# WIRING DIAGRAMS

CONTENTS



## HOW TO USE THIS GROUP

The purpose of this group is to show the electrical circuits in a clear, simple fashion and to make troubleshooting easier. Components that work together are shown together. All electrical components used in a specific system are shown on one diagram. The feed for a system is shown at the top of the page. All wires, connectors, splices, and components are shown in the flow of current to the bottom of the page. Wiring which is not part of the circuit represented is referenced to another page/section, where the complete circuit is shown. In addition, all switches, components, and modules are shown in the **at rest position with the doors closed and the key removed from the ignition.**

If a component is part of several different circuits, it is shown in the diagram for each. For example, the headlamp switch is the main part of the exterior lighting, but it also affects the interior lighting and the chime warning system.

**It is important to realize that no attempt is made on the diagrams to represent components and wiring as they appear on the vehicle. For example, a short piece of wire is treated the same as a long one. In addition, switches and other components are shown as simply as possible, with regard to function only.**

The wiring diagram show circuits for all wheel-bases. If there is a difference in systems or components between wheel-bases, an identifier is placed next to the component.

## SECTION IDENTIFICATION

Sections in Group 8W are organized by sub-systems. The sections contain circuit operation descriptions, helpful information, and system diagrams. The intention is to organize information by system, consistently from year to year.

## CONNECTOR LOCATIONS

Section 8W-90 contains Connector Location illustrations. The illustrations contain the connector number and component identification. Connector Location charts in Section 8W-90 reference the illustration number for components and connectors.

Section 8W-80 shows each connector and the circuits involved with that connector. The connectors are identified using the number on the Diagram pages.

## SPLICE LOCATIONS

Splice Location charts in Section 8W-70 show the entire splice, and provide references to other sections the splice serves.

Section 8W-95 contains illustrations that show the general location of the splices in each harness. The illustrations show the splice by number, and provide a written location.

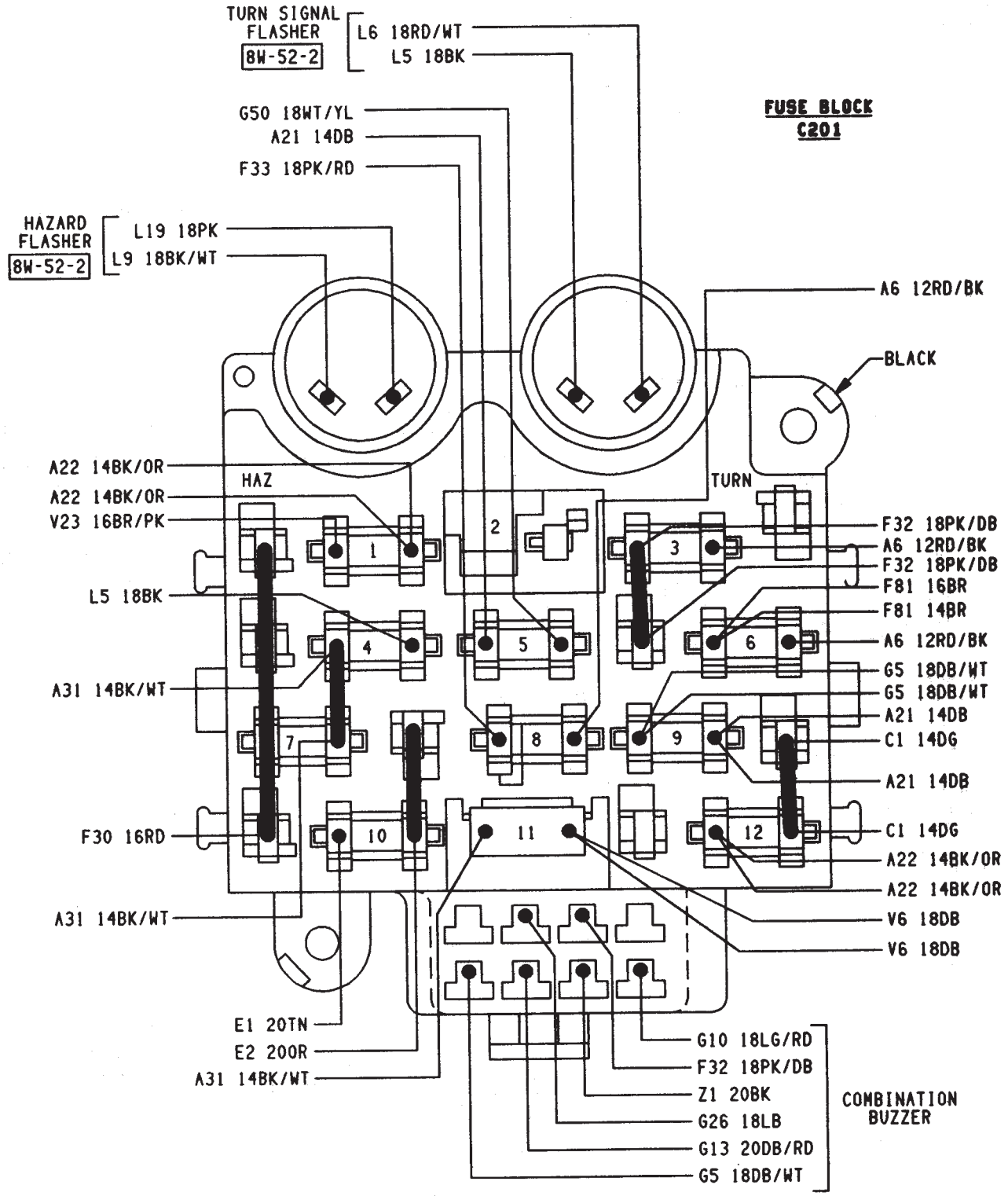
# FUSE/FUSE BLOCK

## GENERAL INFORMATION

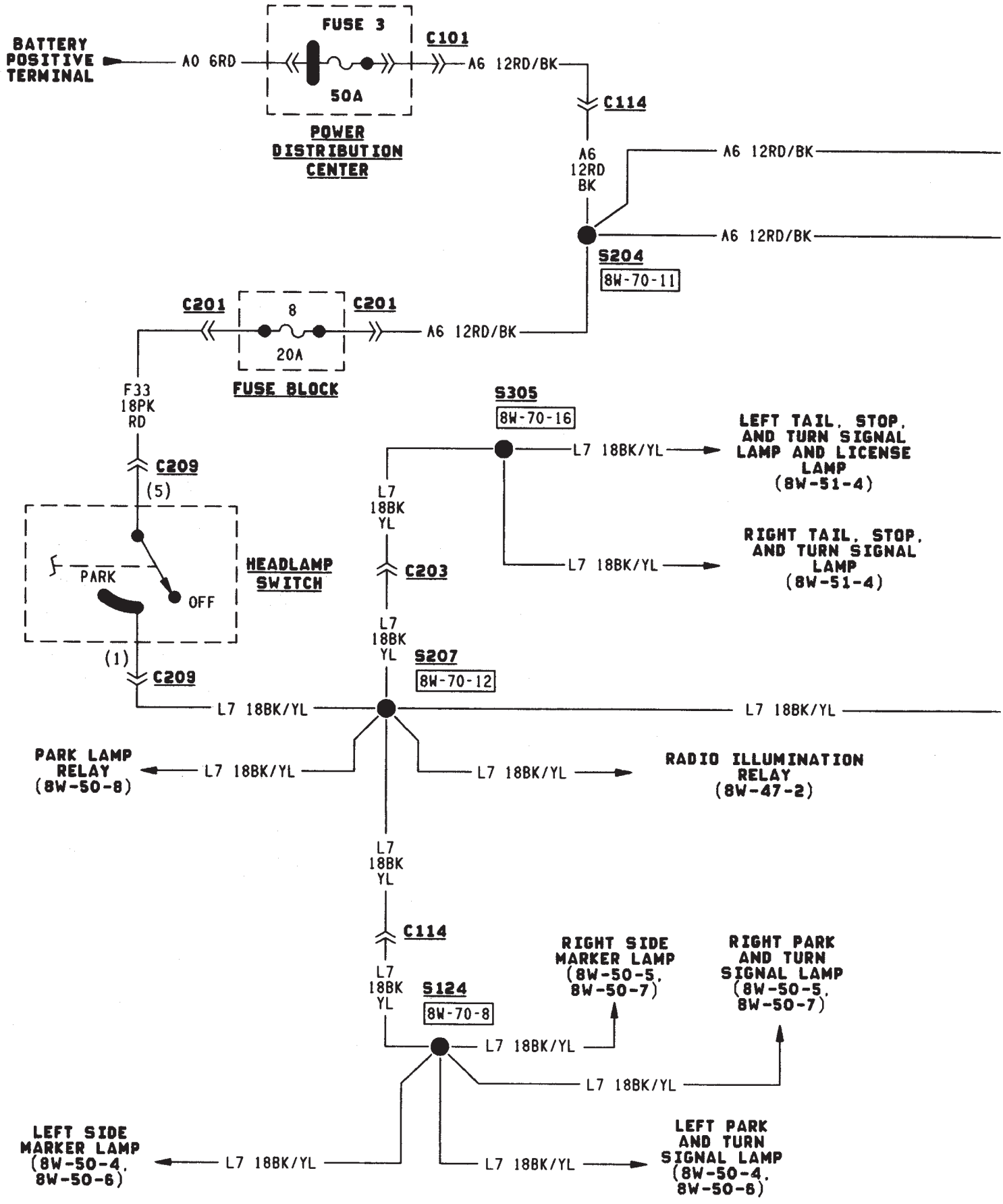
This section covers the Fuse Block and all circuits involved with it. For additional information on system operation, refer to the appropriate section of the wiring diagrams.

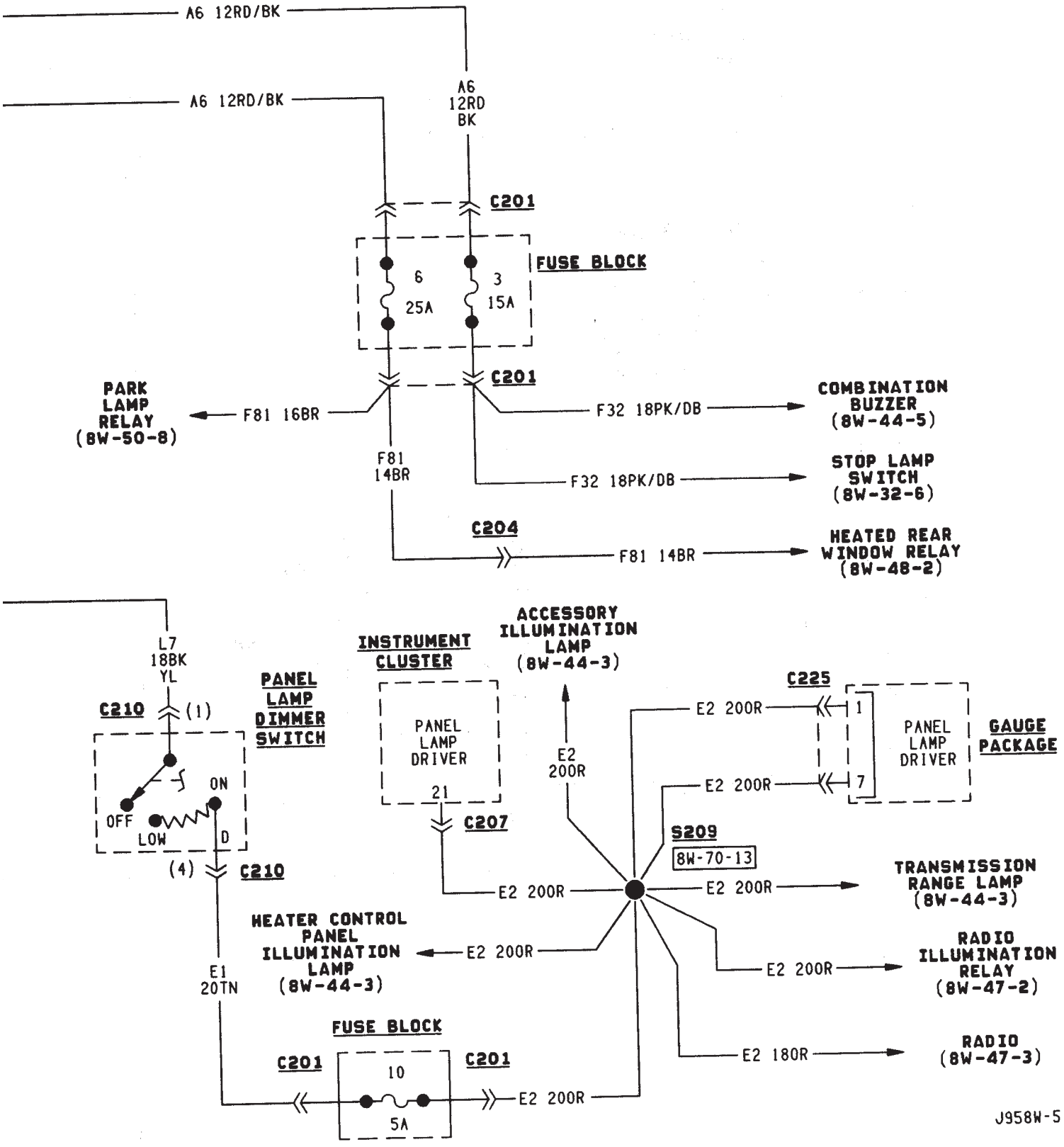
## DIAGRAM INDEX

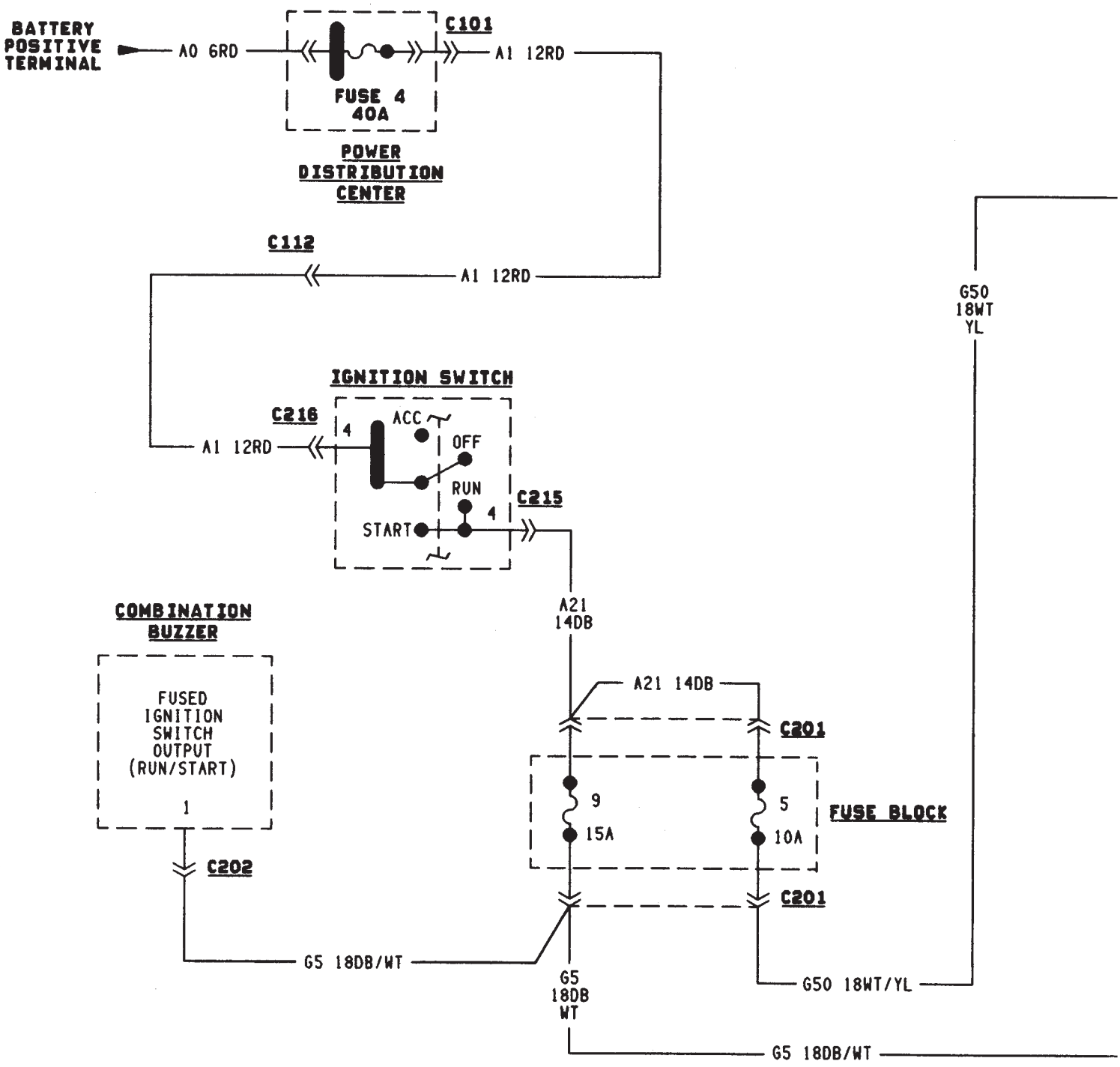
| FUSE NUMBER | AMPS | COLOR | DESCRIPTIONS | SHEET |
|---|---|---|---|---|
| 1 | 20 | YELLOW | REAR WIPERS | 8W-10-9 |
| 2 | —— | —— | —— | |
| 3 | 15 | LT BLUE | STOP LAMPS & BUZZER | 8W-10-5 |
| 4 | 15 | LT BLUE | TURN SIGNAL LAMPS | 8W-10-8 |
| 5 | 10 | RED | ASD & FUEL PUMP RELAYS | 8W-10-6 |
| 6 | 25 | NATURAL | HEATED REAR WINDOW | 8W-10-5 |
| 7 | 20 | YELLOW | CIGAR LIGHTER & ACCESSORIES | 8W-10-8 |
| 8 | 20 | YELLOW | RUNNING LAMPS | 8W-10-4 |
| 9 | 15 | LT BLUE | BUZZER, GAUGES & WARNING LIGHTS & RELAYS & BACKUP LAMPS | 8W-10-6 |
| 10 | 5 | TAN | PANEL ILLUMINATION LAMPS | 8W-10-5 |
| 11 | 5.3 C/B | GOLD | FRONT WIPERS & WASHERS | 8W-10-8 |
| 12 | 25 | NATURAL | HEATER & A/C | 8W-10-9 |


TURN SIGNAL FLASHER
8W-52-2
L6 18RD/WT
L5 18BK
G50 18WT/YL
A21 14DB
F33 18PK/RD
FUSE BLOCK
C201
HAZARD FLASHER
8W-52-2
L19 18PK
L9 18BK/WT
A6 12RD/BK
BLACK
A22 14BK/OR
A22 14BK/OR
V23 16BR/PK
HAZ
TURN
F32 18PK/DB
A6 12RD/BK
F32 18PK/DB
F81 16BR
F81 14BR
L5 18BK
A6 12RD/BK
G5 18DB/WT
G5 18DB/WT
A31 14BK/WT
A21 14DB
C1 14DG
A21 14DB
F30 16RD
C1 14DG
A22 14BK/OR
A22 14BK/OR
A31 14BK/WT
V6 18DB
V6 18DB
E1 20TN
E2 20OR
A31 14BK/WT
G10 18LG/RD
F32 18PK/DB
Z1 20BK
G26 18LB
G13 20DB/RD
G5 18DB/WT
COMBINATION BUZZER
1
2
3
4
5
6
7
8
9
10
11
12

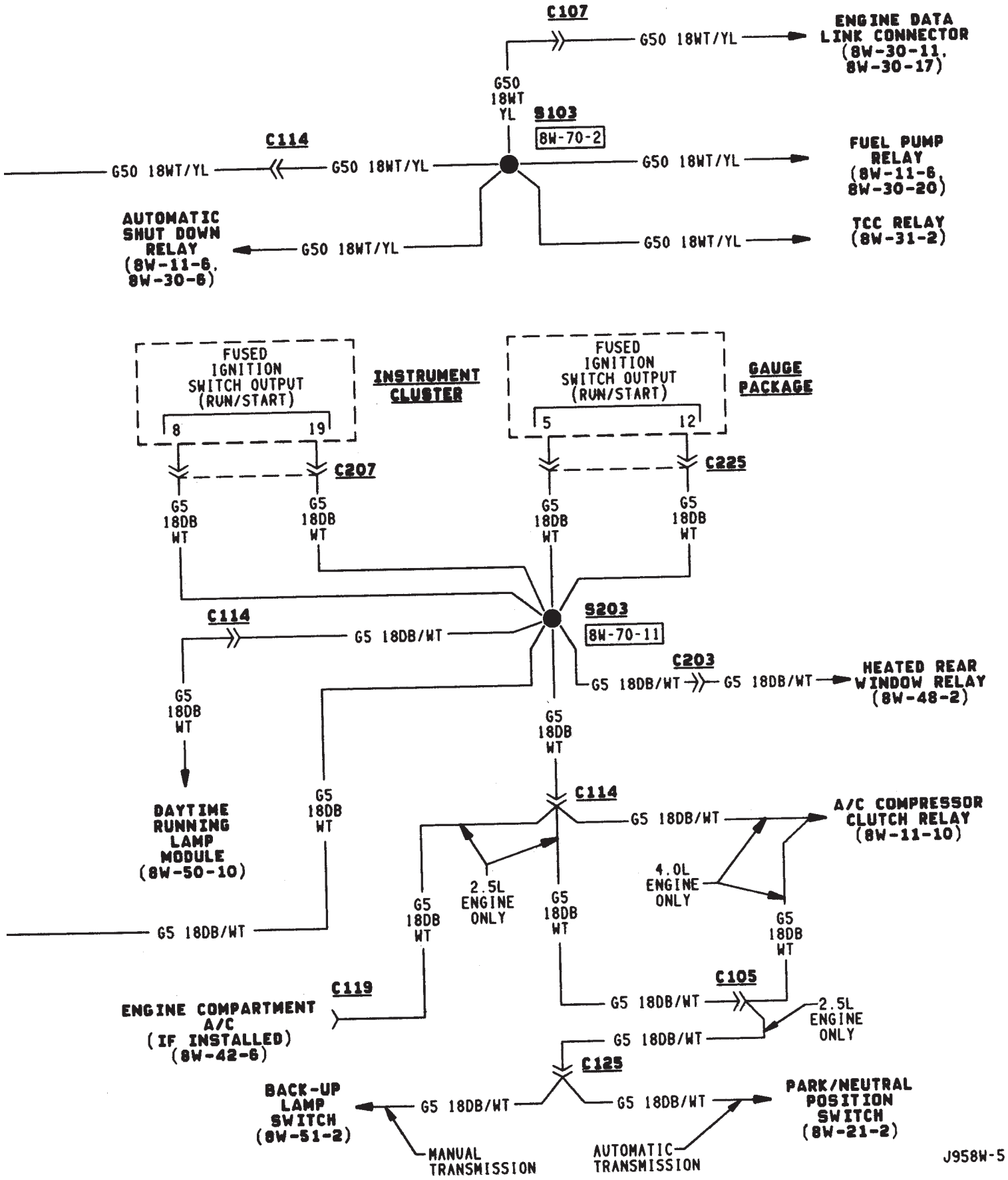
J958W-5

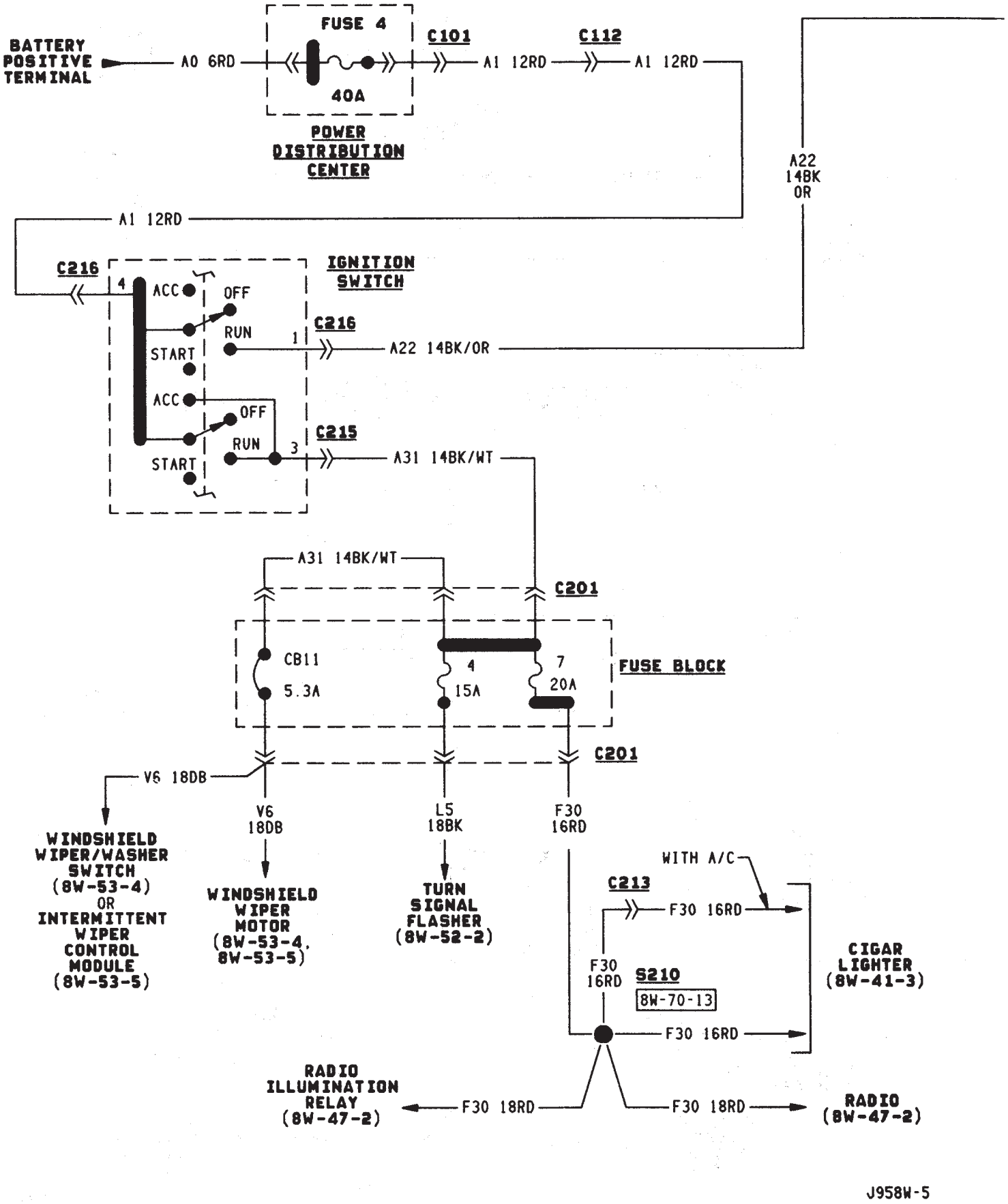

BATTERY POSITIVE TERMINAL
A0 6RD
FUSE 3
50A
C101
A6 12RD/BK
POWER DISTRIBUTION CENTER
C114
A6 12RD BK
A6 12RD/BK
A6 12RD/BK
S204
8W-70-11
C201
8
20A
C201
A6 12RD/BK
FUSE BLOCK
F33 18PK RD
C209
(5)
PARK
OFF
HEADLAMP SWITCH
(1)
C209
S305
8W-70-16
L7 18BK/YL
LEFT TAIL, STOP, AND TURN SIGNAL LAMP AND LICENSE LAMP (8W-51-4)
L7 18BK YL
C203
L7 18BK/YL
RIGHT TAIL, STOP, AND TURN SIGNAL LAMP (8W-51-4)
L7 18BK YL
S207
8W-70-12
L7 18BK/YL
L7 18BK/YL
PARK LAMP RELAY (8W-50-8)
L7 18BK/YL
L7 18BK/YL
RADIO ILLUMINATION RELAY (8W-47-2)
L7 18BK YL
C114
L7 18BK YL
S124
8W-70-8
RIGHT SIDE MARKER LAMP (8W-50-5, 8W-50-7)
RIGHT PARK AND TURN SIGNAL LAMP (8W-50-5, 8W-50-7)
L7 18BK/YL
L7 18BK/YL
LEFT SIDE MARKER LAMP (8W-50-4, 8W-50-6)
L7 18BK/YL
L7 18BK/YL
LEFT PARK AND TURN SIGNAL LAMP (8W-50-4, 8W-50-6)
J958W-5


A6 12RD/BK
A6 12RD/BK
A6 12RD BK
C201
FUSE BLOCK
6 25A
3 15A
C201
PARK LAMP RELAY (8W-50-8)
F81 16BR
F32 18PK/DB
COMBINATION BUZZER (8W-44-5)
F81 14BR
F32 18PK/DB
STOP LAMP SWITCH (8W-32-6)
C204
F81 14BR
HEATED REAR WINDOW RELAY (8W-48-2)
L7 18BK YL
C210
(1)
PANEL LAMP DIMMER SWITCH
ON
OFF
LOW
D
(4)
C210
E1 20TN
INSTRUMENT CLUSTER
PANEL LAMP DRIVER
21
C207
ACCESSORY ILLUMINATION LAMP (8W-44-3)
E2 200R
C225
1
7
PANEL LAMP DRIVER
GAUGE PACKAGE
E2 200R
E2 200R
S209
8W-70-13
E2 200R
E2 200R
TRANSMISSION RANGE LAMP (8W-44-3)
HEATER CONTROL PANEL ILLUMINATION LAMP (8W-44-3)
E2 200R
E2 200R
RADIO ILLUMINATION RELAY (8W-47-2)
E2 180R
RADIO (8W-47-3)
FUSE BLOCK
C201
C201
10
5A
E2 200R
J958W-5

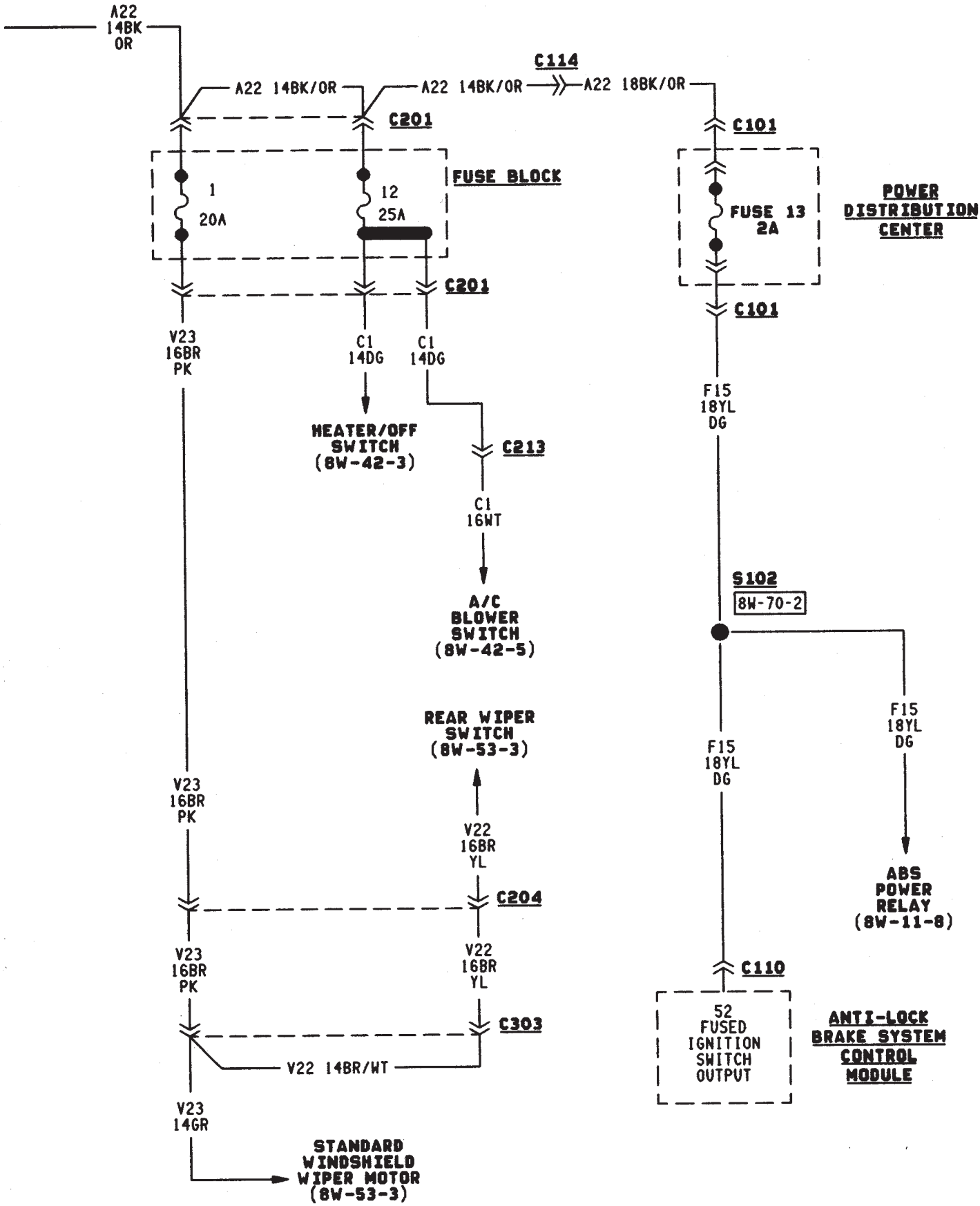

BATTERY POSITIVE TERMINAL
A0 6RD
C101
FUSE 4 40A
A1 12RD
POWER DISTRIBUTION CENTER
C112
A1 12RD
G50 18WT YL
IGNITION SWITCH
C216
4
ACC
OFF
RUN
START
4
C215
A1 12RD
COMBINATION BUZZER
FUSED IGNITION SWITCH OUTPUT (RUN/START)
1
A21 14DB
A21 14DB
C201
9
15A
5
10A
FUSE BLOCK
C202
C201
G5 18DB/WT
G5 18DB WT
G50 18WT/YL
G5 18DB/WT

J958W-5


C107
G50 18WT/YL
ENGINE DATA LINK CONNECTOR (8W-30-11, 8W-30-17)
G50 18WT YL
S103
8W-70-2
C114
G50 18WT/YL
G50 18WT/YL
G50 18WT/YL
FUEL PUMP RELAY (8W-11-6, 8W-30-20)
AUTOMATIC SHUT DOWN RELAY (8W-11-6, 8W-30-6)
G50 18WT/YL
G50 18WT/YL
TCC RELAY (8W-31-2)
FUSED IGNITION SWITCH OUTPUT (RUN/START)
8
19
INSTRUMENT CLUSTER
FUSED IGNITION SWITCH OUTPUT (RUN/START)
5
12
GAUGE PACKAGE
C207
C225
G5 18DB WT
G5 18DB WT
G5 18DB WT
G5 18DB WT
C114
G5 18DB/WT
S203
8W-70-11
C203
G5 18DB/WT
G5 18DB/WT
HEATED REAR WINDOW RELAY (8W-48-2)
G5 18DB WT
G5 18DB WT
DAYTIME RUNNING LAMP MODULE (8W-50-10)
G5 18DB WT
C114
G5 18DB/WT
A/C COMPRESSOR CLUTCH RELAY (8W-11-10)
G5 18DB/WT
G5 18DB WT
2.5L ENGINE ONLY
G5 18DB WT
4.0L ENGINE ONLY
G5 18DB WT
C105
C119
ENGINE COMPARTMENT A/C (IF INSTALLED) (8W-42-6)
G5 18DB/WT
G5 18DB/WT
2.5L ENGINE ONLY
G5 18DB/WT
C125
BACK-UP LAMP SWITCH (8W-51-2)
G5 18DB/WT
G5 18DB/WT
PARK/NEUTRAL POSITION SWITCH (8W-21-2)
MANUAL TRANSMISSION
AUTOMATIC TRANSMISSION
J958W-5


BATTERY POSITIVE TERMINAL
A0 6RD
FUSE 4
40A
C101
A1 12RD
C112
A1 12RD
POWER DISTRIBUTION CENTER
A22 14BK OR
A1 12RD
C216
IGNITION SWITCH
4
ACC
OFF
RUN
START
ACC
OFF
RUN
START
C216
1
A22 14BK/OR
C215
3
A31 14BK/WT
A31 14BK/WT
C201
CB11
5.3A
4
15A
7
20A
FUSE BLOCK
C201
V6 18DB
V6 18DB
L5 18BK
F30 16RD
WINDSHIELD WIPER/WASHER SWITCH (8W-53-4) OR INTERMITTENT WIPER CONTROL MODULE (8W-53-5)
WINDSHIELD WIPER MOTOR (8W-53-4, 8W-53-5)
TURN SIGNAL FLASHER (8W-52-2)
WITH A/C
C213
F30 16RD
F30 16RD
S210
8W-70-13
F30 16RD
CIGAR LIGHTER (8W-41-3)
RADIO ILLUMINATION RELAY (8W-47-2)
F30 18RD
F30 18RD
RADIO (8W-47-2)

J958W-5


A22
14BK
OR
C114
A22 14BK/OR
A22 14BK/OR
A22 18BK/OR
C201
C101
FUSE BLOCK
1
20A
12
25A
FUSE 13
2A
POWER
DISTRIBUTION
CENTER
C201
C101
V23
16BR
PK
C1
14DG
C1
14DG
F15
18YL
DG
HEATER/OFF
SWITCH
(8W-42-3)
C213
C1
16WT
A/C
BLOWER
SWITCH
(8W-42-5)
S102
8W-70-2
REAR WIPER
SWITCH
(8W-53-3)
V23
16BR
PK
V22
16BR
YL
F15
18YL
DG
F15
18YL
DG
C204
ABS
POWER
RELAY
(8W-11-8)
V23
16BR
PK
V22
16BR
YL
C110
C303
52
FUSED
IGNITION
SWITCH
OUTPUT
ANTI-LOCK
BRAKE SYSTEM
CONTROL
MODULE
V22 14BR/WT
V23
14GR
STANDARD
WINDSHIELD
WIPER MOTOR
(8W-53-3)

J958W-5

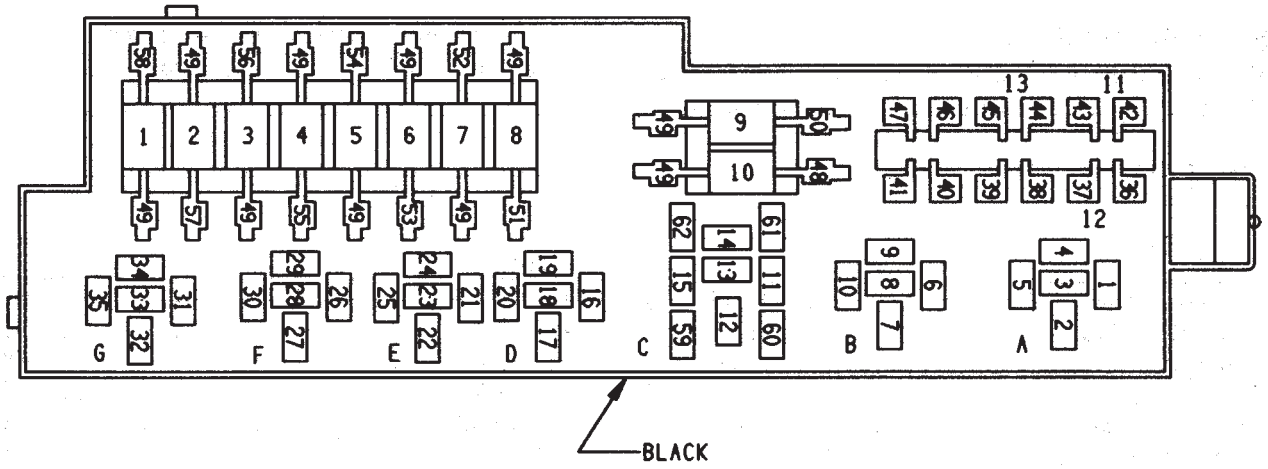
# POWER DISTRIBUTION

## GENERAL INFORMATION

This section covers the Power Distribution Center (PDC) and all circuits involved with it. For additional information on system operation refer to the appropriate section of the wiring diagrams.

## DIAGRAM INDEX

**POWER DISTRIBUTION CENTER**
**C101**




| | FUSE | FUSED CIRCUIT | FEED CIRCUIT | AMPS | SECTION/PAGE | |
|---|---|---|---|---|---|---|
| (2) | 1 | A14 16RD/WT | A0 6RD | 30 | 8W-11-6 | |
| | 2 | A11 10RD | | 50 | 8W-11-7 | |
| | 3 | A6 12RD/BK | | 50 | 8W-11-7 | |
| (2) | 4 | A1 12RD | | 40 | 8W-11-4<br>8W-11-8<br>8W-11-10 | |
| | 5 | L9 18BK/WT | | 20 | 8W-11-7 | |
| | 6 | A11 10RD | | 50 | 8W-11-7 | |
| | 7 | A3 12RD/OR | | 30 | 8W-11-7 | |
| | 8 | A4 18BK/RD | | 20 | 8W-11-5 | |
| | 9 | A10 12RD/BR | | 40 | 8W-11-9 | 4.0L ENGINE ONLY |
| | 10 | A20 14RD/DB | | 30 | 8W-11-8 | 4.0L ENGINE ONLY |
| | 11 | F31 18VT | A4 18BK/RD | 10 | 8W-11-5 | |
| | 12 | M1 18PK | | 10 | 8W-11-5 | |
| | 13 | F15 18YL/DG | A22 18BK/OR | 2 | 8W-11-8 | |

(2) INDICATES 2 WIRES IN CAVITY

A
HORN
RELAY

| CAV | CIRCUIT | FUNCTION | SECTION/PAGE |
|---|---|---|---|
| 1 | X3 18BK/RD | HORN RELAY CONTROL | 8W-11-5 |
| 2 | F31 18VT | FUSED B(+) | 8W-11-5 |
| 4 | X2 18DG/RD | HORN RELAY OUTPUT | 8W-11-5 |
| 5 | F31 18VT | FUSED B(+) | 8W-11-5 |
| 5 | F31 18VT | FUSED B(+) | 8W-11-5 |

B
FUEL
PUMP
RELAY

| CAV | CIRCUIT | FUNCTION | SECTION/PAGE |
|---|---|---|---|
| 6 | G50 18WT/YL | FUSED IGN SW OUTPUT | 8W-11-6 |
| 7 | A14 16RD/WT | FUSED B(+) | 8W-11-6 |
| 7 | A14 16RD/WT | FUSED B(+) | 8W-11-6 |
| 9 | A141 16DG/BK | FUEL PUMP RELAY OUTPUT | 8W-11-6 |
| 10 | K51 18DB/YL | FUEL PUMP RELAY CONTROL | 8W-11-6 |
| 10 | K51 18DB/YL | FUEL PUMP RELAY CONTROL | 8W-11-6 |

C
ABS PUMP
MOTOR
RELAY
(4.0L ENGINE
ONLY)

| CAV | CIRCUIT | FUNCTION | SECTION/PAGE |
|---|---|---|---|
| 11 | B15 14GY/YL | ABS MAIN RELAY OUTPUT | 8W-11-9 |
| 12 | A10 12RD/BR | FUSED B(+) | 8W-11-9 |
| 14 | B25 12TN | ABS PUMP MOTOR RELAY OUTPUT | 8W-11-9 |
| 15 | B116 18GY | ABS PUMP MOTOR RELAY CONTROL | 8W-11-9 |
| 60 | Z12 14BK/TN | GROUND | 8W-11-9 |

D
A/C COMPRESSOR
CLUTCH RELAY
4.0L ENGINE
ONLY)

| CAV | CIRCUIT | FUNCTION | SECTION/PAGE |
|---|---|---|---|
| 16 | C13 18DB/OR | A/C COMPRESSOR CLUTCH RELAY CONTROL | 8W-11-10 |
| 17 | C3 18DB/BK | A/C COMPRESSOR CLUTCH OUTPUT | 8W-11-10 |
| 18 | Z1 16BK | GROUND | 8W-11-10 |
| 19 | C20 18BR/RD(2) | A/C SWITCH SENSE | 8W-11-10 |
| 20 | G5 18DB/WT(2) | FUSED IGN SW OUTPUT(RUN/START) | 8W-11-10 |

E
AUTOMATIC
SHUT DOWN
RELAY

| CAV | CIRCUIT | FUNCTION | SECTION/PAGE |
|---|---|---|---|
| 21 | G50 18WT/YL | FUSED IGNITION SWITCH OUTPUT | 8W-11-6 |
| 22 | A14 16RD/WT(2) | FUSED B(+) | 8W-11-6 |
| 24 | A142 18DG/OR | AUTOMATIC SHUT DOWN RELAY OUTPUT | 8W-11-6 |
| 25 | K51 18DB/YL | AUTOMATIC SHUT DOWN RELAY CONTROL | 8W-11-6 |

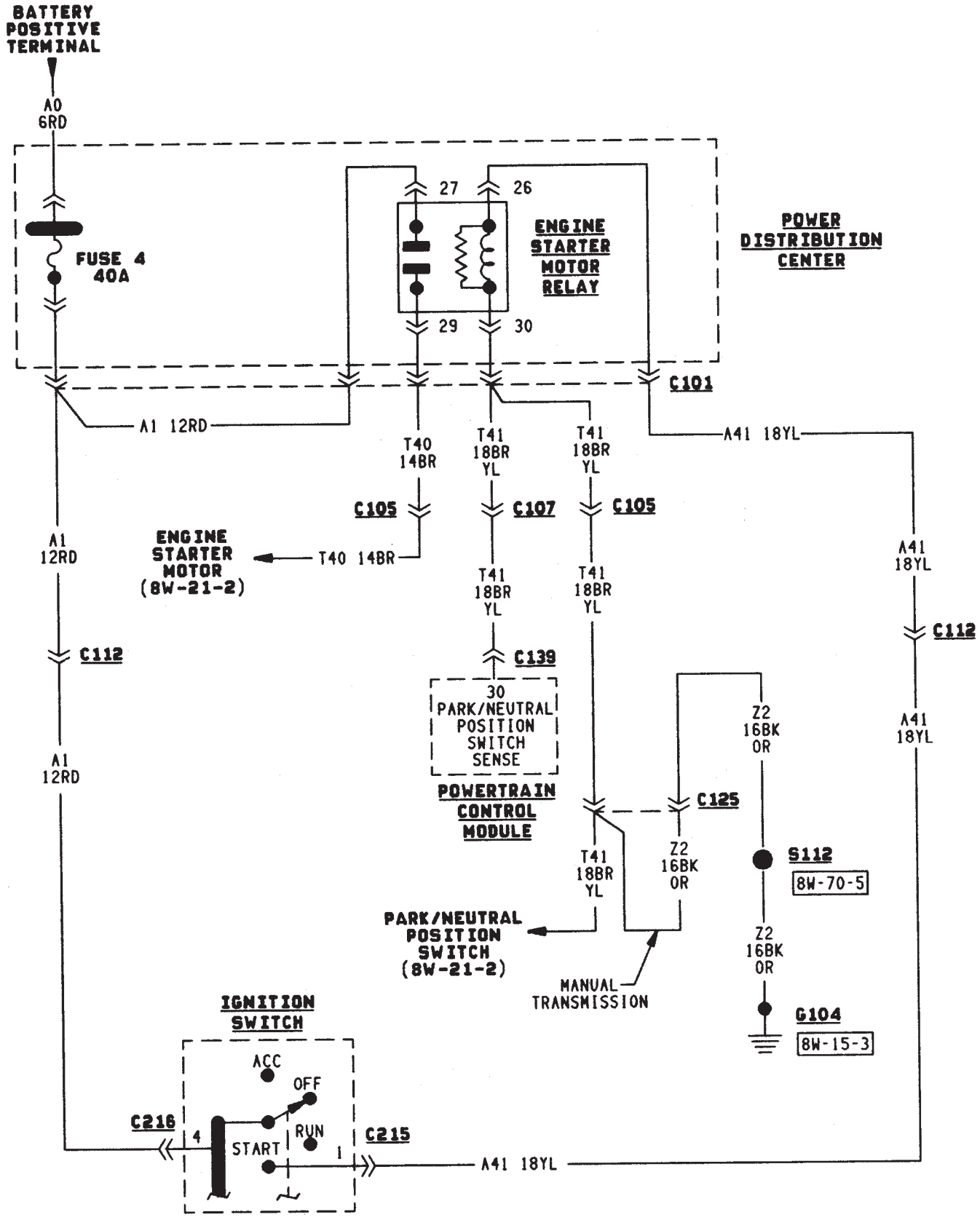
F
ENGINE
STARTER
MOTOR
RELAY

| CAV | CIRCUIT | FUNCTION | SECTION/PAGE |
|---|---|---|---|
| 26 | A41 18YL | IGNITION SWITCH OUTPUT (START) | 8W-11-4 |
| 27 | A1 12RD | FUSED B(+) | 8W-11-4 |
| 29 | T40 14BR | ENGINE STARTER RELAY OUTPUT | 8W-11-4 |
| 30 | T41 18BR/YL(2) | PARK/NEUTRAL POSITION SW SENSE | 8W-11-4 |

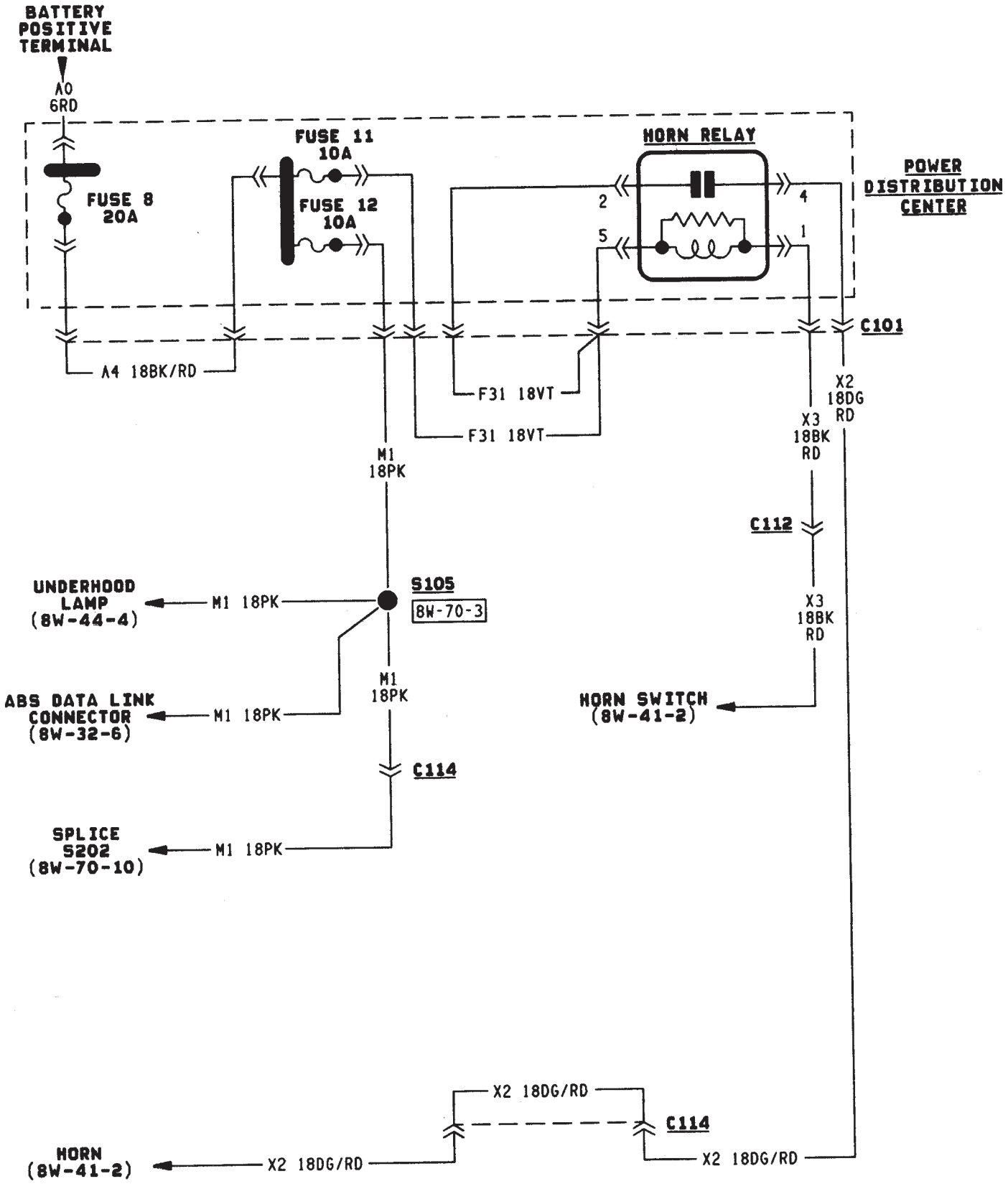
G
ABS
POWER
RELAY
(4.0L ENGINE
ONLY)

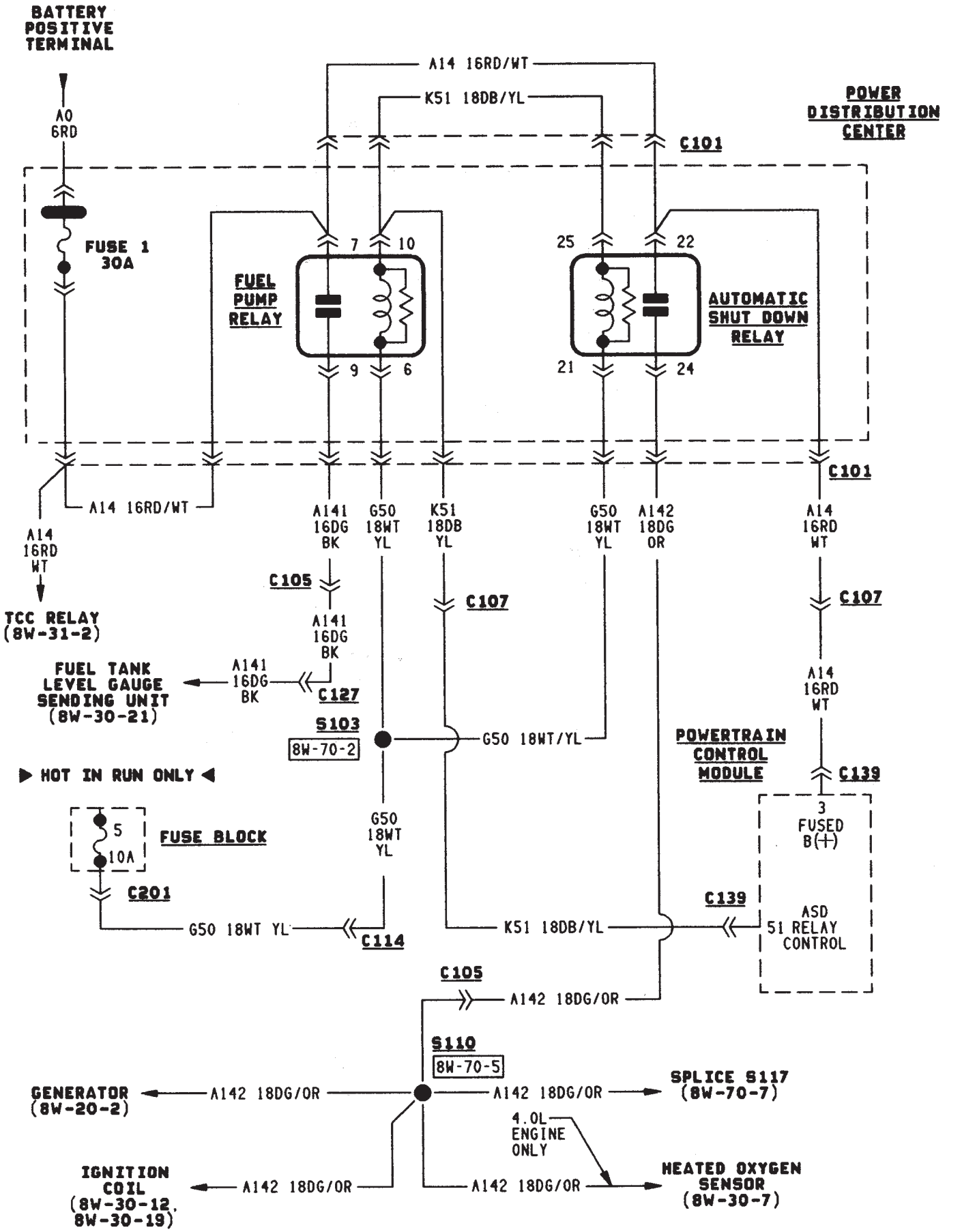
| CAV | CIRCUIT | FUNCTION | SECTION/PAGE |
|---|---|---|---|
| 31 | F15 18YL/DG | FUSED IGNITION SWITCH OUTPUT | 8W-11-8 |
| 32 | B15 14GY/YL(2) | ABS MAIN RELAY OUTPUT | 8W-11-8 |
| 33 | Z12 18BK/TN | GROUND | 8W-11-8 |
| 34 | A20 14RD/DB | FUSED B(+) | 8W-11-8 |
| 35 | B20 18PK | ABS MAIN RELAY CONTROL | 8W-11-8 |

(2) INDICATES 2 WIRES IN CAVITY

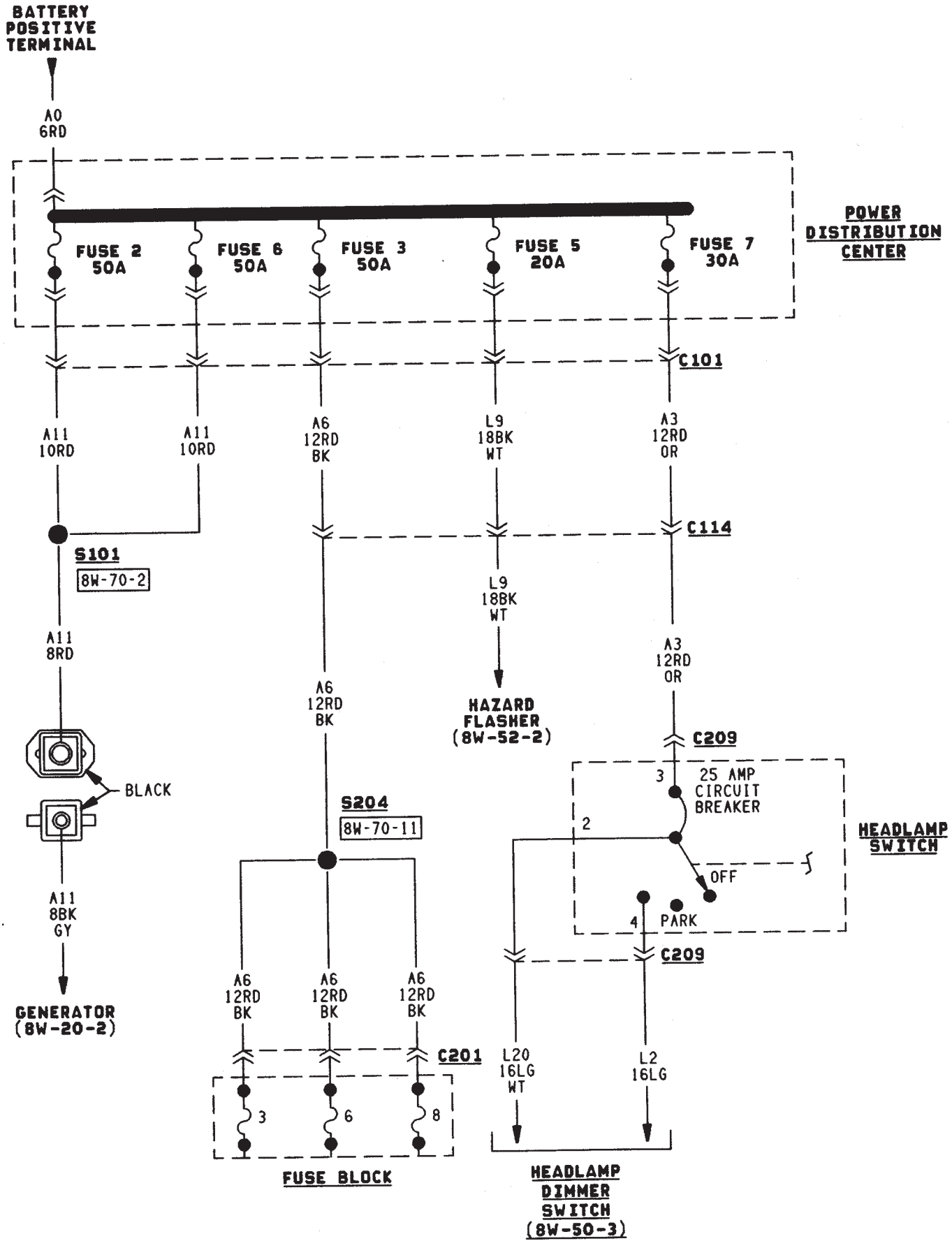

BATTERY POSITIVE TERMINAL
A0 6RD
FUSE 4 40A
27
26
29
30
ENGINE STARTER MOTOR RELAY
POWER DISTRIBUTION CENTER
C101
A1 12RD
T40 14BR
T41 18BR YL
T41 18BR YL
A41 18YL
C105
C107
C105
A1 12RD
ENGINE STARTER MOTOR (8W-21-2)
T40 14BR
T41 18BR YL
T41 18BR YL
A41 18YL
C112
C139
C112
30 PARK/NEUTRAL POSITION SWITCH SENSE
POWERTRAIN CONTROL MODULE
A1 12RD
C125
Z2 16BK OR
A41 18YL
T41 18BR YL
Z2 16BK OR
S112
8W-70-5
PARK/NEUTRAL POSITION SWITCH (8W-21-2)
Z2 16BK OR
MANUAL TRANSMISSION
G104
8W-15-3
IGNITION SWITCH
ACC
OFF
RUN
START
C216
4
1
C215
A41 18YL

J958W-5

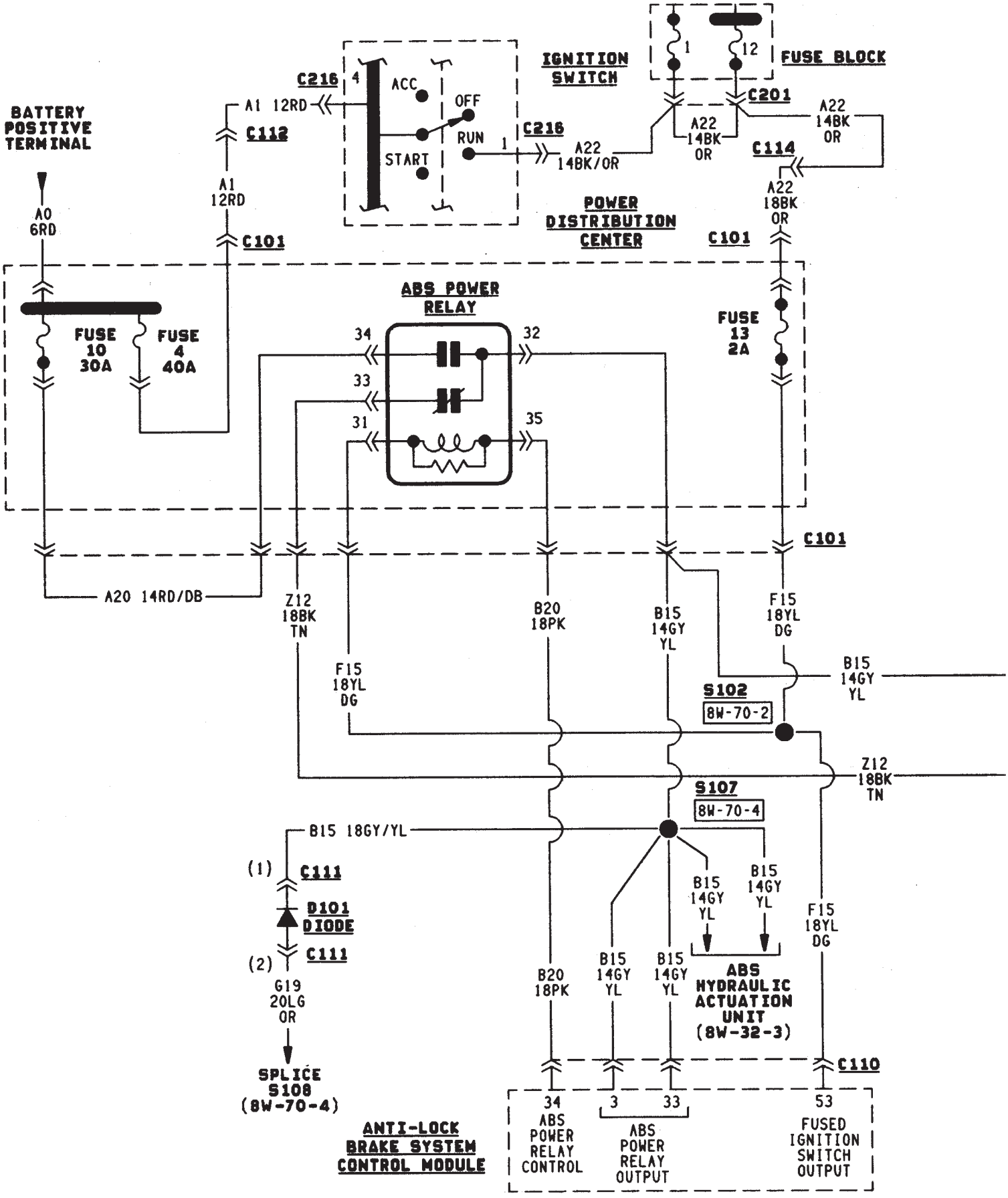

BATTERY POSITIVE TERMINAL
A0 6RD
FUSE 8 20A
FUSE 11 10A
FUSE 12 10A
HORN RELAY
2
4
5
1
POWER DISTRIBUTION CENTER
C101
A4 18BK/RD
F31 18VT
F31 18VT
X2 18DG RD
X3 18BK RD
M1 18PK
C112
UNDERHOOD LAMP (8W-44-4)
M1 18PK
S105
8W-70-3
X3 18BK RD
ABS DATA LINK CONNECTOR (8W-32-6)
M1 18PK
M1 18PK
HORN SWITCH (8W-41-2)
C114
SPLICE S202 (8W-70-10)
M1 18PK
X2 18DG/RD
C114
HORN (8W-41-2)
X2 18DG/RD
X2 18DG/RD


BATTERY POSITIVE TERMINAL
A0 6RD
A14 16RD/WT
K51 18DB/YL
POWER DISTRIBUTION CENTER
C101
FUSE 1 30A
FUEL PUMP RELAY
AUTOMATIC SHUT DOWN RELAY
7
10
25
22
9
6
21
24
A14 16RD/WT
A141 16DG BK
G50 18WT YL
K51 18DB YL
G50 18WT YL
A142 18DG OR
A14 16RD WT
C105
C107
TCC RELAY (8W-31-2)
FUEL TANK LEVEL GAUGE SENDING UNIT (8W-30-21)
C127
S103
8W-70-2
G50 18WT/YL
POWERTRAIN CONTROL MODULE
C139
▶ HOT IN RUN ONLY ◀
5
10A
FUSE BLOCK
C201
3 FUSED B(+)
ASD 51 RELAY CONTROL
K51 18DB/YL
C114
A142 18DG/OR
S110
8W-70-5
GENERATOR (8W-20-2)
SPLICE S117 (8W-70-7)
4.0L ENGINE ONLY
IGNITION COIL (8W-30-12, 8W-30-19)
HEATED OXYGEN SENSOR (8W-30-7)

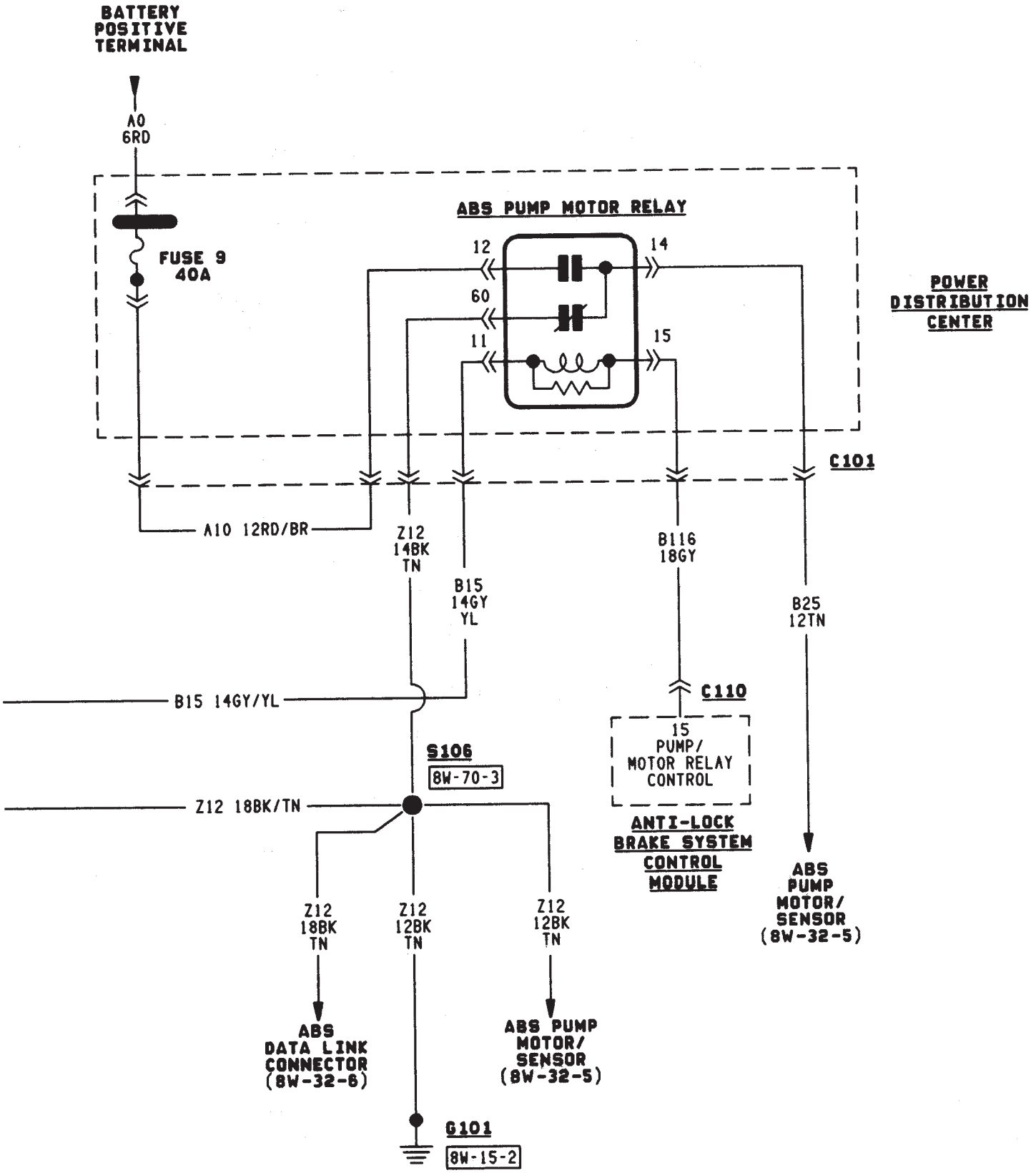
J958W-5


BATTERY POSITIVE TERMINAL
A0 6RD
POWER DISTRIBUTION CENTER
FUSE 2 50A
FUSE 6 50A
FUSE 3 50A
FUSE 5 20A
FUSE 7 30A
C101
A11 10RD
A11 10RD
A6 12RD BK
L9 18BK WT
A3 12RD OR
C114
S101
8W-70-2
L9 18BK WT
A3 12RD OR
A11 8RD
A6 12RD BK
HAZARD FLASHER (8W-52-2)
C209
3
25 AMP CIRCUIT BREAKER
2
HEADLAMP SWITCH
OFF
4
PARK
BLACK
S204
8W-70-11
C209
A11 8BK GY
A6 12RD BK
A6 12RD BK
A6 12RD BK
C201
L20 16LG WT
L2 16LG
3
6
8
GENERATOR (8W-20-2)
FUSE BLOCK
HEADLAMP DIMMER SWITCH (8W-50-3)

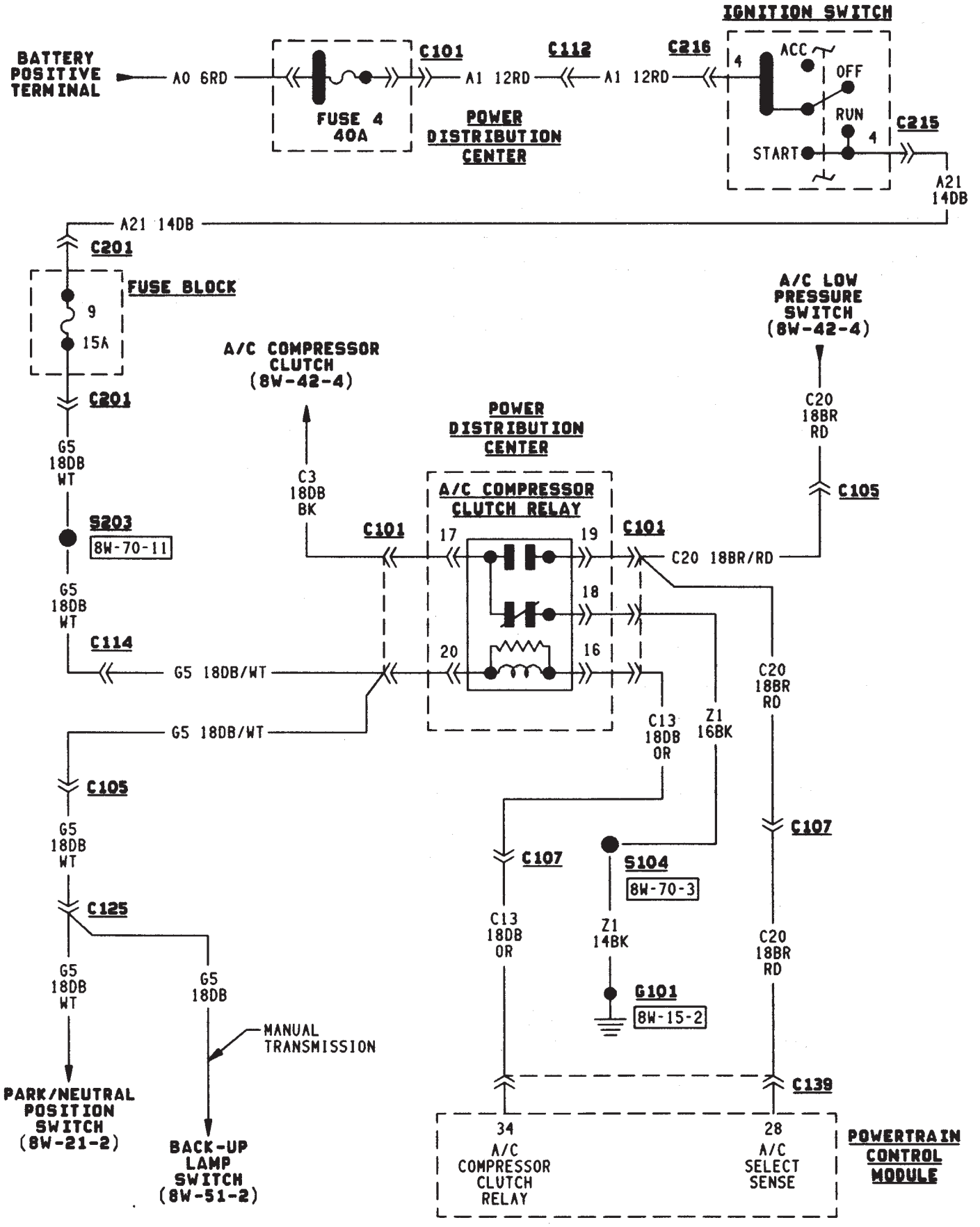
J958W-5


BATTERY POSITIVE TERMINAL
A0 6RD
A1 12RD
C112
C216
4
ACC
OFF
RUN
START
1
C216
A1 12RD
IGNITION SWITCH
1
12
FUSE BLOCK
C201
A22 14BK OR
A22 14BK OR
C114
A22 14BK/OR
A22 18BK OR
POWER DISTRIBUTION CENTER
C101
C101
ABS POWER RELAY
34
32
33
31
35
FUSE 10 30A
FUSE 4 40A
FUSE 13 2A
C101
A20 14RD/DB
Z12 18BK TN
F15 18YL DG
B20 18PK
B15 14GY YL
F15 18YL DG
B15 14GY YL
S102
8W-70-2
Z12 18BK TN
S107
8W-70-4
B15 18GY/YL
(1)
C111
D101 DIODE
(2)
C111
G19 20LG OR
SPLICE S108 (8W-70-4)
B15 14GY YL
B15 14GY YL
F15 18YL DG
B20 18PK
B15 14GY YL
B15 14GY YL
ABS HYDRAULIC ACTUATION UNIT (8W-32-3)
C110
34
3
33
53
ABS POWER RELAY CONTROL
ABS POWER RELAY OUTPUT
FUSED IGNITION SWITCH OUTPUT
ANTI-LOCK BRAKE SYSTEM CONTROL MODULE

J958W-5


BATTERY POSITIVE TERMINAL
A0 6RD
FUSE 9 40A
ABS PUMP MOTOR RELAY
12
14
60
11
15
POWER DISTRIBUTION CENTER
C101
A10 12RD/BR
Z12 14BK TN
B15 14GY YL
B116 18GY
B25 12TN
B15 14GY/YL
C110
15 PUMP/ MOTOR RELAY CONTROL
S106
8W-70-3
Z12 18BK/TN
ANTI-LOCK BRAKE SYSTEM CONTROL MODULE
ABS PUMP MOTOR/ SENSOR (8W-32-5)
Z12 18BK TN
Z12 12BK TN
Z12 12BK TN
ABS DATA LINK CONNECTOR (8W-32-6)
ABS PUMP MOTOR/ SENSOR (8W-32-5)
G101
8W-15-2

J958W-5


IGNITION SWITCH
BATTERY POSITIVE TERMINAL
A0 6RD
C101
FUSE 4 40A
POWER DISTRIBUTION CENTER
C112
A1 12RD
C216
A1 12RD
4
ACC
OFF
RUN
START
4
C215
A21 14DB
A21 14DB
C201
FUSE BLOCK
9
15A
C201
G5 18DB WT
S203
8W-70-11
G5 18DB WT
C114
G5 18DB/WT
A/C COMPRESSOR CLUTCH (8W-42-4)
C3 18DB BK
POWER DISTRIBUTION CENTER
A/C COMPRESSOR CLUTCH RELAY
C101
17
19
18
20
16
C101
A/C LOW PRESSURE SWITCH (8W-42-4)
C20 18BR RD
C105
C20 18BR/RD
C20 18BR RD
G5 18DB/WT
C13 18DB OR
Z1 16BK
C105
G5 18DB WT
C125
G5 18DB WT
G5 18DB
MANUAL TRANSMISSION
C107
C107
S104
8W-70-3
C13 18DB OR
Z1 14BK
G101
8W-15-2
C20 18BR RD
C139
34
A/C COMPRESSOR CLUTCH RELAY
28
A/C SELECT SENSE
POWERTRAIN CONTROL MODULE
PARK/NEUTRAL POSITION SWITCH (8W-21-2)
BACK-UP LAMP SWITCH (8W-51-2)

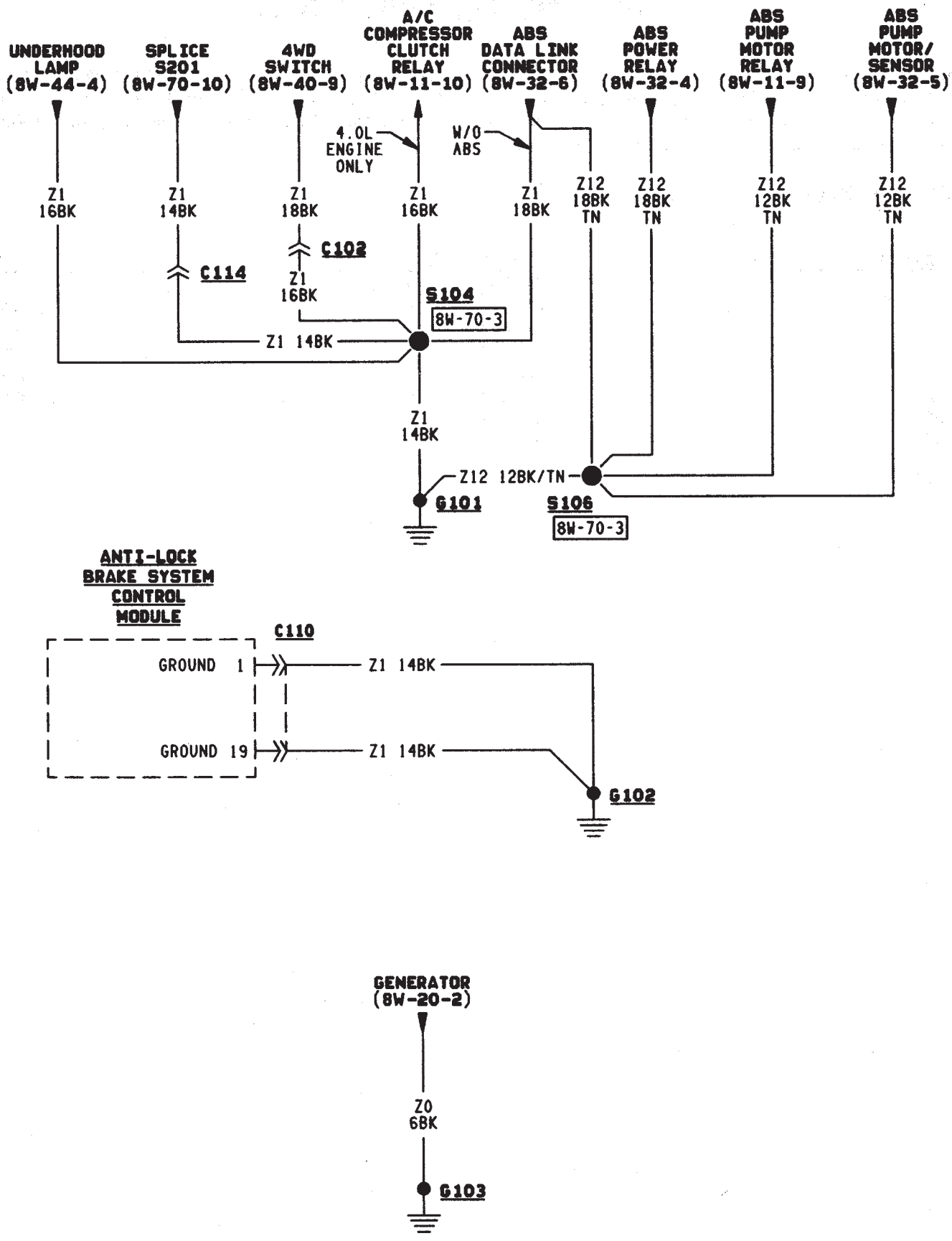
J958W-5

# GROUND DISTRIBUTION

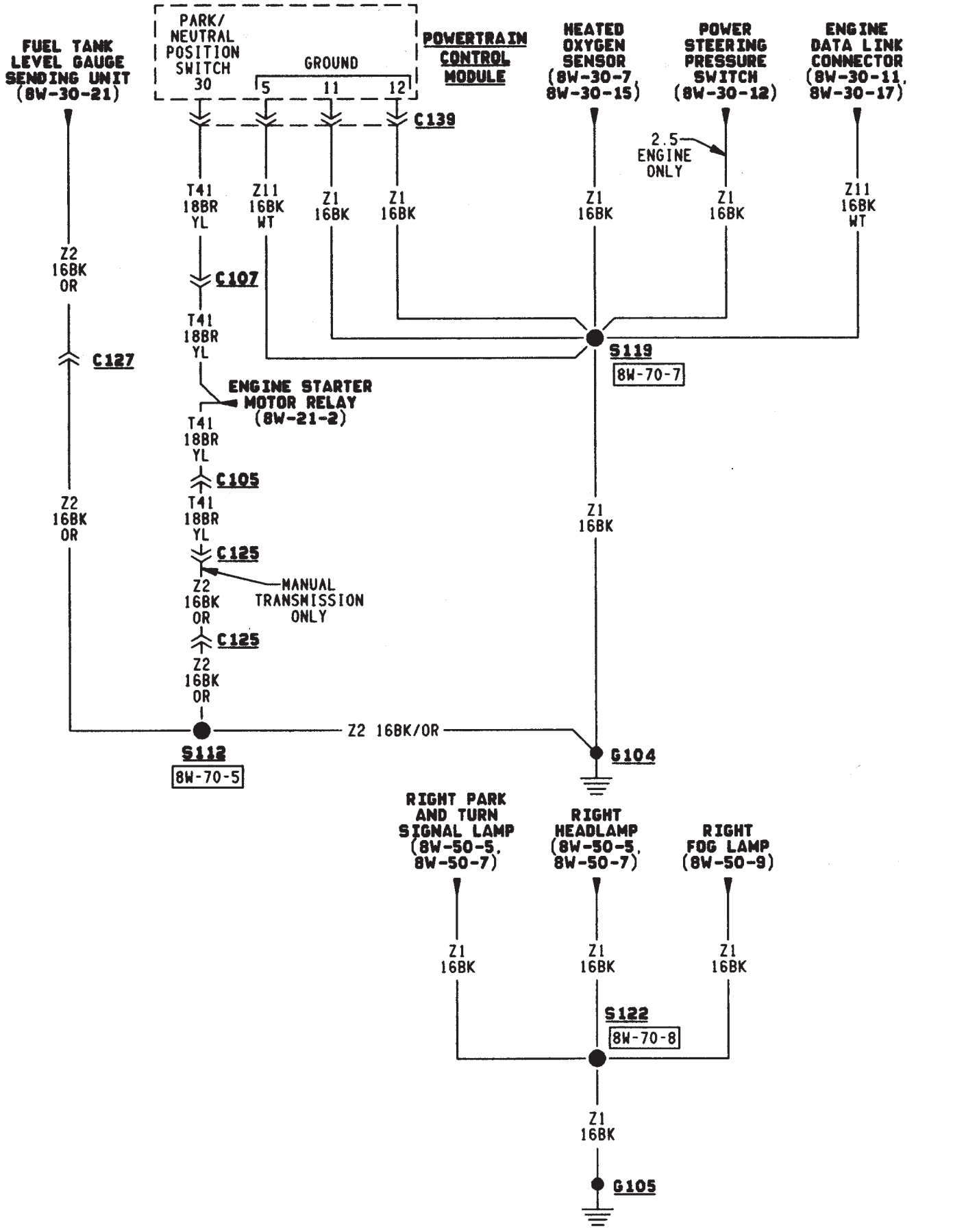
## GENERAL INFORMATION

This section identifies the grounds, splices that connect to those grounds, and the components that connect those grounds. For additional information on system operation, refer to the appropriate section of the wiring diagrams. For an illustration of the physical location of each ground, refer to group 8W-90.

