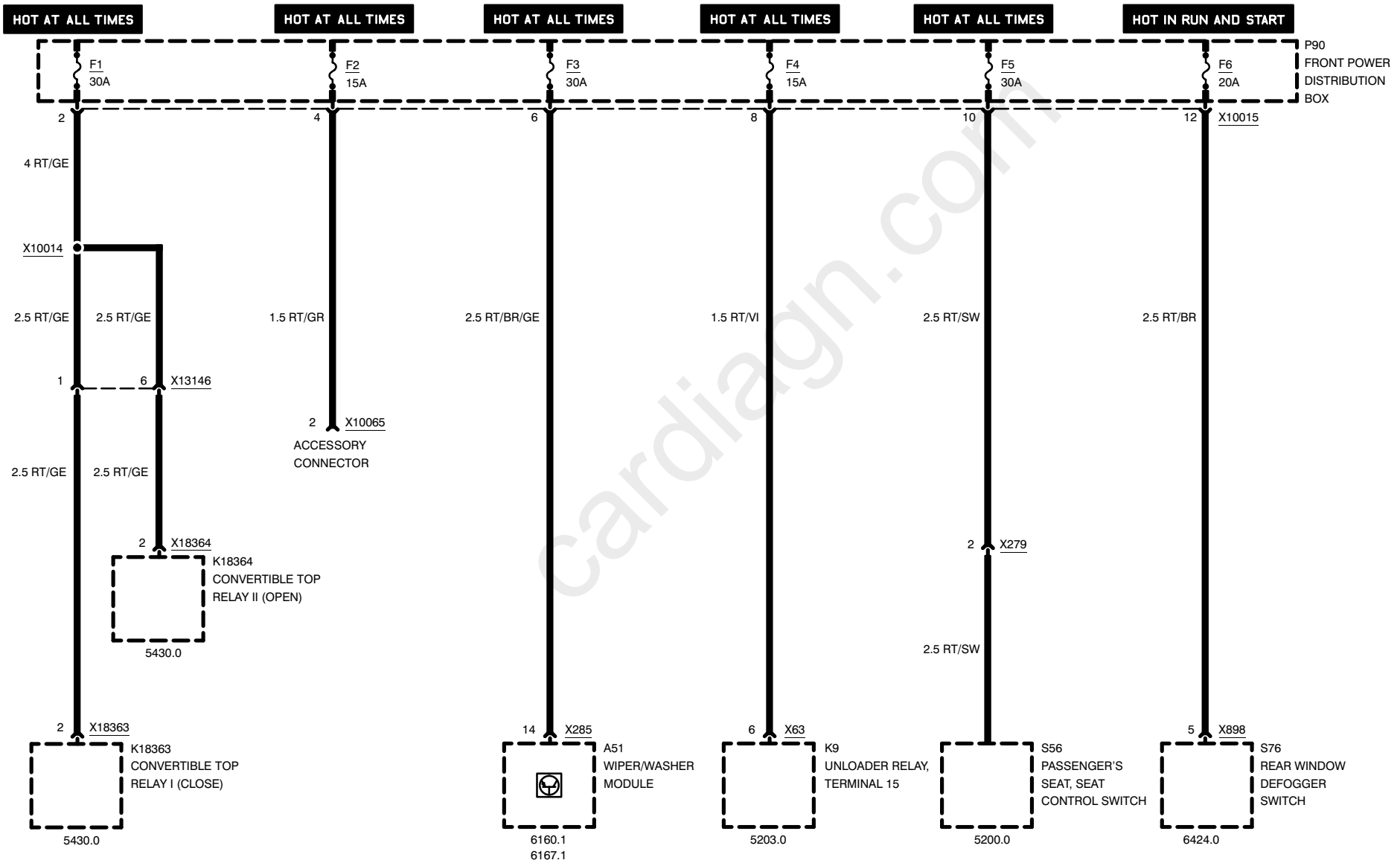


cardiagn.com

FUSE DETAILS

FUSES 1, 2, 3, 4, 5, AND 6

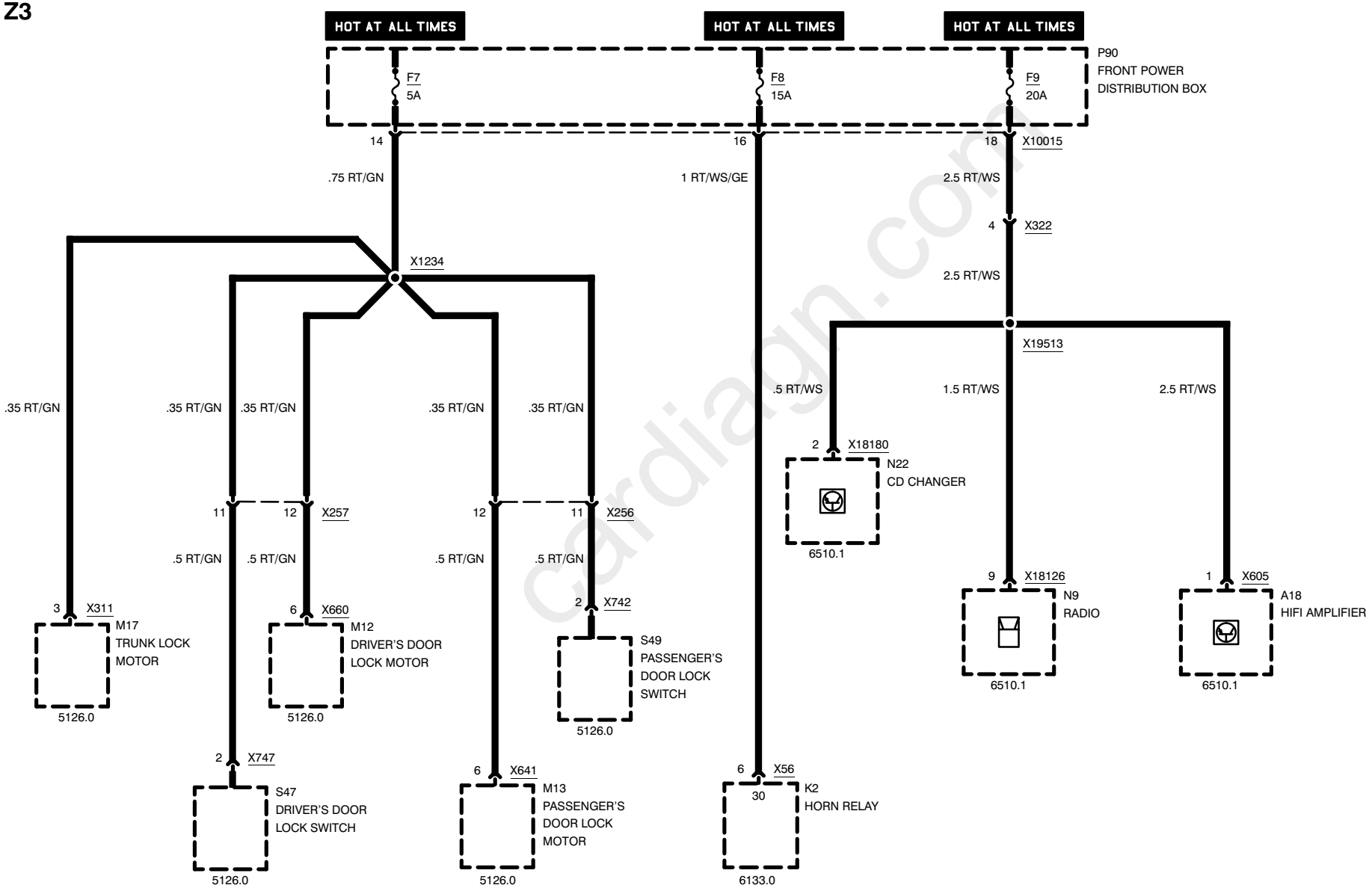
BMW 3 Z3



cardiagn.com

FUSE DETAILS

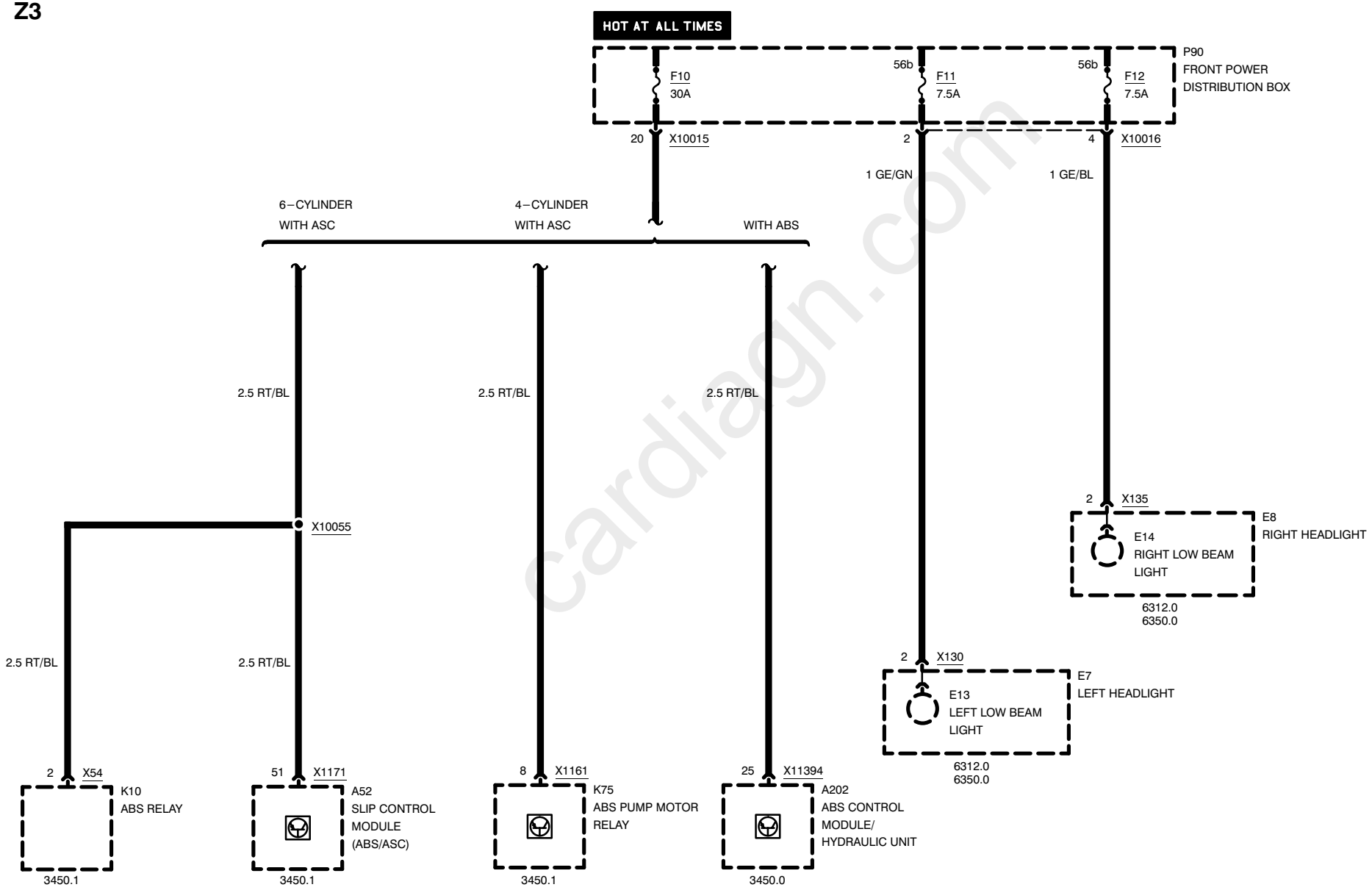
FUSES 7, 8, AND 9



cardiagn.com

FUSE DETAILS

FUSES 10, 11, AND 12

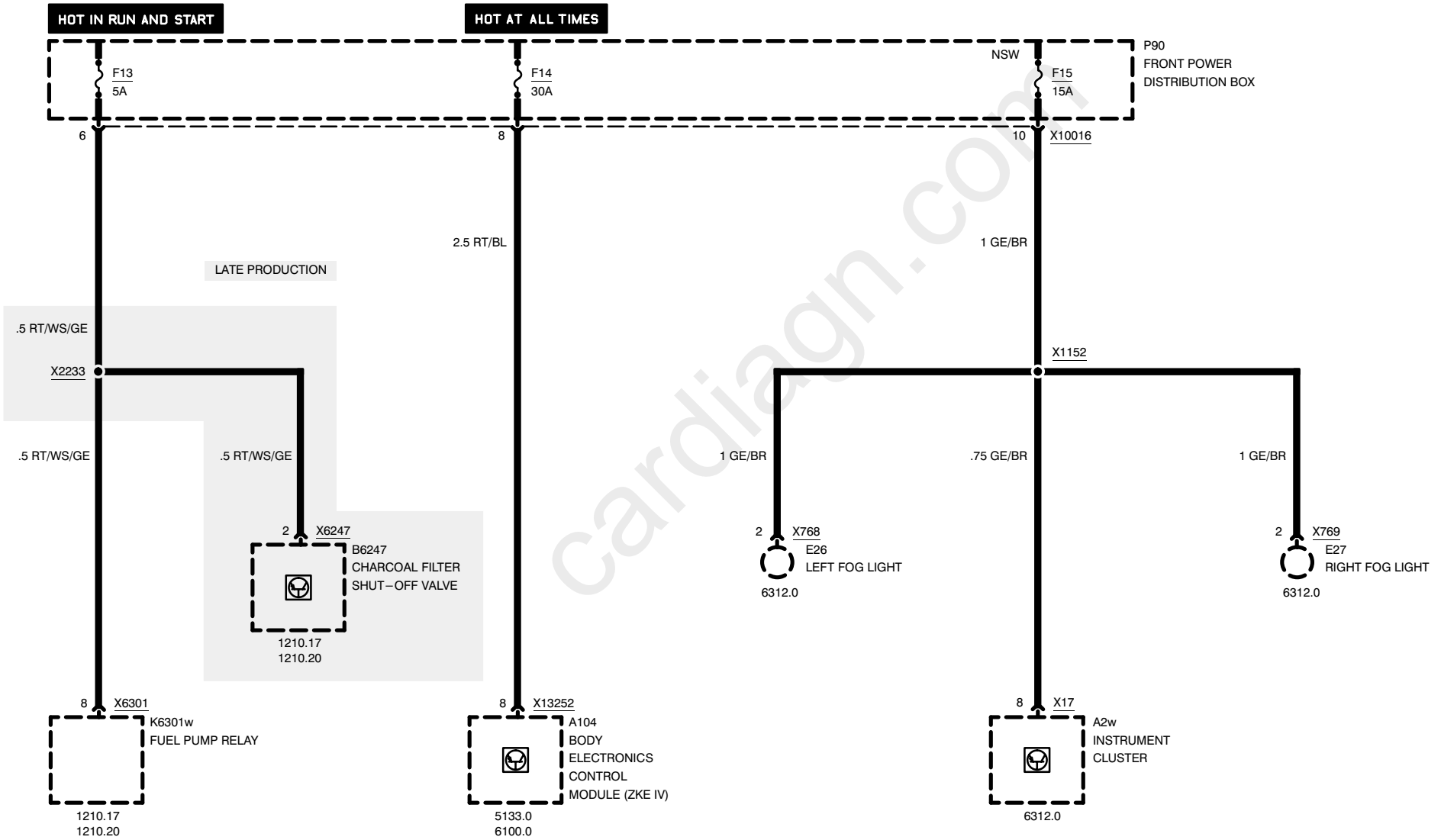


cardiagn.com

FUSE DETAILS

FUSES 13, 14, AND 15

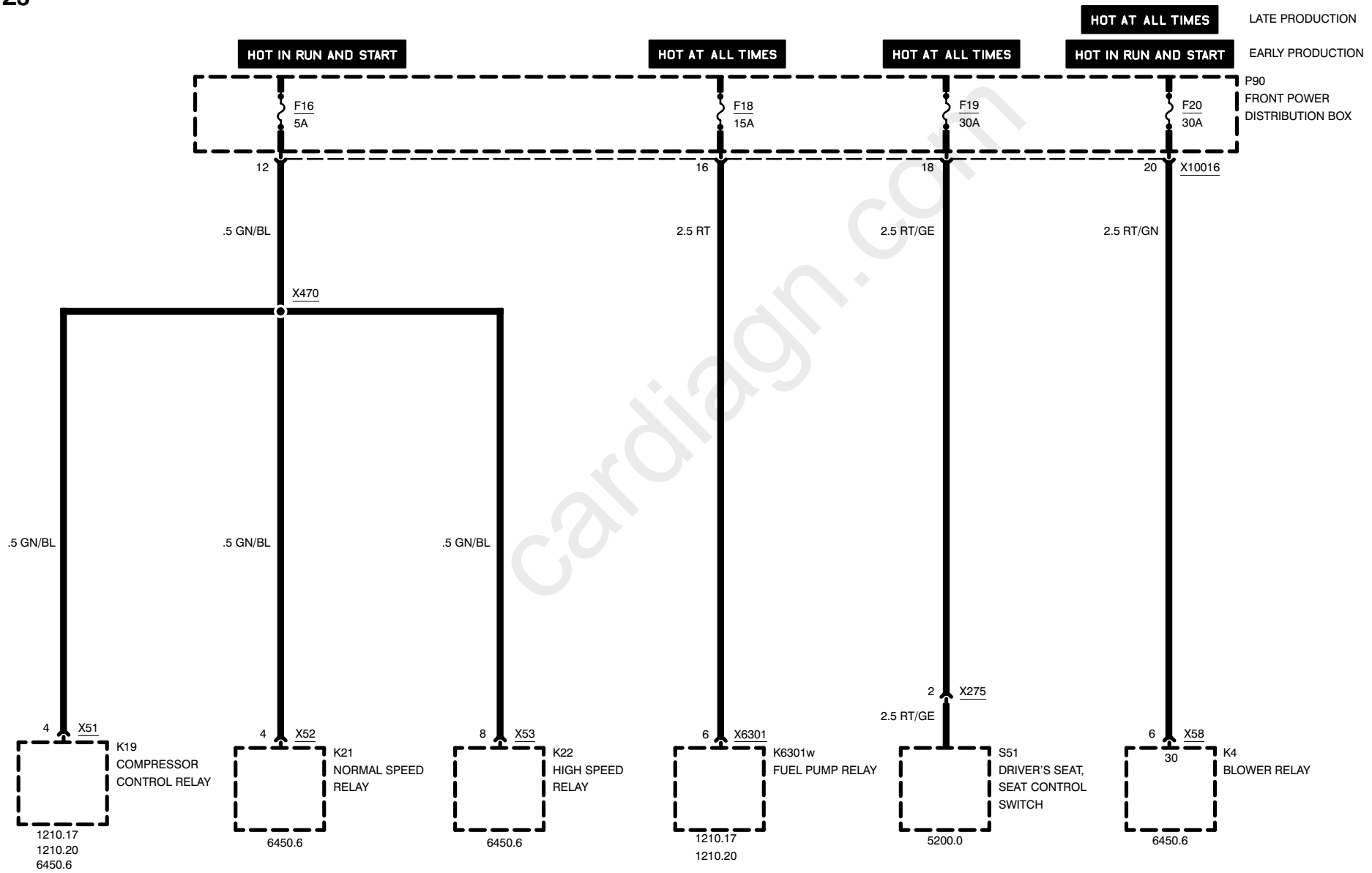
Z3



cardiagn.com

FUSE DETAILS

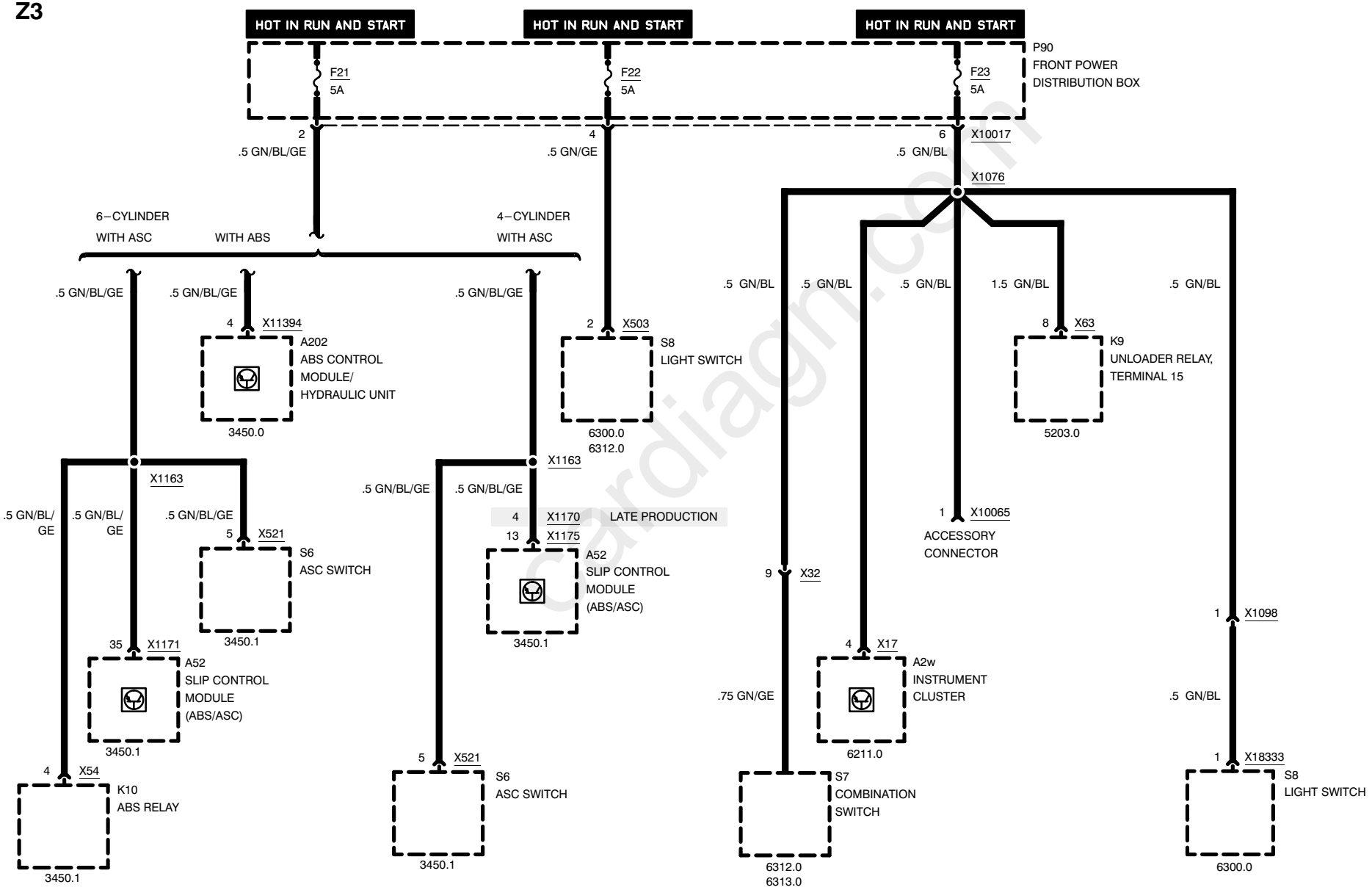
FUSES 16, 18, 19, AND 20



cardiagn.com

FUSE DETAILS

FUSES 21, 22, AND 23

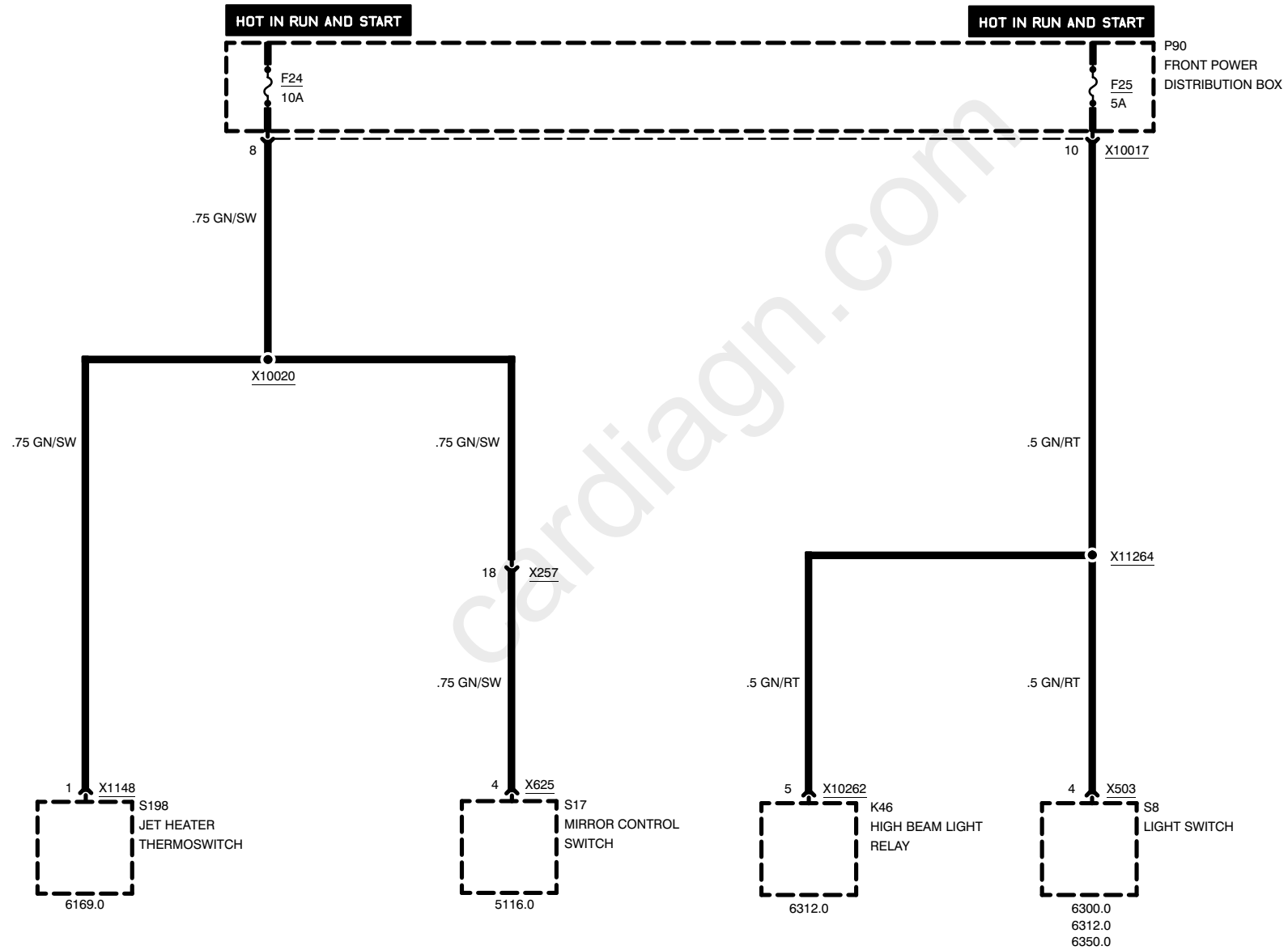


cardiagn.com

BMW 3 Z3

FUSE DETAILS

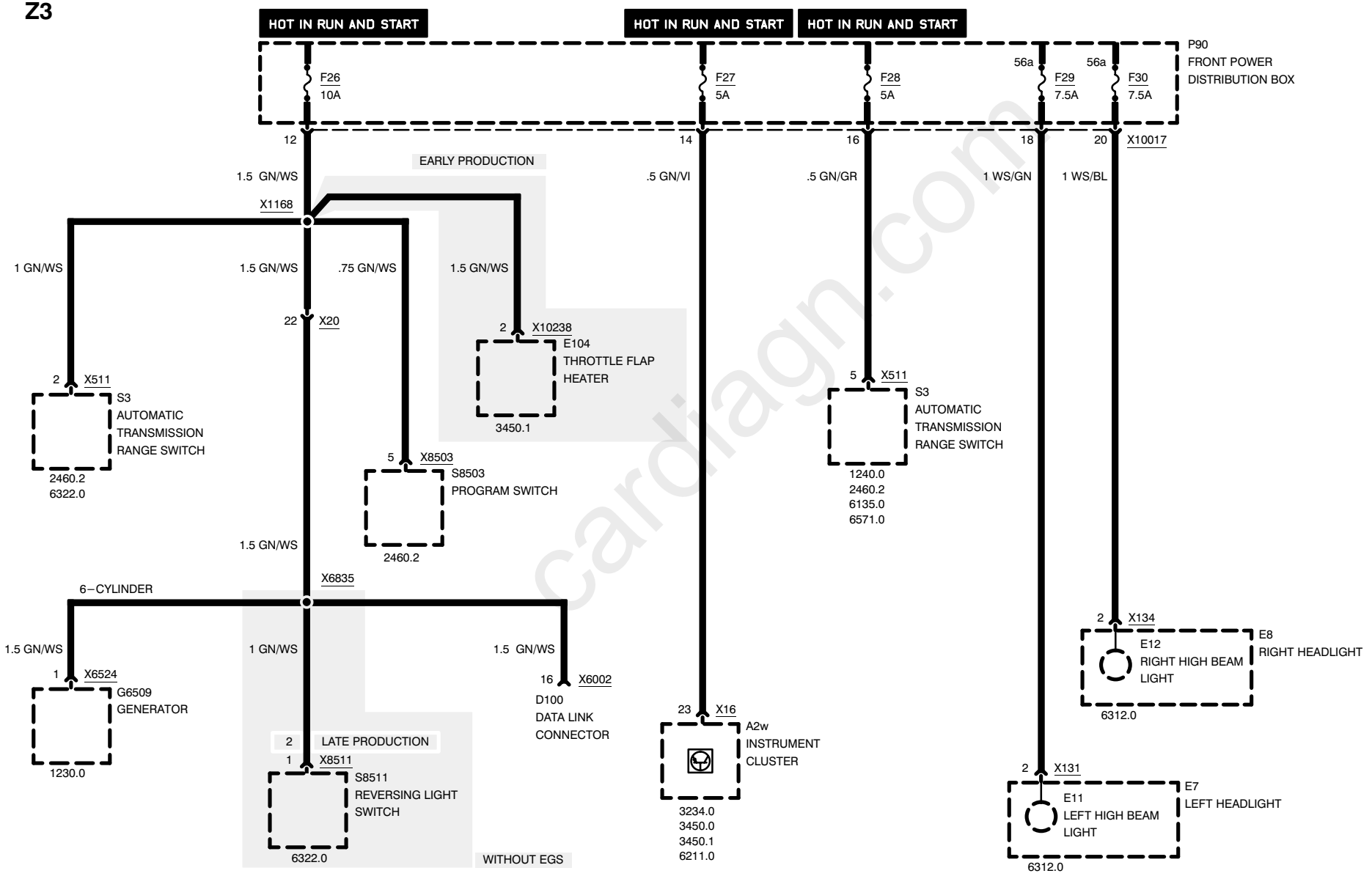
FUSES 24 AND 25



cardiagn.com

FUSE DETAILS

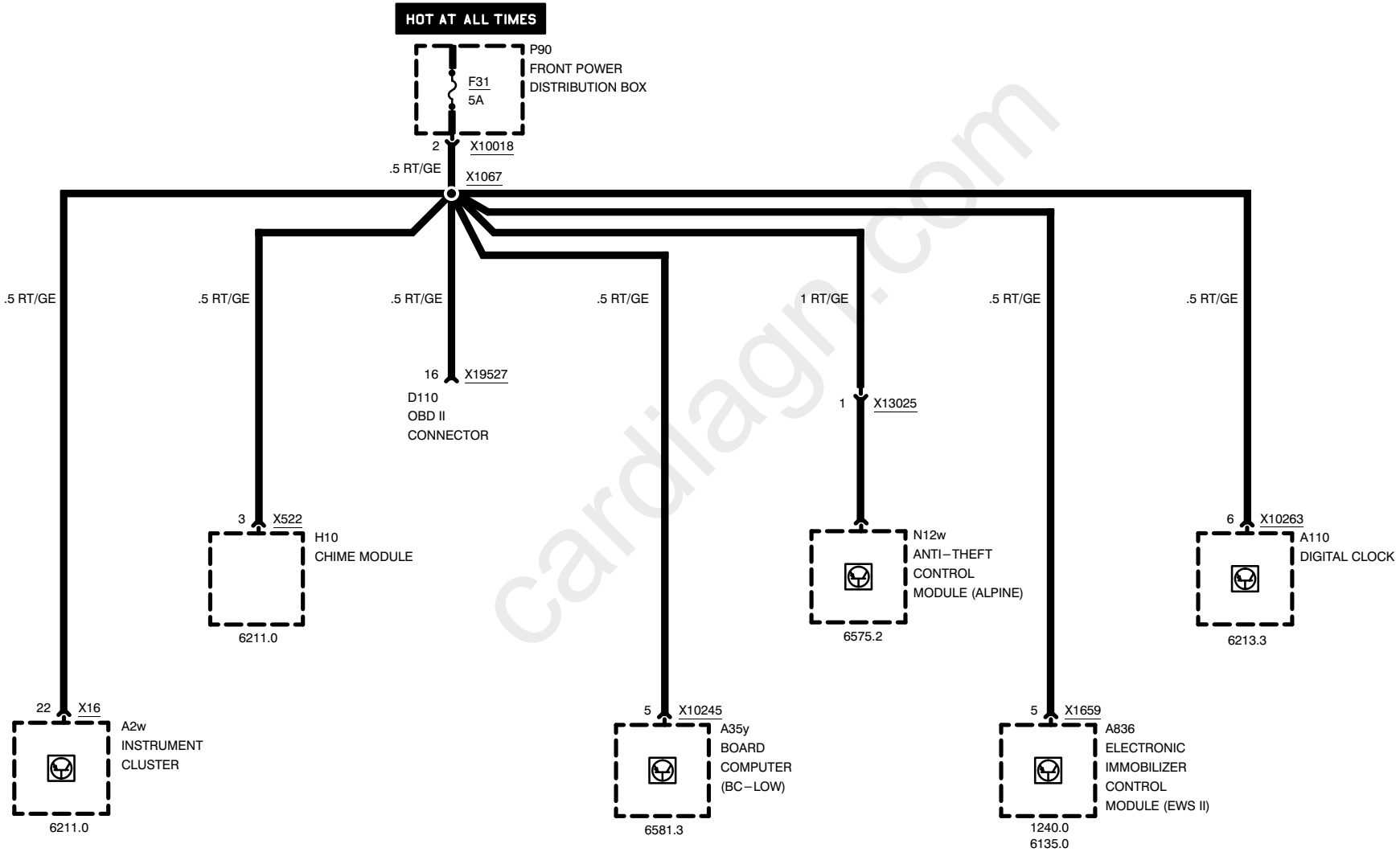
FUSES 26, 27, 28, 29, AND 30



cardiagn.com

FUSE DETAILS

FUSE 31

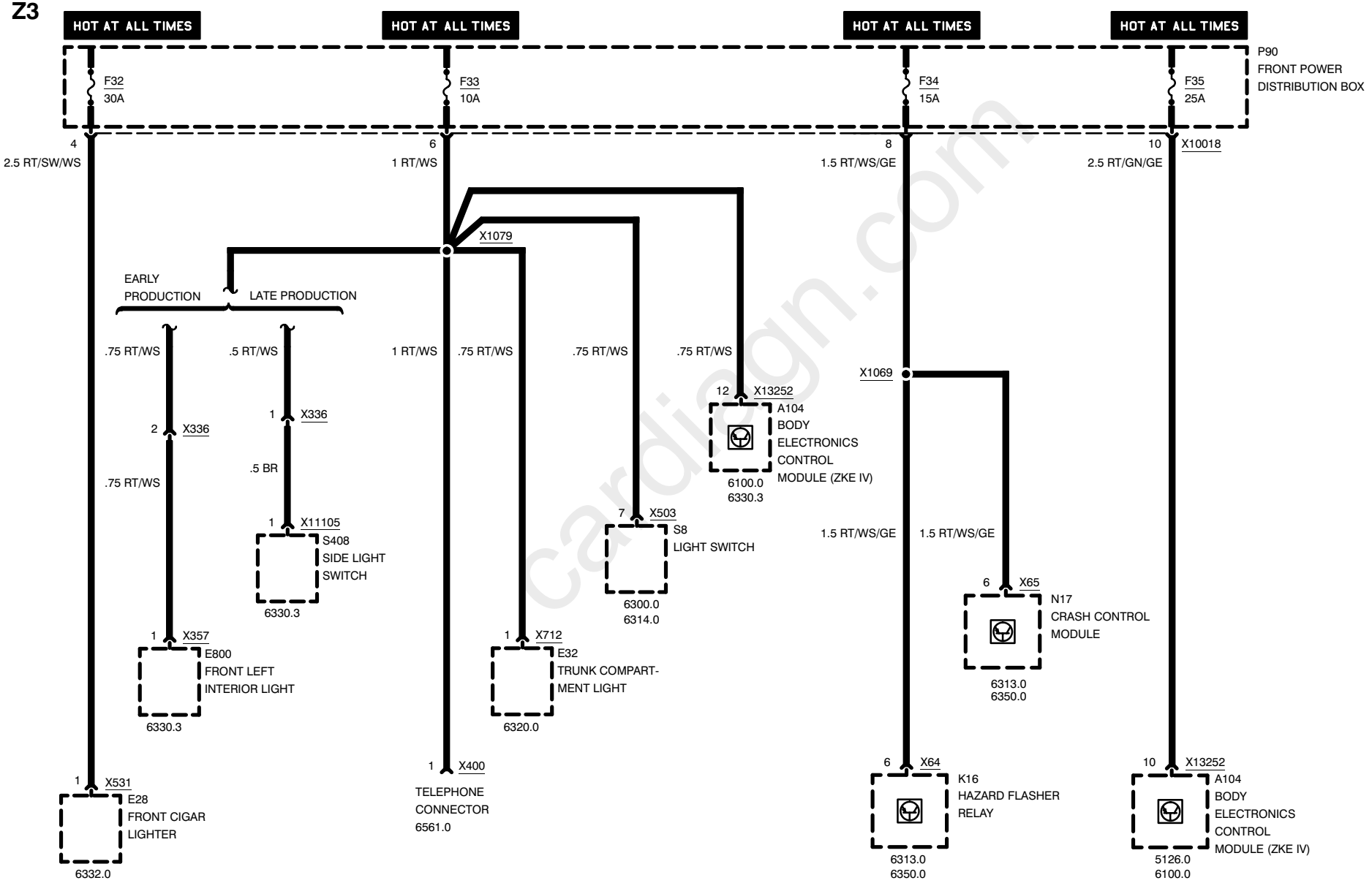


cardiagn.com

BMW 3 Z3

FUSE DETAILS

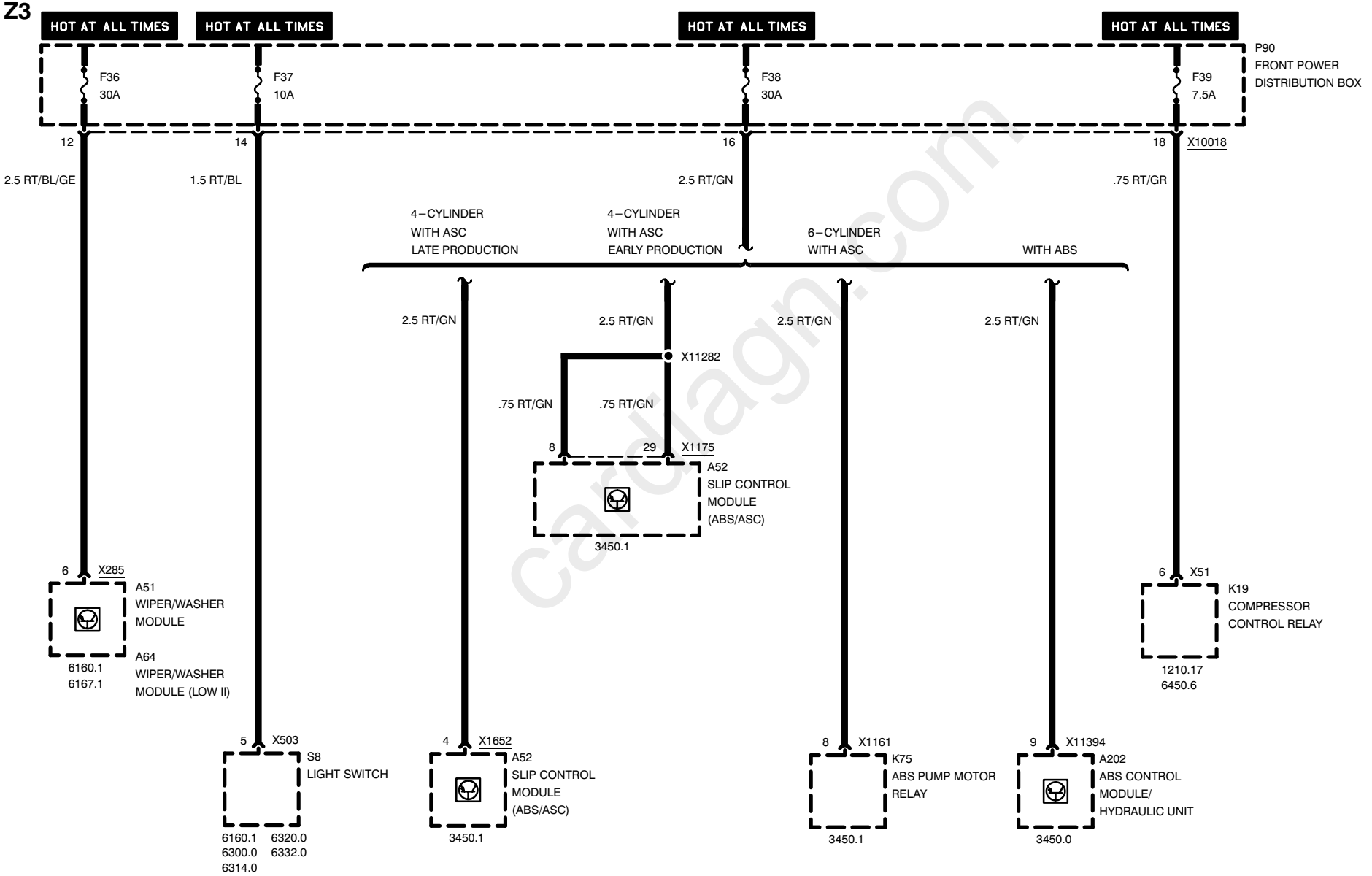
FUSES 32, 33, 34, AND 35



cardiagn.com

FUSE DETAILS

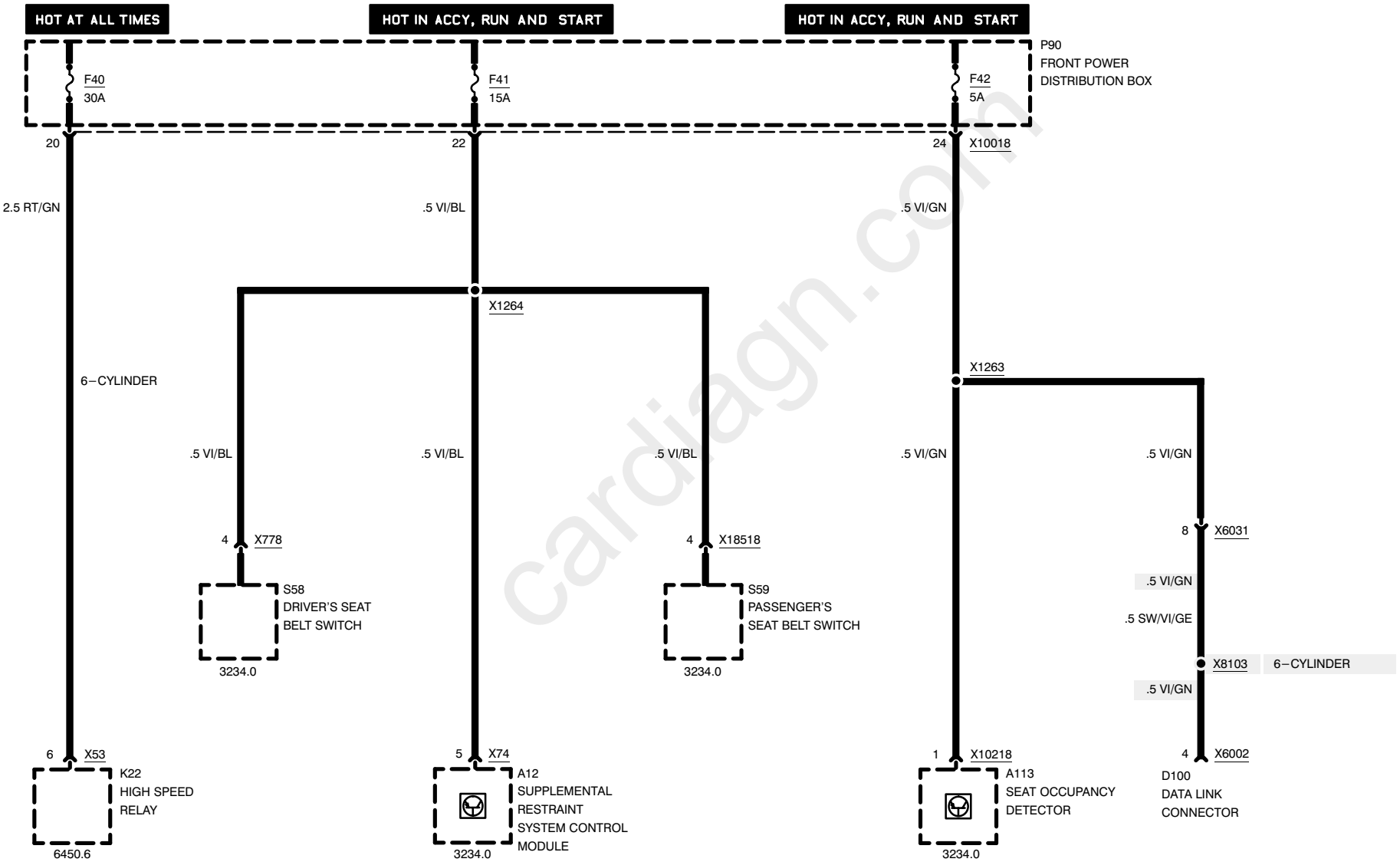
FUSES 36, 37, 38, AND 39



cardiagn.com

FUSE DETAILS

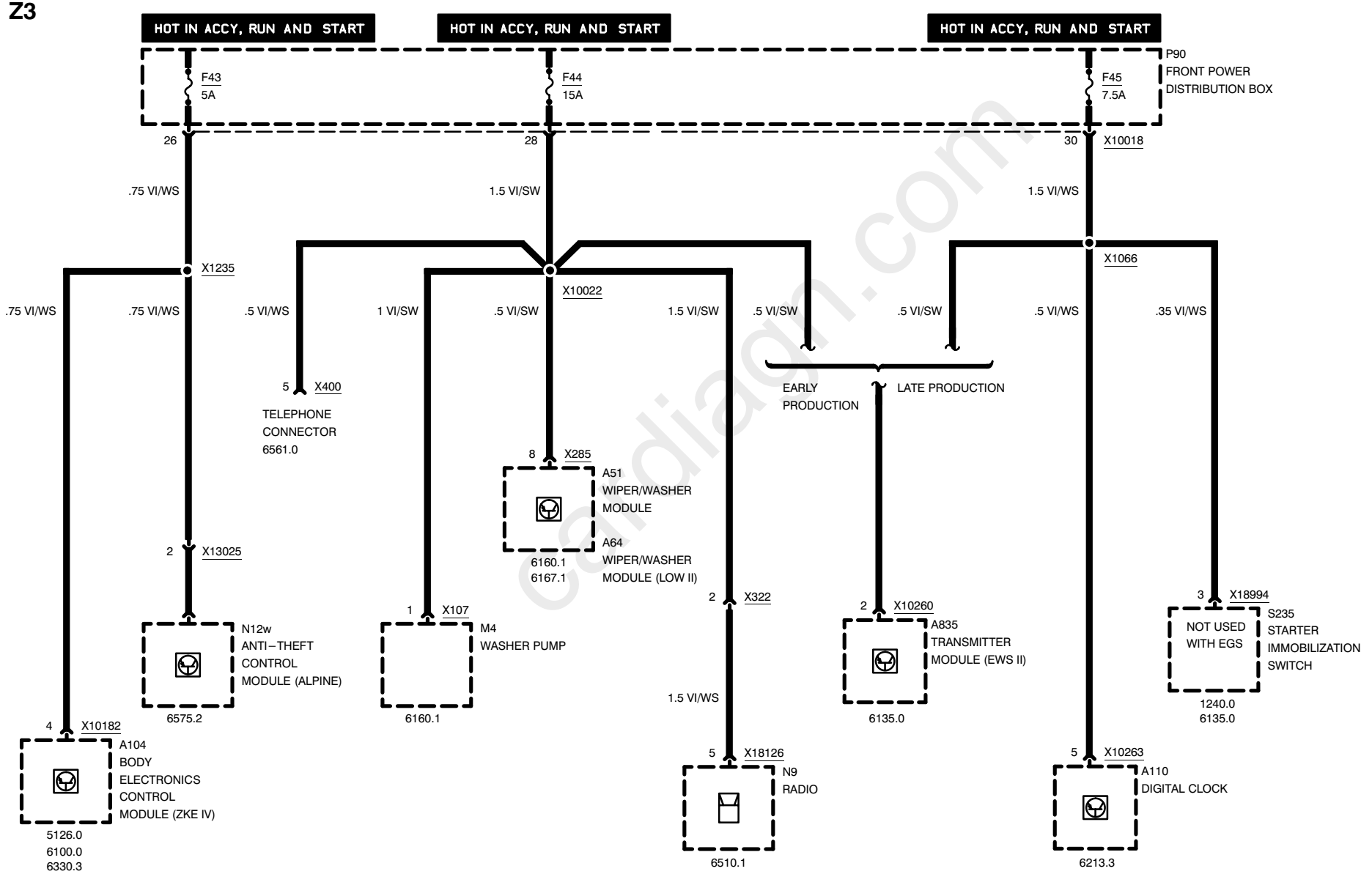
FUSES 40, 41, AND 42



cardiagn.com

FUSE DETAILS

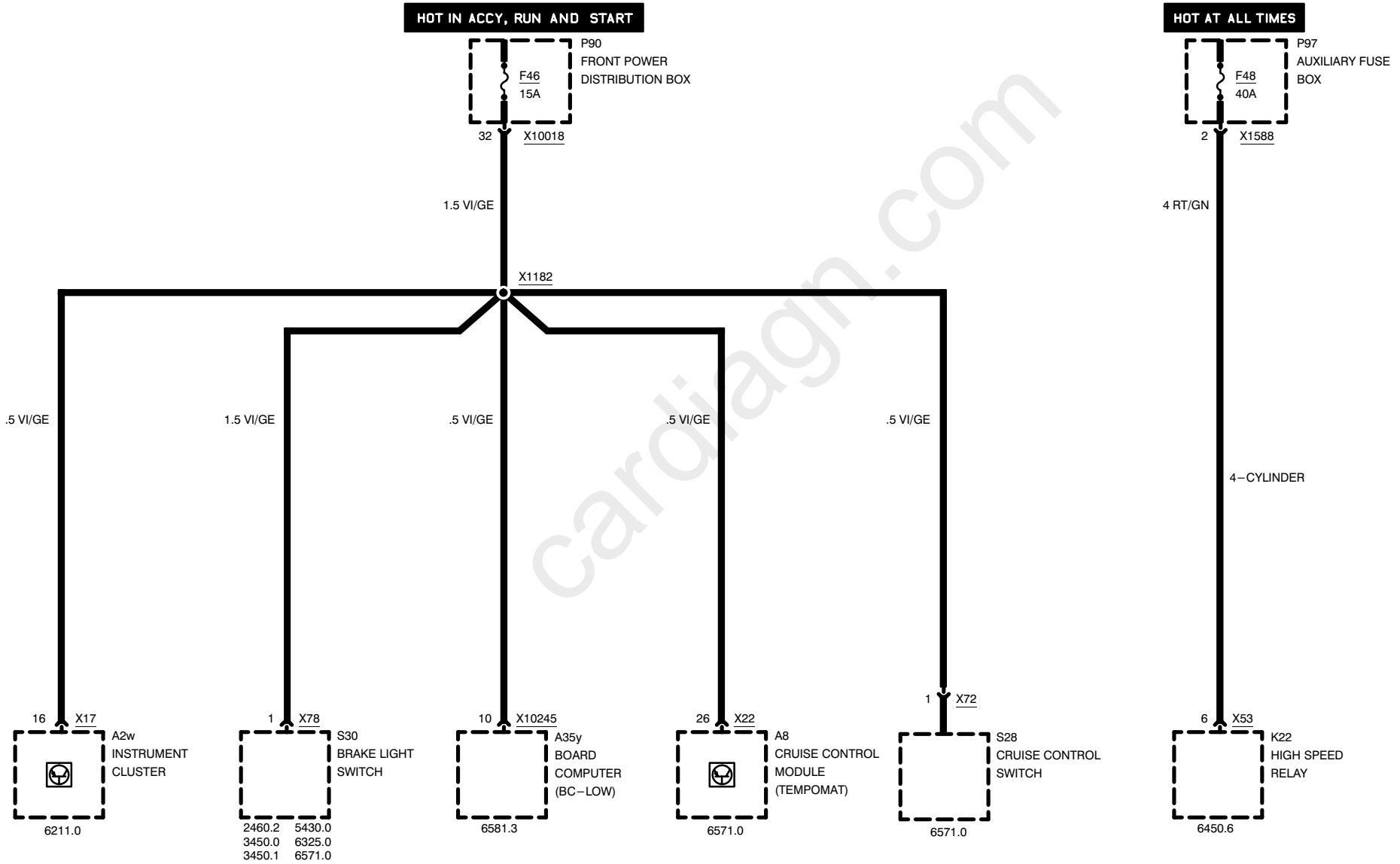
FUSES 43, 44, AND 45



cardiagn.com

FUSE DETAILS

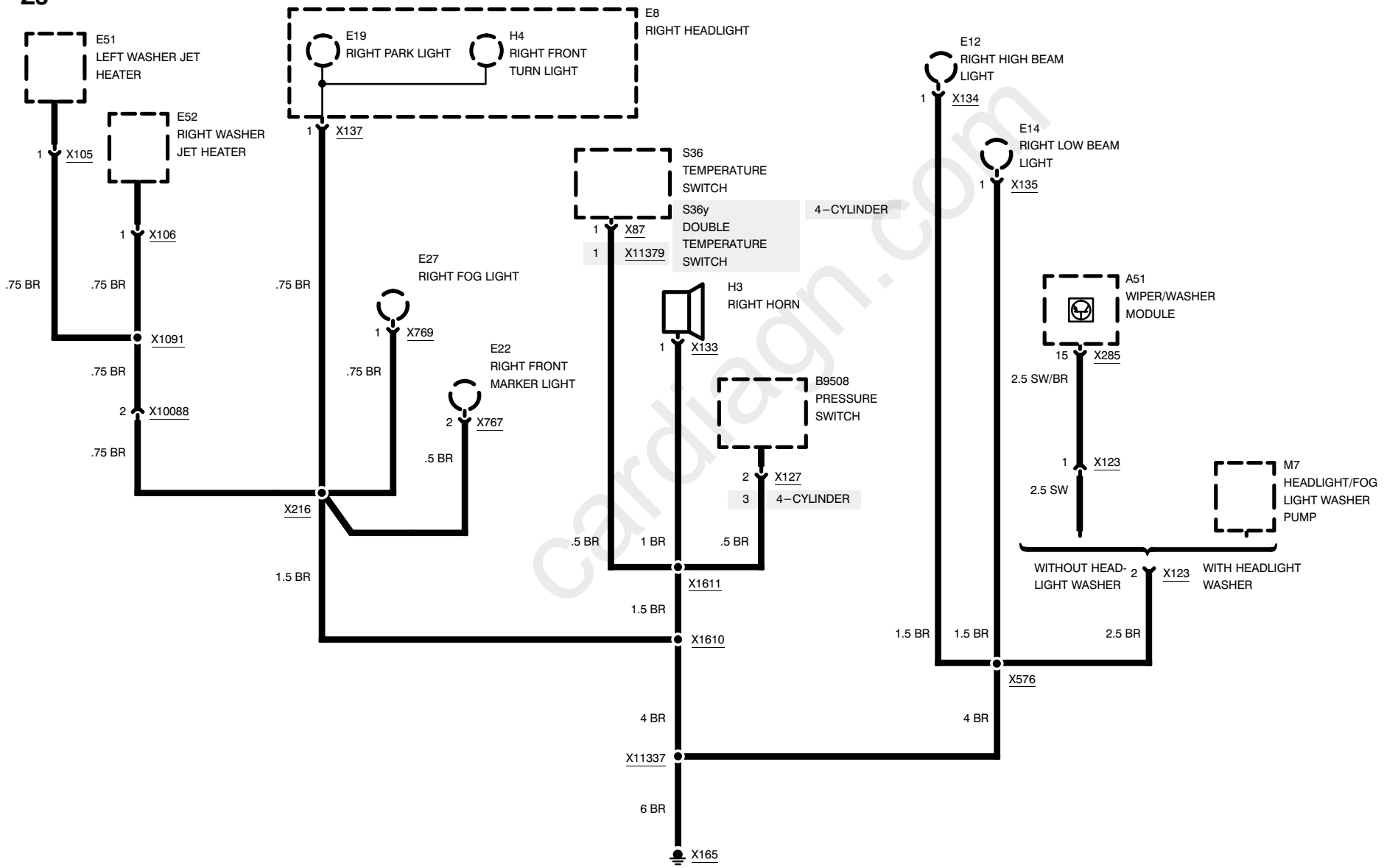
FUSES 46 AND 48



cardiagn.com

GROUND DISTRIBUTION

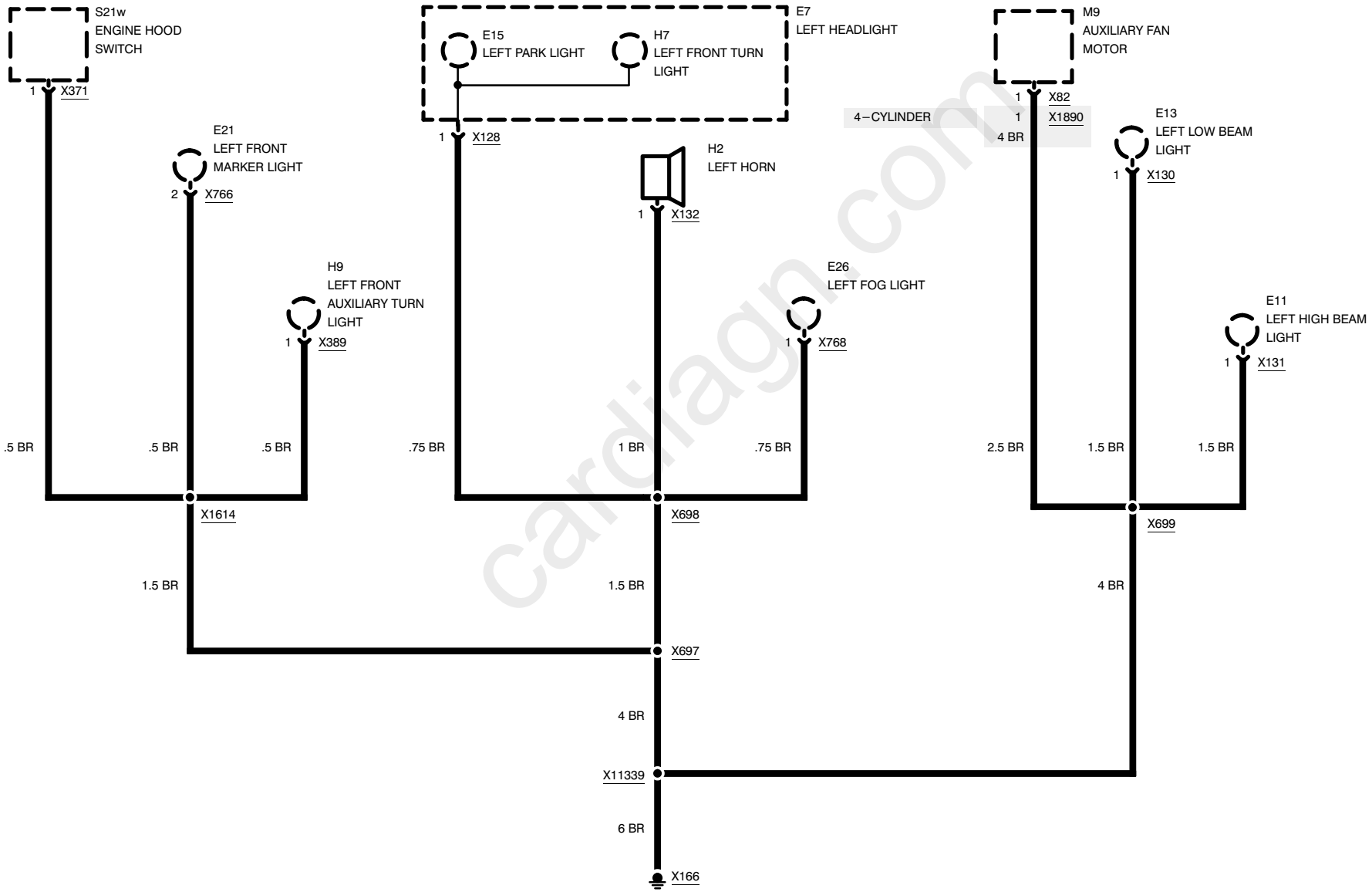
GROUND X165



cardiagn.com

GROUND DISTRIBUTION

GROUND X166

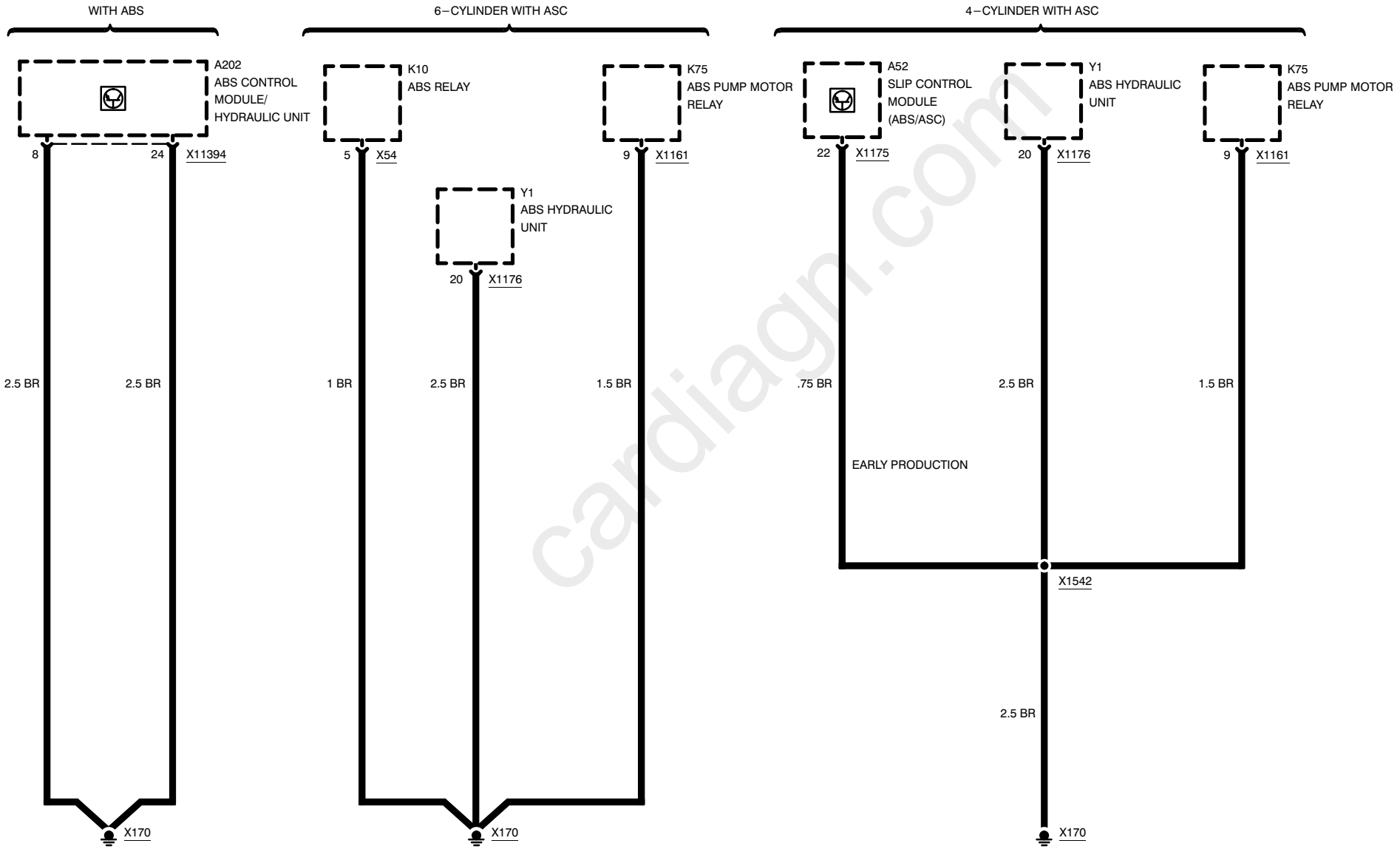


cardiagn.com

GROUND DISTRIBUTION

GROUND X170

Z3

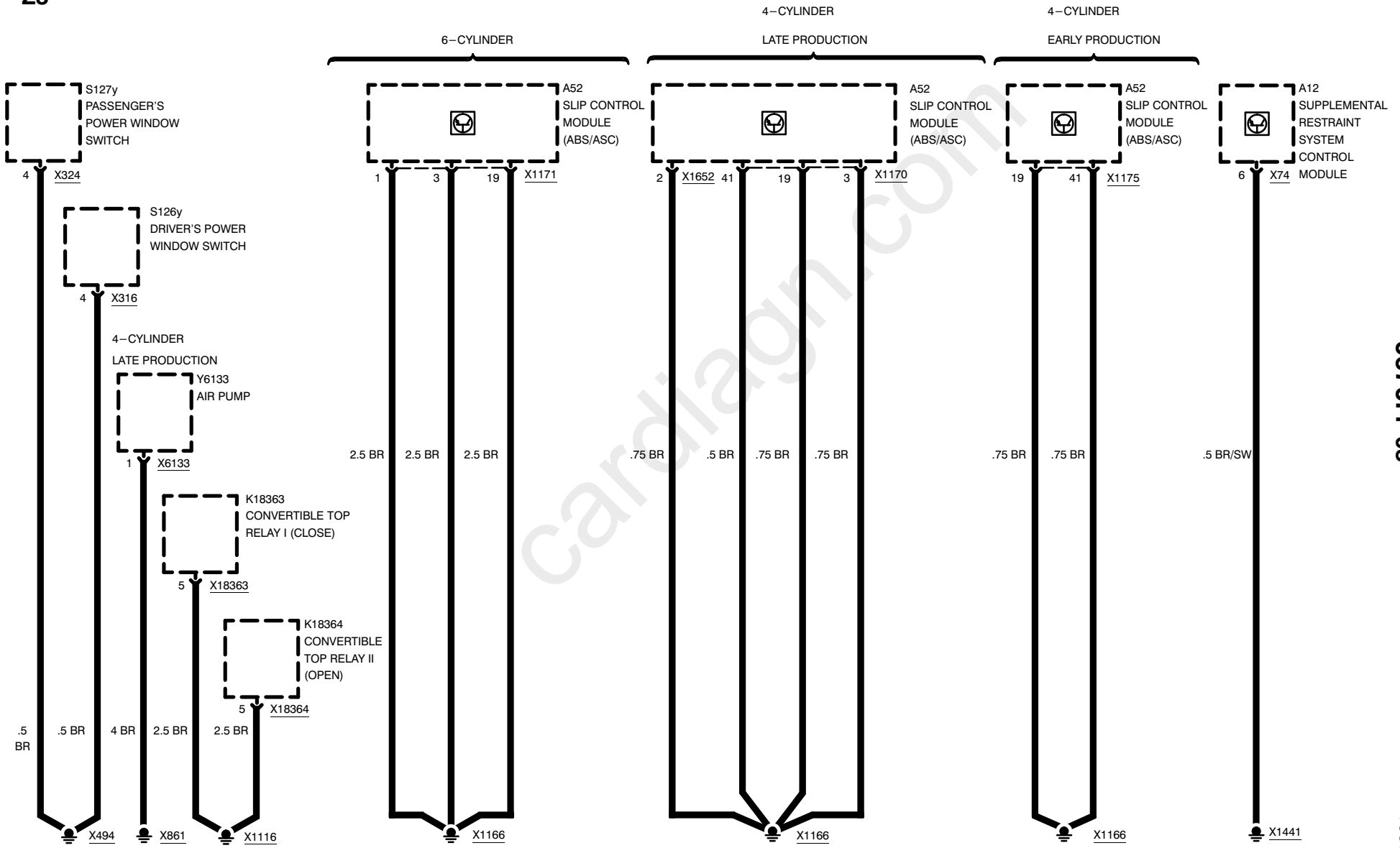


cardiagn.com

GROUND DISTRIBUTION

GROUNDS X494, X861, X1116, X1166, AND X1441

BMW 3 Z3

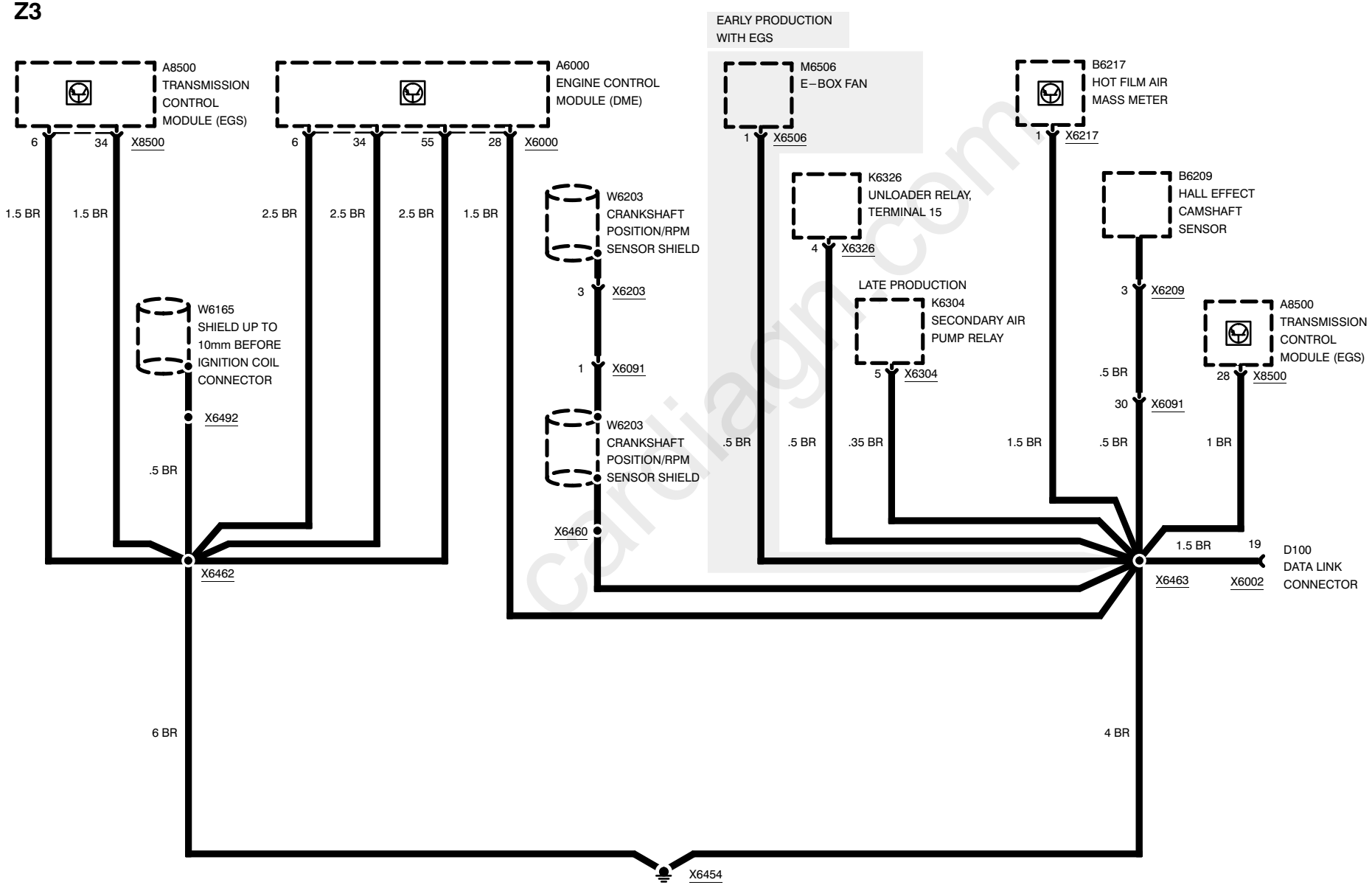


cardiagn.com

GROUND DISTRIBUTION

4–CYLINDER

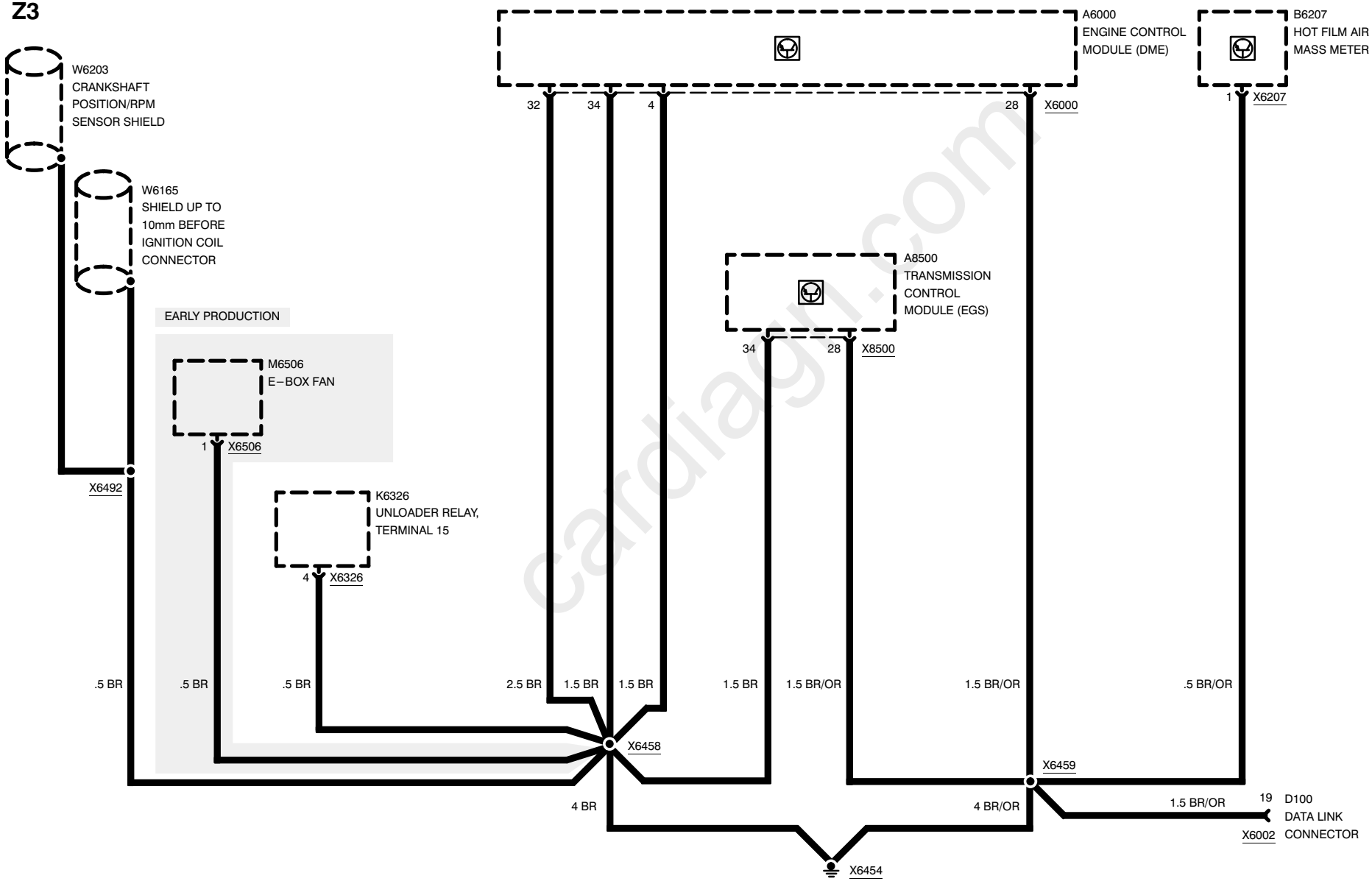
GROUND X6454



carDiagn.com

GROUND DISTRIBUTION

GROUND X6454

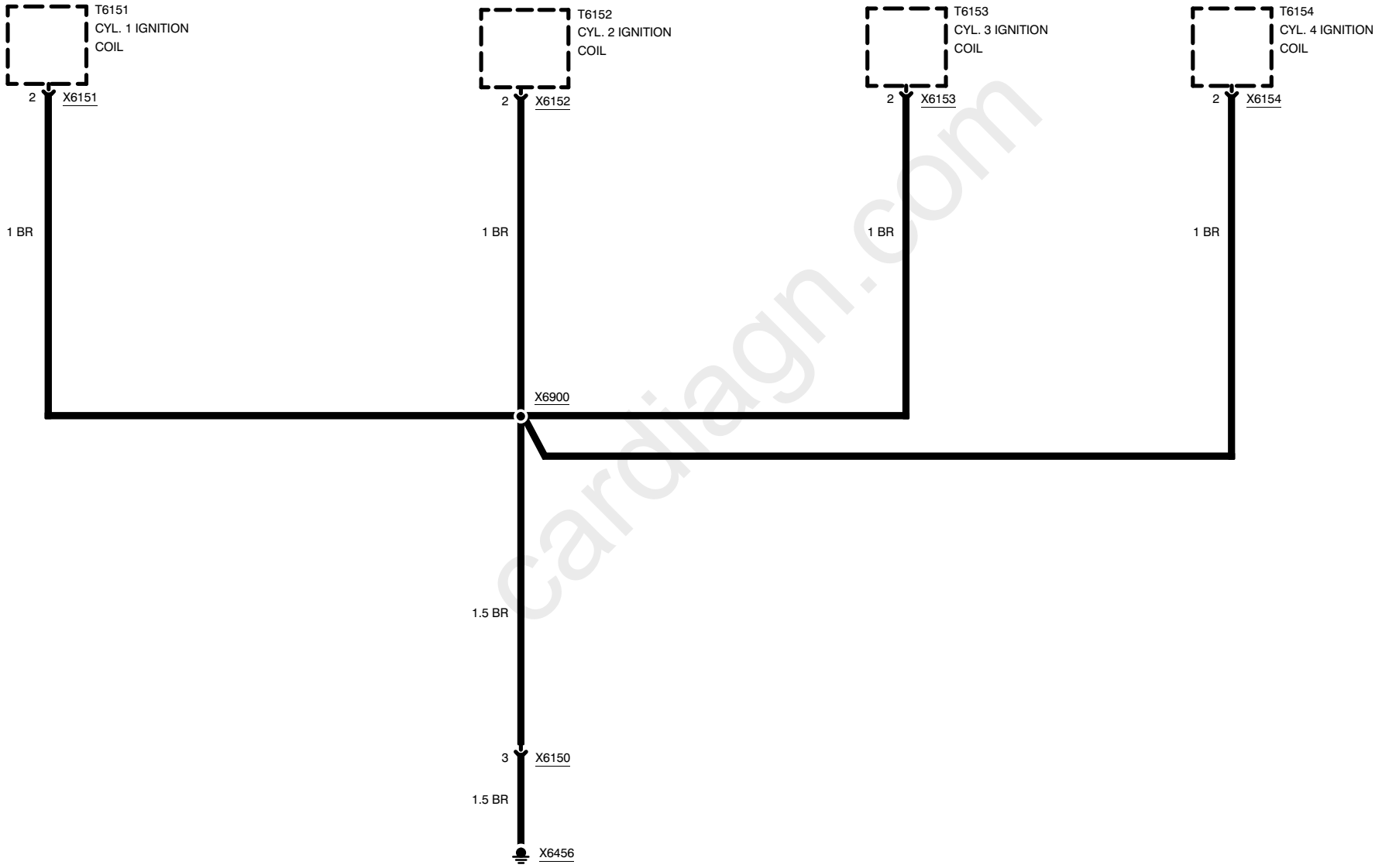


cardiagn.com

GROUND DISTRIBUTION

4–CYLINDER

GROUND X6456



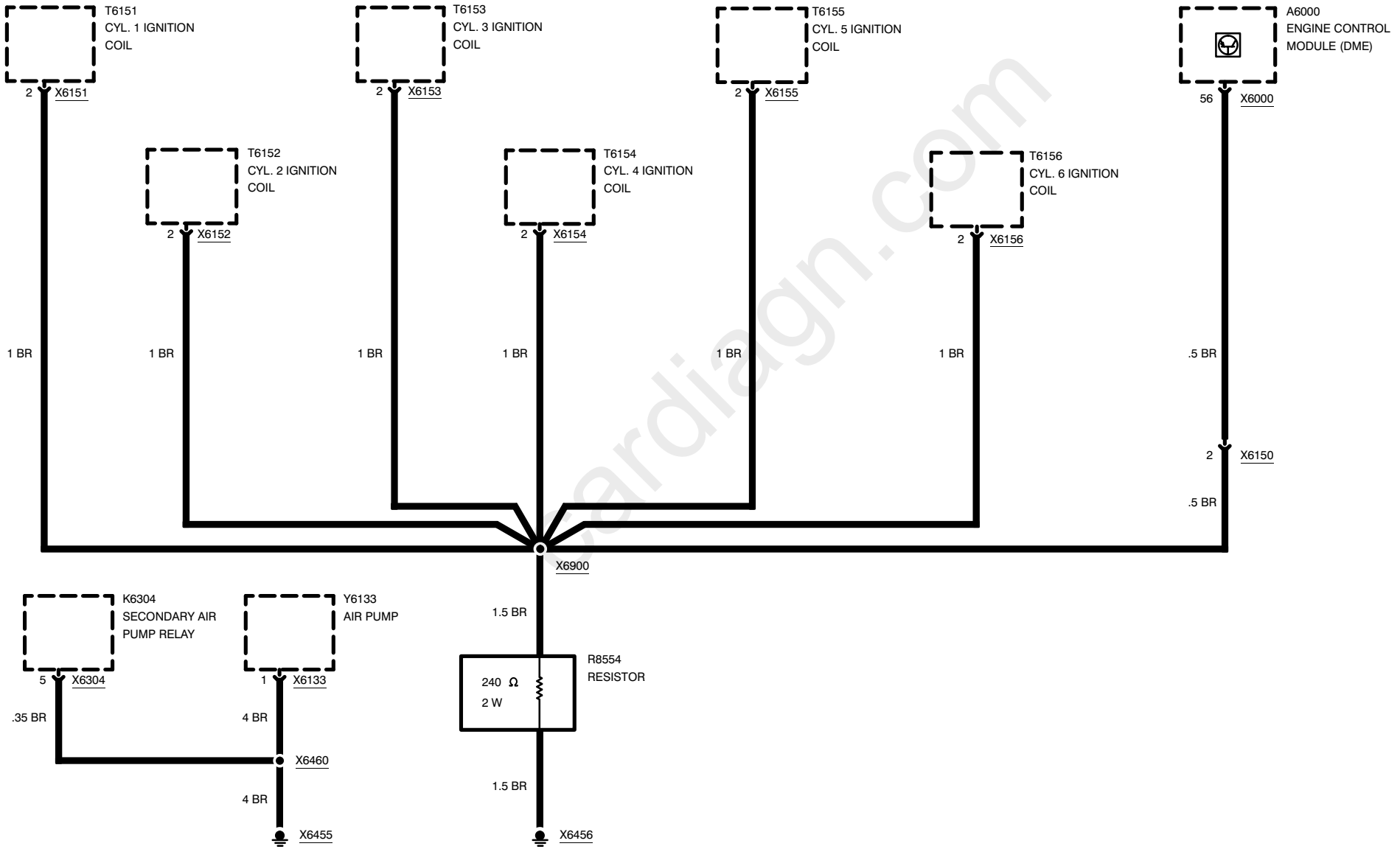
cardiagn.com

GROUND DISTRIBUTION

6–CYLINDER

GROUNDS X6455 AND X6456

BMW 3 Z3

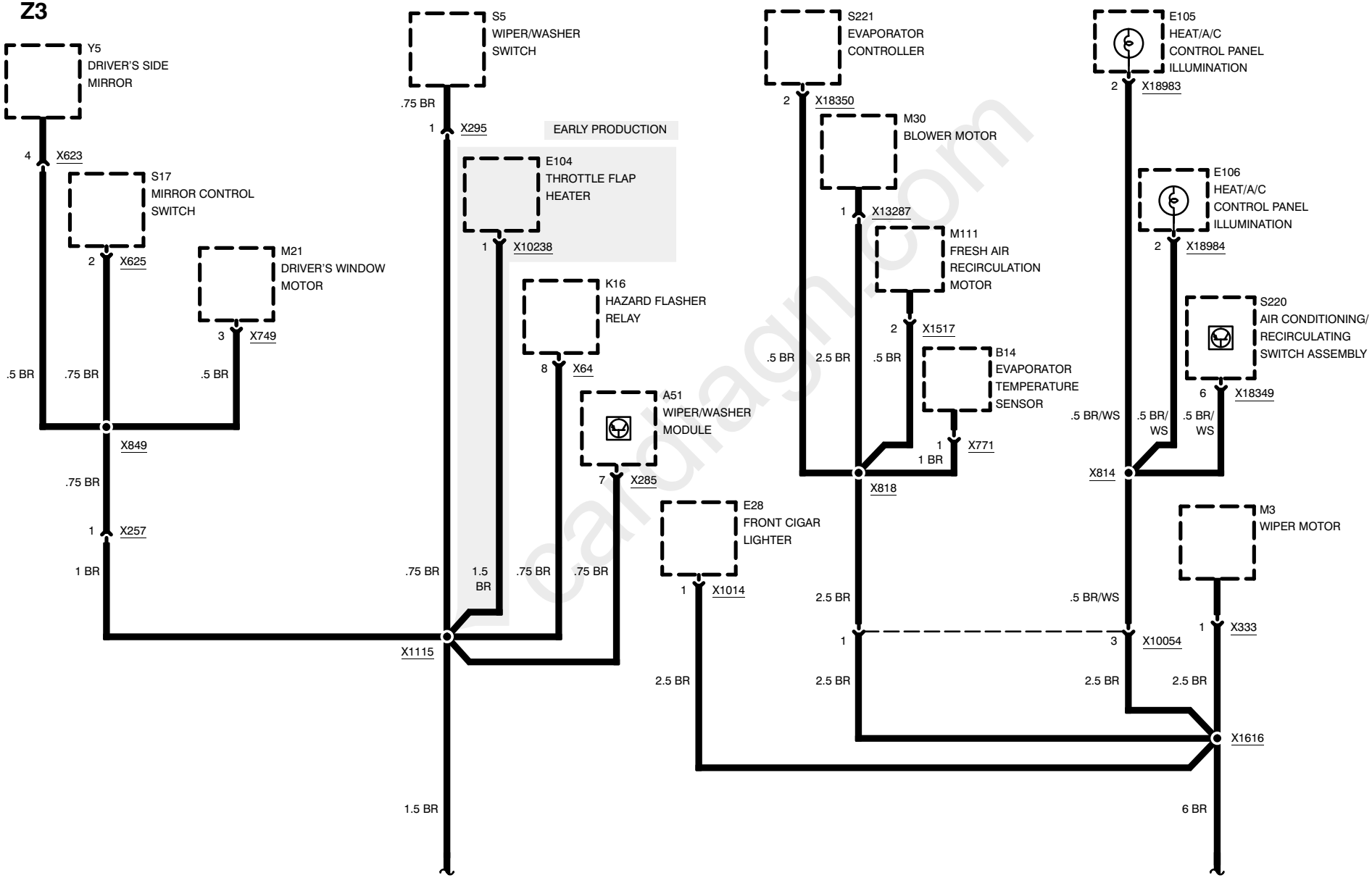


cardiagn.com

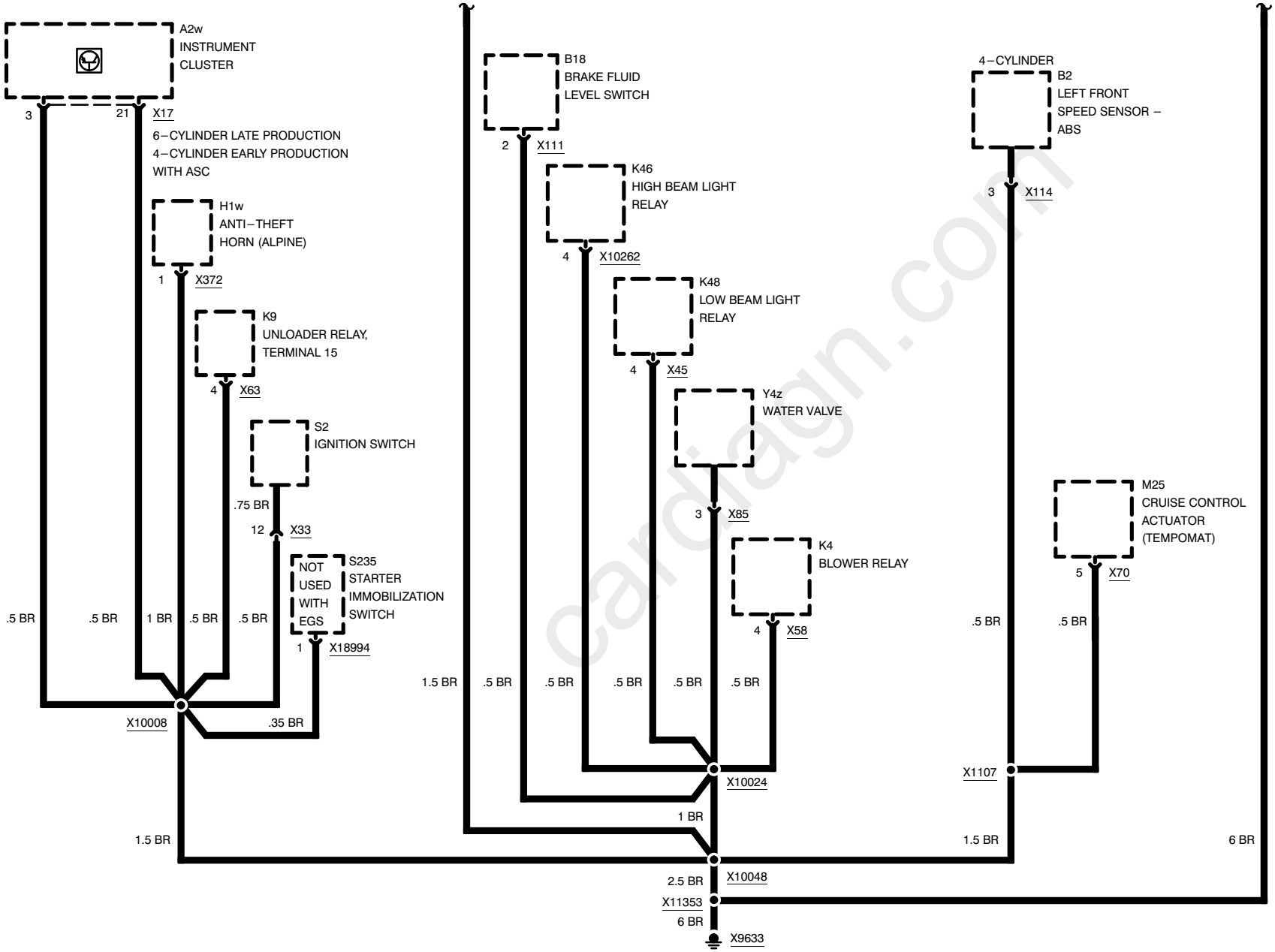
GROUND DISTRIBUTION

GROUND X9633

BMW 3 Z3



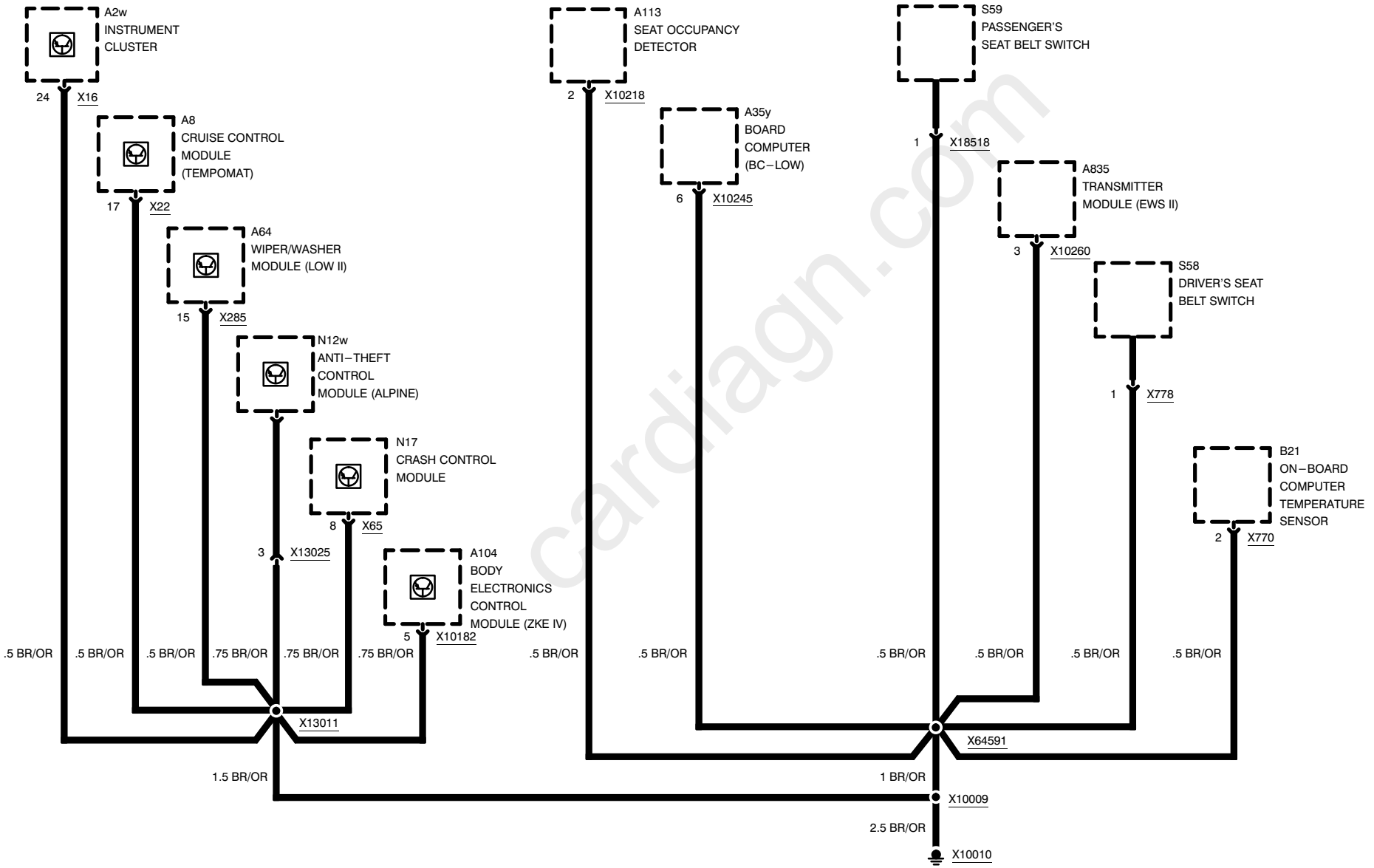
cardiagn.com



cardiagn.com

GROUND DISTRIBUTION

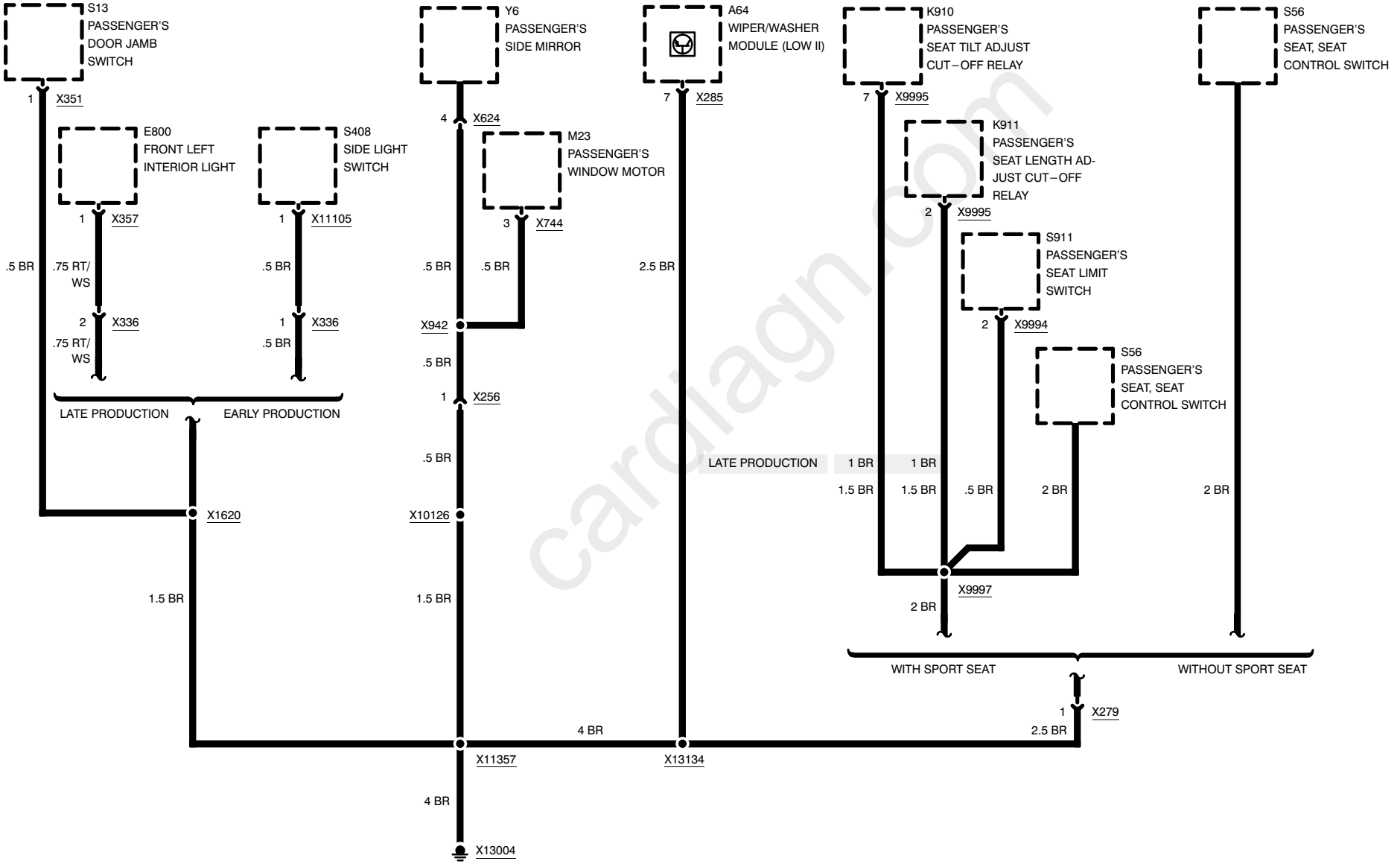
GROUND X10010



cardiagn.com

GROUND DISTRIBUTION

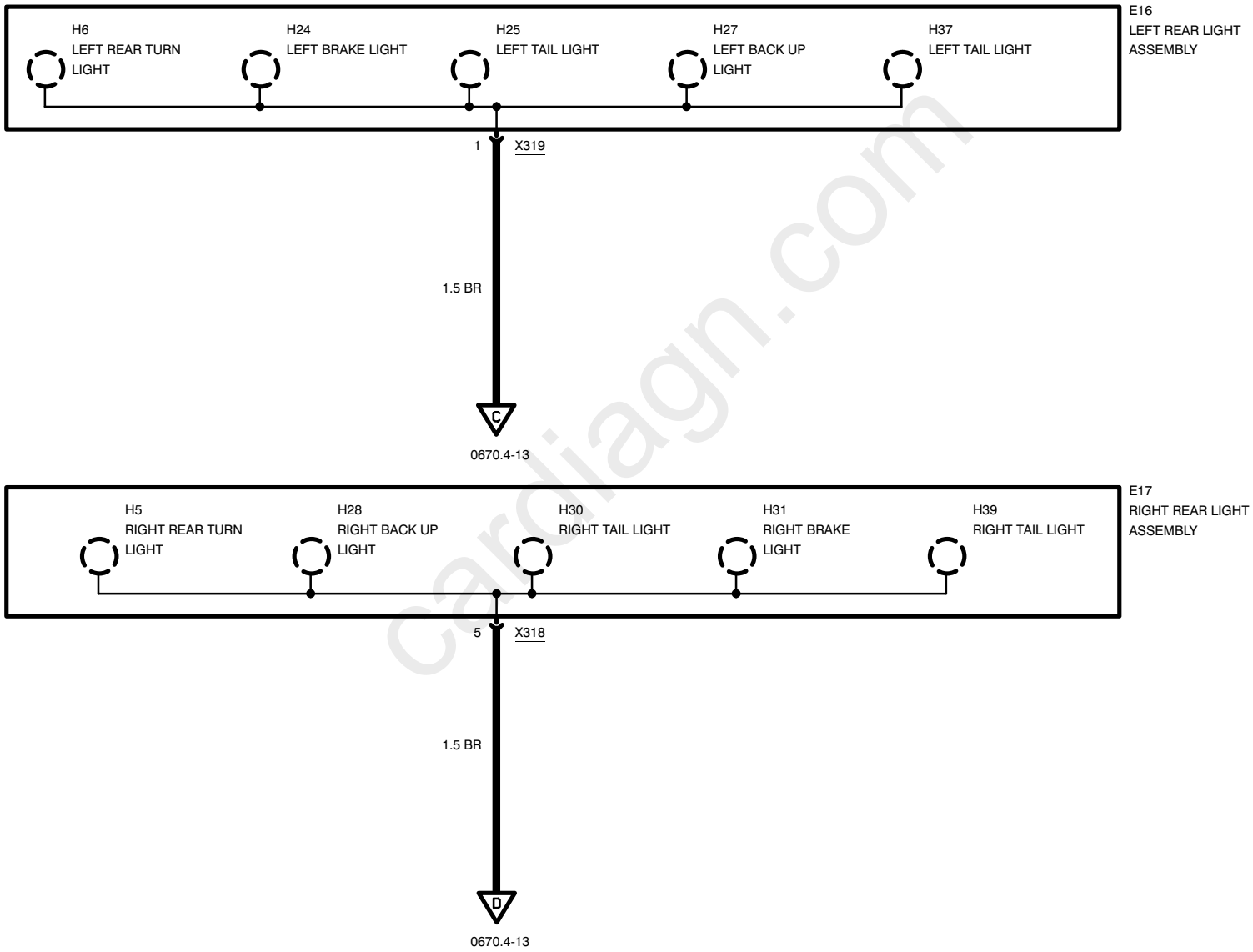
GROUND X13004



cardiagn.com

GROUND DISTRIBUTION

GROUND X13006

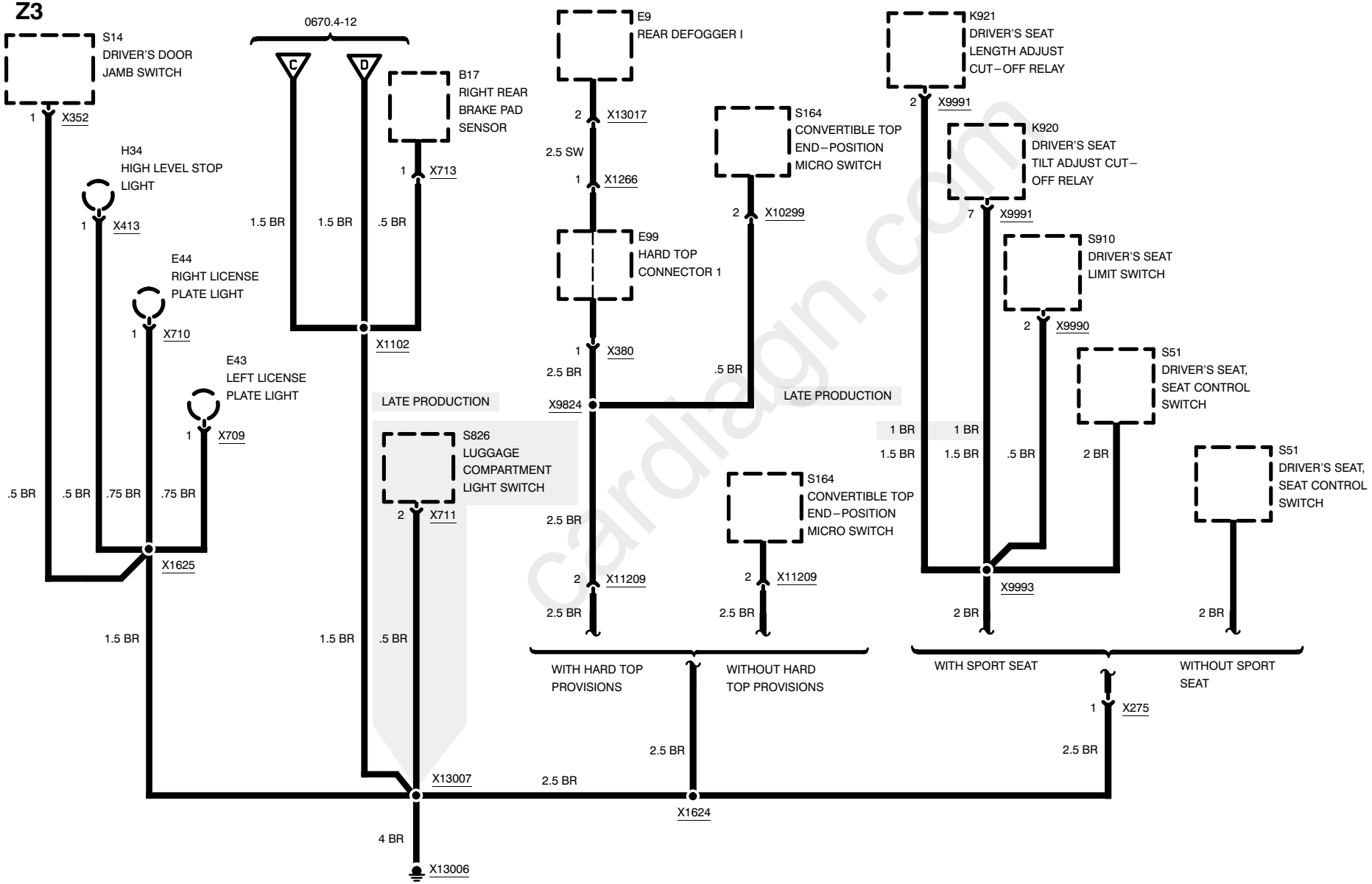


cardiagn.com

GROUND DISTRIBUTION

GROUND X13006

Z3

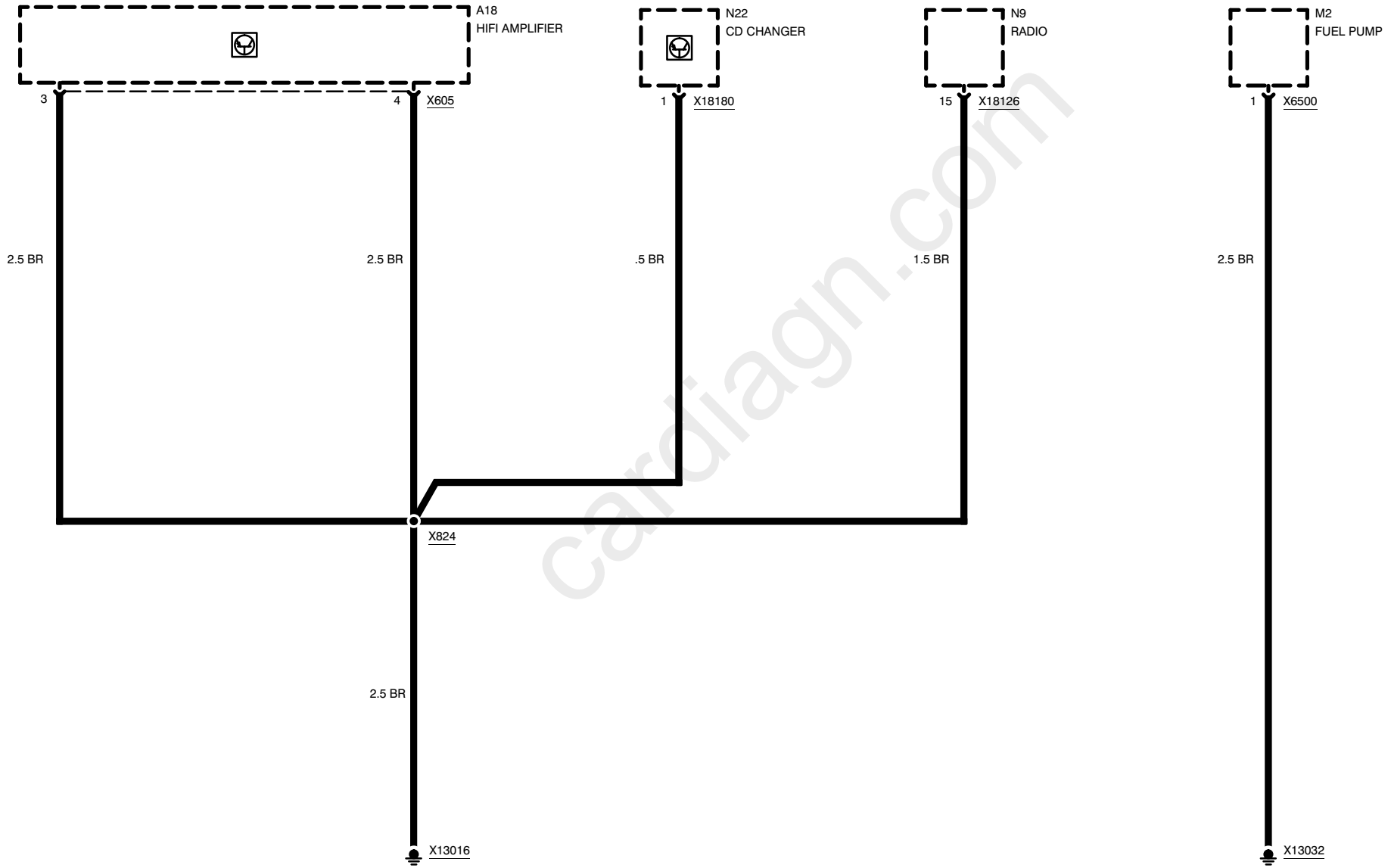


cardiagn.com

GROUND DISTRIBUTION

GROUNDS X13016 AND X13032

Z3

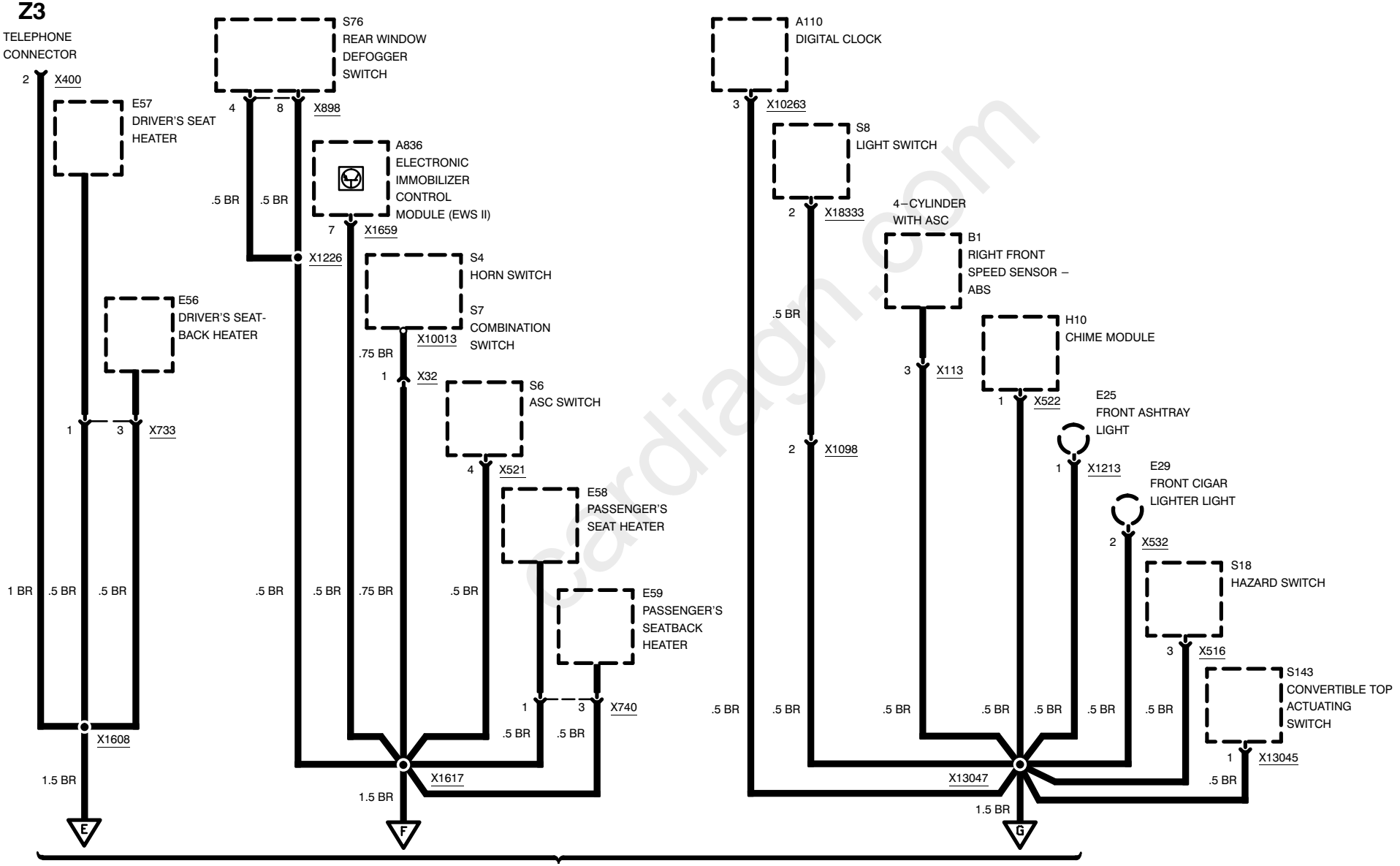


cardiagn.com

GROUND DISTRIBUTION

GROUND X18170

Z3



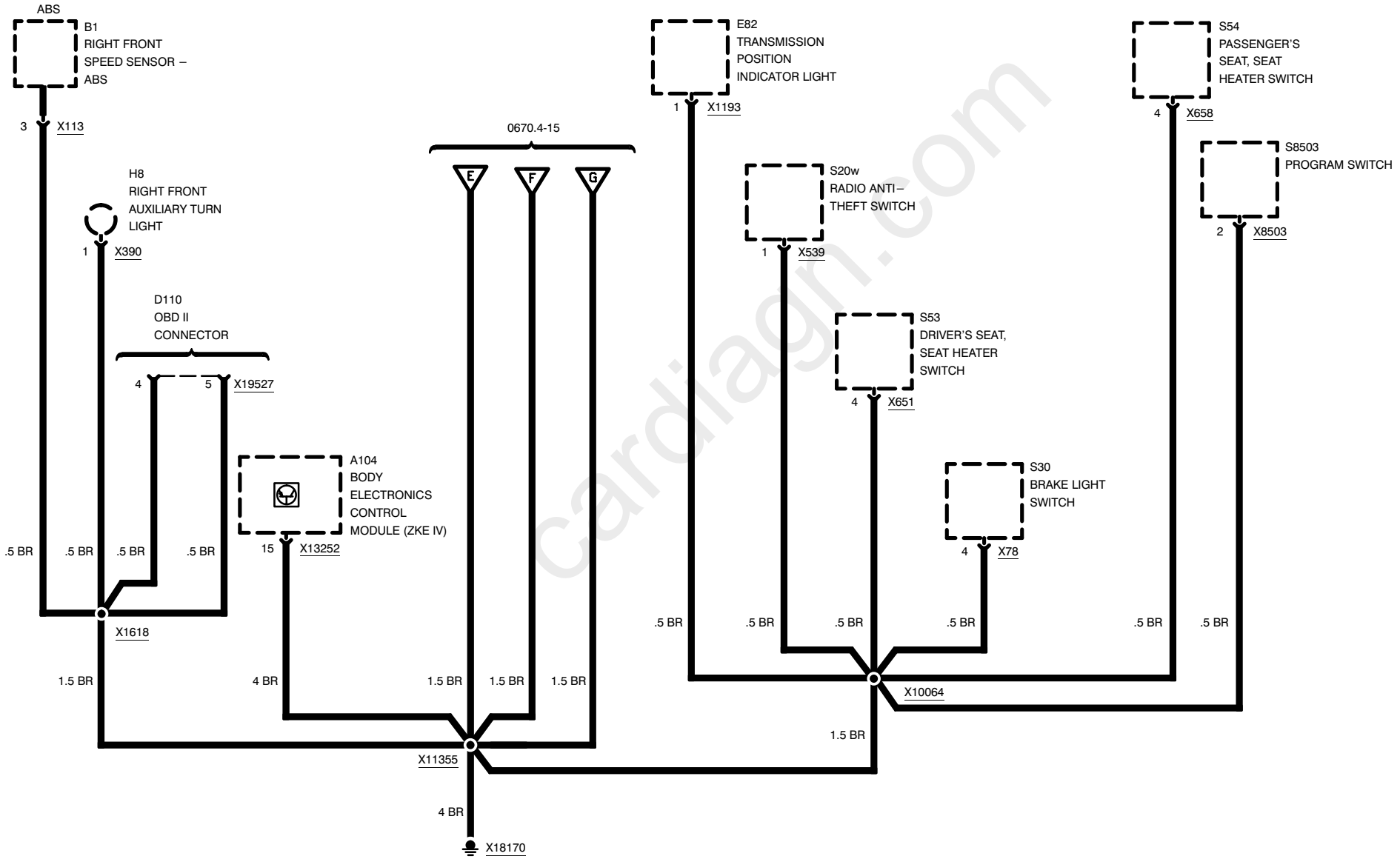
0670.4-16

cardiagn.com

GROUND DISTRIBUTION

GROUND X18170

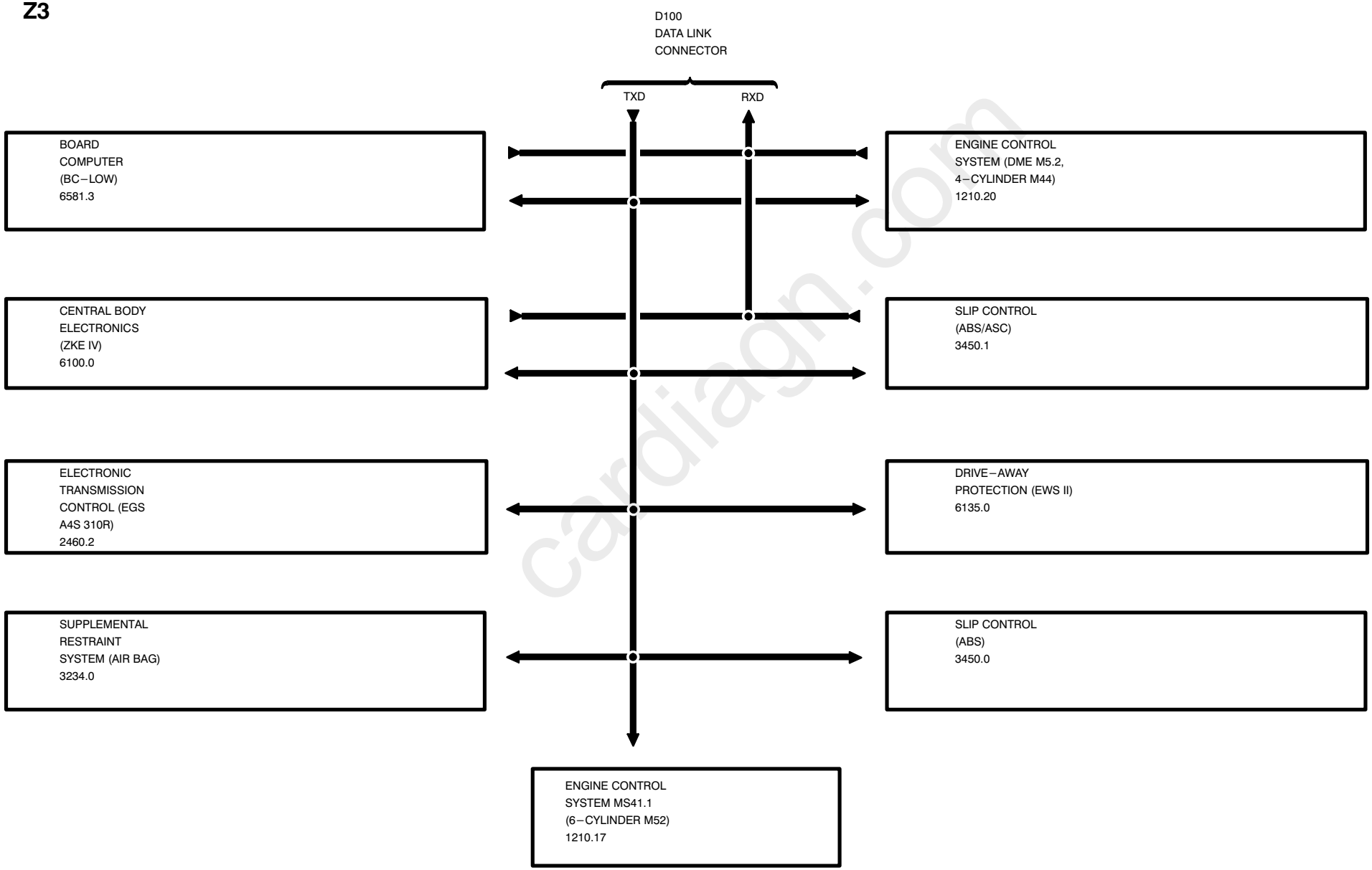
BMW 3 Z3



cardiagn.com

DATA LINK

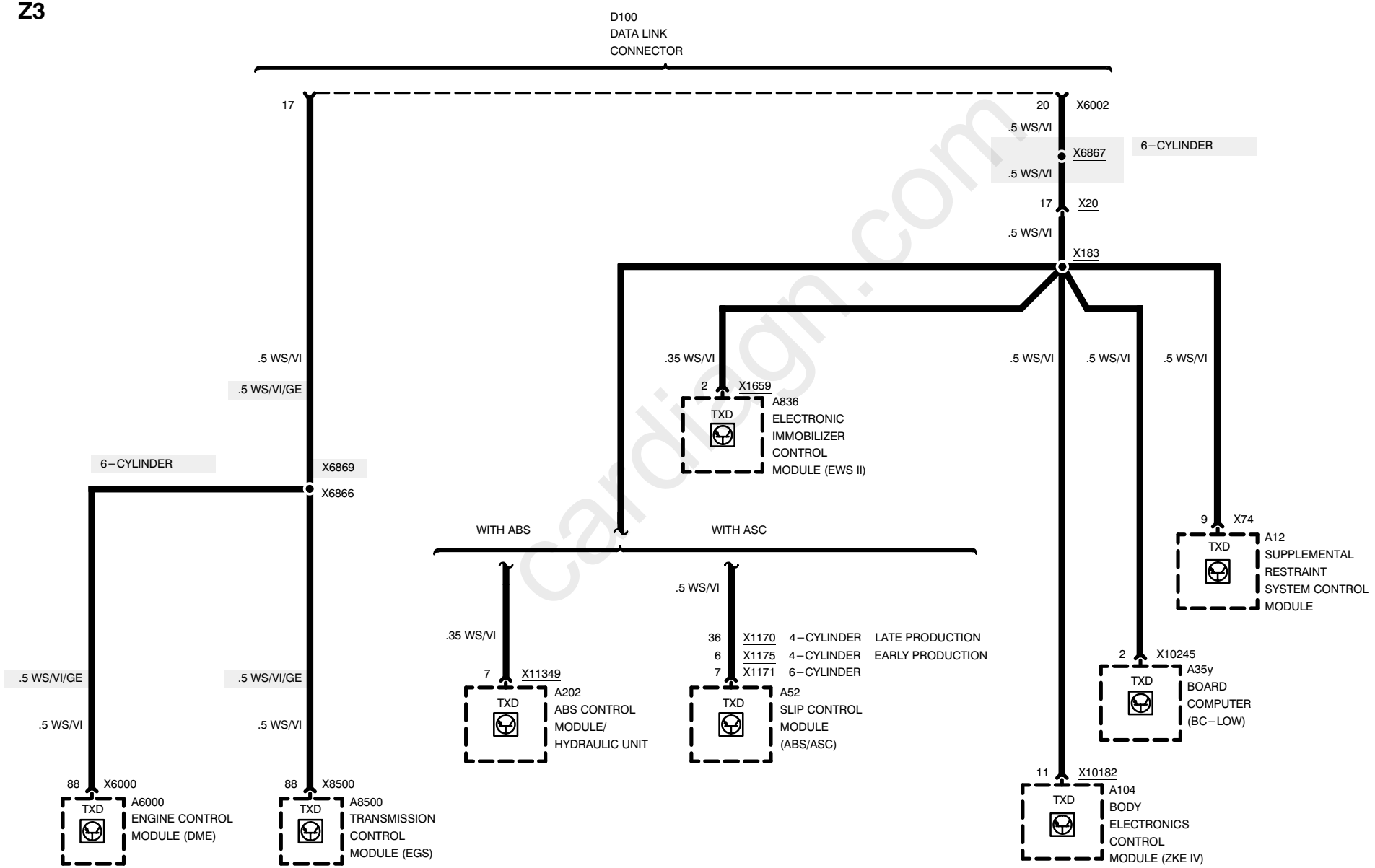
BLOCK DIAGRAM



cardiagn.com

DATA LINK

TXD

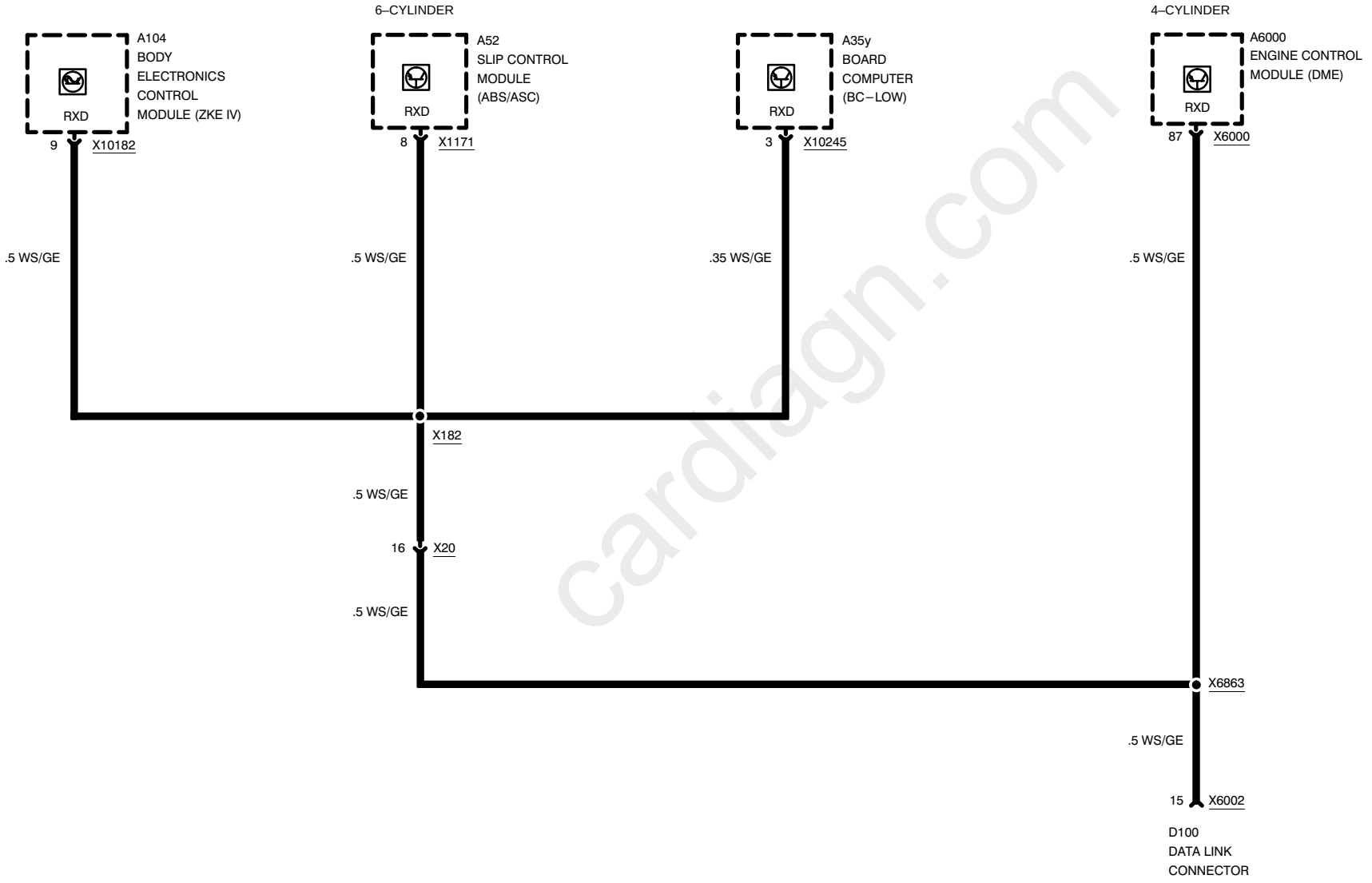


cardiagn.com

DATA LINK

RXD

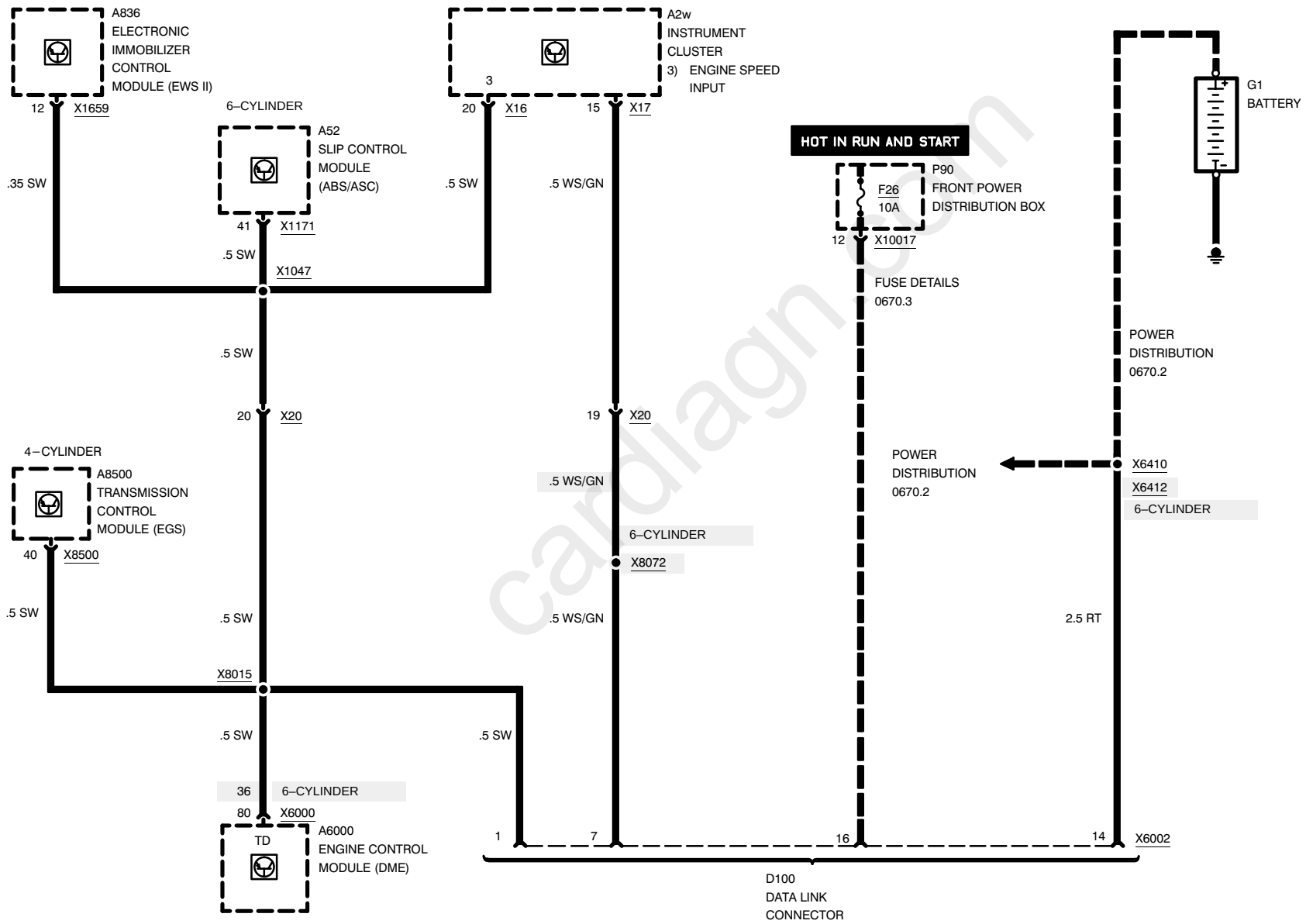
BMW 3 Z3



cardiagn.com

DATA LINK

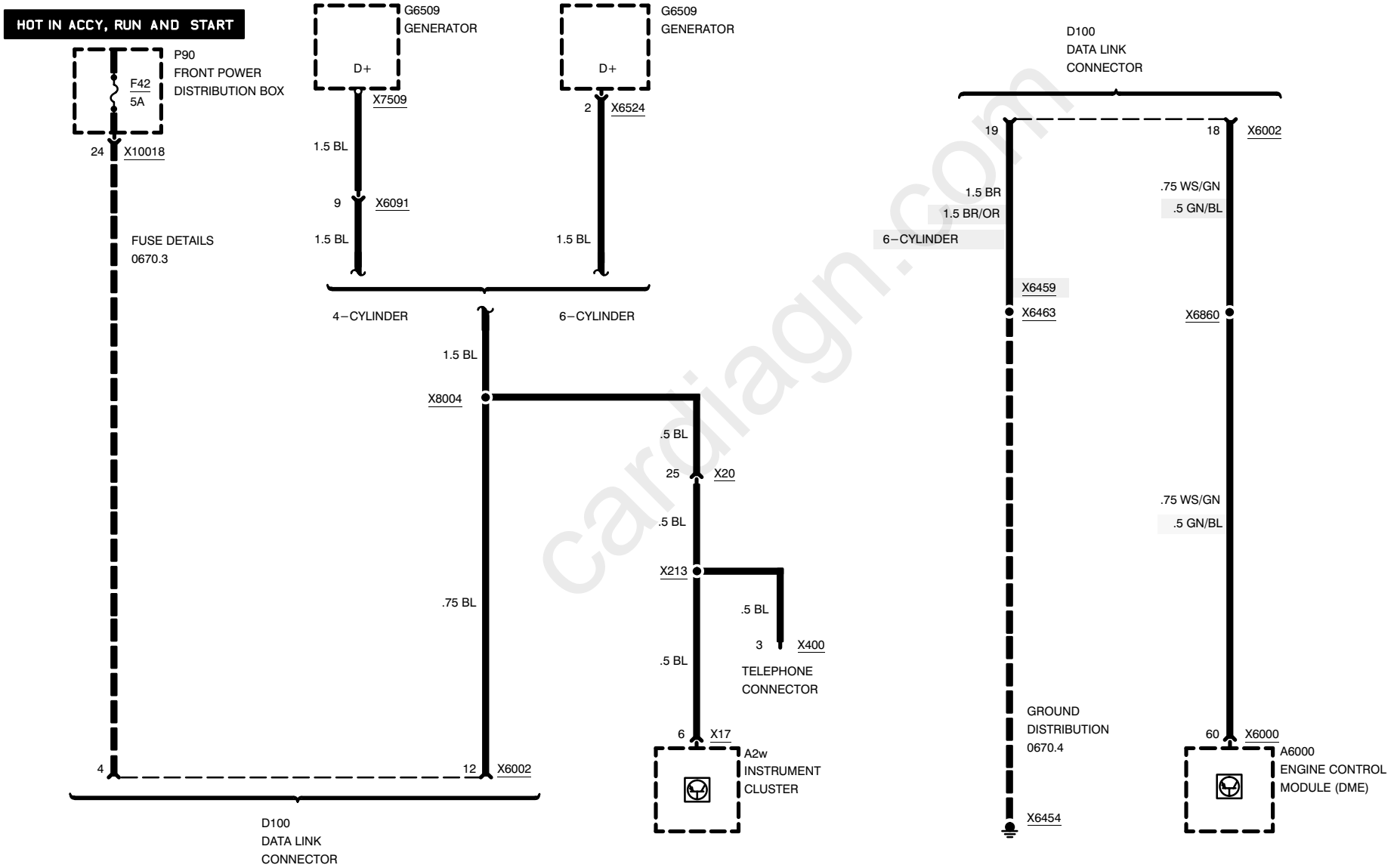
DATA LINK CONNECTOR, PINS 1, 7, 14, AND 16



cardiagn.com

DATA LINK

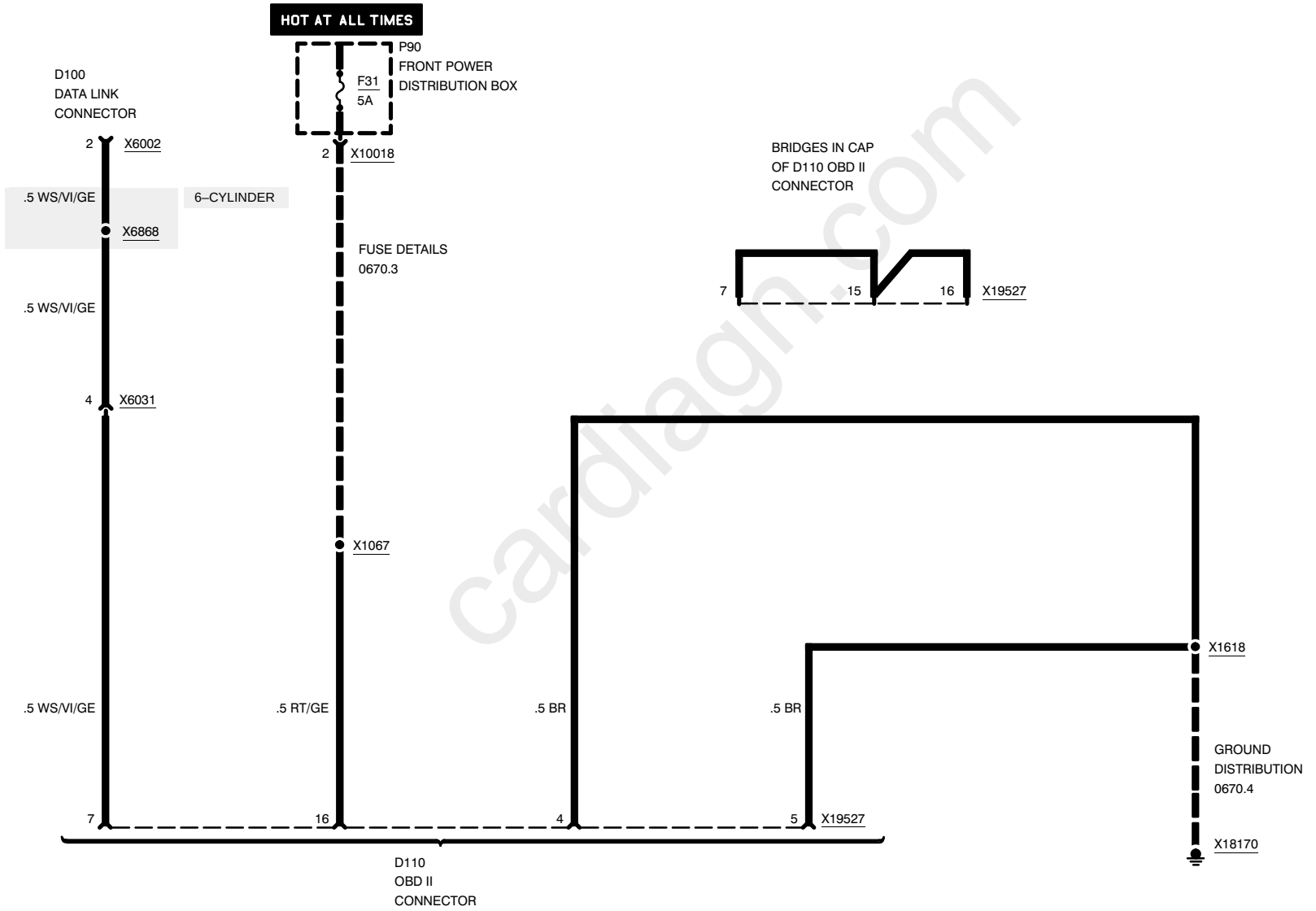
DATA LINK CONNECTOR, PINS 4, 12, 18, AND 19



cardiagn.com

DATA LINK

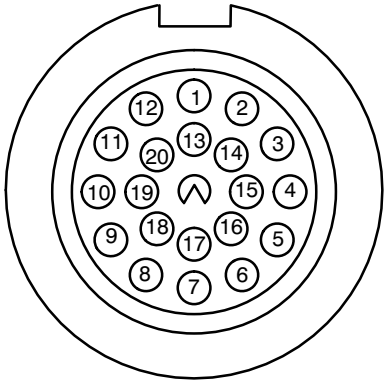
DATA LINK CONNECTOR, PIN 2 AND OBD II CONNECTOR



cardiagn.com

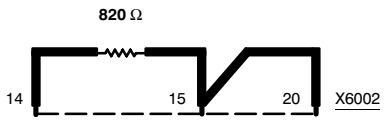
DATA LINK

DATA LINK CONNECTOR (X6002)



BRIDGES IN CAP OF D100 DATA LINK CONNECTOR

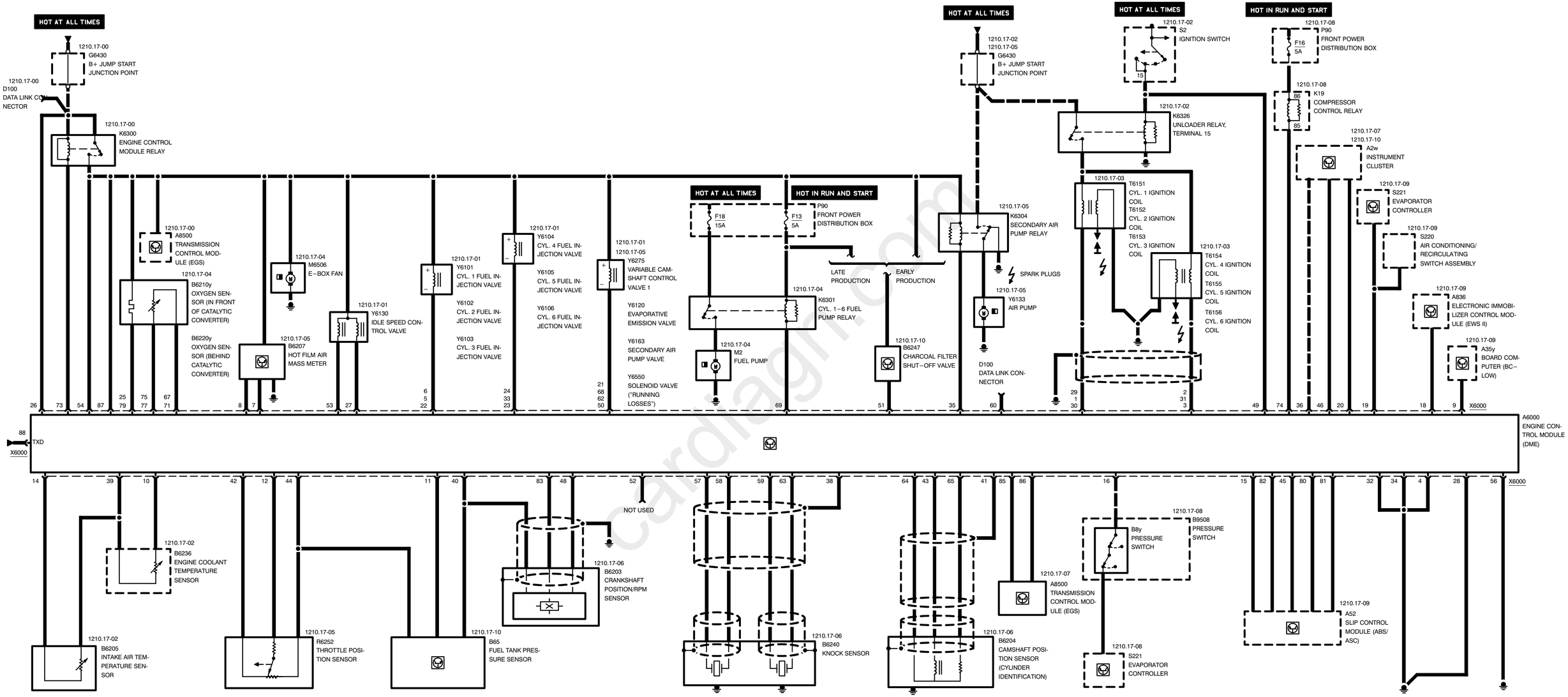




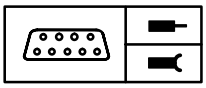
PIN NUMBER	TERMINAL NUMBER	TERMINAL DESCRIPTION	WIRE COLOR
1	TD	ENGINE	SW
2	TXD2	DIAGNOSTIC DATA LINK	WS/VI/GE
3	–	NOT OCCUPIED	
4	R	VOLTAGE: HOT IN ACCY, RUN AND START	SW/VI/GE (*VI/GN)
5	–	NOT OCCUPIED	
6	–	NOT OCCUPIED	
7	SI	SERVICE INTERVAL RESET	WS/GN
8	–	NOT OCCUPIED	
9	–	NOT OCCUPIED	
10	–	NOT OCCUPIED	
11	–	NOT OCCUPIED	
12	61(D+)	GENERATOR CHARGE INDICATOR	BL
13	–	NOT OCCUPIED	
14	30	VOLTAGE: HOT AT ALL TIMES	RT
15	RXD	DIAGNOSTIC DATA LINK	WS/GE
16	15S	VOLTAGE: IGNITION SWITCH IN RUN AND START	GN/WS
17	TXD	DIAGNOSTIC DATA LINK	WS/VI (*WS/VI/GE)
18	PGSP	PROGRAM SELECT FOR ENGINE CONTROL MODULE (DME)	WS/GN (*GN/BL)
19	31	GROUND	BR (*BR/OR)
20	TXD	DIAGNOSTIC DATA LINK	WS/VI

* 6–CYLINDER

carmanuals.com



cardiagn.com



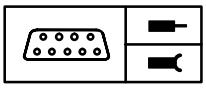
Pin Assignments

X6000

Pin	Type	Description/Function	Connection
1	A	Cyl. 2 ignition coil control	Cyl. 2 ignition coil
2	A	Cyl. 4 ignition coil control	Cyl. 4 ignition coil
3	A	Cyl. 6 ignition coil control	Cyl. 6 ignition coil
4	M	Ground	Ground point
5	A	Cyl. 2 fuel injection valve control	Cyl. 2 fuel injection valve
6	A	Cyl. 1 fuel injection valve control	Cyl. 1 fuel injection valve
7	M	Ground	Hot wire air mass meter
8	E	Hot wire air mass meter	Hot wire air mass meter
9	E	TI measurement signal (fuel consumption)	Board computer
10	E	Engine coolant temperature	Engine coolant temperature sensor
11	E	Fuel tank pressure	Fuel tank pressure sensor
12	E	Throttle position signal	Throttle position sensor
13		Not used	
14	E	Intake air temperature	Intake air temperature sensor
15	E	Speed signal right rear	ABS/ASC control module
16	E	Activate A/C	Pressure switch
17		Not used	
18	E	Drive away protection signal (code)	Electronic immobilizer control module (EWS II)
19	E	A/C-ON-signal	Air conditioning operating unit
20	A	“Check engine” indicator control	Instrument cluster
21	A	Camshaft control	Variable camshaft control valve
22	A	Cyl. 3 fuel injection valve control	Cyl. 3 fuel injection valve
23	A	Cyl. 6 fuel injection valve control	Cyl. 6 fuel injection valve
24	A	Cyl. 4 fuel injection valve control	Cyl. 4 fuel injection valve
25	M	Oxygen sensor heating ground	Oxygen sensor (in front of catalytic converter)
26	E	Battery voltage	B+ jump start junction point
27	A	Activate valve	Idle speed control valve
28	M	Ground	Ground point
29	A	Cyl. 1 ignition coil control	Cyl. 1 ignition coil

E = Input, A = Output, M = Ground

cardiagn.com

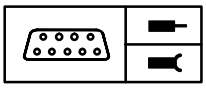


Pin Assignments

Pin	Type	Description/Function	Connection
30	A	Cyl. 3 ignition coil control	Cyl. 3 ignition coil
31	A	Cyl. 5 ignition coil control	Cyl. 5 ignition coil
32	M	Ground	Ground point
33	A	Cyl. 5 fuel injection valve control	Cyl. 5 fuel injection valve
34	M	Ground	Ground point
35	A	Activate relay	Secondary air pump relay
36	A	Crankshaft RPM speed signal TD	Instrument cluster
37		Not used	
38	M	Ground	Shield knock sensor
39	M	Ground	Temperature sensors
40	M	Ground	Crankshaft position/RPM sensor Fuel tank pressure sensor
41	M	Ground	Shield camshaft position sensor
42	M	Ground	Throttle position sensor
43	M	Ground	Camshaft position sensor
44	A	Voltage supply	Throttle position sensor Fuel tank pressure sensor
45	A	Throttle position signal	ABS/ASC control module
46	E	TI measurement signal (fuel consumption)	Instrument cluster
47		Not used	
48	A	Voltage supply	Crankshaft position/RPM sensor
49	E	Terminal 15	Ignition switch
50	A	Running losses	Solenoid valve
51	A	Activate valve	Charcoal filter shut off valve
52	A	Signal exhaust flap	Not used
53	A	Activate valve	Idle speed controle valve
54	E	Battery voltage, terminal 87	Engine control module relay
55		Not used	
56	M	Ground	Ground point
57	E	Cyl. 1-3 knock sensor	Knock sensor
58	E	Cyl. 1-3 knock sensor	Knock sensor
59	E	Cyl. 4-6 knock sensor	Knock sensor
60	E	Programming voltage	Data link connector

E = Input, A = Output, M = Ground

