2003

Wiring Diagrams

DEMO

This DEMO contains only a few pages of the entire manual/product.

Not all Bookmarks work on the Demo, but they do on the full version.

Features:
- Searchable text
- Printable pages
- Bookmarked for easy navigation
- High Resolution images
- Zoom to see exact details
- Money back Guarantee
- Transfer to USB flash drive support

F-150

Ford Official Licensed Product
License #84356800

Ford Motor Company

2003 Ford F-150 Truck Wiring Diagrams
EAN: 978-1-60371-490-7
ISBN: 1-60371-490-1

Forel Publishing Company, LLC
Woodbridge, VA 22192

License #84356800

Note from the Publisher

This product was created from the original Ford Motor Company's publication. Every effort has been made to use the original scanned images, however, due to the condition of the material; some pages have been modified to remove imperfections.

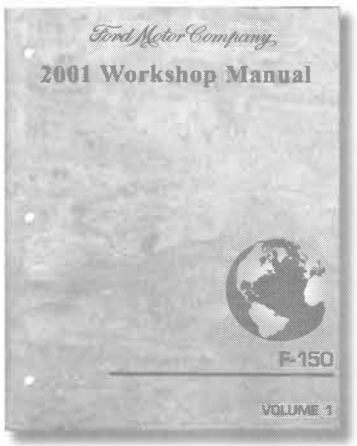
Disclaimer

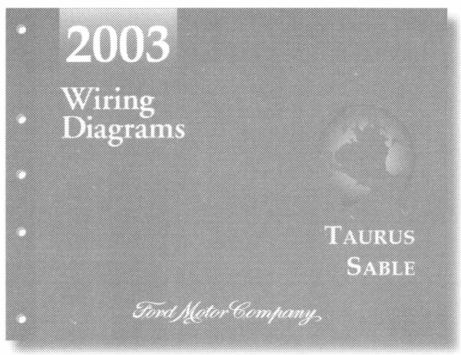
Although every effort was made to ensure the accuracy of this book, no representations or warranties of any kind are made concerning the accuracy, completeness or suitability of the information, either expressed or implied. As a result, the information contained within this book should be used as general information only. The author and Forel Publishing Company, LLC shall have neither liability nor responsibility to any person or entity with respect to any loss or damage caused, or alleged to be caused, directly or indirectly by the information contained in this book. Further, the publisher and author are not engaged in rendering legal or other professional services. If legal, mechanical, electrical, or other expert assistance is required, the services of a competent professional should be sought.

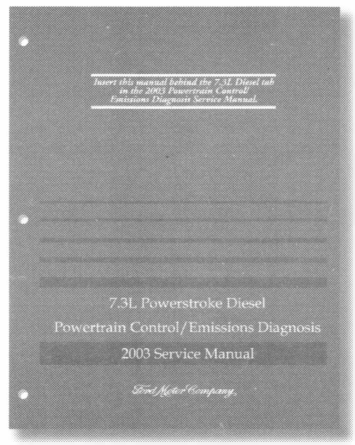
Ford Motor Company

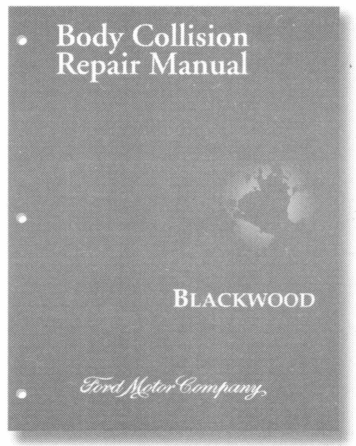
Ford Customer Service Division

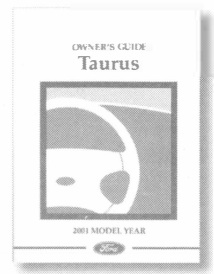
Available publications include this and all other Ford and Lincoln/Mercury Workshop Manuals, Wiring Diagrams, PC/ED Manuals, Body Collision Repair Manuals, and Owner Guides.











Quality is Job 1

To order:

Call:
1(800) 782-4356

Write:
Ford Publications
c/o Helm Inc.
PO Box 07150
Detroit, Michigan 48207

NOTE: The descriptions and specifications contained in this manual were in effect at the time this manual was approved for printing. Ford Motor Company reserves the right to discontinue models at any time, or change specifications or design without notice and without incurring any obligation.

F-150 Wiring Diagrams

Note

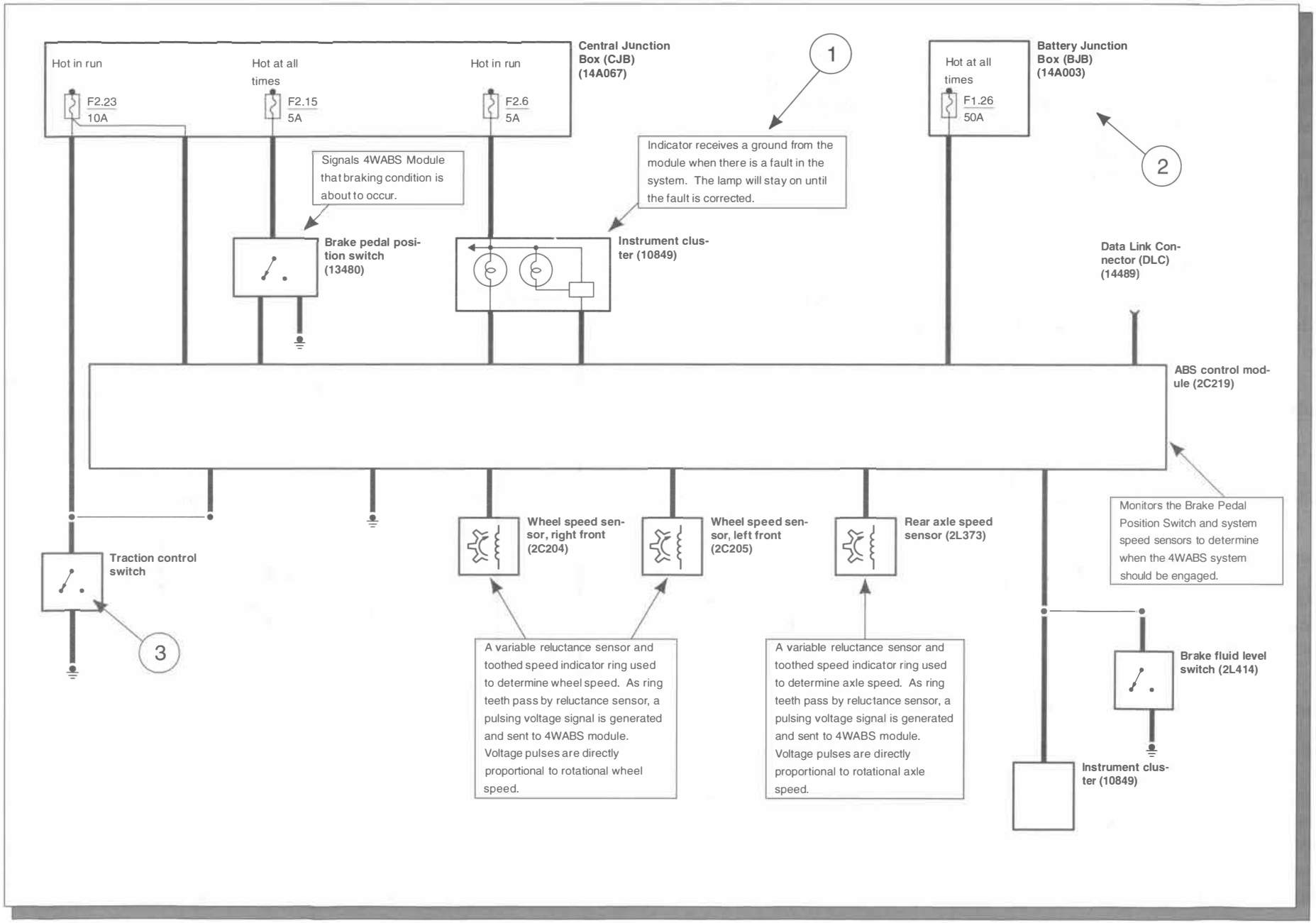
All wiring connections between components are shown exactly as they exist in the vehicles. It is important to realize, however, that no attempt has been made on the schematic to represent components and wiring as they physically appear on the vehicle. For example, a 4-foot length of wire is treated no differently in a schematic from one which is only a few inches long. Furthermore, to aid in understanding electrical (electronic) operation, wiring inside complicated components has been simplified.

Complete Circuit Operation

Each circuit is shown completely and independently in one cell. Other components which are connected to the circuit may not be shown unless they influence the circuit operation.

System Overview

Each major vehicle system includes a complete system overview prior to each set of schematic pages. It is important to realize that this is only a high level overview of the complete system connectivity. It includes component operational information (1), component name and base part number (2), and basic component internals (3). It does not include specific circuit information, connector or pin numbers, splices or grounds. That information is found on the schematic pages.


Hot in run
F2.23
10A
Hot at all times
F2.15
5A
Hot in run
F2.6
5A
Central Junction Box (CJB) (14A067)
1
Hot at all times
F1.26
50A
Battery Junction Box (BJB) (14A003)
2
Signals 4WABS Module that braking condition is about to occur.
Indicator receives a ground from the module when there is a fault in the system. The lamp will stay on until the fault is corrected.
Brake pedal position switch (13480)
Instrument cluster (10849)
Data Link Connector (DLC) (14489)
ABS control module (2C219)
Traction control switch
3
Wheel speed sensor, right front (2C204)
Wheel speed sensor, left front (2C205)
Rear axle speed sensor (2L373)
Monitors the Brake Pedal Position Switch and system speed sensors to determine when the 4WABS system should be engaged.
A variable reluctance sensor and toothed speed indicator ring used to determine wheel speed. As ring teeth pass by reluctance sensor, a pulsing voltage signal is generated and sent to 4WABS module. Voltage pulses are directly proportional to rotational wheel speed.
A variable reluctance sensor and toothed speed indicator ring used to determine axle speed. As ring teeth pass by reluctance sensor, a pulsing voltage signal is generated and sent to 4WABS module. Voltage pulses are directly proportional to rotational axle speed.
Brake fluid level switch (2L414)
Instrument cluster (10849)

Current Flow (1)

Each cell normally starts with the component that powers the circuit, such as a fuse or the ignition switch. Current flow is shown from the power source at the top of the page to ground at the bottom of the page. In order to concentrate on the essential parts, power supply and ground connections are sometimes simplified by a dashed line in the schematics. A full representation of the power supply of a fuse or the power distribution from a fuse to various components is given in cell 13 "Power Distribution". Full representation of the ground connections are shown in cell 10 "Grounds".

Switch Positions (2)

Within the schematic, all switches, sensors and relays are shown "at rest" (as if the Ignition Switch were OFF).

Splices (3)

A dashed line indicates that the splice is not shown completely. A reference is given to the page where the splice appears in full. It is also listed in the Index.

Component Referencing (4)

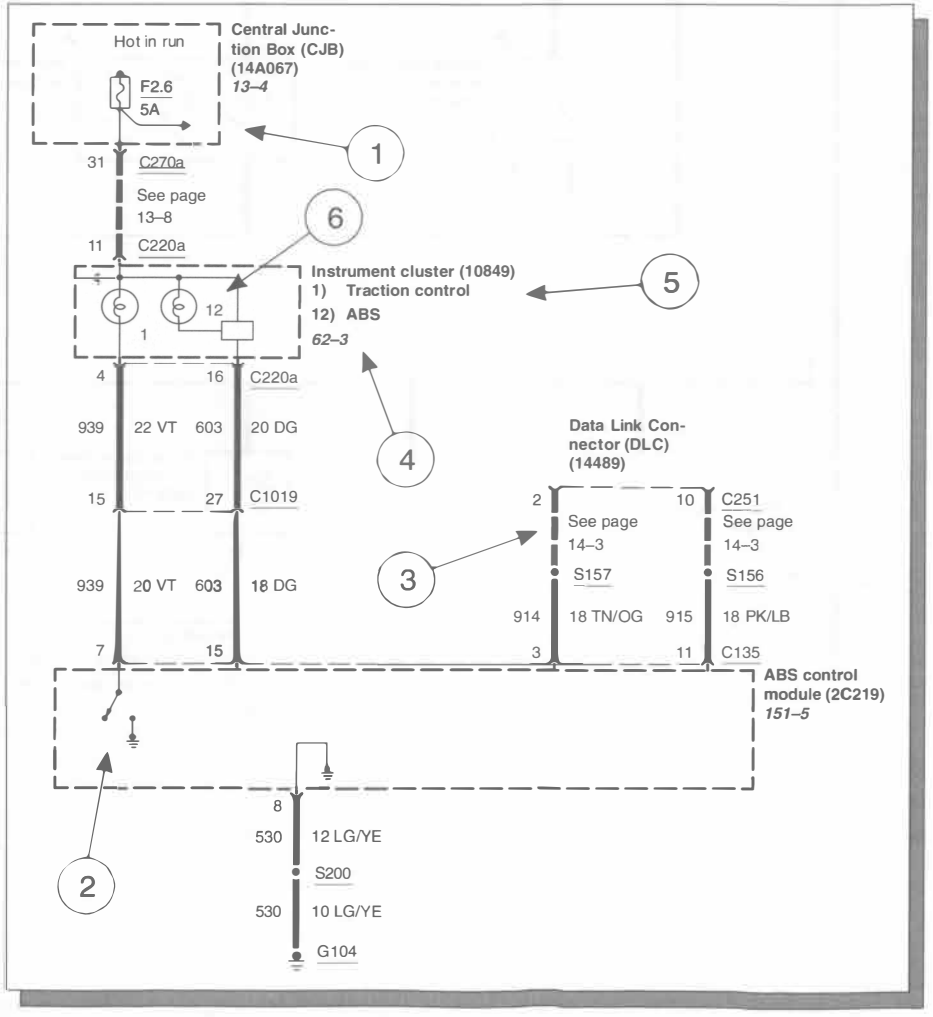
Each component on a schematic has a reference to the component location view or the page where it is shown completely. It is located to the right of each component.

Component Names, Notes and Base Part Numbers (5)

Component names are placed on the right hand side of each component. Any notes that describe switch positions or operating conditions follow the name. Descriptions of the internals of the component are also included here. The page where the component appears in full is listed in the Index. The base part number for a component is listed in parentheses next to or under a component. These part numbers will appear any place the component name appears in the publication.

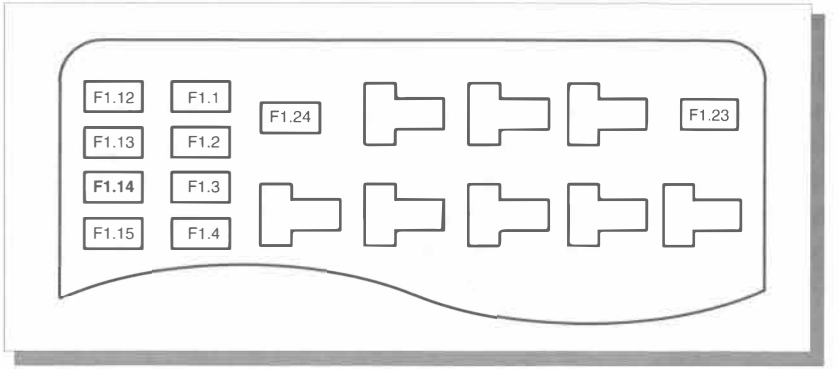
Internal Name and Function Identification Numbers (6)

Some components on each page have internal symbols with an identification number located to the right. You can identify the internal symbol or function by finding the corresponding number under the component name.



Fuse and Relay Information

Cell 11 "Fuse and Relay Information" contains a view of the fuse-/relay box in which all fuses and relays are identified.