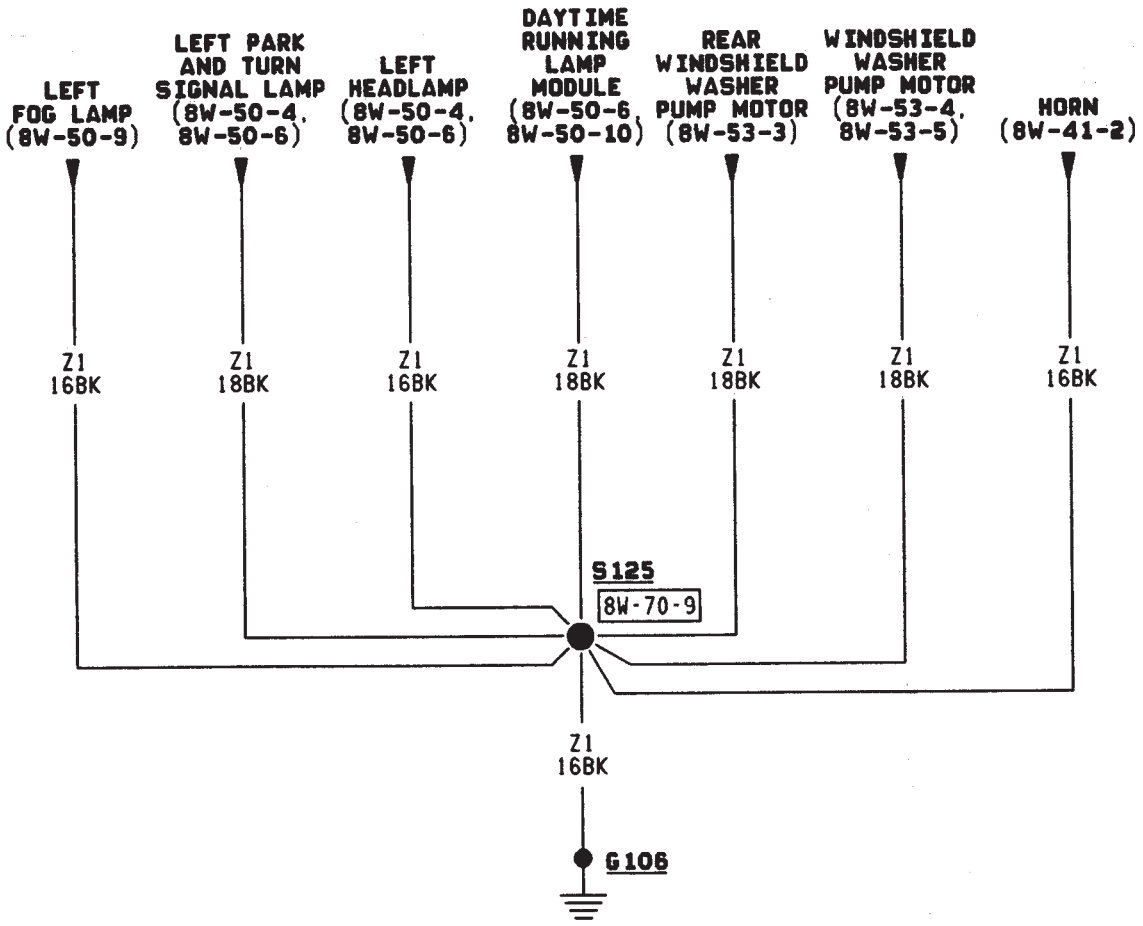
## DIAGRAM INDEX

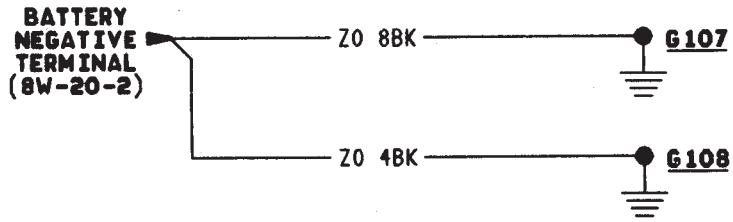

UNDERHOOD LAMP (8W-44-4)
SPLICE S201 (8W-70-10)
4WD SWITCH (8W-40-9)
A/C COMPRESSOR CLUTCH RELAY (8W-11-10)
ABS DATA LINK CONNECTOR (8W-32-6)
ABS POWER RELAY (8W-32-4)
ABS PUMP MOTOR RELAY (8W-11-9)
ABS PUMP MOTOR/ SENSOR (8W-32-5)
4.0L ENGINE ONLY
W/O ABS
Z1 16BK
Z1 14BK
Z1 18BK
Z1 16BK
Z1 18BK
Z12 18BK TN
Z12 18BK TN
Z12 12BK TN
Z12 12BK TN
C102
C114
Z1 16BK
S104
8W-70-3
Z1 14BK
Z1 14BK
Z12 12BK/TN
G101
S106
8W-70-3
ANTI-LOCK BRAKE SYSTEM CONTROL MODULE
C110
GROUND 1
Z1 14BK
GROUND 19
Z1 14BK
G102
GENERATOR (8W-20-2)
Z0 6BK
G103

J958W-5


FUEL TANK LEVEL GAUGE SENDING UNIT (8W-30-21)
PARK/ NEUTRAL POSITION SWITCH
30
GROUND
5
11
12
POWERTRAIN CONTROL MODULE
C139
HEATED OXYGEN SENSOR (8W-30-7, 8W-30-15)
POWER STEERING PRESSURE SWITCH (8W-30-12)
ENGINE DATA LINK CONNECTOR (8W-30-11, 8W-30-17)
2.5 ENGINE ONLY
T41 18BR YL
Z11 16BK WT
Z1 16BK
Z1 16BK
Z1 16BK
Z1 16BK
Z11 16BK WT
Z2 16BK OR
C107
T41 18BR YL
C127
S119
8W-70-7
ENGINE STARTER MOTOR RELAY (8W-21-2)
T41 18BR YL
C105
T41 18BR YL
Z2 16BK OR
Z1 16BK
C125
Z2 16BK OR
MANUAL TRANSMISSION ONLY
C125
Z2 16BK OR
Z2 16BK/OR
S112
8W-70-5
G104
RIGHT PARK AND TURN SIGNAL LAMP (8W-50-5, 8W-50-7)
RIGHT HEADLAMP (8W-50-5, 8W-50-7)
RIGHT FOG LAMP (8W-50-9)
Z1 16BK
Z1 16BK
Z1 16BK
S122
8W-70-8
Z1 16BK
G105

J958W-5


LEFT FOG LAMP (8W-50-9)
LEFT PARK AND TURN SIGNAL LAMP (8W-50-4, 8W-50-6)
LEFT HEADLAMP (8W-50-4, 8W-50-6)
DAYTIME RUNNING LAMP MODULE (8W-50-6, 8W-50-10)
REAR WINDSHIELD WASHER PUMP MOTOR (8W-53-3)
WINDSHIELD WASHER PUMP MOTOR (8W-53-4, 8W-53-5)
HORN (8W-41-2)
Z1 16BK
Z1 18BK
Z1 18BK
Z1 18BK
Z1 18BK
Z1 18BK
Z1 16BK
S125
8W-70-9
Z1 16BK
G106


BATTERY NEGATIVE TERMINAL (8W-20-2)
Z0 8BK
G107
Z0 4BK
G108

# CHARGING SYSTEM

## CHARGING SYSTEM

The charging system is an integral part of the battery and starting systems. Because all these systems work in conjunction, diagnose and test them together.

Circuit A11 connects to the generator output terminal and splices to fuse 2 and fuse 6 in the Power Distribution Center (PDC). Circuit A0 connects the battery to the PDC.

Circuit Z0 provides ground for the generator. Circuit Z0 attaches to the right side rear of the engine.

When the ignition switch is in either the START or RUN position, it connects circuit A1 from fuse 4 in the PDC to circuit A21. Circuit A21 powers fuse 5 in the fuse block. Circuit G50 from fuse 5 splices to power the coil side of the Automatic Shut Down (ASD) relay. The Powertrain Control Module (PCM) provides ground for the relay on circuit K51. Circuit K51 connects to cavity 51 of the PCM.

When the PCM grounds the ASD relay, contacts inside the relay close and connect circuit A14 from fuse 1 in the PDC to circuit A142. Circuit A142 splices to the generator field terminal.

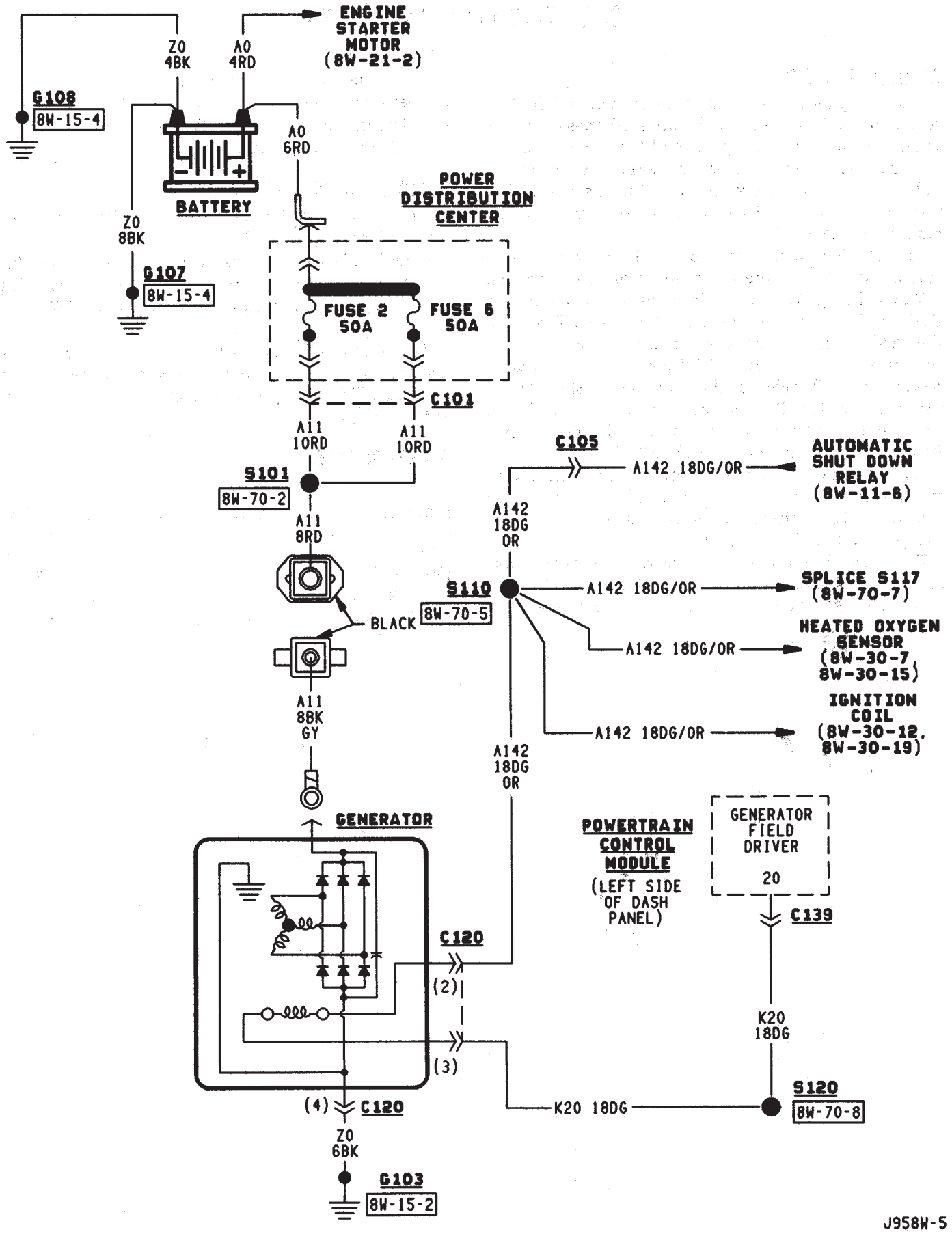
The PCM has an internal voltage regulator that controls generator output. The PCM controls the generator field on circuit K20. Circuit K20 connects to PCM cavity 20.

When the engine operates and there is current in the generator field, the generator produces a B+ voltage. The generator supplies B+ voltage to the battery through the A11 and A0 circuits.

## HELPFUL INFORMATION

- The ignition switch also connects circuit A1 with circuits A41, A22, and A31.
- Circuit A21 also powers fuse 9 in the fuse block.
- Circuit G50 also powers the coil sides of the fuel pump relay and the torque convertor clutch (TCC) relay.
- The ASD relay supplies battery voltage for the fuel injectors, ignition coil, and the heated oxygen sensor.
- Circuit K51 also provides ground for the coil side of the fuel pump relay.

## DIAGRAM INDEX


ENGINE STARTER MOTOR (8W-21-2)
Z0 4BK
A0 4RD
G108
8W-15-4
BATTERY
A0 6RD
POWER DISTRIBUTION CENTER
Z0 8BK
G107
8W-15-4
FUSE 2 50A
FUSE 6 50A
C101
A11 10RD
A11 10RD
S101
8W-70-2
A11 8RD
BLACK
A11 8BK GY
GENERATOR
C105
A142 18DG/OR
AUTOMATIC SHUT DOWN RELAY (8W-11-6)
A142 18DG OR
S110
8W-70-5
A142 18DG/OR
SPLICE S117 (8W-70-7)
A142 18DG/OR
HEATED OXYGEN SENSOR (8W-30-7, 8W-30-15)
A142 18DG/OR
IGNITION COIL (8W-30-12, 8W-30-19)
A142 18DG OR
POWERTRAIN CONTROL MODULE (LEFT SIDE OF DASH PANEL)
GENERATOR FIELD DRIVER
20
C139
K20 18DG
S120
8W-70-8
C120
(2)
(3)
(4)
C120
K20 18DG
Z0 6BK
G103
8W-15-2
J958W-5

# STARTING SYSTEM

## STARTING SYSTEM

*AUTOMATIC TRANSMISSIONS*

Circuit A0 from the battery is double crimped at the positive battery post. One branch of circuit A0 (battery positive cable) connects to the engine starter motor. The other A0 branch supplies voltage to the bus bar in the Power Distribution Center (PDC).

The PDC supplies battery voltage to the engine starter motor solenoid on circuit T40 when the coil side of the engine starter motor relay energizes. Circuit A1 from the fuse 4 in the PDC supplies battery voltage to the contact side of the starter motor relay.

The ignition switch supplies battery voltage to the coil side of the starter motor relay on circuit A41 when the key is moved to the START position and the Park/Neutral position switch is closed. Ground for the coil side of the starter motor relay is supplied by the case grounded Park/Neutral position switch. Circuit T41 connects the coil side of the relay to the Park/Neutral position switch.

When the starter motor relay energizes and the contacts close, circuit T40 supplies battery voltage to the starter motor solenoid. Circuit A0 from the battery supplies voltage to the starter motor when the solenoid energizes.

*MANUAL TRANSMISSIONS*

Circuit A0 from the battery is double crimped at the positive battery post. One branch of circuit A0 (battery positive cable) connects to the battery starter motor. The other A0 branch supplies voltage to the bus bar in the Power Distribution Center (PDC).

The PDC supplies battery voltage to the engine starter motor solenoid on circuit T40 when the coil side of the engine starter motor relay energizes. Circuit A1 from the fuse 4 in the PDC supplies battery voltage to the contact side of the starter motor relay.

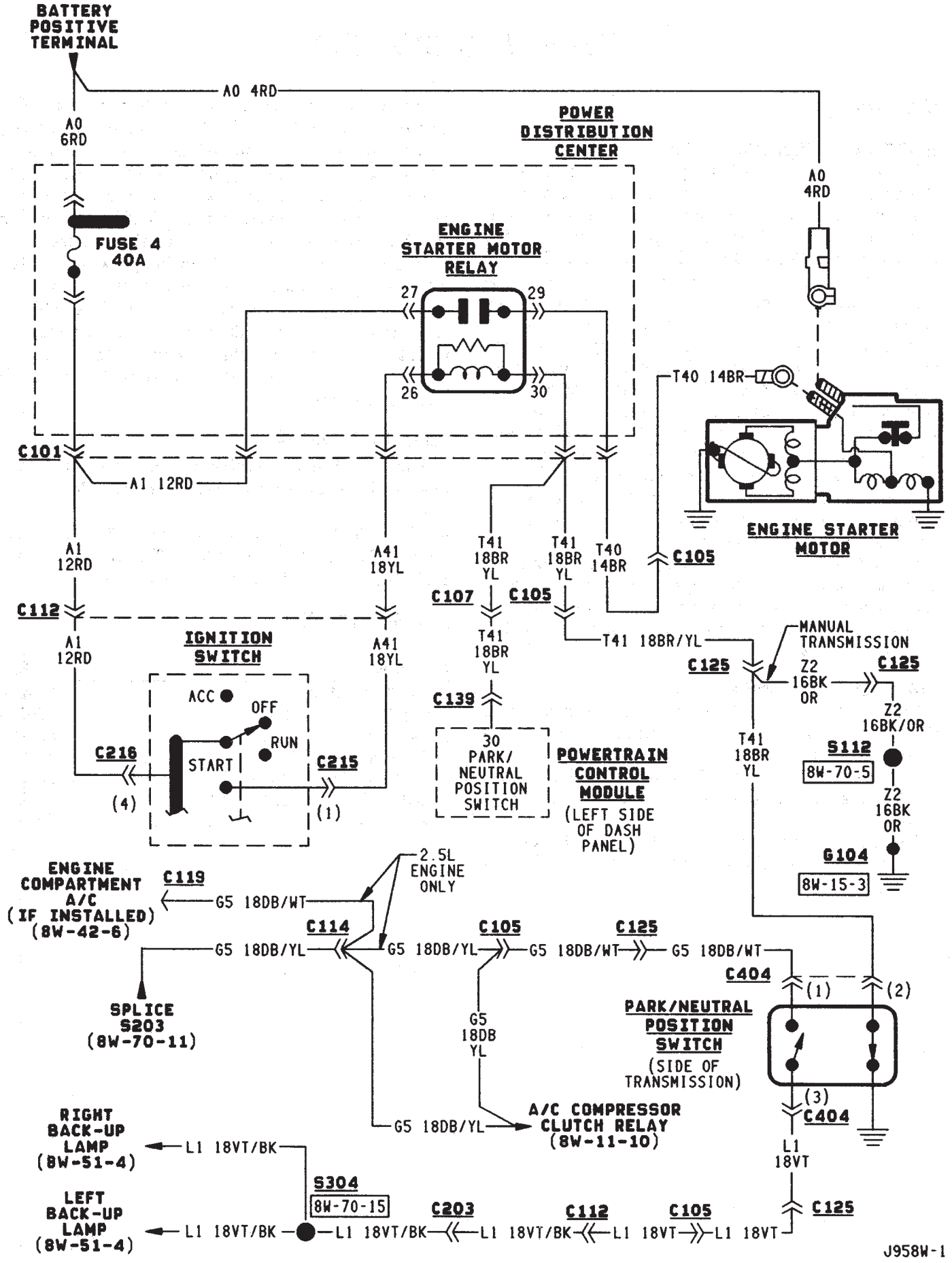
The ignition switch supplies battery voltage to the coil side of the starter motor relay on circuit A41 when the key is moved to the START position. Circuit T41 from the coil side of the relay connects to a Z2 jumper wire in the back-up lamp switch. Circuit Z2 provides ground for the starter motor relay.

When the starter motor relay energizes and the contacts close, circuit T40 supplies battery voltage to the starter motor solenoid. Circuit A0 from the battery supplies voltage to the starter motor when the solenoid energizes.

### HELPFUL INFORMATION

- The Park/Neutral switch closes when the transmission is in either the PARK or NEUTRAL positions.
- Circuit T41 also connects to cavity 30 of the Powertrain Control Module (PCM). This input tells the PCM the operator is starting the vehicle.

## DIAGRAM INDEX


BATTERY POSITIVE TERMINAL
A0 4RD
A0 6RD
POWER DISTRIBUTION CENTER
A0 4RD
FUSE 4 40A
ENGINE STARTER MOTOR RELAY
27
29
26
30
T40 14BR
C101
A1 12RD
ENGINE STARTER MOTOR
A1 12RD
A41 18YL
T41 18BR YL
T41 18BR YL
T40 14BR
C105
C107
C105
C112
T41 18BR/YL
MANUAL TRANSMISSION
C125
Z2 16BK OR
C125
Z2 16BK/OR
IGNITION SWITCH
A1 12RD
A41 18YL
ACC
OFF
RUN
START
C216
C215
(4)
(1)
C139
T41 18BR YL
30 PARK/ NEUTRAL POSITION SWITCH
POWERTRAIN CONTROL MODULE (LEFT SIDE OF DASH PANEL)
T41 18BR YL
S112
8W-70-5
Z2 16BK OR
G104
8W-15-3
ENGINE COMPARTMENT A/C (IF INSTALLED) (8W-42-6)
C119
G5 18DB/WT
2.5L ENGINE ONLY
C114
C105
C125
G5 18DB/YL
G5 18DB/YL
G5 18DB/WT
G5 18DB/WT
C404
(1)
(2)
SPLICE S203 (8W-70-11)
G5 18DB YL
PARK/NEUTRAL POSITION SWITCH (SIDE OF TRANSMISSION)
(3)
C404
A/C COMPRESSOR CLUTCH RELAY (8W-11-10)
G5 18DB/YL
RIGHT BACK-UP LAMP (8W-51-4)
L1 18VT/BK
L1 18VT
S304
8W-70-15
LEFT BACK-UP LAMP (8W-51-4)
L1 18VT/BK
L1 18VT/BK
C203
L1 18VT/BK
C112
L1 18VT
C105
L1 18VT
C125
J958W-1

# FUEL/IGNITION

## INDEX



## IGNITION SWITCH

Circuit A1 from fuse 4 in the Power Distribution Center (PDC), supplies battery voltage to the ignition switch. Depending upon position, the ignition switch powers circuits A21, A22, A31, and A41.

### *START POSITION*

In the START position, the ignition switch connects circuit A1 to circuit A41. Circuit A41 connects to the coil side of the starter motor relay.

Also in the START position, the case grounded ignition switch provides ground for the brake lamp switch and parking brake lamp switch on circuit G11.

### *START OR RUN POSITION*

In the START and RUN position, the ignition switch connects circuit A1 with circuit A21. The A21 circuit connects to fuses 5 and 9 in the fuse block. Fuse 9 powers circuit G5. Fuse 5 powers circuit G50.

- Circuit G5 powers the buzzer module. Circuit G5 also splices to power the daytime running lamps module (Canada only), A/C compressor clutch relay, heated rear window relay, and the gauges and indicator lamps in the instrument cluster.

### *RUN (ONLY) POSITION*

When the ignition switch is in the RUN position, it connects circuit A1 to circuit A22. Circuit A22 powers fuses 1, 12, and 13 in the fuse block.

- Fuse 1 powers the rear wiper system on circuit V23.
- Fuse 12 feeds the blower motor and air conditioning system on circuit C1.
- Fuse 13 feeds circuit F15 which powers the ABS module and connects to the coil side of the ABS power relay.

### *ACCESSORY OR RUN POSITION*

In the ACCESSORY or RUN position, the ignition switch connects circuit A1 to circuit A31. Circuit A31 connects to a bus bar in the fuse block that feeds fuses 4 and 7 along with the circuit breaker in cavity 11.

- Fuse 4 powers circuit L5 which feeds the turn signal flasher.
- Fuse 7 powers circuit F30. Circuit F30 supplies power to the radio, radio relay, and the cigar lighter.
- The circuit breaker in cavity 11 powers the V6 circuits which feed the wiper switch and wiper motor.

## AUTOMATIC SHUT DOWN (ASD) RELAY

When the ignition switch is in either the START or RUN position, it connects circuit A1 from fuse 4 in the Power Distribution Center (PDC) to circuit A21. Circuit A21 powers fuse 5 in the fuse block. Circuit G50 from fuse 5 splices to power the coil side of the Automatic Shut Down (ASD) relay. The Powertrain Control Module (PCM) provides ground for the relay on circuit K51. Circuit K51 connects to cavity 51 of the PCM.

When the PCM grounds the ASD relay, contacts inside the relay close and connect circuit A14 from fuse 1 in the PDC to circuit A142. Circuit A142 splices to the generator field terminal, fuel injectors, ignition coil, and heated oxygen sensor. Circuit A142 also connects to cavity 57 of the PCM.

Circuit A14 from fuse 1 in the PDC supplies battery voltage to the contact side of the ASD relay.

### *HELPFUL INFORMATION*

- Along with supplying voltage to the ASD relay contacts, circuit A14 supplies voltage to the contact side of the fuel pump relay.
- Circuit G50 also supplies battery voltage to the coil side of the fuel pump relay.
- Circuit A14 also connects to cavity 3 of the PCM.

## BATTERY FEED

Circuit A14 from fuse 1 in the Power Distribution Center (PDC) supplies battery voltage to cavity 3 of the Powertrain Control Module (PCM).

*HELPFUL INFORMATION*

Circuit A14 also supplies power to the contact sides of the Automatic Shut Down (ASD) relay and fuel pump relay.

## FUEL INJECTORS

When the Automatic Shut Down (ASD) relay contacts close, they connect circuits A14 and A142. Circuit A142 supplies voltage to the fuel injectors. Each injector has a separate ground circuit controlled by the Powertrain Control Module (PCM).

Circuit K11 provides ground for injector number one. The K11 circuit connects to cavity 16 of the PCM.

Circuit K12 provides ground for injector number two. The K12 circuit connects to cavity 15 of the PCM.

Circuit K13 provides ground for injector number three. The K13 circuit connects to cavity 14 of the PCM.

Circuit K14 provides ground for injector number four. The K14 circuit connects to cavity 13 of the PCM.

On the 4.0L engine, circuit K15 provides ground for injector number five. The K15 circuit connects to cavity 38 of the PCM.

Also on the 4.0L engine, circuit K16 provides ground for injector number six. The K16 circuit connects to cavity 58 of the PCM.

*HELPFUL INFORMATION*

- Circuit A142 splices to supply voltage to the fuel injectors, ignition coil, PCM, generator, and heated oxygen sensor.
- For information about fuel injector operation, refer to Group 14.

## IGNITION COIL

When the Automatic Shut Down (ASD) relay contacts close, they connect circuits A14 and A142. Circuit A142 splices to supply voltage to the ignition coil. The Powertrain Control Module (PCM) controls the ground path for the ignition coil on circuit K19. Circuit K19 connects to cavity 19 of the PCM.

*HELPFUL INFORMATION*

Circuit A142 splices to supply voltage to the fuel injectors, ignition coil, PCM, generator, and heated oxygen sensor.

## FUEL PUMP RELAY

When the ignition switch is in either the START or RUN position, it connects circuit A1 from fuse 4 in the Power Distribution Center (PDC) to circuit A21. Circuit A21 powers fuse 5 in the fuse block. Circuit G50 from fuse 5 splices to power the coil side of the fuel pump relay. The Powertrain Control Module (PCM) provides ground for the relay on circuit K51. Circuit K51 connects to cavity 51 of the PCM.

When the PCM grounds the fuel pump relay, contacts inside the relay close and connect circuit A14 from fuse 1 in the PDC to circuit A141. Circuit A141 supplies voltage to the fuel pump motor (part of the in-tank fuel pump module).

*HELPFUL INFORMATION*

- Circuit A14 is double crimped at the fuel pump relay and supplies voltage to the contact sides of the fuel pump relay and ASD relay.
- Circuit G50 also supplies battery voltage to the coil side of the ASD relay.
- Circuit A14 also connects to cavity 3 of the PCM.

## FUEL PUMP MODULE

*FUEL PUMP MOTOR*

When the fuel pump relay contacts close, circuit A141 feeds the fuel pump motor. Circuit Z2 provides ground for the fuel pump motor.

*FUEL LEVEL SENSOR*

The fuel level sensor is a variable resistor. Circuit G4 connects the fuel level sensor to the fuel gauge in the instrument cluster. Circuit G5 from fuse 9 in the fuse block supplies voltage to the fuel gauge. The fuel level sensor draws voltage from circuit G5 through the fuel gauge on circuit G4.

Circuit Z2 provides the ground path for the fuel level sensor.

**HELPFUL INFORMATION**

As current flows through the coils in the fuel gauge, it creates a magnetic field. One of the coils in the gauge receives fixed current. The other coil is connected to the level sensor. The magnetic field controls the position of the fuel gauge pointer.

The fuel level sensor contains a variable resistor. As the position of the float arm on the fuel level sensor changes, the resistor changes the current flow through second coil in the fuel gauge. A change in current flow alters the magnetic field in the fuel gauge, which changes the pointer position.

## IDLE AIR CONTROL (IAC) MOTOR

The Powertrain Control Module (PCM) operates the idle air control motor through 4 circuits - K39, K40, K59, and K60. Each circuit connects to separate cavities in the PCM connector.

- Circuit K39 connects to cavity 39 of the PCM.
- Circuit K40 connects to cavity 40 of the PCM.
- Circuit K59 connects to cavity 59 of the PCM.

• Circuit K60 connects to cavity 60 of the PCM.

## VEHICLE SPEED SENSOR

Circuit K7 supplies 8 volts from the Powertrain Control Module (PCM) to the vehicle speed sensor. The K7 circuit connects to cavity 7 of the PCM.

Circuit G7 from the vehicle speed sensor provides an input signal to the PCM. The G7 circuit connects to cavity 47 of the PCM.

The PCM provides a ground for the vehicle speed sensor signal (circuit G7) through circuit K4. Circuit K4 connects to cavity 4 of the PCM.

*HELPFUL INFORMATION*

• Circuit G7 splices to the speedometer, and Daytime Running Lamp module (DRL).

• Circuit K7 splices to supply 8 volts to the camshaft position sensor and crankshaft position sensor.

Circuit K4 splices to supply ground for the signals from the following:

• Heated oxygen sensor
• Camshaft position sensor
• Crankshaft position sensor
• Throttle position sensor
• Manifold absolute pressure sensor
• Engine coolant temperature sensor
• Intake air temperature sensor

## HEATED OXYGEN SENSOR

When the Automatic Shut Down (ASD) relay contacts close, they connect circuits A14 and A142. Circuit A142 splices to supply voltage to the heated oxygen sensor.

Circuit K41 delivers the signal from the heated oxygen sensor to the Powertrain Control Module (PCM). Circuit K41 connects to cavity 41 of the PCM.

The PCM provides a ground for the heated oxygen sensor signal (circuit K41) through circuit K4. Circuit K4 connects to cavity 4 of the PCM connector.

Circuit Z1 provides a ground for the heater circuit in the sensor. Circuit Z1 terminates at the rear of the engine.

*HELPFUL INFORMATION*

• Along with supplying voltage to the ASD relay contacts, circuit A14 supplies voltage to the contact side of the fuel pump relay.

• Circuit A142 splices to supply voltage to the fuel injectors, ignition coil, and heated oxygen sensor.

Circuit K4 splices to supply ground for the signals from the following:

• Camshaft position sensor
• Crankshaft position sensor
• Intake air temperature sensor
• Throttle position sensor
• Manifold absolute pressure sensor
• Engine coolant temperature sensor
• Vehicle speed sensor

## CAMSHAFT POSITION SENSOR

The Powertrain Control Module (PCM) supplies 8 volts to the camshaft position sensor (in distributor) on circuit K7. Circuit K7 connects to cavity 7 of the PCM.

The PCM receives the camshaft position sensor signal on circuit K44. Circuit K44 connects to cavity 44 of the PCM.

The PCM provides a ground for the camshaft position sensor signal (circuit K44) through circuit K4. Circuit K4 connects to cavity 4 of the PCM.

*HELPFUL INFORMATION*

• Circuit K7 splices to supply 8 volts to the crankshaft position sensor and the vehicle speed sensor.

Circuit K4 splices to supply ground for the signals from the following:

• Heated oxygen sensor
• Crankshaft position sensor
• Intake air temperature sensor
• Throttle position sensor
• Manifold absolute pressure sensor
• Engine coolant temperature sensor
• Vehicle speed sensor

## CRANKSHAFT POSITION SENSOR

The Powertrain Control Module (PCM) supplies 8 volts to the crankshaft position sensor on circuit K7. Circuit K7 connects to cavity 7 of the PCM.

The PCM receives the crankshaft position sensor signal on circuit K24. Circuit K24 connects to cavity 24 of the PCM.

The PCM provides a ground for the crankshaft position sensor (circuit K24) through circuit K4. Circuit K4 connects to cavity 4 of the PCM.

*HELPFUL INFORMATION*

• Circuit K7 splices to supply 8 volts to the crankshaft position sensor and the vehicle speed sensor.

Circuit K4 splices to supply ground for the signals from the following:

• Heated oxygen sensor
• Camshaft position sensor
• Intake air temperature sensor
• Throttle position sensor
• Manifold absolute pressure sensor
• Engine coolant temperature sensor
• Vehicle speed sensor

## ENGINE COOLANT TEMPERATURE SENSOR

The engine coolant temperature sensor provides an input to the Powertrain Control Module (PCM) on circuit K2. From circuit K2, the engine coolant temperature sensor draws up to 5 volts from the PCM. The sensor is a variable resistor. As coolant temperature changes, the resistance in the sensor changes, causing a change in current draw. The K2 circuit connects to cavity 2 of the PCM.

The PCM provides a ground for the engine coolant temperature sensor signal (circuit K2) through circuit K4. Circuit K4 connects to cavity 4 of the PCM connector.

*HELPFUL INFORMATION*

Circuit K4 splices to supply ground for the signals from the following:

- Heated oxygen sensor
- Camshaft position sensor
- Crankshaft position sensor
- Intake air temperature sensor
- Throttle position sensor
- Manifold absolute pressure sensor
- Vehicle speed sensor

## THROTTLE POSITION SENSOR

From the Powertrain Control Module (PCM), circuit K6 supplies 5 volts to the Throttle Position Sensor (TPS). Circuit K6 connects to cavity 6 of the PCM.

Circuit K22 delivers the TPS signal to the PCM. Circuit K22 connects to cavity 22 of the PCM.

The PCM provides a ground for the throttle position sensor signal (circuit K22) through circuit K4. Circuit K4 connects to cavity 4 of the PCM.

*HELPFUL INFORMATION*

Refer to Group 14 for throttle position sensor operation.

Circuit K6 splices to supply 5 volts to the Manifold Absolute Pressure (MAP) sensor.

Circuit K4 splices to supply ground for the signals from the following:

- Heated oxygen sensor
- Camshaft position sensor
- Crankshaft position sensor
- Intake air temperature sensor
- Manifold absolute pressure sensor
- Engine coolant temperature sensor
- Vehicle speed sensor

## MANIFOLD ABSOLUTE PRESSURE (MAP) SENSOR

From the Powertrain Control Module (PCM), circuit K6 supplies 5 volts to the Manifold Absolute Pressure (MAP) sensor. Circuit K6 connects to cavity 6 of the PCM.

Circuit K1 delivers the MAP signal to the PCM. Circuit K1 connects to cavity 1 of the PCM.

The PCM provides a ground for the MAP sensor signal (circuit K1) through circuit K4. Circuit K4 connects to cavity 4 of the PCM.

*HELPFUL INFORMATION*

Refer to Group 14 for MAP sensor operation.

Circuit K6 splices to supply 5 volts to the throttle position sensor.

Circuit K4 splices to supply ground for the signals from the following:

- Heated oxygen sensor
- Camshaft position sensor
- Crankshaft position sensor
- Intake air temperature sensor
- Throttle position sensor
- Engine coolant temperature sensor
- Vehicle speed sensor

## INTAKE AIR TEMPERATURE SENSOR

The intake air temperature sensor provides an input to the Powertrain Control Module (PCM) on circuit K21. Circuit K21 connects to cavity 21 of the PCM.

From circuit K21, the intake air temperature sensor draws voltage from the PCM. The sensor is a variable resistor. As intake air temperature changes, the resistance in the sensor changes, causing a change in current draw.

The PCM provides a ground for the intake air temperature sensor signal (circuit K21) through circuit K4. Circuit K4 connects to cavity 4 of the PCM.

*HELPFUL INFORMATION*

Circuit K4 splices to supply ground for the signals from the following:

- Heated oxygen sensor
- Camshaft position sensor
- Crankshaft position sensor
- Throttle position sensor
- Manifold absolute pressure sensor
- Engine coolant temperature sensor
- Vehicle speed sensor

## PARK/NEUTRAL POSITION SWITCH

When closed, the case-grounded park/neutral position switch provides a ground path on circuit T41 for the coil side of the starter motor relay. Circuit A41 from the ignition switch provides battery voltage to the coil side of the relay.

Circuit T41 splices to cavity 30 of the Powertrain Control Module (PCM). The park/neutral position switch provides an input to the (PCM).

*HELPFUL INFORMATION*

- In the START position, the ignition switch connects circuit A1 from the Power Distribution Center (PDC) to circuit A41. Fuse 4 in the fuse block protects circuits A1 and A41.
- The Park/Neutral position switch and back-up lamp switch are molded together.

## POWER STEERING PRESSURE SWITCH

The Powertrain Control Module (PCM) supplies voltage to the power steering pressure switch on circuit K10. Circuit Z1 provides ground for the switch. When the switch closes, voltage flows through the

switch to ground on circuit Z1. The switch closes during periods of high power steering pump load and low engine speed; such as parking maneuvers. Circuit K10 connects to cavity 10 of the PCM.

## TACHOMETER SIGNAL

The Powertrain Control Module (PCM) supplies the signal for the tachometer on circuit G21. Circuit G21 connects to cavity 43 of the PCM.

## MALFUNCTION INDICATOR LAMP (MIL)

The Powertrain Control Module (PCM) provides ground for the instrument cluster malfunction indicator lamp on circuit G3. The MIL displays the message CHECK ENGINE when illuminated. Circuit G5 provides voltage for the lamp.

## DATA LINK CONNECTOR

Circuit G50 supplies battery voltage to the data link connector. Circuit G50 originates at fuse 5 in the fuse block. Circuit G50 is double crimped at the data link connector and connects to cavity 9 of the Powertrain Control Module (PCM).

Circuit A21 from the ignition switch powers fuse 5 when the switch is in the START or RUN positions. In the START or RUN position the ignition switch connects circuit A1 from fuse 4 in the Power Distribution Center (PDC) with circuit A21.

Circuit D20 connects to cavity 45 of the PCM. Circuit D20 is the SCI receive circuit for the PCM.

Circuit D21 connects to cavity 25 of the PCM. Circuit D21 is the SCI transmit circuit for the PCM.

Circuit Z11 provides ground for the data link connector. Circuit Z11 splices to circuit Z1 which terminates at the right rear of the engine. Circuit Z11 also connects to cavity 5 of the PCM.

### *HELPFUL INFORMATION*

- Circuit Z1 also supplies a ground for the PCM high current drivers.
- If the system loses ground for the Z1 and Z11 circuits at the right rear of the engine, the vehicle will not operate. Check the connection at the ganged-ground circuit eyelet.

## BRAKE SWITCH INPUT

Circuit V40 provides the brake switch input to the Powertrain Control Module (PCM). Circuit V40 connects to cavity 29 of the PCM.

## POWER (DEVICE) GROUND

Circuit Z11 connects to cavities 11 and 12 of the Powertrain Control Module (PCM). The Z1 circuit provides ground for PCM internal drivers that operate high current devices like the injectors and ignition coil.

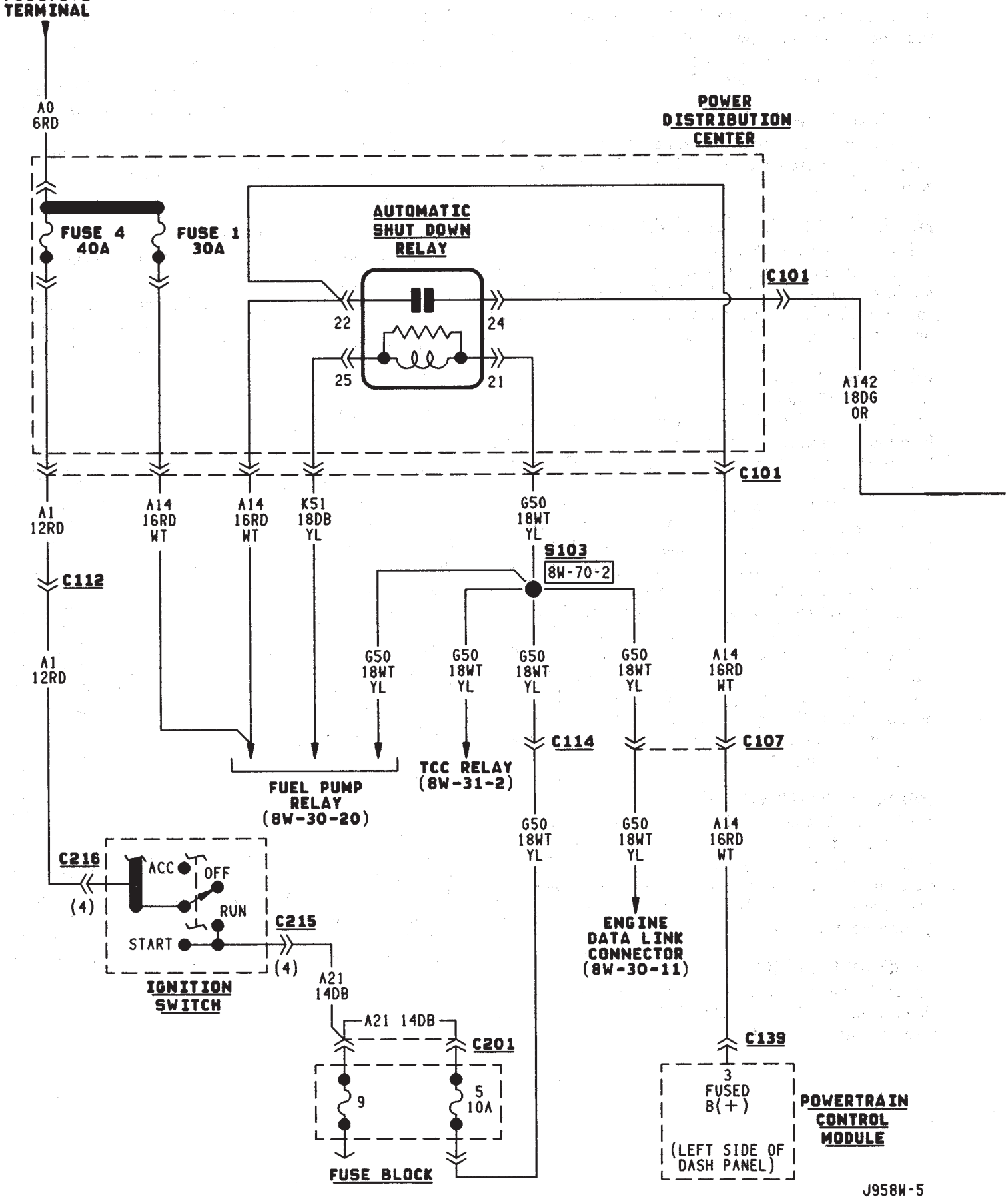
Internal to the PCM, the power (device) ground circuit connects to the PCM sensor return circuit (from circuit K4).

### *HELPFUL INFORMATION*

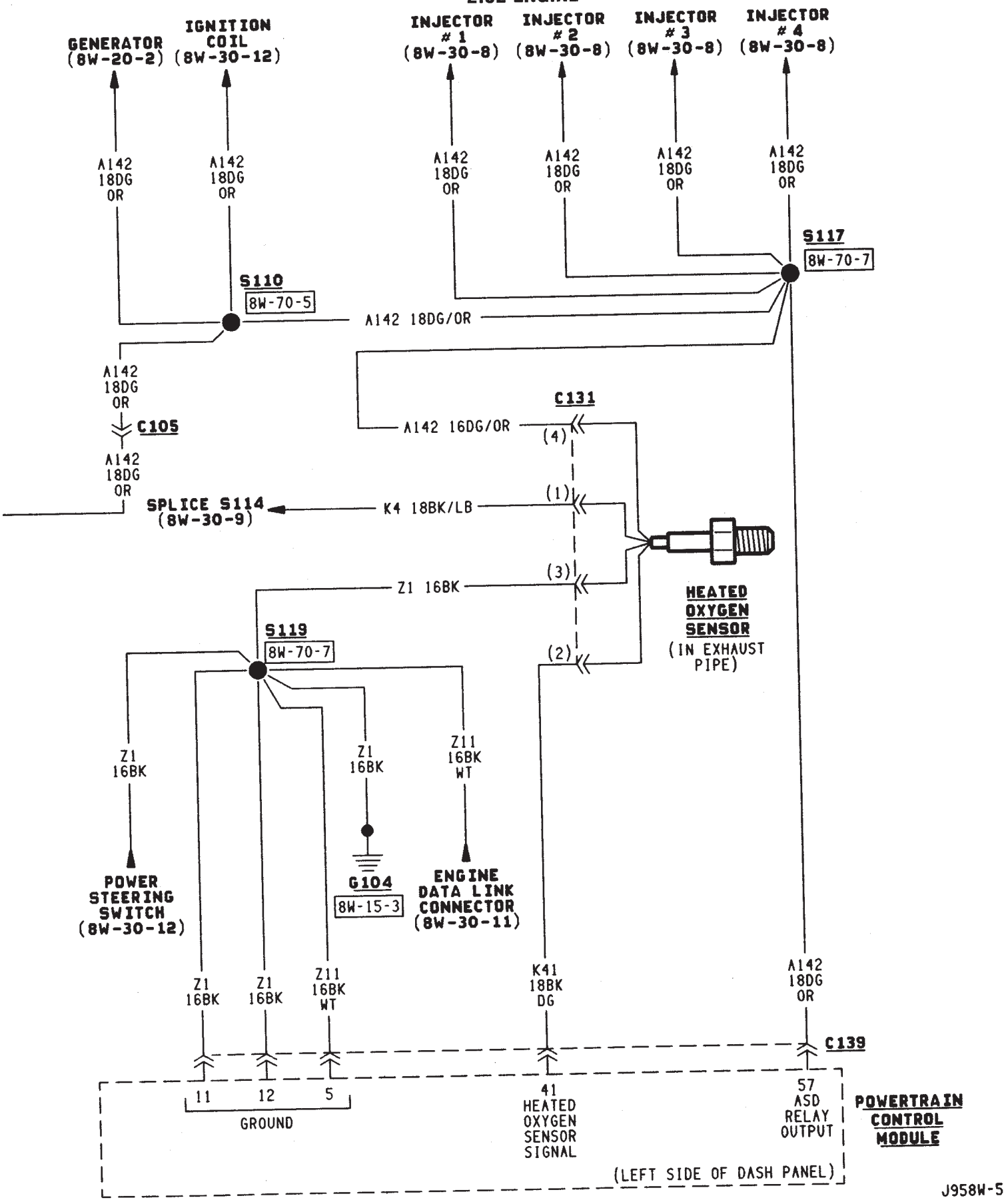
- The grounding point for circuit Z1 is the right rear of the engine.
- If the system loses ground for the Z1 circuits at the rear of the engine, the vehicle will not operate. Check the connection at the ganged-ground circuit eyelet.

## DIAGRAM INDEX

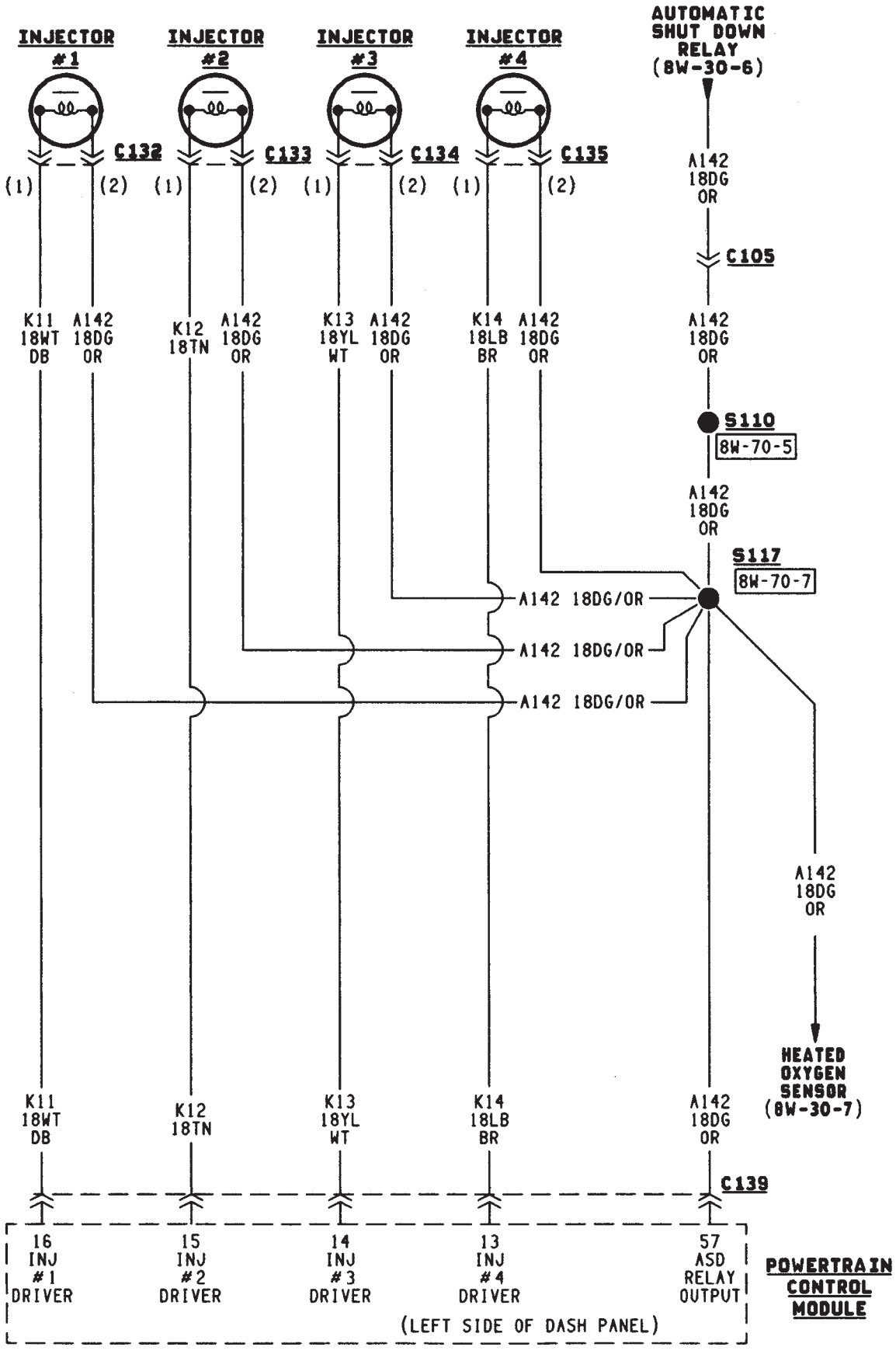
## 2.5L ENGINE


BATTERY POSITIVE TERMINAL
A0 6RD
POWER DISTRIBUTION CENTER
FUSE 4 40A
FUSE 1 30A
AUTOMATIC SHUT DOWN RELAY
22
24
25
21
C101
A142 18DG OR
A1 12RD
A14 16RD WT
A14 16RD WT
K51 18DB YL
G50 18WT YL
S103
8W-70-2
C112
G50 18WT YL
G50 18WT YL
G50 18WT YL
G50 18WT YL
A14 16RD WT
C114
C107
FUEL PUMP RELAY (8W-30-20)
TCC RELAY (8W-31-2)
C216
ACC
OFF
RUN
START
(4)
C215
(4)
IGNITION SWITCH
A21 14DB
A21 14DB
C201
9
5 10A
FUSE BLOCK
G50 18WT YL
G50 18WT YL
A14 16RD WT
ENGINE DATA LINK CONNECTOR (8W-30-11)
C139
3
FUSED B(+)
(LEFT SIDE OF DASH PANEL)
POWERTRAIN CONTROL MODULE
J958W-5

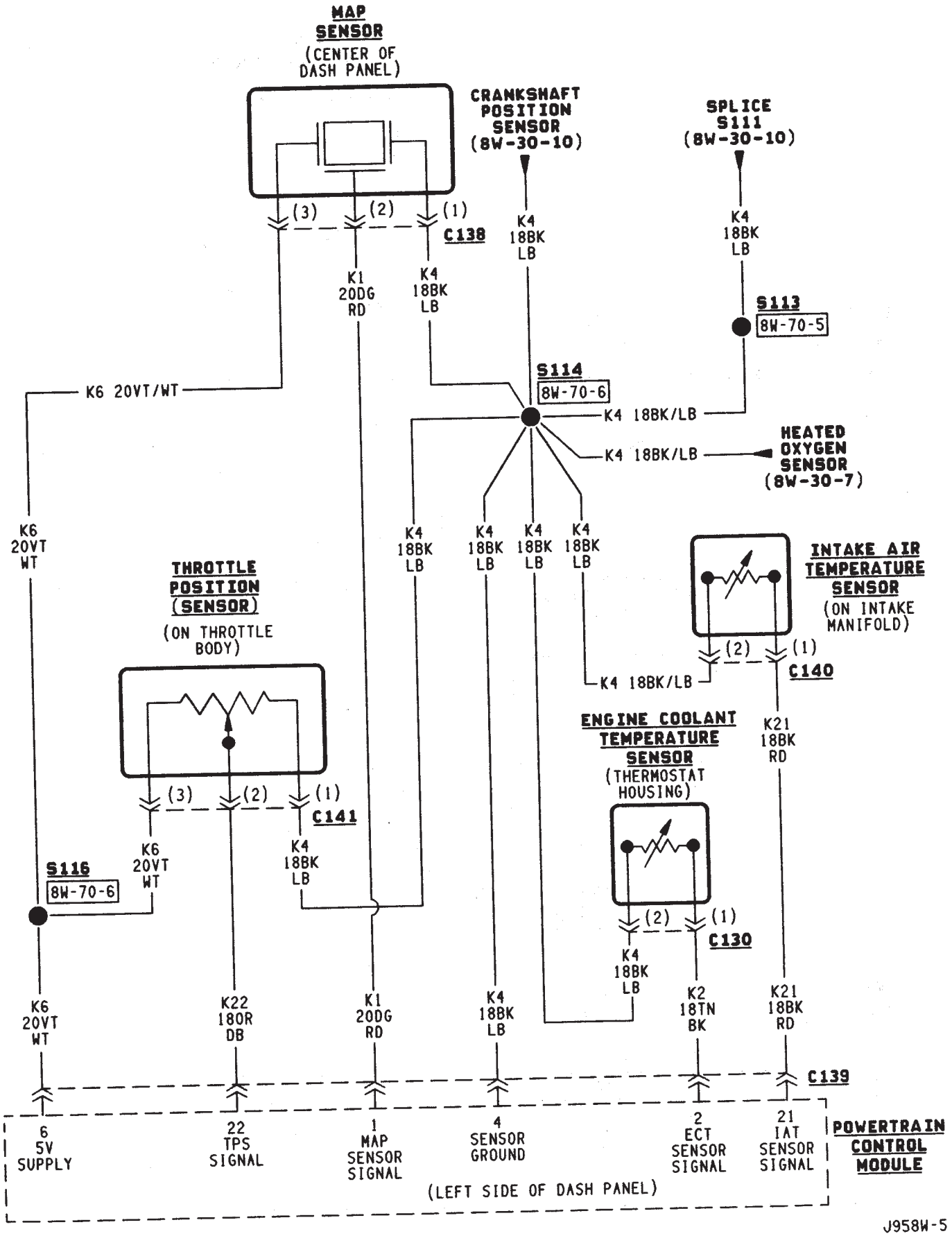
## 2.5L ENGINE


GENERATOR (8W-20-2)
IGNITION COIL (8W-30-12)
INJECTOR #1 (8W-30-8)
INJECTOR #2 (8W-30-8)
INJECTOR #3 (8W-30-8)
INJECTOR #4 (8W-30-8)
A142 18DG OR
S110
8W-70-5
S117
8W-70-7
A142 18DG/OR
C105
C131
A142 16DG/OR
(4)
(1)
(3)
(2)
SPLICE S114 (8W-30-9)
K4 18BK/LB
Z1 16BK
HEATED OXYGEN SENSOR (IN EXHAUST PIPE)
S119
8W-70-7
Z11 16BK WT
POWER STEERING SWITCH (8W-30-12)
G104
8W-15-3
ENGINE DATA LINK CONNECTOR (8W-30-11)
K41 18BK DG
C139
11
12
5
GROUND
41 HEATED OXYGEN SENSOR SIGNAL
57 ASD RELAY OUTPUT
POWERTRAIN CONTROL MODULE
(LEFT SIDE OF DASH PANEL)
J958W-5

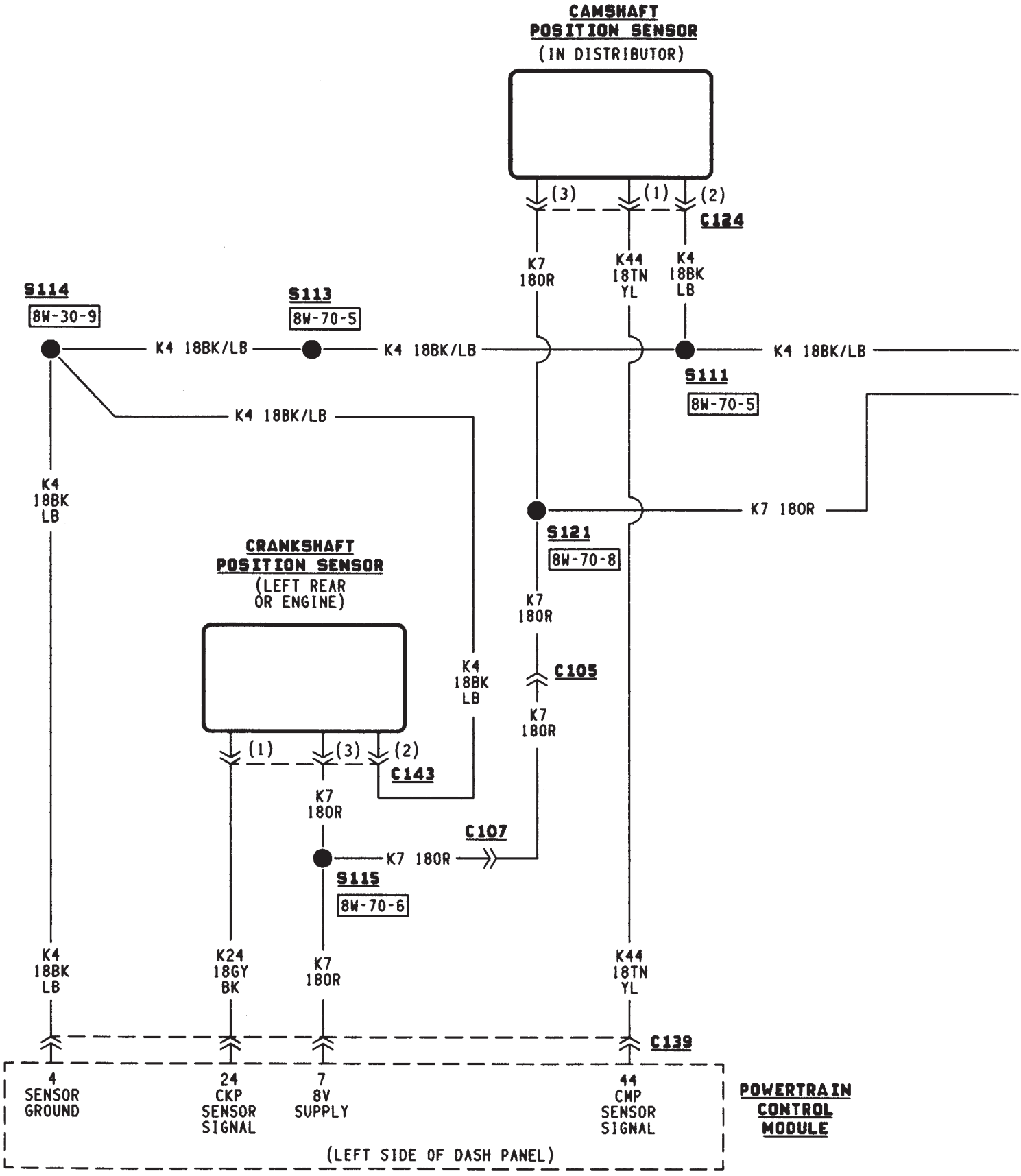
## 2.5L ENGINE


INJECTOR #1
INJECTOR #2
INJECTOR #3
INJECTOR #4
AUTOMATIC SHUT DOWN RELAY (8W-30-6)
C132
C133
C134
C135
(1)
(2)
A142 18DG OR
C105
K11 18WT DB
K12 18TN
K13 18YL WT
K14 18LB BR
S110
8W-70-5
S117
8W-70-7
A142 18DG/OR
HEATED OXYGEN SENSOR (8W-30-7)
C139
16 INJ #1 DRIVER
15 INJ #2 DRIVER
14 INJ #3 DRIVER
13 INJ #4 DRIVER
57 ASD RELAY OUTPUT
(LEFT SIDE OF DASH PANEL)
POWERTRAIN CONTROL MODULE
J958W-5

## 2.5L ENGINE

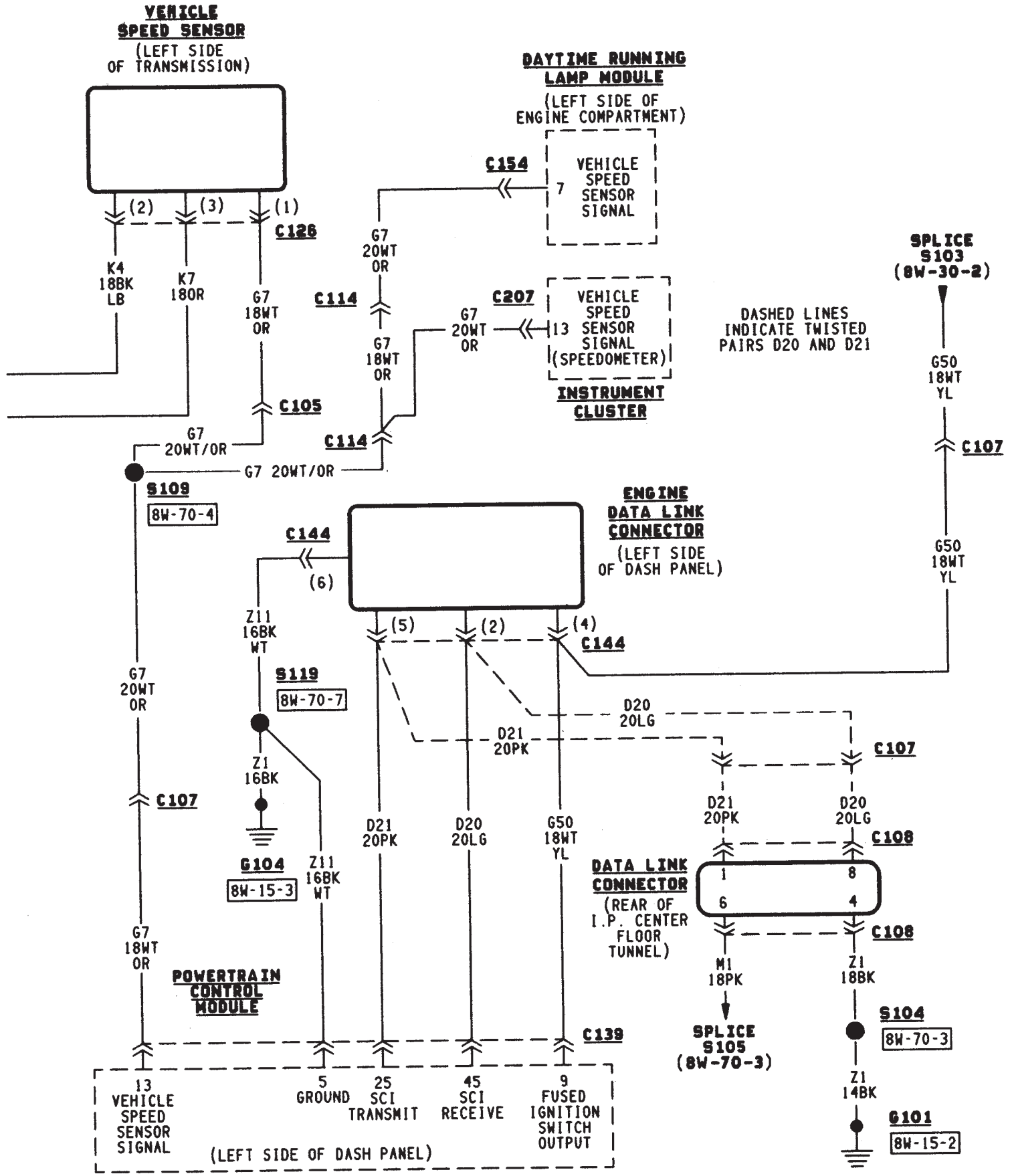

MAP SENSOR
(CENTER OF DASH PANEL)
CRANKSHAFT POSITION SENSOR (8W-30-10)
SPLICE S111 (8W-30-10)
(3)
(2)
(1)
C138
K1 20DG RD
K4 18BK LB
K4 18BK LB
K4 18BK LB
S113
8W-70-5
S114
8W-70-6
K6 20VT/WT
K4 18BK/LB
K4 18BK/LB
HEATED OXYGEN SENSOR (8W-30-7)
K6 20VT WT
K4 18BK LB
K4 18BK LB
K4 18BK LB
K4 18BK LB
INTAKE AIR TEMPERATURE SENSOR
(ON INTAKE MANIFOLD)
(2)
(1)
C140
K4 18BK/LB
THROTTLE POSITION (SENSOR)
(ON THROTTLE BODY)
ENGINE COOLANT TEMPERATURE SENSOR
(THERMOSTAT HOUSING)
K21 18BK RD
(3)
(2)
(1)
C141
K6 20VT WT
K4 18BK LB
S116
8W-70-6
(2)
(1)
C130
K4 18BK LB
K6 20VT WT
K22 180R DB
K1 20DG RD
K4 18BK LB
K2 18TN BK
K21 18BK RD
C139
6 5V SUPPLY
22 TPS SIGNAL
1 MAP SENSOR SIGNAL
4 SENSOR GROUND
2 ECT SENSOR SIGNAL
21 IAT SENSOR SIGNAL
POWERTRAIN CONTROL MODULE
(LEFT SIDE OF DASH PANEL)
J958W-5

## 2.5L ENGINE



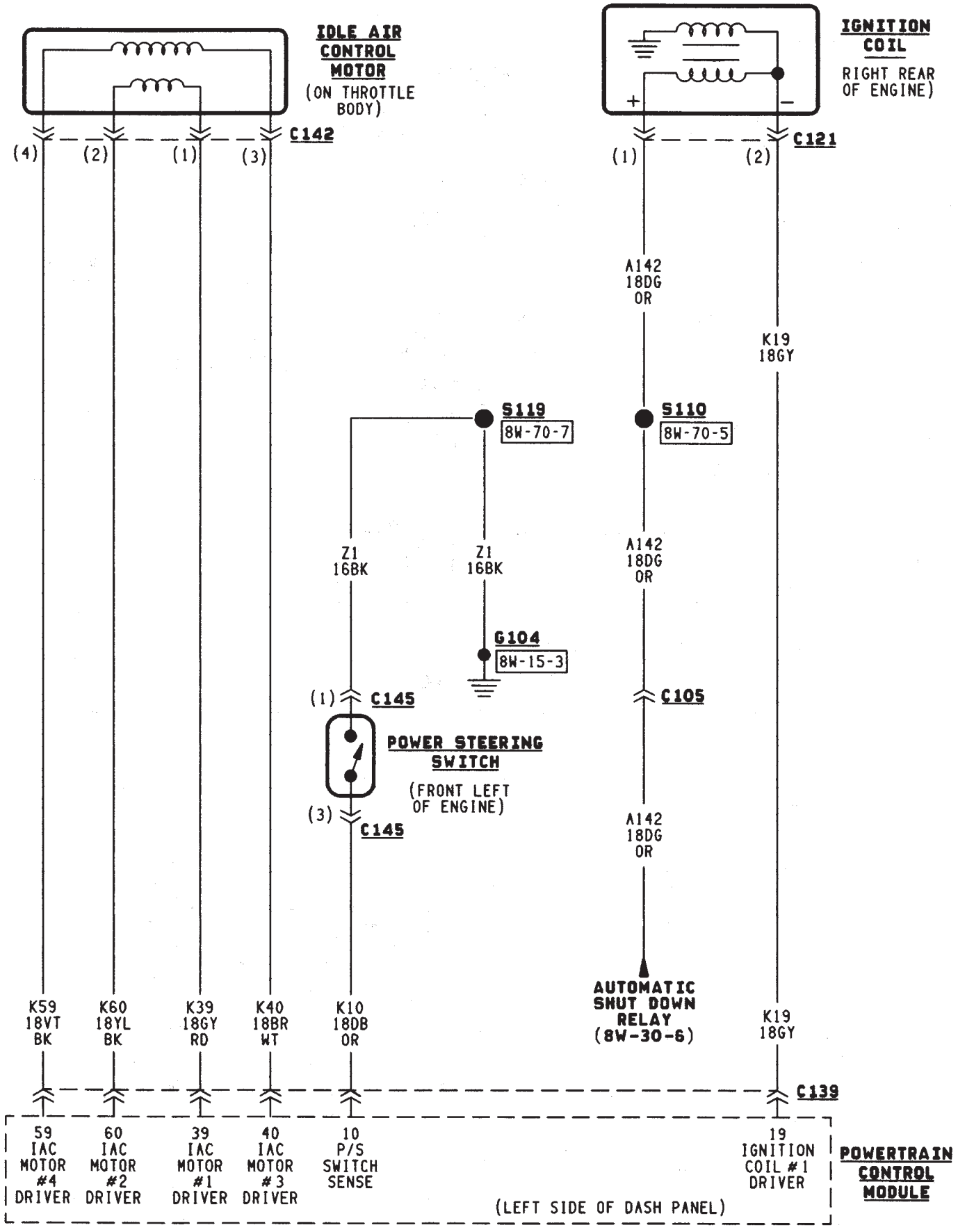

J958W-5

## 2.5L ENGINE



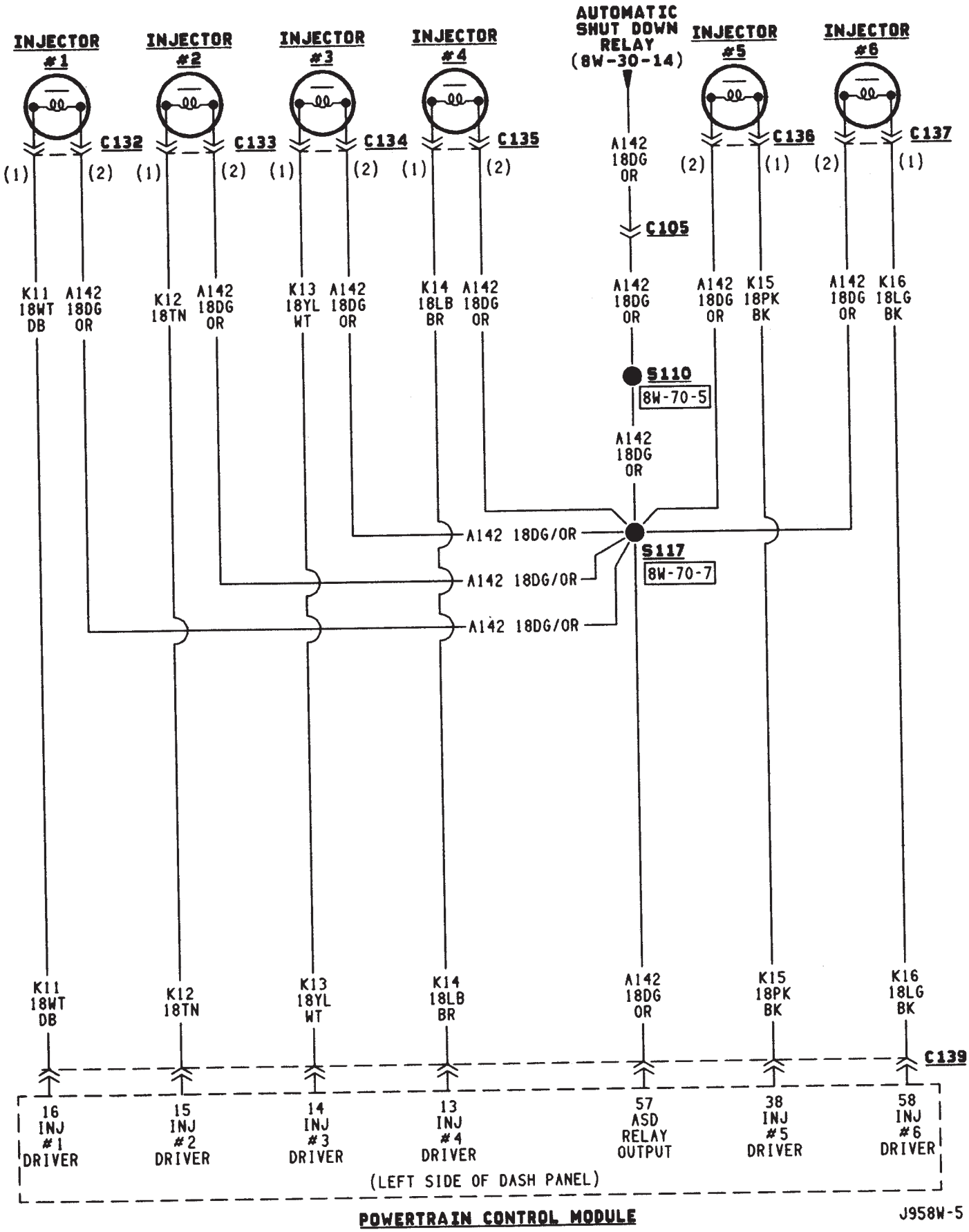

J958W-5

## 2.5L ENGINE

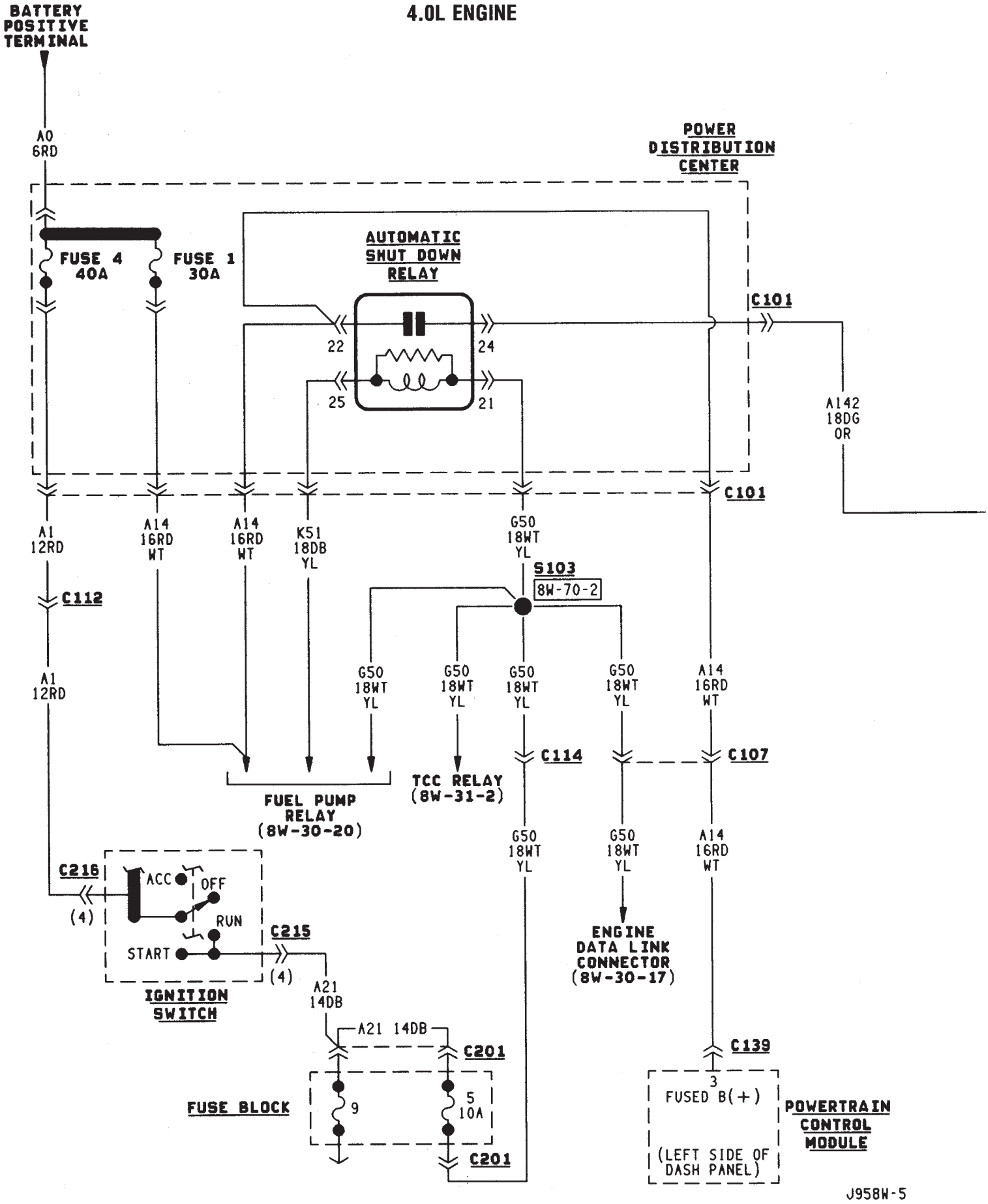



J958W-5

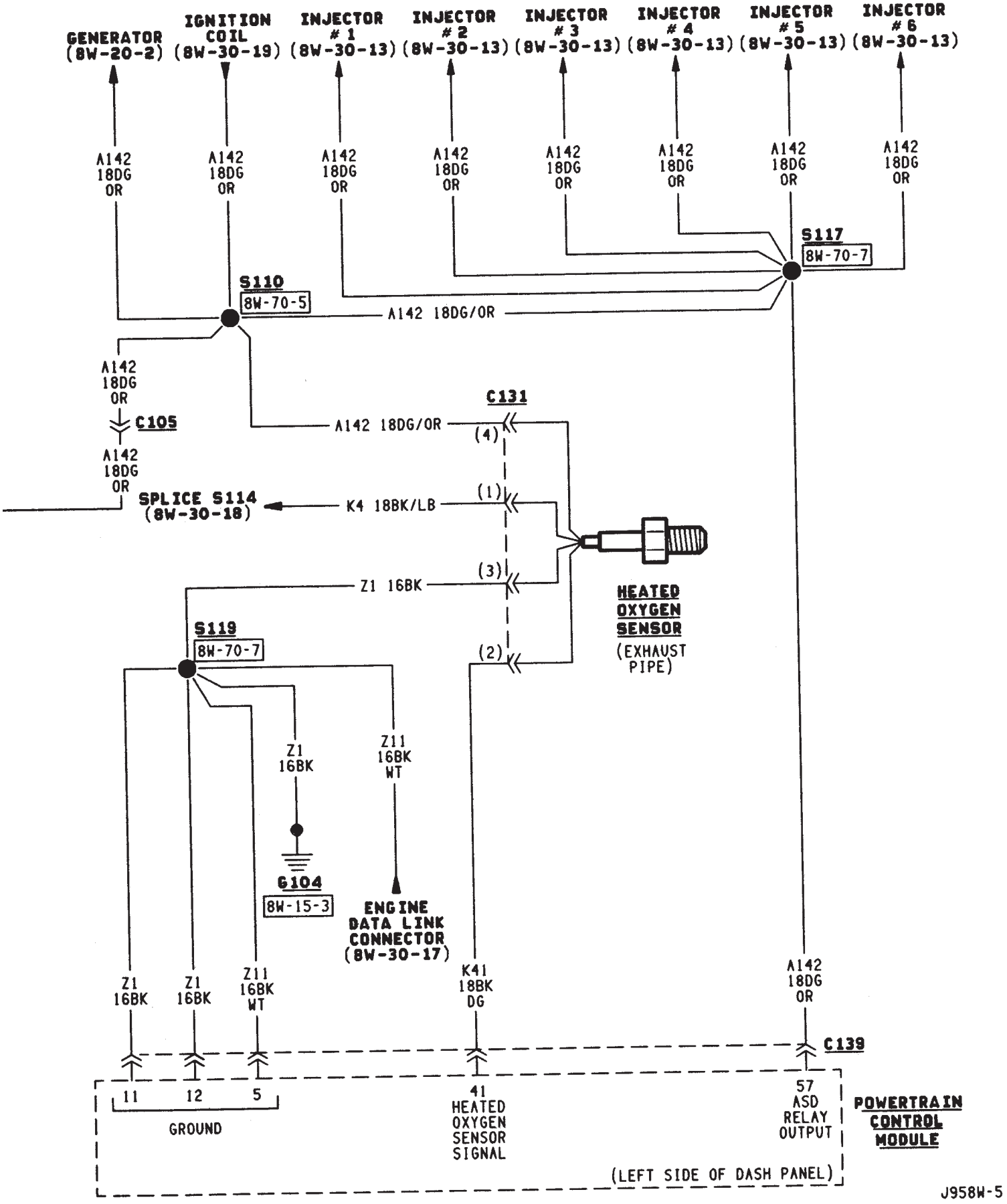
## 4.0L ENGINE

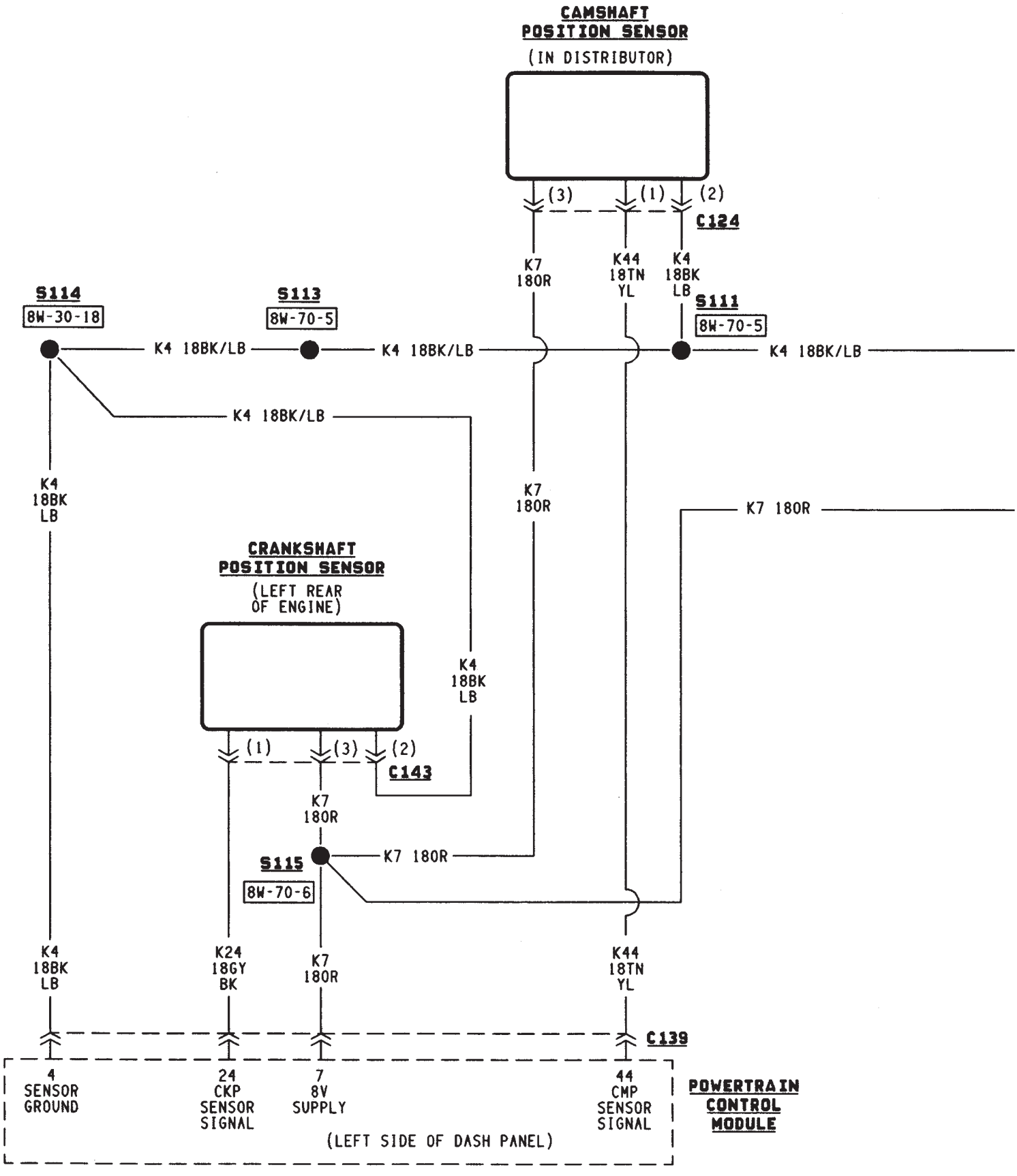

INJECTOR #1
INJECTOR #2
INJECTOR #3
INJECTOR #4
AUTOMATIC SHUT DOWN RELAY (8W-30-14)
INJECTOR #5
INJECTOR #6
C132
C133
C134
C135
C136
C137
C105
S110
8W-70-5
S117
8W-70-7
K11 18WT DB
K12 18TN
K13 18YL WT
K14 18LB BR
K15 18PK BK
K16 18LG BK
A142 18DG OR
A142 18DG/OR
C139
16 INJ #1 DRIVER
15 INJ #2 DRIVER
14 INJ #3 DRIVER
13 INJ #4 DRIVER
57 ASD RELAY OUTPUT
38 INJ #5 DRIVER
58 INJ #6 DRIVER
(LEFT SIDE OF DASH PANEL)
POWERTRAIN CONTROL MODULE
J958W-5

## 4.0L ENGINE


BATTERY POSITIVE TERMINAL
A0 6RD
POWER DISTRIBUTION CENTER
FUSE 4 40A
FUSE 1 30A
AUTOMATIC SHUT DOWN RELAY
22
24
25
21
C101
A142 18DG OR
A1 12RD
A14 16RD WT
A14 16RD WT
K51 18DB YL
G50 18WT YL
S103
8W-70-2
C112
G50 18WT YL
G50 18WT YL
G50 18WT YL
G50 18WT YL
A14 16RD WT
C114
C107
TCC RELAY (8W-31-2)
FUEL PUMP RELAY (8W-30-20)
C216
ACC
OFF
RUN
START
(4)
C215
(4)
IGNITION SWITCH
A21 14DB
A21 14DB
C201
FUSE BLOCK
9
5 10A
C201
ENGINE DATA LINK CONNECTOR (8W-30-17)
C139
3
FUSED B(+)
(LEFT SIDE OF DASH PANEL)
POWERTRAIN CONTROL MODULE
J958W-5

