

**1996**

**BMW 318is/c,  
320i, 325i/c, 328i/c  
M3 (E36)**

**Electrical  
Troubleshooting  
Manual**

Vehicles Produced 9/95 to 8/96



The following systems have been modified during the model year and are marked as early or late production:

- 0670.2 POWER DISTRIBUTION
- 0670.3 FUSE DETAILS
- 0670.4 GROUND DISTRIBUTION
- 0670.5 DATA LINK
- 1210.20 ENGINE CONTROL SYSTEM (DME M5.2, 4-CYLINDER M44)
- 2460.2 ELECTRONIC TRANSMISSION CONTROL (EGS A4S 310R)
- 5126.0 ZKE CENTRAL LOCKING (ZV)
- 5430.1 ELECTRICAL CONVERTIBLE TOP
- 6135.0 DRIVE-AWAY PROTECTION (EWS II)
- 6211.0 INSTRUMENT CLUSTER
- 6313.0 TURN/HAZARD LIGHTS
- 6350.0 CRASH CONTROL MODULE
- 6450.4 INTEGRATED CLIMATE REGULATION (IHKR E36)
- 6450.7 INTEGRATED CLIMATE REGULATION (IHKA E36)
- 6561.0 CELLULAR TELEPHONE (PROVISIONS)
- 6581.2 ON-BOARD COMPUTER (BC V)



## ELECTRICAL TROUBLESHOOTING MANUAL

**3 SERIES – E36 (318is, 320i, 325i, 328i, M3, INCL.  
CONVERTIBLE)**

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### MODEL YEAR 1996

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SEAT BELT SWITCH, PASSENGER'S, S59 ..... 3234.0-00

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SEAT CONTROL SWITCH, PASSENGER'S SEAT, S56 ..... 5200.0-01  
SEAT CUSHION TILT MOTOR, DRIVER'S, M50 ..... 5200.0-00  
SEAT CUSHION TILT MOTOR, PASSENGER'S, M61 ..... 5200.0-01  
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, PASSENGER'S, M59 ..... 5200.0-01  
SEAT MOVEMENT MOTOR, DRIVER'S, M51 ..... 5200.0-00  
SEAT MOVEMENT MOTOR, PASSENGER'S, M60 ..... 5200.0-01  
SEAT OCCUPANCY DETECTOR, A113 ..... 3234.0-00  
SEATBACK HEATER, DRIVER'S, E56 ..... 5203.0-00  
SEATBACK HEATER, PASSENGER'S, E59 ..... 5203.0-00  
SEATBACK RECLINER MOTOR, DRIVER'S, M53 ..... 5200.0-00  
SEATBACK RECLINER MOTOR, PASSENGER'S, M58 ..... 5200.0-01  
SECONDARY AIR PUMP RELAY, K6304 ..... 1210.17-05  
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SLIP CONTROL MODULE (ABS/ASC), A52 ..... 3450.1-01  
SPEAKER, LEFT REAR, H46 ..... 6510.1-01  
SPEAKER, RIGHT REAR, H45 ..... 6510.0-00  
SPEAKER, RIGHT REAR, H45 ..... 6510.1-02  
SPEED SENSOR - ABS, LEFT FRONT, B2 ..... 3450.  
SPEED SENSOR - ABS, LEFT REAR, B4 ..... 3450.  
SPEED SENSOR - ABS, RIGHT FRONT, B1 ..... 3450.  
SPEED SENSOR - ABS, RIGHT REAR, B3 ..... 3450.  
SPlice LOCATION VIEWS ..... 8000.0  
START ..... 1240.0  
STARTER, M6510 ..... 1240.0-01  
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TAIL LIGHT, RIGHT, H30 .....	6314.0-01
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TRANSMISSION CONTROL MODULE (EGS), A8500 .....	2460.2-00
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TRUNK LID RELAY, K117 .....	5126.0-01
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TRUNK LIGHT ASSEMBLY, LEFT, E46 .....	6581.2-04
TRUNK LIGHT ASSEMBLY, RIGHT, E47 .....	6312.0-04
TRUNK LIGHT ASSEMBLY, RIGHT, E47 .....	6314.0-01

TRUNK LIGHT ASSEMBLY, RIGHT, E47 .....	6313.0-02
TRUNK LIGHT ASSEMBLY, RIGHT, E47 .....	6322.0-00
TRUNK LIGHT ASSEMBLY, RIGHT, E47 .....	6325.0-01
TRUNK LIGHT ASSEMBLY, RIGHT, E47 .....	6581.2-04
TRUNK LIGHT SWITCH, S61y .....	6320.0-00
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WINDOW MOTOR, LEFT REAR, M20 .....	5133.1-05
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ZKE CENTRAL LOCKING (ZV) .....	5126.0



0110.0

**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**.

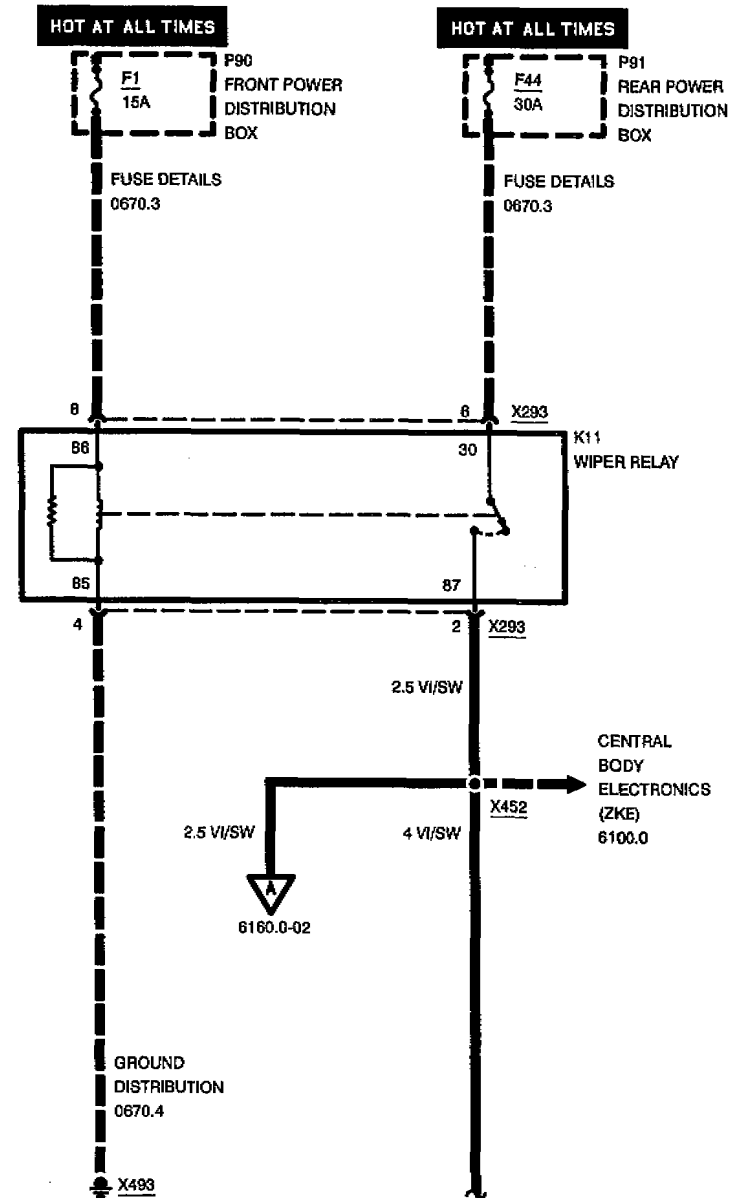
In cell **7000.0 Component Location Chart** all important connectors, ground points and components are listed in tabular form. It provides a precise description of the component locations in the vehicle.

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.

Included in this ETM are foldout block diagrams. These are overviews of the entire system (EGS, ABS, AC, etc.) which helps understand the relationships between various components and control unit of the system being diagnosed.

**Example**

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



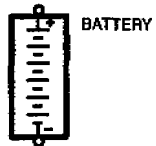


## INTRODUCTION

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### 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.



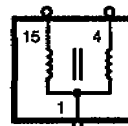
BATTERY



HEATING ELEMENT



VARIABLE RESISTANCE SENSOR  
VARIABLE CONTACT IS MOVED BY AN EXTERNAL FORCE



IGNITION COIL



FUSE DETAILS



LOUDSPEAKER OR HORN



VARIABLE RESISTOR  
RESISTANCE IS CHANGED BY TEMPERATURE OR PRESSURE



CONTROL/POWER ELECTRONICS



FUSIBLE LINK



LIGHT



DIODE CURRENT CAN FLOW ONLY IN DIRECTION OF ARROW



HALL EFFECT SENSOR



RADIO



THERMO SWITCH



PERMANENT MAGNET MOTOR ONE SPEED



ZENER DIODE TO REGULATE VOLTAGE



TRANSISTORIZED SWITCH



SOLENOID



PERMANENT MAGNET MOTOR TWO SPEEDS



LIGHT EMITTING DIODE



INDUCTIVE SENSOR



SOLENOID CONTROLLED VALVE OR CLUTCH SOLENOID



KNOCK SENSOR



OXYGEN SENSOR



VEHICLE SPEED SENSOR

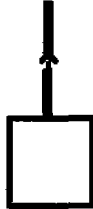




# SYMBOLS



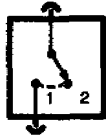
ENTIRE COM-  
PONENT SHOWN



CONNECTOR  
ATTACHED TO  
COMPONENT  
LEAD (PIGTAIL)



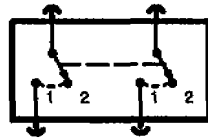
PART OF COM-  
PONENT SHOWN



ONE POLE, TWO  
POSITION SWITCH



COMPONENT WITH  
SCREW TERMINALS



SWITCHES THAT  
MOVE TOGETHER

DASHED LINE SHOWS  
A MECHANICAL CON-  
NECTION BETWEEN  
SWITCHES



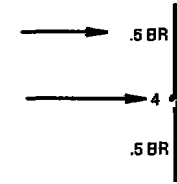
COMPONENT  
CASE ATTACHED  
DIRECTLY TO  
METAL PART OF  
CAR (GROUNDED)



CONNECTOR  
ATTACHED TO  
COMPONENT

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

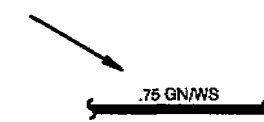
WIRE INSULATION  
IS ONE COLOR



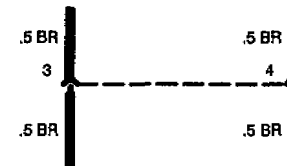
PIN NUMBER

CONNECTOR REF-  
ERENCE NUMBER  
FOR COMPONENT  
LOCATION CHART

WIRE INSULATION  
IS ONE COLOR  
WITH ANOTHER  
COLOR STRIPE  
(GREEN WITH  
WHITE)



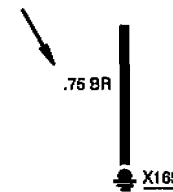
A WAVY LINE  
MEANS WIRE IS  
CONTINUED



TWO CONNE-  
CTIONS (PINS) IN  
THE SAME  
CONNECTOR

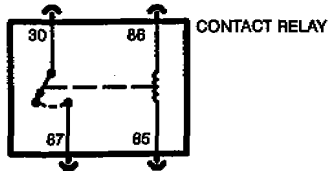
DASHED LINE INDI-  
CATES TERMINALS  
OF THE SAME  
CONNECTOR

WIRE SIZE IN MM  
SQUARED

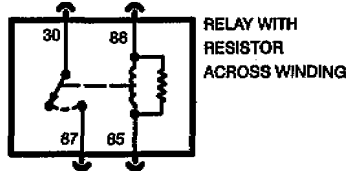


WIRE ATTACHED  
TO METAL PART OF  
CAR (GROUNDED)

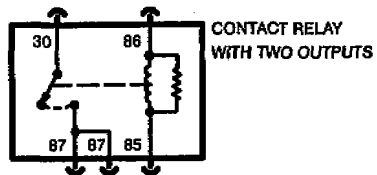
GROUND NUMBERED  
FOR REFERENCE ON  
COMPONENT LOCATION  
CHART



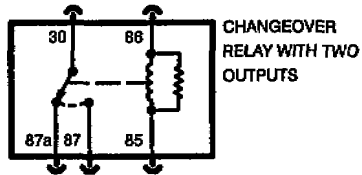
CONTACT RELAY



RELAY WITH RESISTOR ACROSS WINDING



CONTACT RELAY WITH TWO OUTPUTS



CHANGEOVER RELAY WITH TWO OUTPUTS

TERMINAL NUMBER DESCRIPTION

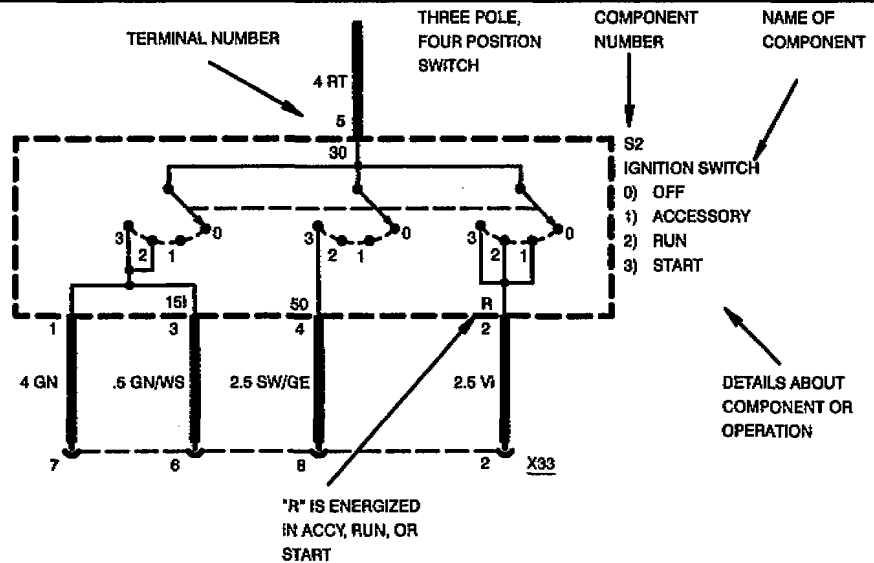
30 RELAY INPUT

85 RELAY OUTPUT (WINDING)

86 RELAY INPUT (WINDING)

87 RELAY OUTPUT (ENERGIZED)

87a RELAY OUTPUT (AT REST)



TERMINAL NUMBER DESCRIPTION

50 VOLTAGE: IGNITION SWITCH IN START

30 VOLTAGE: SUPPLIED AT ALL TIMES

15 VOLTAGE: IGNITION SWITCH IN RUN OR START

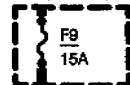
TERMINAL NUMBER DESCRIPTION

15I VOLTAGE: IGNITION SWITCH IN RUN

R VOLTAGE: IGNITION SWITCH IN ACCESSORY, RUN OR START

31 GROUND

**HOT AT ALL TIMES**



INDICATES THAT FUSE 9 IS SUPPLIED WITH POWER AT ALL TIMES

POWER STATUS

**HOT AT ALL TIMES**

**HOT IN RUN AND START**

**HOT IN ACCY, RUN AND START**

DESCRIPTION

VOLTAGE: SUPPLIED AT ALL TIMES

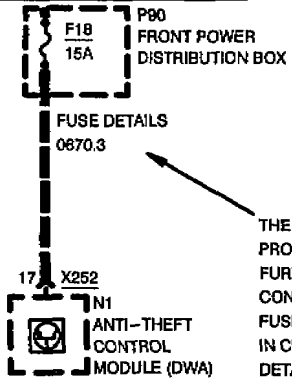
VOLTAGE: IGNITION SWITCH IN RUN OR START

VOLTAGE: IGNITION SWITCH IN ACCESSORY, RUN OR START

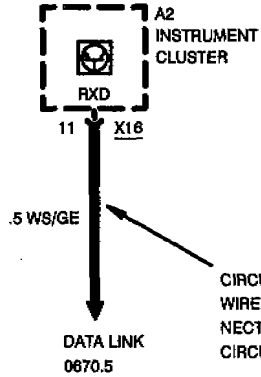


# SYMBOLS

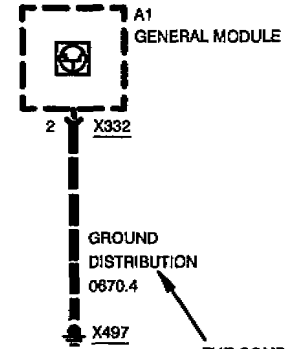
HOT IN ACCY, RUN AND START



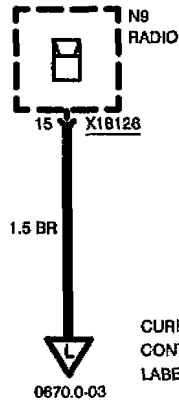
THE COMPLETE WIRE PROGRESSION AND FURTHER CIRCUITS CONNECTED TO FUSE 18 ARE SHOWN IN CELL "0670.3 FUSE DETAILS" AT FUSE 18



CIRCUIT REFERENCE—A WIRE WHICH CONNECTS TO ANOTHER CIRCUIT



THE COMPLETE WIRE PROGRESSION AND FURTHER CIRCUITS CONNECTED TO GROUND X497 ARE SHOWN IN CELL "0670.4 GROUND DISTRIBUTION" AT GROUND X497



CURRENT PATH IS CONTINUED AS LABELED

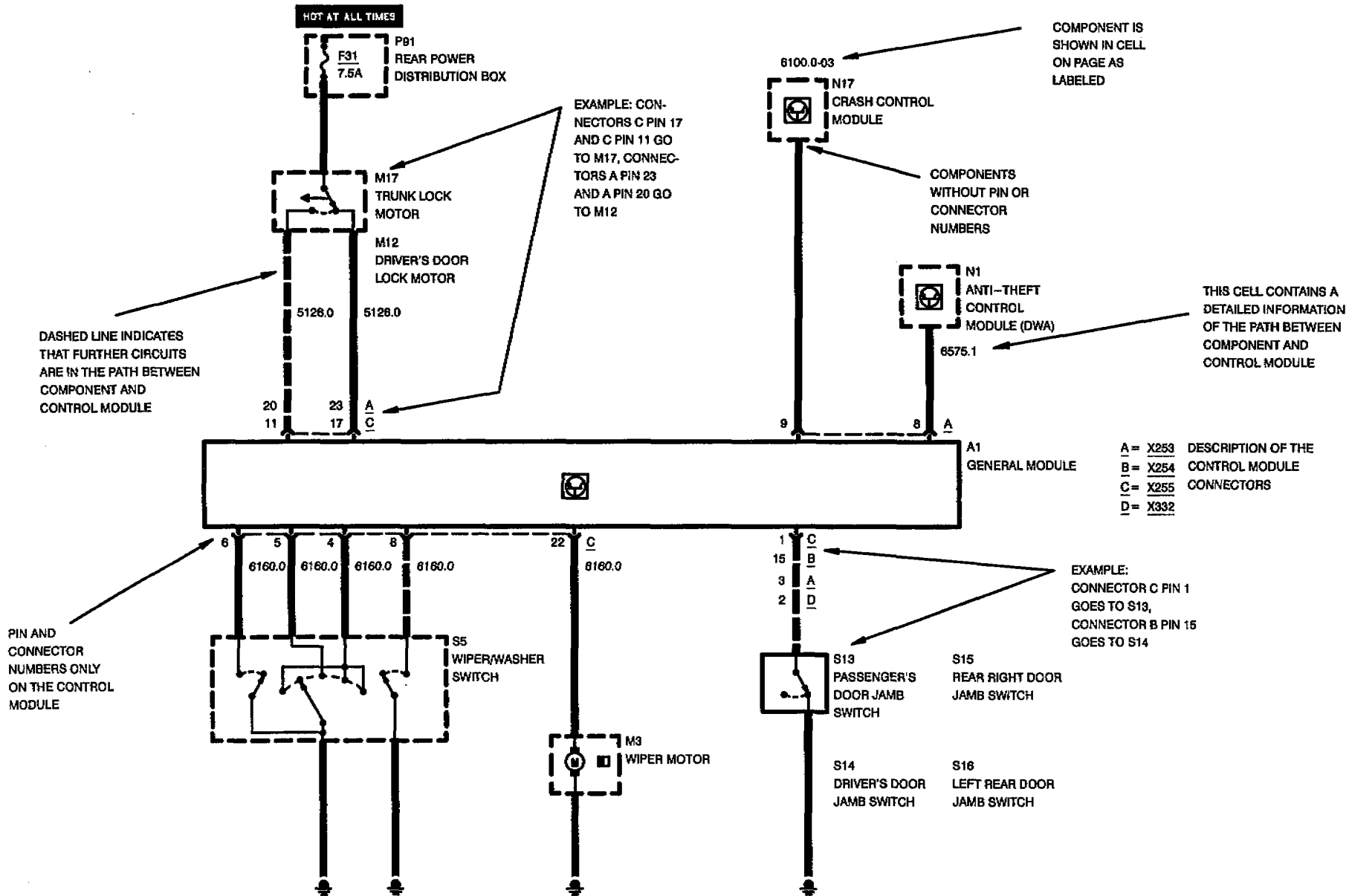


ARROW SHOWS DIRECTION OF CURRENT FLOW AND IS REPEATED WHERE CURRENT PATH CONTINUES



# SYMBOLS

## BLOCK DIAGRAM



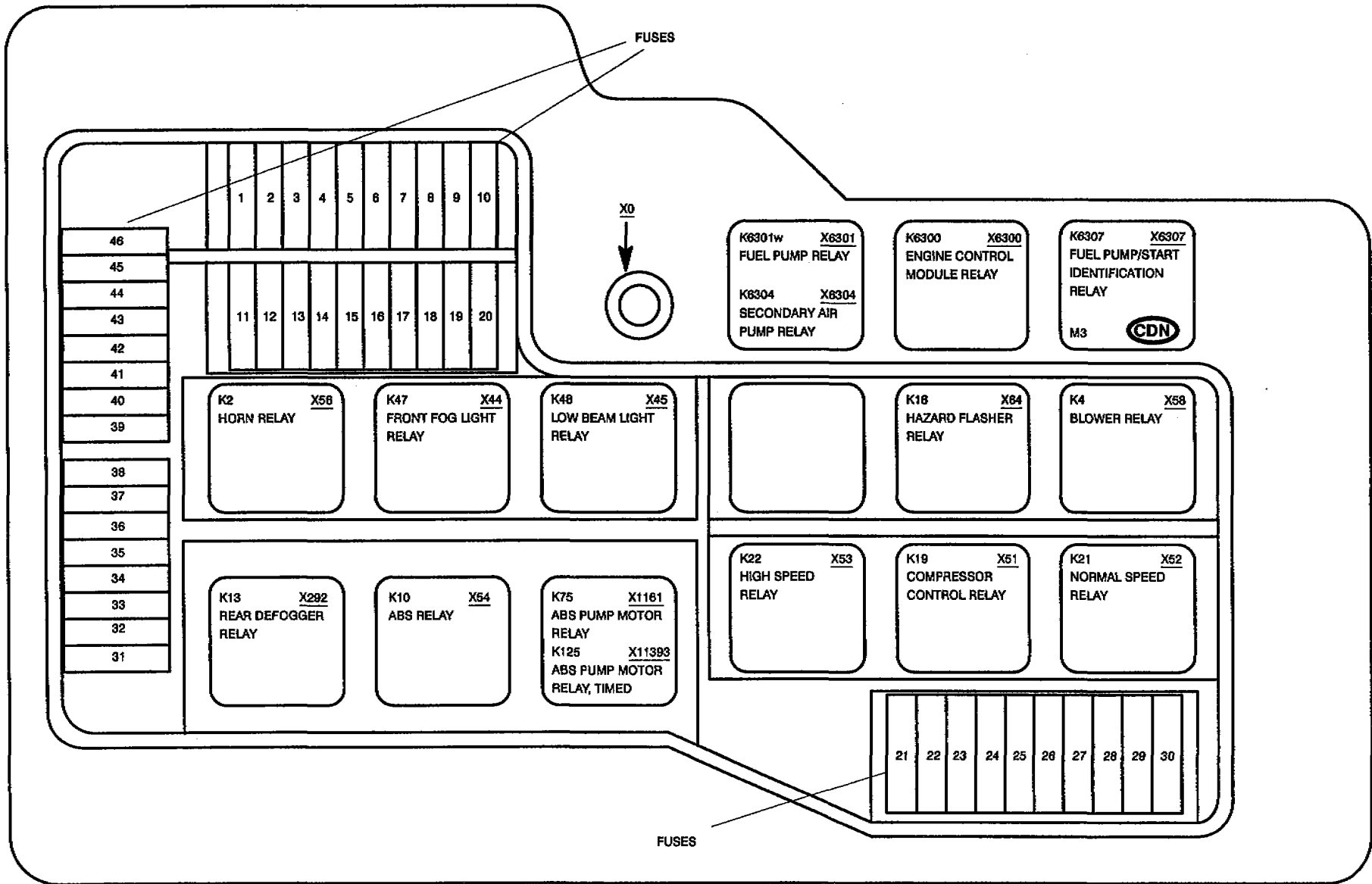
BMW  
3

0670.0



# POWER DISTRIBUTION CHART

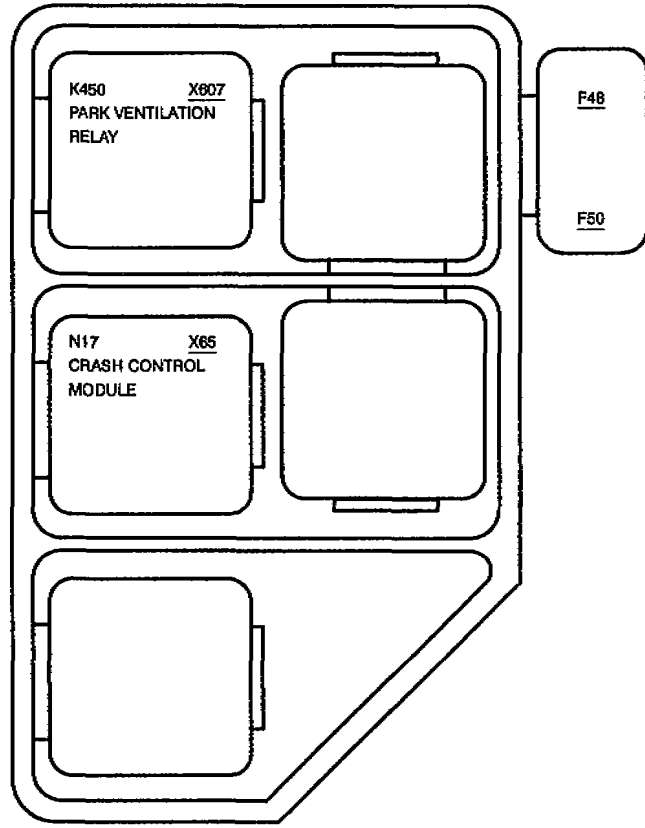
## FRONT POWER DISTRIBUTION BOX





# POWER DISTRIBUTION CHART

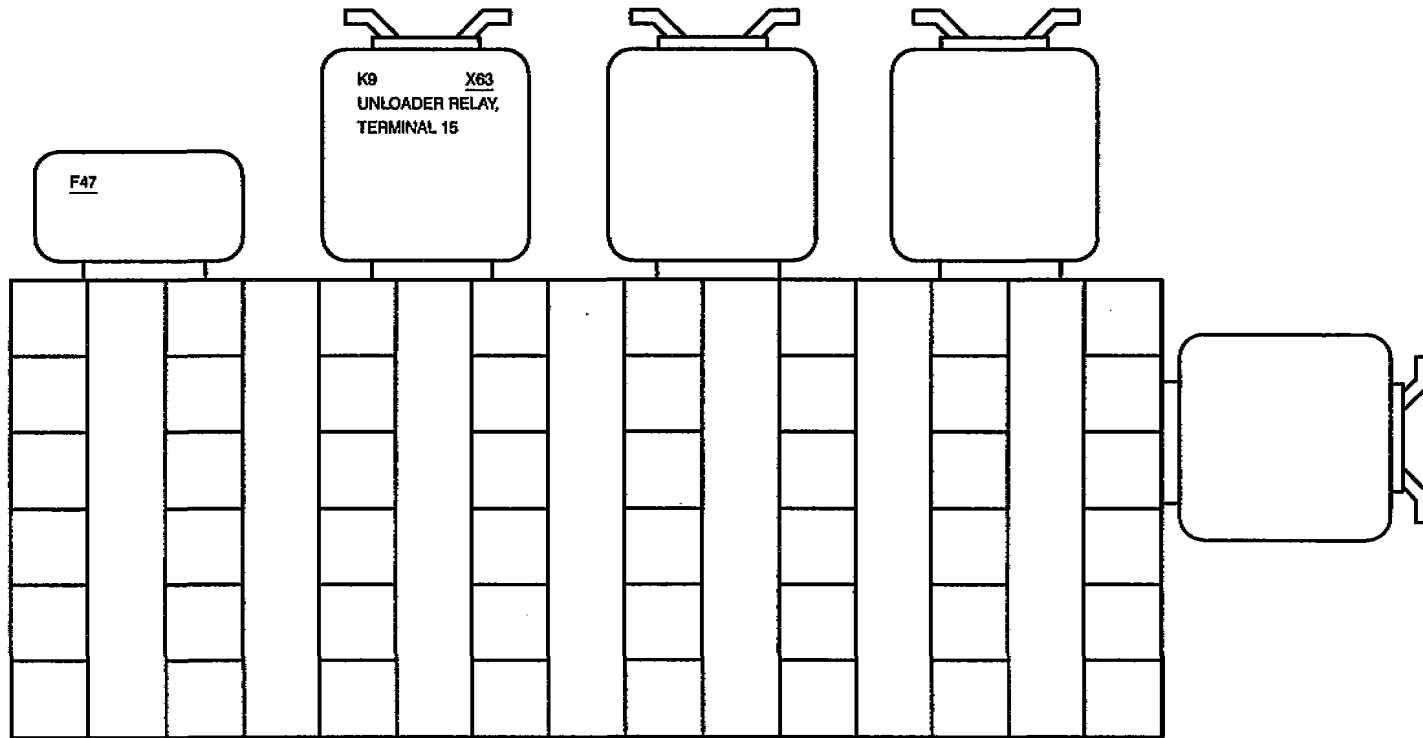
## RELAY PANEL UNDER LH SIDE OF DASHBOARD





# POWER DISTRIBUTION CHART

## SPLICE PANEL UNDER LH SIDE OF DASHBOARD

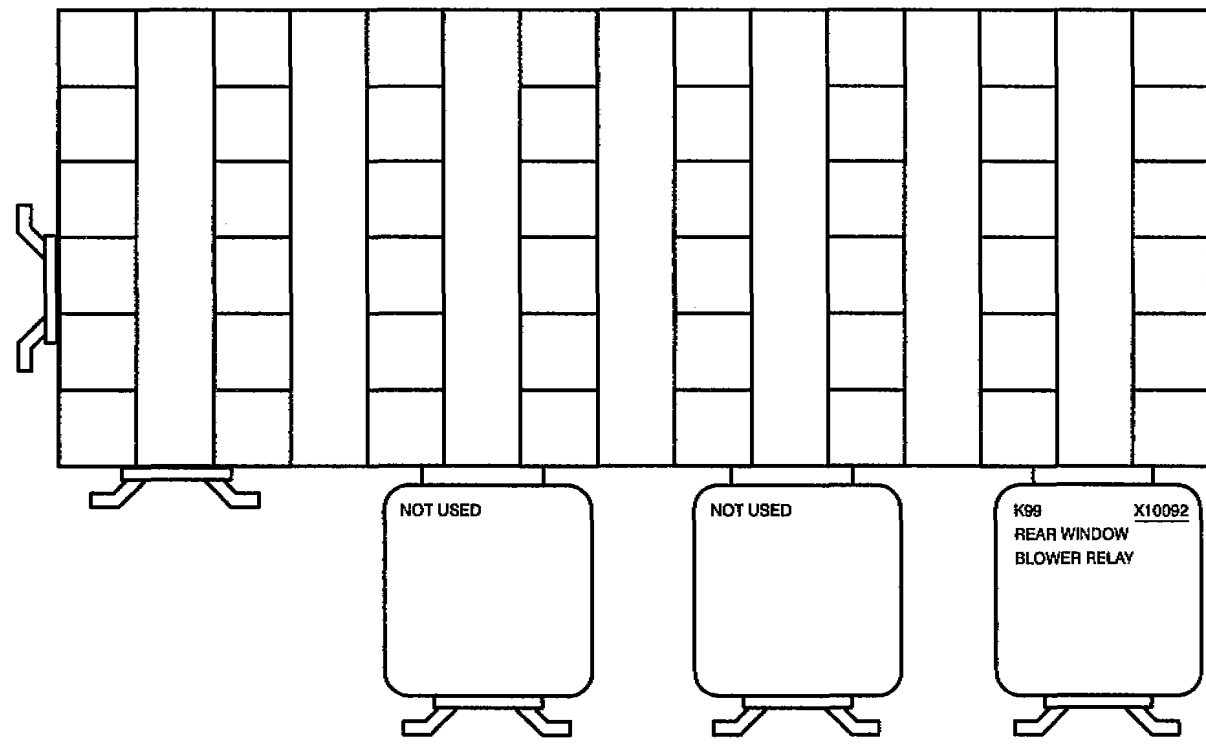






# POWER DISTRIBUTION CHART

SPLICE PANEL UNDER RH SIDE OF DASHBOARD





# 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	10A	15A	30A	30A	5A	5A	5A	10A	5A	10A	5A	5A	7.5A	
1210.9	ENGINE CONTROL SYSTEM (DME M1.7, 4-CYLINDER M42)																●		●											●	
1210.10	ENGINE CONTROL SYSTEM MS40 (6-CYLINDER M50)																●		●												●
1210.13	ENGINE CONTROL SYSTEM (DME M3.3.1, 6-CYLINDER M50)																●		●												●
1210.14	ENGINE CONTROL SYSTEM (DME M3.3, 6-CYLINDER S50 B30)																●		●												
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																														
2460.2	ELECTRONIC TRANSMISSION CONTROL (EGS A4S 310R)																											●		●	
2460.4	ELECTRONIC TRANSMISSION CONTROL (EGS A5S 310Z)																											●		●	
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)							●																				●		●	
5133.1	POWER WINDOWS (FH)															●						●									
5200.0	POWER SEATS					●																									
5203.0	HEATED SEATS			●																				●							
5410.1	POWER SUN ROOF (SHD)	●																													
5430.1	ELECTRICAL CONVERTIBLE TOP							●																					●		



# 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	10A	15A	30A	30A	5A	5A	5A	10A	5A	10A	5A	5A	7.5A
6100.0							●						●																
6133.0								●																					
6135.0																												●	
6160.1			●																										
6167.1			●																										
6211.0																							●				●		
6213.2																							●			●	●		
6214.0																							●				●		
6300.0																						●				●			
6312.0											●	●		●		●							●		●				●
6313.0																							●						
6314.0																													
6320.0																													
6322.0																										●			
6325.0																													
6330.3							●																						
6332.1																													
6350.0																													
6412.5																												●	
6424.0						●																		●					



# 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	10A	15A	30A	30A	5A	5A	5A	10A	5A	10A	5A	5A	7.5A	
6450.4	INTEGRATED CLIMATE REGULATION (IHKR E36)																														
6450.7	INTEGRATED CLIMATE REGULATION (IHKA E36)																														
6510.0	RADIO/CD PLAYER (PROVISIONS)																														
6510.1	RADIO/HIFI																														
6561.0	CELLULAR TELEPHONE (PROVISIONS)																														
6571.0	CRUISE CONTROL (TEMPOMAT)																														
6575.2	ANTI-THEFT SYSTEM (ALPINE)																														
6581.2	ON-BOARD COMPUTER (BC V)																														



# 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	30A	7.5A	5A	15A	7.5A	15A	15A	40A	
<b>1210.9</b> ENGINE CONTROL SYSTEM (DME M1.7, 4-CYLINDER M42)																				
<b>1210.10</b> ENGINE CONTROL SYSTEM MS40 (6-CYLINDER M50)										●										
<b>1210.13</b> ENGINE CONTROL SYSTEM (DME M3.3.1, 6-CYLINDER M50)										●										
<b>1210.14</b> ENGINE CONTROL SYSTEM (DME M3.3, 6-CYLINDER S50 B30)										●										
<b>1210.17</b> ENGINE CONTROL SYSTEM MS41.1 (6-CYLINDER M52)										●							●			
<b>1210.20</b> ENGINE CONTROL SYSTEM (DME M5.2, 4-CYLINDER M44)																				
<b>1230.0</b> CHARGING SYSTEM																				
<b>1240.0</b> START																				
<b>2460.2</b> ELECTRONIC TRANSMISSION CONTROL (EGS A4S 310R)																	●			
<b>2460.4</b> ELECTRONIC TRANSMISSION CONTROL (EGS A5S 310Z)																				
<b>3234.0</b> SUPPLEMENTAL RESTRAINT SYSTEM (AIR BAG)													●	●						
<b>3450.0</b> SLIP CONTROL (ABS)										●							●	●		
<b>3450.1</b> SLIP CONTROL (ABS/ASC)										●							●			
<b>5116.0</b> POWER MIRRORS																				
<b>5126.0</b> ZKE CENTRAL LOCKING (ZV)						●														
<b>5133.1</b> POWER WINDOWS (FH)																				
<b>5200.0</b> POWER SEATS											●									
<b>5203.0</b> HEATED SEATS																				
<b>5410.1</b> POWER SUN ROOF (SHD)																				
<b>5430.1</b> ELECTRICAL CONVERTIBLE TOP						●							●	●						



# 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	30A	7.5A	5A	15A	7.5A	15A	15A	40A
6100.0				●		●									●				
6133.0																			
6135.0		●															●		
6160.1							●	●							●				
6167.1							●								●				
6211.0		●															●		
6213.2		●														●	●		
6214.0		●													●	●			
6300.0				●				●											
6312.0	●																		
6313.0					●														
6314.0				●				●											
6320.0				●				●											
6322.0																			
6325.0																	●		
6330.3				●										●					
6332.1		●	●					●							●				
6350.0					●														
6412.5																			
6424.0																			



# 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	30A	7.5A	5A	15A	7.5A	15A	15A	40A
6450.4 INTEGRATED CLIMATE REGULATION (IHKR E36)		●						●		●		●							●
6450.7 INTEGRATED CLIMATE REGULATION (IHKA E36)		●								●		●							●
6510.0 RADIO/CD PLAYER (PROVISIONS)															●				
6561.0 CELLULAR TELEPHONE (PROVISIONS)				●										●					
6571.0 CRUISE CONTROL (TEMPOMAT)																	●		
6575.2 ANTI-THEFT SYSTEM (ALPINE)														●				●	
6581.2 ON-BOARD COMPUTER (BC V)		●		●				●								●			

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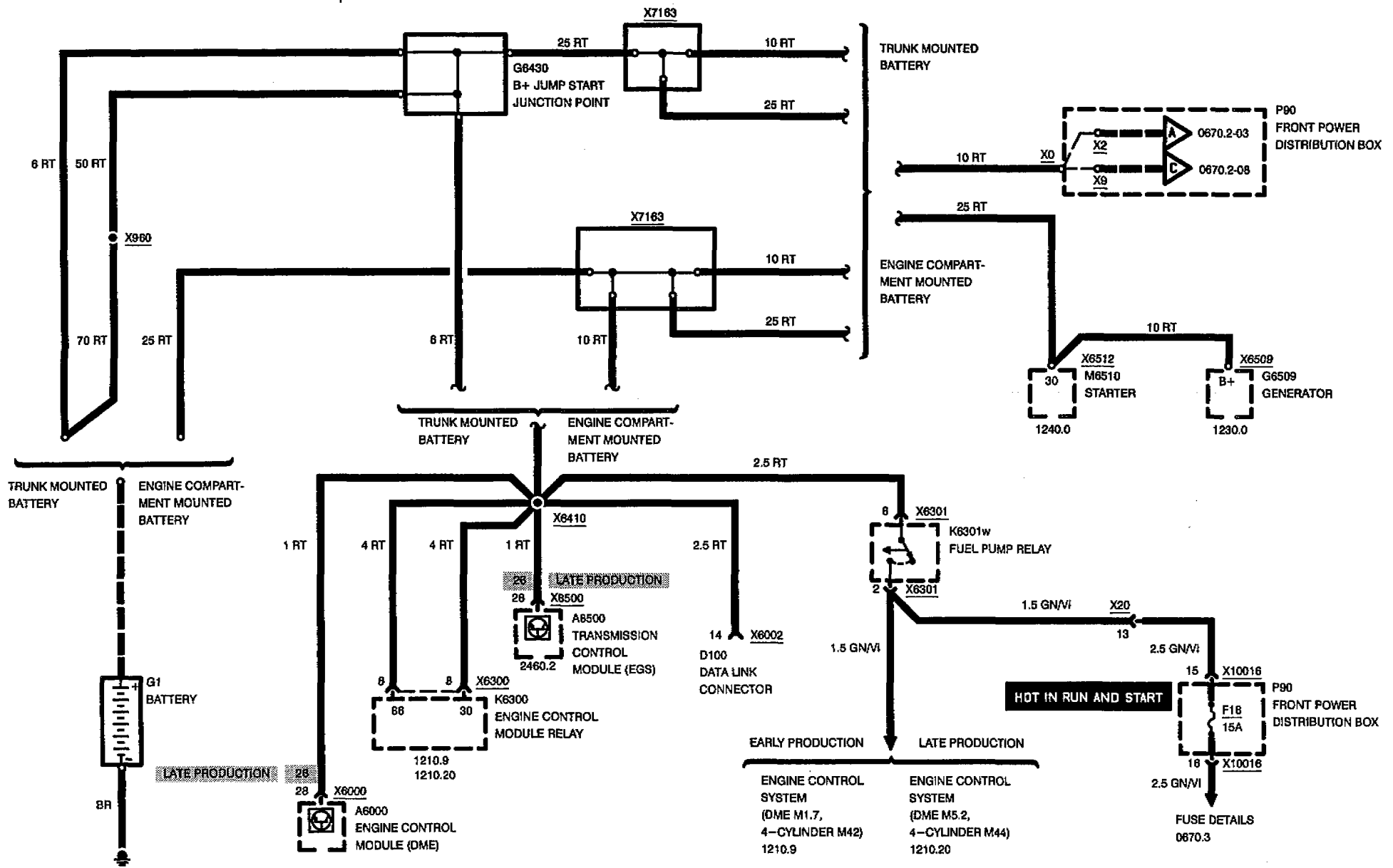
0670.1-05

1996



# POWER DISTRIBUTION

## 318is

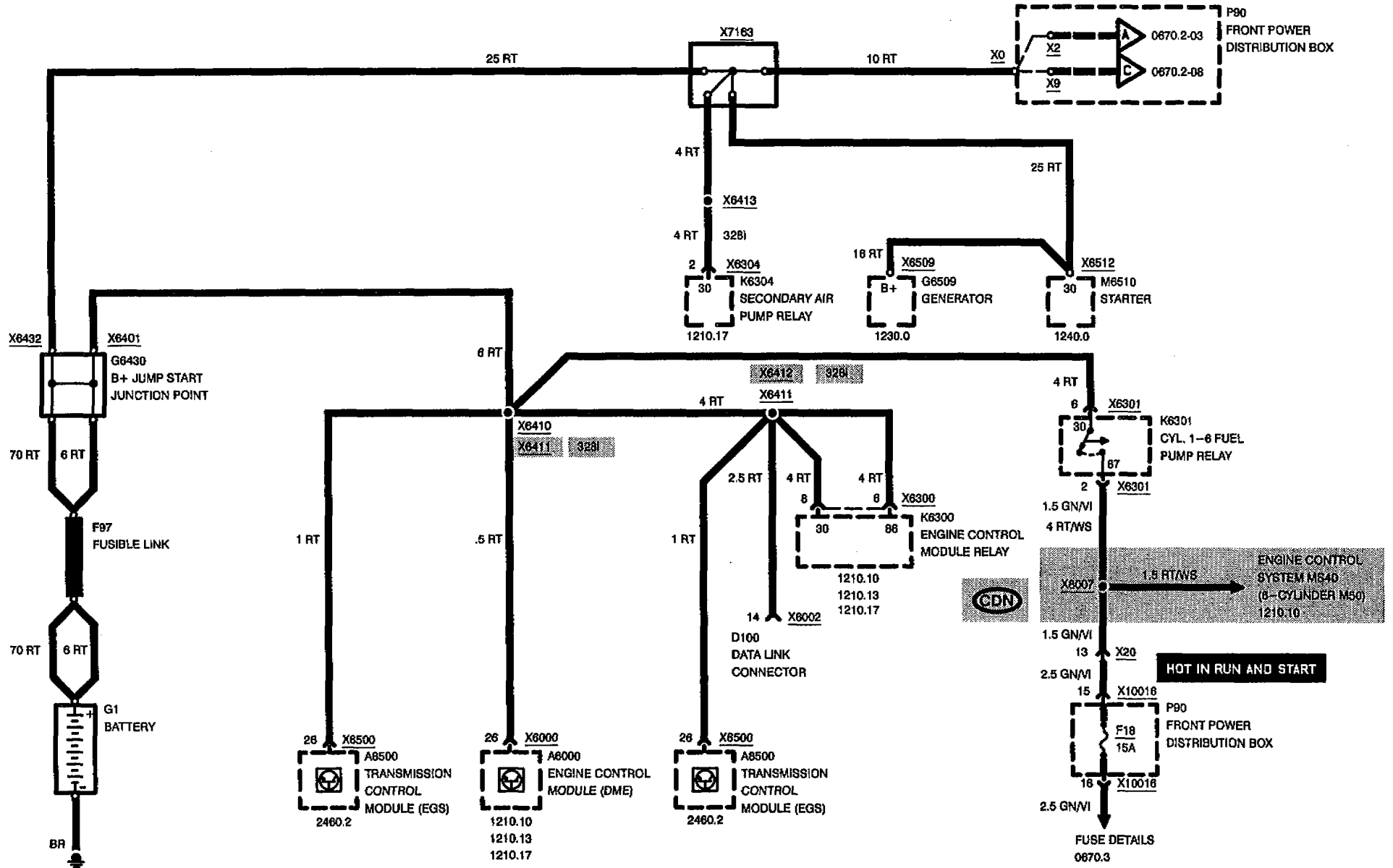


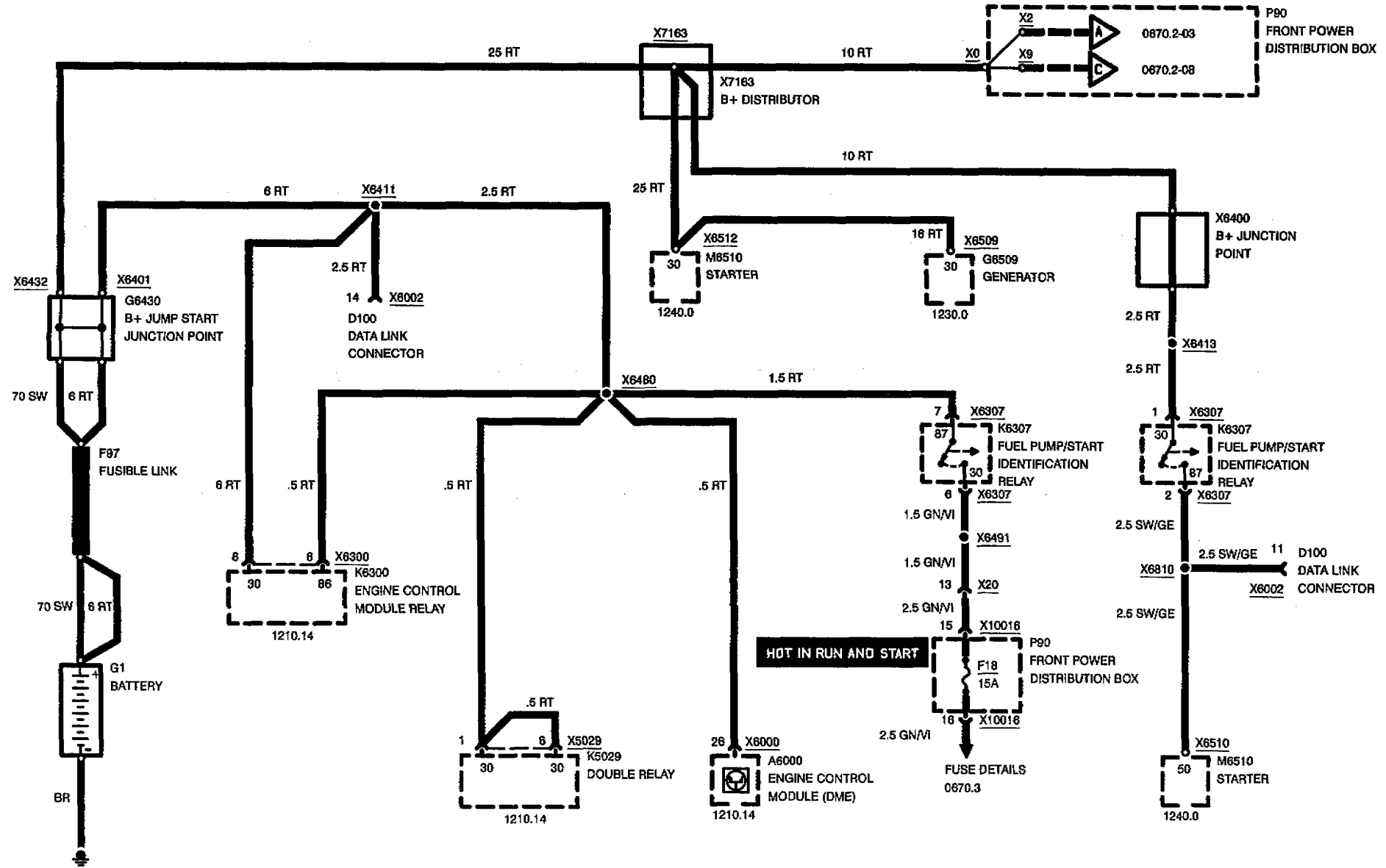




# POWER DISTRIBUTION

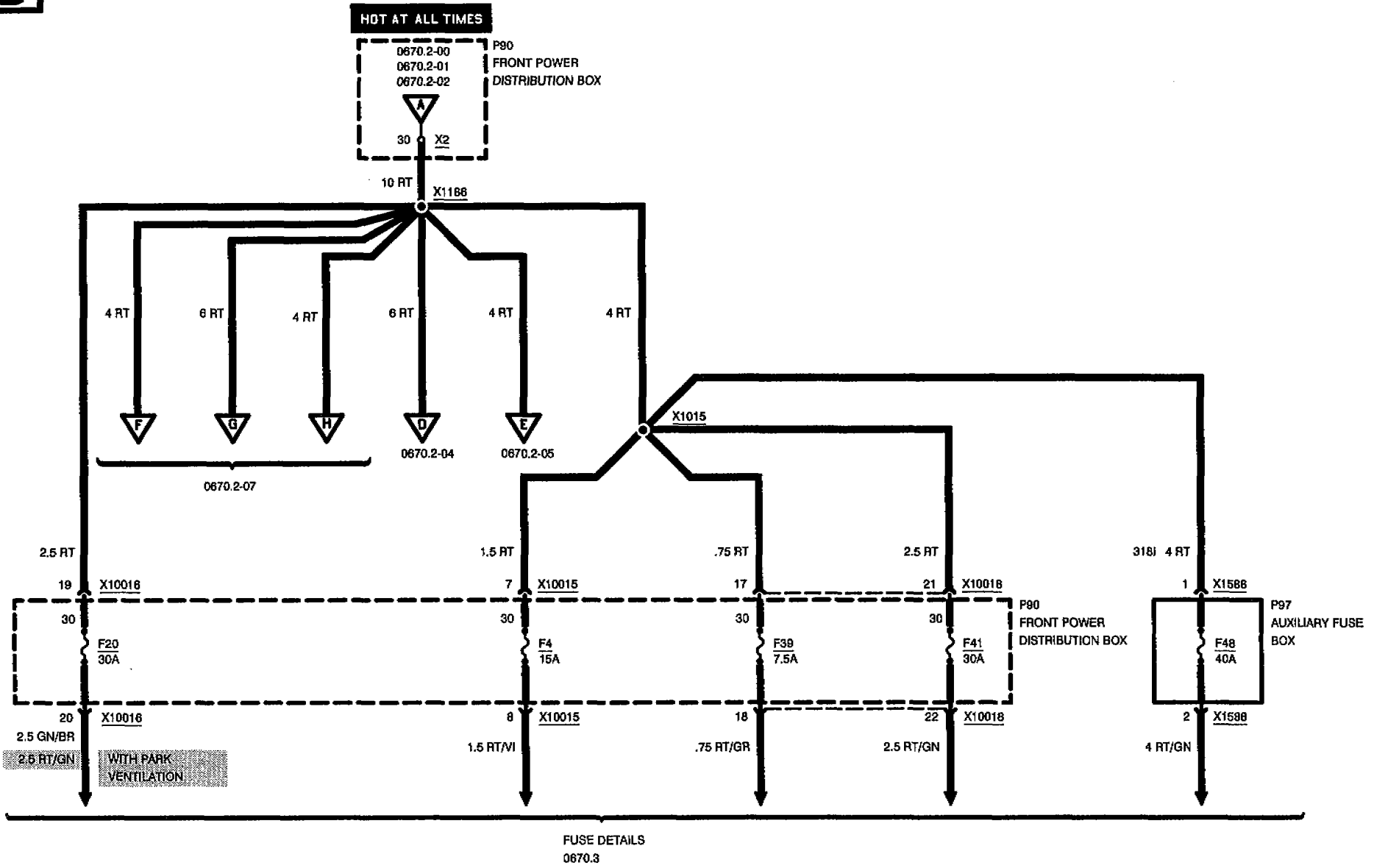
320i (CDN), 325i, 328i





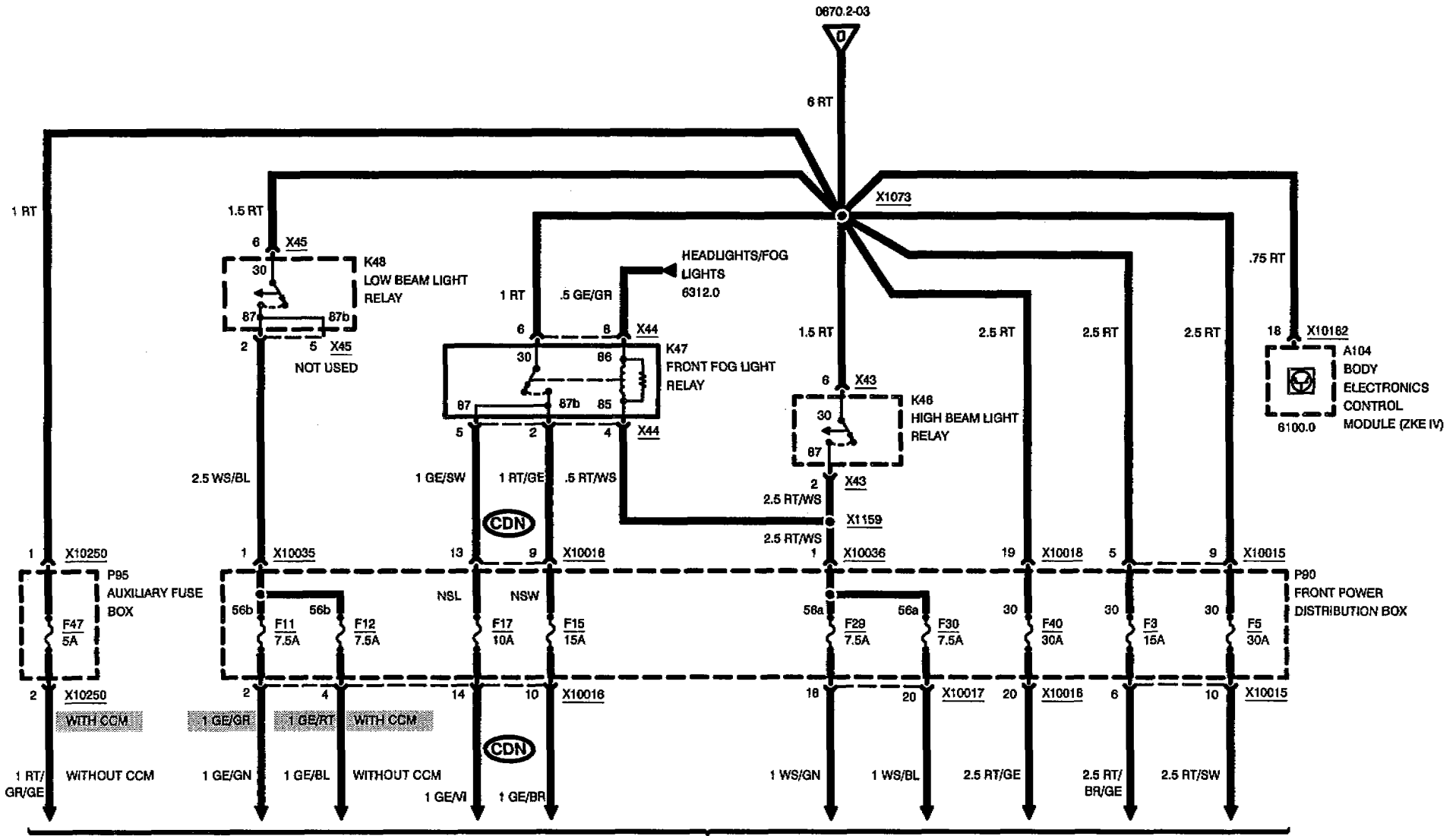


# POWER DISTRIBUTION





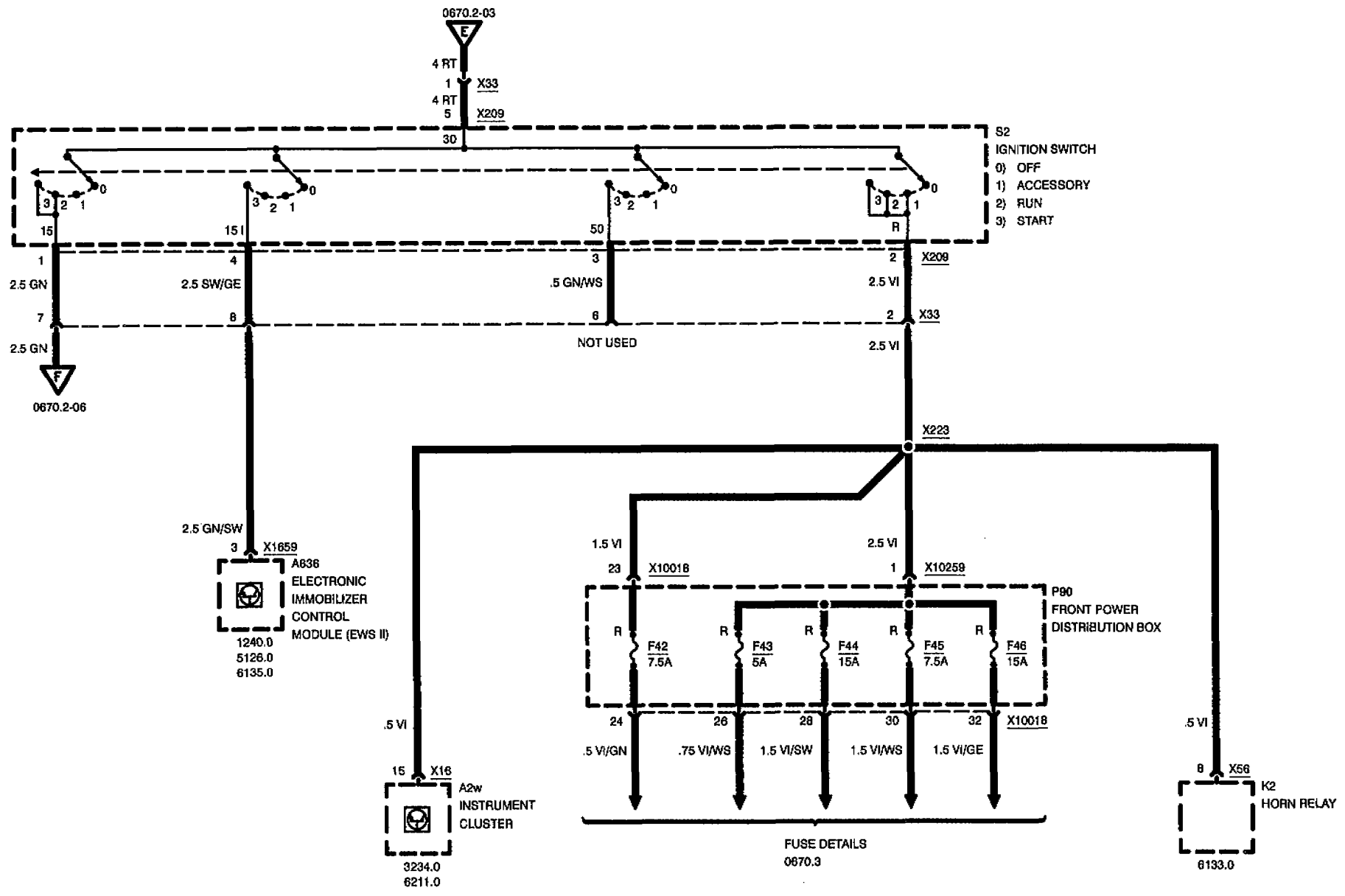
# POWER DISTRIBUTION



FUSE DETAILS  
0670.3

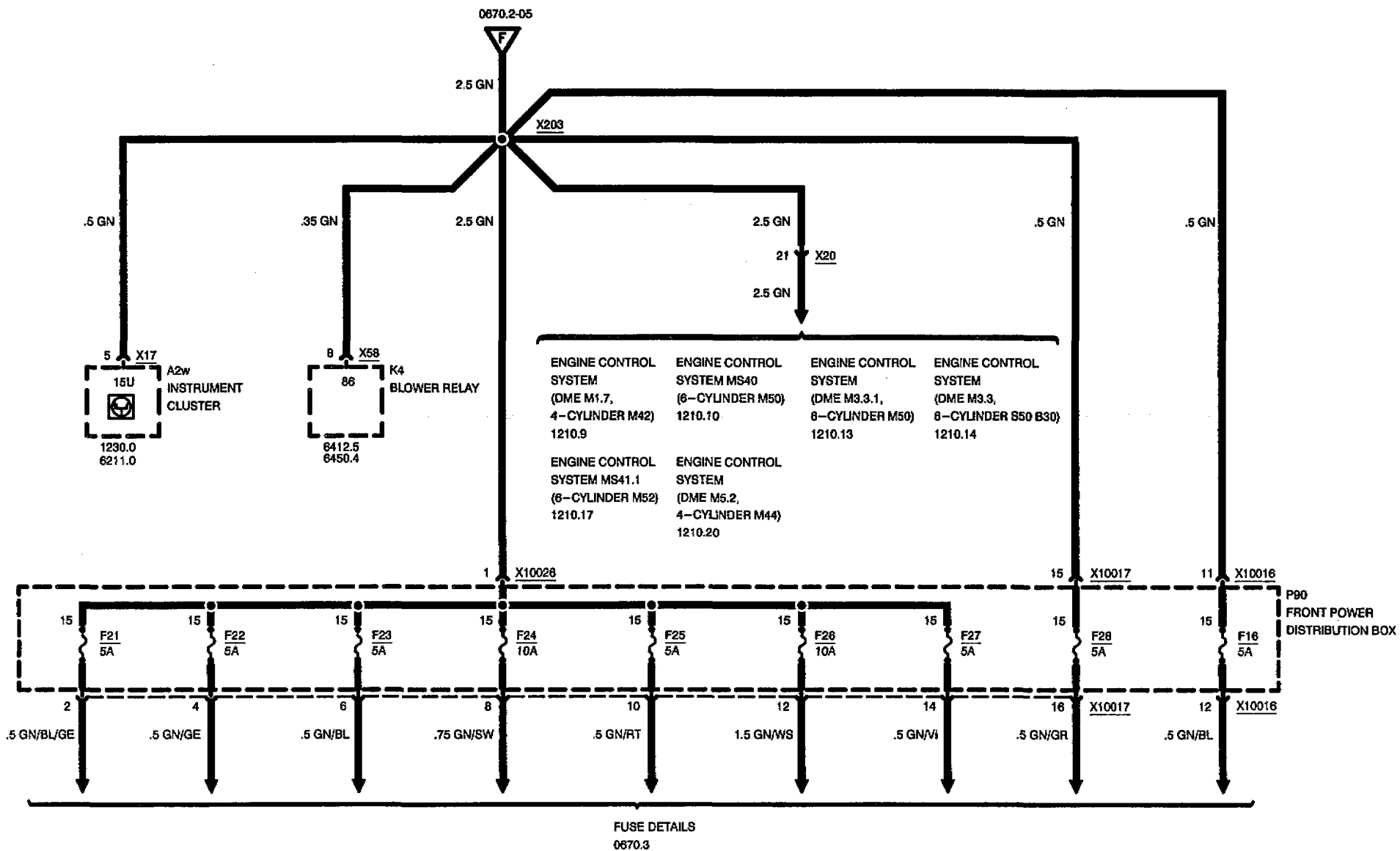


# POWER DISTRIBUTION



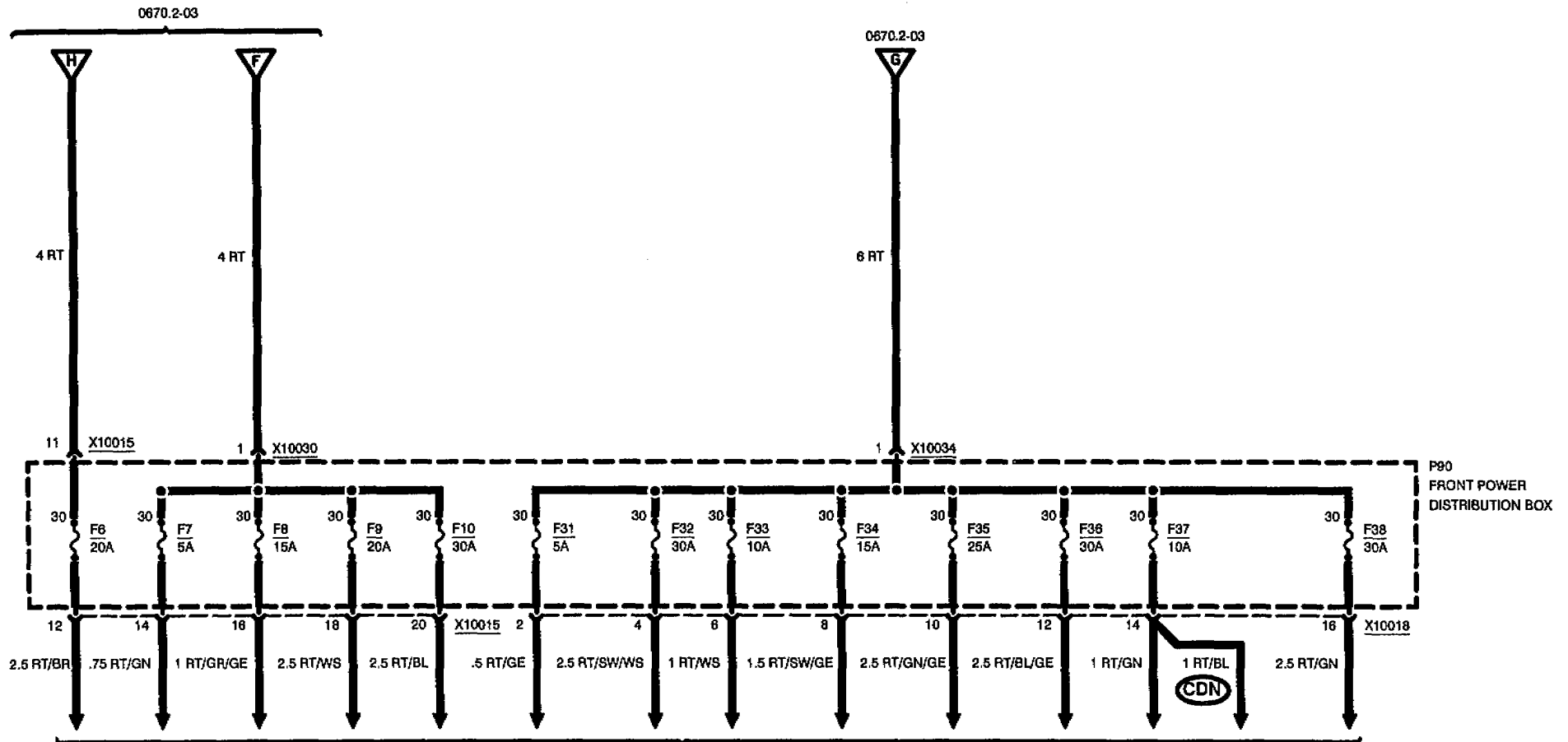


# POWER DISTRIBUTION





# POWER DISTRIBUTION



FUSE DETAILS  
0670.3

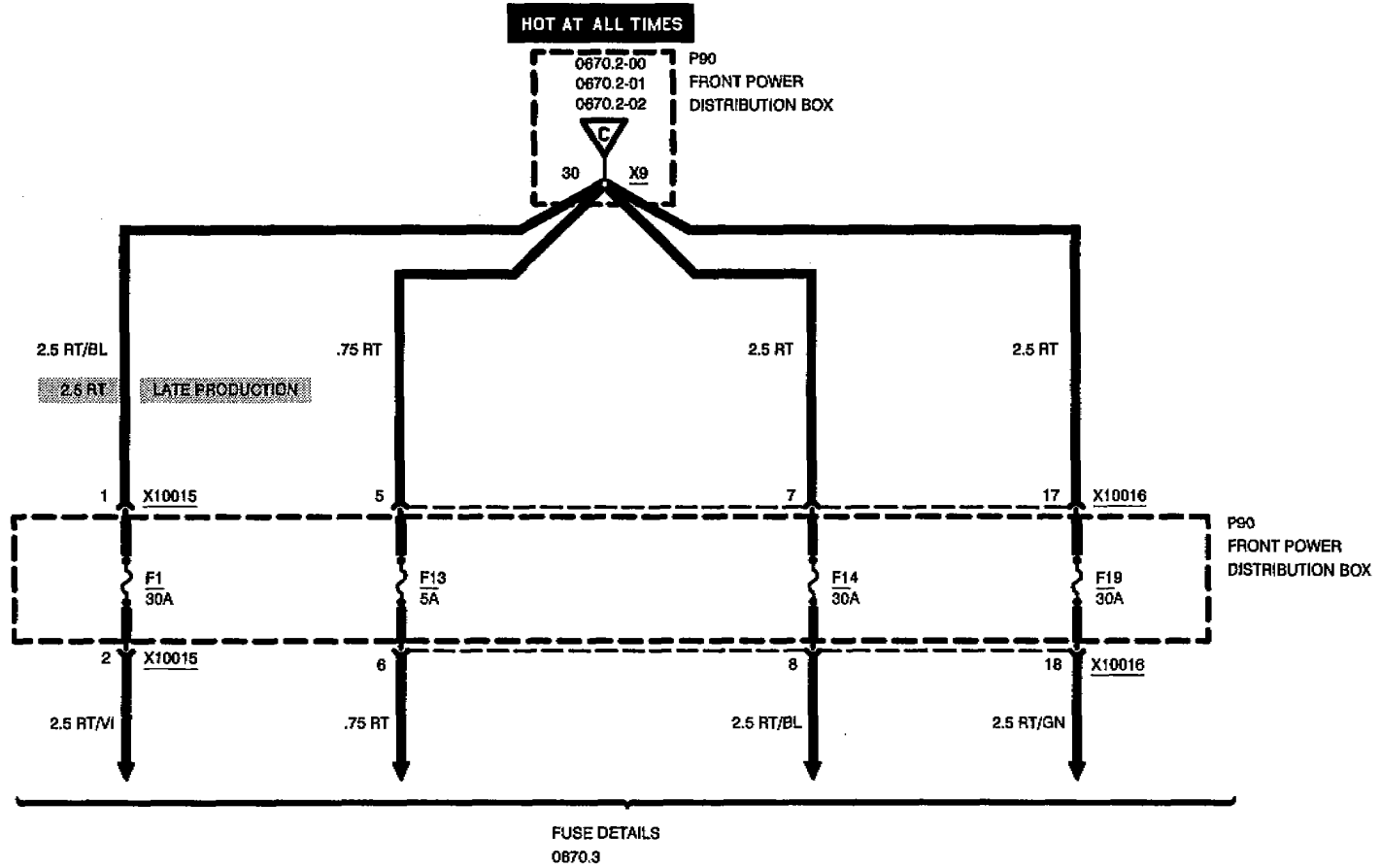
04/97

0670.2-07

1996



# POWER DISTRIBUTION





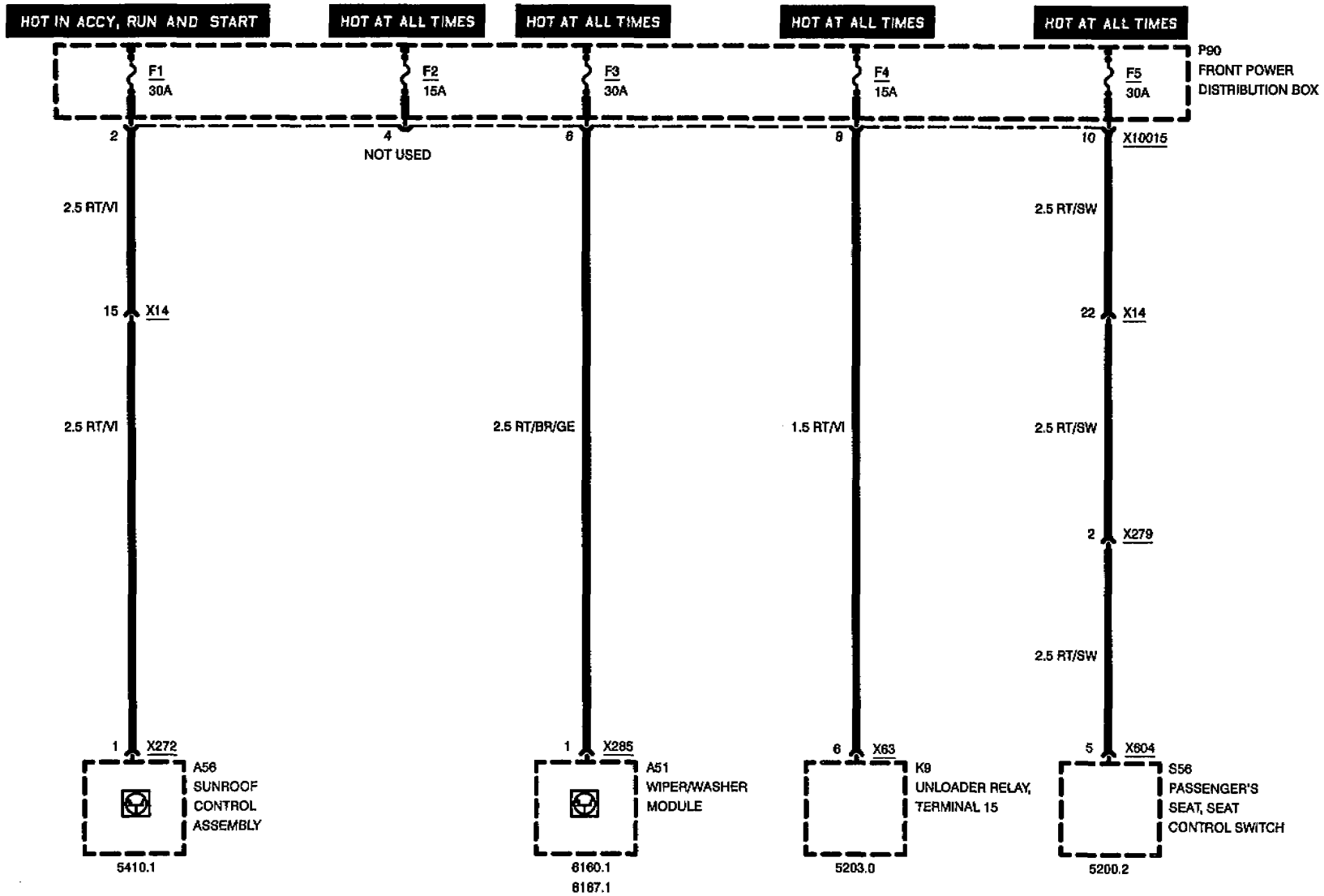


0670.3



# FUSE DETAILS

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



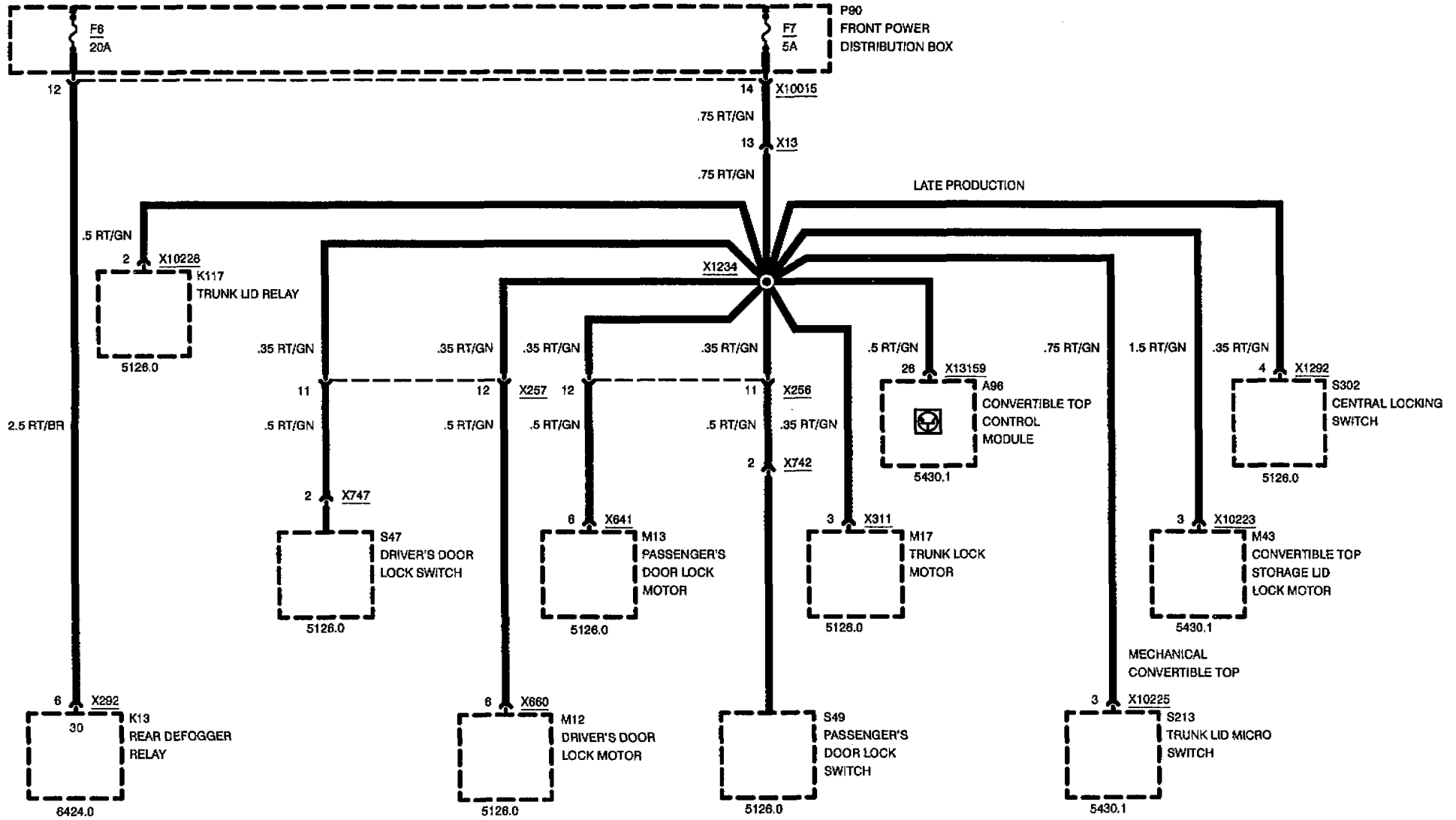


# FUSE DETAILS

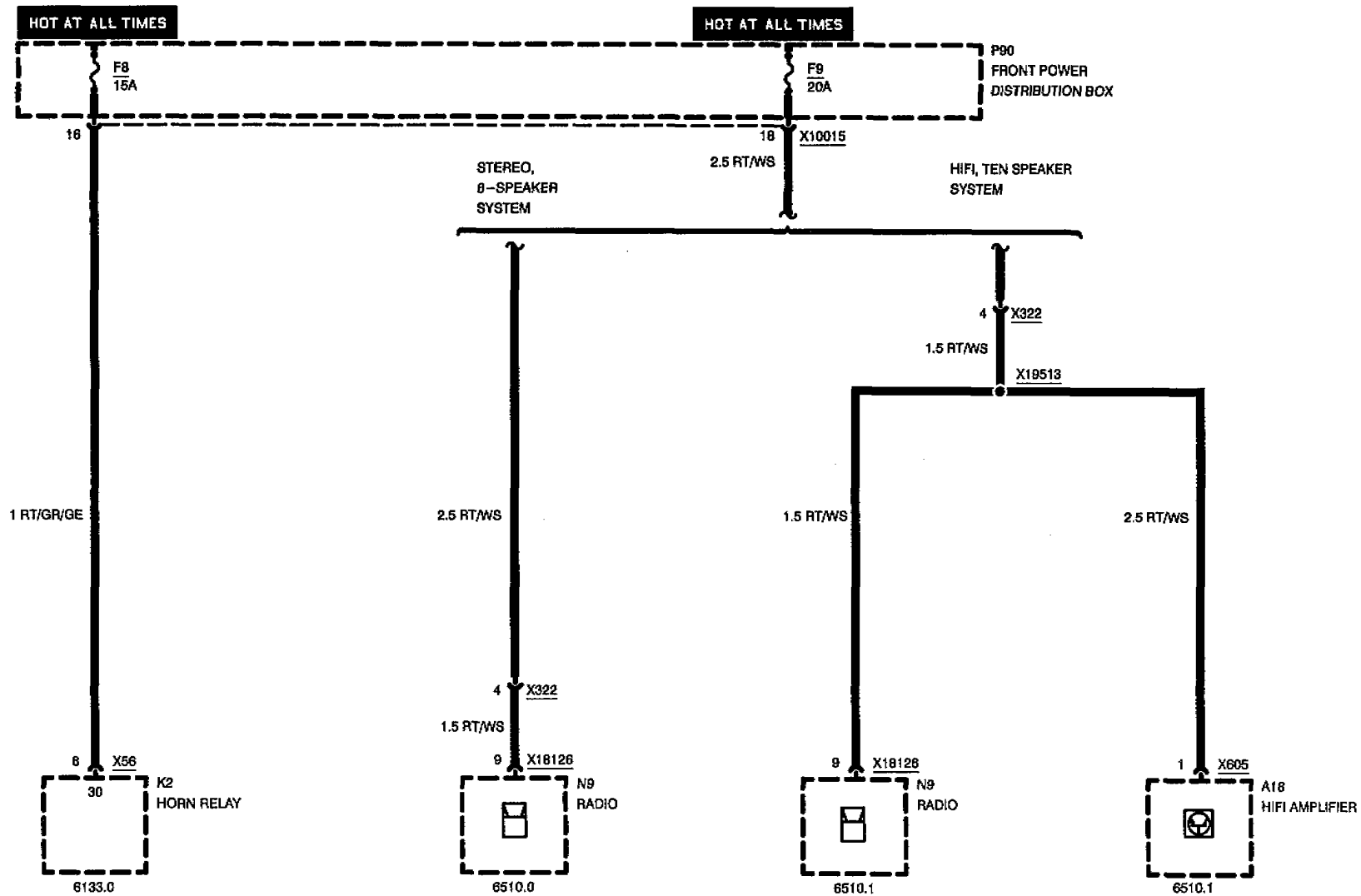
## FUSES 6 AND 7

HOT AT ALL TIMES

HOT AT ALL TIMES



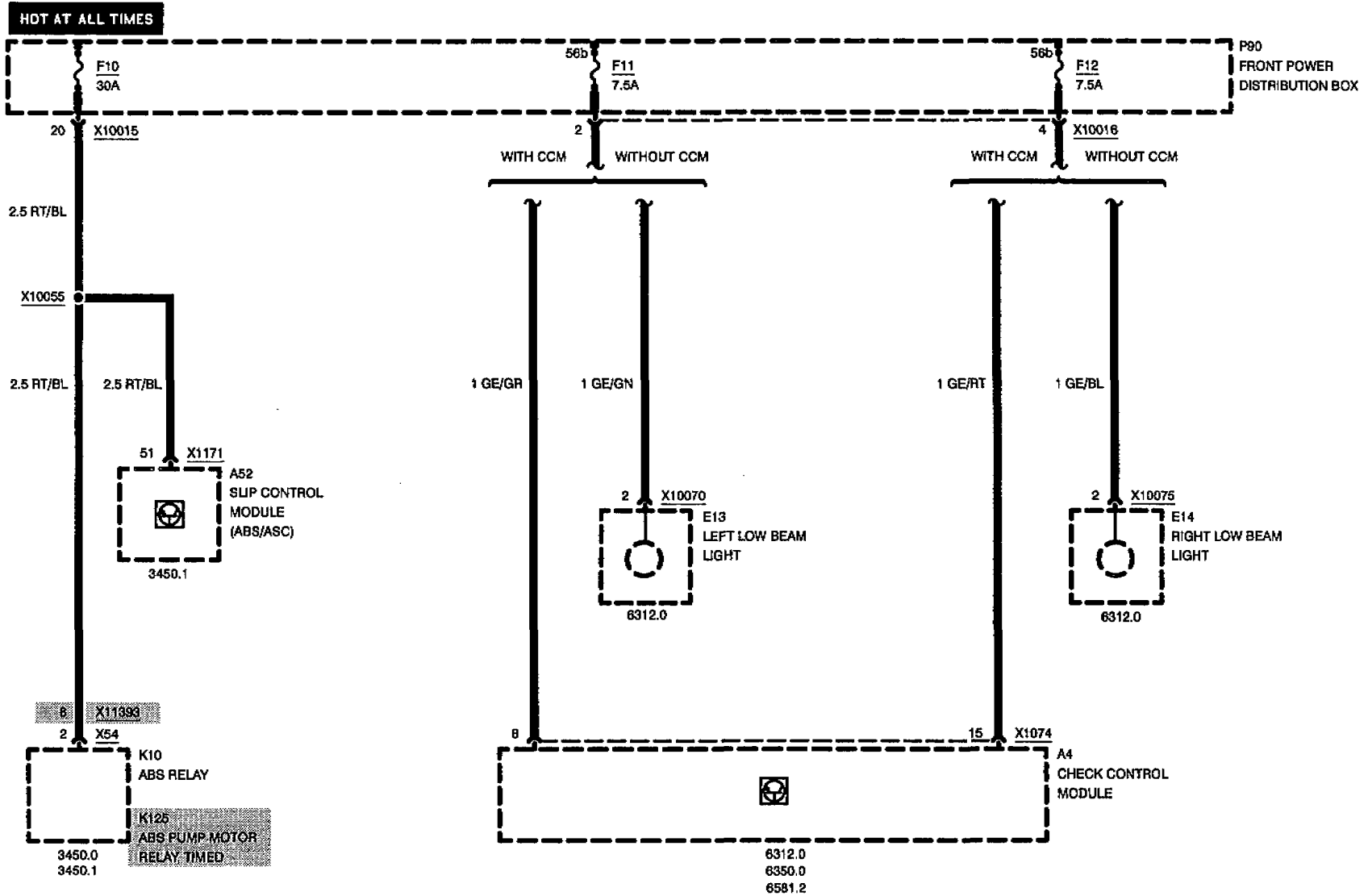
**BMW 3 FUSE DETAILS**  
**FUSES 8 AND 9**





# FUSE DETAILS

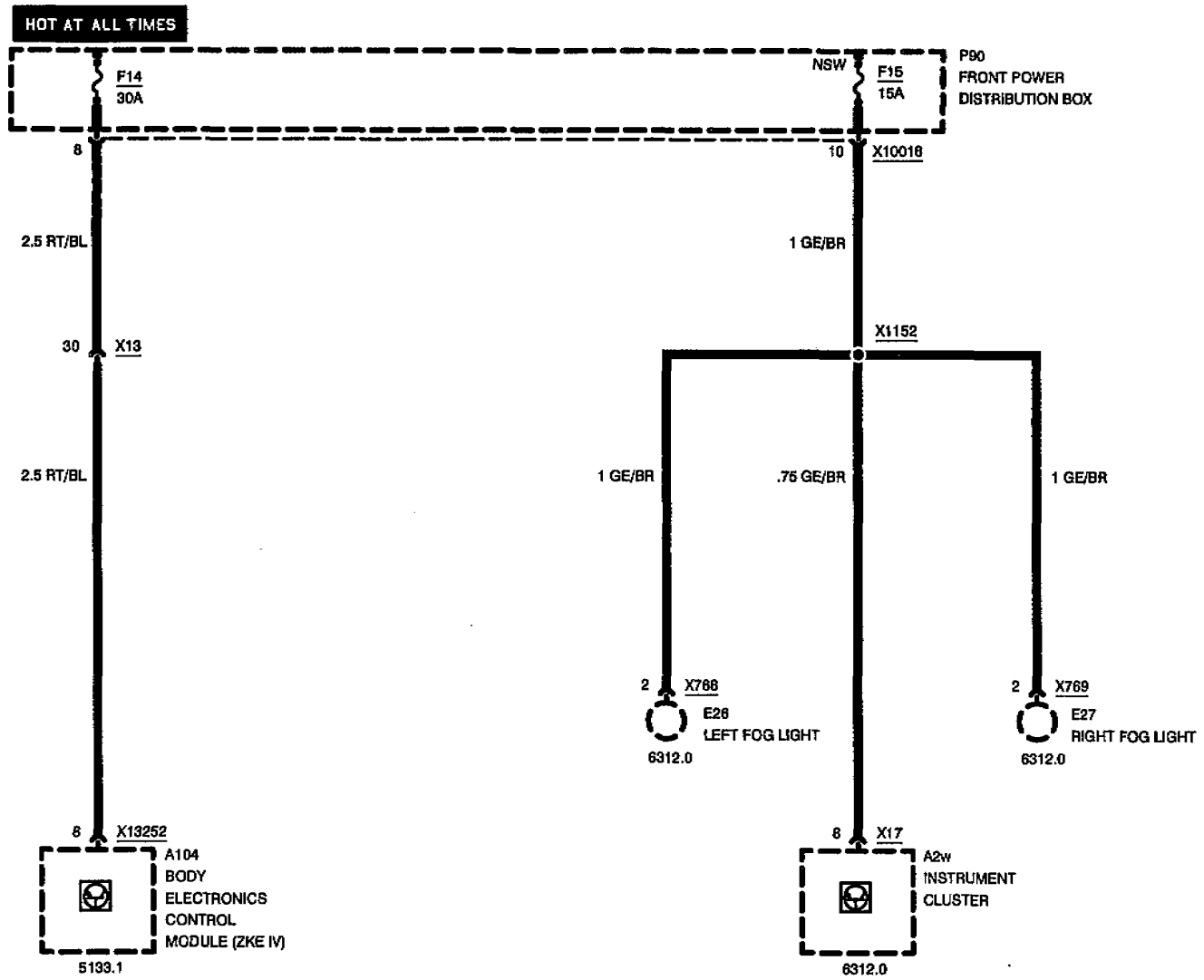
## FUSES 10, 11, AND 12





# FUSE DETAILS

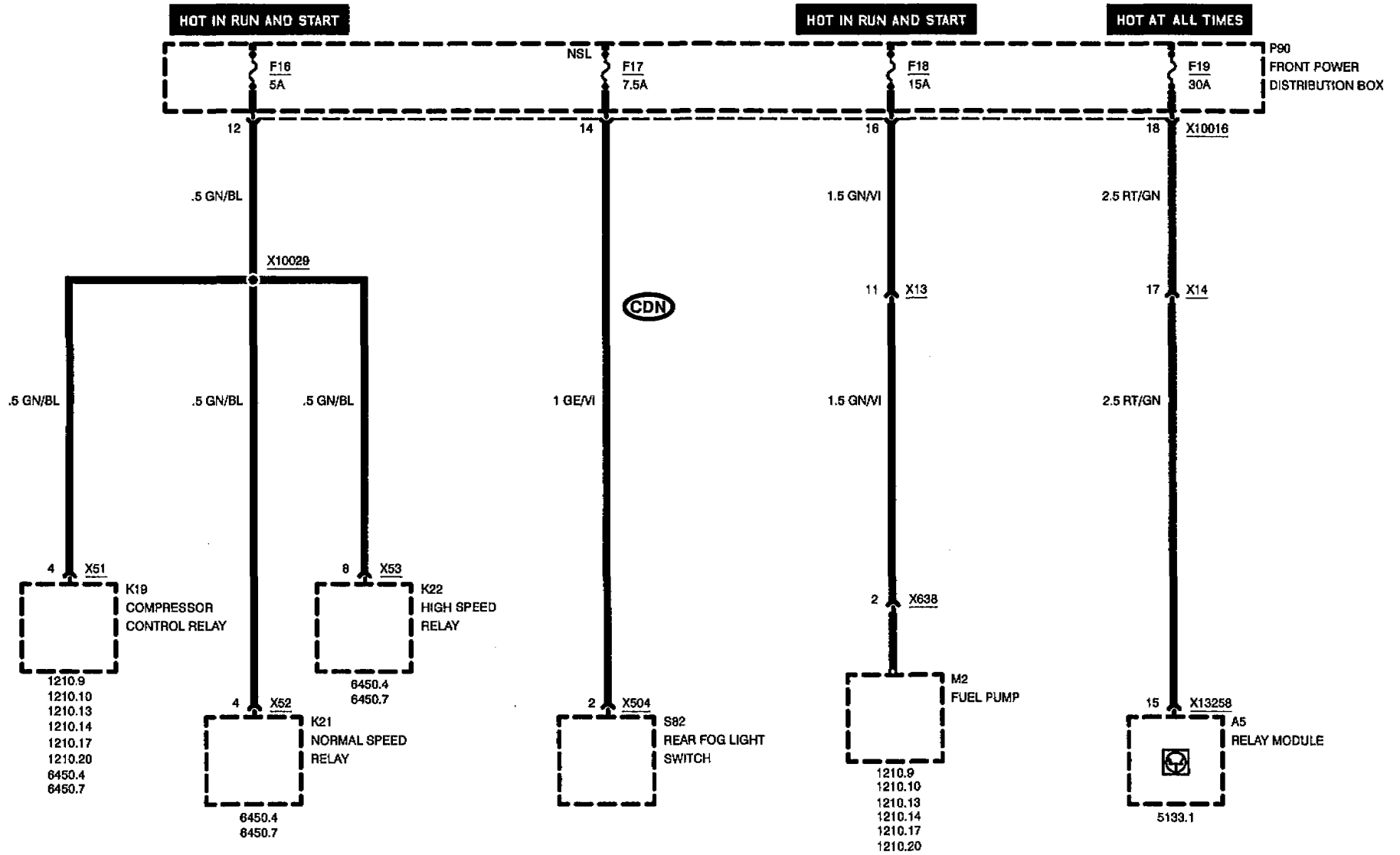
## FUSES 14 AND 15



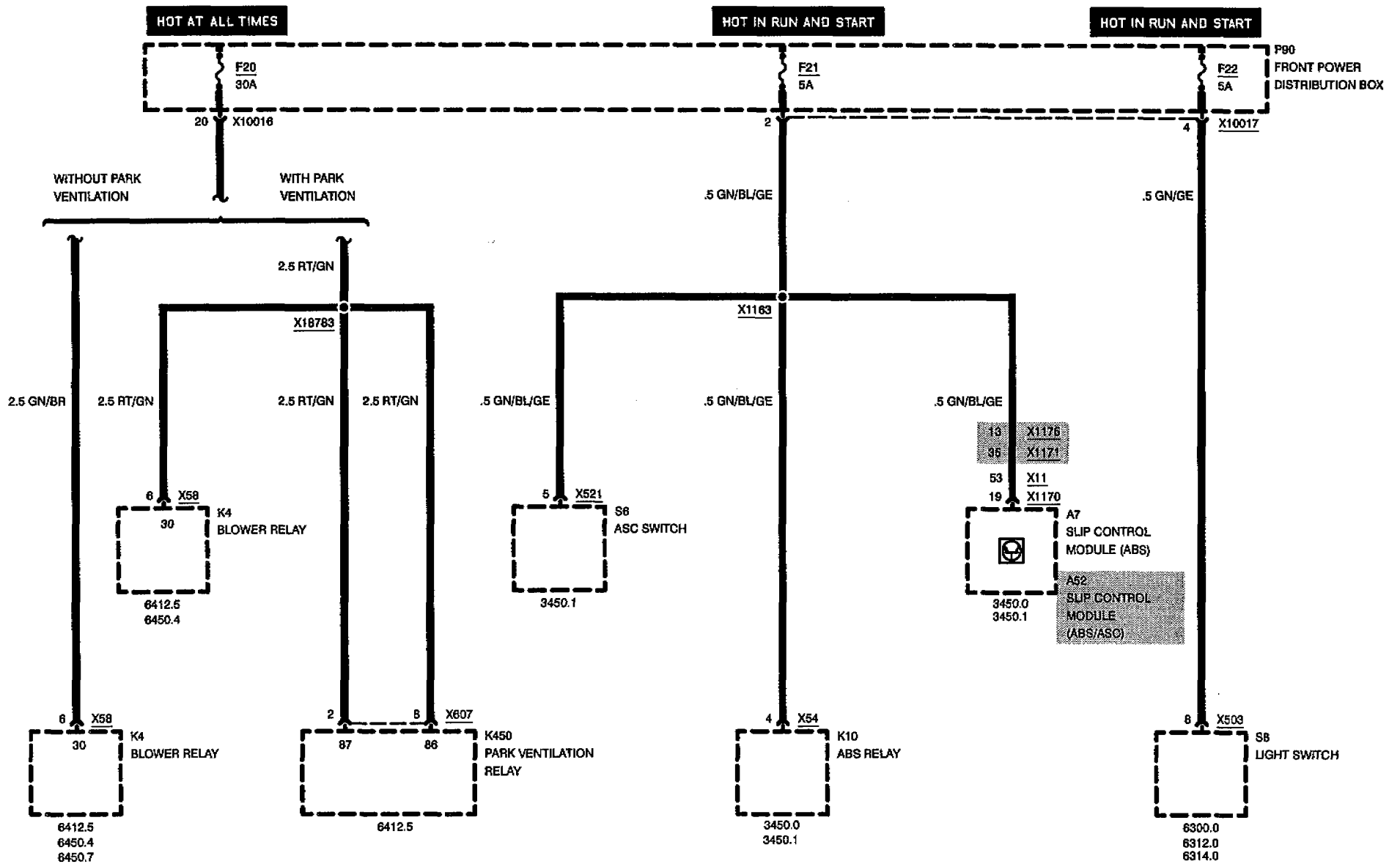


# FUSE DETAILS

## FUSES 16, 17, 18, AND 19



**BMW**  
**3** **FUSE DETAILS**  
**FUSES 20, 21, AND 22**



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0670.3-06

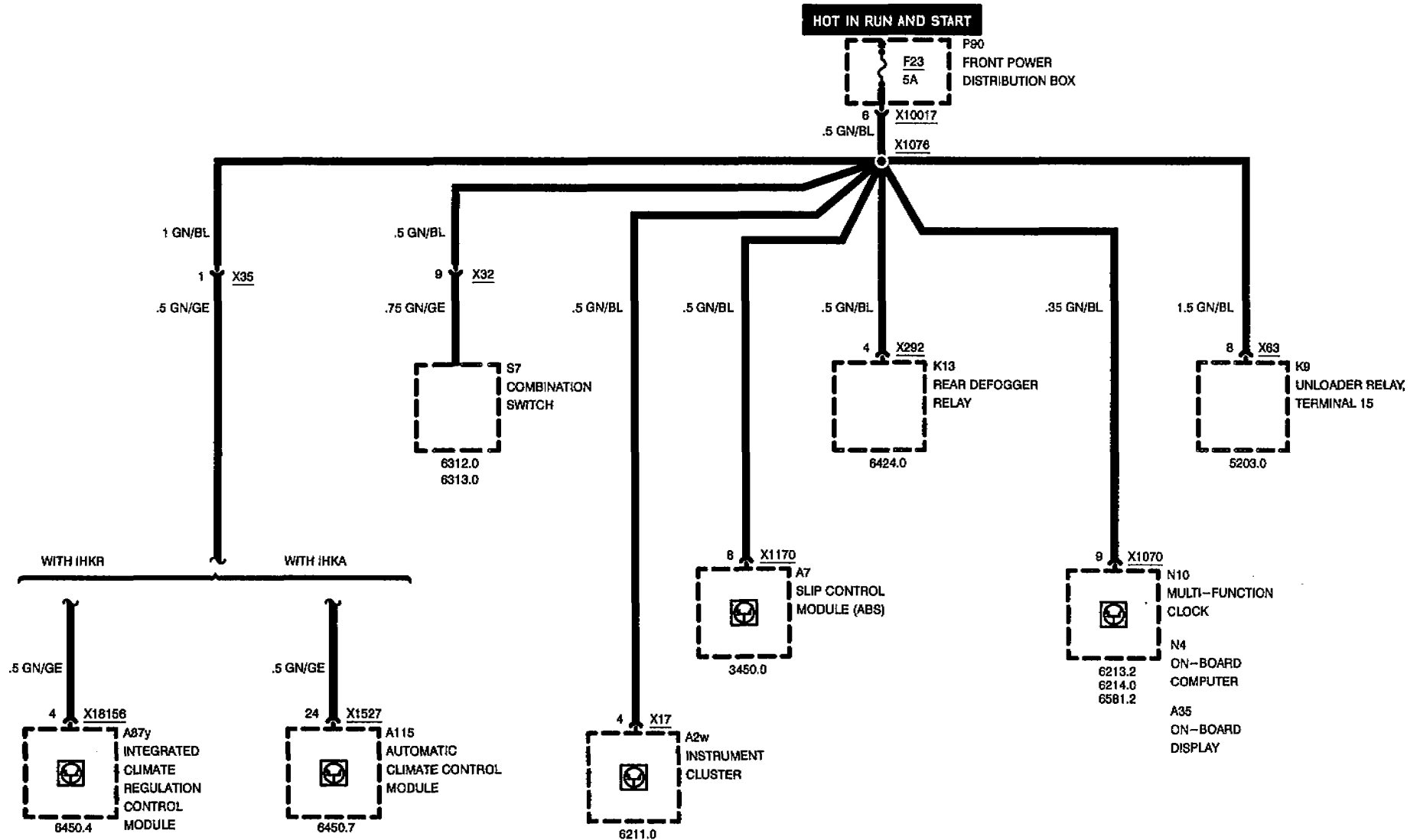
1996





# FUSE DETAILS

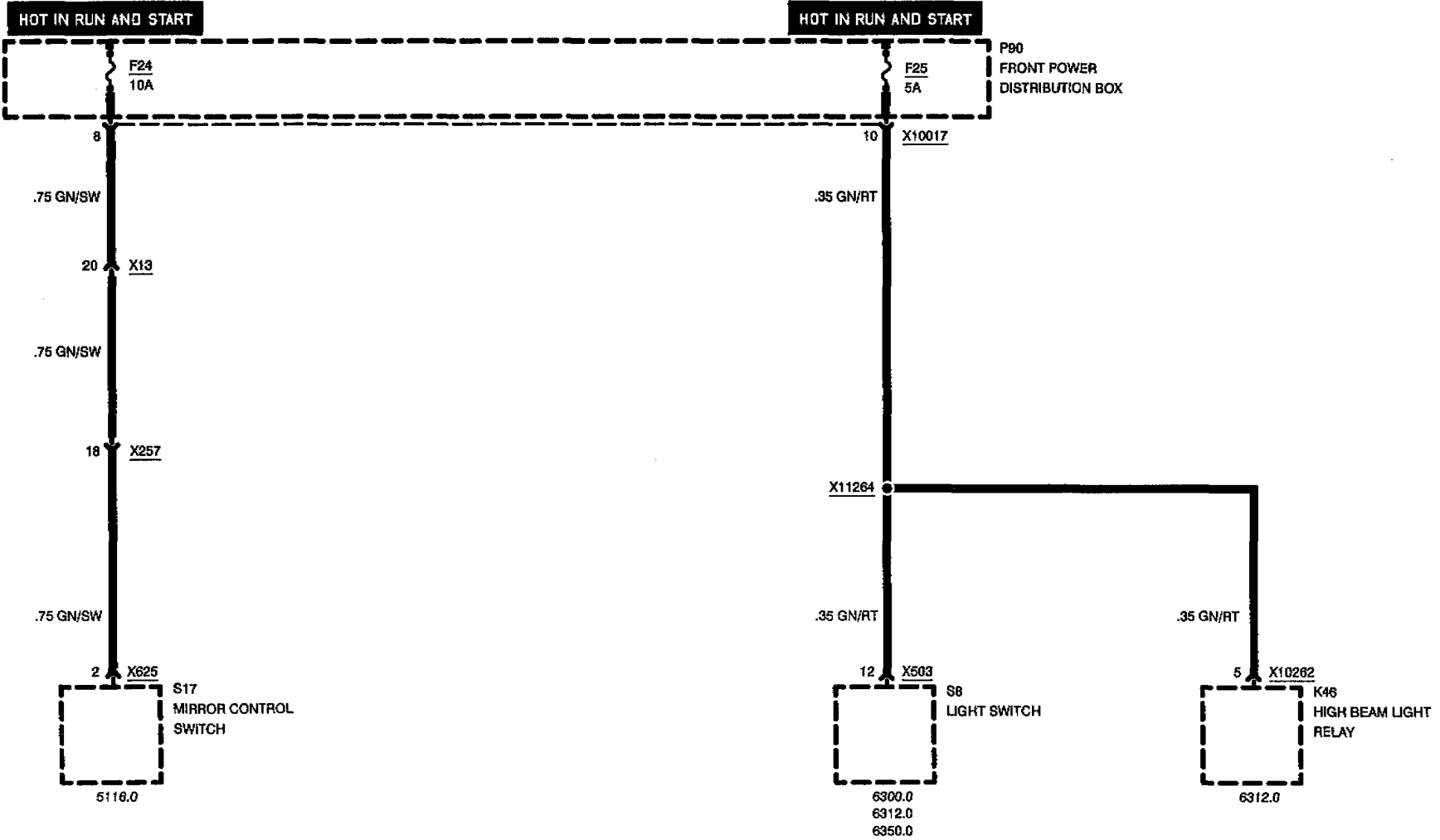
## FUSE 23



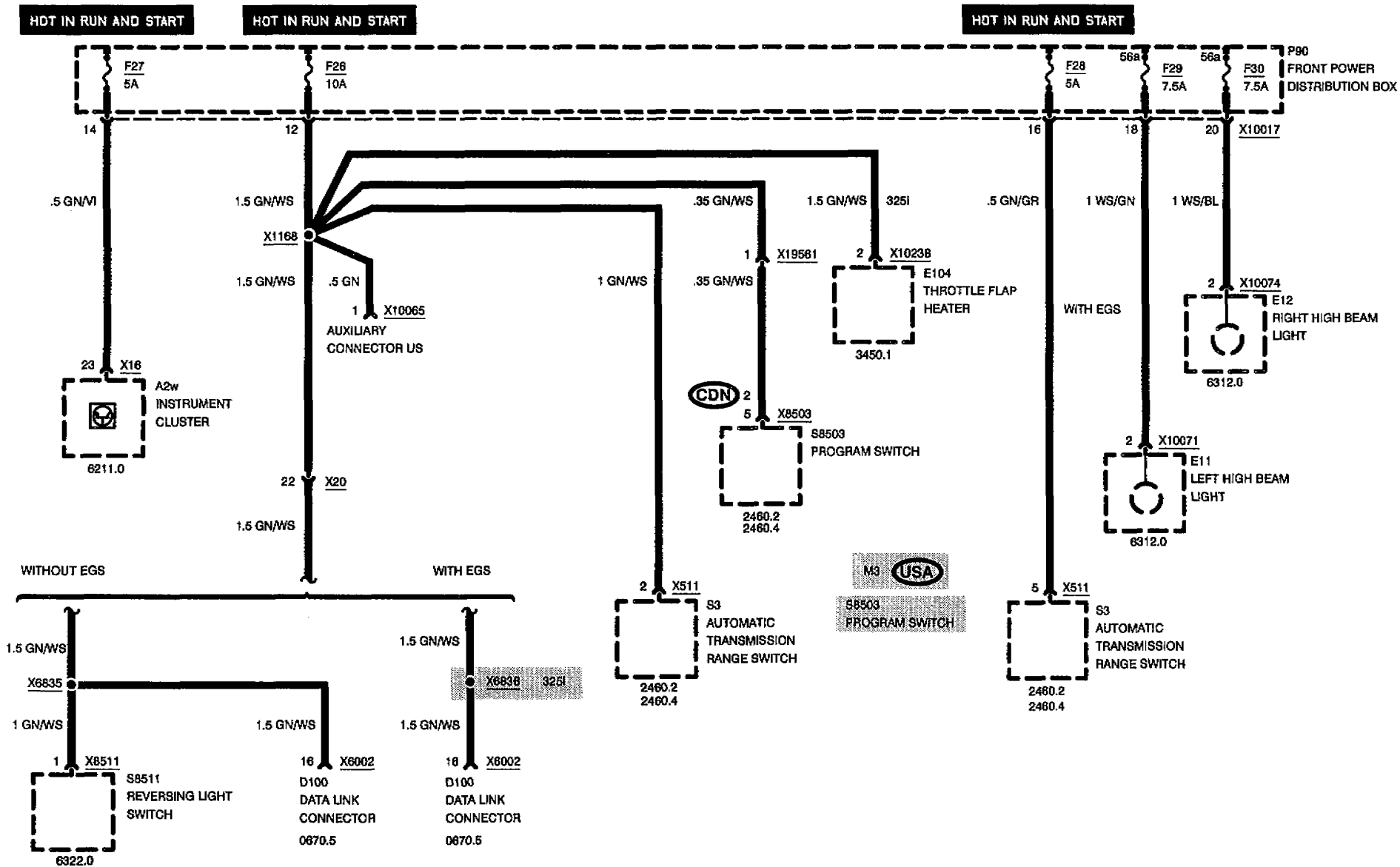


# FUSE DETAILS

## FUSES 24 AND 25



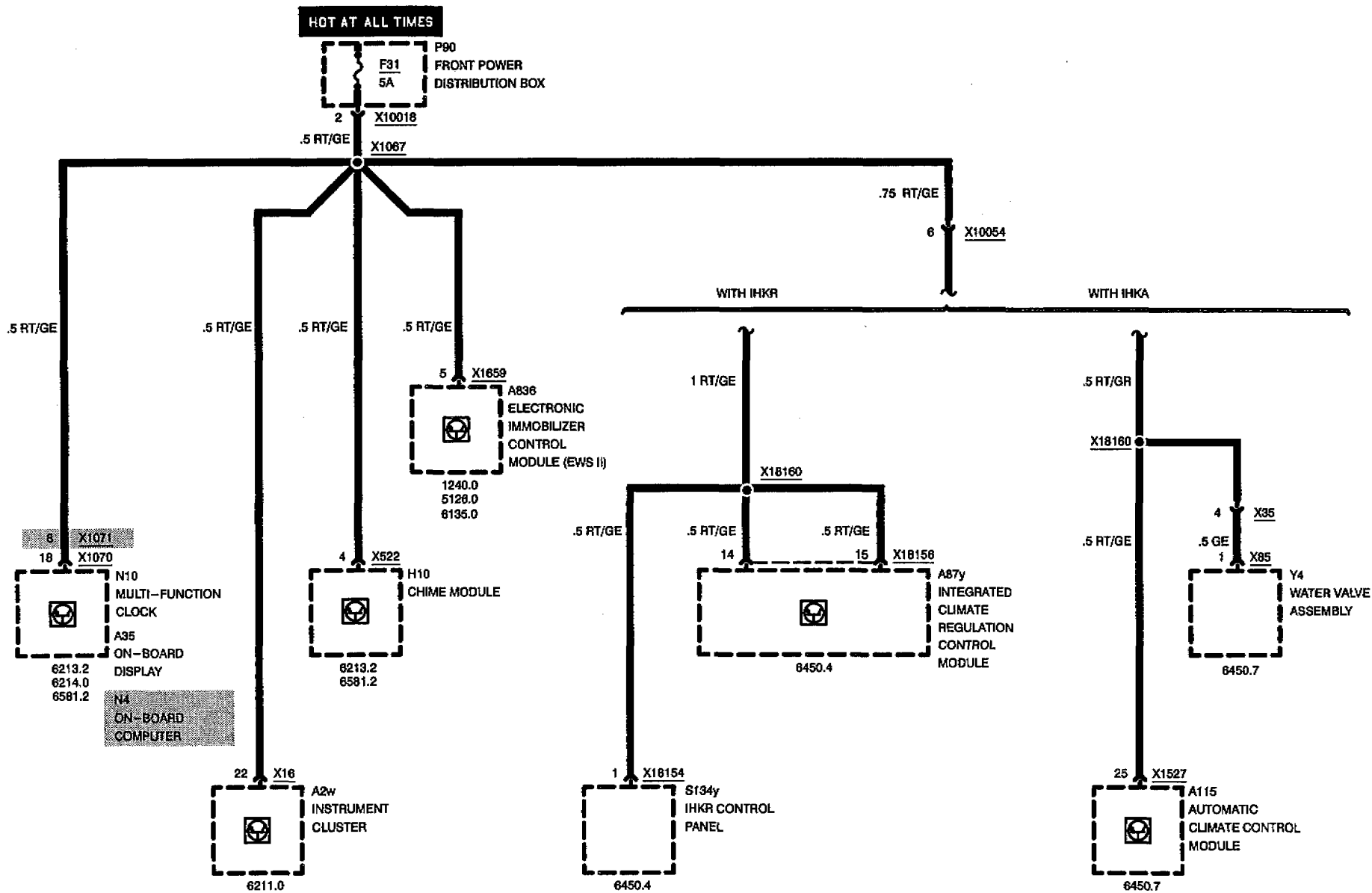
**BMW 3 FUSE DETAILS**  
**FUSES 26, 27, 28, 29, AND 30**





# FUSE DETAILS

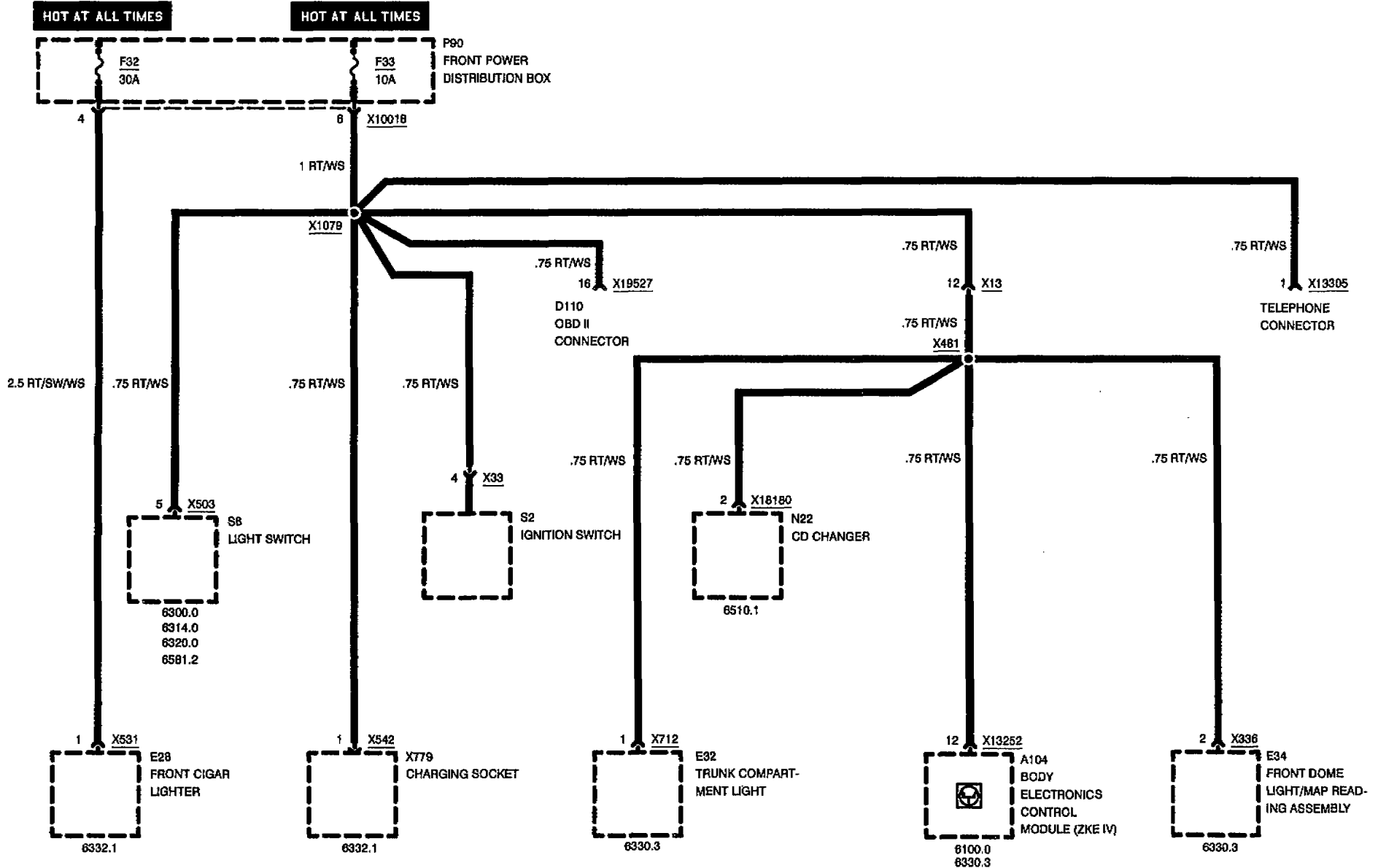
## FUSE 31





# FUSE DETAILS

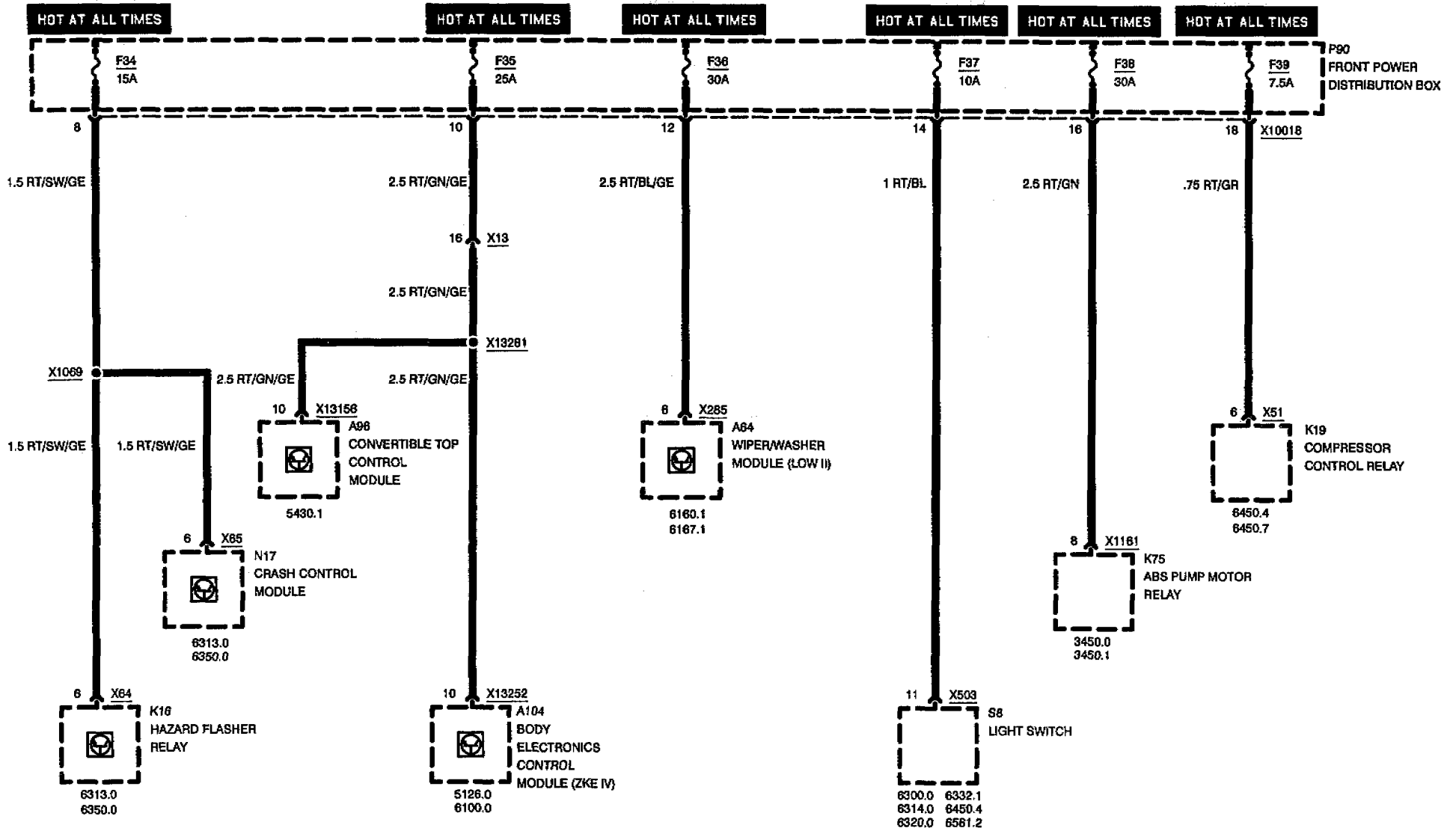
## FUSES 32 AND 33





# FUSE DETAILS

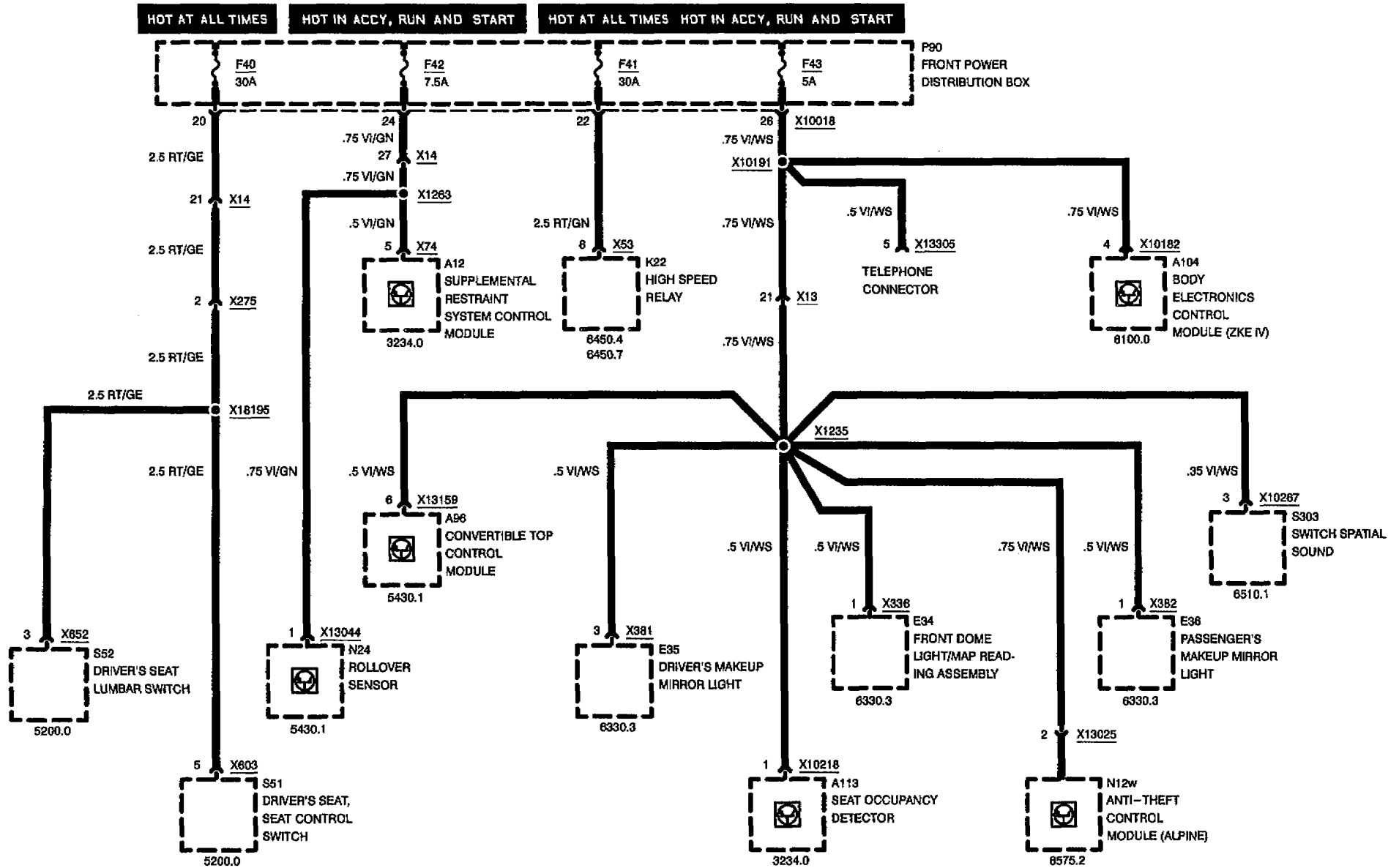
## FUSES 34, 35, 36, 37, 38, AND 39





# FUSE DETAILS

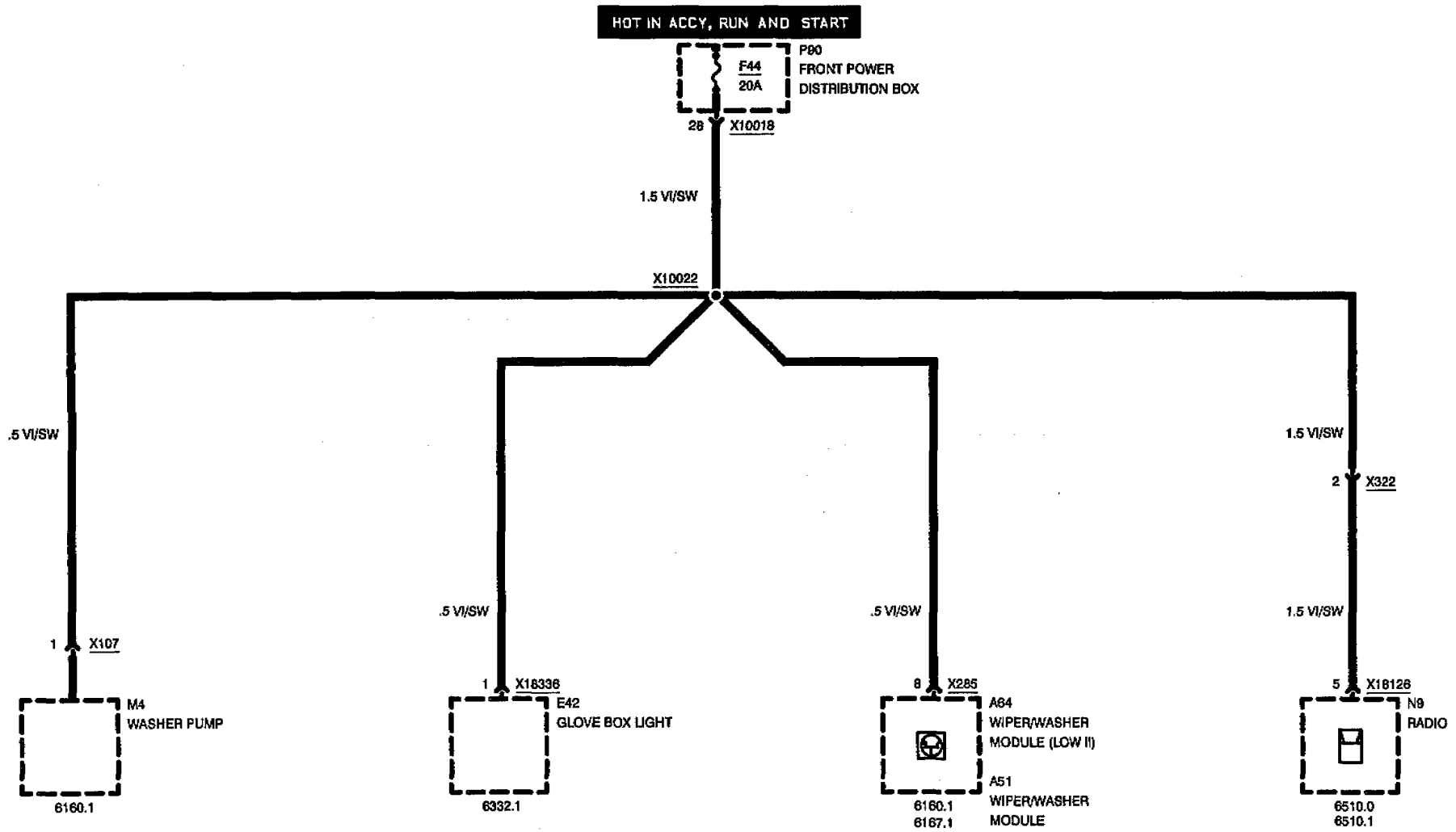
## FUSES 40, 41, 42, AND 43





# FUSE DETAILS

## FUSE 44

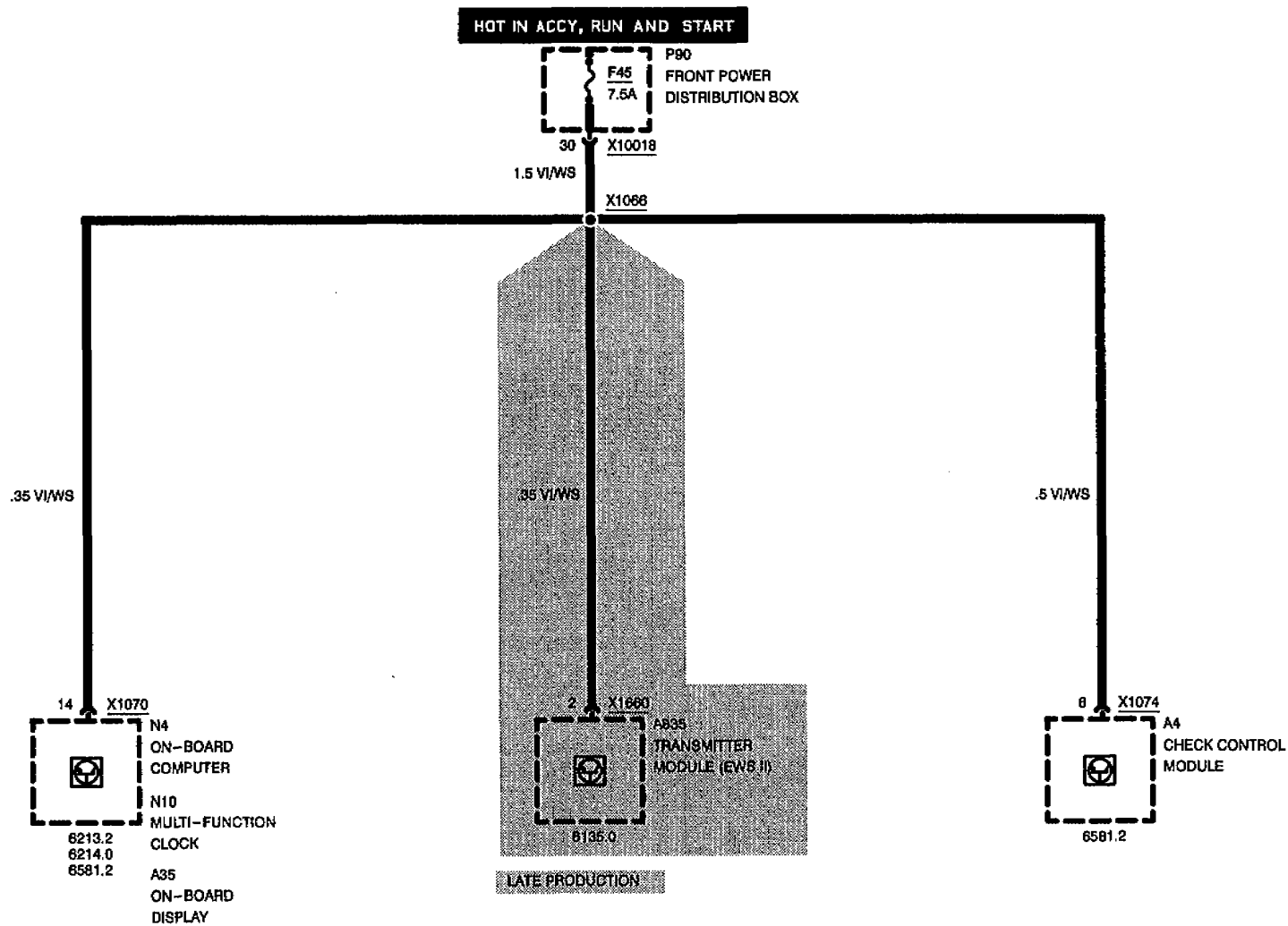




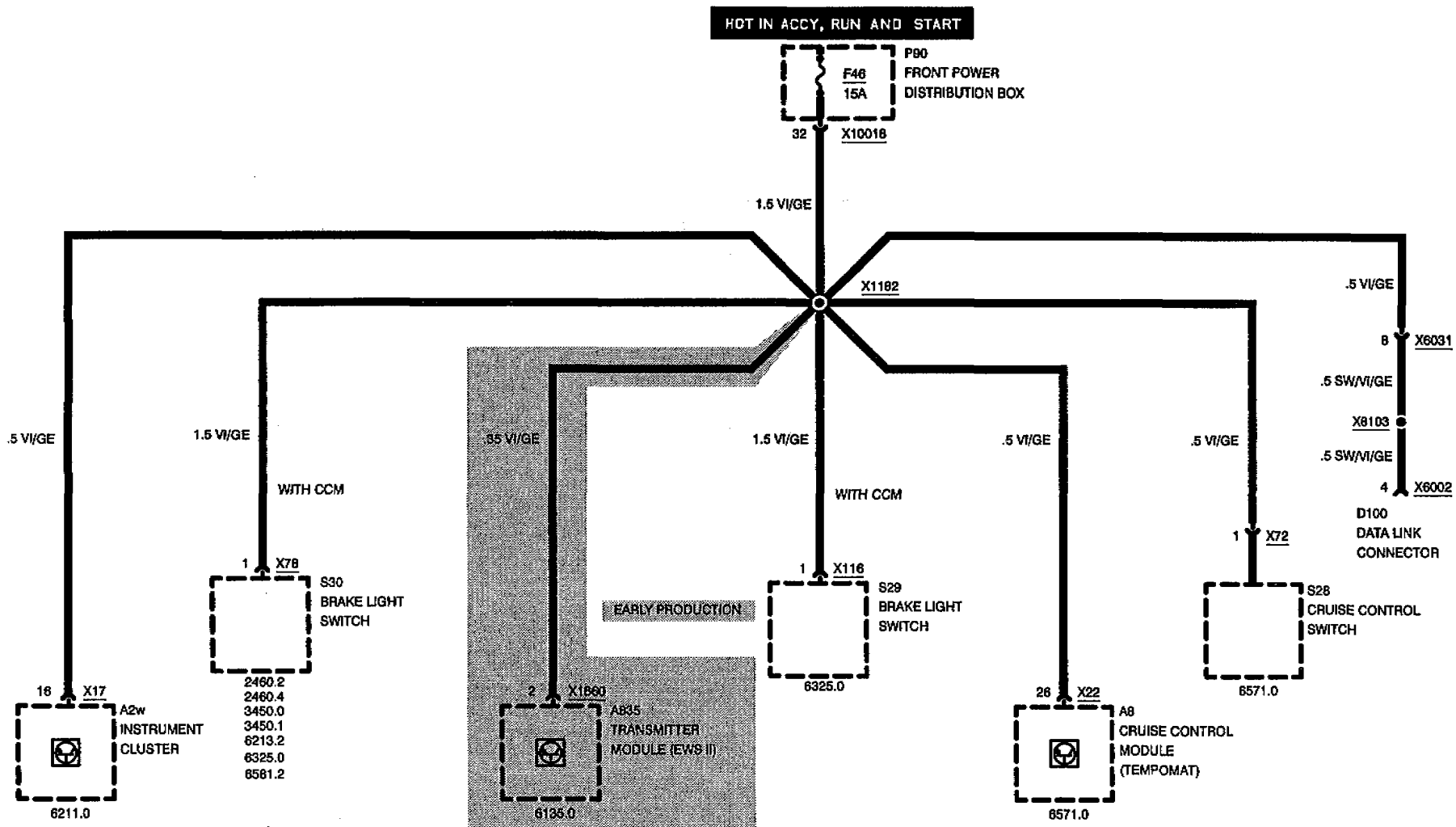


# FUSE DETAILS

## FUSE 45



**BMW**  
**3** FUSE DETAILS  
FUSE 46





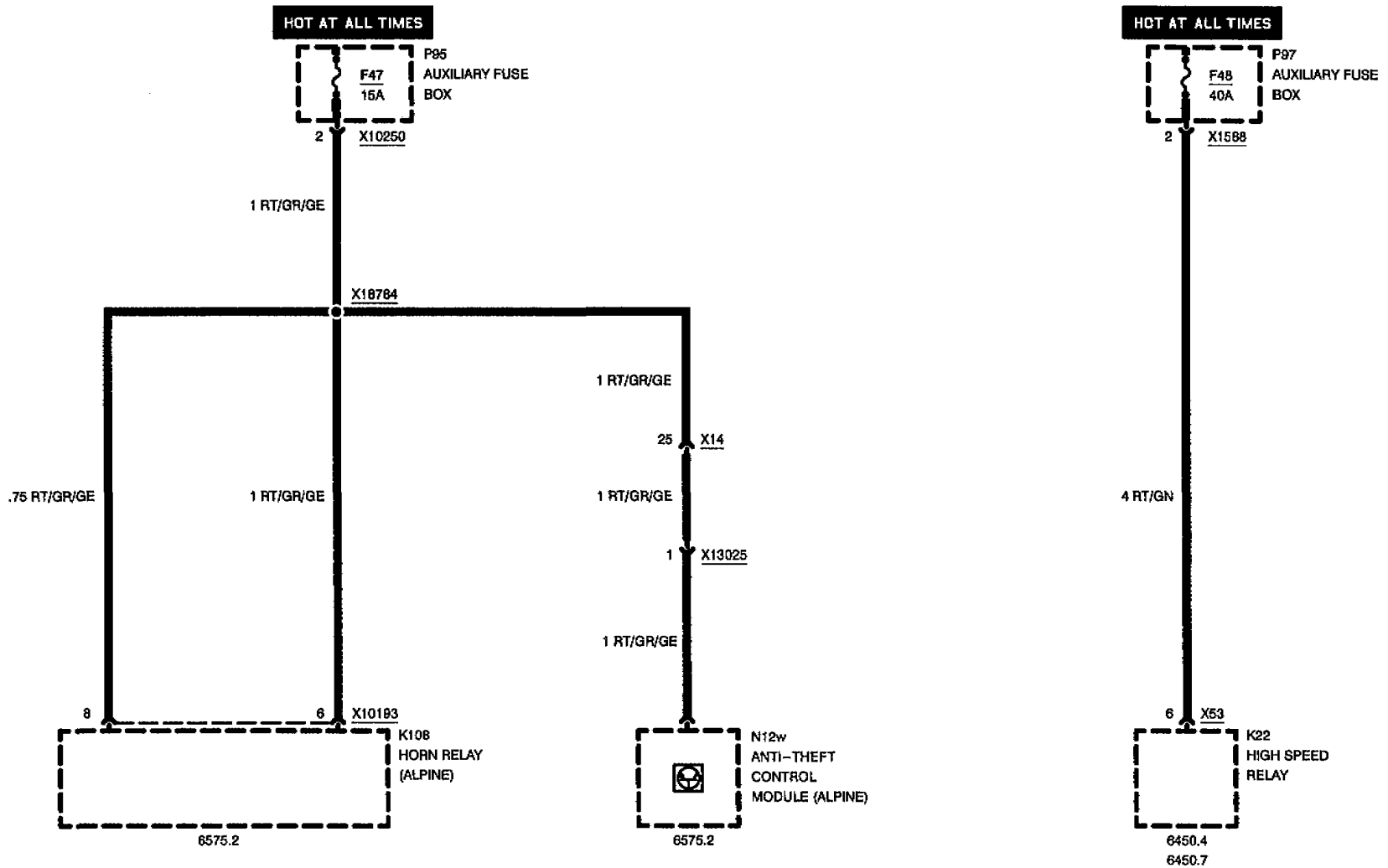
# FUSE DETAILS

## FUSES 47 AND 48

04/97

0670.3-17

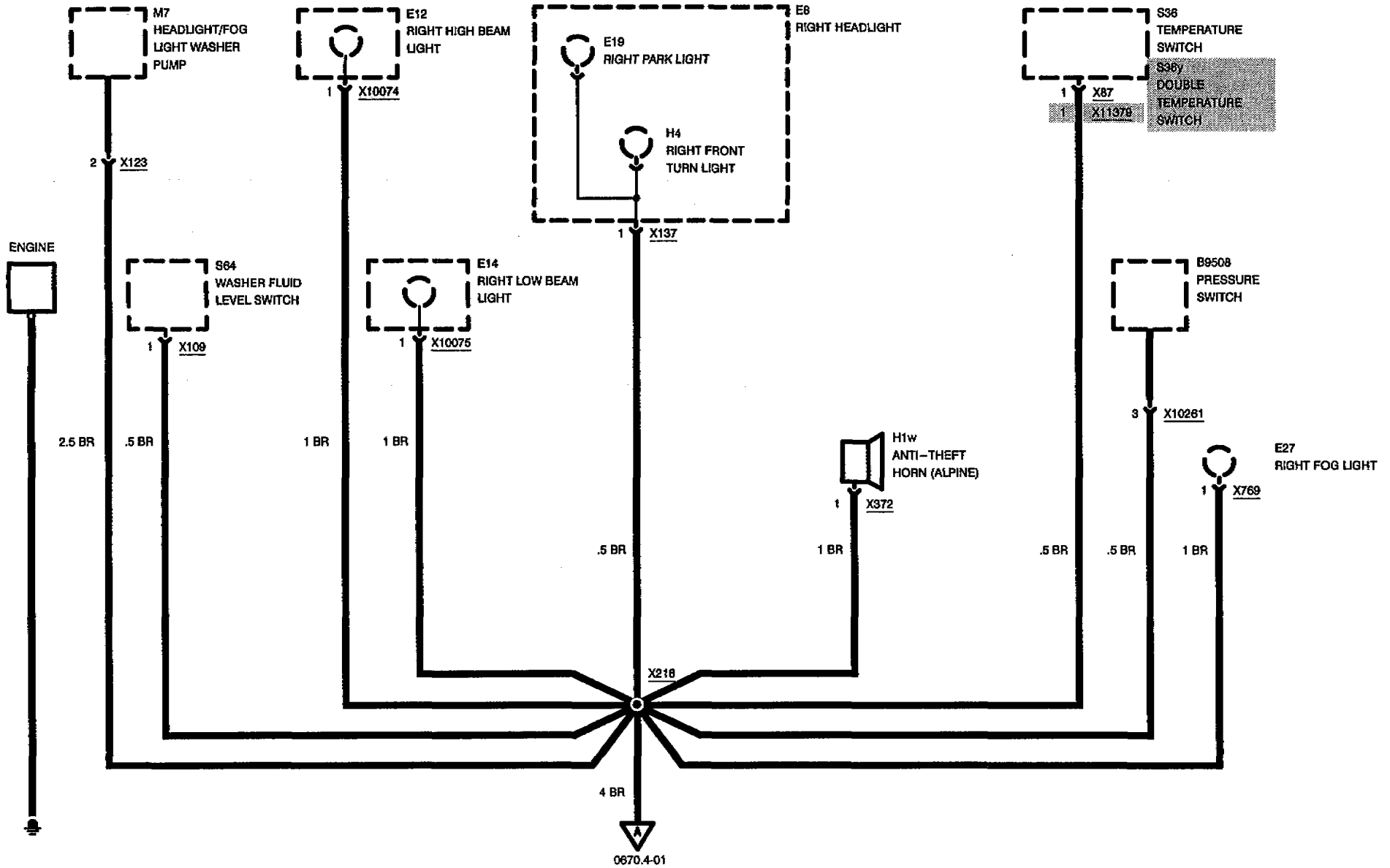
1996





# GROUND DISTRIBUTION

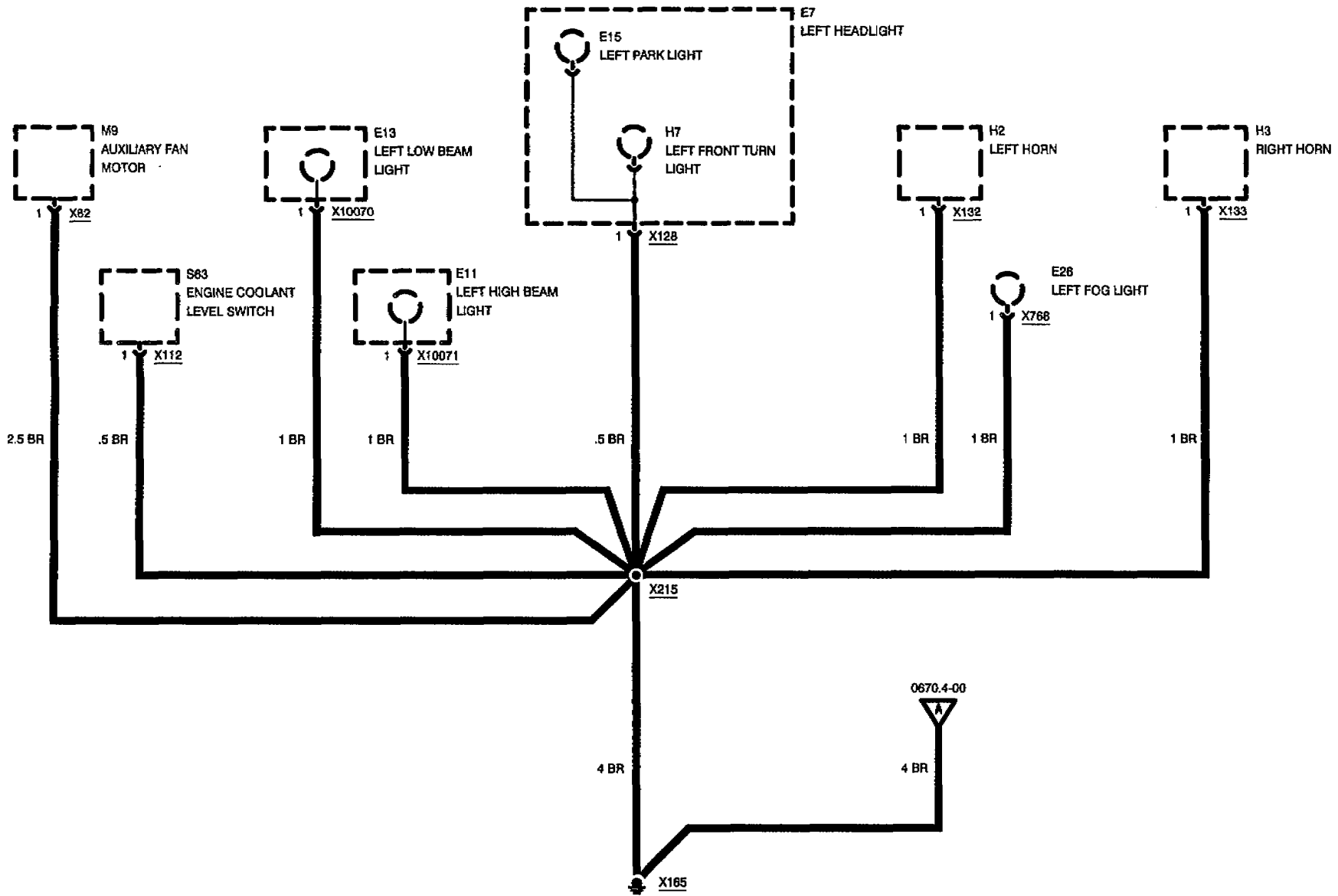
## GROUND X165





# GROUND DISTRIBUTION

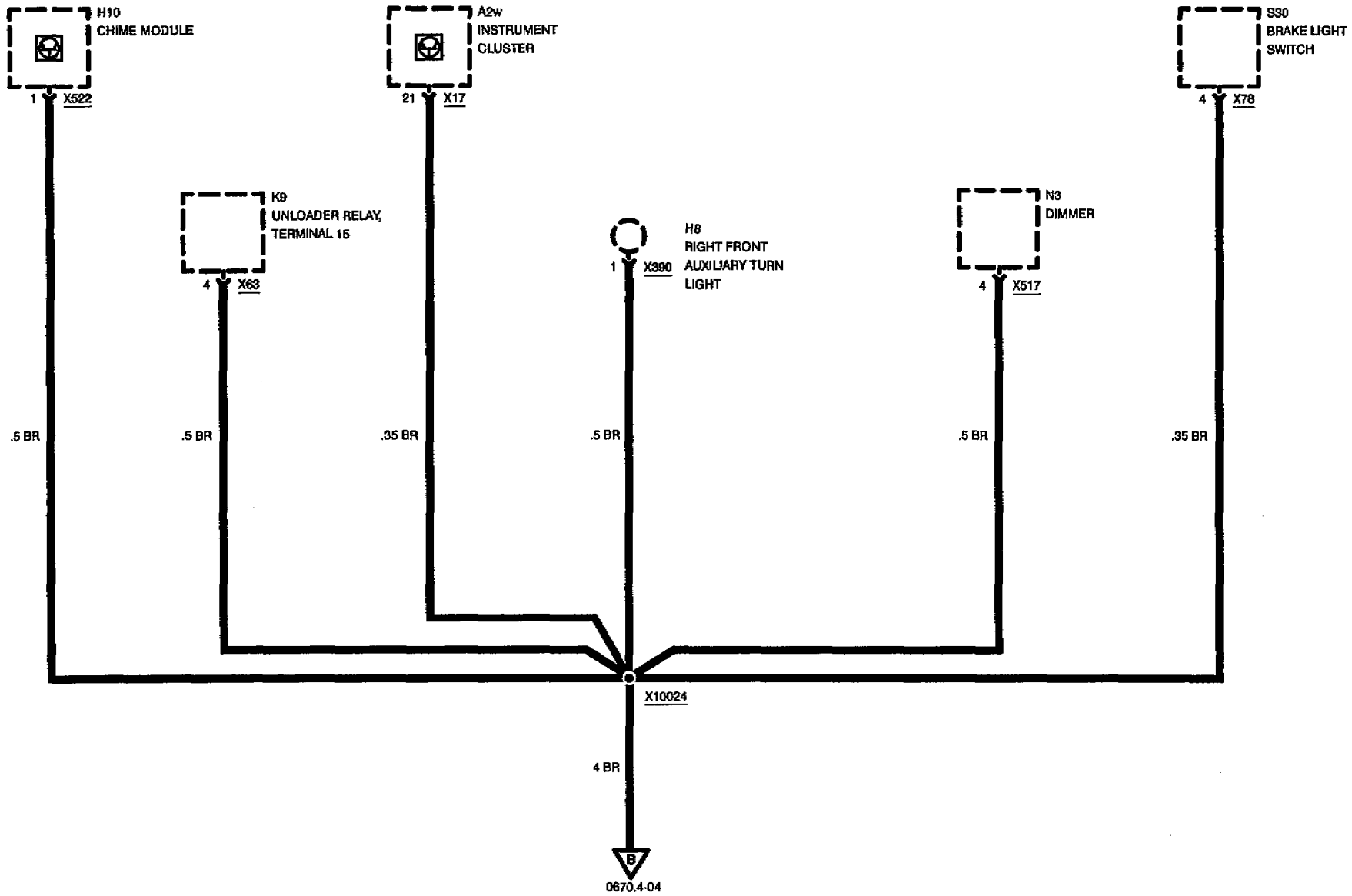
## GROUND X165





# GROUND DISTRIBUTION

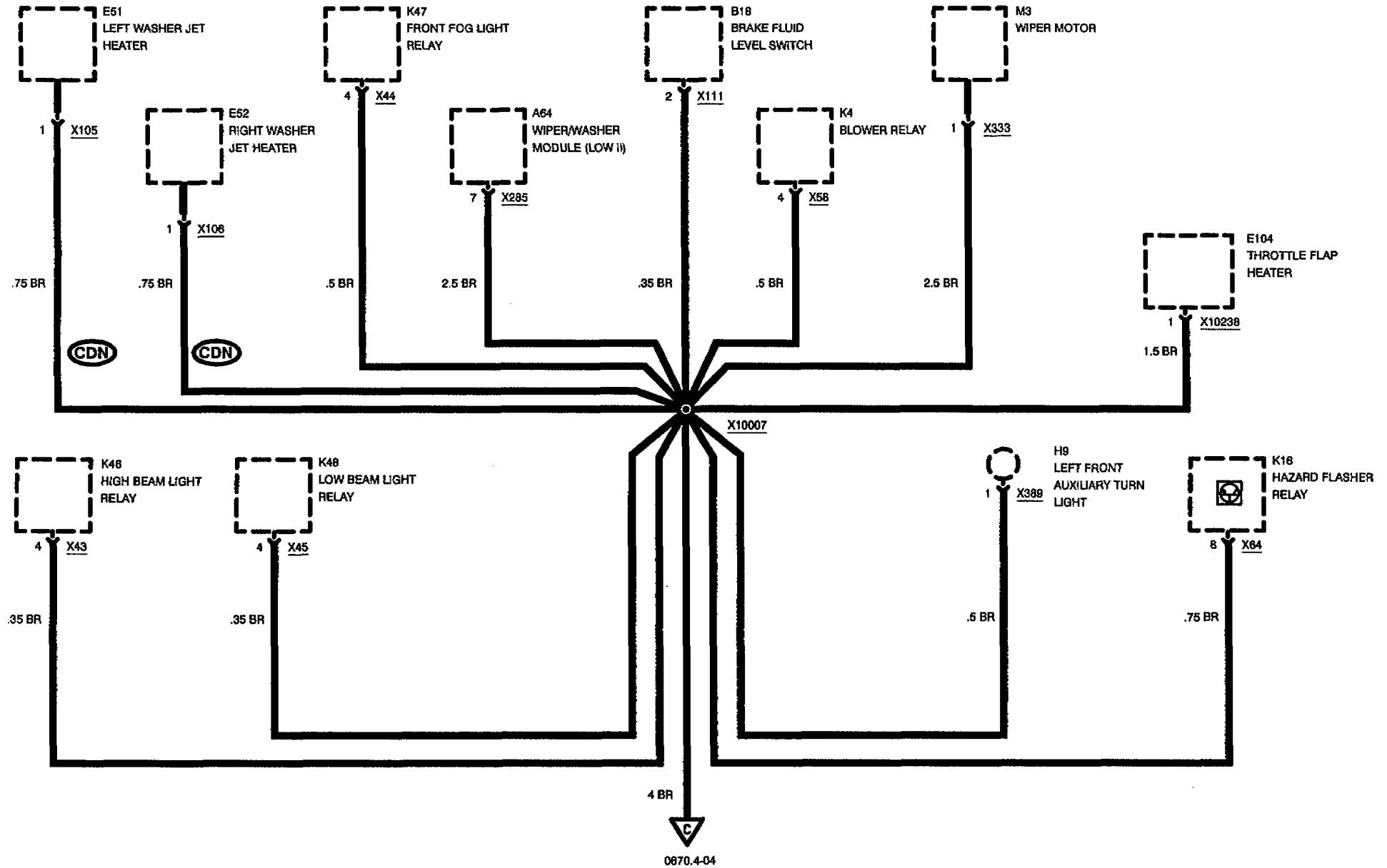
## GROUND X173





# GROUND DISTRIBUTION

## GROUND X173



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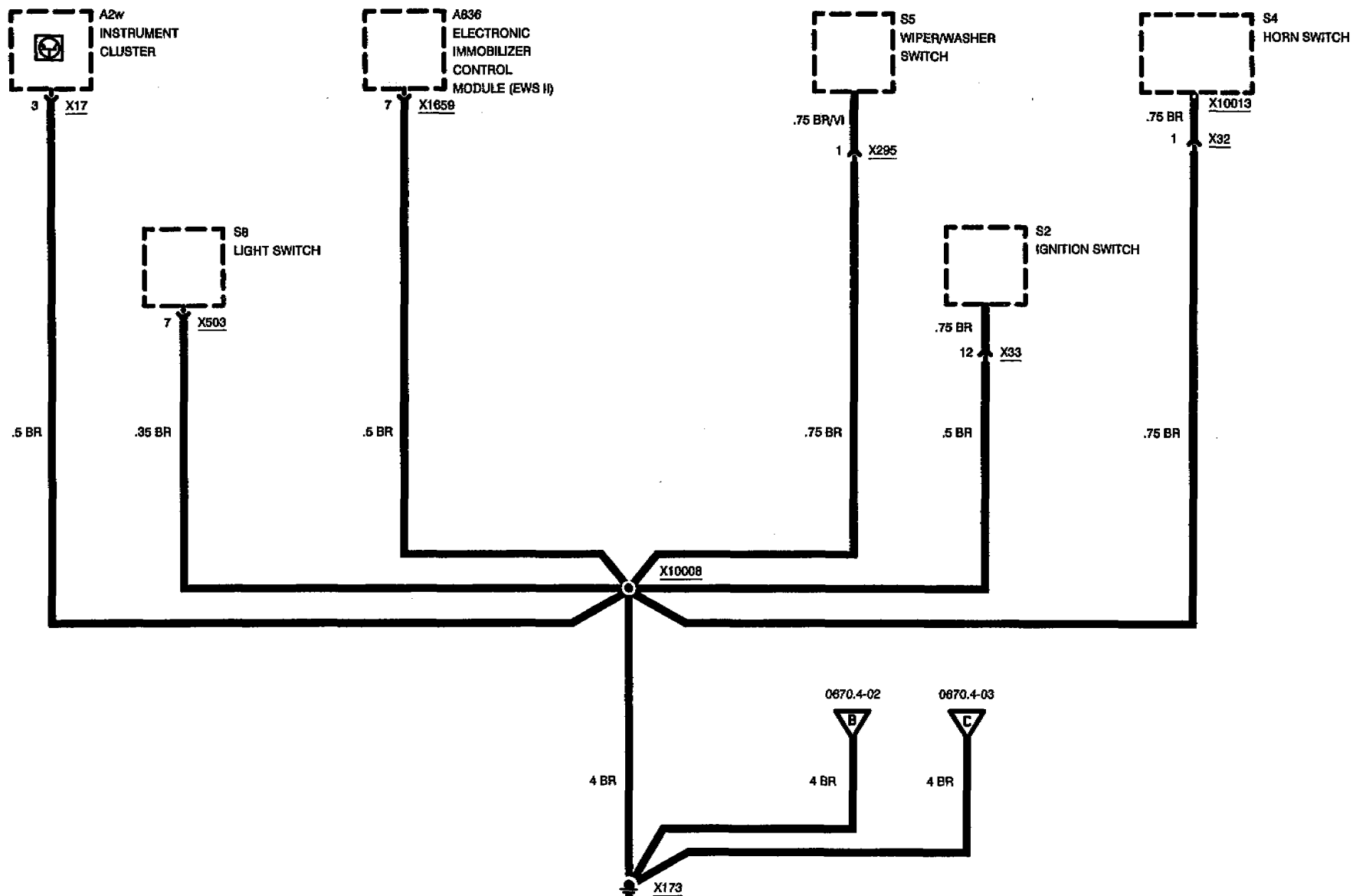
0670.4-03

1996



# GROUND DISTRIBUTION

## GROUND X173

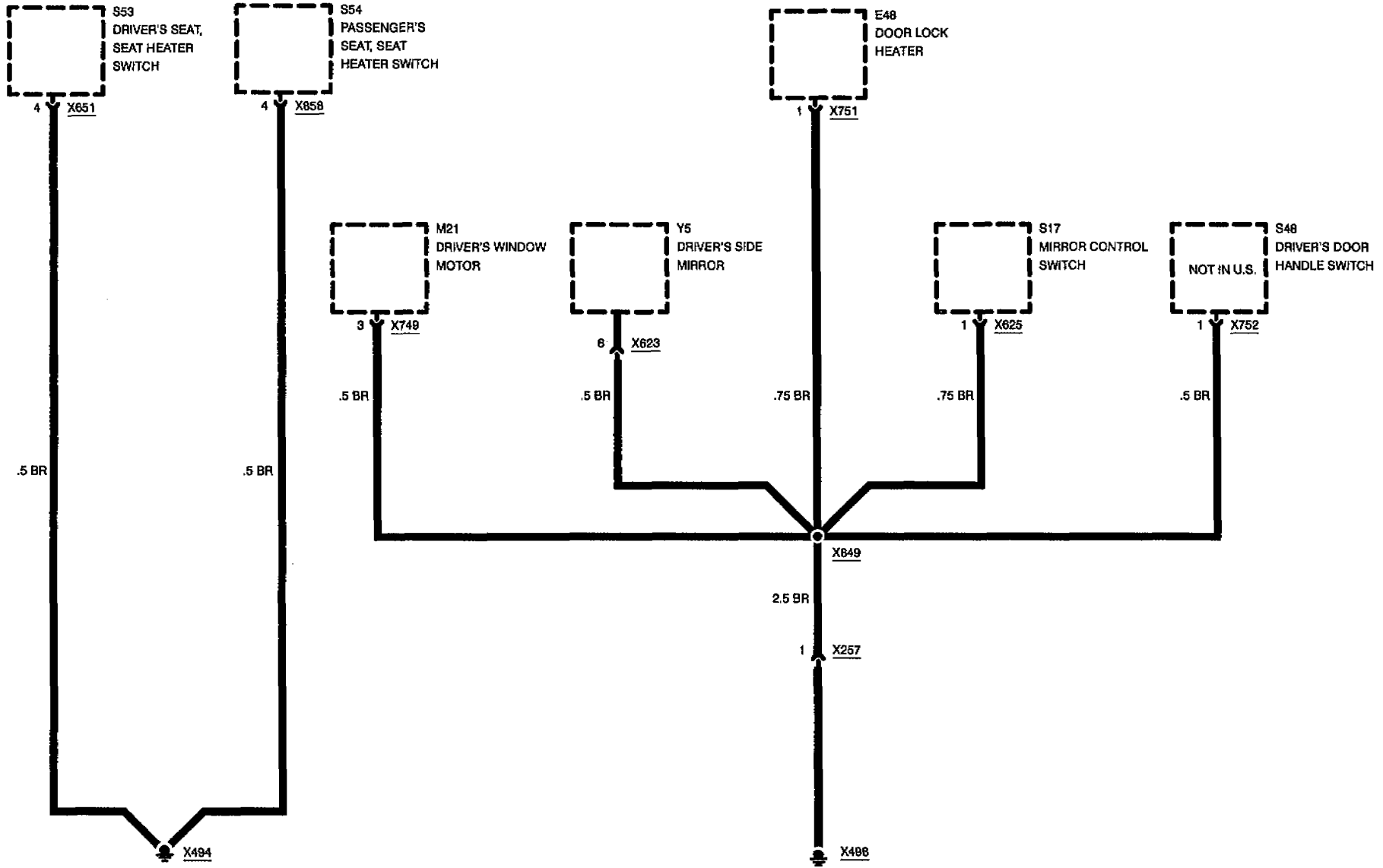






# GROUND DISTRIBUTION

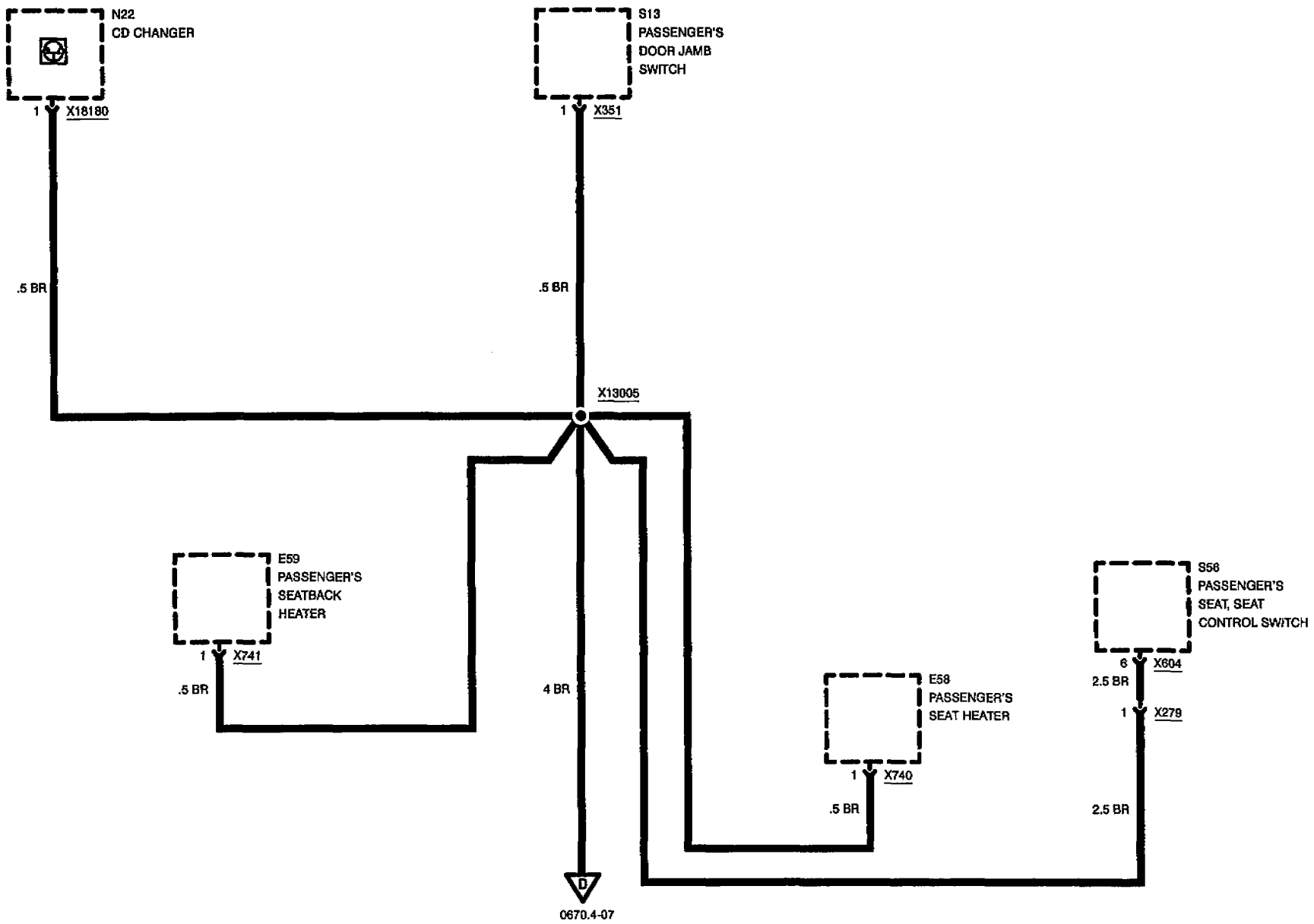
## GROUNDS X494 AND X498





# GROUND DISTRIBUTION

## GROUND X495



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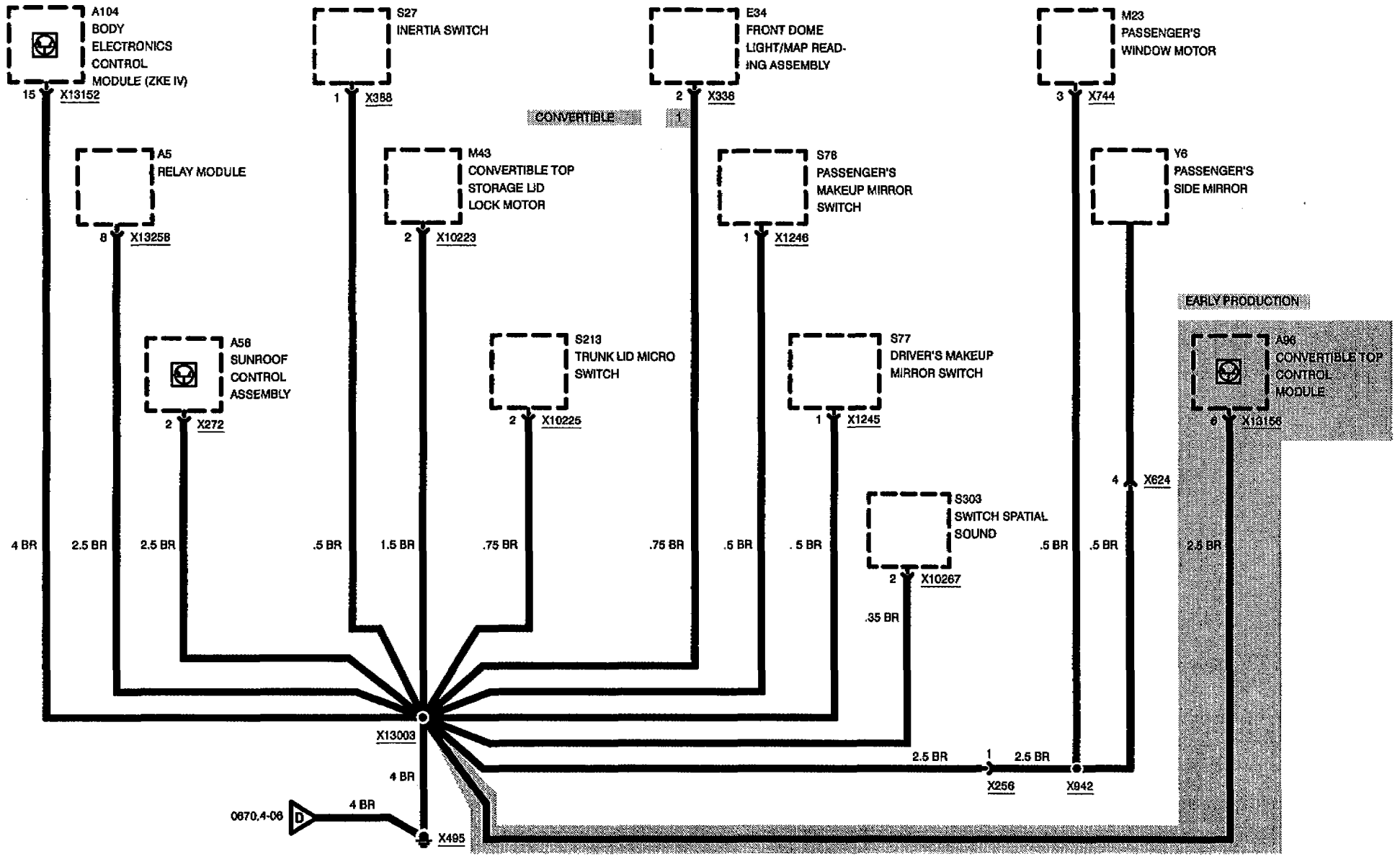
0670.4-06