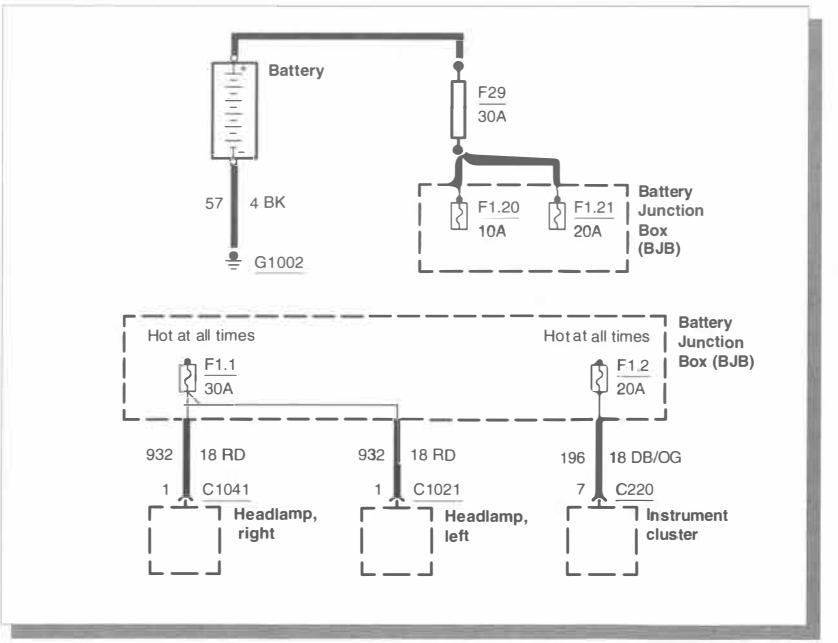


Fuse and Relay Numbering and Naming

Fuse and relay numbering and naming follow the indication of the fuse panel cover. In addition, a prefix precedes the fuse number to facilitate finding the fuse in the Component Location Charts, e.g. "F1." precedes Battery Junction Box fuses, and "F2." precedes Central Junction Box fuses.

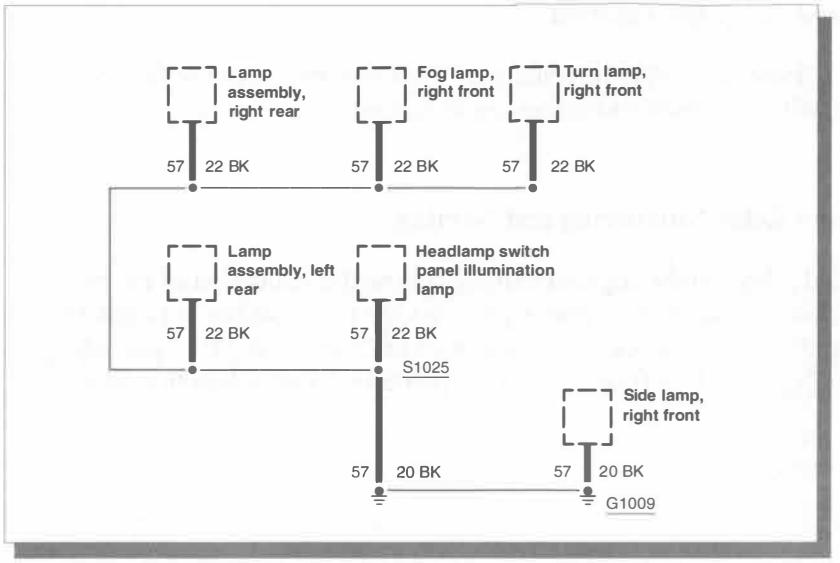
Power Distribution

Cell 13 "Power Distribution" shows the current feed circuit. The current path is shown from the battery to the ignition switch and to all fuses. It also shows the circuits protected by each fuse. The circuit is traced from the fuse to the component. All details (wires, splices, connectors) between the fuse and the first component are shown.



Ground Distribution

Cell 10 "Grounds" contains the schematics that show the complete details for each ground connection or main ground splice. This is useful in diagnosing a problem affecting several components at once (poor ground connection or ground splice). All details (wires, splices, connectors) between the ground point and the components are shown. These ground connection details are shown here in order to keep the individual cell schematics as uncluttered as possible.



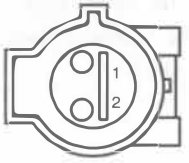
Component and Connector Information

Cell 152 "Component Location Charts" helps the user find where the various items depicted on the schematic can physically be found on the vehicle. A brief written description of the location is given, along with a reference to the component location views.
Cell 151 "Component Location Views" show the components and their connecting wires as they can be found on the vehicle.
Cell 150 "Connector Views" show the views of the pins and/or cavities of all connectors. The pin and cavity sides are shown separately as if the connector were disconnected. The color of the connector housing is indicated next to the connector number when available. The harness causal number is located above the connector view and below the connector number. The circuit function charts are located below each connector. The wiring harness designations are listed in cell 152 "Component Location Charts".

C150

12A581

Wheel speed sensor, left front (2C205)

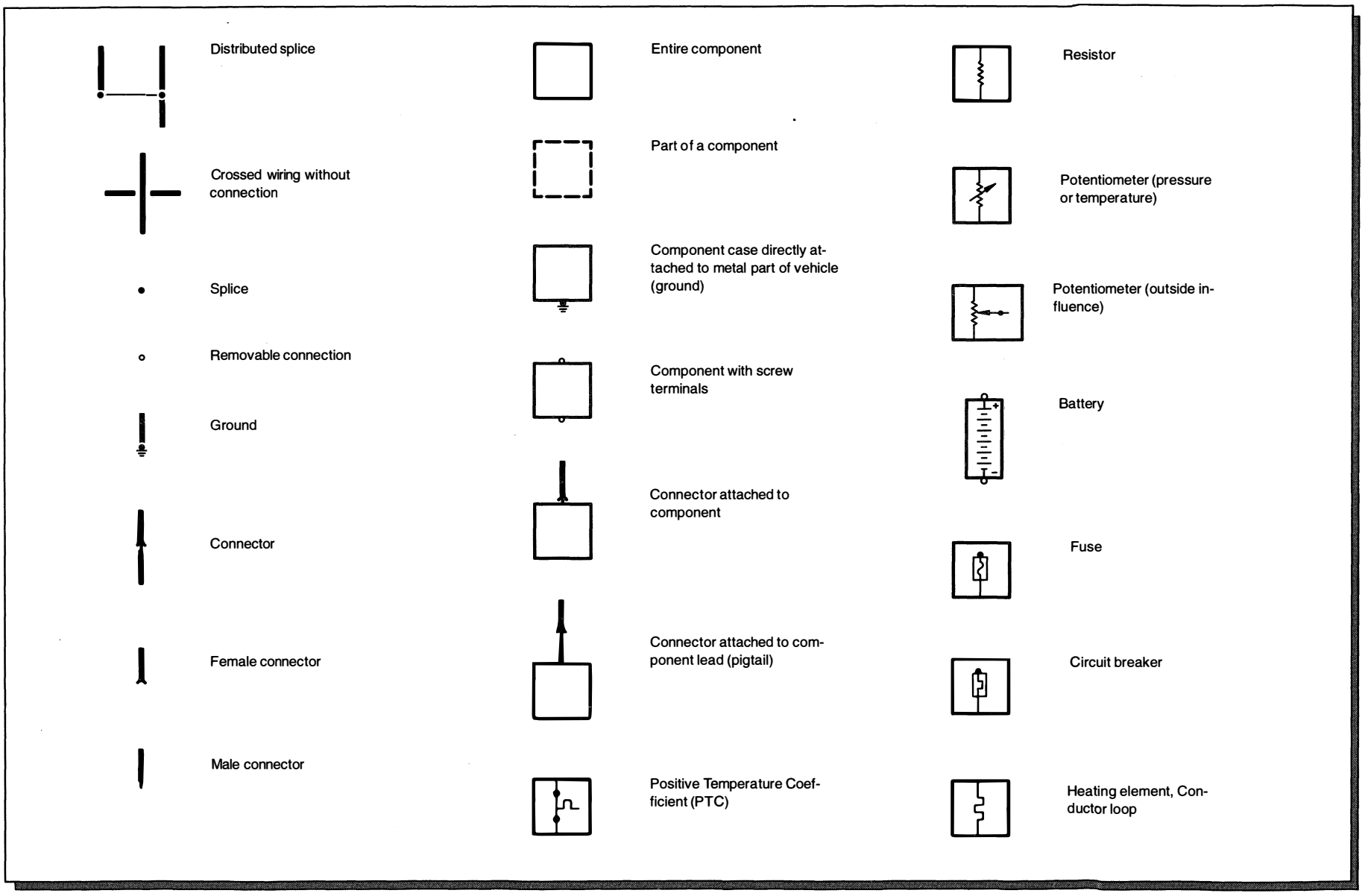


F02085

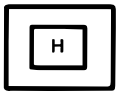
Pin	Circuit	Circuit Function
1	522 (TN/BK)	Wheel speed sensor, left front (2C205) –
2	521 (TN/OG)	Wheel speed sensor, left front (2C205) +

WARNINGS

- *Always wear safety glasses for eye protection.*
- *Use safety stands whenever a procedure requires being under a vehicle.*
- *Be sure that the* **Ignition Switch** *is always in the OFF position, unless otherwise required by the procedure.*
- *Set the parking brake when working on any vehicle. An automatic transmission should be in PARK. A manual transmission should be in NEUTRAL.*
- *Operate the engine only in a well-ventilated area to avoid danger of carbon monoxide.*
- *Keep away from moving parts, especially the fan and belts, when the engine is running.*
- *To prevent serious burns, avoid contact with hot metal parts such as the radiator, exhaust manifold, tail pipe, catalytic converter and muffler.*
- *Do not allow flame or sparks near the battery. Gases are always present in and around the battery cell. An explosion could occur.*
- *Do not smoke when working on a vehicle.*
- *To avoid injury, always remove rings, watches, loose hanging jewelry and avoid wearing loose clothing.*


Distributed splice
Crossed wiring without connection
Splice
Removable connection
Ground
Connector
Female connector
Male connector
Entire component
Part of a component
Component case directly attached to metal part of vehicle (ground)
Component with screw terminals
Connector attached to component
Connector attached to component lead (pigtail)
Positive Temperature Coefficient (PTC)
Resistor
Potentiometer (pressure or temperature)
Potentiometer (outside influence)
Battery
Fuse
Circuit breaker
Heating element, Conductor loop


Ignition coil assembly



Hall sensor


Antenna


Solenoid controlled valve or clutch solenoid


Air bag sliding contact (14A664)

Permanent magnet, one–speed–motor


Light emitting diode (LED)


Diode, current flows in direction of arrow

Permanent magnet, two–speed–motor

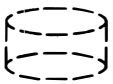

Capacitor


Transistor

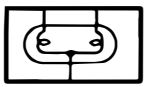

Rotational sensor


Variable capacitor


Lamp


Shield


Piezoelectric sensor


Bifilament lamp

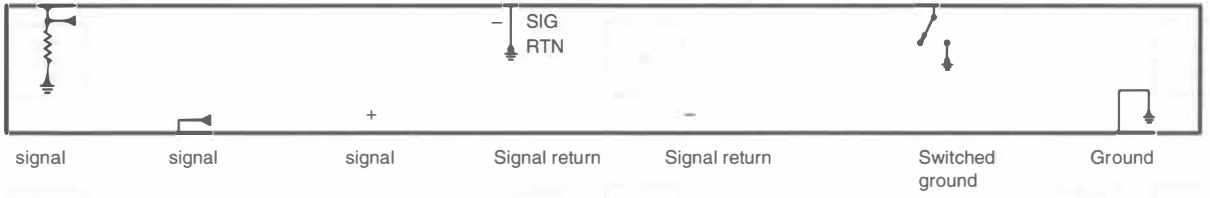

Horn or speaker

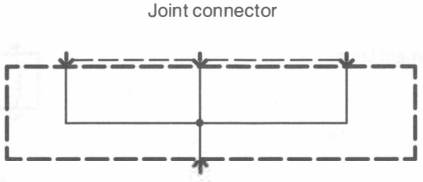

Coil

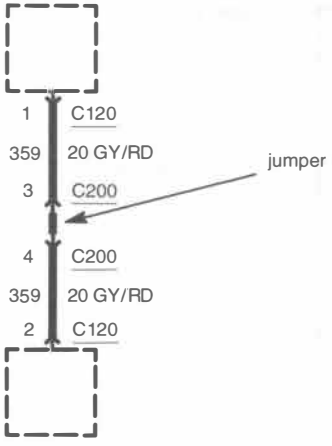

Gauges

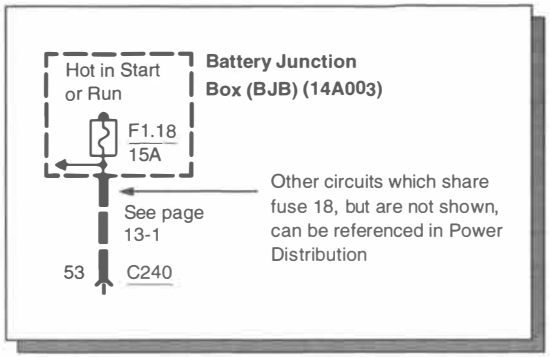

Fusible link

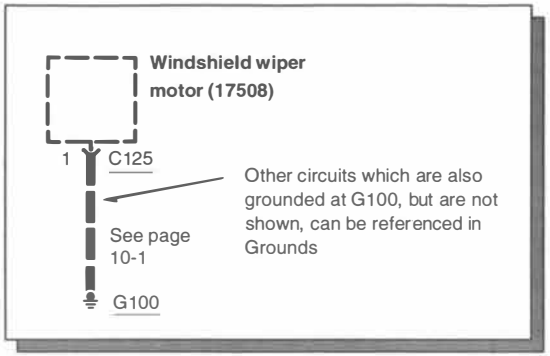
Wire colors	
BK	Black
BN	Brown
BU	Blue
DB	Dark blue
DG	Dark green
GN	Green
GY	Gray
LB	Light blue
LG	Light green
NA	Natural
OG	Orange
PK	Pink
RD	Red
SR	Silver
TN	Tan
VT	Violet
WH	White
YE	Yellow

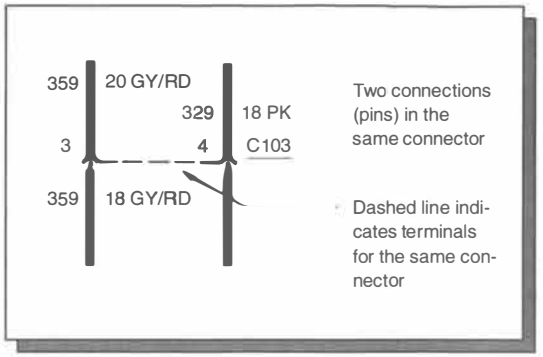


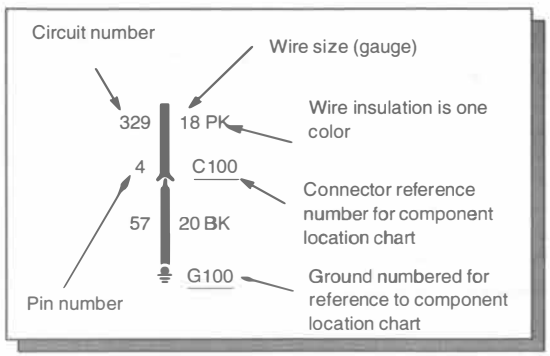


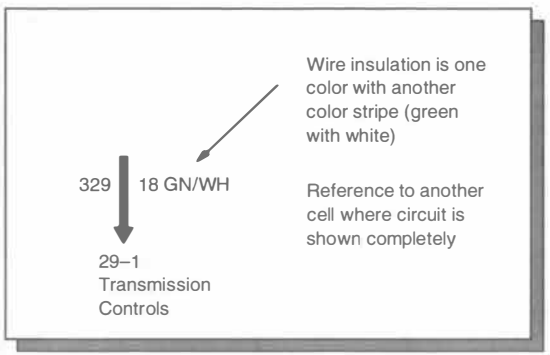


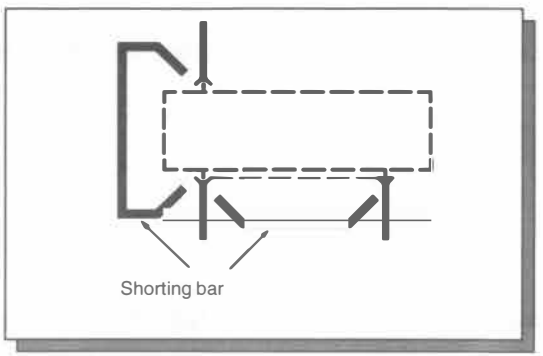

Hot in Start or Run
F1.18
15A
Battery Junction Box (BJB) (14A003)
See page 13-1
Other circuits which share fuse 18, but are not shown, can be referenced in Power Distribution
53
C240