carDiagn.com



Pin Assignments

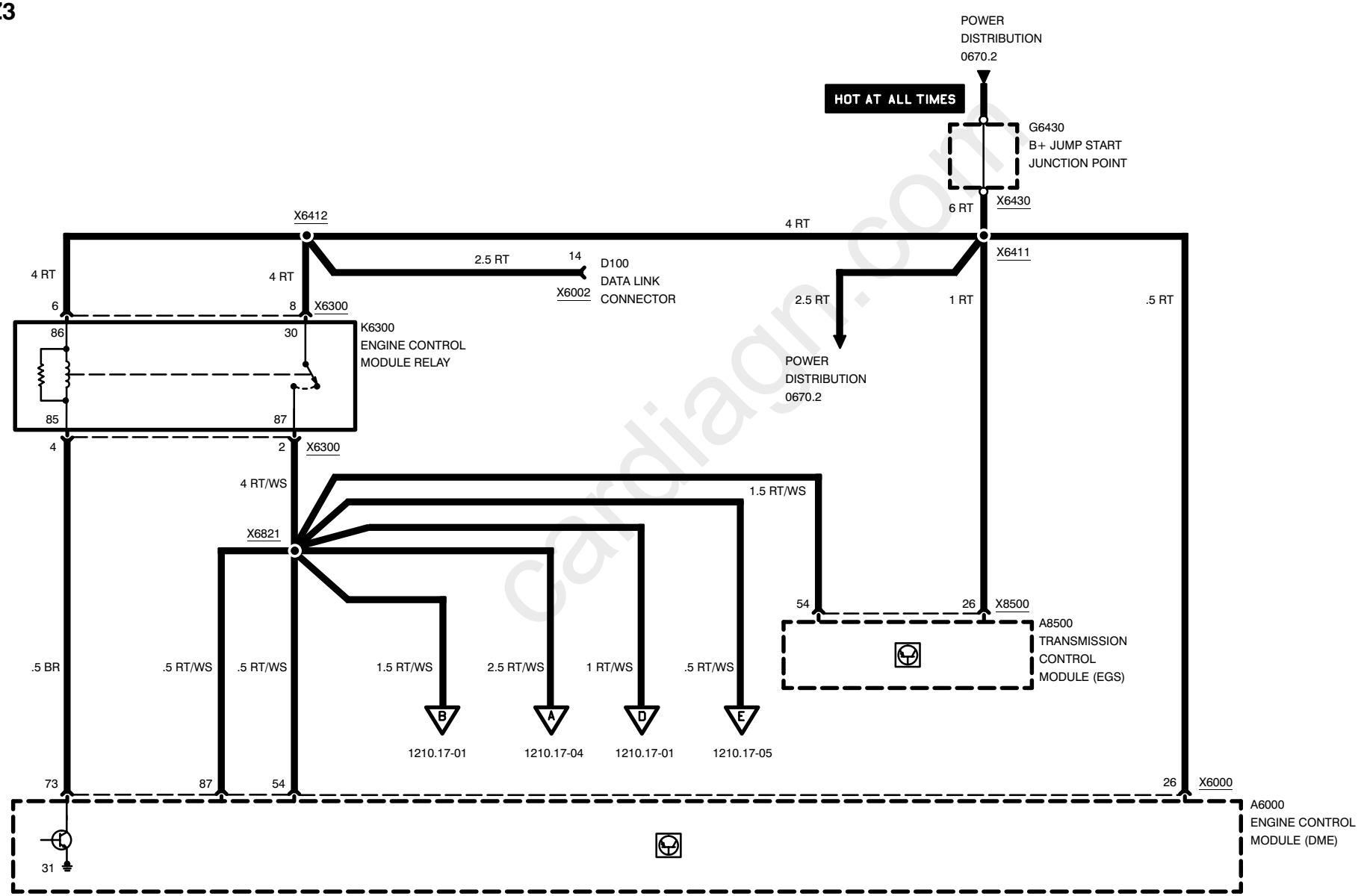
Pin	Type	Description/Function	Connection
61		Not used	
62	E	Activate valve	Secondary air pump value
63	E	Cyl. 4-6 knock sensor	Knock sensor
64	E	Camshaft position	Camshaft position sensor
65	E	Camshaft position	Camshaft position sensor
66		Not used	
67	M	Oxygen sensor signal ground	Oxygen sensor (in front of catalytic converter)
68	E	Activate valve	Evaporative emission valve
69	E	Activate relay	Fuel pump relay
70		Not used	
71	M	Oxygen sensor signal ground	Oxygen sensor (behind catalytic converter)
72		Not used	
73	E	Activate relay	Engine control module relay
74	A	Activate A/C compressor	Compressor control relay
75	E	Sensor signal	Oxygen sensor (in front of catalytic converter)
76		Not used	
77	E	Sensor signal	Oxygen sensor (behind catalytic converter)
78		Not used	
79	M	Oxygen sensor heating ground	Oxygen sensor (behind catalytic converter)
80	A	ASC signal ZA	Slip control module ABS/ASC
81	A	ASC signal ZWV	Slip control module ABS/ASC
82	A	ASC signal MSR	Slip control module ABS/ASC
83	E	Sensor signal	Crankshaft position/RPM sensor
84		Not used	
85	E/A	CAN LOW	Transmission control module EGS
86	E/A	CAN HIGH	Transmission control module EGS
87	E	Battery voltage, terminal 87	Engine control module relay
88	E/A	TxD diagnosis data link	Data link connector

E = Input, A = Output, M = Ground

cardiagn.com

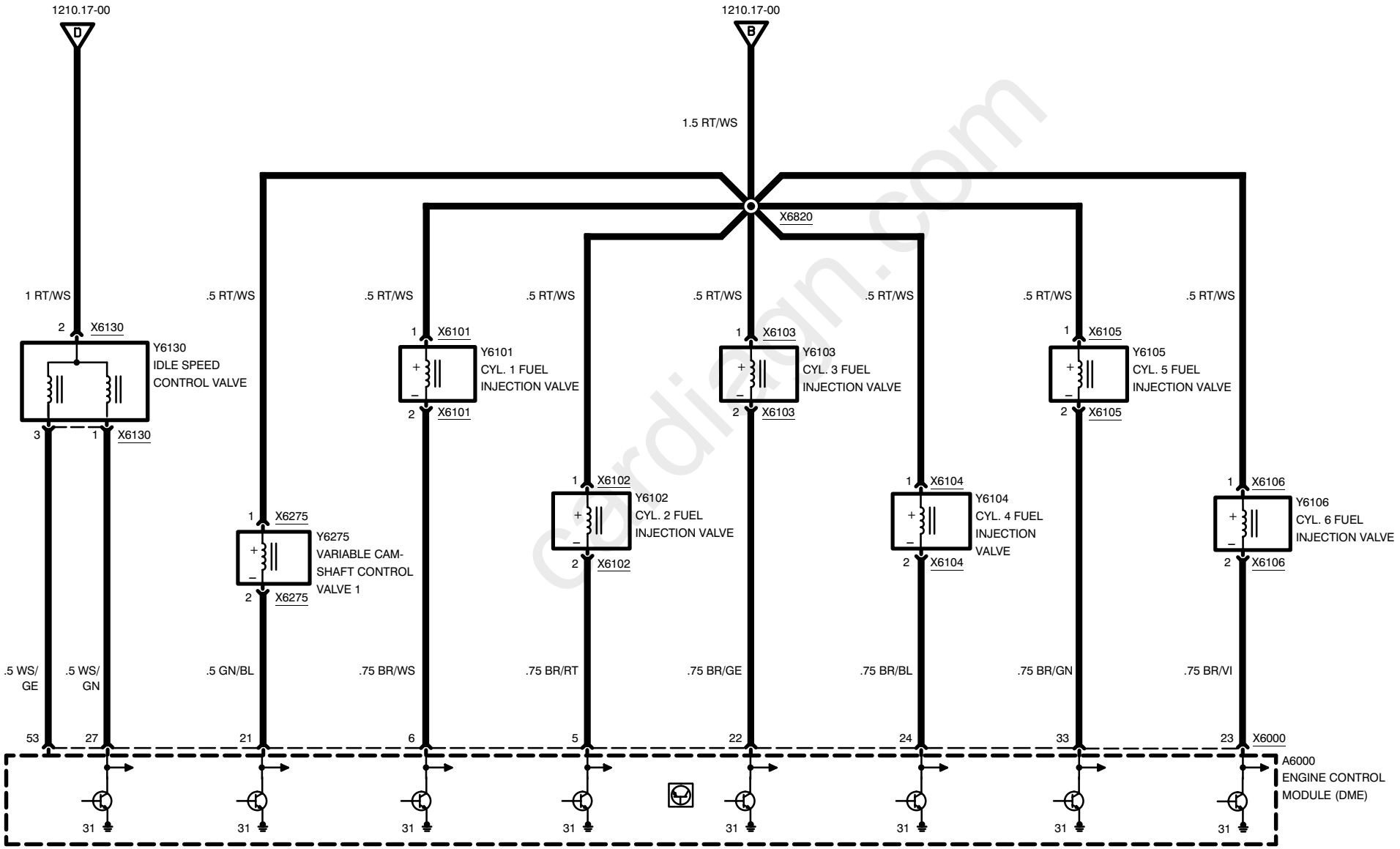
ENGINE CONTROL SYSTEM MS41.1 (6−CYLINDER M52)

POWER



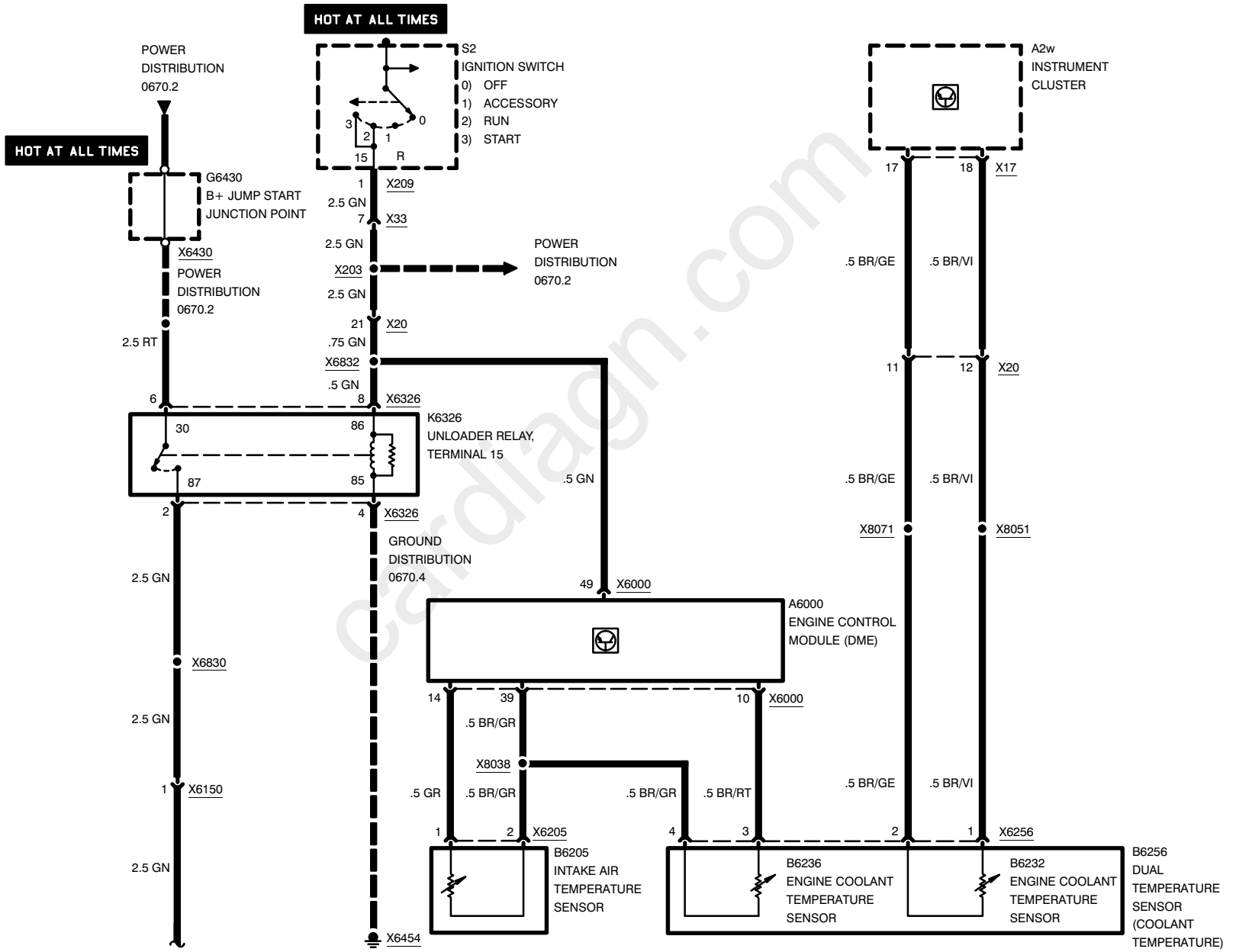
cardiagn.com

ENGINE CONTROL SYSTEM MS41.1 (6−CYLINDER M52)

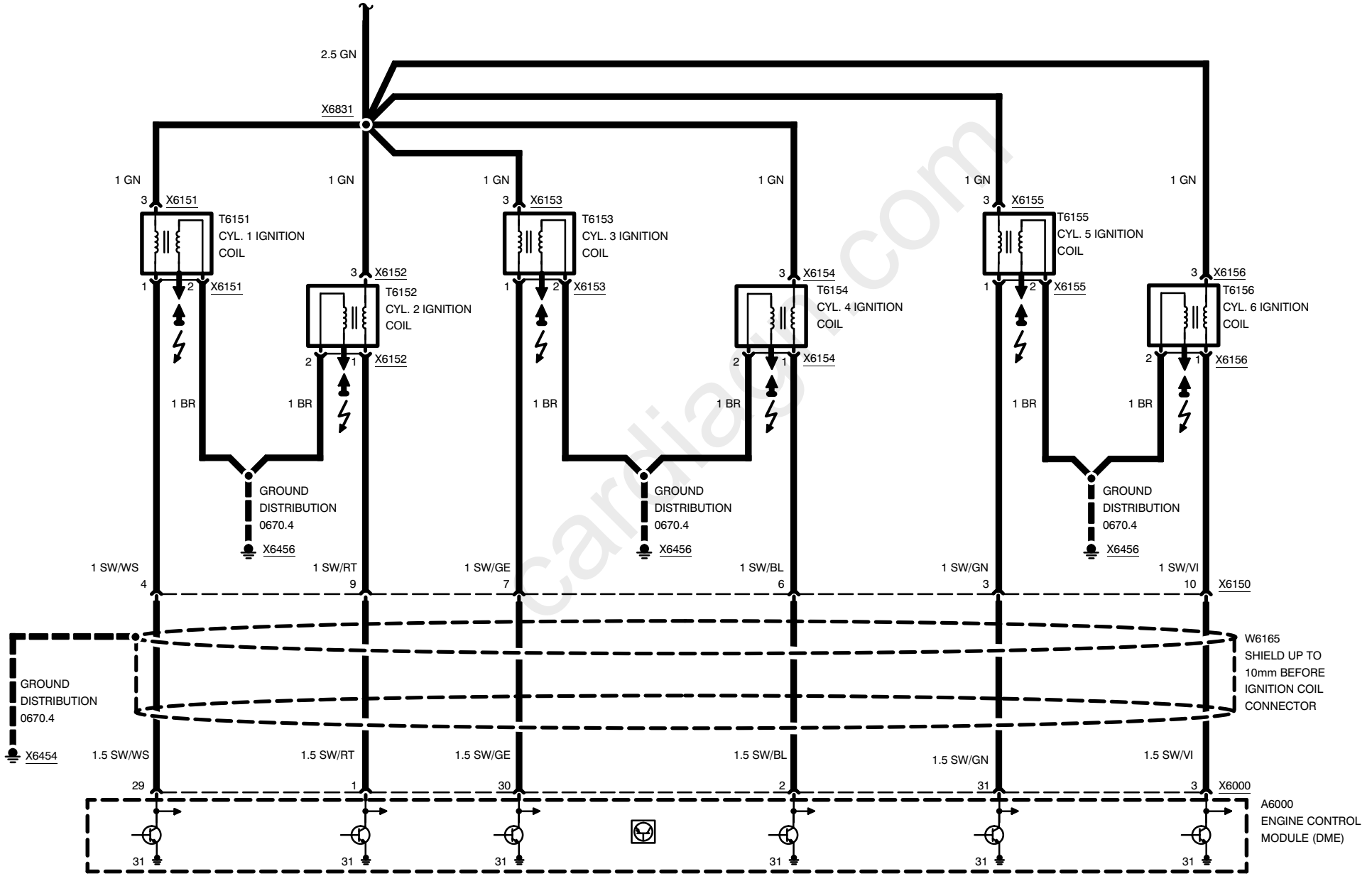


cardiagn.com

ENGINE CONTROL SYSTEM MS41.1 (6−CYLINDER M52)

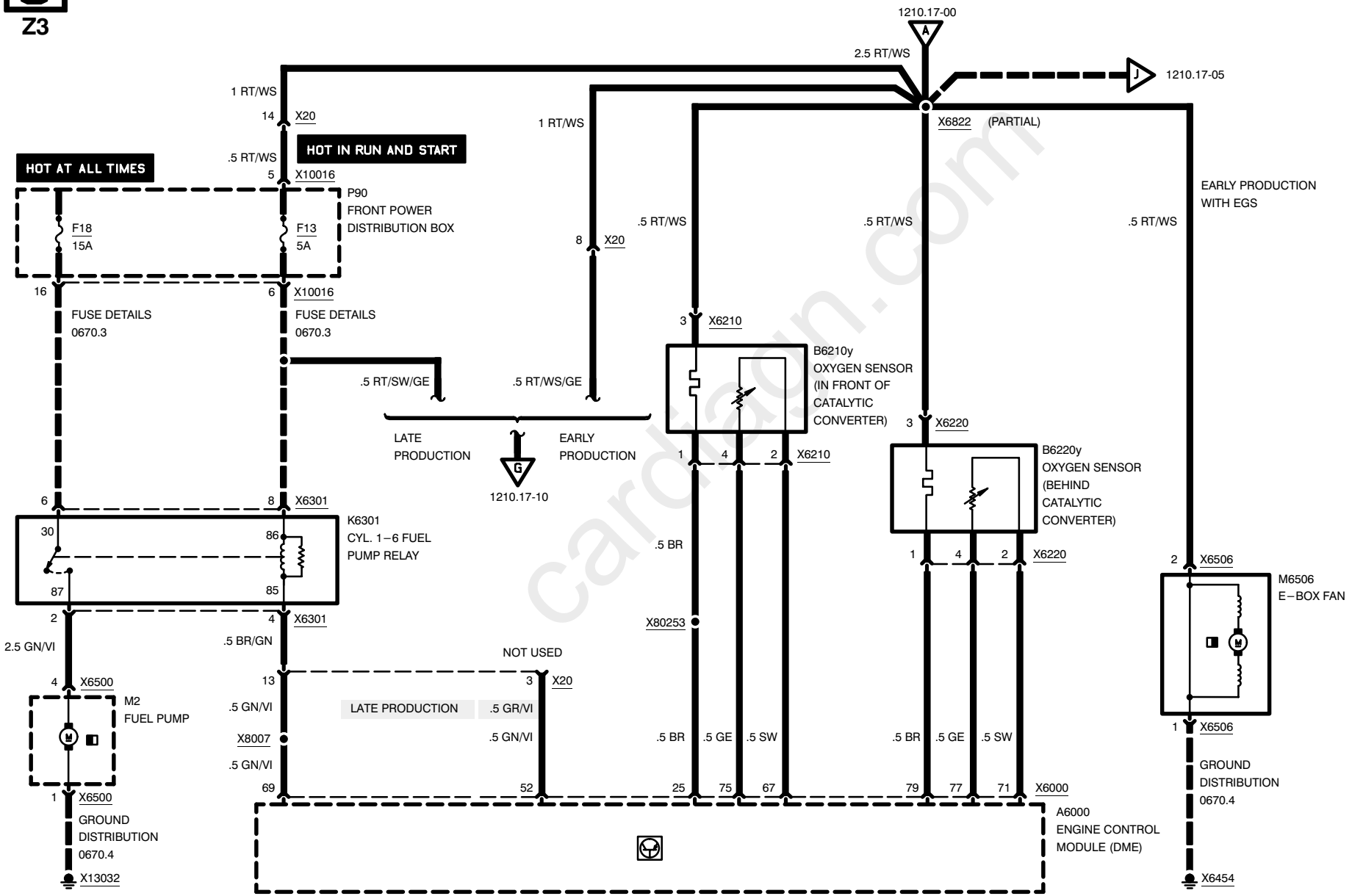


cardiagn.com



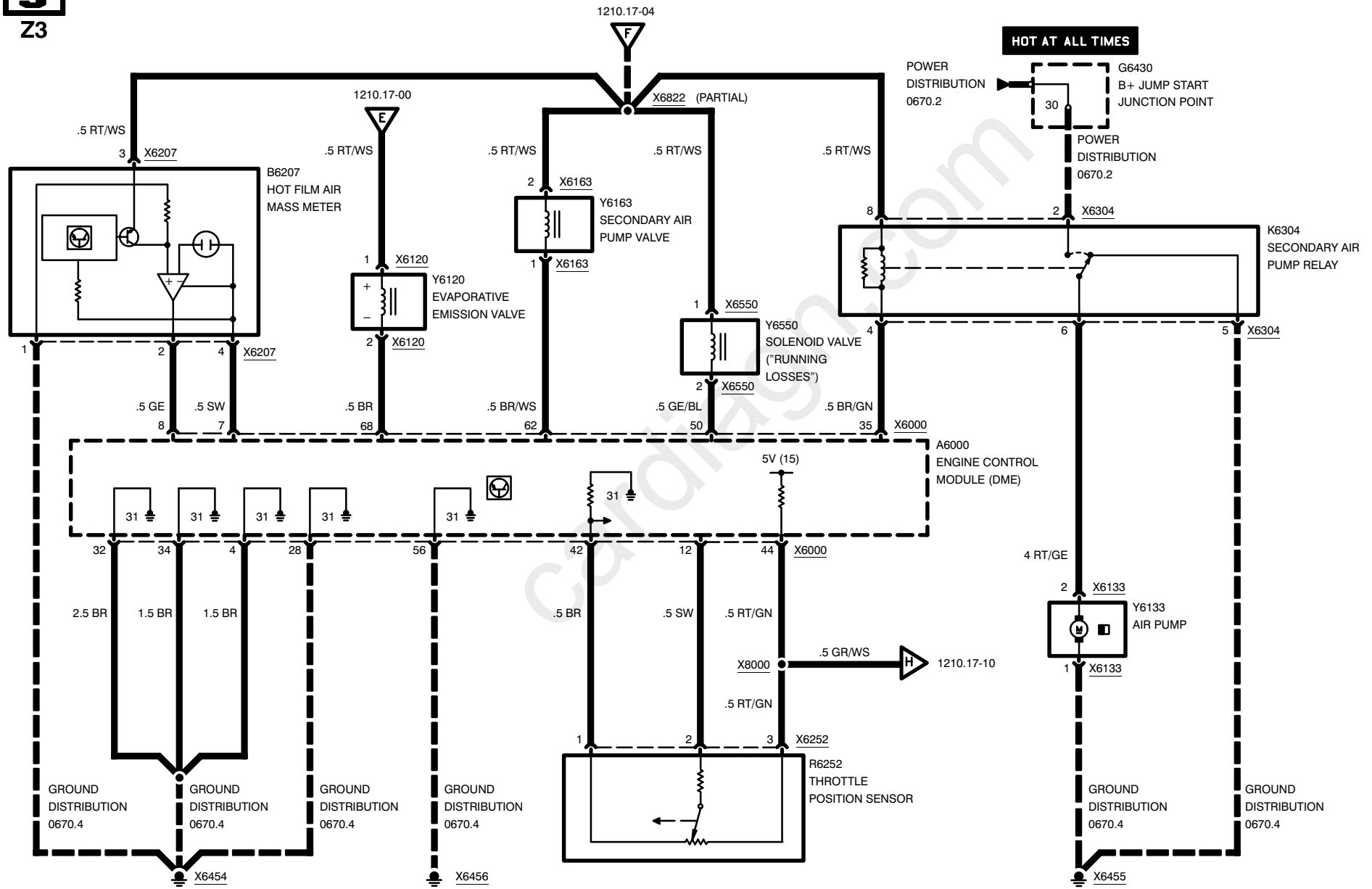
cardiagn.com

ENGINE CONTROL SYSTEM MS41.1 (6−CYLINDER M52)



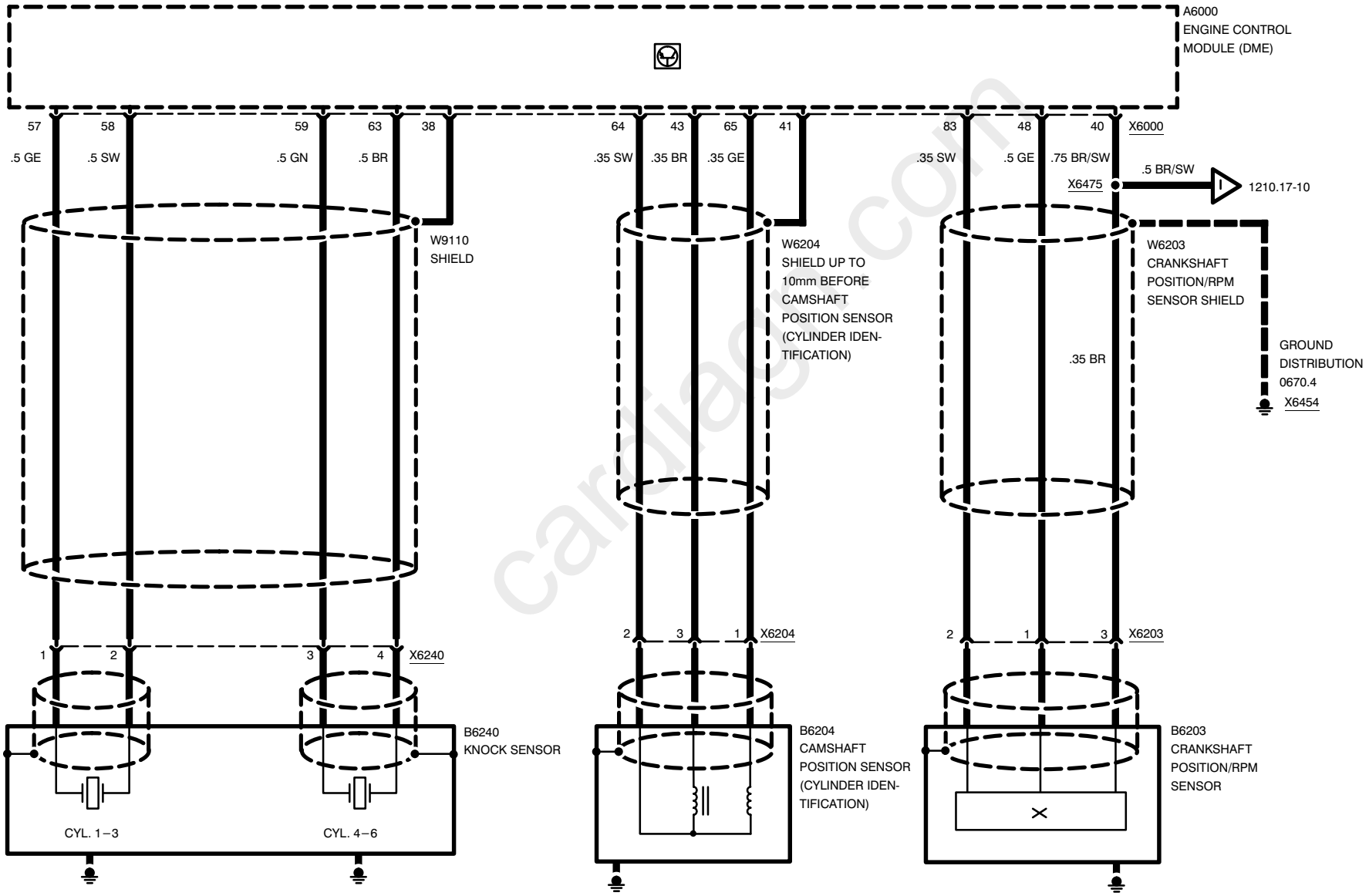
cardiagn.com

ENGINE CONTROL SYSTEM MS41.1 (6−CYLINDER M52)



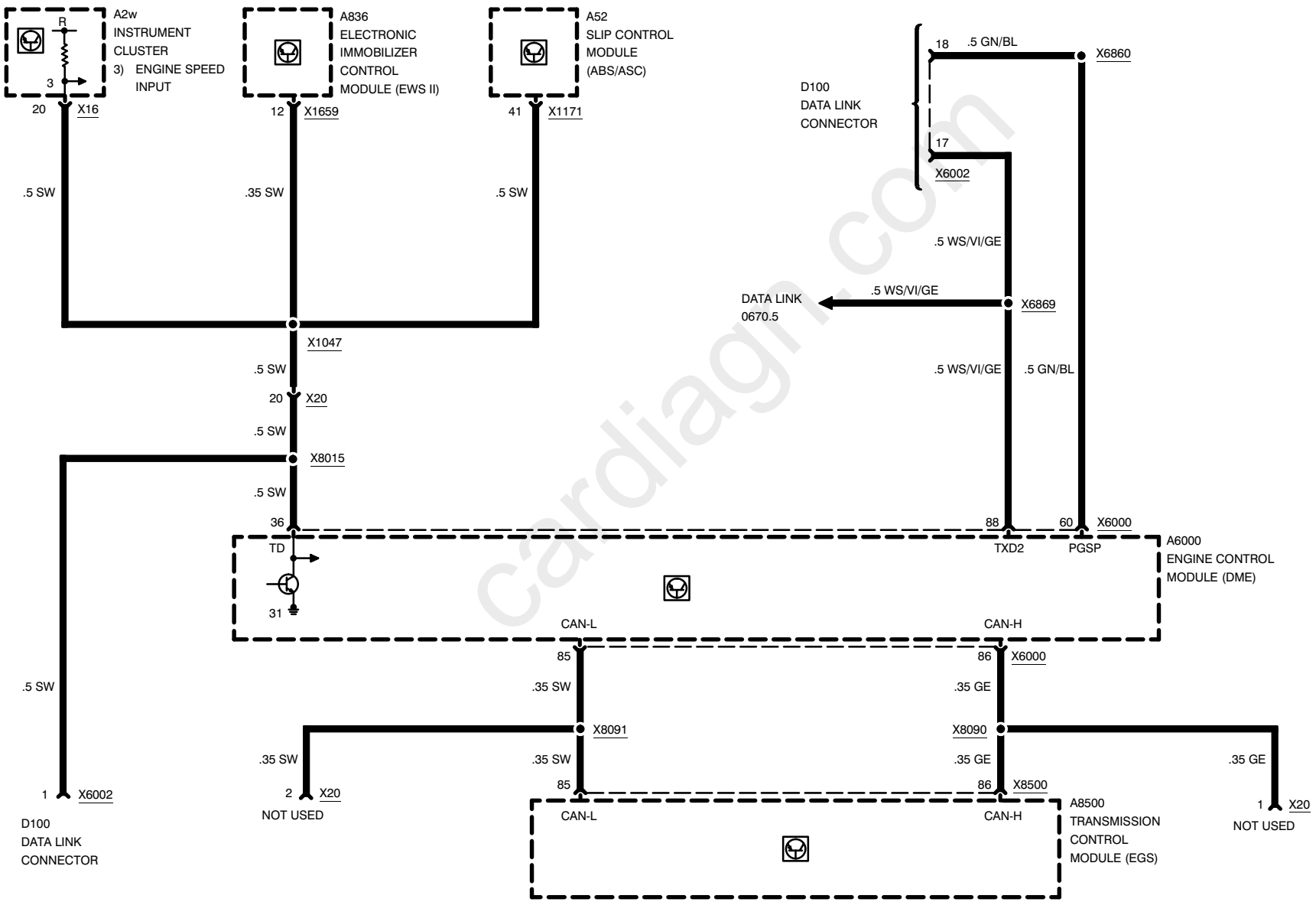
cardiagn.com

ENGINE CONTROL SYSTEM MS41.1 (6−CYLINDER M52)



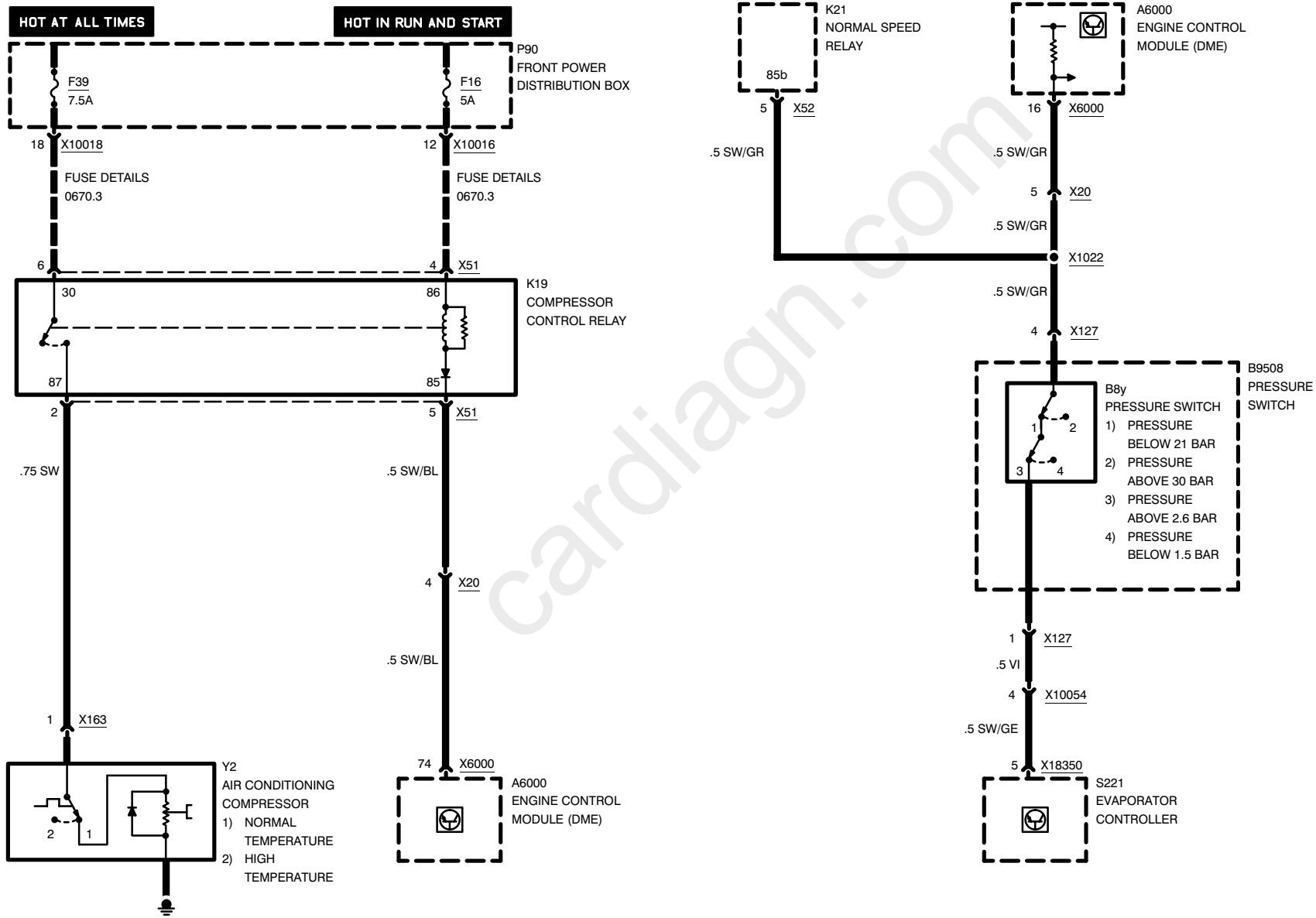
cardiagn.com

ENGINE CONTROL SYSTEM MS41.1 (6−CYLINDER M52)



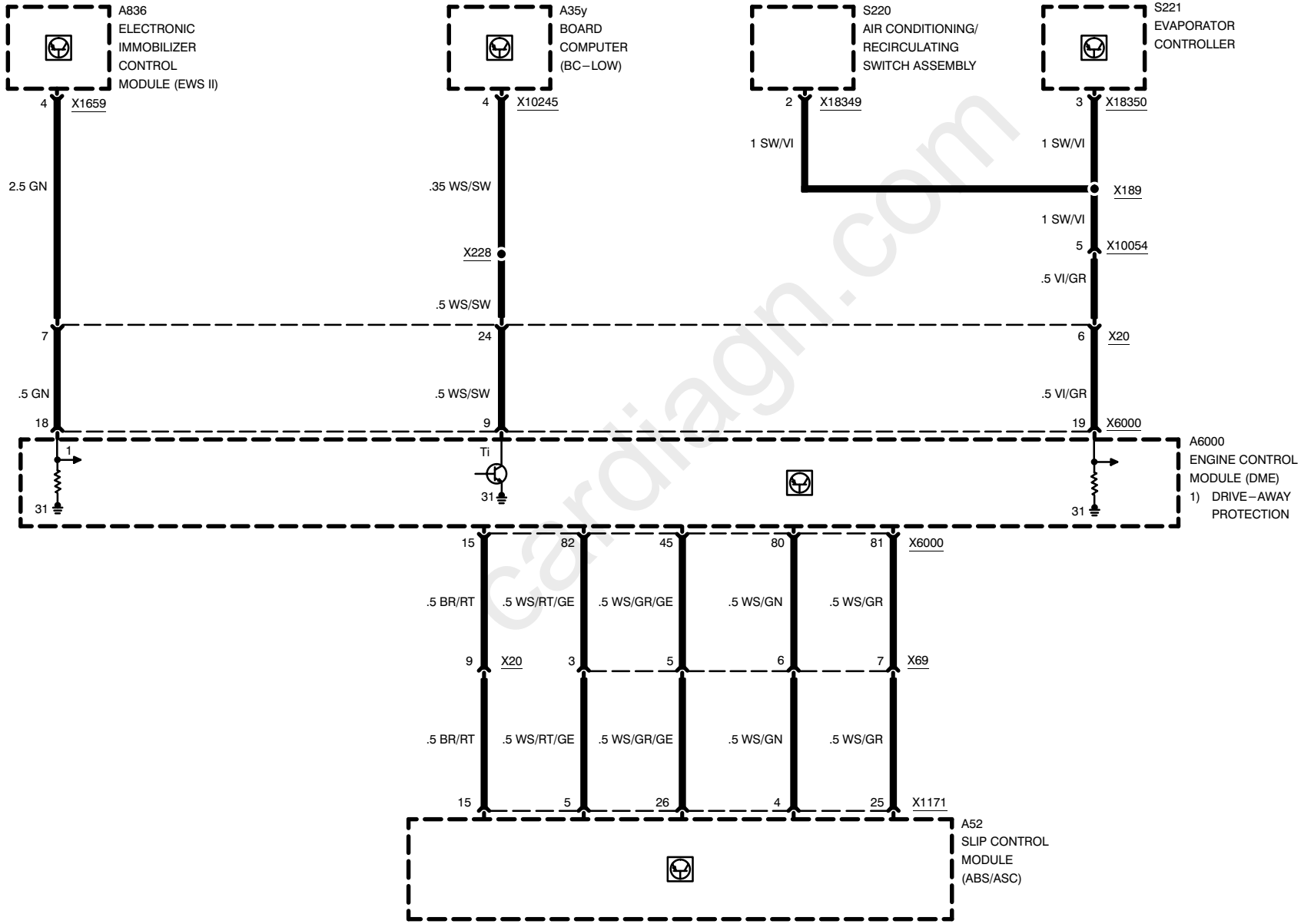
cardiagn.com

ENGINE CONTROL SYSTEM MS41.1 (6−CYLINDER M52)



cardiagn.com

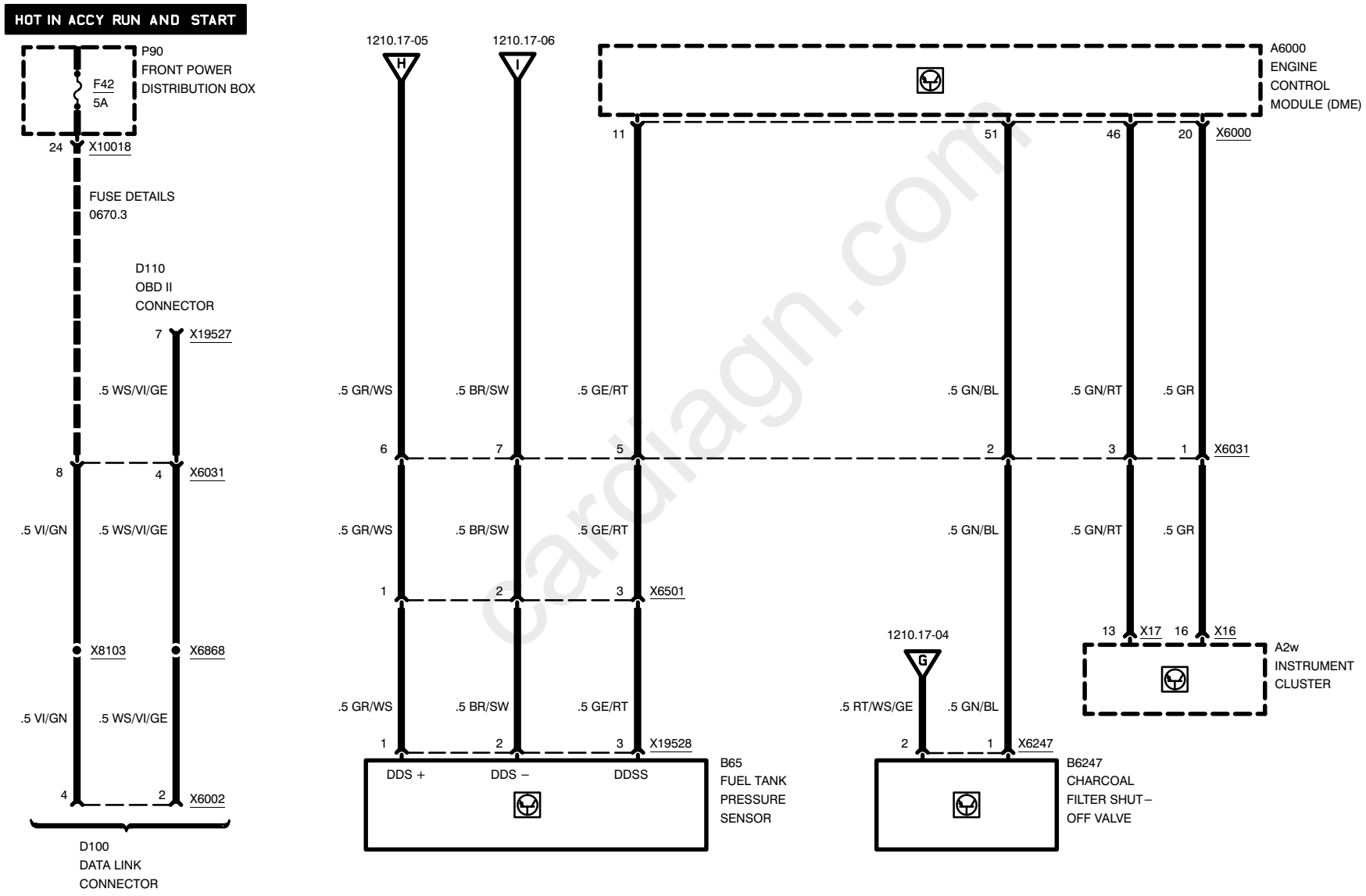
ENGINE CONTROL SYSTEM MS41.1 (6−CYLINDER M52)



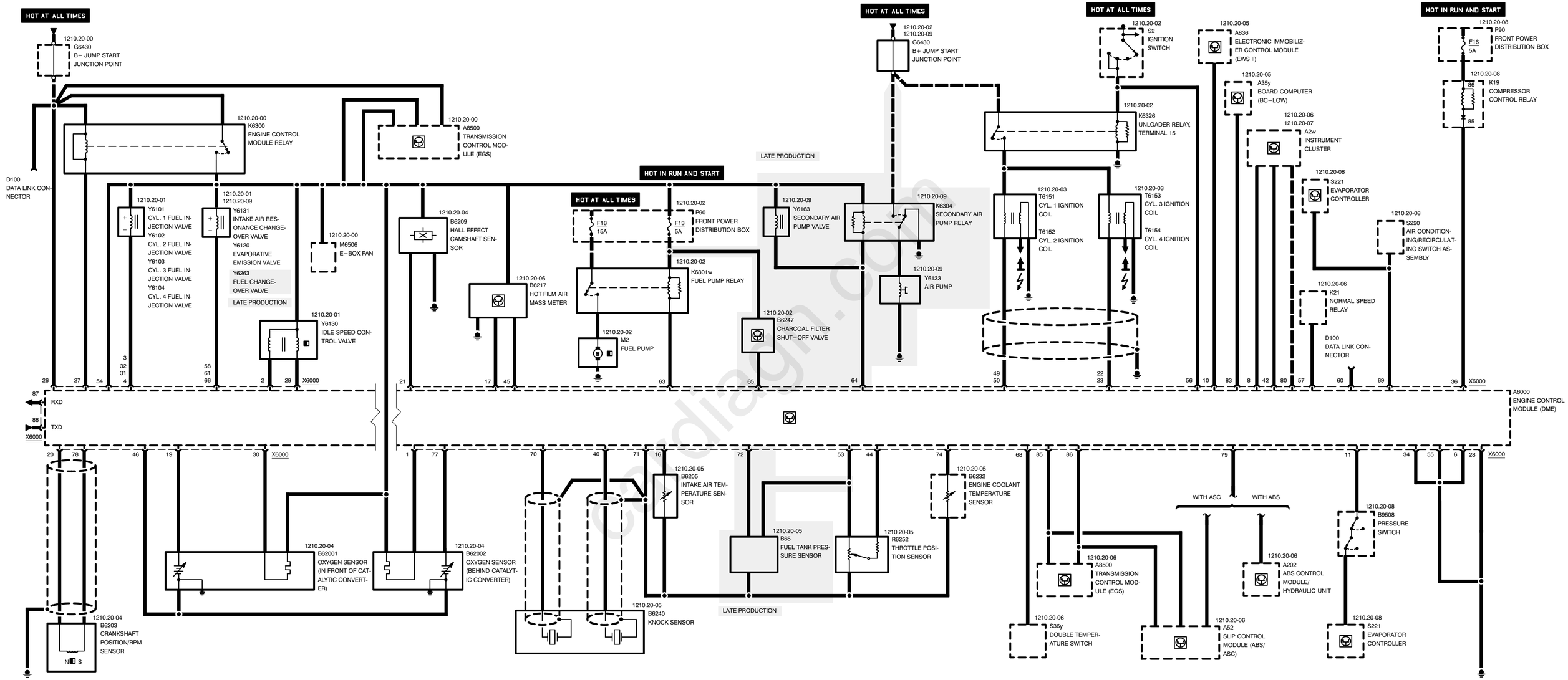
cardiagn.com

ENGINE CONTROL SYSTEM MS41.1 (6–CYLINDER M52)

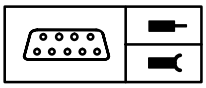
OBD II DIAGNOSIS



cardiagn.com



cardiagn.com



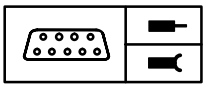
Pin Assignments

X6000

Pin	Type	Description/Function	Connection
89	A	Oxygen sensor heating (−)	Oxygen sensor (behind catalytic converter)
90	A	Activate valve	Idle speed control valve
91	A	Activate valve	Cyl. 1 fuel injection valve
92	A	Activate valve	Cyl. 4 fuel injection valve
93		Not used	
94	M	Ground, fuel injection valve output stages	Ground point
95		Not used	
96	A	“Check engine” indicator control	Instrument cluster
97		Not used	
98	E	Drive away protection signal	Electronic immobilizer control module (EWS II)
99	E	Activate A/C	Pressure switch
100		Not used	
101		Not used	
102		Not used	
103		Not used	
104	E	Intake air temperature	Intake air temperature sensor
105	M	Ground	Hot film air mass meter
106		Not used	
107	E	Oxygen sensor signal	Oxygen sensor (in front of catalytic converter)
108	E	Crankshaft position/RPM	Crankshaft position/RPM sensor
109	E	Camshaft position	Hall effect camshaft sensor
110	A	Cyl. 3 ignition coil control	Cyl. 3 ignition coil
111	A	Cyl. 4 ignition coil control	Cyl. 4 ignition coil
112		Not used	
113		Not used	
114	E	Battery voltage	B+ jump start junction point
115	A	Engine control module relay control	Engine control module relay, terminal 85
116	M	Ground for electronics and shielding of sensors	Ground point

E = Input, A = Output, M = Ground

cardiagn.com

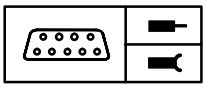


Pin Assignments

Pin	Type	Description/Function	Connection
117	A	Idle speed control valve control	Idle speed control valve
118	A	Oxygen sensor heating	Oxygen sensor (in front of catalytic converter)
119	A	Activate valve	Cyl. 3 fuel injection valve
120	A	Activate valve	Cyl. 2 fuel injection valve
121		Not used	
122	M	Ground, remaning output stages (except for ingnition and fuel injection valves)	Ground point
123		Not used	
124	A	A/C compressor cut-out	Compressor control relay
125		Not used	
126		Not used	
127		Not used	
128	E	Cyl. 3-4 knock sensor	Knock sensor
129		Not used	
130	E	TI-measurement signal (fuel consumption)	Instrument cluster
131		Not used	
132	E	Throttle position	Throttle position sensor
133	E	Signal input	Hot film air mass meter
134	M	Sensor ground	Oxygen sensors
135		Not used	
136		Not used	
137	A	Cyl. 1 ignition coil control	Cyl. 1 ignition coil
138	A	Cyl. 2 ignition coil control	Cyl. 2 ignition coil
139		Not used	
140		Not used	
141	A	Component supply (+)	Throttle position sensor/ Fuel tank pressure-sensor (Late Production)
142	E	Battery voltage from engine control module relay	Engine control module relay, terminal 87
143	M	Ground, ignition	Ground point
144	E	Ignition switch, terminal 15	Ignition switch, terminal 15
145	A	Activate auxiliary fan	Normal speed relay

E = Input, A = Output, M = Ground

cardiagn.com



Pin Assignments

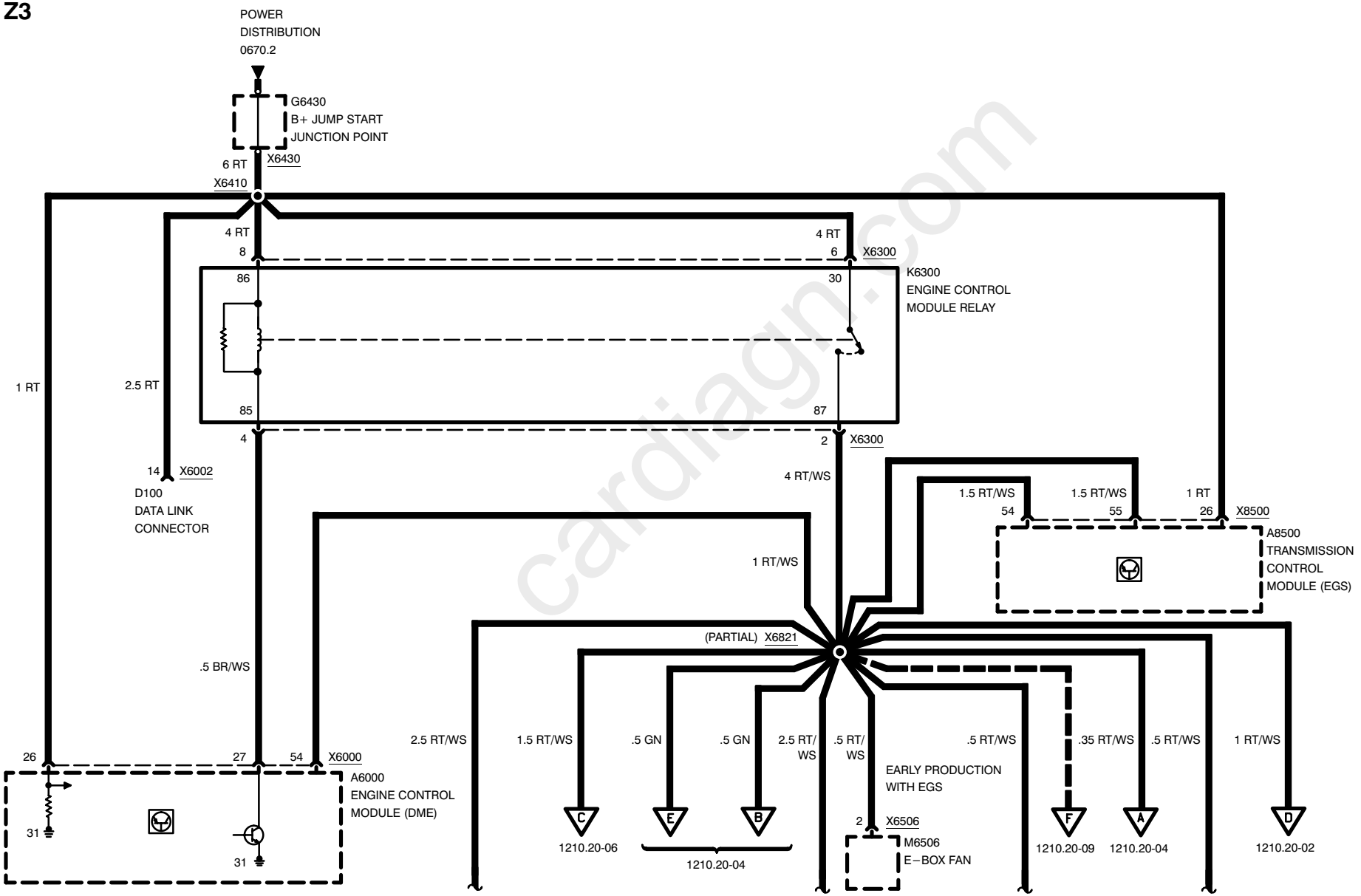
Pin	Type	Description/Function	Connection
146	A	Activate valve	Intake air resonance change over valve
147		Not used	
148	E	Programming voltage	Data link connector
149	A	Activate valve	Evaporation emission valve
150		Not used	
151	A	Activate relay	Fuel pump relay
152	A	Activate air pump (Late Production)	Secondary air pump valve/relay
153	A	Activate valve (Late Production)	Charcoal filter shut-off valve
154	A	Activate valve (Late Production)	Fuel changeover valve
155		Not used	
156	E	Signal above 80 ˚C	Double temperature switch
157	E	A/C-ON-signal	Air conditioning operating unit
158	E	Cyl 1-2 knock sensor	Knock sensor
159	M	Ground for sensors	Temperature-/ knock-/ throttle position-/ fuel tank pressure sensor
160	E	Fuel tank pressure	Fuel tank pressure sensor
161		Not used	
162	E	Temperature signal	Engine coolant temperature sensor
163		Not used	
164		Not used	
165	E	Oxygen sensor signal	Oxygen sensor (behind catalytic converter)
166	E	Crankshaft position/RPM	Crankshaft position/RPM sensor
167	E	Speed signal right rear	ABS/ASC control module
168	E	Crankshaft RPM speed signal TD	Instrument cluster
169		Not used	
170		Not used	
171	E	Vehicle speed signal	Board computer
172		Not used	
173	E/A	CAN-LOW	EGS/ASC control module
174	E/A	CAN-HIGH	EGS/ASC control module
175	A	RxD diagnosis data line	Data link connector
176	E/A	TxD diagnosis data line	Data link connector

E = Input, A = Output, M = Ground

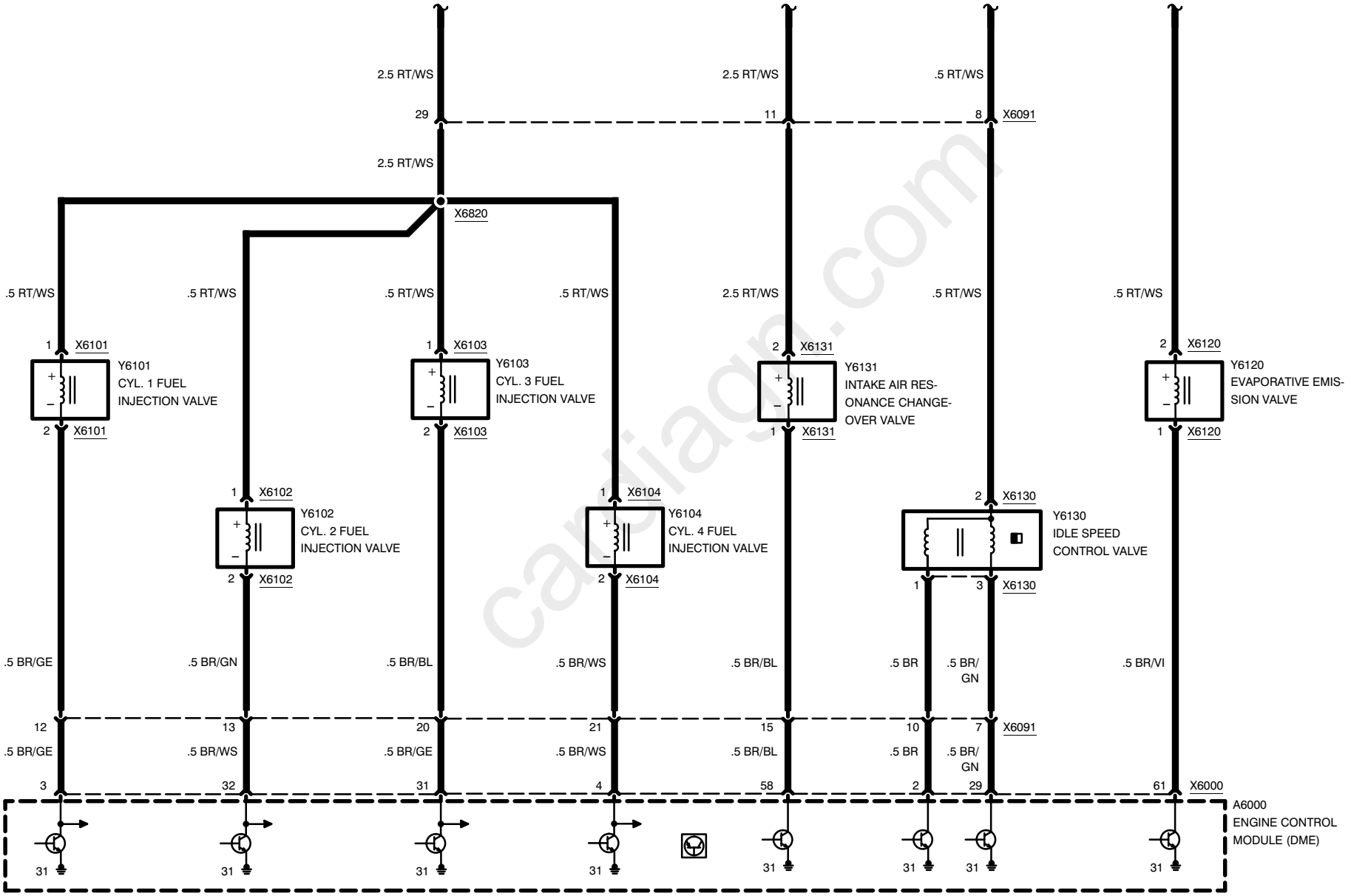
carsdiagn.com

ENGINE CONTROL SYSTEM (DME M5.2, 4−CYLINDER M44)

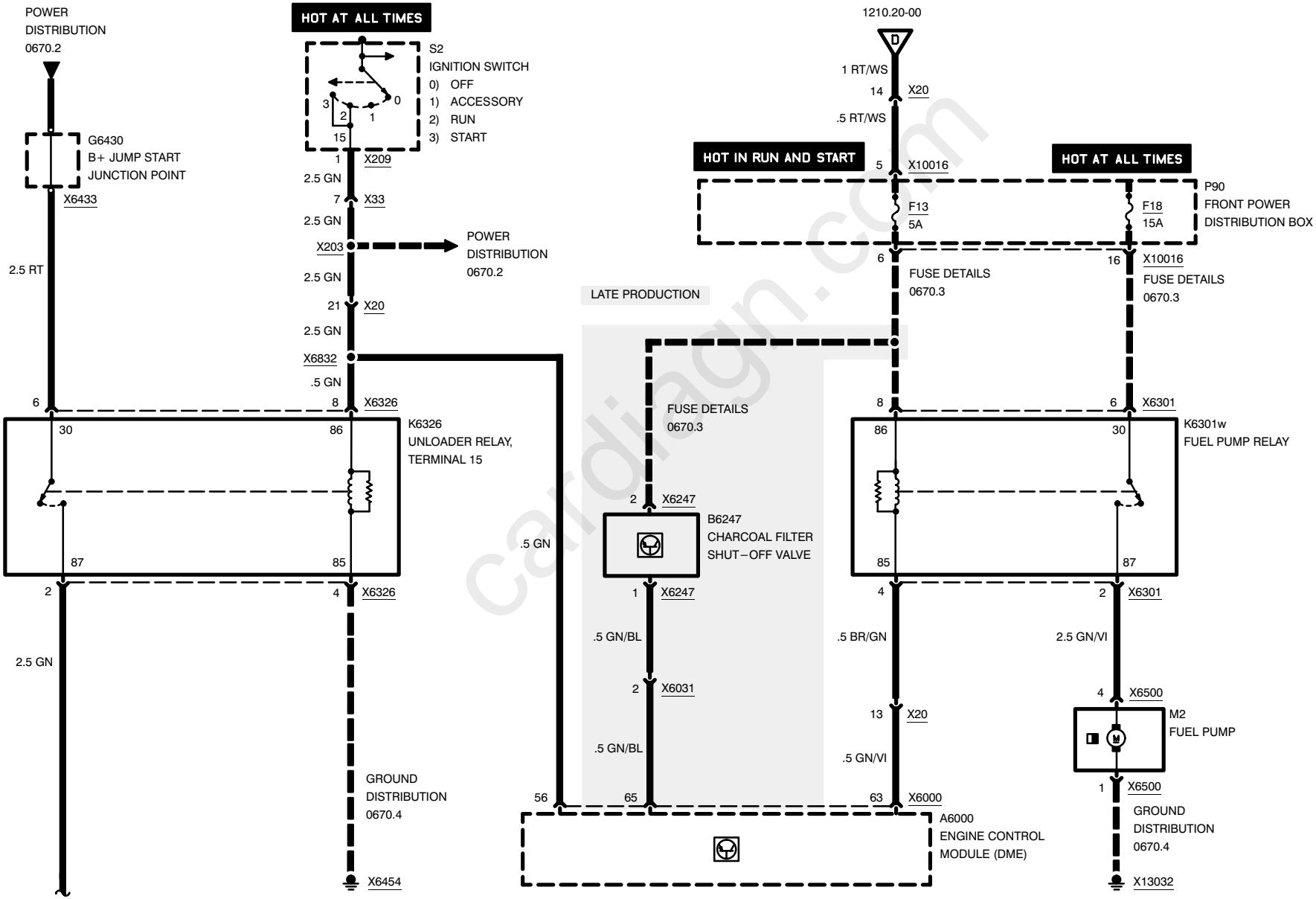
POWER, FUEL INJECTION VALVES



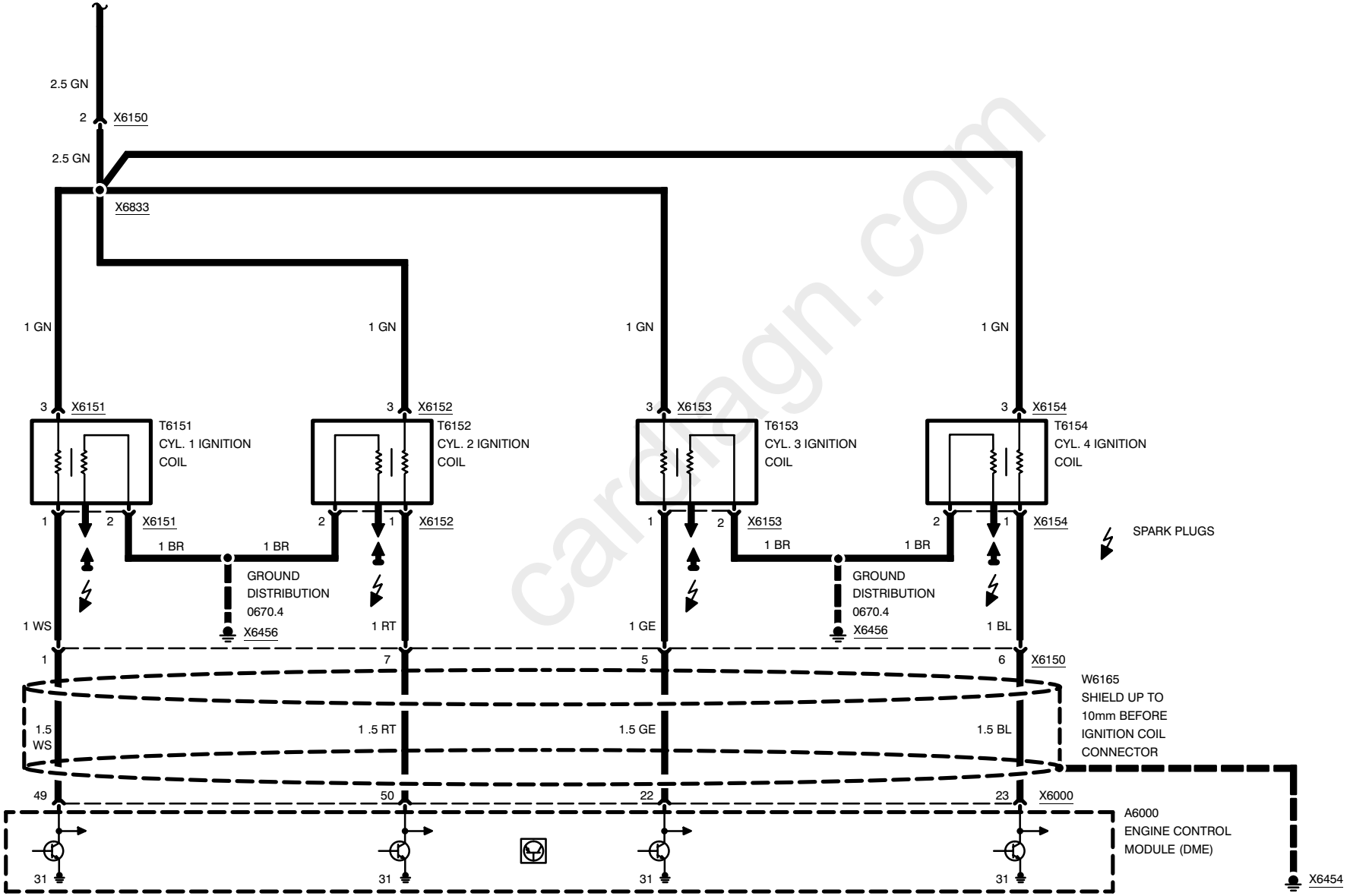
cardiagn.com



carDiagn.com



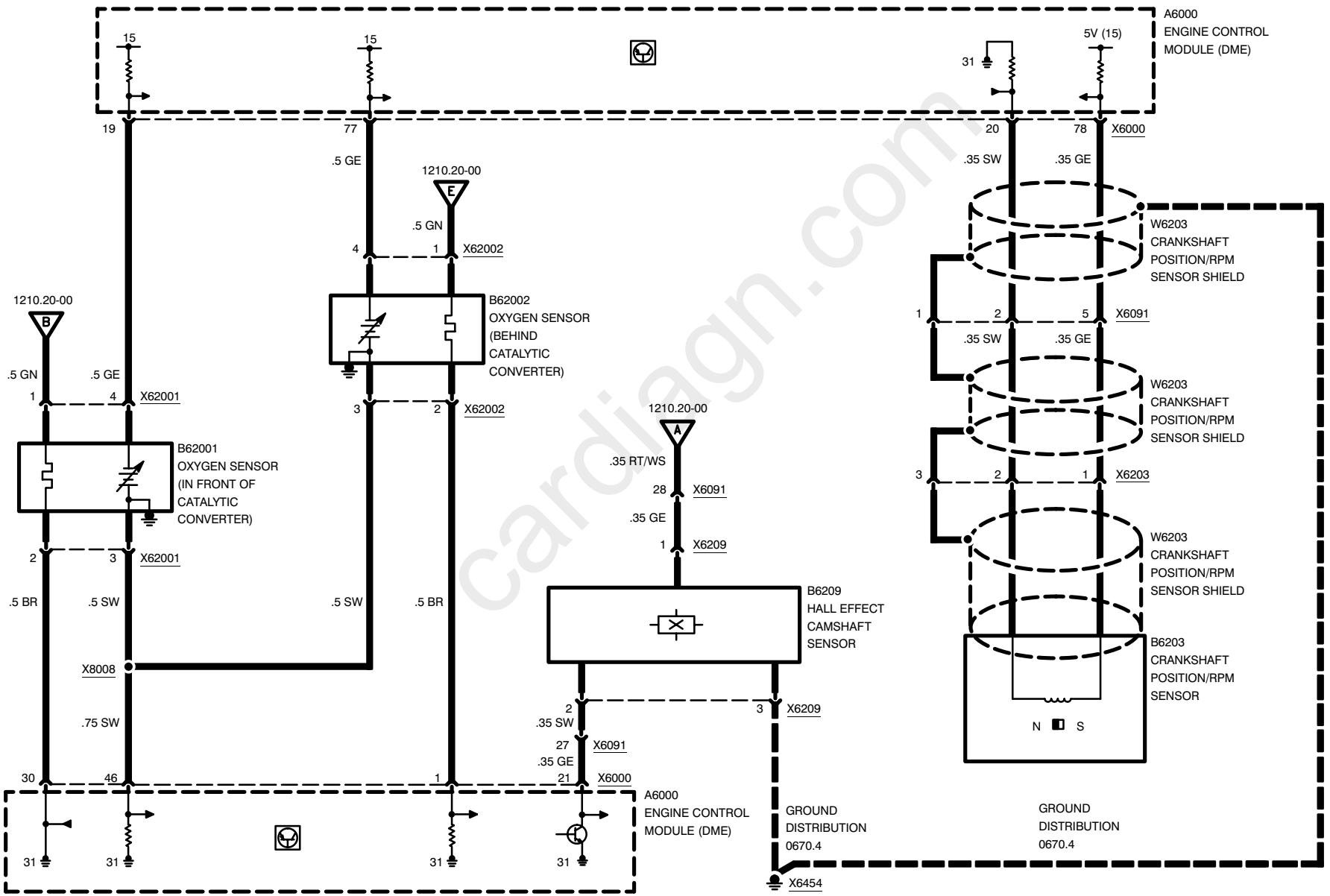
cardiagn.com


2.5 GN
2 X6150
2.5 GN
X6833
1 GN
1 GN
1 GN
1 GN
3 X6151
T6151
CYL. 1 IGNITION COIL
3 X6152
T6152
CYL. 2 IGNITION COIL
3 X6153
T6153
CYL. 3 IGNITION COIL
3 X6154
T6154
CYL. 4 IGNITION COIL
1 X6151 2
2 X6152 1
1 X6153 2
2 X6154 1
SPARK PLUGS
1 BR
1 BR
1 BR
GROUND DISTRIBUTION 0670.4
X6456
GROUND DISTRIBUTION 0670.4
X6456
1 WS
1 RT
1 GE
1 BL
1
7
5
6 X6150
W6165
SHIELD UP TO 10mm BEFORE IGNITION COIL CONNECTOR
1.5 WS
1 .5 RT
1.5 GE
1.5 BL
49
50
22
23 X6000
A6000
ENGINE CONTROL MODULE (DME)
31
31
31
31
X6454

carmagn.com

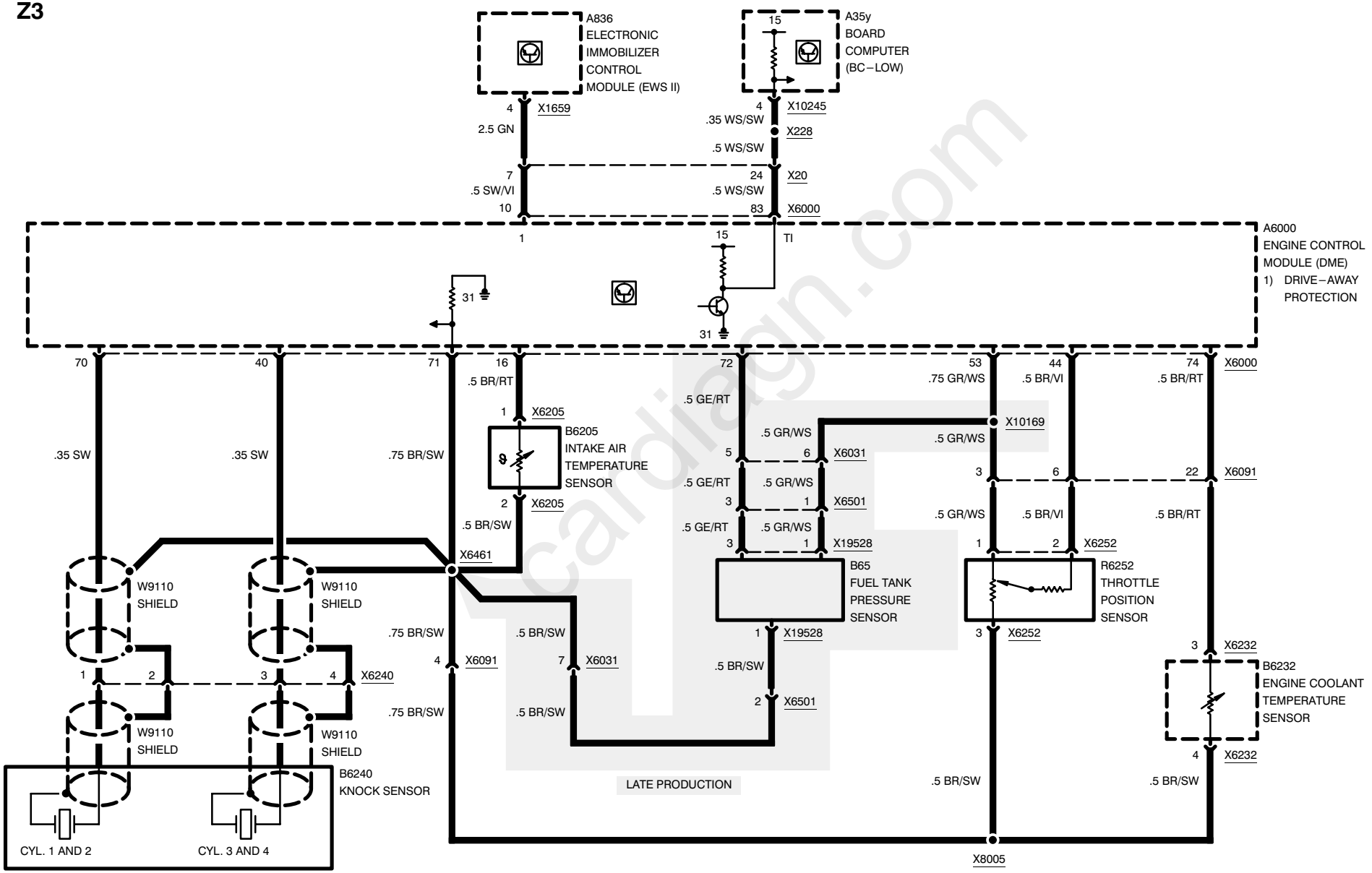
ENGINE CONTROL SYSTEM (DME M5.2, 4–CYLINDER M44)