1996



# GROUND DISTRIBUTION

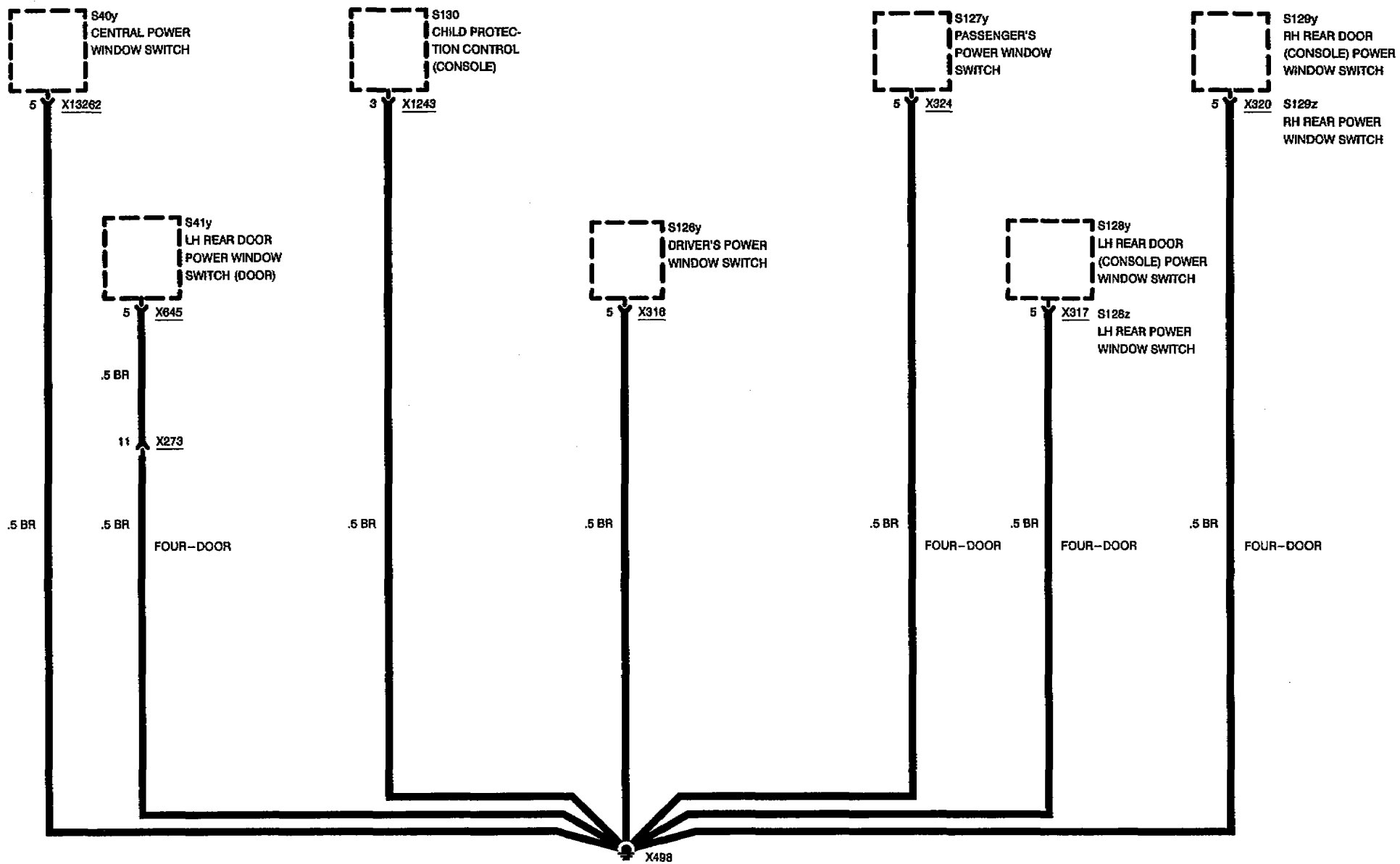
## GROUND X495





# GROUND DISTRIBUTION

## GROUND X498



04/97

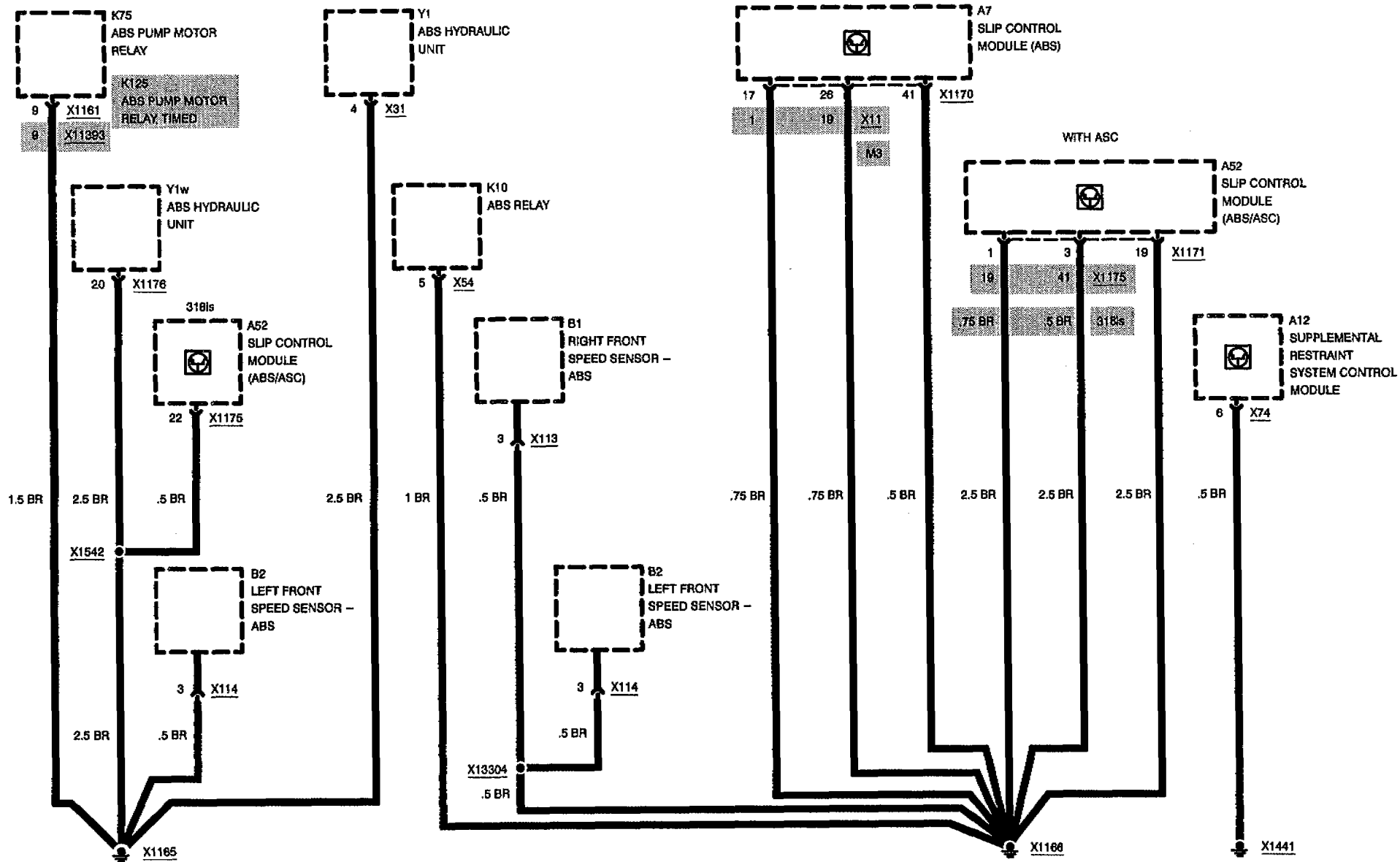
0670.4-08

1996



# GROUND DISTRIBUTION

## GROUNDS X1165, X1166, AND X1441

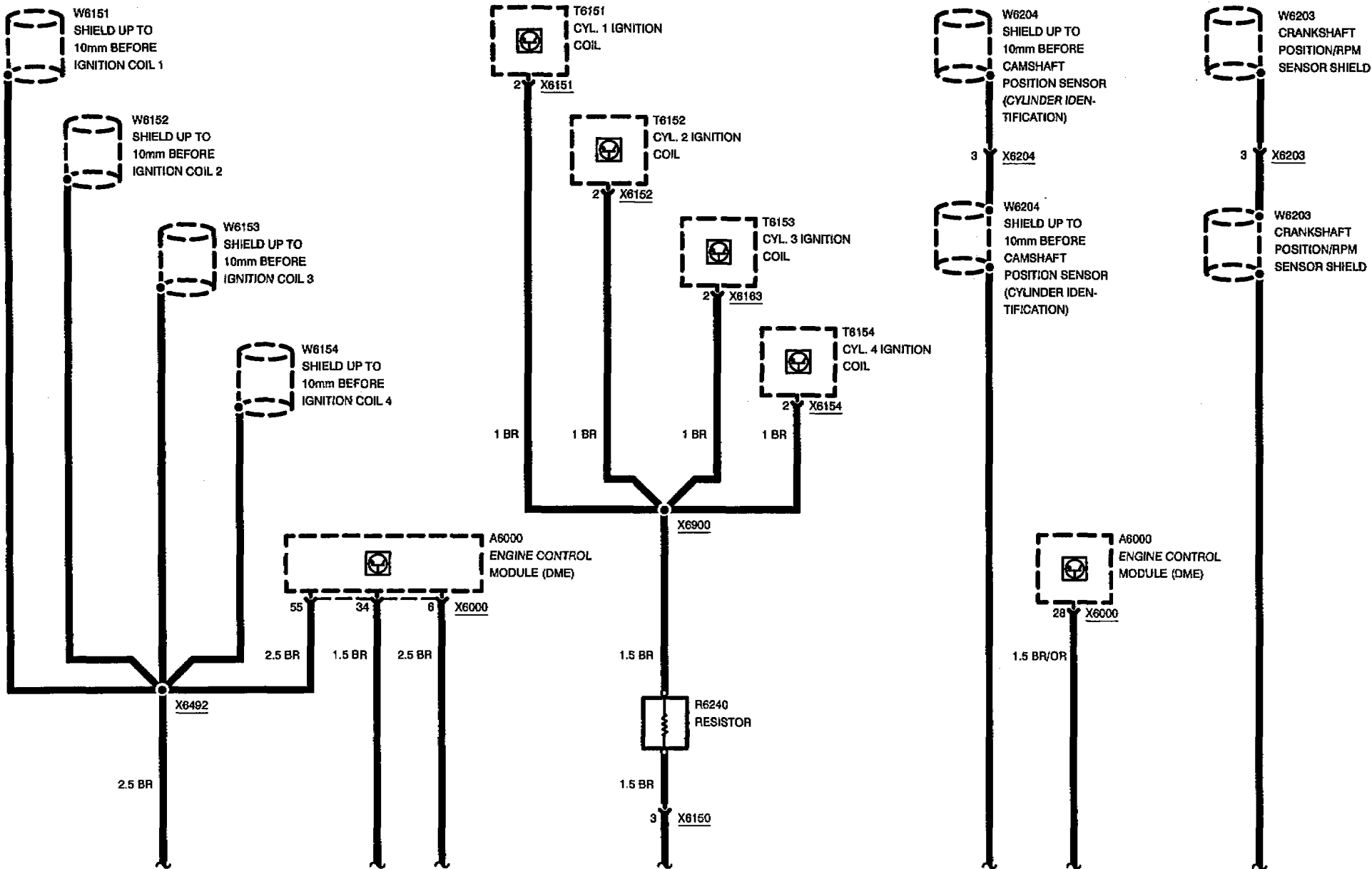


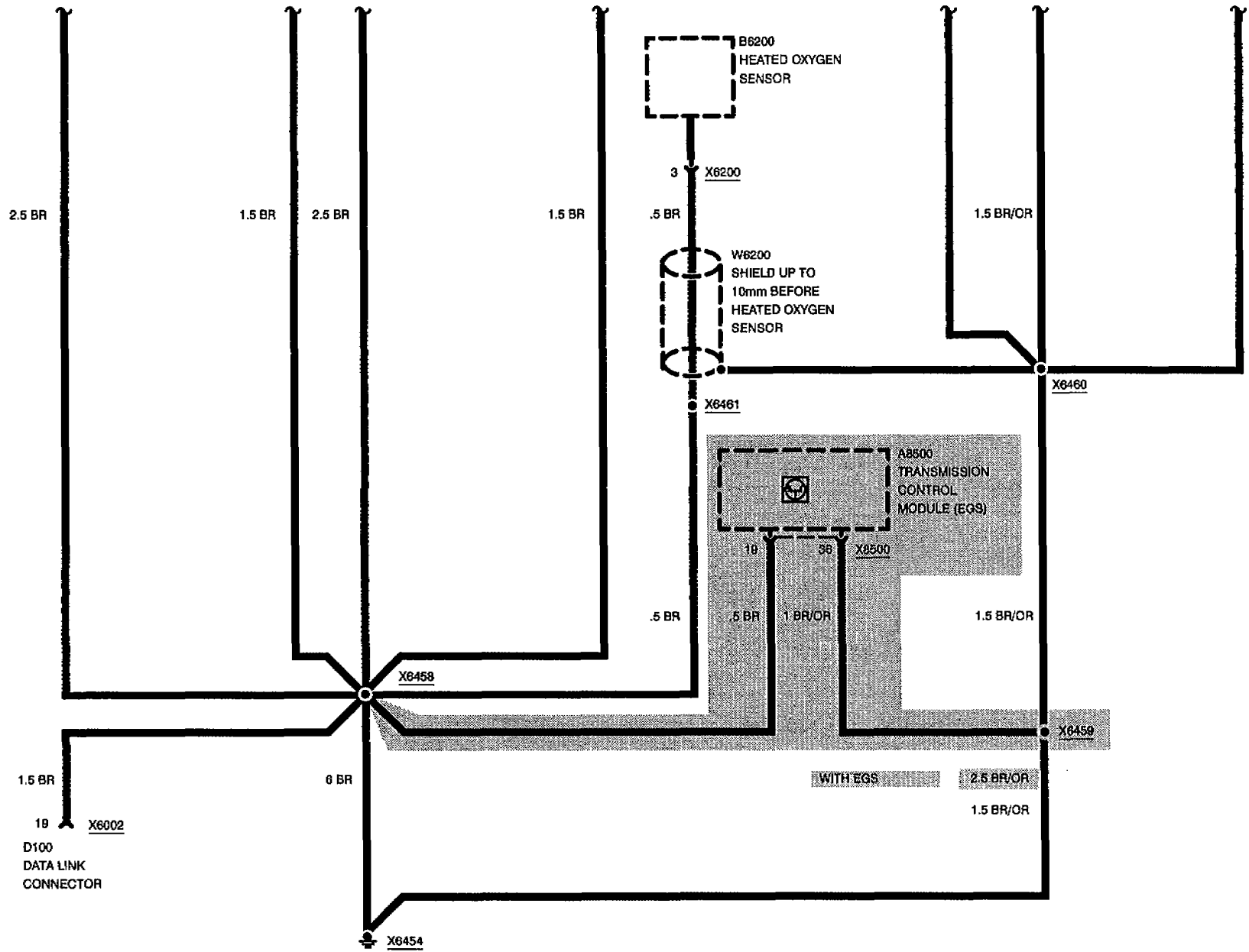


# GROUND DISTRIBUTION

## GROUND X6454

318is EARLY PRODUCTION



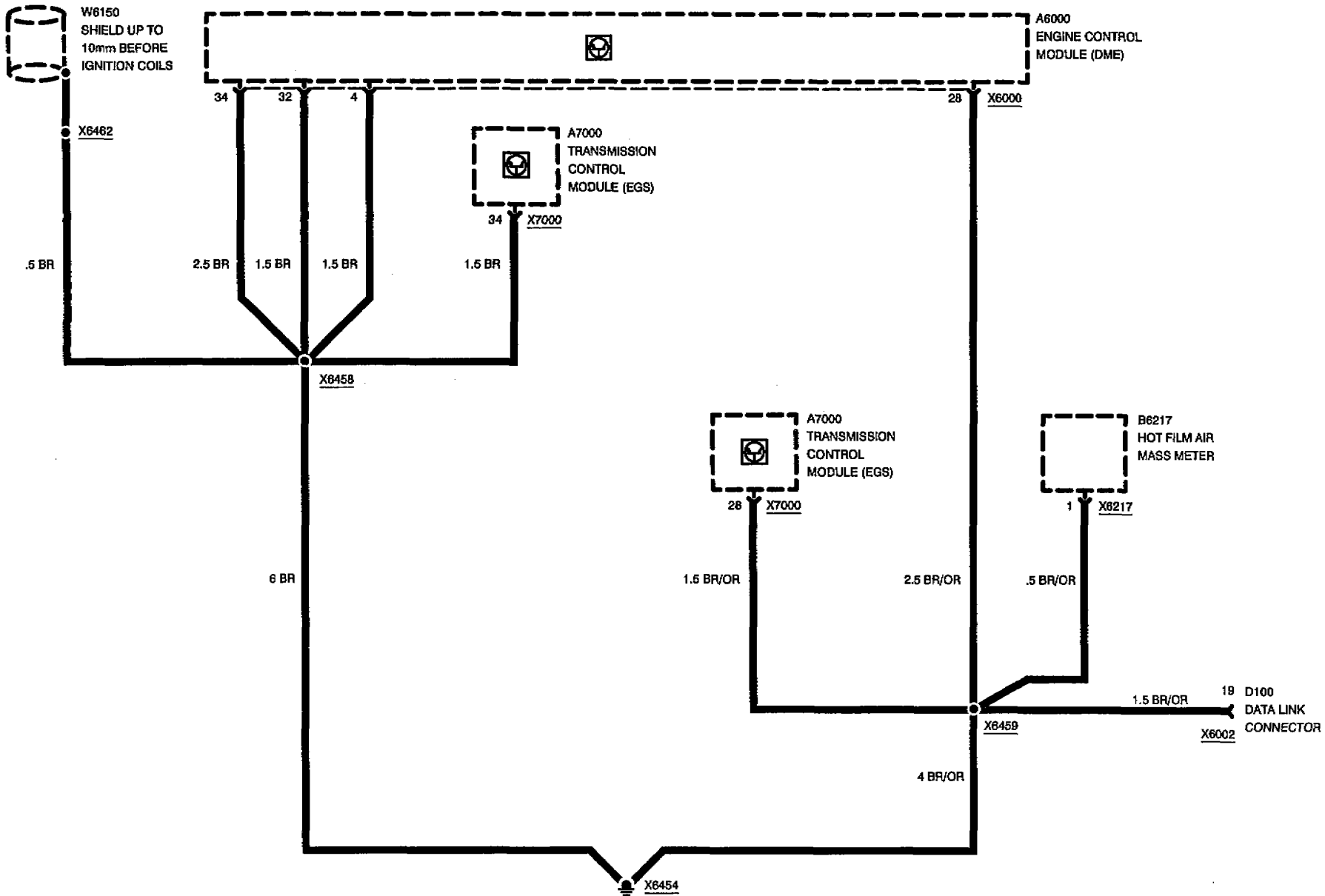




# GROUND DISTRIBUTION

320i **(CDN)**

## GROUND X6454



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0670.4-12

1996

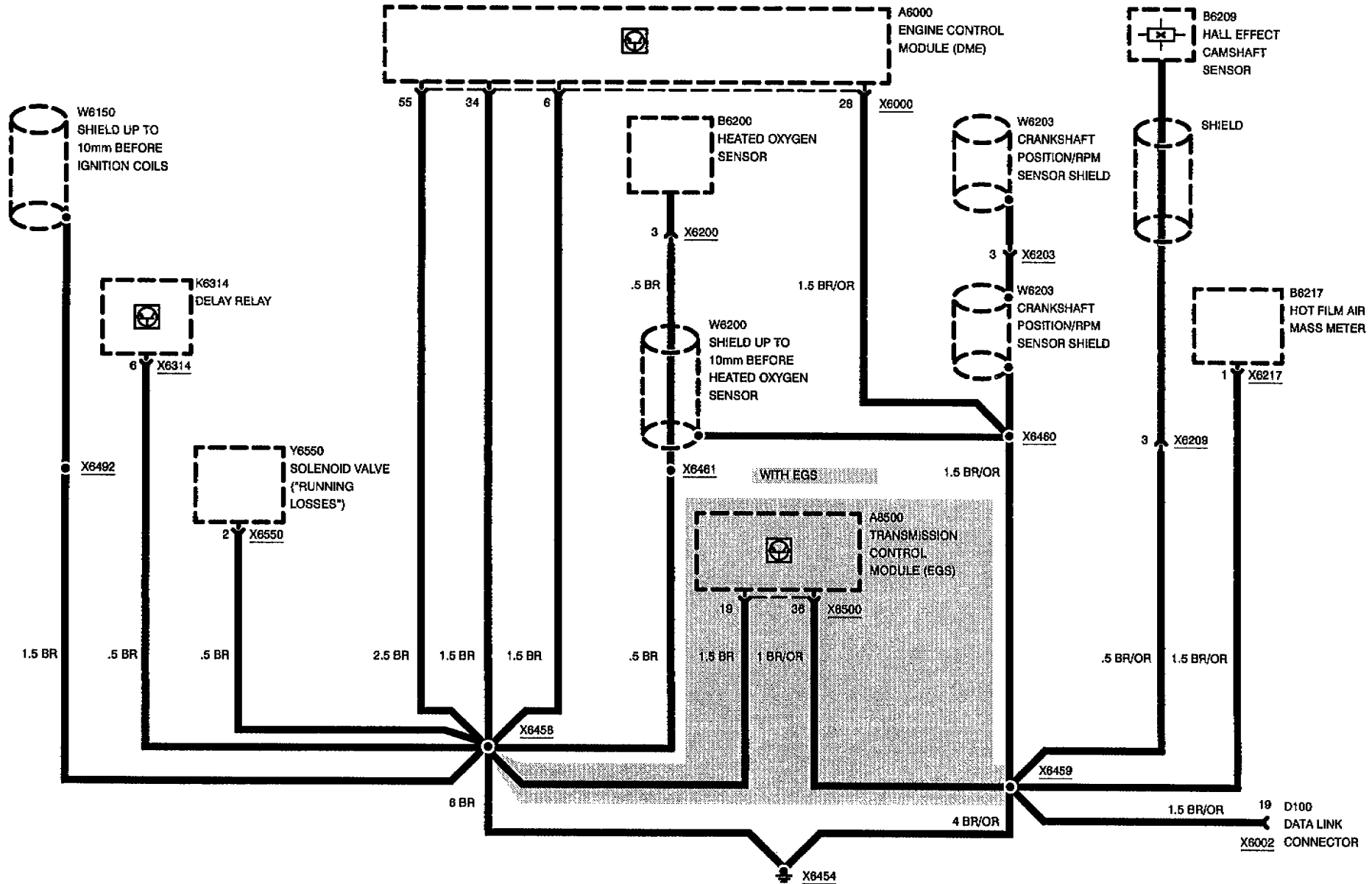




# GROUND DISTRIBUTION

## GROUND X6454

325i, M3 (USA)

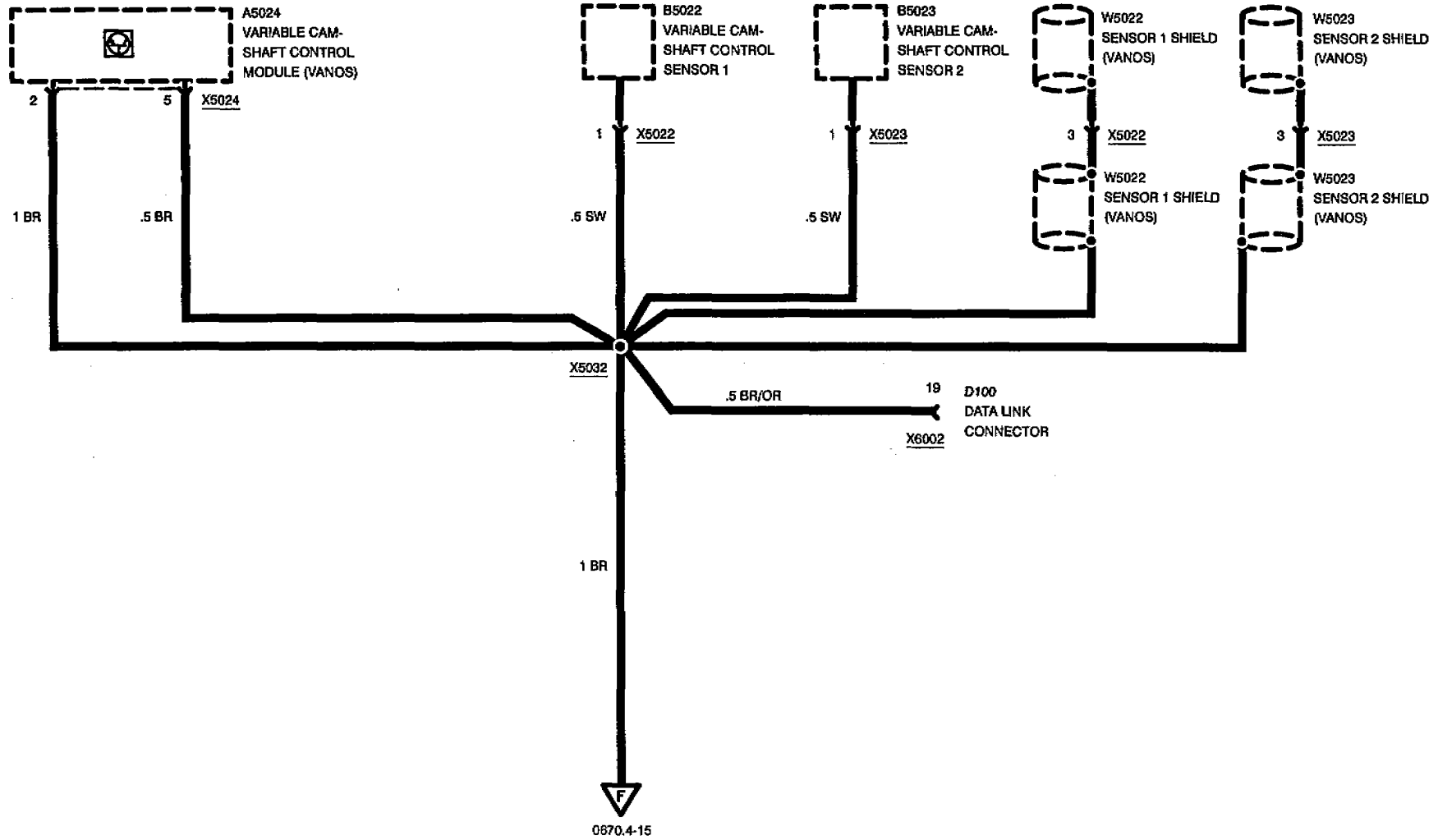




# GROUND DISTRIBUTION

## GROUND X6454

M3 (CDN)



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0670.4-14

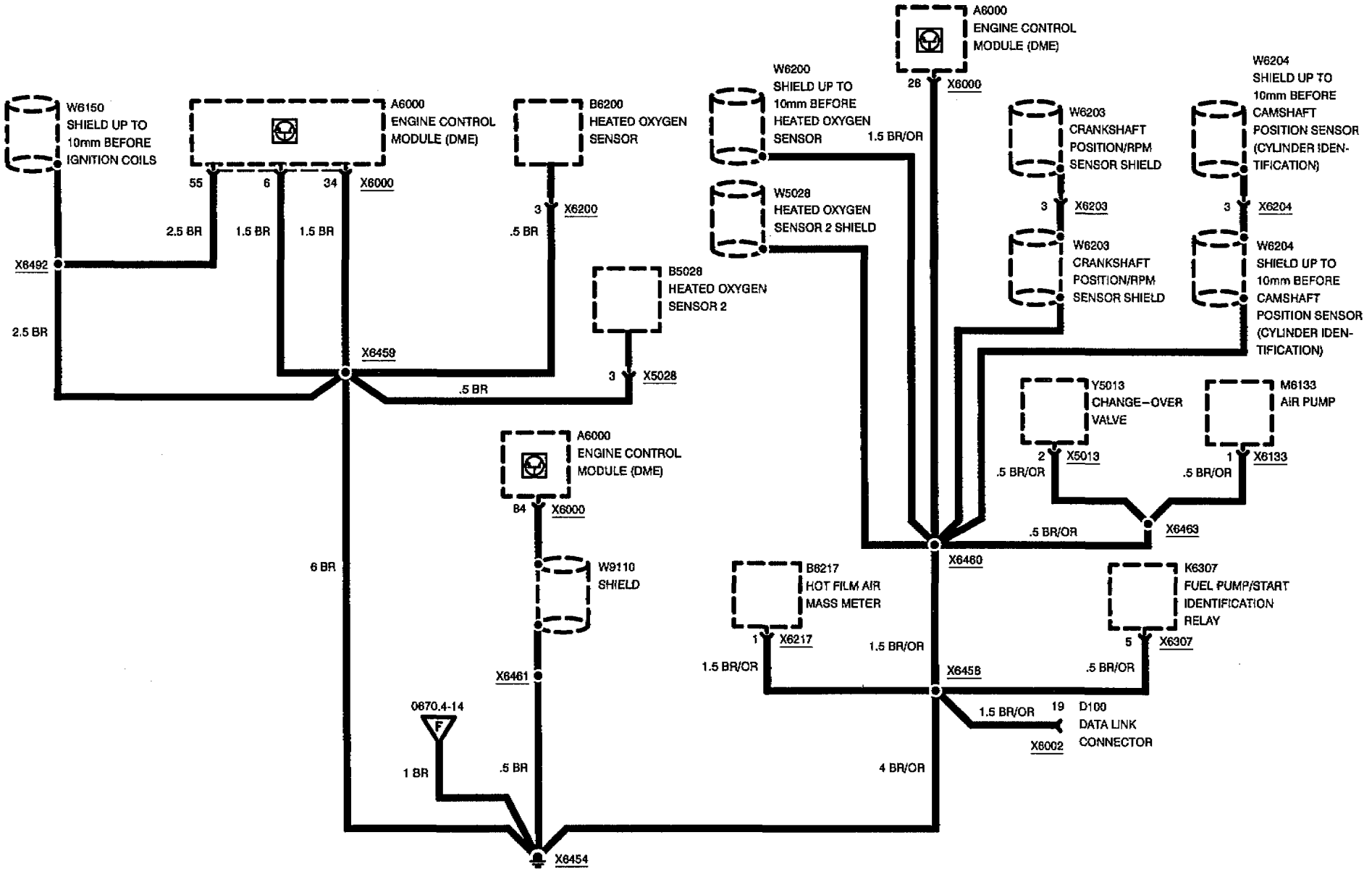
1996



# GROUND DISTRIBUTION

## GROUND X6454

M3



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0670.4-15

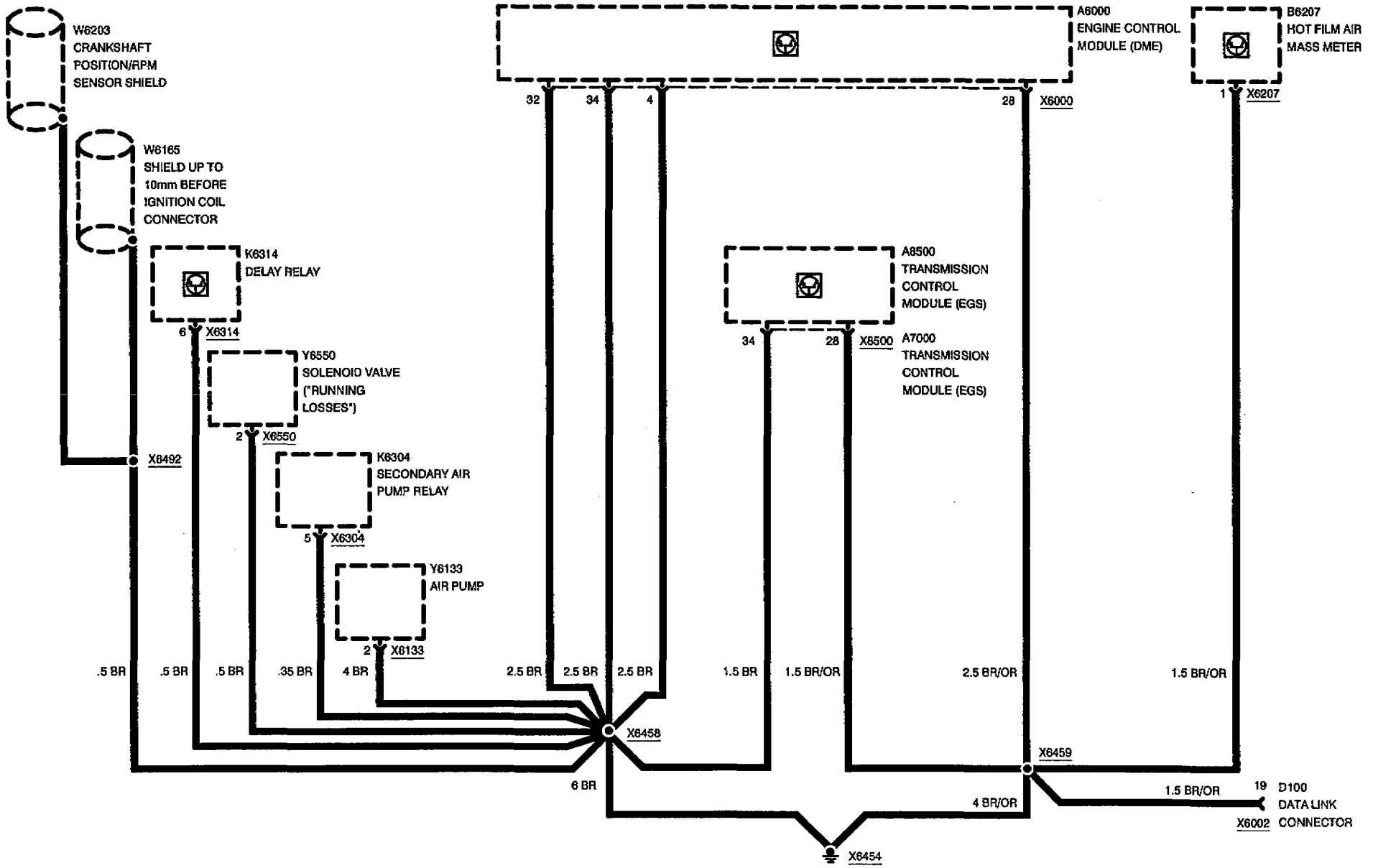
1996



# GROUND DISTRIBUTION

328i, M3 (USA)

## GROUND X6454



04/97

0670.4-16

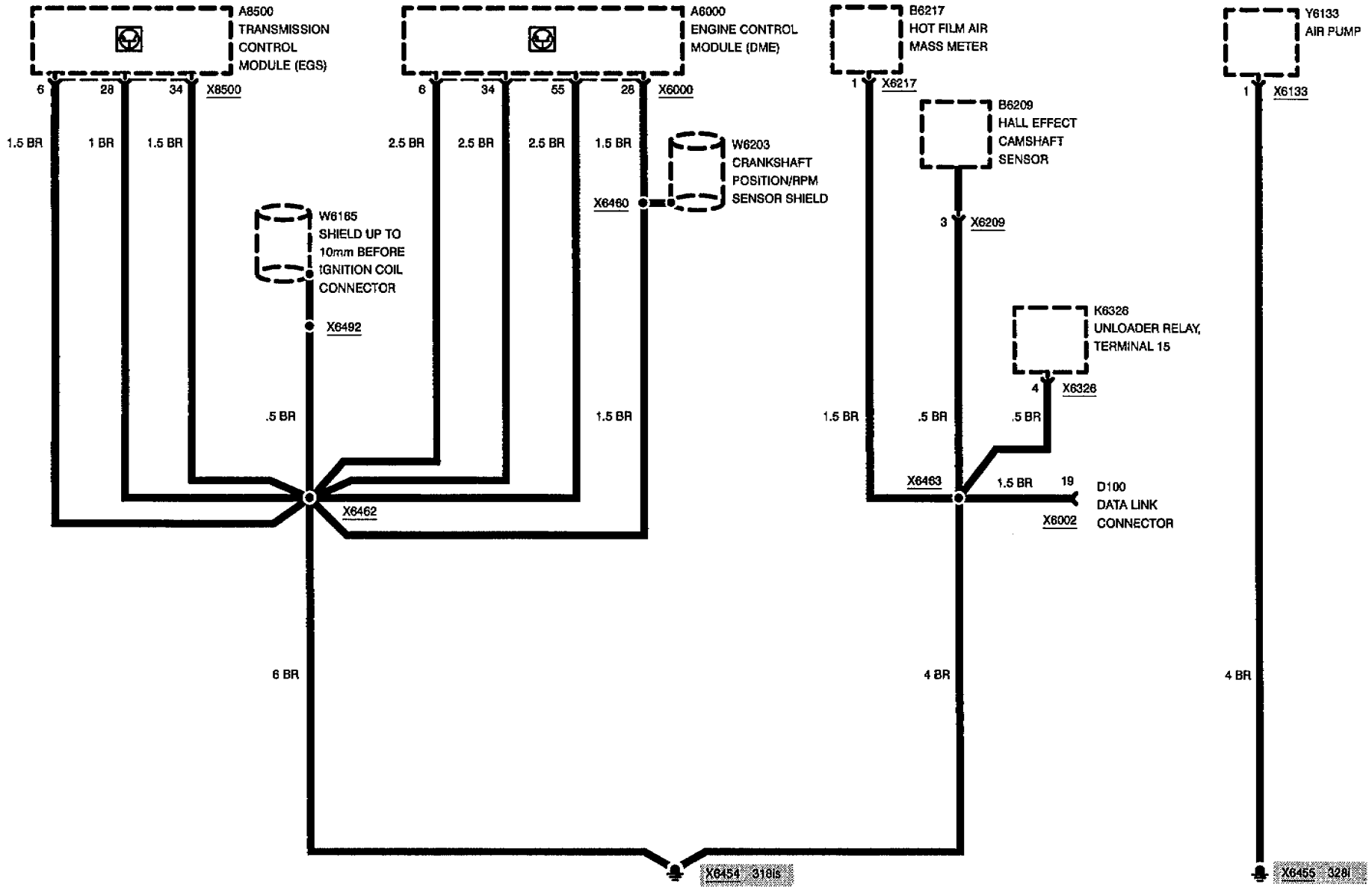
1996



# GROUND DISTRIBUTION

## GROUNDS X6454 AND X6455

318is, 328i LATE PRODUCTION



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0670.4-17

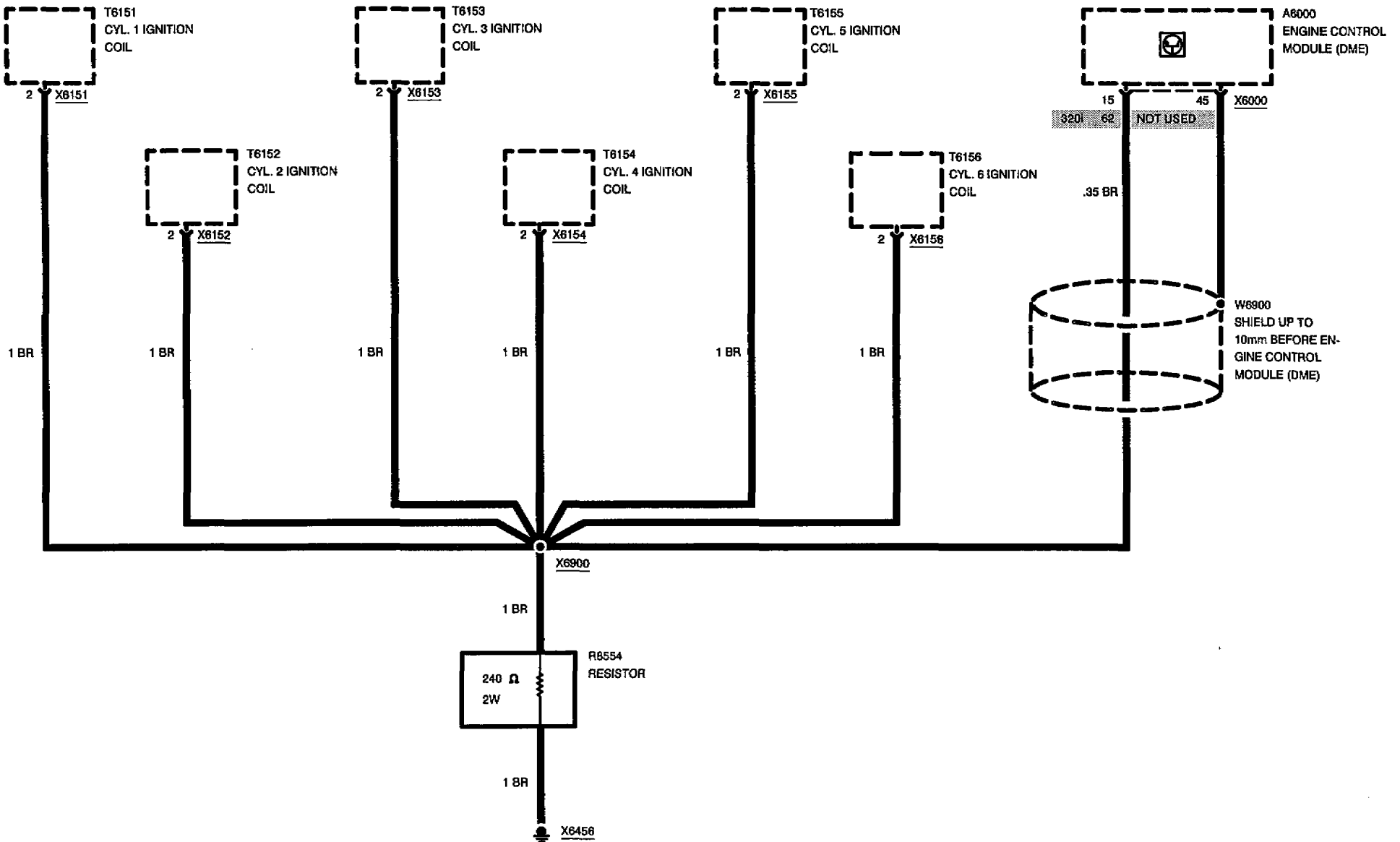
1996



# GROUND DISTRIBUTION

320i, 325i

## GROUND X6456

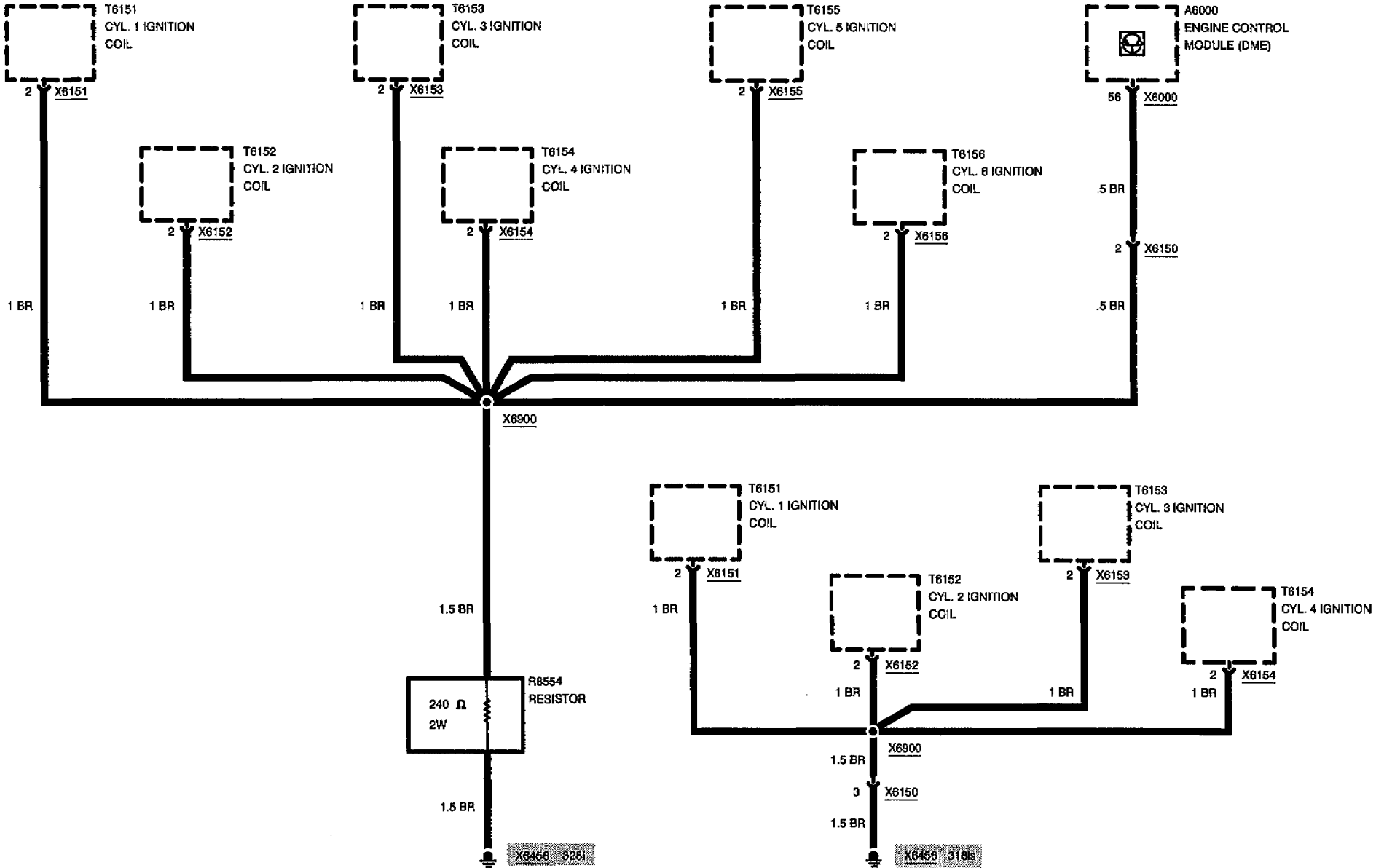




# GROUND DISTRIBUTION

318is, 328i

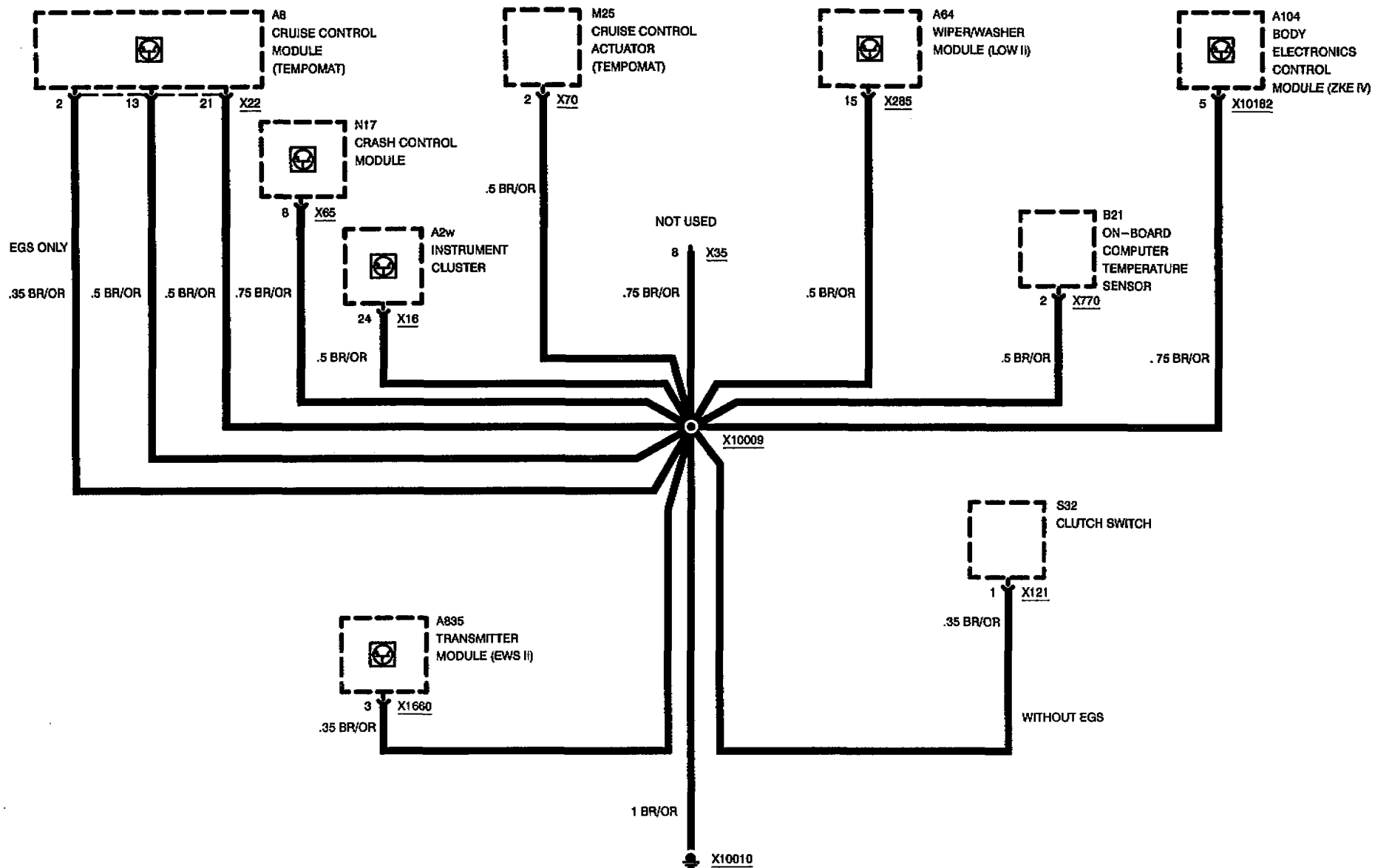
## GROUND X6456





# GROUND DISTRIBUTION

## GROUND X10010



04/97

0670.4-20

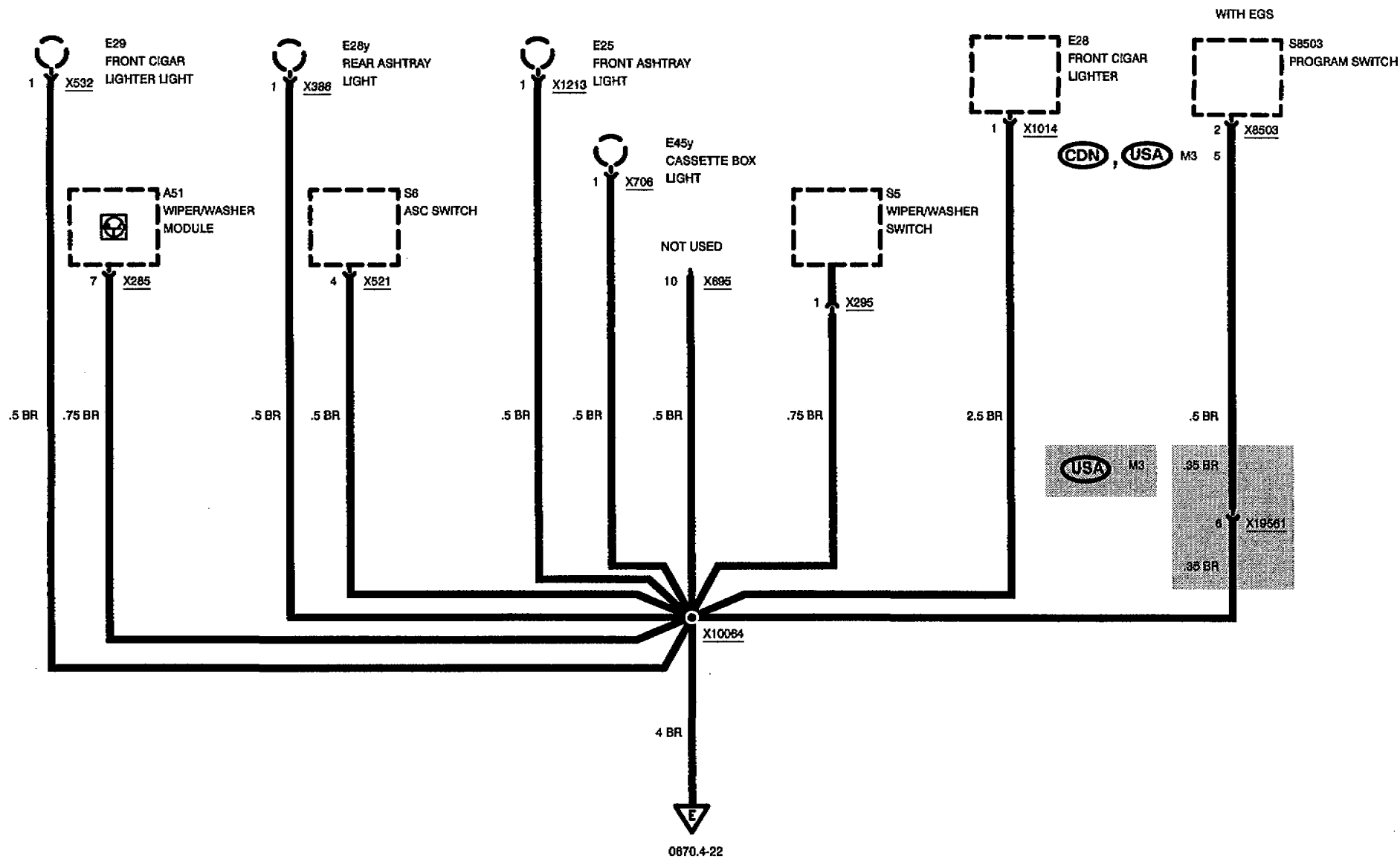
1996





# GROUND DISTRIBUTION

## GROUND X10012



04/97

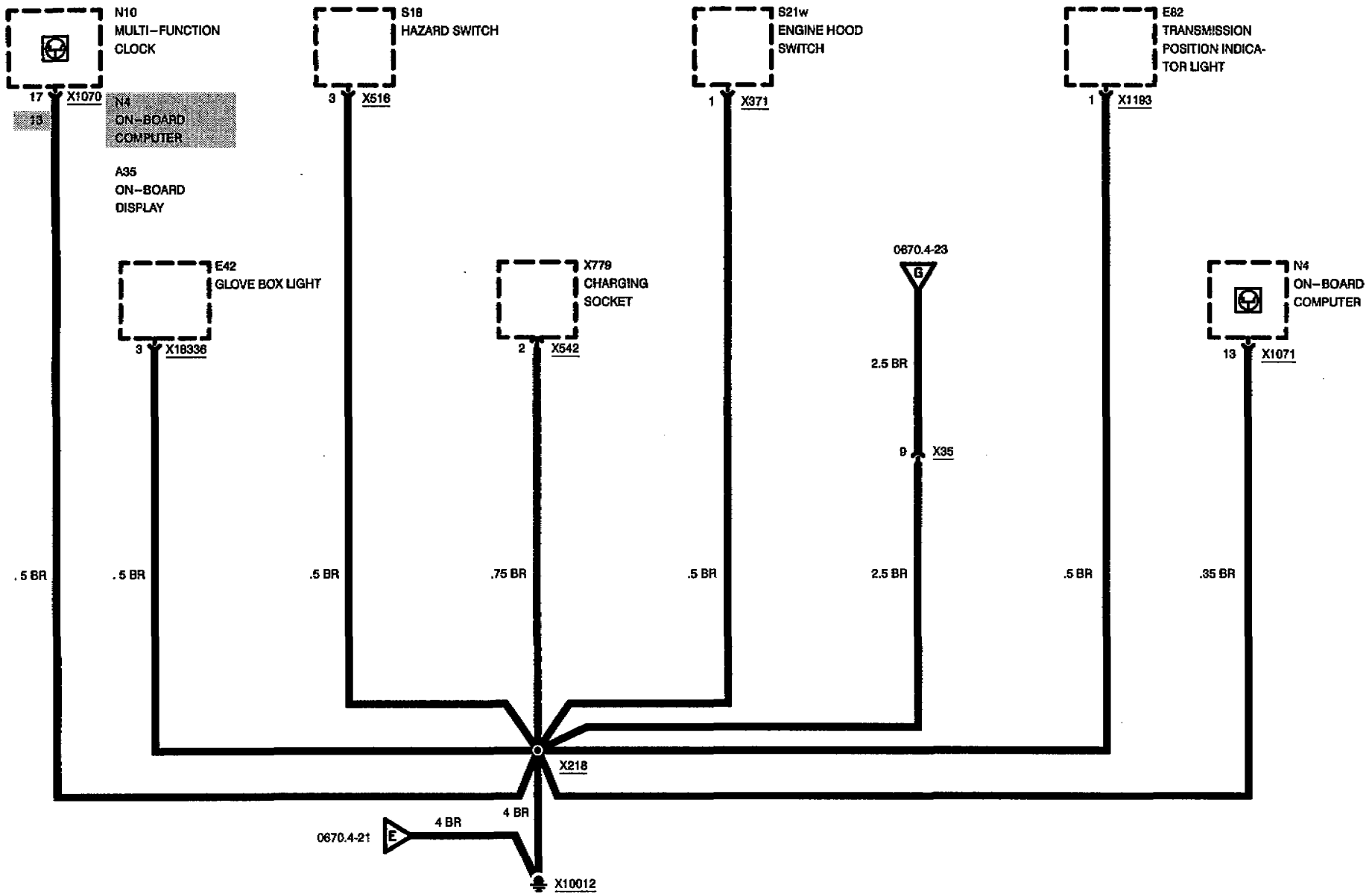
0670.4-21

1996



# GROUND DISTRIBUTION

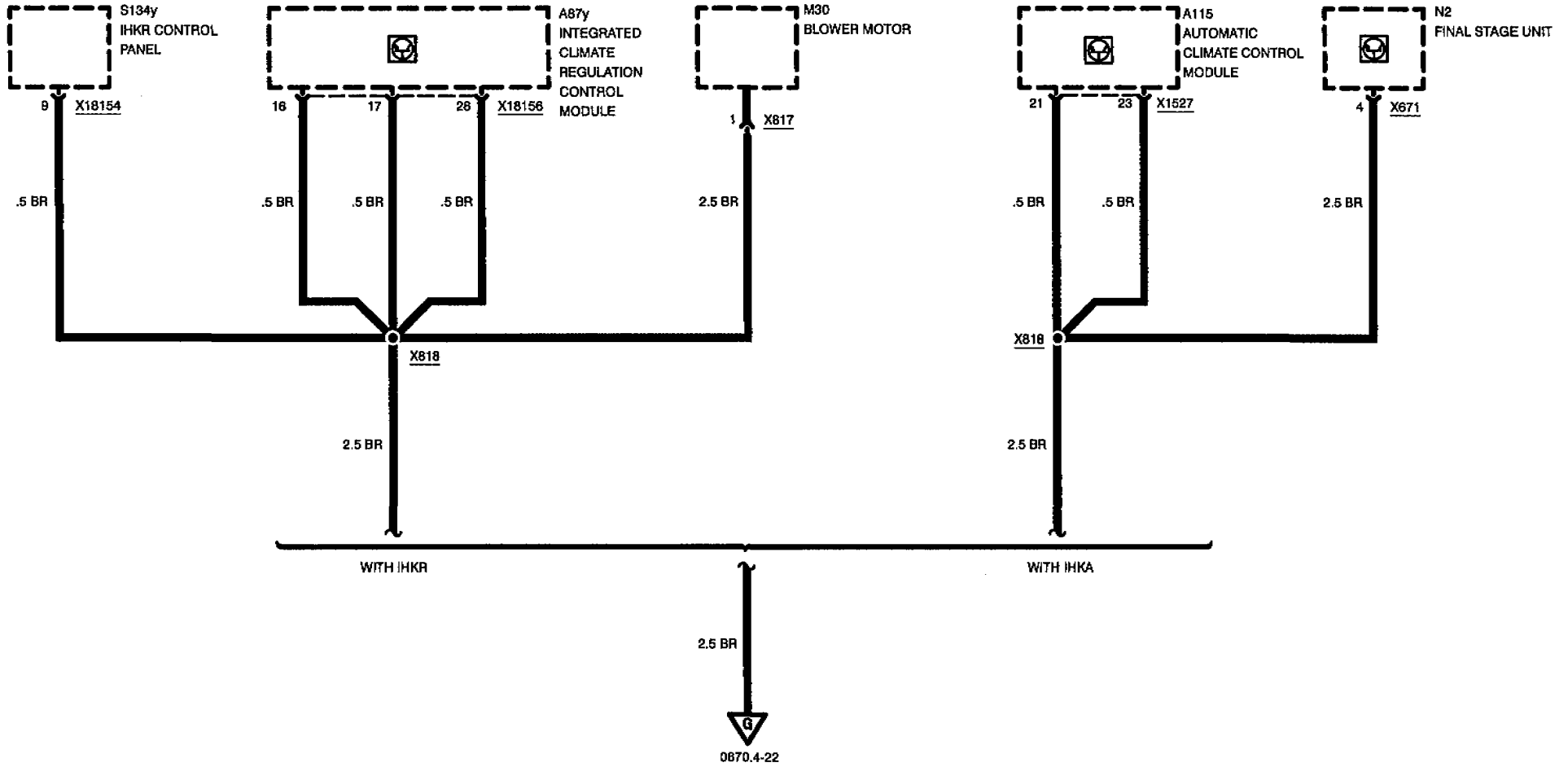
## GROUND X10012





# GROUND DISTRIBUTION

## GROUND X10012



04/97

0670.4-23

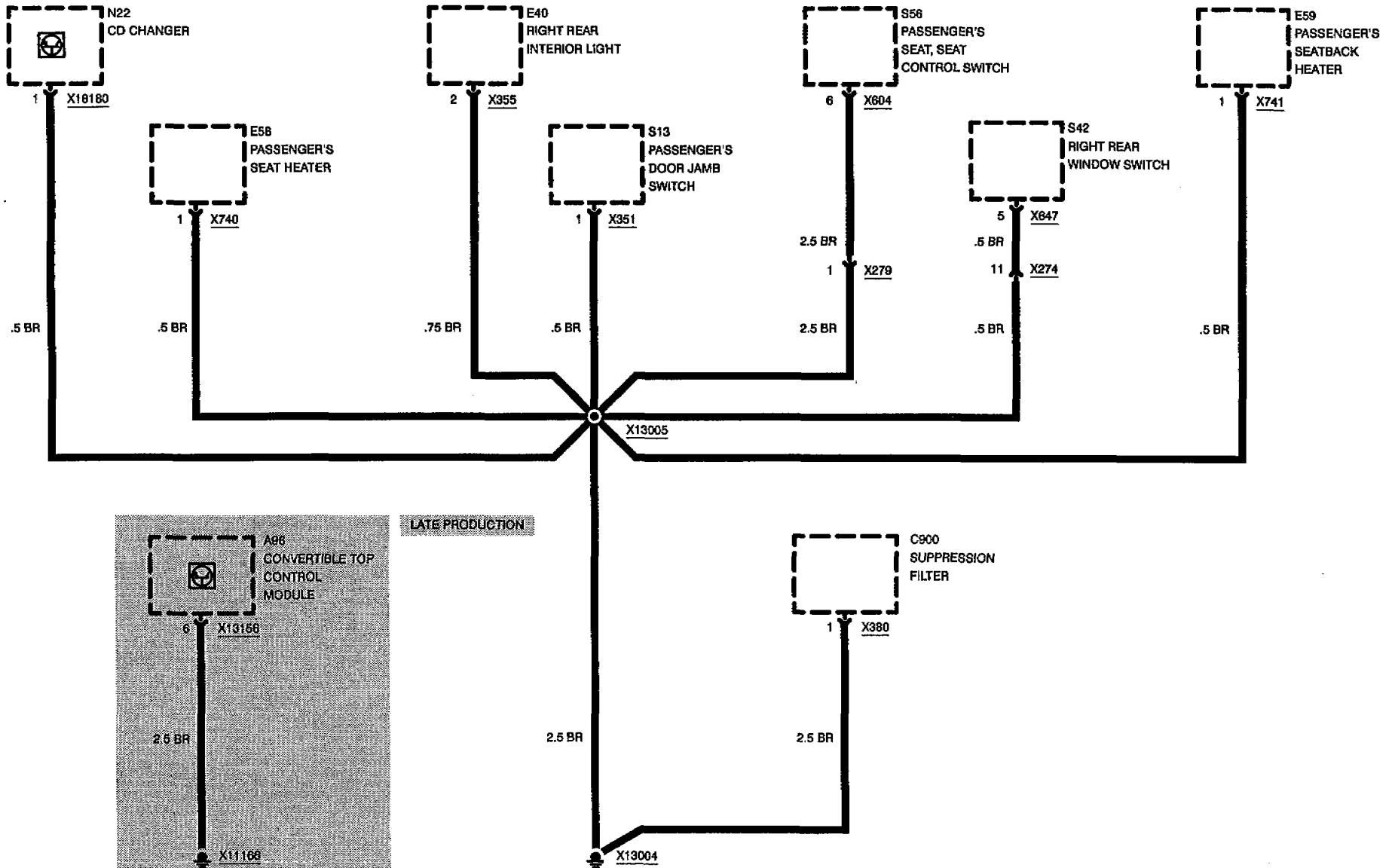
1996



# GROUND DISTRIBUTION

## GROUNDS X11166 AND X13004

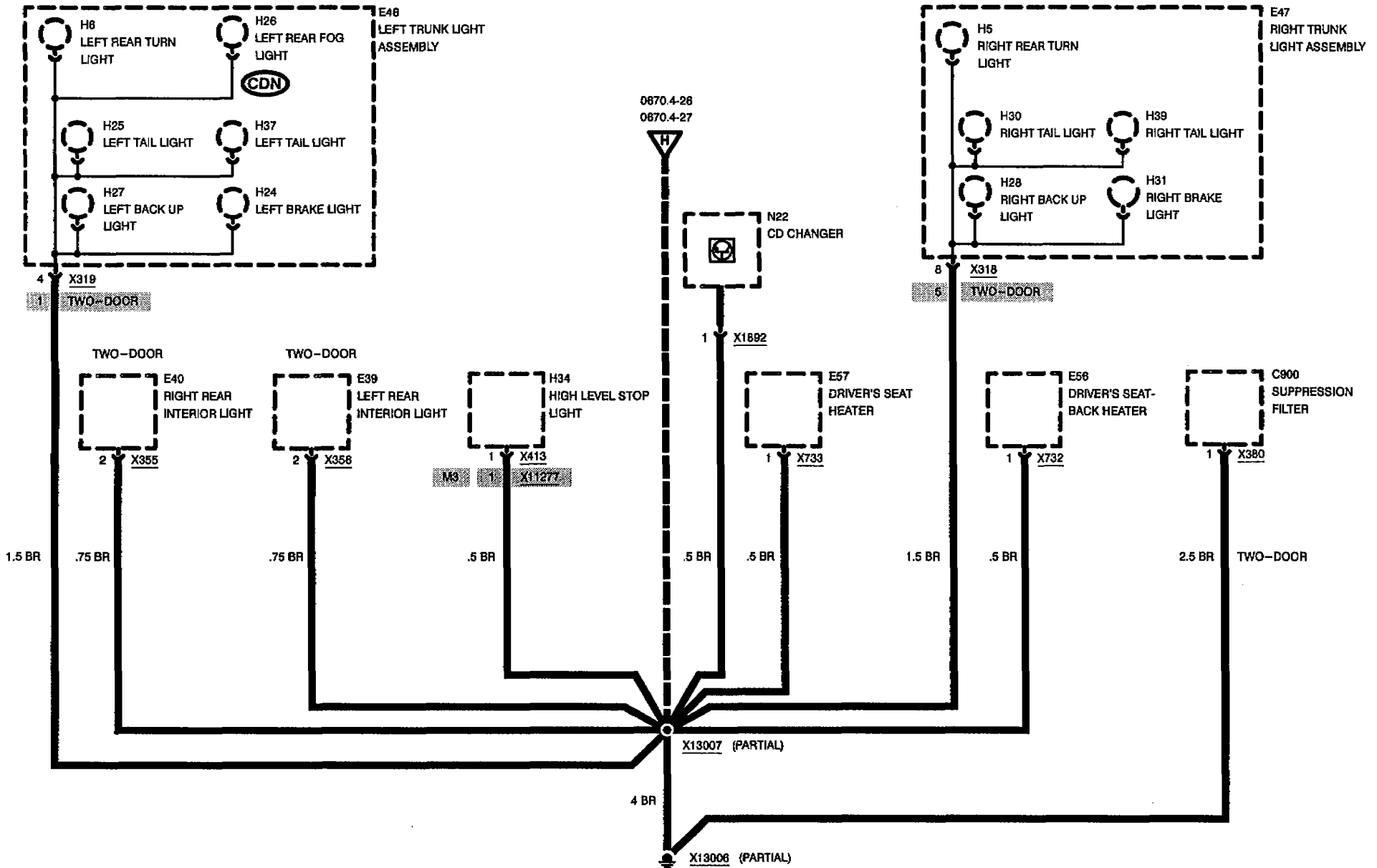
FOUR-DOOR





# GROUND DISTRIBUTION

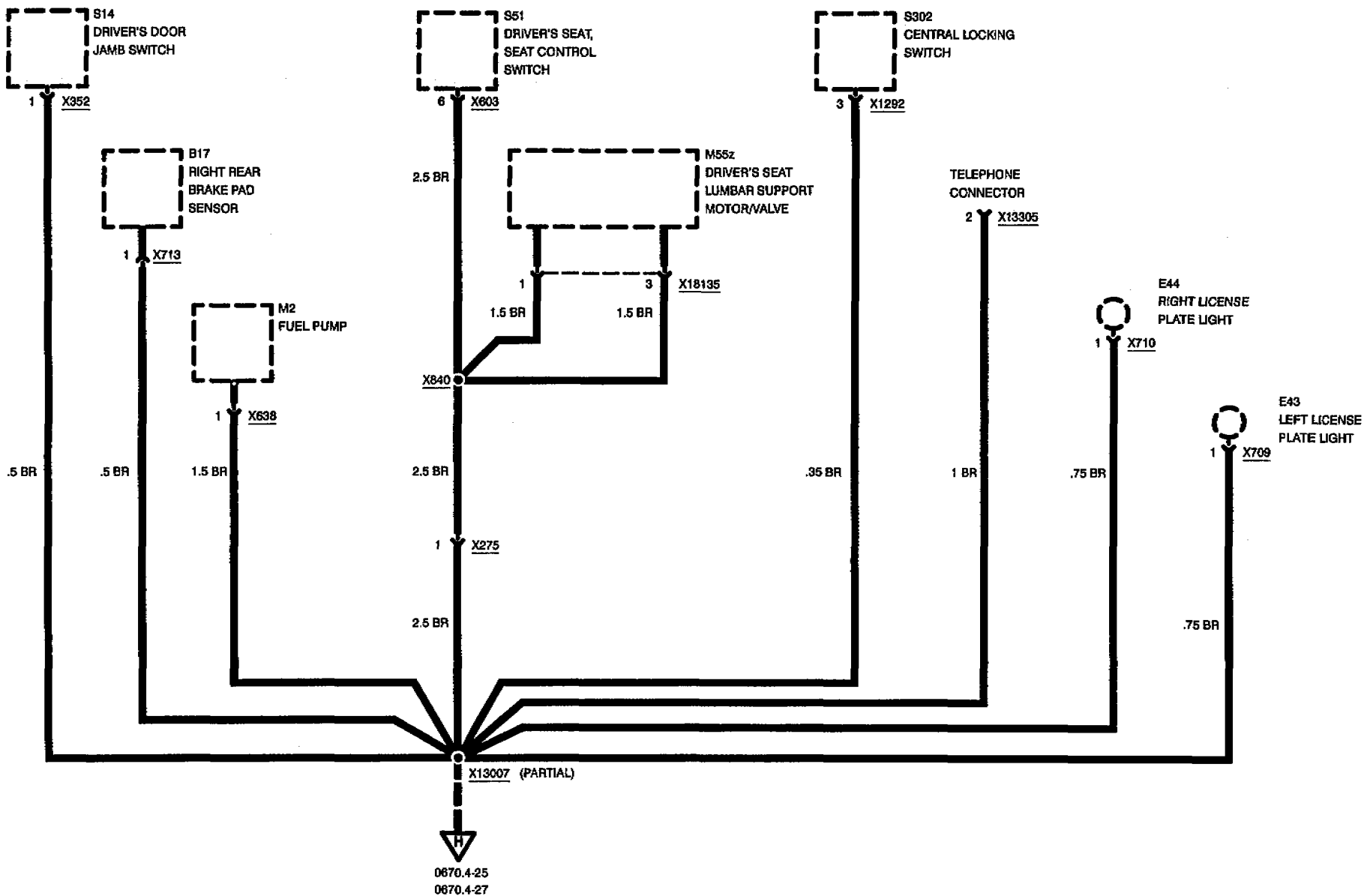
## GROUND X13006





# GROUND DISTRIBUTION

## GROUND X13006

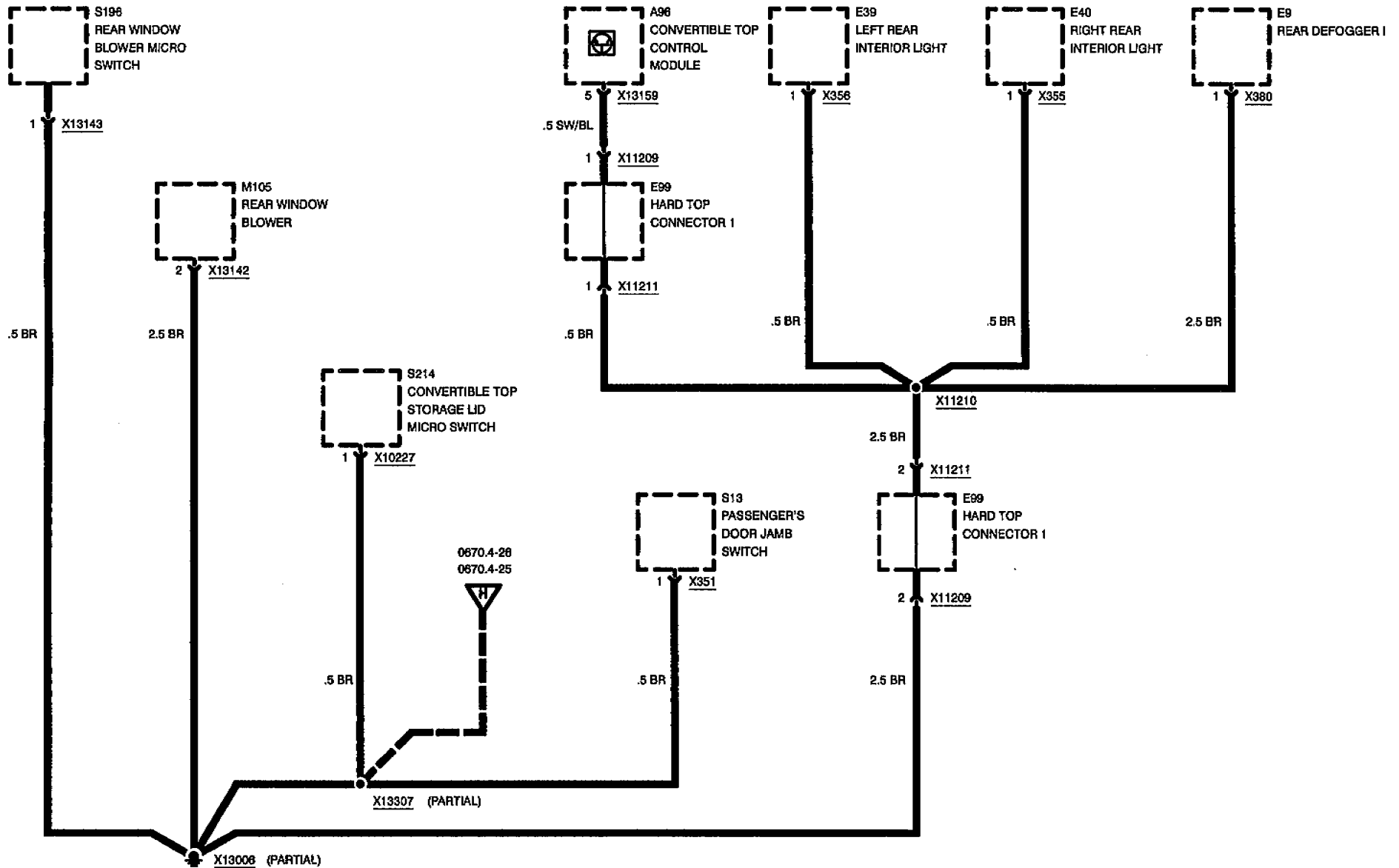




# GROUND DISTRIBUTION

## GROUND X13006

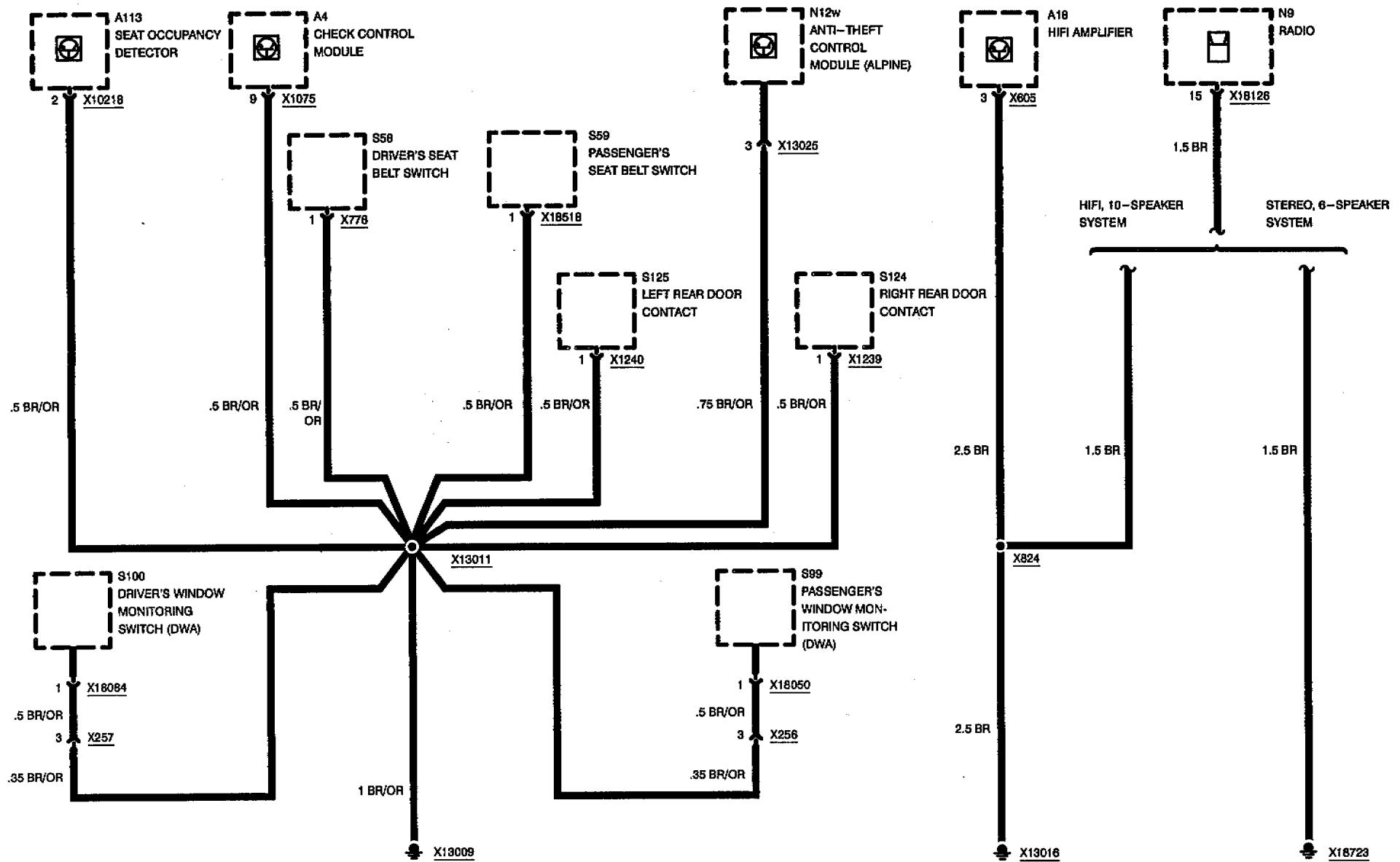
# CONVERTIBLE





# GROUND DISTRIBUTION

## GROUNDS X13009, X13016, AND X18723



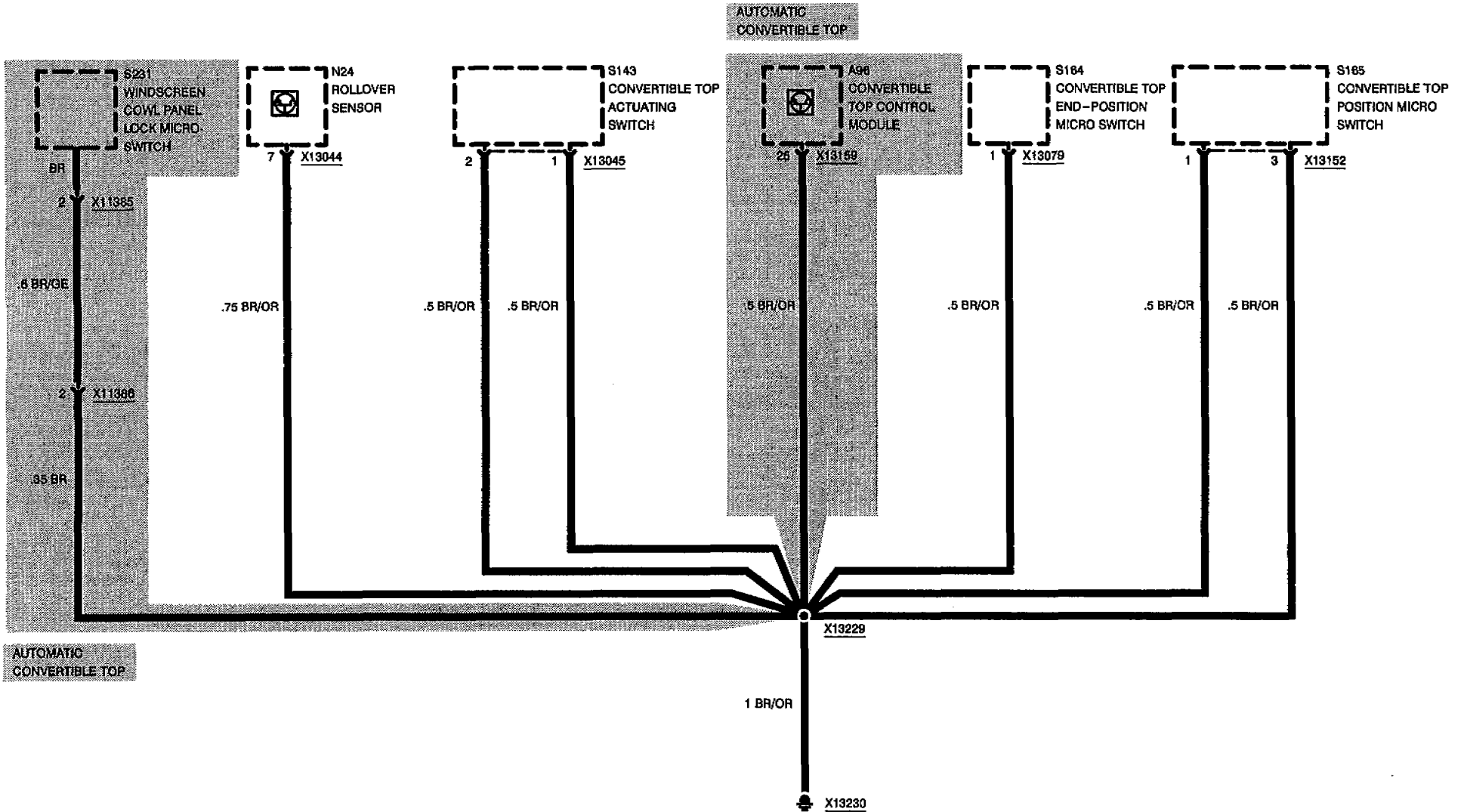




# GROUND DISTRIBUTION

## GROUND X13230

# CONVERTIBLE



04/97

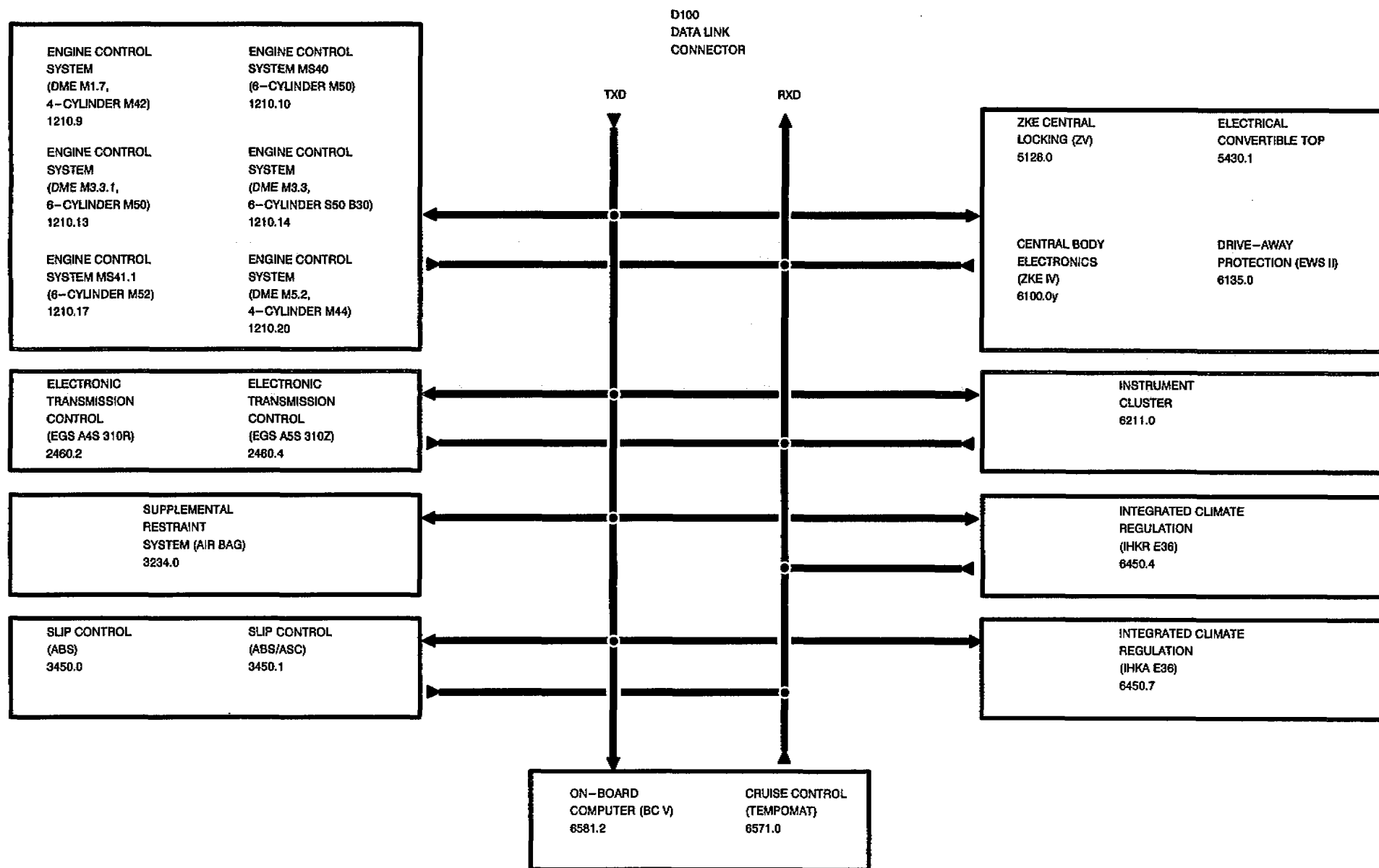
0670.4-29

1996



# DATA LINK

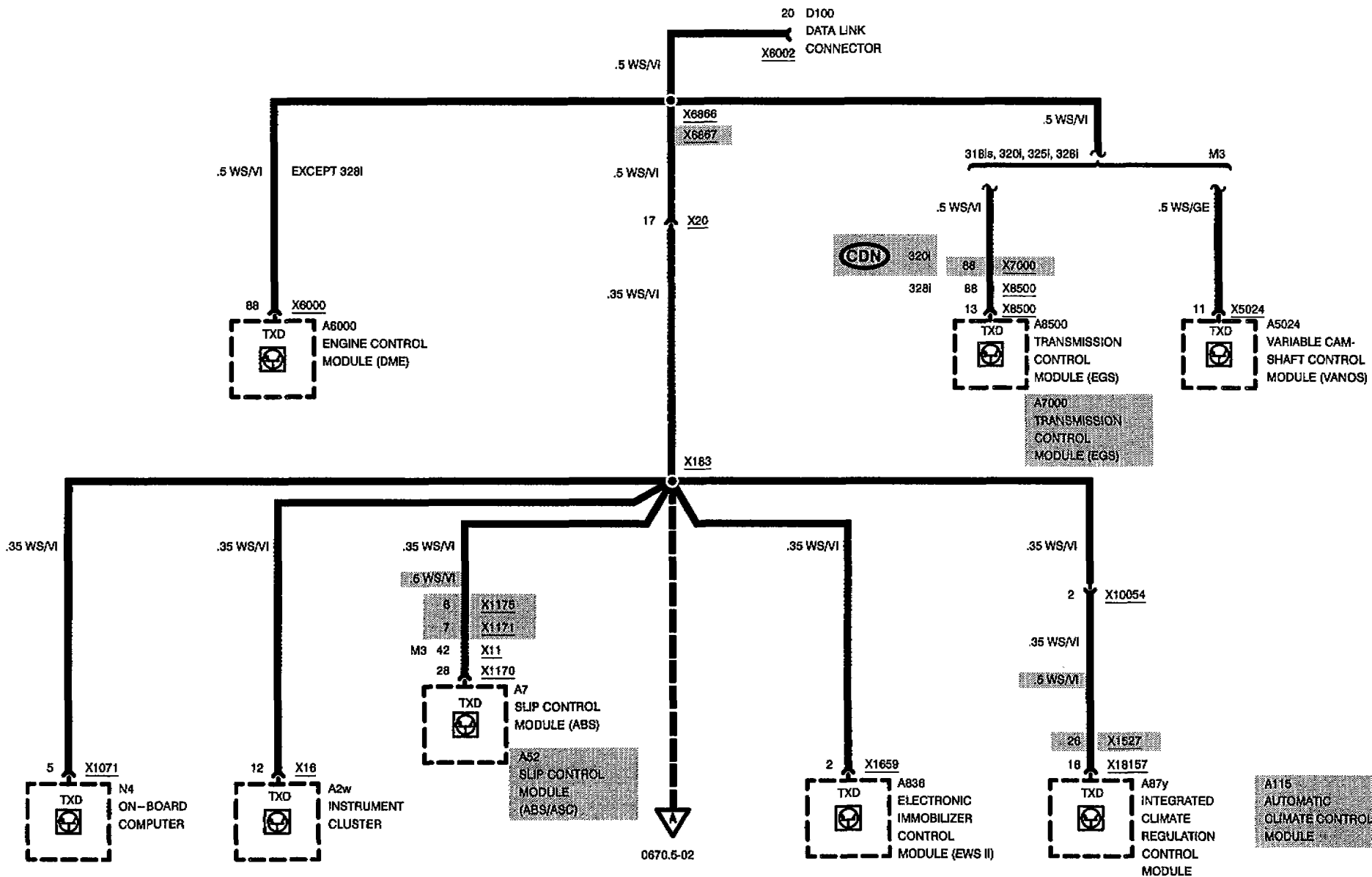
## BLOCK DIAGRAM





# DATA LINK

## TXD, PIN 20



0670.5-02

04/97

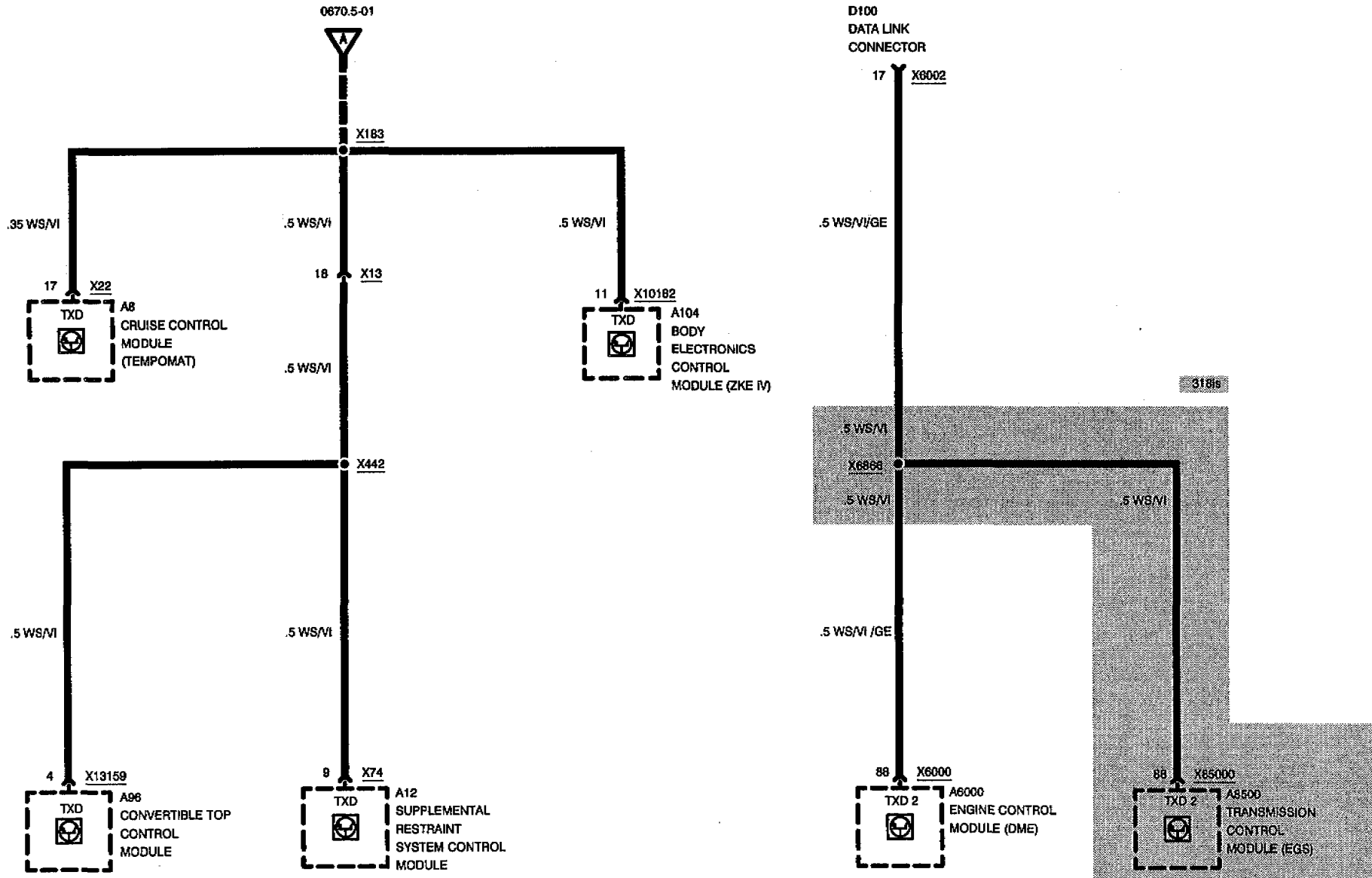
0670.5-01

1996



# DATA LINK

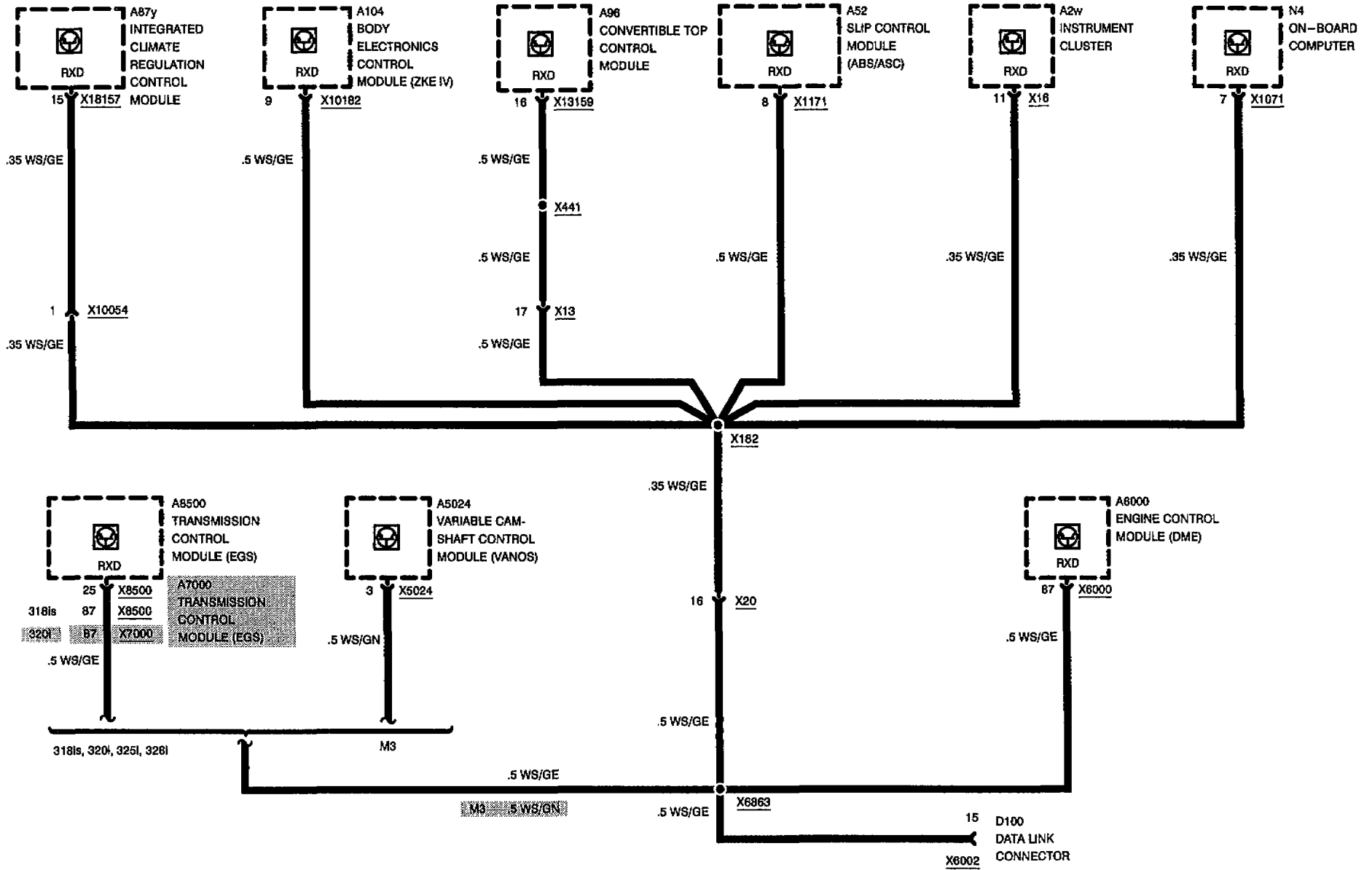
## TXD, PIN 20 AND TXD 2, PIN 17





# DATA LINK

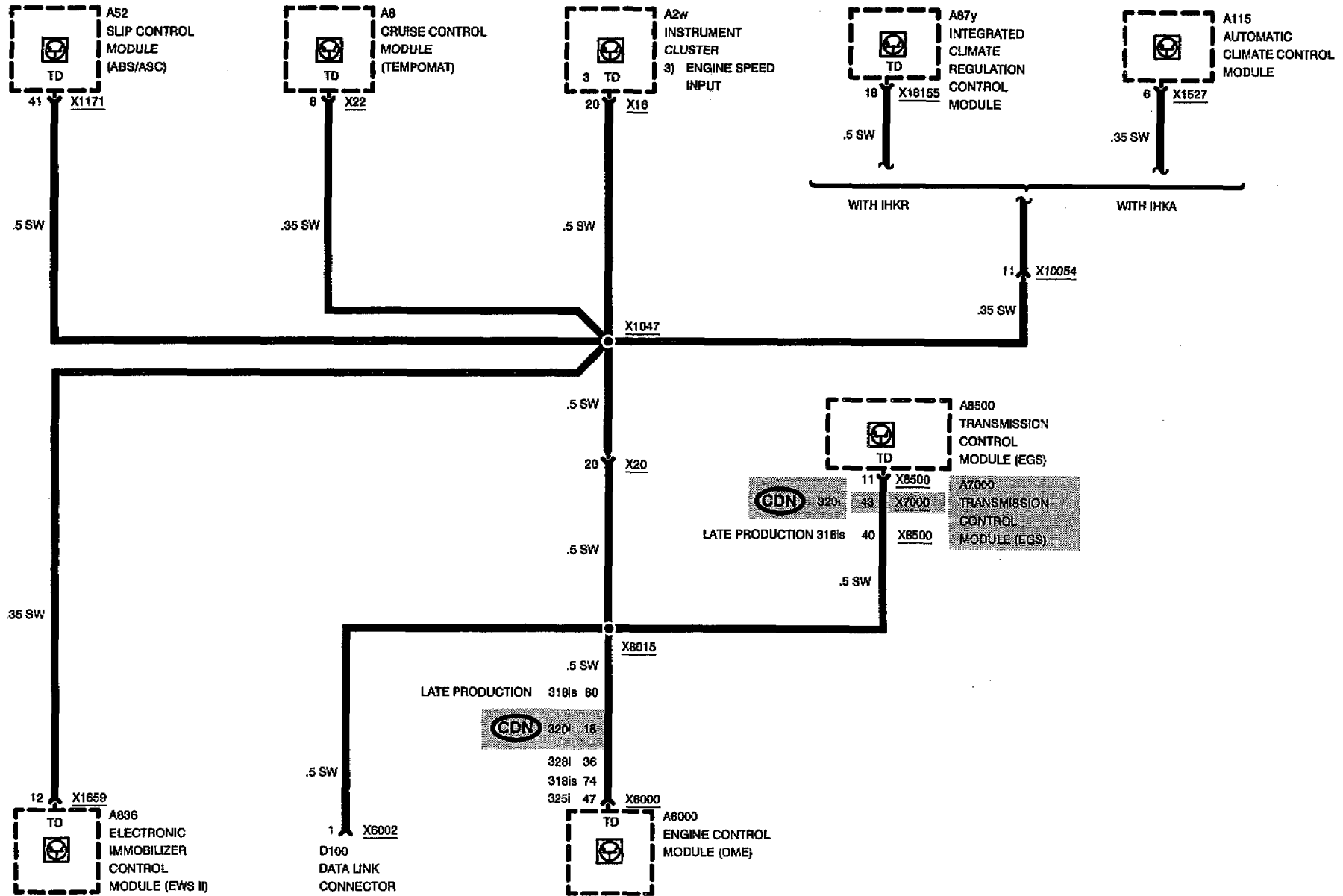
## RXD, PIN 15





# DATA LINK

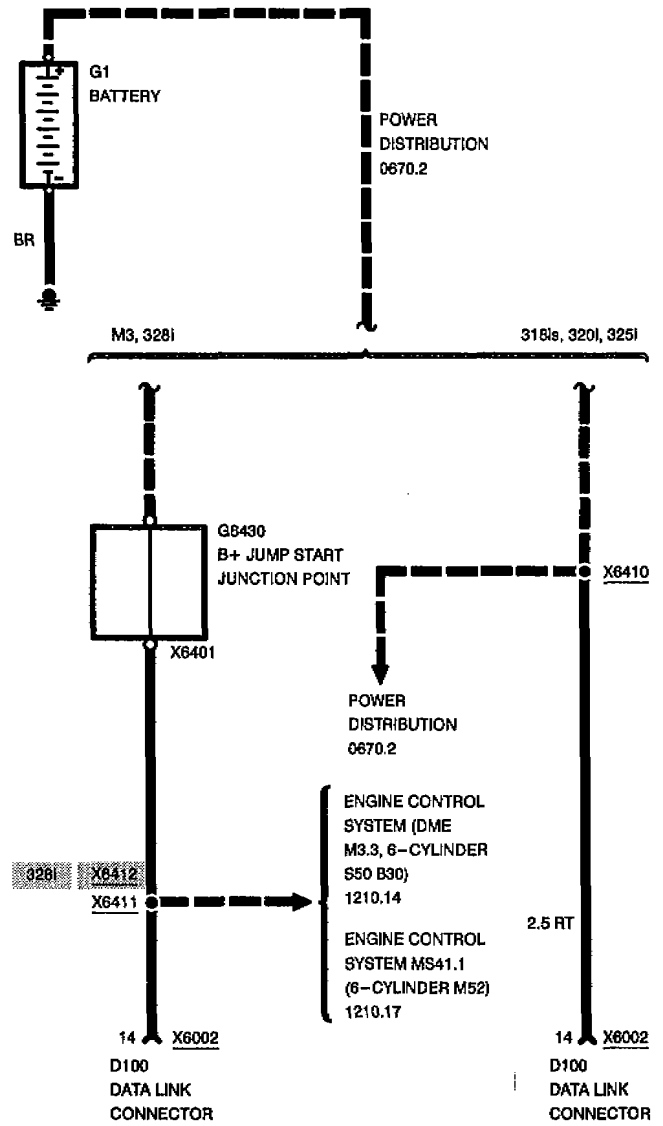
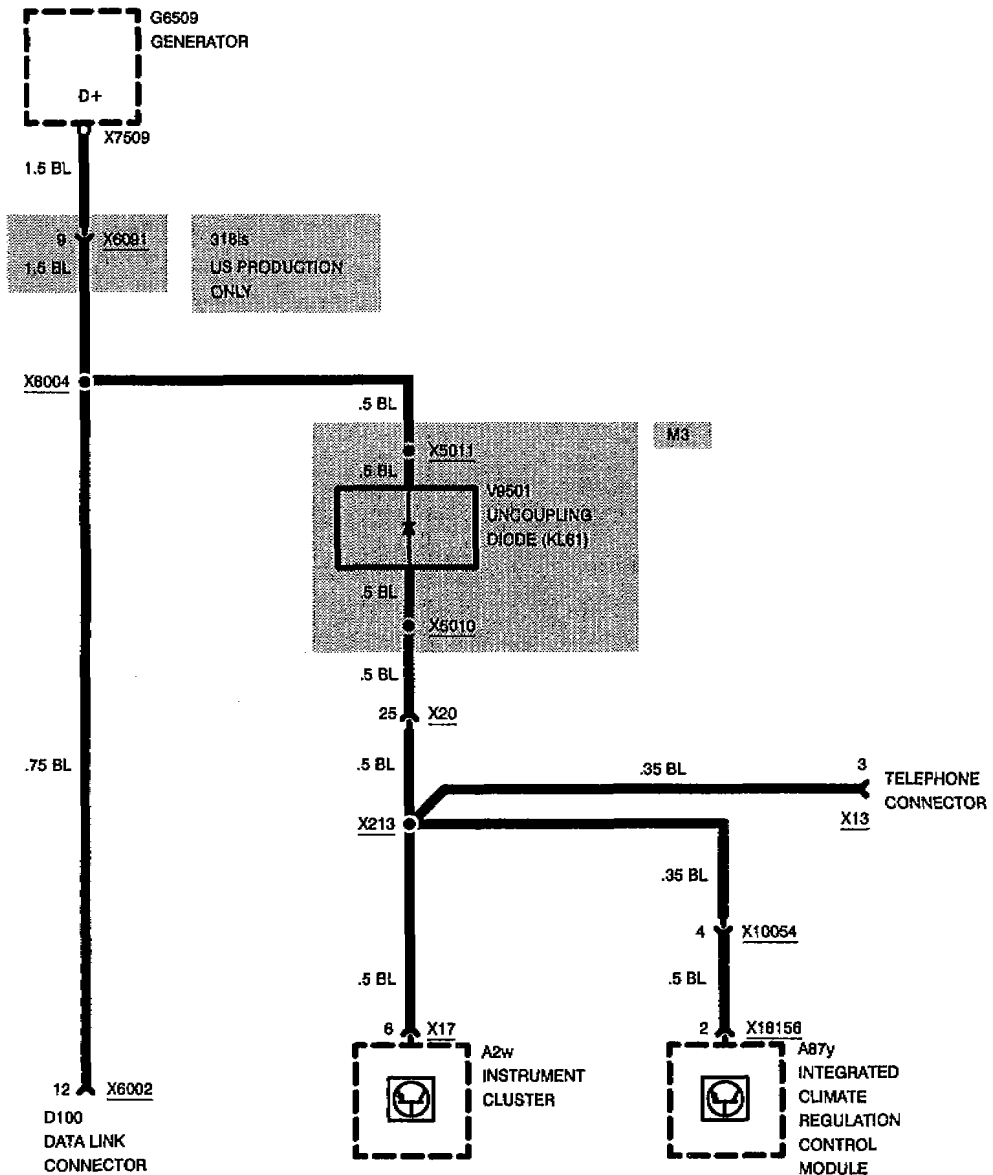
## DATA LINK CONNECTOR, PIN 1





# DATA LINK

## DATA LINK CONNECTOR, PINS 12 AND 14

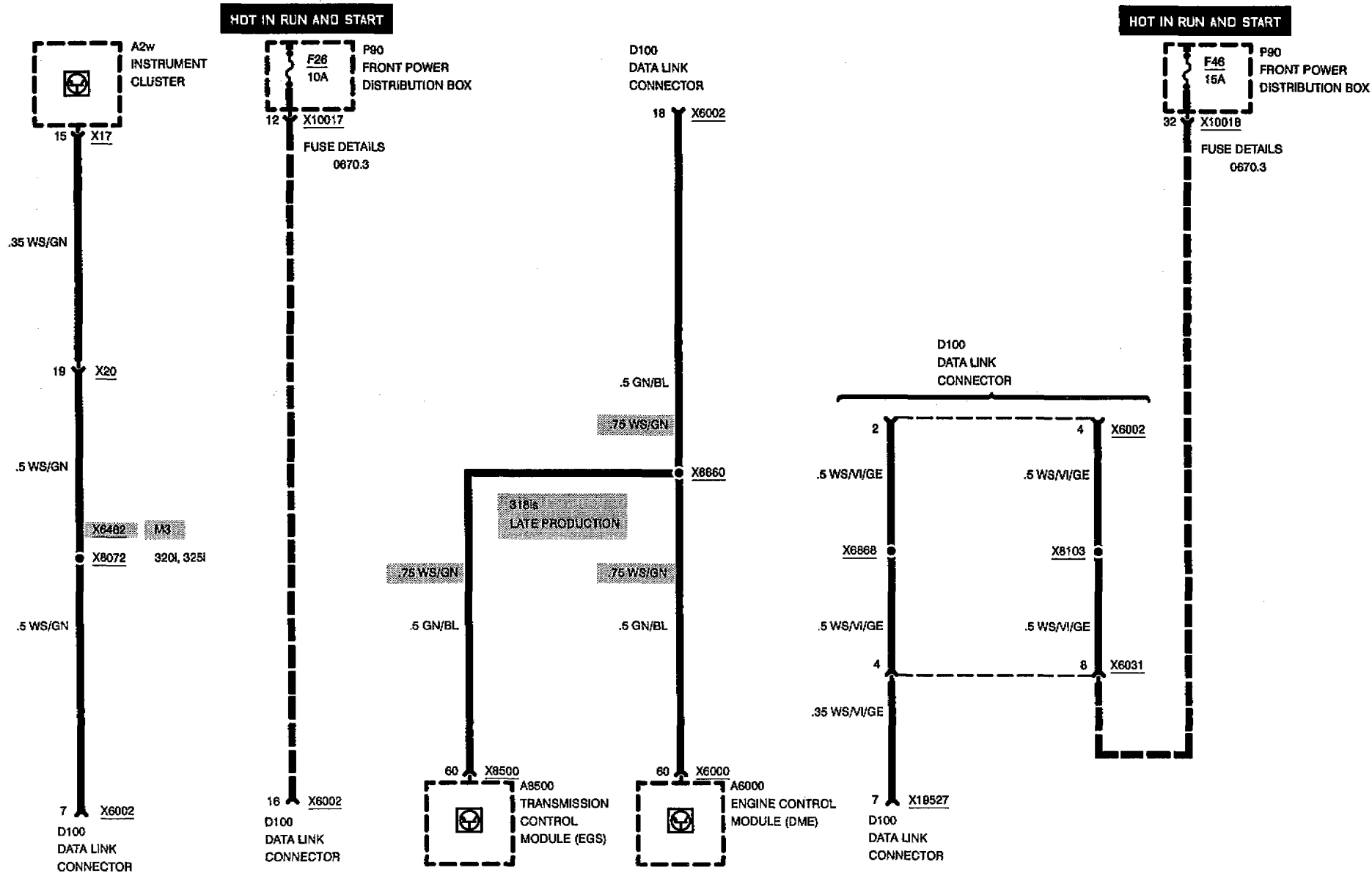


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# DATA LINK

## DATA LINK CONNECTOR, PINS 2, 4, 7, 16, AND 18



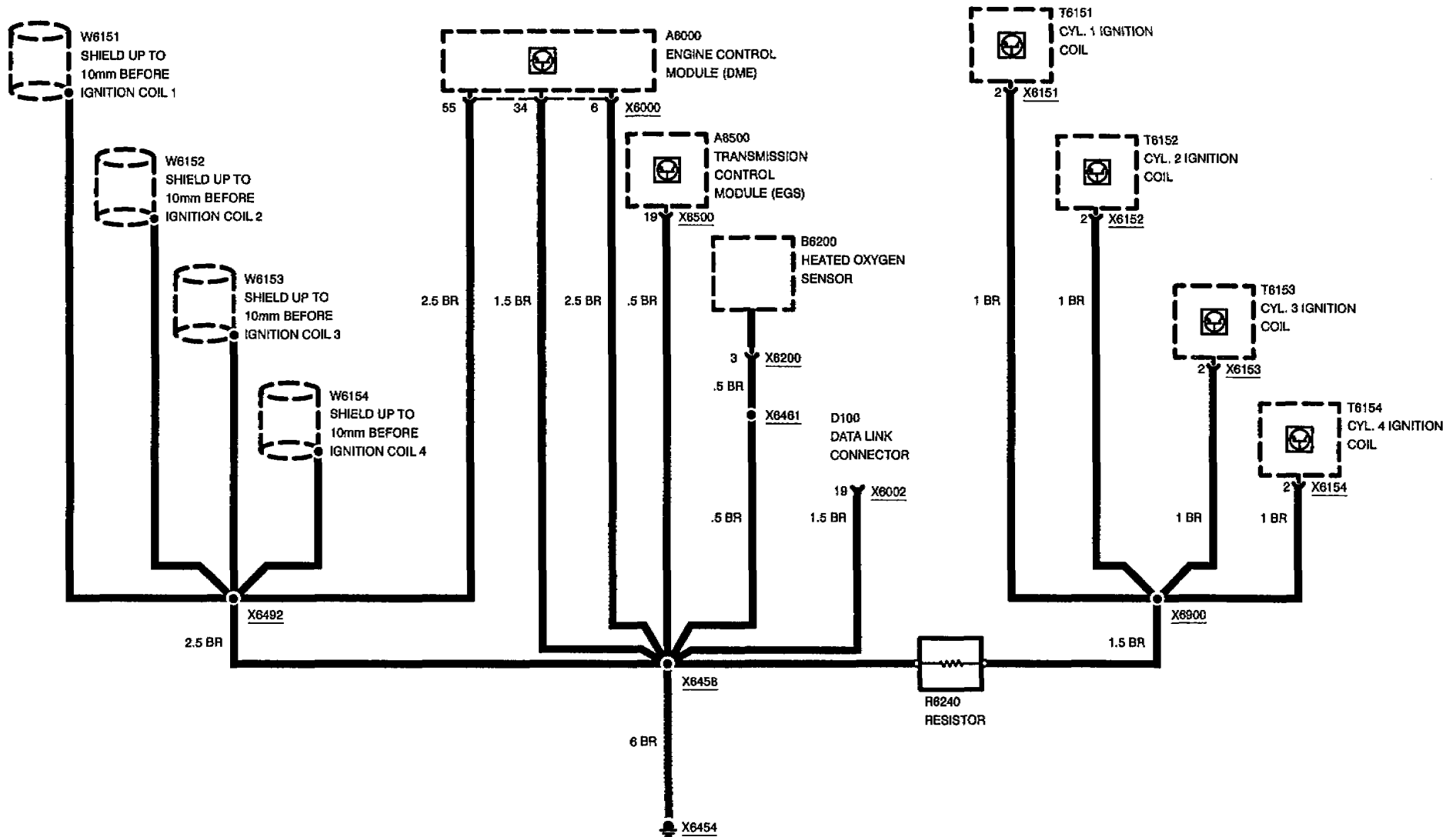




# DATA LINK

## DATA LINK CONNECTOR, PIN 19

318is

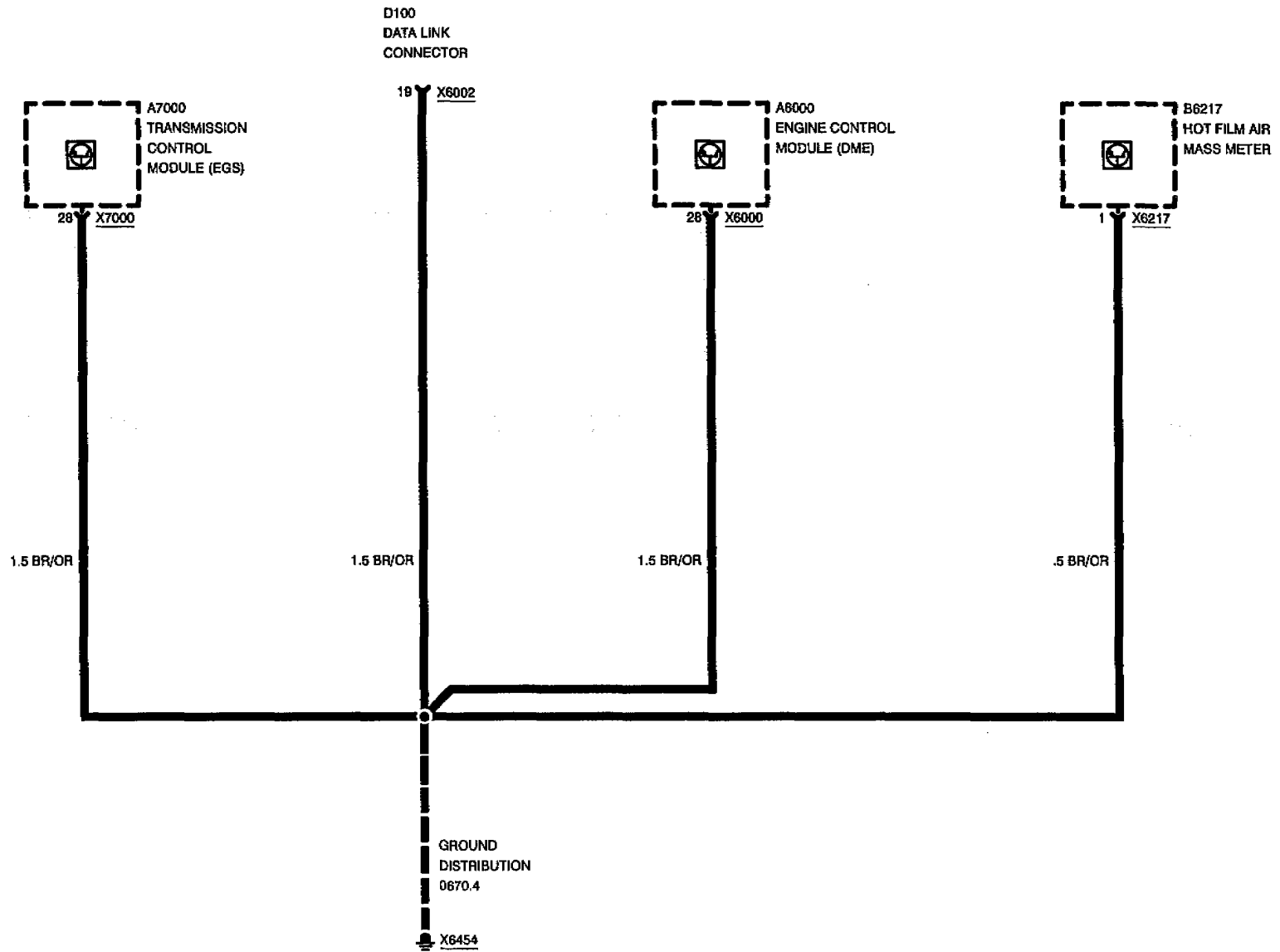




# DATA LINK

## DATA LINK CONNECTOR, PIN 19

320i

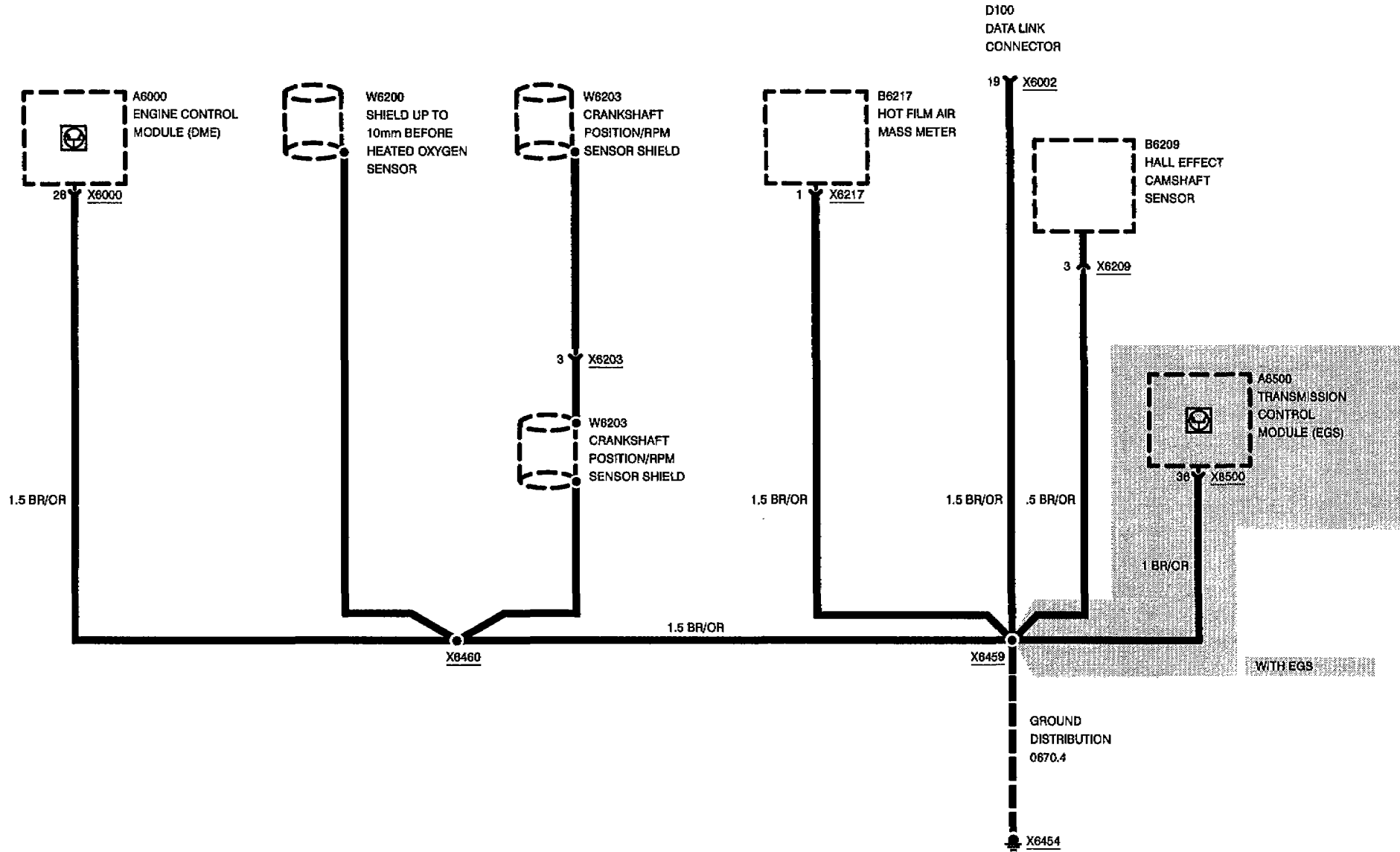




# DATA LINK

## DATA LINK CONNECTOR, PIN 19

325i

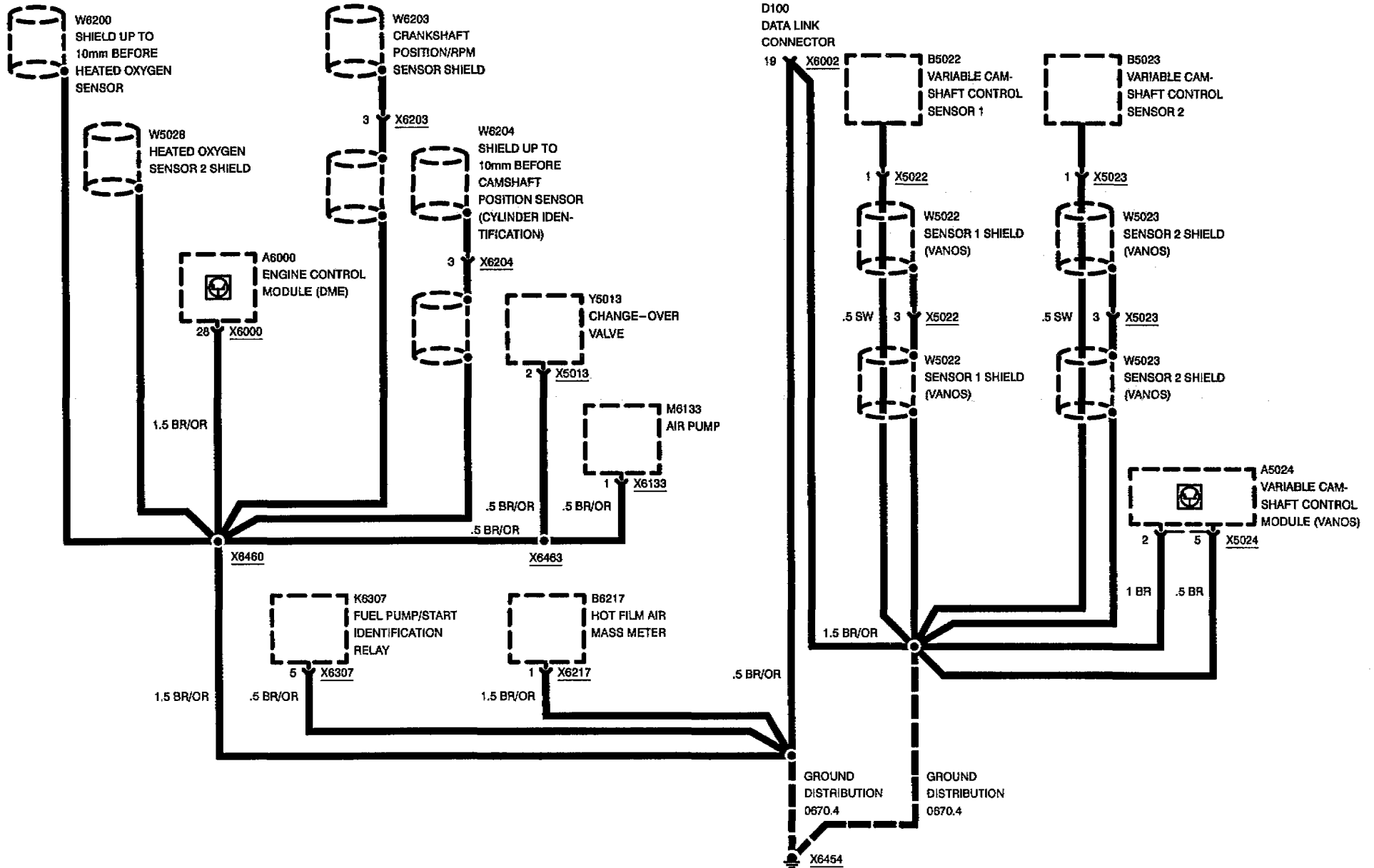




# DATA LINK

## DATA LINK CONNECTOR, PIN 19

M3



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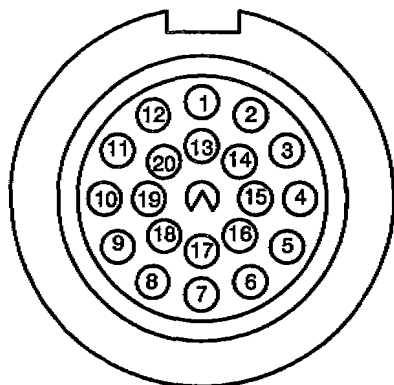
0670.5-10

1996



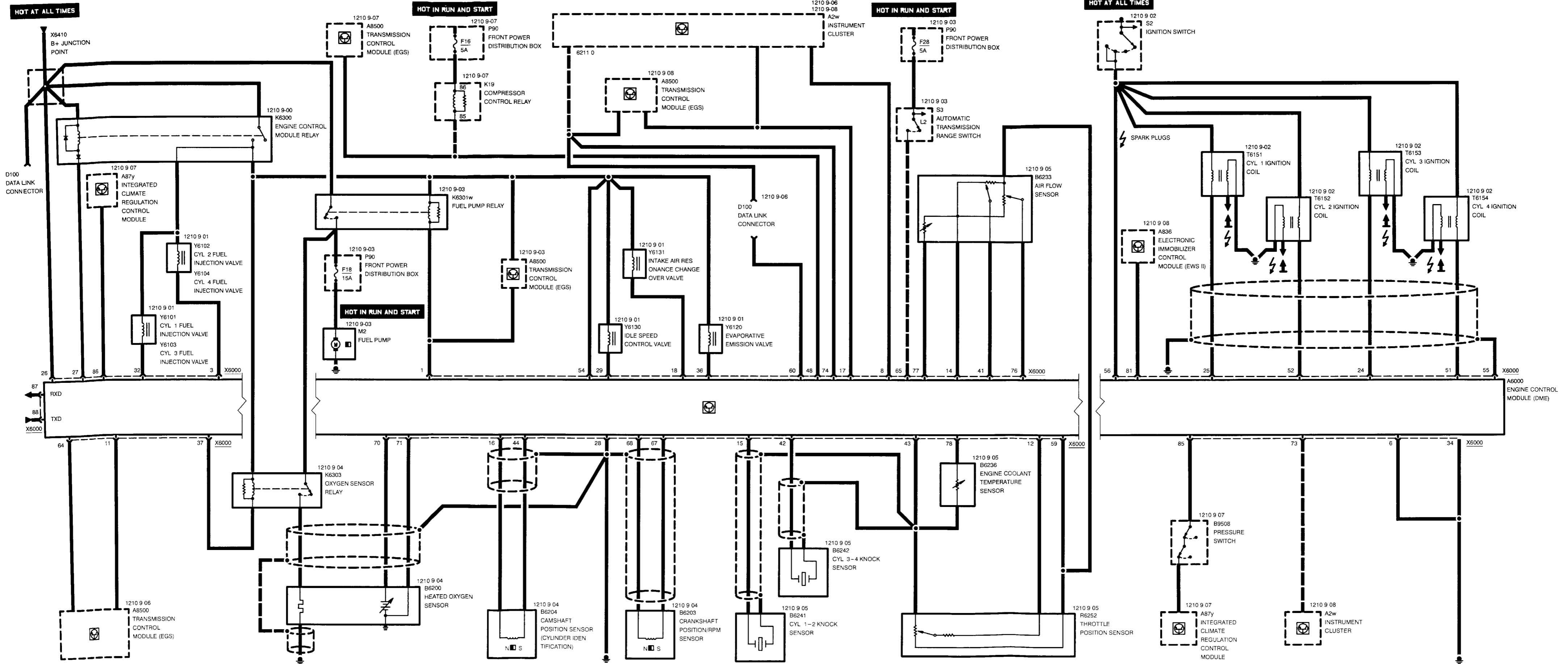
## DATA LINK

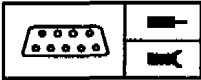
### DATA LINK CONNECTOR (X6002)



PIN NUMBER	TERMINAL NUMBER	TERMINAL DESCRIPTION	WIRE COLOR
1	—	ENGINE	SW
2	—	OBD II CONNECTOR	WS/VI/GE
3	—	NOT OCCUPIED	
4	R	FUSE 46 (328i)	SW/VI/GE
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 2	DIAGNOSTIC DATA LINK	WS/VI/GE
18	PGSP	PROGRAM SELECT FOR ENGINE CONTROL MODULE (DME)	GN/BL
19	31	GROUND	BR
20	TXD	DIAGNOSTIC DATA LINK	WS/VI







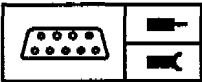
## Pin Assignments

### X6000

Pin	Type	Description/Function	Connection
1	A	Fuel pump relay control	Fuel pump relay, terminal 85
2		Not used	
3	A	Cyl. 2 and cyl. 4 fuel injection valve control	Cyl. 2 and cyl. 4 fuel injection valves
4		Not used	
5		Not used	
6	M	Ground, fuel injection valve output stages	Ground point
7		Not used	
8	A	"Check engine" indicator control	Instrument cluster
9		Not used	
10		Not used	
11	A	DKV potentiometer signal	Transmission control module (EGS)
12	E	Throttle position	Throttle position sensor
13		Not used	
14	E	Volume air flow sensor	Volume air flow sensor
15	E	Cyl. 1-2 knock sensor	Cyl. 1-2 knock sensor
16	E	Camshaft position sensor (cylinder identification)	Camshaft position sensor (cylinder identification)
17	A	Ti-measurement signal (fuel consumption)	Instrument cluster
18	A	Intake air resonance changeover valve control	Intake air resonance changeover valve
19		Not used	
20		Not used	
21		Not used	
22		Not used	
23		Not used	
24	A	Cyl. 3 ignition coil control	Cyl. 3 ignition coil
25	A	Cyl. 1 ignition coil control	Cyl. 1 ignition coil
26	E	Battery voltage	B+ junction point
27	A	Engine control module relay control	Engine control module relay, terminal 85
28	M	Ground for electronics and shielding of sensors	Ground point

E = Input, A = Output, M = Ground

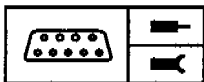




## Pin Assignments

Pin	Type	Description/Function	Connection
29	A	Idle speed control valve control	Idle speed control valve
30		Not used	
31		Not used	
32	A	Cyl. 1 and cyl. 3 fuel injection valve control	Cyl. 1 and cyl. 3 fuel injection valves
33		Not used	
34	M	Ground, remaining output stages (except for ignition and fuel injection valves)	Ground point
35		Not used	
36	A	Evaporative emission valve control	Evaporative emission valve
37	A	Oxygen sensor heater control	Oxygen sensor relay, terminal 85
38		Not used	
39		Not used	
40		Not used	
41	E	Volume air flow sensor	Volume air flow sensor
42	E	Cyl. 3-4 knock sensor	Cyl. 3-4 knock sensor
43	M	Ground for sensors	Engine coolant temperature sensor, cyl. 1-2 knock sensor, cyl. 3-4 knock sensor, and throttle position sensor
44	E	Camshaft position sensor (cylinder identification)	Camshaft position sensor (cylinder identification)
45		Not used	
46		Not used	
47		Not used	
48	A	A/C compressor cut-out	Compressor control relay, terminal 85
49		Not used	
50		Not used	
51	A	Cyl. 4 ignition coil control	Cyl. 4 ignition coil
52	A	Cyl. 2 ignition coil control	Cyl. 2 ignition coil
53		Not used	
54	E	Battery voltage from engine control module relay	Engine control module relay, terminal 87a
55	M	Ground, ignition	Ground point
56	E	Ignition switch, terminal 15	Ignition switch, terminal 15
57		Not used	

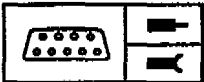
E = Input, A = Output, M = Ground



## Pin Assignments

Pin	Type	Description/Function	Connection
58		Not used	
59	A	5V component supply	Throttle position sensor and volume air flow sensor
60	E	Programming voltage	Data link connector
61		Not used	
62		Not used	
63		Not used	
64	E	Ignition timing intervention	Transmission control module (EGS)
65	E	Drive range P/N	Automatic transmission range switch
66		Not used	
67	E	Crankshaft position/RPM sensor	Crankshaft position/RPM sensor
68	E	Crankshaft position/RPM sensor	Crankshaft position/RPM sensor
69		Not used	
70	E	Oxygen sensor signal	Heated oxygen sensor
71	M	Oxygen sensor signal ground	Heated oxygen sensor
72		Not used	
73	E	Vehicle speed signal	Instrument cluster
74	A	Crankshaft RPM speed signal TD	Instrument cluster
75		Not used	
76	E	Volume air flow sensor	Volume air flow sensor
77	E	Volume air flow sensor	Volume air flow sensor
78	E	Engine coolant temperature	Engine coolant temperature sensor
79		Not used	
80		Not used	
81	E	Drive-away protection signal (code)	Electronic immobilizer control module (EWS II)
82		Not used	
83		Not used	
84		Not used	
85	E	A/C pressure	Pressure switch
86	A	Auxiliary ventilation signal	Integrated climate regulation control module

E = Input, A = Output, M = Ground



## Pin Assignments

Pin	Type	Description/Function	Connection
87	A	RxD diagnosis data line	Data link connector
88	E/A	TxD diagnosis data line	Data link connector

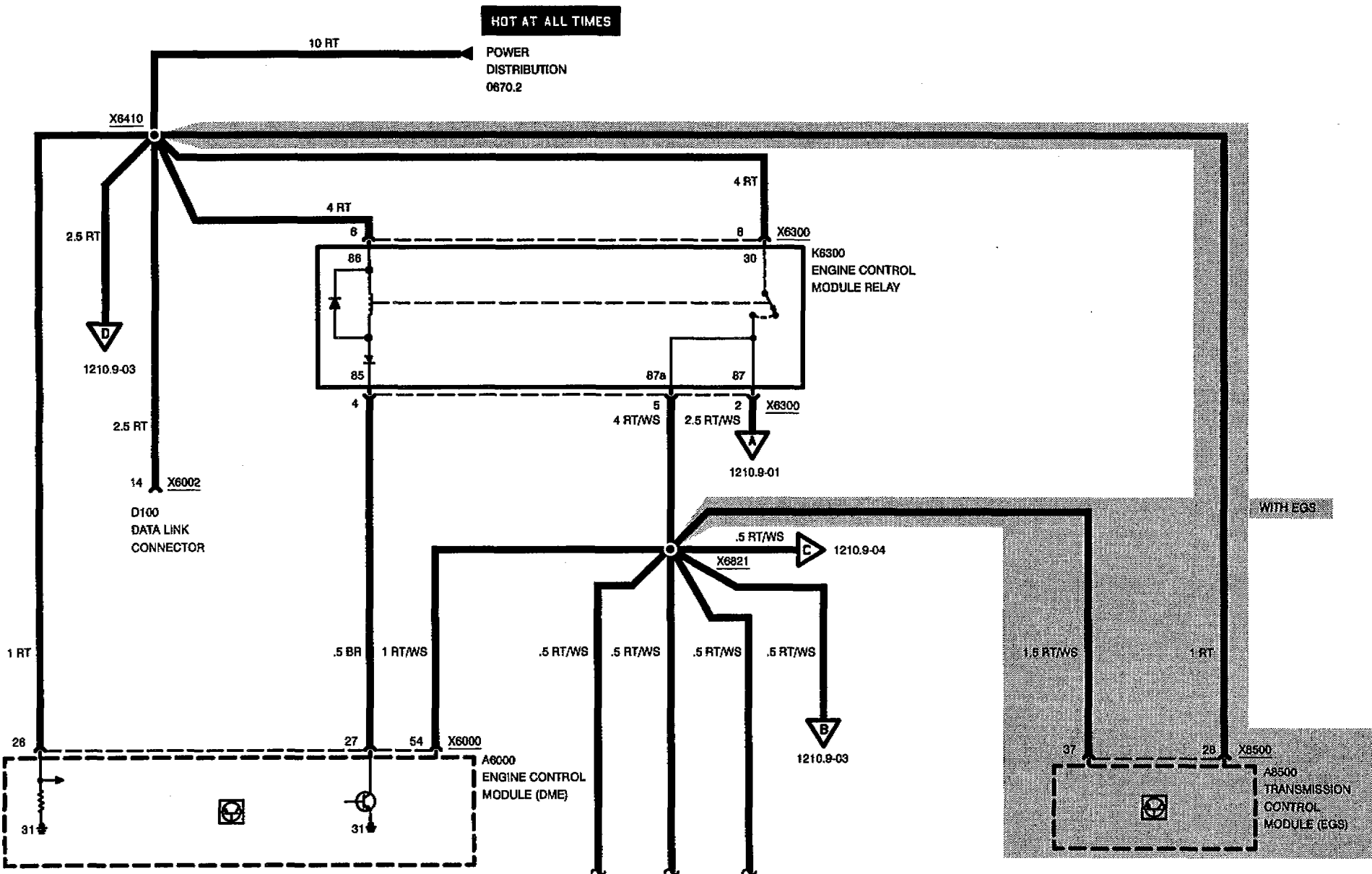
E = Input, A = Output, M = Ground

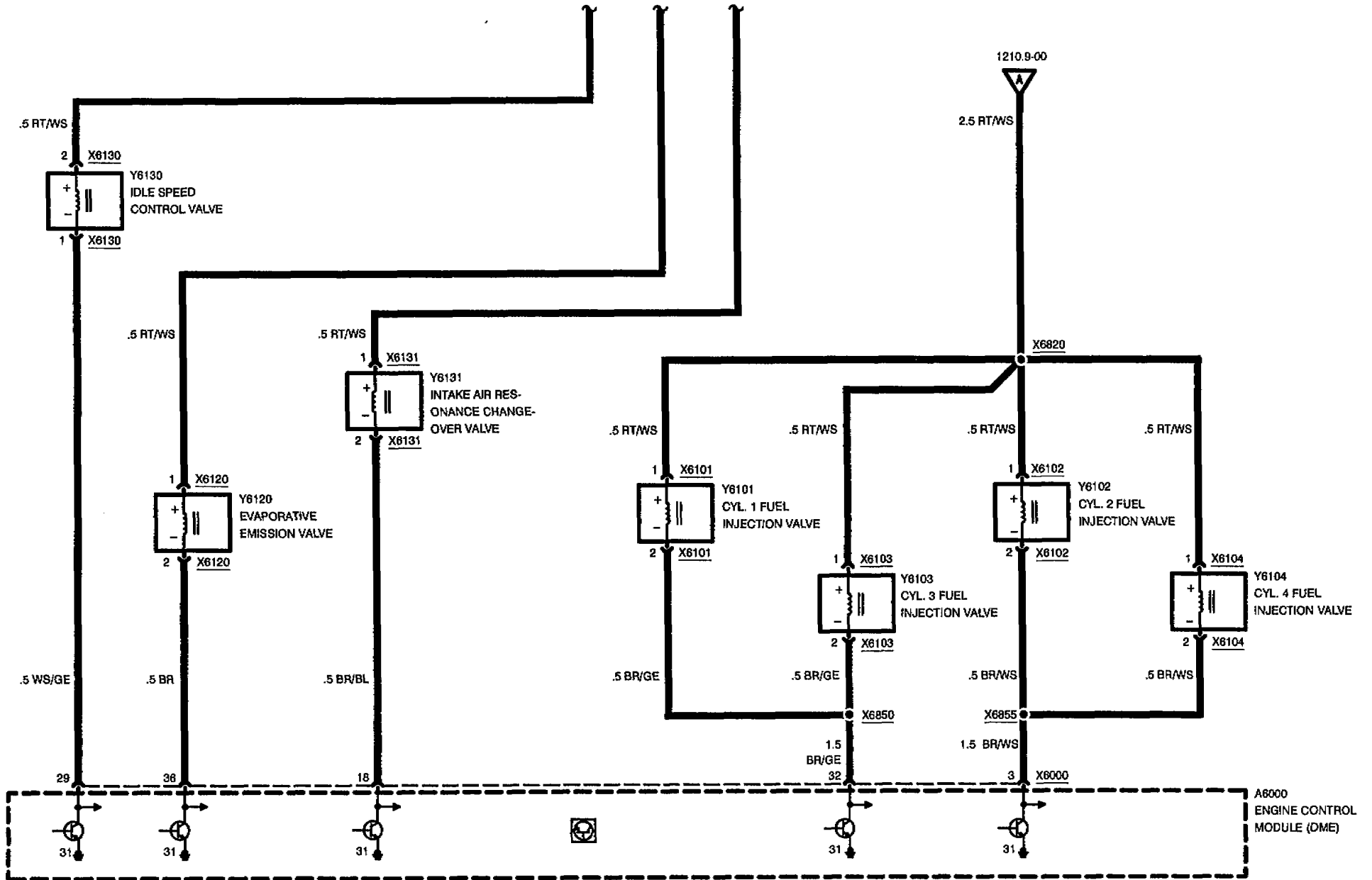




# ENGINE CONTROL SYSTEM (DME M1.7, 4-CYLINDER M42)

## POWER, FUEL INJECTION VALVES

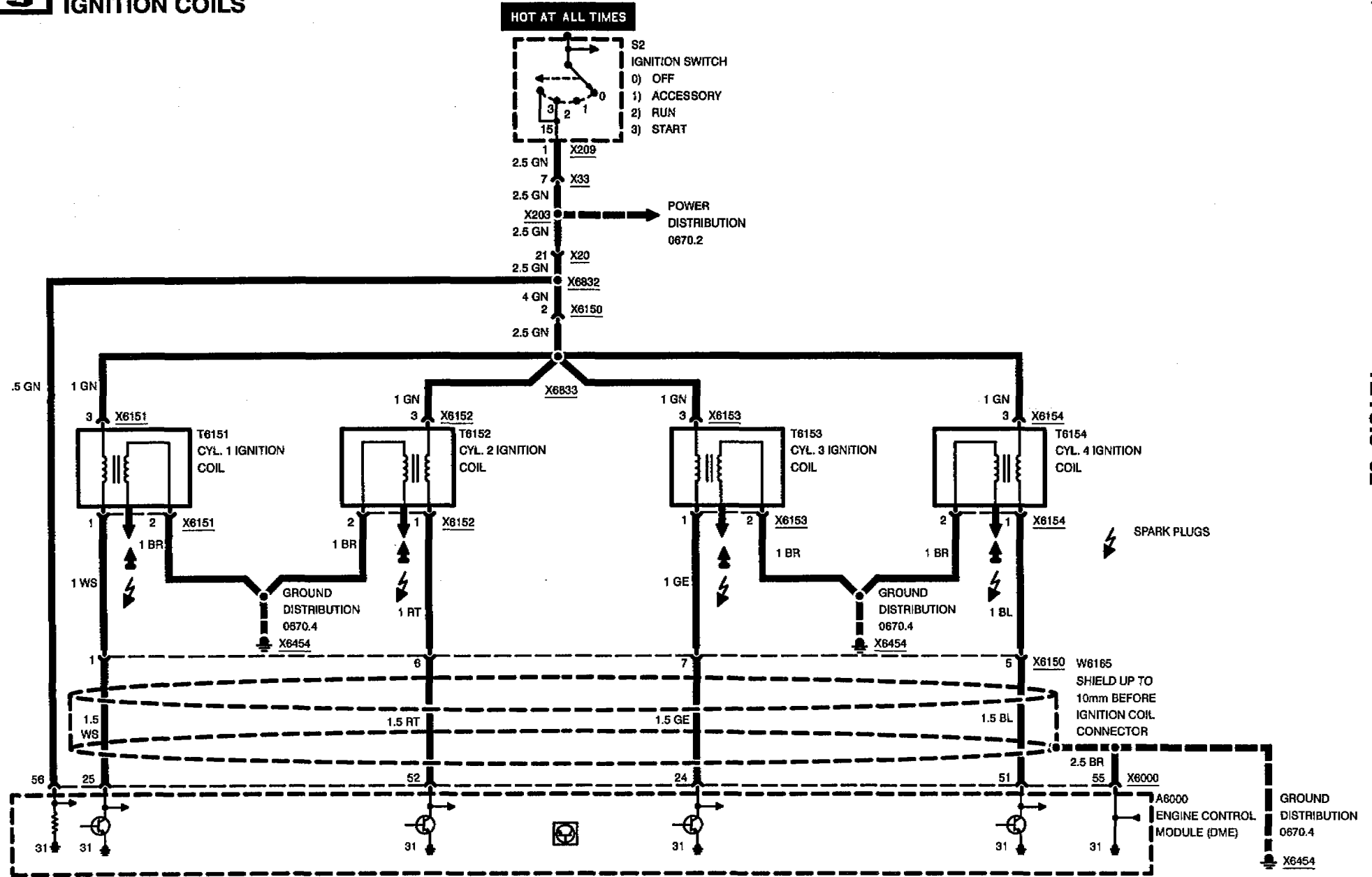






# ENGINE CONTROL SYSTEM (DME M1.7, 4-CYLINDER M42)

## IGNITION COILS

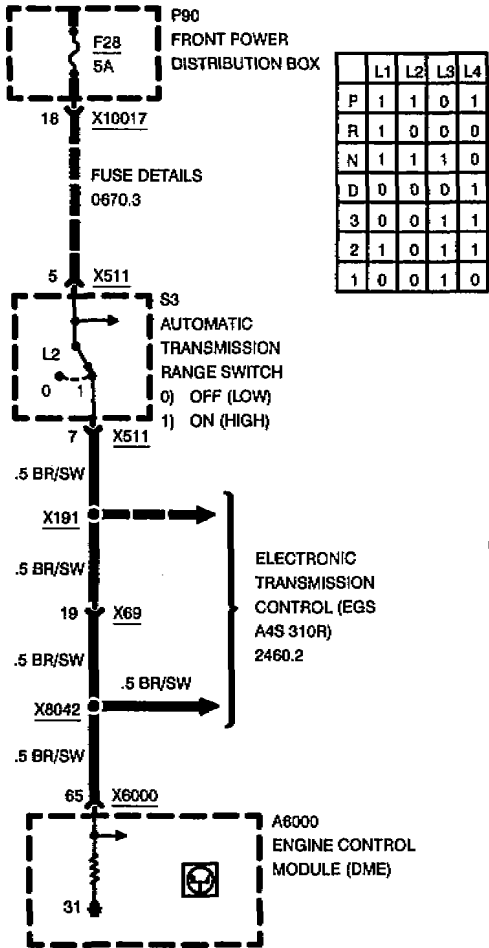




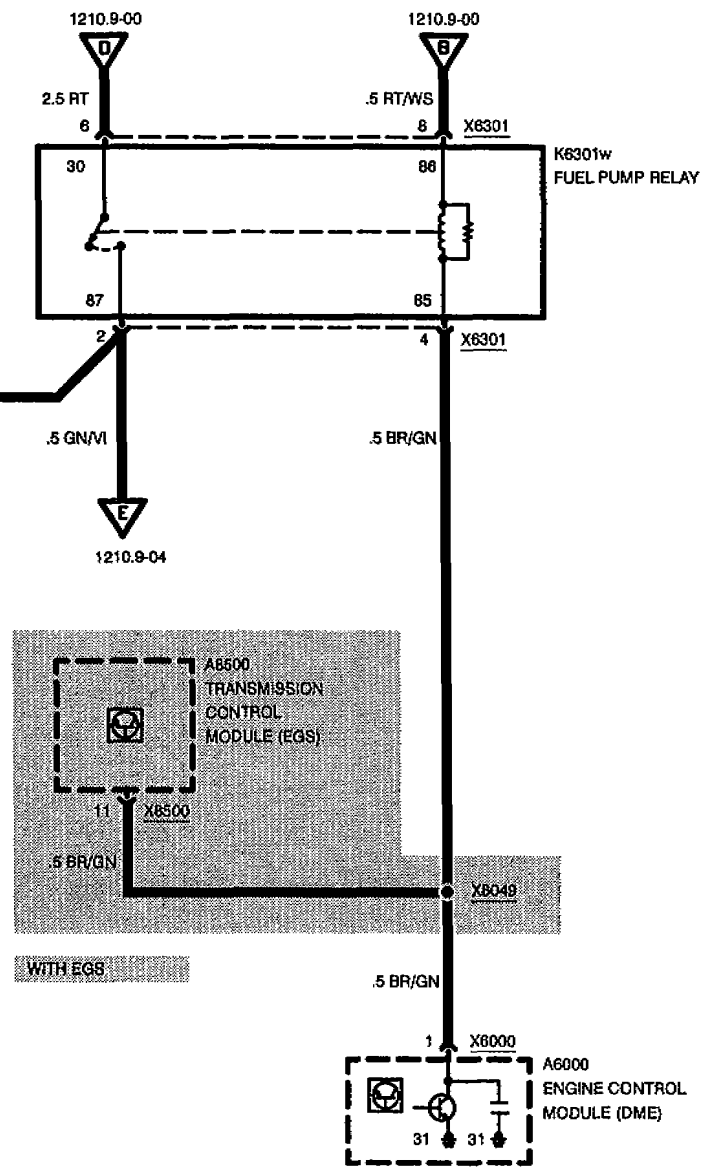
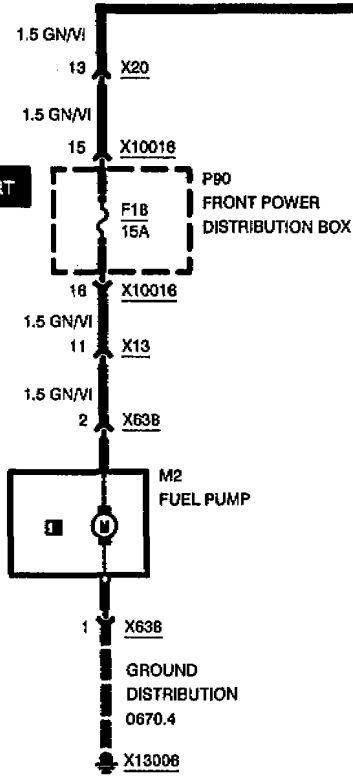
# ENGINE CONTROL SYSTEM (DME M1.7, 4-CYLINDER M42)

## FUEL PUMP

**HOT IN RUN AND START**



**HOT IN RUN AND START**

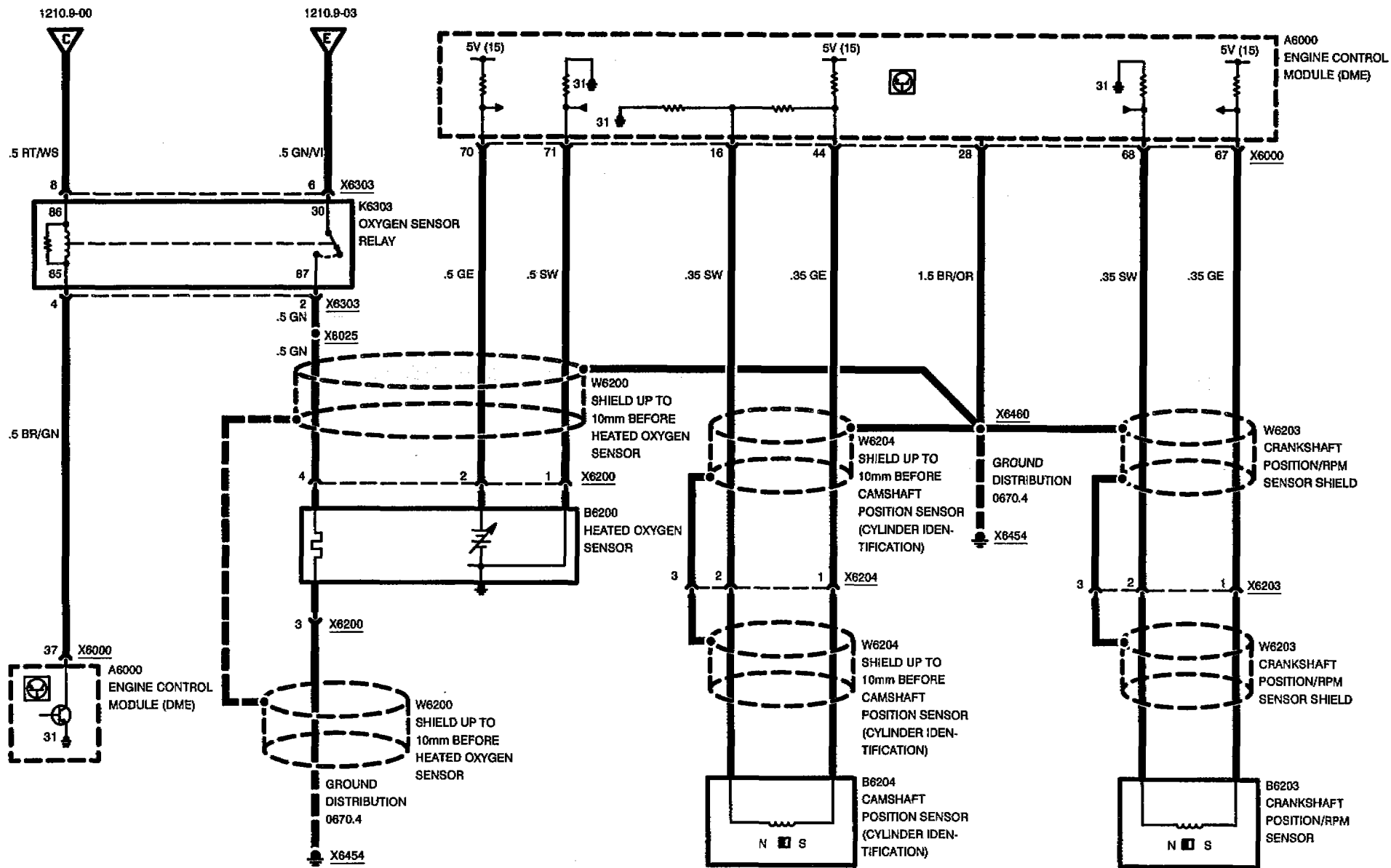






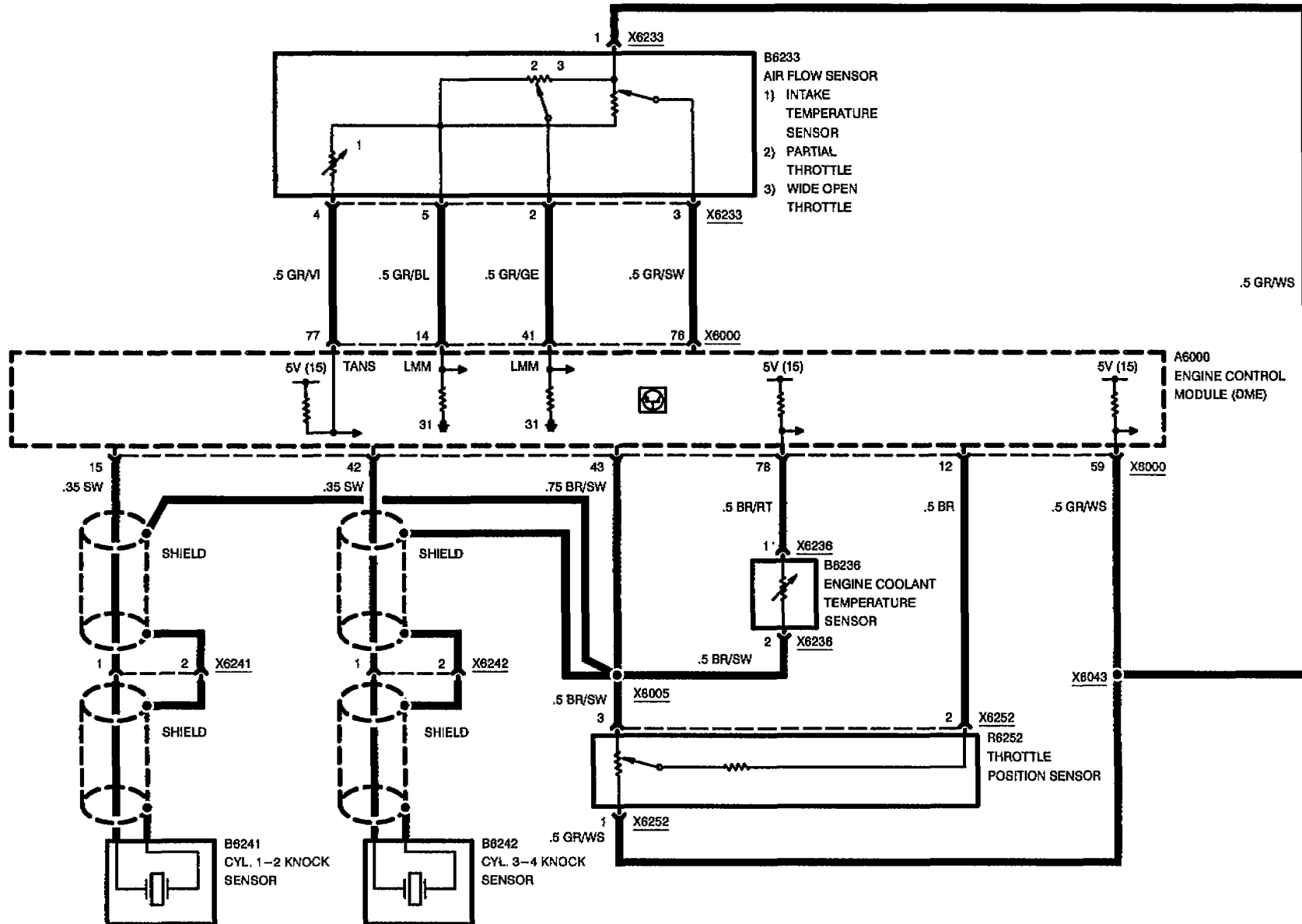
# ENGINE CONTROL SYSTEM (DME M1.7, 4-CYLINDER M42)

## HEATED OXYGEN SENSOR, CRANKSHAFT SENSORS





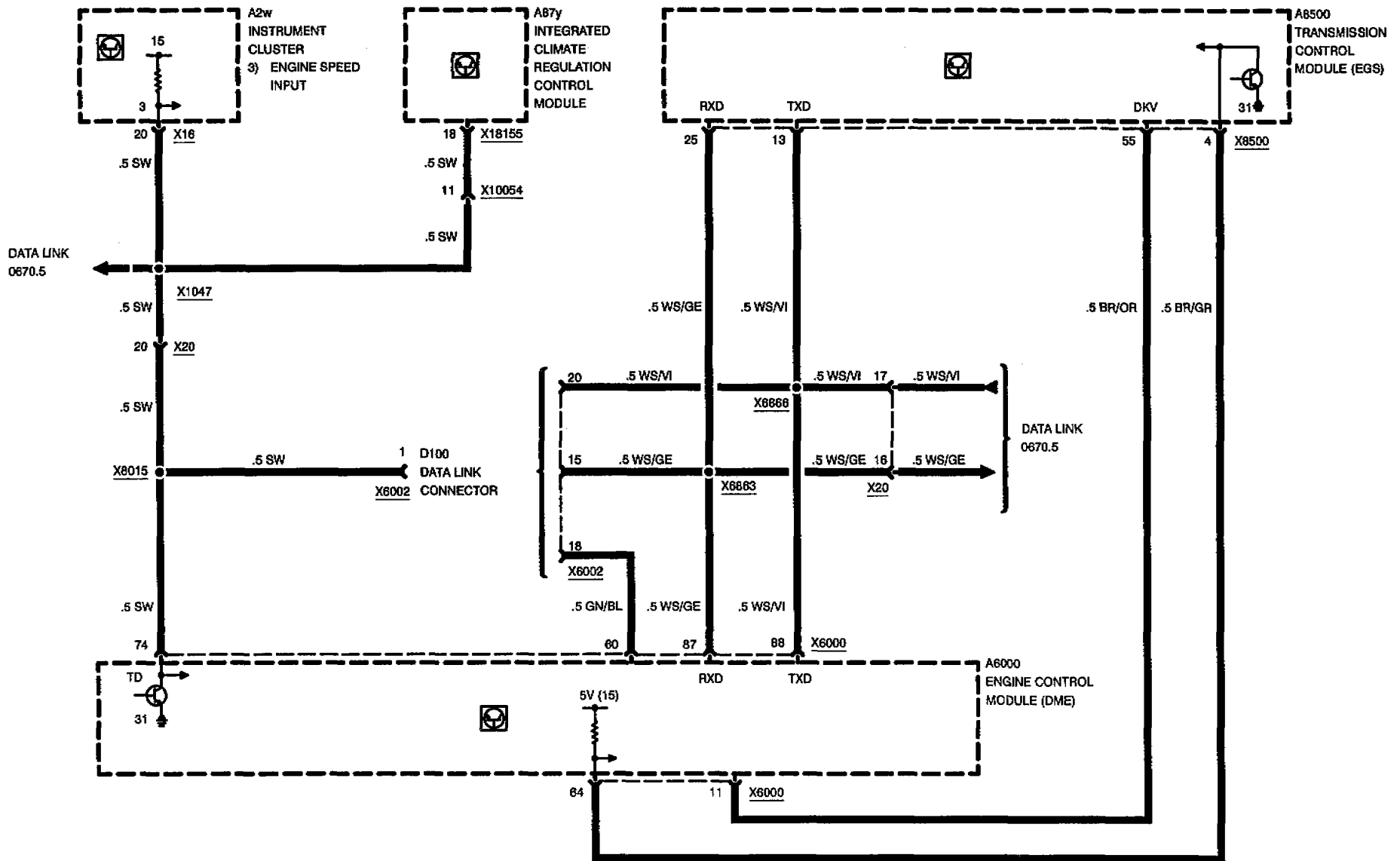
# ENGINE CONTROL SYSTEM (DME M1.7, 4-CYLINDER M42)



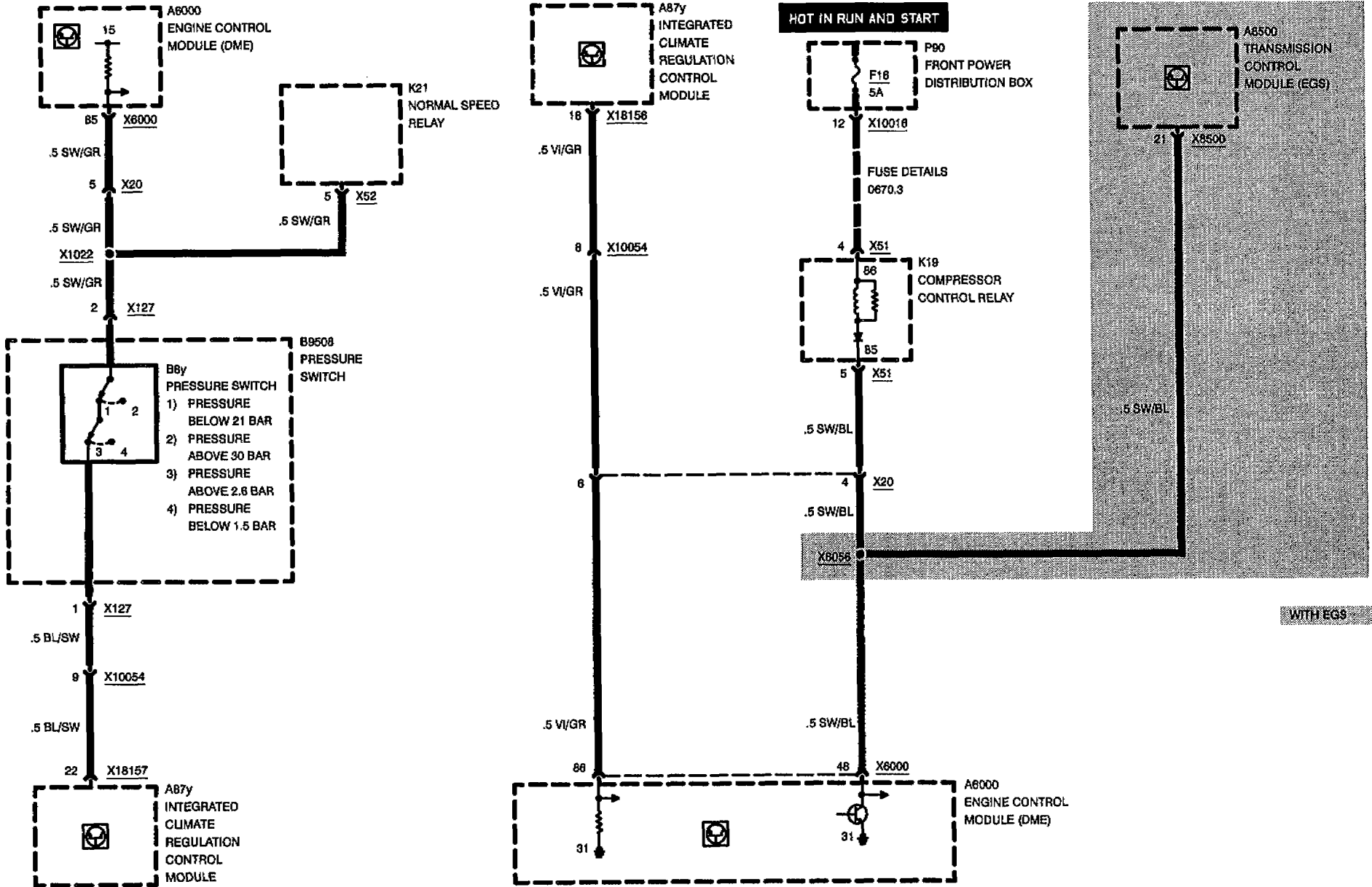


# ENGINE CONTROL SYSTEM (DME M1.7, 4-CYLINDER M42)

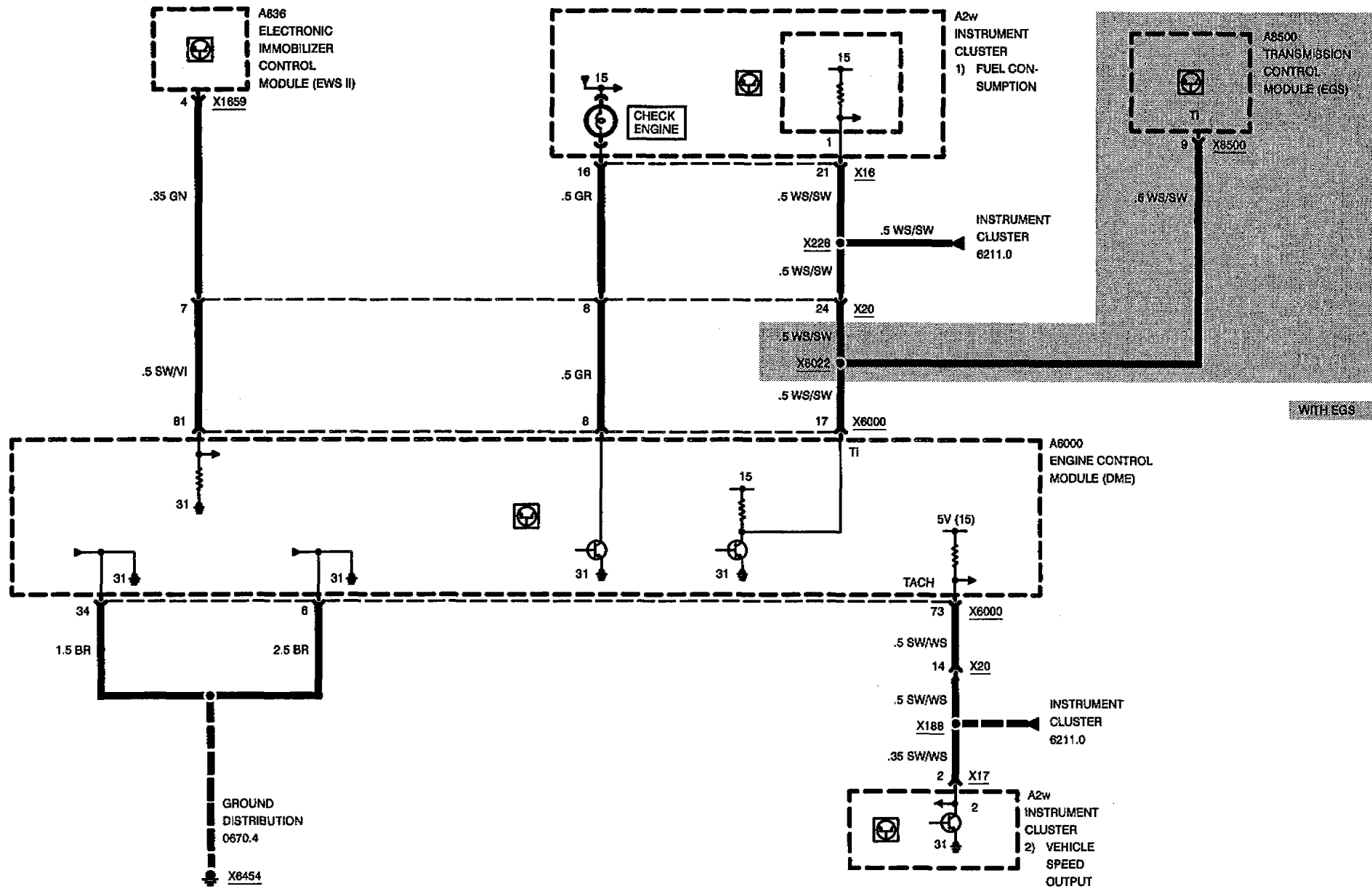
## DATA LINK



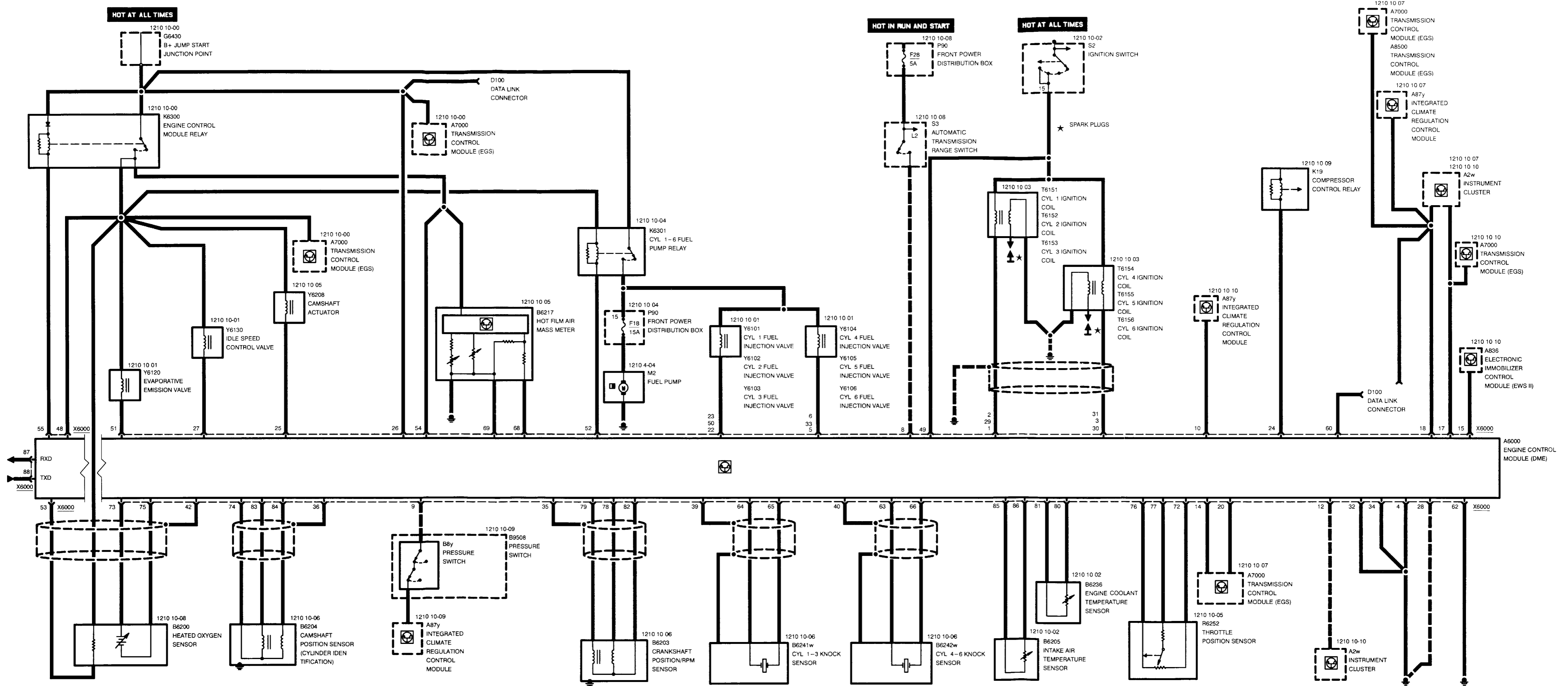
# ENGINE CONTROL SYSTEM (DME M1.7, 4-CYLINDER M42)

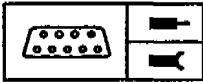


# ENGINE CONTROL SYSTEM (DME M1.7, 4-CYLINDER M42)



WITH EGS



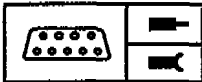


## Pin Assignments

### X6000

Pin	Type	Description/Function	Connection
1	A	Cyl. 1 ignition coil control	Cyl. 1 ignition coil
2	A	Cyl. 3 ignition coil control	Cyl. 3 ignition coil
3	A	Cyl. 5 ignition coil control	Cyl. 5 ignition coil
4	M	Ground	Ground
5	A	Cyl. 6 fuel injection valve control	Cyl. 6 fuel injection valve
6	A	Cyl. 4 fuel injection valve control	Cyl. 4 fuel injection valve
7		Not used	
8	E	Drive range P/N	Automatic transmission range switch
9	A	A/C signal	Pressure switch
10	A	Auxiliary ventilation signal	Integrated climate regulation control module
11		Not used	
12	E	Vehicle speed signal	Instrument cluster
13		Not used	
14	A	Throttle valve position	Transmission control module (EGS)
15	E	Drive-away protection signal	Starter interlock module
16		Not used	
17	A	TI-measurement signal (fuel consumption)	Instrument cluster
18	A	Crankshaft RPM speed signal TD	Instrument cluster
19		Not used	
20	E	Ignition timing intervention	Transmission control module (EGS)
21		Not used	
22	A	Cyl. 3 fuel injection valve control	Cyl. 3 fuel injection valve
23	A	Cyl. 1 fuel injection valve control	Cyl. 1 fuel injection valve
24	A	A/C compressor control	Compressor control relay
25	A	Camshaft control signal	Camshaft control
26	E	Battery voltage	Jump start junction point
27	A	Idle speed signal	Idle speed control valve
28	M	Ground	Ground
29	A	Cyl. 2 ignition coil control	Cyl. 2 ignition coil

E = Input, A = Output, M = Ground

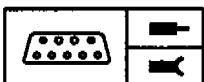


## Pin Assignments

Pin	Type	Description/Function	Connection
30	A	Cyl. 4 ignition coil control	Cyl. 4 ignition coil
31	A	Cyl. 6 ignition coil control	Cyl. 6 ignition coil
32	M	Ground	Ground
33	A	Cyl. 5 fuel injection valve control	Cyl.5 fuel injection valve
34	M	Ground	Ground
35	M	Shield, crankshaft position/RPM sensor	Shield
36	M	Shield, camshaft sensor	Shield
37		Not used	
38		Not used	
39	M	Shield, knock sensor (Cyl. 1-3)	Knock sensor (Cyl. 1-3)
40	M	Shield, knock sensor (Cyl. 4-6)	Knock sensor(Cyl. 4-6)
41		Not used	
42	M	Shield, oxygen sensor	Shield
43		Not used	
44		Not used	
45		Not used	
46		Not used	
47		Not used	
48	E	Voltage supply	Engine control module relay
49	E	Ignition signal	Ignition switch
50	A	Cyl. 2 fuel injection valve control	Cyl. 2 fuel injection valve
51	A	Evaporative emission valve control	Evaporative emission valve
52	A	Fuel pump signal	Fuel pump relay
53	M	Ground, oxygen sensor	Oxygen sensor
54	E	Voltage supply	Engine control module relay
55	A	DME-relay signal	Engine control module relay
56		Not used	
57		Not used	
58		Not used	
59		Not used	
60	E	Programming voltage	Data link connector
61		Not used	

E = Input, A = Output, M = Ground





## Pin Assignments

Pin	Type	Description/Function	Connection
62	M	Ground	Ground
63	E	Knock sensor signal (-)	Knock sensor (Cyl. 4-6)
64	E	Knock sensor signal (-)	Knock sensor (Cyl. 1-3)
65	A	Knock sensor signal (+)	Knock sensor (Cyl. 1-3)
66	A	Knock sensor signal (+)	Knock sensor (Cyl. 4-6)
67		Not used	
68	M	Ground, air mass meter	Hot film air mass meter
69	E	Air mass meter signal	Hot film air mass meter
70		Not used	
71		Not used	
72	A	Voltage supply	Throttle position sensor
73	E	Oxygen sensor signal	Oxygen sensor
74	M	Ground, hall effect camshaft sensor	Hall effect camshaft sensor
75	M	Ground, oxygen sensor	Oxygen sensor
76	M	Ground, throttle position sensor	Throttle position sensor
77	E	Throttle position signal	Throttle position sensor
78	E	Crankshaft position/RPM signal (-)	Crankshaft position/RPM sensor
79	A	Crankshaft position/RPM signal (+)	Crankshaft position/RPM sensor
80	E	Engine coolant temperature	Engine coolant temperature sensor
81	A	Engine coolant temperature	Engine coolant temperature sensor
82	M	Ground, crankshaft position/RPM sensor	Crankshaft position/RPM sensor
83	E	Camshaft signal (-)	Hall effect camshaft sensor
84	A	Camshaft signal (+)	Hall effect camshaft sensor
85	E	Engine intake air temperature	Engine intake air temperature sensor
86	M	Ground, engine intake air temperature sensor	Engine intake air temperature sensor
87	A	RxD diagnostic data link	Data link connector
88	E/A	TxD diagnostic data link	Data link connector

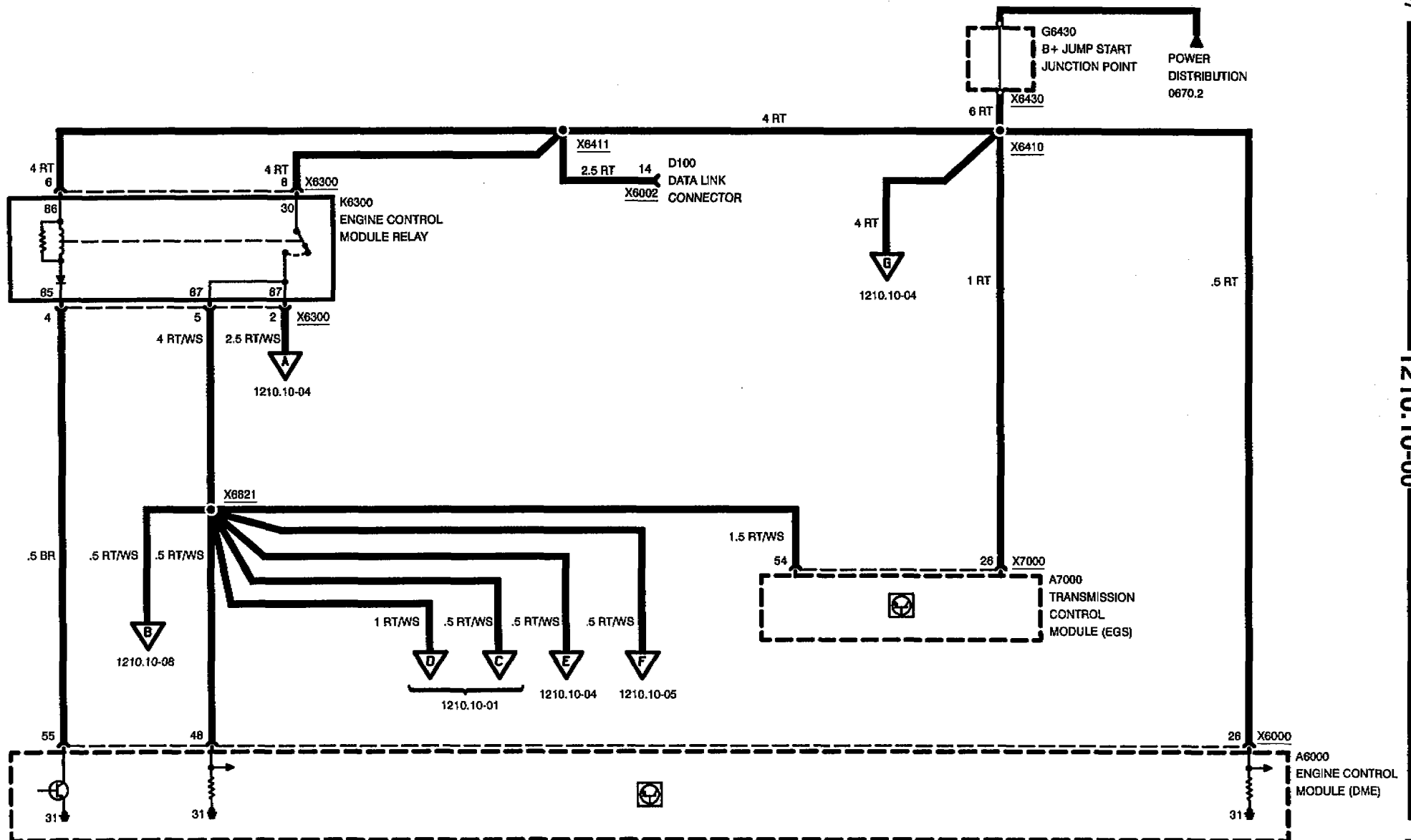
E = Input, A = Output, M = Ground



# ENGINE CONTROL SYSTEM MS40 (6-CYLINDER M50)

CDN

## POWER



04/97

1210.10-00

1996



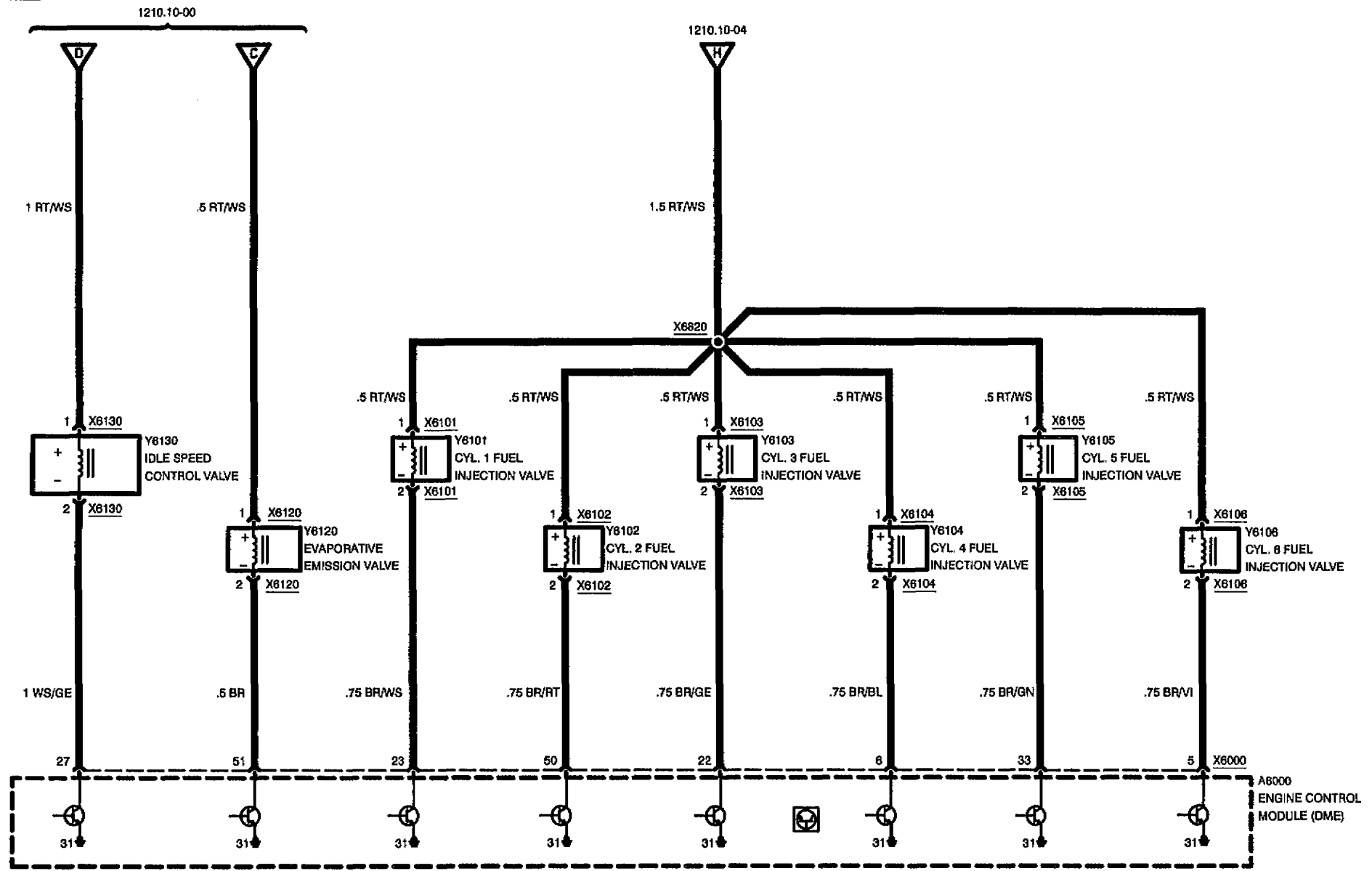
# ENGINE CONTROL SYSTEM MS40 (6-CYLINDER M50)