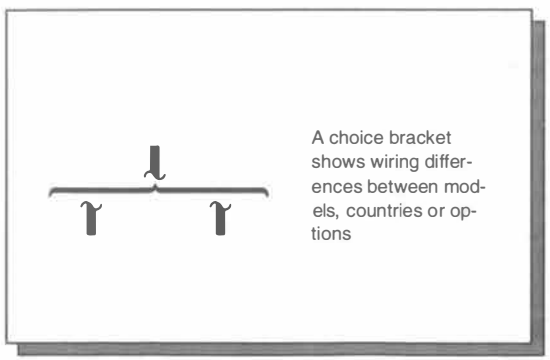

Windshield wiper motor (17508)
1
C125
Other circuits which are also grounded at G100, but are not shown, can be referenced in Grounds
See page 10-1
G100

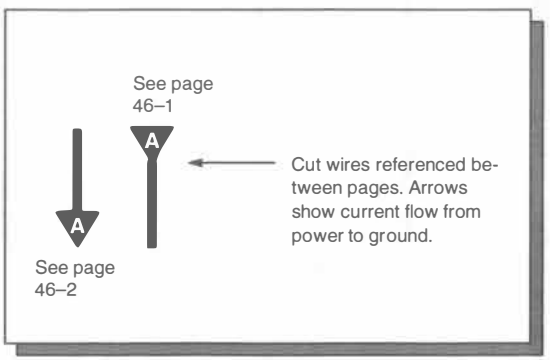

359
20 GY/RD
329
18 PK
3
4
C103
359
18 GY/RD
Two connections (pins) in the same connector
Dashed line indicates terminals for the same connector

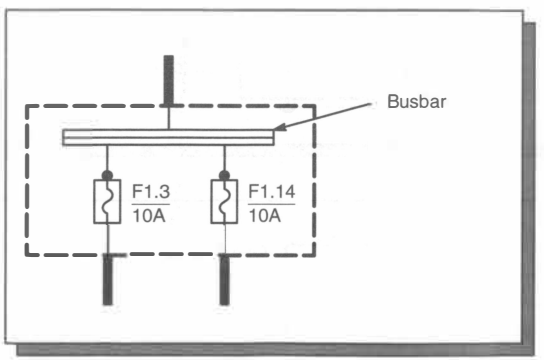

Circuit number
Wire size (gauge)
329
18 PK
Wire insulation is one color
4
C100
Connector reference number for component location chart
57
20 BK
G100
Ground numbered for reference to component location chart
Pin number

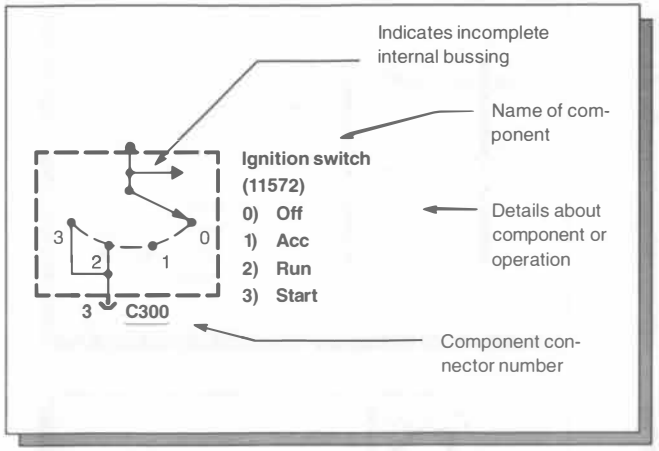

Wire insulation is one color with another color stripe (green with white)
329
18 GN/WH
Reference to another cell where circuit is shown completely
29–1
Transmission Controls

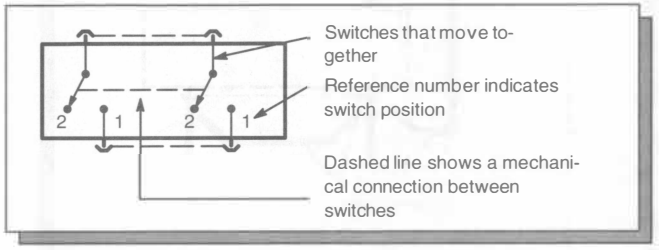

Shorting bar

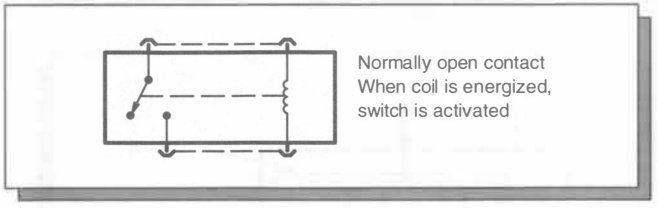

A choice bracket shows wiring differences between models, countries or options

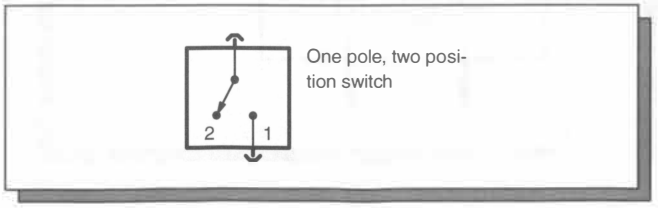

See page 46–1
A
A
Cut wires referenced between pages. Arrows show current flow from power to ground.
See page 46–2

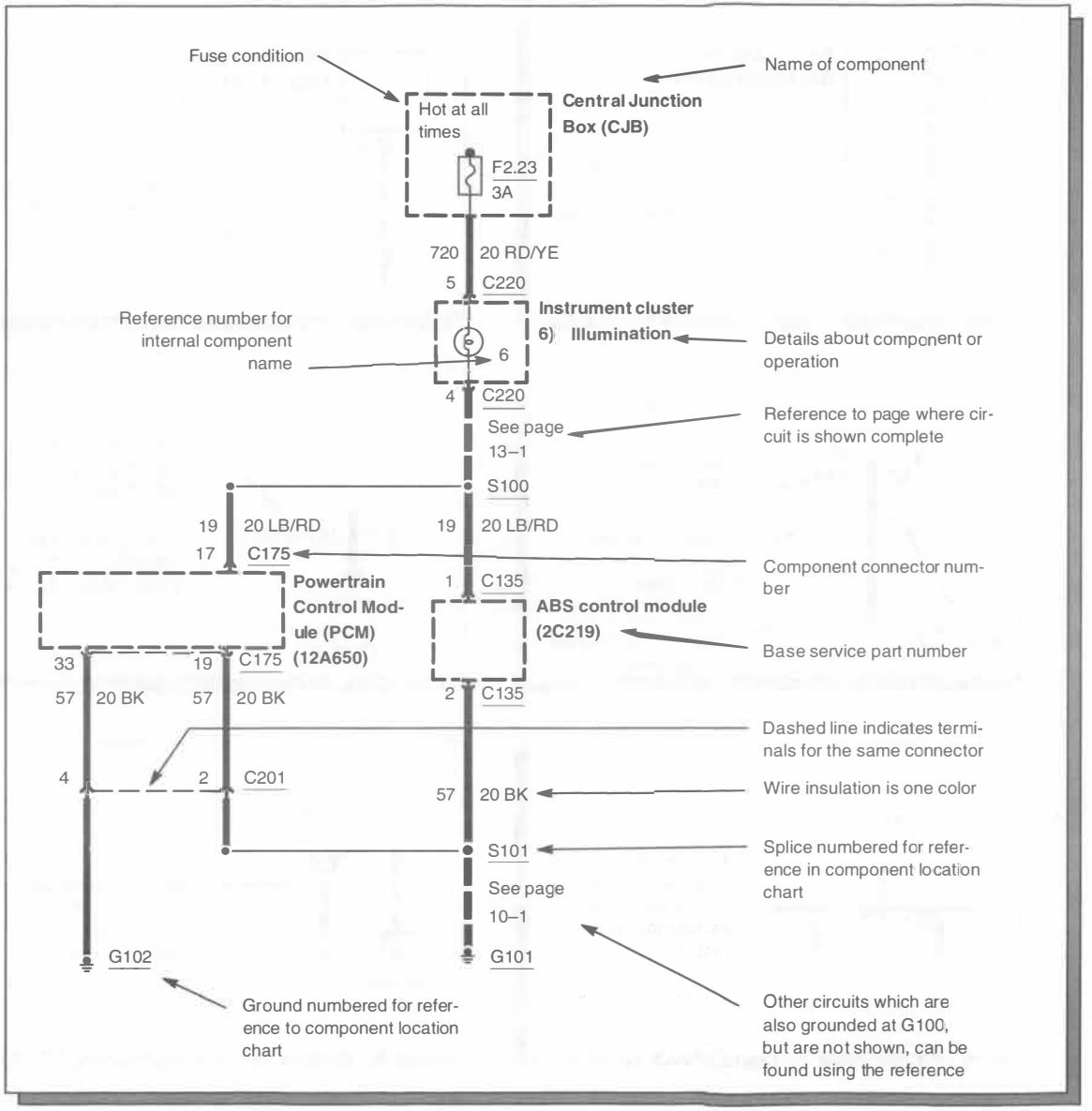

Busbar
F1.3
10A
F1.14
10A


Indicates incomplete internal bussing
Name of component
Ignition switch
(11572)
0) Off
1) Acc
2) Run
3) Start
Details about component or operation
3
C300
Component connector number


Switches that move together
Reference number indicates switch position
Dashed line shows a mechanical connection between switches

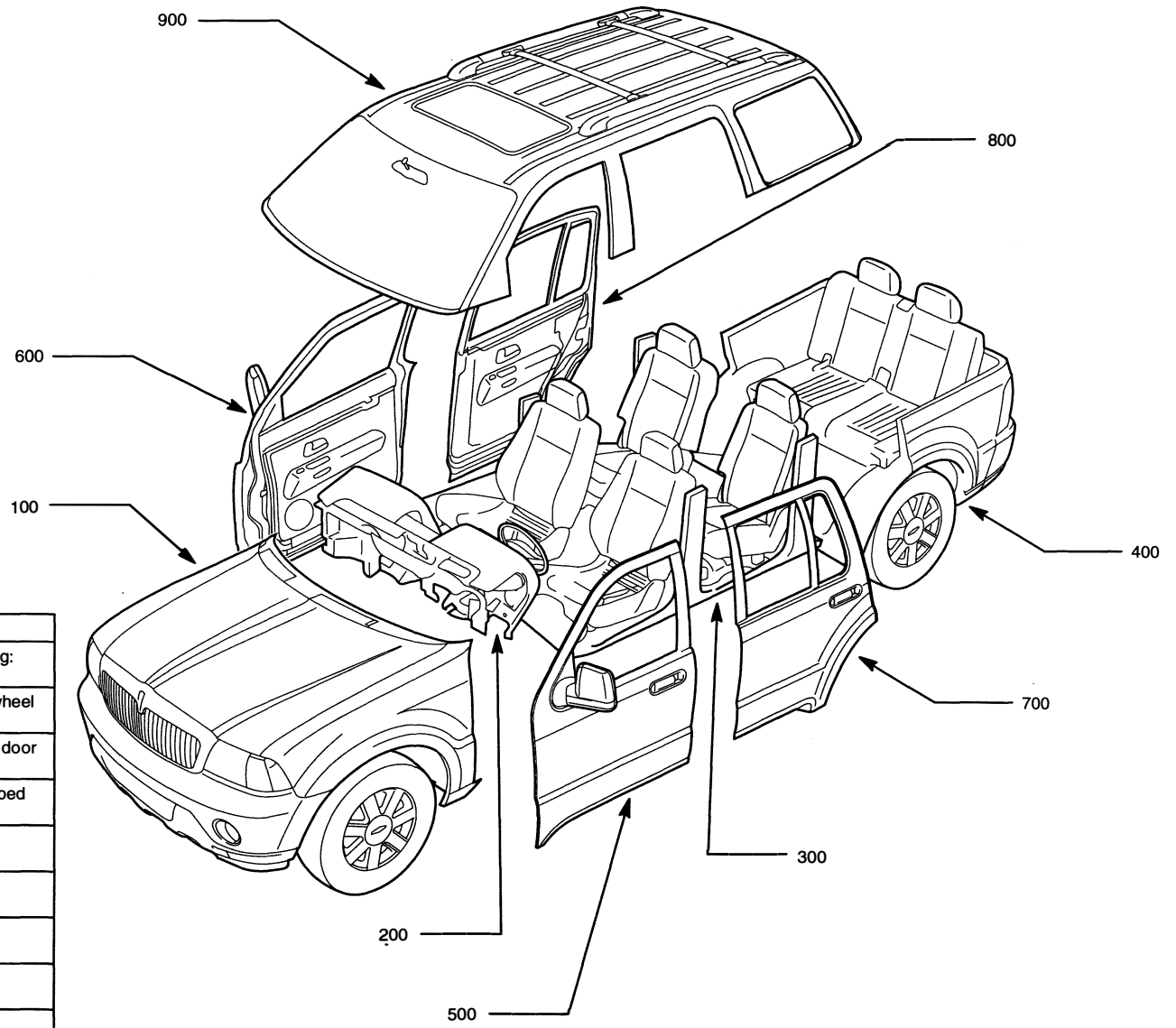

Normally open contact
When coil is energized, switch is activated


One pole, two position switch


Fuse condition
Name of component
Hot at all times
Central Junction Box (CJB)
F2.23
3A
720
20 RD/YE
5
C220
Instrument cluster
6) Illumination
Reference number for internal component name
Details about component or operation
6
4
C220
See page 13–1
Reference to page where circuit is shown complete
S100
19
20 LB/RD
17
C175
19
20 LB/RD
Component connector number
1
C135
Powertrain Control Module (PCM) (12A650)
ABS control module (2C219)
Base service part number
33
19
C175
57
20 BK
57
20 BK
2
C135
Dashed line indicates terminals for the same connector
4
2
C201
57
20 BK
Wire insulation is one color
S101
Splice numbered for reference in component location chart
See page 10–1
G102
G101
Ground numbered for reference to component location chart
Other circuits which are also grounded at G100, but are not shown, can be found using the reference

The first digit of every connector, ground, and splice number used in this publication references its location within the vehicle.

The chart below describes the different sections of the vehicle, and lists the number associated with each.