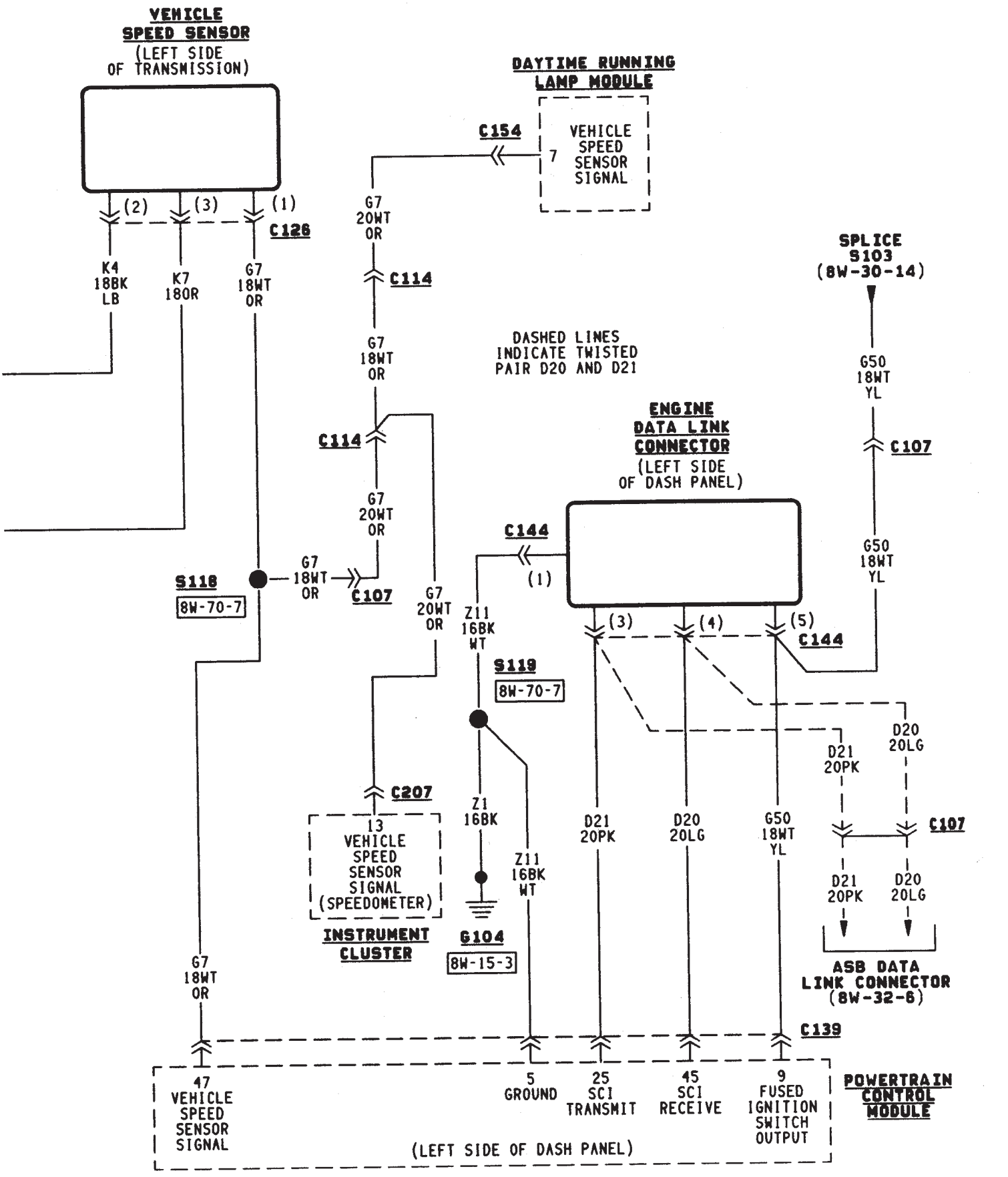
## 4.0L ENGINE


GENERATOR (8W-20-2)
IGNITION COIL (8W-30-19)
INJECTOR #1 (8W-30-13)
INJECTOR #2 (8W-30-13)
INJECTOR #3 (8W-30-13)
INJECTOR #4 (8W-30-13)
INJECTOR #5 (8W-30-13)
INJECTOR #6 (8W-30-13)
A142 18DG OR
S117 8W-70-7
S110 8W-70-5
A142 18DG/OR
C105
C131
(4)
(1)
(3)
(2)
K4 18BK/LB
SPLICE S114 (8W-30-18)
Z1 16BK
HEATED OXYGEN SENSOR (EXHAUST PIPE)
S119 8W-70-7
Z1 16BK
Z11 16BK WT
G104 8W-15-3
ENGINE DATA LINK CONNECTOR (8W-30-17)
K41 18BK DG
C139
11
12
5
GROUND
41 HEATED OXYGEN SENSOR SIGNAL
57 ASD RELAY OUTPUT
POWERTRAIN CONTROL MODULE
(LEFT SIDE OF DASH PANEL)
J958W-5


CAMSHAFT POSITION SENSOR
(IN DISTRIBUTOR)
(3)
(1)
(2)
C124
K7 180R
K44 18TN YL
K4 18BK LB
S114
8W-30-18
S113
8W-70-5
S111
8W-70-5
K4 18BK/LB
K4 18BK/LB
K4 18BK/LB
K4 18BK/LB
K4 18BK LB
K7 180R
K7 180R
CRANKSHAFT POSITION SENSOR
(LEFT REAR OF ENGINE)
K4 18BK LB
(1)
(3)
(2)
C143
K7 180R
S115
8W-70-6
K7 180R
K4 18BK LB
K24 18GY BK
K7 180R
K44 18TN YL
C139
4 SENSOR GROUND
24 CKP SENSOR SIGNAL
7 8V SUPPLY
44 CMP SENSOR SIGNAL
(LEFT SIDE OF DASH PANEL)
POWERTRAIN CONTROL MODULE

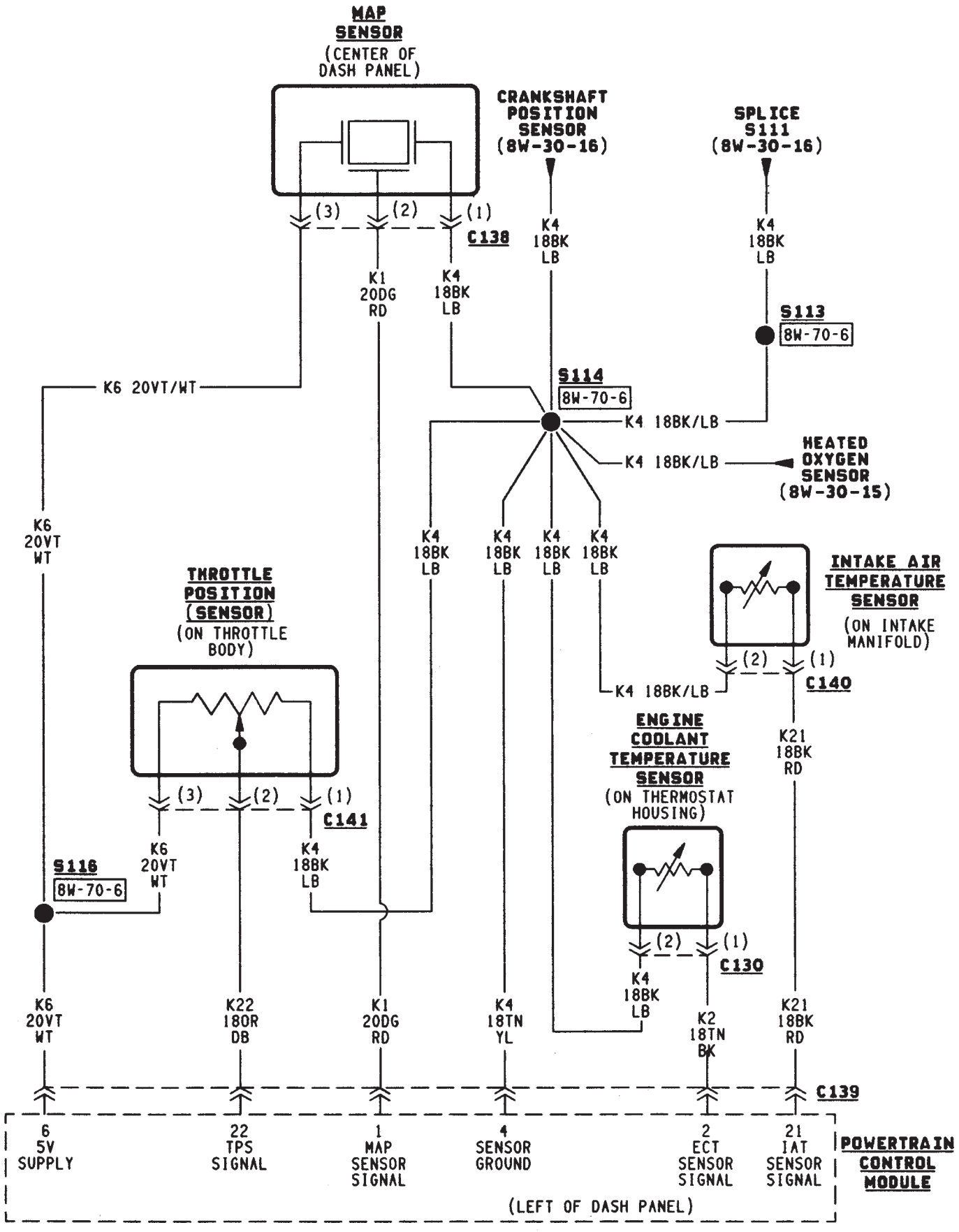
J958W-5

## 4.0L ENGINE



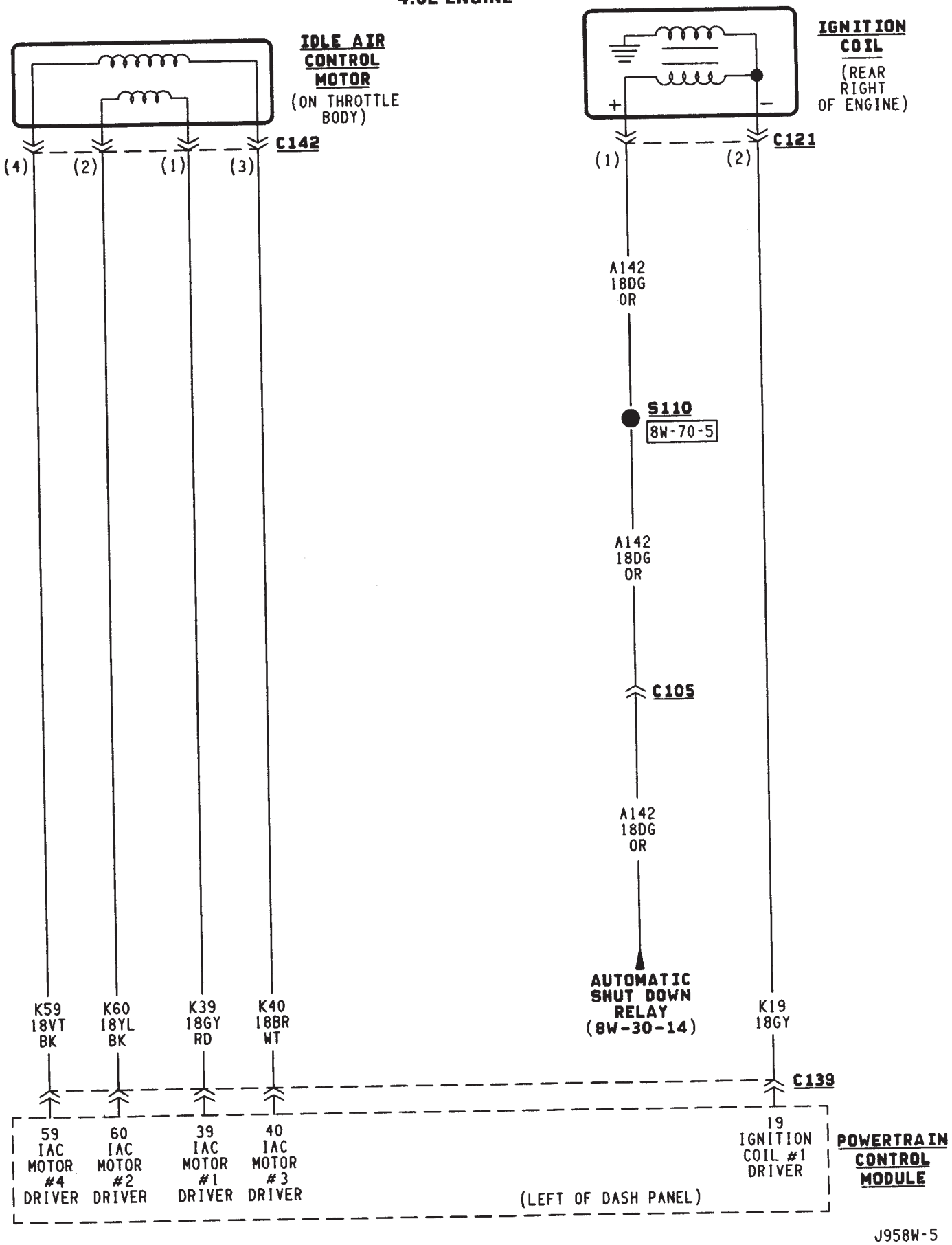

J958W-5

## 4.0L ENGINE

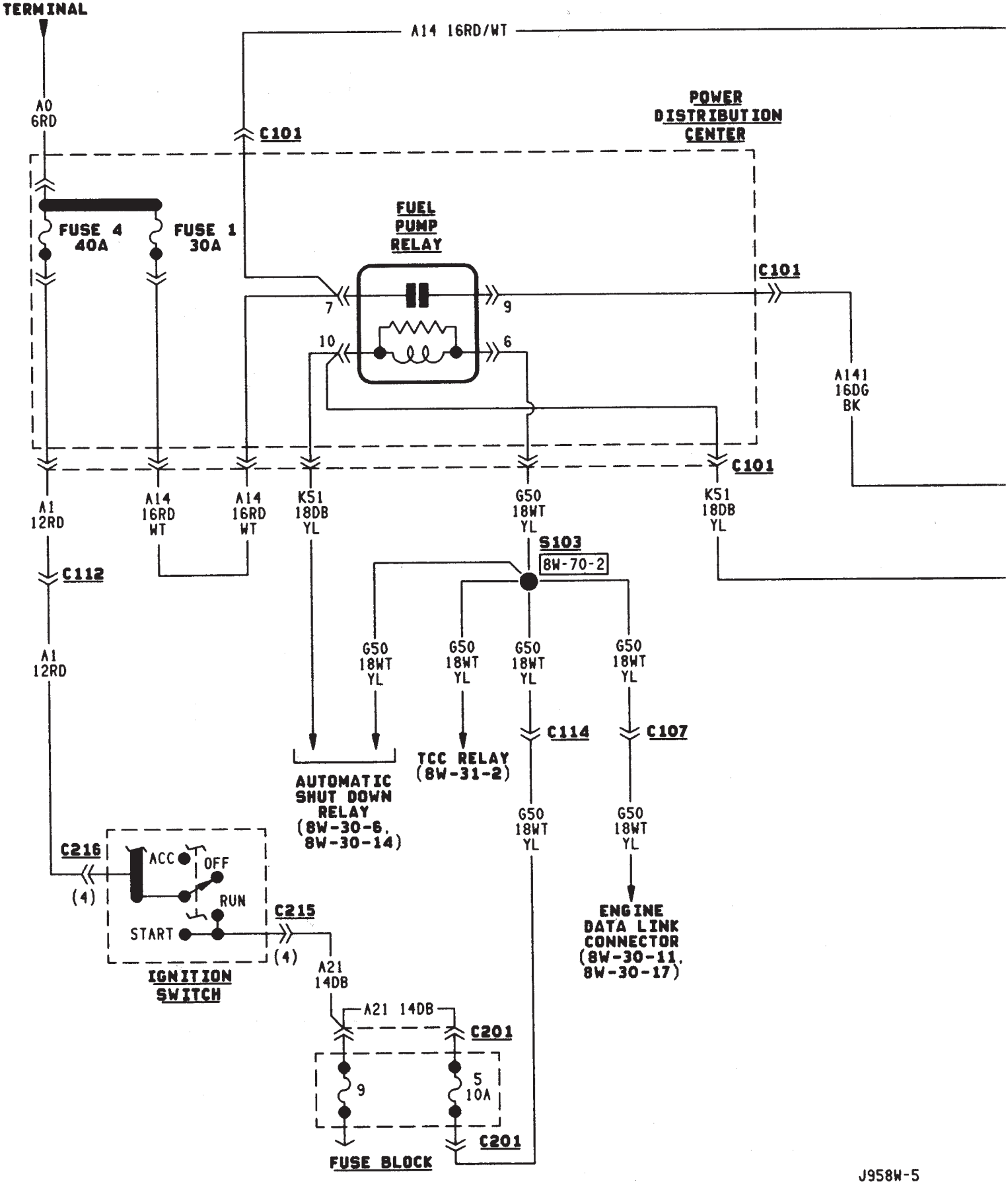



J958W-5

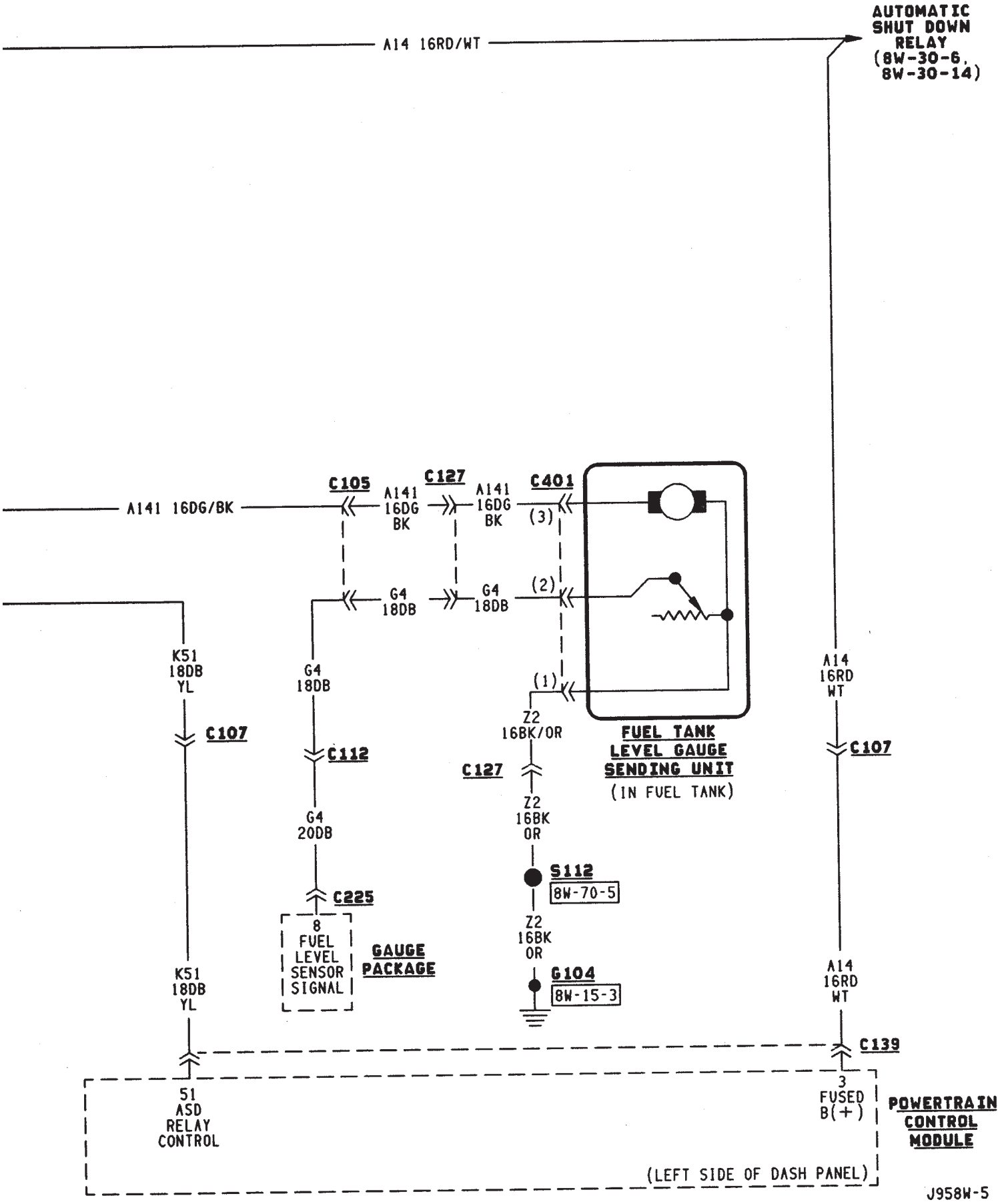
## 4.0L ENGINE


IDLE AIR CONTROL MOTOR
(ON THROTTLE BODY)
C142
(4)
(2)
(1)
(3)
IGNITION COIL
(REAR RIGHT OF ENGINE)
+
–
C121
(1)
(2)
A142
18DG
OR
S110
8W-70-5
A142
18DG
OR
C105
A142
18DG
OR
AUTOMATIC SHUT DOWN RELAY
(8W-30-14)
K59
18VT
BK
K60
18YL
BK
K39
18GY
RD
K40
18BR
WT
K19
18GY
C139
59
IAC
MOTOR
#4
DRIVER
60
IAC
MOTOR
#2
DRIVER
39
IAC
MOTOR
#1
DRIVER
40
IAC
MOTOR
#3
DRIVER
19
IGNITION
COIL #1
DRIVER
POWERTRAIN CONTROL MODULE
(LEFT OF DASH PANEL)
J958W-5

## 2.5L & 4.0L ENGINE




J958W-5


A14 16RD/WT
AUTOMATIC SHUT DOWN RELAY (8W-30-6, 8W-30-14)
A141 16DG/BK
C105
A141 16DG BK
C127
A141 16DG BK
C401
(3)
G4 18DB
G4 18DB
(2)
K51 18DB YL
G4 18DB
(1)
A14 16RD WT
C107
C112
Z2 16BK/OR
C127
FUEL TANK LEVEL GAUGE SENDING UNIT
(IN FUEL TANK)
C107
G4 20DB
Z2 16BK OR
S112
8W-70-5
C225
8 FUEL LEVEL SENSOR SIGNAL
GAUGE PACKAGE
Z2 16BK OR
G104
8W-15-3
K51 18DB YL
A14 16RD WT
C139
51 ASD RELAY CONTROL
3 FUSED B(+)
POWERTRAIN CONTROL MODULE
(LEFT SIDE OF DASH PANEL)
J958W-5

# TRANSMISSION CONTROLS

## TORQUE CONVERTER CLUTCH (TCC) SOLENOID AND RELAY

The TCC solenoid is only used on three-speed automatic transmissions. The Powertrain Control Module (PCM) operates the TCC solenoid by energizing the TCC relay.

Circuit G50 from fuse 5 in the Power Distribution Center (PDC) supplies voltage to the coil side of the TCC relay. When the PCM provides a ground path on circuit K54, the relay contacts close.

When the relay contacts close, they connect circuit A14 from fuse 1 in the PDC with circuit T22. Circuit T22 supplies battery voltage to the case grounded TCC solenoid. Circuit K54 connects to PCM cavity 54.

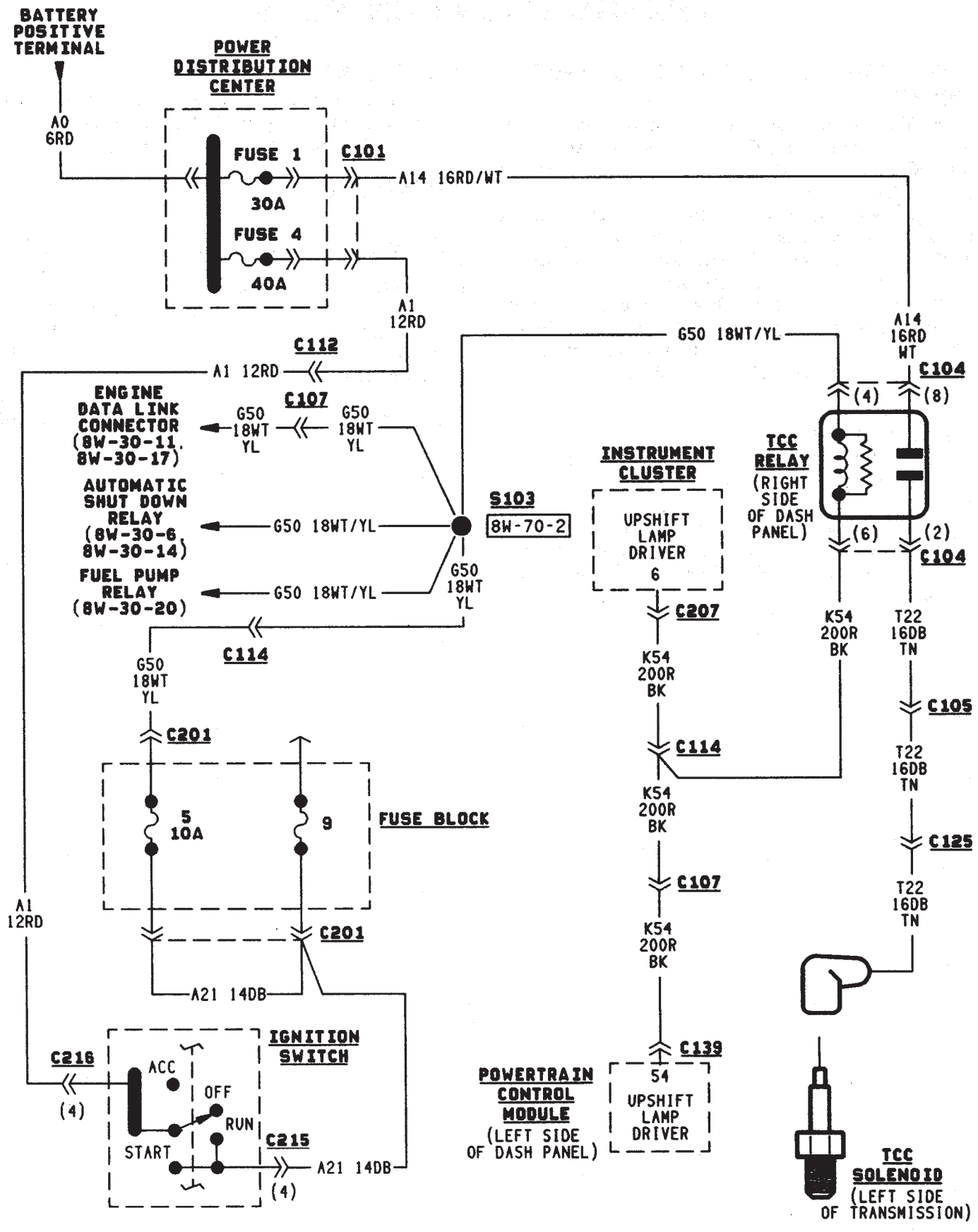
*HELPFUL INFORMATION*

- In the RUN or START position, the ignition switch connects circuit A1 from fuse 4 in the PDC to circuit A21.
- Circuit A21 powers fuse 5 in the fuse block.
- Circuit G50 also connects to the engine data link connector, Automatic Shut Down (ASD) relay, and fuel pump relay.

## UPSHIFT LAMP

On vehicles equipped with a manual transmission, the PCM grounds the up-shift lamp on circuit K54. Circuit K54 connects to cavity 54 of the PCM.

## DIAGRAM INDEX


BATTERY POSITIVE TERMINAL
A0 6RD
POWER DISTRIBUTION CENTER
FUSE 1
30A
FUSE 4
40A
C101
A14 16RD/WT
A1 12RD
C112
A1 12RD
G50 18WT/YL
A14 16RD WT
C104
(4)
(8)
ENGINE DATA LINK CONNECTOR (8W-30-11, 8W-30-17)
C107
G50 18WT YL
G50 18WT YL
AUTOMATIC SHUT DOWN RELAY (8W-30-6, 8W-30-14)
G50 18WT/YL
S103
8W-70-2
FUEL PUMP RELAY (8W-30-20)
G50 18WT/YL
G50 18WT YL
INSTRUMENT CLUSTER
UPSHIFT LAMP DRIVER
6
TCC RELAY (RIGHT SIDE OF DASH PANEL)
(6)
(2)
C104
C207
K54 200R BK
T22 16DB TN
C114
G50 18WT YL
C201
K54 200R BK
C105
T22 16DB TN
5 10A
9
FUSE BLOCK
C114
K54 200R BK
C125
T22 16DB TN
A1 12RD
C201
C107
K54 200R BK
A21 14DB
C216
IGNITION SWITCH
ACC
OFF
RUN
START
C215
A21 14DB
(4)
(4)
C139
POWERTRAIN CONTROL MODULE (LEFT SIDE OF DASH PANEL)
54
UPSHIFT LAMP DRIVER
TCC SOLENOID (LEFT SIDE OF TRANSMISSION)

J958W-5

# ANTI-LOCK BRAKES

## GENERAL INFORMATION

Three fuses supply power for the Anti-Lock Brake System (ABS); fuses 9 and 10 in the PDC and fuse 13 in the fuse block. Fuses 9 and 10 in the Power Distribution Center (PDC) are connected directly to battery voltage and are HOT all times. Fuse 13 is HOT when the ignition switch is the RUN position.

In the RUN position, the ignition switch connects circuit A1 from fuse 4 in the PDC with circuit A22. Circuit A22 connects to a bus bar in the fuse block. The bus bar feeds circuit F15 through fuse 13. Fuse 13 is a 2 amp fuse.

Circuit F15 splices to the coil side of the ABS power relay and cavity 53 of the ABS control module.

Circuit Z1 provides ground for the ABS control module. Circuit Z1 connects to cavities 1 and 19 of the ABS control module.

Refer to group 5, Brakes for operational descriptions of ABS system components.

## WHEEL SPEED SENSORS

The all wheel anti-lock system uses four wheel speed sensors; one for each wheel. Each sensor converts wheel speed into an electrical signal that it transmits to the ABS control module. A pair of twisted wires connect to each sensor to provide signals to the ABS control module.

Circuits B6 and B7 provide signals to ABS control module from the right front wheel speed sensor. Circuit B6, which provides the LOW signal, connects to cavity 29 of the ABS control module. Circuit B7 connects to cavity 47 of the module and provides the HIGH signal.

Circuits B8 and B9 provide signals to ABS control module from the left front wheel speed sensor. Circuit B8, which provides the LOW signal, connects to cavity 30 of the ABS control module. Circuit B9 connects to cavity 48 of the module and provides the HIGH signal.

Circuits B1 and B2 provide signals to ABS control module from the right rear wheel speed sensor. Circuit B1 which provides the LOW signal, connects to cavity 27 of the ABS control module. Circuit B2 connects to cavity 45 of the module and provides the HIGH signal.

Circuits B4 and B3 provide signals to ABS control module from the left rear wheel speed sensor. Circuit B3, which provides the LOW signal, connects to cavity 28 of the ABS control module. Circuit B4 connects to cavity 46 of the module and provides the HIGH signal.

## ACCELERATION SWITCH

During four-wheel drive operation, the acceleration switch provides deceleration data to the ABS control module. Refer to Group 5, Brakes for additional information.

Circuits B21, B22, and B23 connect the acceleration sensor to the ABS control module. Circuits B21 and B22 provide switch states while circuit B23 provides ground. At the ABS control module circuit B21 connects to cavity 25, circuit B22 connects to cavity 43 and circuit B23 connects to cavity 26.

## ABS POWER RELAY

The ABS power relay is located in the Power Distribution Center (PDC). When the ABS module grounds the ABS power relay on circuit B20, the relay switches to connect circuit B15 and circuit A20 from PDC fuse 10. Circuit F15 from fuse 13 in the fuse block splices to feed the coil side of the ABS power relay. Circuit B20 connects to cavity 34 of the ABS control module.

Circuit B15 is double crimped at the ABS power relay. One branch of circuit B15 supplies power to the coil side of the ABS pump motor relay. The other branch of circuit B15 splices to cavities 3 and 33 of the ABS control module and to the hydraulic control unit.

## ABS PUMP MOTOR RELAY

The ABS pump motor relay in the Power Distribution Center (PDC) supplies voltage to the ABS pump motor. When the ABS power relay energizes, circuit B15 supplies battery voltage to the coil side of the ABS pump motor relay. The ABS control module provides ground for the relay on circuit B116. Circuit B116 connects to cavity 15 of the ABS control module.

When the ABS pump motor energizes, it connects circuit A10 from PDC fuse 9 to circuit B25. Circuit B25 supplies battery voltage to the pump motor. Circuit Z12 provides ground for the pump motor.

## PUMP MOTOR SPEED SENSOR

The input from the pump motor speed sensor tells the ABS control module that the pump is operating. Circuit B17 and B16 from the control module connect to the speed sensor.

## BRAKE PEDAL TRAVEL SENSOR

The brake pedal travel sensor provides the ABS control module with data regarding brake pedal position. The sensor is a variable resistor that the ABS

module provides voltage to and receives input from. Circuit B210 from cavity 41 of the ABS control module provides voltage to the sensor. Circuit B258 carries the signal from the sensor to cavity 16 of the ABS module.

## BRAKE SWITCH INPUT

Circuit L50 from the stop lamp provides the brake switch input to the ABS control module. When the brake pedal is pressed, the stop lamp switch closes to supply battery voltage from circuit F32 to circuit L50. Circuit L50 connects to cavity 32 of the ABS control module. Circuit F32 originates at fuse 3 in the fuse block.

Circuit A6 from Power Distribution Center (PDC) fuse 3 supplies voltage to the fuse block for circuit F32.

## HYDRAULIC CONTROL UNIT

When the ABS power relay energizes, two branches of circuit B15 splice to supply voltage to the isolation and decay solenoids in the hydraulic control unit. The hydraulic control unit contains three separate isolation solenoids and three separate decay solenoids. The ABS control module activates the decay and isolation solenoids by providing separate ground paths for each.

The ABS module provides a ground path for the rear isolation solenoid on circuit B251. Circuit B251 connects to cavity 54 of the ABS control module.

For the right front isolation solenoid, the ABS module provides a ground path on circuit B249. Circuit B249 connects to cavity 38 of the ABS control module.

On circuit B245, the ABS module provides ground for the left front isolation solenoid. Circuit B245 connects to cavity 20 of the ABS control module.

The ABS module provides a ground path for the rear decay solenoid on circuit B254. Circuit B254 connects to cavity 36 of the ABS control module.

For the right front decay solenoid, the ABS module provides a ground path on circuit B248. Circuit B248 connects to cavity 21 of the ABS control module.

On circuit B243, the ABS module provides ground for the left decay solenoid. Circuit B243 connects to cavity 2 of the ABS control module.

## ABS WARNING LAMP

Circuit G5 provides power for the ABS warning lamp at the instrument cluster. Ground for the ABS warning lamp is provided by either the ABS control module or by the ABS power relay when the relay is not energized. The ABS control module illuminates the lamp by providing ground on circuit G19.

Circuit G19 splices to connect to circuit B15 through a diode. When the ABS power relay is not energized, it connects circuit B15 to circuit Z12. The ground path for the warning lamp is through the diode to circuit B15, through the ABS power relay to ground on circuit Z12.

The diode between circuit G19 and B15 prevents voltage from flowing to the ABS control module when the ABS power relay switches to supply power on circuit B15.

## DATA LINK CONNECTOR

Circuit D11 from cavity 23 of the ABS control module receives data from the DRB scan tool through the data link connector. The ABS control module transmits data to the scan tool through the connector on circuit D12. Circuit D12 originates at cavity 42 of the ABS control module.

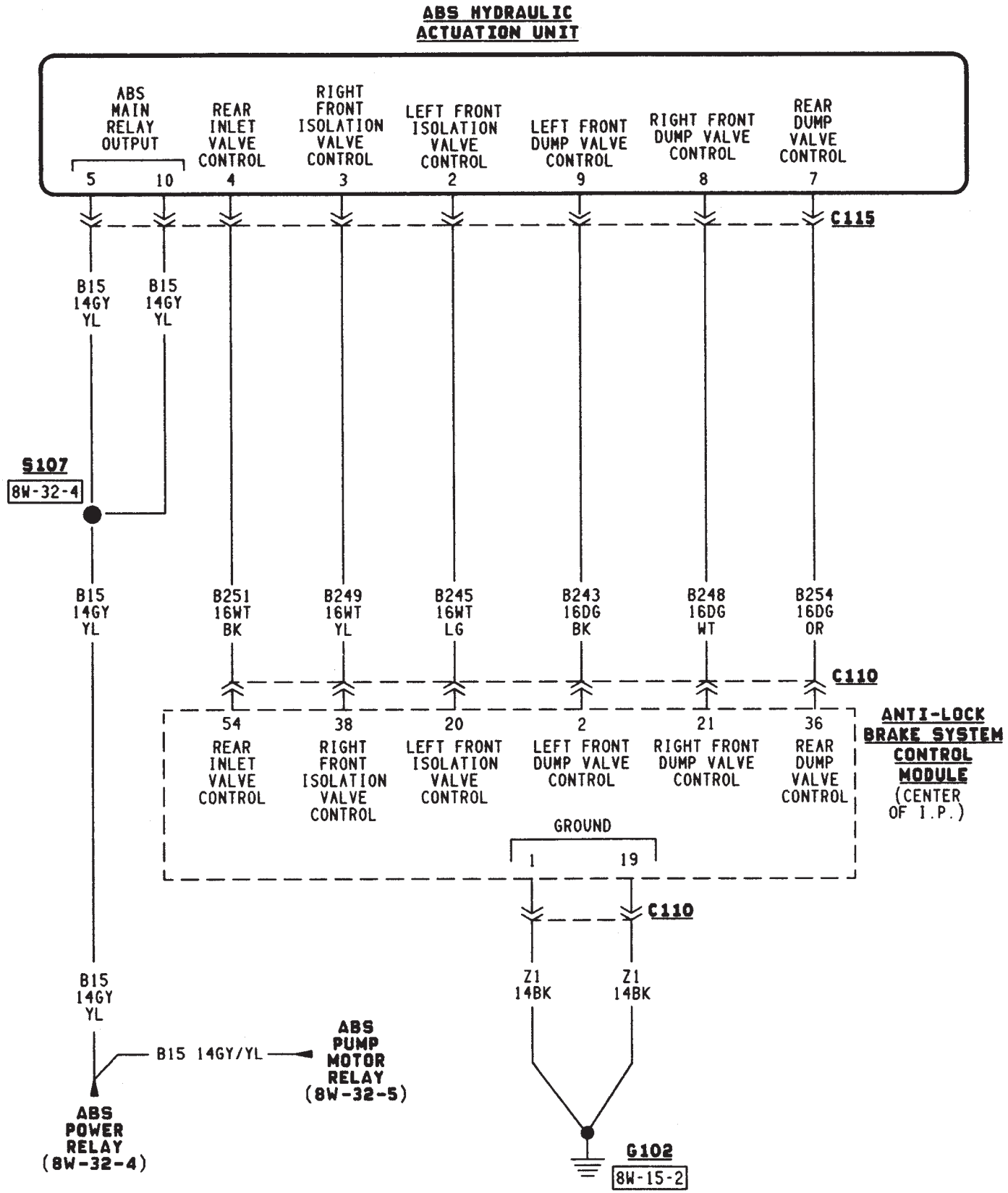
Through the data link connector, circuit Z12 provides ground for the DRB scan tool. Circuit Z12 terminates at the right rear of the dash panel.

Circuit A4 from fuse 8 in the Power Distribution Center (PDC) supplies power to fuse 16 in the PDC. Fuse 16 powers circuit M1 which supplies battery voltage to the scan tool through the diagnostic connector.

### *HELPFUL INFORMATION*

- Check fuses 4, 9 and 10 in the PDC
- Check fuse 13 in the fuse block

## DIAGRAM INDEX


ABS HYDRAULIC ACTUATION UNIT
ABS MAIN RELAY OUTPUT
5
10
REAR INLET VALVE CONTROL
4
RIGHT FRONT ISOLATION VALVE CONTROL
3
LEFT FRONT ISOLATION VALVE CONTROL
2
LEFT FRONT DUMP VALVE CONTROL
9
RIGHT FRONT DUMP VALVE CONTROL
8
REAR DUMP VALVE CONTROL
7
C115
B15 14GY YL
B15 14GY YL
S107
8W-32-4
B15 14GY YL
B251 16WT BK
B249 16WT YL
B245 16WT LG
B243 16DG BK
B248 16DG WT
B254 16DG OR
C110
54
REAR INLET VALVE CONTROL
38
RIGHT FRONT ISOLATION VALVE CONTROL
20
LEFT FRONT ISOLATION VALVE CONTROL
2
LEFT FRONT DUMP VALVE CONTROL
21
RIGHT FRONT DUMP VALVE CONTROL
36
REAR DUMP VALVE CONTROL
ANTI-LOCK BRAKE SYSTEM CONTROL MODULE
(CENTER OF I.P.)
GROUND
1
19
C110
Z1 14BK
Z1 14BK
B15 14GY YL
B15 14GY/YL
ABS PUMP MOTOR RELAY (8W-32-5)
ABS POWER RELAY (8W-32-4)
G102
8W-15-2

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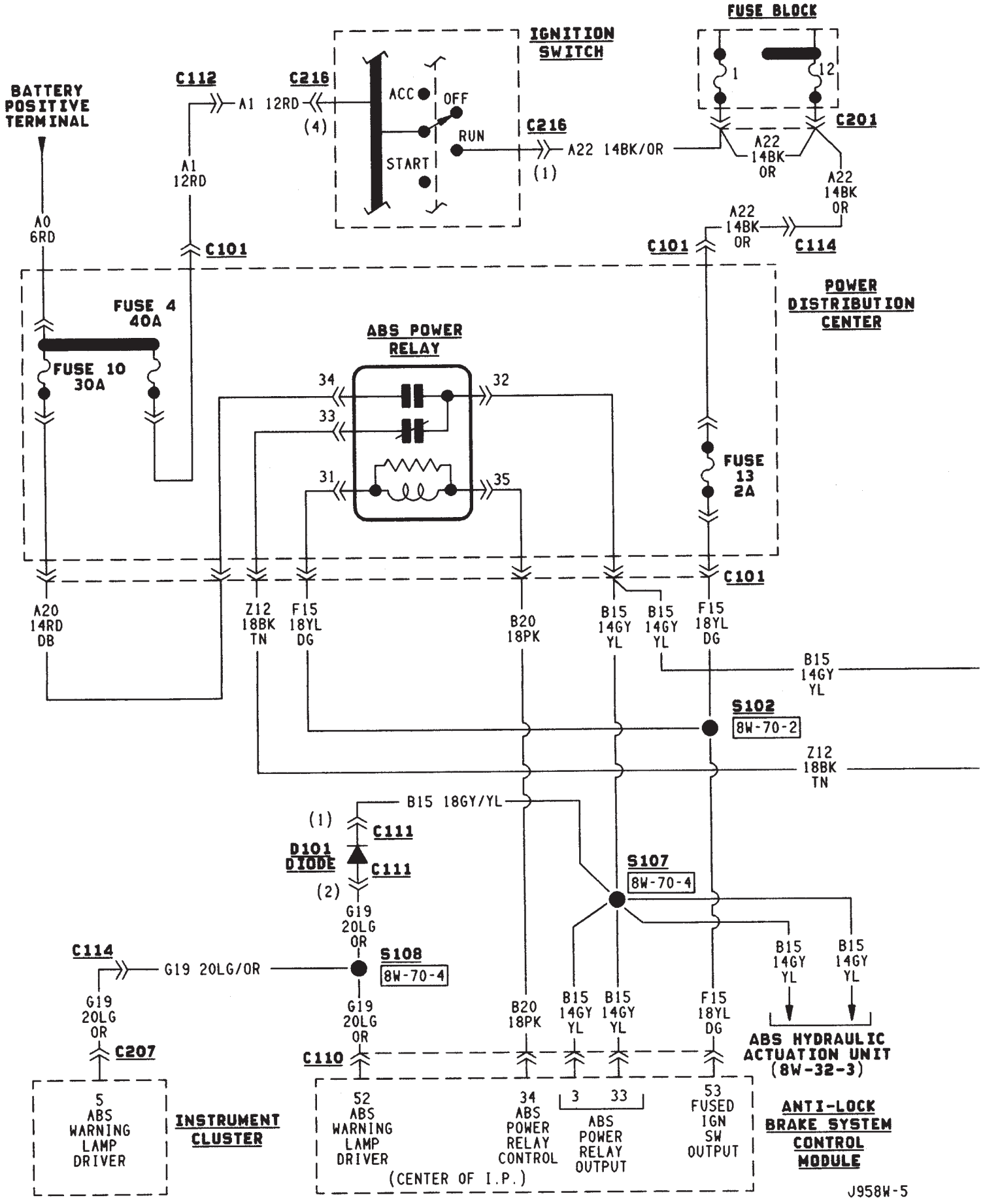
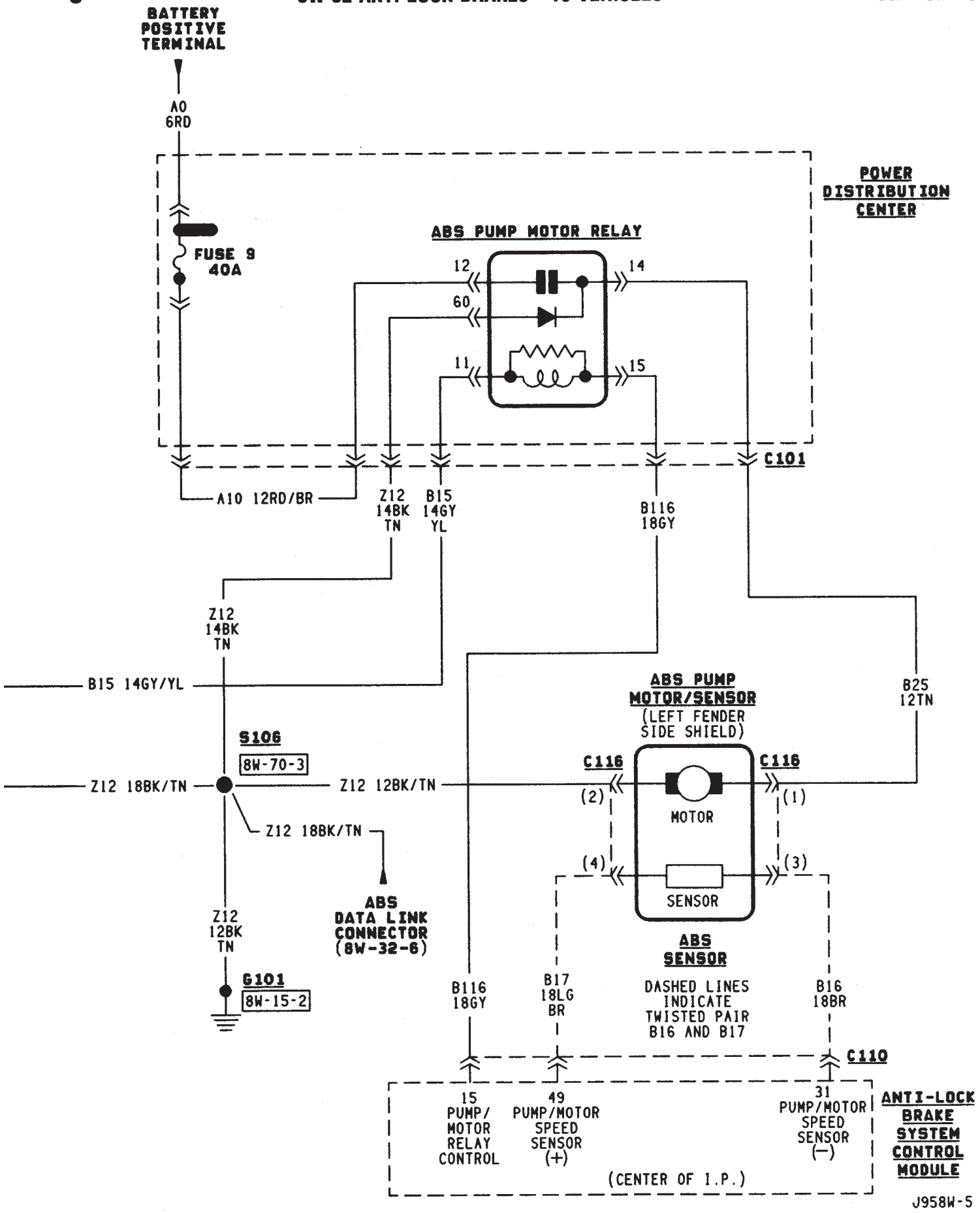
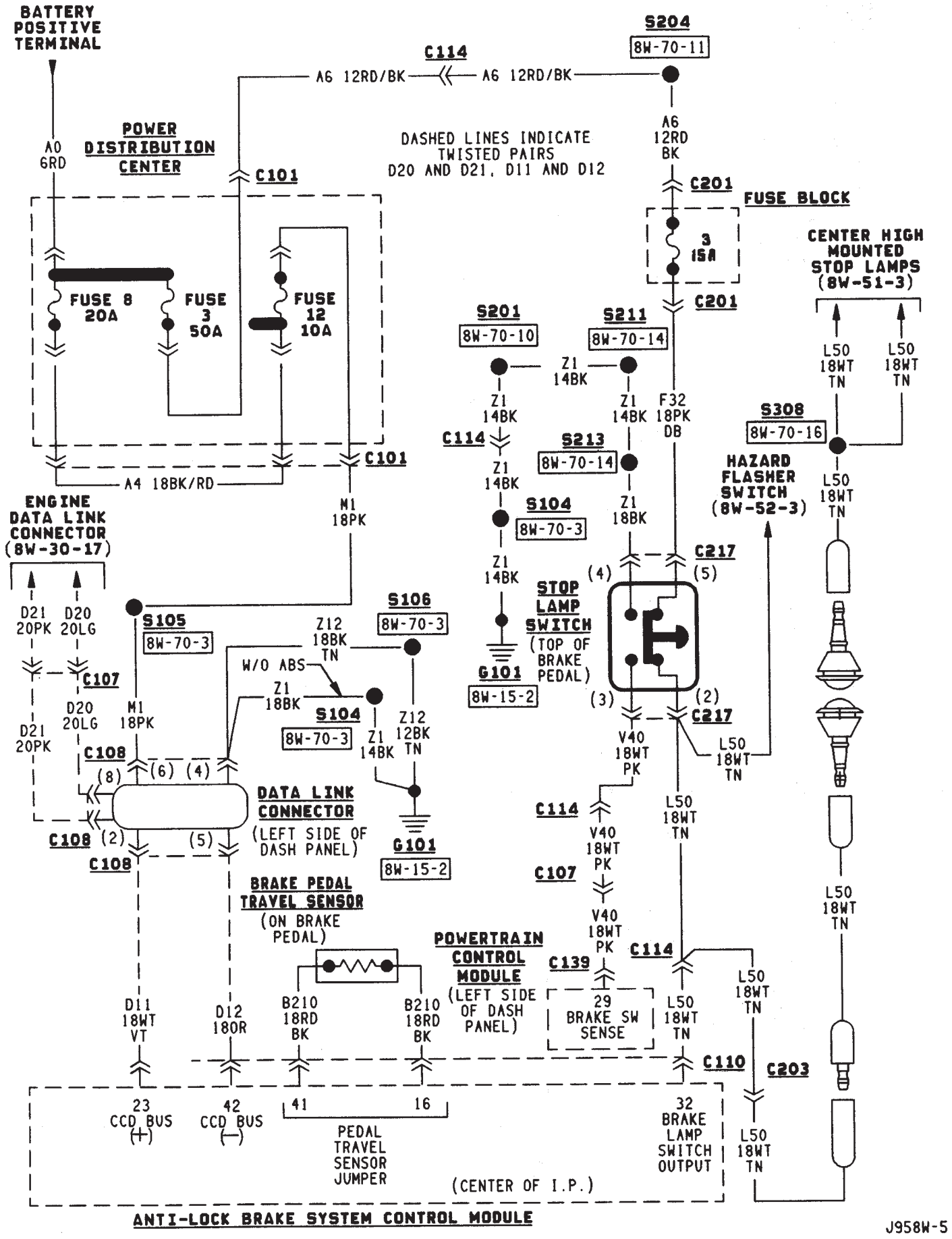
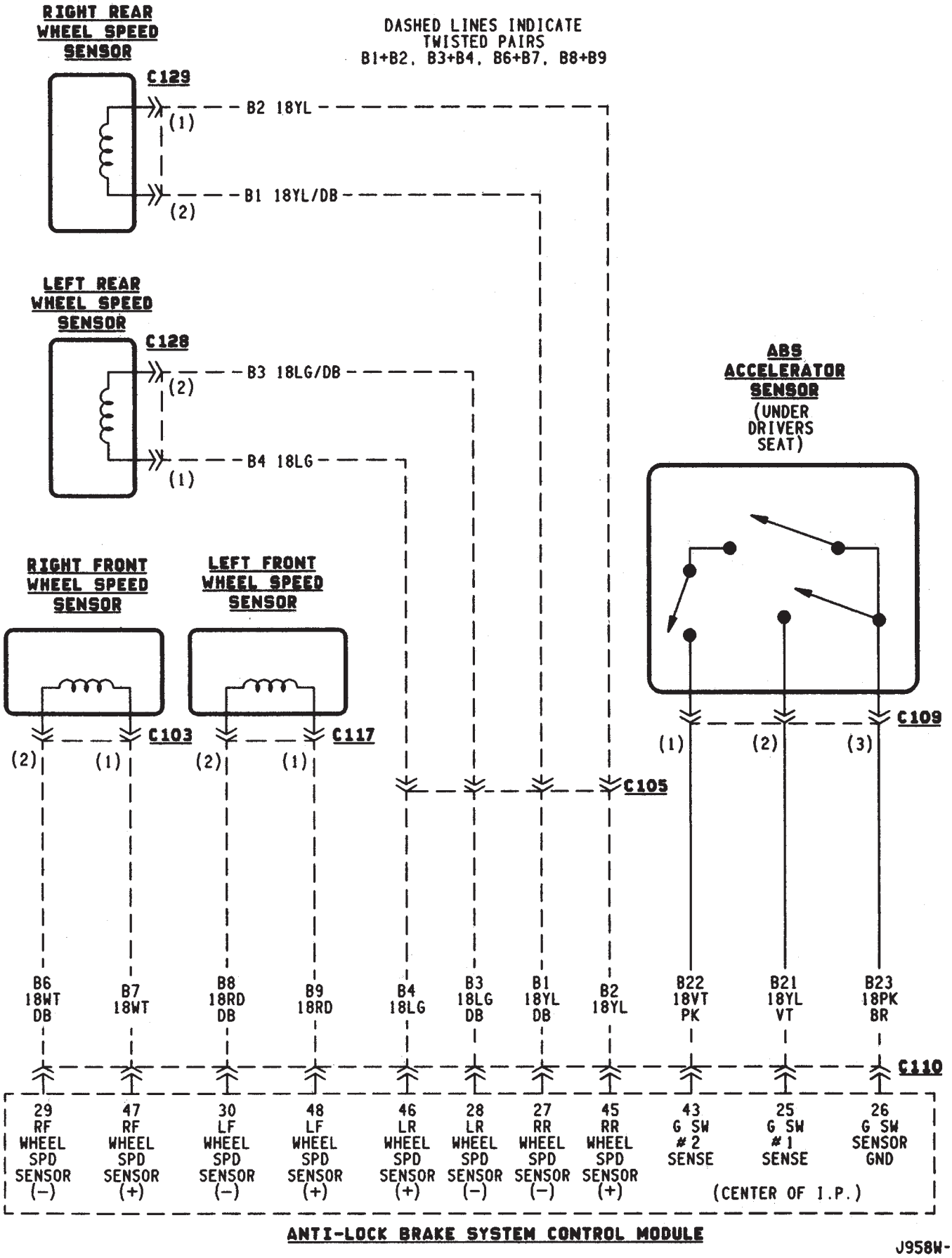

BATTERY POSITIVE TERMINAL
A0 6RD
C112
A1 12RD
C216
(4)
A1 12RD
C101
IGNITION SWITCH
ACC
OFF
RUN
START
C216
A22 14BK/OR
(1)
FUSE BLOCK
1
12
C201
A22 14BK OR
A22 14BK OR
A22 14BK OR
C114
C101
POWER DISTRIBUTION CENTER
FUSE 4 40A
FUSE 10 30A
ABS POWER RELAY
34
33
31
32
35
FUSE 13 2A
C101
A20 14RD DB
Z12 18BK TN
F15 18YL DG
B20 18PK
B15 14GY YL
B15 14GY YL
F15 18YL DG
B15 14GY YL
S102
8W-70-2
Z12 18BK TN
B15 18GY/YL
(1)
C111
D101 DIODE
C111
(2)
G19 20LG OR
S107
8W-70-4
C114
G19 20LG/OR
S108
8W-70-4
G19 20LG OR
G19 20LG OR
C207
C110
B20 18PK
B15 14GY YL
B15 14GY YL
F15 18YL DG
B15 14GY YL
B15 14GY YL
ABS HYDRAULIC ACTUATION UNIT (8W-32-3)
5 ABS WARNING LAMP DRIVER
INSTRUMENT CLUSTER
52 ABS WARNING LAMP DRIVER
34 ABS POWER RELAY CONTROL
3 33 ABS POWER RELAY OUTPUT
53 FUSED IGN SW OUTPUT
(CENTER OF I.P.)
ANTI-LOCK BRAKE SYSTEM CONTROL MODULE
J958W-5


BATTERY POSITIVE TERMINAL
A0 6RD
POWER DISTRIBUTION CENTER
FUSE 9 40A
ABS PUMP MOTOR RELAY
12
14
60
11
15
C101
A10 12RD/BR
Z12 14BK TN
B15 14GY YL
B116 18GY
Z12 14BK TN
B15 14GY/YL
B25 12TN
ABS PUMP MOTOR/SENSOR (LEFT FENDER SIDE SHIELD)
C116
C116
(2)
(1)
MOTOR
(4)
(3)
SENSOR
S106
8W-70-3
Z12 18BK/TN
Z12 12BK/TN
Z12 18BK/TN
ABS DATA LINK CONNECTOR (8W-32-6)
Z12 12BK TN
G101
8W-15-2
ABS SENSOR
DASHED LINES INDICATE TWISTED PAIR B16 AND B17
B116 18GY
B17 18LG BR
B16 18BR
C110
15 PUMP/ MOTOR RELAY CONTROL
49 PUMP/MOTOR SPEED SENSOR (+)
31 PUMP/MOTOR SPEED SENSOR (−)
(CENTER OF I.P.)
ANTI-LOCK BRAKE SYSTEM CONTROL MODULE
J958W-5


BATTERY POSITIVE TERMINAL
A0 6RD
POWER DISTRIBUTION CENTER
C101
FUSE 8 20A
FUSE 3 50A
FUSE 12 10A
A4 18BK/RD
M1 18PK
C114
A6 12RD/BK
A6 12RD/BK
S204
8W-70-11
DASHED LINES INDICATE TWISTED PAIRS D20 AND D21, D11 AND D12
A6 12RD BK
C201
FUSE BLOCK
3 15A
C201
CENTER HIGH MOUNTED STOP LAMPS (8W-51-3)
L50 18WT TN
L50 18WT TN
S201
8W-70-10
S211
8W-70-14
Z1 14BK
Z1 14BK
Z1 14BK
F32 18PK DB
C114
Z1 14BK
S213
8W-70-14
S308
8W-70-16
HAZARD FLASHER SWITCH (8W-52-3)
L50 18WT TN
S104
8W-70-3
Z1 18BK
C217
(4)
(5)
Z1 14BK
STOP LAMP SWITCH (TOP OF BRAKE PEDAL)
G101
8W-15-2
(3)
(2)
C217
V40 18WT PK
L50 18WT TN
ENGINE DATA LINK CONNECTOR (8W-30-17)
D21 20PK
D20 20LG
S105
8W-70-3
S106
8W-70-3
Z12 18BK TN
W/O ABS
Z1 18BK
C107
D20 20LG
M1 18PK
D21 20PK
S104
8W-70-3
Z1 14BK
Z12 12BK TN
C108
(8)
(6)
(4)
DATA LINK CONNECTOR (LEFT SIDE OF DASH PANEL)
C108
(2)
(5)
C108
G101
8W-15-2
C114
V40 18WT PK
L50 18WT TN
C107
V40 18WT PK
BRAKE PEDAL TRAVEL SENSOR (ON BRAKE PEDAL)
POWERTRAIN CONTROL MODULE (LEFT SIDE OF DASH PANEL)
C139
C114
L50 18WT TN
29 BRAKE SW SENSE
L50 18WT TN
L50 18WT TN
D11 18WT VT
D12 180R
B210 18RD BK
B210 18RD BK
C110
C203
23 CCD BUS (+)
42 CCD BUS (-)
41
16
PEDAL TRAVEL SENSOR JUMPER
32 BRAKE LAMP SWITCH OUTPUT
L50 18WT TN
(CENTER OF I.P.)
ANTI-LOCK BRAKE SYSTEM CONTROL MODULE

J958W-5


RIGHT REAR WHEEL SPEED SENSOR
DASHED LINES INDICATE TWISTED PAIRS B1+B2, B3+B4, B6+B7, B8+B9
C129
(1)
(2)
B2 18YL
B1 18YL/DB
LEFT REAR WHEEL SPEED SENSOR
C128
(2)
(1)
B3 18LG/DB
B4 18LG
ABS ACCELERATOR SENSOR (UNDER DRIVERS SEAT)
RIGHT FRONT WHEEL SPEED SENSOR
LEFT FRONT WHEEL SPEED SENSOR
C103
C117
C105
C109
C110
B6 18WT DB
B7 18WT
B8 18RD DB
B9 18RD
B4 18LG
B3 18LG DB
B1 18YL DB
B2 18YL
B22 18VT PK
B21 18YL VT
B23 18PK BR
29 RF WHEEL SPD SENSOR (−)
47 RF WHEEL SPD SENSOR (+)
30 LF WHEEL SPD SENSOR (−)
48 LF WHEEL SPD SENSOR (+)
46 LR WHEEL SPD SENSOR (+)
28 LR WHEEL SPD SENSOR (−)
27 RR WHEEL SPD SENSOR (−)
45 RR WHEEL SPD SENSOR (+)
43 G SW #2 SENSE
25 G SW #1 SENSE
26 G SW SENSOR GND
(CENTER OF I.P.)
ANTI-LOCK BRAKE SYSTEM CONTROL MODULE
J958W-5

# INSTRUMENT CLUSTER

## INSTRUMENT CLUSTER

The instrument cluster contains the gauges and warning lamps. All gauges have magnetic movements.

When the ignition switch is in either the START or RUN position, circuit A1 from fuse 4 in the Power Distribution Center (PDC) connects to circuit A21.

Circuit A21 powers fuse 9 in the fuse block. Fuse 9 powers circuit G5. One branch of circuit G5 connects directly to the combination buzzer. The other branch of circuit G5 splices to power the gauges, speedometer, tachometer, voltmeter, indicator lamps, and warning lamps in the instrument cluster.

When the parking lamps or headlamps are ON, the headlamp switch connects circuit F33 to circuit L7. Circuit L7 splices to the dimmer switch. Circuit E1 from the dimmer switch powers fuse 10 in the fuse block when the parking lamps or headlamps are ON. Circuit E2 from fuse 10 in the fuse block feeds the illumination lamps in the instrument cluster.

Circuit Z1 provides ground the instrument cluster illumination lamps, gauges and warning lamps.

### *HELPFUL INFORMATION*

- Circuit G5 also powers the heated rear window, A/C compressor clutch relay. On Canadian vehicles, circuit G5 powers the Daytime Running Lamps (DRL) module.
- Circuit F33 originates at fuse 8 in the fuse block. Circuit A6 from fuse 3 in the PDC powers fuse 8 in the fuse block.

### *ENGINE COOLANT TEMPERATURE GAUGE*

Circuit G20 connects the engine coolant temperature gauge to the engine coolant temperature sensor. The sensor is a variable resistor and case grounded to the engine. Circuit G5 connects to the instrument cluster and supplies voltage for the gauge.

The gauge uses two coils. The first coil has fixed current flowing through it to maintain magnetic field strength. Circuit Z1 provides ground for the fixed current coil. The current level passing through the second coil is controlled by the variable resistor in the engine coolant temperature sender. The changing current varies the magnetic field in the second coil.

Refer to group 8E, Instrument Panel and Gauges for gauge operation.

### *FUEL GAUGE*

Circuit G4 connects the fuel level sensor to the fuel gauge in the instrument cluster. Circuit G5 supplies voltage to the fuel gauge. The fuel level sensor draws voltage from circuit G5 through the fuel gauge on circuit G4.

The gauge uses two coils. The first coil has fixed current flowing through it to maintain magnetic field strength. Circuit Z1 provides ground for the fixed current coil. The current level passing through the second coil is controlled by the variable resistor in the fuel level sensor. The changing current varies the magnetic field in the second coil.

Circuit Z2 provides the ground path for the fuel level sensor.

Refer to group 8E, Instrument Panel and Gauges for gauge operation.

### *OIL PRESSURE GAUGE*

The case grounded oil pressure sending unit is a variable resistor. The sending unit connects to the oil pressure gauge on circuit G60.

Circuit G5 connects to the instrument cluster and supplies battery voltage to the oil pressure gauge. The gauge uses two coils. The first coil has fixed current flowing through it to maintain magnetic field strength. Circuit Z1 provides ground for the fixed current coil. The current level passing through the second coil is controlled by the variable resistor in the oil pressure sending unit. The changing current varies the magnetic field in the second coil.

Refer to group 8E, Instrument Panel and Gauges for gauge operation.

### *TACHOMETER*

The Powertrain Control Module (PCM) provides the tachometer signal to the electronic tachometer on circuit G21. Circuit G21 originates at cavity 43 of the PCM. Circuit Z1 provides ground for the tachometer's internal logic circuits.

### *SPEEDOMETER*

The electronic speedometer and odometer receive a signal from the vehicle speed sensor on circuit G7. Circuit G5 connects to the instrument cluster and supplies battery voltage to the speedometer. Circuit Z1 provides ground for the speedometer internal logic circuits.

Circuit G7 splices to connect to the Powertrain Control Module (PCM) and if equipped, the Daytime Running Lamps (DRL) module.

### *FOUR-WHEEL DRIVE (4WD) INDICATOR LAMP*

When the 4WD switch closes, circuit Z1 provides ground for the 4WD indicator lamp in the instrument panel. Circuit G5 connects to the instrument cluster and supplies battery voltage to the 4WD indicator lamp. Circuit G1 connects the indicator lamp to the 4WD switch.

### *MALFUNCTION INDICATOR (CHECK ENGINE) LAMP*

The Powertrain Control Module (PCM) provides ground for the malfunction indicator (Check Engine) lamp on circuit G3. Circuit G3 connects to cavity 32 of the PCM. Circuit G5 connects to the instrument cluster and supplies battery voltage for the malfunction indicator lamp. When illuminated, the malfunction indicator lamp displays the message CHECK ENGINE.

For information regarding diagnostic trouble code access using the malfunction indicator lamp, refer to Group 14, Fuel Systems.

### *UP-SHIFT LAMP*

On vehicles equipped with a manual transmission, the Powertrain Control Module (PCM) provides ground for the Up-Shift lamp on circuit K54. Circuit G5 provides battery voltage for the lamp.

### *ABS WARNING LAMP*

Circuit G5 provides power for the ABS warning lamp at the instrument cluster. Ground for the ABS warning lamp is provided by either the ABS control module or by the ABS power relay when the relay is not energized. The ABS control module illuminates the lamp by providing ground on circuit G19.

Circuit G19 splices to connect to circuit B15 through a diode. When the ABS power relay is not energized, it connects circuit B15 to circuit Z12. The ground path for the warning lamp is provided through the diode to circuit B15, through the ABS power relay to ground on circuit Z12.

The diode between circuit G19 and B15 prevents voltage from flowing to the ABS control module when the ABS power relay switches to supply power on circuit B15.

### *BRAKE WARNING LAMP*

Circuit G5 provides battery voltage for the brake warning lamp. Circuit G11 can provide ground for the lamp in 3 ways. The first ground path is through the ignition switch when the key is in the START position.

The second ground path for the brake warning lamp on circuit G11 is through the case grounded brake warning switch. When the switch closes it provides a ground.

The third ground path on circuit G11 is through the case grounded park brake switch. When the switch closes it provides ground.

### *HIGH BEAM INDICATOR LAMP*

Circuit G34 supplies power for the high-beam indicator lamp when the operator either flashes the optical horn (high beams) or selects high beam operation. Circuit Z1 provides the ground path for the lamp.

Circuit L3 from the headlamp switch powers the high beam circuits of the headlamps. On vehicles not equipped with Daytime Running Lamps (DRL), circuit G34 double crimps to circuit L3 at the bulkhead connector.

On vehicles equipped with DRL, circuit L3 splices to the DRL module. The DRL module powers circuit G34.

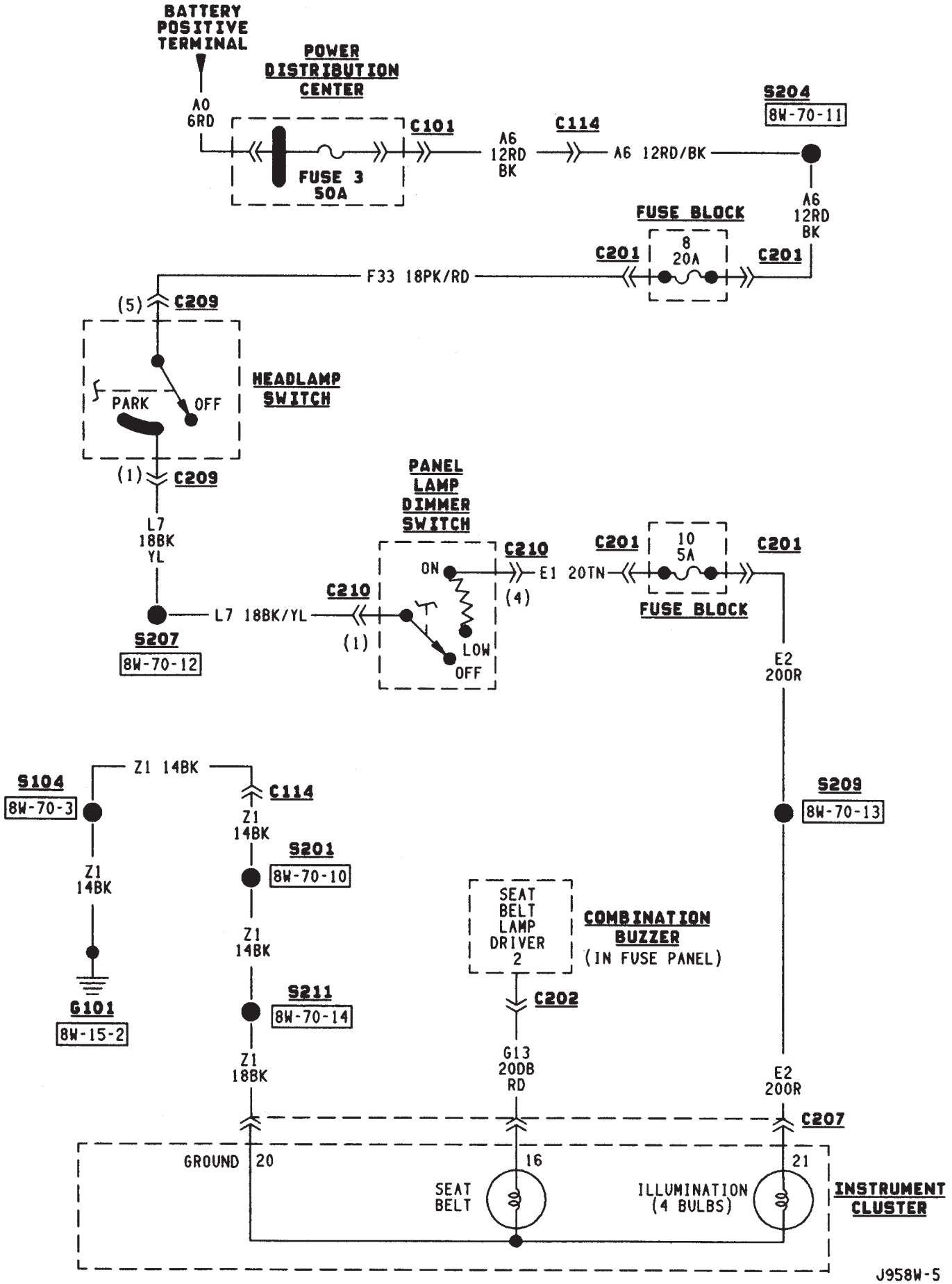
### *TURN SIGNAL INDICATOR LAMPS*

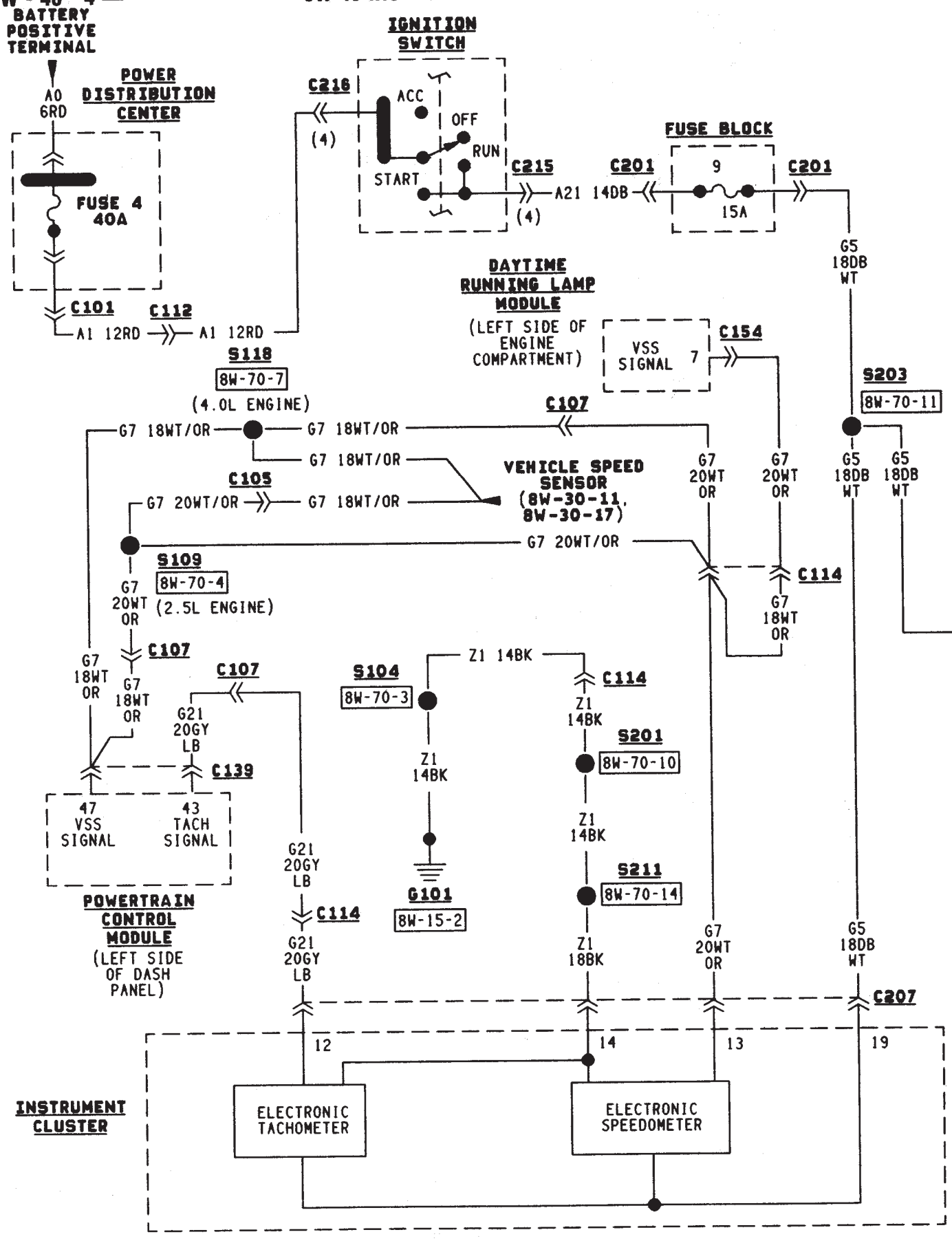
Circuit L61 supplies battery voltage to the left turn signal indicator lamp. The right turn signal indicator lamp receives battery voltage from circuit L60. The turn signal/hazard flasher switch powers circuits L60 and L61. Circuit Z1 provides ground for the lamps.

#### HELPFUL INFORMATION

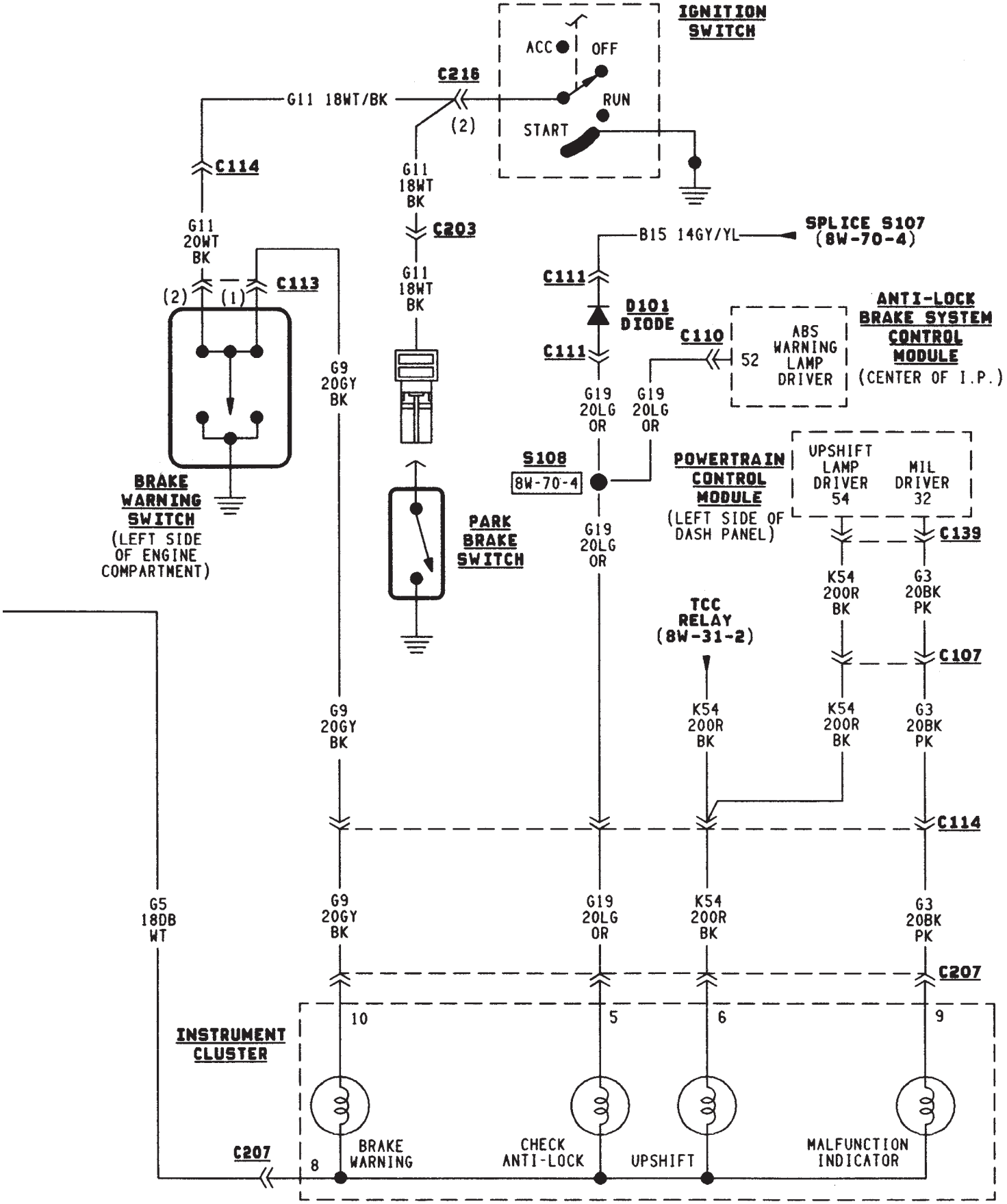
- If the warning lamps, gauges and indicator lamps don't operate, check fuse 4 in the PDC and fuse 9 in the fuse block.
- If the illumination lamps don't operate, check fuse 10 in the fuse block.