HEATED OXYGEN SENSOR, CRANKSHAFT SENSORS

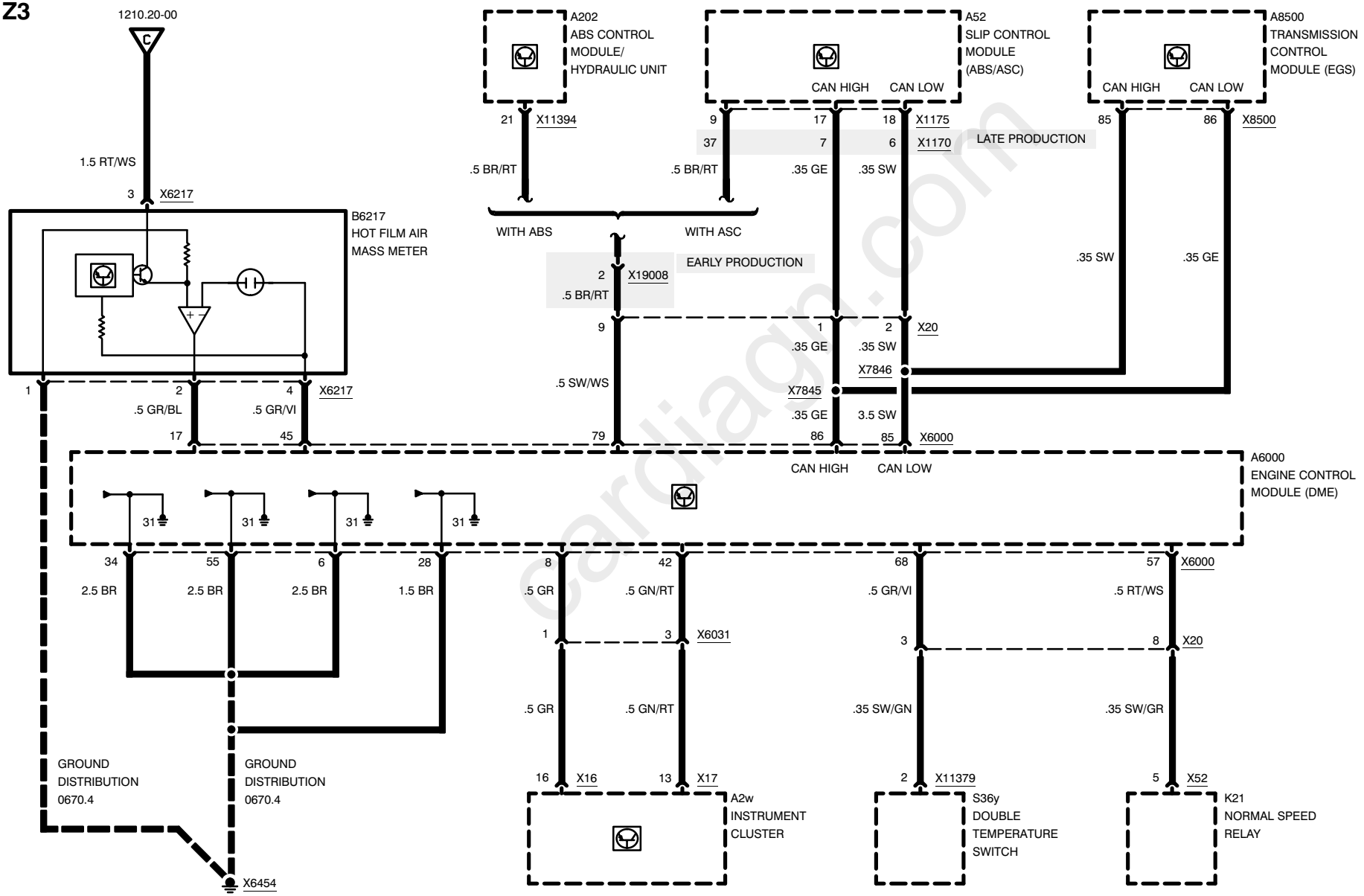


cardiagn.com

ENGINE CONTROL SYSTEM (DME M5.2, 4−CYLINDER M44)



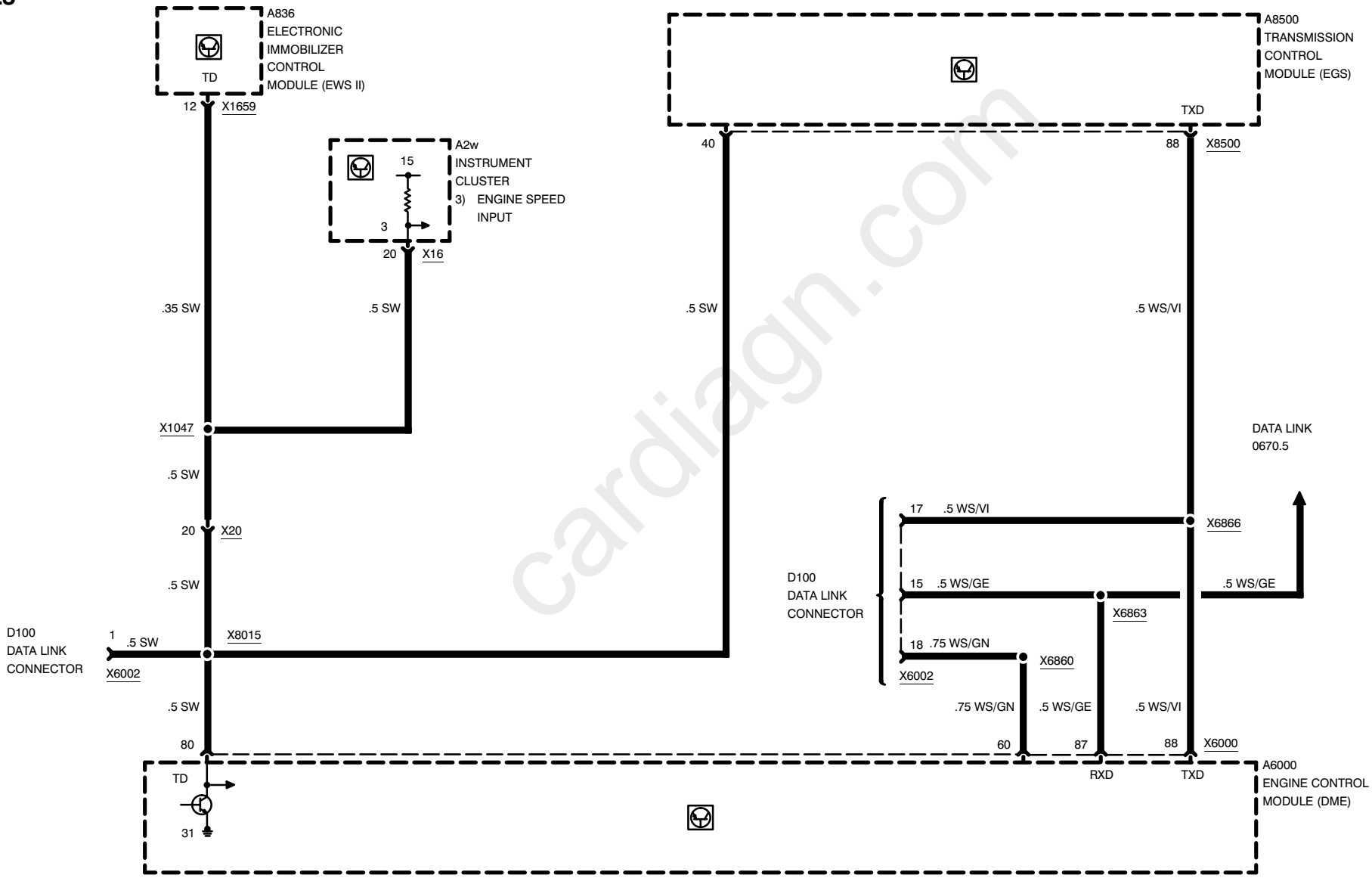
ENGINE CONTROL SYSTEM (DME M5.2, 4–CYLINDER M44)



cardiagn.com

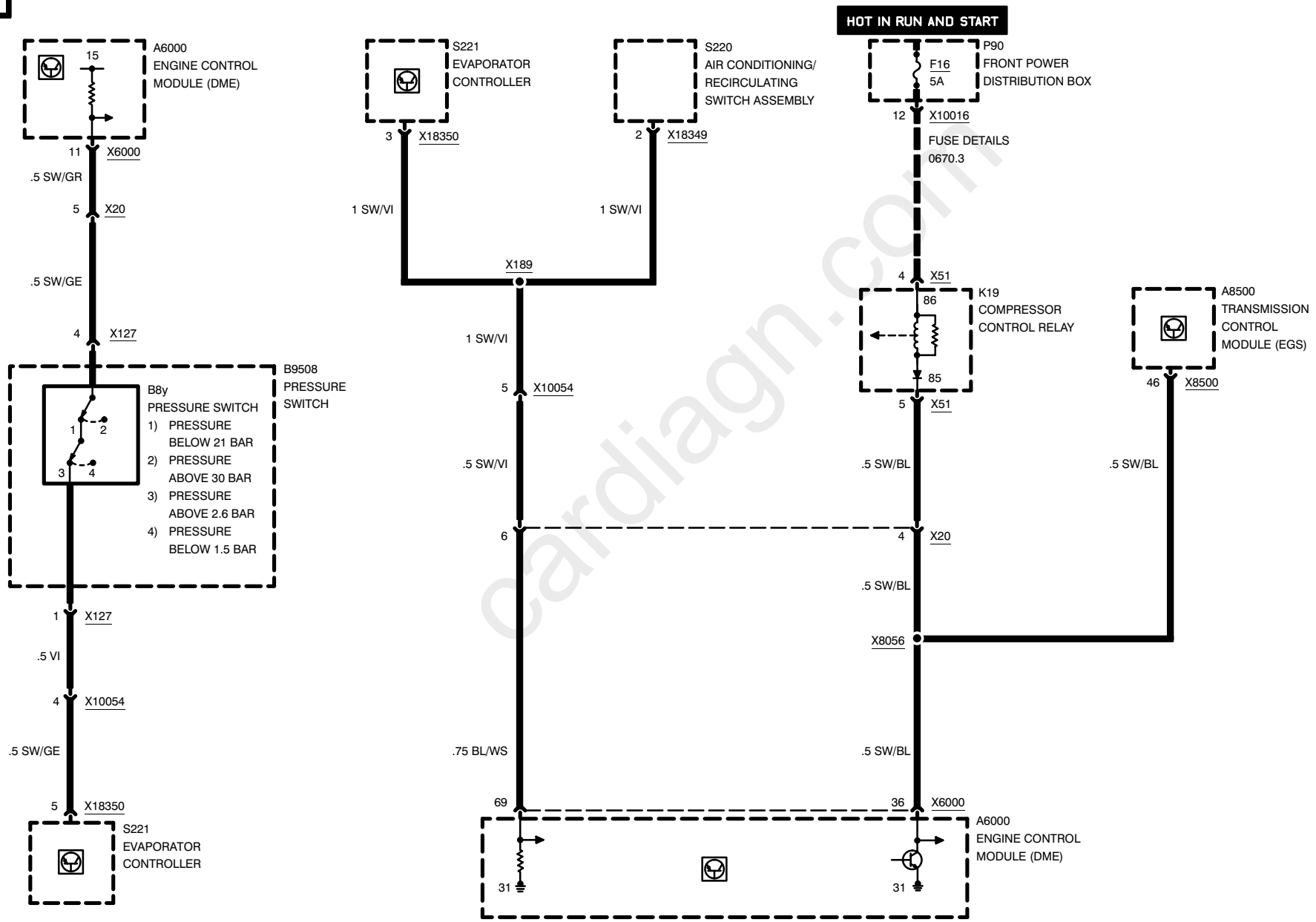
ENGINE CONTROL SYSTEM (DME M5.2, 4−CYLINDER M44)

DATA LINK



cardiagn.com

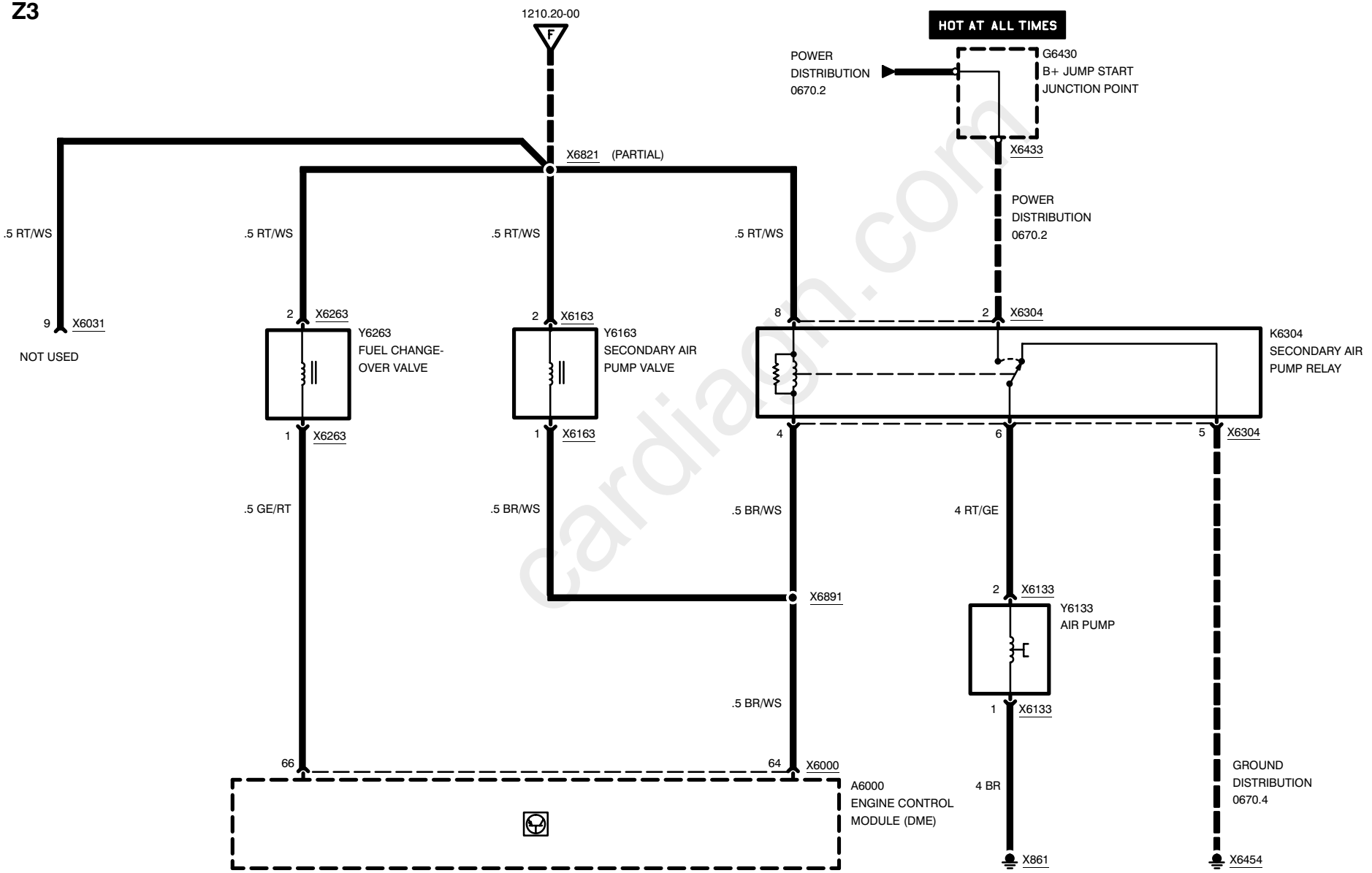
ENGINE CONTROL SYSTEM (DME M5.2, 4–CYLINDER M44)



cardiagn.com

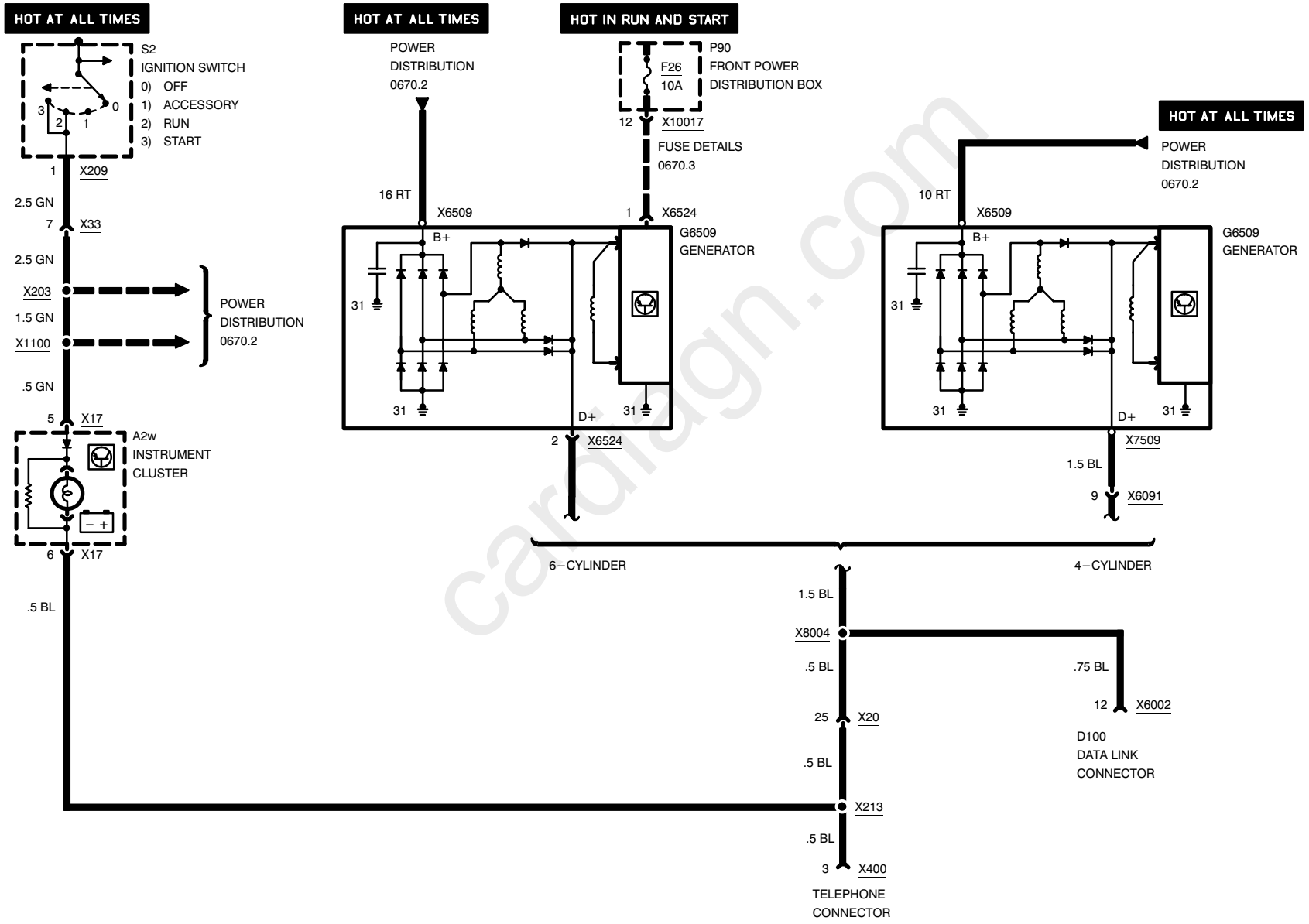
ENGINE CONTROL SYSTEM (DME M5.2, 4–CYLINDER M44)

LATE PRODUCTION

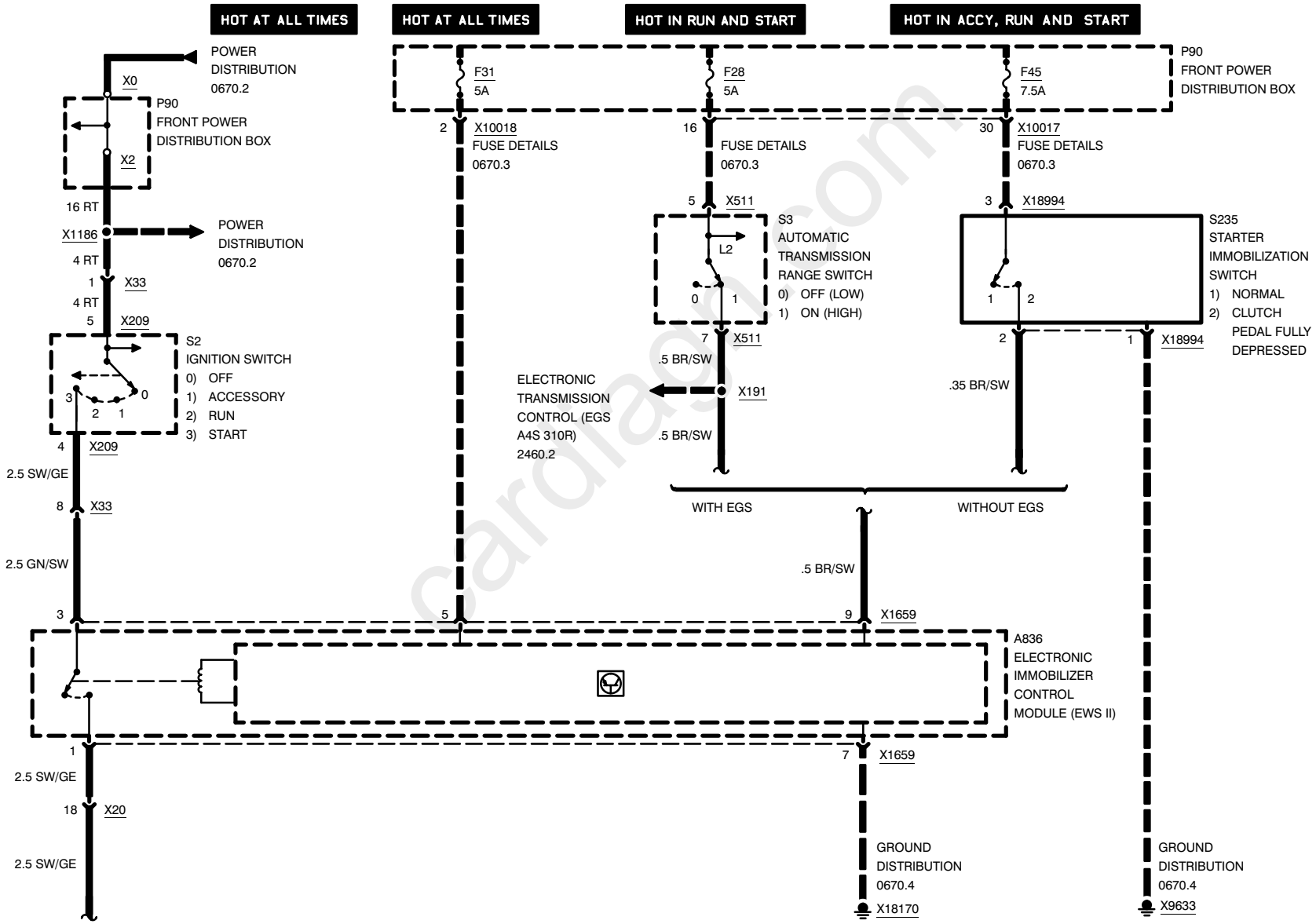


cardiagn.com

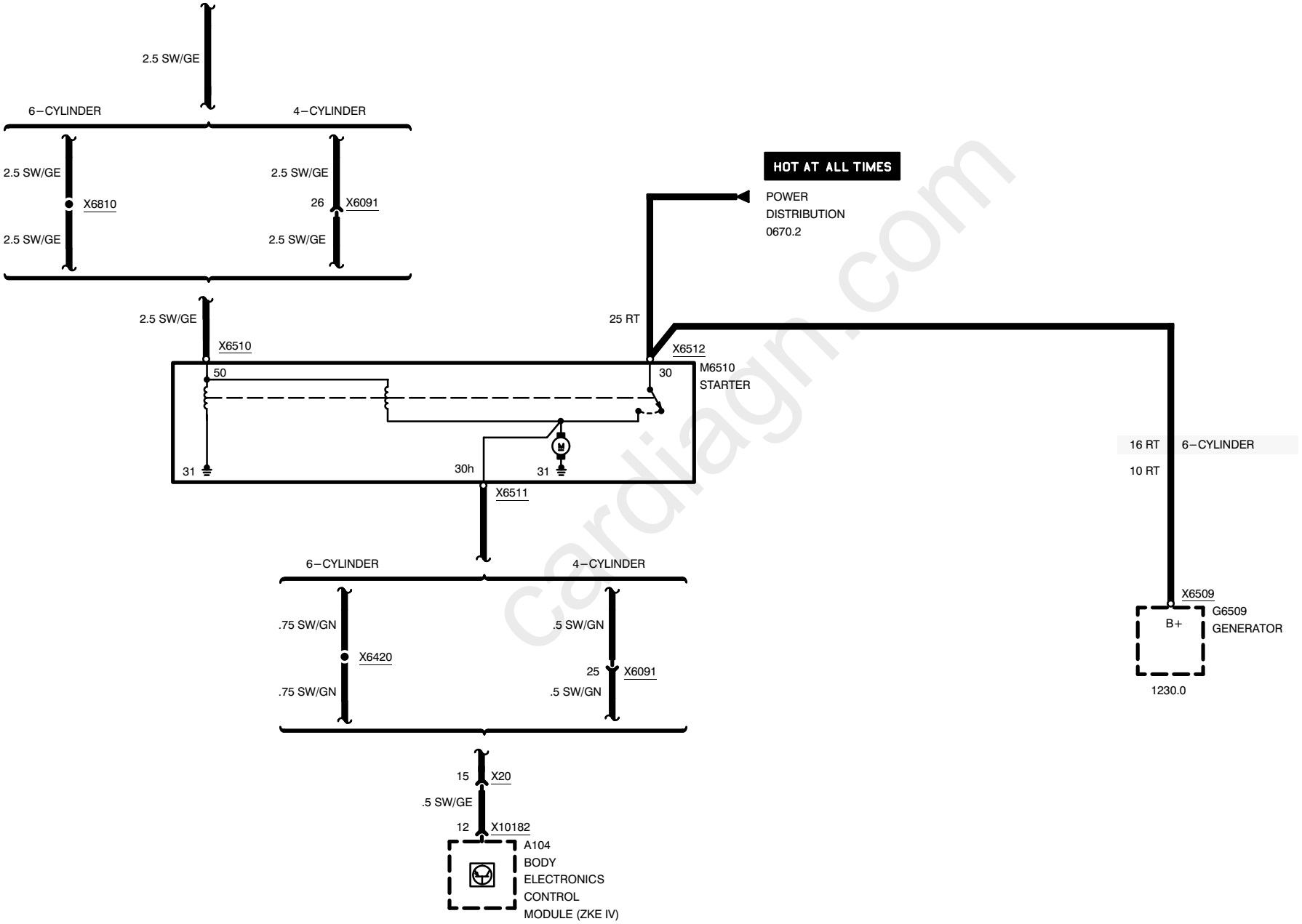
CHARGING SYSTEM



cardiagn.com



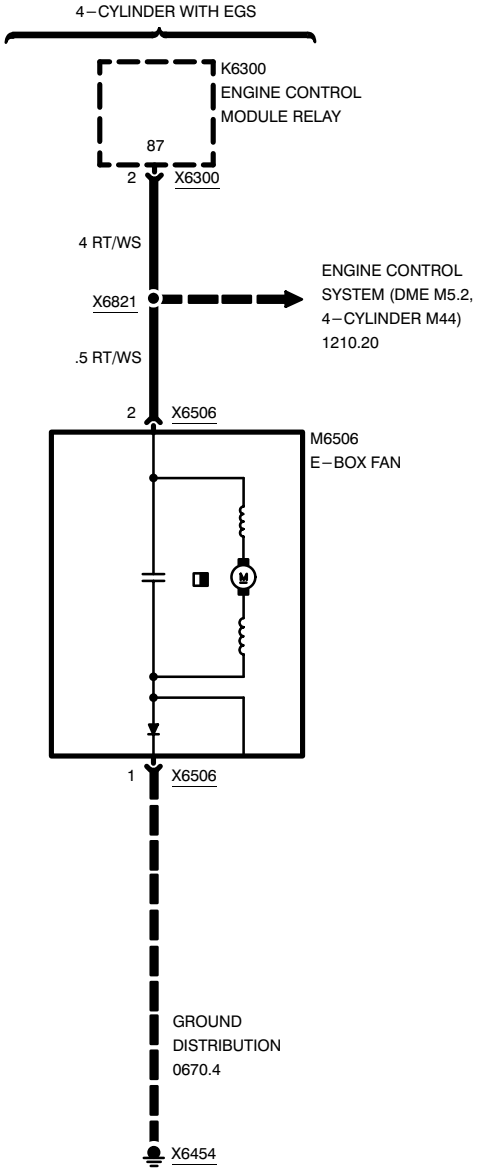
cardiagn.com

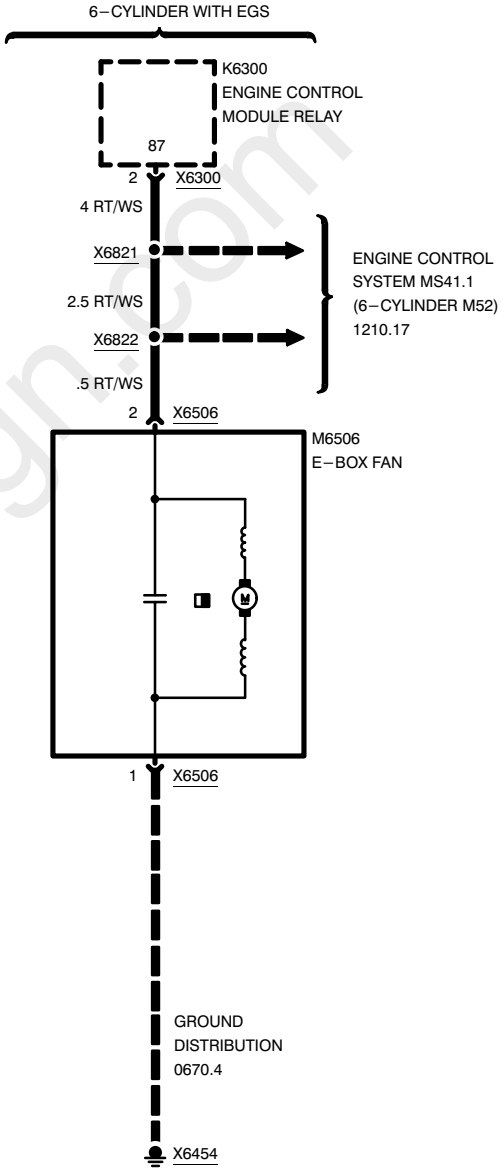


cardiagn.com

E−BOX FAN

EARLY PRODUCTION

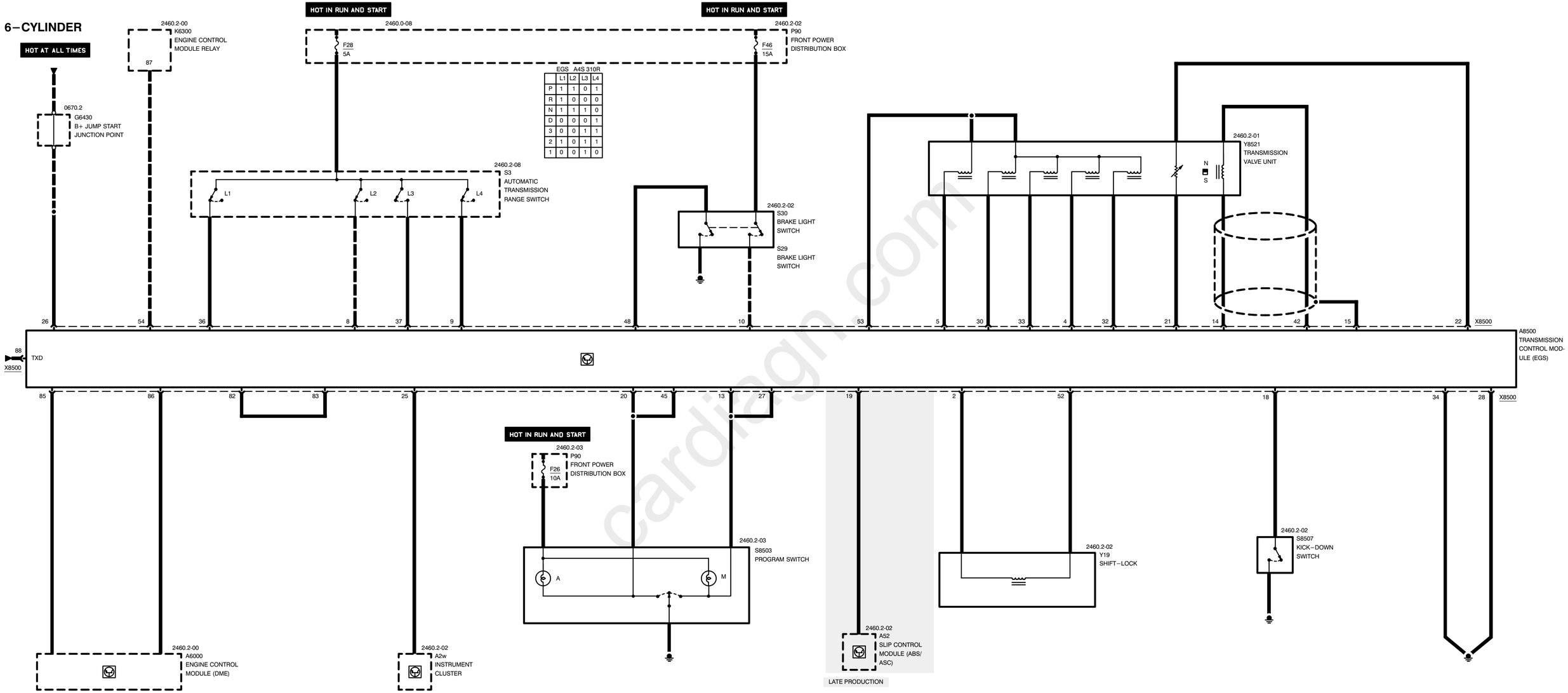




cardiagn.com

03/98 2460.2a 1997
03/98 2460.2a 1997

6–CYLINDER



cardiagn.com

Pin Assignments

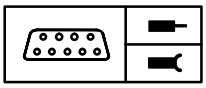
6-Cylinder

X8500

Pin	Type	Description/Function	Connection
177		Not used	
178	M	Ground	Shift-lock
179		Not used	
180	A	Solenoid valve 3 control (−)	Transmission valve unit
181	A	Hydraulic pressure regulator control (−)	Transmission valve unit
182		Not used	
183		Not used	
184	E	Gear range signal L2	Automatic transmission range switch
185	E	Gear range signal L4	Automatic transmission range switch
186	E	Brake pedal position	Brake light switch
187		Not used	
188		Not used	
189	E	Manual mode signal	Program switch
190	E	Output speed (−)	Transmission valve unit
191	M	Ground for shield	Shield for speed sensor
192		Not used	
193		Not used	
194	E	Kick-down signal	Kick-down switch
195	E	ASC signal (Late Production)	Slip control module
196	E	Automatic mode signal	Program switch
197	E	Oil temperature signal (−)	Transmission valve unit
198	E	Oil temperature signal (+)	Transmission valve unit
199		Not used	
200		Not used	
201	A	Fault indicator signal	Instrument cluster
202	E	Battery voltage	B+ jump start junction point
203	A	M-program indication	Program switch
204	M	Ground	Ground point
205		Not used	
206	A	Solenoid valve 1 control (−)	Transmission valve unit

E = Input, A = Output, M = Ground

carsdiagn.com



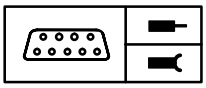
Pin Assignments

6-Cylinder

Pin	Type	Description/Function	Connection
207		Not used	
208	A	Torque converter clutch solenoid valve control (−)	Transmission valve unit
209	A	Solenoid valve 2 control (−)	Transmission valve unit
210	M	Ground	Ground point
211		Not used	
212	E	Gear range signal L1	Automatic transmission range switch
213	E	Gear range signal L3	Automatic transmission range switch
214		Not used	
215		Not used	
216		Not used	
217		Not used	
218	E	Output speed (+)	Transmission valve unit
219		Not used	
220		Not used	
221	A	A-program indication	Program switch
222		Not used	
223		Not used	
224	E	Brake switch test signal	Brake light switch
225		Not used	
226		Not used	
227		Not used	
228	A	Shift-lock solenoid control	Shift-lock
229	A	Voltage solenoid valves	Transmission valve unit
230	E	Voltage supply terminal 87	Engine control module relay
231		Not used	
232		Not used	
233		Not used	
234		Not used	
235		Not used	
236		Not used	
237		Not used	

E = Input, A = Output, M = Ground

cardiagn.com



Pin Assignments

6-Cylinder

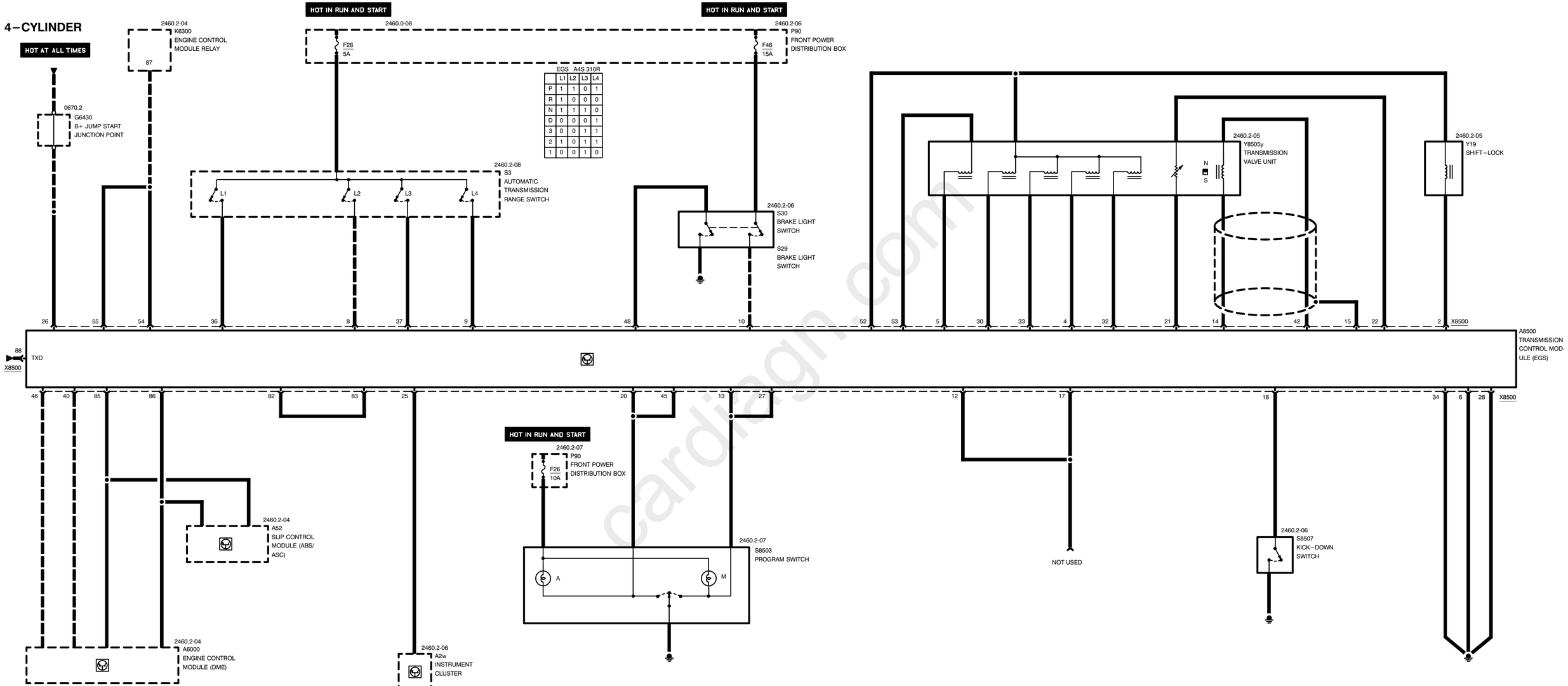
Pin	Type	Description/Function	Connection
238		Not used	
239		Not used	
240		Not used	
241		Not used	
242		Not used	
243		Not used	
244		Not used	
245		Not used	
246		Not used	
247		Not used	
248		Not used	
249		Not used	
250		Not used	
251		Not used	
252		Not used	
253		Not used	
254		Not used	
255		Not used	
256		Not used	
257		Not used	
258	E/A	Jumper plug	
259	E/A	Jumper plug	
260		Not used	
261	E/A	CAN LOW	Engine control module
262	E/A	CAN HIGH	Engine control module
263		Not used	
264	E/A	TxD diagnostic data link	Data link connector

E = Input, A = Output, M = Ground

cardiagn.com

03/98 2460.2b 1997
03/98 2460.2b 1997

4–CYLINDER



cardiagn.com

Pin Assignments

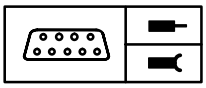
4-Cylinder

X8500

Pin	Type	Description/Function	Connection
265		Not used	
266	A	Shift-lock solenoid control	Shift-lock
267		Not used	
268	A	Solenoid valve 3 control (−)	Transmission valve unit
269	A	Hydraulic pressure regulator control (−)	Transmission valve unit
270	M	Ground	Ground point
271		Not used	
272	E	Gear range signal L2	Automatic transmission range switch
273	E	Gear range signal L4	Automatic transmission range switch
274	E	Brake pedal position	Brake light switch
275		Not used	
276	E	Sport mode signal	Not used
277	E	Manual mode signal	Program switch
278	E	Output speed (−)	Transmission valve unit
279	M	Ground for shield	Shield for speed sensor
280		Not used	
281	A	S-program indication	Not used
282	E	Kick-down signal	Kick-down switch
283		Not used	
284	E	Automatic mode signal	Program switch
285	E	Oil temperature signal (−)	Transmission valve unit
286	E	Oil temperature signal (+)	Transmission valve unit
287		Not used	
288		Not used	
289	A	Fault indicator signal	Instrument cluster
290	E	Battery voltage	B+ Jump start junction point
291	A	M-program indication	Program switch
292	M	Ground	Ground point
293		Not used	
294	A	Solenoid valve 1 control (−)	Transmission valve unit

E = Input, A = Output, M = Ground

cardiagn.com



Pin Assignments

4-Cylinder

Pin	Type	Description/Function	Connection
295		Not used	
296	A	Torque converter clutch solenoid valve control (−)	Transmission valve unit
297	A	Solenoid valve 2 control (−)	Transmission valve unit
298	M	Ground	Ground point
299		Not used	
300	E	Gear range signal L1	Automatic transmission range switch
301	E	Gear range signal L3	Automatic transmission range switch
302		Not used	
303		Not used	
304	E	RPM speed signal TD	Engine control module
305		Not used	
306	E	Output speed (+)	Transmission valve unit
307		Not used	
308		Not used	
309	A	A-program indication	Program switch
310	E	A/C compressor-ON-signal	Engine control module
311		Not used	
312	E	Brake switch test signal	Brake light switch
313		Not used	
314		Not used	
315		Not used	
316	A	Voltage supply	Shift-lock/Transmission valve unit
317	E	Voltage pressure regulator	Transmission valve unit
318	E	Voltage supply terminal 87	Engine control module relay
319	E	Voltage supply terminal 87	Engine control module relay
320		Not used	
321		Not used	
322		Not used	
323		Not used	
324		Not used	
325		Not used	

E = Input, A = Output, M = Ground

cardiagn.com

Pin Assignments

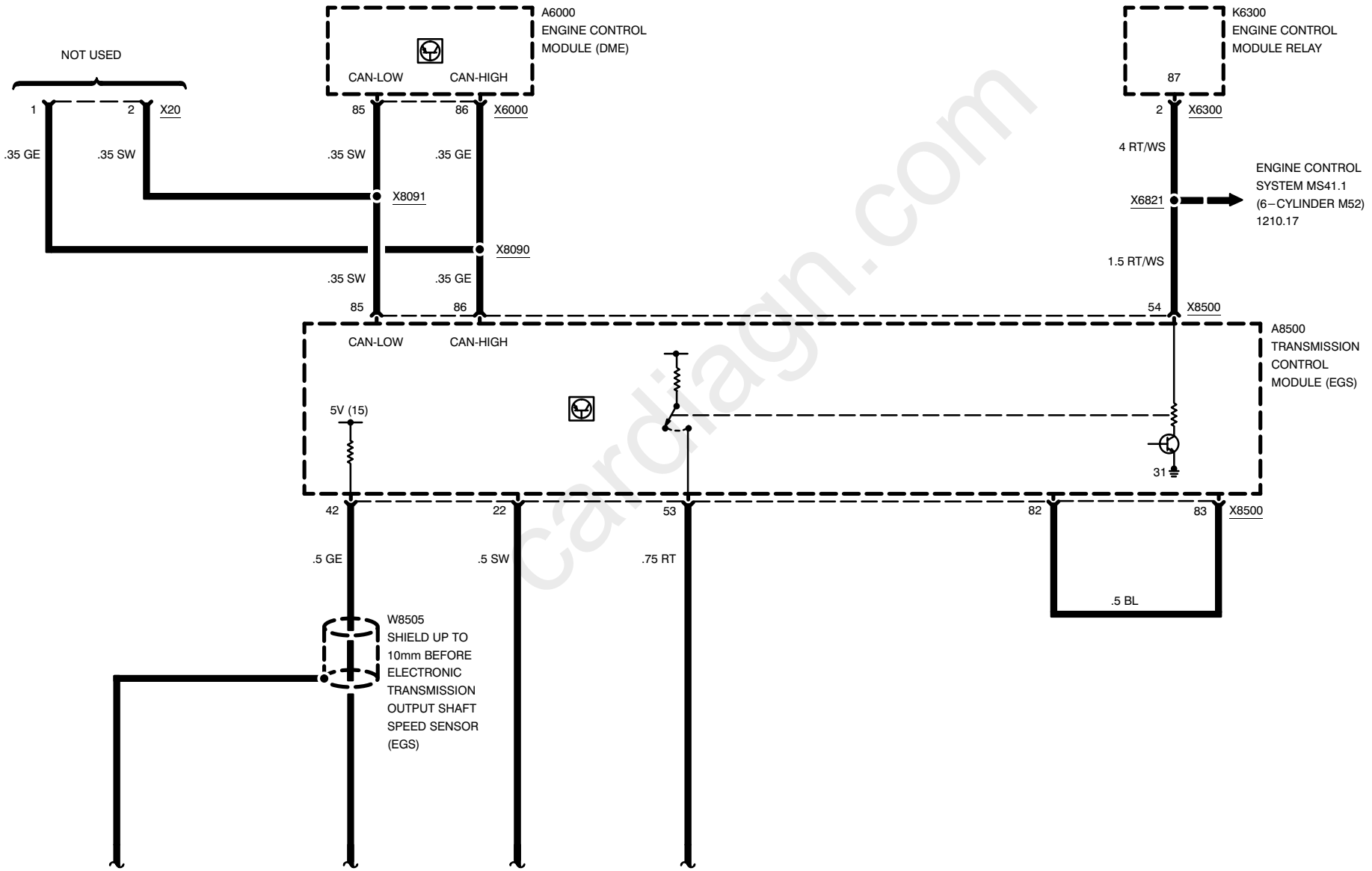
4-Cylinder

Pin	Type	Description/Function	Connection
326		Not used	
327		Not used	
328		Not used	
329		Not used	
330		Not used	
331		Not used	
332		Not used	
333		Not used	
334		Not used	
335		Not used	
336		Not used	
337		Not used	
338		Not used	
339		Not used	
340		Not used	
341		Not used	
342		Not used	
343		Not used	
344		Not used	
345		Not used	
346	E/A	Jumper plug	
347	E/A	Jumper plug	
348		Not used	
349	E/A	CAN LOW	Engine control module
350	E/A	CAN HIGH	Engine control module
351		Not used	
352	E/A	TxD diagnostic data link	Data link connector

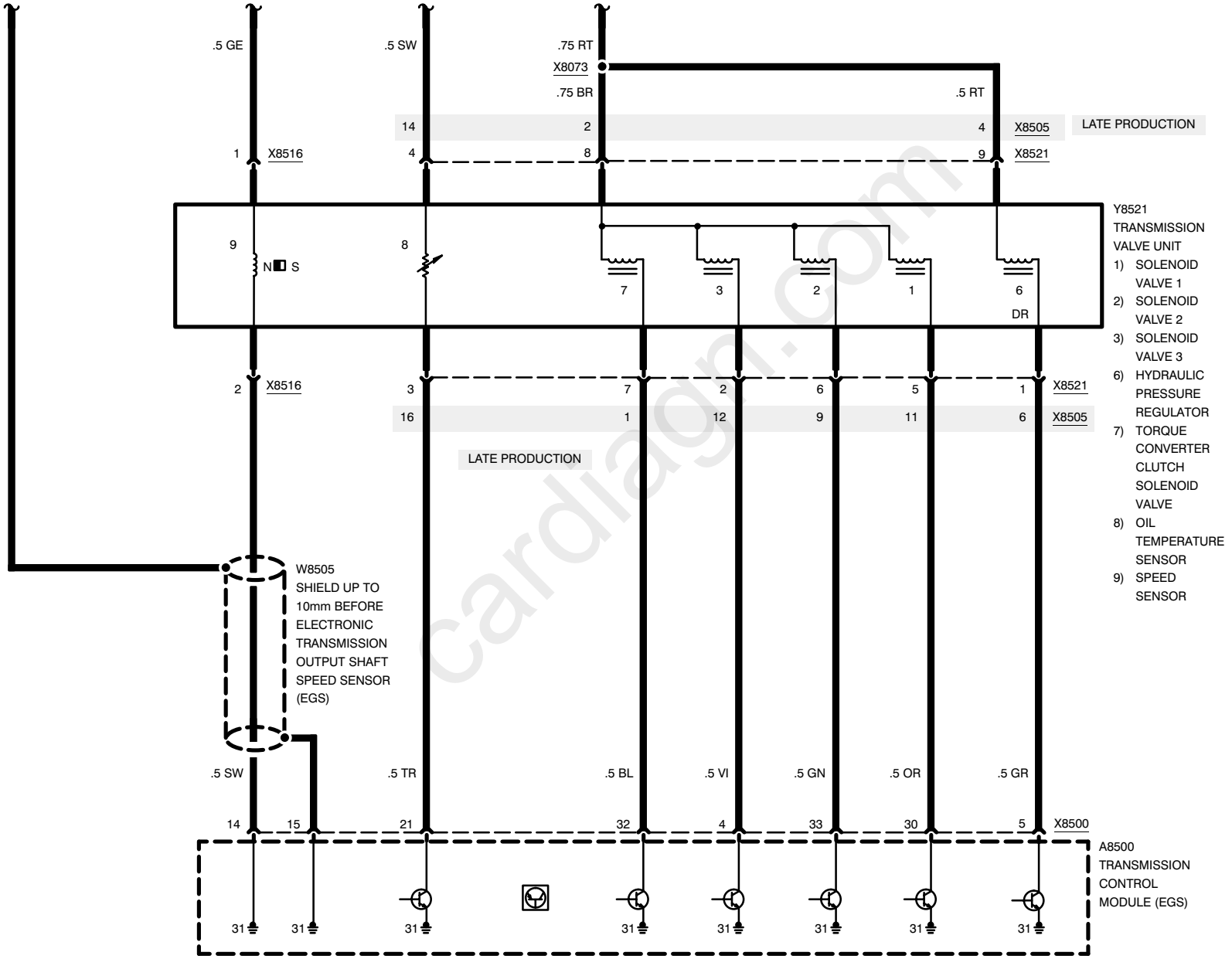
E = Input, A = Output, M = Ground

cardiagn.com

ELECTRONIC TRANSMISSION CONTROL (EGS A4S 310R) 6−CYLINDER



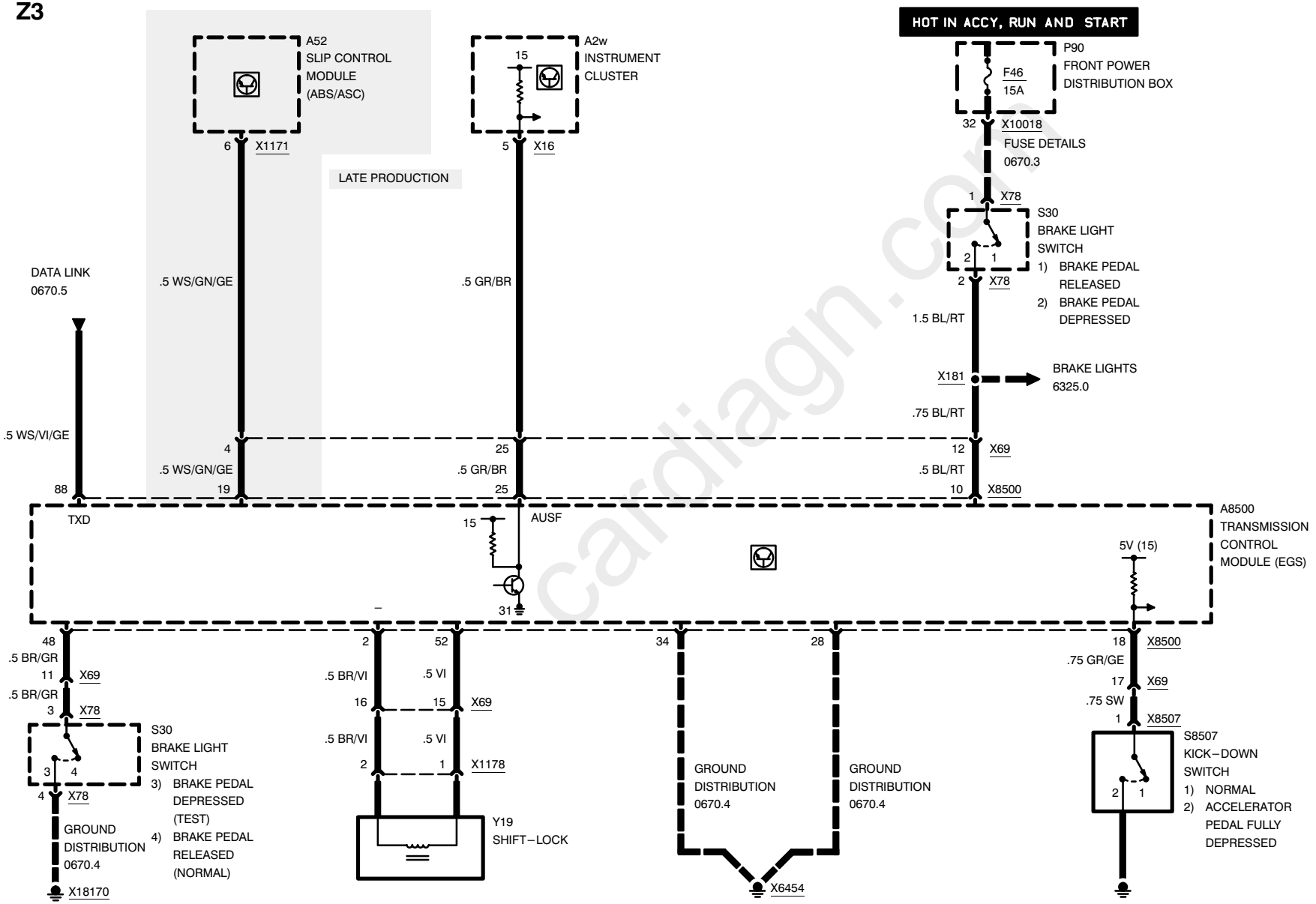
cardiagn.com



cardiagn.com

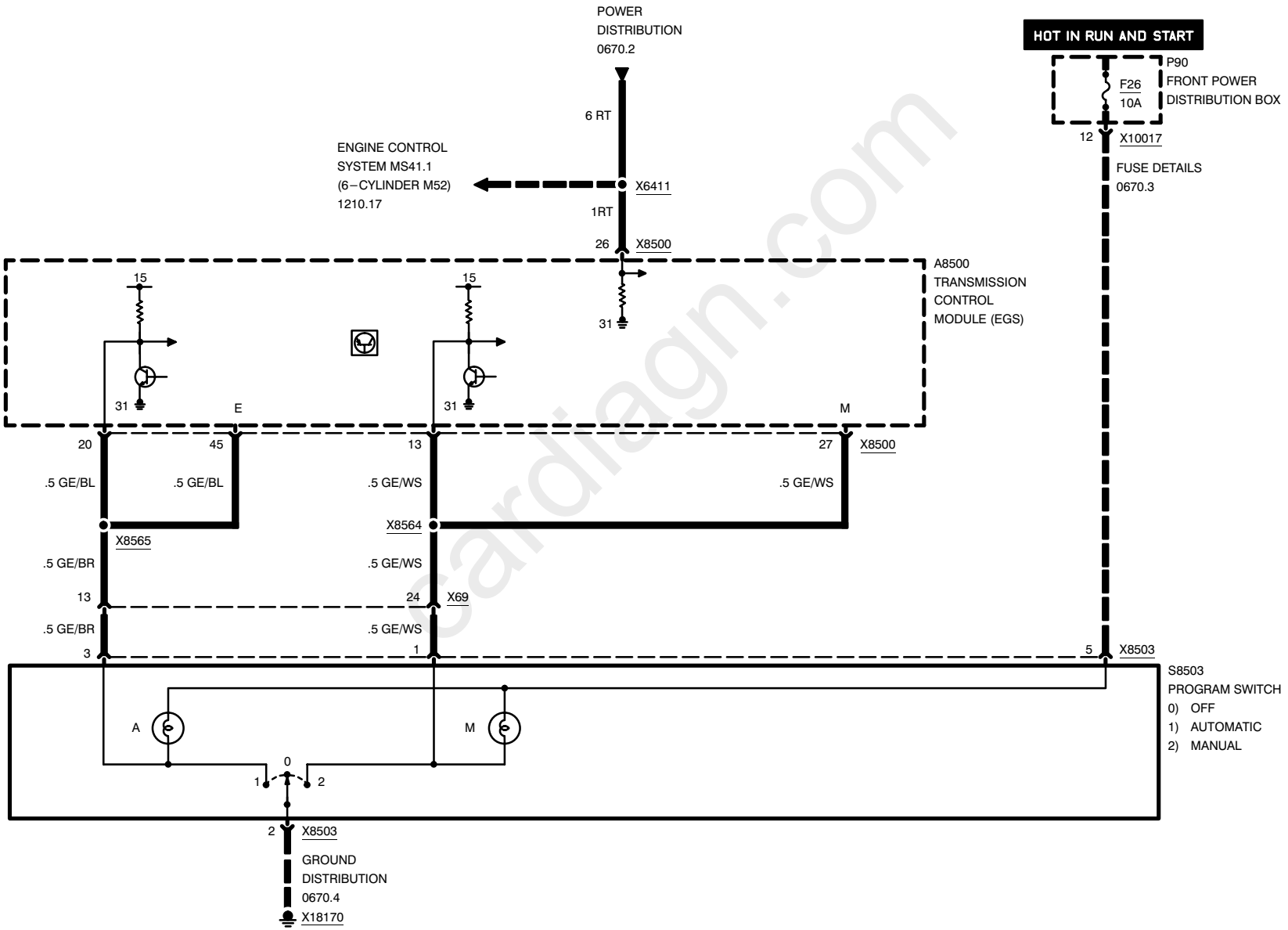
ELECTRONIC TRANSMISSION CONTROL (EGS A4S 310R) — 6–CYLINDER

SHIFT LOCK, DATA LINK, KICK–DOWN SWITCH



cardiagn.com

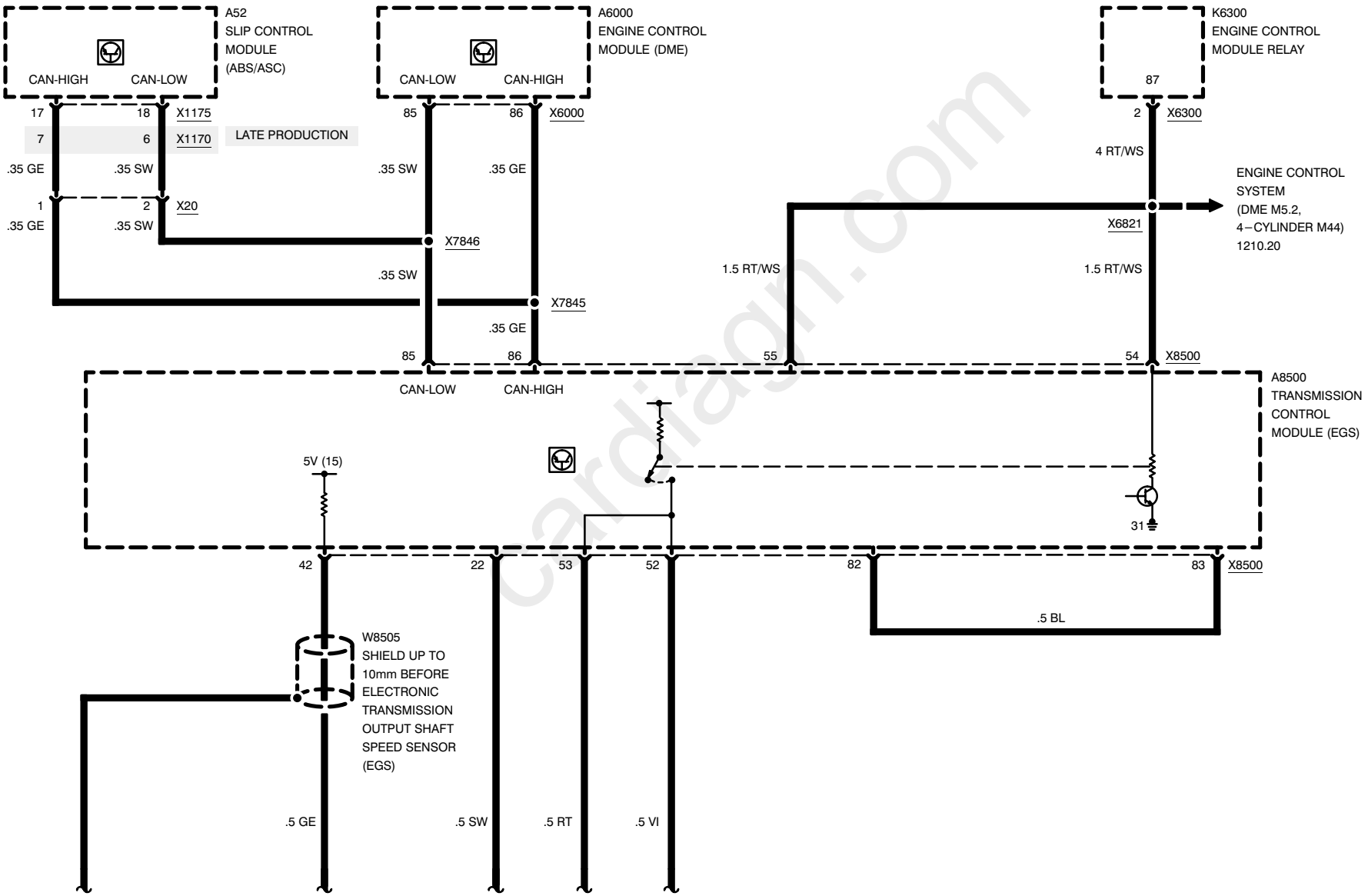
ELECTRONIC TRANSMISSION CONTROL (EGS A4S 310R) 6−CYLINDER



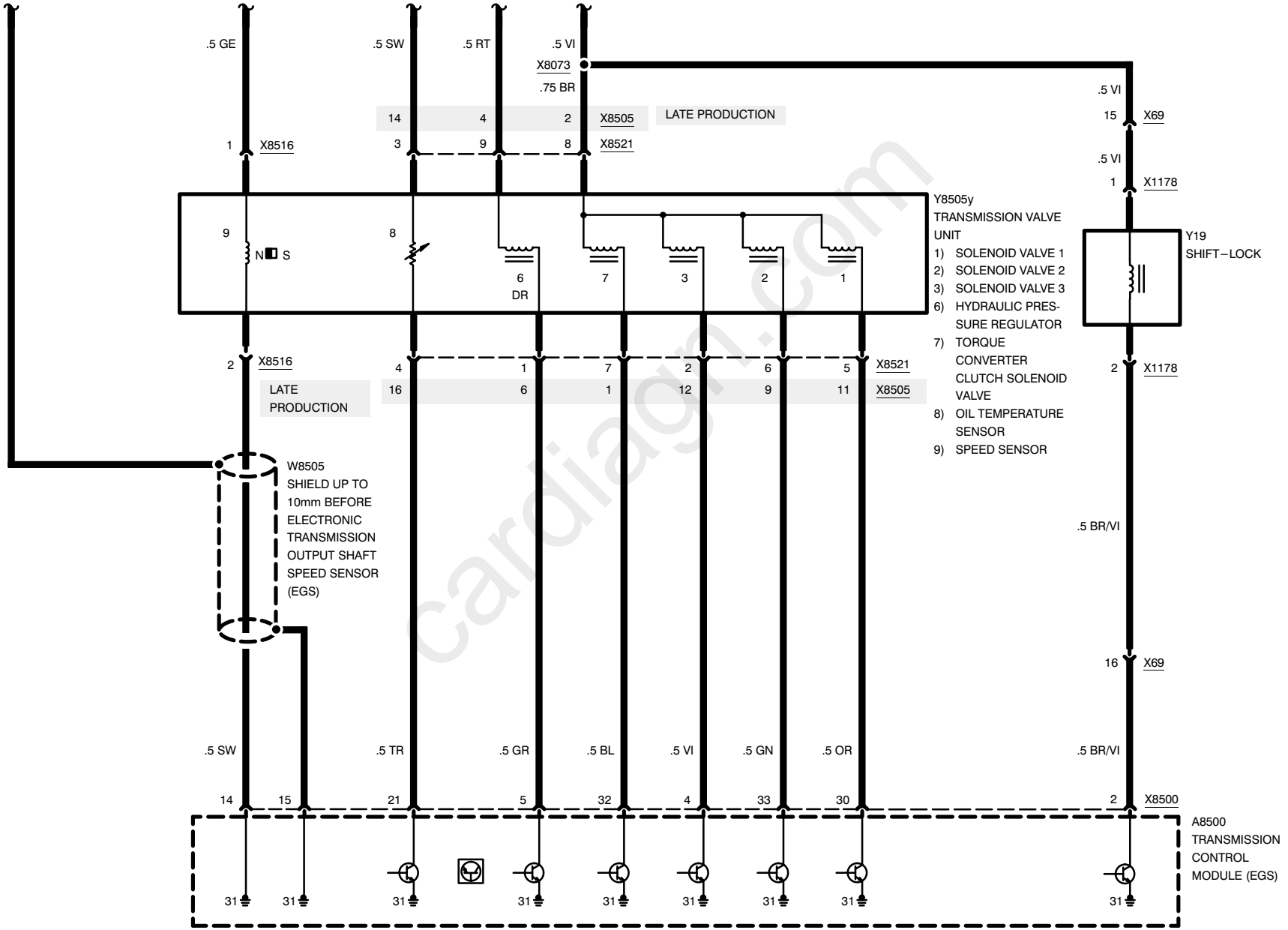
carsdiagn.com

ELECTRONIC TRANSMISSION CONTROL (EGS A4S 310R)

4–CYLINDER



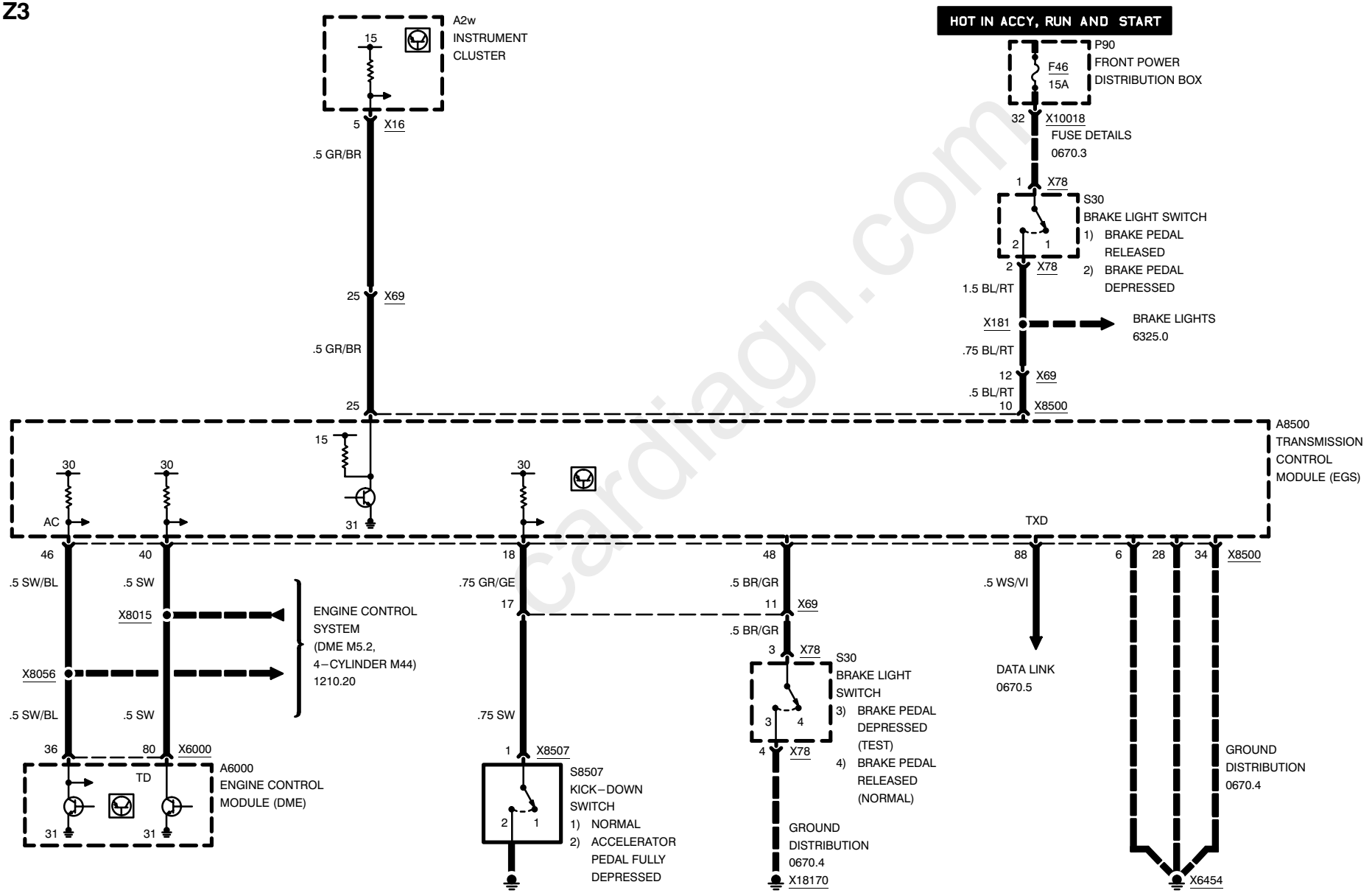
cardiagn.com



cardiagn.com

ELECTRONIC TRANSMISSION CONTROL (EGS A4S 310R)

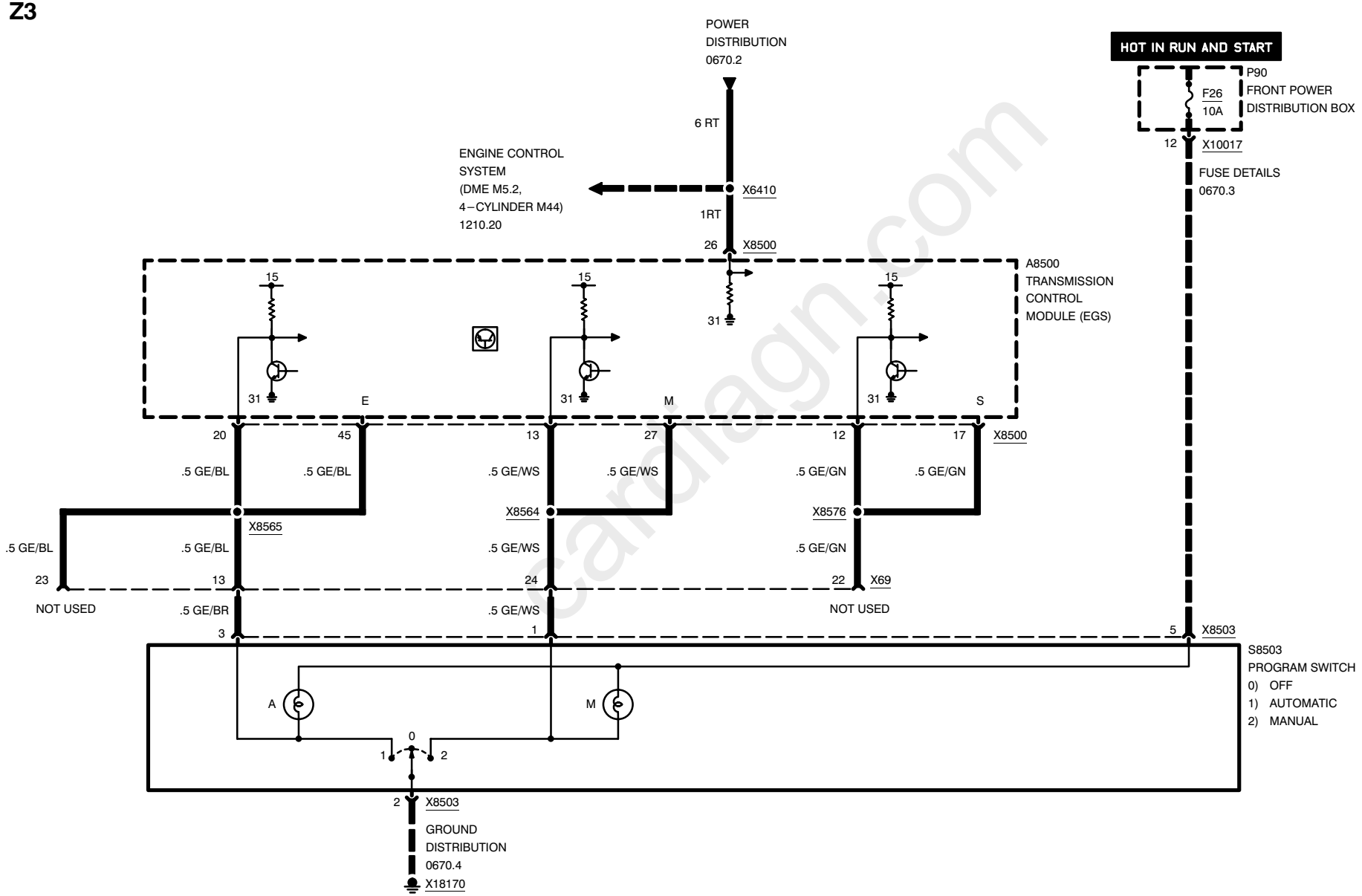
4−CYLINDER



cardiagn.com

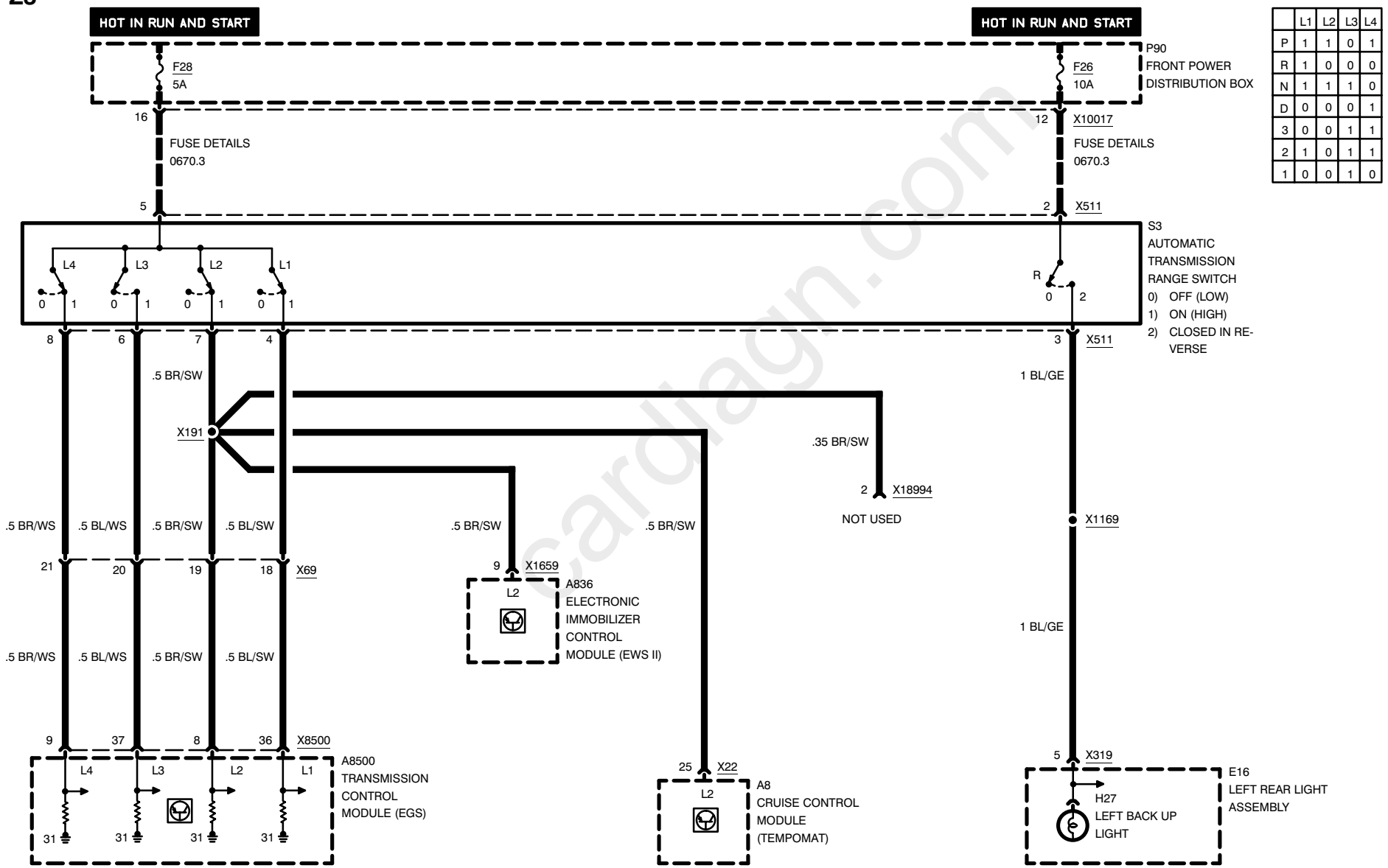
ELECTRONIC TRANSMISSION CONTROL (EGS A4S 310R)

4−CYLINDER



cardiagn.com

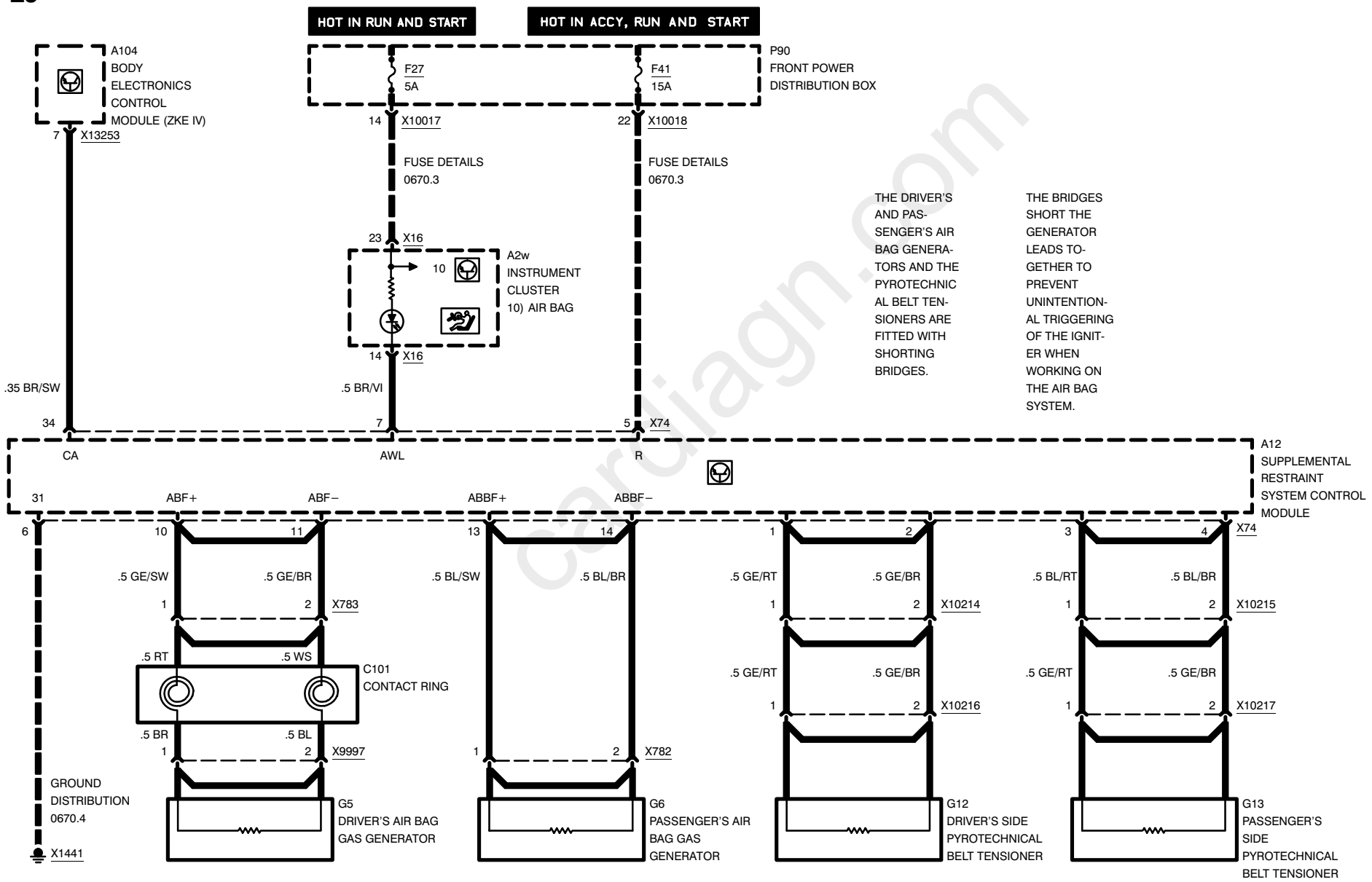
ELECTRONIC TRANSMISSION CONTROL (EGS A4S 310R)



	L1	L2	L3	L4
P	1	1	0	1
R	1	0	0	0
N	1	1	1	0
D	0	0	0	1
3	0	0	1	1
2	1	0	1	1
1	0	0	1	0

cardiagn.com

SUPPLEMENTAL RESTRAINT SYSTEM (AIR BAG)

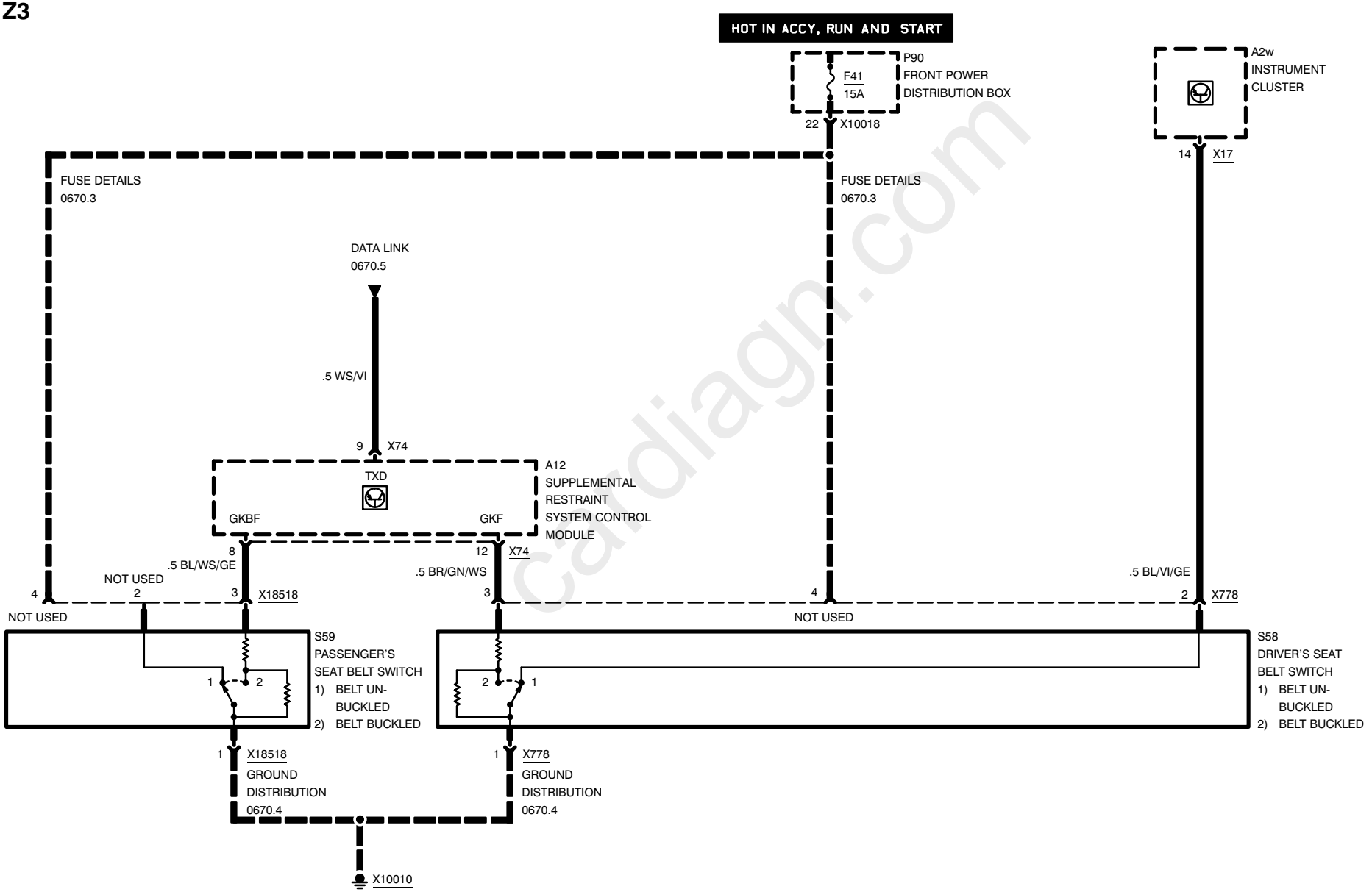


THE DRIVER'S AND PASSENGER'S AIR BAG GENERATORS AND THE PYROTECHNICAL BELT TENSIONERS ARE FITTED WITH SHORTING BRIDGES.

THE BRIDGES SHORT THE GENERATOR LEADS TOGETHER TO PREVENT UNINTENTIONAL TRIGGERING OF THE IGNITER WHEN WORKING ON THE AIR BAG SYSTEM.

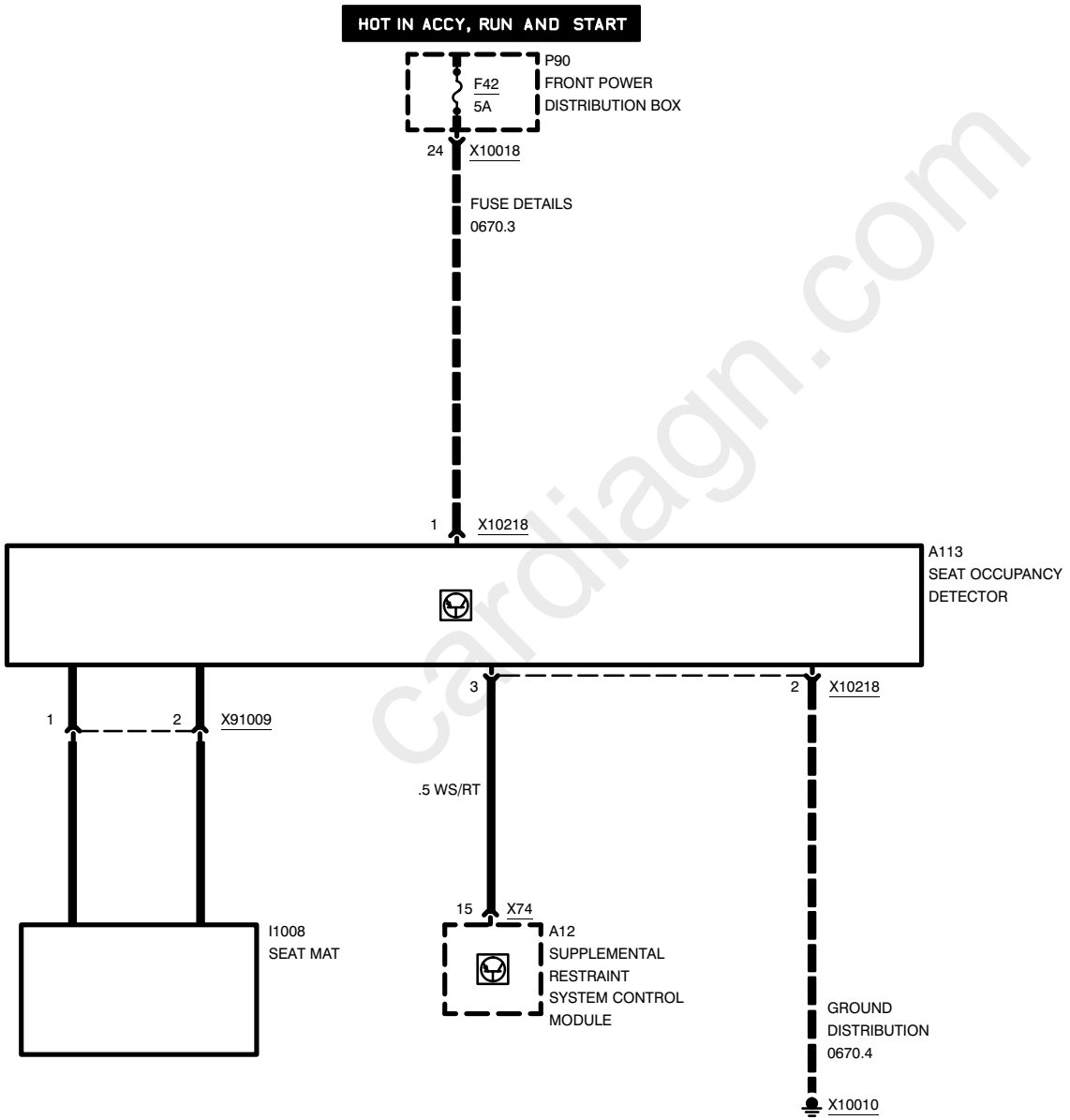
cardiagn.com

SUPPLEMENTAL RESTRAINT SYSTEM (AIR BAG)



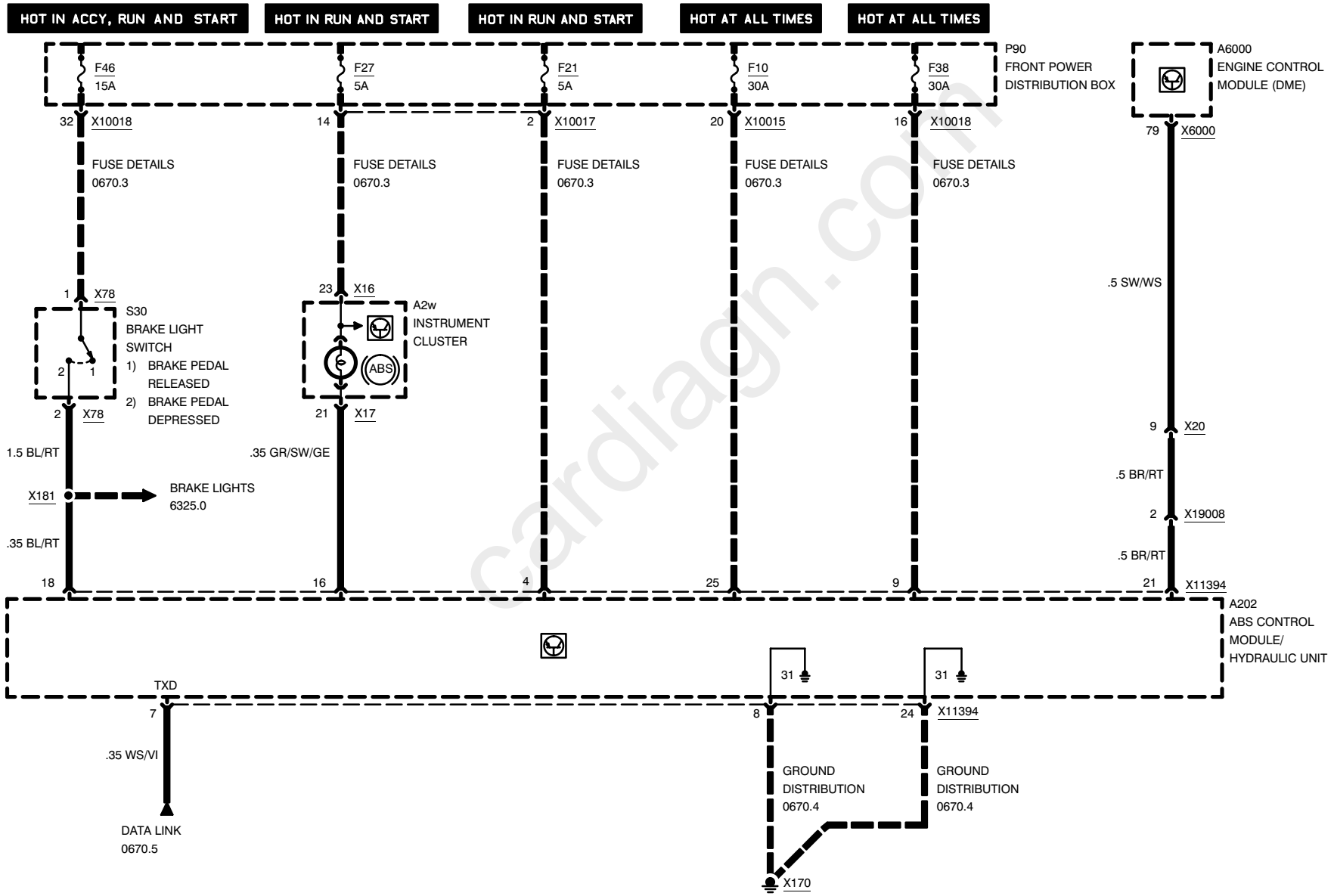
cardiagn.com

SUPPLEMENTAL RESTRAINT SYSTEM (AIR BAG)



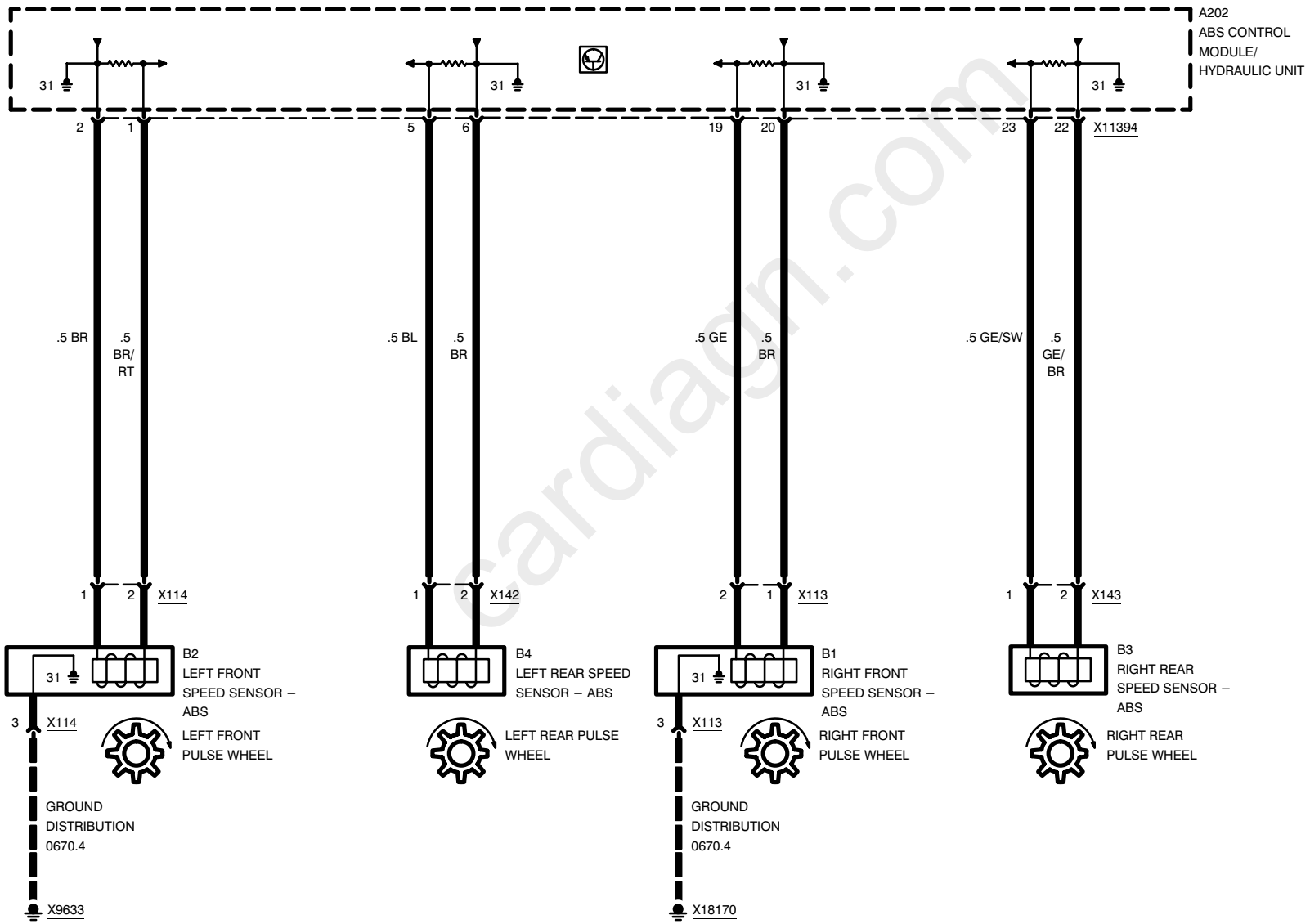
cardiagn.com

SLIP CONTROL (ABS)



cardiagn.com

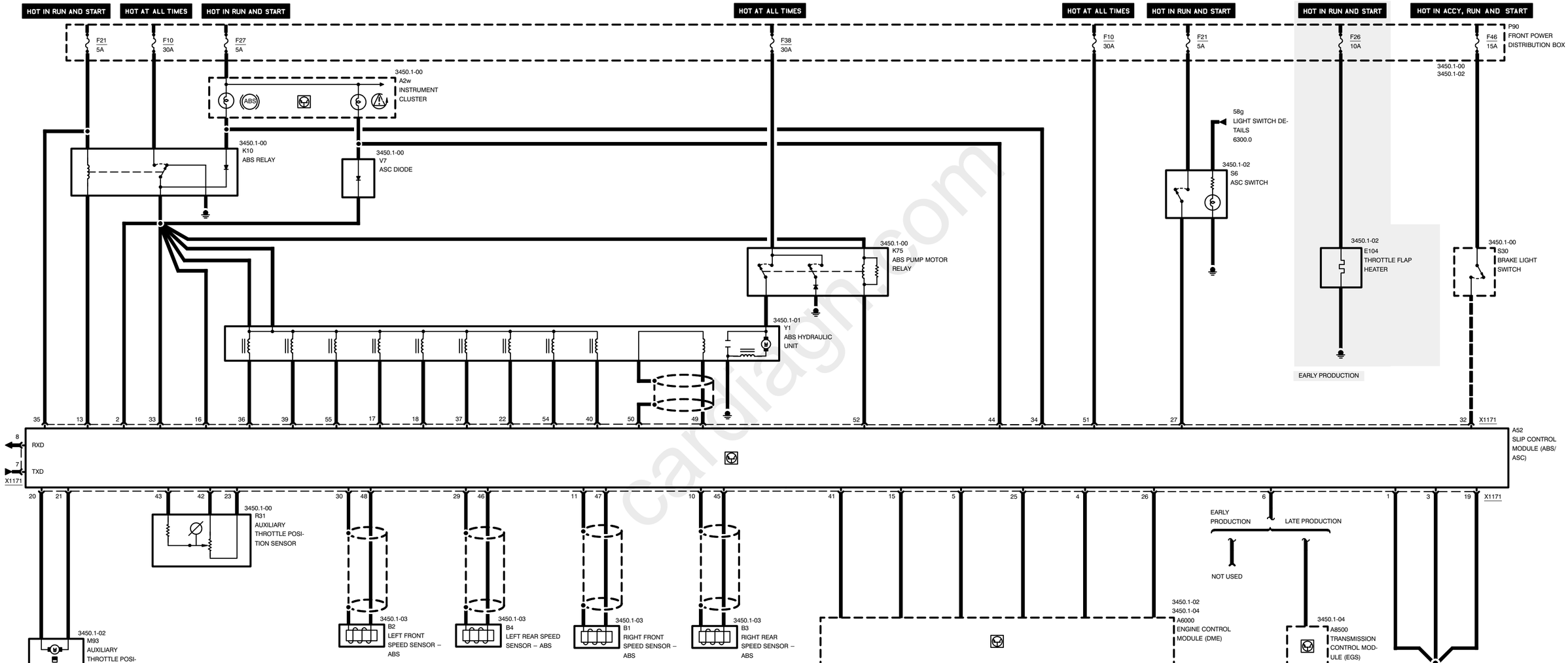
SLIP CONTROL (ABS)



cardiagn.com

03/98 — 3450.1a — 1997
03/98 — 3450.1a — 1997

6–CYLINDER



cardiagn.com

Pin Assignments

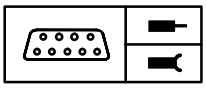
6-Cylinder

X1171

Pin	Type	Description/Function	Connection
1	M	Ground	Ground
2	E	Battery voltage	ABS relay
3	M	Ground, module	Ground
4	E	Ignition cut-off signal	DME module
5	A	EML signal	DME module
6	A	Transmission influence	Transmission control module Early Production: Not used
7	E/A	TxD signal	Diagnostic link
8	A	RxD signal	Diagnostic link
9		Not used	
10	A	Sensor ground	ABS speed sensor rear right
11	A	Sensor ground	ABS speed sensor front right
12		Not used	
13	A	ABS-power protection relay	ABS power protection relay
14		Not used	
15	A	Right rear speed signal	DME module
16	E	Current	ABS relay
17	A	Solenoid valve signal left rear	ABS hydraulic unit
18	A	Solenoid valve signal left rear	ABS hydraulic unit
19	M	Ground	Ground
20	A	ADS step motor (−)	ADS step motor
21	A	ADS step motor (+)	ADS step motor
22	A	Solenoid valve signal right front	ABS hydraulic unit
23	E	ASC throttle flap potentiometer (−)	ASC throttle flap motor potentiometer
24		Not used	
25	E	Signal idle speed	DME module
26	A	Throttle flap position	DME module
27	E	ASC switch signal	ASC switch
28		Not used	
29	A	Sensor ground	ABS speed sensor rear left