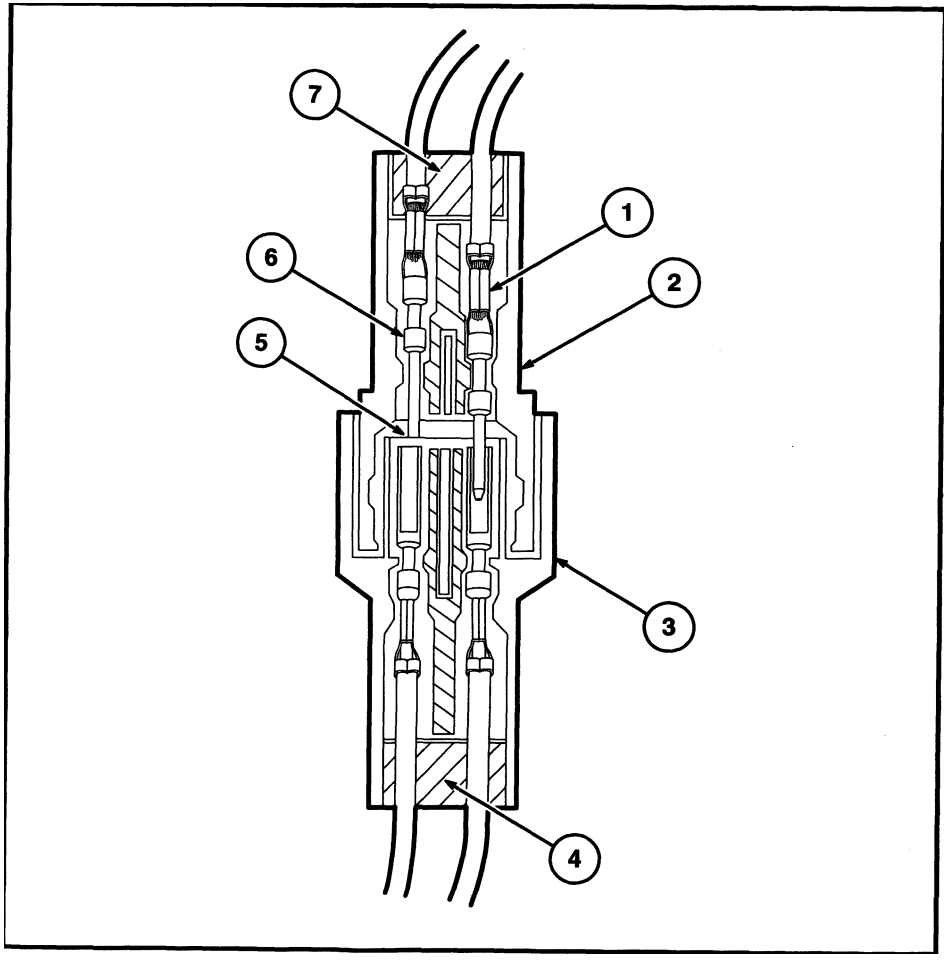


Number	Location
100	Engine compartment, Powertrain (including: axle/differential/transmission)
200	Instrument Panel and Console, Steering wheel assembly
300	From instrument panel to rear seat, below door trim panel
400	behind rear seats, to rear bumper; Truck bed
500	driver door
600	passenger door, front
700	passenger door, left rear
800	passenger door, right rear
900	Above door trim panel and headliner

Troubleshooting wiring harness and connector hidden concerns

The following illustrations are known examples of wiring harness, splices and connectors that will create intermittent electrical concerns. The concerns are hidden and can only be discovered by a physical evaluation as shown in each illustration.

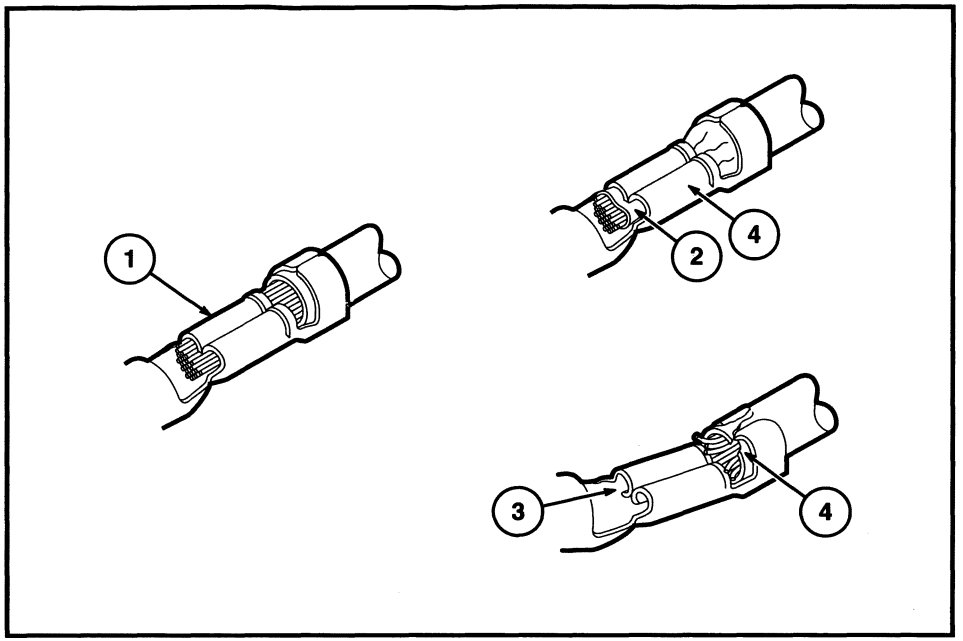
NOTE: Several components, such as the PCM, utilize gold plated terminals in their connections to the wiring harness. If those terminals need to be replaced, they must be replaced with a gold plated terminal.



Terminal not properly seated

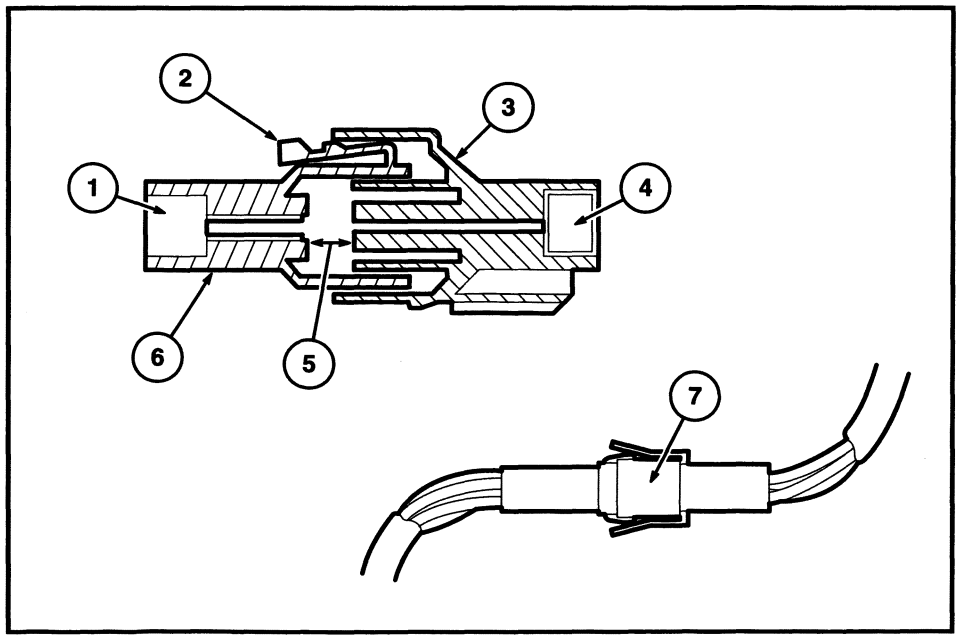
1 = Locked terminal
2 = Male half
3 = Female half
4 = Seal
5 = Intermittent contact
6 = Unlocked terminal (Hidden by wire seal)
7 = Seal

Check for unlocked terminals by pulling each wire at the end of the connector.



Defective insulation stripping

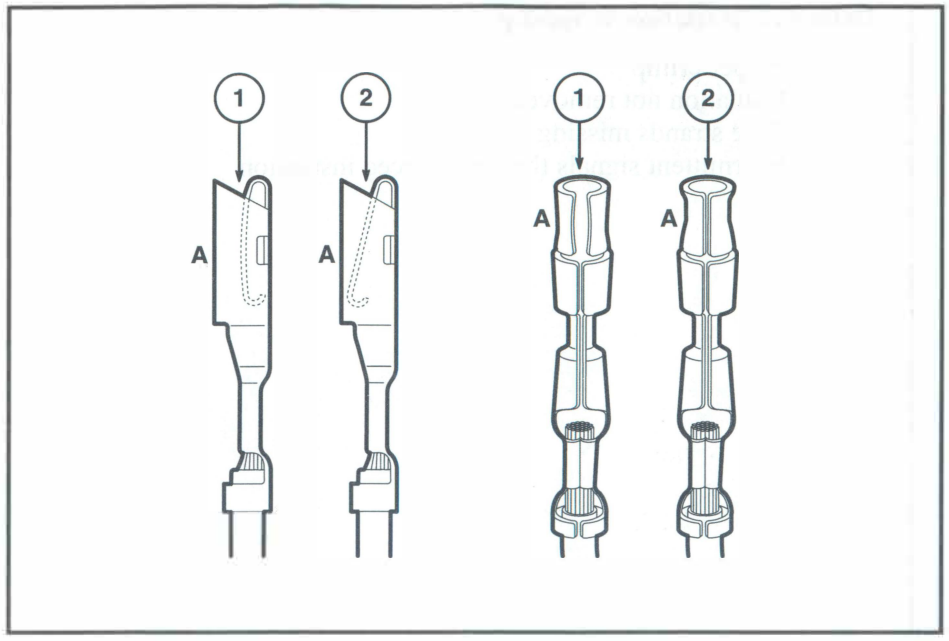
1 = Proper crimp
2 = Insulation not removed
3 = Wire strands missing
4 = Intermittent signals through pierced insulation



Partially mated connectors

1 = Seal
2 = Displaced tab
3 = Female half
4 = Seal
5 = Intermittent contact
6 = Male half
7 = Intermittent contact

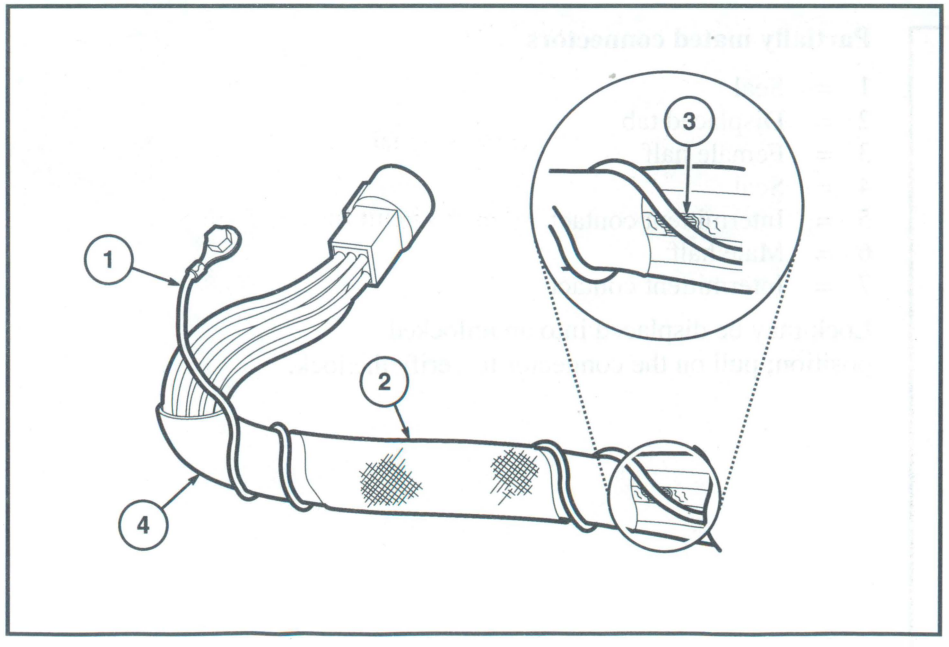
Lock may be displaced into an unlocked position; pull on the connector to verify the lock.



Deformed (enlarged) female terminals

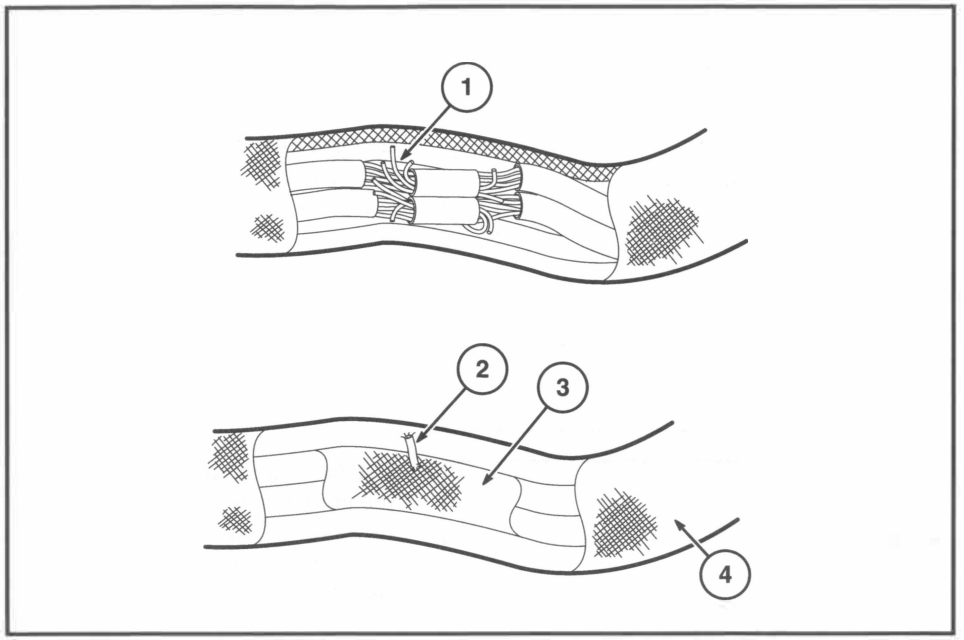
1 = Enlarged
2 = Normal

Any probe entering the terminal may enlarge the contact spring opening creating an intermittent signal. Insert the correct mating terminal (Location A) from the service kit and feel for a loose fit.



Electrical short inside the harness

1 = Solder coated wire to ground
2 = Harness protective tape
3 = Intermittent short
Solder coated wire pierced through the insulation of another circuit
4 = Grounding foil



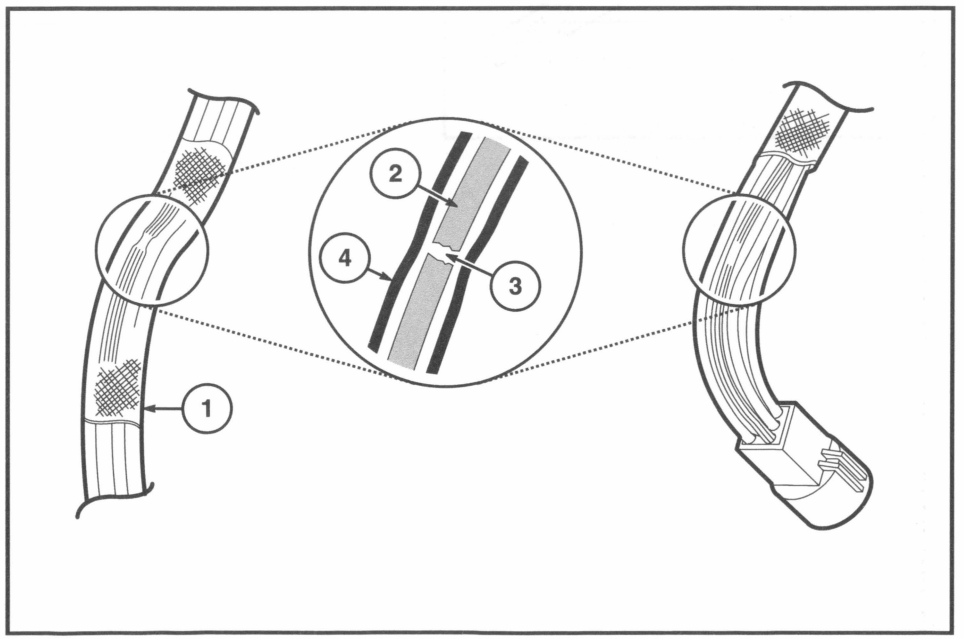
Electrical short within the harness

Splice tape removed

1 = Intermittent short

Splice covered

2 = Wire strand
3 = Splice tape
4 = Harness tape

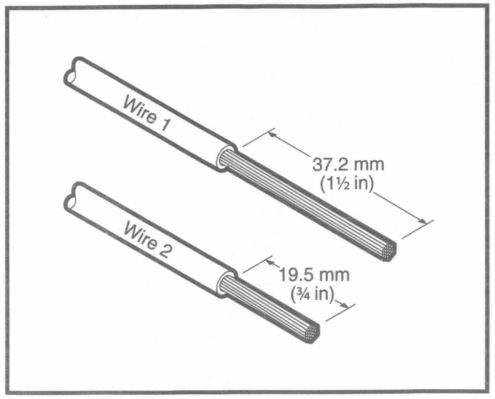


Broken wire strands in harness

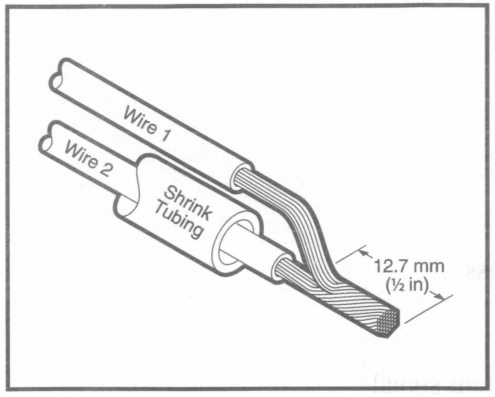
1 = Wiring harness tape
2 = Wiring strand
3 = Broken strands intermittent signal
4 = Circuit insulation

Remove the tape and flex/feel each circuit for a reduction in diameter at break.