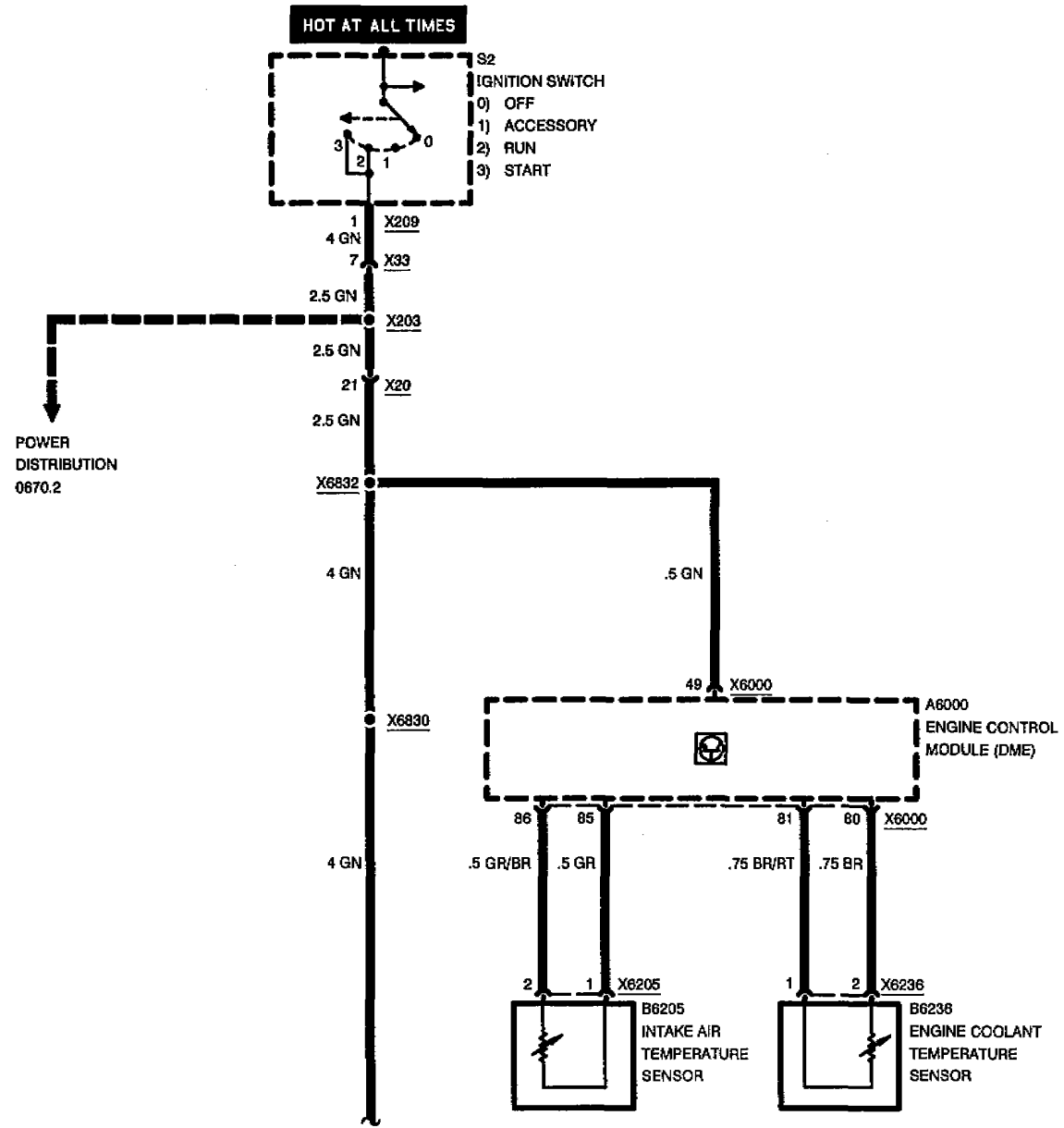


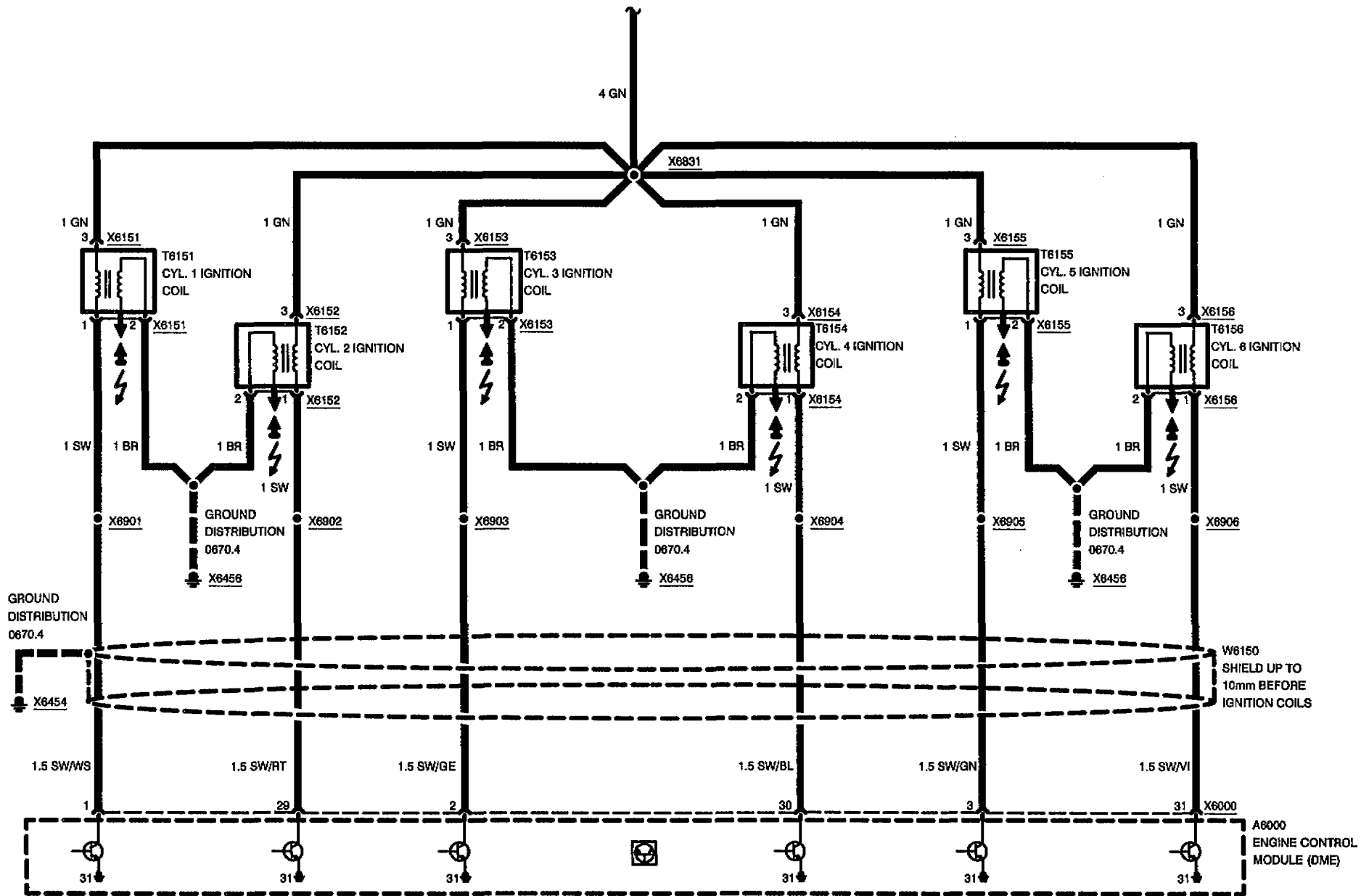
04/97

1210.10-01

1996

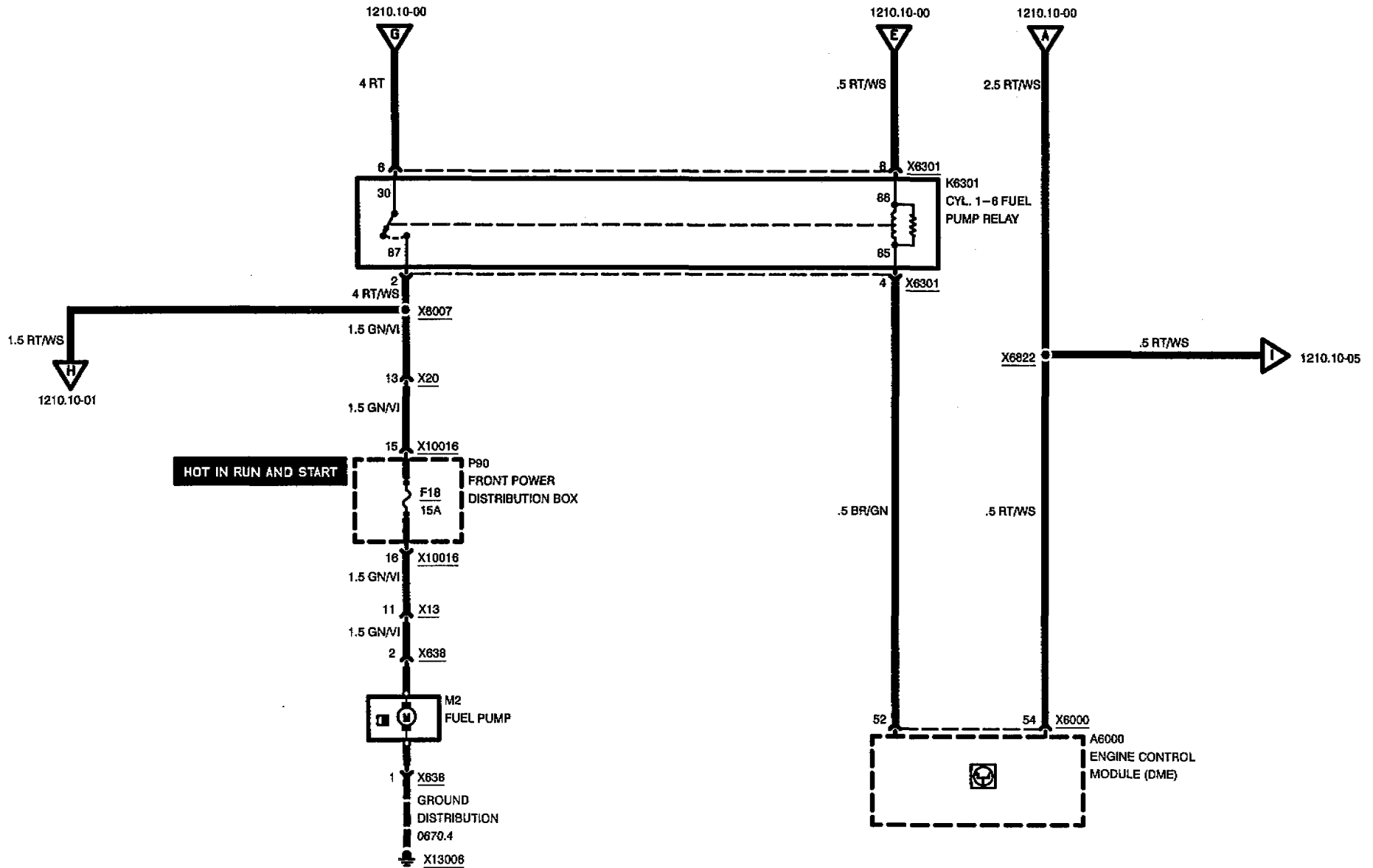








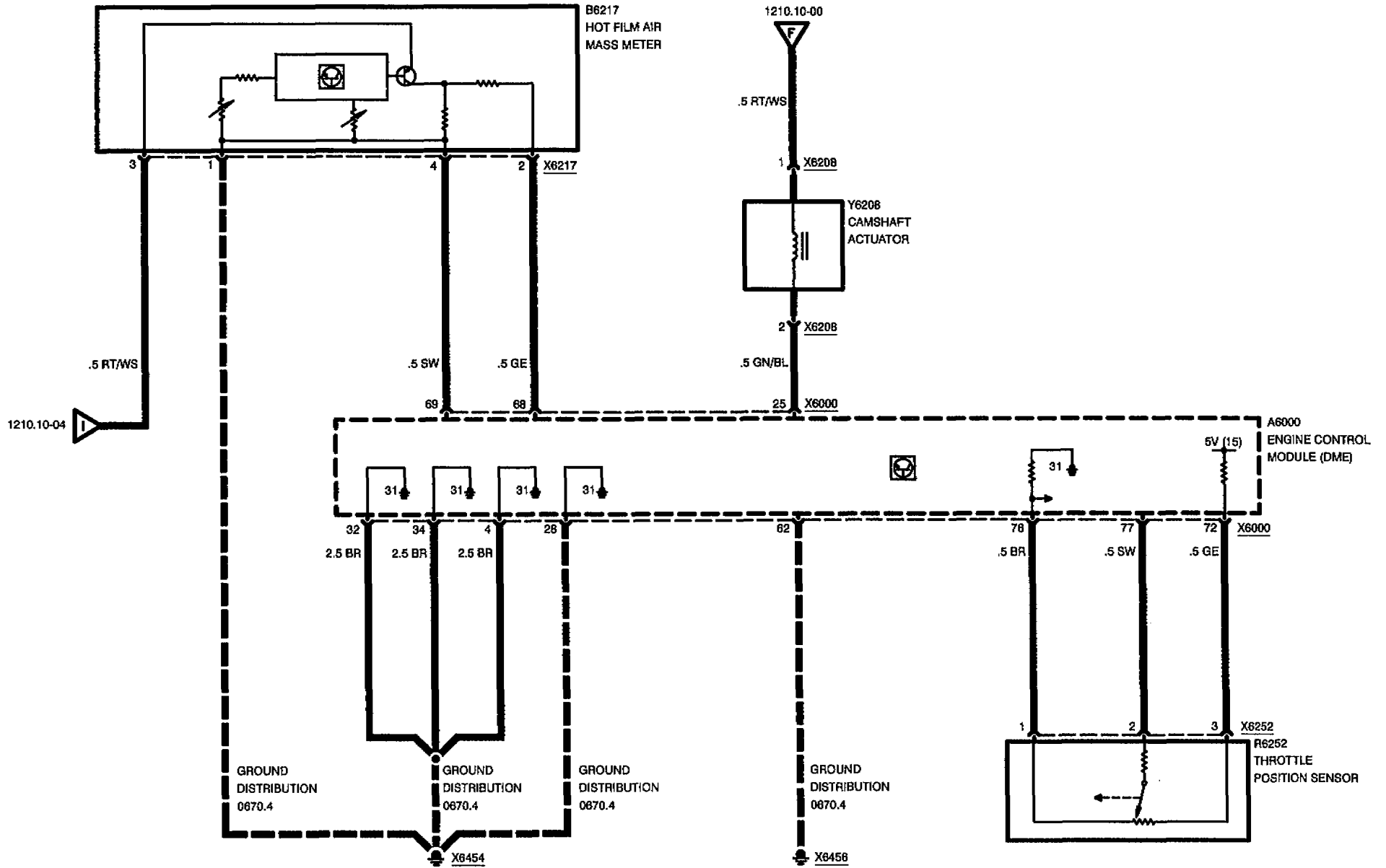
# ENGINE CONTROL SYSTEM MS40 (6-CYLINDER M50)





# ENGINE CONTROL SYSTEM MS40 (6-CYLINDER M50)

CDN



04/97

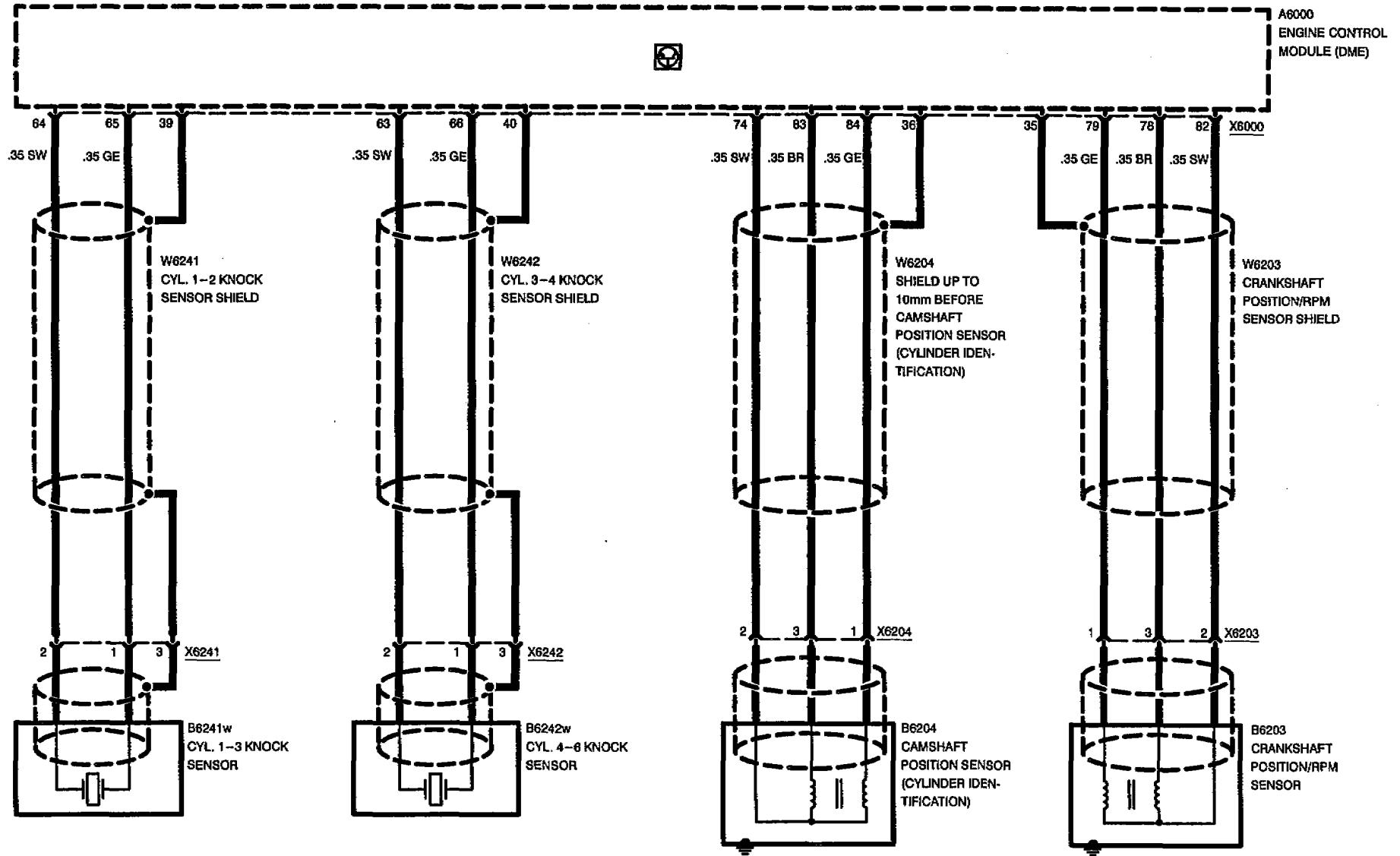
1210.10-05

1996



# ENGINE CONTROL SYSTEM MS40 (6-CYLINDER M50)

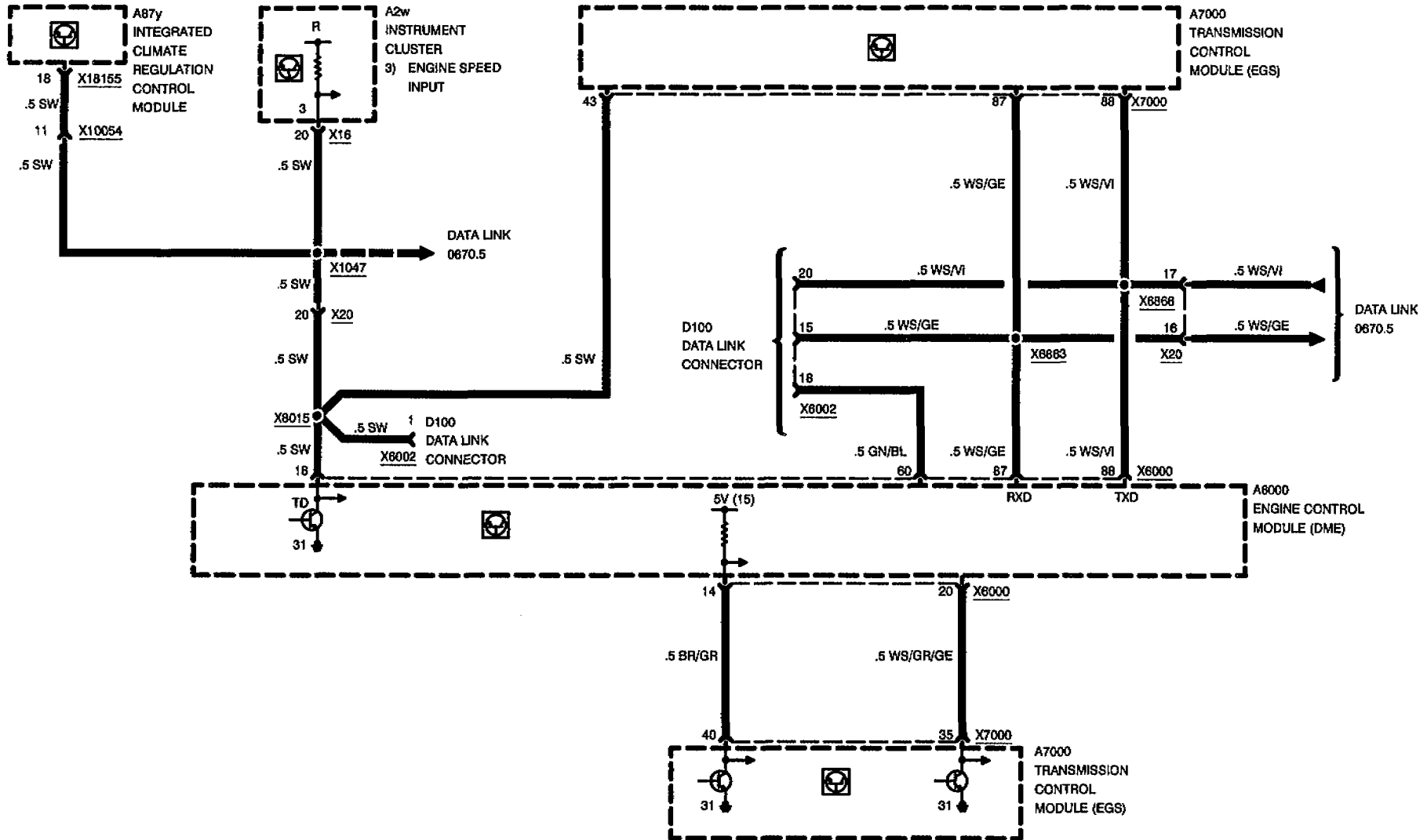
CDN





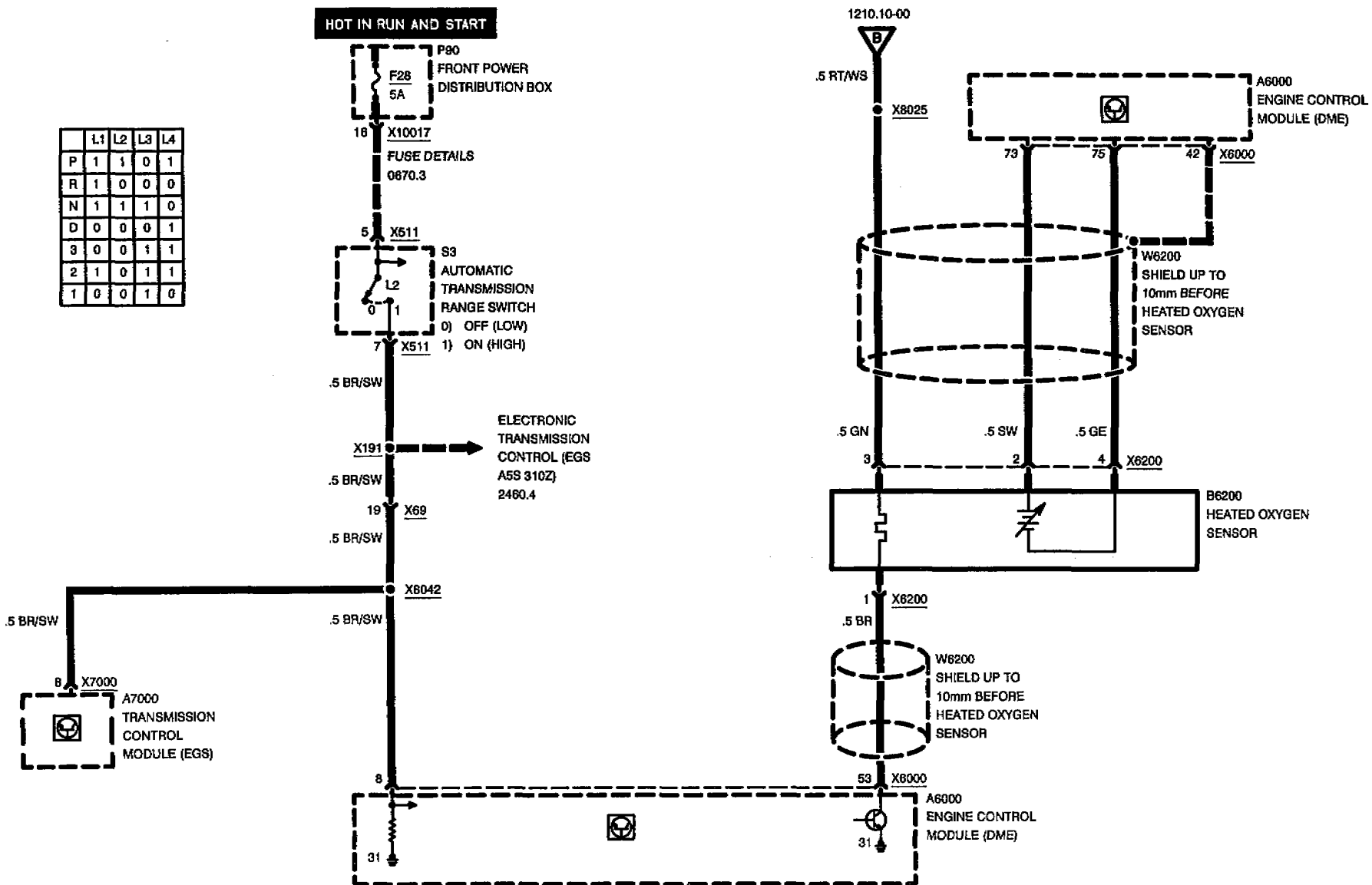


# ENGINE CONTROL SYSTEM MS40 (6-CYLINDER M50)



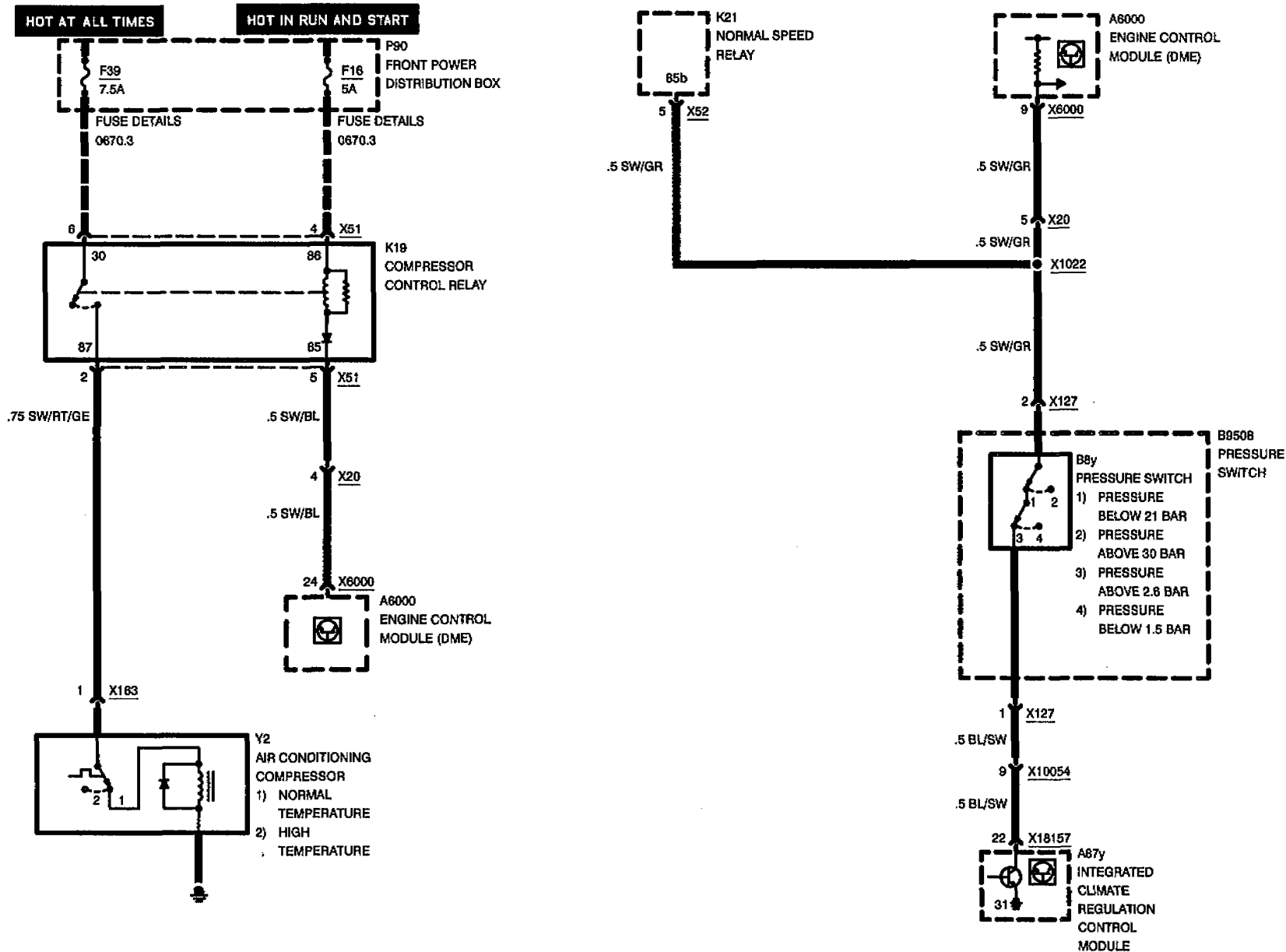
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P	1	1	0	1
R	1	0	0	0
N	1	1	1	0
D	0	0	0	1
3	0	0	1	1
2	1	0	1	1
1	0	0	1	0

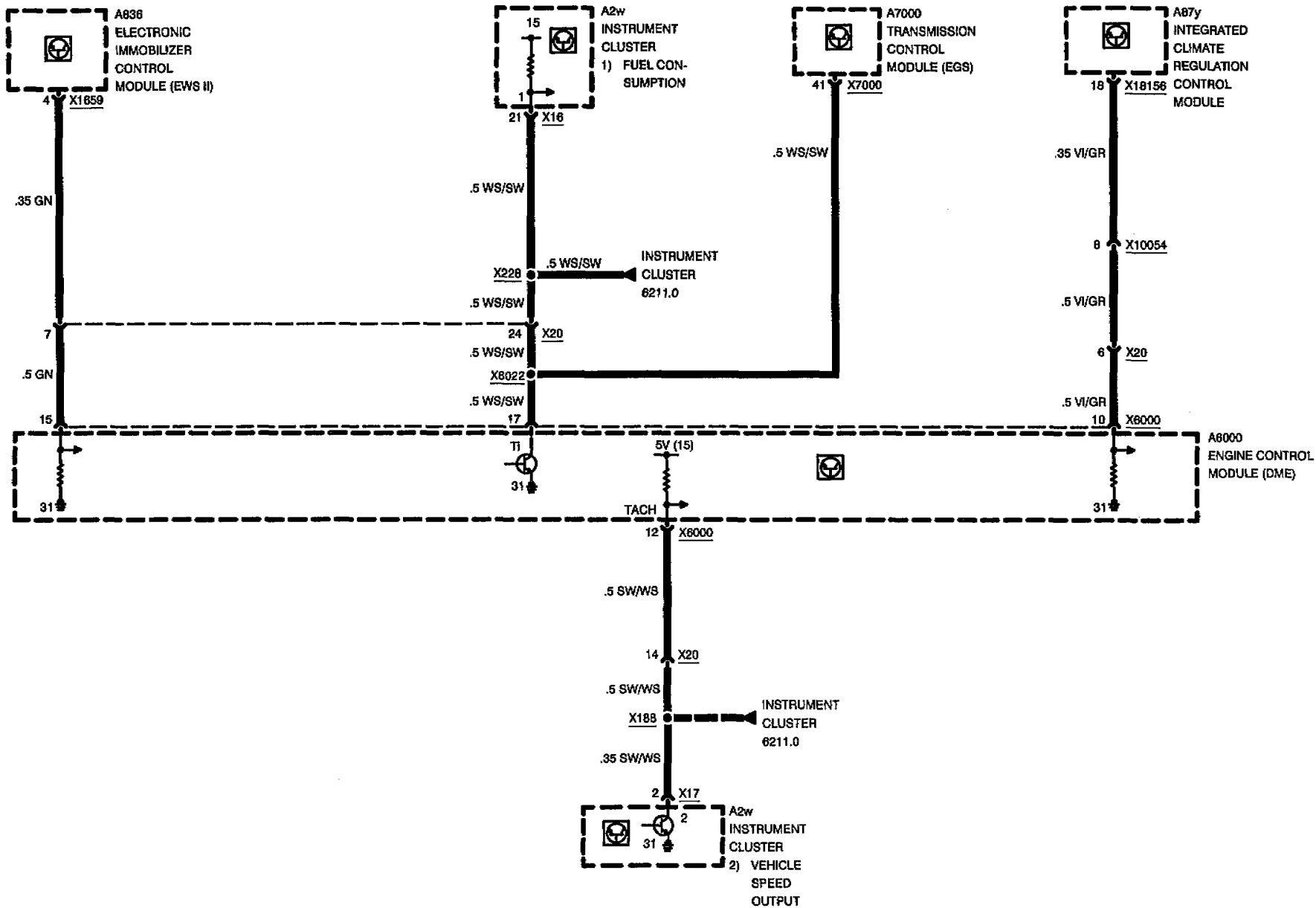
**HOT IN RUN AND START**

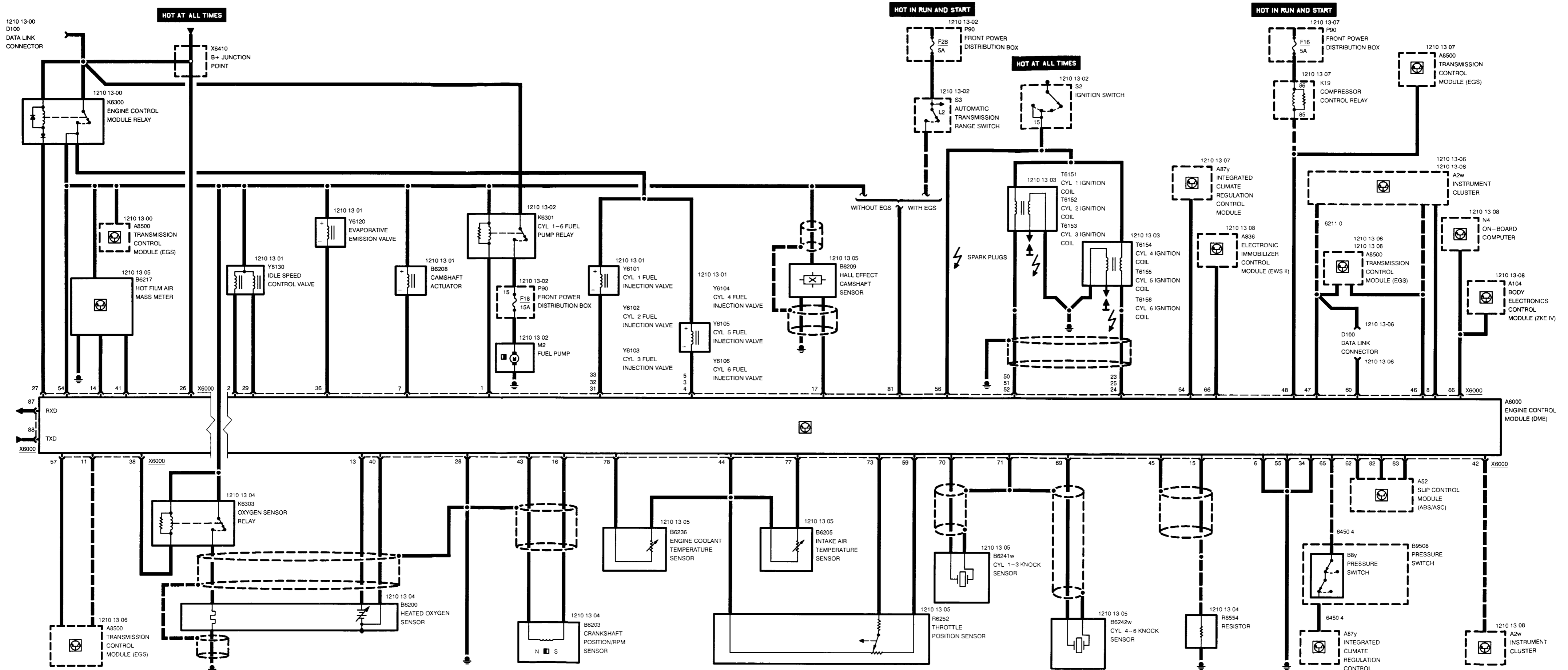


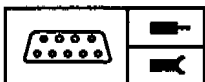


# ENGINE CONTROL SYSTEM MS40 (6-CYLINDER M50)







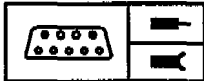


## Pin Assignments

### X6000

Pin	Type	Description/Function	Connection
1	A	Fuel pump relay control	Fuel pump relay, terminal 85
2	A	Idle speed control valve - close winding control	Idle speed control valve
3	A	Cyl. 5 fuel injection valve control	Cyl. 5 fuel injection valve
4	A	Cyl. 6 fuel injection valve control	Cyl. 6 fuel injection valve
5	A	Cyl. 4 fuel injection valve control	Cyl. 4 fuel injection valve
6	M	Ground, fuel injection valve output stages	Ground point
7	A	Camshaft actuator control	Camshaft actuator
8	A	"Check engine" indicator control	Instrument cluster
9		Not used	
10		Not used	
11	A	Throttle valve position	Transmission control module (EGS)
12		Not used	
13	E	Oxygen sensor signal	Heated oxygen sensor
14	A	Hot wire air mass meter	Hot wire air mass meter
15	M	Ground	Ground point
16	E	Crankshaft position/RPM sensor signal (+)	Crankshaft position/RPM sensor
17	E	Camshaft position sensor	Hall effect camshaft sensor
18		Not used	
19		Not used	
20		Not used	
21		Not used	
22		Not used	
23	A	Cyl. 4 ignition coil control	Cyl. 4 ignition coil
24	A	Cyl. 6 ignition coil control	Cyl. 6 ignition coil
25	A	Cyl. 5 ignition coil control	Cyl. 5 ignition coil
26	E	Battery voltage	B+ junction point
27	A	Engine control module relay control	Engine control module relay, terminal 85
28	M	Ground for electronics and shielding of sensors	Ground point
29	A	Idle speed control valve - opening winding control	Idle speed control valve

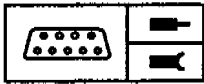
E = Input, A = Output, M = Ground



## Pin Assignments

Pin	Type	Description/Function	Connection
30		Not used	
31	A	Cyl. 3 fuel injection valve control	Cyl. 3 fuel injection valve
32	A	Cyl. 2 fuel injection valve control	Cyl. 2 fuel injection valve
33	A	Cyl. 1 fuel injection valve control	Cyl. 1 fuel injection valve
34	M	Ground remaining output stages (except for ignition and fuel injection valves)	Ground point
35		Not used	
36	A	Evaporative emission valve control	Evaporative emission valve
37		Not used	
38	A	Oxygen sensor heater control	Oxygen sensor relay, terminal 85
39		Not used	
40	M	Oxygen sensor signal ground	Heated oxygen sensor
41	E	Hot wire air mass meter	Hot wire air mass meter
42	E	Vehicle speed signal	Instrument cluster
43	E	Crankshaft position/RPM sensor signal (-)	Crankshaft position/RPM sensor
44	M	Ground for sensors	Engine intake air temperature sensor, engine coolant temperature sensor, and throttle position sensor
45	M	Ground for shield	Shield
46	A	Ti measurement signal (fuel consumption)	Instrument cluster
47	A	Crankshaft RPM speed signal TD	Instrument cluster
48	A	A/C compressor control	Compressor control relay, terminal 85
49		Not used	
50	A	Cyl. 1 ignition coil control	Cyl. 1 ignition coil
51	A	Cyl. 2 ignition coil control	Cyl. 2 ignition coil
52	A	Cyl. 3 ignition coil control	Cyl. 3 ignition coil
53		Not used	
54	E	Battery voltage from engine control module relay	Engine control module relay, terminal 87a
55	M	Ground, ignition	Ground point
56	E	Ignition switch, terminal 15	Ignition switch
57	E	Ignition timing intervention	Transmission control module (EGS)
58		Not used	
59	A	5V component supply	Throttle position sensor

E = Input, A = Output, M = Ground



## Pin Assignments

Pin	Type	Description/Function	Connection
60	E	Programming voltage	Data link connector
61		Not used	
62	E	EML-signal	ABS/ASC control module
63		Not used	
64	E	A/C switch	Integrated climate regulation control module
65	E	A/C pressure signal	Pressure switch
66	E	Drive-away protection signal (code)	Electronic immobilizer control module (EWS II)
67		Not used	
68		Not used	
69	E	Cyl. 4-6 knock sensor	Cyl. 4-6 knock sensor
70	E	Cyl. 1-3 knock sensor	Cyl. 1-3 knock sensor
71	M	Ground for knock sensors and shields	Cyl. 1-3 knock sensor, cyl. 4-6 knock sensor, and shields
72		Not used	
73	E	Throttle position	Throttle position sensor
74		Not used	
75		Not used	
76		Not used	
77	E	Engine intake air temperature	Engine intake air temperature sensor
78	E	Engine coolant temperature	Engine coolant temperature sensor
79		Not used	
80		Not used	
81	E	Drive range P/N	Automatic transmission range switch
82	E	Throttle flap position	ABS/ASC control module
83	A	Ignition cut-off signal	ABS/ASC control module
84		Not used	
85		Not used	
86		Not used	
87	E	RxD diagnosis data line	Data link connector
88	E/A	TxD diagnosis data line	Data link connector

E = Input, A = Output, M = Ground

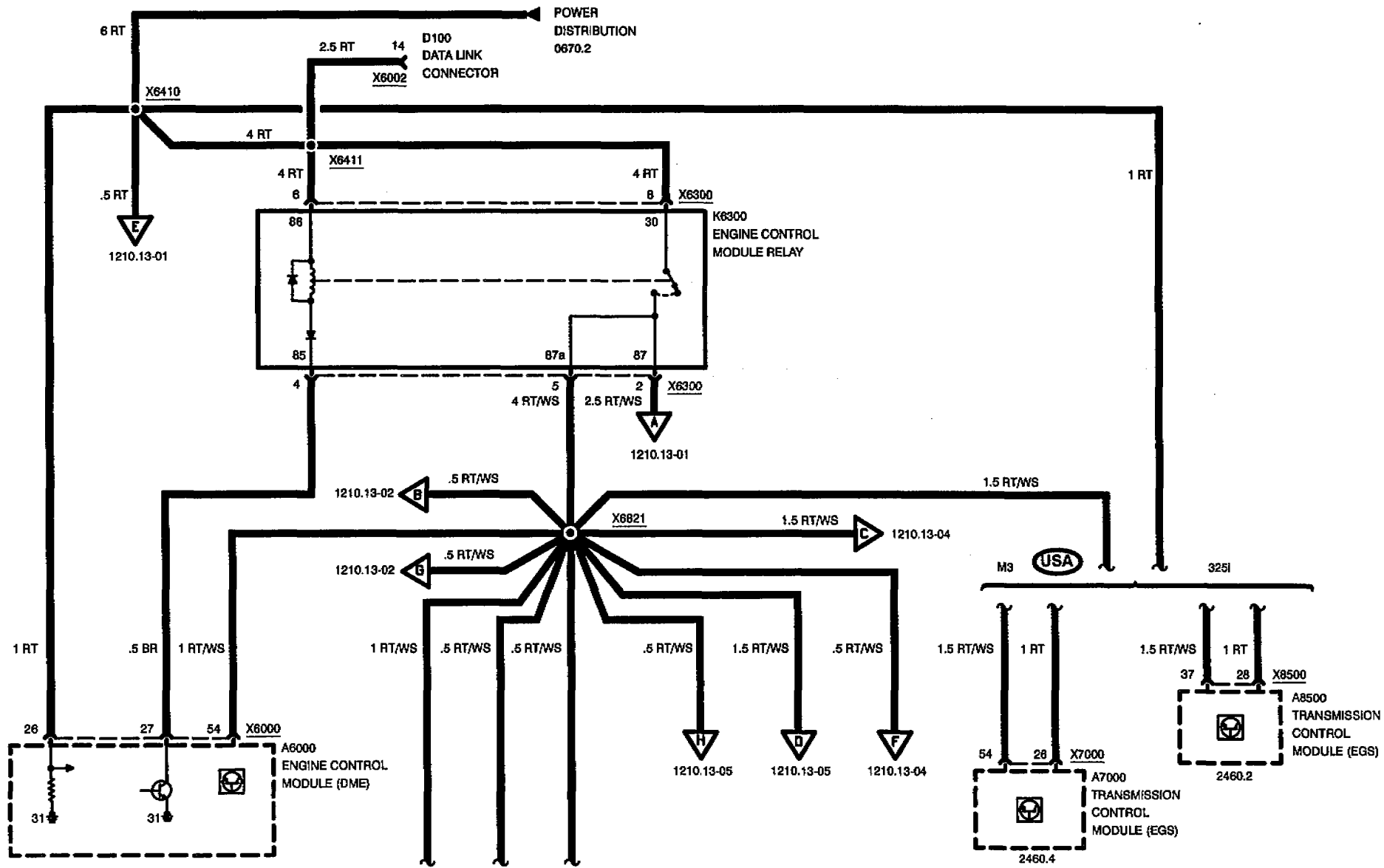




# ENGINE CONTROL SYSTEM (DME M3.3.1, 6-CYLINDER M50)

## POWER, FUEL INJECTION VALVES

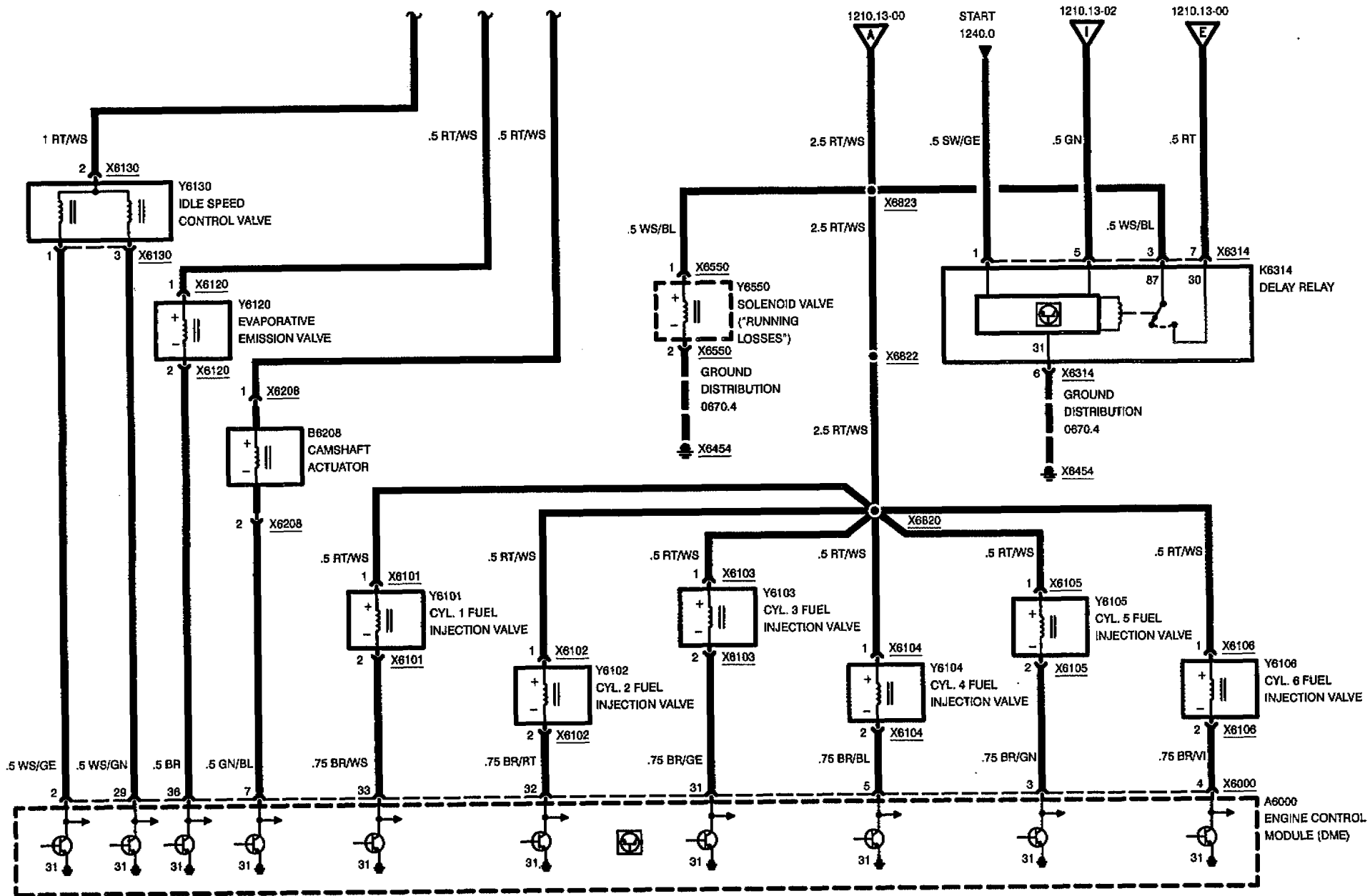
HOT AT ALL TIMES



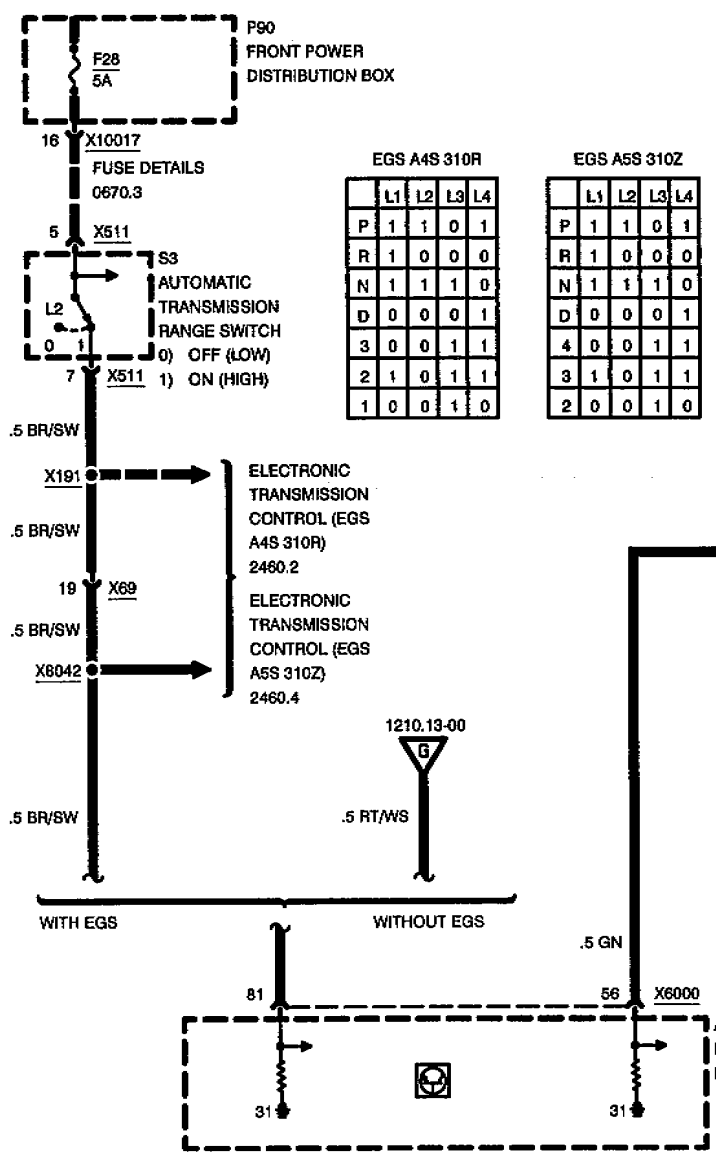
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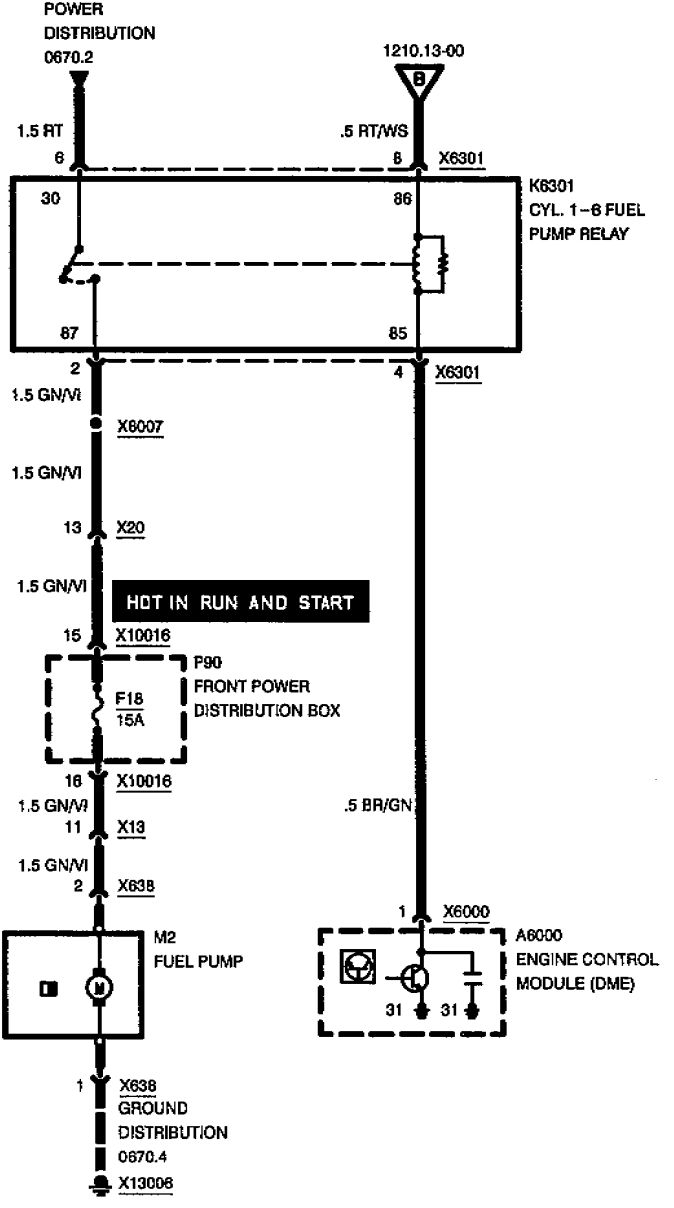
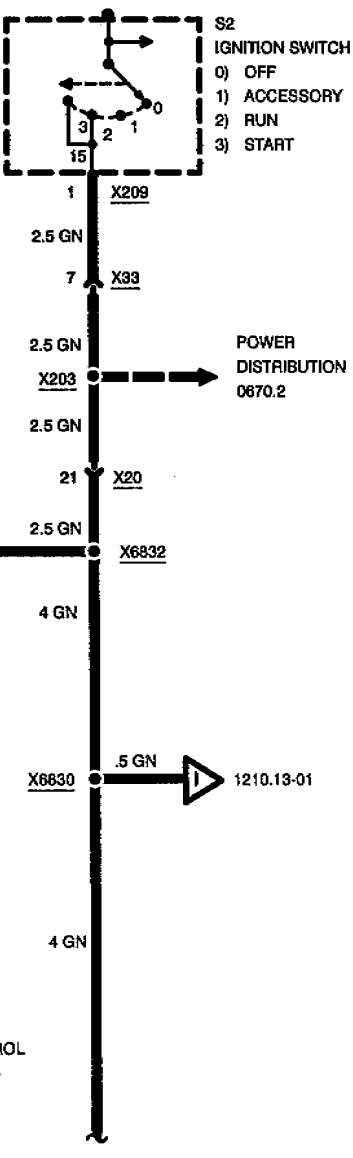
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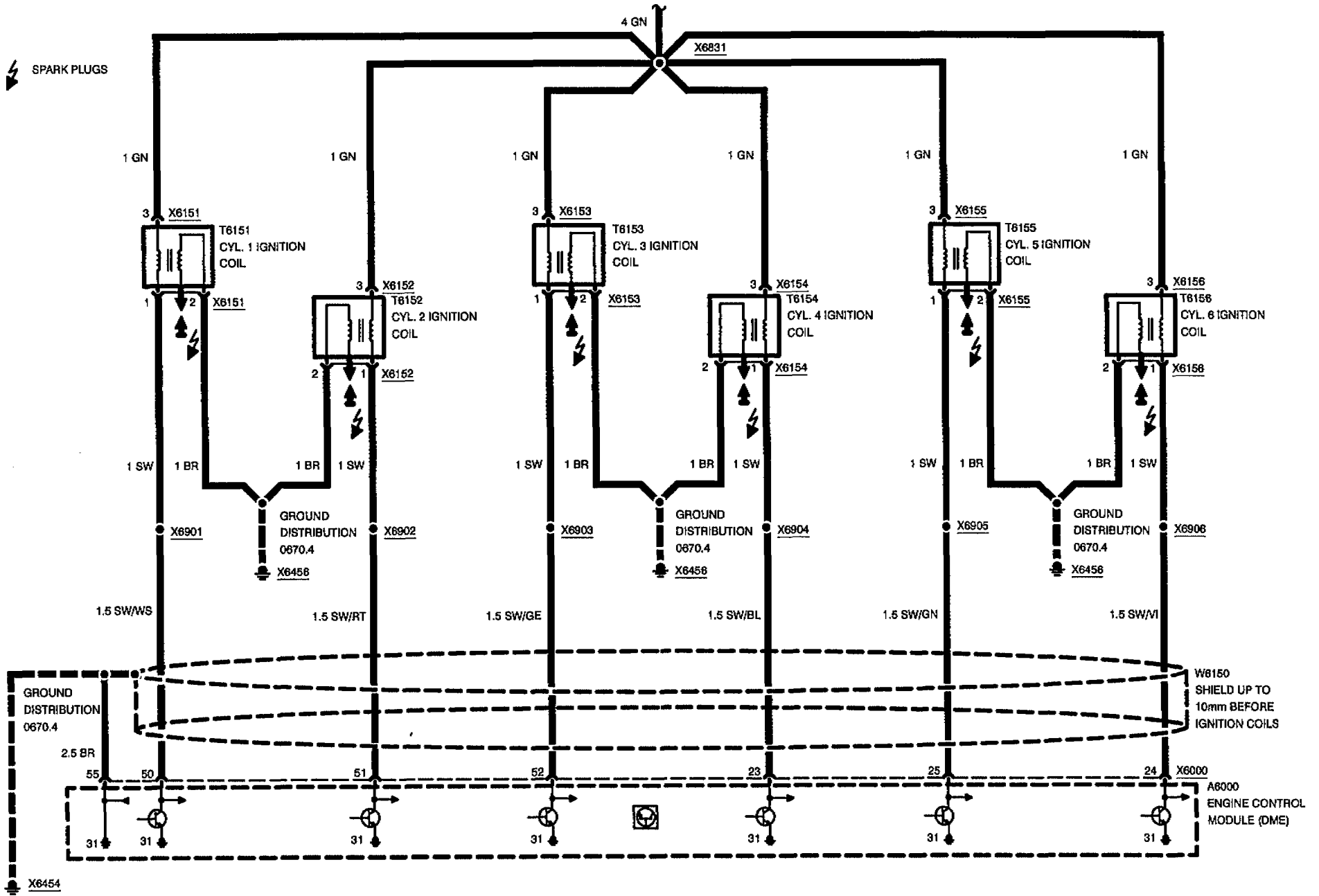


**HOT IN RUN AND START**



**HOT AT ALL TIMES**

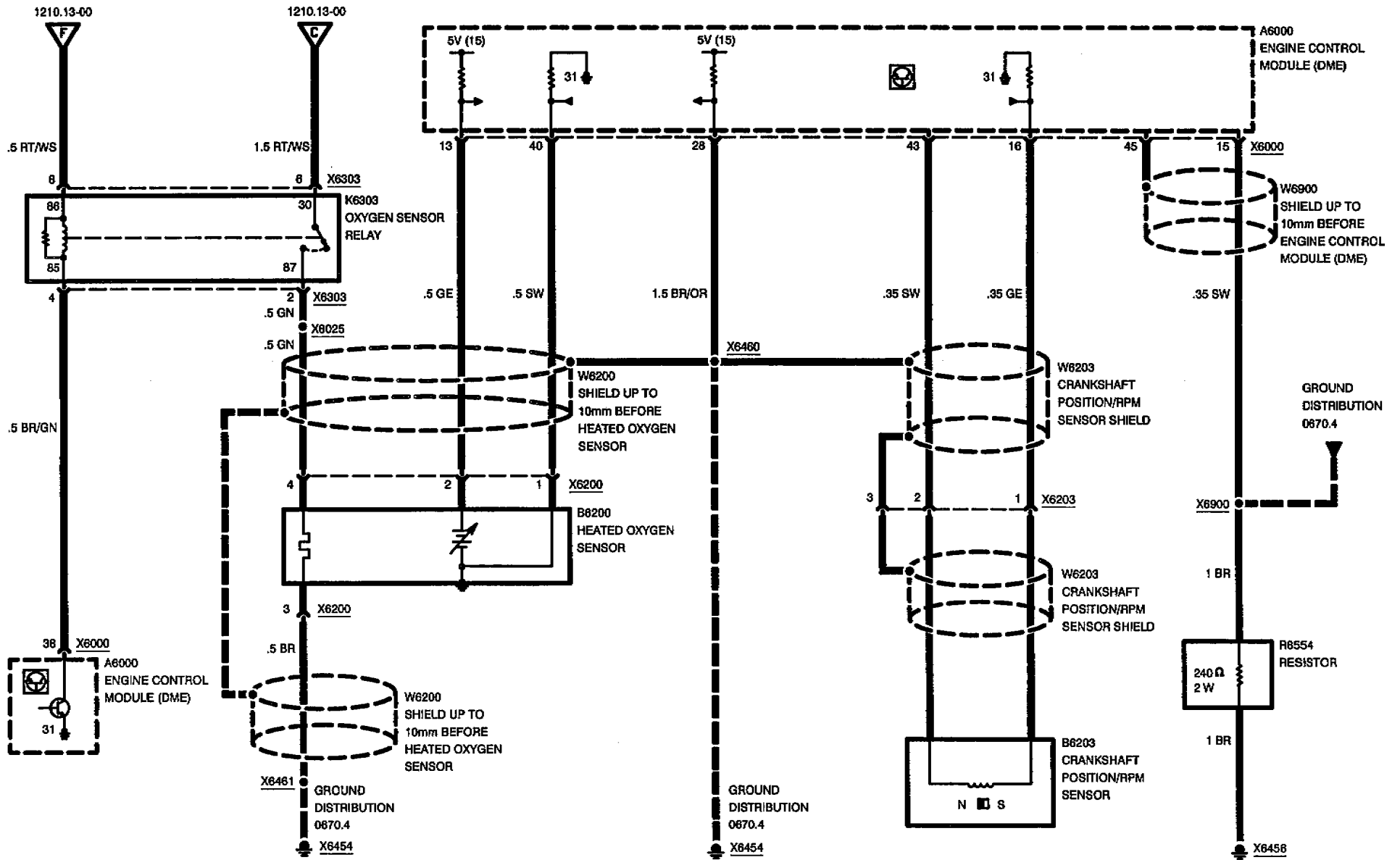






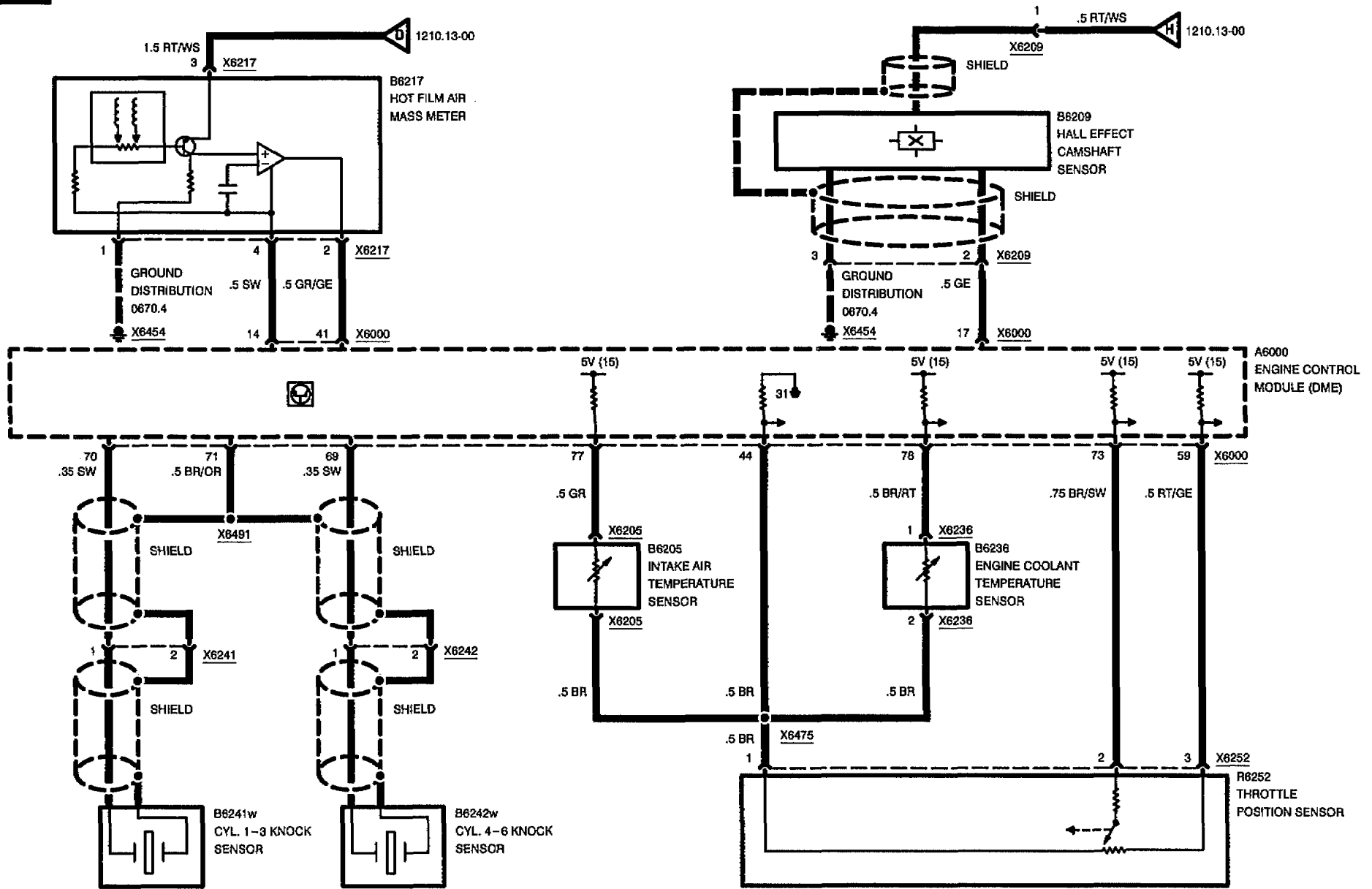
# ENGINE CONTROL SYSTEM (DME M3.3.1, 6-CYLINDER M50)

## HEATED OXYGEN SENSOR, CRANKSHAFT SENSORS





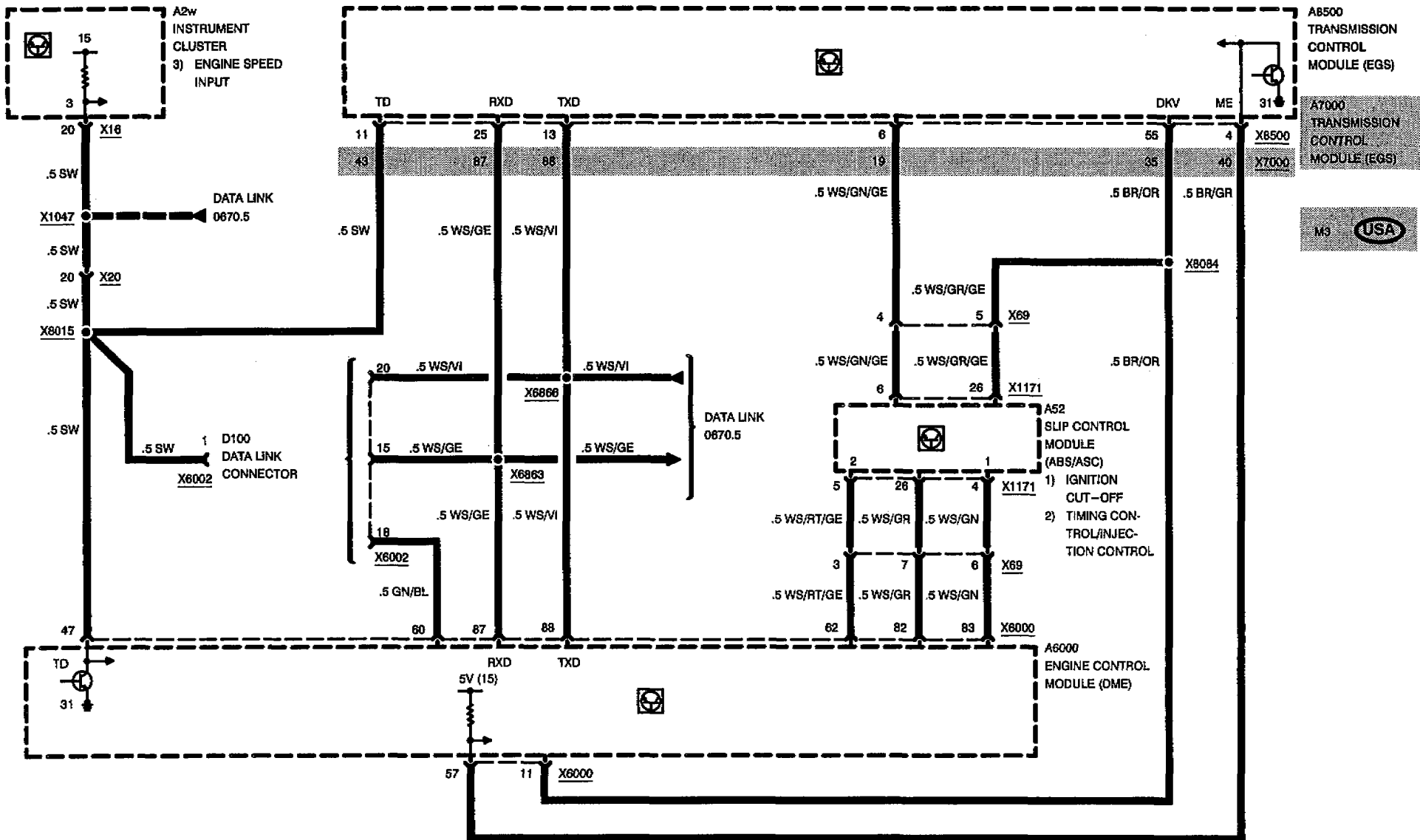
# ENGINE CONTROL SYSTEM (DME M3.3.1, 6-CYLINDER M50)





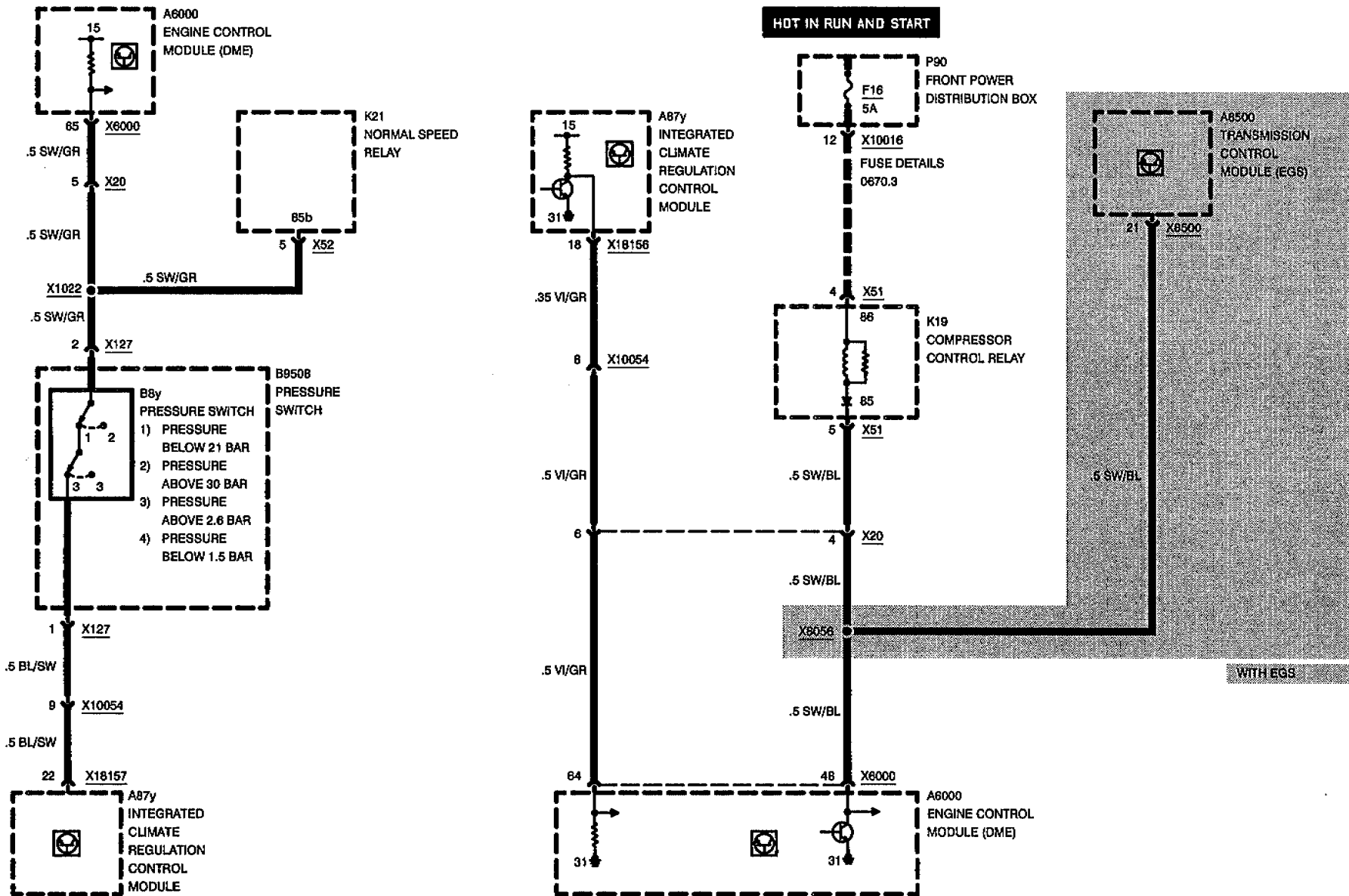
# ENGINE CONTROL SYSTEM (DME M3.3.1, 6-CYLINDER M50)

## DATA LINK



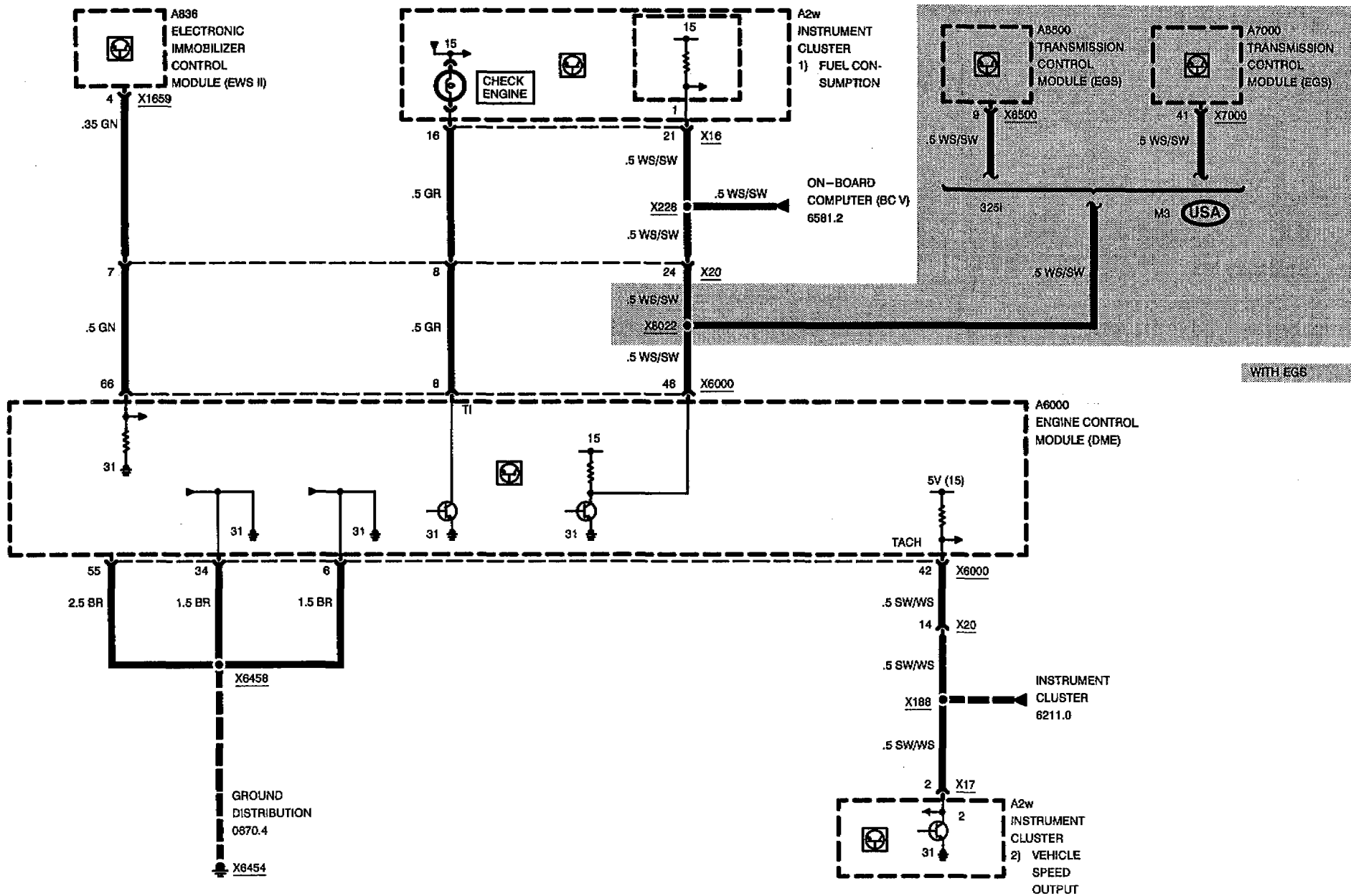


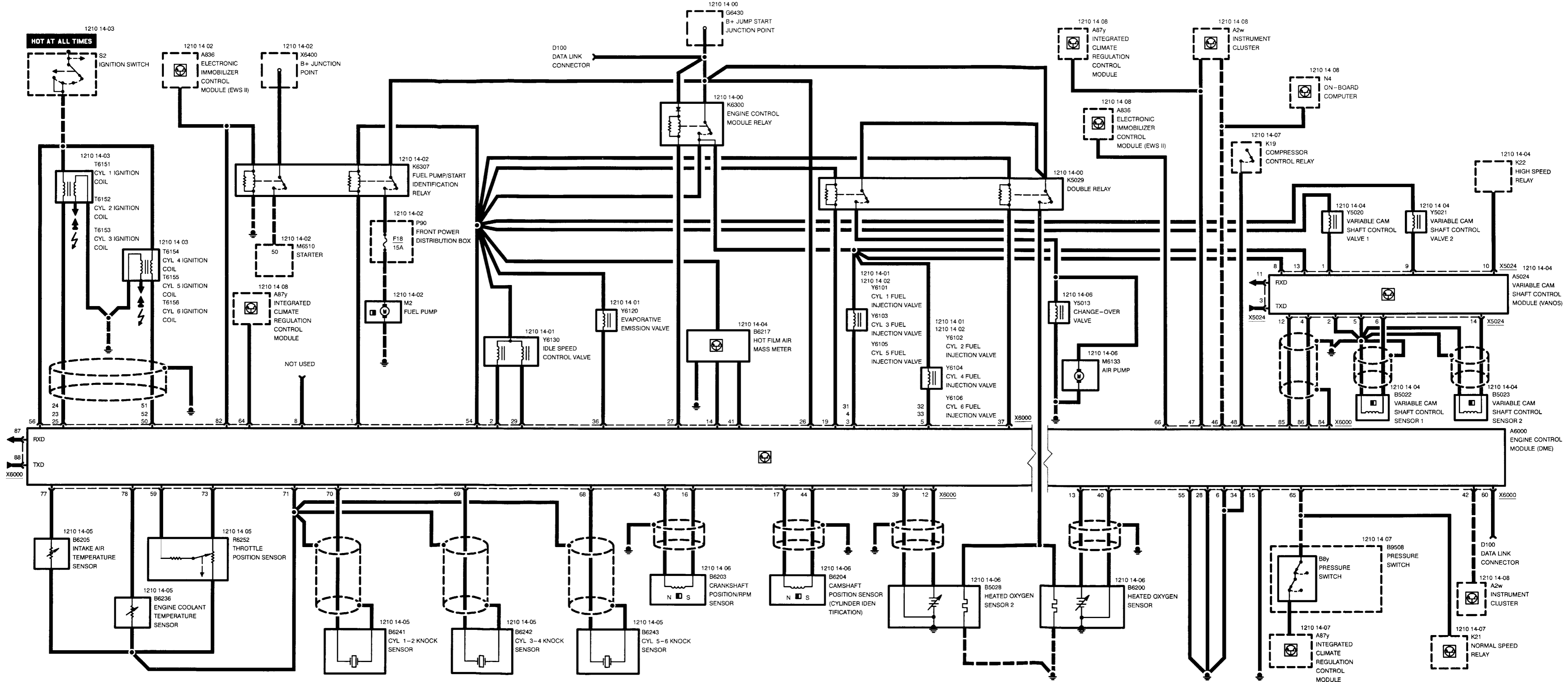
# ENGINE CONTROL SYSTEM (DME M3.3.1, 6-CYLINDER M50)

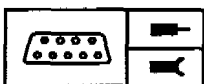




# ENGINE CONTROL SYSTEM (DME M3.3.1, 6-CYLINDER M50)







## Pin Assignments

### X5024

Pin	Type	Description/Function	Connection
1	A	Valve 1 (delayed setting)	Variable camshaft control valve 1
2	M	Ground	Ground
3	A	RxD diagnostic data link	Data link connector
4	E/A	CAN-High signal	Engine control module (DME)
5	M	Ground	Ground
6	E	Sensor 1 (output NW)	Variable camshaft control sensor 1
7		Not used	
8	E	Battery voltage	DME relay
9	A	Valve 2 (advanced setting)	Variable camshaft control valve 2
10	E	Fan signal	High speed relay (auxiliary fan)
11	E/A	TxD diagnostic data link	Data link connector
12	E/A	CAN-Low signal	Engine control module (DME)
13	E	Battery voltage	DME-relay
14	E	Sensor 2 (input NW)	Variable camshaft control sensor 2
15		Not used	

### X6000

Pin	Type	Description/Function	Connection
1	A	Fuel pump relay control	Fuel pump relay
2	A	Close winding control	Idle speed control valve
3	A	Cyl. 1 fuel injection valve control	Cyl. 1 fuel injection valve
4	A	Cyl. 3 fuel injection valve control	Cyl. 3 fuel injection valve
5	A	Cyl. 2 fuel injection valve control	Cyl. 2 fuel injection valve
6	M	Ground, full injection output stages	Ground
7		Not used	
8	A	"Check engine" indicator control	Instrument cluster
9		Not used	
10		Not used	
11		Not used	

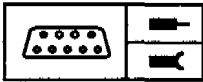
E = Input, A = Output, M = Ground



## Pin Assignments

Pin	Type	Description/Function	Connection
12	E	Oxygen sensor II signal	Heated oxygen sensor
13	E	Oxygen sensor I signal	Heated oxygen sensor
14	M	Ground, hot film air mass meter	Hot film air mass meter
15	E	Ignition control signal	Ground
16	E	Crankshaft position/RPM sensor signal	Crankshaft position/RPM sensor
17	E	Camshaft position sensor signal	Hall effect camshaft sensor
18		Not used	
19	A	Secondary air pump	Double relay
20		Not used	
21		Not used	
22		Not used	
23	A	Cyl. 2 ignition coil control	Cyl. 2 ignition coil
24	A	Cyl. 3 ignition coil control	Cyl. 3 ignition coil
25	A	Cyl. 1 ignition coil control	Cyl. 1 ignition coil
26	E	Battery voltage	Jump start junction point
27	A	DME relay signal	Engine control module relay
28	M	Ground	Ground
29	A	Opening winding control	Idle speed control valve
30		Not used	
31	A	Cyl. 5 fuel injection valve control	Cyl. 5 fuel injection valve
32	A	Cyl. 6 fuel injection valve control	Cyl. 6 fuel injection valve
33	A	Cyl. 4 fuel injection valve control	Cyl. 4 fuel injection valve
34	M	Ground, output stages	Ground
35		Not used	
36	A	Evaporative emission valve control	Evaporative emission valve
37	A	Oxygen sensor heater control	Double relay
38		Not used	
39	M	Ground, oxygen sensor II	Heated oxygen sensor
40	M	Ground, oxygen sensor I	Heated oxygen sensor
41	E	Air mass meter signal	Hot film air mass meter
42	E	Vehicle speed signal	Instrument cluster
43	M	Ground, crankshaft sensor	Crankshaft position/RPM sensor

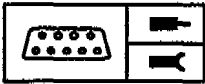
E = Input, A = Output, M = Ground



## Pin Assignments

Pin	Type	Description/Function	Connection
44	M	Ground, camshaft sensor	Hall effect camshaft sensor
45		Not used	
46	A	Ti-measurement signal (fuel consumption)	Instrument cluster/On-board computer
47	A	Crankshaft RPM speed signal TD	Instrument cluster
48	E	A/C compressor signal	Compressor control relay
49		Not used	
50	A	Cyl. 4 ignition coil control	Cyl. 4 ignition coil
51	A	Cyl. 6 ignition coil control	Cyl. 6 ignition coil
52	A	Cyl. 5 ignition coil control	Cyl. 5 ignition coil
53		Not used	
54	E	Battery voltage	Engine control module (DME)
55	M	Ground, ignition	Ground
56	E	Voltage, terminal 15	Ignition switch
57		Not used	
58		Not used	
59	A	5V voltage supply	Throttle position sensor
60	E	Programming voltage	Data link connector
61		Not used	
62		Not used	
63		Not used	
64	E	A/C signal	Integrated climate regulation control module
65	E	A/C pressure signal	Pressure switch/Auxiliary VENT I
66	E	Drive away protection signal	Electronic immobilizer control module (EWS II)
67		Not used	
68	E	Knock sensor signal	Cyl. 5-6 knock sensor
69	E	Knock sensor signal	Cyl. 3-4 knock sensor
70	E	Knock sensor signal	Cyl. 1-2 knock sensor
71	M	Ground, knock sensors and shields	Knock sensors and shields
72		Not used	
73	E	Throttle position	Throttle position sensor
74		Not used	

E = Input, A = Output, M = Ground



## Pin Assignments

Pin	Type	Description/Function	Connection
75		Not used	
76		Not used	
77	E	Engine intake air temperature	Engine intake air temperature sensor
78	E	Engine coolant temperature	Engine coolant temperature sensor
79		Not used	
80		Not used	
81		Not used	
82	E	Start revolution signal	Ignition switch
83		Not used	
84	M	Shield	Ground
85	E/A	CAN-Low signal	Variable camshaft control module
86	E/A	CAN-High signal	Variable camshaft control module
87	A	RxD diagnostic data link	Data link connector
88	E/A	TxD diagnostic data link	Data link connector

E = Input, A = Output, M = Ground

BMW  
3

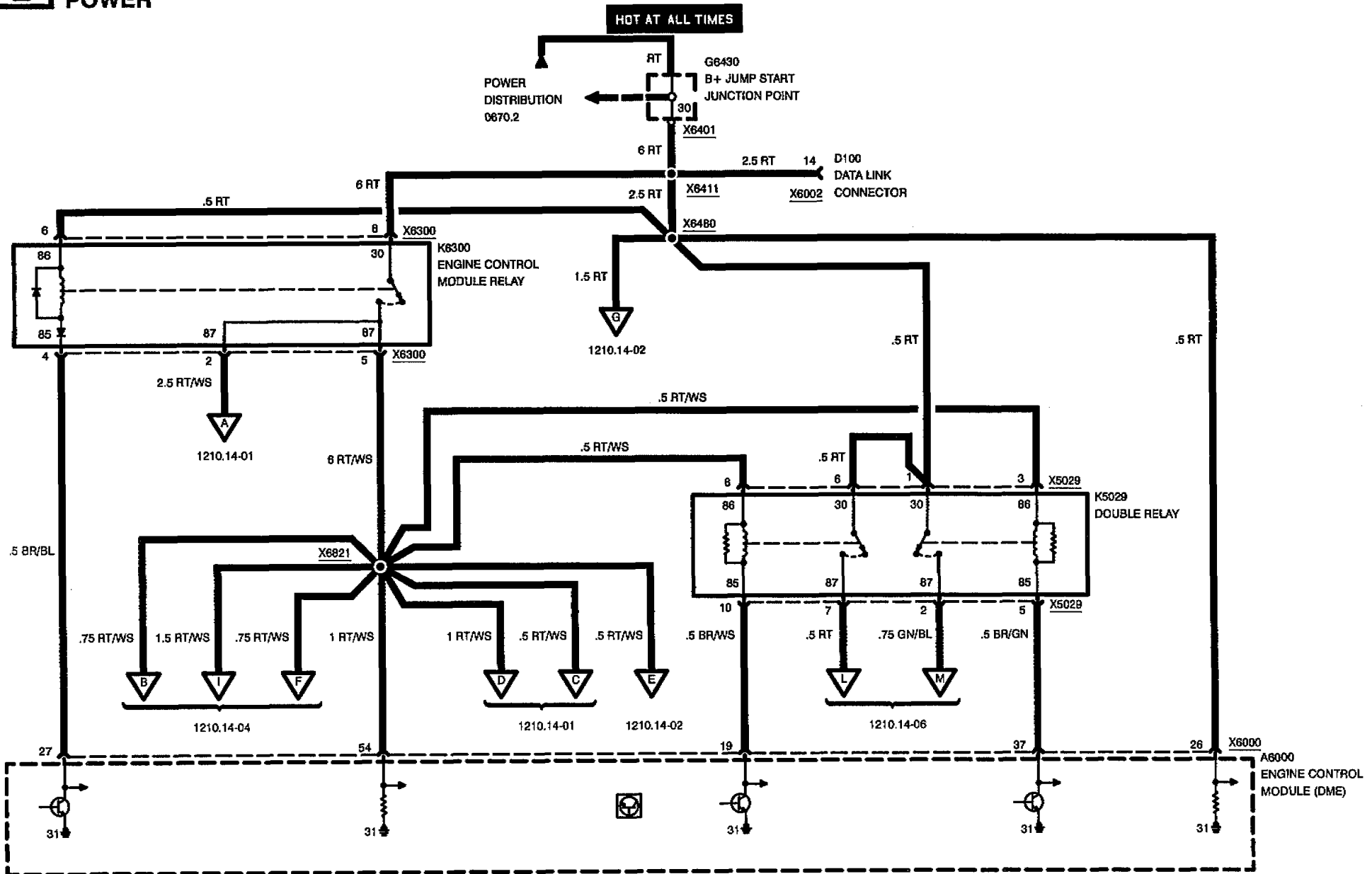
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# ENGINE CONTROL SYSTEM (DME M3.3, 6-CYLINDER S50 B30)



## POWER







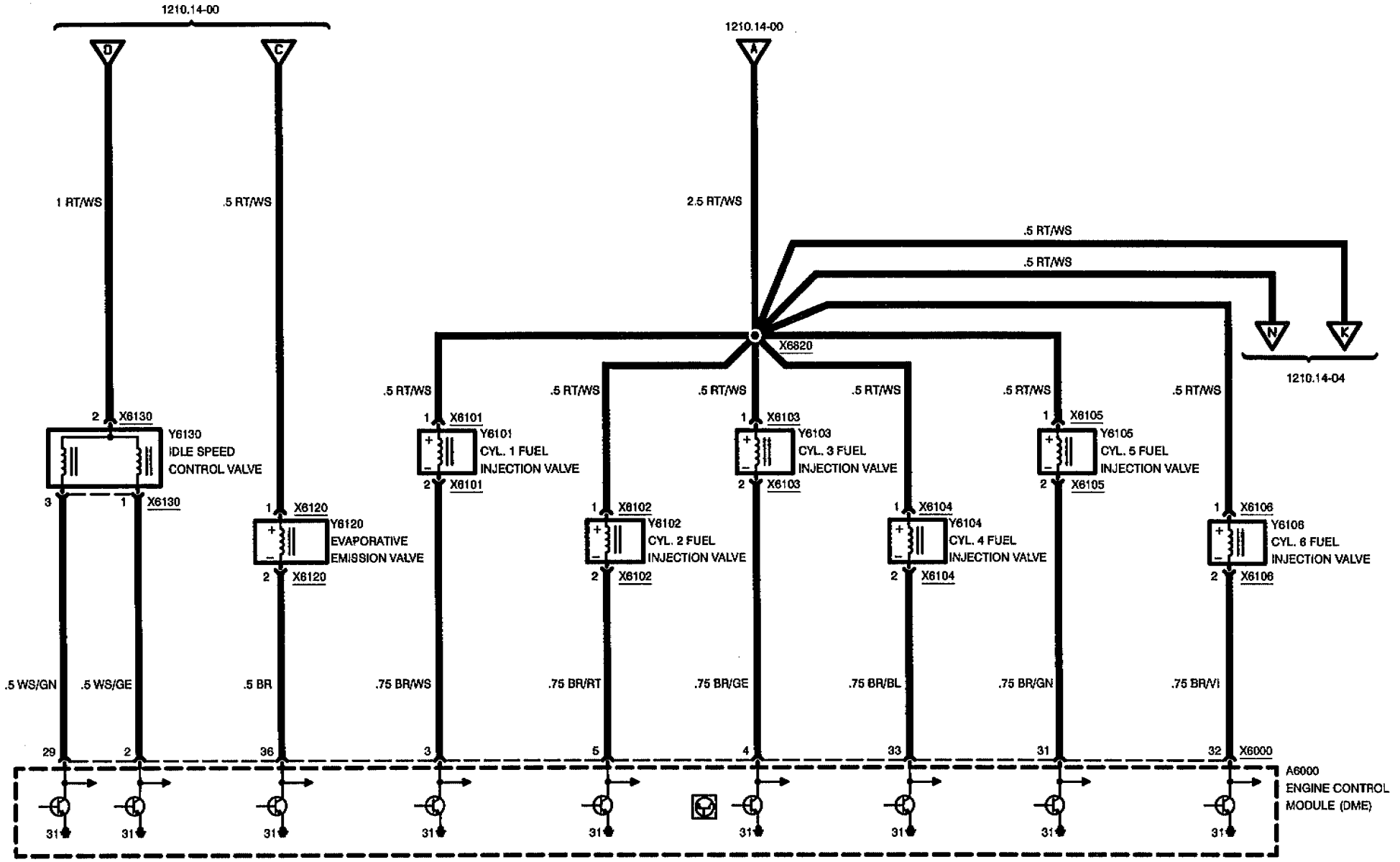
# ENGINE CONTROL SYSTEM (DME M3.3, 6-CYLINDER S50 B30)



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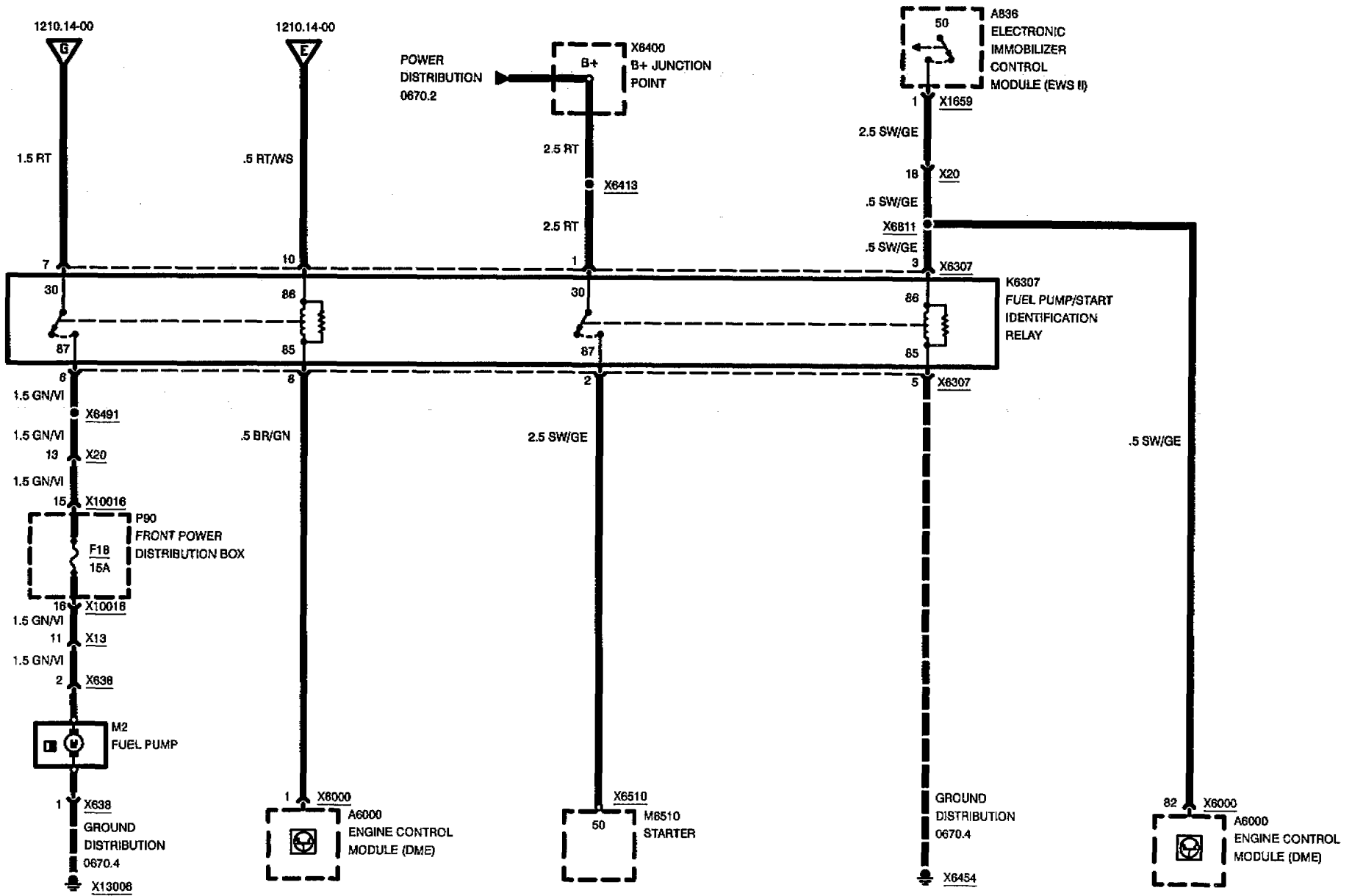
A6000  
ENGINE CONTROL  
MODULE (DME)



# ENGINE CONTROL SYSTEM (DME M3.3, 6-CYLINDER S50 B30)



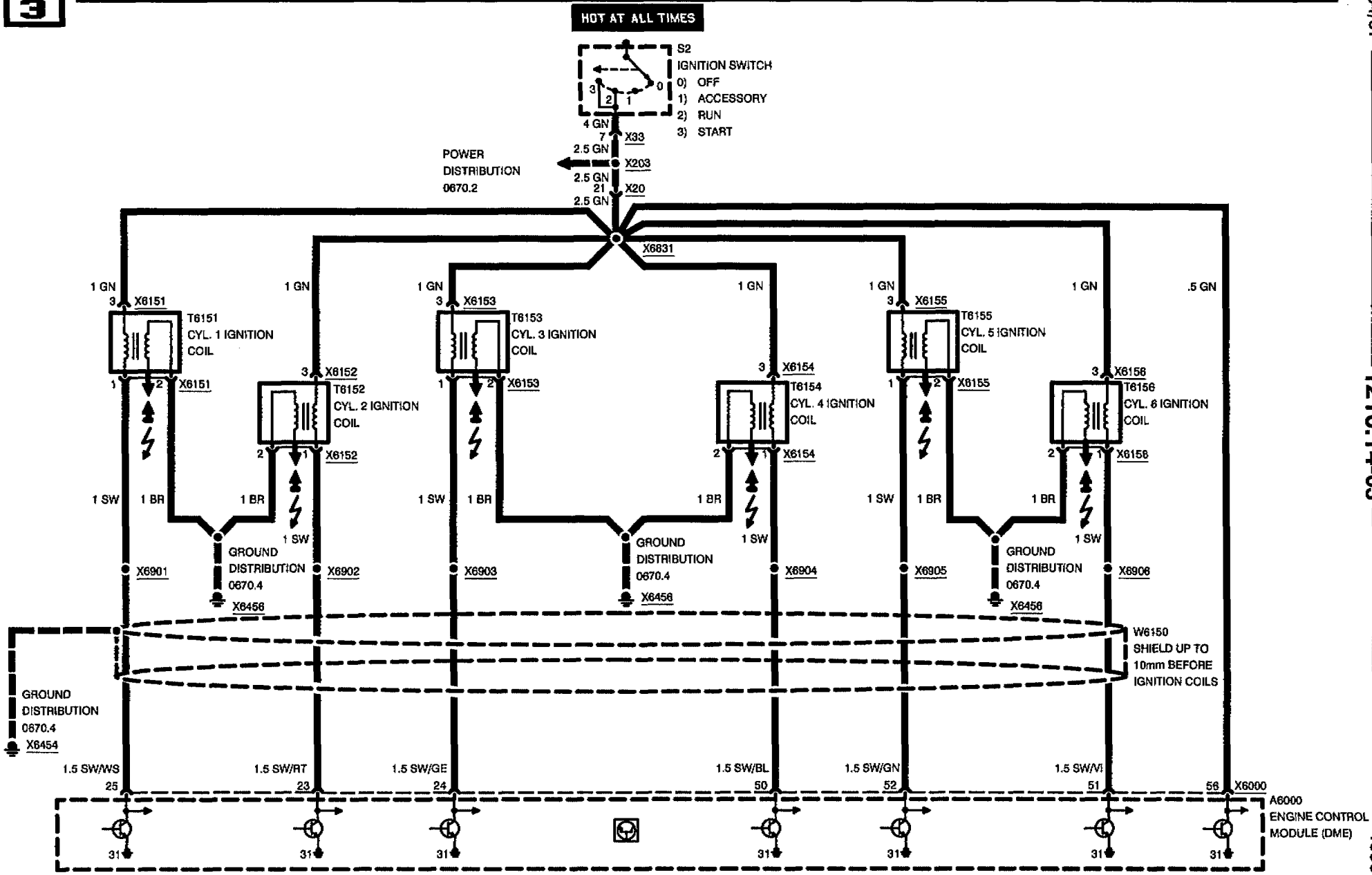
## POWER

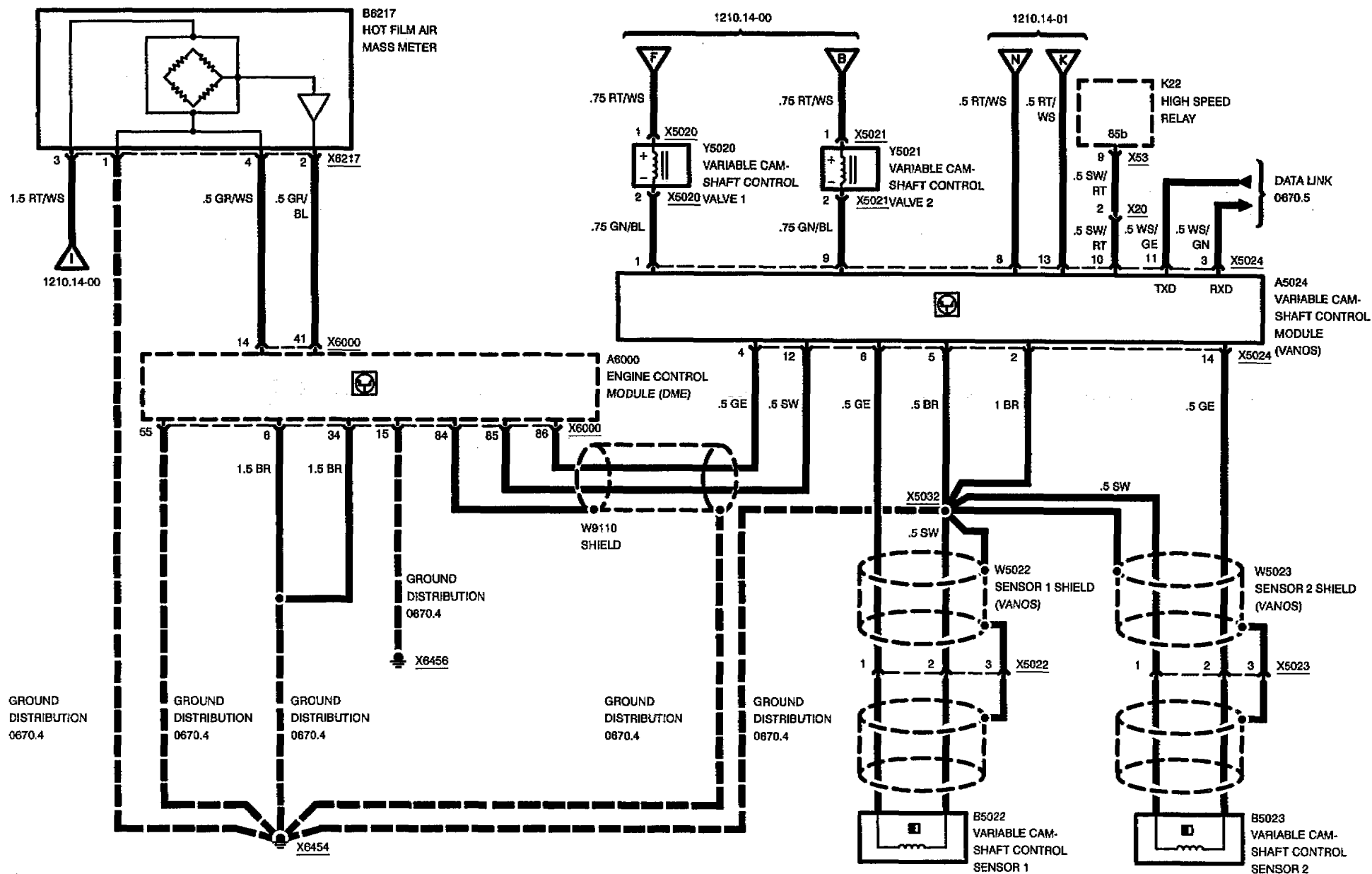


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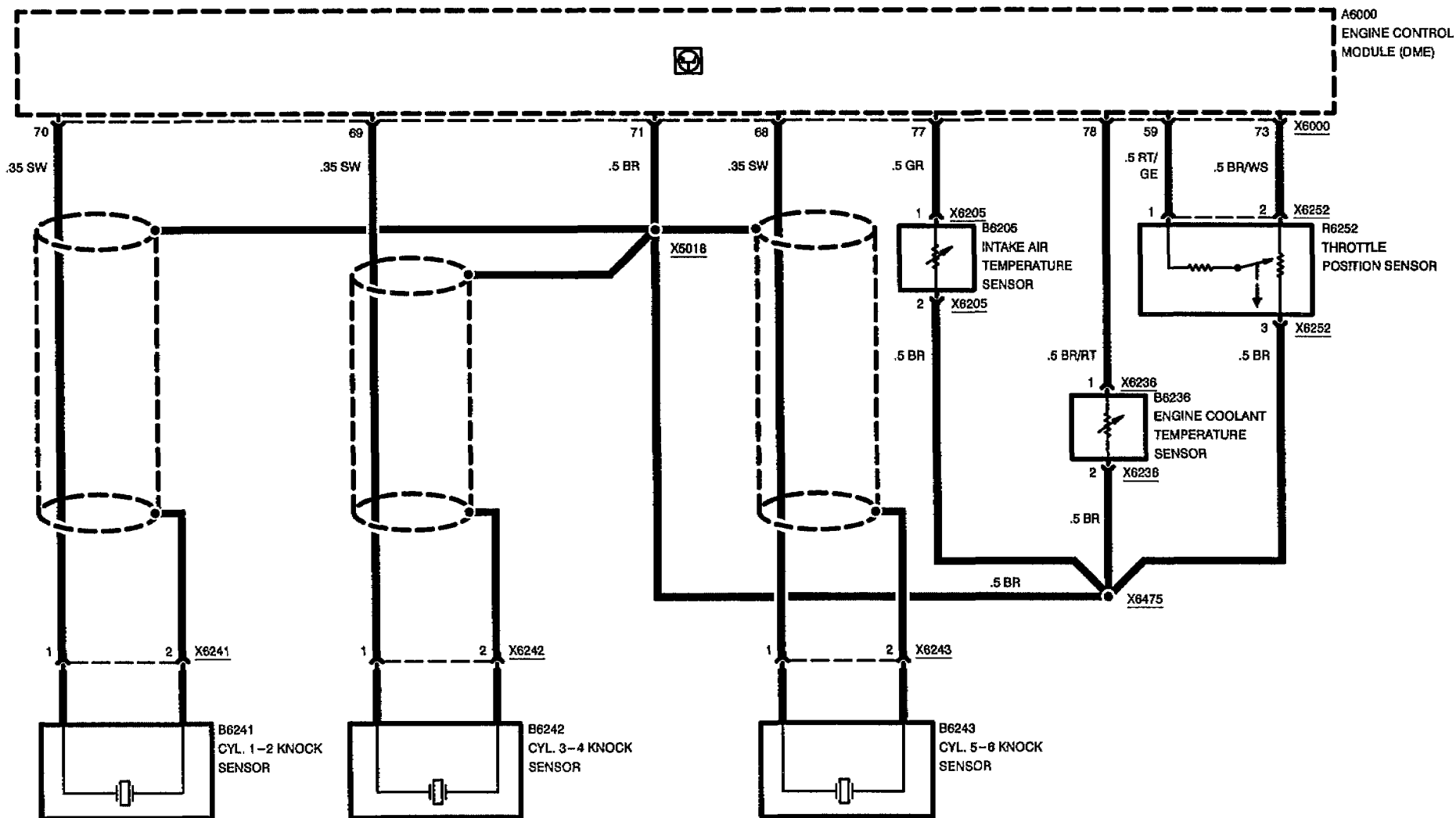


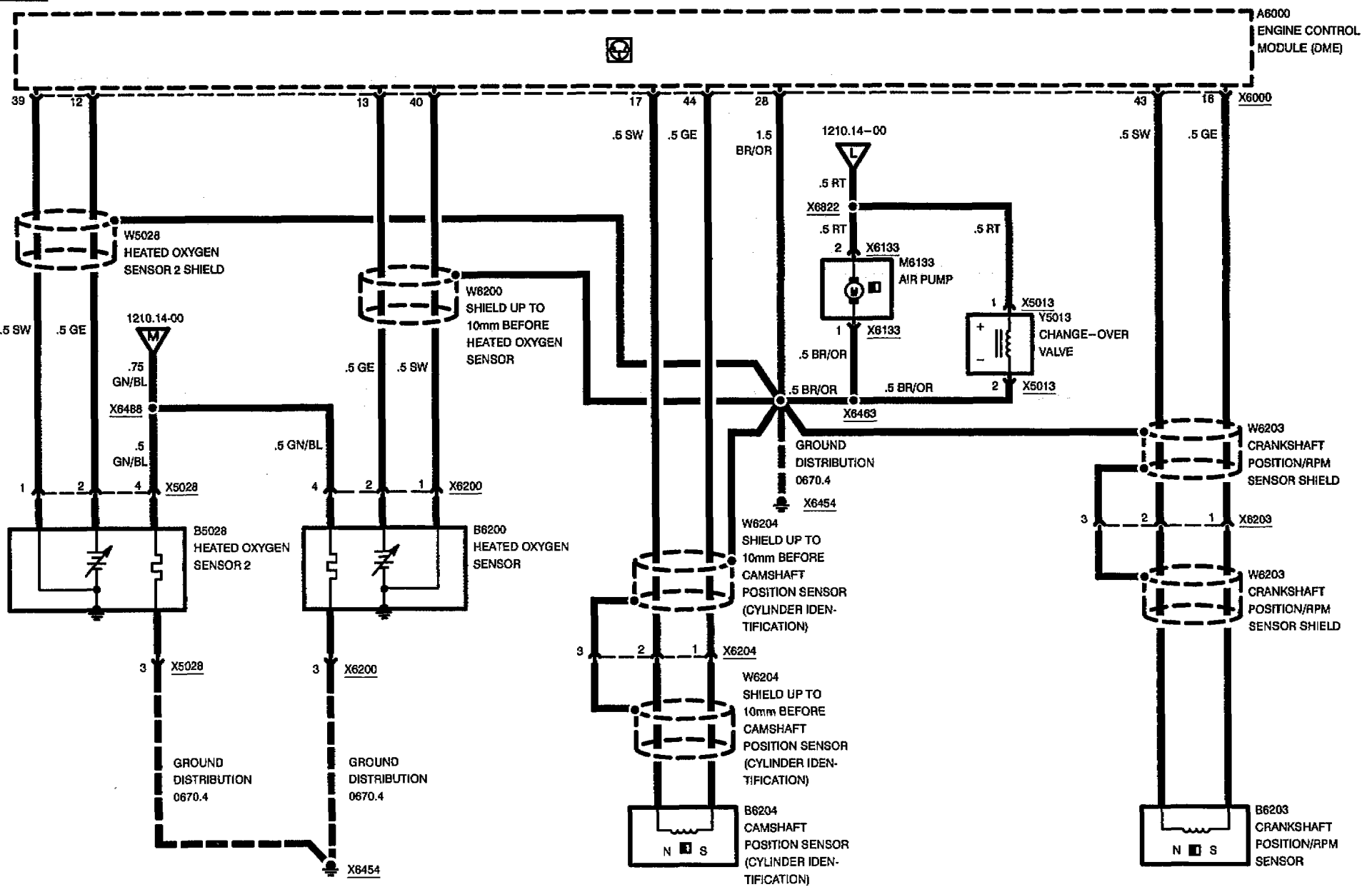




# ENGINE CONTROL SYSTEM (DME M3.3, 6-CYLINDER S50 B30)

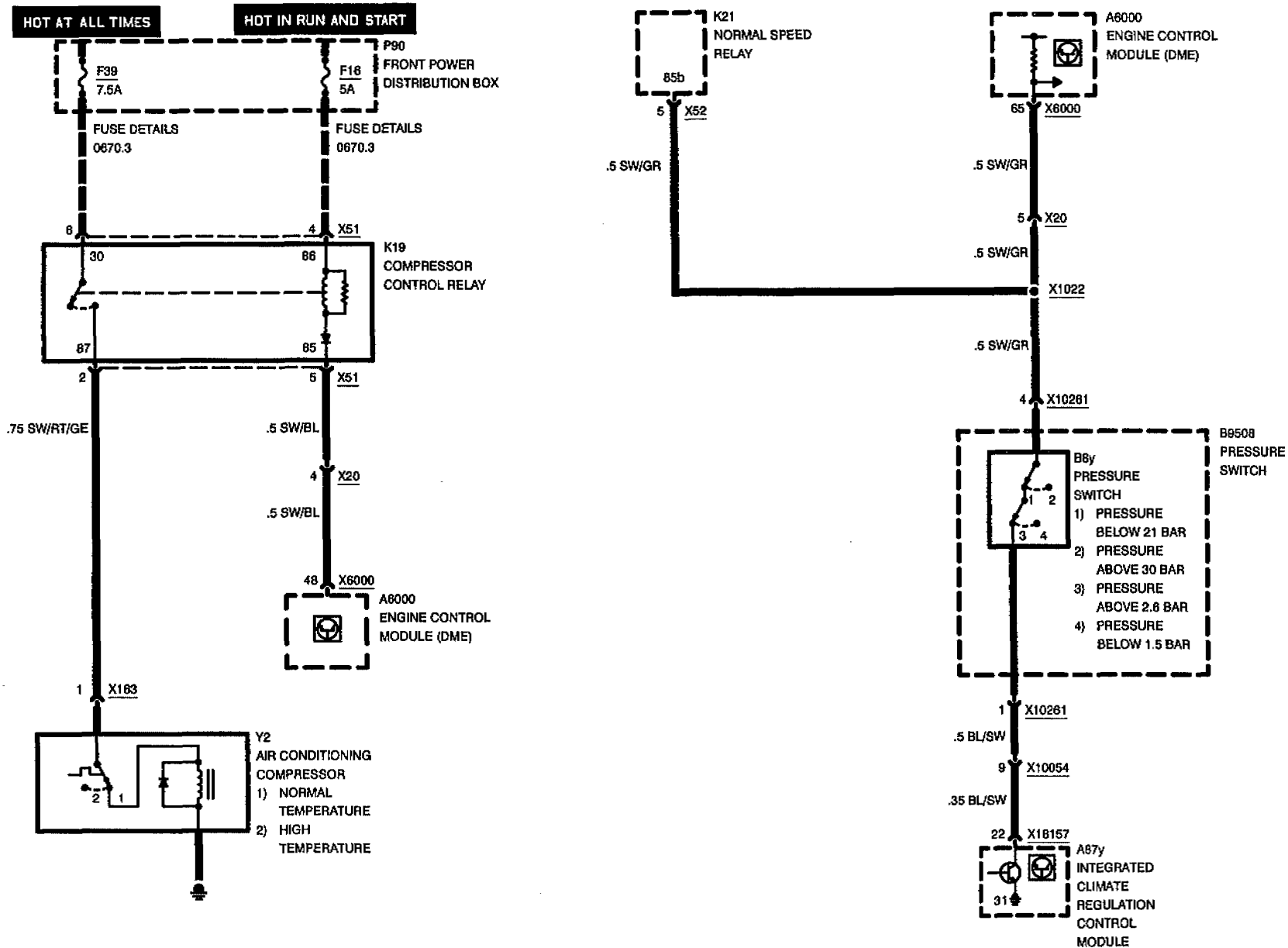
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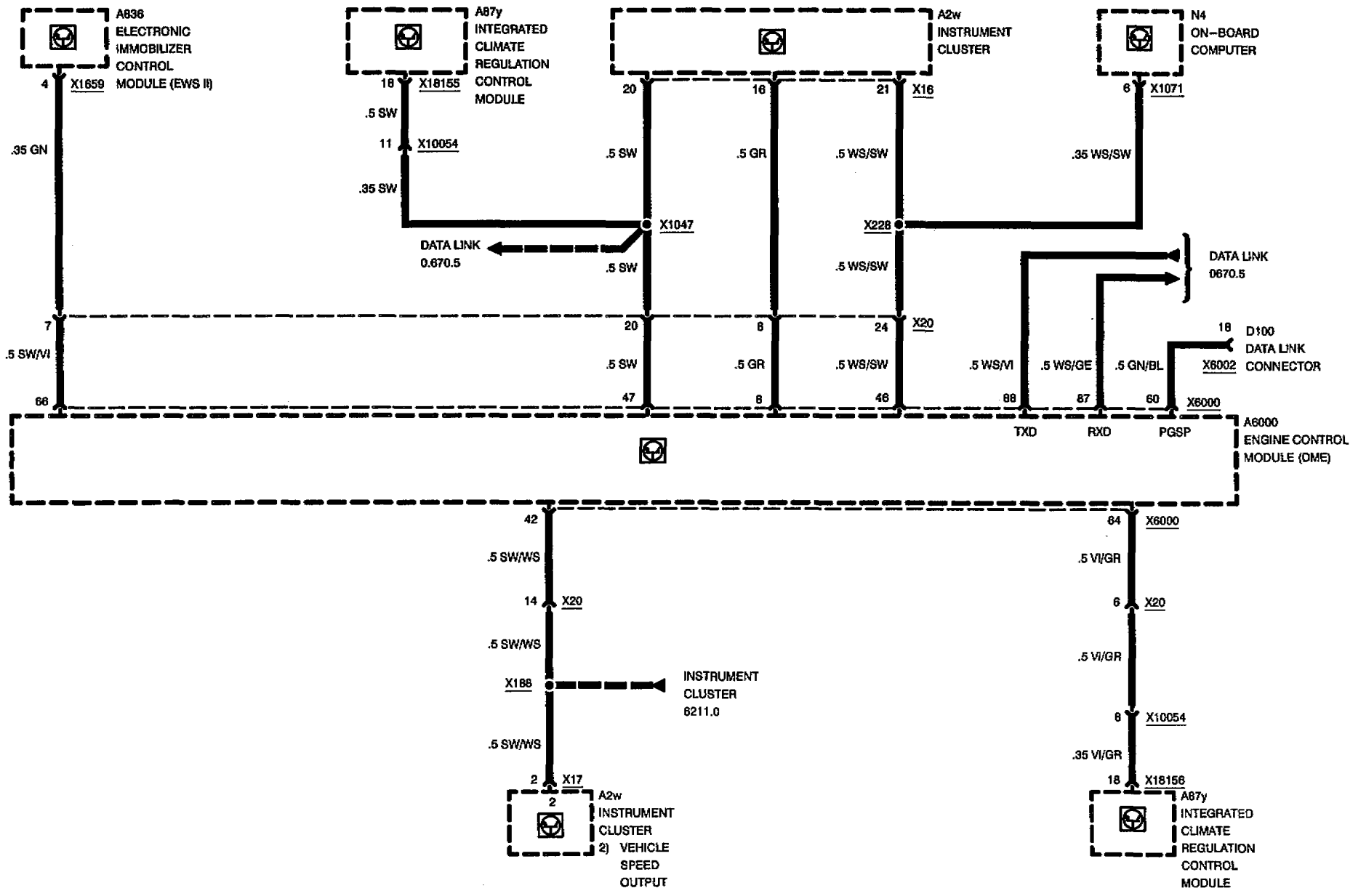


# ENGINE CONTROL SYSTEM (DME M3.3, 6-CYLINDER S50 B30)



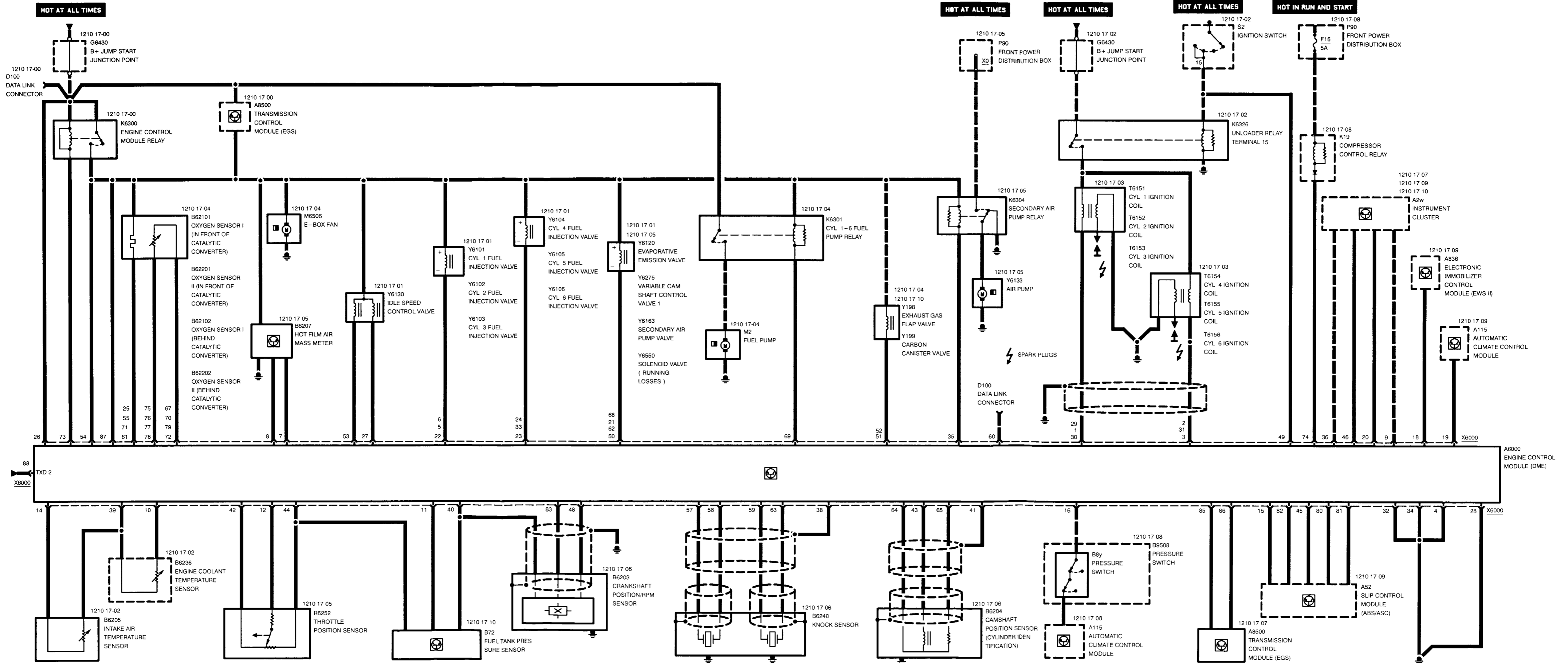


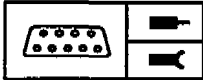
# ENGINE CONTROL SYSTEM (DME M3.3, 6-CYLINDER S50 B30)



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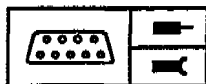


## Pin Assignments

### 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)	Instrument cluster
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

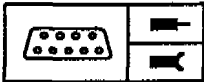
E = Input, A = Output, M = Ground



## 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	E	Camshaft position	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	Carbon canister valve
52	A	Signal exhaust flap	Exhaust gas flap valve
53	A	Activate valve	Idle speed control valve
54	E	Battery voltage, terminal 87	Engine control module relay
55	M	Oxygen sensor heating ground	Oxygen sensor (in front of catalytic converter)
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

E = Input, A = Output, M = Ground



## Pin Assignments

Pin	Type	Description/Function	Connection
60	E	Programming voltage	Data link connector
61	M	Oxygen sensor heating ground	Oxygen sensor (behind catalytic converter)
62	A	Activate valve	Secondary air pump valve
63	E	Cyl. 4-6 knock sensor	Knock sensor
64	M	Ground	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	A	Activate valve	Evaporative emission valve
69	A	Activate relay	Fuel pump relay
70	M	Oxygen sensor signal ground	Oxygen sensor (in front of catalytic converter)
71	M	Oxygen sensor signal ground	Oxygen sensor (behind catalytic converter)
72	M	Oxygen sensor signal ground	Oxygen sensor (behind catalytic converter)
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	E	Sensor signal	Oxygen sensor (in front of catalytic converter)
77	E	Sensor signal	Oxygen sensor (behind catalytic converter)
78	E	Sensor signal	Oxygen sensor (behind catalytic converter)
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

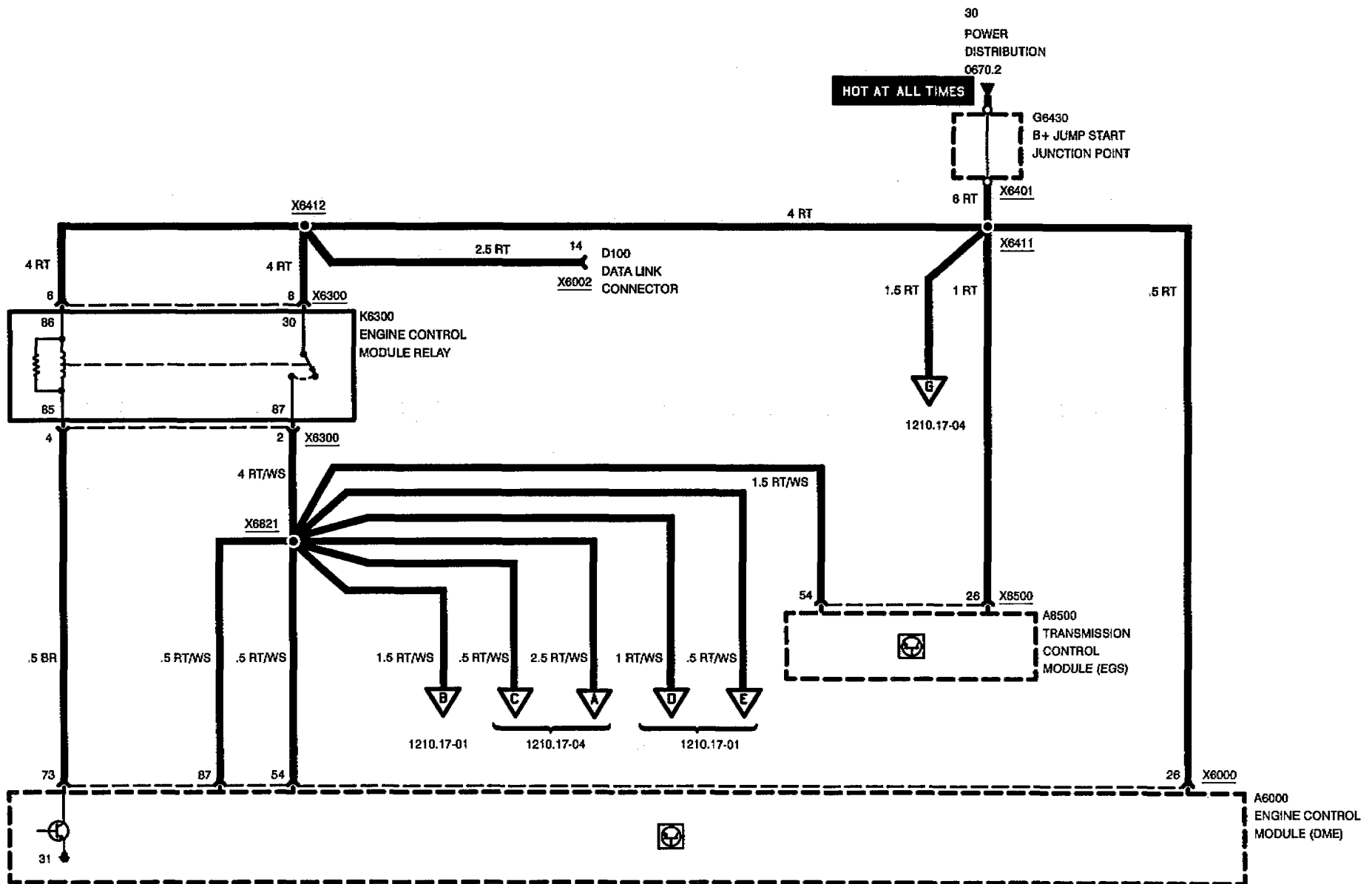
E = Input, A = Output, M = Ground



# ENGINE CONTROL SYSTEM MS41.1 (6-CYLINDER M52)

328i

## POWER



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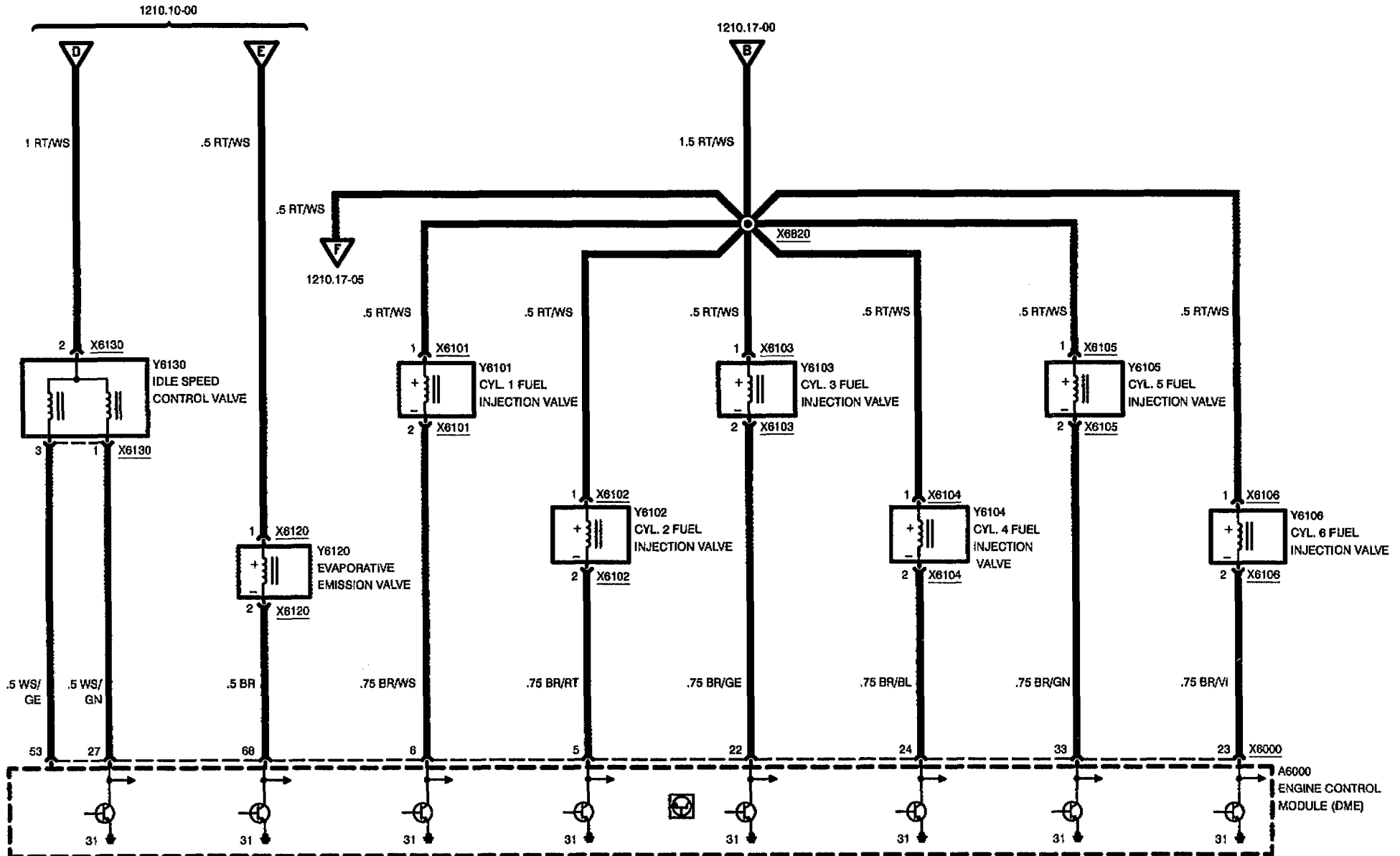
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# ENGINE CONTROL SYSTEM MS41.1 (6-CYLINDER M52)

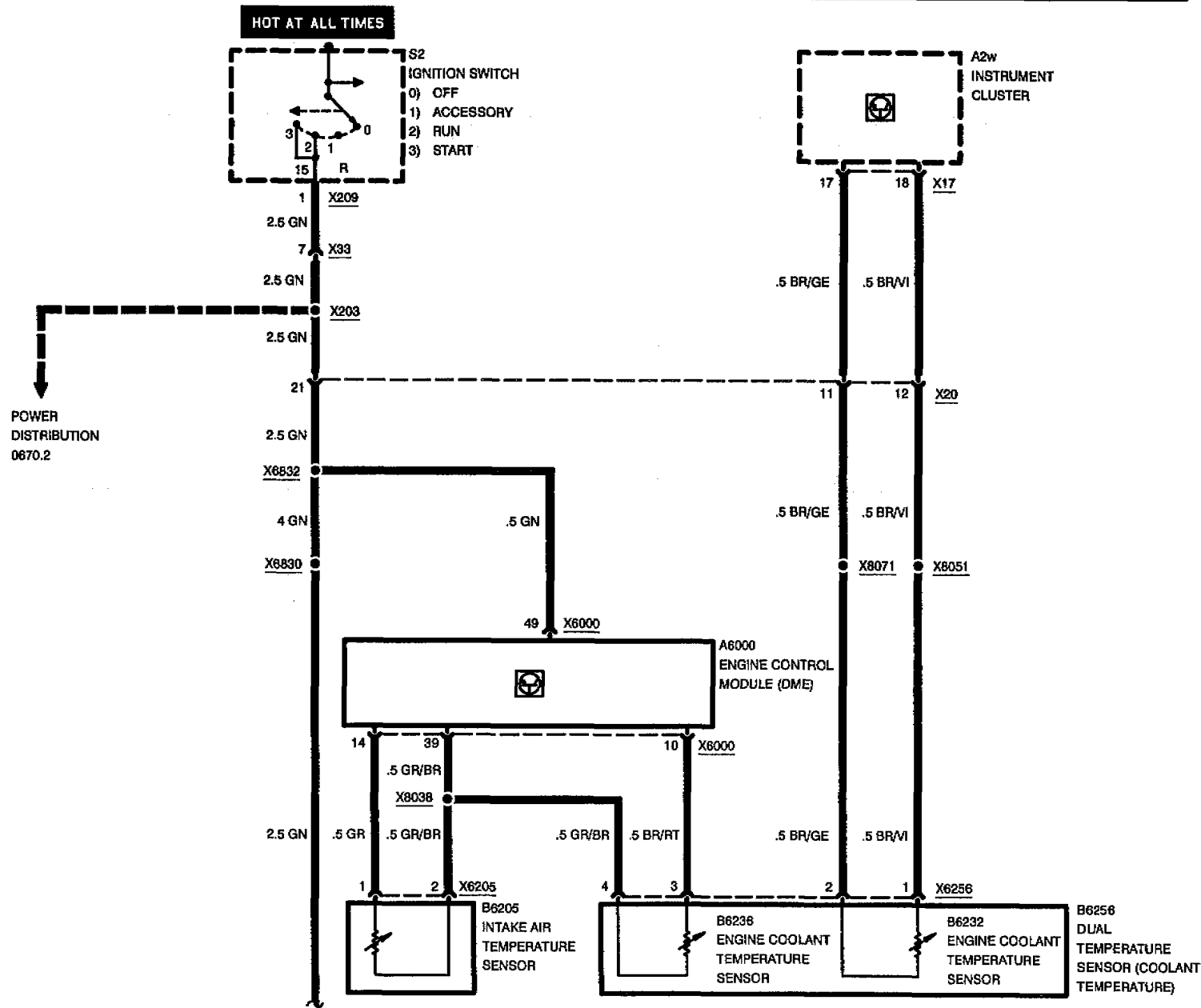
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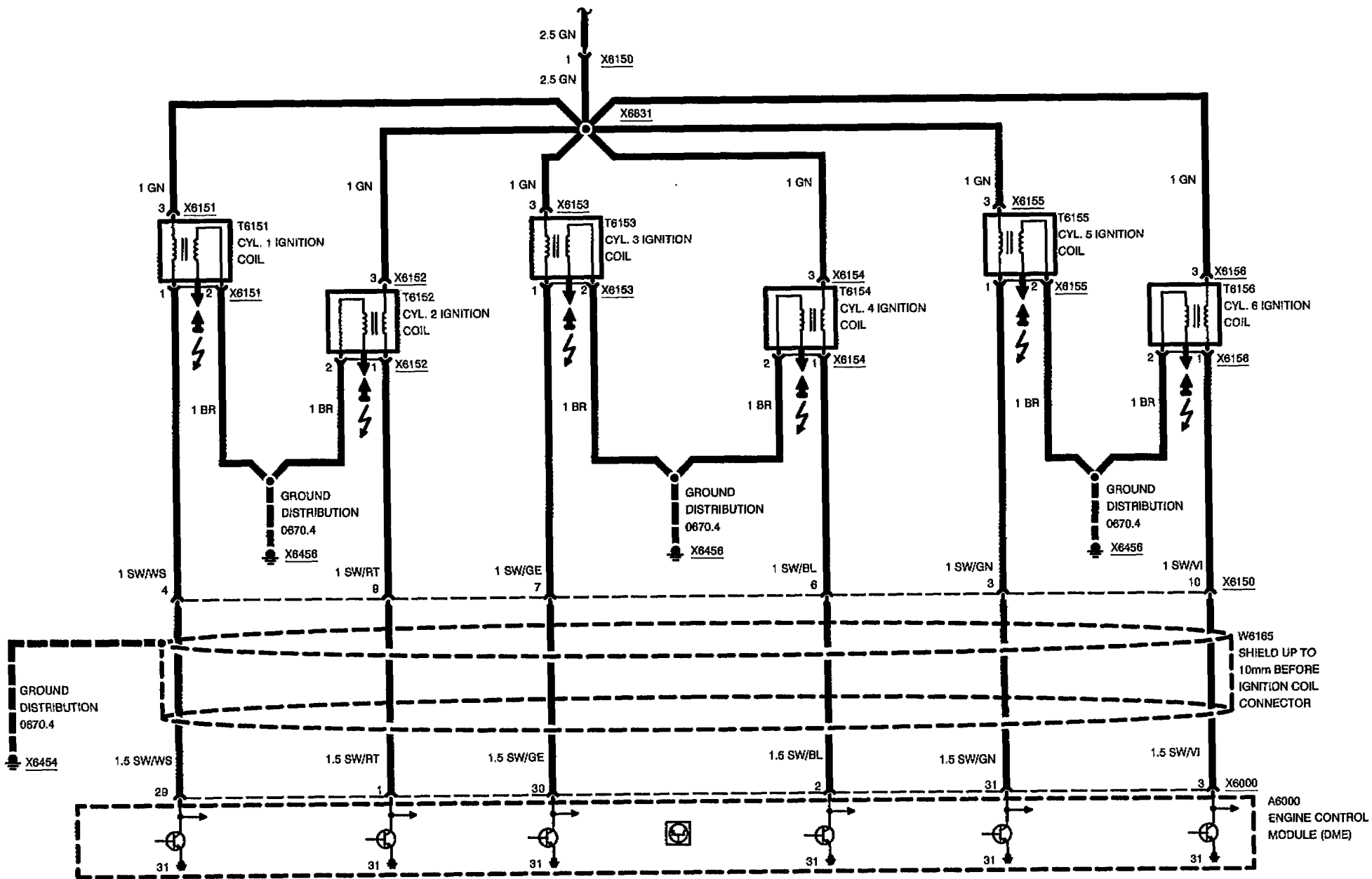
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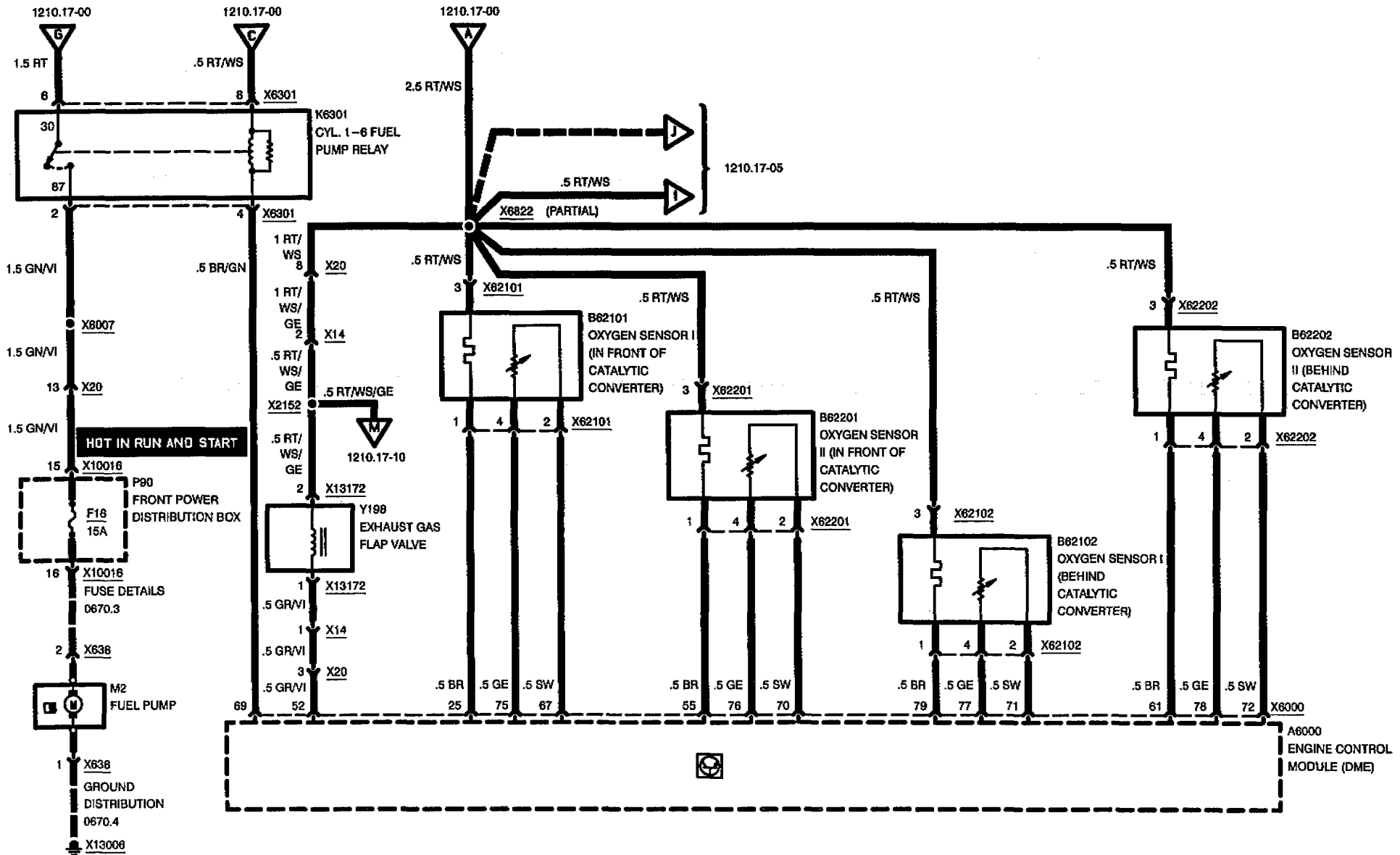
1996



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1996





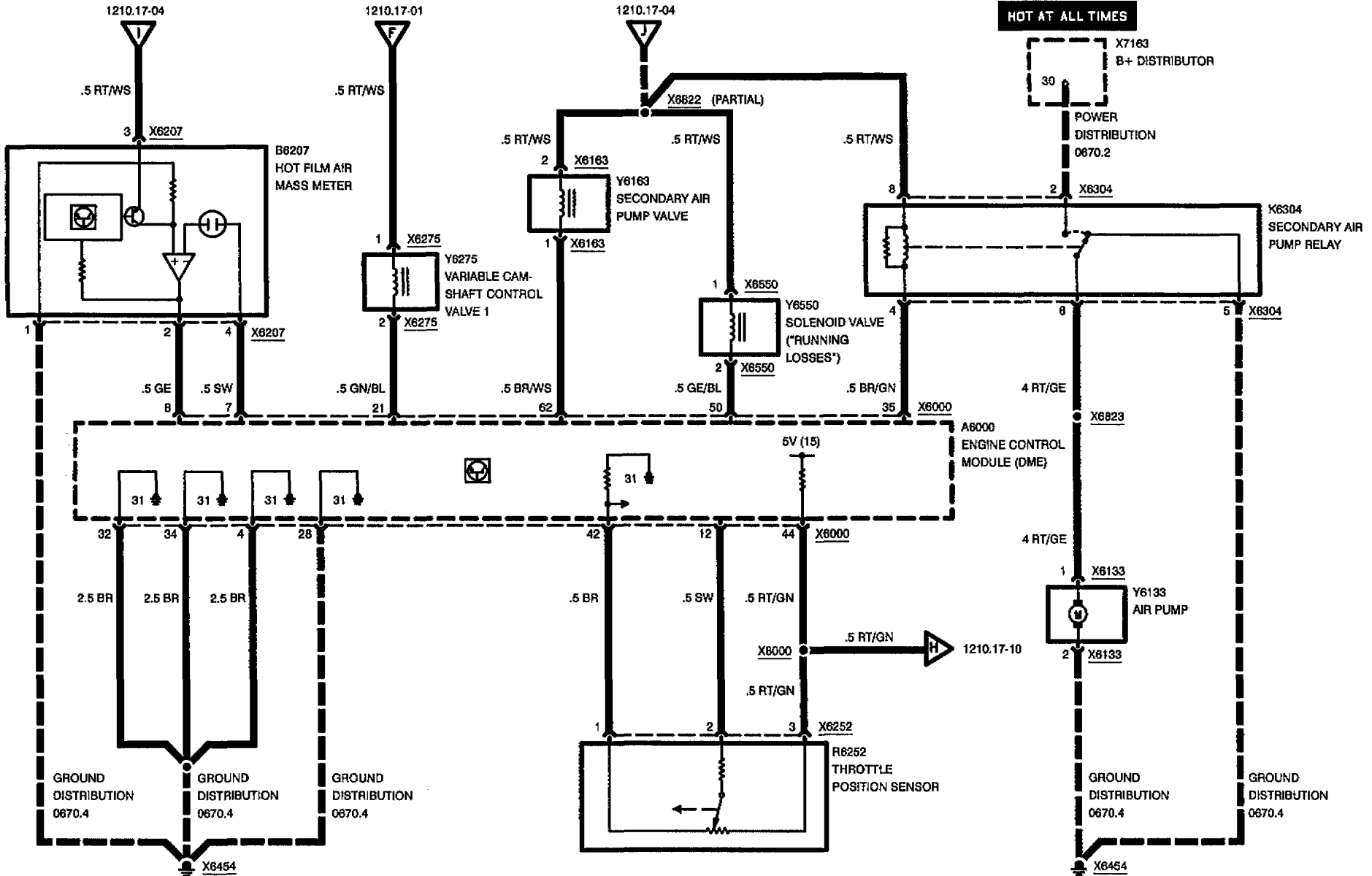


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1996



# ENGINE CONTROL SYSTEM MS41.1 (6-CYLINDER M52)

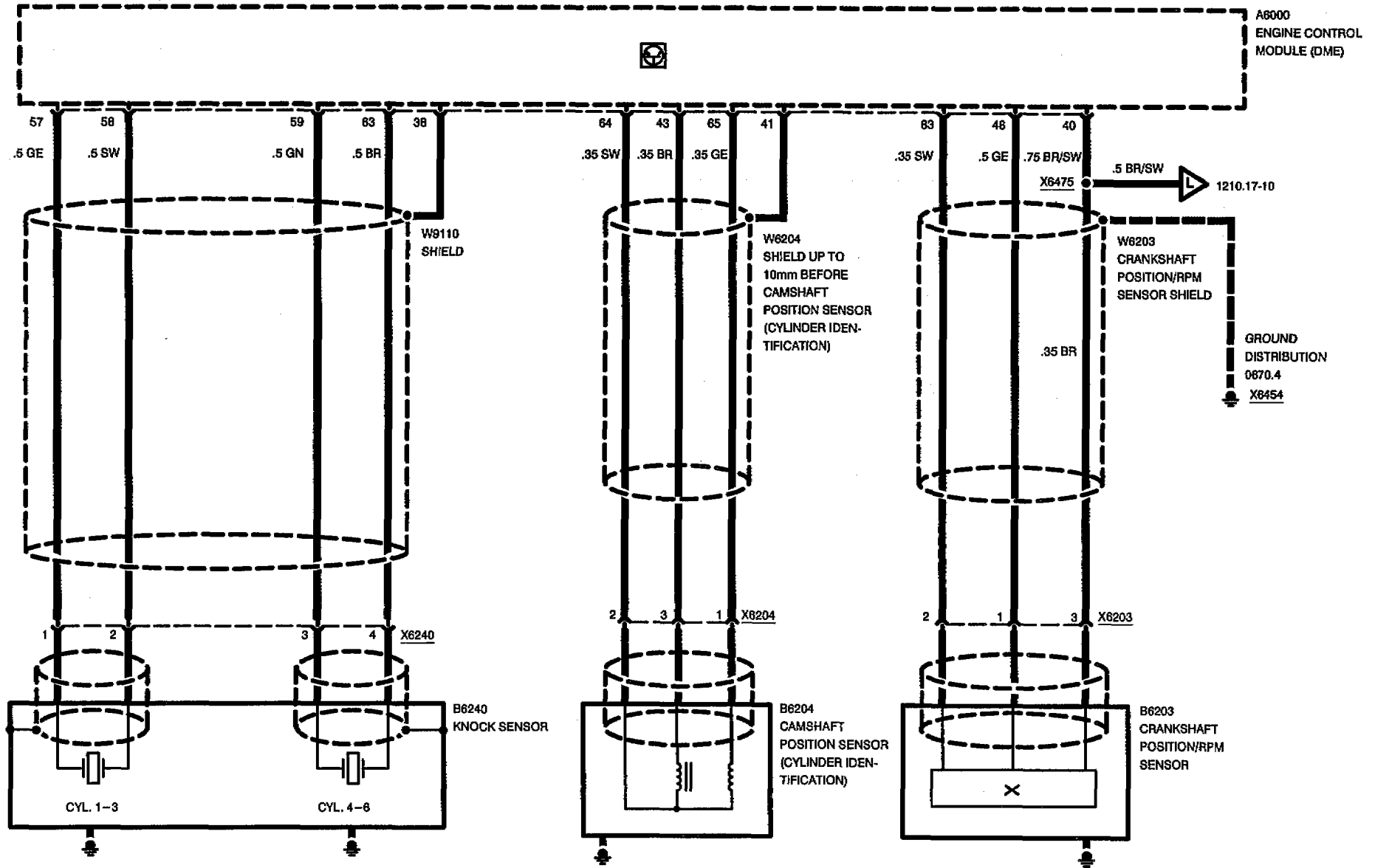
328i



04/97

1210.17-05

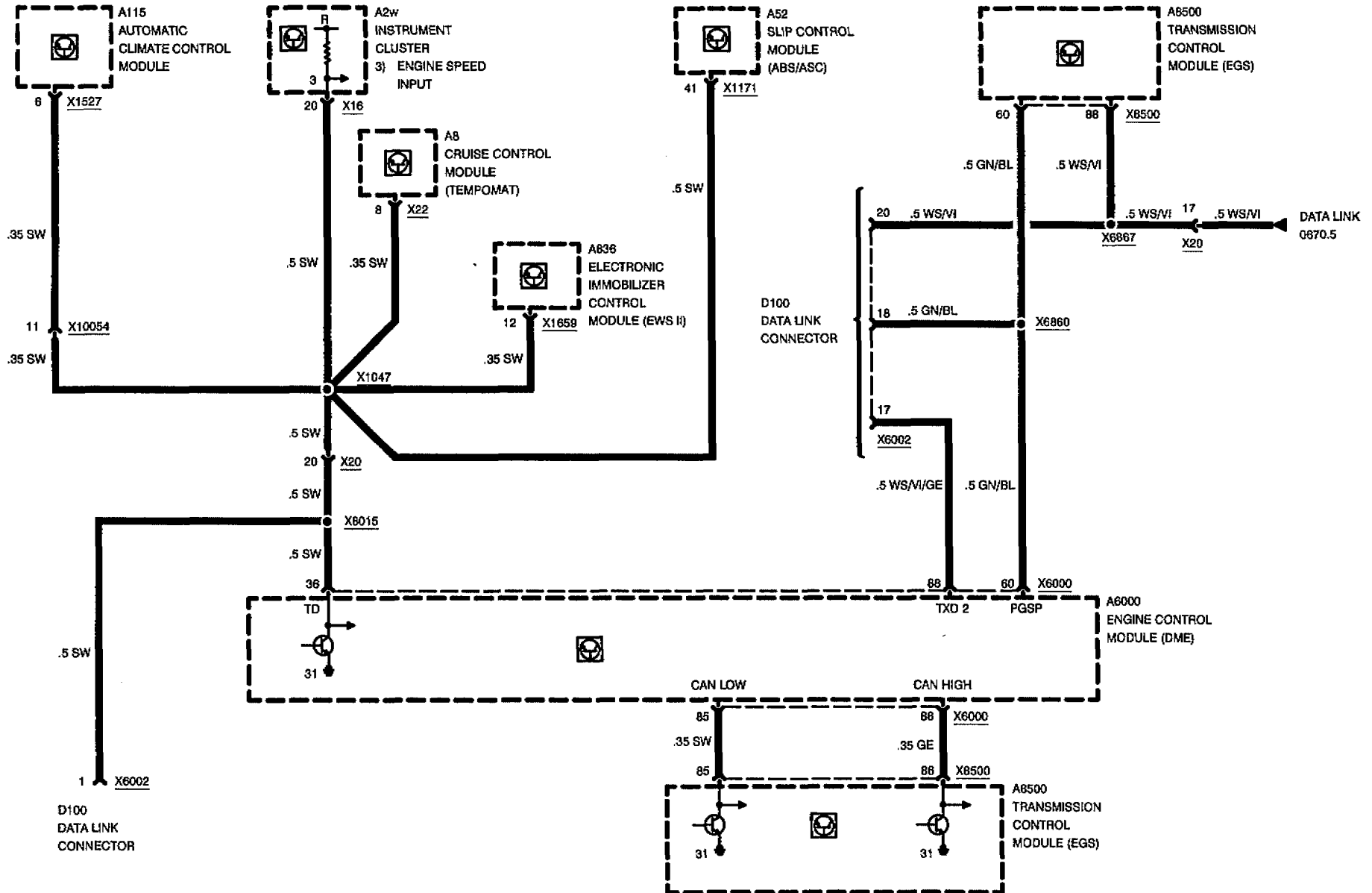
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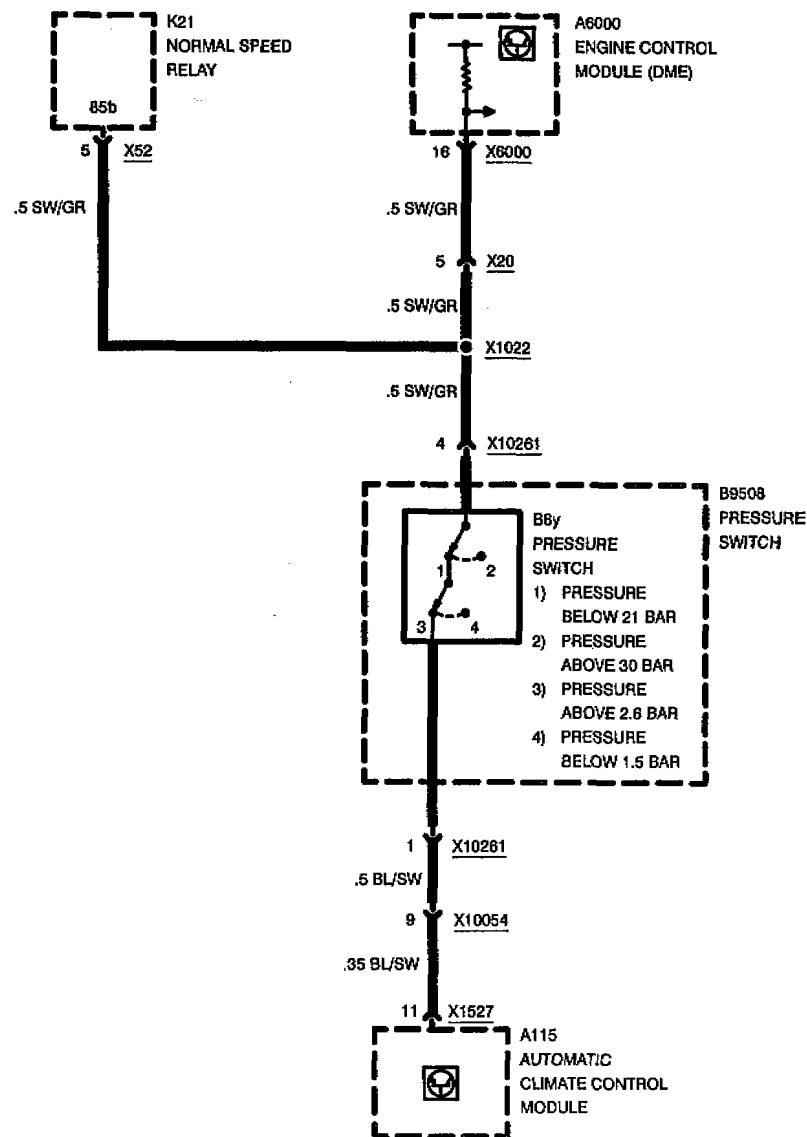
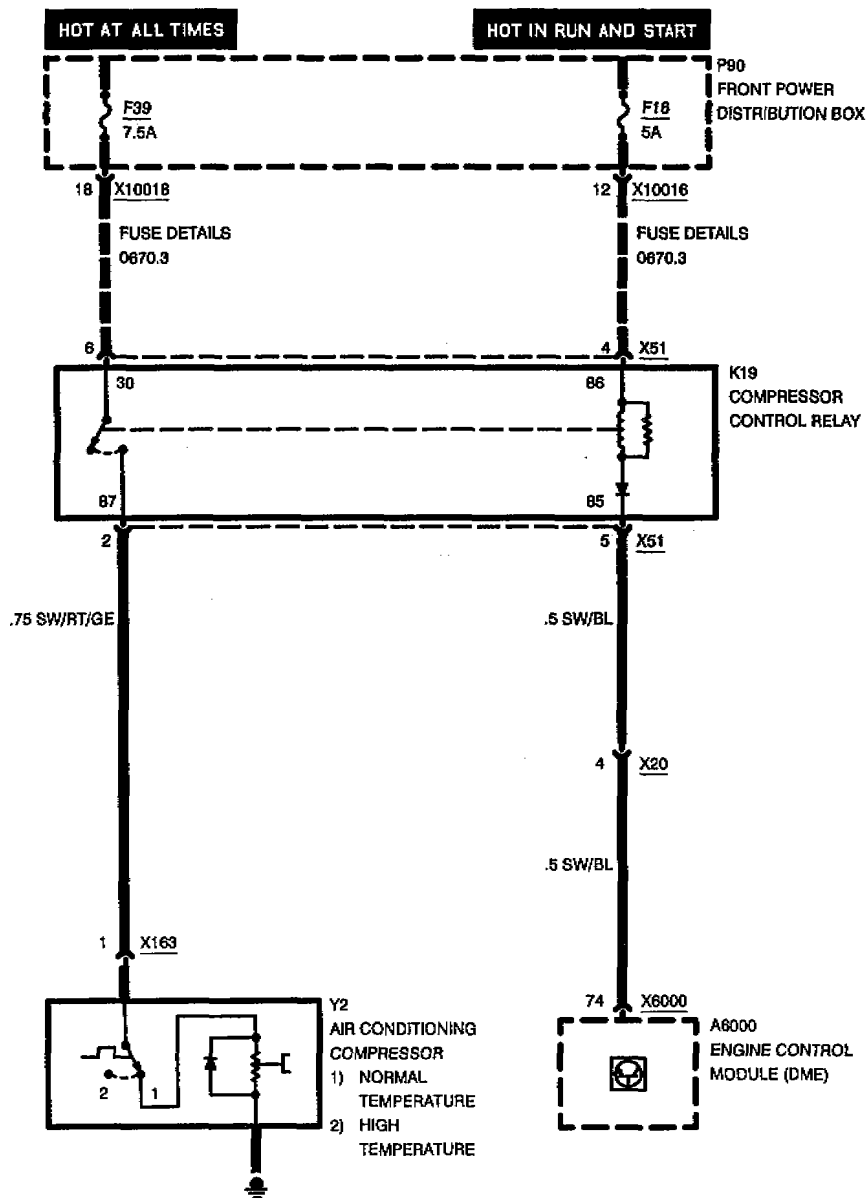




# ENGINE CONTROL SYSTEM MS41.1 (6-CYLINDER M52)

328i

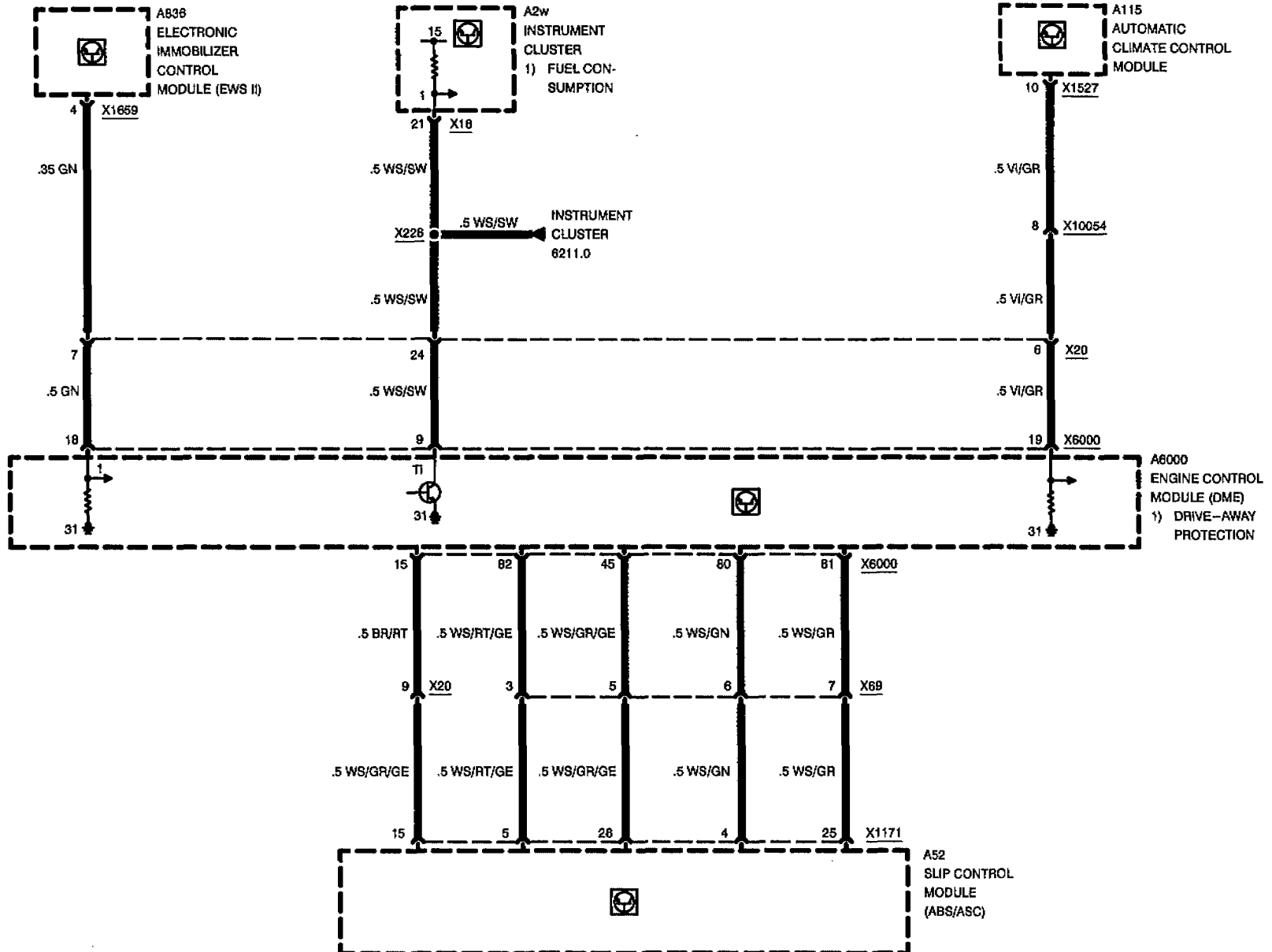






# ENGINE CONTROL SYSTEM MS41.1 (6-CYLINDER M52)

328i



04/97

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1996

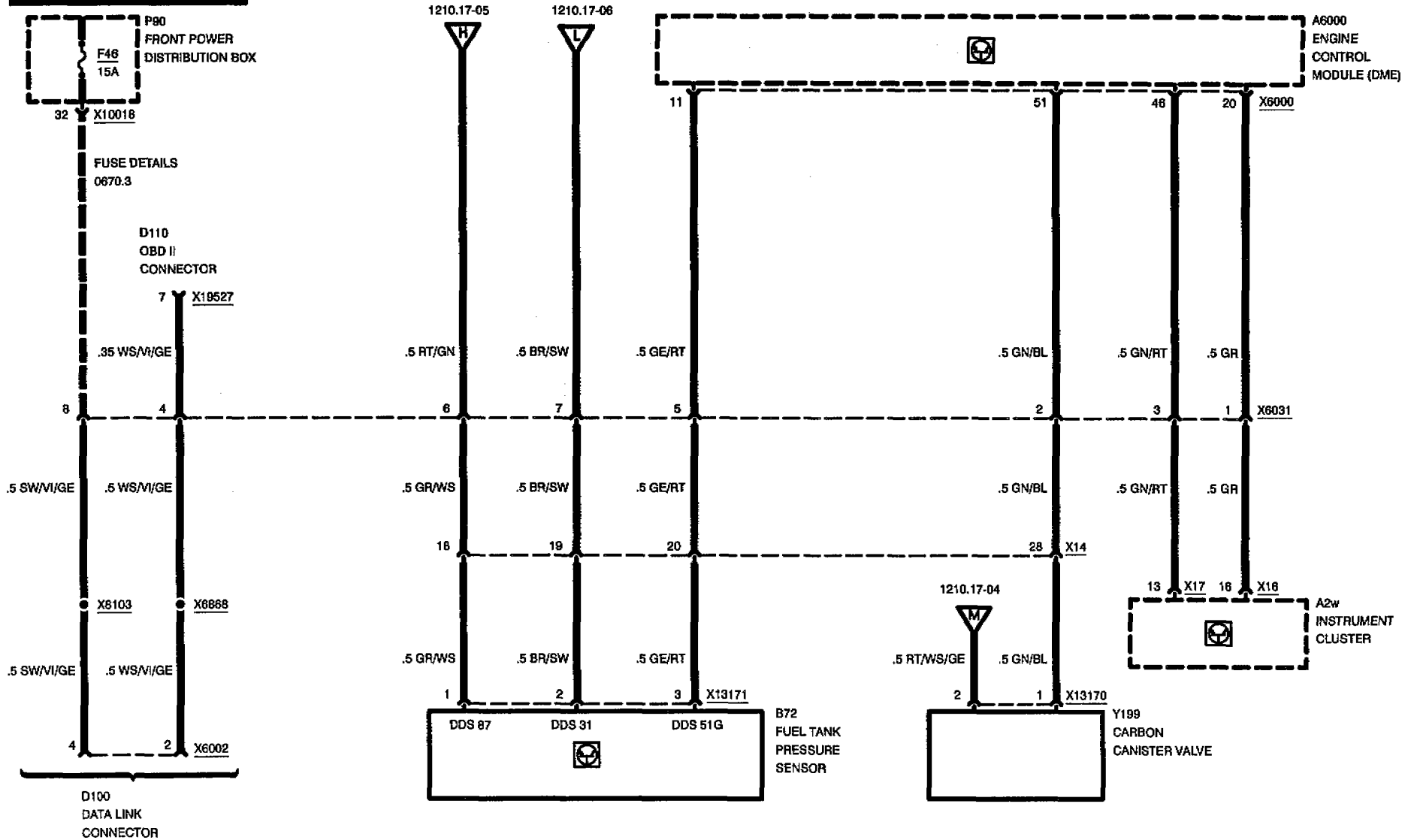


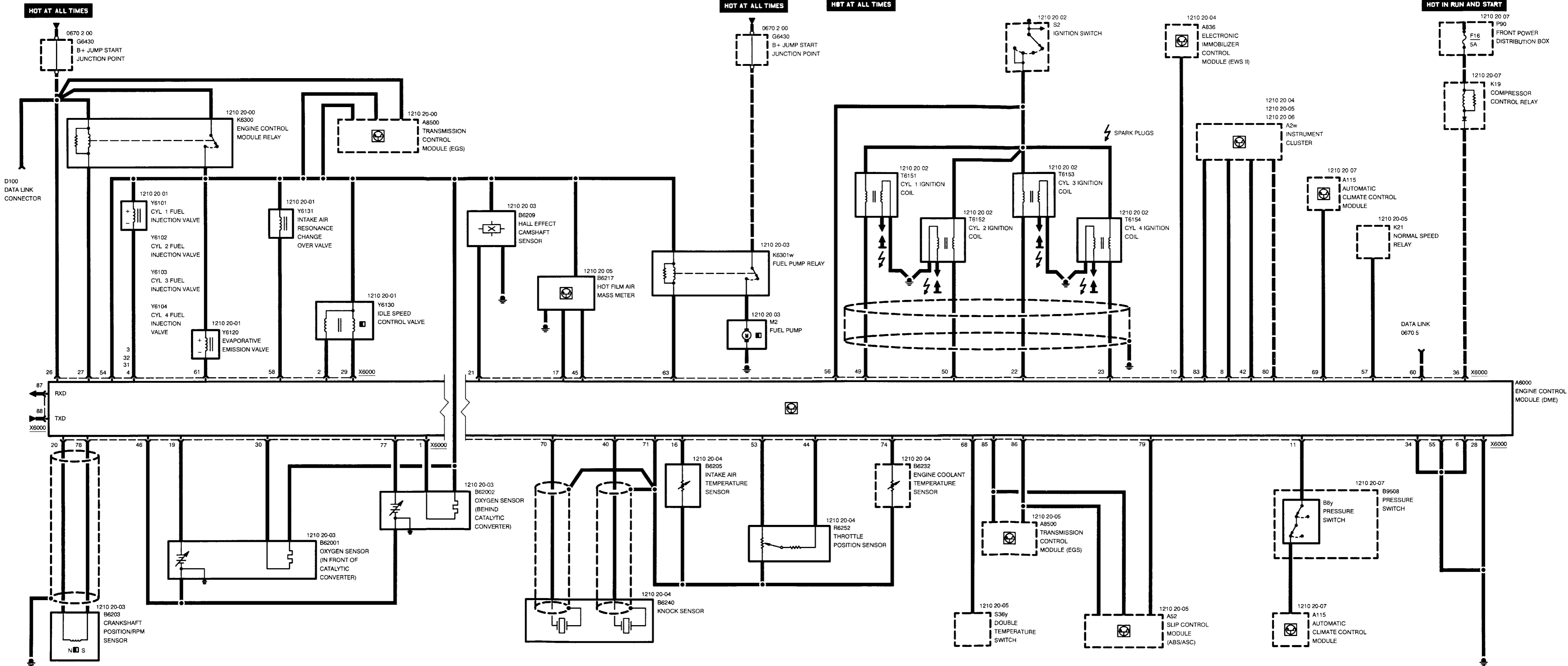
# ENGINE CONTROL SYSTEM MS41.1 (6-CYLINDER M52)

328i

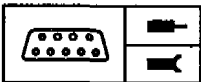
## OBD II DIAGNOSIS

HOT IN ACCY RUN AND START







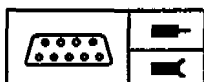


## Pin Assignments

### X6000

Pin	Type	Description/Function	Connection
1	M	Oxygen sensor heating ground	Oxygen sensor (behind catalytic converter)
2	A	Activate valve	Idle speed control valve
3	A	Activate valve	Cyl. 1 fuel injection valve
4	A	Activate valve	Cyl. 4 fuel injection valve
5		Not used	
6	M	Ground, fuel injection valve output stages	Ground point
7		Not used	
8	A	"Check engine" indicator control	Instrument cluster
9		Not used	
10	E	Drive away protection signal	Electronic immobilizer control module (EWS II)
11	E	Activate A/C	Pressure switch
12		Not used	
13		Not used	
14		Not used	
15		Not used	
16	E	Intake air temperature	Intake air temperature sensor
17	M	Ground	Hot film air mass meter
18		Not used	
19	E	Oxygen sensor signal	Oxygen sensor (in front of catalytic converter)
20	E	Crankshaft position/RPM	Crankshaft position/RPM sensor
21	E	Camshaft position	Hall effect camshaft sensor
22	A	Cyl. 3 ignition coil control	Cyl. 3 ignition coil
23	A	Cyl. 4 ignition coil control	Cyl. 4 ignition coil
24		Not used	
25		Not used	
26	E	Battery voltage	B+ jump start junction point
27	A	Engine control module relay control	Engine control module relay, terminal 85
28	M	Ground for electronics and shielding of sensors	Ground point

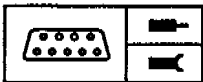
E = Input, A = Output, M = Ground



## Pin Assignments

Pin	Type	Description/Function	Connection
29	A	Idle speed control valve control	Idle speed control valve
30	M	Oxygen sensor heating ground	Oxygen sensor (in front of catalytic converter)
31	A	Activate valve	Cyl. 3 fuel injection valve
32	A	Activate valve	Cyl. 2 fuel injection valve
33		Not used	
34	M	Ground, remaining output stages (except for ignition and fuel injection valves)	Ground point
35		Not used	
36	A	A/C compressor cut-out	Compressor control relay
37		Not used	
38		Not used	
39		Not used	
40	E	Cyl. 3-4 knock sensor	Knock sensor
41		Not used	
42	E	Ti-measurement signal (fuel consumption)	Instrument cluster
43		Not used	
44	E	Throttle position	Throttle position sensor
45	E	Signal input	Hot film air mass meter
46	M	Sensor ground	Oxygen sensors
47		Not used	
48		Not used	
49	A	Cyl. 1 ignition coil control	Cyl. 1 ignition coil
50	A	Cyl. 2 ignition coil control	Cyl. 2 ignition coil
51		Not used	
52		Not used	
53	A	Component supply +	Throttle position sensor
54	E	Battery voltage from engine control module relay	Engine control module relay, terminal 87
55	M	Ground, ignition	Ground point
56	E	Ignition switch, terminal 15	Ignition switch, terminal 15
57	A	Activate auxiliary fan	Normal speed relay
58	A	Activate valve	Intake air resonance change over valve

E = Input, A = Output, M = Ground



## Pin Assignments

Pin	Type	Description/Function	Connection
59		Not used	
60	E	Programming voltage	Data link connector
61	A	Activate valve	Evaporation emission valve
62		Not used	
63	A	Activate relay	Fuel pump relay
64		Not used	
65		Not used	
66		Not used	
67		Not used	
68	E	Signal above 80°C	Double temperature switch
69	E	Signal A/C on	Air conditioning operating unit
70	E	Cyl 1-2 knock sensor	Knock sensor
71	M	Ground for sensors	Temperature-/ knock-/ throttle position-sensors
72		Not used	
73		Not used	
74	E	Temperature signal	Engine coolant temperature sensor
75		Not used	
76		Not used	
77	E	Oxygen sensor signal	Oxygen sensor (behind catalytic converter)
78	E	Crankshaft position/RPM	Crankshaft position/RPM sensor
79	E	Speed signal right rear	ABS/ASC control module
80	A	Crankshaft RPM speed signal TD	Instrument cluster
81		Not used	
82		Not used	
83	E	Vehicle speed signal	Instrument cluster
84		Not used	
85	E/A	CAN-LOW	EGS/ASC control module
86	E/A	CAN-HIGH	EGS/ASC control module
87	A	RxD diagnosis data line	Data link connector
88	E/A	TxD diagnosis data line	Data link connector