E = Input, A = Output, M = Ground

cardiagn.com



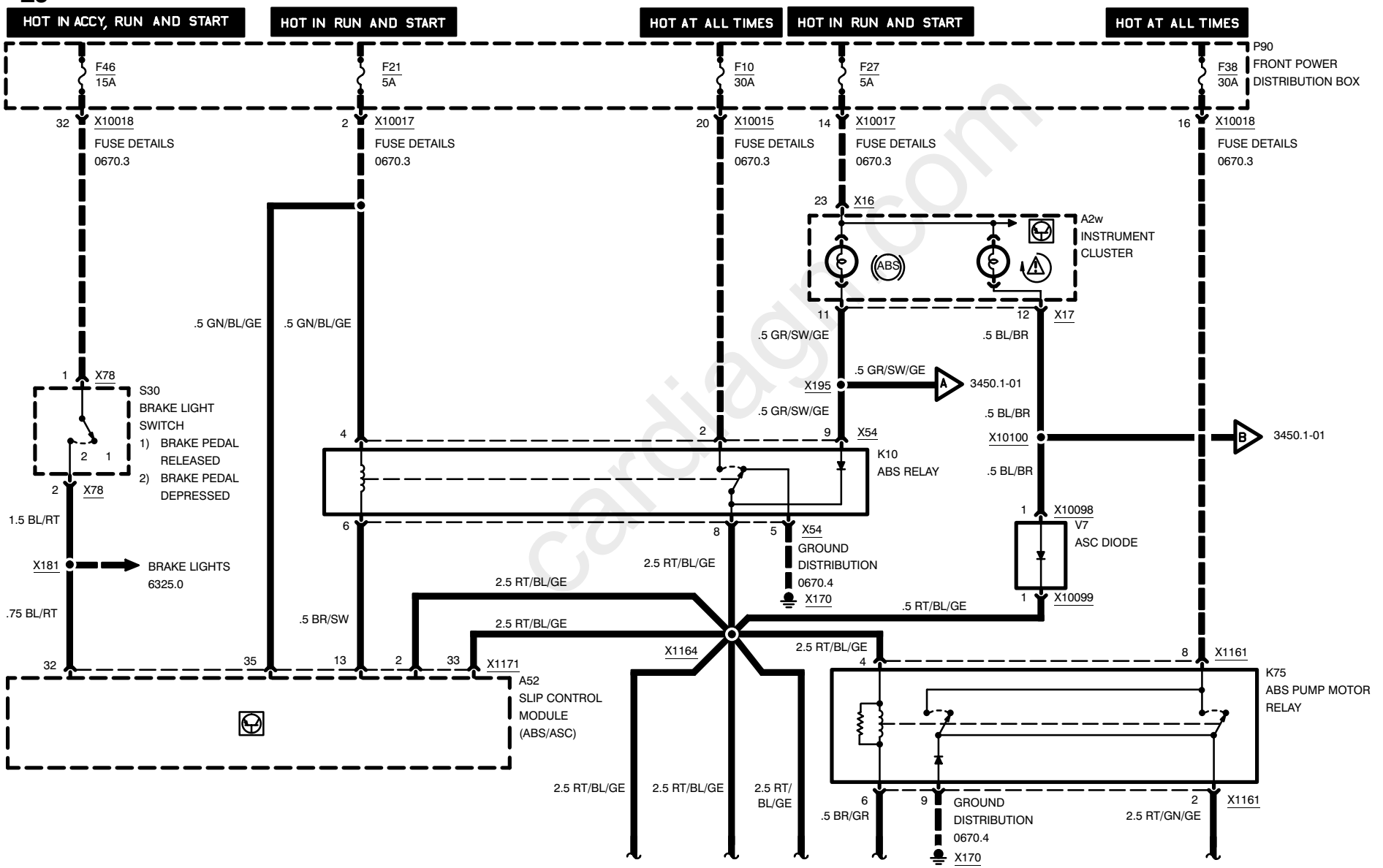
Pin Assignments

6-Cylinder

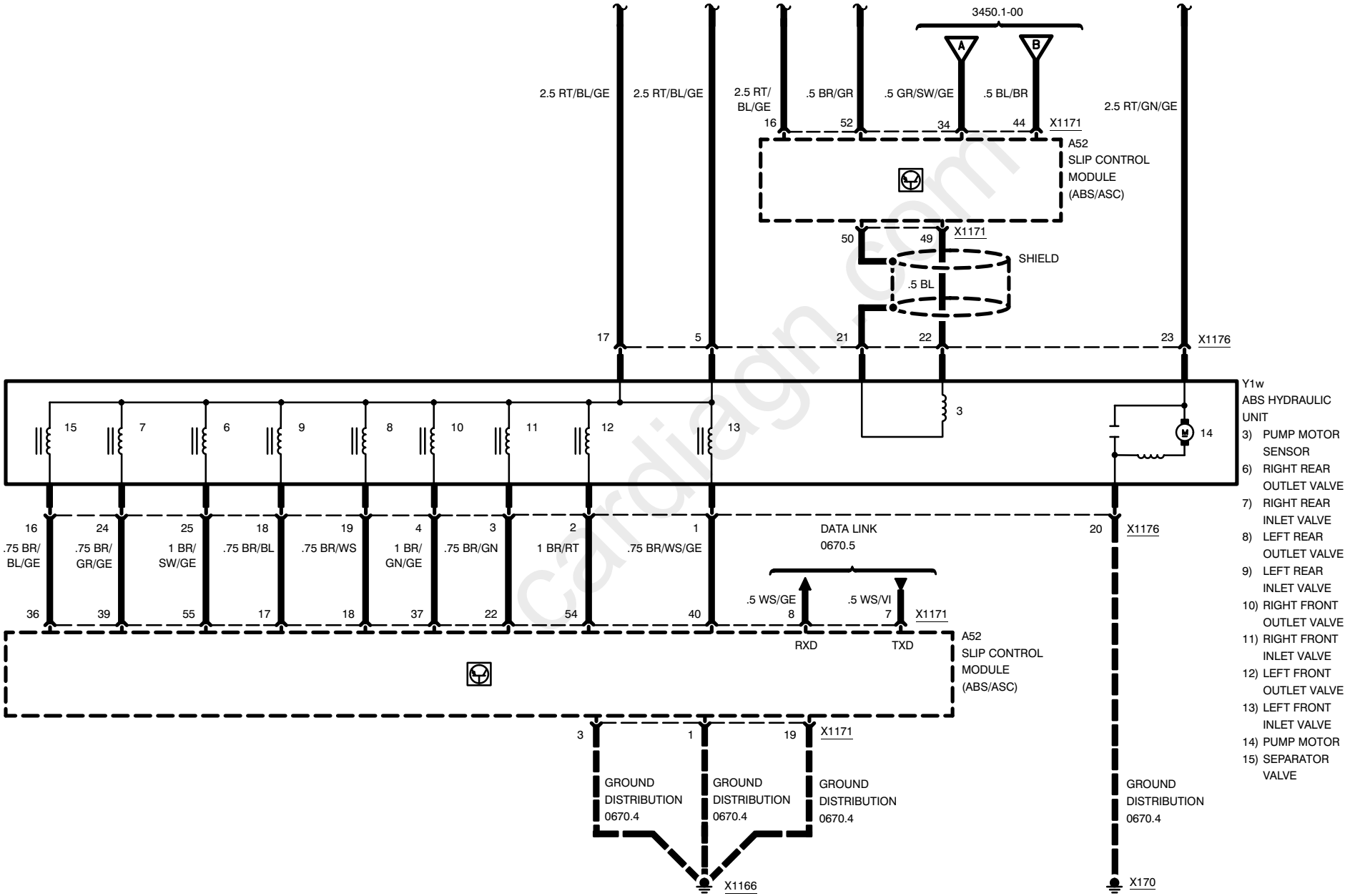
Pin	Type	Description/Function	Connection
30	A	Sensor gound	ABS speed sensor front left
31		Not used	
32	E	Brake signal	Brake light switch
33	E	Plus supply	ABS protection relay
34	A	ABS lamp control	Instrument cluster
35	E	Ignition signal	Fuse 21
36	A	Solenoid valve	ABS hydraulic unit
37	A	Solenoid valve signal right front	ABS hydraulic unit
38		Not used	
39	A	Solenoid valve signal right rear	ABS hydraulic unit
40	A	Solenoid valve signal left front	ABS hydraulic unit
41	E	Speed signal	DME module
42	E	ASC throttle flap potentiometer (+)	ASC throttle flap potentiometer
43	E	ASC throttle flap signal	ASC throttle flap potentiometer
44	A	ASC lamp control	Instrument cluster
45	E	Speed sensor signal rear right	Speed sensor rear right
46	E	Speed sensor signal rear left	Speed sensor rear left
47	E	Speed sensor signal front right	Speed sensor front right
48	E	Speed sensor signal front left	Speed sensor front left
49	E	Pump motor sensor signal	ABS hydraulic unit
50	E	Shield pump motor sensor	ABS hydraulic unit
51	E	Plus supply	Front power distribution box, fuse 10
52	A	ABS pump motor relay	ABS pump motor relay
53		Not used	
54	A	Solenoid valve signal left front	ABS hydraulic unit
55	A	Solenoid valve signal left rear	ABS hydraulic unit

E = Input, A = Output, M = Ground

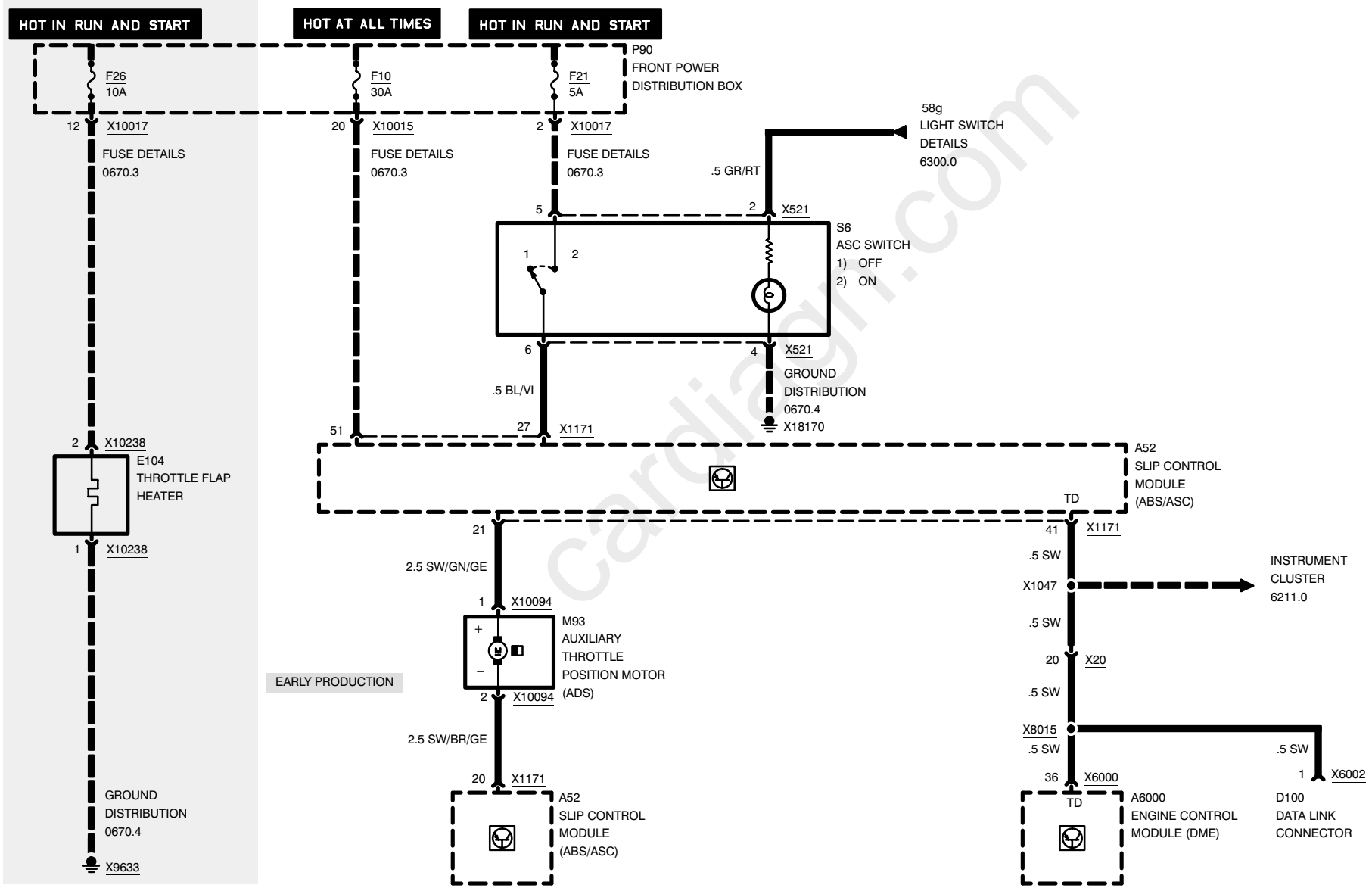
carmagn.com



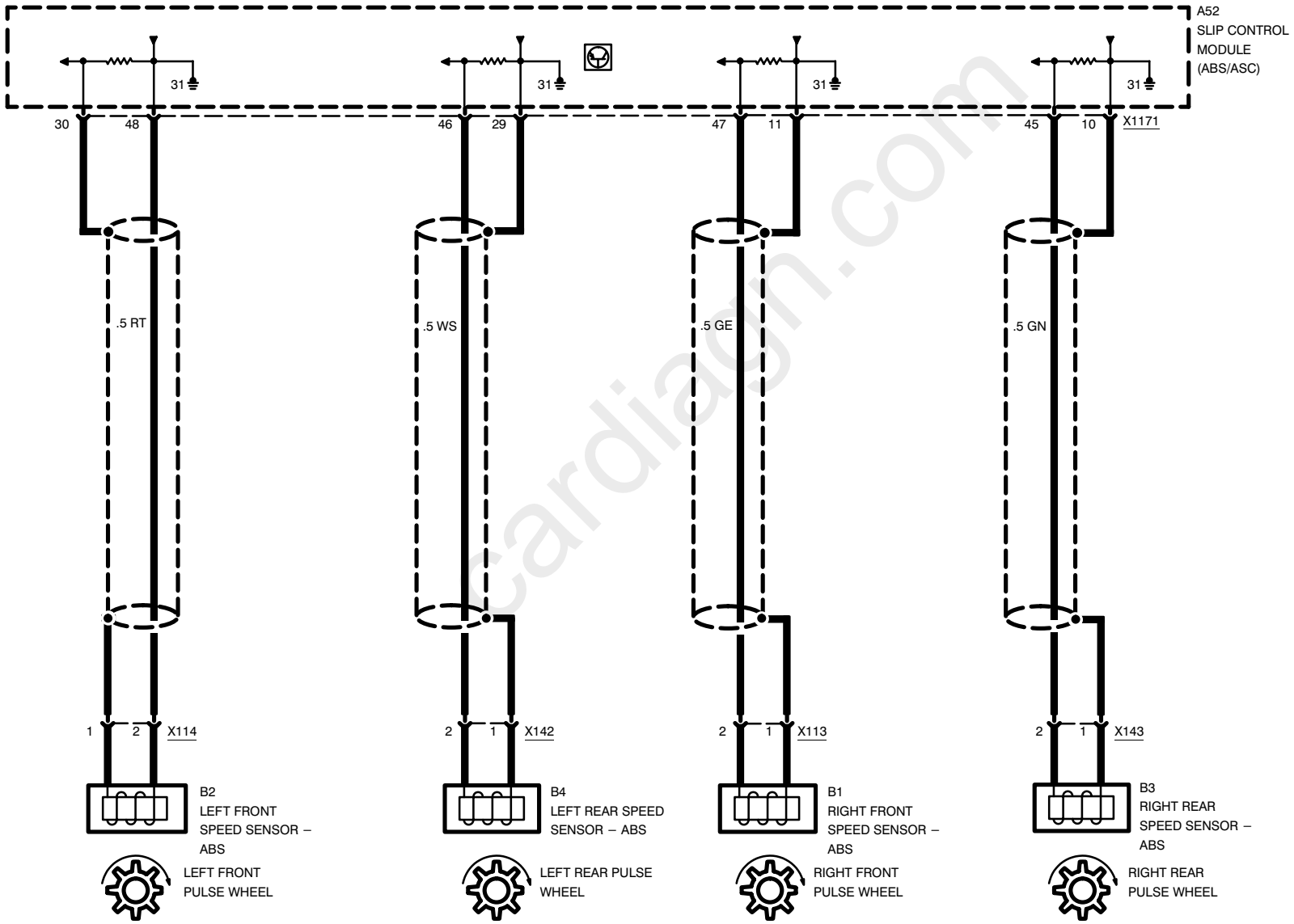
cardiagn.com



cardiagn.com



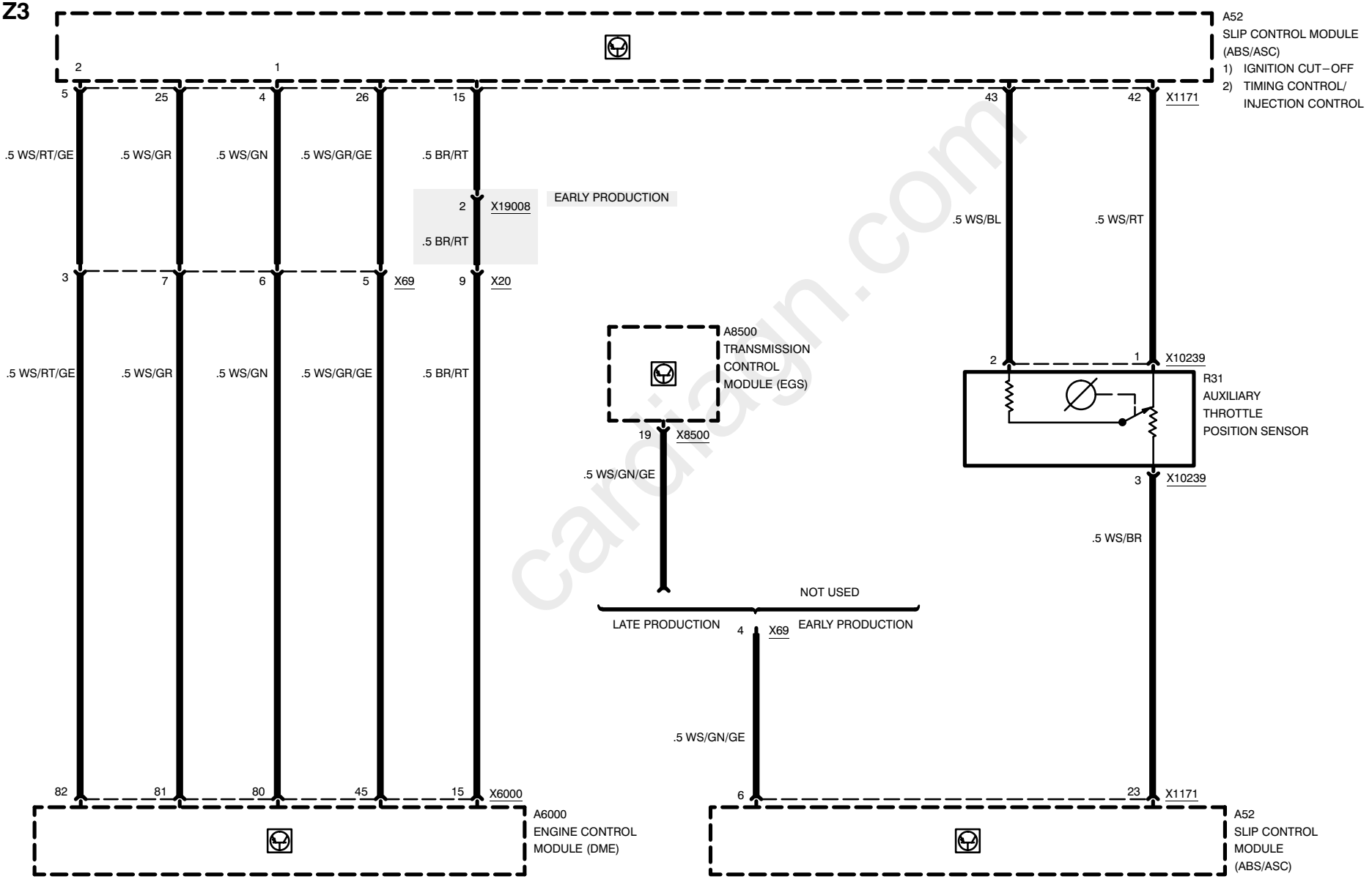
cardiagn.com



cardiagn.com

SLIP CONTROL (ABS/ASC)

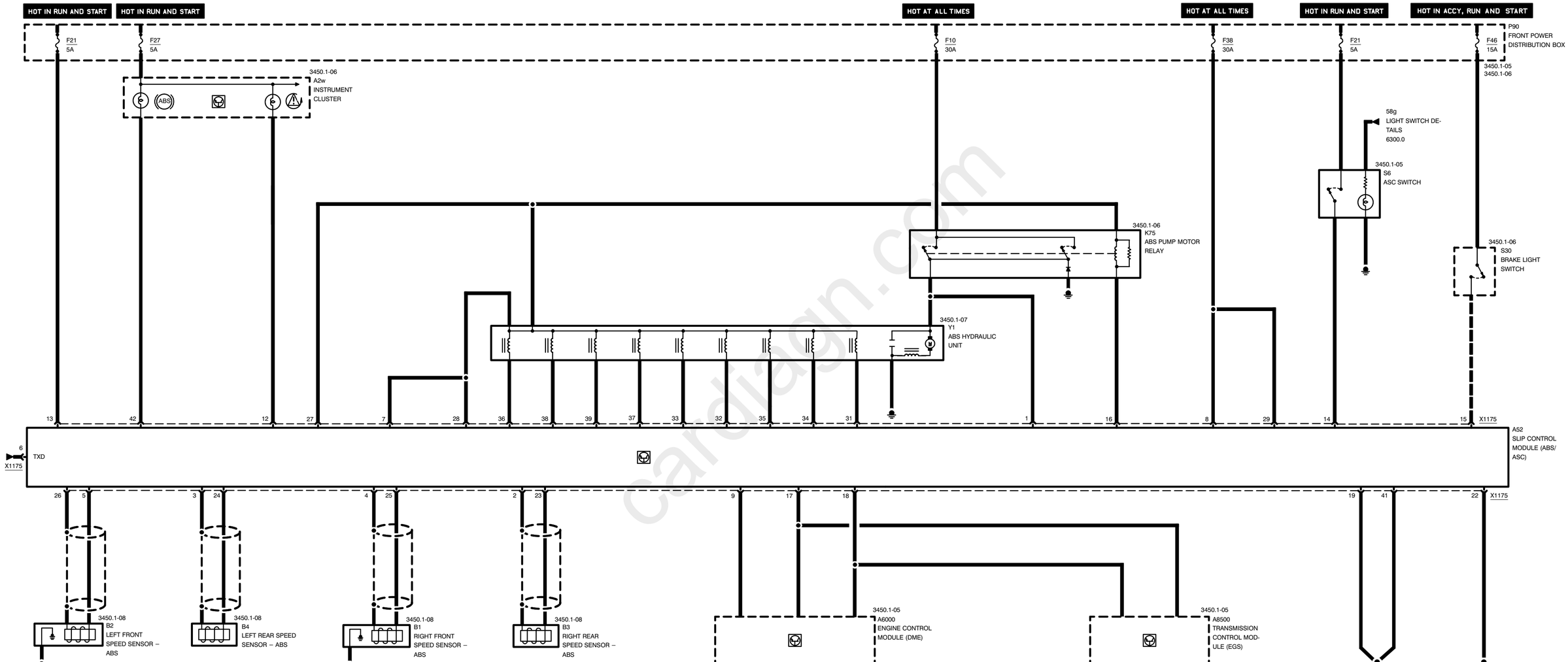
6–CYLINDER



cardiagn.com

03/98 — 3450.1b — 1997
03/98 — 3450.1b — 1997

4–CYLINDER EARLY PRODUCTION



cardiagn.com

Pin Assignments

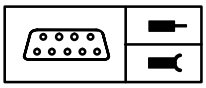
4-Cylinder
Early Production

X1175

Pin	Type	Description/Function	Connection
1	E	Signal pump motor	ABS pump motor relay
2	A	Sensor ground	Right rear speed sensor – ABS
3	A	Sensor gound	Left rear speed sensor – ABS
4	A	Sensor ground	Right front speed sensor – ABS
5	A	Sensor ground	Leftt front speed sensor – ABS
6	E/A	TxD diagnostic data link	Data link connector
7	A	ABS signal	ABS hydraulic unit
8	E	Voltage supply	Fuse 38
9	A	Speed signal right rear	DME module
10		Not used	
11		Not used	
12	A	ASC signal	Instrument cluster
13	E	Voltage supply	Fuse 21
14	E	ASC signal	ASC switch
15	E	Brake pedal position	Brake light switch
16	A	Activate relay	ABS pump motor relay
17	E/A	CAN HIGH	DME/EGS module
18	E/A	CAN LOW	DME/EGS module
19	M	Ground	Ground point
20		Not used	
21		Not used	
22	M	Ground	Ground point
23	E	Speed signal	Right rear speed sensor – ABS
24	E	Speed signal	Left rear speed sensor – ABS
25	E	Speed signal	Right front speed sensor – ABS
26	E	Speed signal	Left front speed sensor – ABS
27	A	ABS signal	ABS pump motor relay/Hydraulic unit
28	A	ABS signal	ABS hydraulic unit
29	E	Voltage supply	Fuse 38
30		Not used	

E = Input, A = Output, M = Ground

cardiagn.com



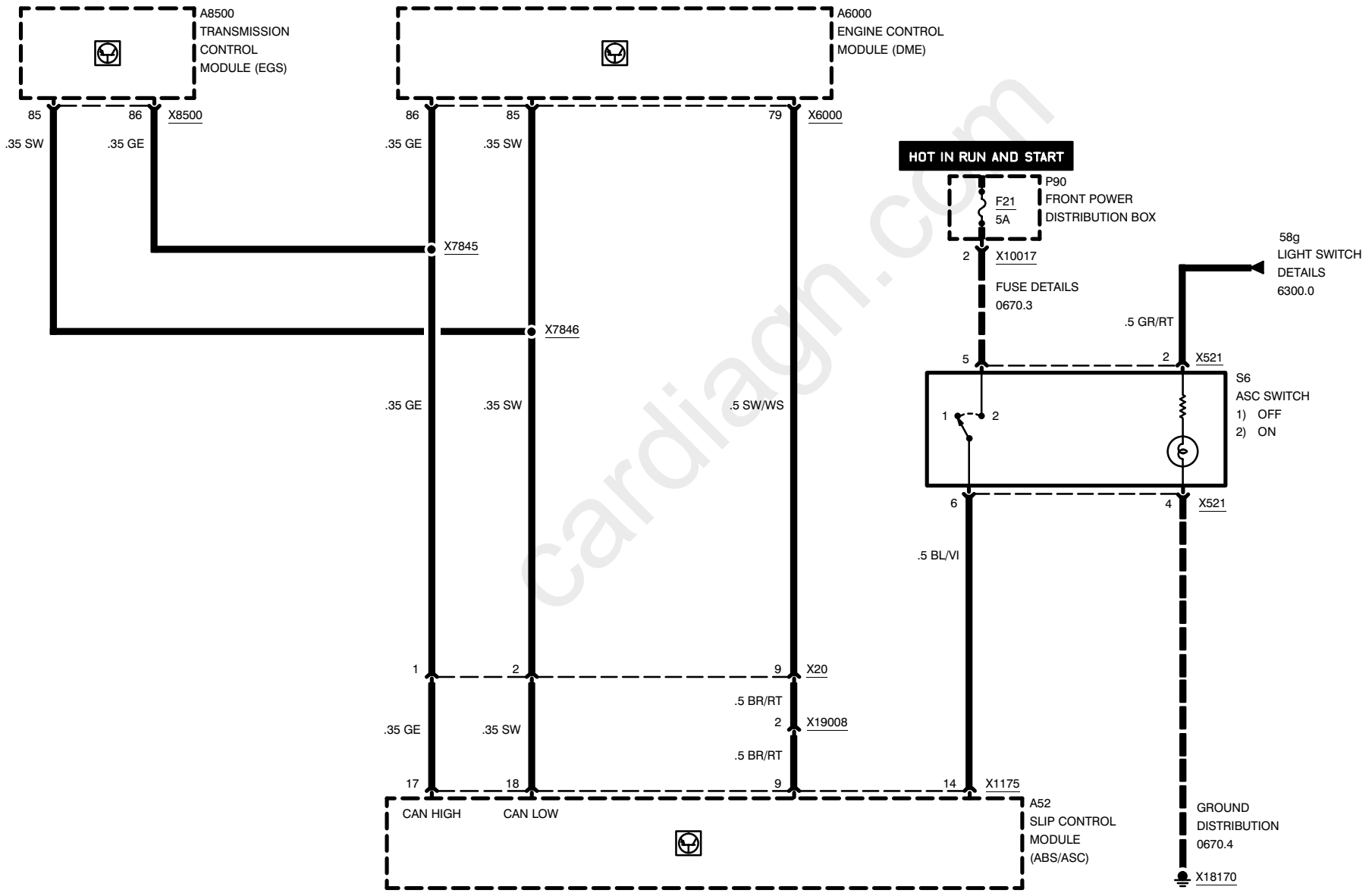
Pin Assignments

4-Cylinder
Early Production

Pin	Type	Description/Function	Connection
31	A	Seperator valve	ABS hydraulic unit
32	A	Left rear inlet valve	ABS hydraulic unit
33	A	Left rear outlet valve	ABS hydraulic unit
34	A	Right rear inlet valve	ABS hydraulic unit
35	A	Right rear outlet valve	ABS hydraulic unit
36	A	Left front outlet valve	ABS hydraulic unit
37	A	Right front outlet valve	ABS hydraulic unit
38	A	Left front inlet valve	ABS hydraulic unit
39	A	Right front inlet valve	ABS hydraulic unit
40		Not used	
41	M	Ground	Ground point
42	A	ABS signal	Instrument cluster

cardiagn.com

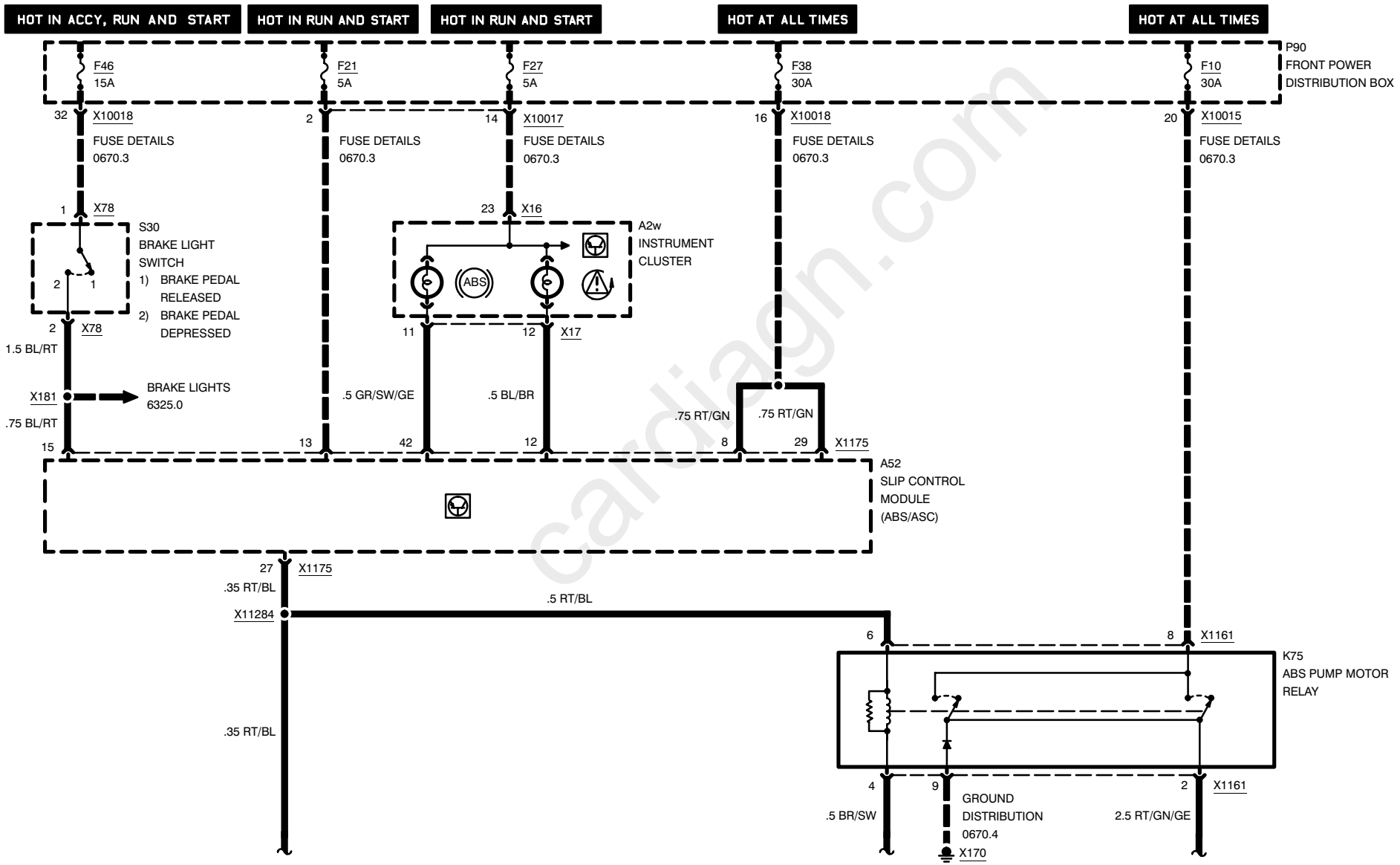
E = Input, A = Output, M = Ground



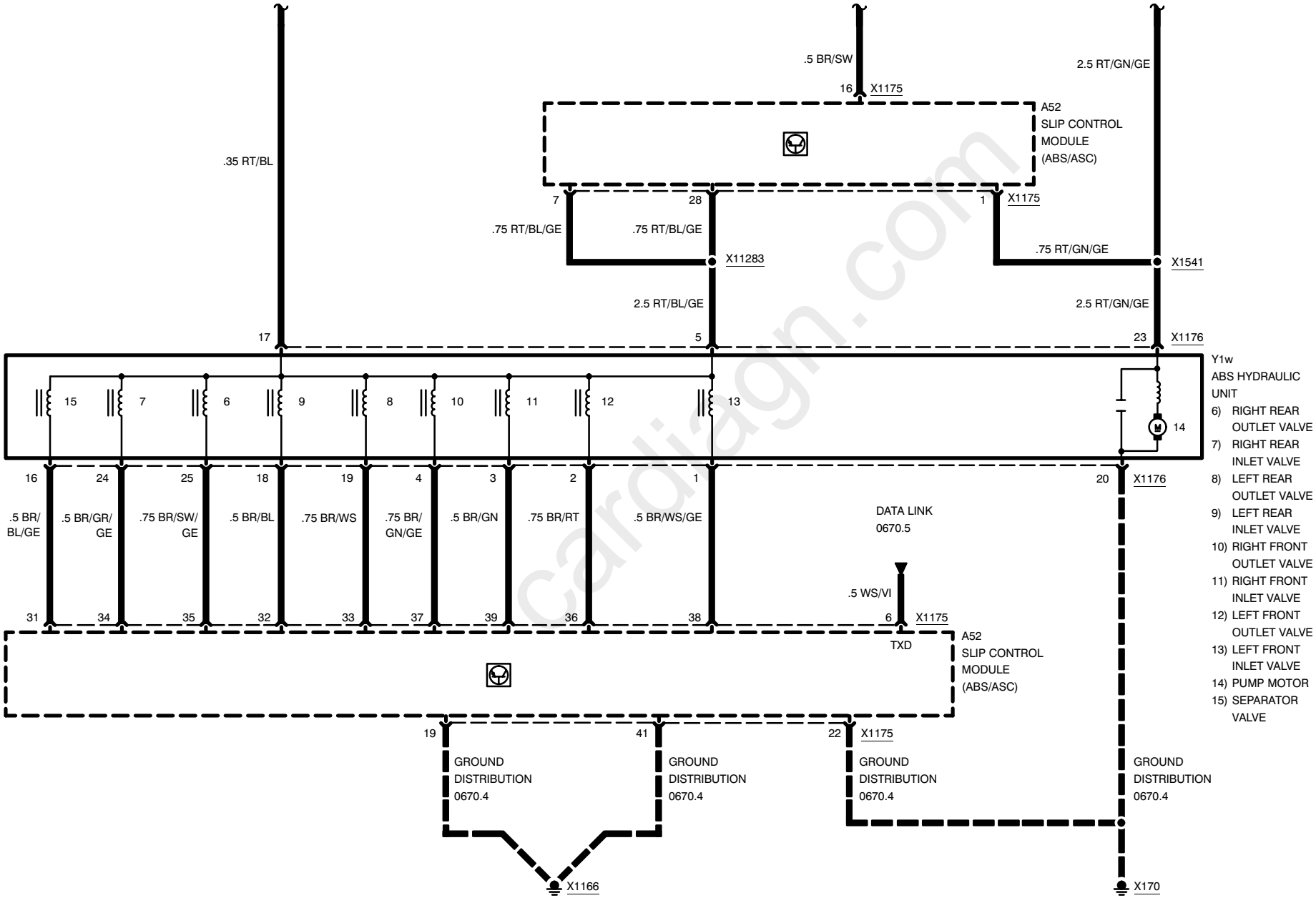
cardiagn.com

SLIP CONTROL (ABS/ASC)

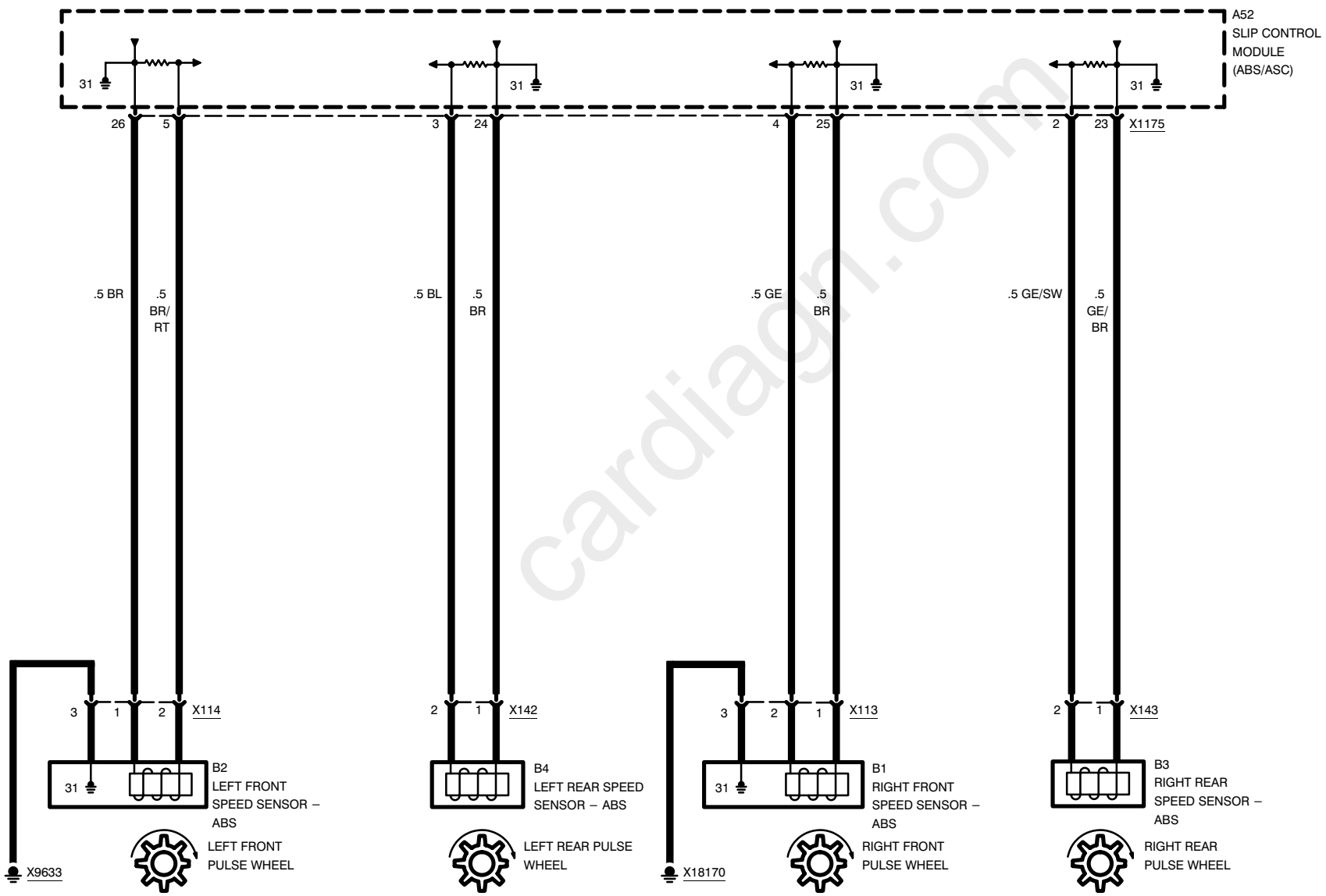
4–CYLINDER EARLY PRODUCTION



cardiagn.com



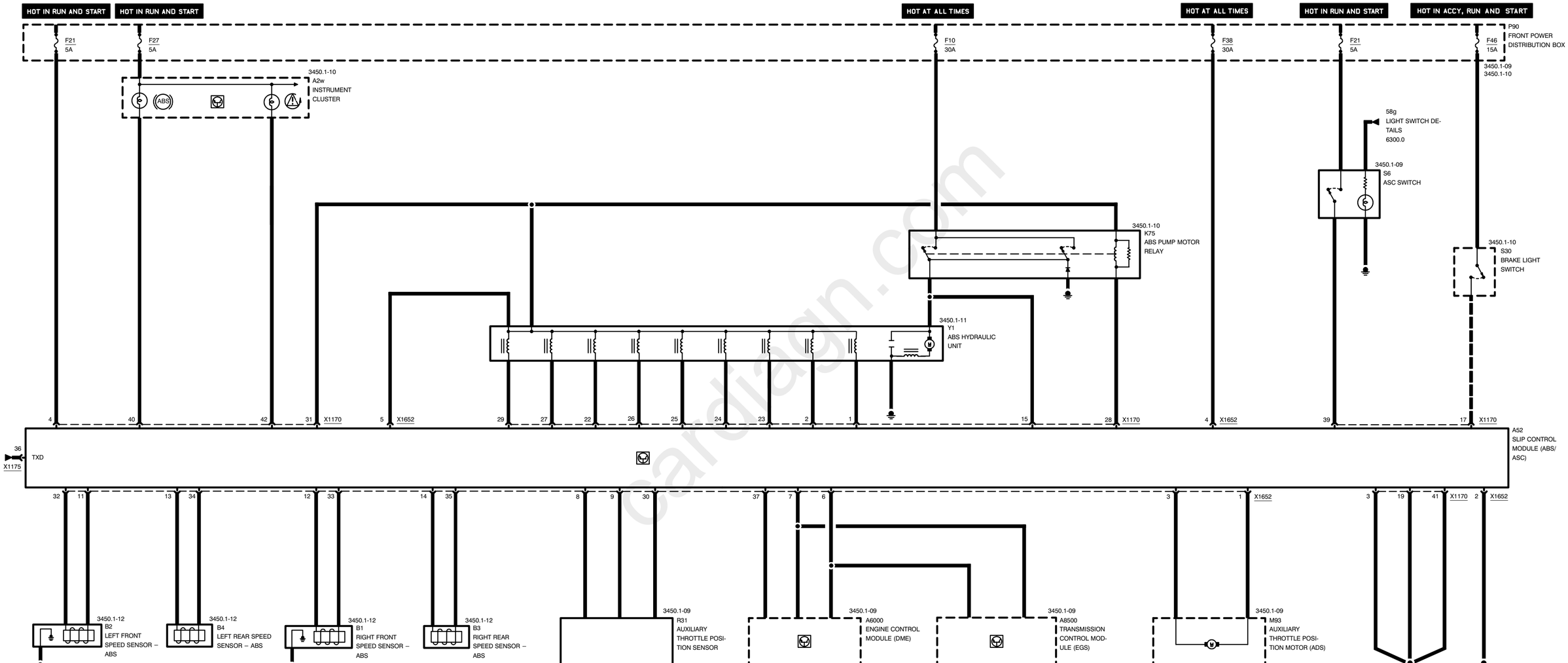
cardiagn.com



cardiagn.com

03/98 — 3450.1c — 1997
03/98 — 3450.1c — 1997

4–CYLINDER LATE PRODUCTION



cardiagn.com

Pin Assignments

4-Cylinder
Late Production

X1170

Pin	Type	Description/Function	Connection
43	A	Left front inlet valve	ABS hydraulic unit
44	A	Left front outlet valve	ABS hydraulic unit
45	M	Ground	Ground point
46	E	Voltage supply	Fuse 21
47		Not used	
48	E/A	CAN LOW	DME/EGS module
49	E/A	CAN HIGH	DME/EGS module
50	E	Throttle position signal 1	Auxiliary throttle position sensor
51	E	Throttle position signal 3	Auxiliary throttle position sensor
52		Not used	
53	A	Sensor ground	Left front speed sensor – ABS
54	A	Sensor ground	Right front speed sensor – ABS
55	A	Sensor ground	Left rear speed sensor – ABS
56	A	Sensor ground	Right rear speed sensor – ABS
57	E	Signal pump motor	ABS pump motor relay
58		Not used	
59	E	Brake pedal position	Brake light switch
60		Not used	
61	M	Ground	Ground point
62		Not used	
63		Not used	
64	A	Right rear outlet valve	ABS hydraulic unit
65	A	Right front inlet valve	ABS hydraulic unit
66	A	Right front outlet valve	ABS hydraulic unit
67	A	Left rear outlet valve	ABS hydraulic unit
68	A	Left rear inlet valve	ABS hydraulic unit
69	A	Right rear inlet valve	ABS hydraulic unit
70	A	Activate relay	ABS pump motor relay
71	A	Separator valve	ABS hydraulic unit
72	E	Throttle position signal 2	Auxiliary throttle position sensor

E = Input, A = Output, M = Ground

cardiagn.com

Pin Assignments

4-Cylinder
Late Production

Pin	Type	Description/Function	Connection
73	A	ABS signal	ABS pump motor relay/Hydraulic unit
74	E	Speed signal	Left front speed sensor – ABS
75	E	Speed signal	Right front speed sensor – ABS
76	E	Speed signal	Left rear speed sensor – ABS
77	E	Speed signal	Right rear speed sensor – ABS
78	E/A	TxD diagnostic data link	Data link connector
79	A	Speed signal right rear	DME module
80		Not used	
81	E	ASC signal	ASC switch
82	A	ABS signal	Instrument cluster
83	M	Ground	Ground point
84	A	ASC signal	Instrument cluster

X1652

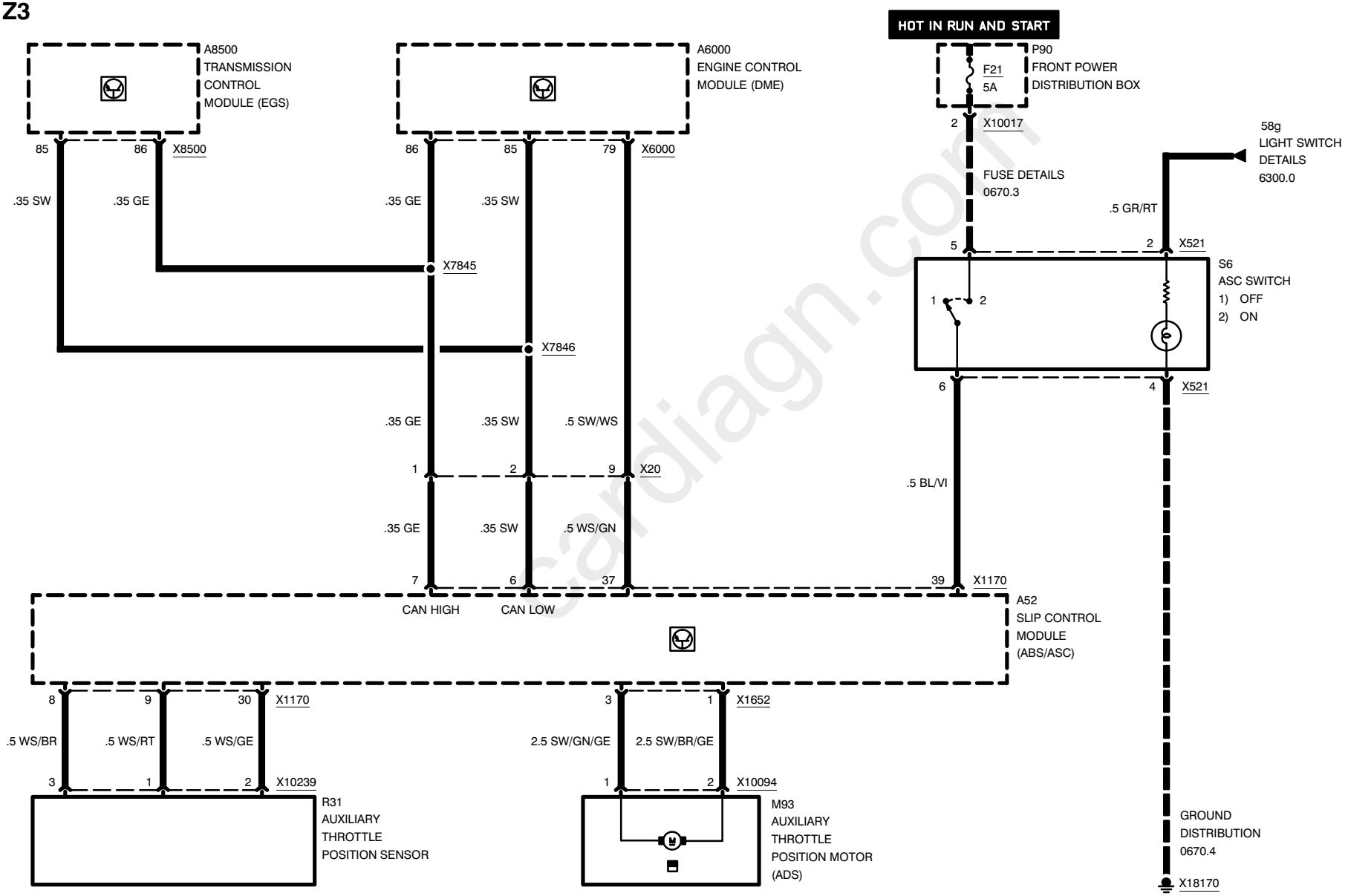
Pin	Type	Description/Function	Connection
1	A	ADS step motor (–)	Auxiliary throttle position motor
2	M	Ground	Ground point
3	A	ADS step motor (+)	Auxiliary throttle position motor
4	E	Voltage supply	Fuse 38
5	A	ABS signal	ABS hydraulic unit

cardiagn.com

E = Input, A = Output, M = Ground

SLIP CONTROL (ABS/ASC)

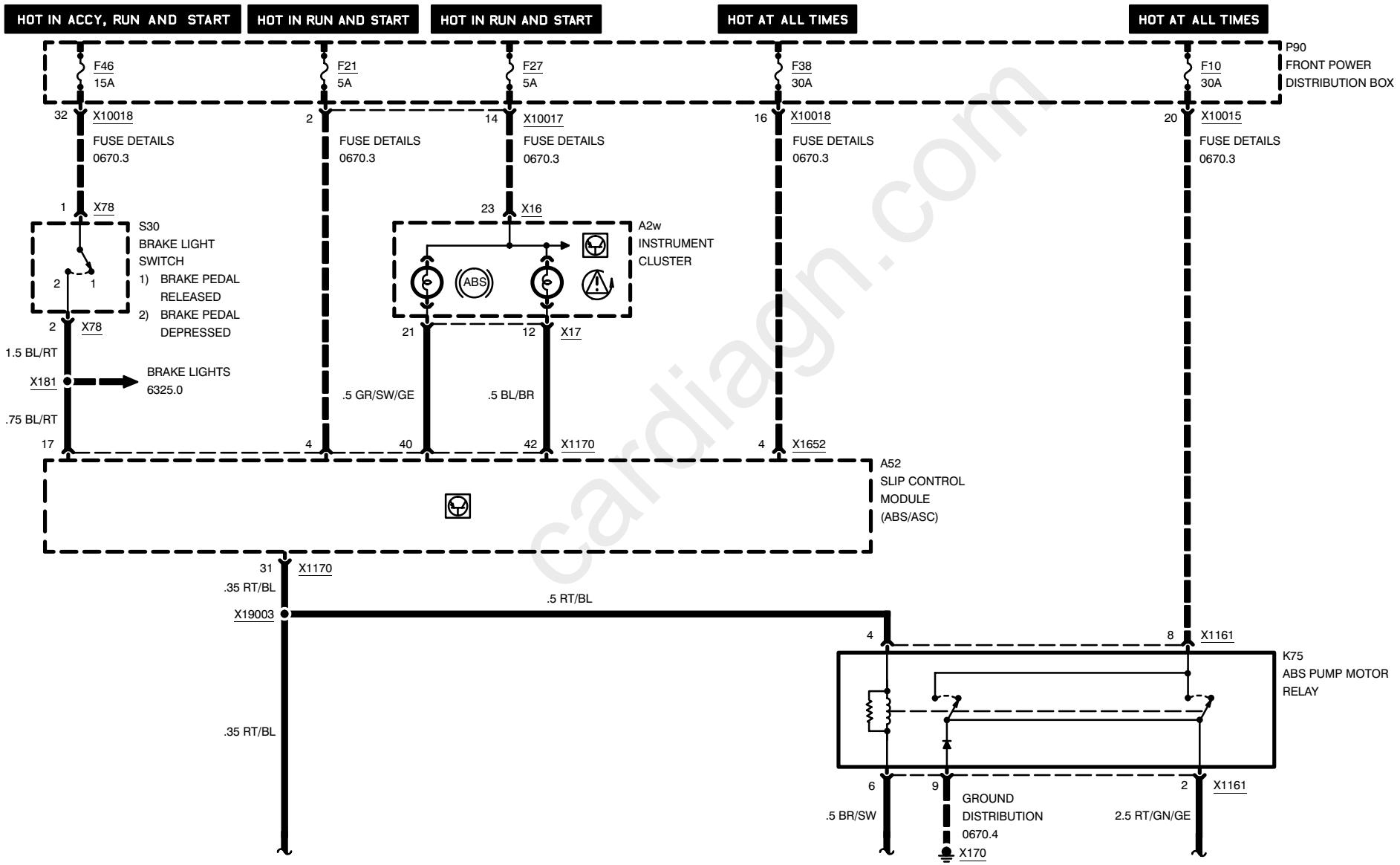
4–CYLINDER LATE PRODUCTION



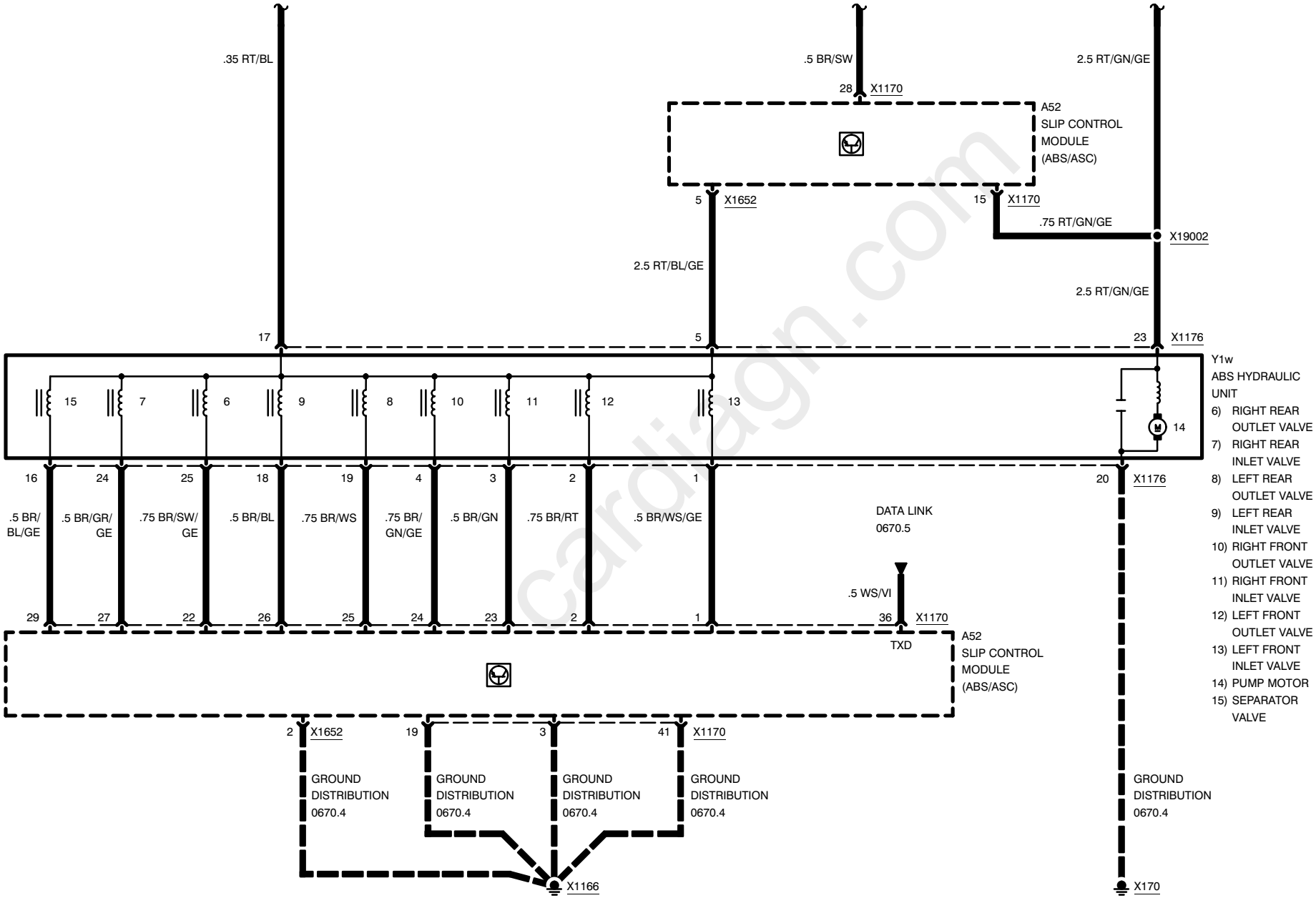
cardiagn.com

SLIP CONTROL (ABS/ASC)

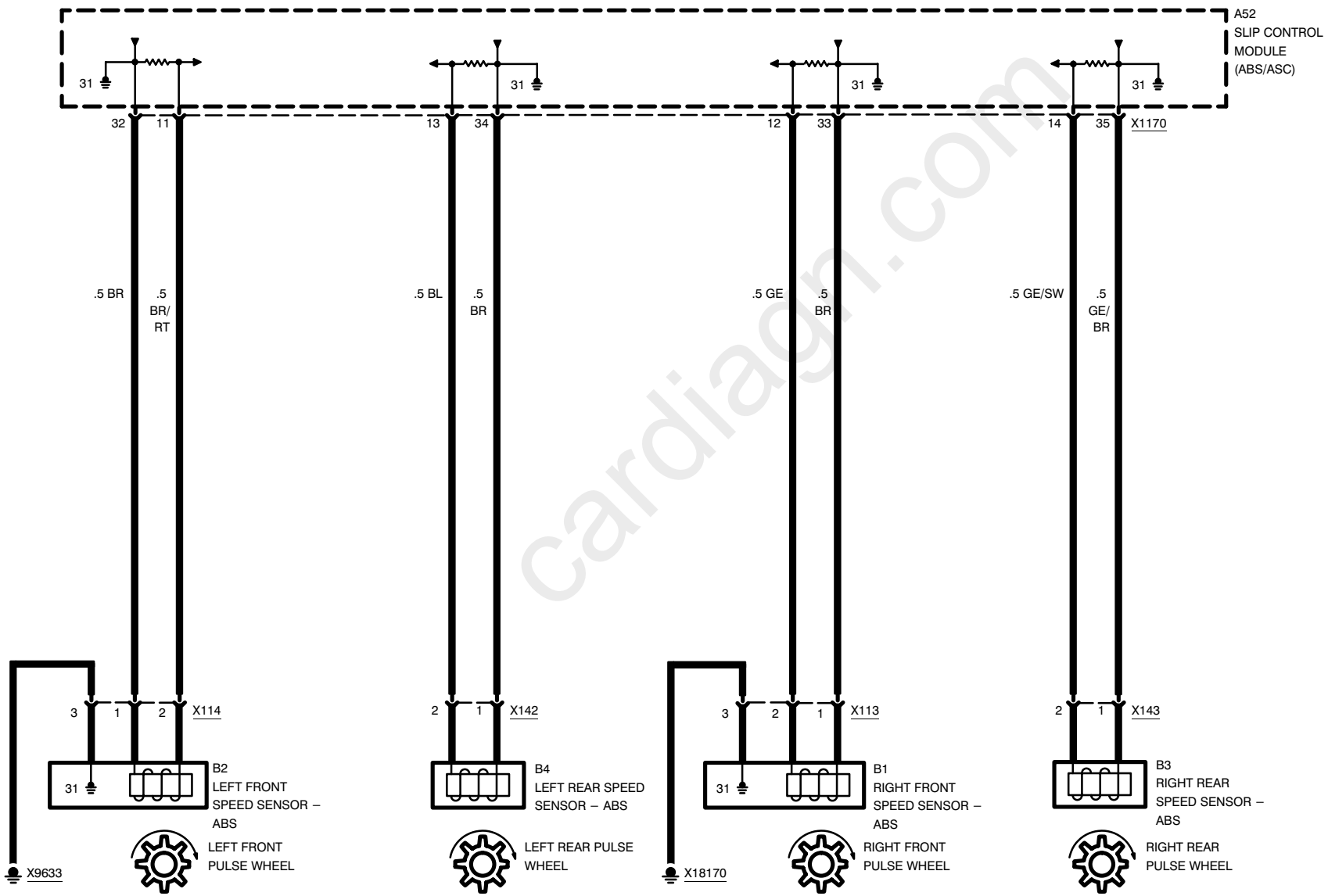
4–CYLINDER LATE PRODUCTION



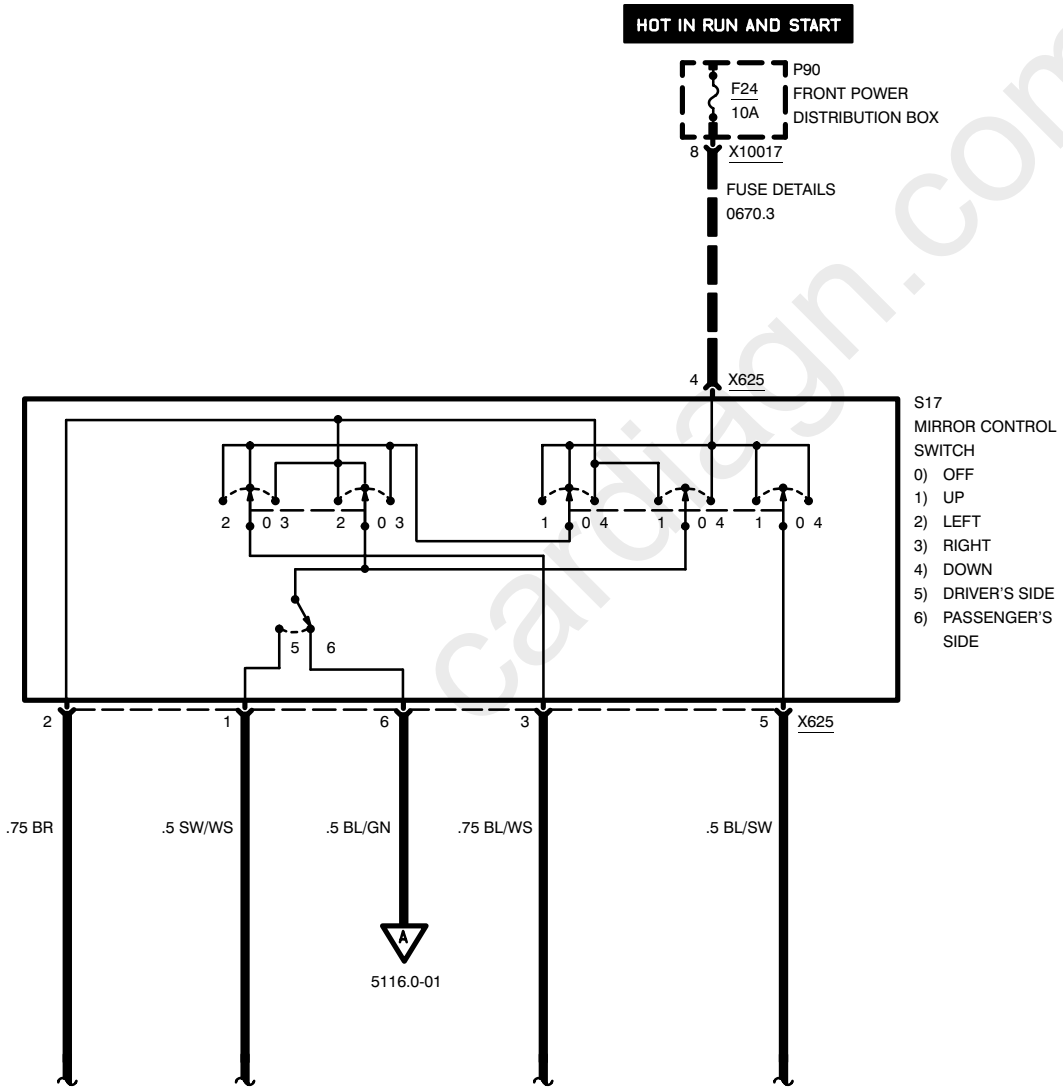
cardiagn.com



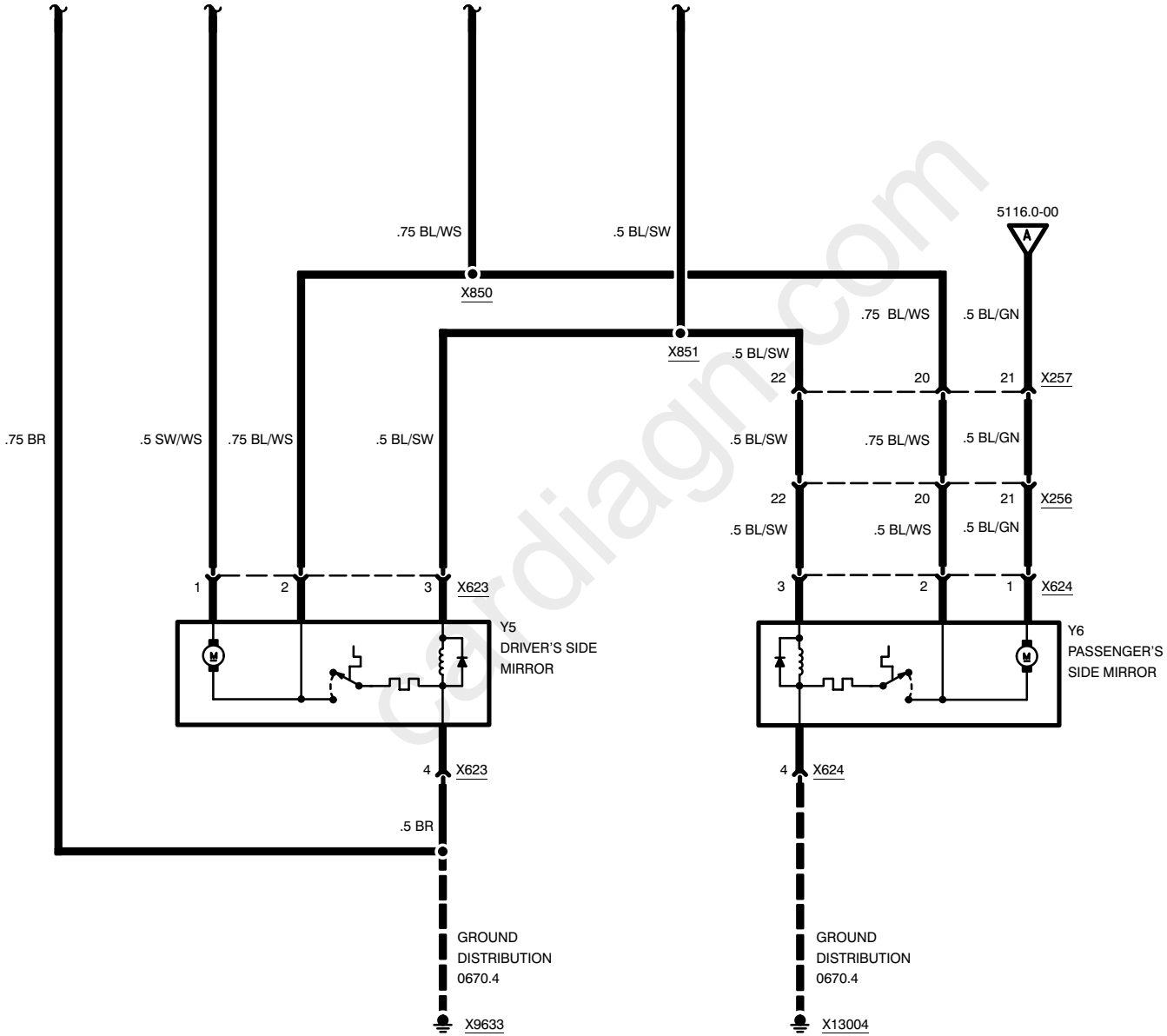
cardiagn.com



cardiagn.com



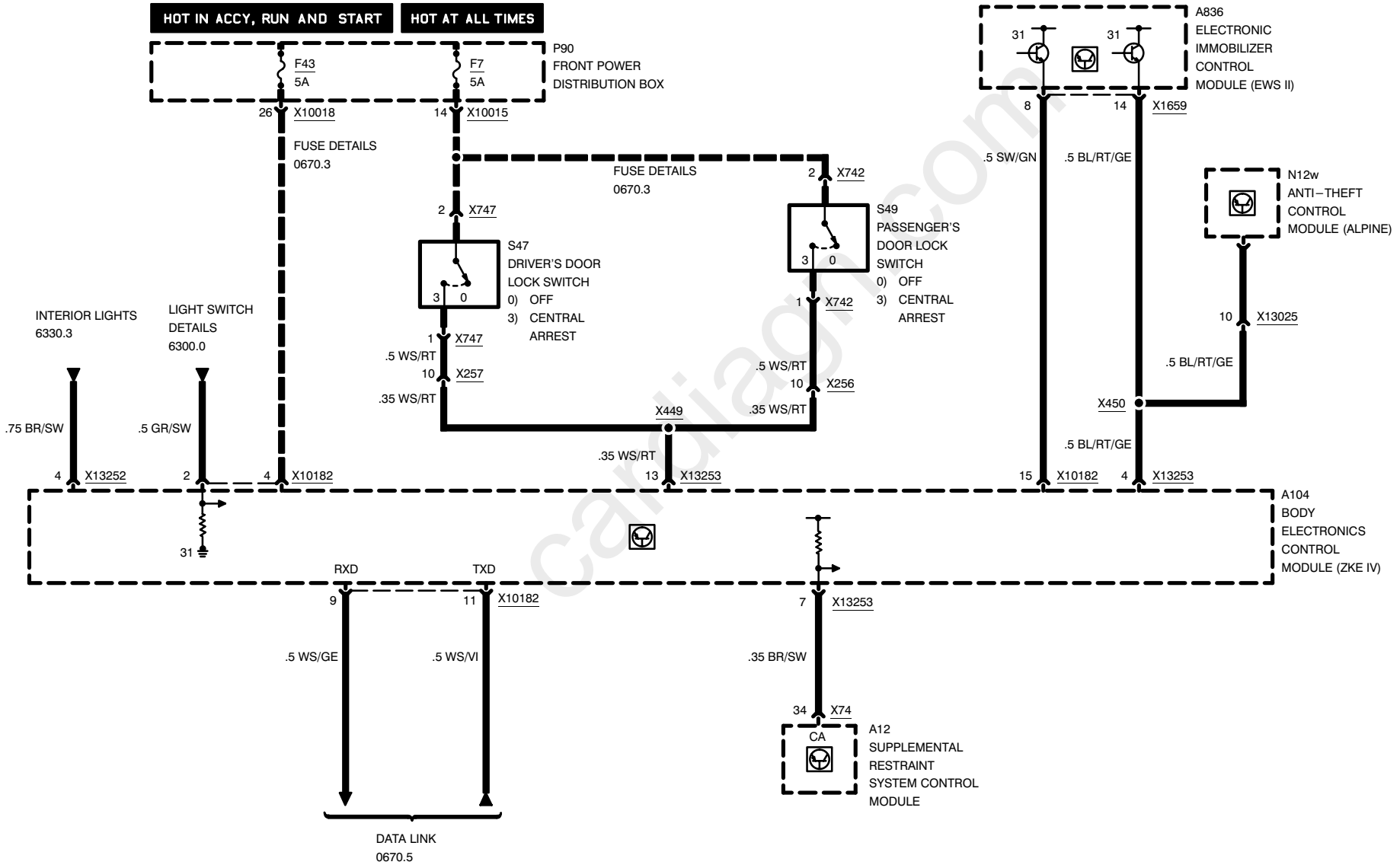
cardiagn.com



cardiagn.com

ZKE CENTRAL LOCKING (ZV)

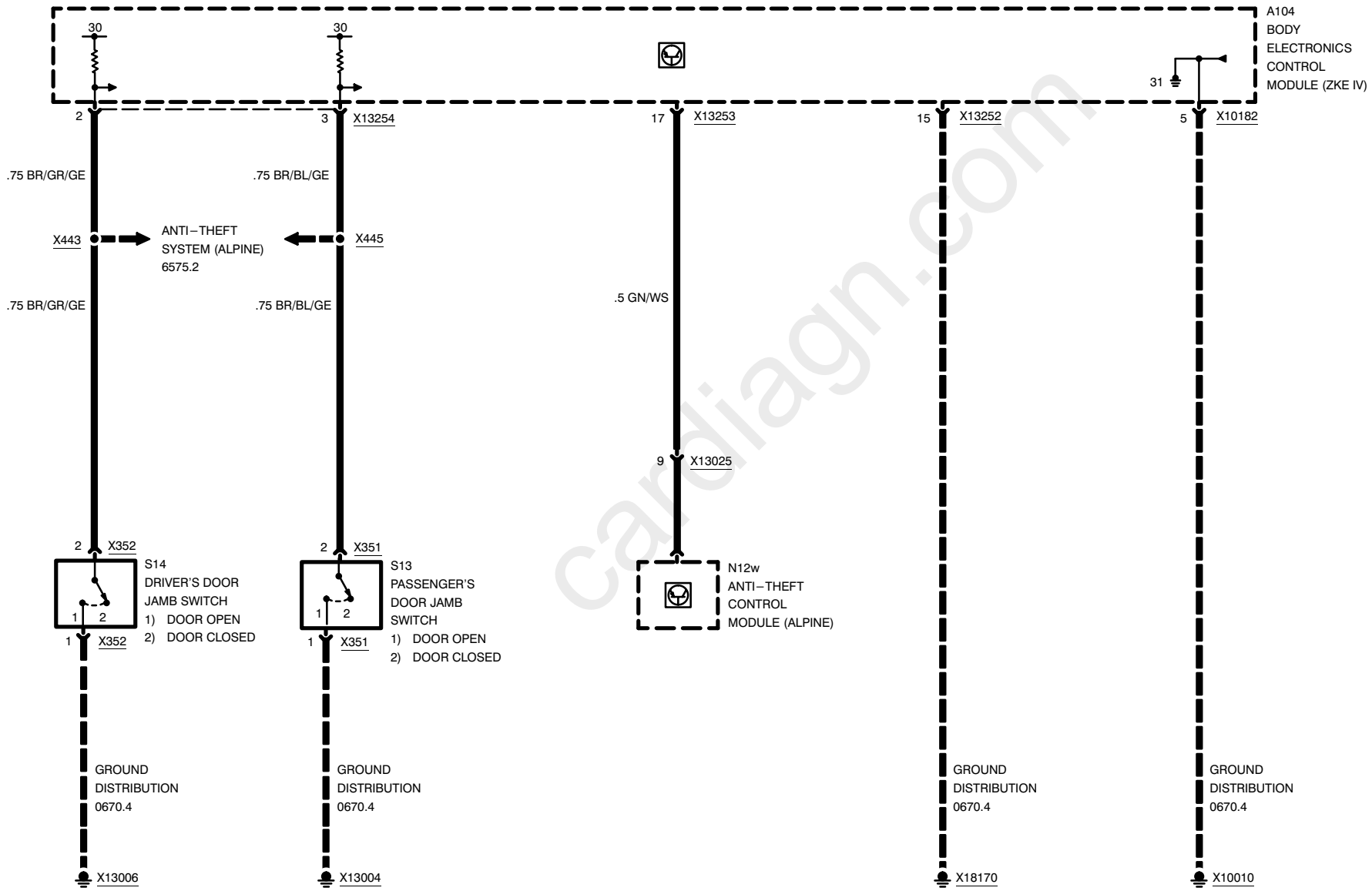
INPUTS, DRIVE–AWAY PROTECTION



carDiagn.com

ZKE CENTRAL LOCKING (ZV)

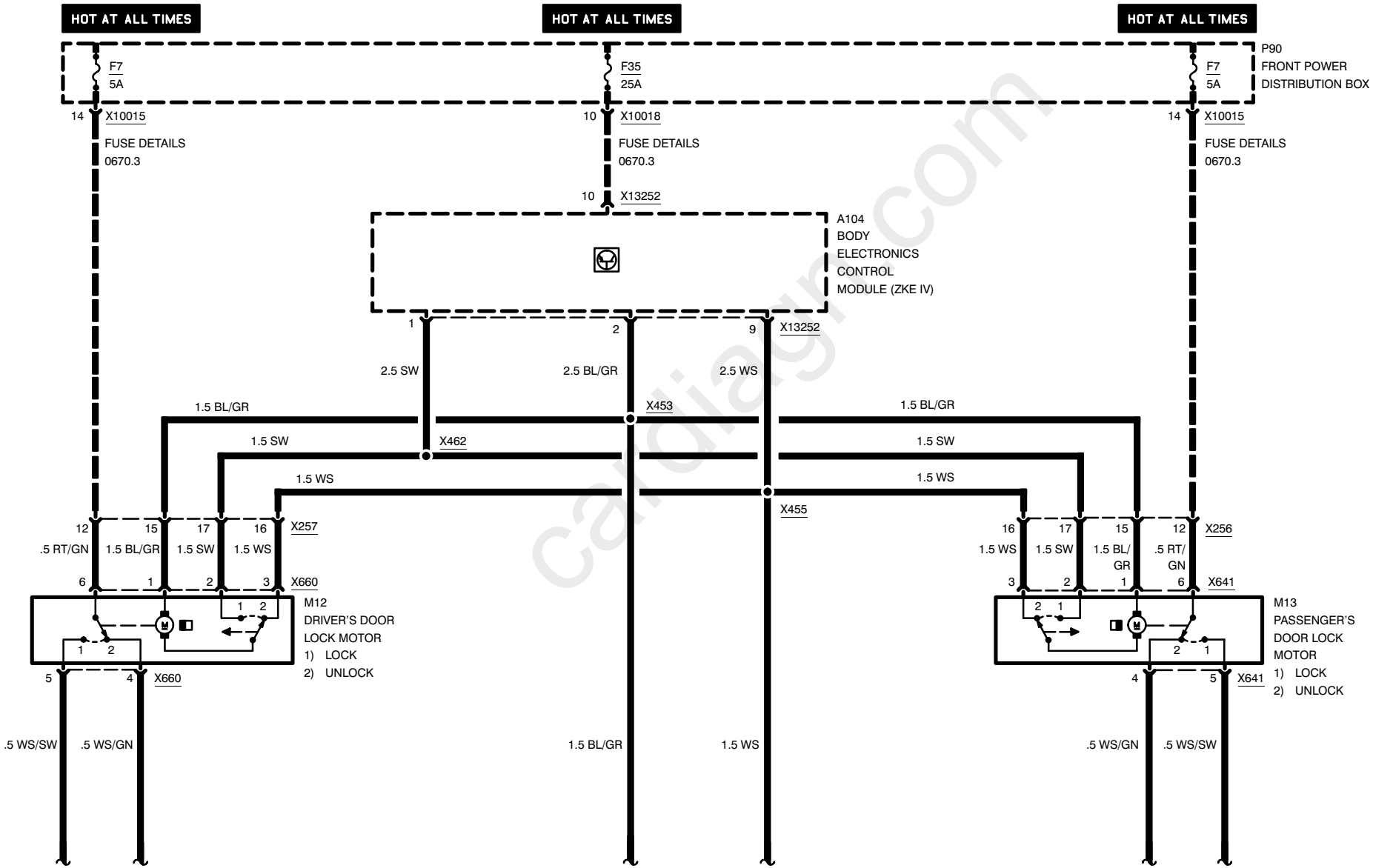
INPUT DETAILS



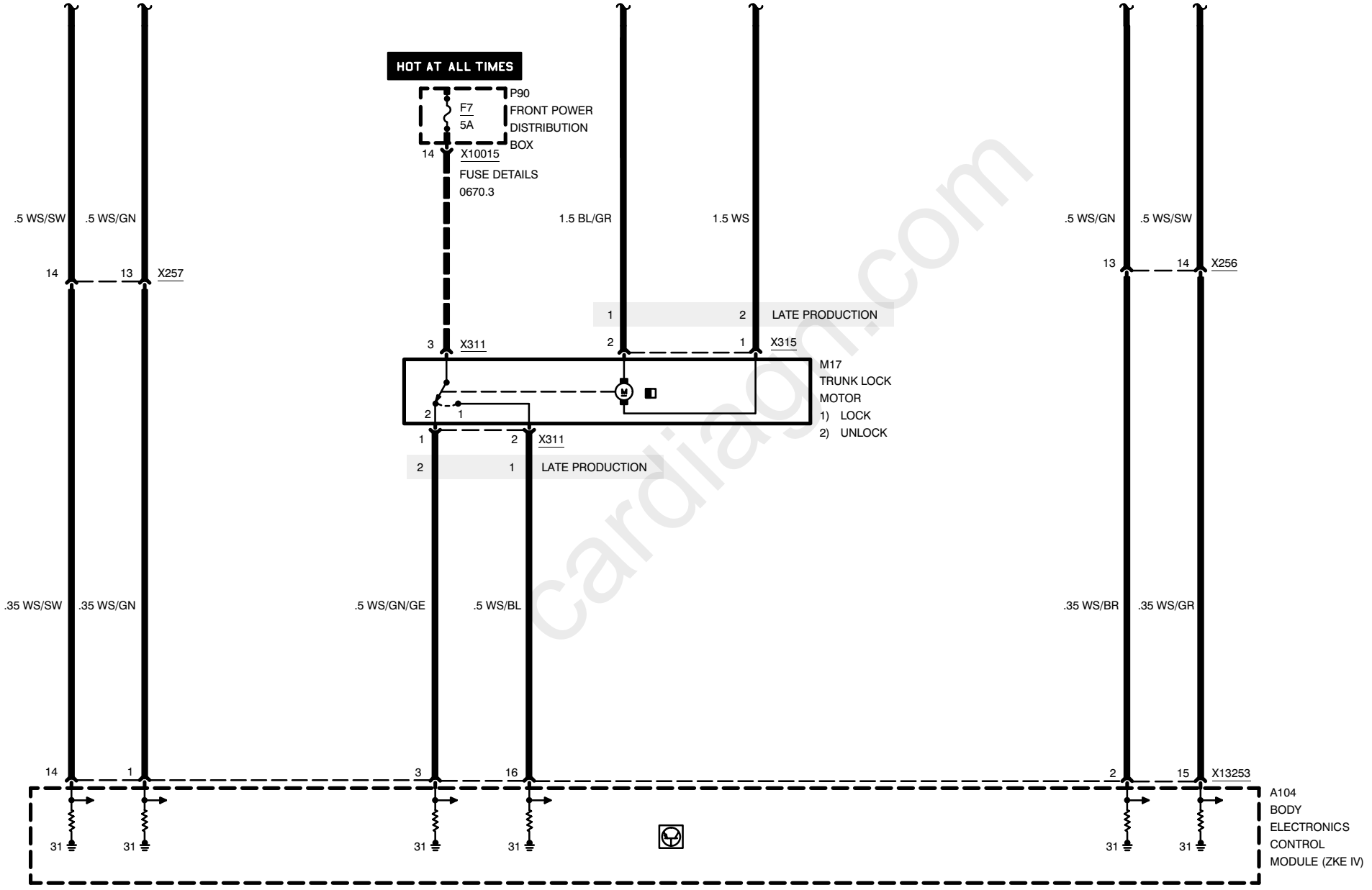
cardiagn.com

ZKE CENTRAL LOCKING (ZV)

OUTPUT DETAILS



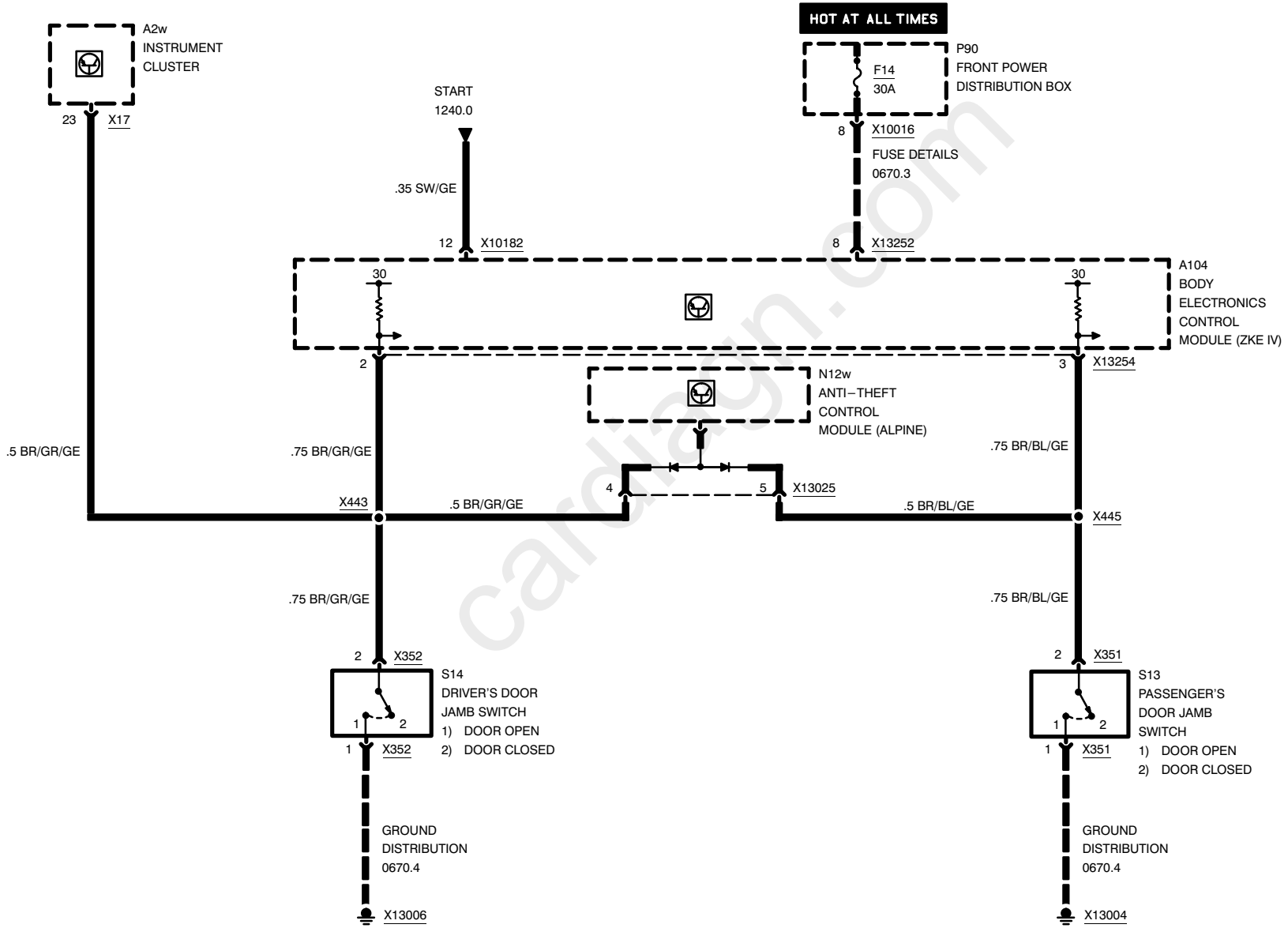
cardiagn.com



cardiagn.com

ZKE POWER WINDOWS (FH)

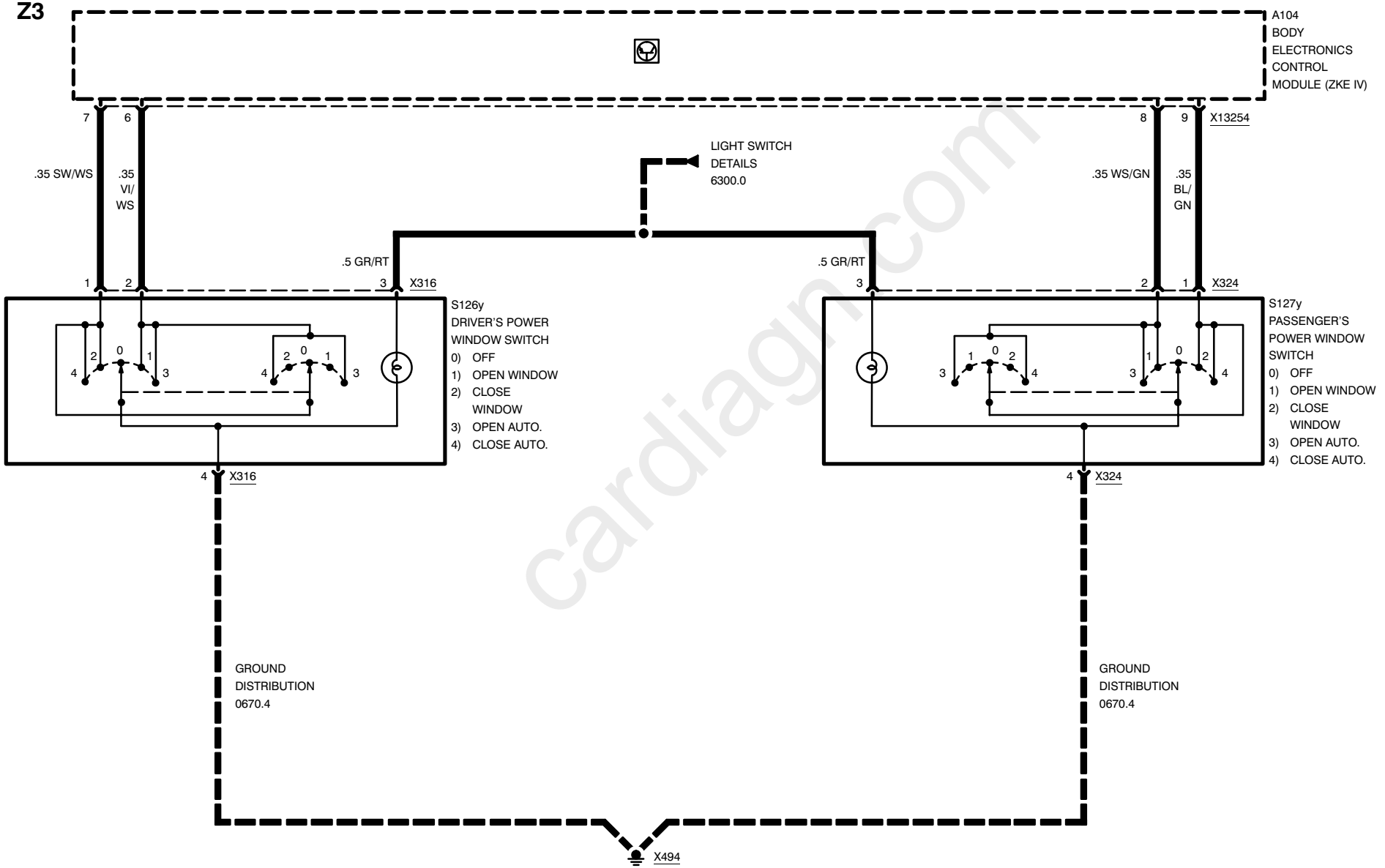
INPUT DETAILS



cardiagn.com

ZKE POWER WINDOWS (FH)

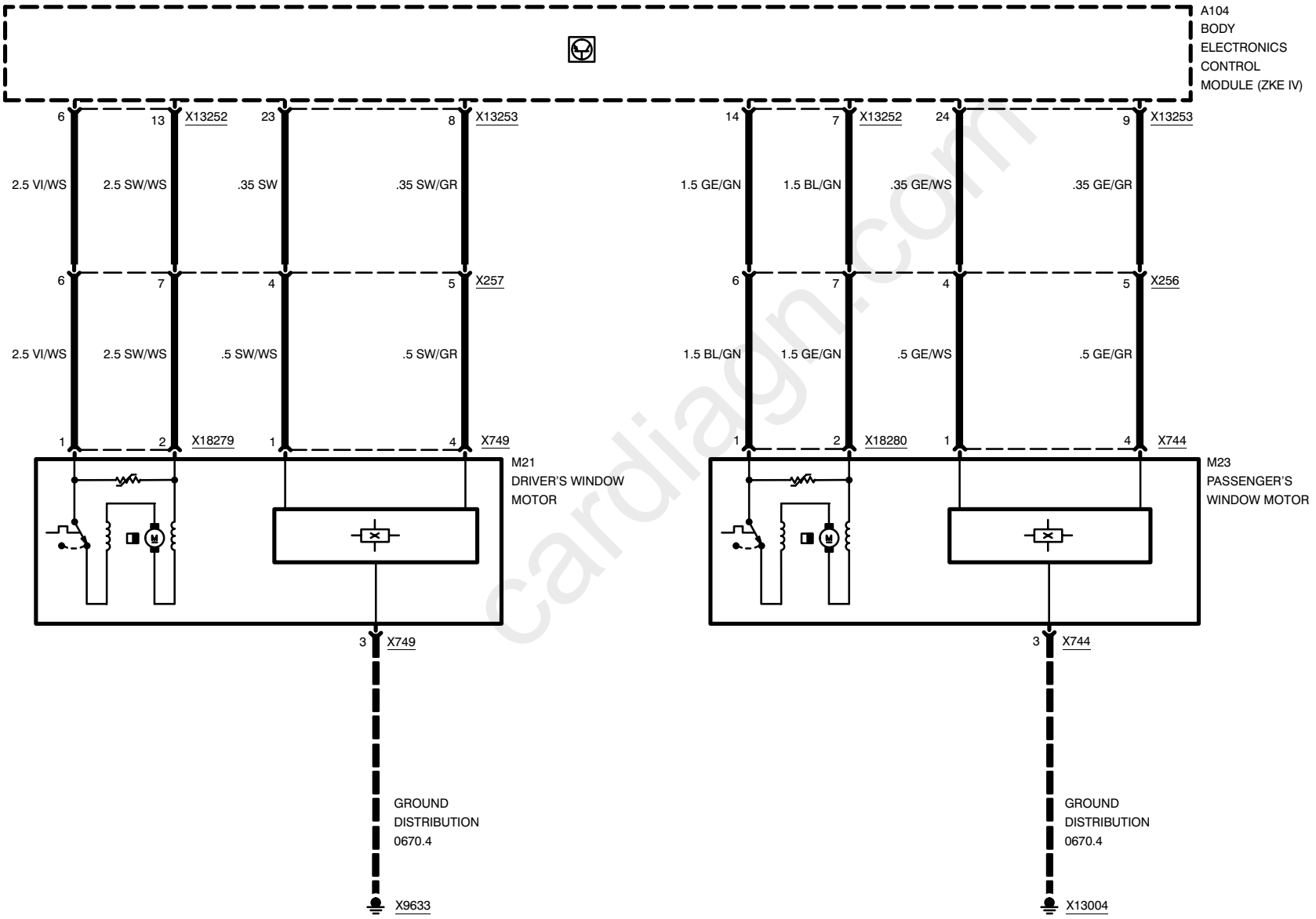
INPUT DETAILS



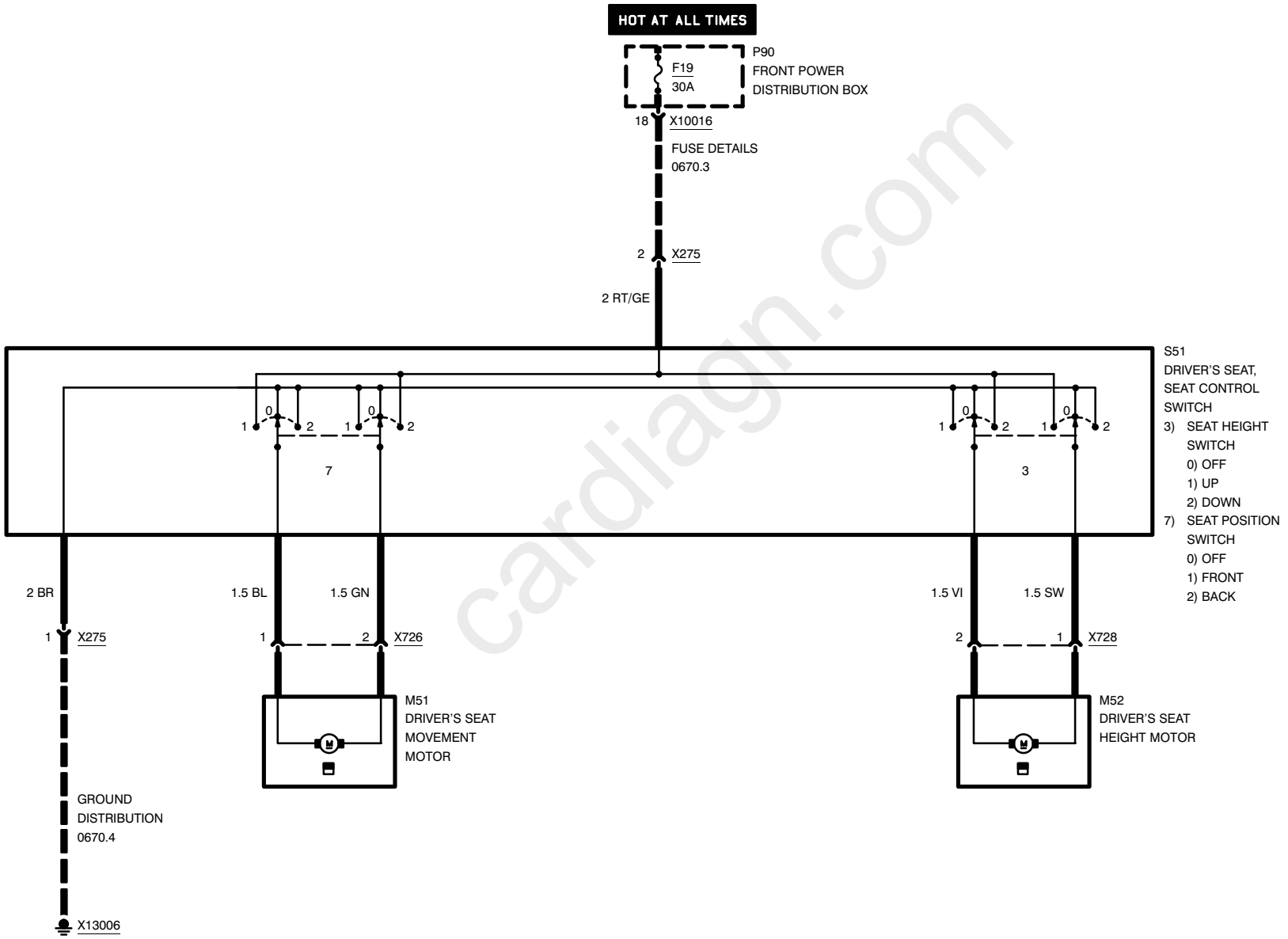
cardiagn.com

ZKE POWER WINDOWS (FH)