Recommended splicing method

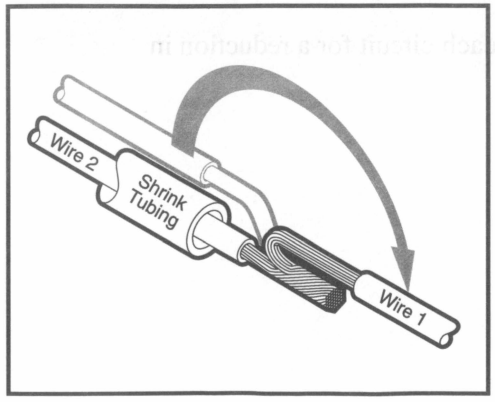


1. Disconnect battery ground cable.
2. Strip wires to appropriate length.



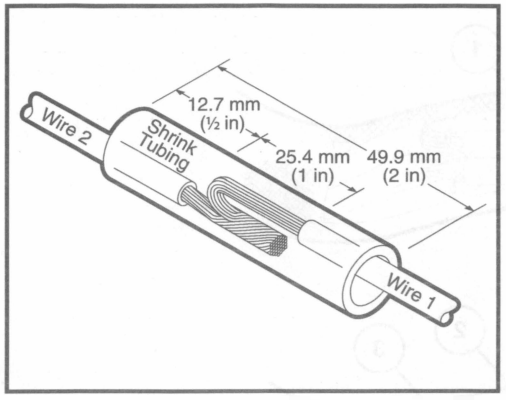
3. Install heat shrink tubing.
4. Twist wires together.
5. Solder wires together.

NOTE: Use rosin core mildly-activated (RMA) solder. Do not use acid core solder.



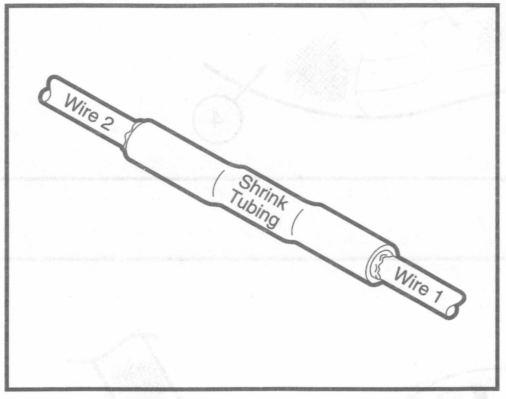
6. Bend Wire 1 back in a straight line.

NOTE: Wait for solder to cool before moving wires.

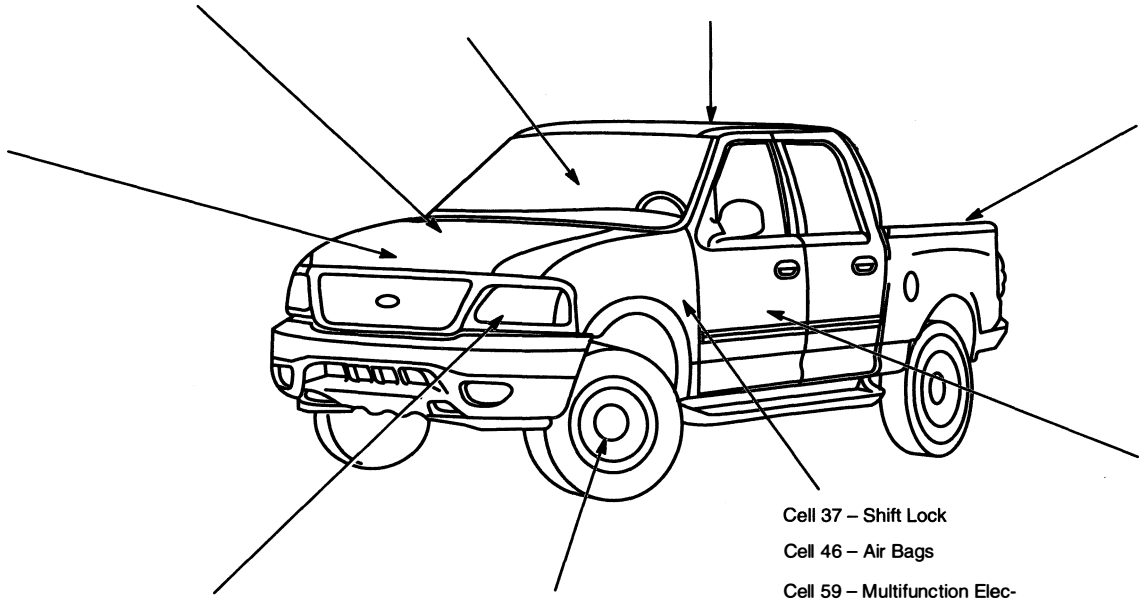


7. Evenly position heat shrink tubing over wire repair.

NOTE: Overlap tubing on both wires.



8. Use heat gun to heat the repaired area until adhesive flows out of both ends of heat shrink tubing.
9. Reconnect battery ground cable.



Cell 12 – Charging System

Cell 20 – Starting System

Cell 21 – Engine Ignition

Cell 22 – Engine Controls – 5.4L Bi–Fuel

Cell 23 – Engine Controls – 4.2L

Cell 24 – Engine Controls – 4.6L

Cell 25 – Engine Controls – 5.4L

Cell 26 – Engine Controls – 5.4L NGV

Cell 27 – Engine Controls – 5.4L supercharged

Cell 28 – Engine Controls – 5.4L CNG

Cell 31 – Vehicle Speed Control

Cell 42 – ABS

Cell 81 – Wipers and Washers

Cell 53 – Heater

Cell 54 – Air Conditioner/ Heater

Cell 55 – EATC

Cell 44 – Horn/Cigar Lighter

Cell 119 – Climate Controlled Seats

Cell 120 – Power Seats

Cell 56 – Rear Window Defrost

Cell 89 – Courtesy Lamps

Cell 101 – Roof Opening Panel

Cell 102 – Overhead Console

Cell 125 – Electronic Day/Night Mirror

Cell 90 – Turn/Stop/Hazard Lamps

Cell 92 – Exterior Lamps

Cell 93 – Reversing Lamps

Cell 95 – Trailer/Camper Adapter

Cell 100 – Power Windows

Cell 110 – Power Door Locks

Cell 117 – Remote Control Alarm and Locks

Cell 124 – Power Mirrors

Cell 85 – Headlamps

Cell 86 – Fog Lamps

Cell 87 – Autolamps

Cell 90 – Turn/Stop/Hazard Lamps

Cell 92 – Exterior Lamps

Cell 97 – Daytime Running Lamps

Cell 29 – Transmission Controls (4R70W)

Cell 30 – Transmission Controls (4R100)

Cell 34 – Electronic Shift Control

Cell 37 – Shift Lock

Cell 46 – Air Bags

Cell 59 – Multifunction Electronic Control Modules

Cell 60 – Instrument Cluster

Cell 66 – Warning Devices

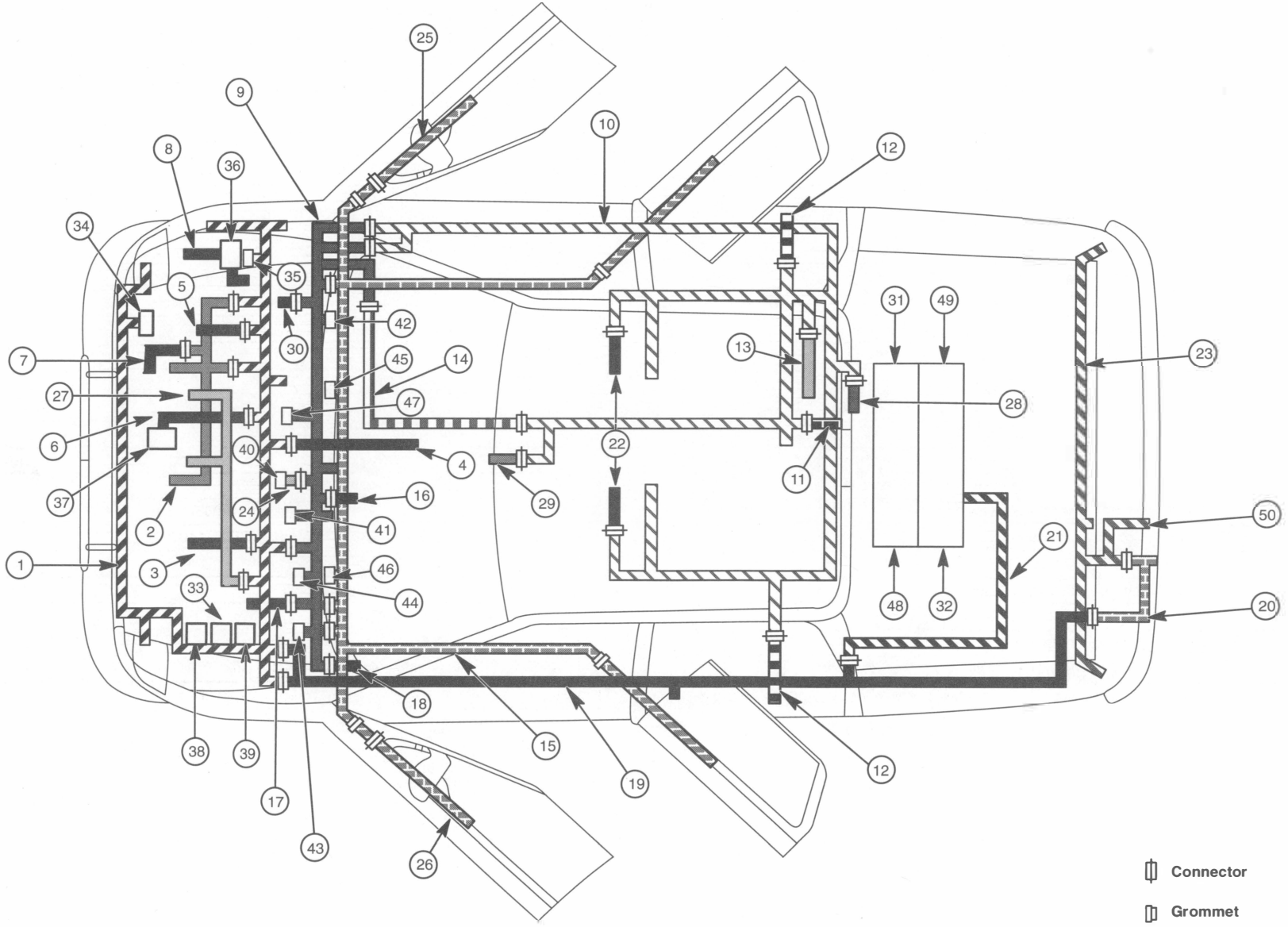
Cell 71 – Illumination

Cell 112 – Anti–Theft

Cell 127 – Adjustable Pedal

Cell 130 – Radio

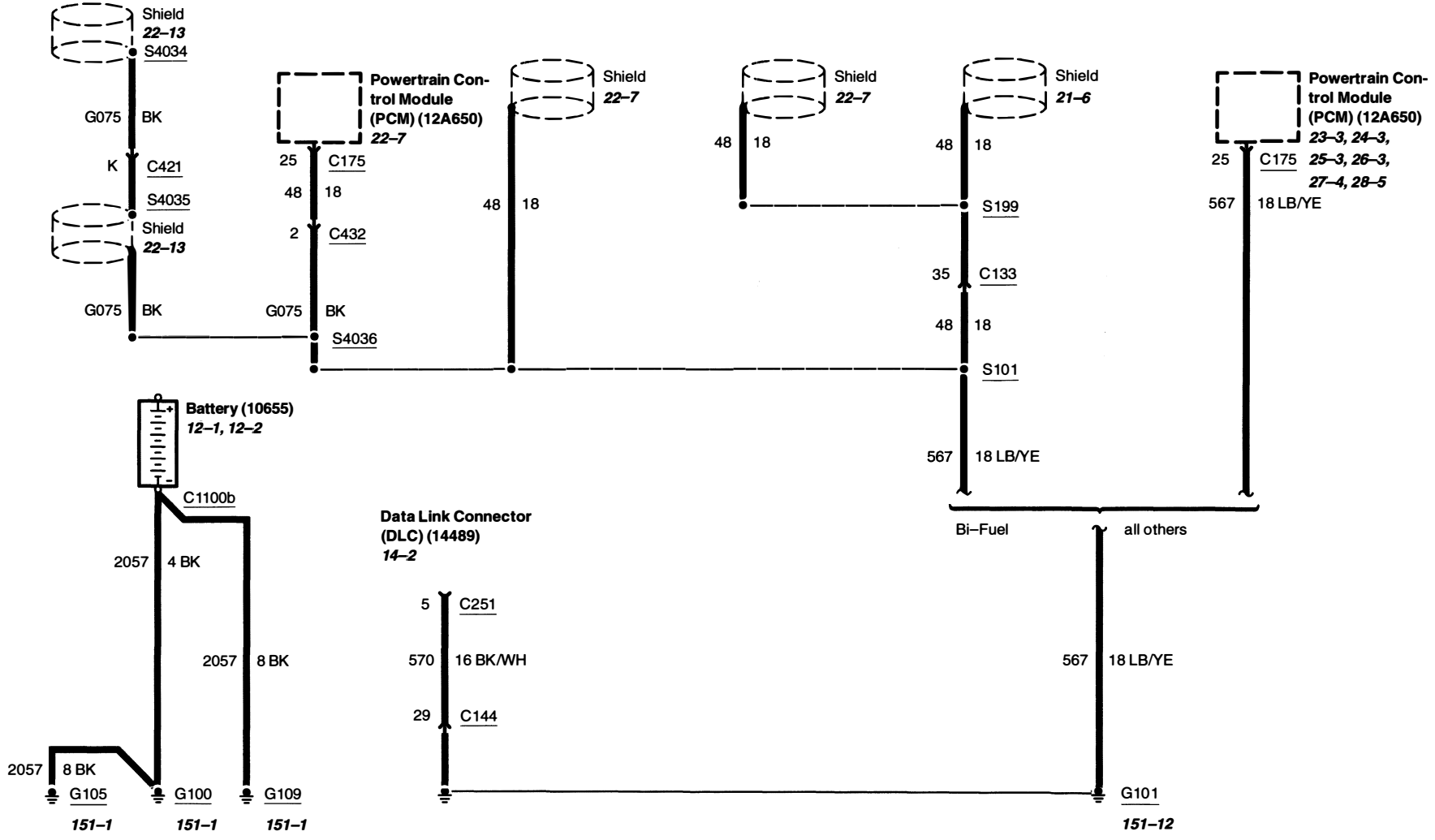
Cell 132 – Rear Seat Entertainment (RSE)