E = Input, A = Output, M = Ground



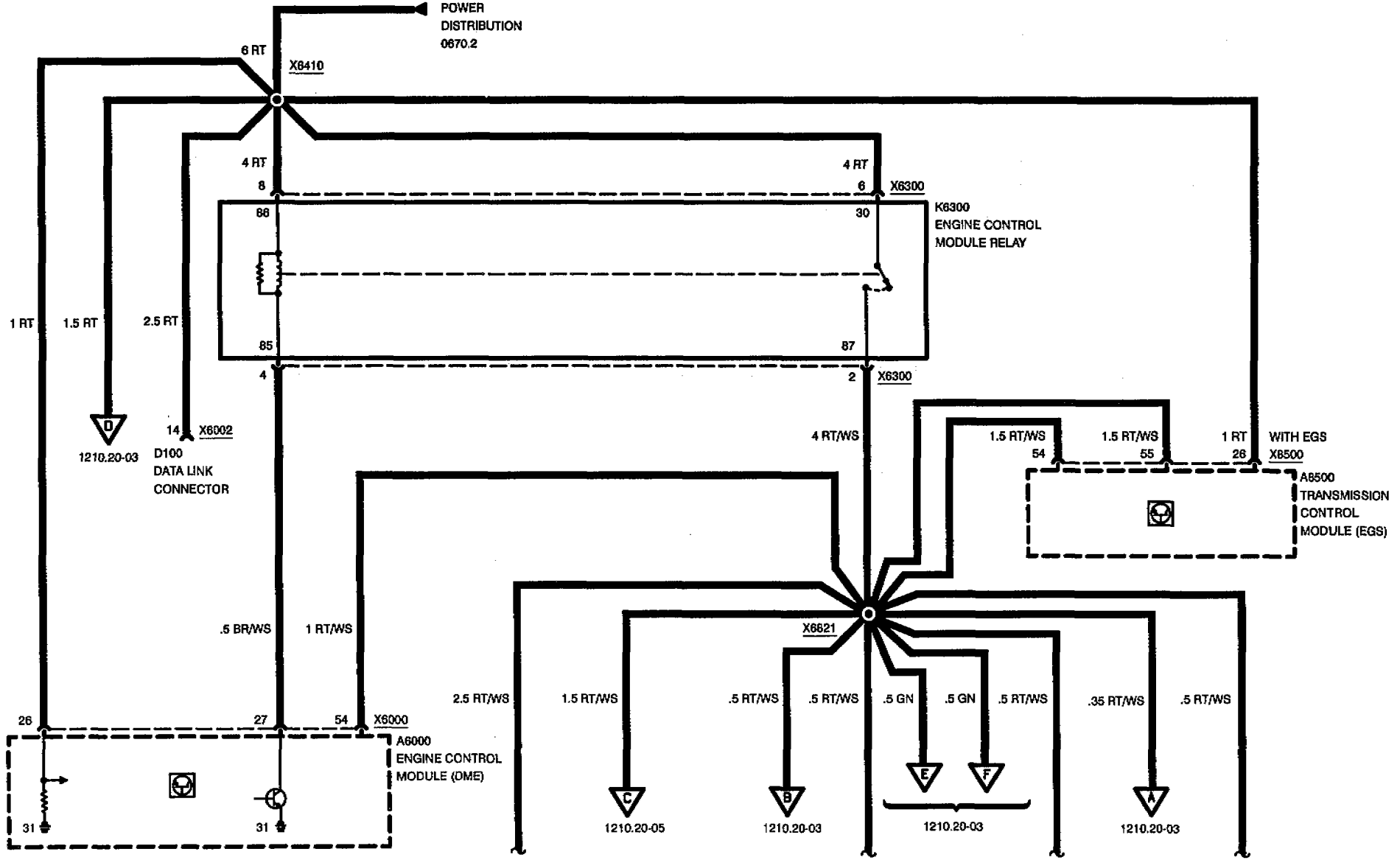
# ENGINE CONTROL SYSTEM (DME M5.2, 4-CYLINDER M44)

LATE PRODUCTION

## POWER, FUEL INJECTION VALVES

HOT AT ALL TIMES

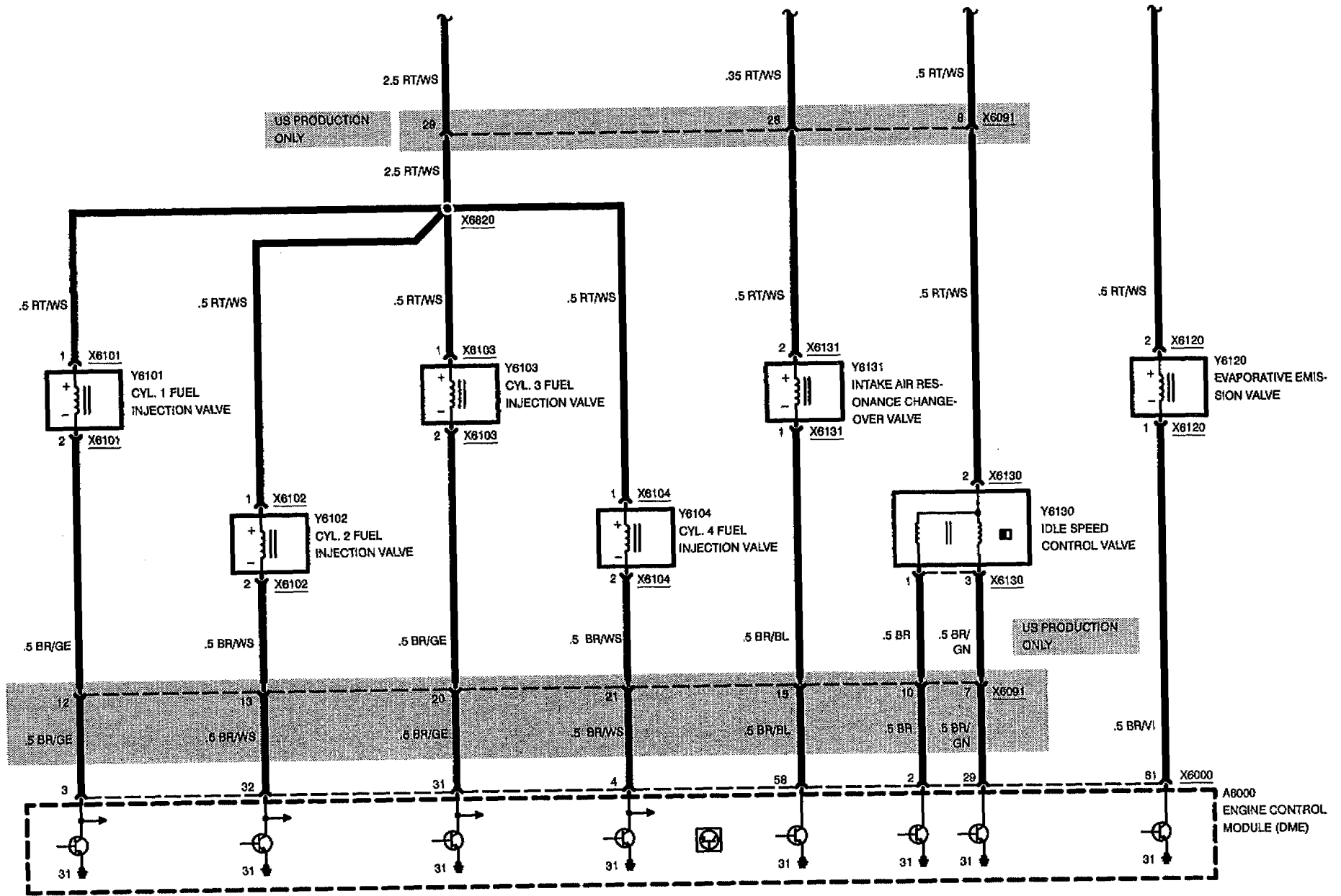
POWER DISTRIBUTION 0670.2



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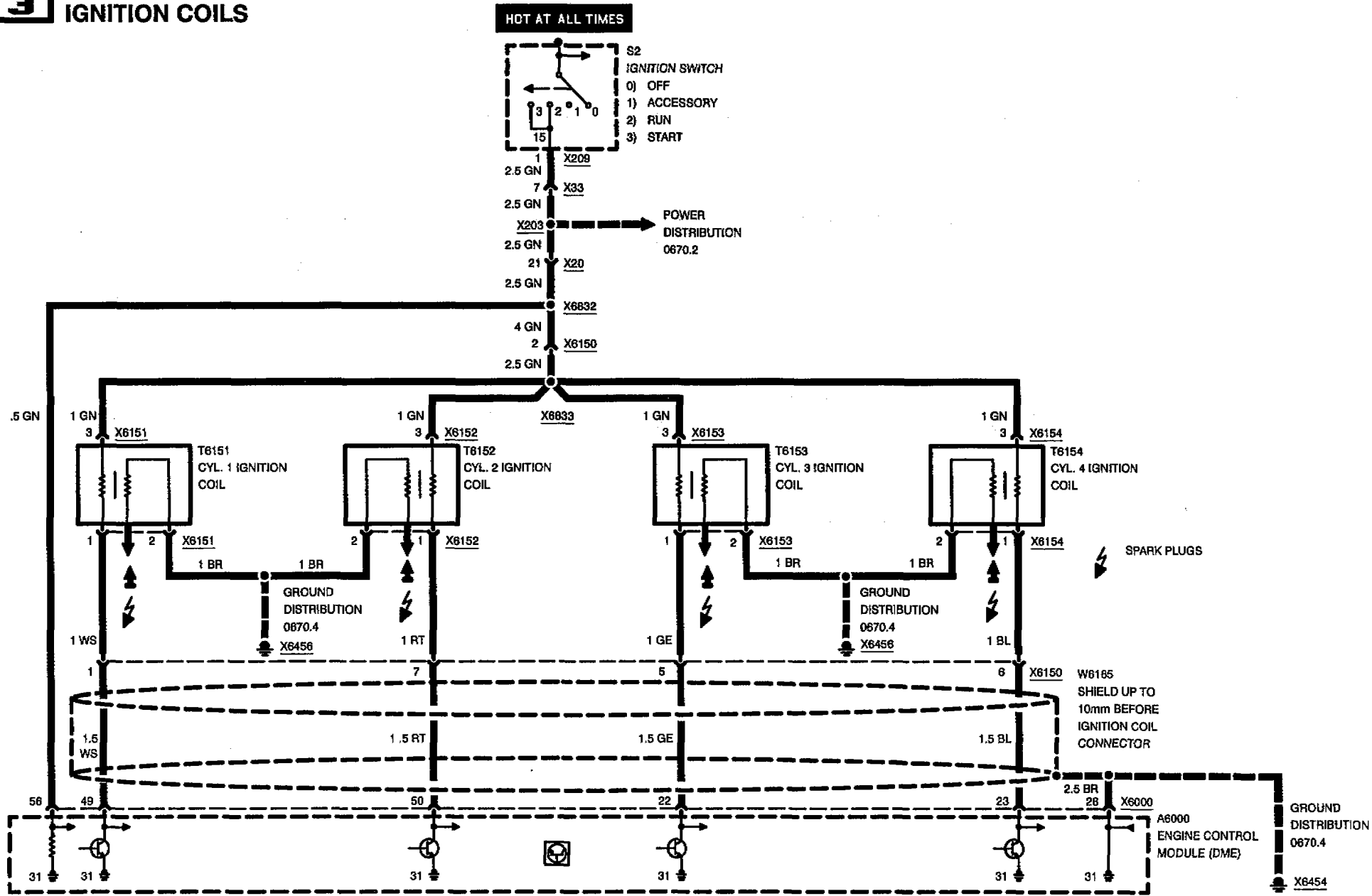
1996





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

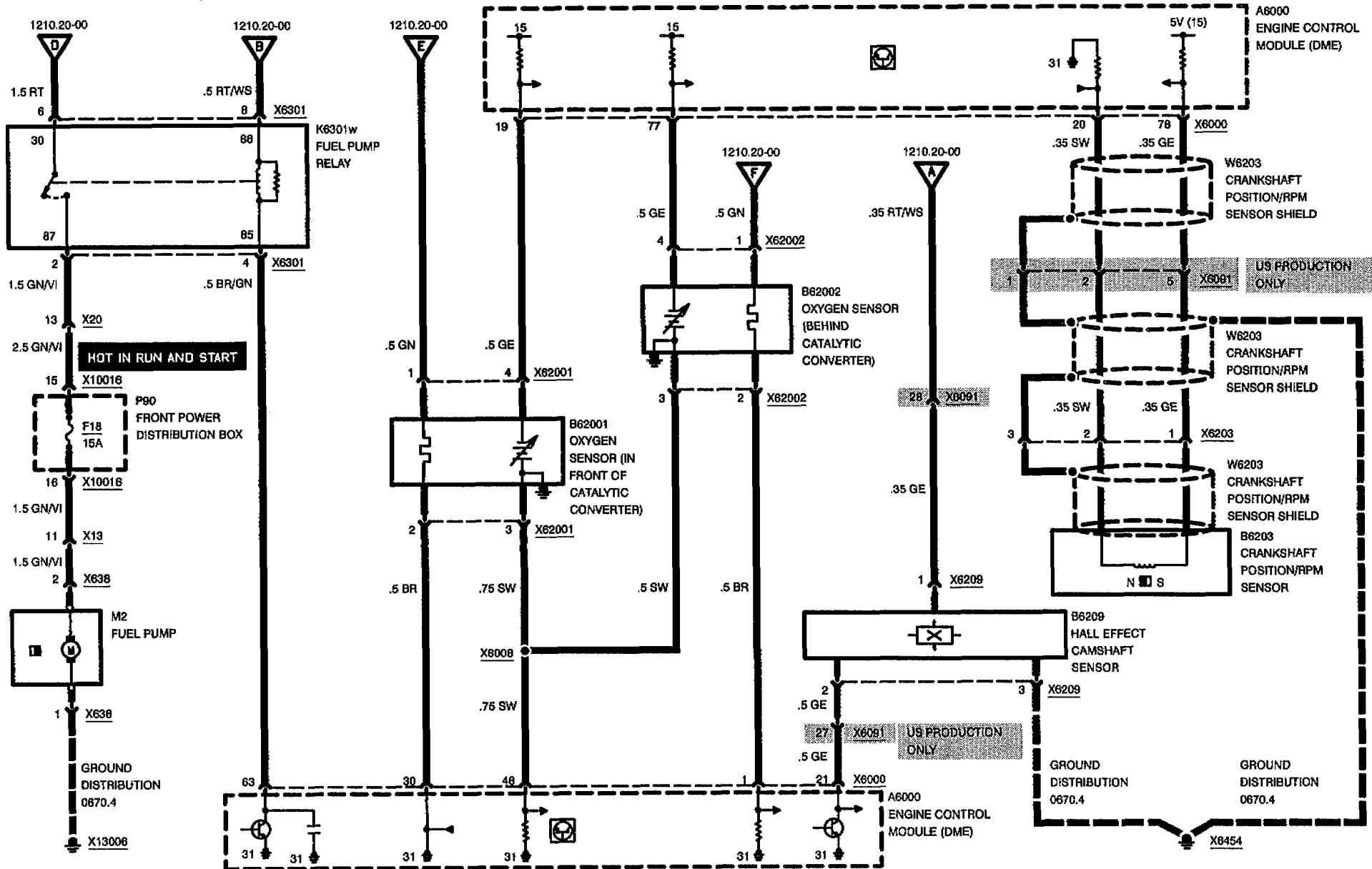
## IGNITION COILS



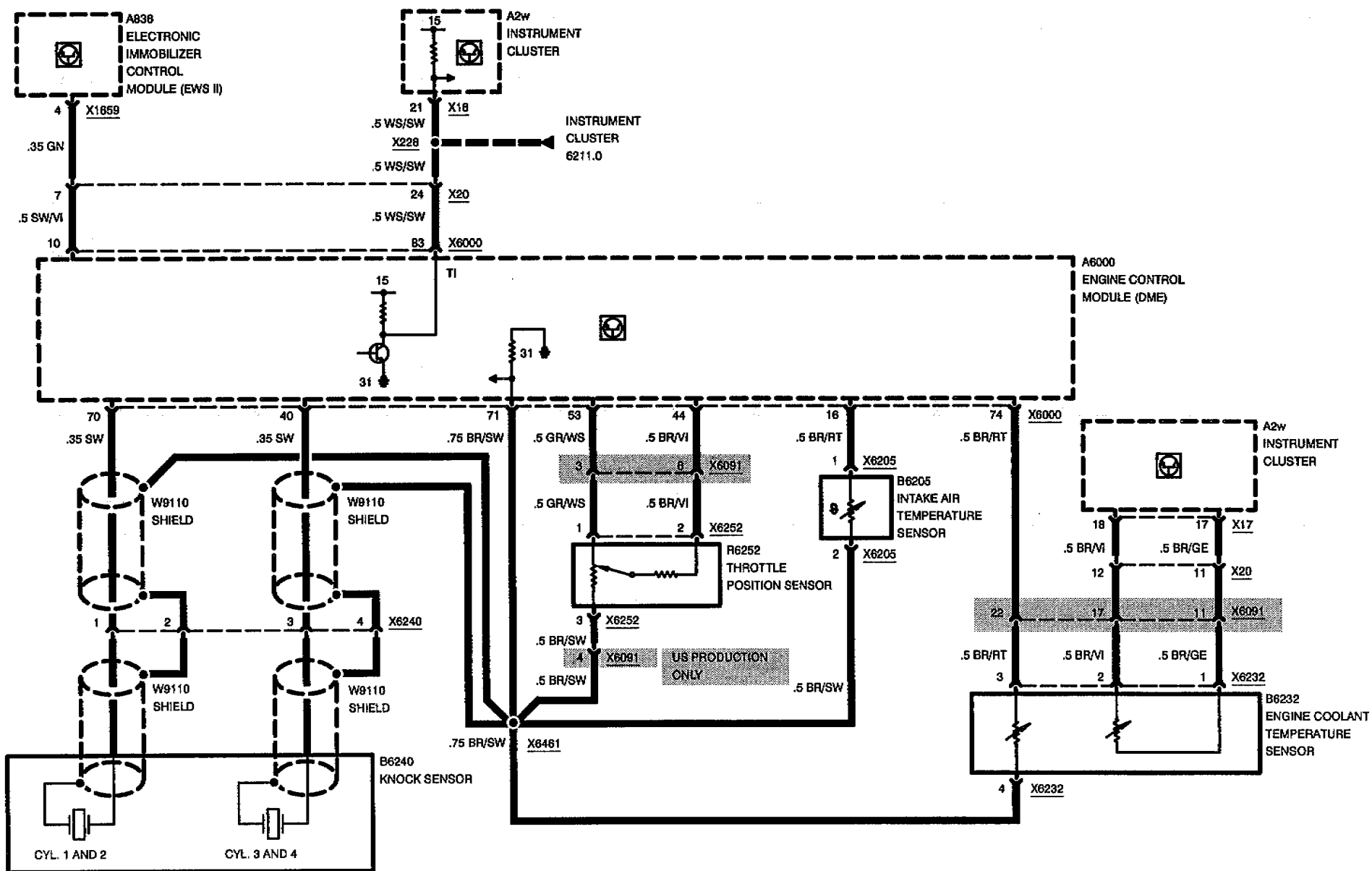


# ENGINE CONTROL SYSTEM (DME M5.2, 4-CYLINDER M44)

## FUEL PUMP, HEATED OXYGEN SENSOR, CRANKSHAFT SENSORS



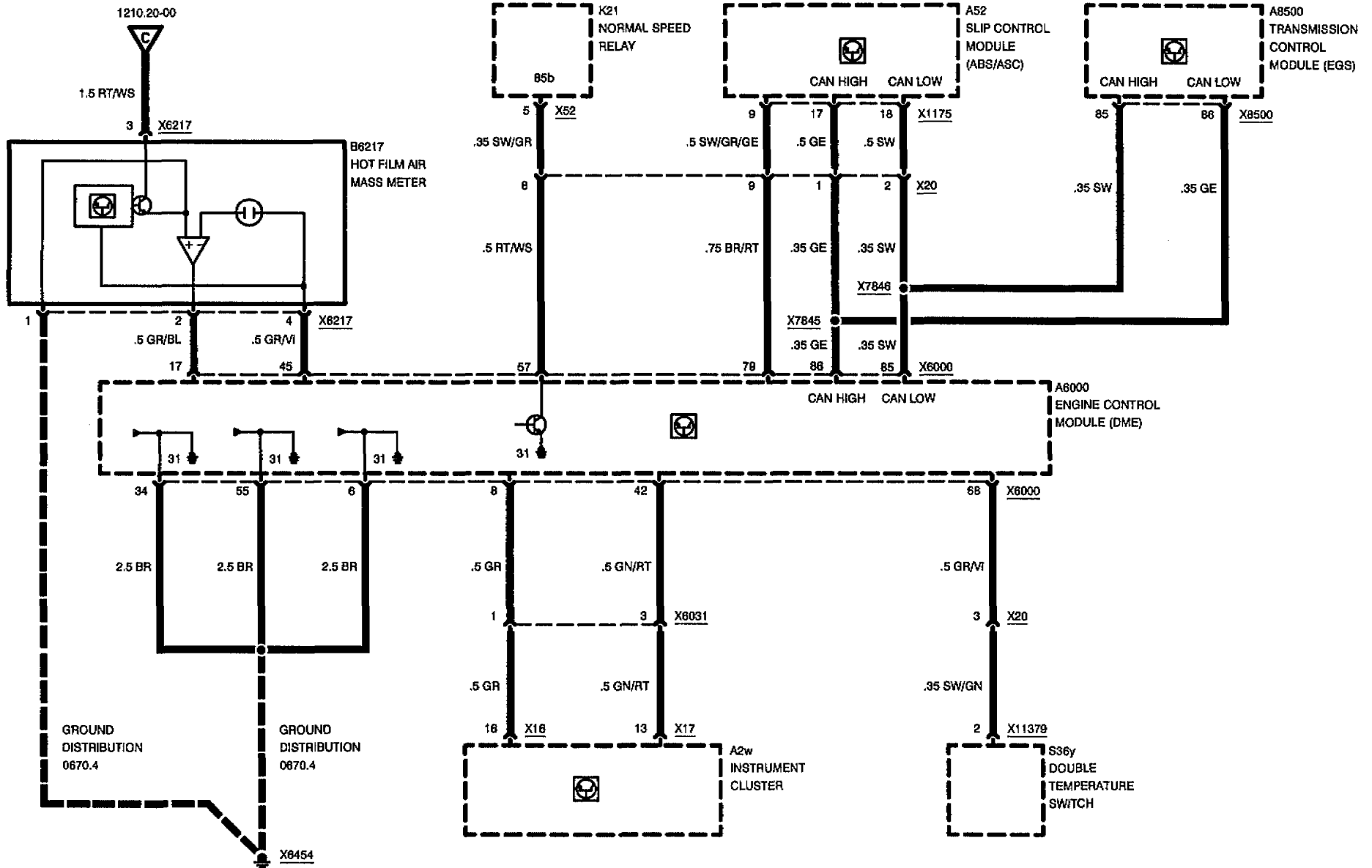
# ENGINE CONTROL SYSTEM (DME M5.2, 4-CYLINDER M44)







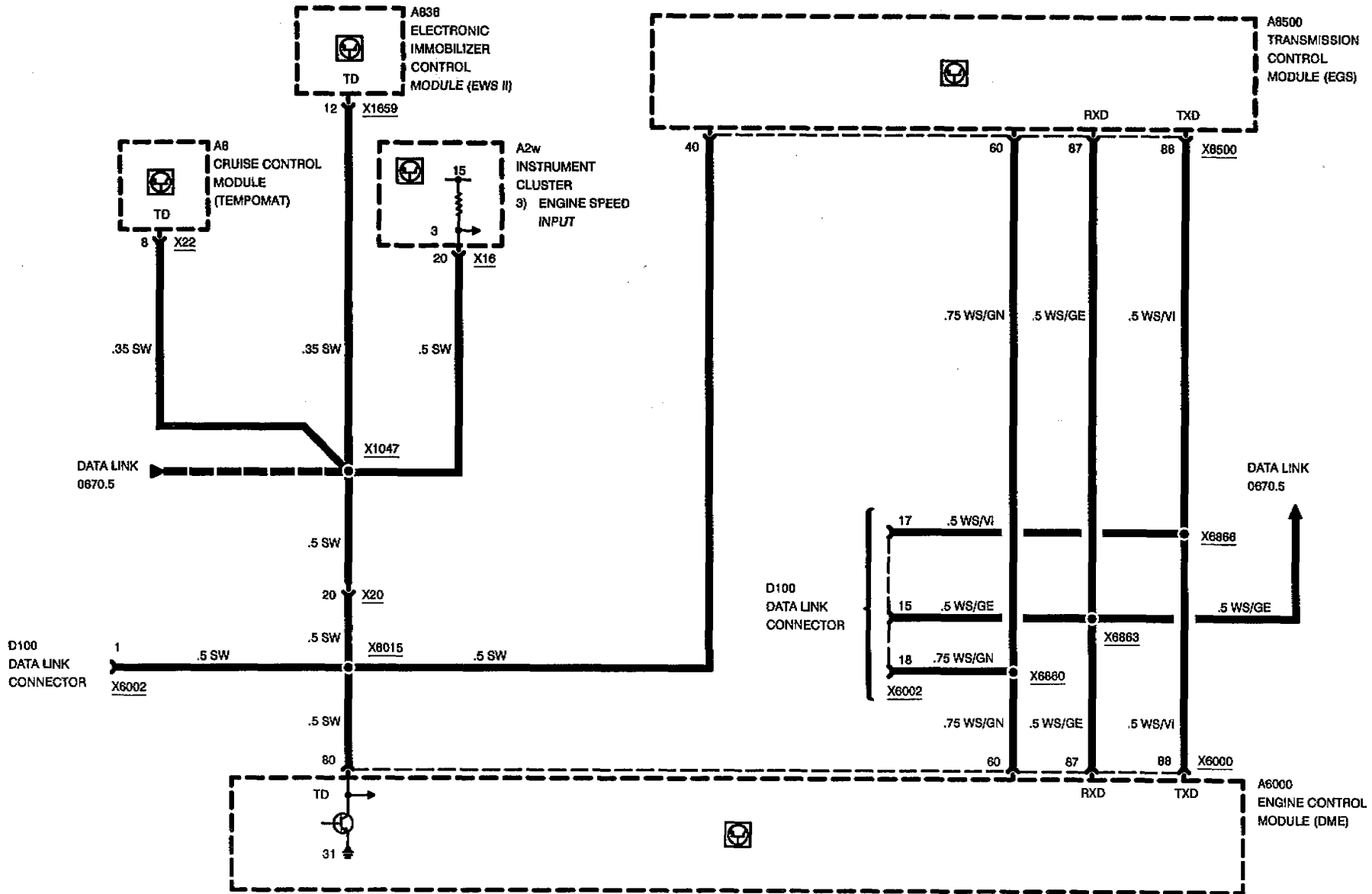
# ENGINE CONTROL SYSTEM (DME M5.2, 4-CYLINDER M44)





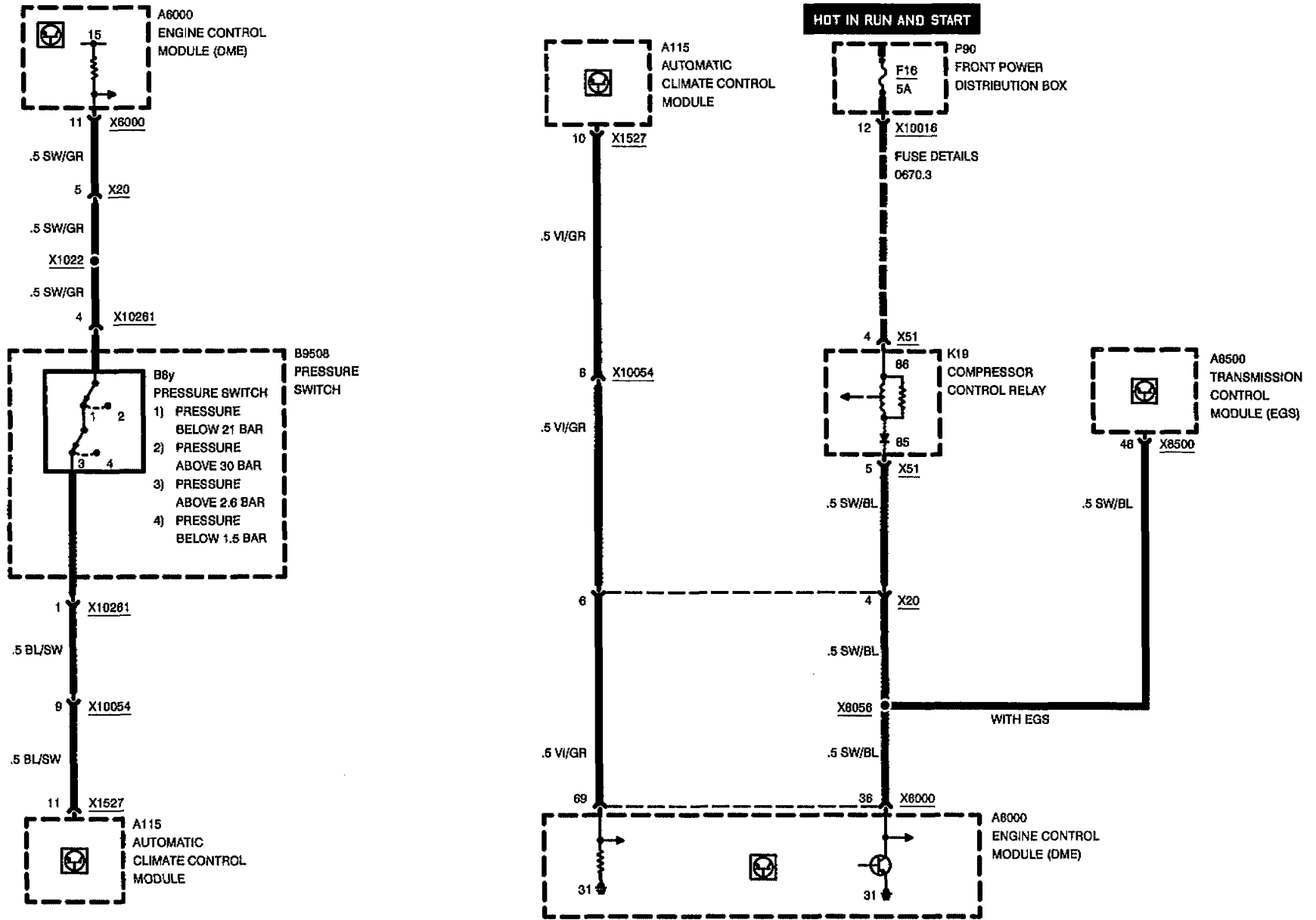
# ENGINE CONTROL SYSTEM (DME M5.2, 4-CYLINDER M44)

## DATA LINK



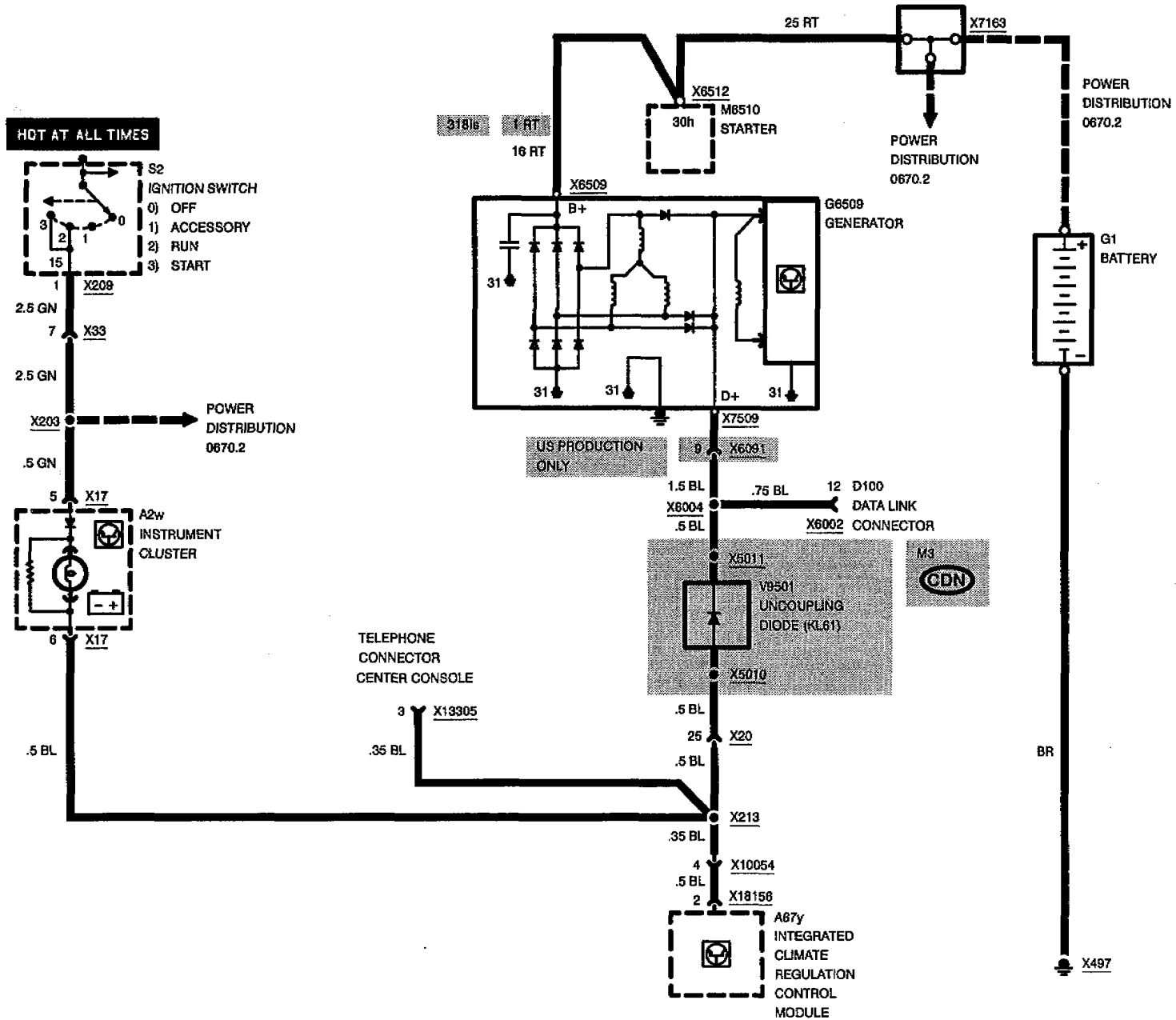


# ENGINE CONTROL SYSTEM (DME M5.2, 4-CYLINDER M44)





# CHARGING SYSTEM

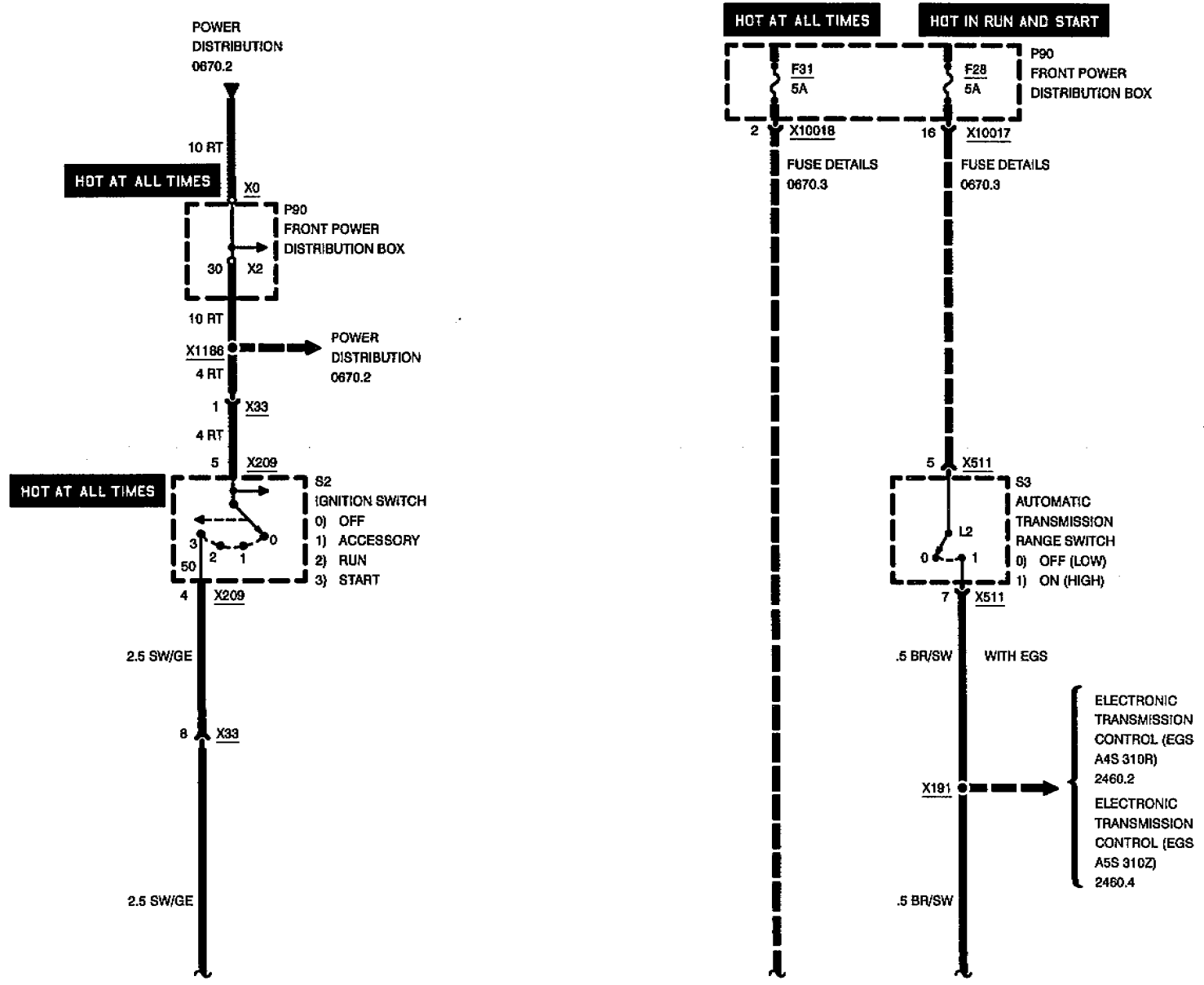


BMW  
3

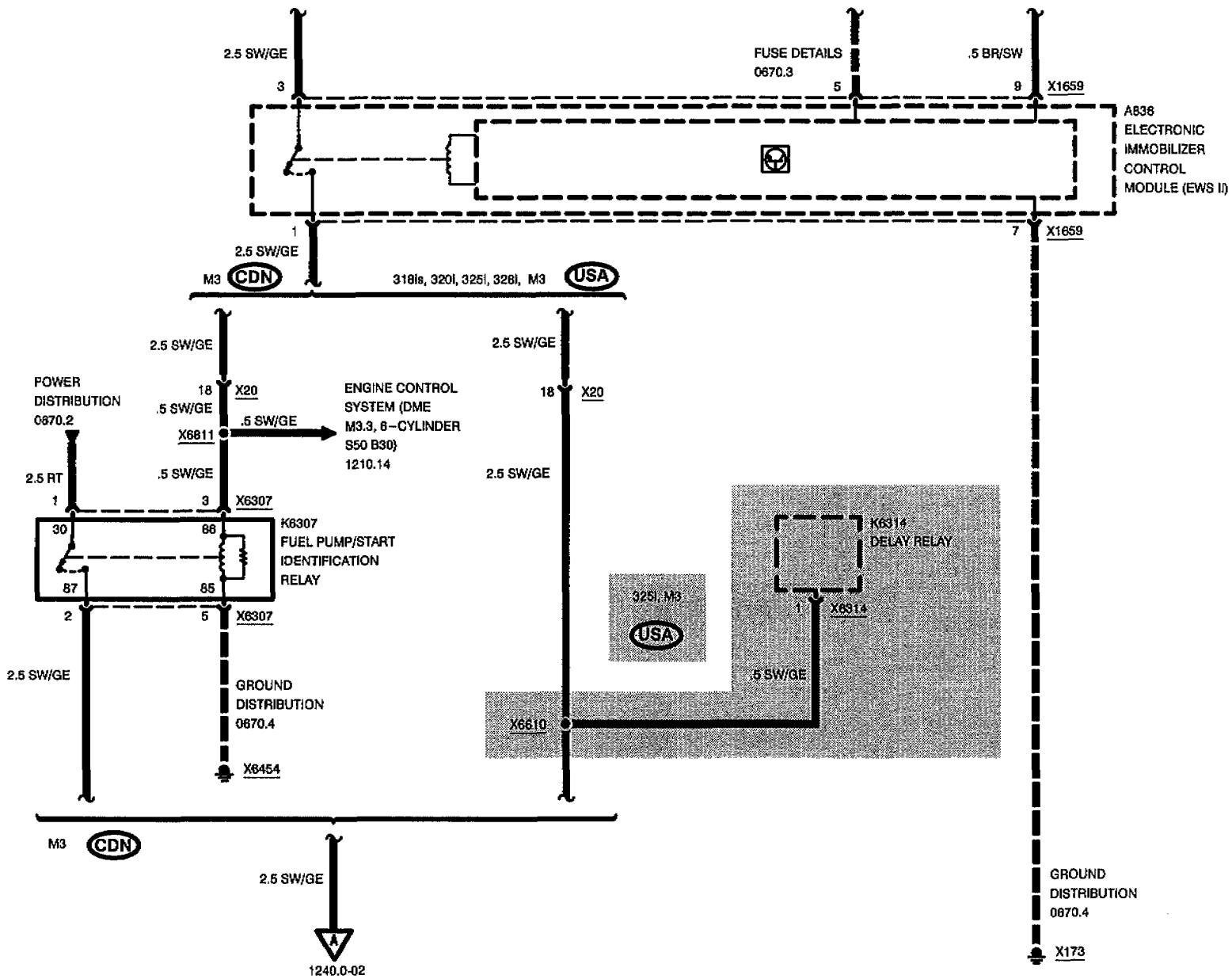
1240.0



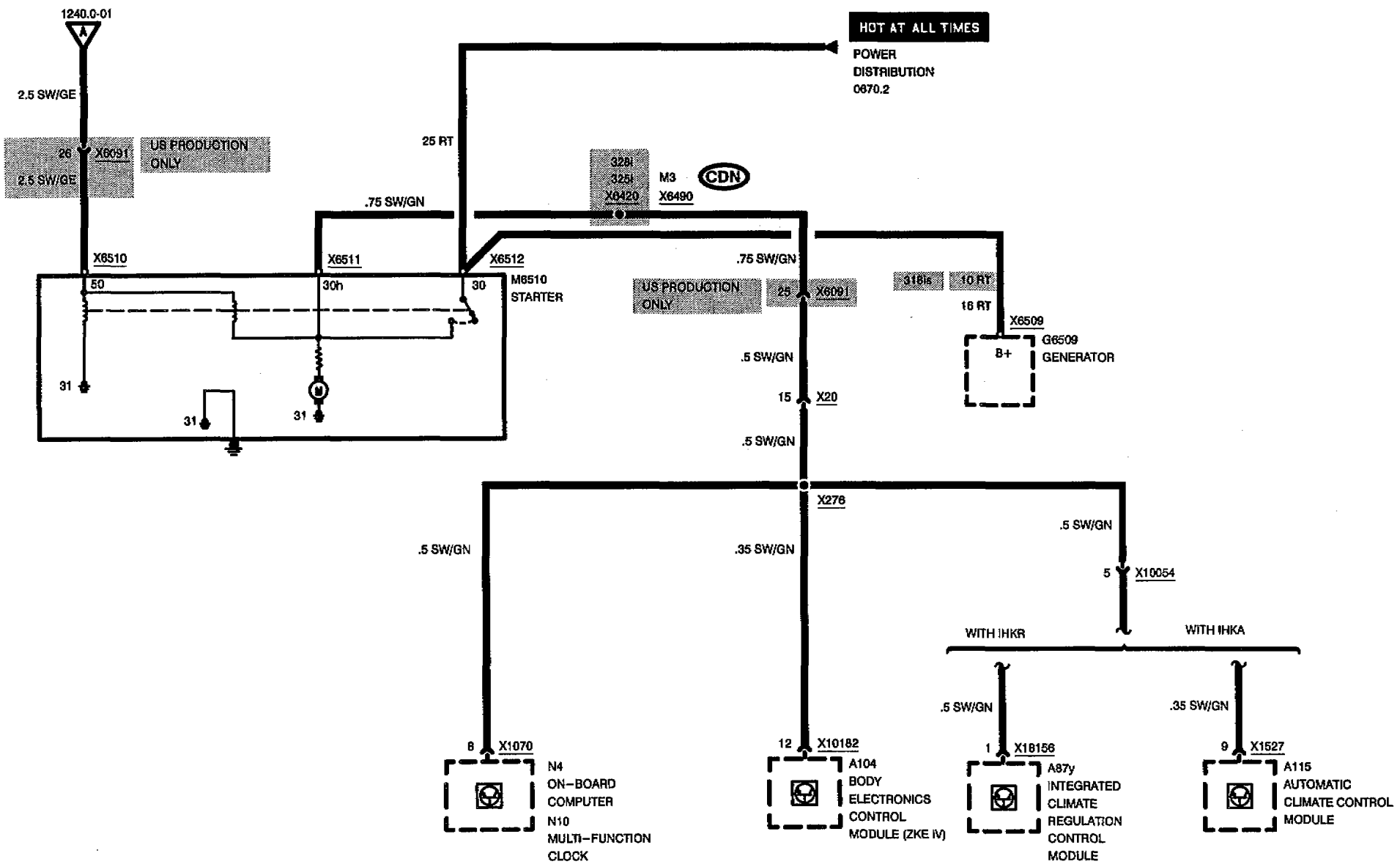
# START



	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

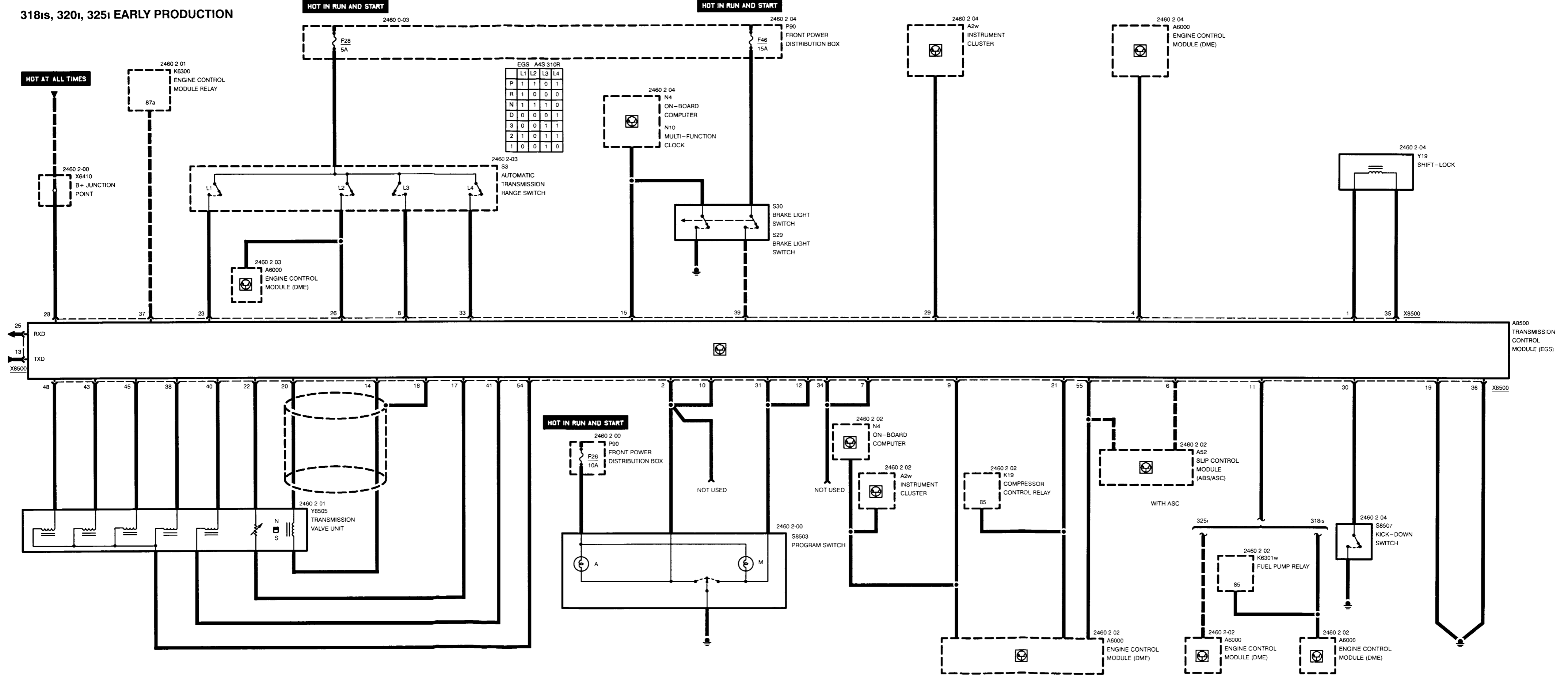


1240.0-02

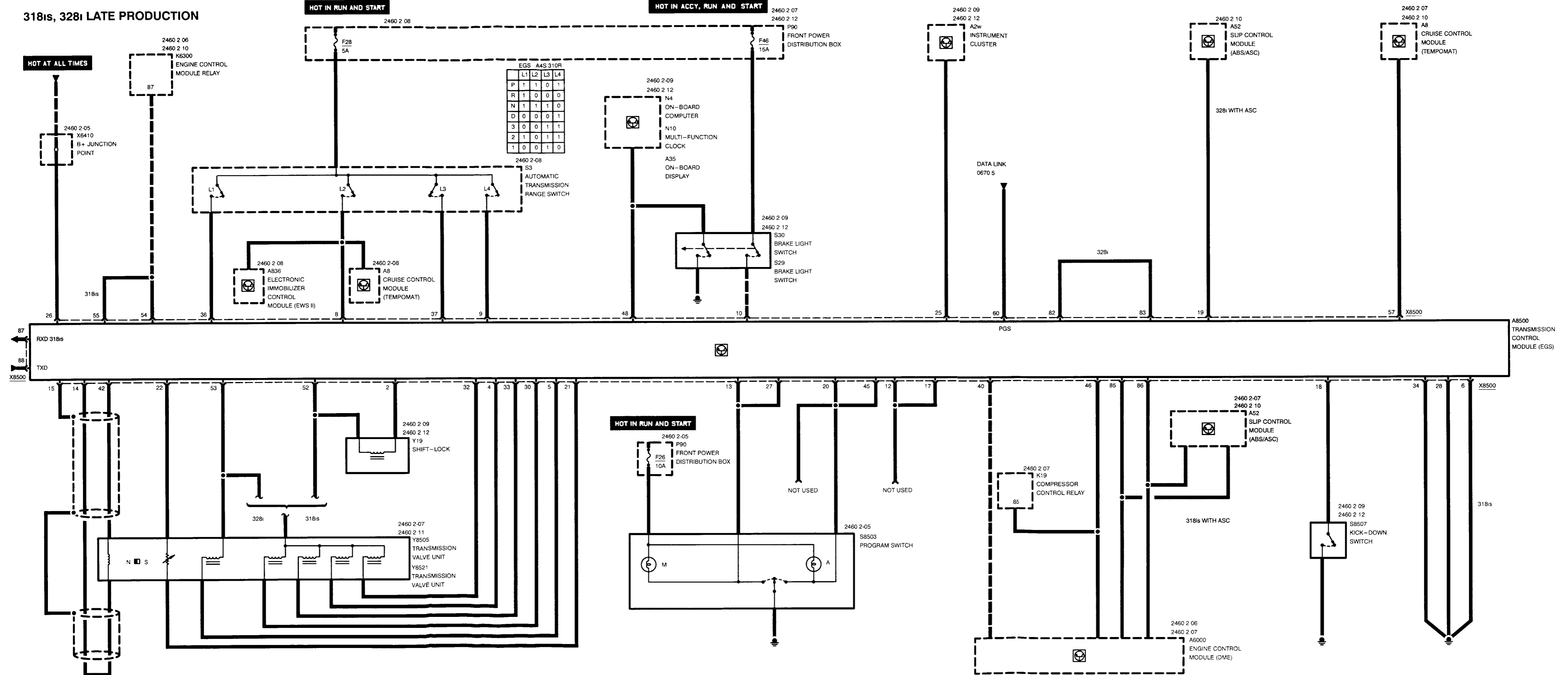


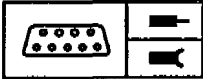


318is, 320i, 325i EARLY PRODUCTION



318is, 328i LATE PRODUCTION



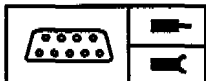


## Pin Assignments (318is, 320i, 325i – Early Production)

### X8500

Pin	Type	Description/Function	Connection
1	A	Shift lock solenoid control	Shift lock
2	E	Automatic mode signal	Program switch
3		Not used	
4	A	Ignition timing intervention	Engine control module (DME)
5		Not used	
6	E	ASC signal	ABS/ASC control module
7	A	S-program indication	Not used
8	E	Gear range signal L3	Automatic transmission range switch
9	E	Ti measurement signal (fuel consumption)	Engine control module (DME)
10	A	A-program indication	Program switch
11	E	Cyl. 1-6 fuel pump relay control	Engine control module (DME)
12	A	M-program indication	Program switch
13	E/A	TxD diagnostic data link	Data link connector
14	E	Output speed (-)	Transmission valve unit
15	E	Brake switch test signal	Brake light switch
16		Not used	
17	E	Oil temperature signal (analog ground)	Transmission valve unit
18	A	Shield for speed sensor	Transmission valve unit shield
19	M	Ground, power	Ground point
20	E	Output speed (+)	Transmission valve unit
21	E	A/C compressor-ON-signal	Engine control module (DME)
22	E	Oil temperature signal (+)	Transmission valve unit
23	E	Gear range signal L1	Automatic transmission range switch
24		Not used	
25	A	RxD diagnostic data link	Data link connector
26	E	Gear range signal L2	Automatic transmission range switch
27		Not used	
28	E	Battery voltage	B+ junction point
29	A	Fault indicator signal	Instrument cluster
30	E	Kick-down signal	Kick-down switch

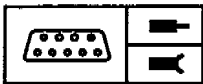
E = Input, A = Output, M = Ground



## Pin Assignments (318is, 320i, 325i – Early Production)

Pin	Type	Description/Function	Connection
31	E	Manual mode signal	Program switch
32		Not used	
33	E	Gear range signal L4	Automatic transmission range switch
34	E	S-program button	Not used
35	A	Ground, shift lock solenoid	Shift lock
36	M	Ground, electronic	Ground point
37	E	Voltage supply	Engine control module relay, terminal 87a
38	A	Torque converter clutch solenoid valve control	Transmission valve unit
39	E	Brake pedal position	Brake light switch
40	A	Hydraulic pressure regulator control (+)	Transmission valve unit
41	A	Hydraulic pressure regulator control (-)	Transmission valve unit
42		Not used	
43	A	Solenoid valve 2 control (+)	Transmission valve unit
44		Not used	
45	A	Band solenoid control (+)	Transmission valve unit
46		Not used	
47		Not used	
48	A	Solenoid valve 1 control (+)	Transmission valve unit
49		Not used	
50		Not used	
51		Not used	
52		Not used	
53		Not used	
54	A	Solenoid valves ground control	Transmission valve unit
55	E	Throttle position signal	Engine control module (DME)

E = Input, A = Output, M = Ground

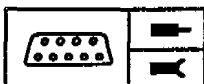


## Pin Assignments (318is, 328i – Late Production)

### X8500

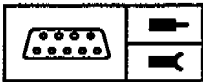
Pin	Type	Description/Function	Connection
1		Not used	
2	A	Shift-lock solenoid control	Shift-lock
3		Not used	
4	A	Band solenoid	Transmission valve unit (318is)
4	A	Solenoid valve 3 control (-)	Transmission valve unit (328i)
5	A	Hydraulic pressure regulator control (-)	Transmission valve unit
6	M	Ground	Ground point (318is)
7		Not used	
8	E	Gear range signal L2	Automatic transmission range switch
9	E	Gear range signal L4	Automatic transmission range switch
10	E	Brake pedal position	Brake light switch
11		Not used	
12	E	Sport mode signal	Not used
13	E	Manual mode signal	Program switch
14	E	Output speed (-)	Transmission valve unit
15	M	Ground for shield	Shield for speed sensor
16		Not used	
17	A	S-program indication	Not used
18	E	Kick-down signal	Kick-down switch
19	E	ASC signal	ASC module (328i)
20	E	Automatic mode signal	Program switch
21	E	Oil temperature signal (-)	Transmission valve unit
22	E	Oil temperature signal (+)	Transmission valve unit
23		Not used	
24		Not used	
25	A	Fault indicator signal	Instrument cluster
26	E	Battery voltage	B+ Jump start junction point
27	A	M-program indication	Program switch
28	M	Ground	Ground point
29		Not used	

E = Input, A = Output, M = Ground

**Pin Assignments (318is, 328i – Late Production)**

Pin	Type	Description/Function	Connection
30	A	Solenoid valve 1 control (-)	Transmission valve unit
31		Not used	
32	A	Torque converter clutch solenoid valve control (-)	Transmission valve unit
33	A	Solenoid valve 2 control (-)	Transmission valve unit
34	M	Ground	Ground point
35		Not used	
36	E	Gear range signal L1	Automatic transmission range switch
37	E	Gear range signal L3	Automatic transmission range switch
38		Not used	
39		Not used	
40	E	RPM speed signal TD	Engine control module (318is)
41		Not used	
42	E	Output speed (+)	Transmission valve unit
43		Not used	
44		Not used	
45	A	A-program indication	Program switch
46	E	A/C compressor-ON-signal	Engine control module (318is)
47		Not used	
48	E	Brake switch test signal	Brake light switch
49		Not used	
50		Not used	
51		Not used	
52	A	Voltage supply	Shift-lock/Transmission valve unit (318is)
52	A	Voltage supply	Shift-lock (328i)
53	E	Voltage pressure regulator	Transmission valve unit
54	E	Voltage supply terminal 87	Engine control module relay
55	E	Voltage supply terminal 87	Engine control module relay (318is)
56		Not used	
57	E	Cruise control signal	Cruise control module
58		Not used	
59		Not used	

E = Input, A = Output, M = Ground

**Pin Assignments (318is, 328i – Late Production)**

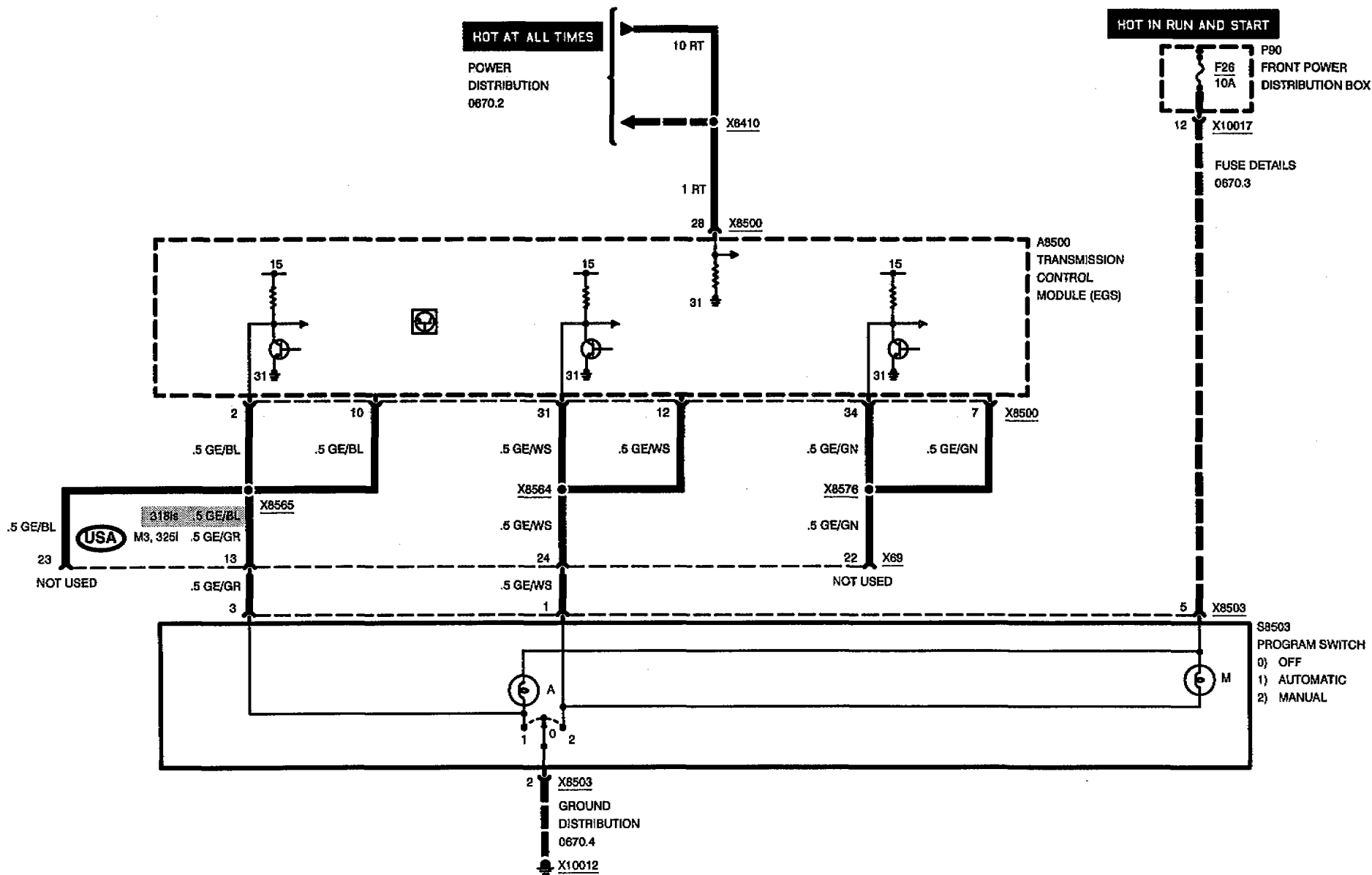
Pin	Type	Description/Function	Connection
60	E	Programming voltage	Data link connector
61		Not used	
62		Not used	
63		Not used	
64		Not used	
65		Not used	
66		Not used	
67		Not used	
68		Not used	
69		Not used	
70		Not used	
71		Not used	
72		Not used	
73		Not used	
74		Not used	
75		Not used	
76		Not used	
77		Not used	
78		Not used	
79		Not used	
80		Not used	
81		Not used	
82	E/A	Jumper plug	(328i)
83	E/A	Jumper plug	(328i)
84		Not used	
85	E/A	CAN-LOW	Engine control module
86	E/A	CAN-HIGH	Engine control module
87	A	RxD diagnostic data link	Data link connector (318is)
88	E/A	TxD diagnostic data link	Data link connector

E = Input, A = Output, M = Ground



# ELECTRONIC TRANSMISSION CONTROL (EGS A4S 310R) 318is, 325i, M3 EARLY PRODUCTION

## POWER, PROGRAM SWITCH





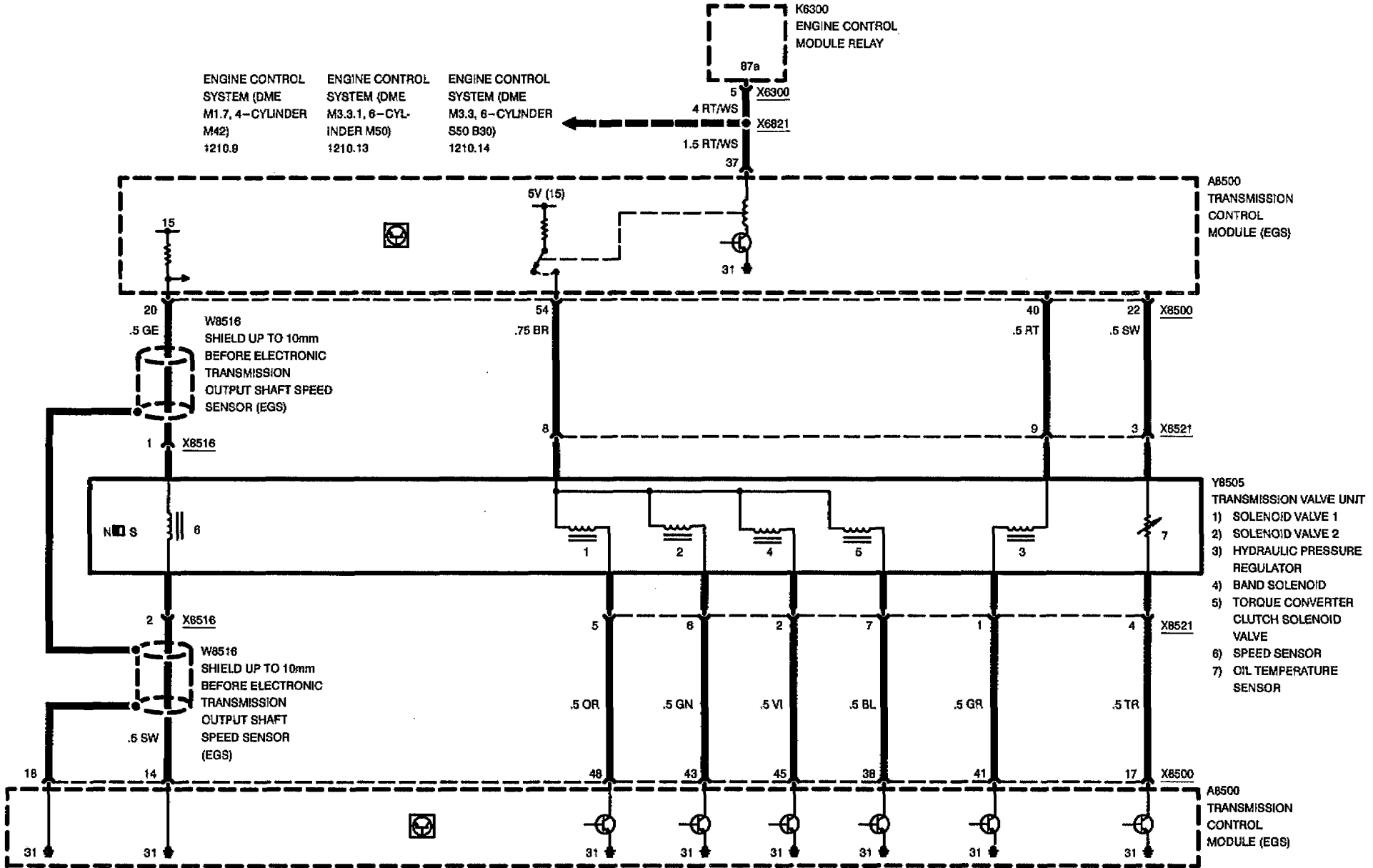


# ELECTRONIC TRANSMISSION CONTROL (EGS A4S 310R) 318is, 325i, M3 EARLY PRODUCTION

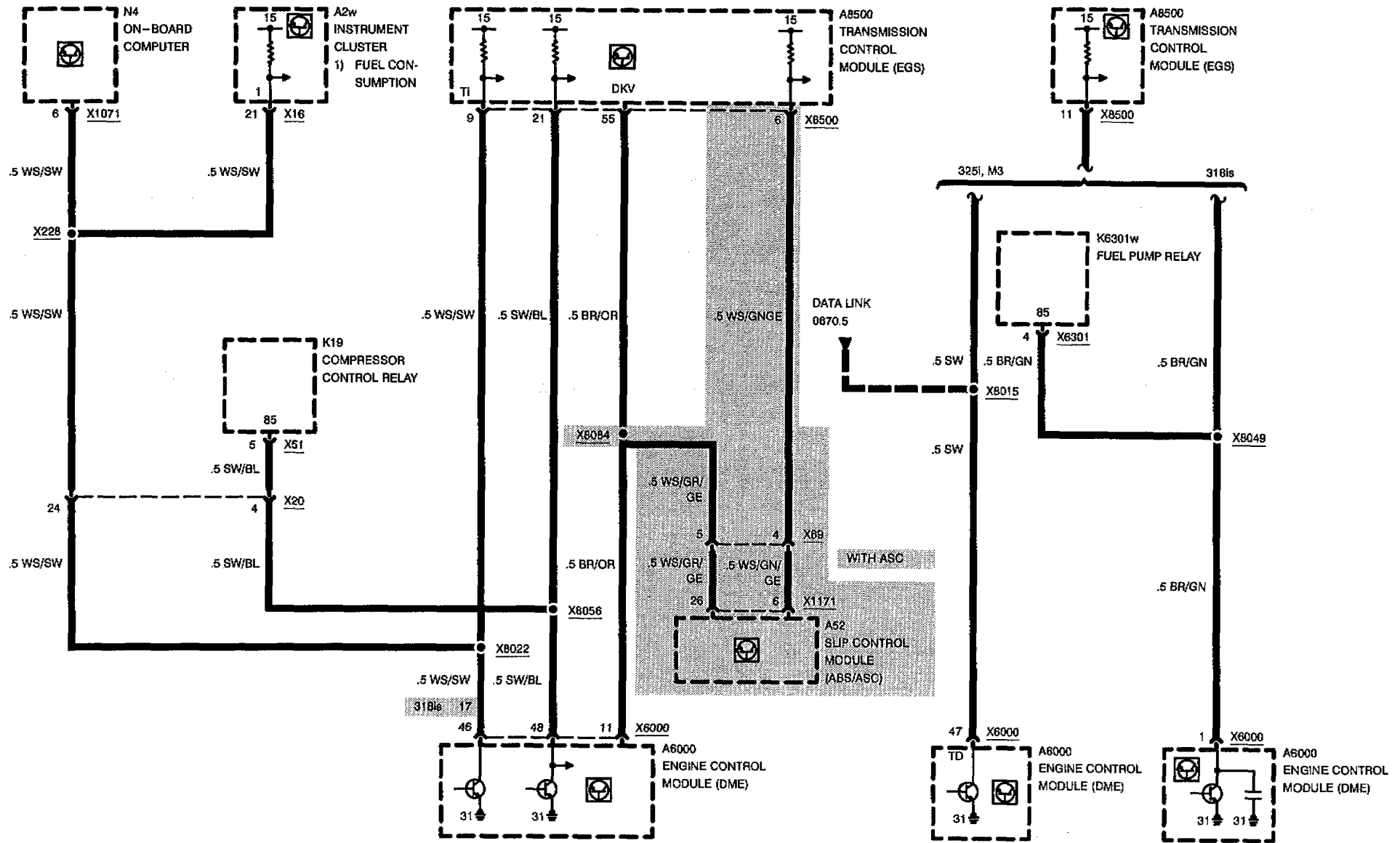
## POWER

ENGINE CONTROL SYSTEM (DME M1.7, 4-CYLINDER M42) 1210.8	ENGINE CONTROL SYSTEM (DME M3.3.1, 6-CYLINDER M50) 1210.13	ENGINE CONTROL SYSTEM (DME M3.3, 6-CYLINDER S50 B30) 1210.14
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K6300 ENGINE CONTROL MODULE RELAY



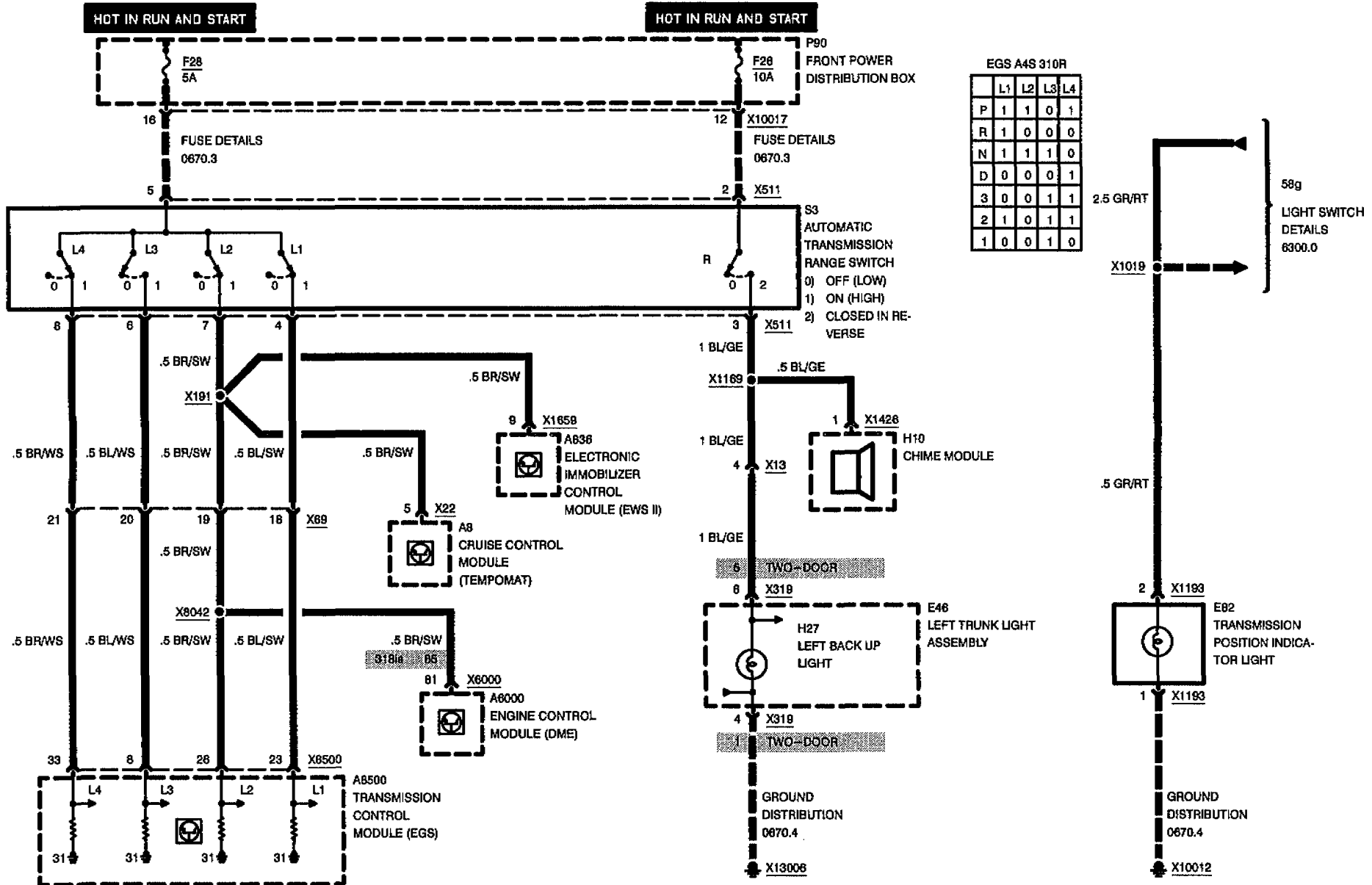
**ELECTRONIC TRANSMISSION CONTROL (EGS A4S 310R) 318is, 325i, M3 EARLY PRODUCTION**





# ELECTRONIC TRANSMISSION CONTROL (EGS A4S 310R) 318is, 325i, M3 EARLY PRODUCTION

## GEAR SELECTOR SWITCH

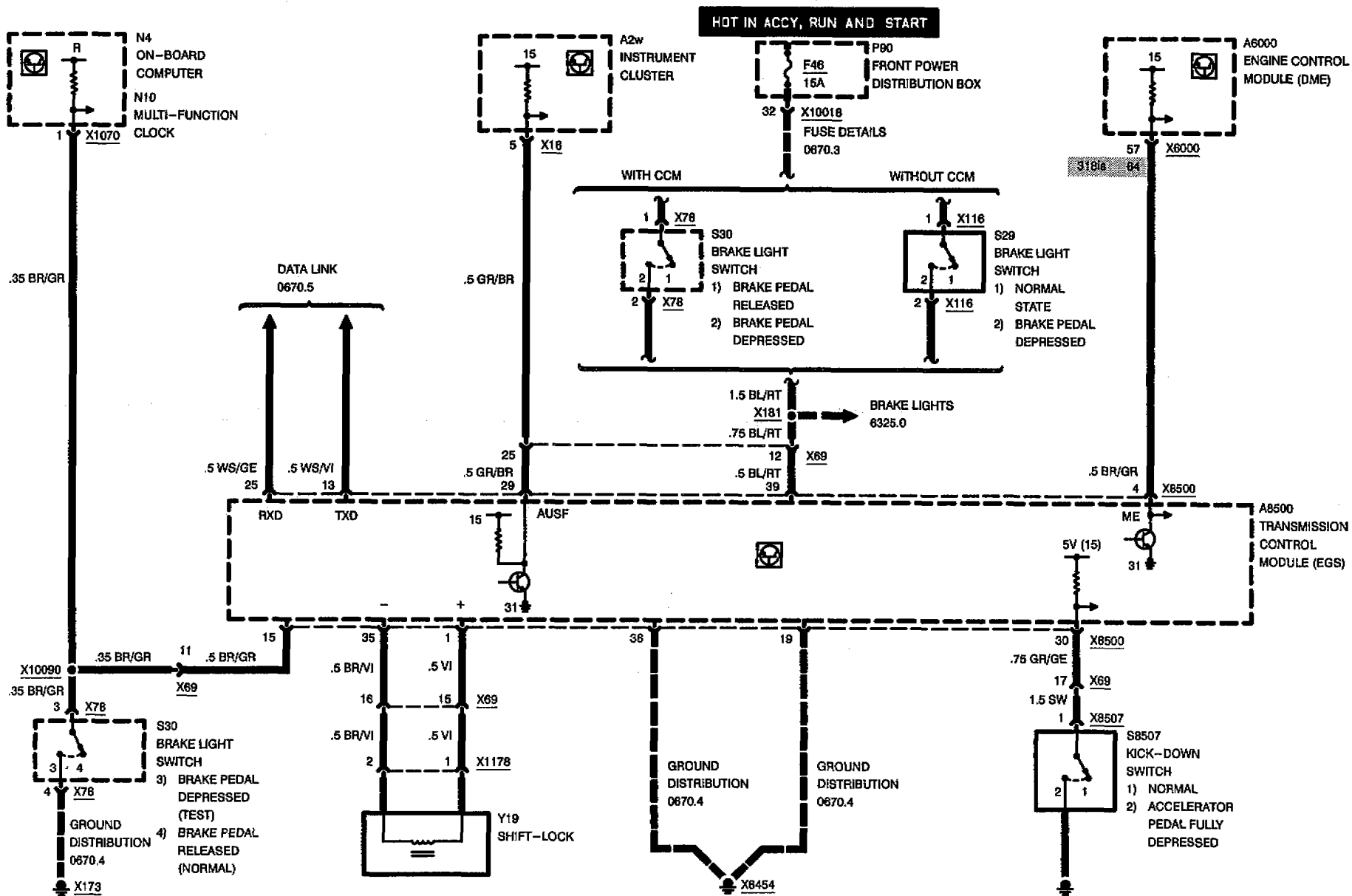




# ELECTRONIC TRANSMISSION CONTROL (EGS A4S 310R)

318is, 325i EARLY PRODUCTION

## SHIFT LOCK, DATA LINK, KICK-DOWN SWITCH

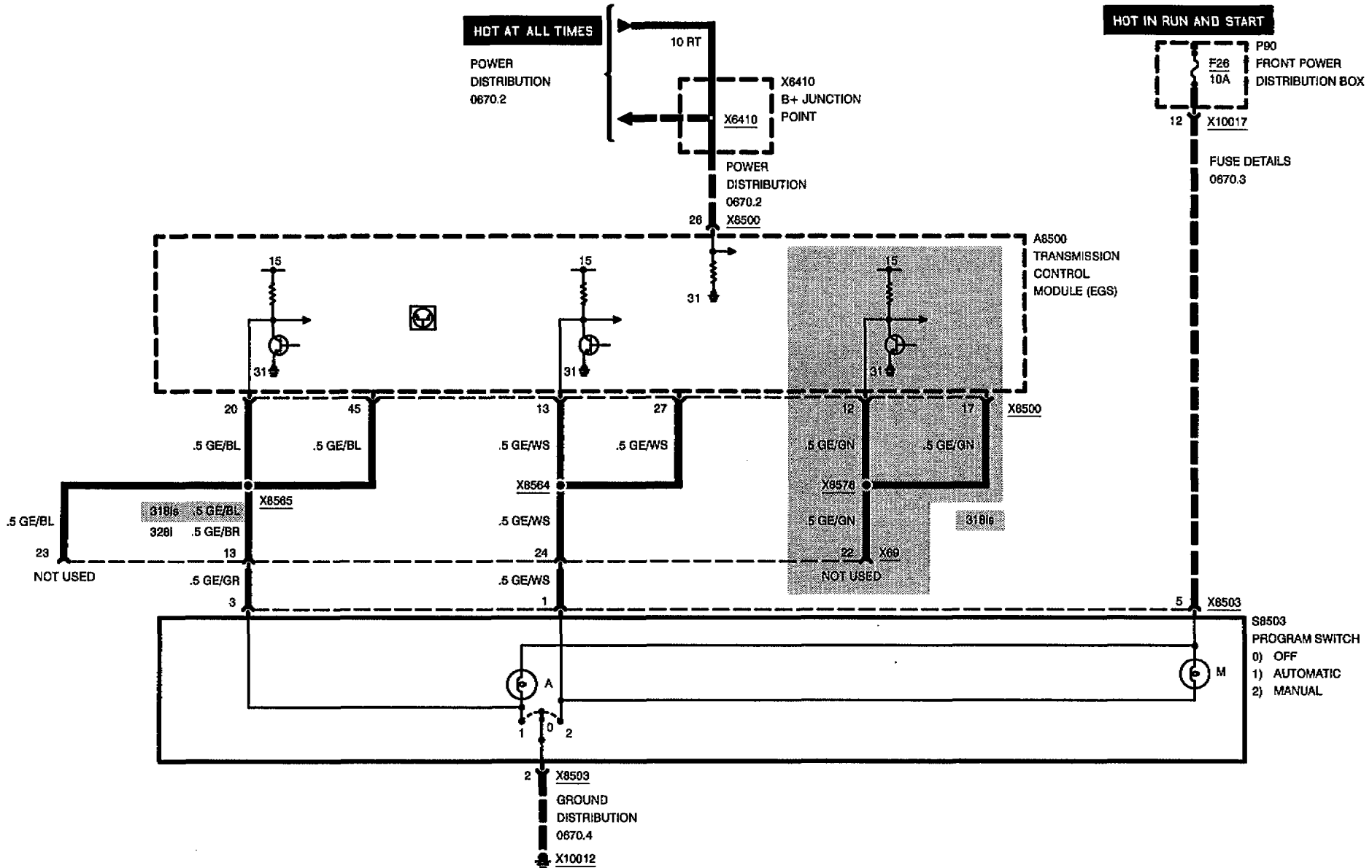




# ELECTRONIC TRANSMISSION CONTROL (EGS A4S 310R)

328i, 318is LATE PRODUCTION

## POWER, PROGRAM SWITCH



04/97

2460.2-05

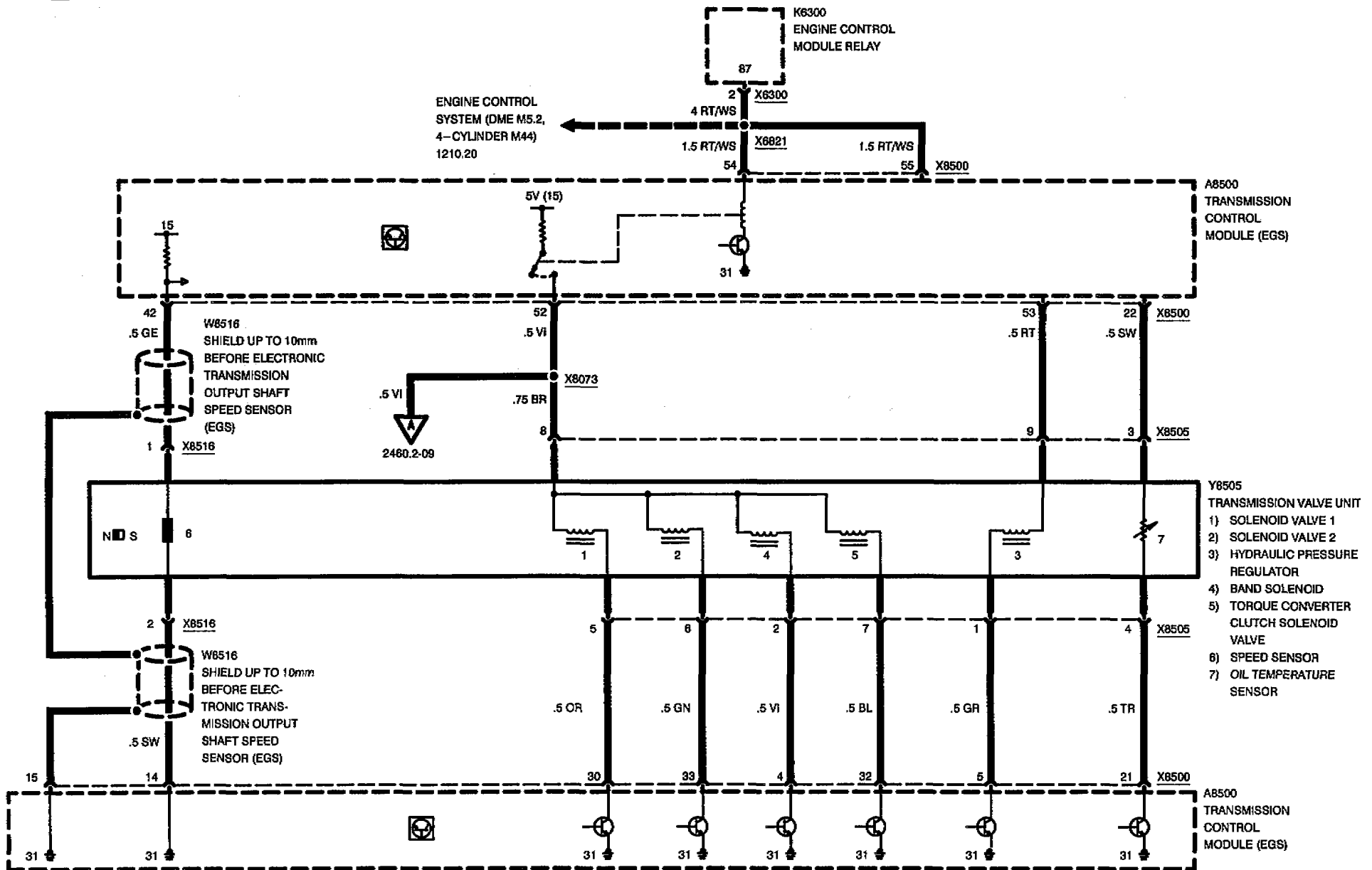
1996



# ELECTRONIC TRANSMISSION CONTROL (EGS A4S 310R)

318is LATE PRODUCTION

## POWER



04/97

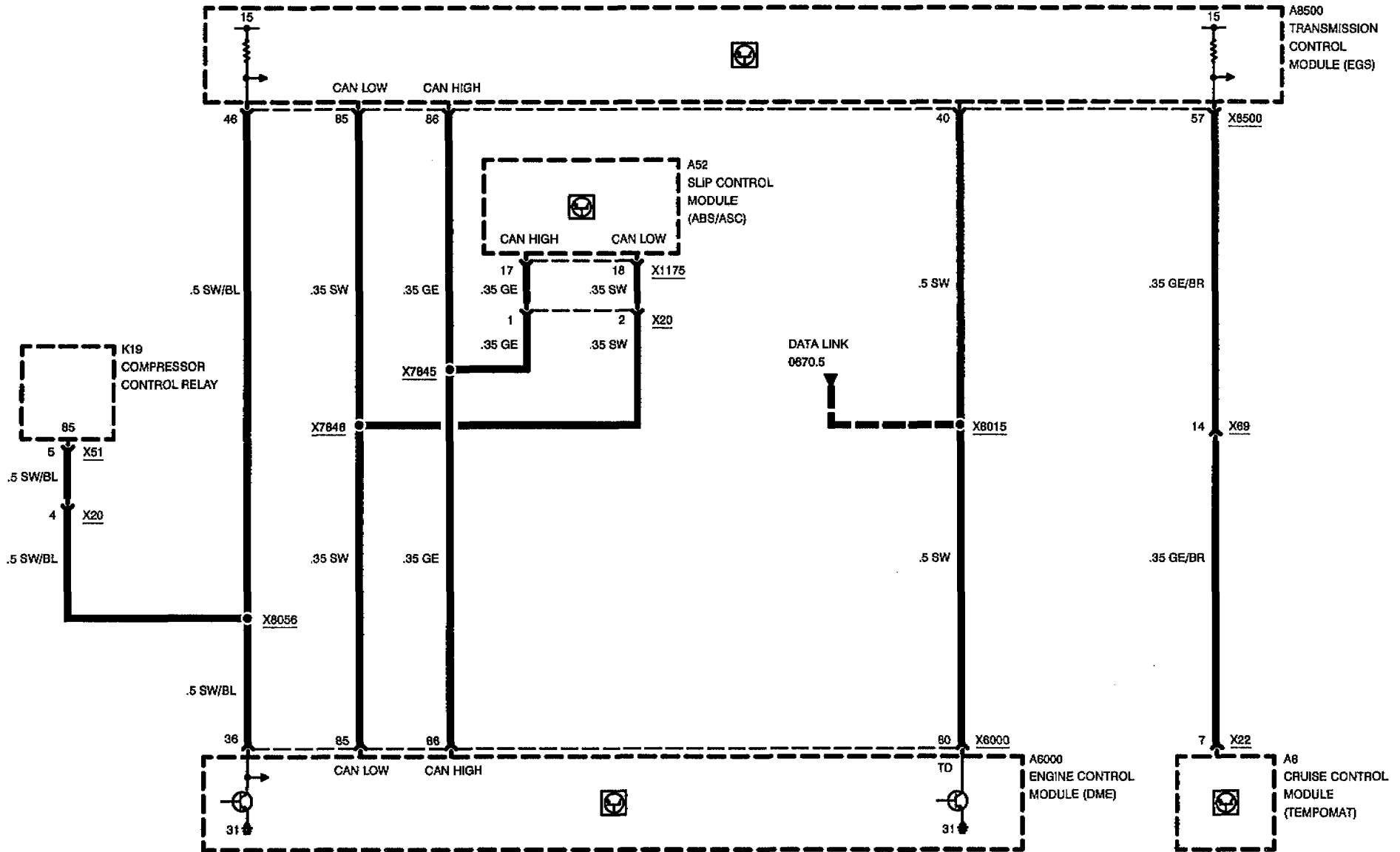
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1996



# ELECTRONIC TRANSMISSION CONTROL (EGS A4S 310R)

318is LATE PRODUCTION

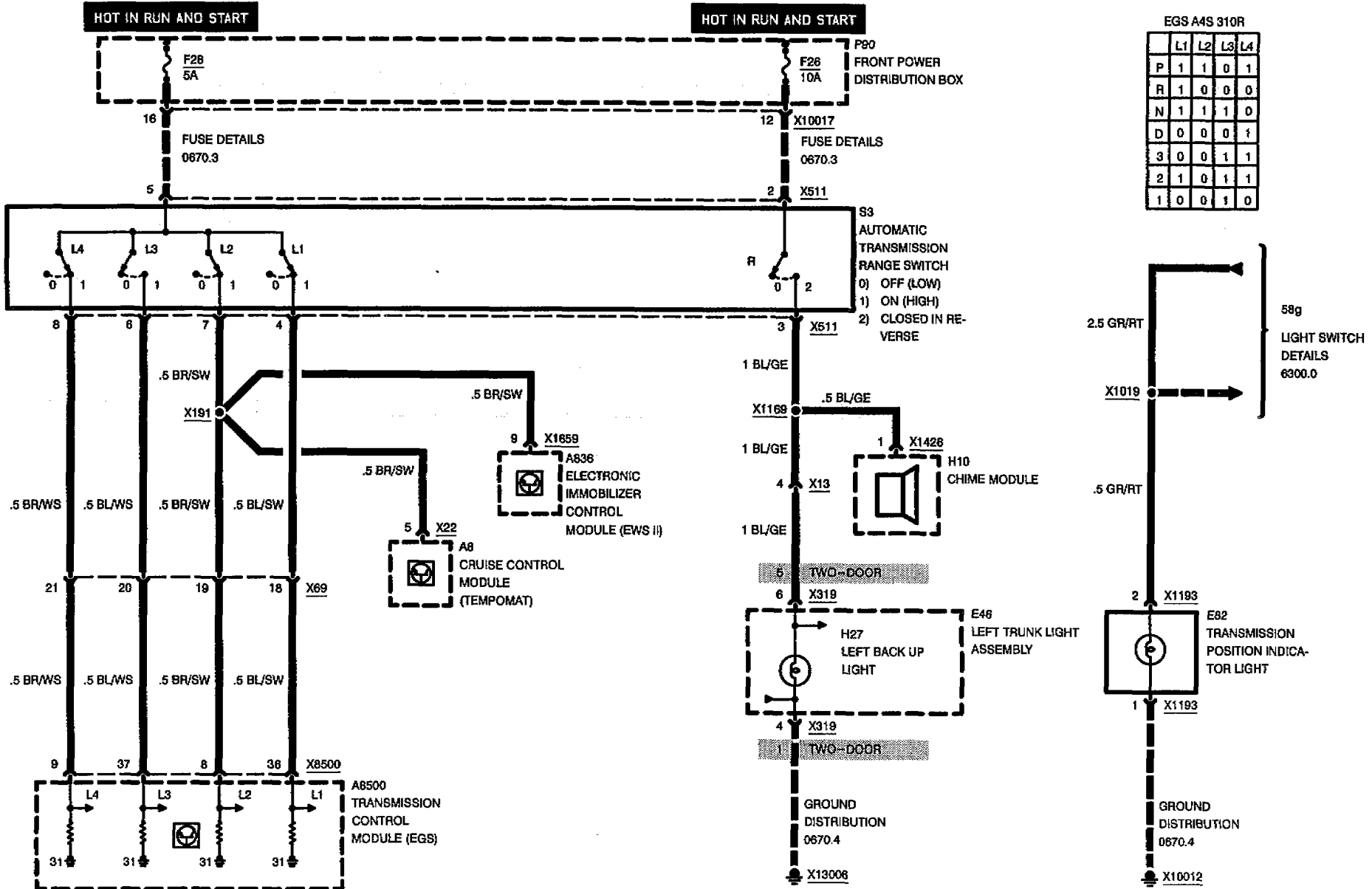




# ELECTRONIC TRANSMISSION CONTROL (EGS A4S 310R)

318is, 328i LATE PRODUCTION

## GEAR SELECTOR SWITCH



04/97

2460.2-08

1996

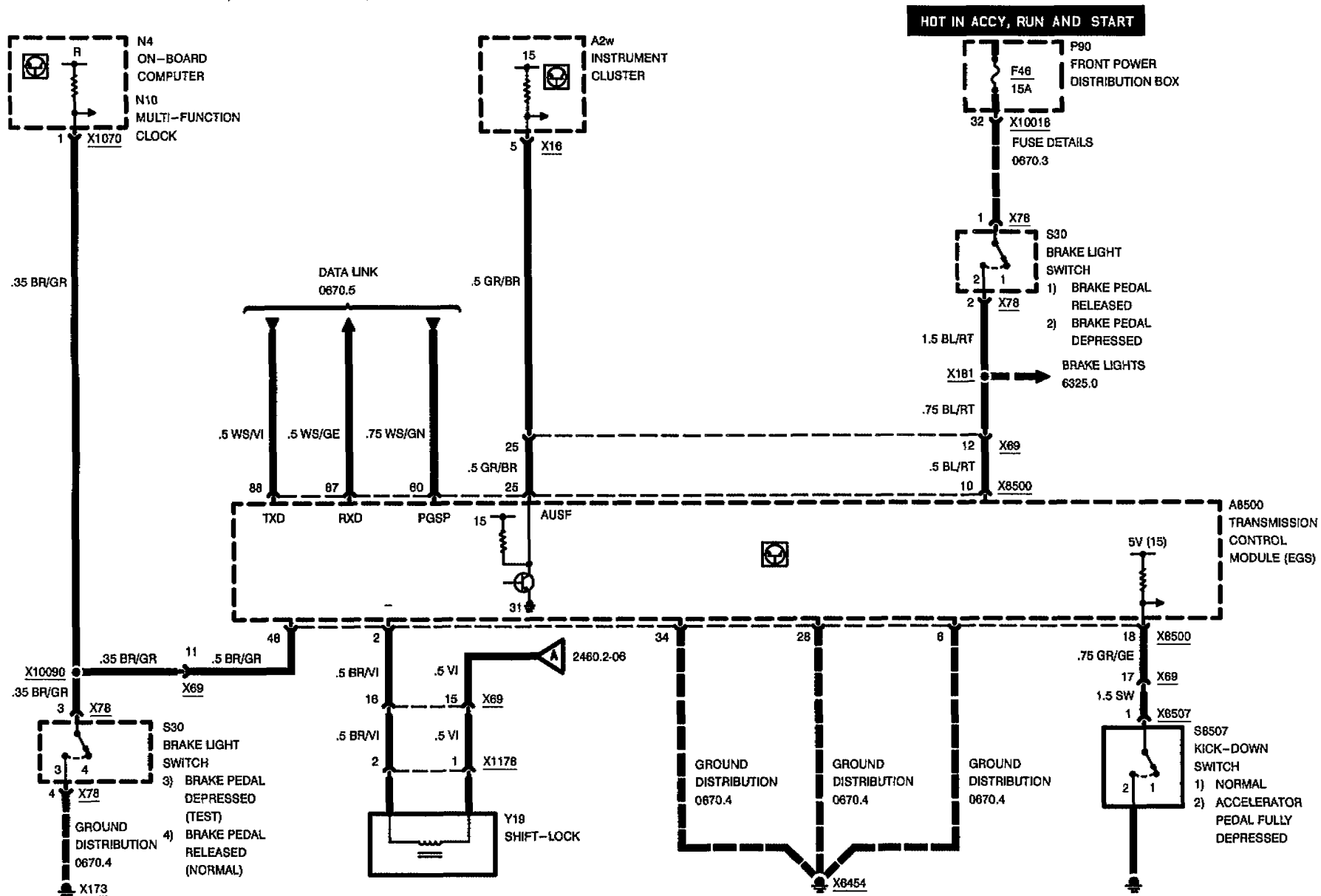




# ELECTRONIC TRANSMISSION CONTROL (EGS A4S 310R)

318is LATE PRODUCTION

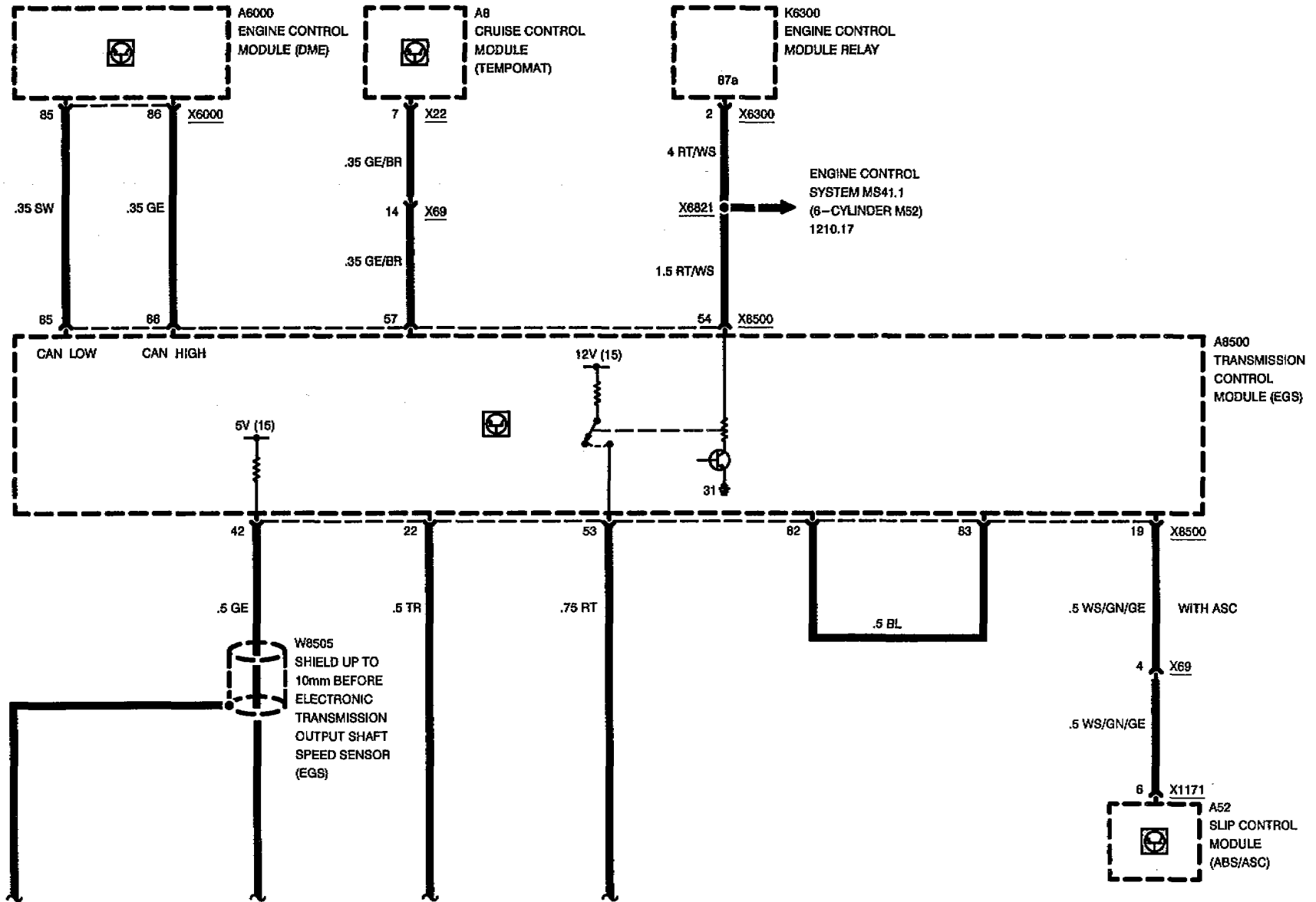
## SHIFT LOCK, DATA LINK, KICK-DOWN SWITCH





# ELECTRONIC TRANSMISSION CONTROL (EGS A4S 310R)

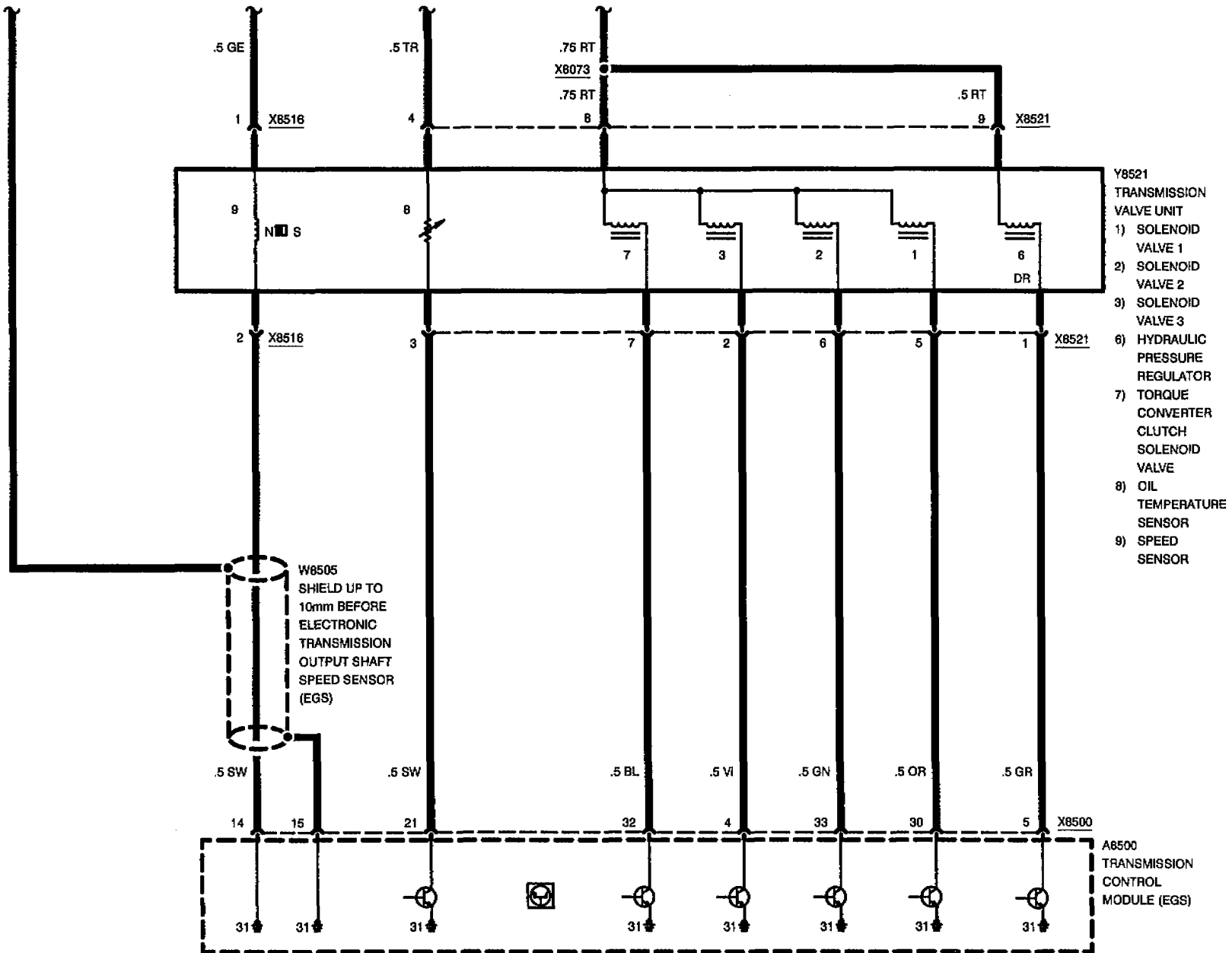
328i LATE PRODUCTION



04/97

2460.2-10

1996

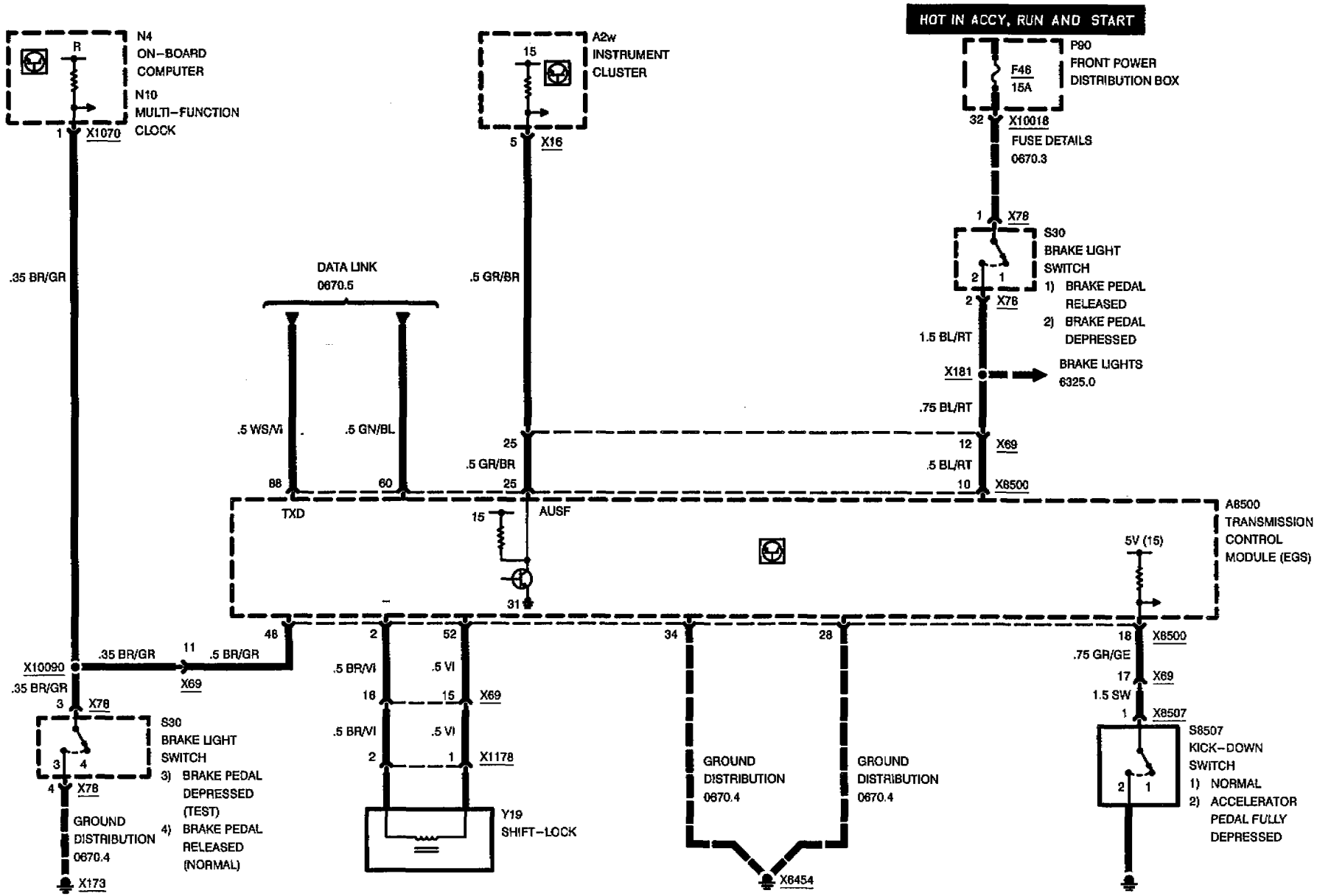




# ELECTRONIC TRANSMISSION CONTROL (EGS A4S 310R)

328i LATE PRODUCTION

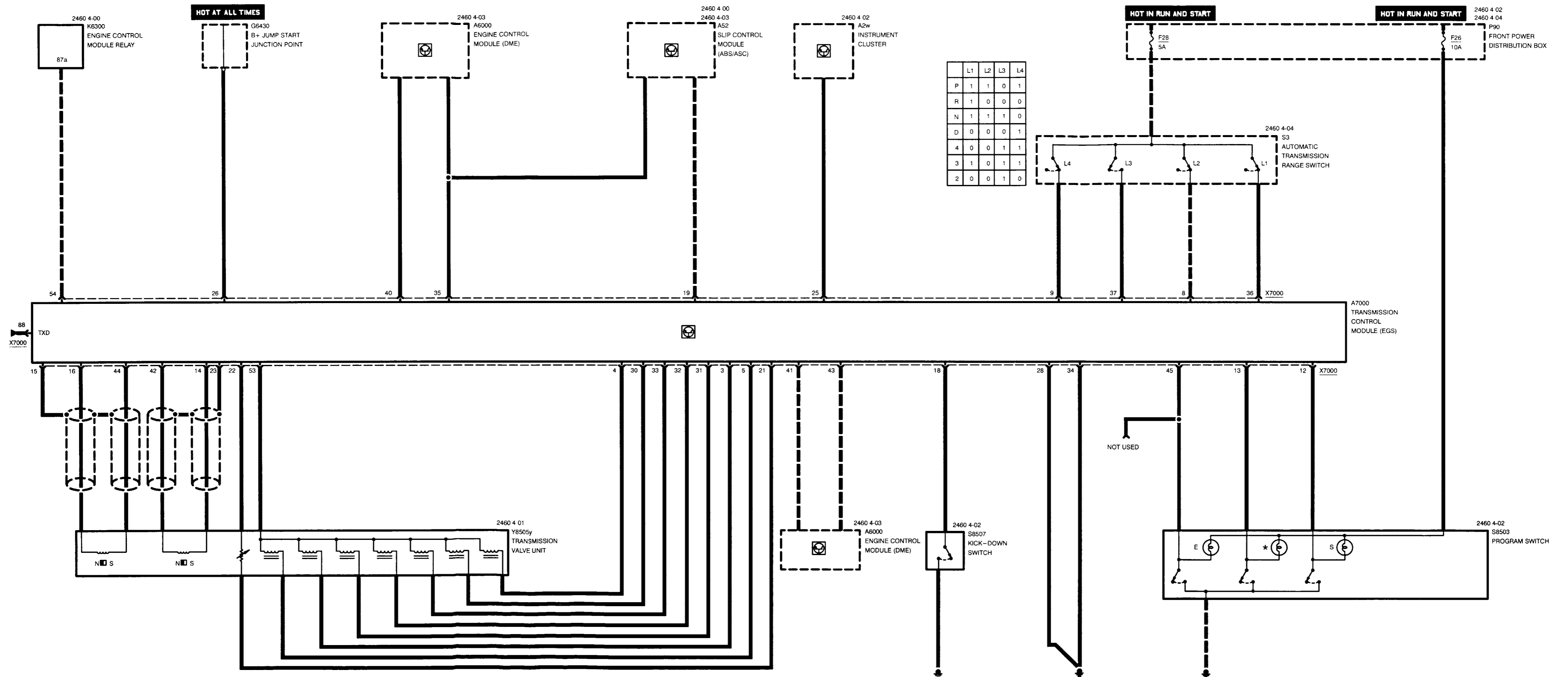
## SHIFT LOCK, DATA LINK, KICK-DOWN SWITCH

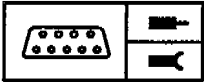


04/97

2460.2-12

1996



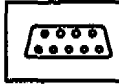


## Pin Assignments

### X7000

Pin	Type	Description/Function	Connection
1		Not used	
2		Not used	
3	A	Solenoid valve 5	Transmission valve unit
4	A	Torque converter clutch solenoid valve	Transmission valve unit
5	A	Hydraulic pressure regulator	Transmission valve unit
6		Not used	
7		Not used	
8		Gear range signal L2	Automatic transmission range switch
9		Gear range signal L4	Automatic transmission range switch
10		Not used	
11		Not used	
12	E	S-program indication	Program switch
13	E	*-program indication	Program switch
14	E	Speed sensor	Transmission valve unit
15	M	Shield speed sensor	Shield
16	A	Speed sensor n-turbine	Transmission valve unit
17		Not used	
18	E	Kick-down signal	Kick-down switch
19	E	ABS signal	ABS/ASC control module
20		Not used	
21	M	Ground oil temperature sensor	Transmission valve unit
22	E	Oil temperature sensor	Transmission valve unit
23		Not used	
24		Not used	
25	A	Fault indicator signal	Instrument cluster
26	E	Battery voltage	Jump start junction point
27		Not used	
28	M	Ground, electronics	Ground
29		Not used	
30	A	Solenoid valve 1	Transmission valve unit

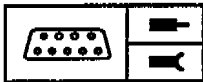
E = Input, A = Output, M = Ground



## Pin Assignments

Pin	Type	Description/Function	Connection
31	A	Solenoid valve 4	Transmission valve unit
32	A	Solenoid valve 3	Transmission valve unit
33	A	Solenoid valve 2	Transmission valve unit
34	M	Ground	Ground
35	E	DKT interface	Engine control module (DME)
36	E	Gear range signal L1	Automatic transmission range switch
37	E	Gear range signal L3	Automatic transmission range switch
38		Not used	
39		Not used	
40	A	Ignition timing intervention	Engine control module (DME)
41	E	Ti-measurement signal (fuel consumption)	Engine control module (DME)
42	A	Speed sensor n - ab (+)	Transmission valve unit
43	E	Crankshaft RPM speed signal TD	Engine control module (DME)
44	E	Speed sensor n-turbine	Transmission valve unit
45	E	E-program indication	Program switch
46		Not used	
47		Not used	
48		Not used	
49		Not used	
50		Not used	
51		Not used	
52		Not used	
53	A	Voltage supply for solenoid valves	Transmission valve unit
54	E	Voltage supply	DME relay
55		Not used	
56		Not used	
57		Not used	
58		Not used	
59		Not used	
60		Not used	
61		Not used	
62		Not used	

E = Input, A = Output, M = Ground



### Pin Assignments

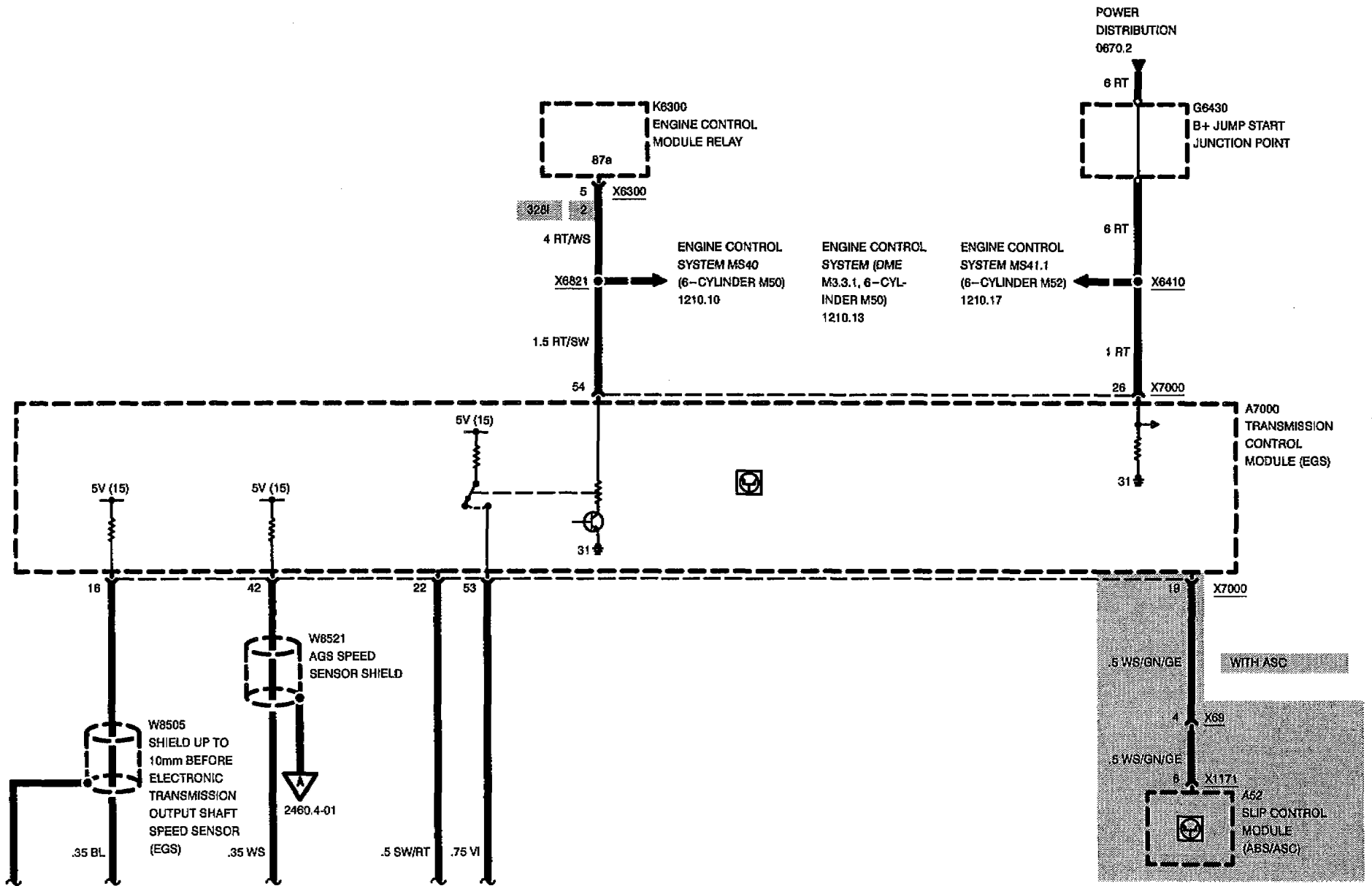
Pin	Type	Description/Function	Connection
63		Not used	
64		Not used	
65		Not used	
66		Not used	
67		Not used	
68		Not used	
69		Not used	
70		Not used	
71		Not used	
72		Not used	
73		Not used	
74		Not used	
75		Not used	
76		Not used	
77		Not used	
78		Not used	
79		Not used	
80		Not used	
81		Not used	
82		Not used	
83		Not used	
84		Not used	
85		Not used	
86		Not used	
87	A	RxD diagnostic data link	Data link connector
88	E/A	TxD diagnostic data link	Data link connector

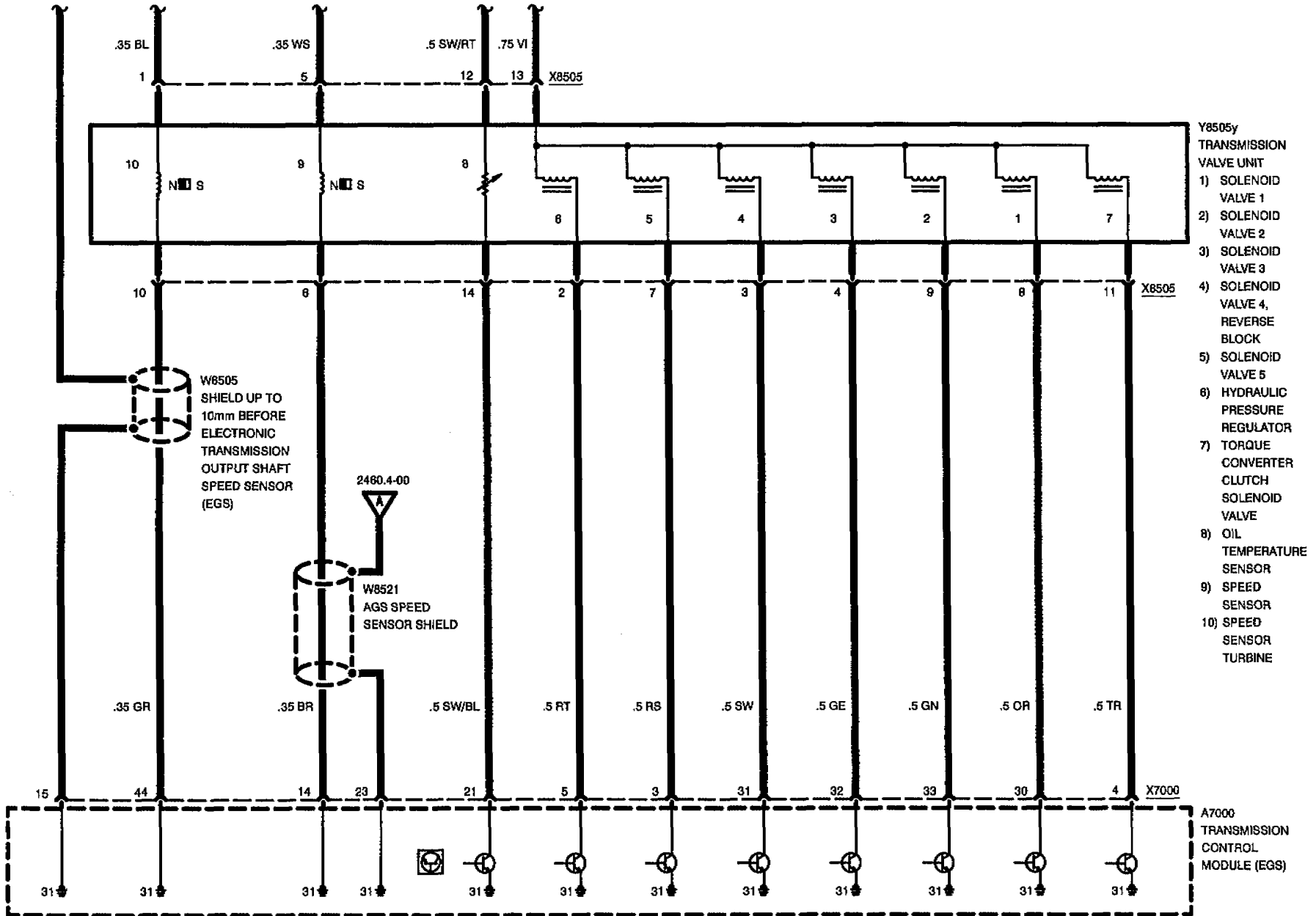
E = Input, A = Output, M = Ground



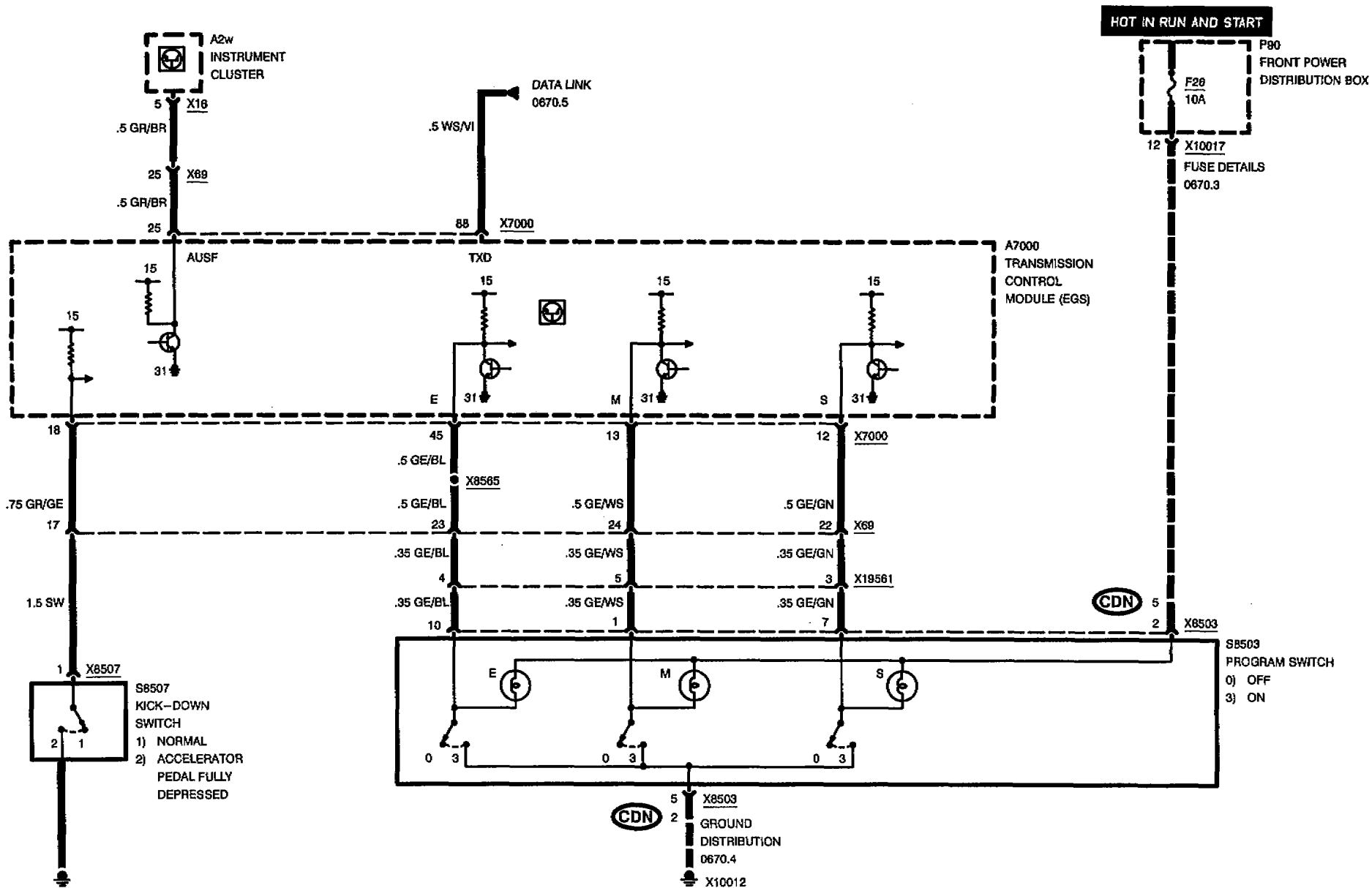


# ELECTRONIC TRANSMISSION CONTROL (EGS A5S 310Z)



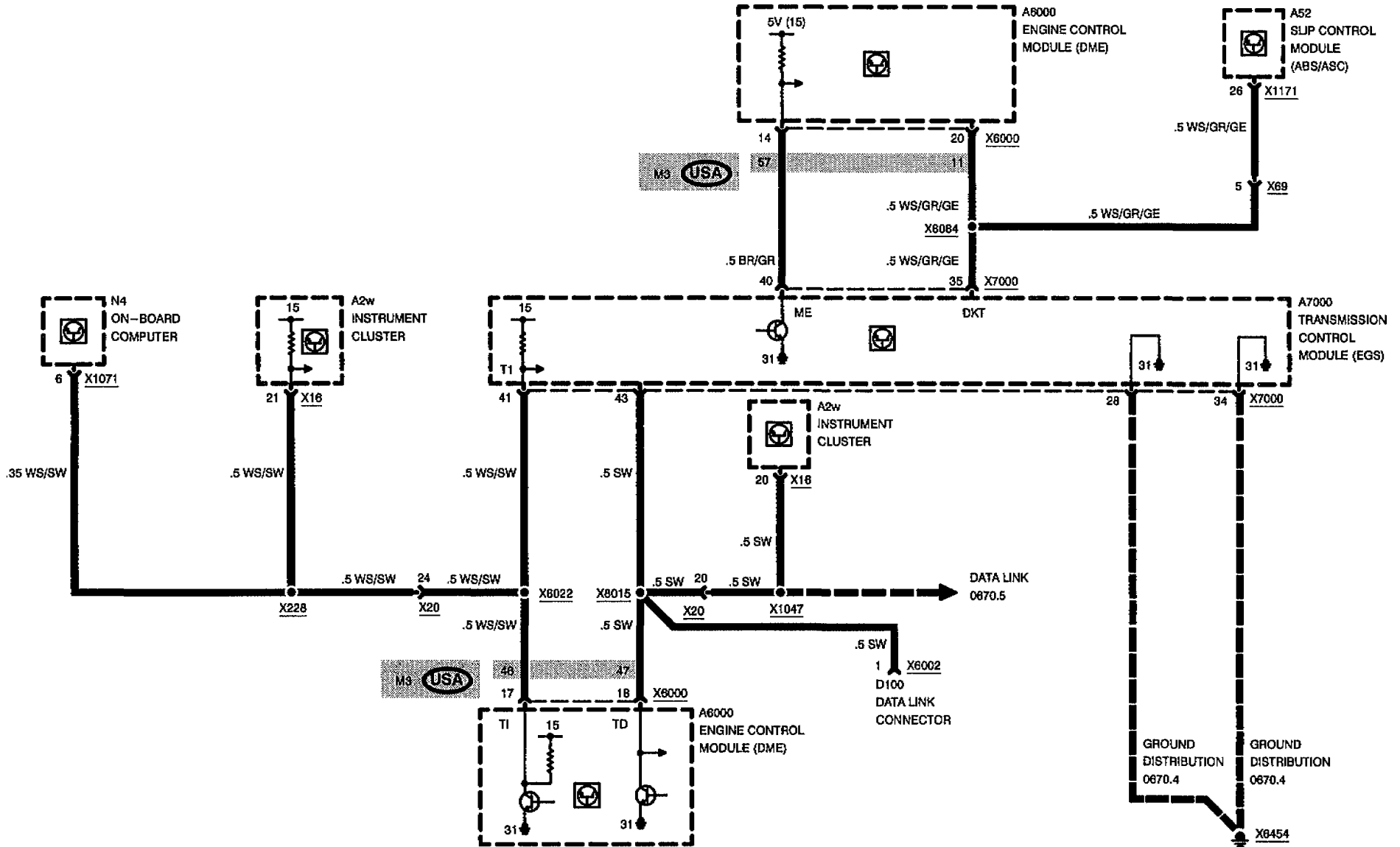


# ELECTRONIC TRANSMISSION CONTROL (EGS A5S 310Z)

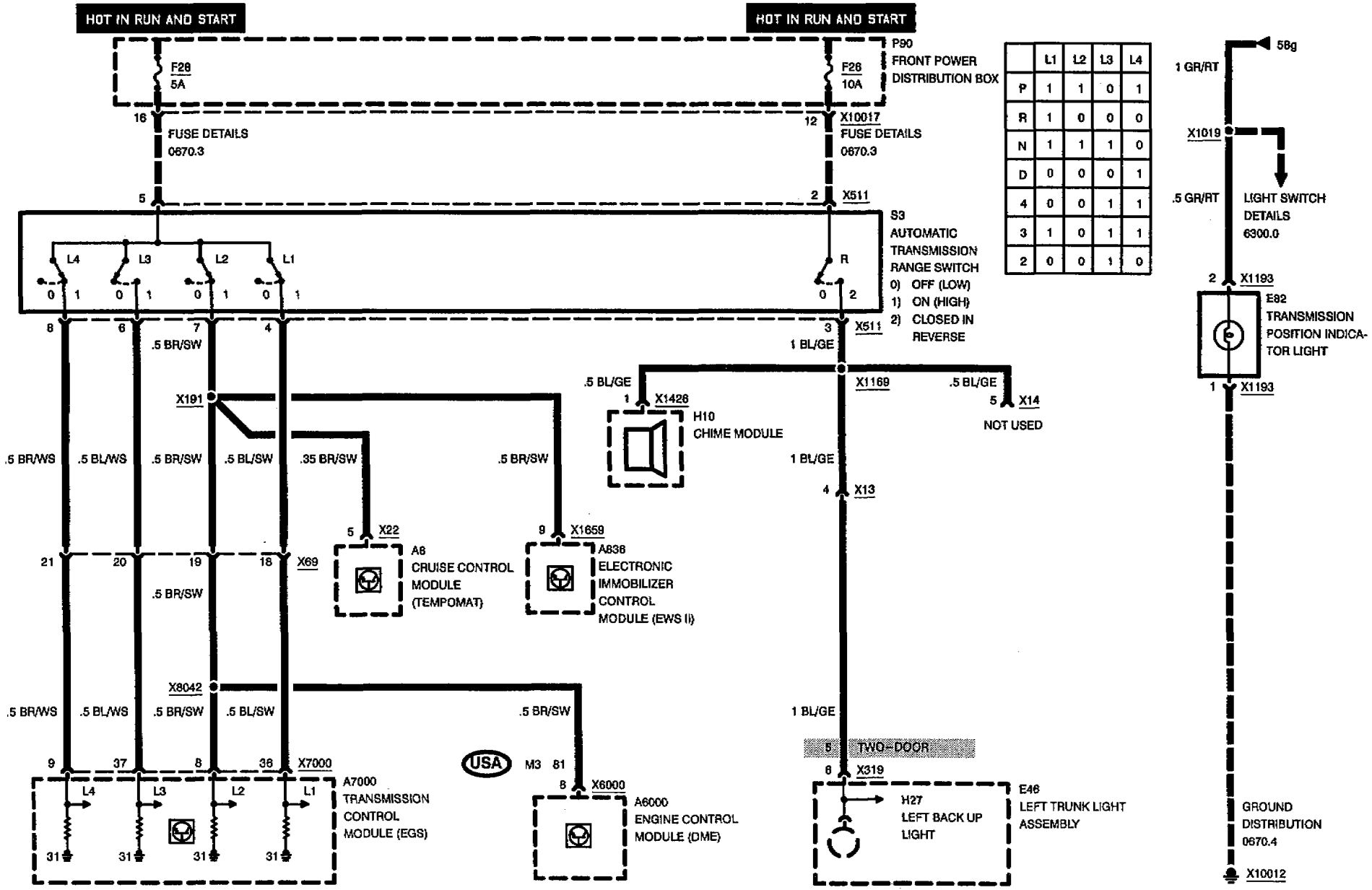




# ELECTRONIC TRANSMISSION CONTROL (EGS A5S 310Z)



**ELECTRONIC TRANSMISSION CONTROL (EGS A5S 310Z)**

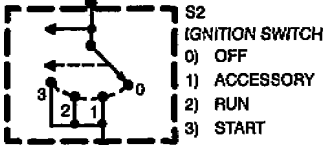




3234.0

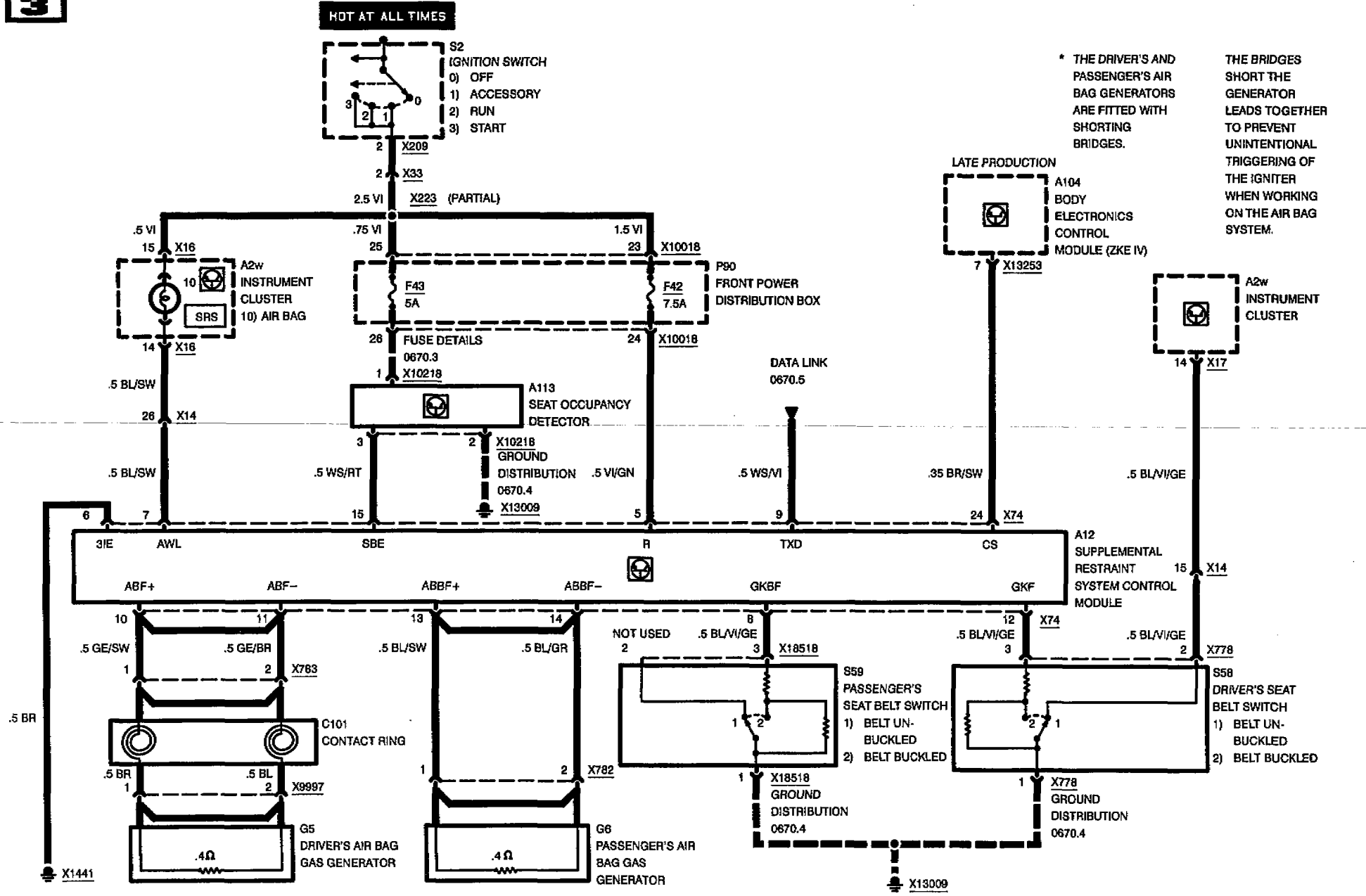
# SUPPLEMENTAL RESTRAINT SYSTEM (AIR BAG)

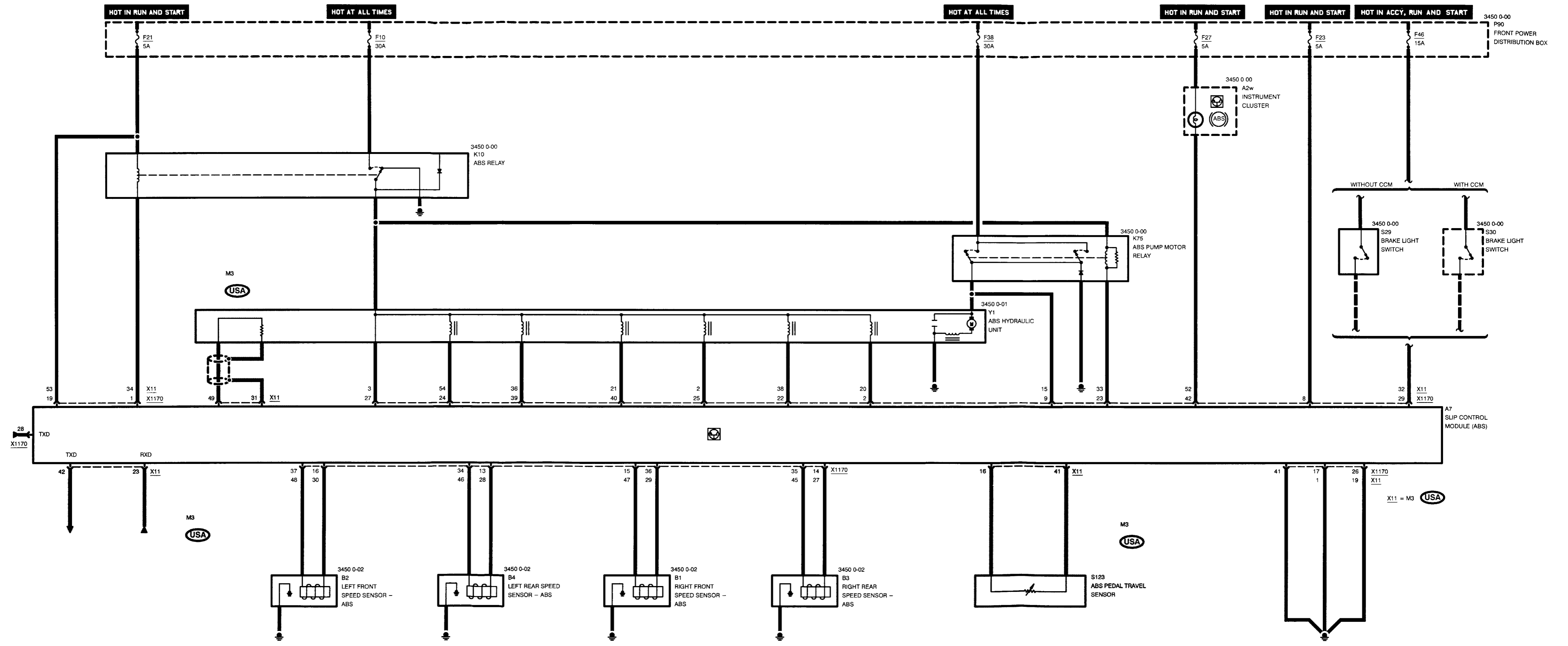
**HOT AT ALL TIMES**



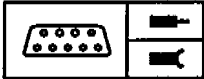
\* THE DRIVER'S AND PASSENGER'S AIR BAG GENERATORS ARE FITTED WITH SHORTING BRIDGES.  
 THE BRIDGES SHORT THE GENERATOR LEADS TOGETHER TO PREVENT UNINTENTIONAL TRIGGERING OF THE IGNITER WHEN WORKING ON THE AIR BAG SYSTEM.

LATE PRODUCTION







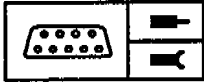


## Pin Assignments

### X1170

Pin	Type	Description/Function	Connection
1	A	ABS relay control	ABS relay
2	A	Right front inlet valve control	ABS hydraulic unit
3		Not used	
4		Not used	
5		Not used	
6		Not used	
7		Not used	
8	E	Voltage supply, terminal 15	Front power distribution box, fuse 23
9	E	Operating voltage	ABS relay
10		Not used	
11		Not used	
12		Not used	
13	A	Speed sensor ground, RL	Left rear speed sensor - ABS
14	A	Speed sensor ground, RR	Right rear speed sensor - ABS
15	A	Speed sensor ground, FR	Right front speed sensor - ABS
16	A	Speed sensor ground, FL	Left front speed sensor - ABS
17	M	Ground, control module	Chassis ground
18		Not used	
19	E	Voltage supply, terminal 15	Front power distribution box, fuse 21
20		Not used	
21		Not used	
22	A	Left front inlet valve control	ABS hydraulic unit
23	A	ABS pump motor relay control	ABS pump motor relay
24	A	Rear axle inlet valve control	ABS hydraulic unit
25	A	Left front outlet valve control	ABS hydraulic unit
26	M	Ground, control module	Chassis ground
27	E	Voltage monitoring, hydraulics	ABS hydraulic unit
28	E/A	TxD diagnostic data link	Data link connector
29	E	Brake light signal	Brake light switch
30		Not used	

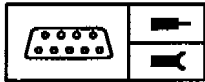
E = Input, A = Output, M = Ground



## Pin Assignments

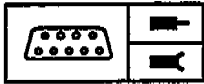
Pin	Type	Description/Function	Connection
31		Not used	
32		Not used	
33		Not used	
34	E	Speed sensor signal RL	Left rear speed sensor - ABS
35	E	Speed sensor signal RR	Right rear speed sensor - ABS
36	E	Speed sensor signal FR	Right front speed sensor - ABS
37	E	Speed sensor signal FL	Left front speed sensor - ABS
38		Not used	
39	A	Rear axle outlet valve control	ABS hydraulic unit
40	A	Right front outlet valve control	ABS hydraulic unit
41	M	Ground, control module	Chassis ground
42	A	ABS warning lamp control	Instrument cluster
43		Not used	
44		Not used	
45		Not used	
46		Not used	
47		Not used	
48		Not used	
49		Not used	
50		Not used	
51		Not used	
52		Not used	
53		Not used	
54		Not used	
55		Not used	

E = Input, A = Output, M = Ground


**Pin Assignments (M3 )**
**X11**

Pin	Type	Description/Function	Connection
1	M	Ground, control module	Chassis ground
2	A	Left front outlet valve	ABS hydraulic unit
3	E	Voltage monitoring, hydraulics	ABS hydraulic unit
4		Not used	
5		Not used	
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		Not used	
15	E	Operating voltage	ABS relay
16	E	Pedal travel sensor	ABS pedal travel sensor
17		Not used	
18		Not used	
19	M	Ground, control module	Chassis ground
20	A	Left front inlet valve	ABS hydraulic unit
21	A	Right front outlet valve control	ABS hydraulic unit
22		Not used	
23	A	RxD diagnostic data link	Data link connector
24		Not used	
25		Not used	
26		Not used	
27	A	Speed sensor ground, RR	Right rear speed sensor - ABS
28	A	Speed sensor ground, RL	Left rear speed sensor - ABS
29	E	Speed sensor signal, FR	Right front speed sensor - ABS
30	A	Speed sensor ground, FL	Left front speed sensor - ABS

E = Input, A = Output, M = Ground

**Pin Assignments (M3 )**

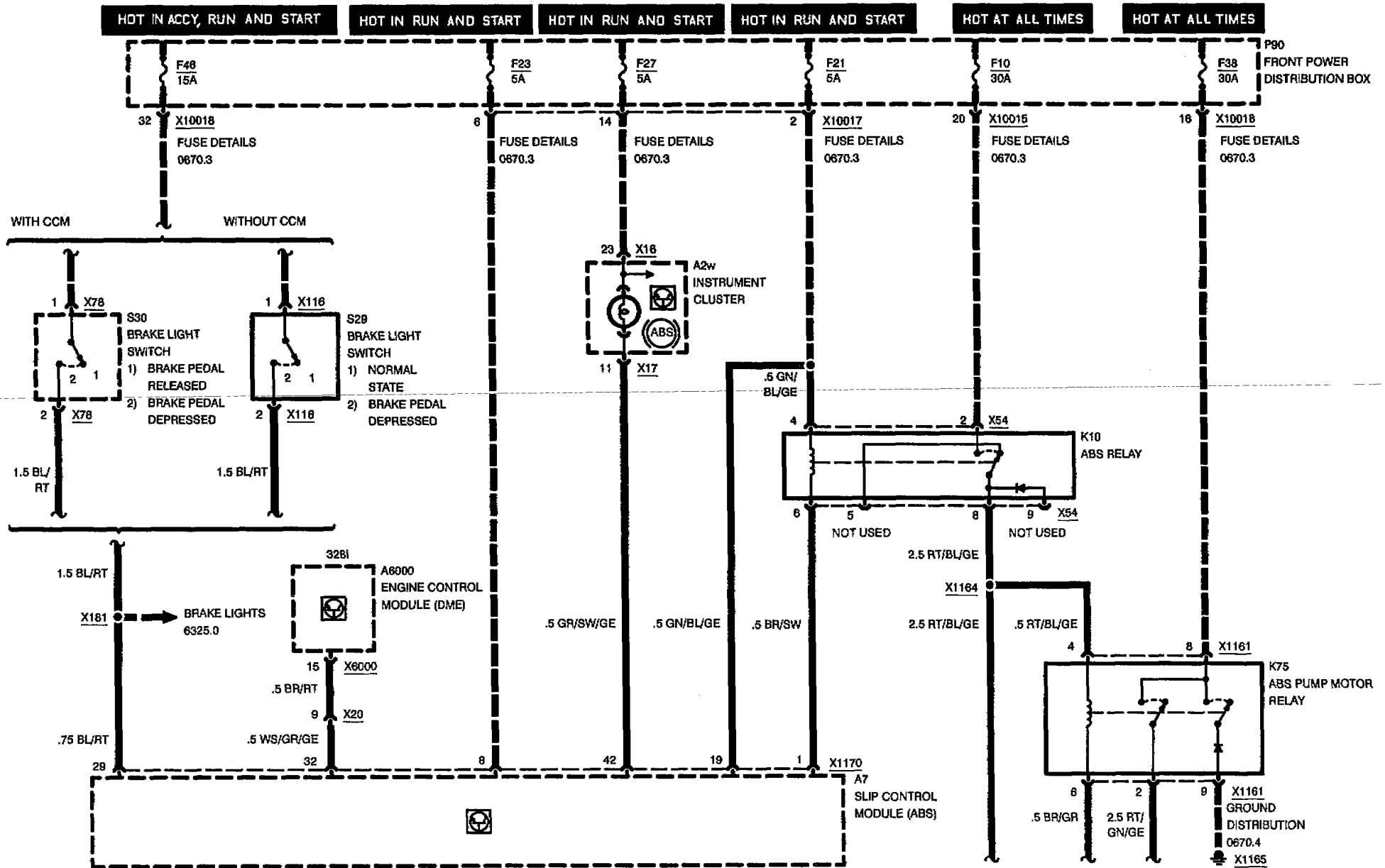
Pin	Type	Description/Function	Connection
31	A	Fuel injection quantity controller	ABS hydraulic unit
32	E	Brake light signal	Brake light switch
33	A	ABS pump motor relay control	ABS pump motor relay
34	A	ABS relay control	ABS relay
35		Not used	
36	A	Rear axle outlet valve control	ABS hydraulic unit
37		Not used	
38	A	Right front inlet valve control	ABS hydraulic unit
39		Not used	
40		Not used	
41	E	Pedal travel sensor	ABS pedal travel sensor
42	E/A	TxD diagnostic data link	Data link connector
43		Not used	
44		Not used	
45	E	Speed sensor signal, RR	Right rear speed sensor - ABS
46	E	Speed sensor signal, RL	Left rear speed sensor - ABS
47	A	Speed sensor signal, FR	Right front speed sensor - ABS
48	E	Speed sensor signal, FL	Left front speed sensor - ABS
49	A	Fuel injection quantity controller	ABS hydraulic unit
50		Not used	
51		Not used	
52	A	ABS warning lamp control	Instrument cluster
53	E	Voltage supply, terminal 15	Front power distribution box, fuse 21
54	A	Rear axle inlet valve control	ABS hydraulic unit

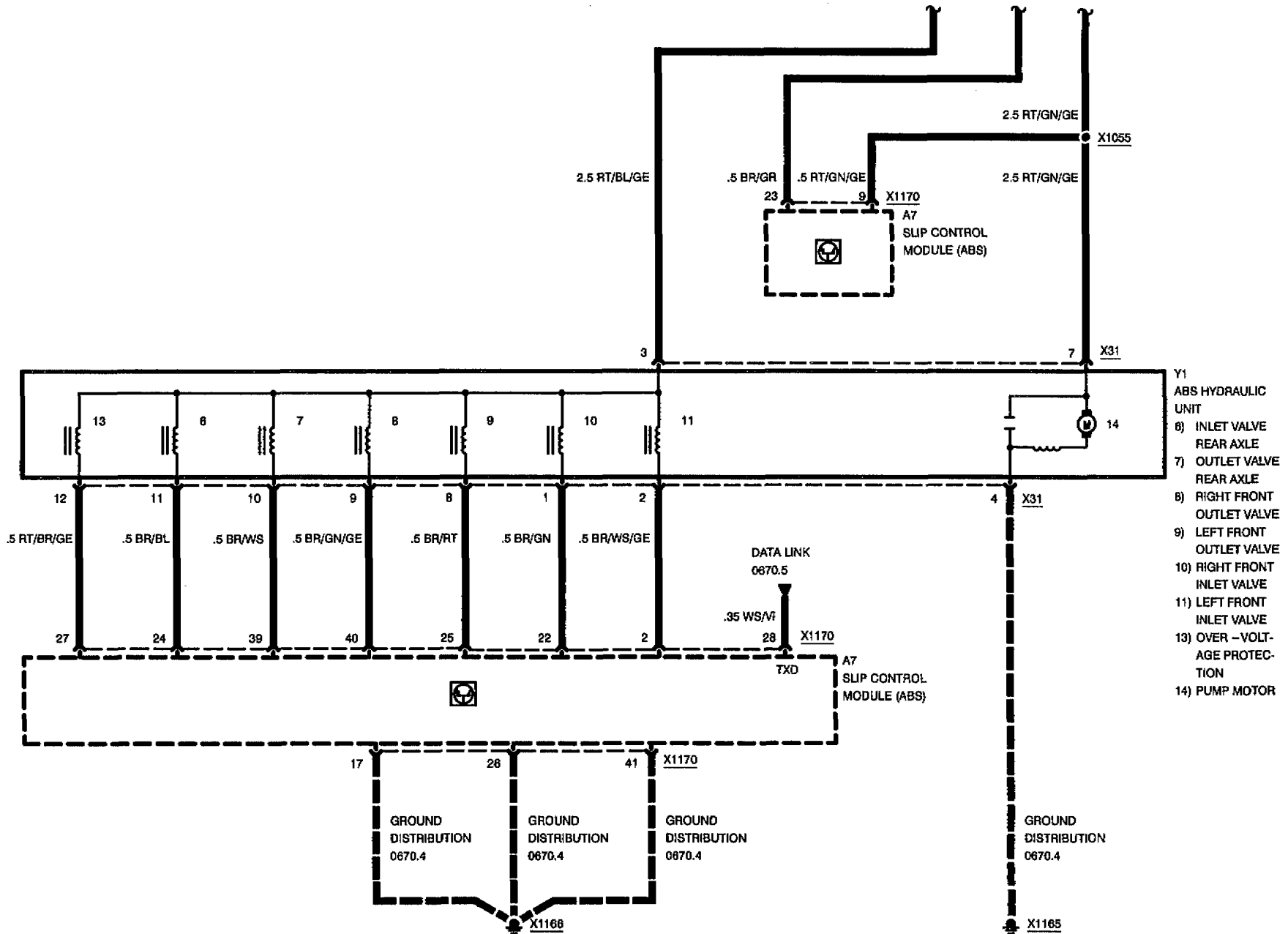
E = Input, A = Output, M = Ground



3450.0

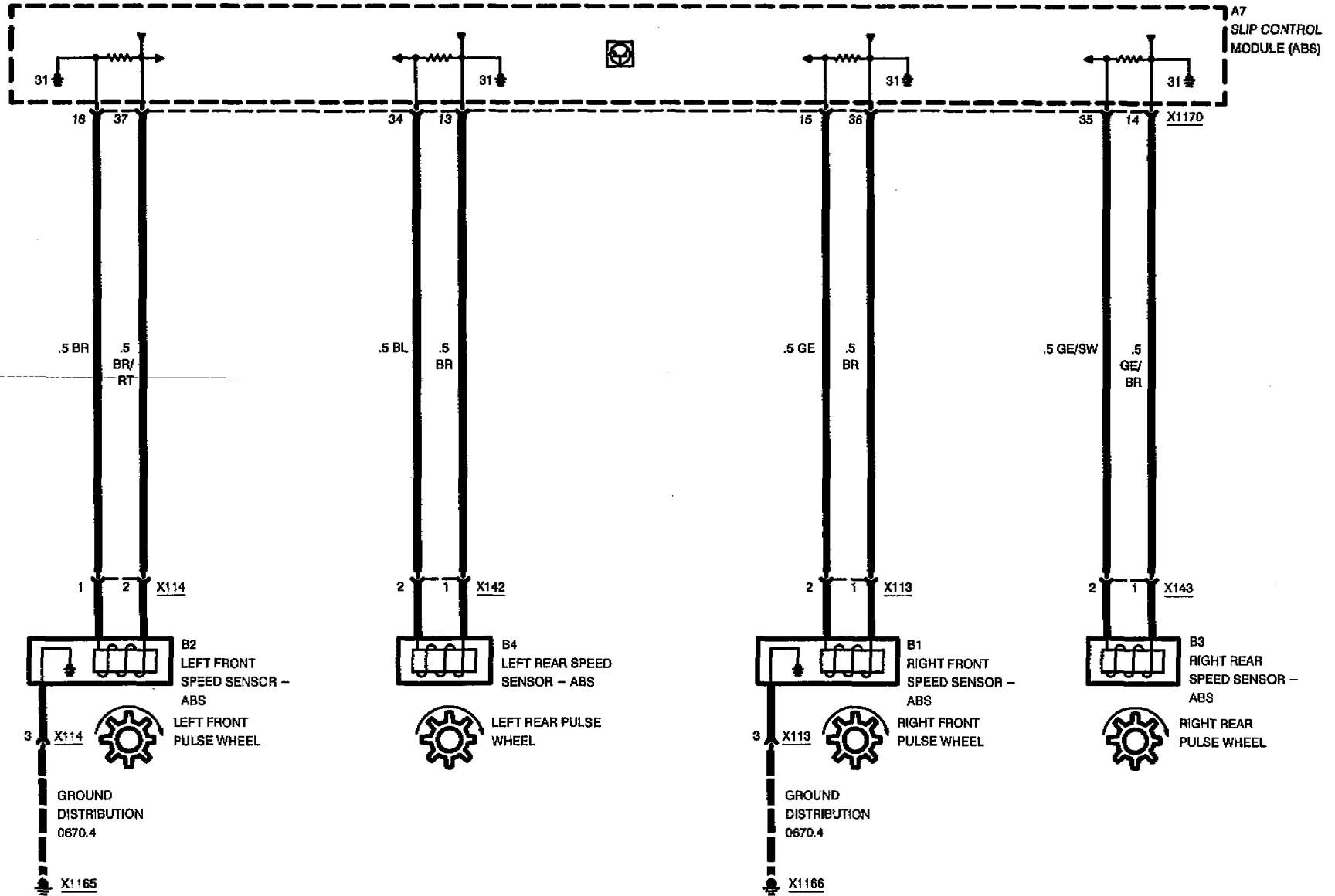
# SLIP CONTROL (ABS)



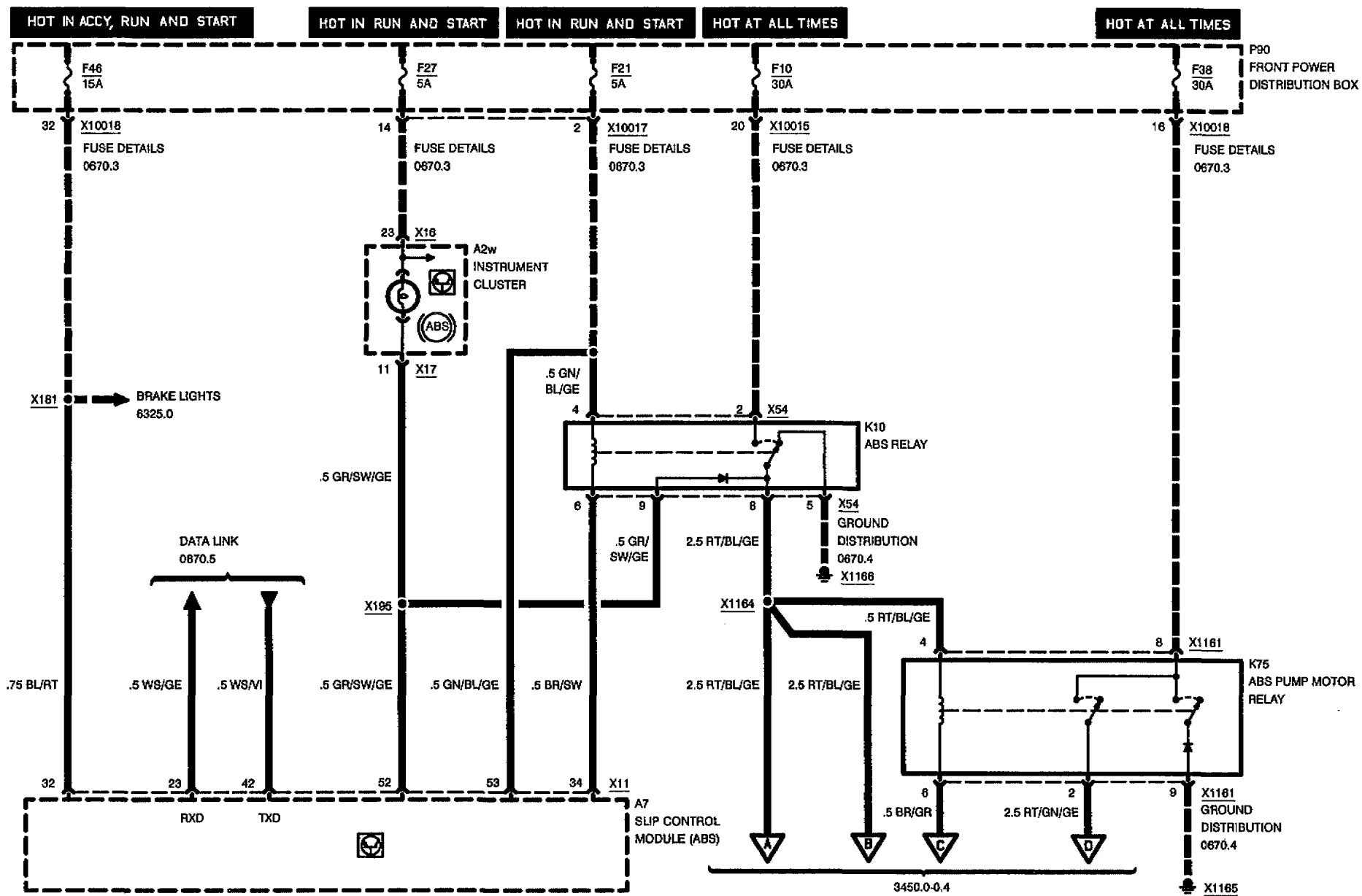




# SLIP CONTROL (ABS)









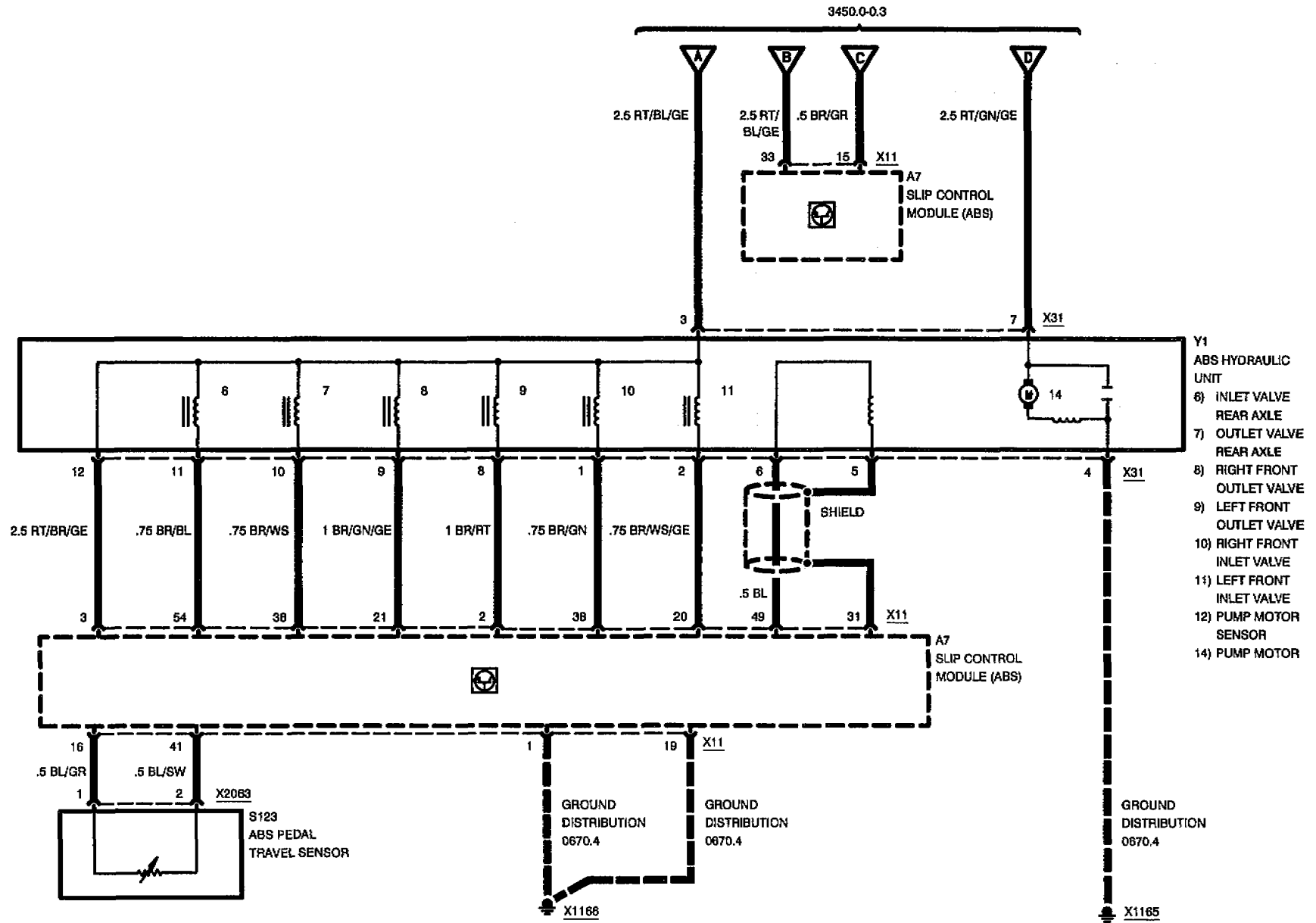
# SLIP CONTROL (ABS)

M3 (USA)

04/97

3450.0-04

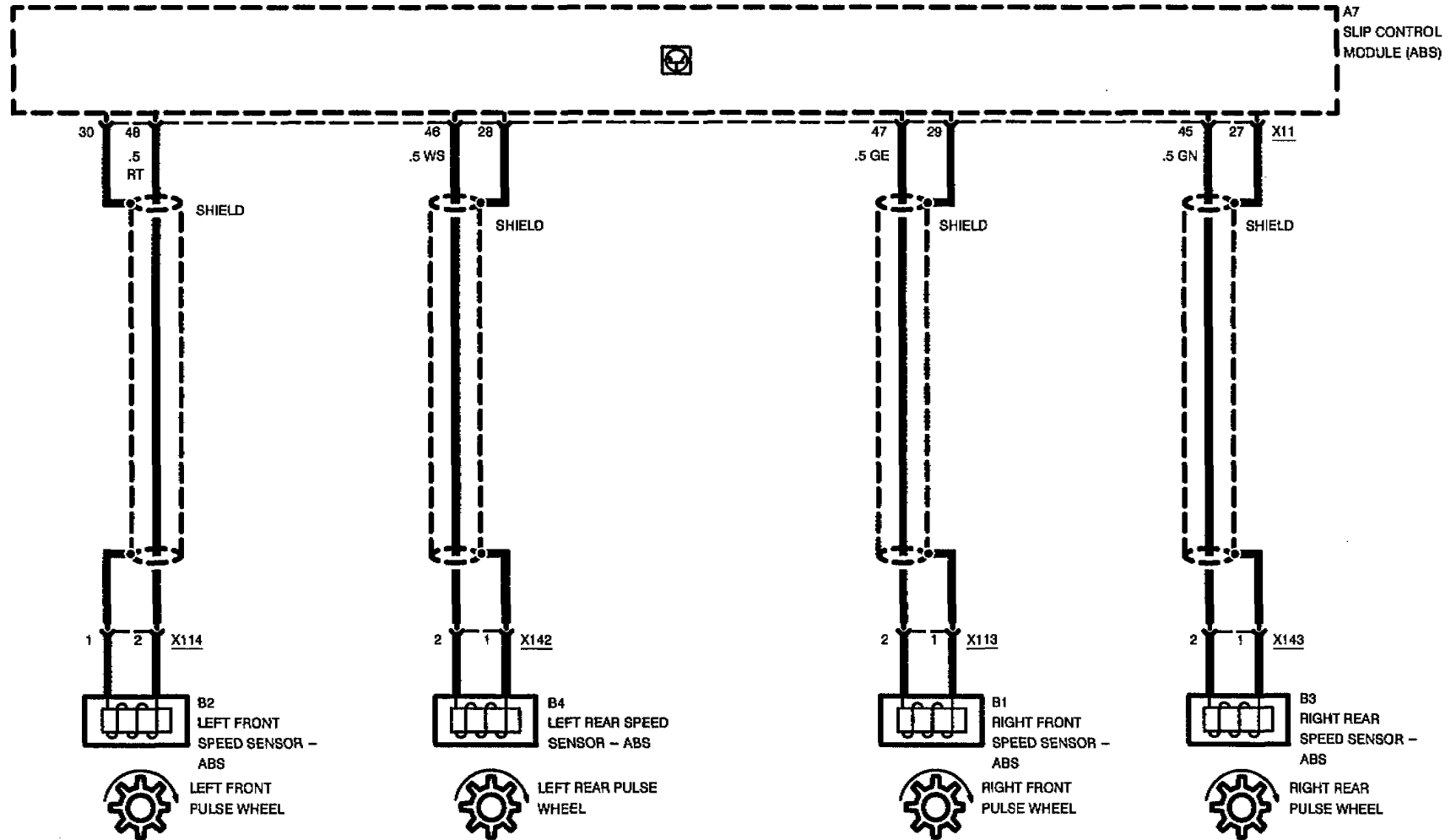
1996





# SLIP CONTROL (ABS)

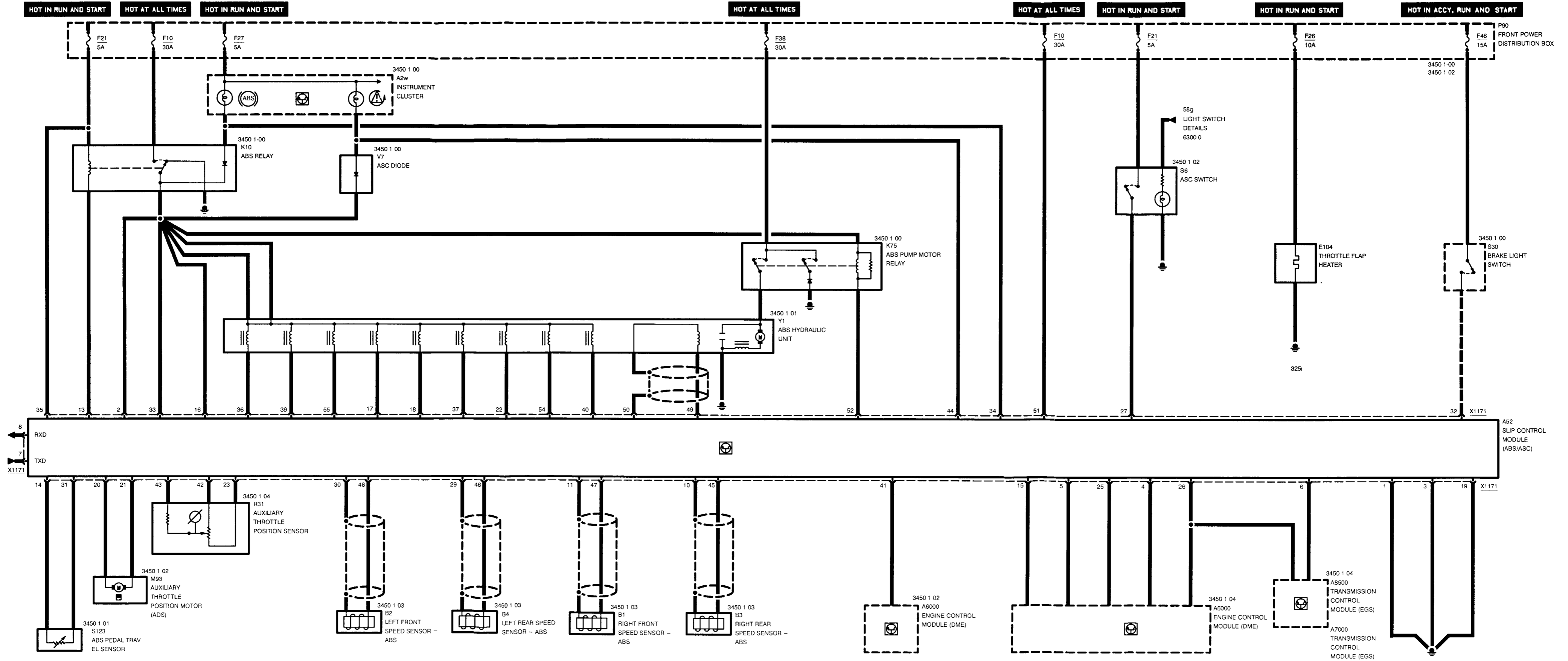
M3 (USA)



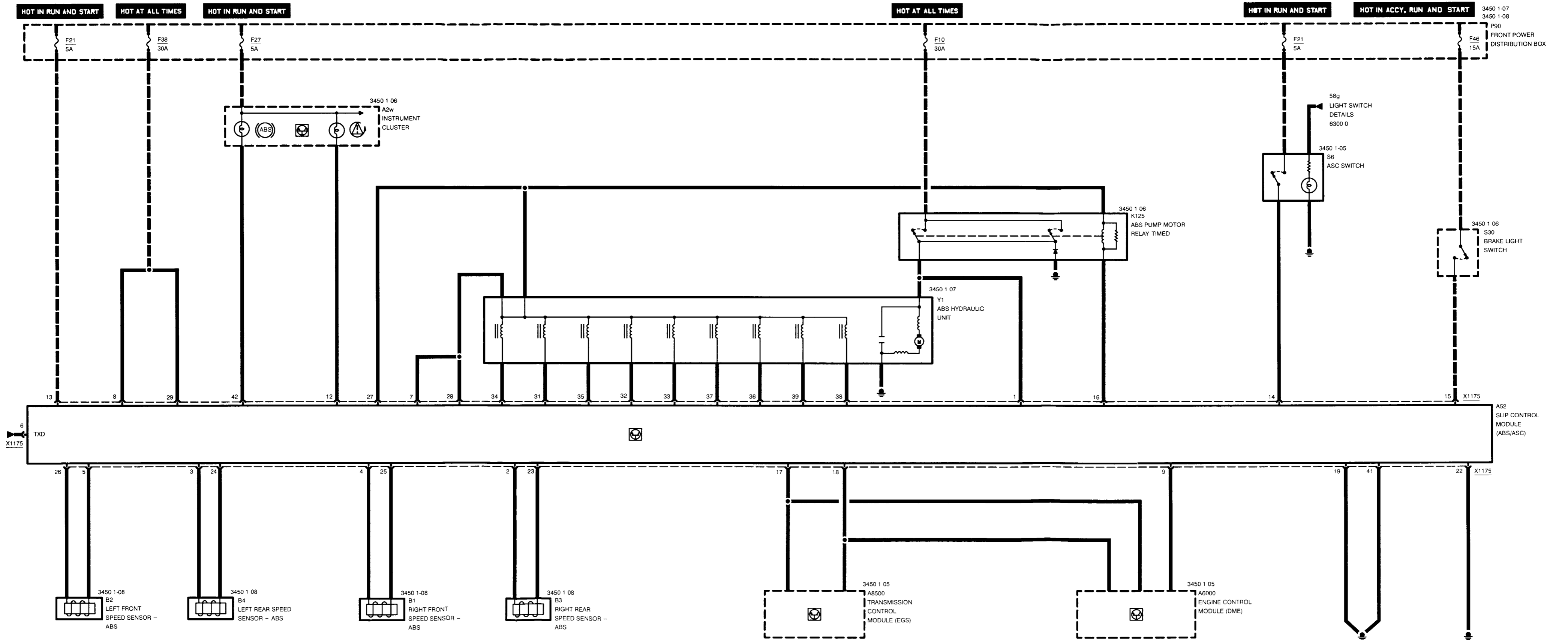
BMW  
3

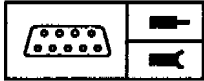
3450.0-06

325i, 328i, M3



318is



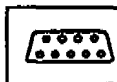


## Pin Assignments (325i, 328i, M3)

### 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	EGS module
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	E	Signal ABS travel sensor	ABS travel sensor
15	E	Speed sensor signal right rear	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
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
30	A	Sensor ground	ABS speed sensor front left

E = Input, A = Output, M = Ground

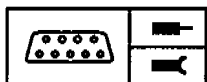


## Pin Assignments (325i, 328i, M3)

Pin	Type	Description/Function	Connection
31	A	Signal ABS travel sensor	ABS travel sensor
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	Ignition switch
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 left 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 potentiometer	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
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



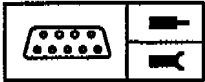


## Pin Assignments (318is)

### 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 ground	Left rear speed sensor - ABS
4	A	Sensor ground	Right front speed sensor - ABS
5	A	Sensor ground	Left front speed sensor - ABS
6	E/A	TxD diagnostic data link	Data link connector
7	A	Signal ABS	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	Signal ASC	Instrument cluster
13	E	Voltage supply	Fuse 21
14	E	Signal ASC	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	Signal ABS	ABS pump motor relay/Hydraulic unit
28	A	Signal ABS	ABS hydraulic unit
29	E	Voltage supply	Fuse 38
30		Not used	