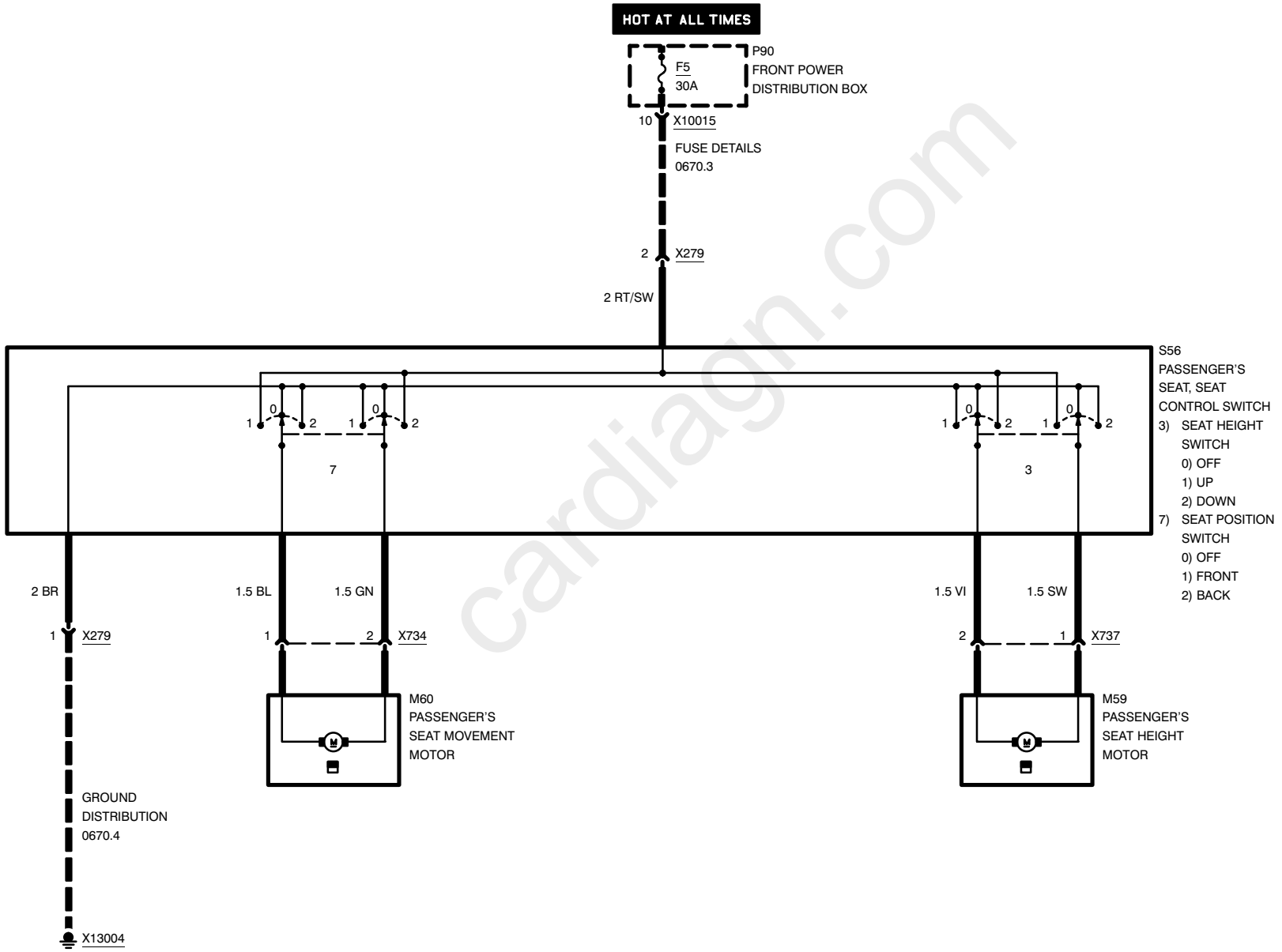
OUTPUT DETAILS



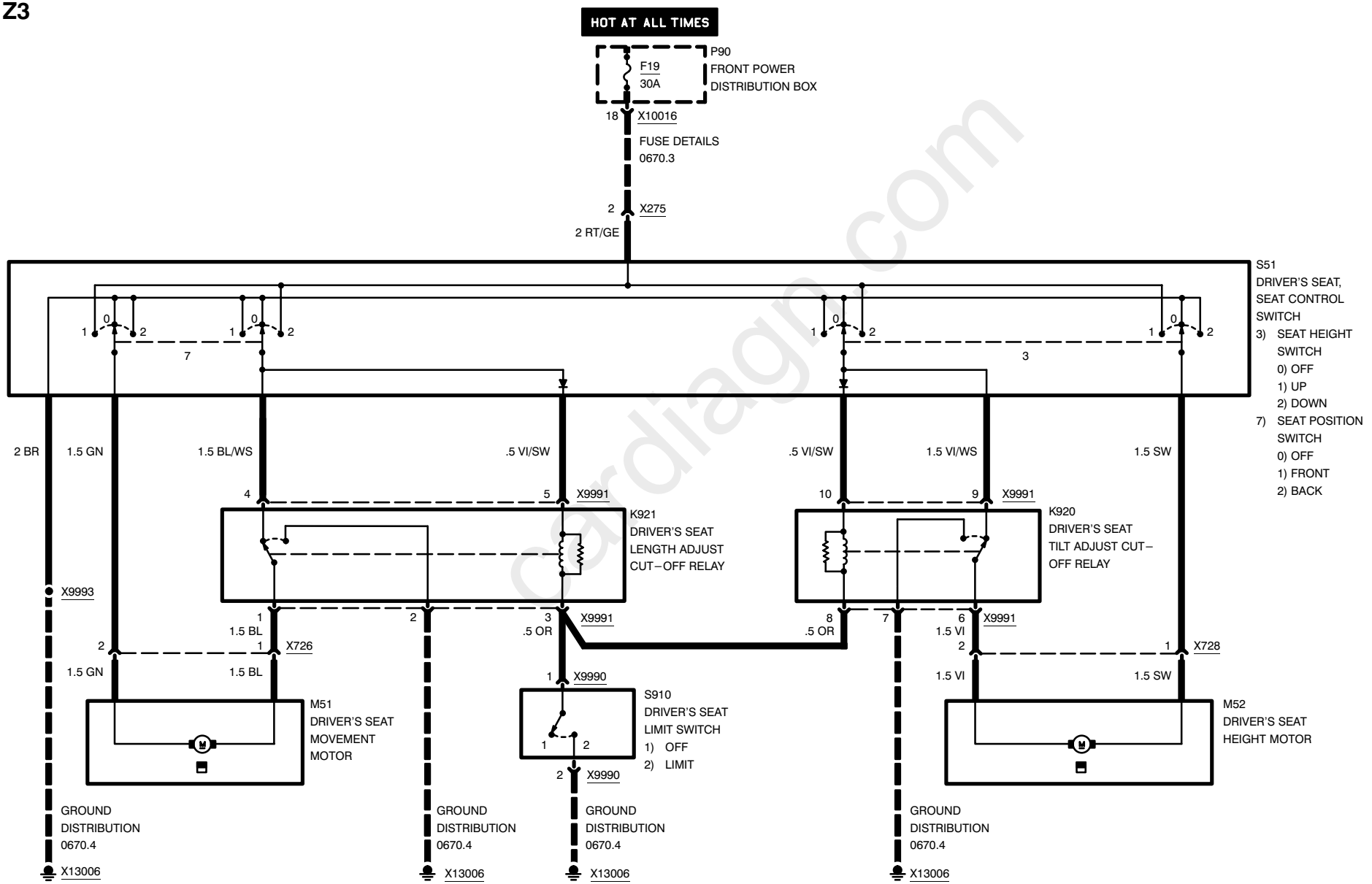
cardiagn.com



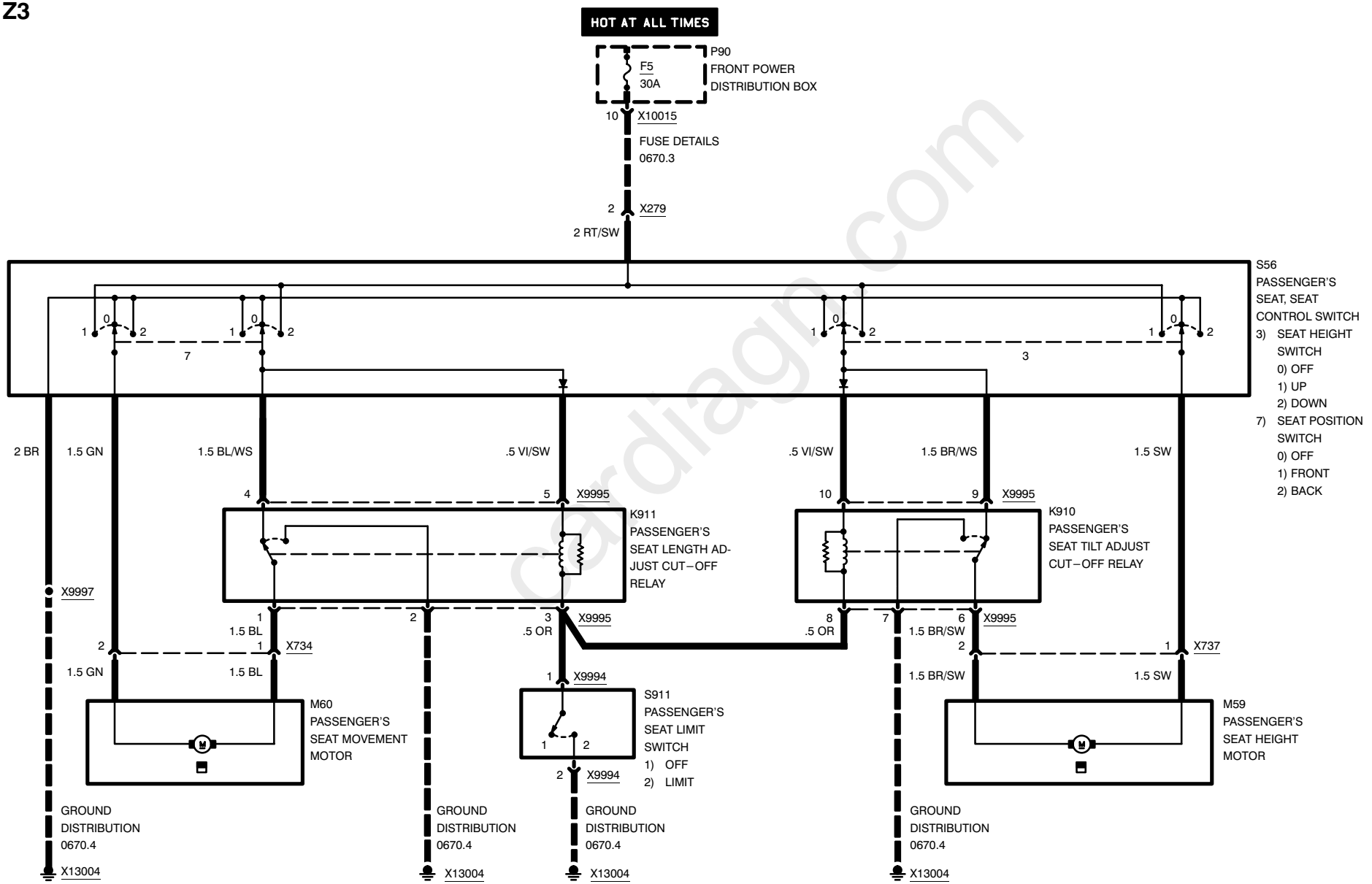
cardiagn.com



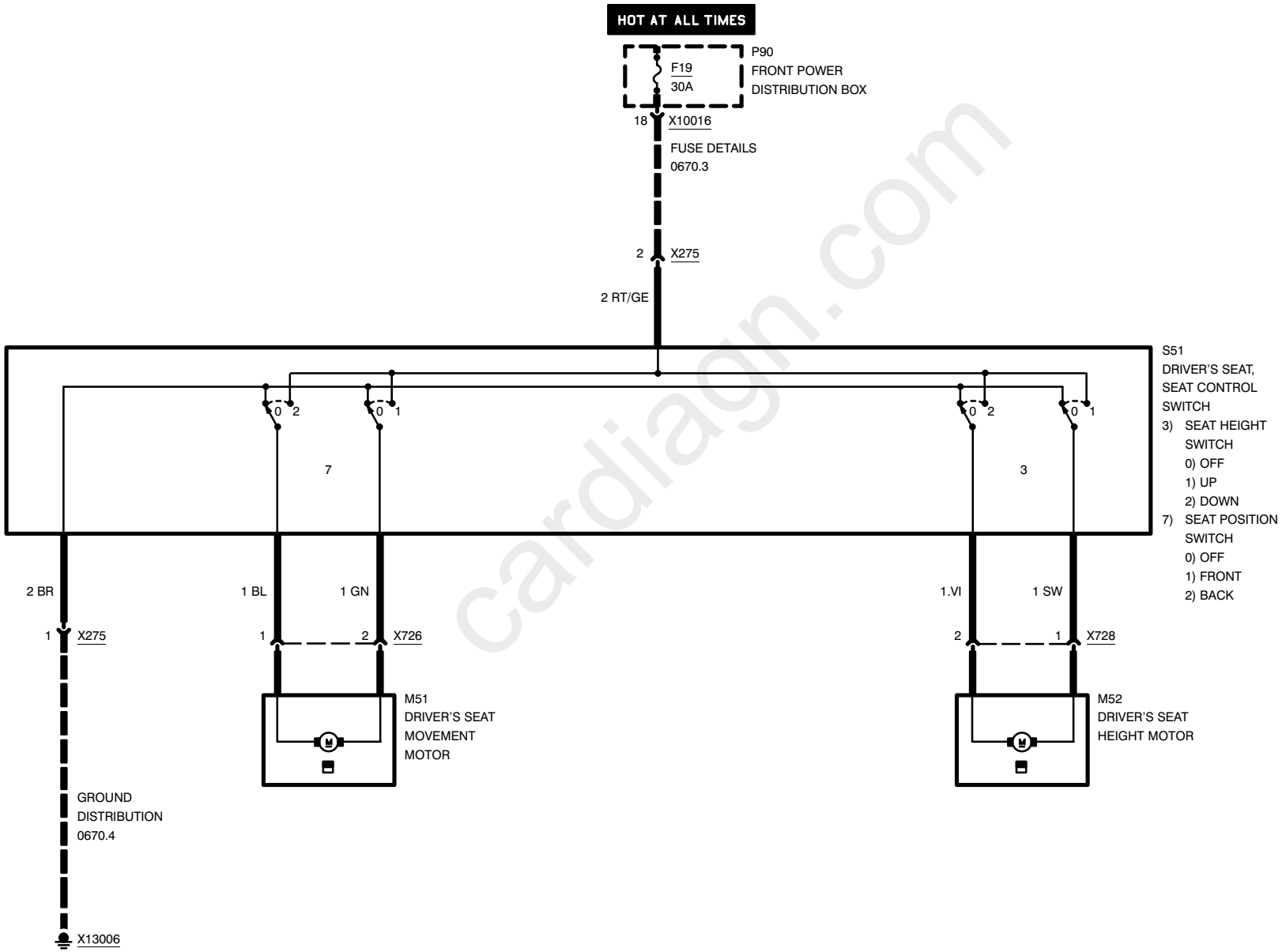
cardiagn.com



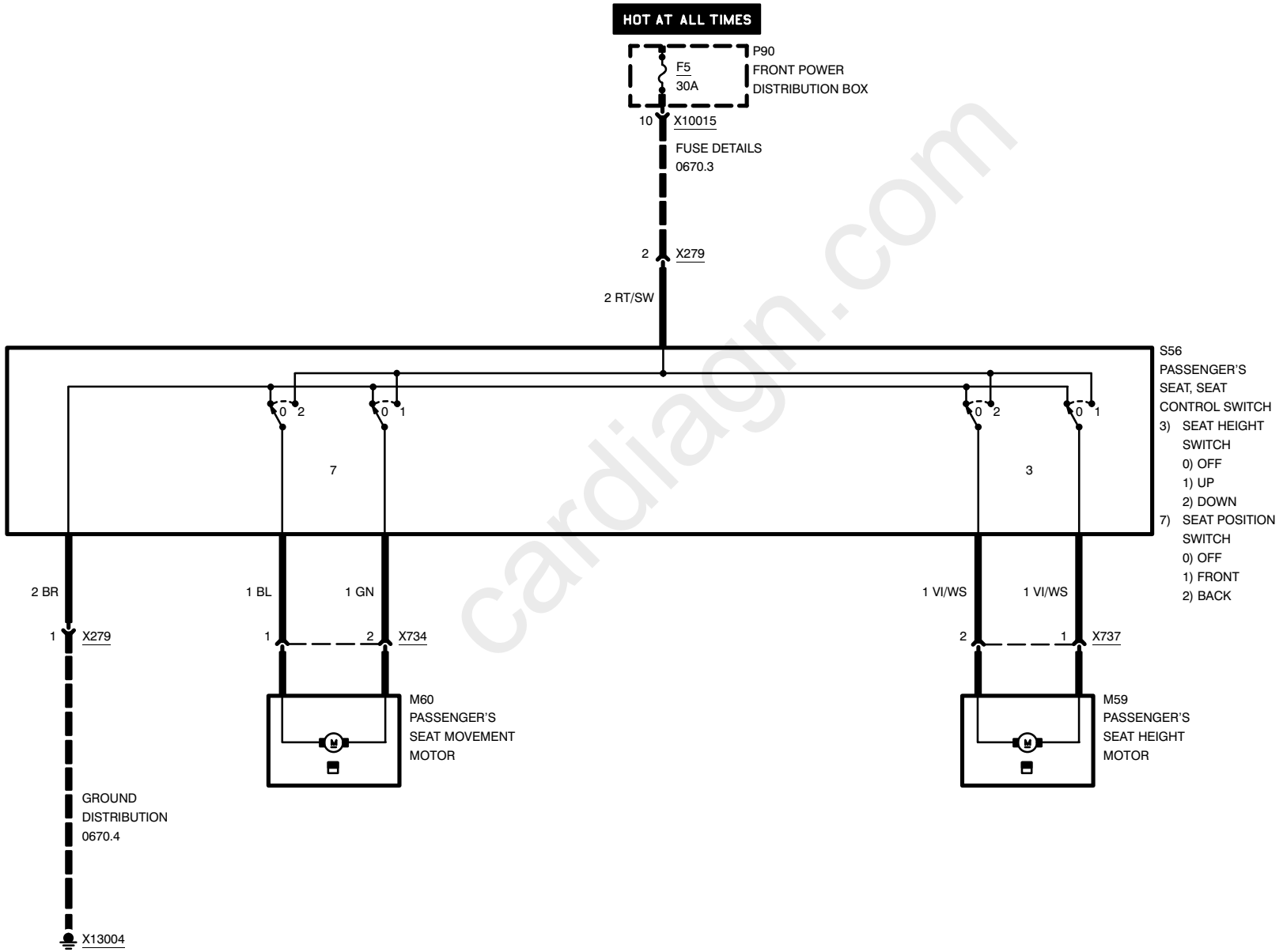
cardiagn.com



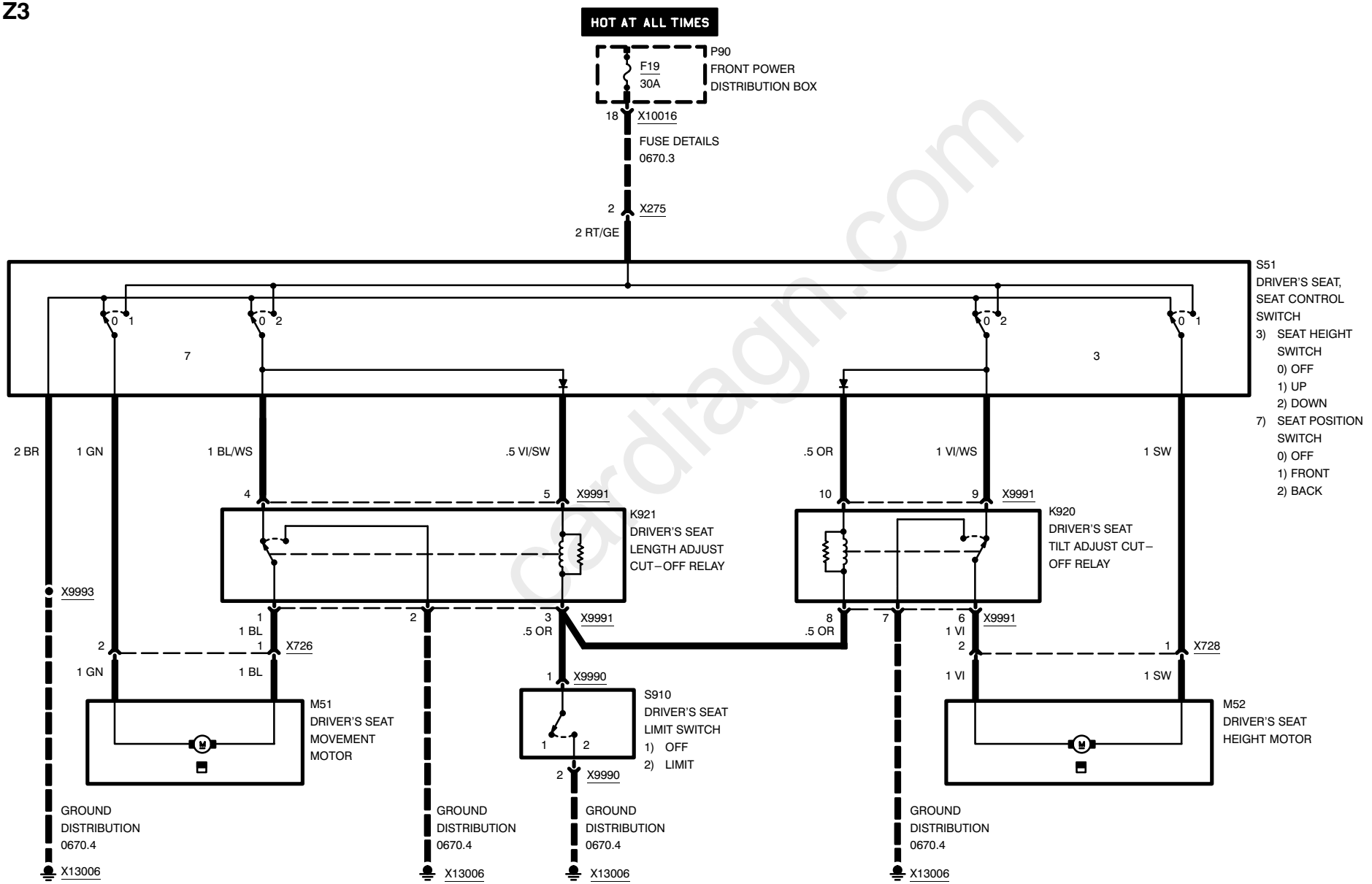
cardiagn.com



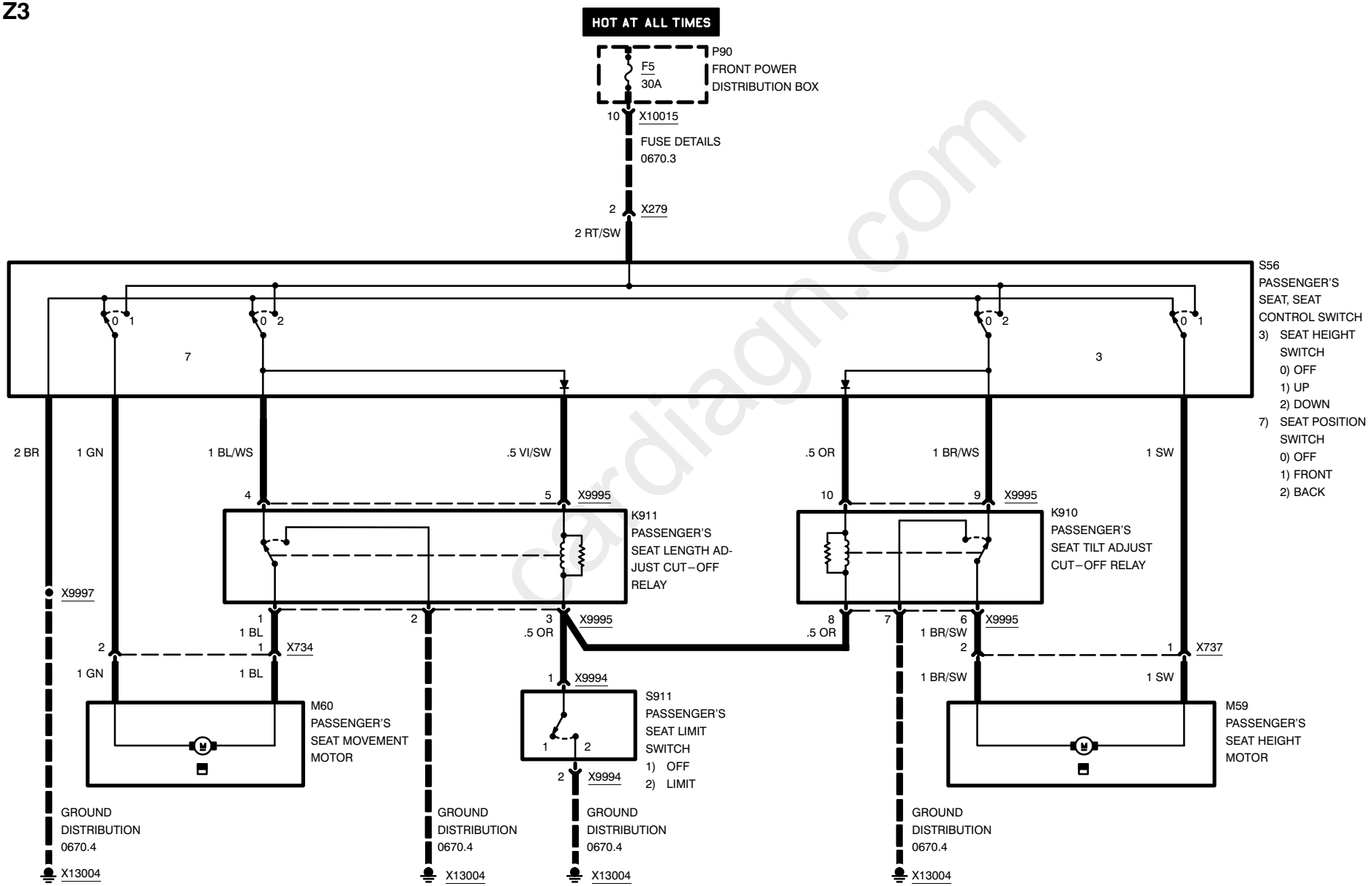
cardiagn.com



cardiagn.com

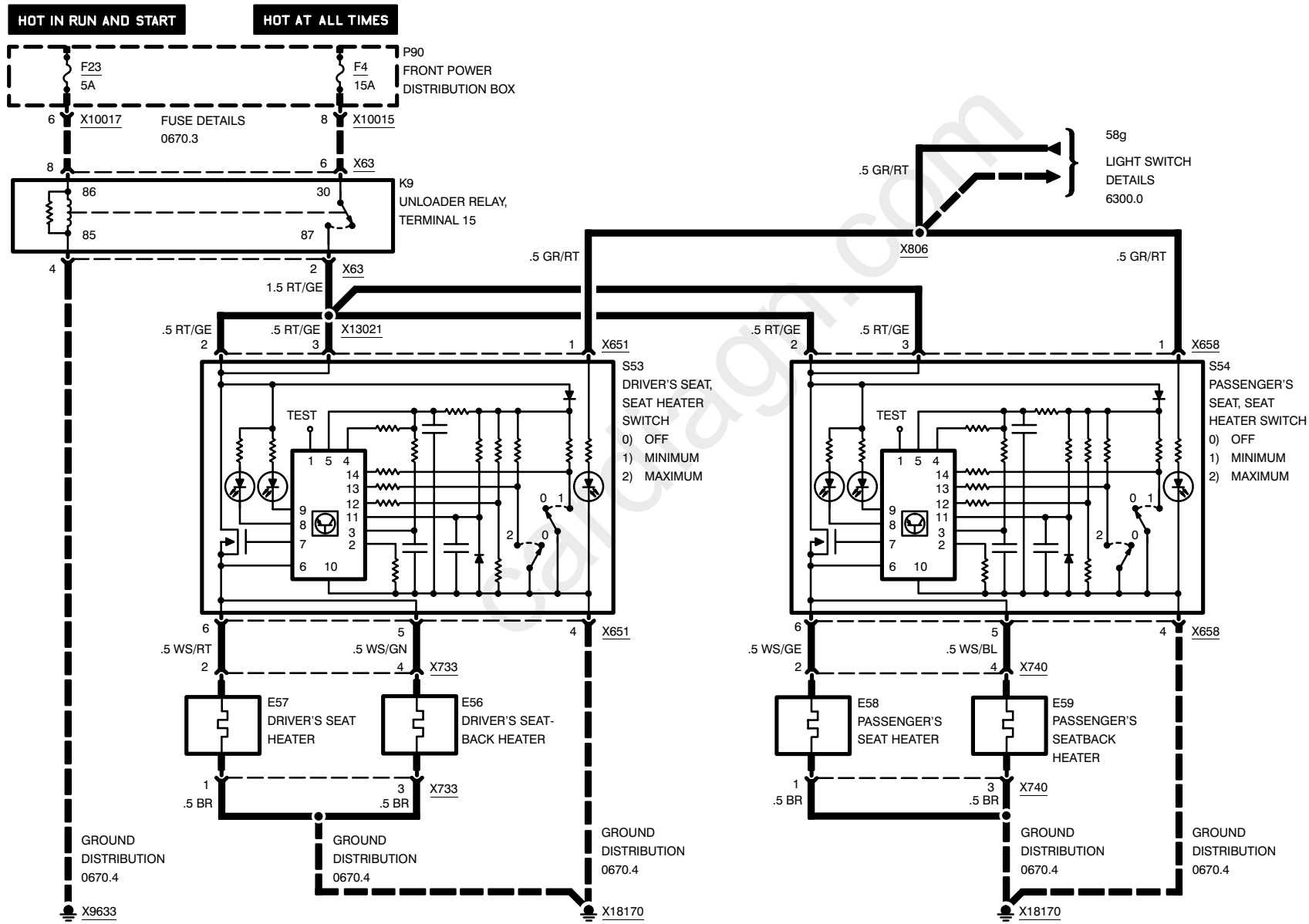


cardiagn.com



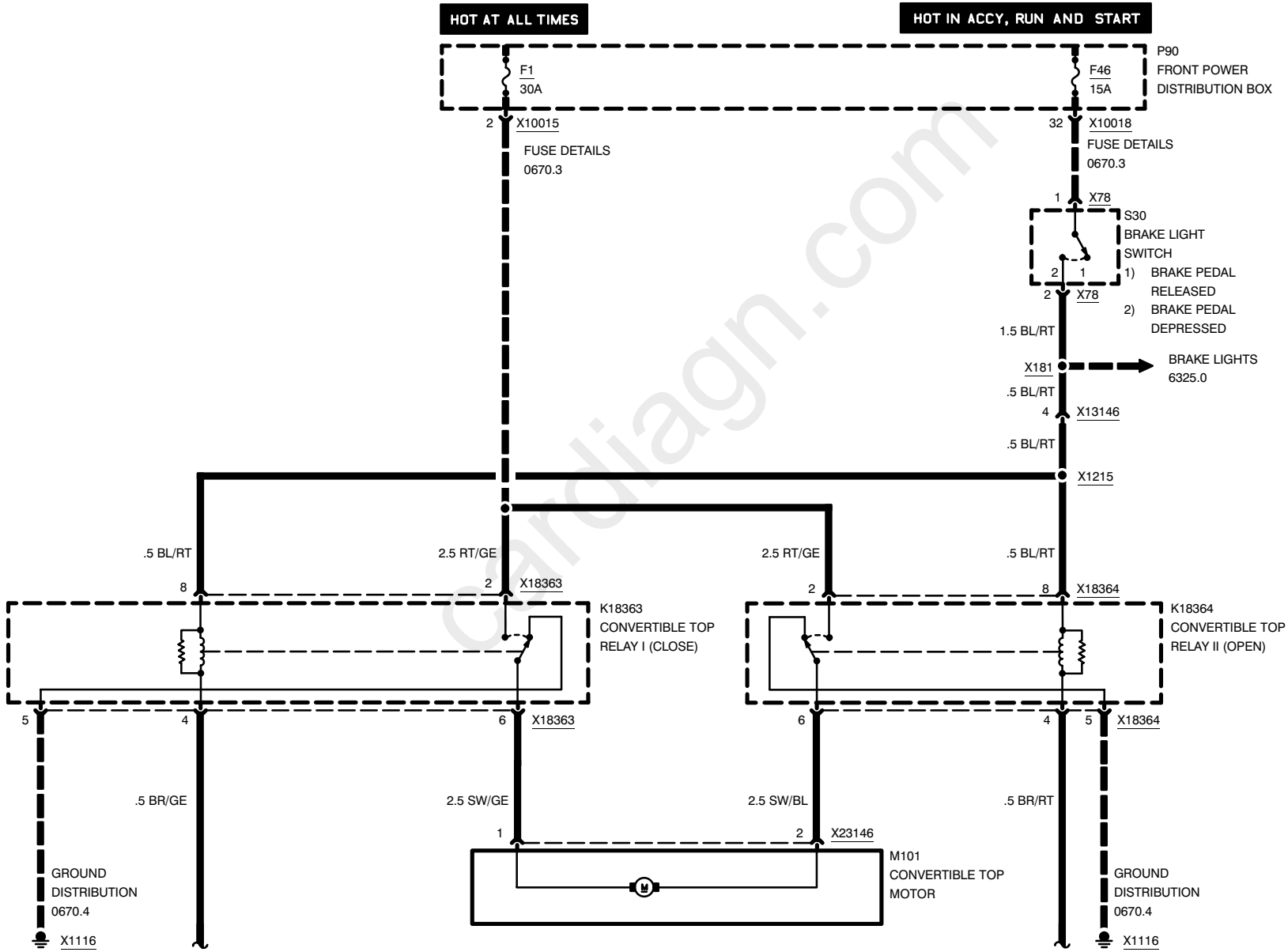
cardiagn.com

HEATED SEATS

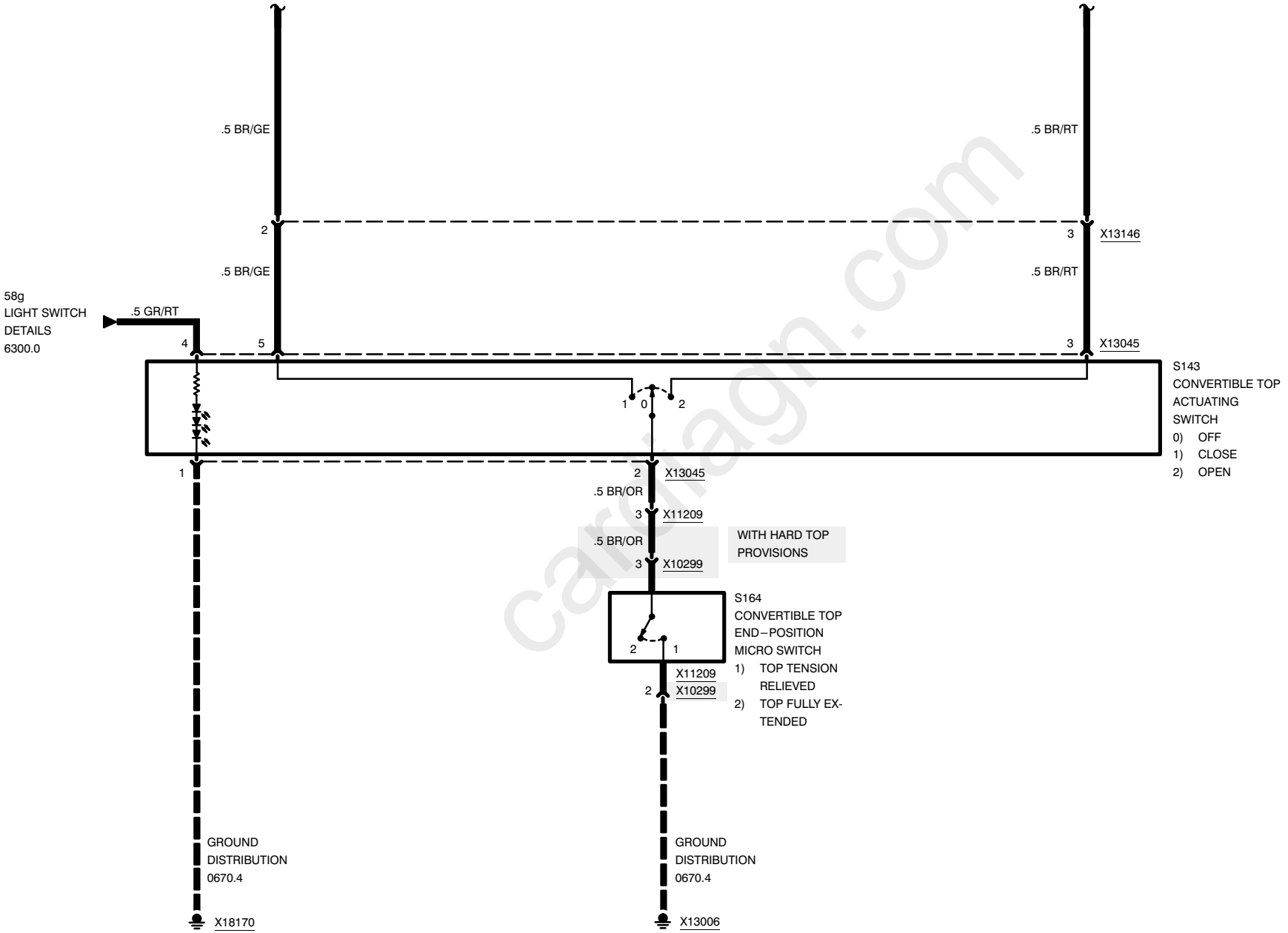


carmagic.com

ELECTRO–MECHANICAL CONVERTIBLE TOP

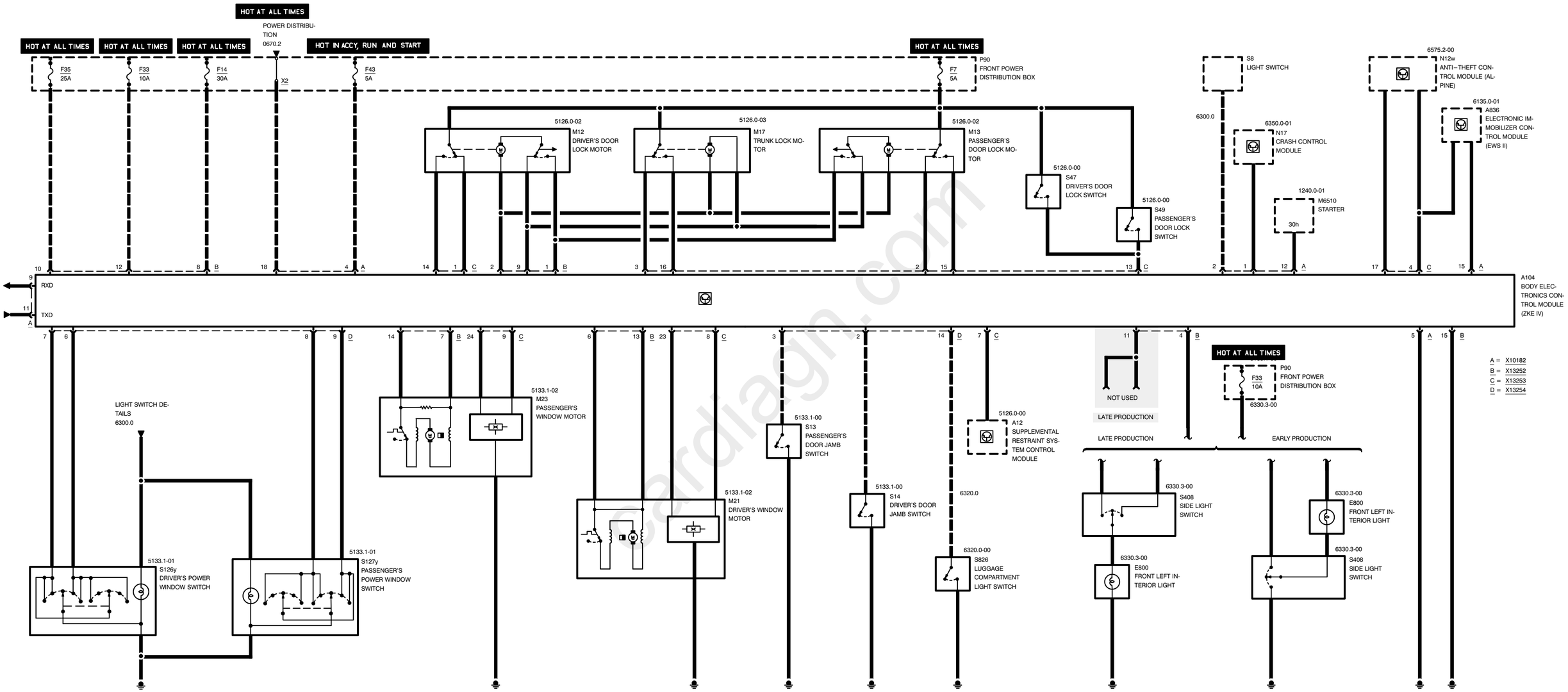


cardiagn.com

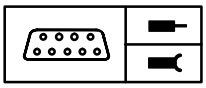

.5 BR/GE
.5 BR/RT
2
3
X13146
.5 BR/GE
.5 BR/RT
58g
LIGHT SWITCH
DETAILS
6300.0
.5 GR/RT
4
5
3
X13045
S143
CONVERTIBLE TOP
ACTUATING
SWITCH
0) OFF
1) CLOSE
2) OPEN
1
0
2
1
2
X13045
.5 BR/OR
3
X11209
.5 BR/OR
3
X10299
WITH HARD TOP
PROVISIONS
S164
CONVERTIBLE TOP
END–POSITION
MICRO SWITCH
1) TOP TENSION
RELIEVED
2) TOP FULLY EX-
TENDED
2
1
X11209
2
X10299
GROUND
DISTRIBUTION
0670.4
GROUND
DISTRIBUTION
0670.4
X18170
X13006

carmagn.com

03/98 6100.0 1997
03/98 6100.0 1997



cardiagn.com



Pin Assignments

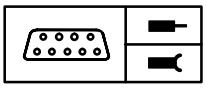
A = X10182	18 Pins, black
B = X13252	15 Pins, black
C = X13253	26 Pins, yellow
D = X13254	26 Pins, green

X10182

Pin	Type	Description/Function	Connection
1	E	Crash signal	Crash control module
2	E	Light signal	Light switch
3		Not used	
4	E	Power supply	Front power distribution box, fuse 43
5	M	Ground	Ground point
6		Not used	
7		Not used	
8		Not used	
9	A	Diagnosis RxD signal	Data link connector
10		Not used	
11	E/A	Diagnosis TxD signal	Data link connector
12	E	Start signal	Starter
13		Not used	
14		Not used	
15	A	Drive away protection	Electronic immobilizer control module (EWS II)
16		Not used	
17		Not used	
18	E	Power supply	Front power distribution box

E = Input, A = Output, M = Ground

cardiagn.com



Pin Assignments

X13252

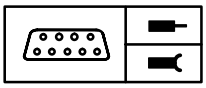
Pin	Type	Description/Function	Connection
1	A	Central arest signal	Lock motors
2	A	Unlock signal	Lock motors
3		Not used	
4	A	Automatic interior light signal	Side light switch
5		Not used	
6	A	Voltage supply	Power window motor driver's door
7	A	Voltage supply	Power window motor passenger's door
8	E	Power supply	Front power distribution box, fuse 14
9	A	Lock signal	Lock motors
10	E	Power supply	Front power distribution box, fuse 35
11	A	Consumer cut-off signal (Late Production)	Not used
12	E	Power supply	Front power distribution box, fuse 33
13	E	Motor signal	Power window motor driver's door
14	E	Motor signal	Power window motor passenger's door
15	M	Ground	Ground point

X13253

Pin	Type	Description/Function	Connection
1	E	Unlock signal	Door lock motor driver's door
2	E	Unlock signal	Door lock motor passenger's door
3	E	Unlock signal	Trunk lock motor
4	E	Data signal	Anti-theft system control module (Alpine)
5		Not used	
6		Not used	
7	E	Crash signal	Supplemental restraint system control module
8	E	Revolution signal	Power window motor driver's door
9	E	Revolution signal	Power window motor passenger's door
10		Not used	

E = Input, A = Output, M = Ground

cardiagn.com



Pin Assignments

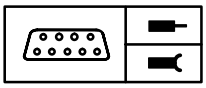
Pin	Type	Description/Function	Connection
11		Not used	
12		Not used	
13	E	Central arrest signal	Door lock switches
14	E	Lock signal driver's door	Door lock motor driver's door
15	E	Lock signal passenger's door	Door lock motor passenger's door
16	E	Lock signal trunk lid	Trunk lock motor
17	E	Data signal	Anti-theft system control module (Alpine)
18		Not used	
19		Not used	
20		Not used	
21		Not used	
22		Not used	
23	A	Plus supply (revolution)	Power window's motor driver's side
24	A	Voltage supply (revolution)	Power window's motor passenger's side
25		Not used	
26		Not used	

X13254

Pin	Type	Description/Function	Connection
1		Not used	
2	E	Door signal	Door jamb switch driver's door
3	E	Door signal	Door jamb switch passenger's door
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	

E = Input, A = Output, M = Ground

cardiagn.com



Pin Assignments

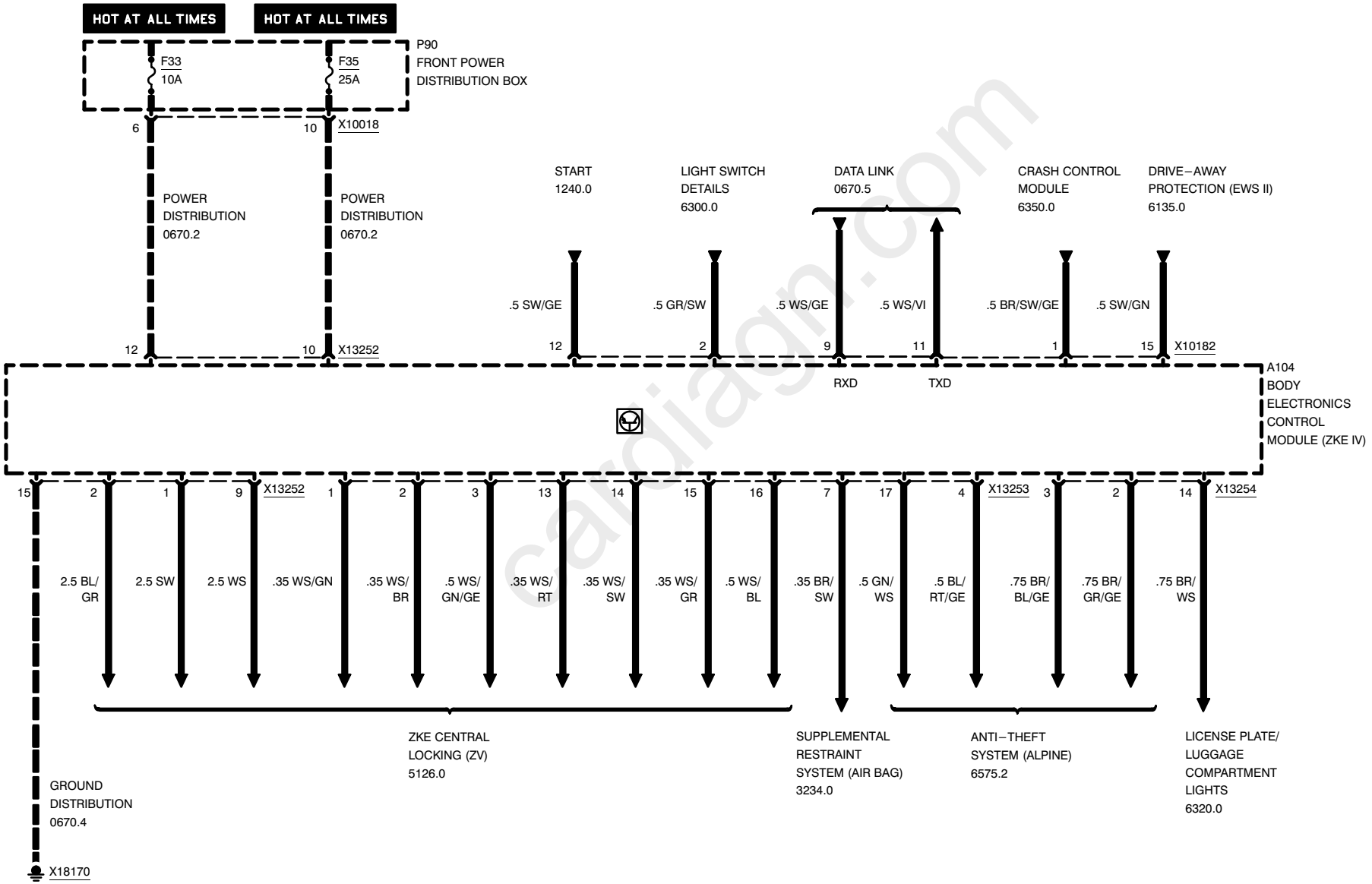
Pin	Type	Description/Function	Connection
13		Not used	
14	E	Luggage compartment signal	Luggage compartment light switch
15		Not used	
16		Not used	
17		Not used	
18		Not used	
19		Not used	
20		Not used	
21		Not used	
22		Not used	
23		Not used	
24		Not used	
25		Not used	
26		Not used	

cardiagn.com

E = Input, A = Output, M = Ground

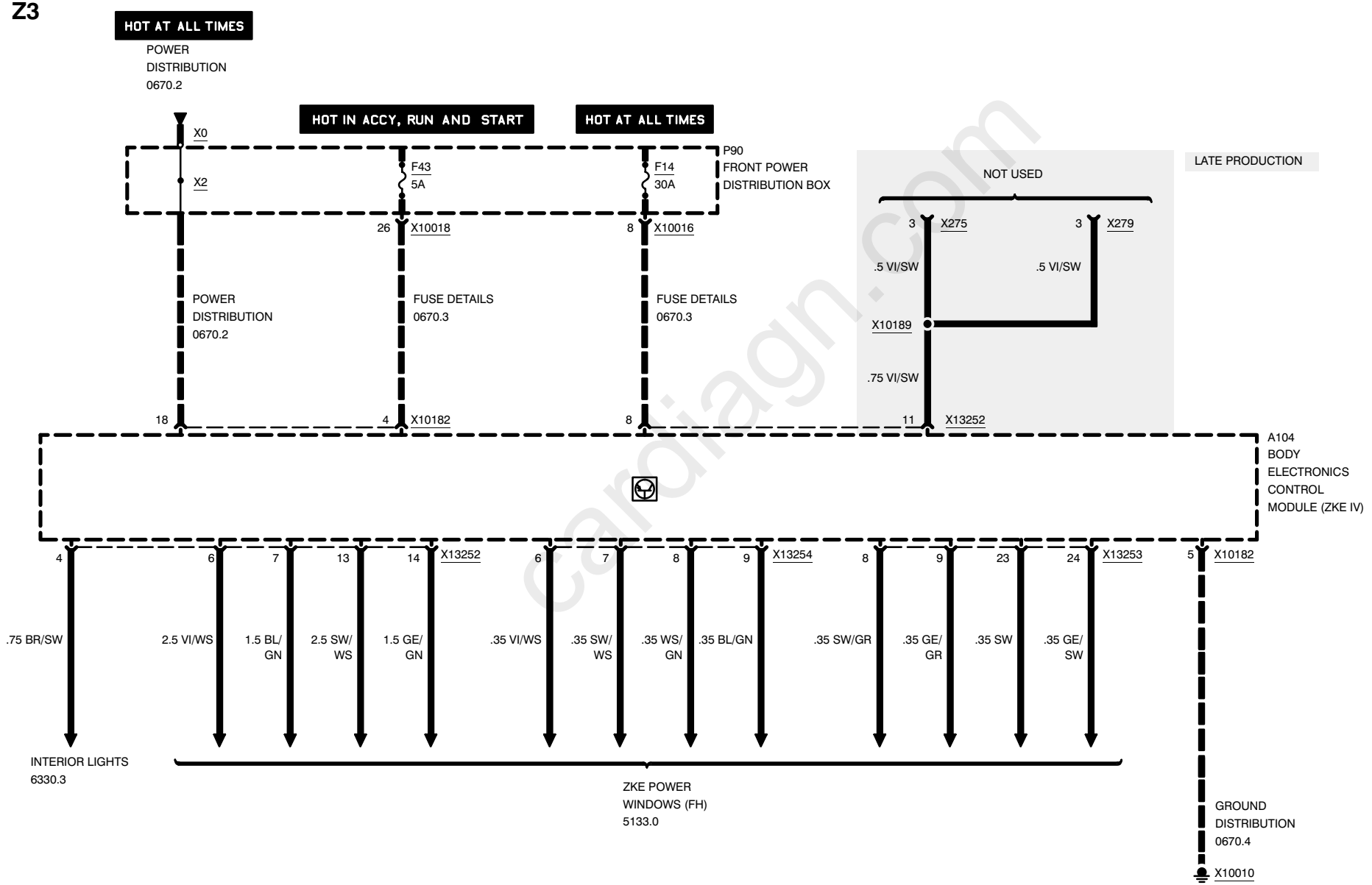
CENTRAL BODY ELECTRONICS (ZKE IV)

BMW 3 Z3

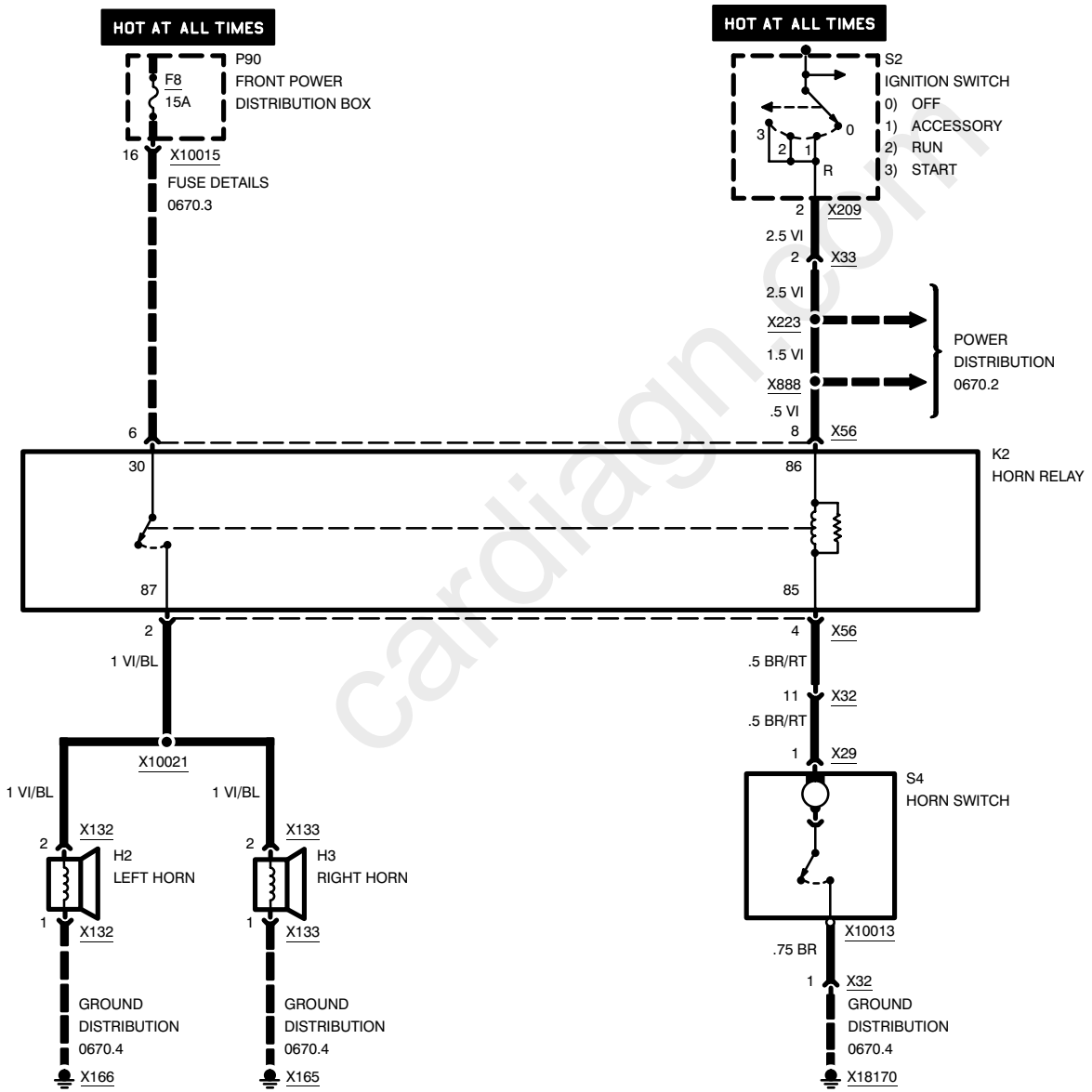


cardiagn.com

CENTRAL BODY ELECTRONICS (ZKE IV)

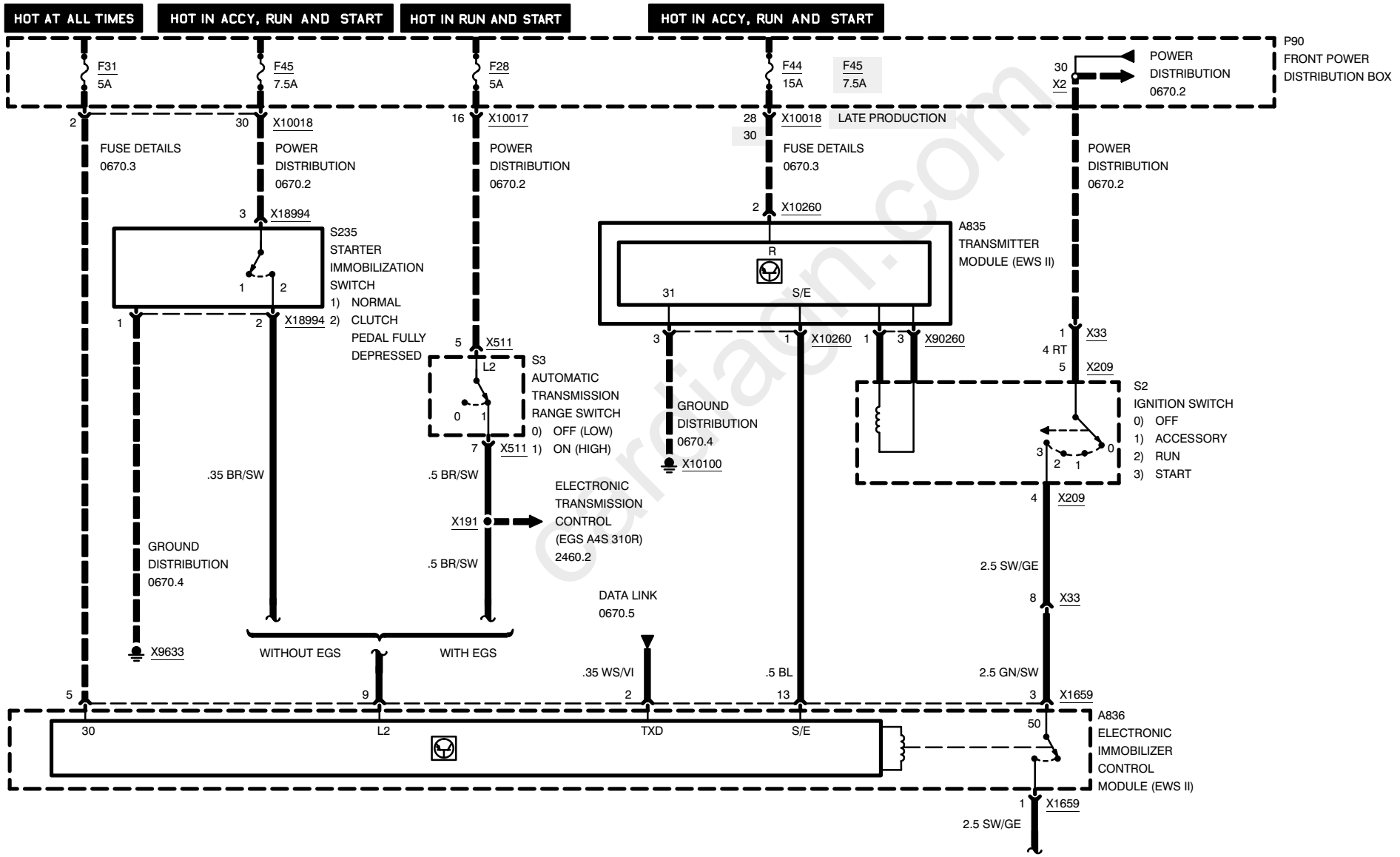


cardiagn.com

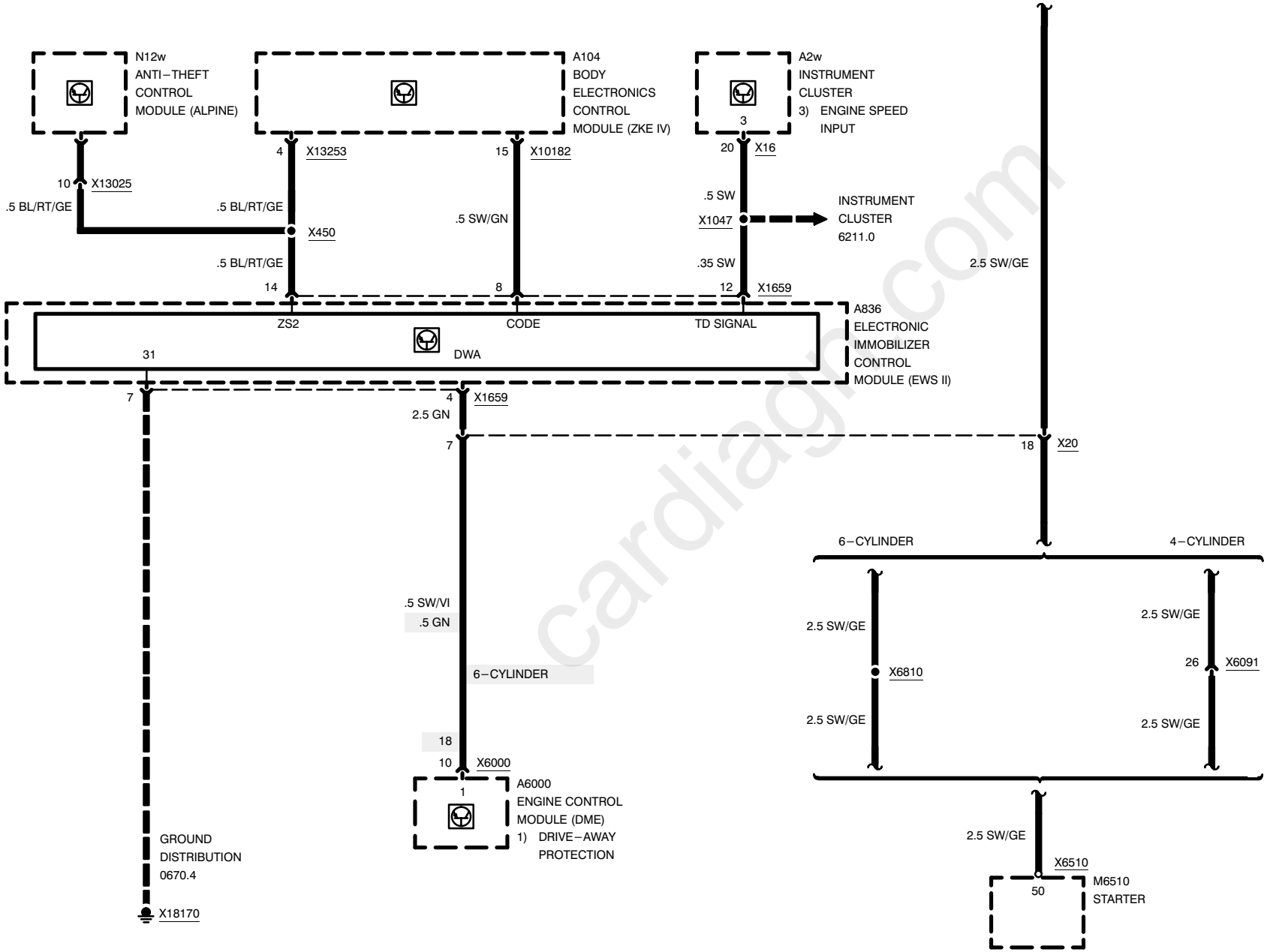


cardiagn.com

DRIVE–AWAY PROTECTION (EWS II)



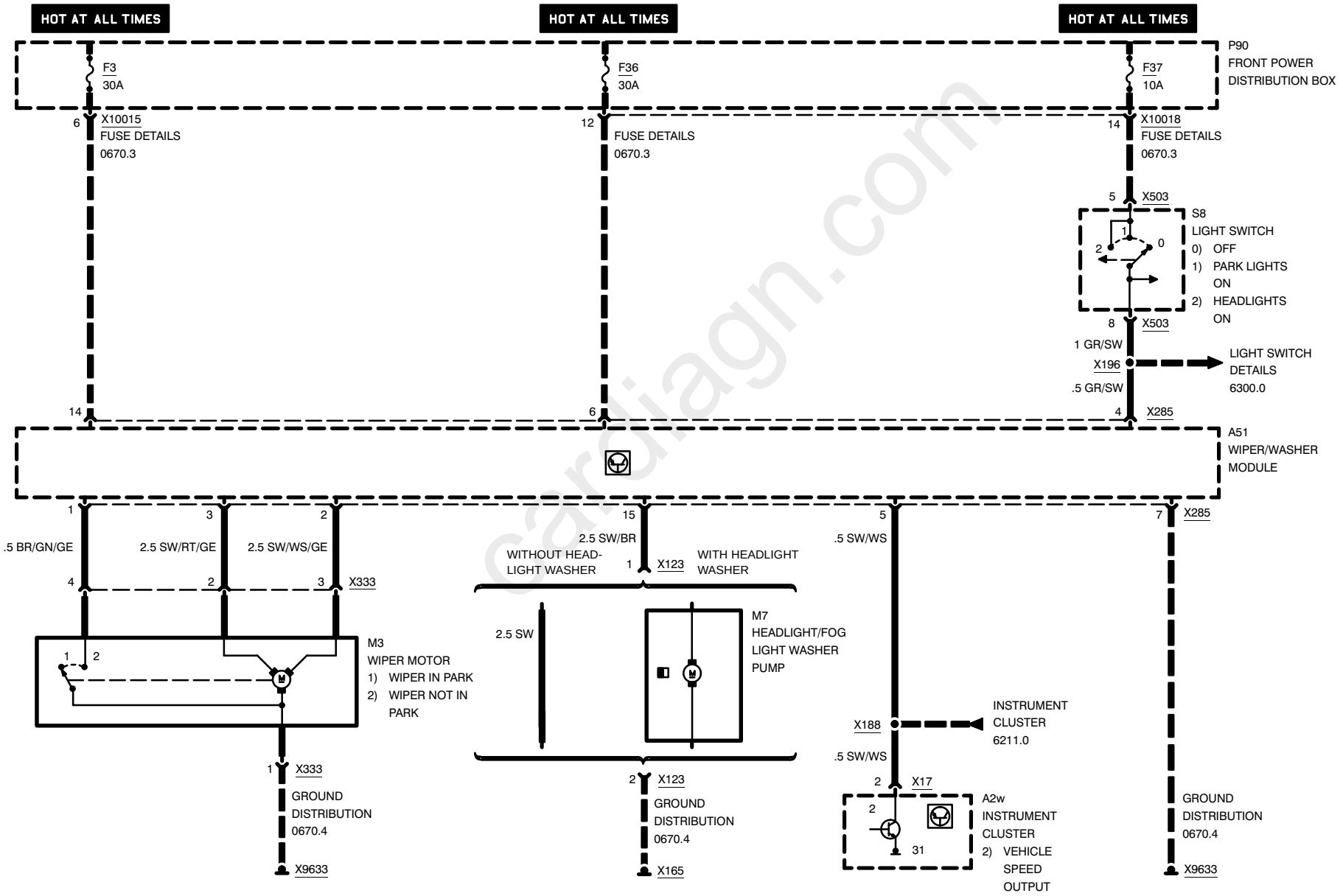
carlagn.com



cardiagn.com

WIPER/WASHER MODULE (WWM)

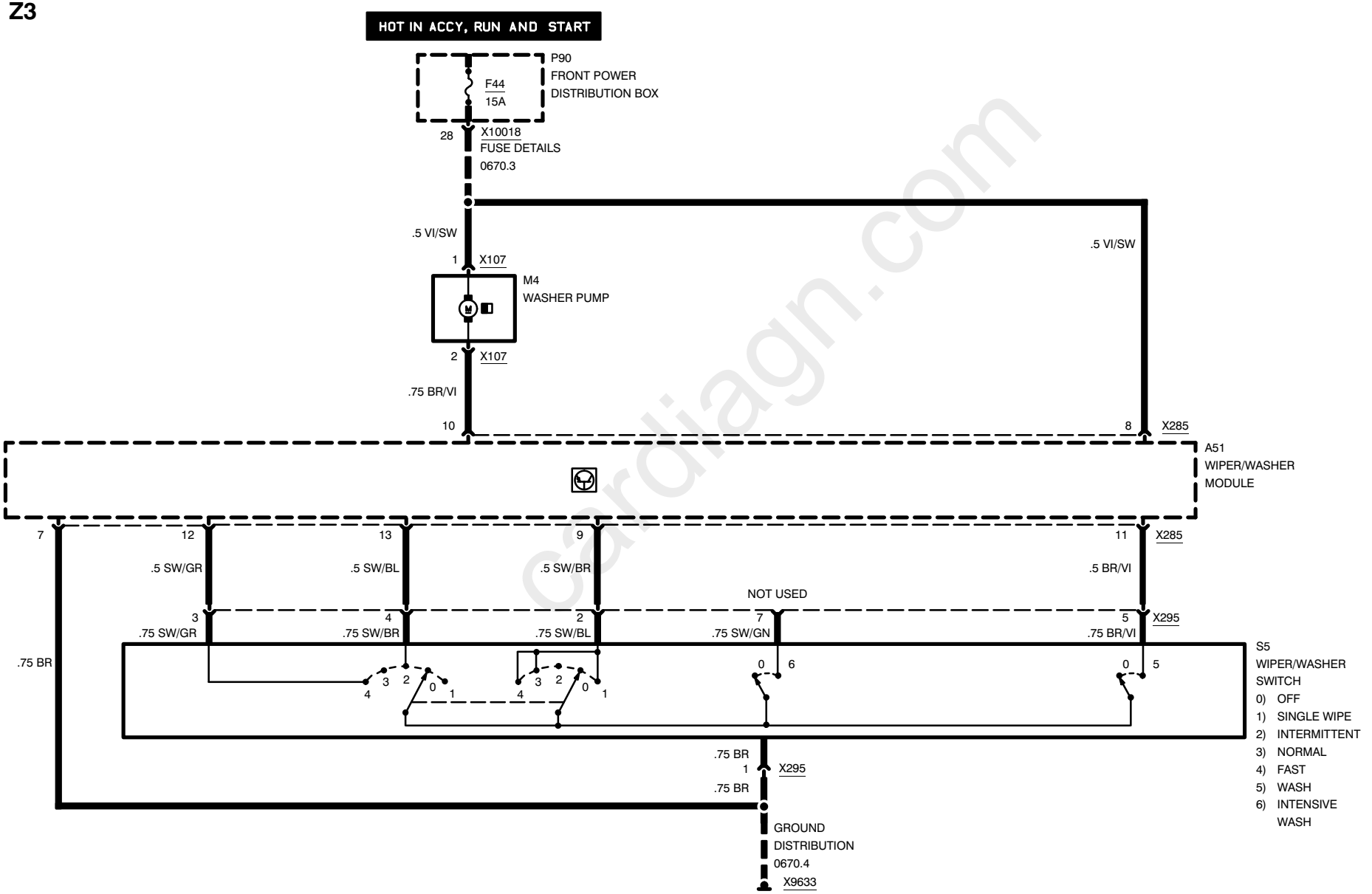
WIPER – HIGH



cardiagn.com

WIPER/WASHER MODULE (WWM)

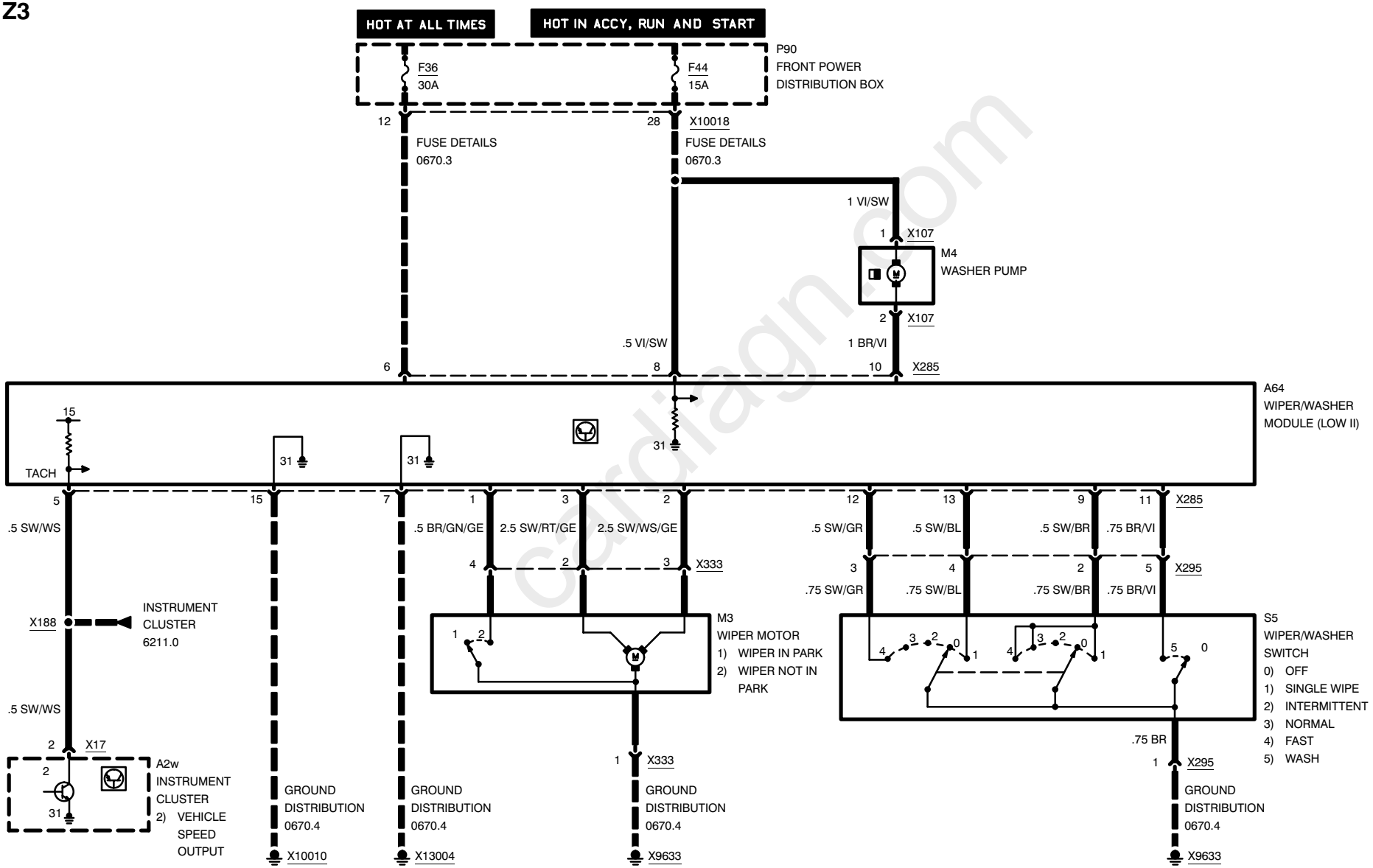
HIGH



cardiagn.com

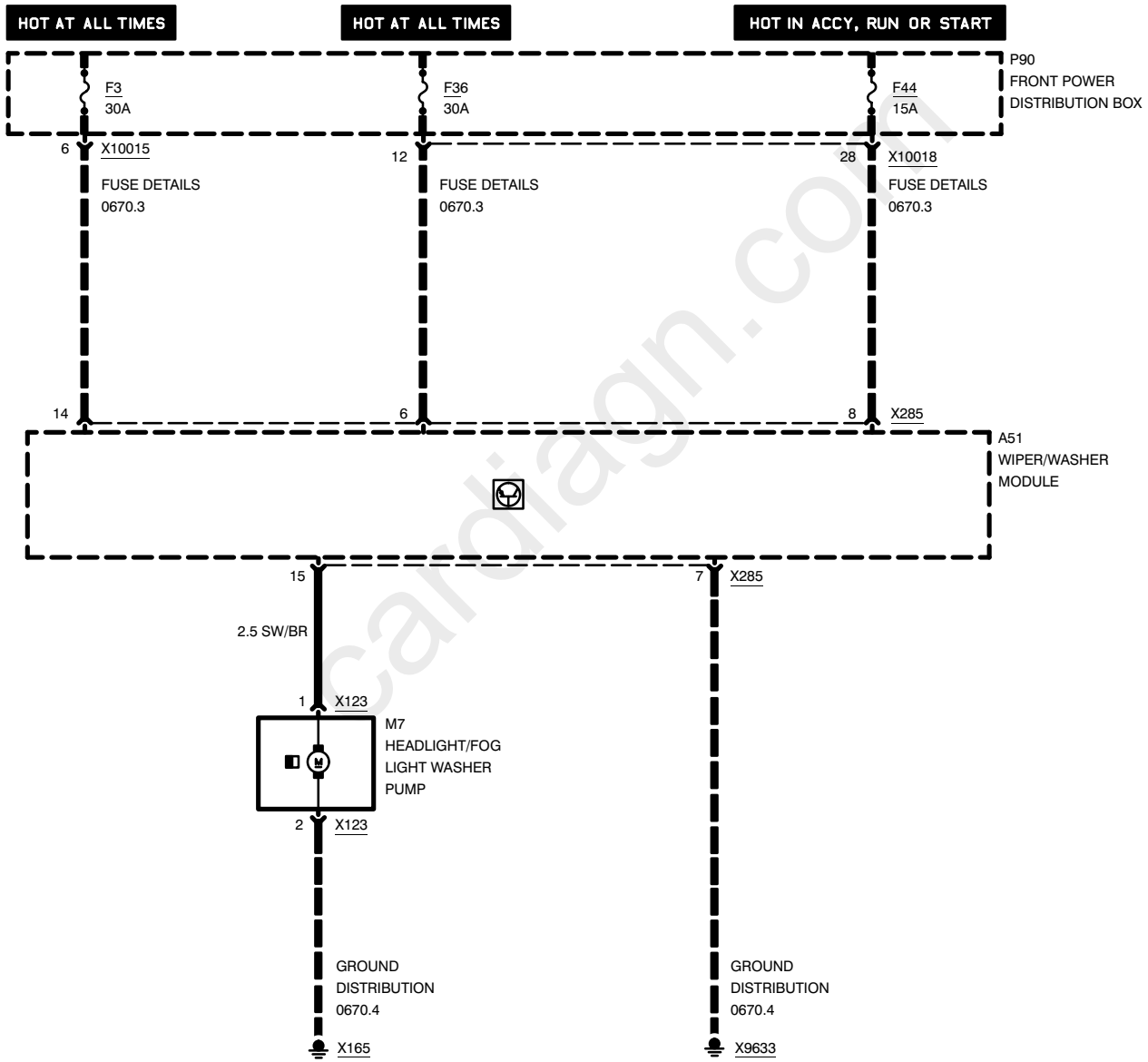
WIPER/WASHER MODULE (WWM)

LOW



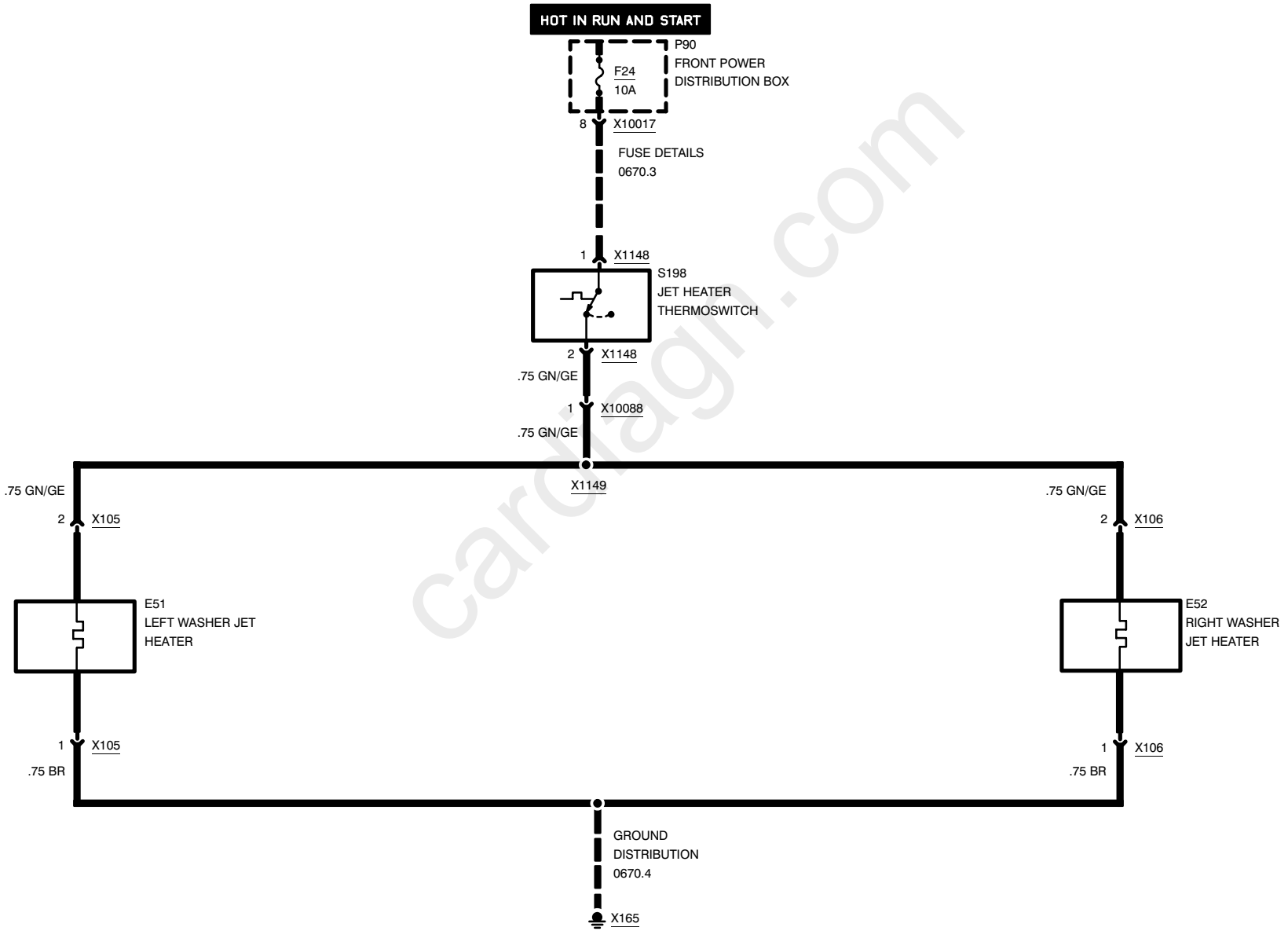
cardiagn.com

HEADLIGHT WASHER (SRA)



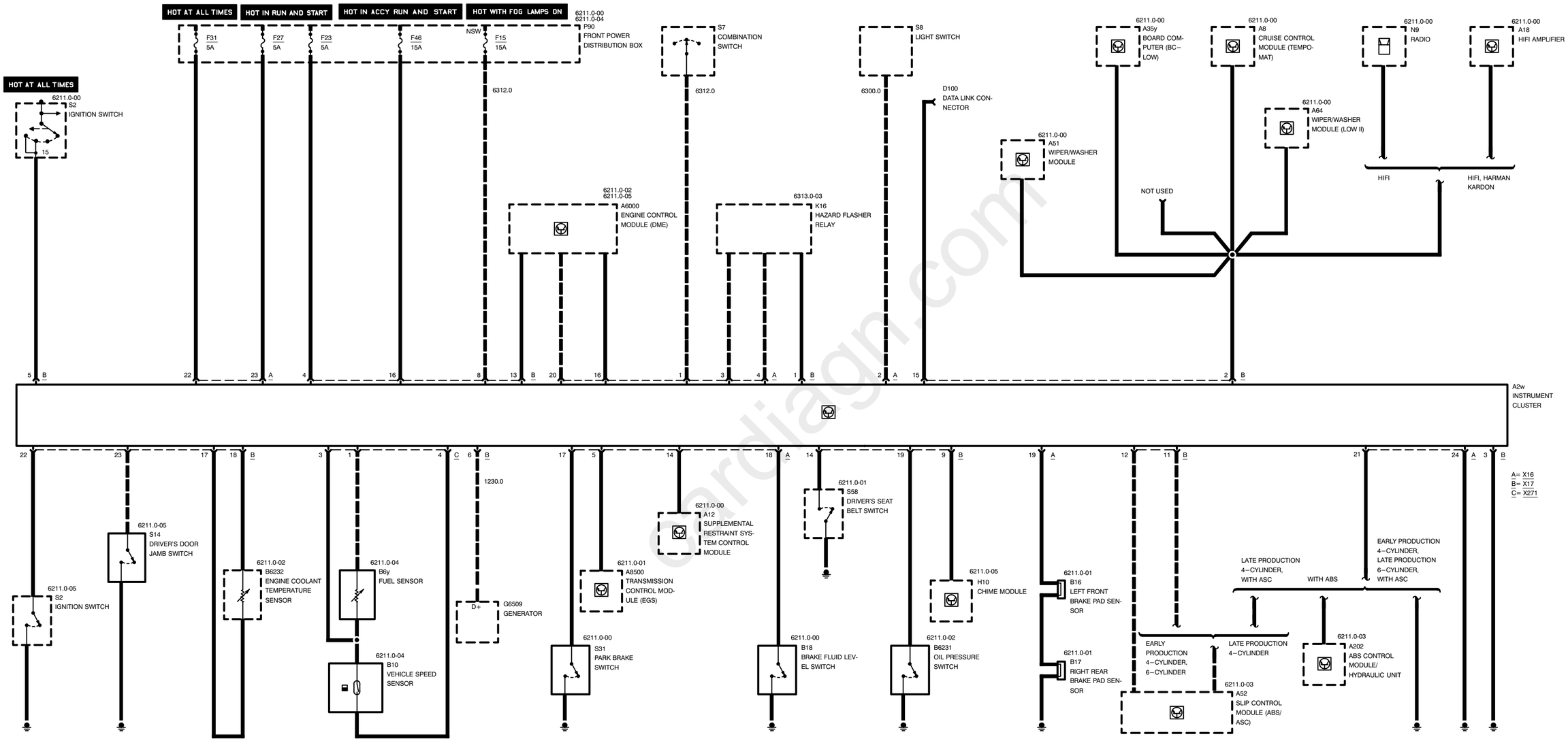
cardiagn.com

WINDSHIELD WASHER JET HEATERS



cardiagn.com

03/98 6211.0 1997
03/98 6211.0 1997



cardiagn.com

Pin Assignments

X16

Pin	Type	Description/Function	Connection
1	E	High beam indicator control	Combination switch
2	E	Terminal 58g, instrument illumination power	Light switch (dimmer)
3	E	Right turn signal indicator control	Hazard flasher relay
4	E	Left turn signal indicator control	Hazard flasher relay
5	E	Warning lamp for EGS fault (information signal transmission oil temperature)	Transmission control module (EGS)
6		Not used	
7		Not used	
8		Not used	
9		Not used	
10		Not used	
11		Not used	
12		Not used	
13		Not used	
14	E	Airbag warning lamp (SRS) control	Supplemental restraint system control module
15		Not used	
16	E	“Check engine” indicator control	Engine control module (DME)
17	E	Park brake warning lamp control	Park brake switch
18	E	Brake fluid warning lamp control	Brake fluid level switch
19	E	Brake pad wear warning lamp control	Brake pad sensors
20	E	Crankshaft RPM speed signal TD	Engine control module (DME)
21		Not used	
22	E	Voltage supply, terminal 30	Front power distribution box, fuse 31
23	E	Voltage supply, terminal 15 for indicator and warning lamps	Front power distribution box, fuse 27
24	M	Ground supply, terminal 31 for instrument cluster electronics	Ground point
25		Not used	
26		Not used	

E = Input, A = Output, M = Ground

cardiagn.com

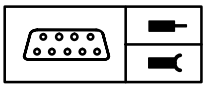
Pin Assignments

X17

Pin	Type	Description/Function	Connection
1	E	Trailer turn signal indicator control	Hazard flasher relay
2	A	Vehicle speed signal	Various control modules
3	M	Ground supply, terminal 31 for indicator and warning lamps	Ground point
4	E	Voltage supply, terminal 15 for instrument cluster electronics	Front power distribution box, fuse 23
5	E	Voltage supply, terminal 15 for battery charge indicator	Ignition switch, terminal 15
6	E	Ground supply, terminal 61 for battery charge indicator	Generator
7		Not used	
8	E	Fog light indicator control	Front power distribution box, fuse 15
9	A	Sound tone signal	Chime module
10		Not used	
11	E	Slip control system warning lamp (ABS) control	Slip control module (ABS/ASC) (with ASC, 6-Cylinder and 4-Cylinder Early Production)
12	E	ASC signal	ASC control module
13	A	TI-measurement signal (fuel consumption)	Engine control module (DME)
14	E	Seat belt warning lamp control	Driver's seat belt switch
15	E	SIA reset/service interval indicator reset	Data link connector
16	E	Voltage supply, terminal R	Front power distibution box, fuse 46
17	A	Coolant temperature sensor (−)	Coolant temperature sensor
18	E	Coolant temperature sensor (+)	Coolant temperature sensor
19	E	Oil pressure warning lamp control	Oil pressure switch
20		Not used	
21	M	Ground (ASC) (6-Cylinder and 4-Cylinder Early Production)	Ground point
21	E	ABS warning lamp (ABS)	ABS control module/hydraulic unit Slip control module (ABS/ASC) (4-Cylinder Late Production)

E = Input, A = Output, M = Ground

cardiagn.com



Pin Assignments

Pin	Type	Description/Function	Connection
22	E	Ignition key warning/audible ignition key warning	Ignition switch
23	E	Driver's door open	Driver's door jamb switch
24		Not used	
25		Not used	
26		Not used	

X271

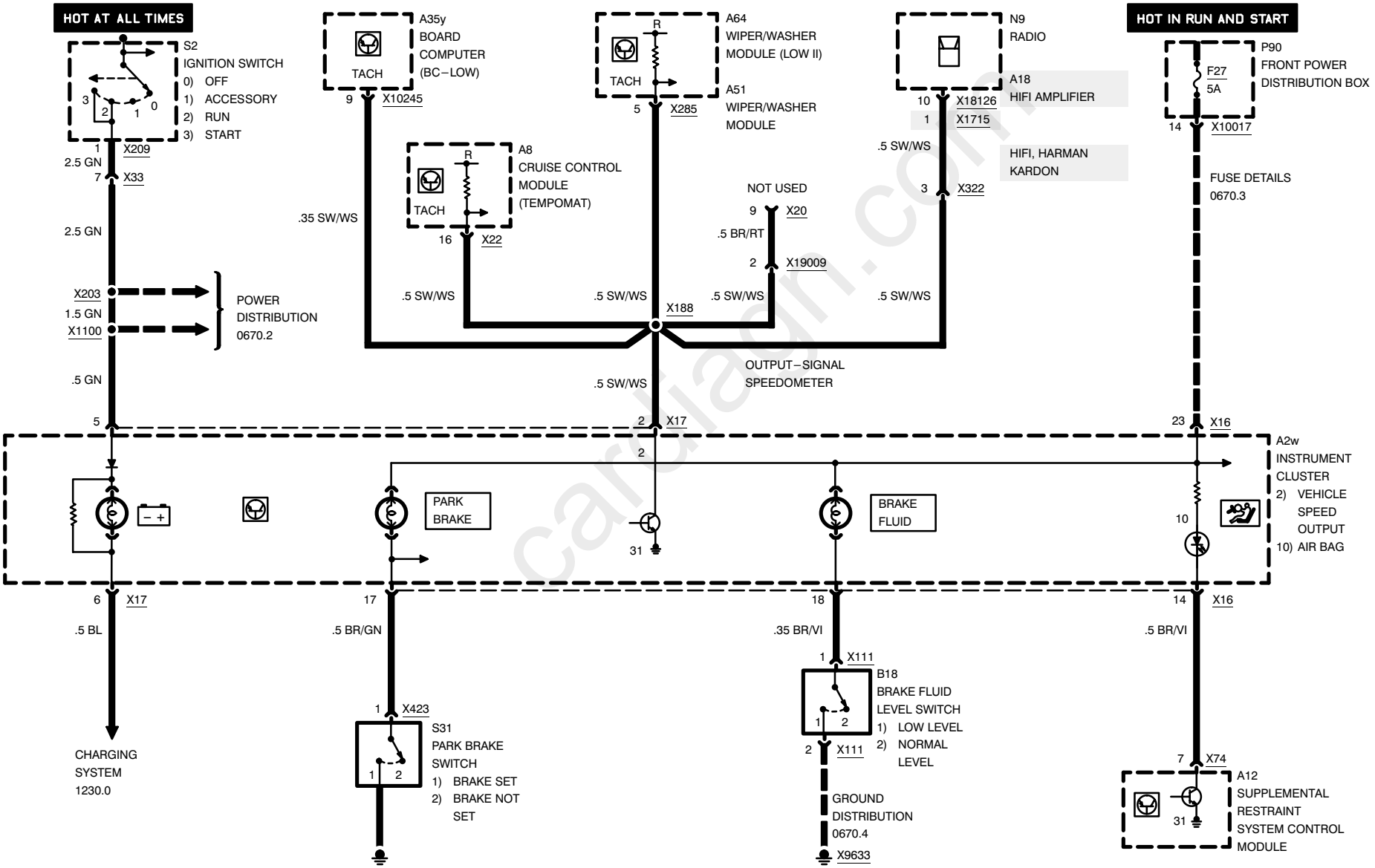
Pin	Type	Description/Function	Connection
1	A	Fuel level sensor	Fuel tank sensors
2		Not used	
3	A	Ground supply for fuel tank sensor and vehicle speed sensor	Fuel tank sensor and vehicle speed sensor
4	E	Position signal TW	Vehicle speed sensor
5		Not used	
6		Not used	
7		Not used	
8		Not used	
9		Not used	
10		Not used	
11		Not used	
12		Not used	

cardiagn.com

E = Input, A = Output, M = Ground

INSTRUMENT CLUSTER

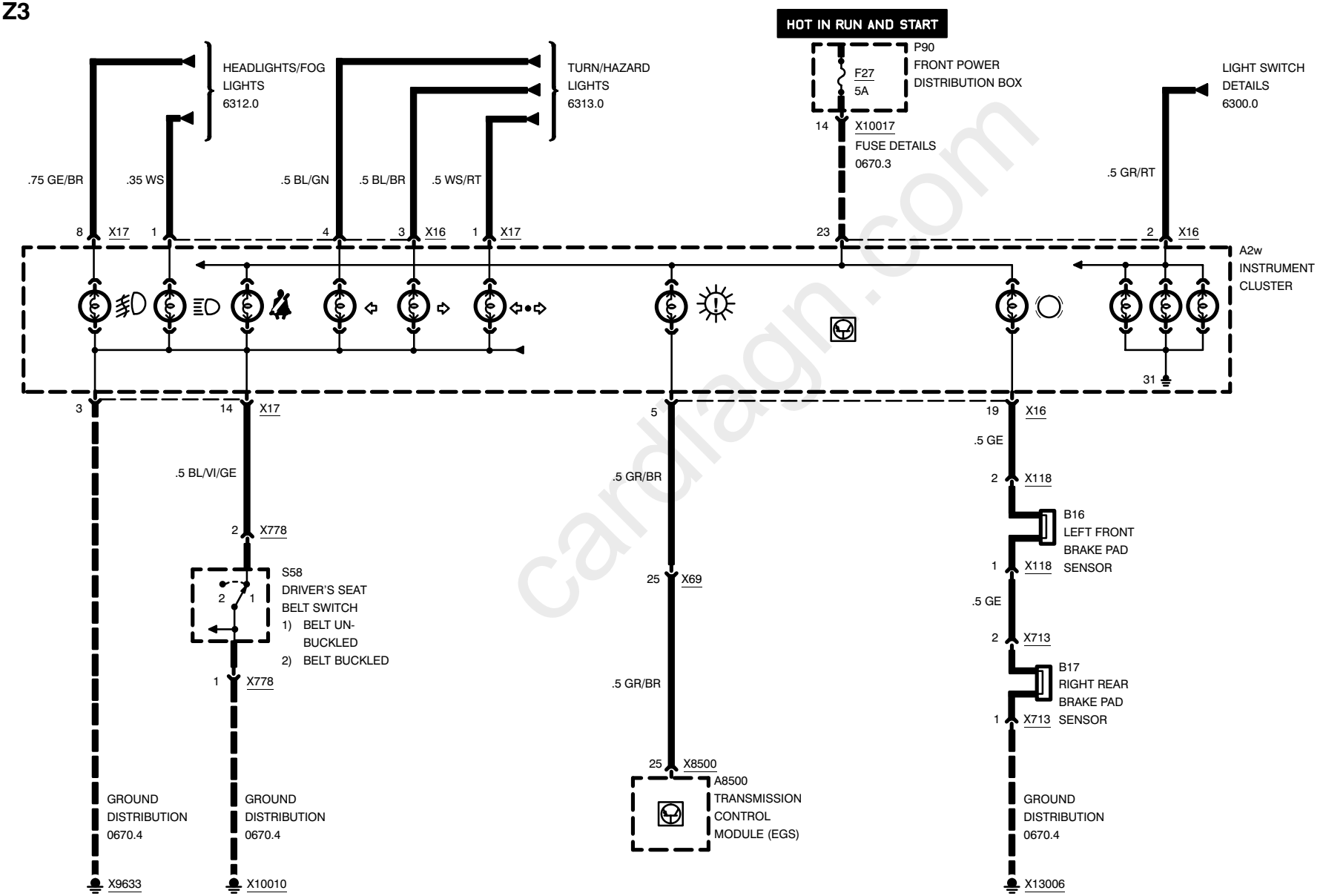
INDICATORS



carDiagn.com

INSTRUMENT CLUSTER

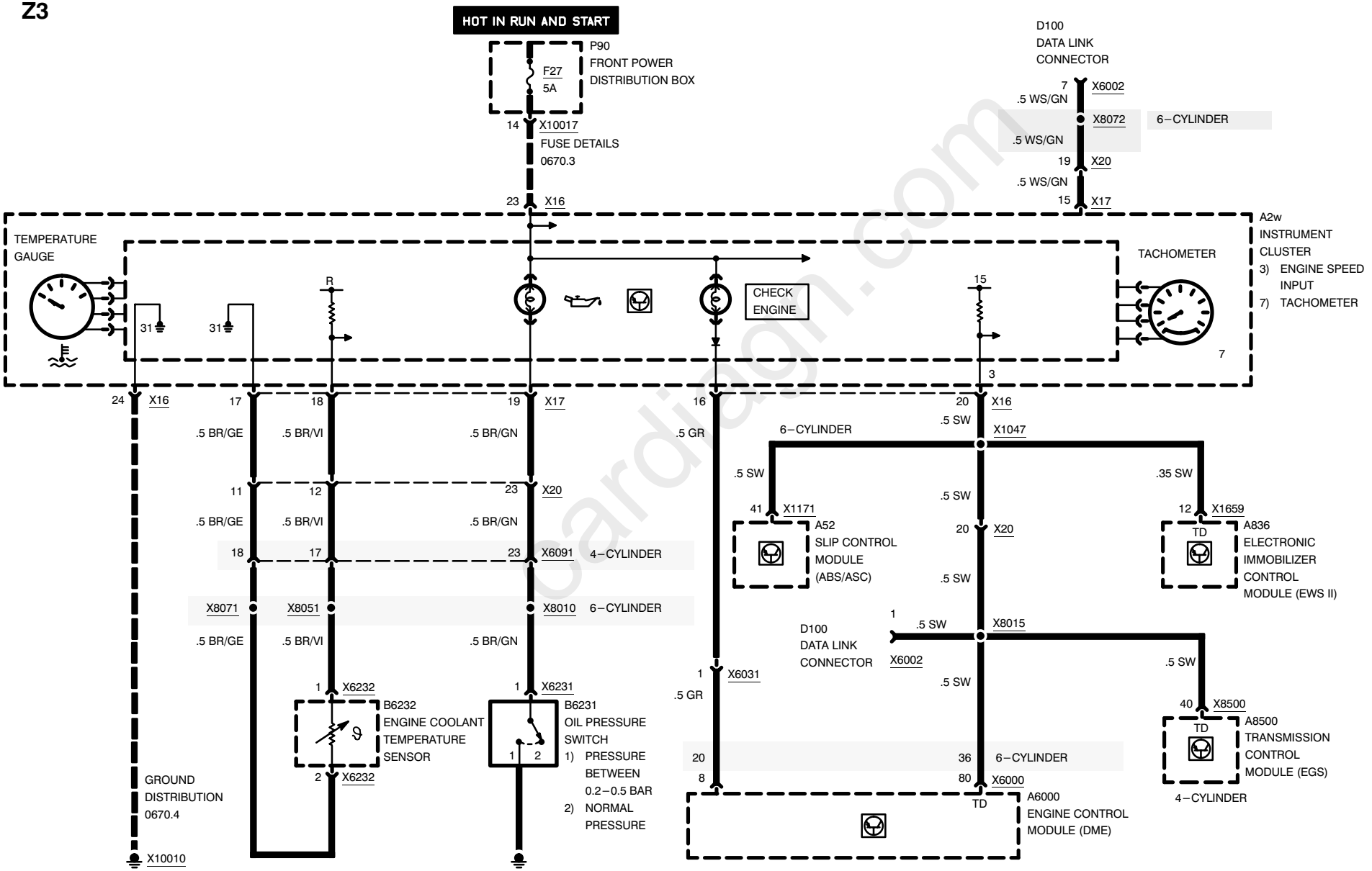
INDICATORS



cardiagn.com

INSTRUMENT CLUSTER

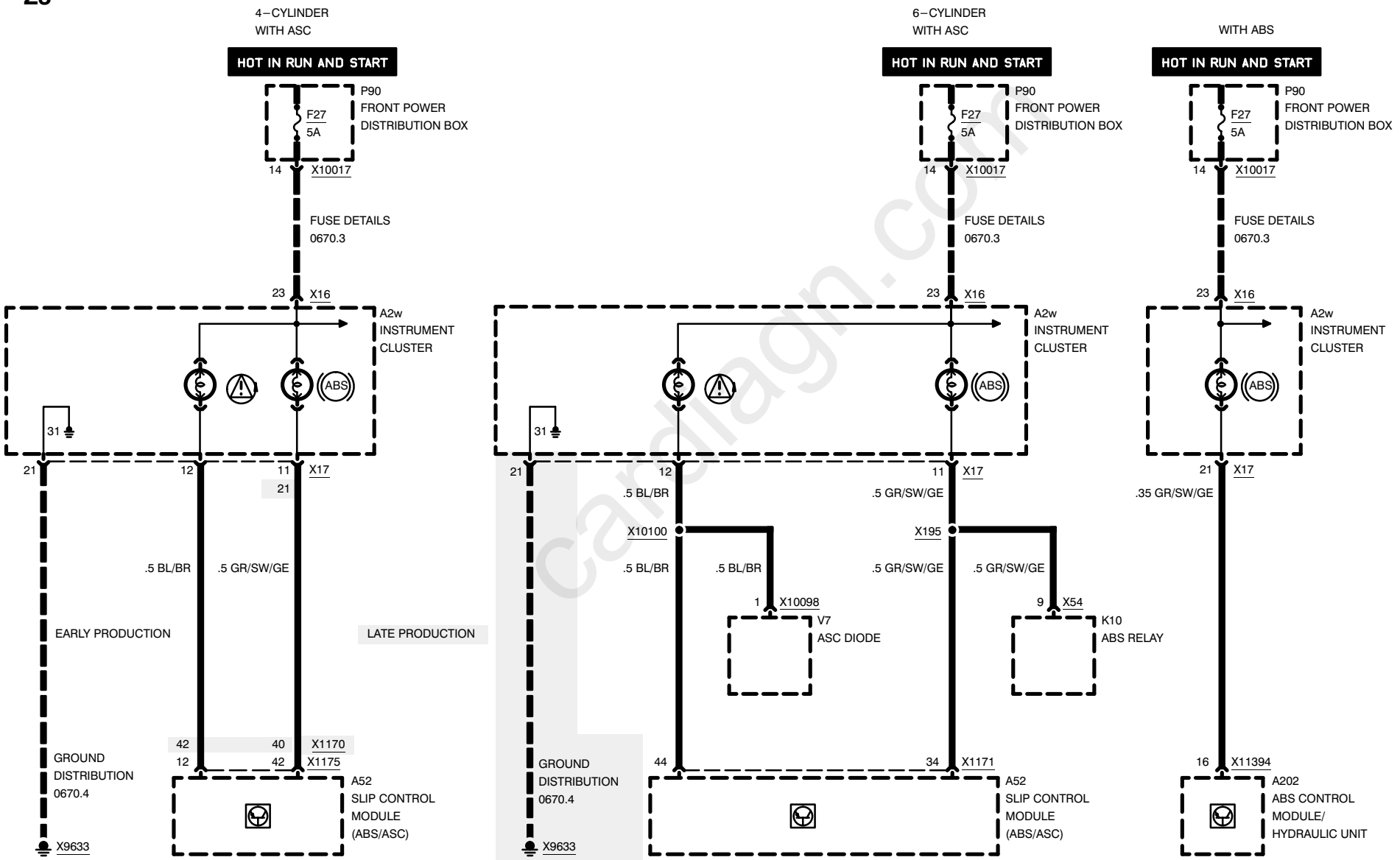
INDICATORS



bardiagn.com

INSTRUMENT CLUSTER

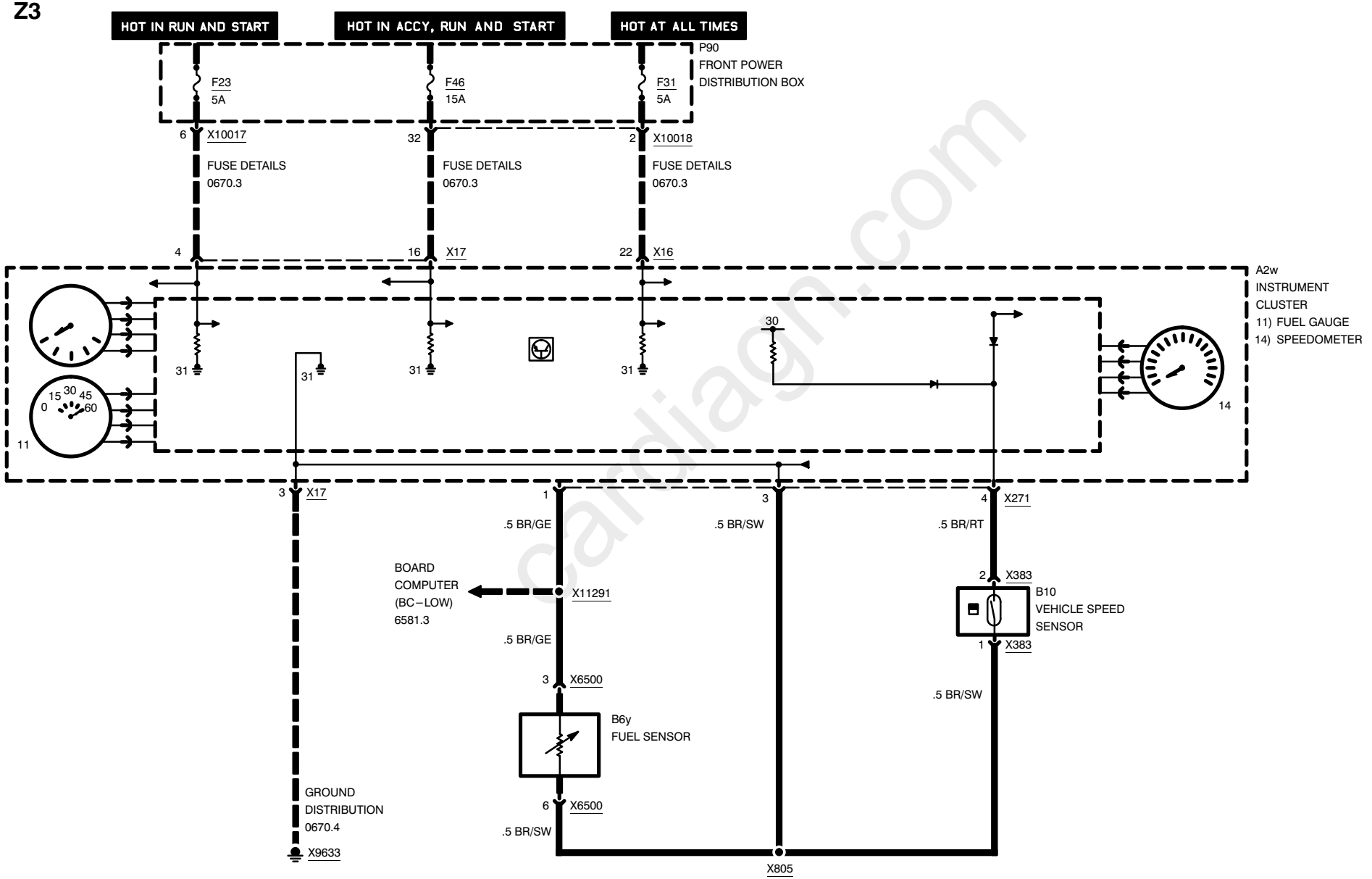
INSTRUMENT CLUSTER – ABS AND ASC INDICATORS