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

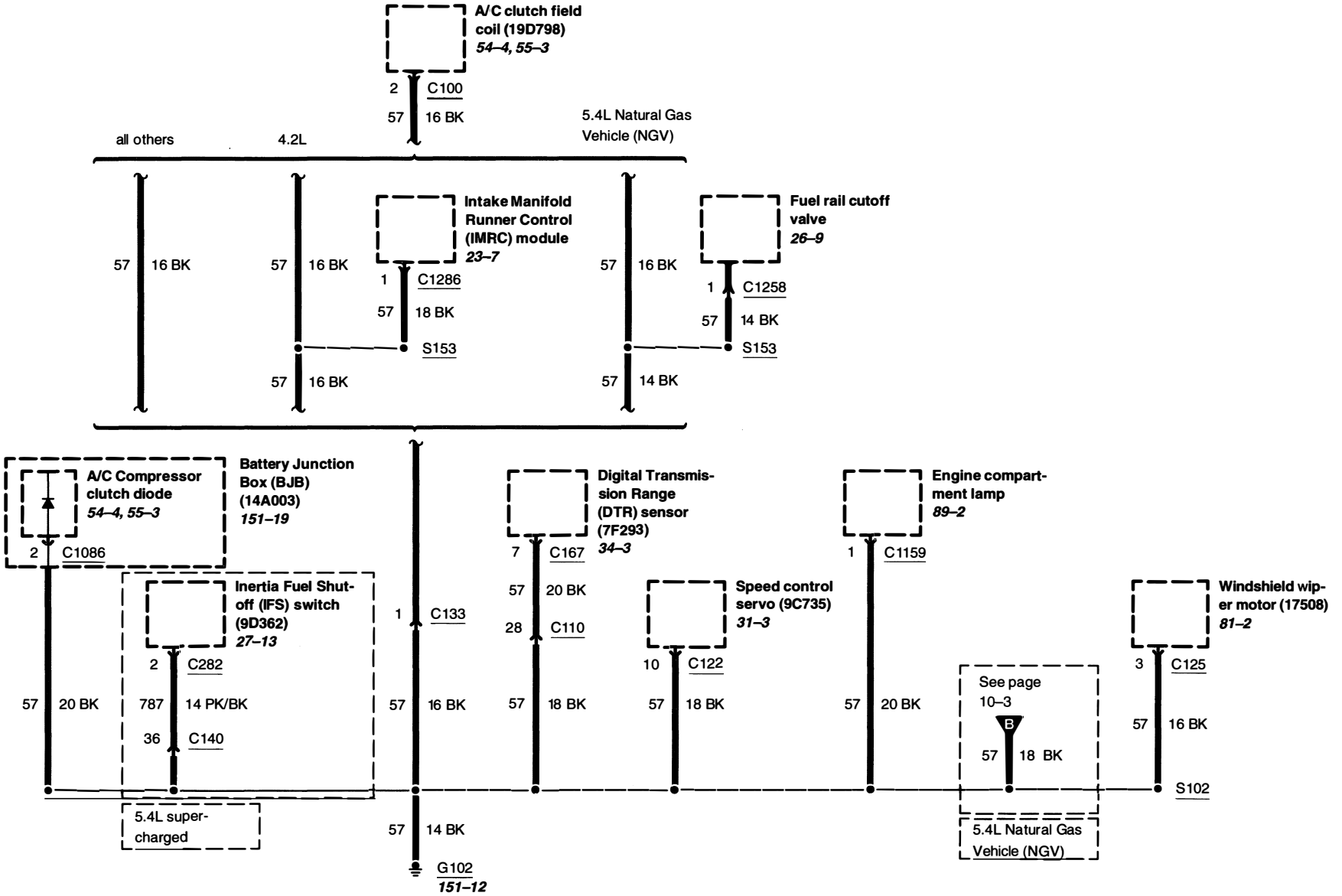
Item	Part Number	Description
1	12A581	Wiring harness – Engine control sensor
2	12B637	Wiring harness – Engine control sensor and fuel charge
	9D930	Wiring harness – Fuel charge (4.2L)
3	12A690	Wiring harness – Engine control sensor extension
4	15525	Wiring harness – Back up lamp switch to rear lamp feed
5	14B110	Wiring Harness – Four–wheel drive relay to solenoid
6	14305	Wiring harness – Alternator rectifier system
7	14B102	Wiring harness – Temperature sensor
8	14B060	Wiring harness – Starter motor relay and battery ground
9	14401	Wiring harness – Main
10	14A504	Wiring harness – Seat belt retractor switch right
11	13A625	Wiring harness – High mounted stoplamp
12	14632	Wiring harness – Window regulator, right rear door
13	14687	Wiring harness – Back window regulator
14	14335	Wiring harness – Interior illumination
15	14A005	Wiring harness – Body main
16	15080	Wiring and socket assembly – Cigar lighter lamp
17	7A786	Wiring assembly – Transfer case four–wheel drive control
18	14A320	Wiring harness – Multifunction switch
19	14405	Wiring harness – Tail lamps
20	13A576	Wiring harness – Trailer lamp feed
21	14406	Wiring harness – Fuel tank sender
22	14B084	Wiring harness – Passenger, driver seat jumper
23	13A409	Wiring harness – Rear lamp connector
24	13K027	Wiring harness – Headlamp relay
25	14630	Wiring harness – Window regulator, right front door (Regular cab, Super cab)

Item	Part Number	Description
26	14631	Wiring harness – Window regulator, left front door (Regular cab, Super cab)
27	14B527	Wiring harness – Fuel injector jumper (5.4L CNG)
28	18C619	Wiring harness – Rear window heater
29	17K745	Wiring harness – Rear view inside mirror
30	18B574	Wiring harness – Heater blower motor
31	A2–765	Wiring harness – Bi–fuel tank 1
32	A2–766	Wiring harness – Bi–fuel tank 2
33	–	Auxiliary relay box 1
34	–	Alternative Fuel Control Module (AFCM) (5.4L CNG)
35	–	Powertrain Control Module (PCM) (12A650)
36	–	Battery (10655)
37	–	Generator
38	–	ABS control module (2C219)
39	–	Battery Junction Box (BJB) (14A003)
40	–	Auxiliary relay box 2
41	–	Auxiliary relay box 3
42	–	Auxiliary relay box 4
43	–	Central Junction Box (CJB) (14A068)
44	–	Generic Electronic Module (GEM) (14B205)
45	–	Auxiliary relay box 5
46	–	Central security module
47	–	Belt minder module
48	–	Natural Gas Vehicle (NGV) tank
49	–	Natural Gas Vehicle (NGV) tank
50	14A348	Wiring harness – Trailer brake control switch

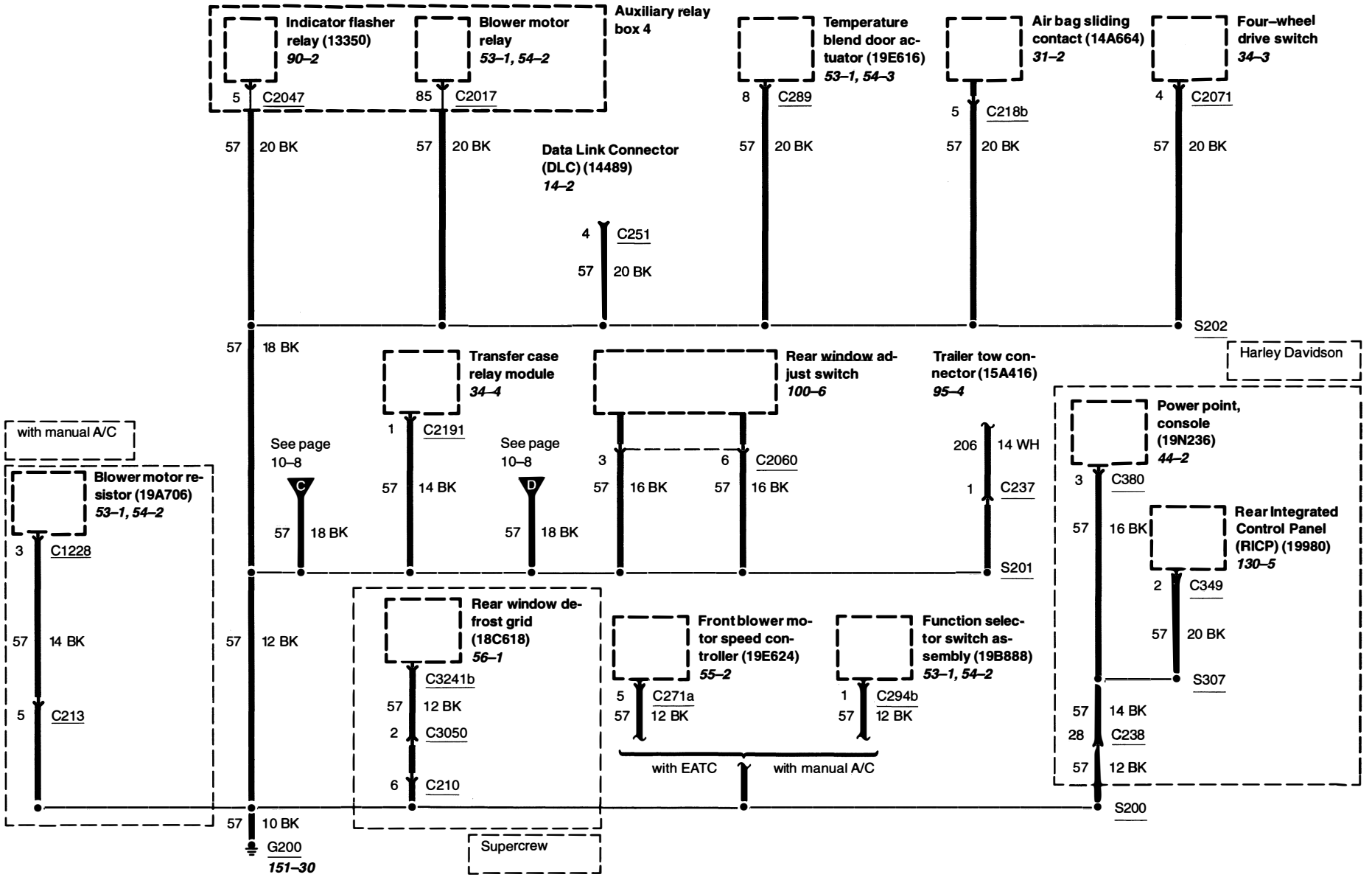
G100, G101, G105, G109



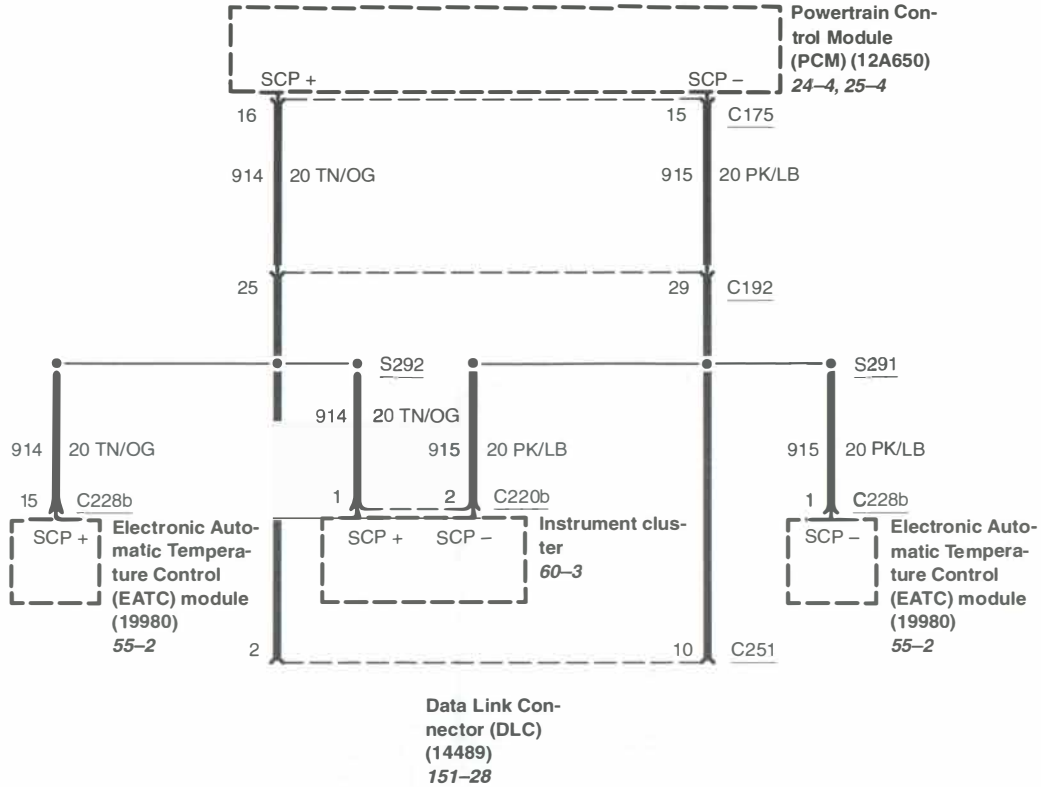
G102


A/C clutch field coil (19D798)
54–4, 55–3
2 C100
57 16 BK
all others
4.2L
5.4L Natural Gas Vehicle (NGV)
57 16 BK
57 16 BK
Intake Manifold Runner Control (IMRC) module
23–7
1 C1286
57 18 BK
S153
57 16 BK
57 16 BK
Fuel rail cutoff valve
26–9
1 C1258
57 14 BK
S153
57 14 BK
A/C Compressor clutch diode
54–4, 55–3
2 C1086
Battery Junction Box (BJB) (14A003)
151–19
Inertia Fuel Shut-off (IFS) switch (9D362)
27–13
2 C282
787 14 PK/BK
36 C140
5.4L super-charged
57 20 BK
1 C133
57 16 BK
57 14 BK
G102
151–12
Digital Transmis-sion Range (DTR) sensor (7F293)
34–3
7 C167
57 20 BK
28 C110
57 18 BK
Speed control servo (9C735)
31–3
10 C122
57 18 BK
Engine compart-ment lamp
89–2
1 C1159
57 20 BK
See page 10–3
B
57 18 BK
5.4L Natural Gas Vehicle (NGV)
Windshield wip-er motor (17508)
81–2
3 C125
57 16 BK
S102