## DIAGRAM INDEX

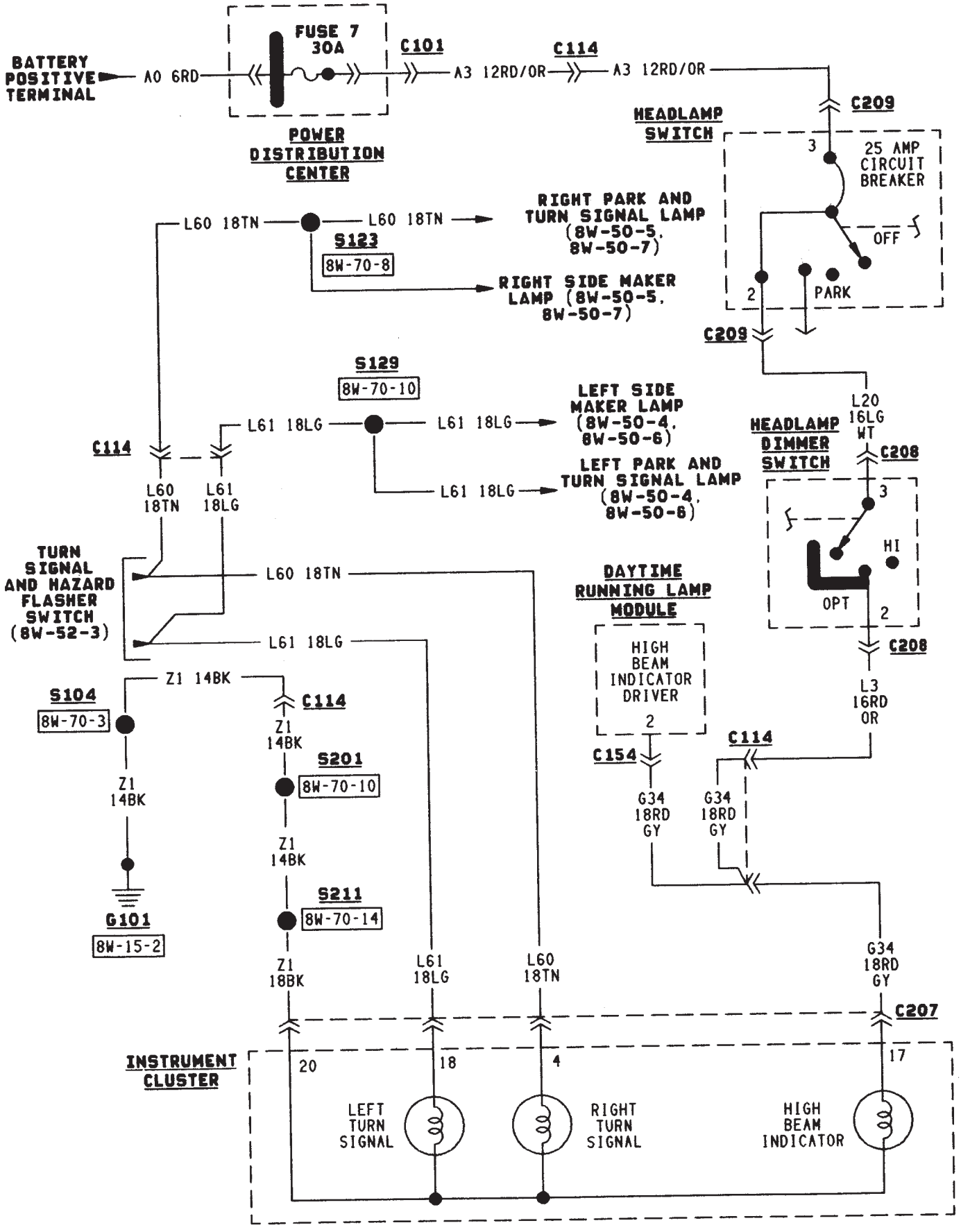

BATTERY POSITIVE TERMINAL
A0 6RD
POWER DISTRIBUTION CENTER
C101
FUSE 3 50A
A6 12RD BK
C114
A6 12RD/BK
S204
8W-70-11
A6 12RD BK
FUSE BLOCK
C201
8 20A
C201
F33 18PK/RD
(5)
C209
HEADLAMP SWITCH
PARK
OFF
(1)
C209
L7 18BK YL
S207
8W-70-12
L7 18BK/YL
PANEL LAMP DIMMER SWITCH
C210
(1)
ON
LOW
OFF
C210
(4)
E1 20TN
C201
10 5A
C201
FUSE BLOCK
E2 20OR
S209
8W-70-13
Z1 14BK
S104
8W-70-3
Z1 14BK
G101
8W-15-2
C114
Z1 14BK
S201
8W-70-10
Z1 14BK
S211
8W-70-14
Z1 18BK
SEAT BELT LAMP DRIVER 2
COMBINATION BUZZER
(IN FUSE PANEL)
C202
G13 20DB RD
E2 20OR
C207
GROUND
20
16
21
SEAT BELT
ILLUMINATION (4 BULBS)
INSTRUMENT CLUSTER
J958W-5


BATTERY POSITIVE TERMINAL
A0 6RD
POWER DISTRIBUTION CENTER
FUSE 4 40A
C101
C112
A1 12RD
A1 12RD
C216
(4)
IGNITION SWITCH
ACC
OFF
RUN
START
C215
A21 14DB
(4)
C201
9
15A
C201
FUSE BLOCK
G5 18DB WT
DAYTIME RUNNING LAMP MODULE
(LEFT SIDE OF ENGINE COMPARTMENT)
VSS SIGNAL 7
C154
S118
8W-70-7
(4.0L ENGINE)
S203
8W-70-11
C107
G7 18WT/OR
G7 18WT/OR
G7 18WT/OR
C105
G7 20WT/OR
G7 18WT/OR
VEHICLE SPEED SENSOR
(8W-30-11, 8W-30-17)
G7 20WT OR
G7 20WT OR
G5 18DB WT
G5 18DB WT
G7 20WT/OR
S109
8W-70-4
(2.5L ENGINE)
G7 20WT OR
C114
G7 18WT OR
C107
G7 18WT OR
G7 18WT OR
C107
G21 20GY LB
C139
S104
8W-70-3
Z1 14BK
C114
Z1 14BK
S201
8W-70-10
Z1 14BK
Z1 14BK
G101
8W-15-2
S211
8W-70-14
47 VSS SIGNAL
43 TACH SIGNAL
POWERTRAIN CONTROL MODULE
(LEFT SIDE OF DASH PANEL)
G21 20GY LB
C114
G21 20GY LB
Z1 18BK
G7 20WT OR
G5 18DB WT
C207
12
14
13
19
INSTRUMENT CLUSTER
ELECTRONIC TACHOMETER
ELECTRONIC SPEEDOMETER

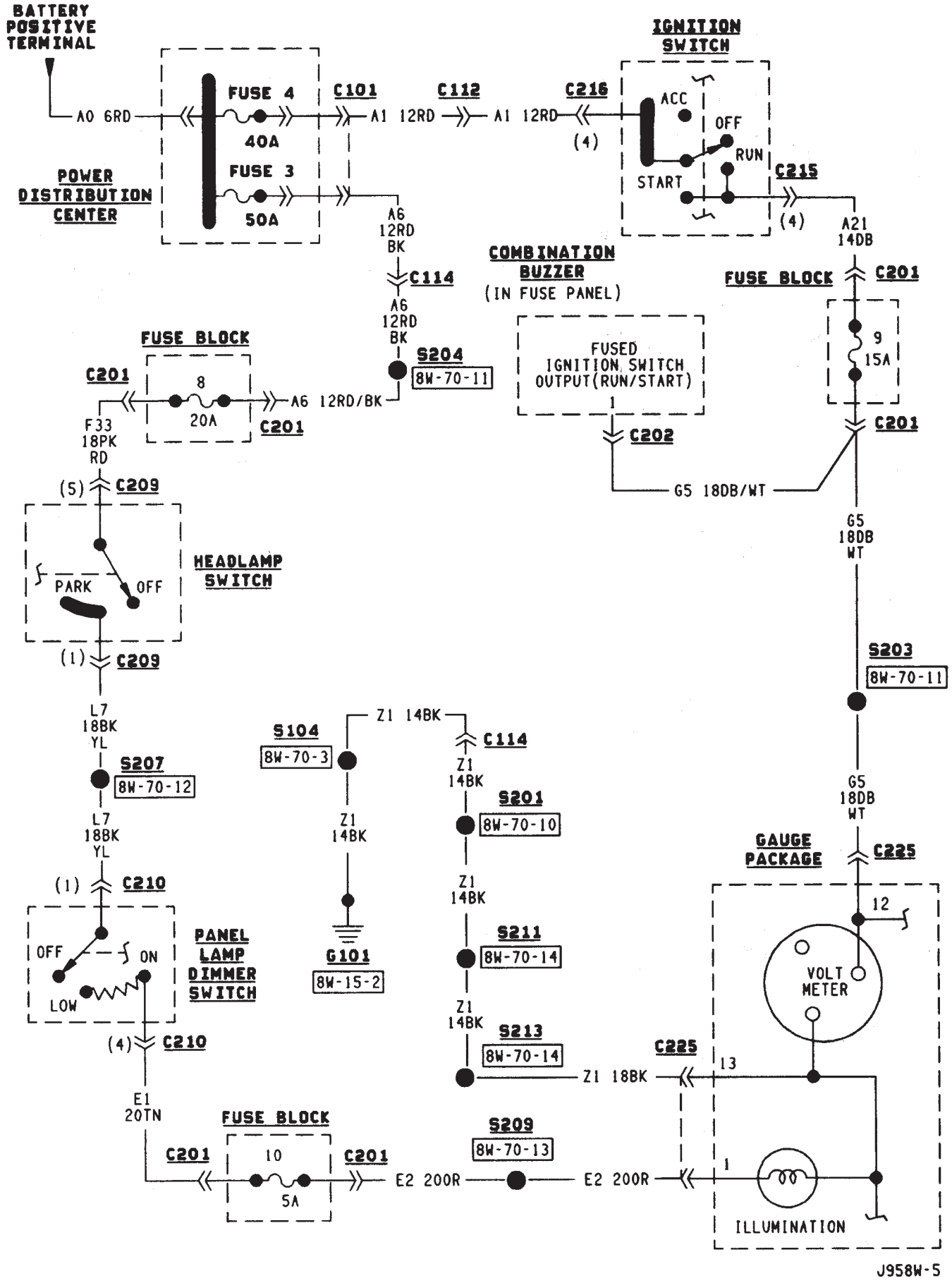
J958W-5

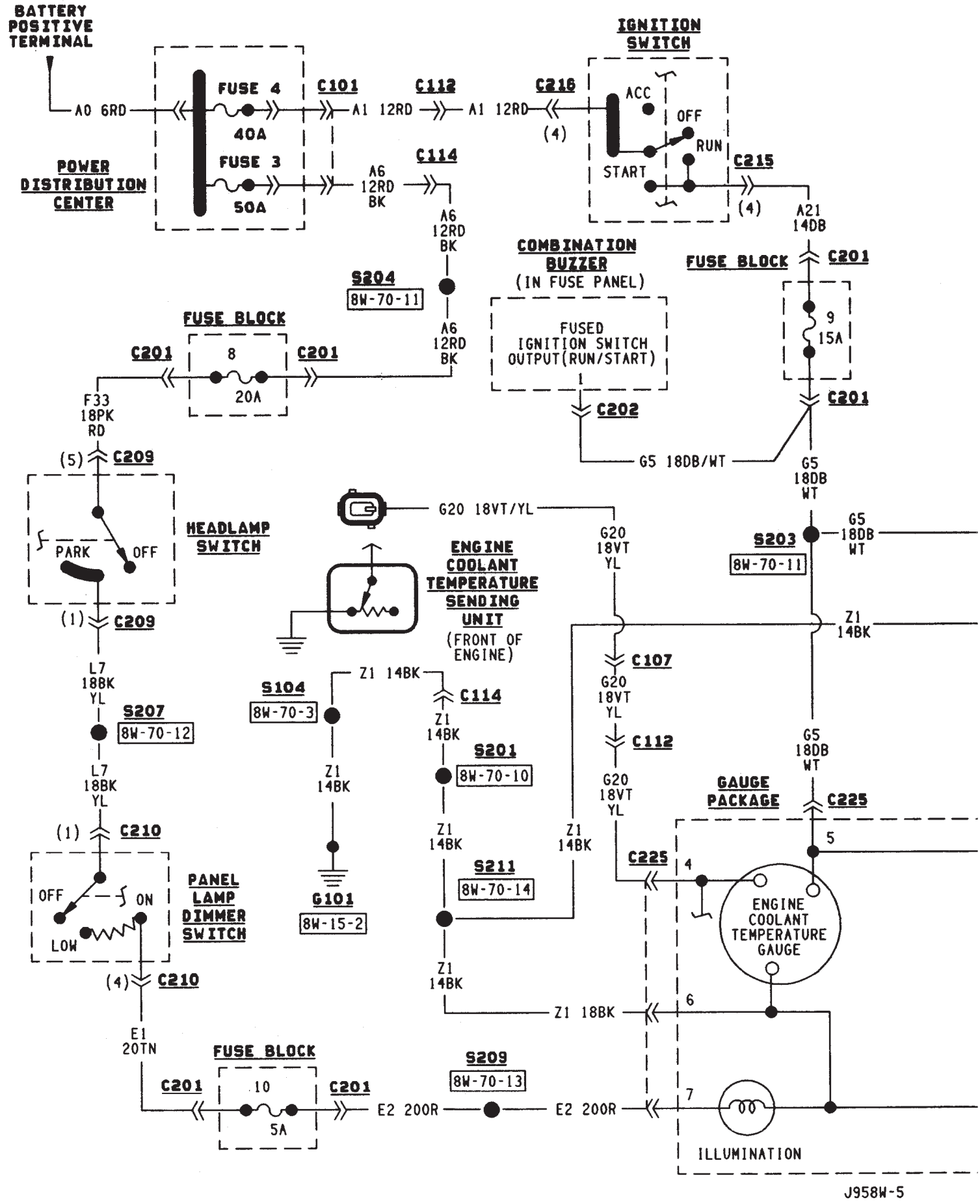

IGNITION SWITCH
ACC
OFF
RUN
START
C216
G11 18WT/BK
(2)
C114
G11 20WT BK
G11 18WT BK
C203
G11 18WT BK
B15 14GY/YL
SPLICE S107 (8W-70-4)
C111
D101 DIODE
C111
C110
52
ABS WARNING LAMP DRIVER
ANTI-LOCK BRAKE SYSTEM CONTROL MODULE
(CENTER OF I.P.)
(2)
(1)
C113
G9 20GY BK
G19 20LG OR
G19 20LG OR
S108
8W-70-4
POWERTRAIN CONTROL MODULE
(LEFT SIDE OF DASH PANEL)
UPSHIFT LAMP DRIVER 54
MIL DRIVER 32
C139
BRAKE WARNING SWITCH
(LEFT SIDE OF ENGINE COMPARTMENT)
PARK BRAKE SWITCH
G19 20LG OR
K54 200R BK
G3 20BK PK
TCC RELAY (8W-31-2)
C107
K54 200R BK
G9 20GY BK
K54 200R BK
G3 20BK PK
C114
G5 18DB WT
G9 20GY BK
G19 20LG OR
K54 200R BK
G3 20BK PK
C207
INSTRUMENT CLUSTER
10
5
6
9
C207
8
BRAKE WARNING
CHECK ANTI-LOCK
UPSHIFT
MALFUNCTION INDICATOR

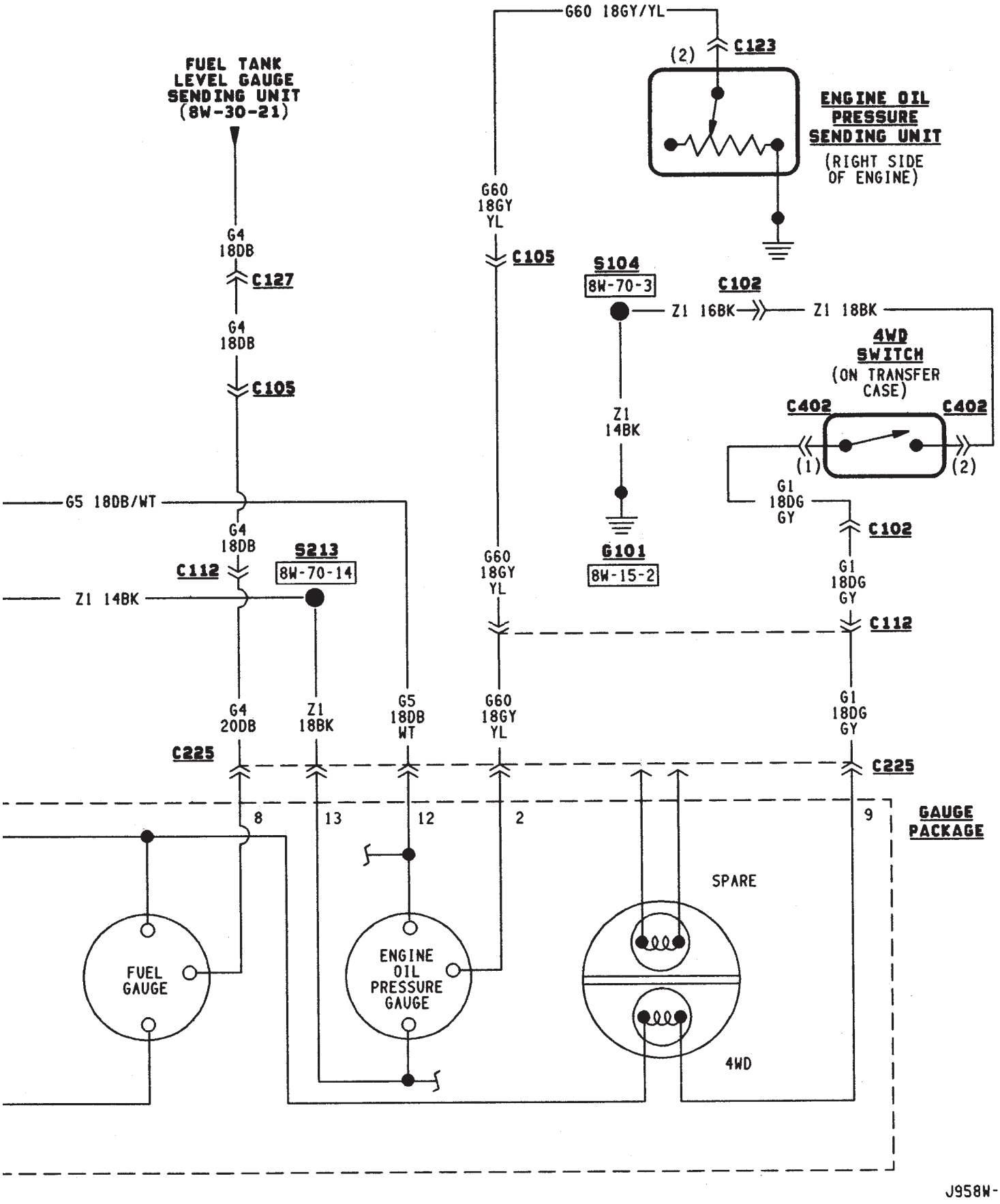
J958W-5


BATTERY POSITIVE TERMINAL
A0 6RD
FUSE 7 30A
C101
A3 12RD/OR
C114
A3 12RD/OR
C209
POWER DISTRIBUTION CENTER
HEADLAMP SWITCH
3
25 AMP CIRCUIT BREAKER
OFF
PARK
2
C209
L60 18TN
L60 18TN
S123
8W-70-8
RIGHT PARK AND TURN SIGNAL LAMP (8W-50-5, 8W-50-7)
RIGHT SIDE MAKER LAMP (8W-50-5, 8W-50-7)
S129
8W-70-10
L61 18LG
L61 18LG
LEFT SIDE MAKER LAMP (8W-50-4, 8W-50-6)
L61 18LG
LEFT PARK AND TURN SIGNAL LAMP (8W-50-4, 8W-50-6)
L20 16LG WT
HEADLAMP DIMMER SWITCH
C208
3
HI
OPT
2
C208
C114
L60 18TN
L61 18LG
TURN SIGNAL AND HAZARD FLASHER SWITCH (8W-52-3)
L60 18TN
L61 18LG
DAYTIME RUNNING LAMP MODULE
HIGH BEAM INDICATOR DRIVER
2
C154
G34 18RD GY
C114
G34 18RD GY
L3 16RD OR
Z1 14BK
C114
Z1 14BK
S104
8W-70-3
Z1 14BK
S201
8W-70-10
Z1 14BK
S211
8W-70-14
G101
8W-15-2
Z1 18BK
L61 18LG
L60 18TN
G34 18RD GY
C207
INSTRUMENT CLUSTER
20
18
4
17
LEFT TURN SIGNAL
RIGHT TURN SIGNAL
HIGH BEAM INDICATOR

J958W-5


BATTERY POSITIVE TERMINAL
A0 6RD
FUSE 4
40A
FUSE 3
50A
POWER DISTRIBUTION CENTER
C101
A1 12RD
C112
A1 12RD
C216
(4)
IGNITION SWITCH
ACC
OFF
RUN
START
C215
(4)
A21 14DB
A6 12RD BK
C114
A6 12RD BK
S204
8W-70-11
COMBINATION BUZZER
(IN FUSE PANEL)
FUSED IGNITION SWITCH OUTPUT (RUN/START)
C202
FUSE BLOCK
C201
8
20A
C201
A6 12RD/BK
F33 18PK RD
(5)
C209
HEADLAMP SWITCH
PARK
OFF
(1)
C209
L7 18BK YL
S207
8W-70-12
L7 18BK YL
(1)
C210
PANEL LAMP DIMMER SWITCH
OFF
ON
LOW
(4)
C210
E1 20TN
FUSE BLOCK
C201
10
5A
C201
S104
8W-70-3
Z1 14BK
G101
8W-15-2
Z1 14BK
C114
Z1 14BK
S201
8W-70-10
Z1 14BK
S211
8W-70-14
Z1 14BK
S213
8W-70-14
S209
8W-70-13
E2 200R
E2 200R
FUSE BLOCK
C201
9
15A
C201
G5 18DB/WT
G5 18DB WT
S203
8W-70-11
G5 18DB WT
GAUGE PACKAGE
C225
12
VOLT METER
C225
13
1
ILLUMINATION
Z1 18BK
J958W-5


BATTERY POSITIVE TERMINAL
A0 6RD
POWER DISTRIBUTION CENTER
FUSE 4
40A
FUSE 3
50A
C101
A1 12RD
C112
A1 12RD
C216
(4)
IGNITION SWITCH
ACC
OFF
RUN
START
C215
(4)
A21 14DB
C114
A6 12RD BK
A6 12RD BK
S204
8W-70-11
COMBINATION BUZZER (IN FUSE PANEL)
FUSED IGNITION SWITCH OUTPUT(RUN/START)
1
C202
FUSE BLOCK
C201
9
15A
C201
G5 18DB/WT
G5 18DB WT
FUSE BLOCK
C201
8
20A
C201
F33 18PK RD
(5) C209
HEADLAMP SWITCH
PARK
OFF
(1) C209
L7 18BK YL
S207
8W-70-12
L7 18BK YL
(1) C210
PANEL LAMP DIMMER SWITCH
OFF
ON
LOW
(4) C210
E1 20TN
G20 18VT/YL
ENGINE COOLANT TEMPERATURE SENDING UNIT (FRONT OF ENGINE)
G20 18VT YL
S203
8W-70-11
G5 18DB WT
Z1 14BK
C107
G20 18VT YL
C112
G20 18VT YL
Z1 14BK
S104
8W-70-3
Z1 14BK
C114
Z1 14BK
S201
8W-70-10
Z1 14BK
G101
8W-15-2
Z1 14BK
S211
8W-70-14
Z1 14BK
Z1 18BK
GAUGE PACKAGE
C225
5
C225
4
6
7
ENGINE COOLANT TEMPERATURE GAUGE
ILLUMINATION
FUSE BLOCK
C201
10
5A
C201
S209
8W-70-13
E2 200R
E2 200R
J958W-5


G60 18GY/YL
(2)
C123
ENGINE OIL PRESSURE SENDING UNIT
(RIGHT SIDE OF ENGINE)
FUEL TANK LEVEL GAUGE SENDING UNIT (8W-30-21)
G4 18DB
C127
G4 18DB
C105
G60 18GY YL
C105
S104
8W-70-3
C102
Z1 16BK
Z1 18BK
4WD SWITCH
(ON TRANSFER CASE)
C402
C402
(1)
(2)
Z1 14BK
G101
8W-15-2
G1 18DG GY
C102
G5 18DB/WT
G4 18DB
C112
S213
8W-70-14
Z1 14BK
G60 18GY YL
G1 18DG GY
C112
G4 20DB
Z1 18BK
G5 18DB WT
G60 18GY YL
G1 18DG GY
C225
C225
8
13
12
2
9
GAUGE PACKAGE
SPARE
FUEL GAUGE
ENGINE OIL PRESSURE GAUGE
4WD
J958W-5

# HORN/CIGAR LIGHTER

## HORN

The horn system uses a switch and horn relay. The horn switch is in the center of the steering wheel.

Circuit A4 from fuse 8 in the Power Distribution Center (PDC) feeds circuit F31 through fuse 15 in the PDC. Circuit F31 is HOT at all times and powers the coil and contact sides of the horn relay.

When the case grounded horn switch is pressed, circuit X3 provides ground for the coil side of the relay and the contacts close. When the contacts close, circuit X2 supplies voltage to the horn. Circuit Z1 provides ground for the horn.

### *HELPFUL INFORMATION*

- The horn switch is grounded to the steering wheel.
- Circuit F31 is double crimped at the coil side of the horn relay.
- Check fuse 8 in the PDC and fuse 15 in the fuse block.

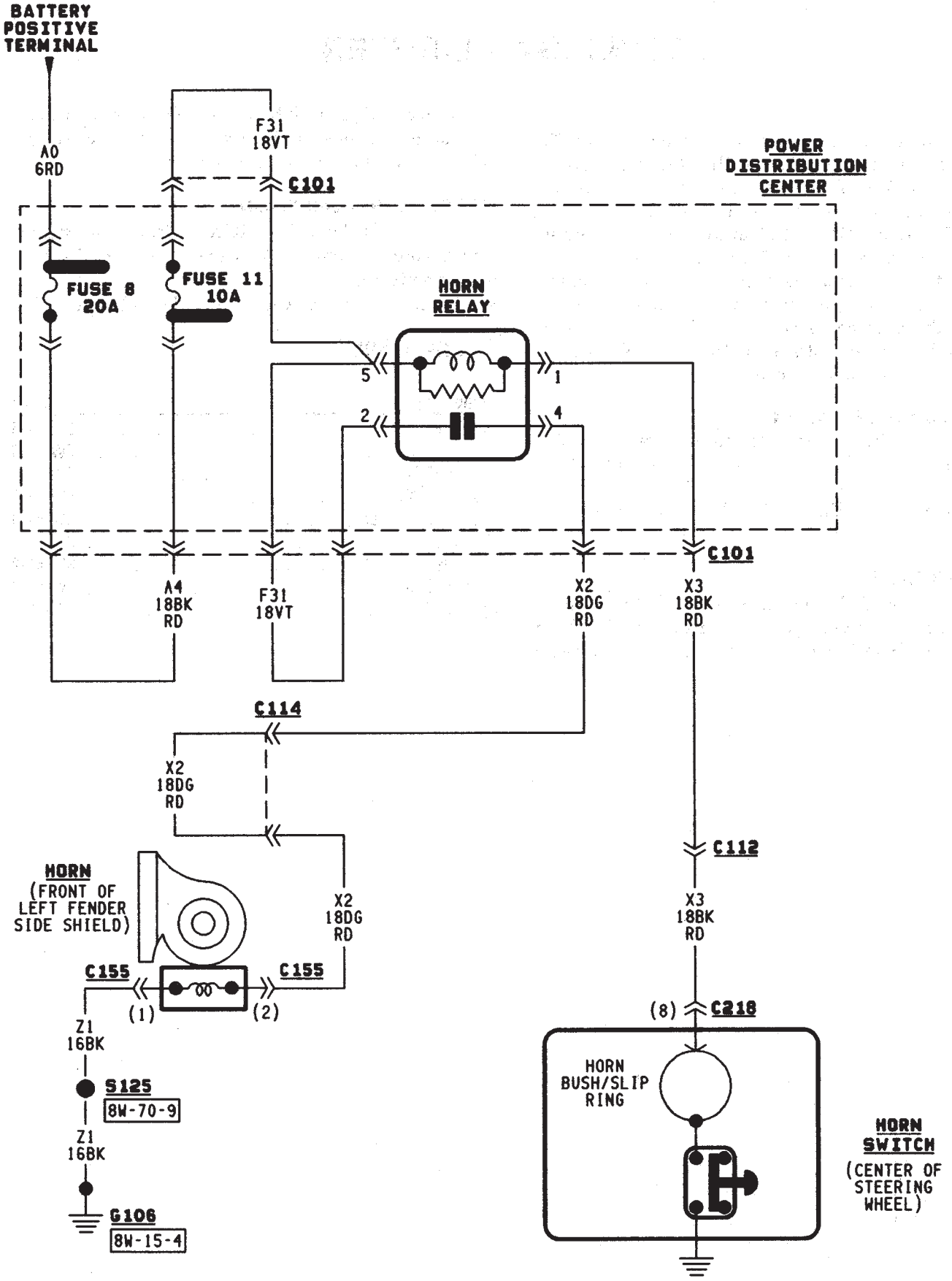
## CIGAR LIGHTER

In the ACCESSORY or RUN position, the ignition switch supplies voltage to fuse 7 in the fuse block on circuit A31. Fuse 7 feeds circuit F30 which connects to the cigar lighter. When the lighter is depressed, the contacts inside of the lighter element close and voltage flows to ground on circuit Z1.

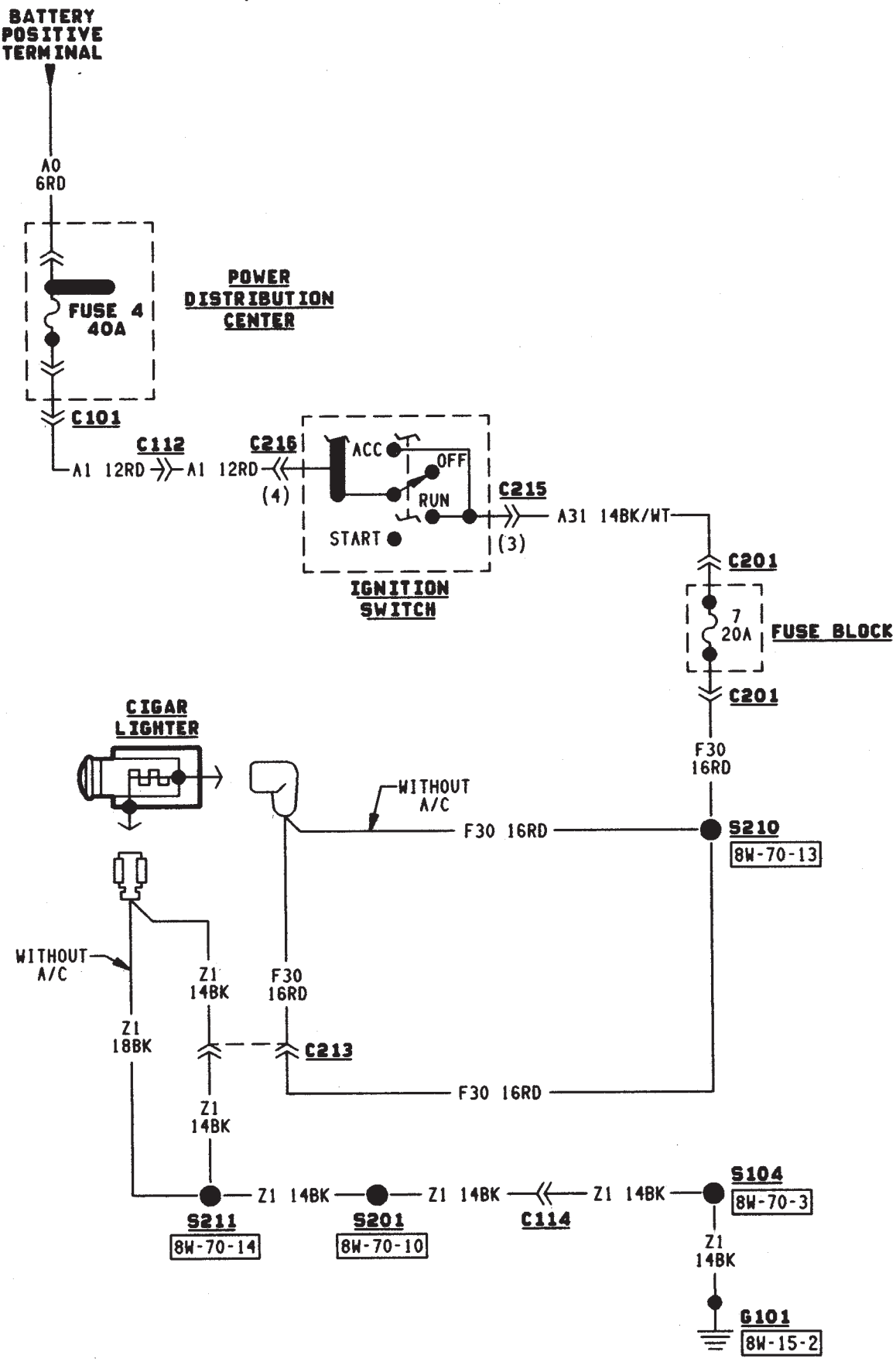
### *HELPFUL INFORMATION*

- In the ACCESSORY or RUN position, the ignition switch connects circuit A1 from fuse 4 in the PDC with circuit A31.
- Circuit F30 also powers the radio and radio relay.

## DIAGRAM INDEX


BATTERY POSITIVE TERMINAL
A0 6RD
F31 18VT
C101
POWER DISTRIBUTION CENTER
FUSE 8 20A
FUSE 11 10A
HORN RELAY
5
1
2
4
C101
A4 18BK RD
F31 18VT
X2 18DG RD
X3 18BK RD
C114
X2 18DG RD
C112
X3 18BK RD
HORN (FRONT OF LEFT FENDER SIDE SHIELD)
X2 18DG RD
C155
C155
(1)
(2)
(8)
C218
Z1 16BK
S125
8W-70-9
Z1 16BK
G106
8W-15-4
HORN BUSH/SLIP RING
HORN SWITCH (CENTER OF STEERING WHEEL)

J958W-5


BATTERY POSITIVE TERMINAL
A0 6RD
FUSE 4 40A
POWER DISTRIBUTION CENTER
C101
C112
A1 12RD
C216
A1 12RD
(4)
ACC
OFF
RUN
START
C215
(3)
IGNITION SWITCH
A31 14BK/WT
C201
7 20A
FUSE BLOCK
C201
F30 16RD
CIGAR LIGHTER
WITHOUT A/C
F30 16RD
S210
8W-70-13
WITHOUT A/C
Z1 18BK
Z1 14BK
F30 16RD
C213
F30 16RD
Z1 14BK
Z1 14BK
Z1 14BK
Z1 14BK
Z1 14BK
S104
8W-70-3
S211
8W-70-14
S201
8W-70-10
C114
Z1 14BK
G101
8W-15-2

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# AIR CONDITIONING/HEATER

## CONTENTS



### GENERAL INFORMATION

This section of the wiring diagrams is divided into two sub-sections; Heater, and A/C-Heater. When referring to the circuit descriptions or wiring diagrams, ensure that you use the correct sub-section.

## HEATER SYSTEM

### HEATER

In the RUN position, the ignition switch connects circuit A1 from fuse 4 in the Power Distribution Center (PDC) to circuit A22. Circuit A22 powers a bus bar in the fuse block that supplies voltage to circuit C1 through fuse 12.

A heater-off switch in circuit C1 opens when the heater controls are in the VENT position. When the heater-off switch closes, circuit C1 supplies battery voltage to the blower motor switch. The switch sets blower motor speed to HIGH, MEDIUM, LOW or OFF.

The switch connects to the blower motor resistor block in the LOW and MEDIUM positions and directly to the blower motor in the HIGH position. The resistor block contains two resistors connected in series. Circuit C7 connects the resistor block to the blower motor.

From the blower motor resistor block, circuit C7 is double crimped at the HIGH terminal of the blower motor switch. Circuit C7 continues to the blower motor from the blower motor switch.

When the blower motor switch is in the LOW position, it supplies voltage to the resistor block on circuit C4. From circuit C4, voltage passes through both resistors in the resistor block to the blower motor on circuit C7.

In the MEDIUM position, the blower motor supplies voltage to the resistor block on circuit C5. From circuit C5 voltage flows through one resistor to the blower motor on circuit C7.

In the HIGH position, the blower motor switch connects directly to the blower motor on circuit C7. Voltage does not pass through the resistor block.

Circuit Z1 provides ground for the blower motor.

*HELPFUL INFORMATION*

- Check fuse 4 in the PDC.
- Check fuse 12 in the fuse block.

### DIAGRAM INDEX

# AIR CONDITIONING AND HEATER

## GENERAL INFORMATION

On vehicles built with the 2.5L engine, the electrical system has provisions for dealer installed air conditioning. The provisions consist of two connectors which include circuitry for:

- Circuit C1 - Ignition feed
- Circuit C21 - Blower motor switch
- Circuit C91 - A/C request signal
- Circuit C20 - A/C select signal
- Circuit C13 - Ground for coil side of A/C compressor clutch relay
- Circuit G5 - Battery voltage for coil side of A/C compressor clutch relay

## A/C COMPRESSOR

When the ignition switch is in the RUN position it connects circuit A1 from fuse 4 in the Power Distribution Center (PDC) to circuit A22. Circuit A22 supplies battery voltage to fuse 12 in the fuse block. Fuse 12 powers circuit C1.

Circuit C1 supplies battery voltage to the A/C blower switch. Circuit C21 connects the A/C blower switch to the A/C low pressure switch.

When the operator selects A/C operation, the A/C blower switch provides the A/C request signal to cavity 27 of the Powertrain Control Module (PCM) on circuit C91. At the same time, the blower switch supplies voltage through the A/C thermostat to circuit C21.

Circuit C21 supplies voltage to the A/C low pressure switch. When the A/C low pressure switch closes, circuit C20 provides battery voltage to the contact side of the A/C compressor clutch relay and provides the A/C select signal to the PCM. Circuit C20 is double crimped at the contact side of the relay. The C20 circuit branch from the relay supplies the A/C select input to cavity 28 of the PCM.

After receiving the A/C request signal, the PCM energizes the A/C compressor clutch relay by providing ground for the coil side of the relay on circuit C13. Circuit C13 connects to cavity 34 of the PCM.

Circuit G5 from fuse 9 in the fuse block supplies voltage to the coil side of the relay. In the START or RUN positions the ignition switch connects circuit A1 from fuse 4 in the PDC with circuit A21. Circuit A21 connects to the fuse block bus bar that powers circuit C5 through fuse 9.

When the PCM energizes the A/C compressor clutch relay, the relay switches from its normally grounded position to connect circuit C20 to circuit C3. Circuit C3 supplies voltage to the case grounded A/C compressor clutch.

### *HELPFUL INFORMATION*

- Circuit G5 is double crimped at the coil side of the A/C compressor clutch relay. The G5 branch from the relay continues to the back-up lamp switch.
- Circuit Z1 provides ground for the A/C compressor clutch relay when the relay is in its normally grounded position.

## A/C-HEATER BLOWER MOTOR

When the ignition switch is in the RUN position it connects circuit A1 from fuse 4 in the Power Distribution Center (PDC) to circuit A22. Circuit A22 supplies battery voltage to fuse 12 in the fuse block. Fuse 12 powers circuit C1.

Circuit C1 supplies battery voltage to the A/C blower switch. In the LOW position, the A/C blower switch supplies voltage to the low speed brush of the blower motor. In the MEDIUM position, the switch supplies voltage to the medium speed bush of the blower motor. In the HIGH position, the switch supplies voltage to the high speed brush of the blower motor.

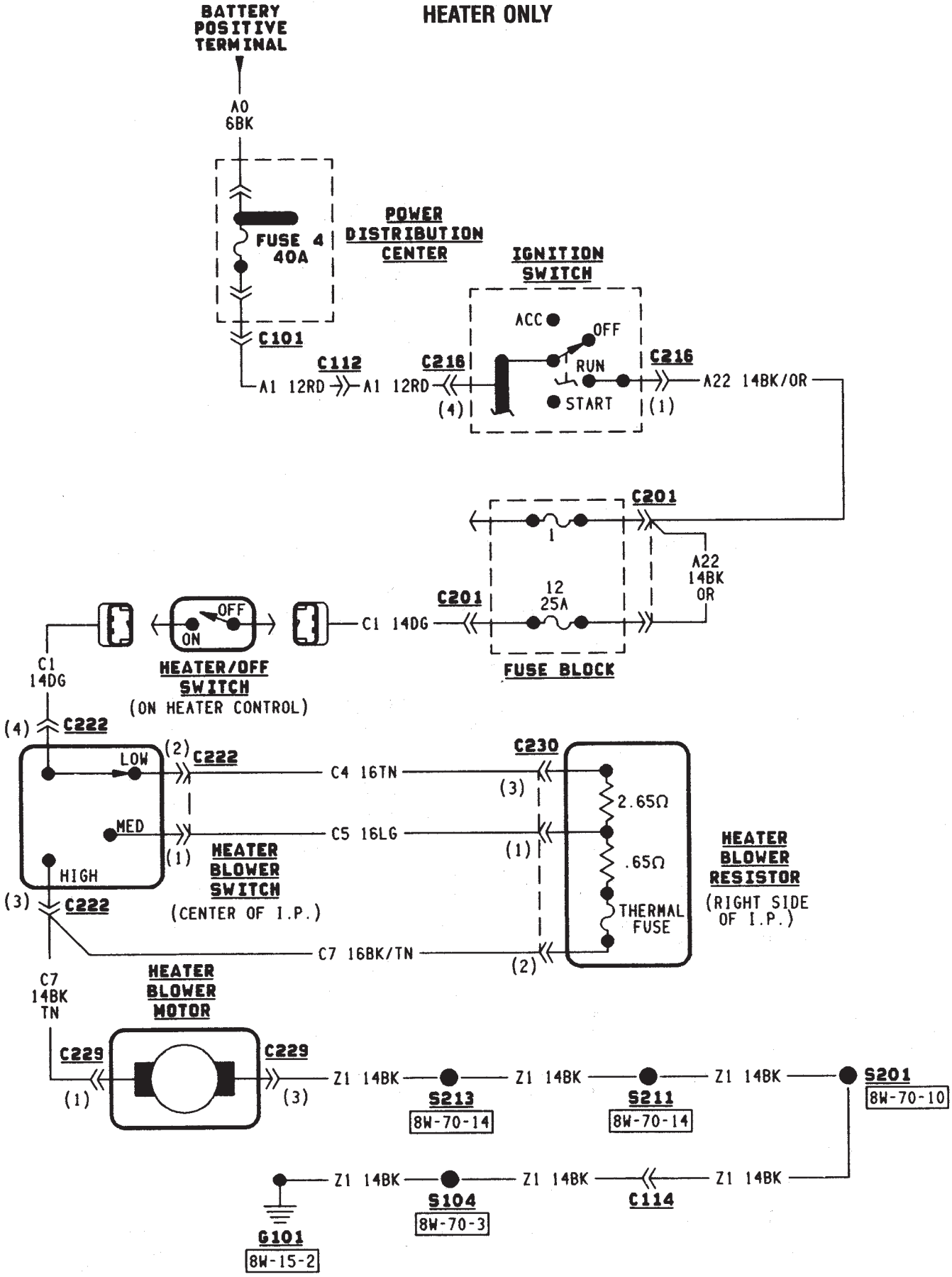
The blower motor has a field jumper. The ground circuit for the blower motor connects to the cigar lighter. Circuit Z1 provides ground for the blower motor and the cigar lighter.

### *HELPFUL INFORMATION*

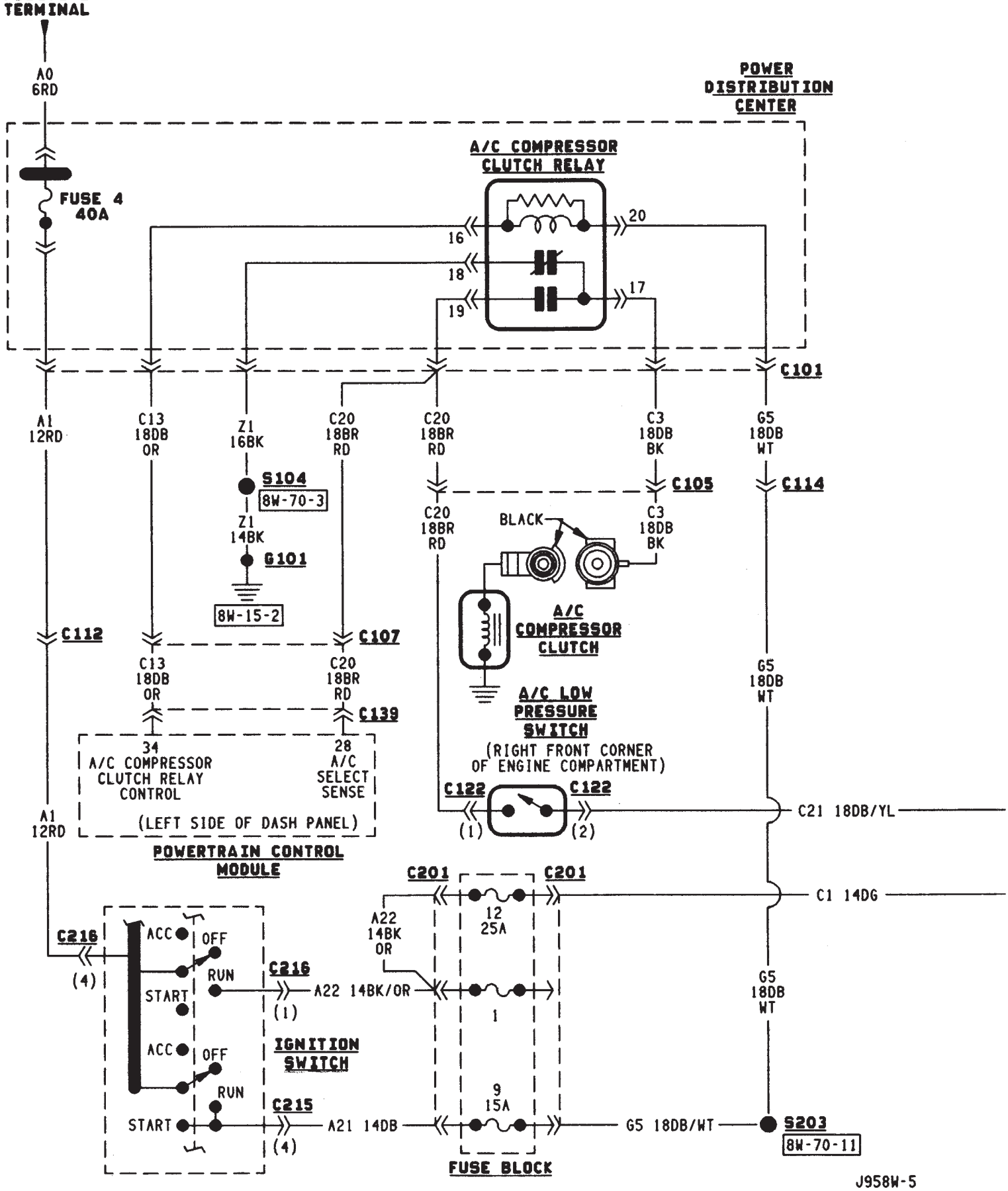
- Check fuse 4 in the PDC.
- Check fuse 12 in the fuse block.

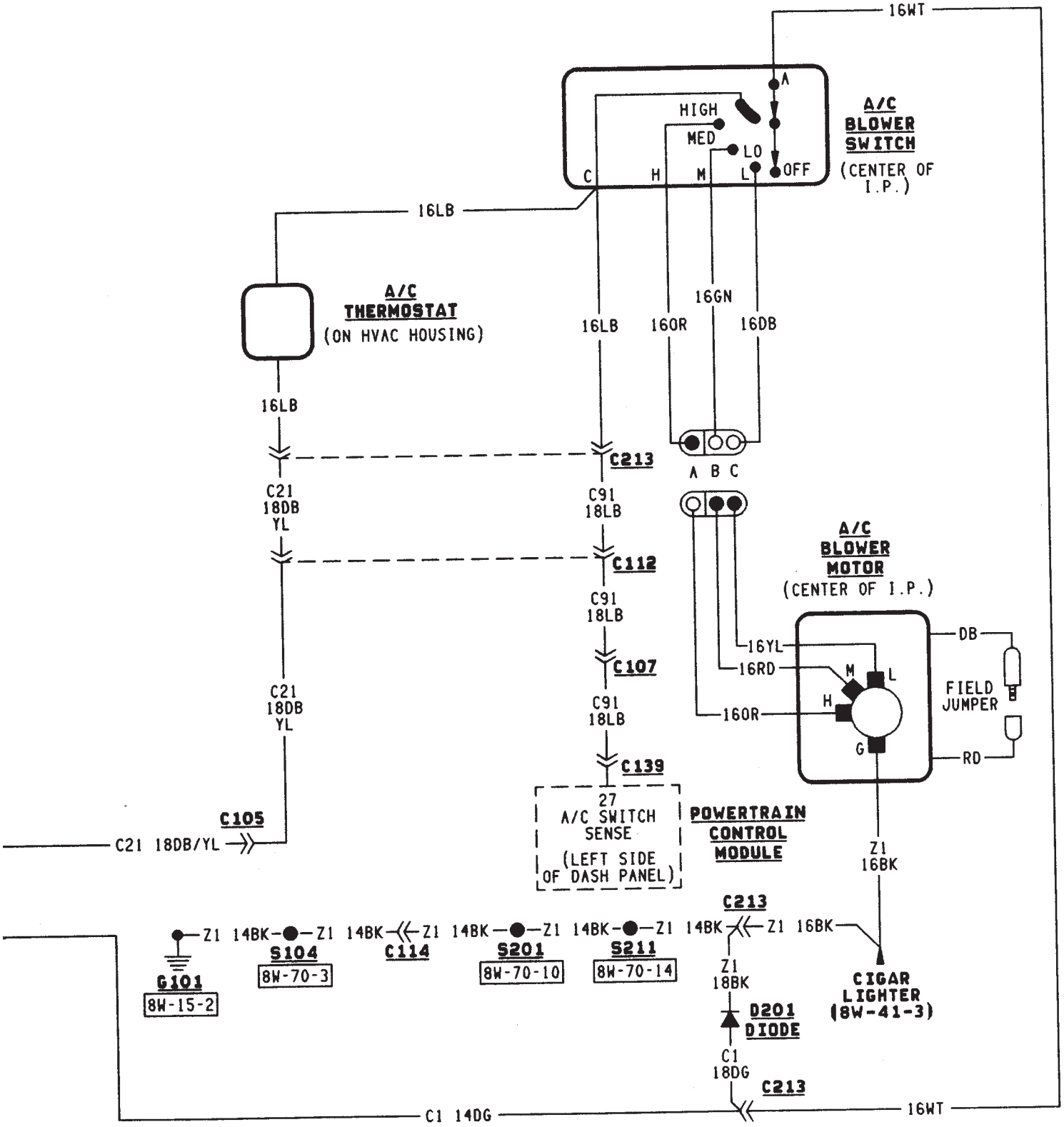
## DIAGRAM INDEX

## HEATER ONLY

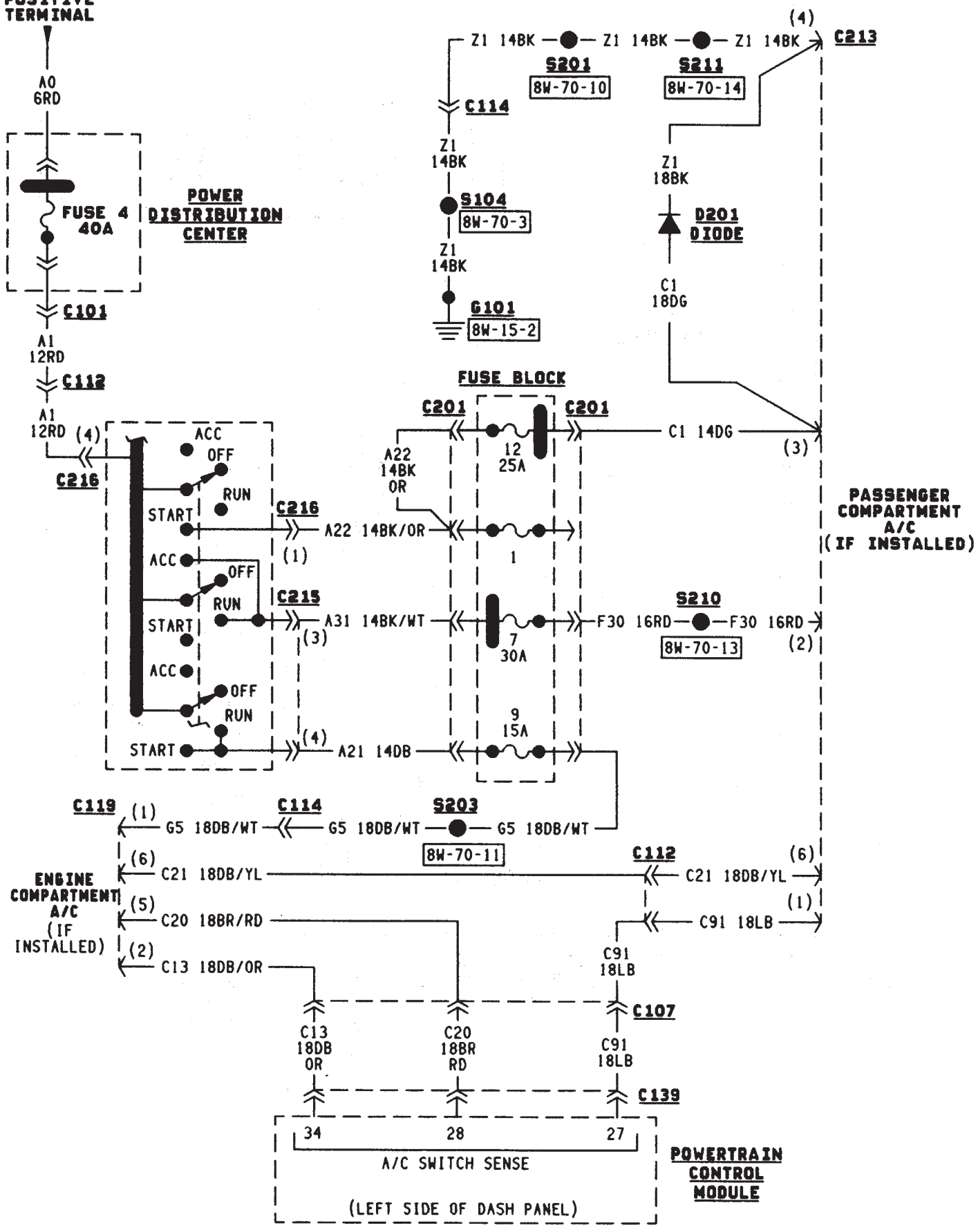



J958W-5


BATTERY POSITIVE TERMINAL
A0 6RD
POWER DISTRIBUTION CENTER
A/C COMPRESSOR CLUTCH RELAY
FUSE 4 40A
16
18
19
20
17
C101
A1 12RD
C13 18DB OR
Z1 16BK
C20 18BR RD
C20 18BR RD
C3 18DB BK
G5 18DB WT
S104
8W-70-3
C105
C114
Z1 14BK
G101
8W-15-2
C20 18BR RD
C3 18DB BK
BLACK
A/C COMPRESSOR CLUTCH
C112
C107
C13 18DB OR
C20 18BR RD
C139
A/C LOW PRESSURE SWITCH
(RIGHT FRONT CORNER OF ENGINE COMPARTMENT)
34 A/C COMPRESSOR CLUTCH RELAY CONTROL
28 A/C SELECT SENSE
(LEFT SIDE OF DASH PANEL)
C122
C122
(1)
(2)
C21 18DB/YL
A1 12RD
POWERTRAIN CONTROL MODULE
C201
C201
C1 14DG
A22 14BK OR
12 25A
C216
ACC
OFF
RUN
START
C216
(4)
A22 14BK/OR
(1)
1
G5 18DB WT
IGNITION SWITCH
ACC
OFF
RUN
START
C215
9 15A
A21 14DB
G5 18DB/WT
S203
8W-70-11
(4)
FUSE BLOCK
J958W-5


16WT
A
HIGH
MED
LO
OFF
C
H
M
L
A/C BLOWER SWITCH
(CENTER OF I.P.)
16LB
A/C THERMOSTAT
(ON HVAC HOUSING)
16LB
16GN
16OR
16DB
16LB
C213
A B C
C21 18DB YL
C91 18LB
C112
A/C BLOWER MOTOR
(CENTER OF I.P.)
C91 18LB
C107
16YL
16RD
16OR
M
L
H
G
DB
FIELD JUMPER
RD
C21 18DB YL
C91 18LB
C139
C105
C21 18DB/YL
27
A/C SWITCH SENSE
(LEFT SIDE OF DASH PANEL)
POWERTRAIN CONTROL MODULE
Z1 16BK
C213
Z1 14BK
Z1 14BK
Z1 14BK
Z1 14BK
Z1 14BK
Z1 16BK
G101
8W-15-2
S104
8W-70-3
C114
S201
8W-70-10
S211
8W-70-14
Z1 18BK
CIGAR LIGHTER (8W-41-3)
D201 DIODE
C1 18DG
C213
C1 14DG
16WT

## PROVISIONS FOR A/C 2.5L ENGINE

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# INTERIOR LIGHTING

## INDEX



## GENERAL INFORMATION

Circuit M1 supplies power to the underhood lamp, dome lamp, right courtesy lamp and left courtesy lamp. Fuse 12 in the Power Distribution Center (PDC) protects circuit M1. Circuit A4 from fuse 8 in the PDC supplies voltage to fuse 12 and circuit M1. Fuse 12 is referred to as the Ignition Off Draw (IOD) fuse.

## COURTESY LAMPS AND DOME LAMPS

Circuit M1 supplies battery voltage to the dome lamps and the right and left courtesy lamps. Circuit M2 provides ground for the lamps through either the case grounded door jamb switches or through the dimmer switch to circuit Z1.

In the ON position, the dimmer switch connects circuit M2 to ground on circuit Z1. When a door opens, the case grounded door jamb switch closes and provides ground for the lamps on circuit M2.

### *HELPFUL INFORMATION*

- Circuit M1 also supplies voltage for radio memory, underhood lamp and the ABS data link connector.

## UNDERHOOD LAMP

Circuit M1 supplies battery voltage for the underhood lamp. A mercury switch in series after the lamp connects the lamp to ground on circuit Z1. When the hood is raised, mercury inside the switch moves to a position where it connects circuit M1 to circuit Z1, illuminating the lamp. The underhood lamp is wired in parallel with other components on circuit M1.

## ACCESSORY LAMP AND HEATER CONTROL PANEL LAMP

Circuit E1 from the dimmer switch supplies battery voltage to fuse 10 in the fuse block when the dimmer switch is in the LOW or ON position. Fuse 10 protects circuit E2 which supplies power to the heater control panel lamp and the accessory lamp. Circuit Z1 provides ground for each lamp.

## TRANSMISSION RANGE LAMP

Circuit E1 from the dimmer switch supplies battery voltage to fuse 10 in the fuse block when the dimmer switch is in the LOW or ON positions. Fuse 10 protects circuit E2 which supplies power to the transmission range lamp. The lamp is case grounded.

## COMBINATION BUZZER

The combination buzzer module sounds an audible warning tone. The tone sounds for seat belt warning and when the key is in the ignition switch while the drivers door is open. The tone also sounds when the ignition switch is in the ON position while the drivers side seat belt is not buckled. Refer to Group 8U for buzzer operation.

Fuses 3 and 9 in the fuse block protect the combination buzzer. Fuse 3 powers circuit F32 which connects to the buzzer. Circuit A6 from fuse 3 in the Power Distribution Center (PDC) supplies power to the fuse block for circuit F32.

Circuit G5 from fuse 9 also provides voltage to the combination buzzer when the ignition switch is in the START or RUN position. The ignition switch connects circuit A1 from fuse 4 in the PDC to circuit A21. Circuit A21 connects to the fuse block.

When the key-in switch closes, it connects circuit G26 to circuit G16. Circuit G16 connects to the drivers side door jamb switch. When the drivers side door is open and the key-in switch is closed, the case grounded door jamb switch closes and supplies ground for the buzzer. Circuit G26 from the combination buzzer connects to the key-in switch.

Circuit G13 form the buzzer powers the seat belt warning lamp in the instrument cluster. Circuit Z1 at the instrument cluster provides ground for the lamp.

Circuit G10 from the buzzer connects to the seat belt switch. When the seat belt is unlatched, the seat belt switch closes providing ground on circuit Z1.

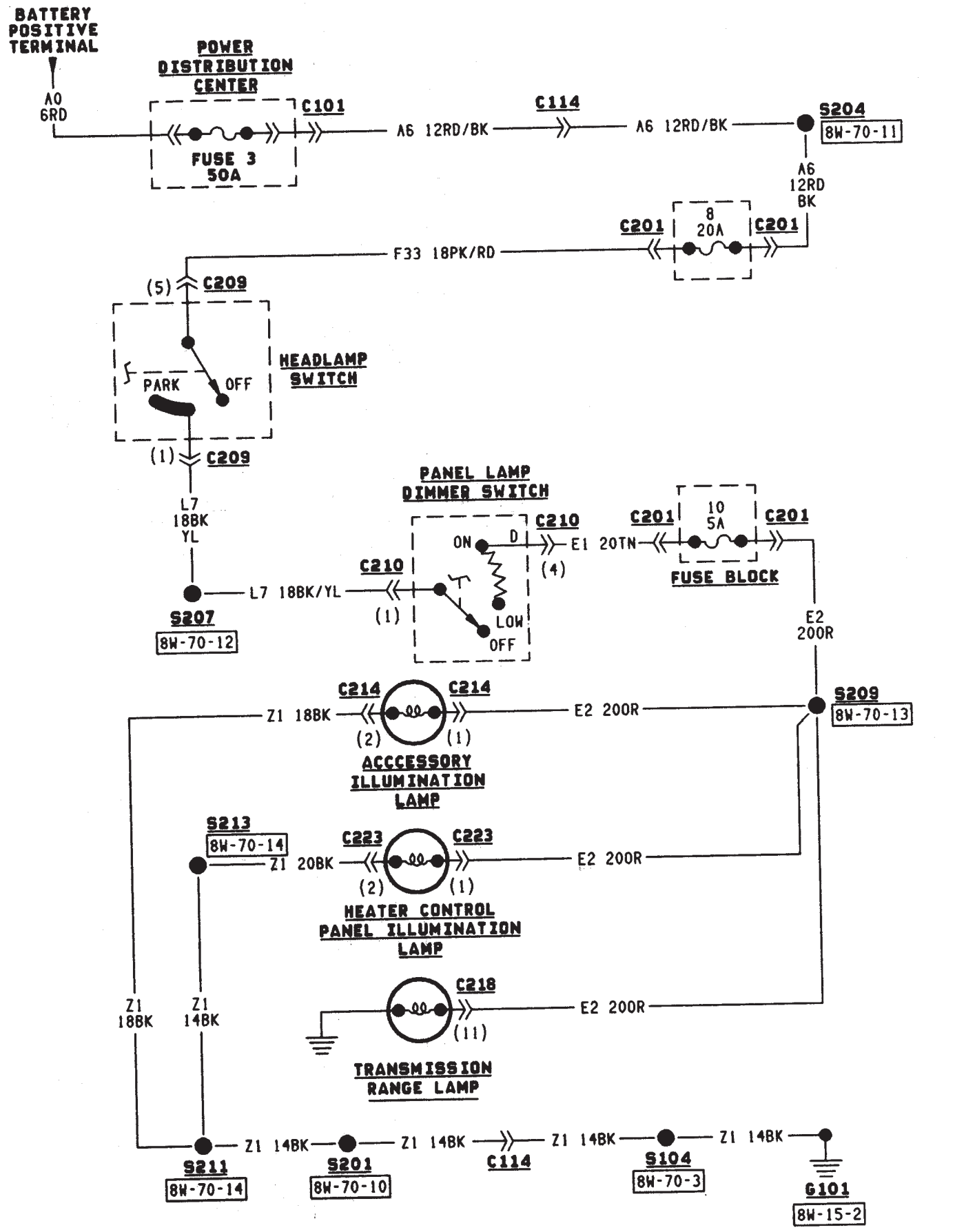
Circuit Z1 also grounds the combination buzzer module.

### *HELPFUL INFORMATION*

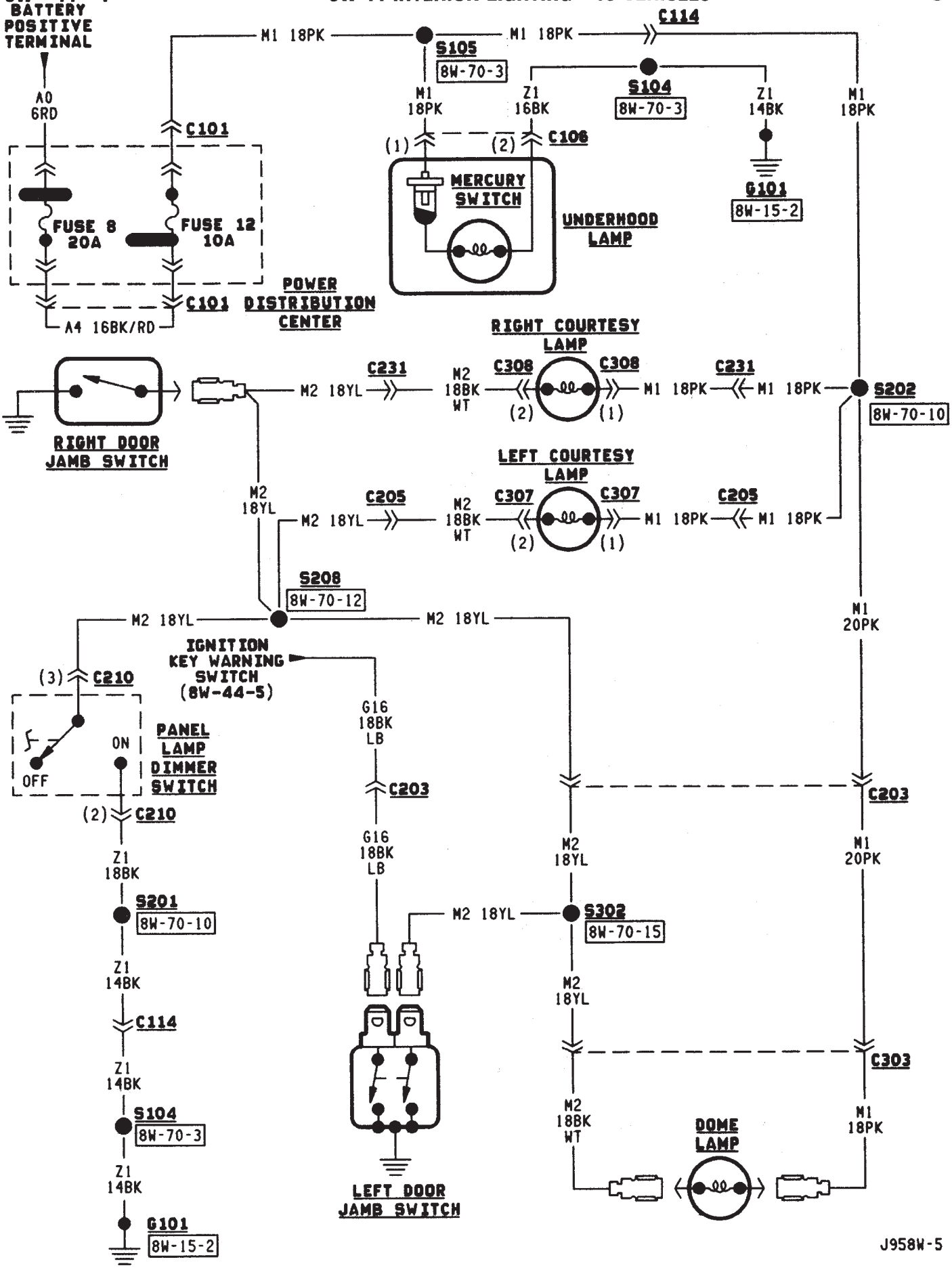
- Circuit F32 also powers the stop lamp switch.
- Circuit G5 also provides power for the instrument cluster gauges and warning lamps, heated rear window relay and A/C compressor clutch relay. On Cana-

dian vehicles, circuit G5 also powers the Daytime Running Lamps (DRL) module.

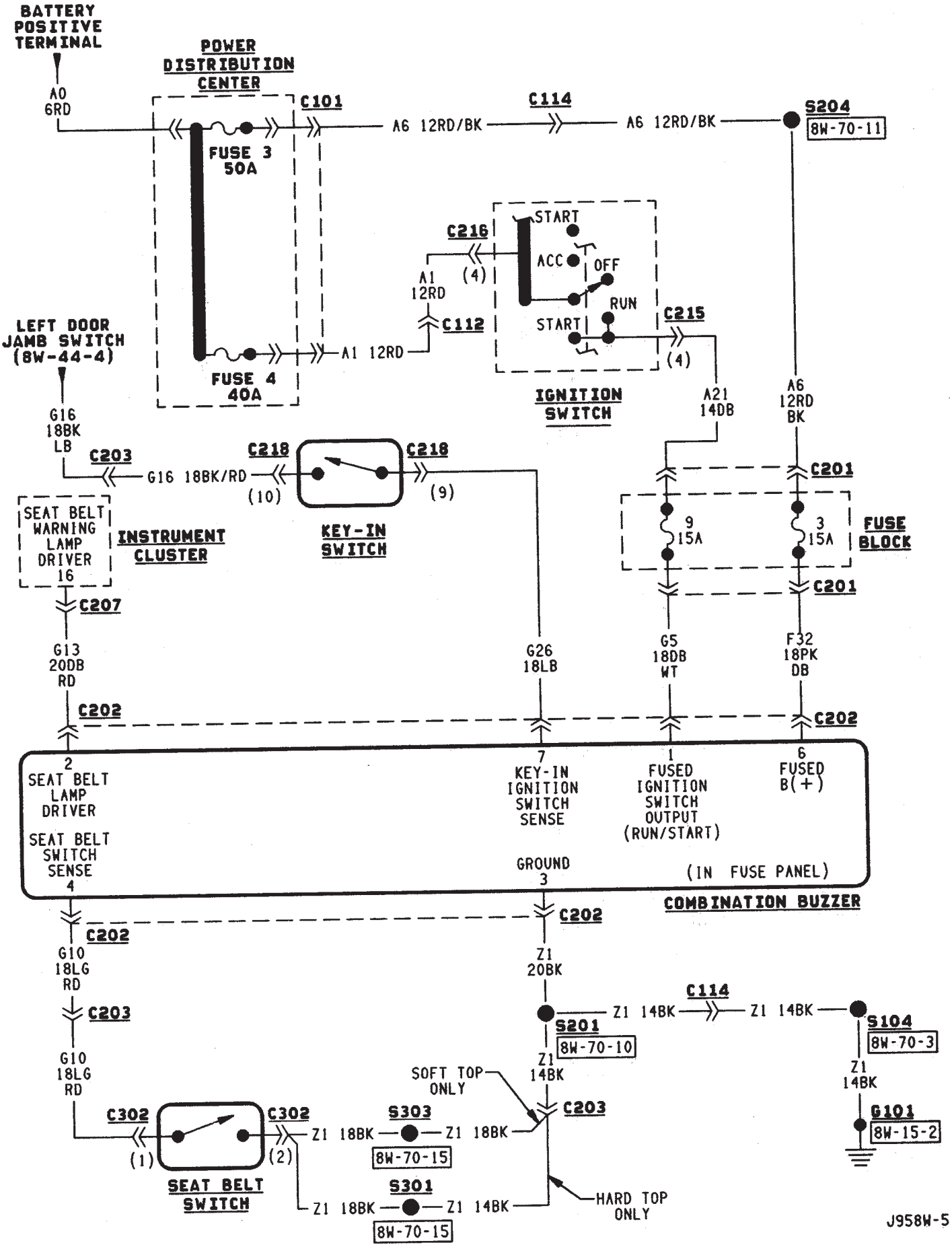
## DIAGRAM INDEX


BATTERY POSITIVE TERMINAL
A0 6RD
POWER DISTRIBUTION CENTER
C101
FUSE 3 50A
A6 12RD/BK
C114
A6 12RD/BK
S204
8W-70-11
A6 12RD BK
C201
8 20A
C201
F33 18PK/RD
(5) C209
HEADLAMP SWITCH
PARK
OFF
(1) C209
L7 18BK YL
S207
8W-70-12
L7 18BK/YL
PANEL LAMP DIMMER SWITCH
C210
ON
D
E1 20TN
(4)
C210
(1)
LOW
OFF
C201
10 5A
C201
FUSE BLOCK
E2 200R
C214
C214
Z1 18BK
E2 200R
(2)
(1)
ACCCESSORY ILLUMINATION LAMP
S209
8W-70-13
S213
8W-70-14
Z1 20BK
C223
C223
E2 200R
(2)
(1)
HEATER CONTROL PANEL ILLUMINATION LAMP
Z1 18BK
Z1 14BK
C218
E2 200R
(11)
TRANSMISSION RANGE LAMP
Z1 14BK
Z1 14BK
Z1 14BK
Z1 14BK
S211
8W-70-14
S201
8W-70-10
C114
S104
8W-70-3
G101
8W-15-2

J958W-5


BATTERY POSITIVE TERMINAL
A0 6RD
M1 18PK
S105
8W-70-3
C114
S104
8W-70-3
Z1 16BK
Z1 14BK
G101
8W-15-2
C101
FUSE 8 20A
FUSE 12 10A
POWER DISTRIBUTION CENTER
A4 16BK/RD
C106
MERCURY SWITCH
UNDERHOOD LAMP
RIGHT COURTESY LAMP
C231
M2 18YL
M2 18BK WT
C308
M1 18PK
S202
8W-70-10
RIGHT DOOR JAMB SWITCH
LEFT COURTESY LAMP
C205
C307
S208
8W-70-12
M1 20PK
IGNITION KEY WARNING SWITCH (8W-44-5)
C210
PANEL LAMP DIMMER SWITCH
ON
OFF
G16 18BK LB
C203
S201
8W-70-10
S302
8W-70-15
C303
DOME LAMP
LEFT DOOR JAMB SWITCH

J958W-5


BATTERY POSITIVE TERMINAL
A0 6RD
POWER DISTRIBUTION CENTER
C101
FUSE 3 50A
FUSE 4 40A
A6 12RD/BK
C114
A6 12RD/BK
S204
8W-70-11
C216
A1 12RD
(4)
C112
A1 12RD
START
ACC
OFF
RUN
START
C215
(4)
IGNITION SWITCH
A21 14DB
A6 12RD BK
LEFT DOOR JAMB SWITCH (8W-44-4)
G16 18BK LB
C203
G16 18BK/RD
C218
(10)
C218
(9)
KEY-IN SWITCH
C201
SEAT BELT WARNING LAMP DRIVER 16
INSTRUMENT CLUSTER
9 15A
3 15A
FUSE BLOCK
C201
C207
G13 20DB RD
G26 18LB
G5 18DB WT
F32 18PK DB
C202
C202
2 SEAT BELT LAMP DRIVER
SEAT BELT SWITCH SENSE 4
7 KEY-IN IGNITION SWITCH SENSE
1 FUSED IGNITION SWITCH OUTPUT (RUN/START)
6 FUSED B(+)
GROUND 3
(IN FUSE PANEL)
COMBINATION BUZZER
C202
C202
G10 18LG RD
Z1 20BK
C114
C203
Z1 14BK
C114
Z1 14BK
S104
8W-70-3
S201
8W-70-10
G10 18LG RD
Z1 14BK
Z1 14BK
SOFT TOP ONLY
C302
C302
(1)
(2)
SEAT BELT SWITCH
S303
Z1 18BK
Z1 18BK
8W-70-15
C203
G101
8W-15-2
S301
Z1 18BK
Z1 14BK
8W-70-15
HARD TOP ONLY
J958W-5

# RADIO

## RADIO MEMORY

Circuit M1 from the Ignition Off Draw (IOD) fuse in the Power Distribution Center (PDC) supplies power for the radio memory. The IOD fuse is removed during vehicle shipping to prevent excessive battery draw.

Circuit A4 from fuse 8 in the PDC supplies voltage to the IOD fuse in cavity 12. Circuit A4 is HOT at all times.

## RADIO ILLUMINATION

Circuit E2 supplies battery voltage to the radio illumination lamps when the headlamps or parking lamps are ON and the dimmer switch is in the LOW or ON positions.

Circuit E22 supplies battery voltage for the radio clock and station frequency display. Circuit E22 originates at the radio illumination relay and is fed by either circuit F30 or circuit E2 depending on the switch position inside the relay.

When the headlamps and parking lamps are OFF, the radio illumination relay is in its normal At-Rest position. In the At Rest position, the relay connects circuit F30 from fuse 7 in the fuse block to circuit E22.

When the headlamps or parking lamps are ON, circuit L7 from the headlamp switch supplies battery voltage to the coil side of the radio illumination relay. Circuit Z1 provides ground for the coil side of the relay.

When voltage is present on circuit L7, the radio illumination relay switches from its at rest position to connect circuit E2 to circuit E22.

### *HELPFUL INFORMATION*

- Circuit A31 supplies voltage to the fuse block for circuit F30 when the ignition switch is in the ACCESSORY or RUN positions. In these positions the ignition switch connects circuit A1 from fuse 4 in the PDC to circuit A31. Circuit A31 powers a bus bar in the fuse block that feeds circuit F30 through fuse 7.
- Circuit A6 from fuse 3 in the PDC supplies power to the fuse block for fuse 8. Fuse 8 protects circuit F33. When the headlamps or parking lamps are ON, the headlamp switch connects circuit F33 to circuit L7. When the adjustable dimmer switch is in the LOW to ON positions, it connects circuit L7 to circuit E1. Circuit E1 powers fuse 10 in the fuse block. Fuse 10 in the fuse block protects circuit E2.

## SPEAKERS

Circuit X53 feeds the speaker on the left side of the instrument panel. Circuit X55 is the return from the speaker to the radio.

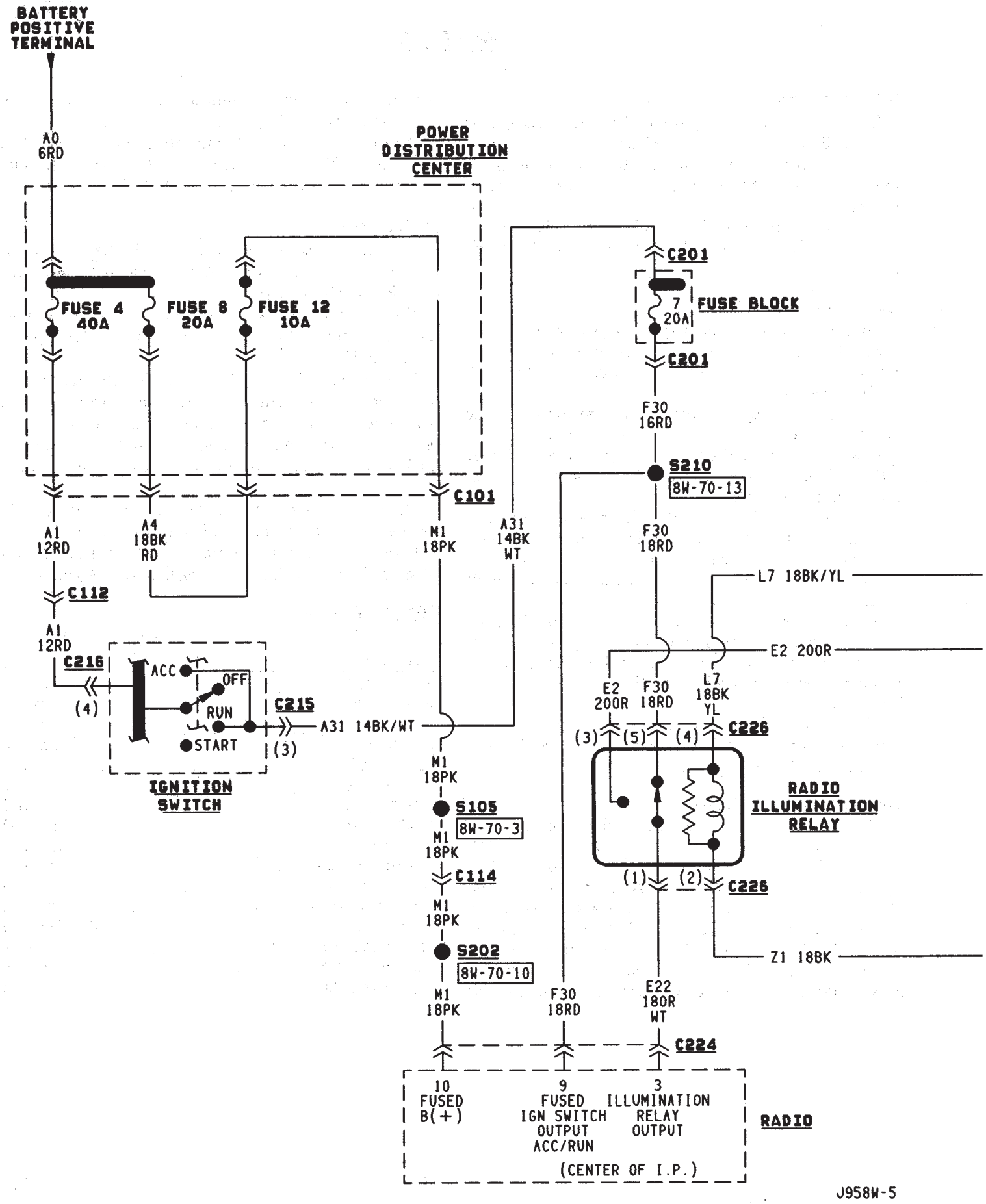
Circuit X54 feeds the right instrument panel speaker. Circuit X56 is the return from the speaker to the radio.

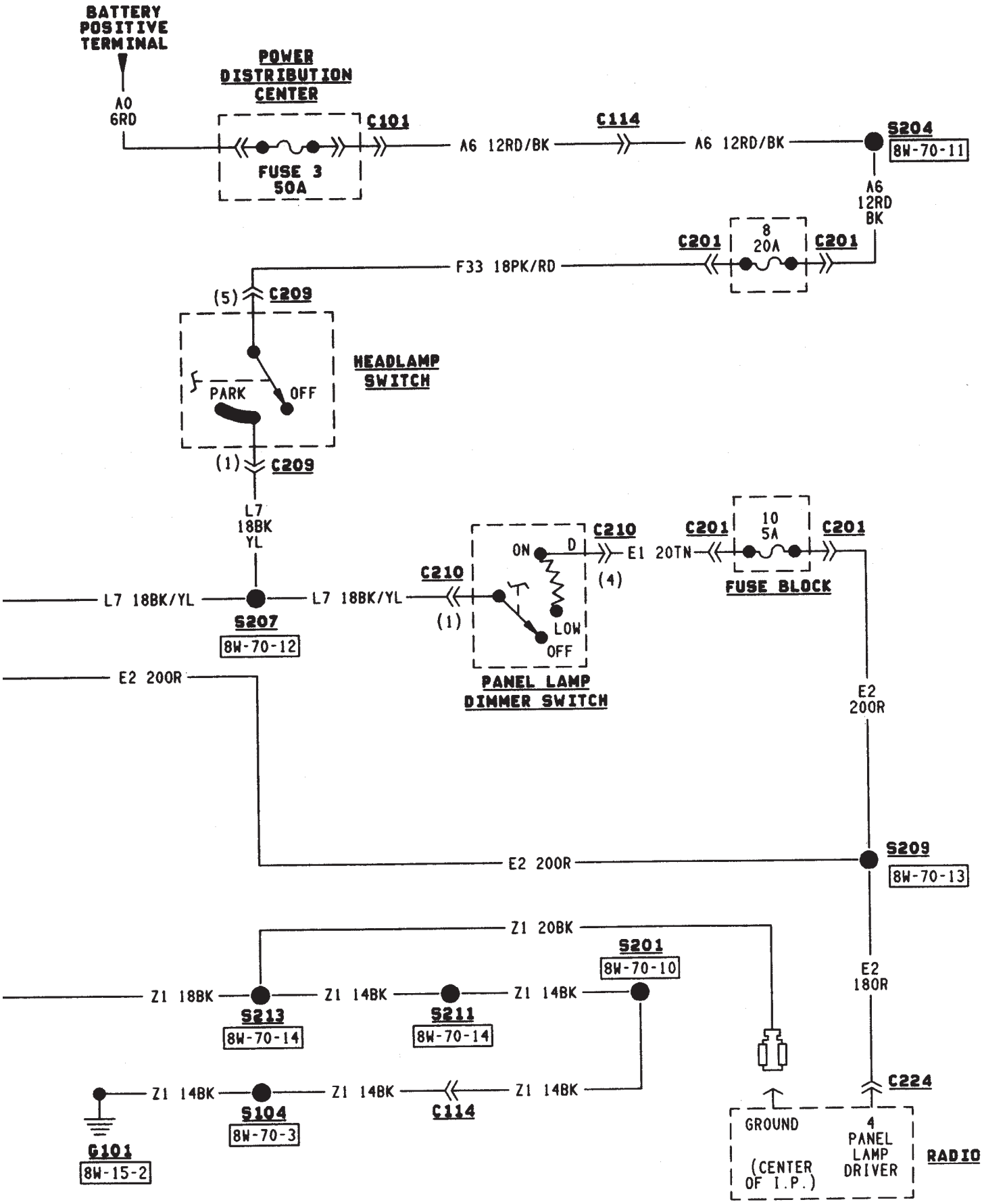
The speaker feed and return circuits are double crimped at the front speakers and continue to the connector for the rear speakers. If the vehicle is not equipped with the rear speaker sound bar, a jumper is installed in the harness to simulate rear speaker load.

Circuit X51 feeds the left rear speaker. Circuit X57 is the return from the speaker to the radio.

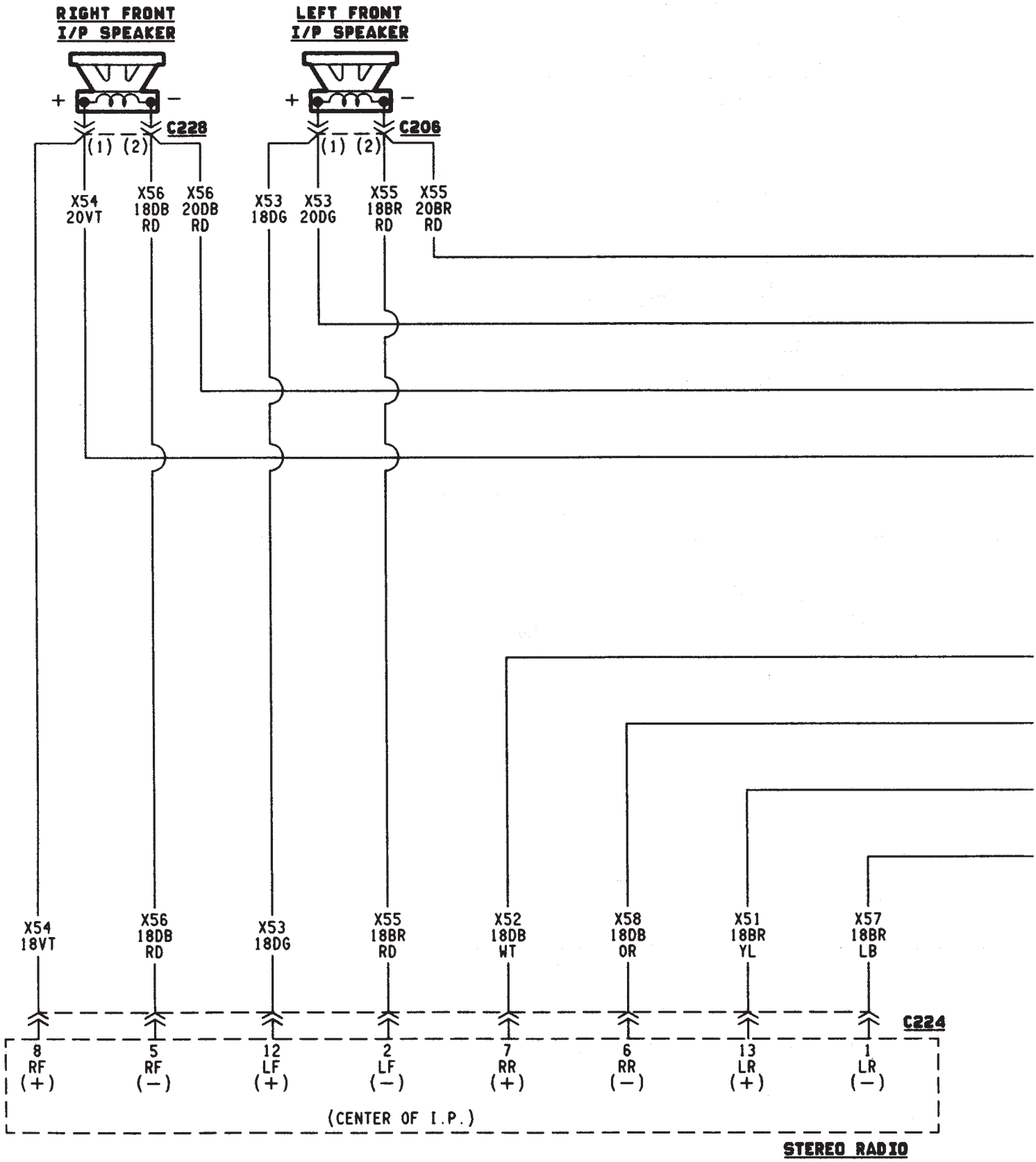
Circuit X52 feeds the right rear speaker. Circuit X58 is the return from the speaker to the radio.