cardiagn.com

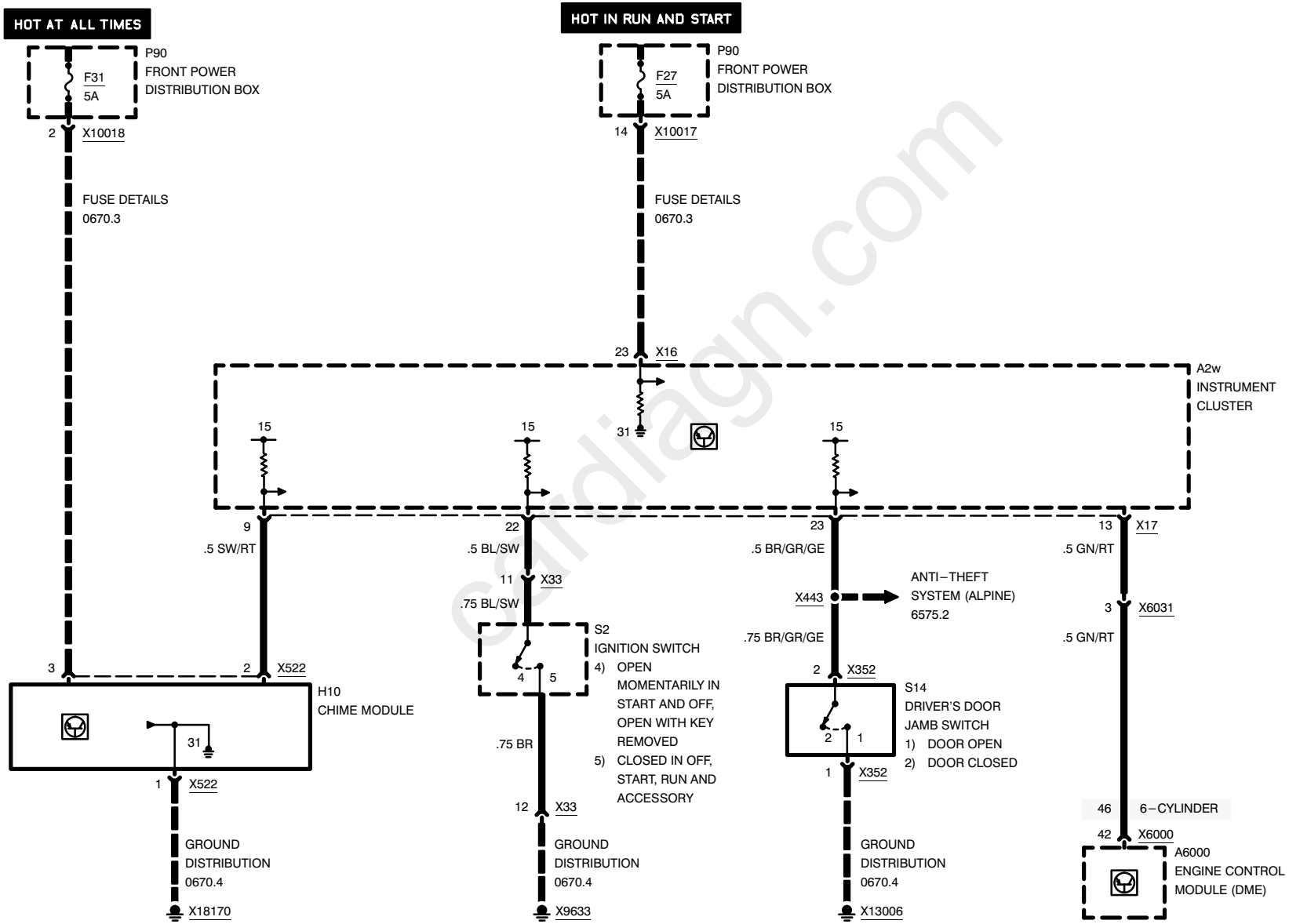
INSTRUMENT CLUSTER

INDICATORS



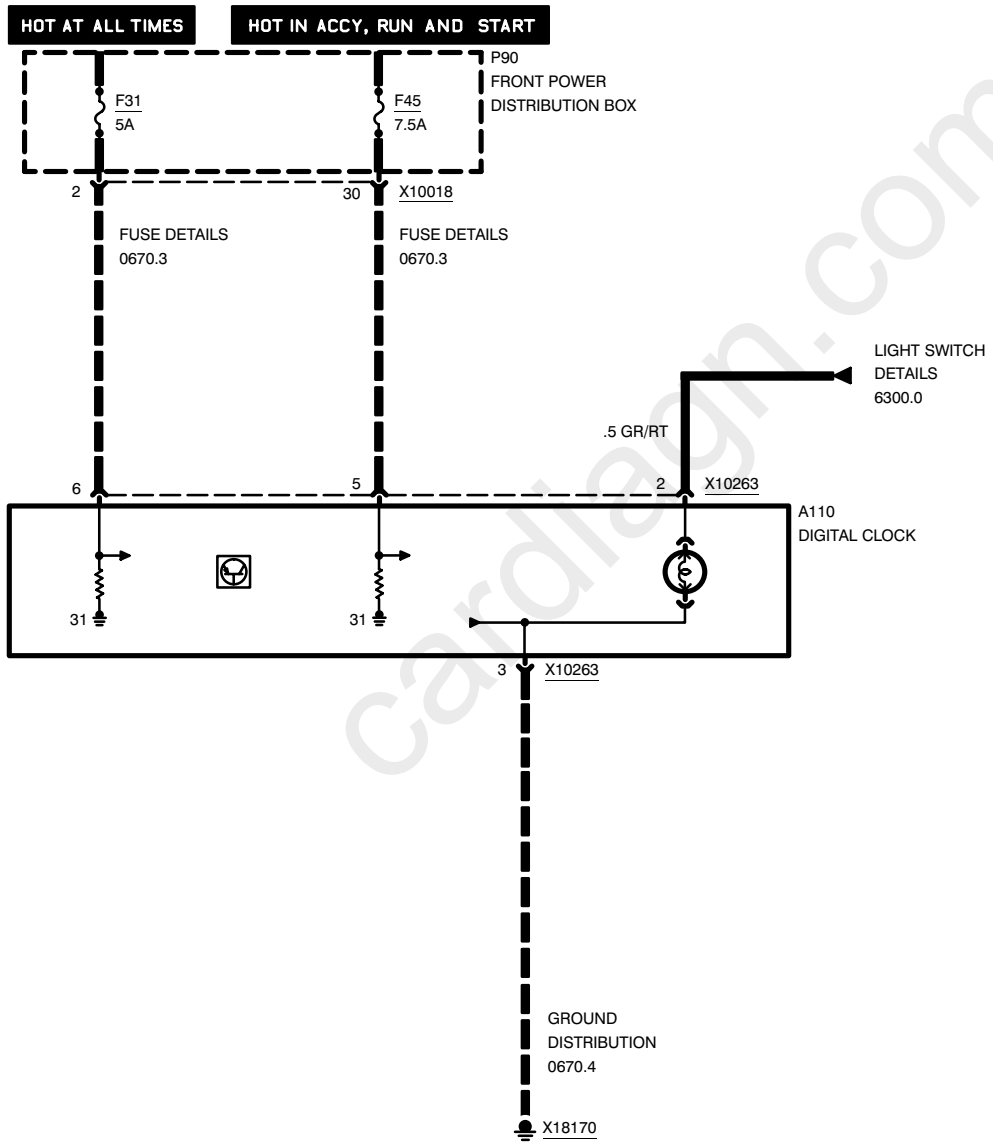
cardiagn.com

INSTRUMENT CLUSTER



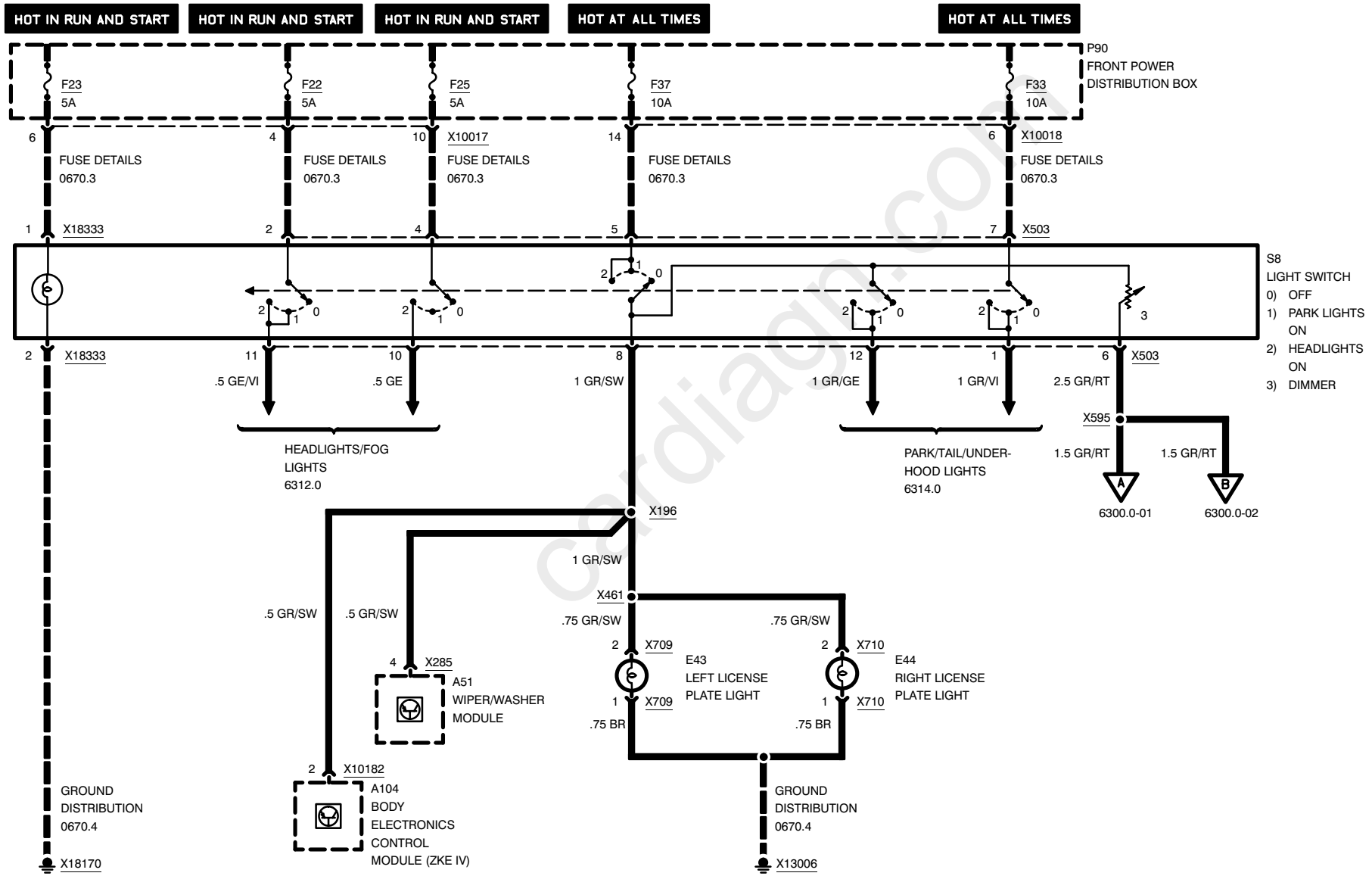
cardiagn.com

DIGITAL CLOCK



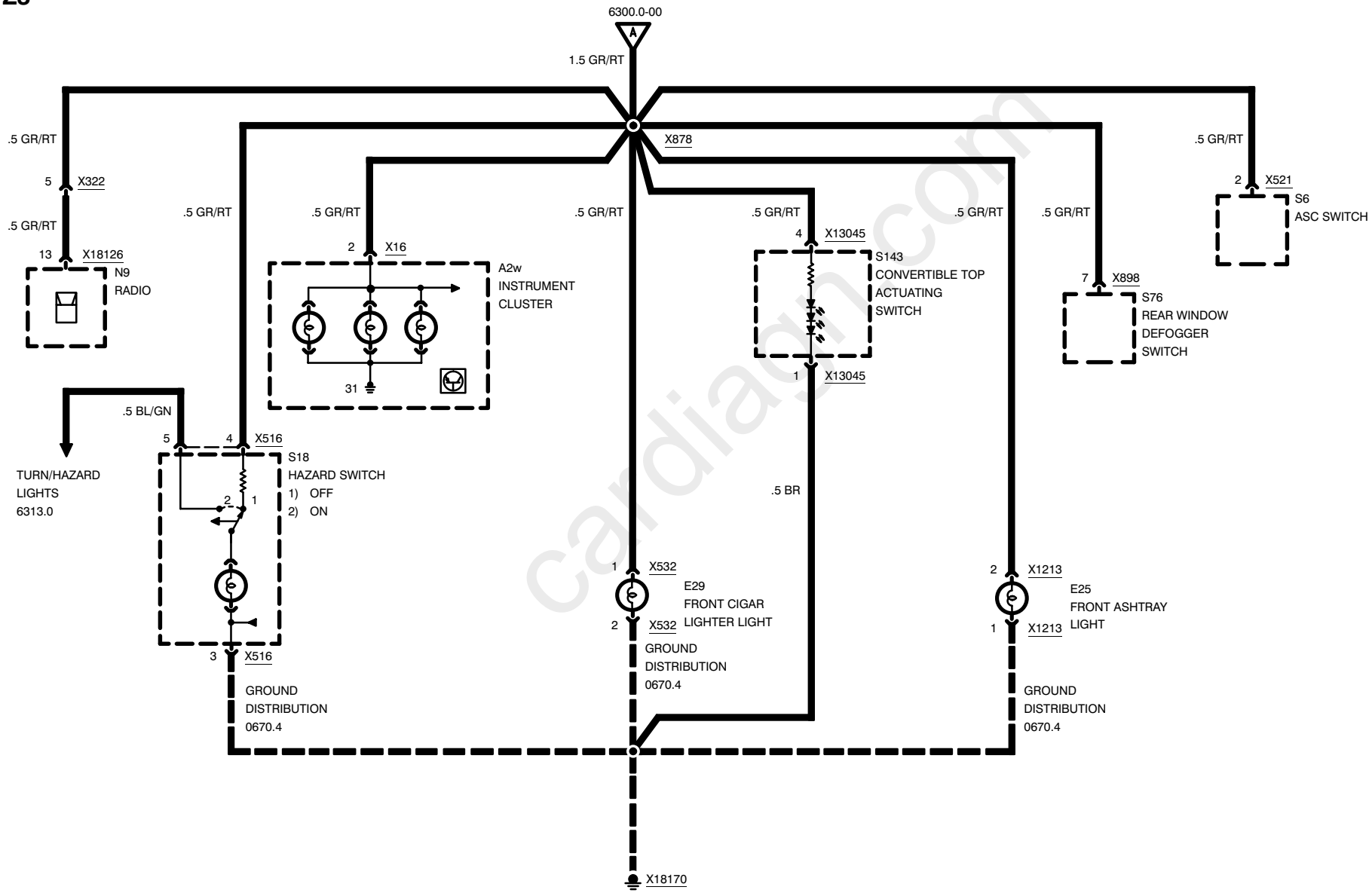
cardiagn.com

LIGHT SWITCH DETAILS



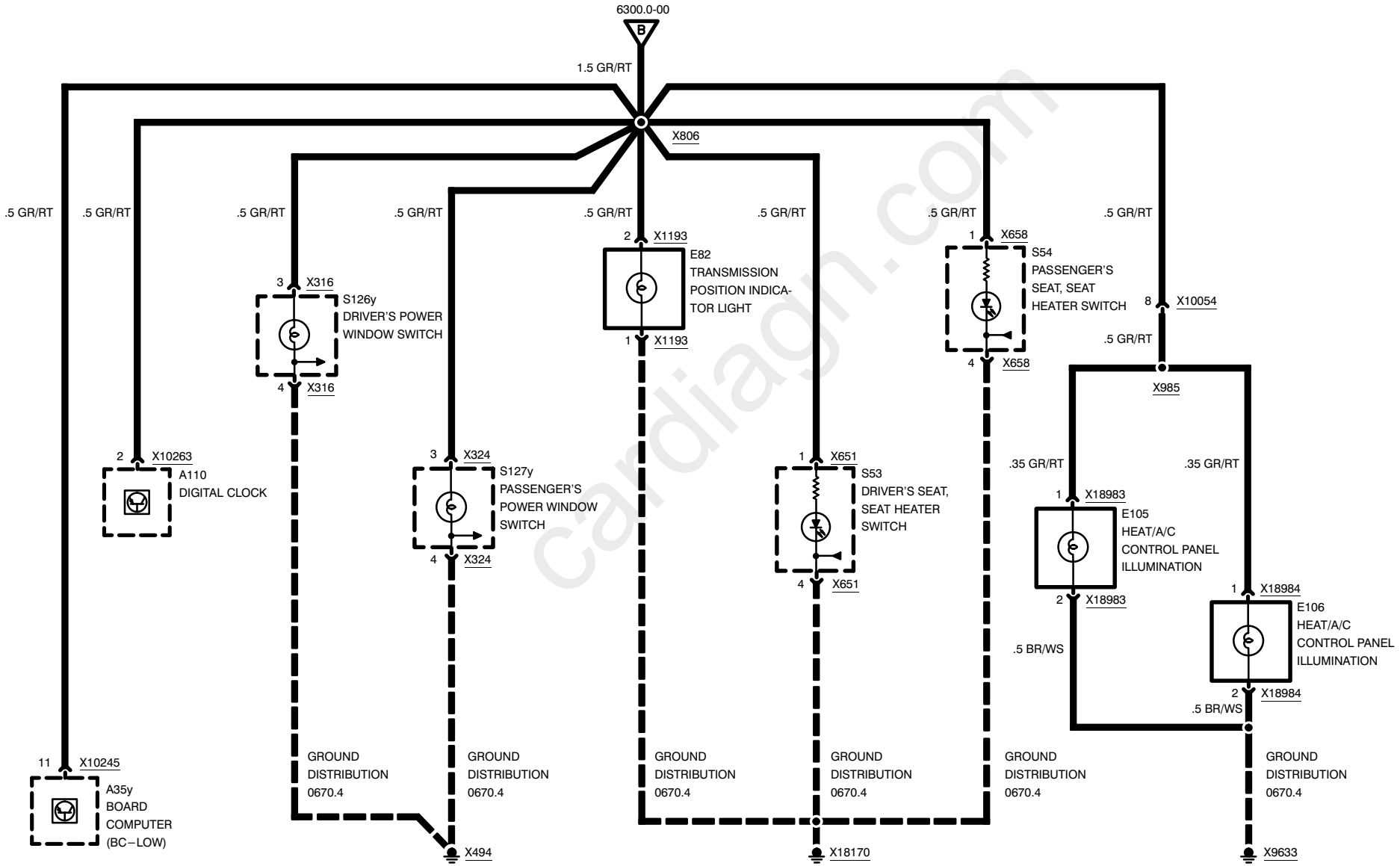
cardiagn.com

LIGHT SWITCH DETAILS



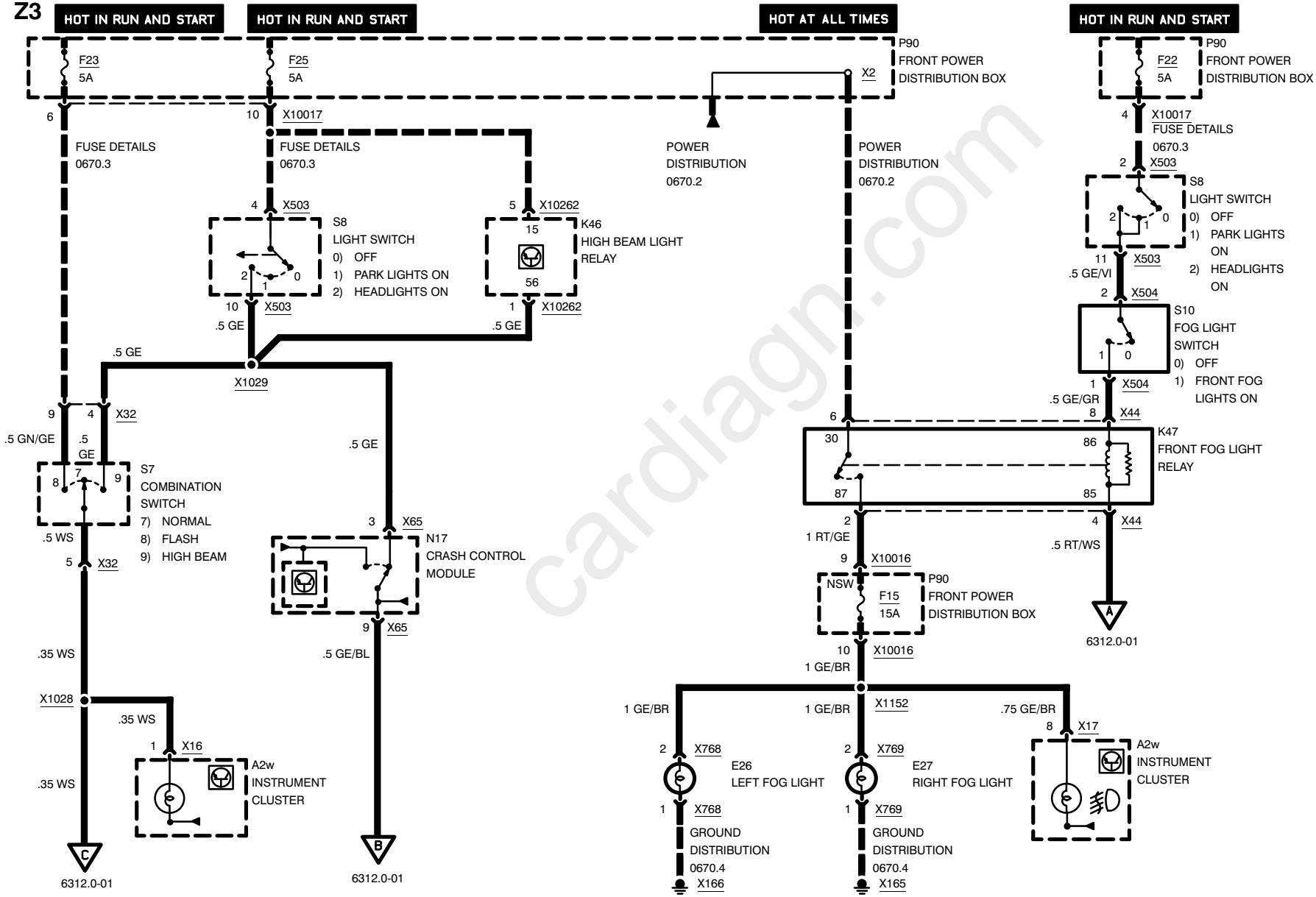
cardiagn.com

LIGHT SWITCH DETAILS



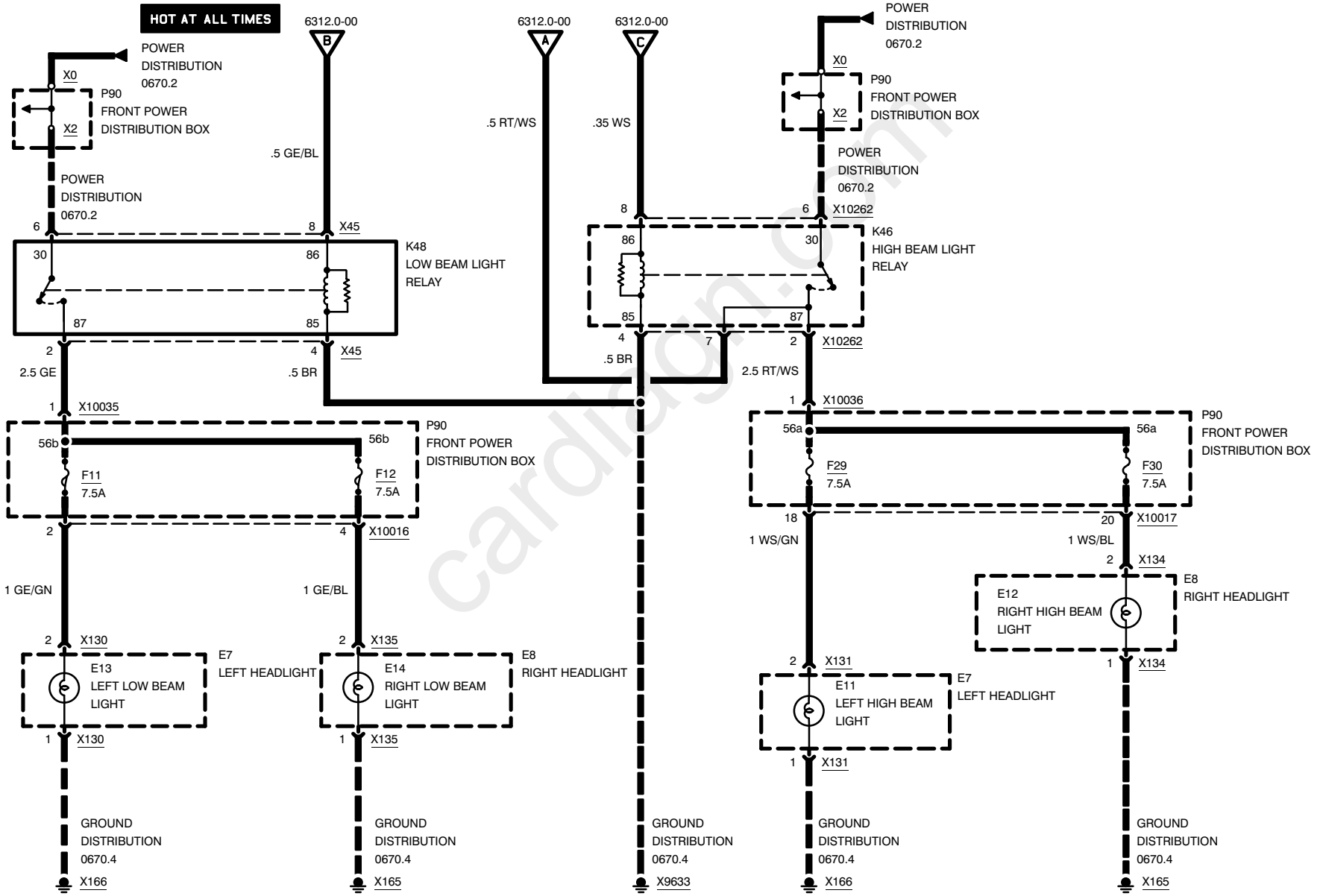
cardiagn.com

HEADLIGHTS/FOG LIGHTS



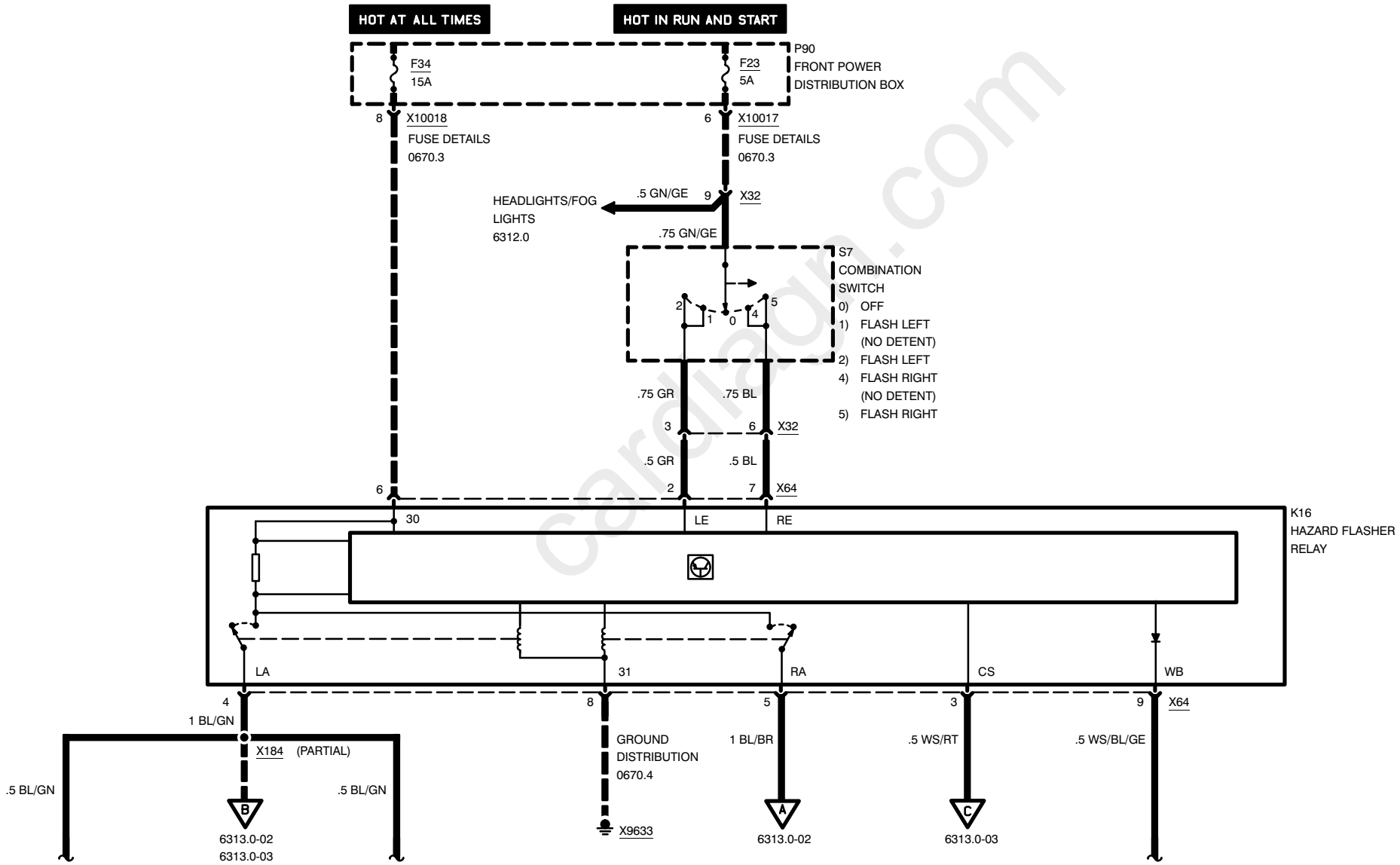
cardiagn.com

HEADLIGHTS/FOG LIGHTS

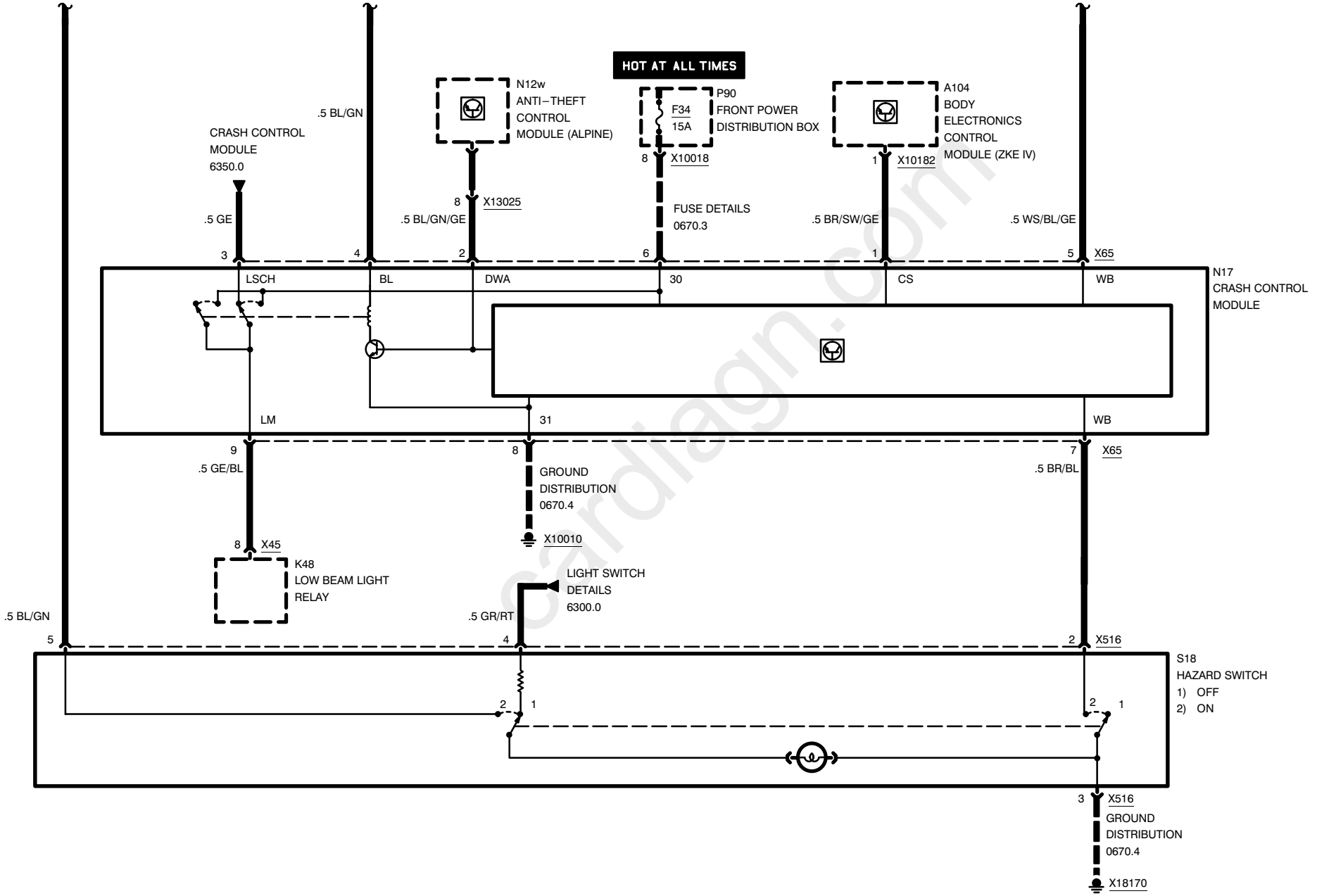


cardiagn.com

TURN/HAZARD LIGHTS

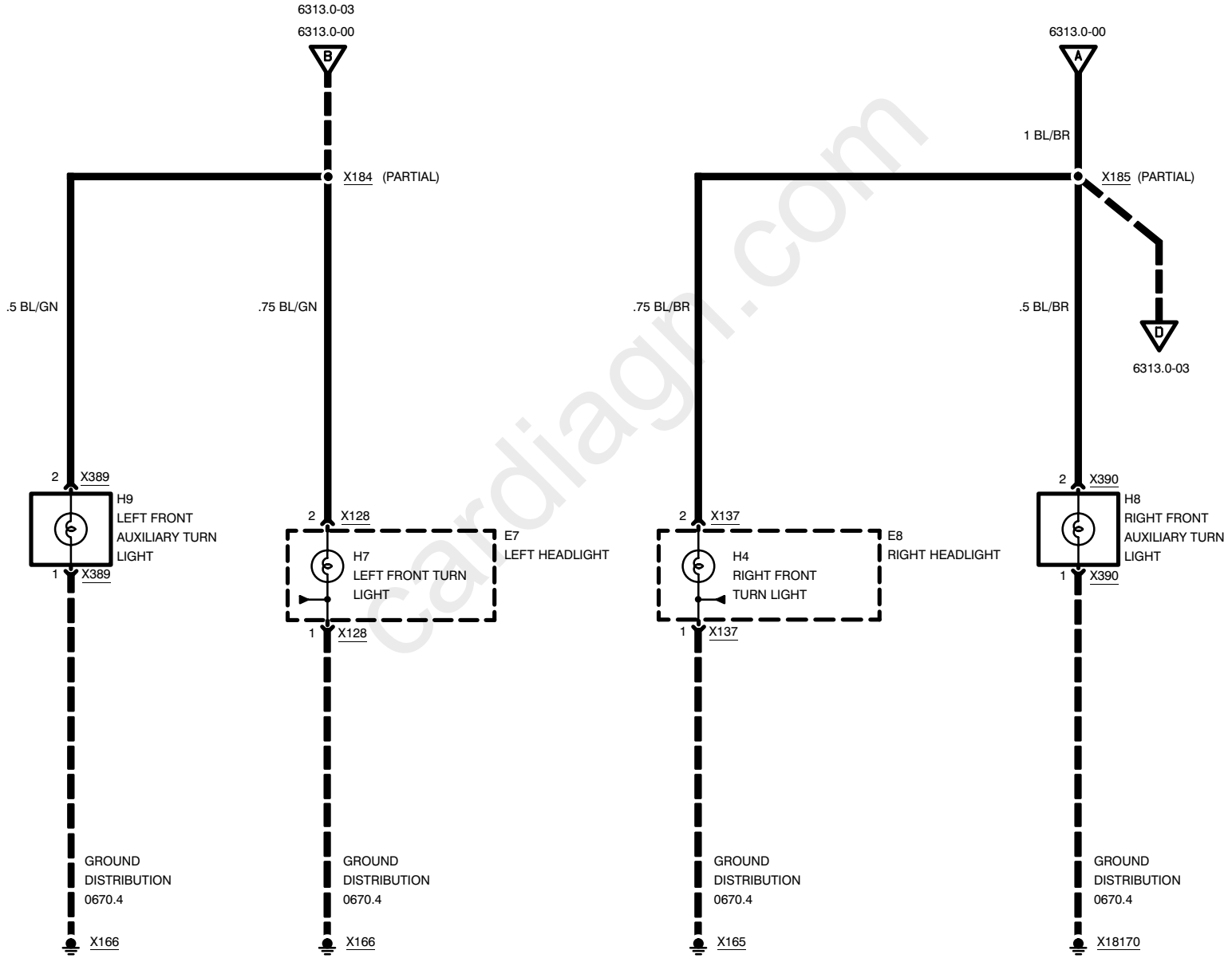


cardiagn.com



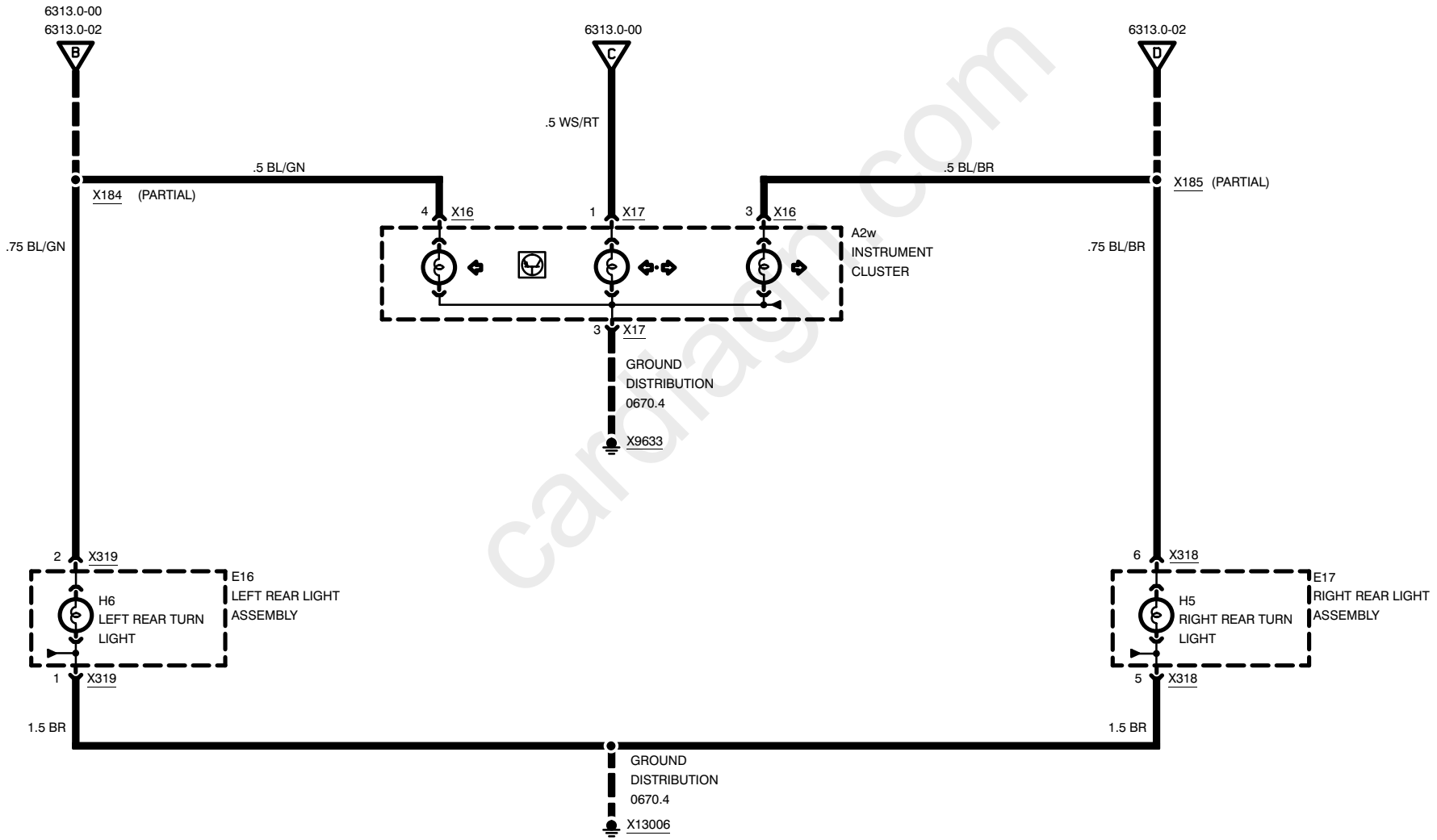
cardiagn.com

TURN/HAZARD LIGHTS



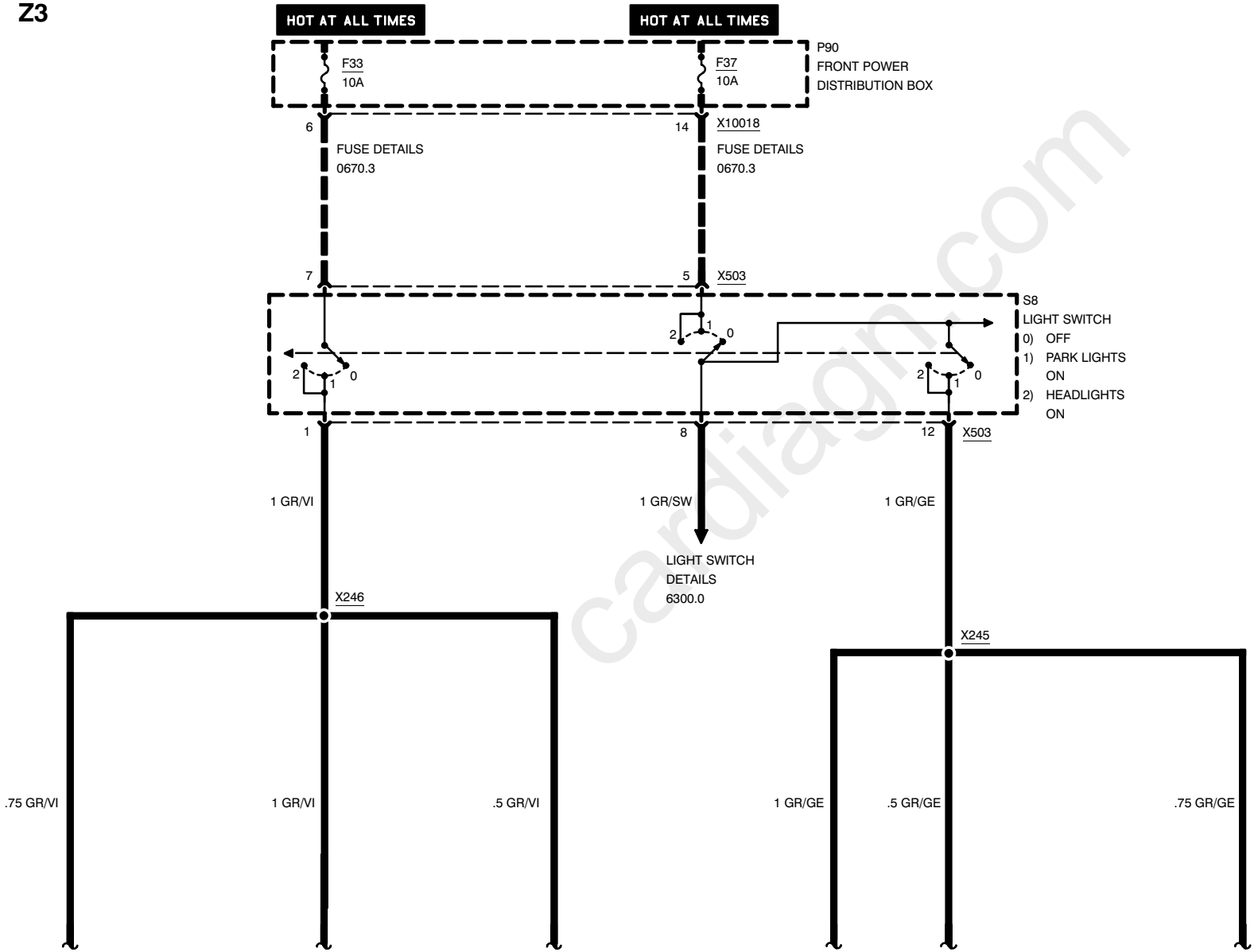
Cardiagn.com

TURN/HAZARD LIGHTS

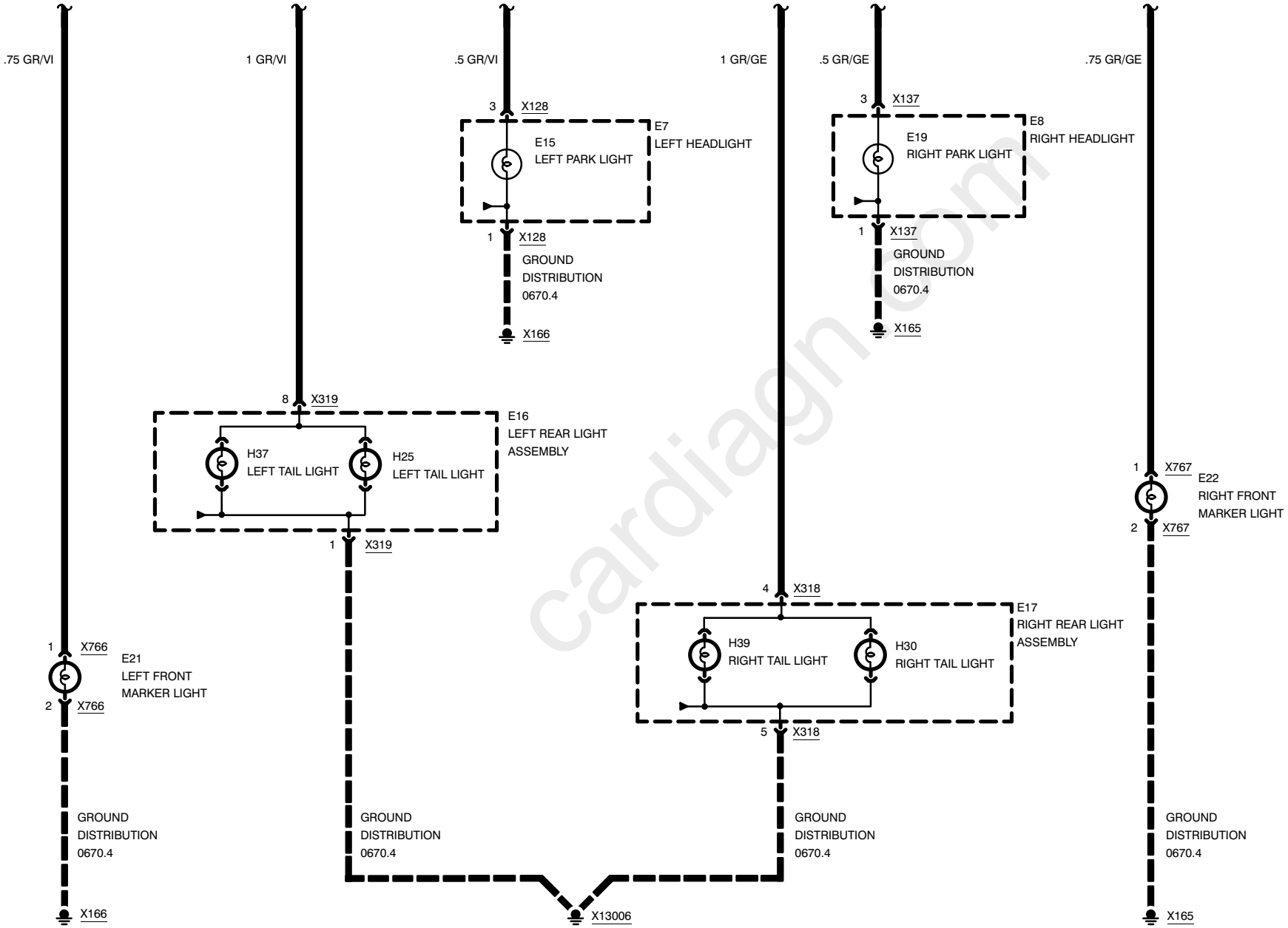


carcraft.com

PARK/TAIL/UNDERHOOD LIGHTS

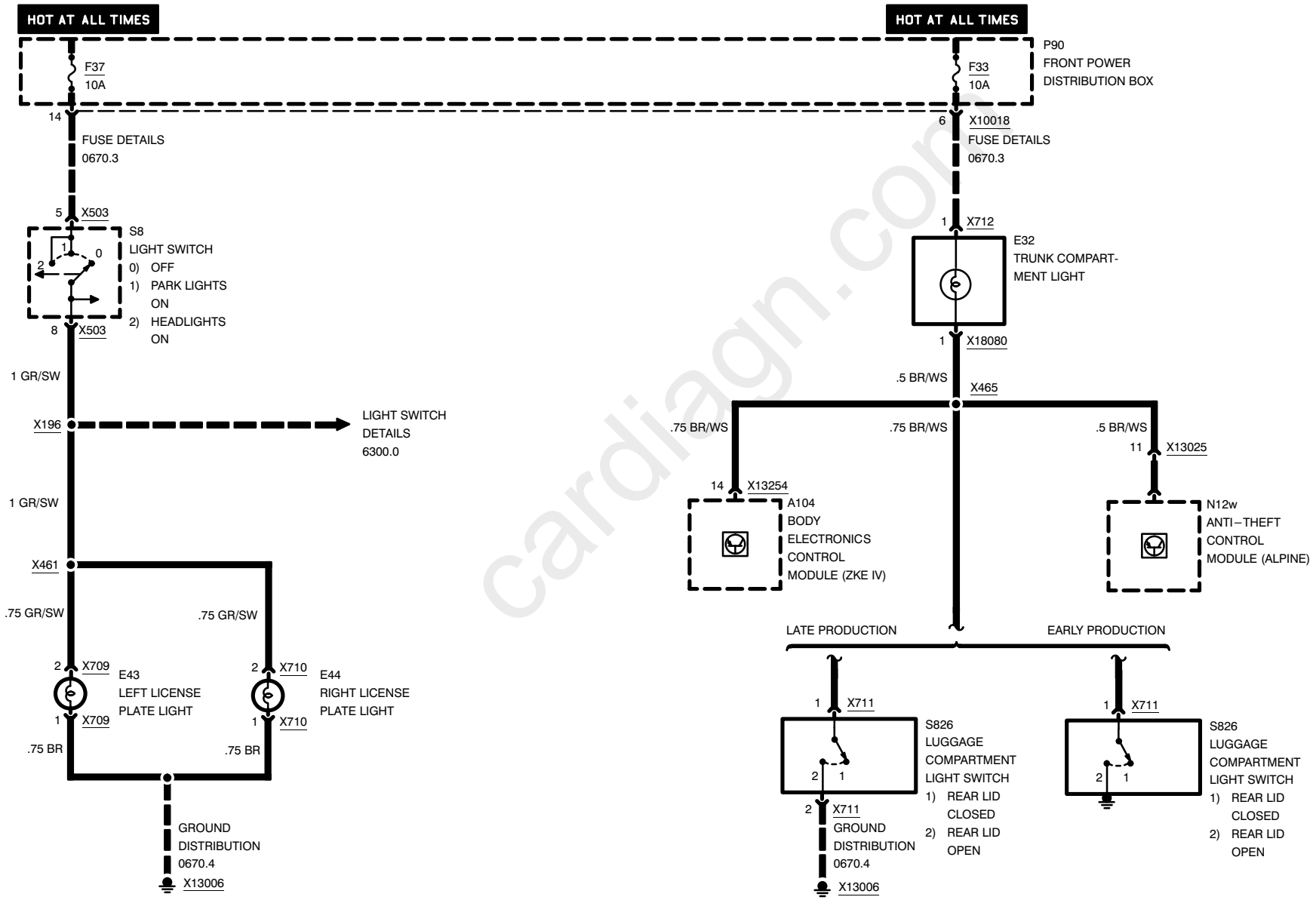


cardiagn.com



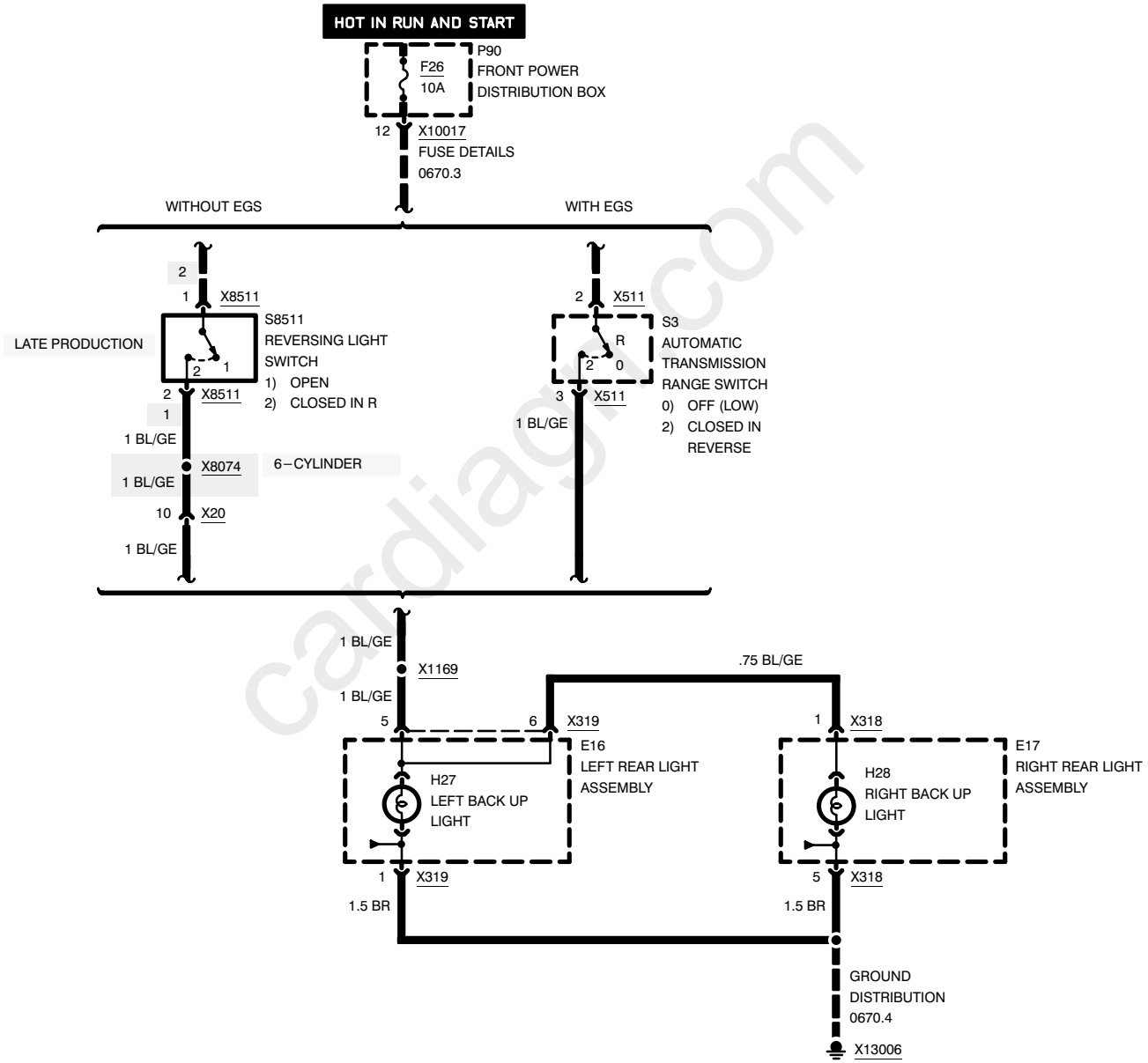
cardiagn.com

LICENSE PLATE/LUGGAGE COMPARTMENT LIGHTS



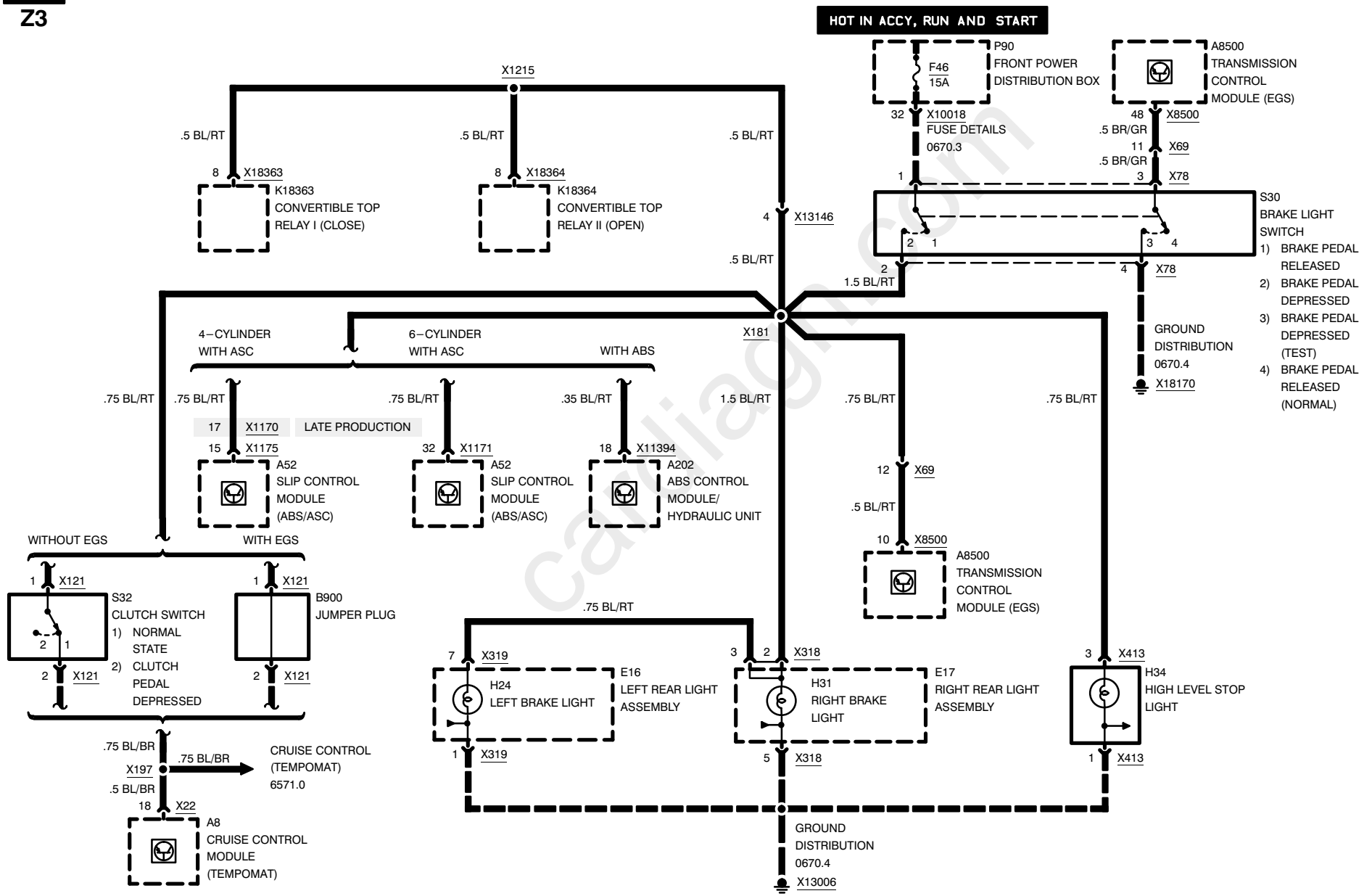
cardiagn.com

BACK UP LIGHTS



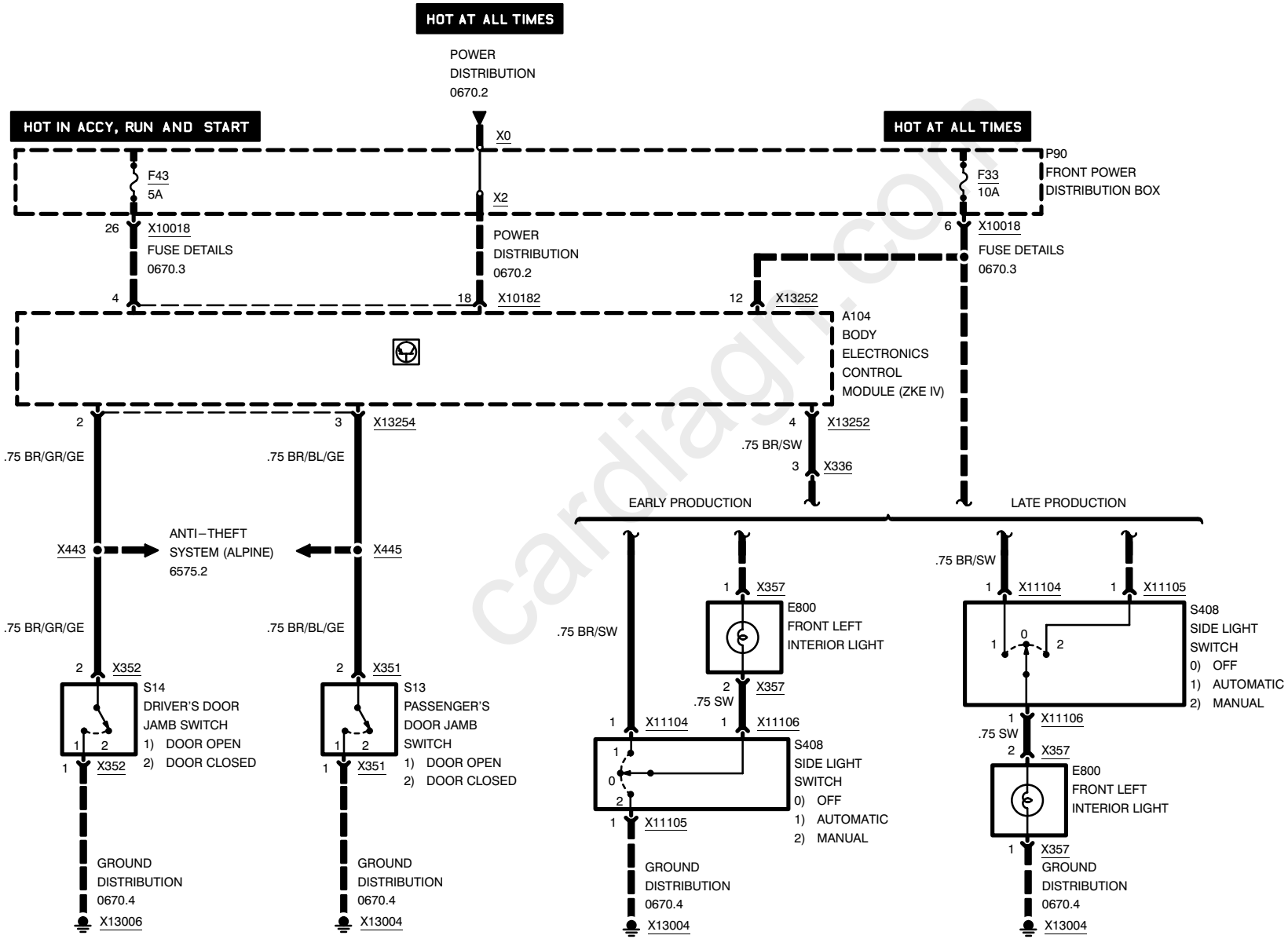
cardiagn.com

BRAKE LIGHTS

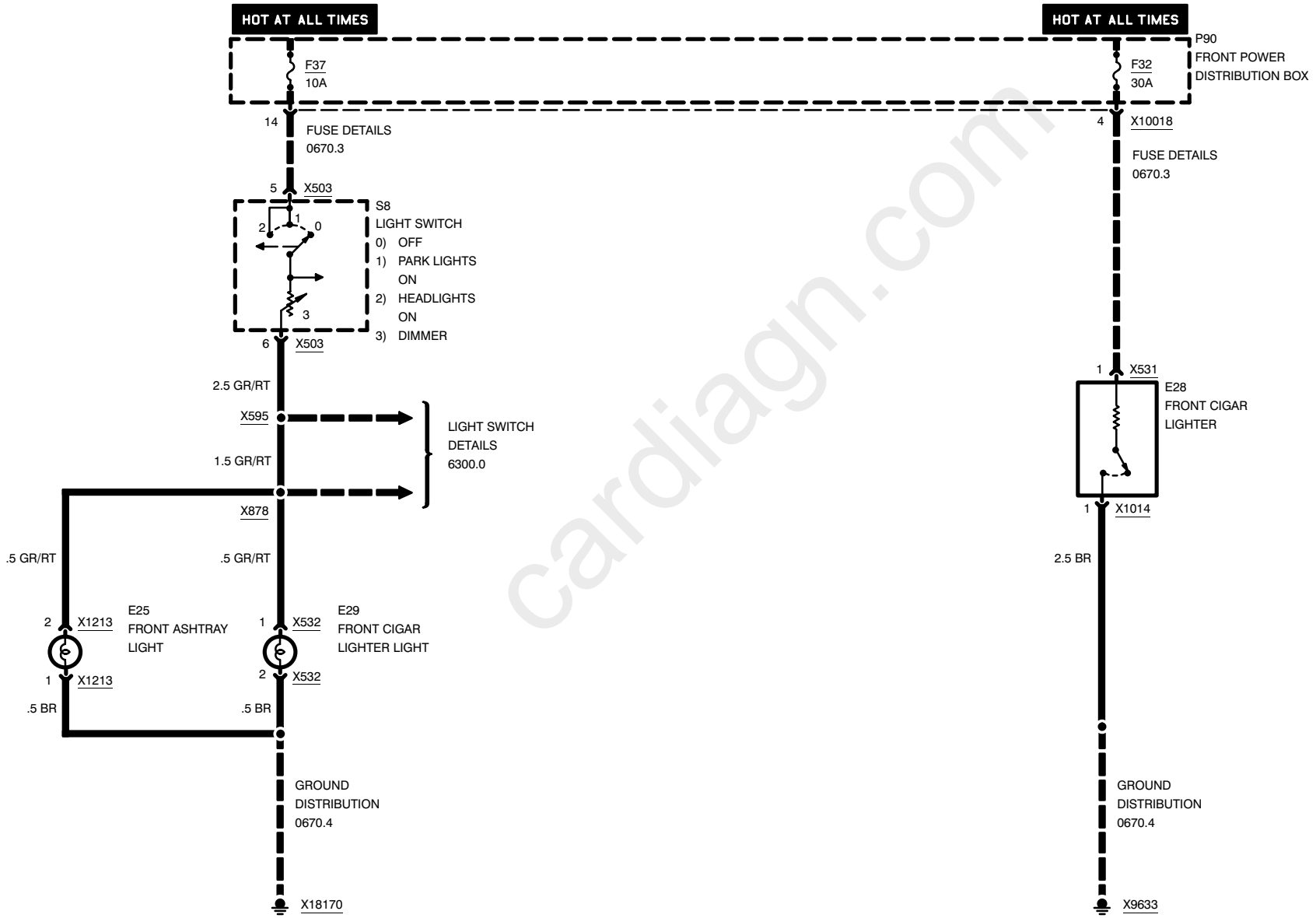


carliagram.com

INTERIOR LIGHTS

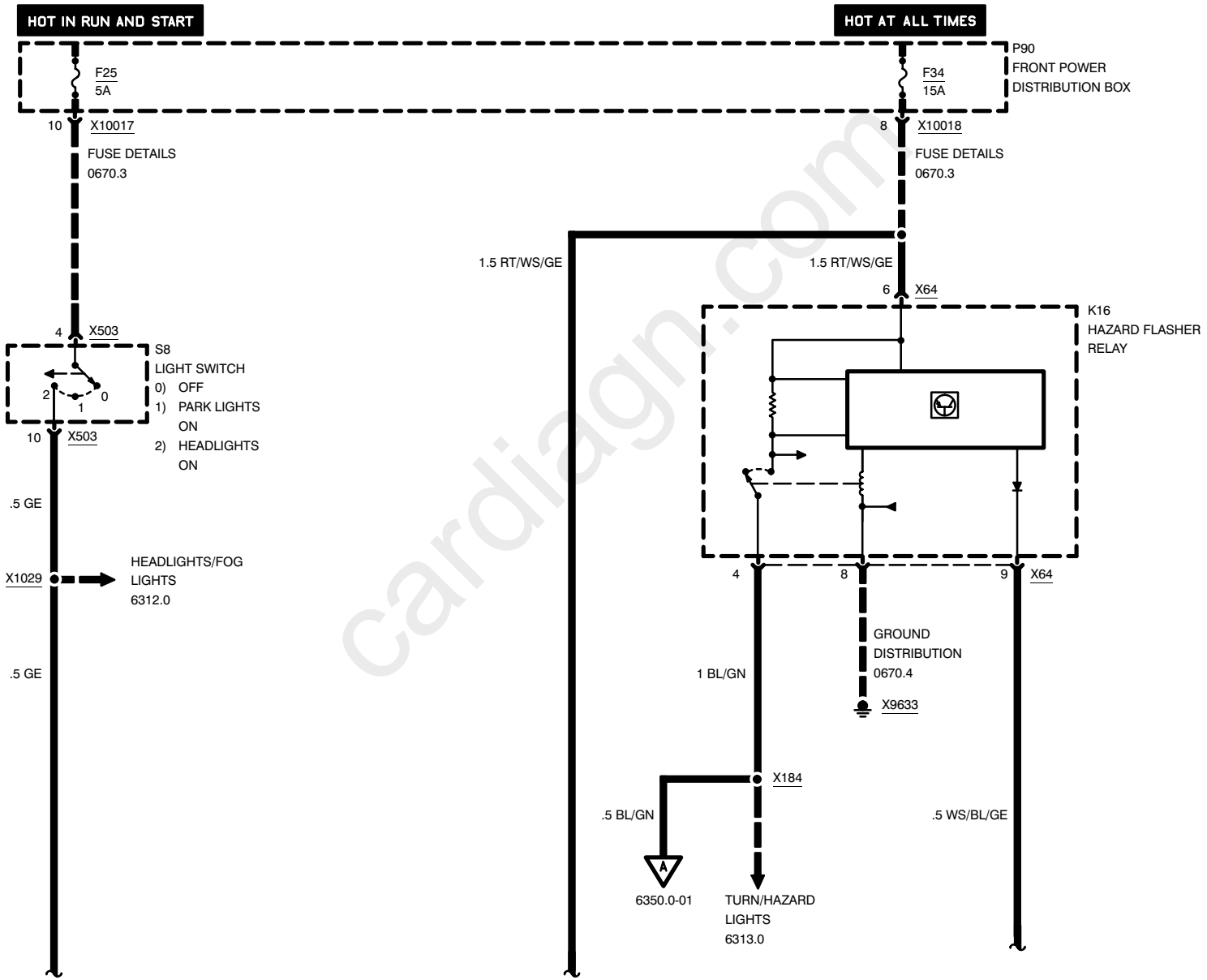


cardiagn.com

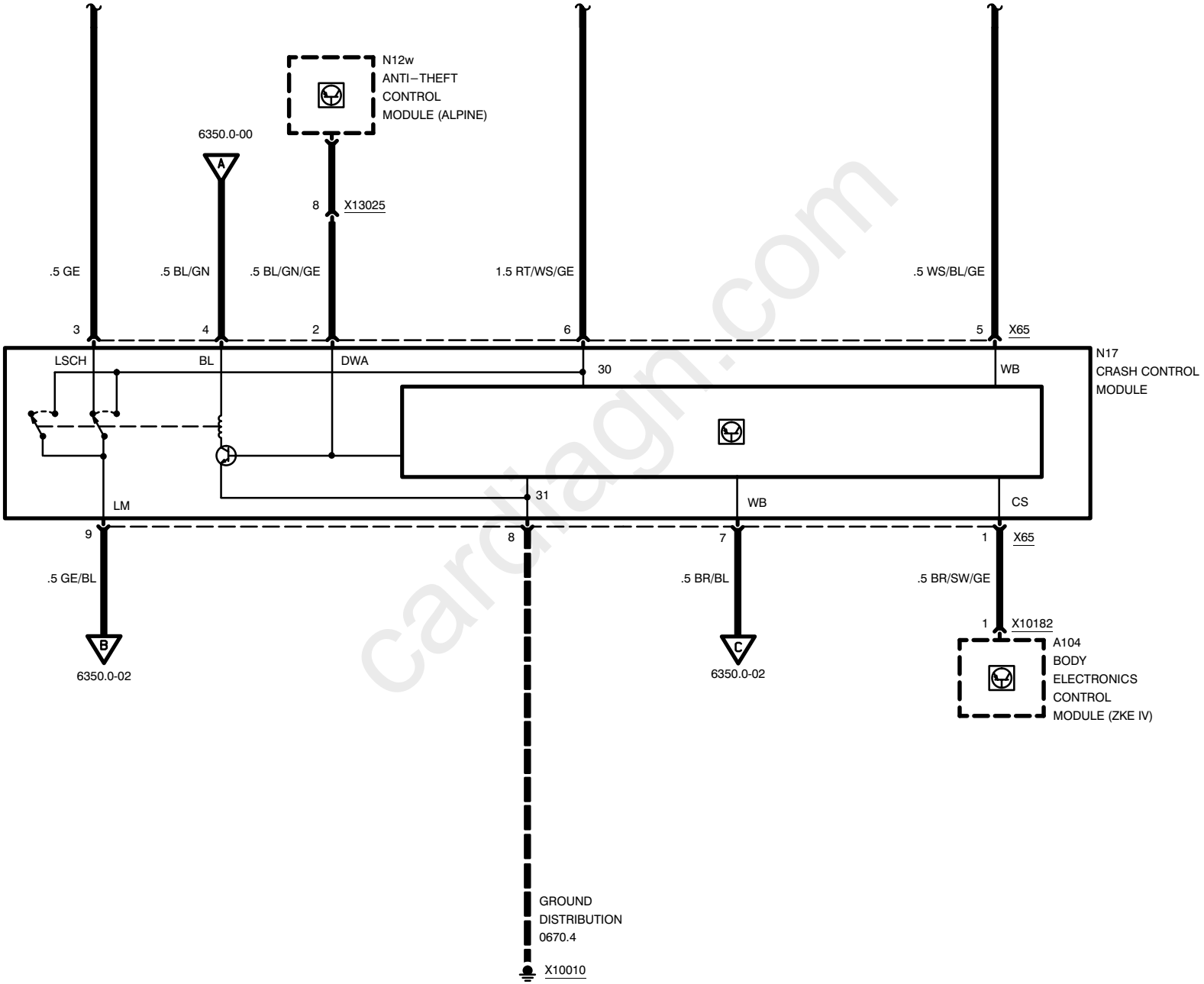


cardiagn.com

CRASH CONTROL MODULE

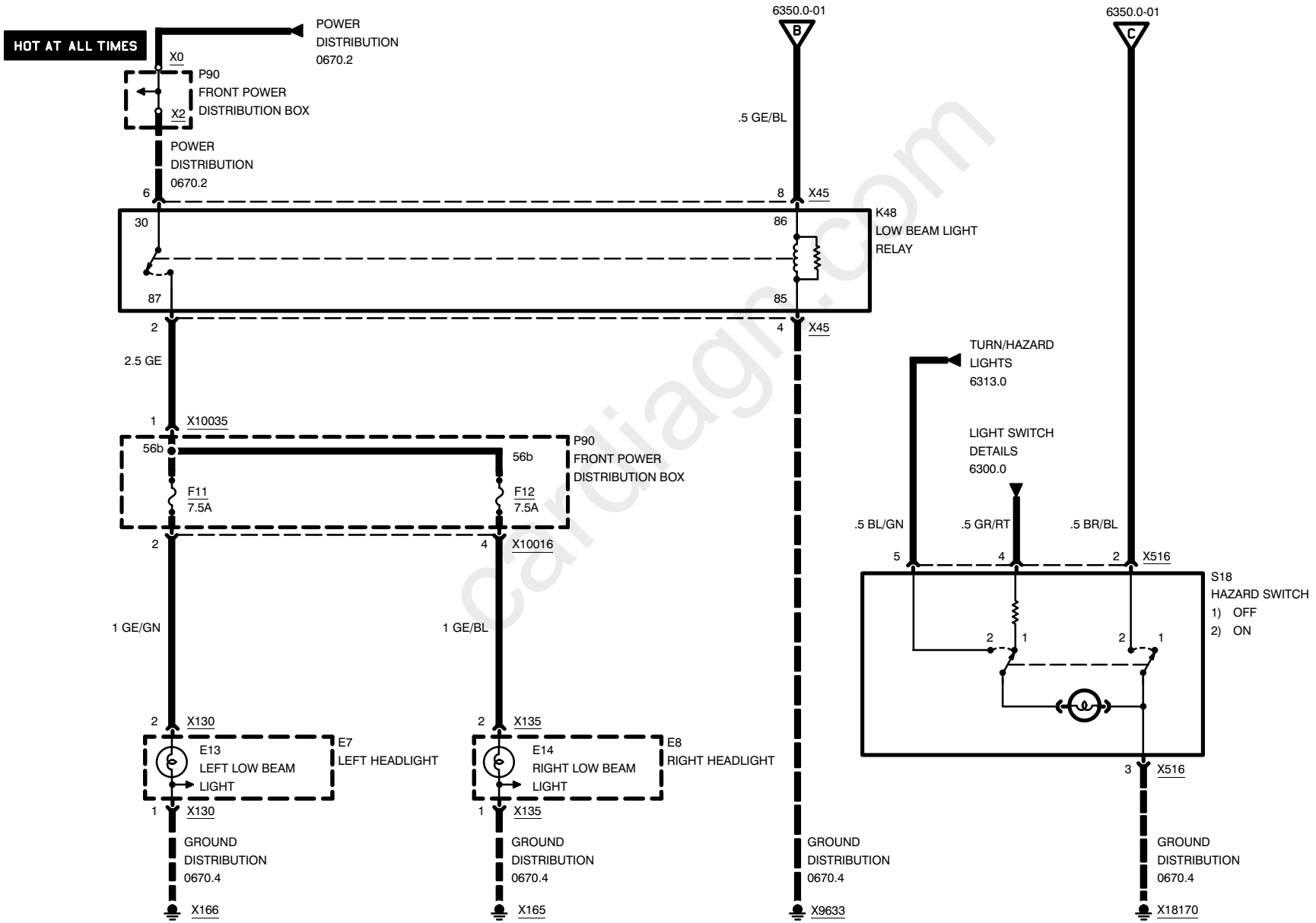


cardiagn.com



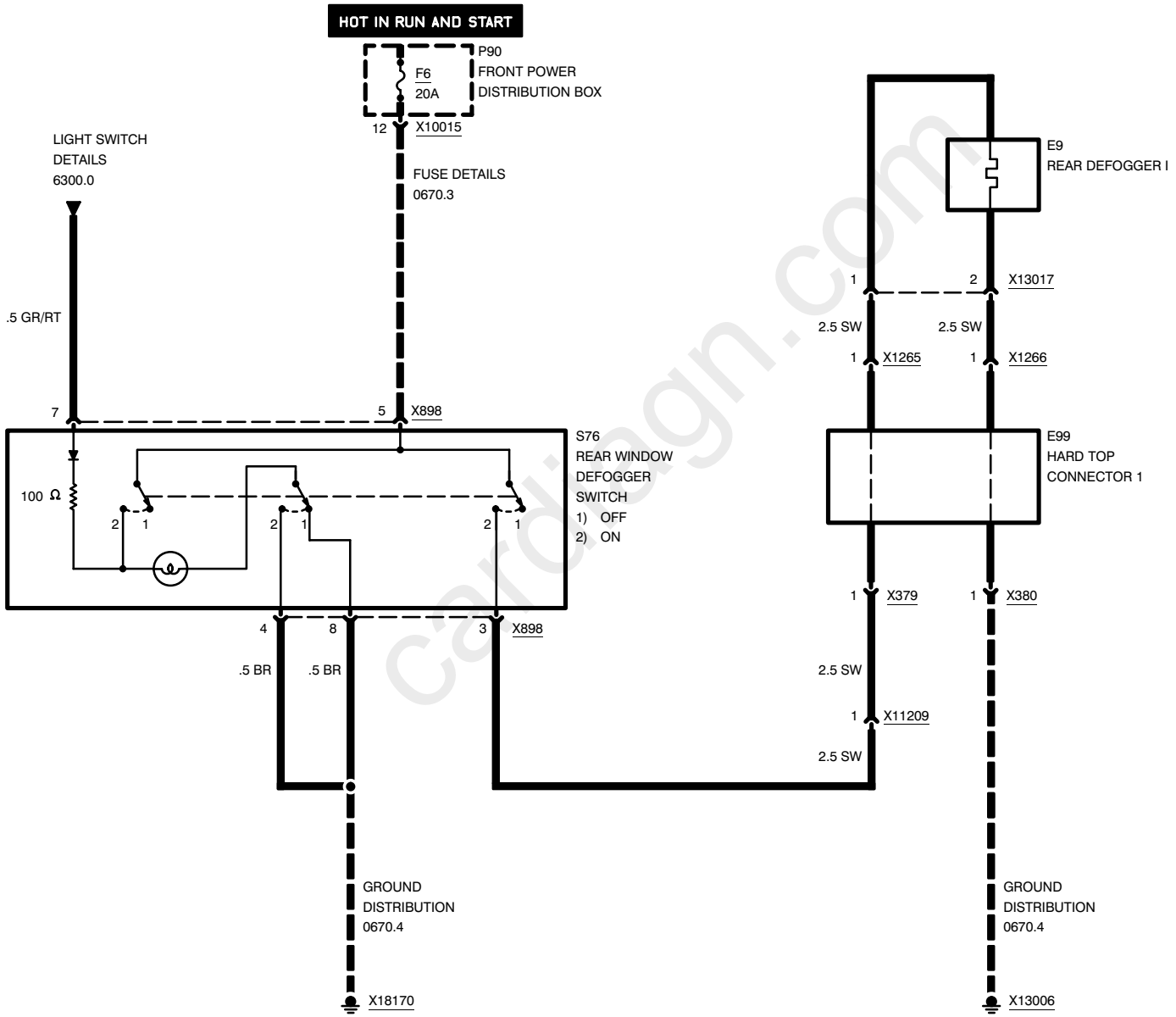
cardiagn.com

CRASH CONTROL MODULE

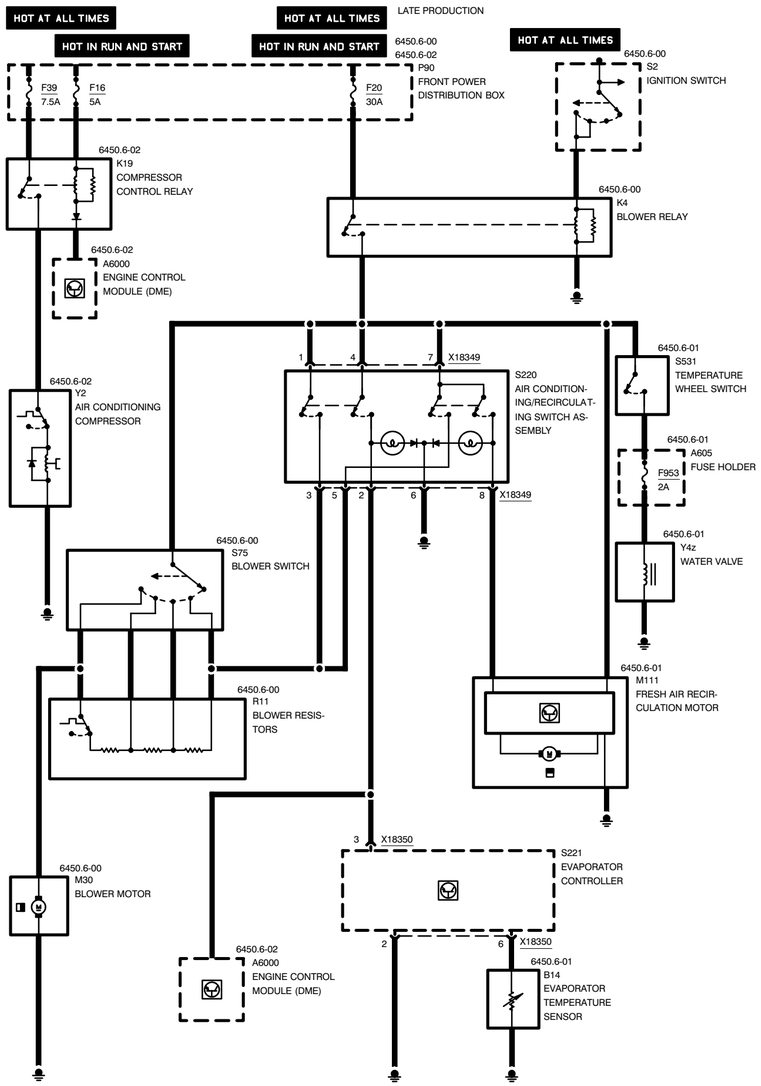


cardiagn.com

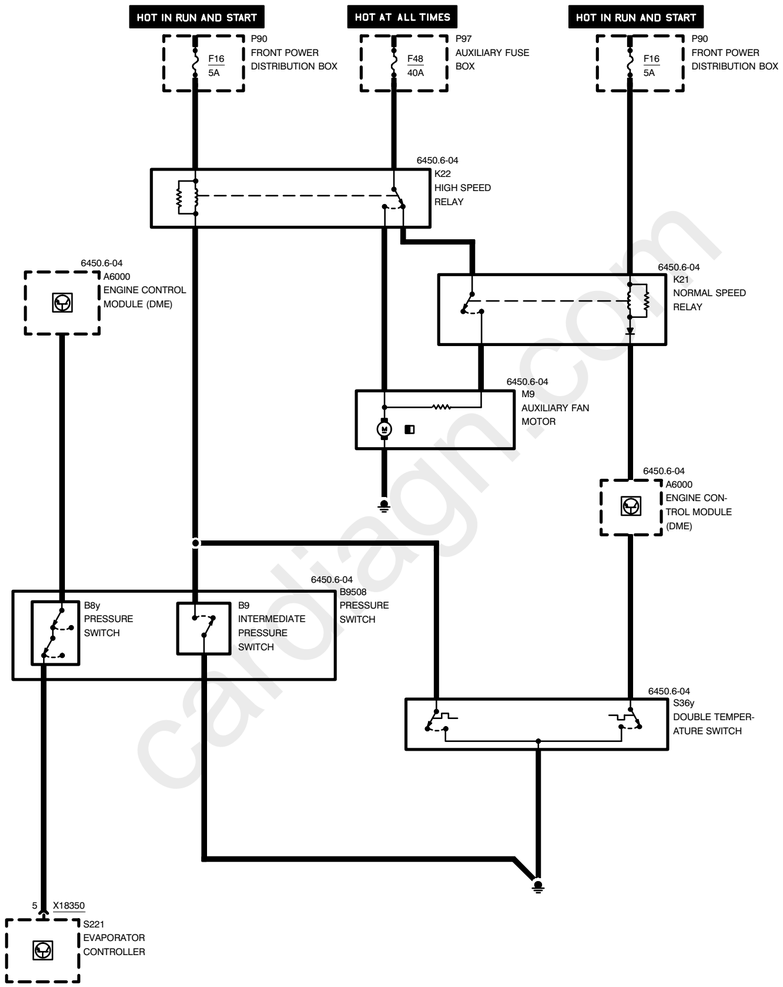
REAR WINDOW DEFOGGER



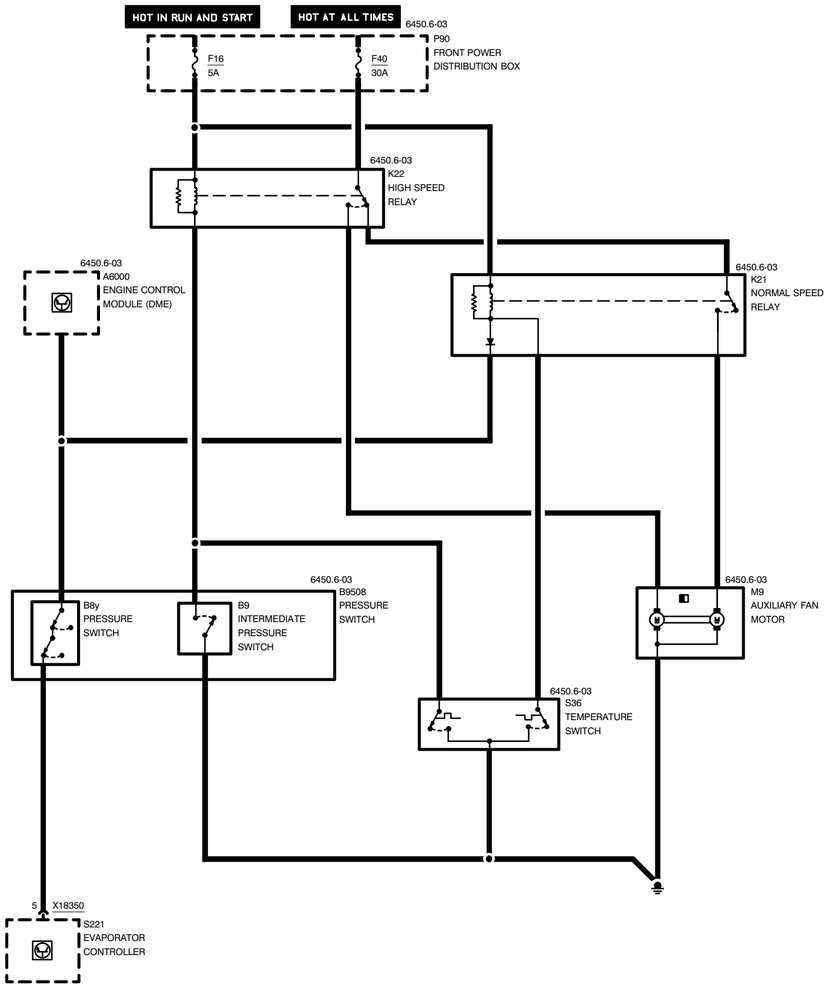
cardiagn.com



AUXILIARY FAN – 4–CYLINDER



AUXILIARY FAN – 6–CYLINDER



carDiagn.com

Pin Assignments

X18349	8 Pins, black
X18350	6 Pins, black

X18349

Pin	Type	Description/Function	Connection
1	E	Terminal 15	Heating blower relay
2	A	Activate compressor clutch	Engine control module (DME)
3	A	Blower level 1 (air conditioning)	Blower resistor
4	E	Terminal 15	Heating blower relay
5	A	Blower level 1 (air recirculation)	Blower resistor
6	M	Ground for function lights	Ground point
7	E	Terminal 15	Heating blower relay
8	A	Activate fresh air recirculation	Fresh air recirculation motor

X18350

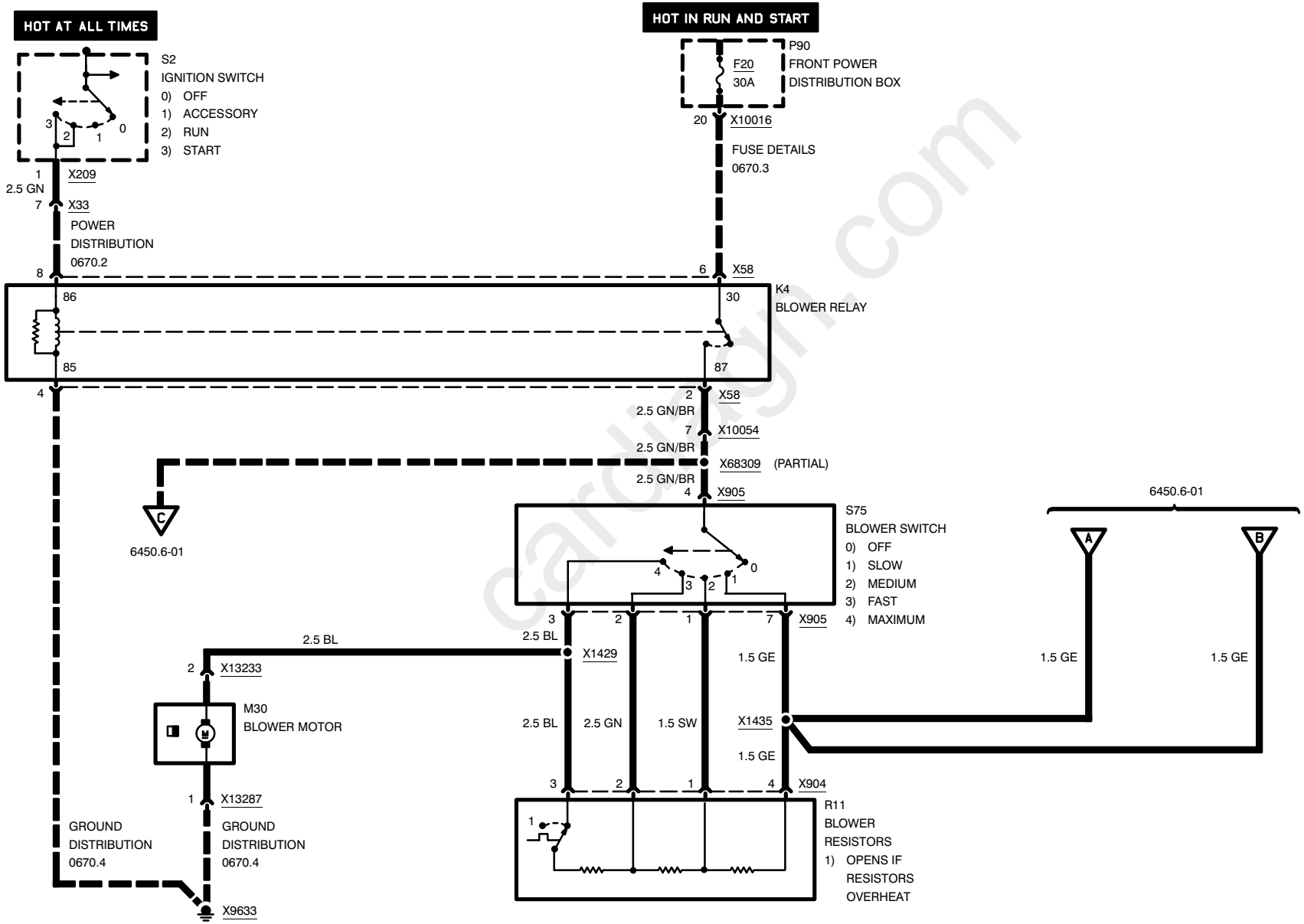
Pin	Type	Description/Function	Connection
1		Not used	
2	M	Ground	Ground point
3	E	Climate-ON-signal	Air conditioning/recirculated air operating unit
4		Not used	
5	A	Activate A/C compressor	Pressure switch
6	E	Evaporator temperature	Evaporator temperature sensor

E = Input, A = Output, M = Ground

cardiagn.com

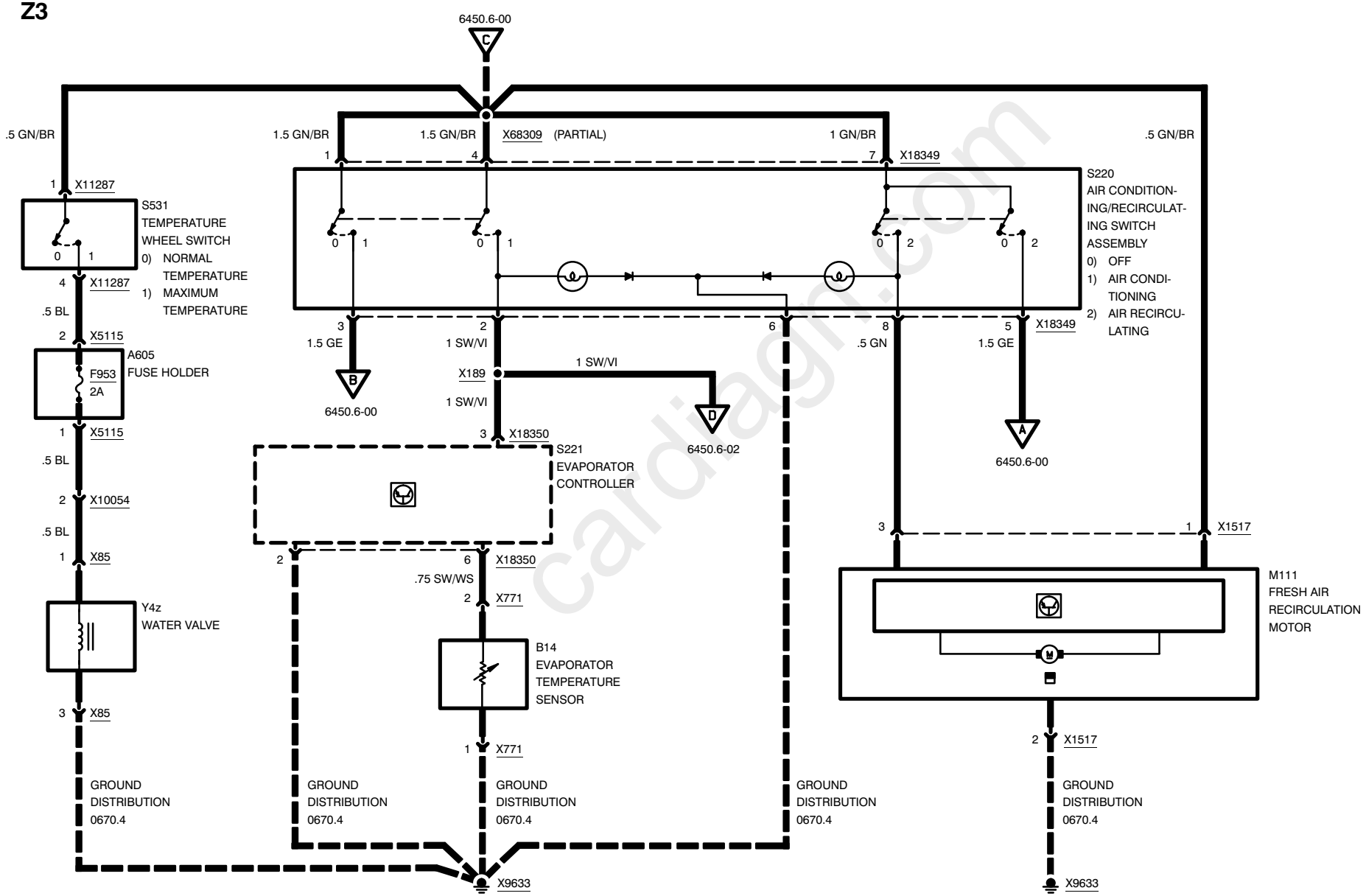
INTEGRATED HEATING– AND CLIMATE CONTROL

POWER, AIR FLOW CONTROL



cardiagn.com

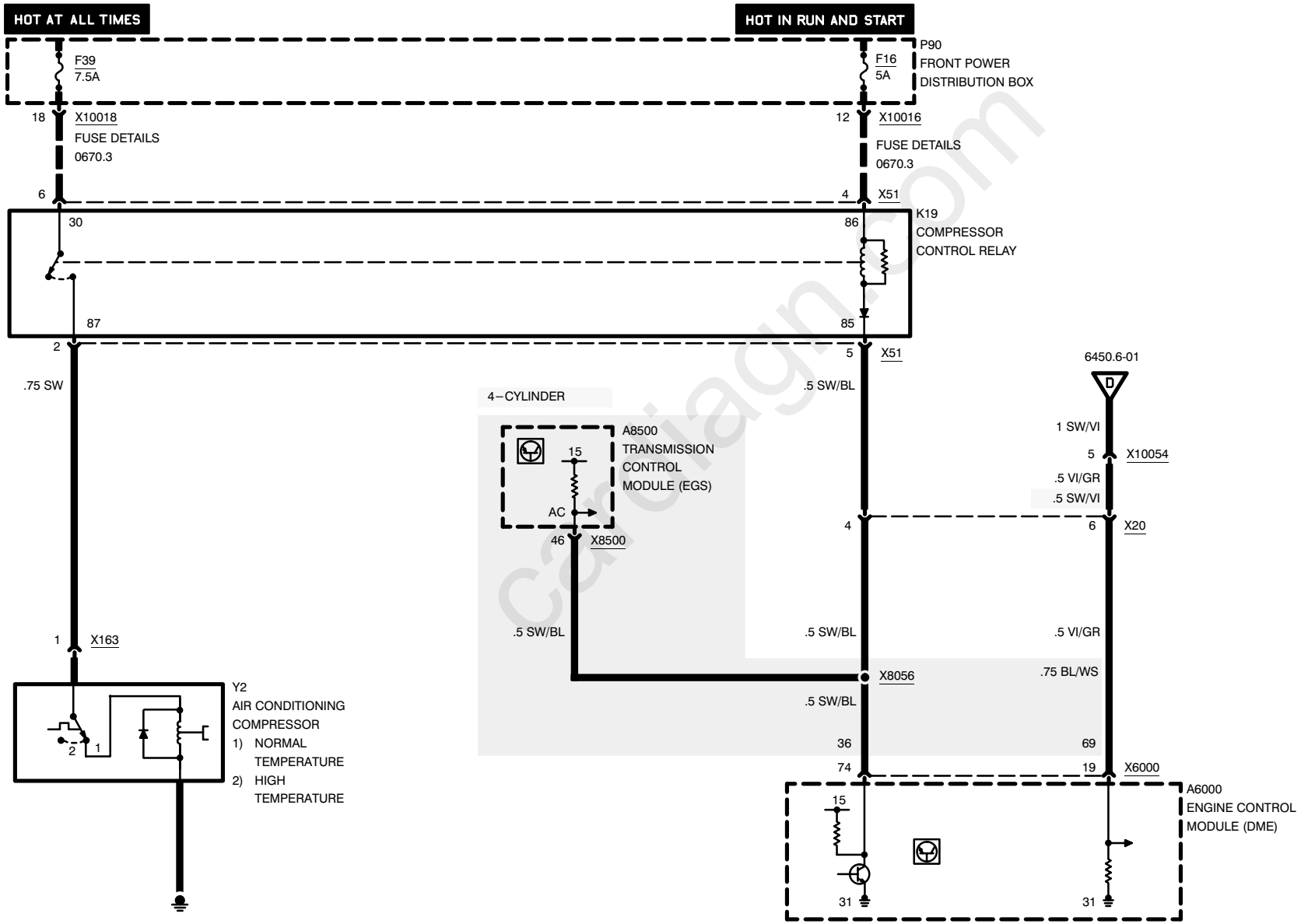
INTEGRATED HEATING– AND CLIMATE CONTROL



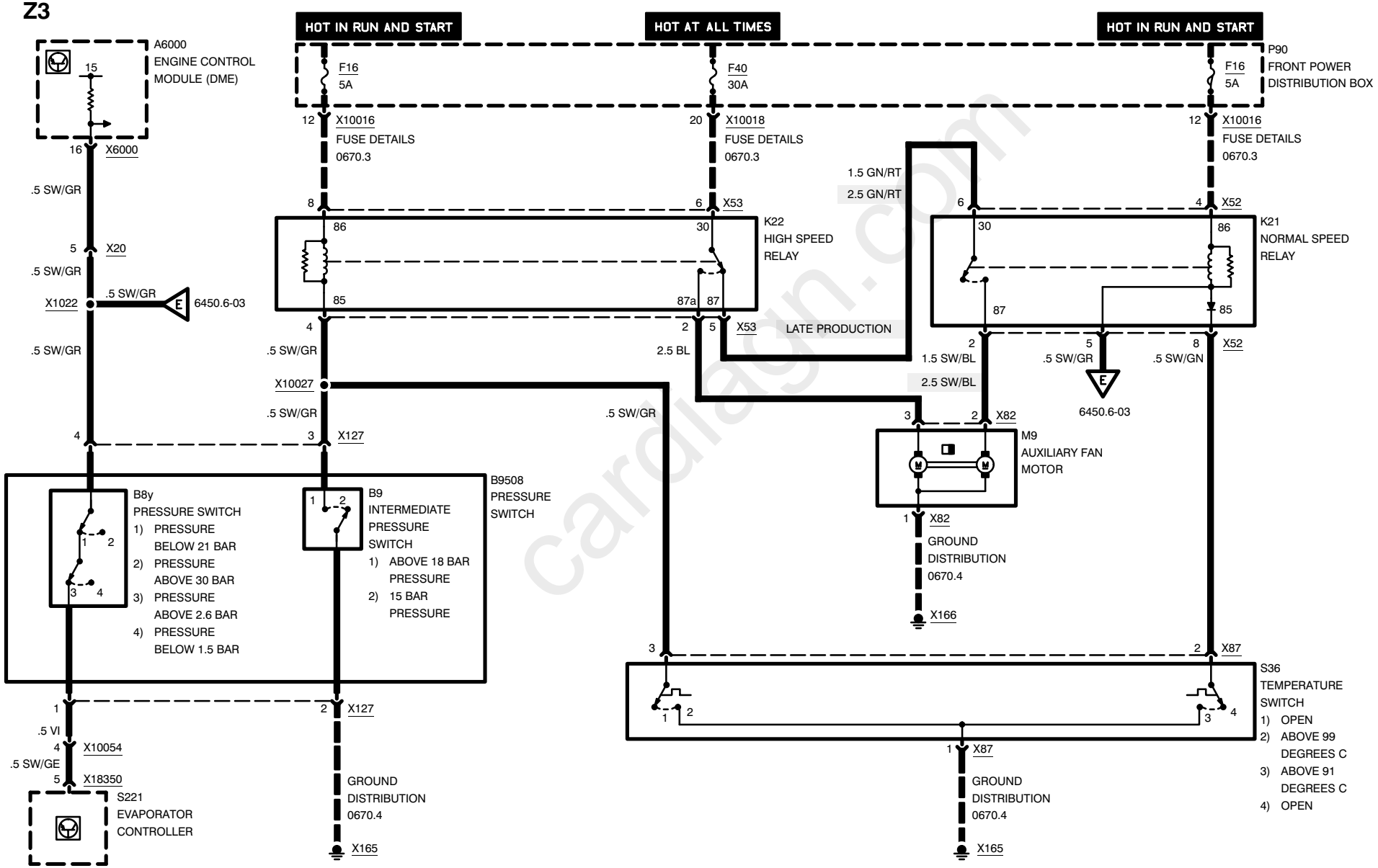
cardiagn.com

INTEGRATED HEATING– AND CLIMATE CONTROL

COMPRESSOR CONTROLS

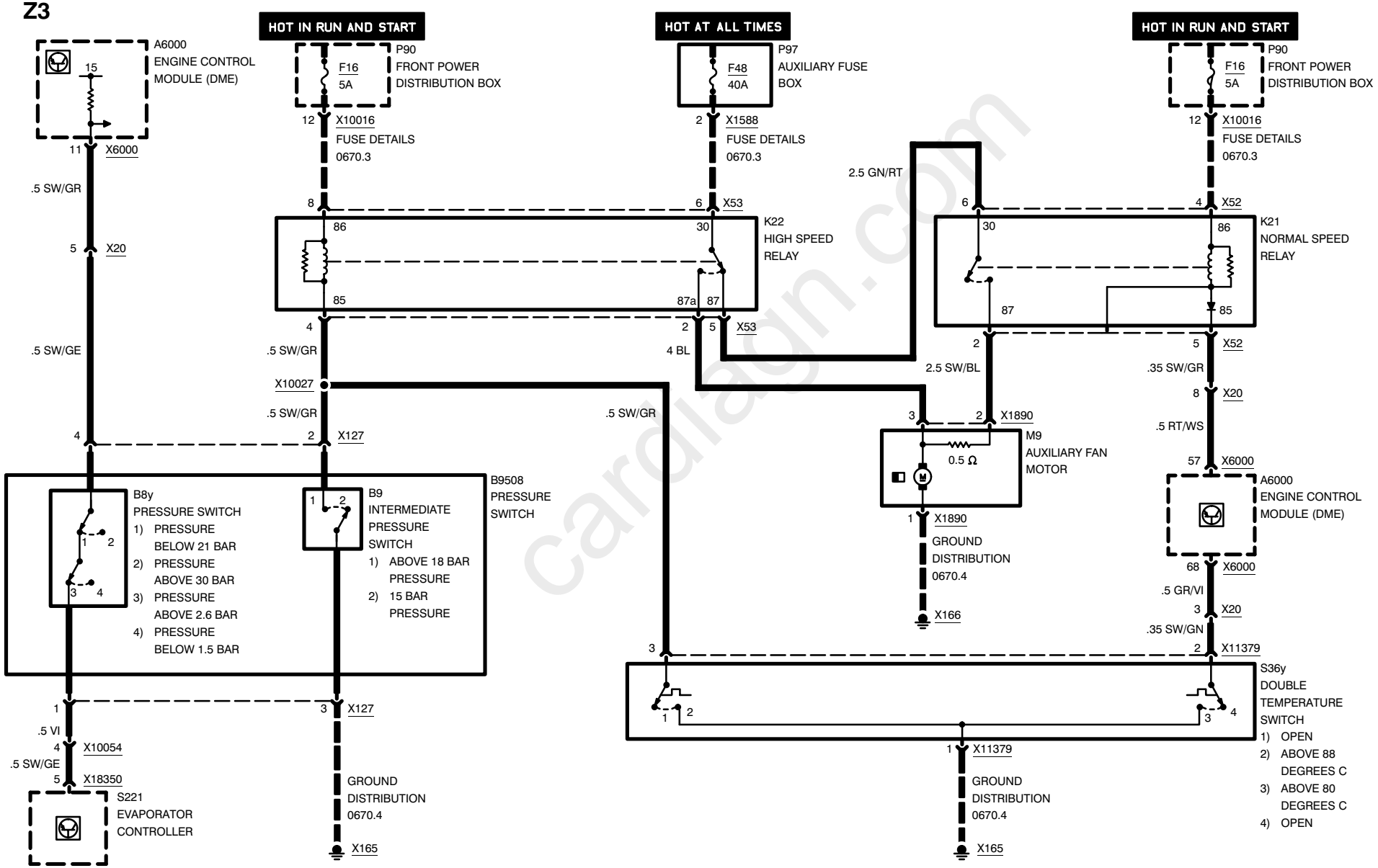


cardiagn.com



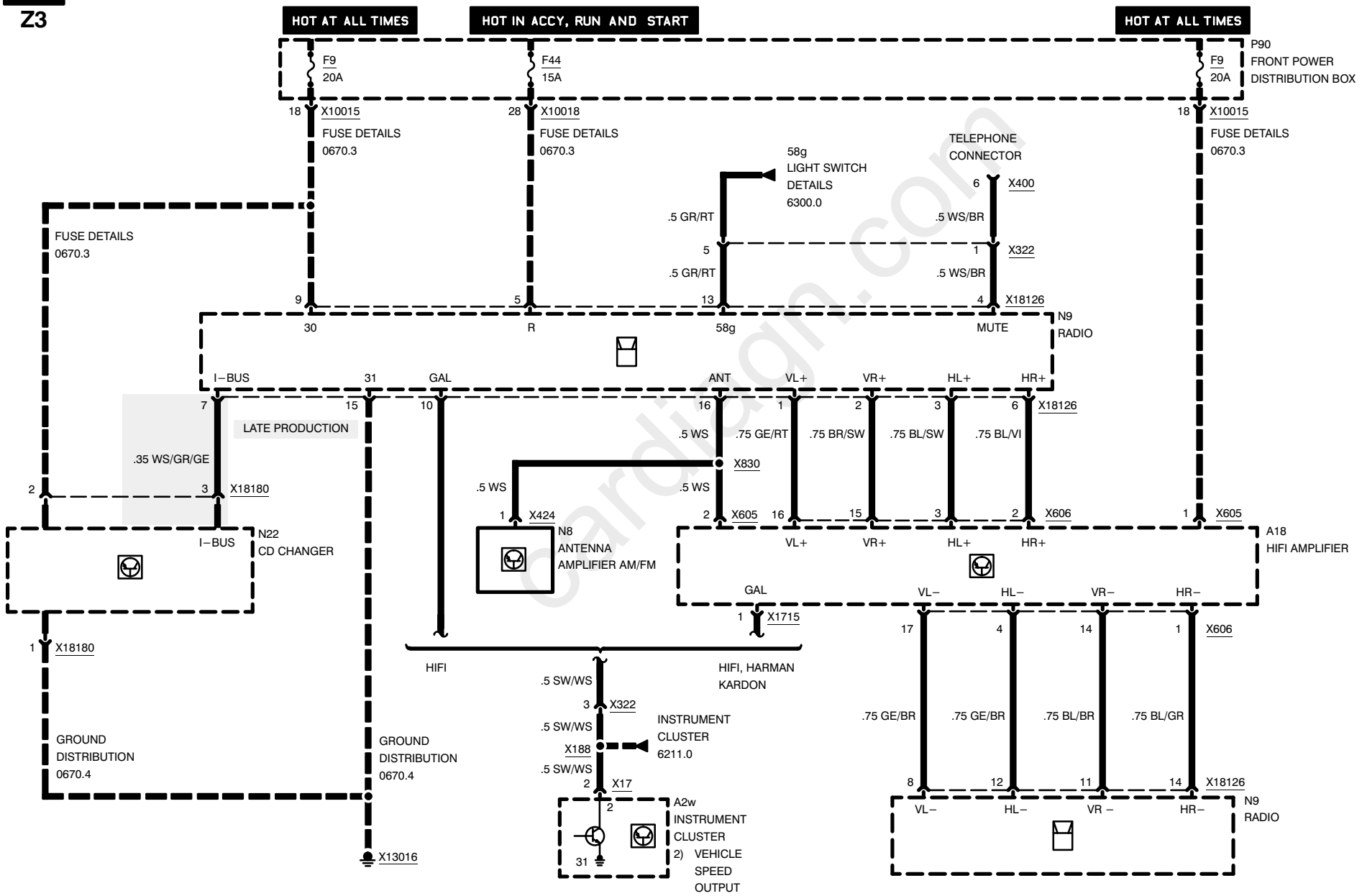
cardiagn.com

AUXILIARY FAN

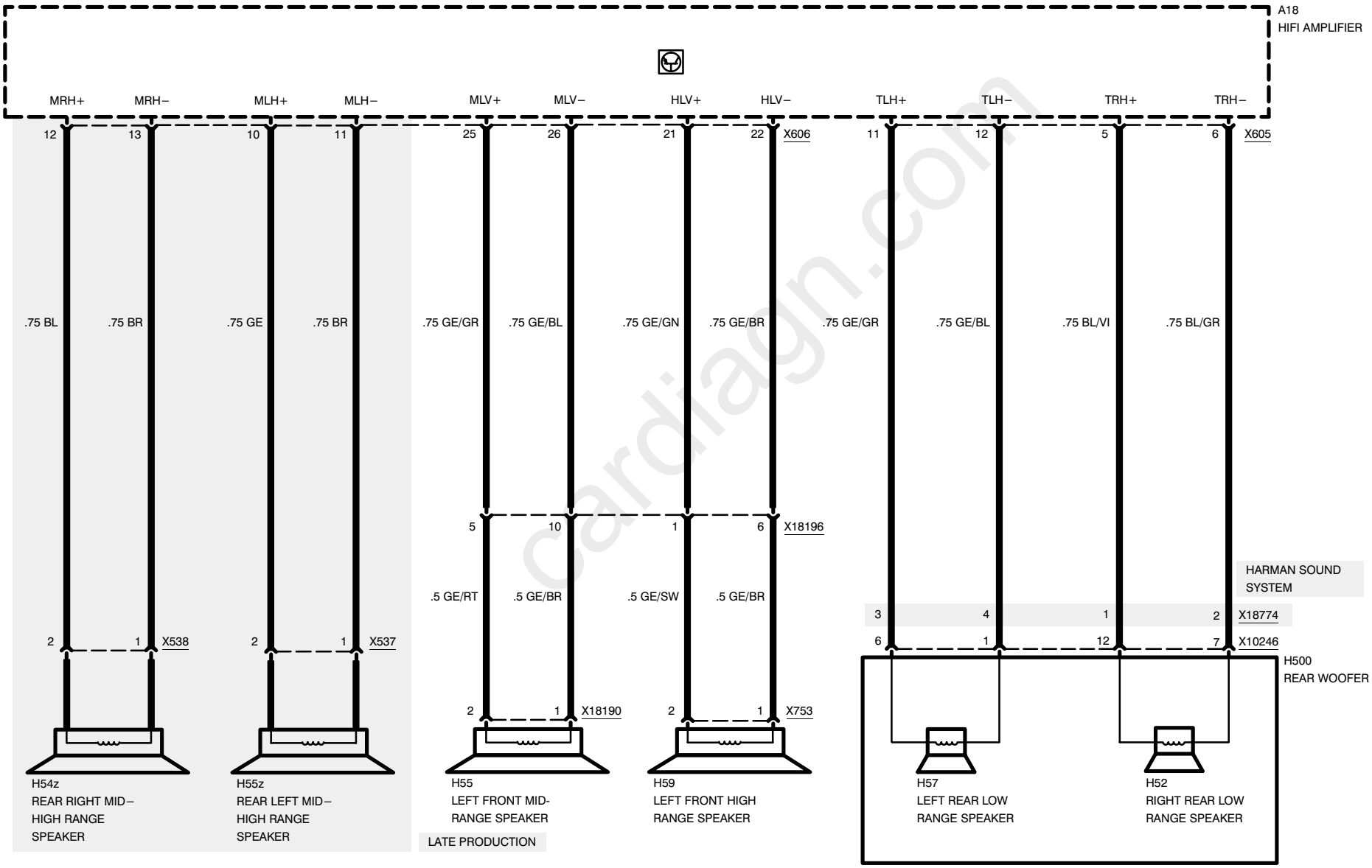


cardiagn.com

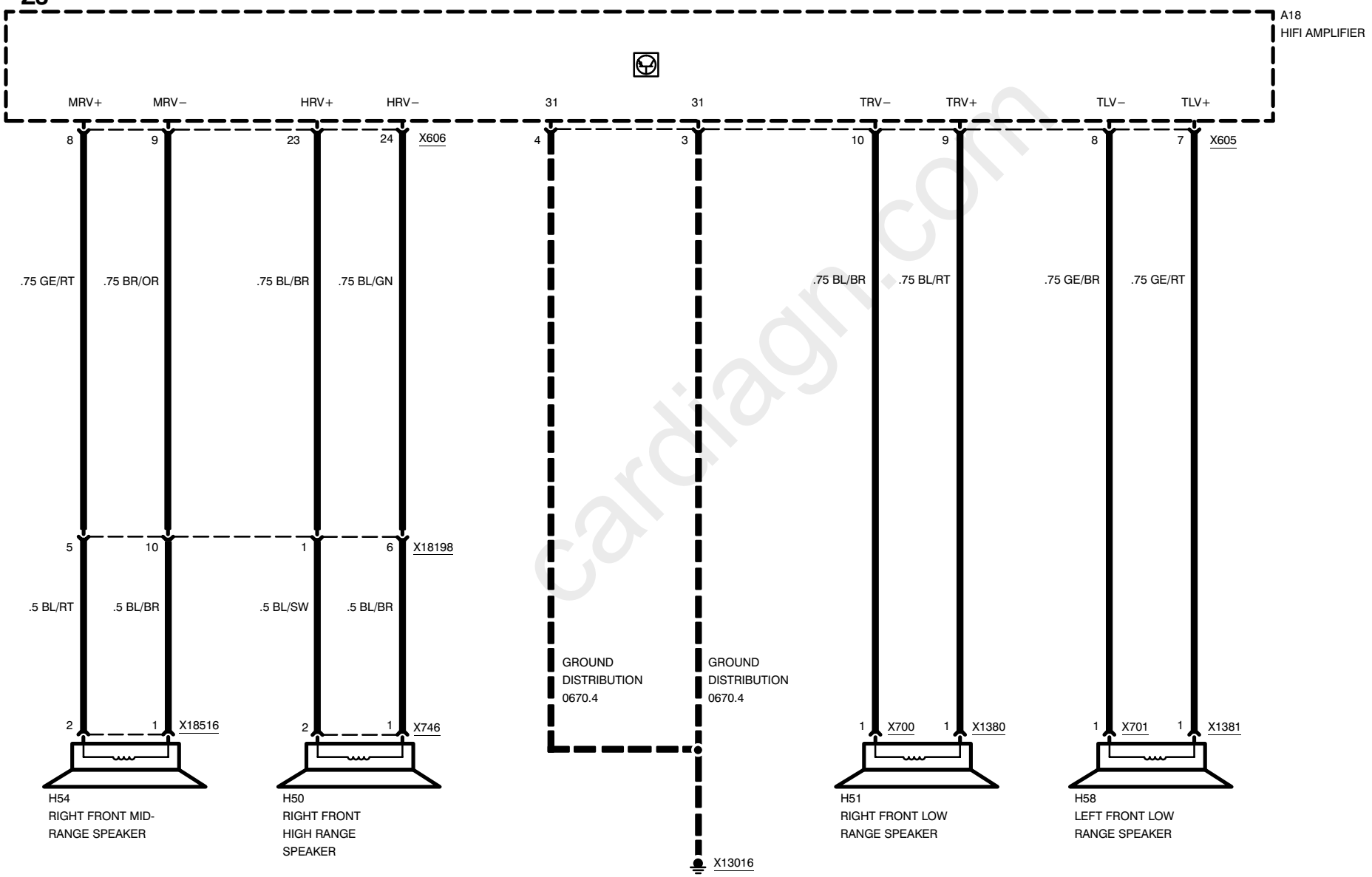
RADIO/HIFI



cardiagn.com

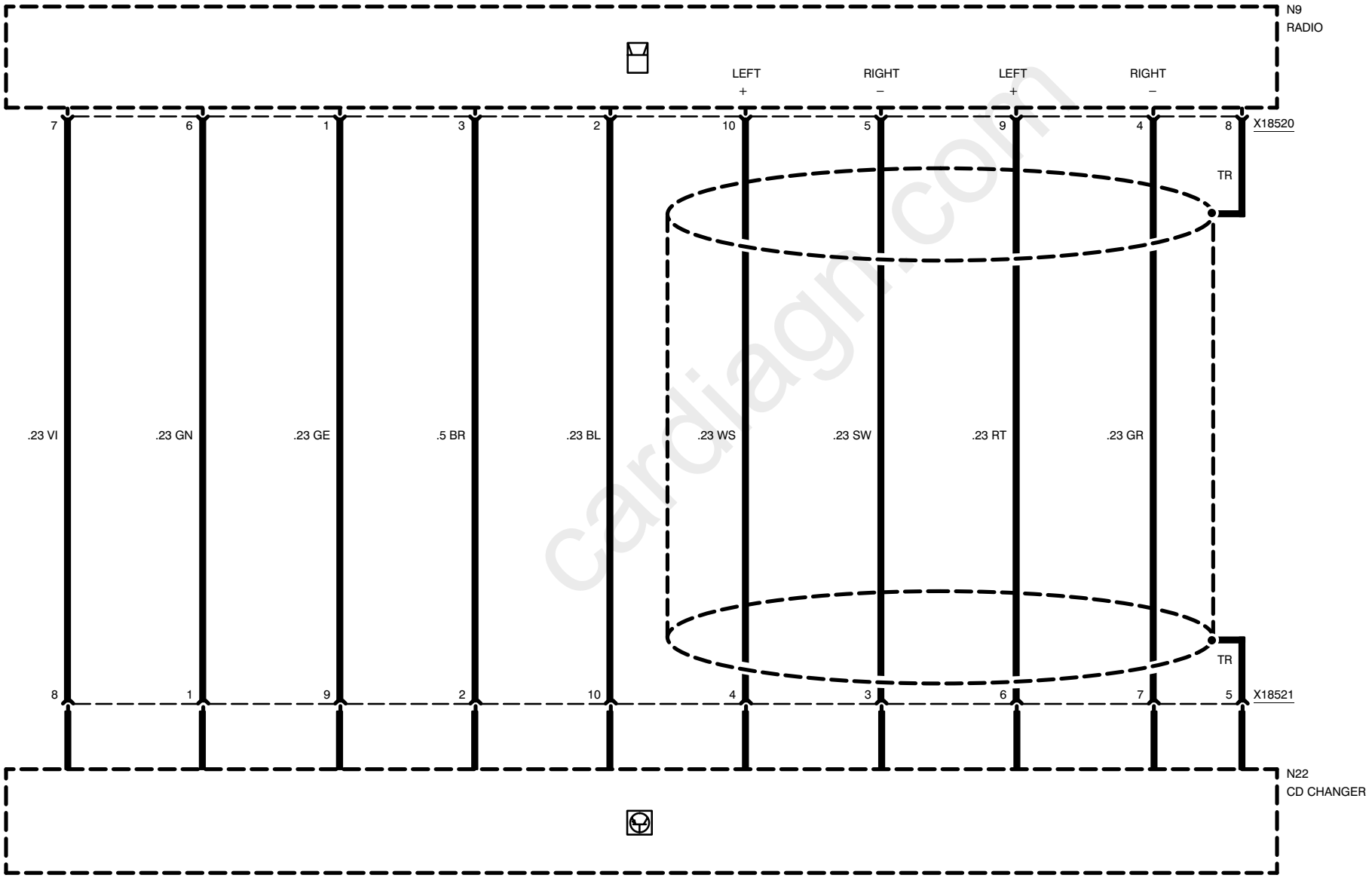


cardiagn.com



cardiagn.com

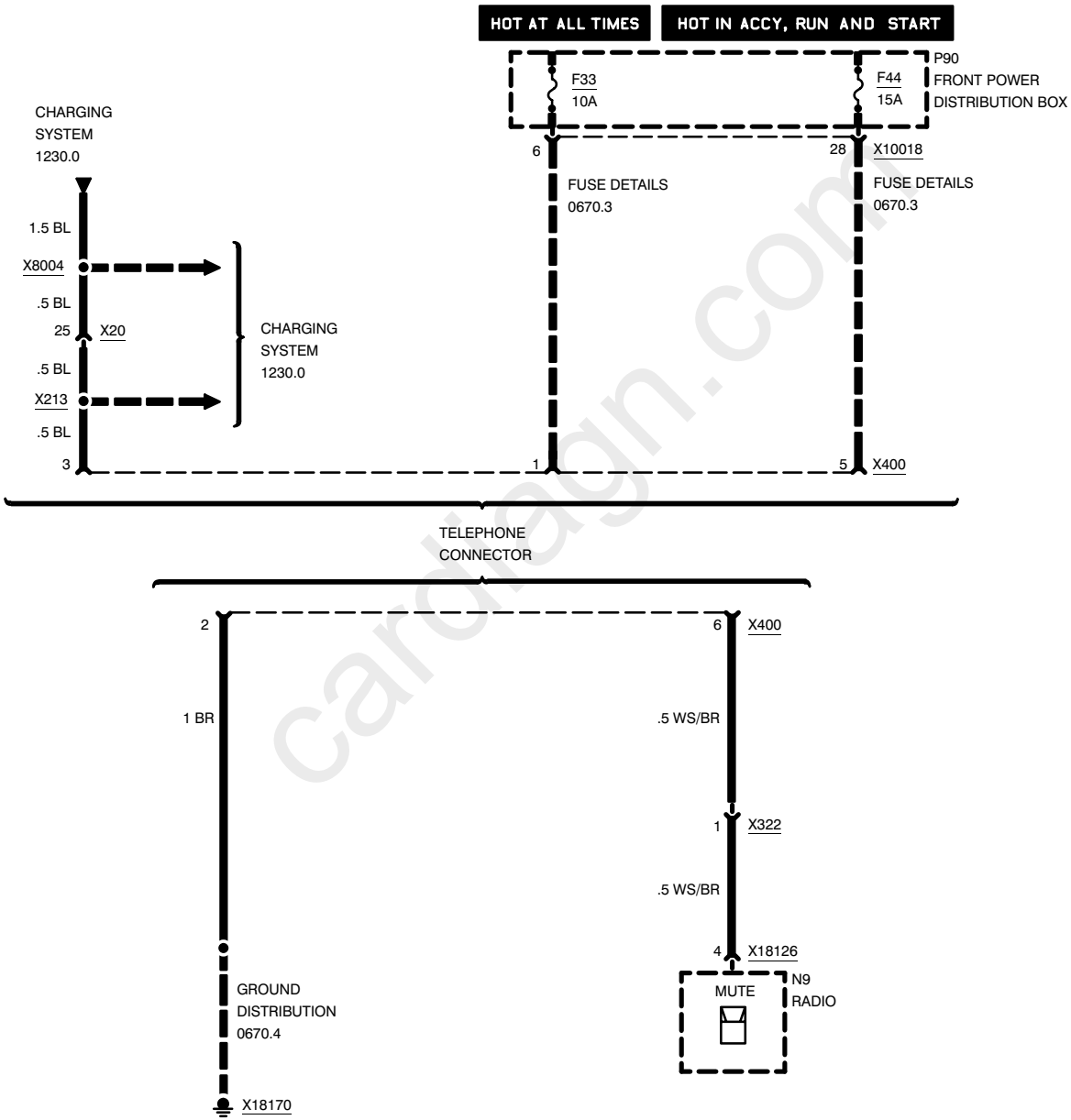
RADIO/HIFI



cardiagn.com

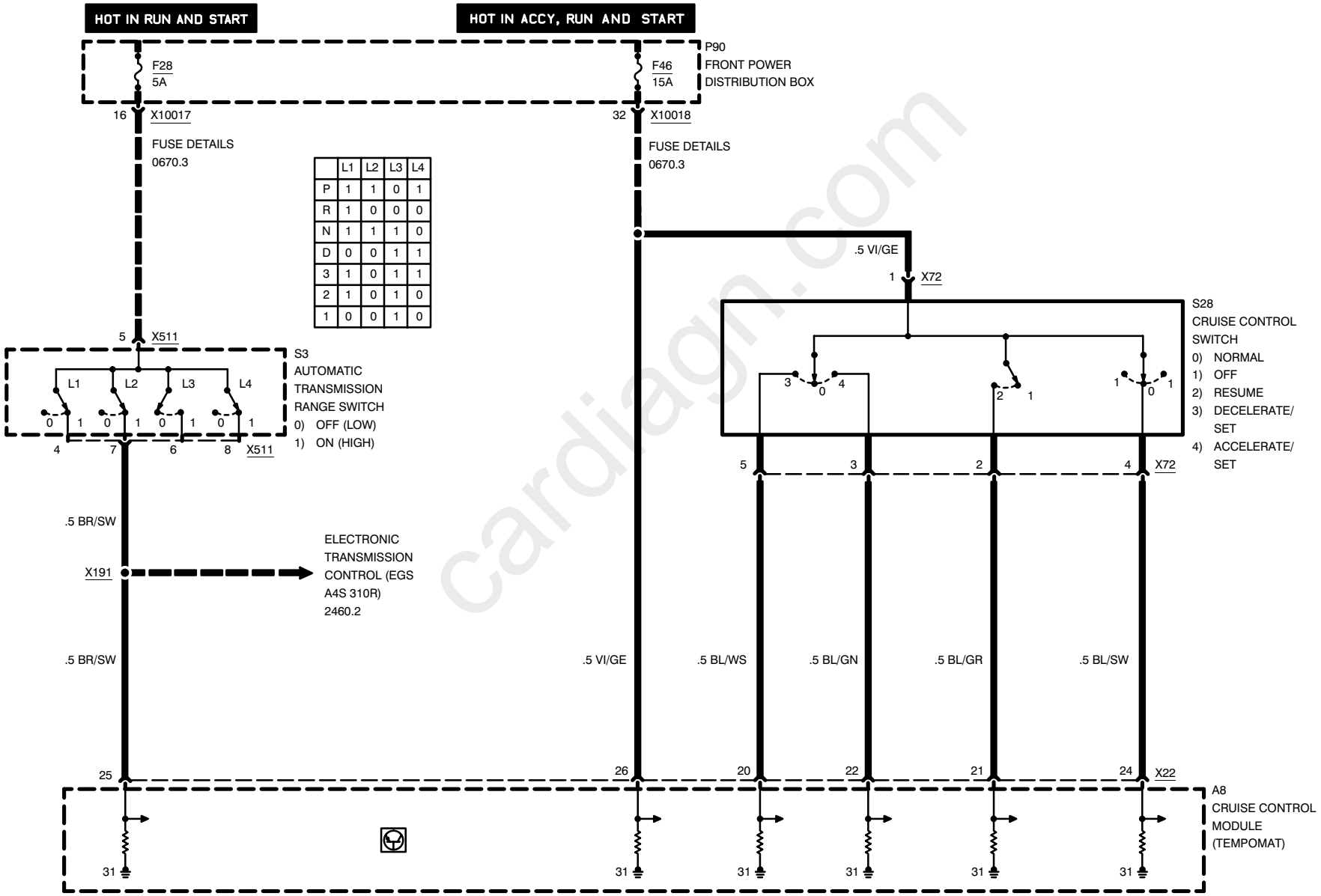
CELLULAR TELEPHONE (PROVISIONS)