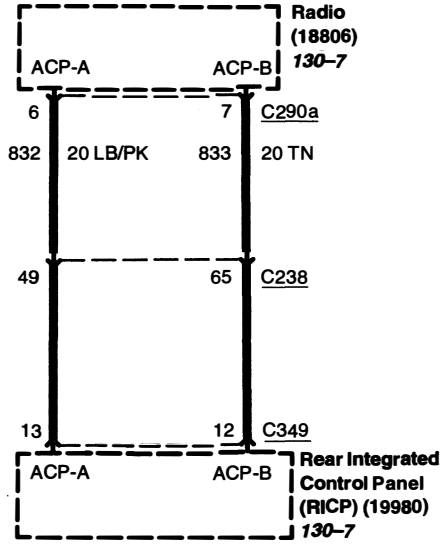
G200

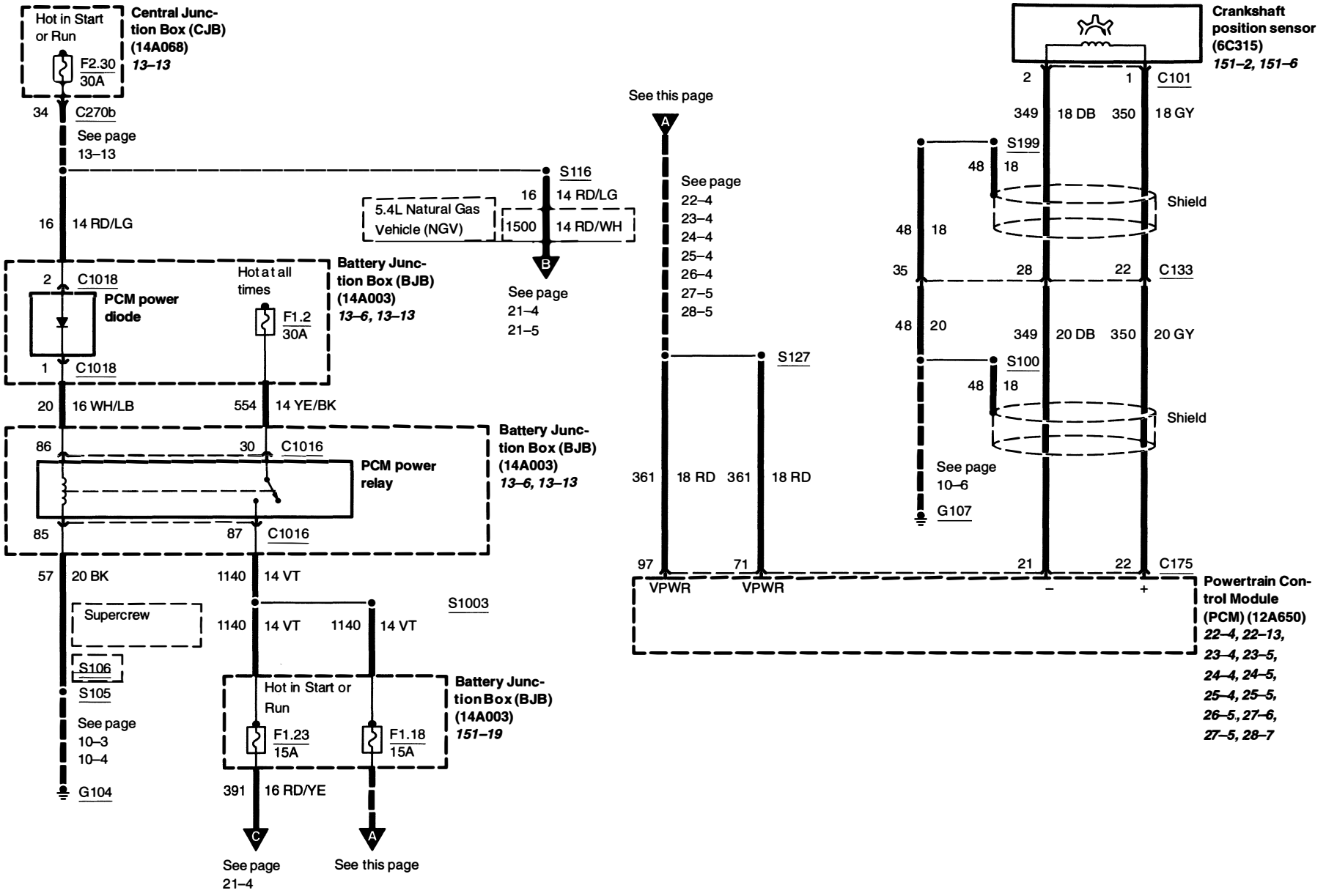

Indicator flasher relay (13350) 90–2
Blower motor relay 53–1, 54–2
Auxiliary relay box 4
Temperature blend door actuator (19E616) 53–1, 54–3
Air bag sliding contact (14A664) 31–2
Four–wheel drive switch 34–3
5 C2047
85 C2017
8 C289
5 C218b
4 C2071
57 20 BK
Data Link Connector (DLC) (14489) 14–2
4 C251
57 20 BK
S202
Harley Davidson
57 18 BK
Transfer case relay module 34–4
Rear window adjust switch 100–6
Trailer tow connector (15A416) 95–4
Power point, console (19N236) 44–2
with manual A/C
See page 10–8
C
D
1 C2191
3 C2060
6 C2060
206 14 WH
1 C237
3 C380
Blower motor resistor (19A706) 53–1, 54–2
3 C1228
57 14 BK
5 C213
57 12 BK
Rear window defrost grid (18C618) 56–1
C3241b
2 C3050
6 C210
Front blower motor speed controller (19E624) 55–2
5 C271a
Function selector switch assembly (19B888) 53–1, 54–2
1 C294b
with EATC
with manual A/C
Rear Integrated Control Panel (RICP) (19980) 130–5
2 C349
S307
28 C238
S201
S200
57 10 BK
G200 151–30
Supercrew

SCP Bus, with EATC

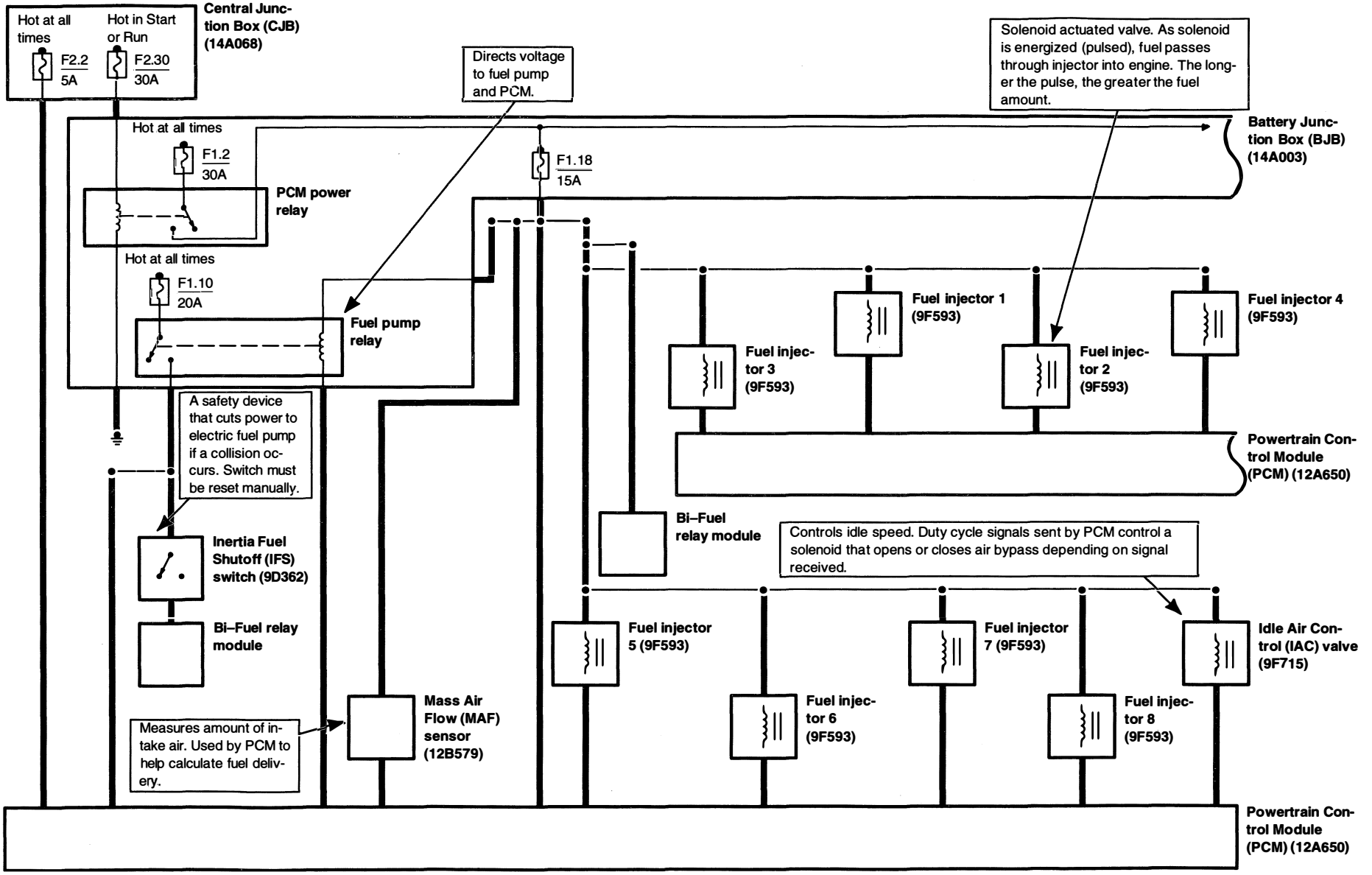


ACP Bus, Harley Davidson




Hot in Start or Run
F2.30 30A
Central Junction Box (CJB) (14A068) 13–13
34 C270b
See page 13–13
S116
16 14 RD/LG
5.4L Natural Gas Vehicle (NGV)
1500 14 RD/WH
See page 21–4 21–5
16 14 RD/LG
2 C1018
PCM power diode
1 C1018
Hot at all times
F1.2 30A
Battery Junction Box (BJB) (14A003) 13–6, 13–13
20 16 WH/LB
554 14 YE/BK
86 30 C1016
PCM power relay
85 87 C1016
Battery Junction Box (BJB) (14A003) 13–6, 13–13
57 20 BK
1140 14 VT
S1003
Supercrew
1140 14 VT 1140 14 VT
S106
S105
See page 10–3 10–4
G104
Hot in Start or Run
F1.23 15A
F1.18 15A
Battery Junction Box (BJB) (14A003) 151–19
391 16 RD/YE
C
A
See page 21–4
See this page
See this page
A
See page 22–4 23–4 24–4 25–4 26–4 27–5 28–5
S127
361 18 RD 361 18 RD
97 71
VPWR VPWR
Crankshaft position sensor (6C315) 151–2, 151–6
2 1 C101
349 18 DB 350 18 GY
S199
48 18
Shield
48 18
35 28 22 C133
48 20
349 20 DB 350 20 GY
S100
48 18
Shield
See page 10–6
G107
21 22 C175
– +
Powertrain Control Module (PCM) (12A650) 22–4, 22–13, 23–4, 23–5, 24–4, 24–5, 25–4, 25–5, 26–5, 27–6, 27–5, 28–7

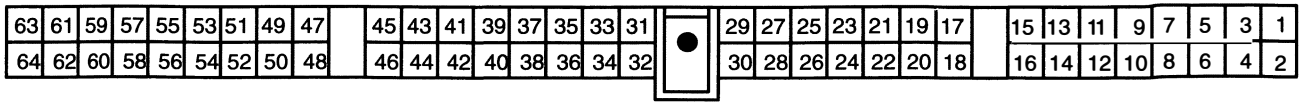
5.4L Bi–Fuel, System overview



C1294 (BK)

A3–288

Compuvalve module



F66001

* CNG
** LPG

Pin	Circuit	Circuit function
1	G001 (WH)	Coolant solenoid, signal
2	G002 (WH)	Voltage supplied at all times (overload protected)
3	*G003 (WH)	Tank valve 1, control
	**G003 (WH)	Lock off solenoid, control
4	G004 (WH)	Reference voltage
5	G005 (WH)	Fuel pump cutoff relay, control
6	*G006 (WH)	Fuel tank pressure transducer sensor (9C968), signal
	**G006 (WH)	Liquid Propane Gas (LPG) sender, signal
7	G007 (WH)	Cold start heater relay, control
8	*G008 (WH)	Fuel tank pressure transducer sensor (9C968), Signal return
	**G008 (WH)	Liquid Propane Gas (LPG) sender, Signal return
9	G009 (WH)	Voltage supplied in Start and Run (overload protected)
10	G010 (WH)	Heated Oxygen Sensor (HO2S) #21 (9F472), signal
11	G011 (WH)	Voltage supplied in Start and Run (overload protected)
12	G096 (WH)	not used
13	G013 (WH)	Voltage supplied in Start and Run (overload protected)
14	G086 (WH)	SCP Bus +
15	G015 (WH)	not used
16	G085 (WH)	SCP Bus –
17	G017 (WH)	Low flow injector 1, control

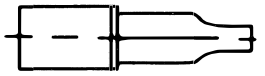
Pin	Circuit	Circuit function
18	G018 (WH)	not used
19	G019 (WH)	Low flow injector 2, control
20	–	not used
21	G021 (WH)	signal, return
22	G022 (WH)	Throttle Position Sensor (TPS) (9B989), signal
23	–	not used
24	G024 (WH)	not used
25	–	not used
26	G026 (WH)	Fuel tank temperature sensor, signal
27	G027 (WH)	not used
28	–	not used
29	–	not used
30	G030 (WH)	Heated Oxygen Sensor (HO2S) #11 (9F472), signal
31	–	not used
32	G032 (WH)	signal, return
33	–	not used
34	G830 (WH)	Crankshaft position sensor (6C315) –
35	–	not used
36	–	not used
37	–	not used
38	G831 (WH)	Crankshaft position sensor (6C315) +

Pin	Circuit	Circuit function
39	–	not used
40	–	not used
41	–	not used
42	G042 (WH)	not used
43	G043 (WH)	not used
44	–	not used
45	G045 (WH)	High flow injector 3, control
46	G046 (WH)	Indicator light switch, return
47	G047 (WH)	High flow injector 4, control
48	–	not used
49	G049 (WH)	High flow injector 5, control
50	G050 (WH)	Indicator light switch, switch, output
51	G051 (WH)	High flow injector 6, control
52	G052 (WH)	Indicator light switch, indicator, control
53	G053 (WH)	High flow injector 7, control
54	G054 (WH)	not used
55	G055 (WH)	High flow injector 8, control
56	G056 (WH)	not used
57	G057 (BK)	Ground
58	G058 (WH)	not used
59	G059 (BK)	Ground
60	G060 (WH)	not used
61	G061 (BK)	Ground
62	G062 (BK)	Ground
63	G063 (BK)	Ground
64	G064 (BK)	Ground

C1295

A2–525

Cold start heater



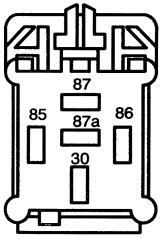
F01143

Pin	Circuit	Circuit function
1	G109 (WH)	Cold start heater relay, switched power, output

C1296

A2–525

Cold start heater relay



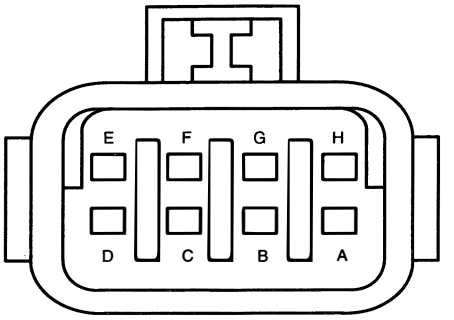
F05062

Pin	Circuit	Circuit function
30	G109 (WH)	Cold start heater relay, switched power, output
85	G007 (GY)	Cold start heater relay, control
86	G080 (WH)	Fuel pump, Power (Start or Run)
87	G002 (WH)	Voltage supplied at all times (overload protected)
87a	–	not used

C1297 (BK)

A3–288

High flow injector assembly



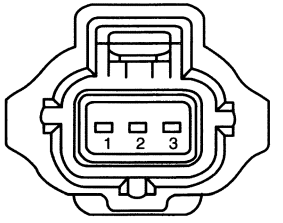
F08135

Pin	Circuit	Circuit function
A	G045 (WH)	High flow injector 3, control
B	G047 (WH)	High flow injector 4, control
C	G049 (WH)	High flow injector 5, control
D	G051 (WH)	High flow injector 6, control
E	G053 (WH)	High flow injector 7, control
F	G055 (WH)	High flow injector 8, control
G	G072 (WH)	Voltage supplied in Start and Run (overload protected)
H	G073 (WH)	Voltage supplied in Start and Run (overload protected)

C1299 (BK)

12B637

Barometric Absolute Pressure (BAP) sensor



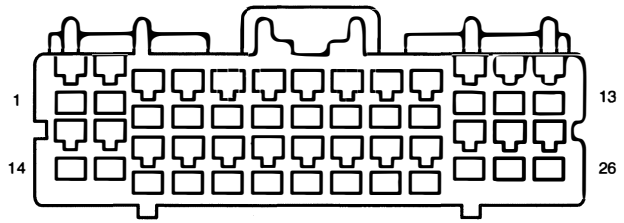
F03273

Pin	Circuit	Circuit function
1	351 (BN/WH)	Reference, voltage
2	359 (GY/RD)	signal, return
3	356 (DB/LG)	Barometric Absolute Pressure (BAP) sensor, signal

C3076 (GY)

14B079

Video cassette player



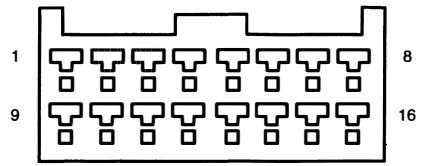
F26009

Pin	Circuit	Circuit function
1	(RD)	Audio signal positive, Left
2	(RD)	Audio signal positive, Right
3	–	not used
4	–	not used
5	–	not used
6	–	not used
7	–	not used
8	–	not used
9	–	not used
10	–	not used
11	(BK)	Shield
12	(RD)	video +
13	–	not used
14	(BK)	Shield
15	(BK)	Shield
16	–	not used
17	–	not used
18	–	not used
19	–	not used
20	–	not used
21	–	not used
22	–	not used
23	(WH)	Video cassette player, to, Rear Seat Entertainment (RSE) module, signal
24	(BK/LG)	audio ground
25	(LG/VT)	Voltage supplied at all times (overload protected)
26	(BK/PK)	Voltage in Run or Accessory (overload protected)