E = Input, A = Output, M = Ground



### Pin Assignments (318is)

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

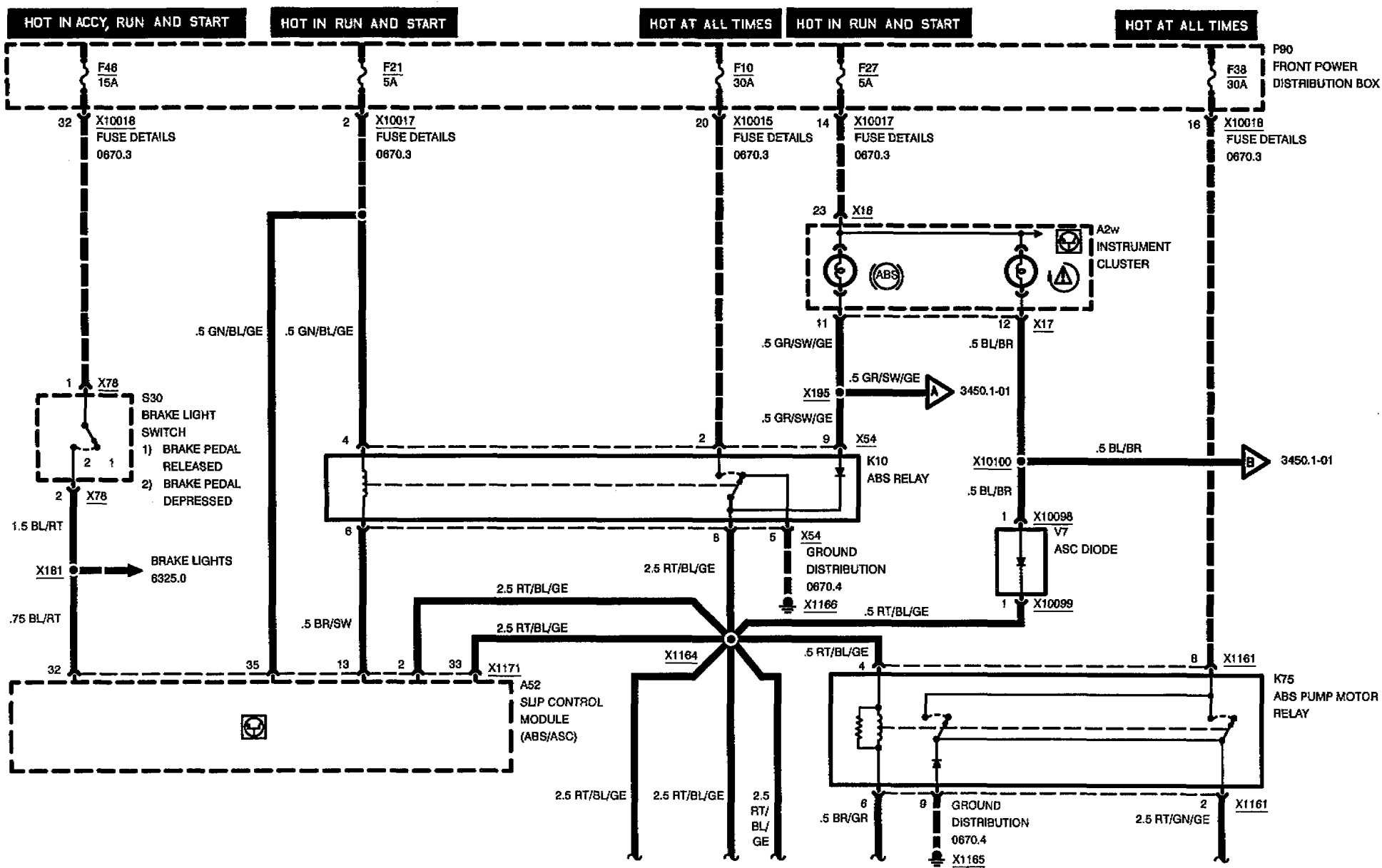
E = Input, A = Output, M = Ground

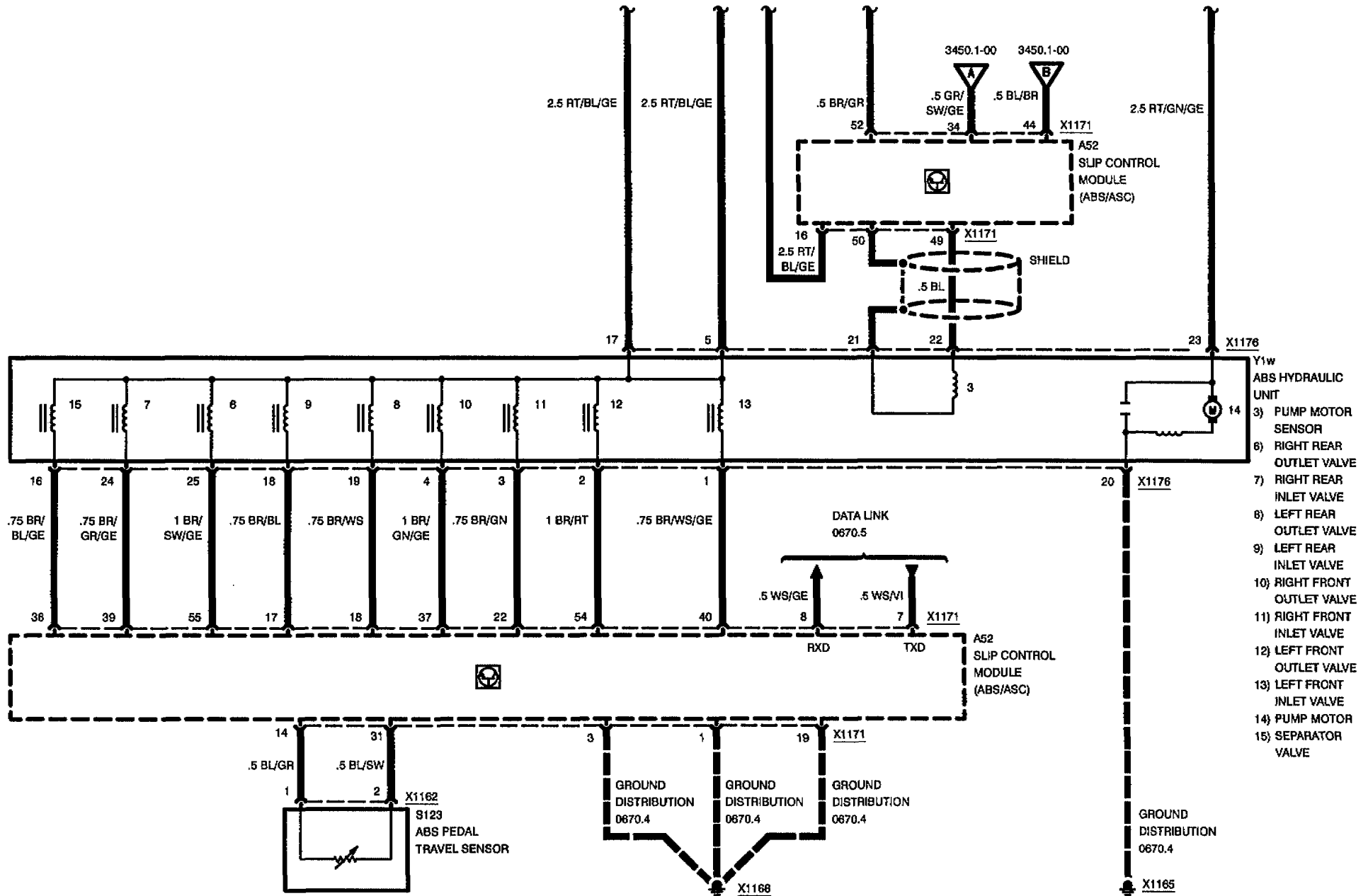


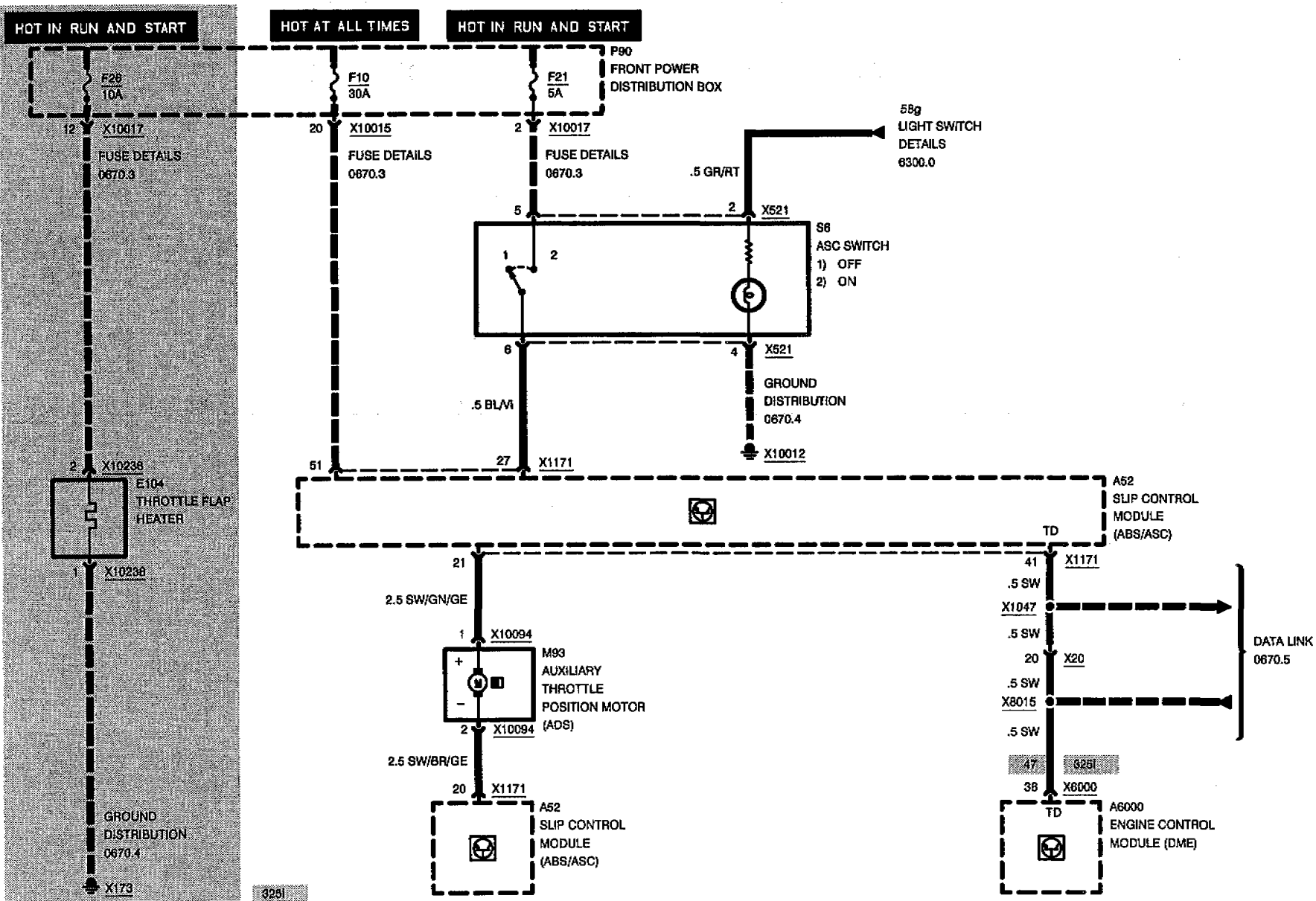


# SLIP CONTROL (ABS/ASC)

325i, 328i, M3



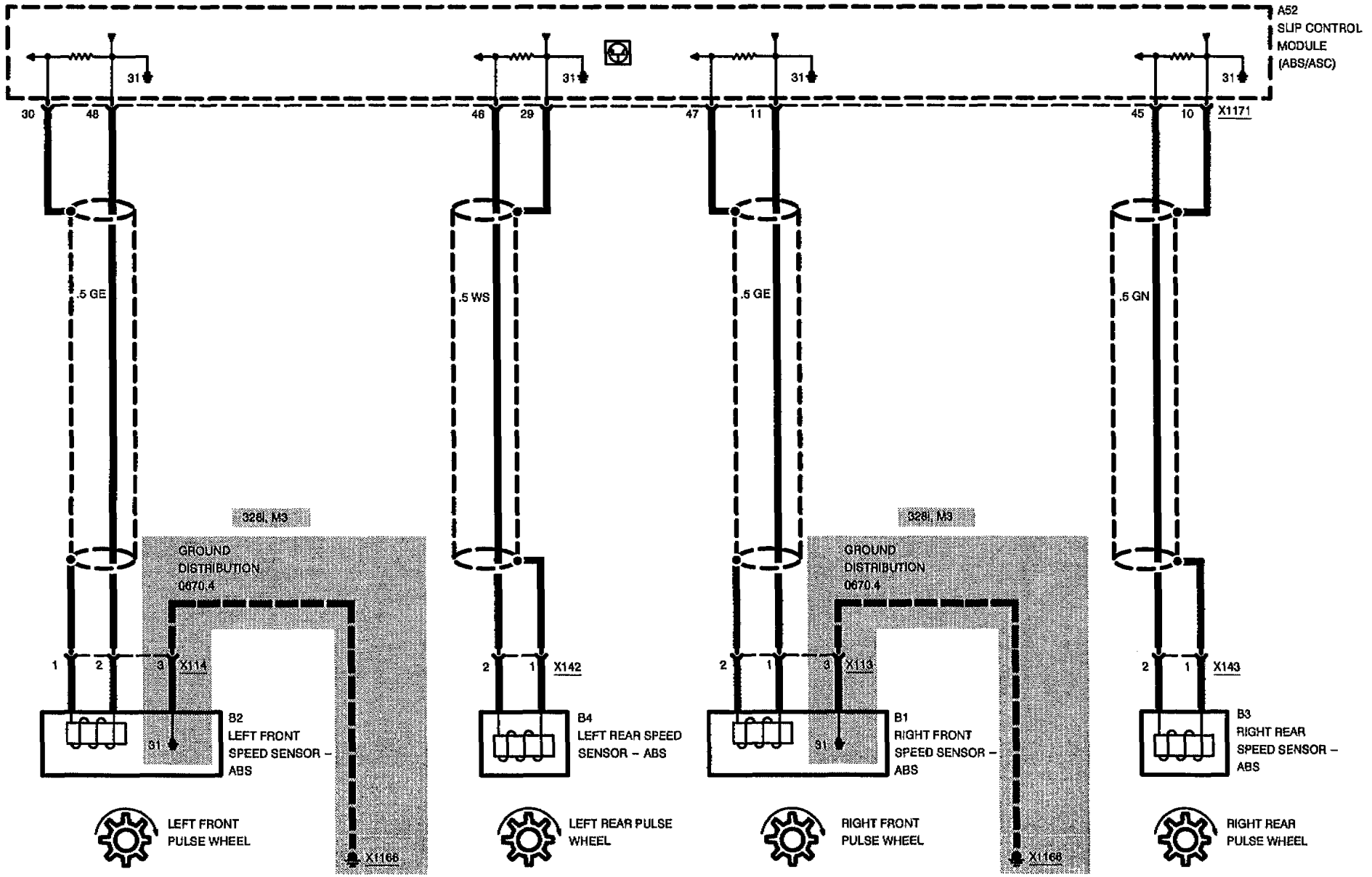


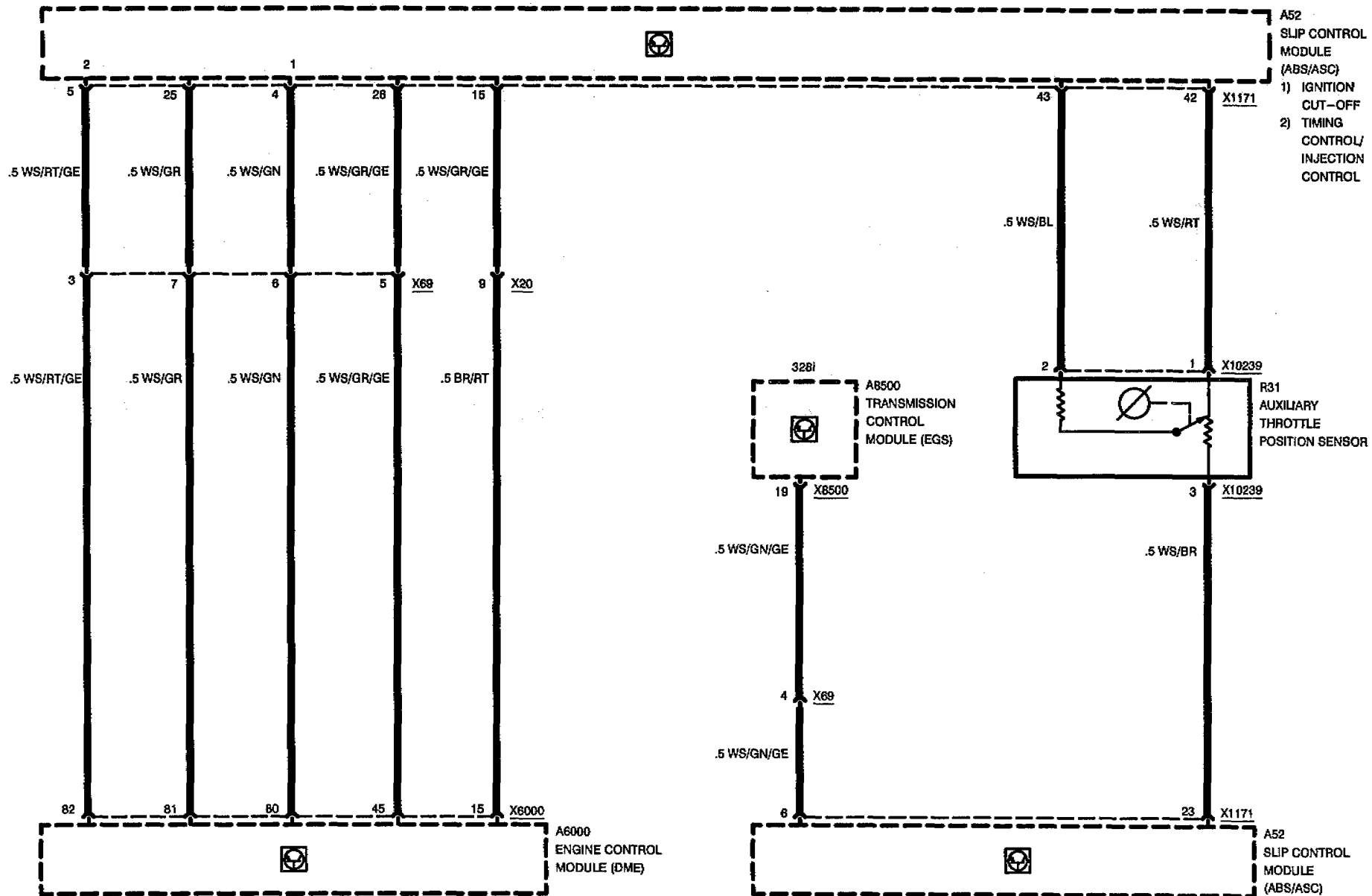




# SLIP CONTROL (ABS/ASC)

325i, 328i, M3



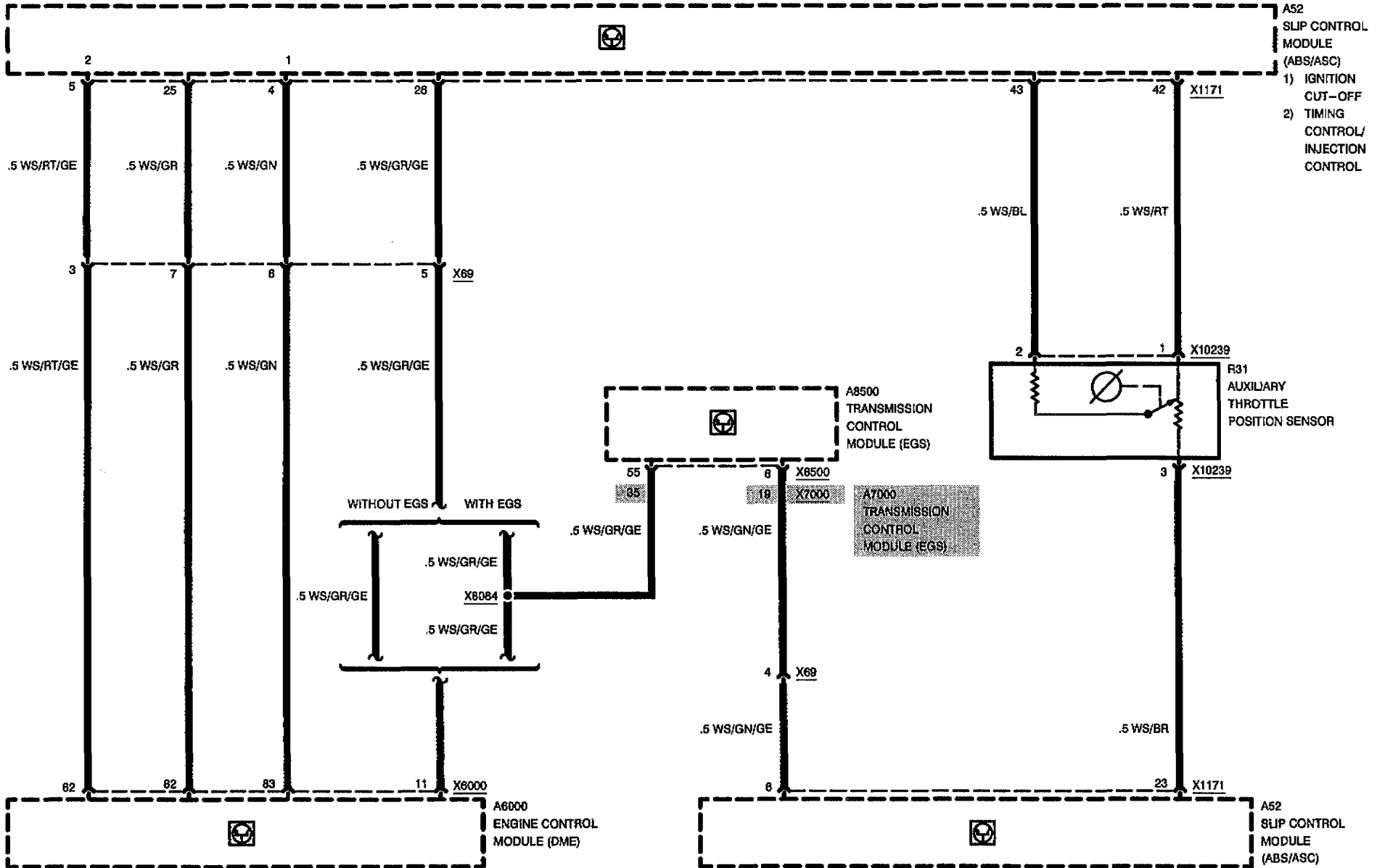






# SLIP CONTROL (ABS/ASC)

325i, M3 (USA)



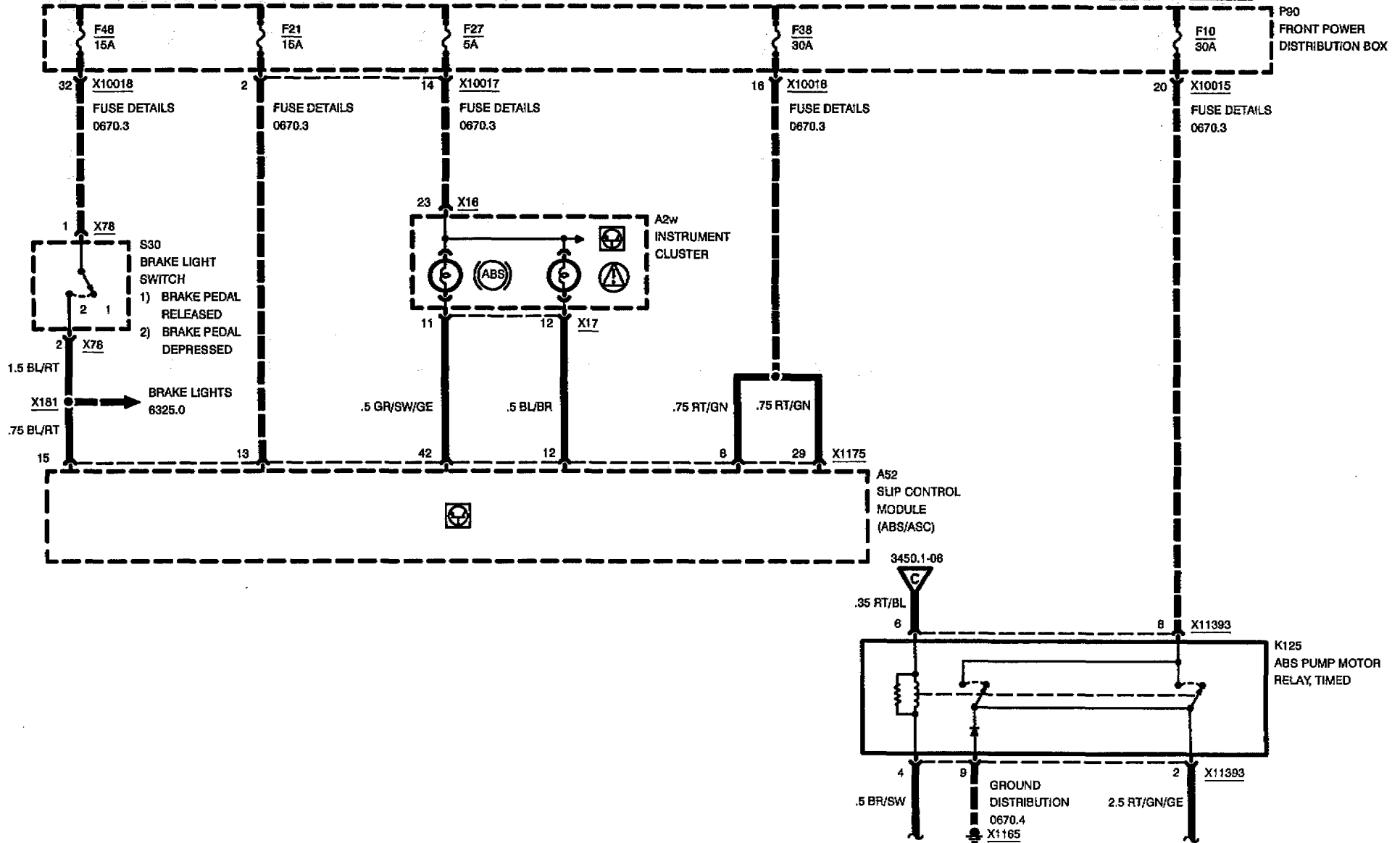
HOT IN ACCY, RUN AND START

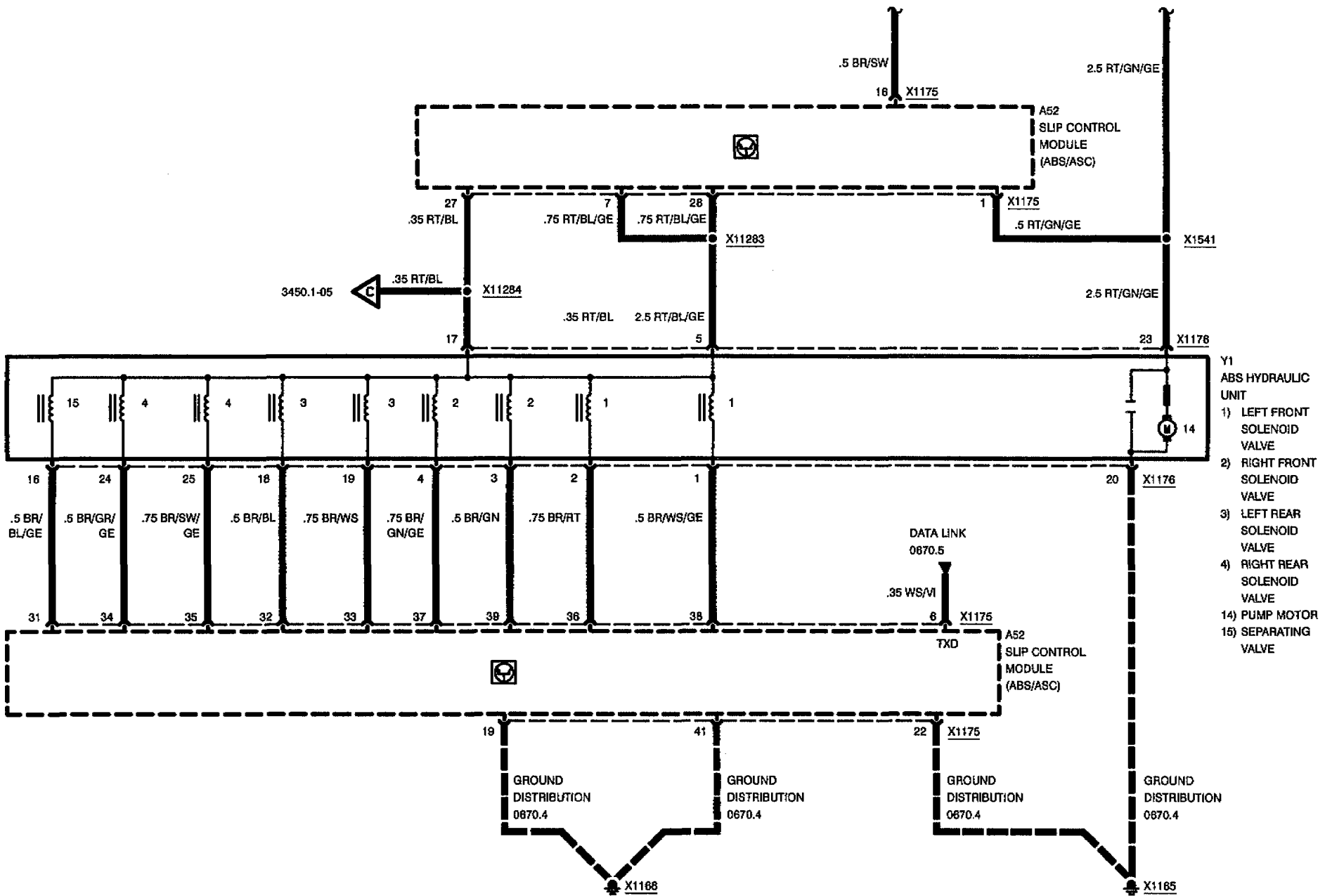
HOT IN RUN AND START

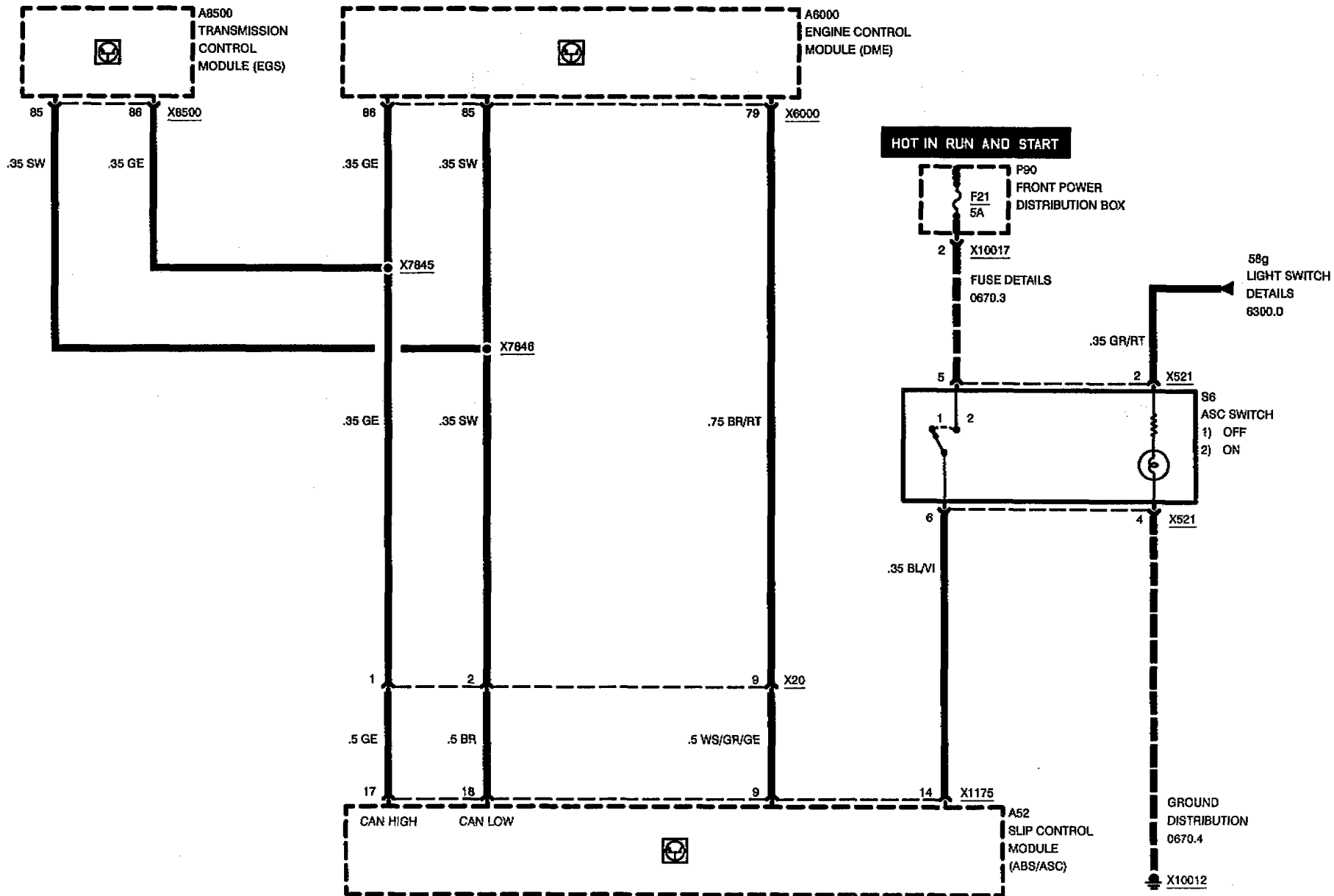
HOT IN RUN AND START

HOT AT ALL TIMES

HOT AT ALL TIMES



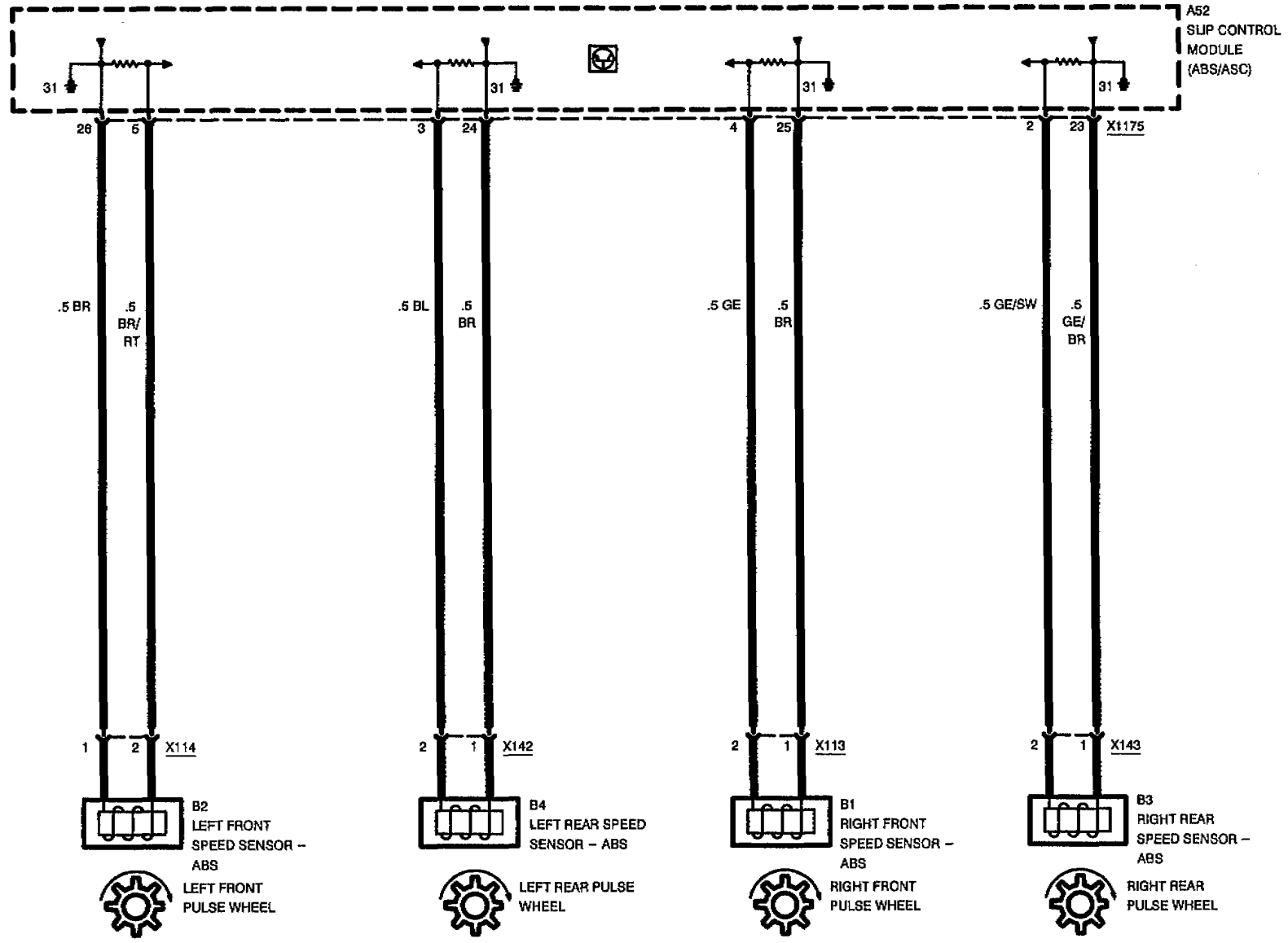






# SLIP CONTROL (ABS/ASC)

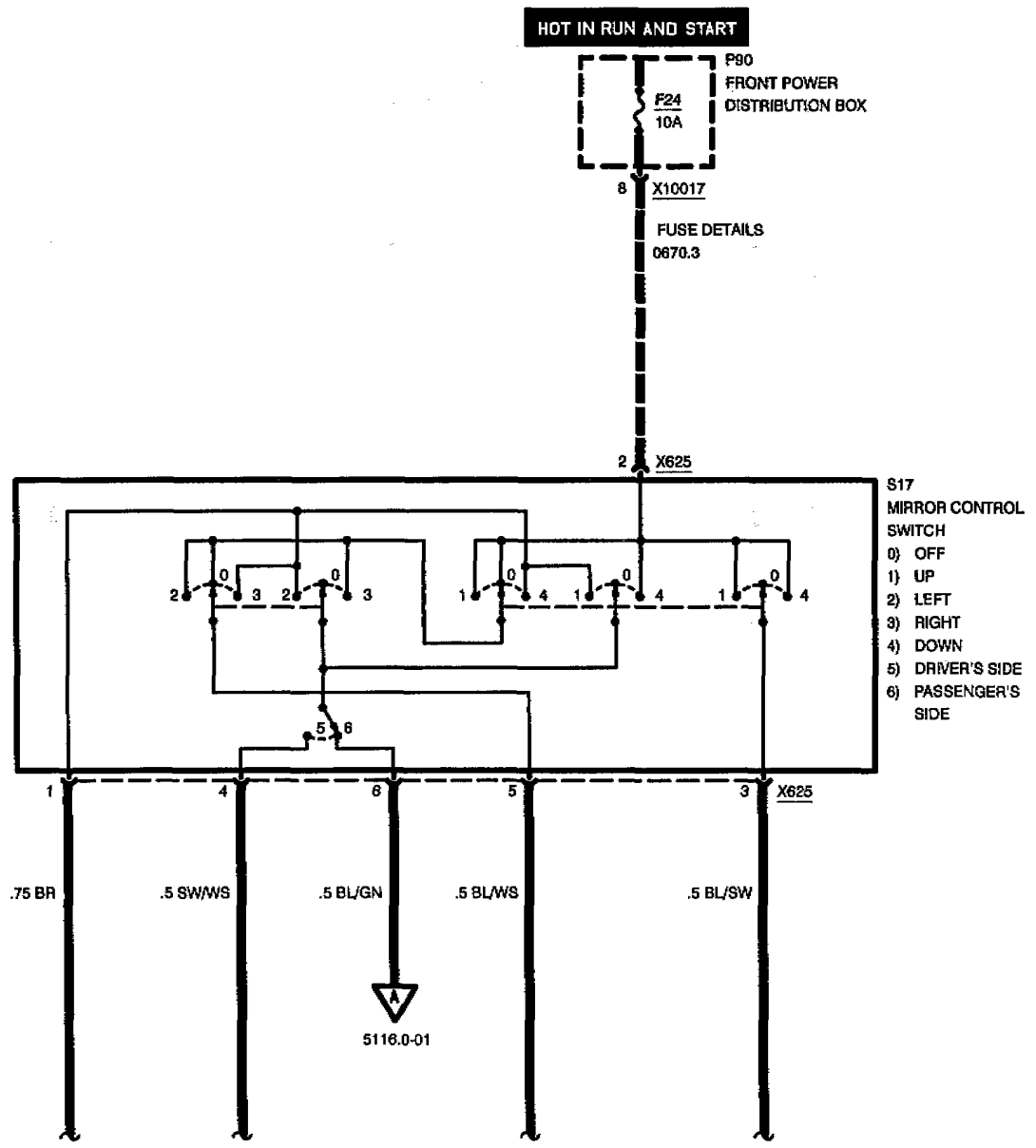
318is

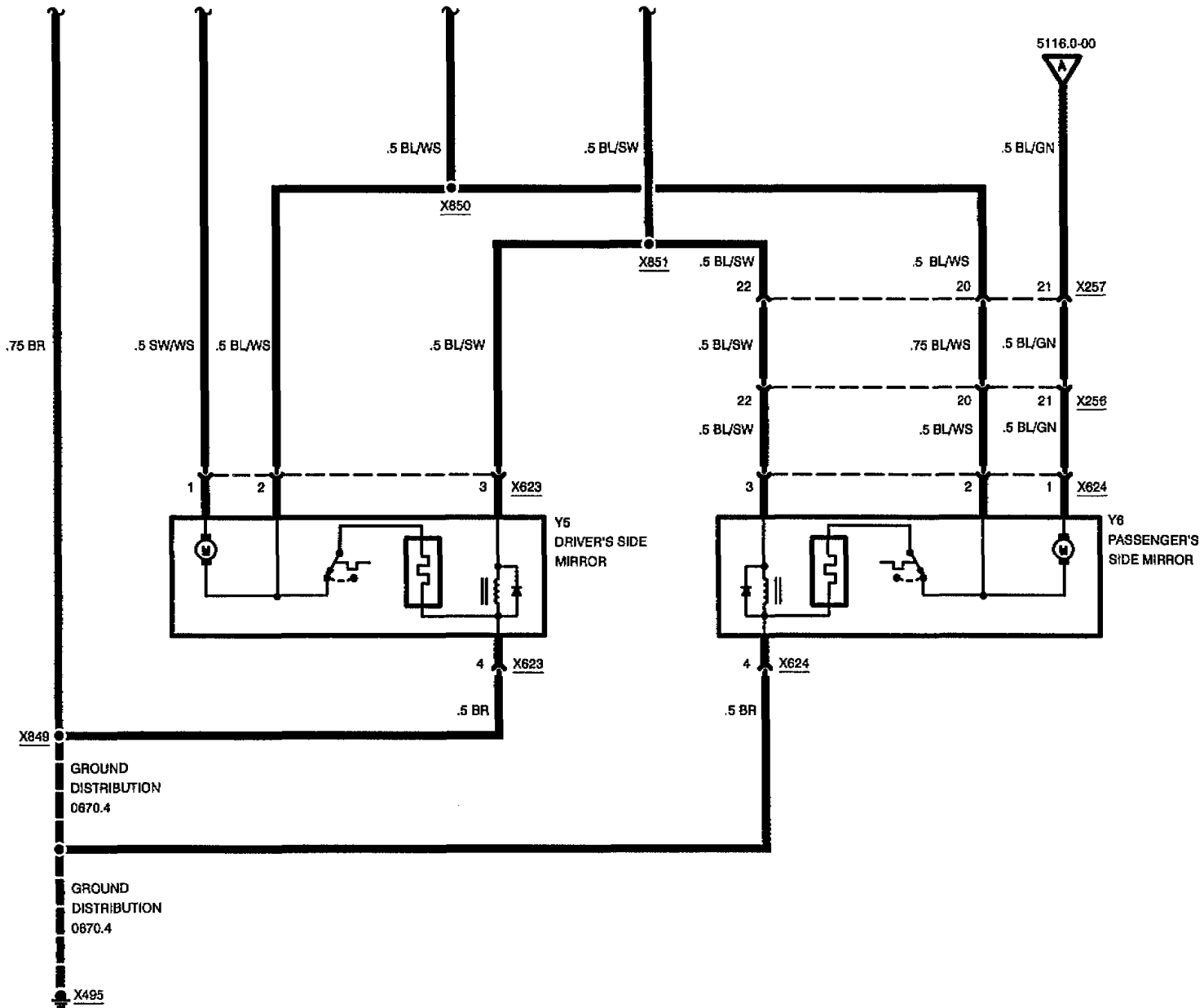




# POWER MIRRORS

## OUTSIDE MIRROR

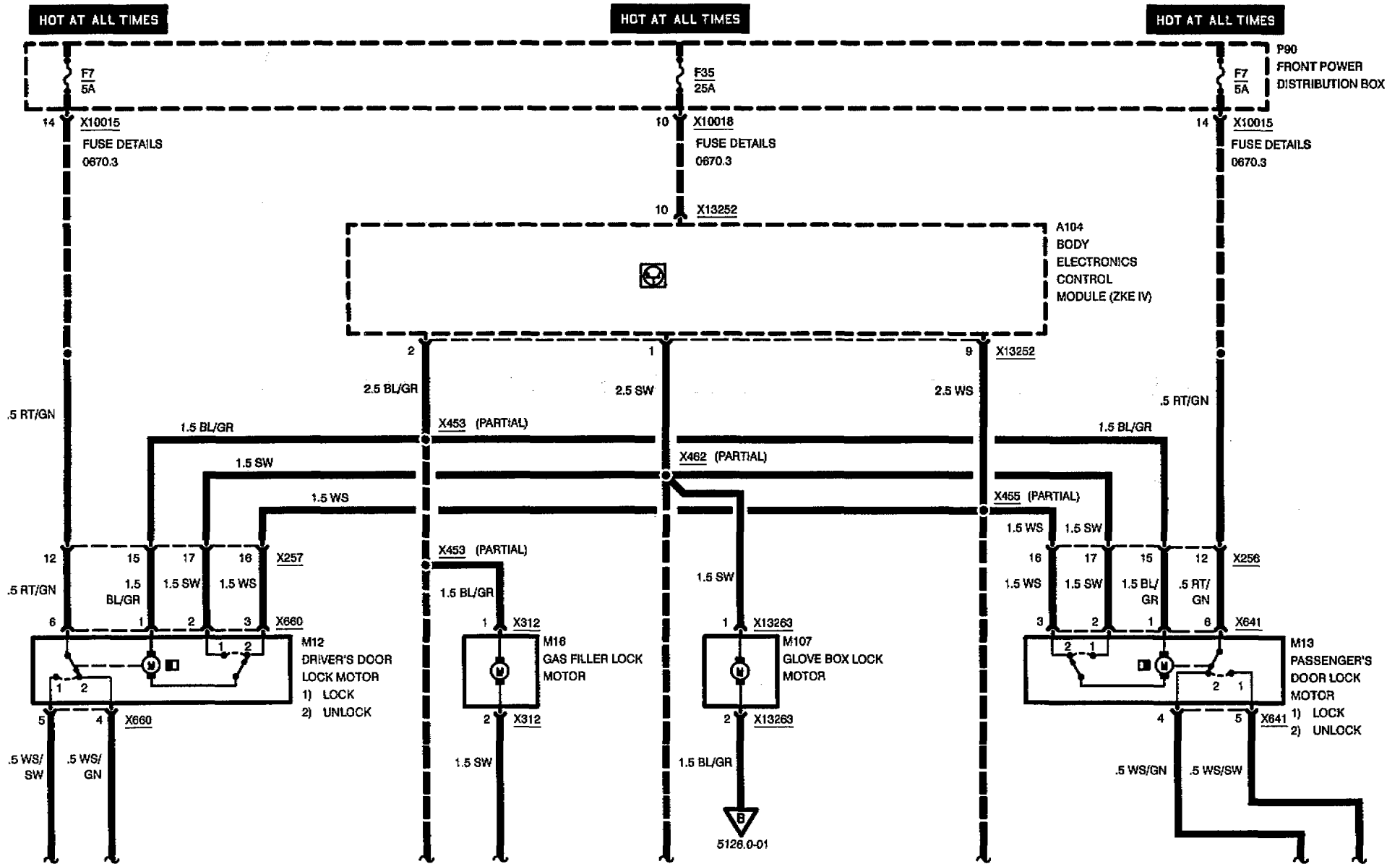




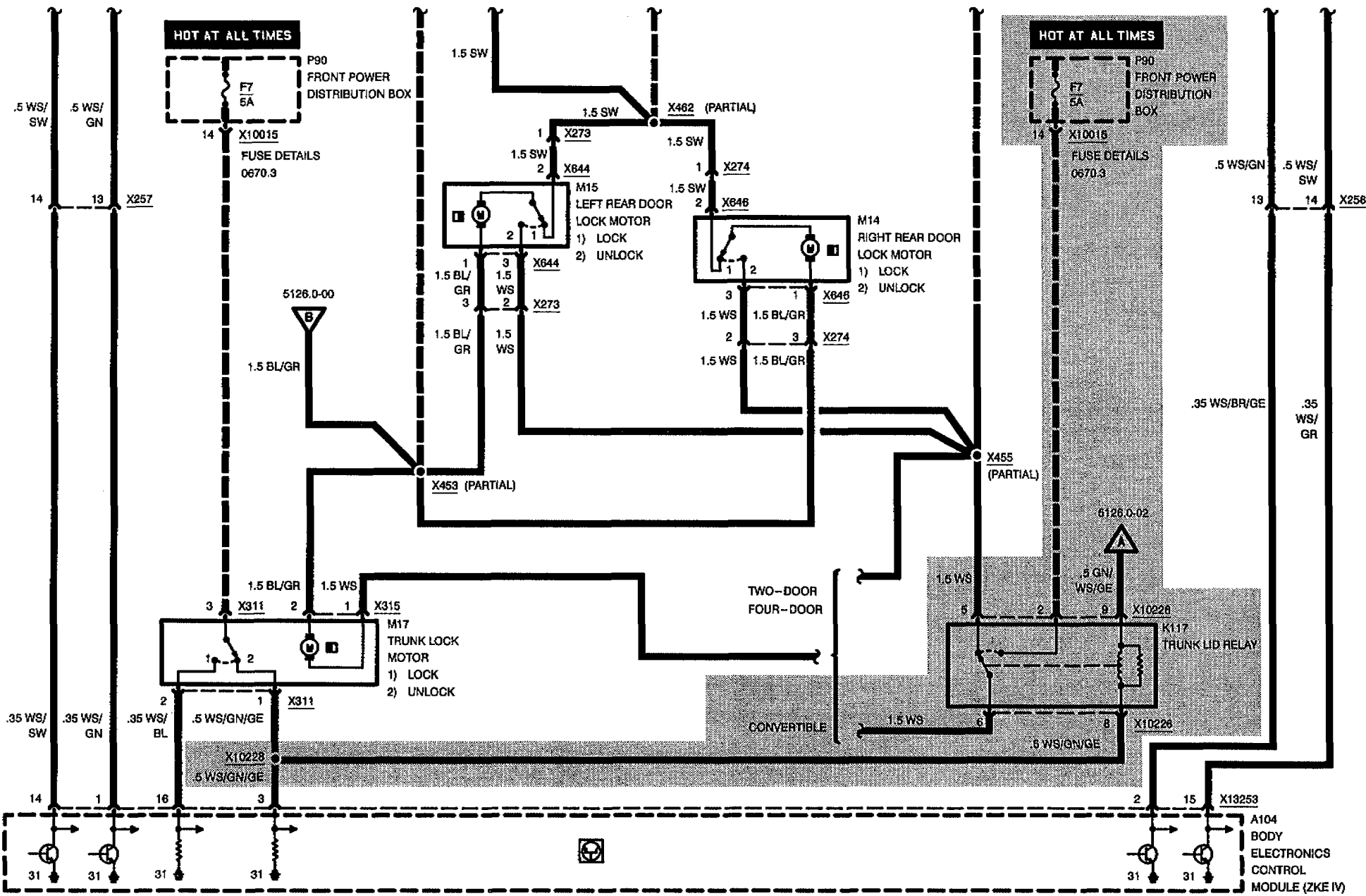


# ZKE CENTRAL LOCKING (ZV)

## OUTPUT DETAILS

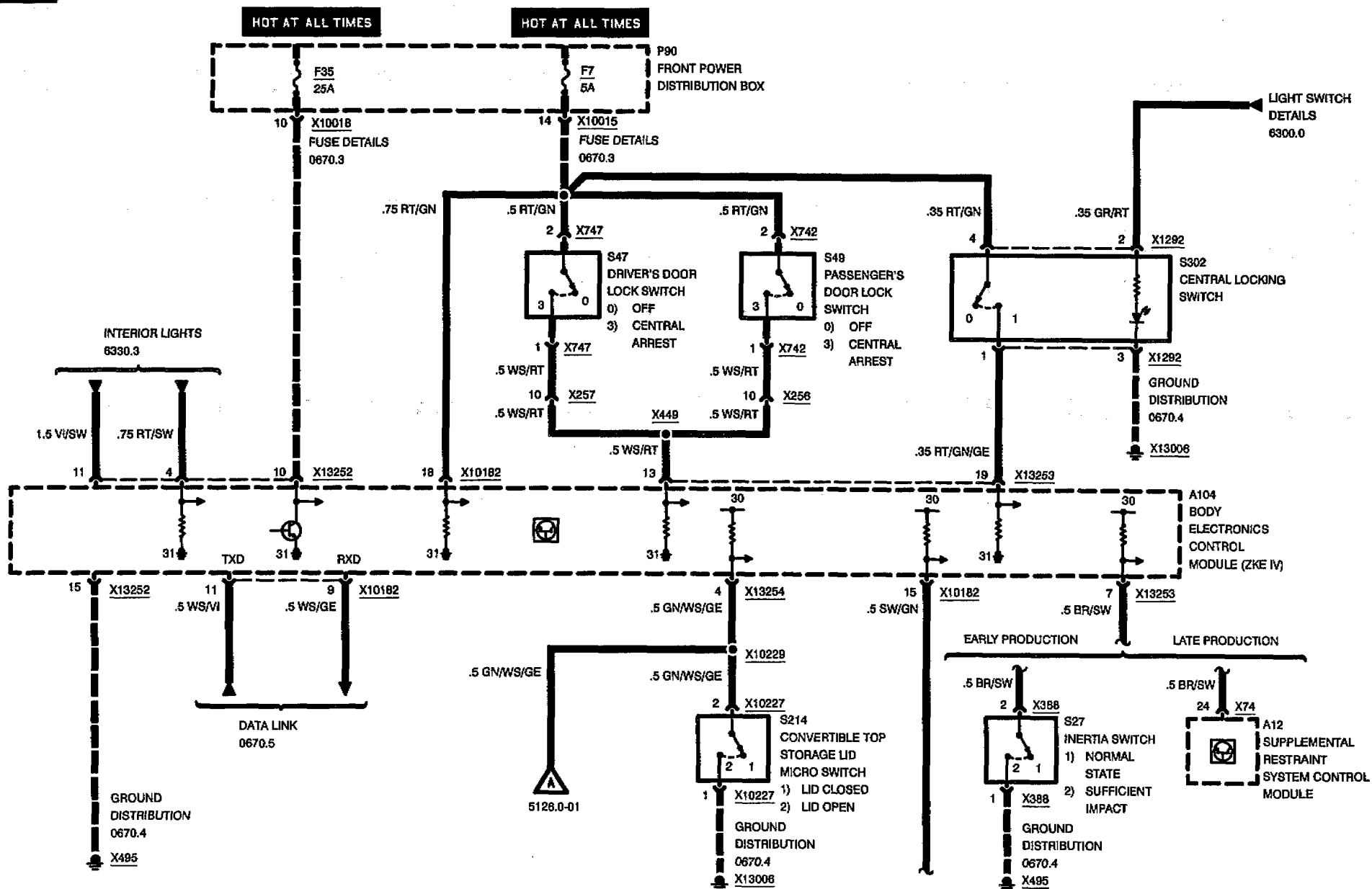








# ZKE CENTRAL LOCKING (ZV)



04/97

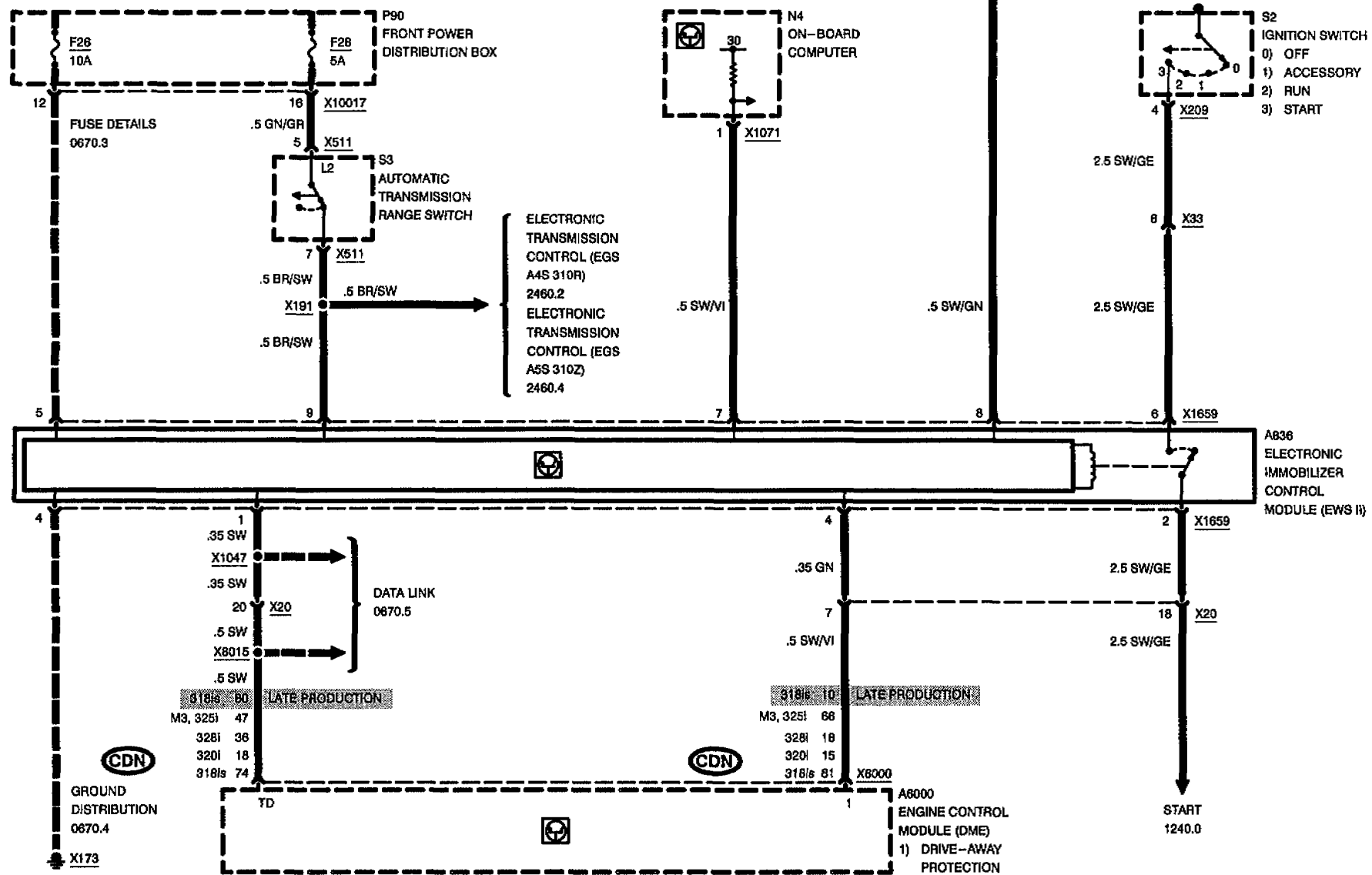
5126.0-02

1996

HOT IN RUN AND START

HOT IN RUN AND START

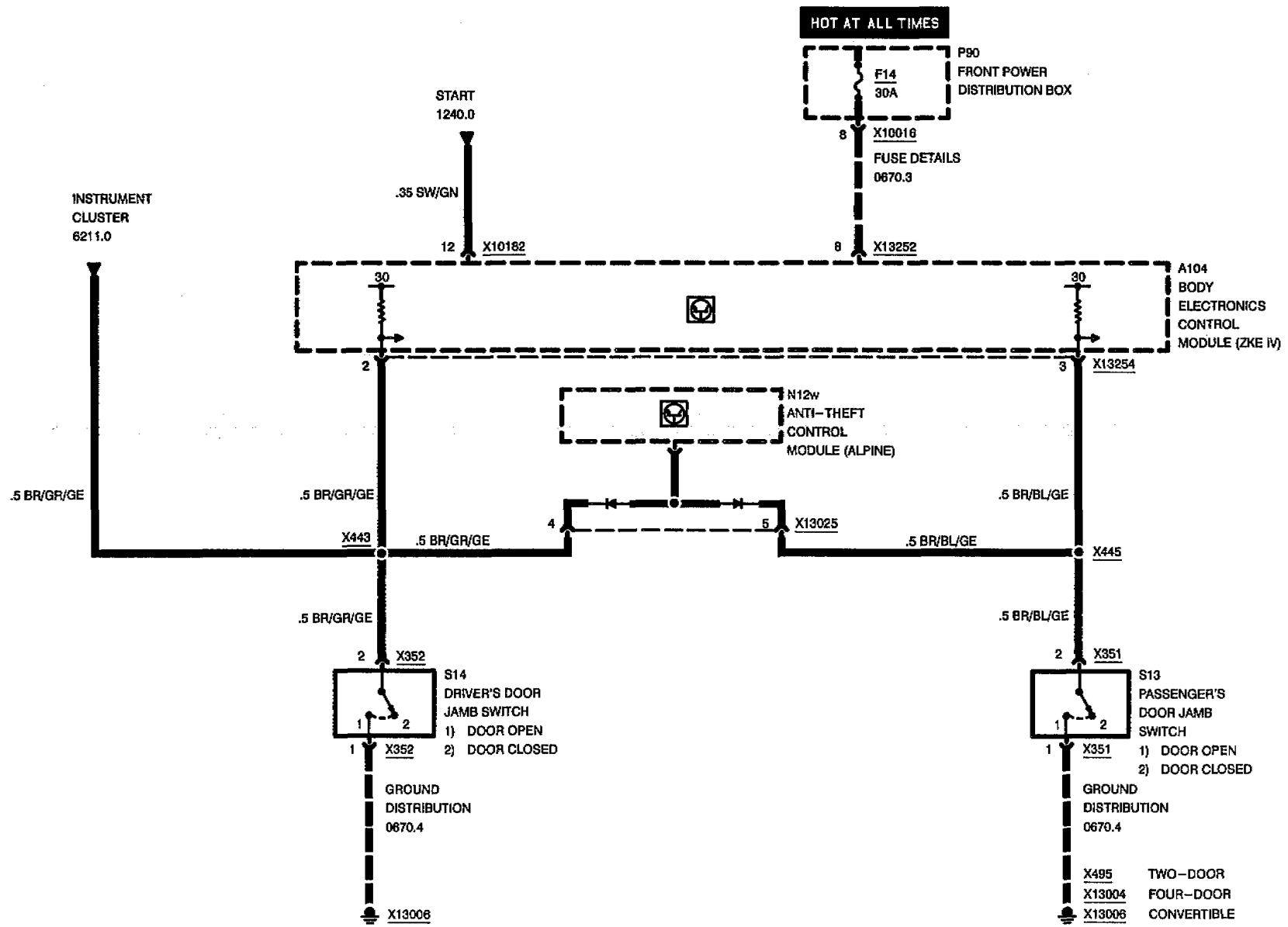
HOT AT ALL TIMES





# POWER WINDOWS (FH)

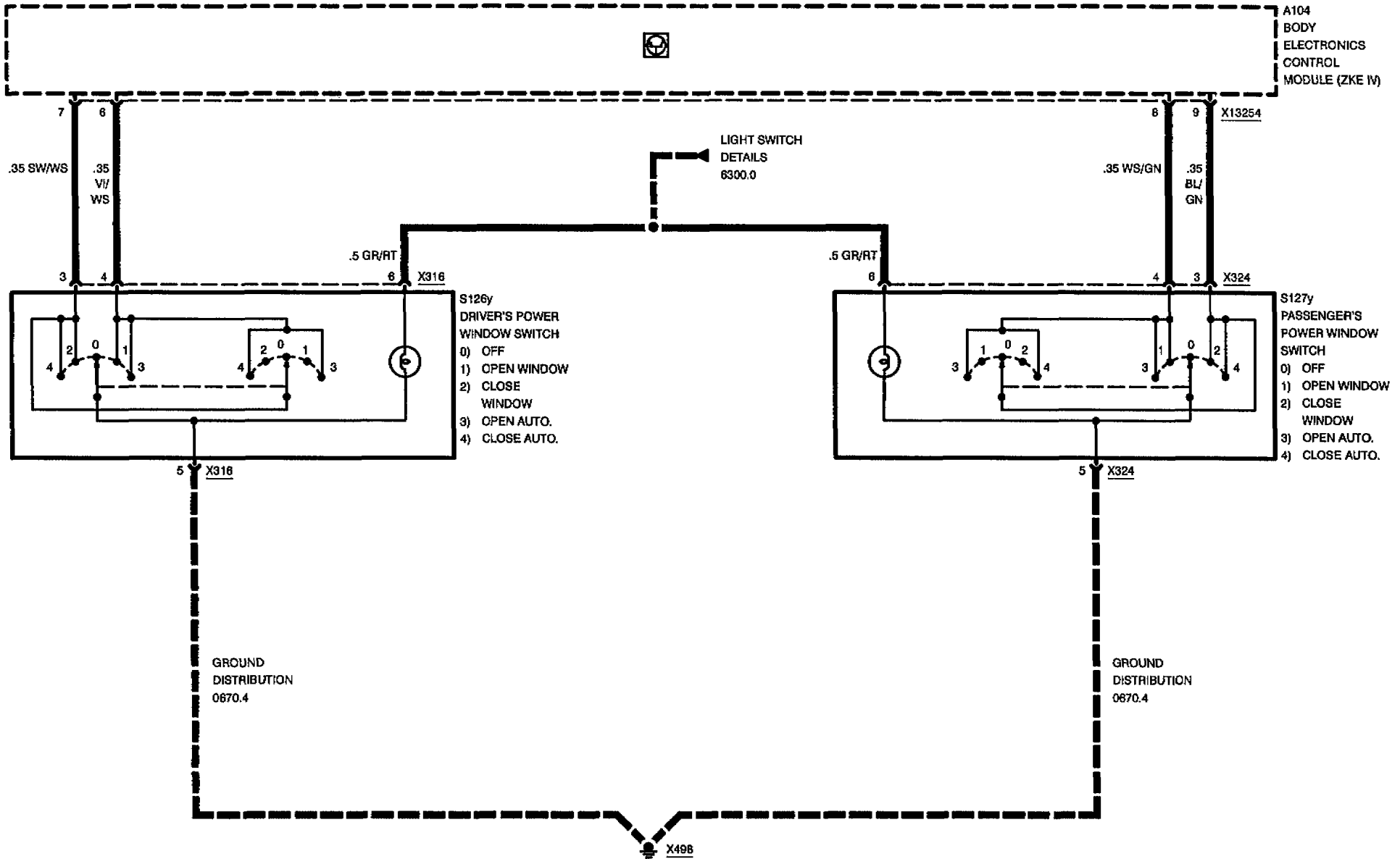
## INPUT DETAILS





# POWER WINDOWS (FH)

## INPUT DETAILS

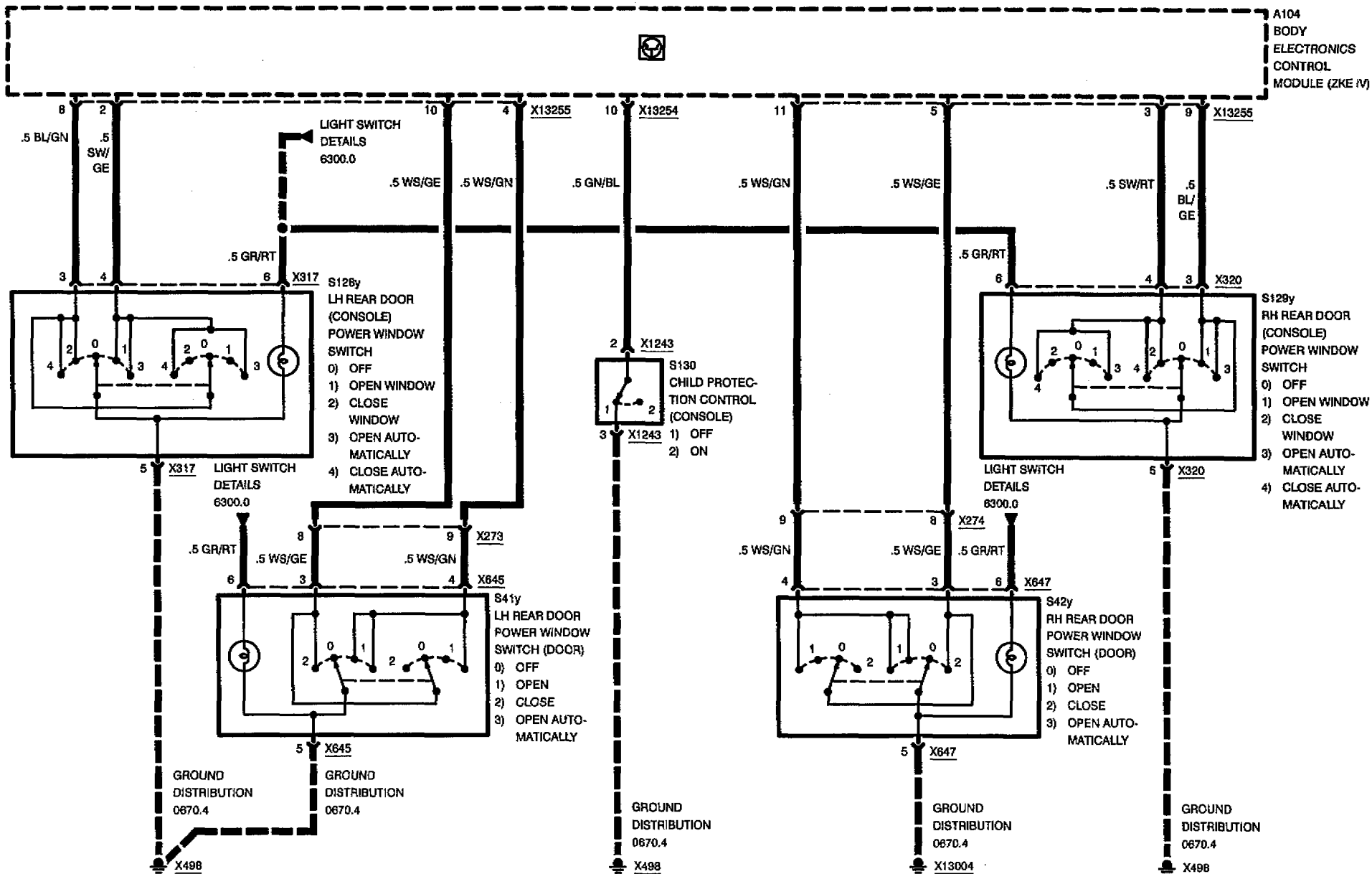




# POWER WINDOWS (FH)

## INPUT DETAILS

# FOUR-DOOR

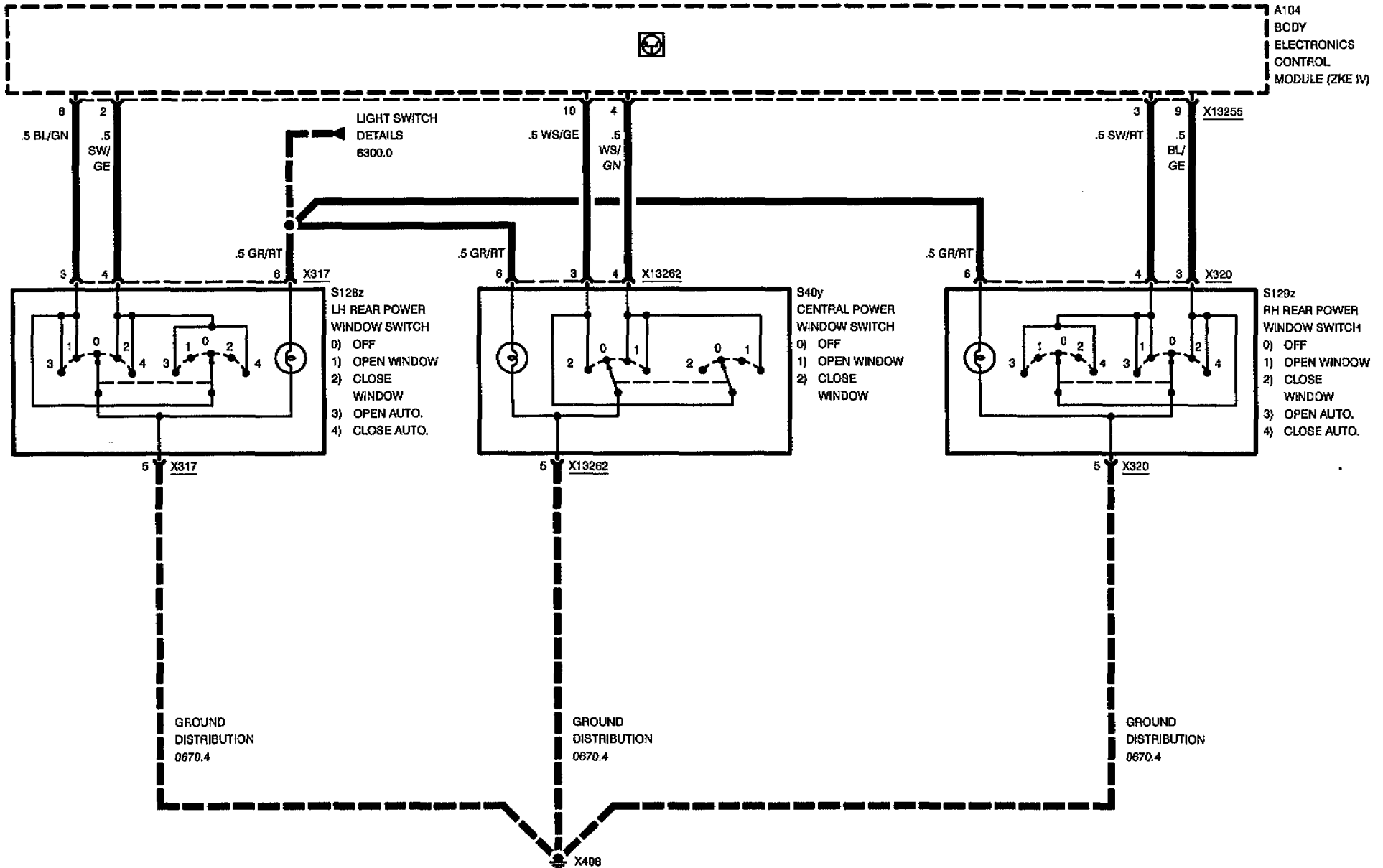




# POWER WINDOWS (FH)

## INPUT DETAILS

CONVERTIBLE

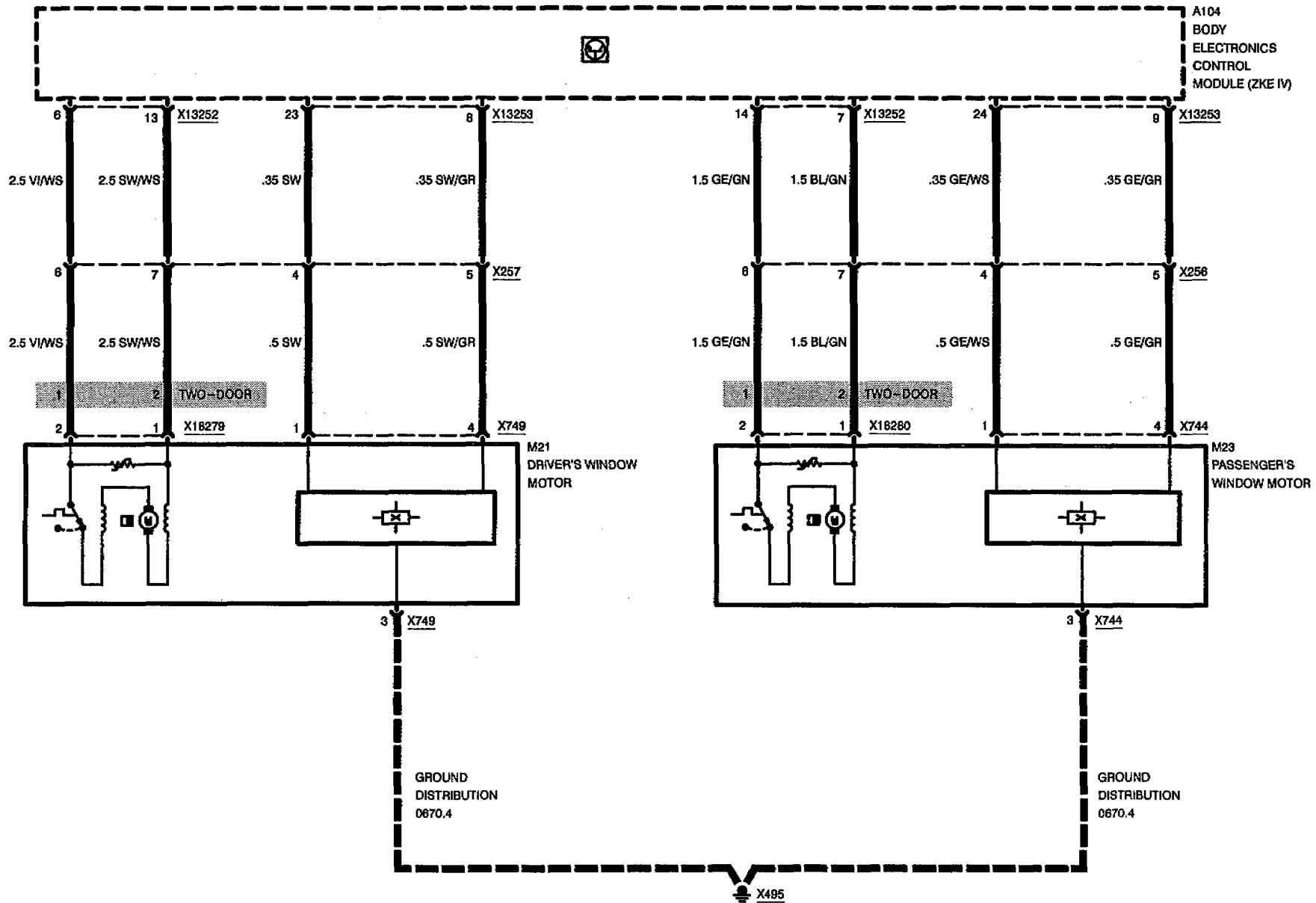


04/97

5133.1-03

1996

# POWER WINDOWS (FH) OUTPUT DETAILS

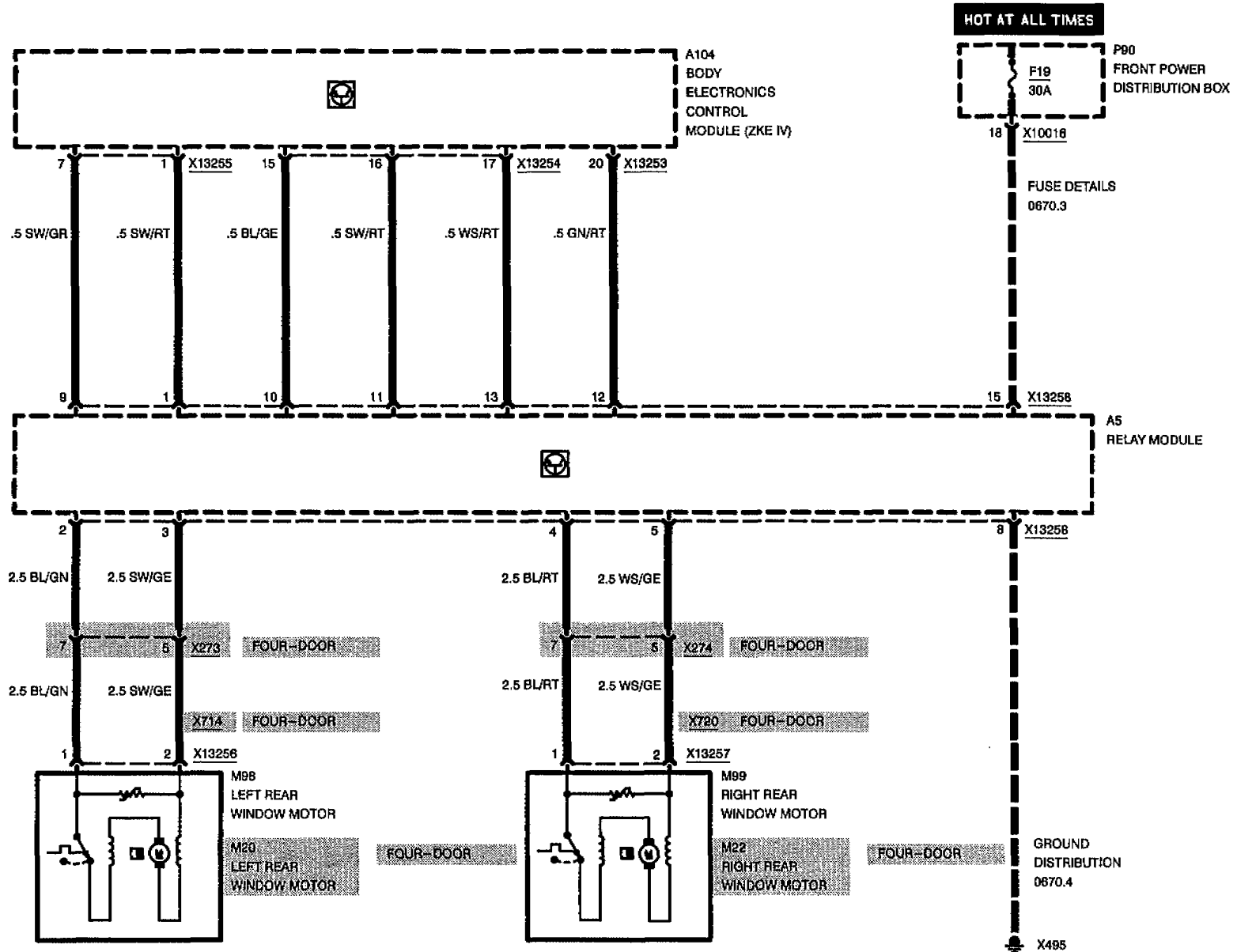






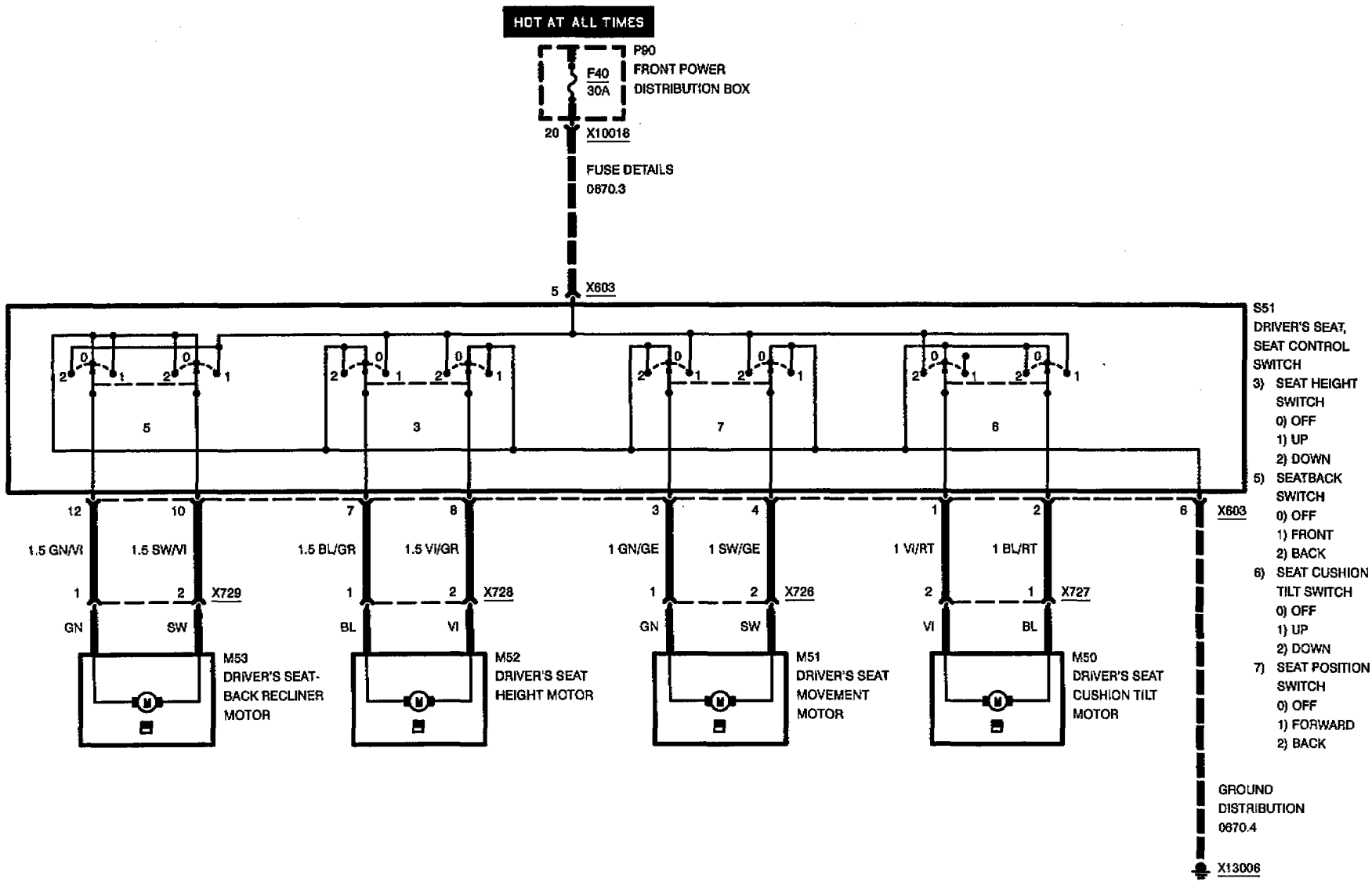
# POWER WINDOWS (FH)

## OUTPUT DETAILS





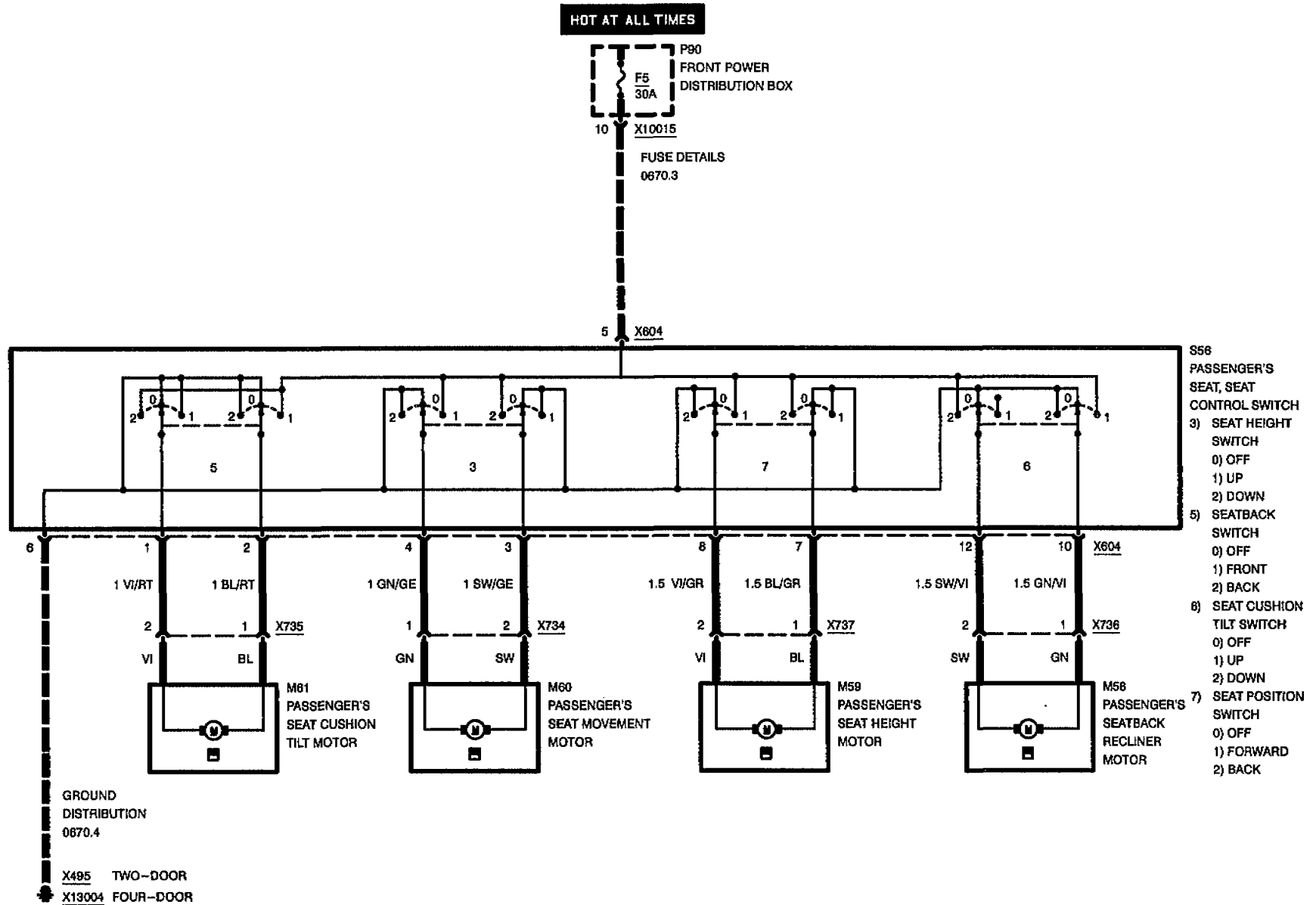
# POWER SEATS DRIVER'S SEAT





# POWER SEATS

## PASSENGER'S SEAT

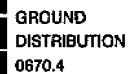
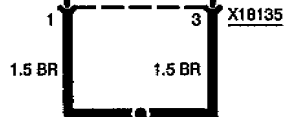
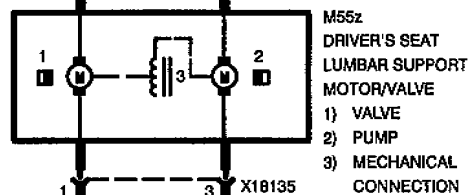
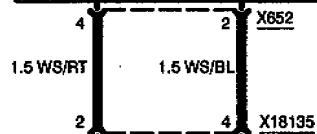
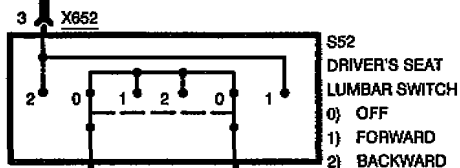
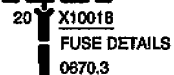




# POWER SEATS AND LUMBAR SUPPORT

## DRIVER'S SIDE - LUMBAR SUPPORT

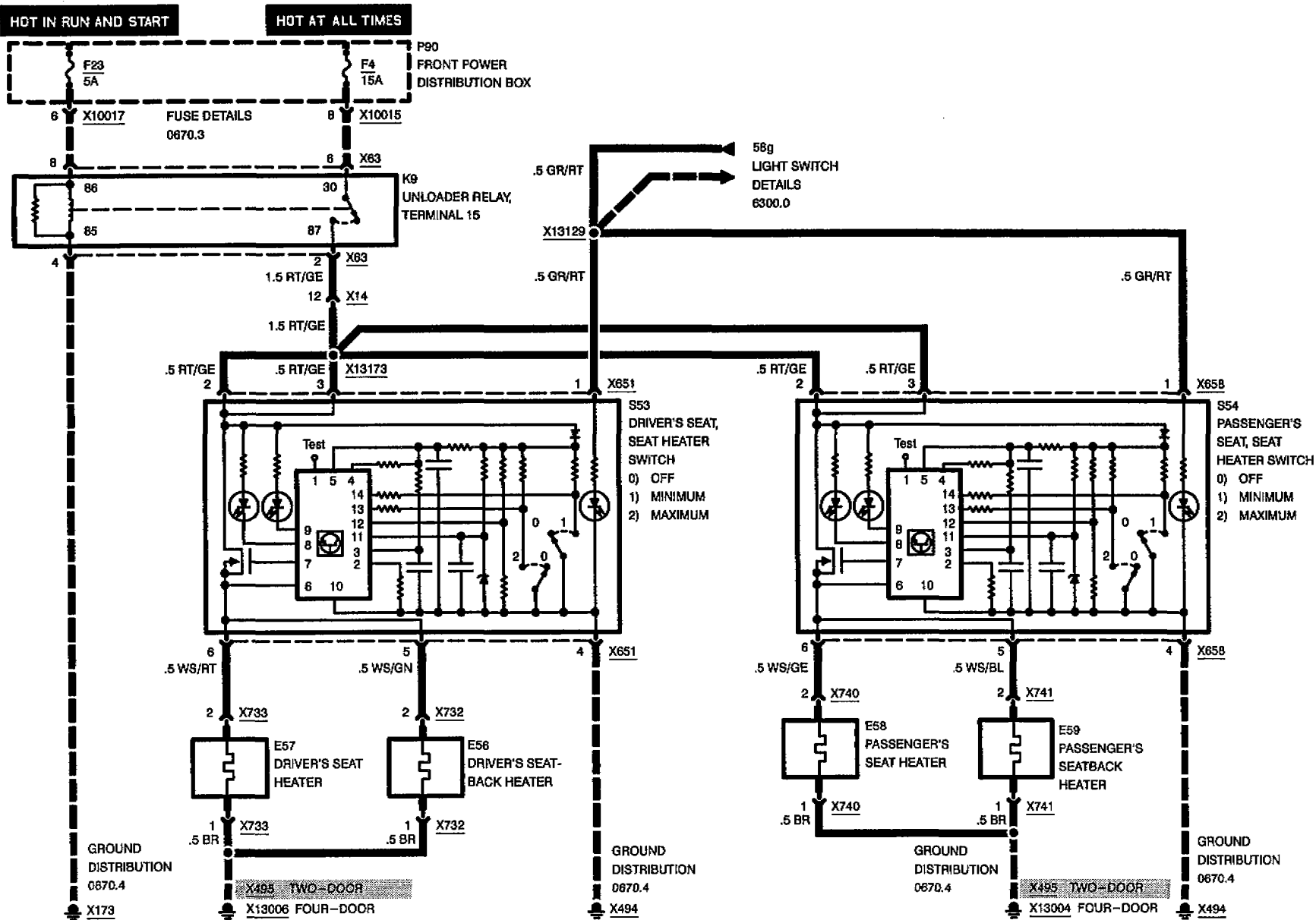
**HOT AT ALL TIMES**





5203.0

# HEATED SEATS

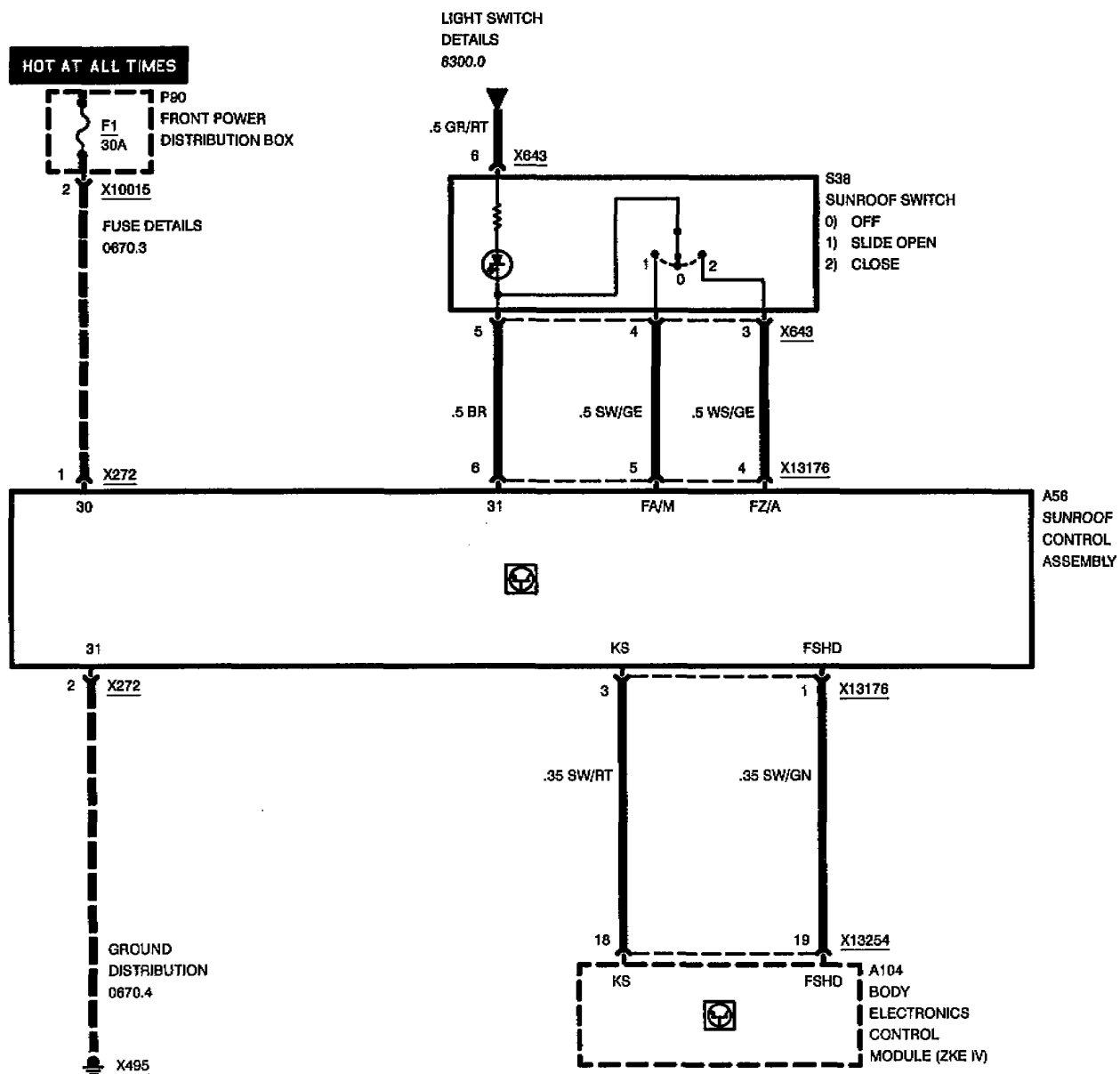




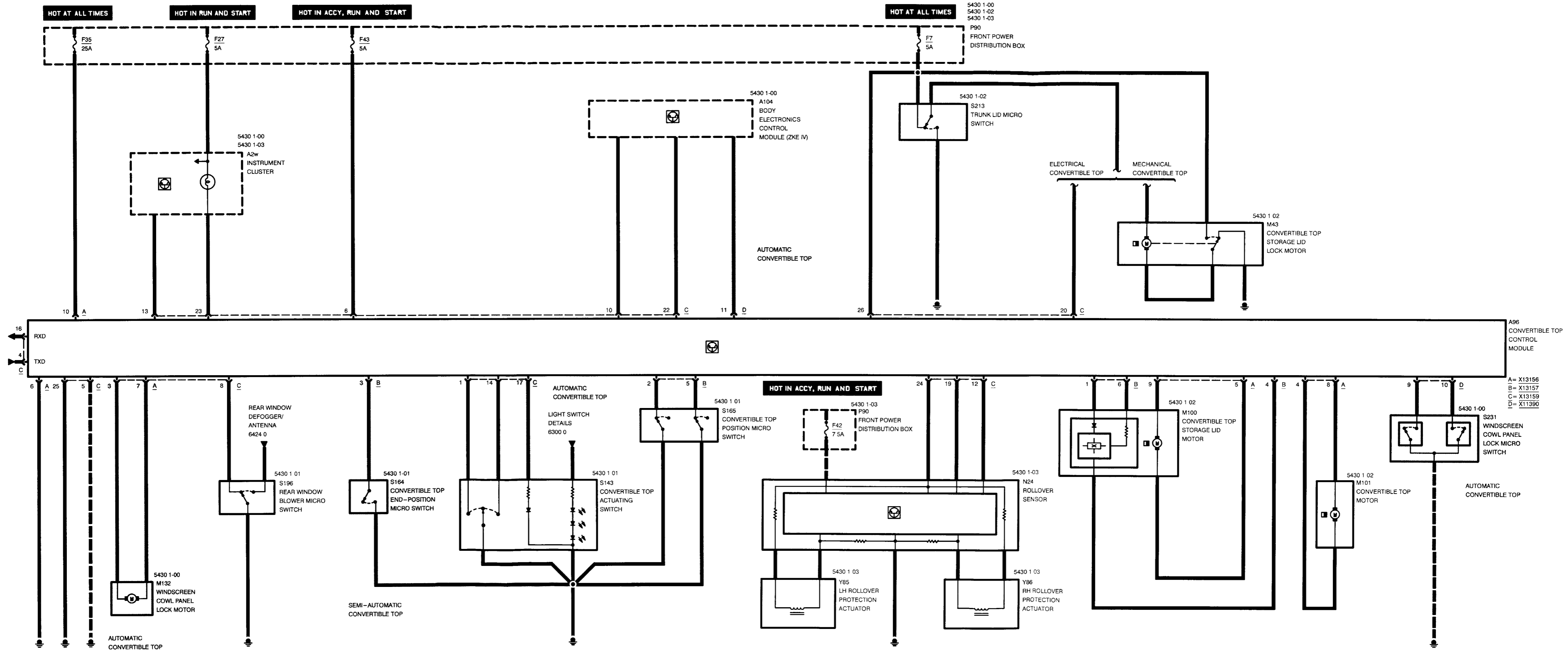
5410.1

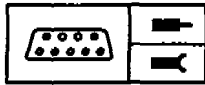


# POWER SUN ROOF (SHD)









## Pin Assignments

A = X13156	10 Pins, black
B = X13157	6 Pins, black
C = X13159	26 Pins, black
D = X11390	12 Pins, black

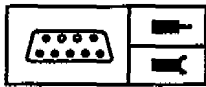
### X13156

Pin	Type	Description/Function	Connection
1		Not used	
2		Not used	
3	E/A	Activate engine (MVER R2)	Windscreen cowl panel locking (automatic convertible top)
4	E/A	Control signal	Convertible top motor
5	E/A	Control signal	Convertible top storage lid motor
6	M	Ground	Ground
7	E/A	Activate engine (MVER R2)	Windscreen cowl panel locking (automatic convertible top)
8	E/A	Control signal	Convertible top motor
9	E/A	Control signal	Convertible top storage lid motor
10	E	Plus supply 12V	Front power distribution box

### X13157

Pin	Type	Description/Function	Connection
1	A	Plus supply	Position sensor (convertible top storage lid motor)
2	E	Position signal	Convertible top position micro switch
3	E	Position signal	Convertible top end position micro switch (semi-automatic convertible top)
4	E	Component ground	Position sensor (convertible top storage lid motor)
5	E	Position signal	Convertible top position micro switch
6	E	Control signal	Position sensor (convertible top storage lid motor)

E = Input, A = Output, M = Ground

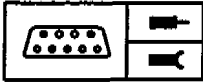


## Pin Assignments

### X13159

Pin	Type	Description/Function	Connection
1	E	Top open signal	Convertible top actuating switch
2		Not used	
3		Not used	
4	E/A	TxD data signal	Data link connector
5	M	Ground	Hard top connector 1
6	E	Power supply	Front power distribution box
7		Not used	
8	E	Rear window blower signal	Rear window blower micro switch
9		Not used	
10	A	Data signal	Body electronics control module
11		Not used	
12	A	Data signal	Roll over sensor
13	A	Speed signal	Instrument cluster
14	E	Top closed signal	Convertible top actuating switch
15		Not used	
16	A	RxD data signal	Data link connector
17	A	LED	Convertible top actuating switch
18		Not used	
19	A	Data signal	Roll over sensor
20	E	Trunk lid signal	Trunk lid micro switch
21		Not used	
22	A	Data signal	Body electronics control module
23	A	Roll over signal	Instrument cluster
24	A	Data signal	Roll over sensor
25	M	Ground	Ground
26	E	Power supply	Front power distribution box

E = Input, A = Output, M = Ground



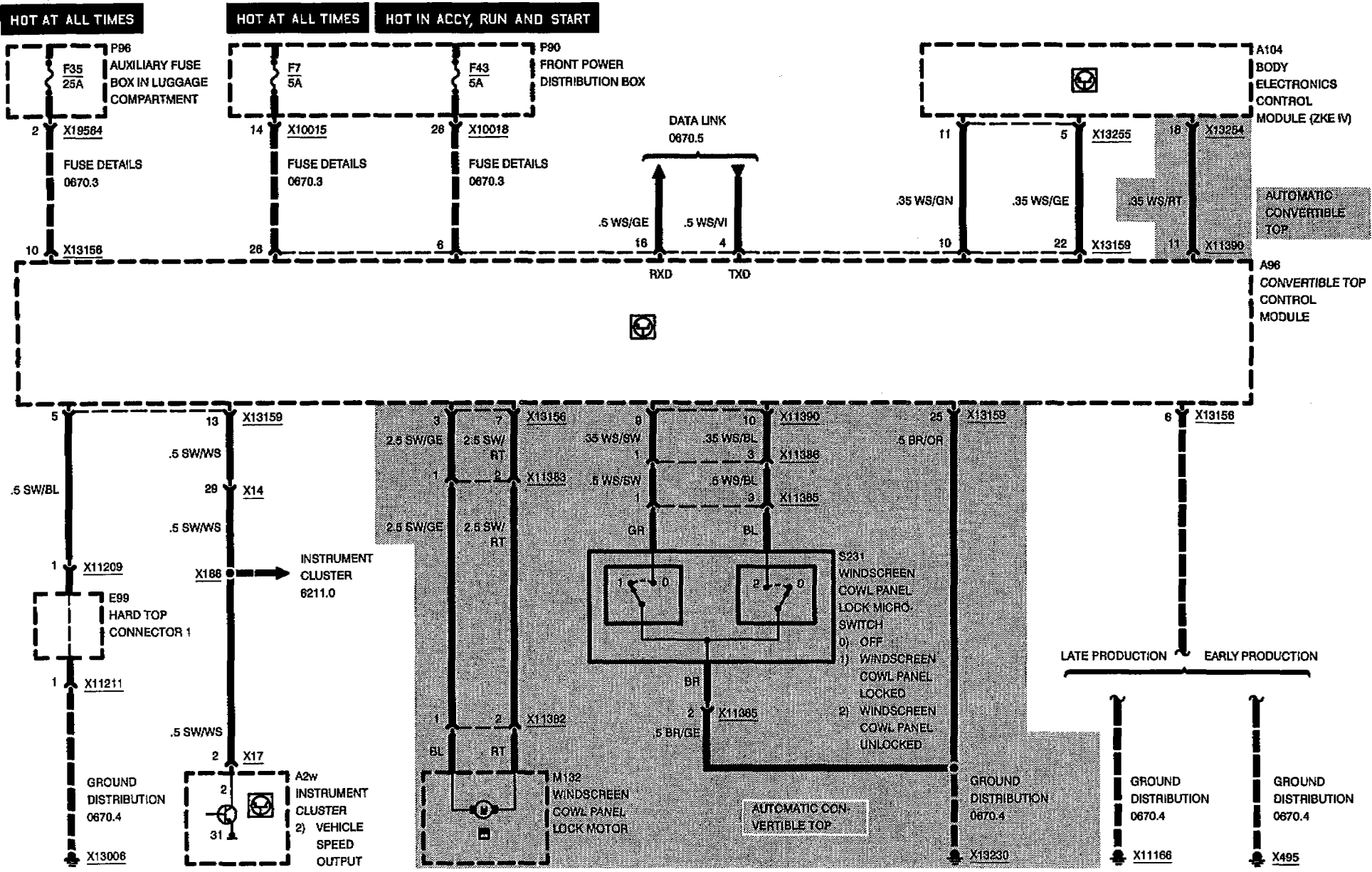
## Pin Assignments

### X11390

Pin	Type	Description/Function	Connection
1		Not used	
2		Not used	
3		Not used	
4		Not used	
5		Not used	
6		Not used	
7		Not used	
8		Not used	
9	E/A	ML VER	Windscreen cowl panel lock microswitch (automatic convertible top)
10	E/A	ML UNLOCKED	Windscreen cowl panel UNLOCKED (automatic convertible top)
11	E/A	ML KOSCHL	Body electronics control module (ZKE IV) (automatic convertible top)
12		Not used	

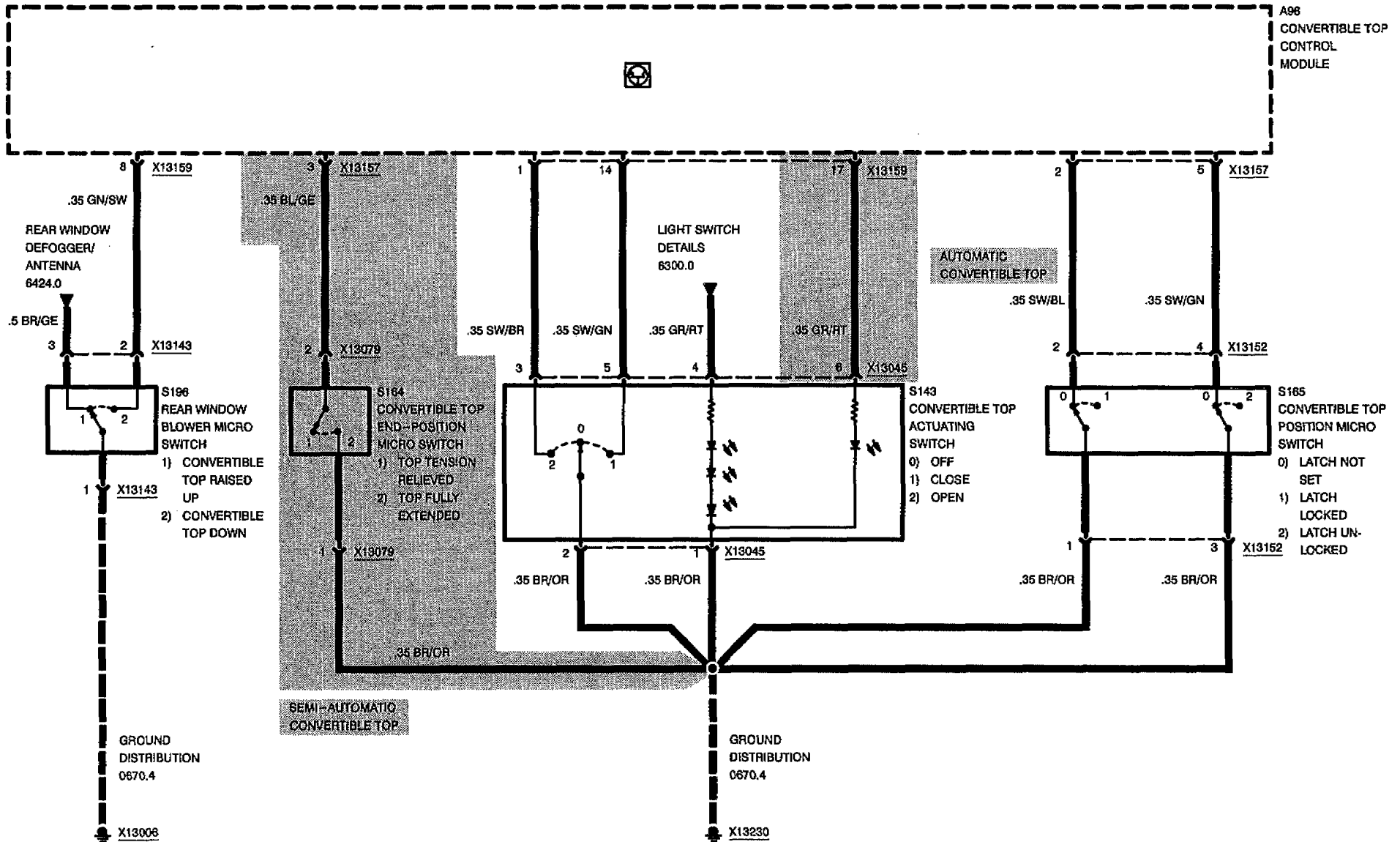
E = Input, A = Output, M = Ground

# ELECTRICAL CONVERTIBLE TOP



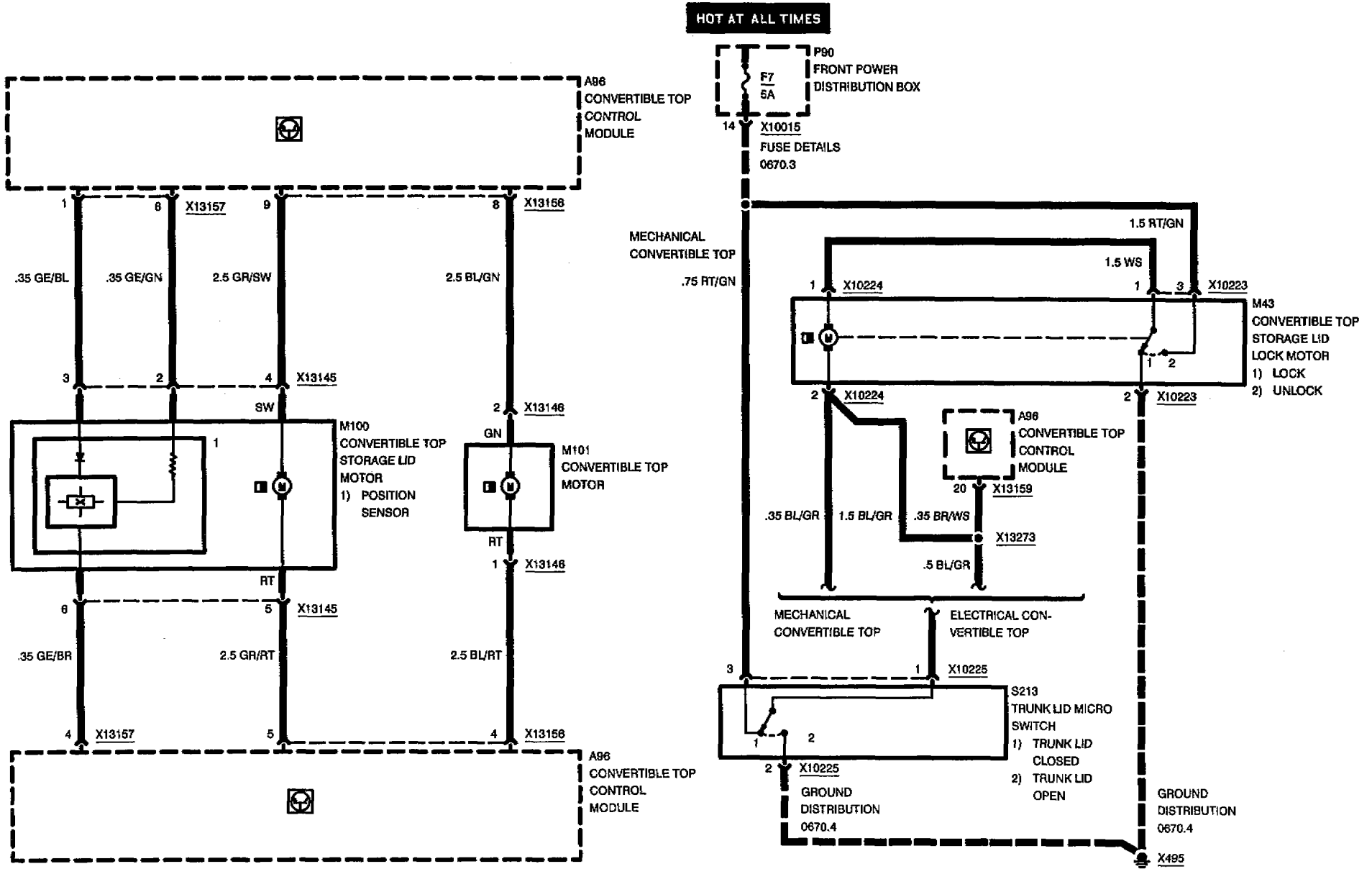


# ELECTRICAL CONVERTIBLE TOP

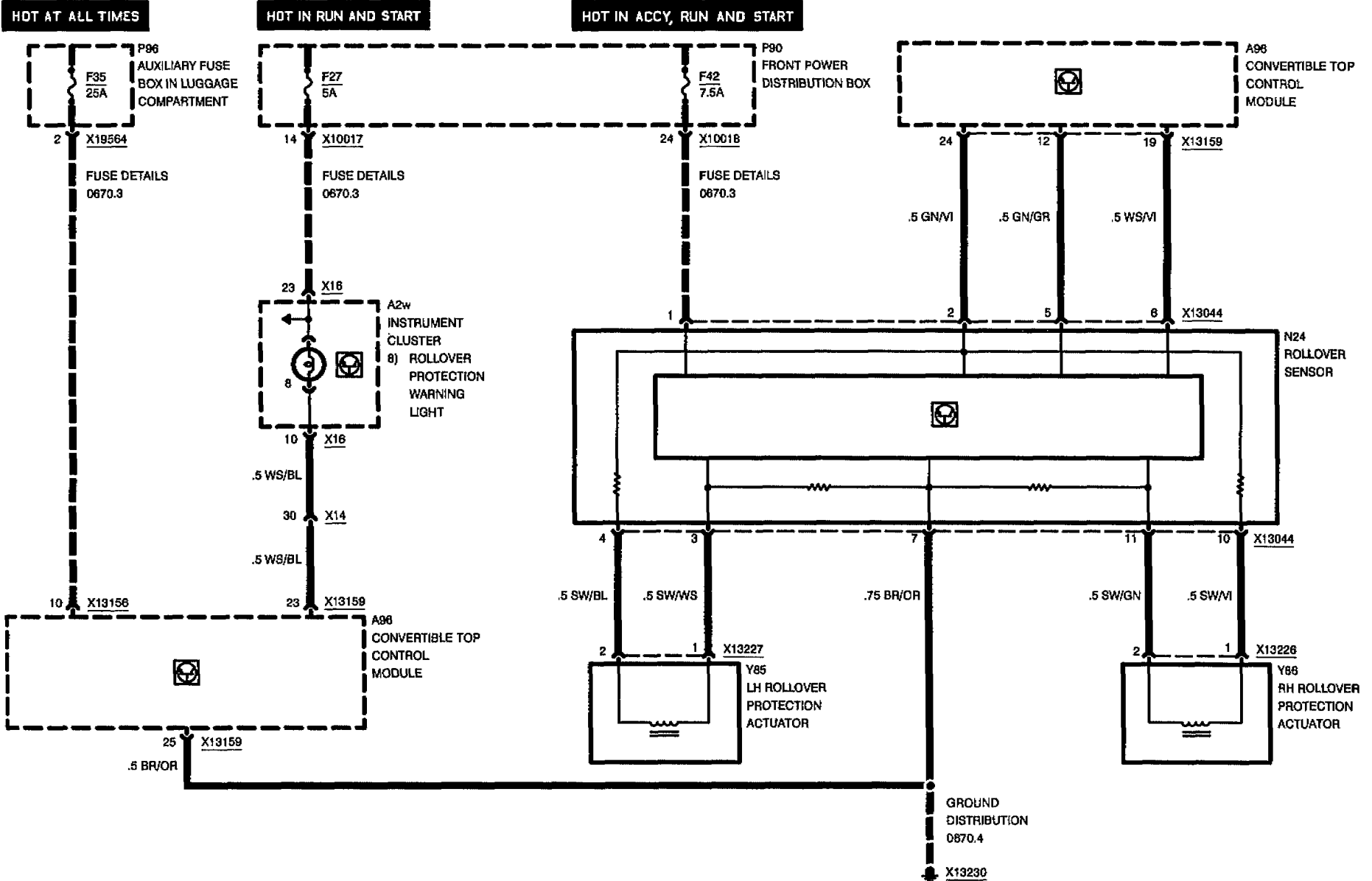




# ELECTRICAL CONVERTIBLE TOP



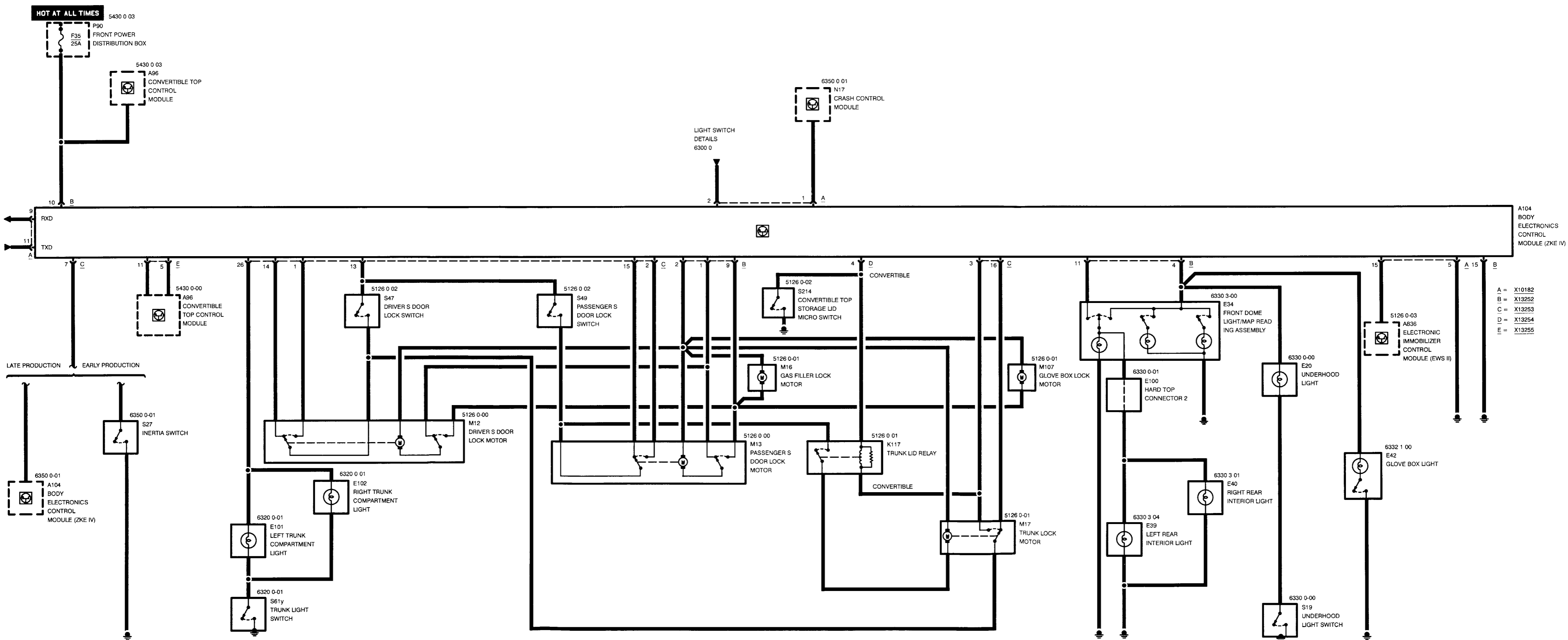
# ELECTRICAL CONVERTIBLE TOP

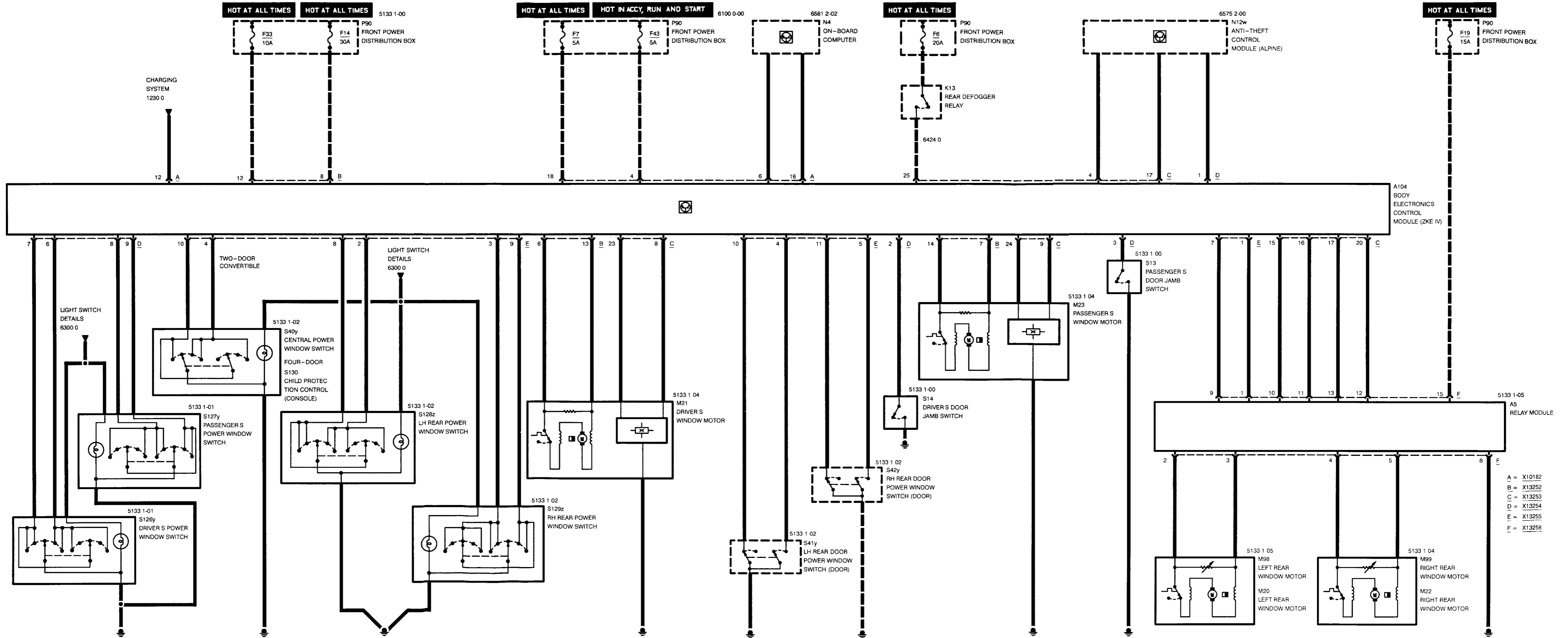




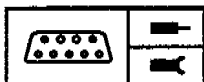


5430.1-04





A = X10182  
 B = X13252  
 C = X13253  
 D = X13254  
 E = X13255  
 F = X13258



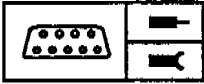
## Pin Assignments

A = X10182	18 Pins, black
B = X13252	15 Pins, black
C = X13253	26 Pins, yellow
D = X13254	26 Pins, green
E = X13255	26 Pins, nature
F = X13258	15 Pins, white

### X10182

Pin	Type	Description/Function	Connection
1	E	Crash signal	Crash control unit
2	E	Light signal	Light switch
3		Not used	
4	E	Power supply	Front power distribution box
5	M	Ground	Ground
6		Not used	
7	A	Activate relay	Horn relay (Alpine)
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	Terminal 50	Starter
13		Not used	
14		Not used	
15	A	Drive away protection	Electronic immobilizer control module (EWS II)
16	A	Data signal	On Board computer
17	E	Hood/radio signal	Hood/radio micro switches
18	E	Power supply	Front power distribution box

E = Input, A = Output, M = Ground



## Pin Assignments

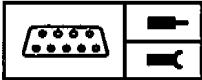
### X13252

Pin	Type	Description/Function	Connection
1	E	Power lock signal	Door lock motors
2	A	Voltage supply	All lock motors
3		Not used	
4	E	Automatic interior light signal	Interior light
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
9	E	Lock signal	Lock motor & trunk lid relay
10	E	Power supply	Front power distribution box
11	A	Voltage supply	Interior lights, engine compartment light, glove box light
12	E	Power supply	Front power distribution box
13	E	Motor signal	Power window motor driver's door
14	E	Motor signal	Power window motor passenger's door
15	M	Ground	Ground

### X13253

Pin	Type	Description/Function	Connection
1	E	Position signal	Door lock motor driver's door
2	E	Position signal	Door lock motor passenger's door
3	E	Lock signal trunk lid	Trunk lid lock motor, trunk lid relay
4	E	Data signal	Anti-theft system control module (Alpine)
5		Not used	
6		Not used	
7	E	Crash signal	Inertia switch
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



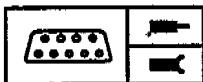
## Pin Assignments

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 lid lock motor
17	E	Data signal	Anti-theft system control module (Alpine)
18		Not used	
19	E	Central locking signal	Central locking switch
20	E/A	Data signal	Relay module
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		Rear defogger signal	Rear defogger relay
26	A	Voltage supply	Luggage compartment lights

### X13254

Pin	Type	Description/Function	Connection
1	E	Door signal	Driver's door handle switch
2	E	Door signal	Door jamb switch driver's door
3	E	Door signal	Door jamb switch passenger's door
4	E	Convertible trunk lid signal Four-door door-signal	Trunk lid switch/trunk lid relay Door jump switch left rear
5	E	Door signal	Door jump switch right rear
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	E	Four-door child protection signal	Child protection switch
11		Not used	

E = Input, A = Output, M = Ground



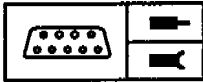
## Pin Assignments

Pin	Type	Description/Function	Connection
12		Not used	
13		Not used	
14	E	Trunk lid signal	Trunk lid switch
15	A	DATA signal	Relay module
16	A	DATA signal	Relay module
17	A	DATA signal	Relay module
18	A	Convertible DATA signal	Convertible top control module
19	A	Four-door CORRECT signal	Comfort relay
20		Not used	
21		Not used	
22		Not used	
23		Not used	
24		Not used	
25		Not used	
26		Not used	

### X13255

Pin	Type	Description/Function	Connection
1	A	DATA signal	Relay module
2	E	OPEN signal	Power window switch left rear
3	E	OPEN signal	Power window switch right rear
4	E	Convertible OPEN signal Four-door OPEN signal	Main power window switch Driver's rear window switch
5	E	Convertible DATA signal Four-door CLOSE signal	Convertible top control module Passenger's rear window switch
6		Not used	
7	A	DATA signal	Relay module
8	E	CLOSE signal	Power window switch left rear
9	E	CLOSE signal	Power window switch right rear
10	E	Convertible CLOSE signal Four-door CLOSE signal	Main power window switch Driver's window switch

E = Input, A = Output, M = Ground



## Pin Assignments

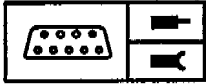
Pin	Type	Description/Function	Connection
11	E	Convertible DATA signal Four-door OPEN signal	Convertible top control module Passenger's window switch
12		Not used	
13		Not used	
14		Not used	
15		Not used	
16		Not used	
17		Not used	
18		Not used	
19		Not used	
20		Not used	
21		Not used	
22		Not used	
23		Not used	
24		Not used	
25		Not used	
26		Not used	

### X13258

Pin	Type	Description/Function	Connection
1	E	DATA signal	Central body electronic module
2	A	Voltage supply (motor)	Power window motor right rear
3	E	Signal	Power window motor right rear
4	E	Signal	Power window motor left rear
5	A	Voltage supply (motor)	Power window motor left rear
6		Not used	
7		Not used	
8	M	Ground	Ground
9	E	DATA signal	Central body electronic module
10	E/A	DATA signal	Central body electronic module
11	E/A	DATA signal	Central body electronic module

E = Input, A = Output, M = Ground





## Pin Assignments

Pin	Type	Description/Function	Connection
12	E	DATA signal	Central body electronic module
13	E/A	DATA signal	Central body electronic module
14		Not used	
15	E	Power supply	Front power distribution box

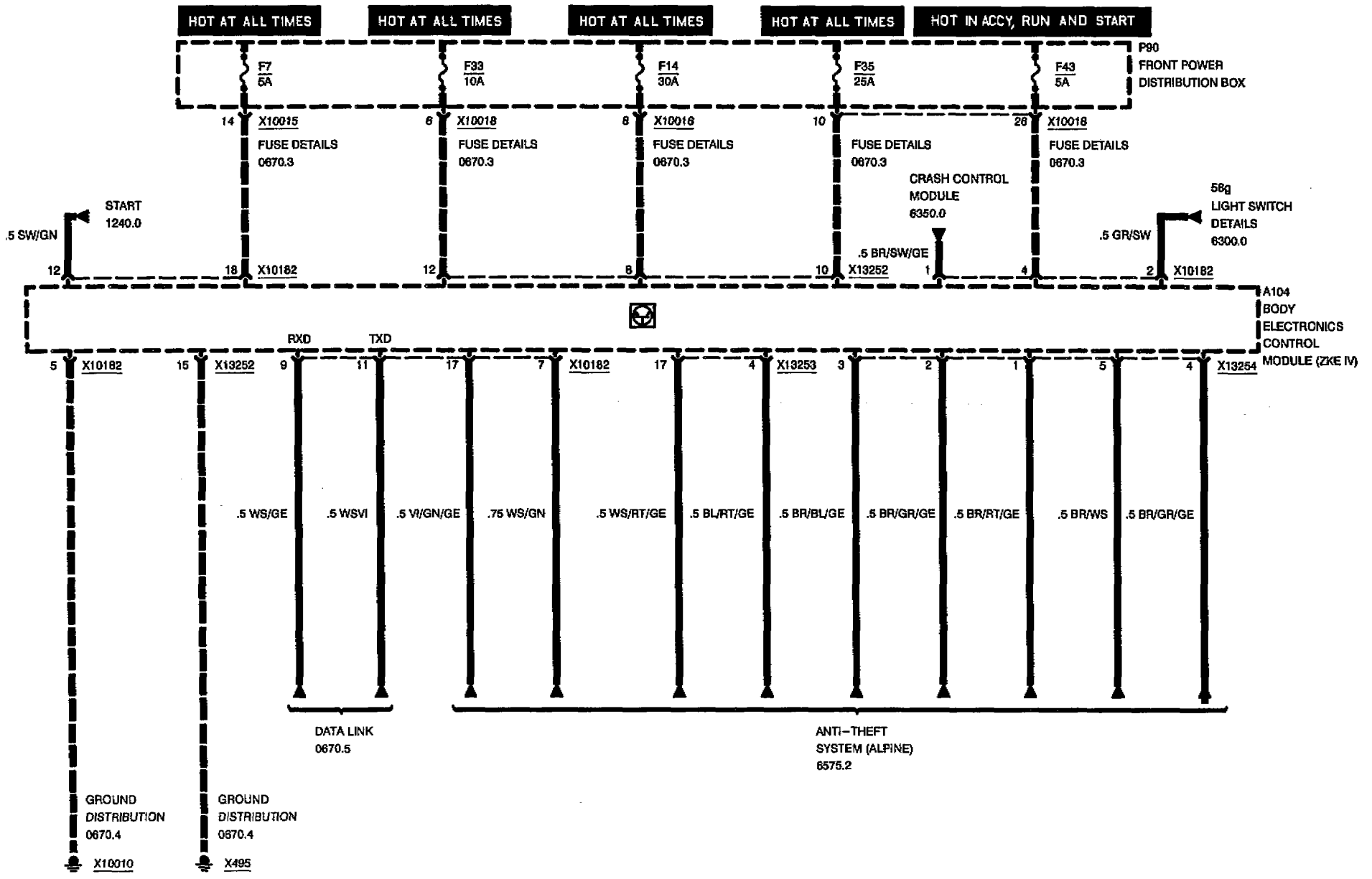
E = Input, A = Output, M = Ground

BMW  
3

6100.0

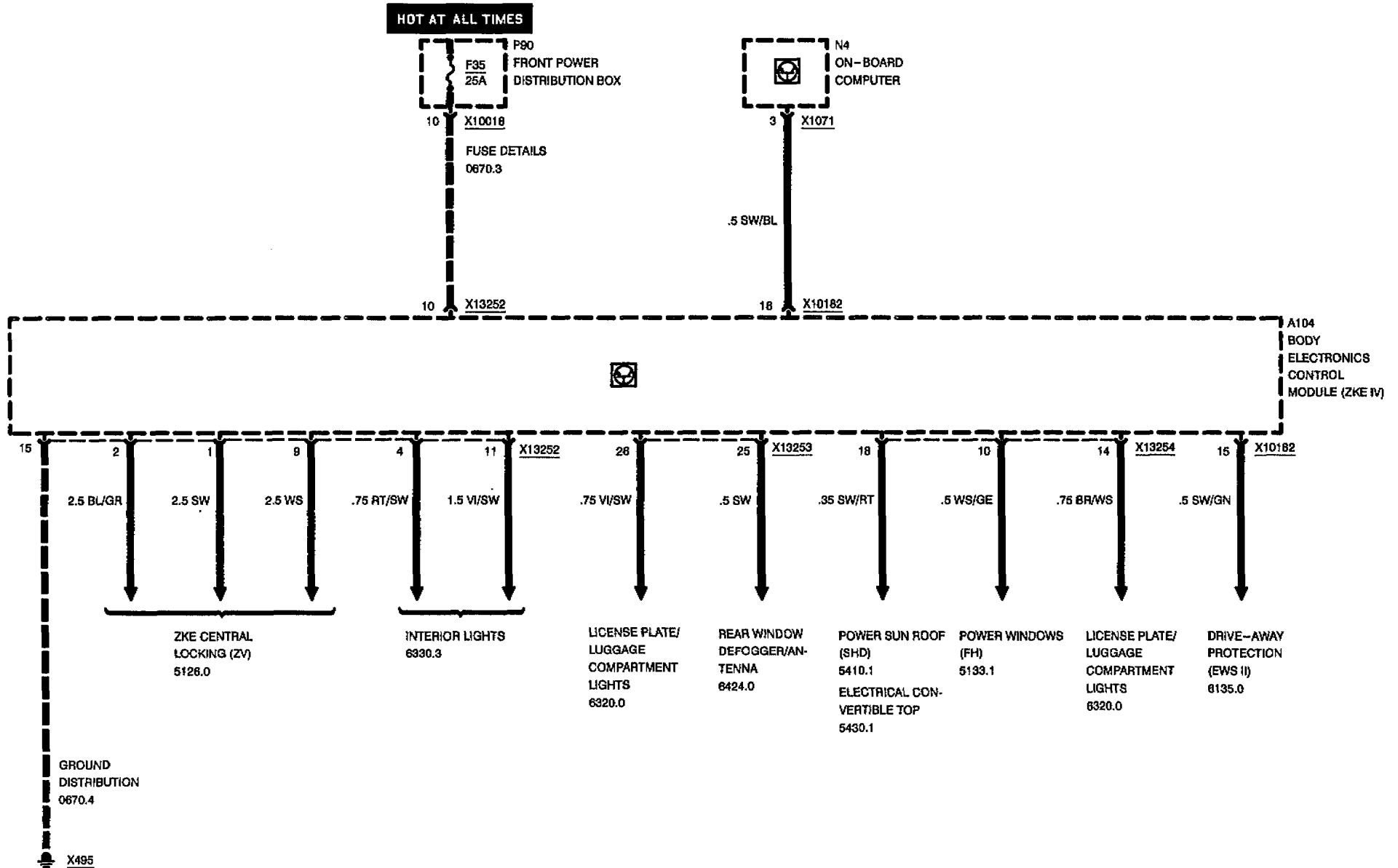


# CENTRAL BODY ELECTRONICS (ZKE IV)



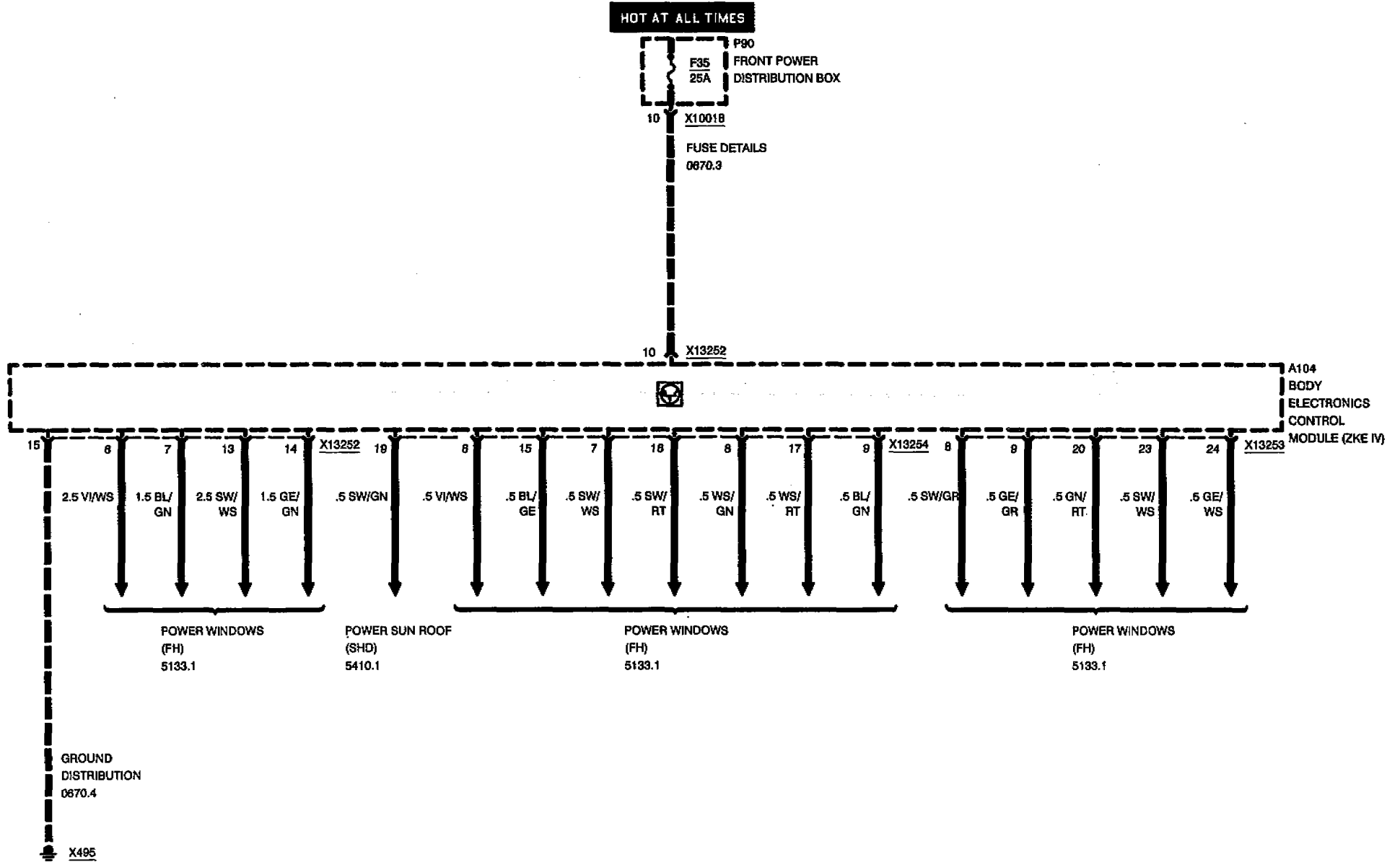


# CENTRAL BODY ELECTRONICS (ZKE IV)



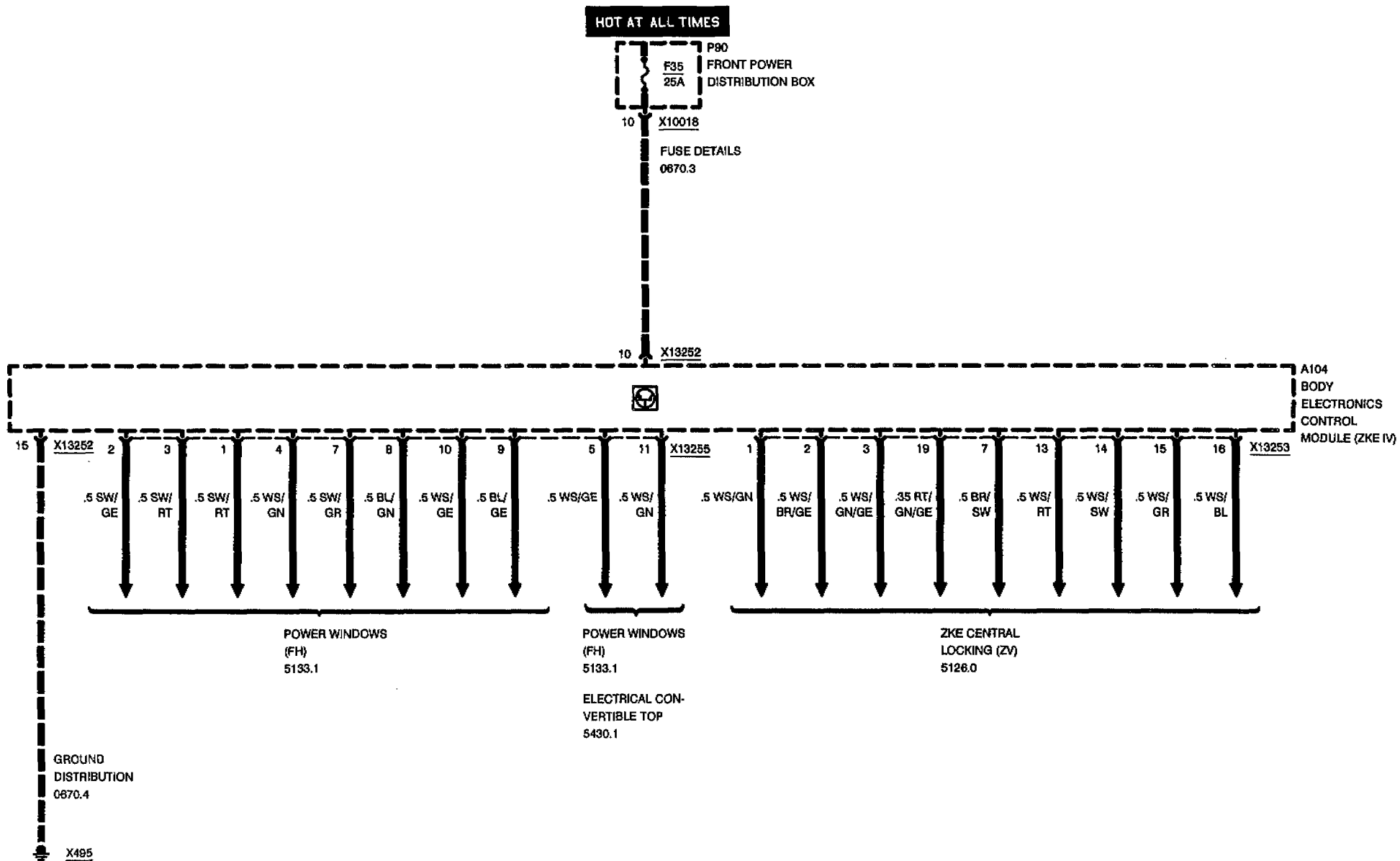


# CENTRAL BODY ELECTRONICS (ZKE IV)



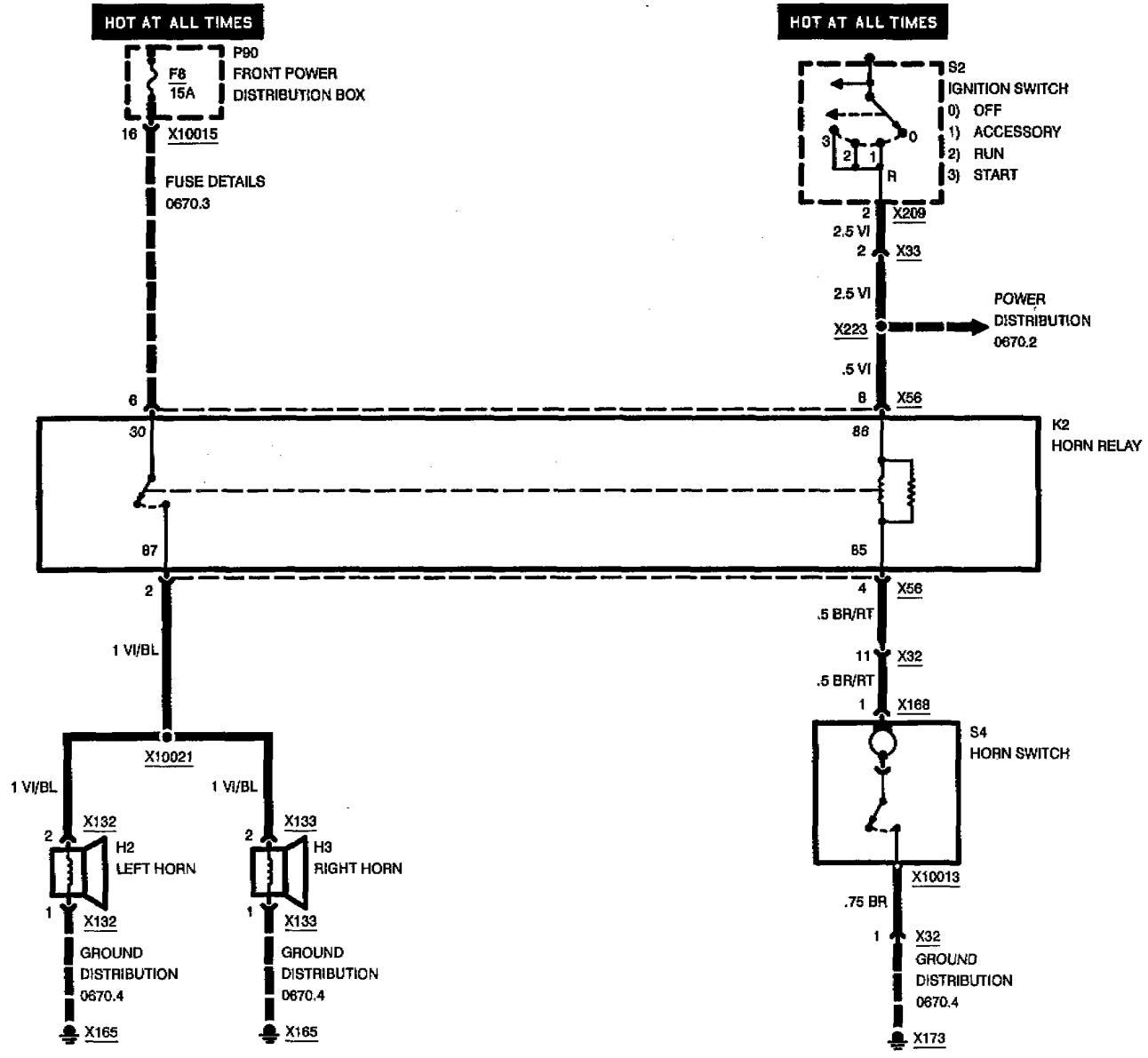


# CENTRAL BODY ELECTRONICS (ZKE IV)





# HORN



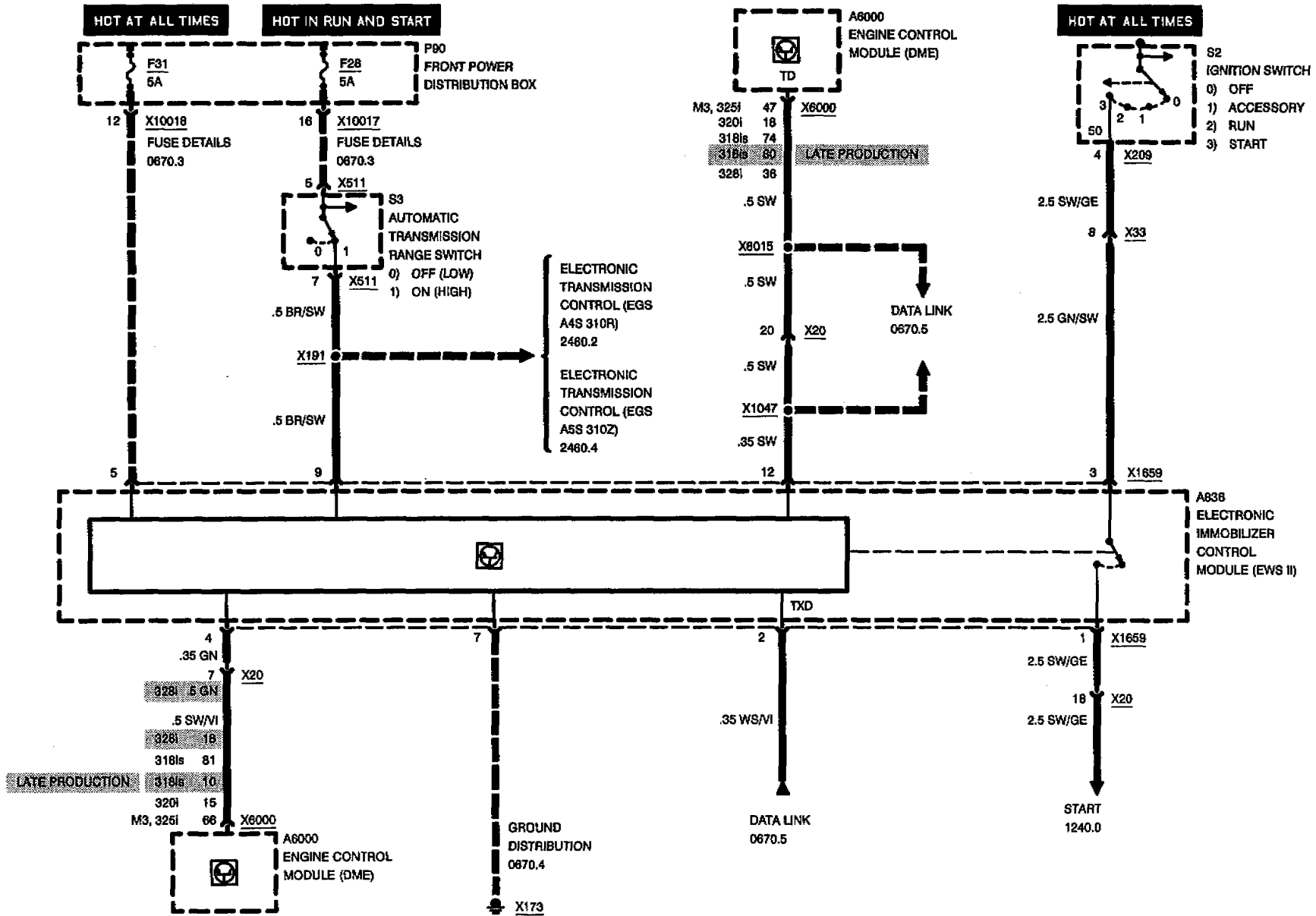
BMW  
3

6135.0

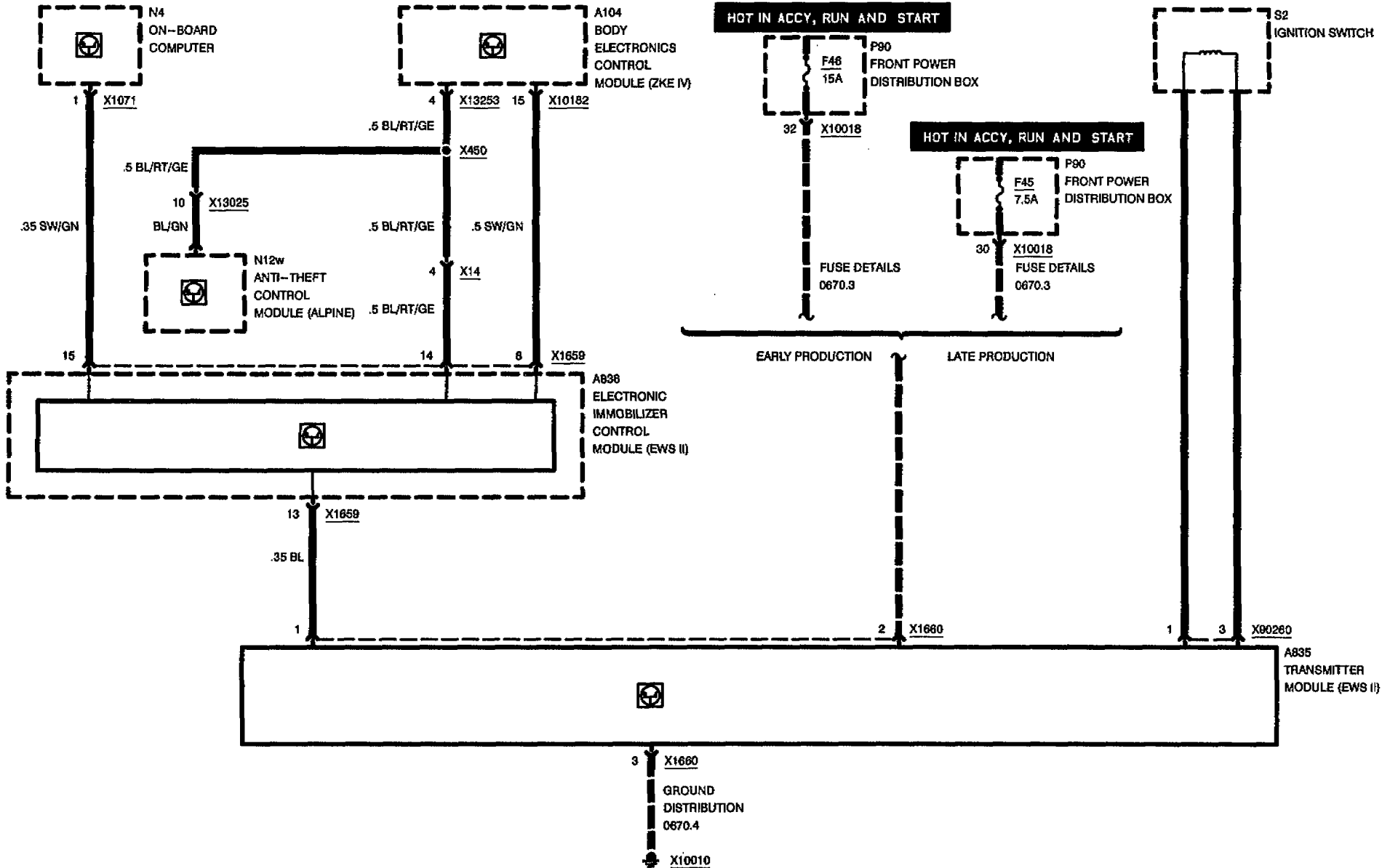




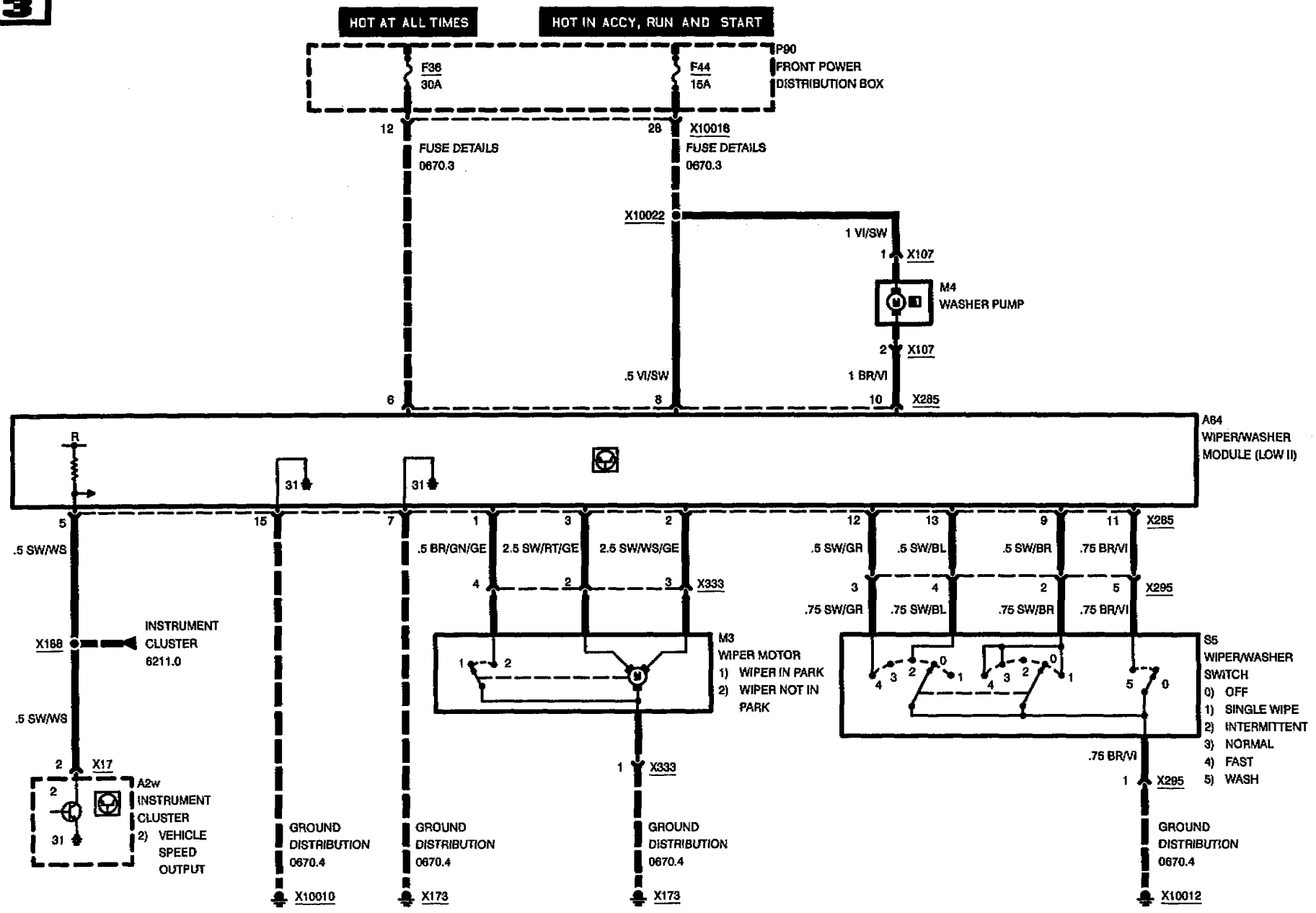
# DRIVE-AWAY PROTECTION (EWS II)



# DRIVE-AWAY PROTECTION (EWS II)



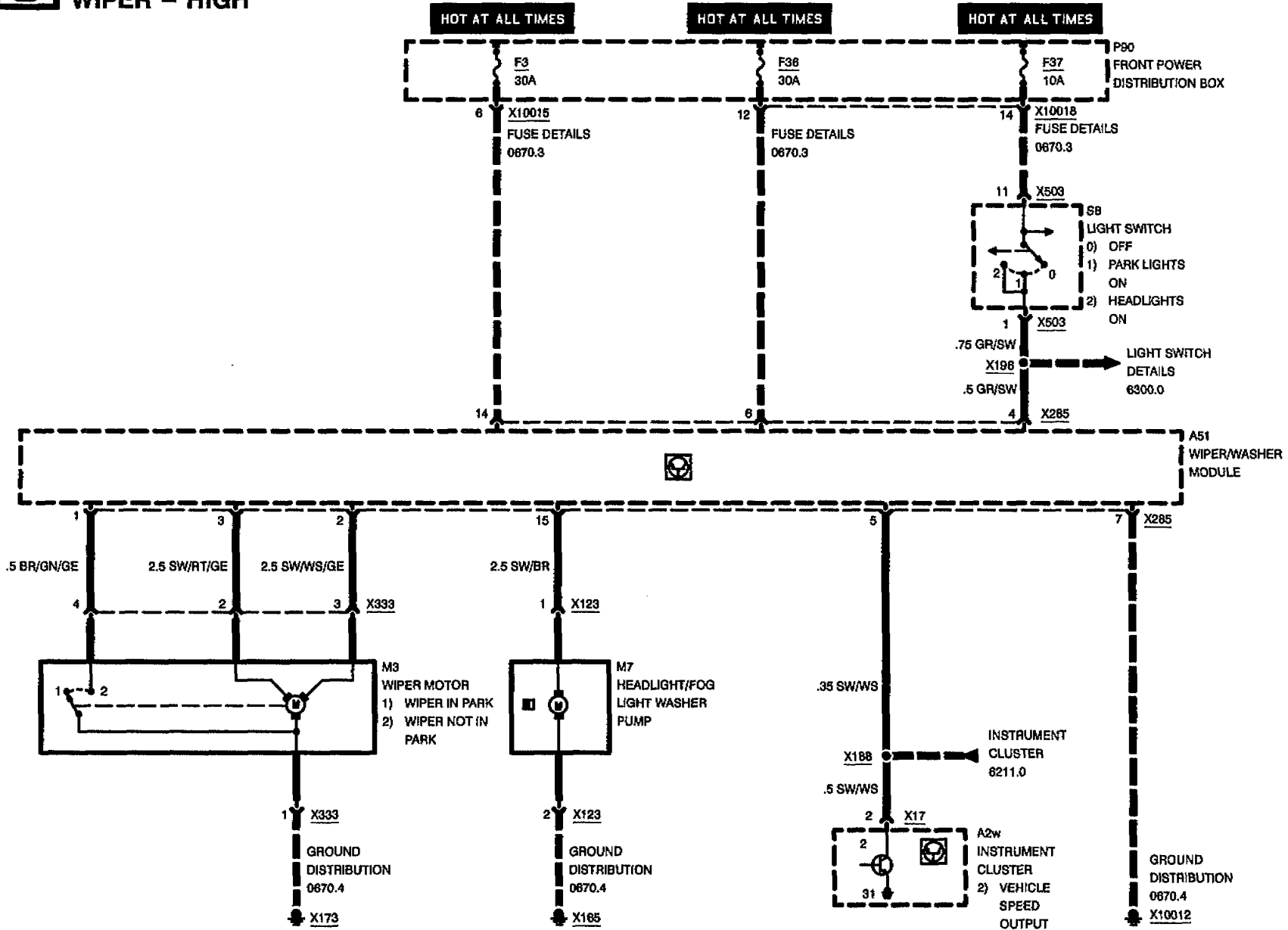
# WIPER/WASHER MODULE (WWM)





# WIPER/WASHER MODULE (WWM)

## WIPER - HIGH

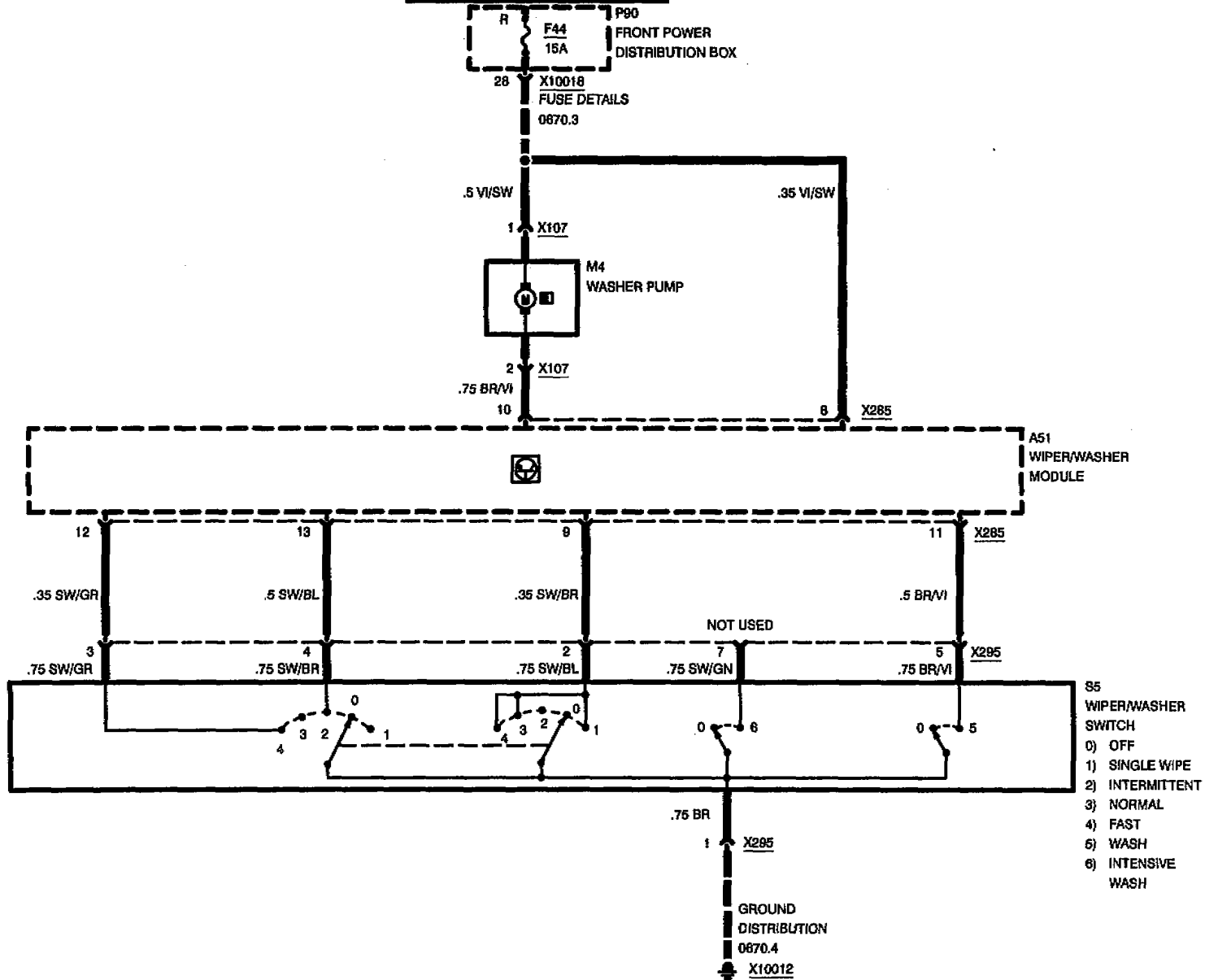




# WIPER/WASHER MODULE (WWM)

## WASHER - HIGH

HOT IN ACCY, RUN AND START

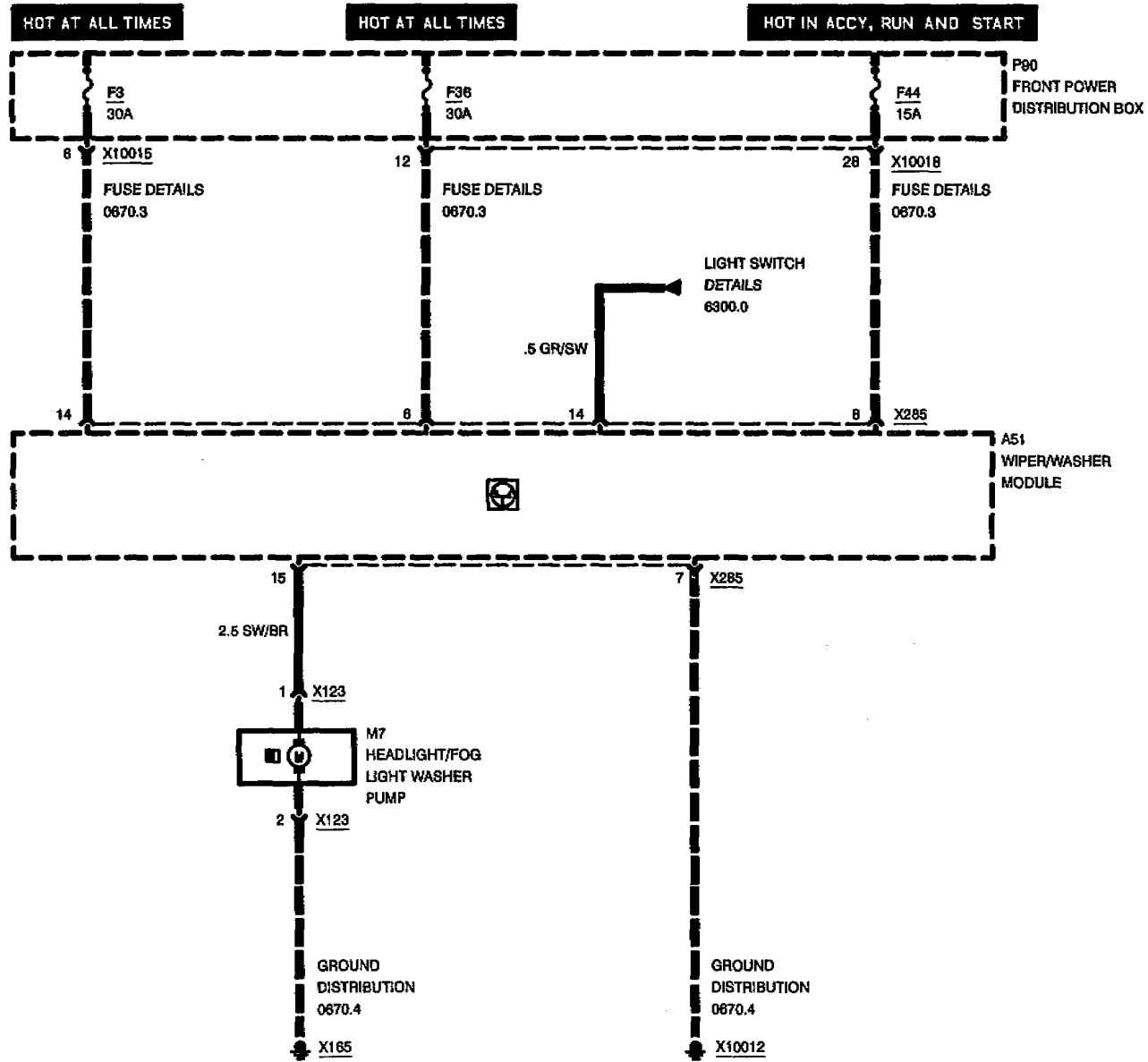


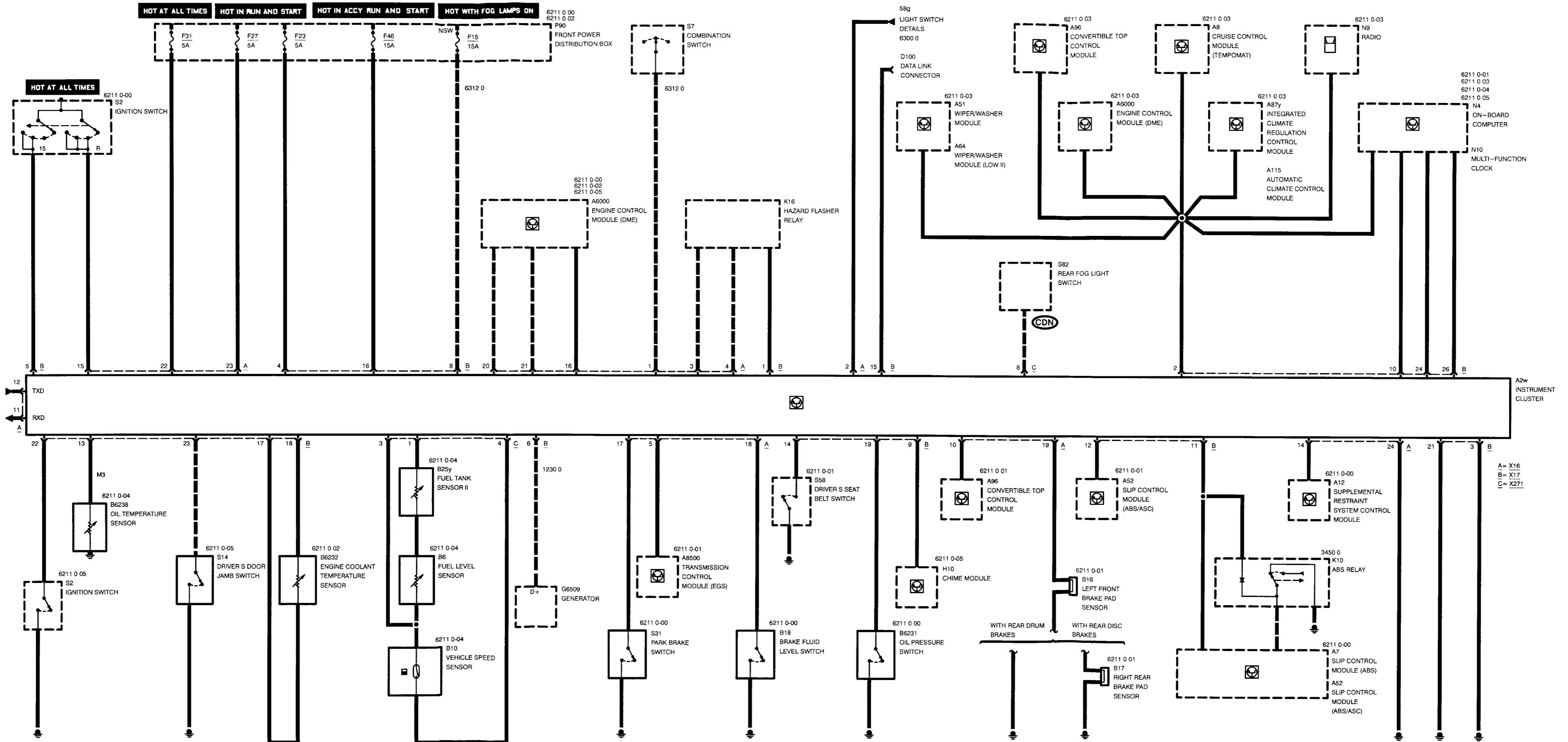
BMW  
3

6167.1

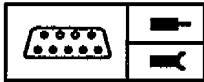


# HEADLIGHT WASHER (SRA)









## Pin Assignments

### X16

Pin	Type	Description/Function	Connection
1	E	High beam indicator control	Combination switch
2	E	Terminal 58g, instrument illumination power	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	E	Convertible Roll over signal	Convertible top control module
11	A	RxD diagnostic data link	Data link connector
12	E/A	TxD diagnostic data link	Data link connector
13	E	M3 oil temperature	Engine oil temperature sensor
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	E	Fuel consumption signal + KVA	Engine control module (DME)
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

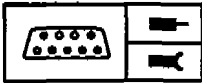


## Pin Assignments

### 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	A	Information signal, fuel tank content	On-board computer
11	E	Slip control system warning lamp (ABS) control	Slip control module (ABS)
12	E	ASC signal	ASC control module
13		Not used	
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 distribution 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	Ground point
22	E	Ignition key warning/audible ignition key warning	Ignition switch
23	E	Driver's door open	Driver's door jamb switch
24	A	Dimmer signal/brightness information signal for connected control modules	On-board computer or multi-function clock

E = Input, A = Output, M = Ground



## Pin Assignments

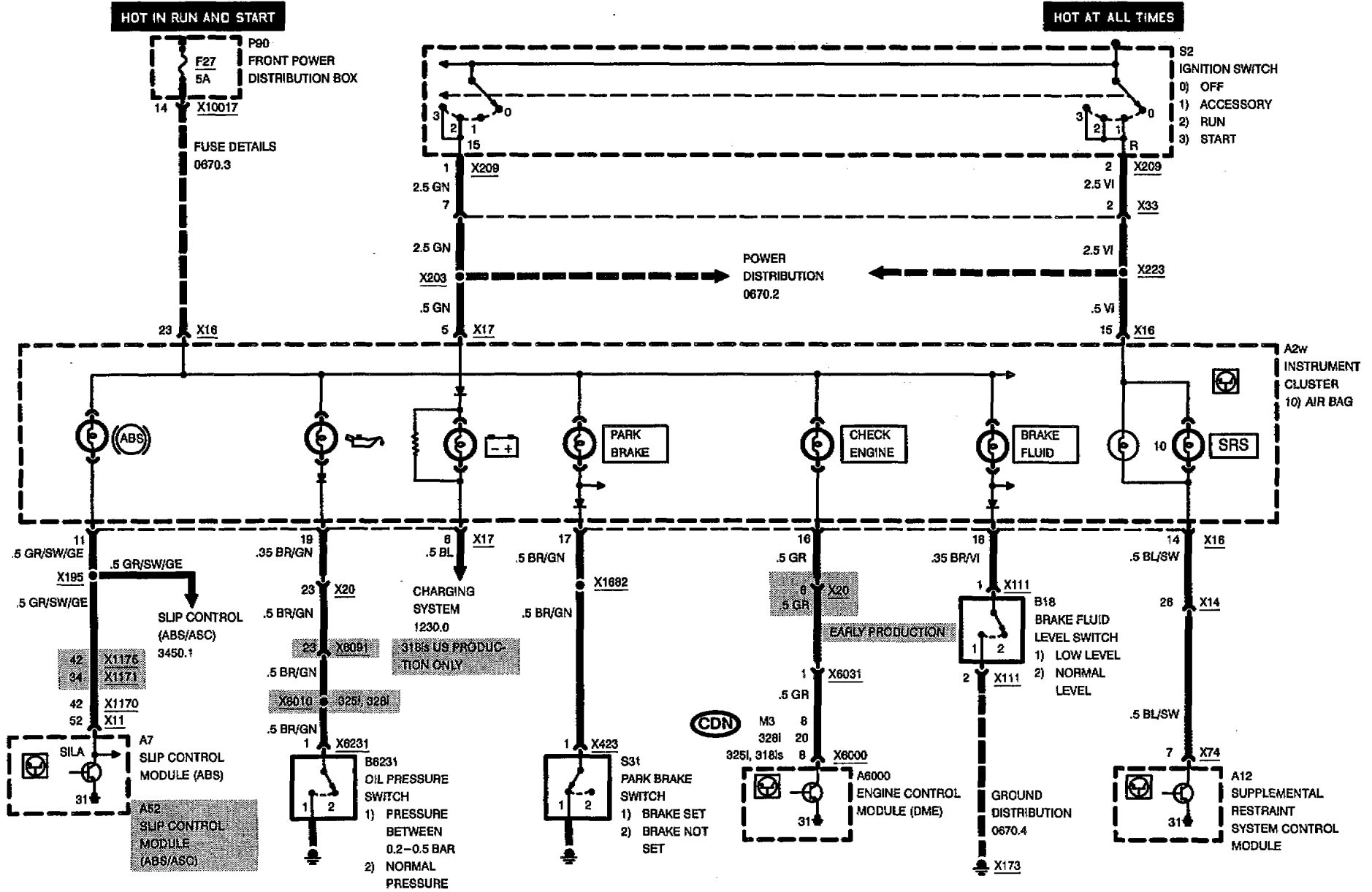
Pin	Type	Description/Function	Connection
25		Not used	
26	E	Central indicator lamp/check-control	On-board computer or multi-function clock