PROVISIONS



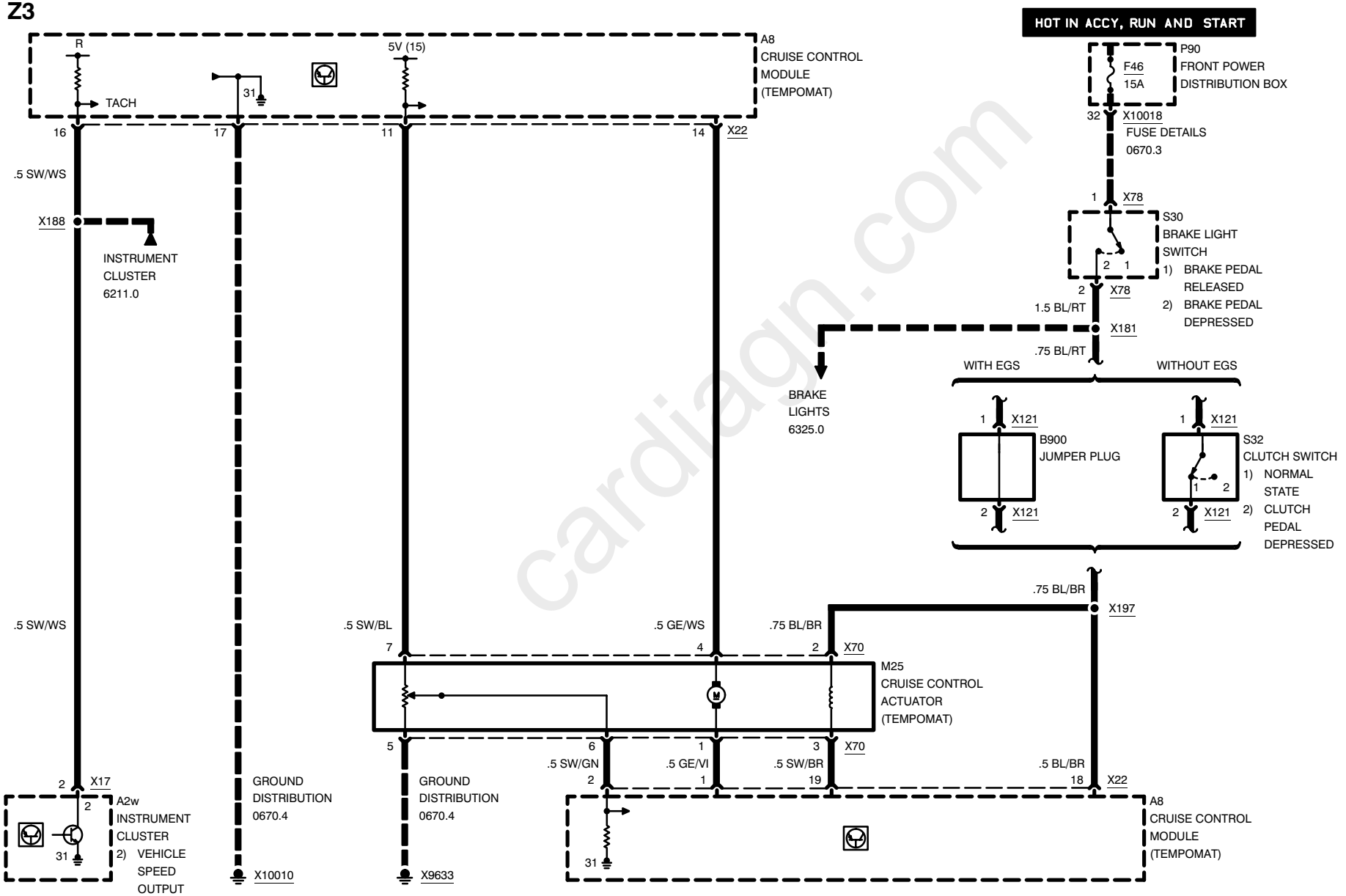
cardiagn.com

CRUISE CONTROL (TEMPOMAT)



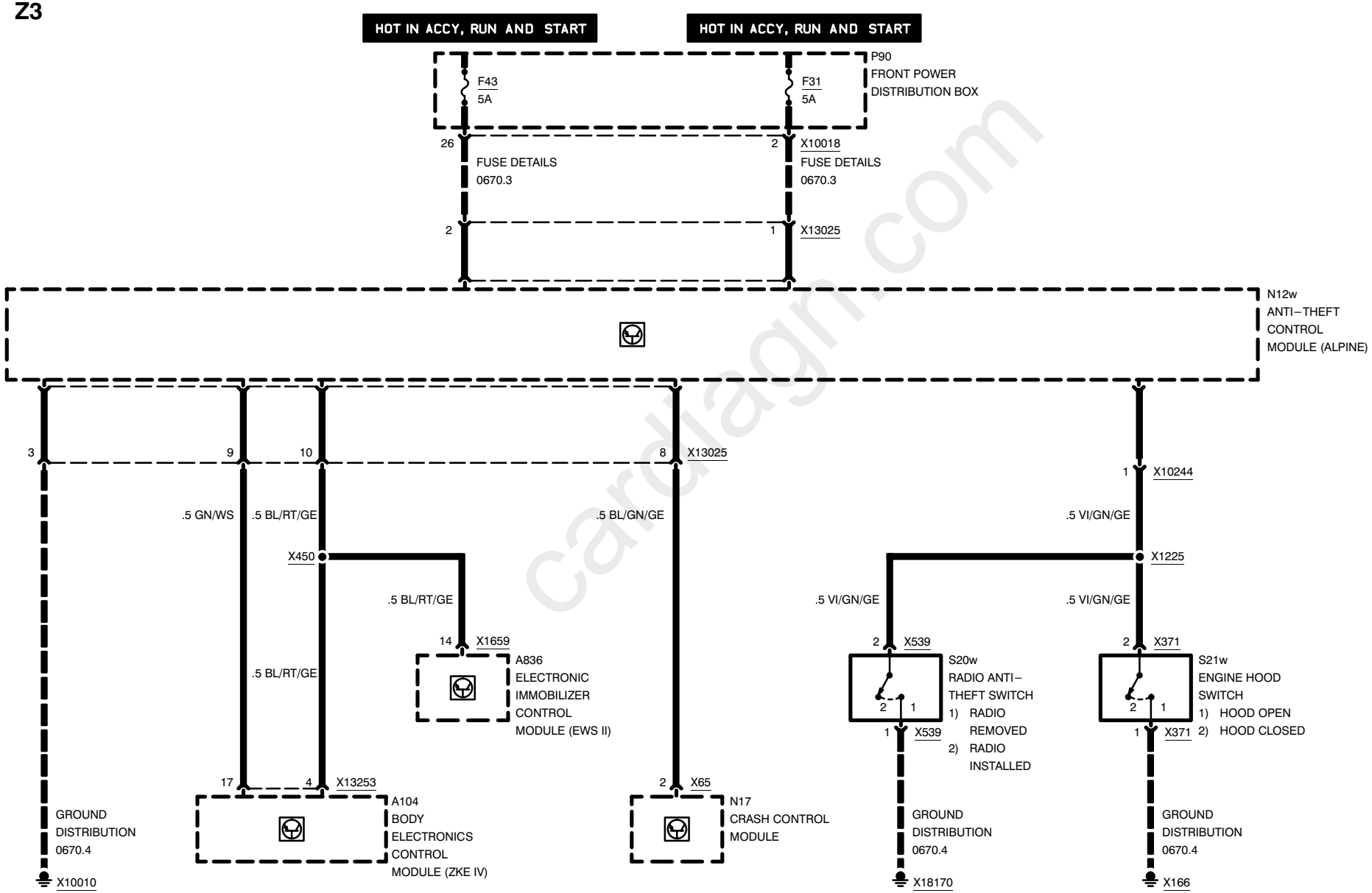
cardiagn.com

CRUISE CONTROL (TEMPOMAT)



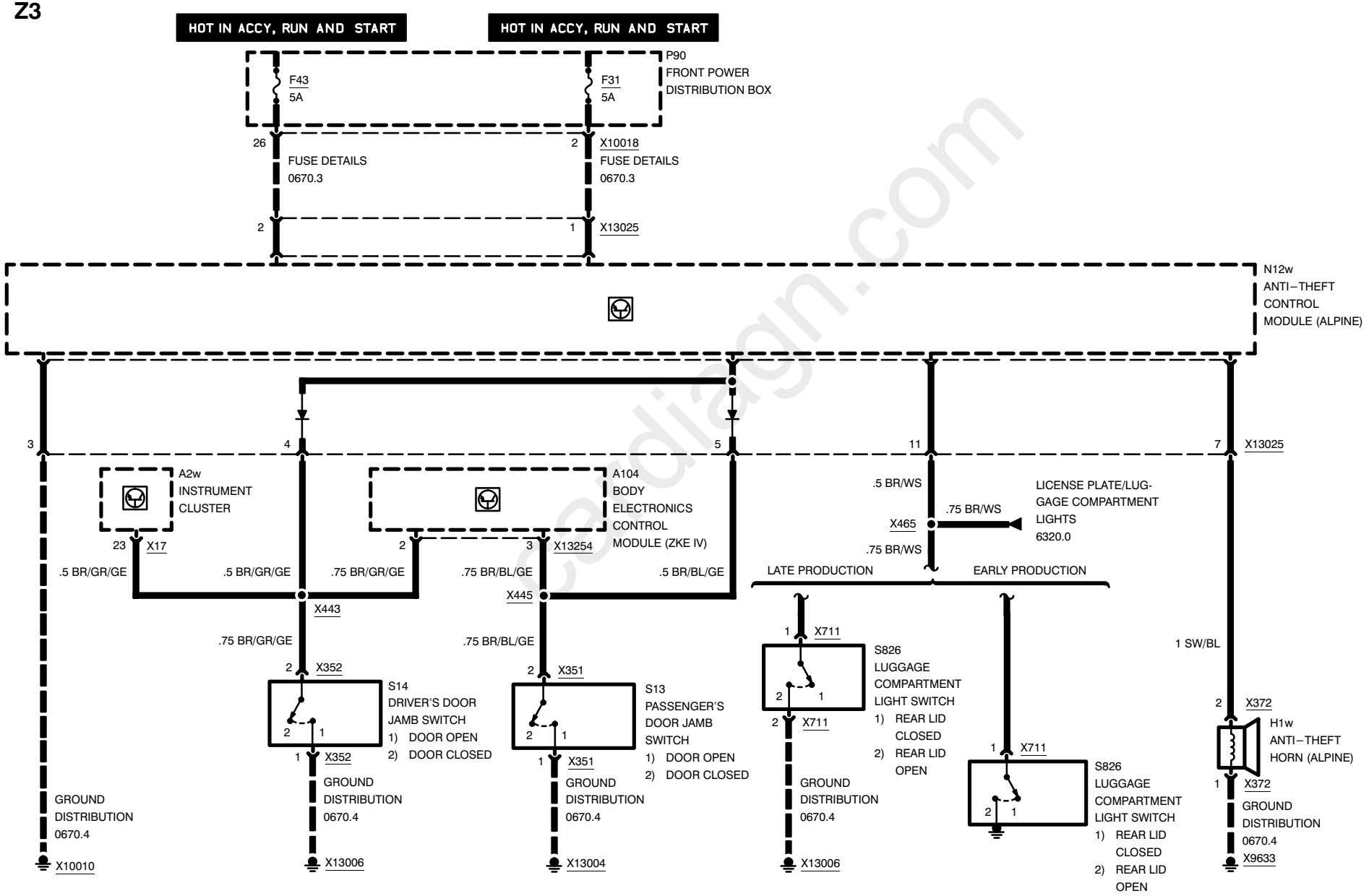
cardiagn.com

ANTI–THEFT SYSTEM (ALPINE)



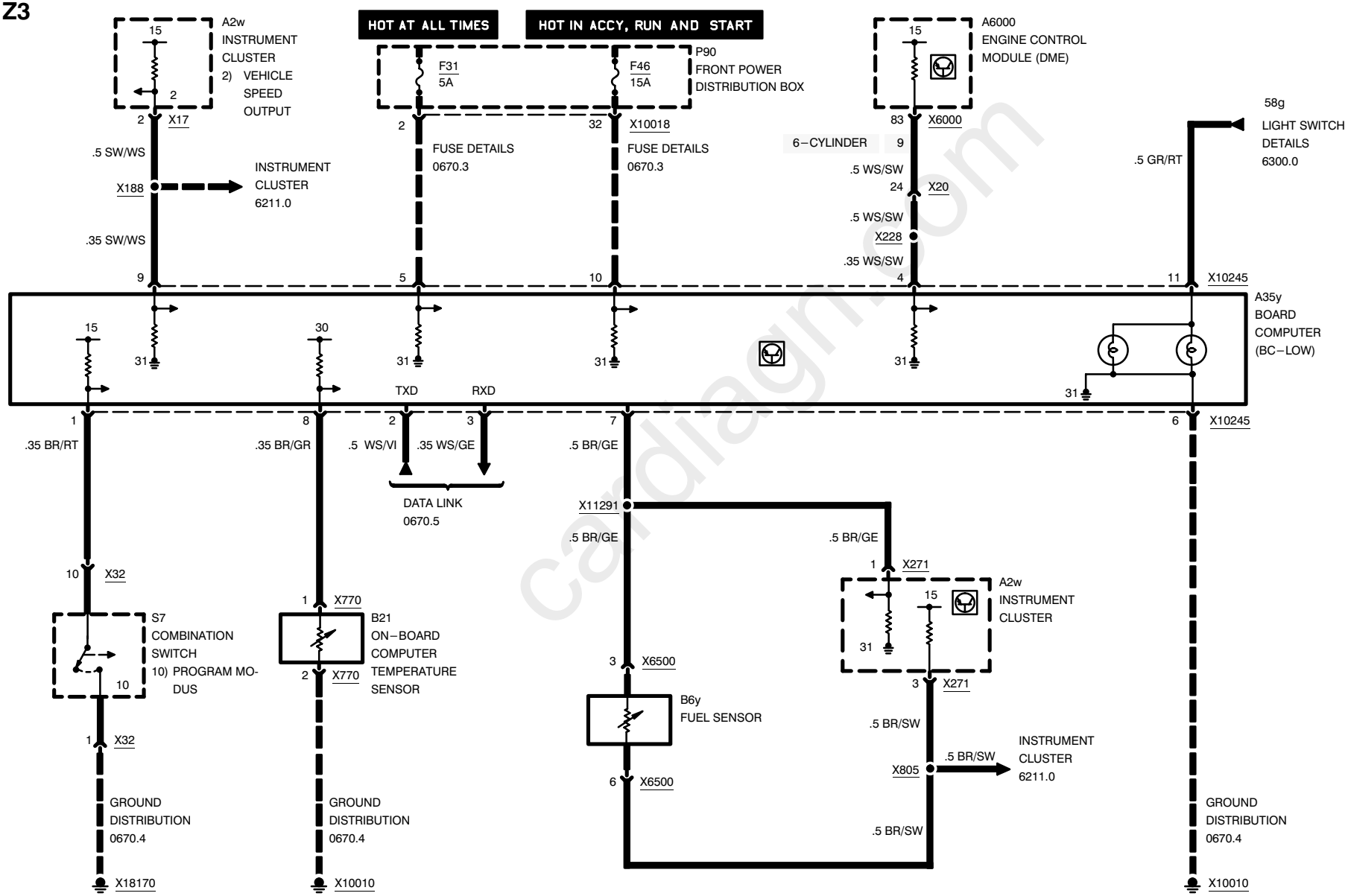
cardiagn.com

ANTI–THEFT SYSTEM (ALPINE)



cardiagn.com

BOARD COMPUTER (BC–LOW)



cardiagn.com

COMPONENT LOCATION CHART

COMP.	DESCRIPTION	LOCATION	7100.0	8500.0
A2w	INSTRUMENT CLUSTER	LH side of dash	20-2	
A8	CRUISE CONTROL MODULE (TEMPOMAT)	behind glove box	00-2	
A12	SUPPLEMENTAL RESTRAINT SYSTEM CONTROL MODULE	below center console	22-2	
A18	HIFI AMPLIFIER	in RH side of luggage compartment behind trim panel	27-3	
A35y	BOARD COMPUTER (BC−LOW)	center console	01-3	
A51	WIPER/WASHER MODULE	behind glove box	00-2	
A52	SLIP CONTROL MODULE (ABS/ASC)	behind glove box (4−cylinder)	00-1	
A52	SLIP CONTROL MODULE (ABS/ASC)	behind glove box (6−cylinder)	00-3	
A64	WIPER/WASHER MODULE (LOW II)	behind glove box	00-2	
A104	BODY ELECTRONICS CONTROL MODULE (ZKE IV)	behind glove box	00-2	
A110	DIGITAL CLOCK	center console		
A113	SEAT OCCUPANCY DETECTOR	under RH front seat (WITH SPORT SEAT)	41-2	
A113	SEAT OCCUPANCY DETECTOR	under RH front seat	24-1	
A202	ABS CONTROL MODULE/HYDRAULIC UNIT	rear LH side of engine compartment		
A605	FUSE HOLDER	center console (radio and console removed)	38-1	
A835	TRANSMITTER MODULE (EWS II)	near steering column	01-2	
A836	ELECTRONIC IMMOBILIZER CONTROL MODULE (EWS II)	behind glove box	00-1	
A6000	ENGINE CONTROL MODULE (DME)	rear RH side of engine compartment in E−Box	01-1	
A8500	TRANSMISSION CONTROL MODULE (EGS)	rear RH side of engine compartment in E−Box	01-1	

cardiagn.com

COMPONENT LOCATION CHART

COMP.	DESCRIPTION	LOCATION	7100.0	8500.0
B1	RIGHT FRONT SPEED SENSOR – ABS	on RH front wheel, above brake caliper		
B2	LEFT FRONT SPEED SENSOR – ABS	on LH front wheel, above brake caliper	12-3	
B3	RIGHT REAR SPEED SENSOR – ABS	on RH rear wheel, above brake caliper		
B4	LEFT REAR SPEED SENSOR – ABS	on LH rear wheel, above brake caliper		
B6y	FUEL SENSOR	in fuel tank		
B8y	PRESSURE SWITCH	front RH side of engine compartment		
B9	INTERMEDIATE PRESSURE SWITCH	front RH side of engine compartment		
B10	VEHICLE SPEED SENSOR	on differential	15-2	
B14	EVAPORATOR TEMPERATURE SENSOR	RH side of LH footwell	21-2	
B16	LEFT FRONT BRAKE PAD SENSOR	on LH front wheel, above brake caliper	12-3	
B17	RIGHT REAR BRAKE PAD SENSOR	behind RH rear wheel		
B18	BRAKE FLUID LEVEL SWITCH	rear LH side of engine compartment	09-1	
B21	ON–BOARD COMPUTER TEMPERATURE SENSOR	on front LH wheel well (4–cylinder)	12-1	
B21	ON–BOARD COMPUTER TEMPERATURE SENSOR	in RH front bumper (6–cylinder)	35-2	
B65	FUEL TANK PRESSURE SENSOR	top of fuel tank	39-2	
B900	JUMPER PLUG	LH footwell		
B6203	CRANKSHAFT POSITION/RPM SENSOR	rear LH side of engine compartment	32-3	
B6204	CAMSHAFT POSITION SENSOR (CYLINDER IDENTIFICATION)	front of engine	31-3	
B6205	INTAKE AIR TEMPERATURE SENSOR	front LH side of engine compartment (4–cylinder)	11-2	
B6205	INTAKE AIR TEMPERATURE SENSOR	front LH side of engine compartment (6–cylinder)	34-1	

cardiagn.com

COMPONENT LOCATION CHART

COMP.	DESCRIPTION	LOCATION	7100.0	8500.0
B6207	HOT FILM AIR MASS METER	LH side of engine compartment	33-3	
B6209	HALL EFFECT CAMSHAFT SENSOR	front of engine		
B6210y	OXYGEN SENSOR (IN FRONT OF CATALYTIC CONVERTER)	under center of car	35-1	
B6217	HOT FILM AIR MASS METER	front LH side of engine compartment	11-3	
B6220y	OXYGEN SENSOR (BEHIND CATALYTIC CONVERTER)	under center of car	35-1	
B6231	OIL PRESSURE SWITCH	lower LH side of engine	32-2	
B6232	ENGINE COOLANT TEMPERATURE SENSOR	front of engine	10-2	
B6240	KNOCK SENSOR	top front of engine (4−cylinder)	10-2	
B6240	KNOCK SENSOR	top front of engine (6−cylinder)	33-2	
B6247	CHARCOAL FILTER SHUT−OFF VALVE	under LH rear of car	36-1	
B6256	DUAL TEMPERATURE SENSOR (COOLANT TEMPERATURE)	rear of engine compartment	32-1	
B9508	PRESSURE SWITCH	front RH side of engine compartment	30-2	
B62001	OXYGEN SENSOR (IN FRONT OF CATALYTIC CONVERTER)	under center of car	14-3	
B62002	OXYGEN SENSOR (BEHIND CATALYTIC CONVERTER)	under center of car		
C101 .	CONTACT RING	top of steering column	38-3	
D100 .	DATA LINK CONNECTOR	rear RH side of engine compartment	31-1	
D110 .	OBD II CONNECTOR	center console right	28-3	
E7	LEFT HEADLIGHT	front LH side of engine compartment		

cardiagn.com

COMPONENT LOCATION CHART

COMP.	DESCRIPTION	LOCATION	7100.0	8500.0
E8	RIGHT HEADLIGHT	front RH side of engine compartment		
E9	REAR DEFOGGER I	hard top		
E11	LEFT HIGH BEAM LIGHT	near front LH headlight	29-1	
E12	RIGHT HIGH BEAM LIGHT	near front RH headlight		
E13	LEFT LOW BEAM LIGHT	near front LH headlight	29-1	
E14	RIGHT LOW BEAM LIGHT	near front RH headlight	29-3	
E15	LEFT PARK LIGHT	near front LH headlight		
E16	LEFT REAR LIGHT ASSEMBLY	LH side of body rear end		
E17	RIGHT REAR LIGHT ASSEMBLY	RH side of body rear end	03-1	
E19	RIGHT PARK LIGHT	near front RH headlight		
E21	LEFT FRONT MARKER LIGHT	front of vehicle		
E22	RIGHT FRONT MARKER LIGHT	front of vehicle		
E25	FRONT ASHTRAY LIGHT	center console		
E26	LEFT FOG LIGHT	under LH front bumper		
E27	RIGHT FOG LIGHT	under RH front bumper	13-2	
E28	FRONT CIGAR LIGHTER	center console		
E29	FRONT CIGAR LIGHTER LIGHT	center console	22-3	
E32	TRUNK COMPARTMENT LIGHT	in luggage compartment		
E43	LEFT LICENSE PLATE LIGHT	underside of trunk lid, near license plate		
E44	RIGHT LICENSE PLATE LIGHT	underside of trunk lid, near license plate		
E51	LEFT WASHER JET HEATER	on underside of engine hood	16-2	
E52	RIGHT WASHER JET HEATER	on underside of engine hood	16-2	

cardiagn.com

COMPONENT LOCATION CHART

COMP.	DESCRIPTION	LOCATION	7100.0	8500.0
E56 . . .	DRIVER'S SEATBACK HEATER	in top of LH backrest		
E57 . . .	DRIVER'S SEAT HEATER	under LH front seat		
E58 . . .	PASSENGER'S SEAT HEATER	underside of RH front seat		
E59 . . .	PASSENGER'S SEATBACK HEATER	in top of RH backrest		
E82 . . .	TRANSMISSION POSITION INDICATOR LIGHT	center console	22-1	
E99 . . .	HARD TOP CONNECTOR 1	near LH rear wheel well		
E104 .	THROTTLE FLAP HEATER	front of engine		
E105 .	HEAT/A/C CONTROL PANEL ILLUMINATION	center of dash	21-3	
E106 .	HEAT/A/C CONTROL PANEL ILLUMINATION	center of dash	21-3	
E800 .	FRONT LEFT INTERIOR LIGHT	near interior rear view mirror		
F97 . . .	FUSIBLE LINK	in RH side of luggage compartment	03-1	
G1 . . .	BATTERY	in RH side of luggage compartment	03-1	
G5 . . .	DRIVER'S AIR BAG GAS GENERATOR	behind steering wheel		
G6 . . .	PASSENGER'S AIR BAG GAS GENERATOR	behind glove box above		
G12 . .	DRIVER'S SIDE PYROTECHNICAL BELT TENSIONER	in LH front seat belt buckle	38-2	
G13 . .	PASSENGER'S SIDE PYROTECHNICAL BELT TENSIONER	in RH front seat belt buckle	38-2	
G6430	B+ JUMP START JUNCTION POINT	rear RH side of engine compartment	03-2	
G6509	GENERATOR	front LH side of engine compartment	02-3	
H1w . .	ANTI−THEFT HORN (ALPINE)	rear LH side of engine compartment	09-1	

cardiagn.com

COMPONENT LOCATION CHART

COMP.	DESCRIPTION	LOCATION	7100.0	8500.0
H2	LEFT HORN	under LH front bumper		
H3	RIGHT HORN	RH front of wheel well	13-2	
H4	RIGHT FRONT TURN LIGHT	front of vehicle		
H7	LEFT FRONT TURN LIGHT	front of vehicle		
H8	RIGHT FRONT AUXILIARY TURN LIGHT	front of vehicle		
H9	LEFT FRONT AUXILIARY TURN LIGHT	front of vehicle		
H10	CHIME MODULE	below LH side of dash		
H34	HIGH LEVEL STOP LIGHT	on lift gate		
H50	RIGHT FRONT HIGH RANGE SPEAKER	in upper RH front door		
H51	RIGHT FRONT LOW RANGE SPEAKER	in lower RH A−pillar		
H52	RIGHT REAR LOW RANGE SPEAKER	in rear speaker box		
H54	RIGHT FRONT MIDRANGE SPEAKER	in upper RH front door		
H54z	REAR RIGHT MID−HIGH RANGE SPEAKER	in rear speaker box	39-3	
H55	LEFT FRONT MIDRANGE SPEAKER	in upper LH front door		
H55z	REAR LEFT MID−HIGH RANGE SPEAKER	in rear speaker box	40-1	
H57	LEFT REAR LOW RANGE SPEAKER	in rear speaker box		
H58	LEFT FRONT LOW RANGE SPEAKER	in lower LH A−pillar		
H59	LEFT FRONT HIGH RANGE SPEAKER	in upper LH front door		
H500	REAR WOOFER	in rear speaker box		
I1008	SEAT MAT	in passenger's seat area		
K2	HORN RELAY	rear LH side of engine compartment in Power Distribution Box	09-2	

cardiagn.com

COMPONENT LOCATION CHART

COMP.	DESCRIPTION	LOCATION	7100.0	8500.0
K4	BLOWER RELAY	rear LH side of engine compartment in Power Distribution Box	09-2	
K9	UNLOADER RELAY, TERMINAL 15	rear LH side of engine compartment in Power Distribution Box	09-3	
K10	ABS RELAY	rear LH side of engine compartment in Power Distribution Box	09-3	
K16	HAZARD FLASHER RELAY	rear LH side of engine compartment in Power Distribution Box	09-2	
K19	COMPRESSOR CONTROL RELAY	rear LH side of engine compartment in Power Distribution Box	09-3	
K21	NORMAL SPEED RELAY	rear LH side of engine compartment in Power Distribution Box	09-3	
K22	HIGH SPEED RELAY	rear LH side of engine compartment in Power Distribution Box	09-3	
K46	HIGH BEAM LIGHT RELAY	footwell, driver's side	19-1	
K47	FRONT FOG LIGHT RELAY	rear LH side of engine compartment in Power Distribution Box	09-2	
K48	LOW BEAM LIGHT RELAY	rear LH side of engine compartment in Power Distribution Box	09-2	
K75	ABS PUMP MOTOR RELAY	rear LH side of engine compartment in Power Distribution Box	09-3	
K910	PASSENGER'S SEAT TILT ADJUST CUT−OFF RELAY	underside of RH front seat	41-1	
K911	PASSENGER'S SEAT LENGTH ADJUST CUT−OFF RELAY	underside of RH front seat	41-1	
K920	DRIVER'S SEAT TILT ADJUST CUT−OFF RELAY	underside of LH front seat	40-2	
K921	DRIVER'S SEAT LENGTH ADJUST CUT−OFF RELAY	underside of LH front seat	40-2	
K6300	ENGINE CONTROL MODULE RELAY	rear RH side of engine compartment in E−Box (6−cylinder)	01-1	
K6300	ENGINE CONTROL MODULE RELAY	rear RH side of engine compartment in E−Box (4−cylinder)	36-3	
K6304	SECONDARY AIR PUMP RELAY	rear RH side of engine compartment in E−Box (6−cylinder)	01-1	
K6304	SECONDARY AIR PUMP RELAY	rear LH side of engine compartment (4−cylinder)	37-1	

cardiagn.com

COMPONENT LOCATION CHART

COMP.	DESCRIPTION	LOCATION	7100.0	8500.0
K6326	UNLOADER RELAY, TERMINAL 15	rear RH side of engine compartment in E−Box (6−cylinder)	01-1	
K6326	UNLOADER RELAY, TERMINAL 15	rear RH side of engine compartment in E−Box (4−cylinder)	36-3	
K6301w	FUEL PUMP RELAY	below LH side of dash	19-1	
K18363	CONVERTIBLE TOP RELAY I (CLOSE)	in LH side of luggage compartment	25-3	
K18364	CONVERTIBLE TOP RELAY II (OPEN)	in LH side of luggage compartment	25-3	
M2 ...	FUEL PUMP	in fuel tank		
M3 ...	WIPER MOTOR	rear of engine compartment		
M4 ...	WASHER PUMP	front RH side of engine compartment on washer fluid reservoir	08-3	
M7 ...	HEADLIGHT/FOG LIGHT WASHER PUMP	front RH side of engine compartment on washer fluid reservoir	08-3	
M9 ...	AUXILIARY FAN MOTOR	behind front grille		
M12 ..	DRIVER'S DOOR LOCK MOTOR	driver's door		
M13 ..	PASSENGER'S DOOR LOCK MOTOR	passenger's door		
M17 ..	TRUNK LOCK MOTOR	rear side of luggage compartment behind trim panel		
M21 ..	DRIVER'S WINDOW MOTOR	in driver's door	17-2	
M23 ..	PASSENGER'S WINDOW MOTOR	in passenger's door	18-3	
M25 ..	CRUISE CONTROL ACTUATOR (TEMPOMAT)	rear LH side of engine compartment	08-1	
M30 ..	BLOWER MOTOR	rear of engine compartment		
M51 ..	DRIVER'S SEAT MOVEMENT MOTOR	under LH front seat	25-1	
M51 ..	DRIVER'S SEAT MOVEMENT MOTOR	under LH front seat (WITH SPORT SEAT)	40-3	
M52 ..	DRIVER'S SEAT HEIGHT MOTOR	under LH front seat	25-1	
M52 ..	DRIVER'S SEAT HEIGHT MOTOR	under LH front seat (WITH SPORT SEAT)	40-3	

cardiagn.com

COMPONENT LOCATION CHART

COMP.	DESCRIPTION	LOCATION	7100.0	8500.0
M59	PASSENGER'S SEAT HEIGHT MOTOR	under RH front seat	24-1	
M60	PASSENGER'S SEAT MOVEMENT MOTOR	under RH front seat	24-1	
M93	AUXILIARY THROTTLE POSITION MOTOR (ADS)	front of engine	35-3	
M101	CONVERTIBLE TOP MOTOR	in LH side of luggage compartment	25-3	
M111	FRESH AIR RECIRCULATION MOTOR	RH side of LH footwell	21-2	
M6510	STARTER	rear LH side of engine compartment	02-2	
M6506	E−BOX FAN	front RH side of engine compartment in E−Box		
N8	ANTENNA AMPLIFIER AM/FM	in LH side of luggage compartment behind trim panel		
N9	RADIO	center console		
N12w	ANTI−THEFT CONTROL MODULE (ALPINE)	behind glove box		
N17	CRASH CONTROL MODULE	footwell, driver's side	19-1	
N22	CD CHANGER	in LH forward side of luggage compartment		
P90	FRONT POWER DISTRIBUTION BOX	rear LH side of engine compartment		
P97	AUXILIARY FUSE BOX	below LH side of dash	19-1	
R11	BLOWER RESISTORS	rear of engine compartment behind firewall		
R31	AUXILIARY THROTTLE POSITION SENSOR	front of engine (6−cylinder)	33-3	
R31	AUXILIARY THROTTLE POSITION SENSOR	front of engine (4−cylinder)	37-3	
R6252	THROTTLE POSITION SENSOR	front of engine (4−cylinder)	10-3	
R6252	THROTTLE POSITION SENSOR	front of engine (6−cylinder)	33-3	
S2	IGNITION SWITCH	LH side of dash		

cardiagn.com

COMPONENT LOCATION CHART

COMP.	DESCRIPTION	LOCATION	7100.0	8500.0
S3	AUTOMATIC TRANSMISSION RANGE SWITCH	center console	22-1	
S4	HORN SWITCH	on steering wheel		
S5	WIPER/WASHER SWITCH	LH side of dash RH side of steering column above		
S6	ASC SWITCH	center console		
S7	COMBINATION SWITCH	LH side of dash LH side of steering column above		
S8	LIGHT SWITCH	LH side of dash		
S10	FOG LIGHT SWITCH	LH side of dash		
S13	PASSENGER'S DOOR JAMB SWITCH	RH B−pillar	26-1	
S14	DRIVER'S DOOR JAMB SWITCH	LH B−pillar	27-1	
S17	MIRROR CONTROL SWITCH	in upper LH front door		
S18	HAZARD SWITCH	center console bottom		
S20w	RADIO ANTI−THEFT SWITCH	center console (radio and console removed)	38-1	
S21w	ENGINE HOOD SWITCH	near LH headlight assembly	29-1	
S28	CRUISE CONTROL SWITCH	LH side of dash RH side of steering column above		
S30	BRAKE LIGHT SWITCH	LH footwell	20-1	
S31	PARK BRAKE SWITCH	center console on rear of park brake lever		
S32	CLUTCH SWITCH	LH footwell	20-1	
S36	TEMPERATURE SWITCH	front RH side of engine compartment	30-1	
S36y	DOUBLE TEMPERATURE SWITCH	front RH side of engine compartment	30-1	
S47	DRIVER'S DOOR LOCK SWITCH	in driver's door	17-1	
S49	PASSENGER'S DOOR LOCK SWITCH	in passenger's door		

cardiagn.com

COMPONENT LOCATION CHART

COMP.	DESCRIPTION	LOCATION	7100.0	8500.0
S51 . . .	DRIVER'S SEAT, SEAT CONTROL SWITCH .	LH front seat		
S53 . . .	DRIVER'S SEAT, SEAT HEATER SWITCH . . .	center console (EARLY PRODUCTION)	23-1	
S53 . . .	DRIVER'S SEAT, SEAT HEATER SWITCH . . .	center console (behind seat) (LATE PRODUCTION)		
S54 . . .	PASSENGER'S SEAT, SEAT HEATER SWITCH	center console (EARLY PRODUCTION)	23-1	
S54 . . .	PASSENGER'S SEAT, SEAT HEATER SWITCH	center console (behind seat) (LATE PRODUCTION)		
S56 . . .	PASSENGER'S SEAT, SEAT CONTROL SWITCH	RH front seat		
S58 . . .	DRIVER'S SEAT BELT SWITCH	in LH front seat belt buckle		
S59 . . .	PASSENGER'S SEAT BELT SWITCH	in RH front seat belt buckle		
S75 . . .	BLOWER SWITCH	center of dash	21-3	
S76 . . .	REAR WINDOW DEFOGGER SWITCH	center console		
S126y	DRIVER'S POWER WINDOW SWITCH	center console near gearshift lever		
S127y	PASSENGER'S POWER WINDOW SWITCH	center console near gearshift lever		
S143 .	CONVERTIBLE TOP ACTUATING SWITCH .	center console		
S164 .	CONVERTIBLE TOP END–POSITION MICRO SWITCH	at convertible top linkage	17-3	
S198 .	JET HEATER THERMOSWITCH	on front LH wheel well	12-1	
S220 .	AIR CONDITIONING/RECIRCULATING SWITCH ASSEMBLY	center console	01-3	
S221 .	EVAPORATOR CONTROLLER	RH side of LH footwell	21-2	
S235 .	STARTER IMMOBILIZATION SWITCH	LH footwell		
S408 .	SIDE LIGHT SWITCH	near interior rear view mirror	28-2	

cardiagn.com

COMPONENT LOCATION CHART

COMP.	DESCRIPTION	LOCATION	7100.0	8500.0
S531	TEMPERATURE WHEEL SWITCH	center of dash	21-3	
S826	LUGGAGE COMPARTMENT LIGHT SWITCH	underside of trunk lid		
S910	DRIVER'S SEAT LIMIT SWITCH	in driver's seatback		
S911	PASSENGER'S SEAT LIMIT SWITCH	in passenger's seatback		
S8503	PROGRAM SWITCH	center console	22-1	
S8507	KICK−DOWN SWITCH	behind gas pedal	19-3	
S8511	REVERSING LIGHT SWITCH	LH side of transmission	14-2	
T6151	CYL. 1 IGNITION COIL	RH side of engine compartment		
T6152	CYL. 2 IGNITION COIL	RH side of engine compartment		
T6153	CYL. 3 IGNITION COIL	RH side of engine compartment		
T6154	CYL. 4 IGNITION COIL	RH side of engine compartment		
T6155	CYL. 5 IGNITION COIL	RH side of engine compartment		
T6156	CYL. 6 IGNITION COIL	RH side of engine compartment		
V7	ASC DIODE	Power Distribution Box rear LH side of engine compartment		
X0	B+ JUNCTION POINT	rear LH side of engine compartment in Power Distribution Box	02-1	
X2	BATTERY B+ START POINT	rear LH side of engine compartment in Power Distribution Box		
X16	(26 PINS, NATURAL)	LH side of dash rear side of instrument cluster, A2w	20-2	00-3
X17	(26 PINS, BLUE)	LH side of dash rear side of instrument cluster, A2w	20-2	00-3
X20	(25 PINS, BLACK)	rear LH side of engine compartment	08-1	04-4
X22	(26 PINS, BLUE)	behind glove box	00-2	00-3
X29	(1 PIN, −−−)	LH side of steering column		

cardiagn.com

COMPONENT LOCATION CHART

COMP.	DESCRIPTION	LOCATION	7100.0	8500.0
X32 . . .	(12 PINS, NATURAL)	on steering column	19-2	02-4
X33 . . .	(12 PINS, BLACK)	on steering column	19-2	02-4
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)	Power Distribution Box rear LH side of engine compartment		03-4
X64 . . .	(9 PINS, BLACK)	Power Distribution Box rear LH side of engine compartment		03-4
X65 . . .	(9 PINS, BLACK)	below LH side of dash		03-4
X69 . . .	(25 PINS, GRAY)	rear LH side of engine compartment	08-1	04-4
X70 . . .	(8 PINS, BLACK)	rear LH side of engine compartment	08-1	06-2
X72 . . .	(6 PINS, NATURAL)	on steering column	19-2	05-3
X74 . . .	(50 PINS, YELLOW)	below center console	22-2	10-2
X78 . . .	(4 PINS, BLACK)	on steering column	20-1	03-1
X82 . . .	(3 PINS, BLACK)	under radiator	13-1	05-4
X85 . . .	(3 PINS, BLACK)	rear LH side of engine compartment	11-1	05-4
X87 . . .	(3 PINS, BLACK)	RH top of radiator	30-1	05-4
X105 .	(2 PINS, GRAY)	on underside of engine hood	16-2	

carmagn.com

COMPONENT LOCATION CHART

COMP.	DESCRIPTION	LOCATION	7100.0	8500.0
X106	(2 PINS, GRAY)	on underside of engine hood	16-2	
X107	(2 PINS, GRAY)	front RH side of engine compartment on washer fluid reservoir	08-3	
X111	(2 PINS, BLACK)	rear LH side of engine compartment	09-1	
X113	(3 PINS, GRAY)	behind RH front wheel	13-3	06-3
X114	(3 PINS, GRAY)	behind LH front wheel	12-2	06-3
X118	(2 PINS, BLACK)	behind LH front wheel	12-2	
X121	(2 PINS, WHITE)	LH footwell	20-1	
X123	(2 PINS, GRAY)	front RH side of engine compartment on washer fluid reservoir	08-3	
X127	(4 PINS, BLACK)	front RH side of engine compartment	30-2	05-3
X128	(3 PINS, BLACK)	front LH side of engine compartment	11-2	02-5
X130	(2 PINS, GRAY)	near front LH headlight	29-2	
X131	(2 PINS, BLACK)	near front LH headlight	29-2	
X132	(2 PINS, BLACK)	on front LH wheel well	12-1	
X133	(2 PINS, BLACK)	on front LH wheel well	13-2	
X134	(2 PINS, BLACK)	near front RH headlight	29-3	
X135	(2 PINS, GRAY)	near front RH headlight	29-3	
X137	(3 PINS, BLACK)	front RH side of engine compartment	30-3	02-5
X142	(3 PINS, GRAY)	under LH rear of car, ASC		06-3
X142	(2 PINS, GRAY)	under LH rear of car, ABS	16-1	
X143	(3 PINS, GRAY)	under RH rear of car, ASC		06-3
X143	(2 PINS, GRAY)	under RH rear of car, ABS	15-3	

carmagn.com

COMPONENT LOCATION CHART

COMP.	DESCRIPTION	LOCATION	7100.0	8500.0
X163	(3 PINS, BLACK)	front RH side of engine compartment on washer fluid reservoir near RH headlight assembly	30-2	05-4
X165	GROUND	front RH side of engine compartment	04-2	
X166	GROUND	front LH side of engine compartment	05-1	
X170	GROUND	behind LH footwell speaker grille	07-2	
X256	(26 PINS, BLACK)	RH A−pillar	18-1	03-5
X257	(26 PINS, BLACK)	LH A−pillar	16-3	03-5
X271	(12 PINS, BLACK)	LH side of dash rear side of instrument cluster, A2w	20-2	01-3
X275	(4 PINS, NATURAL)	under LH front seat	25-2	03-1
X275	(4 PINS, NATURAL)	under LH front seat (WITH SPORT SEAT)	40-3	03-1
X279	(4 PINS, NATURAL)	under RH front seat	24-2	03-1
X279	(4 PINS, NATURAL)	under RH front seat (WITH SPORT SEAT)	41-2	03-1
X285	(15 PINS, BLUE)	behind glove box	00-2	05-1
X295	(8 PINS, BLACK)	on steering column	19-2	03-3
X311	(3 PINS, BLACK)	in luggage compartment lid	28-1	01-1
X315	(2 PINS, BLACK)	in luggage compartment lid	28-1	
X316	(4 PINS, YELLOW)	center console near gearshift lever		07-1
X318	(8 PINS, BLACK)	in RH rear side of luggage compartment behind RH rear light assembly	03-1	02-1
X319	(8 PINS, BLACK)	in LH side of luggage compartment behind trim panel		02-1
X322	(6 PINS, BLACK)	footwell, driver's side	19-1	03-6
X324	(4 PINS, YELLOW)	center console near gearshift lever		07-1
X333	(4 PINS, NATURAL)	rear of engine compartment below center of cowl		03-1

cardiagn.com

COMPONENT LOCATION CHART

COMP.	DESCRIPTION	LOCATION	7100.0	8500.0
X336	(3 PINS, BLACK)	in upper RH A−pillar		01-1
X351	(3 PINS, BLACK)	RH B−pillar	26-1	01-1
X352	(3 PINS, BLACK)	LH B−pillar	27-1	01-1
X357	(2 PINS, WHITE)	near interior rear view mirror	28-2	
X371	(3 PINS, BLACK)	near front LH headlight	29-1	02-5
X372	(2 PINS, GRAY)	rear LH side of engine compartment	09-1	
X379	(1 PIN, NATURAL)	HARD TOP CONNECTOR 1		
X380	(1 PIN, NATURAL)	HARD TOP CONNECTOR 1		
X383	(2 PINS, BLACK)	on differential	15-2	
X389	(2 PINS, BLACK)	LEFT FRONT AUXILIARY TURN LIGHT		
X390	(2 PINS, BLACK)	RIGHT FRONT AUXILIARY TURN LIGHT		
X400	(8 PINS, BLACK)	center console (EARLY PRODUCTION)	23-2	02-1
X400	(8 PINS, BLACK)	center console (behind seat) (LATE PRODUCTION)		02-1
X413	(3 PINS, BLACK)	HIGH LEVEL STOP LIGHT		01-1
X423	(1 PIN, −−−)	below center console on rear of park brake lever		
X424	(1 PIN, −−−)	in LH side of luggage compartment behind trim panel		
X494	GROUND	below center console	07-1	
X503	(12 PINS, BLACK)	LH side of dash	20-3	07-2
X504	(4 PINS, NATURAL)	LH side of dash	20-3	03-1
X511	(8 PINS, BLACK)	center console	22-1	02-1
X516	(5 PINS, BLACK)	center console		02-6
X521	(6 PINS, BLUE)	center console		04-5

carmagn.com

COMPONENT LOCATION CHART

COMP.	DESCRIPTION	LOCATION	7100.0	8500.0
X522	(3 PINS, NATURAL)	RH side of LH footwell		04-3
X531	(1 PIN, NATURAL)	center console	22-3	
X532	(2 PINS, BLACK)	center console	22-3	
X537	(3 PINS, BLACK)	REAR LEFT MID−HIGH RANGE SPEAKER	40-1	01-1
X538	(3 PINS, BLACK)	REAR RIGHT MID−HIGH RANGE SPEAKER	39-3	01-1
X539	(2 PINS, BLACK)	center console (radio and console removed)	38-1	
X605	(12 PINS, BLACK)	in RH side of luggage compartment behind trim panel	27-3	01-5
X606	(26 PINS, BLACK)	in RH side of luggage compartment behind trim panel	27-3	00-3
X623	(4 PINS, BLACK)	in driver's door	17-2	07-1
X624	(4 PINS, BLACK)	in passenger's door	18-3	07-1
X625	(6 PINS, BLACK)	in driver's door	17-2	08-2
X641	(6 PINS, BLACK)	in passenger's door	18-2	07-4
X651	(6 PINS, YELLOW)	center console (EARLY PRODUCTION)	23-1	04-5
X651	(6 PINS, YELLOW)	center console (behind seat) (LATE PRODUCTION)		04-5
X658	(6 PINS, YELLOW)	center console (EARLY PRODUCTION)	23-1	04-5
X658	(6 PINS, YELLOW)	center console (behind seat) (LATE PRODUCTION)		04-5
X660	(6 PINS, BLACK)	LH front door behind door panel		07-4
X700	(1 PIN, −−−)	behind RH footwell speaker grille	23-3	
X701	(1 PIN, −−−)	behind LH footwell speaker grille		
X709	(2 PINS, BLACK)	underside of trunk lid, near license plate		
X710	(2 PINS, BLACK)	underside of trunk lid, near license plate		
X711	(2 PINS, BLACK)	in luggage compartment lid	28-1	

cardiagn.com

COMPONENT LOCATION CHART

COMP.	DESCRIPTION	LOCATION	7100.0	8500.0
X712	(1 PIN, BLACK)	in luggage compartment		
X713	(2 PINS, BLACK)	under RH rear of car	15-3	
X726	(2 PINS, NATURAL)	under LH front seat	25-1	
X726	(2 PINS, NATURAL)	under LH front seat (WITH SPORT SEAT)	40-3	
X728	(2 PINS, BLACK)	under LH front seat	25-1	
X728	(2 PINS, BLACK)	under LH front seat (WITH SPORT SEAT)	40-3	
X733	(4 PINS, BLACK)	under LH front seat	25-2	03-1
X733	(4 PINS, BLACK)	under LH front seat (WITH SPORT SEAT)	40-3	03-1
X734	(2 PINS, NATURAL)	under RH front seat	24-1	
X734	(2 PINS, NATURAL)	under RH front seat (WITH SPORT SEAT)	41-1	
X737	(2 PINS, BLACK)	under RH front seat	24-1	
X737	(2 PINS, BLACK)	under RH front seat (WITH SPORT SEAT)	41-2	
X740	(4 PINS, BLACK)	under RH front seat	24-2	03-1
X740	(4 PINS, BLACK)	under RH front seat (WITH SPORT SEAT)	41-2	03-1
X742	(2 PINS, YELLOW)	in passenger's door		
X744	(4 PINS, GRAY)	in passenger's door	18-3	05-3
X746	(3 PINS, YELLOW)	in passenger's door	18-3	05-2
X747	(2 PINS, YELLOW)	in driver's door	17-1	
X749	(2 PINS, GRAY)	in driver's door	17-2	
X753	(3 PINS, YELLOW)	in driver's door	17-2	05-2
X766	(2 PINS, BLACK)	LH front of vehicle		
X767	(2 PINS, BLACK)	RH front of vehicle		

carmagn.com

COMPONENT LOCATION CHART

COMP.	DESCRIPTION	LOCATION	7100.0	8500.0
X768	(2 PINS, BLACK)	on front LH wheel well	12-1	
X769	(2 PINS, BLACK)	RH front of wheel well	13-2	
X770	(2 PINS, YELLOW)	on front LH wheel well (4−cylinder)	12-1	
X770	(2 PINS, YELLOW)	in RH front bumper (6−cylinder)	35-2	
X771	(2 PINS, NATURAL)	RH side of LH footwell	21-2	
X778	(4 PINS, BLACK)	under LH front seat		07-1
X778	(4 PINS, BLACK)	under LH front seat (WITH SPORT SEAT)	40-2	07-1
X782	(3 PINS, ORANGE)	behind glove box above	00-3	07-5
X783	(3 PINS, ORANGE)	underside of steering column	38-3	07-5
X861	GROUND	LH side of engine compartment	05-1	
X898	(8 PINS, BLACK)	under rear storage compartment	26-2	08-3
X904	(4 PINS, BLACK)	rear of engine compartment behind firewall		03-1
X905	(7 PINS, BLACK)	center of dash	21-3	09-3
X1014	(1 PIN, BLACK)	center console	22-3	
X1098	(3 PINS, BLACK)	LH side of dash	20-3	01-1
X1116	GROUND	in LH side of luggage compartment	06-3	
X1148	(2 PINS, BLACK)	on front LH wheel well	12-1	
X1161	(9 PINS, BLACK)	Power Distribution Box rear LH side of engine compartment		03-4
X1166	GROUND	behind glove box	04-3	
X1170	(42 PINS, BLACK)	behind glove box	00-1	09-4
X1171	(55 PINS, NATURAL)	behind glove box	00-3	10-3
X1175	(42 PINS, BLACK)	behind glove box	00-1	09-4

carDiagn.com

COMPONENT LOCATION CHART

COMP.	DESCRIPTION	LOCATION	7100.0	8500.0
X1176	(25 PINS, BLACK)	rear LH side of engine compartment	35-3	04-4
X1178	(2 PINS, WHITE)	center console	27-2	
X1193	(3 PINS, BLACK)	center console	22-1	01-1
X1213	(2 PINS, BLACK)	center console		
X1265	(1 PIN, NATURAL)	HARD TOP CONNECTOR 1		
X1266	(1 PIN, NATURAL)	HARD TOP CONNECTOR 1		
X1380	(1 PIN, – – –)	behind RH footwell speaker grille	23-3	
X1381	(1 PIN, – – –)	behind LH footwell speaker grille		
X1441	GROUND	below center console	07-3	
X1517	(6 PINS, BLACK)	RH side of LH footwell	21-2	09-2
X1588	(2 PINS, BLACK)	below LH side of dash	19-1	
X1652	(5 PINS, BLACK)	behind glove box	00-1	06-4
X1659	(15 PINS, YELLOW)	behind glove box	00-1	05-1
X1715	(6 PINS, BLACK)	in RH side of luggage compartment behind trim panel	27-3	04-5
X1890	(3 PINS, BLACK)	under radiator		05-4
X5115	(2 PINS, BLACK)	center console (radio and console removed)	38-1	
X6000	(88 PINS, NATURAL)	rear RH side of engine compartment in E–Box		00-1
X6002	(20 PINS, BLACK)	rear RH side of engine compartment		04-1
X6031	(12 PINS, BLACK)	rear LH side of engine compartment	08-1	01-6
X6091	(30 PINS, BLACK)	rear of engine compartment on firewall	10-1	01-2
X6101	(2 PINS, BLACK)	top center of engine		
X6102	(2 PINS, BLACK)	top center of engine		

carmagn.com

COMPONENT LOCATION CHART

COMP.	DESCRIPTION	LOCATION	7100.0	8500.0
X6103	(2 PINS, BLACK)	top center of engine		
X6104	(2 PINS, BLACK)	top center of engine		
X6105	(2 PINS, BLACK)	top center of engine		
X6106	(2 PINS, BLACK)	top center of engine		
X6120	(2 PINS, BLACK)	LH side of engine compartment (4−cylinder)	08-2	
X6120	(2 PINS, BLACK)	LH side of engine compartment (6−cylinder)	34-2	
X6130	(3 PINS, BLACK)	front of engine (4−cylinder)	10-3	01-6
X6130	(3 PINS, BLACK)	front of engine (6−cylinder)		01-6
X6131	(2 PINS, BLACK)	front LH side of engine compartment	11-3	
X6133	(2 PINS, BLACK)	rear RH side of engine compartment (6−cylinder)	31-2	
X6133	(2 PINS, BLACK)	LH side of engine compartment (4−cylinder)	37-2	
X6150	(10 PINS, BLACK)	rear RH side of engine compartment		01-4
X6150	(7 PINS, BLACK)	rear RH side of engine compartment	31-1	04-2
X6151	(3 PINS, GRAY)	top RH side of engine (4−cylinder)		08-4
X6151	(3 PINS, BLACK)	top RH side of engine (6−cylinder)		08-4
X6152	(3 PINS, GRAY)	top RH side of engine (4−cylinder)		08-4
X6152	(3 PINS, BLACK)	top RH side of engine (6−cylinder)		08-4
X6153	(3 PINS, BLACK)	top RH side of engine (4−cylinder)		08-4
X6153	(3 PINS, GRAY)	top RH side of engine (6−cylinder)		08-4
X6154	(3 PINS, GRAY)	top RH side of engine (4−cylinder)		08-4
X6154	(3 PINS, BLACK)	top RH side of engine (6−cylinder)		08-4
X6155	(3 PINS, BLACK)	top RH side of engine		08-4

cardiagn.com

COMP.	DESCRIPTION	LOCATION	7100.0	8500.0
X6156	(3 PINS, BLACK)	top RH side of engine		08-4
X6163	(2 PINS, BLACK)	LH side of engine compartment (6−cylinder)	31-3	
X6163	(2 PINS, BLACK)	LH side of engine compartment (4−cylinder)	37-3	
X6203	(3 PINS, BLACK)	front of engine below intake manifold	33-1	01-6
X6204	(3 PINS, BLACK)	front of engine below intake manifold	33-1	01-6
X6205	(2 PINS, BLACK)	front LH side of engine compartment (4−cylinder)	11-2	
X6205	(2 PINS, BLACK)	front LH side of engine compartment (6−cylinder)	34-1	
X6207	(4 PINS, BLACK)	LH side of engine compartment	33-3	03-2
X6209	(3 PINS, BLACK)	front of engine HALL EFFECT CAMSHAFT SENSOR		06-4
X6210	(4 PINS, BLACK)	under center of car	35-1	06-1
X6217	(4 PINS, GRAY)	front LH side of engine compartment	11-3	03-2
X6220	(4 PINS, BLACK)	under center of car	35-1	06-1
X6231	(2 PINS, BLACK)	RH front of engine (4−cylinder)	10-2	
X6231	(2 PINS, BLACK)	front of engine (6−cylinder)	32-2	
X6232	(4 PINS, BLACK)	RH front of engine	10-2	06-1
X6240	(4 PINS, BLACK)	LH side of engine near starter (4−cylinder)	02-2	06-1
X6240	(4 PINS, BLACK)	LH side of engine (6−cylinder)	33-1	06-1
X6247	(2 PINS, BLACK)	under LH rear of car	36-1	
X6252	(3 PINS, BLACK)	front of engine (4−cylinder)	10-3	06-4
X6252	(3 PINS, BLACK)	front of engine (6−cylinder)	33-3	01-6
X6256	(4 PINS, BLACK)	rear of engine compartment		02-6
X6263	(2 PINS, BLACK)	under LH center of car	36-2	

cardiagn.com

COMPONENT LOCATION CHART

COMP.	DESCRIPTION	LOCATION	7100.0	8500.0
X6275	(2 PINS, BLACK)	top center of engine	31-3	
X6300	(9 PINS, BLACK)	rear RH side of engine compartment in E−Box		03-4
X6301	(9 PINS, BLACK)	below LH side of dash		03-4
X6304	(9 PINS, BLACK)	rear RH side of engine compartment in E−Box (6−cylinder)		03-4
X6304	(9 PINS, BLACK)	rear LH side of engine compartment (4−cylinder)		03-4
X6326	(9 PINS, BLACK)	rear RH side of engine compartment in E−Box		03-4
X6430	CABLE SOCKET B+ JUMP START JUNCTION POINT	rear RH side of engine compartment		
X6431	CABLE SOCKET B+ JUMP START JUNCTION POINT	rear RH side of engine compartment		
X6432	CABLE SOCKET B+ JUMP START JUNCTION POINT	rear RH side of engine compartment		
X6454	GROUND	rear RH side of engine compartment (4−cylinder)	04-1	
X6454	GROUND	rear RH side of engine compartment (6−cylinder)	04-2	
X6455	GROUND	rear RH side of engine compartment	04-2	
X6456	GROUND	rear RH side of engine compartment (4−cylinder)	04-1	
X6456	GROUND	rear RH side of engine compartment (6−cylinder)	06-1	
X6500	(6 PINS, BLACK)	under rear storage compartment	39-1	06-5
X6501	(3 PINS, BLACK)	under rear storage compartment	39-1	02-5
X6506	(2 PINS, BLACK)	rear RH side of engine compartment in E−Box		
X6509	CABLE SOCKET ALTERNATOR B+	front LH side of engine compartment	02-3	
X6510	CABLE SOCKET STARTER, TERMINAL 50	rear LH side of engine compartment at starter	02-2	
X6511	CABLE SOCKET STARTER, TERMINAL 30h	rear LH side of engine compartment at starter		

cardiagn.com

COMPONENT LOCATION CHART

COMP.	DESCRIPTION	LOCATION	7100.0	8500.0
X6512	CABLE SOCKET STARTER, TERMINAL 30	rear LH side of engine compartment at starter	02-2	
X6524	(3 PINS, BLACK)	front LH side of engine compartment		01-6
X6550	(2 PINS, BLACK)	under LH center of car	34-3	
X7509	CABLE SOCKET ALTERNATOR, TERMINAL D+	front LH side of engine compartment	02-3	
X8500	(88 PINS, NATURAL)	rear RH side of engine compartment in E−Box		00-1
X8503	(6 PINS, YELLOW)	center console	22-1	04-5
X8505	(16 PINS, BLACK)	on RH side of transmission	15-1	10-4
X8507	(1 PIN, BLACK)	behind gas pedal	19-3	
X8511	(2 PINS, BLACK)	LH side of transmission	14-2	
X8516	(2 PINS, BLACK)	LH side of transmission		
X8521	(9 PINS, BLACK)	on RH side of transmission	15-1	09-1
X9633	GROUND	behind LH footwell speaker grille	07-2	
X9990	(3 PINS, BLACK)	in driver's seatback		10-1
X9991	(10 PINS, BLACK)	underside of LH front seat	40-2	01-2
X9994	(3 PINS, BLACK)	in passenger's seatback		10-1
X9995	(10 PINS, BLACK)	underside of RH front seat	41-1	01-2
X9997	(2 PINS, ORANGE)	behind steering wheel		
X10010	GROUND	behind glove box	04-3	
X10013	(2 PINS, NATURAL)	behind steering wheel		
X10054	(8 PINS, BLACK)	RH side of LH footwell	21-1	02-1
X10065	(2 PINS, WHITE)	LH footwell	14-1	

cardiagn.com

COMPONENT LOCATION CHART

COMP.	DESCRIPTION	LOCATION	7100.0	8500.0
X10088	(2 PINS, BLACK)	front RH side of engine compartment	30-3	
X10094	(2 PINS, BLACK)	front of engine	35-3	
X10098	(1 PIN, NATURAL)	Power Distribution Box rear LH side of engine compartment		
X10099	(1 PIN, – – –)	Power Distribution Box rear LH side of engine compartment		
X10182	(18 PINS, BLACK)	behind glove box		07-3
X10214	(3 PINS, BLACK)	under LH front seat	40-2	05-2
X10215	(3 PINS, BLACK)	under RH front seat	41-1	05-2
X10216	(3 PINS, BLACK)	in LH front seat belt buckle	38-2	07-5
X10217	(3 PINS, BLACK)	in RH front seat belt buckle	38-2	07-5
X10218	(3 PINS, NATURAL)	under RH front seat (WITH SPORT SEAT)	41-2	01-1
X10218	(3 PINS, NATURAL)	under RH front seat	24-2	01-1
X10238	(3 PINS, BLACK)	front of engine		
X10239	(3 PINS, BLACK)	front of engine (6–cylinder)	33-3	01-6
X10239	(3 PINS, BLACK)	front of engine (4–cylinder)	37-3	01-6
X10244	(1 PIN, BLACK)	behind glove box	24-3	
X10245	(12 PINS, BLACK)	center console	01-3	01-3
X10246	(12 PINS, BLACK)	in rear left speaker box	26-3	01-3
X10260	(3 PINS, NATURAL)	near steering column	01-2	01-1
X10262	(9 PINS, BLACK)	below LH side of dash		03-4
X10263	(6 PIN, BLACK)	center console		04-5
X10299	(4 PINS, BLACK)	RH rear wheel well	17-3	03-1
X11104	(1 PIN, – – –)	near interior rear view mirror	28-2	

carmagn.com

COMPONENT LOCATION CHART

COMP.	DESCRIPTION	LOCATION	7100.0	8500.0
X11105	(1 PIN, ---)	near interior rear view mirror	28-2	
X11106	(1 PIN, ---)	near interior rear view mirror	28-2	
X11209	(4 PINS, BLACK)	near RH rear wheel well	17-3	03-1
X11287	CONNECTORS SOLDERED UP	center of dash		
X11379	(3 PINS, BLACK)	RH top of radiator	30-1	05-4
X11394	(25 PINS, BLACK)	rear LH side of engine compartment		00-2
X13004	GROUND	behind glove box	04-3	
X13006	GROUND	in LH side of luggage compartment	05-3	
X13016	GROUND	in LH side of luggage compartment	05-2	
X13017	(2 PINS, BLUE)	hard top		
X13025	(12 PINS, BLACK)	behind glove box	24-3	02-4
X13032	GROUND	under rear storage compartment	06-2	
X13045	(6 PINS, NATURAL)	center console		04-5
X13146	(8 PINS, BLACK)	in LH side of luggage compartment	25-3	02-1
X13233	(1 PIN, BLACK)	center of dash behind center console		
X13252	(15 PINS, BLACK)	behind glove box		05-1
X13253	(26 PINS, YELLOW)	behind glove box		00-3
X13254	(26 PINS, GREEN)	behind glove box		00-3
X13287	(1 PIN, WHITE)	center of dash behind center console		
X18080	(1 PIN, BLACK)	in LH side of luggage compartment		
X18126	(17 PINS, BLACK)	center console behind radio		02-2
X18170	GROUND	below center console	07-1	

cardiagn.com

COMPONENT LOCATION CHART

COMP.	DESCRIPTION	LOCATION	7100.0	8500.0
X18180	(3 PINS, BLACK)	in RH rear side of luggage compartment		01-1
X18190	(3 PINS, BLACK)	in driver's door	17-2	05-2
X18196	(10 PINS, BLACK)	LH A−pillar	16-3	02-3
X18198	(10 PINS, BLACK)	RH A−pillar	18-1	02-3
X18279	(2 PINS, GRAY)	in driver's door		
X18280	(2 PINS, GRAY)	in passenger's door		
X18333	(2 PINS, BLACK)	on instrument cluster		
X18349	(8 PINS, BLACK)	center console	01-3	08-3
X18350	(6 PINS, BLACK)	RH side of LH footwell	21-2	03-6
X18363	(9 PINS, BLACK)	in LH side of luggage compartment		03-4
X18364	(9 PINS, BLACK)	in LH side of luggage compartment		03-4
X18516	(3 PINS, BLACK)	in passenger's door	18-3	05-2
X18518	(4 PINS, BLACK)	under RH front seat		07-1
X18518	(4 PINS, BLACK)	under RH front seat (WITH SPORT SEAT)	41-1	07-1
X18520	(10 PINS, BLACK)	center console RADIO		
X18521	(10 PINS, BLACK)	RH side of luggage compartment CD CHANGER		
X18774	(4 PINS, NATURAL)	in rear speaker box	26-3	03-1
X18983	(2 PINS, BLACK)	center of dash		
X18984	(2 PINS, BLACK)	center of dash	21-3	
X18994	(3 PINS, YELLOW)	LH footwell		01-1
X19527	(16 PINS, BLACK)	center console right	28-3	08-1
X19528	(3 PINS, NATURAL)	top of fuel tank	39-2	02-5

cardiagn.com

COMPONENT LOCATION CHART

COMP.	DESCRIPTION	LOCATION	7100.0	8500.0
X23146	(2 PINS, BLACK)	in LH side of luggage compartment	25-3	
X62001	(4 PINS, BLACK)	under center of car	14-3	06-1
X62002	(4 PINS, BLACK)	under center of car		06-1
X90260	(3 PINS, BLACK)	near steering column	01-2	01-1
X91009	(2 PINS, BLACK)	under RH front seat	41-2	
Y1w ..	ABS HYDRAULIC UNIT	rear LH side of engine compartment (4−cylinder)	08-2	
Y1w ..	ABS HYDRAULIC UNIT	rear LH side of engine compartment (6−cylinder)	35-3	
Y2	AIR CONDITIONING COMPRESSOR	front RH side of engine compartment		
Y4z ...	WATER VALVE	rear LH side of engine compartment	11-1	
Y5	DRIVER'S SIDE MIRROR	in upper LH front door		
Y6	PASSENGER'S SIDE MIRROR	in upper RH front door		
Y19 ...	SHIFT−LOCK	center console	27-2	
Y6101	CYL. 1 FUEL INJECTION VALVE	on cylinder head		
Y6102	CYL. 2 FUEL INJECTION VALVE	on cylinder head		
Y6103	CYL. 3 FUEL INJECTION VALVE	on cylinder head		
Y6104	CYL. 4 FUEL INJECTION VALVE	on cylinder head		
Y6105	CYL. 5 FUEL INJECTION VALVE	on cylinder head		
Y6106	CYL. 6 FUEL INJECTION VALVE	on cylinder head		
Y6120	EVAPORATIVE EMISSION VALVE	LH side of engine compartment (4−cylinder)	08-2	
Y6120	EVAPORATIVE EMISSION VALVE	LH side of engine compartment (6−cylinder)	34-2	
Y6130	IDLE SPEED CONTROL VALVE	front of engine (4−cylinder)	10-3	
Y6130	IDLE SPEED CONTROL VALVE	front of engine (6−cylinder)		

cardiagn.com

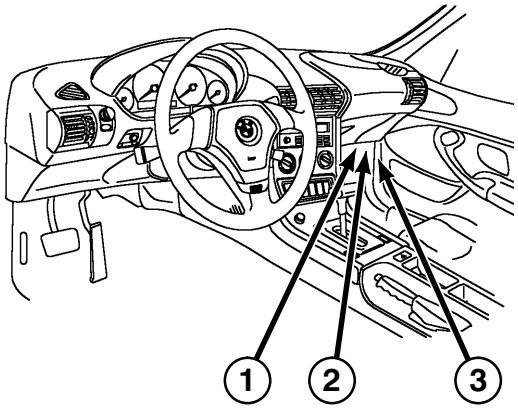
COMPONENT LOCATION CHART

COMP.	DESCRIPTION	LOCATION	7100.0	8500.0
Y6131	INTAKE AIR RESONANCE CHANGEOVER VALVE	front of engine	11-3	
Y6133	AIR PUMP	LH side of engine compartment (4−cylinder)	37-2	
Y6133	AIR PUMP	rear RH side of engine compartment (6−cylinder)	31-2	
Y6163	SECONDARY AIR PUMP VALVE	LH side of engine compartment (6−cylinder)	33-2	
Y6163	SECONDARY AIR PUMP VALVE	LH side of engine compartment (4−cylinder)	37-3	
Y6263	FUEL CHANGEOVER VALVE	under LH center of car	36-2	
Y6275	VARIABLE CAMSHAFT CONTROL VALVE 1	on cylinder head	31-3	
Y6550	SOLENOID VALVE (”RUNNING LOSSES”)	under LH center of car	34-3	
Y8505y	TRANSMISSION VALVE UNIT	on RH side of transmission	15-1	
Y8521	TRANSMISSION VALVE UNIT	on RH side of transmission	15-1	

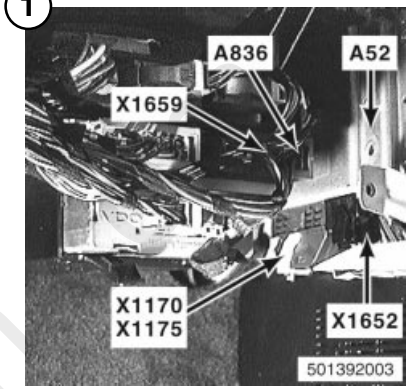
cardiagn.com

COMPONENT LOCATION VIEWS

ELECTRICAL CONTROL MODULE LOCATIONS



1

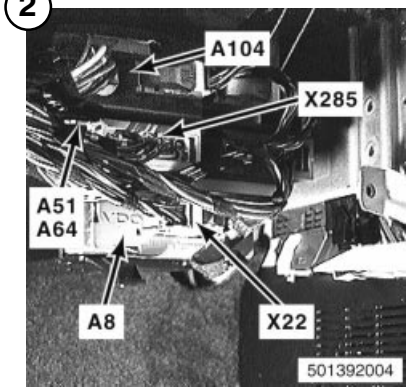


A52
SLIP CONTROL
MODULE
(ABS/ASC)

A836
ELECTRONIC
IMMOBILIZER
CONTROL
MODULE (EWS II)

X1170
X1175
X1652
X1659

2



A8
CRUISE CONTROL
MODULE
(TEMPOMAT)

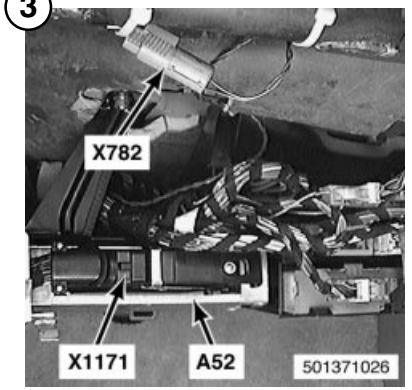
A51
WIPER/WASHER
MODULE

A64
WIPER/WASHER
MODULE (LOW II)

A104
BODY
ELECTRONICS
CONTROL
MODULE (ZKE IV)

X22
X285

3



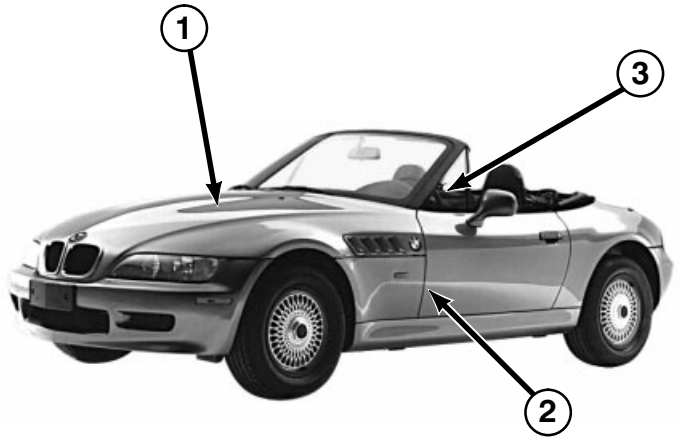
A52
SLIP CONTROL
MODULE
(ABS/ASC)

X782
X1171

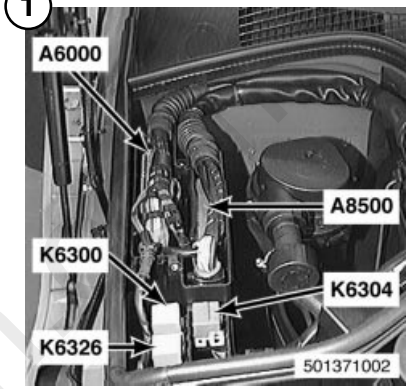
cardiagn

COMPONENT LOCATION VIEWS

ELECTRICAL CONTROL MODULE LOCATIONS



1



A6000
ENGINE CONTROL MODULE (DME)

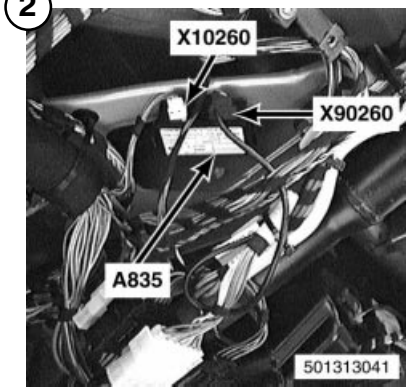
A8500
TRANSMISSION CONTROL MODULE (EGS)

K6300
ENGINE CONTROL MODULE RELAY

K6304
SECONDARY AIR PUMP RELAY

K6326
UNLOADER RELAY, TERMINAL 15

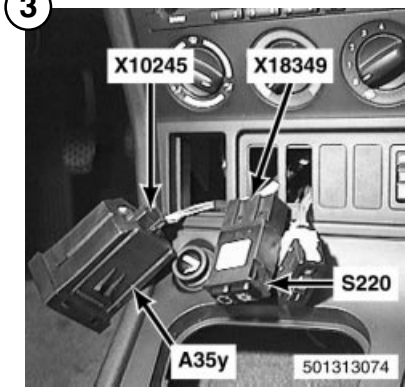
2



A835
TRANSMITTER MODULE (EWS II)

X10260
X90260

3



A35y
BOARD COMPUTER (BC−LOW)

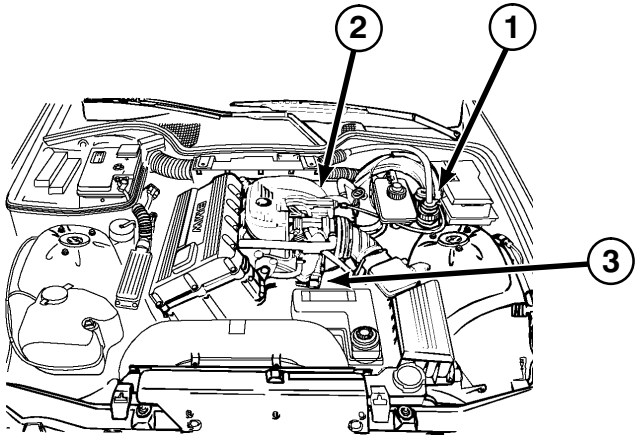
S220
AIR CONDITIONING/ RECIRCULATING SWITCH ASSEMBLY

X10245
X18349

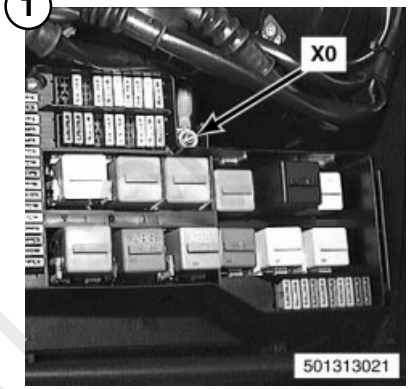
cardiagn

COMPONENT LOCATION VIEWS

B(+)

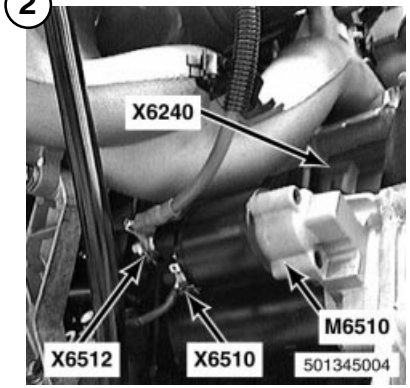


1



X0
B+ JUNCTION POINT

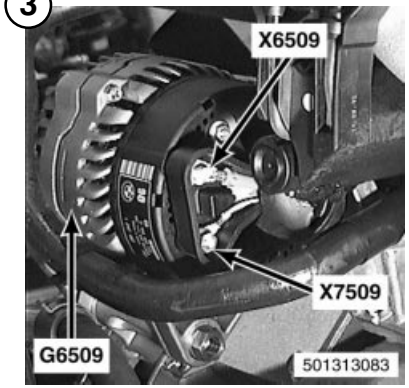
2



M6510
STARTER

X6240
X6510
X6512

3



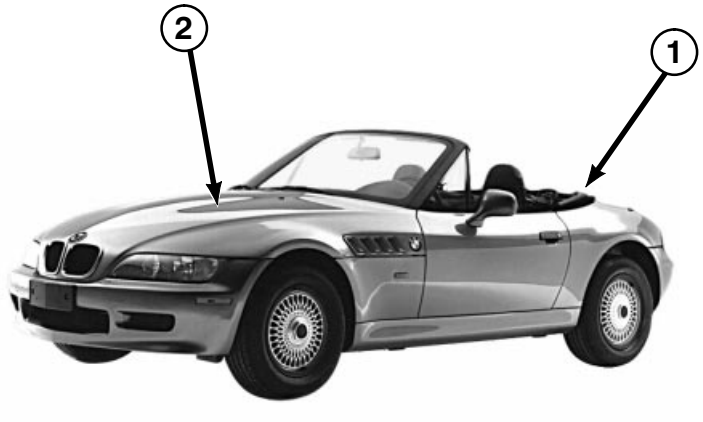
G6509
GENERATOR

X6509
X7509

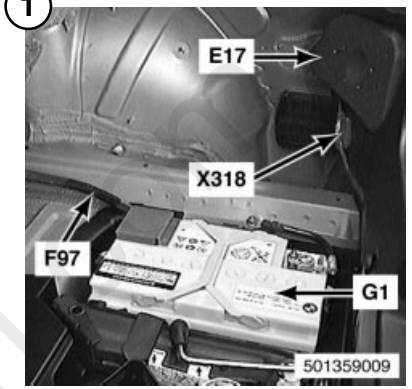
cardiagn

COMPONENT LOCATION VIEWS

B(+)



1



E17
RIGHT REAR LIGHT
ASSEMBLY

X318

F97
FUSIBLE LINK

G1
BATTERY

2

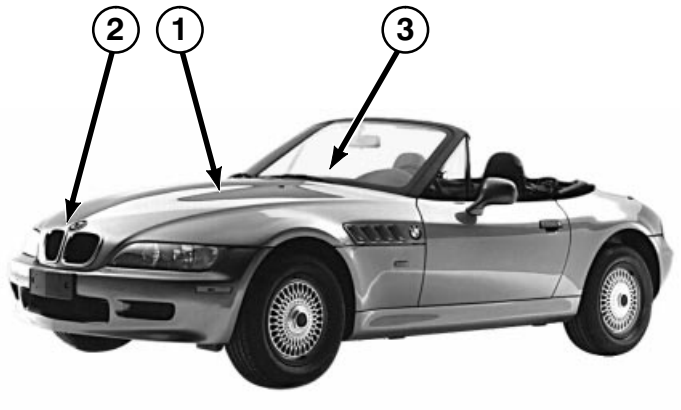


G6430
B+ JUMP START
JUNCTION POINT

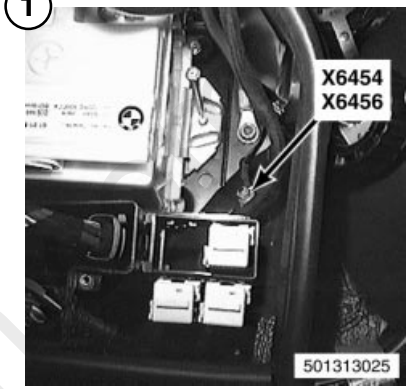
cardiagn

COMPONENT LOCATION VIEWS

B(–)



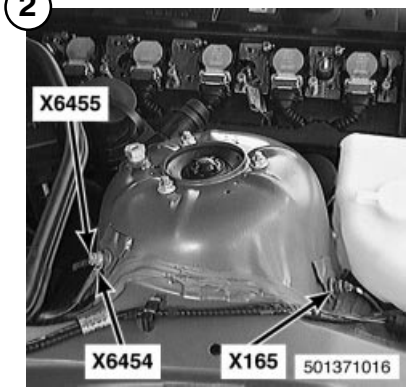
1



X6454
GROUND

X6456
GROUND

2

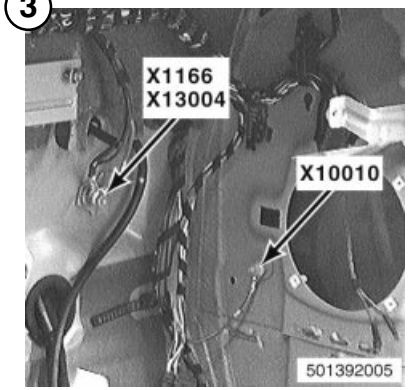


X165
GROUND

X6454
GROUND

X6455
GROUND

3



X1166
GROUND

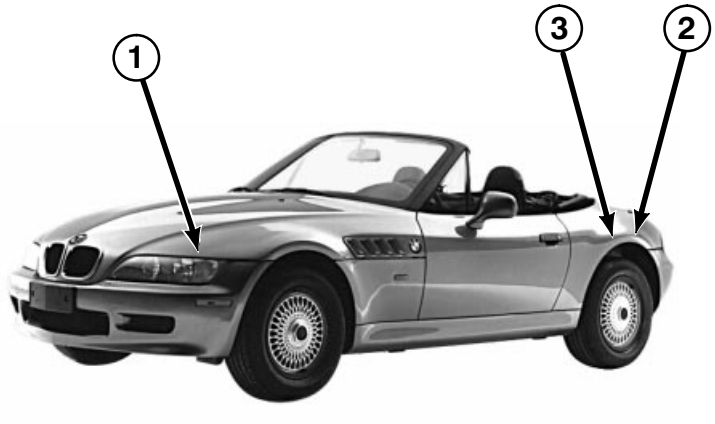
X10010
GROUND

X13004
GROUND

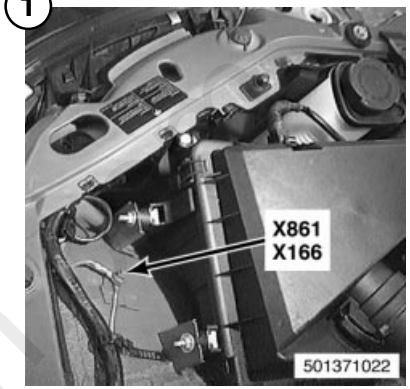
cardiagn

COMPONENT LOCATION VIEWS

B(–)



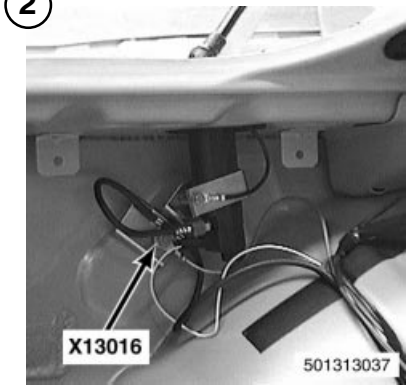
1



X166
GROUND

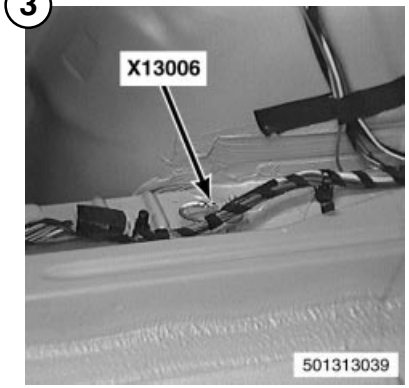
X861
GROUND

2



X13016
GROUND

3

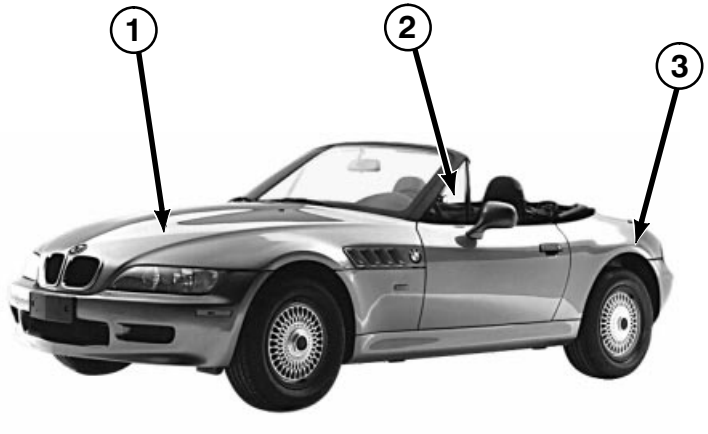


X13006
GROUND

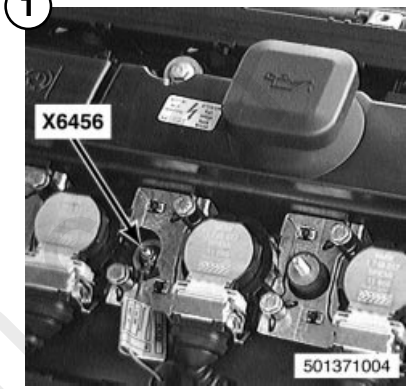
cardiagn

COMPONENT LOCATION VIEWS

B(–)



1 X6456
GROUND



2 X13032
GROUND



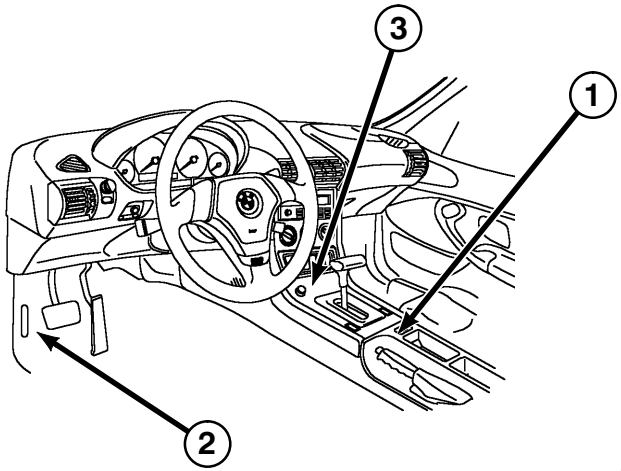
3 X1116
GROUND



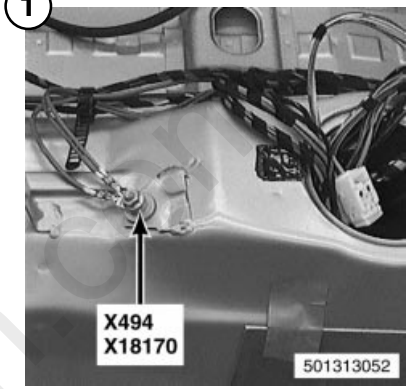
cardiagn

COMPONENT LOCATION VIEWS

B(–)



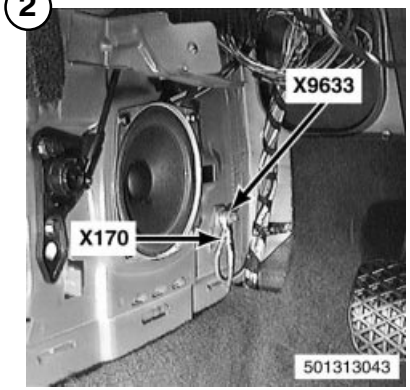
1



X494
GROUND

X18170
GROUND

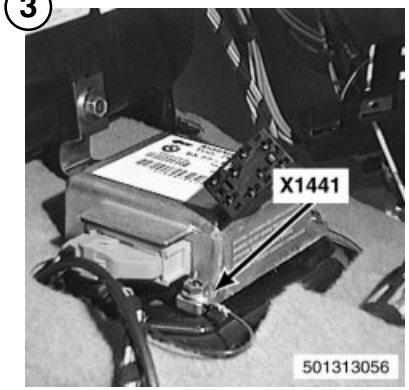
2



X170
GROUND

X9633
GROUND

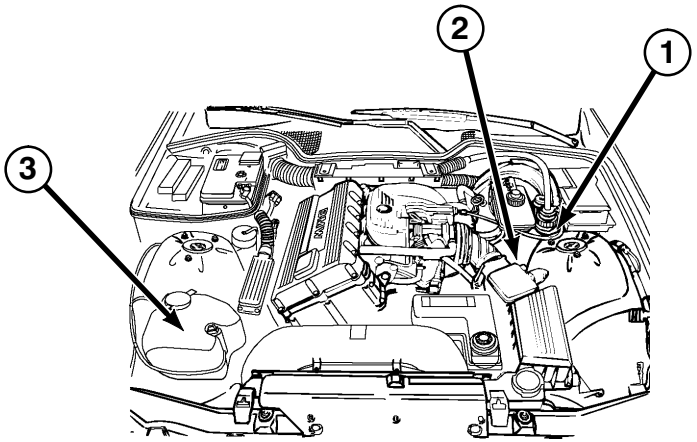
3

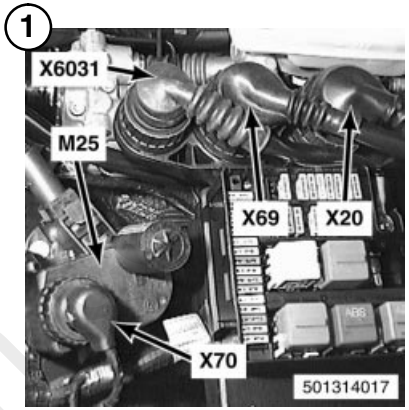


X1441
GROUND

cardiagn.com

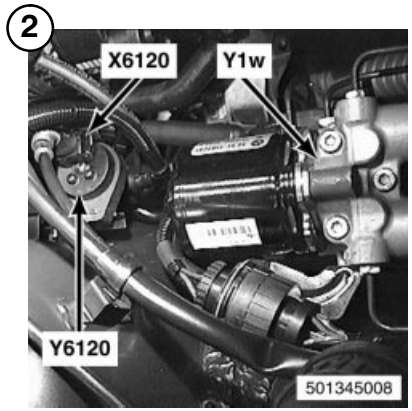
COMPONENT LOCATION VIEWS





M25
CRUISE CONTROL
ACTUATOR
(TEMPOMAT)

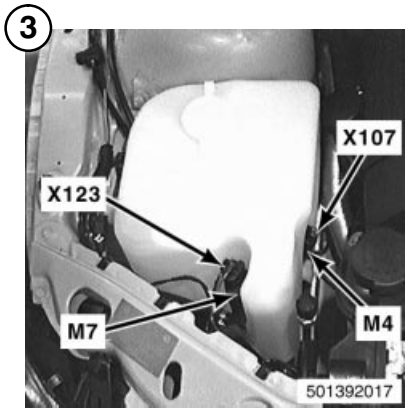
X20
X69
X70
X6031



Y1w
ABS HYDRAULIC
UNIT

Y6120
EVAPORATIVE
EMISSION VALVE

X6120



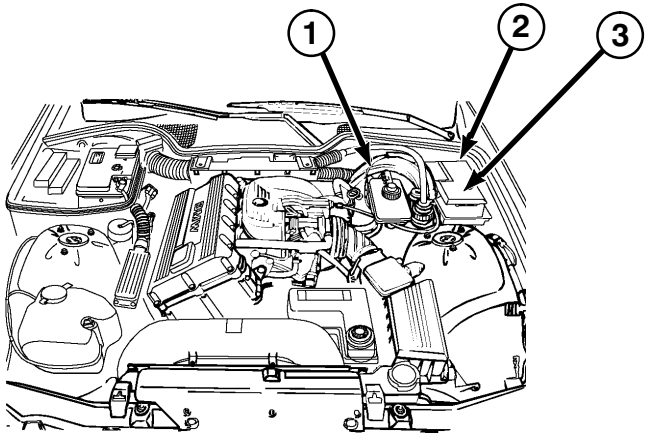
M4
WASHER PUMP

M7
HEADLIGHT/FOG
LIGHT WASHER
PUMP

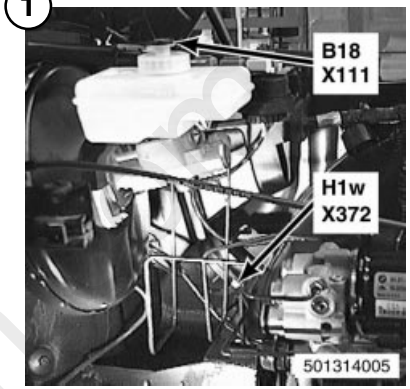
X107
X123

cardiagn

COMPONENT LOCATION VIEWS



1

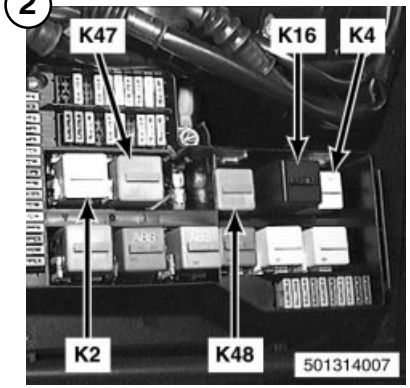


B18
BRAKE FLUID
LEVEL SWITCH

H1w
ANTI–THEFT
HORN (ALPINE)

X111
X372

2



K2
HORN RELAY

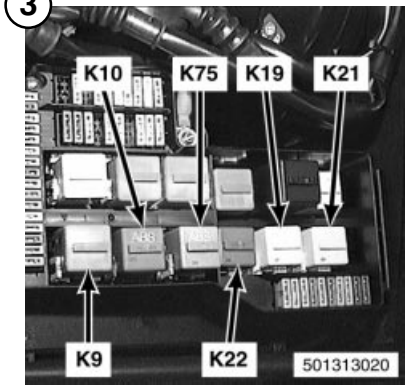
K47
FRONT FOG LIGHT
RELAY

K4
BLOWER RELAY

K48
LOW BEAM LIGHT
RELAY

K16
HAZARD FLASHER
RELAY

3



K9
UNLOADER RELAY,
TERMINAL 15

K21
NORMAL SPEED
RELAY

K10
ABS RELAY

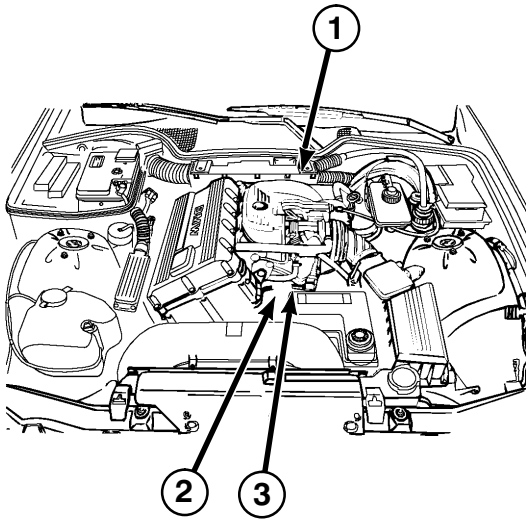
K22
HIGH SPEED
RELAY

K19
COMPRESSOR
CONTROL RELAY

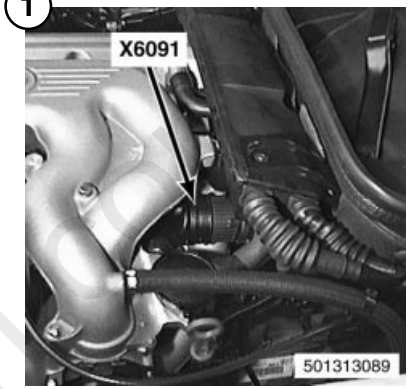
K75
ABS PUMP MOTOR
RELAY

cardiagn.com

COMPONENT LOCATION VIEWS

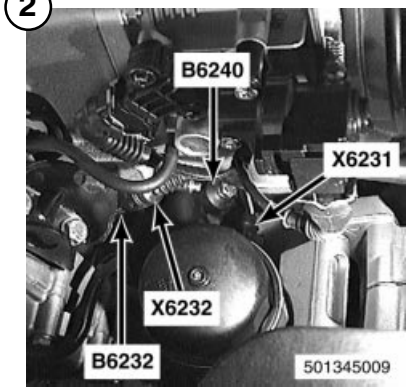


1



X6091

2

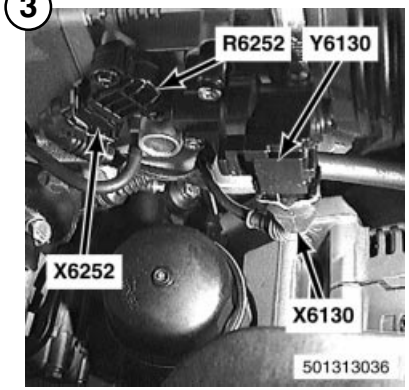


B6232
ENGINE COOLANT
TEMPERATURE
SENSOR

B6240
KNOCK SENSOR

X6231
X6232

3



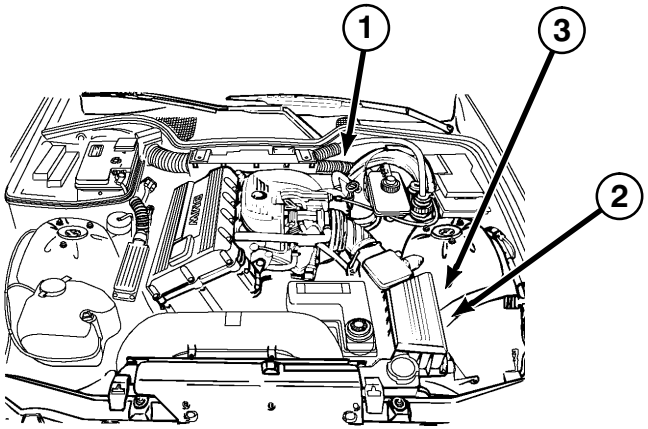
R6252
THROTTLE
POSITION SENSOR

Y6130
IDLE SPEED
CONTROL VALVE

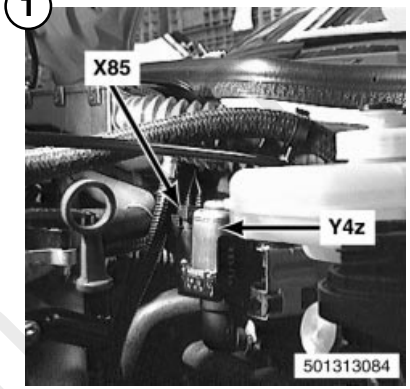
X6130
X6252

cardiagn

COMPONENT LOCATION VIEWS



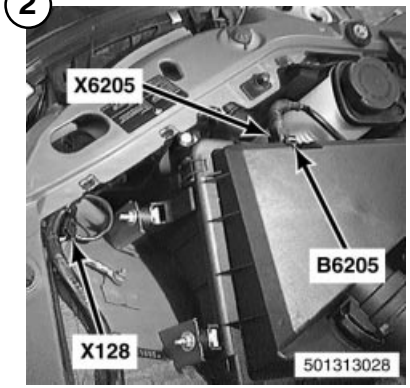
1



Y4z
WATER VALVE

X85

2

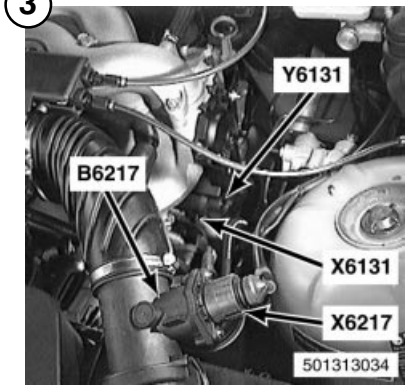


B6205
INTAKE AIR
TEMPERATURE
SENSOR

X128

X6205

3



B6217
HOT FILM AIR
MASS METER

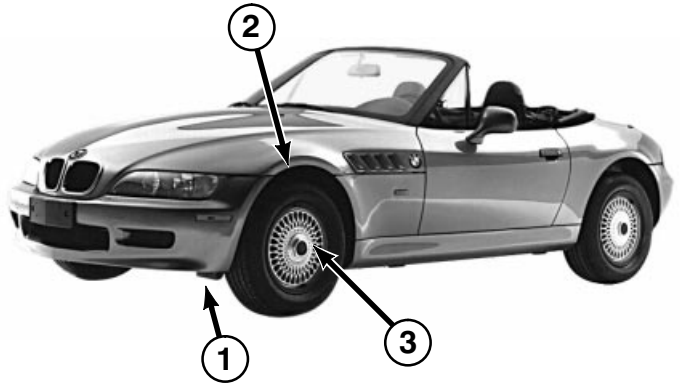
Y6131
INTAKE AIR RES-
ONANCE CHANGE-
OVER VALVE