## DIAGRAM INDEX

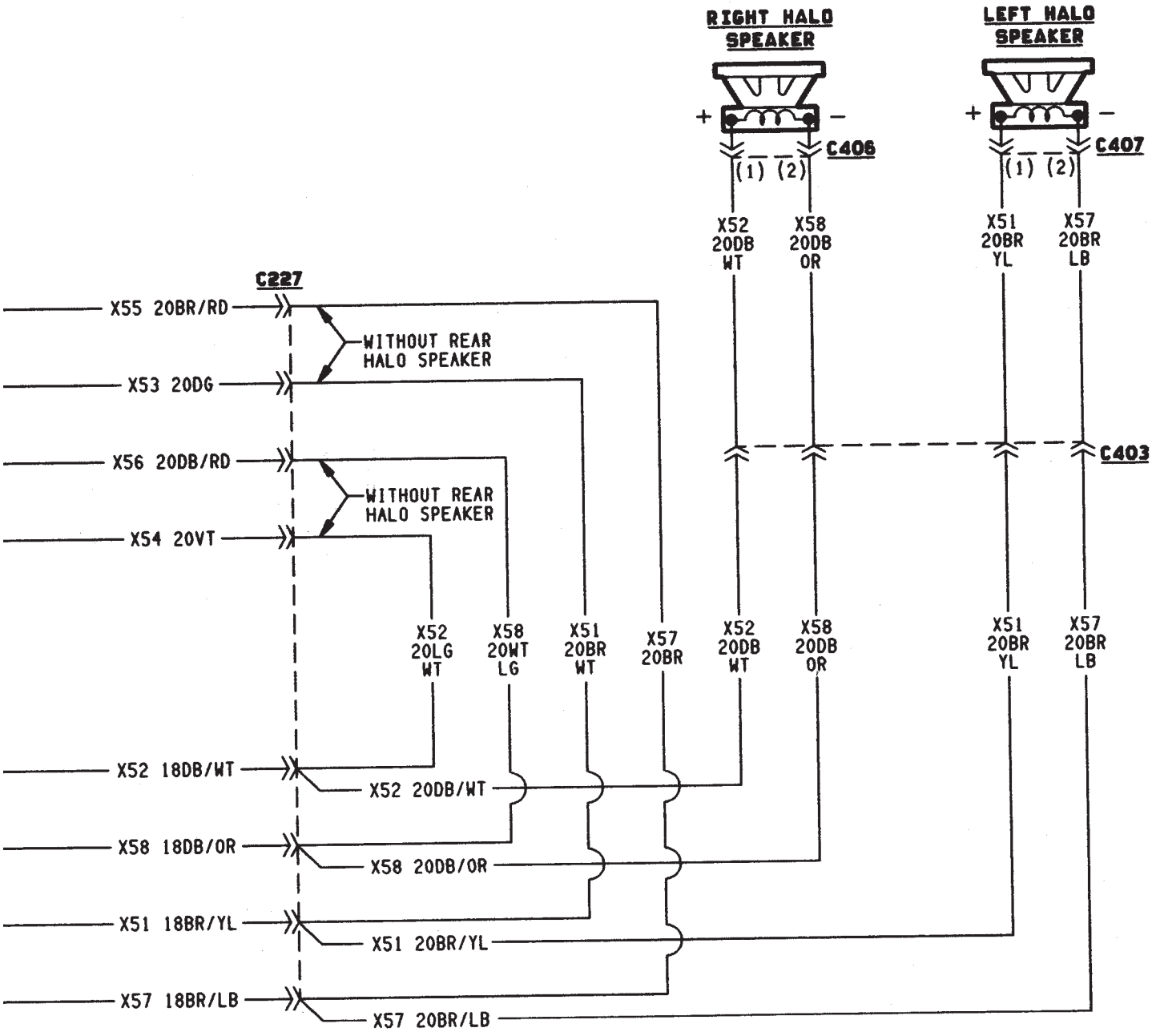

BATTERY POSITIVE TERMINAL
A0 6RD
POWER DISTRIBUTION CENTER
FUSE 4 40A
FUSE 8 20A
FUSE 12 10A
C101
A1 12RD
A4 18BK RD
M1 18PK
A31 14BK WT
C112
A1 12RD
C216
(4)
ACC
OFF
RUN
START
C215
(3)
A31 14BK/WT
IGNITION SWITCH
M1 18PK
S105
8W-70-3
M1 18PK
C114
M1 18PK
S202
8W-70-10
M1 18PK
C201
7 20A
FUSE BLOCK
C201
F30 16RD
S210
8W-70-13
F30 18RD
L7 18BK/YL
E2 200R
E2 200R
F30 18RD
L7 18BK YL
(3)
(5)
(4)
C226
RADIO ILLUMINATION RELAY
(1)
(2)
C226
Z1 18BK
F30 18RD
E22 180R WT
C224
10 FUSED B(+)
9 FUSED IGN SWITCH OUTPUT ACC/RUN
3 ILLUMINATION RELAY OUTPUT
(CENTER OF I.P.)
RADIO
J958W-5


BATTERY POSITIVE TERMINAL
A0 6RD
POWER DISTRIBUTION CENTER
C101
FUSE 3 50A
A6 12RD/BK
C114
A6 12RD/BK
S204
8W-70-11
A6 12RD BK
C201
8 20A
C201
F33 18PK/RD
(5)
C209
HEADLAMP SWITCH
PARK
OFF
(1)
C209
L7 18BK YL
L7 18BK/YL
S207
8W-70-12
L7 18BK/YL
C210
ON
D
E1 20TN
(4)
C210
(1)
LOW
OFF
PANEL LAMP DIMMER SWITCH
C201
10 5A
C201
FUSE BLOCK
E2 200R
E2 200R
E2 200R
S209
8W-70-13
Z1 20BK
S201
8W-70-10
Z1 18BK
Z1 14BK
Z1 14BK
S213
8W-70-14
S211
8W-70-14
E2 180R
Z1 14BK
Z1 14BK
Z1 14BK
S104
8W-70-3
C114
C224
G101
8W-15-2
GROUND
(CENTER OF I.P.)
4
PANEL LAMP DRIVER
RADIO

J958W-5


RIGHT FRONT
I/P SPEAKER
LEFT FRONT
I/P SPEAKER
+
−
C228
(1) (2)
C206
X54
20VT
X56
18DB
RD
X56
20DB
RD
X53
18DG
X53
20DG
X55
18BR
RD
X55
20BR
RD
X54
18VT
X56
18DB
RD
X53
18DG
X55
18BR
RD
X52
18DB
WT
X58
18DB
OR
X51
18BR
YL
X57
18BR
LB
C224
8
RF
(+)
5
RF
(−)
12
LF
(+)
2
LF
(−)
7
RR
(+)
6
RR
(−)
13
LR
(+)
1
LR
(−)
(CENTER OF I.P.)
STEREO RADIO

J958W-5


RIGHT HALO SPEAKER
LEFT HALO SPEAKER
+
−
C406
C407
(1) (2)
X52 20DB WT
X58 20DB OR
X51 20BR YL
X57 20BR LB
C227
C403
X55 20BR/RD
X53 20DG
X56 20DB/RD
X54 20VT
WITHOUT REAR HALO SPEAKER
WITHOUT REAR HALO SPEAKER
X52 20LG WT
X58 20WT LG
X51 20BR WT
X57 20BR
X52 18DB/WT
X58 18DB/OR
X51 18BR/YL
X57 18BR/LB
X52 20DB/WT
X58 20DB/OR
X51 20BR/YL
X57 20BR/LB

# HEATED REAR WINDOW

## HEATED REAR WINDOW

The heated rear window relay supplies power to heated rear window grid. When the operator presses the heated rear window switch, the contacts inside the switch momentarily close and circuit C16 connects the relay timer to ground on circuit Z1. This causes the relay to change state and complete a circuit to energize the coil side of the relay and start the relay timer. Circuit G5 from fuse 9 in the fuse block supplies voltage to the coil side of the relay. Circuit Z1 provides ground for the relay.

When the heated rear window relay energizes, the contacts inside the relay close and connect circuit F32 to circuit C15. Fuse 3 in the fuse block protects circuit F32.

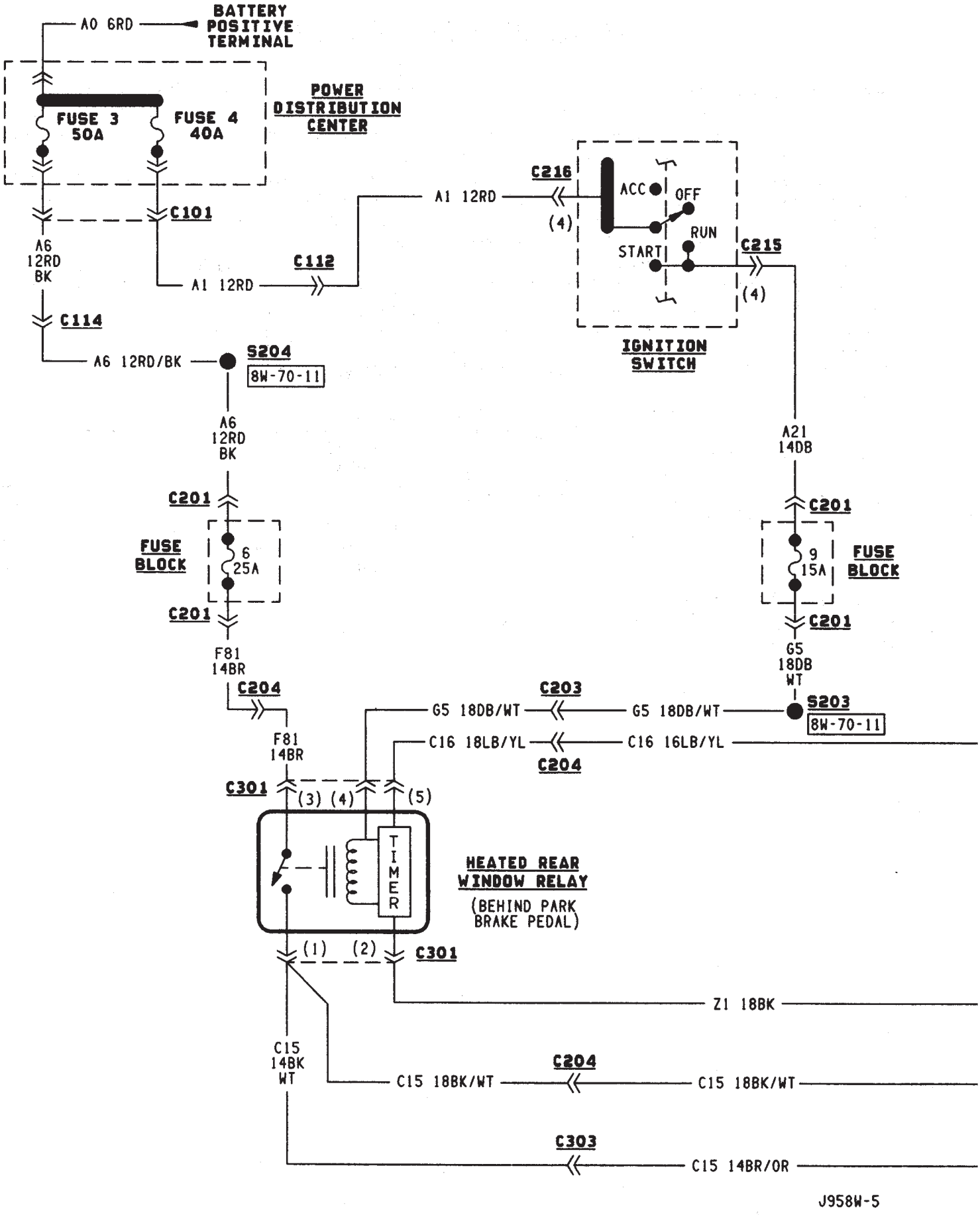
Circuit C15 is double crimped at the heated rear window relay. One branch of circuit C15 powers the indicator lamp in the heated rear window switch. The other branch of circuit C15 powers the heated rear window grid. Circuit Z1 provides ground for the heated rear window grid.

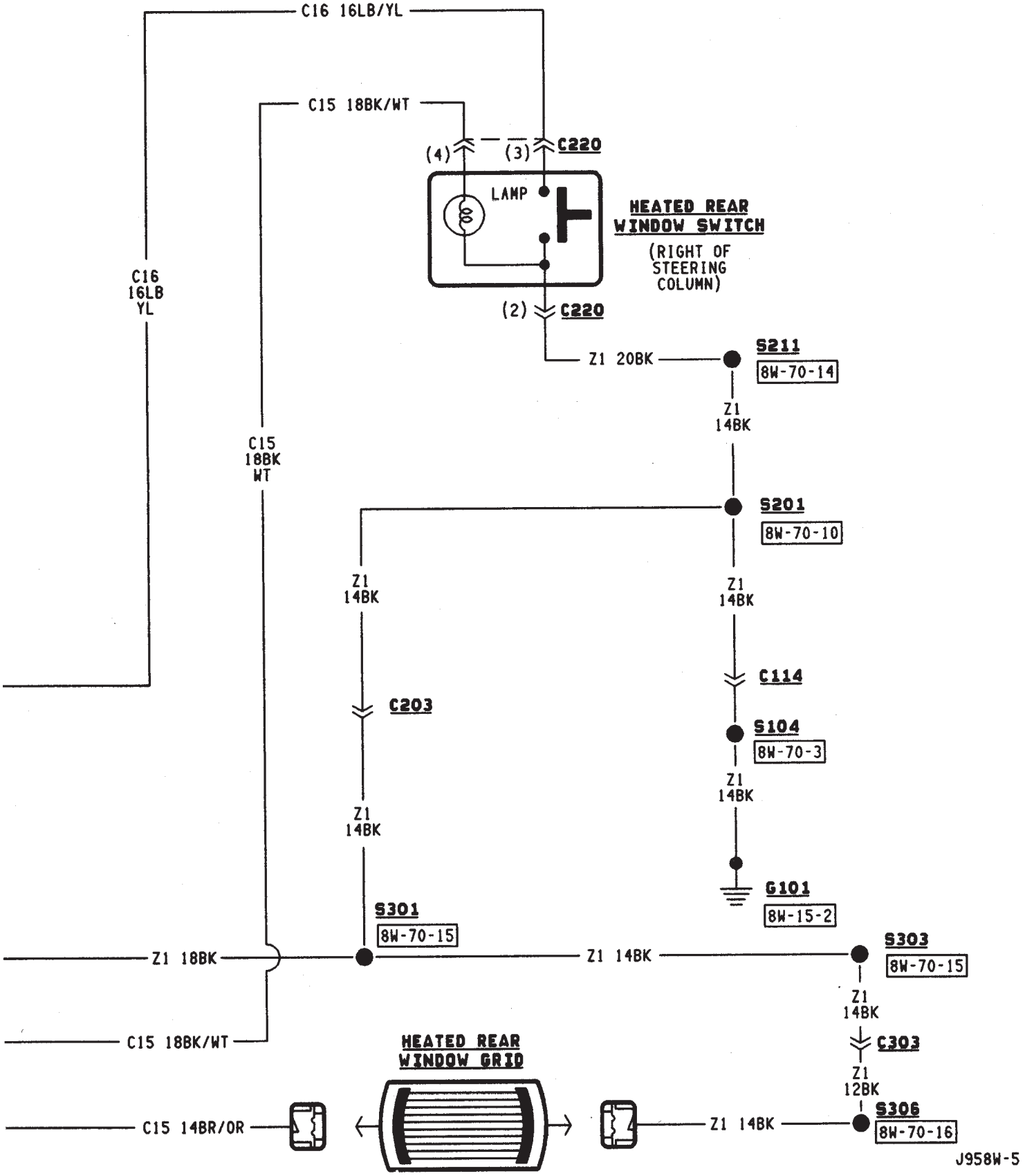
At the rear window grid, circuits C15 and Z1 pass through lift gate support struts.

*HELPFUL INFORMATION*

- When the ignition switch is in the START or RUN positions, it connects circuit A1 from fuse 4 in the Power Distribution Center (PDC) to circuit A21. Circuit A21 supplies battery voltage to the fuse block bus bar that powers circuit G5 through the fuse in cavity 9.
- Circuit A6 from PDC fuse 3 supplies battery voltage to the fuse block bus bar that feeds fuse 3 and circuit F32. Check fuse 3 in the PDC and fuse 3 in the fuse block.
- Check for broken grid lines on the window.
- Check for a broken bus bar or disconnected leads at the rear window.
- Check for a good ground.

## DIAGRAM INDEX


A0 6RD
BATTERY POSITIVE TERMINAL
FUSE 3 50A
FUSE 4 40A
POWER DISTRIBUTION CENTER
C101
A6 12RD BK
C114
A6 12RD/BK
S204
8W-70-11
C112
A1 12RD
C216
(4)
ACC
OFF
RUN
START
C215
(4)
IGNITION SWITCH
A6 12RD BK
C201
FUSE BLOCK
6 25A
C201
F81 14BR
C204
A21 14DB
C201
9 15A
FUSE BLOCK
C201
G5 18DB WT
S203
8W-70-11
G5 18DB/WT
C203
G5 18DB/WT
C16 18LB/YL
C204
C16 16LB/YL
F81 14BR
C301
(3) (4) (5)
TIMER
HEATED REAR WINDOW RELAY
(BEHIND PARK BRAKE PEDAL)
(1) (2)
C301
Z1 18BK
C15 14BK WT
C15 18BK/WT
C204
C15 18BK/WT
C303
C15 14BR/OR
J958W-5


C16 16LB/YL
C15 18BK/WT
(4)
(3)
C220
LAMP
HEATED REAR WINDOW SWITCH
(RIGHT OF STEERING COLUMN)
C16 16LB YL
(2)
C220
Z1 20BK
S211
8W-70-14
Z1 14BK
C15 18BK WT
S201
8W-70-10
Z1 14BK
Z1 14BK
C114
C203
S104
8W-70-3
Z1 14BK
Z1 14BK
G101
8W-15-2
S301
8W-70-15
Z1 18BK
Z1 14BK
S303
8W-70-15
Z1 14BK
C15 18BK/WT
C303
HEATED REAR WINDOW GRID
Z1 12BK
C15 14BR/OR
Z1 14BK
S306
8W-70-16
J958W-5

# FRONT LIGHTING

## INDEX



## HEADLAMPS

The headlamp switch has three positions: ON, PARK (parking lamps) and OFF. Two circuits, L2 and L20, connect the headlamp switch to the headlamp dimmer/optical horn switch. The dimmer switch feeds the low and high beams of the headlamps.

### *HEADLAMP SWITCH IN OFF OR PARKING LAMP POSITION*

Circuit A3 from fuse 7 in the Power Distribution Center (PDC) supplies battery voltage to the headlamp switch. The headlamp switch has an internal circuit breaker that connects circuit A3 to circuit L20. The switch connects circuit A3 to circuit L2 when the headlamps are ON.

Circuit L20 connects to the dimmer switch. Circuit L20 powers the high beams of the head lamps on circuit L3 when the operator flashes the headlamps with the turn signal stalk.

### *HEADLAMP SWITCH IN ON POSITION*

When the headlamp switch is in the ON position, the A3 circuit from the PDC connects to circuit L2. Circuit L2 connects to circuit L4 through the dimmer switch. Circuit L4 powers the low beam of the headlamps.

When the operator selects high beam operation with the turn signal stalk, the dimmer switch connects circuit L20 to circuit L3. Circuit L3 supplies battery voltage to the high beams.

### *HEADLAMP GROUND*

Although circuit Z1 provides ground for both the right and left headlamps, it has different termination points for each. For the right headlamp, the Z1 circuit terminates at the radiator right support. For the left headlamp, the Z1 circuit terminates at the left radiator support.

### *HELPFUL INFORMATION*

- Check fuse 7 in the PDC.
- The headlamp switch has an internal circuit breaker.
- For the left front parking lamp, turn signal, side marker lamp, headlamp, and fog lamp, circuit Z1 terminates at the left radiator support.
- For the right front parking lamp, turn signal, side marker lamp, headlamp, and fog lamp, circuit Z1 terminates at the right radiator support.

## PARKING LAMPS

Circuit A6 from fuse 3 in the Power Distribution Center (PDC) connects to the fuse block bus bar that powers circuit F33. Fuse 8 in the fuse block protects circuit F33. Circuit F33 connects to the headlamp switch.

The headlamp switch has three positions: ON, PARK (parking lamps) and OFF, plus a dimmer switch. When the headlamp switch is in the PARK or ON position, the switch connects circuit F33 to circuit L7. From the headlamp switch, circuit L7 branches to power the front parking lamps, rear tail lamps, and side marker lamps. Circuit L7 also powers the park lamp relay, if equipped with fog lamps.

### *GROUND CIRCUIT*

- For the left front parking lamp, turn signal, side marker lamp, headlamp, and fog lamp, circuit Z1 terminates at the left radiator support.
- For the right front parking lamp, turn signal, side marker lamp, headlamp, and fog lamp, circuit Z1 terminates at the right radiator support.

### *HELPFUL INFORMATION*

- Check fuse 3 in the PDC.
- Check fuse 8 in the fuse block.
- Circuit L7 also feeds the radio, if equipped.

## FOG LAMPS

The fog lamps are controlled by the fog lamp switch and two relays. The fog lamps operate only when the headlamp switch is in the ON position, and the operator has selected low-beam operation. When the headlamps are in high-beam operation, the fog lamps will not operate.

When the headlamps or parking lamps are ON, circuit L7 from the headlamp switch supplies battery voltage to the coil side of the park lamp relay. When the operator presses the fog lamp switch, it provides ground for the coil side of the park lamp relay. This energizes the relay.

When the park lamp relay energizes, the relay contacts close and connect circuit F81 from fuse 6 in the fuse block to circuit L36. Circuit L36 connects to the contact side of the high beam relay. The contacts in the high beam relay are normally closed. Battery voltage flows through high beam relay to the fog lamps on circuit L39. Circuit L39 also splices to the lamp in the fog lamp switch.

Circuit L3 from the dimmer switch provides power for the high beams of the headlamps and connects to Circuit G34. Circuit G34 powers the coil side of the high beam relay. Circuit Z1 provides ground for the coil. When the operator selects high beam operation or flashes the optical horn, circuit G34 energizes the high beam relay. When energized, the normally closed contacts in the relay open, shutting off battery voltage to the fog lamps on circuit L39.

*HELPFUL INFORMATION*

- Circuit A6 from fuse 3 in the PDC supplies voltage to the fuse block for fuses in cavities 3 and 6. Fuse 6 in the fuse block protects circuit F81 which powers the contact side of the park lamp relay.
- In the high beam position, the dimmer switch connects circuit L20 from the headlamp switch to circuit L3. The headlamp switch connects circuit A3 from fuse 7 in the PDC with circuit L20. Circuits A3 and L20 are HOT at all times.

## DAYTIME RUNNING LAMP (DRL) MODULE—CANADIAN VEHICLES ONLY

On Canadian vehicles, the low-beam headlamps operate when the ignition switch is in the RUN position and the headlamp switch is OFF.

When the ignition switch is in the START or RUN positions, circuit A1 from fuse 4 in the Power Distribution Center (PDC) connects to circuit A21. Circuit A21 supplies voltage to circuit G5 through fuse 9 in the fuse block. Circuit G5 splices to supply battery voltage to the DRL module.

Circuit L20 from the headlamp switch connects to the DRL module. Circuit L20 is HOT at all times.

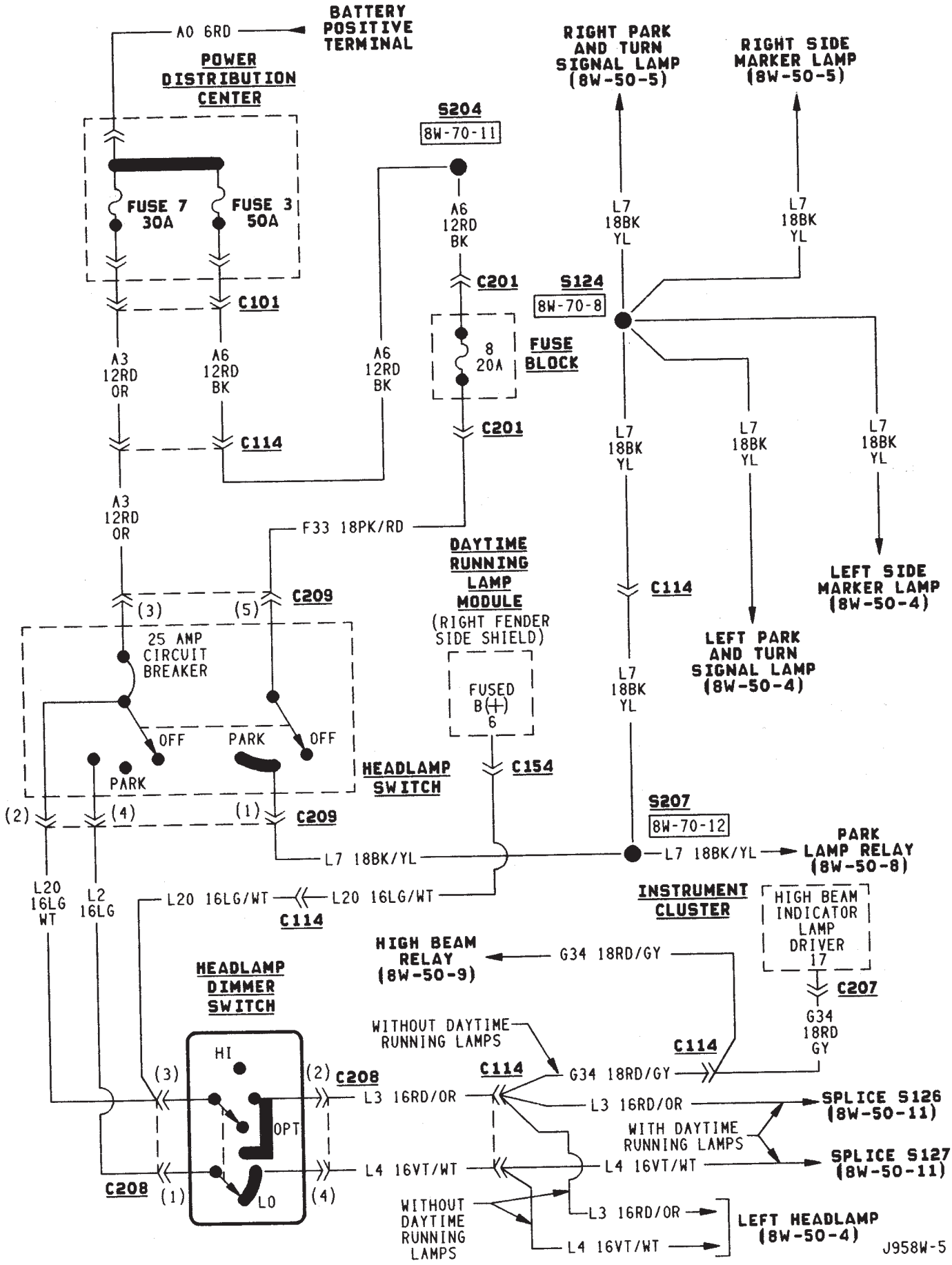
The DRL module receives the vehicle speed sensor input from circuit G7. Circuit G34 from the DRL module provides power for the high beam indicator lamp in the instrument cluster.

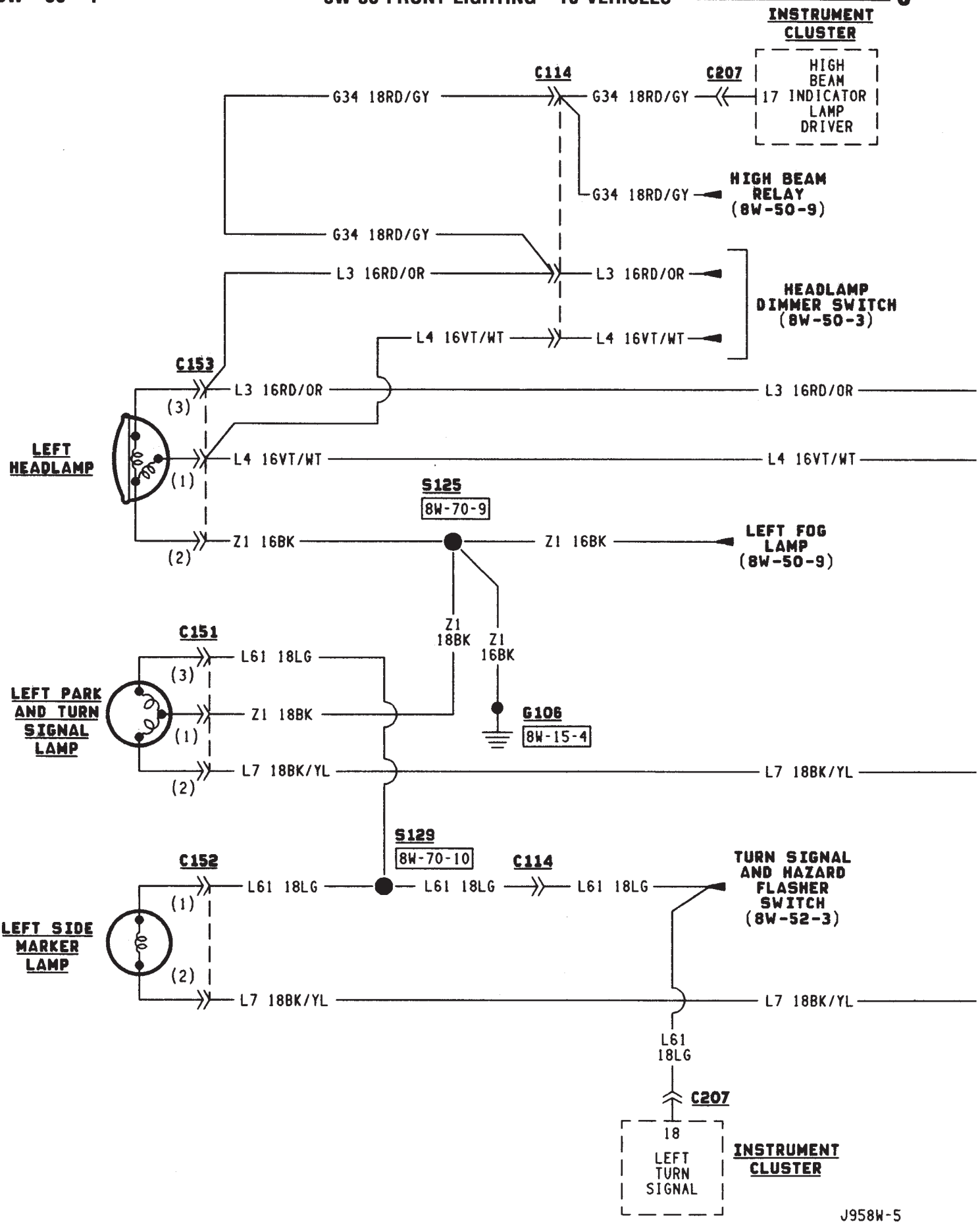
Circuit L4 feeds the low beams of the headlamps. When the headlamp switch is in the OFF position, the DRL module powers the left and right headlamps on circuit L4. When the headlamps are ON, the dimmer switch powers the low beams on circuit L4.

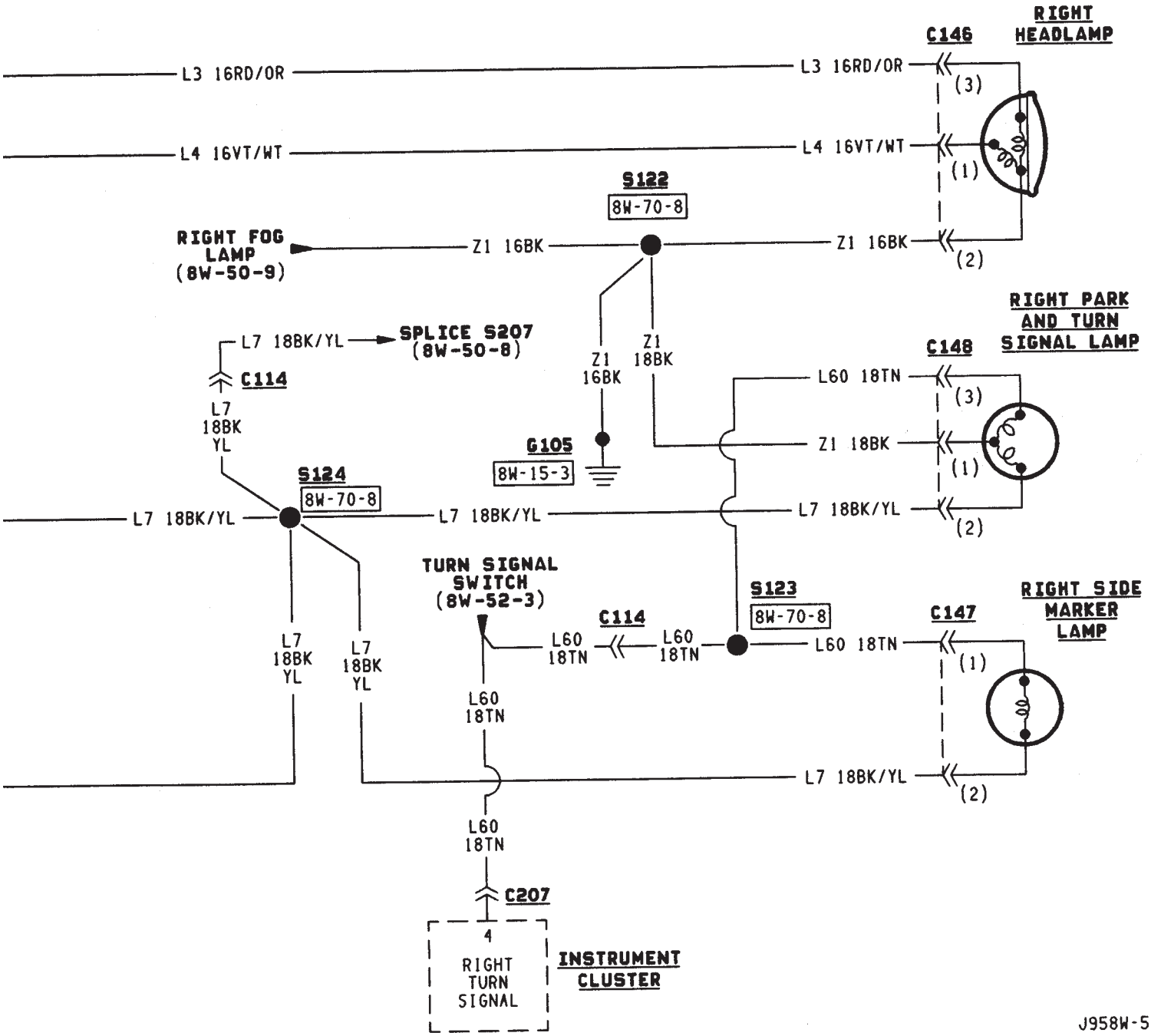
Circuit L3 feeds the high beams of the headlamps. When the operator flashes the high beams with the turn signal stalk, the DRL senses voltage on circuit L3. When it senses voltage on circuit L3, the DRL module stops supplying power to the low beams on circuit L4.

Circuit Z1 provides ground for the DRL module. Circuit Z1 terminates at the radiator left side support.

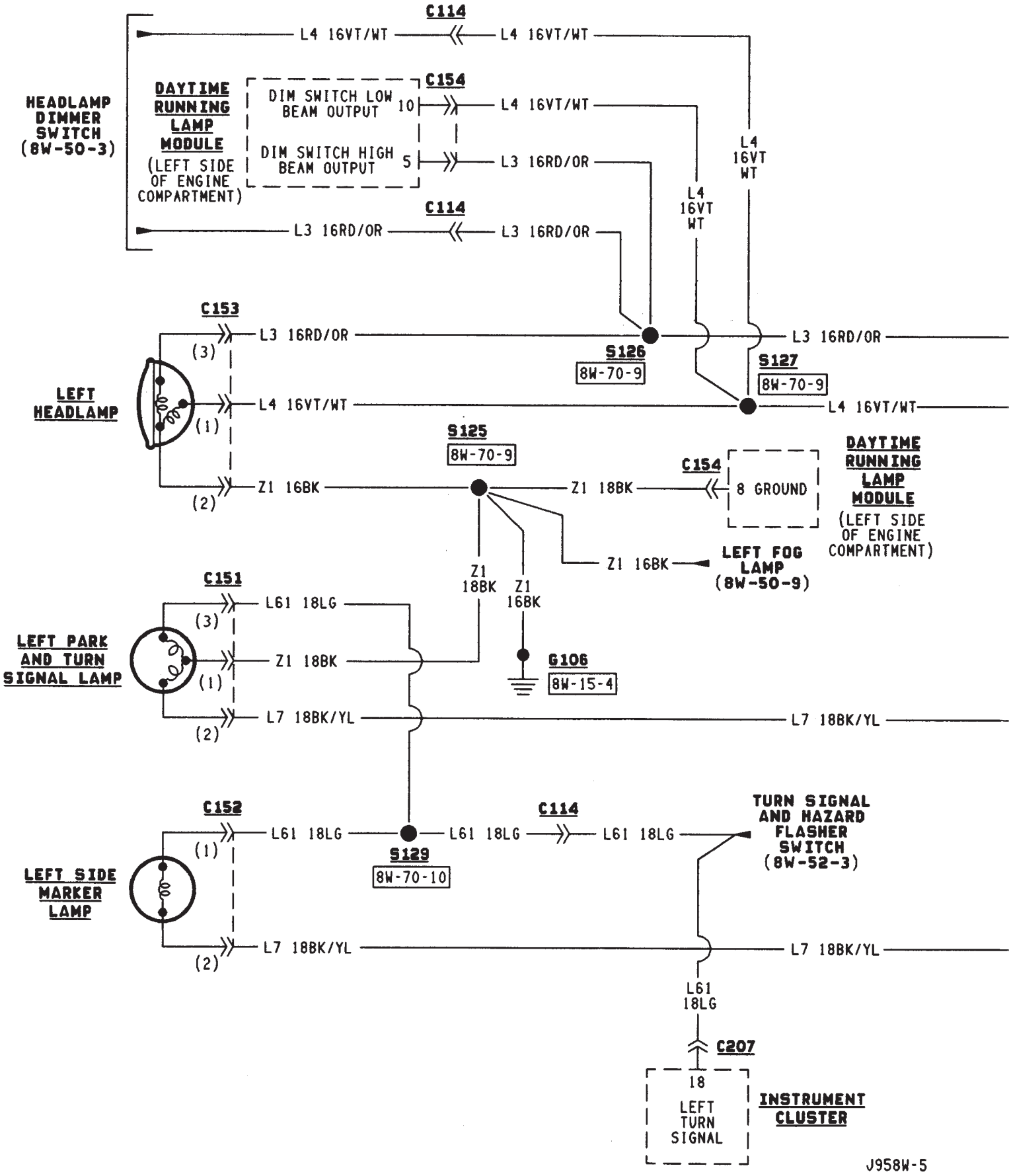
## DIAGRAM INDEX

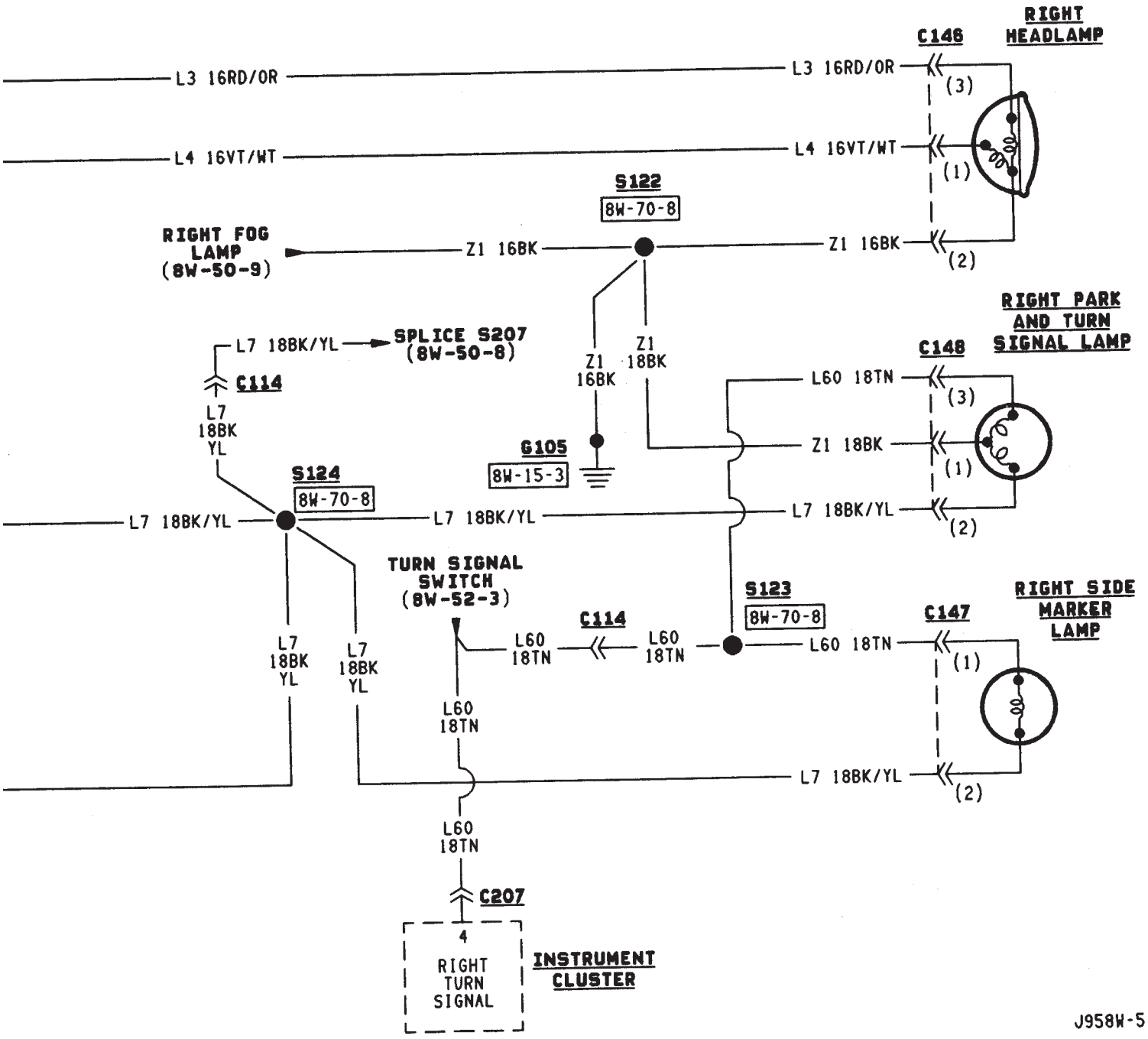

BATTERY POSITIVE TERMINAL
A0 6RD
POWER DISTRIBUTION CENTER
FUSE 7 30A
FUSE 3 50A
C101
A3 12RD OR
A6 12RD BK
C114
A3 12RD OR
S204
8W-70-11
A6 12RD BK
C201
8 20A
FUSE BLOCK
C201
A6 12RD BK
F33 18PK/RD
RIGHT PARK AND TURN SIGNAL LAMP (8W-50-5)
RIGHT SIDE MARKER LAMP (8W-50-5)
L7 18BK YL
L7 18BK YL
S124
8W-70-8
L7 18BK YL
L7 18BK YL
L7 18BK YL
C114
L7 18BK YL
LEFT SIDE MARKER LAMP (8W-50-4)
LEFT PARK AND TURN SIGNAL LAMP (8W-50-4)
DAYTIME RUNNING LAMP MODULE
(RIGHT FENDER SIDE SHIELD)
FUSED B(+) 6
C154
C209
(3)
(5)
25 AMP CIRCUIT BREAKER
OFF
PARK
OFF
PARK
HEADLAMP SWITCH
(2)
(4)
(1)
C209
S207
8W-70-12
L7 18BK/YL
L7 18BK/YL
PARK LAMP RELAY (8W-50-8)
L20 16LG WT
L2 16LG
L20 16LG/WT
L20 16LG/WT
C114
INSTRUMENT CLUSTER
HIGH BEAM INDICATOR LAMP DRIVER 17
C207
G34 18RD GY
HIGH BEAM RELAY (8W-50-9)
G34 18RD/GY
HEADLAMP DIMMER SWITCH
HI
OPT
LO
(3)
(2)
C208
(1)
(4)
C208
WITHOUT DAYTIME RUNNING LAMPS
C114
C114
G34 18RD/GY
L3 16RD/OR
L3 16RD/OR
SPLICE S126 (8W-50-11)
WITH DAYTIME RUNNING LAMPS
SPLICE S127 (8W-50-11)
L4 16VT/WT
L4 16VT/WT
WITHOUT DAYTIME RUNNING LAMPS
L3 16RD/OR
L4 16VT/WT
LEFT HEADLAMP (8W-50-4)
J958W-5


INSTRUMENT CLUSTER
HIGH BEAM INDICATOR DRIVER
17
C207
C114
G34 18RD/GY
G34 18RD/GY
G34 18RD/GY
HIGH BEAM RELAY (8W-50-9)
G34 18RD/GY
L3 16RD/OR
L3 16RD/OR
HEADLAMP DIMMER SWITCH (8W-50-3)
L4 16VT/WT
L4 16VT/WT
C153
L3 16RD/OR
L3 16RD/OR
(3)
LEFT HEADLAMP
L4 16VT/WT
L4 16VT/WT
(1)
S125
8W-70-9
Z1 16BK
Z1 16BK
LEFT FOG LAMP (8W-50-9)
(2)
Z1 18BK
Z1 16BK
C151
L61 18LG
(3)
LEFT PARK AND TURN SIGNAL LAMP
Z1 18BK
(1)
G106
8W-15-4
L7 18BK/YL
L7 18BK/YL
(2)
S129
8W-70-10
C152
C114
TURN SIGNAL AND HAZARD FLASHER SWITCH (8W-52-3)
L61 18LG
L61 18LG
L61 18LG
(1)
LEFT SIDE MARKER LAMP
(2)
L7 18BK/YL
L7 18BK/YL
L61 18LG
C207
18
LEFT TURN SIGNAL
INSTRUMENT CLUSTER
J958W-5

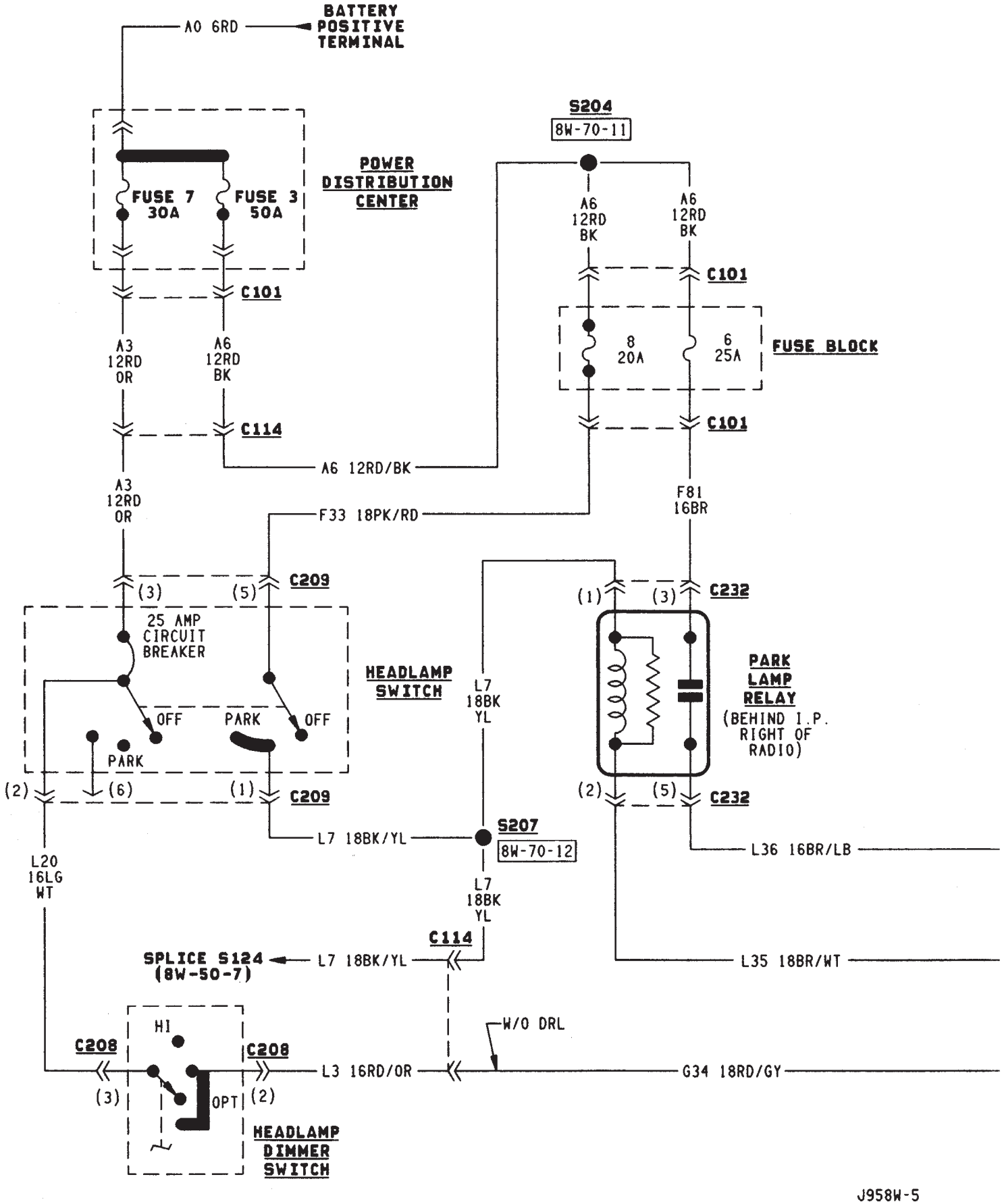

RIGHT HEADLAMP
C146
L3 16RD/OR
L3 16RD/OR
(3)
L4 16VT/WT
L4 16VT/WT
(1)
S122
8W-70-8
RIGHT FOG LAMP (8W-50-9)
Z1 16BK
Z1 16BK
(2)
RIGHT PARK AND TURN SIGNAL LAMP
C148
L7 18BK/YL
SPLICE S207 (8W-50-8)
Z1 16BK
Z1 18BK
L60 18TN
(3)
C114
L7 18BK YL
G105
8W-15-3
Z1 18BK
(1)
S124
8W-70-8
L7 18BK/YL
L7 18BK/YL
L7 18BK/YL
(2)
TURN SIGNAL SWITCH (8W-52-3)
S123
8W-70-8
C114
C147
RIGHT SIDE MARKER LAMP
L7 18BK YL
L7 18BK YL
L60 18TN
L60 18TN
L60 18TN
L60 18TN
(1)
L7 18BK/YL
(2)
L60 18TN
C207
4
RIGHT TURN SIGNAL
INSTRUMENT CLUSTER
J958W-5

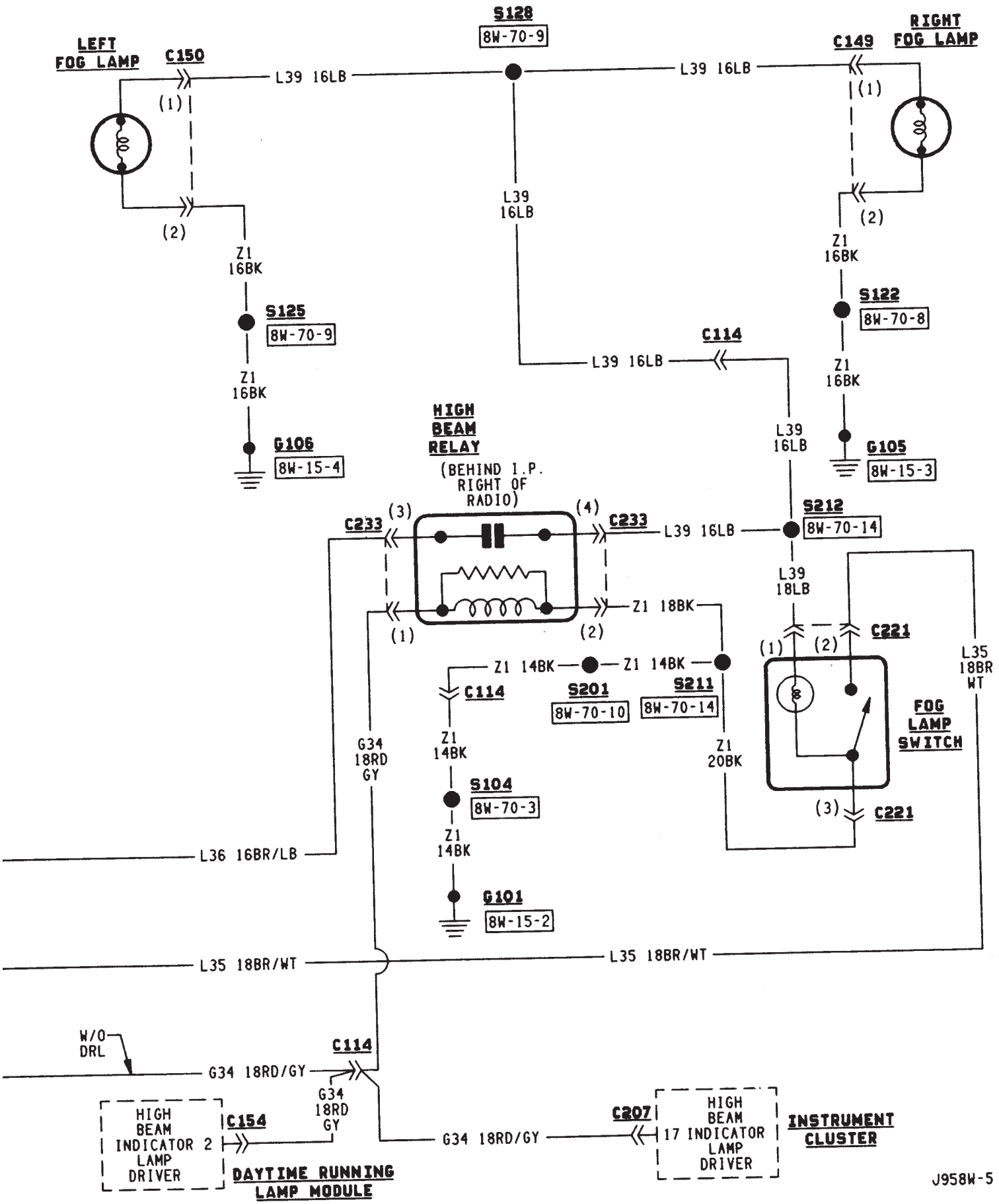
## WITH DAYTIME RUNNING LAMPS

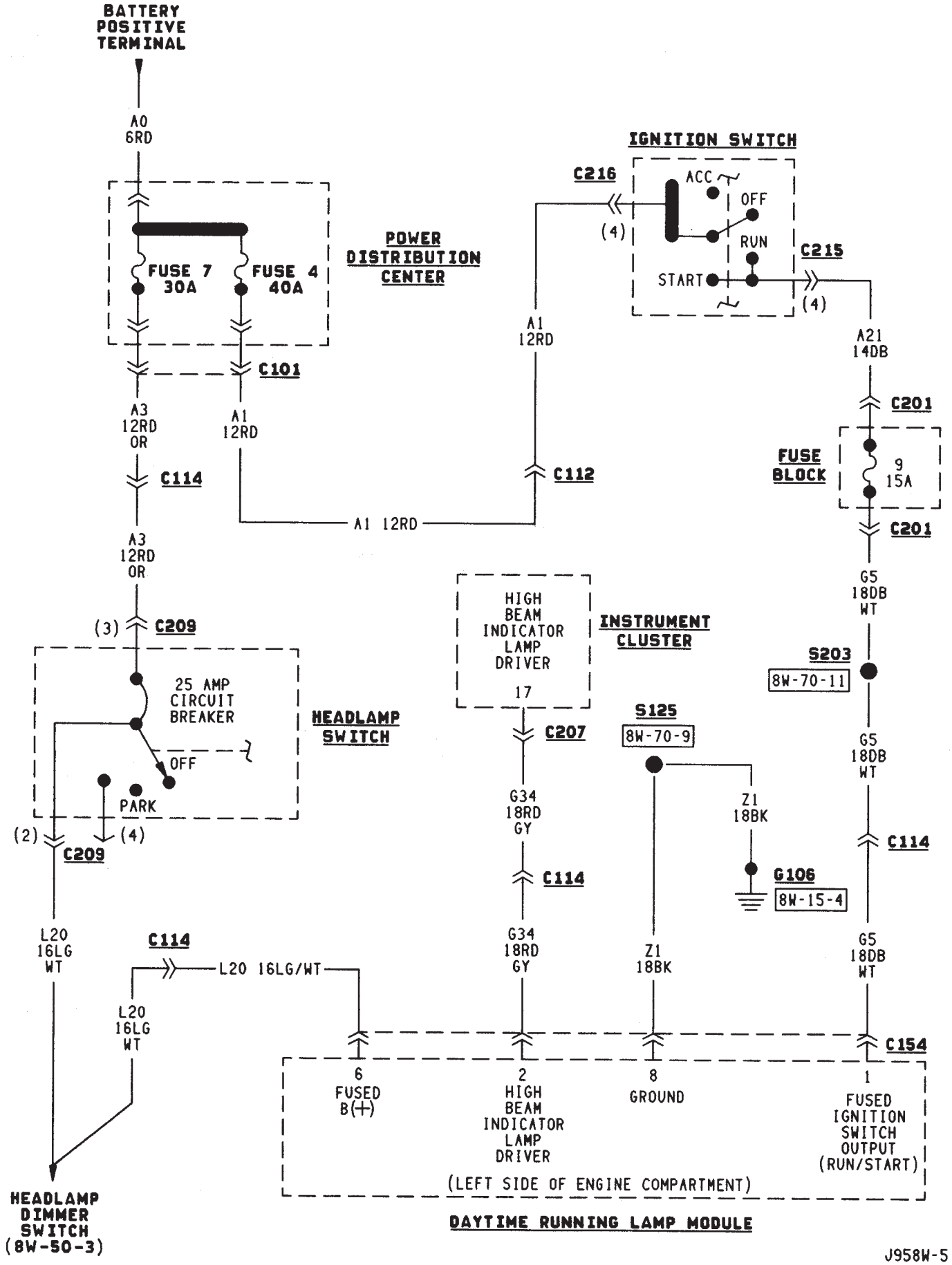


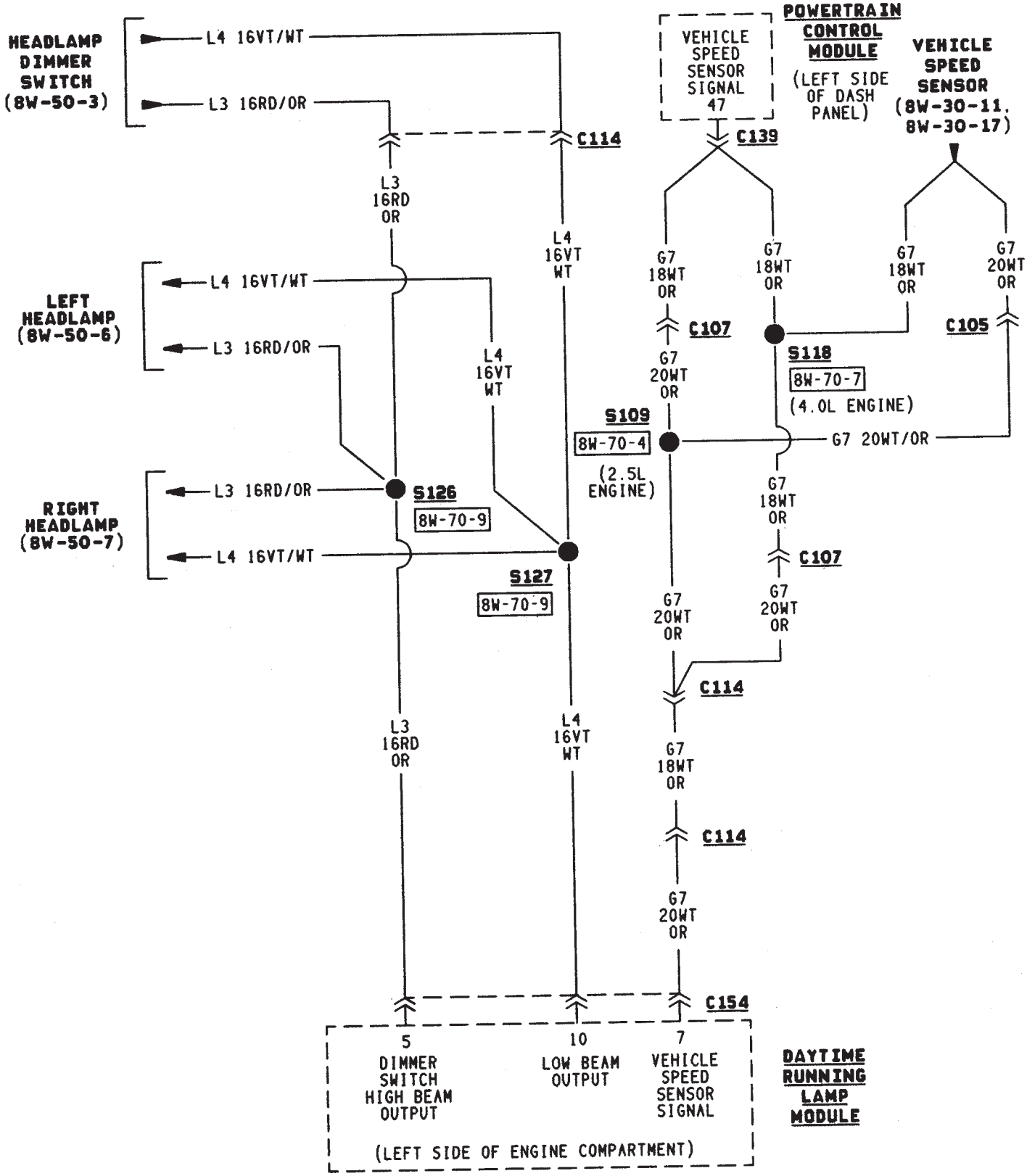

RIGHT HEADLAMP
C146
L3 16RD/OR
L3 16RD/OR
(3)
L4 16VT/WT
L4 16VT/WT
(1)
S122
8W-70-8
RIGHT FOG LAMP (8W-50-9)
Z1 16BK
Z1 16BK
(2)
RIGHT PARK AND TURN SIGNAL LAMP
C148
L7 18BK/YL
SPLICE S207 (8W-50-8)
C114
L7 18BK YL
Z1 16BK
Z1 18BK
L60 18TN
(3)
G105
8W-15-3
Z1 18BK
(1)
S124
8W-70-8
L7 18BK/YL
L7 18BK/YL
L7 18BK/YL
(2)
TURN SIGNAL SWITCH (8W-52-3)
S123
8W-70-8
C114
C147
RIGHT SIDE MARKER LAMP
L7 18BK YL
L7 18BK YL
L60 18TN
L60 18TN
L60 18TN
L60 18TN
(1)
L7 18BK/YL
(2)
L60 18TN
C207
4
RIGHT TURN SIGNAL
INSTRUMENT CLUSTER

J958W-5


A0 6RD
BATTERY POSITIVE TERMINAL
POWER DISTRIBUTION CENTER
FUSE 7 30A
FUSE 3 50A
C101
A3 12RD OR
A6 12RD BK
C114
A6 12RD/BK
S204
8W-70-11
A6 12RD BK
A6 12RD BK
C101
8 20A
6 25A
FUSE BLOCK
C101
F33 18PK/RD
F81 16BR
A3 12RD OR
C209
(3)
(5)
25 AMP CIRCUIT BREAKER
HEADLAMP SWITCH
OFF
PARK
OFF
PARK
(2)
(6)
(1)
C209
L7 18BK/YL
S207
8W-70-12
L20 16LG WT
L7 18BK YL
C114
SPLICE S124 (8W-50-7)
L7 18BK/YL
(1)
(3)
C232
PARK LAMP RELAY
(BEHIND I.P. RIGHT OF RADIO)
(2)
(5)
C232
L36 16BR/LB
L35 18BR/WT
W/O DRL
C208
C208
HI
OPT
(3)
(2)
L3 16RD/OR
G34 18RD/GY
HEADLAMP DIMMER SWITCH
J958W-5


S128
8W-70-9
LEFT FOG LAMP
C150
RIGHT FOG LAMP
C149
L39 16LB
L39 16LB
(1)
(2)
Z1 16BK
S125
8W-70-9
Z1 16BK
G106
8W-15-4
L39 16LB
C114
L39 16LB
Z1 16BK
S122
8W-70-8
Z1 16BK
G105
8W-15-3
HIGH BEAM RELAY
(BEHIND I.P. RIGHT OF RADIO)
C233
C233
(3)
(4)
L39 16LB
S212
8W-70-14
L39 18LB
Z1 18BK
(1)
(2)
C221
(1)
(2)
Z1 14BK
Z1 14BK
C114
S201
8W-70-10
S211
8W-70-14
L35 18BR WT
FOG LAMP SWITCH
G34 18RD GY
Z1 14BK
Z1 20BK
S104
8W-70-3
Z1 14BK
(3)
C221
L36 16BR/LB
G101
8W-15-2
L35 18BR/WT
L35 18BR/WT
W/O DRL
C114
G34 18RD/GY
G34 18RD GY
HIGH BEAM INDICATOR 2 LAMP DRIVER
C154
DAYTIME RUNNING LAMP MODULE
G34 18RD/GY
C207
HIGH BEAM 17 INDICATOR LAMP DRIVER
INSTRUMENT CLUSTER
J958W-5


BATTERY POSITIVE TERMINAL
A0 6RD
POWER DISTRIBUTION CENTER
FUSE 7 30A
FUSE 4 40A
C101
A3 12RD OR
A1 12RD
C114
A3 12RD OR
(3) C209
25 AMP CIRCUIT BREAKER
OFF
PARK
HEADLAMP SWITCH
(2) C209
(4)
L20 16LG WT
HEADLAMP DIMMER SWITCH (8W-50-3)
C114
L20 16LG/WT
L20 16LG WT
C216
(4)
IGNITION SWITCH
ACC
OFF
RUN
START
C215
(4)
A1 12RD
C112
A1 12RD
A21 14DB
C201
FUSE BLOCK
9 15A
C201
G5 18DB WT
S203
8W-70-11
G5 18DB WT
C114
G5 18DB WT
HIGH BEAM INDICATOR LAMP DRIVER
17
INSTRUMENT CLUSTER
C207
G34 18RD GY
C114
G34 18RD GY
S125
8W-70-9
Z1 18BK
Z1 18BK
G106
8W-15-4
C154
6 FUSED B(+)
2 HIGH BEAM INDICATOR LAMP DRIVER
8 GROUND
1 FUSED IGNITION SWITCH OUTPUT (RUN/START)
(LEFT SIDE OF ENGINE COMPARTMENT)
DAYTIME RUNNING LAMP MODULE
J958W-5


HEADLAMP DIMMER SWITCH (8W-50-3)
L4 16VT/WT
L3 16RD/OR
C114
L3 16RD OR
L4 16VT WT
LEFT HEADLAMP (8W-50-6)
L4 16VT/WT
L3 16RD/OR
L4 16VT WT
RIGHT HEADLAMP (8W-50-7)
L3 16RD/OR
S126
8W-70-9
L4 16VT/WT
S127
8W-70-9
L3 16RD OR
L4 16VT WT
VEHICLE SPEED SENSOR SIGNAL 47
C139
POWERTRAIN CONTROL MODULE
(LEFT SIDE OF DASH PANEL)
VEHICLE SPEED SENSOR (8W-30-11, 8W-30-17)
G7 18WT OR
G7 18WT OR
G7 18WT OR
G7 20WT OR
C107
C105
G7 20WT OR
S118
8W-70-7
(4.0L ENGINE)
S109
8W-70-4
(2.5L ENGINE)
G7 20WT/OR
G7 18WT OR
C107
G7 20WT OR
G7 20WT OR
C114
G7 18WT OR
C114
G7 20WT OR
C154
5
DIMMER SWITCH HIGH BEAM OUTPUT
10
LOW BEAM OUTPUT
7
VEHICLE SPEED SENSOR SIGNAL
(LEFT SIDE OF ENGINE COMPARTMENT)
DAYTIME RUNNING LAMP MODULE

J958W-5

# REAR LIGHTING

## TAIL LAMPS AND LICENSE PLATE LAMPS

Circuit A6 in the Power Distribution Center (PDC) connects to a bus bar in the fuse block. The fuse block bus bar powers circuit F33. Circuit F33 connects to the headlamp switch. Fuse 3 in the PDC protects circuit A3. Fuse 8 in the fuse block protects circuit F33.

The headlamp switch has three positions: ON, PARK (parking lamps) and OFF, plus a dimmer switch. When the headlamp switch is in the PARK or ON position, the switch connects circuit F33 to circuit L7. From the headlamp switch, circuit L7 branches to power the front parking lamps and rear tail and license plate lamps. The lamps are case grounded.

### *HELPFUL INFORMATION*

- If the vehicle is equipped with factory installed fog lamps, circuit L7 splices to feed the park lamp relay.
- Jumper harnesses connect the tail, stop, turn signal lamp to the body harness.
- Check fuse 3 in the PDC.
- Check fuse 8 in the fuse block.
- Circuit L7 also feeds the radio, if equipped.

## STOP LAMPS AND CHMSL LAMPS

Circuit A6 from fuse 3 in the Power Distribution Center (PDC) supplies voltage to the fuse block bus bar. The bus bar powers circuit F32 through fuse 3 in the fuse block. Circuit F32 connects to the stop lamp switch.

When the operator depresses the brake pedal, the stop lamp switch closes, and connects circuit F32 to circuit L50. Circuit L50 connects to the CHMSL lamps and turn signal/hazard flasher. Circuit Z1 provides ground for the CHMSL lamps. The turn signal/hazard flasher supplies current to the L62 and L63 circuits. Circuit L62 powers the right stop lamp. Circuit L63 powers the left stop lamp. The stop lamps are case grounded.

### *HELPFUL INFORMATION*

- Circuits L50 and Z1 pass through contacts in the rear door before reaching the CHMSL lamps.
- Check fuse 3 in the PDC.
- Check fuse 3 in the fuse block.
- Check for continuity across the stop lamp switch when it is closed.
- If the vehicle is equipped with anti-lock brakes, circuit L50 connects to the ABS module.

## BACK-UP LAMPS

In the START or RUN position, the ignition switch connects circuit A1 from fuse 4 in the Power Distribution Center (PDC) to circuit A21. Circuit A21 feeds a bus bar in the fuse block that powers circuit G5 through fuse 9.

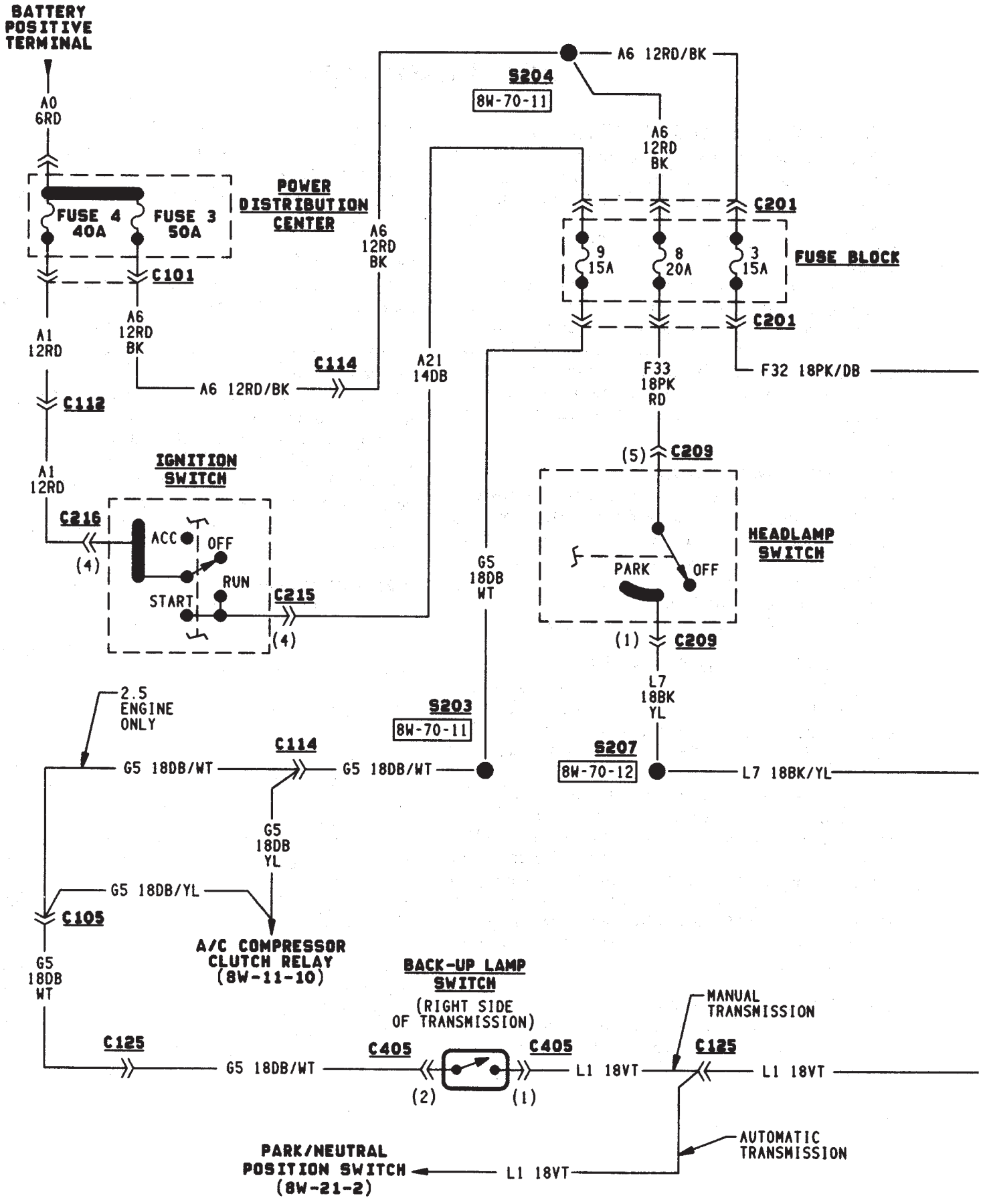
Circuit G5 splices to supply power to the back-up lamp switch. On automatic transmission vehicles, the back-up lamp switch is part of an assembly that includes the PARK/NEUTRAL position switch.

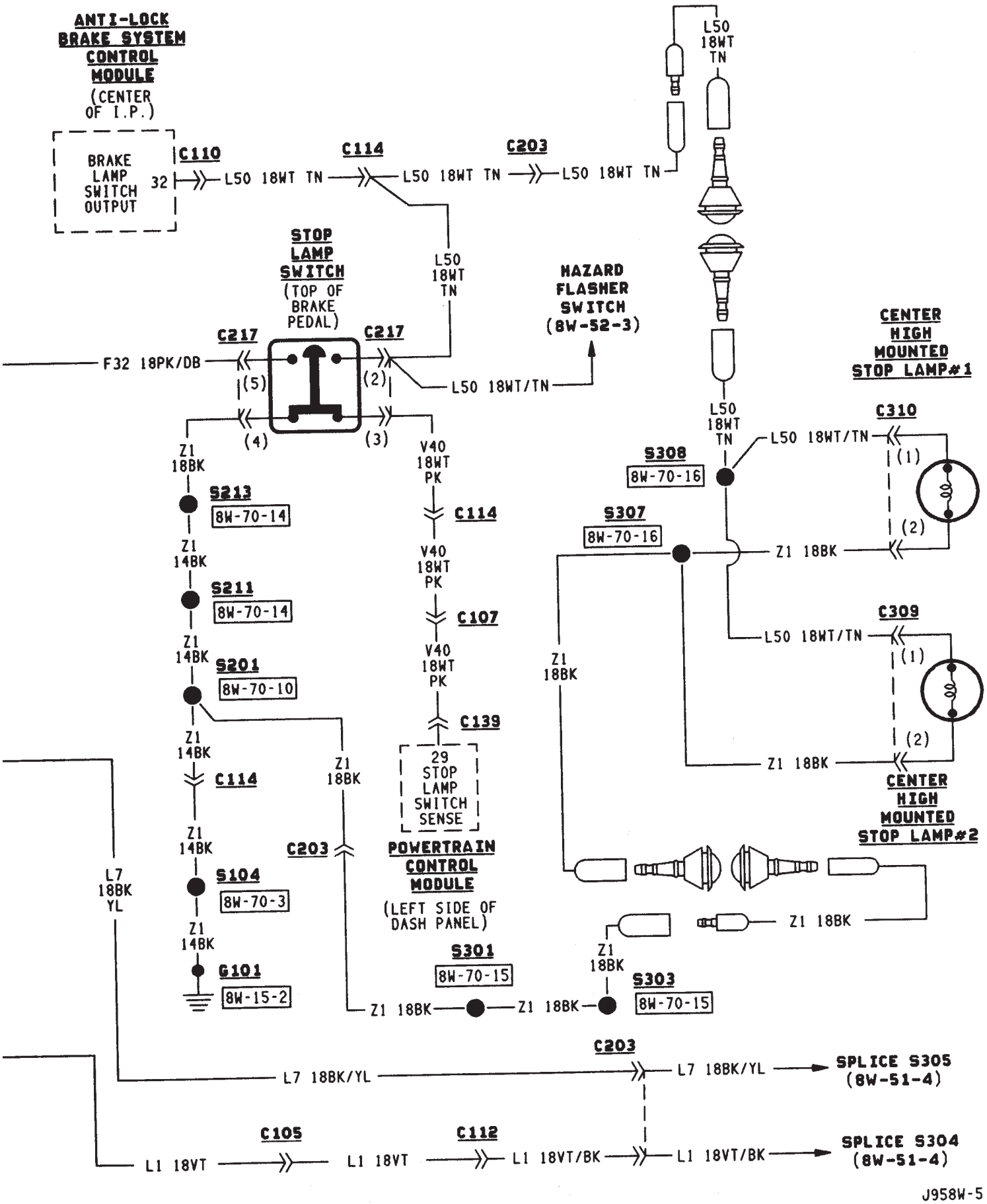
When the operator puts the transmission in Reverse, the back-up lamp switch connects circuit G5 to circuit L1. Circuit L1 feeds the case grounded back-up lamps.

### *HELPFUL INFORMATION*

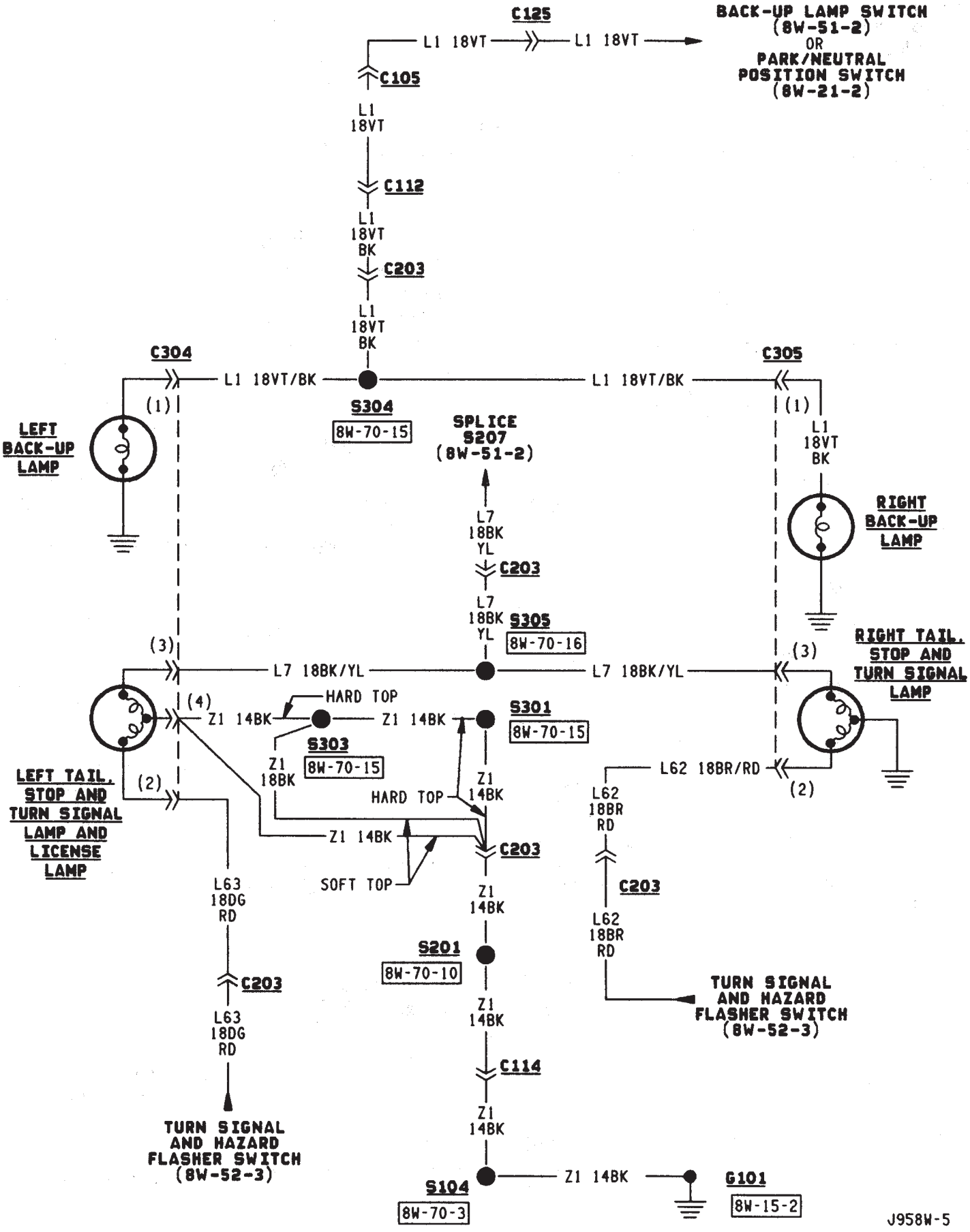
- Check fuse 4 in the PDC.
- Check fuse 9 in the fuse block.
- Check for continuity across the back-up lamp switch when it is closed.

## DIAGRAM INDEX


BATTERY POSITIVE TERMINAL
A0 6RD
FUSE 4 40A
FUSE 3 50A
POWER DISTRIBUTION CENTER
C101
A1 12RD
A6 12RD BK
C112
A6 12RD BK
C114
A6 12RD/BK
S204
8W-70-11
A6 12RD BK
C201
9 15A
8 20A
3 15A
FUSE BLOCK
C201
A21 14DB
F33 18PK RD
F32 18PK/DB
(5) C209
IGNITION SWITCH
C216
(4)
ACC
OFF
RUN
START
C215
(4)
G5 18DB WT
HEADLAMP SWITCH
PARK
OFF
(1) C209
L7 18BK YL
S207
8W-70-12
L7 18BK/YL
2.5 ENGINE ONLY
S203
8W-70-11
C114
G5 18DB/WT
G5 18DB/WT
G5 18DB YL
G5 18DB/YL
C105
G5 18DB WT
A/C COMPRESSOR CLUTCH RELAY (8W-11-10)
BACK-UP LAMP SWITCH
(RIGHT SIDE OF TRANSMISSION)
MANUAL TRANSMISSION
C125
C405
C405
C125
G5 18DB/WT
L1 18VT
L1 18VT
(2)
(1)
AUTOMATIC TRANSMISSION
PARK/NEUTRAL POSITION SWITCH (8W-21-2)
L1 18VT
J958W-5


ANTI-LOCK BRAKE SYSTEM CONTROL MODULE
(CENTER OF I.P.)
BRAKE LAMP SWITCH OUTPUT
32
C110
L50 18WT TN
C114
L50 18WT TN
C203
L50 18WT TN
L50 18WT TN
STOP LAMP SWITCH
(TOP OF BRAKE PEDAL)
C217
C217
F32 18PK/DB
(5)
(2)
(4)
(3)
L50 18WT/TN
HAZARD FLASHER SWITCH
(8W-52-3)
CENTER HIGH MOUNTED STOP LAMP#1
C310
L50 18WT TN
L50 18WT/TN
(1)
(2)
S308
8W-70-16
S307
8W-70-16
Z1 18BK
Z1 18BK
Z1 18BK
S213
8W-70-14
Z1 14BK
S211
8W-70-14
Z1 14BK
S201
8W-70-10
Z1 14BK
C114
Z1 14BK
S104
8W-70-3
Z1 14BK
G101
8W-15-2
V40 18WT PK
C114
V40 18WT PK
C107
V40 18WT PK
C139
29 STOP LAMP SWITCH SENSE
POWERTRAIN CONTROL MODULE
(LEFT SIDE OF DASH PANEL)
C309
L50 18WT/TN
(1)
(2)
Z1 18BK
CENTER HIGH MOUNTED STOP LAMP#2
Z1 18BK
Z1 18BK
Z1 18BK
S301
8W-70-15
S303
8W-70-15
Z1 18BK
Z1 18BK
L7 18BK YL
C203
L7 18BK/YL
L7 18BK/YL
SPLICE S305
(8W-51-4)
C105
C112
L1 18VT
L1 18VT
L1 18VT/BK
L1 18VT/BK
SPLICE S304
(8W-51-4)

J958W-5


C125
L1 18VT
L1 18VT
BACK-UP LAMP SWITCH
(8W-51-2)
OR
PARK/NEUTRAL
POSITION SWITCH
(8W-21-2)
C105
L1
18VT
C112
L1
18VT
BK
C203
L1
18VT
BK
C304
L1 18VT/BK
L1 18VT/BK
C305
S304
8W-70-15
SPLICE
S207
(8W-51-2)
(1)
LEFT
BACK-UP
LAMP
L7
18BK
YL
C203
L7
18BK
YL
S305
8W-70-16
(1)
L1
18VT
BK
RIGHT
BACK-UP
LAMP
(3)
L7 18BK/YL
L7 18BK/YL
(3)
RIGHT TAIL,
STOP AND
TURN SIGNAL
LAMP
(4)
HARD TOP
Z1 14BK
Z1 14BK
S301
8W-70-15
S303
8W-70-15
Z1
18BK
LEFT TAIL,
STOP AND
TURN SIGNAL
LAMP AND
LICENSE
LAMP
(2)
L62 18BR/RD
(2)
HARD TOP
Z1
14BK
L62
18BR
RD
Z1 14BK
C203
SOFT TOP
C203
Z1
14BK
L63
18DG
RD
C203
L62
18BR
RD
S201
8W-70-10
TURN SIGNAL
AND HAZARD
FLASHER SWITCH
(8W-52-3)
Z1
14BK
L63
18DG
RD
C114
Z1
14BK
TURN SIGNAL
AND HAZARD
FLASHER SWITCH
(8W-52-3)
S104
8W-70-3
Z1 14BK
G101
8W-15-2
J958W-5

# TURN SIGNALS

## TURN SIGNALS

In the ACCESSORY or RUN position, the ignition switch connects circuit A1 from fuse 4 in the Power Distribution Center (PDC) to circuit A31. Circuit A31 feeds circuit L5 through fuse 4 in the fuse block.

Circuit L5 powers the turn signal flasher. Circuit L6 from the flasher connects to the turn signal/hazard flasher switch which supplies current to the turn signals. The switch connects to the turn signal and side marker lamps on circuits L60, L61, L62 and L63.

### *RIGHT TURN SIGNAL*

When the operator selects the right turn signal, the turn signal/hazard flasher switch connects power from circuit L6 to circuits L60 and L62. Circuit L62 feeds the right rear turn signal/hazard flasher/stop lamp.

Circuit L60 feeds the right front turn signal/hazard flasher lamp and side marker lamp. Circuit L60 also splices to power the turn signal indicator lamp on the instrument cluster.

### *LEFT TURN SIGNAL*

When the operator selects the left turn signal, the turn signal/hazard flasher switch connects power from circuit L6 to circuits L61 and L63. Circuit L63 feeds the left rear turn signal/hazard flasher/stop lamp.

Circuit L61 feeds the left front turn signal/hazard flasher lamp and side marker lamp. Circuit L61 also splices to power the turn signal indicator lamp on the instrument cluster.

### *GROUND CIRCUIT*

Circuit Z1 provides a ground for the left front park and turn signal lamp, side marker lamp and head lamp. The grounding point for circuit Z1 is the radiator left support.

Circuit Z1 provides a ground for the right front park and turn signal lamp, side marker lamp and head lamp. The grounding point for circuit Z1 is the radiator right support.

### *HELPFUL INFORMATION*

- Check fuse 4 in the PDC.
- Check fuse 4 in the fuse block.

## HAZARD FLASHERS

Circuit L9 from fuse 5 in the Power Distribution Center (PDC) supplies power to the hazard flasher. Circuit L19 from the flasher connects to the turn signal/hazard flasher switch.

When the operator presses the hazard flasher button, the turn signal/hazard flasher switch connects circuit L19 to circuits L60, L61, L62, and L63. Circuit L62 powers the right rear turn signal/stop/hazard lamp. Circuit L63 powers the left rear turn signal/stop/hazard lamp. Circuit L60 powers the right front indicator lamp. Circuit L61 powers the left front lamp.

Circuit L60 also splices to feed the instrument cluster right indicator lamp. Circuit L61 splices to feed the instrument cluster left indicator lamp.

### *GROUND CIRCUIT*

The rear turn signal/stop/hazard lamps are case grounded.