### X271

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

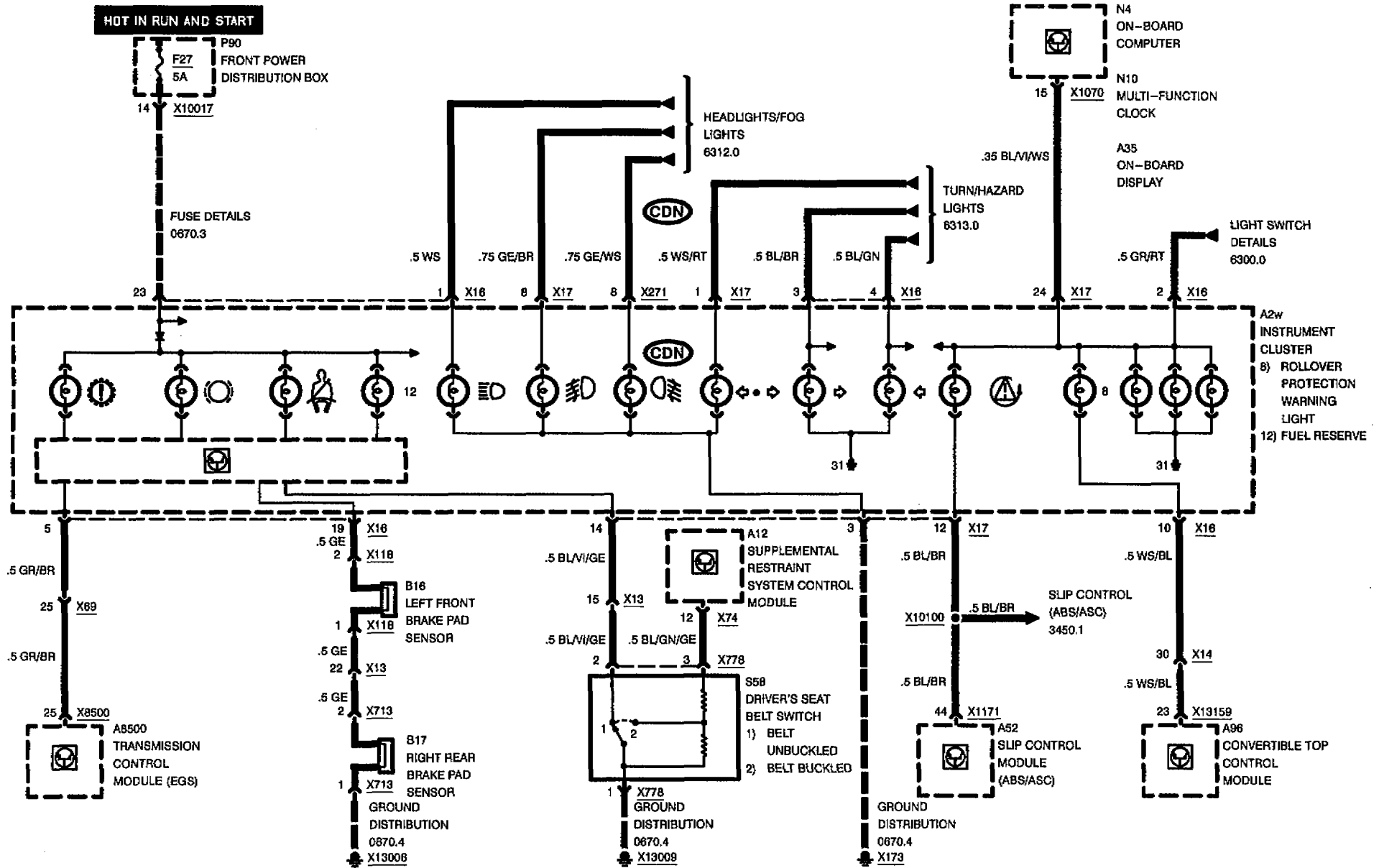
E = Input, A = Output, M = Ground

# INSTRUMENT CLUSTER INDICATORS





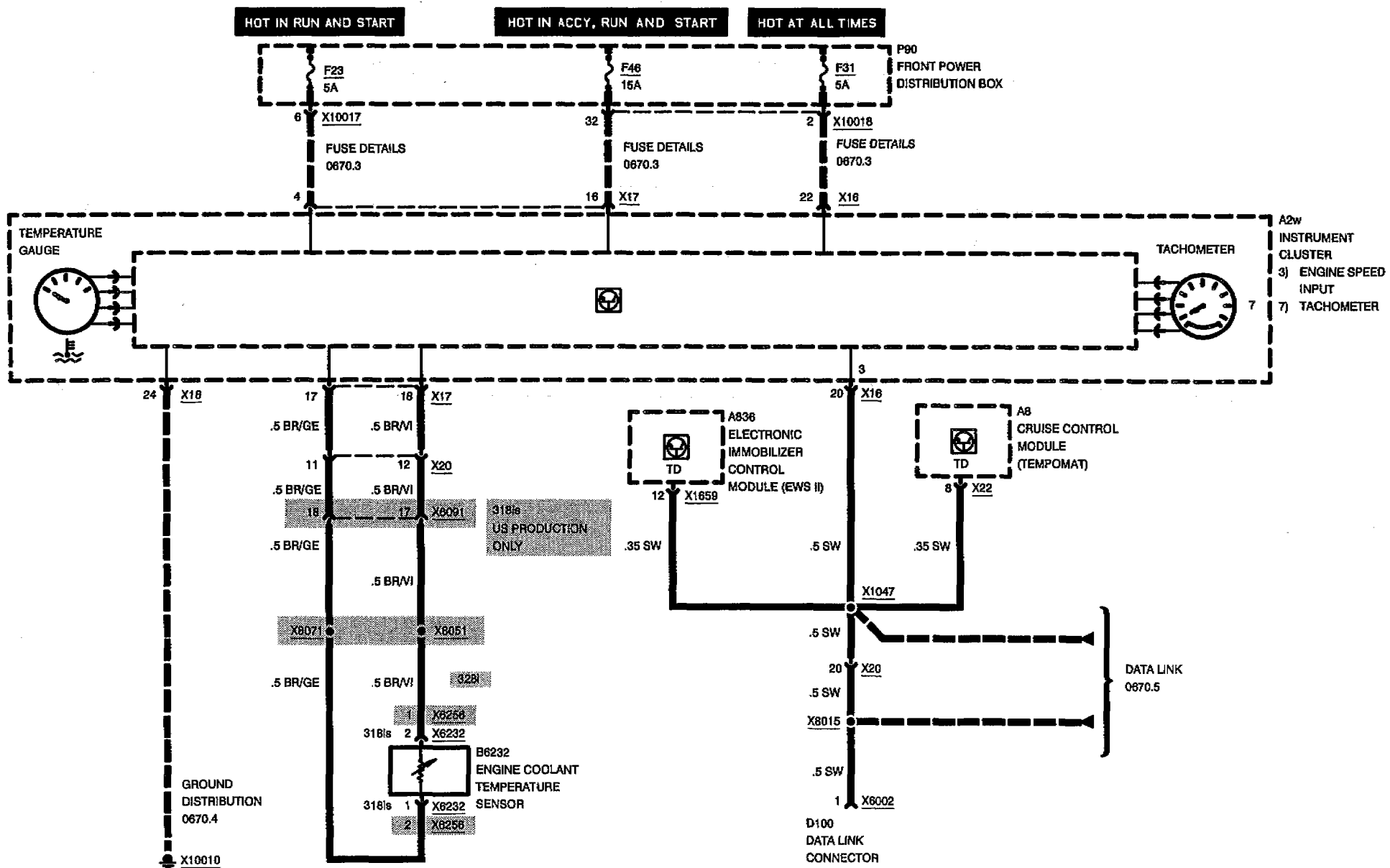
# INSTRUMENT CLUSTER INDICATORS





# INSTRUMENT CLUSTER

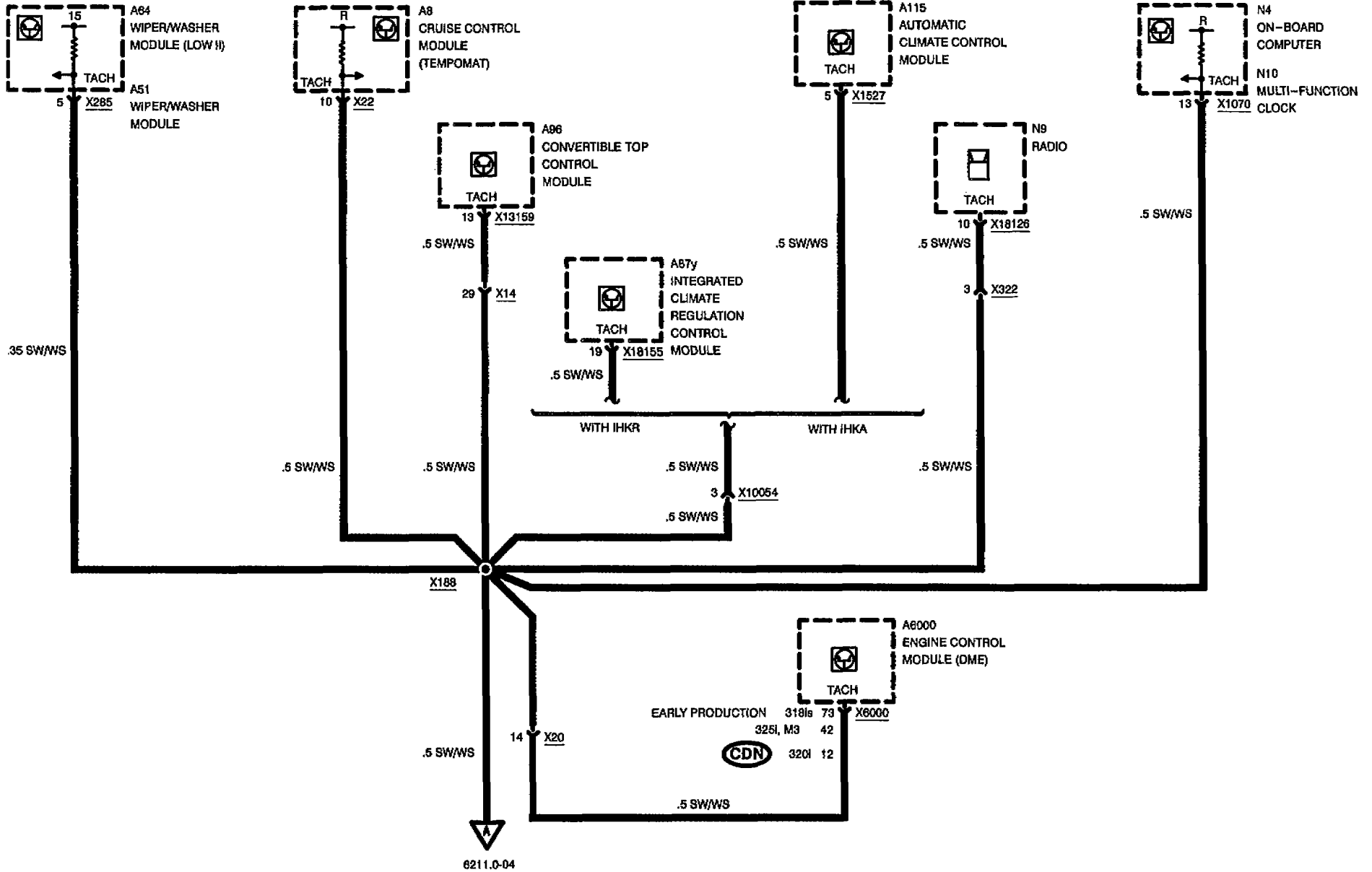
## INDICATORS





# INSTRUMENT CLUSTER

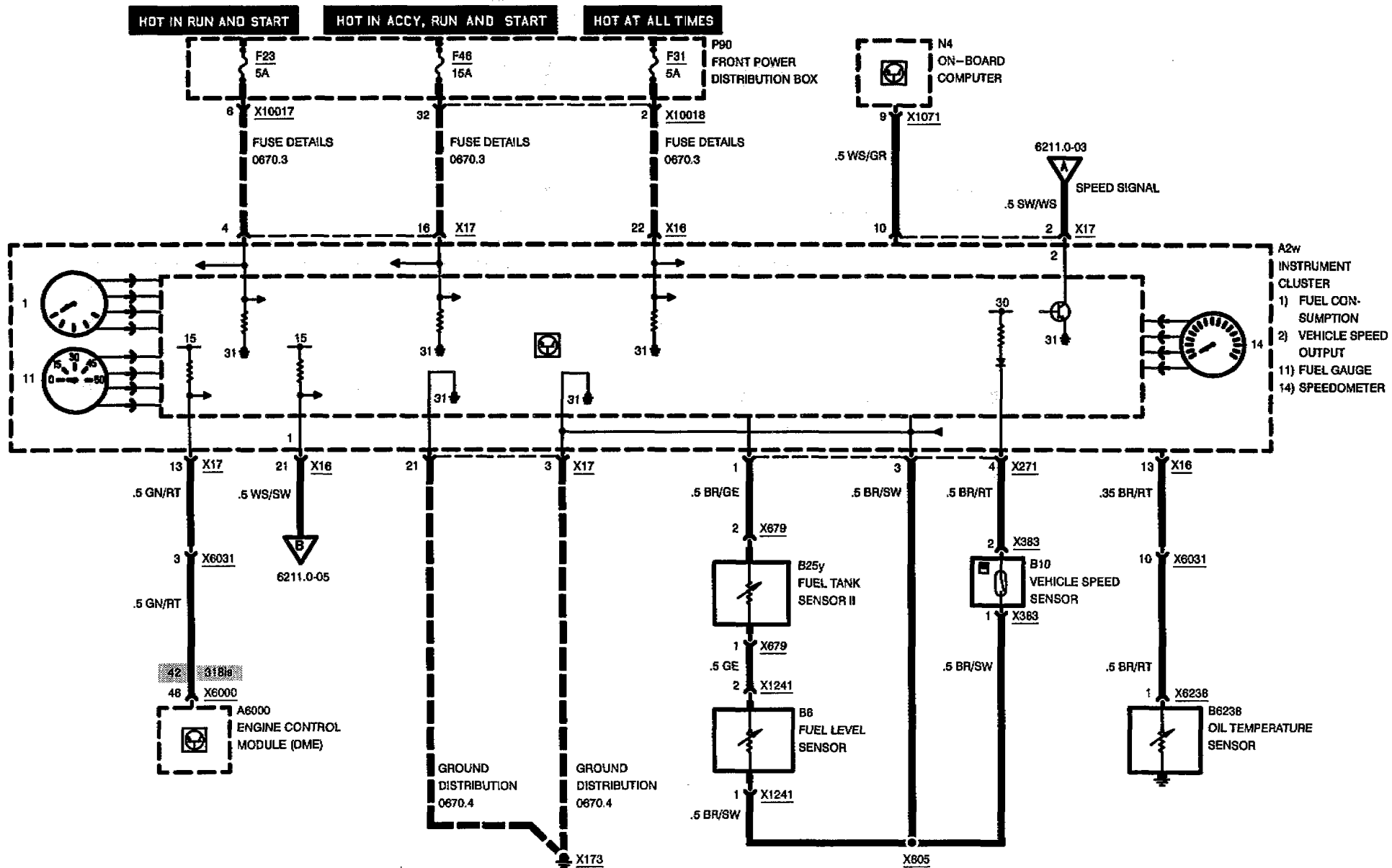
## SIGNAL-OUTPUT SPEEDOMETER





# INSTRUMENT CLUSTER

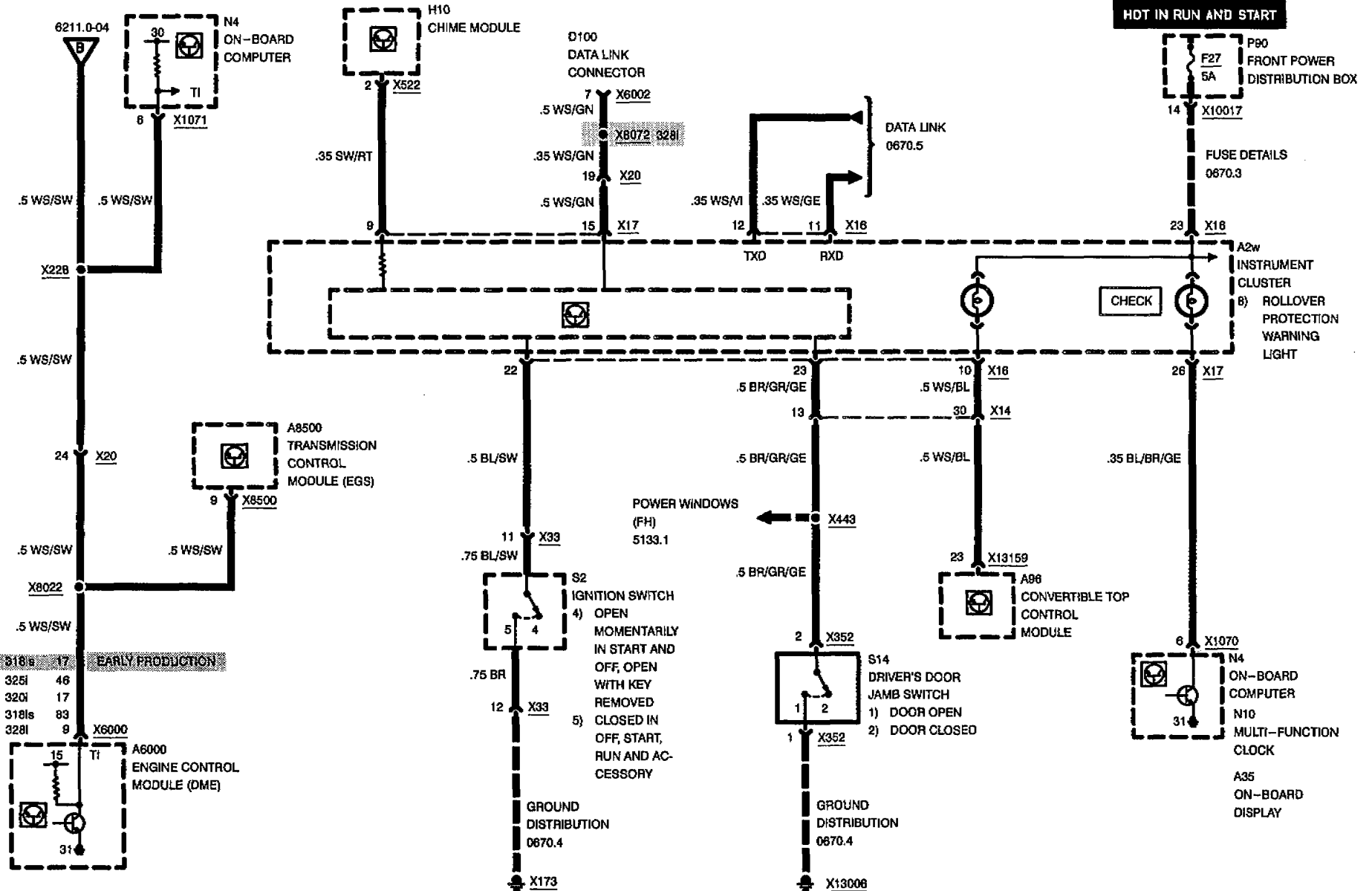
## INDICATORS





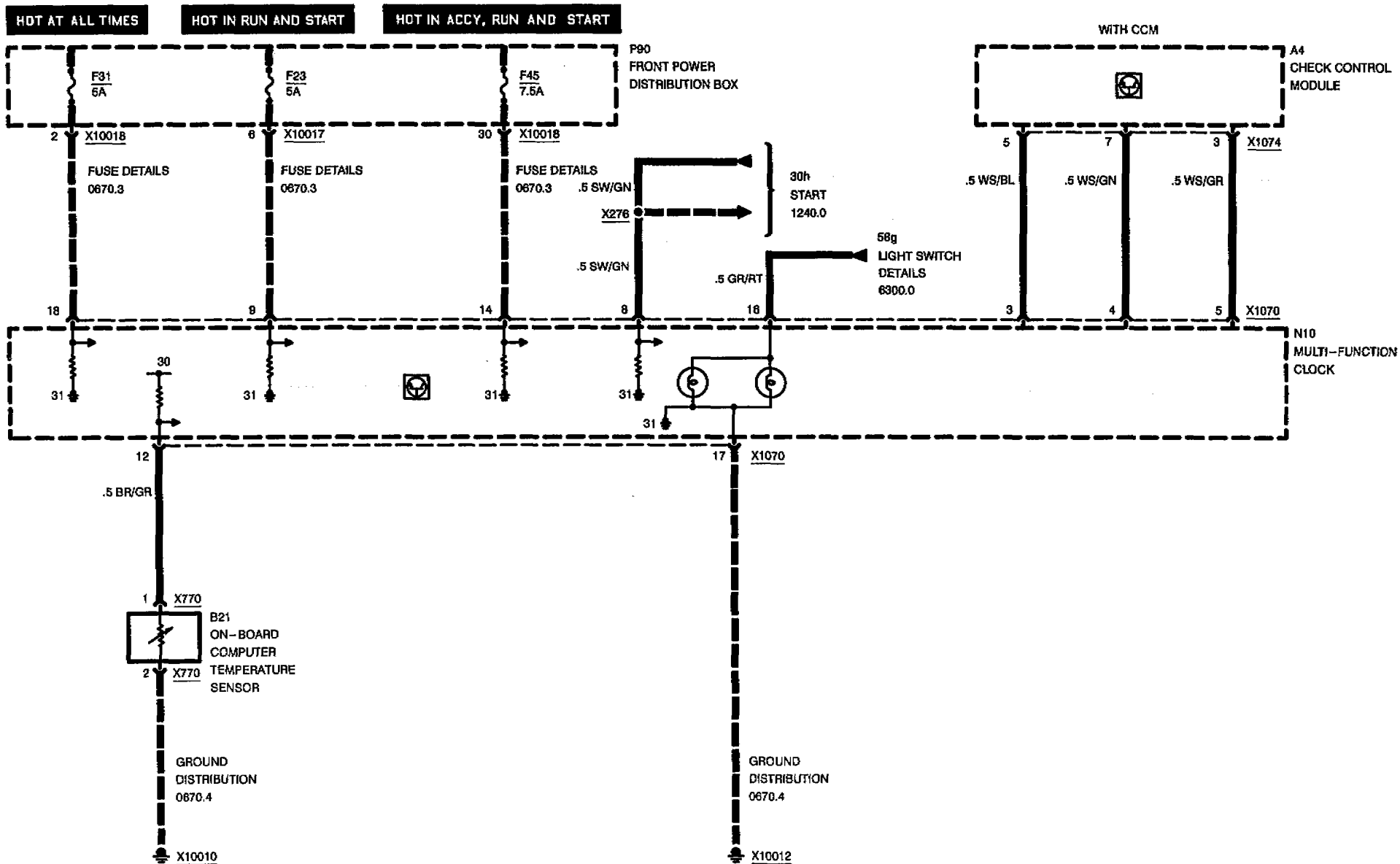


# INSTRUMENT CLUSTER INDICATORS



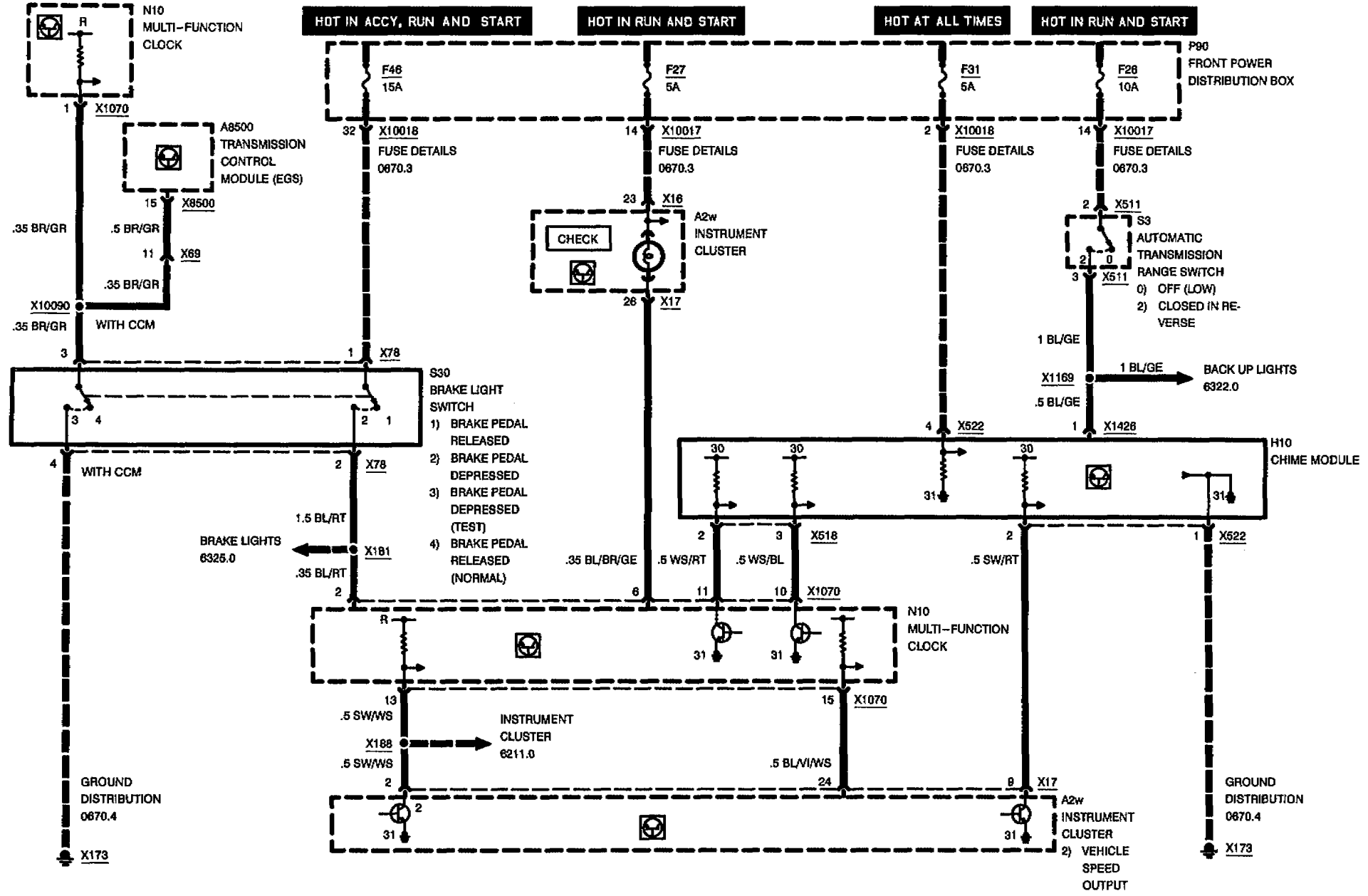


# MULTI-FUNCTION CLOCK





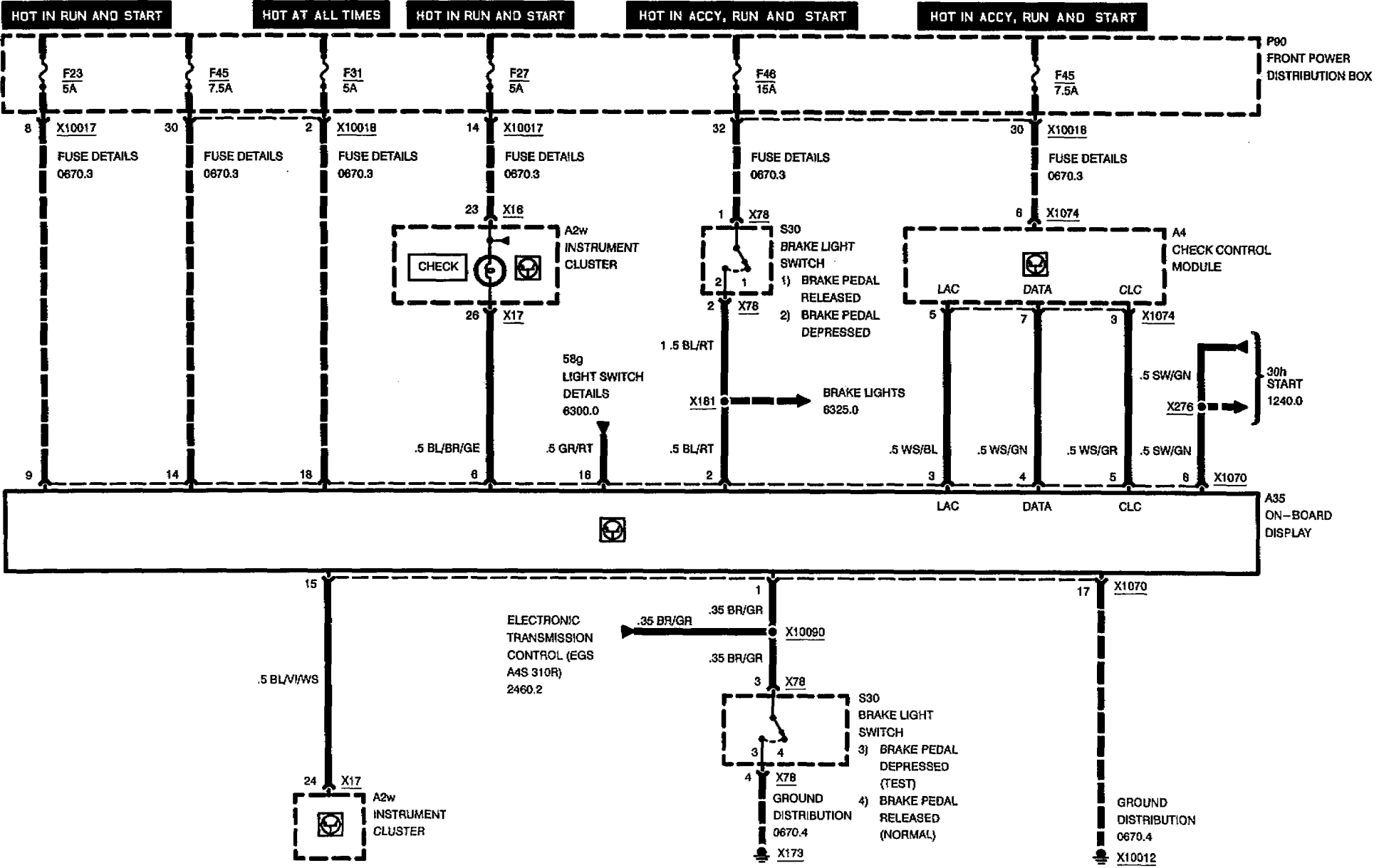
# MULTI-FUNCTION CLOCK CHIME, BRAKE LIGHT SWITCH





# ON-BOARD DISPLAY

HOT IN ACCY, RUN AND START



04/97

6214.0-00

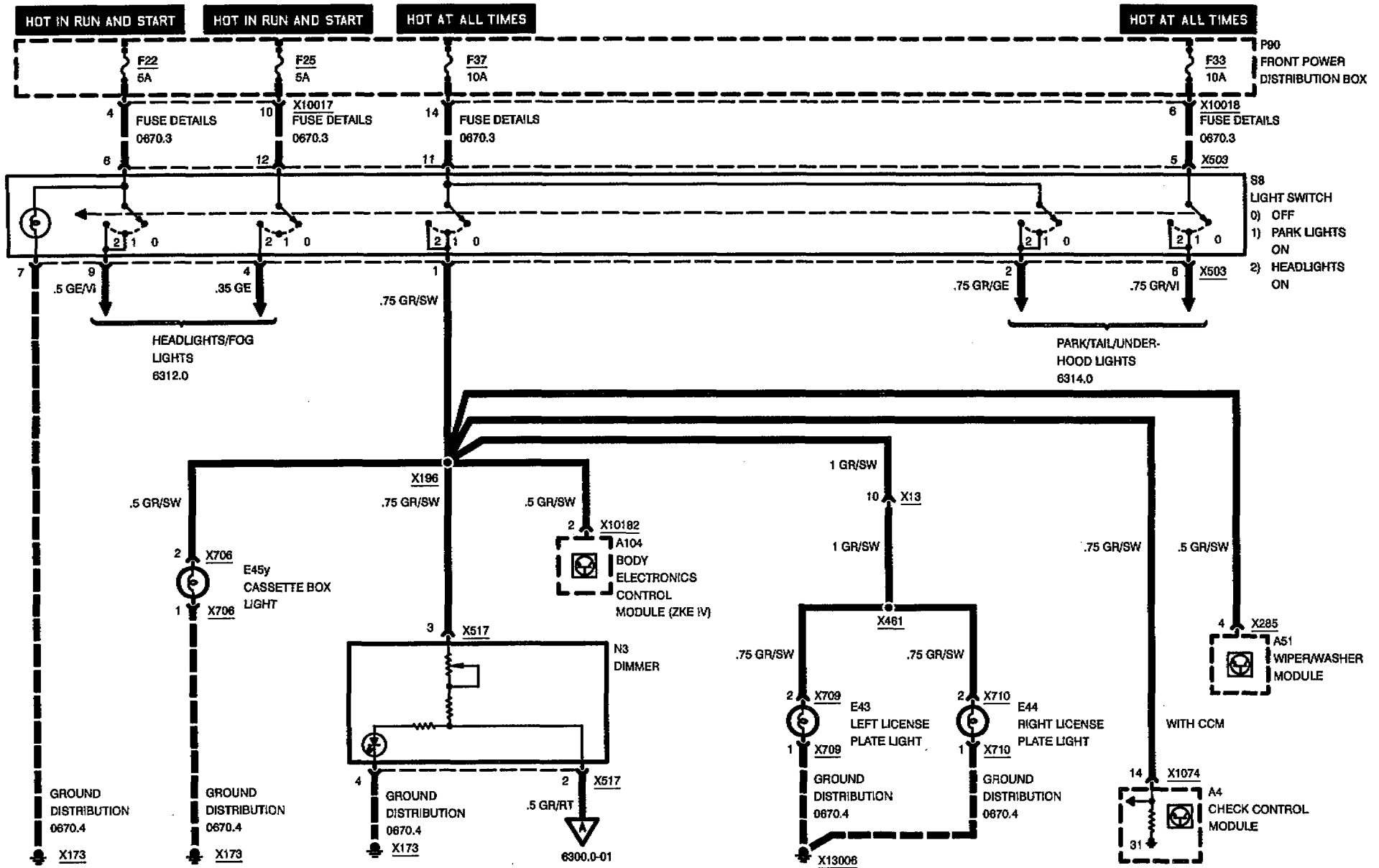
1996



6300.0

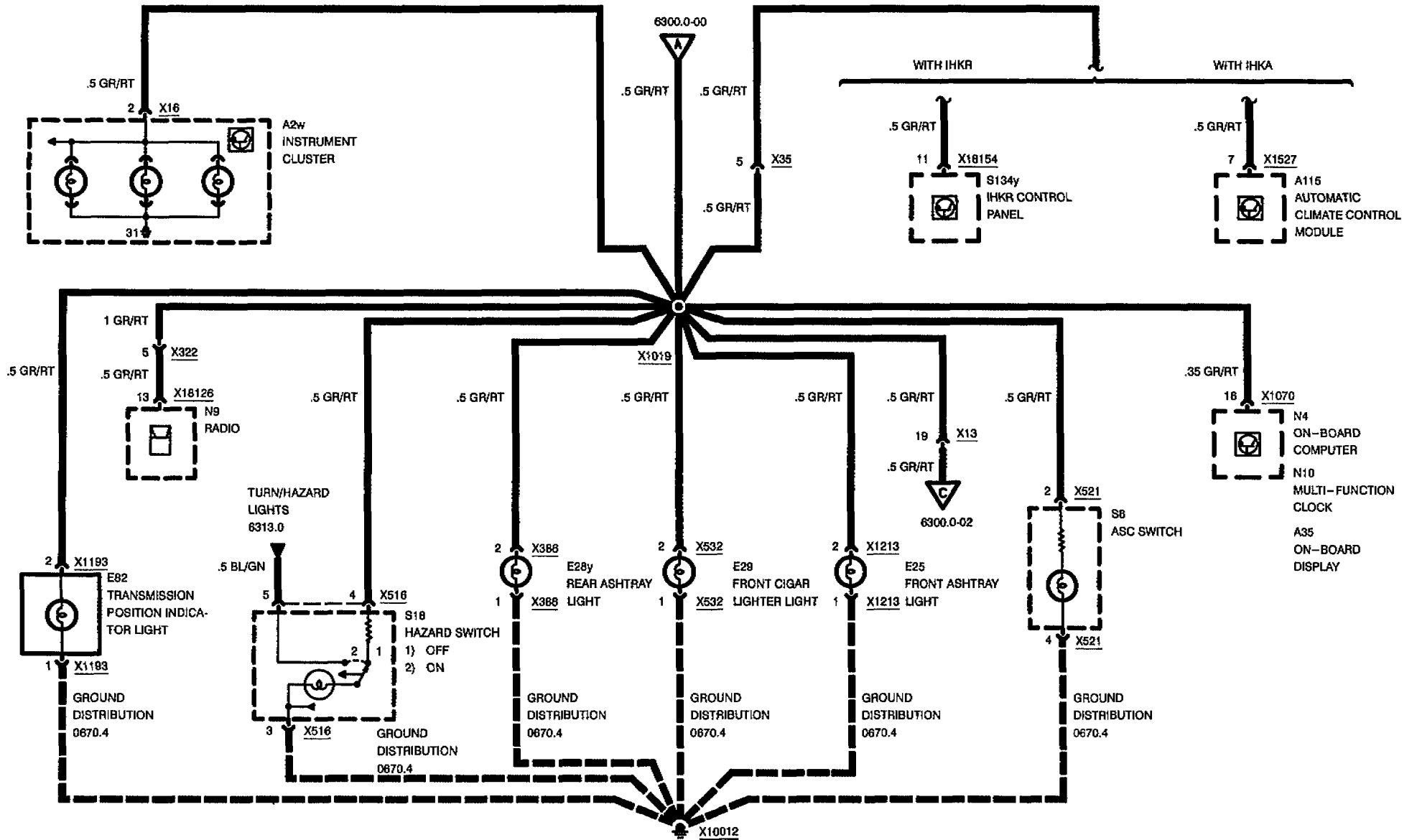


# LIGHT SWITCH DETAILS



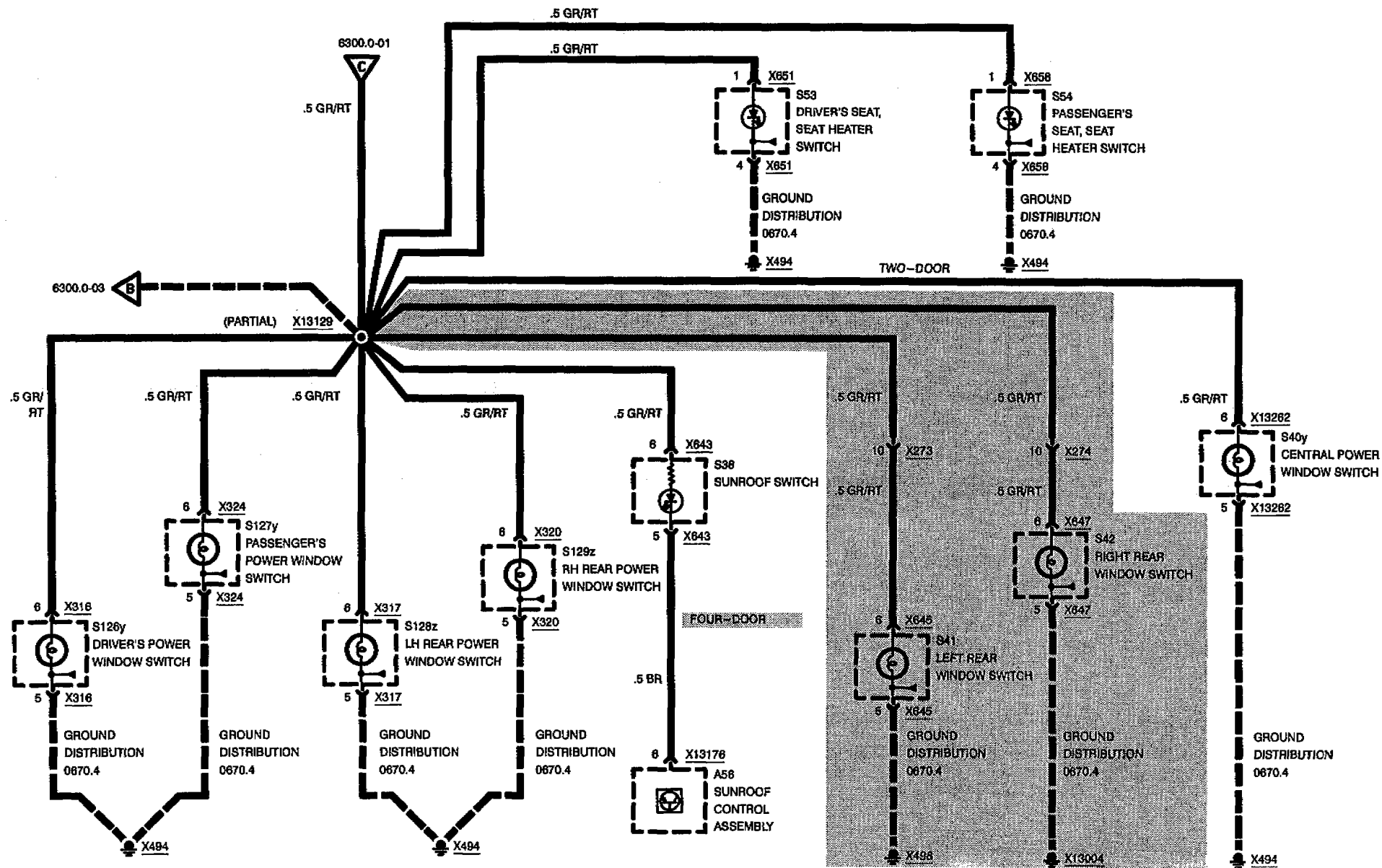


# LIGHT SWITCH DETAILS



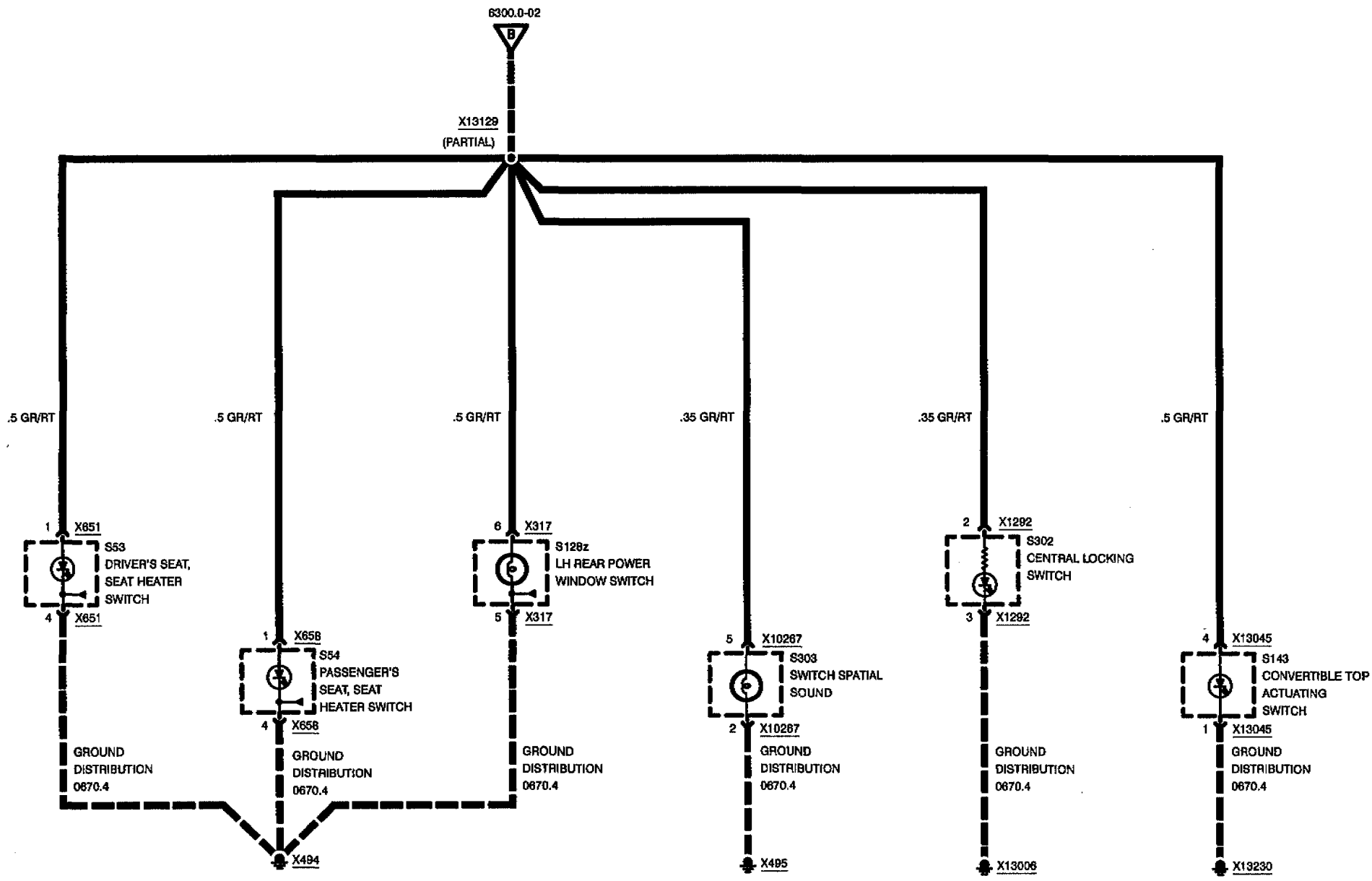


# LIGHT SWITCH DETAILS





**BMW 3 LIGHT SWITCH DETAILS**



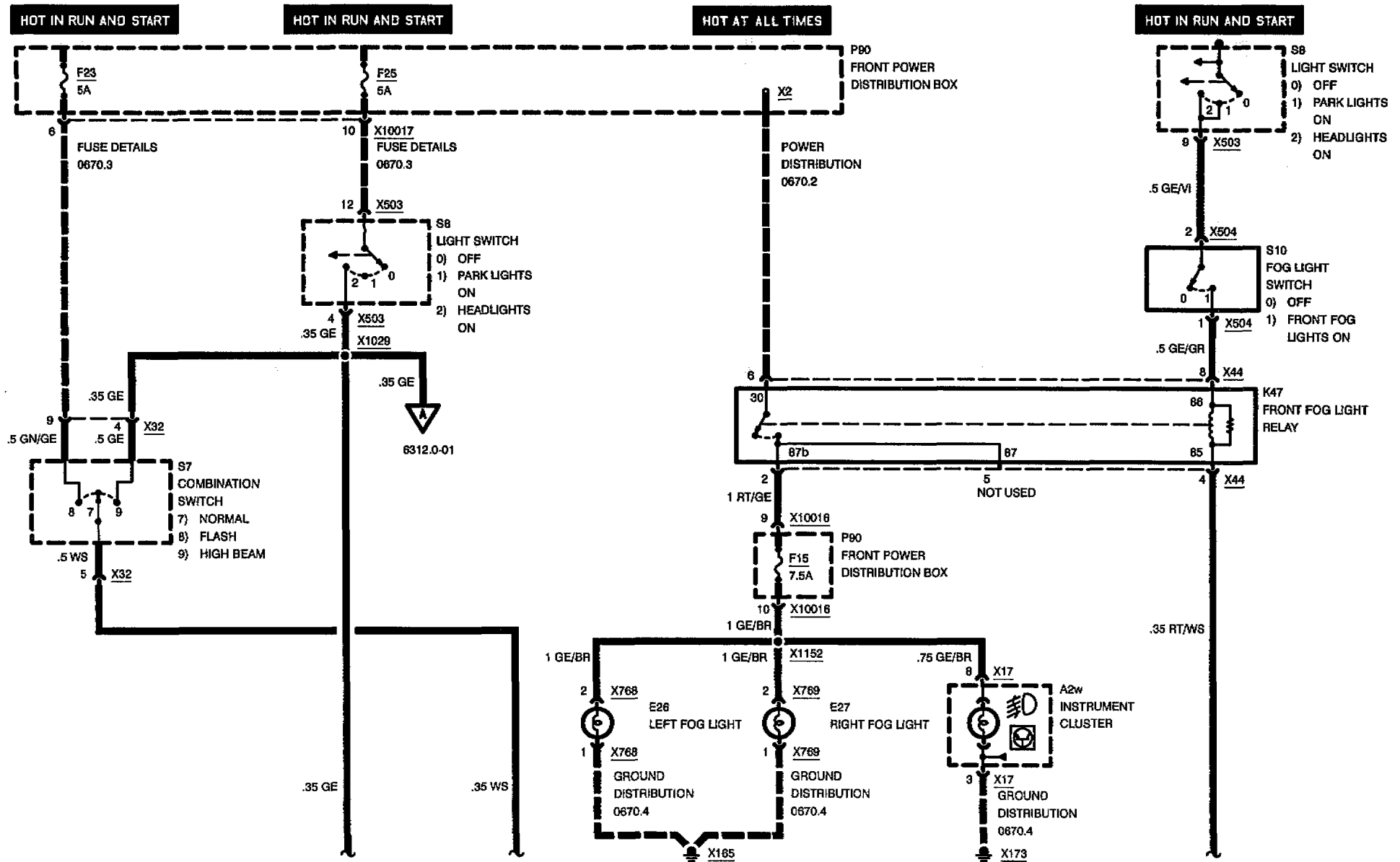
04/97

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1996

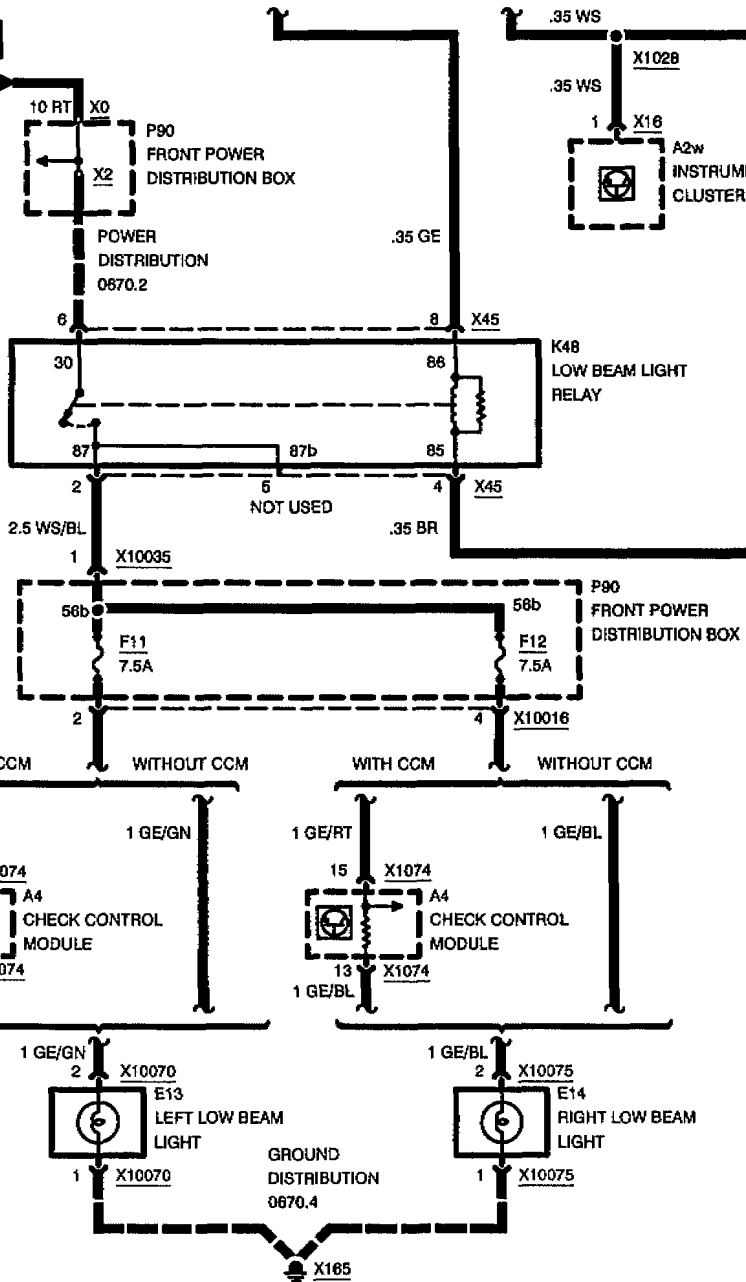


# HEADLIGHTS/FOG LIGHTS



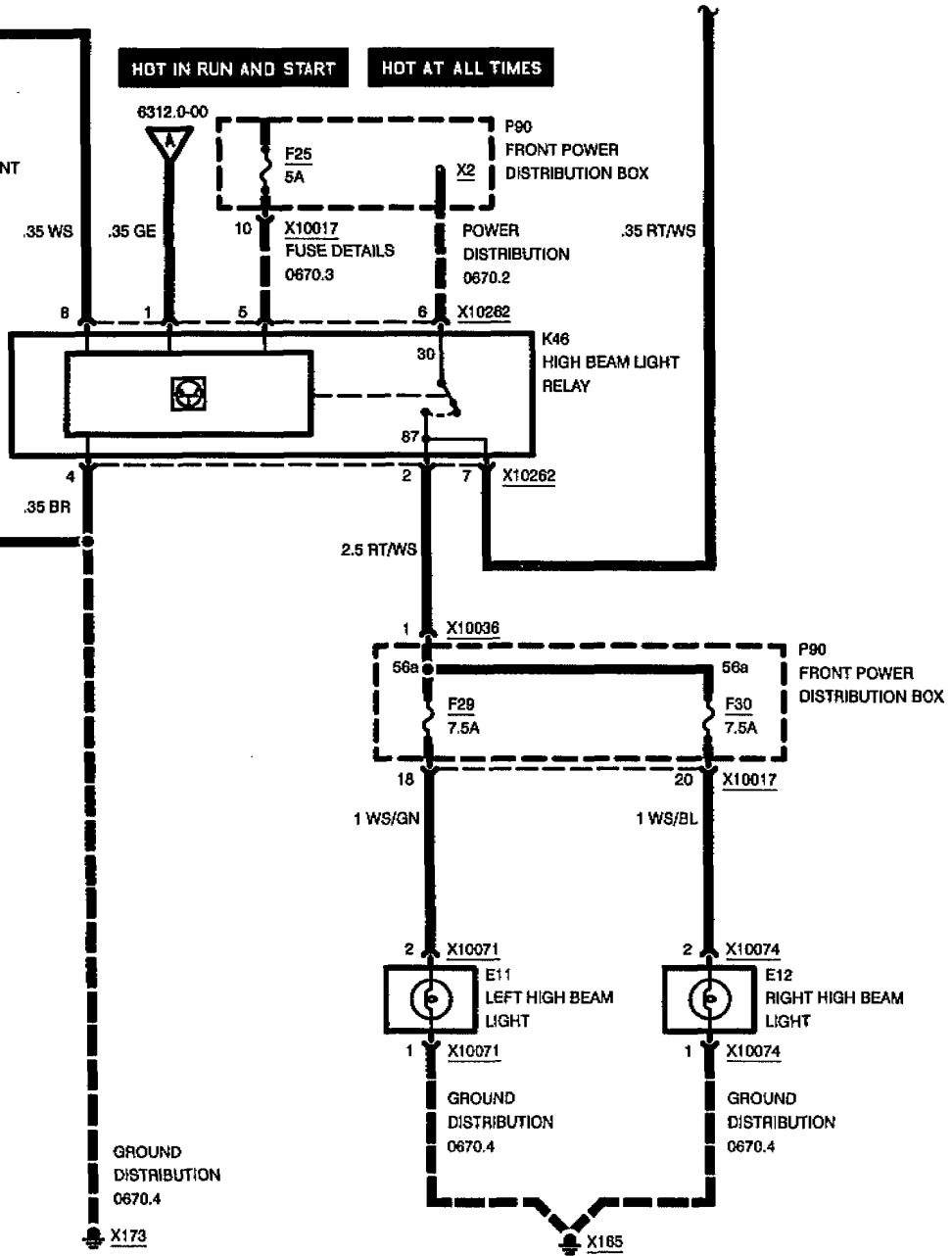
**HOT AT ALL TIMES**

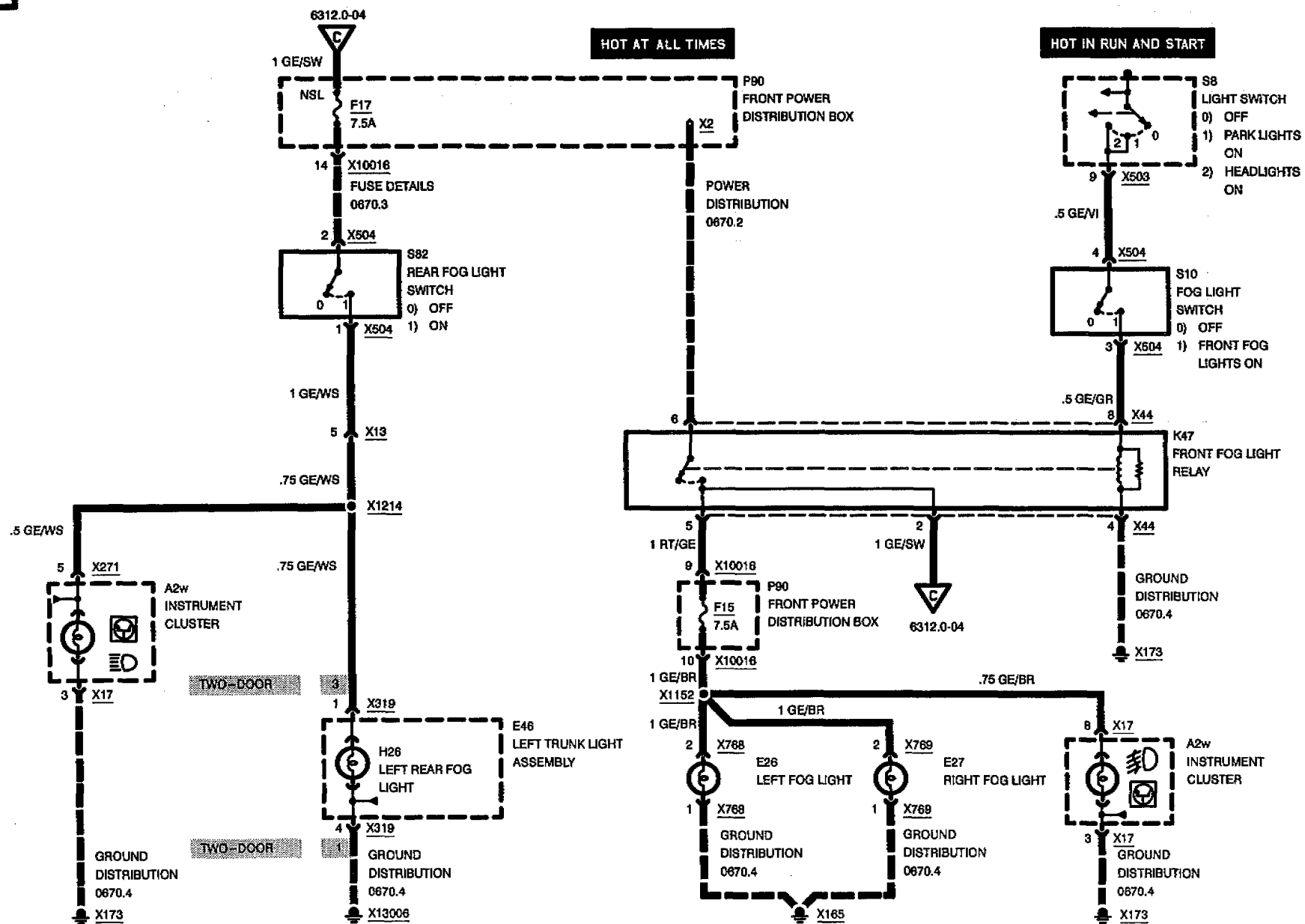
POWER DISTRIBUTION 0670.2



**HOT IN RUN AND START**

**HOT AT ALL TIMES**

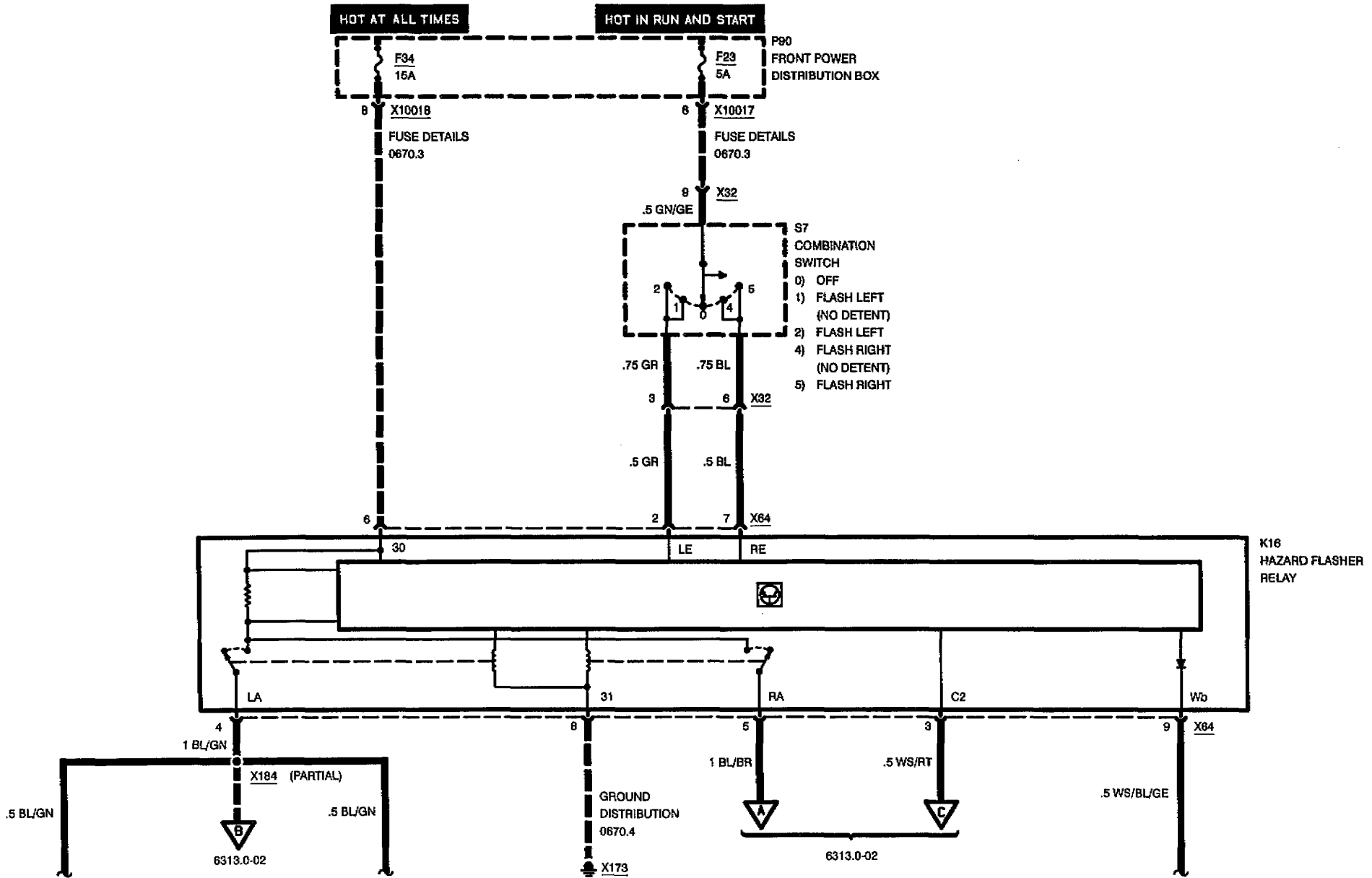


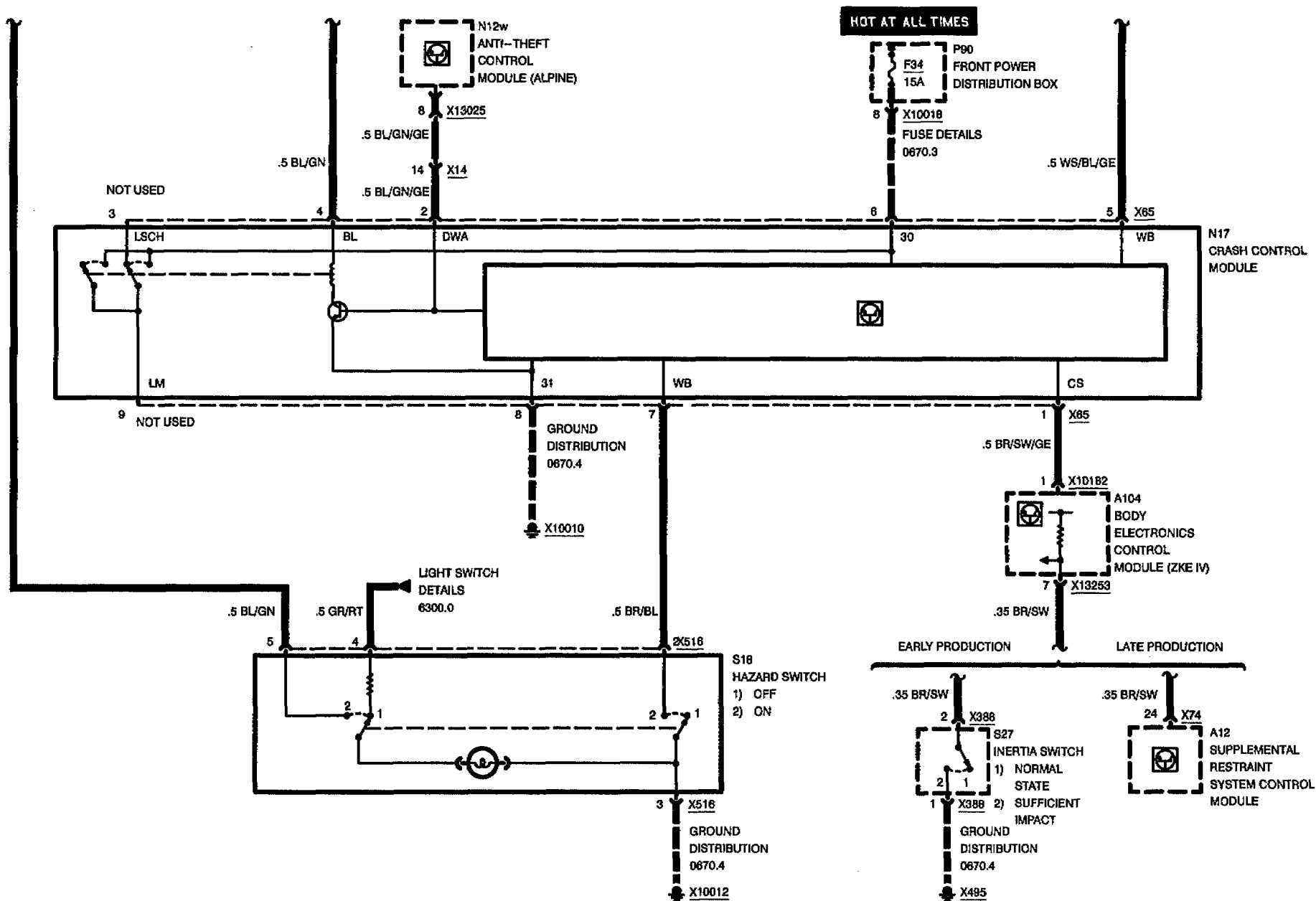






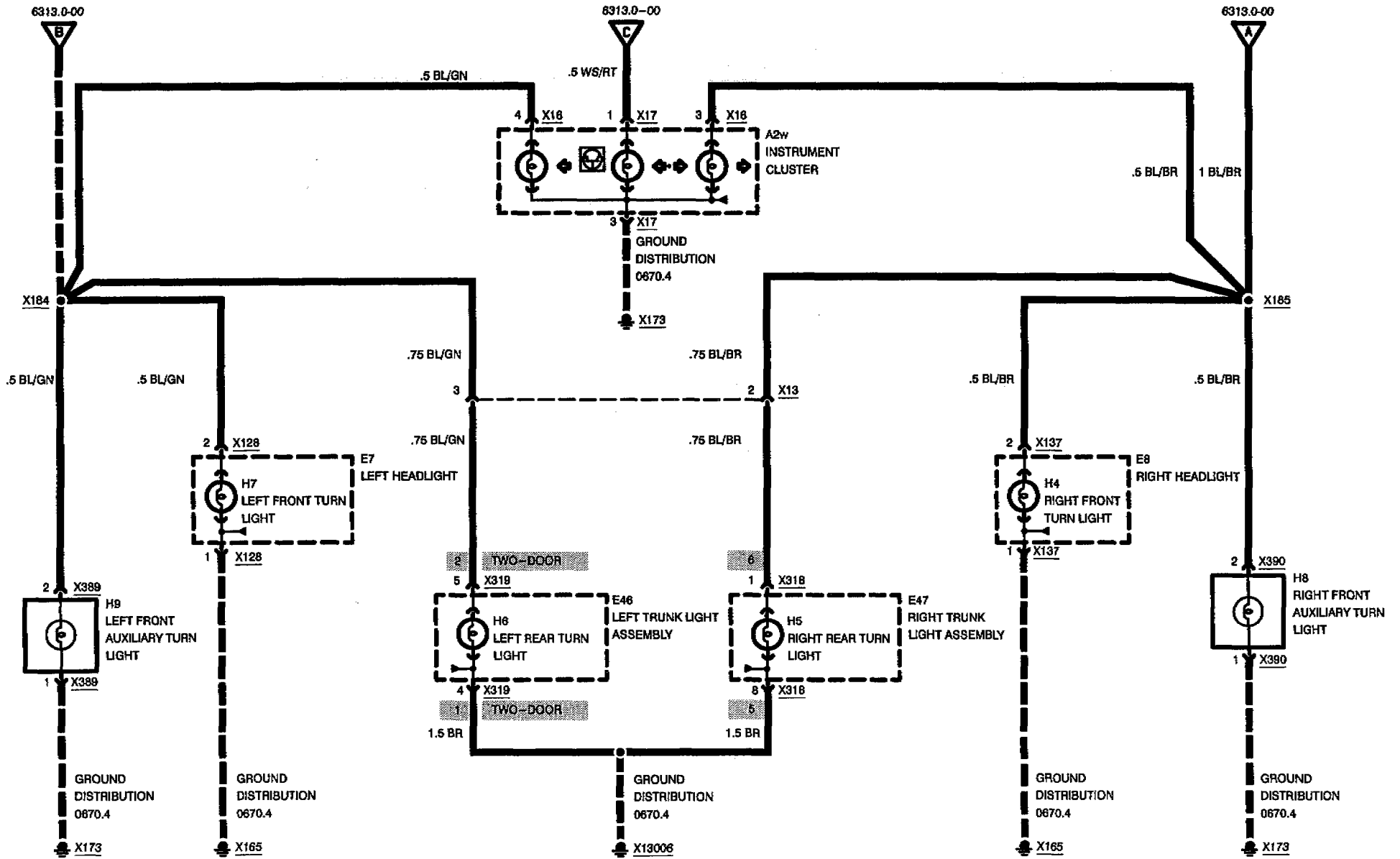
# TURN/HAZARD LIGHTS







# TURN/HAZARD LIGHTS



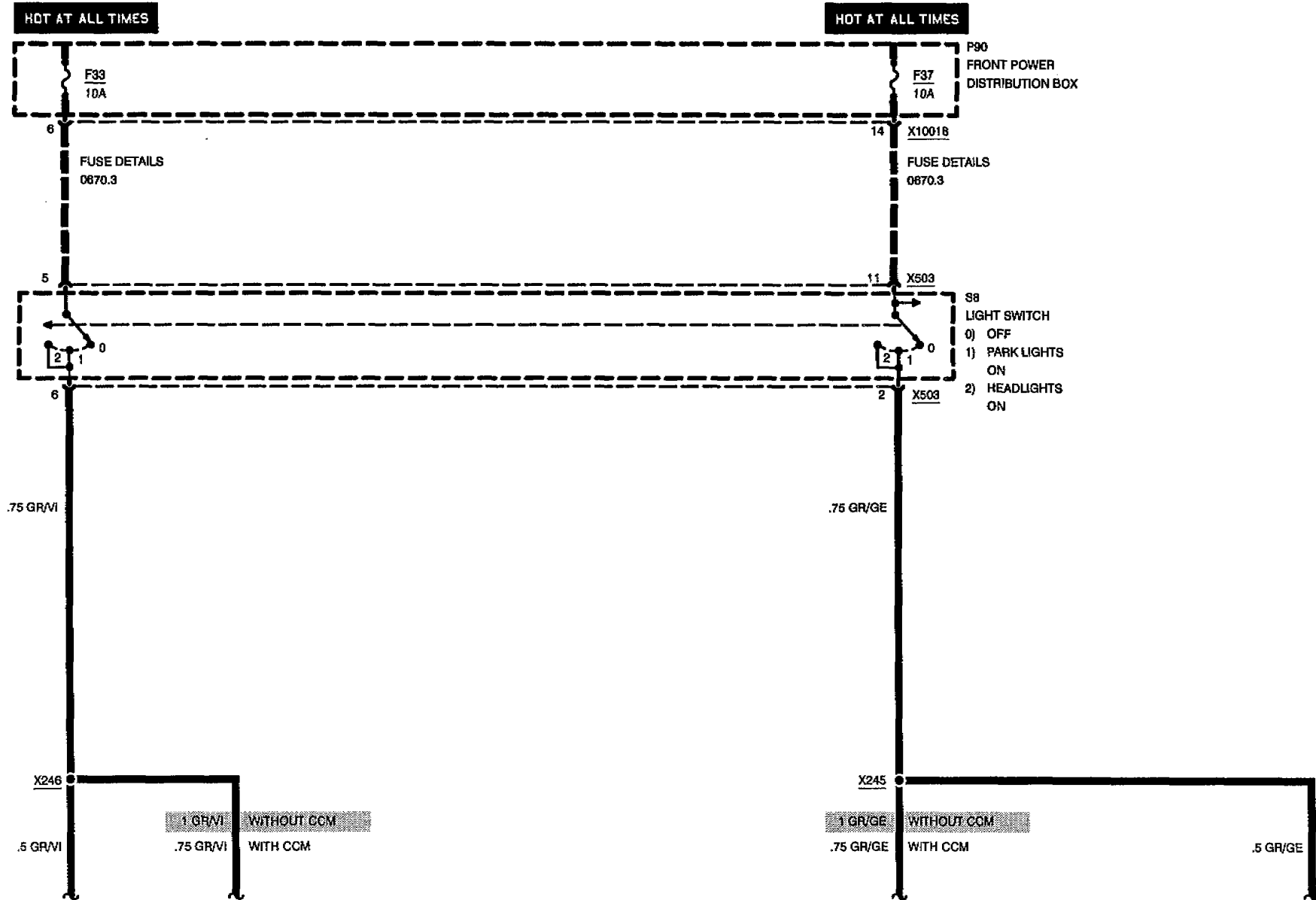


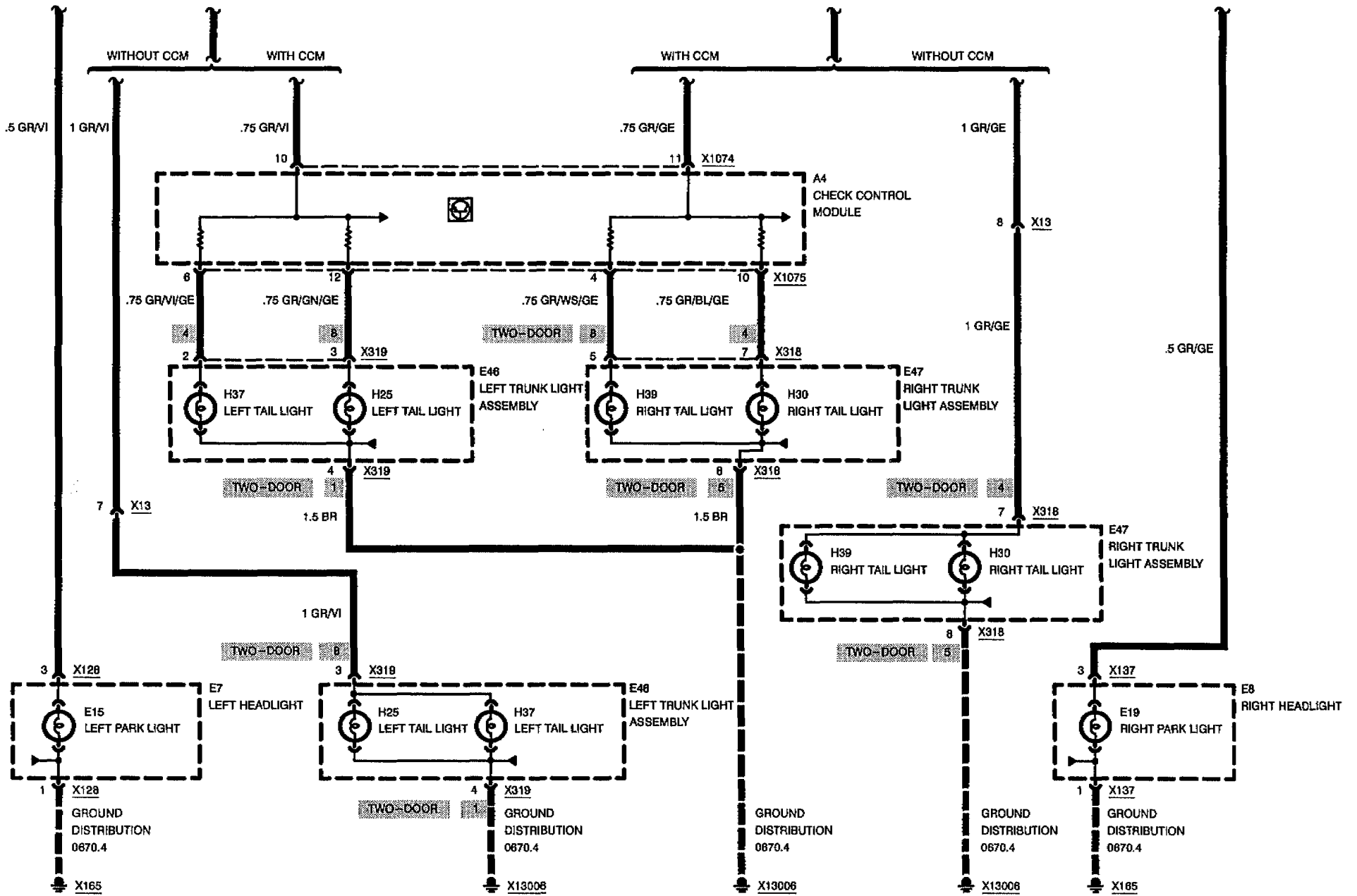
BMW  
3

6314.0



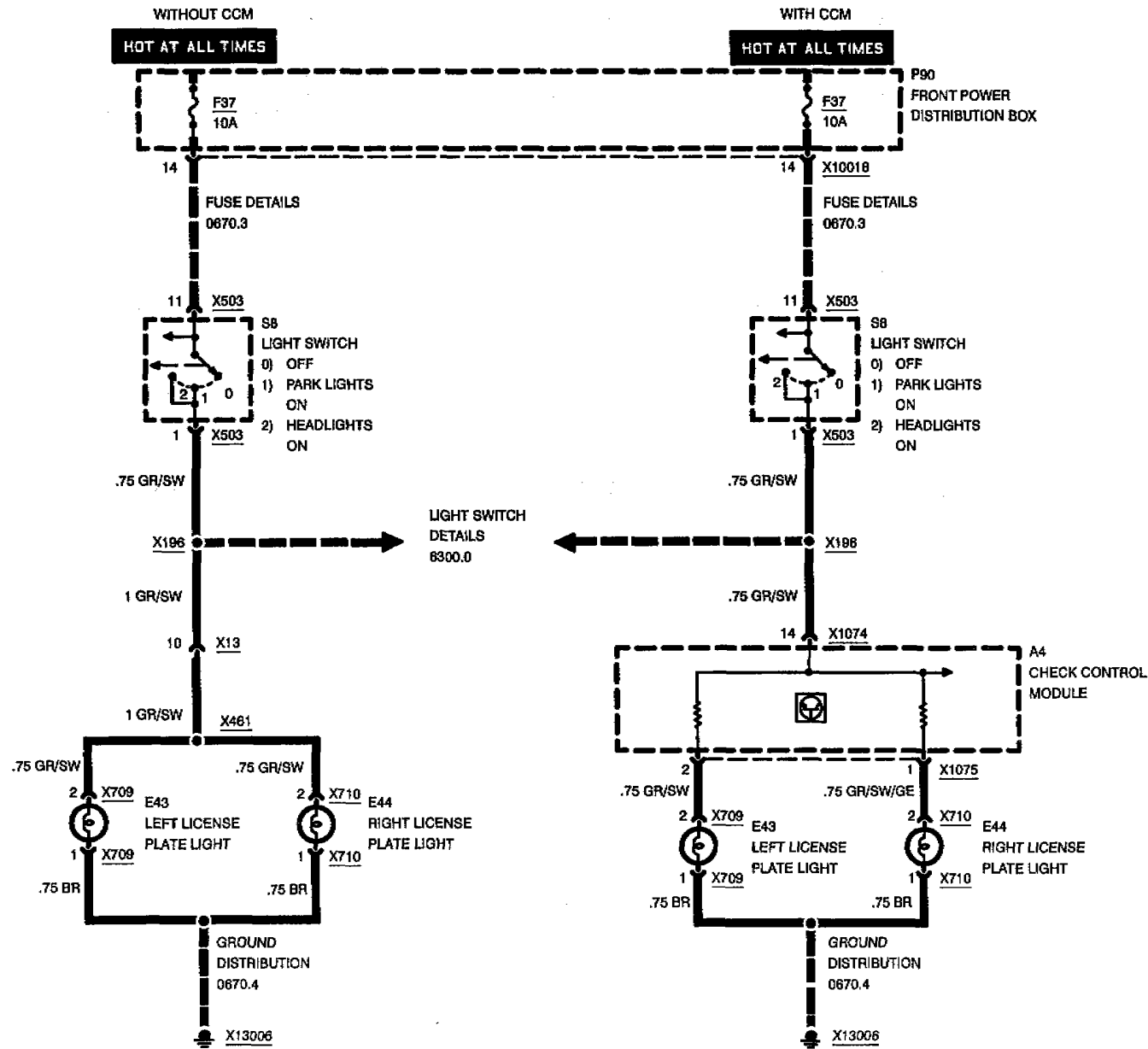
# PARK/TAIL LIGHTS





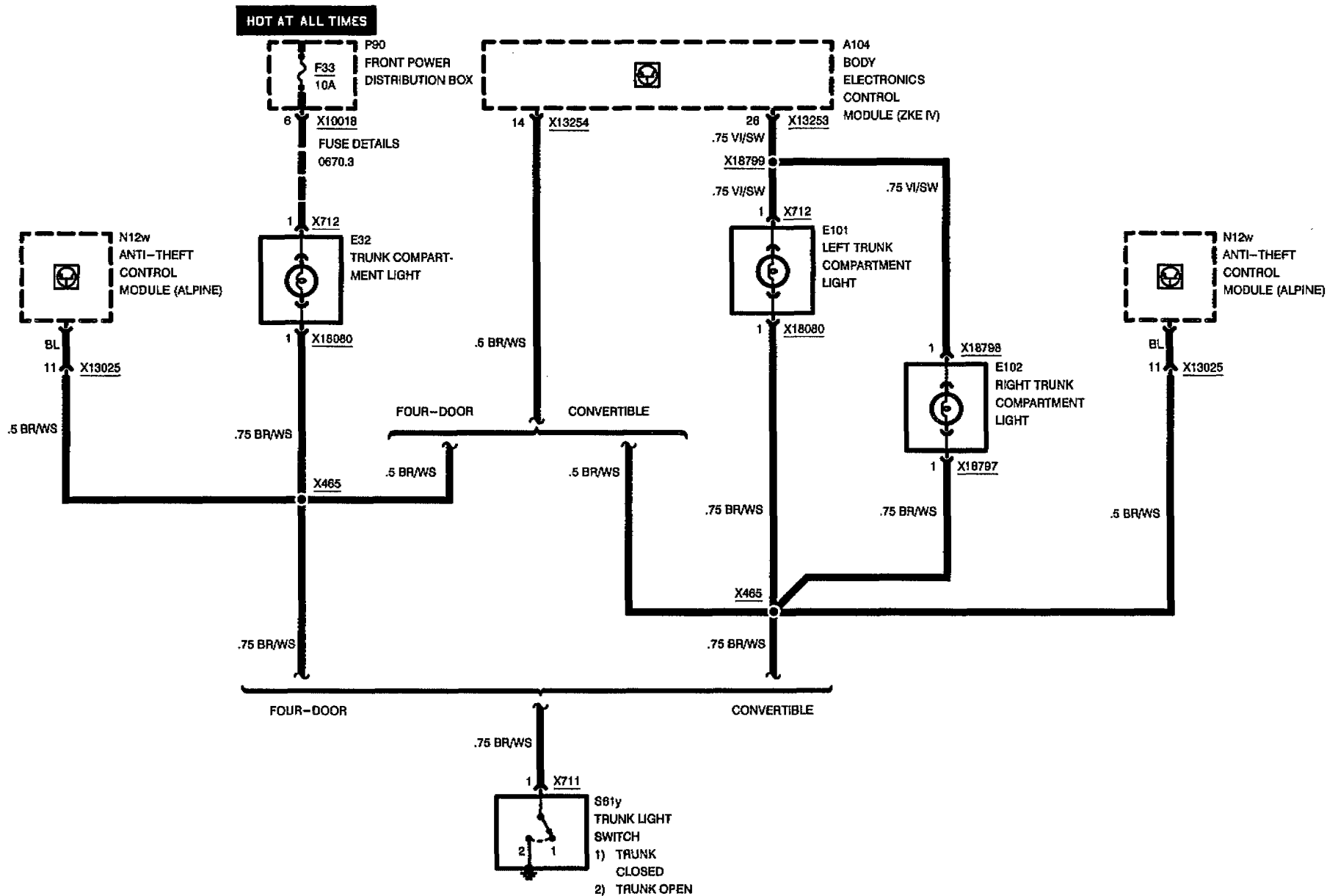


# LICENSE PLATE/LUGGAGE COMPARTMENT LIGHTS



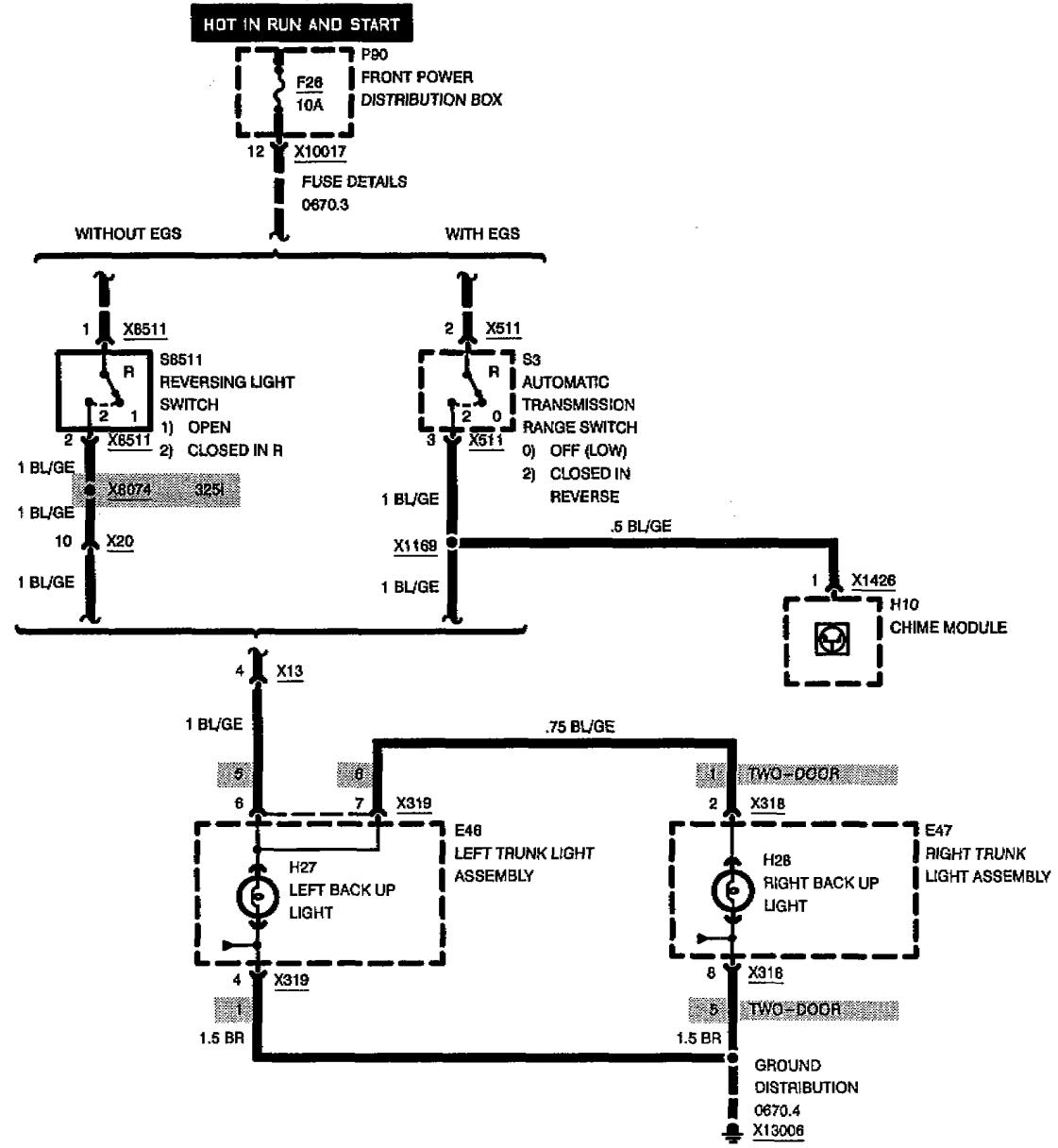


# LICENSE PLATE/LUGGAGE COMPARTMENT LIGHTS





# BACK UP LIGHTS

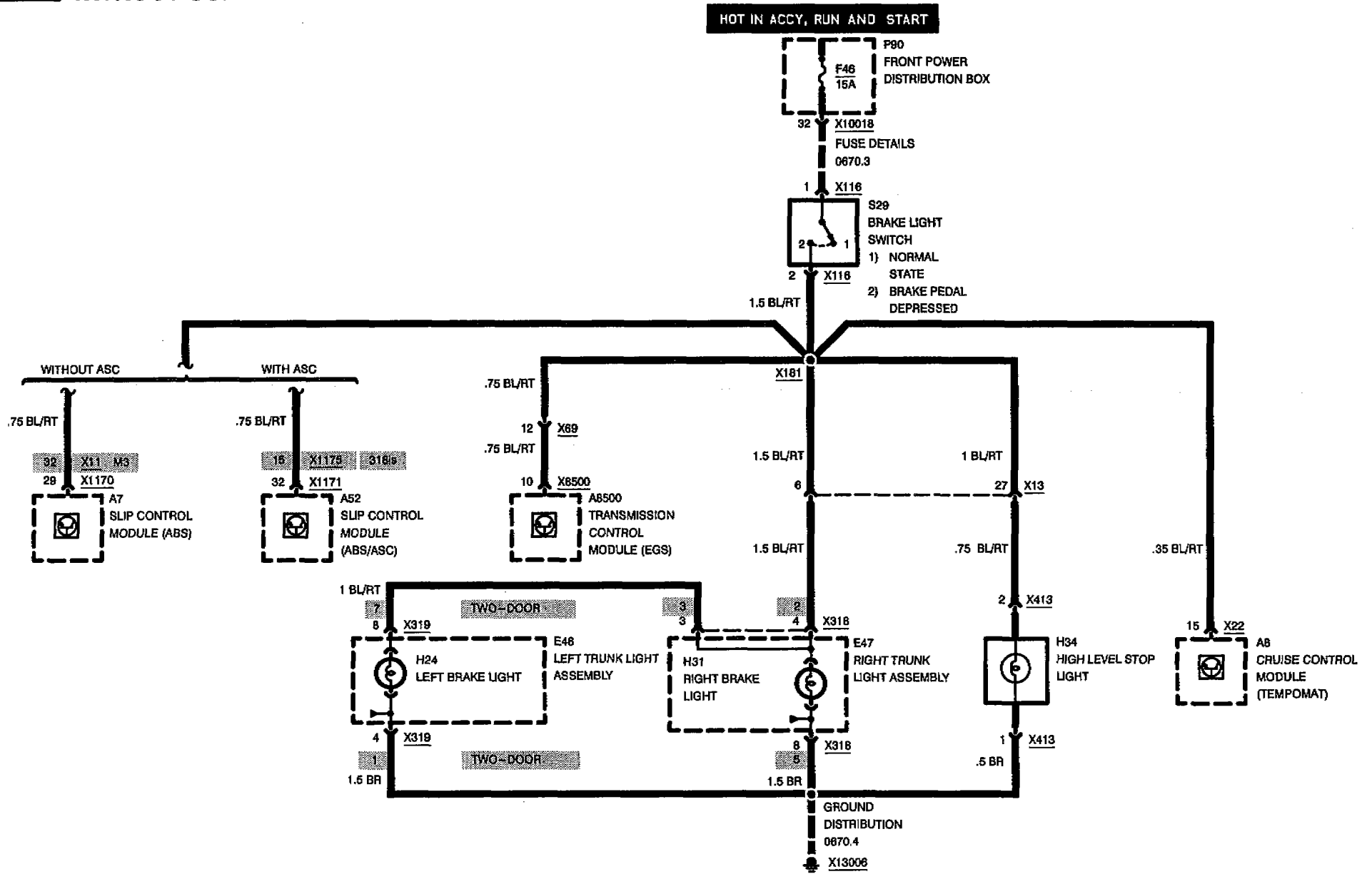


BMW  
3

6325.0



# BRAKE LIGHTS WITHOUT CCM

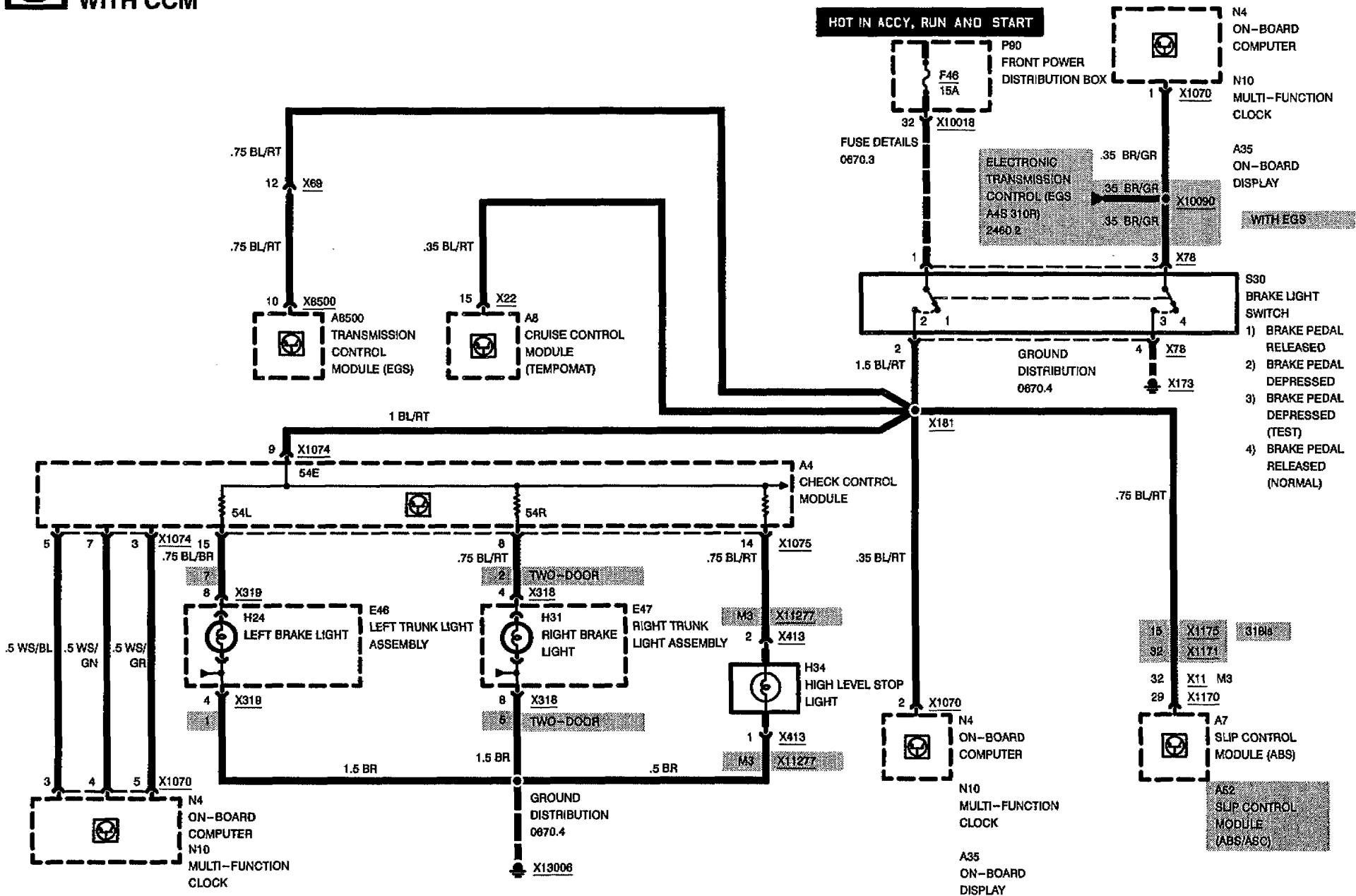






# BRAKE LIGHTS

WITH CCM



04/97

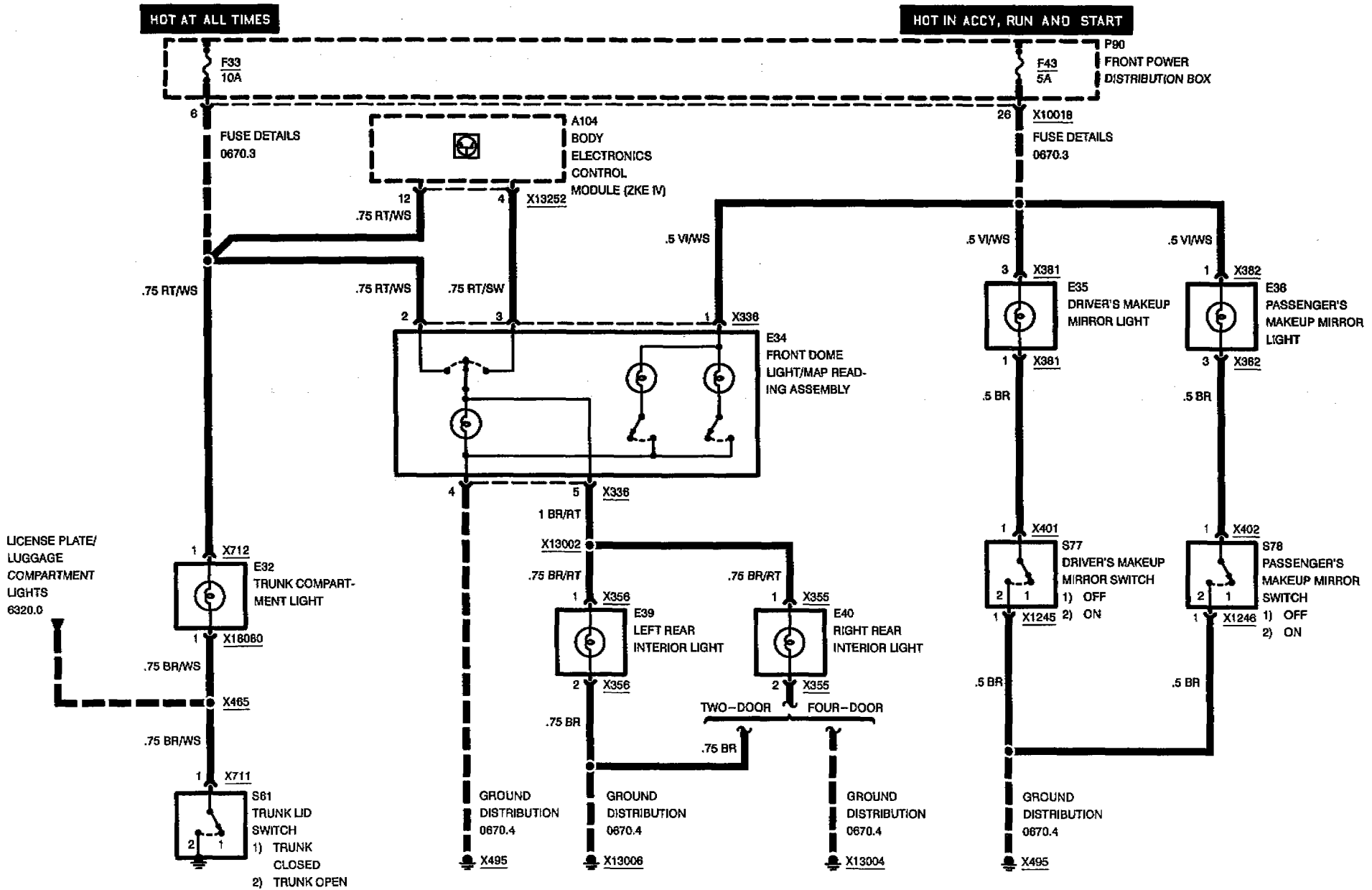
6325.0-01

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# INTERIOR LIGHTS

# TWO DOOR/FOUR DOOR



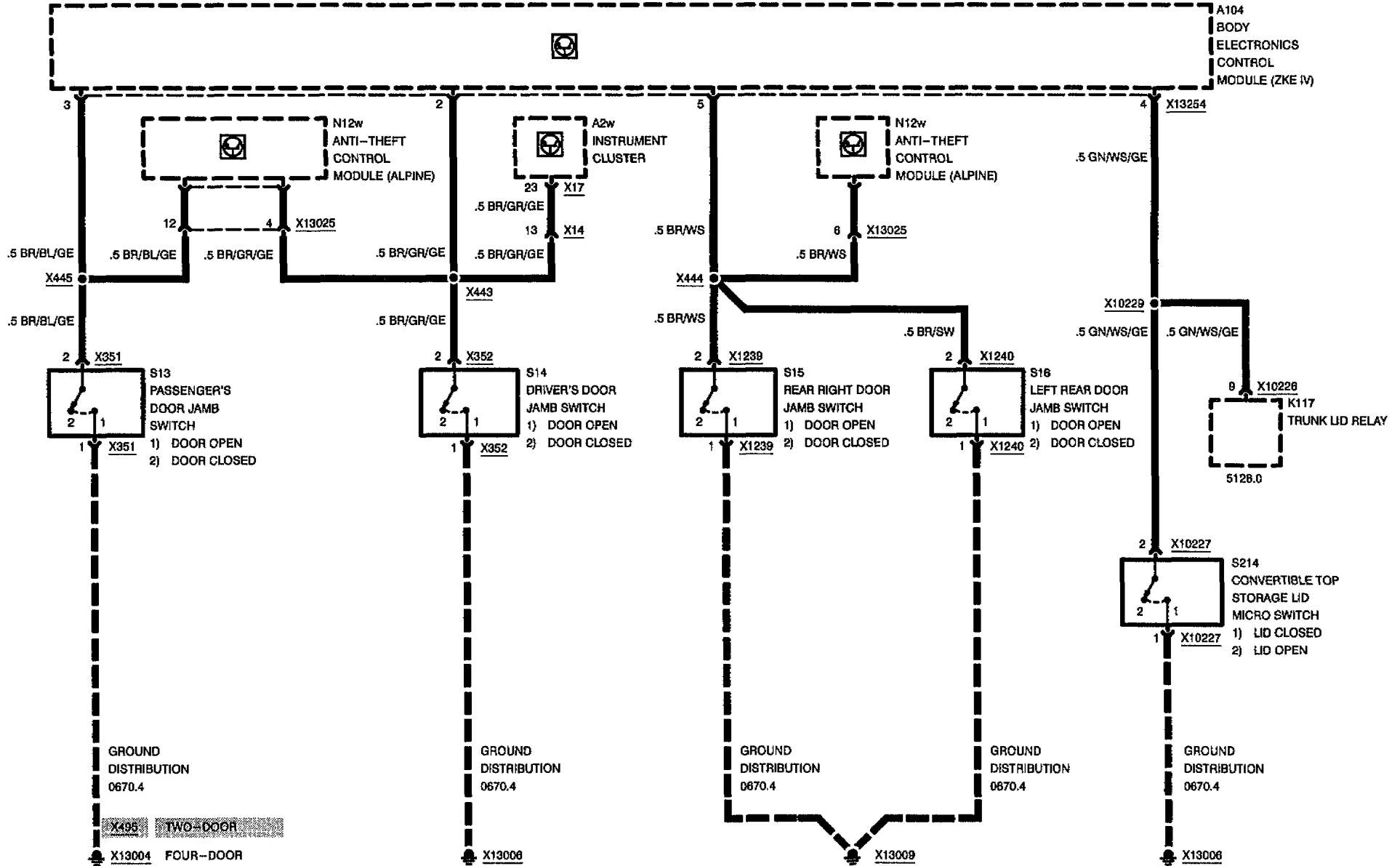
04/97

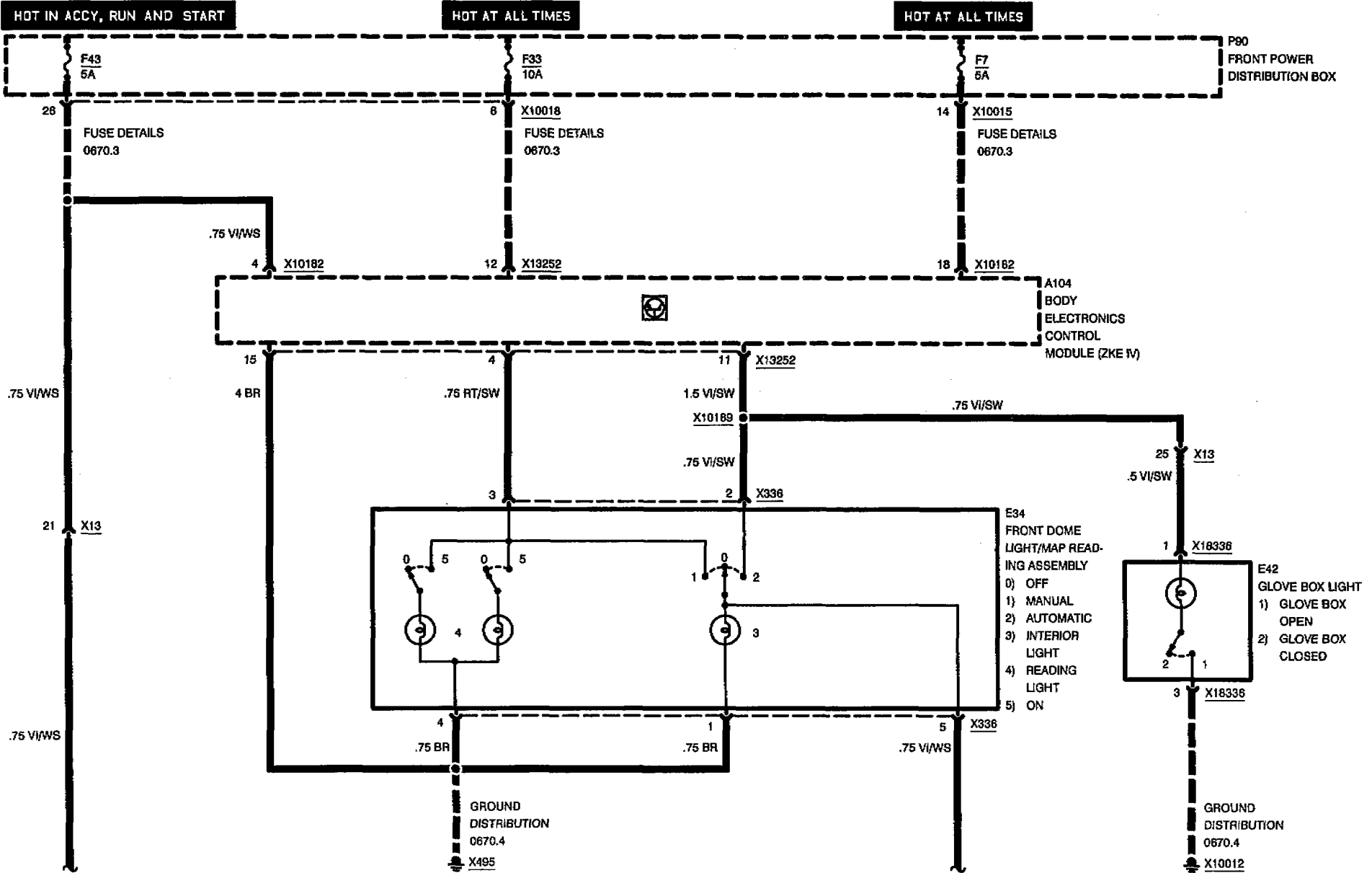
6330.3-00

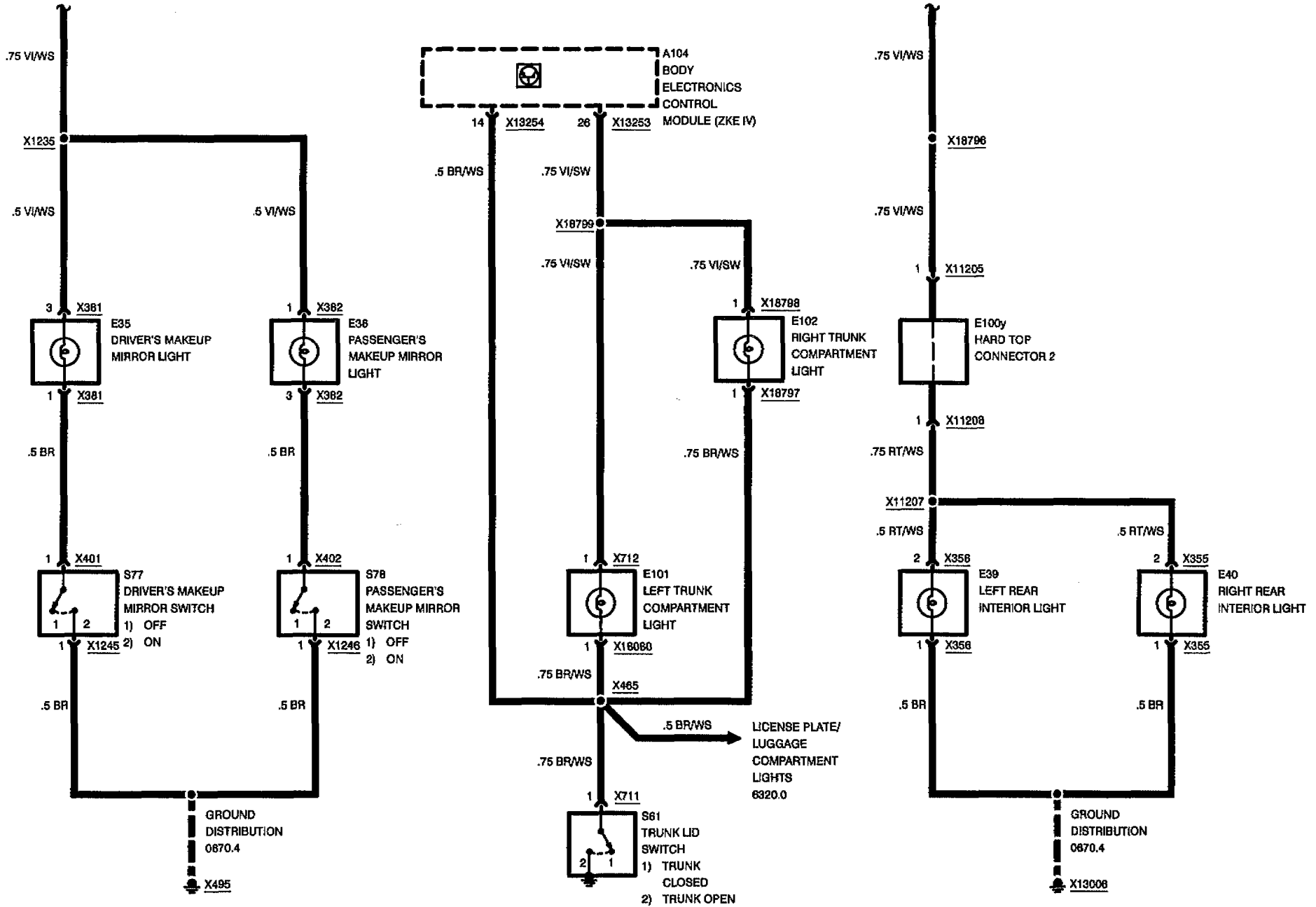
1996



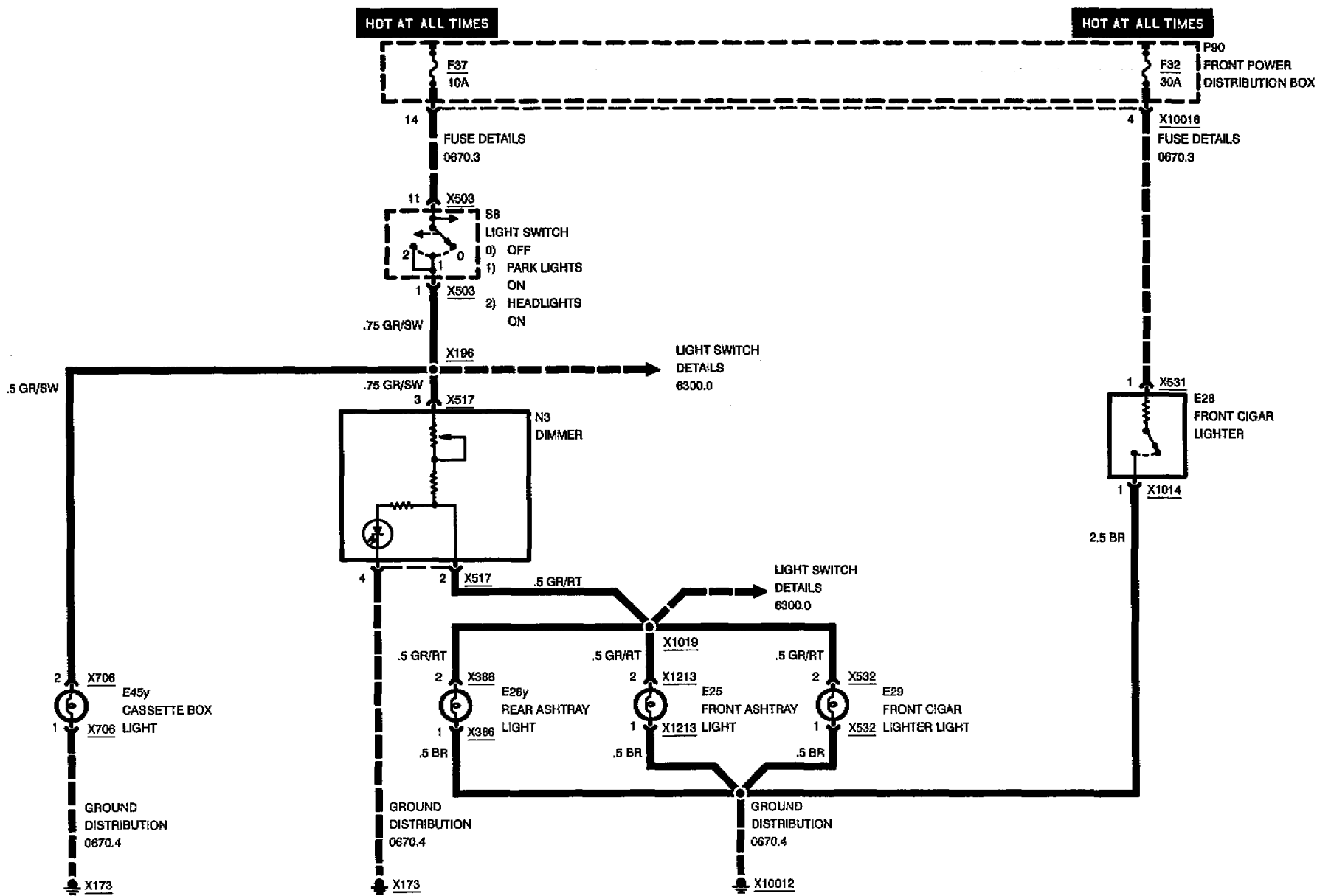
# INTERIOR LIGHTS





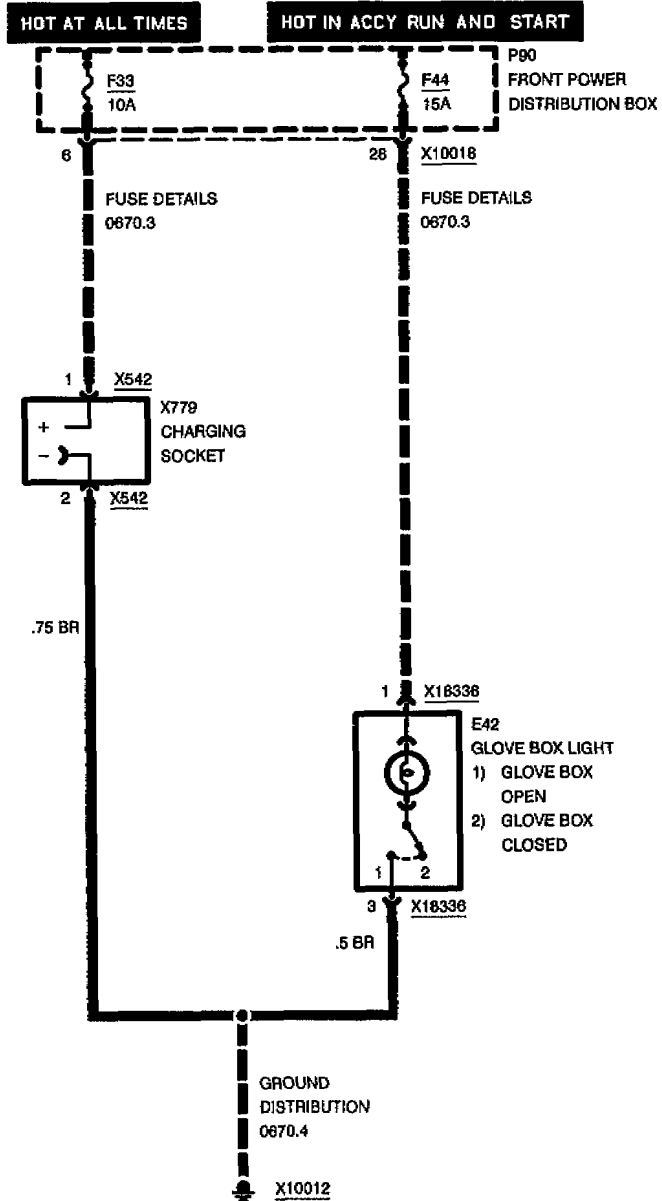


GLOVE BOX LIGHT/CASSETTE BOX/ASHTRAY LIGHT/CHARGING SOCKET/CIGAR LIGHTER

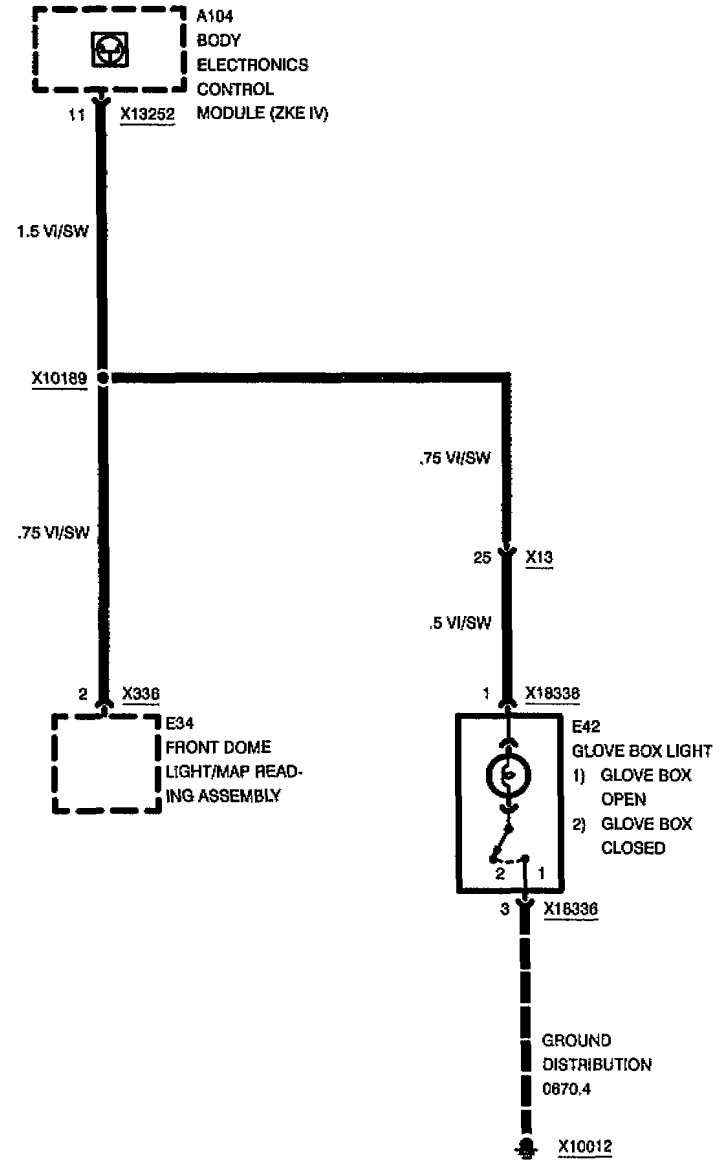




# GLOVE BOX LIGHT/CASSETTE BOX/ASHTRAY LIGHT/CHARGING SOCKET/CIGAR LIGHTER

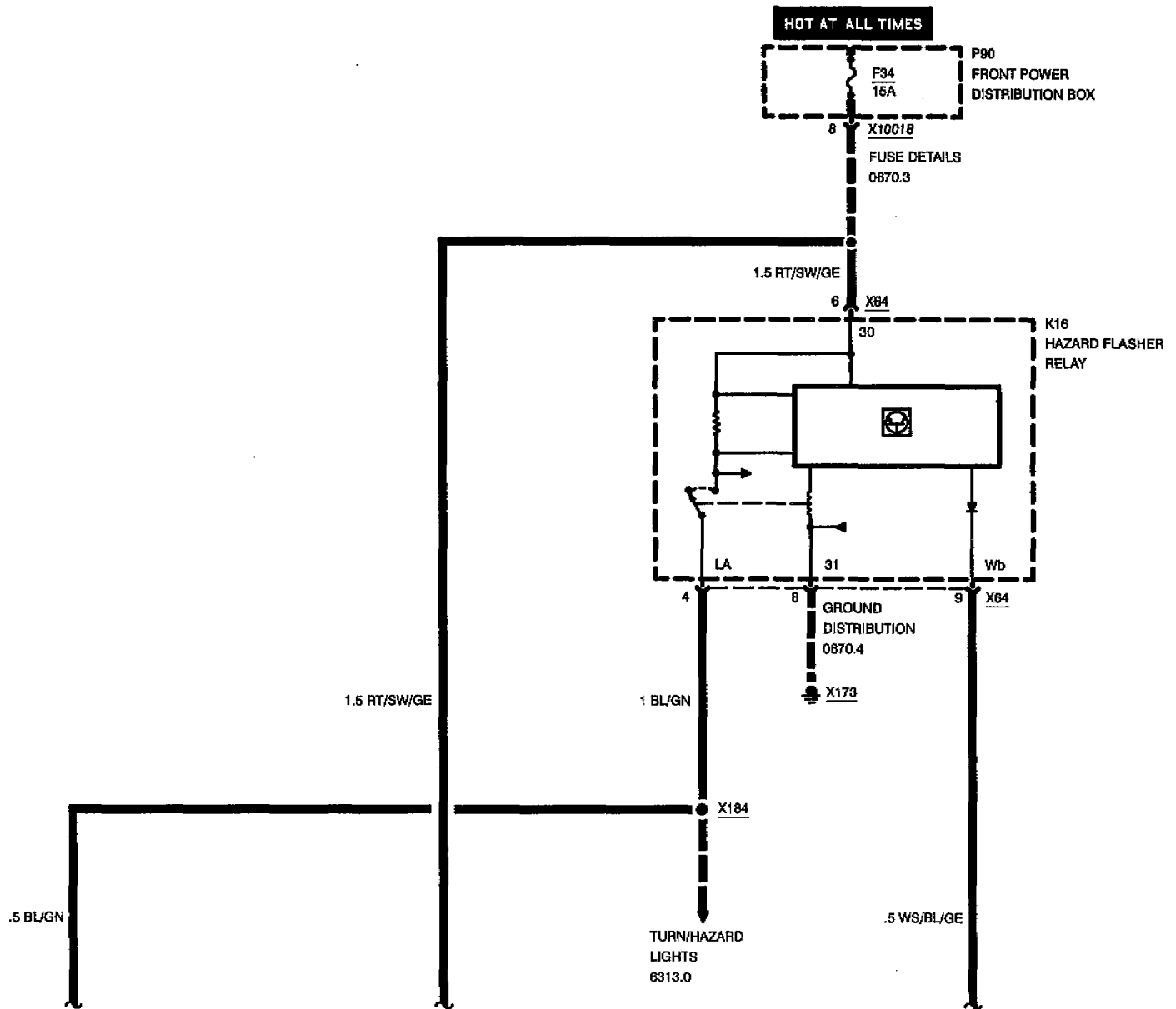


## CONVERTIBLE

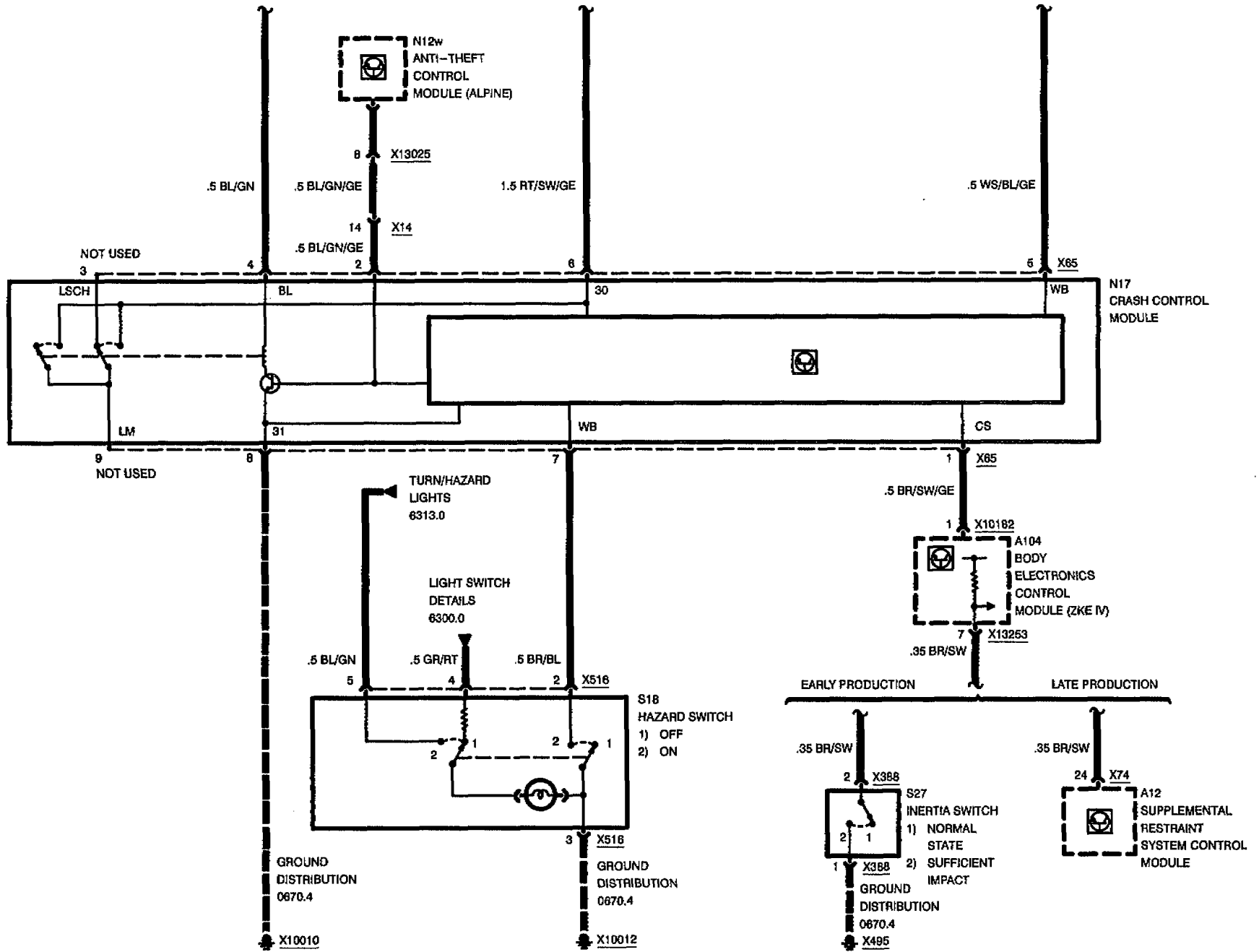


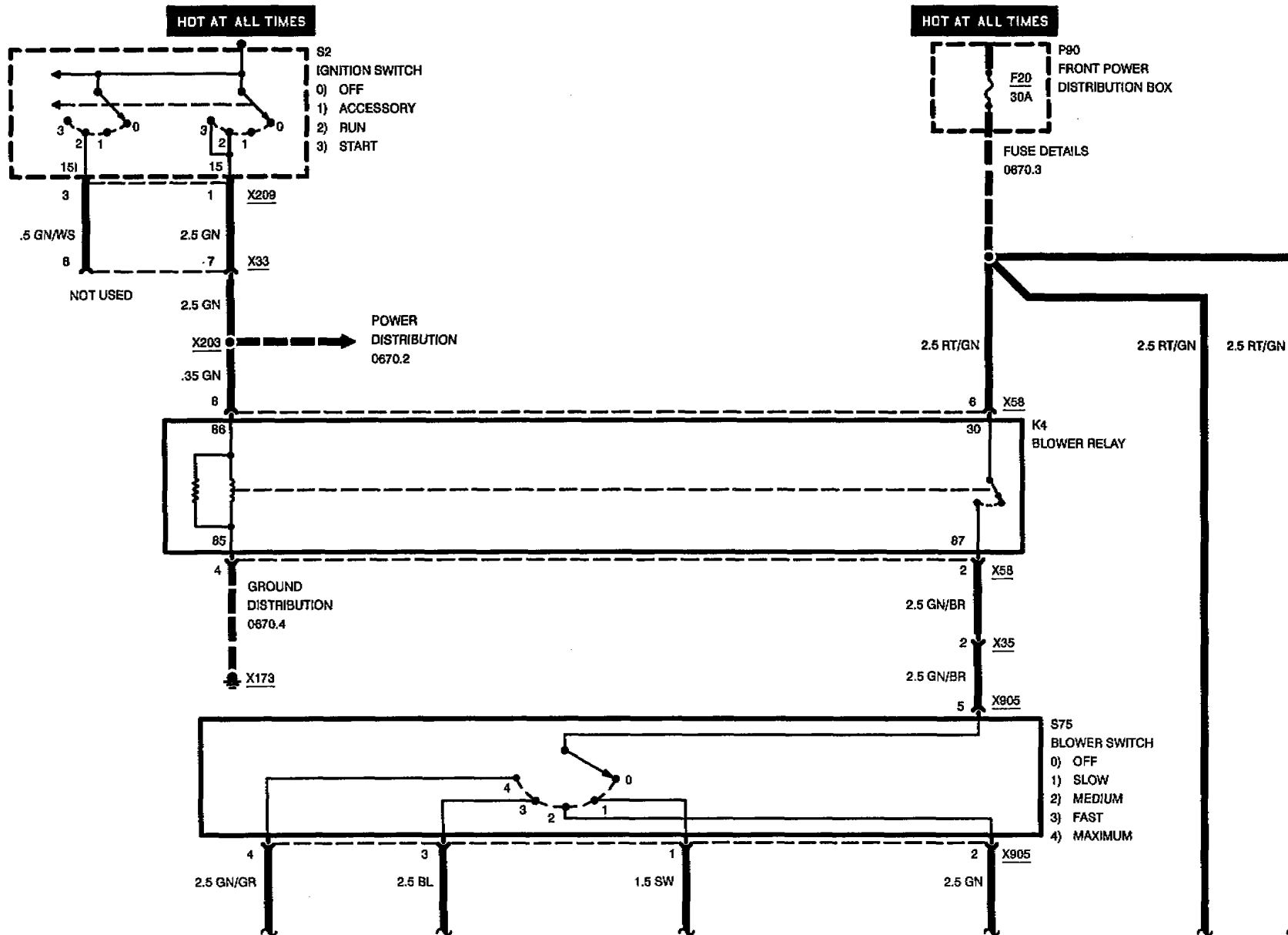


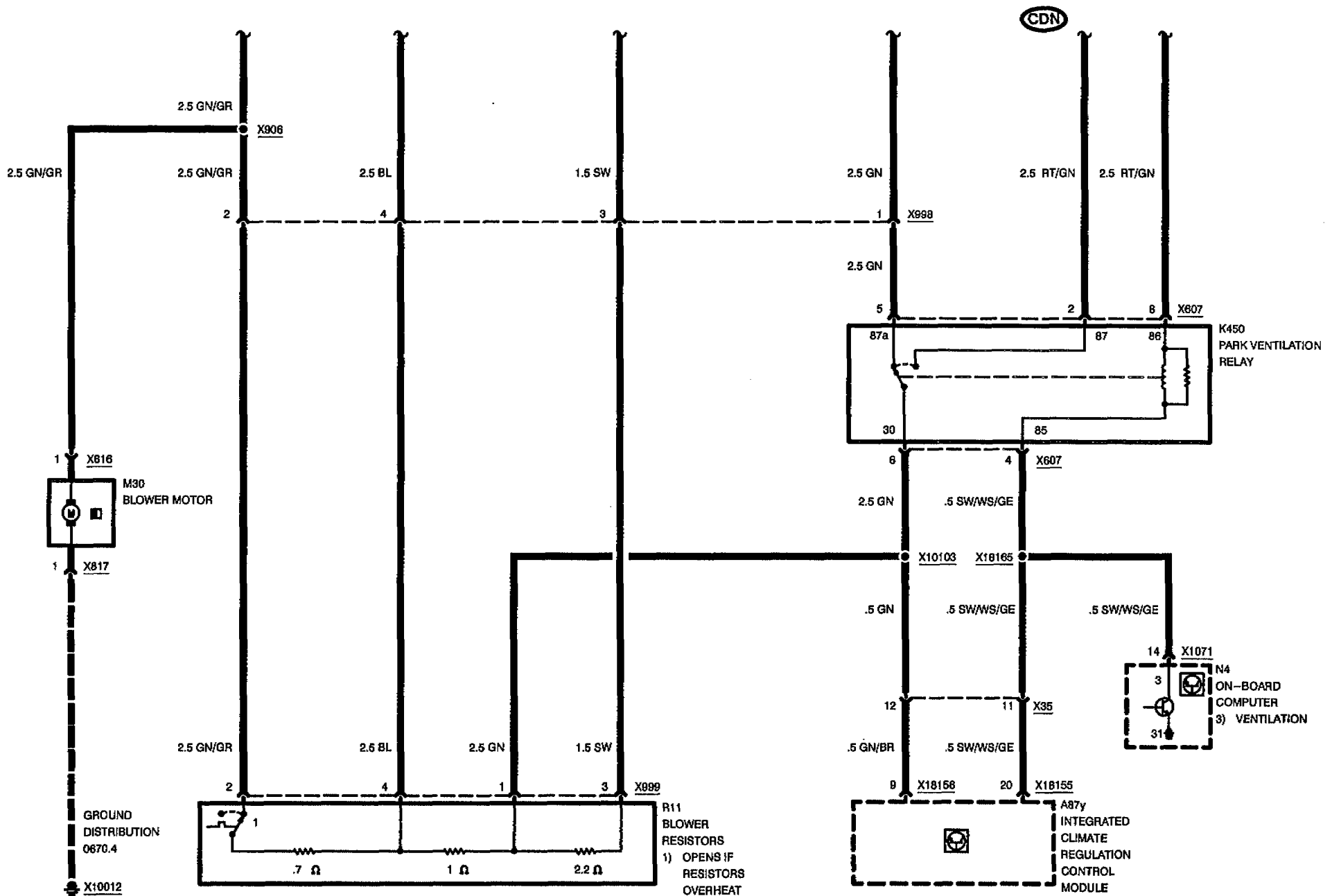
# CRASH CONTROL MODULE





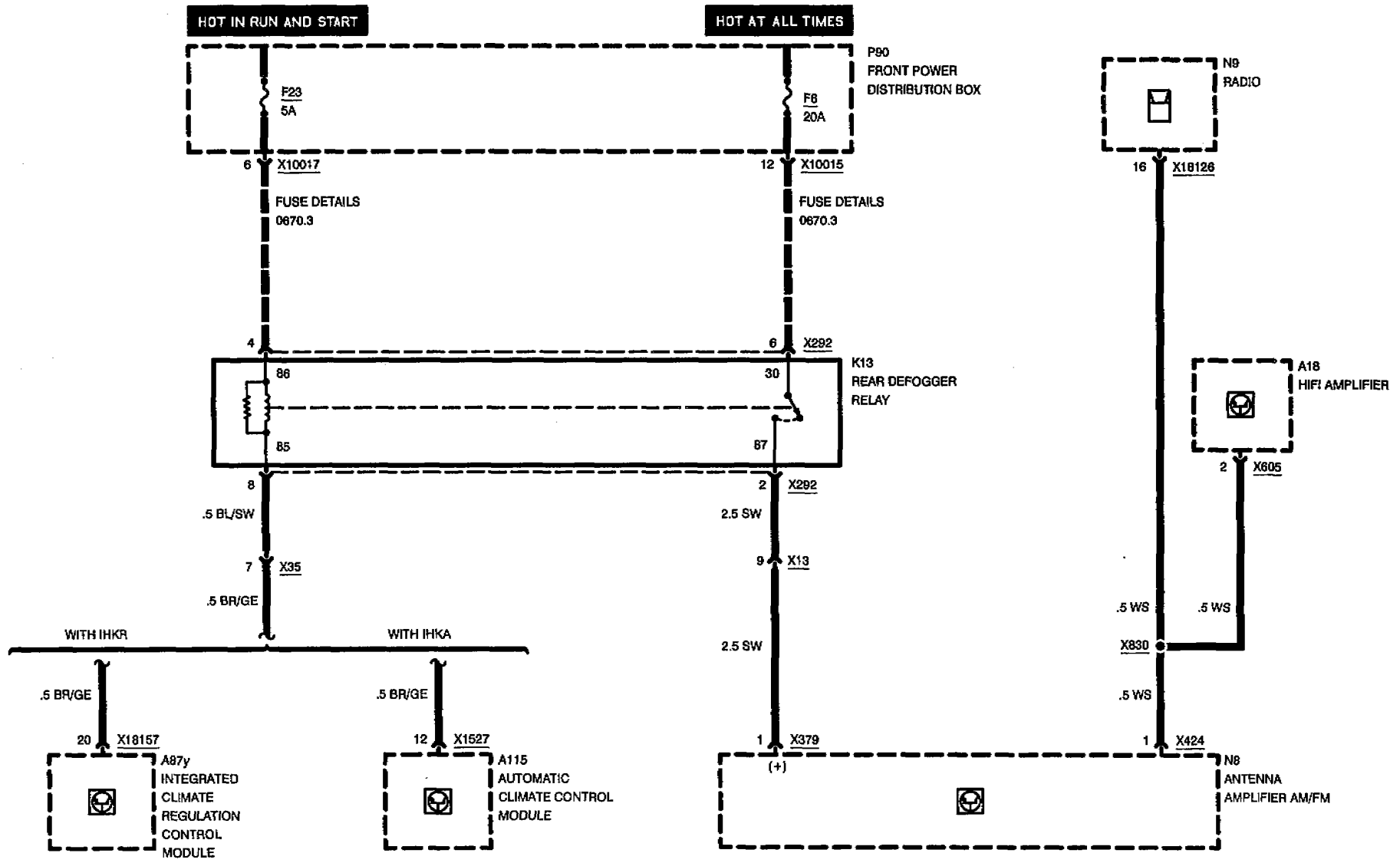








# REAR WINDOW DEFOGGER/ANTENNA





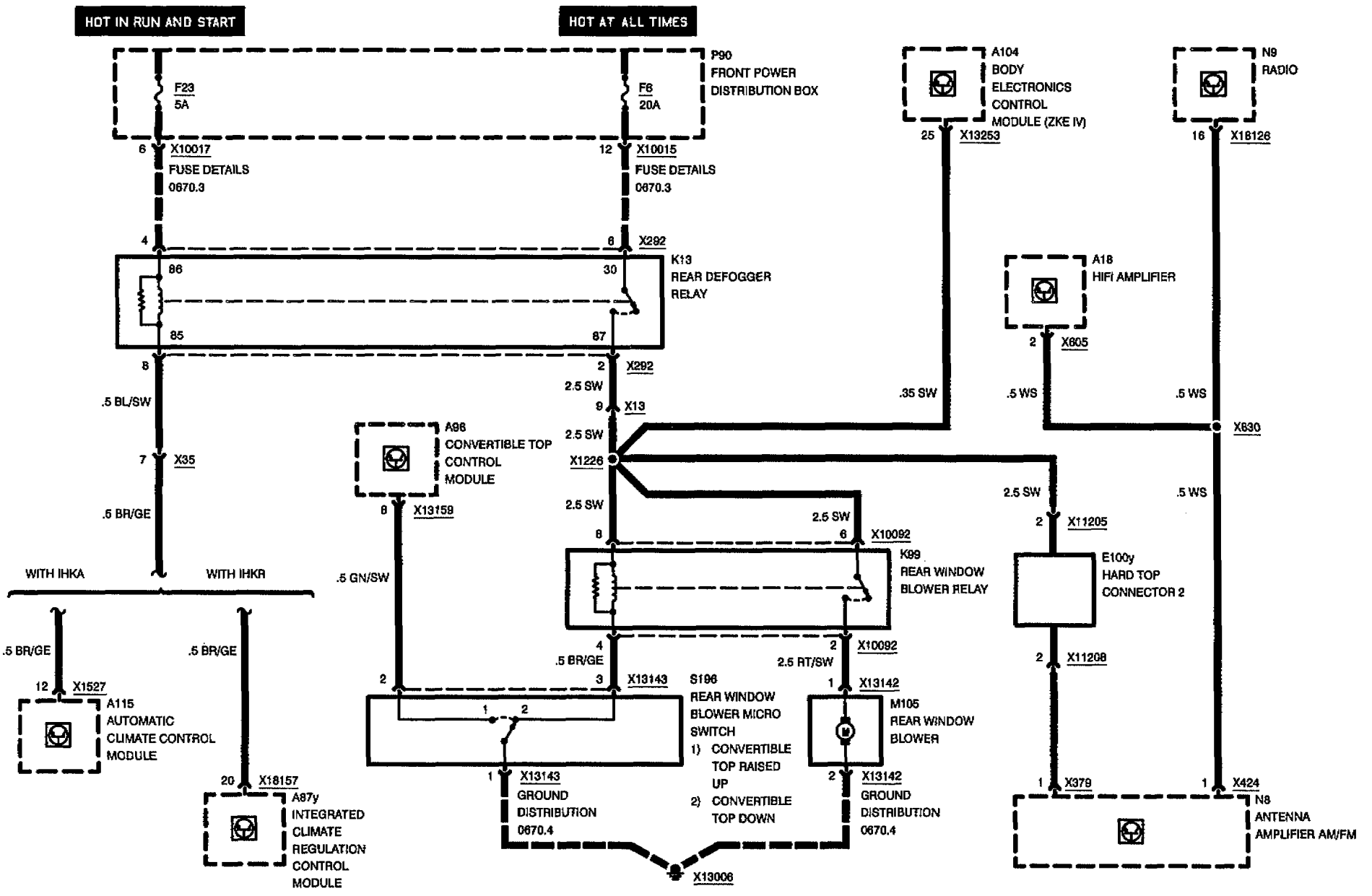
# REAR WINDOW DEFOGGER/ANTENNA

# CONVERTIBLE

04/97

6424.0-01

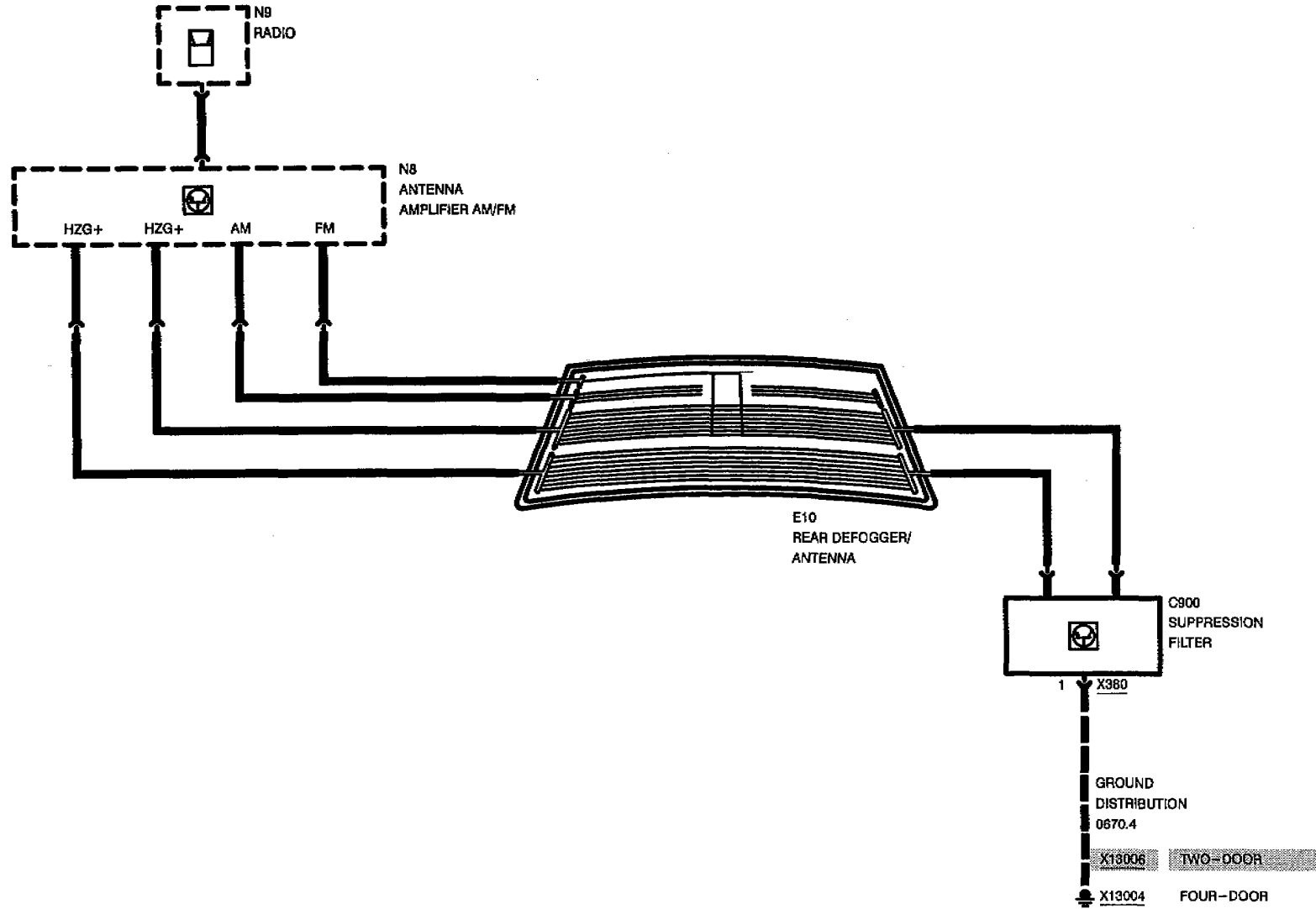
1996





# REAR WINDOW DEFOGGER/ANTENNA

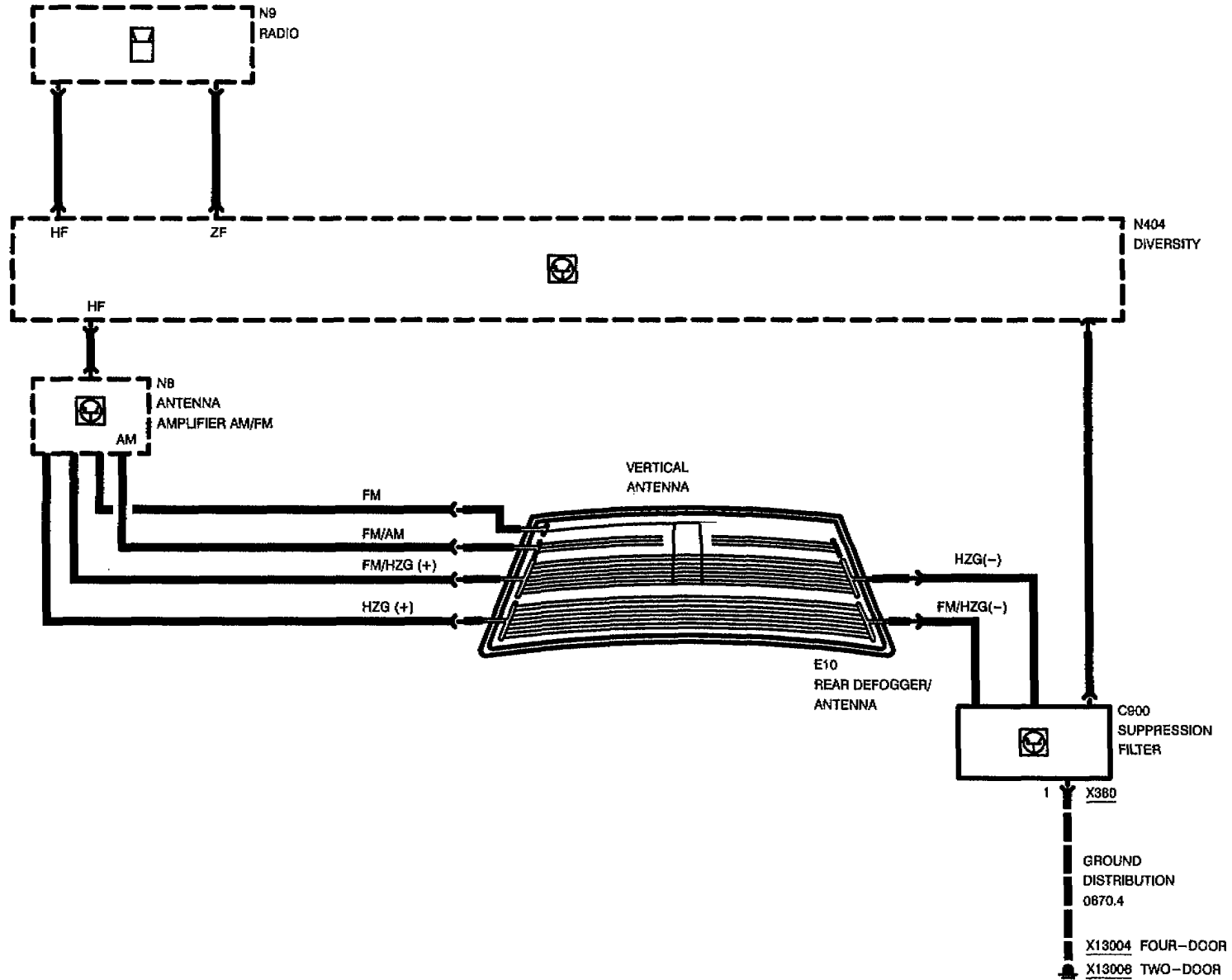
## REAR WINDOW ANTENNA





# REAR WINDOW DEFOGGER/ANTENNA

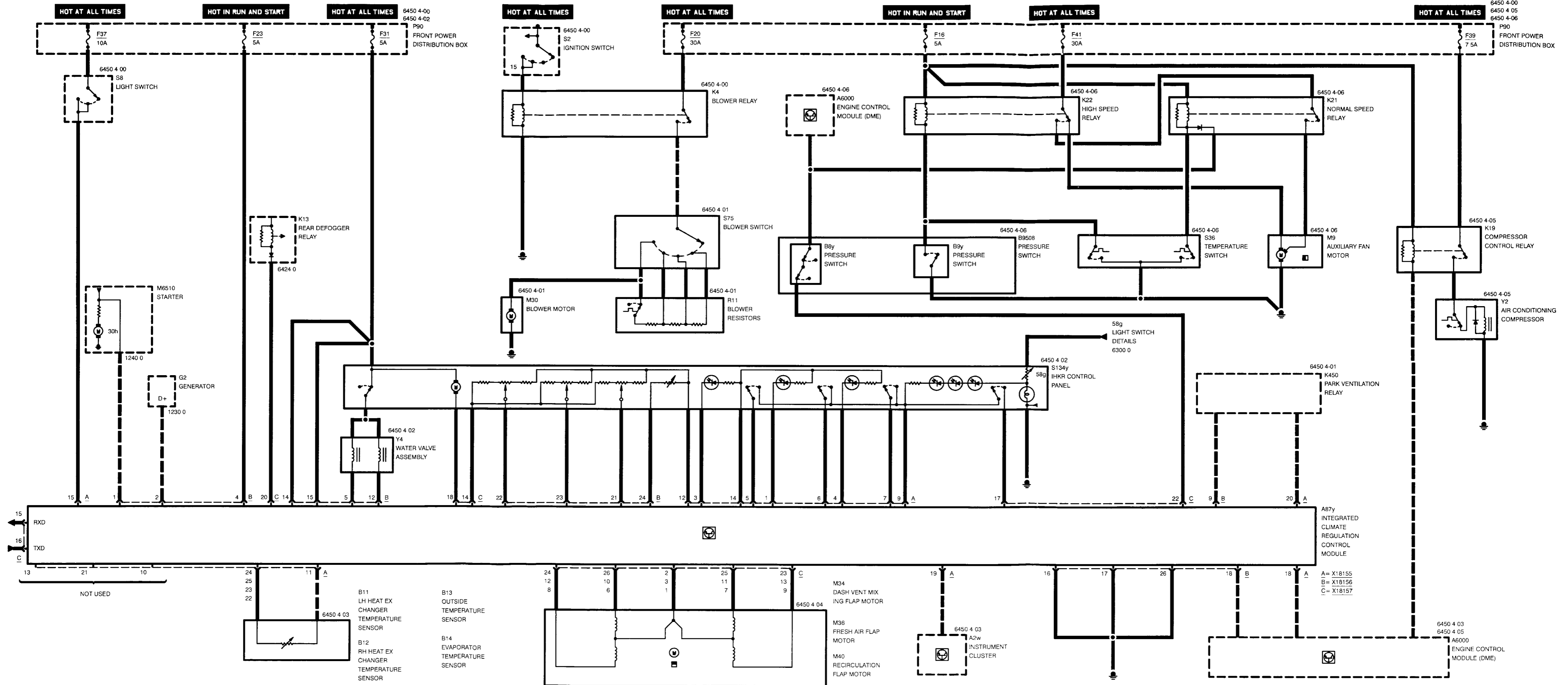
## 3-ANTENNA-DIVERSITY

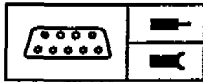




6424.0-04







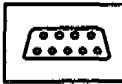
## Pin Assignments

A = X18155	26 Pins, white
B = X18156	26 Pins, black
C = X18157	26 Pins, blue

### X18155

Pin	Type	Description/Function	Connection
1	A	Function light, air recirculation	IHKR control panel
2		Not used	
3	A	Function light, rear window defogger	IHKR control panel
4	A	Function light, air conditioning	IHKR control panel
5	E	Rear window defogger switch	IHKR control panel
6	E	Air circulation switch	IHKR control panel
7	E	Air conditioning switch	IHKR control panel
8		Not used	
9	A	Ground for rear window defogger switch, air recirculation switch, air conditioning switch, electric flaps switch, and function lights	IHKR control panel
10		Not used	
11	A	Ground for temperature sensors	Various temperature sensors
12	A	Ground for rotary switches and interior temperature sensor	IHKR control panel
13		Not used	
14	<sup>(USA)</sup> E	Voltage supply for function lights	IHKR control panel
15	E	Terminal 58g	Light switch
16		Not used	
17		Not used	
18	E	Crankshaft position/RPM speed signal TD	Engine control module (DME)
19	A	Vehicle speed	Instrument cluster
20	E	Independent ventilation	Park heating/ventilation relay
21		Not used	
22	A/E	Evaporator temperature	Evaporator temperature sensor

E = Input, A = Output, M = Ground



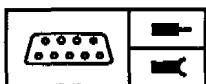
## Pin Assignments

Pin	Type	Description/Function	Connection
23	A/E	Outside temperature	Outside temperature sensor
24	A/E	Heater temperature, left	Left heat exchanger temperature sensor
25	A/E	Heater temperature, right	Right heat exchanger temperature sensor
26		Not used	

### X18156

Pin	Type	Description/Function	Connection
1	E	Terminal 30h	Starter, terminal 30h
2	E	Terminal 61	Generator
3		Not used	
4	E	Voltage supply, terminal 15	Front power distribution box, fuse 23
5	A	Left water valve activation	Water valve assembly
6		Not used	
7		Not used	
8		Not used	
9		Terminal 15 (independent ventilation only)	Park heating/ventilation relay
10		Not used	
11		Not used	
12	A	Right water valve activation	Water valve assembly
13		Not used	
14	E	Voltage supply, terminal 30	Front power distribution box, fuse 31
15	E	Voltage supply, terminal 30	Front power distribution box, fuse 31
16	M	Ground for load circuit	Ground point
17	M	Ground for load circuit	Ground point
18	A	Engine control module (DME) activation (anti-stall)	Engine control module (DME)
19		Not used	
20		Not used	
21	E	Nominal temperature valve, right	IHKR control panel
22	E	Nominal temperature valve, left	IHKR control panel
23	E	Nominal air flow valve	IHKR control panel

E = Input, A = Output, M = Ground



## Pin Assignments

Pin	Type	Description/Function	Connection
24	A/E	Interior temperature sensor	IHKR control panel
25		Not used	
26	M	Ground for electronics	Ground point

### X18157

Pin	Type	Description/Function	Connection
1	A	Voltage supply for recirculation flap motor	Recirculation flap motor
2	A	Voltage supply for dash vent mixing flap motor	Dash vent mixing flap motor
3	A	Voltage supply for fresh air flap motor	Fresh air flap motor
4		Not used	
5		Not used	
6	A	Recirculation flap motor activation	Recirculation flap motor
7	A	Recirculation flap motor activation	Recirculation flap motor
8	A	Recirculation flap motor activation	Recirculation flap motor
9	A	Recirculation flap motor activation	Recirculation flap motor
10	A	Fresh air flap motor activation	Fresh air flap motor
11	A	Fresh air flap motor activation	Fresh air flap motor
12	A	Fresh air flap motor activation	Fresh air flap motor
13	A	Fresh air flap motor activation	Fresh air flap motor
14	A	Voltage supply for rotary switches	IHKR control panel
15	A	RxD diagnostic data line	Data link connector
16	E/A	TxD diagnostic data line	Data link connector
17	E	Ventilation flap switch	IHKR control panel
18	A	Interior sensor blower activation	IHKR control panel
19		Not used	
20	A	Rear window defogger activation	Rear defogger relay, terminal 86b
21		Not used	
22	A	A/C compressor activation	Pressure switch
23	A	Dash vent mixing flap motor activation	Dash vent mixing flap motor
24	A	Dash vent mixing flap motor activation	Dash vent mixing flap motor

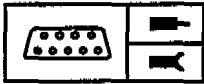
E = Input, A = Output, M = Ground



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6450.4-d

1996



## Pin Assignments

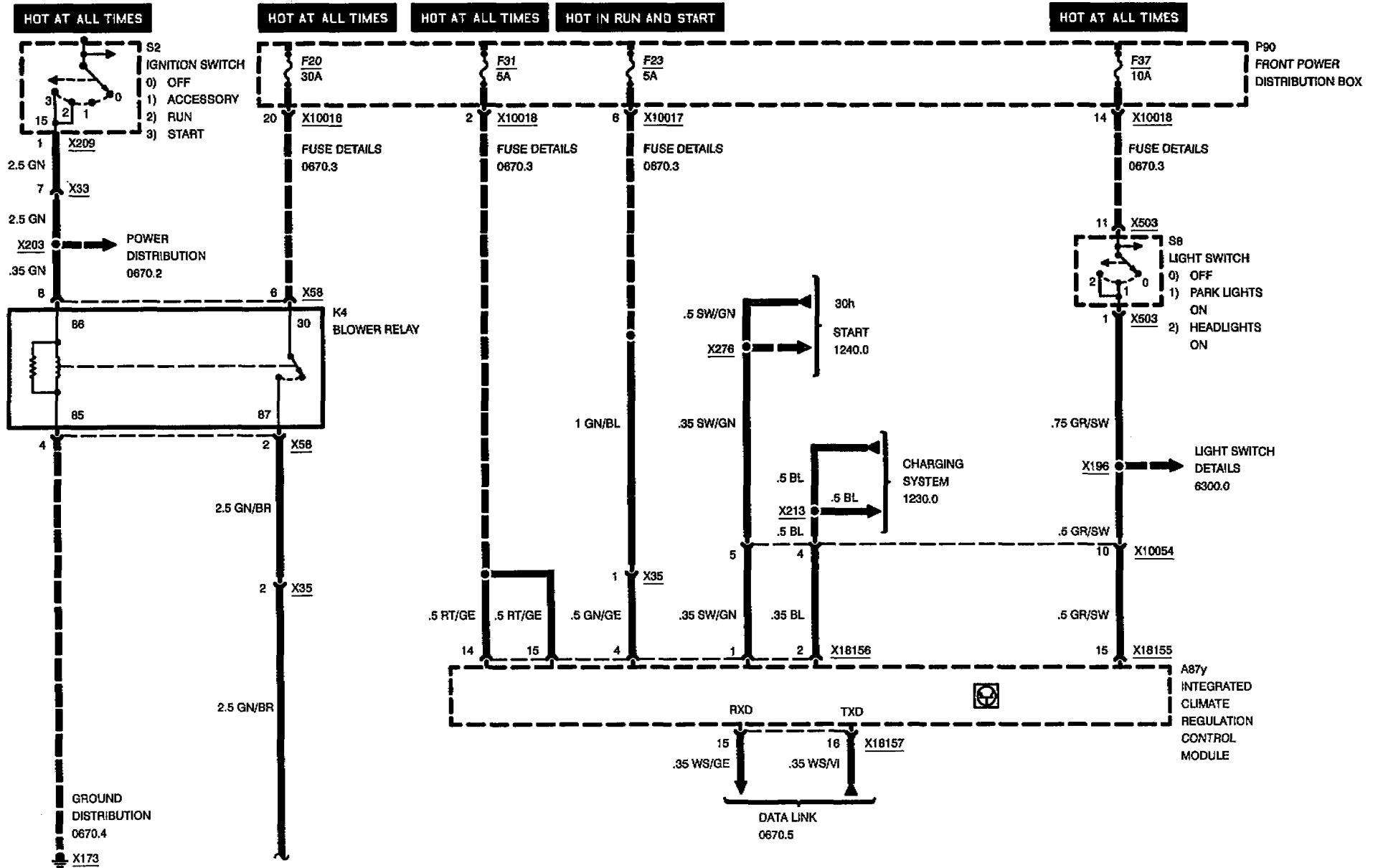
Pin	Type	Description/Function	Connection
25	A	Dash vent mixing flap motor activation	Dash vent mixing flap motor
26	A	Dash vent mixing flap motor activation	Dash vent mixing flap motor

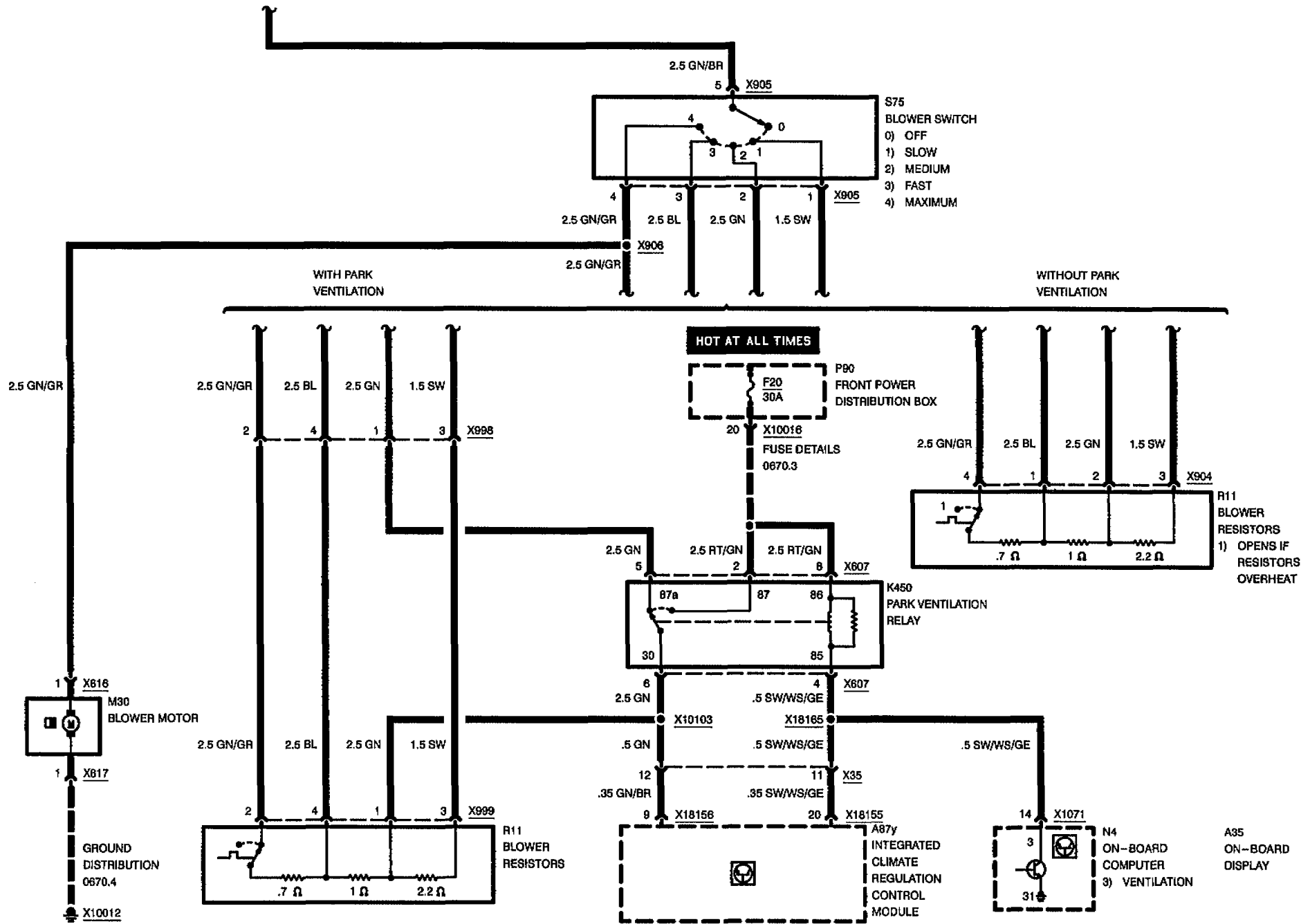
E = Input, A = Output, M = Ground

BMW  
3

6450.4

**POWER, BLOWER CONTROLS**





S75  
 BLOWER SWITCH  
 0) OFF  
 1) SLOW  
 2) MEDIUM  
 3) FAST  
 4) MAXIMUM

HOT AT ALL TIMES

F20  
 30A  
 X10016  
 FUSE DETAILS  
 0670.3

PB0  
 FRONT POWER  
 DISTRIBUTION BOX

R11  
 BLOWER  
 RESISTORS  
 1) OPENS IF  
 RESISTORS  
 OVERHEAT

K450  
 PARK VENTILATION  
 RELAY

A35  
 ON-BOARD  
 DISPLAY

N4  
 ON-BOARD  
 COMPUTER  
 3) VENTILATION

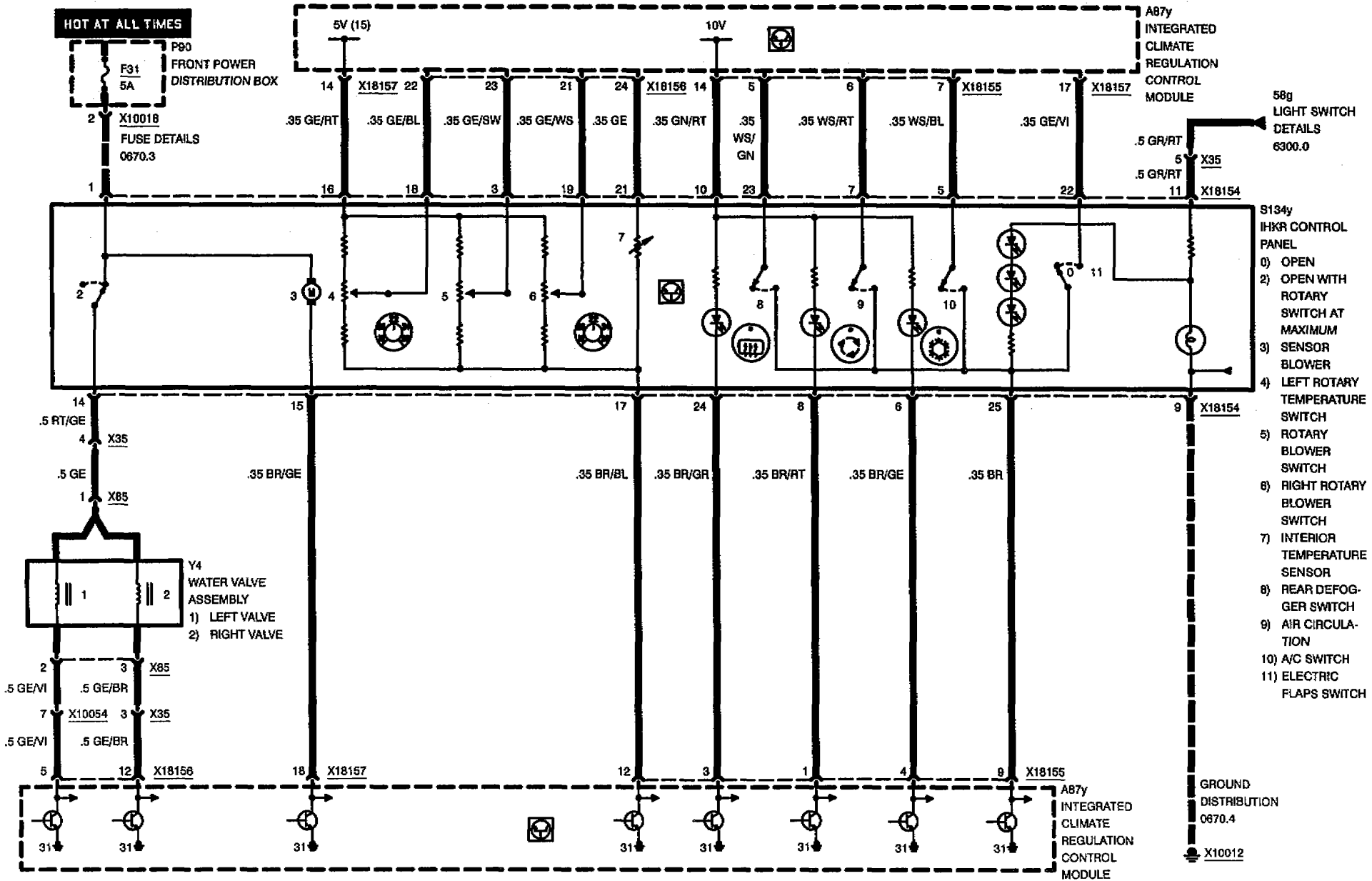
A87y  
 INTEGRATED  
 CLIMATE  
 REGULATION  
 CONTROL  
 MODULE





# INTEGRATED CLIMATE REGULATION (IHKR E36)

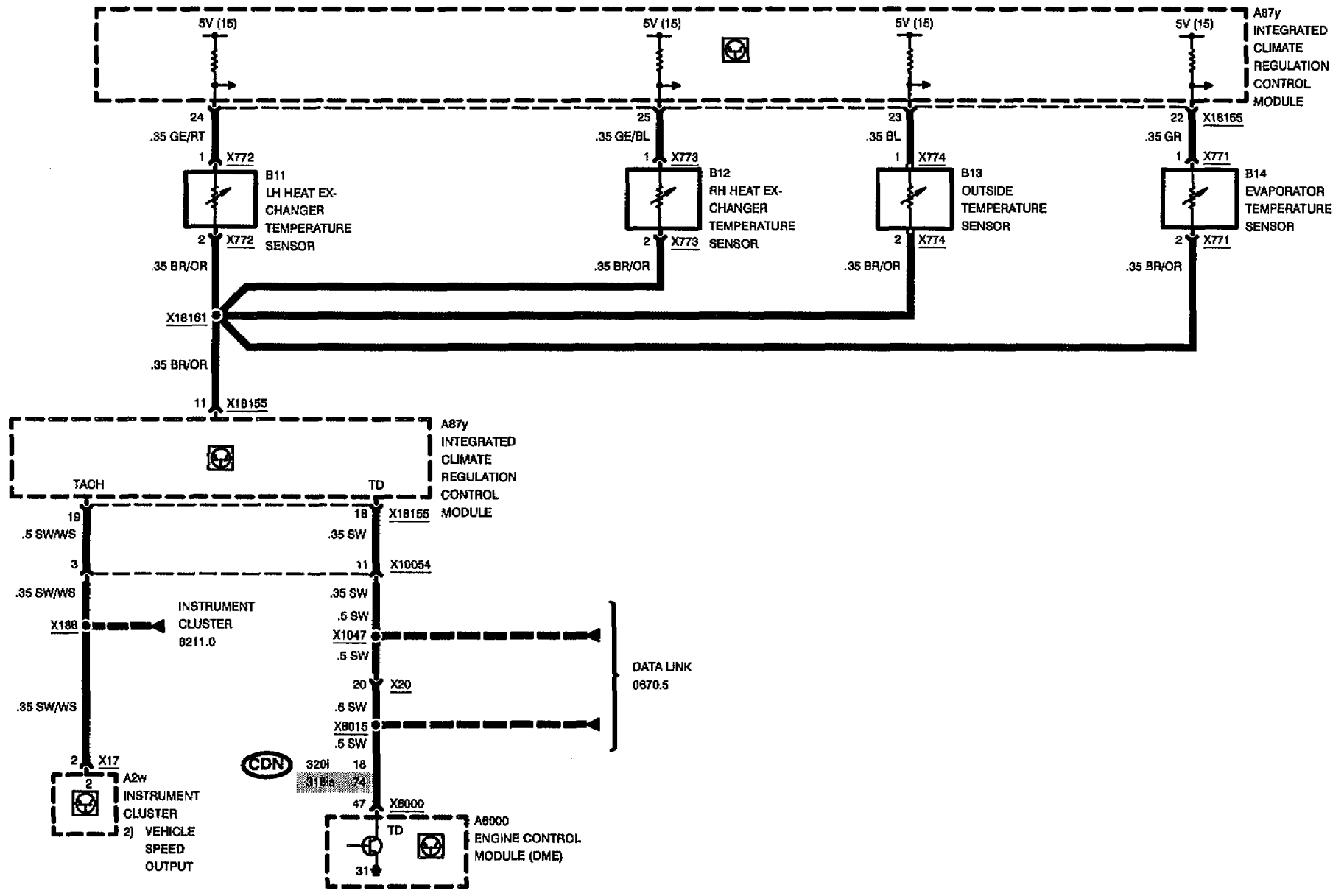
## CONTROL MODULE, WATER VALVES





# INTEGRATED CLIMATE REGULATION (IHKR E36)

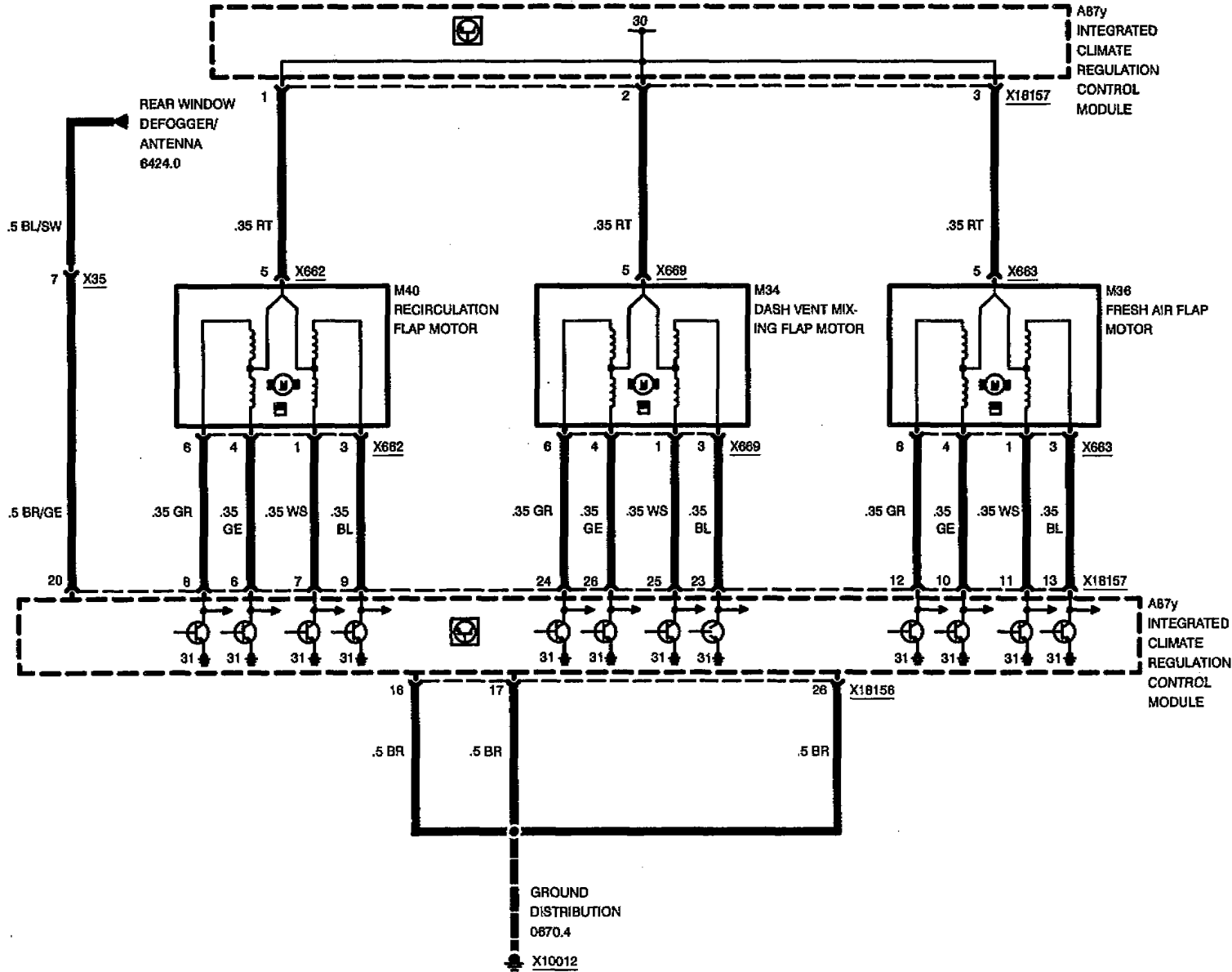
## TEMPERATURE CONTROL





# INTEGRATED CLIMATE REGULATION (IHKR E36)

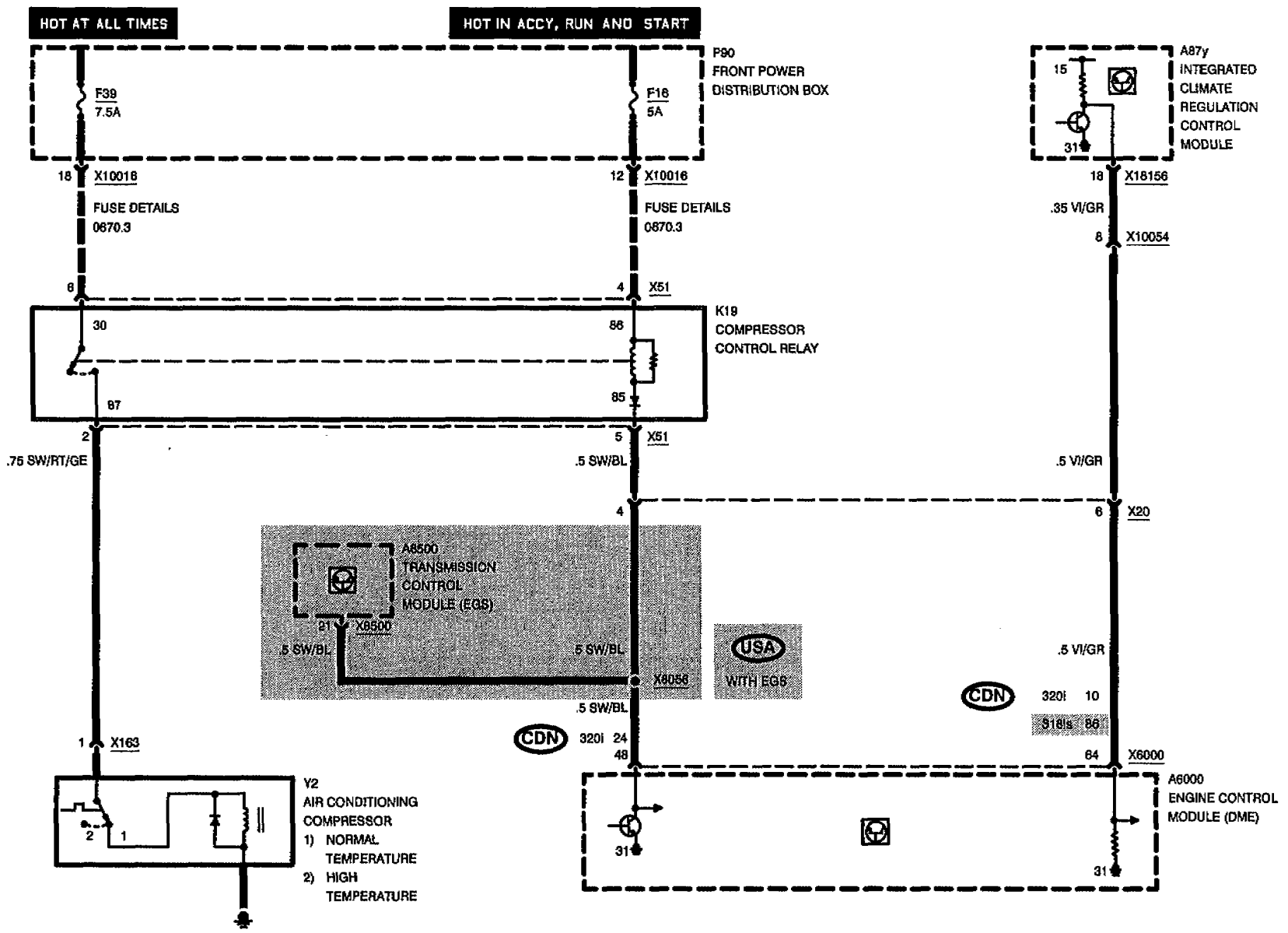
## AIR DELIVERY





# INTEGRATED CLIMATE REGULATION (IHKR E36) COMPRESSOR CONTROLS

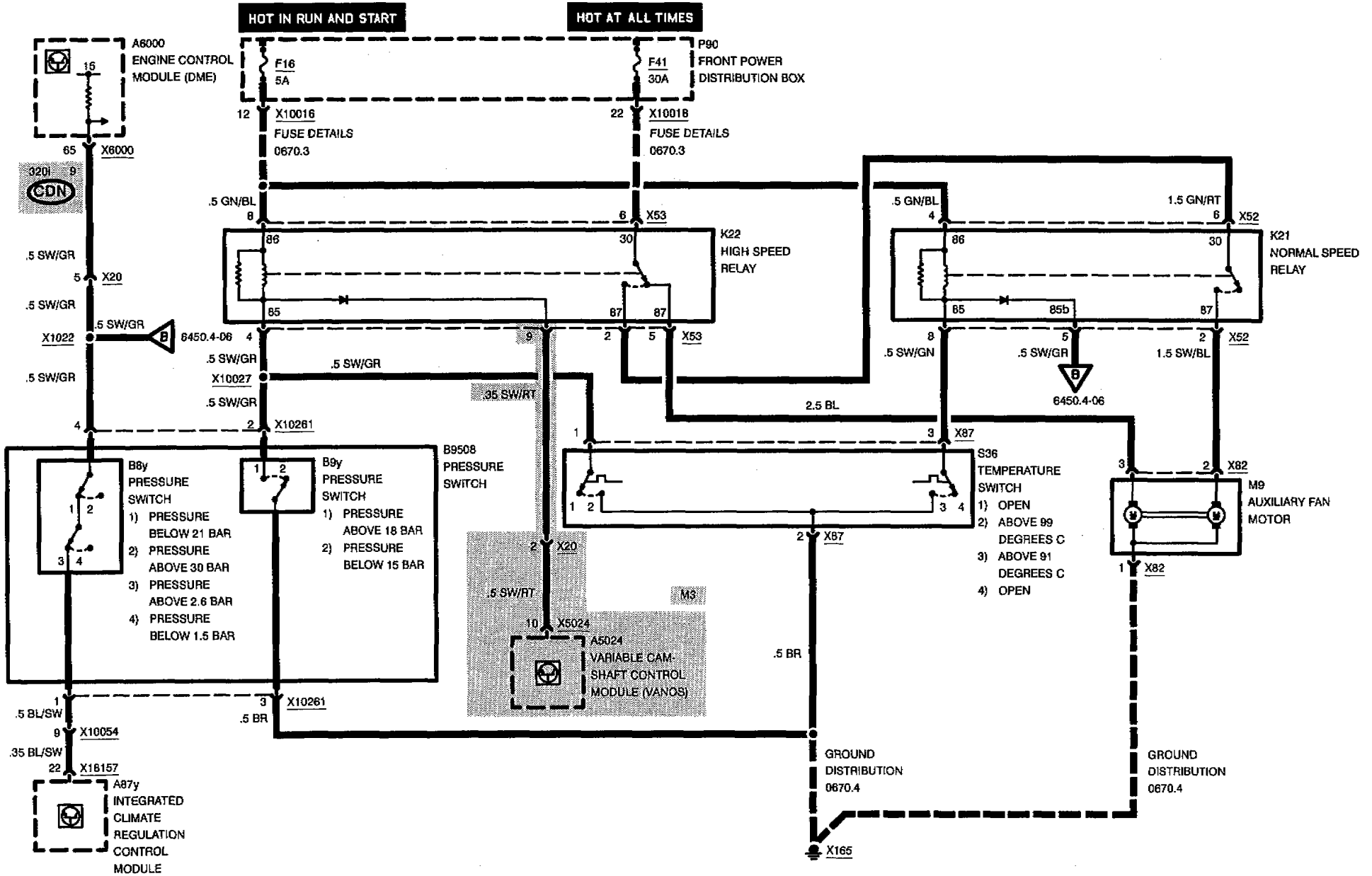
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# INTEGRATED CLIMATE REGULATION (IHKR E36)