X6131

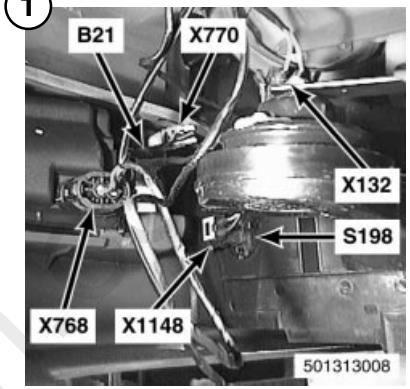
X6217

cardiagn

COMPONENT LOCATION VIEWS



1

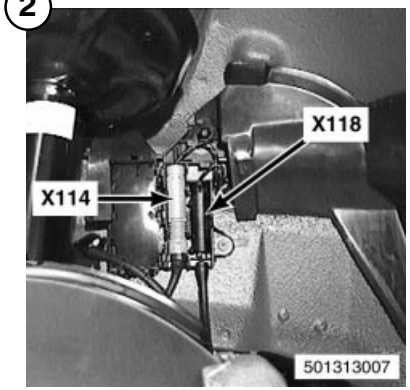


B21
ON–BOARD
COMPUTER
TEMPERATURE
SENSOR

S198
JET HEATER
THERMOSWITCH

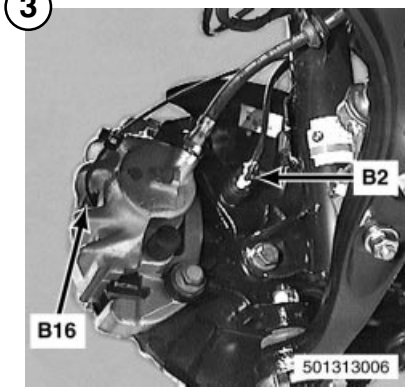
X132
X768
X770
X1148

2



X114
X118

3

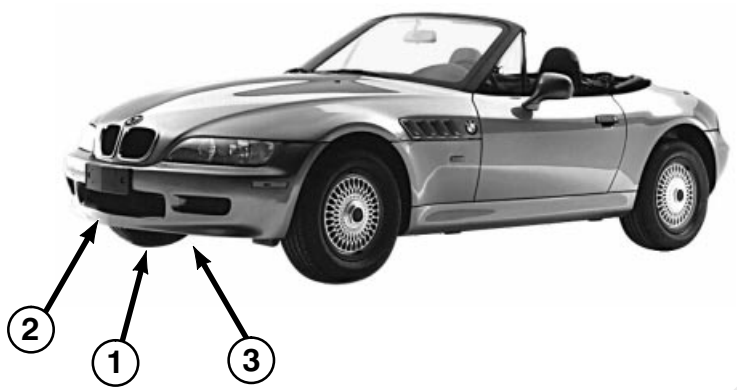


B2
LEFT FRONT
SPEED SENSOR –
ABS

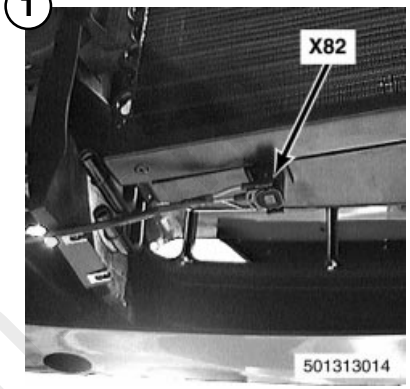
B16
LEFT FRONT
BRAKE PAD
SENSOR

cardiagn

COMPONENT LOCATION VIEWS

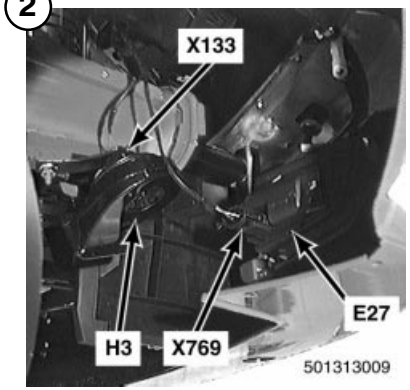


1



X82

2



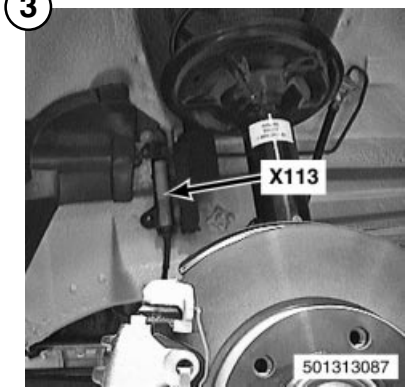
E27
RIGHT FOG LIGHT

H3
RIGHT HORN

X133

X769

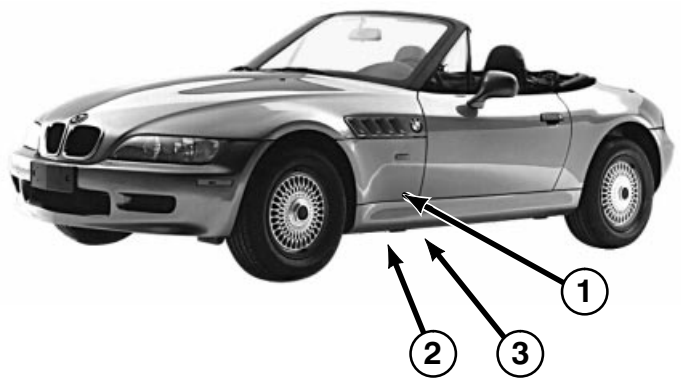
3



X113

cardiagn

COMPONENT LOCATION VIEWS

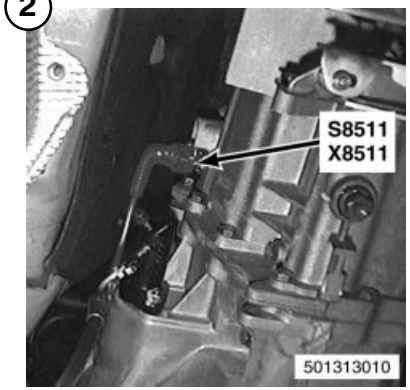


1



X10065

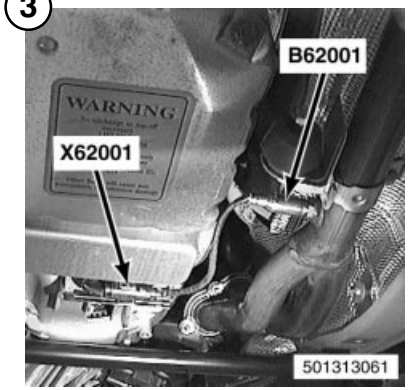
2



S8511
REVERSING LIGHT SWITCH

X8511

3

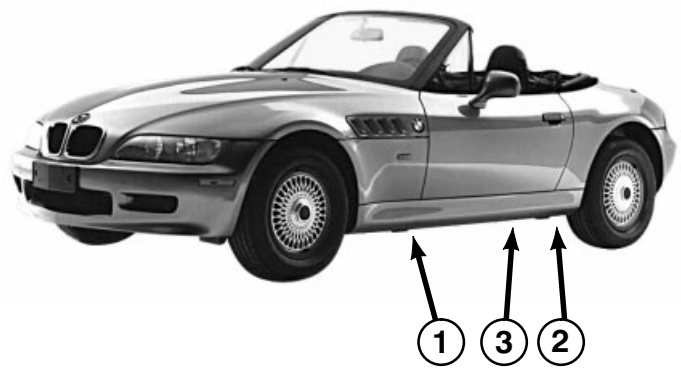


B62001
OXYGEN SENSOR (IN FRONT OF CATALYTIC CONVERTER)

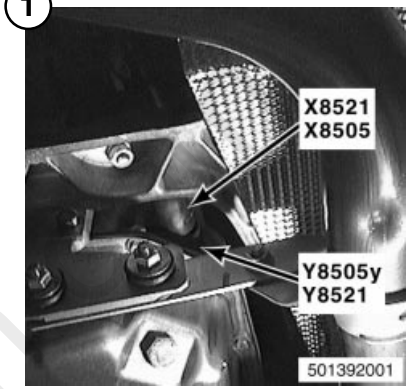
X62001

cardiagn

COMPONENT LOCATION VIEWS



1

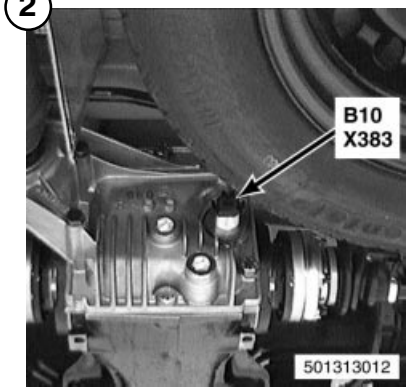


Y8505y
TRANSMISSION
VALVE UNIT

Y8521
TRANSMISSION
VALVE UNIT

X8505
X8521

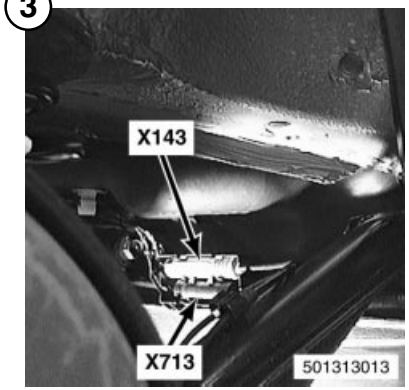
2



B10
VEHICLE SPEED
SENSOR

X383

3

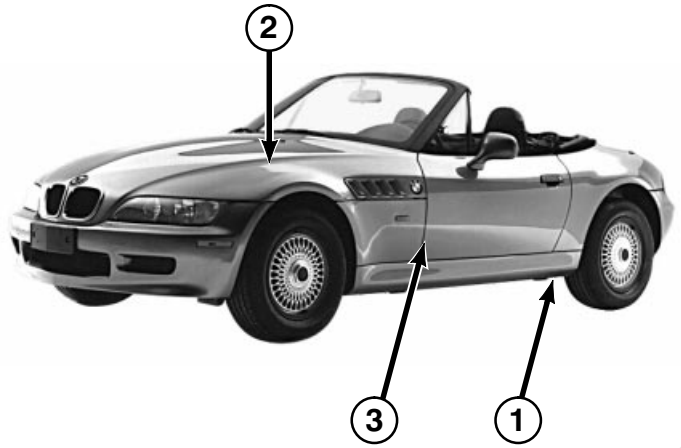


X143

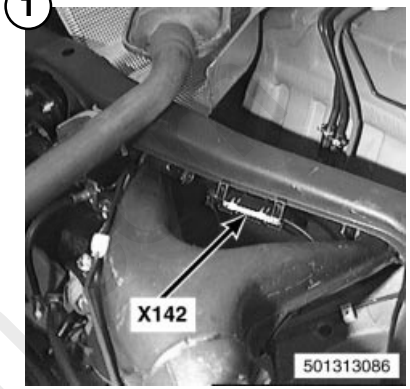
X713

cardiagn

COMPONENT LOCATION VIEWS

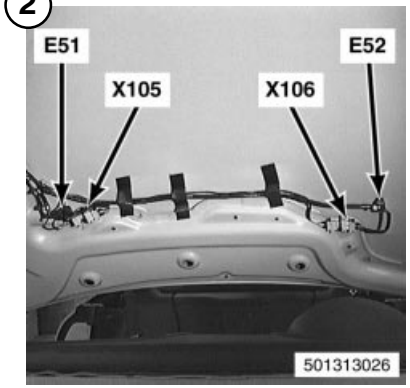


1



X142

2



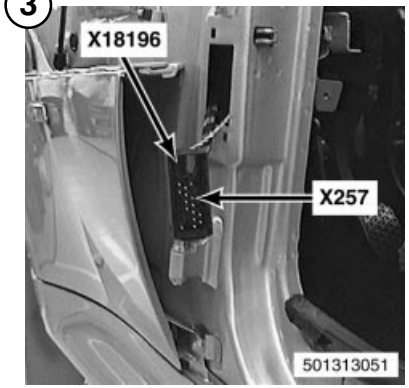
E51
LEFT WASHER JET HEATER

E52
RIGHT WASHER JET HEATER

X105

X106

3

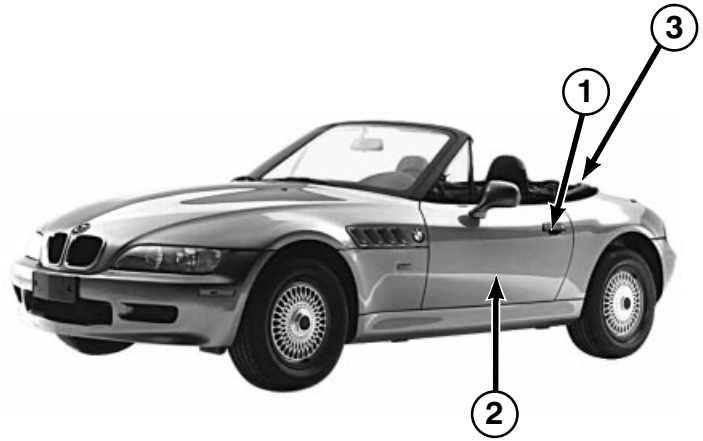


X257

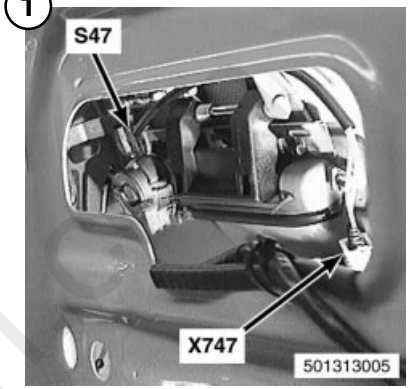
X18196

cardiagn

COMPONENT LOCATION VIEWS



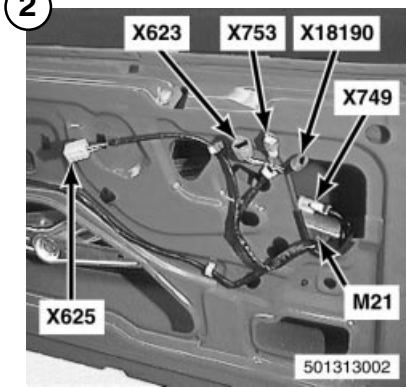
1



S47
DRIVER'S DOOR
LOCK SWITCH

X747

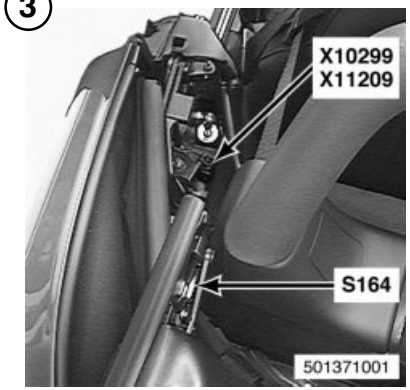
2



M21
DRIVER'S WINDOW
MOTOR

X623
X625
X749
X753
X18190

3

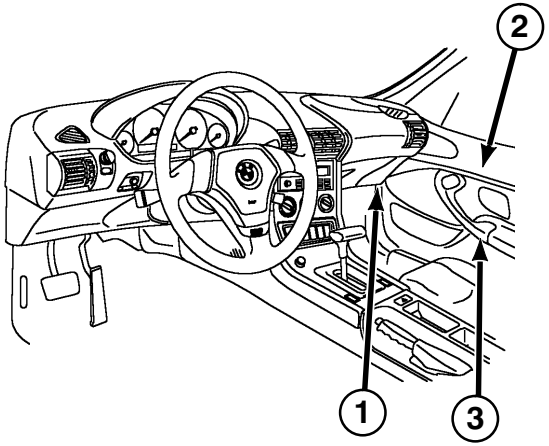


S164
CONVERTIBLE TOP
END–POSITION
MICRO SWITCH

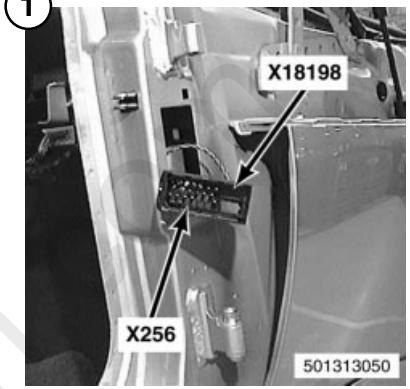
X10299
X11209

cardiagn

COMPONENT LOCATION VIEWS

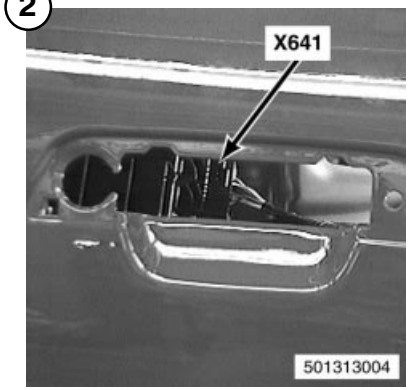


1



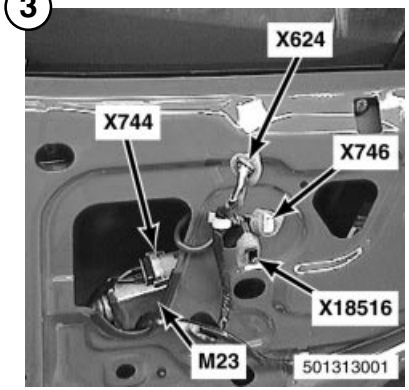
X256
X18198

2



X641

3

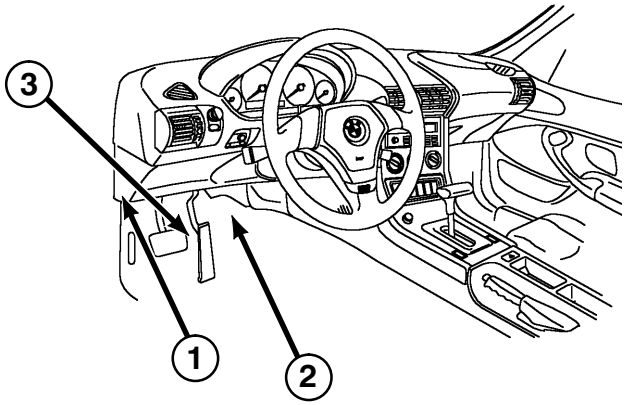


M23
PASSENGER'S
WINDOW MOTOR

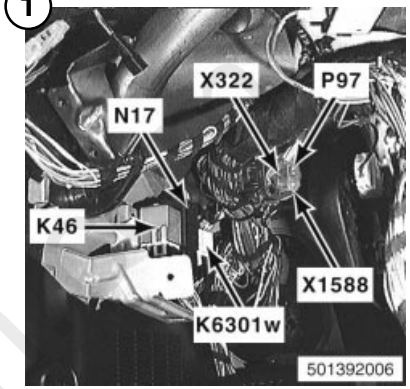
X624
X744
X746
X18516

cardiagn.com

COMPONENT LOCATION VIEWS



1



K46
HIGH BEAM LIGHT RELAY

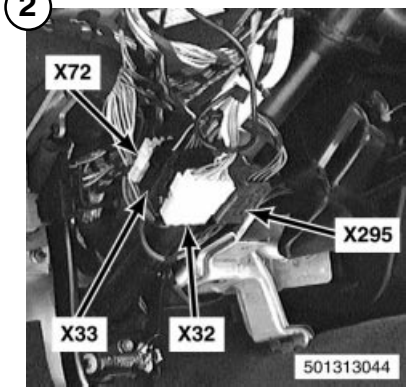
P97
AUXILIARY FUSE BOX

K6301w
FUEL PUMP RELAY

X322
X1588

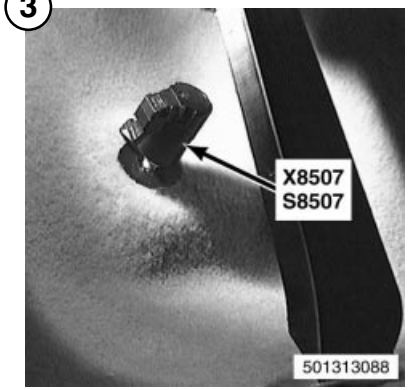
N17
CRASH CONTROL MODULE

2



X32
X33
X72
X295

3

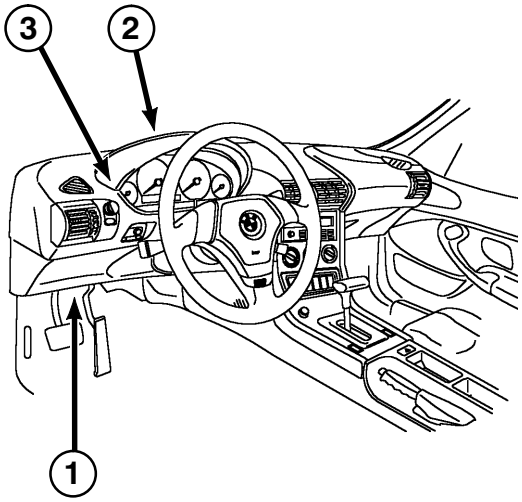


S8507
KICK–DOWN SWITCH

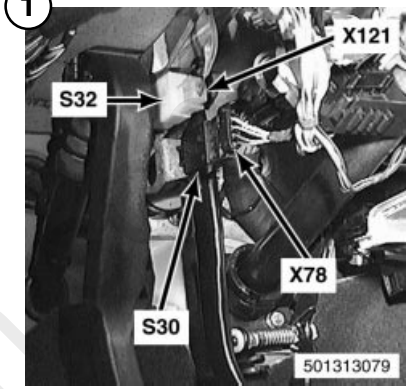
X8507

cardiagn

COMPONENT LOCATION VIEWS



1

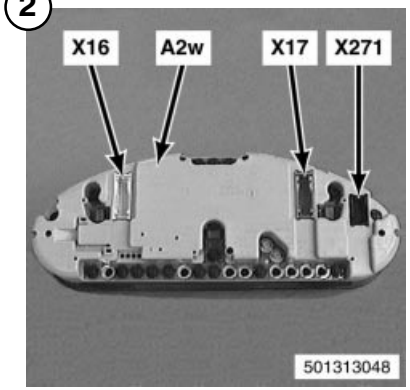


S30
BRAKE LIGHT SWITCH

S32
CLUTCH SWITCH

X78
X121

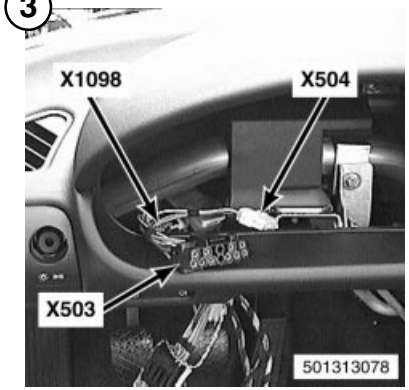
2



A2w
INSTRUMENT CLUSTER

X16
X17
X271

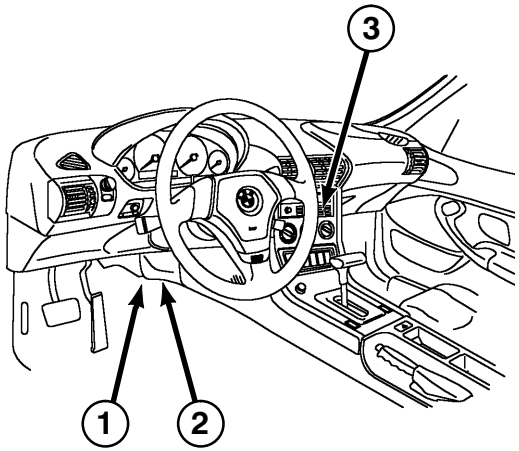
3



X503
X504
X1098

cardiagn

COMPONENT LOCATION VIEWS

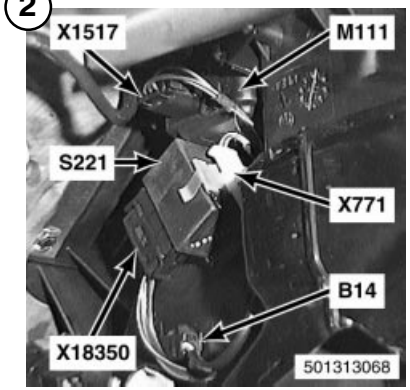


1



X10054

2

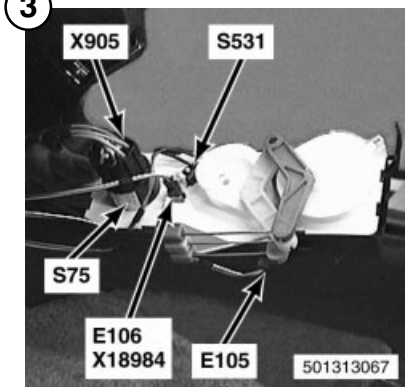


B14 EVAPORATOR TEMPERATURE SENSOR — X771, X1517, X18350

M111 FRESH AIR RECIRCULATION MOTOR

S221 EVAPORATOR CONTROLLER

3



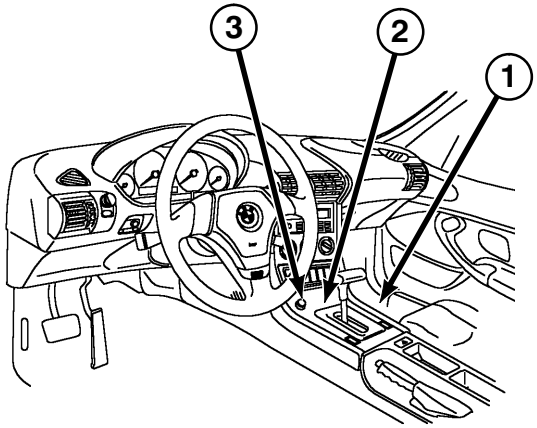
E105 HEAT/A/C CONTROL PANEL ILLUMINATION — S531 TEMPERATURE WHEEL SWITCH

E106 HEAT/A/C CONTROL PANEL ILLUMINATION — X905, X18984

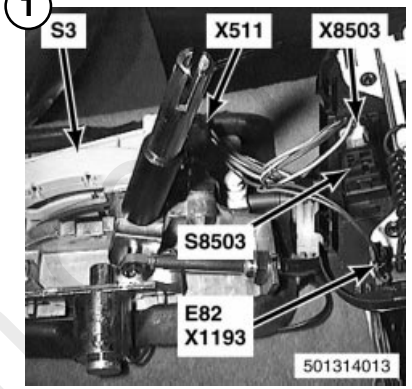
S75 BLOWER SWITCH

cardiagn

COMPONENT LOCATION VIEWS



1



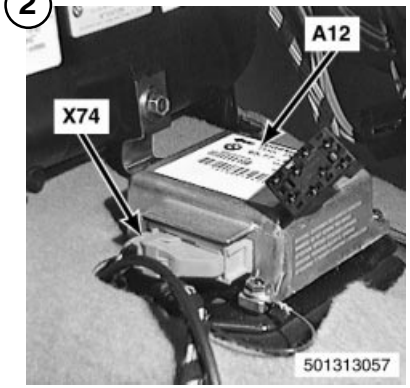
E82
TRANSMISSION POSITION INDICATOR LIGHT

X511
X1193
X8503

S3
AUTOMATIC TRANSMISSION RANGE SWITCH

S8503
PROGRAM SWITCH

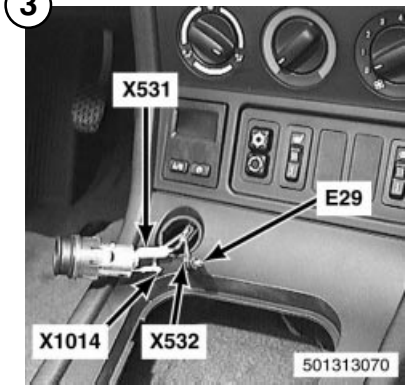
2



A12
SUPPLEMENTAL RESTRAINT SYSTEM CONTROL MODULE

X74

3

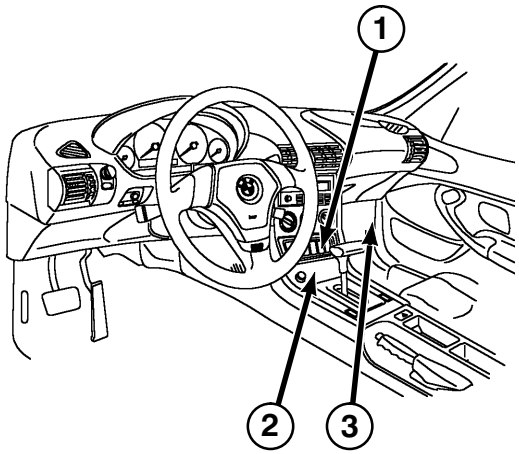


E29
FRONT CIGAR LIGHTER LIGHT

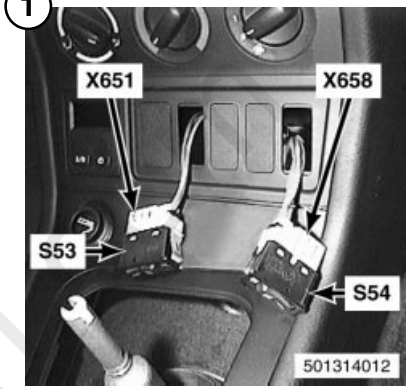
X531
X532
X1014

cardiagn

COMPONENT LOCATION VIEWS



1

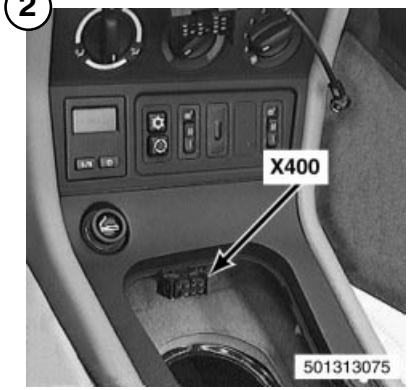


S53
DRIVER'S SEAT, SEAT HEATER SWITCH

S54
PASSENGER'S SEAT, SEAT HEATER SWITCH

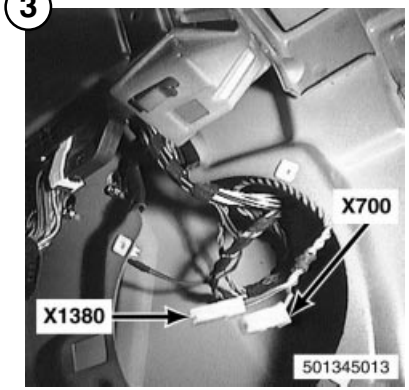
X651
X658

2



X400

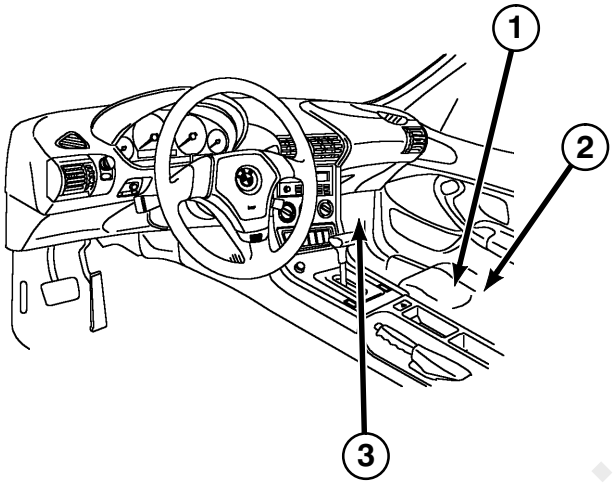
3



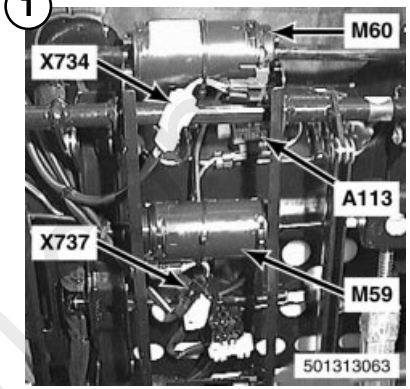
X700
X1380

cardiagn

COMPONENT LOCATION VIEWS



1

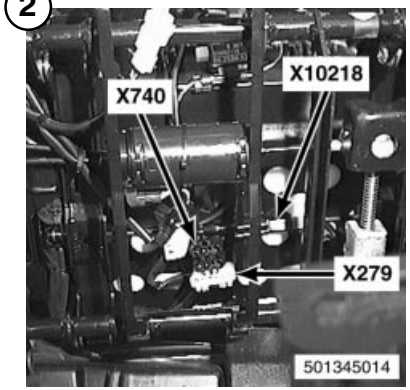


A113 X734
SEAT OCCUPANCY X737
DETECTOR

M59
PASSENGER'S
SEAT HEIGHT
MOTOR

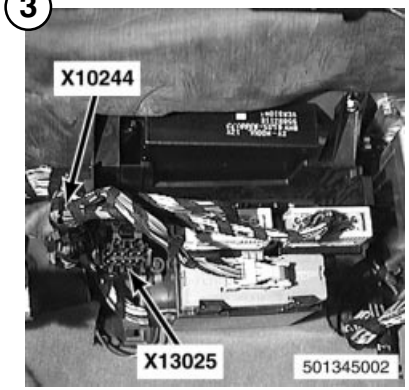
M60
PASSENGER'S
SEAT MOVEMENT
MOTOR

2



X279
X740
X10218

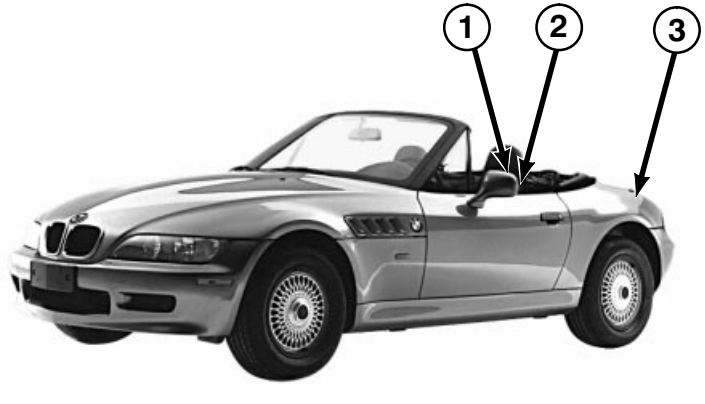
3



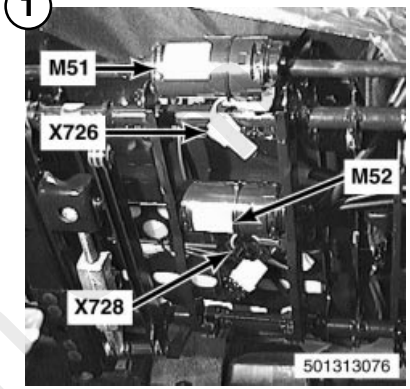
X10244
X13025

cardiagn

COMPONENT LOCATION VIEWS



1

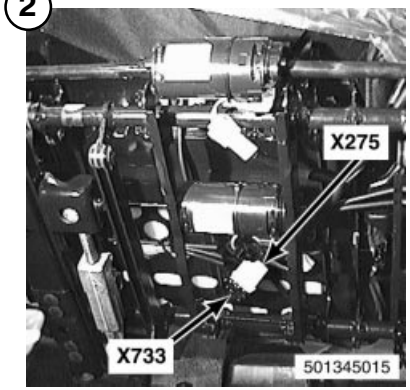


M51
DRIVER'S SEAT
MOVEMENT
MOTOR

M52
DRIVER'S SEAT
HEIGHT MOTOR

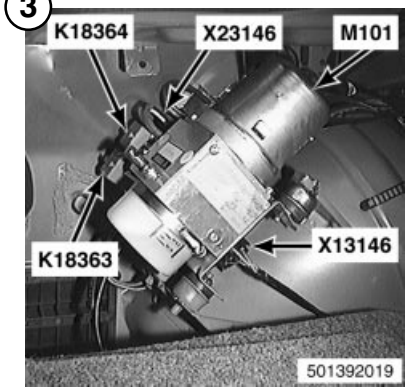
X726
X728

2



X275
X733

3



K18363
CONVERTIBLE TOP
RELAY I (CLOSE)

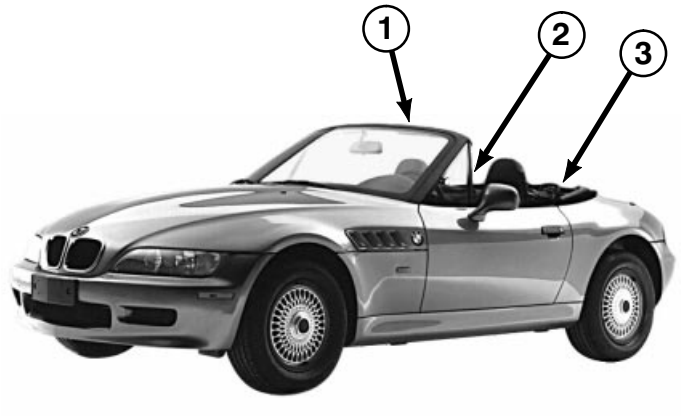
K18364
CONVERTIBLE TOP
RELAY II (OPEN)

M101
CONVERTIBLE TOP
MOTOR

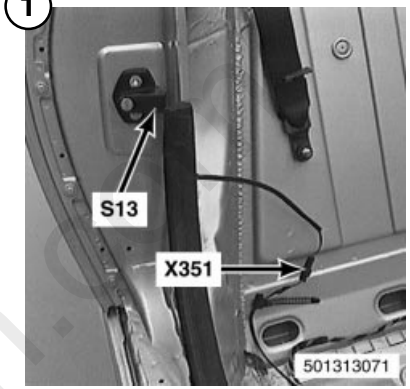
X13146
X23146

cardiagn

COMPONENT LOCATION VIEWS



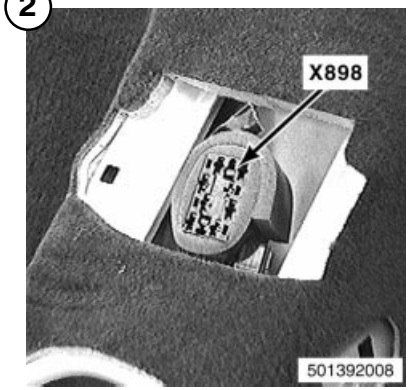
1



S13
PASSENGER'S
DOOR JAMB
SWITCH

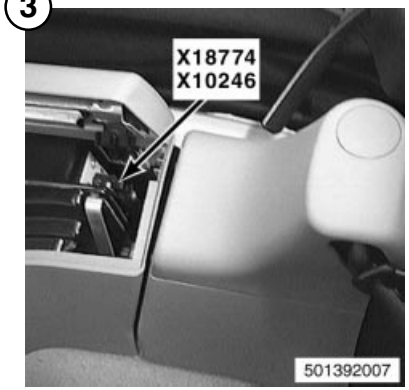
X351

2



X898

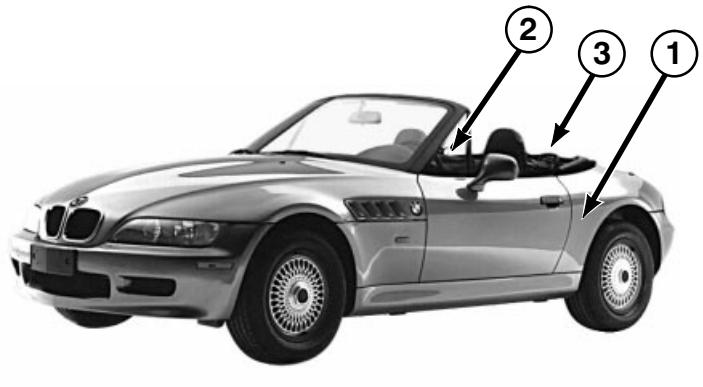
3



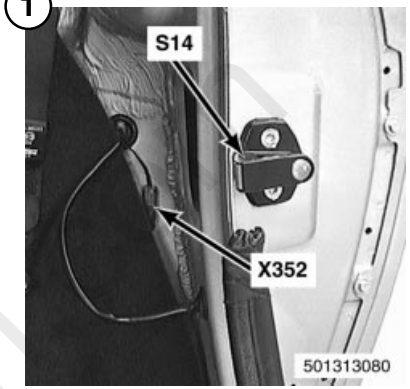
X10246
X18774

cardiagn.com

COMPONENT LOCATION VIEWS



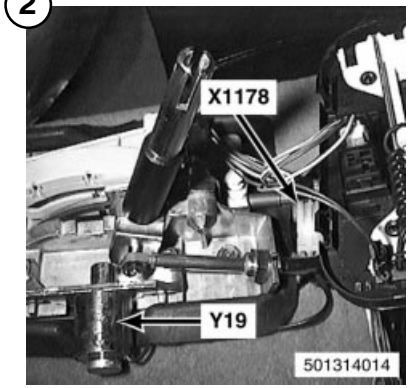
1



S14
DRIVER'S DOOR
JAMB SWITCH

X352

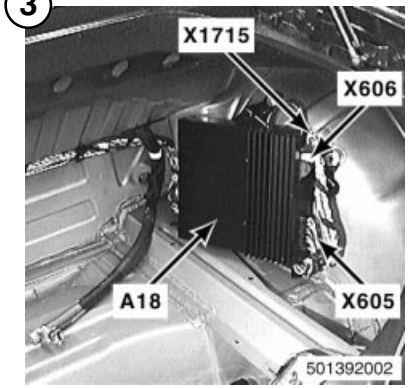
2



Y19
SHIFT – LOCK

X1178

3

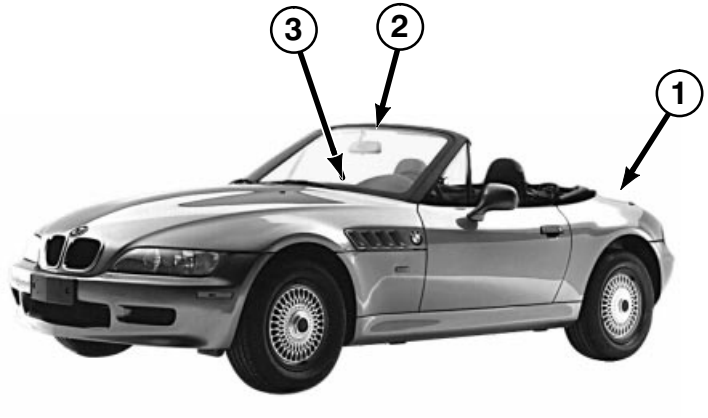


A18
HIFI
AMPLIFIER

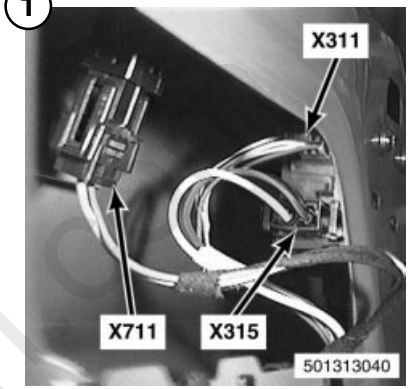
X605
X606
X1715

cardiagn

COMPONENT LOCATION VIEWS

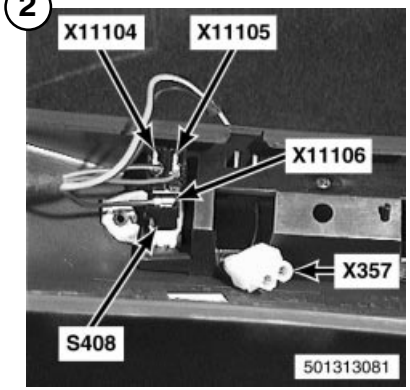


1



X311
X315
X711

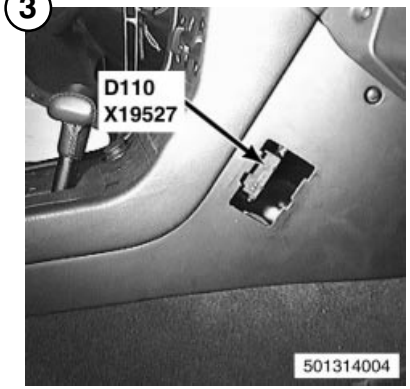
2



S408
SIDE LIGHT
SWITCH

X357
X11104
X11105
X11106

3

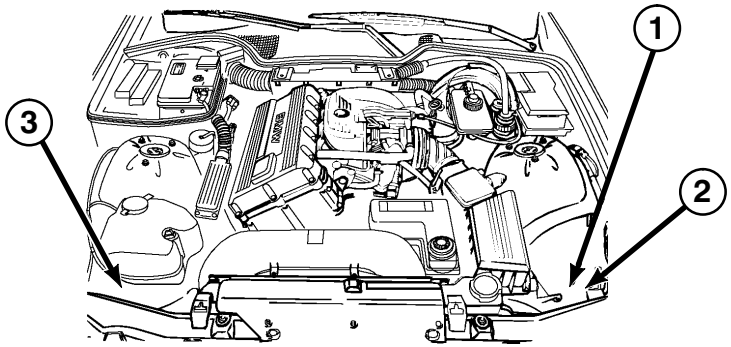


D110
OBD II
CONNECTOR

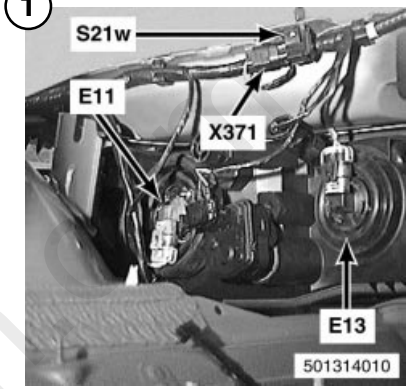
X19527

cardiagn.com

COMPONENT LOCATION VIEWS



1



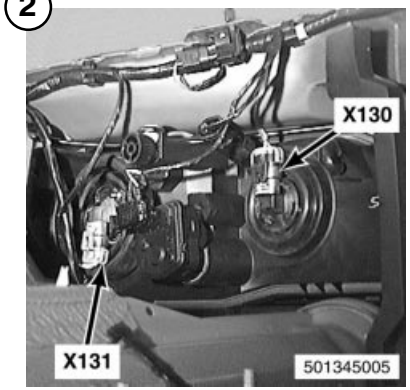
E11
LEFT HIGH BEAM LIGHT

E13
LEFT LOW BEAM LIGHT

S21w
ENGINE HOOD SWITCH

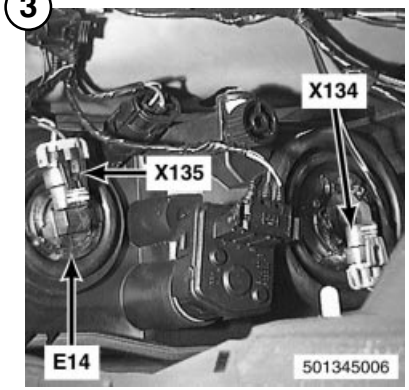
X371

2



X130
X131

3

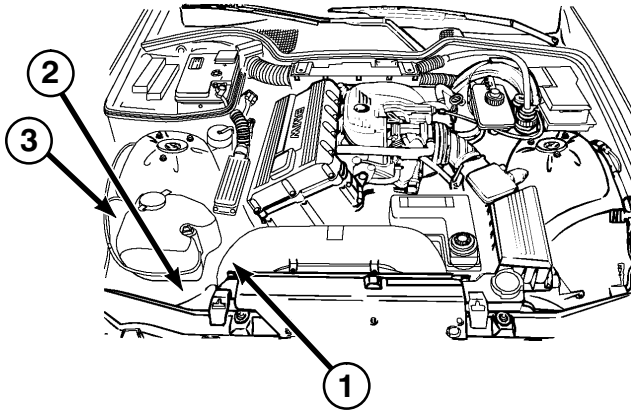


E14
RIGHT LOW BEAM LIGHT

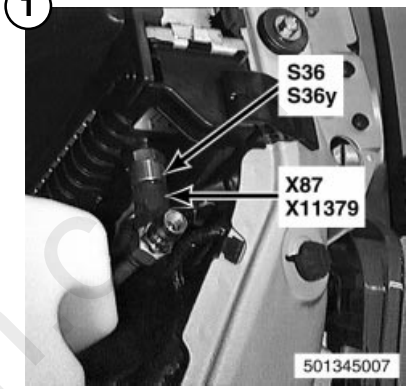
X134
X135

cardiagn

COMPONENT LOCATION VIEWS



1

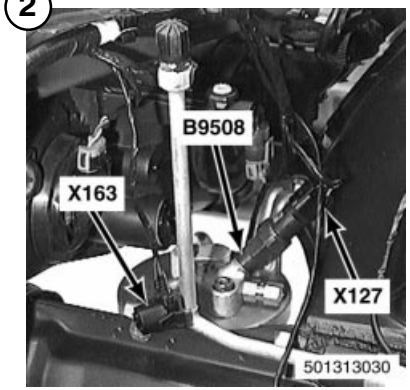


S36
TEMPERATURE
SWITCH

S36y
DOUBLE
TEMPERATURE
SWITCH

X87
X11379

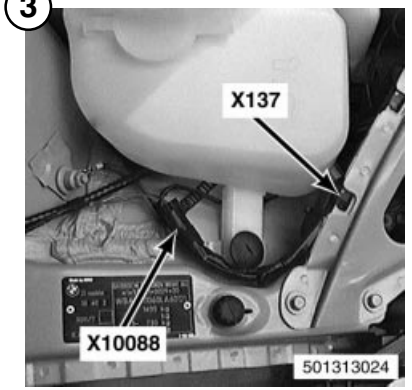
2



B9508
PRESSURE
SWITCH

X127
X163

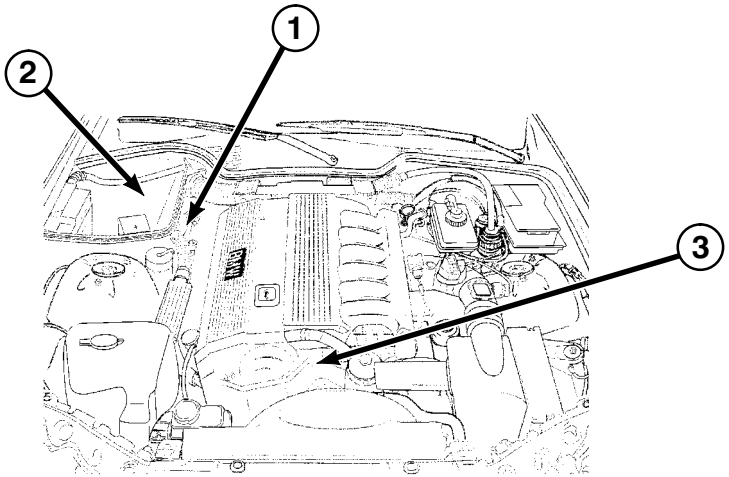
3

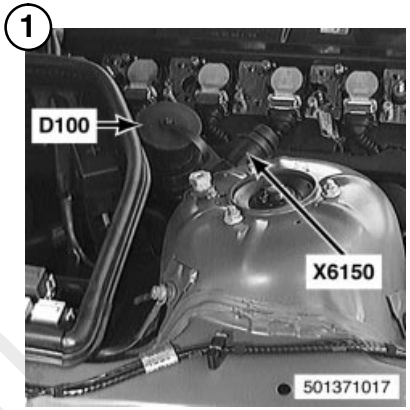


X137
X10088

cardiagn.c

COMPONENT LOCATION VIEWS





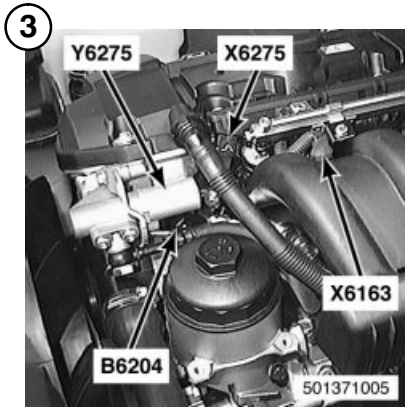
D100
DATA LINK
CONNECTOR

X6150



Y6133
AIR PUMP

X6133



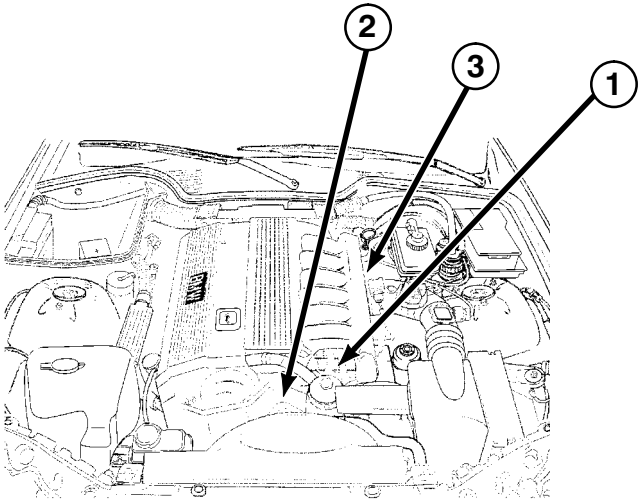
B6204
CAMSHAFT
POSITION SENSOR
(CYLINDER IDEN-
TIFICATION)

Y6275
VARIABLE CAM-
SHAFT CONTROL
VALVE 1

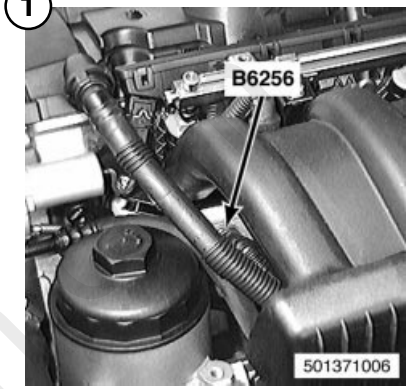
X6163
X6275

cardiagn

COMPONENT LOCATION VIEWS

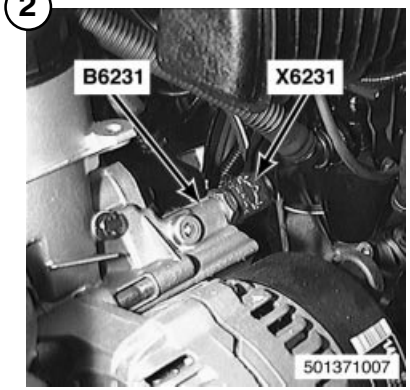


1



B6256
DUAL
TEMPERATURE
SENSOR
(COOLANT
TEMPERATURE)

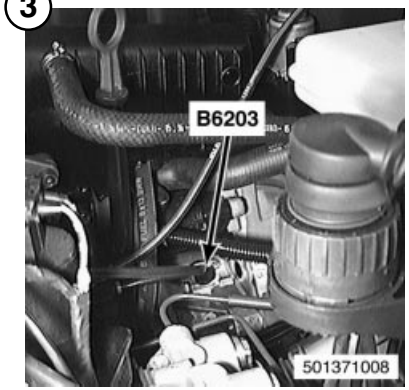
2



B6231
OIL PRESSURE
SWITCH

X6231

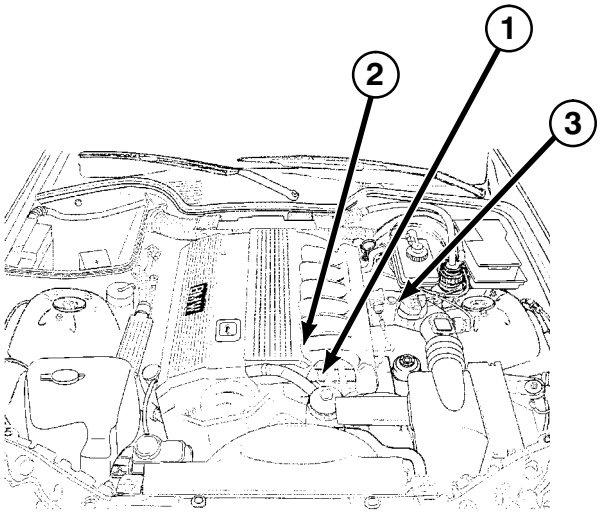
3



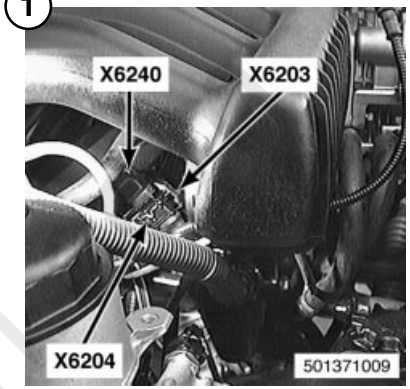
B6203
CRANKSHAFT
POSITION/RPM
SENSOR

cardiagn

COMPONENT LOCATION VIEWS



1



X6203
X6204
X6240

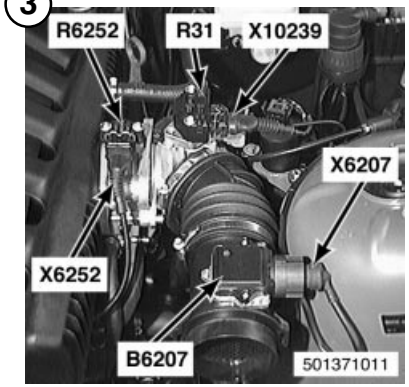
2



B6240
KNOCK SENSOR

Y6163
SECONDARY AIR
PUMP VALVE

3



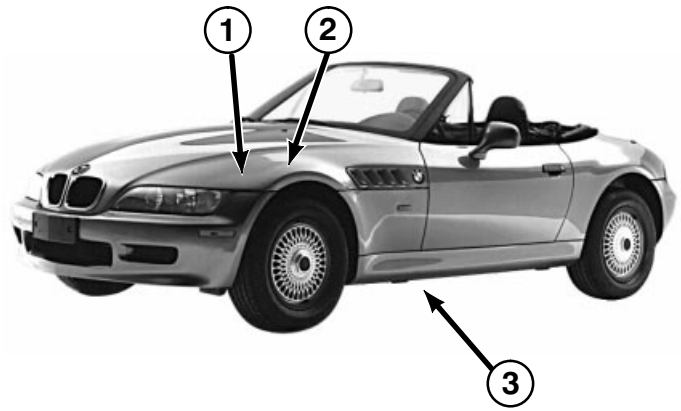
B6207 X6207
HOT FILM AIR X6252
MASS METER X10239

R31
AUXILIARY
THROTTLE
POSITION SENSOR

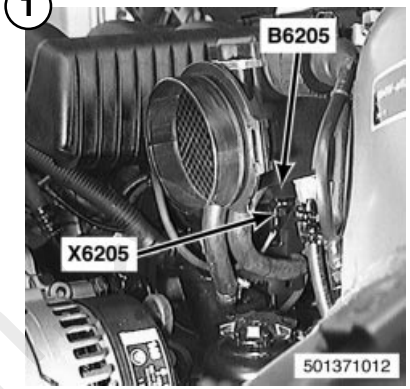
R6252
THROTTLE
POSITION SENSOR

cardiagn

COMPONENT LOCATION VIEWS



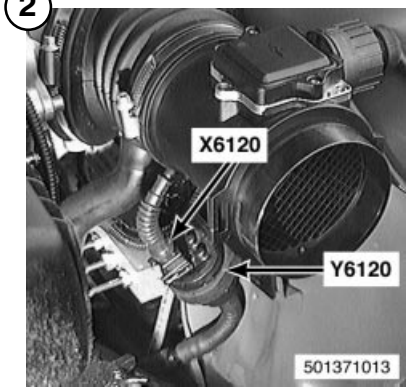
1



B6205
INTAKE AIR
TEMPERATURE
SENSOR

X6205

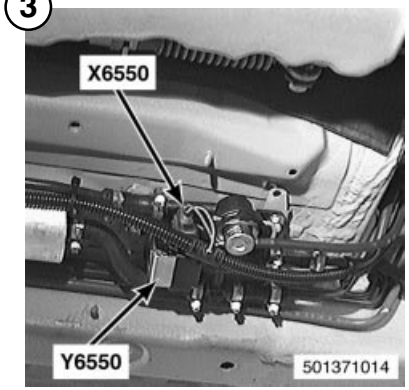
2



Y6120
EVAPORATIVE
EMISSION VALVE

X6120

3

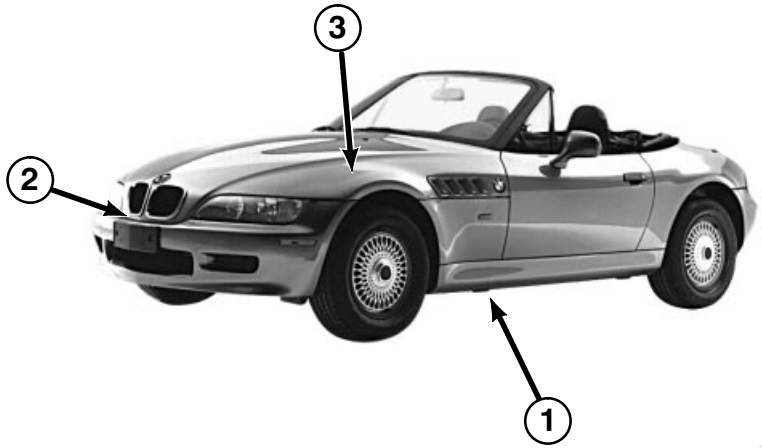


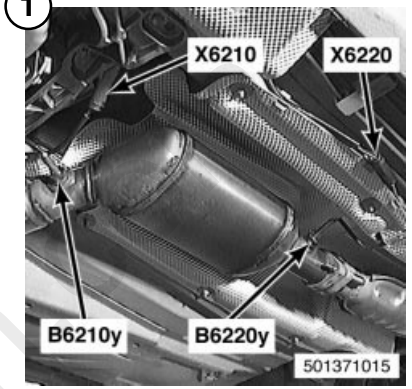
Y6550
SOLENOID VALVE
("RUNNING
LOSSES")

X6550

cardiagn

COMPONENT LOCATION VIEWS





B6210y
OXYGEN SENSOR
(IN FRONT OF
CATALYTIC
CONVERTER)

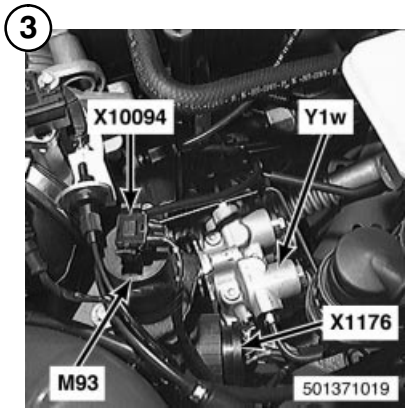
B6220y
OXYGEN SENSOR
(BEHIND
CATALYTIC
CONVERTER)

X6210
X6220



B21
ON–BOARD
COMPUTER
TEMPERATURE
SENSOR

X770



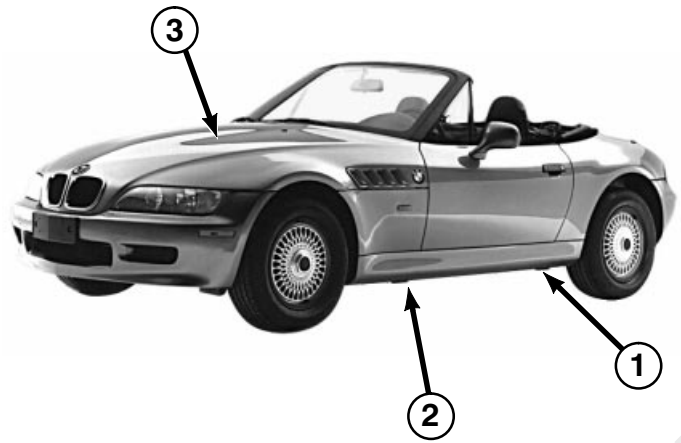
M93
AUXILIARY
THROTTLE
POSITION MOTOR
(ADS)

Y1w
ABS HYDRAULIC
UNIT

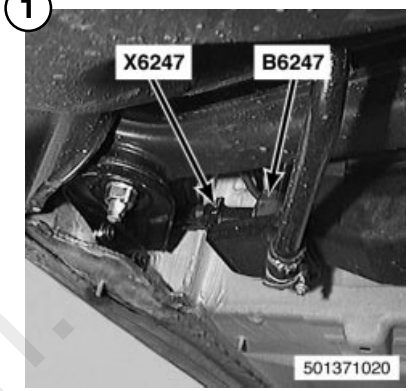
X1176
X10094

cardiagn

COMPONENT LOCATION VIEWS



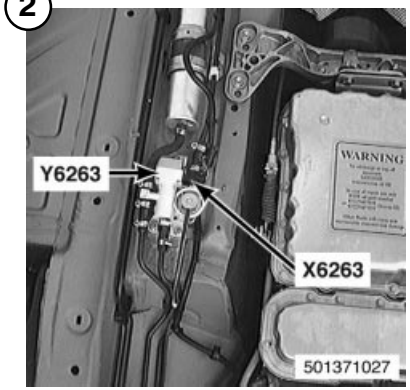
1



B6247
CHARCOAL FILTER
SHUT–OFF VALVE

X6247

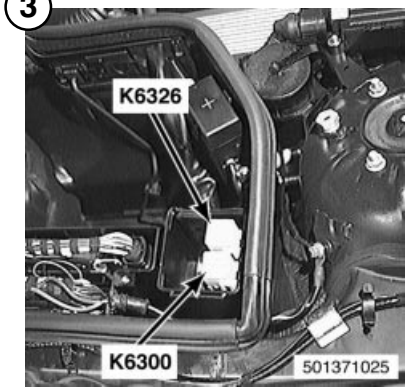
2



Y6263
FUEL CHANGE-
OVER VALVE

X6263

3

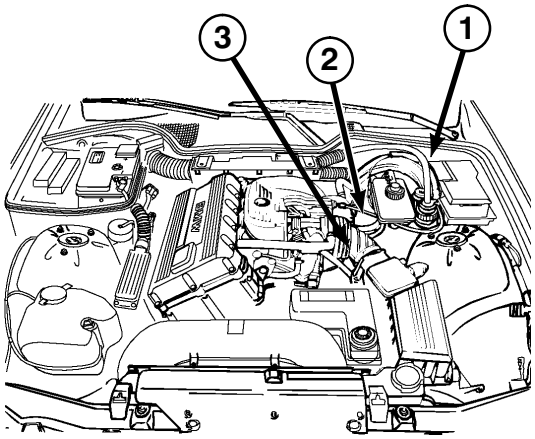


K6300
ENGINE CONTROL
MODULE RELAY

K6326
UNLOADER RELAY,
TERMINAL 15

cardiagn.

COMPONENT LOCATION VIEWS



1



K6304
SECONDARY AIR
PUMP RELAY

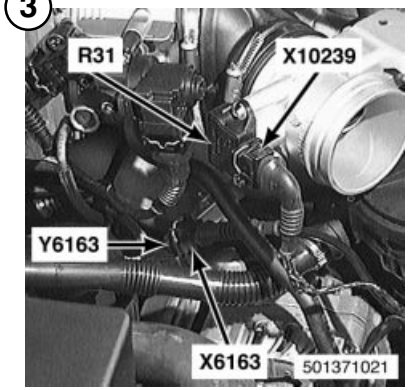
2



Y6133
AIR PUMP

X6133

3



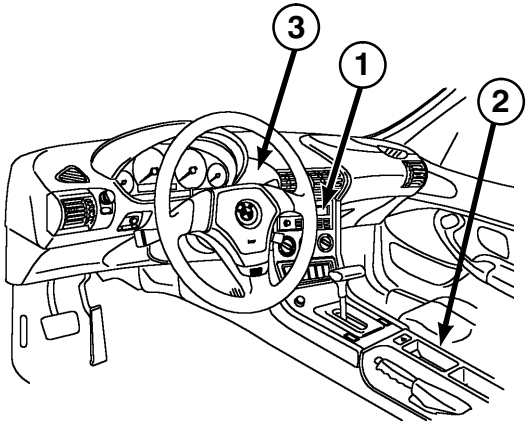
R31
AUXILIARY
THROTTLE
POSITION SENSOR

Y6163
SECONDARY AIR
PUMP VALVE

X6163
X10239

cardiagn

COMPONENT LOCATION VIEWS



1

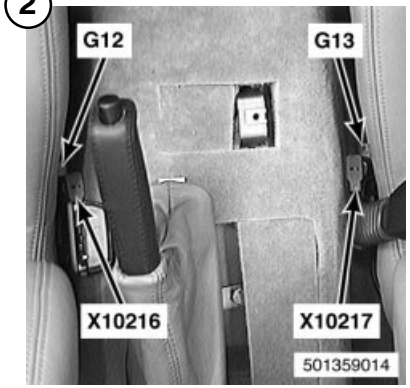


A605
FUSE HOLDER

S20w
RADIO ANTI–
THEFT SWITCH

X539
X5115

2

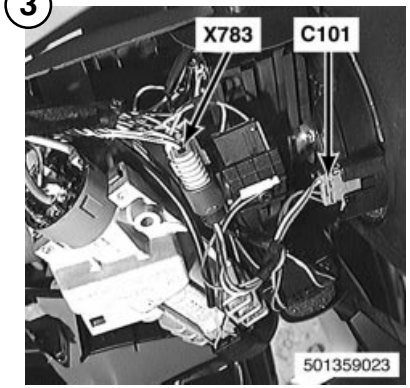


G12
DRIVER'S SIDE
PYROTECHNICAL
BELT TENSIONER

G13
PASSENGER'S
SIDE
PYROTECHNICAL
BELT TENSIONER

X10216
X10217

3

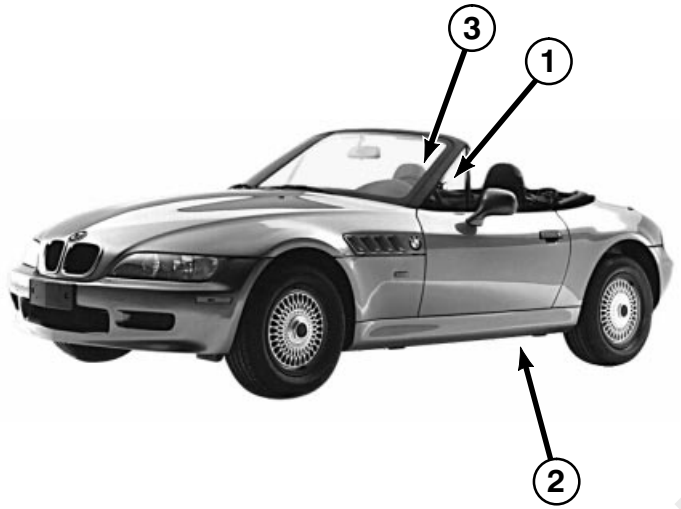


C101
CONTACT RING

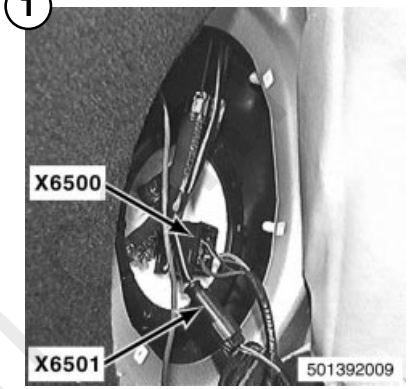
X783

cardiagn

COMPONENT LOCATION VIEWS

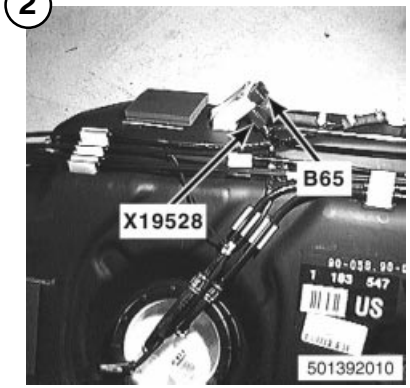


1



X6500
X6501

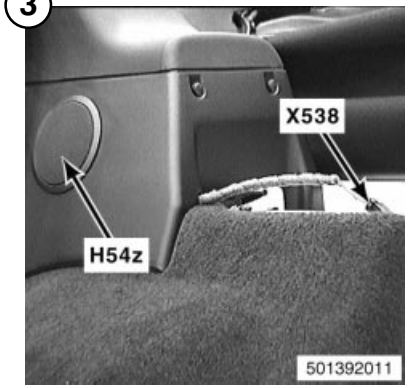
2



B65
FUEL TANK PRESSURE SENSOR

X19528

3

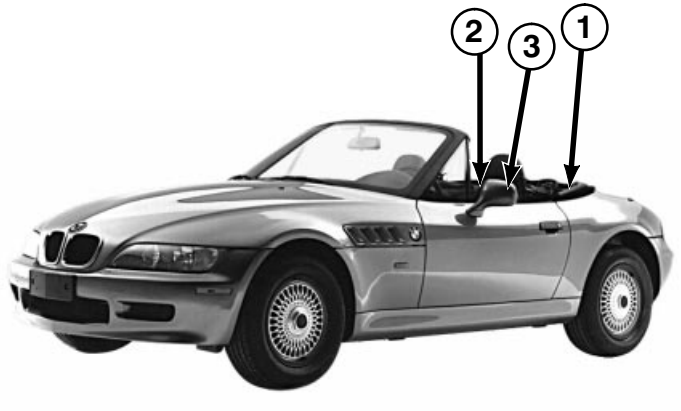


H54z
REAR RIGHT MID–HIGH RANGE SPEAKER

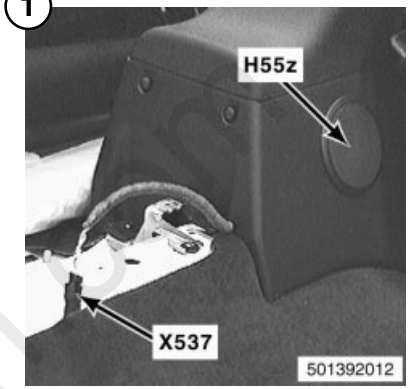
X538

cardiagn

COMPONENT LOCATION VIEWS



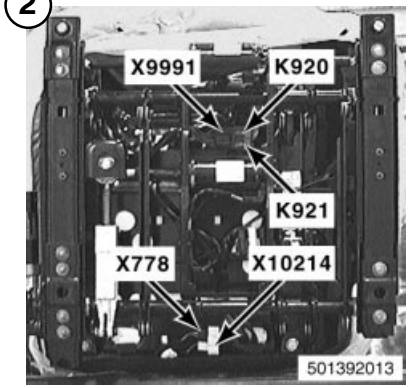
1



H55z
REAR LEFT MID–HIGH RANGE SPEAKER

X537

2

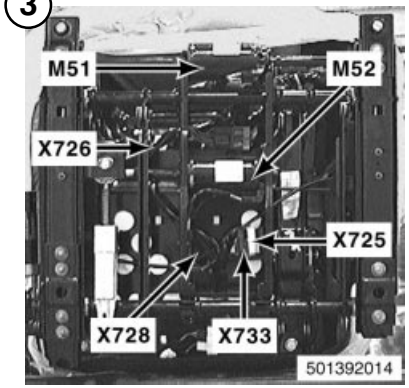


K920
DRIVER'S SEAT TILT ADJUST CUT–OFF RELAY

K921
DRIVER'S SEAT LENGTH ADJUST CUT–OFF RELAY

X778
X9991
X10214

3



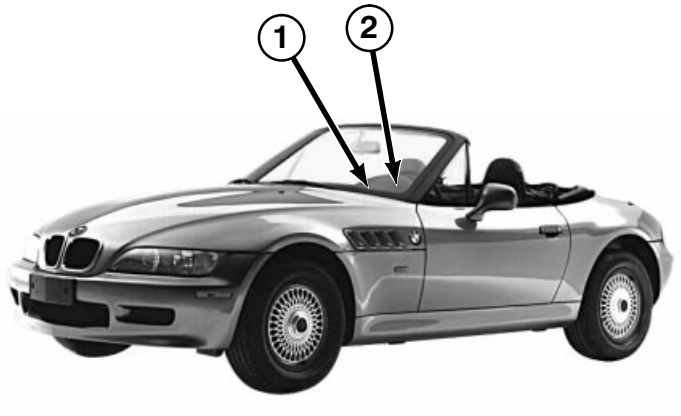
M51
DRIVER'S SEAT MOVEMENT MOTOR

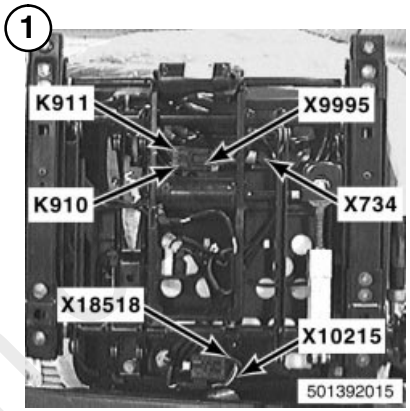
M52
DRIVER'S SEAT HEIGHT MOTOR

X275
X726
X728
X733

cardiagn

COMPONENT LOCATION VIEWS

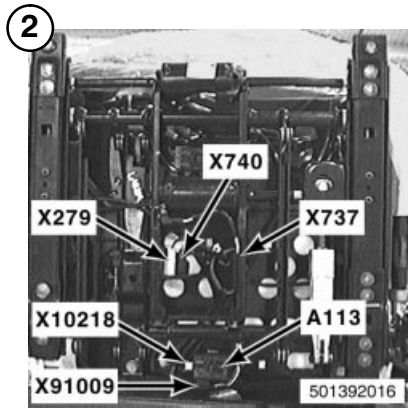




K910
PASSENGER'S
SEAT TILT ADJUST
CUT−OFF RELAY

K911
PASSENGER'S
SEAT LENGTH AD-
JUST CUT−OFF
RELAY

X734
X9995
X10215
X18518



A113
SEAT OCCUPANCY
DETECTOR

X279
X737
X740
X10218
X91009

cardiagn

SPLICE LOCATION VIEWS

SPLICE	HARNESS	PAGE NUMBER
X181–X188	BODY	8000.0-03
X189	IHKS	8000.0-03
X191–X196	BODY	8000.0-03
X197	BODY	8000.0-04
X203–X223	BODY	8000.0-03
X228	BODY	8000.0-04
X245–X246	BODY	8000.0-03
X443	BODY	8000.0-03
X444	BODY	8000.0-04
X445	BODY	8000.0-03
X449	BODY	8000.0-04
X450	BODY	8000.0-03
X453–X460	BODY	8000.0-04
X461	BODY	8000.0-03
X462–X465	BODY	8000.0-04
X470	BODY	8000.0-03
X530	BODY	8000.0-03
X576–X595	BODY	8000.0-03
X697–X699	BODY	8000.0-03
X805	BODY	8000.0-04
X806	BODY	8000.0-03
X814–X818	IHKS	8000.0-03
X824–X830	RADIO/HIFI/CD	8000.0-04
X849–X851	DRIVER'S DOOR	8000.0-04
X876–X877	RADIO/HIFI/CD	8000.0-04
X878–X888	BODY	8000.0-03
X942	PASSENGER'S DOOR	8000.0-04
X985	IHKS	8000.0-03
X1015–X1019	BODY	8000.0-03
X1022–X1047	BODY	8000.0-03
X1055	BODY	8000.0-04
X1066–X1079	BODY	8000.0-03
X1091	BODY	8000.0-04
X1100–X1115	BODY	8000.0-03
X1149	BODY	8000.0-04
X1152–X1164	BODY	8000.0-03
X1167	BODY	8000.0-04
X1168–X1186	BODY	8000.0-03
X1214	BODY	8000.0-03
X1225–X1226	BODY	8000.0-04
X1234–X1238	BODY	8000.0-04
X1258	BODY	8000.0-03
X1263	BODY	8000.0-04
X1264	BODY	8000.0-03
X1280	BODY	8000.0-03
X1403	BODY	8000.0-03

cardiagn.com

SPLICE LOCATION VIEWS

SPLICE	HARNESS	PAGE NUMBER
X1429–X1435	IHKS	8000.0-03
X1541–X1542	BODY	8000.0-03
X1608	BODY	8000.0-04
X1610–X1616	BODY	8000.0-03
X1617–X1618	BODY	8000.0-04
X1620–X1625	BODY	8000.0-03
X2233	BODY	8000.0-03
X6410	M44 ENGINE	8000.0-05
X6411–X6415	M52 ENGINE	8000.0-06
X6420	M52 ENGINE	8000.0-06
X6458–X6460	M52 ENGINE	8000.0-06
X6460–X6492	M44 ENGINE	8000.0-05
X6475	M52 ENGINE	8000.0-06
X6492	M52 ENGINE	8000.0-06
X6810	M52 ENGINE	8000.0-06
X6820–X6822	M52 ENGINE	8000.0-06
X6820–X6823	M44 ENGINE	8000.0-05
X6830–X6835	M52 ENGINE	8000.0-06
X6832–X6891	M44 ENGINE	8000.0-05
X6860–X6869	M52 ENGINE	8000.0-06
X6900	M44 ENGINE	8000.0-05
X6949	BODY	8000.0-03
X7845–X7846	M44 ENGINE	8000.0-05
X8000–X8015	M52 ENGINE	8000.0-06
X8004–X8005	M44 ENGINE	8000.0-05
X8008	M44 ENGINE	8000.0-05
X8015	M44 ENGINE	8000.0-05
X8038	M52 ENGINE	8000.0-06
X8051	M52 ENGINE	8000.0-06
X8056	M44 ENGINE	8000.0-05
X8071–X8074	M52 ENGINE	8000.0-06
X8073	M44 ENGINE	8000.0-05
X8090–X8091	M52 ENGINE	8000.0-06
X8103	M52 ENGINE	8000.0-06
X8564–X8565	M52 ENGINE	8000.0-06
X8564–X8576	M44 ENGINE	8000.0-05
X9430	BODY	8000.0-03
X9993	DRIVER'S SEAT	NOT SHOWN
X9997	PASSENGER'S SEAT	NOT SHOWN
X10008	BODY	8000.0-03
X10009	BODY	8000.0-04
X10014–X10055	BODY	8000.0-03
X10064	BODY	8000.0-04
X10100–X10126	BODY	8000.0-03
X10169	M44 ENGINE	8000.0-05
X10189	BODY	8000.0-04

cardiagn.com

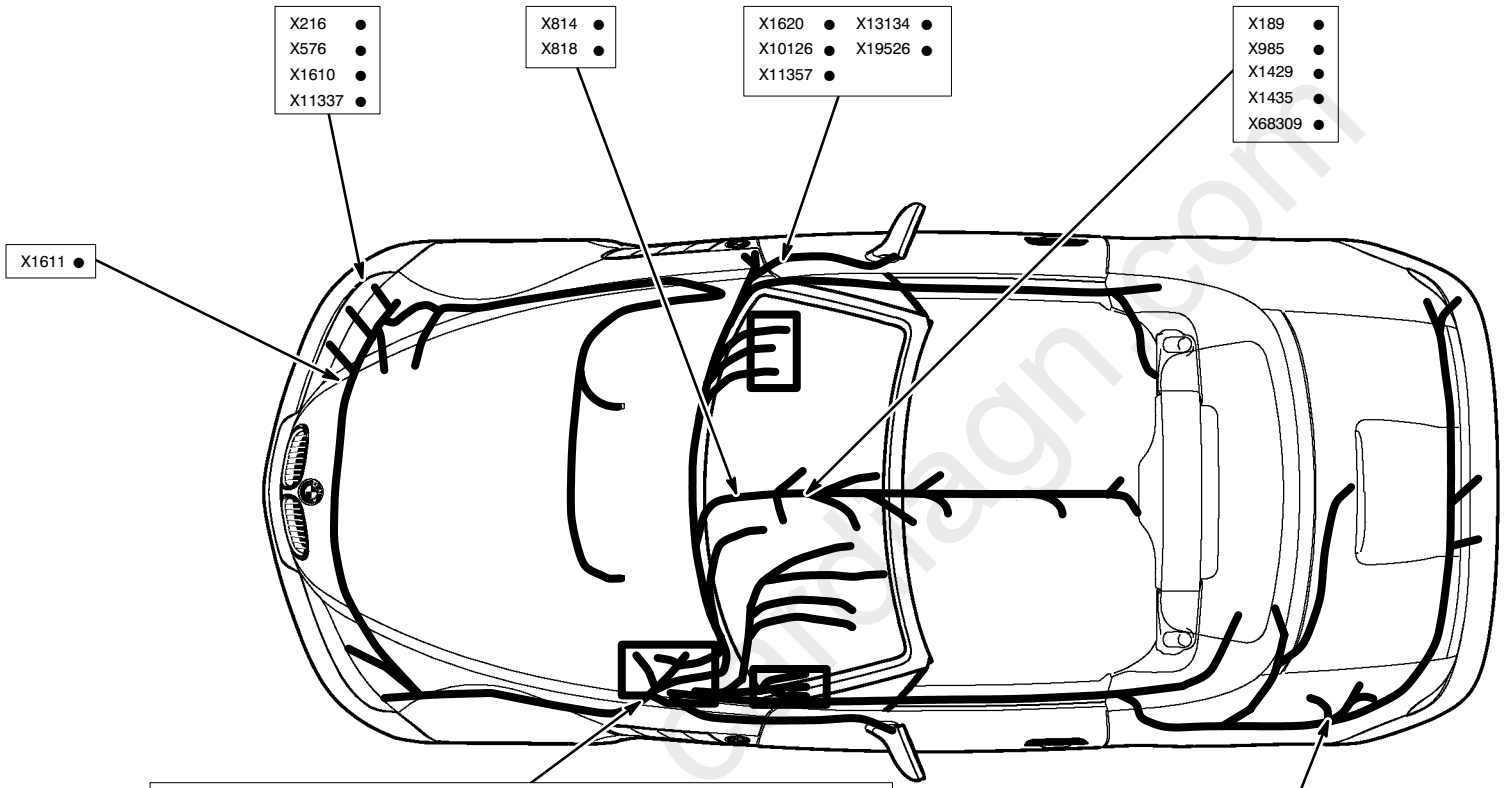
SPLICE LOCATION VIEWS

SPLICE	HARNESS	PAGE NUMBER
X10251–X10252	BODY	8000.0-03
X11264–X11284	BODY	8000.0-03
X11291	BODY	8000.0-04
X11337–X11353	BODY	8000.0-03
X11355	BODY	8000.0-04
X11357	BODY	8000.0-03
X13007	BODY	8000.0-03
X13011–X13047	BODY	8000.0-04
X13134	BODY	8000.0-03
X13289	BODY	8000.0-03
X18061	BODY	8000.0-03
X19513	RADIO/HIFI/CD	8000.0-04
X19002–X19004	BODY	8000.0-04
X19526	BODY	8000.0-03
X64109	BODY	8000.0-03
X64119	BODY	8000.0-03
X64129	BODY	8000.0-03
X64591	BODY	8000.0-04
X68309	IHKS	8000.0-03
X80253	M52 ENGINE	8000.0-06

cardiagn.com

SPLICE LOCATION VIEWS

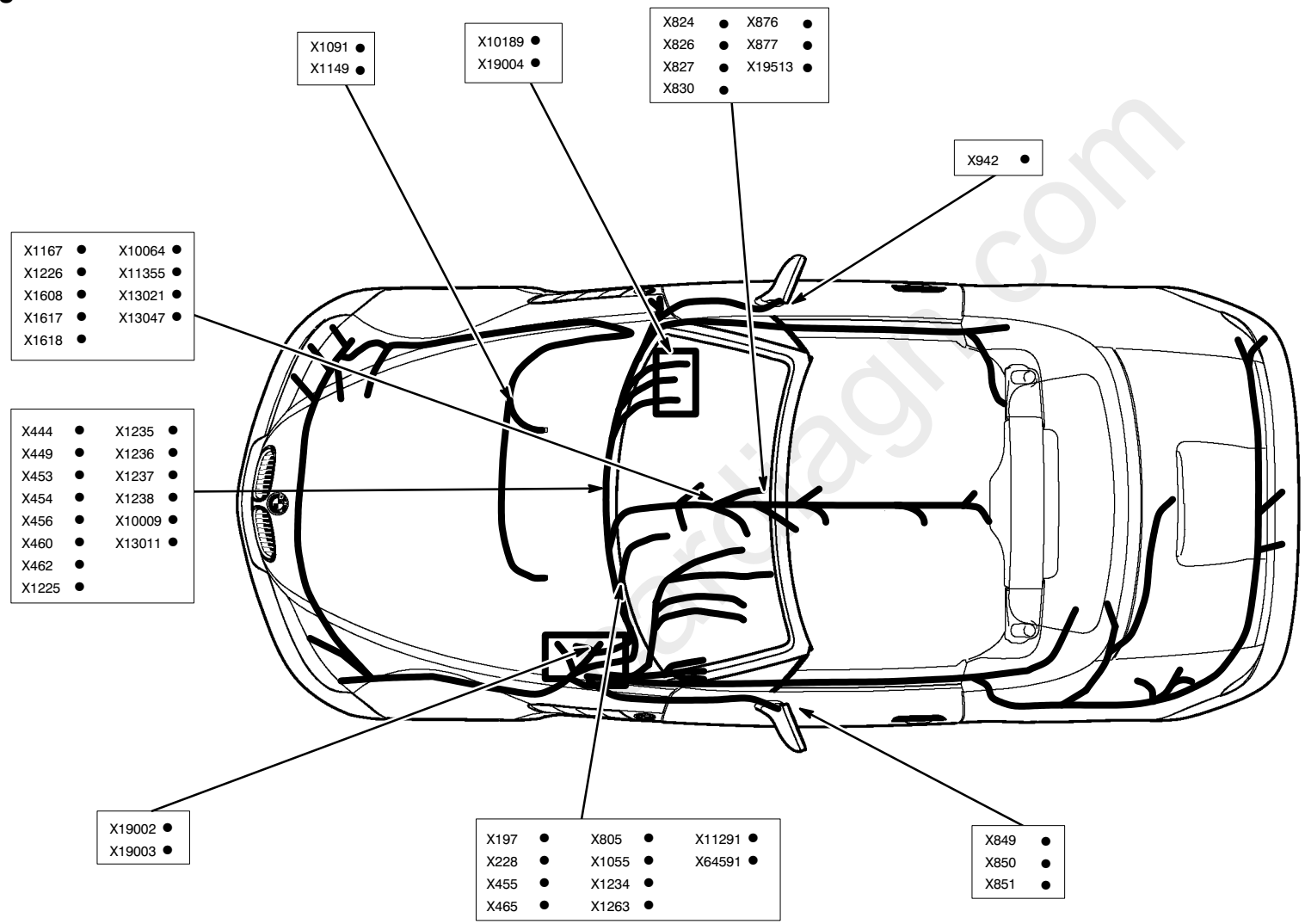
BODY HARNESS



SPLICE PANEL						
X181	X246	X888	X1076	X1258	X10021	X11339
X182	X443	X1015	X1079	X1264	X10022	X11353
X183	X445	X1019	X1100	X1280	X10024	X13289
X184	X450	X1022	X1107	X1403	X10027	X18061
X185	X461	X1027	X1115	X1541	X10048	X64109
X188	X470	X1028	X1152	X1542	X10055	X64119
X191	X530	X1029	X1159	X1614	X10100	X64129
X195	X595	X1036	X1163	X1616	X10251	
X196	X697	X1047	X1164	X2233	X10252	
X203	X698	X1066	X1168	X6949	X11264	
X213	X699	X1067	X1169	X9430	X11282	
X223	X806	X1069	X1182	X10008	X11283	
X245	X878	X1073	X1186	X10020	X11284	

SPLICE LOCATION VIEWS

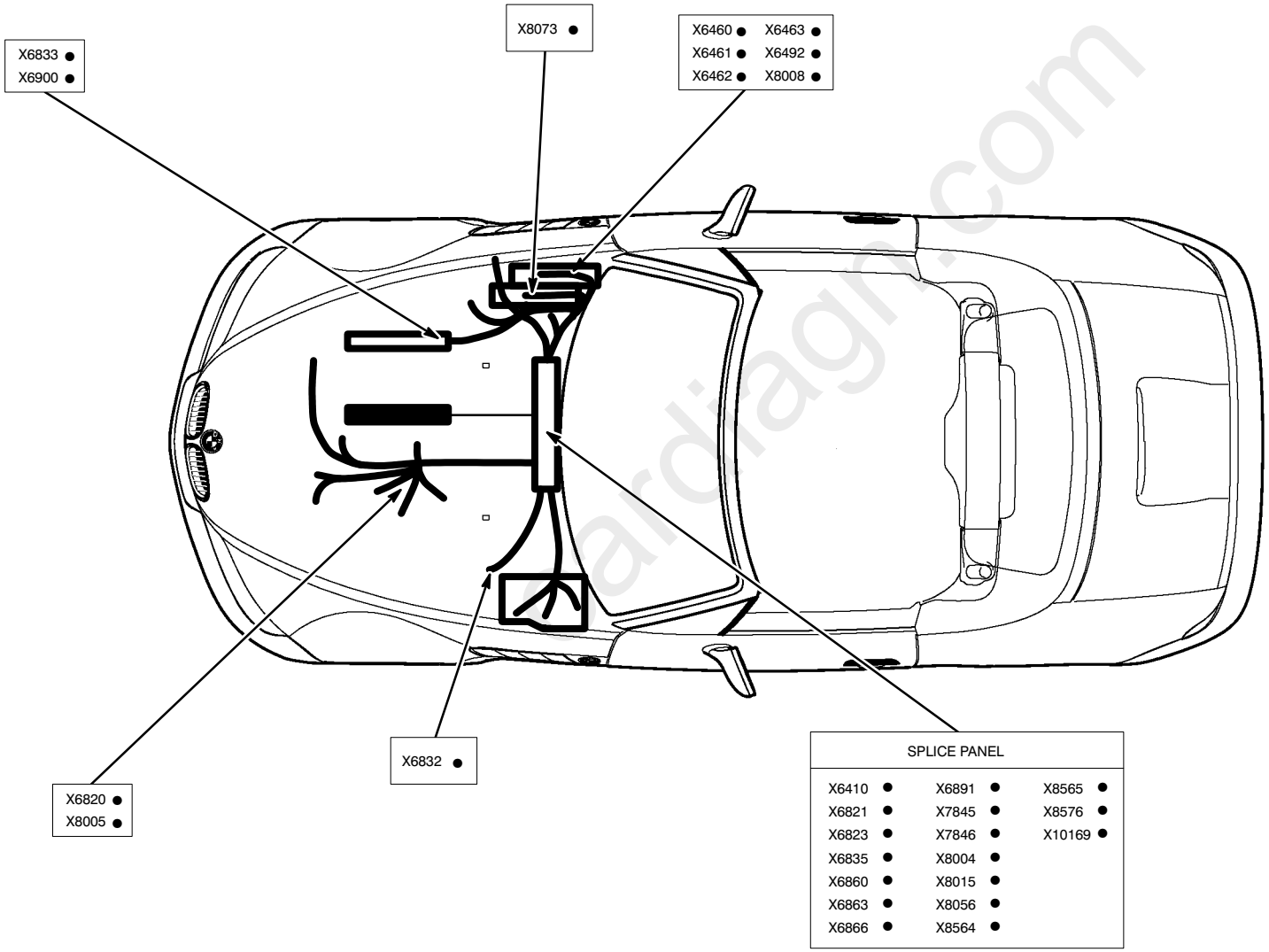
BODY HARNESS



bmwfaq.com

SPLICE LOCATION VIEWS

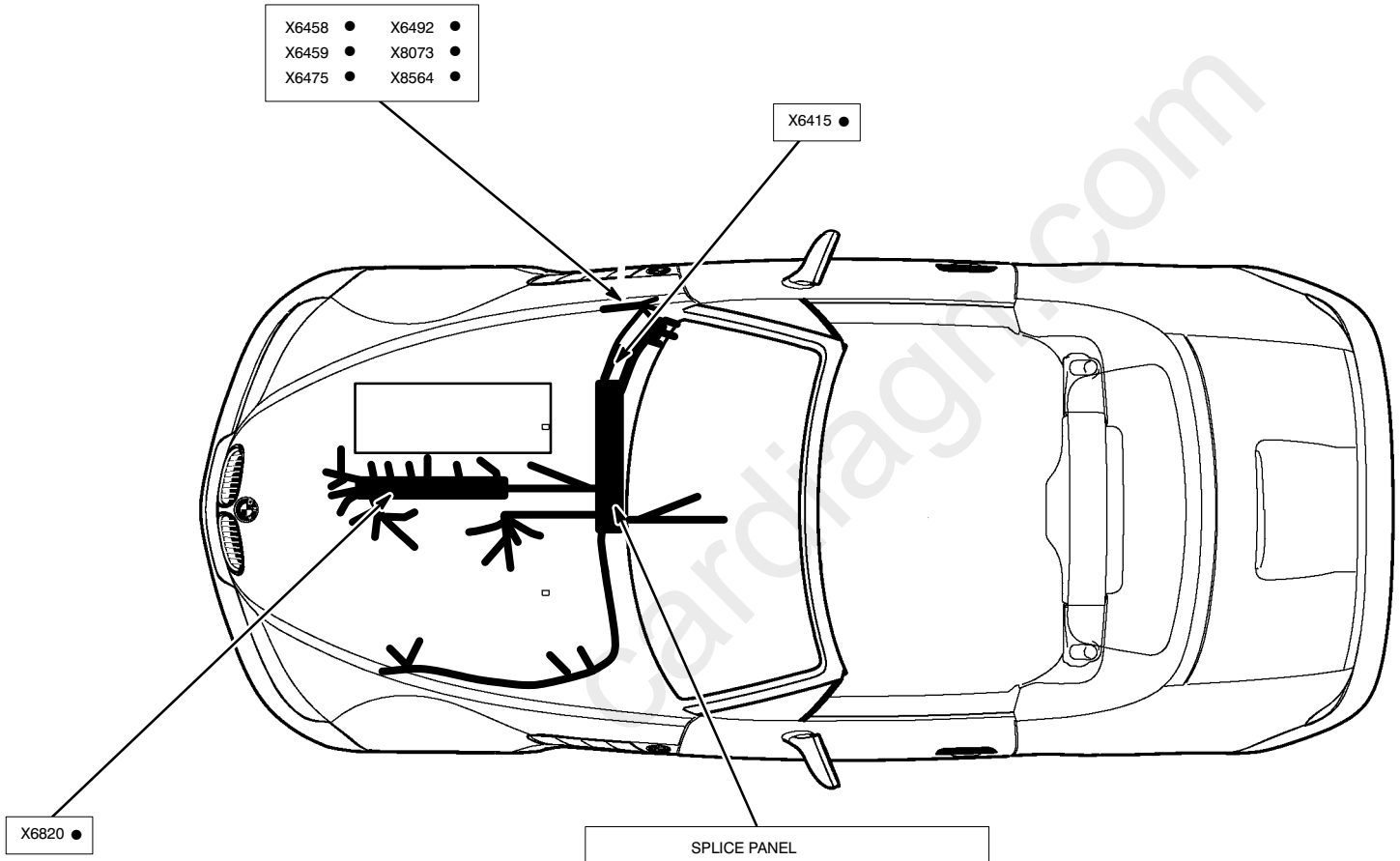
ENGINE HARNESS M44



cardiagn.com

SPLICE LOCATION VIEWS

ENGINE HARNESS M52



SPLICE PANEL			
X6411 ●	X6822 ●	X6869 ●	X8071 ●
X6412 ●	X6830 ●	X8000 ●	X8072 ●
X6413 ●	X6832 ●	X8004 ●	X8074 ●
X6414 ●	X6835 ●	X8007 ●	X8090 ●
X6420 ●	X6860 ●	X8010 ●	X8091 ●
X6460 ●	X6863 ●	X8015 ●	X8103 ●
X6810 ●	X6867 ●	X8038 ●	X8565 ●
X6821 ●	X6868 ●	X8051 ●	X80253 ●

cardiagn.com

CONNECTOR VIEWS

FIG. 1

B880001.00

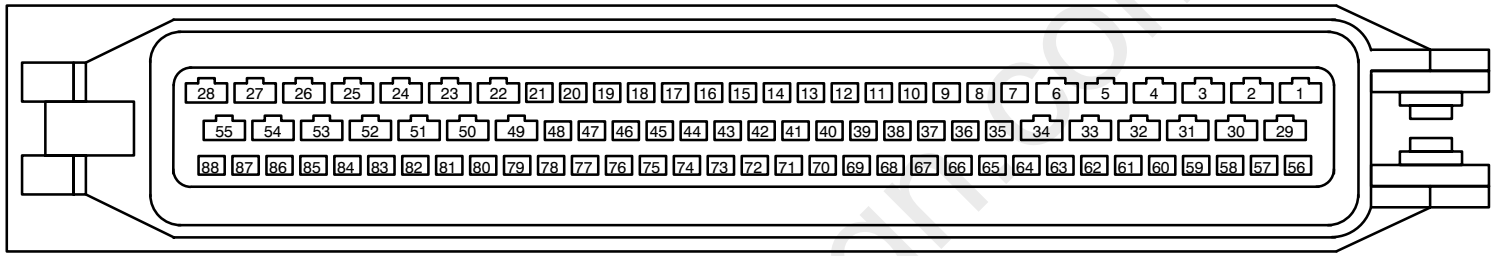


FIG. 2

B250004.00

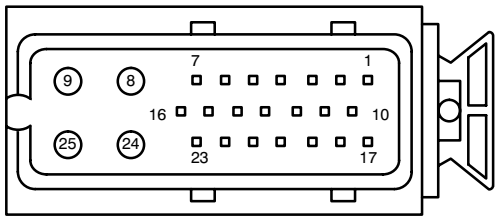
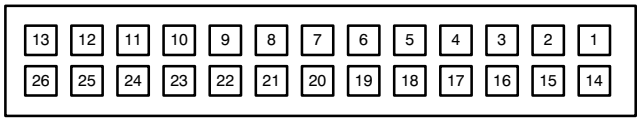


FIG. 3

B260005.00



cardiagn.com

CONNECTOR VIEWS

FIG. 1

B030024

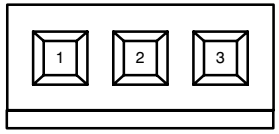


FIG. 2

B100004.02

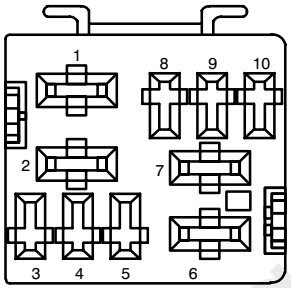


FIG. 3

B120001.01

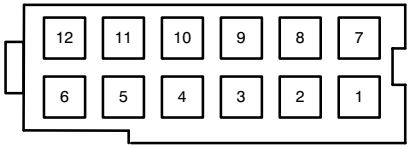


FIG. 4

B100001.00

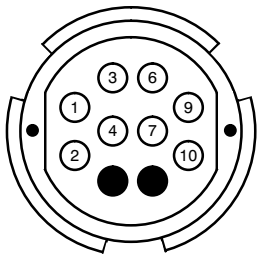


FIG. 5

B120002.02

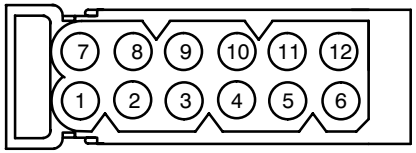
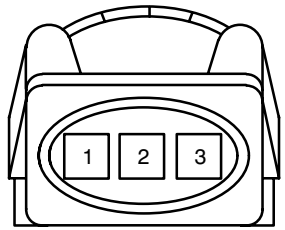


FIG. 6

B030018.02



cardiagn.com

CONNECTOR VIEWS

FIG. 1

B080002.00

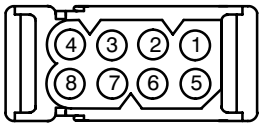


FIG. 2

B170001.00

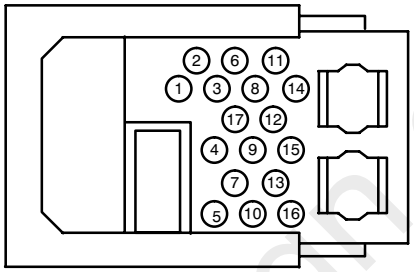


FIG. 3

B100008.00

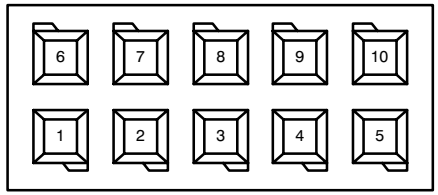


FIG. 4

B120004.01

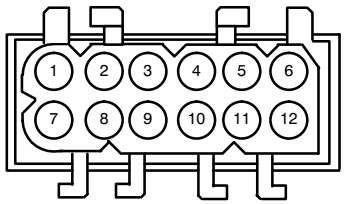


FIG. 5

B030004.01

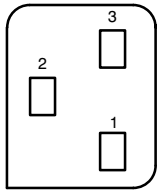
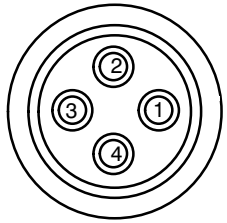


FIG. 6

B040023.02



cardiagn.com

CONNECTOR VIEWS

FIG. 1

B040004.00

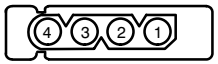


FIG. 2

B040023.01

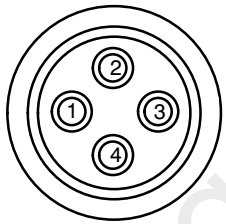


FIG. 3

B080001.00

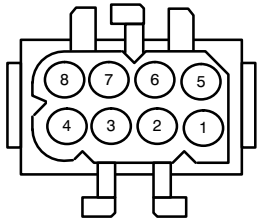


FIG. 4

B090002.00

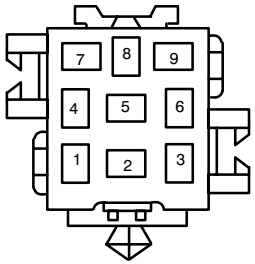


FIG. 5

B260002.01

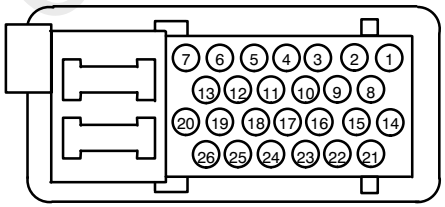
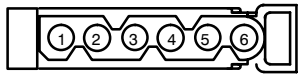


FIG. 6

B060001.02



cardiagn.com

CONNECTOR VIEWS

FIG. 1

B200003.00

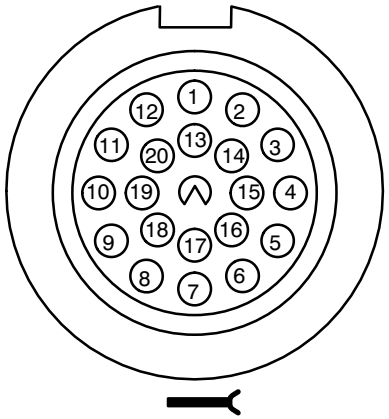


FIG. 2

B070005.00

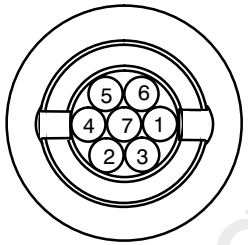


FIG. 3

B030003.00

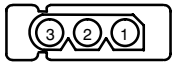


FIG. 4

B250001.02

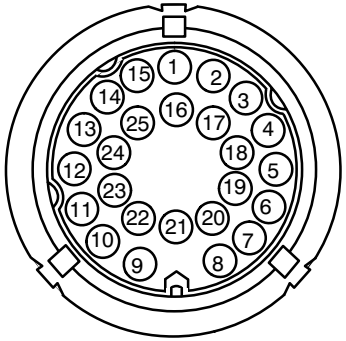
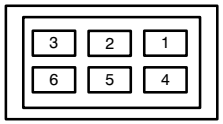


FIG. 5

B060019.03



cardiagn.com

CONNECTOR VIEWS

FIG. 1

B150002.00

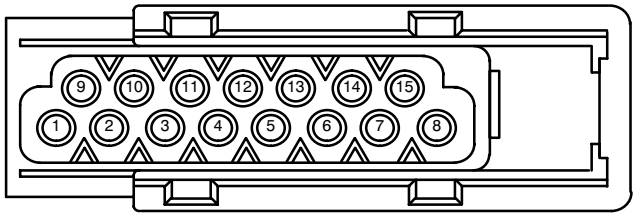


FIG. 2

B030036.01

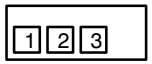


FIG. 3

B040027.00

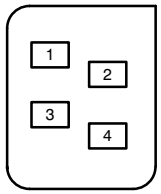
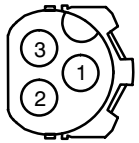


FIG. 4

B030006.00



cardiagn.com

CONNECTOR VIEWS

FIG. 1

B0400028.00

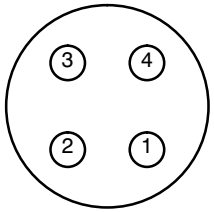


FIG. 2

B080020.00

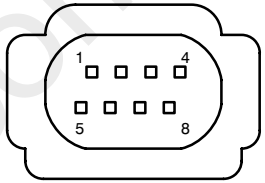


FIG. 3

B0300044.00

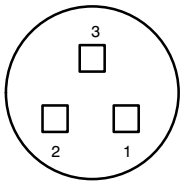


FIG. 4

B050001.00

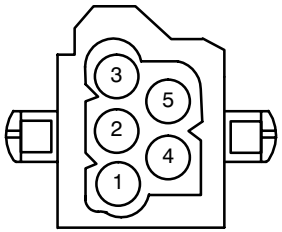
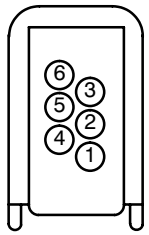


FIG. 5

B060041.00



cardiagn.com

CONNECTOR VIEWS

FIG. 1

B040026

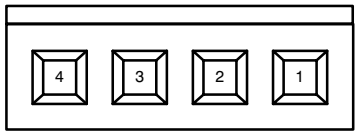


FIG. 2

B120006.00

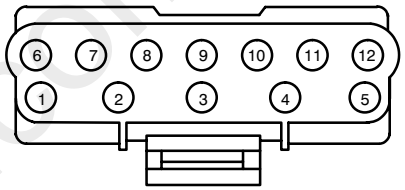


FIG. 3

B180000.00

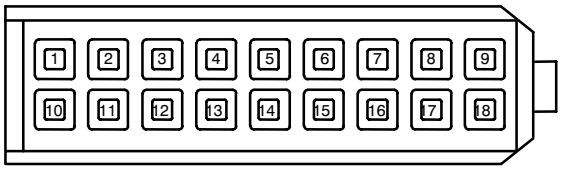


FIG. 4

B060037.00

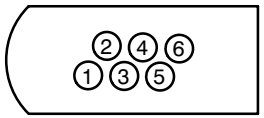
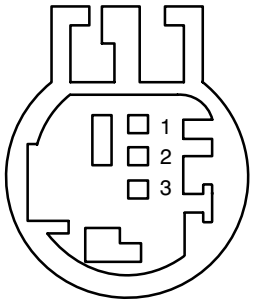


FIG. 5

B030042.00



cardiagn.com

CONNECTOR VIEWS

FIG. 1

B160002.00

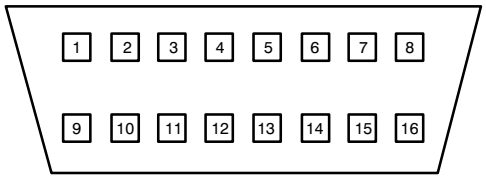


FIG. 2

B060013.00

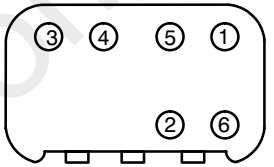


FIG. 3

B080013.00

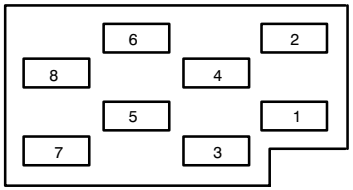
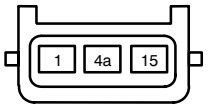


FIG. 4

B030015.08



cardiagn.com

CONNECTOR VIEWS

FIG. 1

B090006.01

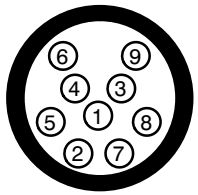


FIG. 2

B060043.00

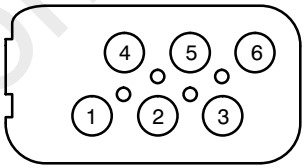


FIG. 3

B070012.00

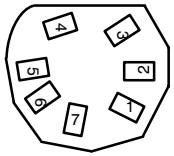
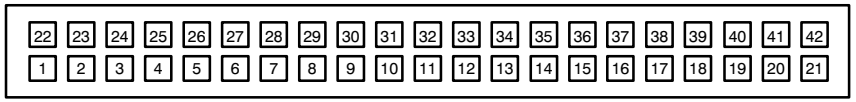


FIG. 4

B420000.00



cardiagn.com

CONNECTOR VIEWS

FIG. 1

B030022.00

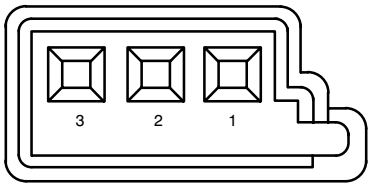


FIG. 2

B500000.00

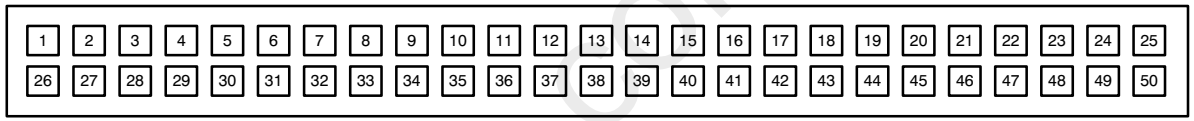


FIG. 3

B550002.00

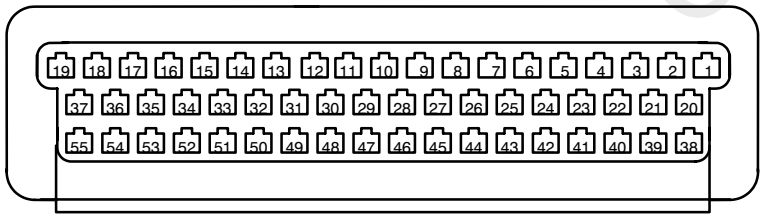
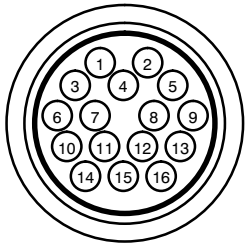


FIG. 4

B160001.00



cardiagn.com