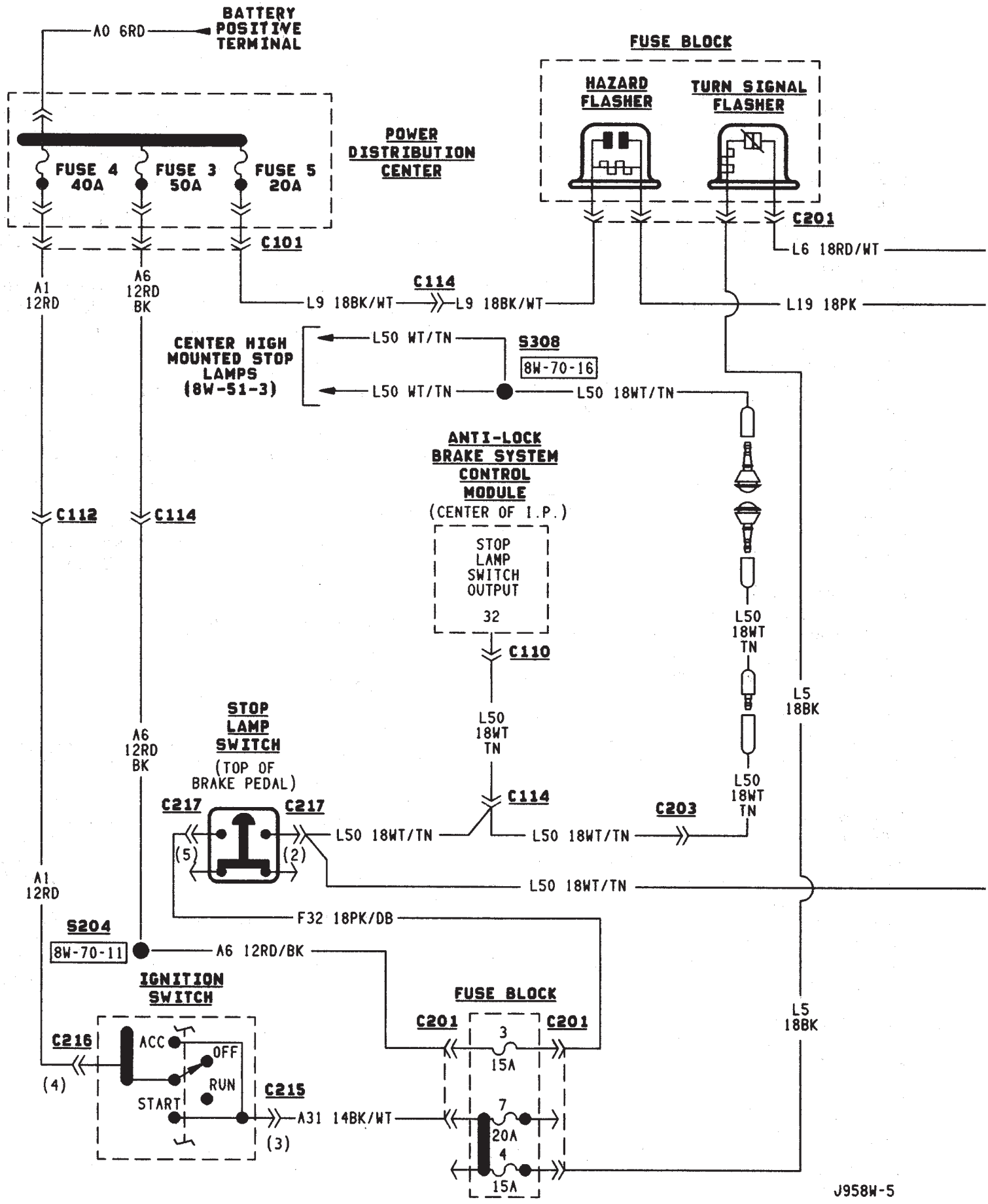
Circuit Z1 provides a ground for the left front park and turn signal lamp, side marker lamp and head lamp. The grounding point for circuit Z1 is the radiator left support.

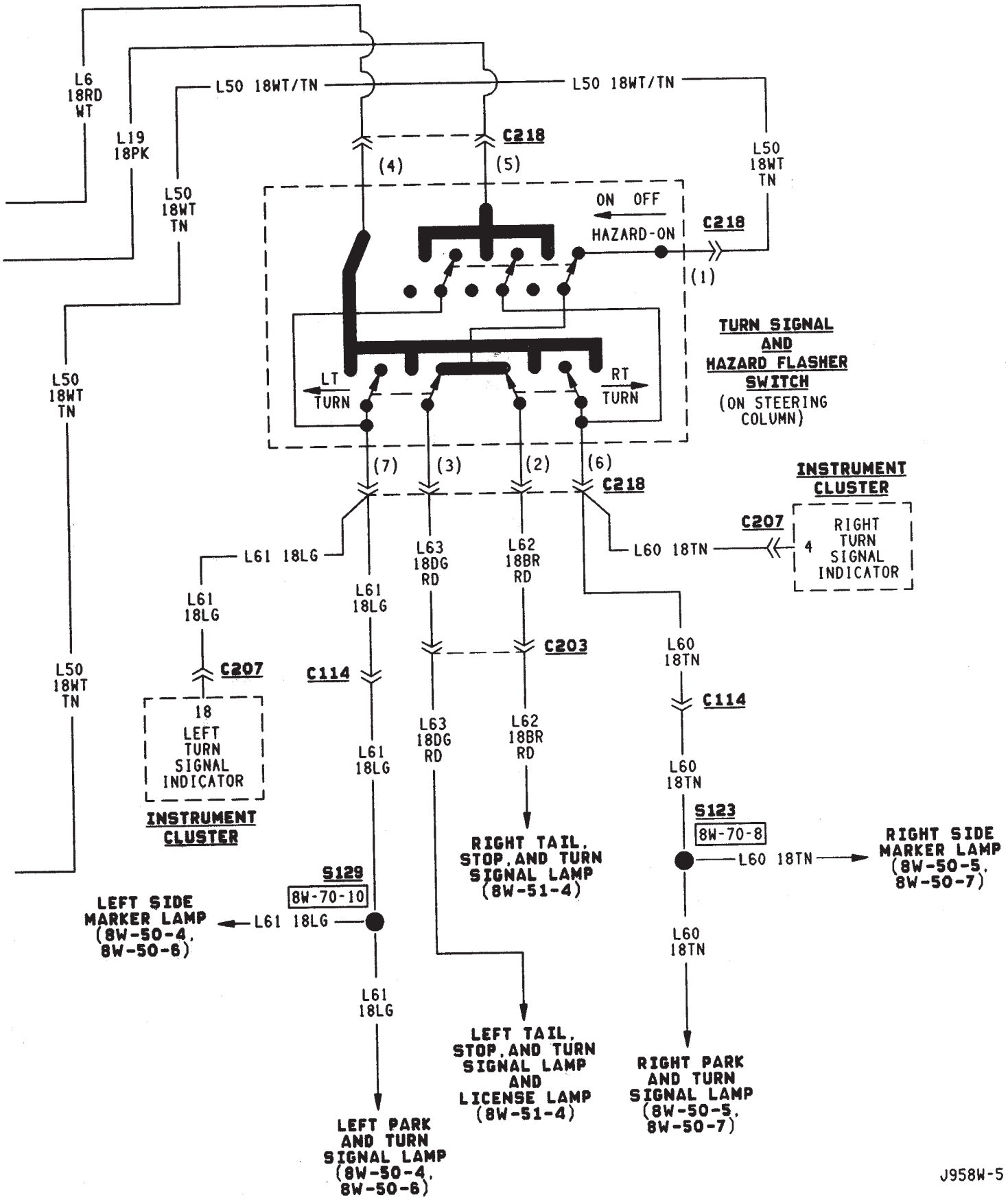
Circuit Z1 provides a ground for the right left park and turn signal lamp, side marker lamp and head lamp. The grounding point for circuit Z1 is the radiator right support.

### *HELPFUL INFORMATION*

Check fuse 5 in the PDC.

## DIAGRAM INDEX


BATTERY POSITIVE TERMINAL
A0 6RD
FUSE BLOCK
HAZARD FLASHER
TURN SIGNAL FLASHER
POWER DISTRIBUTION CENTER
FUSE 4 40A
FUSE 3 50A
FUSE 5 20A
C201
C101
L6 18RD/WT
A1 12RD
A6 12RD BK
C114
L9 18BK/WT
L9 18BK/WT
L19 18PK
CENTER HIGH MOUNTED STOP LAMPS (8W-51-3)
L50 WT/TN
L50 WT/TN
S308
8W-70-16
L50 18WT/TN
ANTI-LOCK BRAKE SYSTEM CONTROL MODULE
(CENTER OF I.P.)
STOP LAMP SWITCH OUTPUT
32
C112
C114
C110
L50 18WT TN
L5 18BK
STOP LAMP SWITCH
(TOP OF BRAKE PEDAL)
C217
C217
(5)
(2)
L50 18WT/TN
L50 18WT/TN
C114
C203
L50 18WT TN
L50 18WT/TN
F32 18PK/DB
S204
8W-70-11
A6 12RD/BK
IGNITION SWITCH
C216
ACC
OFF
RUN
START
(4)
C215
(3)
A31 14BK/WT
FUSE BLOCK
C201
C201
3
15A
7
20A
4
15A
L5 18BK
J958W-5


L6 18RD WT
L19 18PK
L50 18WT/TN
L50 18WT/TN
C218
(4)
(5)
L50 18WT TN
ON OFF
HAZARD-ON
C218
(1)
L50 18WT TN
L50 18WT TN
LT TURN
RT TURN
TURN SIGNAL AND HAZARD FLASHER SWITCH
(ON STEERING COLUMN)
(7)
(3)
(2)
(6)
C218
INSTRUMENT CLUSTER
C207
4 RIGHT TURN SIGNAL INDICATOR
L61 18LG
L63 18DG RD
L62 18BR RD
L60 18TN
L61 18LG
C207
18 LEFT TURN SIGNAL INDICATOR
INSTRUMENT CLUSTER
C114
L61 18LG
C203
L60 18TN
C114
L63 18DG RD
L62 18BR RD
L60 18TN
S123
8W-70-8
L60 18TN
RIGHT SIDE MARKER LAMP (8W-50-5, 8W-50-7)
S129
8W-70-10
L61 18LG
LEFT SIDE MARKER LAMP (8W-50-4, 8W-50-6)
RIGHT TAIL, STOP, AND TURN SIGNAL LAMP (8W-51-4)
L61 18LG
L60 18TN
LEFT TAIL, STOP, AND TURN SIGNAL LAMP AND LICENSE LAMP (8W-51-4)
RIGHT PARK AND TURN SIGNAL LAMP (8W-50-5, 8W-50-7)
LEFT PARK AND TURN SIGNAL LAMP (8W-50-4, 8W-50-6)
J958W-5

# WIPERS

## INDEX



## WIPERS—STANDARD

A circuit breaker in the fuse block powers the standard wiper system. The standard wiper system operates at either LOW or HIGH speeds.

In the ACCESSORY or RUN position, the ignition switch connects circuit A1 from fuse 4 in the Power Distribution Center (PDC) with circuit A31. Circuit A31 supplies voltage to circuit V6 through the circuit breaker in cavity 11 of the fuse block.

Circuit V6 is double crimped at the circuit breaker and supplies power to the wiper switch and the park switch in the wiper motor. Circuit Z1 provides ground for the wiper motor and switch.

When the operator moves the wiper switch to the LOW position, battery voltage passes through the switch to circuit V3. Circuit V3 feeds the wiper motor low speed brushes. If the operator selects wiper HIGH speed operation, the wiper switch passes current to circuit V4. Circuit V4 feeds the wiper motor high speed brushes.

As the windshield wiper motor turns, the park switch, internal to the motor, moves from its DOWN position to the UP position. When the wiper switch is turned OFF, the V5 circuit prevents the wipers from stopping in any position but park.

The windshield washer uses a pump motor located inside the windshield washer fluid reservoir. When the washer switch is pressed, power is supplied through the wiper switch to the pump motor on circuit V10. Circuit Z1 provide ground for the pump motor.

## WIPERS—INTERMITTENT

A circuit breaker in the fuse block powers the intermittent wiper system. The wiper system operates at either LOW, HIGH, or DELAY speeds.

In the ACCESSORY or RUN position, the ignition switch connects circuit A1 from fuse 4 in the Power Distribution Center (PDC) with circuit A31. Circuit A31 supplies voltage to circuit V6 through the circuit breaker in cavity 11 of the fuse block.

Circuit V6 is double crimped at the circuit breaker and supplies power to the wiper switch and the park switch in the wiper motor. Circuit Z1 provides ground for the wiper motor and switch.

When the operator moves the wiper switch to the LOW position, battery voltage passes through the switch to circuit V3. Circuit V3 feeds the wiper motor low speed brushes. If the operator selects wiper HIGH speed operation, the wiper switch passes current to circuit V4. Circuit V4 feeds the wiper motor high speed brushes.

The DELAY portion of the wiper switch contains a variable resistor. The variable resistor connects to the intermittent wiper module through the wiper switch harness. The amount of delay selected by the operator determines the voltage drop through the resistor and the voltage level received by the intermittent wiper module.

After the intermittent wiper control module determines the amount of delay selected, it cycles the wipers by periodically energizing circuit V3. Circuit V3 powers the wiper motor low speed brushes.

As the windshield wiper motor turns, the park switch, internal to the motor, moves from its DOWN position to the UP position. When the wiper switch is turned OFF, the V5 circuit prevents the wipers from stopping in any position but park.

The windshield washer uses a pump motor located inside the windshield washer fluid reservoir. When the washer switch is pressed, power is supplied through the wiper switch to the pump motor on circuit V10. Circuit Z1 provides ground for the pump motor.

## REAR WIPER SYSTEM

In the RUN position, the ignition switch connects circuit A1 from fuse 4 in the Power Distribution Center (PDC) with circuit A22. Circuit A22 connects to a fuse block in the bus bar that powers circuit V23 through the fuse in cavity 1.

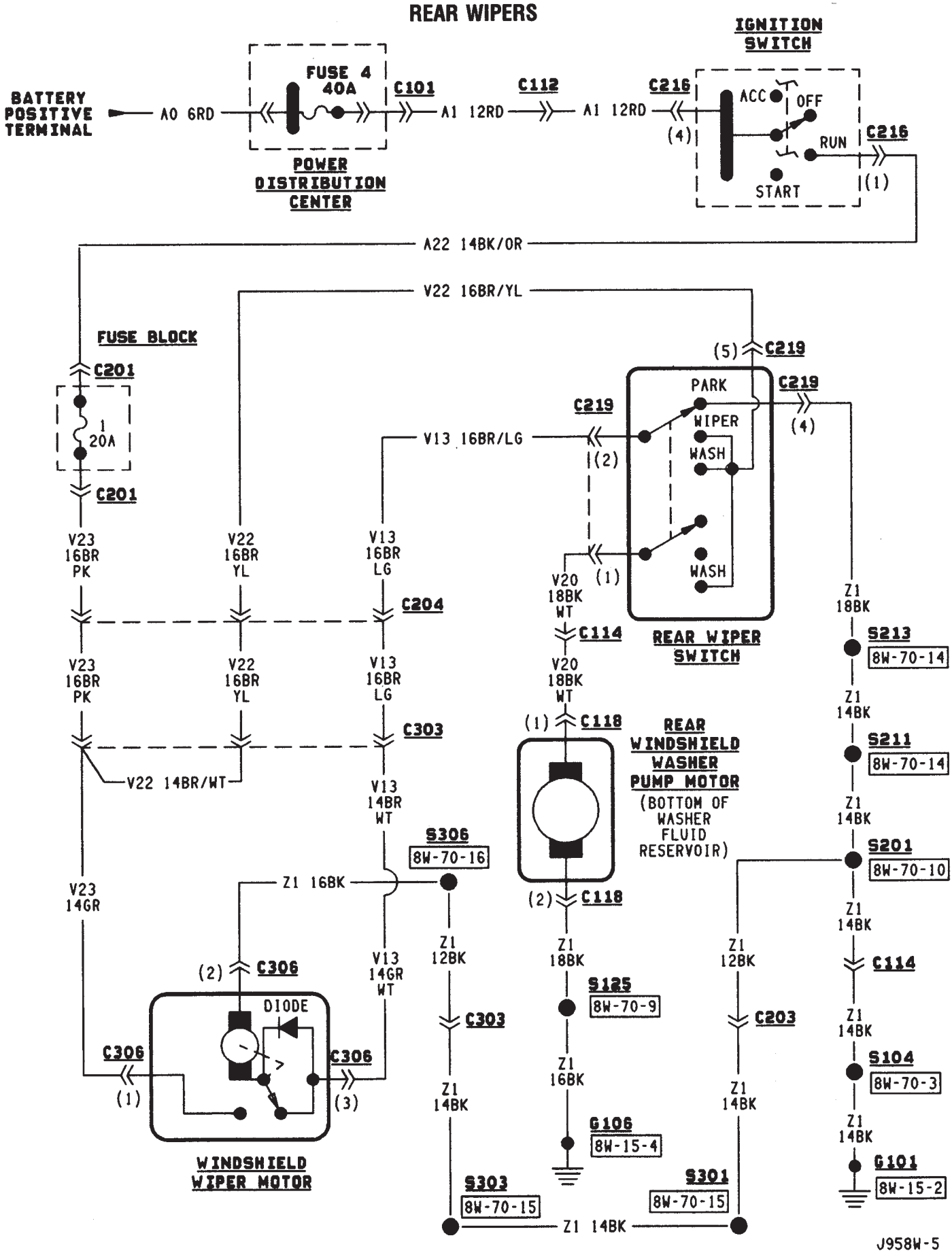
Circuit V23 supplies power to the park switch in the rear wiper motor. Also, circuit V22 is crimped to circuit V23 at the rear wiper motor connector. Circuit V22 supplies current to the rear wiper switch.

In the WIPE or WASH positions, the rear wiper switch supplies voltage to the wiper motor on circuit V13. Circuit Z1 provides ground for the wiper motor.

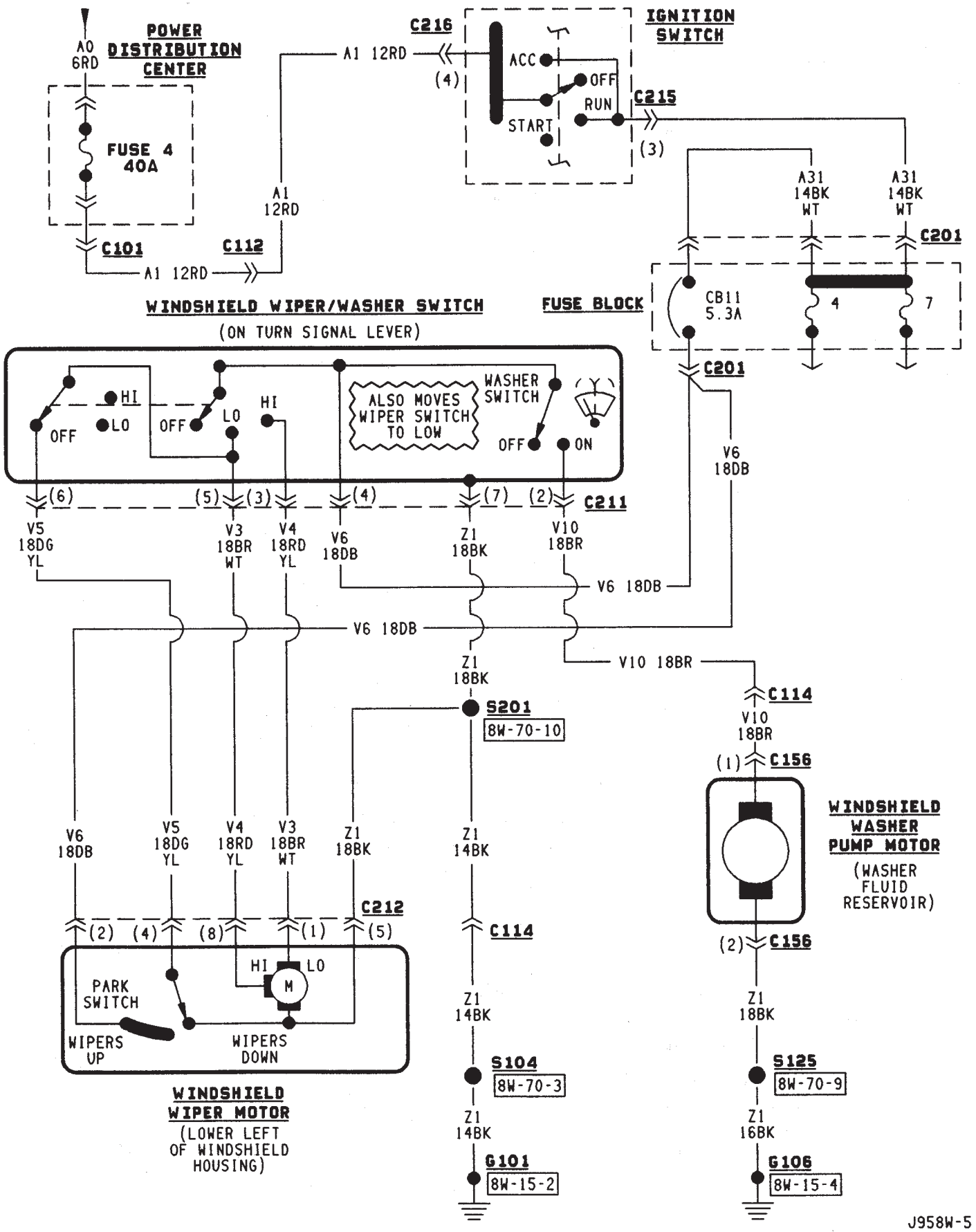
The rear windshield washer uses a pump motor located inside the windshield washer fluid reservoir. When the rear wiper switch is pressed, power is supplied through the wiper switch to the pump motor on circuit V20. Circuit Z1 provides ground for the pump motor.

## DIAGRAM INDEX

## REAR WIPERS

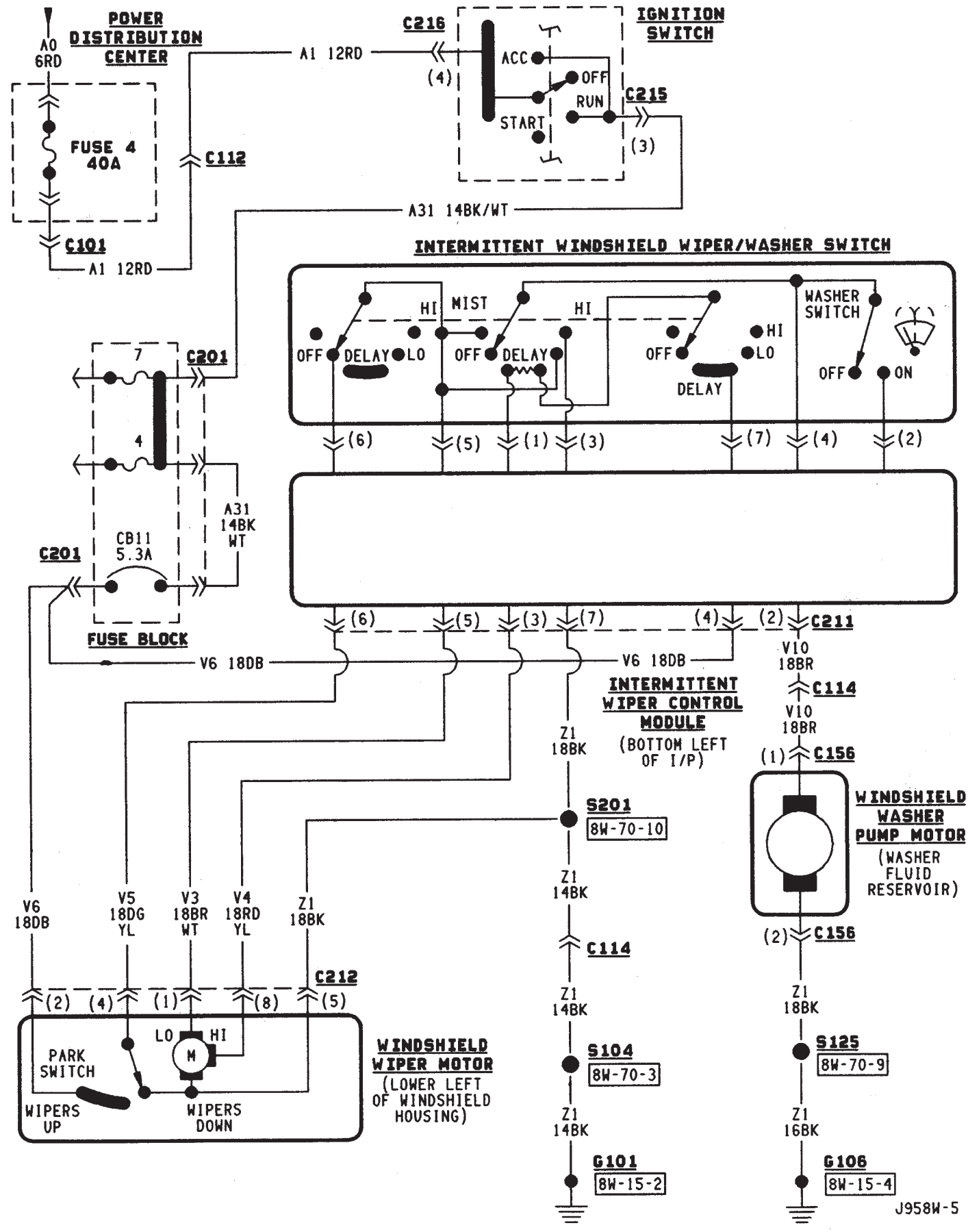

BATTERY POSITIVE TERMINAL
A0 6RD
FUSE 4 40A
C101
POWER DISTRIBUTION CENTER
A1 12RD
C112
A1 12RD
C216
IGNITION SWITCH
ACC
OFF
RUN
START
(4)
C216
(1)
A22 14BK/OR
V22 16BR/YL
FUSE BLOCK
C201
1 20A
C201
(5) C219
C219
PARK
WIPER
WASH
WASH
C219
(4)
C219
(2)
V13 16BR/LG
V20 18BK WT
(1)
C114
REAR WIPER SWITCH
V23 16BR PK
V22 16BR YL
V13 16BR LG
C204
V23 16BR PK
V22 16BR YL
V13 16BR LG
C303
V22 14BR/WT
V13 14BR WT
S306
8W-70-16
Z1 16BK
V23 14GR
(2) C306
DIODE
C306
C306
(1)
(3)
V13 14GR WT
WINDSHIELD WIPER MOTOR
Z1 12BK
C303
Z1 14BK
S303
8W-70-15
(1) C118
REAR WINDSHIELD WASHER PUMP MOTOR
(BOTTOM OF WASHER FLUID RESERVOIR)
(2) C118
Z1 18BK
S125
8W-70-9
Z1 16BK
G106
8W-15-4
Z1 12BK
C203
Z1 14BK
S301
8W-70-15
Z1 18BK
S213
8W-70-14
Z1 14BK
S211
8W-70-14
Z1 14BK
S201
8W-70-10
Z1 14BK
C114
Z1 14BK
S104
8W-70-3
Z1 14BK
G101
8W-15-2
Z1 14BK
J958W-5

STANDARD




J958W-5

## INTERMITTENT

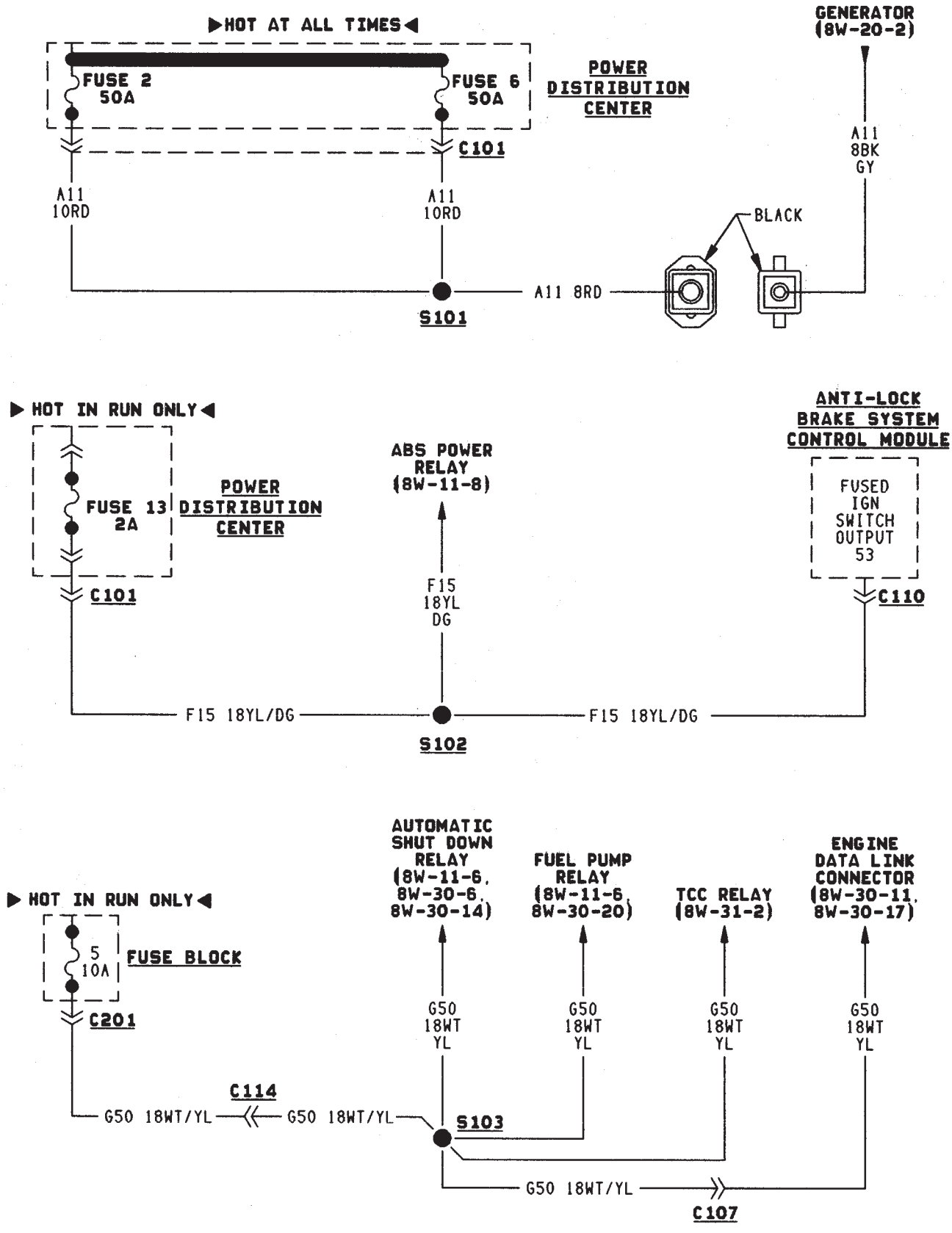


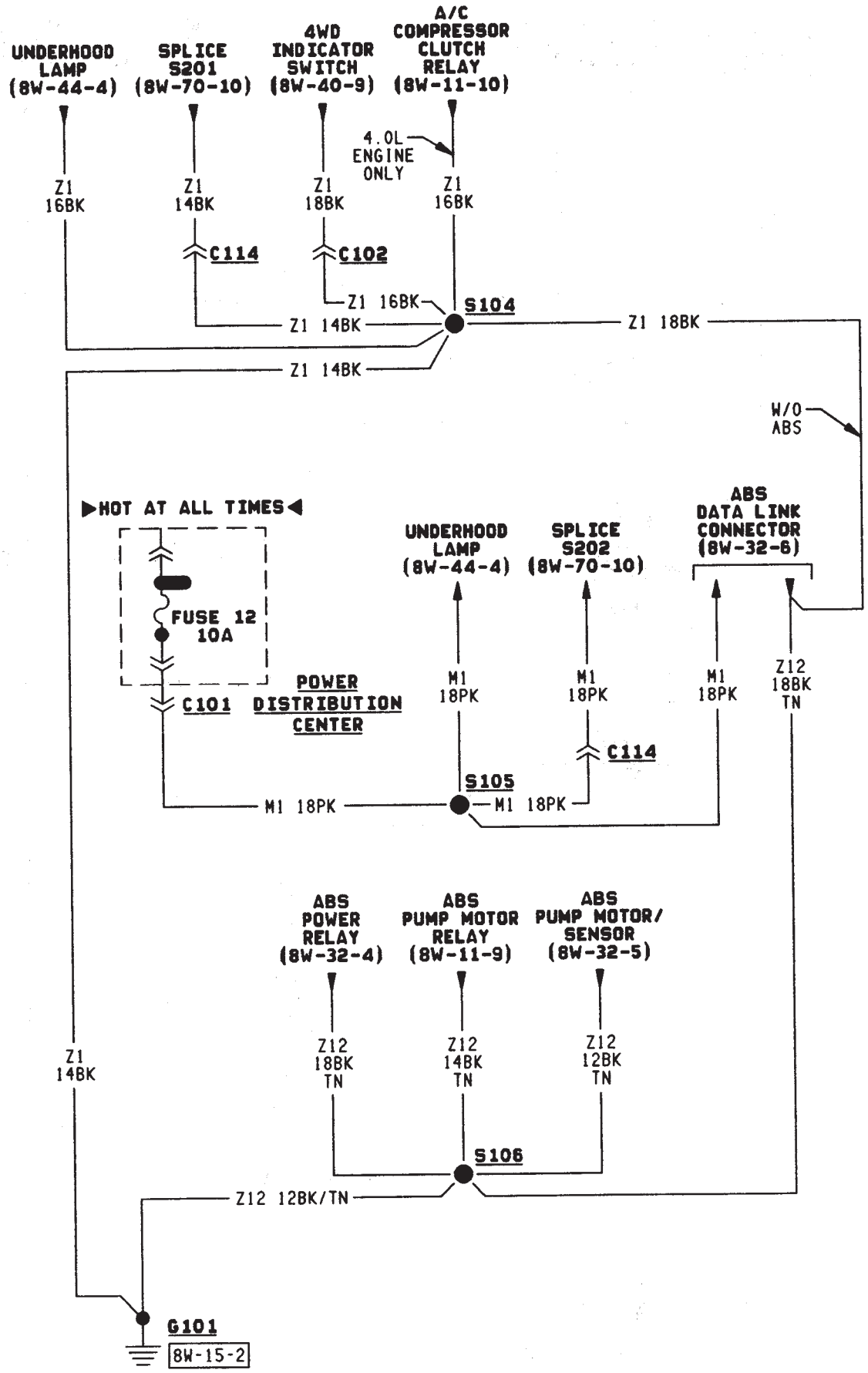
# SPLICE INFORMATION

## GENERAL INFORMATION

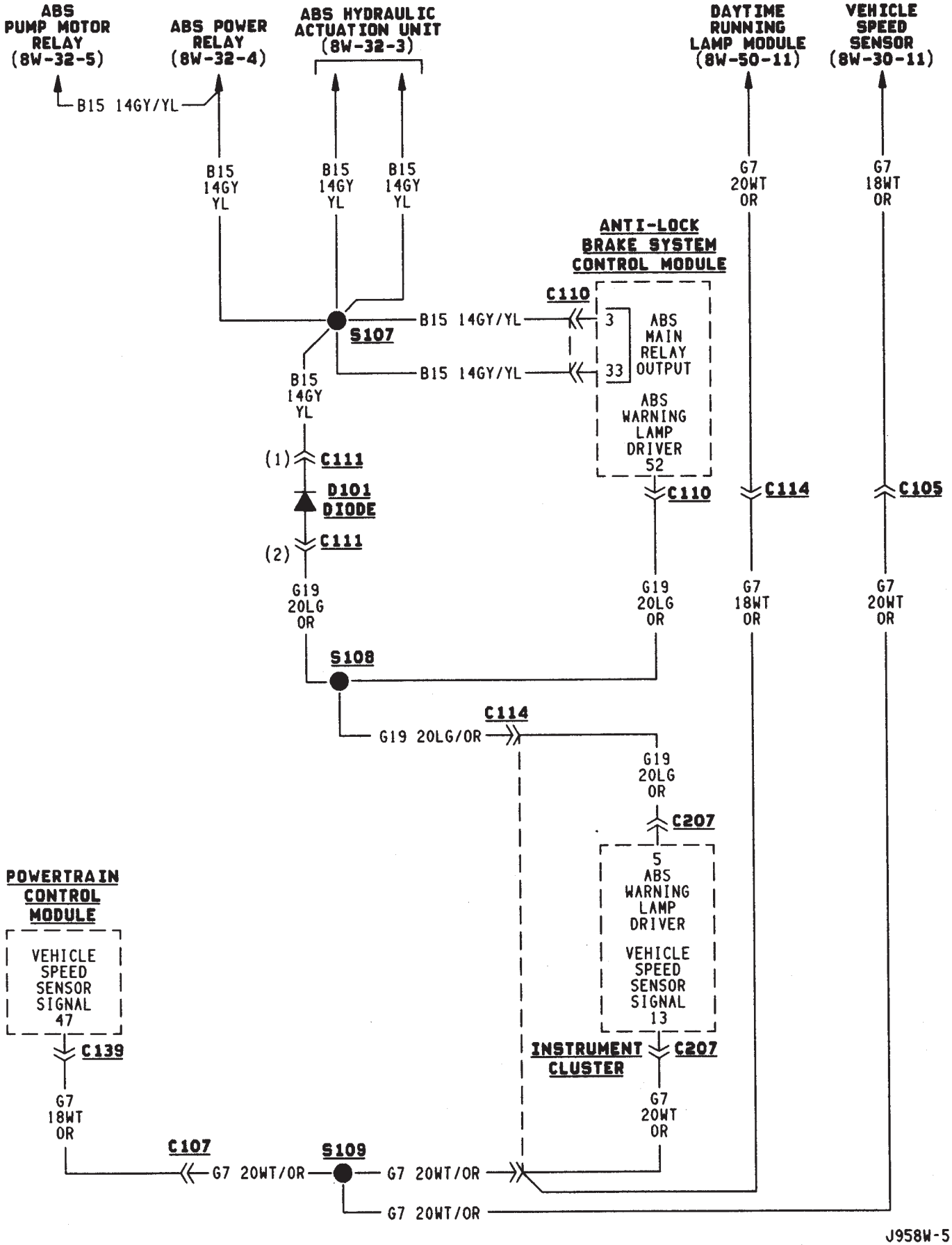
This section identifies all splices in the wiring diagrams. It also shows the splices in their entirety. All circuits that are part of the splices are shown, and the systems they affect are referenced. For viewing the location of each splice in the vehicle, refer to Section 8W-95.

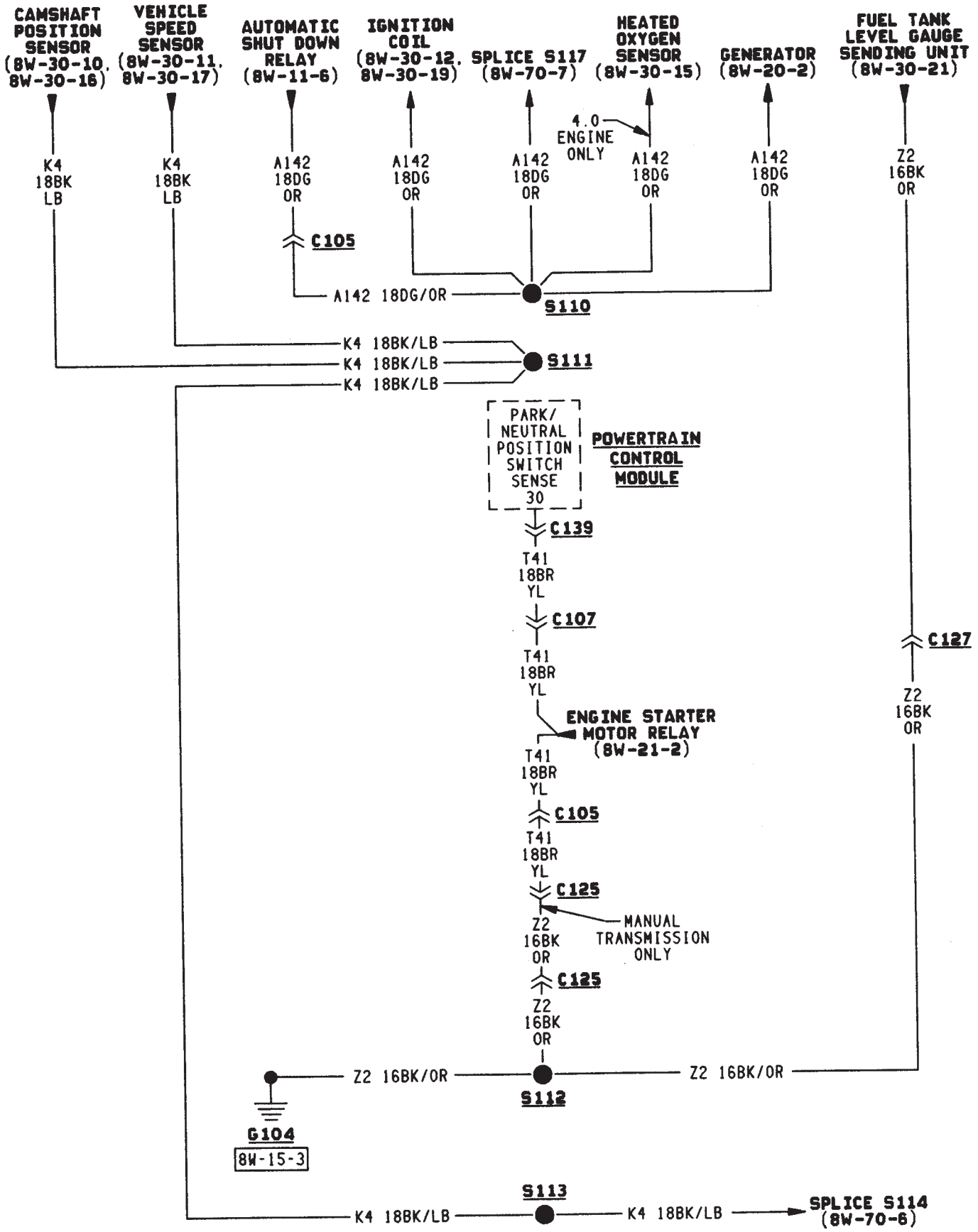
## SPLICE INDEX


▶HOT AT ALL TIMES◀
FUSE 2
50A
FUSE 6
50A
POWER
DISTRIBUTION
CENTER
C101
A11
10RD
A11
10RD
GENERATOR
(8W-20-2)
A11
8BK
GY
BLACK
A11 8RD
S101
▶ HOT IN RUN ONLY◀
FUSE 13
2A
POWER
DISTRIBUTION
CENTER
C101
ABS POWER
RELAY
(8W-11-8)
F15
18YL
DG
ANTI-LOCK
BRAKE SYSTEM
CONTROL MODULE
FUSED
IGN
SWITCH
OUTPUT
53
C110
F15 18YL/DG
F15 18YL/DG
S102
▶ HOT IN RUN ONLY◀
5
10A
FUSE BLOCK
C201
AUTOMATIC
SHUT DOWN
RELAY
(8W-11-6,
8W-30-6,
8W-30-14)
FUEL PUMP
RELAY
(8W-11-6,
8W-30-20)
TCC RELAY
(8W-31-2)
ENGINE
DATA LINK
CONNECTOR
(8W-30-11,
8W-30-17)
G50
18WT
YL
G50
18WT
YL
G50
18WT
YL
G50
18WT
YL
C114
G50 18WT/YL
G50 18WT/YL
S103
G50 18WT/YL
C107

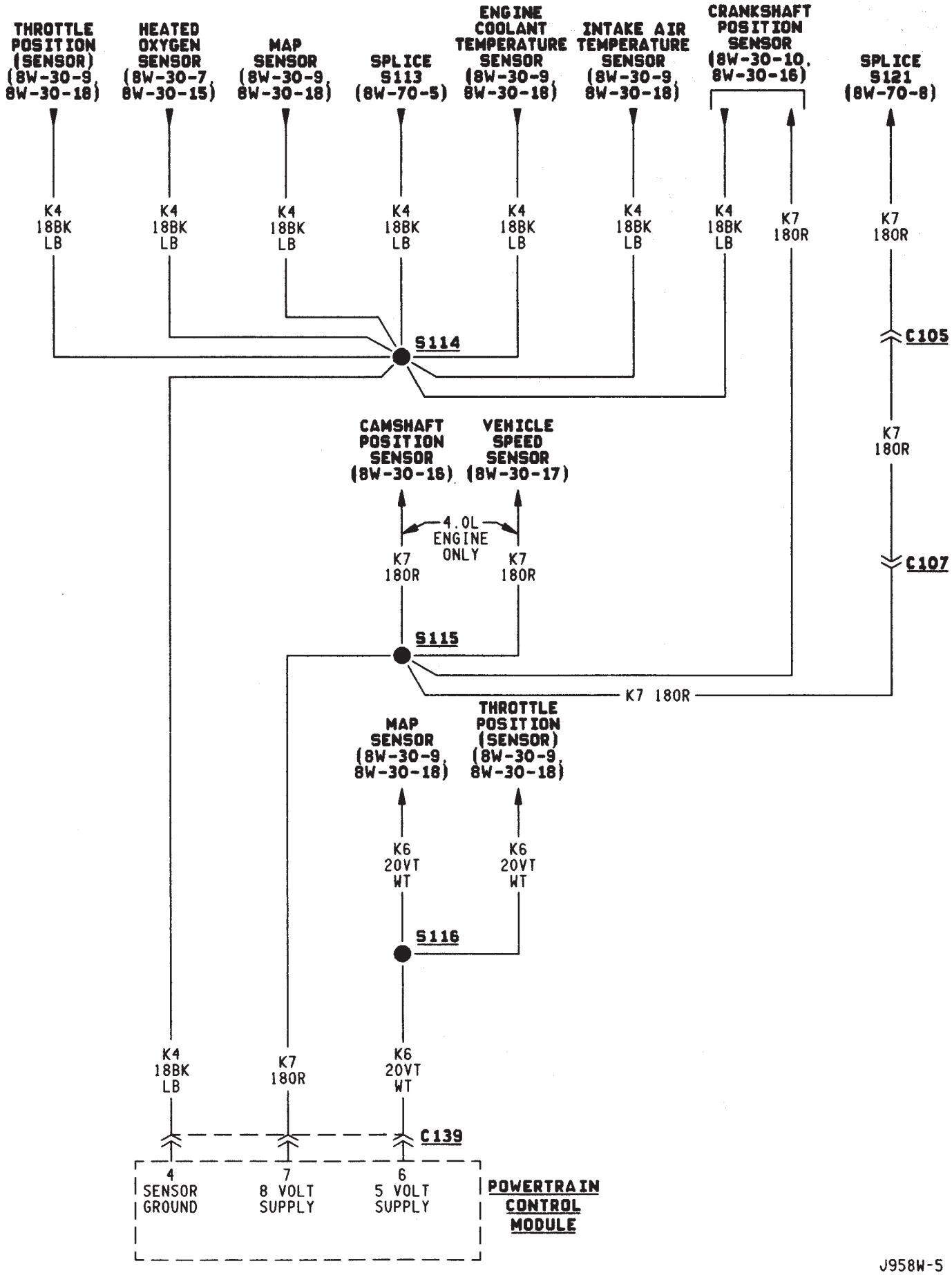

UNDERHOOD LAMP (8W-44-4)
SPLICE S201 (8W-70-10)
4WD INDICATOR SWITCH (8W-40-9)
A/C COMPRESSOR CLUTCH RELAY (8W-11-10)
4.0L ENGINE ONLY
Z1 16BK
Z1 14BK
Z1 18BK
Z1 16BK
C114
C102
Z1 16BK
S104
Z1 14BK
Z1 18BK
Z1 14BK
W/O ABS
▶HOT AT ALL TIMES◀
FUSE 12 10A
C101
POWER DISTRIBUTION CENTER
UNDERHOOD LAMP (8W-44-4)
SPLICE S202 (8W-70-10)
ABS DATA LINK CONNECTOR (8W-32-6)
M1 18PK
M1 18PK
M1 18PK
Z12 18BK TN
C114
S105
M1 18PK
M1 18PK
ABS POWER RELAY (8W-32-4)
ABS PUMP MOTOR RELAY (8W-11-9)
ABS PUMP MOTOR/ SENSOR (8W-32-5)
Z1 14BK
Z12 18BK TN
Z12 14BK TN
Z12 12BK TN
S106
Z12 12BK/TN
G101
8W-15-2

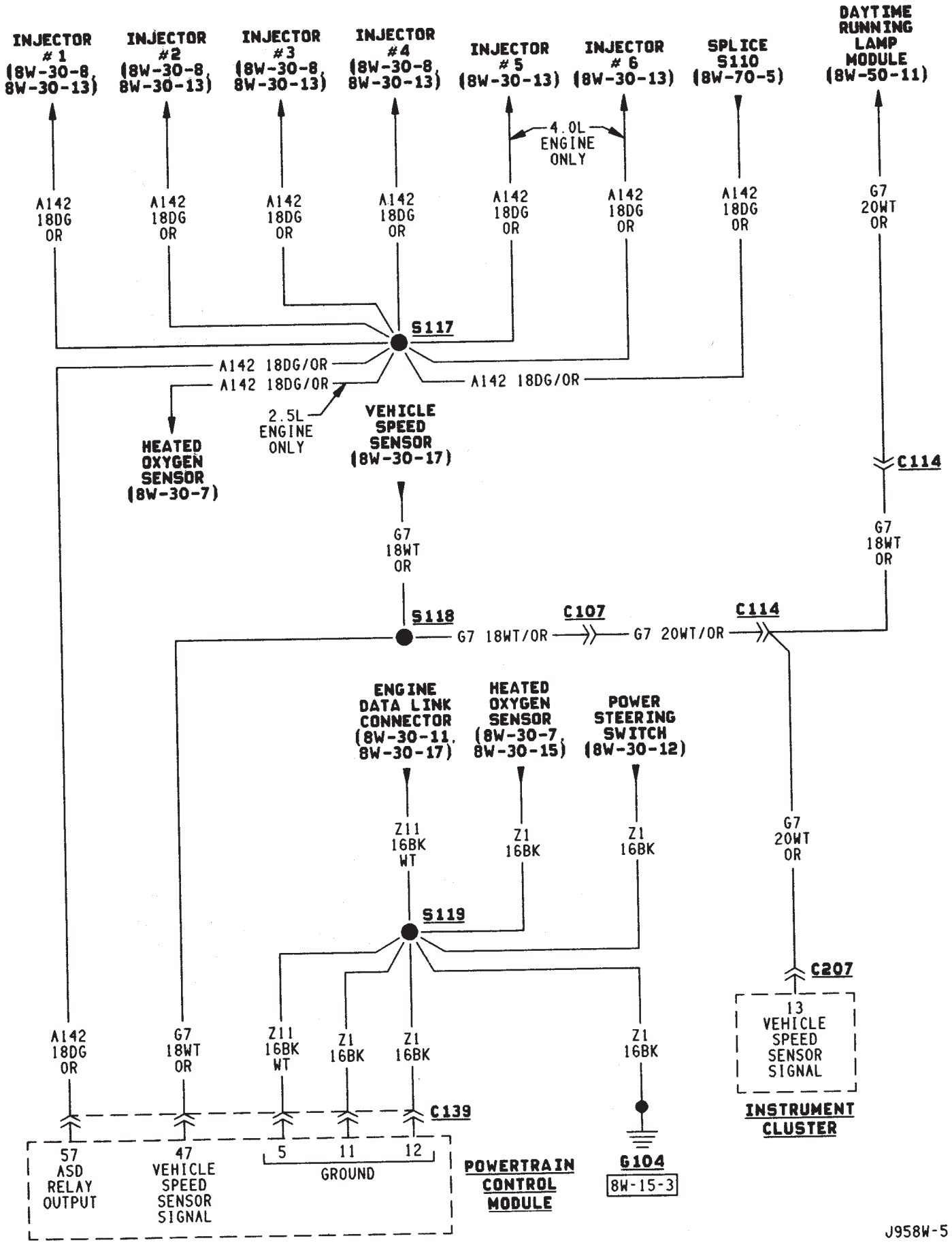
J958W-5

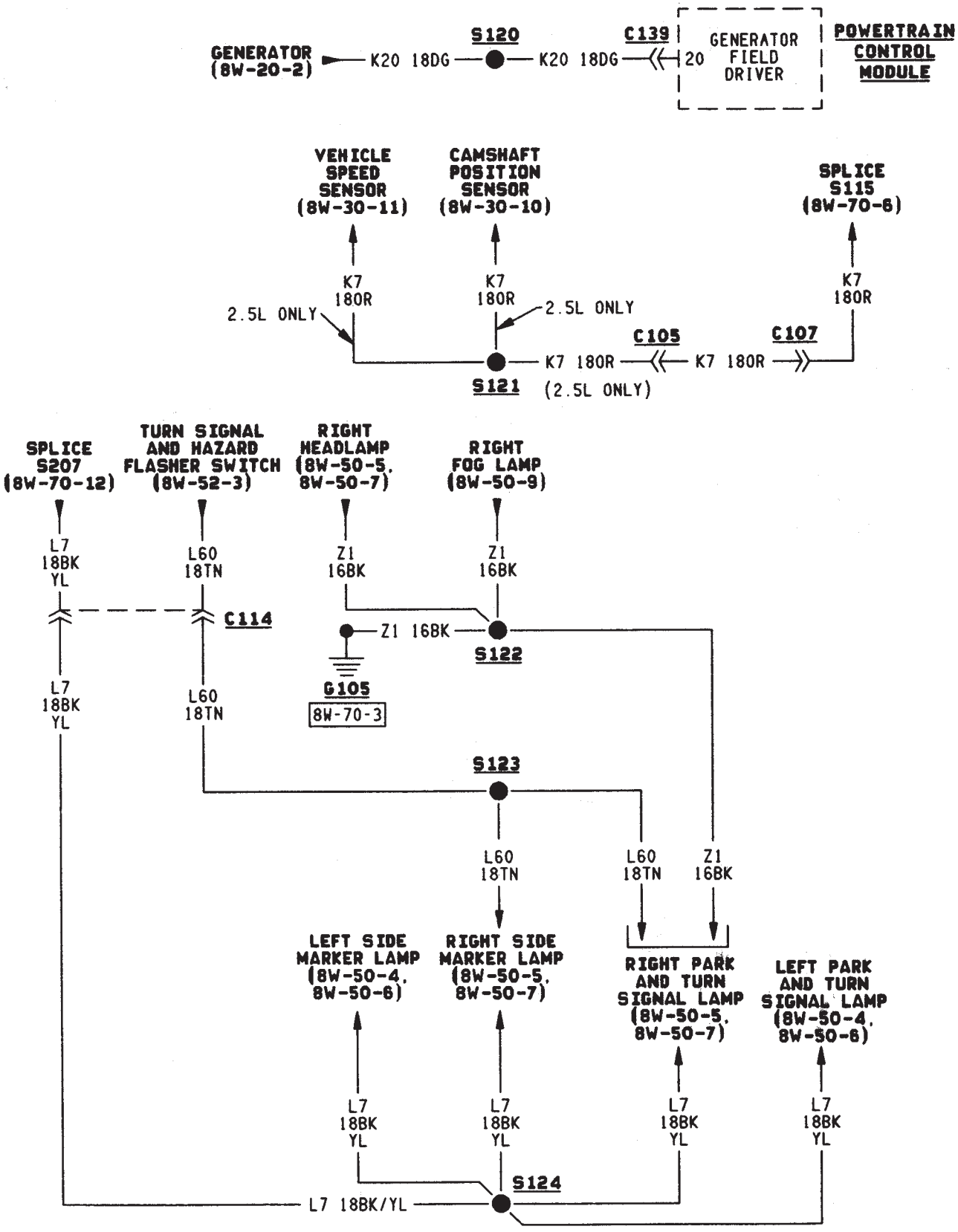

ABS PUMP MOTOR RELAY (8W-32-5)
ABS POWER RELAY (8W-32-4)
ABS HYDRAULIC ACTUATION UNIT (8W-32-3)
DAYTIME RUNNING LAMP MODULE (8W-50-11)
VEHICLE SPEED SENSOR (8W-30-11)
B15 14GY/YL
B15 14GY YL
G7 20WT OR
G7 18WT OR
ANTI-LOCK BRAKE SYSTEM CONTROL MODULE
C110
3
33
ABS MAIN RELAY OUTPUT
ABS WARNING LAMP DRIVER 52
S107
(1)
C111
D101 DIODE
(2)
G19 20LG OR
S108
C114
G19 20LG/OR
C207
5
ABS WARNING LAMP DRIVER
VEHICLE SPEED SENSOR SIGNAL 13
POWERTRAIN CONTROL MODULE
VEHICLE SPEED SENSOR SIGNAL 47
C139
INSTRUMENT CLUSTER
C105
C107
S109
G7 20WT/OR
J958W-5


CAMSHAFT POSITION SENSOR (8W-30-10, 8W-30-16)
VEHICLE SPEED SENSOR (8W-30-11, 8W-30-17)
AUTOMATIC SHUT DOWN RELAY (8W-11-6)
IGNITION COIL (8W-30-12, 8W-30-19)
SPLICE S117 (8W-70-7)
HEATED OXYGEN SENSOR (8W-30-15)
GENERATOR (8W-20-2)
FUEL TANK LEVEL GAUGE SENDING UNIT (8W-30-21)
4.0 ENGINE ONLY
K4 18BK LB
K4 18BK LB
A142 18DG OR
A142 18DG OR
A142 18DG OR
A142 18DG OR
A142 18DG OR
Z2 16BK OR
C105
A142 18DG/OR
S110
K4 18BK/LB
K4 18BK/LB
K4 18BK/LB
S111
PARK/ NEUTRAL POSITION SWITCH SENSE 30
POWERTRAIN CONTROL MODULE
C139
T41 18BR YL
C107
T41 18BR YL
ENGINE STARTER MOTOR RELAY (8W-21-2)
T41 18BR YL
C105
T41 18BR YL
C125
Z2 16BK OR
MANUAL TRANSMISSION ONLY
C125
Z2 16BK OR
C127
Z2 16BK OR
Z2 16BK/OR
Z2 16BK/OR
S112
G104
8W-15-3
S113
K4 18BK/LB
K4 18BK/LB
SPLICE S114 (8W-70-6)

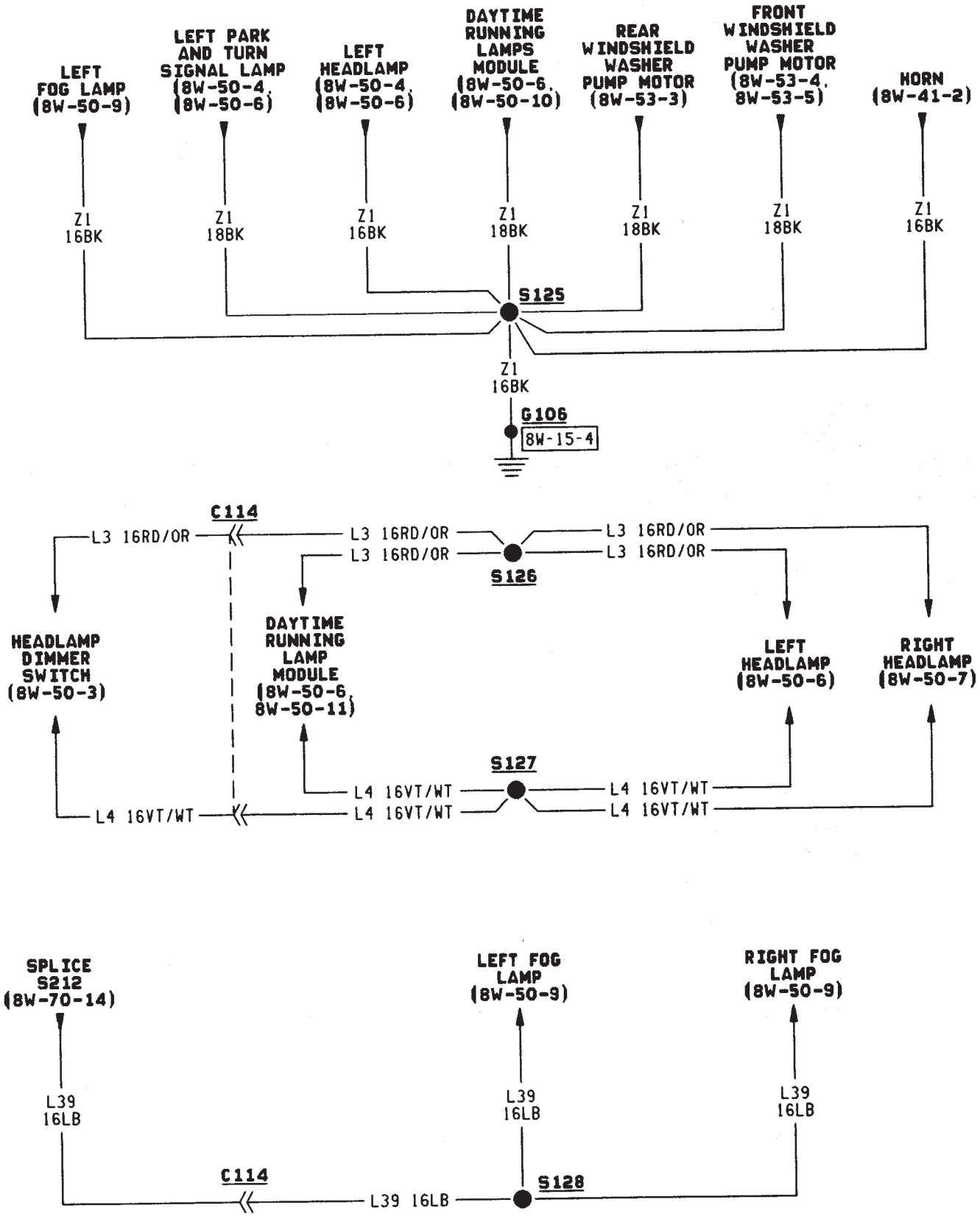
J958W-5


THROTTLE POSITION (SENSOR) (8W-30-9, 8W-30-18)
HEATED OXYGEN SENSOR (8W-30-7, 8W-30-15)
MAP SENSOR (8W-30-9, 8W-30-18)
SPLICE S113 (8W-70-5)
ENGINE COOLANT TEMPERATURE SENSOR (8W-30-9, 8W-30-18)
INTAKE AIR TEMPERATURE SENSOR (8W-30-9, 8W-30-18)
CRANKSHAFT POSITION SENSOR (8W-30-10, 8W-30-16)
SPLICE S121 (8W-70-8)
K4 18BK LB
K7 180R
S114
C105
CAMSHAFT POSITION SENSOR (8W-30-16)
VEHICLE SPEED SENSOR (8W-30-17)
4.0L ENGINE ONLY
C107
S115
MAP SENSOR (8W-30-9, 8W-30-18)
THROTTLE POSITION (SENSOR) (8W-30-9, 8W-30-18)
K6 20VT WT
S116
C139
4 SENSOR GROUND
7 8 VOLT SUPPLY
6 5 VOLT SUPPLY
POWERTRAIN CONTROL MODULE
J958W-5

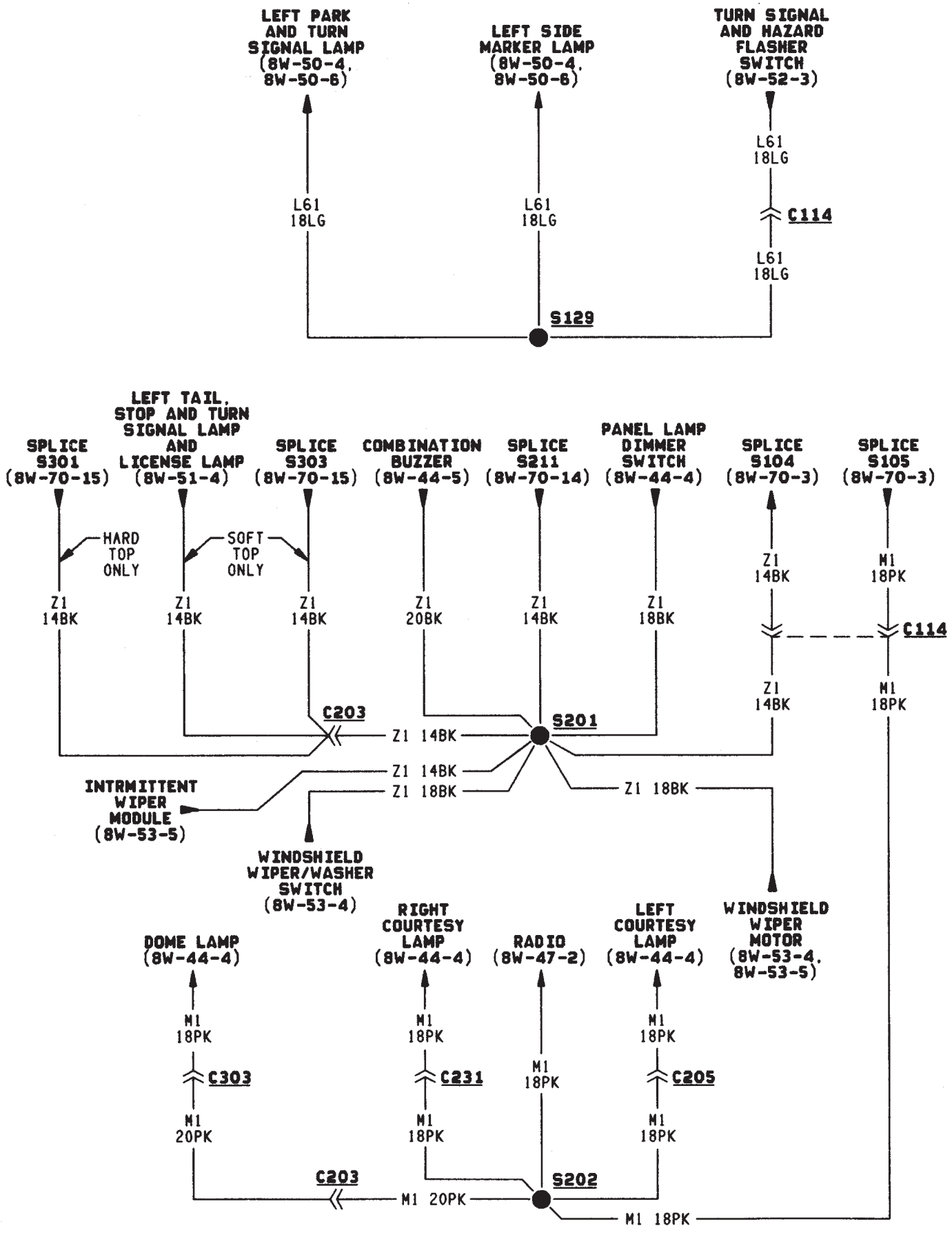

INJECTOR #1 (8W-30-8, 8W-30-13)
INJECTOR #2 (8W-30-8, 8W-30-13)
INJECTOR #3 (8W-30-8, 8W-30-13)
INJECTOR #4 (8W-30-8, 8W-30-13)
INJECTOR #5 (8W-30-13)
INJECTOR #6 (8W-30-13)
SPLICE S110 (8W-70-5)
DAYTIME RUNNING LAMP MODULE (8W-50-11)
4.0L ENGINE ONLY
A142 18DG OR
G7 20WT OR
S117
A142 18DG/OR
HEATED OXYGEN SENSOR (8W-30-7)
2.5L ENGINE ONLY
VEHICLE SPEED SENSOR (8W-30-17)
C114
G7 18WT OR
S118
C107
G7 18WT/OR
G7 20WT/OR
ENGINE DATA LINK CONNECTOR (8W-30-11, 8W-30-17)
HEATED OXYGEN SENSOR (8W-30-7, 8W-30-15)
POWER STEERING SWITCH (8W-30-12)
Z11 16BK WT
Z1 16BK
S119
C207
13 VEHICLE SPEED SENSOR SIGNAL
INSTRUMENT CLUSTER
Z11 16BK WT
C139
57 ASD RELAY OUTPUT
47 VEHICLE SPEED SENSOR SIGNAL
5 11 12 GROUND
POWERTRAIN CONTROL MODULE
G104
8W-15-3
J958W-5


GENERATOR (8W-20-2)
K20 18DG
S120
K20 18DG
C139
20
GENERATOR FIELD DRIVER
POWERTRAIN CONTROL MODULE
VEHICLE SPEED SENSOR (8W-30-11)
CAMSHAFT POSITION SENSOR (8W-30-10)
SPLICE S115 (8W-70-6)
K7 180R
2.5L ONLY
2.5L ONLY
C105
C107
S121
(2.5L ONLY)
SPLICE S207 (8W-70-12)
TURN SIGNAL AND HAZARD FLASHER SWITCH (8W-52-3)
RIGHT HEADLAMP (8W-50-5, 8W-50-7)
RIGHT FOG LAMP (8W-50-9)
L7 18BK YL
L60 18TN
Z1 16BK
C114
S122
G105
8W-70-3
S123
LEFT SIDE MARKER LAMP (8W-50-4, 8W-50-6)
RIGHT SIDE MARKER LAMP (8W-50-5, 8W-50-7)
RIGHT PARK AND TURN SIGNAL LAMP (8W-50-5, 8W-50-7)
LEFT PARK AND TURN SIGNAL LAMP (8W-50-4, 8W-50-6)
S124
L7 18BK/YL

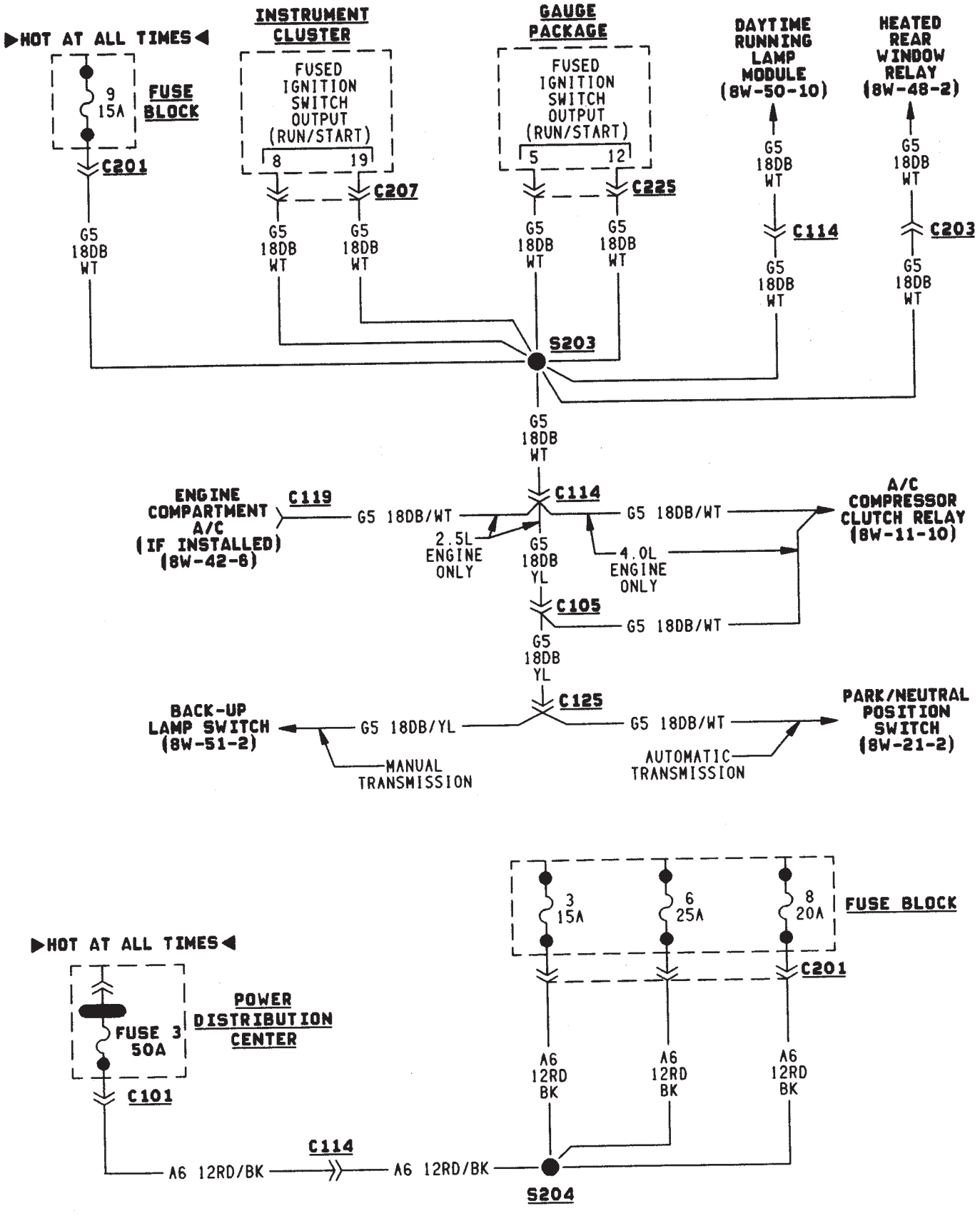
J958W-5


LEFT FOG LAMP (8W-50-9)
LEFT PARK AND TURN SIGNAL LAMP (8W-50-4, 8W-50-6)
LEFT HEADLAMP (8W-50-4, 8W-50-6)
DAYTIME RUNNING LAMPS MODULE (8W-50-6, 8W-50-10)
REAR WINDSHIELD WASHER PUMP MOTOR (8W-53-3)
FRONT WINDSHIELD WASHER PUMP MOTOR (8W-53-4, 8W-53-5)
HORN (8W-41-2)
Z1 16BK
Z1 18BK
Z1 16BK
Z1 18BK
Z1 18BK
Z1 18BK
Z1 16BK
S125
Z1 16BK
G106
8W-15-4
C114
L3 16RD/OR
L3 16RD/OR
L3 16RD/OR
L3 16RD/OR
L3 16RD/OR
S126
HEADLAMP DIMMER SWITCH (8W-50-3)
DAYTIME RUNNING LAMP MODULE (8W-50-6, 8W-50-11)
LEFT HEADLAMP (8W-50-6)
RIGHT HEADLAMP (8W-50-7)
S127
L4 16VT/WT
L4 16VT/WT
L4 16VT/WT
L4 16VT/WT
L4 16VT/WT
SPLICE S212 (8W-70-14)
LEFT FOG LAMP (8W-50-9)
RIGHT FOG LAMP (8W-50-9)
L39 16LB
L39 16LB
L39 16LB
C114
L39 16LB
S128

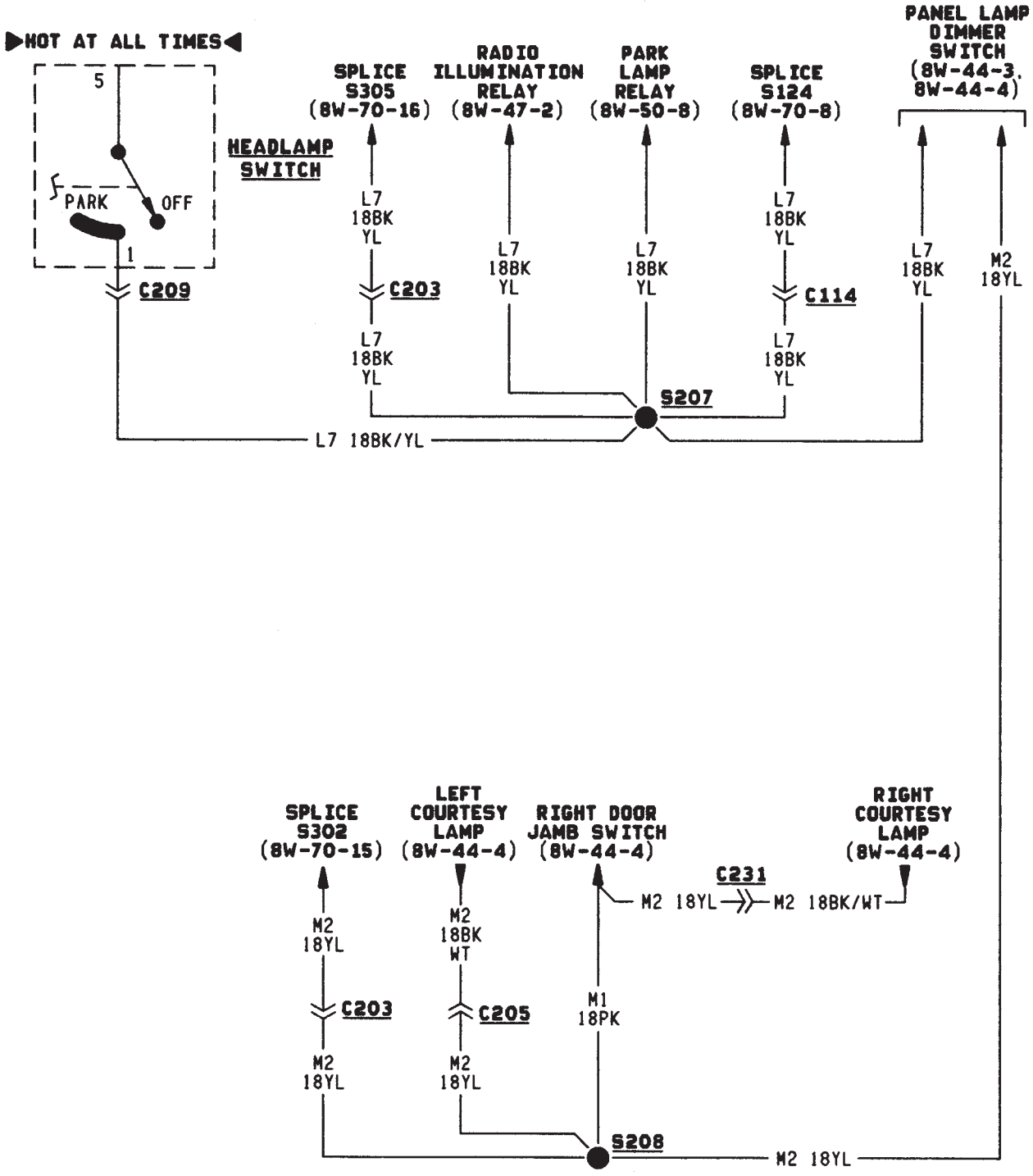
J958W-5


LEFT PARK AND TURN SIGNAL LAMP (8W-50-4, 8W-50-6)
LEFT SIDE MARKER LAMP (8W-50-4, 8W-50-6)
TURN SIGNAL AND HAZARD FLASHER SWITCH (8W-52-3)
L61 18LG
L61 18LG
L61 18LG
C114
L61 18LG
S129
LEFT TAIL, STOP AND TURN SIGNAL LAMP AND LICENSE LAMP (8W-51-4)
SPLICE S301 (8W-70-15)
SPLICE S303 (8W-70-15)
COMBINATION BUZZER (8W-44-5)
SPLICE S211 (8W-70-14)
PANEL LAMP DIMMER SWITCH (8W-44-4)
SPLICE S104 (8W-70-3)
SPLICE S105 (8W-70-3)
HARD TOP ONLY
SOFT TOP ONLY
Z1 14BK
Z1 14BK
Z1 14BK
Z1 20BK
Z1 14BK
Z1 18BK
Z1 14BK
M1 18PK
C114
Z1 14BK
M1 18PK
C203
Z1 14BK
S201
Z1 14BK
Z1 18BK
Z1 18BK
INTRMITTENT WIPER MODULE (8W-53-5)
WINDSHIELD WIPER/WASHER SWITCH (8W-53-4)
DOME LAMP (8W-44-4)
RIGHT COURTESY LAMP (8W-44-4)
RADIO (8W-47-2)
LEFT COURTESY LAMP (8W-44-4)
WINDSHIELD WIPER MOTOR (8W-53-4, 8W-53-5)
M1 18PK
M1 18PK
M1 18PK
M1 18PK
C303
C231
C205
M1 20PK
M1 18PK
M1 18PK
C203
S202
M1 20PK
M1 18PK

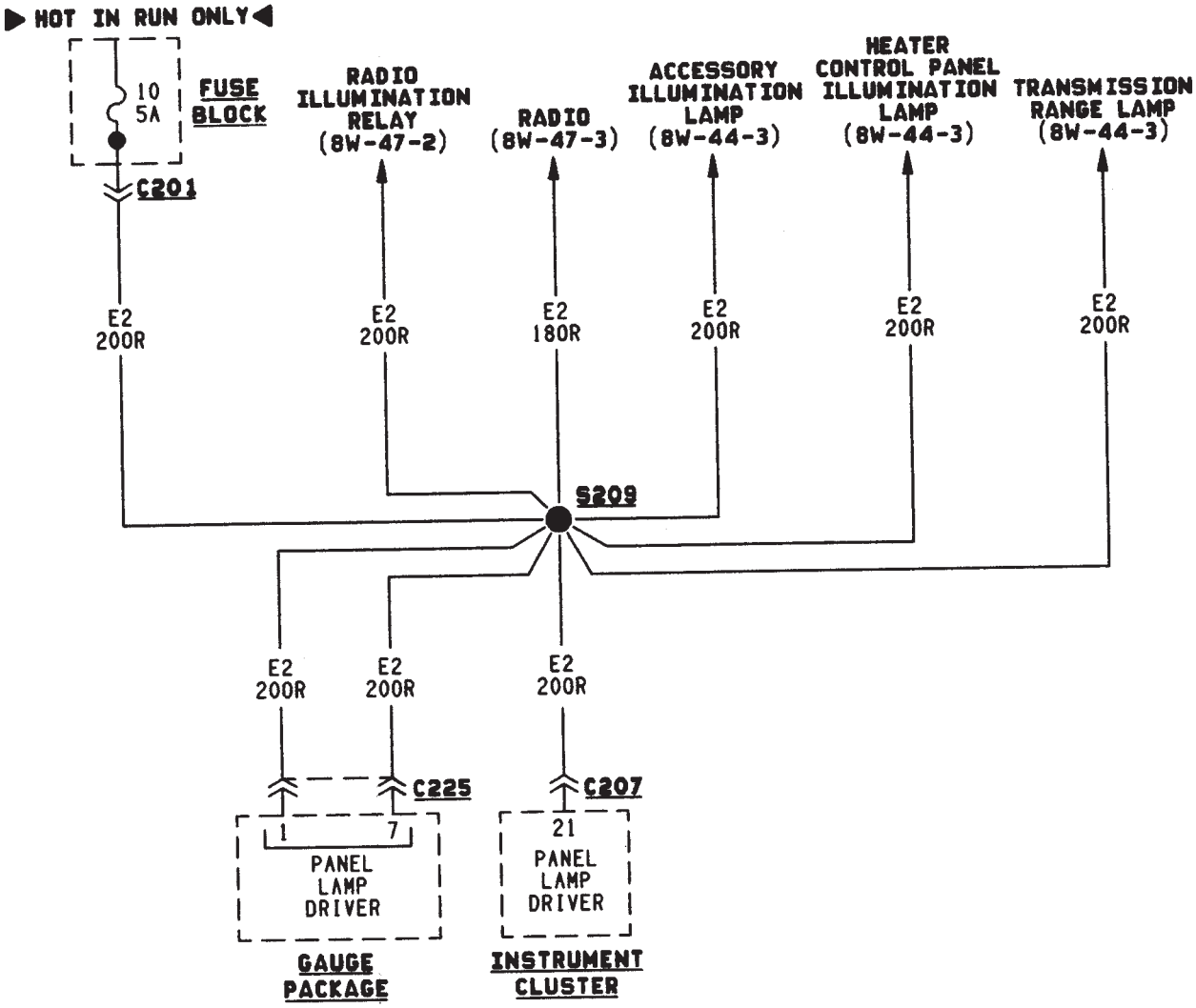
J958W-5

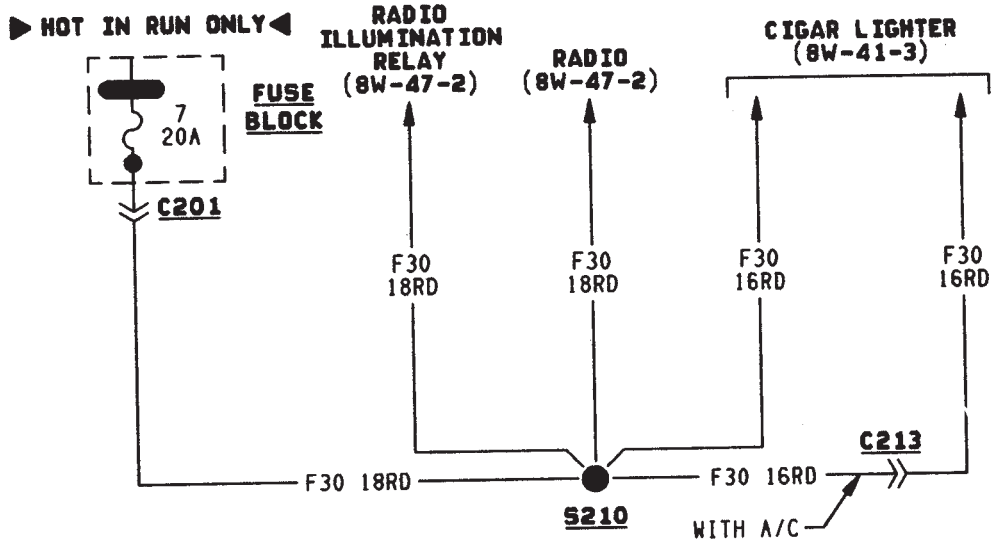

▶HOT AT ALL TIMES◀
9
15A
FUSE BLOCK
C201
G5
18DB
WT
INSTRUMENT CLUSTER
FUSED IGNITION SWITCH OUTPUT (RUN/START)
8
19
C207
GAUGE PACKAGE
FUSED IGNITION SWITCH OUTPUT (RUN/START)
5
12
C225
DAYTIME RUNNING LAMP MODULE (8W-50-10)
C114
HEATED REAR WINDOW RELAY (8W-48-2)
C203
S203
C114
ENGINE COMPARTMENT A/C (IF INSTALLED) (8W-42-6)
C119
G5 18DB/WT
2.5L ENGINE ONLY
G5 18DB YL
4.0L ENGINE ONLY
A/C COMPRESSOR CLUTCH RELAY (8W-11-10)
C105
C125
BACK-UP LAMP SWITCH (8W-51-2)
G5 18DB/YL
MANUAL TRANSMISSION
AUTOMATIC TRANSMISSION
PARK/NEUTRAL POSITION SWITCH (8W-21-2)
▶HOT AT ALL TIMES◀
FUSE 3
50A
POWER DISTRIBUTION CENTER
C101
3
15A
6
25A
8
20A
FUSE BLOCK
C201
A6
12RD
BK
C114
A6 12RD/BK
S204