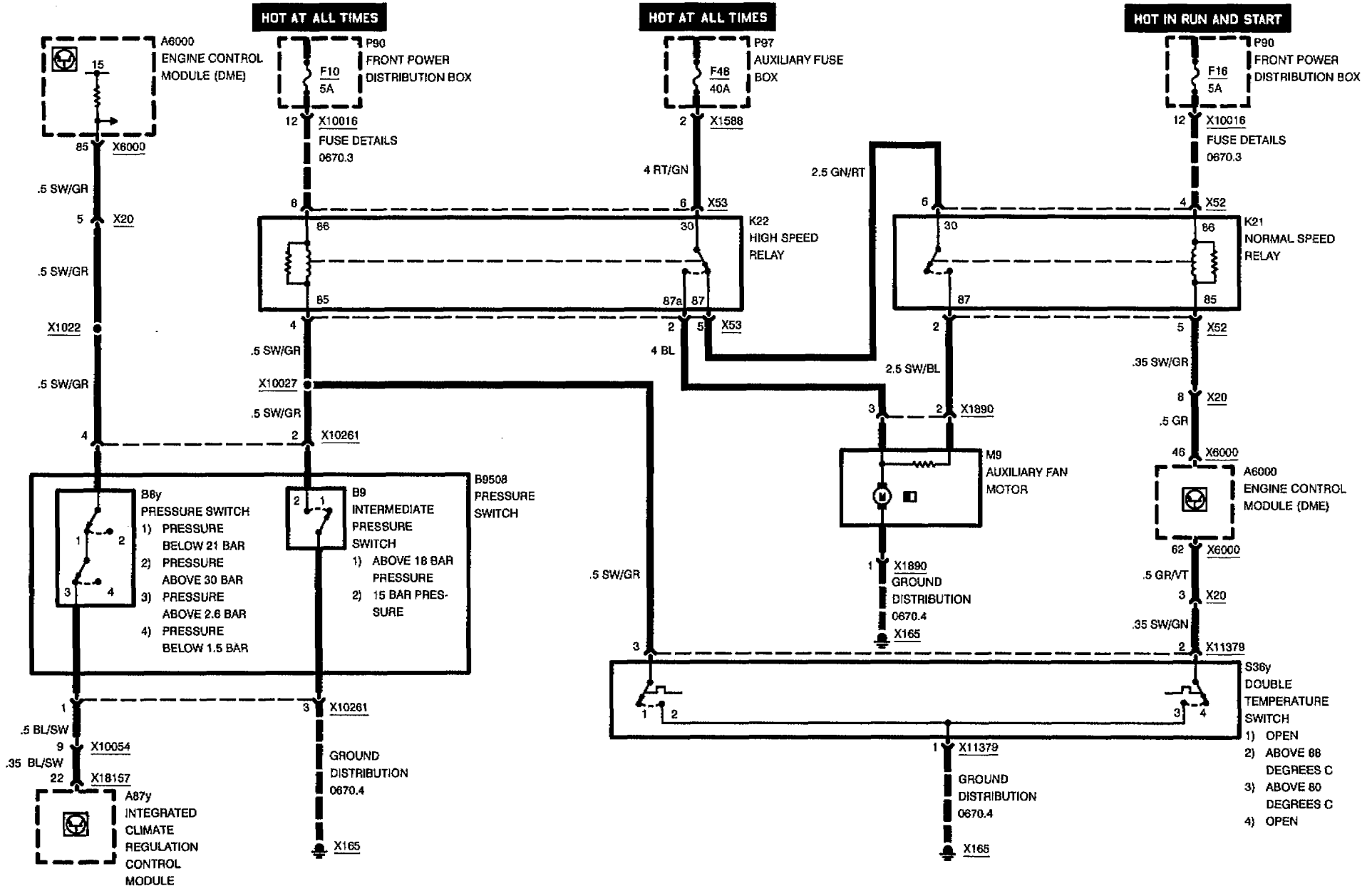
## AUXILIARY FAN - 6-CYLINDER ENGINE





# INTEGRATED CLIMATE REGULATION (IHKR E36)

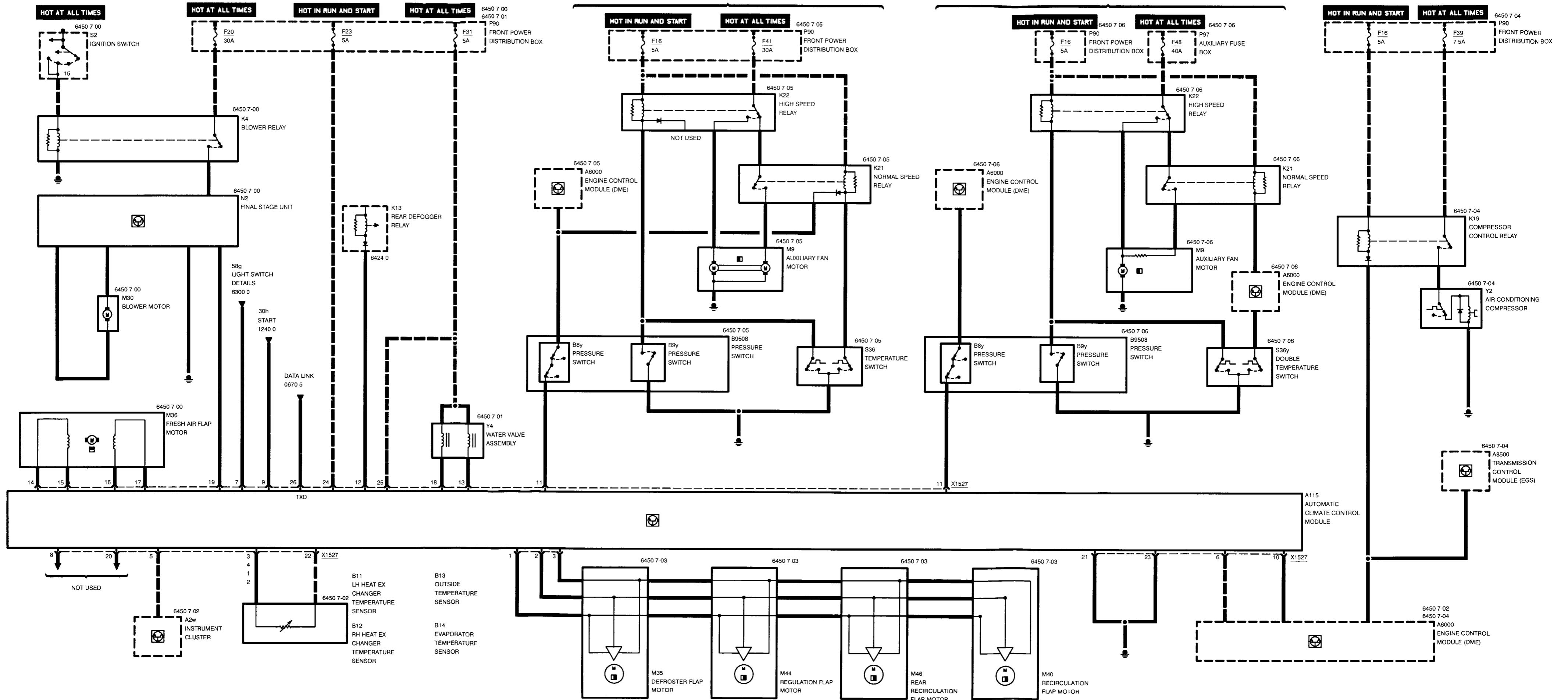
## AUXILIARY FAN - 4-CYLINDER ENGINE



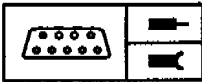


AUXILIARY FAN - 6-CYLINDER ENGINE

AUXILIARY FAN - 4-CYLINDER ENGINE







## Pin Assignments

### X1527

Pin	Type	Description/Function	Connection
1	E	Outside temperature	Outside temperature sensor
2	E	Evaporator temperature	Evaporator temperature sensor
3	E	Heater temperature, left	Left heat exchanger temperature sensor
4	E	Heater temperature, right	Right heat exchanger temperature sensor
5	E	Vehicle speed signal (Speedometer output Signal)	Instrument cluster
6	E	RPM speed signal TD	Engine control module (DME)
7	E	Illumination input	Illumination
8	A	Output signal	On-board computer
9	E	Terminal 50	Starter
10	A	RPM speed increase	Engine control module (DME)
11	A	A/C compressor activation	Pressure switch
12	A	Rear window signal	Rear window
13	A	Water valve activation, right	Right water valve
14	A	Fresh air flap motor activation	Fresh air flap motor
15	A	Fresh air flap motor activation	Fresh air flap motor
16	A	Fresh air flap motor activation	Fresh air flap motor
17	A	Fresh air flap motor activation	Fresh air flap motor
18	A	Water valve activation, left	Left water valve
19	A	A/C fan activation	A/C fan final stage
20	E	Independent ventilation	Relay box
21	M	Ground	Control panel
22	M	Ground	Mixing actuator
23	M	Ground	Control panel
24	E	Terminal 15	Fuse
25	E	Terminal 30	Fuse
26	E/A	Diagnostic data link	Data link connector

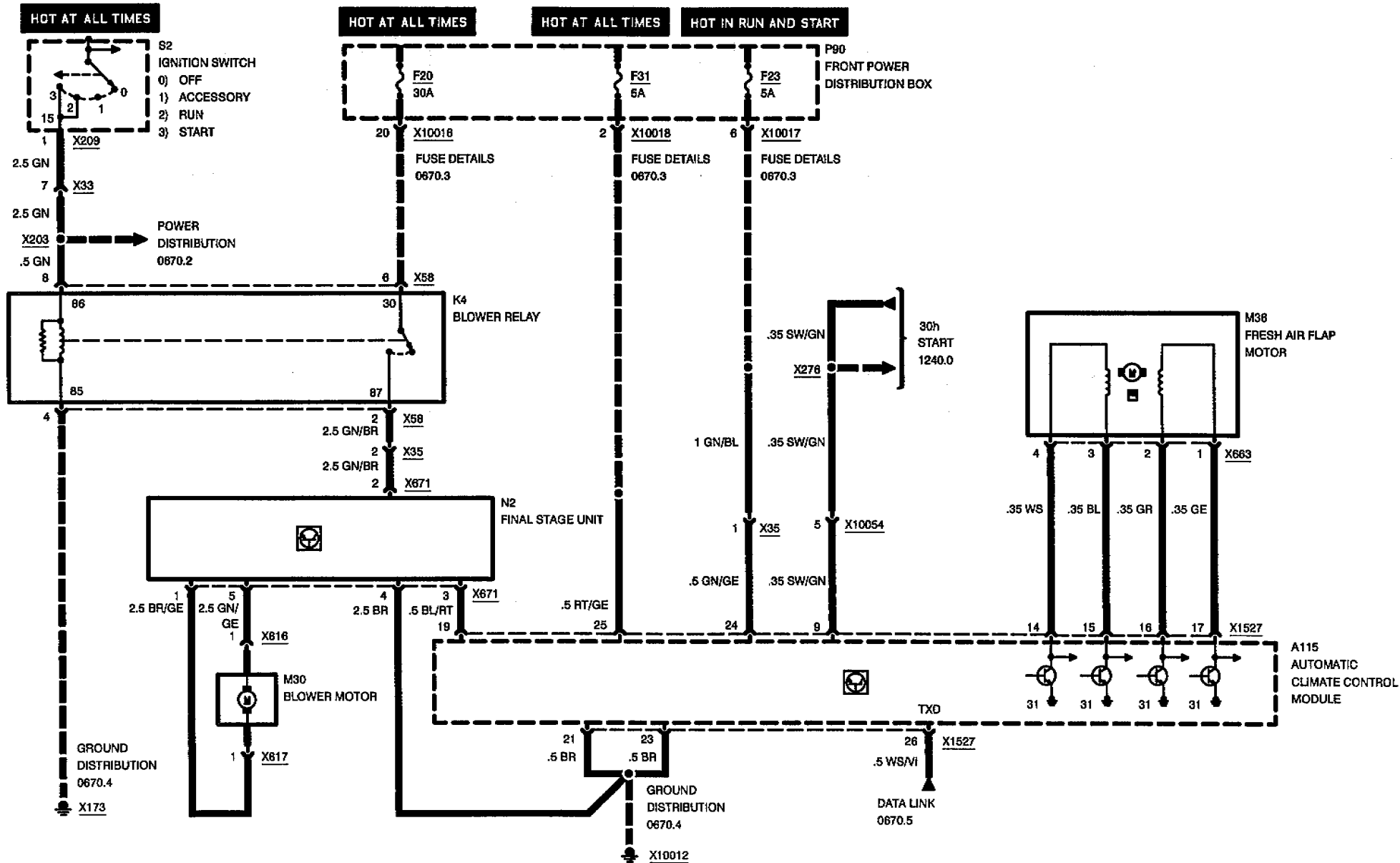
E = Input, A = Output, M = Ground



# INTEGRATED CLIMATE REGULATION (IHKA E36)

318is, 328i, M3 LATE PRODUCTION

## POWER, AIR FLOW CONTROL



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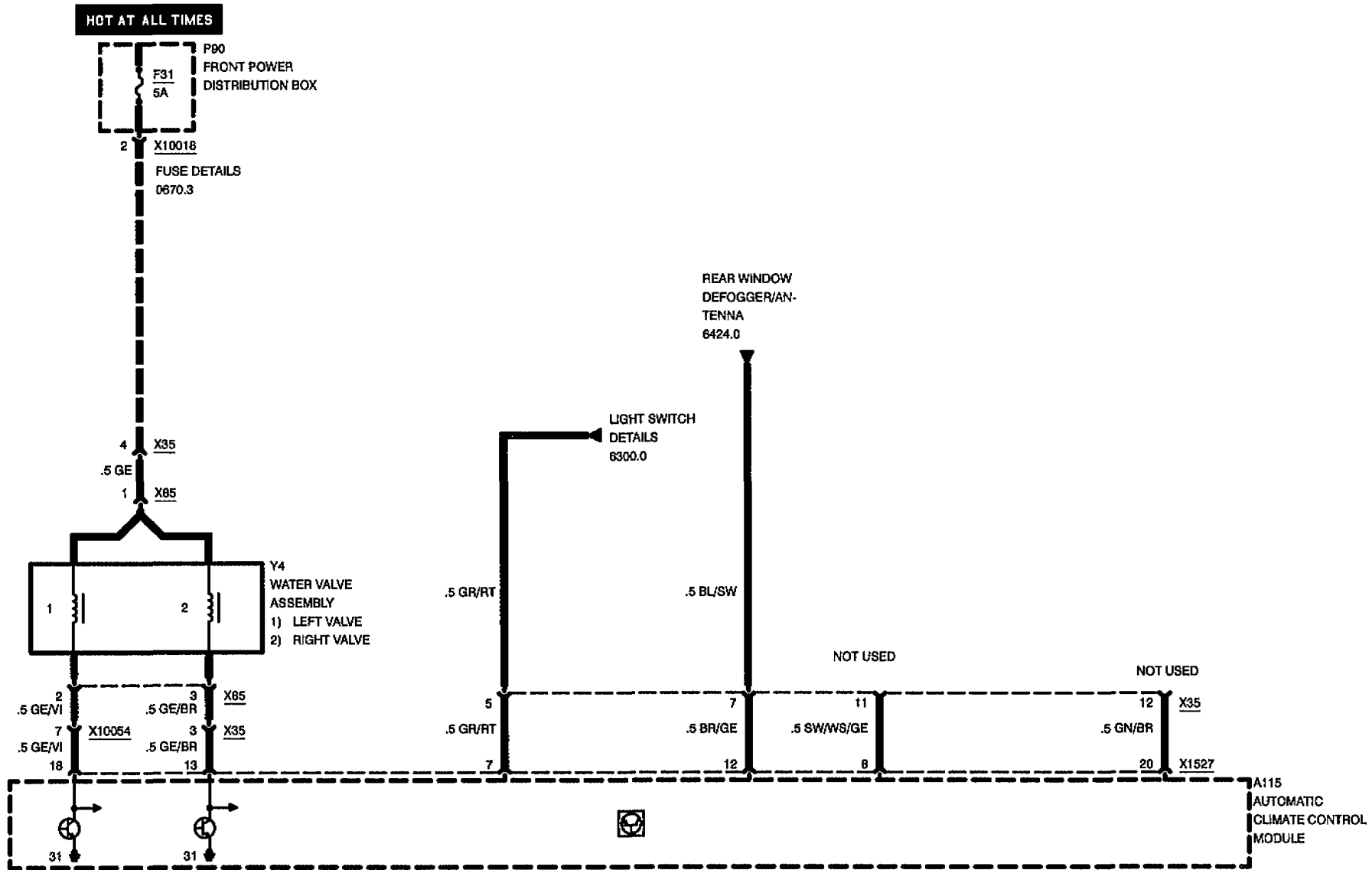
# INTEGRATED CLIMATE REGULATION (IHKA E36)

318is, 328i, M3 LATE PRODUCTION

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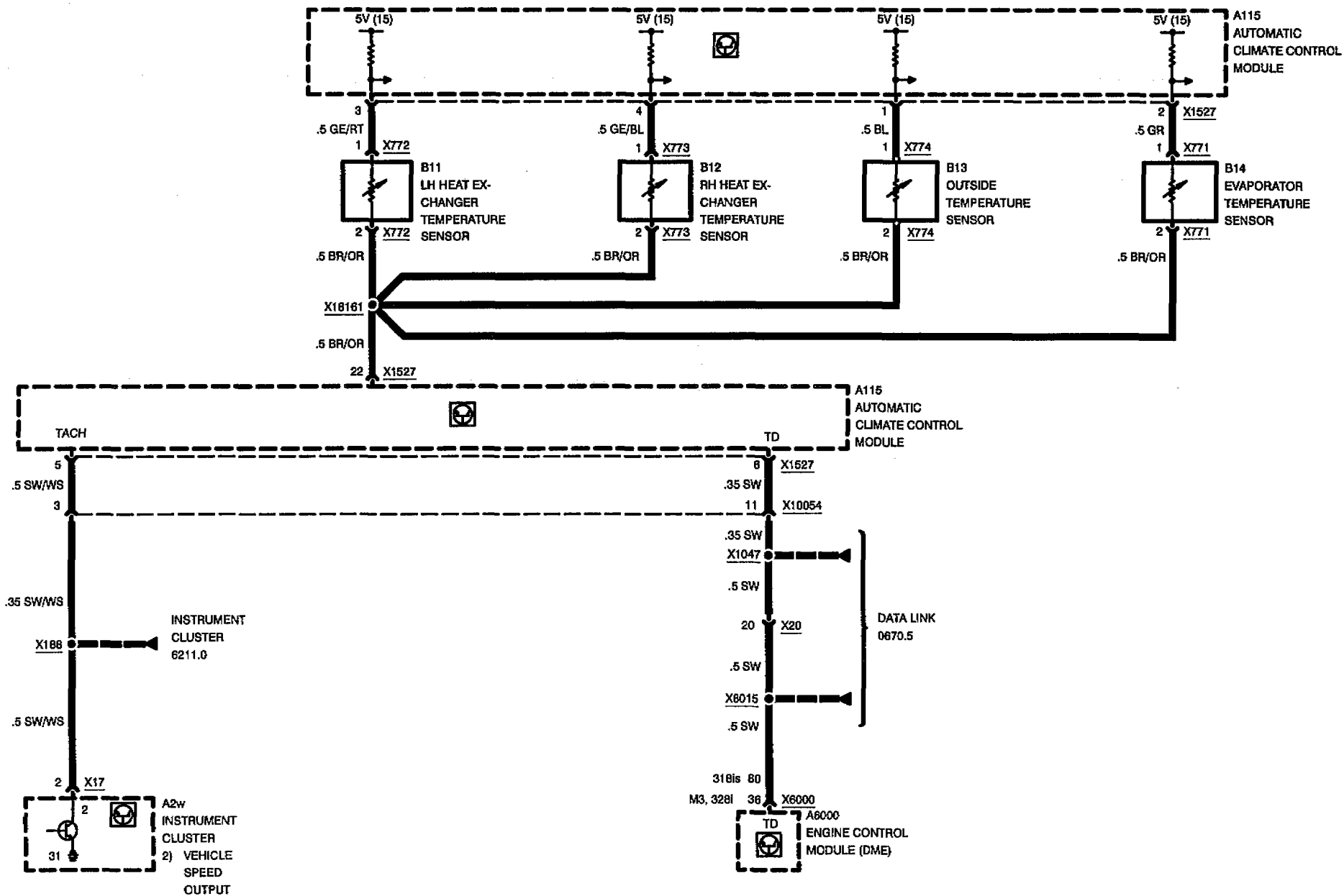




# INTEGRATED CLIMATE REGULATION (IHKA E36)

318is, 328i, M3 LATE PRODUCTION

## TEMPERATURE CONTROL

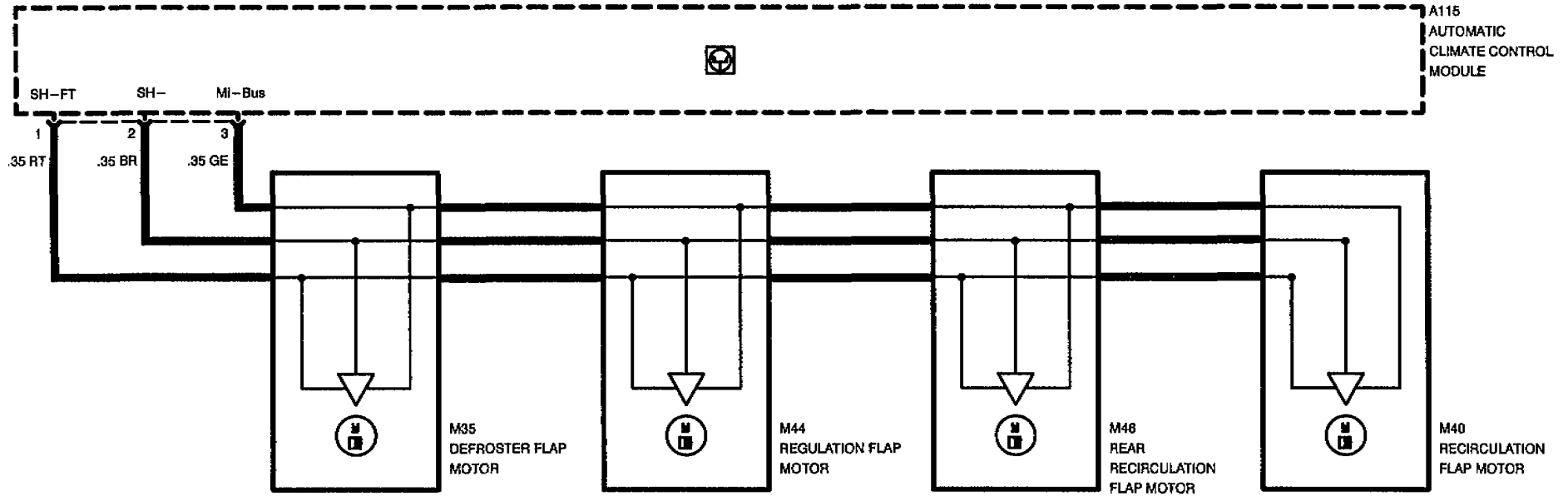




# INTEGRATED CLIMATE REGULATION (IHKA E36)

318is, 328i, M3 LATE PRODUCTION

AIR DELIVERY

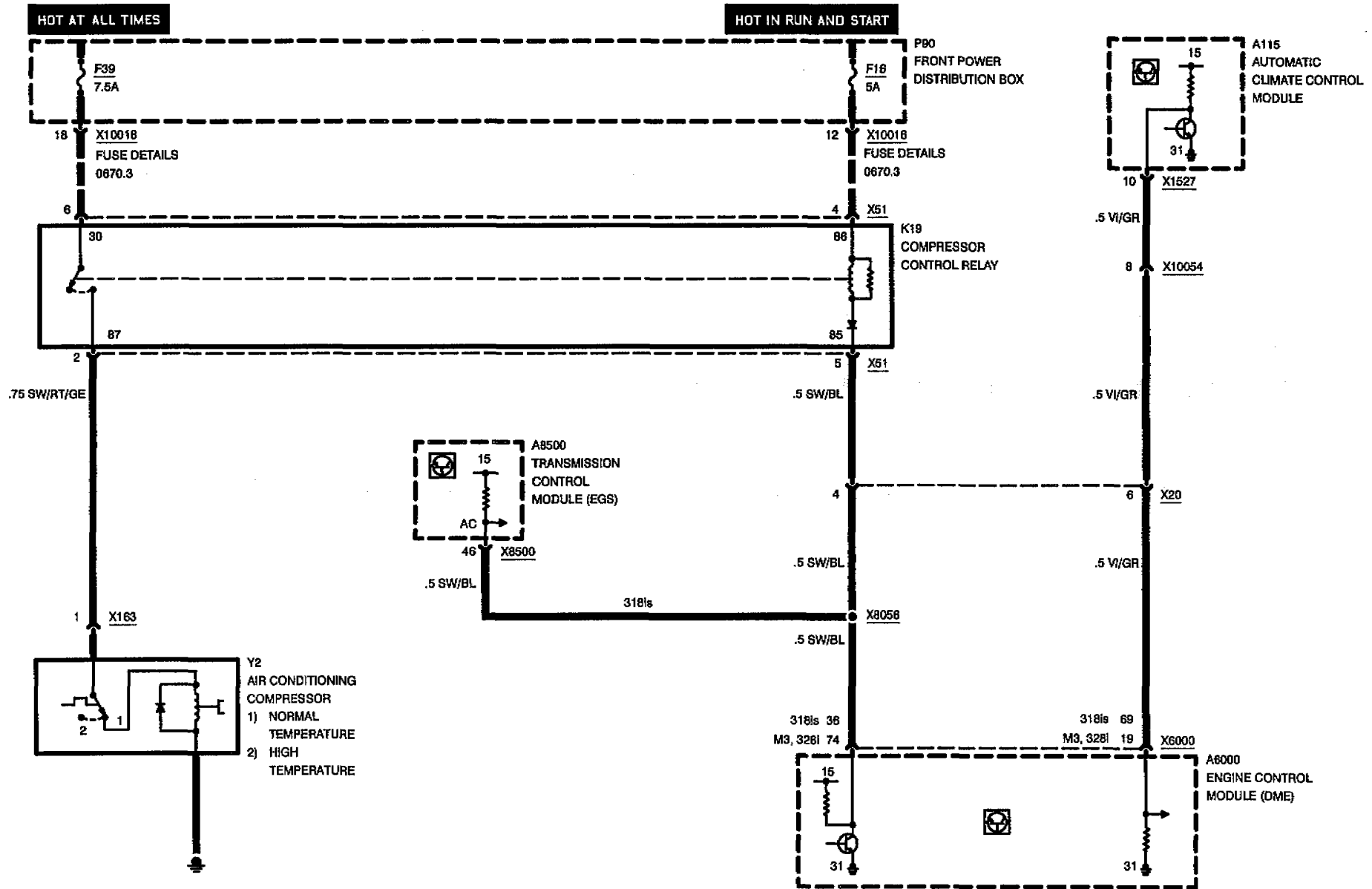




# INTEGRATED CLIMATE REGULATION (IHKA E36)

## COMPRESSOR CONTROLS

318is, 328i, M3 LATE PRODUCTION

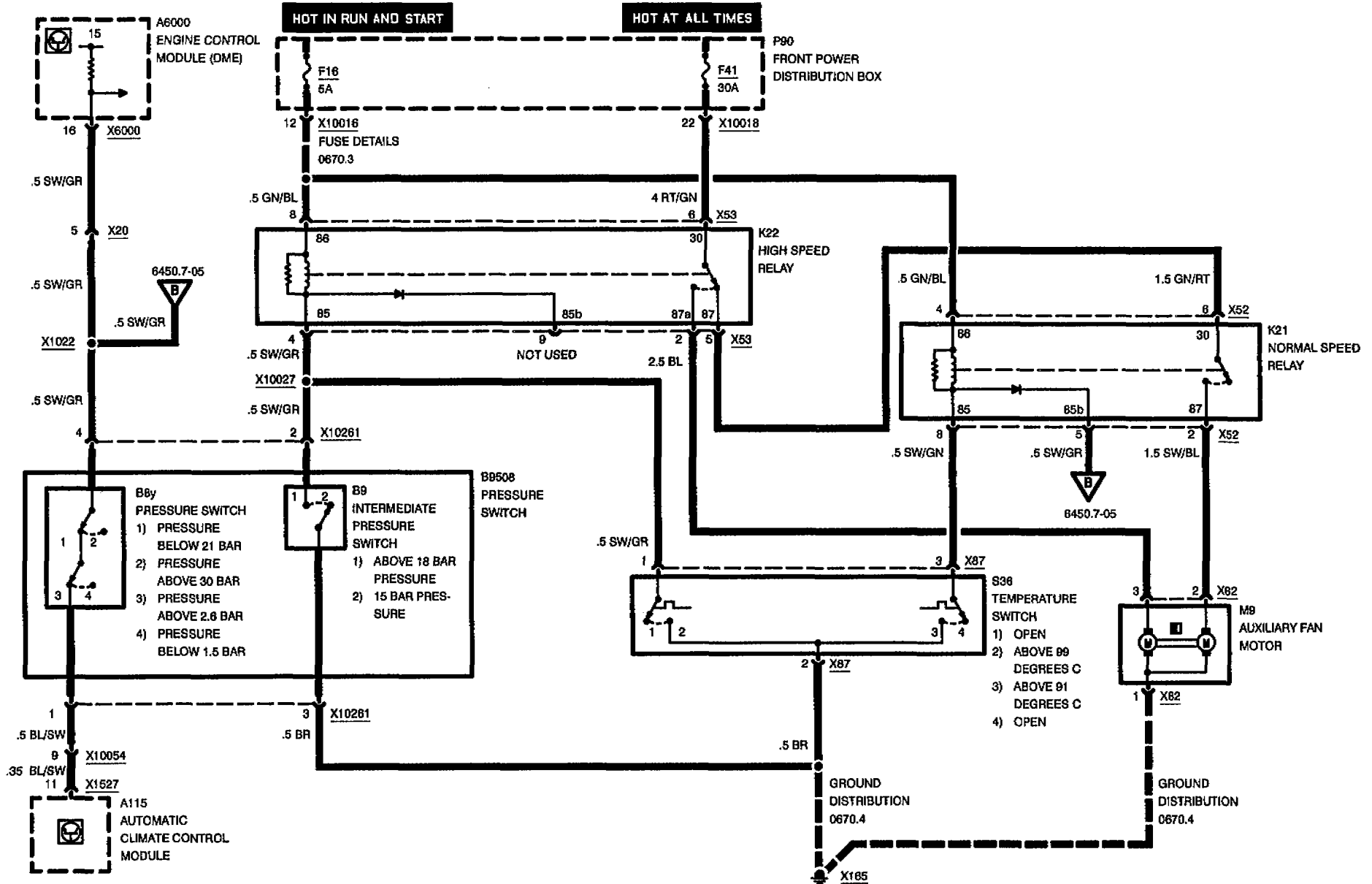




# INTEGRATED CLIMATE REGULATION (IHKA E36)

328i, M3 LATE PRODUCTION

## AUXILIARY FAN - 6-CYLINDER ENGINE



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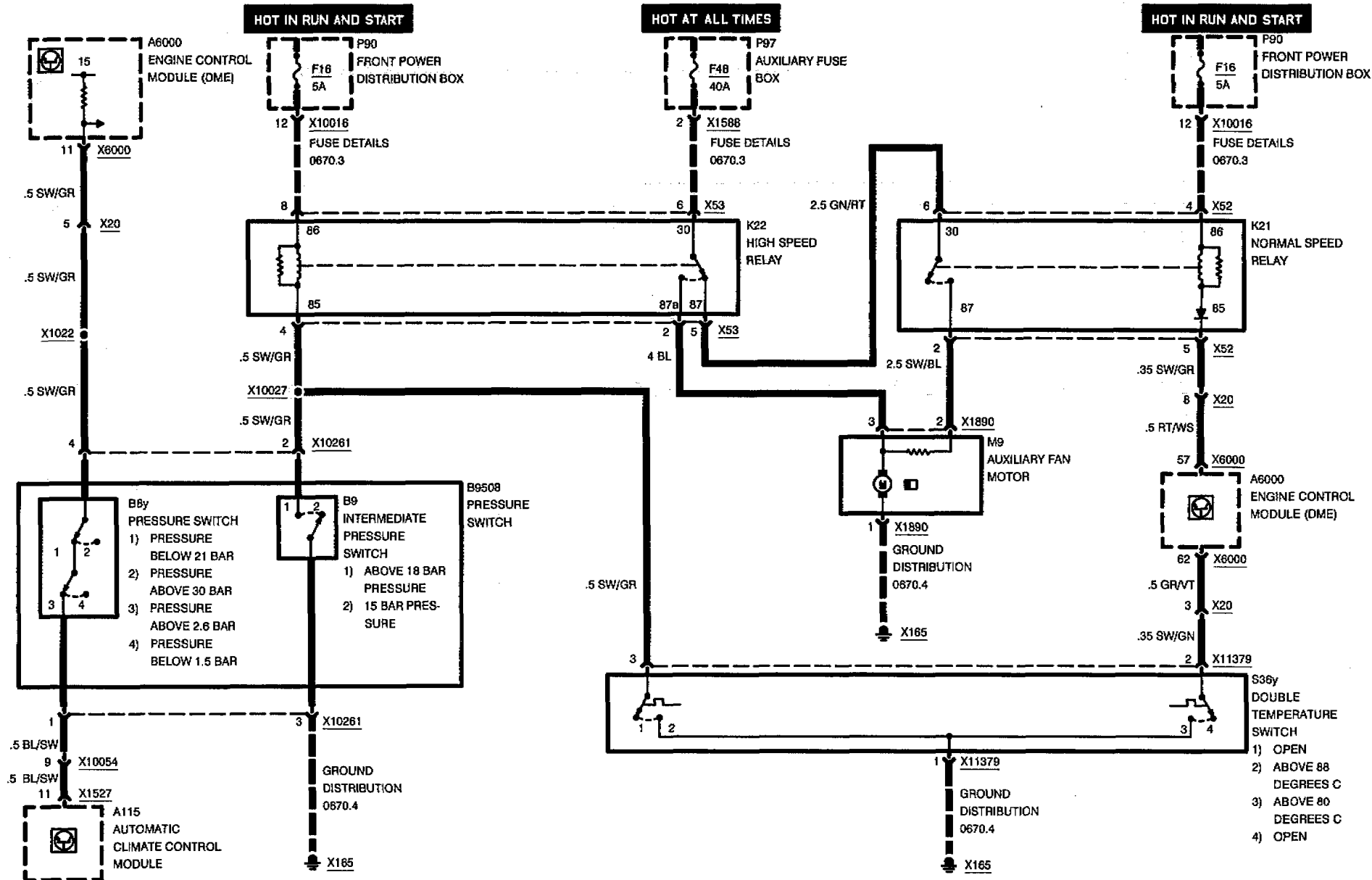
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# INTEGRATED CLIMATE REGULATION (IHKA E36)

318is LATE PRODUCTION

## AUXILIARY FAN - 4-CYLINDER ENGINE



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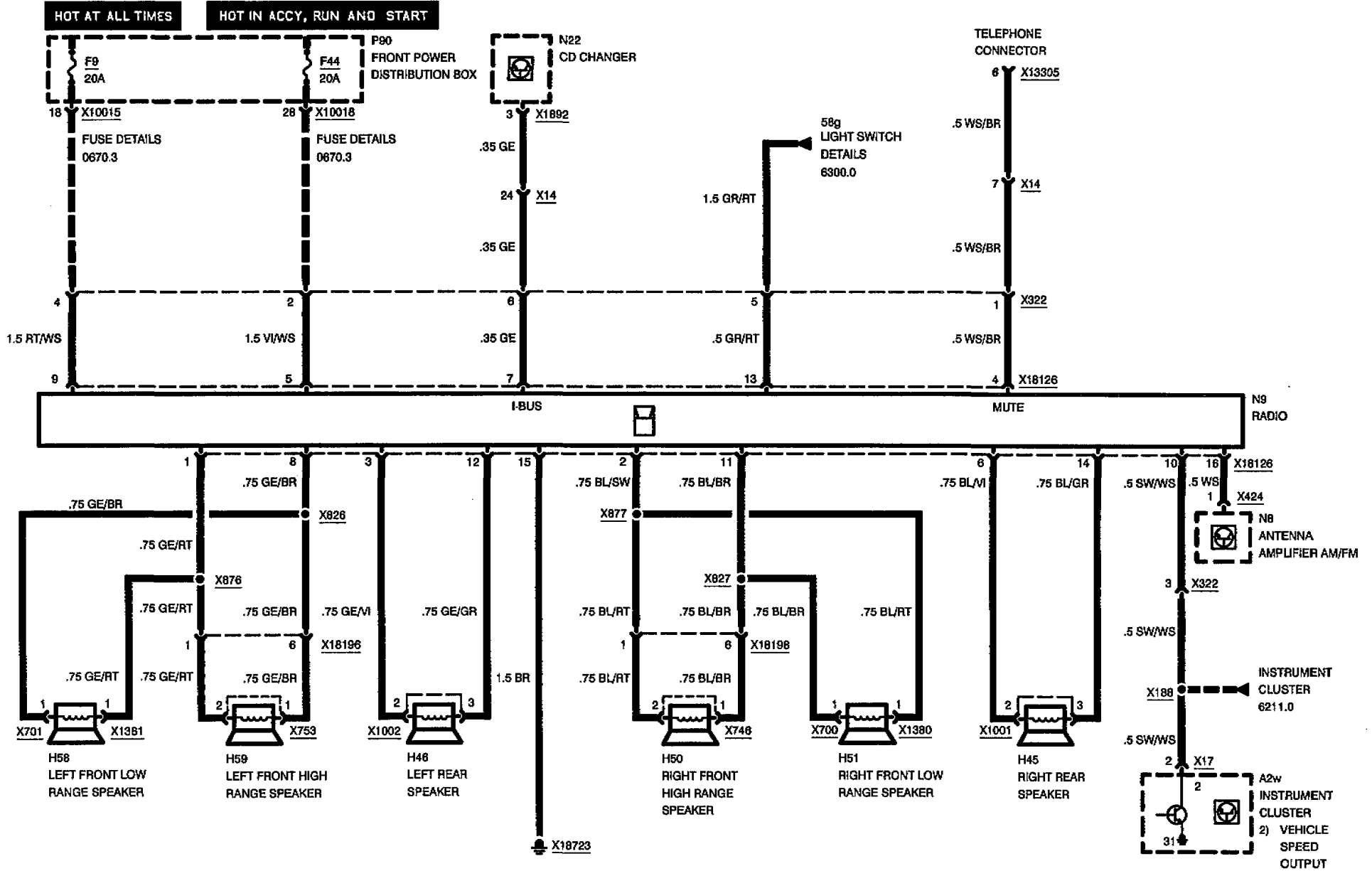
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**STEREO, 6-SPEAKER SYSTEM**



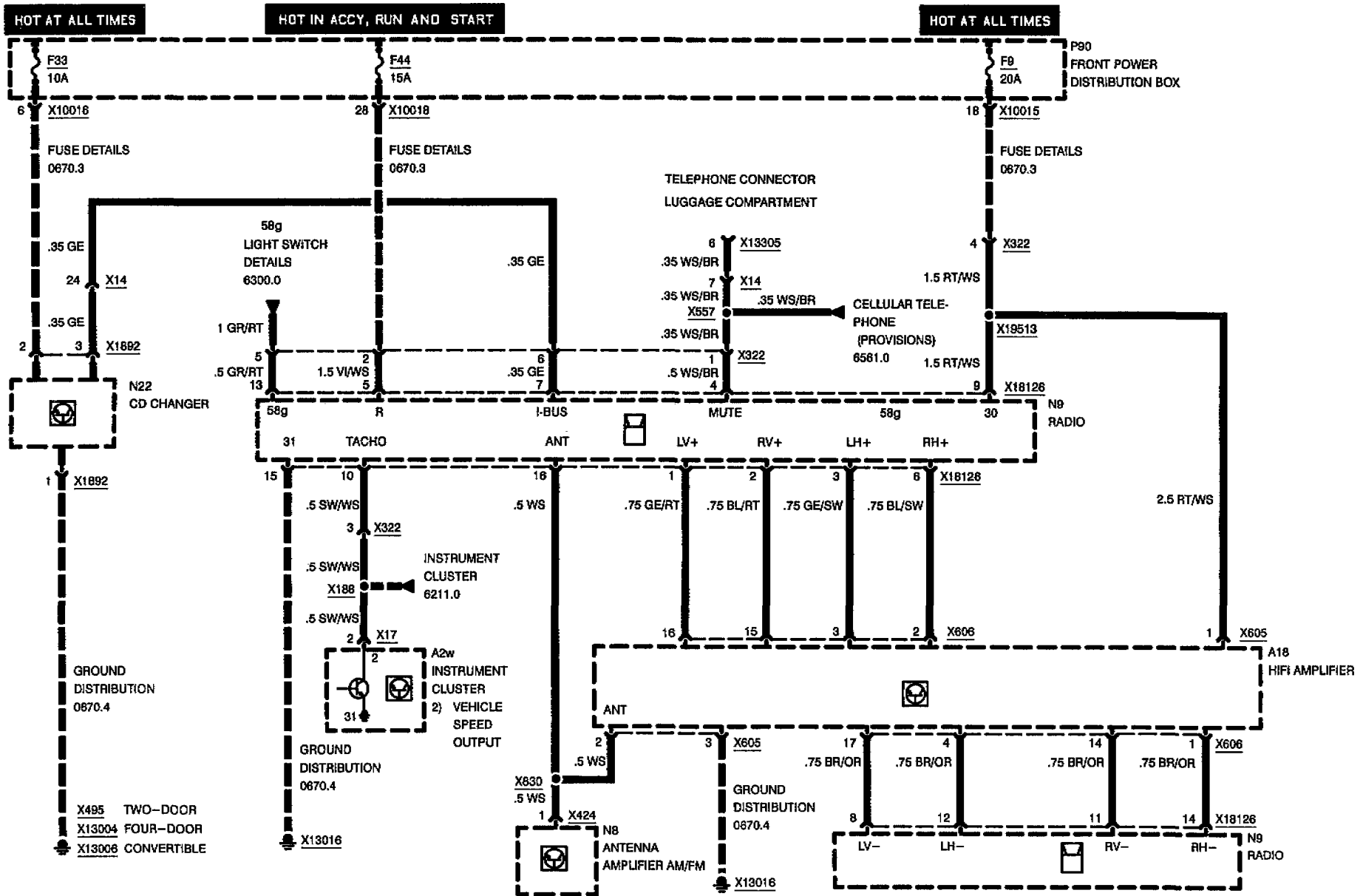


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# RADIO/HIFI

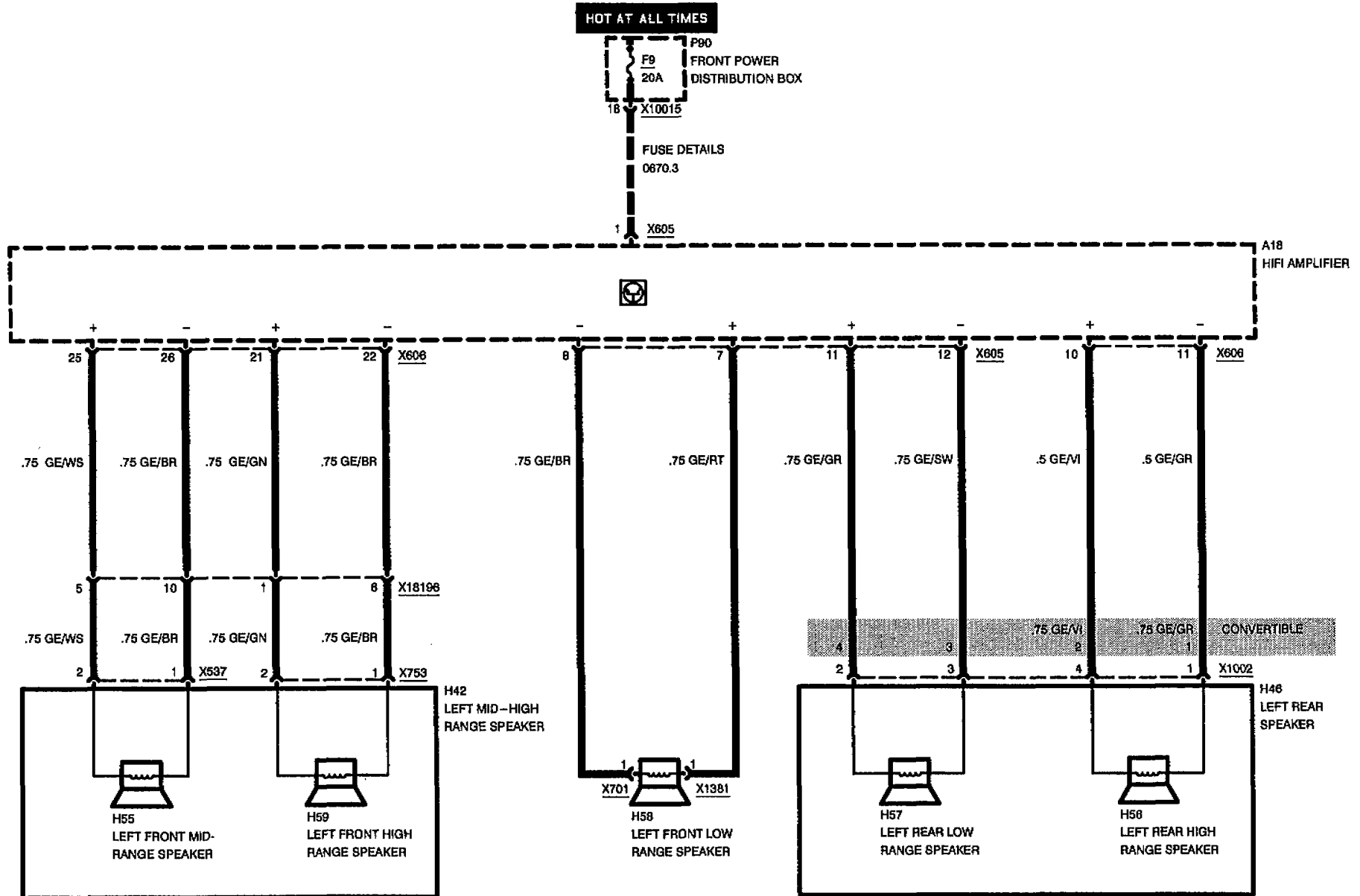
## HIFI, 10-SPEAKER SYSTEM





# RADIO/HIFI

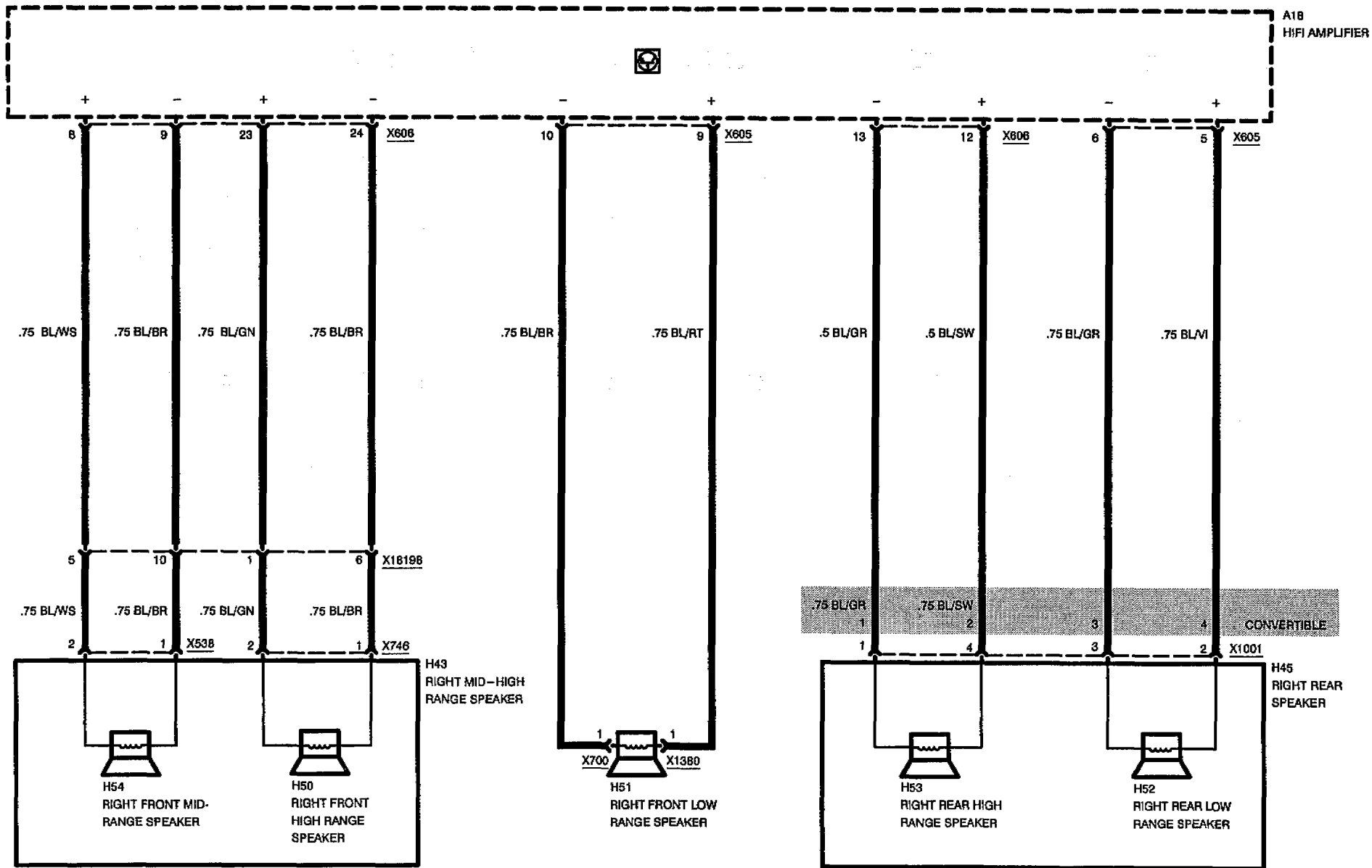
## HIFI, 10-SPEAKER SYSTEM





# RADIO/HIFI

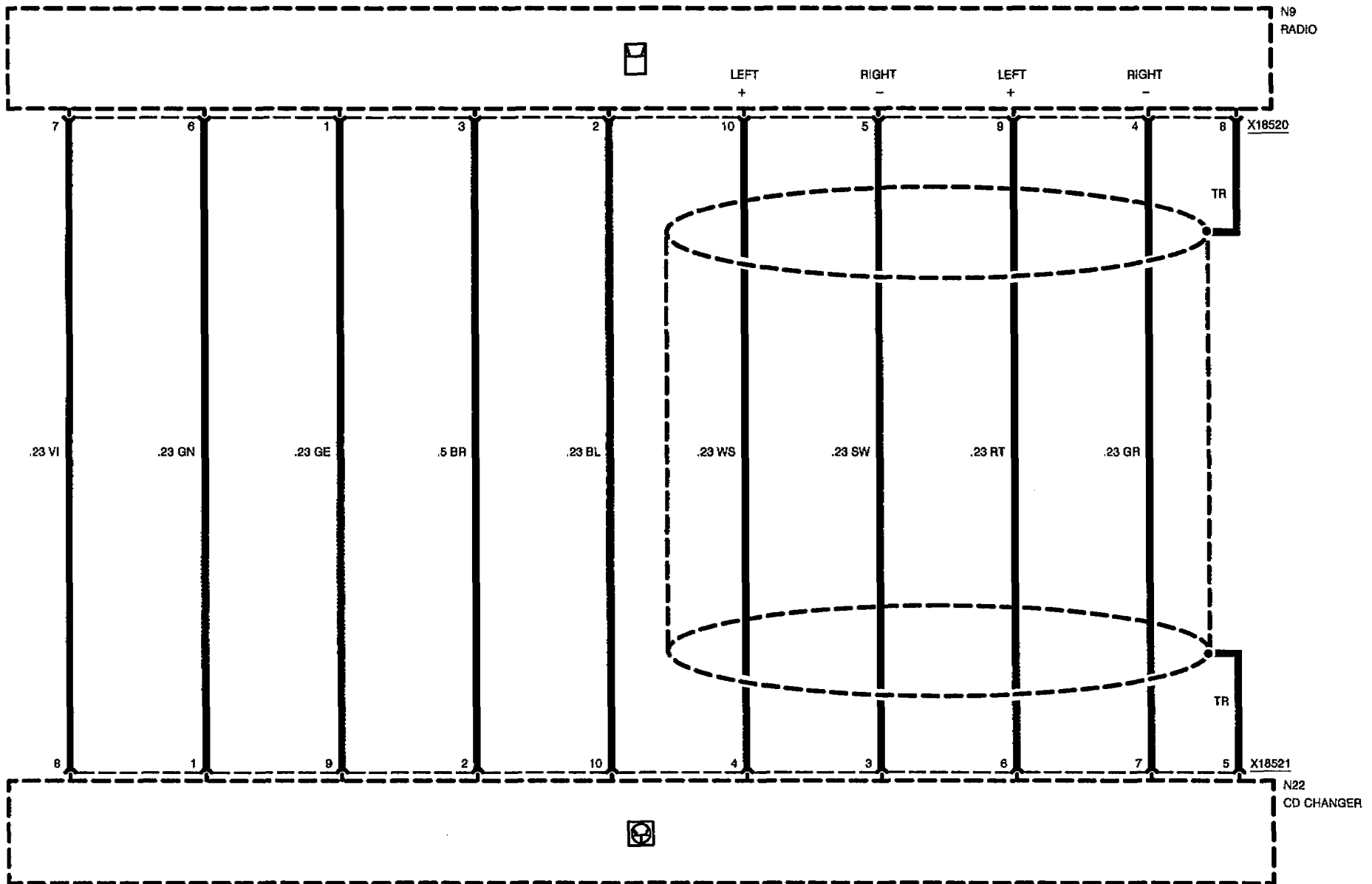
## HIFI, 10-SPEAKER SYSTEM





# RADIO/HIFI

## HIFI, 10-SPEAKER SYSTEM

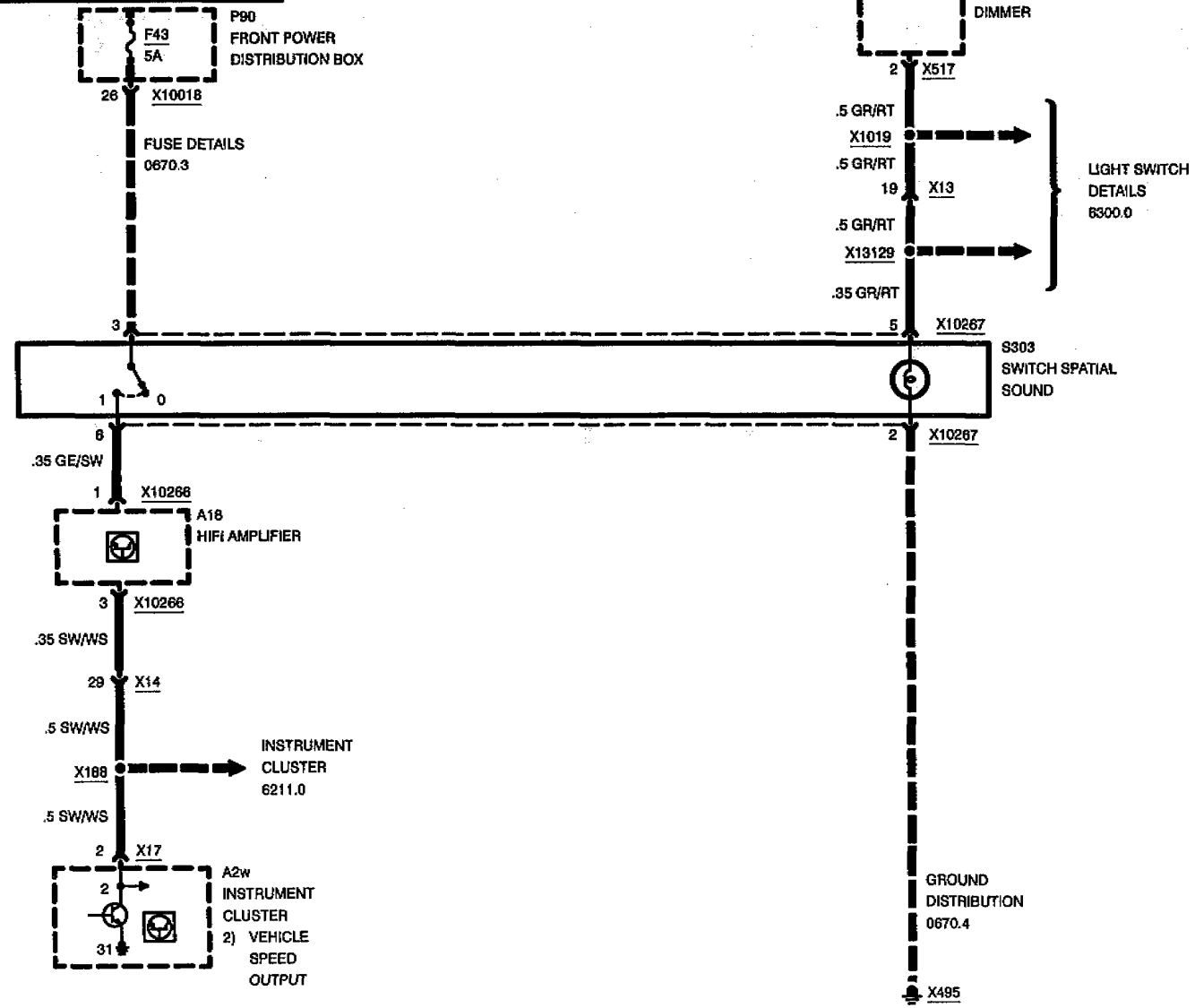




# RADIO/HIFI

## HIFI, 10-SPEAKER SYSTEM

HOT IN ACCY, RUN AND START



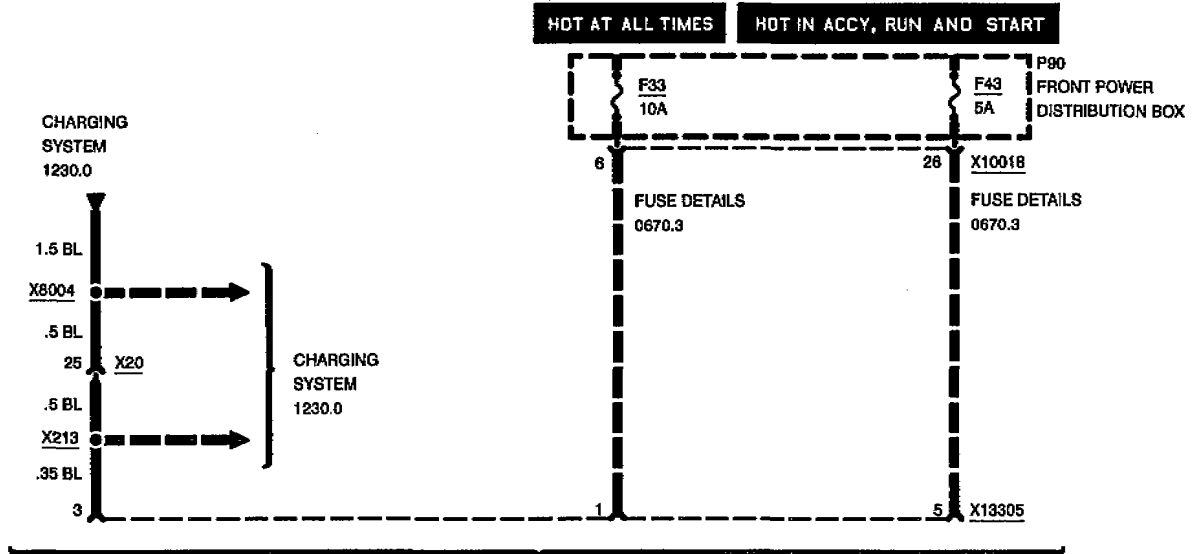




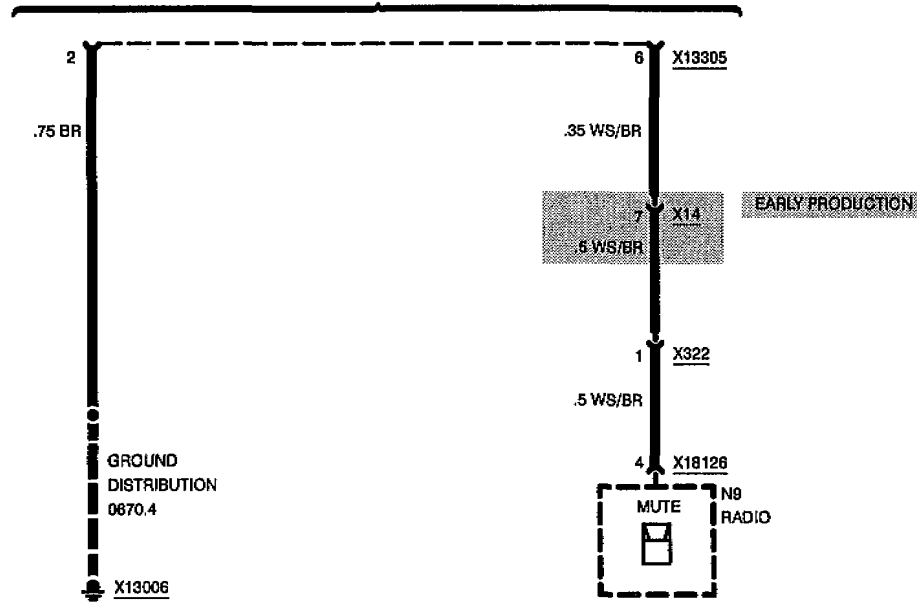


# CELLULAR TELEPHONE (PROVISIONS)

## PROVISIONS



TELEPHONE CONNECTOR

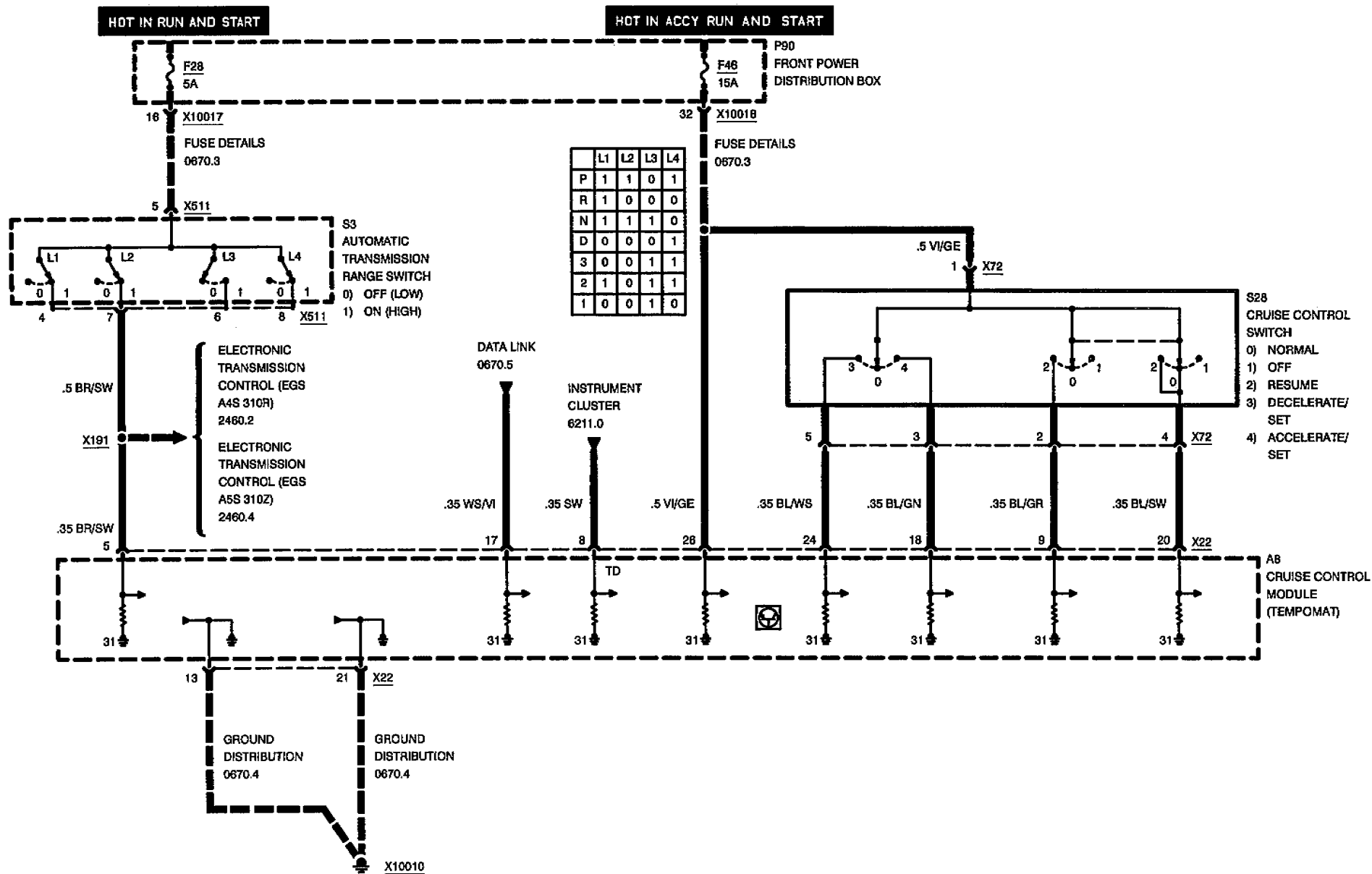




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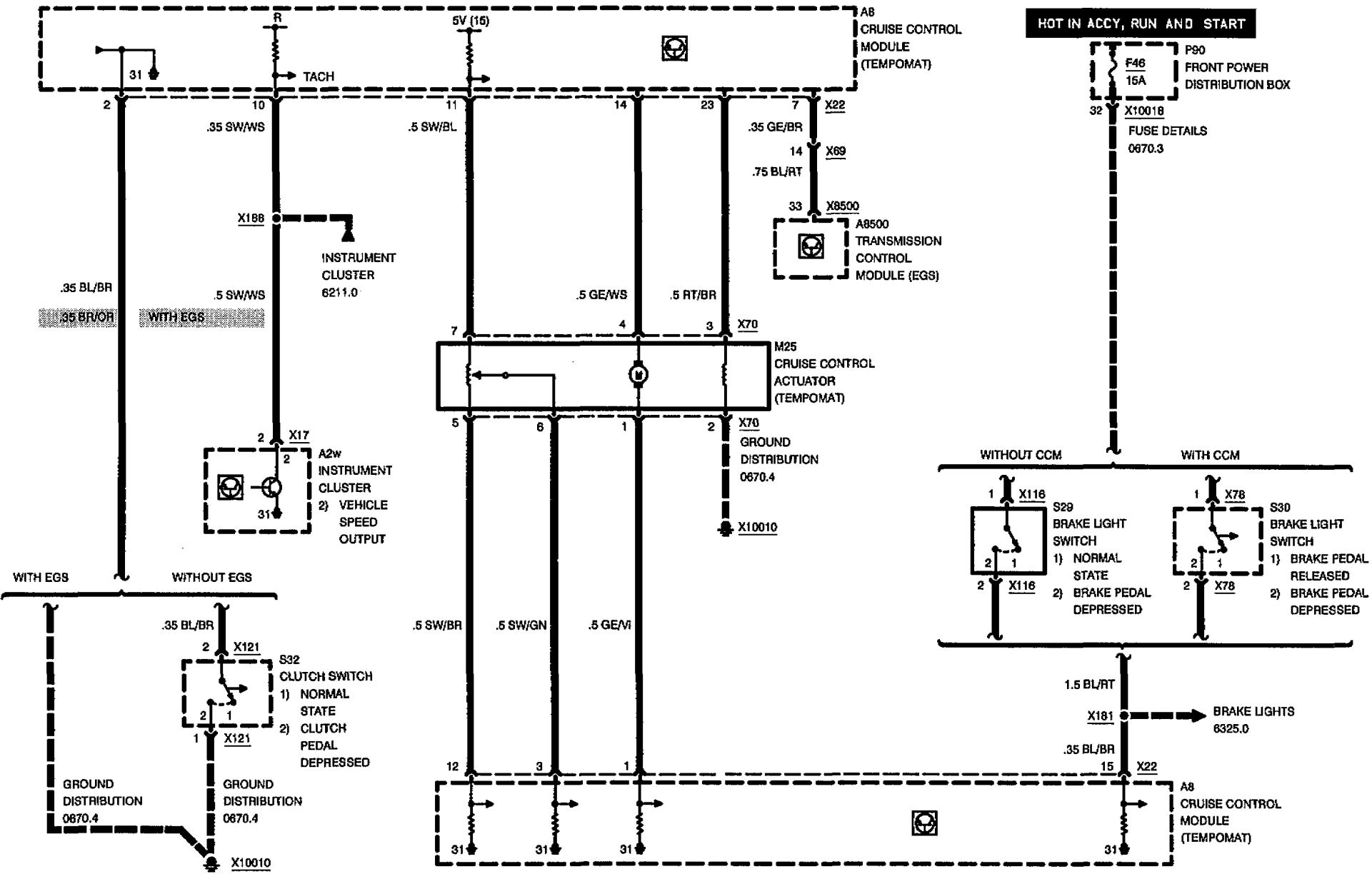


# CRUISE CONTROL (TEMPOMAT)



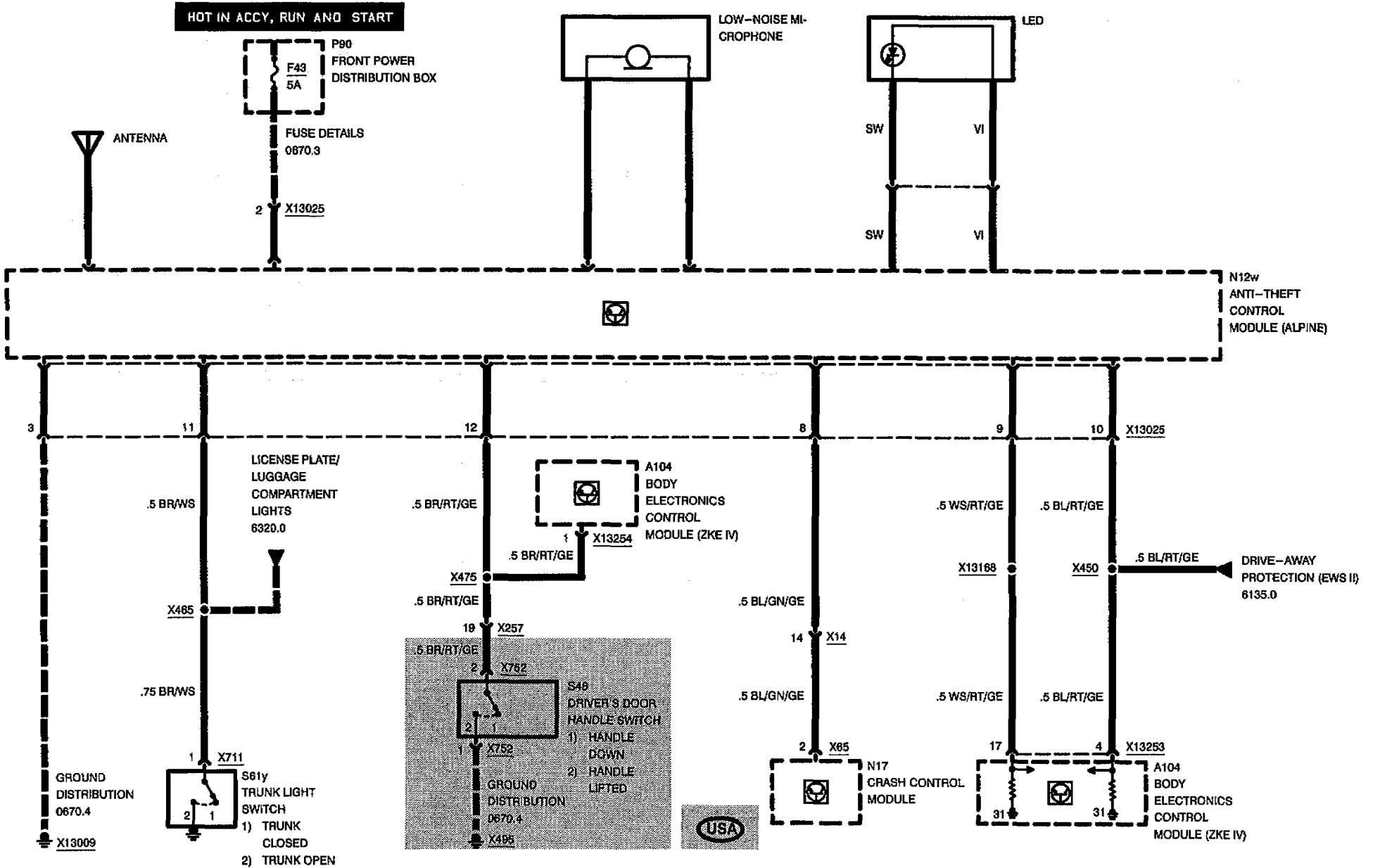


# CRUISE CONTROL (TEMPOMAT)





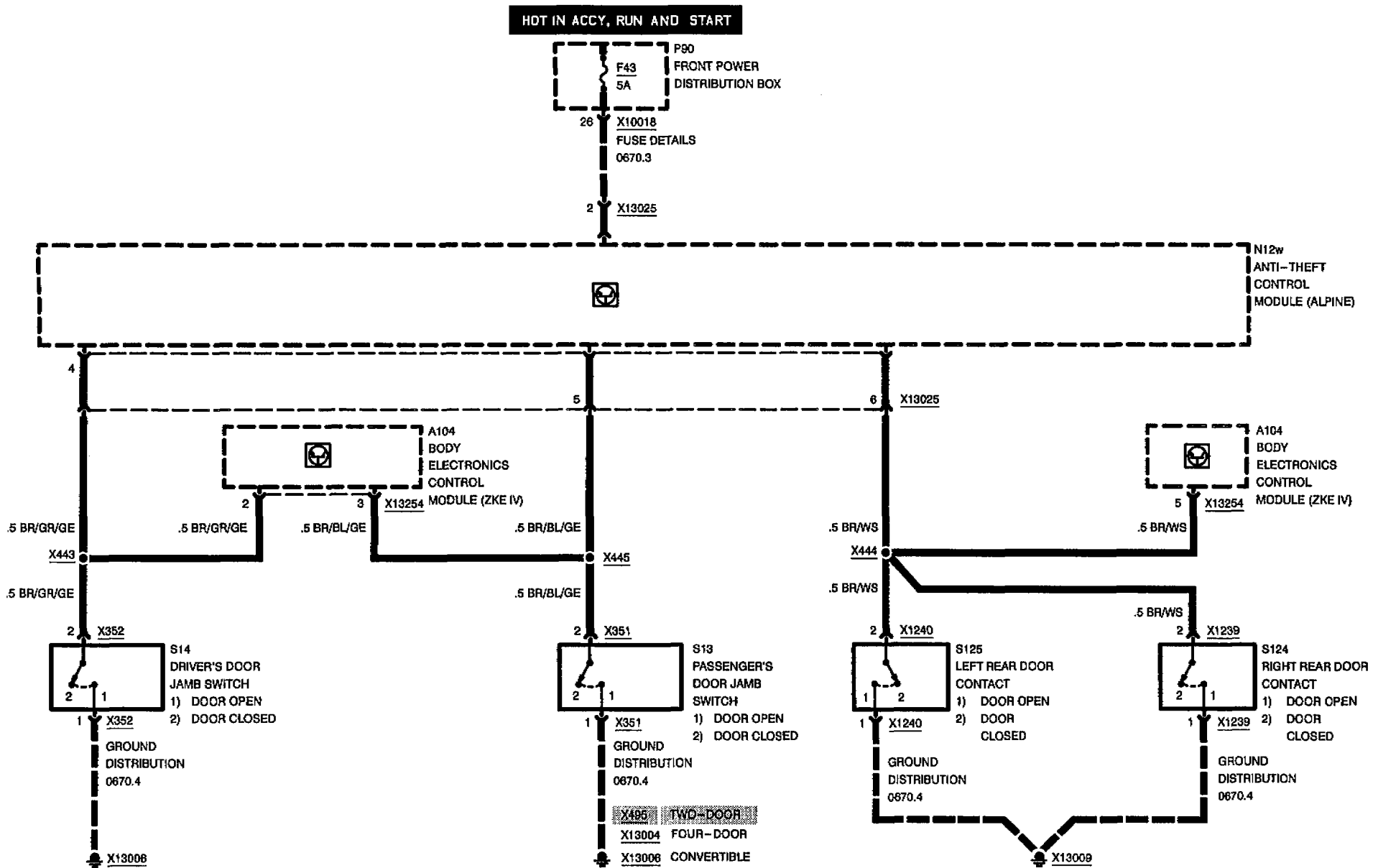
# ANTI-THEFT SYSTEM (ALPINE)



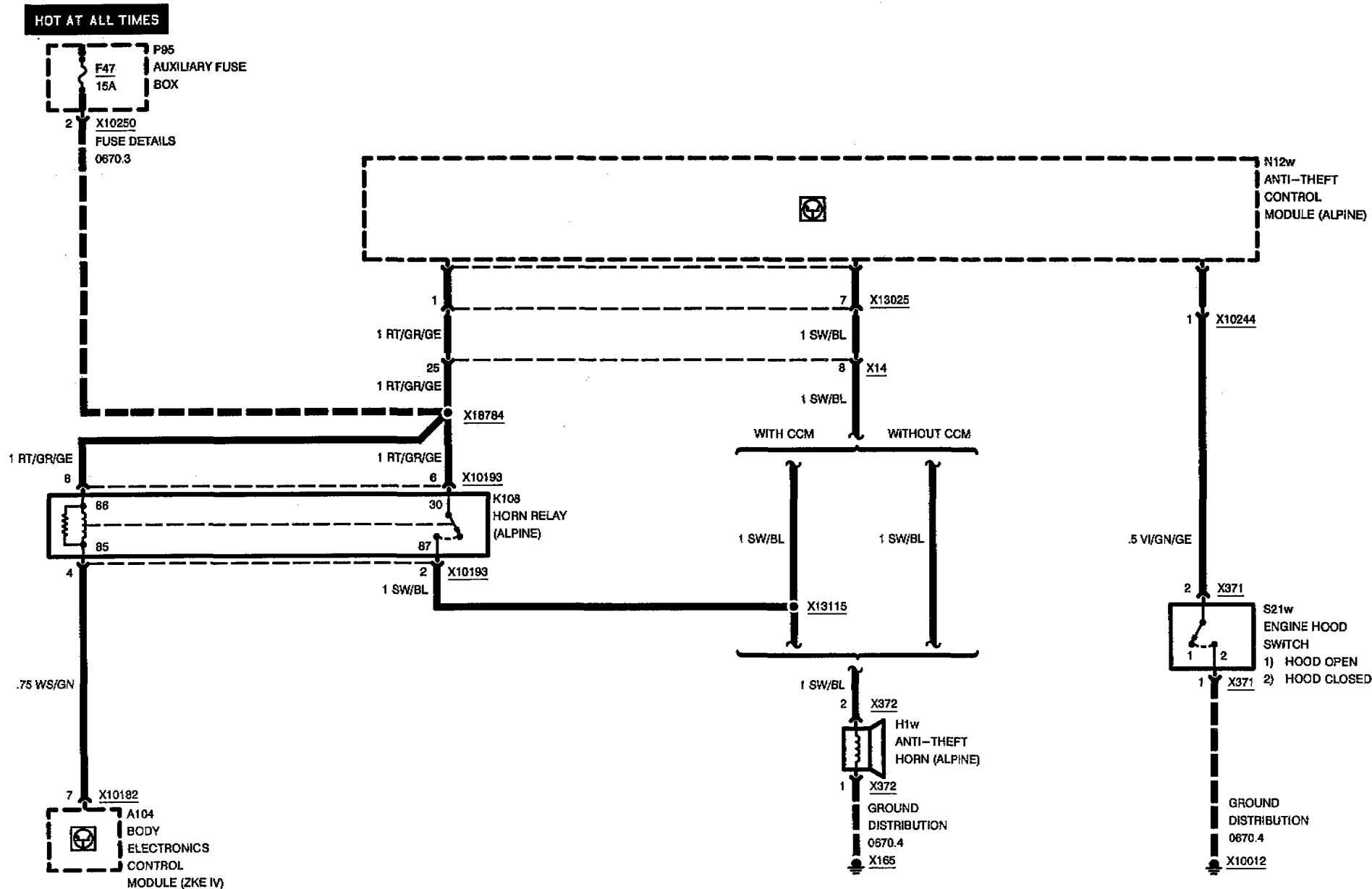


# ANTI-THEFT SYSTEM (ALPINE)

## FRONT AND REAR DOOR JAMB SWITCHES



**ANTI-THEFT SYSTEM (ALPINE)**



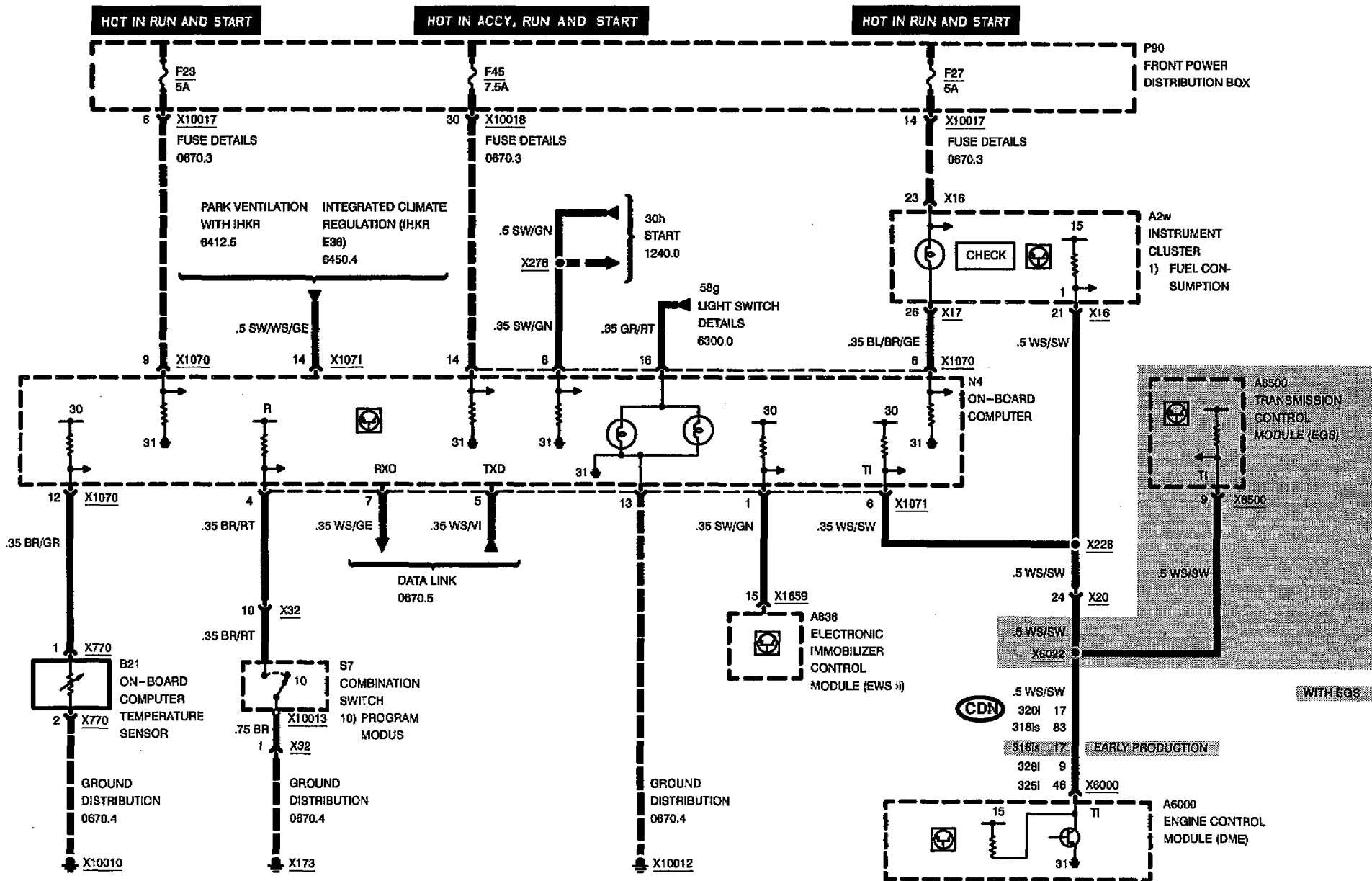






# ON-BOARD COMPUTER (BC V)

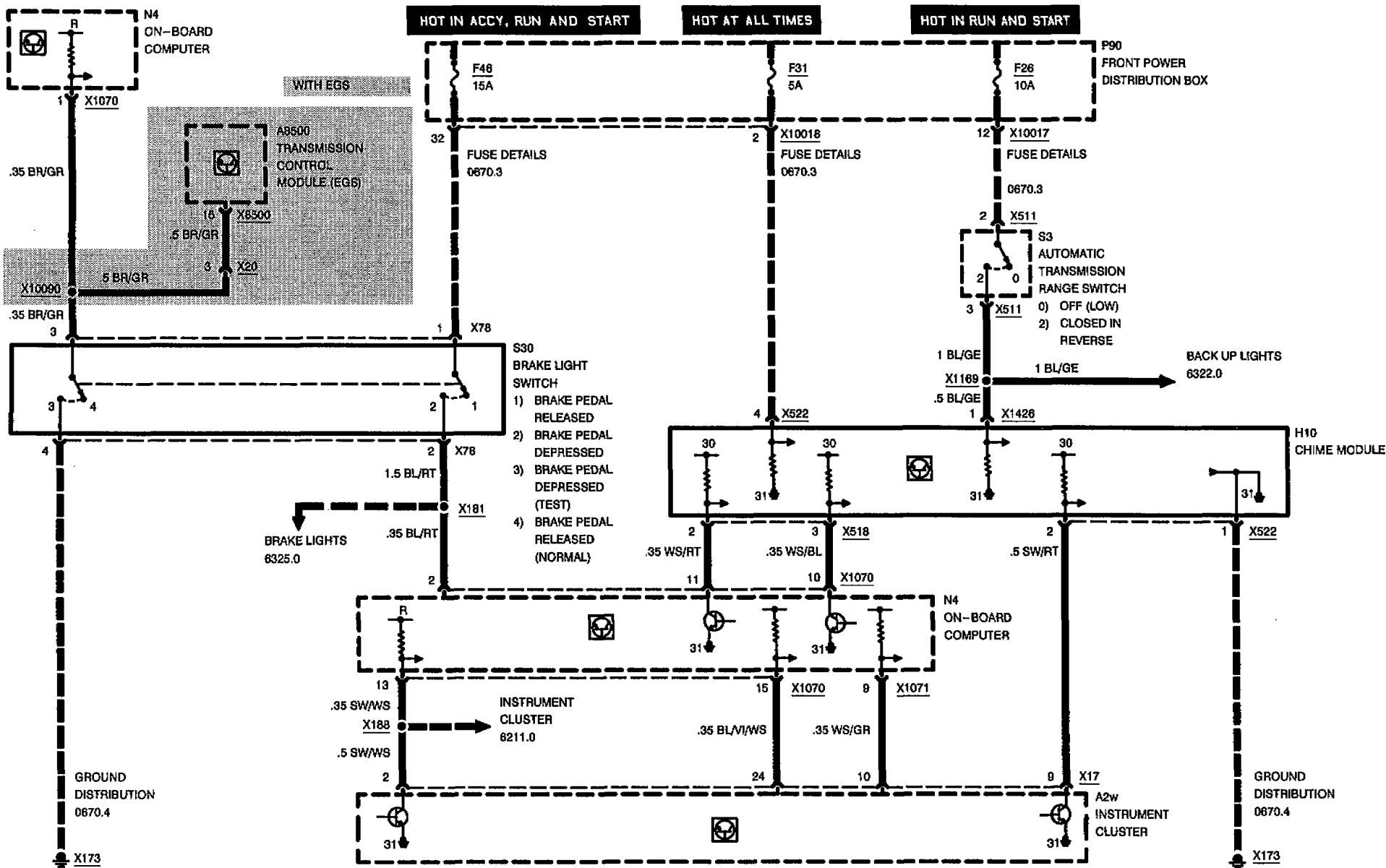
## POWER





# ON-BOARD COMPUTER (BC V)

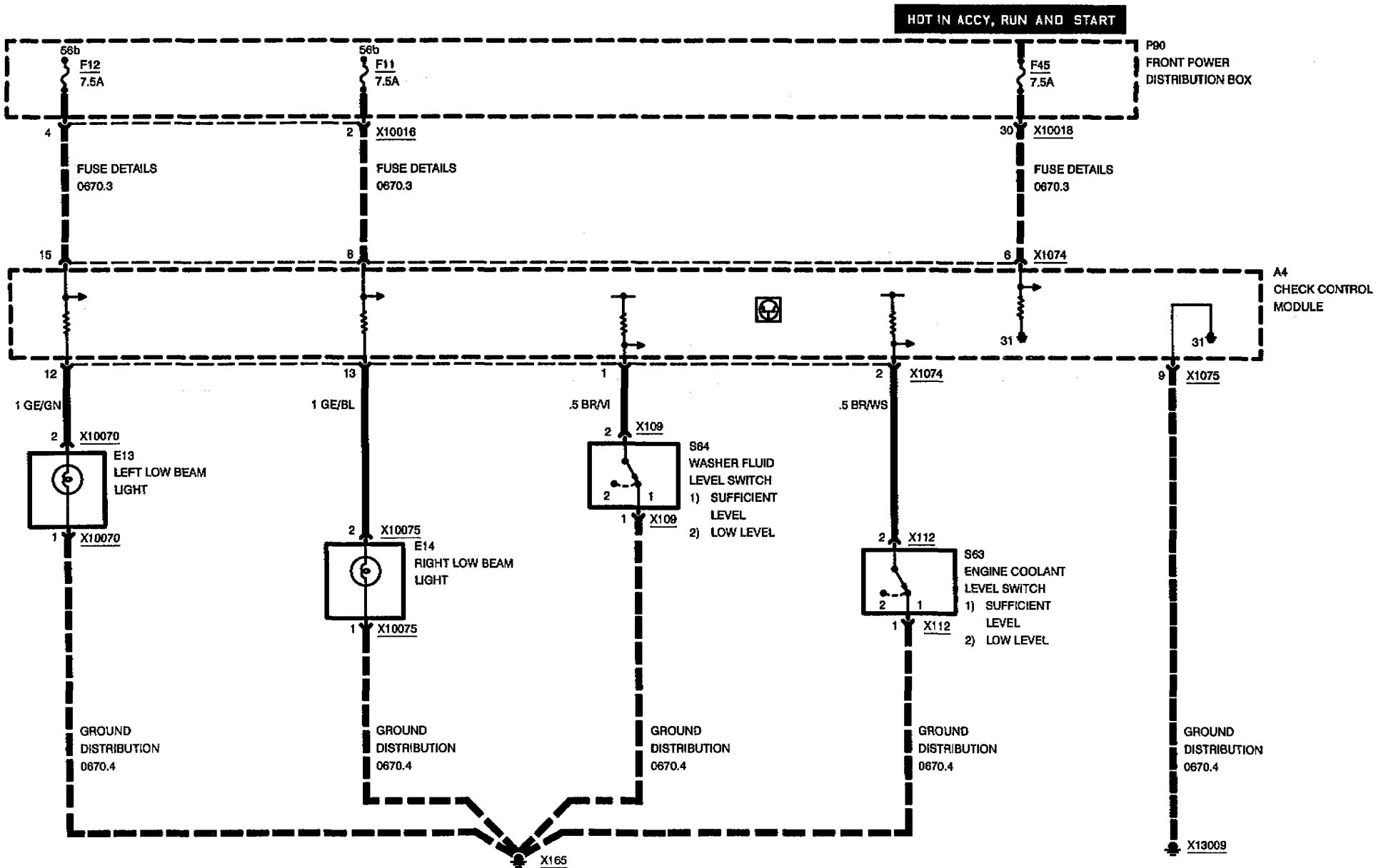
## CHIME, BRAKE LIGHT SWITCH





# ON-BOARD COMPUTER (BC V)

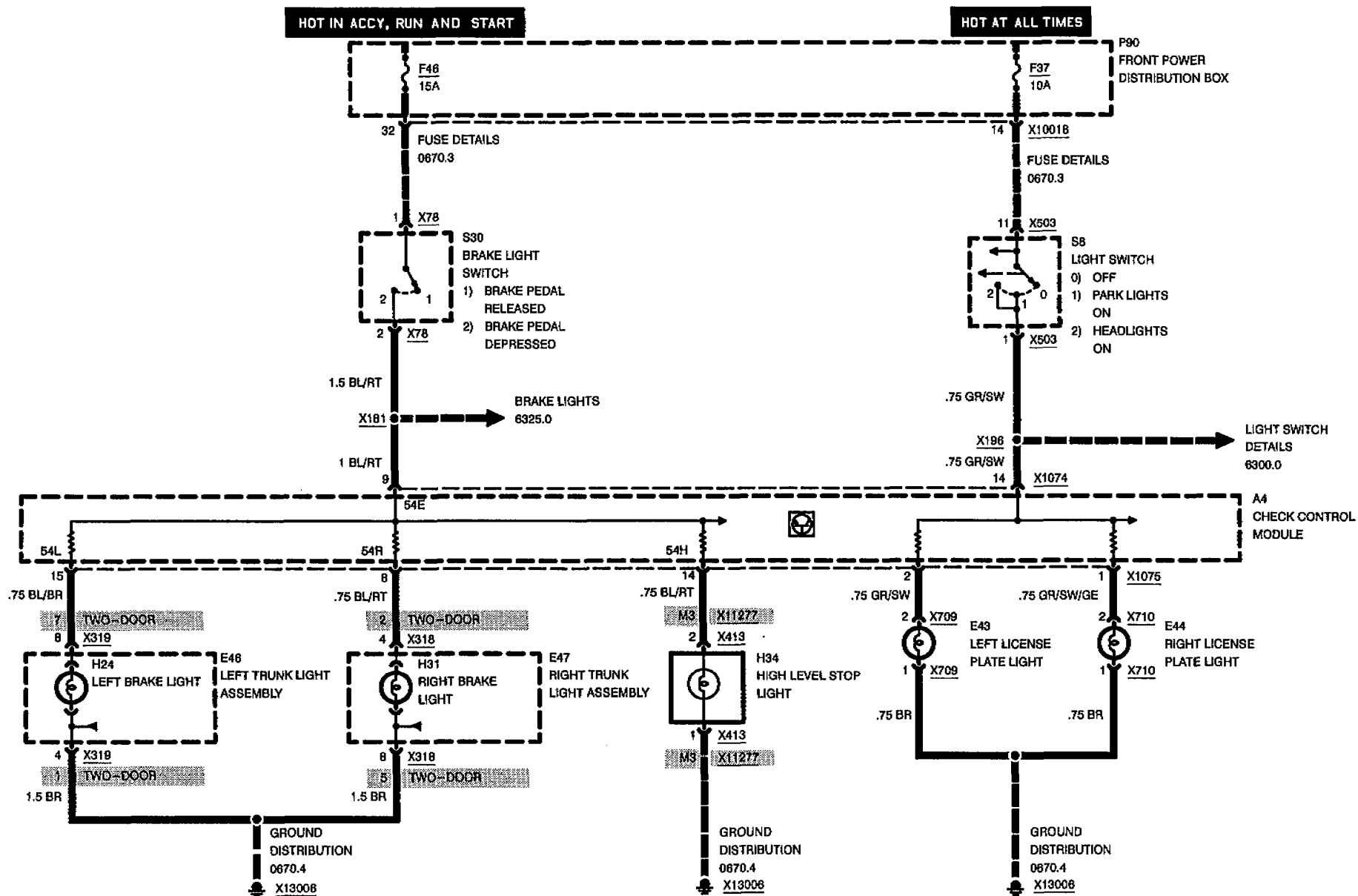
## CHECK CONTROL





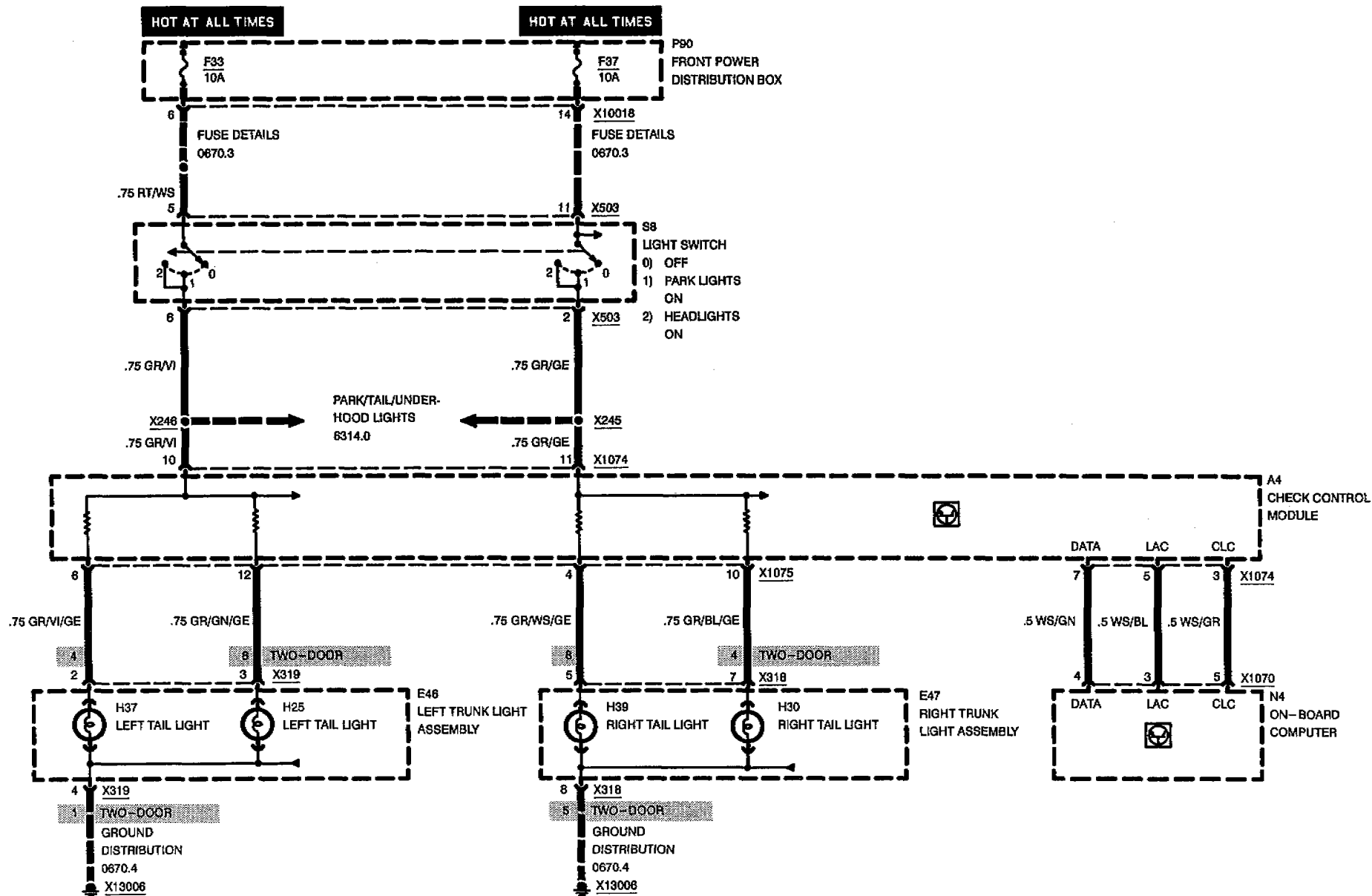
# ON-BOARD COMPUTER (BC V)

## CHECK CONTROL





# ON-BOARD COMPUTER (BC V) CHECK CONTROL



BMW  
3

7000.0



# COMPONENT LOCATION CHART

COMP.	DESCRIPTION	LOCATION	7100.0	8500.0
A2w	INSTRUMENT CLUSTER	LH side of dash	28-3	
A4	CHECK CONTROL MODULE	below LH side of dash	00-3	
A5	RELAY MODULE	behind glove box		
A7	SLIP CONTROL MODULE (ABS)	RH side of dash behind glove box	01-2	
A8	CRUISE CONTROL MODULE (TEMPOMAT)	RH side of dash behind glove box	01-2	
A12	SUPPLEMENTAL RESTRAINT SYSTEM CONTROL MODULE	below rear seat	00-2	
A18	HIFI AMPLIFIER	behind rear seats right (Convertible)	02-3	
A18	HIFI AMPLIFIER	in LH side of luggage compartment	04-1	
A35	ON-BOARD DISPLAY	center of dash center console		
A51	WIPER/WASHER MODULE	behind glove box (glove box removed)	01-1	
A52	SLIP CONTROL MODULE (ABS/ASC)	behind glove box (glove box removed)	01-3	
A56	SUNROOF CONTROL ASSEMBLY	under roof center panel	04-2	
A64	WIPER/WASHER MODULE (LOW II)	behind glove box (glove box removed)	01-1	
A87y	INTEGRATED CLIMATE REGULATION CONTROL MODULE	center console	03-2	
A96	CONVERTIBLE TOP CONTROL MODULE	in lower LH C-pillar behind side panel	02-1	
A104	BODY ELECTRONICS CONTROL MODULE (ZKE IV)	behind glove box (glove box removed)	01-1	
A113	SEAT OCCUPANCY DETECTOR	under RH front seat		
A115	AUTOMATIC CLIMATE CONTROL MODULE	behind center console	03-2	
A117	TELEPHONE EJECT BOX	center console		
A835	TRANSMITTER MODULE (EWS II)	RH side of steering column	37-3	





# COMPONENT LOCATION CHART

COMP.	DESCRIPTION	LOCATION	7100.0	8500.0
A836	ELECTRONIC IMMOBILIZER CONTROL MODULE (EWS II)	RH side of dash behind glove box	37-2	
A5024	VARIABLE CAMSHAFT CONTROL MODULE (VANOS)	rear RH side of engine compartment	04-3	
A6000	ENGINE CONTROL MODULE (DME)	rear RH side of engine compartment	00-1	
A7000	TRANSMISSION CONTROL MODULE (EGS)	rear RH side of engine compartment	00-1	
A8500	TRANSMISSION CONTROL MODULE (EGS)	rear RH side of engine compartment	00-1	
B1	RIGHT FRONT SPEED SENSOR – ABS	on RH front wheel, above brake caliper	08-3	
B2	LEFT FRONT SPEED SENSOR – ABS	on LH front wheel, above brake caliper	08-3	
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		
B6	FUEL LEVEL SENSOR	below LH side of rear seat	21-2	
B10	VEHICLE SPEED SENSOR	under rear of car	08-1	
B11	LH HEAT EXCHANGER TEMPERATURE SENSOR	center console		
B12	RH HEAT EXCHANGER TEMPERATURE SENSOR	center console		
B13	OUTSIDE TEMPERATURE SENSOR	rear of engine compartment behind RH fresh air cowl	15-2	
B14	EVAPORATOR TEMPERATURE SENSOR	RH side of LH footwell LH side of IHKR Plenum	28-1	
B16	LEFT FRONT BRAKE PAD SENSOR	on LH front wheel, above brake caliper	08-3	
B17	RIGHT REAR BRAKE PAD SENSOR	behind RH rear wheel		
B18	BRAKE FLUID LEVEL SWITCH	rear LH side of engine compartment near brake master cylinder top of brake fluid reservoir (325l)	18-3	



# COMPONENT LOCATION CHART

COMP.	DESCRIPTION	LOCATION	7100.0	8500.0
B21 ..	ON-BOARD COMPUTER TEMPERATURE SENSOR .....	front RH side of engine compartment .....	20-1	
B25y .	FUEL TANK SENSOR II .....	top of fuel tank		
B72 ..	FUEL TANK PRESSURE SENSOR .....	RH rear wheel well behind trim panel .....	35-1	
B400 .	MICROPHONE .....	center of dash		
B5022	VARIABLE CAMSHAFT CONTROL SENSOR 1	front of engine compartment (M3) .....	12-2	
B5023	VARIABLE CAMSHAFT CONTROL SENSOR 2	RH front of engine (M3) .....	12-1	
B5028	HEATED OXYGEN SENSOR 2 .....	front of engine compartment		
B6200	HEATED OXYGEN SENSOR .....	under center of car .....	15-3	
B6203	CRANKSHAFT POSITION/RPM SENSOR ...	under RH front of car rear of radiator .....	10-3	
B6204	CAMSHAFT POSITION SENSOR (CYLINDER IDENTIFICATION) .....	RH front of engine below intake manifold rear of radiator (325i) .....	11-1	
B6204	CAMSHAFT POSITION SENSOR (CYLINDER IDENTIFICATION) .....	RH front of engine (M3) .....	11-2	
B6204	CAMSHAFT POSITION SENSOR (CYLINDER IDENTIFICATION) .....	RH front of engine .....	36-2	
B6205	INTAKE AIR TEMPERATURE SENSOR .....	LH side of engine (near oil level stick) .....	13-3	
B6207	HOT FILM AIR MASS METER .....	LH side of engine		
B6208	CAMSHAFT ACTUATOR .....	front of engine		
B6209	HALL EFFECT CAMSHAFT SENSOR .....	front of engine		
B6217	HOT FILM AIR MASS METER .....	top front of engine		
B6231	OIL PRESSURE SWITCH .....	RH front of engine below intake manifold (325i) .....	11-1	
B6231	OIL PRESSURE SWITCH .....	LH side of engine (near oil level stick) (M3) .....	14-2	

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# COMPONENT LOCATION CHART

COMP.	DESCRIPTION	LOCATION	7100.0	8500.0
B6231	OIL PRESSURE SWITCH .....	RH front of engine below intake manifold (318is) .....	17-1	
B6232	ENGINE COOLANT TEMPERATURE SENSOR .....	RH front of engine below intake manifold (325i) .....	11-3	
B6232	ENGINE COOLANT TEMPERATURE SENSOR .....	RH front of engine (M3) .....	12-1	
B6232	ENGINE COOLANT TEMPERATURE SENSOR .....	RH front of engine below intake manifold (318is) .....	17-2	
B6233	AIR FLOW SENSOR .....	LH side of engine compartment right of LH side shock tower		
B6236	ENGINE COOLANT TEMPERATURE SENSOR .....	RH front of engine below intake manifold (325i) .....	11-1	
B6236	ENGINE COOLANT TEMPERATURE SENSOR .....	RH front of engine (M3) .....	12-1	
B6236	ENGINE COOLANT TEMPERATURE SENSOR .....	RH front of engine below intake manifold (318is) .....	17-2	
B6238	OIL TEMPERATURE SENSOR .....	LH side of engine (M3) .....	14-2	
B6240	KNOCK SENSOR .....	top front of engine		
B6241	CYL. 1-2 KNOCK SENSOR .....	top front of engine		
B6241w	CYL. 1-3 KNOCK SENSOR .....	top front of engine		
B6242	CYL. 3-4 KNOCK SENSOR .....	top front of engine .....	14-3	
B6242w	CYL. 4-6 KNOCK SENSOR .....	top front of engine		
B6243	CYL. 5-6 KNOCK SENSOR .....	top front of engine (M3)		
B6256	DUAL TEMPERATURE SENSOR (COOLANT TEMPERATURE) .....	RH front of engine below intake manifold		
B9508	PRESSURE SWITCH .....	front RH side of engine compartment near RH headlight assembly .....	09-3	



# COMPONENT LOCATION CHART

COMP.	DESCRIPTION	LOCATION	7100.0	8500.0
B62001	OXYGEN SENSOR (IN FRONT OF CATALYTIC CONVERTER) .....	on catalytic converter		
B62002	OXYGEN SENSOR (BEHIND CATALYTIC CONVERTER) .....	on catalytic converter		
B62101	OXYGEN SENSOR I (IN FRONT OF CATALYTIC CONVERTER) .....	on catalytic converter		
B62102	OXYGEN SENSOR I (BEHIND CATALYTIC CONVERTER) .....	on catalytic converter		
B62201	OXYGEN SENSOR II (IN FRONT OF CATALYTIC CONVERTER) .....	on catalytic converter		
B62202	OXYGEN SENSOR II (BEHIND CATALYTIC CONVERTER) .....	on catalytic converter		
C101	CONTACT RING .....	top of steering column .....	24-2	
C900	SUPPRESSION FILTER .....	in upper RH C-pillar .....	33-2	
D100	DATA LINK CONNECTOR .....	rear RH side of engine compartment .....	05-1	
E9	REAR DEFOGGER I .....	in upper RH C-pillar .....	33-2	
E10	REAR DEFOGGER/ANTENNA .....	in rear window		
E11	LEFT HIGH BEAM LIGHT .....	near LH headlight assembly		
E12	RIGHT HIGH BEAM LIGHT .....	near RH headlight assembly		
E13	LEFT LOW BEAM LIGHT .....	near LH headlight assembly		
E14	RIGHT LOW BEAM LIGHT .....	near RH headlight assembly		
E15	LEFT PARK LIGHT .....	front of vehicle		
E19	RIGHT PARK LIGHT .....	front of vehicle		
E20	UNDERHOOD LIGHT .....	on underside of engine hood		



# COMPONENT LOCATION CHART

COMP.	DESCRIPTION	LOCATION	7100.0	8500.0
E25 ...	FRONT ASHTRAY LIGHT .....	center console .....	31-2	
E26 ...	LEFT FOG LIGHT .....	under LH front bumper .....	08-2	
E27 ...	RIGHT FOG LIGHT .....	under RH front bumper .....	08-2	
E28 ...	FRONT CIGAR LIGHTER .....	near gearshift lever		
E28y ..	REAR ASHTRAY LIGHT .....	below center console .....	31-2	
E28y ..	REAR ASHTRAY LIGHT .....	behind center console		
E29 ...	FRONT CIGAR LIGHTER LIGHT .....	center console		
E32 ...	TRUNK COMPARTMENT LIGHT .....	in luggage compartment		
E34 ...	FRONT DOME LIGHT/MAP READING ASSEMBLY .....	under roof center panel .....	04-2	
E35 ...	DRIVER'S MAKEUP MIRROR LIGHT .....	center of windshield header		
E36 ...	PASSENGER'S MAKEUP MIRROR LIGHT ..	center of windshield header .....	23-1	
E39 ...	LEFT REAR INTERIOR LIGHT .....	in upper LH C-pillar .....	33-1	
E40 ...	RIGHT REAR INTERIOR LIGHT .....	in upper RH C-pillar .....	33-2	
E42 ...	GLOVE BOX LIGHT .....	LH side of glove box .....	25-1	
E43 ...	LEFT LICENSE PLATE LIGHT .....	underside of trunk lid, near license plate .....	09-1	
E44 ...	RIGHT LICENSE PLATE LIGHT .....	underside of trunk lid, near license plate .....	09-1	
E45y ..	CASSETTE BOX LIGHT .....	center of dash		
E46 ...	LEFT TRUNK LIGHT ASSEMBLY .....	in LH rear side of luggage compartment		
E47 ...	RIGHT TRUNK LIGHT ASSEMBLY .....	in RH rear side of luggage compartment .....	03-3	
E56 ...	DRIVER'S SEATBACK HEATER .....	in upper LH front seatback .....	23-3	
E57 ...	DRIVER'S SEAT HEATER .....	under LH front seat .....	23-3	



# COMPONENT LOCATION CHART

COMP.	DESCRIPTION	LOCATION	7100.0	8500.0
E58 ...	PASSENGER'S SEAT HEATER .....	underside of RH front seat		
E59 ...	PASSENGER'S SEATBACK HEATER .....	in upper RH front seatback		
E82 ...	TRANSMISSION POSITION INDICATOR LIGHT .....	center console		
E99 ...	HARD TOP CONNECTOR 1 .....	in convertible top compartment		
E100y	HARD TOP CONNECTOR 2 .....	in convertible top compartment		
E101 .	LEFT TRUNK COMPARTMENT LIGHT .....	in LH rear side of luggage compartment Convertible		
E102 .	RIGHT TRUNK COMPARTMENT LIGHT .....	in RH rear side of luggage compartment Convertible		
E104 .	THROTTLE FLAP HEATER .....	LH side of engine compartment		
G1 ...	BATTERY .....	rear RH side of engine compartment		
G5 ...	DRIVER'S AIR BAG GAS GENERATOR .....	behind steering wheel .....		24-2
G6 ...	PASSENGER'S AIR BAG GAS GENERATOR .....	RH side of dash .....		27-2
G6430	B+ JUMP START JUNCTION POINT .....	rear RH side of engine compartment back of RH side shock tower .....		05-1
G6509	GENERATOR .....	front LH side of engine compartment .....		05-2
H1w ..	ANTI-THEFT HORN (ALPINE) .....	front RH side of engine compartment		
H2 ...	LEFT HORN .....	front of engine compartment		
H3 ...	RIGHT HORN .....	front of engine compartment		
H4 ...	RIGHT FRONT TURN LIGHT .....	front of vehicle		
H5 ...	RIGHT REAR TURN LIGHT .....	RH side of body rear end		
H6 ...	LEFT REAR TURN LIGHT .....	LH side of body rear end		
H7 ...	LEFT FRONT TURN LIGHT .....	front of vehicle		
H8 ...	RIGHT FRONT AUXILIARY TURN LIGHT ...	front of vehicle		



## COMPONENT LOCATION CHART

COMP.	DESCRIPTION	LOCATION	7100.0	8500.0
H9	... LEFT FRONT AUXILIARY TURN LIGHT .....	front of vehicle		
H10	.. CHIME MODULE .....	below LH side of dash		
H24	.. LEFT BRAKE LIGHT .....	LH side of body rear end		
H25	.. LEFT TAIL LIGHT .....	LH side of body rear end		
H26	.. LEFT REAR FOG LIGHT .....	LEFT TRUNK LIGHT ASSEMBLY		
H27	.. LEFT BACK UP LIGHT .....	LEFT TRUNK LIGHT ASSEMBLY		
H28	.. RIGHT BACK UP LIGHT .....	LEFT TRUNK LIGHT ASSEMBLY		
H30	.. RIGHT TAIL LIGHT .....	RIGHT TRUNK LIGHT ASSEMBLY		
H31	.. RIGHT BRAKE LIGHT .....	RIGHT TRUNK LIGHT ASSEMBLY		
H34	.. HIGH LEVEL STOP LIGHT .....	at back of rear window shelf		
H37	.. LEFT TAIL LIGHT .....	RIGHT TRUNK LIGHT ASSEMBLY		
H38	.. TELEPHONE TRANSCEIVER .....	rear side of luggage compartment		
H41	.. LEFT FRONT SPEAKER .....	in lower LH A-pillar		
H42	.. LEFT MID-HIGH RANGE SPEAKER .....	in upper LH front door		
H43	.. RIGHT MID-HIGH RANGE SPEAKER .....	in upper RH front door		
H45	.. RIGHT REAR SPEAKER .....	under rear window shelf		
H46	.. LEFT REAR SPEAKER .....	under rear window shelf		
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 .....	under rear window shelf		
H53	.. RIGHT REAR HIGH RANGE SPEAKER .....	under rear window shelf		
H54	.. RIGHT FRONT MIDRANGE SPEAKER .....	in upper RH front door		



# COMPONENT LOCATION CHART

COMP.	DESCRIPTION	LOCATION	7100.0	8500.0
H55	LEFT FRONT MIDRANGE SPEAKER	in upper LH front door		
H56	LEFT REAR HIGH RANGE SPEAKER	under rear window shelf		
H57	LEFT REAR LOW RANGE SPEAKER	under rear window shelf		
H58	LEFT FRONT LOW RANGE SPEAKER	in lower LH A-pillar		
H59	LEFT FRONT HIGH RANGE SPEAKER	in upper LH front door		
K2	HORN RELAY	rear LH side of engine compartment in Power Distribution Box	19-2	
K4	BLOWER RELAY	rear LH side of engine compartment in Power Distribution Box	19-2	
K9	UNLOADER RELAY, TERMINAL 15	behind LH footwell trim	25-3	
K10	ABS RELAY	rear LH side of engine compartment in Power Distribution Box	19-1	
K13	REAR DEFOGGER RELAY	rear LH side of engine compartment in Power Distribution Box	19-1	
K16	HAZARD FLASHER RELAY	rear LH side of engine compartment in Power Distribution Box	19-2	
K19	COMPRESSOR CONTROL RELAY	rear LH side of engine compartment in Power Distribution Box	19-1	
K21	NORMAL SPEED RELAY	rear LH side of engine compartment in Power Distribution Box	19-3	
K22	HIGH SPEED RELAY	rear LH side of engine compartment in Power Distribution Box	19-3	
K46	HIGH BEAM LIGHT RELAY	LH side of dash behind instrument cluster	02-2	
K47	FRONT FOG LIGHT RELAY	rear LH side of engine compartment in Power Distribution Box	19-2	
K48	LOW BEAM LIGHT RELAY	rear LH side of engine compartment in Power Distribution Box	19-2	
K75	ABS PUMP MOTOR RELAY	rear LH side of engine compartment in Power Distribution Box	19-1	
K99	REAR WINDOW BLOWER RELAY	behind glove box left	25-2	
K108	HORN RELAY (ALPINE)	behind glove box left	01-2	
K117	TRUNK LID RELAY	behind glove box right		
K125	ABS PUMP MOTOR RELAY, TIMED	rear LH side of engine compartment in Power Distribution Box	37-1	





# COMPONENT LOCATION CHART

COMP.	DESCRIPTION	LOCATION	7100.0	8500.0
K450	PARK VENTILATION RELAY	footwell, driver's side	02-2	
K5029	DOUBLE RELAY	rear LH side of engine compartment in Power Distribution Box (M3)	19-3	
K6300	ENGINE CONTROL MODULE RELAY	rear LH side of engine compartment in Power Distribution Box	19-1	
K6300	ENGINE CONTROL MODULE RELAY	rear LH side of engine compartment in Power Distribution Box (M3)	19-3	
K6300	ENGINE CONTROL MODULE RELAY	rear LH side of engine compartment in Power Distribution Box	37-1	
K6301	CYL. 1-6 FUEL PUMP RELAY	rear LH side of engine compartment in Power Distribution Box	19-1	
K6301	CYL. 1-6 FUEL PUMP RELAY	rear LH side of engine compartment in Power Distribution Box	37-1	
K6301w	FUEL PUMP RELAY	rear LH side of engine compartment in Front Power Distribution Box		
K6303	OXYGEN SENSOR RELAY	Power Distribution Box rear LH side of engine compartment	19-2	
K6304	SECONDARY AIR PUMP RELAY	rear LH side of engine compartment in Power Distribution Box (M3)	37-1	
K6307	FUEL PUMP/START IDENTIFICATION RELAY	rear LH side of engine compartment in Power Distribution Box (M3)	19-3	
K6314	DELAY RELAY	below LH side of dash		
M2	FUEL PUMP	below RH side of rear seat	20-2	
M3	WIPER MOTOR	rear of engine compartment below center of cowl	16-1	
M4	WASHER PUMP	front RH side of engine compartment on washer fluid reservoir	10-1	
M7	HEADLIGHT/FOG LIGHT WASHER PUMP	front RH side of engine compartment on washer fluid reservoir	10-2	
M9	AUXILIARY FAN MOTOR	behind front grille behind trim panel	18-1	
M12	DRIVER'S DOOR LOCK MOTOR	in upper LH front door behind trim panel		
M13	PASSENGER'S DOOR LOCK MOTOR	in upper RH front door behind trim panel		
M14	RIGHT REAR DOOR LOCK MOTOR	in upper RH rear door behind trim panel		
M15	LEFT REAR DOOR LOCK MOTOR	in upper LH rear door behind trim panel		



# COMPONENT LOCATION CHART

COMP.	DESCRIPTION	LOCATION	7100.0	8500.0
M16 ..	GAS FILLER LOCK MOTOR .....	in RH rear side of luggage compartment .....	03-3	
M17 ..	TRUNK LOCK MOTOR .....	rear side of luggage compartment		
M20 ..	LEFT REAR WINDOW MOTOR .....	in lower LH rear door behind trim panel		
M21 ..	DRIVER'S WINDOW MOTOR .....	LH front door behind door panel .....	31-3	
M22 ..	RIGHT REAR WINDOW MOTOR .....	in lower RH rear door behind door panel		
M23 ..	PASSENGER'S WINDOW MOTOR .....	RH front door behind door panel .....	32-1	
M24 ..	SUNROOF MOTOR .....	center of windshield header		
M25 ..	CRUISE CONTROL ACTUATOR (TEMPOMAT) .....	front LH side of engine compartment .....	18-2	
M30 ..	BLOWER MOTOR .....	rear of engine compartment behind RH fresh air cowl .....	15-2	
M34 ..	DASH VENT MIXING FLAP MOTOR .....	below RH side of dash center console right .....	29-3	
M35 ..	DEFROSTER FLAP MOTOR .....	RH side of IHKA Plenum		
M36 ..	FRESH AIR FLAP MOTOR .....	below LH side of dash RH side of steering column .....	29-2	
M40 ..	RECIRCULATION FLAP MOTOR .....	below LH side of dash RH side of steering column .....	29-2	
M43 ..	CONVERTIBLE TOP STORAGE LID LOCK MOTOR .....	in convertible top compartment left .....	22-1	
M44 ..	REGULATION FLAP MOTOR .....	RH side of IHKA Plenum		
M46 ..	REAR RECIRCULATION FLAP MOTOR .....	RH side of IHKA Plenum		
M50 ..	DRIVER'S SEAT CUSHION TILT MOTOR ...	under LH front seat .....	23-3	
M51 ..	DRIVER'S SEAT MOVEMENT MOTOR .....	under LH front seat .....	23-3	
M52 ..	DRIVER'S SEAT HEIGHT MOTOR .....	under LH front seat .....	23-3	
M53 ..	DRIVER'S SEATBACK RECLINER MOTOR .	under LH front seat .....	23-3	



# COMPONENT LOCATION CHART

COMP.	DESCRIPTION	LOCATION	7100.0	8500.0
M58 ..	PASSENGER'S SEATBACK RECLINER MOTOR .....	under RH front seat		
M59 ..	PASSENGER'S SEAT HEIGHT MOTOR ....	under RH front seat		
M60 ..	PASSENGER'S SEAT MOVEMENT MOTOR	under RH front seat		
M61 ..	PASSENGER'S SEAT CUSHION TILT MOTOR .....	under RH front seat		
M93 ..	AUXILIARY THROTTLE POSITION MOTOR (ADS) .....	front of engine compartment		
M98 ..	LEFT REAR WINDOW MOTOR .....	left from LH rear seat behind trim panel .....	22-2	
M99 ..	RIGHT REAR WINDOW MOTOR .....	RH side of RH rear seat behind trim panel .....	22-2	
M100 .	CONVERTIBLE TOP STORAGE LID MOTOR	in LH side of luggage compartment .....	34-1	
M101 .	CONVERTIBLE TOP MOTOR .....	in LH side of luggage compartment .....	34-3	
M103 .	LH POP OUT WINDOW MOTOR .....	in lower LH C-pillar		
M104 .	RH POP OUT WINDOW MOTOR .....	in lower RH C-pillar		
M105 .	REAR WINDOW BLOWER .....	behind rear seats .....	21-3	
M107 .	GLOVE BOX LOCK MOTOR .....	RH side of dash behind glove box		
M132 .	WINDSCREEN COWL PANEL LOCK MOTOR .....	front cover .....	38-2	
M6133	AIR PUMP .....	front of engine compartment		
M6510	STARTER .....	rear LH side of engine compartment		
N2 ...	FINAL STAGE UNIT .....	behind LH side of dash		
N3 ...	DIMMER .....	LH side of dash .....	26-1	
N4 ...	ON-BOARD COMPUTER .....	center console .....	03-1	



# COMPONENT LOCATION CHART

COMP.	DESCRIPTION	LOCATION	7100.0	8500.0
N8 ...	ANTENNA AMPLIFIER AM/FM	In upper LH C-pillar	33-1	
N8 ...	ANTENNA AMPLIFIER AM/FM	in LH side of TRUNK (CONVERTIBLE)		
N10 ..	MULTI-FUNCTION CLOCK	center console		
N12w .	ANTI-THEFT CONTROL MODULE (ALPINE)	behind glove box (glove box removed)	01-3	
N17 ..	CRASH CONTROL MODULE	footwell, driver's side	02-2	
N22 ..	CD CHANGER	in LH forward side of luggage compartment	03-3	
N24 ..	ROLLOVER SENSOR	behind rear seats left	02-1	
N404 .	DIVERSITY	in upper LH C-pillar		
N444 .	FM AMPLIFIER HLO	in upper RH C-pillar		
P90 ...	FRONT POWER DISTRIBUTION BOX	rear LH side of engine compartment	05-3	
P95 ...	AUXILIARY FUSE BOX	footwell, driver's side		
P97 ...	AUXILIARY FUSE BOX	LH side of dash behind instrument cluster	02-2	
R11 ..	BLOWER RESISTORS	behind center of dashboard left	29-1	
R6240	RESISTOR	front of engine compartment		
R6252	THROTTLE POSITION SENSOR	RH front of engine (M3)	11-2	
R6252	THROTTLE POSITION SENSOR	LH side of engine (near oil level stick) (320i-325i)	13-3	
R6252	THROTTLE POSITION SENSOR	LH side of engine compartment (318is)	17-3	
R8554	RESISTOR	front of engine compartment		
S2 ....	IGNITION SWITCH	LH side of dash	24-3	
S3 ....	AUTOMATIC TRANSMISSION RANGE SWITCH	center console near gearshift lever	30-3	



## COMPONENT LOCATION CHART

COMP.	DESCRIPTION	LOCATION	7100.0	8500.0
S4	HORN SWITCH	top of steering column	24-2	
S5	WIPER/WASHER SWITCH	LH side of dash RH side of steering column above		
S6	ASC SWITCH	center console	30-2	
S7	COMBINATION SWITCH	LH side of steering column	24-3	
S8	LIGHT SWITCH	LH side of dash	26-1	
S10	FOG LIGHT SWITCH	LH side of dash		
S13	PASSENGER'S DOOR JAMB SWITCH	rear RH door pillar	33-3	
S14	DRIVER'S DOOR JAMB SWITCH	LH rear door jamb	33-3	
S17	MIRROR CONTROL SWITCH	in upper LH front door		
S18	HAZARD SWITCH	center console near gearshift lever	30-3	
S19	UNDERHOOD LIGHT SWITCH	near RH headlight assembly		
S21w	ENGINE HOOD SWITCH	front RH side of engine compartment on washer fluid reservoir	10-2	
S27	INERTIA SWITCH	in lower RH A-pillar		
S28	CRUISE CONTROL SWITCH	LH side of dash RH side of steering column above	24-3	
S29	BRAKE LIGHT SWITCH	LH footwell on brake pedal support bracket behind LH footwell trim	26-3	
S30	BRAKE LIGHT SWITCH	LH footwell on brake pedal support bracket behind LH footwell trim	26-2	
S31	PARK BRAKE SWITCH	center console on rear of park brake lever	31-2	
S32	CLUTCH SWITCH	LH footwell on clutch pedal support bracket behind LH footwell trim	26-3	
S36	TEMPERATURE SWITCH	front RH side of engine compartment near RH headlight assembly	09-3	
S36y	DOUBLE TEMPERATURE SWITCH	front RH side of engine compartment near RH headlight assembly	09-3	
S38	SUNROOF SWITCH	roof		
S40y	CENTRAL POWER WINDOW SWITCH	center console		



# COMPONENT LOCATION CHART

COMP.	DESCRIPTION	LOCATION	7100.0	8500.0
S41 ...	LEFT REAR WINDOW SWITCH .....	in lower LH rear door behind trim panel		
S42 ...	RIGHT REAR WINDOW SWITCH .....	in lower RH rear door behind trim panel		
S51 ...	DRIVER'S SEAT, SEAT CONTROL SWITCH .	LH side of driver's seat		
S53 ...	DRIVER'S SEAT, SEAT HEATER SWITCH ...	center console near gearshift lever .....	30-2	
S54 ...	PASSENGER'S SEAT, SEAT HEATER SWITCH .....	center console near gearshift lever .....	30-1	
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		
S63 ...	ENGINE COOLANT LEVEL SWITCH .....	front RH side of engine compartment .....	18-1	
S61y .	TRUNK LIGHT SWITCH .....	underside of trunk lid left .....	34-2	
S64 ...	WASHER FLUID LEVEL SWITCH .....	front RH side of engine compartment on washer fluid reservoir .....	10-1	
S75 ...	BLOWER SWITCH .....	center of dash		
S77 ...	DRIVER'S MAKEUP MIRROR SWITCH .....	above LH sun visor		
S78 ...	PASSENGER'S MAKEUP MIRROR SWITCH .....	above RH sun visor .....	23-1	
S82 ...	REAR FOG LIGHT SWITCH .....	LH side of dash		
S123 .	ABS PEDAL TRAVEL SENSOR .....	near brake master cylinder .....	18-3	
S124 .	RIGHT REAR DOOR CONTACT .....	in lower RH C-pillar .....	33-3	
S125 .	LEFT REAR DOOR CONTACT .....	in lower LH C-pillar .....	33-3	
S126y	DRIVER'S POWER WINDOW SWITCH .....	center console near gearshift lever .....	31-1	
S127y	PASSENGER'S POWER WINDOW SWITCH .....	center console near gearshift lever .....	31-1	



# COMPONENT LOCATION CHART

COMP.	DESCRIPTION	LOCATION	7100.0	8500.0
S128y	LH REAR DOOR (CONSOLE) POWER WINDOW SWITCH .....	center console		
S128z	LH REAR POWER WINDOW SWITCH .....	center console		
S129y	RH REAR DOOR (CONSOLE) POWER WINDOW SWITCH .....	center console		
S129z	RH REAR POWER WINDOW SWITCH .....	center console		
S130	CHILD PROTECTION CONTROL (CONSOLE) .....	center console		
S134y	IHKR CONTROL PANEL .....	center of dash		
S143	VERTIBLE TOP ACTUATING SWITCH .	center console		
S164	VERTIBLE TOP END-POSITION MICRO SWITCH .....	at convertible top linkage		
S165	VERTIBLE TOP POSITION MICRO SWITCH .....	at convertible top linkage		
S182	LH POP OUT WINDOW SWITCH .....	center console		
S183	RH POP OUT WINDOW SWITCH .....	center console		
S196	REAR WINDOW BLOWER MICRO SWITCH .	in convertible top compartment left .....	22-3	
S213	TRUNK LID MICRO SWITCH .....	underside of trunk lid		
S214	VERTIBLE TOP STORAGE LID MICRO SWITCH .....	at convertible top linkage		
S231	WINDSCREEN COWL PANEL LOCK MICRO-SWITCH .....	front cover .....	38-2	
S303	SWITCH SPATIAL SOUND .....	center console		
S8503	PROGRAM SWITCH .....	center console		



# COMPONENT LOCATION CHART

COMP.	DESCRIPTION	LOCATION	7100.0	8500.0
S8507	KICK-DOWN SWITCH .....	LH footwell		
S8511	REVERSING LIGHT SWITCH .....	under front of car LH side of transmission		
T6151	CYL. 1 IGNITION COIL .....	top RH side of engine .....	13-1	
T6151	CYL. 1 IGNITION COIL .....	RH side of engine compartment (318is) .....	17-3	
T6152	CYL. 2 IGNITION COIL .....	top RH side of engine .....	13-1	
T6152	CYL. 2 IGNITION COIL .....	RH side of engine compartment (318is) .....	17-3	
T6153	CYL. 3 IGNITION COIL .....	top RH side of engine .....	13-1	
T6153	CYL. 3 IGNITION COIL .....	RH side of engine compartment (318is) .....	17-3	
T6154	CYL. 4 IGNITION COIL .....	top RH side of engine .....	13-1	
T6154	CYL. 4 IGNITION COIL .....	RH side of engine compartment (318is) .....	17-3	
T6155	CYL. 5 IGNITION COIL .....	top RH side of engine .....	13-1	
T6156	CYL. 6 IGNITION COIL .....	top RH side of engine .....	13-1	
U4 ...	TELEPHONE HANDSET .....	below front of console		
V4 ....	DAYTIME RUNNING LIGHTS CODING DIODE .....	LH side of dash		
V7 ....	ASC DIODE .....	top LH side of engine compartment in Front Power Distribution Box		
V9501	UNCOUPLING DIODE (KL61) .....	front of engine compartment		
X0 ....	B+ JUNCTION POINT .....	rear LH side of engine compartment .....	05-3	
X2 ....	BATTERY B+ START POINT .....	rear LH side of engine compartment .....	05-3	
X9 ....	B+ JUNCTION POINT .....	rear LH side of engine compartment .....	05-3	
X13 ...	(30 PINS, BLACK) .....	behind LH footwell kickpanel .....		00-4
X14 ...	(30 PINS, WHITE) .....	behind LH footwell kickpanel .....		00-4





## COMPONENT LOCATION CHART

COMP.	DESCRIPTION	LOCATION	7100.0	8500.0
X16 ...	(26 PINS, WHITE)	LH side of dash rear of instrument cluster, A2	28-3	00-2
X17 ...	(26 PINS, BLUE)	LH side of dash rear of instrument cluster, A2	28-3	00-2
X20 ...	(25 PINS, BLACK)	rear LH side of engine compartment	18-3	05-2
X22 ...	(26 PINS, BLUE)	RH side of dash behind glove box	01-2	00-2
X31 ...	(12 PINS, BLACK)	rear LH side of engine compartment back of LH side shock tower	16-2	01-4
X32 ...	(12 PINS, WHITE)	LH footwell underside of steering column	27-3	02-6
X33 ...	(12 PINS, BLACK)	LH footwell underside of steering column behind LH footwell trim	27-3	02-6
X35 ...	(12 PINS, NATURAL)	below LH side of dash RH side of steering column	27-3	02-6
X43 ...	(9 PINS, BLACK)	Power Distribution Box rear LH side of engine compartment		03-6
X45 ...	(9 PINS, BLACK)	Power Distribution Box rear LH side of engine compartment		03-6
X52 ...	(9 PINS, BLACK)	Power Distribution Box rear LH side of engine compartment		03-6
X53 ...	(9 PINS, BLACK)	Power Distribution Box rear LH side of engine compartment		03-6
X54 ...	(9 PINS, BLACK)	Power Distribution Box rear LH side of engine compartment		03-6
X55 ...	(9 PINS, BLACK)	behind LH footwell speaker grille		03-6
X56 ...	(9 PINS, BLACK)	Power Distribution Box rear LH side of engine compartment		03-6
X58 ...	(9 PINS, BLACK)	Power Distribution Box rear LH side of engine compartment		03-6
X63 ...	(9 PINS, BLACK)	behind LH footwell speaker grille		03-6
X64 ...	(9 PINS, BLACK)	Power Distribution Box rear LH side of engine compartment		03-6
X65 ...	(9 PINS, BLACK)	below LH side of dash		03-6
X69 ...	(25 PINS, GRAY)	rear LH side of engine compartment (325i)	18-3	05-2
X70 ...	(8 PINS, BLACK)	front LH side of engine compartment	18-2	02-2
X72 ...	(6 PINS, BLACK)	LATE PRODUCTION footwell, driver's side		04-2



# COMPONENT LOCATION CHART

COMP.	DESCRIPTION	LOCATION	7100.0	8500.0
X74	(30 PINS, ORANGE)	below rear seat	00-2	12-2
X78	(4 PINS, BLACK)	LH footwell on brake pedal support bracket behind LH footwell trim	26-2	03-3
X82	(3 PINS, BLACK)	front of engine compartment on auxiliary fan	18-1	08-1
X83	(8 PINS, BLACK)	RH side of dash behind glove box		03-6
X85	(3 PINS, BLACK)	rear LH side of engine compartment	16-2	06-3
X87	(3 PINS, BLACK)	front RH side of engine compartment RH top of radiator	09-3	06-3
X107	(2 PINS, GRAY)	front RH side of engine compartment on washer fluid reservoir	10-1	
X109	(2 PINS, BLACK)	front RH side of engine compartment on washer fluid reservoir	10-1	
X111	(2 PINS, BLACK)	rear LH side of engine compartment near brake master cylinder top of brake fluid reservoir	18-3	
X112	(2 PINS, BLACK)	front RH side of engine compartment	18-1	
X113	(2 PINS, GRAY)	above RH front wheel well behind RH front wheel	09-2	
X114	(2 PINS, GRAY)	above LH front wheel well behind LH front wheel	09-2	
X116	(2 PINS, BLACK)	LH footwell near brake pedal	26-3	
X118	(2 PINS, BLACK)	above LH front wheel well behind LH front wheel	09-2	
X120	(2 PINS, BLACK)	near LH front wheel well on steering-gear box		
X121	(2 PINS, WHITE)	LH footwell on clutch pedal	26-3	
X123	(2 PINS, GRAY)	front RH side of engine compartment on washer fluid reservoir	10-2	
X128	(2 PINS, BLACK)	front RH side of engine compartment		
X132	(2 PINS, BLACK)	front of engine compartment		
X133	(2 PINS, BLACK)	front of engine compartment		
X137	(2 PINS, BLACK)	front LH side of engine compartment		



# COMPONENT LOCATION CHART

COMP.	DESCRIPTION	LOCATION	7100.0	8500.0
X142	(3 PINS, GRAY)	under rear of car LH side of on differential		02-1
X143	(3 PINS, GRAY)	under rear of car LH side of on differential	08-1	02-1
X161	(1 PIN, WHITE)	near RH headlight assembly		
X163	(3 PINS, BLACK)	front RH side of engine compartment on washer fluid reservoir near RH headlight assembly	10-1	06-3
X165	GROUND	front LH side of engine compartment	06-3	
X173	GROUND	below LH side of dash	07-1	
X209	(12 PINS, BLACK)	LH footwell underside of steering column		
X256	(26 PINS, BLACK)	ahead of RH front door in lower RH A-pillar	32-1	04-1
X257	(26 PINS, BLACK)	ahead of LH front door in lower LH A-pillar		04-1
X271	(12 PINS, BLACK)	LH side of dash rear of instrument cluster, A2	28-3	01-3
X272	(2 PINS, BLACK)	under roof center panel		
X273	(12 PINS, BLACK)	in lower LH B-pillar	21-1	01-2
X274	(12 PINS, BLACK)	in lower RH B-pillar	21-1	01-2
X275	(4 PINS, WHITE)	under LH front seat under carpet	23-2	03-3
X279	(4 PINS, WHITE)	under RH front seat	32-3	03-3
X285	(15 PINS, BLUE)	behind glove box	25-2	00-3
X292	(9 PINS, BLACK)	Power Distribution Box rear LH side of engine compartment		03-6
X295	(8 PINS, BLACK)	LH footwell underside of steering column behind LH footwell trim	27-3	03-5
X311	(3 PINS, BLACK)	underside of trunk lid left	34-2	01-1
X312	(2 PINS, BLACK)	in RH rear side of luggage compartment behind RH rear light assembly	03-3	01-6
X315	(2 PINS, BLACK)	underside of trunk lid left	34-2	



# COMPONENT LOCATION CHART

COMP.	DESCRIPTION	LOCATION	7100.0	8500.0
X316	(6 PINS, WHITE)	center console near gearshift lever	31-1	05-3
X317	(6 PINS, WHITE)	center console near gearshift lever	30-3	07-1
X318	(8 PINS, BLACK)	in RH rear side of luggage compartment behind RH rear light assembly	03-3	01-4
X319	(8 PINS, BLACK)	in LH rear side of luggage compartment behind LH rear light assembly		01-4
X320	(6 PINS, WHITE)	center console near gearshift lever	30-3	07-1
X322	(6 PINS, BLACK)	LH footwell	28-2	04-2
X324	(6 PINS, WHITE)	center console near gearshift lever	31-1	05-3
X333	(4 PINS, BLACK)	rear of engine compartment below center of cowl	16-1	07-2
X351	(2 PINS, BLACK)	in upper RH B-pillar		
X352	(3 PINS, BLACK)	in upper LH B-pillar	38-3	01-1
X355	(2 PINS, BLACK)	in upper RH C-pillar	33-2	
X356	(2 PINS, BLACK)	in upper LH C-pillar	33-1	
X371	(2 PINS, BLACK)	front RH side of engine compartment on washer fluid reservoir	10-2	
X372	(2 PINS, GRAY)	rear RH side of engine compartment back of RH side shock tower		
X379	(1 PIN, NATURAL)	in upper LH C-pillar	33-1	
X380	(1 PIN, NATURAL)	in upper RH C-pillar	33-2	
X381	(3 PINS, BLACK)	under roof center panel		01-1
X382	(3 PINS, BLACK)	above RH sun visor	23-1	01-1
X383	(2 PINS, BLACK)	under rear of car LH side of on differential	08-1	
X386	(2 PINS, BLACK)	REAR ASHTRAY LIGHT		
X388	(2 PINS, BLACK)	in lower RH A-pillar		
X389	(2 PINS, GRAY)	rear LH side of engine compartment		



# COMPONENT LOCATION CHART

COMP.	DESCRIPTION	LOCATION	7100.0	8500.0
X390	(2 PINS, BLACK)	RH side of dash behind glove box		
X401	(1 PIN, BLACK)	above LH sun visor		
X402	(1 PIN, BLACK)	above RH sun visor	23-1	
X413	(2 PINS, BLACK)	at back of rear window shelf		
X423	(1 PIN, NATURAL)	below center console on rear of park brake lever		
X424	(1 PIN, BROWN)	in upper LH C-pillar	33-1	
X494	GROUND	center console near gearshift lever	07-2	
X495	GROUND	behind RH footwell trim above	07-3	
X498	GROUND	center console near gearshift lever	07-2	
X503	(12 PINS, WHITE)	below LH side of dash	26-1	01-6
X504	(4 PINS, WHITE)	center console	26-1	03-3
X509	(9 PINS, BLACK)	behind glove box (glove box removed)		03-6
X510	(9 PINS, BLACK)	behind glove box (glove box removed)		03-6
X511	(8 PINS, BLACK)	center console near gearshift lever	30-3	01-4
X516	(5 PINS, BLACK)	center console	30-3	03-2
X517	(4 PINS, BLACK)	below LH side of dash	26-1	03-3
X518	(4 PINS, BLACK)	LH footwell	28-2	03-3
X521	(6 PINS, BLUE)	center console		04-5
X522	(3 PINS, WHITE)	LH footwell	28-2	03-6
X523	(3 PINS, NATURAL)	LH side of dash		03-6
X531	(1 PIN, NATURAL)	center console near gearshift lever	30-2	
X532	(2 PINS, BLACK)	center console near gearshift lever	30-2	



# COMPONENT LOCATION CHART

COMP.	DESCRIPTION	LOCATION	7100.0	8500.0
X537	(2 PINS, BLACK)	in upper LH front door behind door panel	31-3	01-1
X538	(2 PINS, BLACK)	RH front door behind door panel	32-1	
X540	(2 PINS, BLACK)	LH side of glove box	25-1	
X541	(1 PIN, NATURAL)	LH side of glove box	25-1	
X542	(2 PINS, BLACK)	LH side of glove box	25-1	
X603	(6 PINS, ---)	center console		05-1
X604	(6 PINS, ---)	RH front seat		05-1
X605	(12 PINS, BLACK)	below RH side of rear seat Convertible	02-3	11-3
X605	(12 PINS, BLACK)	in LH side of luggage compartment	04-1	11-3
X606	(26 PINS, BLACK)	below RH side of rear seat Convertible	02-3	00-2
X606	(26 PINS, BLACK)	in LH side of luggage compartment	04-1	00-2
X607	(9 PINS, BLACK)	below LH side of dash		03-6
X623	(4 PINS, BLACK)	in upper LH front door behind door panel		10-1
X624	(4 PINS, BLACK)	in upper RH front door behind door panel	32-1	10-1
X625	(6 PINS, WHITE)	LH front door	31-3	05-1
X638	(2 PINS, BLACK)	below RH side of rear seat	20-2	
X641	(6 PINS, BLACK)	RH front door behind door panel		08-2
X644	(6 PINS, BLACK)	in lower LH rear door		05-3
X645	(6 PINS, BLUE)	in lower LH rear door		06-2
X646	(6 PINS, BLACK)	in lower RH rear door behind trim panel		06-2
X647	(6 PINS, BLUE)	in lower RH rear door behind trim panel		08-4
X651	(6 PINS, YELLOW)	center console	30-2	05-3



# COMPONENT LOCATION CHART

COMP.	DESCRIPTION	LOCATION	7100.0	8500.0
X658	(6 PINS, YELLOW)	center console	30-1	05-3
X660	(4 PINS, BLACK)	LH front door in door at key lock assembly		05-4
X662	(6 PINS, GRAY)	below LH side of dash RH side of steering column	29-2	04-5
X663	(6 PINS, GRAY)	below RH side of dash		10-1
X669	(6 PINS, GRAY)	below RH side of dash center console right	29-3	04-5
X671	(5 PINS, BLACK)	behind LH side of dash		12-1
X679	(2 PINS, WHITE)	below RH side of rear seat	20-2	
X692	(3 PINS, BLACK)	center console		02-1
X695	(10 PINS, BLACK)	below center console		02-4
X700	(1 PIN, NATURAL)	behind RH footwell speaker grille		
X701	(1 PIN, NATURAL)	behind LH footwell kickpanel		
X706	(2 PINS, BLACK)	center console	31-2	
X709	(2 PINS, BLACK)	underside of trunk lid, near license plate	09-1	
X710	(2 PINS, BLACK)	underside of trunk lid, near license plate	09-1	
X711	(1 PIN, NATURAL)	underside of trunk lid left	34-2	
X712	(1 PIN, NATURAL)	underside of trunk lid left		
X713	(2 PINS, BLACK)	under rear of car LH side of on differential	08-1	
X714	(2 PINS, GRAY)	in lower LH rear door behind trim panel		
X720	(2 PINS, GRAY)	in lower RH rear door behind trim panel		
X726	(2 PINS, ---)	under LH front seat	23-2	
X727	(2 PINS, ---)	under LH front seat	23-2	
X728	(2 PINS, ---)	under LH front seat	23-2	



# COMPONENT LOCATION CHART

COMP.	DESCRIPTION	LOCATION	7100.0	8500.0
X729	(2 PINS, ---)	under LH front seat	23-2	
X732	(4 PINS, BLACK)	under LH front seat under carpet		03-3
X733	(4 PINS, BLACK)	under LH front seat under carpet		03-3
X734	(2 PINS, ---)	under RH front seat		
X735	(2 PINS, ---)	under RH front seat		
X736	(2 PINS, ---)	under RH front seat		
X737	(2 PINS, ---)	under RH front seat		
X740	(4 PINS, BLACK)	under RH front seat	24-1	03-3
X741	(4 PINS, BLACK)	under RH front seat	24-1	03-3
X742	(2 PINS, YELLOW)	RH front door in door at key lock assembly		
X744	(2 PINS, GRAY)	RH front door behind door panel	32-1	
X746	(3 PINS, BLACK)	RH front door behind door panel	32-1	01-1
X747	(2 PINS, YELLOW)	LH front door in door at key lock assembly	32-2	
X749	(4 PINS, BLACK)	in upper LH front door	31-3	12-3
X751	(2 PINS, WHITE)	LH front door in door at key lock assembly	32-2	
X752	(2 PINS, GRAY)	LH front door in door at key lock assembly	32-2	
X768	(2 PINS, WHITE)	in the engine compartment near LH headlight assembly	08-2	
X768	(2 PINS, WHITE)	in the engine compartment near LH headlight assembly		
X769	(2 PINS, WHITE)	in the engine compartment near RH headlight assembly	08-2	
X770	(2 PINS, YELLOW)	front RH side of engine compartment	20-1	
X771	(2 PINS, BLACK)	RH side of LH footwell LH side of IHKR Plenum	28-1	
X772	(2 PINS, WHITE)	center console		





# COMPONENT LOCATION CHART

COMP.	DESCRIPTION	LOCATION	7100.0	8500.0
X773	(2 PINS, WHITE)	center console		
X774	(1 PIN, GRAY)	rear of engine compartment behind RH fresh air cowl		
X778	(3 PINS, BLACK)	in LH front seat belt buckle	23-2	01-1
X779	(2 PINS, BLACK)	LH side of glove box	25-1	
X782	(3 PINS, ORANGE)	below RH side of dash	27-2	13-1
X783	(3 PINS, BLACK)	underside of steering column		13-1
X786	(2 PINS, BLACK)	UNDERHOOD LIGHT		
X816	(2 PINS, BLACK)	rear of engine compartment behind RH fresh air cowl		
X817	(1 PIN, BLACK)	rear of engine compartment behind RH fresh air cowl		
X904	(4 PINS, GRAY)	LH side of IHKR Plenum	29-1	03-3
X905	(5 PINS, BLACK)	behind center of dashboard		
X998	(4 PINS, BLACK)	below center console		03-1
X999	(4 PINS, BLACK)	behind center of dashboard LH side of IHKR Plenum		03-3
X1001	(4 PINS, BLACK)	RIGHT REAR SPEAKER		03-3
X1002	(4 PINS, ---)	LEFT REAR SPEAKER		03-3
X1014	(1 PIN, BLACK)	center console near gearshift lever	30-2	
X1070	(18 PINS, BLACK)	center console	03-1	01-5
X1071	(18 PINS, NATURAL)	center console	03-1	01-5
X1074	(15 PINS, WHITE)	below LH side of dash	00-3	00-3
X1075	(15 PINS, BLACK)	below LH side of dash	00-3	00-3
X1161	(9 PINS, BLACK)	rear LH side of engine compartment		03-6
X1162	(2 PINS, BLACK)	near brake master cylinder	18-3	



# COMPONENT LOCATION CHART

COMP.	DESCRIPTION	LOCATION	7100.0	8500.0
X1165	GROUND	below LH side of dash	07-1	
X1166	GROUND	behind RH footwell trim above	07-3	
X1170	(42 PINS, BLACK)	behind glove box (glove box removed)	01-2	12-4
X1171	(55 PINS, BLACK)	behind glove box (glove box removed)	01-3	00-1
X1176	(25 PINS, BLACK)	LH side of engine compartment		05-3
X1178	(2 PINS, WHITE)	below center console LH side of gearshift selector		
X1193	(3 PINS, BLACK)	center console RH side of gearshift selector		01-1
X1213	(2 PINS, BLACK)	center console	31-2	
X1239	(2 PINS, BLACK)	RH C-Pillar		
X1240	(2 PINS, BLACK)	LH C-Pillar		
X1241	(2 PINS, NATURAL)	below LH side of rear seat	21-2	
X1243	(6 PINS, BLACK)	center console near gearshift lever	31-1	04-2
X1245	(1 PIN, BLACK)	above LH sun visor		
X1246	(1 PIN, BLACK)	above RH sun visor		
X1380	(1 PIN, NATURAL)	behind RH footwell speaker grille		
X1381	(1 PIN, NATURAL)	behind LH footwell kickpanel		
X1426	(1 PIN, BROWN)	rear RH side of engine compartment in E-Box		
X1441	GROUND	below rear seat	00-2	
X1527	(26 PINS, BLUE)	behind center console	03-2	00-2
X1659	(15 PINS, YELLOW)	RH side of dash behind glove box	37-2	00-3
X1660	(3 PINS, WHITE)	RH side of steering column	37-3	01-1
X1890	(3 PINS, BLACK)	behind front grille behind trim panel		01-1



# COMPONENT LOCATION CHART

COMP.	DESCRIPTION	LOCATION	7100.0	8500.0
X1892	(3 PINS, WHITE)	in LH rear side of luggage compartment CD CHANGER	03-3	02-1
X5013	(2 PINS, BLACK)	LH side of engine (M3)	14-2	
X5013	(2 PINS, BLACK)	front of engine compartment		
X5020	(2 PINS, BLACK)	front of engine compartment (M3)		
X5021	(2 PINS, BLACK)	front of engine compartment		
X5022	(3 PINS, BLACK)	front of engine compartment (M3)	12-2	07-3
X5023	(3 PINS, BLACK)	RH front of engine (M3)	12-1	07-3
X5023	(3 PINS, BLACK)	front of engine compartment		07-3
X5024	(15 PINS, WHITE)	rear RH side of engine compartment	04-3	00-3
X5028	(4 PINS, BLACK)	lower LH side of engine (M3)		03-4
X5029	(10 PINS, BLACK)	front LH side of engine compartment in Front Power Distribution Box		09-1
X5032	(15 PINS, BLACK)	front of engine compartment		00-3
X6000	(88 PINS, BLACK)	rear RH side of engine compartment	00-1	06-1
X6002	(20 PINS, BLACK)	rear RH side of engine compartment	05-1	04-4
X6091	(30 PINS, BLACK)	rear of engine compartment on engine bulkhead		13-4
X6101	(2 PINS, BLACK)	on throttle body (M3)	11-2	
X6101	(2 PINS, BLACK)	top center of engine		
X6102	(2 PINS, BLACK)	top center of engine		
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		



# COMPONENT LOCATION CHART

COMP.	DESCRIPTION	LOCATION	7100.0	8500.0
X6120	(2 PINS, BLACK)	LH side of engine compartment right of LH side shock tower	15-1	
X6120	(2 PINS, BLACK)	LH side of engine compartment right of LH side shock tower	20-3	
X6130	(3 PINS, GRAY)	RH front of engine below intake manifold (325i)	11-3	13-2
X6130	(2 PINS, BLACK)	rear LH side of engine compartment (M3)	14-3	
X6131	(2 PINS, BLACK)	front RH side of engine compartment		
X6133	(2 PINS, BLACK)	front of engine compartment		
X6150	(12 PINS, BLACK)	rear RH side of engine compartment	05-1	01-6
X6151	(3 PINS, GRAY)	top RH side of engine		07-4
X6152	(3 PINS, GRAY)	top RH side of engine		07-4
X6153	(3 PINS, GRAY)	top RH side of engine		07-4
X6154	(3 PINS, GRAY)	top RH side of engine		07-4
X6155	(3 PINS, GRAY)	top RH side of engine		07-4
X6156	(3 PINS, GRAY)	top RH side of engine		07-4
X6163	(2 PINS, BLACK)	RH side of engine		
X6200	(4 PINS, BLACK)	under center of car	15-3	03-4
X6203	(3 PINS, BLACK)	front of engine below intake manifold (M3)	12-2	13-2
X6204	(3 PINS, BLACK)	front of engine below intake manifold (M3)	12-2	07-3
X6205	(2 PINS, BLACK)	LH side of engine (near oil level stick)	13-3	
X6207	(4 PINS, BLACK)	LH side of engine		07-2
X6208	(2 PINS, BLACK)	front of engine CAMSHAFT ACTUATOR		
X6209	(3 PINS, BLACK)	front of engine HALL EFFECT CAMSHAFT SENSOR		07-5
X6217	(4 PINS, GRAY)	top front of engine		07-2



# COMPONENT LOCATION CHART

COMP.	DESCRIPTION	LOCATION	7100.0	8500.0
X6231	(2 PINS, BROWN)	RH front of engine below intake manifold (near oil level stick) (325i)	11-1	
X6231	(2 PINS, BLACK)	LH side of engine compartment (near oil level stick) (M3)	14-2	
X6231	(2 PINS, BROWN)	RH front of engine below intake manifold (near oil level stick) (318is)	17-1	
X6232	(2 PINS, BLACK)	RH front of engine below intake manifold (325i)	11-3	
X6232	(2 PINS, BLACK)	RH front of engine (M3)	12-1	
X6232	(2 PINS, BLACK)	RH front of engine below intake manifold (318is)	17-2	
X6233	(7 PINS, BLACK)	LH side of engine compartment right of LH side shock tower		04-3
X6236	(2 PINS, BLUE)	RH front of engine below intake manifold (325i)		
X6236	(2 PINS, BLUE)	RH front of engine (M3)	12-1	
X6236	(2 PINS, BLUE)	RH front of engine below intake manifold (318is)	17-2	
X6238	(2 PINS, BLACK)	LH side of engine (M3)	14-2	
X6240	(4 PINS, BLACK)	LH side of engine near starter		07-2
X6241	(3 PINS, BLACK)	LH side of engine (M3)	14-1	07-5
X6241	(3 PINS, BLACK)	LH side of engine (318is)	16-3	07-5
X6242	(2 PINS, BLACK)	LH side of engine (M3)	14-1	07-3
X6242	(3 PINS, BLACK)	LH side of engine (318is)	16-3	07-5
X6243	(3 PINS, BLACK)	LH side of engine (M3)	14-1	07-5
X6252	(3 PINS, BLACK)	LH side of engine (M3)	11-2	07-3
X6252	(3 PINS, BLACK)	LH side of engine (near oil level stick) (320i-325i)	13-3	13-2
X6256	(4 PINS, BLACK)	rear of engine compartment	11-1	07-2
X6275	(2 PINS, BLACK)	top center of engine	36-2	
X6300	(9 PINS, BLACK)	rear LH side of engine compartment		03-6



# COMPONENT LOCATION CHART

COMP.	DESCRIPTION	LOCATION	7100.0	8500.0
X6301	(9 PINS, BLACK)	rear LH side of engine compartment		03-6
X6303	(9 PINS, BLACK)	rear LH side of engine compartment		03-6
X6304	(9 PINS, BLACK)	rear LH side of engine compartment		03-6
X6307	(10 PINS, BLACK)	front of engine compartment		09-1
X6454	GROUND	rear RH side of engine compartment back of RH side shock tower	06-2	
X6456	GROUND	RH front of engine (325i)	11-3	
X6456	GROUND	on cylinder head	36-1	
X6509	CABLE SOCKET ALTERNATOR B+	front LH side of engine compartment	05-2	
X6509	CABLE SOCKET ALTERNATOR B+	front LH side of engine compartment		
X6510	CABLE SOCKET STARTER TERMINAL 50	rear LH side of engine compartment below intake manifold		
X6511	CABLE SOCKET STARTER TERMINAL 30h	rear LH side of engine compartment below intake manifold		
X6512	CABLE SOCKET STARTER TERMINAL 30h	rear LH side of engine compartment below intake manifold		
X6550	(2 PINS, BLACK)	under LH center of car	27-1	
X7000	(88 PINS, BLACK)	rear RH side of engine compartment	00-1	06-1
X7509	CABLE SOCKET ALTERNATOR TERMINAL D+	front LH side of engine compartment below		
X8500	(55 PINS, BLACK)	rear RH side of engine compartment	00-1	00-1
X8503	(10 PINS, WHITE)	center console RH side of gearshift selector	31-1	02-4
X8507	(1 PIN, BLACK)	below LH side of dash		
X8511	(2 PINS, BLACK)	under front of car LH side of transmission		
X8516	(3 PINS, BLACK)	under center of car above		13-2
X8521	(9 PINS, BLACK)	under center of car above		13-3



# COMPONENT LOCATION CHART

COMP.	DESCRIPTION	LOCATION	7100.0	8500.0
X9317	(6 PINS, YELLOW)	in lower LH C-pillar		05-3
X9320	(6 PINS, YELLOW)	in lower RH C-pillar		05-3
X9997	(2 PINS, ORANGE)	behind steering wheel	24-2	
X10010	GROUND	behind RH footwell trim above		
X10012	GROUND	behind RH footwell trim above	07-3	
X10013	(1 PIN, ---)	top of steering column		
X10015	(20 PINS, BLACK)	Power Distribution Box rear LH side of engine compartment FRONT POWER DISTRIBUTION BOX		
X10016	(20 PINS, BLACK)	Power Distribution Box rear LH side of engine compartment FRONT POWER DISTRIBUTION BOX		
X10017	(20 PINS, BLACK)	Power Distribution Box rear LH side of engine compartment FRONT POWER DISTRIBUTION BOX		
X10018	(32 PINS, BLACK)	Power Distribution Box rear LH side of engine compartment FRONT POWER DISTRIBUTION BOX		
X10026	(6 PINS, BLACK)	Power Distribution Box rear LH side of engine compartment FRONT POWER DISTRIBUTION BOX		
X10030	(5 PINS, BLACK)	Power Distribution Box rear LH side of engine compartment FRONT POWER DISTRIBUTION BOX		
X10034	(2 PINS, ---)	rear LH side of engine compartment FRONT POWER DISTRIBUTION BOX		
X10035	(2 PINS, ---)	rear LH side of engine compartment FRONT POWER DISTRIBUTION BOX		
X10036	(2 PINS, BLACK)	rear LH side of engine compartment FRONT POWER DISTRIBUTION BOX		
X10054	(12 PINS, BLACK)	below LH side of dash RH side of steering column	28-1	02-6
X10065	(2 PINS, WHITE)	LH side of LH footwell under footrest		
X10070	(2 PINS, GRAY)	near LH headlight assembly	13-2	



# COMPONENT LOCATION CHART

COMP.	DESCRIPTION	LOCATION	7100.0	8500.0
X10071	(2 PINS, BLACK) .....	near LH headlight assembly .....	13-2	
X10074	(2 PINS, BLACK) .....	near LH headlight assembly		
X10075	(2 PINS, GRAY) .....	near RH headlight assembly		
X10092	(9 PINS, BLACK) .....	behind glove box left .....	25-2	03-6
X10094	(2 PINS, BLACK) .....	LH side of engine compartment		
X10098	(1 PIN, ---) .....	front RH side of engine compartment		
X10099	(1 PIN, ---) .....	front RH side of engine compartment		
X10182	(18 PINS, BLACK) .....	behind glove box (glove box removed) .....	01-1	01-5
X10193	(9 PINS, BLACK) .....	behind glove box (glove box removed) .....		03-6
X10218	(3 PINS, NATURAL) .....	under RH front seat .....	24-1	01-1
X10223	(3 PINS, BLACK) .....	in convertible top compartment left .....	22-1	03-6
X10224	(2 PINS, BLACK) .....	in convertible top compartment left .....	22-1	
X10225	(3 PINS, BLACK) .....	underside of trunk lid .....		01-1
X10226	(9 PINS, BLACK) .....	behind glove box .....	25-2	03-6
X10238	(2 PINS, BLACK) .....	LH side of engine compartment		
X10239	(3 PINS, BLACK) .....	LH side of engine compartment .....		07-3
X10244	(1 PIN, BLACK) .....	below LH side of dash		
X10250	(2 PINS, ---) .....	behind LH footwell speaker grille		
X10261	(4 PINS, BLACK) .....	front RH side of engine compartment near RH headlight assembly .....	09-3	12-3
X10262	(9 PINS, BLACK) .....	below LH side of dash .....		03-6
X10267	(6 PINS, BLACK) .....	center console .....		05-3
X11166	GROUND .....	behind rear seats left .....	38-3	





# COMPONENT LOCATION CHART

COMP.	DESCRIPTION	LOCATION	7100.0	8500.0
X11205	(2 PINS, BLACK)	behind rear seats left	38-1	
X11209	(2 PINS, BLACK)	behind rear seats left	38-3	
X11211	(2 PINS, ---)	in convertible top compartment		
X11379	(3 PINS, BLACK)	RH top of radiator	09-3	06-3
X11382	(2 PINS, BLUE)	front cover	38-2	
X11383	(2 PINS, BLUE)	behind rear seats	38-3	
X11385	(3 PINS, BLACK)	front cover	38-2	01-1
X11386	(3 PINS, BLUE)	behind rear seats	38-3	01-1
X11390	(12 PINS, BLACK)	in lower LH C-pillar behind side panel	02-1	01-3
X13004	GROUND	in upper RH rear seatback	06-1	
X13006	GROUND	in upper LH rear seatback		
X13009	GROUND	behind RH footwell trim above	07-3	
X13016	GROUND	below LH side of dash	07-1	
X13025	(12 PINS, BLACK)	behind glove box (glove box removed)	01-3	02-6
X13026	(1 PIN, BLACK)	LH side of dash		
X13044	(12 PINS, BLACK)	in lower LH C-pillar behind side panel	02-1	01-3
X13045	(6 PINS, GREEN)	center console		05-3
X13079	(3 PINS, YELLOW)	behind rear seats		01-1
X13125	(3 PINS, YELLOW)	in lower LH C-pillar		01-1
X13126	(3 PINS, YELLOW)	in lower RH C-pillar		01-1
X13142	(2 PINS, WHITE)	behind rear seats	21-3	
X13143	(3 PINS, BLACK)	behind rear seats	38-3	01-1



# COMPONENT LOCATION CHART

COMP.	DESCRIPTION	LOCATION	7100.0	8500.0
X13145	(6 PINS, BLACK)	in LH side of luggage compartment	34-3	04-2
X13146	(2 PINS, BLACK)	in LH side of luggage compartment	34-1	
X13152	(4 PINS, BLACK)	in LH side of luggage compartment	34-1	07-6
X13156	(10 PINS, BLACK)	in lower LH C-pillar behind side panel	02-1	09-4
X13157	(6 PINS, BLACK)	in lower LH C-pillar behind side panel	02-1	05-3
X13159	(26 PINS, BLACK)	in lower LH C-pillar behind side panel	02-1	00-2
X13170	(2 PINS, BLACK)	in spare-wheel well	35-3	
X13171	(3 PINS, NATURAL)	RH rear wheel well behind trim panel	35-1	06-4
X13172	(2 PINS, BLACK)	in LH rear side of luggage compartment	35-2	
X13226	(2 PINS, BLACK)	behind rear seats		
X13227	(2 PINS, BLACK)	behind rear seats		
X13230	GROUND	behind RH footwell trim above Convertible		
X13252	(15 PINS, YELLOW)	behind glove box (glove box removed)	01-1	00-3
X13253	(26 PINS, YELLOW)	behind glove box (glove box removed)	01-1	00-2
X13254	(26 PINS, GREEN)	behind glove box (glove box removed)	01-1	00-2
X13255	(12 PINS, NATURAL)	behind glove box (glove box removed)		01-3
X13256	(2 PINS, GRAY)	left from LH rear seat behind trim panel	22-2	
X13257	(2 PINS, GRAY)	RH side of RH rear seat behind trim panel	22-2	
X13258	(15 PINS, WHITE)	behind glove box (glove box removed)	25-2	00-3
X13262	(6 PINS, BLUE)	center console		05-3
X13263	(2 PINS, BLACK)	behind glove box		
X13283	(9 PINS, BLACK)	LH side of LH footwell		03-6



# COMPONENT LOCATION CHART

COMP.	DESCRIPTION	LOCATION	7100.0	8500.0
X13305	(8 PINS, BLACK)	in LH rear side of luggage compartment		03-5
X18080	(1 PIN, NATURAL)	in luggage compartment		
X18126	(17 PINS, BLACK)	center console behind radio		02-3
X18154	(26 PINS, BLUE)	center console		00-2
X18155	(26 PINS, WHITE)	center console	03-2	00-2
X18156	(26 PINS, BLACK)	center console	03-2	00-2
X18157	(26 PINS, BLUE)	center console	03-2	00-2
X18196	(10 PINS, BLACK)	driver's door LEFT FRONT HIGH RANGE SPEAKER		02-4
X18198	(10 PINS, BLACK)	passenger's door RIGHT FRONT HIGH RANGE SPEAKER		02-4
X18277	(2 PINS, BLACK)	LH front door	32-2	
X18295	(2 PINS, YELLOW)	in lower RH B-pillar behind trim panel		
X18296	(2 PINS, YELLOW)	in lower LH B-pillar behind trim panel	32-2	
X18336	(3 PINS, BLACK)	LH side of glove box (glove box removed)		01-1
X18507	(2 PINS, ---)	center console		
X18509	(8 PINS, ---)	center console		
X18515	(2 PINS, ---)	LH side of LH footwell behind trim panel		
X18518	(3 PINS, BLACK)	under RH front seat		01-1
X18520	(10 PINS, ---)	center console RADIO		
X18521	(10 PINS, ---)	RH side of luggage compartment CD CHANGER		
X18723	GROUND	below LH side of dash		
X18741	(4 PINS, ---)	center of dash MICROPHONE		
X18797	(1 PIN, NATURAL)	in RH rear side of luggage compartment		



# COMPONENT LOCATION CHART

COMP.	DESCRIPTION	LOCATION	7100.0	8500.0
X18798	(1 PIN, NATURAL)	in RH rear side of luggage compartment		
X19527	(16 PINS, BLACK)	below LH side of dash		05-5
X62101	(4 PINS, BLACK)	on catalytic converter		07-2
X62101	(4 PINS, BLACK)	top center of engine	36-3	07-2
X62102	(4 PINS, BLACK)	under center of car on catalytic converter		07-2
X62201	(4 PINS, BLACK)	top center of engine	36-3	07-2
X62202	(4 PINS, BLACK)	under center of car on catalytic converter		07-2
X90260	(3 PINS, BLACK)	RH side of steering column	37-3	01-1
Y1	ABS HYDRAULIC UNIT	rear LH side of engine compartment back of LH side shock tower	16-2	
Y2	AIR CONDITIONING COMPRESSOR	front of engine		
Y4	WATER VALVE ASSEMBLY	rear LH side of engine compartment	16-2	
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 RH side of gearshift selector		
Y1w	ABS HYDRAULIC UNIT	LH side of engine compartment		
Y85	LH ROLLOVER PROTECTION ACTUATOR	behind rear seats Convertible	02-3	
Y86	RH ROLLOVER PROTECTION ACTUATOR	behind rear seats Convertible	02-3	
Y198	EXHAUST GAS FLAP VALVE	in LH rear side of luggage compartment	35-2	
Y199	CARBON CANISTER VALVE	in spare-wheel well	35-3	
Y5013	CHANGE-OVER VALVE	LH side of engine (M3)	14-2	
Y5020	VARIABLE CAMSHAFT CONTROL VALVE 1	RH front of engine (M3)	11-2	
Y5021	VARIABLE CAMSHAFT CONTROL VALVE 2	front of engine compartment (M3)		



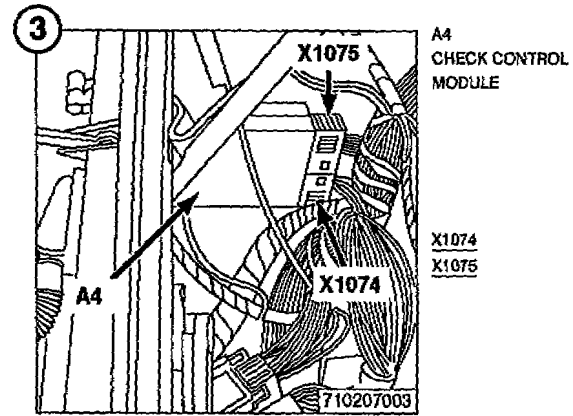
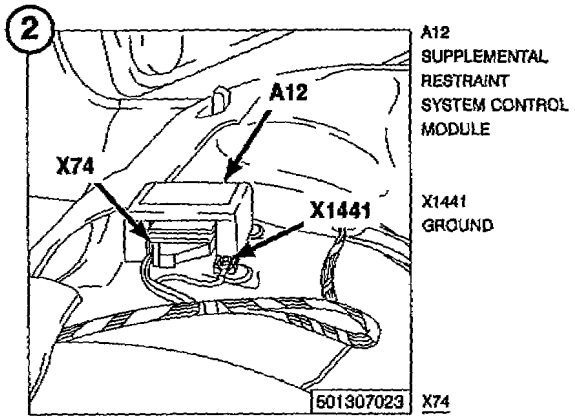
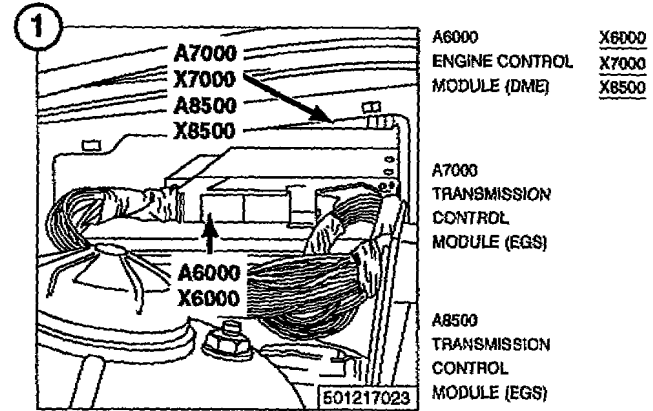
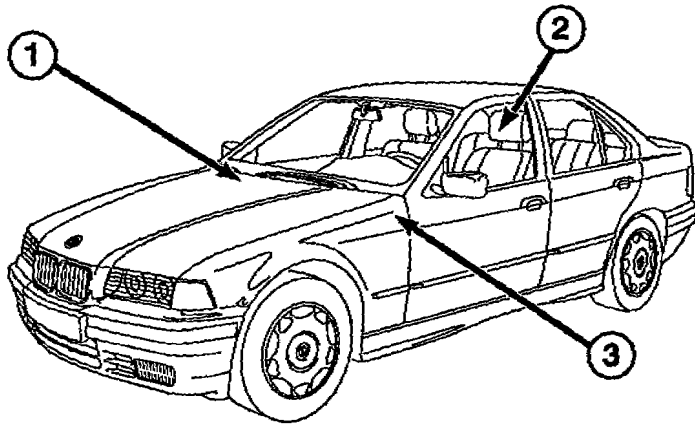
## COMPONENT LOCATION CHART

COMP.	DESCRIPTION	LOCATION	7100.0	8500.0
Y6101	CYL. 1 FUEL INJECTION VALVE .....	RH front of engine (M3) .....	11-2	
Y6101	CYL. 1 FUEL INJECTION VALVE .....	top center of engine .....	12-3	
Y6102	CYL. 2 FUEL INJECTION VALVE .....	top center of engine .....	12-3	
Y6103	CYL. 3 FUEL INJECTION VALVE .....	top center of engine .....	12-3	
Y6104	CYL. 4 FUEL INJECTION VALVE .....	top center of engine .....	12-3	
Y6105	CYL. 5 FUEL INJECTION VALVE .....	top center of engine .....	12-3	
Y6106	CYL. 6 FUEL INJECTION VALVE .....	top center of engine .....	12-3	
Y6120	EVAPORATIVE EMISSION VALVE .....	front LH side of engine compartment right of LH side shock tower .....	15-1	
Y6120	EVAPORATIVE EMISSION VALVE .....	LH side of engine compartment right of LH side shock tower .....	20-3	
Y6130	IDLE SPEED CONTROL VALVE .....	RH front of engine below intake manifold (325i) .....	11-3	
Y6130	IDLE SPEED CONTROL VALVE .....	rear LH side of engine compartment (M3) .....	14-3	
Y6131	INTAKE AIR RESONANCE CHANGEOVER VALVE .....	rear LH side of engine compartment		
Y6133	AIR PUMP .....	rear RH side of engine compartment .....	05-1	
Y6163	SECONDARY AIR PUMP VALVE .....	RH side of engine		
Y6208	CAMSHAFT ACTUATOR .....	front of engine compartment		
Y6275	VARIABLE CAMSHAFT CONTROL VALVE 1	top center of engine .....	36-2	
Y6550	SOLENOID VALVE ("RUNNING LOSSES") ..	lower front side of engine compartment		
Y8505y	TRANSMISSION VALVE UNIT .....	on LH side of transmission		