C3077a

14B079

Rear Seat Entertainment (RSE) module



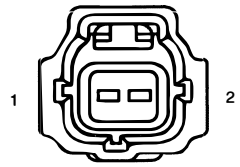
F16037

Pin	Circuit	Circuit function
1	(TN/LG)	Audio signal positive, left rear
2	(OG/RD)	Audio signal positive, right rear
3	(BN/PK)	Audio signal negative, right rear
4	–	not used
5	(TN/YE)	Audio signal negative, left rear
6	(GY/LB)	Audio signal positive, left rear
7	(TN/WH)	Audio signal positive, left rear
8	(BK/LG)	audio ground
9	(LG/BK)	Audio System ON (ASYSON)
10	(LG/VT)	Voltage supplied at all times (overload protected)
11	(BK)	audio/video ground
12	(LB/PK)	Audio corporate protocol A
13	(TN)	Audio corporate protocol B
14	(WH)	Video cassette player, to, Rear Seat Entertainment (RSE) module, signal
15	(BK)	Ground, Illumination
16	(LB/RD)	Illumination, feed

C4123

14406

In–bed fuel tank valve, rear



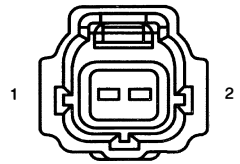
F02111

Pin	Circuit	Circuit function
1	57 (BK)	Ground
2	787 (PK/BK)	Fuel pump, Power

C4124

14406

In–bed fuel tank valve, front



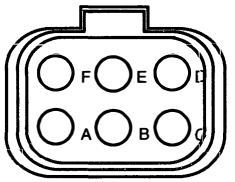
F02091

Pin	Circuit	Circuit function
1	57 (BK)	Ground
2	787 (PK/BK)	Fuel pump, Power

C4125

* CNG
** LPG

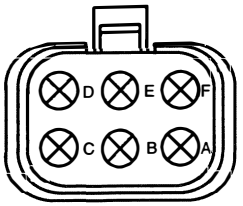
A3–198



F06028

(A) G008 (BK)
(B) G006 (DG)
(C) G004 (RD)
(D) G080 (PK)
(E) *G026 (OG)
(F) G003 (YE)

A2–765



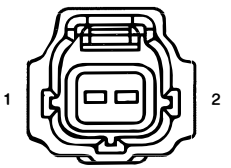
F06029

(A) G008 (BK)
(B) **G006 (GN)
(C) **G004 (RD)
(D) *G080 (RD/LB)
(E) *G026 (OG)
(F) *G003 (YE)

C4126

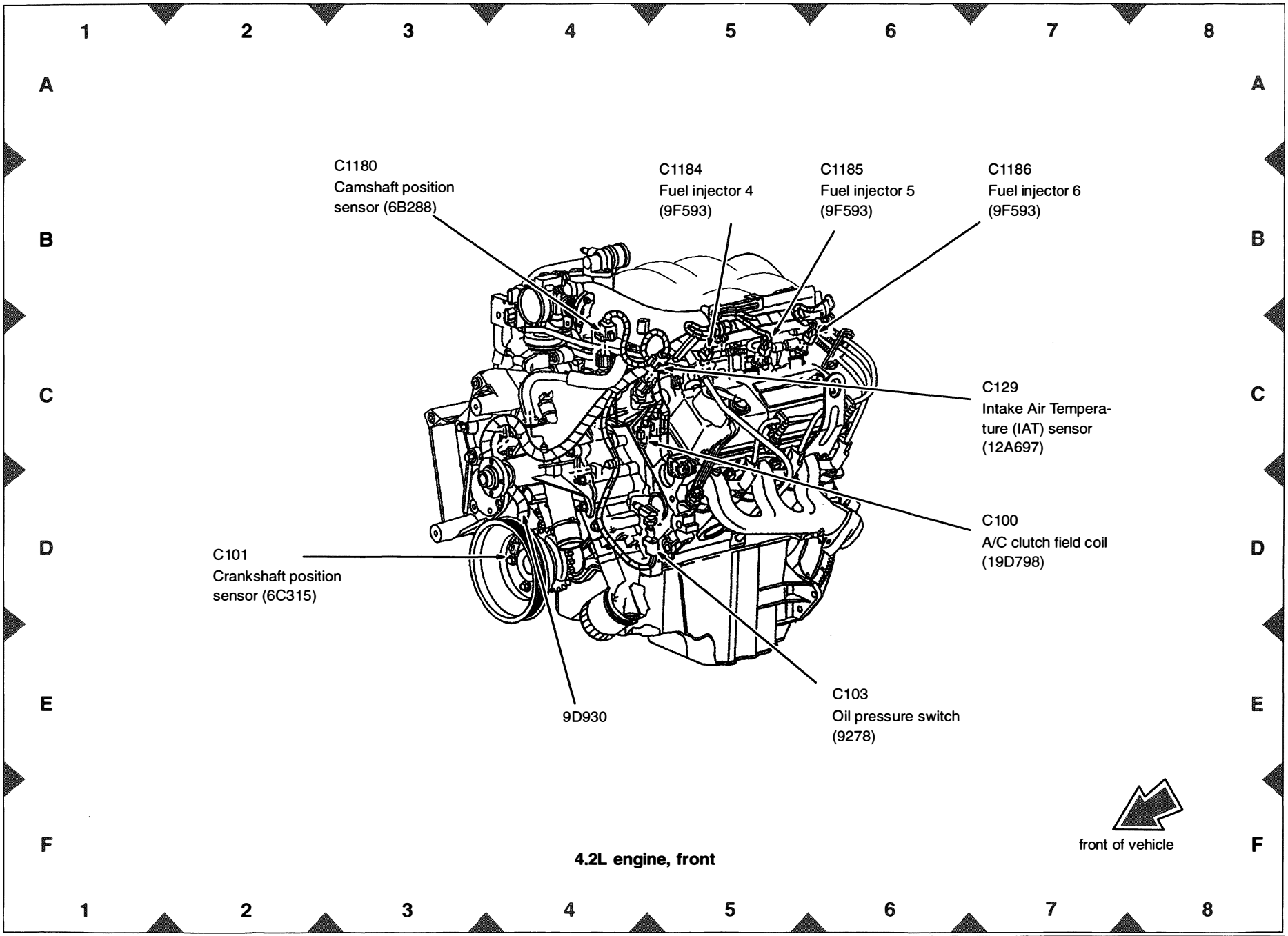
14406

Midship fuel tank valve

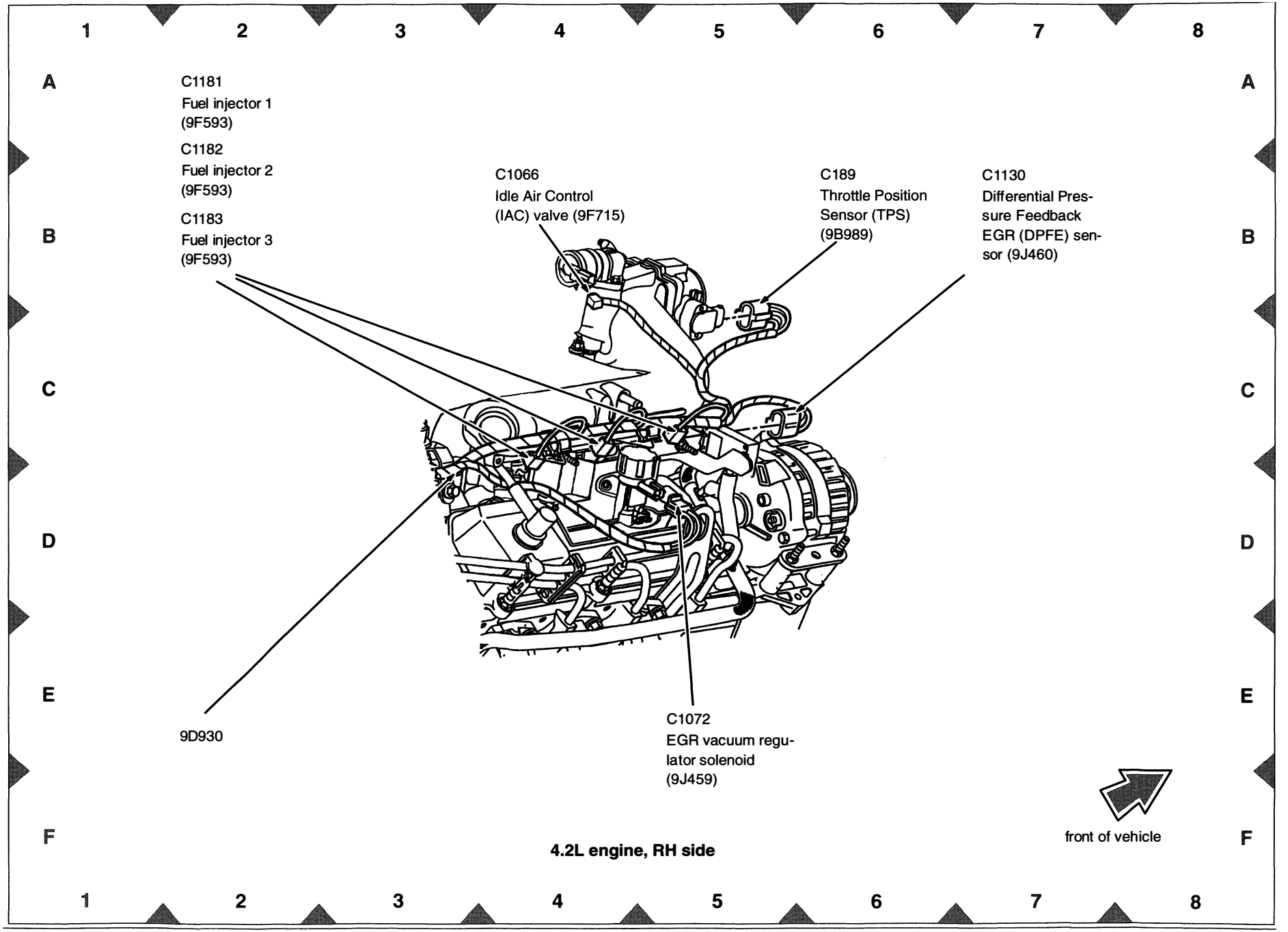


F02091

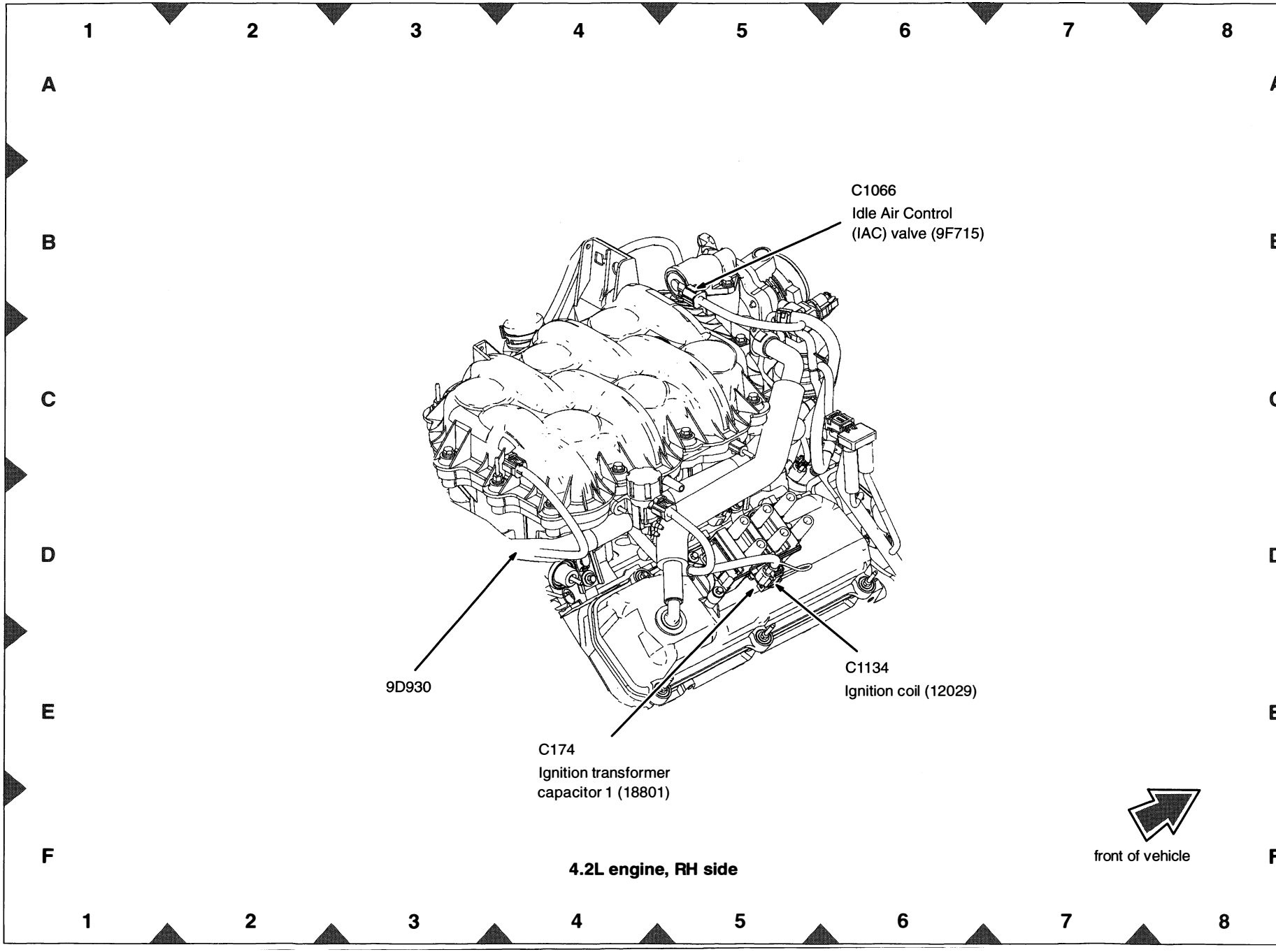
Pin	Circuit	Circuit function
1	57 (BK)	Ground
2	787 (PK/BK)	Fuel pump, Power



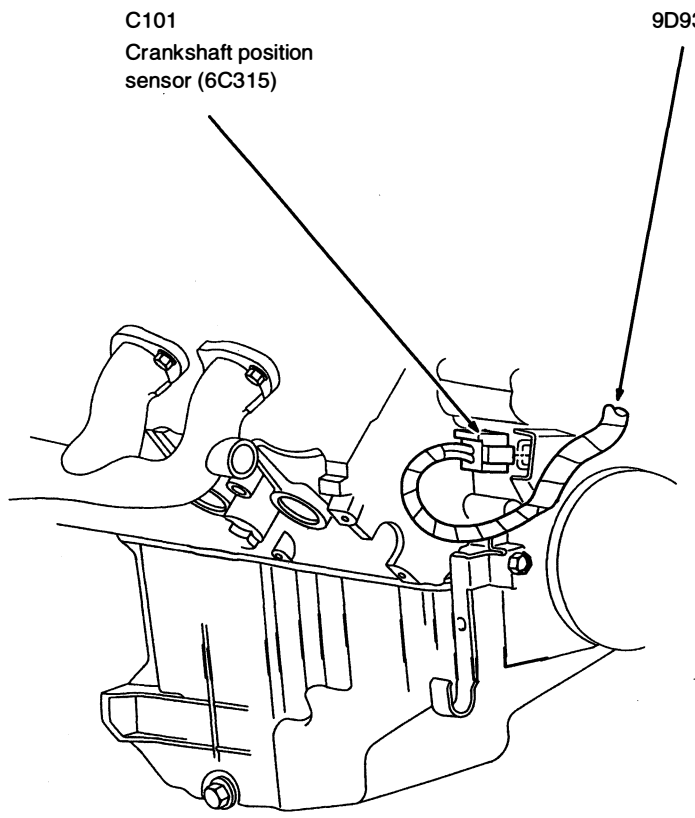
4.2L engine, front



4.2L engine, RH side



4.2L engine, RH side



4.2L engine, RH side