J958W-5

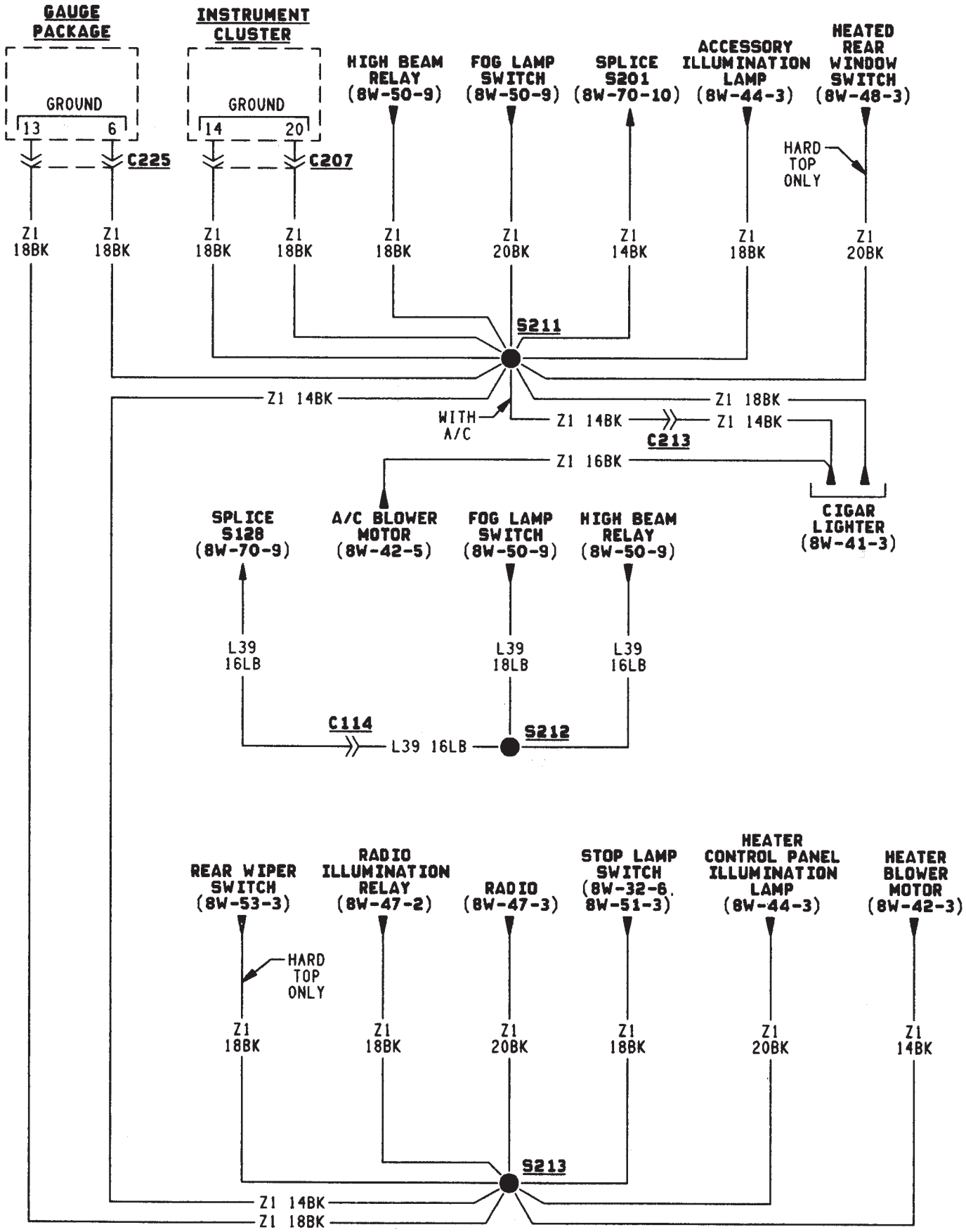

▶HOT AT ALL TIMES◀
5
PARK
OFF
1
C209
HEADLAMP SWITCH
SPLICE S305 (8W-70-16)
RADIO ILLUMINATION RELAY (8W-47-2)
PARK LAMP RELAY (8W-50-8)
SPLICE S124 (8W-70-8)
PANEL LAMP DIMMER SWITCH (8W-44-3, 8W-44-4)
L7 18BK YL
C203
C114
S207
L7 18BK/YL
M2 18YL
SPLICE S302 (8W-70-15)
LEFT COURTESY LAMP (8W-44-4)
RIGHT DOOR JAMB SWITCH (8W-44-4)
RIGHT COURTESY LAMP (8W-44-4)
C231
M2 18YL
M2 18BK/WT
M2 18BK WT
C205
M1 18PK
S208

J958W-5

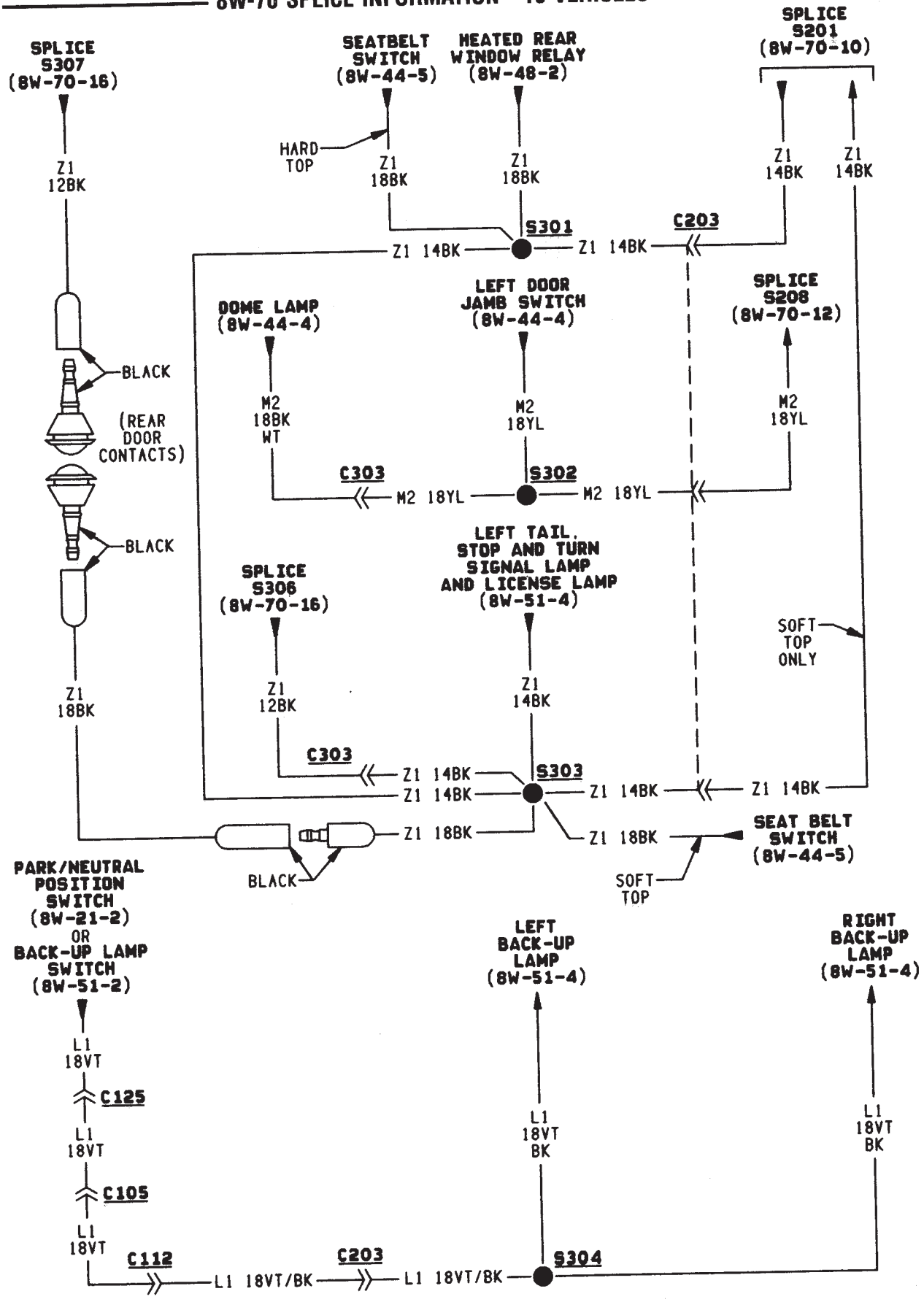

▶ HOT IN RUN ONLY◀
10
5A
FUSE BLOCK
C201
RADIO ILLUMINATION RELAY (8W-47-2)
RADIO (8W-47-3)
ACCESSORY ILLUMINATION LAMP (8W-44-3)
HEATER CONTROL PANEL ILLUMINATION LAMP (8W-44-3)
TRANSMISSION RANGE LAMP (8W-44-3)
E2 200R
E2 200R
E2 180R
E2 200R
E2 200R
E2 200R
S209
E2 200R
E2 200R
E2 200R
C225
C207
1
7
21
PANEL LAMP DRIVER
PANEL LAMP DRIVER
GAUGE PACKAGE
INSTRUMENT CLUSTER


▶ HOT IN RUN ONLY◀
7
20A
FUSE BLOCK
C201
RADIO ILLUMINATION RELAY (8W-47-2)
RADIO (8W-47-2)
CIGAR LIGHTER (8W-41-3)
F30 18RD
F30 18RD
F30 16RD
F30 16RD
C213
F30 18RD
F30 16RD
S210
WITH A/C

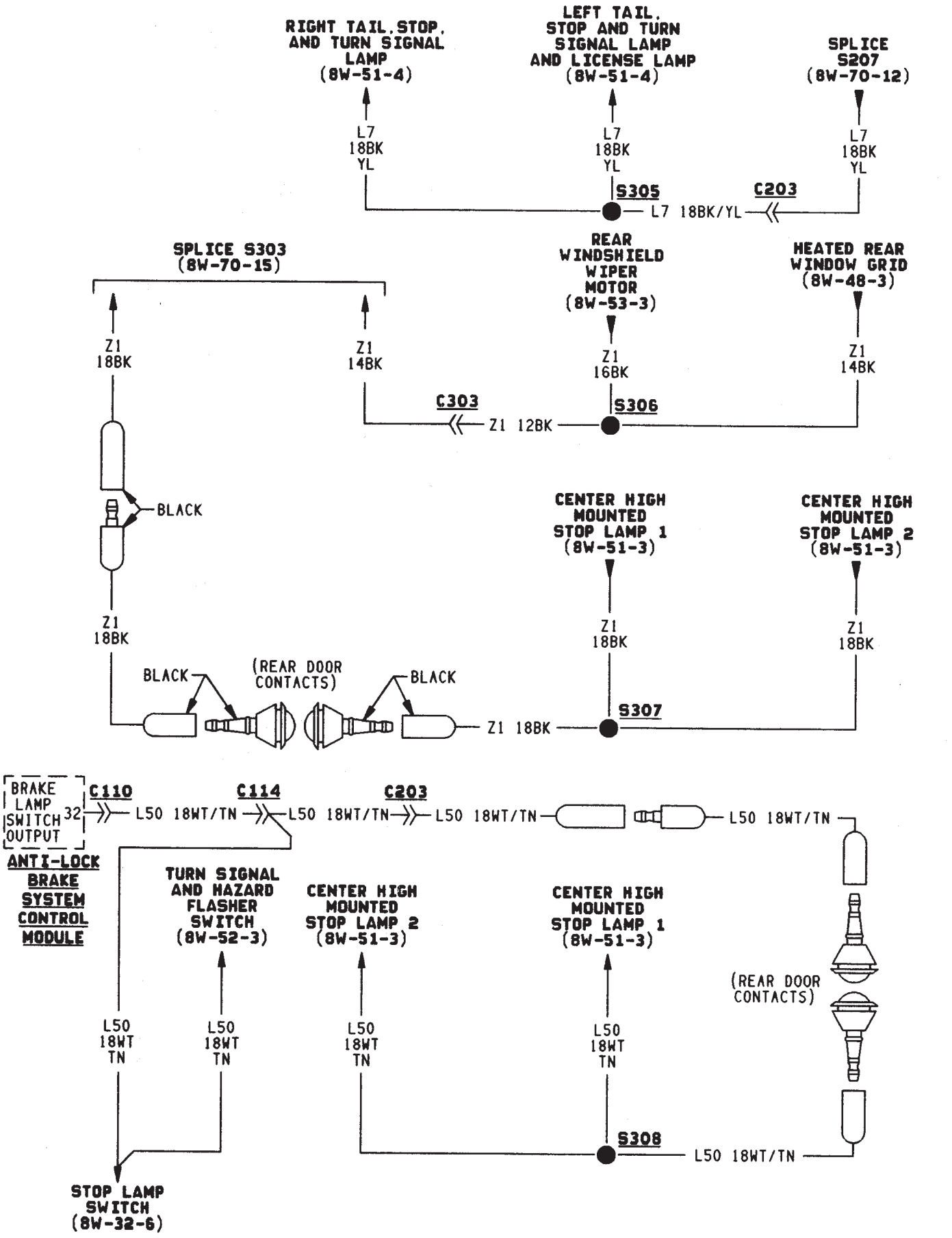
J958W-5


GAUGE PACKAGE
GROUND
13
6
C225
INSTRUMENT CLUSTER
GROUND
14
20
C207
HIGH BEAM RELAY (8W-50-9)
FOG LAMP SWITCH (8W-50-9)
SPLICE S201 (8W-70-10)
ACCESSORY ILLUMINATION LAMP (8W-44-3)
HEATED REAR WINDOW SWITCH (8W-48-3)
HARD TOP ONLY
Z1 18BK
Z1 18BK
Z1 18BK
Z1 18BK
Z1 18BK
Z1 20BK
Z1 14BK
Z1 18BK
Z1 20BK
S211
Z1 14BK
Z1 18BK
WITH A/C
Z1 14BK
Z1 14BK
C213
Z1 16BK
SPLICE S128 (8W-70-9)
A/C BLOWER MOTOR (8W-42-5)
FOG LAMP SWITCH (8W-50-9)
HIGH BEAM RELAY (8W-50-9)
CIGAR LIGHTER (8W-41-3)
L39 16LB
L39 18LB
L39 16LB
C114
L39 16LB
S212
REAR WIPER SWITCH (8W-53-3)
RADIO ILLUMINATION RELAY (8W-47-2)
RADIO (8W-47-3)
STOP LAMP SWITCH (8W-32-6, 8W-51-3)
HEATER CONTROL PANEL ILLUMINATION LAMP (8W-44-3)
HEATER BLOWER MOTOR (8W-42-3)
HARD TOP ONLY
Z1 18BK
Z1 18BK
Z1 20BK
Z1 18BK
Z1 20BK
Z1 14BK
S213
Z1 14BK
Z1 18BK

J958W-5


SPLICE S307 (8W-70-16)
Z1 12BK
BLACK
(REAR DOOR CONTACTS)
BLACK
Z1 18BK
SEATBELT SWITCH (8W-44-5)
HARD TOP
Z1 18BK
HEATED REAR WINDOW RELAY (8W-48-2)
Z1 18BK
SPLICE S201 (8W-70-10)
Z1 14BK
Z1 14BK
S301
C203
Z1 14BK
Z1 14BK
DOME LAMP (8W-44-4)
M2 18BK WT
LEFT DOOR JAMB SWITCH (8W-44-4)
M2 18YL
SPLICE S208 (8W-70-12)
M2 18YL
C303
S302
M2 18YL
M2 18YL
SPLICE S306 (8W-70-16)
Z1 12BK
LEFT TAIL, STOP AND TURN SIGNAL LAMP AND LICENSE LAMP (8W-51-4)
Z1 14BK
SOFT TOP ONLY
C303
Z1 14BK
S303
Z1 14BK
Z1 14BK
Z1 14BK
Z1 18BK
Z1 18BK
SEAT BELT SWITCH (8W-44-5)
BLACK
SOFT TOP
PARK/NEUTRAL POSITION SWITCH (8W-21-2)
OR
BACK-UP LAMP SWITCH (8W-51-2)
L1 18VT
C125
L1 18VT
C105
L1 18VT
C112
L1 18VT/BK
C203
L1 18VT/BK
LEFT BACK-UP LAMP (8W-51-4)
L1 18VT BK
S304
RIGHT BACK-UP LAMP (8W-51-4)
L1 18VT BK

J958W-5


RIGHT TAIL, STOP, AND TURN SIGNAL LAMP (8W-51-4)
LEFT TAIL, STOP AND TURN SIGNAL LAMP AND LICENSE LAMP (8W-51-4)
SPLICE S207 (8W-70-12)
L7 18BK YL
S305
C203
L7 18BK/YL
SPLICE S303 (8W-70-15)
REAR WINDSHIELD WIPER MOTOR (8W-53-3)
HEATED REAR WINDOW GRID (8W-48-3)
Z1 18BK
Z1 14BK
Z1 16BK
C303
S306
Z1 12BK
BLACK
CENTER HIGH MOUNTED STOP LAMP 1 (8W-51-3)
CENTER HIGH MOUNTED STOP LAMP 2 (8W-51-3)
(REAR DOOR CONTACTS)
S307
BRAKE LAMP SWITCH OUTPUT
32
C110
C114
C203
L50 18WT/TN
ANTI-LOCK BRAKE SYSTEM CONTROL MODULE
TURN SIGNAL AND HAZARD FLASHER SWITCH (8W-52-3)
S308
STOP LAMP SWITCH (8W-32-6)

J958W-5

# CONNECTOR PIN OUTS

## GENERAL INFORMATION

The pages referenced in this section show the connector, the circuits in the connector, and the pin that circuit occupies. Individual connector numbers are referenced on diagram pages throughout Group 8W.

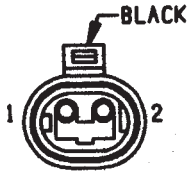
## CONNECTOR LOCATIONS

## C101

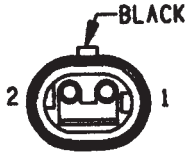
# POWER DISTRIBUTION CENTER

(SEE 8W-11-2)

## C102

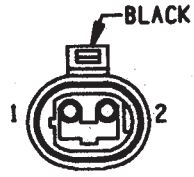



| CAV | CIRCUIT |
|---|---|
| 1 | G1 18DG/GY |
| 2 | Z1 18BK |




| CAV | CIRCUIT |
|---|---|
| 1 | G1 18DG/GY |
| 2 | Z1 18BK |

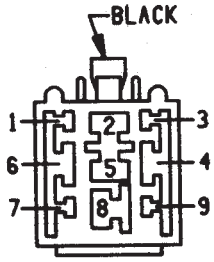
## C103




RIGHT FRONT WHEEL SPEED SENSOR

| | CAV | CIRCUIT | FUNCTION |
|---|---|---|---|
| * | 1 | B7 18WT | RIGHT FRONT WHEEL SPEED SENSOR (+) |
| * | 2 | B6 18WT/DB | RIGHT FRONT WHEEL SPEED SENSOR (−) |

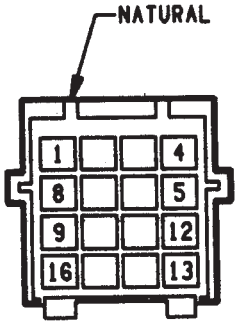
## C104



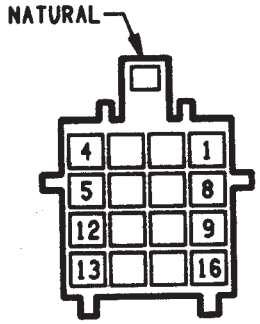

TCC RELAY

| CAV | CIRCUIT | FUNCTION |
|---|---|---|
| 1 | — | — |
| 2 | T22 16DB/TN | TCC RELAY OUTPUT |
| 3 | — | — |
| 4 | G50 18WT/YL | FUSED IGNITION SWITCH OUTPUT |
| 5 | — | — |
| 6 | K54 200R/BK | TCC SOLENOID CONTROL |
| 7 | — | — |
| 8 | A14 16RD/WT | FUSED B(+) |
| 9 | — | — |

## C105



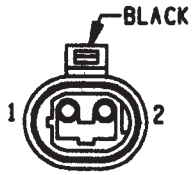

| | CAV | CIRCUIT | |
|---|---|---|---|
| | 1 | T40 14BR | |
| | 2 | C3 18DB/BK | |
| | 3 | A141 16DG/BK | |
| | 4 | G4 18DB | |
| | 5 | L1 18VT | |
| | 6 | C20 18BR/RD | |
| | 7 | C21 18DB/YL | 4.0L |
| | 7 | G7 20WT/OR | 2.5L |
| | 8 | A142 18DG/OR | |
| | 9 | G5 18DB/WT | |
| | 10 | T41 18BR/YL | |
| * | 11 | B4 18LG | 4.0L |
| | 11 | K7 18OR | 2.5L |
| * | 12 | B3 18LG/DB | |
| | 13 | T22 16DB/TN | |
| | 14 | G60 18GY/YL | |
| * | 15 | B2 18YL | |
| * | 16 | B1 18YL/DB | |




| | CAV | CIRCUIT | |
|---|---|---|---|
| | 1 | T40 14BR | |
| | 2 | C3 18DB/BK | |
| | 3 | A141 16DG/BK | |
| | 4 | G4 18DB | |
| | 5 | L1 18VT | |
| | 6 | C20 18BR/RD | |
| | 7 | C21 18DB/YL | 4.0L |
| | 7 | G7 18WT/OR | 2.5L |
| | 8 | A142 18DG/OR | |
| | 9 | G5 18DB/WT | |
| | 10 | T41 18BR/YL | |
| * | 11 | B4 18LG | 4.0L |
| | 11 | K7 18OR | 2.5L |
| * | 12 | B3 18LG/DB | |
| | 13 | T22 16DB/TN | |
| | 14 | G60 18GY/YL | |
| * | 15 | B2 18YL | |
| * | 16 | B1 18YL/DB | |

* — INDICATES TWISTED PAIRS (B1 & B2, B3 & B4, B6 & B7)

J958W-5

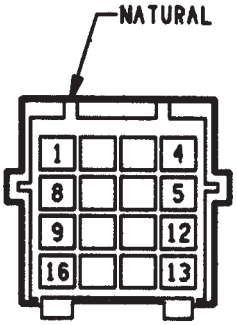



UNDERHOOD LAMP

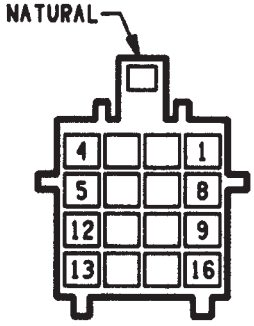
**C106**

| CAV | CIRCUIT | FUNCTION |
|---|---|---|
| 1 | M1 18PK | FUSED B(+) |
| 2 | Z1 16BK | GROUND |

**C107**

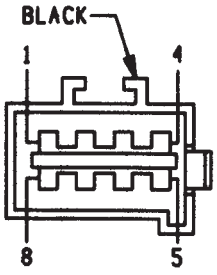



| | CAV | CIRCUIT | |
|---|---|---|---|
| | 1 | C20 18BR/RD | |
| | 2 | C91 18LB | |
| | 3 | A14 16RD/WT | |
| | 4 | C13 18DB/OR | |
| | 5 | T41 18BR/YL | |
| | 6 | G20 18VT/YL | |
| | 7 | G50 18WT/YL | |
| | 8 | G3 20BK/PK | |
| | 9 | V40 18WT/PK | |
| | 10 | K51 18DB/YL | |
| | 11 | K54 20OR/BK | |
| | 12 | G21 20GY/LB | |
| * | 13 | D20 20LG | |
| * | 14 | D21 20PK | |
| | 15 | G7 20WT/OR | |
| | 16 | — | 4.0L |
| | 16 | K7 18OR | 2.5L |




| | CAV | CIRCUIT | |
|---|---|---|---|
| | 1 | C20 18BR/RD | |
| | 2 | C91 18LB | |
| | 3 | A14 16RD/WT | |
| | 4 | C13 18DB/OR | |
| | 5 | T41 18BR/YL | |
| | 6 | G20 18VT/YL | |
| | 7 | G50 18WT/YL | |
| | 8 | G3 20BK/PK | |
| | 9 | V40 18WT/PK | |
| | 10 | K51 18DB/YL | |
| | 11 | K54 20OR/BK | |
| | 12 | G21 20GY/LB | |
| * | 13 | D20 20LG | |
| * | 14 | D21 20PK | |
| | 15 | G7 18WT/OR | |
| | 16 | — | 4.0L |
| | 16 | K7 18OR | 2.5L |

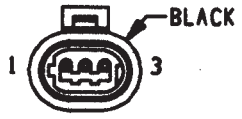
**C108**




DATA LINK CONNECTOR

| | CAV | CIRCUIT | FUNCTION |
|---|---|---|---|
| * | 1 | D21 20PK | SCI TRANSMIT |
| * | 2 | D11 18WT/VT | CCD BUS (+) |
| | 3 | — | — |
| | 4 | Z12 18BK/TN | GROUND (4.0L ENGINE) |
| | 4 | Z1 18BK | GROUND (2.5L ENGINE) |
| * | 5 | D12 18OR | CCD BUS (−) |
| | 6 | M1 18PK | FUSED B(+) |
| | 7 | — | — |
| * | 8 | D20 20LG | SCI RECEIVE |

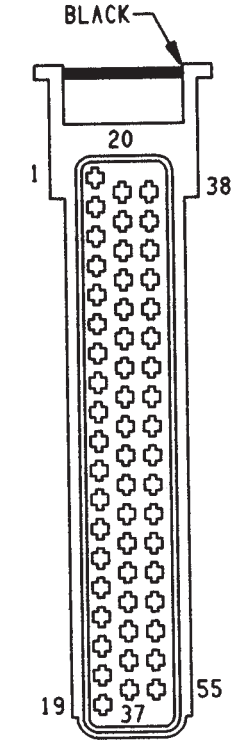
**C109**




ABS ACCELERATOR SENSOR

| CAV | CIRCUIT | FUNCTION |
|---|---|---|
| 1 | B22 18VT/PK | G SWITCH #2 SENSE |
| 2 | B21 18YL/VT | G SWITCH #1 SENSE |
| 3 | B23 18PK/BR | G SWITCH SENSOR GROUND |

* — INDICATES TWISTED PAIRS (D11 & D12, D20 & D21)

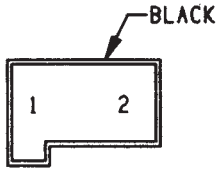



ANTI-LOCK
BRAKE SYSTEM
(ABS) CONTROL MODULE

**C110**

| | CAV | CIRCUIT | FUNCTION |
|---|---|---|---|
| | 1 | Z1 14BK | GROUND |
| | 2 | B243 16DG/BK | LEFT FRONT DUMP VALVE CONTROL |
| | 3 | B15 14GY/YL | ABS POWER RELAY OUTPUT |
| | 4 | — | — |
| | 5 | — | — |
| | 6 | — | — |
| | 7 | — | — |
| | 8 | — | — |
| | 9 | — | — |
| | 10 | — | — |
| | 11 | — | — |
| | 12 | — | — |
| | 13 | — | — |
| | 14 | — | — |
| | 15 | B116 18GY | PUMP/MOTOR RELAY CONTROL |
| | 16 | B210 18RD/BK | PEDAL TRAVEL SENSOR JUMPER |
| | 17 | — | — |
| | 18 | — | — |
| | 19 | Z1 14BK | GROUND |
| | 20 | B245 16WT/LG | LEFT FRONT ISOLATION VALVE CONTROL |
| | 21 | B248 16DG/WT | RIGHT FRONT DUMP VALVE CCONTROL |
| | 22 | — | — |
| * | 23 | D11 18WT/VT | CCD BUS (+) |
| | 24 | — | — |
| | 25 | B21 18YL/VT | G SWITCH #1 SENSE |
| | 26 | B23 18PK/BR | G SWITCH SENSE GROUND |
| * | 27 | B1 18YL/DB | RIGHT REAR WHEEL SPEED SENSOR (—) |
| * | 28 | B3 18LG/DB | LEFT REAR WHEEL SPEED SENSOR (—) |
| * | 29 | B6 18WT/DB | RIGHT FRONT WHEEL SPEED SENSOR (—) |
| * | 30 | B8 18RD/DB | LEFT FRONT WHEEL SPEED SENSOR (—) |
| * | 31 | B16 18BR | PUMP/MOTOR SPEED SENSOR (—) |
| | 32 | L50 18WT/TN | BRAKE LAMP SWITCH OUTPUT |
| | 33 | B15 14GY/YL | ABS POWER RELAY OUTPUT |
| | 34 | B20 18PK | ABS POWER RELAY CONTROL |
| | 35 | — | — |
| | 36 | B254 16DG/OR | REAR DUMP VALVE CONTROL |
| | 37 | — | — |
| | 38 | B249 16WT/YL | RIGHT FRONT ISOLATION VALVE CONTROL |
| | 39 | — | — |
| | 40 | — | — |
| | 41 | B210 18RD/BK | PEDAL TRAVEL SENSOR GROUND |
| * | 42 | D12 18OR | CCD BUS (—) |
| | 43 | B22 18VT/PK | G SWITCH #2 SENSE |
| | 44 | — | — |
| * | 45 | B2 18YL | RIGHT REAR WHEEL SPEED SENSOR (+) |
| * | 46 | B4 18LG | LEFT REAR WHEEL SPEED SENSOR (+) |
| * | 47 | B7 18WT | RIGHT FRONT WHEEL SPEED SENSOR (+) |
| * | 48 | B9 18RD | LEFT FRONT WHEEL SPEED SENSOR (+) |
| * | 49 | B17 18LG/BR | PUMP/MOTOR SPEED SENSOR (+) |
| | 50 | — | — |
| | 51 | — | — |
| | 52 | G19 20LG/OR | ABS WARNING LAMP DRIVER |
| | 53 | F15 18YL/DG | FUSED IGNITION SWITCH OUTPUT |
| | 54 | B251 16WT/BK | REAR INLET VALVE CONTROL |
| | 55 | — | — |

* — INDICATES TWISTED PAIRS (B1 & B2, B3 & B4, B6 & B7, B8 & B9, B16 & B17, D11 & D12)

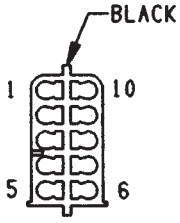



DIODE

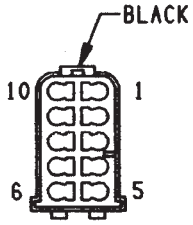
**C111**

| CAV | CIRCUIT | FUNCTION |
|---|---|---|
| 1 | B15 18GY/YL | ABS POWER RELAY OUTPUT |
| 2 | G19 20LG/OR | ABS WARNING LAMP DRIVER |

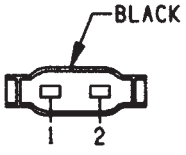
**C112**




| CAV | CIRCUIT |
|---|---|
| 1 | C21 18DB/YL |
| 2 | G4 18DB |
| 3 | G20 18VT/YL |
| 4 | A1 12RD |
| 5 | X3 18BK/RD |
| 6 | G1 18DG/GY |
| 7 | L1 18VT |
| 8 | G60 18GY/YL |
| 9 | A41 18YL |
| 10 | C91 18LB |




| CAV | CIRCUIT |
|---|---|
| 1 | C21 18DB/YL |
| 2 | G4 20DB |
| 3 | G20 18VT/YL |
| 4 | A1 12RD |
| 5 | X3 18BK/RD |
| 6 | G1 18DG/GY |
| 7 | L1 18VT/BK |
| 8 | G60 18GY/YL |
| 9 | A41 18YL |
| 10 | C91 18LB |

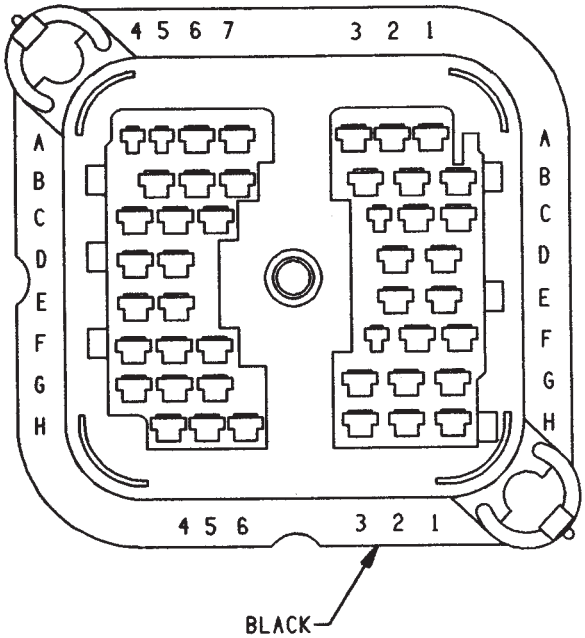



BRAKE
WARNING SWITCH

**C113**

| CAV | CIRCUIT | FUNCTION |
|---|---|---|
| 1 | G9 20GY/BK | BRAKE WARNING LAMP DRIVER |
| 2 | G11 20WT/BK | PARK BRAKE SWITCH SENSE |

**C114**

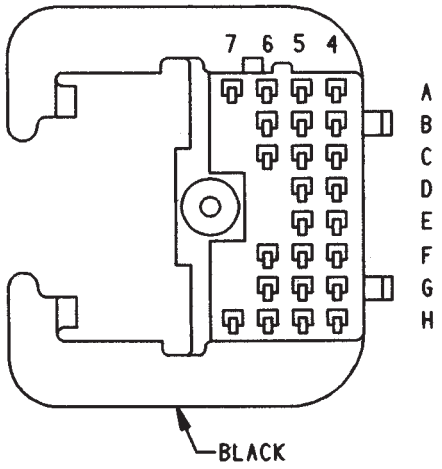



| | CAV | CIRCUIT |
|---|---|---|
| | A1 | L7 18BK/YL |
| | A2 | V20 18BR/WT |
| | A3 | L60 18TN |
| | A4 | G19 20LG/OR |
| | A5 | A22 14BK/OR |
| (2) | A6 | L50 18WT/TN |
| | A7 | G9 20GY/BK |
| | B1 | L20 16LG/WT |
| | B2 | G5 18DB/WT |
| | B3 | — |
| | B4 | G7 20WT/OR |
| | B4 | G7 18WT/OR |
| | B5 | Z1 14BK |
| | B6 | G11 18WT/BK |
| (2) | C1 | G7 18WT/OR |
| | C2 | L61 18LG |
| | C3 | — |
| | C4 | — |
| | C5 | G3 20BK/PK |
| | C6 | G5 18DB/WT |
| | D1 | L39 16LB |
| | D2 | — |
| | D4 | L9 18BK/WT |
| | D5 | G50 18WT/YL |
| | E1 | L3 16RD/OR |
| (2) | E2 | G34 18RD/GY |
| | E4 | A3 12RD/OR |
| | E5 | — |
| | F1 | — |
| | F2 | — |
| | F3 | V10 18BR |
| | F4 | — |
| | F5 | — |
| | F6 | K54 200R/BK |
| | G1 | — |
| | G2 | — |
| | G3 | X2 18DG/RD |
| | G4 | A6 12RD/BK |
| | G5 | — |
| | G6 | X2 18DG/RD |
| | H1 | L4 16VT/WT |
| | H2 | — |
| | H3 | — |
| | H4 | M1 18PK |
| | H5 | V40 18WT/PK |
| | H6 | G21 20GY/LB |

(2) INDICATES 2 WIRES IN CAVITY

J958W-5

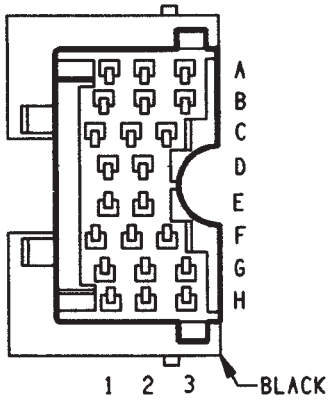
**C114**




ON DASH HARNESS

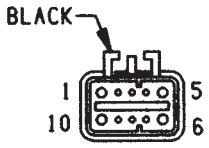
| CAV | CIRCUIT |
|---|---|
| A4 | G19 20LG/OR |
| A5 | A22 18BK/OR |
| A6 | L50 18WT/TN |
| A7 | G9 20GY/BK |
| B4 | G7 20WT/OR |
| B5 | Z1 14BK |
| B6 | G11 20WT/BK |
| C4 | — |
| C5 | G3 20BK/PK |
| C6 | G5 18DB/WT |
| C6 | G5 18DB/WT |
| D4 | L9 18BK/WT |
| D5 | G50 18WT/YL |
| E4 | A3 12RD/OR |
| E5 | — |
| F4 | — |
| F5 | — |
| F6 | K54 20OR/BK |
| F6 | K54 20OR/BK |
| G4 | A6 12RD/BK |
| G5 | — |
| G6 | X2 18DG/RD |
| H4 | M1 18PK |
| H5 | V40 18WT/PK |
| H6 | G21 20GY/LB |

**C114**




ON HEADLAMP HARNESS

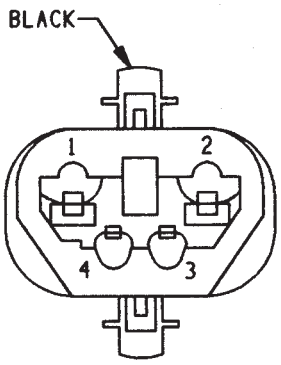
| CAV | CIRCUIT |
|---|---|
| A1 | L7 18BK/YL |
| A2 | V20 18BK/WT |
| A3 | L60 18TN |
| B1 | L20 16LG/WT |
| B2 | G5 18DB/WT |
| B3 | — |
| C1 | G7 20WT/OR |
| C2 | L61 18LG |
| C3 | — |
| D1 | L39 16LB |
| D2 | — |
| E1 | L3 16RD/OR |
| E2 | G34 18RD/GY |
| F1 | — |
| F2 | — |
| F3 | V10 18BR |
| G1 | — |
| G2 | — |
| G3 | X2 18DG/RD |
| H1 | L4 16VT/WT |
| H2 | — |
| H3 | — |




ABS HYDRAULIC ACTUATION UNIT

**C115**

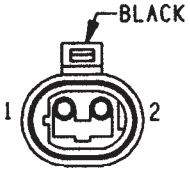
| CAV | CIRCUIT | FUNCTION |
|---|---|---|
| 1 | — | — |
| 2 | B245 16WT/LG | LEFT FRONT ISOLATION VALVE CONTROL |
| 3 | B249 16WT/YL | RIGHT FRONT ISOLATION VALVE CONTROL |
| 4 | B251 16WT/BK | REAR INLET VALVE CONTROL |
| 5 | B15 14GY/YL | ABS POWER RELAY OUTPUT |
| 6 | — | — |
| 7 | B254 16DG/OR | REAR DUMP VALVE CONTROL |
| 8 | B248 16DG/WT | RIGHT FRONT DUMP VALVE CONTROL |
| 9 | B243 16DG/BK | LEFT FRONT DUMP VALVE CONTROL |
| 10 | B15 14GY/YL | ABS POWER RELAY OUTPUT |




ABS PUMP MOTOR/SENSOR

**C116**

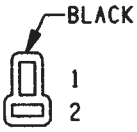
| | CAV | CIRCUIT | FUNCTION |
|---|---|---|---|
| | 1 | B25 12TN | ABS POWER RELAY OUTPUT |
| | 2 | Z12 12BK/TN | GROUND |
| * | 3 | B16 18BR | PUMP/MOTOR SPEED SENSOR (−) |
| * | 4 | B17 18LG/BR | PUMP/MOTOR SPEED SENSOR (+) |




LEFT FRONT WHEEL SPEED SENSOR

**C117**

| | CAV | CIRCUIT | FUNCTION |
|---|---|---|---|
| * | 1 | B9 18RD | LEFT FRONT WHEEL SPEED SENSOR (+) |
| * | 2 | B8 18RD/DB | LEFT FRONT WHEEL SPEED SENSOR (−) |

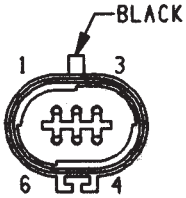



REAR WINDSHIELD WASHER PUMP MOTOR

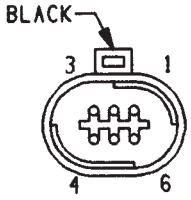
**C118**

| CAV | CIRCUIT | FUNCTION |
|---|---|---|
| 1 | V20 18BK/WT | REAR WASHER PUMP MOTOR CONTROL |
| 2 | Z1 18BK | GROUND |

**C119**



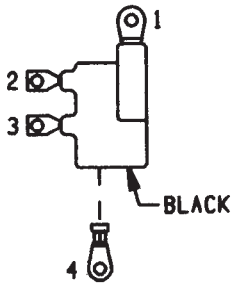

| CAV | CIRCUIT |
|---|---|
| 1 | G5 18DB/WT |
| 2 | C13 18DB/OR |
| 3 | — |
| 4 | — |
| 5 | C20 18BR/RD |
| 6 | C21 18DB/YL |




— OPTION — AIR CONDITIONING WIRING IF INSTALLED (2.5L ENGINE)

*—INDICATES TWISTED PAIRS (B8 & B9, B16 & B17)

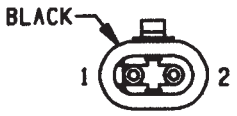
J958W-5




GENERATOR

**C120**

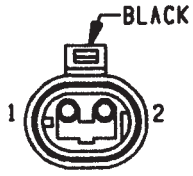
| CAV | CIRCUIT | FUNCTION |
|---|---|---|
| 1 | — | — |
| 2 | A142 18DG/OR | AUTOMATIC SHUT DOWN RELAY OUTPUT |
| 3 | K20 18DG | GENERATOR FIELD DRIVER |
| 4 | Z0 6BK | GROUND |




IGNITION COIL

**C121**

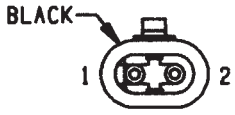
| CAV | CIRCUIT | FUNCTION |
|---|---|---|
| 1 | A142 18DG/OR | AUTOMATIC SHUT DOWN RELAY OUTPUT |
| 2 | K19 18GY | IGNITION COIL #1 DRIVER |




A/C LOW PRESSURE SWITCH

**C122**

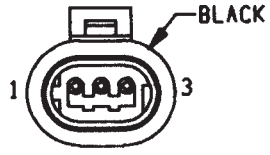
| CAV | CIRCUIT | FUNCTION |
|---|---|---|
| 1 | C20 18BR/RD | A/C SWITCH SENSE |
| 2 | C21 18DB/YL | A/C SWITCH SENSE |




ENGINE OIL PRESSURE SENDING UNIT

**C123**

| CAV | CIRCUIT | FUNCTION |
|---|---|---|
| 1 | — | — |
| 2 | G60 18GY/YL | OIL PRESSURE SENSOR SIGNAL |

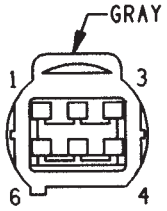



CAMSHAFT POSITION SENSOR

**C124**

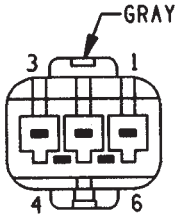
| CAV | CIRCUIT | FUNCTION |
|---|---|---|
| 1 | K44 18TN/YL | CAMSHAFT POSITION SENSOR SIGNAL |
| 2 | K4 18BK/LB | SENSOR GROUND |
| 3 | K7 18OR | 8—VOLT SUPPLY |

## C125




| CAV | CIRCUIT |
|---|---|
| 1 | Z2 16BK/OR |
| 2 | T41 18BR/YL |
| 3 | G5 18DB/WT |
| 4 | — |
| 5 | T22 16DB/TN |
| 6 | L1 18VT |

WITH AUTOMATIC TRANSMISSION

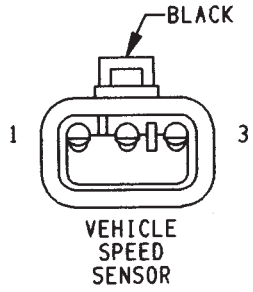



| CAV | CIRCUIT |
|---|---|
| 1 | — |
| 2 | T41 18BR/YL |
| 3 | G5 18DB/WT |
| 4 | — |
| 5 | T22 16DB/TN |
| 6 | L1 18VT |

WITH MANUAL TRANSMISSION

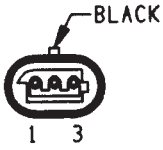
| CAV | CIRCUIT |
|---|---|
| 1 | Z2 16BK/OR |
| 2 | Z2 16BK/OR |
| 3 | G5 18DB/WT |
| 4 | — |
| 5 | — |
| 6 | L1 18VT |

## C126

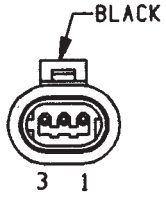



| CAV | CIRCUIT | FUNCTION |
|---|---|---|
| 1 | G7 18WT/OR | VEHICLE SPEED SENSOR SIGNAL |
| 2 | K4 18BK/LB | SENSOR GROUND |
| 3 | K7 18OR | 8—VOLT SUPPLY |

## C127




| CAV | CIRCUIT |
|---|---|
| 1 | Z2 16BK/OR |
| 2 | G4 18DB |
| 3 | A141 16DG/BK |




| CAV | CIRCUIT |
|---|---|
| 1 | Z2 16BK/OR |
| 2 | G4 18DB |
| 3 | A141 16DG/BK |

## C128

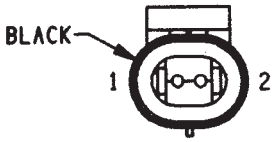

| | CAV | CIRCUIT | FUNCTION |
|---|---|---|---|
| * | 1 | B4 18LG | LEFT REAR WHEEL SPEED SENSOR (+) |
| * | 2 | B3 18LG/DB | LEFT REAR WHEEL SPEED SENSOR (—) |

## C129


| | CAV | CIRCUIT | FUNCTION |
|---|---|---|---|
| * | 1 | B2 18YL | RIGHT REAR WHEEL SPEED SENSOR (+) |
| * | 2 | B1 18YL/DB | RIGHT REAR WHEEL SPEED SENSOR (—) |

* - INDICATES TWISTED PAIRS (B1 & B2, B3 & B4)

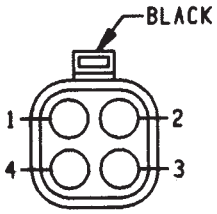
J958W-5




ENGINE COOLANT TEMPERATURE SENSOR

**C130**

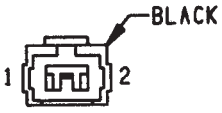
| CAV | CIRCUIT | FUNCTION |
|---|---|---|
| 1 | K2 18TN/BK | ENGINE COOLANT TEMP SENSOR SIGNAL |
| 2 | K4 18BK/LB | SENSOR GROUND |




HEATED OXYGEN SENSOR

**C131**

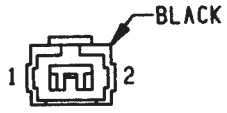
| CAV | CIRCUIT | FUNCTION |
|---|---|---|
| 1 | K4 18BK/LB | SENSOR GROUND |
| 2 | K41 18BK/DG | HEATED OXYGEN SENSOR SIGNAL |
| 3 | Z1 16BK | GROUND |
| 4 | A142 16DG/OR | AUTOMATIC SHUT DOWN RELAY OUTPUT |




INJECTOR # 1

**C132**

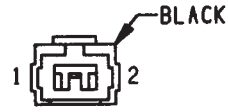
| CAV | CIRCUIT | FUNCTION |
|---|---|---|
| 1 | K11 18WT/DB | INJECTOR # 1 DRIVER |
| 2 | A142 18DG/OR | AUTOMATIC SHUT DOWN RELAY OUTPUT |




INJECTOR # 2

**C133**

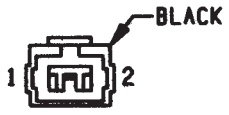
| CAV | CIRCUIT | FUNCTION |
|---|---|---|
| 1 | K12 18TN | INJECTOR # 2 DRIVER |
| 2 | A142 18DG/OR | AUTOMATIC SHUT DOWN RELAY OUTPUT |




INJECTOR # 3

**C134**

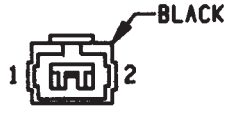
| CAV | CIRCUIT | FUNCTION |
|---|---|---|
| 1 | K13 18YL/WT | INJECTOR # 3 DRIVER |
| 2 | A142 18DG/OR | AUTOMATIC SHUT DOWN RELAY OUTPUT |




INJECTOR #4

**C135**

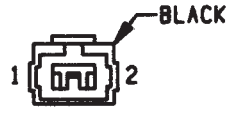
| CAV | CIRCUIT | FUNCTION |
|---|---|---|
| 1 | K14 18LB/BR | INJECTOR #4 DRIVER |
| 2 | A142 18DG/OR | AUTOMATIC SHUT DOWN RELAY OUTPUT |




INJECTOR #5

**C136**

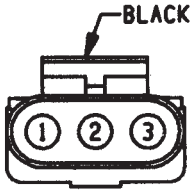
| CAV | CIRCUIT | FUNCTION |
|---|---|---|
| 1 | K15 18PK/BK | INJECTOR #5 DRIVER |
| 2 | A142 18DG/OR | AUTOMATIC SHUT DOWN RELAY OUTPUT |




INJECTOR #6

**C137**

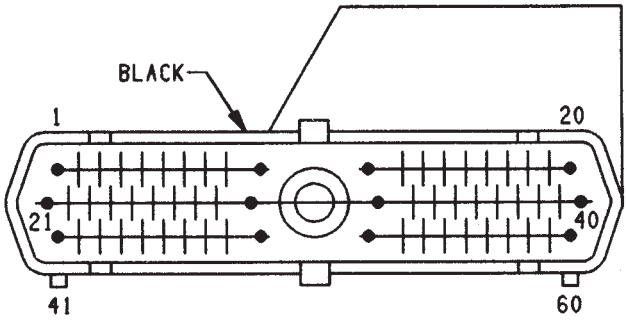
| CAV | CIRCUIT | FUNCTION |
|---|---|---|
| 1 | K16 18LG/BK | INJECTOR #6 DRIVER |
| 2 | A142 18DG/OR | AUTOMATIC SHUT DOWN RELAY OUTPUT |




MAP SENSOR

**C138**

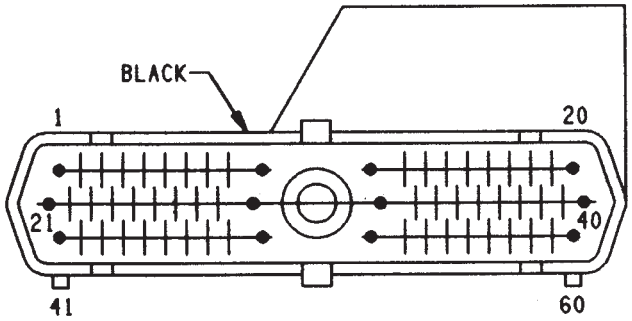
| CAV | CIRCUIT | FUNCTION |
|---|---|---|
| 1 | K4 18BK/LB | SENSOR GROUND |
| 2 | K1 20DG/RD | MAP SENSOR SIGNAL |
| 3 | K6 20VT/WT | 5—VOLT SUPPLY |




POWERTRAIN
CONTROL
MODULE
(2.5L ENGINE)

**C139**

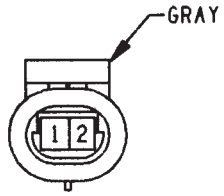
| CAV | CIRCUIT | FUNCTION |
|---|---|---|
| 1 | K1 20DG/RD | MAP SENSOR SIGNAL |
| 2 | K2 18TN/BK | ENGINE COOLANT TEMP SENSOR SIGNAL |
| 3 | A14 16RD/WT | FUSED B(+) |
| 4 | K4 18BK/LB | SENSOR GROUND |
| 5 | Z11 16BK/WT | GROUND |
| 6 | K6 20VT/WT | 5—VOLT SUPPLY |
| 7 | K7 18OR | 8—VOLT SUPPLY |
| 8 | — | — |
| 9 | G50 18WT/YL | FUSED IGNITION SWITCH OUTPUT |
| 10 | K10 18DB/OR | POWER STEERING SWITCH SENSE |
| 11 | Z1 16BK | GROUND |
| 12 | Z1 16BK | GROUND |
| 13 | K14 18LB/BR | INJECTOR #4 DRIVER |
| 14 | K13 18YL/WT | INJECTOR #3 DRIVER |
| 15 | K12 18TN | INJECTOR #2 DRIVER |
| 16 | K11 18WT/DB | INJECTOR #1 DRIVER |
| 17 | — | — |
| 18 | — | — |
| 19 | K19 18GY | IGNITION COIL #1 DRIVER |
| 20 | K20 18DG | GENERATOR FIELD DRIVER |
| 21 | K21 18BK/RD | INTAKE AIR TEMPERATURE SENSOR SIGNAL |
| 22 | K22 18OR/DB | THROTTLE POSITION SENSOR SIGNAL |
| 23 | — | — |
| 24 | K24 18GY/BK | CRANKSHAFT POSITION SENSOR SIGNAL |
| 25 | D21 20PK | SCI TRANSMIT |
| 26 | — | — |
| 27 | C91 18LB | A/C SWITCH SENSE |
| 28 | C20 18BR/RD | A/C SWITCH SENSE |
| 29 | V40 18WT/PK | STOP LAMP SWITCH SENSE |
| 30 | T41 18BR/YL | PARK/NEUTRAL POSITION SWITCH SENSE |
| 31 | — | — |
| 32 | G3 20BK/PK | MALFUNCTION INDICATOR LAMP DRIVER |
| 33 | — | — |
| 34 | C13 18DB/OR | A/C COMPRESSOR CLUTCH RELAY CONTROL |
| 35 | — | — |
| 36 | — | — |
| 37 | — | — |
| 38 | — | — |
| 39 | K39 18GY/RD | IDLE AIR CONTROL MOTOR #1 DRIVER |
| 40 | K40 18BR/WT | IDLE AIR CONTROL MOTOR #3 DRIVER |
| 41 | K41 18BK/DG | HEATED OXYGEN SENSOR SIGNAL |
| 42 | — | — |
| 43 | G21 20GY/LB | TACHOMETER SIGNAL |
| 44 | K44 18TN/YL | CAMSHAFT POSITION SENSOR SIGNAL |
| 45 | D20 20LG | SCI RECEIVE |
| 46 | — | — |
| 47 | G7 18WT/OR | VEHICLE SPEED SENSOR SIGNAL |
| 48 | — | — |
| 49 | — | — |
| 50 | — | — |
| 51 | K51 18DB/YL | AUTOMATIC SHUT DOWN RELAY CONTROL |
| 52 | — | — |
| 53 | — | — |
| 54 | K54 20OR/BK | UPSHIFT LAMP DRIVER |
| 55 | — | — |
| 56 | — | — |
| 57 | A142 18DG/OR | AUTOMATIC SHUT DOWN RELAY OUTPUT |
| 58 | — | — |
| 59 | K59 18VT/BK | IDLE AIR CONTROL MOTOR #4 DRIVER |
| 60 | K60 18YL/BK | IDLE AIR CONTROL MOTOR #2 DRIVER |




POWERTRAIN
CONTROL
MODULE
(4.0L ENGINE)

**C139**

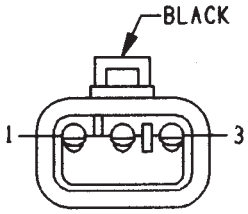
| CAV | CIRCUIT | FUNCTION |
|---|---|---|
| 1 | K1 20DG/RD | MAP SENSOR SIGNAL |
| 2 | K2 18TN/BK | ENGINE COOLANT TEMP SENSOR SIGNAL |
| 3 | A14 16RD/WT | FUSED B(+) |
| 4 | K4 18BK/LB | SENSOR GROUND |
| 5 | Z11 16BK/WT | GROUND |
| 6 | K6 20VT/WT | 5—VOLT SUPPLY |
| 7 | K7 18OR | 8—VOLT SUPPLY |
| 8 | — | — |
| 9 | G50 18WT/YL | FUSED IGNITION SWITCH OUTPUT |
| 10 | — | — |
| 11 | Z1 16BK | GROUND |
| 12 | Z1 16BK | GROUND |
| 13 | K14 18LB/BR | INJECTOR #4 DRIVER |
| 14 | K13 18YL/WT | INJECTOR #3 DRIVER |
| 15 | K12 18TN | INJECTOR #2 DRIVER |
| 16 | K11 18WT/DB | INJECTOR #1 DRIVER |
| 17 | — | — |
| 18 | — | — |
| 19 | K19 18GY | IGNITION COIL #1 DRIVER |
| 20 | K20 18DG | GENERATOR FIELD DRIVER |
| 21 | K21 18BK/RD | INTAKE AIR TEMPERATURE SENSOR SIGNAL |
| 22 | K22 18OR/DB | THROTTLE POSITION SENSOR SIGNAL |
| 23 | — | — |
| 24 | K24 18GY/BK | CRANKSHAFT POSITION SENSOR SIGNAL |
| 25 | D21 20PK | SCI TRANSMIT |
| 26 | — | — |
| 27 | C91 18LB | A/C SWITCH SENSE |
| 28 | C20 18BR/RD | A/C SWITCH SENSE |
| 29 | V40 18WT/PK | STOP LAMP SWITCH SENSE |
| 30 | T41 18BR/YL | PARK/NEUTRAL POSITION SWITCH SENSE |
| 31 | — | — |
| 32 | G3 20BK/PK | MALFUNCTION INDICATOR LAMP DRIVER |
| 33 | — | — |
| 34 | C13 18DB/OR | A/C COMPRESSOR CLUTCH RELAY CONTROL |
| 35 | — | — |
| 36 | — | — |
| 37 | — | — |
| 38 | K15 18PK/BK | INJECTOR #5 DRIVER |
| 39 | K39 18GY/RD | IDLE AIR CONTROL MOTOR #1 DRIVER |
| 40 | K40 18BR/WT | IDLE AIR CONTROL MOTOR #3 DRIVER |
| 41 | K41 18BK/DG | HEATED OXYGEN SENSOR SIGNAL |
| 42 | — | — |
| 43 | G21 20GY/LB | TACHOMETER SIGNAL |
| 44 | K44 18TN/YL | CAMSHAFT POSITION SENSOR SIGNAL |
| 45 | D20 20LG | SCI RECEIVE |
| 46 | — | — |
| 47 | G7 18WT/OR | VEHICLE SPEED SENSOR SIGNAL |
| 48 | — | — |
| 49 | — | — |
| 50 | — | — |
| 51 | K51 18DB/YL | AUTOMATIC SHUT DOWN RELAY CONTROL |
| 52 | — | — |
| 53 | — | — |
| 54 | K54 20OR/BK | UPSHIFT LAMP DRIVER |
| 55 | — | — |
| 56 | — | — |
| 57 | A142 18DG/OR | AUTOMATIC SHUT DOWN RELAY OUTPUT |
| 58 | K16 18LG/BK | INJECTOR #6 DRIVER |
| 59 | K59 18VT/BK | IDLE AIR CONTROL MOTOR #4 DRIVER |
| 60 | K60 18YL/BK | IDLE AIR CONTROL MOTOR #2 DRIVER |




INTAKE AIR TEMPERATURE SENSOR

**C140**

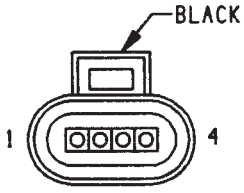
| CAV | CIRCUIT | FUNCTION |
|---|---|---|
| 1 | K21 18BK/RD | INTAKE AIR TEMPERATURE SENSOR SIGNAL |
| 2 | K4 18BK/LB | SENSOR GROUND |




THROTTLE POSITION SENSOR

**C141**

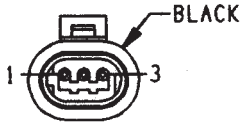
| CAV | CIRCUIT | FUNCTION |
|---|---|---|
| 1 | K4 18BK/LB | SENSOR GROUND |
| 2 | K22 18OR/DB | THROTTLE POSITION SENSOR SIGNAL |
| 3 | K6 20VT/WT | 5—VOLT SUPPLY |




IDLE AIR CONTROL MOTOR

**C142**

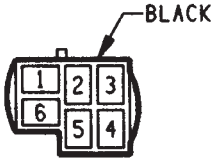
| CAV | CIRCUIT | FUNCTION |
|---|---|---|
| 1 | K39 18GY/RD | IDLE AIR CONTROL MOTOR DRIVER #1 |
| 2 | K60 18YL/BK | IDLE AIR CONTROL MOTOR DRIVER #2 |
| 3 | K40 18BR/WT | IDLE AIR CONTROL MOTOR DRIVER #3 |
| 4 | K59 18VT/BK | IDLE AIR CONTROL MOTOR DRIVER #4 |




CRANKSHAFT POSITION SENSOR

**C143**

| CAV | CIRCUIT | FUNCTION |
|---|---|---|
| 1 | K24 18GY/BK | CRANKSHAFT POSITION SENSOR SIGNAL |
| 2 | K4 18BK/LB | SENSOR GROUND |
| 3 | K7 18OR | 8—VOLT SUPPLY |

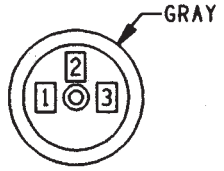



ENGINE DATA LINK CONNECTOR

**C144**

| | CAV | CIRCUIT | FUNCTION |
|---|---|---|---|
| | 1 | — | — |
| | 2 | D20 20LG | SCI RECEIVE |
| * | 2 | D20 20LG | SCI RECEIVE |
| | 3 | — | — |
| | 4 | G50 18WT/YL | FUSED IGNITION SWITCH OUPUT |
| | 4 | G50 18WT/YL | FUSED IGNITION SWITCH OUPUT |
| | 5 | D21 20PK | SCI TRANSMIT |
| * | 5 | D21 20PK | SCI TRANSMIT |
| | 6 | Z11 16BK/WT | GROUND |

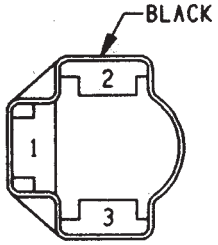
* -INDICATES TWISTED PAIR




POWER STEERING SWITCH

**C145**

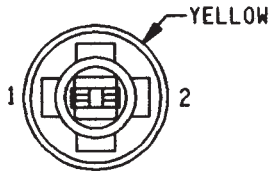
| CAV | CIRCUIT | FUNCTION |
|---|---|---|
| 1 | Z1 16BK | GROUND |
| 2 | — | — |
| 3 | K10 18DB/OR | POWER STEERING SWITCH SENSE |




RIGHT HEADLAMP

**C146**

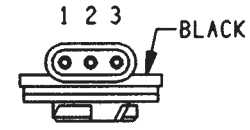
| CAV | CIRCUIT | FUNCTION |
|---|---|---|
| 1 | L4 16VT/WT | DIMMER SWITCH LOW BEAM OUTPUT |
| 2 | Z1 16BK | GROUND |
| 3 | L3 16RD/OR | DIMMER SWITCH HIGH BEAM OUTPUT |




RIGHT SIDE MARKER LAMP

**C147**

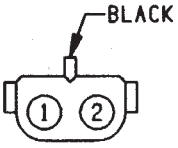
| CAV | CIRCUIT | FUNCTION |
|---|---|---|
| 1 | L60 18TN | RIGHT TURN SIGNAL |
| 2 | L7 18BK/YL | PARK LAMP SWITCH OUTPUT |




RIGHT PARK AND TURN SIGNAL LAMP

**C148**

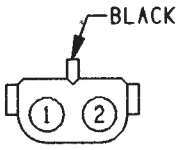
| CAV | CIRCUIT | FUNCTION |
|---|---|---|
| 1 | Z1 18BK | GROUND |
| 2 | L7 18BK/YL | PARK LAMP SWITCH OUTPUT |
| 3 | L60 18TN | RIGHT TURN SIGNAL |




RIGHT FOG LAMP

**C149**

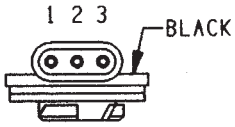
| CAV | CIRCUIT | FUNCTION |
|---|---|---|
| 1 | L39 16LB | FOG LAMP SWITCH OUTPUT |
| 2 | Z1 16BK | GROUND |




LEFT
FOG LAMP

**C150**

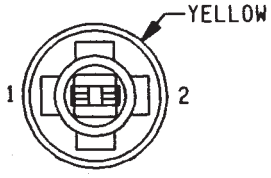
| CAV | CIRCUIT | FUNCTION |
|---|---|---|
| 1 | L39 16LB | FOG LAMP SWITCH OUTPUT |
| 2 | Z1 16BK | GROUND |




LEFT PARK AND
TURN SIGNAL LAMP

**C151**

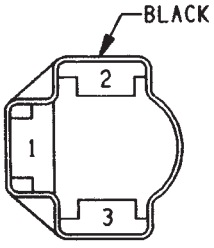
| CAV | CIRCUIT | FUNCTION |
|---|---|---|
| 1 | Z1 18BK | GROUND |
| 2 | L7 18BK/YL | PARK LAMP SWITCH OUTPUT |
| 3 | L61 18LG | LEFT TURN SIGNAL |




LEFT SIDE
MARKER LAMP

**C152**

| CAV | CIRCUIT | FUNCTION |
|---|---|---|
| 1 | L61 18LG | LEFT TURN SIGNAL |
| 2 | L7 18BK/YL | PARK LAMP SWITCH OUTPUT |




LEFT
HEADLAMP

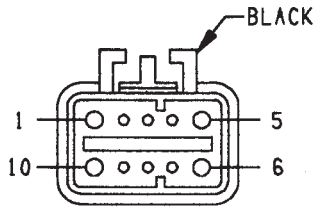
**C153**

| CAV | CIRCUIT | FUNCTION |
|---|---|---|
| 1 | L4 16VT/WT | DIMMER SWITCH LOW BEAM OUTPUT |
| 2 | Z1 16BK | GROUND |
| 3 | L3 16RD/OR | DIMMER SWITCH HIGH BEAM OUTPUT |

WITH DAYTIME RUNNING LAMP

| CAV | CIRCUIT | FUNCTION |
|---|---|---|
| 1 | L4 16VT/WT | DIMMER SWITCH LOW BEAM OUTPUT |
| 1 | L4 16VT/WT | DIMMER SWITCH LOW BEAM OUTPUT |
| 2 | Z1 16BK | GROUND |
| 3 | L3 16RD/OR | DIMMER SWITCH HIGH BEAM OUTPUT |
| 3 | L3 16RD/OR | DIMMER SWITCH HIGH BEAM OUTPUT |

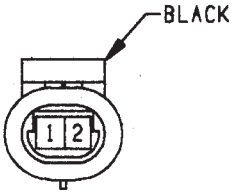
WITHOUT DAYTIME RUNNING LAMP




DAYTIME RUNNING LAMP MODULE

**C154**

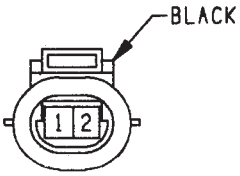
| CAV | CIRCUIT | FUNCTION |
|---|---|---|
| 1 | G5 18DB/WT | FUSED IGN SWITCH OUTPUT (RUN/START) |
| 2 | G34 18RD/GY | HIGH BEAM INDICATOR DRIVER |
| 3 | — | — |
| 4 | — | — |
| 5 | L3 16RD/OR | DIMMER SWITCH HIGH BEAM OUTPUT |
| 6 | L20 16LG/WT | FUSED B(+) (TO DIMMER SWITCH) |
| 7 | G7 20WT/OR | VEHICLE SPEED SENSOR SIGNAL |
| 8 | Z1 18BK | GROUND |
| 9 | — | — |
| 10 | L4 16VT/WT | LOW BEAM OUTPUT |




HORN

**C155**

| CAV | CIRCUIT | FUNCTION |
|---|---|---|
| 1 | Z1 16BK | GROUND |
| 2 | X2 18DG/RD | HORN RELAY OUTPUT |

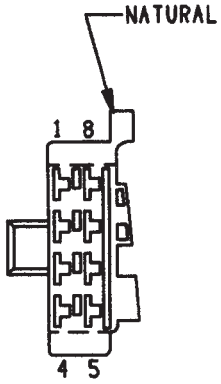



WINDSHIELD WASHER PUMP MOTOR

**C156**

| CAV | CIRCUIT | FUNCTION |
|---|---|---|
| 1 | V10 18BR | WINDSHIELD WASHER SWITCH OUTPUT |
| 2 | Z1 18BK | GROUND |

## C201
## FUSE BLOCK
(8W-10-3)

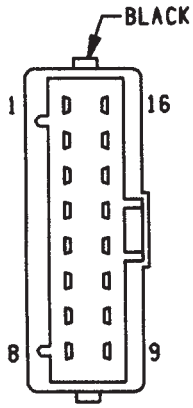



COMBINATION BUZZER

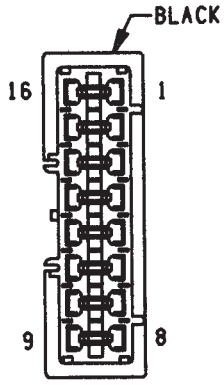
### C202

| CAV | CIRCUIT | FUNCTION |
|---|---|---|
| 1 | G5 18DB/WT | FUSED IGN SWITCH OUTPUT (RUN/START) |
| 2 | G13 20DB/RD | SEAT BELT LAMP DRIVER |
| 3 | Z1 20BK | GROUND |
| 4 | G10 18LG/RD | SEAT BELT SWITCH SENSE |
| 5 | — | — |
| 6 | F32 18PK/DB | FUSED B(+) |
| 7 | G26 18LB | KEY IN IGNITION SWITCH SENSE |
| 8 | — | — — |

### C203



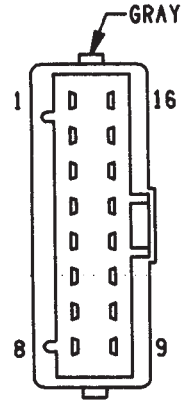

| CAV | CIRCUIT |
|---|---|
| 1 | G5 18DB/WT |
| 2 | M2 18YL |
| 3 | M1 20PK |
| 4 | G16 18BK/LB |
| 5 | L7 18BK/YL |
| 6 | L62 18BR/RD |
| 7 | L1 18VT/BK |
| 8 | L50 18WT/TN |
| 9 | G11 18WT/BK |
| 10 | — |
| 11 | Z1 14BK |
| 12 | G10 18LG/RD |
| 13 | — |
| 14 | — |
| 15 | — |
| 16 | L63 18DG/RD |



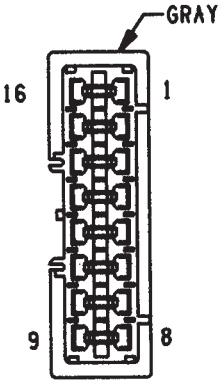

| CAV | CIRCUIT |
|---|---|
| 1 | G5 18DB/WT |
| 2 | M2 18YL |
| 3 | M1 20PK |
| 4 | G16 18BK/RD |
| 5 | L7 18BK/YL |
| 6 | L62 18BR/RD |
| 7 | L1 18VT/BK |
| 8 | L50 18WT/TN |
| 9 | G11 18WT/BK |
| 10 | — |
| 11 | Z1 14BK |
| 11 | Z1 18BK |
| 12 | G10 18LG/RD |
| 13 | — |
| 14 | — |
| 15 | — |
| 16 | L63 18DG/RD |

SOFT TOP ONLY

### C204

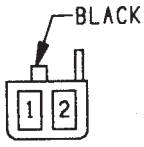



| CAV | CIRCUIT |
|---|---|
| 1 | C15 18BK/WT |
| 2 | — |
| 3 | C16 18LB/YL |
| 4 | — |
| 5 | F81 14BR |
| 6 | — |
| 7 | V22 16BR/YL |
| 8 | — |
| 9 | — |
| 10 | — |
| 11 | — |
| 12 | — |
| 13 | — |
| 14 | V23 16BR/PK |
| 15 | — |
| 16 | V13 16BR/LG |

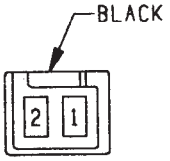



| CAV | CIRCUIT |
|---|---|
| 1 | C15 18BK/WT |
| 2 | — |
| 3 | C16 16LB/YL |
| 4 | — |
| 5 | F81 14BR |
| 6 | — |
| 7 | V22 16BR/YL |
| 8 | — |
| 9 | — |
| 10 | — |
| 11 | — |
| 12 | — |
| 13 | — |
| 14 | V23 16BR/PK |
| 15 | — |
| 16 | V13 16BR/LG |

## C205

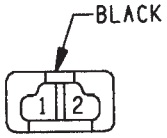



| CAV | CIRCUIT |
|---|---|
| 1 | M1 18PK |
| 2 | M2 18YL |




| CAV | CIRCUIT |
|---|---|
| 1 | M1 18PK |
| 2 | M2 18BK/WT |

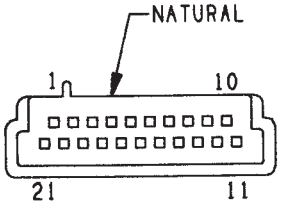
## C206




LEFT FRONT I/P SPEAKER

| CAV | CIRCUIT | FUNCTION |
|---|---|---|
| 1 | X53 18DG | LEFT FRONT SPEAKER (+) |
| 1 | X53 20DG | LEFT FRONT SPEAKER (+) |
| 2 | X55 18BR/RD | LEFT FRONT SPEAKER (−) |
| 2 | X55 20BR/RD | LEFT FRONT SPEAKER (−) |

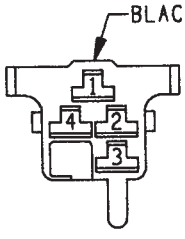
## C207




INSTRUMENT CLUSTER

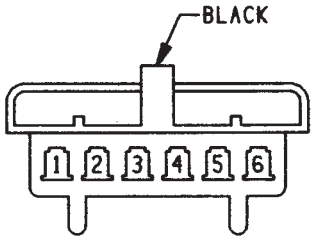
| CAV | CIRCUIT | FUNCTION |
|---|---|---|
| 1 | — | — |
| 2 | — | — |
| 3 | — | — |
| 4 | L60 18TN | RIGHT TURN SIGNAL |
| 5 | G19 20LG/OR | CHECK ANTI-LOCK LAMP DRIVER |
| 6 | K54 20OR/BK | UPSHIFT LAMP DRIVER |
| 7 | — | — |
| 8 | G5 18DB/WT | FUSED IGN SWITCH OUTPUT (RUN/START) |
| 9 | G3 20BK/PK | MALFUNCTION INDICATOR LAMP DRIVER |
| 10 | G9 20GY/BK | BRAKE WARNING LAMP DRIVER |
| 11 | — | — |
| 12 | G21 20GY/LB | TACHOMETER SIGNAL |
| 13 | G7 20WT/OR | VEHICLE SPEED SENSOR SIGNAL |
| 14 | Z1 18BK | GROUND |
| 15 | — | — |
| 16 | G13 20DB/RD | SEAT BELT LAMP DRIVER |
| 17 | G34 18RD/GY | HIGH BEAM INDICATOR LAMP DRIVER |
| 18 | L61 18LG | LEFT TURN SIGNAL |
| 19 | G5 18DB/WT | FUSED IGN SWITCH OUTPUT (RUN/START) |
| 20 | Z1 18BK | GROUND |
| 21 | E2 20OR | PANEL LAMP DRIVER |

## C208




HEADLAMP DIMMER SWITCH

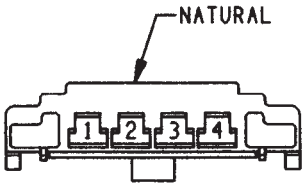
| CAV | CIRCUIT | FUNCTION |
|---|---|---|
| 1 | L2 16LG | HEADLAMP SWITCH OUTPUT |
| 2 | L3 16RD/OR | DIMMER SWITCH HIGH BEAM OUTPUT |
| 3 | L20 16LG/WT | FUSED B(+) (TO DIMMER SWITCH) |
| 3 | L20 16LG/WT | FUSED B(+) (TO DIMMER SWITCH) |
| 4 | L4 16VT/WT | DIMMER SWITCH LOW BEAM OUTPUT |




HEADLAMP SWITCH

**C209**

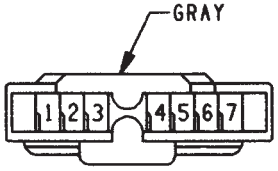
| CAV | CIRCUIT | FUNCTION |
|---|---|---|
| 1 | L7 18BK/YL | PARK LAMP SWITCH OUTPUT |
| 2 | L20 16LG/WT | FUSED B(+) (TO DIMMER SWITCH) |
| 3 | A3 12RD/OR | FUSED B(+) |
| 4 | L2 16LG | HEADLAMP SWITCH OUTPUT |
| 5 | F33 18PK/RD | FUSED B(+) |
| 6 | — | — |




PANEL LAMP DIMMER SWITCH

**C210**

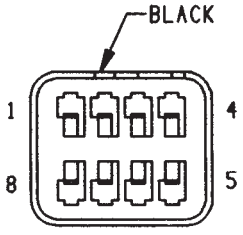
| CAV | CIRCUIT | FUNCTION |
|---|---|---|
| 1 | L7 18BK/YL | PARK LAMP SWITCH OUTPUT |
| 2 | Z1 18BK | GROUND |
| 3 | M2 18YL | COURTESY LAMP SWITCH OUTPUT |
| 4 | E1 20TN | PANEL LAMP DIMMER SWITCH SIGNAL |




WINDSHIELD WIPER/WASHER SWITCH

**C211**

| CAV | CIRCUIT | FUNCTION |
|---|---|---|
| 1 | — | — |
| 2 | V10 18BR | WINDSHIELD WASHER SWITCH OUTPUT |
| 3 | V4 18RD/YL | WIPER SWITCH HIGH SPEED OUTPUT |
| 4 | V6 18DB | FUSED IGN SWITCH OUTPUT (ACC/RUN) |
| 5 | V3 18BR/WT | WIPER SWITCH LOW SPEED OUTPUT |
| 6 | V5 18DG/YL | WIPER SWITCH MODE SENSE |
| 7 | Z1 18BK | GROUND |

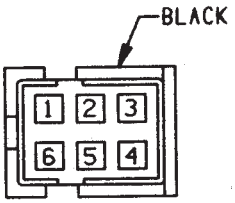



WINDSHIELD WIPER MOTOR

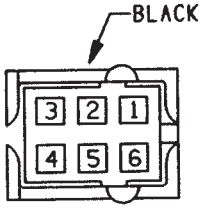
**C212**

| CAV | CIRCUIT | FUNCTION |
|---|---|---|
| 1 | V3 18BR/WT | WIPER SWITCH LOW SPEED OUTPUT |
| 2 | V6 18DB | FUSED IGNITION SWITCH OUTPUT |
| 3 | — | — |
| 4 | V5 18DG/YL | WIPER SWITCH MODE SENSE |
| 5 | Z1 18BK | GROUND |
| 6 | — | — |
| 7 | — | — |
| 8 | V4 18RD/YL | WIPER SWITCH HIGH SPEED OUTPUT |

## C213

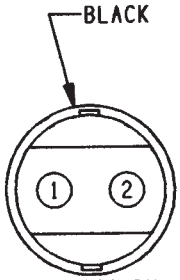



| CAV | CIRCUIT |
|---|---|
| 1 | C91 18LB |
| 2 | F30 16RD |
| 3 | C1 14DG |
| 3 | C1 18DG |
| 4 | Z1 14BK |
| 4 | Z1 18BK |
| 5 | — |
| 6 | C21 18DB/YL |




— OPTION —

AIR CONDITIONING WIRING IF INSTALLED (2.5L ENGINE)

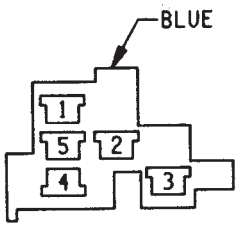



ACCCESSORY ILLUMINATION LAMP

## C214

| CAV | CIRCUIT | FUNCTION |
|---|---|---|
| 1 | E2 20OR | PANEL LAMP DRIVER |
| 2 | Z1 18BK | GROUND |

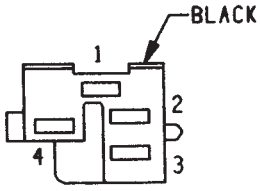
## C215




IGNITION SWITCH #2

| CAV | CIRCUIT | FUNCTION |
|---|---|---|
| 1 | A41 18YL | IGNITION SWITCH OUTPUT (START) |
| 2 | — | — |
| 3 | A31 14BK/WT | IGNITION SWITCH OUTPUT (ACC/RUN) |
| 4 | A21 14DB | IGNITION SWITCH OUTPUT (RUN/START) |
| 5 | — | — |

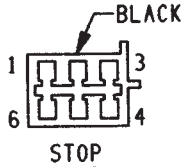
## C216




IGNITION SWITCH #1

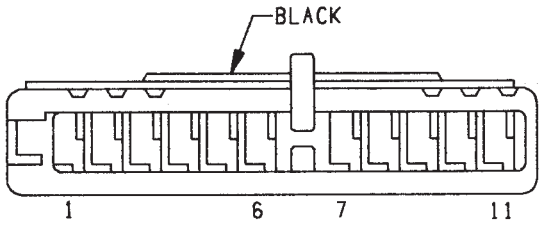
| CAV | CIRCUIT | FUNCTION |
|---|---|---|
| 1 | A22 14BK/OR | IGNITION SWITCH OUTPUT (RUN) |
| 2 | G11 18WT/BK | PARK BRAKE SWITCH SENSE |
| 2 | G11 18WT/BK | PARK BRAKE SWITCH SENSE |
| 3 | — | — |
| 4 | A1 12RD | FUSED B(+) |

## C217




STOP LAMP SWITCH

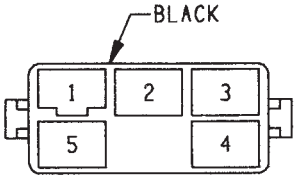
| CAV | CIRCUIT | FUNCTION |
|---|---|---|
| 1 | — | — |
| 2 | L50 18WT/TN | BRAKE LAMP SWITCH OUTPUT |
| 2 | L50 18WT/TN | BRAKE LAMP SWITCH OUTPUT |
| 3 | V40 18WT/PK | BRAKE SWITCH SENSE |
| 4 | Z1 18BK | GROUND |
| 5 | F32 18PK/DB | FUSED B(+) |
| 6 | — | — |




TURN SIGNAL SWITCH AND HAZARD FLASHER SWITCH

**C218**

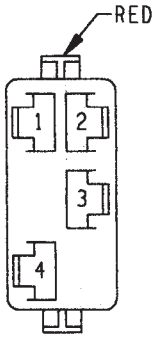
| CAV | CIRCUIT | FUNCTION |
|---|---|---|
| 1 | L50 18WT/TN | STOP LAMP SWITCH OUTPUT |
| 2 | L62 18BR/RD | RIGHT REAR/TURN SIGNAL |
| 3 | L63 18DG/RD | LEFT REAR/TURN SIGNAL |
| 4 | L6 18RD/WT | TURN SIGNAL FLASHER SIGNAL |
| 5 | L19 18PK | HAZARD FLASHER SIGNAL |
| 6 | L60 18TN | RIGHT TURN SIGNAL |
| 6 | L60 18TN | RIGHT TURN SIGNAL |
| 7 | L61 18LG | LEFT TURN SIGNAL |
| 7 | L61 18LG | LEFT TURN SIGNAL |
| 8 | X3 18BK/RD | HORN RELAY CONTROL |
| 9 | G26 18LB | KEY—IN IGNITION SWITCH SENSE |
| 10 | G16 18BK/LB | LEFT FRONT DOOR JAMB SWITCH SENSE |
| 11 | E2 200R | PANEL LAMP DRIVER |




REAR WIPER SWITCH

**C219**

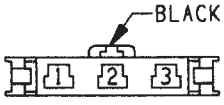
| CAV | CIRCUIT | FUNCTION |
|---|---|---|
| 1 | V20 18BR/WT | REAR WASHER PUMP GROUND |
| 2 | V13 16BR/LG | REAR WIPER RUN |
| 3 | — | — |
| 4 | Z1 18BK | GROUND |
| 5 | V22 16BR/YL | WASHER DELAY TO REAR WIPER |




HEATED REAR WINDOW SWITCH

**C220**

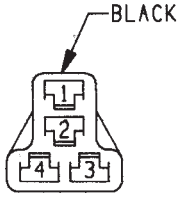
| CAV | CIRCUIT | FUNCTION |
|---|---|---|
| 1 | — | — |
| 2 | Z1 20BK | GROUND |
| 3 | C16 16LB/YL | HEATED REAR WINDOW RELAY CONTROL |
| 4 | C15 18BK/WT | HEATED REAR WINDOW RELAY OUTPUT |




FOG LAMP SWITCH

**C221**

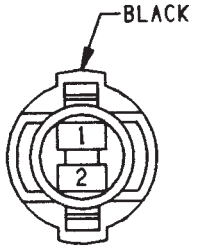
| CAV | CIRCUIT | FUNCTION |
|---|---|---|
| 1 | L39 18LB | FOG LAMP SWITCH OUTPUT |
| 2 | L35 18BR/WT | PARK LAMP RELAY CONTROL |
| 3 | Z1 20BK | GROUND |




HEATER BLOWER SWITCH

**C222**

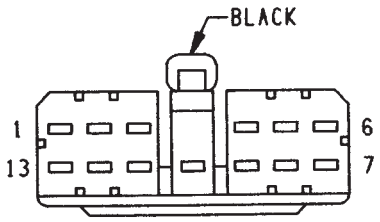
| CAV | CIRCUIT | FUNCTION |
|---|---|---|
| 1 | C5 16LG | M1 BLOWER MOTOR DRIVER |
| 2 | C4 16TN | LOW BLOWER MOTOR DRIVER |
| 3 | C7 14BK/TN | HIGH BLOWER MOTOR DRIVER |
| 3 | C7 16BK/TN | HIGH BLOWER MOTOR DRIVER |
| 4 | C1 14DG | FUSED IGNITION SWITCH OUTPUT |




HEATER CONTROL PANEL ILLUMINATION LAMP

**C223**

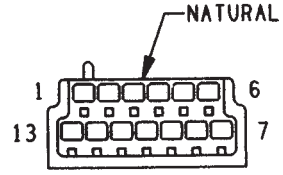
| CAV | CIRCUIT | FUNCTION |
|---|---|---|
| 1 | E2 200R | PANEL LAMP DRIVER |
| 2 | Z1 20BK | GROUND |




RADIO

**C224**

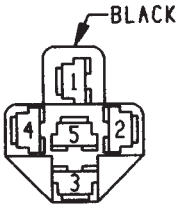
| CAV | CIRCUIT | FUNCTION |
|---|---|---|
| 1 | X57 18BR/LB | LEFT REAR SPEAKER (–) |
| 2 | X55 18BR/RD | LEFT FRONT SPEAKER (–) |
| 3 | E22 180R/WT | ILLUMINATION RELAY OUTPUT |
| 4 | E2 180R | PANEL LAMP DRIVER |
| 5 | X56 18DB/RD | RIGHT FRONT SPEAKER (–) |
| 6 | X58 18DB/OR | RIGHT REAR SPEAKER (–) |
| 7 | X52 18DB/WT | RIGHT REAR SPEAKER (+) |
| 8 | X54 18VT | RIGHT FRONT SPEAKER (+) |
| 9 | F30 18RD | FUSED IGN SWITCH OUTPUT (ACC/RUN) |
| 10 | M1 18PK | FUSED B(+) |
| 11 | – | – |
| 12 | X53 18DG | LEFT FRONT SPEAKER (+) |
| 13 | X51 18BR/YL | LEFT REAR SPEAKER (+) |




GAUGE PACKAGE

**C225**

| CAV | CIRCUIT | FUNCTION |
|---|---|---|
| 1 | E2 200R | PANEL LAMP DRIVER |
| 2 | G60 18GY/YL | OIL PRESSURE SENSOR SIGNAL |
| 3 | – | – |
| 4 | G20 18VT/YL | ECT GAUGE SENSOR SIGNAL |
| 5 | G5 18DB/WT | FUSED IGN SWITCH OUTPUT (RUN/START) |
| 6 | Z1 18BK | GROUND |
| 7 | E2 200R | PANEL LAMP DRIVER |
| 8 | G4 20DB | FUEL LEVEL SENSOR SIGNAL |
| 9 | G1 18DG/GY | 4WD SENSE |
| 10 | – | – |
| 11 | – | – |
| 12 | G5 18DB/WT | FUSED IGN SWITCH OUTPUT (RUN/START) |
| 13 | Z1 18BK | GROUND |

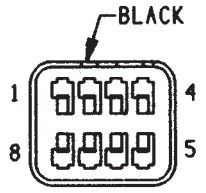



RADIO ILLUMINATION RELAY

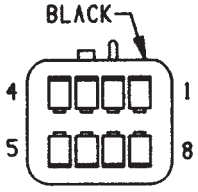
**C226**

| CAV | CIRCUIT | FUNCTION |
|---|---|---|
| 1 | E22 180R/WT | ILLUMINATION OUTPUT TO RADIO |
| 2 | Z1 18BK | GROUND |
| 3 | E2 200R | PANEL LAMP DRIVER |
| 4 | L7 18BK/YL | PARK LAMP SWITCH OUTPUT |
| 5 | F30 18RD | FUSED IGN SWITCH OUTPUT (ACC/RUN) |