# COMPONENT LOCATION VIEWS

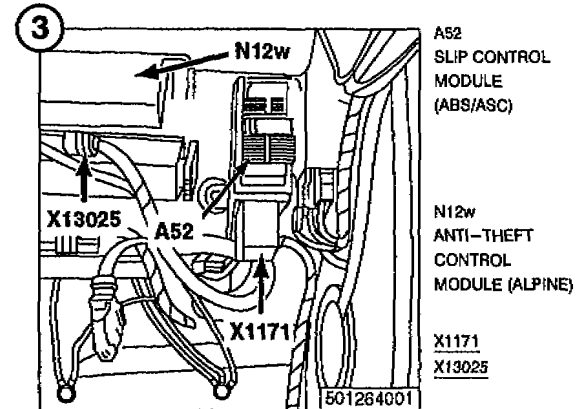
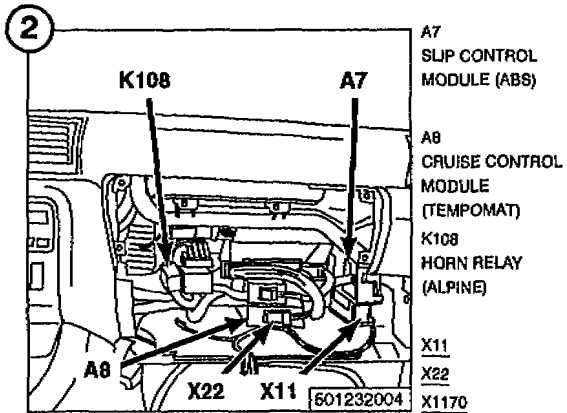
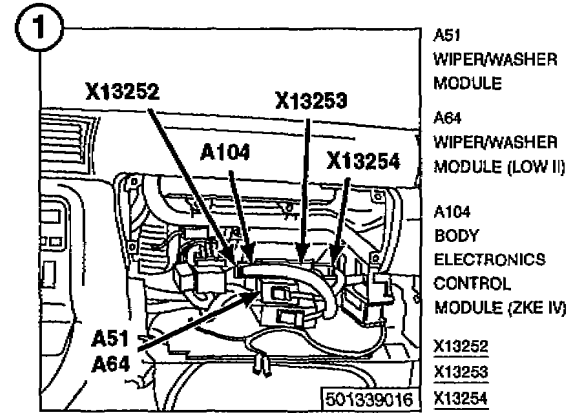
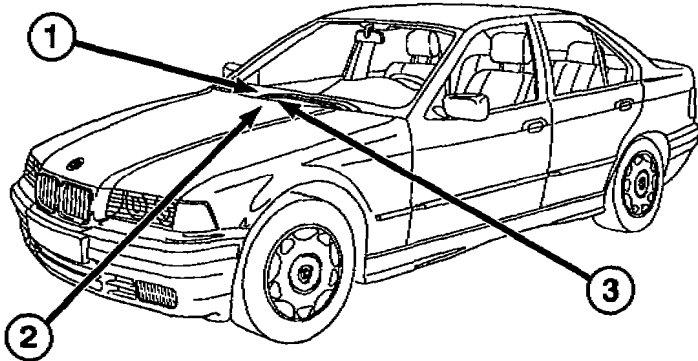
## ELECTRICAL CONTROL MODULE LOCATIONS





# COMPONENT LOCATION VIEWS

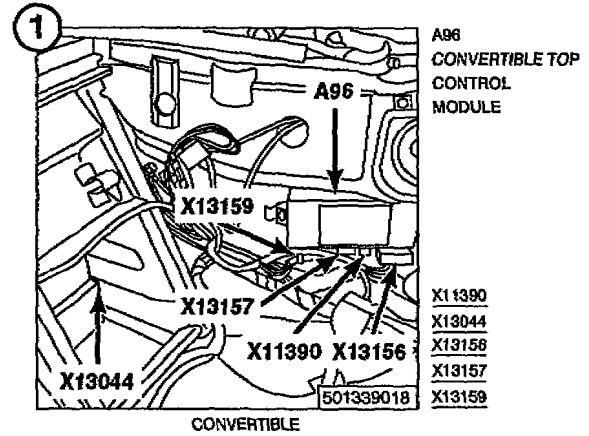
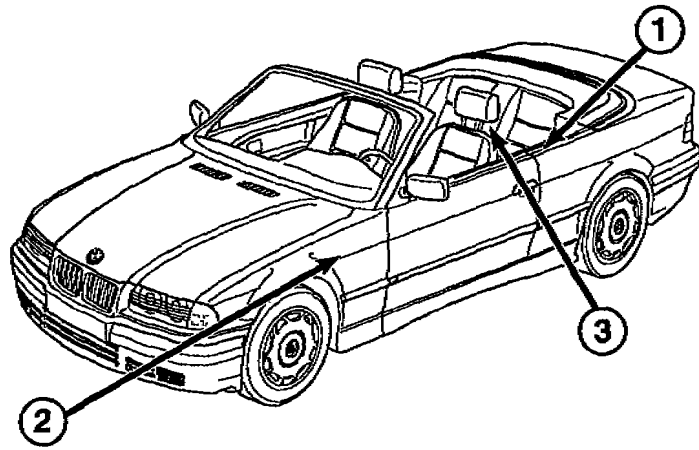
## ELECTRICAL CONTROL MODULE LOCATIONS



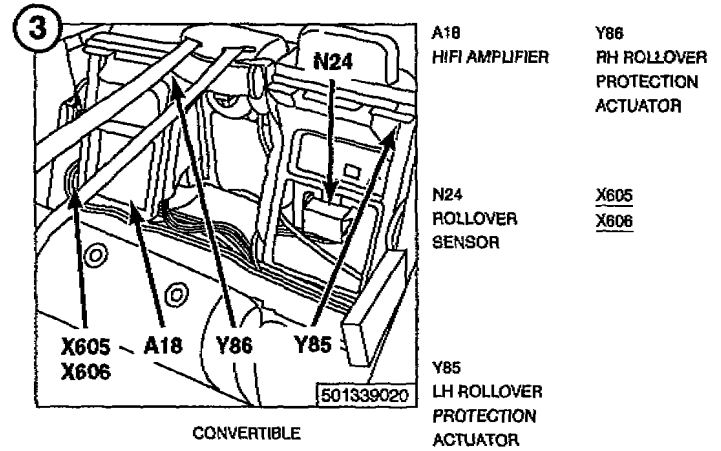
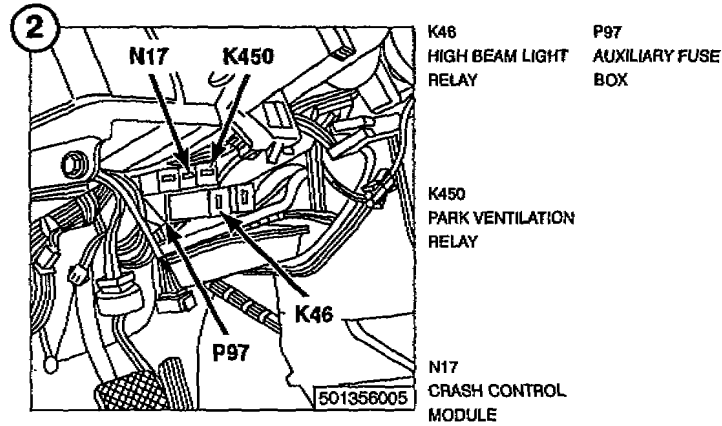


# COMPONENT LOCATION VIEWS

## ELECTRICAL CONTROL MODULE LOCATIONS



X11390  
X13044  
X13156  
X13157  
X13159

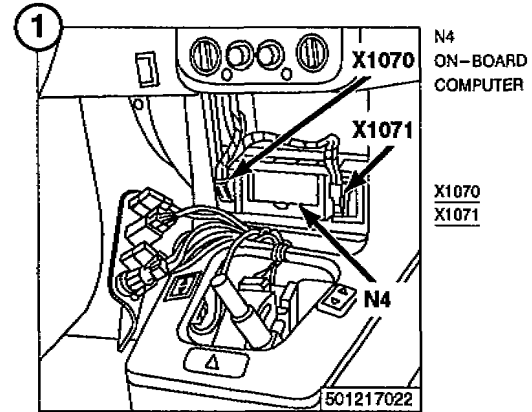
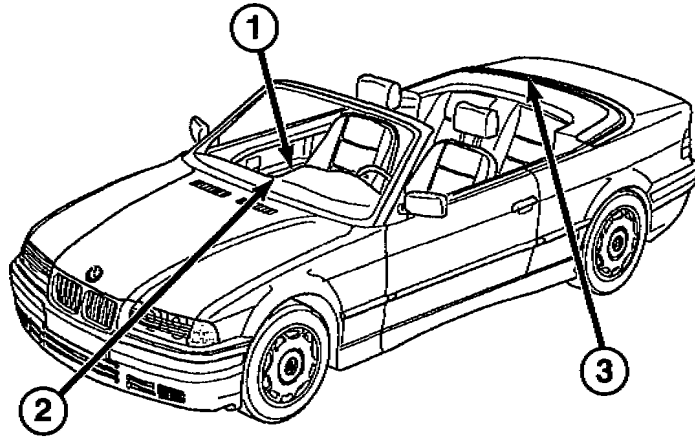






# COMPONENT LOCATION VIEWS

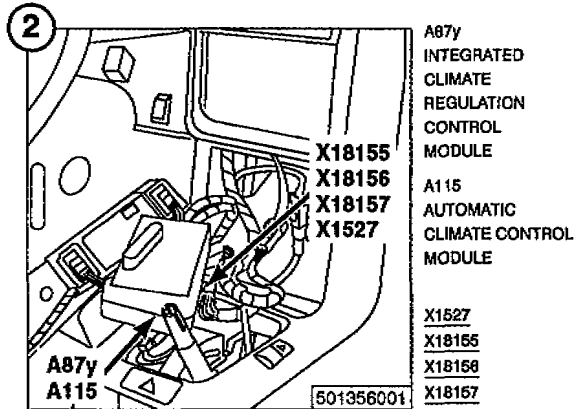
## ELECTRICAL CONTROL MODULE LOCATIONS



N4  
ON-BOARD  
COMPUTER

X1070  
X1071

501217022



A87y  
INTEGRATED  
CLIMATE  
REGULATION  
CONTROL  
MODULE

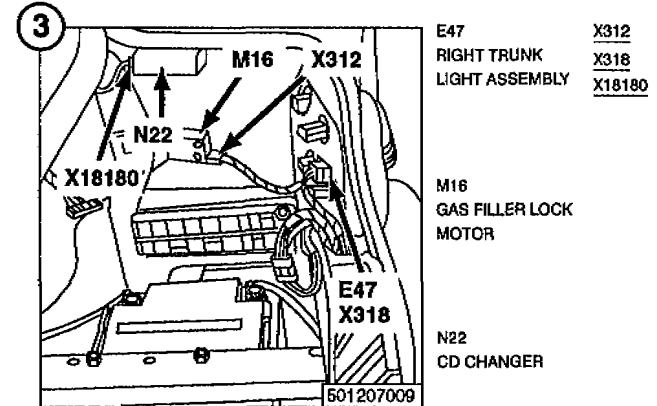
X18155  
X18156  
X18157  
X1527

A115  
AUTOMATIC  
CLIMATE CONTROL  
MODULE

X1527  
X18155  
X18156  
X18157

A87y  
A115

501356001



E47  
RIGHT TRUNK  
LIGHT ASSEMBLY

X312  
X318  
X18180

M16  
GAS FILLER LOCK  
MOTOR

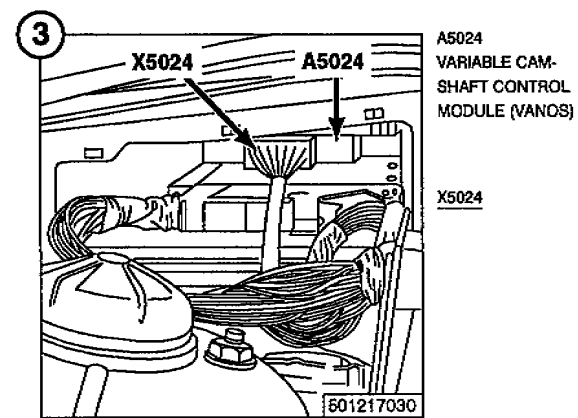
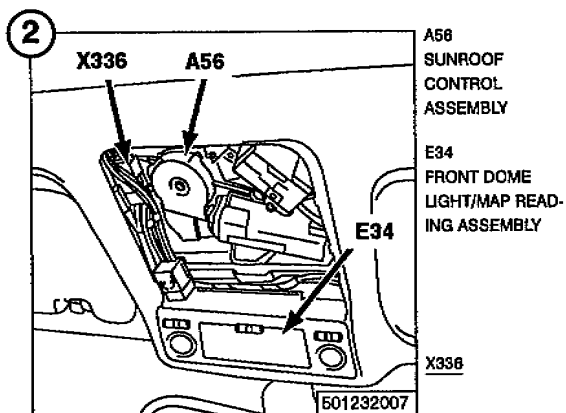
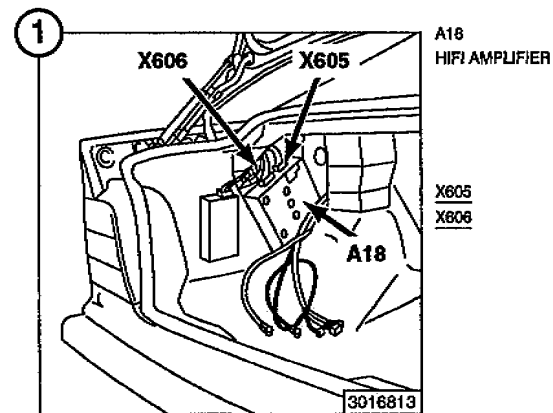
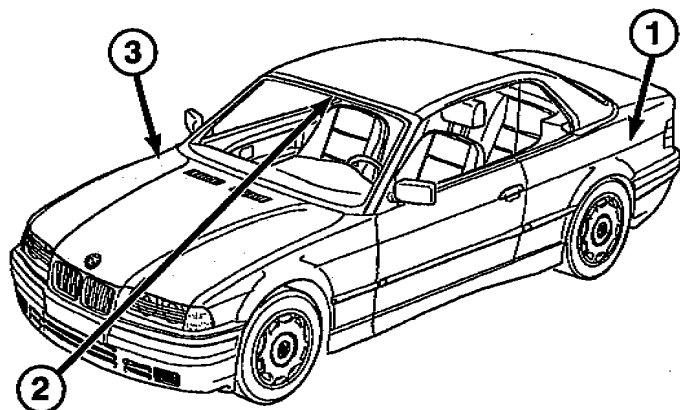
N22  
CD CHANGER

501207009



# COMPONENT LOCATION VIEWS

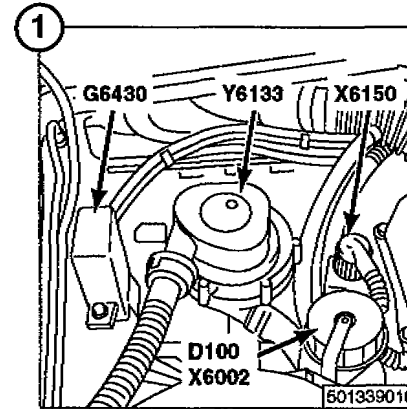
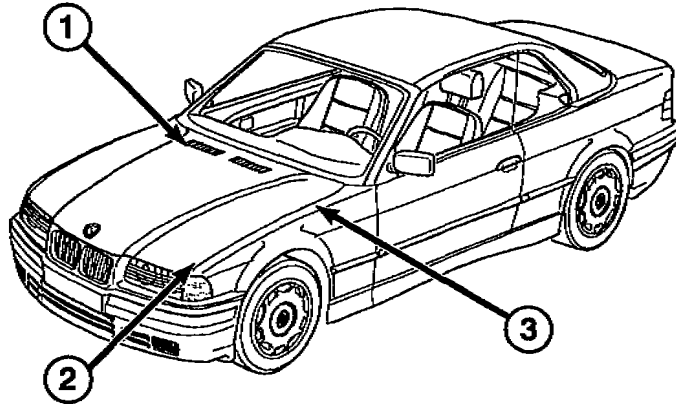
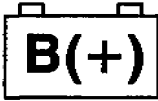
## ELECTRICAL CONTROL MODULE LOCATIONS



M3



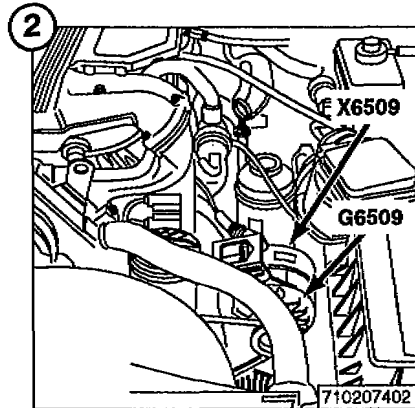
# COMPONENT LOCATION VIEWS



D100 DATA LINK CONNECTOR X6002 X6150

G6430 B+ JUMP START JUNCTION POINT

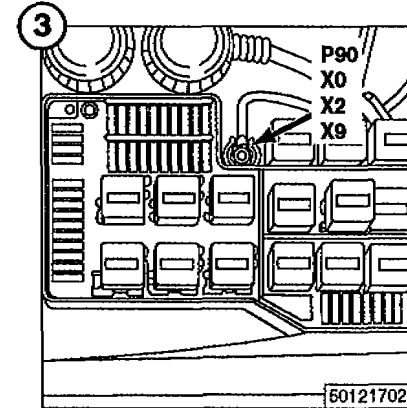
Y6133 AIR PUMP



G8509 GENERATOR

X6509 CABLE SOCKET ALTERNATOR B+

710207402



P90 FRONT POWER DISTRIBUTION BOX

X1 B+ JUNCTION POINT

X2 BATTERY B+ START POINT

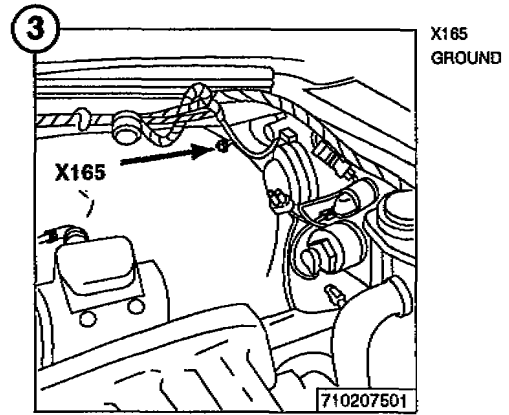
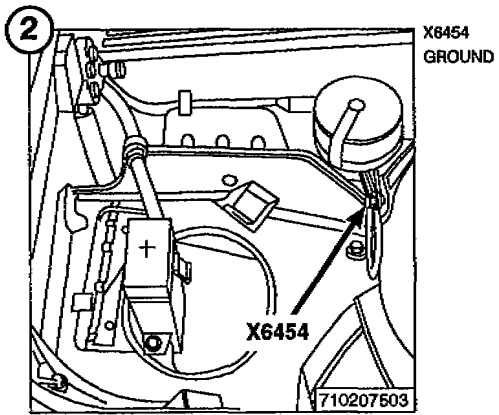
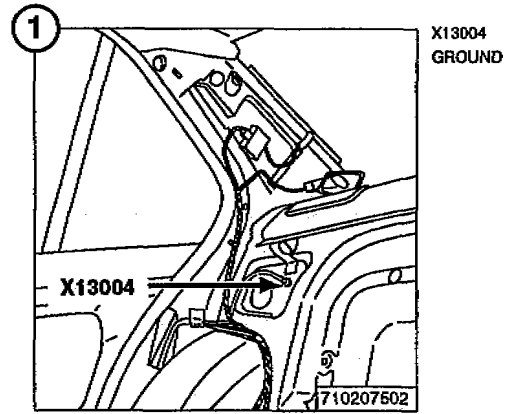
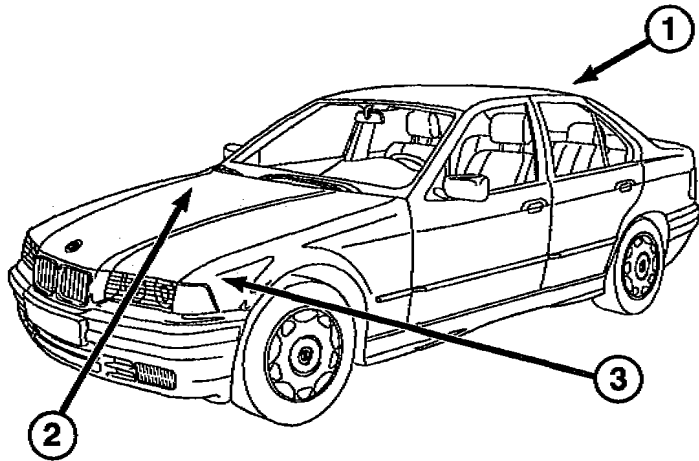
X8 B+ JUNCTION POINT

501217029



# COMPONENT LOCATION VIEWS

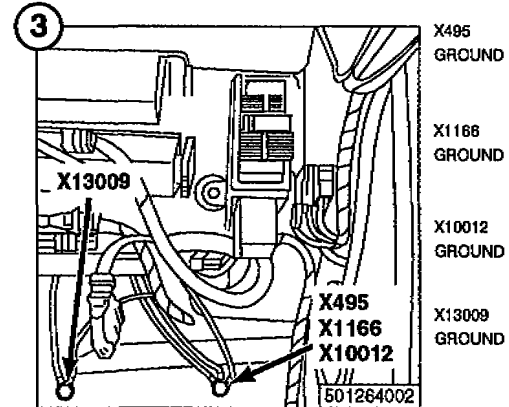
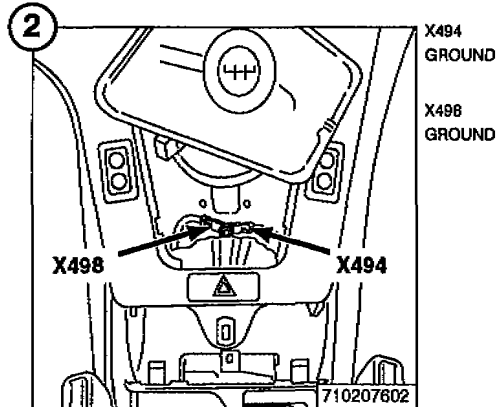
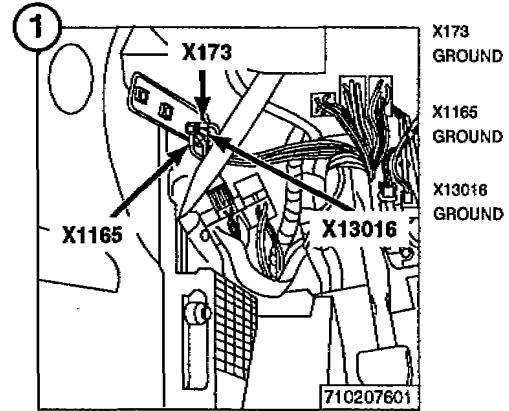
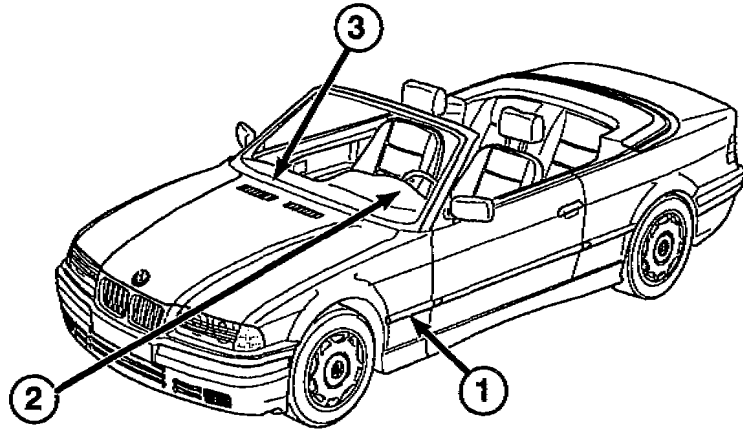
**B(-)**





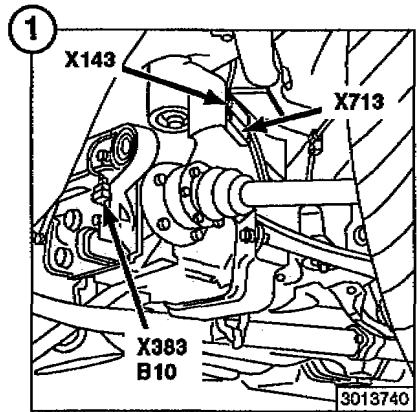
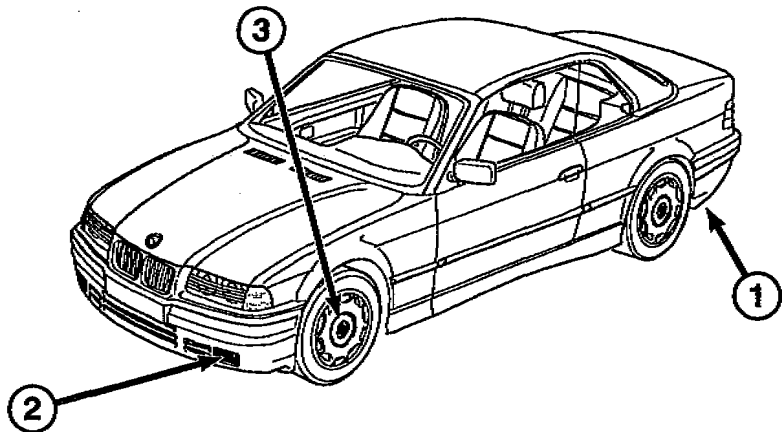
# COMPONENT LOCATION VIEWS

**B(-)**



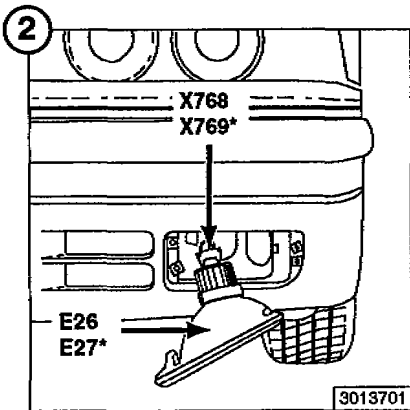


# COMPONENT LOCATION VIEWS



B10  
VEHICLE SPEED  
SENSOR

X143  
X383  
X713

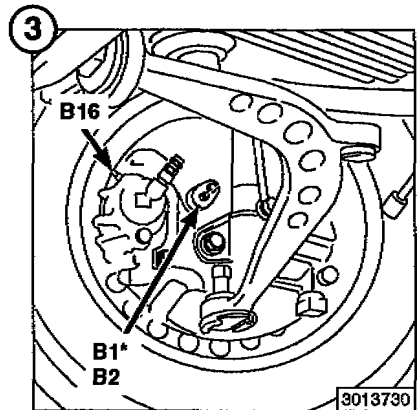


E26  
LEFT FOG LIGHT

E27 \*  
RIGHT FOG LIGHT

X768  
X769 \*

\*RH similar



B1 \*  
RIGHT FRONT  
SPEED SENSOR -  
ABS

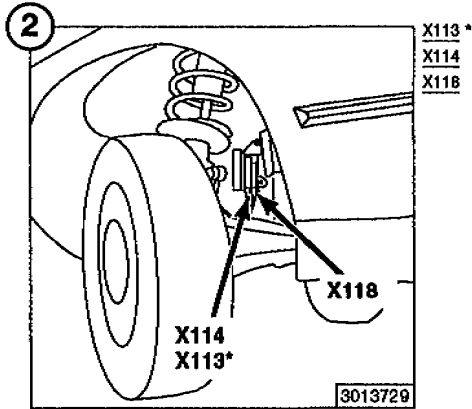
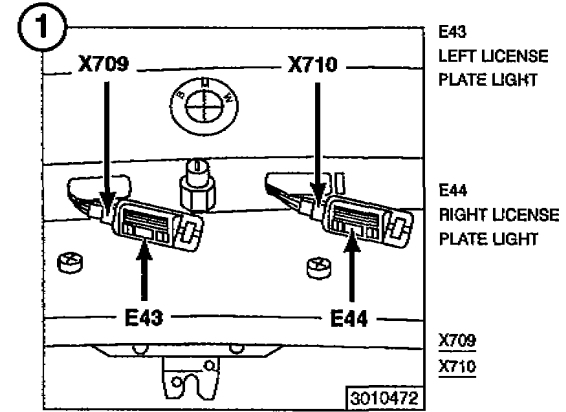
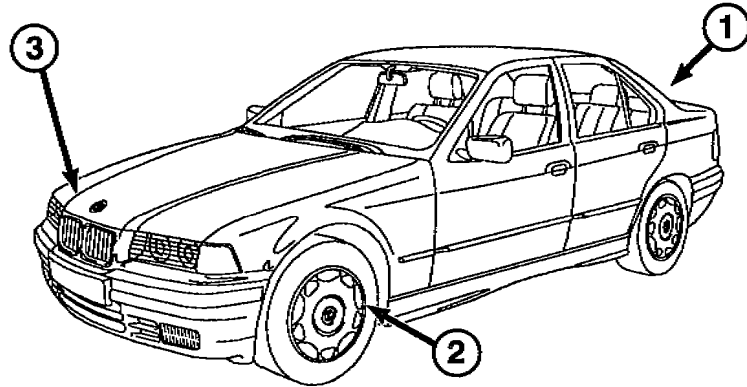
B2  
LEFT FRONT  
SPEED SENSOR -  
ABS

B16  
LEFT FRONT  
BRAKE PAD  
SENSOR

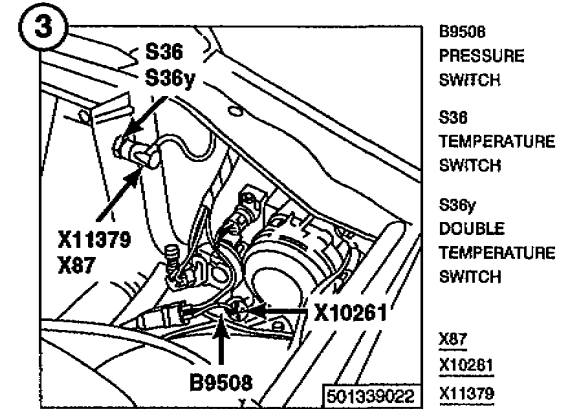
\*RH similar

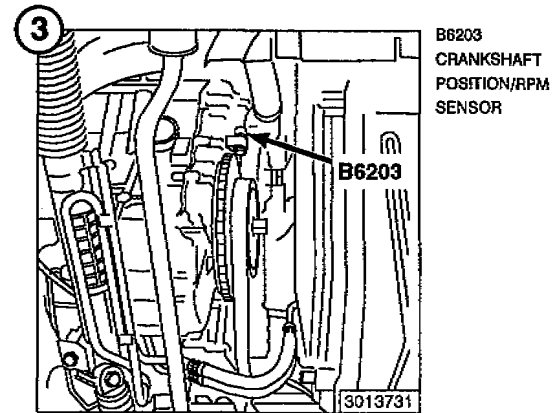
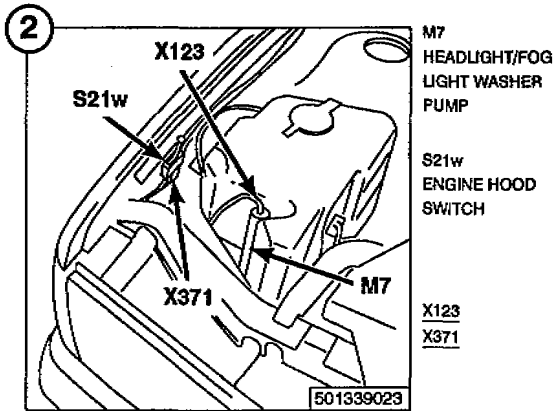
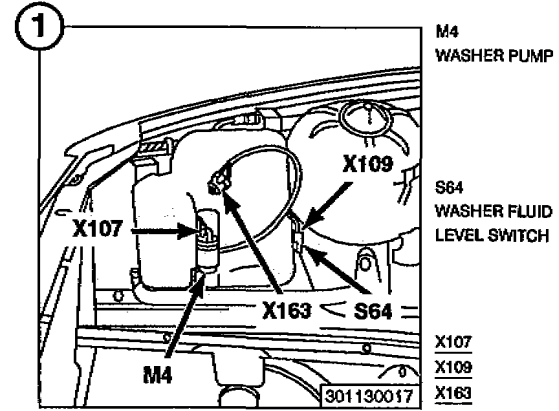
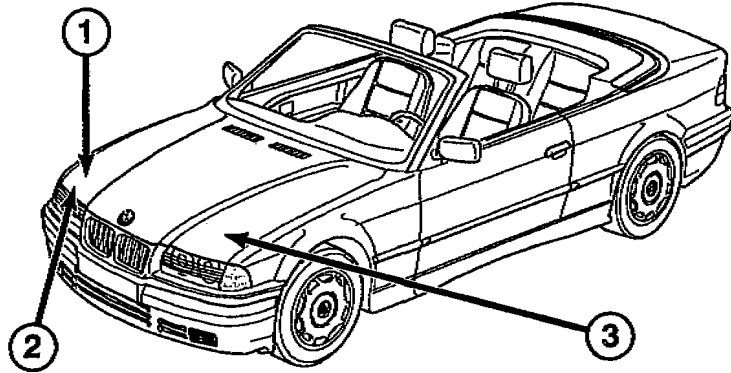


# COMPONENT LOCATION VIEWS



\*RH similar

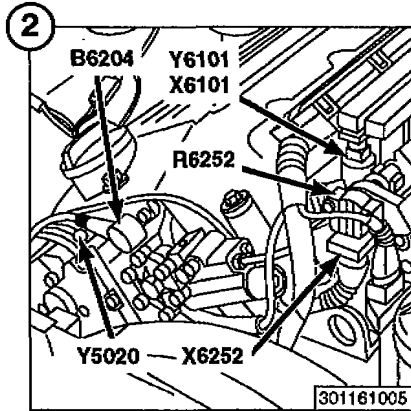
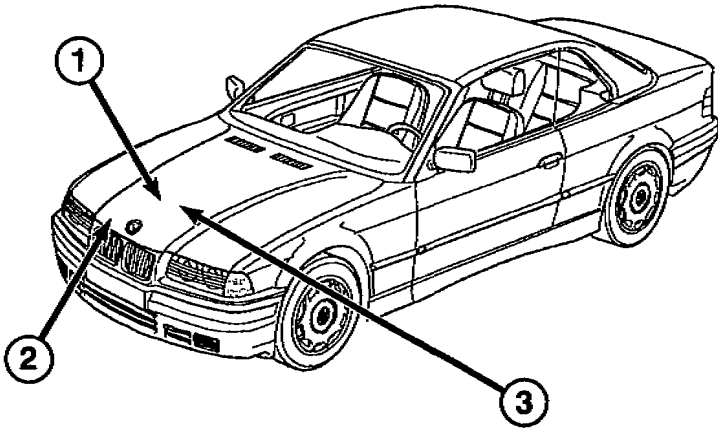








# COMPONENT LOCATION VIEWS



B6204 CAMSHAFT POSITION SENSOR (CYLINDER IDENTIFICATION)

Y6101 CYL. 1 FUEL INJECTION VALVE

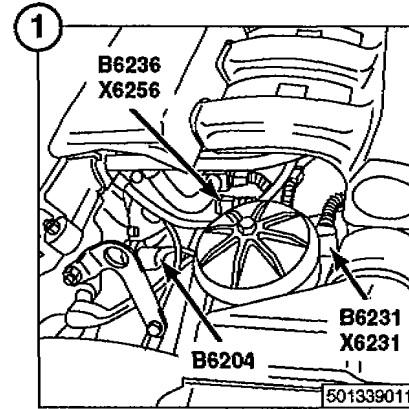
R6252 THROTTLE POSITION SENSOR

Y5020 VARIABLE CAM-SHAFT CONTROL VALVE 1

X6101

X6252

M3



B6236 CAMSHAFT POSITION SENSOR (CYLINDER IDENTIFICATION)

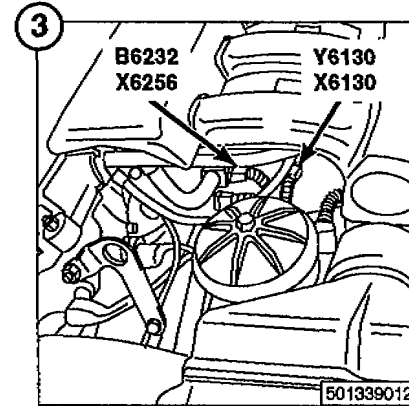
B6231 OIL PRESSURE SWITCH

B6204 ENGINE COOLANT TEMPERATURE SENSOR

B6231 X6231

X6231  
X6256

325i



B6232 ENGINE COOLANT TEMPERATURE SENSOR

Y6130 IDLE SPEED CONTROL VALVE

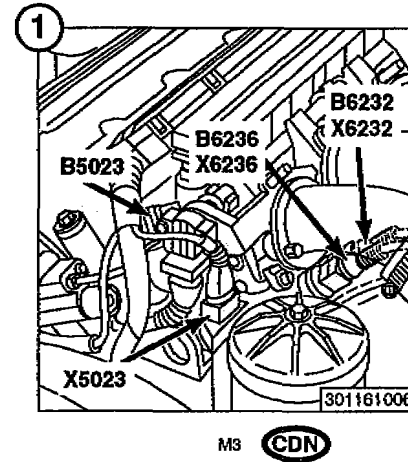
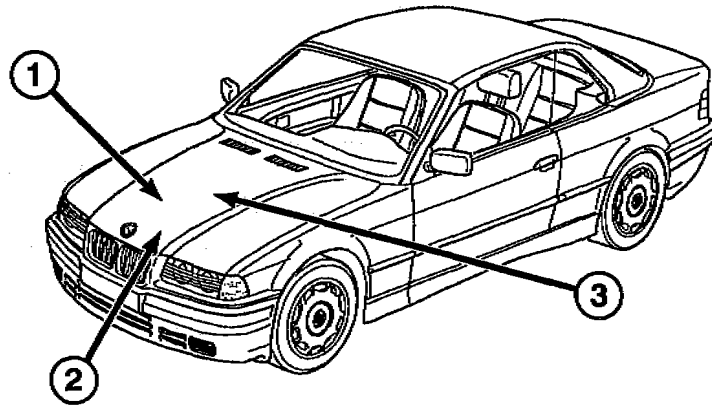
X6456 GROUND

X6130 X6256

325i



# COMPONENT LOCATION VIEWS

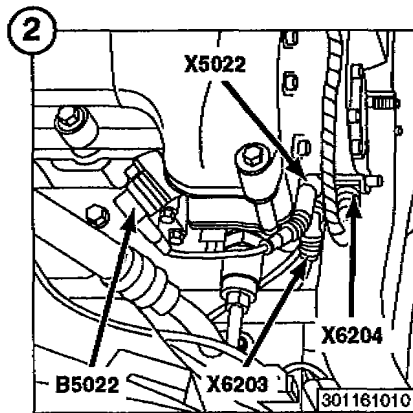


B5023 X5023  
 VARIABLE CAM- X6232  
 SHAFT CONTROL X6236  
 SENSOR 2

B6232  
 ENGINE COOLANT  
 TEMPERATURE  
 SENSOR

B6236  
 ENGINE COOLANT  
 TEMPERATURE  
 SENSOR

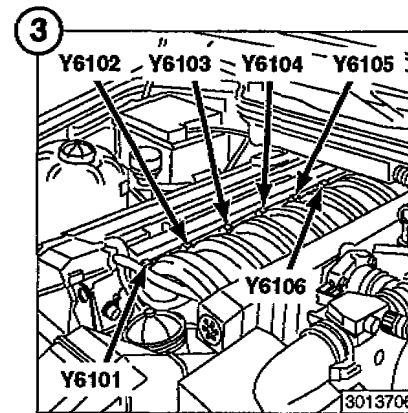
M3 **CDN**



B5022  
 VARIABLE CAM-  
 SHAFT CONTROL  
 SENSOR 1

X5022  
 X6203  
 X6204

M3 **CDN**



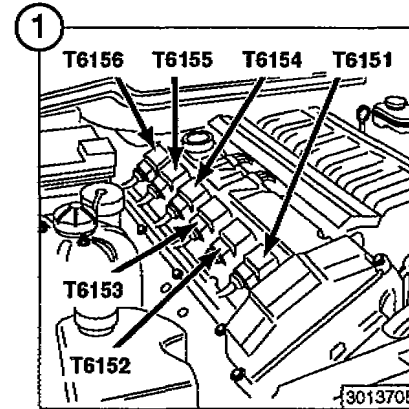
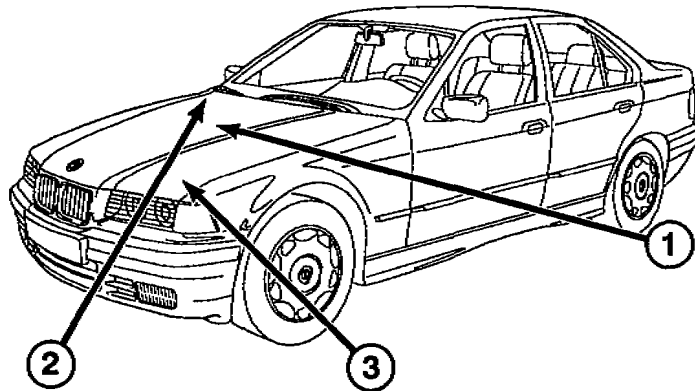
Y6101 Y6104  
 CYL. 1 FUEL INJECTION VALVE CYL. 4 FUEL INJECTION VALVE

Y6102 Y6105  
 CYL. 2 FUEL INJECTION VALVE CYL. 5 FUEL INJECTION VALVE

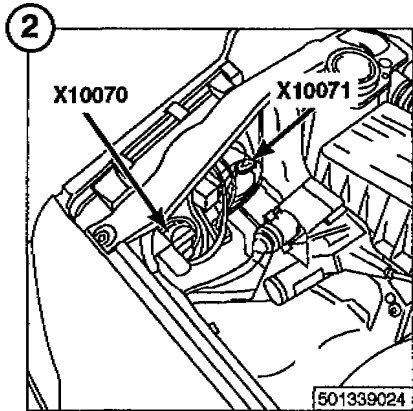
Y6103 Y6106  
 CYL. 3 FUEL INJECTION VALVE CYL. 6 FUEL INJECTION VALVE



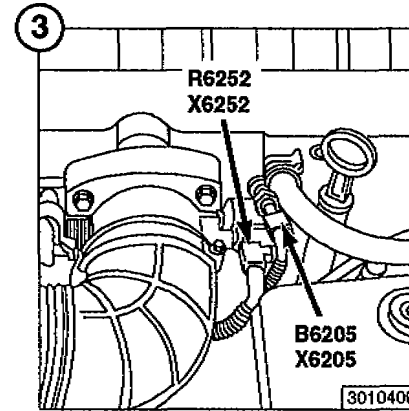
# COMPONENT LOCATION VIEWS



- |                                  |                                  |
|----------------------------------|----------------------------------|
| T6151<br>CYL. 1 IGNITION<br>COIL | T6154<br>CYL. 4 IGNITION<br>COIL |
| T6152<br>CYL. 2 IGNITION<br>COIL | T6155<br>CYL. 5 IGNITION<br>COIL |
| T6153<br>CYL. 3 IGNITION<br>COIL | T6156<br>CYL. 6 IGNITION<br>COIL |



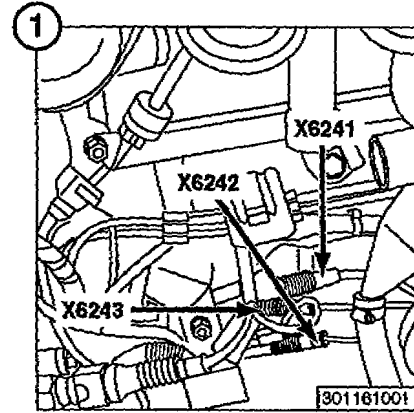
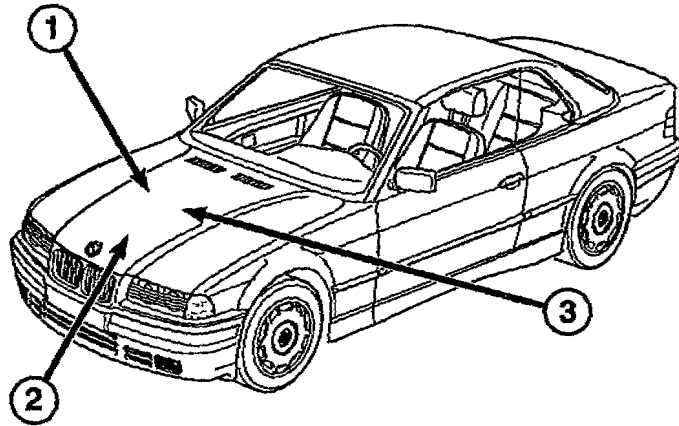
- X10070
- X10071



- B6205  
INTAKE AIR  
TEMPERATURE  
SENSOR
- R6252  
THROTTLE  
POSITION SENSOR
- X6205
- X6252

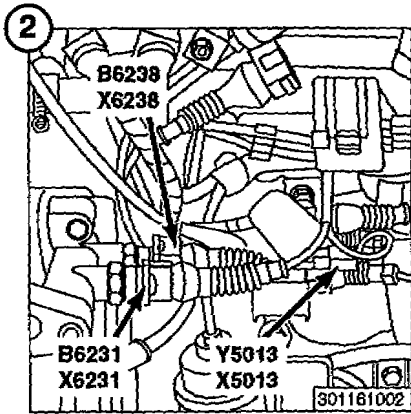


# COMPONENT LOCATION VIEWS



X6241  
X6242  
X6243

M3



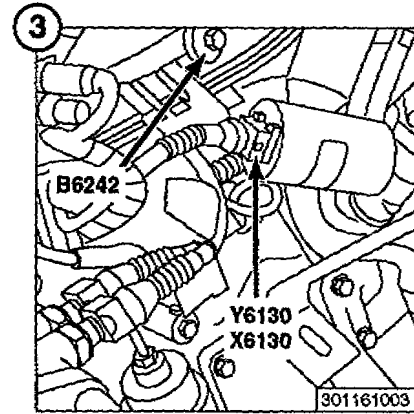
B6231  
OIL PRESSURE  
SWITCH

X5013  
X6231  
X6238

B6238  
OIL TEMPERATURE  
SENSOR

Y5013  
CHANGE-OVER  
VALVE

M3



B6242  
CYL 3-4 KNOCK  
SENSOR

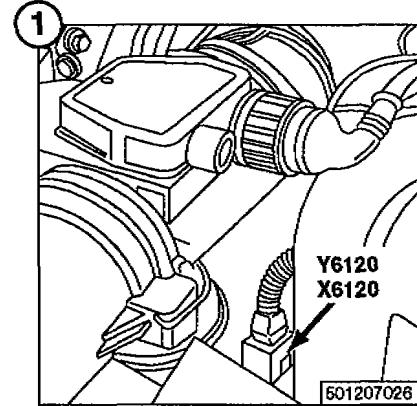
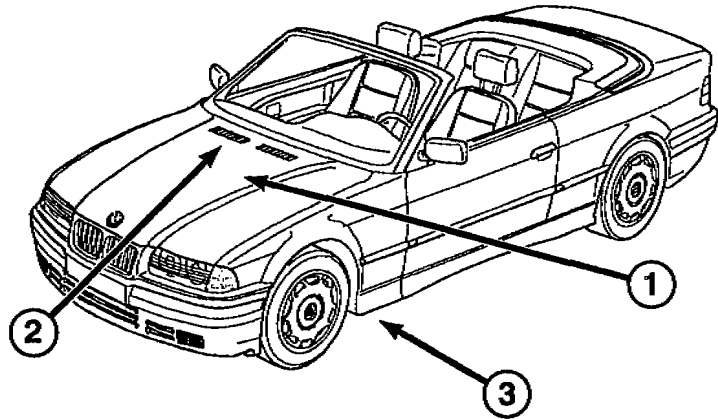
Y6130  
IDLE SPEED  
CONTROL VALVE

X6130

M3



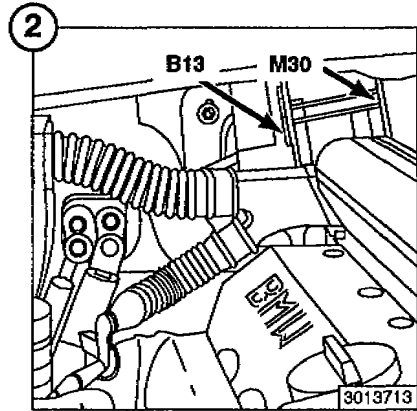
# COMPONENT LOCATION VIEWS



Y6120  
EVAPORATIVE  
EMISSION VALVE

X6120

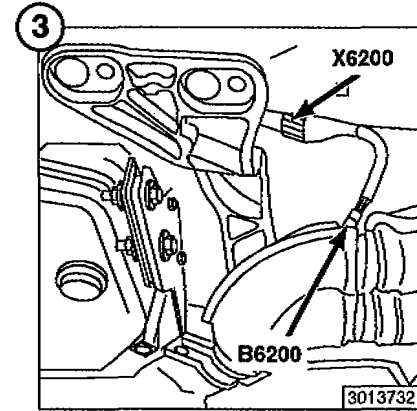
601207026



B13  
OUTSIDE  
TEMPERATURE  
SENSOR

M30  
BLOWER MOTOR

3013713



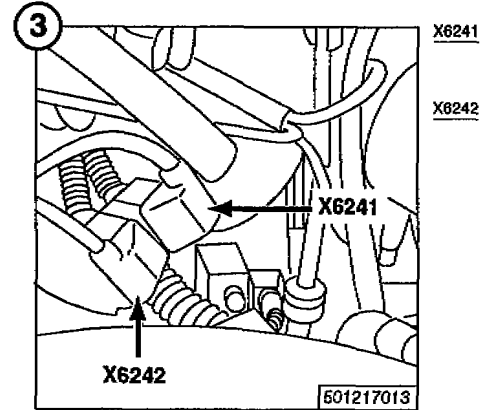
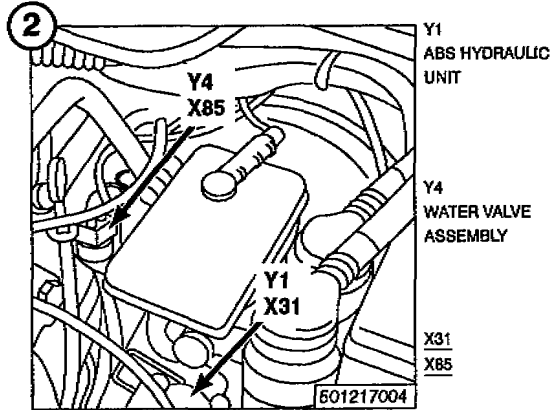
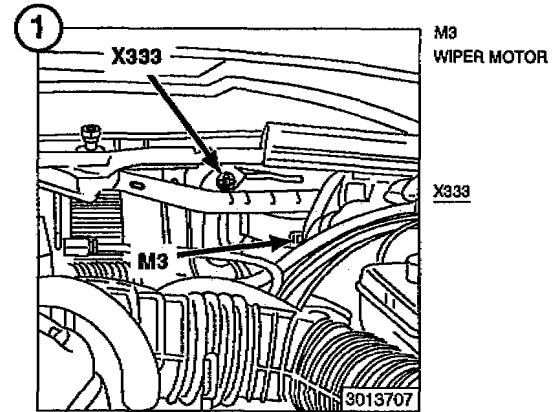
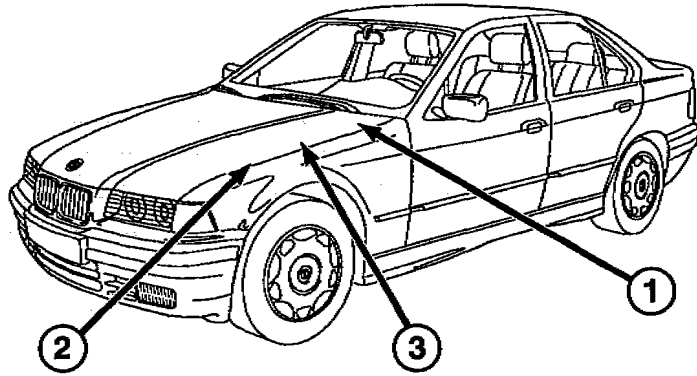
B6200  
HEATED OXYGEN  
SENSOR

X6200

3013732



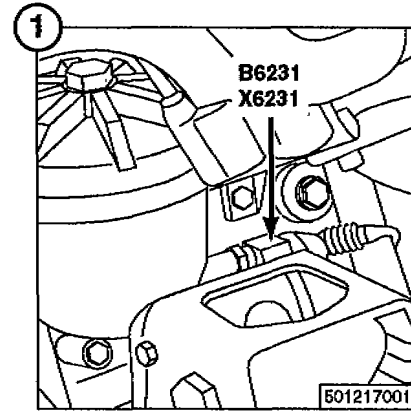
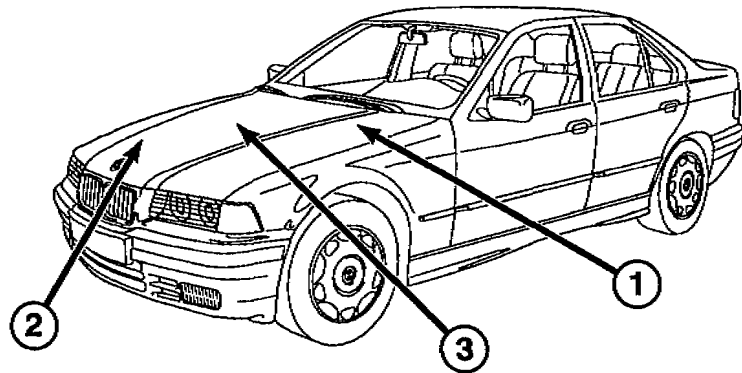
# COMPONENT LOCATION VIEWS



318is



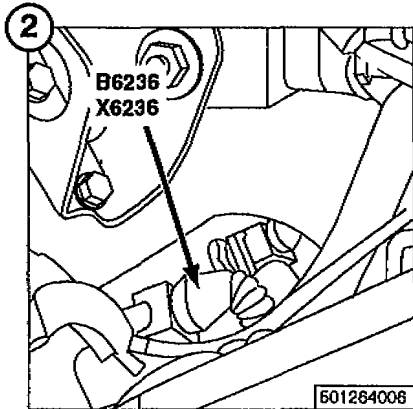
# COMPONENT LOCATION VIEWS



B6231  
OIL PRESSURE  
SWITCH

X6231

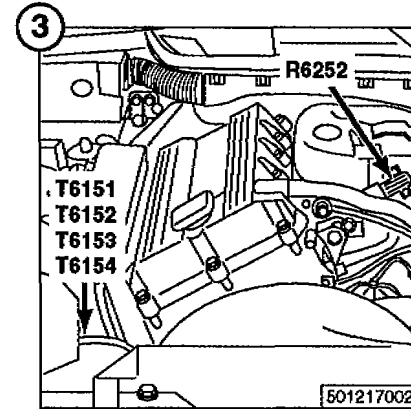
318is



B6236  
ENGINE COOLANT  
TEMPERATURE  
SENSOR

X6236

318is



R6252  
THROTTLE  
POSITION SENSOR

T6153  
CYL. 3 IGNITION  
COIL

T6151  
CYL. 1 IGNITION  
COIL

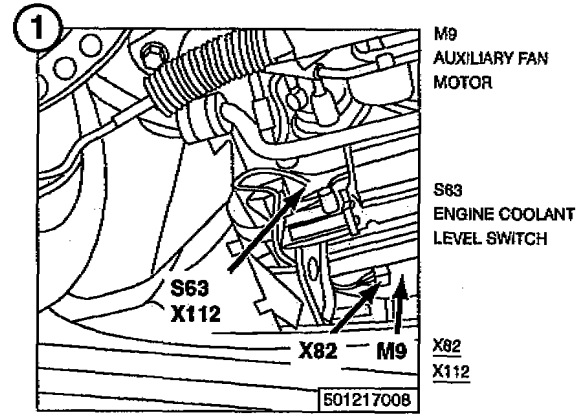
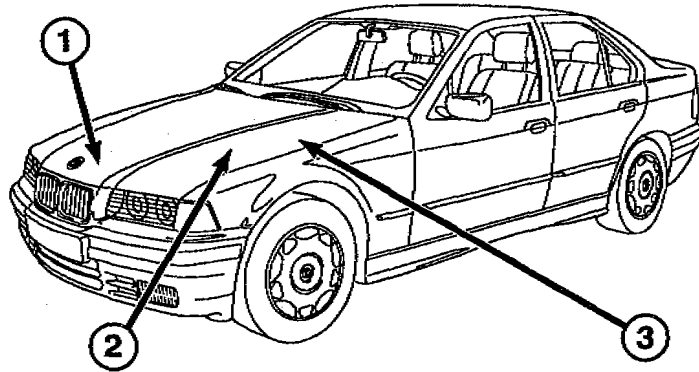
T6154  
CYL. 4 IGNITION  
COIL

T6152  
CYL. 2 IGNITION  
COIL

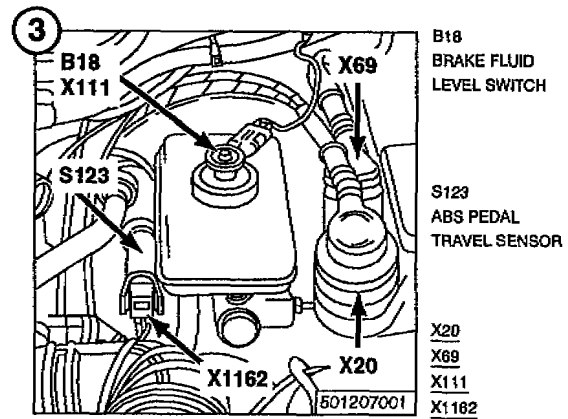
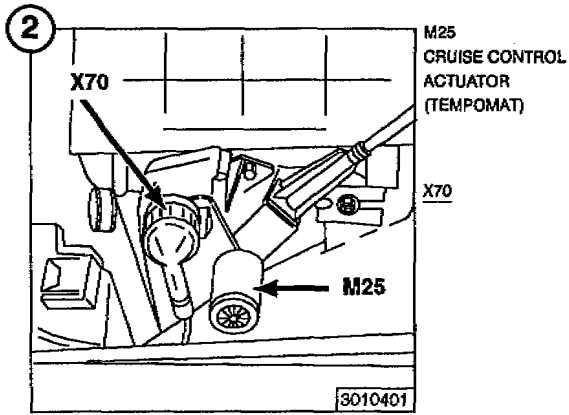
318is



# COMPONENT LOCATION VIEWS



318is

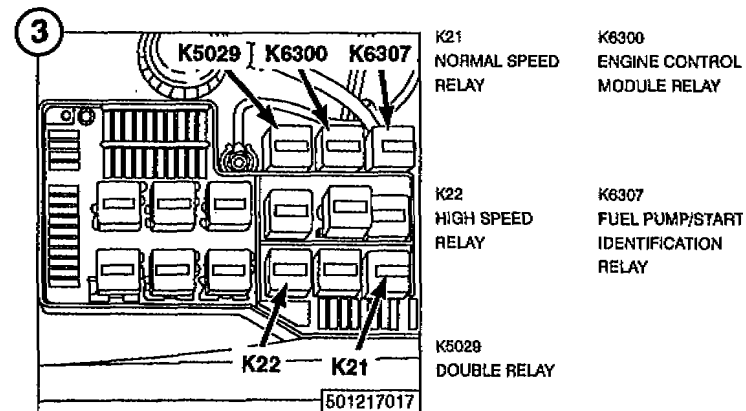
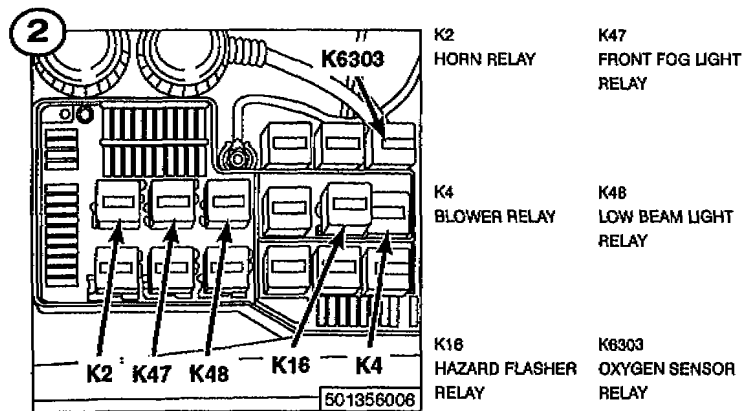
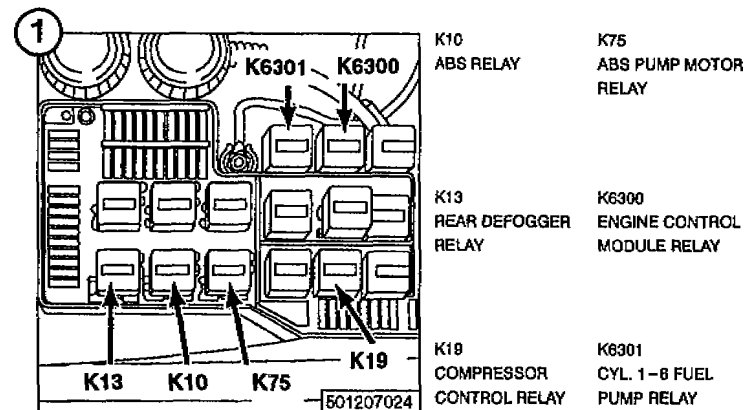
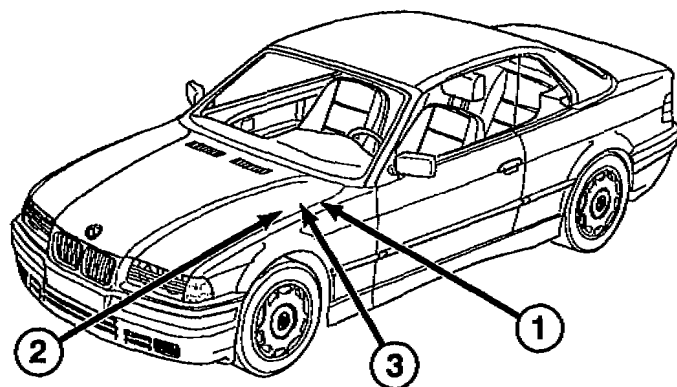


325i





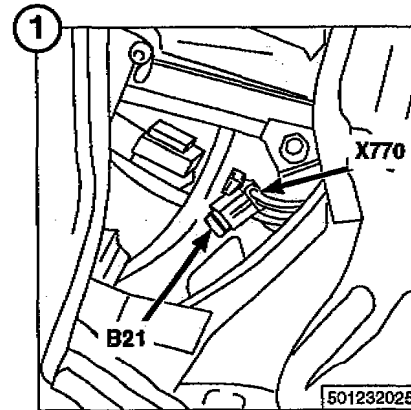
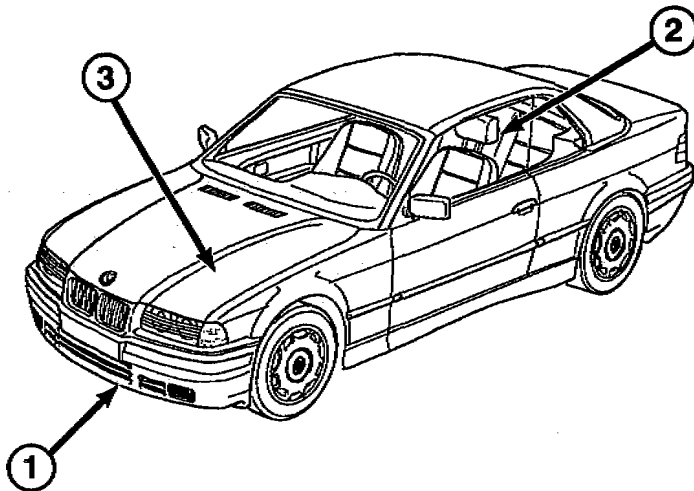
# COMPONENT LOCATION VIEWS



M3



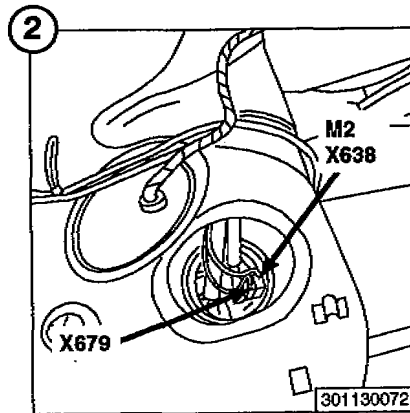
# COMPONENT LOCATION VIEWS



B21  
ON-BOARD  
COMPUTER  
TEMPERATURE  
SENSOR

X770

501232025



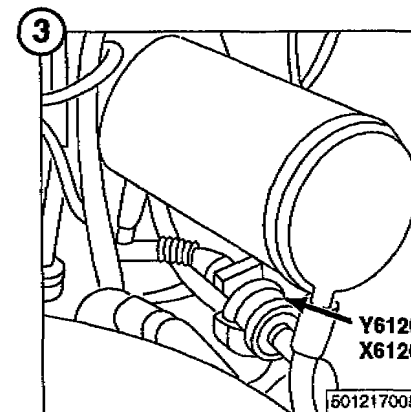
M2  
FUEL PUMP

M2  
X638

X638  
X679

X679

301130072



Y6120  
EVAPORATIVE  
EMISSION VALVE

X6120

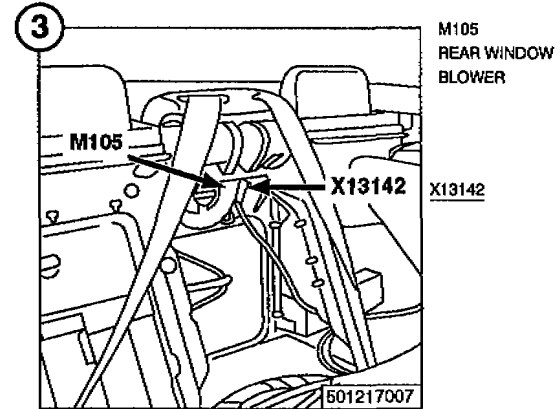
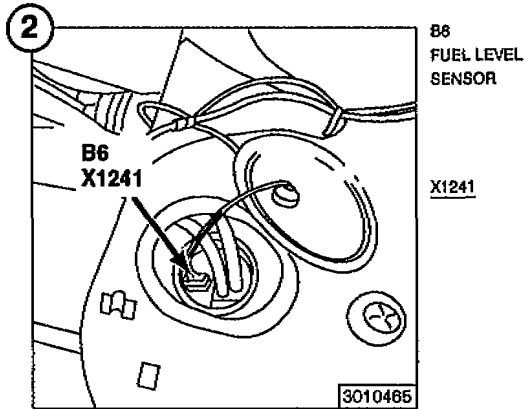
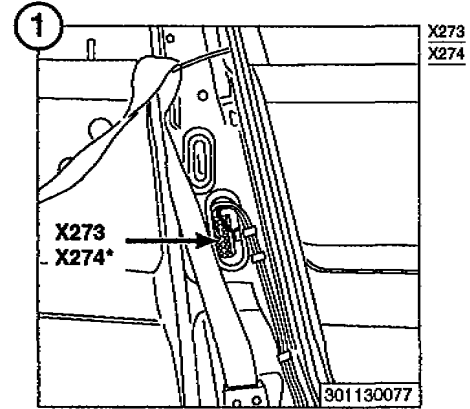
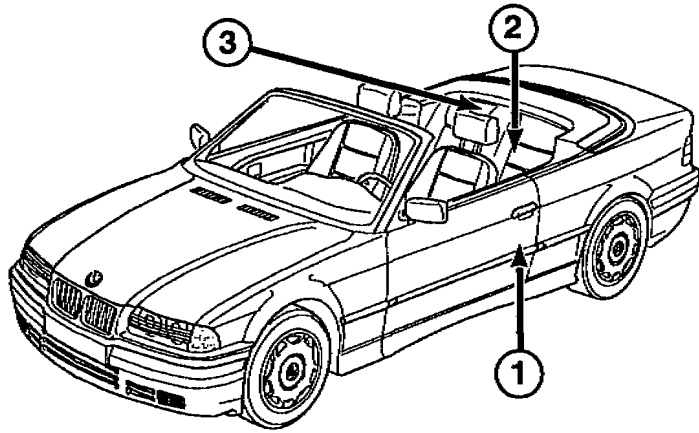
Y6120  
X6120

501217005

318is

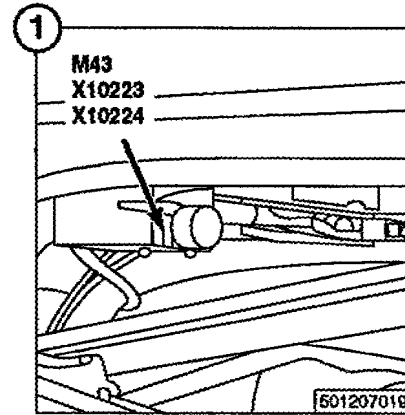
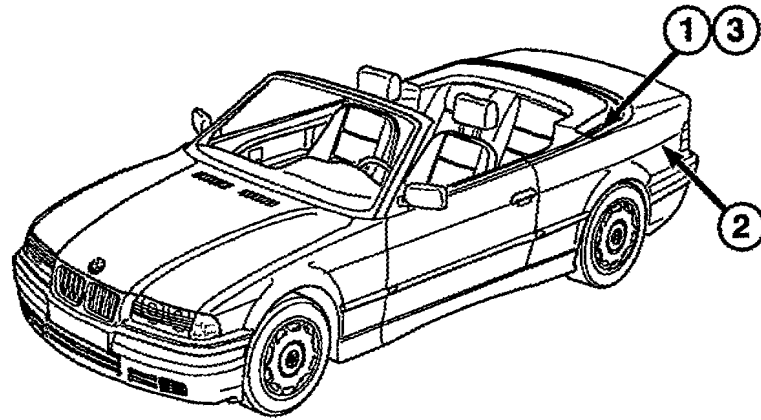


# COMPONENT LOCATION VIEWS





# COMPONENT LOCATION VIEWS

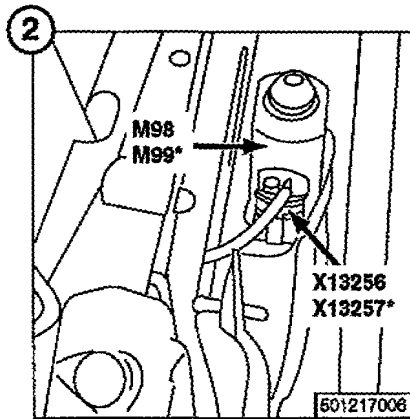


M43  
X10223  
X10224

M43  
CONVERTIBLE TOP  
STORAGE LID  
LOCK MOTOR

X10223  
X10224

501207019



M98  
M99\*

M98 \*  
LEFT REAR  
WINDOW MOTOR

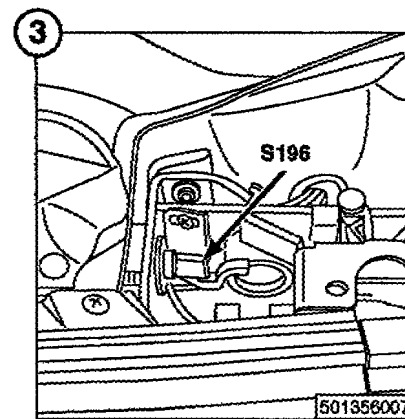
M99 \*  
RIGHT REAR  
WINDOW MOTOR

X13256  
X13257\*

X13256  
X13257

501217006

\*RH similar



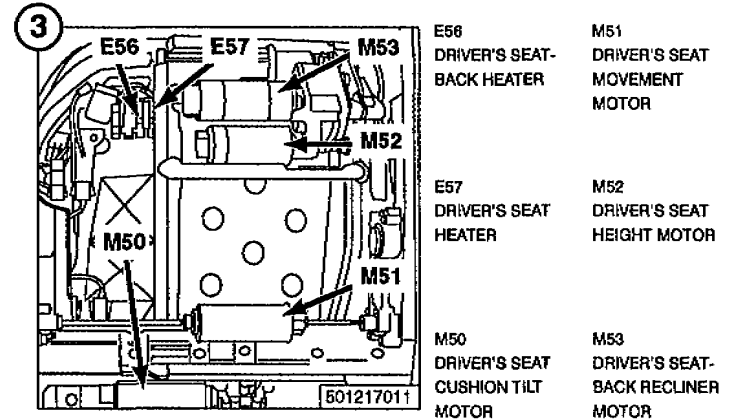
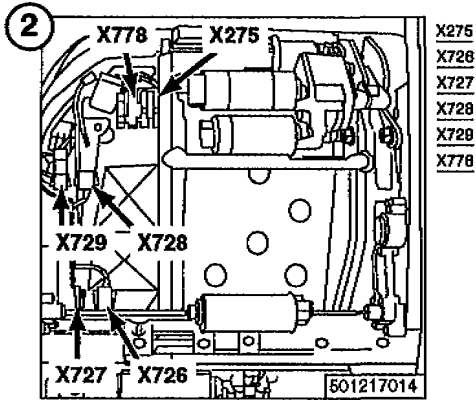
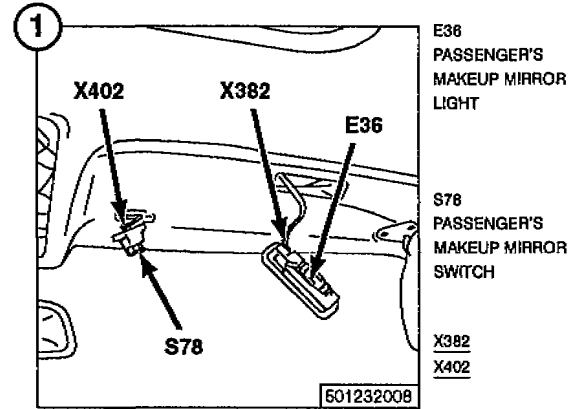
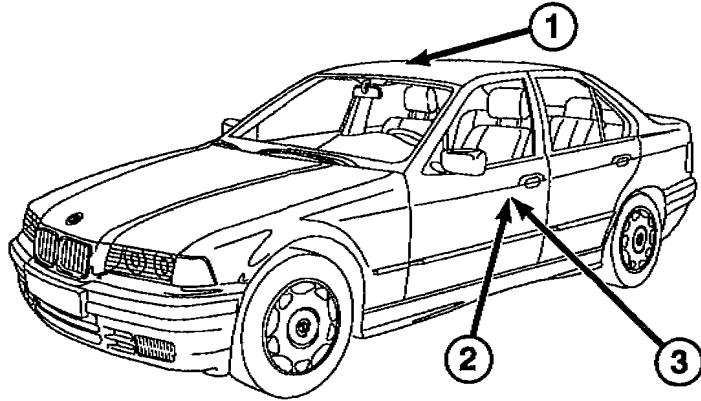
S196

S196  
REAR WINDOW  
BLOWER MICRO  
SWITCH

501356007

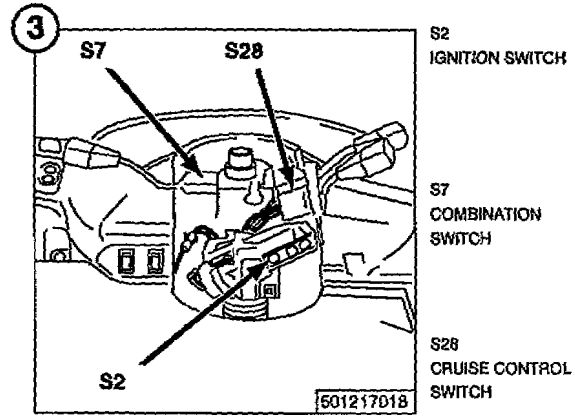
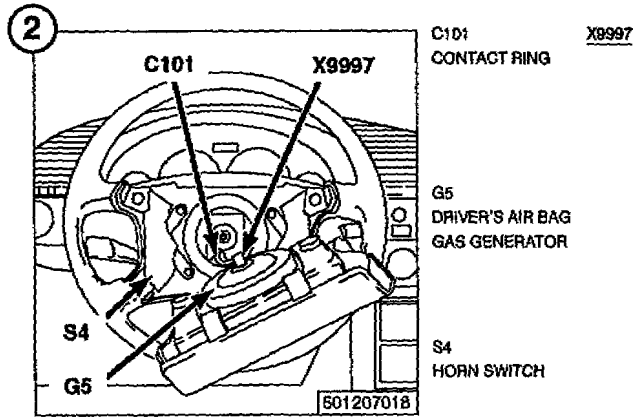
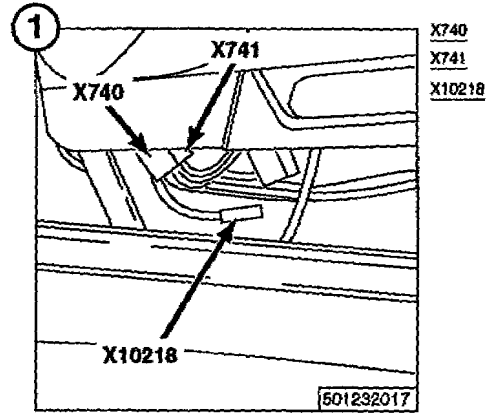
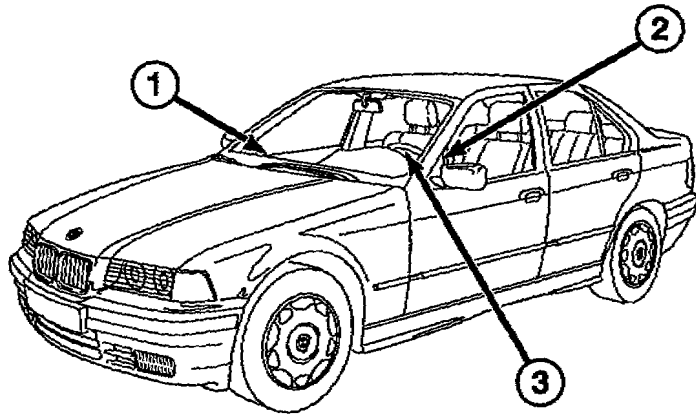


# COMPONENT LOCATION VIEWS



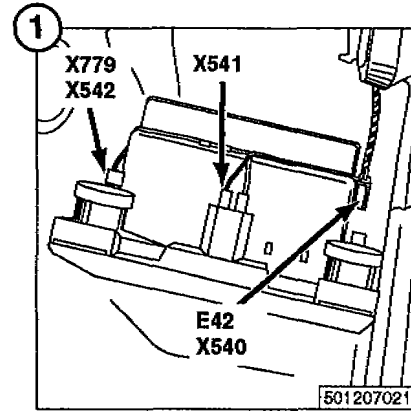
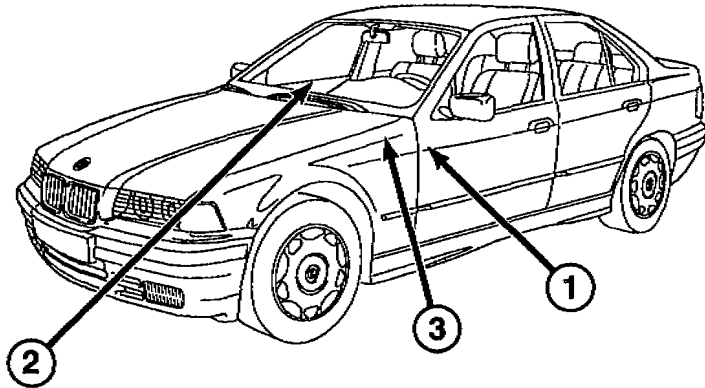


# COMPONENT LOCATION VIEWS



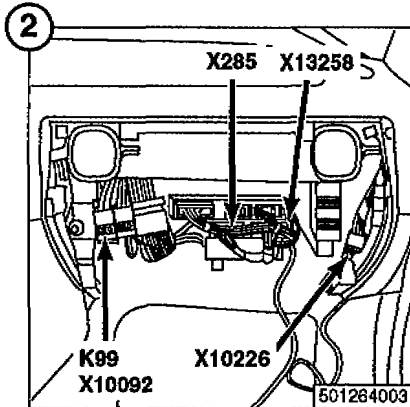


# COMPONENT LOCATION VIEWS



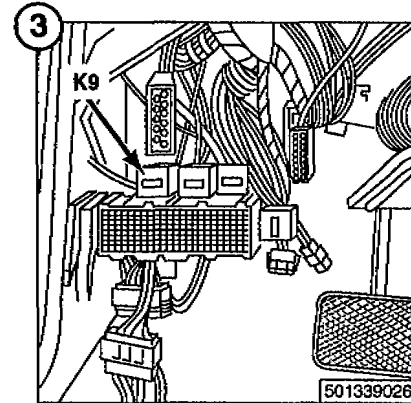
E42  
GLOVE BOX LIGHT

X540  
X541  
X542  
X779



K99  
REAR WINDOW  
BLOWER RELAY

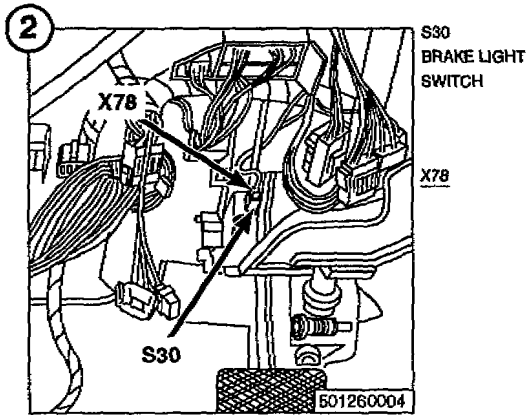
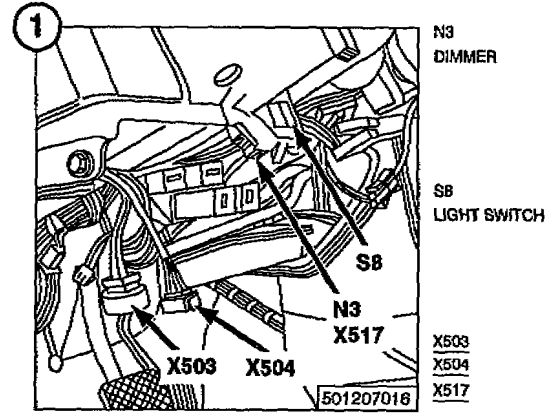
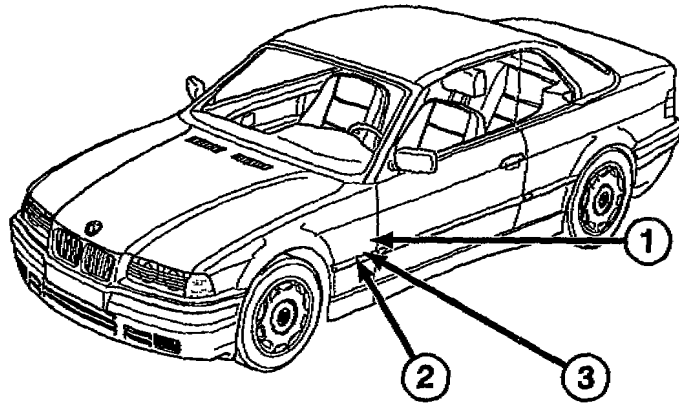
X285  
X10092  
X10226  
X13258



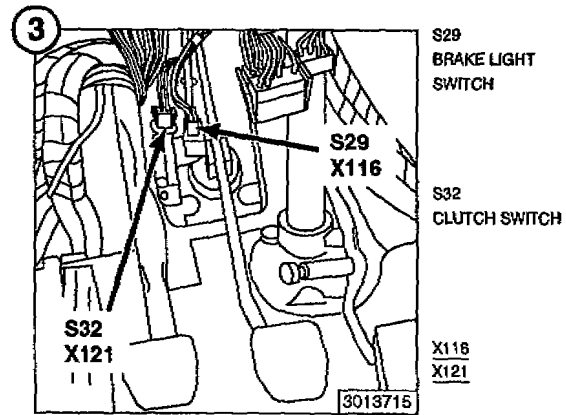
K9  
UNLOADER RELAY,  
TERMINAL 15



# COMPONENT LOCATION VIEWS



AUTOMATIC

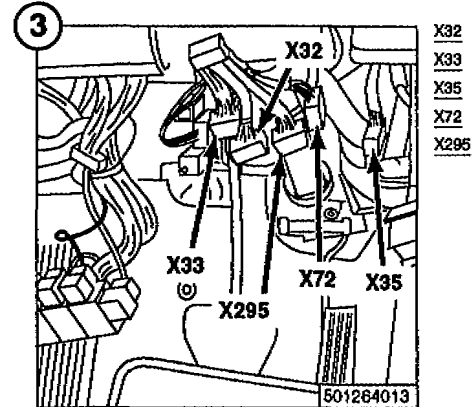
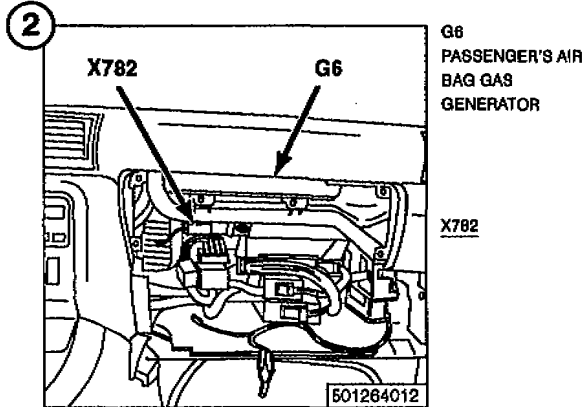
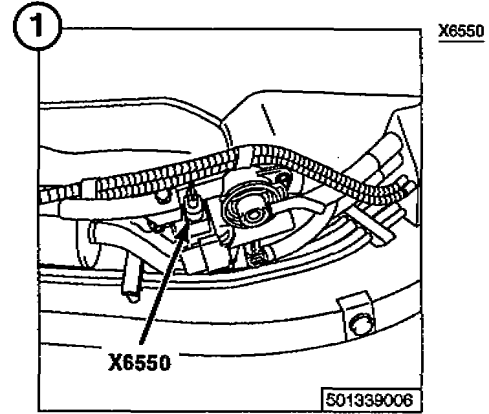
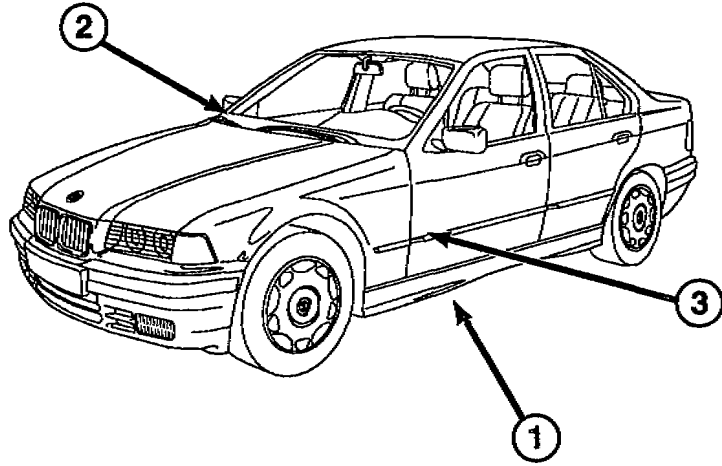


MANUAL



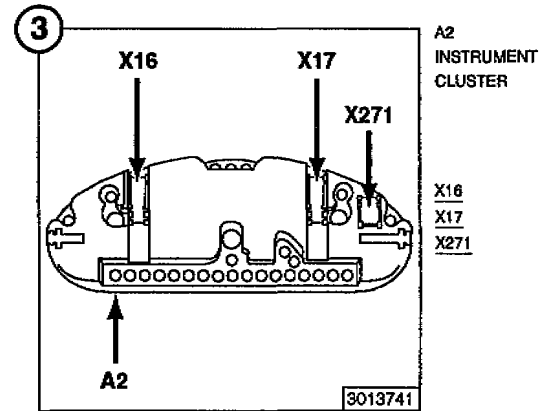
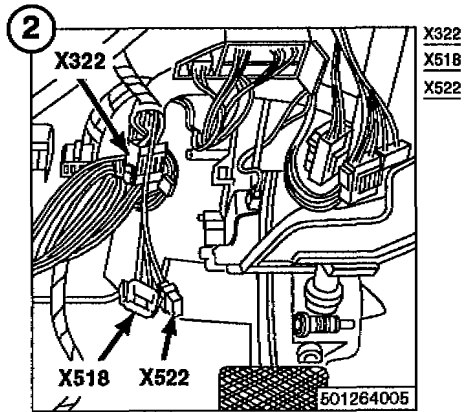
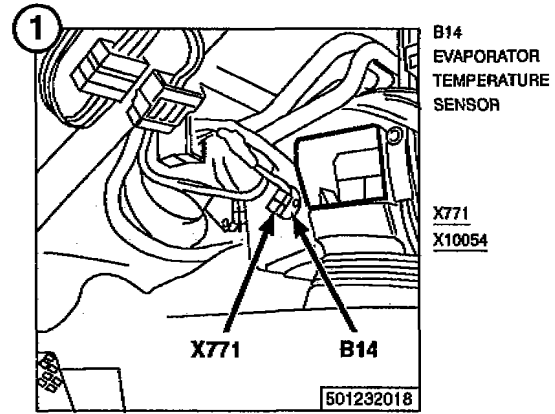
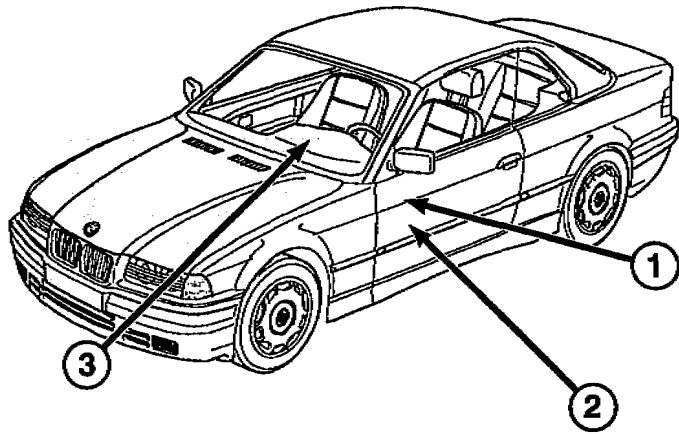


# COMPONENT LOCATION VIEWS



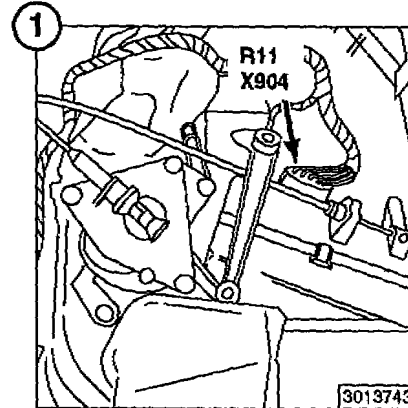
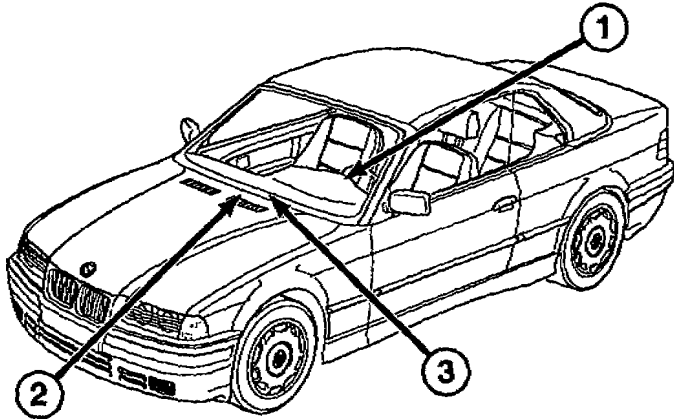


# COMPONENT LOCATION VIEWS





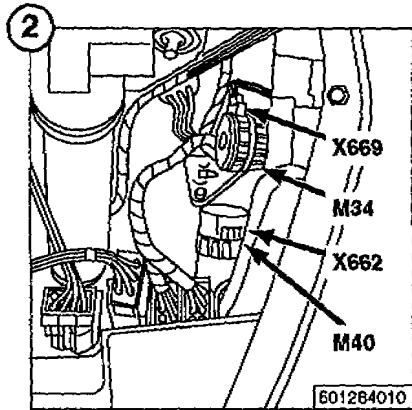
# COMPONENT LOCATION VIEWS



R11  
BLOWER  
RESISTORS

X904

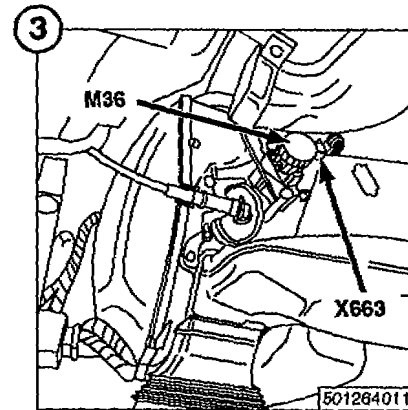
9013743



M34  
DASH VENT MIX-  
ING FLAP MOTOR

M40  
RECIRCULATION  
FLAP MOTOR

X669  
X662  
X663  
M40  
601264010



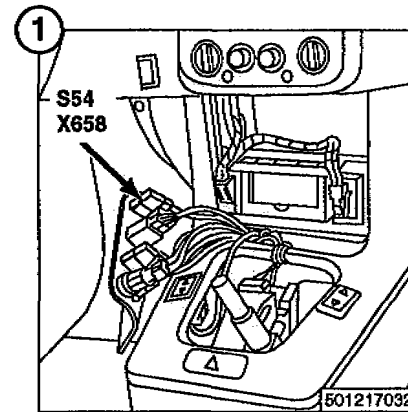
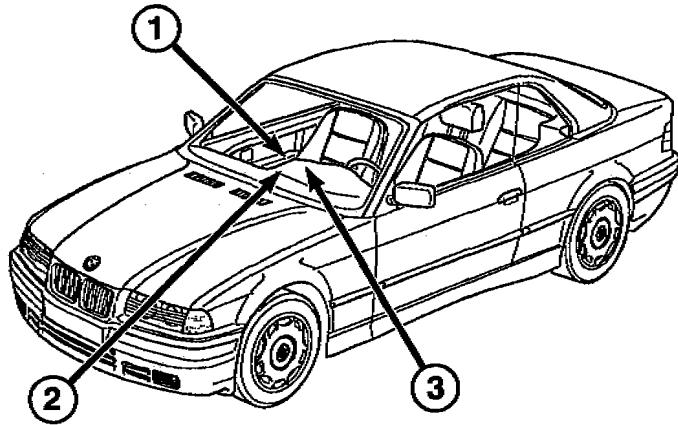
M36  
FRESH AIR FLAP  
MOTOR

X669

X663  
601264011



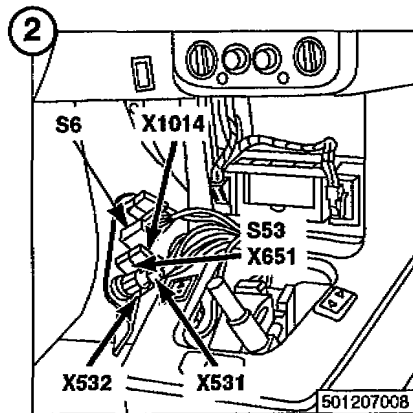
# COMPONENT LOCATION VIEWS



S54  
PASSENGER'S  
SEAT, SEAT  
HEATER SWITCH

X658

501217032



S6  
ASC SWITCH

S6

X1014

S53  
DRIVER'S SEAT,  
SEAT HEATER  
SWITCH

S53

X651

X531

X532

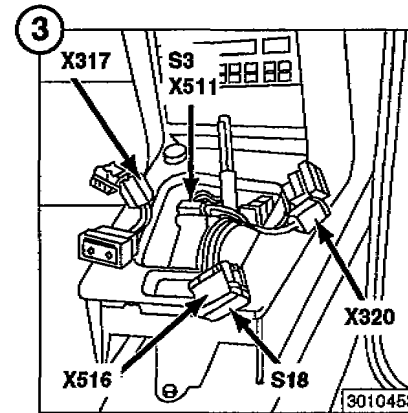
X651

X1014

X532

X531

501207008



S3  
AUTOMATIC  
TRANSMISSION  
RANGE SWITCH

S18  
HAZARD SWITCH

X317

X320

X511

X516

X317

S3

X511

X320

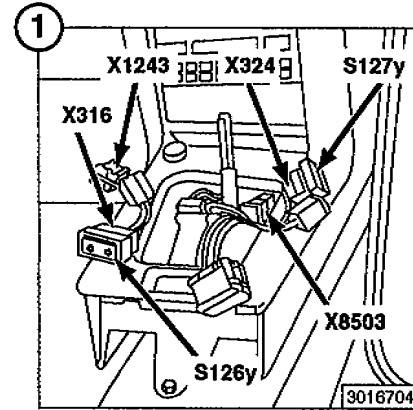
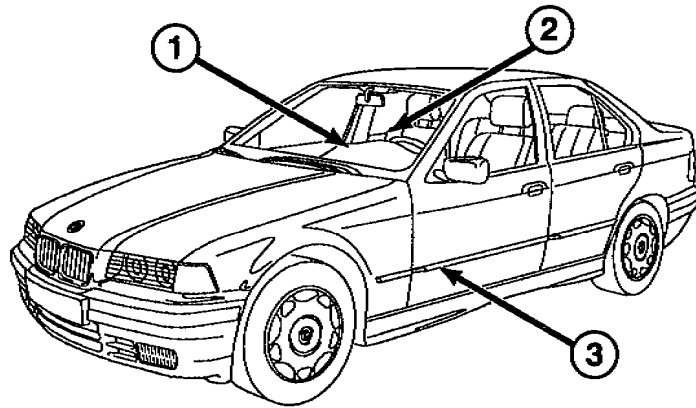
X516

S18

3010453



# COMPONENT LOCATION VIEWS

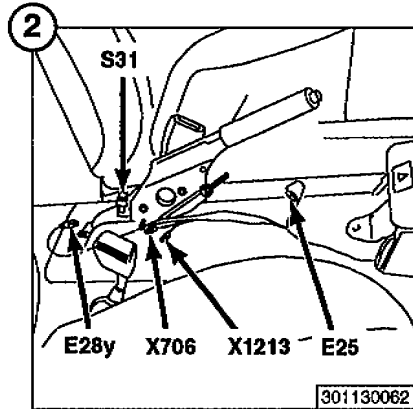


S126y  
DRIVER'S POWER WINDOW SWITCH

S127y  
PASSENGER'S POWER WINDOW SWITCH

X316  
X324  
X1243  
X8503

3016704



E25  
FRONT ASHTRAY LIGHT

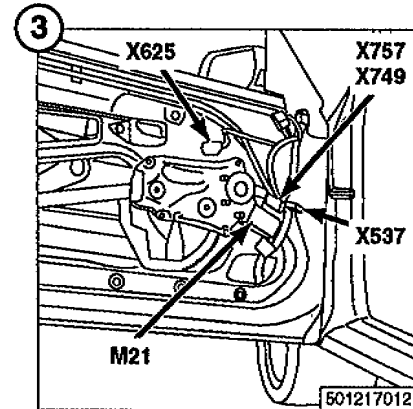
X706  
X1213

E28y  
REAR ASHTRAY LIGHT

E28y X706 X1213 E25

S31  
PARK BRAKE SWITCH

301130062



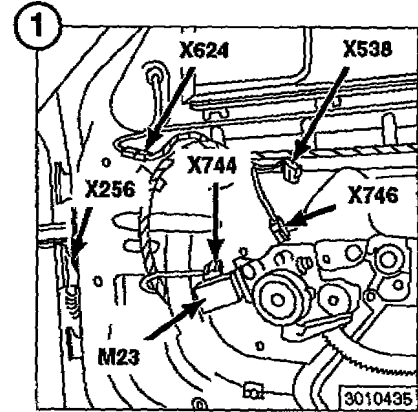
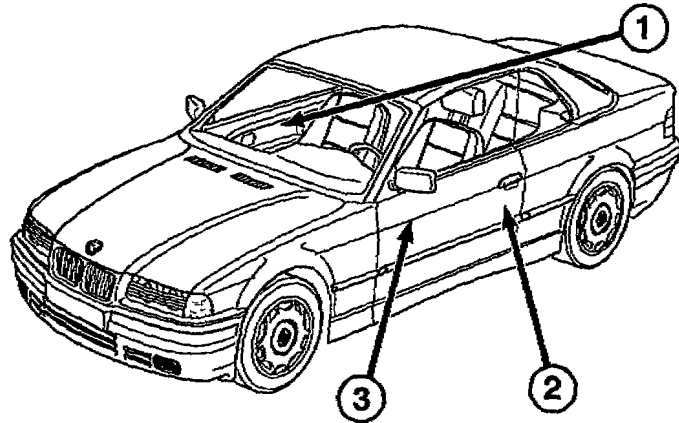
M21  
DRIVER'S WINDOW MOTOR

X537  
X625  
X749  
X757

501217012



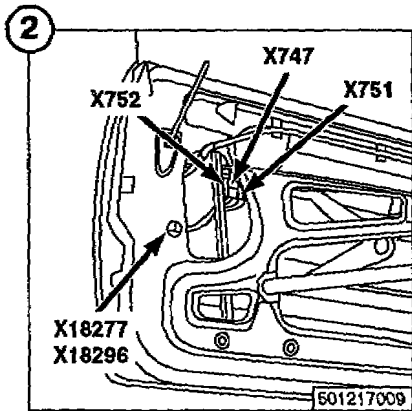
# COMPONENT LOCATION VIEWS



M23  
PASSENGER S  
WINDOW MOTOR

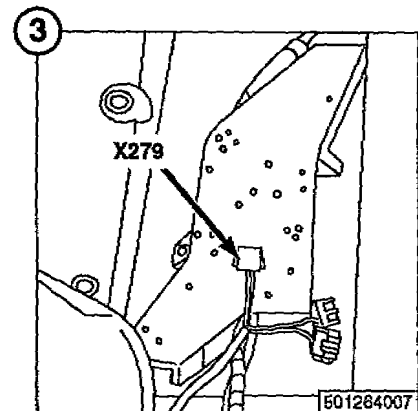
X256  
X538  
X624  
X744  
X746

3010435



X747  
X751  
X752  
X18277  
X18296

501217009

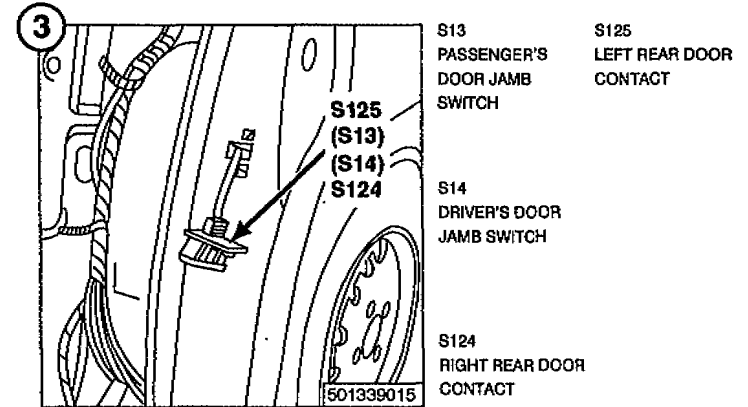
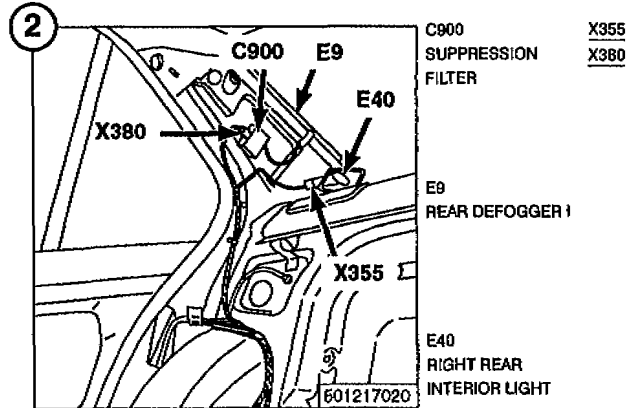
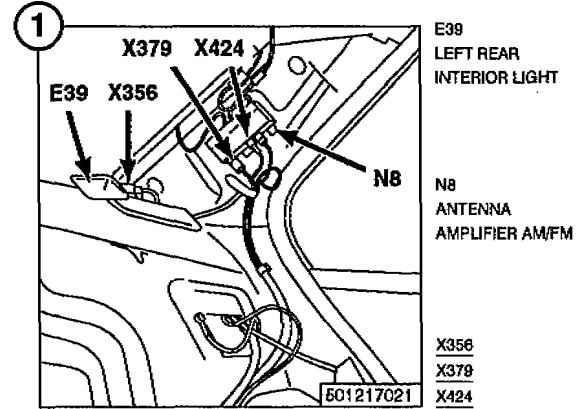
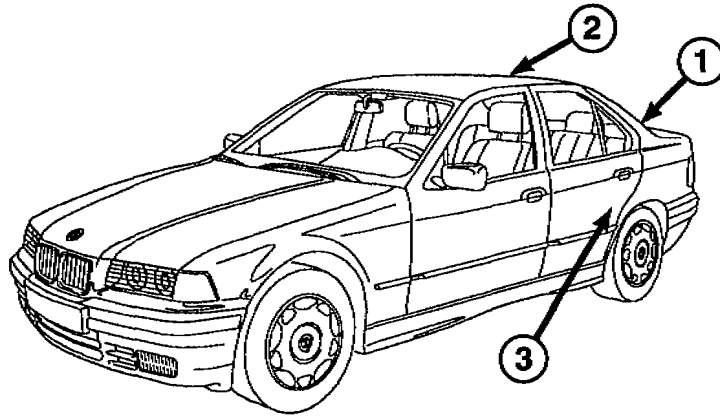


X279

501284007

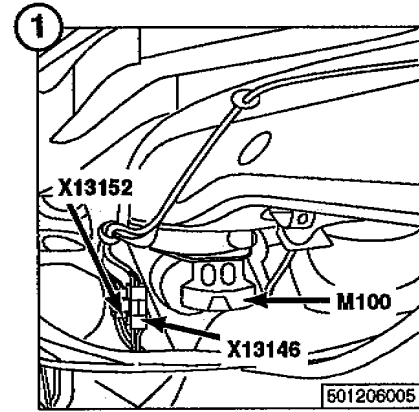
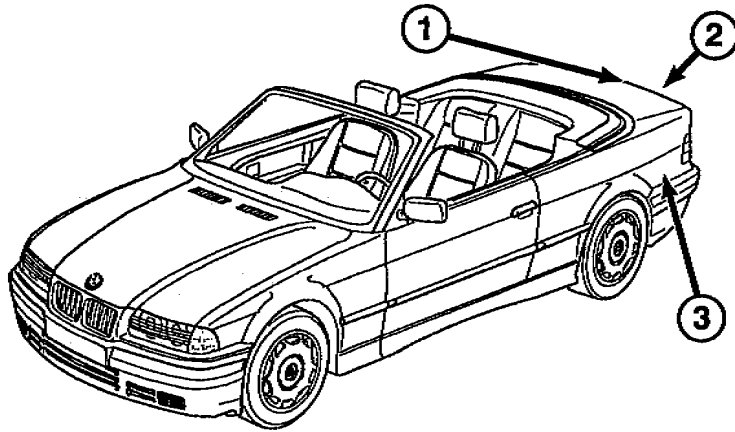


# COMPONENT LOCATION VIEWS





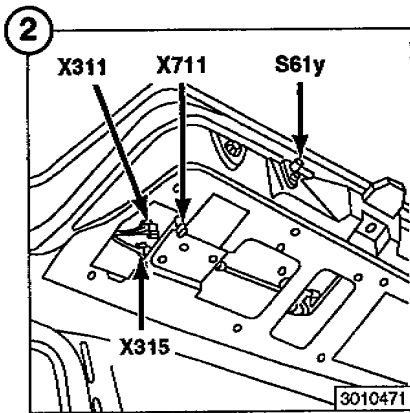
# COMPONENT LOCATION VIEWS



M100  
CONVERTIBLE TOP  
STORAGE LID  
MOTOR

X13146  
X13152

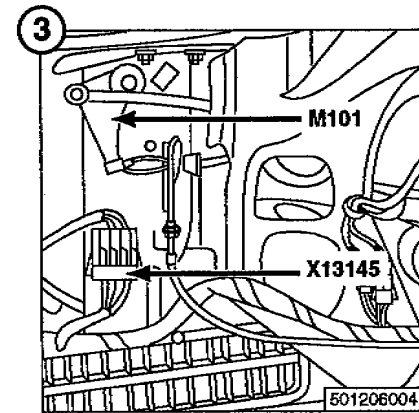
601206005



S61y  
TRUNK LIGHT  
SWITCH

X311  
X315  
X711

3010471



M101  
CONVERTIBLE TOP  
MOTOR

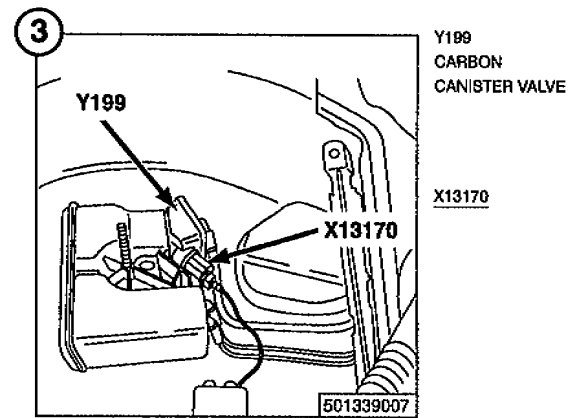
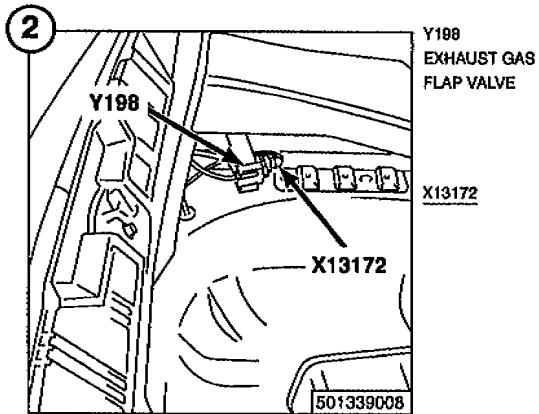
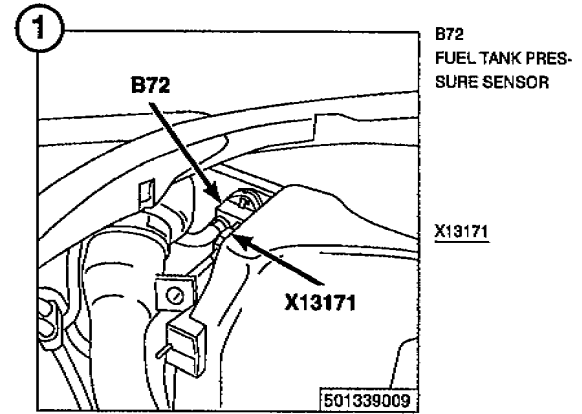
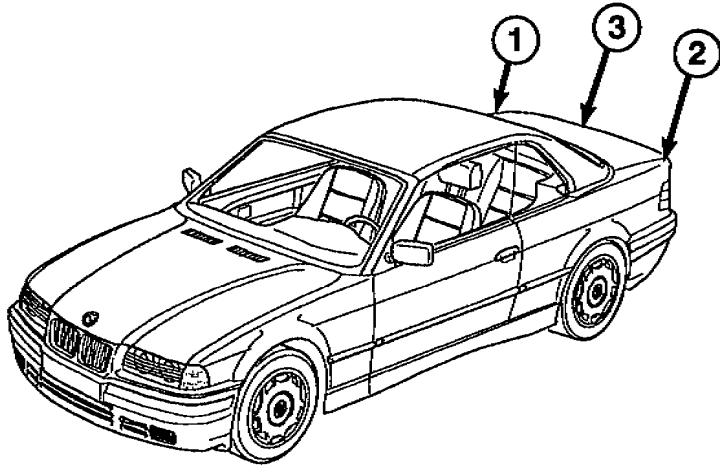
X13145

501206004



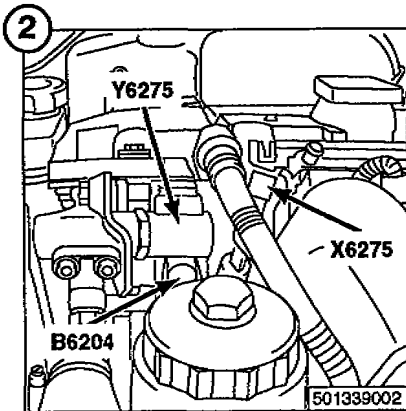
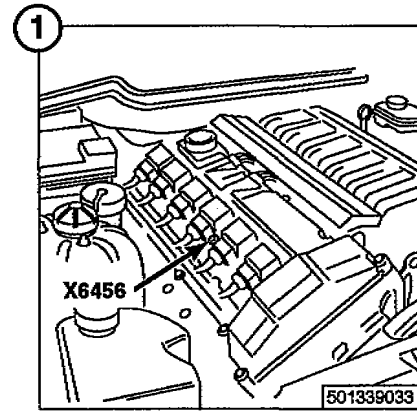
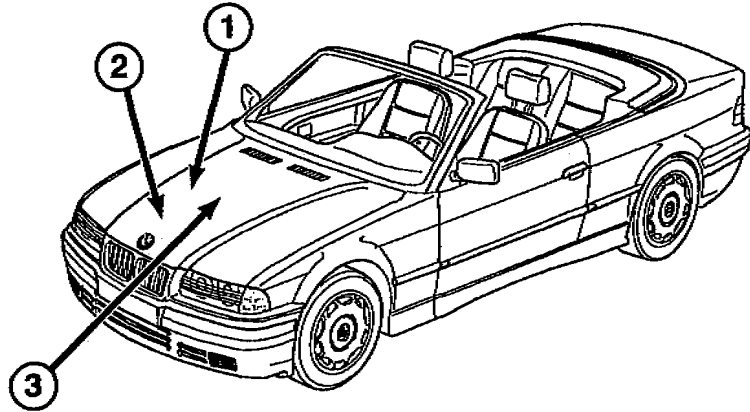


# COMPONENT LOCATION VIEWS





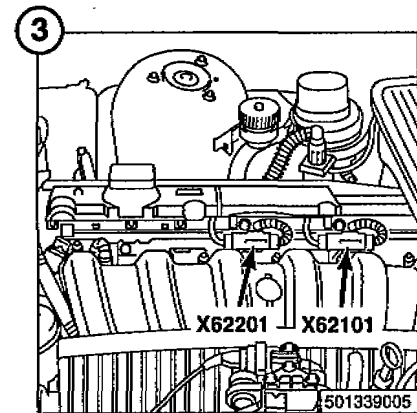
# COMPONENT LOCATION VIEWS



B6204  
CAMSHAFT  
POSITION SENSOR  
(CYLINDER IDENTIFICATION)

Y6275  
VARIABLE CAMSHAFT CONTROL VALVE 1

X6275

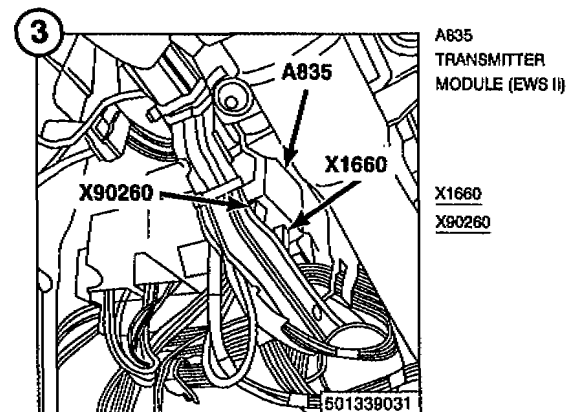
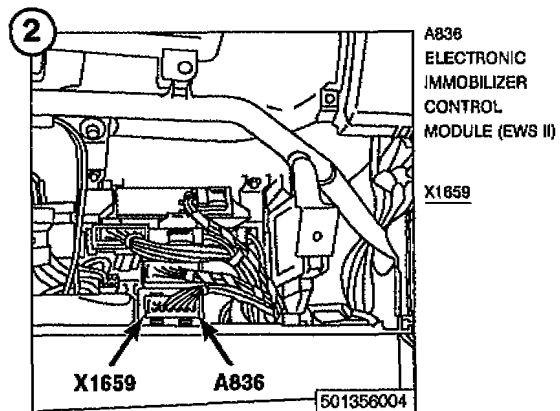
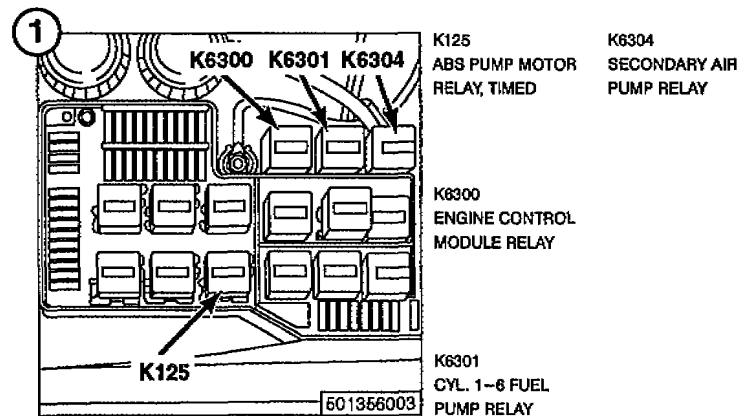
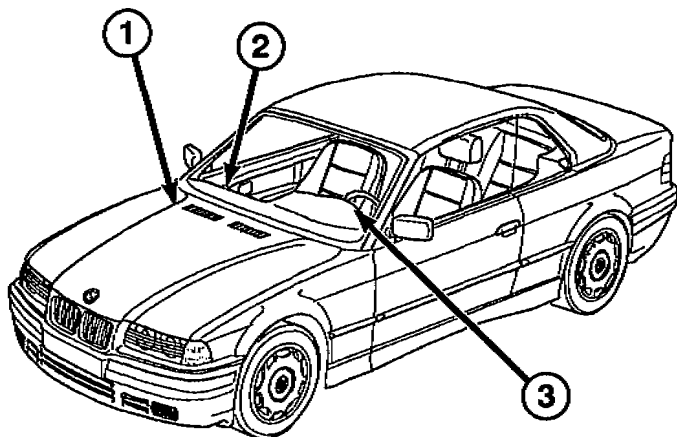


X62101  
X62201



# COMPONENT LOCATION VIEWS

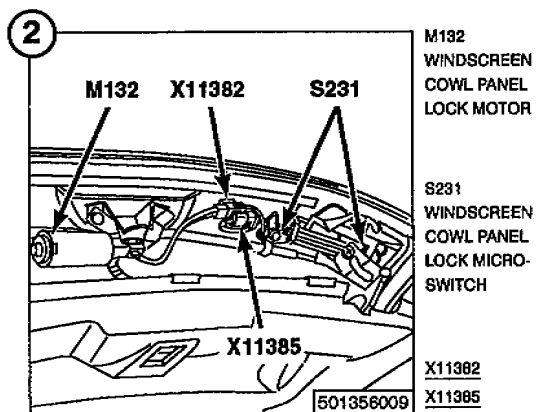
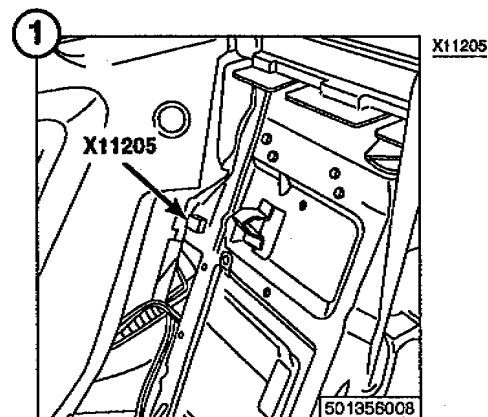
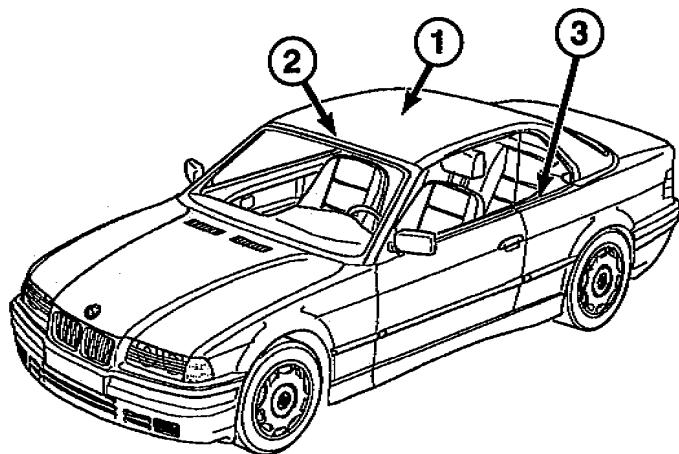
## ELECTRICAL CONTROL MODULE LOCATIONS





# COMPONENT LOCATION VIEWS

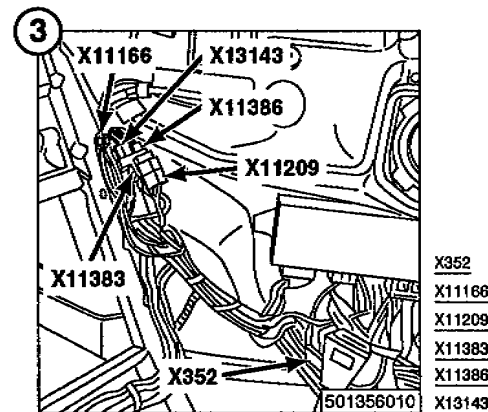
## ELECTRICAL CONTROL MODULE LOCATIONS



M132  
WINDSCREEN  
COWL PANEL  
LOCK MOTOR

S231  
WINDSCREEN  
COWL PANEL  
LOCK MICRO-  
SWITCH

X11382  
X11385



X352  
X11166  
X11209  
X11383  
X11386  
X13143

BMW  
3

8000.0



# SPLICE LOCATION VIEWS

SPLICE	HARNESS	PAGE NUMBER	SPLICE	HARNESS	PAGE NUMBER
X181-X276	FRONT	8000.0-02	X5018-X5035	S50 ENGINE	8000.0-06
X313-X314	REAR	8000.0-03	X6410	M42/M43 ENGINE	8000.0-05
X313-X314	REAR, CONVERTIBLE	8000.0-04	X6410	M50 ENGINE	8000.0-07
X428-X481	REAR	8000.0-03	X6410-X6411	M44 ENGINE	8000.0-08
X428	REAR, CONVERTIBLE	8000.0-04	X6410-X6492	S50 ENGINE	8000.0-06
X441-X456	REAR, CONVERTIBLE	8000.0-04	X6411	M50 ENGINE	8000.0-07
X460-X462	REAR, CONVERTIBLE	8000.0-04	X6411-X6420	M52 ENGINE	8000.0-09
X465-X481	REAR, CONVERTIBLE	8000.0-04	X6458-X6459	M52 ENGINE	8000.0-09
X530-X595	FRONT	8000.0-02	X6458-X6492	M42/M43 ENGINE	8000.0-05
X805	REAR	8000.0-03	X6458-X6461	M50 ENGINE	8000.0-07
X805	REAR, CONVERTIBLE	8000.0-04	X6460-X6463	M44 ENGINE	8000.0-08
X824-X830	RADIO	NOT SHOWN	X6475	M50 ENGINE	8000.0-07
X849-X851	DRIVER'S DOOR	NOT SHOWN	X6475	M52 ENGINE	8000.0-09
X876-X878	RADIO	NOT SHOWN	X6491	M50 ENGINE	8000.0-07
X906	IHKR	NOT SHOWN	X6492	M50 ENGINE	8000.0-07
X942	PASSENGER'S DOOR	NOT SHOWN	X6492	M44 ENGINE	8000.0-08
X1015-X1164	FRONT	8000.0-02	X6492	M52 ENGINE	8000.0-09
X1167	REAR	8000.0-03	X6810-X6823	M52 ENGINE	8000.0-09
X1168-X1192	FRONT	8000.0-02	X6810-X6866	M42/M43 ENGINE	8000.0-05
X1212-X1218	REAR	8000.0-03	X6810-X6866	S50 ENGINE	8000.0-06
X1212-X1238	REAR, CONVERTIBLE	8000.0-04	X6810	M50 ENGINE	8000.0-07
X1225-X1233	FRONT	8000.0-02	X6820-X6821	M44 ENGINE	8000.0-08
X1226-X1235	REAR	8000.0-03	X6820-X6822	M50 ENGINE	8000.0-07
X1258	FRONT	8000.0-02	X6830-X6831	M50 ENGINE	8000.0-07
X1299	REAR	8000.0-03	X6832	M44 ENGINE	8000.0-08
X1382-X1383	RADIO	W22	X6832-X6835	M52 ENGINE	8000.0-09
X1387-X1396	REAR	8000.0-03	X6833	M44 ENGINE	8000.0-08
X1387-X1396	REAR, CONVERTIBLE	8000.0-04	X6835	M44 ENGINE	8000.0-08



# SPLICE LOCATION VIEWS

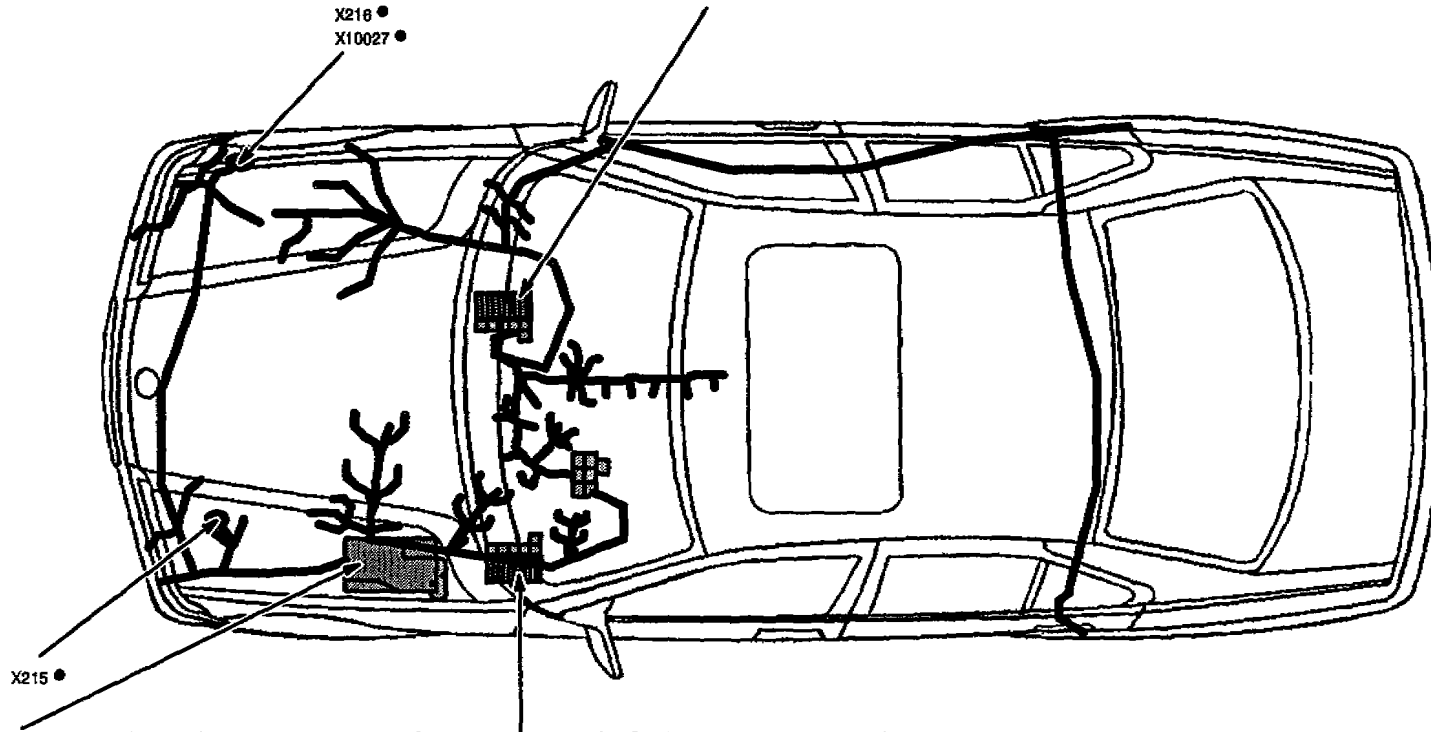
SPLICE	HARNESS	PAGE NUMBER	SPLICE	HARNESS	PAGE NUMBER
X6835-X6836	M50 ENGINE	8000.0-07	X8103	M52 ENGINE	8000.0-09
X6860-X6869	M52 ENGINE	8000.0-09	X8564-X8576	M44 ENGINE	8000.0-08
X6860-X6891	M44 ENGINE	8000.0-08	X8564-X8576	M52 ENGINE	8000.0-09
X6863-X6866	M50 ENGINE	8000.0-07	X8565	M52 ENGINE	8000.0-09
X6900	M44 ENGINE	8000.0-08	X10007-X10100	FRONT	8000.0-02
X6900	M52 ENGINE	8000.0-09	X10118	REAR, CONVERTIBLE	8000.0-04
X6900-X6906	M50 ENGINE	8000.0-07	X10169	M44 ENGINE	8000.0-08
X6900-X6906	S50 ENGINE	8000.0-06	X10251-10252	FRONT	8000.0-02
X7845-X7846	M44 ENGINE	8000.0-08	X10120-X10192	FRONT	8000.0-02
X8000-X8015	M52 ENGINE	8000.0-09	X10189-X10229	REAR, CONVERTIBLE	8000.0-04
X8004	M50 ENGINE	8000.0-07	X13002-X13011	REAR	8000.0-03
X8004	S50 ENGINE	8000.0-06	X13002-X13011	REAR, CONVERTIBLE	8000.0-04
X8004-X8015	M44 ENGINE	8000.0-08	X13021-X13115	FRONT	8000.0-02
X8004-X8576	M42/M43 ENGINE	8000.0-05	X13007-X13273	REAR, CONVERTIBLE	8000.0-04
X8007	M50 ENGINE	8000.0-07	X18160-X18161	IHKR	NOT SHOWN
X8010	M50 ENGINE	8000.0-07	X18165	FRONT	8000.0-02
X8015	M50 ENGINE	8000.0-07	X18251	DRIVER'S DOOR	NOT SHOWN
X8022	M50 ENGINE	8000.0-07	X18252	PASSENGER'S DOOR	NOT SHOWN
X8025	M50 ENGINE	8000.0-07	X18253	DRIVER'S DOOR	NOT SHOWN
X8038	M52 ENGINE	8000.0-09	X18254-X18284	PASSENGER'S DOOR	NOT SHOWN
X8042	M50 ENGINE	8000.0-07	X18783-X18784	FRONT	8000.0-02
X8051	M50 ENGINE	8000.0-07	X18785-X18799	REAR, CONVERTIBLE	8000.0-04
X8056	M50 ENGINE	8000.0-07	X19513-X19514	RADIO	NOT SHOWN
X8056-X8073	M44 ENGINE	8000.0-08	X69008-X69009	S50 ENGINE	8000.0-06
X8065	M50 ENGINE	8000.0-07			
X8071-8074	M50 ENGINE	8000.0-07			
X8071-8074	M52 ENGINE	8000.0-09			
X8084	M50 ENGINE	8000.0-07			



# SPLICE LOCATION VIEWS

## FRONT HARNESS

SPLICE PANEL	
X195 ●	X1149 ●
X218 ●	X10008 ●
X222 ●	X10064 ●
X557 ●	X13115 ●



SPLICE PANEL					
X164 ●	X245 ●	X1027 ●	X1077 ●	X1177 ●	X10022 ●
X185 ●	X248 ●	X1028 ●	X1152 ●	X1188 ●	X10055 ●
X186 ●	X276 ●	X1038 ●	X1159 ●	X1192 ●	X10100 ●
X187 ●	X530 ●	X1055 ●	X1163 ●	X1233 ●	X18783 ●
X203 ●	X595 ●	X1068 ●	X1164 ●	X10007 ●	X18784 ●
X223 ●	X1015 ●	X1073 ●	X1168 ●	X10020 ●	
X236 ●	X1022 ●	X1076 ●	X1172 ●	X10021 ●	

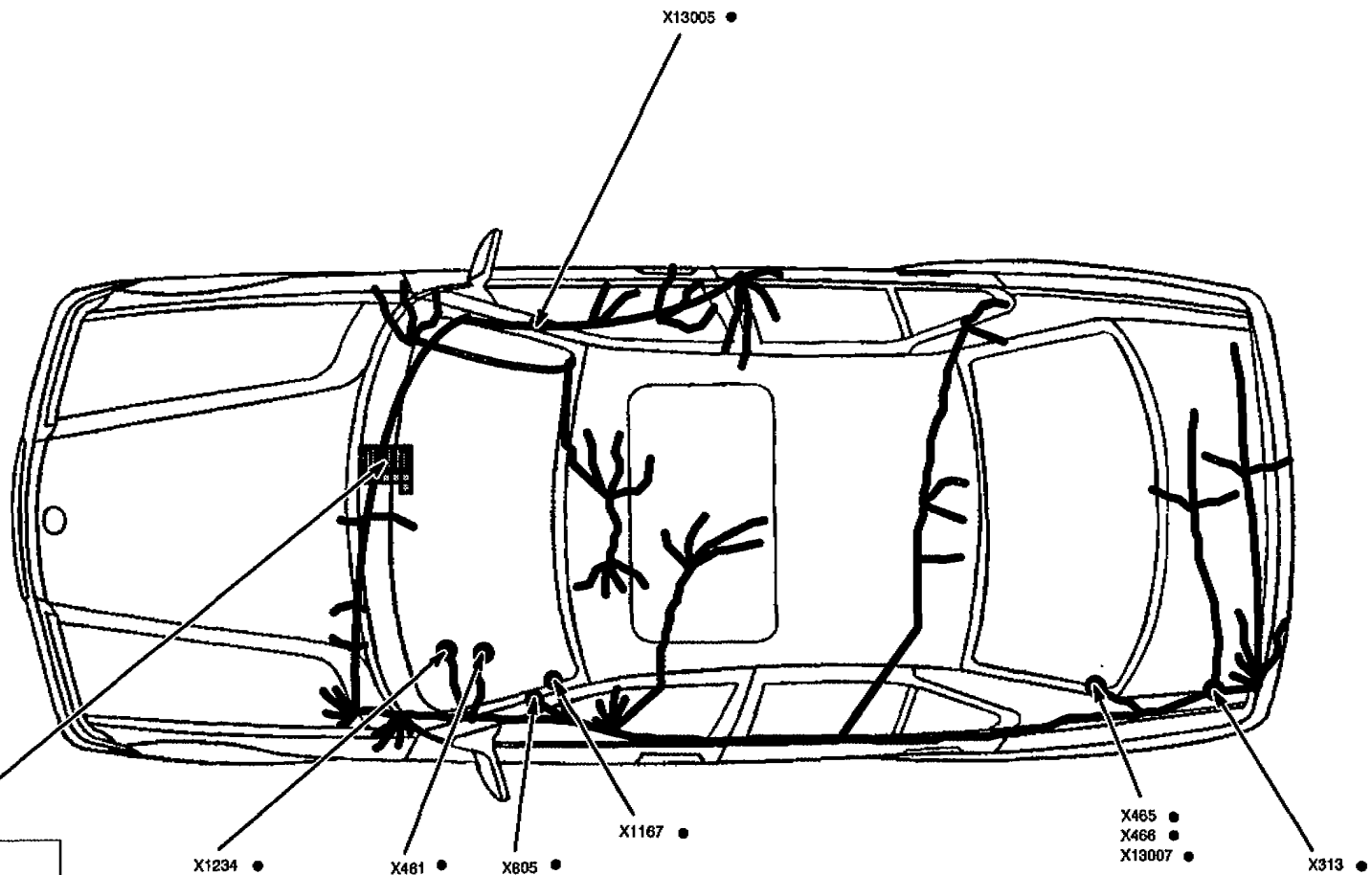
SPLICE PANEL						
X181 ●	X213 ●	X1067 ●	X1179 ●	X10028 ●	X10120 ●	X11284 ●
X182 ●	X228 ●	X1069 ●	X1182 ●	X10029 ●	X10123 ●	X13021 ●
X183 ●	X1019 ●	X1079 ●	X1225 ●	X10060 ●	X10181 ●	X18165 ●
X186 ●	X1029 ●	X1080 ●	X1258 ●	X10061 ●	X10192 ●	
X191 ●	X1047 ●	X1085 ●	X10008 ●	X10090 ●	X10231 ●	
X196 ●	X1065 ●	X1159 ●	X10011 ●	X10103 ●	X10251 ●	
X197 ●	X1066 ●	X1169 ●	X10024 ●	X10104 ●	X10252 ●	





# SPLICE LOCATION VIEWS

## REAR HARNESS



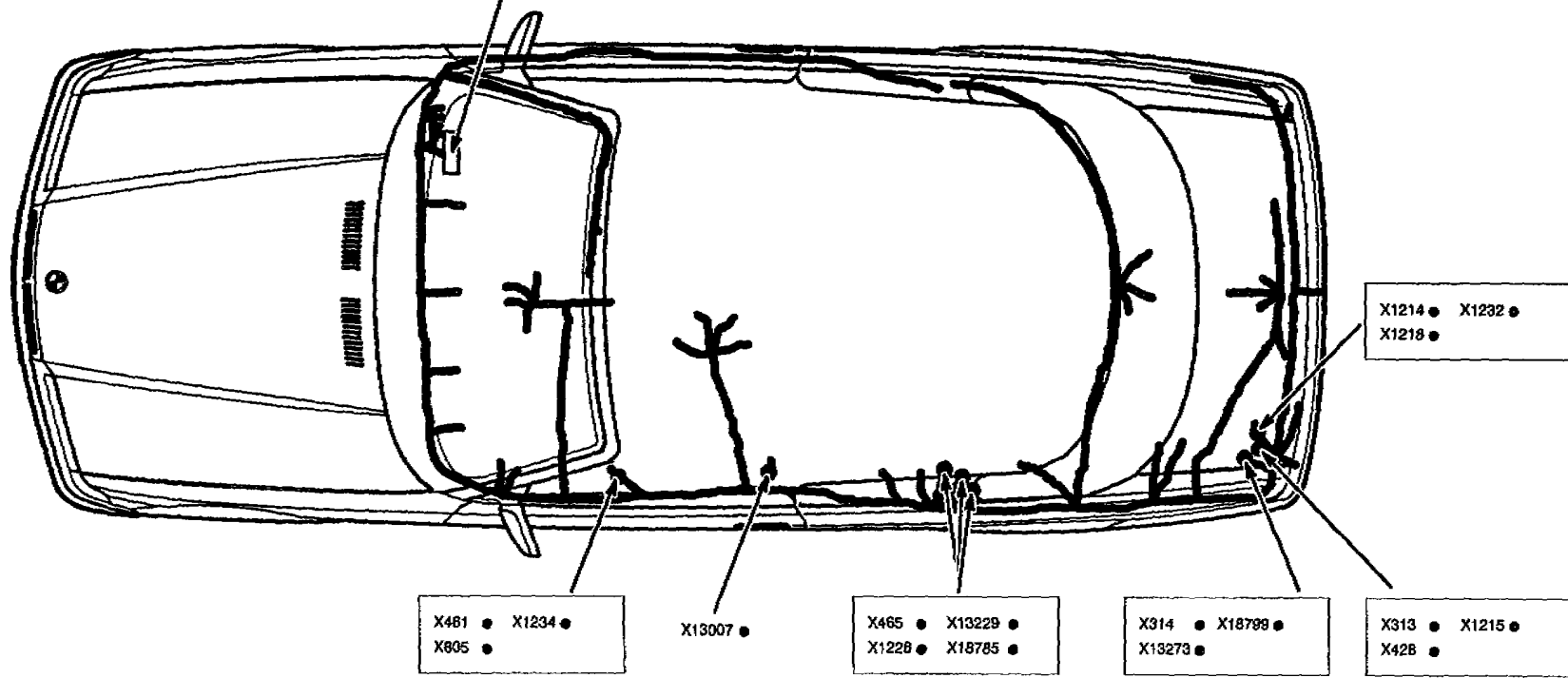
SPLICE PANEL		
X441 ●	X402 ●	X1396 ●
X442 ●	X475 ●	X13002 ●
X443 ●	X481 ●	X13003 ●
X444 ●	X1212 ●	X13010 ●
X445 ●	X1235 ●	X13011 ●
X449 ●	X1299 ●	
X450 ●	X1387 ●	



# SPLICE LOCATION VIEWS

## REAR WIRING HARNESS – CONVERTIBLE

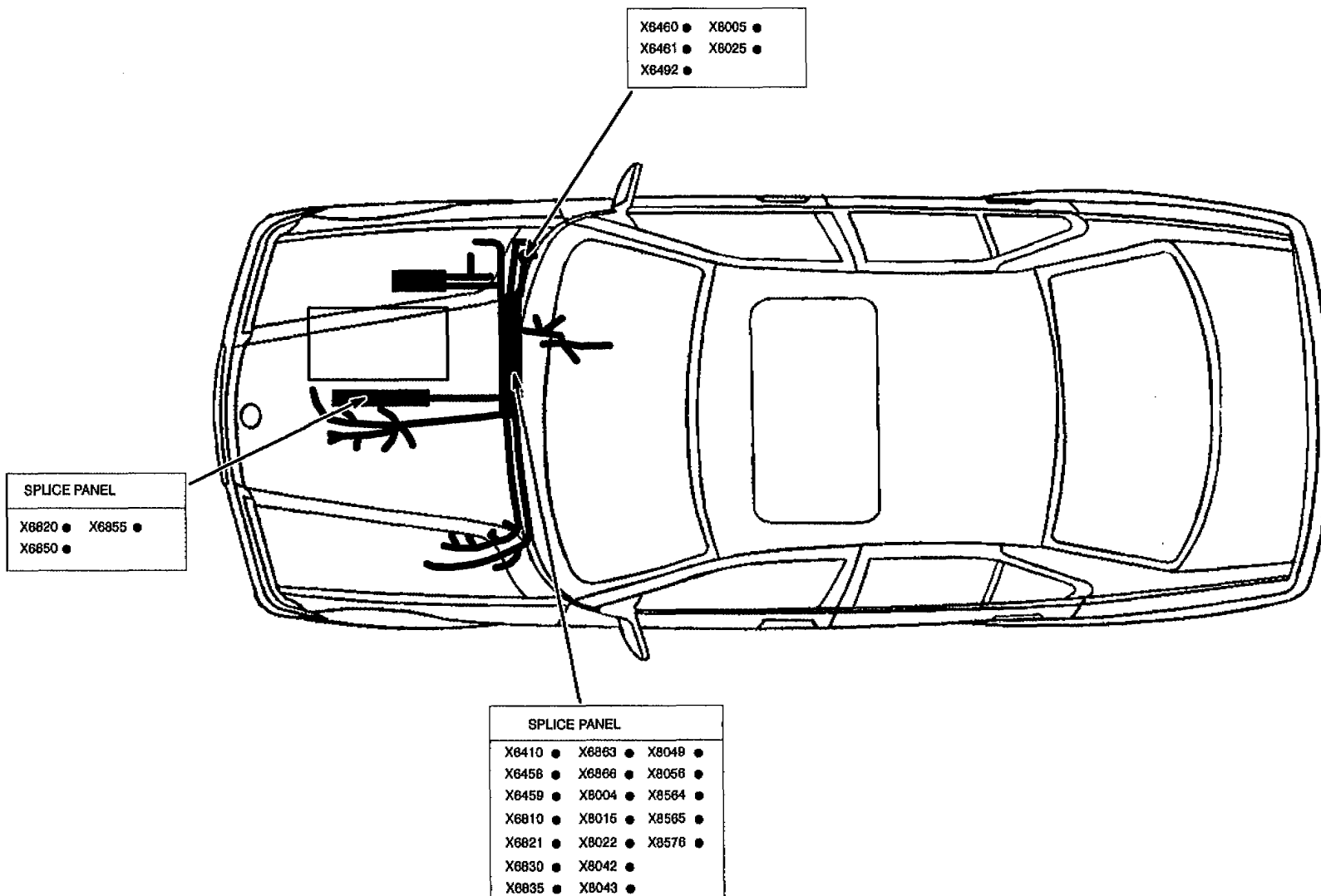
SPLICE PANEL					
X441 ●	X453 ●	X481 ●	X1387 ●	X13003 ●	X13281 ●
X442 ●	X454 ●	X1212 ●	X1396 ●	X13010 ●	X18786 ●
X443 ●	X455 ●	X1235 ●	X10118 ●	X13011 ●	
X444 ●	X456 ●	X1236 ●	X10189 ●	X13127 ●	
X445 ●	X460 ●	X1237 ●	X10226 ●	X13129 ●	
X449 ●	X462 ●	X1238 ●	X10229 ●	X13132 ●	
X450 ●	X475 ●	X1283 ●	X13002 ●	X13168 ●	





# SPLICE LOCATION VIEWS

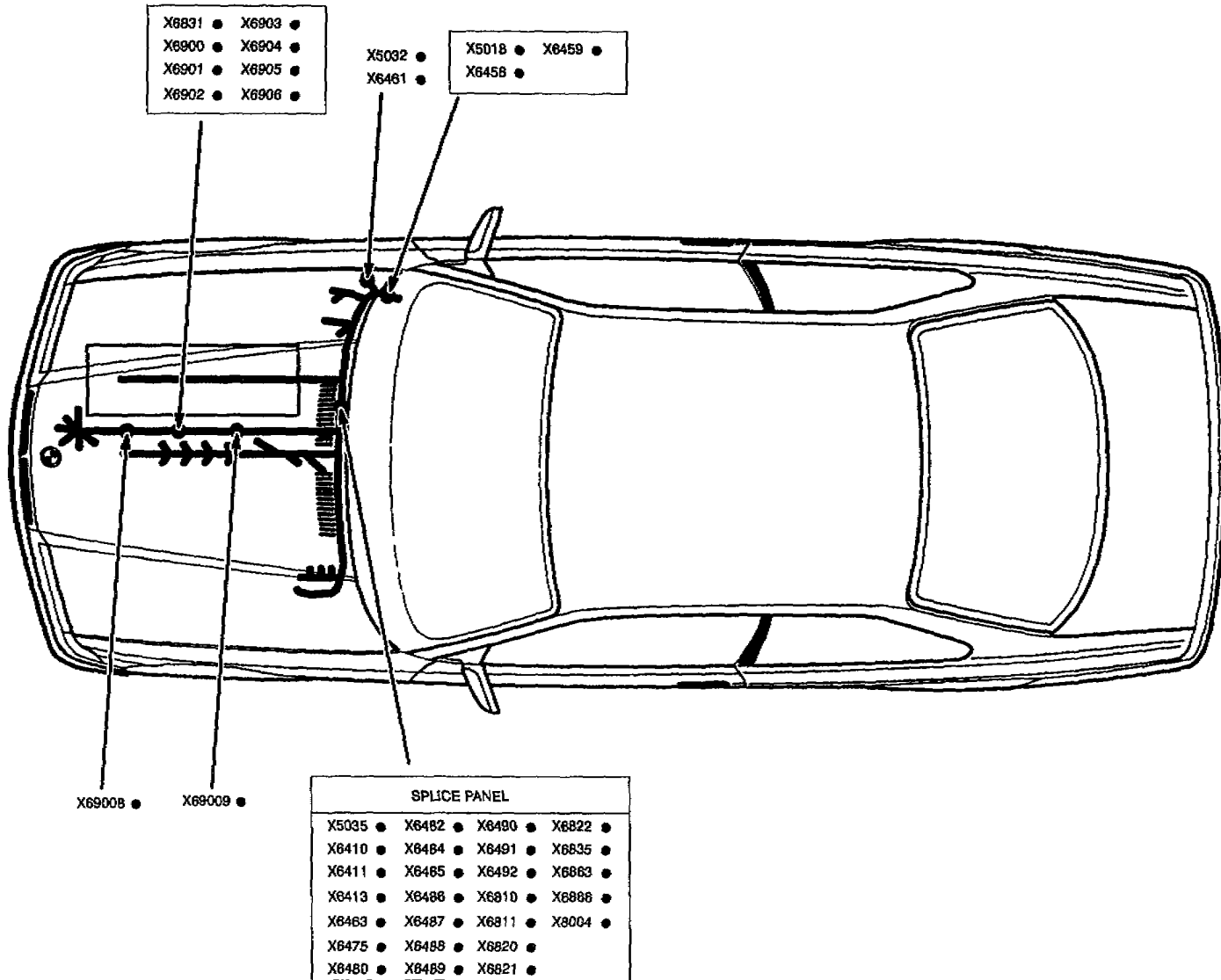
## ENGINE HARNESS M42/M43





# SPLICE LOCATION VIEWS

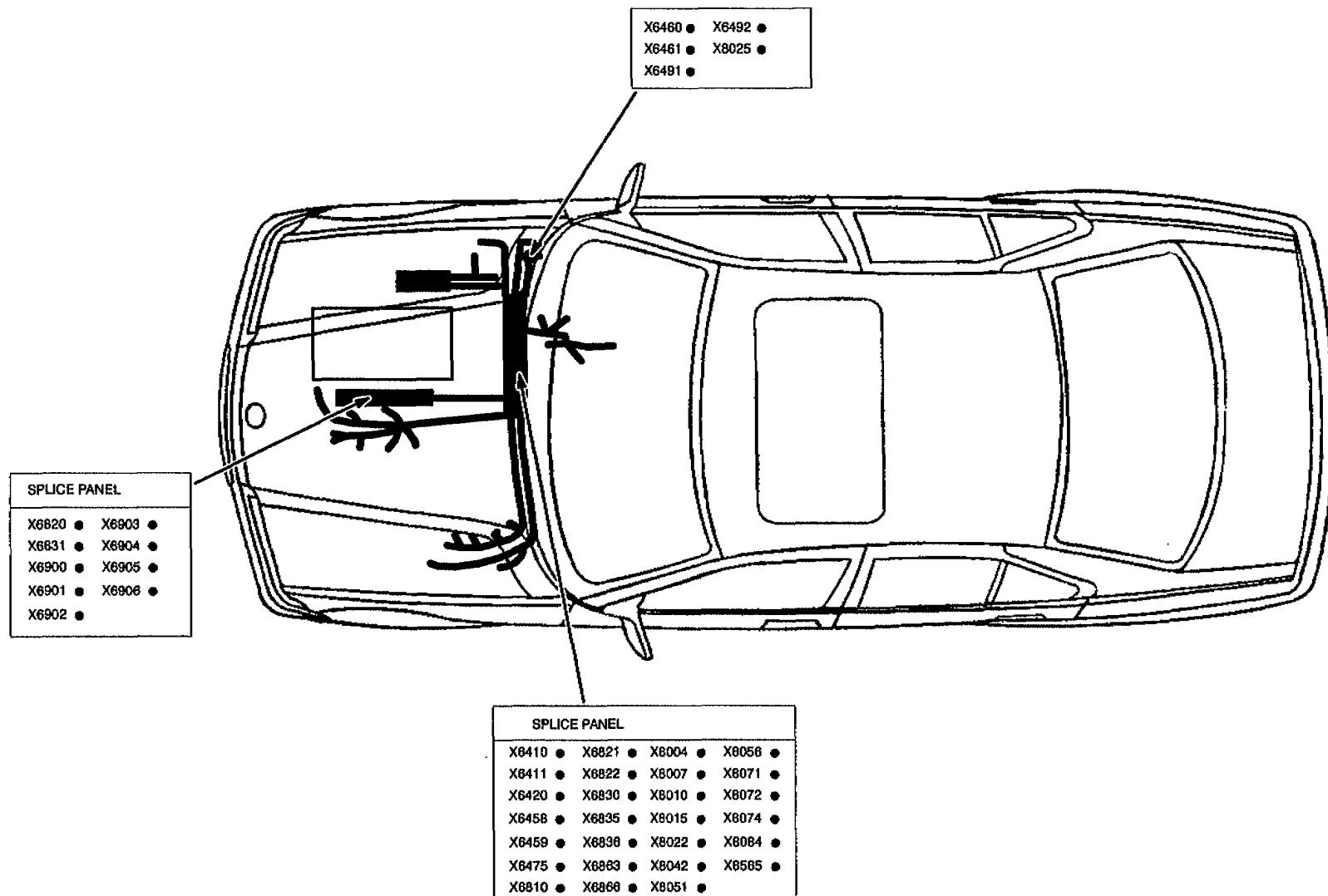
## ENGINE HARNESS S50





# SPLICE LOCATION VIEWS

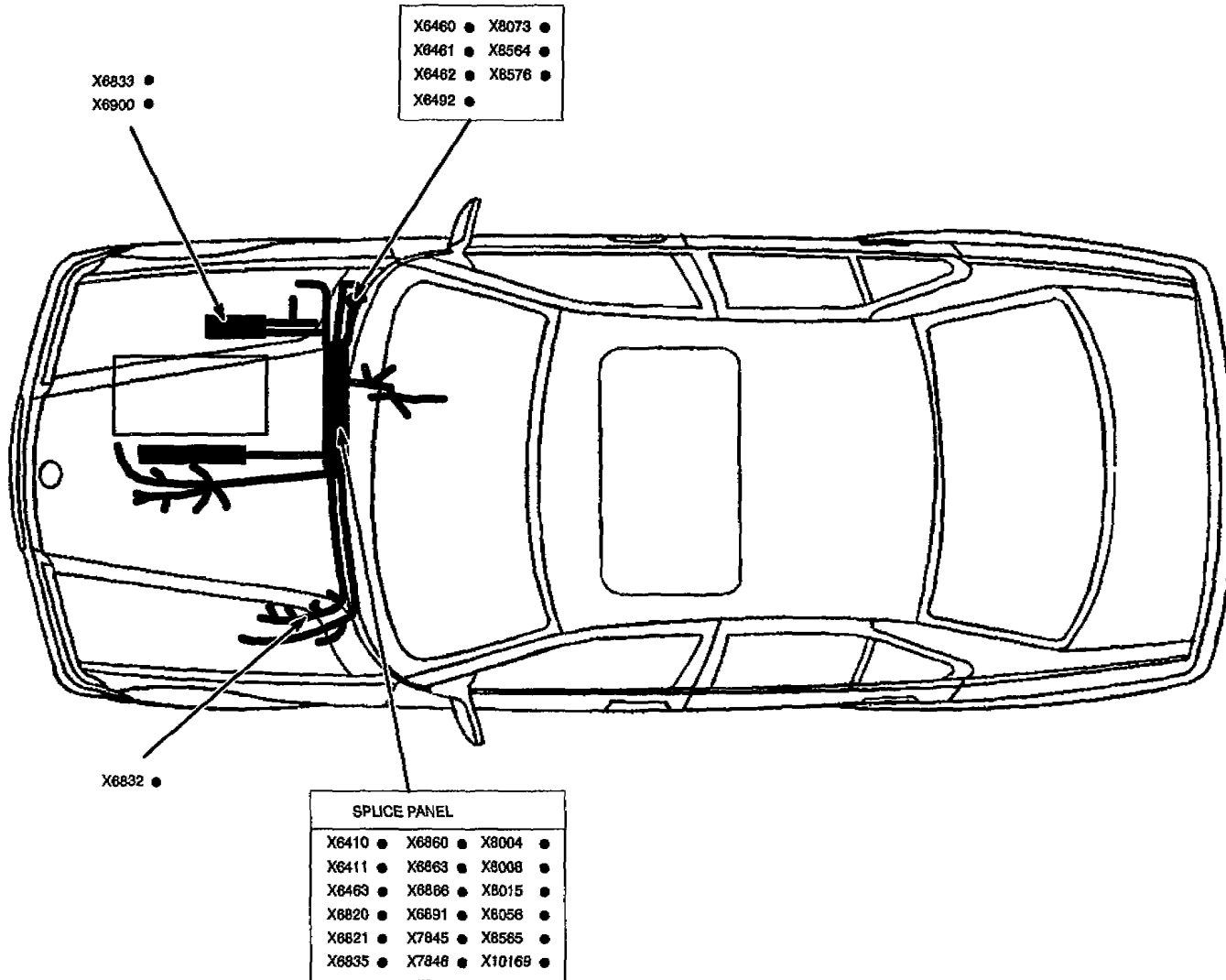
## M50 ENGINE HARNESS





# SPLICE LOCATION VIEWS

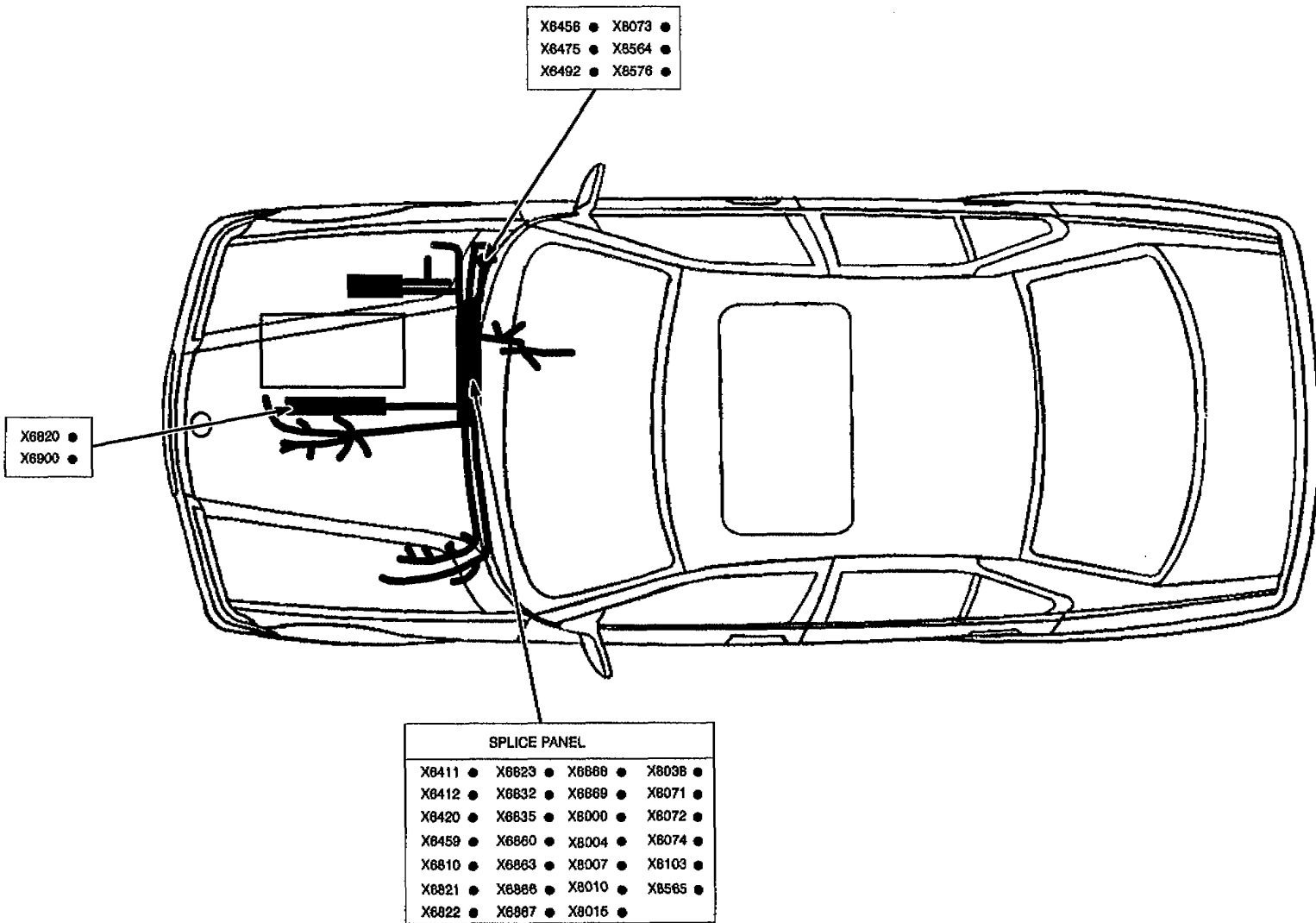
## ENGINE HARNESS M44





# SPLICE LOCATION VIEWS

## ENGINE HARNESS M52





# CONNECTOR VIEWS

FIG. 1

B550001.03

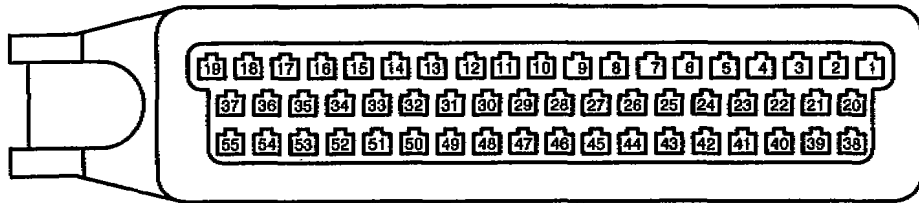


FIG. 2

B260005.00

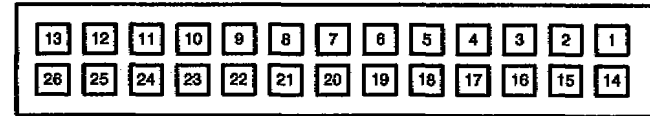


FIG. 3

B150003.00

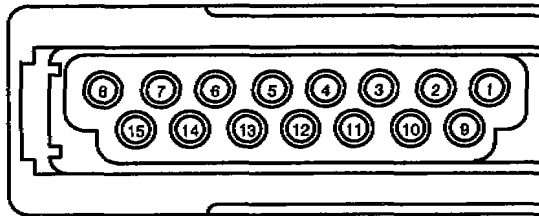
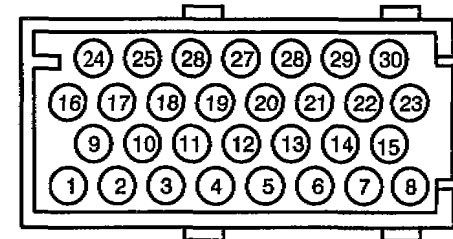


FIG. 4

B300001.00







# CONNECTOR VIEWS

FIG. 1

B030024

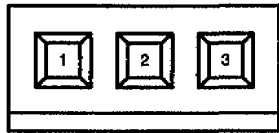


FIG. 2

B120003.00

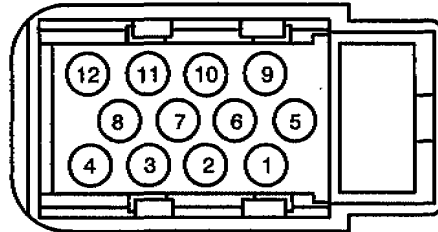


FIG. 3

B120001.00

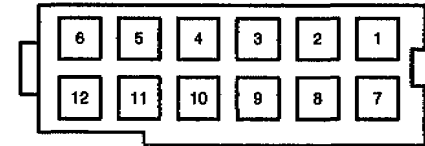


FIG. 4

B080002.00

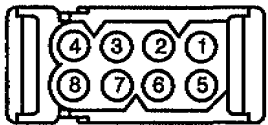


FIG. 5

B180000.00

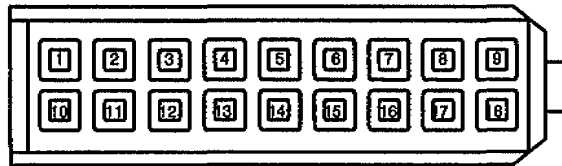
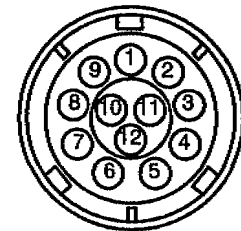


FIG. 6

B120015





# CONNECTOR VIEWS

FIG. 1

B030001.00

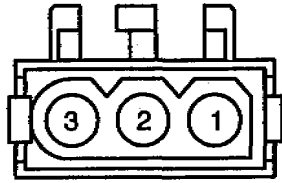


FIG. 2

B070007.00

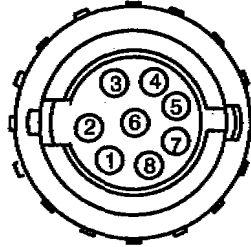


FIG. 3

B170001.00

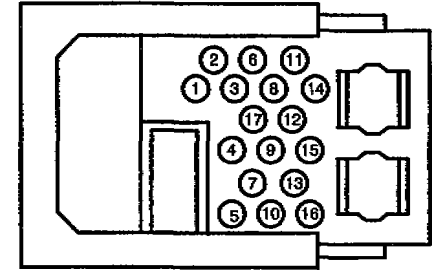


FIG. 4

B100008.00

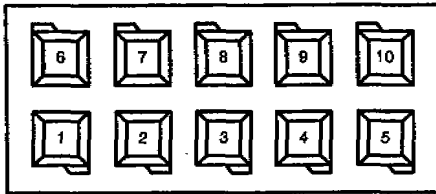


FIG. 5

B030005.00

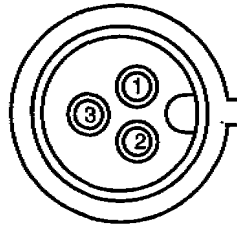
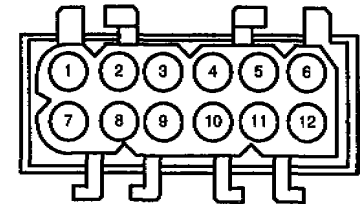


FIG. 6

B120004.01





# CONNECTOR VIEWS

FIG. 1

B040002.00

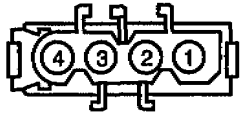


FIG. 2

B050003.00

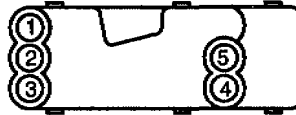


FIG. 3

B040004.00



FIG. 4

B040018

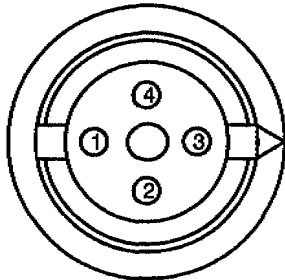


FIG. 5

B080001.00

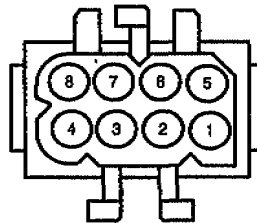
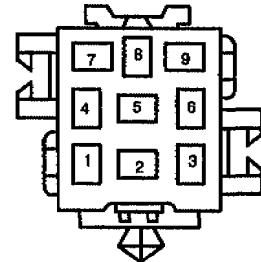


FIG. 6

B090002.00





# CONNECTOR VIEWS

FIG. 1

B210002.00

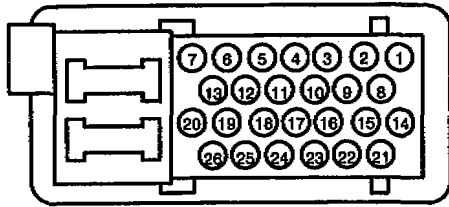


FIG. 2

B060001.02



FIG. 3

B070005.00

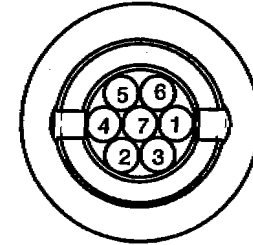


FIG. 4

B200003.00

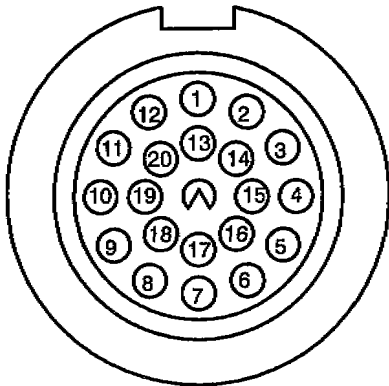


FIG. 5

B080010.01

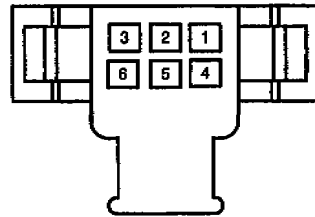


FIG. 6

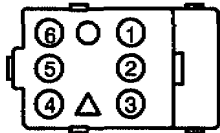
B030003.02



**BMW**  
**3** **CONNECTOR VIEWS**

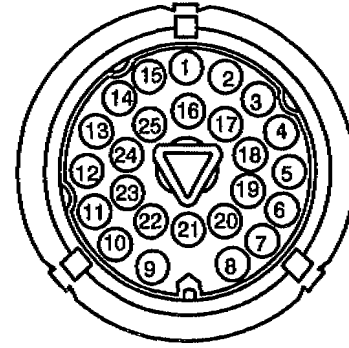
**FIG. 1**

B060008.00



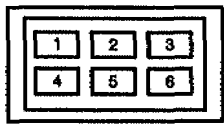
**FIG. 2**

B250001.01



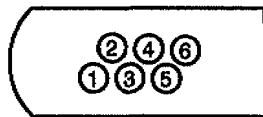
**FIG. 3**

B060018.02



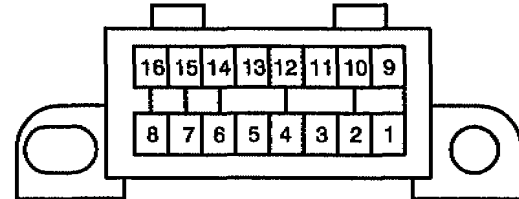
**FIG. 4**

B060037.00



**FIG. 5**

B160003.00





# CONNECTOR VIEWS

FIG. 1

B880001.00

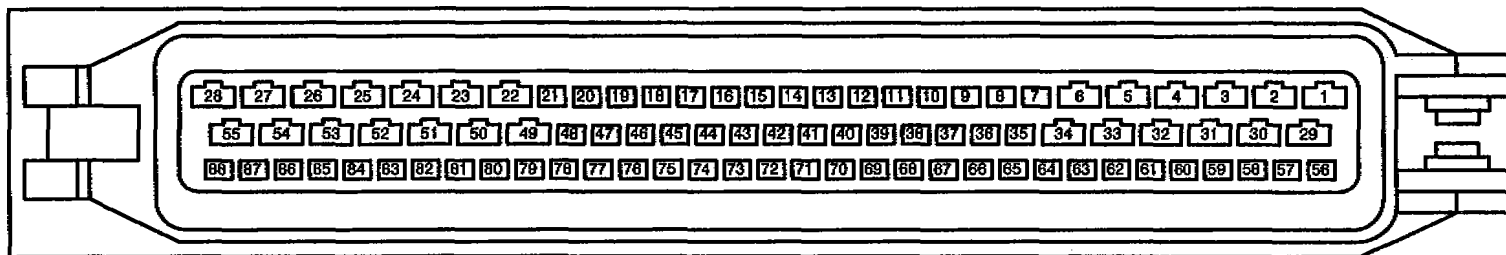


FIG. 2

B060038.00

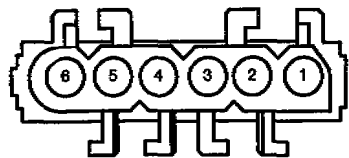


FIG. 3

B030006.00

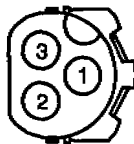
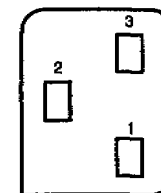


FIG. 4

B030004.01





# CONNECTOR VIEWS

FIG. 1

B060012.00

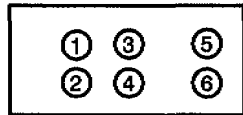


FIG. 2

B040023.01

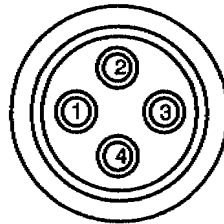


FIG. 3

B030018.00

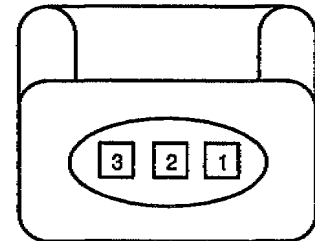


FIG. 4

B030015.08

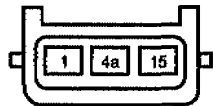


FIG. 5

B030023.00

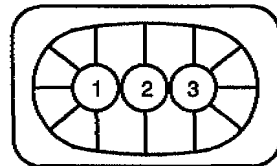


FIG. 6

B040020.00

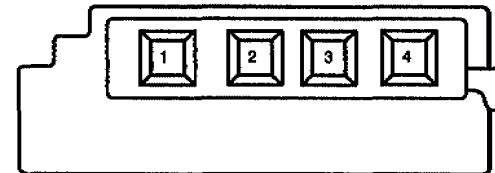


FIG. 1

B030025.00

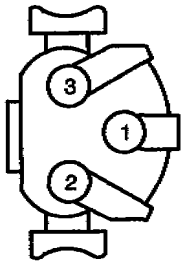


FIG. 2

B060037.01



FIG. 3

B030001.00

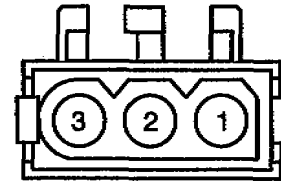


FIG. 4

B060001.00



FIG. 5

B120004.05

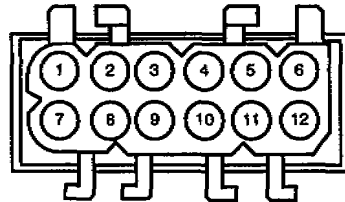
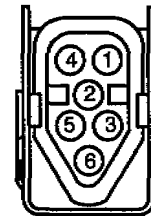


FIG. 6

B060009.00







# CONNECTOR VIEWS

FIG. 1

B100004.01

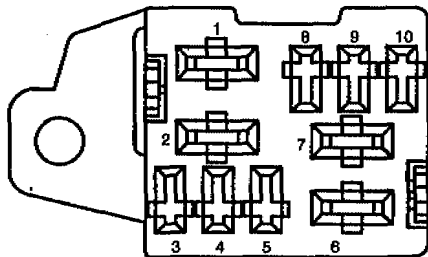


FIG. 2

B180002.00

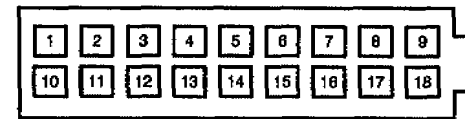


FIG. 3

B080042

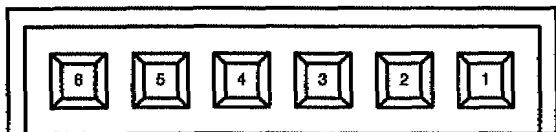
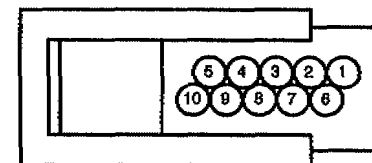


FIG. 4

B100007.00





# CONNECTOR VIEWS

FIG. 1

B040021

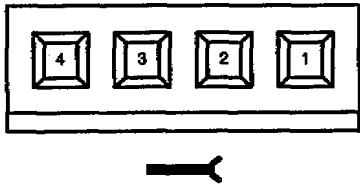


FIG. 2

B260002.04

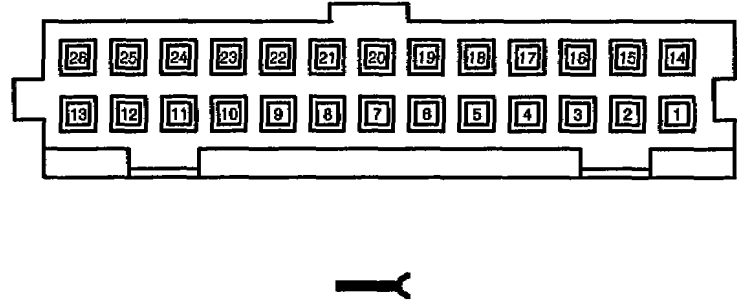


FIG. 3

B040003.00

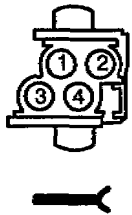


FIG. 4

B130002.00

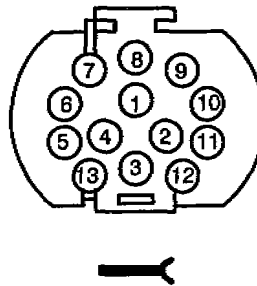
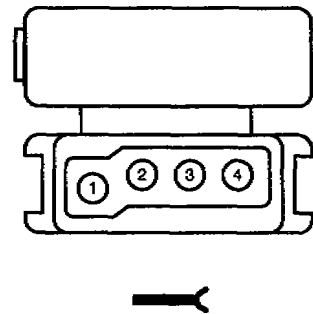


FIG. 5

B040013





# CONNECTOR VIEWS

FIG. 1

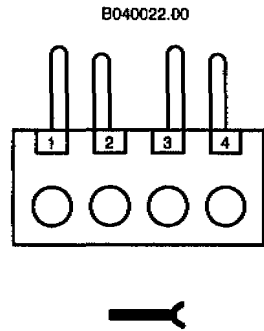


FIG. 2

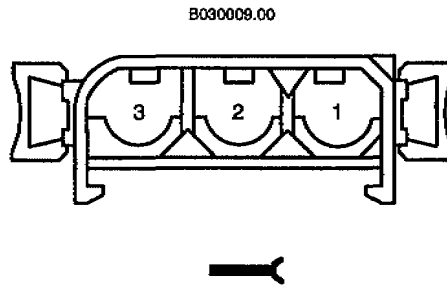


FIG. 3

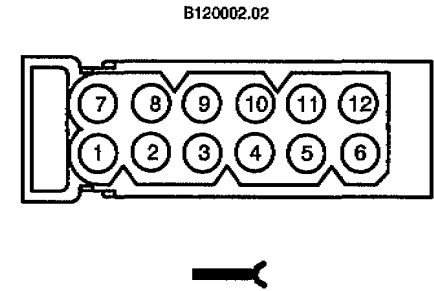


FIG. 4

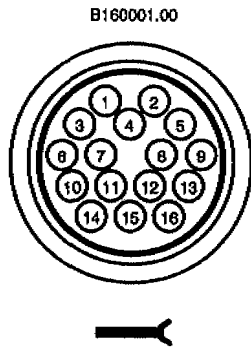


FIG. 5

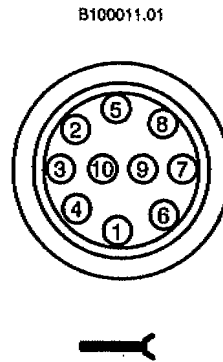
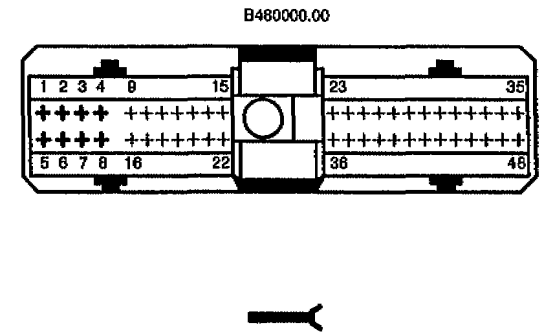


FIG. 6





# CONNECTOR VIEWS

FIG. 1

B050005.00

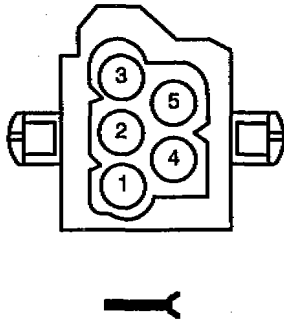


FIG. 2

B300003.00

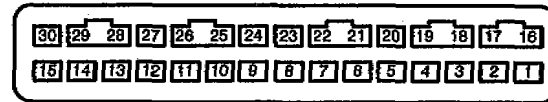


FIG. 3

B040027.00

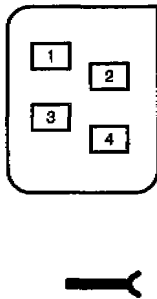
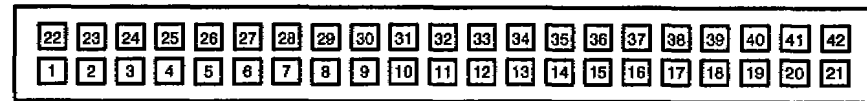


FIG. 4

B420000.00





# CONNECTOR VIEWS

FIG. 1

B030042.01

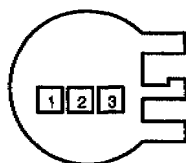


FIG. 2

B030018.01

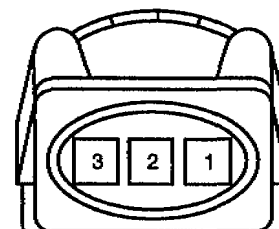


FIG. 3

B090006.00

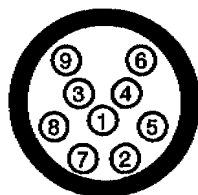


FIG. 4

B300005.00