## C227




| CAV | CIRCUIT |
|---|---|
| 1 | X56 20DB/RD |
| 2 | X54 20VT |
| 3 | X53 20DG |
| 4 | X55 20BR/RD |
| 5 | X58 18DB/OR |
| 6 | X52 18DB/WT |
| 7 | X51 18BR/YL |
| 8 | X57 18BR/LB |



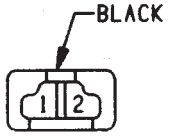

WITHOUT HALO SPEAKERS

| CAV | CIRCUIT |
|---|---|
| 1 | X58 20WT/LG |
| 2 | X52 20LG/WT |
| 3 | X51 20BR/WT |
| 4 | X57 20BR |
| 5 | X58 20WT/LG |
| 6 | X52 20LG/WT |
| 7 | X51 20BR/WT |
| 8 | X57 20BR |

WITH HALO SPEAKERS

| CAV | CIRCUIT |
|---|---|
| 1 | — |
| 2 | — |
| 3 | — |
| 4 | — |
| 5 | X58 20DB/OR |
| 6 | X52 20DB/WT |
| 7 | X51 20BR/YL |
| 8 | X57 20BR/LB |

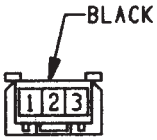
## C228




RIGHT FRONT I/P SPEAKER

| CAV | CIRCUIT | FUNCTION |
|---|---|---|
| 1 | X54 18VT | RIGHT FRONT SPEAKER (+) |
| 1 | X54 20VT | RIGHT FRONT SPEAKER (+) |
| 2 | X56 18DB/RD | RIGHT FRONT SPEAKER (−) |
| 2 | X56 20DB/RD | RIGHT FRONT SPEAKER (−) |

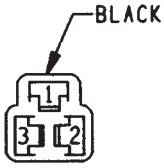
## C229




HEATER BLOWER MOTOR

| CAV | CIRCUIT | FUNCTION |
|---|---|---|
| 1 | C7 14BK/TN | HIGH BLOWER MOTOR DRIVER |
| 2 | — | — |
| 3 | Z1 14BK | GROUND |

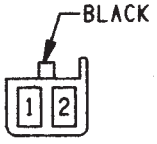
## C230



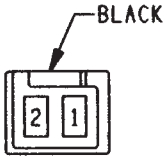

HEATER BLOWER RESISTOR

| CAV | CIRCUIT | FUNCTION |
|---|---|---|
| 1 | C5 16LG | M1 BLOWER MOTOR DRIVER |
| 2 | C7 16BK/TN | HIGH BLOWER MOTOR DRIVER |
| 3 | C4 16TN | LOW BLOWER MOTOR DRIVER |

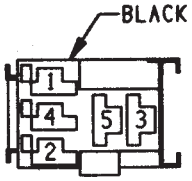
## C231




| CAV | CIRCUIT |
|---|---|
| 1 | M1 18PK |
| 2 | M2 18YL |



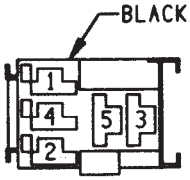

| CAV | CIRCUIT |
|---|---|
| 1 | M1 18PK |
| 2 | M2 18BK/WT |




PARK LAMP RELAY

**C232**

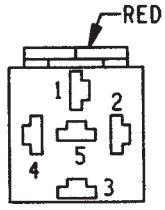
| CAV | CIRCUIT | FUNCTION |
|---|---|---|
| 1 | L7 18BK/YL | PARK LAMP SWITCH OUTPUT |
| 2 | L35 18BR/WT | PARK LAMP RELAY CONTROL |
| 3 | F81 16BR | FUSED B(+) |
| 4 | — | — |
| 5 | L36 16BR/LB | PARK LAMP RELAY OUTPUT |




HIGH BEAM RELAY

**C233**

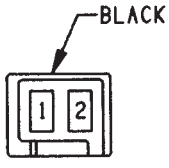
| CAV | CIRCUIT | FUNCTION |
|---|---|---|
| 1 | G34 18RD/GY | HIGH BEAM INDICATOR DRIVER |
| 2 | Z1 18BK | GROUND |
| 3 | L36 16BR/LB | PARK LAMP RELAY OUTPUT |
| 4 | L39 16LB | HIGH BEAM RELAY OUTPUT |
| 5 | — | — |




HEATED REAR WINDOW RELAY

**C301**

| CAV | CIRCUIT | FUNCTION |
|---|---|---|
| 1 | C15 18BK/WT | HEATED REAR WINDOW RELAY OUTPUT |
| 1 | C15 14BK/WT | HEATED REAR WINDOW RELAY OUTPUT |
| 2 | Z1 18BK | GROUND |
| 3 | F81 14BR | FUSED B(+) |
| 4 | G5 18DB/WT | FUSED IGN SWITCH OUTPUT (RUN/START) |
| 5 | C16 18LB/YL | HEATED REAR WINDOW RELAY CONTROL |

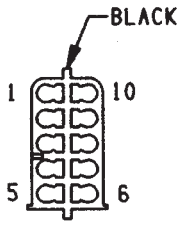



SEAT BELT SWITCH

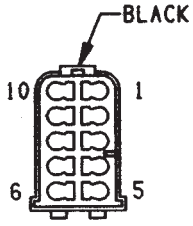
**C302**

| CAV | CIRCUIT | FUNCTION |
|---|---|---|
| 1 | G10 18LG/RD | SEAT BELT SWITCH SENSE |
| 2 | Z1 18BK | GROUND |

## C303

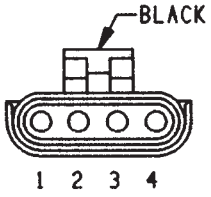



| CAV | CIRCUIT |
|---|---|
| 1 | C15 14BK/WT |
| 2 | M2 18YL |
| 3 | M1 20PK |
| 4 | V23 16BR/PK |
| 5 | V13 16BR/LG |
| 6 | — |
| 7 | — |
| 8 | — |
| 9 | V22 16BR/YL |
| 10 | Z1 14BK |




| CAV | CIRCUIT |
|---|---|
| 1 | C15 14BR/OR |
| 2 | M2 18BK/WT |
| 3 | M1 18PK |
| 4 | V22 14BR/WT |
| 4 | V23 14GR |
| 5 | V13 14GR/WT |
| 6 | — |
| 7 | — |
| 8 | — |
| 9 | V22 14BR/WT |
| 10 | Z1 12BK |

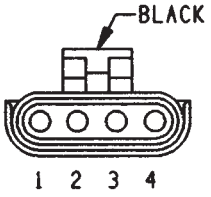
## C304




LEFT TAIL, STOP AND TURN SIGNAL LAMP AND LICENSE LAMP

| CAV | CIRCUIT | FUNCTION |
|---|---|---|
| 1 | L1 18VT/BK | BACK—UP LAMP SWITCH OUTPUT |
| 2 | L63 18DG/RD | LEFT REAR TURN SIGNAL OUTPUT |
| 3 | L7 18BK/YL | PARK LAMP SWITCH OUTPUT |
| 4 | Z1 14BK | GROUND |

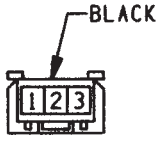
## C305




RIGHT TAIL, STOP AND TURN SIGNAL LAMP

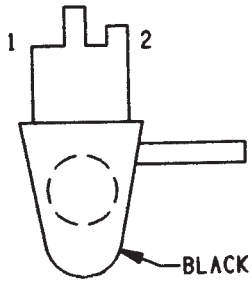
| CAV | CIRCUIT | FUNCTION |
|---|---|---|
| 1 | L1 18VT/BK | BACK—UP LAMP SWITCH OUTPUT |
| 2 | L62 18BR/RD | RIGHT REAR TURN SIGNAL OUTPUT |
| 3 | L7 18BK/YL | PARK LAMP SWITCH OUTPUT |
| 4 | — | — |

## C306




TWO SPEED WINDSHIELD WIPER MOTOR

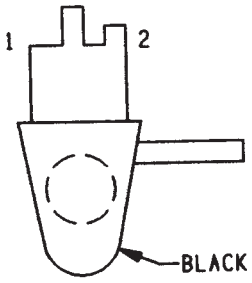
| CAV | CIRCUIT | FUNCTION |
|---|---|---|
| 1 | V23 14GR | IGNITION SWITCH OUTPUT |
| 2 | Z1 16BK | GROUND |
| 3 | V13 14GR/WT | REAR WIPER SWITCH OUTPUT |




LEFT COURTESY LAMP

**C307**

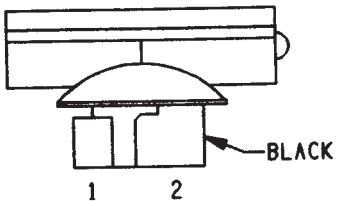
| CAV | CIRCUIT | FUNCTION |
|---|---|---|
| 1 | M1 18PK | FUSED B(+) |
| 2 | M2 18BK/WT | COURTESY LAMP DRIVER |




RIGHT COURTESY LAMP

**C308**

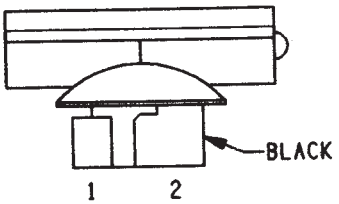
| CAV | CIRCUIT | FUNCTION |
|---|---|---|
| 1 | M1 18PK | FUSED B(+) |
| 2 | M2 18BK/WT | COURTESY LAMP DRIVER |




CENTER HIGH MOUNTED STOP LAMP #2

**C309**

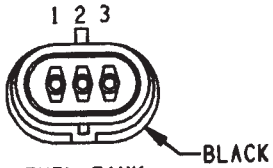
| CAV | CIRCUIT | FUNCTION |
|---|---|---|
| 1 | L50 18WT/TN | BRAKE LAMP SWITCH OUTPUT |
| 2 | Z1 18BK | GROUND |




CENTER HIGH MOUNTED STOP LAMP #1

**C310**

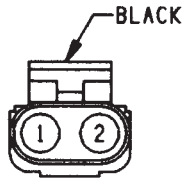
| CAV | CIRCUIT | FUNCTION |
|---|---|---|
| 1 | L50 18WT/TN | BRAKE LAMP SWITCH OUTPUT |
| 2 | Z1 18BK | GROUND |




FUEL TANK LEVEL GAUGE SENDING UNIT

**C401**

| CAV | CIRCUIT | FUNCTION |
|---|---|---|
| 1 | Z2 16BK/OR | GROUND |
| 2 | G4 18DB | FUEL LEVEL SENSOR SIGNAL |
| 3 | A141 16DG/BK | FUEL PUMP RELAY OUTPUT |

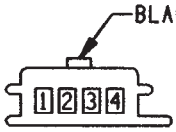



4WD SWITCH

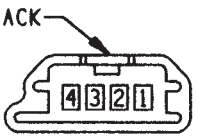
**C402**

| CAV | CIRCUIT | FUNCTION |
|---|---|---|
| 1 | G1 18DG/GY | 4WD SENSE |
| 2 | Z1 18BK | GROUND |

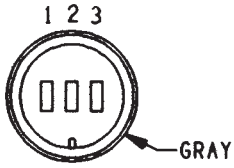
**C403**




| CAV | CIRCUIT |
|---|---|
| 1 | X51 20BR/YL |
| 2 | X57 20BR/LB |
| 3 | X52 20DB/WT |
| 4 | X58 20DB/OR |



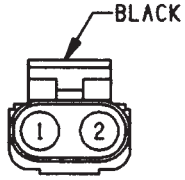

| CAV | CIRCUIT |
|---|---|
| 1 | X51 20BR/YL |
| 2 | X57 20BR/LB |
| 3 | X52 20DB/WT |
| 4 | X58 20DB/OR |




PARK/NEUTRAL POSITION SWITCH

**C404**

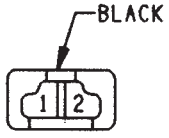
| CAV | CIRCUIT | FUNCTION |
|---|---|---|
| 1 | G5 18DB/WT | FUSED IGN SWITCH OUTPUT (RUN/START) |
| 2 | T41 18BR/YL | PARK/NEUTRAL POSITION SWITCH SENSE |
| 3 | L1 18VT | BACK—UP LAMP SWITCH OUTPUT |




BACK-UP LAMP SWITCH

**C405**

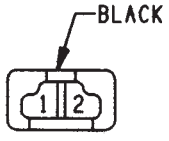
| CAV | CIRCUIT | FUNCTION |
|---|---|---|
| 1 | L1 18VT | BACK—UP LAMP SWITCH OUTPUT |
| 2 | G5 18DB/WT | FUSED IGN SWITCH OUTPUT (RUN/START) |




RIGHT HALO SPEAKER

**C406**

| CAV | CIRCUIT | FUNCTION |
|---|---|---|
| 1 | X52 20DB/WT | RIGHT REAR SPEAKER (+) |
| 2 | X58 20DB/OR | RIGHT REAR SPEAKER (—) |




LEFT HALO SPEAKER

**C407**

| CAV | CIRCUIT | FUNCTION |
|---|---|---|
| 1 | X51 20BR/YL | LEFT REAR SPEAKER (+) |
| 2 | X57 20BR/LB | LEFT REAR SPEAKER (—) |

# CONNECTOR LOCATIONS

## GENERAL INFORMATION

This section provides illustrations identifying component and connector locations in the vehicle. A connector index is provided. Use the wiring diagrams in each section for connector number identification. Refer to the index for the proper figure number.

## CONNECTOR LOCATIONS

| Connector # | Color | Location | Fig. |
|---|---|---|---|
| C101 | BK | RT Fender Side Shield | 1 |
| C102 | BK | RT Fender Side Shield Under PDC | 1 |
| C103 | BK | RT Fender Side Shield | 1 |
| C104 | BK | LT Side of Battery on Cowl Panel | 1 |
| C105 2.5L | NAT | RT Rear of Engine | 3 |
| C105 4.0L | NAT | RT Rear of Engine | 4 |
| C106 | BK | At Lamp | 1 |
| C107 | NAT | Center of Cowl Panel Near Map Sensor | 1 |
| C108 | BK | LT Kick Panel Above Park Brake | 8 |
| C109 | BK | Under Drivers Seat | 8 |
| C110 | BK | Under I.P.Front of Floor Tunnel | 6 |
| C111 | BK | Under I.P.Front of Floor Tunnel | 6 |
| C112 | BK | Under I.P. RT of Stop Lamp Switch | 7 |
| C113 | BK | LT Fender Side Shield | 1 |
| C114 | BK | LT Side Cowl Panel | 1 |
| C115 | BK | LT Fender Side Shield | 1 |
| C116 | BK | LT Fender Side Shield | 1 |
| C117 | BK | LT Fender Side Shield | 1 |
| C118 | BK | Bottom of Washer Reservoir | 2 |
| C119 | BK | Near Bulkhead Disconnect 2.5L only | Not Shown |
| C120 2.5L | BK | Rear of Generator | 3 |
| C120 4.0L | BK | Rear of Generator | 5 |
| C121 2.5L | BK | RT Rear of Engine | 3 |
| C121 4.0L | BK | Rear of Generator | 4 |
| C122 | BK | On Receiver/Drier | 4 |
| C123 2.5L | BK | RT Side of Engine Rear of Distributor | 3 |
| C123 4.0L | BK | RT Side of Engine Rear of Distributor | 4 |
| C124 2.5L | BK | At End of Distributor Pig Tail | 3 |
| C124 4.0L | BK | At End of Distributor Pig Tail | 4 |
| C125 | GY | RT Side of Transmission | 5 |
| C126 | BK | LT Rear of Transmission | 5 |
| C127 | BK | Top of Fuel Tank | 9 |
| C128 | BK | Top of Rear Cross-member | 9 |
| C129 | BK | Top of Rear Cross-member | 9 |
| C130 2.5L | BK | On Thermostat Housing | 3 |
| C130 4.0L | BK | On Thermostat Housing | 4 |
| C131 2.5L | BK | LT Side of Engine Bottom of Intake | 3 |
| C131 4.0L | BK | LT Side of Engine Bottom of Intake | 4 |
| C132 2.5L | BK | Injector #1 | 3 |
| C132 4.0L | BK | Injector #1 | 4 |
| C133 2.5L | BK | Injector #2 | 3 |
| C133 4.0L | BK | Injector #2 | 4 |
| C134 2.5L | BK | Injector #3 | 3 |
| C134 4.0L | BK | Injector #3 | 4 |
| C135 2.5L | BK | Injector #4 | 3 |
| C135 4.0L | BK | Injector #4 | 4 |
| C136 | BK | Injector #5 | 4 |
| C137 | BK | Injector #6 | 4 |
| C138 2.5L | BK | Center of Dash Panel | 1 |
| C138 4.0L | BK | Center of Dash Panel | 1 |
| C139 | BK | Under Bulkhead LT Side of I.P. | 1 |
| C140 2.5L | GY | LT Rear of Intake | 3 |
| C140 4.0L | GY | LT Rear of Intake | 4 |
| C141 2.5L | BK | Rear of Throttle Body | 3 |
| C141 4.0L | BK | Rear of Throttle Body | 4 |
| C142 2.5L | BK | On Throttle Body | 3 |
| C142 4.0L | BK | On Throttle Body | 4 |
| C143 2.5L | BK | Rear of Intake | 3 |
| C143 4.0L | BK | Rear of Intake | 4 |
| C144 | BK | Above Bulkhead Disconnect | 1 |
| C145 | GY | On Power Steering Pump | 3 |
| C146 | BK | At Headlamp | Not Shown |
| C147 | YL | At Side Marker Lamp | 2 |
| C148 | BK | At Park/Turn Lamp | Not Shown |
| C149 | BK | RT Side Behind Bumper | 2 |
| C150 | BK | LT Side Behind Bumper | 2 |
| C151 | BK | At Park/Turn Lamp | 2 |
| C152 | YL | At Side Marker Lamp | Not Shown |
| C153 | BK | At Headlamp | 2 |
| C154 | BK | LT Fender Side Shield | 2 |
| C155 | BK | Direct Connection to Horn | 2 |
| C156 | BK | Bottom of Washer Reservoir | 2 |
| C201 | BK | LT Side of I.P | 7 |
| C202 | BK | On Fuse Block | 7 |
| C203 | BK | LT Kick Panel | 7 |
| C204 | BK | LT Kick Panel | 7 |
| C205 | BK | LT Side Kick Panel Under I.P. | 7 |
| C206 | BK | At Speaker | Not Shown |
| C207 | BK | LT of Steering Column Rear of Cluster | 7 |
| C208 | BK | LT Side of Steering Column | 7 |
| C209 | BK | Rear of Switch | 7 |
| C210 | BK | Rear of Switch | 7 |
| C211 | BK | Base of Steering Column | 7 |
| C212 | BK | At Wiper Motor | 7 |
| C213 | BK | RT of Steering Column Under I.P. | 7 |
| C214 | BK | RT Side of Cluster Bezel | Not Shown |
| C215 | BK | Base of Steering Column | 7 |
| C216 | BK | Base of Steering Column | 7 |
| C217 | BK | RT Side of Brake Pedal Support | 7 |
| C218 | BK | Base of Steering Column | 7 |
| C219 | BK | Rear of Switch | 7 |
| C220 | BK | Rear of Switch | 7 |
| C221 | BK | Rear of Switch | 7 |

| Connector # | Color | Location | Fig. |
|---|---|---|---|
| C222 | BK | Rear of Switch | 6 |
| C223 | BK | Rear of HVAC Switch | 6 |
| C224 | BK | Rear of Radio | 6 |
| C225 | BK | Rear Center of I.P | 6 |
| C226 | BK | Rear of Glove Box LT Side | 6 |
| C227 | BK | Under I.P Right Side | 6 |
| C228 | BK | At Speaker | Not Shown |
| C229 | BK | RT Side of HVAC Housing | 6 |
| C230 | BK | RT Side of HVAC Housing | 6 |
| C231 | BK | RT Kick Panel | 6, 7 |
| C232 | BK | Top of I.P. Center Support | 7 |
| C233 | BK | Top of I.P. Center Support | 7 |
| C301 | RD | LT Kick Panel | 8 |
| C302 | BK | At Buckle | 8 |
| C303 | BK | LT Rear Quarter Panel | 8 |
| C304 | BK | LT Rear Quarter Panel | 8 |
| C305 | BK | RT Rear Quarter Panel | 8 |
| C306 | BK | At Motor | Not Shown |
| C307 | BK | LT Side of I.P. at Lamp | 6 |
| C308 | BK | RT Side of I.P. at Lamp | 7 |
| C309 | BK | At CHMSL Lamp | Not Shown |
| C310 | BK | At CHMSL Lamp | Not Shown |
| C401 | BK | Top of Fuel Tank | 9 |
| C402 | BK | RT Side of Axle | Not Shown |
| C403 | BK | RT Side of Roll Bar | 8 |
| C404 | GY | LT Side Front of Transmission | 5 |
| C405 | BK | RT Side of Transmission | 5 |
| D101 | | ABS Diode Under I.P.Front of Floor Tunnel | 6 |
| D201 | | Taped In Harness Near Wiper Switch T/O | 6 |
| G101 | | Left of Battery on Dash Panel | 1 |
| G102 | | Center of Dash Panel | 1 |
| G103 2.5L | | Rear of Distributor | 3 |
| G103 4.0L | | Rear of Generator | 4 |
| G104 2.5L | | RT Side of Engine | 3 |
| G104 4.0L | | Rt Side of Engine | 4 |
| G105 | | RT Side Radiator Closure Panel | 2 |
| G106 | | LT Side Radiator Closure Panel | 2 |
| G107 | | RT Side of Dash Panel | 1 |
| G108 2.5L | | RT Rear of Engine | 3 |
| G108 4.0L | | RT Rear of Engine | 4 |
| G201 | | At Cigar Lighter | 6 |
| G202 | | Rear of Radio | 6 |

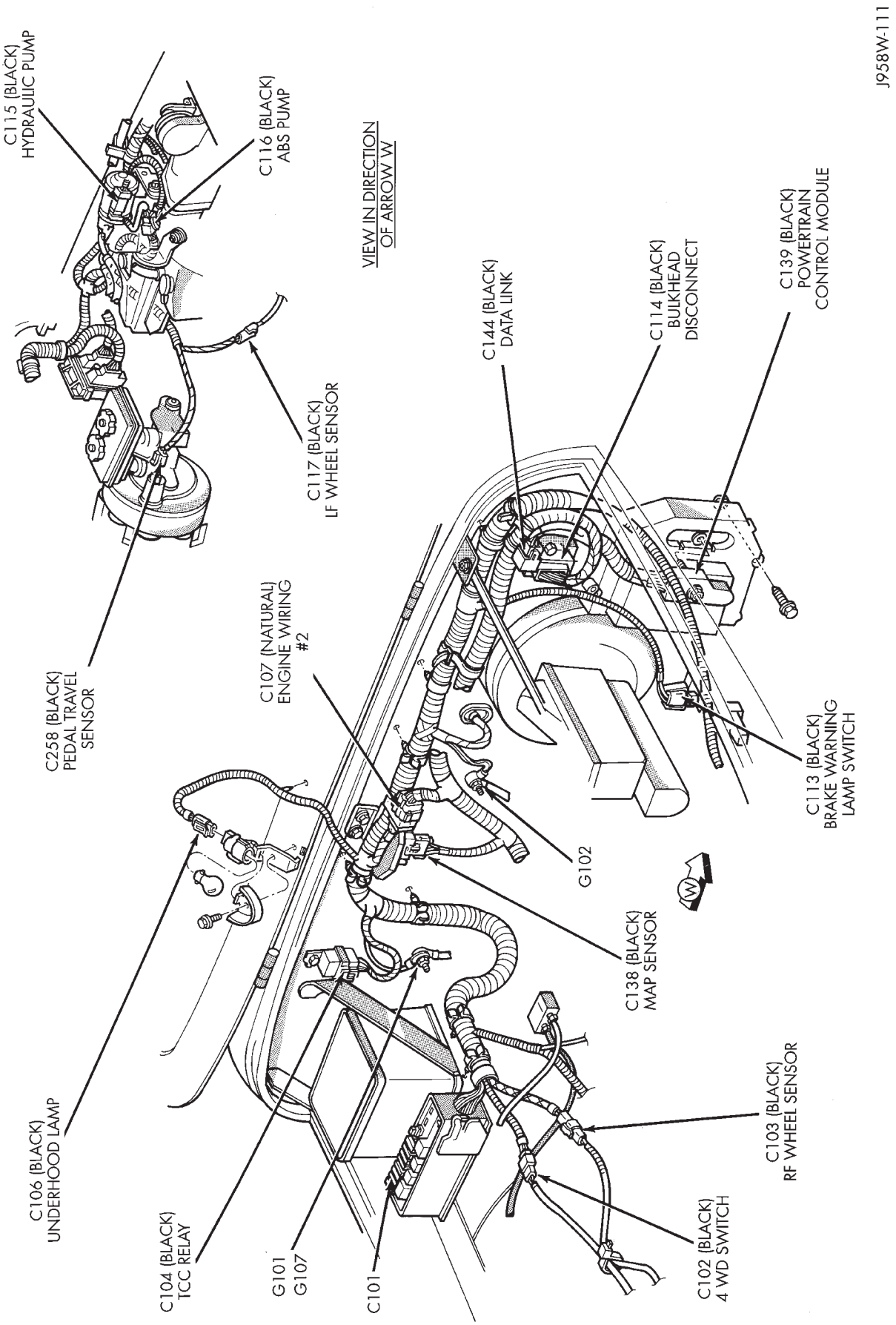



*Fig. 1 Engine Compartment Connections YJ*

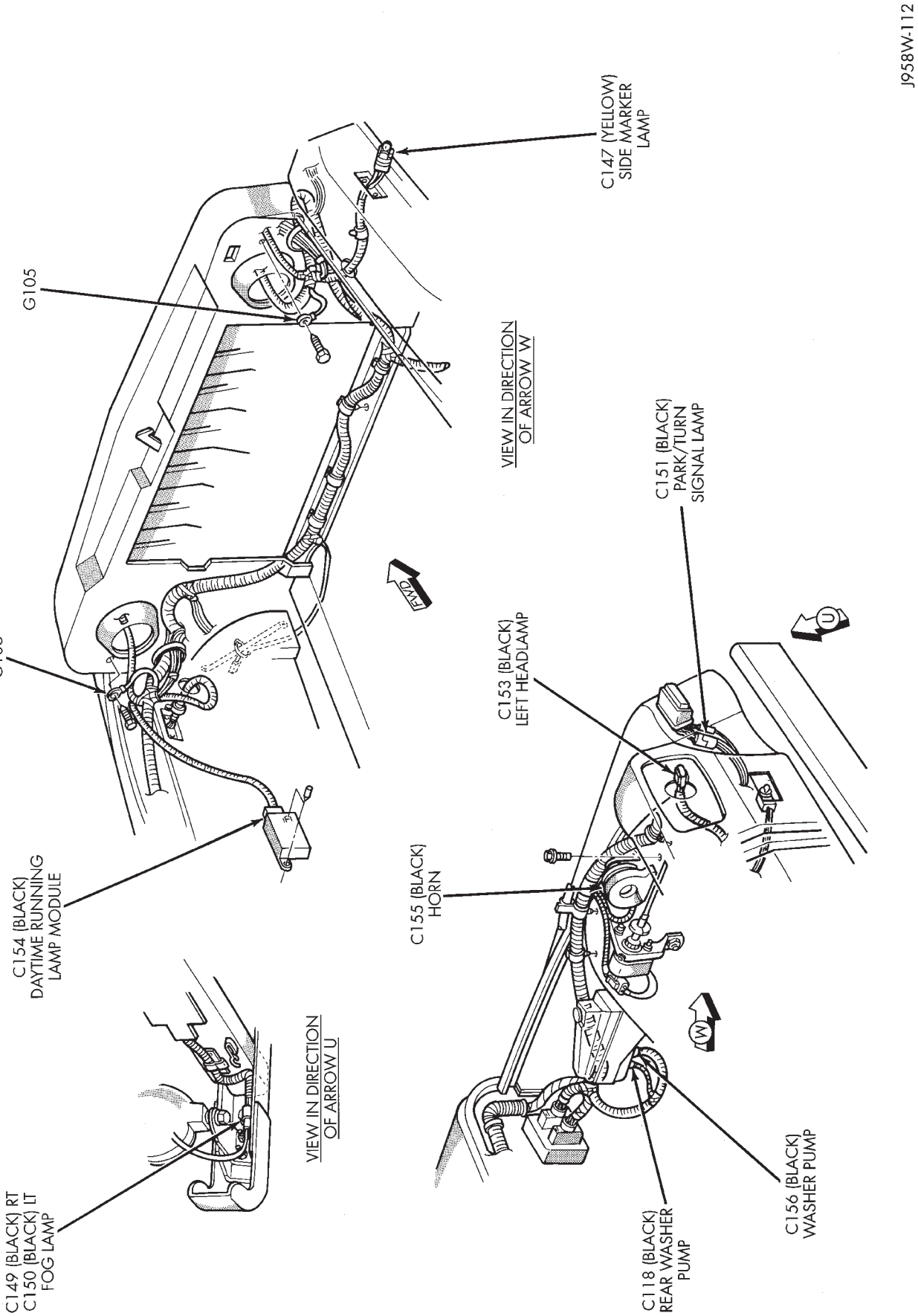



*Fig. 2 Engine Compartment Connections YJ*

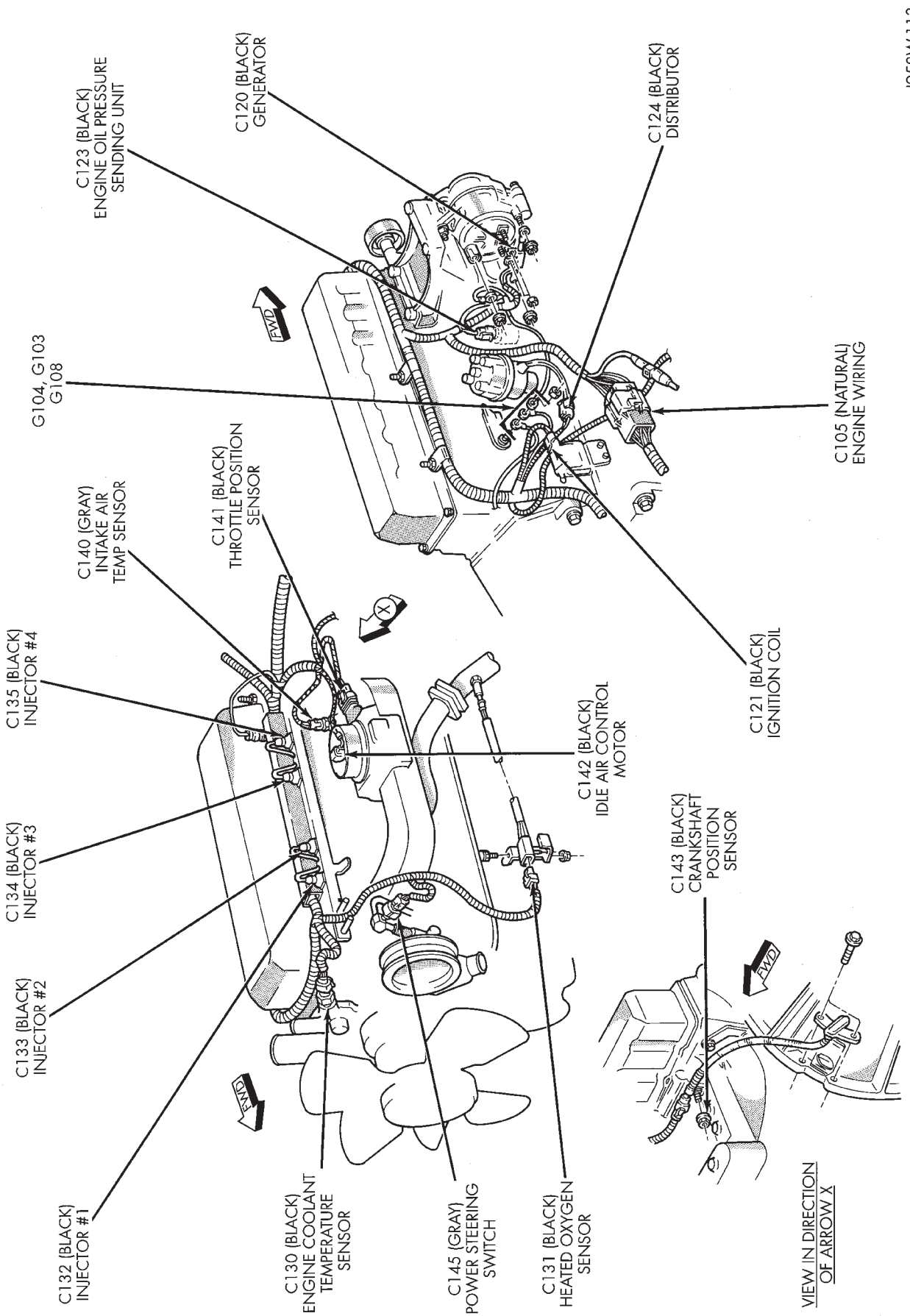



***Fig. 3 Engine Connections 2.5L YJ***

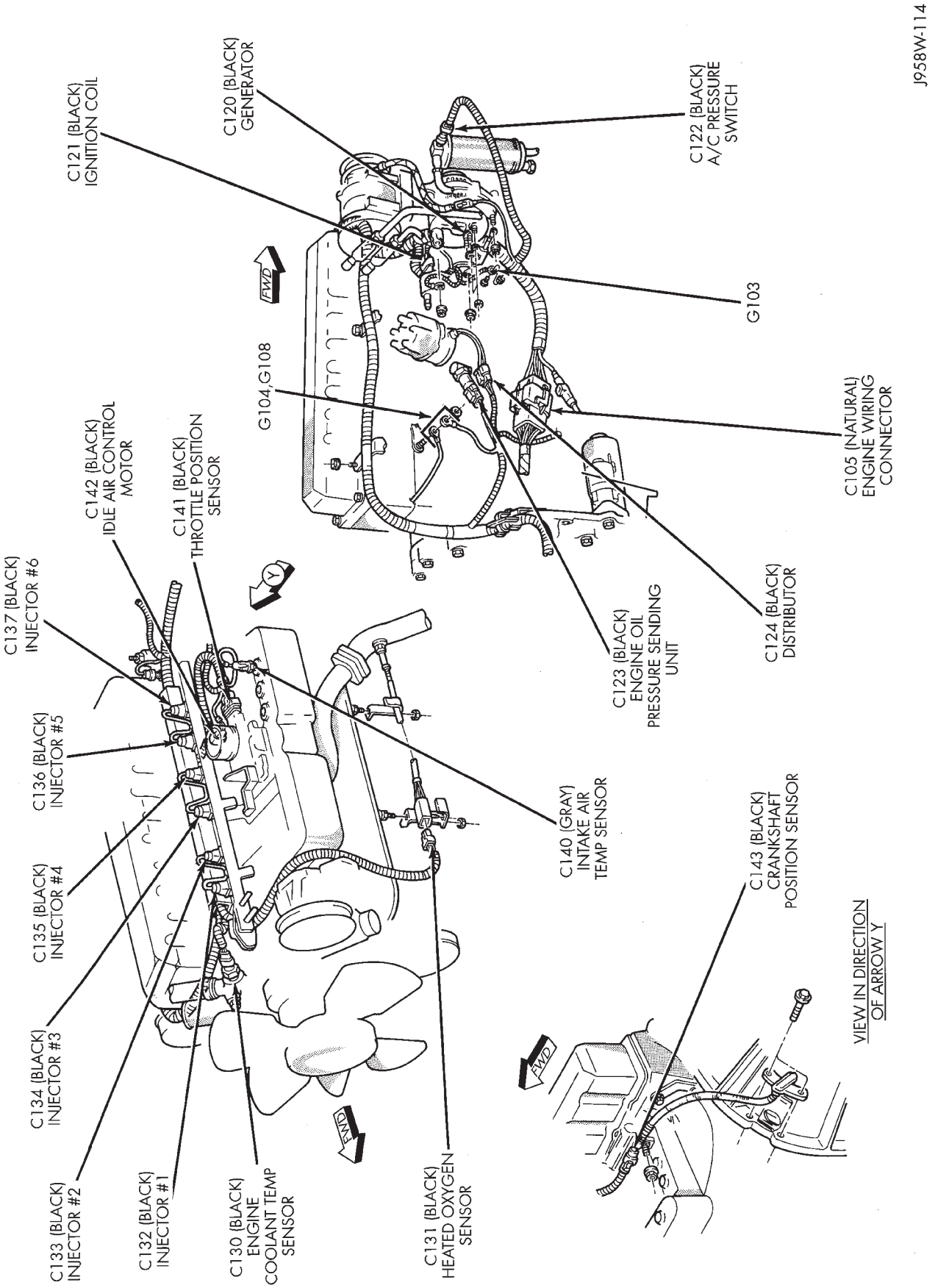



*Fig. 4 Engine Connections 4.0L YJ*

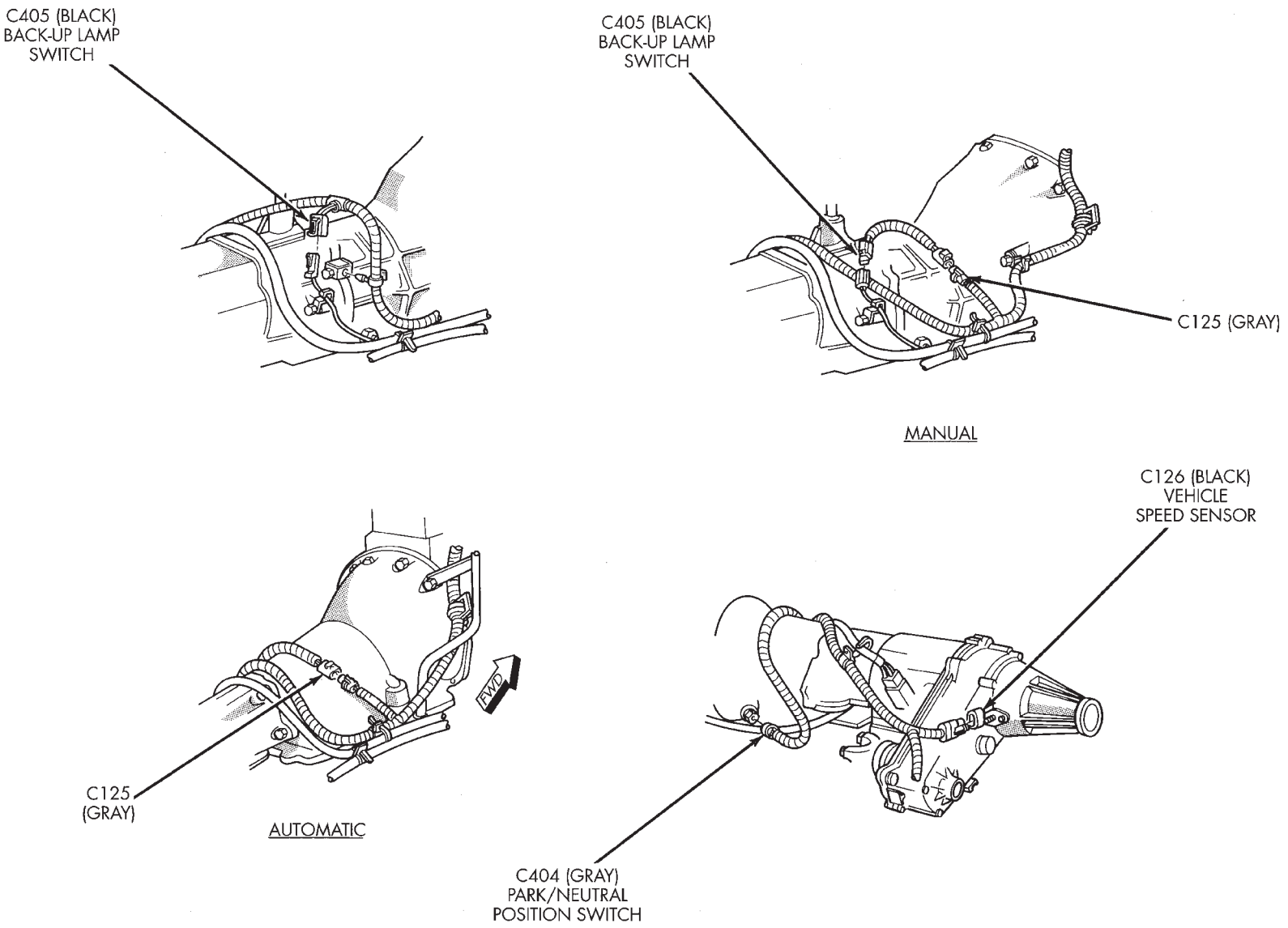



***Fig. 5 Transmission Connections YJ***

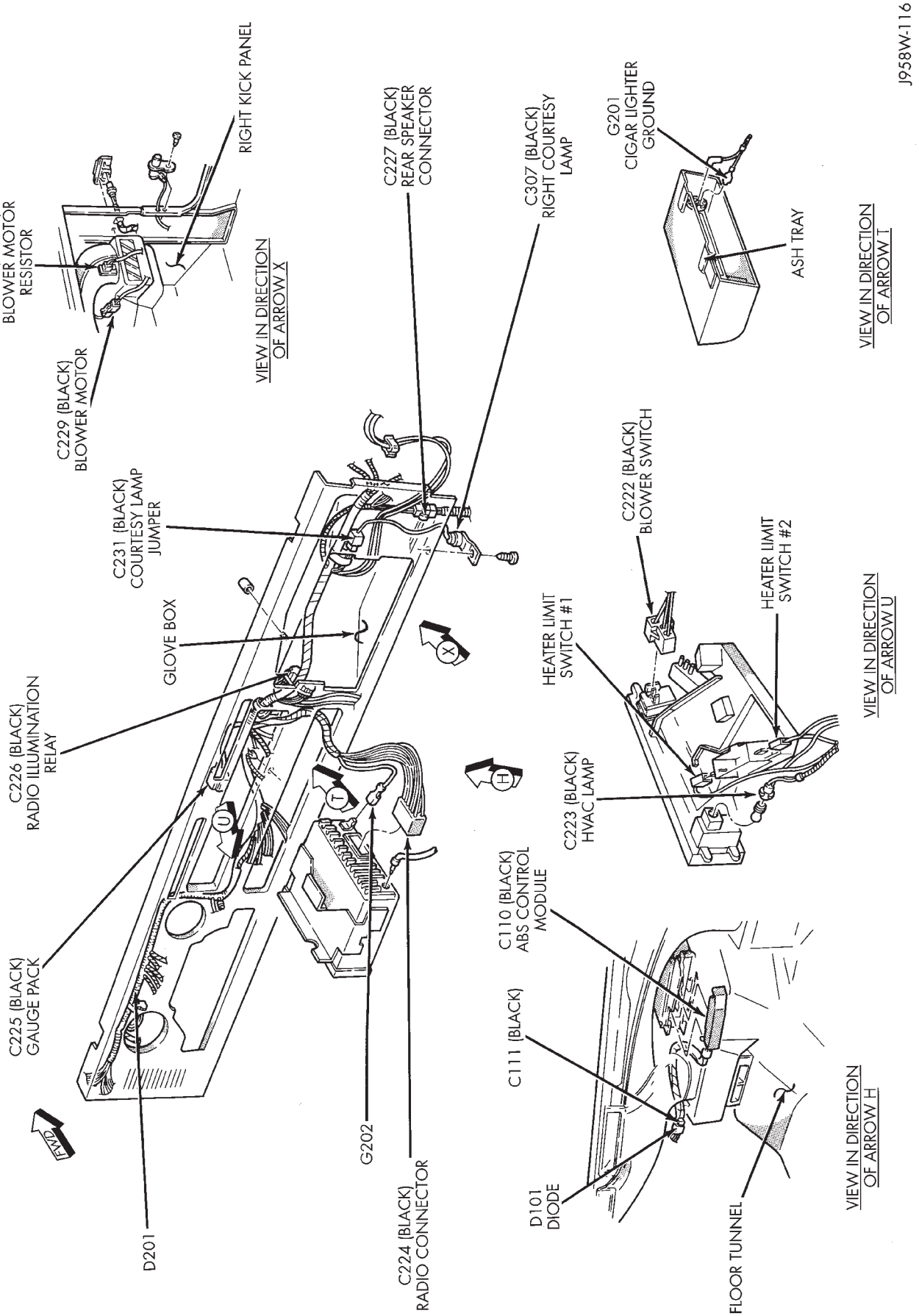



*Fig. 6 Instrument Panel Connections YJ*

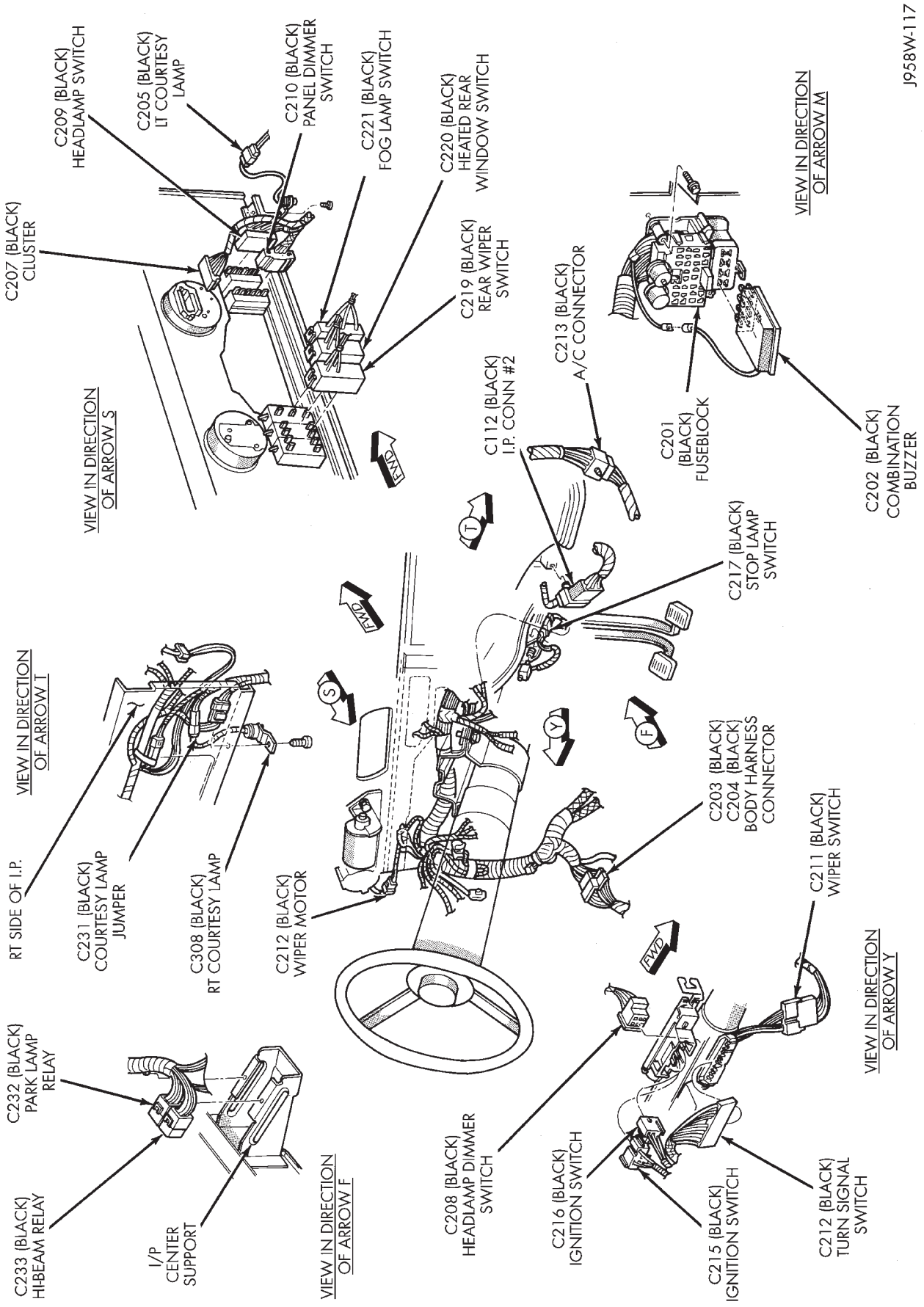



*Fig. 7 Instrument Panel Connections YJ*

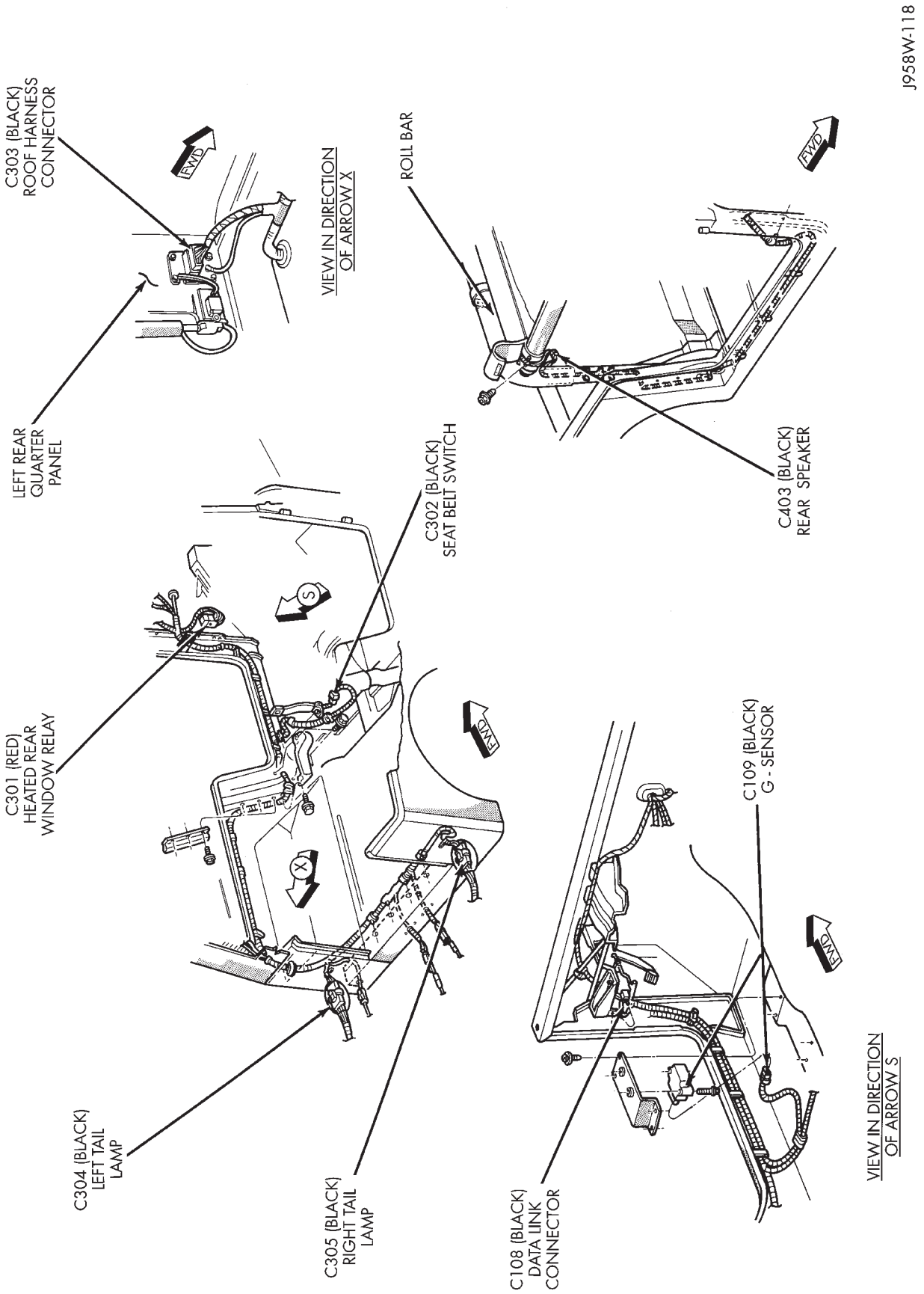



*Fig. 8 Body Connections YJ*

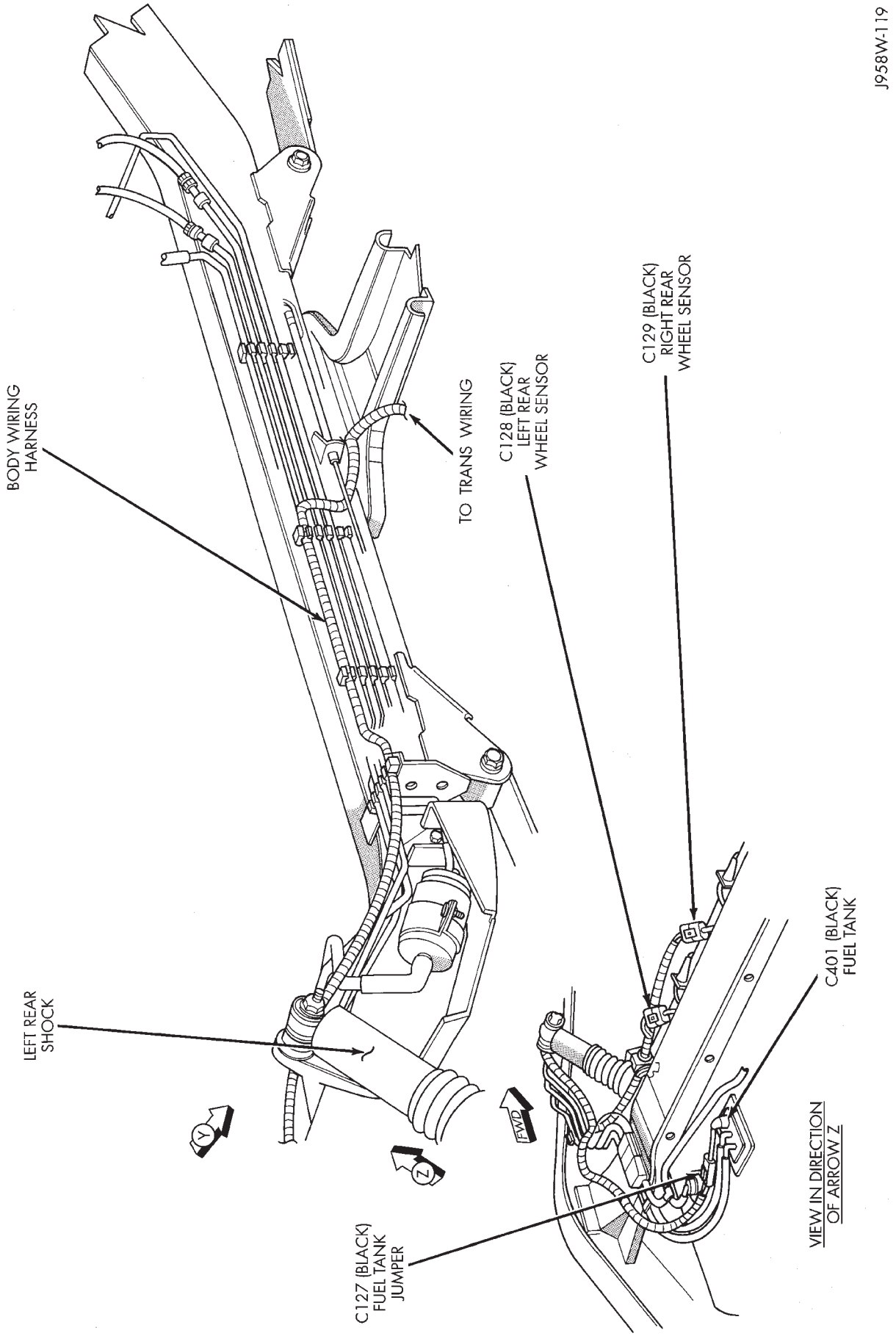



*Fig. 9 Frame Connections YJ*

# SPLICE LOCATIONS

## GENERAL INFORMATION

This section provides illustrations identifying the general location of the splices in this vehicle. A splice index is provided. Use the wiring diagrams in each section for splice number identification. Refer to the index for the proper splice number.

## SPLICE LOCATIONS

| Splice Number | Locations | Fig. |
|---|---|---|
| S101 | Near PDC T/O | 1 |
| S102 | Near T/O for Engine Wiring | 1 |
| S103 | RT Dash Panel Near T/o for Ground | 1 |
| S104 | Near T/O for MAP Sensor | 1 |
| S105 | Near T/O for MAP Sensor | 1 |
| S106 | Left Side of MAP Sensor | 1 |
| S107 | In ABS Wiring T/O Near Grommet | 1 |
| S108 | In ABS Wiring T/O Near Grommet | 1 |
| S109 | Above Brake Booster | 1 |
| S110 | Rear of Generator | 3 |
| S111 2.5L | RT Side of Valve Cover | 4 |
| S111 4.0L | RT Side of Valve Cover | 3 |
| S112 | Near T/O for PRNDL Switch | 5 |
| S113 | Between Inj #2 and Inj #3 | 3 |
| S114 | Near T/O for Throttle Body Wiring | 3 |
| S115 | Above Bulkhead Connector | 1 |
| S116 | Above Bulkhead Connector | 1 |
| S117 | Near Data Link T/O | 1 |
| S118 | Near Data Link T/O | 1 |
| S119 | Near Data Link T/O | 1 |
| S120 4.0L | RT Side of Valve Cover | 3 |
| S121 2.5L | RT Side of Valve Cover | 4 |
| S122 | Near T/O for RT PK/TURN Lamp | 2 |
| S123 | Near T/O for RT Fog Lamp | 2 |
| S124 | Near T/O for LT Fog Lamp | 2 |
| S125 | Near T/O for LT PK/TURN Lamp | 2 |
| S126 | Near T/O for Headlamp | 2 |
| S127 | Near T/O for Headlamp | 2 |
| S128 | Near T/O for Headlamp | 2 |
| S129 | Near Horn T/O | 2 |
| S201 | Near T/O for Dimmer Switch | 7 |
| S202 | Near T/O for Dimmer Switch | 7 |
| S203 | Near T/O for Dimmer Switch | 7 |
| S204 | Near T/O for Dimmer Switch | 7 |
| S205 | Near T/O for Wiper Switch | 7 |
| S206 | Near T/O for Wiper Switch | 7 |
| S207 | Near Panel Illumination T/O | 7 |
| S208 | Near Panel Illumination T/O | 7 |
| S209 | Near Panel Illumination T/O | 7 |
| S210 | Near Panel Illumination T/O | 7 |
| S211 | Near T/O for Ignition Switch | 7 |
| S212 | Near T/O for Ignition Switch | 7 |
| S213 | Near T/O for Radio | 6 |
| S301 | Near T/O for Park Brake Switch | 8 |
| S302 | Near T/O for Park Brake Switch | 8 |
| S303 | Near Grommet LT Rear Quarter Panel | 8 |
| S304 | Near LT Rear Tail Lamp T/O | 8 |
| S305 | RT Rear Quarter Panel Near Tail Lamp | 8 |
| S306 | Near T/O for Dome Lamp | Not Shown |
| S307 | In CHMSL Jumper Harness | Not Shown |
| S308 | In CHMSL Jumper Harness | Not Shown |

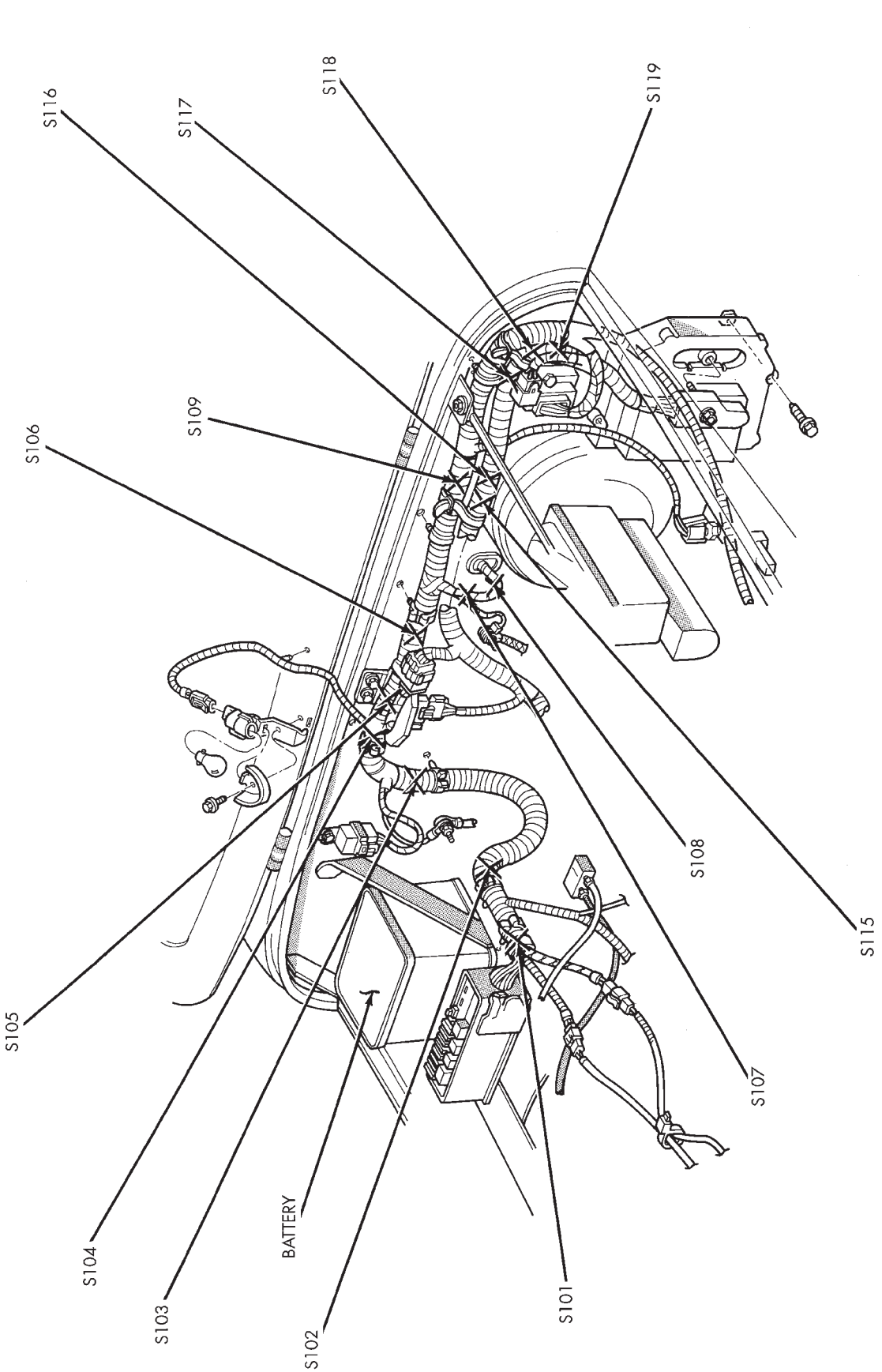



*Fig. 1 Engine Compartment Splices YJ*

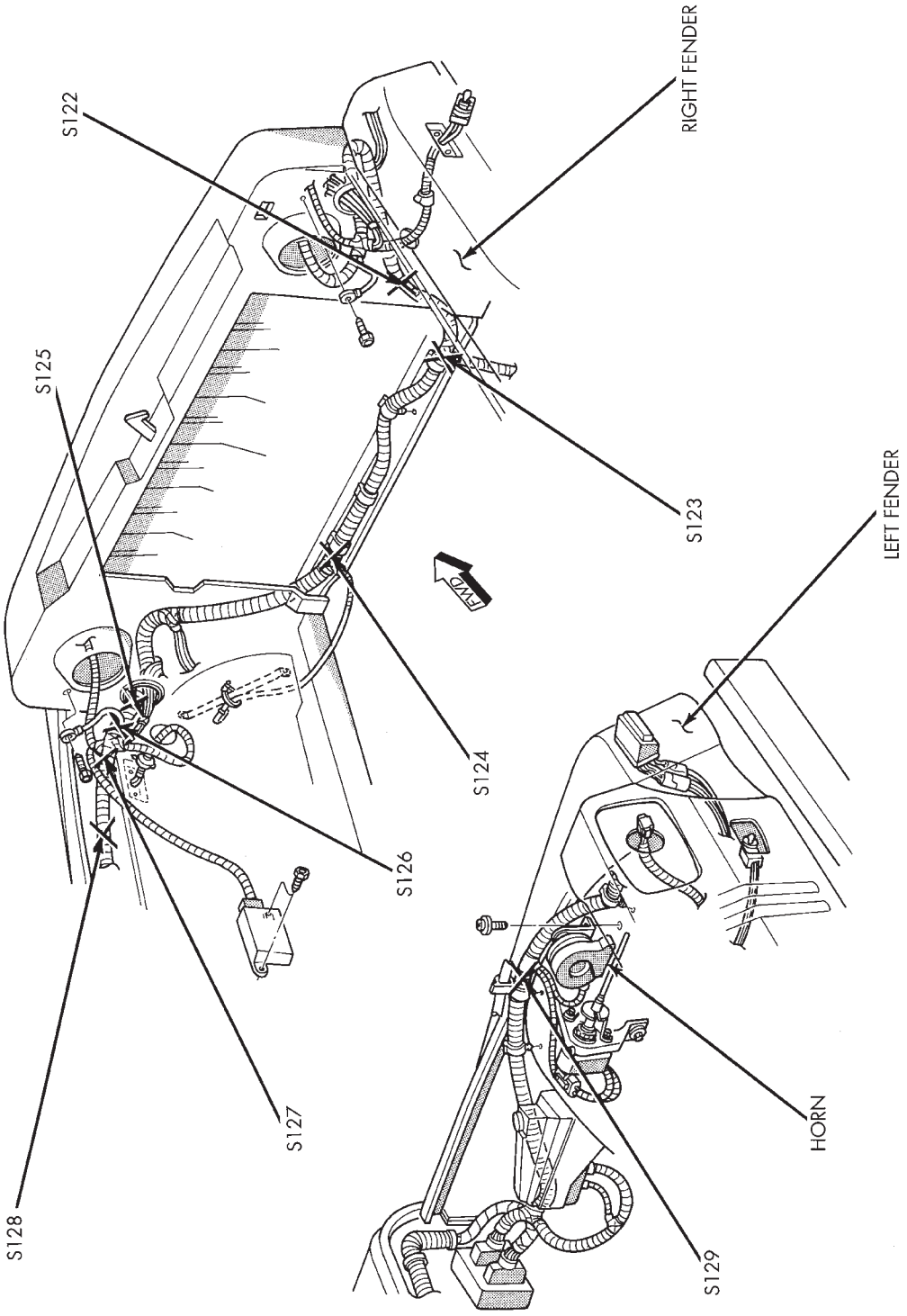



*Fig. 2 Engine Compartment Splices YJ*

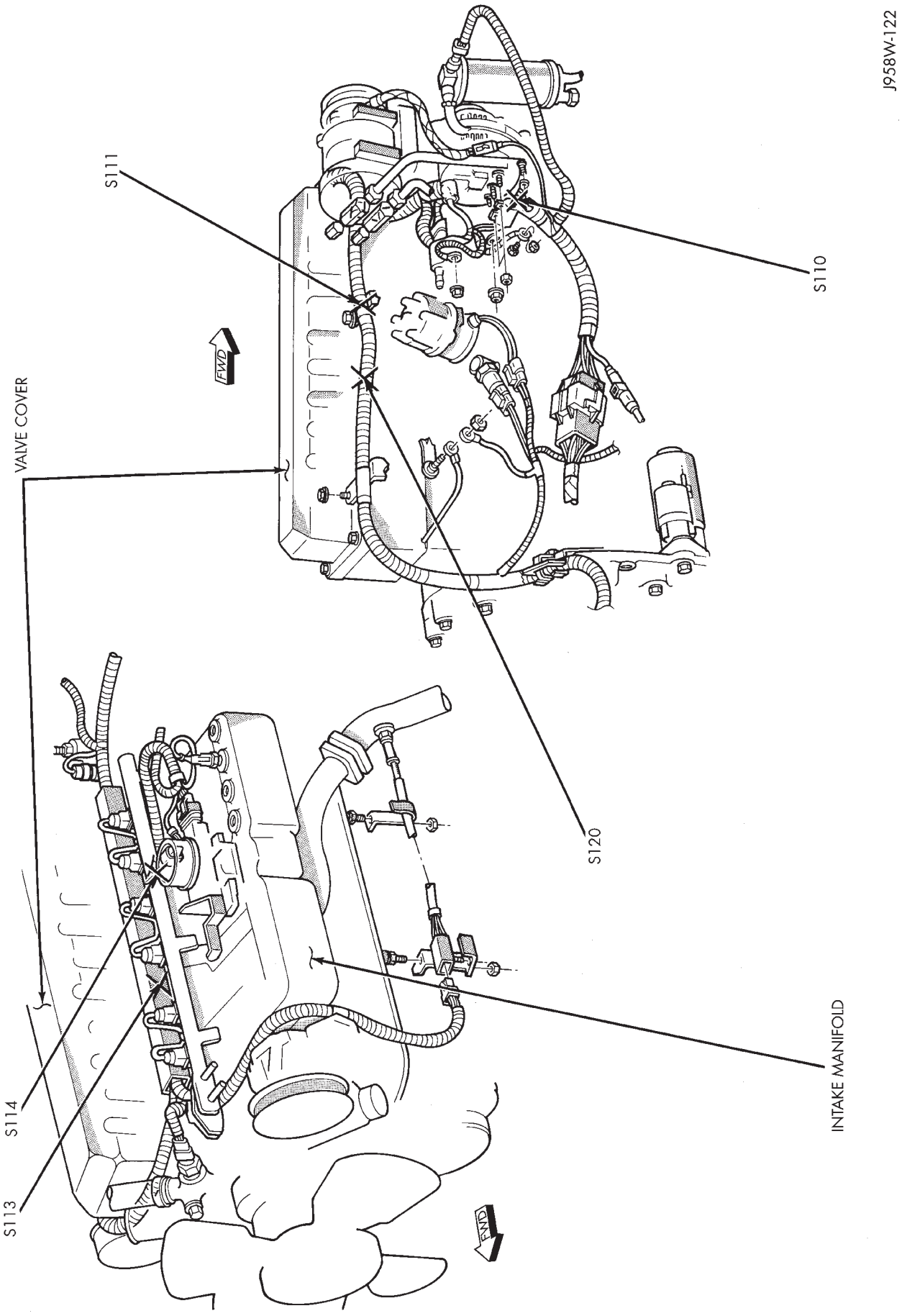



*Fig. 3 Engine Splices 4.0L YJ*

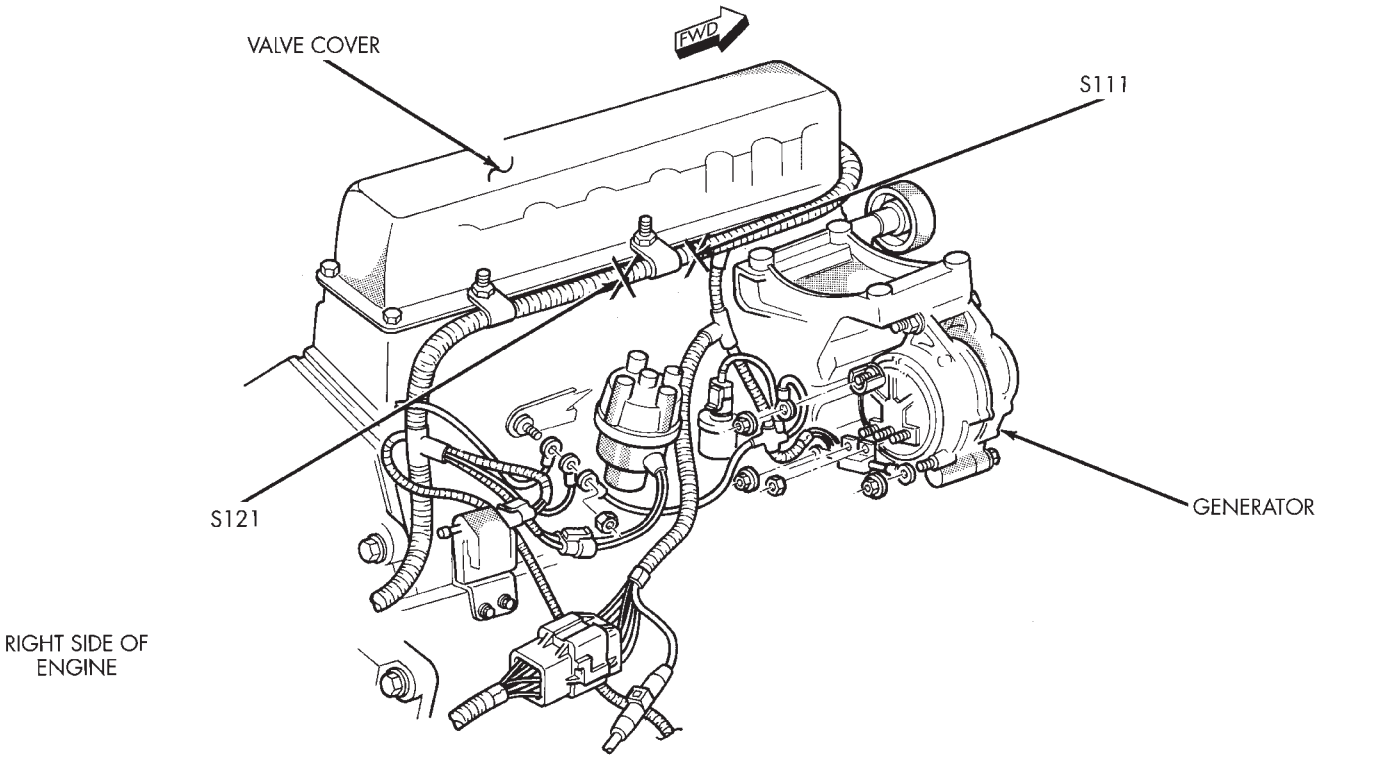



*Fig. 4 Engine Splices 2.5L YJ*

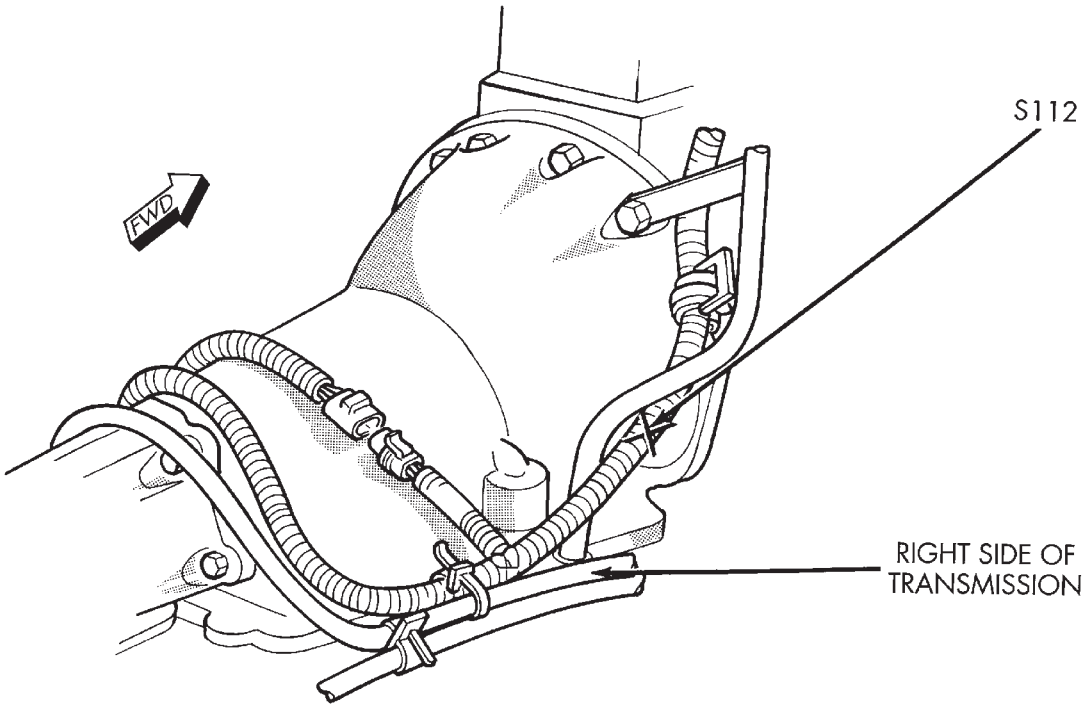



*Fig. 5 Transmission Splices YJ*

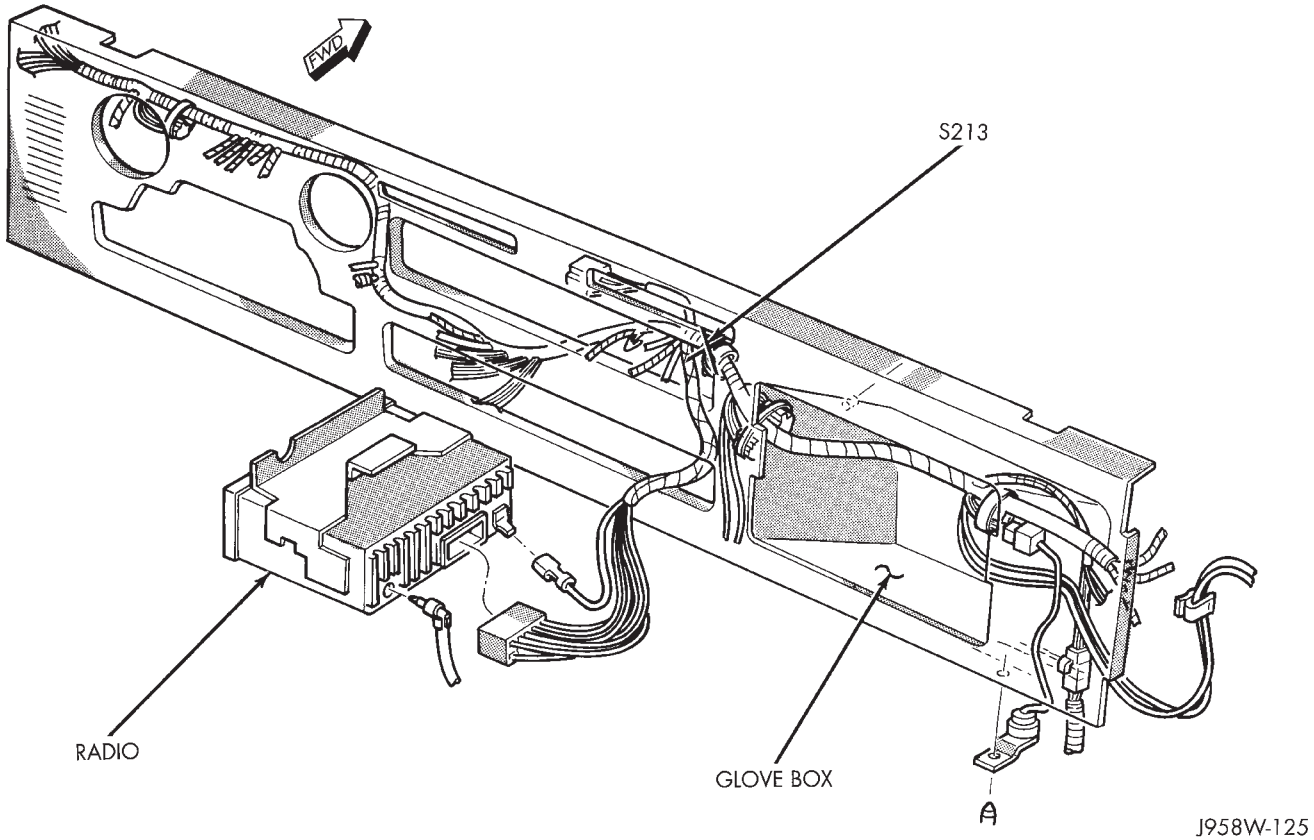



*Fig. 6 Instrument Panel Splices YJ*

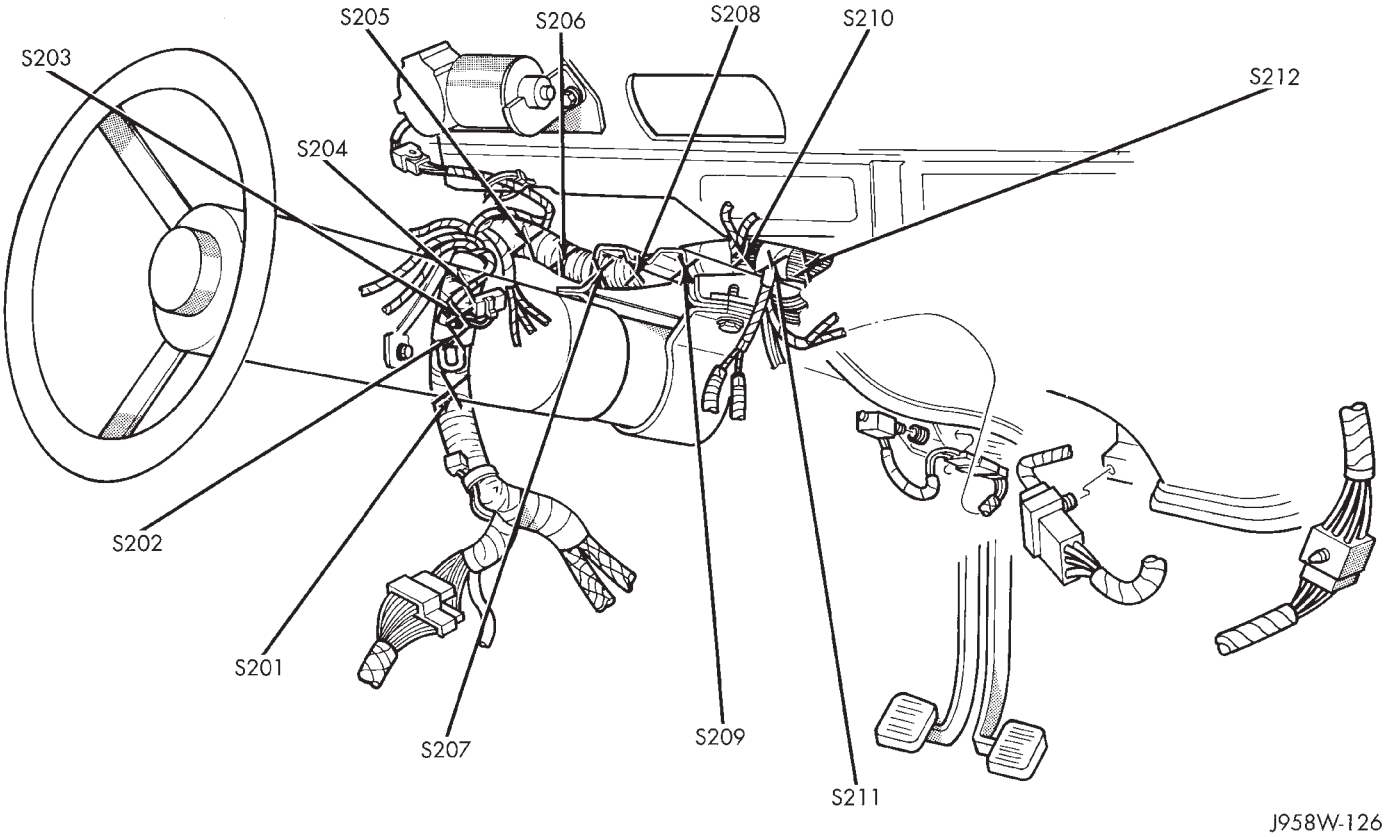



*Fig. 7 Instrument Panel Splices YJ*

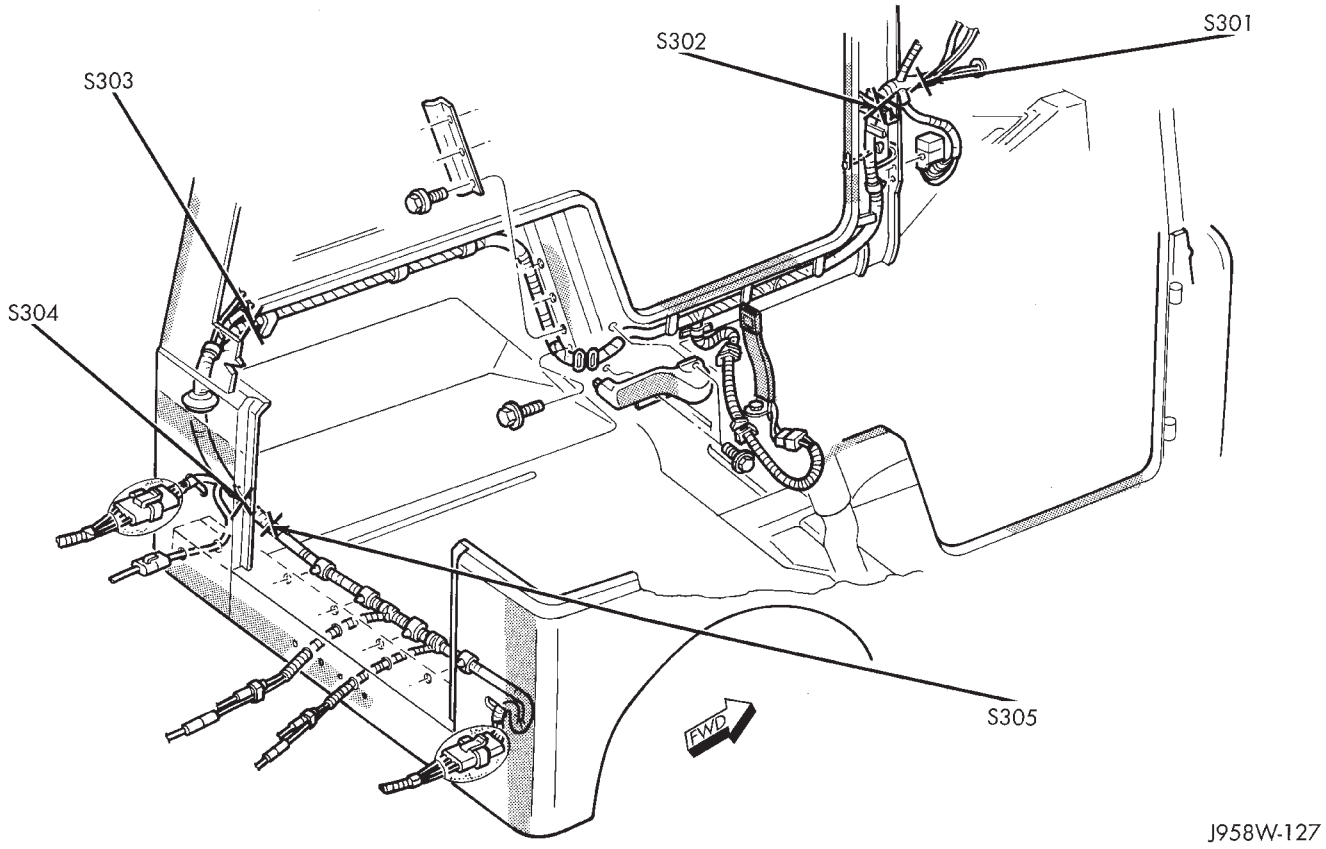



*Fig. 8 Body Splices YJ*